Full wwPDB EM Validation Report ⓘ

Oct 8, 2022 – 01:06 PM EDT

PDB ID	:	7UEB
EMDB ID	:	EMD-26471
Title	:	Photosynthetic assembly of Chlorobaculum tepidum (RC-FMO2)
Authors	:	Puskar, R.; Truong, C.D.; Swain, K.; Li, S.; Cheng, K.-W.; Wang, T.Y.; Poh, Y.-P.; Liu, H.; Chou, T.-F.; Nannenga, B.; Chiu, P.-L.
Deposited on	:	2022-03-21
Resolution	:	3.08 Å(reported)
Based on initial model	:	6M32

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ⓘ) were used in the production of this report:

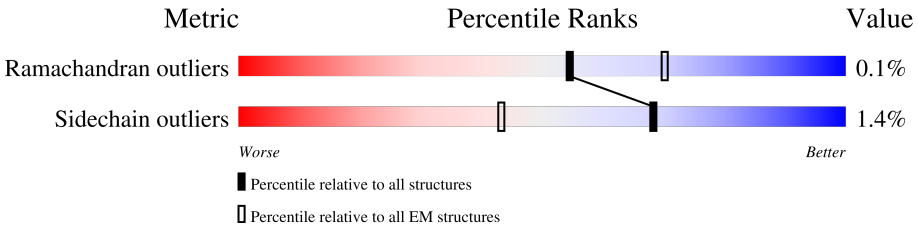
EMDB validation analysis	:	0.0.1.dev43
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 3.08 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	731	87% 11%
1	a	731	87% 11%
2	B	231	7% 47% 51%
3	C	206	9% 59% 41%
3	c	206	32% 49% 49%
4	D	143	21% 69% 29%
5	E	59	34% 90% 5% 5%
6	F	58	57% 83% 14%
7	U	366	7% 99%

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Mol	Chain	Length	Quality of chain
7	V	366	6% 98%
7	W	366	9% 98%
7	X	366	13% 98%
7	Y	366	12% 98%
7	Z	366	10% 98%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
8	GS0	A	801	X	-	-	-
8	GS0	a	802	X	-	-	-
9	G2O	A	802	X	-	-	-
9	G2O	A	826	X	-	-	-
9	G2O	A	827	X	-	-	-
9	G2O	a	801	X	-	-	-

2 Entry composition (i)

There are 16 unique types of molecules in this entry. The entry contains 37570 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Photosystem P840 reaction center, large subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	650	Total	C	N	O	S	0	0
			5197	3469	827	875	26		
1	a	652	Total	C	N	O	S	0	0
			5214	3478	832	878	26		

- Molecule 2 is a protein called Photosystem P840 reaction center iron-sulfur protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	114	Total	C	N	O	S	0	0
			887	564	148	166	9		

- Molecule 3 is a protein called Cytochrome c.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	122	Total	C	N	O	S	0	0
			950	637	149	157	7		
3	c	105	Total	C	N	O	S	0	0
			839	565	130	138	6		

- Molecule 4 is a protein called P840 reaction center 17 kDa protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	101	Total	C	N	O	S	0	0
			823	523	145	151	4		

- Molecule 5 is a protein called PscE.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	E	56	Total	C	N	O	S	0	0
			441	280	75	83	3		

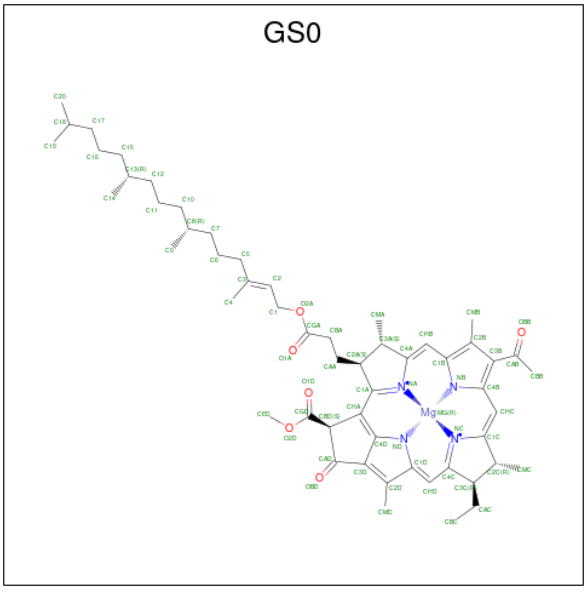
- Molecule 6 is a protein called PscF.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	50	Total	C	N	O	S	0	0
			379	253	62	61	3		

- Molecule 7 is a protein called Bacteriochlorophyll a protein.

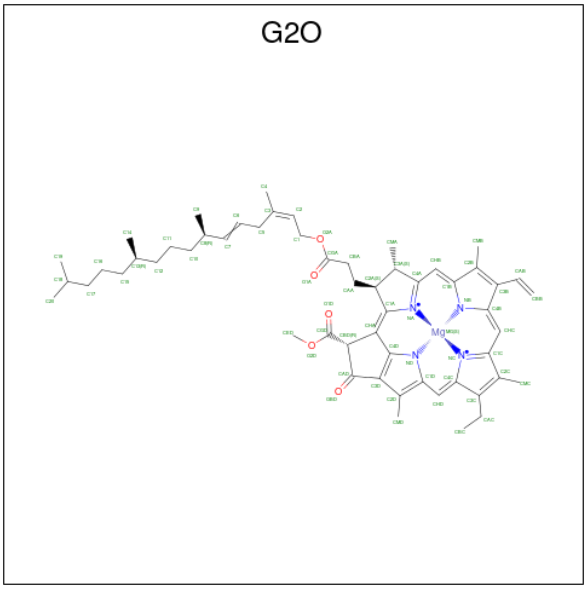
Mol	Chain	Residues	Atoms					AltConf	Trace
7	U	363	Total	C	N	O	S	0	0
			2826	1792	502	525	7		
7	V	360	Total	C	N	O	S	0	0
			2805	1778	499	521	7		
7	W	358	Total	C	N	O	S	0	0
			2789	1770	496	516	7		
7	X	357	Total	C	N	O	S	0	0
			2782	1765	495	515	7		
7	Y	360	Total	C	N	O	S	0	0
			2805	1778	499	521	7		
7	Z	358	Total	C	N	O	S	0	0
			2789	1770	496	516	7		

- Molecule 8 is Bacteriochlorophyll A isomer (three-letter code: GS0) (formula: $C_{55}H_{74}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



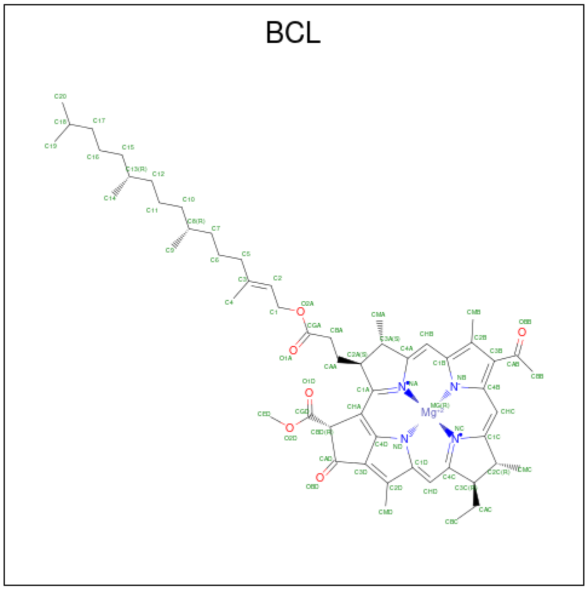
Mol	Chain	Residues	Atoms					AltConf
8	A	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
8	a	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

- Molecule 9 is Chlorophyll A ester (three-letter code: G2O) (formula: $C_{55}H_{70}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
9	A	1	Total	C	Mg	N	O	0
			195	165	3	12	15	
9	A	1	Total	C	Mg	N	O	0
			195	165	3	12	15	
9	A	1	Total	C	Mg	N	O	0
			195	165	3	12	15	
9	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

- Molecule 10 is BACTERIOCHLOROPHYLL A (three-letter code: BCL) (formula: $C_{55}H_{74}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	A	1	Total C Mg N O 791 659 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0

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Mol	Chain	Residues	Atoms	AltConf
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	a	1	Total C Mg N O 772 640 12 48 72	0
10	B	1	Total C Mg N O 66 55 1 4 6	0
10	U	1	Total C Mg N O 442 365 7 28 42	0
10	U	1	Total C Mg N O 442 365 7 28 42	0
10	U	1	Total C Mg N O 442 365 7 28 42	0
10	U	1	Total C Mg N O 442 365 7 28 42	0
10	U	1	Total C Mg N O 442 365 7 28 42	0
10	U	1	Total C Mg N O 442 365 7 28 42	0
10	U	1	Total C Mg N O 442 365 7 28 42	1
10	V	1	Total C Mg N O 574 475 9 36 54	0
10	V	1	Total C Mg N O 574 475 9 36 54	0
10	V	1	Total C Mg N O 574 475 9 36 54	0

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Mol	Chain	Residues	Atoms					AltConf
10	V	1	Total 574	C 475	Mg 9	N 36	O 54	0
10	V	1	Total 574	C 475	Mg 9	N 36	O 54	0
10	V	1	Total 574	C 475	Mg 9	N 36	O 54	0
10	V	1	Total 574	C 475	Mg 9	N 36	O 54	0
10	V	1	Total 574	C 475	Mg 9	N 36	O 54	0
10	V	1	Total 574	C 475	Mg 9	N 36	O 54	1
10	W	1	Total 508	C 420	Mg 8	N 32	O 48	0
10	W	1	Total 508	C 420	Mg 8	N 32	O 48	0
10	W	1	Total 508	C 420	Mg 8	N 32	O 48	0
10	W	1	Total 508	C 420	Mg 8	N 32	O 48	0
10	W	1	Total 508	C 420	Mg 8	N 32	O 48	0
10	W	1	Total 508	C 420	Mg 8	N 32	O 48	0
10	W	1	Total 508	C 420	Mg 8	N 32	O 48	0
10	W	1	Total 508	C 420	Mg 8	N 32	O 48	1
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	0
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	0
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	0
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	0
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	0
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	0
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	1

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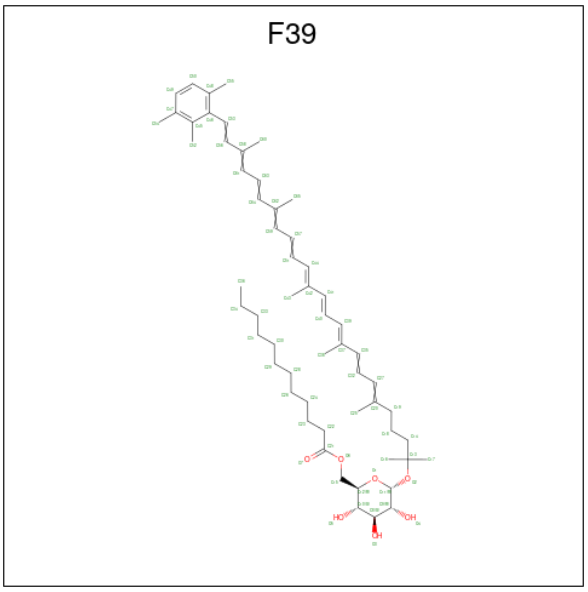
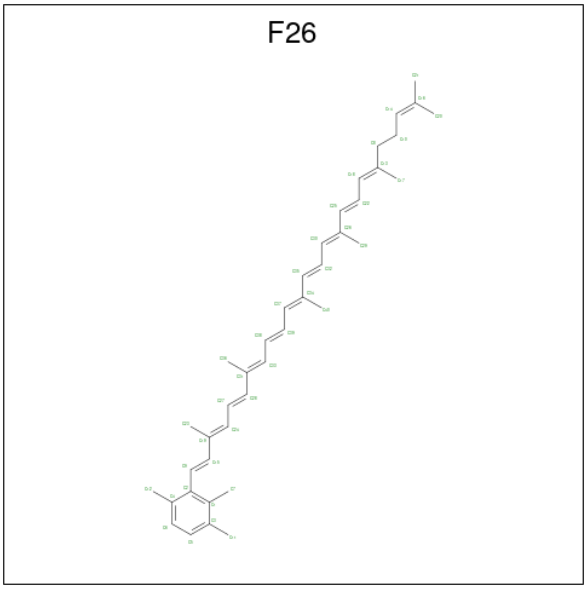
Mol	Chain	Residues	Atoms					AltConf
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	1
10	X	1	Total 554	C 455	Mg 9	N 36	O 54	0
10	Y	1	Total 528	C 440	Mg 8	N 32	O 48	0
10	Y	1	Total 528	C 440	Mg 8	N 32	O 48	0
10	Y	1	Total 528	C 440	Mg 8	N 32	O 48	0
10	Y	1	Total 528	C 440	Mg 8	N 32	O 48	0
10	Y	1	Total 528	C 440	Mg 8	N 32	O 48	0
10	Y	1	Total 528	C 440	Mg 8	N 32	O 48	0
10	Y	1	Total 528	C 440	Mg 8	N 32	O 48	0
10	Y	1	Total 528	C 440	Mg 8	N 32	O 48	0
10	Z	1	Total 442	C 365	Mg 7	N 28	O 42	0
10	Z	1	Total 442	C 365	Mg 7	N 28	O 42	0
10	Z	1	Total 442	C 365	Mg 7	N 28	O 42	0
10	Z	1	Total 442	C 365	Mg 7	N 28	O 42	0
10	Z	1	Total 442	C 365	Mg 7	N 28	O 42	0
10	Z	1	Total 442	C 365	Mg 7	N 28	O 42	0
10	Z	1	Total 442	C 365	Mg 7	N 28	O 42	1

- Molecule 11 is [(2R,3S,4S,5R,6R)-6-[(10E,12E,14E)-2,6,10,14,19,23-hexamethyl-25-(2,3,6-trimethylphenyl)pentacosa-6,8,10,12,14,16,18,20,22,24-decaen-2-yl]oxy-3,4,5-tris(oxidanyl)oxan-2-yl]methyl dodecanoate (three-letter code: F39) (formula: $C_{58}H_{86}O_7$) (labeled as "Ligand of Interest" by depositor).



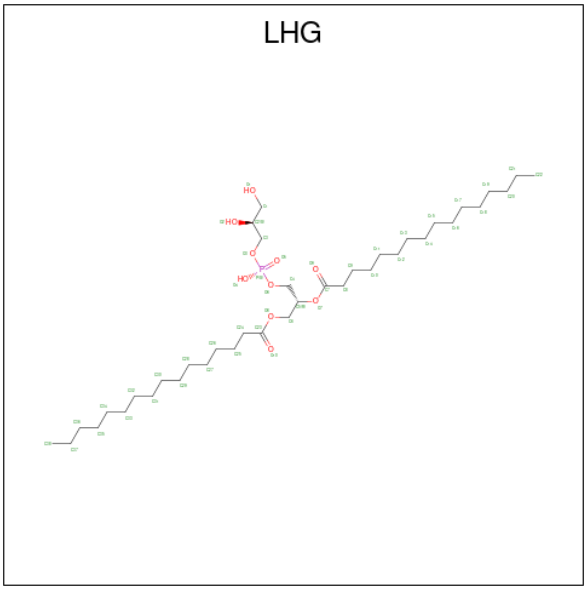
Mol	Chain	Residues	Atoms			AltConf
11	A	1	Total	C	O	0
			65	58	7	
11	a	1	Total	C	O	0
			65	58	7	
11	C	1	Total	C	O	0
			65	58	7	

- Molecule 12 is 2-[(1E,3E,5E,7E,9E,11E,13E,15E,17E,19E)-3,7,12,16,20,24-hexamethylpentacosa-1,3,5,7,9,11,13,15,17,19,23-undecaenyl]-1,3,4-trimethyl-benzene (three-letter code: F26) (formula: $C_{40}H_{52}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
12	A	1	Total C 40 40	0
12	a	1	Total C 80 80	0
12	a	1	Total C 80 80	0

- Molecule 13 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
13	A	1	Total C O P 111 78 30 3	0
13	A	1	Total C O P 111 78 30 3	0
13	A	1	Total C O P 111 78 30 3	0
13	a	1	Total C O P 155 111 40 4	0
13	a	1	Total C O P 155 111 40 4	0
13	a	1	Total C O P 155 111 40 4	0
13	a	1	Total C O P 155 111 40 4	0
13	E	1	Total C O P 82 60 20 2	0

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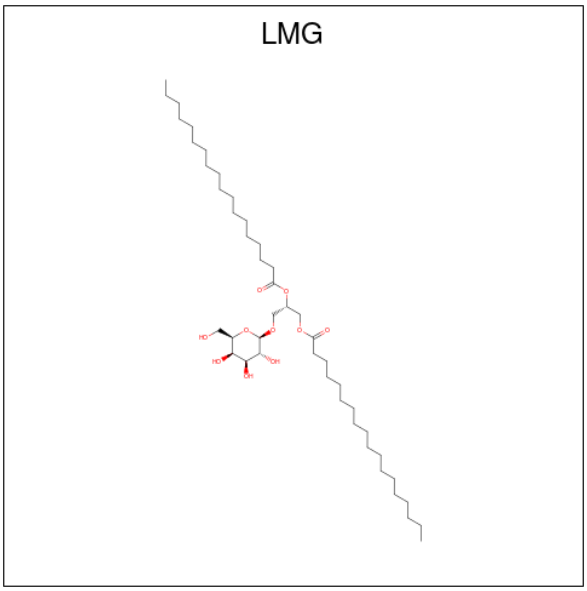
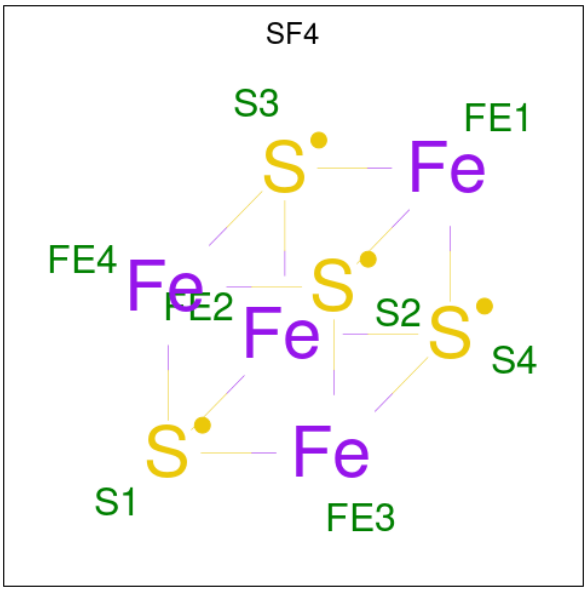
Mol	Chain	Residues	Atoms				AltConf
13	E	1	Total	C	O	P	0
			82	60	20	2	
13	Z	1	Total	C	O	P	0
			43	32	10	1	

- Molecule 14 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
14	A	1	Total	C	O	0
			156	116	40	
14	A	1	Total	C	O	0
			156	116	40	
14	A	1	Total	C	O	0
			156	116	40	
14	A	1	Total	C	O	0
			156	116	40	
14	a	1	Total	C	O	0
			45	35	10	
14	C	1	Total	C	O	0
			42	32	10	

- Molecule 15 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
15	A	1	Total Fe S 8 4 4	0
15	B	1	Total Fe S 16 8 8	0
15	B	1	Total Fe S 16 8 8	0

- Molecule 16 is CALCIUM ION (three-letter code: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

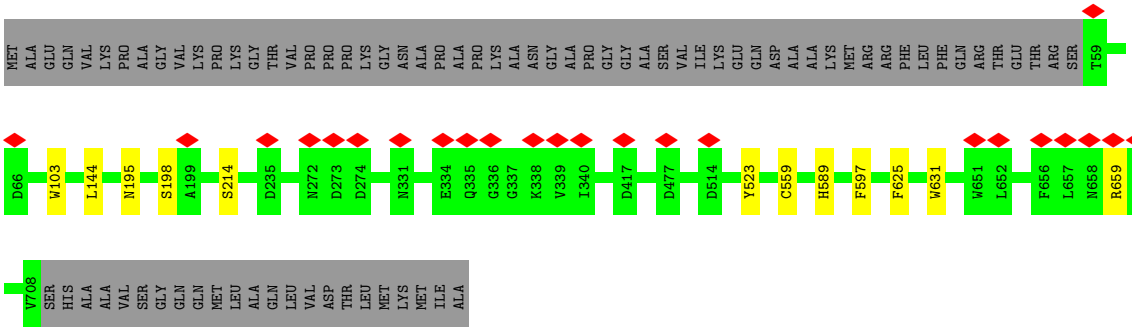
Mol	Chain	Residues	Atoms	AltConf
16	A	1	Total Ca 1 1	0
16	a	1	Total Ca 1 1	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

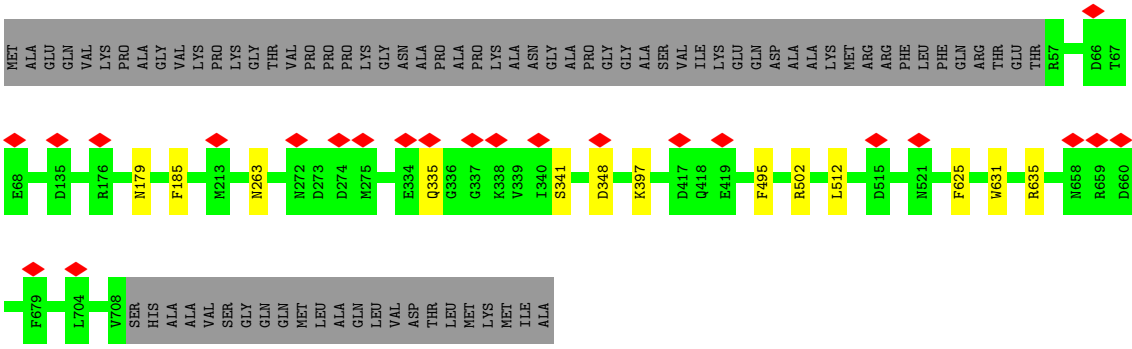
• Molecule 1: Photosystem P840 reaction center, large subunit

Chain A:



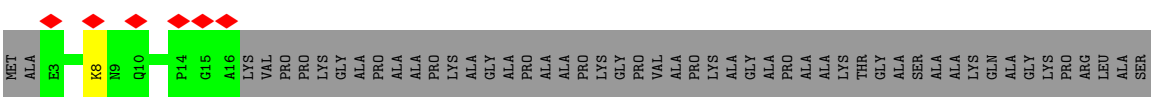
• Molecule 1: Photosystem P840 reaction center, large subunit

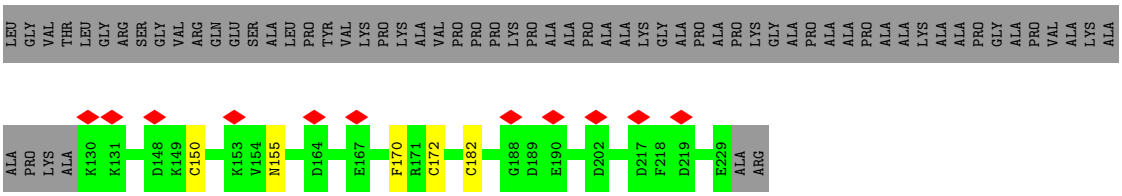
Chain a:



• Molecule 2: Photosystem P840 reaction center iron-sulfur protein

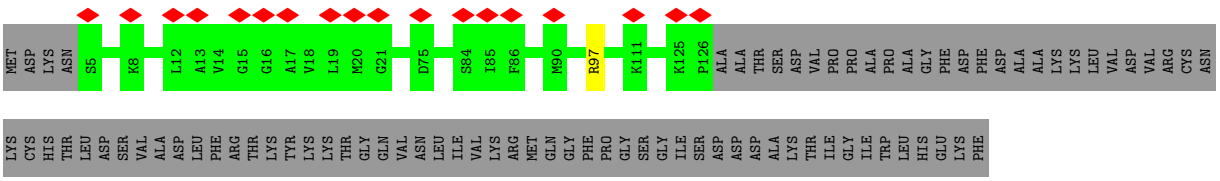
Chain B:





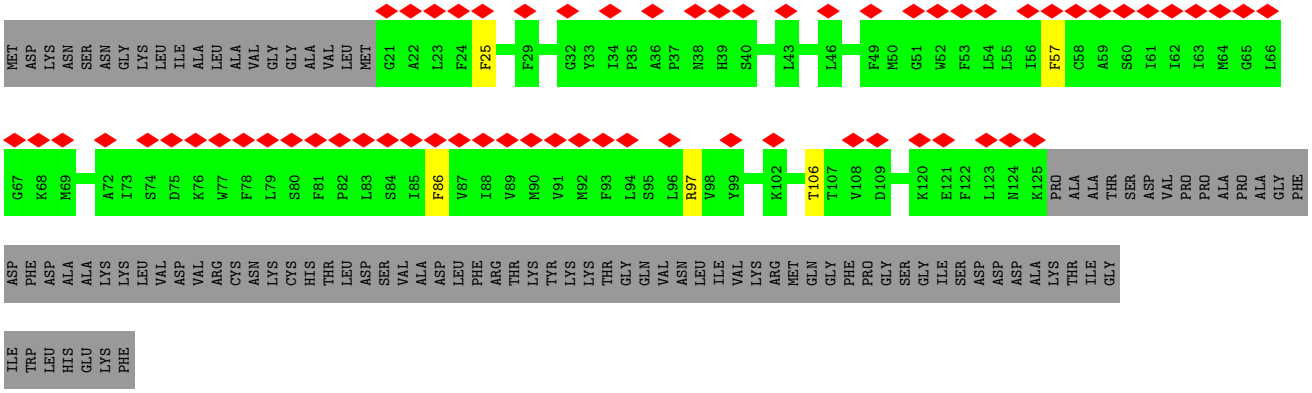
• Molecule 3: Cytochrome c

Chain C:



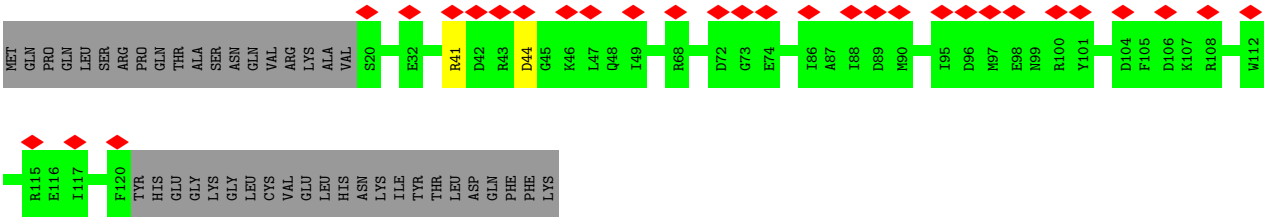
• Molecule 3: Cytochrome c

Chain c:



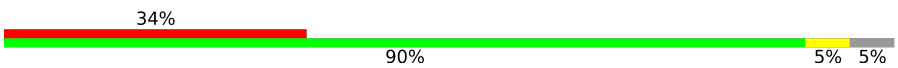
• Molecule 4: P840 reaction center 17 kDa protein

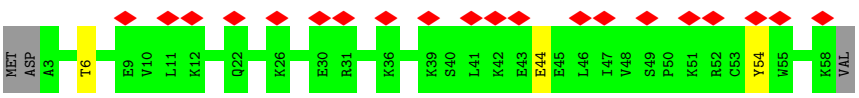
Chain D:



• Molecule 5: PscE

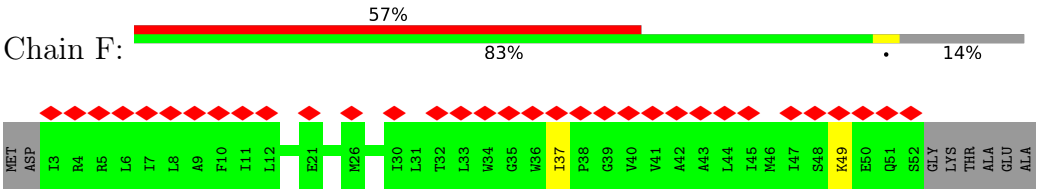
Chain E:





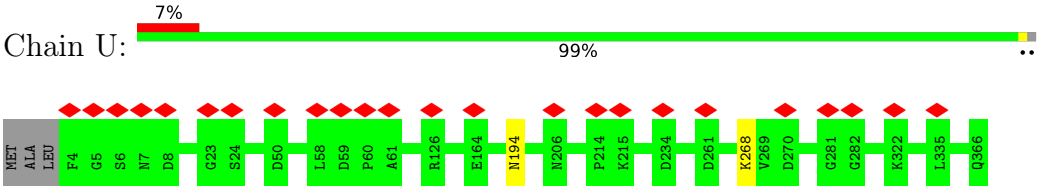
• Molecule 6: PscF

Chain F:



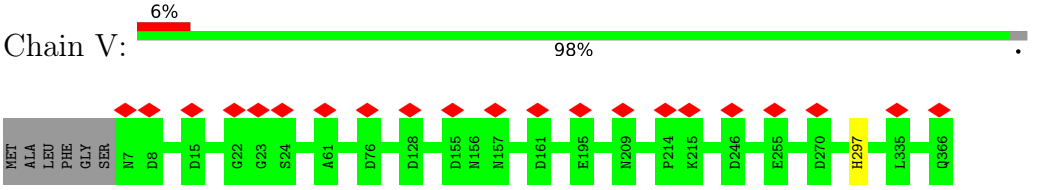
• Molecule 7: Bacteriochlorophyll a protein

Chain U:



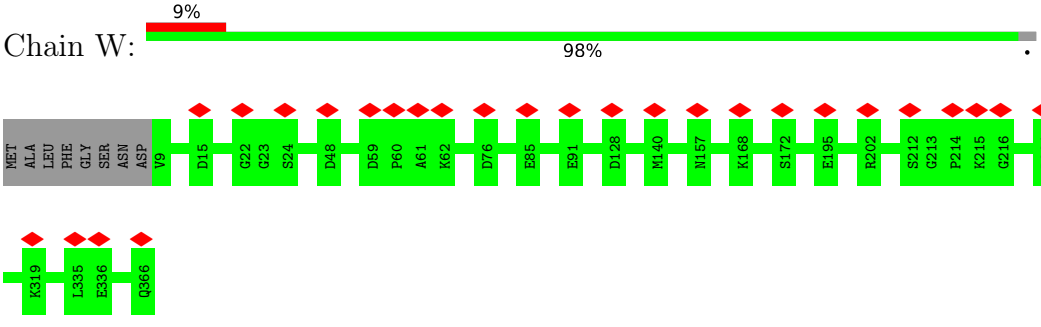
• Molecule 7: Bacteriochlorophyll a protein

Chain V:



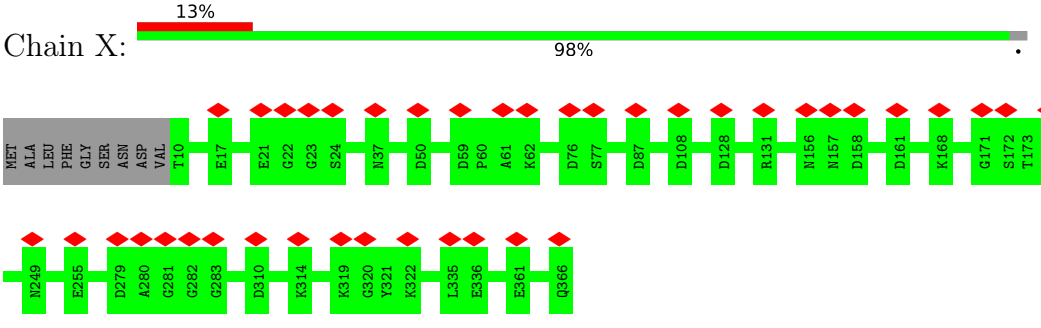
• Molecule 7: Bacteriochlorophyll a protein

Chain W:



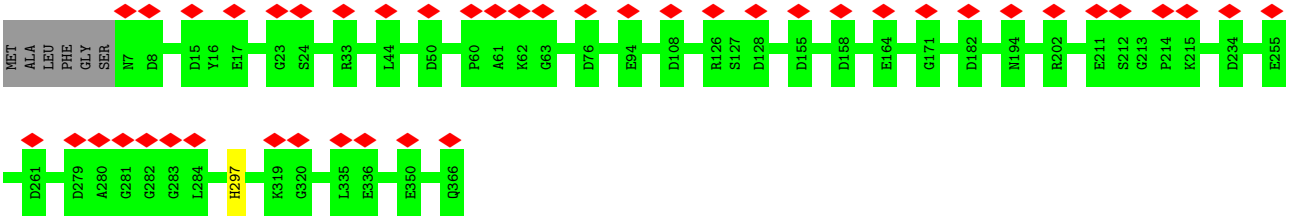
• Molecule 7: Bacteriochlorophyll a protein

Chain X:

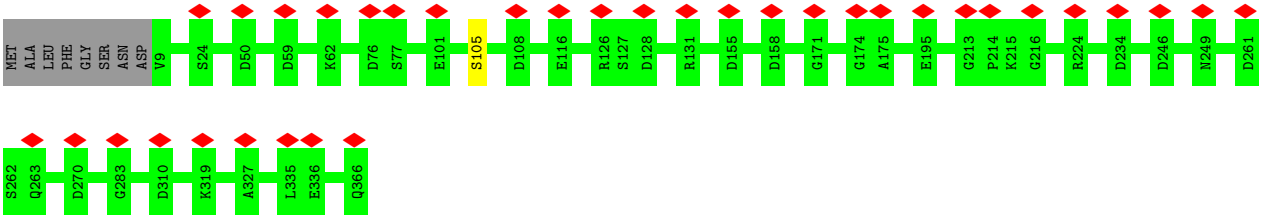


• Molecule 7: Bacteriochlorophyll a protein

Chain Y:



• Molecule 7: Bacteriochlorophyll a protein



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	157486	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	45.4	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	47259	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	4.835	Depositor
Minimum map value	-2.409	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.112	Depositor
Recommended contour level	0.428	Depositor
Map size (Å)	374.4, 374.4, 374.4	wwPDB
Map dimensions	360, 360, 360	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.04, 1.04, 1.04	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: BCL, LHG, G2O, GS0, F26, LMG, CA, F39, SF4

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|>5$	RMSZ	#$\|Z\|>5$
1	A	0.31	0/5379	0.47	0/7330
1	a	0.30	0/5396	0.45	0/7352
2	B	0.32	0/910	0.54	1/1230 (0.1%)
3	C	0.27	0/975	0.47	0/1319
3	c	0.28	0/863	0.52	0/1167
4	D	0.28	0/839	0.55	0/1130
5	E	0.28	0/446	0.53	0/593
6	F	0.28	0/386	0.58	0/525
7	U	0.30	0/2897	0.53	0/3926
7	V	0.30	0/2875	0.54	0/3897
7	W	0.29	0/2859	0.52	0/3875
7	X	0.28	0/2852	0.53	0/3865
7	Y	0.28	0/2875	0.53	0/3897
7	Z	0.29	0/2859	0.53	0/3875
All	All	0.30	0/32411	0.51	1/43981 (0.0%)

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	172	CYS	CA-CB-SG	6.87	126.36	114.00

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	648/731 (89%)	619 (96%)	29 (4%)	0	100 100
1	a	650/731 (89%)	616 (95%)	34 (5%)	0	100 100
2	B	110/231 (48%)	99 (90%)	10 (9%)	1 (1%)	17 49
3	C	120/206 (58%)	108 (90%)	12 (10%)	0	100 100
3	c	103/206 (50%)	91 (88%)	11 (11%)	1 (1%)	15 47
4	D	99/143 (69%)	88 (89%)	11 (11%)	0	100 100
5	E	54/59 (92%)	42 (78%)	12 (22%)	0	100 100
6	F	48/58 (83%)	46 (96%)	1 (2%)	1 (2%)	7 28
7	U	361/366 (99%)	340 (94%)	21 (6%)	0	100 100
7	V	358/366 (98%)	345 (96%)	13 (4%)	0	100 100
7	W	356/366 (97%)	338 (95%)	18 (5%)	0	100 100
7	X	355/366 (97%)	343 (97%)	12 (3%)	0	100 100
7	Y	358/366 (98%)	344 (96%)	14 (4%)	0	100 100
7	Z	356/366 (97%)	343 (96%)	13 (4%)	0	100 100
All	All	3976/4561 (87%)	3762 (95%)	211 (5%)	3 (0%)	54 82

All (3) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	B	8	LYS
6	F	37	ILE
3	c	106	THR

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	A	538/599 (90%)	524 (97%)	14 (3%)	46 72
1	a	540/599 (90%)	527 (98%)	13 (2%)	49 74
2	B	96/162 (59%)	92 (96%)	4 (4%)	30 61
3	C	103/173 (60%)	102 (99%)	1 (1%)	76 89
3	c	92/173 (53%)	88 (96%)	4 (4%)	29 60
4	D	90/128 (70%)	88 (98%)	2 (2%)	52 76
5	E	49/52 (94%)	46 (94%)	3 (6%)	18 48
6	F	40/45 (89%)	39 (98%)	1 (2%)	47 74
7	U	300/302 (99%)	298 (99%)	2 (1%)	84 92
7	V	298/302 (99%)	297 (100%)	1 (0%)	92 96
7	W	296/302 (98%)	296 (100%)	0	100 100
7	X	295/302 (98%)	295 (100%)	0	100 100
7	Y	298/302 (99%)	297 (100%)	1 (0%)	92 96
7	Z	296/302 (98%)	295 (100%)	1 (0%)	92 96
All	All	3331/3743 (89%)	3284 (99%)	47 (1%)	68 84

All (47) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	103	TRP
1	A	144	LEU
1	A	195	ASN
1	A	198	SER
1	A	214	SER
1	A	523	TYR
1	A	559	CYS
1	A	589	HIS
1	A	597	PHE
1	A	625	PHE
1	A	631	TRP
1	A	659	ARG
1	A	663	PHE
1	A	682	PHE
1	a	179	ASN
1	a	185	PHE

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Mol	Chain	Res	Type
1	a	263	ASN
1	a	335	GLN
1	a	341	SER
1	a	348	ASP
1	a	397	LYS
1	a	495	PHE
1	a	502	ARG
1	a	512	LEU
1	a	625	PHE
1	a	631	TRP
1	a	635	ARG
2	B	150	CYS
2	B	155	ASN
2	B	170	PHE
2	B	182	CYS
3	C	97	ARG
3	c	25	PHE
3	c	57	PHE
3	c	86	PHE
3	c	97	ARG
4	D	41	ARG
4	D	44	ASP
5	E	6	THR
5	E	44	GLU
5	E	54	TYR
6	F	49	LYS
7	U	194	ASN
7	U	268	LYS
7	V	297	HIS
7	Y	297	HIS
7	Z	105	SER

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (2) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	543	GLN
7	U	13	HIS

5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains (i)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 106 ligands modelled in this entry, 2 are monoatomic - leaving 104 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
10	BCL	W	408[B]	7	38,54,74	1.41	4 (10%)	45,91,115	1.55	9 (20%)
10	BCL	Z	404	-	58,74,74	1.09	3 (5%)	69,115,115	1.52	13 (18%)
10	BCL	U	401	-	58,74,74	1.13	2 (3%)	69,115,115	1.65	14 (20%)
10	BCL	X	404	7	58,74,74	1.11	3 (5%)	69,115,115	1.40	12 (17%)
10	BCL	U	403	-	58,74,74	1.10	4 (6%)	69,115,115	1.52	15 (21%)
9	G2O	A	827	-	67,73,73	4.14	40 (59%)	75,113,113	2.96	24 (32%)
10	BCL	Z	402	-	58,74,74	1.14	2 (3%)	69,115,115	1.74	14 (20%)
15	SF4	B	302	2	0,12,12	-	-	-		
10	BCL	W	402	-	58,74,74	1.14	3 (5%)	69,115,115	1.47	12 (17%)
10	BCL	W	407	-	58,74,74	1.12	2 (3%)	69,115,115	1.41	13 (18%)
10	BCL	Y	402	-	58,74,74	1.13	3 (5%)	69,115,115	1.59	12 (17%)
10	BCL	a	808	1	38,54,74	1.33	3 (7%)	45,91,115	1.70	12 (26%)
10	BCL	X	403	-	58,74,74	1.12	3 (5%)	69,115,115	1.52	14 (20%)
10	BCL	Y	401	-	58,74,74	1.17	2 (3%)	69,115,115	1.55	14 (20%)
10	BCL	W	405	-	58,74,74	1.16	4 (6%)	69,115,115	1.42	12 (17%)
10	BCL	Y	403	-	58,74,74	1.16	4 (6%)	69,115,115	1.44	12 (17%)
9	G2O	A	826	-	67,73,73	4.15	38 (56%)	75,113,113	3.13	20 (26%)
10	BCL	A	810	-	58,74,74	1.18	3 (5%)	69,115,115	1.58	12 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
9	G2O	a	801	-	67,73,73	4.18	40 (59%)	75,113,113	2.94	20 (26%)
10	BCL	X	408[B]	7	38,54,74	1.41	5 (13%)	45,91,115	1.51	9 (20%)
10	BCL	Y	408	-	58,74,74	1.15	2 (3%)	69,115,115	1.42	14 (20%)
10	BCL	A	812	-	58,74,74	1.16	4 (6%)	69,115,115	1.81	16 (23%)
10	BCL	V	403	-	58,74,74	1.17	3 (5%)	69,115,115	1.36	11 (15%)
10	BCL	A	806	-	58,74,74	1.12	3 (5%)	69,115,115	1.72	13 (18%)
10	BCL	A	813	-	58,74,74	1.21	4 (6%)	69,115,115	1.48	11 (15%)
10	BCL	V	405	-	58,74,74	1.09	3 (5%)	69,115,115	1.45	12 (17%)
10	BCL	X	407[B]	7	38,54,74	1.39	4 (10%)	45,91,115	1.52	9 (20%)
10	BCL	W	406	-	58,74,74	1.17	3 (5%)	69,115,115	1.44	11 (15%)
11	F39	A	815	-	66,66,66	2.71	20 (30%)	79,85,85	2.16	21 (26%)
10	BCL	A	805	-	58,74,74	1.22	4 (6%)	69,115,115	1.42	11 (15%)
10	BCL	U	405	-	58,74,74	1.16	3 (5%)	69,115,115	1.36	9 (13%)
11	F39	a	815	-	66,66,66	2.76	19 (28%)	79,85,85	2.20	22 (27%)
10	BCL	U	407[B]	7	38,54,74	1.43	5 (13%)	45,91,115	1.59	9 (20%)
10	BCL	A	807	-	58,74,74	1.14	4 (6%)	69,115,115	1.57	10 (14%)
9	G2O	A	802	-	67,73,73	4.11	39 (58%)	75,113,113	2.99	21 (28%)
10	BCL	a	809	-	58,74,74	1.20	4 (6%)	69,115,115	1.36	9 (13%)
14	LMG	A	821	-	41,41,55	0.82	0	49,49,63	1.16	4 (8%)
13	LHG	a	821	-	37,37,48	0.68	1 (2%)	40,43,54	0.98	2 (5%)
12	F26	a	817	-	40,40,40	1.74	10 (25%)	46,50,50	2.16	15 (32%)
10	BCL	a	814	-	58,74,74	1.13	2 (3%)	69,115,115	1.56	12 (17%)
10	BCL	V	404	-	58,74,74	1.16	4 (6%)	69,115,115	1.48	11 (15%)
10	BCL	W	404	-	58,74,74	1.09	2 (3%)	69,115,115	1.50	13 (18%)
10	BCL	a	806	10	58,74,74	1.11	3 (5%)	69,115,115	1.67	11 (15%)
10	BCL	a	803	-	58,74,74	1.13	3 (5%)	69,115,115	1.48	12 (17%)
14	LMG	A	820	-	42,42,55	0.84	1 (2%)	50,50,63	1.17	4 (8%)
10	BCL	V	402	-	58,74,74	1.15	4 (6%)	69,115,115	1.60	15 (21%)
10	BCL	V	401	-	58,74,74	1.18	4 (6%)	69,115,115	1.44	12 (17%)
10	BCL	X	409	-	58,74,74	1.17	4 (6%)	69,115,115	1.48	13 (18%)
10	BCL	U	402	-	58,74,74	1.14	2 (3%)	69,115,115	1.43	12 (17%)
8	GS0	a	802	8	64,74,74	2.41	14 (21%)	78,115,115	2.87	29 (37%)
11	F39	C	301	-	66,66,66	2.82	21 (31%)	79,85,85	2.10	25 (31%)
10	BCL	V	406	7	58,74,74	1.14	2 (3%)	69,115,115	1.51	10 (14%)
13	LHG	A	819	-	33,33,48	0.73	1 (3%)	36,39,54	1.00	2 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
10	BCL	A	804	-	58,74,74	1.20	3 (5%)	69,115,115	1.50	15 (21%)
10	BCL	A	803	-	58,74,74	1.16	3 (5%)	69,115,115	1.51	14 (20%)
10	BCL	a	813	-	58,74,74	1.19	3 (5%)	69,115,115	1.46	12 (17%)
13	LHG	a	820	-	37,37,48	0.65	0	40,43,54	0.96	2 (5%)
13	LHG	E	101	-	38,38,48	0.66	0	41,44,54	0.96	2 (4%)
10	BCL	Z	403	-	58,74,74	1.17	3 (5%)	69,115,115	1.44	10 (14%)
13	LHG	E	102	-	42,42,48	0.63	0	45,48,54	0.99	2 (4%)
14	LMG	A	823	10	31,31,55	0.90	0	39,39,63	1.20	5 (12%)
10	BCL	V	407	-	58,74,74	1.15	3 (5%)	69,115,115	1.58	13 (18%)
10	BCL	X	406	-	58,74,74	1.15	5 (8%)	69,115,115	1.51	14 (20%)
12	F26	A	816	-	40,40,40	1.78	10 (25%)	46,50,50	2.27	15 (32%)
10	BCL	a	810	-	58,74,74	1.14	3 (5%)	69,115,115	1.54	12 (17%)
10	BCL	Y	406	7	58,74,74	1.13	2 (3%)	69,115,115	1.47	11 (15%)
10	BCL	A	808	1	58,74,74	1.14	3 (5%)	69,115,115	1.42	12 (17%)
14	LMG	a	822	-	45,45,55	0.77	0	53,53,63	1.15	4 (7%)
10	BCL	B	301	14	58,74,74	1.18	3 (5%)	69,115,115	1.61	15 (21%)
15	SF4	B	303	2	0,12,12	-	-	-		
13	LHG	a	819	-	33,33,48	0.71	0	36,39,54	0.97	2 (5%)
10	BCL	Y	404	-	58,74,74	1.16	4 (6%)	69,115,115	1.52	12 (17%)
10	BCL	Z	405	7	58,74,74	1.11	3 (5%)	69,115,115	1.50	11 (15%)
10	BCL	Z	408[B]	7	38,54,74	1.41	5 (13%)	45,91,115	1.65	10 (22%)
12	F26	a	816	-	40,40,40	1.67	10 (25%)	46,50,50	2.16	12 (26%)
8	GS0	A	801	8	64,74,74	2.23	13 (20%)	78,115,115	3.02	27 (34%)
10	BCL	Y	407	-	58,74,74	1.13	3 (5%)	69,115,115	1.48	10 (14%)
13	LHG	a	818	-	44,44,48	0.63	0	47,50,54	0.95	2 (4%)
10	BCL	V	408	-	58,74,74	1.13	2 (3%)	69,115,115	1.42	11 (15%)
10	BCL	A	809	-	58,74,74	1.16	4 (6%)	69,115,115	1.54	12 (17%)
10	BCL	X	402	-	58,74,74	1.16	4 (6%)	69,115,115	1.47	12 (17%)
13	LHG	Z	401	-	42,42,48	0.61	0	45,48,54	0.97	2 (4%)
13	LHG	A	818	-	39,39,48	0.70	1 (2%)	42,45,54	1.00	2 (4%)
14	LMG	C	302	-	42,42,55	0.80	0	50,50,63	1.16	4 (8%)
10	BCL	W	403	-	58,74,74	1.14	2 (3%)	69,115,115	1.50	12 (17%)
10	BCL	a	807	10	58,74,74	1.15	3 (5%)	69,115,115	1.55	12 (17%)
10	BCL	U	406	-	58,74,74	1.15	4 (6%)	69,115,115	1.44	13 (18%)
10	BCL	U	404	7	58,74,74	1.13	2 (3%)	69,115,115	1.52	12 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	LMG	A	822	-	42,42,55	0.81	0	50,50,63	1.12	3 (6%)
10	BCL	a	805	-	58,74,74	1.17	3 (5%)	69,115,115	1.47	10 (14%)
10	BCL	A	814	-	57,73,74	1.20	3 (5%)	67,113,115	1.45	12 (17%)
10	BCL	Z	407	-	58,74,74	1.15	3 (5%)	69,115,115	1.47	13 (18%)
10	BCL	Z	406	-	58,74,74	1.14	2 (3%)	69,115,115	1.42	9 (13%)
15	SF4	A	824	1	0,12,12	-	-	-		
10	BCL	V	409[B]	7	38,54,74	1.38	4 (10%)	45,91,115	1.51	8 (17%)
10	BCL	a	811	-	58,74,74	1.15	3 (5%)	69,115,115	1.46	13 (18%)
10	BCL	W	401	-	58,74,74	1.15	4 (6%)	69,115,115	1.71	16 (23%)
10	BCL	X	405	-	58,74,74	1.15	2 (3%)	69,115,115	1.48	9 (13%)
10	BCL	A	811	-	58,74,74	1.16	5 (8%)	69,115,115	1.59	14 (20%)
10	BCL	a	804	-	58,74,74	1.18	3 (5%)	69,115,115	1.37	11 (15%)
10	BCL	X	401	-	58,74,74	1.15	3 (5%)	69,115,115	1.51	13 (18%)
10	BCL	a	812	-	58,74,74	1.18	4 (6%)	69,115,115	1.44	13 (18%)
13	LHG	A	817	-	36,36,48	0.71	1 (2%)	39,42,54	0.97	2 (5%)
10	BCL	Y	405	-	58,74,74	1.07	2 (3%)	69,115,115	1.48	11 (15%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
10	BCL	W	408[B]	7	-	8/13/113/137	-
10	BCL	Z	404	-	-	11/37/137/137	-
10	BCL	U	401	-	-	8/37/137/137	-
10	BCL	X	404	7	-	8/37/137/137	-
10	BCL	U	403	-	-	11/37/137/137	-
9	G2O	A	827	-	3/3/15/22	15/39/115/115	-
10	BCL	Z	402	-	-	8/37/137/137	-
15	SF4	B	302	2	-	-	0/6/5/5
10	BCL	W	402	-	-	10/37/137/137	-
10	BCL	W	407	-	-	7/37/137/137	-
10	BCL	Y	402	-	-	9/37/137/137	-
10	BCL	a	808	1	-	6/13/113/137	-
10	BCL	X	403	-	-	11/37/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
10	BCL	Y	401	-	-	12/37/137/137	-
10	BCL	W	405	-	-	16/37/137/137	-
10	BCL	Y	403	-	-	12/37/137/137	-
9	G2O	A	826	-	3/3/15/22	21/39/115/115	-
10	BCL	A	810	-	-	6/37/137/137	-
9	G2O	a	801	-	3/3/15/22	22/39/115/115	-
10	BCL	X	408[B]	7	-	8/13/113/137	-
10	BCL	Y	408	-	-	6/37/137/137	-
10	BCL	A	812	-	-	12/37/137/137	-
10	BCL	V	403	-	-	8/37/137/137	-
10	BCL	A	806	-	-	12/37/137/137	-
10	BCL	A	813	-	-	22/37/137/137	-
10	BCL	V	405	-	-	12/37/137/137	-
10	BCL	X	407[B]	7	-	4/13/113/137	-
10	BCL	W	406	-	-	10/37/137/137	-
11	F39	A	815	-	-	33/58/78/78	0/2/2/2
10	BCL	A	805	-	-	9/37/137/137	-
10	BCL	U	405	-	-	3/37/137/137	-
11	F39	a	815	-	-	39/58/78/78	0/2/2/2
10	BCL	U	407[B]	7	-	7/13/113/137	-
10	BCL	A	807	-	-	12/37/137/137	-
9	G2O	A	802	-	3/3/15/22	21/39/115/115	-
10	BCL	a	809	-	-	16/37/137/137	-
14	LMG	A	821	-	-	23/36/56/70	0/1/1/1
13	LHG	a	821	-	-	23/42/42/53	-
12	F26	a	817	-	-	22/36/36/36	0/1/1/1
10	BCL	a	814	-	-	9/37/137/137	-
10	BCL	V	404	-	-	9/37/137/137	-
10	BCL	W	404	-	-	7/37/137/137	-
10	BCL	a	806	10	-	18/37/137/137	-
10	BCL	a	803	-	-	9/37/137/137	-
14	LMG	A	820	-	-	20/37/57/70	0/1/1/1
10	BCL	V	402	-	-	9/37/137/137	-
10	BCL	V	401	-	-	10/37/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
10	BCL	X	409	-	-	5/37/137/137	-
10	BCL	U	402	-	-	14/37/137/137	-
8	GS0	a	802	8	2/2/21/25	15/37/137/137	-
11	F39	C	301	-	-	33/58/78/78	0/2/2/2
10	BCL	V	406	7	-	9/37/137/137	-
13	LHG	A	819	-	-	20/38/38/53	-
10	BCL	A	804	-	-	15/37/137/137	-
10	BCL	A	803	-	-	11/37/137/137	-
10	BCL	a	813	-	-	17/37/137/137	-
13	LHG	a	820	-	-	26/42/42/53	-
13	LHG	E	101	-	-	21/43/43/53	-
10	BCL	Z	403	-	-	13/37/137/137	-
13	LHG	E	102	-	-	24/47/47/53	-
14	LMG	A	823	10	-	4/26/46/70	0/1/1/1
10	BCL	V	407	-	-	11/37/137/137	-
10	BCL	X	406	-	-	6/37/137/137	-
12	F26	A	816	-	-	19/36/36/36	0/1/1/1
10	BCL	a	810	-	-	14/37/137/137	-
10	BCL	Y	406	7	-	8/37/137/137	-
10	BCL	A	808	1	-	7/37/137/137	-
14	LMG	a	822	-	-	20/40/60/70	0/1/1/1
10	BCL	B	301	14	-	18/37/137/137	-
15	SF4	B	303	2	-	-	0/6/5/5
13	LHG	a	819	-	-	19/38/38/53	-
10	BCL	Y	404	-	-	14/37/137/137	-
10	BCL	Z	405	7	-	12/37/137/137	-
10	BCL	Z	408[B]	7	-	6/13/113/137	-
12	F26	a	816	-	-	19/36/36/36	0/1/1/1
8	GS0	A	801	8	2/2/21/25	21/37/137/137	-
10	BCL	Y	407	-	-	11/37/137/137	-
13	LHG	a	818	-	-	23/49/49/53	-
10	BCL	V	408	-	-	10/37/137/137	-
10	BCL	A	809	-	-	12/37/137/137	-
10	BCL	X	402	-	-	12/37/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
13	LHG	Z	401	-	-	26/47/47/53	-
13	LHG	A	818	-	-	23/44/44/53	-
14	LMG	C	302	-	-	19/37/57/70	0/1/1/1
10	BCL	W	403	-	-	10/37/137/137	-
10	BCL	a	807	10	-	16/37/137/137	-
10	BCL	U	406	-	-	6/37/137/137	-
10	BCL	U	404	7	-	12/37/137/137	-
14	LMG	A	822	-	-	25/37/57/70	0/1/1/1
10	BCL	a	805	-	-	5/37/137/137	-
10	BCL	A	814	-	-	11/36/136/137	-
10	BCL	Z	407	-	-	7/37/137/137	-
10	BCL	Z	406	-	-	7/37/137/137	-
15	SF4	A	824	1	-	-	0/6/5/5
10	BCL	V	409[B]	7	-	8/13/113/137	-
10	BCL	a	811	-	-	8/37/137/137	-
10	BCL	W	401	-	-	10/37/137/137	-
10	BCL	X	405	-	-	5/37/137/137	-
10	BCL	A	811	-	-	7/37/137/137	-
10	BCL	a	804	-	-	9/37/137/137	-
10	BCL	X	401	-	-	6/37/137/137	-
10	BCL	a	812	-	-	16/37/137/137	-
13	LHG	A	817	-	-	17/41/41/53	-
10	BCL	Y	405	-	-	8/37/137/137	-

All (513) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	A	826	G2O	MG-NA	12.95	2.37	2.06
9	a	801	G2O	MG-NC	12.78	2.36	2.06
9	A	827	G2O	MG-NA	11.93	2.34	2.06
9	a	801	G2O	C1D-ND	11.55	1.45	1.35
9	A	826	G2O	C1D-ND	11.42	1.45	1.35
9	A	827	G2O	C1D-ND	11.37	1.45	1.35
9	A	802	G2O	MG-NC	11.15	2.32	2.06
9	A	802	G2O	C1D-ND	11.07	1.45	1.35
8	a	802	GS0	MG-NC	11.05	2.32	2.06
9	a	801	G2O	MG-NA	11.05	2.32	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	A	802	G2O	MG-NA	10.62	2.31	2.06
9	A	826	G2O	MG-NC	10.42	2.31	2.06
9	A	827	G2O	MG-NC	10.10	2.30	2.06
9	A	827	G2O	C4B-NB	9.43	1.49	1.37
9	A	802	G2O	C4B-NB	9.37	1.49	1.37
8	A	801	GS0	MG-NC	9.15	2.28	2.06
9	a	801	G2O	C4B-NB	9.05	1.48	1.37
9	A	826	G2O	C4B-NB	8.40	1.48	1.37
9	A	826	G2O	C3D-C4D	8.15	1.47	1.40
9	A	827	G2O	C3D-C4D	8.04	1.47	1.40
9	A	802	G2O	C3D-C4D	8.00	1.47	1.40
9	a	801	G2O	C3D-C4D	7.59	1.47	1.40
11	C	301	F39	C35-C37	7.57	1.62	1.45
11	a	815	F39	C35-C37	7.37	1.61	1.45
11	A	815	F39	C35-C37	7.22	1.61	1.45
11	C	301	F39	C56-C58	7.19	1.61	1.45
11	a	815	F39	C56-C58	7.16	1.61	1.45
11	C	301	F39	C64-C62	7.06	1.61	1.45
11	A	815	F39	C56-C58	6.98	1.60	1.45
9	A	802	G2O	CAA-C2A	-6.97	1.41	1.54
9	A	826	G2O	CAA-C2A	-6.89	1.41	1.54
8	a	802	GS0	MG-NA	6.86	2.22	2.06
8	a	802	GS0	MG-ND	-6.75	1.92	2.05
9	A	827	G2O	CAA-C2A	-6.74	1.41	1.54
9	a	801	G2O	CAA-C2A	-6.68	1.41	1.54
11	A	815	F39	C64-C62	6.65	1.60	1.45
9	A	826	G2O	C1A-CHA	6.62	1.51	1.37
8	A	801	GS0	MG-NA	6.61	2.22	2.06
9	A	802	G2O	C1A-CHA	6.61	1.51	1.37
11	a	815	F39	C64-C62	6.60	1.60	1.45
9	A	827	G2O	C1A-CHA	6.54	1.51	1.37
9	a	801	G2O	C1A-CHA	6.45	1.50	1.37
11	C	301	F39	C41-C42	6.44	1.59	1.45
11	a	815	F39	C41-C42	6.43	1.59	1.45
8	A	801	GS0	MG-ND	-6.38	1.93	2.05
9	A	826	G2O	C1B-C2B	6.33	1.57	1.45
11	A	815	F39	C41-C42	6.33	1.59	1.45
9	a	801	G2O	C1B-C2B	6.22	1.57	1.45
9	A	802	G2O	C3B-C4B	6.19	1.57	1.46
9	A	827	G2O	C3B-C4B	6.19	1.57	1.46
9	a	801	G2O	C4C-NC	6.05	1.46	1.37
9	a	801	G2O	C3B-C4B	6.01	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	A	802	G2O	C1B-C2B	5.97	1.57	1.45
9	A	802	G2O	C4C-NC	5.95	1.46	1.37
9	A	827	G2O	C1B-C2B	5.94	1.57	1.45
9	A	826	G2O	C3B-C4B	5.93	1.56	1.46
11	a	815	F39	C46-C53	5.80	1.60	1.47
9	A	827	G2O	C4C-NC	5.78	1.46	1.37
11	C	301	F39	C46-C53	5.62	1.60	1.47
11	A	815	F39	C46-C53	5.55	1.59	1.47
9	A	826	G2O	C4C-NC	5.42	1.45	1.37
11	C	301	F39	C51-C44	5.34	1.60	1.43
11	C	301	F39	C57-C59	5.32	1.59	1.43
11	C	301	F39	C32-C27	5.30	1.59	1.43
11	C	301	F39	C63-C61	5.28	1.59	1.43
11	A	815	F39	C51-C44	5.27	1.59	1.43
11	a	815	F39	C32-C27	5.25	1.59	1.43
11	a	815	F39	C51-C44	5.22	1.59	1.43
11	C	301	F39	C40-C39	5.19	1.59	1.43
10	W	408[B]	BCL	C1B-NB	5.17	1.39	1.35
11	a	815	F39	C40-C39	5.15	1.59	1.43
11	A	815	F39	C32-C27	5.15	1.59	1.43
10	X	408[B]	BCL	C1B-NB	5.12	1.39	1.35
11	A	815	F39	C63-C61	5.10	1.59	1.43
11	A	815	F39	C40-C39	5.10	1.59	1.43
9	A	826	G2O	CMA-C3A	-5.06	1.42	1.53
10	Z	408[B]	BCL	C1B-NB	5.06	1.39	1.35
9	A	827	G2O	CHD-C4C	5.06	1.47	1.35
11	a	815	F39	C63-C61	5.04	1.59	1.43
9	A	802	G2O	CHD-C4C	5.03	1.47	1.35
10	U	407[B]	BCL	C1B-NB	5.03	1.39	1.35
10	a	804	BCL	C1B-NB	5.01	1.39	1.35
11	A	815	F39	C57-C59	5.01	1.59	1.43
9	a	801	G2O	CMA-C3A	-4.99	1.42	1.53
10	X	407[B]	BCL	C1B-NB	4.98	1.39	1.35
11	a	815	F39	C57-C59	4.96	1.58	1.43
10	A	814	BCL	C1B-NB	4.95	1.39	1.35
10	A	813	BCL	C1B-NB	4.95	1.39	1.35
10	V	409[B]	BCL	C1B-NB	4.94	1.39	1.35
9	A	826	G2O	CHD-C4C	4.94	1.47	1.35
10	V	401	BCL	C1B-NB	4.93	1.39	1.35
10	Y	403	BCL	C1B-NB	4.92	1.39	1.35
10	A	810	BCL	C1B-NB	4.92	1.39	1.35
9	A	802	G2O	CMA-C3A	-4.91	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	A	805	BCL	C1B-NB	4.91	1.39	1.35
9	A	827	G2O	CMA-C3A	-4.90	1.42	1.53
10	V	403	BCL	C1B-NB	4.90	1.39	1.35
10	U	402	BCL	C1B-NB	4.90	1.39	1.35
10	B	301	BCL	C1B-NB	4.88	1.39	1.35
10	A	803	BCL	C1B-NB	4.88	1.39	1.35
9	a	801	G2O	CHB-C1B	4.86	1.47	1.38
9	A	827	G2O	C3C-C2C	4.86	1.47	1.36
10	W	405	BCL	C1B-NB	4.84	1.39	1.35
9	A	826	G2O	CHB-C1B	4.83	1.47	1.38
9	a	801	G2O	CHD-C4C	4.82	1.47	1.35
10	A	809	BCL	C1B-NB	4.81	1.39	1.35
9	A	802	G2O	C3C-C2C	4.81	1.47	1.36
10	Y	401	BCL	C1B-NB	4.80	1.39	1.35
9	A	826	G2O	C3C-C2C	4.80	1.46	1.36
10	Z	407	BCL	C1B-NB	4.80	1.39	1.35
10	A	804	BCL	C1B-NB	4.78	1.39	1.35
10	Y	404	BCL	C1B-NB	4.78	1.39	1.35
10	X	406	BCL	C1B-NB	4.78	1.39	1.35
10	X	409	BCL	C1B-NB	4.78	1.39	1.35
9	a	801	G2O	C1C-C2C	4.76	1.53	1.44
10	Z	403	BCL	C1B-NB	4.75	1.39	1.35
10	X	403	BCL	C1B-NB	4.75	1.39	1.35
9	A	827	G2O	CHB-C1B	4.74	1.47	1.38
10	U	404	BCL	C1B-NB	4.74	1.39	1.35
10	W	406	BCL	C1B-NB	4.73	1.39	1.35
10	a	807	BCL	C1B-NB	4.73	1.39	1.35
10	A	807	BCL	C1B-NB	4.73	1.39	1.35
10	W	401	BCL	C1B-NB	4.73	1.39	1.35
10	X	402	BCL	C1B-NB	4.72	1.39	1.35
10	W	402	BCL	C1B-NB	4.71	1.39	1.35
11	C	301	F39	C14-C13	4.71	1.60	1.53
10	a	811	BCL	C1B-NB	4.71	1.39	1.35
10	a	810	BCL	C1B-NB	4.71	1.39	1.35
9	a	801	G2O	C3C-C2C	4.71	1.46	1.36
9	A	802	G2O	C1C-C2C	4.70	1.53	1.44
10	Y	408	BCL	C1B-NB	4.70	1.39	1.35
10	W	407	BCL	C1B-NB	4.68	1.39	1.35
9	A	827	G2O	C1C-C2C	4.67	1.53	1.44
10	U	406	BCL	C1B-NB	4.66	1.39	1.35
10	a	803	BCL	C1B-NB	4.66	1.39	1.35
10	V	404	BCL	C1B-NB	4.65	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	A	811	BCL	C1B-NB	4.65	1.39	1.35
10	V	408	BCL	C1B-NB	4.65	1.39	1.35
10	a	812	BCL	C1B-NB	4.64	1.39	1.35
10	Y	406	BCL	C1B-NB	4.64	1.39	1.35
10	V	406	BCL	C1B-NB	4.64	1.39	1.35
10	a	809	BCL	C1B-NB	4.63	1.39	1.35
10	X	401	BCL	C1B-NB	4.63	1.39	1.35
10	Z	406	BCL	C1B-NB	4.63	1.39	1.35
10	X	404	BCL	C1B-NB	4.63	1.39	1.35
10	a	813	BCL	C1B-NB	4.62	1.39	1.35
10	a	805	BCL	C1B-NB	4.62	1.39	1.35
10	a	814	BCL	C1B-NB	4.61	1.39	1.35
10	W	404	BCL	C1B-NB	4.61	1.39	1.35
10	Z	402	BCL	C1B-NB	4.60	1.39	1.35
9	A	802	G2O	CHB-C1B	4.60	1.47	1.38
10	X	405	BCL	C1B-NB	4.60	1.39	1.35
10	a	808	BCL	C1B-NB	4.60	1.39	1.35
10	U	403	BCL	C1B-NB	4.60	1.39	1.35
10	W	403	BCL	C1B-NB	4.57	1.39	1.35
10	Z	405	BCL	C1B-NB	4.56	1.39	1.35
10	Z	404	BCL	C1B-NB	4.55	1.39	1.35
10	Y	407	BCL	C1B-NB	4.55	1.39	1.35
10	U	405	BCL	C1B-NB	4.54	1.39	1.35
11	C	301	F39	C19-C20	4.52	1.60	1.51
10	V	402	BCL	C1B-NB	4.52	1.39	1.35
10	Y	405	BCL	C1B-NB	4.51	1.39	1.35
10	Y	402	BCL	MG-NA	4.50	2.17	2.06
10	A	812	BCL	C1B-NB	4.49	1.39	1.35
10	A	808	BCL	C1B-NB	4.47	1.39	1.35
11	a	815	F39	C14-C13	4.47	1.60	1.53
10	W	401	BCL	MG-NA	4.44	2.16	2.06
10	a	806	BCL	C1B-NB	4.43	1.39	1.35
10	X	405	BCL	MG-NA	4.43	2.16	2.06
10	V	407	BCL	C1B-NB	4.43	1.39	1.35
10	Y	402	BCL	C1B-NB	4.43	1.39	1.35
10	U	401	BCL	C1B-NB	4.43	1.39	1.35
10	U	401	BCL	MG-NA	4.42	2.16	2.06
10	V	402	BCL	MG-NA	4.41	2.16	2.06
9	A	826	G2O	CHC-C1C	4.41	1.49	1.39
10	X	401	BCL	MG-NA	4.40	2.16	2.06
10	V	407	BCL	MG-NA	4.40	2.16	2.06
8	A	801	GS0	O1D-CGD	-4.40	1.10	1.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	A	802	G2O	CBD-CGD	-4.39	1.38	1.52
9	A	827	G2O	CHC-C1C	4.38	1.49	1.39
9	a	801	G2O	CBD-CGD	-4.38	1.38	1.52
10	a	813	BCL	MG-NA	4.36	2.16	2.06
10	Y	408	BCL	MG-NA	4.35	2.16	2.06
10	Z	408[B]	BCL	MG-NA	4.34	2.16	2.06
10	A	806	BCL	C1B-NB	4.33	1.39	1.35
9	A	826	G2O	CBD-CGD	-4.33	1.38	1.52
9	A	802	G2O	CHC-C1C	4.33	1.49	1.39
10	V	405	BCL	C1B-NB	4.32	1.39	1.35
9	A	827	G2O	OBD-CAD	4.32	1.28	1.22
10	V	401	BCL	MG-NA	4.32	2.16	2.06
9	A	827	G2O	CBD-CGD	-4.32	1.38	1.52
10	B	301	BCL	MG-NA	4.32	2.16	2.06
10	W	406	BCL	MG-NA	4.31	2.16	2.06
9	a	801	G2O	CHC-C1C	4.31	1.49	1.39
10	U	406	BCL	MG-NA	4.31	2.16	2.06
10	W	403	BCL	MG-NA	4.31	2.16	2.06
10	X	406	BCL	MG-NA	4.29	2.16	2.06
8	A	801	GS0	OBD-CAD	4.29	1.29	1.22
10	U	407[B]	BCL	MG-NA	4.29	2.16	2.06
9	A	826	G2O	C1C-C2C	4.29	1.52	1.44
10	Y	406	BCL	MG-NA	4.28	2.16	2.06
10	V	404	BCL	MG-NA	4.26	2.16	2.06
10	A	808	BCL	MG-NA	4.24	2.16	2.06
9	A	802	G2O	OBD-CAD	4.24	1.28	1.22
10	V	409[B]	BCL	MG-NA	4.24	2.16	2.06
8	a	802	GS0	O1D-CGD	-4.23	1.10	1.21
11	a	815	F39	C19-C20	4.23	1.60	1.51
10	V	408	BCL	MG-NA	4.23	2.16	2.06
10	Z	407	BCL	MG-NA	4.23	2.16	2.06
10	V	403	BCL	MG-NA	4.22	2.16	2.06
10	X	402	BCL	MG-NA	4.22	2.16	2.06
8	a	802	GS0	OBD-CAD	4.22	1.29	1.22
10	V	406	BCL	MG-NA	4.22	2.16	2.06
10	a	808	BCL	MG-NA	4.21	2.16	2.06
10	X	407[B]	BCL	MG-NA	4.21	2.16	2.06
10	Y	404	BCL	MG-NA	4.20	2.16	2.06
9	a	801	G2O	O2D-CGD	4.20	1.43	1.33
10	Z	402	BCL	MG-NA	4.20	2.16	2.06
10	A	812	BCL	MG-NA	4.19	2.16	2.06
10	A	809	BCL	MG-NA	4.19	2.16	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	W	402	BCL	MG-NA	4.19	2.16	2.06
10	U	405	BCL	MG-NA	4.18	2.16	2.06
10	X	408[B]	BCL	MG-NA	4.18	2.16	2.06
8	a	802	GS0	C4D-ND	-4.18	1.32	1.37
10	Z	403	BCL	MG-NA	4.17	2.16	2.06
11	A	815	F39	C19-C20	4.16	1.59	1.51
10	Y	401	BCL	MG-NA	4.15	2.16	2.06
9	A	826	G2O	OBD-CAD	4.15	1.28	1.22
10	U	404	BCL	MG-NA	4.14	2.16	2.06
10	W	408[B]	BCL	MG-NA	4.14	2.16	2.06
10	Z	405	BCL	MG-NA	4.12	2.16	2.06
10	W	407	BCL	MG-NA	4.12	2.16	2.06
10	a	812	BCL	MG-NA	4.12	2.16	2.06
10	X	409	BCL	MG-NA	4.12	2.16	2.06
9	A	826	G2O	O2D-CGD	4.10	1.43	1.33
10	A	810	BCL	MG-NA	4.10	2.16	2.06
10	W	405	BCL	MG-NA	4.09	2.16	2.06
10	a	804	BCL	MG-NA	4.08	2.16	2.06
10	a	805	BCL	MG-NA	4.08	2.16	2.06
9	A	827	G2O	O2D-CGD	4.08	1.43	1.33
10	X	404	BCL	MG-NA	4.07	2.15	2.06
10	X	403	BCL	MG-NA	4.06	2.15	2.06
10	A	814	BCL	MG-NA	4.06	2.15	2.06
10	Y	403	BCL	MG-NA	4.06	2.15	2.06
10	W	404	BCL	MG-NA	4.05	2.15	2.06
10	Y	407	BCL	MG-NA	4.05	2.15	2.06
11	A	815	F39	C14-C13	4.03	1.59	1.53
10	Z	406	BCL	MG-NA	4.03	2.15	2.06
10	A	807	BCL	MG-NA	4.03	2.15	2.06
10	a	809	BCL	MG-NA	4.02	2.15	2.06
10	A	804	BCL	MG-NA	4.02	2.15	2.06
8	A	801	GS0	C4D-ND	-4.01	1.32	1.37
10	a	807	BCL	MG-NA	4.01	2.15	2.06
10	U	402	BCL	MG-NA	4.01	2.15	2.06
10	a	814	BCL	MG-NA	3.99	2.15	2.06
9	A	802	G2O	C4C-C3C	3.99	1.51	1.45
10	A	805	BCL	MG-NA	3.99	2.15	2.06
10	U	403	BCL	MG-NA	3.97	2.15	2.06
10	a	810	BCL	MG-NA	3.96	2.15	2.06
10	Y	405	BCL	MG-NA	3.94	2.15	2.06
9	A	826	G2O	C3B-C2B	3.94	1.45	1.37
10	V	405	BCL	MG-NA	3.93	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	A	806	BCL	MG-NA	3.93	2.15	2.06
9	A	827	G2O	C4C-C3C	3.92	1.51	1.45
10	Z	404	BCL	MG-NA	3.89	2.15	2.06
9	A	802	G2O	O2D-CGD	3.87	1.42	1.33
10	A	813	BCL	MG-NA	3.87	2.15	2.06
10	A	803	BCL	MG-NA	3.87	2.15	2.06
9	a	801	G2O	C3B-C2B	3.87	1.45	1.37
9	A	826	G2O	O2A-CGA	3.86	1.44	1.33
10	a	806	BCL	MG-NA	3.86	2.15	2.06
9	A	827	G2O	O2A-CGA	3.86	1.44	1.33
9	a	801	G2O	O2A-CGA	3.83	1.44	1.33
9	A	802	G2O	C3D-C2D	3.81	1.46	1.39
10	a	811	BCL	MG-NA	3.81	2.15	2.06
10	A	811	BCL	MG-NA	3.81	2.15	2.06
9	A	826	G2O	CHB-C4A	3.80	1.50	1.39
9	A	802	G2O	O2A-CGA	3.79	1.44	1.33
9	a	801	G2O	C4C-C3C	3.78	1.51	1.45
9	A	827	G2O	C3D-C2D	3.78	1.46	1.39
9	A	827	G2O	C3B-C2B	3.77	1.44	1.37
9	A	826	G2O	C3D-C2D	3.77	1.46	1.39
10	a	803	BCL	MG-NA	3.76	2.15	2.06
9	A	802	G2O	C4D-CHA	3.73	1.49	1.45
9	A	826	G2O	C4C-C3C	3.70	1.51	1.45
9	a	801	G2O	C4D-CHA	3.68	1.49	1.45
9	a	801	G2O	CHB-C4A	3.66	1.49	1.39
9	A	802	G2O	C3B-C2B	3.64	1.44	1.37
9	A	827	G2O	CHB-C4A	3.64	1.49	1.39
12	A	816	F26	C35-C34	3.58	1.53	1.45
9	a	801	G2O	OBD-CAD	3.58	1.27	1.22
9	A	802	G2O	CHB-C4A	3.55	1.49	1.39
12	A	816	F26	C25-C26	3.53	1.53	1.45
9	A	826	G2O	C2-C3	3.51	1.41	1.33
9	A	827	G2O	O1D-CGD	3.48	1.29	1.21
9	A	827	G2O	C4D-ND	3.46	1.38	1.35
9	A	826	G2O	O1D-CGD	3.45	1.29	1.21
9	A	802	G2O	O1D-CGD	3.44	1.29	1.21
8	a	802	GS0	O2D-CED	3.42	1.53	1.45
12	a	817	F26	C35-C34	3.41	1.53	1.45
12	A	816	F26	C28-C31	3.41	1.53	1.45
12	a	817	F26	C25-C26	3.40	1.53	1.45
9	a	801	G2O	C3D-C2D	3.40	1.45	1.39
9	A	827	G2O	C4D-CHA	3.38	1.49	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	a	801	G2O	O1D-CGD	3.38	1.29	1.21
12	a	817	F26	C28-C31	3.34	1.53	1.45
12	a	817	F26	C15-C19	3.34	1.53	1.45
9	A	802	G2O	C4D-ND	3.32	1.38	1.35
9	a	801	G2O	C2-C3	3.32	1.40	1.33
8	A	801	GS0	O2D-CED	3.32	1.53	1.45
12	a	816	F26	C15-C19	3.28	1.53	1.45
9	A	802	G2O	C2-C3	3.27	1.40	1.33
12	a	816	F26	C28-C31	3.27	1.53	1.45
9	A	827	G2O	C2-C3	3.27	1.40	1.33
12	A	816	F26	C15-C19	3.25	1.52	1.45
12	a	816	F26	C25-C26	3.24	1.52	1.45
9	A	826	G2O	C4D-CHA	3.24	1.49	1.45
12	a	816	F26	C35-C34	3.23	1.52	1.45
8	a	802	GS0	O2D-CGD	-3.11	1.25	1.33
12	A	816	F26	C32-C30	3.03	1.52	1.43
8	a	802	GS0	O2A-CGA	-2.99	1.24	1.33
9	A	826	G2O	C4D-ND	2.98	1.37	1.35
8	A	801	GS0	O2D-CGD	-2.98	1.25	1.33
8	A	801	GS0	O2A-CGA	-2.97	1.24	1.33
12	A	816	F26	C22-C18	2.96	1.52	1.43
12	A	816	F26	C27-C24	2.95	1.52	1.43
12	a	817	F26	C32-C30	2.95	1.52	1.43
12	A	816	F26	C39-C37	2.93	1.52	1.43
12	A	816	F26	C38-C33	2.89	1.52	1.43
12	a	817	F26	C39-C37	2.89	1.52	1.43
12	a	816	F26	C27-C24	2.89	1.52	1.43
8	A	801	GS0	O1A-CGA	-2.87	1.14	1.22
12	a	817	F26	C38-C33	2.87	1.52	1.43
9	A	827	G2O	C5-C3	2.87	1.58	1.51
9	A	827	G2O	C5-C6	2.86	1.59	1.50
12	a	816	F26	C32-C30	2.86	1.52	1.43
8	a	802	GS0	O1A-CGA	-2.84	1.14	1.22
12	a	816	F26	C39-C37	2.83	1.52	1.43
9	A	826	G2O	C5-C6	2.83	1.59	1.50
9	a	801	G2O	C5-C6	2.81	1.59	1.50
12	a	817	F26	C22-C18	2.81	1.52	1.43
9	a	801	G2O	C4D-ND	2.81	1.37	1.35
12	a	816	F26	C38-C33	2.81	1.52	1.43
12	a	817	F26	C27-C24	2.81	1.52	1.43
12	a	817	F26	C8-C13	2.81	1.57	1.51
9	A	802	G2O	C5-C6	2.81	1.59	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	a	802	GS0	C1D-C2D	-2.80	1.39	1.45
12	a	816	F26	C22-C18	2.78	1.52	1.43
9	a	801	G2O	C5-C3	2.78	1.58	1.51
11	C	301	F39	C11-C9	2.76	1.60	1.52
9	A	802	G2O	C5-C3	2.75	1.58	1.51
12	A	816	F26	C8-C13	2.72	1.56	1.51
9	A	802	G2O	C3A-C2A	-2.70	1.46	1.54
9	A	826	G2O	C5-C3	2.68	1.58	1.51
9	A	827	G2O	C3A-C2A	-2.67	1.47	1.54
9	A	826	G2O	C3A-C2A	-2.66	1.47	1.54
9	A	802	G2O	O1A-CGA	2.63	1.30	1.22
9	a	801	G2O	C1B-NB	2.61	1.41	1.37
9	A	827	G2O	O1A-CGA	2.58	1.30	1.22
9	a	801	G2O	CBA-CGA	2.57	1.58	1.50
11	a	815	F39	C46-C48	2.56	1.44	1.41
9	A	826	G2O	O1A-CGA	2.56	1.30	1.22
9	A	802	G2O	C1B-NB	2.54	1.40	1.37
8	A	801	GS0	C1D-C2D	-2.53	1.40	1.45
9	a	801	G2O	O1A-CGA	2.51	1.30	1.22
9	A	827	G2O	CBA-CGA	2.50	1.58	1.50
9	A	802	G2O	CBA-CGA	2.50	1.58	1.50
9	A	826	G2O	C1-C2	2.49	1.56	1.49
9	A	827	G2O	C1-C2	2.48	1.56	1.49
11	C	301	F39	O6-C21	2.48	1.40	1.33
9	a	801	G2O	C3A-C2A	-2.48	1.47	1.54
9	A	826	G2O	CBA-CGA	2.46	1.57	1.50
10	A	814	BCL	C4B-NB	2.46	1.37	1.35
11	C	301	F39	C23-C22	2.44	1.61	1.52
9	a	801	G2O	O2D-CED	2.42	1.51	1.45
10	A	806	BCL	C3B-CAB	-2.42	1.42	1.49
13	A	818	LHG	O7-C5	-2.41	1.40	1.46
11	C	301	F39	C46-C48	2.41	1.44	1.41
8	a	802	GS0	C4B-NB	2.40	1.37	1.35
11	A	815	F39	C46-C48	2.40	1.44	1.41
9	A	802	G2O	C1-C2	2.40	1.56	1.49
9	a	801	G2O	C1-C2	2.39	1.56	1.49
11	a	815	F39	O6-C21	2.37	1.40	1.33
11	a	815	F39	C50-C49	2.37	1.43	1.38
11	a	815	F39	C23-C22	2.37	1.60	1.52
10	A	805	BCL	C3D-CAD	-2.36	1.40	1.46
11	C	301	F39	C50-C49	2.36	1.43	1.38
9	A	827	G2O	C1B-NB	2.35	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	A	815	F39	C50-C49	2.35	1.43	1.38
10	W	408[B]	BCL	C4B-NB	2.31	1.37	1.35
10	U	407[B]	BCL	MG-NC	2.30	2.11	2.06
11	A	815	F39	O6-C21	2.30	1.40	1.33
9	A	826	G2O	C4-C3	2.29	1.56	1.50
10	a	809	BCL	C2A-C1A	-2.29	1.47	1.52
10	a	811	BCL	C2A-C1A	-2.28	1.47	1.52
9	a	801	G2O	C4-C3	2.27	1.56	1.50
10	X	408[B]	BCL	C4B-NB	2.27	1.37	1.35
9	A	827	G2O	C4-C3	2.26	1.56	1.50
9	A	802	G2O	C4-C3	2.25	1.56	1.50
11	A	815	F39	C23-C22	2.25	1.60	1.52
10	U	406	BCL	MG-NC	2.23	2.11	2.06
13	A	819	LHG	O7-C5	-2.23	1.41	1.46
13	A	817	LHG	O7-C5	-2.22	1.41	1.46
10	A	810	BCL	OBD-CAD	2.22	1.25	1.22
10	W	405	BCL	OBD-CAD	2.21	1.25	1.22
10	Y	404	BCL	OBD-CAD	2.21	1.25	1.22
10	A	812	BCL	OBD-CAD	2.20	1.25	1.22
14	A	820	LMG	O6-C5	-2.20	1.39	1.44
10	W	402	BCL	OBD-CAD	2.18	1.25	1.22
12	a	816	F26	C8-C13	2.18	1.55	1.51
10	a	805	BCL	C3D-CAD	-2.18	1.40	1.46
9	A	827	G2O	CAA-CBA	2.17	1.59	1.52
10	a	806	BCL	MG-NC	2.16	2.11	2.06
9	A	826	G2O	C1B-NB	2.16	1.40	1.37
10	Z	408[B]	BCL	C4B-NB	2.16	1.37	1.35
10	A	811	BCL	C2A-C1A	-2.16	1.47	1.52
10	W	406	BCL	OBD-CAD	2.15	1.25	1.22
10	A	803	BCL	C3B-CAB	-2.15	1.43	1.49
10	A	813	BCL	CBD-CGD	-2.14	1.45	1.52
10	A	805	BCL	CBD-CGD	-2.14	1.45	1.52
9	A	827	G2O	C7-C6	2.14	1.40	1.31
10	V	404	BCL	C4B-NB	2.14	1.37	1.35
9	A	826	G2O	CAA-CBA	2.14	1.59	1.52
9	a	801	G2O	C7-C6	2.13	1.40	1.31
10	U	403	BCL	C4B-NB	2.13	1.37	1.35
9	A	802	G2O	CAA-CBA	2.13	1.59	1.52
10	X	408[B]	BCL	MG-NC	2.13	2.11	2.06
11	a	815	F39	C18-C19	2.12	1.60	1.52
11	a	815	F39	C47-C45	2.12	1.44	1.40
10	U	407[B]	BCL	OBD-CAD	2.12	1.25	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	V	401	BCL	MG-NC	2.12	2.11	2.06
10	Z	408[B]	BCL	MG-NC	2.12	2.11	2.06
8	A	801	GS0	C4B-NB	2.12	1.37	1.35
10	a	812	BCL	C4B-NB	2.12	1.37	1.35
10	A	811	BCL	C3B-CAB	-2.11	1.43	1.49
10	A	812	BCL	C4B-NB	2.11	1.37	1.35
10	a	807	BCL	OBD-CAD	2.11	1.25	1.22
10	V	409[B]	BCL	C4B-NB	2.11	1.37	1.35
9	a	801	G2O	CAA-CBA	2.11	1.59	1.52
11	C	301	F39	C47-C45	2.11	1.44	1.40
10	a	810	BCL	C3B-CAB	-2.11	1.43	1.49
10	Z	403	BCL	OBD-CAD	2.11	1.25	1.22
10	A	809	BCL	C4B-NB	2.11	1.37	1.35
10	X	409	BCL	MG-NC	2.10	2.11	2.06
9	A	802	G2O	C7-C6	2.10	1.40	1.31
8	a	802	GS0	C1B-NB	2.10	1.37	1.35
10	U	405	BCL	OBD-CAD	2.09	1.25	1.22
10	a	813	BCL	MG-NC	2.09	2.11	2.06
11	A	815	F39	C38-C37	2.09	1.55	1.50
10	a	803	BCL	OBD-CAD	2.09	1.25	1.22
10	X	401	BCL	OBD-CAD	2.09	1.25	1.22
11	C	301	F39	C18-C19	2.09	1.59	1.52
9	A	827	G2O	O2D-CED	2.09	1.50	1.45
9	A	826	G2O	C7-C6	2.08	1.40	1.31
10	W	408[B]	BCL	MG-NC	2.08	2.11	2.06
10	V	403	BCL	MG-NC	2.08	2.11	2.06
11	a	815	F39	C38-C37	2.08	1.55	1.50
10	X	406	BCL	MG-NC	2.08	2.11	2.06
10	V	405	BCL	OBD-CAD	2.08	1.25	1.22
8	a	802	GS0	C3B-C2B	-2.08	1.35	1.39
10	a	808	BCL	OBD-CAD	2.08	1.25	1.22
8	A	801	GS0	C3D-C2D	-2.08	1.33	1.39
10	Y	402	BCL	OBD-CAD	2.07	1.25	1.22
10	Z	408[B]	BCL	OBD-CAD	2.07	1.25	1.22
10	Z	404	BCL	OBD-CAD	2.07	1.25	1.22
10	V	401	BCL	C4B-NB	2.07	1.37	1.35
10	X	407[B]	BCL	C4B-NB	2.06	1.37	1.35
10	W	401	BCL	MG-NC	2.06	2.11	2.06
10	Z	405	BCL	OBD-CAD	2.06	1.25	1.22
10	V	402	BCL	MG-NC	2.06	2.11	2.06
10	W	401	BCL	OBD-CAD	2.06	1.25	1.22
11	A	815	F39	C47-C45	2.05	1.44	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	A	809	BCL	MG-NC	2.05	2.11	2.06
13	a	821	LHG	O7-C5	-2.05	1.41	1.46
10	V	404	BCL	OBD-CAD	2.05	1.25	1.22
10	X	409	BCL	OBD-CAD	2.05	1.25	1.22
11	A	815	F39	C18-C19	2.05	1.59	1.52
10	V	407	BCL	OBD-CAD	2.05	1.25	1.22
10	X	404	BCL	OBD-CAD	2.04	1.25	1.22
10	V	409[B]	BCL	MG-NC	2.04	2.11	2.06
10	V	402	BCL	OBD-CAD	2.04	1.25	1.22
10	X	402	BCL	MG-NC	2.03	2.11	2.06
10	Y	403	BCL	MG-NC	2.03	2.11	2.06
10	A	811	BCL	OBD-CAD	2.03	1.25	1.22
10	Y	407	BCL	OBD-CAD	2.03	1.25	1.22
11	A	815	F39	C11-C9	2.03	1.58	1.52
10	A	807	BCL	MG-NC	2.03	2.11	2.06
10	A	807	BCL	OBD-CAD	2.03	1.25	1.22
10	X	406	BCL	OBD-CAD	2.03	1.25	1.22
11	C	301	F39	C38-C37	2.03	1.55	1.50
10	A	808	BCL	OBD-CAD	2.03	1.25	1.22
10	X	408[B]	BCL	OBD-CAD	2.03	1.25	1.22
10	X	403	BCL	OBD-CAD	2.02	1.25	1.22
10	A	804	BCL	OBD-CAD	2.02	1.25	1.22
10	Y	403	BCL	OBD-CAD	2.02	1.25	1.22
10	X	407[B]	BCL	OBD-CAD	2.02	1.25	1.22
10	A	813	BCL	C3B-CAB	-2.02	1.43	1.49
10	B	301	BCL	MG-NC	2.02	2.11	2.06
10	X	402	BCL	OBD-CAD	2.02	1.25	1.22
10	a	812	BCL	OBD-CAD	2.02	1.25	1.22
10	Y	404	BCL	MG-NC	2.02	2.11	2.06
9	A	802	G2O	CBB-CAB	2.01	1.40	1.30
9	a	801	G2O	CBB-CAB	2.01	1.40	1.30
10	W	405	BCL	MG-NC	2.01	2.11	2.06
10	a	809	BCL	C4B-NB	2.01	1.37	1.35
10	Z	407	BCL	MG-NC	2.01	2.11	2.06
10	U	403	BCL	OBD-CAD	2.01	1.25	1.22
10	X	406	BCL	C4B-NB	2.01	1.37	1.35
10	U	407[B]	BCL	C4B-NB	2.01	1.37	1.35
9	A	827	G2O	CBB-CAB	2.01	1.40	1.30
10	U	406	BCL	OBD-CAD	2.01	1.25	1.22
10	a	804	BCL	C4B-NB	2.00	1.37	1.35
11	C	301	F39	C46-C45	2.00	1.43	1.41

All (1167) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	A	826	G2O	C1A-NA-C4A	19.49	115.47	106.71
9	A	802	G2O	C1A-NA-C4A	18.88	115.20	106.71
9	a	801	G2O	C1A-NA-C4A	18.59	115.06	106.71
9	A	827	G2O	C1A-NA-C4A	17.92	114.76	106.71
8	A	801	GS0	C4A-NA-C1A	13.46	112.76	106.71
8	a	802	GS0	C4A-NA-C1A	12.85	112.48	106.71
8	a	802	GS0	C1C-NC-C4C	8.45	110.51	106.71
8	A	801	GS0	C1C-NC-C4C	7.94	110.28	106.71
10	A	812	BCL	C1-C2-C3	-7.36	113.31	126.04
8	a	802	GS0	C4D-CHA-C1A	7.32	130.15	121.25
8	A	801	GS0	C4D-CHA-C1A	7.17	129.98	121.25
9	A	827	G2O	C5-C6-C7	-7.03	109.09	125.05
9	A	802	G2O	C5-C6-C7	-7.01	109.14	125.05
12	A	816	F26	C38-C33-C31	-6.99	117.34	127.31
8	A	801	GS0	CMB-C2B-C1B	-6.98	117.74	128.46
9	a	801	G2O	C5-C6-C7	-6.97	109.22	125.05
9	A	826	G2O	C5-C6-C7	-6.96	109.24	125.05
10	A	807	BCL	CAD-C3D-C4D	-6.56	104.81	108.47
8	a	802	GS0	CMB-C2B-C1B	-6.20	118.94	128.46
8	A	801	GS0	O2D-CGD-O1D	-6.00	112.11	123.84
12	a	816	F26	C38-C33-C31	-5.73	119.13	127.31
9	A	802	G2O	CMA-C3A-C4A	5.70	127.10	111.77
9	A	827	G2O	CMA-C3A-C4A	5.65	126.97	111.77
11	a	815	F39	C57-C59-C62	-5.61	119.31	127.31
10	A	806	BCL	CAD-C3D-C4D	-5.59	105.35	108.47
11	a	815	F39	C51-C44-C42	-5.56	119.38	127.31
11	a	815	F39	C11-O1-C12	5.51	124.51	113.69
12	a	817	F26	C23-C19-C15	-5.44	109.50	118.08
9	A	826	G2O	CMA-C3A-C4A	5.44	126.39	111.77
12	a	816	F26	C23-C19-C15	-5.41	109.55	118.08
9	a	801	G2O	CMA-C3A-C4A	5.27	125.94	111.77
11	A	815	F39	C40-C39-C37	-5.26	119.81	127.31
9	a	801	G2O	CAA-C2A-C3A	5.24	127.13	112.78
11	C	301	F39	C25-C20-C27	-5.24	109.07	122.59
11	C	301	F39	C63-C61-C58	-5.24	119.83	127.31
10	a	805	BCL	CAD-C3D-C4D	-5.23	105.55	108.47
8	A	801	GS0	C2A-C1A-CHA	5.22	133.00	123.86
11	A	815	F39	C25-C20-C27	-5.22	109.11	122.59
11	a	815	F39	C25-C20-C27	-5.21	109.15	122.59
10	a	806	BCL	CAD-C3D-C4D	-5.20	105.57	108.47
10	A	806	BCL	C4A-NA-C1A	5.14	109.02	106.71
10	a	806	BCL	C4A-NA-C1A	5.14	109.02	106.71
11	A	815	F39	C11-O1-C12	5.13	123.76	113.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	a	815	F39	C63-C61-C58	-5.11	120.02	127.31
10	W	401	BCL	C1-C2-C3	-5.08	117.25	126.04
12	A	816	F26	C32-C30-C26	-5.08	120.06	127.31
11	a	815	F39	C40-C39-C37	-5.08	120.06	127.31
9	A	826	G2O	CHB-C4A-NA	5.08	130.72	125.08
8	a	802	GS0	O2D-CGD-O1D	-5.07	113.92	123.84
10	A	813	BCL	CAD-C3D-C4D	-5.07	105.64	108.47
8	a	802	GS0	C2A-C1A-CHA	5.04	132.67	123.86
9	A	802	G2O	CAA-C2A-C1A	5.03	128.45	111.97
12	a	817	F26	C32-C30-C26	-5.02	120.14	127.31
9	A	827	G2O	CAA-C2A-C1A	5.02	128.43	111.97
11	A	815	F39	C57-C59-C62	-5.02	120.14	127.31
9	A	826	G2O	CAA-C2A-C1A	5.01	128.40	111.97
10	a	803	BCL	CAD-C3D-C4D	-5.01	105.68	108.47
10	a	813	BCL	CAD-C3D-C4D	-4.99	105.69	108.47
11	A	815	F39	C63-C61-C58	-4.99	120.19	127.31
10	Y	406	BCL	CAD-C3D-C4D	-4.99	105.69	108.47
11	A	815	F39	C51-C44-C42	-4.97	120.22	127.31
10	X	405	BCL	C4A-NA-C1A	4.95	108.93	106.71
8	A	801	GS0	O2D-CGD-CBD	4.95	120.06	111.27
9	A	827	G2O	CAA-C2A-C3A	4.92	126.24	112.78
10	U	404	BCL	CAD-C3D-C4D	-4.91	105.73	108.47
10	A	811	BCL	CAD-C3D-C4D	-4.91	105.73	108.47
8	A	801	GS0	CAC-C3C-C2C	-4.89	102.03	114.26
9	A	827	G2O	CHB-C4A-NA	4.89	130.50	125.08
9	A	826	G2O	CAA-C2A-C3A	4.88	126.13	112.78
12	A	816	F26	C23-C19-C15	-4.84	110.45	118.08
11	C	301	F39	C40-C39-C37	-4.83	120.41	127.31
9	a	801	G2O	CAA-C2A-C1A	4.82	127.75	111.97
10	Z	405	BCL	CAD-C3D-C4D	-4.80	105.80	108.47
12	a	817	F26	C38-C33-C31	-4.79	120.47	127.31
12	a	817	F26	C27-C24-C19	-4.78	120.48	127.31
11	C	301	F39	C57-C59-C62	-4.77	120.50	127.31
10	Y	402	BCL	CAD-C3D-C4D	-4.77	105.81	108.47
10	Z	402	BCL	CAD-C3D-C4D	-4.73	105.83	108.47
10	U	404	BCL	C1-C2-C3	-4.72	117.87	126.04
10	Y	405	BCL	CAD-C3D-C4D	-4.71	105.84	108.47
10	A	811	BCL	CMB-C2B-C1B	-4.71	121.22	128.46
8	A	801	GS0	CMA-C3A-C4A	-4.71	99.12	111.77
9	A	802	G2O	CAA-C2A-C3A	4.71	125.67	112.78
10	A	809	BCL	CAD-C3D-C4D	-4.69	105.85	108.47
9	A	826	G2O	C2B-C1B-NB	-4.67	106.66	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	Y	404	BCL	C4A-NA-C1A	4.67	108.81	106.71
11	C	301	F39	C51-C44-C42	-4.67	120.65	127.31
12	a	817	F26	C39-C37-C34	-4.64	120.69	127.31
12	a	816	F26	C27-C24-C19	-4.64	120.69	127.31
10	a	808	BCL	CAD-C3D-C4D	-4.63	105.89	108.47
10	Z	408[B]	BCL	CAD-C3D-C4D	-4.61	105.90	108.47
12	A	816	F26	C39-C37-C34	-4.60	120.74	127.31
11	A	815	F39	O6-C21-C22	4.59	126.31	111.91
10	X	402	BCL	C4A-NA-C1A	4.58	108.76	106.71
10	a	803	BCL	C1C-NC-C4C	4.53	108.74	106.71
10	A	804	BCL	CAD-C3D-C4D	-4.51	105.96	108.47
10	U	401	BCL	C4-C3-C5	-4.49	107.71	115.27
10	Y	407	BCL	CAD-C3D-C4D	-4.49	105.97	108.47
10	Z	402	BCL	C4A-NA-C1A	4.48	108.72	106.71
8	A	801	GS0	CMB-C2B-C3B	4.46	133.03	124.68
10	V	406	BCL	CAD-C3D-C4D	-4.46	105.98	108.47
11	a	815	F39	O6-C21-C22	4.45	125.88	111.91
10	Z	404	BCL	CMB-C2B-C1B	-4.44	121.64	128.46
9	A	826	G2O	C2C-C1C-NC	-4.42	105.75	110.57
10	W	402	BCL	CAD-C3D-C4D	-4.42	106.01	108.47
10	V	405	BCL	C4A-NA-C1A	4.41	108.69	106.71
12	A	816	F26	C27-C24-C19	-4.39	121.05	127.31
9	A	802	G2O	CHB-C4A-NA	4.36	129.92	125.08
10	A	812	BCL	C4A-NA-C1A	4.36	108.67	106.71
8	a	802	GS0	O2D-CGD-CBD	4.36	119.01	111.27
10	U	407[B]	BCL	CAD-C3D-C4D	-4.35	106.04	108.47
10	Z	402	BCL	C4-C3-C5	-4.35	107.95	115.27
10	A	808	BCL	CAD-C3D-C4D	-4.34	106.05	108.47
10	V	401	BCL	C1-C2-C3	-4.32	118.57	126.04
10	V	401	BCL	CAD-C3D-C4D	-4.32	106.06	108.47
10	W	403	BCL	CAD-C3D-C4D	-4.32	106.06	108.47
10	a	814	BCL	C4-C3-C5	-4.32	108.01	115.27
11	C	301	F39	O6-C21-C22	4.30	125.39	111.91
10	a	814	BCL	C1C-NC-C4C	4.29	108.63	106.71
10	Z	403	BCL	CAD-C3D-C4D	-4.27	106.09	108.47
10	A	810	BCL	C1-C2-C3	-4.26	118.67	126.04
10	V	407	BCL	CMB-C2B-C1B	-4.26	121.92	128.46
10	A	810	BCL	C1C-NC-C4C	4.24	108.61	106.71
10	U	405	BCL	CAD-C3D-C4D	-4.24	106.11	108.47
10	V	404	BCL	CAD-C3D-C4D	-4.23	106.11	108.47
10	V	406	BCL	C4A-NA-C1A	4.22	108.60	106.71
9	A	826	G2O	C3C-C4C-NC	-4.22	105.91	109.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	a	804	BCL	C1C-NC-C4C	4.22	108.60	106.71
10	Y	404	BCL	C1-C2-C3	-4.21	118.76	126.04
10	a	807	BCL	C4-C3-C5	-4.21	108.19	115.27
10	X	402	BCL	CAD-C3D-C4D	-4.20	106.13	108.47
10	W	406	BCL	CAD-C3D-C4D	-4.19	106.13	108.47
12	a	816	F26	C39-C37-C34	-4.19	121.33	127.31
10	Z	406	BCL	C4A-NA-C1A	4.18	108.59	106.71
10	X	407[B]	BCL	CAD-C3D-C4D	-4.18	106.14	108.47
10	B	301	BCL	CMB-C2B-C1B	-4.18	122.04	128.46
10	X	401	BCL	CAD-C3D-C4D	-4.17	106.14	108.47
12	a	816	F26	C32-C30-C26	-4.17	121.36	127.31
10	A	805	BCL	CAD-C3D-C4D	-4.16	106.15	108.47
10	V	408	BCL	CAD-C3D-C4D	-4.15	106.16	108.47
10	Z	407	BCL	C4A-NA-C1A	4.13	108.56	106.71
12	a	816	F26	C2-C9-C15	-4.13	119.32	128.63
10	X	408[B]	BCL	CAD-C3D-C4D	-4.12	106.17	108.47
10	Z	402	BCL	CMB-C2B-C1B	-4.12	122.13	128.46
8	a	802	GS0	OBB-CAB-CBB	-4.09	110.96	120.17
10	U	401	BCL	CAD-C3D-C4D	-4.09	106.19	108.47
10	U	403	BCL	CMB-C2B-C1B	-4.08	122.20	128.46
8	A	801	GS0	OBB-CAB-CBB	-4.07	111.01	120.17
10	W	401	BCL	CMB-C2B-C1B	-4.07	122.21	128.46
10	B	301	BCL	C4A-NA-C1A	4.07	108.53	106.71
10	a	807	BCL	CAD-C3D-C4D	-4.05	106.21	108.47
10	W	404	BCL	CMB-C2B-C1B	-4.05	122.24	128.46
10	A	814	BCL	CAD-C3D-C4D	-4.05	106.21	108.47
10	W	404	BCL	CAD-C3D-C4D	-4.03	106.22	108.47
10	Y	402	BCL	C1-C2-C3	-4.03	119.07	126.04
10	X	403	BCL	CMB-C2B-C1B	-4.03	122.27	128.46
10	Z	406	BCL	C1C-NC-C4C	4.03	108.52	106.71
9	A	827	G2O	C2B-C1B-NB	-4.02	107.14	110.10
8	A	801	GS0	CGD-CBD-CAD	4.02	123.77	110.73
10	U	402	BCL	CAD-C3D-C4D	-4.02	106.23	108.47
10	Z	403	BCL	C4A-NA-C1A	4.01	108.51	106.71
10	W	401	BCL	C4A-NA-C1A	4.01	108.51	106.71
10	W	402	BCL	C1-C2-C3	-3.99	119.15	126.04
10	W	403	BCL	C4A-NA-C1A	3.98	108.50	106.71
10	Y	404	BCL	CAD-C3D-C4D	-3.98	106.25	108.47
10	V	402	BCL	CMB-C2B-C1B	-3.97	122.36	128.46
10	Y	407	BCL	C1C-NC-C4C	3.97	108.49	106.71
10	a	811	BCL	CMB-C2B-C1B	-3.96	122.37	128.46
10	X	403	BCL	CAD-C3D-C4D	-3.96	106.26	108.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	Y	401	BCL	CMB-C2B-C1B	-3.94	122.40	128.46
10	X	409	BCL	C4A-NA-C1A	3.94	108.48	106.71
10	A	809	BCL	C1C-NC-C4C	3.93	108.47	106.71
10	A	808	BCL	CMB-C2B-C1B	-3.92	122.44	128.46
10	A	806	BCL	C1-C2-C3	-3.91	119.28	126.04
10	W	405	BCL	CAD-C3D-C4D	-3.91	106.29	108.47
11	C	301	F39	C46-C53-C56	-3.91	119.81	128.63
11	C	301	F39	C11-O1-C12	3.90	121.35	113.69
10	a	808	BCL	CMB-C2B-C1B	-3.90	122.46	128.46
10	V	405	BCL	CMB-C2B-C1B	-3.90	122.46	128.46
10	a	814	BCL	C4A-NA-C1A	3.90	108.46	106.71
10	a	809	BCL	CAD-C3D-C4D	-3.90	106.29	108.47
10	X	405	BCL	CAD-C3D-C4D	-3.89	106.30	108.47
9	a	801	G2O	CHB-C4A-NA	3.89	129.39	125.08
10	W	402	BCL	C4A-NA-C1A	3.89	108.45	106.71
11	C	301	F39	C41-C42-C44	-3.88	112.99	118.94
10	a	814	BCL	CAD-C3D-C4D	-3.88	106.31	108.47
10	X	401	BCL	C4A-NA-C1A	3.88	108.45	106.71
10	X	404	BCL	CAD-C3D-C4D	-3.88	106.31	108.47
10	B	301	BCL	C1-C2-C3	-3.87	119.34	126.04
10	X	406	BCL	CAD-C3D-C4D	-3.87	106.31	108.47
9	a	801	G2O	C2B-C1B-NB	-3.87	107.25	110.10
10	U	403	BCL	CAD-C3D-C4D	-3.86	106.31	108.47
10	U	401	BCL	CMB-C2B-C1B	-3.86	122.53	128.46
10	V	402	BCL	C1C-NC-C4C	3.85	108.44	106.71
11	A	815	F39	O6-C21-O7	-3.85	113.88	123.59
10	U	402	BCL	C4A-NA-C1A	3.85	108.44	106.71
11	A	815	F39	C56-C58-C61	-3.85	113.04	118.94
10	Z	402	BCL	C1-C2-C3	-3.84	119.39	126.04
10	Y	401	BCL	C1-C2-C3	-3.84	119.41	126.04
10	X	406	BCL	C4A-NA-C1A	3.83	108.43	106.71
10	X	401	BCL	CMB-C2B-C1B	-3.82	122.59	128.46
11	a	815	F39	O6-C21-O7	-3.81	113.98	123.59
8	a	802	GS0	CMB-C2B-C3B	3.81	131.80	124.68
10	A	810	BCL	C4A-NA-C1A	3.81	108.42	106.71
8	a	802	GS0	CHA-C1A-NA	-3.80	117.69	126.40
10	a	808	BCL	C4A-NA-C1A	3.80	108.41	106.71
10	Y	403	BCL	CAD-C3D-C4D	-3.80	106.35	108.47
10	Y	405	BCL	C4A-NA-C1A	3.79	108.41	106.71
9	A	827	G2O	C3C-C4C-NC	-3.78	106.31	109.88
10	X	403	BCL	C4A-NA-C1A	3.78	108.40	106.71
10	a	807	BCL	C4A-NA-C1A	3.77	108.40	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	A	826	G2O	O2D-CGD-O1D	-3.77	116.47	123.84
11	A	815	F39	C41-C42-C44	-3.77	113.16	118.94
10	a	810	BCL	CAD-C3D-C4D	-3.77	106.37	108.47
8	a	802	GS0	CGD-CBD-CAD	3.76	122.93	110.73
10	U	404	BCL	C1C-NC-C4C	3.75	108.39	106.71
10	Y	402	BCL	C4A-NA-C1A	3.75	108.39	106.71
10	W	408[B]	BCL	CAD-C3D-C4D	-3.74	106.38	108.47
10	W	405	BCL	C1C-NC-C4C	3.74	108.39	106.71
11	C	301	F39	O6-C21-O7	-3.74	114.16	123.59
10	U	405	BCL	C4A-NA-C1A	3.74	108.39	106.71
10	a	807	BCL	CMB-C2B-C1B	-3.74	122.72	128.46
8	a	802	GS0	CMA-C3A-C4A	-3.73	101.75	111.77
10	Y	405	BCL	CMB-C2B-C1B	-3.72	122.74	128.46
10	V	409[B]	BCL	CAD-C3D-C4D	-3.72	106.40	108.47
11	a	815	F39	C46-C53-C56	-3.72	120.25	128.63
10	Y	402	BCL	CMB-C2B-C1B	-3.71	122.77	128.46
10	W	407	BCL	C1C-NC-C4C	3.70	108.37	106.71
8	A	801	GS0	CHA-C1A-NA	-3.70	117.92	126.40
10	V	408	BCL	C4A-NA-C1A	3.69	108.37	106.71
9	A	827	G2O	CGD-CBD-CAD	3.69	122.68	110.73
10	Y	401	BCL	C4A-NA-C1A	3.68	108.36	106.71
10	U	406	BCL	CAD-C3D-C4D	-3.68	106.42	108.47
10	X	406	BCL	CMB-C2B-C1B	-3.67	122.82	128.46
11	a	815	F39	C35-C37-C39	-3.67	113.31	118.94
10	A	803	BCL	CAD-C3D-C4D	-3.67	106.42	108.47
12	a	817	F26	C2-C9-C15	-3.67	120.36	128.63
10	a	807	BCL	C5-C3-C2	-3.66	113.71	121.12
10	V	402	BCL	CAD-C3D-C4D	-3.66	106.43	108.47
10	a	806	BCL	C4-C3-C5	-3.65	109.13	115.27
10	W	408[B]	BCL	C1C-NC-C4C	3.65	108.35	106.71
9	a	801	G2O	CGD-CBD-CAD	3.65	122.55	110.73
10	A	807	BCL	C1C-NC-C4C	3.65	108.35	106.71
10	W	406	BCL	C4A-NA-C1A	3.65	108.35	106.71
10	Z	406	BCL	CAD-C3D-C4D	-3.65	106.44	108.47
10	Z	404	BCL	C4A-NA-C1A	3.64	108.34	106.71
10	a	806	BCL	C1-C2-C3	-3.63	119.77	126.04
10	a	810	BCL	C4-C3-C5	-3.63	109.17	115.27
10	a	809	BCL	C4A-NA-C1A	3.62	108.33	106.71
10	V	404	BCL	C4A-NA-C1A	3.62	108.33	106.71
10	X	401	BCL	C1-C2-C3	-3.62	119.78	126.04
10	V	407	BCL	C4A-NA-C1A	3.62	108.33	106.71
10	a	810	BCL	C1-C2-C3	-3.61	119.80	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	U	403	BCL	C4A-NA-C1A	3.61	108.33	106.71
10	Z	402	BCL	C1C-NC-C4C	3.61	108.33	106.71
10	Y	403	BCL	CMB-C2B-C1B	-3.60	122.93	128.46
11	a	815	F39	C41-C42-C44	-3.59	113.43	118.94
10	U	401	BCL	C4A-NA-C1A	3.59	108.32	106.71
10	Y	407	BCL	C4A-NA-C1A	3.59	108.32	106.71
10	V	404	BCL	C1-C2-C3	-3.58	119.84	126.04
10	A	803	BCL	C1C-NC-C4C	3.58	108.31	106.71
10	V	402	BCL	C4A-NA-C1A	3.58	108.31	106.71
10	B	301	BCL	OBD-CAD-CBD	-3.58	120.79	125.89
10	V	402	BCL	C1-C2-C3	-3.57	119.87	126.04
10	a	811	BCL	CAD-C3D-C4D	-3.57	106.48	108.47
10	A	804	BCL	CMB-C2B-C1B	-3.56	122.98	128.46
9	A	802	G2O	CGD-CBD-CAD	3.56	122.28	110.73
10	a	805	BCL	CMB-C2B-C1B	-3.56	122.99	128.46
10	a	804	BCL	CAD-C3D-C4D	-3.56	106.48	108.47
10	V	403	BCL	C4A-NA-C1A	3.56	108.31	106.71
10	Z	408[B]	BCL	C4A-NA-C1A	3.56	108.31	106.71
10	A	813	BCL	C1C-NC-C4C	3.56	108.31	106.71
10	X	405	BCL	C1C-NC-C4C	3.56	108.31	106.71
10	V	407	BCL	CAD-C3D-C4D	-3.53	106.50	108.47
10	V	405	BCL	CAD-C3D-C4D	-3.53	106.50	108.47
10	Y	402	BCL	C4B-C3B-CAB	-3.52	120.32	127.13
10	V	401	BCL	C4A-NA-C1A	3.52	108.29	106.71
10	W	404	BCL	C4A-NA-C1A	3.52	108.29	106.71
9	A	826	G2O	CGD-CBD-CAD	3.51	122.11	110.73
10	Z	404	BCL	CAD-C3D-C4D	-3.51	106.51	108.47
10	a	810	BCL	OBD-CAD-CBD	-3.51	120.88	125.89
10	A	806	BCL	C1C-NC-C4C	3.50	108.28	106.71
10	U	407[B]	BCL	C1C-NC-C4C	3.50	108.28	106.71
10	A	812	BCL	CMB-C2B-C1B	-3.50	123.09	128.46
10	W	401	BCL	CAD-C3D-C4D	-3.49	106.52	108.47
10	W	403	BCL	C1-C2-C3	-3.49	120.01	126.04
10	a	809	BCL	CMB-C2B-C1B	-3.49	123.11	128.46
10	A	804	BCL	C4A-NA-C1A	3.49	108.27	106.71
10	Y	408	BCL	C4A-NA-C1A	3.47	108.26	106.71
10	A	814	BCL	OBD-CAD-CBD	-3.47	120.94	125.89
10	a	812	BCL	CAD-C3D-C4D	-3.46	106.54	108.47
10	A	809	BCL	C4A-NA-C1A	3.46	108.26	106.71
10	Y	406	BCL	CMB-C2B-C1B	-3.46	123.15	128.46
10	B	301	BCL	CAD-C3D-C4D	-3.46	106.54	108.47
10	X	406	BCL	OBD-CAD-CBD	-3.46	120.96	125.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	A	812	BCL	CAD-C3D-C4D	-3.45	106.54	108.47
10	U	402	BCL	C1C-NC-C4C	3.45	108.26	106.71
9	A	802	G2O	C3C-C4C-NC	-3.45	106.63	109.88
10	a	810	BCL	C4A-NA-C1A	3.45	108.26	106.71
10	X	404	BCL	C1C-NC-C4C	3.45	108.26	106.71
11	A	815	F39	C46-C53-C56	-3.44	120.86	128.63
11	a	815	F39	C56-C58-C61	-3.44	113.66	118.94
10	Z	405	BCL	CMB-C2B-C1B	-3.44	123.18	128.46
10	V	403	BCL	CAD-C3D-C4D	-3.44	106.55	108.47
10	V	403	BCL	OBD-CAD-CBD	-3.43	120.99	125.89
10	Z	402	BCL	OBD-CAD-CBD	-3.43	120.99	125.89
10	U	404	BCL	OBD-CAD-CBD	-3.43	121.00	125.89
10	A	810	BCL	OBD-CAD-CBD	-3.43	121.00	125.89
10	A	810	BCL	C4-C3-C5	-3.42	109.51	115.27
10	a	814	BCL	OBD-CAD-CBD	-3.42	121.01	125.89
10	Y	408	BCL	OBD-CAD-CBD	-3.42	121.01	125.89
10	X	405	BCL	OBD-CAD-CBD	-3.41	121.02	125.89
10	V	402	BCL	CHA-C1A-NA	-3.41	118.58	126.40
10	W	405	BCL	CMB-C2B-C1B	-3.41	123.22	128.46
10	X	409	BCL	CAD-C3D-C4D	-3.41	106.57	108.47
10	W	406	BCL	C1C-NC-C4C	3.41	108.24	106.71
10	Z	404	BCL	OBD-CAD-CBD	-3.41	121.02	125.89
10	U	406	BCL	OBD-CAD-CBD	-3.41	121.03	125.89
8	a	802	GS0	C16-C15-C13	-3.41	104.91	115.92
10	V	403	BCL	CMB-C2B-C1B	-3.41	123.23	128.46
10	W	404	BCL	C1C-NC-C4C	3.41	108.24	106.71
10	W	401	BCL	OBD-CAD-CBD	-3.41	121.03	125.89
10	Z	407	BCL	OBD-CAD-CBD	-3.40	121.03	125.89
10	A	811	BCL	CMB-C2B-C3B	3.40	131.04	124.68
10	V	407	BCL	OBD-CAD-CBD	-3.39	121.05	125.89
10	W	402	BCL	CMB-C2B-C1B	-3.39	123.25	128.46
10	Z	407	BCL	CAD-C3D-C4D	-3.39	106.58	108.47
10	A	809	BCL	C1-C2-C3	-3.39	120.19	126.04
10	A	810	BCL	CMB-C2B-C1B	-3.38	123.26	128.46
10	X	404	BCL	OBD-CAD-CBD	-3.38	121.06	125.89
10	Z	407	BCL	C1C-NC-C4C	3.38	108.23	106.71
10	A	804	BCL	OBD-CAD-CBD	-3.38	121.07	125.89
10	V	406	BCL	C1C-NC-C4C	3.37	108.22	106.71
10	a	807	BCL	OBD-CAD-CBD	-3.37	121.08	125.89
10	W	404	BCL	OBD-CAD-CBD	-3.37	121.09	125.89
10	U	401	BCL	OBD-CAD-CBD	-3.36	121.09	125.89
10	A	812	BCL	OBD-CAD-CBD	-3.36	121.09	125.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	a	806	BCL	CHA-C1A-NA	-3.36	118.70	126.40
10	V	409[B]	BCL	C2A-C1A-CHA	3.36	129.73	123.86
10	A	806	BCL	CHA-C1A-NA	-3.36	118.71	126.40
10	W	407	BCL	OBD-CAD-CBD	-3.35	121.10	125.89
10	Y	408	BCL	CAD-C3D-C4D	-3.35	106.60	108.47
10	W	405	BCL	OBD-CAD-CBD	-3.35	121.11	125.89
10	A	810	BCL	CAD-C3D-C4D	-3.35	106.60	108.47
10	A	809	BCL	OBD-CAD-CBD	-3.34	121.12	125.89
10	V	404	BCL	OBD-CAD-CBD	-3.34	121.13	125.89
10	V	401	BCL	OBD-CAD-CBD	-3.33	121.13	125.89
10	Y	407	BCL	OBD-CAD-CBD	-3.33	121.13	125.89
9	A	802	G2O	C2B-C1B-NB	-3.33	107.65	110.10
10	A	806	BCL	OBD-CAD-CBD	-3.33	121.14	125.89
10	a	813	BCL	CHA-C1A-NA	-3.33	118.77	126.40
10	V	402	BCL	OBD-CAD-CBD	-3.33	121.14	125.89
10	V	404	BCL	C1C-NC-C4C	3.33	108.20	106.71
10	Z	403	BCL	C1-C2-C3	-3.32	120.30	126.04
9	a	801	G2O	CMA-C3A-C2A	3.32	127.21	113.83
10	Y	403	BCL	OBD-CAD-CBD	-3.32	121.16	125.89
10	X	401	BCL	OBD-CAD-CBD	-3.32	121.16	125.89
10	W	408[B]	BCL	CMB-C2B-C1B	-3.31	123.37	128.46
10	Y	402	BCL	CHA-C1A-NA	-3.31	118.82	126.40
10	A	803	BCL	OBD-CAD-CBD	-3.31	121.17	125.89
10	X	409	BCL	OBD-CAD-CBD	-3.31	121.17	125.89
10	Y	401	BCL	OBD-CAD-CBD	-3.31	121.17	125.89
10	a	813	BCL	C1C-NC-C4C	3.31	108.19	106.71
10	X	408[B]	BCL	CMB-C2B-C1B	-3.31	123.38	128.46
10	X	405	BCL	CMB-C2B-C1B	-3.31	123.38	128.46
10	V	409[B]	BCL	OBD-CAD-CBD	-3.31	121.17	125.89
10	Y	406	BCL	OBD-CAD-CBD	-3.30	121.17	125.89
10	X	406	BCL	C1C-NC-C4C	3.30	108.19	106.71
10	W	408[B]	BCL	OBD-CAD-CBD	-3.30	121.18	125.89
10	X	409	BCL	C4B-C3B-CAB	-3.30	120.75	127.13
10	V	406	BCL	OBD-CAD-CBD	-3.30	121.18	125.89
10	Y	402	BCL	OBD-CAD-CBD	-3.30	121.18	125.89
9	A	826	G2O	C2A-C3A-C4A	3.30	107.20	101.87
10	A	808	BCL	OBD-CAD-CBD	-3.30	121.18	125.89
10	Y	401	BCL	C4B-C3B-CAB	-3.30	120.76	127.13
10	a	812	BCL	OBD-CAD-CBD	-3.29	121.19	125.89
10	a	811	BCL	OBD-CAD-CBD	-3.29	121.19	125.89
10	W	401	BCL	CHA-C1A-NA	-3.29	118.86	126.40
10	Y	404	BCL	OBD-CAD-CBD	-3.29	121.19	125.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	A	807	BCL	C1-C2-C3	-3.29	120.35	126.04
10	U	401	BCL	C1-C2-C3	-3.29	120.35	126.04
10	X	404	BCL	CMB-C2B-C1B	-3.29	123.41	128.46
10	U	401	BCL	CHA-C1A-NA	-3.29	118.86	126.40
12	A	816	F26	C36-C31-C33	-3.29	118.32	122.92
10	Y	405	BCL	OBD-CAD-CBD	-3.28	121.20	125.89
10	Z	403	BCL	OBD-CAD-CBD	-3.28	121.20	125.89
10	Z	405	BCL	OBD-CAD-CBD	-3.28	121.20	125.89
10	W	406	BCL	OBD-CAD-CBD	-3.28	121.21	125.89
10	A	807	BCL	CMB-C2B-C1B	-3.28	123.42	128.46
10	V	408	BCL	OBD-CAD-CBD	-3.28	121.21	125.89
8	A	801	GS0	C16-C15-C13	-3.28	105.32	115.92
11	a	815	F39	C32-C35-C37	-3.28	117.20	126.42
10	U	402	BCL	OBD-CAD-CBD	-3.28	121.21	125.89
10	A	805	BCL	C4A-NA-C1A	3.28	108.18	106.71
10	a	803	BCL	CMB-C2B-C1B	-3.28	123.42	128.46
10	a	809	BCL	OBD-CAD-CBD	-3.28	121.21	125.89
10	V	405	BCL	OBD-CAD-CBD	-3.28	121.21	125.89
10	Y	401	BCL	CAD-C3D-C4D	-3.28	106.64	108.47
11	C	301	F39	C35-C37-C39	-3.27	113.92	118.94
10	Z	406	BCL	OBD-CAD-CBD	-3.27	121.23	125.89
10	V	404	BCL	CMB-C2B-C1B	-3.27	123.44	128.46
10	U	402	BCL	CMB-C2B-C1B	-3.26	123.45	128.46
10	V	408	BCL	CMB-C2B-C1B	-3.26	123.46	128.46
10	V	406	BCL	CMB-C2B-C1B	-3.25	123.46	128.46
10	X	408[B]	BCL	OBD-CAD-CBD	-3.25	121.25	125.89
10	a	803	BCL	C1-C2-C3	-3.25	120.42	126.04
10	V	404	BCL	CHA-C1A-NA	-3.25	118.96	126.40
11	A	815	F39	C32-C35-C37	-3.25	117.29	126.42
10	U	406	BCL	CMB-C2B-C1B	-3.25	123.47	128.46
10	U	407[B]	BCL	CMB-C2B-C1B	-3.24	123.48	128.46
10	W	403	BCL	OBD-CAD-CBD	-3.24	121.27	125.89
10	U	403	BCL	OBD-CAD-CBD	-3.24	121.27	125.89
10	A	803	BCL	C16-C15-C13	-3.24	105.45	115.92
10	A	808	BCL	C4A-NA-C1A	3.24	108.16	106.71
10	A	808	BCL	CHA-C1A-NA	-3.24	118.98	126.40
9	A	827	G2O	C2C-C1C-NC	-3.24	107.04	110.57
10	W	401	BCL	C4B-C3B-CAB	-3.24	120.88	127.13
10	X	403	BCL	OBD-CAD-CBD	-3.23	121.28	125.89
10	W	407	BCL	CAD-C3D-C4D	-3.23	106.67	108.47
10	a	812	BCL	CMB-C2B-C1B	-3.23	123.50	128.46
10	a	812	BCL	C4A-NA-C1A	3.23	108.16	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	Y	408	BCL	C1C-NC-C4C	3.22	108.16	106.71
10	a	810	BCL	CMB-C2B-C1B	-3.22	123.52	128.46
10	a	806	BCL	OBD-CAD-CBD	-3.22	121.30	125.89
10	X	401	BCL	C4B-C3B-CAB	-3.22	120.92	127.13
10	X	409	BCL	CMB-C2B-C1B	-3.21	123.52	128.46
11	C	301	F39	C32-C35-C37	-3.21	117.39	126.42
8	A	801	GS0	CMA-C3A-C2A	-3.21	100.87	113.83
11	C	301	F39	C56-C58-C61	-3.21	114.01	118.94
10	a	804	BCL	OBD-CAD-CBD	-3.21	121.31	125.89
10	U	404	BCL	CMB-C2B-C1B	-3.21	123.53	128.46
10	V	409[B]	BCL	CMB-C2B-C1B	-3.21	123.54	128.46
10	a	803	BCL	OBD-CAD-CBD	-3.20	121.32	125.89
10	A	809	BCL	CHA-C1A-NA	-3.20	119.06	126.40
14	A	820	LMG	O6-C1-O1	-3.20	102.39	109.97
10	U	405	BCL	C1C-NC-C4C	3.20	108.14	106.71
10	U	405	BCL	OBD-CAD-CBD	-3.20	121.33	125.89
10	U	407[B]	BCL	OBD-CAD-CBD	-3.20	121.33	125.89
10	a	813	BCL	OBD-CAD-CBD	-3.19	121.34	125.89
11	A	815	F39	C35-C37-C39	-3.19	114.05	118.94
10	X	402	BCL	OBD-CAD-CBD	-3.19	121.34	125.89
10	a	804	BCL	CMB-C2B-C1B	-3.18	123.57	128.46
10	U	401	BCL	C1C-NC-C4C	3.18	108.14	106.71
10	a	805	BCL	C1C-NC-C4C	3.18	108.14	106.71
8	a	802	GS0	C7-C6-C5	-3.17	104.74	113.36
10	Z	405	BCL	C1C-NC-C4C	3.17	108.13	106.71
10	A	811	BCL	CHA-C1A-NA	-3.17	119.14	126.40
10	X	407[B]	BCL	OBD-CAD-CBD	-3.17	121.37	125.89
10	a	808	BCL	OBD-CAD-CBD	-3.17	121.37	125.89
10	Z	402	BCL	CHA-C1A-NA	-3.16	119.15	126.40
10	V	401	BCL	CMB-C2B-C1B	-3.16	123.60	128.46
10	A	813	BCL	CHA-C1A-NA	-3.16	119.15	126.40
10	Z	408[B]	BCL	OBD-CAD-CBD	-3.16	121.38	125.89
10	A	811	BCL	OBD-CAD-CBD	-3.16	121.38	125.89
10	A	809	BCL	CMB-C2B-C1B	-3.15	123.62	128.46
10	a	810	BCL	C16-C15-C13	-3.15	105.73	115.92
10	W	401	BCL	C1C-NC-C4C	3.15	108.12	106.71
10	V	407	BCL	CHA-C1A-NA	-3.14	119.20	126.40
9	A	802	G2O	CMA-C3A-C2A	3.14	126.51	113.83
10	A	806	BCL	C1-O2A-CGA	3.14	124.69	116.44
10	X	406	BCL	C4B-C3B-CAB	-3.14	121.06	127.13
10	A	813	BCL	CMB-C2B-C1B	-3.14	123.64	128.46
10	A	805	BCL	OBD-CAD-CBD	-3.14	121.41	125.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	A	813	BCL	OBD-CAD-CBD	-3.14	121.42	125.89
10	a	814	BCL	CMB-C2B-C1B	-3.13	123.66	128.46
10	a	805	BCL	OBD-CAD-CBD	-3.13	121.43	125.89
9	A	826	G2O	CMA-C3A-C2A	3.12	126.41	113.83
10	W	402	BCL	OBD-CAD-CBD	-3.11	121.44	125.89
10	A	814	BCL	CHA-C1A-NA	-3.11	119.27	126.40
10	X	407[B]	BCL	CMB-C2B-C1B	-3.11	123.68	128.46
8	a	802	GS0	CAC-C3C-C2C	-3.11	106.49	114.26
10	X	401	BCL	CHA-C1A-NA	-3.11	119.28	126.40
10	W	407	BCL	CMB-C2B-C1B	-3.11	123.69	128.46
10	A	807	BCL	OBD-CAD-CBD	-3.11	121.46	125.89
10	Z	407	BCL	CMB-C2B-C1B	-3.10	123.69	128.46
10	W	403	BCL	CMB-C2B-C1B	-3.10	123.70	128.46
10	Y	408	BCL	CMB-C2B-C1B	-3.10	123.70	128.46
10	Y	404	BCL	CMB-C2B-C1B	-3.10	123.70	128.46
9	A	827	G2O	C2A-C3A-C4A	3.10	106.87	101.87
10	a	805	BCL	C1-C2-C3	-3.10	120.69	126.04
10	W	401	BCL	C2A-C1A-CHA	3.10	129.27	123.86
10	Z	408[B]	BCL	CMB-C2B-C1B	-3.09	123.71	128.46
10	A	813	BCL	C5-C3-C2	-3.09	114.86	121.12
10	V	407	BCL	CMB-C2B-C3B	3.09	130.47	124.68
10	a	809	BCL	CHA-C1A-NA	-3.09	119.32	126.40
10	Z	405	BCL	C2A-C1A-CHA	3.09	129.26	123.86
10	W	407	BCL	C4A-NA-C1A	3.08	108.09	106.71
10	W	406	BCL	CHA-C1A-NA	-3.08	119.34	126.40
9	a	801	G2O	C2A-C3A-C4A	3.08	106.85	101.87
10	A	812	BCL	C11-C10-C8	3.08	125.88	115.92
8	A	801	GS0	C7-C6-C5	-3.08	105.00	113.36
10	Z	404	BCL	CMB-C2B-C3B	3.08	130.44	124.68
10	Z	402	BCL	C4B-C3B-CAB	-3.07	121.19	127.13
10	V	405	BCL	C4B-C3B-CAB	-3.07	121.20	127.13
10	U	403	BCL	CHA-C1A-NA	-3.07	119.36	126.40
10	W	404	BCL	C4B-C3B-CAB	-3.06	121.21	127.13
10	V	402	BCL	C4B-C3B-CAB	-3.06	121.21	127.13
8	a	802	GS0	O2A-CGA-O1A	-3.06	115.87	123.59
9	A	827	G2O	CMA-C3A-C2A	3.06	126.16	113.83
10	U	403	BCL	C2A-C1A-CHA	3.06	129.20	123.86
8	A	801	GS0	CMC-C2C-C3C	-3.05	101.52	113.83
8	A	801	GS0	C11-C10-C8	-3.05	106.05	115.92
10	a	813	BCL	CMB-C2B-C1B	-3.05	123.78	128.46
10	A	805	BCL	CHA-C1A-NA	-3.04	119.44	126.40
10	V	407	BCL	C16-C15-C13	-3.04	106.09	115.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	W	403	BCL	CHA-C1A-NA	-3.04	119.44	126.40
10	V	401	BCL	C1C-NC-C4C	3.03	108.07	106.71
9	A	802	G2O	C3A-C2A-C1A	3.03	105.88	101.34
10	Z	404	BCL	C4-C3-C5	-3.03	110.17	115.27
10	V	401	BCL	CHA-C1A-NA	-3.03	119.46	126.40
10	X	402	BCL	CMB-C2B-C1B	-3.03	123.81	128.46
10	a	810	BCL	C2A-C1A-CHA	3.02	129.15	123.86
10	Y	407	BCL	CHA-C1A-NA	-3.02	119.48	126.40
10	B	301	BCL	CMB-C2B-C3B	3.02	130.33	124.68
10	W	402	BCL	C4B-C3B-CAB	-3.02	121.30	127.13
10	U	402	BCL	CHA-C1A-NA	-3.02	119.49	126.40
10	a	805	BCL	C4A-NA-C1A	3.02	108.06	106.71
10	a	804	BCL	CHA-C1A-NA	-3.02	119.49	126.40
10	Z	408[B]	BCL	C1C-NC-C4C	3.01	108.06	106.71
10	A	803	BCL	CMB-C2B-C1B	-3.01	123.84	128.46
8	A	801	GS0	C2D-C1D-ND	3.01	112.32	110.10
10	X	402	BCL	C1-C2-C3	-3.01	120.84	126.04
10	V	406	BCL	C1-C2-C3	-3.01	120.84	126.04
10	X	409	BCL	C1C-NC-C4C	3.01	108.06	106.71
10	V	408	BCL	C4B-C3B-CAB	-3.00	121.33	127.13
8	a	802	GS0	C2D-C1D-ND	3.00	112.32	110.10
10	A	810	BCL	CHA-C1A-NA	-3.00	119.52	126.40
10	W	406	BCL	CMB-C2B-C1B	-3.00	123.85	128.46
10	A	806	BCL	C2A-C1A-CHA	3.00	129.10	123.86
10	W	408[B]	BCL	CHA-C1A-NA	-2.99	119.55	126.40
10	V	409[B]	BCL	CHA-C1A-NA	-2.99	119.55	126.40
10	A	813	BCL	C2A-C1A-CHA	2.99	129.09	123.86
10	Z	408[B]	BCL	CHA-C1A-NA	-2.99	119.55	126.40
10	U	401	BCL	C4B-C3B-CAB	-2.99	121.36	127.13
10	X	405	BCL	CHA-C1A-NA	-2.98	119.57	126.40
10	X	402	BCL	CHA-C1A-NA	-2.98	119.58	126.40
9	a	801	G2O	C2C-C1C-NC	-2.98	107.32	110.57
10	a	808	BCL	CHA-C1A-NA	-2.98	119.58	126.40
10	A	805	BCL	CMB-C2B-C1B	-2.98	123.89	128.46
10	a	806	BCL	C2A-C1A-CHA	2.97	129.05	123.86
10	W	401	BCL	CMB-C2B-C3B	2.97	130.23	124.68
10	X	403	BCL	C4B-C3B-CAB	-2.97	121.39	127.13
10	X	402	BCL	C1C-NC-C4C	2.96	108.04	106.71
10	Z	405	BCL	CHA-C1A-NA	-2.96	119.61	126.40
9	A	827	G2O	O2D-CGD-O1D	-2.96	118.05	123.84
8	A	801	GS0	O2A-CGA-O1A	-2.96	116.13	123.59
10	A	803	BCL	CHA-C1A-NA	-2.96	119.62	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	a	814	BCL	CHA-C1A-NA	-2.96	119.63	126.40
10	A	809	BCL	C4-C3-C5	-2.96	110.30	115.27
10	A	807	BCL	CHA-C1A-NA	-2.95	119.64	126.40
10	a	807	BCL	C1C-NC-C4C	2.95	108.03	106.71
10	U	406	BCL	CHA-C1A-NA	-2.95	119.64	126.40
10	X	409	BCL	CHA-C1A-NA	-2.95	119.64	126.40
10	W	401	BCL	C4-C3-C5	-2.95	110.31	115.27
10	U	404	BCL	CHA-C1A-NA	-2.95	119.64	126.40
10	X	408[B]	BCL	CHA-C1A-NA	-2.95	119.64	126.40
10	V	407	BCL	C2A-C1A-CHA	2.95	129.01	123.86
9	A	827	G2O	CBD-CHA-C1A	2.95	134.39	128.75
10	Y	405	BCL	C4B-C3B-CAB	-2.95	121.44	127.13
10	U	406	BCL	C4A-NA-C1A	2.94	108.03	106.71
10	V	402	BCL	C4-C3-C5	-2.94	110.32	115.27
10	X	403	BCL	CHA-C1A-NA	-2.94	119.66	126.40
10	a	810	BCL	CHA-C1A-NA	-2.94	119.66	126.40
10	a	803	BCL	C2A-C1A-CHA	2.94	129.00	123.86
10	W	403	BCL	C1C-NC-C4C	2.94	108.03	106.71
10	Z	404	BCL	CHA-C1A-NA	-2.94	119.67	126.40
10	Z	406	BCL	C2A-C1A-CHA	2.93	128.99	123.86
10	Y	401	BCL	C4-C3-C5	-2.93	110.34	115.27
10	Y	404	BCL	CHA-C1A-NA	-2.93	119.69	126.40
10	a	809	BCL	C4-C3-C5	-2.93	110.34	115.27
10	B	301	BCL	C4B-C3B-CAB	-2.93	121.47	127.13
10	Z	402	BCL	CMB-C2B-C3B	2.93	130.15	124.68
10	Y	408	BCL	CHA-C1A-NA	-2.93	119.70	126.40
11	A	815	F39	C19-C20-C27	-2.93	113.12	121.98
9	A	826	G2O	CBD-CHA-C1A	2.92	134.34	128.75
10	A	805	BCL	C1-C2-C3	-2.92	121.00	126.04
10	X	404	BCL	CHA-C1A-NA	-2.92	119.72	126.40
10	A	803	BCL	C11-C10-C8	-2.92	106.49	115.92
10	Z	404	BCL	C2A-C1A-CHA	2.92	128.96	123.86
10	a	803	BCL	CHA-C1A-NA	-2.91	119.73	126.40
10	Z	406	BCL	CHA-C1A-NA	-2.91	119.74	126.40
10	W	405	BCL	C4A-NA-C1A	2.90	108.01	106.71
10	V	406	BCL	CHA-C1A-NA	-2.90	119.75	126.40
10	Y	403	BCL	CHA-C1A-NA	-2.90	119.75	126.40
10	a	811	BCL	CHA-C1A-NA	-2.90	119.75	126.40
10	Y	407	BCL	CMB-C2B-C1B	-2.90	124.00	128.46
10	a	807	BCL	CHA-C1A-NA	-2.90	119.76	126.40
10	A	814	BCL	C2A-C1A-CHA	2.90	128.93	123.86
10	U	407[B]	BCL	CHA-C1A-NA	-2.90	119.77	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	W	407	BCL	CHA-C1A-NA	-2.89	119.77	126.40
10	A	812	BCL	CHA-C1A-NA	-2.89	119.78	126.40
10	Z	403	BCL	CHA-C1A-NA	-2.89	119.78	126.40
10	A	807	BCL	C2A-C1A-CHA	2.89	128.91	123.86
10	X	409	BCL	C2A-C1A-CHA	2.89	128.91	123.86
10	V	408	BCL	CHA-C1A-NA	-2.88	119.79	126.40
10	V	404	BCL	C2A-C1A-CHA	2.88	128.90	123.86
10	A	811	BCL	CAC-C3C-C4C	2.88	118.98	112.58
10	Y	406	BCL	C2A-C1A-CHA	2.88	128.89	123.86
10	X	403	BCL	C1C-NC-C4C	2.88	108.00	106.71
10	V	402	BCL	CMB-C2B-C3B	2.88	130.06	124.68
10	U	403	BCL	CMB-C2B-C3B	2.88	130.06	124.68
14	A	823	LMG	O6-C1-O1	-2.87	103.17	109.97
12	A	816	F26	C17-C13-C8	2.87	120.10	115.27
10	Y	405	BCL	C2A-C1A-CHA	2.87	128.88	123.86
9	A	802	G2O	C2C-C1C-NC	-2.87	107.44	110.57
10	Y	407	BCL	C2A-C1A-CHA	2.87	128.88	123.86
8	A	801	GS0	C3C-C2C-C1C	2.87	106.50	101.87
10	Y	406	BCL	C4A-NA-C1A	2.87	108.00	106.71
10	Z	403	BCL	C1C-NC-C4C	2.87	108.00	106.71
10	Y	403	BCL	C2A-C1A-CHA	2.87	128.87	123.86
10	U	405	BCL	CHA-C1A-NA	-2.87	119.84	126.40
10	Y	406	BCL	CHA-C1A-NA	-2.86	119.84	126.40
10	Y	403	BCL	C4A-NA-C1A	2.86	107.99	106.71
10	Y	405	BCL	CHA-C1A-NA	-2.86	119.85	126.40
10	Z	407	BCL	CHA-C1A-NA	-2.86	119.85	126.40
10	A	812	BCL	C2A-C1A-CHA	2.86	128.86	123.86
10	a	812	BCL	CHA-C1A-NA	-2.85	119.86	126.40
10	Z	405	BCL	C4B-C3B-CAB	-2.85	121.62	127.13
10	Y	403	BCL	C1-C2-C3	-2.85	121.11	126.04
10	Y	401	BCL	CMB-C2B-C3B	2.85	130.00	124.68
10	X	406	BCL	CHA-C1A-NA	-2.85	119.88	126.40
10	V	403	BCL	CHA-C1A-NA	-2.84	119.89	126.40
10	X	403	BCL	CMB-C2B-C3B	2.84	130.00	124.68
8	a	802	GS0	C11-C10-C8	-2.84	106.73	115.92
11	a	815	F39	C19-C20-C27	-2.84	113.38	121.98
10	A	804	BCL	CHA-C1A-NA	-2.83	119.91	126.40
10	X	407[B]	BCL	CHA-C1A-NA	-2.83	119.92	126.40
10	a	811	BCL	O2A-CGA-O1A	-2.83	116.45	123.59
10	a	814	BCL	C5-C3-C2	-2.83	115.40	121.12
10	W	405	BCL	CHA-C1A-NA	-2.82	119.93	126.40
10	W	404	BCL	CMB-C2B-C3B	2.82	129.96	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	a	807	BCL	C2A-C1A-CHA	2.82	128.79	123.86
10	A	809	BCL	C2A-C1A-CHA	2.82	128.79	123.86
10	U	403	BCL	C1C-NC-C4C	2.82	107.97	106.71
10	W	407	BCL	C5-C3-C2	-2.81	115.42	121.12
10	B	301	BCL	CHA-C1A-NA	-2.81	119.96	126.40
10	a	805	BCL	CHA-C1A-NA	-2.81	119.96	126.40
10	Z	407	BCL	C1-C2-C3	-2.81	121.19	126.04
10	V	405	BCL	C1C-NC-C4C	2.81	107.97	106.71
10	W	404	BCL	CHA-C1A-NA	-2.80	119.98	126.40
10	a	803	BCL	C4A-NA-C1A	2.80	107.97	106.71
10	V	408	BCL	C2A-C1A-CHA	2.80	128.76	123.86
9	A	827	G2O	CMD-C2D-C1D	-2.80	124.16	128.46
9	A	802	G2O	C2A-C3A-C4A	2.80	106.39	101.87
11	A	815	F39	C25-C20-C19	2.80	119.98	115.27
10	A	814	BCL	C1C-NC-C4C	2.80	107.96	106.71
10	X	403	BCL	C2A-C1A-CHA	2.80	128.75	123.86
10	V	407	BCL	C1C-NC-C4C	2.79	107.96	106.71
12	A	816	F26	C27-C28-C31	-2.79	118.58	126.42
10	U	401	BCL	C2A-C1A-CHA	2.79	128.74	123.86
10	V	402	BCL	C2A-C1A-CHA	2.79	128.74	123.86
10	A	814	BCL	CMB-C2B-C1B	-2.79	124.18	128.46
10	U	402	BCL	C2A-C1A-CHA	2.79	128.73	123.86
9	A	826	G2O	CMD-C2D-C1D	-2.79	124.18	128.46
10	U	402	BCL	C1-C2-C3	-2.79	121.22	126.04
10	A	807	BCL	C4A-NA-C1A	2.78	107.96	106.71
10	X	409	BCL	C1-C2-C3	-2.78	121.23	126.04
10	U	403	BCL	C5-C3-C2	-2.78	115.49	121.12
10	V	405	BCL	CHA-C1A-NA	-2.78	120.03	126.40
10	W	408[B]	BCL	C2A-C1A-CHA	2.78	128.72	123.86
10	U	406	BCL	C5-C3-C2	-2.78	115.49	121.12
10	X	407[B]	BCL	C4A-NA-C1A	2.78	107.95	106.71
9	a	801	G2O	CBD-CHA-C1A	2.78	134.07	128.75
9	a	801	G2O	C2A-C1A-CHA	2.78	131.90	126.36
10	A	804	BCL	C1C-NC-C4C	2.77	107.95	106.71
10	a	810	BCL	C1C-NC-C4C	2.77	107.95	106.71
10	V	409[B]	BCL	C1C-NC-C4C	2.77	107.95	106.71
10	W	405	BCL	C2A-C1A-CHA	2.77	128.70	123.86
10	X	409	BCL	C4-C3-C5	-2.77	110.61	115.27
10	a	805	BCL	C2A-C1A-CHA	2.77	128.70	123.86
12	a	816	F26	C17-C13-C8	2.77	119.93	115.27
10	Z	403	BCL	CMB-C2B-C1B	-2.77	124.21	128.46
10	X	407[B]	BCL	C1C-NC-C4C	2.76	107.95	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	U	406	BCL	C2A-C1A-CHA	2.76	128.69	123.86
10	W	406	BCL	C2A-C1A-CHA	2.76	128.69	123.86
10	Y	401	BCL	CHA-C1A-NA	-2.76	120.08	126.40
9	A	802	G2O	O2D-CGD-O1D	-2.76	118.44	123.84
10	Y	404	BCL	O2D-CGD-O1D	-2.76	118.44	123.84
9	A	826	G2O	C3A-C2A-C1A	2.76	105.47	101.34
10	A	806	BCL	CMB-C2B-C1B	-2.76	124.23	128.46
10	Z	406	BCL	CMB-C2B-C1B	-2.75	124.23	128.46
12	a	817	F26	C17-C13-C8	2.75	119.90	115.27
10	Y	405	BCL	C1-C2-C3	-2.75	121.28	126.04
10	a	811	BCL	C1-C2-C3	-2.75	121.28	126.04
14	a	822	LMG	O6-C1-O1	-2.75	103.46	109.97
10	a	808	BCL	CMB-C2B-C3B	2.75	129.82	124.68
10	Z	403	BCL	CMD-C2D-C3D	2.75	129.82	124.68
10	A	803	BCL	C2A-C1A-CHA	2.75	128.66	123.86
10	Z	404	BCL	C4B-C3B-CAB	-2.74	121.83	127.13
10	W	404	BCL	C1-C2-C3	-2.74	121.30	126.04
10	a	812	BCL	C2A-C1A-CHA	2.74	128.65	123.86
10	X	401	BCL	CMB-C2B-C3B	2.74	129.80	124.68
10	W	402	BCL	CHA-C1A-NA	-2.74	120.13	126.40
10	U	401	BCL	CMB-C2B-C3B	2.73	129.79	124.68
10	Y	401	BCL	C2A-C1A-CHA	2.73	128.64	123.86
10	a	808	BCL	C4B-C3B-CAB	-2.73	121.85	127.13
10	A	804	BCL	C11-C10-C8	2.73	124.73	115.92
10	A	811	BCL	O2A-CGA-O1A	-2.73	116.71	123.59
10	Y	403	BCL	C5-C3-C2	-2.72	115.60	121.12
10	a	811	BCL	CMB-C2B-C3B	2.72	129.77	124.68
10	Y	404	BCL	C2A-C1A-CHA	2.72	128.62	123.86
10	V	403	BCL	C1-C2-C3	-2.72	121.34	126.04
10	X	404	BCL	C2A-C1A-CHA	2.72	128.62	123.86
10	a	806	BCL	C1C-NC-C4C	2.72	107.93	106.71
11	C	301	F39	C25-C20-C19	2.72	119.85	115.27
13	A	818	LHG	O8-C23-C24	2.71	120.43	111.91
10	a	812	BCL	C1-C2-C3	-2.71	121.35	126.04
10	V	408	BCL	C5-C3-C2	-2.71	115.63	121.12
10	Z	407	BCL	C4B-C3B-CAB	-2.71	121.90	127.13
10	U	404	BCL	C2A-C1A-CHA	2.71	128.59	123.86
10	U	403	BCL	C4B-C3B-CAB	-2.70	121.90	127.13
10	X	408[B]	BCL	C2A-C1A-CHA	2.70	128.59	123.86
10	V	405	BCL	CMB-C2B-C3B	2.70	129.74	124.68
8	a	802	GS0	C3C-C2C-C1C	2.70	106.23	101.87
10	U	405	BCL	CMB-C2B-C1B	-2.70	124.31	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	a	815	F39	C25-C20-C19	2.70	119.81	115.27
9	a	801	G2O	O2D-CGD-O1D	-2.69	118.57	123.84
9	A	827	G2O	CHB-C1B-NB	2.69	126.93	124.45
14	C	302	LMG	O6-C1-O1	-2.69	103.60	109.97
10	Y	406	BCL	C4B-C3B-CAB	-2.69	121.93	127.13
9	a	801	G2O	C3C-C4C-NC	-2.69	107.34	109.88
10	a	806	BCL	CHC-C1C-NC	-2.69	120.80	124.51
10	a	813	BCL	CMD-C2D-C3D	2.69	129.71	124.68
10	V	403	BCL	C2A-C1A-CHA	2.69	128.55	123.86
10	X	402	BCL	C2A-C1A-CHA	2.68	128.55	123.86
10	X	406	BCL	CMD-C2D-C3D	2.68	129.69	124.68
10	Y	408	BCL	C4B-C3B-CAB	-2.68	121.96	127.13
10	W	407	BCL	C4B-C3B-CAB	-2.67	121.97	127.13
10	V	406	BCL	C2A-C1A-CHA	2.67	128.53	123.86
10	V	405	BCL	C2A-C1A-CHA	2.67	128.53	123.86
9	A	802	G2O	CHB-C1B-NB	2.67	126.91	124.45
10	a	807	BCL	C4B-C3B-CAB	-2.67	121.98	127.13
10	a	808	BCL	C2A-C1A-CHA	2.67	128.52	123.86
10	A	813	BCL	C1-C2-C3	-2.67	121.43	126.04
10	A	809	BCL	CMD-C2D-C3D	2.67	129.67	124.68
10	Y	404	BCL	C1C-NC-C4C	2.66	107.90	106.71
10	a	811	BCL	O2A-CGA-CBA	2.66	120.26	111.91
10	Z	402	BCL	C2A-C1A-CHA	2.66	128.51	123.86
10	V	404	BCL	CMD-C2D-C3D	2.66	129.66	124.68
10	a	809	BCL	C1C-NC-C4C	2.66	107.90	106.71
9	A	827	G2O	C3A-C2A-C1A	2.66	105.32	101.34
10	A	805	BCL	C1C-NC-C4C	2.66	107.90	106.71
10	a	807	BCL	CMB-C2B-C3B	2.66	129.65	124.68
10	X	406	BCL	C2A-C1A-CHA	2.66	128.50	123.86
8	A	801	GS0	C11-C12-C13	-2.66	107.33	115.92
10	Z	407	BCL	CMD-C2D-C3D	2.65	129.64	124.68
10	W	402	BCL	C1C-NC-C4C	2.65	107.90	106.71
10	W	406	BCL	CMD-C2D-C3D	2.65	129.63	124.68
10	Z	405	BCL	C1-C2-C3	-2.65	121.46	126.04
11	C	301	F39	C19-C20-C27	-2.65	113.97	121.98
10	A	812	BCL	CAC-C3C-C4C	2.65	118.46	112.58
10	A	807	BCL	CMD-C2D-C3D	2.65	129.63	124.68
10	W	404	BCL	C2A-C1A-CHA	2.64	128.47	123.86
13	a	820	LHG	O8-C23-C24	2.64	120.19	111.91
9	A	802	G2O	CMD-C2D-C1D	-2.64	124.41	128.46
10	A	804	BCL	C2A-C1A-CHA	2.63	128.46	123.86
8	a	802	GS0	CHD-C4C-NC	-2.63	122.16	125.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	X	408[B]	BCL	C1C-NC-C4C	2.62	107.89	106.71
10	W	403	BCL	CMD-C2D-C3D	2.62	129.58	124.68
13	a	819	LHG	O8-C23-C24	2.62	120.13	111.91
10	Z	408[B]	BCL	C2A-C1A-CHA	2.62	128.44	123.86
10	U	402	BCL	CMD-C2D-C3D	2.61	129.57	124.68
10	X	402	BCL	CMD-C2D-C3D	2.61	129.57	124.68
10	a	806	BCL	CMB-C2B-C1B	-2.61	124.45	128.46
12	a	816	F26	C20-C16-C21	2.61	120.37	114.60
13	E	102	LHG	O8-C23-C24	2.61	120.10	111.91
13	E	101	LHG	O8-C23-C24	2.61	120.10	111.91
11	A	815	F39	O5-C10-C12	-2.60	102.83	109.30
10	U	406	BCL	C4B-C3B-CAB	-2.60	122.10	127.13
10	A	814	BCL	O2D-CGD-O1D	-2.60	118.75	123.84
13	A	819	LHG	C11-C10-C9	-2.60	101.22	114.42
10	Y	402	BCL	CMB-C2B-C3B	2.60	129.54	124.68
14	A	822	LMG	O6-C1-O1	-2.60	103.82	109.97
10	U	405	BCL	C2A-C1A-CHA	2.60	128.40	123.86
10	X	404	BCL	C4B-C3B-CAB	-2.60	122.11	127.13
10	U	404	BCL	C4A-NA-C1A	2.60	107.87	106.71
10	Z	406	BCL	C1-C2-C3	-2.60	121.55	126.04
10	Y	408	BCL	C2A-C1A-CHA	2.59	128.40	123.86
10	Y	401	BCL	C1C-NC-C4C	2.59	107.87	106.71
10	V	408	BCL	CMD-C2D-C3D	2.59	129.53	124.68
10	Y	405	BCL	CMD-C2D-C3D	2.59	129.52	124.68
10	X	407[B]	BCL	C2A-C1A-CHA	2.59	128.38	123.86
10	X	401	BCL	C2A-C1A-CHA	2.59	128.38	123.86
10	V	407	BCL	C6-C5-C3	2.59	120.24	113.45
9	A	802	G2O	C2A-C1A-CHA	2.58	131.52	126.36
10	W	405	BCL	C4B-C3B-CAB	-2.58	122.14	127.13
13	E	101	LHG	C11-C10-C9	-2.58	101.32	114.42
10	A	803	BCL	C4A-NA-C1A	2.58	107.87	106.71
10	A	805	BCL	C2A-C1A-CHA	2.58	128.37	123.86
13	E	102	LHG	C11-C10-C9	-2.58	101.35	114.42
10	Y	406	BCL	C1C-NC-C4C	2.58	107.86	106.71
10	Y	408	BCL	CMD-C2D-C3D	2.57	129.49	124.68
10	A	811	BCL	C1C-NC-C4C	2.57	107.86	106.71
10	A	811	BCL	C2A-C1A-CHA	2.57	128.35	123.86
10	Y	405	BCL	CMB-C2B-C3B	2.57	129.49	124.68
10	A	810	BCL	C2A-C1A-CHA	2.57	128.35	123.86
8	A	801	GS0	CMD-C2D-C1D	2.57	129.24	124.71
10	U	407[B]	BCL	C4A-NA-C1A	2.57	107.86	106.71
10	X	407[B]	BCL	CMD-C2D-C3D	2.57	129.48	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	Y	403	BCL	C4B-C3B-CAB	-2.56	122.18	127.13
10	X	406	BCL	CMB-C2B-C3B	2.56	129.47	124.68
10	W	407	BCL	C2A-C1A-CHA	2.56	128.33	123.86
10	U	406	BCL	CMD-C2D-C3D	2.56	129.47	124.68
10	U	406	BCL	C1-C2-C3	-2.55	121.63	126.04
13	Z	401	LHG	O8-C23-C24	2.55	119.92	111.91
10	Y	403	BCL	CMB-C2B-C3B	2.55	129.45	124.68
10	A	805	BCL	C5-C3-C2	-2.55	115.97	121.12
10	X	404	BCL	CMD-C2D-C3D	2.54	129.44	124.68
10	a	812	BCL	CAC-C3C-C4C	2.54	118.23	112.58
10	a	809	BCL	CMD-C2D-C3D	2.54	129.43	124.68
10	Y	404	BCL	CMD-C2D-C3D	2.54	129.43	124.68
9	a	801	G2O	O2A-CGA-O1A	-2.54	117.18	123.59
10	X	405	BCL	C2A-C1A-CHA	2.54	128.29	123.86
13	A	818	LHG	C11-C10-C9	-2.54	101.55	114.42
10	W	408[B]	BCL	CMD-C2D-C3D	2.54	129.42	124.68
10	W	407	BCL	CMD-C2D-C3D	2.53	129.42	124.68
10	Z	404	BCL	C1-C2-C3	-2.53	121.66	126.04
11	C	301	F39	O4-C9-C11	-2.53	103.89	110.05
10	Z	403	BCL	C2A-C1A-CHA	2.53	128.29	123.86
10	Z	403	BCL	O2D-CGD-O1D	-2.53	118.89	123.84
10	a	804	BCL	C2A-C1A-CHA	2.53	128.28	123.86
10	A	808	BCL	C5-C3-C2	-2.53	116.01	121.12
10	V	406	BCL	CMD-C2D-C3D	2.52	129.40	124.68
10	V	401	BCL	C4-C3-C5	-2.52	111.03	115.27
9	a	801	G2O	C3A-C2A-C1A	2.52	105.11	101.34
9	A	826	G2O	CMD-C2D-C3D	2.52	129.39	124.68
10	V	407	BCL	CMD-C2D-C3D	2.52	129.39	124.68
13	A	817	LHG	O8-C23-C24	2.52	119.80	111.91
8	a	802	GS0	CMA-C3A-C2A	-2.52	103.68	113.83
10	A	811	BCL	CMD-C2D-C3D	2.51	129.38	124.68
12	a	817	F26	C22-C25-C26	-2.51	119.36	126.42
10	a	807	BCL	CMD-C2D-C3D	2.51	129.38	124.68
10	a	813	BCL	C2A-C1A-CHA	2.51	128.25	123.86
10	Y	408	BCL	C5-C3-C2	-2.51	116.04	121.12
9	A	802	G2O	CBD-CHA-C1A	2.51	133.55	128.75
10	U	406	BCL	C11-C10-C8	-2.51	107.82	115.92
14	A	821	LMG	C1-O6-C5	-2.51	108.77	113.69
10	Y	405	BCL	C4-C3-C5	-2.50	111.06	115.27
10	Z	407	BCL	C2A-C1A-CHA	2.50	128.24	123.86
10	X	406	BCL	C5-C3-C2	-2.50	116.06	121.12
10	A	804	BCL	CMB-C2B-C3B	2.50	129.35	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	Y	402	BCL	C2A-C1A-CHA	2.49	128.22	123.86
10	A	803	BCL	C16-C17-C18	-2.49	104.23	115.98
10	A	811	BCL	C1-C2-C3	-2.49	121.73	126.04
10	a	805	BCL	CMB-C2B-C3B	2.49	129.34	124.68
10	A	806	BCL	CHD-C4C-NC	-2.49	122.31	125.08
10	a	812	BCL	C11-C10-C8	2.49	123.96	115.92
10	Y	407	BCL	C16-C15-C13	-2.49	107.88	115.92
10	A	808	BCL	CMB-C2B-C3B	2.48	129.33	124.68
10	a	814	BCL	CAC-C3C-C4C	2.48	118.09	112.58
14	A	823	LMG	O3-C3-C2	-2.48	104.61	110.35
13	Z	401	LHG	C11-C10-C9	-2.48	101.82	114.42
10	Y	402	BCL	C1C-NC-C4C	2.48	107.82	106.71
13	a	821	LHG	O8-C23-C24	2.48	119.68	111.91
8	a	802	GS0	C11-C12-C13	-2.48	107.92	115.92
8	A	801	GS0	CBB-CAB-C3B	2.47	127.69	120.34
10	B	301	BCL	C1C-NC-C4C	2.47	107.82	106.71
10	V	409[B]	BCL	CMD-C2D-C3D	2.47	129.30	124.68
10	a	808	BCL	C1C-NC-C4C	2.46	107.81	106.71
10	W	402	BCL	C2A-C1A-CHA	2.46	128.16	123.86
9	A	802	G2O	CHC-C4B-NB	2.46	126.72	124.45
9	A	827	G2O	C2A-C1A-CHA	2.46	131.27	126.36
10	A	812	BCL	O2A-CGA-O1A	-2.46	117.39	123.59
10	U	406	BCL	O2A-CGA-O1A	-2.46	117.39	123.59
10	Z	405	BCL	C4A-NA-C1A	2.45	107.81	106.71
10	Z	408[B]	BCL	CMD-C2D-C3D	2.45	129.27	124.68
10	W	404	BCL	CMD-C2D-C3D	2.45	129.27	124.68
10	a	806	BCL	CMD-C2D-C3D	2.45	129.26	124.68
10	X	409	BCL	CMD-C2D-C3D	2.45	129.26	124.68
10	V	403	BCL	C4B-C3B-CAB	-2.45	122.40	127.13
10	A	814	BCL	C4A-NA-C1A	2.45	107.81	106.71
13	a	819	LHG	C11-C10-C9	-2.45	102.00	114.42
12	a	817	F26	C23-C19-C24	-2.45	119.49	122.92
10	W	402	BCL	CMD-C2D-C3D	2.45	129.26	124.68
10	X	404	BCL	C4A-NA-C1A	2.45	107.81	106.71
10	X	403	BCL	CMD-C2D-C3D	2.45	129.25	124.68
13	a	820	LHG	C11-C10-C9	-2.44	102.01	114.42
10	Z	404	BCL	CMD-C2D-C3D	2.44	129.25	124.68
10	a	811	BCL	C1C-NC-C4C	2.44	107.80	106.71
10	a	810	BCL	CMD-C2D-C3D	2.44	129.24	124.68
10	U	403	BCL	CMD-C2D-C3D	2.44	129.24	124.68
10	W	405	BCL	CMB-C2B-C3B	2.44	129.24	124.68
12	a	817	F26	C27-C28-C31	-2.44	119.57	126.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	A	817	LHG	C11-C10-C9	-2.44	102.06	114.42
10	B	301	BCL	C2A-C1A-CHA	2.44	128.12	123.86
10	W	404	BCL	C4-C3-C5	-2.43	111.18	115.27
10	V	407	BCL	C4B-C3B-CAB	-2.43	122.43	127.13
13	A	819	LHG	O8-C23-C24	2.43	119.52	111.91
10	Y	401	BCL	CMD-C2D-C3D	2.42	129.21	124.68
11	a	815	F39	C63-C64-C62	-2.42	119.62	126.42
9	A	826	G2O	CHC-C4B-C3B	2.42	129.39	125.26
10	a	814	BCL	C2A-C1A-CHA	2.42	128.08	123.86
10	A	814	BCL	CAC-C3C-C4C	2.42	117.94	112.58
11	C	301	F39	O1-C12-C10	-2.41	105.31	109.69
8	a	802	GS0	CHB-C4A-NA	-2.41	121.18	124.51
10	Z	405	BCL	CMD-C2D-C3D	2.41	129.19	124.68
12	A	816	F26	C23-C19-C24	-2.41	119.55	122.92
10	Y	403	BCL	CMD-C2D-C3D	2.41	129.18	124.68
14	A	821	LMG	O6-C1-O1	-2.41	104.27	109.97
8	a	802	GS0	CMC-C2C-C1C	-2.41	105.30	111.77
10	W	401	BCL	CMD-C2D-C3D	2.41	129.18	124.68
10	X	408[B]	BCL	CMD-C2D-C3D	2.40	129.18	124.68
14	A	821	LMG	O2-C2-C1	-2.40	104.21	110.05
14	a	822	LMG	O1-C1-C2	-2.40	104.55	108.30
10	W	402	BCL	CMB-C2B-C3B	2.40	129.17	124.68
10	A	810	BCL	CMD-C2D-C3D	2.40	129.17	124.68
10	a	803	BCL	O2D-CGD-O1D	-2.40	119.14	123.84
10	Y	407	BCL	C1-C2-C3	-2.40	121.89	126.04
10	Z	406	BCL	CMD-C2D-C3D	2.40	129.16	124.68
10	a	812	BCL	C1C-NC-C4C	2.39	107.78	106.71
10	Z	405	BCL	CMB-C2B-C3B	2.39	129.15	124.68
10	V	401	BCL	C2A-C1A-CHA	2.39	128.04	123.86
10	U	404	BCL	CMD-C2D-C3D	2.39	129.14	124.68
10	V	403	BCL	CMB-C2B-C3B	2.38	129.14	124.68
12	A	816	F26	C32-C35-C34	-2.38	119.72	126.42
10	U	405	BCL	CMD-C2D-C3D	2.38	129.14	124.68
8	a	802	GS0	CHD-C1D-ND	-2.38	122.26	124.45
10	Y	402	BCL	CMD-C2D-C3D	2.38	129.13	124.68
10	B	301	BCL	CMD-C2D-C3D	2.38	129.13	124.68
10	U	406	BCL	CMB-C2B-C3B	2.38	129.12	124.68
9	A	826	G2O	C2A-C1A-CHA	2.37	131.10	126.36
10	A	808	BCL	O2D-CGD-O1D	-2.37	119.20	123.84
13	a	821	LHG	C11-C10-C9	-2.37	102.38	114.42
10	a	808	BCL	CMD-C2D-C3D	2.37	129.12	124.68
10	V	405	BCL	CMD-C2D-C3D	2.37	129.11	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	W	403	BCL	C2A-C1A-CHA	2.36	127.99	123.86
10	V	402	BCL	CBA-CAA-C2A	2.36	120.83	113.86
10	U	407[B]	BCL	CMD-C2D-C3D	2.36	129.09	124.68
11	A	815	F39	C63-C64-C62	-2.36	119.80	126.42
10	A	812	BCL	CMD-C2D-C3D	2.35	129.08	124.68
10	A	812	BCL	O2A-C1-C2	-2.35	102.45	108.64
10	U	407[B]	BCL	C2A-C1A-CHA	2.35	127.97	123.86
10	V	408	BCL	CMB-C2B-C3B	2.35	129.07	124.68
14	A	822	LMG	O2-C2-C1	-2.35	104.34	110.05
13	a	818	LHG	C11-C10-C9	-2.35	102.52	114.42
9	A	827	G2O	C4-C3-C2	-2.34	117.67	123.68
12	A	816	F26	C20-C16-C21	2.34	119.77	114.60
10	Y	406	BCL	CMB-C2B-C3B	2.34	129.05	124.68
9	a	801	G2O	CHC-C4B-C3B	2.34	129.26	125.26
10	a	813	BCL	C1-C2-C3	-2.34	122.00	126.04
10	V	401	BCL	CMD-C2D-C3D	2.34	129.05	124.68
10	W	401	BCL	CBA-CAA-C2A	2.33	120.75	113.86
14	C	302	LMG	O3-C3-C2	-2.33	104.96	110.35
10	V	404	BCL	O2D-CGD-O1D	-2.33	119.28	123.84
14	a	822	LMG	O2-C2-C1	-2.33	104.38	110.05
10	a	803	BCL	CMD-C2D-C3D	2.33	129.04	124.68
10	a	811	BCL	C2A-C1A-CHA	2.33	127.93	123.86
10	X	406	BCL	O2A-CGA-O1A	-2.33	117.72	123.59
13	a	818	LHG	O8-C23-C24	2.33	119.21	111.91
10	Z	402	BCL	CMD-C2D-C3D	2.33	129.03	124.68
11	a	815	F39	C38-C37-C39	-2.33	119.67	122.92
10	X	402	BCL	C5-C3-C2	-2.33	116.41	121.12
10	V	403	BCL	CMD-C2D-C3D	2.32	129.03	124.68
12	a	816	F26	C10-C14-C16	-2.32	119.81	127.75
10	A	808	BCL	CMD-C2D-C3D	2.32	129.02	124.68
11	a	815	F39	C60-C58-C61	-2.32	119.67	122.92
10	W	405	BCL	CMD-C2D-C3D	2.32	129.02	124.68
10	X	405	BCL	CMB-C2B-C3B	2.32	129.02	124.68
10	Y	406	BCL	CMD-C2D-C3D	2.31	129.01	124.68
10	A	814	BCL	C1-C2-C3	-2.31	122.05	126.04
10	a	813	BCL	CBA-CAA-C2A	2.31	120.68	113.86
9	A	802	G2O	CMD-C2D-C3D	2.31	129.00	124.68
10	V	402	BCL	CMD-C2D-C3D	2.31	129.00	124.68
10	a	804	BCL	C4-C3-C5	-2.31	111.39	115.27
10	A	813	BCL	CMD-C2D-C3D	2.31	128.99	124.68
10	U	404	BCL	O2A-CGA-O1A	-2.31	117.77	123.59
9	A	802	G2O	O2A-CGA-O1A	-2.31	117.77	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	A	816	F26	C40-C34-C37	-2.31	119.69	122.92
12	a	816	F26	C38-C39-C37	-2.30	118.75	123.47
10	W	408[B]	BCL	CMB-C2B-C3B	2.30	128.99	124.68
10	a	809	BCL	CMB-C2B-C3B	2.30	128.99	124.68
10	X	409	BCL	CMB-C2B-C3B	2.30	128.98	124.68
12	A	816	F26	C10-C14-C16	-2.30	119.89	127.75
10	a	811	BCL	CMD-C2D-C3D	2.30	128.98	124.68
10	A	808	BCL	C1-C2-C3	-2.30	122.07	126.04
8	a	802	GS0	CMC-C2C-C3C	-2.30	104.57	113.83
10	W	403	BCL	C16-C15-C13	2.29	123.33	115.92
14	A	821	LMG	O1-C7-C8	-2.29	105.37	110.90
10	A	810	BCL	CMB-C2B-C3B	2.29	128.96	124.68
11	C	301	F39	C63-C64-C62	-2.29	119.99	126.42
10	A	806	BCL	OBB-CAB-C3B	2.29	124.05	119.99
10	U	401	BCL	CMD-C2D-C3D	2.28	128.95	124.68
8	a	802	GS0	C4B-CHC-C1C	-2.28	125.59	130.12
10	A	812	BCL	O2D-CGD-O1D	-2.28	119.38	123.84
10	X	403	BCL	C4-C3-C5	-2.28	111.44	115.27
10	a	812	BCL	CMD-C2D-C3D	2.28	128.94	124.68
12	A	816	F26	C38-C39-C37	-2.28	118.81	123.47
11	a	815	F39	C43-C42-C44	-2.28	119.74	122.92
10	U	403	BCL	O2D-CGD-O1D	-2.28	119.39	123.84
10	A	814	BCL	CMD-C2D-C3D	2.27	128.93	124.68
10	a	813	BCL	CAA-C2A-C1A	2.27	119.42	111.97
12	a	817	F26	C32-C35-C34	-2.27	120.03	126.42
10	W	403	BCL	O2D-CGD-O1D	-2.26	119.41	123.84
10	a	805	BCL	C4-C3-C5	-2.26	111.47	115.27
9	A	827	G2O	CMD-C2D-C3D	2.26	128.91	124.68
10	X	402	BCL	O2D-CGD-O1D	-2.25	119.43	123.84
14	A	820	LMG	C3-C4-C5	-2.25	106.22	110.24
10	U	407[B]	BCL	CMB-C2B-C3B	2.25	128.89	124.68
10	X	405	BCL	CMD-C2D-C3D	2.25	128.89	124.68
11	a	815	F39	O5-C10-C12	-2.25	103.72	109.30
8	A	801	GS0	C3D-C2D-C1D	-2.24	102.77	105.83
10	B	301	BCL	CBA-CAA-C2A	2.24	120.48	113.86
10	X	404	BCL	CMB-C2B-C3B	2.24	128.87	124.68
10	U	404	BCL	CMB-C2B-C3B	2.24	128.87	124.68
10	V	402	BCL	OBB-CAB-CBB	-2.24	115.13	120.17
10	A	806	BCL	CMD-C2D-C3D	2.24	128.86	124.68
11	a	815	F39	O4-C9-C11	-2.24	104.61	110.05
10	V	406	BCL	CMB-C2B-C3B	2.23	128.85	124.68
14	A	823	LMG	O7-C10-O9	-2.23	118.31	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	A	815	F39	O4-C9-C11	-2.23	104.63	110.05
10	A	804	BCL	CMD-C2D-C3D	2.23	128.85	124.68
10	A	813	BCL	O2A-CGA-O1A	-2.23	117.97	123.59
12	a	816	F26	C36-C31-C33	-2.23	119.80	122.92
14	C	302	LMG	O1-C1-C2	-2.23	104.83	108.30
10	X	406	BCL	C1-C2-C3	-2.22	122.20	126.04
11	C	301	F39	C40-C41-C42	-2.22	120.18	126.42
10	A	812	BCL	C6-C7-C8	2.22	123.10	115.92
10	a	803	BCL	CMB-C2B-C3B	2.22	128.83	124.68
14	a	822	LMG	O3-C3-C2	-2.22	105.22	110.35
10	X	408[B]	BCL	CMB-C2B-C3B	2.22	128.82	124.68
12	a	817	F26	C10-C14-C16	-2.22	120.17	127.75
8	A	801	GS0	C1D-ND-C4D	-2.21	104.77	106.33
10	Y	407	BCL	CMD-C2D-C3D	2.21	128.81	124.68
10	U	402	BCL	CMB-C2B-C3B	2.21	128.81	124.68
10	A	808	BCL	C2A-C1A-CHA	2.21	127.72	123.86
10	a	804	BCL	CMD-C2D-C3D	2.21	128.81	124.68
10	X	401	BCL	OBB-CAB-CBB	-2.21	115.20	120.17
10	V	409[B]	BCL	CMB-C2B-C3B	2.21	128.80	124.68
10	U	402	BCL	C5-C3-C2	-2.20	116.66	121.12
10	A	803	BCL	CMD-C2D-C3D	2.20	128.80	124.68
10	X	401	BCL	CMD-C2D-C3D	2.20	128.79	124.68
12	a	817	F26	C20-C16-C21	2.19	119.45	114.60
9	A	826	G2O	O2A-CGA-O1A	-2.19	118.06	123.59
9	a	801	G2O	CMD-C2D-C3D	2.19	128.77	124.68
10	a	810	BCL	CMB-C2B-C3B	2.19	128.77	124.68
10	A	806	BCL	O2A-CGA-CBA	-2.18	105.05	111.91
10	Z	402	BCL	OBB-CAB-CBB	-2.18	115.25	120.17
10	Z	407	BCL	CMB-C2B-C3B	2.18	128.76	124.68
11	A	815	F39	C65-C62-C59	-2.18	119.86	122.92
11	C	301	F39	C65-C62-C59	-2.18	119.87	122.92
10	U	402	BCL	O2D-CGD-O1D	-2.18	119.57	123.84
11	A	815	F39	C40-C41-C42	-2.18	120.29	126.42
10	Y	406	BCL	C1-C2-C3	-2.18	122.27	126.04
10	W	407	BCL	CMB-C2B-C3B	2.18	128.76	124.68
11	C	301	F39	O2-C11-C9	2.18	114.69	108.29
10	V	405	BCL	C6-C5-C3	2.18	119.16	113.45
12	a	816	F26	C27-C28-C31	-2.17	120.31	126.42
10	Y	408	BCL	C1-C2-C3	-2.17	122.28	126.04
10	X	404	BCL	C4-C3-C5	-2.17	111.62	115.27
10	Y	408	BCL	O2A-CGA-O1A	-2.17	118.11	123.59
10	a	813	BCL	C4A-NA-C1A	2.17	107.68	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	Z	404	BCL	C1C-NC-C4C	2.17	107.68	106.71
10	W	401	BCL	O2A-CGA-O1A	-2.16	118.13	123.59
10	U	403	BCL	OBB-CAB-CBB	-2.16	115.31	120.17
10	Z	402	BCL	CBA-CAA-C2A	2.16	120.24	113.86
10	V	403	BCL	C1C-NC-C4C	2.16	107.68	106.71
10	A	804	BCL	C17-C16-C15	2.16	123.16	113.24
12	A	816	F26	C29-C26-C30	-2.16	119.90	122.92
10	X	407[B]	BCL	CMB-C2B-C3B	2.16	128.71	124.68
10	X	403	BCL	OBB-CAB-CBB	-2.15	115.32	120.17
10	W	405	BCL	C5-C3-C2	-2.15	116.76	121.12
10	X	404	BCL	C1-C2-C3	-2.15	122.32	126.04
10	X	403	BCL	C1-C2-C3	-2.15	122.32	126.04
10	V	401	BCL	CMB-C2B-C3B	2.15	128.70	124.68
11	a	815	F39	C40-C41-C42	-2.15	120.38	126.42
10	U	401	BCL	CBA-CAA-C2A	2.15	120.21	113.86
10	a	812	BCL	O2D-CGD-O1D	-2.15	119.64	123.84
11	C	301	F39	C60-C58-C61	-2.14	119.92	122.92
10	B	301	BCL	OBB-CAB-CBB	-2.14	115.35	120.17
10	W	401	BCL	CAA-C2A-C1A	2.14	119.00	111.97
11	C	301	F39	O5-C10-C12	-2.14	103.98	109.30
10	B	301	BCL	O2D-CGD-O1D	-2.14	119.65	123.84
10	A	812	BCL	C6-C5-C3	2.14	119.06	113.45
10	A	812	BCL	CMB-C2B-C3B	2.14	128.68	124.68
10	A	813	BCL	CMB-C2B-C3B	2.13	128.67	124.68
9	A	827	G2O	CHC-C4B-NB	2.13	126.41	124.45
10	A	814	BCL	O2A-CGA-O1A	-2.13	118.21	123.59
10	W	407	BCL	C1-C2-C3	-2.13	122.36	126.04
10	W	408[B]	BCL	C4A-NA-C1A	2.13	107.66	106.71
10	A	803	BCL	C17-C16-C15	2.13	123.03	113.24
14	C	302	LMG	O2-C2-C1	-2.13	104.88	110.05
14	A	823	LMG	O2-C2-C1	-2.13	104.88	110.05
8	a	802	GS0	C3D-C2D-C1D	-2.13	102.93	105.83
10	A	804	BCL	C6-C5-C3	2.13	119.03	113.45
14	A	820	LMG	O3-C3-C2	-2.13	105.44	110.35
10	a	814	BCL	CMD-C2D-C3D	2.12	128.65	124.68
10	A	811	BCL	OBD-CAD-C3D	2.12	131.50	127.98
11	A	815	F39	C43-C42-C44	-2.12	119.95	122.92
10	A	803	BCL	O2A-CGA-O1A	-2.12	118.25	123.59
10	A	808	BCL	OBB-CAB-CBB	-2.12	115.40	120.17
10	Y	401	BCL	C11-C10-C8	2.12	122.76	115.92
10	a	804	BCL	C4A-NA-C1A	2.12	107.66	106.71
8	a	802	GS0	CBB-CAB-C3B	2.11	126.62	120.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B	301	BCL	C4-C3-C5	-2.11	111.72	115.27
12	a	817	F26	C29-C26-C30	-2.11	119.96	122.92
9	A	827	G2O	O2A-CGA-O1A	-2.11	118.27	123.59
10	W	406	BCL	C4B-C3B-CAB	-2.11	123.05	127.13
8	A	801	GS0	C12-C11-C10	-2.11	103.56	113.24
9	a	801	G2O	CMD-C2D-C1D	-2.11	125.23	128.46
10	a	804	BCL	CMB-C2B-C3B	2.10	128.61	124.68
10	Y	408	BCL	CMB-C2B-C3B	2.10	128.61	124.68
10	A	804	BCL	C16-C15-C13	2.10	122.70	115.92
10	V	405	BCL	OBB-CAB-CBB	-2.10	115.45	120.17
10	A	811	BCL	C4B-C3B-CAB	-2.10	123.08	127.13
10	A	811	BCL	C5-C3-C2	-2.10	116.88	121.12
10	X	401	BCL	C4-C3-C5	-2.09	111.75	115.27
10	Z	408[B]	BCL	CMB-C2B-C3B	2.09	128.59	124.68
10	W	406	BCL	CMB-C2B-C3B	2.09	128.59	124.68
10	Z	404	BCL	OBB-CAB-CBB	-2.09	115.47	120.17
10	a	811	BCL	O2D-CGD-O1D	-2.09	119.75	123.84
10	Z	408[B]	BCL	O2D-CGD-O1D	-2.09	119.75	123.84
10	a	811	BCL	C4A-NA-C1A	2.09	107.64	106.71
10	W	406	BCL	C5-C3-C2	-2.09	116.89	121.12
10	W	401	BCL	OBB-CAB-CBB	-2.09	115.47	120.17
11	C	301	F39	C14-C18-C19	2.09	117.34	112.33
10	V	407	BCL	C11-C10-C8	-2.08	109.18	115.92
10	Y	402	BCL	OBB-CAB-CBB	-2.08	115.48	120.17
14	A	822	LMG	O3-C3-C2	-2.08	105.54	110.35
10	A	803	BCL	CMB-C2B-C3B	2.08	128.57	124.68
10	V	401	BCL	O2D-CGD-O1D	-2.08	119.77	123.84
10	Z	407	BCL	O2A-CGA-O1A	-2.08	118.35	123.59
10	U	404	BCL	C4B-C3B-CAB	-2.08	123.12	127.13
10	A	805	BCL	O2A-CGA-O1A	-2.08	118.35	123.59
9	A	827	G2O	CHC-C4B-C3B	2.08	128.81	125.26
10	X	406	BCL	C11-C10-C8	-2.08	109.21	115.92
10	V	402	BCL	CAA-C2A-C1A	2.07	118.75	111.97
10	Y	404	BCL	C5-C3-C2	-2.06	116.94	121.12
10	X	401	BCL	C1C-NC-C4C	2.06	107.63	106.71
12	a	817	F26	C36-C31-C33	-2.06	120.04	122.92
10	Y	403	BCL	C1C-NC-C4C	2.06	107.63	106.71
10	W	403	BCL	CMB-C2B-C3B	2.06	128.53	124.68
10	a	812	BCL	CMB-C2B-C3B	2.06	128.52	124.68
10	V	408	BCL	C1C-NC-C4C	2.06	107.63	106.71
10	X	408[B]	BCL	C4A-NA-C1A	2.06	107.63	106.71
10	W	405	BCL	C4C-CHD-C1D	2.05	128.92	125.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	U	405	BCL	C6-C5-C3	2.05	118.84	113.45
10	A	809	BCL	CMB-C2B-C3B	2.05	128.52	124.68
10	W	402	BCL	OBD-CAD-C3D	2.05	131.39	127.98
10	X	403	BCL	O2D-CGD-O1D	-2.05	119.83	123.84
10	a	814	BCL	CMB-C2B-C3B	2.05	128.51	124.68
10	A	804	BCL	C4C-CHD-C1D	2.05	128.91	125.88
10	a	808	BCL	OBD-CAD-C3D	2.05	131.38	127.98
10	a	813	BCL	CMB-C2B-C3B	2.04	128.50	124.68
10	A	810	BCL	OBB-CAB-C3B	2.04	123.62	119.99
10	A	804	BCL	O2D-CGD-O1D	-2.04	119.85	123.84
14	A	820	LMG	O2-C2-C1	-2.04	105.10	110.05
10	Z	407	BCL	C11-C10-C8	-2.04	109.33	115.92
10	Y	408	BCL	O2D-CGD-O1D	-2.04	119.86	123.84
10	A	809	BCL	O2D-CGD-O1D	-2.04	119.86	123.84
10	Y	404	BCL	CMB-C2B-C3B	2.03	128.48	124.68
10	U	403	BCL	CAC-C3C-C4C	2.03	117.10	112.58
10	a	808	BCL	O2D-CGD-O1D	-2.03	119.87	123.84
10	A	807	BCL	CMB-C2B-C3B	2.03	128.47	124.68
10	a	803	BCL	C4C-CHD-C1D	2.02	128.87	125.88
10	Y	401	BCL	OBB-CAB-CBB	-2.02	115.62	120.17
14	A	823	LMG	C3-C4-C5	-2.02	106.63	110.24
10	A	805	BCL	OBD-CAD-C3D	2.02	131.33	127.98
10	a	804	BCL	C4C-CHD-C1D	2.01	128.86	125.88
10	W	407	BCL	O2A-CGA-O1A	-2.01	118.51	123.59
10	U	403	BCL	C1-O2A-CGA	2.01	121.72	116.44
10	X	402	BCL	O2A-CGA-O1A	-2.01	118.52	123.59
10	W	404	BCL	C4C-CHD-C1D	2.01	128.85	125.88
11	C	301	F39	C43-C42-C44	-2.01	120.11	122.92
9	A	827	G2O	C1-C2-C3	-2.01	122.57	126.04
10	X	409	BCL	O2D-CGD-O1D	-2.01	119.92	123.84
10	V	404	BCL	CMB-C2B-C3B	2.01	128.43	124.68
10	U	401	BCL	OBB-CAB-CBB	-2.00	115.67	120.17

All (16) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
8	A	801	GS0	CBD
8	A	801	GS0	C13
8	a	802	GS0	C3C
8	a	802	GS0	CBD
9	A	802	G2O	CBD
9	A	802	G2O	C2A

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Mol	Chain	Res	Type	Atom
9	A	802	G2O	C3A
9	A	826	G2O	CBD
9	A	826	G2O	C2A
9	A	826	G2O	C3A
9	A	827	G2O	CBD
9	A	827	G2O	C2A
9	A	827	G2O	C3A
9	a	801	G2O	CBD
9	a	801	G2O	C2A
9	a	801	G2O	C3A

All (1344) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	A	801	GS0	C1-C2-C3-C4
8	A	801	GS0	C1-C2-C3-C5
8	A	801	GS0	C3A-C2A-CAA-CBA
8	A	801	GS0	CBD-CGD-O2D-CED
8	A	801	GS0	O1D-CGD-O2D-CED
8	a	802	GS0	C1-C2-C3-C4
8	a	802	GS0	C1-C2-C3-C5
8	a	802	GS0	C3A-C2A-CAA-CBA
8	a	802	GS0	C2C-C3C-CAC-CBC
8	a	802	GS0	C4C-C3C-CAC-CBC
9	A	802	G2O	C1-C2-C3-C4
9	A	802	G2O	C2-C3-C5-C6
9	A	802	G2O	C5-C6-C7-C8
9	A	802	G2O	C6-C7-C8-C10
9	A	802	G2O	CHA-CBD-CGD-O1D
9	A	802	G2O	CBD-CGD-O2D-CED
9	A	826	G2O	C1-C2-C3-C4
9	A	826	G2O	C1-C2-C3-C5
9	A	826	G2O	C4-C3-C5-C6
9	A	826	G2O	C5-C6-C7-C8
9	A	826	G2O	C11-C10-C8-C7
9	A	826	G2O	C14-C13-C15-C16
9	A	826	G2O	C6-C7-C8-C10
9	A	826	G2O	C6-C7-C8-C9
9	A	826	G2O	CBD-CGD-O2D-CED
9	A	826	G2O	O1D-CGD-O2D-CED
9	A	827	G2O	C5-C6-C7-C8
9	A	827	G2O	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
9	A	827	G2O	C6-C7-C8-C10
9	A	827	G2O	C6-C7-C8-C9
9	a	801	G2O	C1-C2-C3-C4
9	a	801	G2O	C1-C2-C3-C5
9	a	801	G2O	C5-C6-C7-C8
9	a	801	G2O	C11-C10-C8-C7
9	a	801	G2O	C11-C10-C8-C9
9	a	801	G2O	C6-C7-C8-C10
9	a	801	G2O	C6-C7-C8-C9
9	a	801	G2O	CHA-CBD-CGD-O1D
9	a	801	G2O	CBD-CGD-O2D-CED
9	a	801	G2O	O1D-CGD-O2D-CED
10	A	803	BCL	C1-C2-C3-C4
10	A	804	BCL	C4-C3-C5-C6
10	A	805	BCL	C4C-C3C-CAC-CBC
10	A	805	BCL	C1-C2-C3-C4
10	A	806	BCL	O2A-C1-C2-C3
10	A	806	BCL	C1-C2-C3-C4
10	A	807	BCL	C4C-C3C-CAC-CBC
10	A	807	BCL	C1-C2-C3-C4
10	A	808	BCL	CHA-CBD-CGD-O1D
10	A	808	BCL	O2A-C1-C2-C3
10	A	808	BCL	C1-C2-C3-C4
10	A	809	BCL	CHA-CBD-CGD-O1D
10	A	809	BCL	CAD-CBD-CGD-O1D
10	A	809	BCL	CAD-CBD-CGD-O2D
10	A	809	BCL	C1-C2-C3-C4
10	A	810	BCL	CHA-CBD-CGD-O2D
10	A	810	BCL	C1-C2-C3-C4
10	A	811	BCL	C1-C2-C3-C4
10	A	812	BCL	C1-C2-C3-C4
10	A	812	BCL	C1-C2-C3-C5
10	A	813	BCL	C1A-C2A-CAA-CBA
10	A	813	BCL	C4C-C3C-CAC-CBC
10	A	813	BCL	C1-C2-C3-C4
10	A	814	BCL	CHA-CBD-CGD-O2D
10	a	803	BCL	C4C-C3C-CAC-CBC
10	a	805	BCL	C4C-C3C-CAC-CBC
10	a	805	BCL	C1-C2-C3-C4
10	a	806	BCL	C2C-C3C-CAC-CBC
10	a	806	BCL	C4C-C3C-CAC-CBC
10	a	806	BCL	O2A-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
10	a	806	BCL	C1-C2-C3-C4
10	a	807	BCL	C2C-C3C-CAC-CBC
10	a	807	BCL	C4C-C3C-CAC-CBC
10	a	807	BCL	CHA-CBD-CGD-O2D
10	a	807	BCL	C1-C2-C3-C4
10	a	809	BCL	CHA-CBD-CGD-O2D
10	a	809	BCL	CAD-CBD-CGD-O2D
10	a	809	BCL	O2A-C1-C2-C3
10	a	809	BCL	C1-C2-C3-C4
10	a	810	BCL	C2C-C3C-CAC-CBC
10	a	810	BCL	C4C-C3C-CAC-CBC
10	a	810	BCL	CHA-CBD-CGD-O2D
10	a	810	BCL	C1-C2-C3-C4
10	a	812	BCL	CHA-CBD-CGD-O1D
10	a	812	BCL	CAD-CBD-CGD-O2D
10	a	813	BCL	C1A-C2A-CAA-CBA
10	a	813	BCL	C3A-C2A-CAA-CBA
10	a	813	BCL	C2C-C3C-CAC-CBC
10	a	813	BCL	C4C-C3C-CAC-CBC
10	a	813	BCL	CHA-CBD-CGD-O2D
10	a	813	BCL	CAD-CBD-CGD-O2D
10	a	814	BCL	C4C-C3C-CAC-CBC
10	a	814	BCL	O2A-C1-C2-C3
10	a	814	BCL	C1-C2-C3-C4
10	a	814	BCL	C2-C3-C5-C6
10	B	301	BCL	C1A-C2A-CAA-CBA
10	B	301	BCL	C4C-C3C-CAC-CBC
10	B	301	BCL	CHA-CBD-CGD-O1D
10	B	301	BCL	CAD-CBD-CGD-O1D
10	B	301	BCL	CAD-CBD-CGD-O2D
10	B	301	BCL	O2A-C1-C2-C3
10	B	301	BCL	C1-C2-C3-C4
10	U	401	BCL	C1-C2-C3-C4
10	U	402	BCL	C4C-C3C-CAC-CBC
10	U	402	BCL	CHA-CBD-CGD-O1D
10	U	402	BCL	CAD-CBD-CGD-O1D
10	U	402	BCL	CAD-CBD-CGD-O2D
10	U	402	BCL	C1-C2-C3-C4
10	U	402	BCL	C2-C3-C5-C6
10	U	403	BCL	C4-C3-C5-C6
10	U	404	BCL	CHA-CBD-CGD-O2D
10	U	404	BCL	C1-C2-C3-C4

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Mol	Chain	Res	Type	Atoms
10	U	406	BCL	C1-C2-C3-C4
10	U	407[B]	BCL	C2C-C3C-CAC-CBC
10	U	407[B]	BCL	CHA-CBD-CGD-O2D
10	V	401	BCL	CHA-CBD-CGD-O2D
10	V	401	BCL	C1-C2-C3-C4
10	V	402	BCL	CHA-CBD-CGD-O2D
10	V	402	BCL	C1-C2-C3-C4
10	V	403	BCL	C1-C2-C3-C4
10	V	404	BCL	C2C-C3C-CAC-CBC
10	V	404	BCL	C4C-C3C-CAC-CBC
10	V	404	BCL	C1-C2-C3-C4
10	V	405	BCL	C2C-C3C-CAC-CBC
10	V	405	BCL	C4C-C3C-CAC-CBC
10	V	405	BCL	CHA-CBD-CGD-O2D
10	V	407	BCL	C2-C3-C5-C6
10	V	407	BCL	C4-C3-C5-C6
10	V	408	BCL	C1-C2-C3-C4
10	V	409[B]	BCL	C1A-C2A-CAA-CBA
10	V	409[B]	BCL	CHA-CBD-CGD-O2D
10	W	401	BCL	CHA-CBD-CGD-O1D
10	W	401	BCL	CHA-CBD-CGD-O2D
10	W	401	BCL	C1-C2-C3-C4
10	W	402	BCL	C2C-C3C-CAC-CBC
10	W	402	BCL	C4C-C3C-CAC-CBC
10	W	402	BCL	C1-C2-C3-C4
10	W	403	BCL	C4C-C3C-CAC-CBC
10	W	403	BCL	C1-C2-C3-C4
10	W	403	BCL	C2-C3-C5-C6
10	W	404	BCL	C2C-C3C-CAC-CBC
10	W	404	BCL	C4C-C3C-CAC-CBC
10	W	404	BCL	C1-C2-C3-C4
10	W	405	BCL	C2C-C3C-CAC-CBC
10	W	405	BCL	C1-C2-C3-C4
10	W	407	BCL	C1-C2-C3-C4
10	W	408[B]	BCL	C4C-C3C-CAC-CBC
10	W	408[B]	BCL	CHA-CBD-CGD-O2D
10	X	401	BCL	C1-C2-C3-C4
10	X	402	BCL	C4C-C3C-CAC-CBC
10	X	402	BCL	C4-C3-C5-C6
10	X	403	BCL	C2C-C3C-CAC-CBC
10	X	403	BCL	C4C-C3C-CAC-CBC
10	X	403	BCL	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
10	X	403	BCL	C1-C2-C3-C4
10	X	404	BCL	CHA-CBD-CGD-O2D
10	X	404	BCL	C1-C2-C3-C4
10	X	405	BCL	CHA-CBD-CGD-O2D
10	X	406	BCL	C1-C2-C3-C4
10	X	408[B]	BCL	CHA-CBD-CGD-O2D
10	X	409	BCL	C1-C2-C3-C4
10	Y	401	BCL	CHA-CBD-CGD-O1D
10	Y	401	BCL	CHA-CBD-CGD-O2D
10	Y	401	BCL	C1-C2-C3-C4
10	Y	402	BCL	CHA-CBD-CGD-O2D
10	Y	402	BCL	C1-C2-C3-C4
10	Y	403	BCL	CHA-CBD-CGD-O1D
10	Y	403	BCL	C1-C2-C3-C4
10	Y	403	BCL	C2-C3-C5-C6
10	Y	404	BCL	C4C-C3C-CAC-CBC
10	Y	404	BCL	CAD-CBD-CGD-O1D
10	Y	405	BCL	C1-C2-C3-C4
10	Y	406	BCL	C1-C2-C3-C4
10	Y	407	BCL	CHA-CBD-CGD-O1D
10	Y	407	BCL	C1-C2-C3-C4
10	Y	408	BCL	C1-C2-C3-C4
10	Z	402	BCL	CHA-CBD-CGD-O1D
10	Z	402	BCL	CHA-CBD-CGD-O2D
10	Z	402	BCL	C1-C2-C3-C4
10	Z	403	BCL	C4C-C3C-CAC-CBC
10	Z	403	BCL	CHA-CBD-CGD-O1D
10	Z	403	BCL	CAD-CBD-CGD-O1D
10	Z	403	BCL	CAD-CBD-CGD-O2D
10	Z	404	BCL	C4C-C3C-CAC-CBC
10	Z	404	BCL	CHA-CBD-CGD-O2D
10	Z	404	BCL	C1-C2-C3-C4
10	Z	405	BCL	C1-C2-C3-C4
10	Z	406	BCL	C1-C2-C3-C4
10	Z	407	BCL	C1-C2-C3-C4
10	Z	408[B]	BCL	CHA-CBD-CGD-O1D
10	Z	408[B]	BCL	CAD-CBD-CGD-O1D
10	Z	408[B]	BCL	CAD-CBD-CGD-O2D
11	A	815	F39	C17-C13-C14-C18
11	A	815	F39	C18-C19-C20-C25
11	A	815	F39	C25-C20-C27-C32
11	A	815	F39	C32-C35-C37-C38

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Mol	Chain	Res	Type	Atoms
11	A	815	F39	C38-C37-C39-C40
11	A	815	F39	C37-C39-C40-C41
11	A	815	F39	C39-C40-C41-C42
11	A	815	F39	C40-C41-C42-C44
11	A	815	F39	C41-C42-C44-C51
11	A	815	F39	C44-C51-C57-C59
11	A	815	F39	C53-C56-C58-C60
11	A	815	F39	C56-C58-C61-C63
11	A	815	F39	C60-C58-C61-C63
11	A	815	F39	C57-C59-C62-C64
11	A	815	F39	C57-C59-C62-C65
11	A	815	F39	C58-C61-C63-C64
11	A	815	F39	C59-C62-C64-C63
11	A	815	F39	C65-C62-C64-C63
11	a	815	F39	O2-C13-C14-C18
11	a	815	F39	C19-C20-C27-C32
11	a	815	F39	C22-C21-O6-C15
11	a	815	F39	O7-C21-O6-C15
11	a	815	F39	C37-C39-C40-C41
11	a	815	F39	C39-C40-C41-C42
11	a	815	F39	C40-C41-C42-C43
11	a	815	F39	C41-C42-C44-C51
11	a	815	F39	C43-C42-C44-C51
11	a	815	F39	C44-C51-C57-C59
11	a	815	F39	C53-C56-C58-C60
11	a	815	F39	C56-C58-C61-C63
11	a	815	F39	C60-C58-C61-C63
11	a	815	F39	C57-C59-C62-C64
11	a	815	F39	C57-C59-C62-C65
11	a	815	F39	C65-C62-C64-C63
11	a	815	F39	C61-C63-C64-C62
11	C	301	F39	C19-C20-C27-C32
11	C	301	F39	C25-C20-C27-C32
11	C	301	F39	C22-C21-O6-C15
11	C	301	F39	C27-C32-C35-C37
11	C	301	F39	C32-C35-C37-C38
11	C	301	F39	C32-C35-C37-C39
11	C	301	F39	C37-C39-C40-C41
11	C	301	F39	C40-C41-C42-C43
11	C	301	F39	C43-C42-C44-C51
11	C	301	F39	C42-C44-C51-C57
11	C	301	F39	C44-C51-C57-C59

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Mol	Chain	Res	Type	Atoms
11	C	301	F39	C46-C53-C56-C58
11	C	301	F39	C53-C56-C58-C61
11	C	301	F39	C51-C57-C59-C62
11	C	301	F39	C56-C58-C61-C63
11	C	301	F39	C60-C58-C61-C63
11	C	301	F39	C59-C62-C64-C63
11	C	301	F39	C65-C62-C64-C63
12	A	816	F26	C17-C13-C18-C22
12	A	816	F26	C8-C13-C18-C22
12	A	816	F26	C9-C15-C19-C24
12	A	816	F26	C23-C19-C24-C27
12	A	816	F26	C15-C19-C24-C27
12	A	816	F26	C10-C14-C16-C21
12	A	816	F26	C22-C25-C26-C29
12	A	816	F26	C22-C25-C26-C30
12	A	816	F26	C25-C26-C30-C32
12	A	816	F26	C29-C26-C30-C32
12	A	816	F26	C26-C30-C32-C35
12	A	816	F26	C35-C34-C37-C39
12	A	816	F26	C40-C34-C37-C39
12	a	816	F26	C17-C13-C18-C22
12	a	816	F26	C8-C13-C18-C22
12	a	816	F26	C9-C15-C19-C24
12	a	816	F26	C23-C19-C24-C27
12	a	816	F26	C15-C19-C24-C27
12	a	816	F26	C10-C14-C16-C21
12	a	816	F26	C10-C14-C16-C20
12	a	816	F26	C25-C26-C30-C32
12	a	816	F26	C29-C26-C30-C32
12	a	817	F26	C17-C13-C18-C22
12	a	817	F26	C8-C13-C18-C22
12	a	817	F26	C23-C19-C24-C27
12	a	817	F26	C15-C19-C24-C27
12	a	817	F26	C25-C26-C30-C32
12	a	817	F26	C29-C26-C30-C32
12	a	817	F26	C27-C28-C31-C33
12	a	817	F26	C27-C28-C31-C36
12	a	817	F26	C31-C33-C38-C39
13	A	817	LHG	C3-O3-P-O4
13	A	817	LHG	C3-O3-P-O5
13	A	817	LHG	C3-O3-P-O6
13	A	817	LHG	O9-C7-O7-C5

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Mol	Chain	Res	Type	Atoms
13	A	817	LHG	C8-C7-O7-C5
13	A	818	LHG	C3-O3-P-O5
13	A	818	LHG	C4-O6-P-O3
13	A	818	LHG	C4-O6-P-O4
13	A	818	LHG	C4-O6-P-O5
13	A	819	LHG	O1-C1-C2-C3
13	a	818	LHG	C1-C2-C3-O3
13	a	818	LHG	C3-O3-P-O5
13	a	818	LHG	O9-C7-O7-C5
13	a	818	LHG	C8-C7-O7-C5
13	a	819	LHG	C8-C7-O7-C5
13	a	820	LHG	O1-C1-C2-C3
13	a	820	LHG	C4-O6-P-O5
13	a	821	LHG	O9-C7-O7-C5
13	a	821	LHG	C8-C7-O7-C5
13	a	821	LHG	O10-C23-O8-C6
13	E	101	LHG	O1-C1-C2-C3
13	E	101	LHG	C3-O3-P-O5
13	E	102	LHG	O1-C1-C2-O2
13	E	102	LHG	O1-C1-C2-C3
13	E	102	LHG	C3-O3-P-O6
13	E	102	LHG	O9-C7-O7-C5
13	Z	401	LHG	O1-C1-C2-C3
13	Z	401	LHG	C3-O3-P-O4
13	Z	401	LHG	C3-O3-P-O5
13	Z	401	LHG	C8-C7-O7-C5
14	A	820	LMG	C2-C1-O1-C7
14	A	820	LMG	O6-C1-O1-C7
14	A	822	LMG	O9-C10-O7-C8
14	a	822	LMG	C2-C1-O1-C7
14	a	822	LMG	O6-C1-O1-C7
14	C	302	LMG	O6-C1-O1-C7
14	C	302	LMG	O9-C10-O7-C8
8	a	802	GS0	CBD-CGD-O2D-CED
8	A	801	GS0	O1A-CGA-O2A-C1
8	a	802	GS0	O1A-CGA-O2A-C1
9	A	826	G2O	O1A-CGA-O2A-C1
11	C	301	F39	O7-C21-O6-C15
9	A	802	G2O	O1D-CGD-O2D-CED
9	A	827	G2O	O1D-CGD-O2D-CED
9	A	826	G2O	CBA-CGA-O2A-C1
12	a	817	F26	C10-C14-C16-C21

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Mol	Chain	Res	Type	Atoms
12	a	817	F26	C10-C14-C16-C20
9	A	827	G2O	CBD-CGD-O2D-CED
13	A	819	LHG	O10-C23-O8-C6
13	a	819	LHG	O10-C23-O8-C6
13	Z	401	LHG	O10-C23-O8-C6
14	C	302	LMG	O10-C28-O8-C9
9	A	802	G2O	C13-C15-C16-C17
9	A	826	G2O	C8-C10-C11-C12
11	A	815	F39	O1-C12-C15-O6
11	a	815	F39	O1-C12-C15-O6
13	a	820	LHG	O9-C7-O7-C5
13	Z	401	LHG	O9-C7-O7-C5
14	A	821	LMG	O9-C10-O7-C8
14	A	821	LMG	O10-C28-O8-C9
8	a	802	GS0	CBA-CGA-O2A-C1
13	a	821	LHG	C24-C23-O8-C6
13	Z	401	LHG	C24-C23-O8-C6
14	C	302	LMG	C29-C28-O8-C9
13	E	102	LHG	C8-C7-O7-C5
14	A	821	LMG	C11-C10-O7-C8
14	A	822	LMG	C11-C10-O7-C8
14	C	302	LMG	C11-C10-O7-C8
9	a	801	G2O	C2C-C3C-CAC-CBC
11	A	815	F39	C10-C12-C15-O6
9	A	802	G2O	C2C-C3C-CAC-CBC
9	A	802	G2O	C2A-CAA-CBA-CGA
9	A	827	G2O	C2A-CAA-CBA-CGA
8	A	801	GS0	CBA-CGA-O2A-C1
13	A	818	LHG	C24-C23-O8-C6
13	A	819	LHG	C24-C23-O8-C6
13	a	819	LHG	C24-C23-O8-C6
13	E	102	LHG	C24-C23-O8-C6
14	A	820	LMG	C29-C28-O8-C9
14	A	821	LMG	C29-C28-O8-C9
9	a	801	G2O	C4C-C3C-CAC-CBC
13	a	819	LHG	O9-C7-O7-C5
13	E	102	LHG	O10-C23-O8-C6
11	C	301	F39	C20-C27-C32-C35
12	a	817	F26	C34-C37-C39-C38
9	A	827	G2O	C2C-C3C-CAC-CBC
13	A	819	LHG	O2-C2-C3-O3
13	a	819	LHG	O2-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
11	a	815	F39	C10-C12-C15-O6
13	a	820	LHG	C24-C23-O8-C6
9	a	801	G2O	O1A-CGA-O2A-C1
11	A	815	F39	O7-C21-O6-C15
11	A	815	F39	C46-C53-C56-C58
11	a	815	F39	C46-C53-C56-C58
10	W	406	BCL	C3-C5-C6-C7
11	A	815	F39	C22-C21-O6-C15
9	A	826	G2O	C2-C3-C5-C6
9	A	802	G2O	C4-C3-C5-C6
12	A	816	F26	C10-C14-C16-C20
10	V	405	BCL	C4-C3-C5-C6
11	a	815	F39	C18-C19-C20-C25
10	A	804	BCL	C2-C3-C5-C6
10	V	404	BCL	C2-C3-C5-C6
10	V	405	BCL	C2-C3-C5-C6
10	X	402	BCL	C2-C3-C5-C6
10	Y	404	BCL	C2-C3-C5-C6
10	Z	403	BCL	C2-C3-C5-C6
10	a	814	BCL	C2A-CAA-CBA-CGA
14	C	302	LMG	C30-C31-C32-C33
13	A	819	LHG	C1-C2-C3-O3
13	E	101	LHG	O9-C7-O7-C5
9	A	802	G2O	C4C-C3C-CAC-CBC
13	A	818	LHG	C25-C26-C27-C28
9	a	801	G2O	CBA-CGA-O2A-C1
14	A	822	LMG	C29-C28-O8-C9
13	A	818	LHG	C23-C24-C25-C26
14	A	823	LMG	O6-C5-C6-O5
10	U	403	BCL	C13-C15-C16-C17
10	X	405	BCL	C10-C11-C12-C13
13	a	818	LHG	O2-C2-C3-O3
14	A	822	LMG	C28-C29-C30-C31
14	C	302	LMG	C2-C1-O1-C7
12	a	817	F26	C17-C13-C8-C10
9	a	801	G2O	C14-C13-C15-C16
10	A	803	BCL	C11-C12-C13-C14
10	A	804	BCL	C6-C7-C8-C9
10	A	805	BCL	C11-C10-C8-C9
10	A	811	BCL	C11-C12-C13-C14
10	a	809	BCL	C11-C10-C8-C9
10	a	812	BCL	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
10	a	814	BCL	C11-C10-C8-C9
10	X	409	BCL	C14-C13-C15-C16
10	A	803	BCL	C2A-CAA-CBA-CGA
10	A	814	BCL	C2A-CAA-CBA-CGA
11	A	815	F39	C40-C41-C42-C43
12	A	816	F26	C9-C15-C19-C23
12	a	816	F26	C22-C25-C26-C29
12	a	816	F26	C27-C28-C31-C36
12	a	817	F26	C9-C15-C19-C23
11	a	815	F39	C32-C35-C37-C39
11	a	815	F39	C40-C41-C42-C44
11	C	301	F39	C40-C41-C42-C44
12	a	816	F26	C22-C25-C26-C30
12	a	817	F26	C9-C15-C19-C24
12	a	817	F26	C37-C34-C35-C32
13	A	818	LHG	O10-C23-O8-C6
14	A	820	LMG	O10-C28-O8-C9
10	X	409	BCL	C5-C6-C7-C8
10	Y	401	BCL	C8-C10-C11-C12
13	a	820	LHG	C23-C24-C25-C26
9	A	827	G2O	C4C-C3C-CAC-CBC
10	a	814	BCL	C13-C15-C16-C17
10	X	402	BCL	O1D-CGD-O2D-CED
13	a	818	LHG	C7-C8-C9-C10
10	A	804	BCL	C5-C6-C7-C8
10	a	806	BCL	C13-C15-C16-C17
10	a	813	BCL	C2-C1-O2A-CGA
9	A	827	G2O	C13-C15-C16-C17
10	A	813	BCL	C8-C10-C11-C12
13	A	817	LHG	C2-C3-O3-P
14	A	820	LMG	C10-C11-C12-C13
14	a	822	LMG	C28-C29-C30-C31
9	A	826	G2O	C12-C13-C15-C16
10	A	804	BCL	C11-C10-C8-C7
10	A	813	BCL	C6-C7-C8-C10
10	a	812	BCL	C11-C10-C8-C7
12	a	817	F26	C19-C24-C27-C28
10	a	808	BCL	C2A-CAA-CBA-CGA
10	a	803	BCL	O1D-CGD-O2D-CED
14	A	823	LMG	C4-C5-C6-O5
12	a	816	F26	C14-C10-C8-C13
13	A	818	LHG	O2-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
13	a	820	LHG	O2-C2-C3-O3
8	A	801	GS0	C13-C15-C16-C17
10	V	408	BCL	C13-C15-C16-C17
13	a	820	LHG	O10-C23-O8-C6
10	a	803	BCL	C13-C15-C16-C17
10	a	813	BCL	C15-C16-C17-C18
10	V	403	BCL	C10-C11-C12-C13
13	A	819	LHG	C8-C7-O7-C5
13	E	101	LHG	C8-C7-O7-C5
10	A	810	BCL	C8-C10-C11-C12
10	A	812	BCL	C5-C6-C7-C8
13	A	819	LHG	C4-O6-P-O3
13	a	818	LHG	C3-O3-P-O6
13	a	819	LHG	C4-O6-P-O3
13	a	820	LHG	C4-O6-P-O3
13	Z	401	LHG	C3-O3-P-O6
13	a	819	LHG	C23-C24-C25-C26
14	A	820	LMG	C4-C5-C6-O5
14	a	822	LMG	C29-C28-O8-C9
10	a	805	BCL	O1D-CGD-O2D-CED
13	a	820	LHG	C1-C2-C3-O3
14	A	823	LMG	O9-C10-O7-C8
10	Y	404	BCL	C4-C3-C5-C6
8	A	801	GS0	C2A-CAA-CBA-CGA
11	C	301	F39	O1-C12-C15-O6
11	C	301	F39	C58-C61-C63-C64
12	A	816	F26	C19-C24-C27-C28
13	a	821	LHG	C23-C24-C25-C26
13	Z	401	LHG	C15-C16-C17-C18
11	a	815	F39	C38-C37-C39-C40
12	A	816	F26	C36-C31-C33-C38
12	a	816	F26	C36-C31-C33-C38
12	a	816	F26	C40-C34-C37-C39
12	a	817	F26	C40-C34-C37-C39
13	a	818	LHG	C12-C13-C14-C15
13	E	101	LHG	C14-C15-C16-C17
14	a	822	LMG	C32-C33-C34-C35
10	A	814	BCL	O1D-CGD-O2D-CED
11	C	301	F39	C10-C12-C15-O6
13	A	818	LHG	C10-C11-C12-C13
14	C	302	LMG	C31-C32-C33-C34
13	a	819	LHG	C6-C5-O7-C7

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Mol	Chain	Res	Type	Atoms
10	A	808	BCL	O1D-CGD-O2D-CED
10	V	404	BCL	O1D-CGD-O2D-CED
13	A	818	LHG	O9-C7-O7-C5
10	Y	403	BCL	C10-C11-C12-C13
13	a	820	LHG	C13-C14-C15-C16
10	A	813	BCL	O1D-CGD-O2D-CED
14	A	822	LMG	O6-C5-C6-O5
11	a	815	F39	C24-C26-C28-C29
13	A	817	LHG	C24-C25-C26-C27
13	A	818	LHG	C17-C18-C19-C20
14	A	821	LMG	C13-C14-C15-C16
13	Z	401	LHG	O2-C2-C3-O3
11	C	301	F39	C28-C29-C30-C31
13	E	102	LHG	C7-C8-C9-C10
11	A	815	F39	C35-C37-C39-C40
11	C	301	F39	C35-C37-C39-C40
12	A	816	F26	C28-C31-C33-C38
12	a	816	F26	C28-C31-C33-C38
12	a	816	F26	C35-C34-C37-C39
12	a	817	F26	C35-C34-C37-C39
13	A	818	LHG	C24-C25-C26-C27
14	A	821	LMG	C12-C13-C14-C15
10	A	813	BCL	C16-C17-C18-C20
10	Y	403	BCL	C16-C17-C18-C19
10	Y	403	BCL	C16-C17-C18-C20
10	Y	404	BCL	O1D-CGD-O2D-CED
14	A	820	LMG	O6-C5-C6-O5
10	A	809	BCL	C4-C3-C5-C6
10	a	804	BCL	C4-C3-C5-C6
10	U	404	BCL	C4-C3-C5-C6
10	Z	402	BCL	C4-C3-C5-C6
13	A	817	LHG	C26-C27-C28-C29
13	a	818	LHG	C25-C26-C27-C28
14	A	820	LMG	C30-C31-C32-C33
14	A	822	LMG	C13-C14-C15-C16
10	V	407	BCL	C14-C13-C15-C16
10	W	405	BCL	C6-C7-C8-C9
10	Y	402	BCL	C14-C13-C15-C16
10	Z	405	BCL	C14-C13-C15-C16
8	a	802	GS0	O1D-CGD-O2D-CED
14	A	820	LMG	C28-C29-C30-C31
10	A	814	BCL	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
13	A	817	LHG	C25-C26-C27-C28
14	a	822	LMG	C31-C32-C33-C34
11	C	301	F39	C53-C56-C58-C60
12	a	817	F26	C40-C34-C35-C32
13	a	820	LHG	C10-C11-C12-C13
13	E	102	LHG	C31-C32-C33-C34
14	A	820	LMG	C32-C33-C34-C35
13	A	817	LHG	O1-C1-C2-C3
13	a	818	LHG	O1-C1-C2-C3
13	a	819	LHG	O1-C1-C2-C3
11	A	815	F39	C53-C56-C58-C61
11	a	815	F39	C53-C56-C58-C61
12	a	816	F26	C27-C28-C31-C33
13	a	821	LHG	C17-C18-C19-C20
13	a	821	LHG	C18-C19-C20-C21
14	A	821	LMG	C32-C33-C34-C35
11	a	815	F39	C21-C22-C23-C24
13	A	819	LHG	C7-C8-C9-C10
13	a	819	LHG	C11-C12-C13-C14
13	E	102	LHG	C24-C25-C26-C27
14	A	821	LMG	C11-C12-C13-C14
14	C	302	LMG	C13-C14-C15-C16
10	W	401	BCL	C16-C17-C18-C19
10	W	404	BCL	O1D-CGD-O2D-CED
13	E	102	LHG	C15-C16-C17-C18
9	A	802	G2O	C8-C10-C11-C12
13	A	818	LHG	C18-C19-C20-C21
13	Z	401	LHG	C26-C27-C28-C29
14	C	302	LMG	C34-C35-C36-C37
14	A	820	LMG	C17-C18-C19-C20
10	A	813	BCL	C3A-C2A-CAA-CBA
10	a	807	BCL	C3A-C2A-CAA-CBA
10	B	301	BCL	C3A-C2A-CAA-CBA
13	a	818	LHG	C14-C15-C16-C17
10	U	403	BCL	O1D-CGD-O2D-CED
10	Z	408[B]	BCL	O1D-CGD-O2D-CED
11	A	815	F39	C26-C28-C29-C30
13	a	820	LHG	C16-C17-C18-C19
10	A	809	BCL	C5-C6-C7-C8
10	a	809	BCL	C4-C3-C5-C6
10	Y	402	BCL	C4-C3-C5-C6
10	a	812	BCL	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
10	U	401	BCL	C2-C3-C5-C6
14	A	822	LMG	C8-C9-O8-C28
13	Z	401	LHG	C25-C26-C27-C28
13	A	819	LHG	O1-C1-C2-O2
13	a	820	LHG	O1-C1-C2-O2
13	E	101	LHG	O1-C1-C2-O2
13	E	102	LHG	C30-C31-C32-C33
14	a	822	LMG	C16-C17-C18-C19
14	C	302	LMG	C11-C12-C13-C14
13	E	102	LHG	C10-C11-C12-C13
13	Z	401	LHG	C18-C19-C20-C21
14	A	821	LMG	C35-C36-C37-C38
13	A	818	LHG	C1-C2-C3-O3
14	C	302	LMG	C36-C37-C38-C39
10	A	813	BCL	C16-C17-C18-C19
10	A	812	BCL	C3-C5-C6-C7
13	A	818	LHG	C8-C7-O7-C5
13	a	820	LHG	C8-C7-O7-C5
13	a	818	LHG	C23-C24-C25-C26
10	W	404	BCL	C8-C10-C11-C12
10	V	402	BCL	C4-C3-C5-C6
10	a	808	BCL	O1D-CGD-O2D-CED
10	A	803	BCL	C11-C12-C13-C15
10	A	807	BCL	C2-C3-C5-C6
10	A	809	BCL	C12-C13-C15-C16
10	A	811	BCL	C6-C7-C8-C10
10	A	813	BCL	C11-C12-C13-C15
10	a	804	BCL	C12-C13-C15-C16
10	a	811	BCL	C11-C10-C8-C7
10	V	408	BCL	C12-C13-C15-C16
10	W	402	BCL	C11-C12-C13-C15
10	W	405	BCL	C6-C7-C8-C10
10	Y	401	BCL	C12-C13-C15-C16
10	Z	405	BCL	C12-C13-C15-C16
11	a	815	F39	C42-C44-C51-C57
10	V	401	BCL	C16-C17-C18-C19
10	Z	403	BCL	O1D-CGD-O2D-CED
13	a	818	LHG	C11-C10-C9-C8
13	E	102	LHG	C27-C28-C29-C30
13	Z	401	LHG	C12-C13-C14-C15
10	A	805	BCL	O1D-CGD-O2D-CED
13	E	101	LHG	C24-C25-C26-C27

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Mol	Chain	Res	Type	Atoms
10	A	812	BCL	O1D-CGD-O2D-CED
10	X	409	BCL	O1D-CGD-O2D-CED
13	A	819	LHG	C25-C26-C27-C28
14	A	822	LMG	C33-C34-C35-C36
14	a	822	LMG	C18-C19-C20-C21
13	a	821	LHG	C7-C8-C9-C10
14	A	821	LMG	C28-C29-C30-C31
10	A	809	BCL	O1D-CGD-O2D-CED
13	Z	401	LHG	C11-C12-C13-C14
9	A	826	G2O	C2B-C3B-CAB-CBB
10	A	804	BCL	C16-C17-C18-C20
10	W	405	BCL	C16-C17-C18-C20
9	A	826	G2O	C4B-C3B-CAB-CBB
10	V	403	BCL	C15-C16-C17-C18
13	A	819	LHG	O9-C7-O7-C5
11	C	301	F39	C30-C31-C33-C34
14	a	822	LMG	C33-C34-C35-C36
10	Z	403	BCL	C4-C3-C5-C6
10	U	403	BCL	C2-C3-C5-C6
12	a	817	F26	C18-C13-C8-C10
14	C	302	LMG	C32-C33-C34-C35
10	A	806	BCL	C14-C13-C15-C16
10	A	809	BCL	C14-C13-C15-C16
10	A	813	BCL	C11-C12-C13-C14
10	a	804	BCL	C14-C13-C15-C16
10	a	809	BCL	C6-C7-C8-C9
10	a	812	BCL	C11-C10-C8-C9
10	a	813	BCL	C11-C12-C13-C14
10	V	408	BCL	C14-C13-C15-C16
10	W	402	BCL	C11-C12-C13-C14
10	Y	401	BCL	C11-C10-C8-C9
13	a	820	LHG	C9-C10-C11-C12
13	E	101	LHG	C25-C26-C27-C28
9	a	801	G2O	C2A-CAA-CBA-CGA
14	A	822	LMG	C36-C37-C38-C39
10	W	402	BCL	O1D-CGD-O2D-CED
11	a	815	F39	C59-C62-C64-C63
10	A	812	BCL	O1A-CGA-O2A-C1
14	A	822	LMG	O10-C28-O8-C9
8	A	801	GS0	C1A-C2A-CAA-CBA
8	a	802	GS0	C1A-C2A-CAA-CBA
9	A	802	G2O	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
9	A	826	G2O	C1A-C2A-CAA-CBA
9	a	801	G2O	C1A-C2A-CAA-CBA
10	A	809	BCL	C1A-C2A-CAA-CBA
10	a	807	BCL	C1A-C2A-CAA-CBA
10	a	810	BCL	C1A-C2A-CAA-CBA
13	a	821	LHG	C3-O3-P-O6
14	a	822	LMG	O6-C5-C6-O5
13	A	817	LHG	O6-C4-C5-C6
13	a	821	LHG	O6-C4-C5-C6
13	Z	401	LHG	C17-C18-C19-C20
14	a	822	LMG	C14-C15-C16-C17
10	V	403	BCL	C5-C6-C7-C8
10	A	804	BCL	C16-C17-C18-C19
10	V	401	BCL	C16-C17-C18-C20
10	W	405	BCL	C16-C17-C18-C19
13	a	820	LHG	C12-C13-C14-C15
13	Z	401	LHG	C7-C8-C9-C10
10	A	813	BCL	C2C-C3C-CAC-CBC
10	a	813	BCL	C2-C3-C5-C6
10	B	301	BCL	C2C-C3C-CAC-CBC
10	U	402	BCL	C2C-C3C-CAC-CBC
10	W	403	BCL	C2C-C3C-CAC-CBC
10	X	402	BCL	C2C-C3C-CAC-CBC
10	Y	404	BCL	C2C-C3C-CAC-CBC
10	Z	403	BCL	C2C-C3C-CAC-CBC
10	Z	404	BCL	C2C-C3C-CAC-CBC
10	A	806	BCL	C13-C15-C16-C17
10	a	811	BCL	C2A-CAA-CBA-CGA
10	A	803	BCL	C16-C17-C18-C20
10	W	401	BCL	C16-C17-C18-C20
10	B	301	BCL	O1D-CGD-O2D-CED
10	X	405	BCL	O1D-CGD-O2D-CED
13	a	821	LHG	C15-C16-C17-C18
14	A	821	LMG	C7-C8-C9-O8
14	a	822	LMG	C7-C8-C9-O8
10	a	806	BCL	O1A-CGA-O2A-C1
10	V	408	BCL	O1D-CGD-O2D-CED
10	V	407	BCL	C15-C16-C17-C18
13	E	101	LHG	C16-C17-C18-C19
14	a	822	LMG	C36-C37-C38-C39
13	A	817	LHG	O1-C1-C2-O2
13	a	819	LHG	O1-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
13	Z	401	LHG	O1-C1-C2-O2
13	Z	401	LHG	C19-C20-C21-C22
14	C	302	LMG	O6-C5-C6-O5
14	A	823	LMG	C11-C10-O7-C8
14	a	822	LMG	C30-C31-C32-C33
10	V	403	BCL	O1D-CGD-O2D-CED
10	V	405	BCL	C10-C11-C12-C13
10	a	812	BCL	C4-C3-C5-C6
10	W	407	BCL	C4-C3-C5-C6
13	a	821	LHG	C19-C20-C21-C22
14	C	302	LMG	C37-C38-C39-C40
10	X	401	BCL	C2-C3-C5-C6
10	Y	406	BCL	O1D-CGD-O2D-CED
9	a	801	G2O	C13-C15-C16-C17
10	a	809	BCL	C13-C15-C16-C17
13	a	818	LHG	C30-C31-C32-C33
13	E	101	LHG	C6-C5-O7-C7
10	B	301	BCL	C15-C16-C17-C18
14	A	822	LMG	C15-C16-C17-C18
10	a	806	BCL	O1D-CGD-O2D-CED
10	W	403	BCL	O1D-CGD-O2D-CED
13	E	101	LHG	O6-C4-C5-O7
13	A	817	LHG	C9-C10-C11-C12
10	A	810	BCL	O1D-CGD-O2D-CED
10	a	809	BCL	O1D-CGD-O2D-CED
10	A	805	BCL	O1A-CGA-O2A-C1
10	W	401	BCL	O1A-CGA-O2A-C1
13	a	820	LHG	C25-C26-C27-C28
13	a	820	LHG	O7-C5-C6-O8
14	A	822	LMG	C16-C17-C18-C19
10	a	806	BCL	C10-C11-C12-C13
13	E	101	LHG	O10-C23-O8-C6
13	A	818	LHG	C9-C10-C11-C12
14	a	822	LMG	C12-C13-C14-C15
10	a	807	BCL	C4-C3-C5-C6
10	a	810	BCL	C4-C3-C5-C6
8	A	801	GS0	C11-C10-C8-C7
8	a	802	GS0	C11-C12-C13-C15
9	a	801	G2O	C11-C12-C13-C15
10	A	805	BCL	C11-C10-C8-C7
10	A	806	BCL	C12-C13-C15-C16
10	a	806	BCL	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
10	a	813	BCL	C11-C12-C13-C15
10	Y	406	BCL	C11-C10-C8-C7
8	A	801	GS0	C11-C10-C8-C9
10	A	804	BCL	C11-C10-C8-C9
10	a	806	BCL	C11-C12-C13-C14
10	B	301	BCL	C14-C13-C15-C16
10	U	403	BCL	C14-C13-C15-C16
10	U	405	BCL	C11-C10-C8-C9
10	W	405	BCL	C11-C12-C13-C14
10	X	402	BCL	C11-C10-C8-C9
10	Y	401	BCL	C14-C13-C15-C16
10	Y	406	BCL	C11-C10-C8-C9
10	U	403	BCL	C5-C6-C7-C8
10	Z	407	BCL	C2A-CAA-CBA-CGA
10	a	807	BCL	O1D-CGD-O2D-CED
10	U	402	BCL	O1D-CGD-O2D-CED
11	a	815	F39	C32-C35-C37-C38
10	A	803	BCL	C16-C17-C18-C19
11	A	815	F39	C32-C35-C37-C39
10	a	813	BCL	C10-C11-C12-C13
13	a	818	LHG	C13-C14-C15-C16
12	A	816	F26	C19-C15-C9-C2
10	a	804	BCL	C15-C16-C17-C18
10	X	408[B]	BCL	O1D-CGD-O2D-CED
14	A	821	LMG	C37-C38-C39-C40
10	A	804	BCL	C15-C16-C17-C18
13	A	818	LHG	O6-C4-C5-C6
14	A	820	LMG	C15-C16-C17-C18
10	A	804	BCL	C10-C11-C12-C13
10	A	806	BCL	C4-C3-C5-C6
10	a	813	BCL	C4-C3-C5-C6
10	a	804	BCL	C2-C3-C5-C6
10	Y	401	BCL	C2-C3-C5-C6
10	U	407[B]	BCL	O1D-CGD-O2D-CED
10	Y	408	BCL	O1D-CGD-O2D-CED
10	Z	407	BCL	O1D-CGD-O2D-CED
13	A	817	LHG	C24-C23-O8-C6
14	C	302	LMG	C16-C17-C18-C19
9	A	826	G2O	C13-C15-C16-C17
11	A	815	F39	C16-C13-C14-C18
11	a	815	F39	C17-C13-C14-C18
13	E	102	LHG	C4-C5-C6-O8

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Mol	Chain	Res	Type	Atoms
14	C	302	LMG	C7-C8-C9-O8
10	A	803	BCL	O1A-CGA-O2A-C1
10	A	806	BCL	O1A-CGA-O2A-C1
13	E	102	LHG	C14-C15-C16-C17
14	A	821	LMG	C38-C39-C40-C41
8	A	801	GS0	C8-C10-C11-C12
10	U	406	BCL	C4-C3-C5-C6
10	W	402	BCL	C2-C3-C5-C6
10	V	401	BCL	O1D-CGD-O2D-CED
13	A	818	LHG	C11-C10-C9-C8
14	A	820	LMG	C31-C32-C33-C34
13	A	818	LHG	C11-C12-C13-C14
10	Y	403	BCL	C8-C10-C11-C12
13	E	101	LHG	C3-O3-P-O6
10	a	807	BCL	O1A-CGA-O2A-C1
10	A	804	BCL	O1D-CGD-O2D-CED
10	Y	402	BCL	O1D-CGD-O2D-CED
10	a	812	BCL	C10-C11-C12-C13
14	a	822	LMG	O10-C28-O8-C9
10	A	805	BCL	C5-C6-C7-C8
13	a	819	LHG	C13-C14-C15-C16
10	A	814	BCL	O1A-CGA-O2A-C1
10	V	406	BCL	O1A-CGA-O2A-C1
13	E	101	LHG	C10-C11-C12-C13
13	a	819	LHG	O7-C5-C6-O8
13	E	102	LHG	O7-C5-C6-O8
14	a	822	LMG	O7-C8-C9-O8
14	C	302	LMG	O7-C8-C9-O8
13	a	819	LHG	C1-C2-C3-O3
10	B	301	BCL	C2-C1-O2A-CGA
10	W	408[B]	BCL	O1D-CGD-O2D-CED
10	Y	402	BCL	C2-C3-C5-C6
10	A	806	BCL	C6-C7-C8-C9
10	A	814	BCL	C6-C7-C8-C9
10	V	406	BCL	C11-C10-C8-C9
10	W	406	BCL	C11-C10-C8-C9
10	Y	401	BCL	C6-C7-C8-C9
13	A	819	LHG	C2-C3-O3-P
13	E	101	LHG	C2-C3-O3-P
13	Z	401	LHG	C2-C3-O3-P
10	A	813	BCL	O1A-CGA-O2A-C1
11	C	301	F39	C26-C28-C29-C30

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Mol	Chain	Res	Type	Atoms
10	A	808	BCL	C2A-CAA-CBA-CGA
10	a	807	BCL	C5-C6-C7-C8
14	A	822	LMG	C35-C36-C37-C38
14	A	822	LMG	C14-C15-C16-C17
10	A	809	BCL	C4C-C3C-CAC-CBC
10	A	810	BCL	C4C-C3C-CAC-CBC
10	U	407[B]	BCL	C4C-C3C-CAC-CBC
10	W	405	BCL	C4C-C3C-CAC-CBC
10	W	406	BCL	C4C-C3C-CAC-CBC
13	a	819	LHG	C14-C15-C16-C17
14	A	820	LMG	C33-C34-C35-C36
13	A	819	LHG	O6-C4-C5-C6
13	a	820	LHG	O6-C4-C5-C6
13	E	101	LHG	O6-C4-C5-C6
9	A	802	G2O	C12-C13-C15-C16
9	a	801	G2O	C12-C13-C15-C16
10	A	806	BCL	C6-C7-C8-C10
10	A	813	BCL	C12-C13-C15-C16
10	a	810	BCL	C2-C3-C5-C6
10	a	810	BCL	C12-C13-C15-C16
10	U	403	BCL	C12-C13-C15-C16
10	U	405	BCL	C11-C10-C8-C7
10	V	406	BCL	C11-C10-C8-C7
10	W	403	BCL	C11-C10-C8-C7
10	X	402	BCL	C11-C10-C8-C7
10	X	404	BCL	C11-C10-C8-C7
10	Y	407	BCL	C11-C10-C8-C7
10	Z	403	BCL	C11-C10-C8-C7
13	E	102	LHG	C11-C12-C13-C14
14	A	821	LMG	C34-C35-C36-C37
13	a	821	LHG	C11-C10-C9-C8
10	W	406	BCL	C10-C11-C12-C13
8	A	801	GS0	CAD-CBD-CGD-O2D
9	A	802	G2O	CAD-CBD-CGD-O2D
10	a	803	BCL	CAD-CBD-CGD-O2D
10	a	808	BCL	CAD-CBD-CGD-O2D
10	V	407	BCL	CAD-CBD-CGD-O2D
10	W	404	BCL	CAD-CBD-CGD-O2D
10	W	406	BCL	CAD-CBD-CGD-O2D
10	X	402	BCL	CAD-CBD-CGD-O2D
10	X	408[B]	BCL	CAD-CBD-CGD-O2D
10	Y	404	BCL	CAD-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
13	Z	401	LHG	C6-C5-O7-C7
14	A	821	LMG	C9-C8-O7-C10
13	E	101	LHG	C27-C28-C29-C30
10	A	807	BCL	C4-C3-C5-C6
10	a	814	BCL	C5-C6-C7-C8
10	A	809	BCL	C2-C3-C5-C6
13	a	819	LHG	C4-C5-C6-O8
14	A	820	LMG	O1-C7-C8-C9
10	V	407	BCL	O1A-CGA-O2A-C1
10	Y	406	BCL	O1A-CGA-O2A-C1
13	A	817	LHG	O6-C4-C5-O7
13	A	818	LHG	O6-C4-C5-O7
13	a	821	LHG	O6-C4-C5-O7
10	V	409[B]	BCL	O1D-CGD-O2D-CED
14	A	821	LMG	C33-C34-C35-C36
14	a	822	LMG	C13-C14-C15-C16
9	A	827	G2O	CHA-CBD-CGD-O1D
10	A	803	BCL	CHA-CBD-CGD-O2D
10	A	807	BCL	CHA-CBD-CGD-O1D
10	a	803	BCL	CHA-CBD-CGD-O1D
10	a	808	BCL	CHA-CBD-CGD-O1D
10	a	809	BCL	CHA-CBD-CGD-O1D
10	a	813	BCL	CHA-CBD-CGD-O1D
10	U	405	BCL	CHA-CBD-CGD-O2D
10	V	406	BCL	CHA-CBD-CGD-O2D
10	V	407	BCL	CHA-CBD-CGD-O1D
10	W	406	BCL	CHA-CBD-CGD-O1D
10	X	403	BCL	CHA-CBD-CGD-O1D
10	X	404	BCL	CHA-CBD-CGD-O1D
10	X	407[B]	BCL	CHA-CBD-CGD-O2D
10	X	408[B]	BCL	CHA-CBD-CGD-O1D
10	Y	403	BCL	CHA-CBD-CGD-O2D
10	Y	404	BCL	CHA-CBD-CGD-O1D
10	Y	405	BCL	CHA-CBD-CGD-O1D
10	Y	405	BCL	CHA-CBD-CGD-O2D
10	Y	407	BCL	CHA-CBD-CGD-O2D
10	Z	405	BCL	CHA-CBD-CGD-O2D
10	Z	406	BCL	CHA-CBD-CGD-O2D
10	a	805	BCL	O1A-CGA-O2A-C1
10	a	809	BCL	O1A-CGA-O2A-C1
10	V	408	BCL	O1A-CGA-O2A-C1
14	A	820	LMG	O1-C7-C8-O7

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Mol	Chain	Res	Type	Atoms
14	A	822	LMG	O1-C7-C8-O7
10	U	401	BCL	C15-C16-C17-C18
10	V	406	BCL	C16-C17-C18-C19
13	A	819	LHG	C13-C14-C15-C16
10	Z	406	BCL	O1A-CGA-O2A-C1
10	A	813	BCL	C14-C13-C15-C16
10	W	403	BCL	C11-C10-C8-C9
10	Z	405	BCL	C11-C10-C8-C9
14	A	820	LMG	C19-C20-C21-C22
10	A	806	BCL	O1D-CGD-O2D-CED
13	A	818	LHG	C26-C27-C28-C29
9	A	826	G2O	C11-C10-C8-C9
10	W	407	BCL	C16-C17-C18-C19
10	B	301	BCL	C13-C15-C16-C17
10	Y	407	BCL	C2-C1-O2A-CGA
13	A	818	LHG	C3-O3-P-O6
13	a	819	LHG	C25-C26-C27-C28
10	A	813	BCL	C4-C3-C5-C6
11	A	815	F39	C22-C23-C24-C26
10	Y	403	BCL	O1A-CGA-O2A-C1
10	Z	405	BCL	O1A-CGA-O2A-C1
13	A	819	LHG	C4-O6-P-O4
13	a	818	LHG	C3-O3-P-O4
13	a	819	LHG	C4-O6-P-O5
10	V	406	BCL	C16-C17-C18-C20
10	W	407	BCL	C10-C11-C12-C13
8	a	802	GS0	C2A-CAA-CBA-CGA
14	A	822	LMG	C11-C12-C13-C14
10	X	406	BCL	C16-C17-C18-C19
8	A	801	GS0	CAD-CBD-CGD-O1D
8	a	802	GS0	CAD-CBD-CGD-O1D
10	A	807	BCL	CAD-CBD-CGD-O1D
10	a	809	BCL	CAD-CBD-CGD-O1D
10	a	812	BCL	CAD-CBD-CGD-O1D
10	a	813	BCL	CAD-CBD-CGD-O1D
10	U	403	BCL	CAD-CBD-CGD-O1D
10	X	404	BCL	CAD-CBD-CGD-O1D
10	X	408[B]	BCL	CAD-CBD-CGD-O1D
11	C	301	F39	C14-C13-O2-C11
9	a	801	G2O	C10-C11-C12-C13
10	B	301	BCL	C5-C6-C7-C8
10	U	404	BCL	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
11	C	301	F39	C29-C30-C31-C33
8	A	801	GS0	C11-C12-C13-C15
10	A	804	BCL	C11-C12-C13-C15
10	A	807	BCL	C2C-C3C-CAC-CBC
10	a	810	BCL	C6-C7-C8-C10
10	a	812	BCL	C6-C7-C8-C10
10	U	401	BCL	C12-C13-C15-C16
10	U	402	BCL	C11-C10-C8-C7
10	V	402	BCL	C12-C13-C15-C16
10	V	404	BCL	C11-C10-C8-C7
10	W	408[B]	BCL	C2C-C3C-CAC-CBC
10	Y	404	BCL	C11-C10-C8-C7
10	Z	402	BCL	C12-C13-C15-C16
10	Z	404	BCL	C11-C12-C13-C15
10	Z	405	BCL	C11-C10-C8-C7
13	A	819	LHG	O6-C4-C5-O7
13	a	820	LHG	O6-C4-C5-O7
11	C	301	F39	C13-C14-C18-C19
14	C	302	LMG	C14-C15-C16-C17
10	Z	405	BCL	C13-C15-C16-C17
10	X	408[B]	BCL	C2A-CAA-CBA-CGA
10	a	811	BCL	O1D-CGD-O2D-CED
11	A	815	F39	O2-C13-C14-C18
14	A	822	LMG	O1-C7-C8-C9
14	A	821	LMG	O7-C8-C9-O8
13	a	818	LHG	C11-C12-C13-C14
10	Y	407	BCL	C15-C16-C17-C18
10	Y	401	BCL	O1A-CGA-O2A-C1
10	X	403	BCL	O1D-CGD-O2D-CED
10	X	406	BCL	C4-C3-C5-C6
10	A	812	BCL	C13-C15-C16-C17
10	A	813	BCL	C6-C7-C8-C9
10	a	803	BCL	C11-C12-C13-C14
10	X	404	BCL	C11-C10-C8-C9
10	Z	403	BCL	C11-C10-C8-C9
10	X	407[B]	BCL	O1D-CGD-O2D-CED
14	A	820	LMG	C14-C15-C16-C17
9	A	802	G2O	C6-C7-C8-C9
10	X	405	BCL	O1A-CGA-O2A-C1
10	W	401	BCL	C5-C6-C7-C8
14	a	822	LMG	C11-C12-C13-C14
10	W	406	BCL	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
13	a	820	LHG	C6-C5-O7-C7
9	A	826	G2O	C2A-CAA-CBA-CGA
10	A	811	BCL	C2A-CAA-CBA-CGA
10	U	406	BCL	O1A-CGA-O2A-C1
10	A	805	BCL	C2-C1-O2A-CGA
10	B	301	BCL	O1A-CGA-O2A-C1
10	X	404	BCL	O1A-CGA-O2A-C1
10	a	811	BCL	CAA-CBA-CGA-O2A
10	X	409	BCL	C10-C11-C12-C13
13	E	101	LHG	C24-C23-O8-C6
10	U	404	BCL	CAA-CBA-CGA-O2A
10	Z	407	BCL	O1A-CGA-O2A-C1
13	A	819	LHG	C3-O3-P-O6
13	a	821	LHG	C4-O6-P-O3
13	E	101	LHG	C4-O6-P-O3
8	A	801	GS0	C16-C17-C18-C19
10	U	406	BCL	C16-C17-C18-C19
10	Z	404	BCL	O1D-CGD-O2D-CED
13	E	102	LHG	C12-C13-C14-C15
13	a	820	LHG	C4-C5-C6-O8
8	A	801	GS0	C4-C3-C5-C6
10	V	407	BCL	C12-C13-C15-C16
10	W	405	BCL	C2-C3-C5-C6
10	W	405	BCL	C11-C12-C13-C15
10	Y	402	BCL	C12-C13-C15-C16
13	A	819	LHG	C24-C25-C26-C27
9	A	802	G2O	C14-C13-C15-C16
10	A	804	BCL	C11-C12-C13-C14
10	a	810	BCL	C14-C13-C15-C16
10	V	404	BCL	C11-C10-C8-C9
10	Y	404	BCL	C11-C10-C8-C9
10	Y	407	BCL	C14-C13-C15-C16
10	Z	404	BCL	C11-C12-C13-C14
11	a	815	F39	C58-C61-C63-C64
10	Y	408	BCL	C16-C17-C18-C19
13	Z	401	LHG	C24-C25-C26-C27
14	A	822	LMG	C4-C5-C6-O5
13	A	819	LHG	C5-C4-O6-P
13	A	819	LHG	C9-C10-C11-C12
13	Z	401	LHG	C14-C15-C16-C17
13	a	821	LHG	C14-C15-C16-C17
13	A	817	LHG	C1-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
14	A	821	LMG	C10-C11-C12-C13
11	a	815	F39	C30-C31-C33-C34
11	a	815	F39	C20-C27-C32-C35
10	A	814	BCL	C3-C5-C6-C7
10	X	403	BCL	O1A-CGA-O2A-C1
10	W	406	BCL	C5-C6-C7-C8
11	A	815	F39	C27-C32-C35-C37
11	a	815	F39	C27-C32-C35-C37
10	U	403	BCL	C8-C10-C11-C12
10	A	813	BCL	C3-C5-C6-C7
13	a	818	LHG	C24-C25-C26-C27
10	A	814	BCL	C4-C3-C5-C6
10	X	401	BCL	C4-C3-C5-C6
13	E	101	LHG	C13-C14-C15-C16
10	W	408[B]	BCL	CAA-CBA-CGA-O1A
10	A	812	BCL	C2-C1-O2A-CGA
10	a	806	BCL	C2-C1-O2A-CGA
10	V	408	BCL	C2-C1-O2A-CGA
10	Y	405	BCL	C2-C1-O2A-CGA
10	Z	404	BCL	C2-C1-O2A-CGA
10	a	813	BCL	C2A-CAA-CBA-CGA
10	U	404	BCL	O1D-CGD-O2D-CED
10	V	409[B]	BCL	C3A-C2A-CAA-CBA
10	W	401	BCL	C8-C10-C11-C12
10	Y	406	BCL	CAA-CBA-CGA-O2A
11	a	815	F39	C23-C24-C26-C28
10	U	407[B]	BCL	CAA-CBA-CGA-O1A
10	Y	408	BCL	C4-C3-C5-C6
10	X	403	BCL	C10-C11-C12-C13
13	a	818	LHG	C32-C33-C34-C35
10	a	806	BCL	C6-C7-C8-C9
10	Y	403	BCL	C6-C7-C8-C9
10	a	806	BCL	C16-C17-C18-C19
10	Z	405	BCL	C16-C17-C18-C19
13	a	821	LHG	C12-C13-C14-C15
10	a	804	BCL	CAA-CBA-CGA-O2A
10	A	807	BCL	O2A-C1-C2-C3
10	A	812	BCL	O2A-C1-C2-C3
13	a	820	LHG	C18-C19-C20-C21
10	Z	408[B]	BCL	CAA-CBA-CGA-O1A
13	a	820	LHG	C11-C12-C13-C14
10	a	808	BCL	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
13	a	821	LHG	C4-C5-O7-C7
14	A	822	LMG	C9-C8-O7-C10
10	a	811	BCL	C16-C17-C18-C20
10	A	803	BCL	C12-C13-C15-C16
10	a	811	BCL	C11-C12-C13-C15
10	V	405	BCL	C11-C12-C13-C15
10	W	406	BCL	C11-C10-C8-C7
10	Y	405	BCL	C11-C12-C13-C15
13	a	821	LHG	C13-C14-C15-C16
10	V	403	BCL	O1A-CGA-O2A-C1
10	Z	405	BCL	CAA-CBA-CGA-O1A
10	W	405	BCL	O1D-CGD-O2D-CED
13	a	821	LHG	O1-C1-C2-O2
10	X	407[B]	BCL	CAA-CBA-CGA-O1A
10	Y	406	BCL	C5-C6-C7-C8
13	a	818	LHG	C33-C34-C35-C36
11	a	815	F39	C51-C57-C59-C62
10	a	812	BCL	O1D-CGD-O2D-CED
10	V	401	BCL	C15-C16-C17-C18
10	V	401	BCL	C13-C15-C16-C17
10	X	407[B]	BCL	CAA-CBA-CGA-O2A
10	V	407	BCL	O1D-CGD-O2D-CED
9	A	827	G2O	C2-C1-O2A-CGA
10	a	807	BCL	C2-C1-O2A-CGA
10	Z	406	BCL	C2-C1-O2A-CGA
10	U	404	BCL	C2-C3-C5-C6
10	A	813	BCL	C13-C15-C16-C17
10	Z	402	BCL	C15-C16-C17-C18
13	a	821	LHG	O1-C1-C2-C3
10	A	803	BCL	C4C-C3C-CAC-CBC
10	V	409[B]	BCL	C4C-C3C-CAC-CBC
14	A	821	LMG	C8-C7-O1-C1
11	a	815	F39	C28-C29-C30-C31
10	A	806	BCL	CAA-CBA-CGA-O2A
14	A	821	LMG	C14-C15-C16-C17
13	E	102	LHG	C11-C10-C9-C8
13	a	818	LHG	O6-C4-C5-O7
10	a	806	BCL	CAA-CBA-CGA-O2A
10	Z	407	BCL	C16-C17-C18-C19
9	A	802	G2O	C1-C2-C3-C5
14	A	822	LMG	O6-C1-O1-C7
10	a	812	BCL	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
10	B	301	BCL	C4-C3-C5-C6
10	A	805	BCL	C2-C3-C5-C6
10	V	408	BCL	C2-C3-C5-C6
10	X	403	BCL	C11-C12-C13-C15
10	W	403	BCL	C10-C11-C12-C13
9	A	827	G2O	C1-C2-C3-C4
10	A	814	BCL	C1-C2-C3-C4
10	a	803	BCL	C1-C2-C3-C4
10	a	804	BCL	C1-C2-C3-C4
10	a	811	BCL	C1-C2-C3-C4
10	a	812	BCL	C1-C2-C3-C4
10	V	406	BCL	C1-C2-C3-C4
10	W	406	BCL	C1-C2-C3-C4
10	X	402	BCL	C1-C2-C3-C4
10	Y	404	BCL	C1-C2-C3-C4
10	Z	403	BCL	C1-C2-C3-C4
12	a	816	F26	C31-C33-C38-C39
10	V	406	BCL	CAA-CBA-CGA-O2A
8	A	801	GS0	C16-C17-C18-C20
10	W	405	BCL	O1A-CGA-O2A-C1
10	W	408[B]	BCL	CAA-CBA-CGA-O2A
10	U	401	BCL	CAA-CBA-CGA-O2A
10	U	403	BCL	CAA-CBA-CGA-O2A
10	V	409[B]	BCL	CAA-CBA-CGA-O1A
12	a	817	F26	C36-C31-C33-C38
10	U	406	BCL	CAA-CBA-CGA-O2A
10	W	402	BCL	C4-C3-C5-C6
10	Z	407	BCL	C4-C3-C5-C6
11	a	815	F39	C22-C23-C24-C26
10	A	812	BCL	C2-C3-C5-C6
9	a	801	G2O	C11-C12-C13-C14
10	A	812	BCL	C6-C7-C8-C9
10	a	810	BCL	C6-C7-C8-C9
10	U	401	BCL	C14-C13-C15-C16
10	U	402	BCL	C11-C10-C8-C9
10	X	403	BCL	C11-C12-C13-C14
10	Y	405	BCL	C11-C12-C13-C14
10	Z	402	BCL	C14-C13-C15-C16
11	A	815	F39	C24-C26-C28-C29
10	V	402	BCL	C15-C16-C17-C18
13	E	101	LHG	O2-C2-C3-O3
10	A	814	BCL	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
13	Z	401	LHG	O8-C23-C24-C25
13	a	819	LHG	C11-C10-C9-C8
9	A	827	G2O	CAD-CBD-CGD-O2D
10	A	807	BCL	CAD-CBD-CGD-O2D
10	A	811	BCL	CAD-CBD-CGD-O2D
10	U	406	BCL	CAD-CBD-CGD-O2D
10	V	408	BCL	CAD-CBD-CGD-O2D
10	X	406	BCL	CAD-CBD-CGD-O2D
10	Y	408	BCL	CAD-CBD-CGD-O2D
14	A	822	LMG	C7-C8-O7-C10
10	Y	404	BCL	C16-C17-C18-C19
10	V	402	BCL	CAA-CBA-CGA-O2A
10	Y	407	BCL	CAA-CBA-CGA-O2A
10	U	404	BCL	C13-C15-C16-C17
10	a	803	BCL	C4-C3-C5-C6
10	V	403	BCL	C4-C3-C5-C6
10	U	404	BCL	C16-C17-C18-C20
10	A	808	BCL	C2-C3-C5-C6
10	A	811	BCL	C2-C3-C5-C6
10	W	401	BCL	C2-C3-C5-C6
10	V	408	BCL	CAA-CBA-CGA-O2A
10	X	401	BCL	CAA-CBA-CGA-O2A
10	Y	402	BCL	CAA-CBA-CGA-O2A
14	A	821	LMG	O8-C28-C29-C30
9	A	827	G2O	CAA-CBA-CGA-O2A
10	V	405	BCL	CAA-CBA-CGA-O2A
10	X	406	BCL	CAA-CBA-CGA-O2A
10	Y	408	BCL	CAA-CBA-CGA-O2A
10	Z	402	BCL	CAA-CBA-CGA-O2A
10	Z	404	BCL	CAA-CBA-CGA-O2A
10	Z	406	BCL	CAA-CBA-CGA-O2A
13	A	817	LHG	C31-C32-C33-C34
10	A	813	BCL	C2A-CAA-CBA-CGA
10	Y	405	BCL	CAA-CBA-CGA-O2A
10	A	806	BCL	CAA-CBA-CGA-O1A
10	U	407[B]	BCL	CAA-CBA-CGA-O2A
10	W	407	BCL	C16-C17-C18-C20
8	A	801	GS0	CHA-CBD-CGD-O2D
9	A	802	G2O	CHA-CBD-CGD-O2D
10	A	808	BCL	CHA-CBD-CGD-O2D
10	A	810	BCL	CHA-CBD-CGD-O1D
10	A	813	BCL	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
10	a	807	BCL	CHA-CBD-CGD-O1D
10	a	810	BCL	CHA-CBD-CGD-O1D
10	a	812	BCL	CHA-CBD-CGD-O2D
10	U	401	BCL	CHA-CBD-CGD-O2D
10	U	402	BCL	CHA-CBD-CGD-O2D
10	U	404	BCL	CHA-CBD-CGD-O1D
10	V	403	BCL	CHA-CBD-CGD-O2D
10	V	405	BCL	CHA-CBD-CGD-O1D
10	W	402	BCL	CHA-CBD-CGD-O2D
10	W	404	BCL	CHA-CBD-CGD-O1D
10	W	405	BCL	CHA-CBD-CGD-O2D
10	X	401	BCL	CHA-CBD-CGD-O2D
10	X	405	BCL	CHA-CBD-CGD-O1D
10	Y	406	BCL	CHA-CBD-CGD-O2D
10	Z	404	BCL	CHA-CBD-CGD-O1D
10	Z	406	BCL	CHA-CBD-CGD-O1D
10	a	808	BCL	CAA-CBA-CGA-O1A
10	Z	408[B]	BCL	CAA-CBA-CGA-O2A
14	A	821	LMG	C29-C30-C31-C32
10	Z	405	BCL	C16-C17-C18-C20
10	B	301	BCL	CAA-CBA-CGA-O2A
10	a	812	BCL	C13-C15-C16-C17
10	Z	406	BCL	C10-C11-C12-C13
10	V	409[B]	BCL	CAA-CBA-CGA-O2A
14	A	822	LMG	C31-C32-C33-C34
10	U	402	BCL	CAA-CBA-CGA-O2A
10	X	403	BCL	CAA-CBA-CGA-O2A
10	Z	407	BCL	CAA-CBA-CGA-O2A
13	Z	401	LHG	C29-C30-C31-C32
10	a	809	BCL	C2A-CAA-CBA-CGA
13	a	818	LHG	O1-C1-C2-O2
10	V	401	BCL	O1A-CGA-O2A-C1
14	a	822	LMG	C35-C36-C37-C38
10	W	407	BCL	CAA-CBA-CGA-O2A
10	Z	403	BCL	CAA-CBA-CGA-O2A
10	A	804	BCL	C6-C7-C8-C10
10	a	807	BCL	C12-C13-C15-C16
10	a	806	BCL	C16-C17-C18-C20
10	a	806	BCL	C14-C13-C15-C16
10	V	402	BCL	C14-C13-C15-C16
10	V	405	BCL	C11-C12-C13-C14
10	Y	407	BCL	C11-C10-C8-C9

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Mol	Chain	Res	Type	Atoms
10	A	807	BCL	CAA-CBA-CGA-O2A
13	E	102	LHG	O8-C23-C24-C25
10	W	407	BCL	O1D-CGD-O2D-CED
10	X	406	BCL	O1A-CGA-O2A-C1
10	X	408[B]	BCL	CAA-CBA-CGA-O2A
13	a	820	LHG	C11-C10-C9-C8
10	V	404	BCL	CAA-CBA-CGA-O1A
10	X	402	BCL	CAA-CBA-CGA-O1A
13	E	102	LHG	O10-C23-C24-C25
10	Y	402	BCL	C8-C10-C11-C12
10	W	403	BCL	CAA-CBA-CGA-O1A
10	Y	401	BCL	CAA-CBA-CGA-O1A
10	Y	404	BCL	CAA-CBA-CGA-O1A
10	Y	405	BCL	CAA-CBA-CGA-O1A
10	A	807	BCL	C2-C1-O2A-CGA
10	Z	403	BCL	CAA-CBA-CGA-O1A
10	W	408[B]	BCL	C2A-CAA-CBA-CGA
10	X	402	BCL	C16-C17-C18-C19
10	a	804	BCL	CAA-CBA-CGA-O1A
10	U	402	BCL	CAA-CBA-CGA-O1A
10	W	405	BCL	CAA-CBA-CGA-O2A
11	C	301	F39	C21-C22-C23-C24
10	V	402	BCL	CAA-CBA-CGA-O1A
10	X	401	BCL	CAA-CBA-CGA-O1A
13	a	821	LHG	C4-O6-P-O5
10	V	405	BCL	O1D-CGD-O2D-CED
8	a	802	GS0	CAA-CBA-CGA-O1A
14	A	820	LMG	O10-C28-C29-C30
10	V	402	BCL	C5-C6-C7-C8
8	A	801	GS0	CAA-CBA-CGA-O1A
14	A	822	LMG	C32-C33-C34-C35
10	a	810	BCL	CAA-CBA-CGA-O2A
13	E	102	LHG	O7-C7-C8-C9
10	U	402	BCL	C16-C17-C18-C19
10	W	401	BCL	C4-C3-C5-C6
14	A	822	LMG	C12-C13-C14-C15
10	a	805	BCL	C8-C10-C11-C12
10	a	811	BCL	C10-C11-C12-C13
10	A	803	BCL	CAD-CBD-CGD-O1D
10	a	810	BCL	CAD-CBD-CGD-O1D
10	U	404	BCL	CAD-CBD-CGD-O1D
10	U	407[B]	BCL	CAD-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
10	V	406	BCL	CAD-CBD-CGD-O1D
10	V	409[B]	BCL	CAD-CBD-CGD-O1D
10	W	408[B]	BCL	CAD-CBD-CGD-O1D
10	X	402	BCL	CAD-CBD-CGD-O1D
10	Z	404	BCL	CAD-CBD-CGD-O1D
10	Y	407	BCL	O1A-CGA-O2A-C1
14	A	821	LMG	O10-C28-C29-C30
13	a	818	LHG	C17-C18-C19-C20
10	Y	404	BCL	CAA-CBA-CGA-O2A
10	a	809	BCL	C11-C12-C13-C14
10	V	407	BCL	C11-C10-C8-C9
10	a	804	BCL	C8-C10-C11-C12
10	a	813	BCL	C5-C6-C7-C8
10	W	405	BCL	CAA-CBA-CGA-O1A
10	a	809	BCL	CAA-CBA-CGA-O2A
10	W	403	BCL	CAA-CBA-CGA-O2A
10	Z	405	BCL	CAA-CBA-CGA-O2A
8	a	802	GS0	C10-C11-C12-C13
10	Y	401	BCL	C5-C6-C7-C8
10	U	401	BCL	O1A-CGA-O2A-C1
10	Y	403	BCL	CAA-CBA-CGA-O1A
13	E	102	LHG	C16-C17-C18-C19
10	Y	403	BCL	C5-C6-C7-C8
10	W	402	BCL	C2A-CAA-CBA-CGA
10	A	813	BCL	C10-C11-C12-C13
10	a	807	BCL	C10-C11-C12-C13
10	A	807	BCL	CAA-CBA-CGA-O1A
13	Z	401	LHG	O10-C23-C24-C25
13	a	821	LHG	C9-C10-C11-C12
10	A	811	BCL	C11-C12-C13-C15
10	A	814	BCL	C3A-C2A-CAA-CBA
10	a	803	BCL	C11-C12-C13-C15
10	a	806	BCL	C2-C3-C5-C6
10	a	807	BCL	C11-C12-C13-C15
10	a	809	BCL	C11-C10-C8-C7
10	a	814	BCL	C11-C10-C8-C7
10	V	407	BCL	C11-C10-C8-C7
10	Y	407	BCL	C12-C13-C15-C16
10	a	806	BCL	CAA-CBA-CGA-O1A
10	V	401	BCL	CAA-CBA-CGA-O1A
9	A	802	G2O	CAA-CBA-CGA-O2A
10	A	812	BCL	CAA-CBA-CGA-O2A

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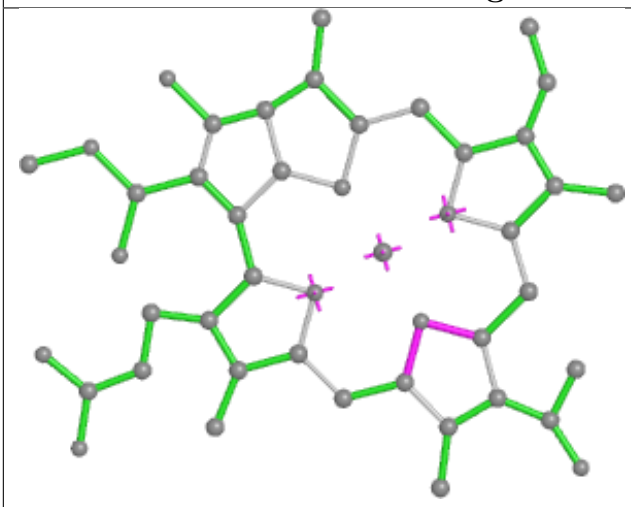
Mol	Chain	Res	Type	Atoms
10	V	404	BCL	CAA-CBA-CGA-O2A
14	A	822	LMG	O9-C10-C11-C12
10	X	408[B]	BCL	CAA-CBA-CGA-O1A
10	a	812	BCL	O1A-CGA-O2A-C1
10	U	403	BCL	CAA-CBA-CGA-O1A
13	a	820	LHG	O9-C7-C8-C9
10	a	807	BCL	C13-C15-C16-C17
10	A	804	BCL	CAA-CBA-CGA-O2A
14	A	820	LMG	O8-C28-C29-C30
10	U	404	BCL	C8-C10-C11-C12
10	W	405	BCL	C5-C6-C7-C8
10	V	401	BCL	C2A-CAA-CBA-CGA
10	V	405	BCL	CAA-CBA-CGA-O1A
10	X	404	BCL	CAA-CBA-CGA-O2A

There are no ring outliers.

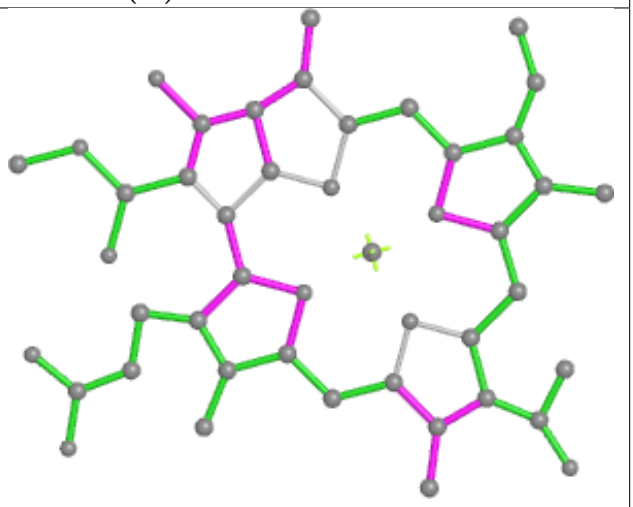
No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

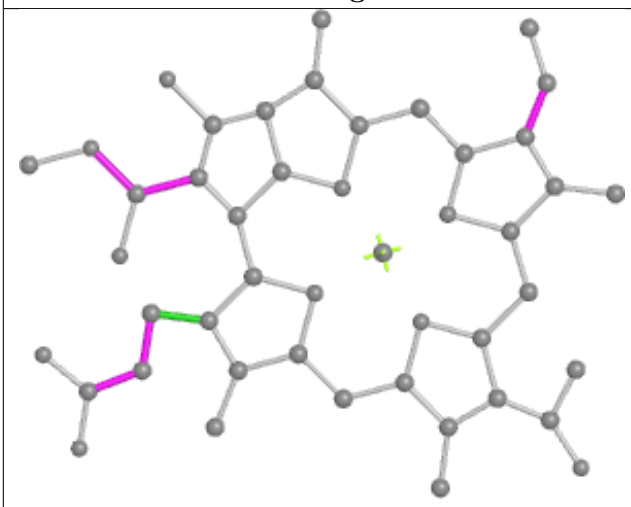
Ligand BCL W 408 (B)



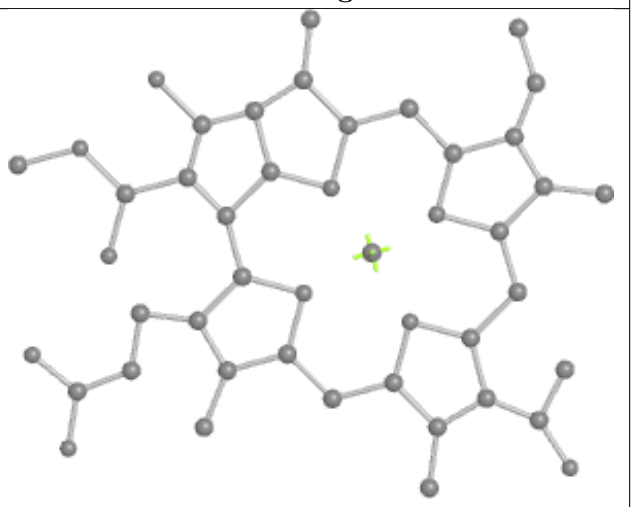
Bond lengths



Bond angles

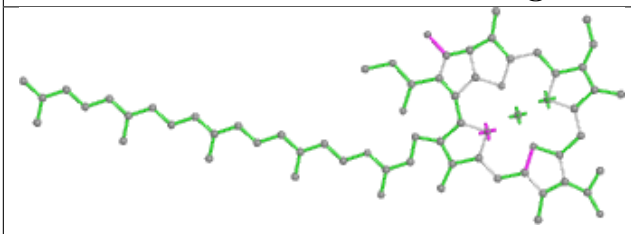


Torsions

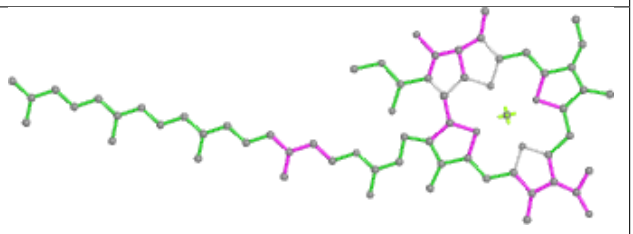


Rings

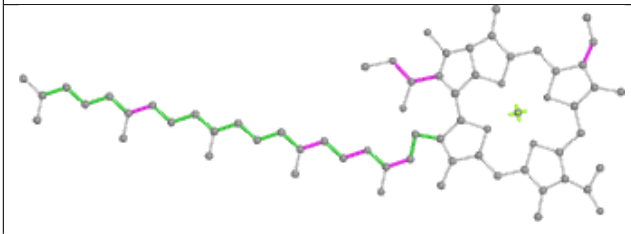
Ligand BCL Z 404



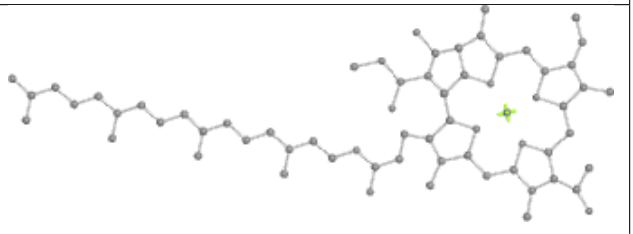
Bond lengths



Bond angles

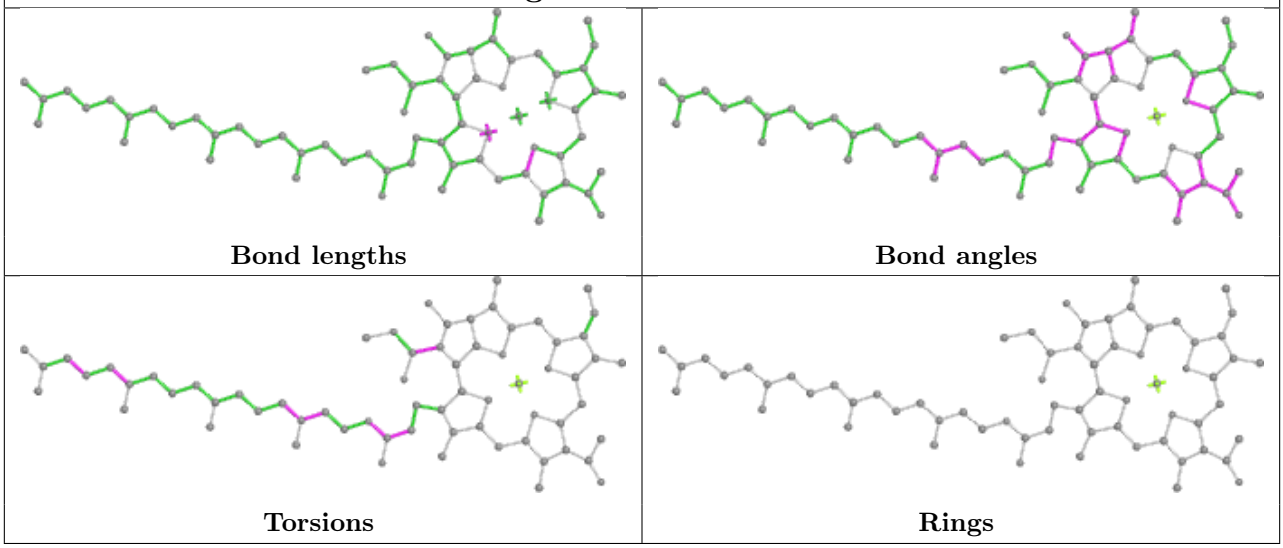


Torsions

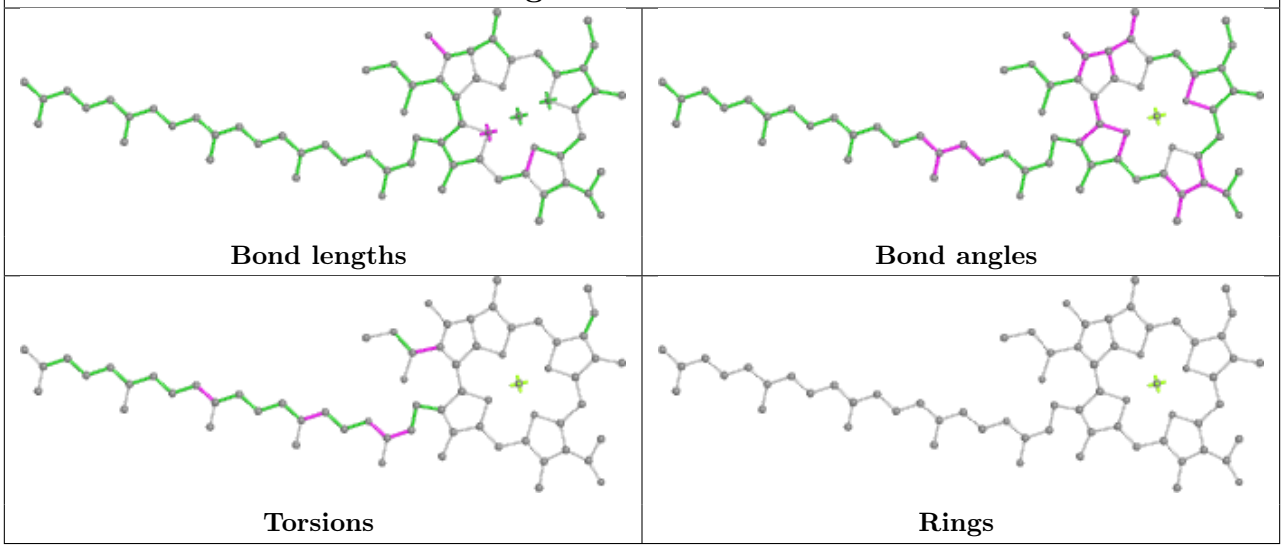


Rings

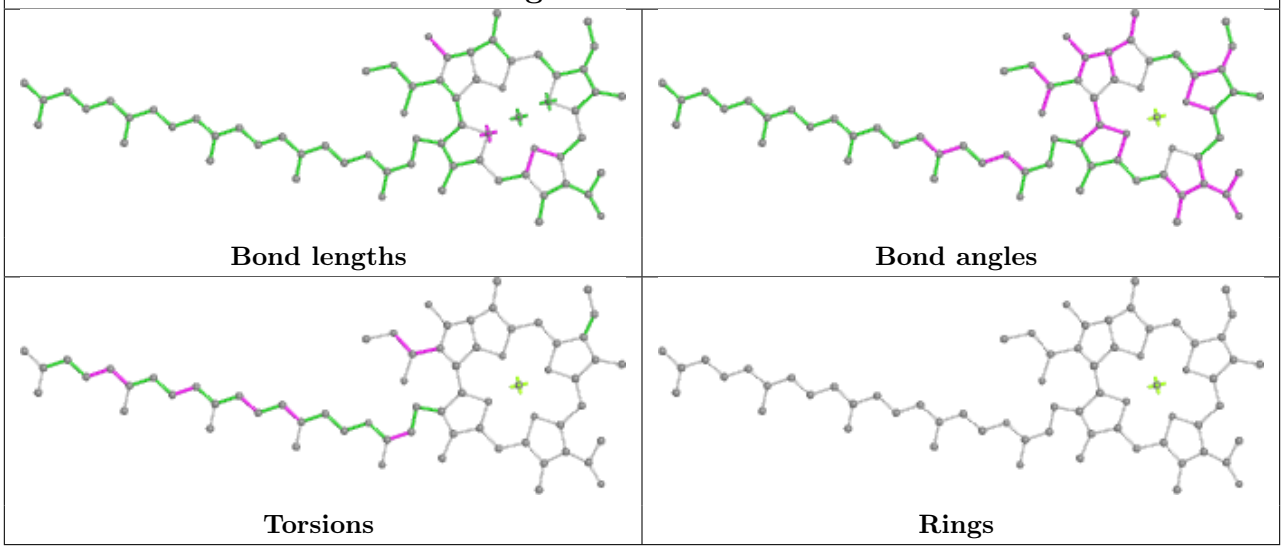
Ligand BCL U 401



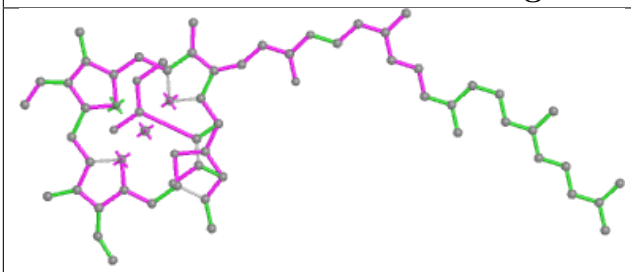
Ligand BCL X 404



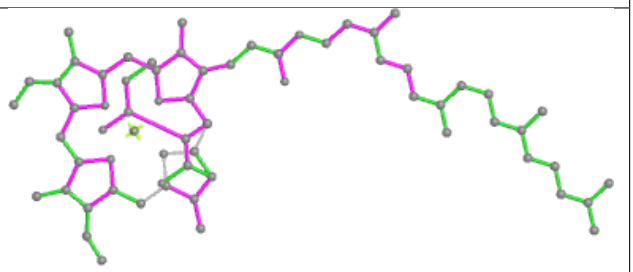
Ligand BCL U 403



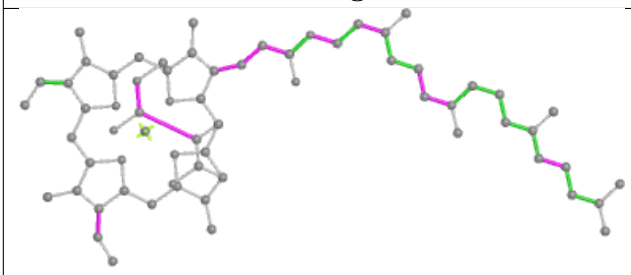
Ligand G2O A 827



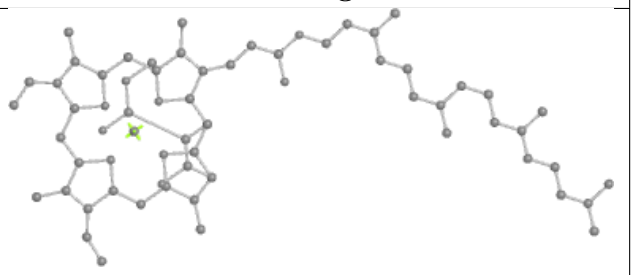
Bond lengths



Bond angles

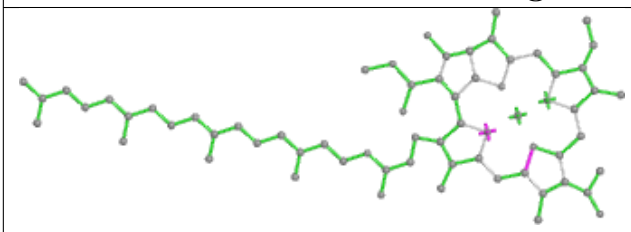


Torsions

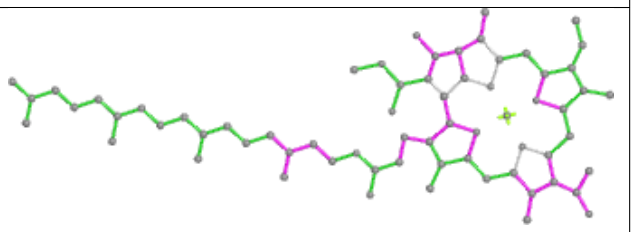


Rings

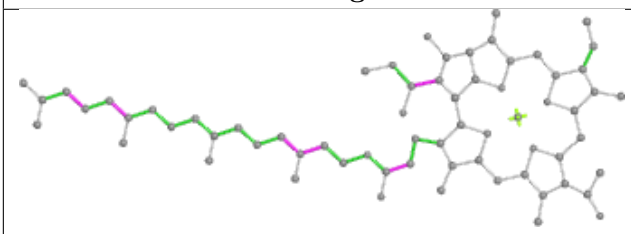
Ligand BCL Z 402



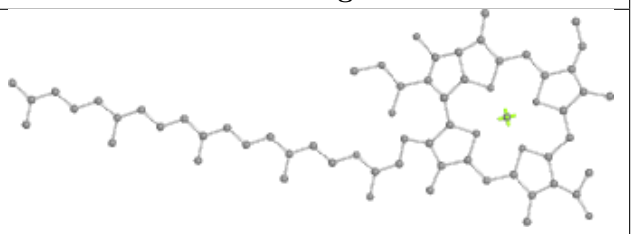
Bond lengths



Bond angles

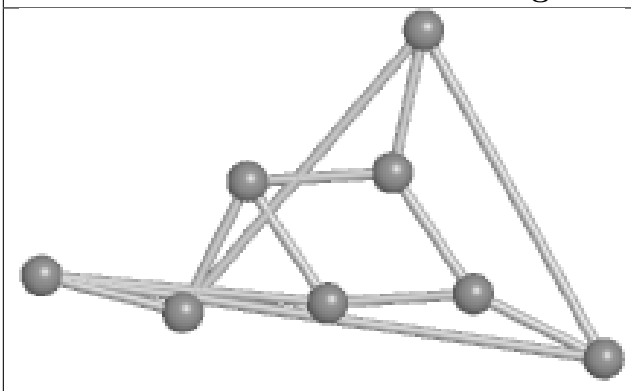


Torsions

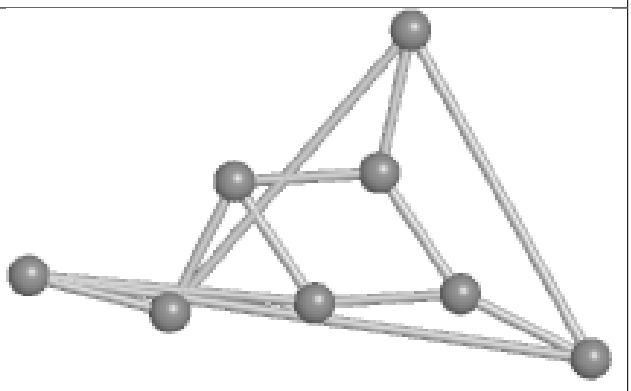


Rings

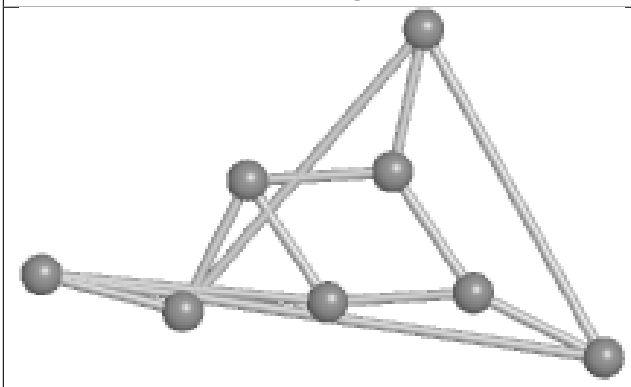
Ligand SF4 B 302



Bond lengths



Bond angles



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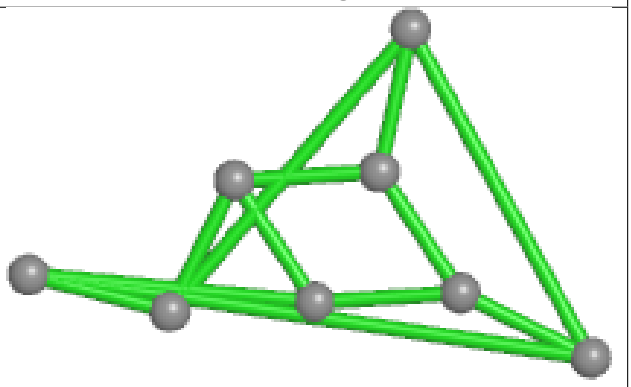
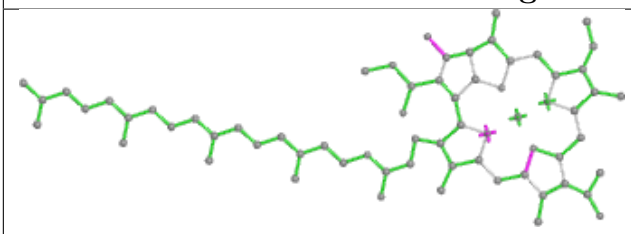
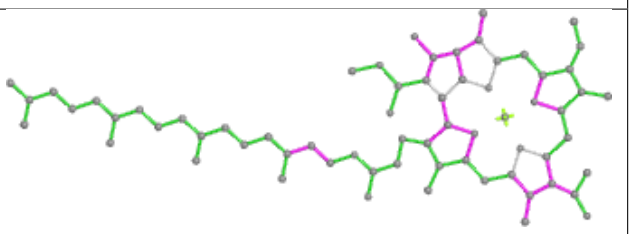


Rings

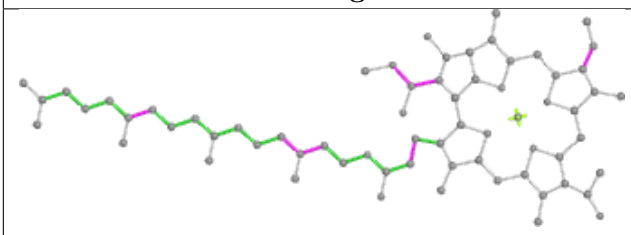
Ligand BCL W 402



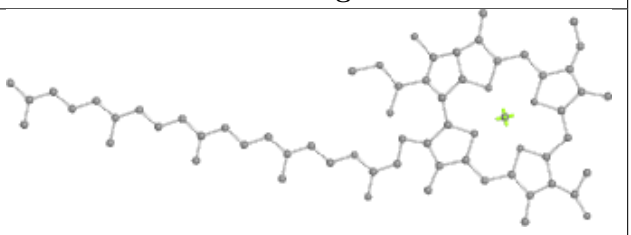
Bond lengths



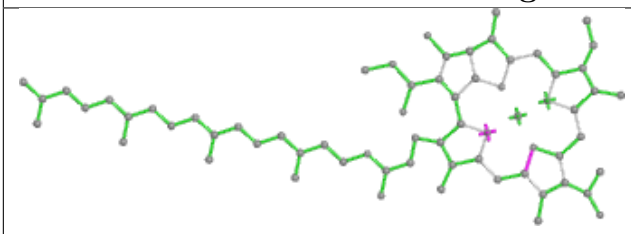
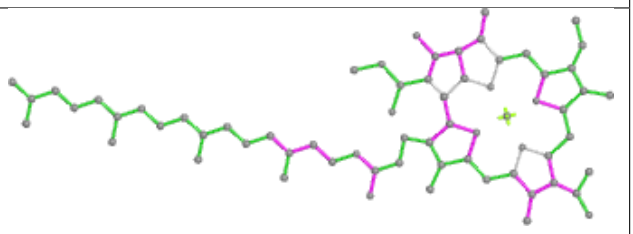
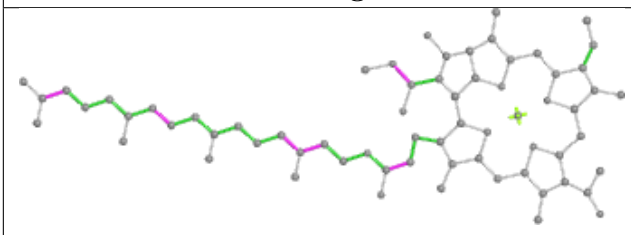
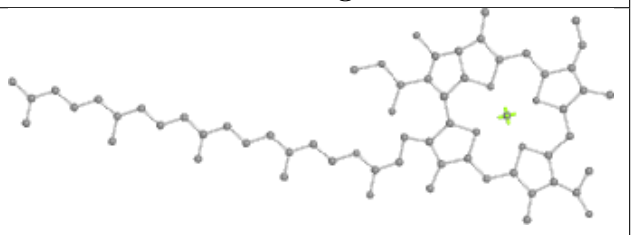
Bond angles

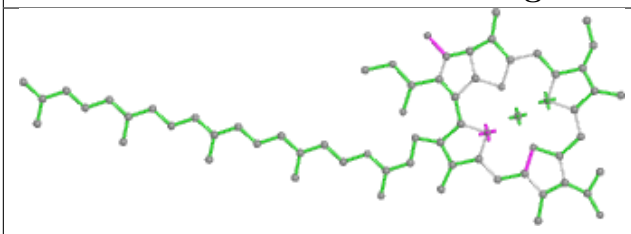
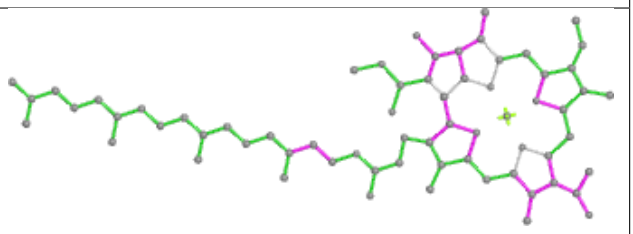
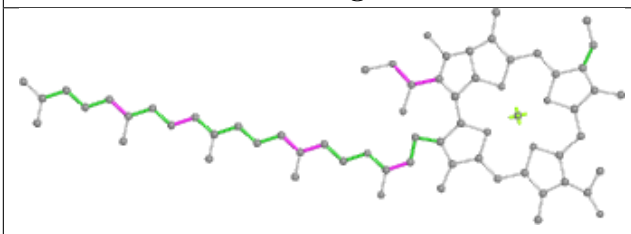
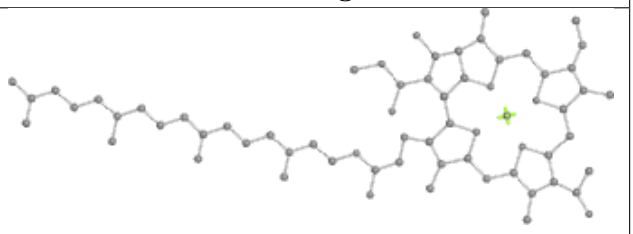


Torsions

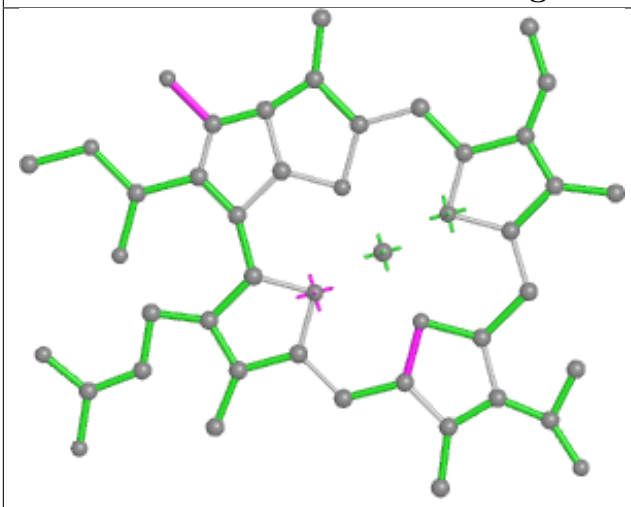


Rings

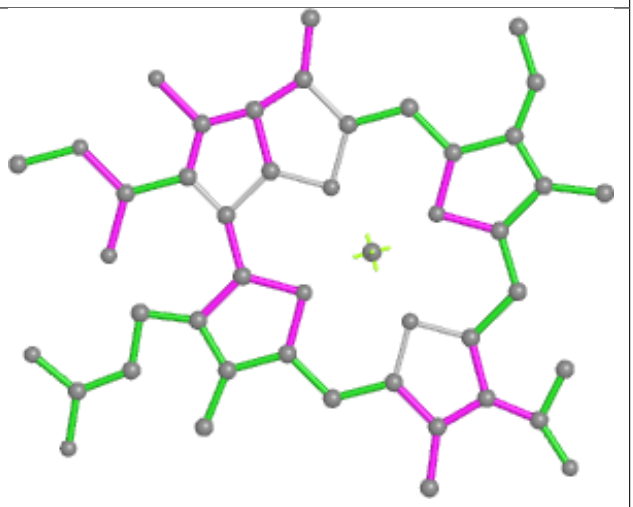
Ligand BCL W 407	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL Y 402	
 Bond lengths	 Bond angles
 Torsions	 Rings

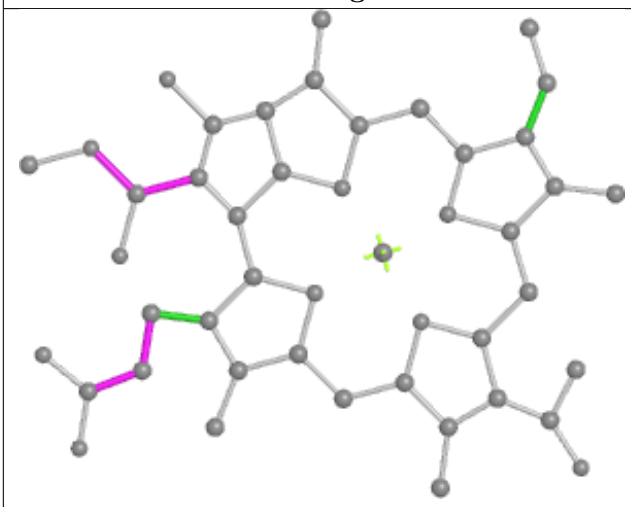
Ligand BCL a 808



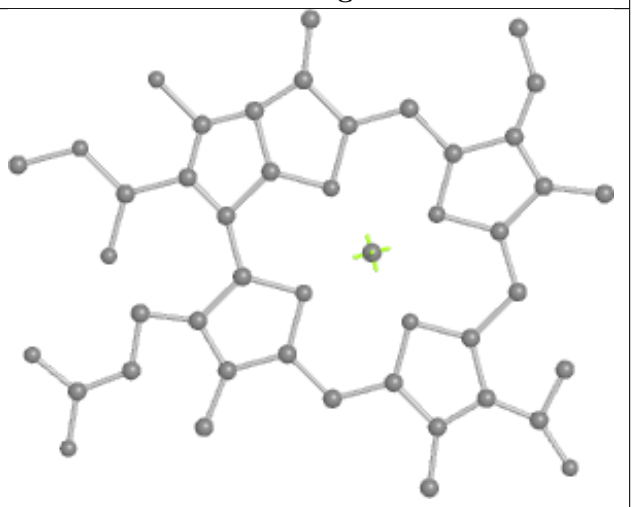
Bond lengths



Bond angles

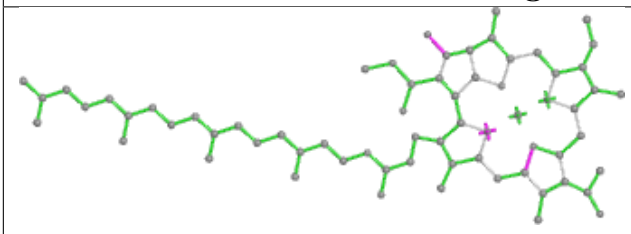


Torsions

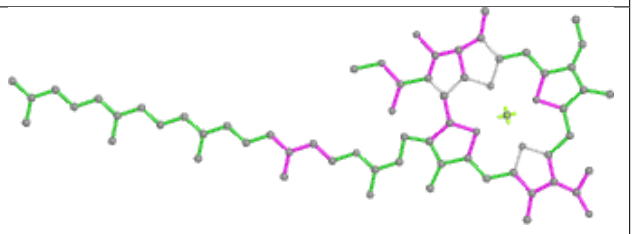


Rings

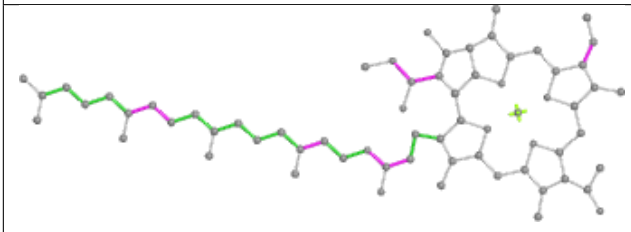
Ligand BCL X 403



Bond lengths



Bond angles



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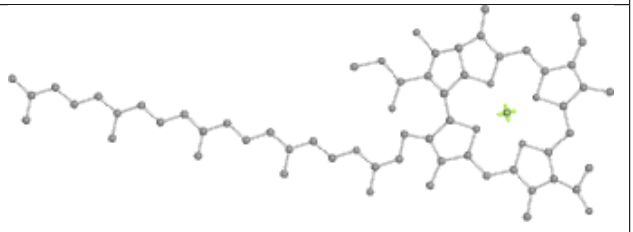
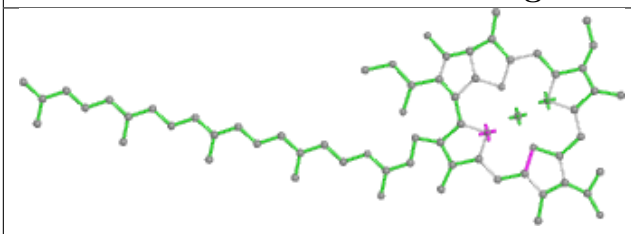
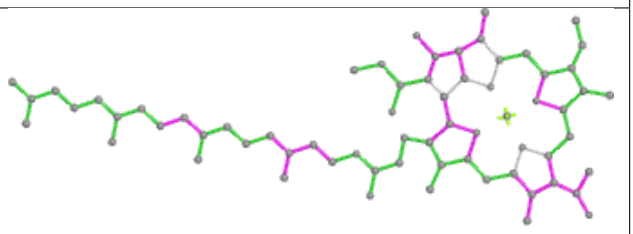


Rings

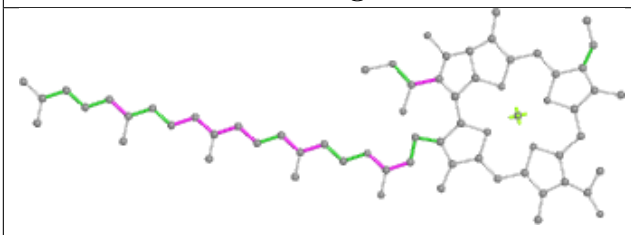
Ligand BCL Y 401



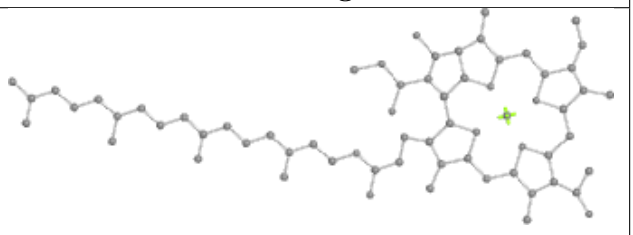
Bond lengths



Bond angles

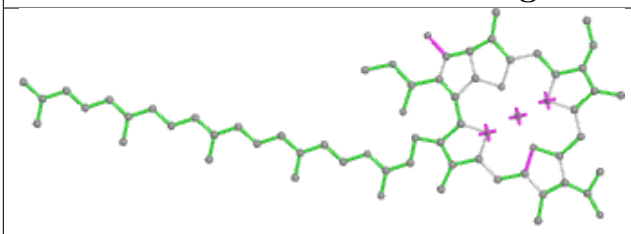


Torsions

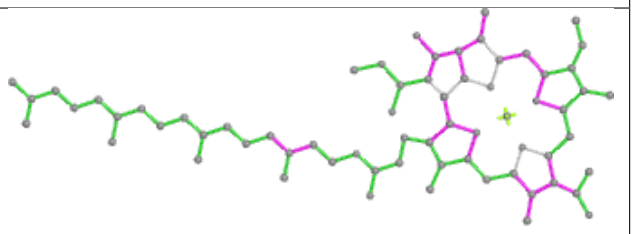


Rings

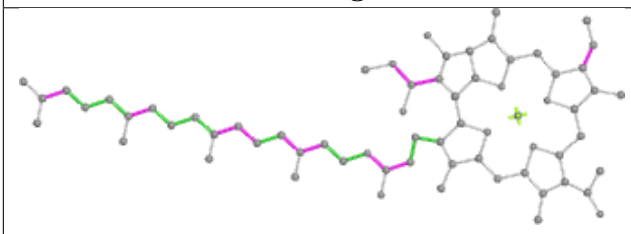
Ligand BCL W 405



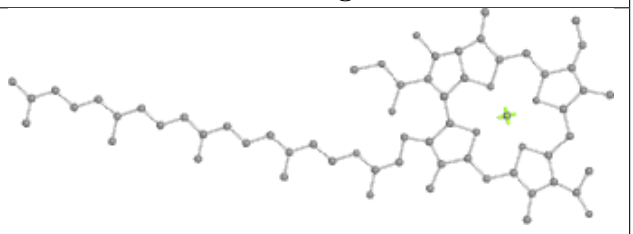
Bond lengths



Bond angles

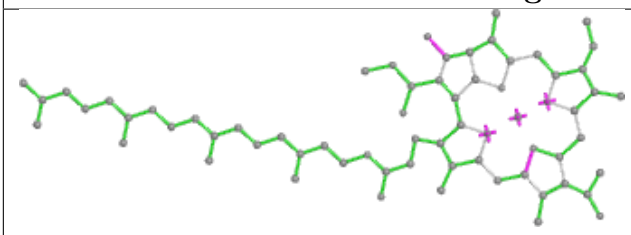


Torsions

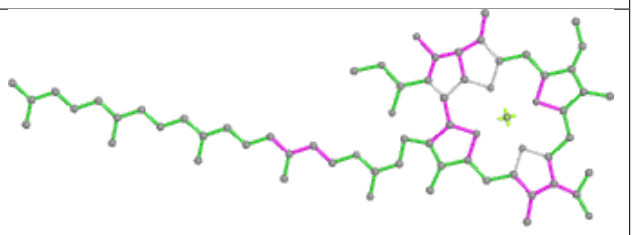


Rings

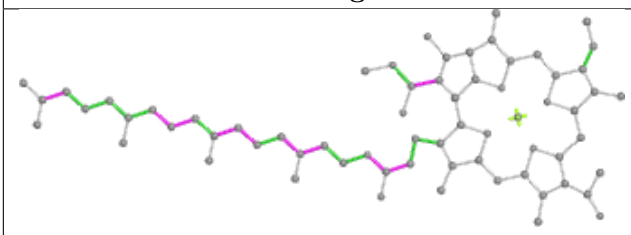
Ligand BCL Y 403



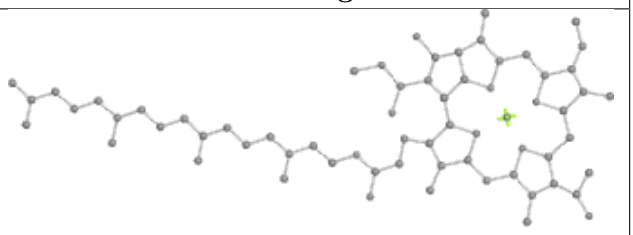
Bond lengths



Bond angles

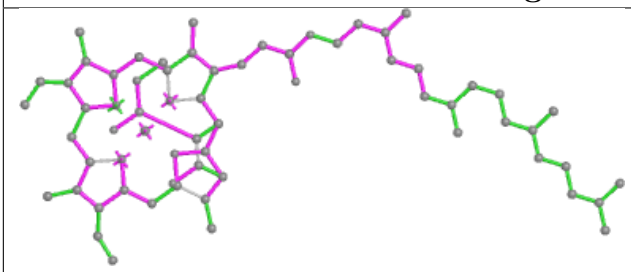


Torsions

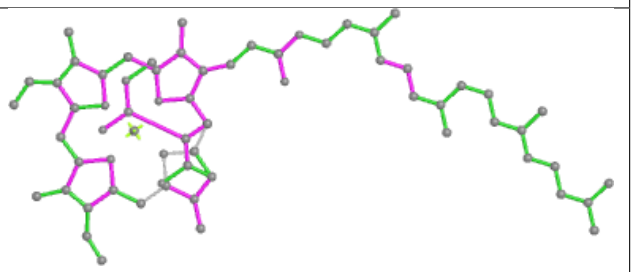


Rings

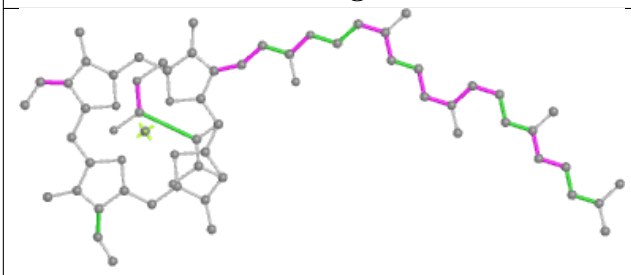
Ligand G2O A 826



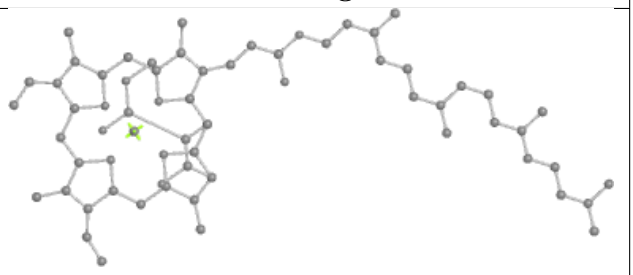
Bond lengths



Bond angles

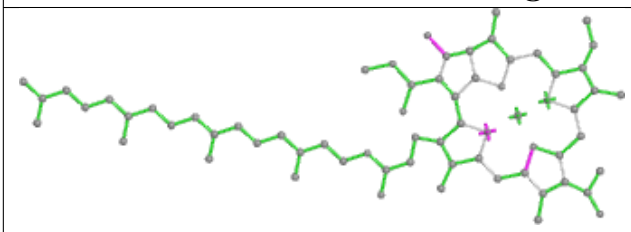


Torsions

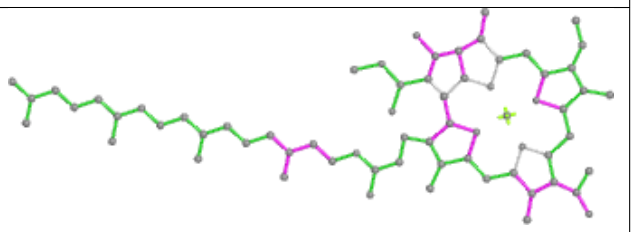


Rings

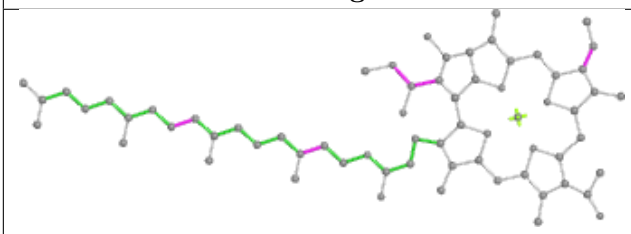
Ligand BCL A 810



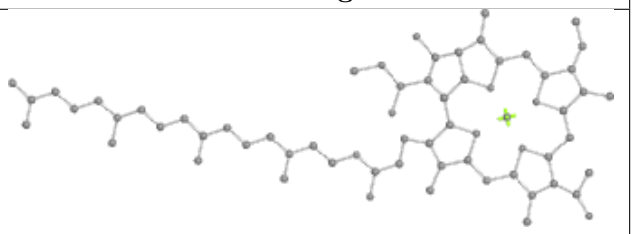
Bond lengths



Bond angles

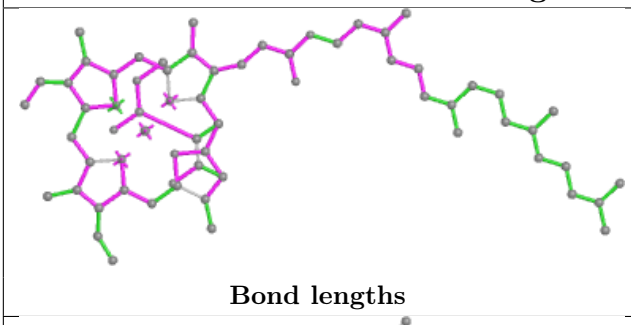


Torsions

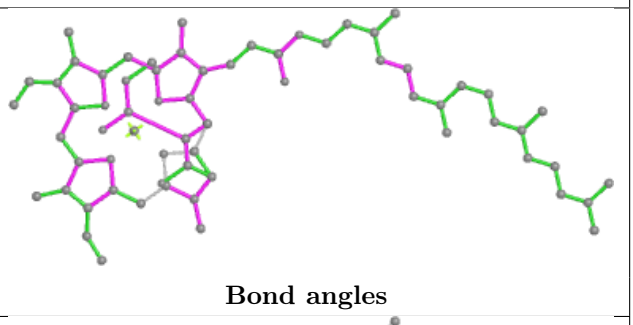


Rings

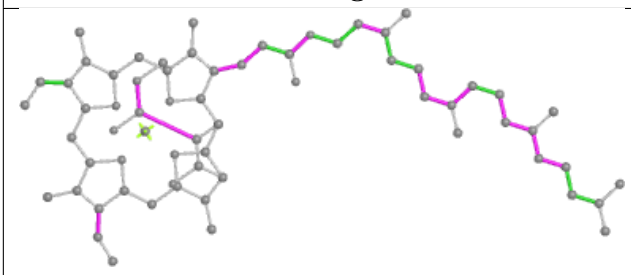
Ligand G2O a 801



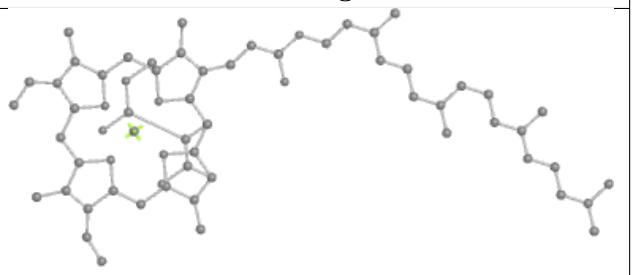
Bond lengths



Bond angles

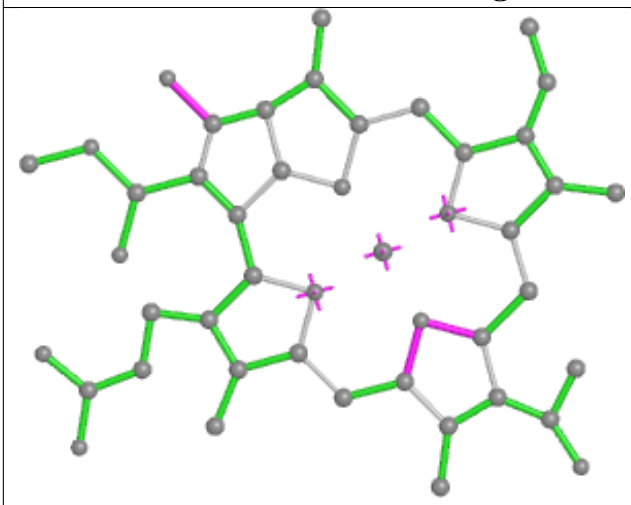


Torsions

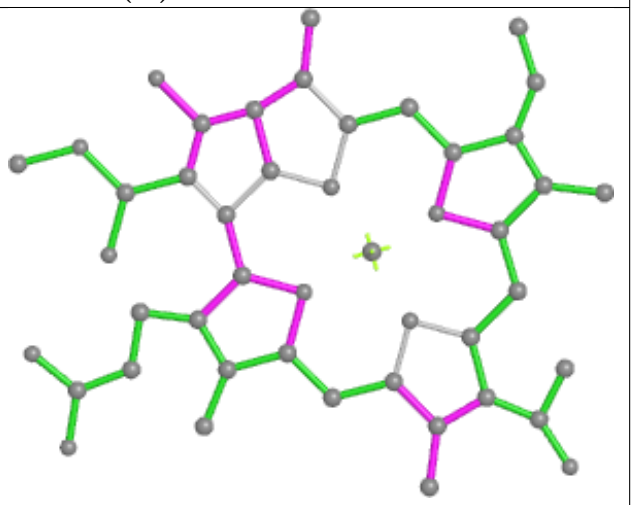


Rings

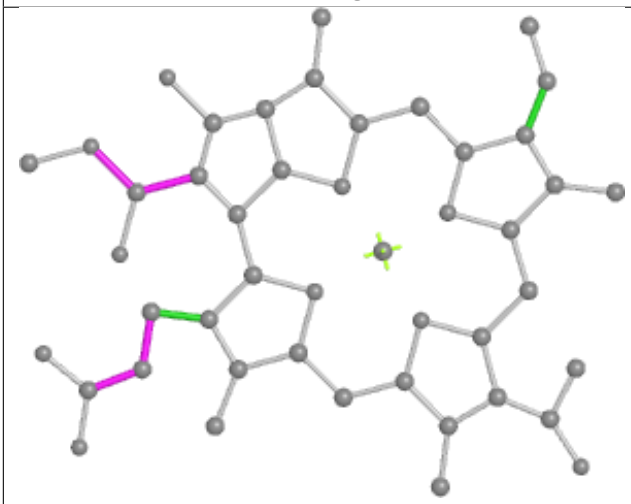
Ligand BCL X 408 (B)



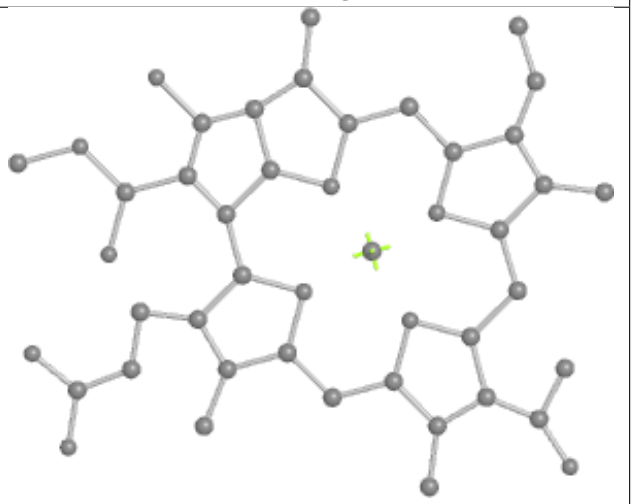
Bond lengths



Bond angles

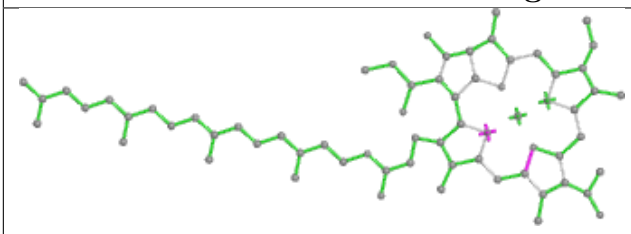


Torsions

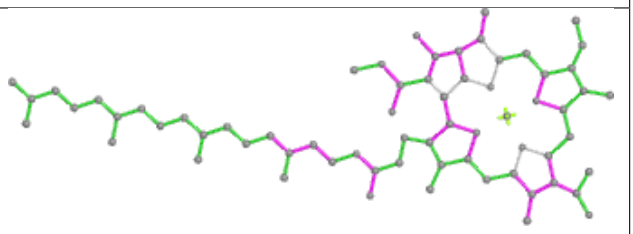


Rings

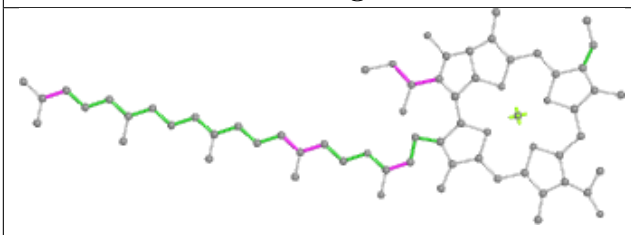
Ligand BCL Y 408



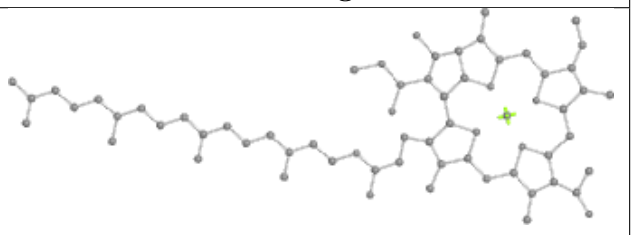
Bond lengths



Bond angles

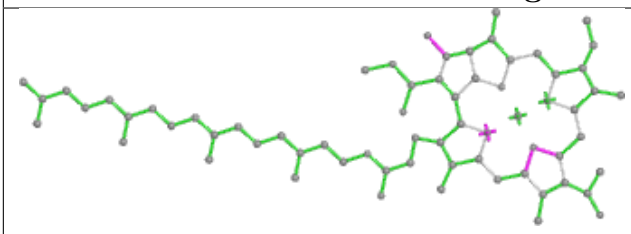


Torsions

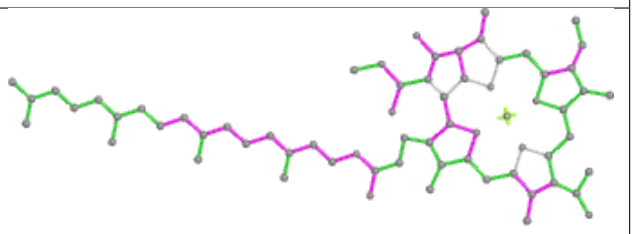


Rings

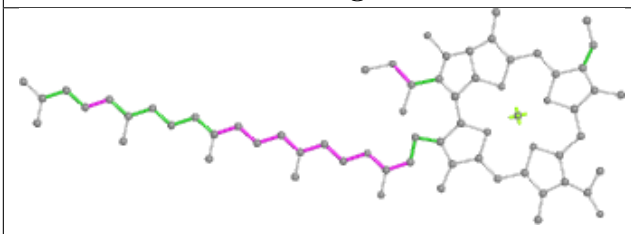
Ligand BCL A 812



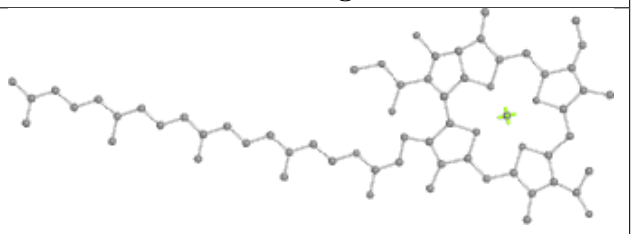
Bond lengths



Bond angles

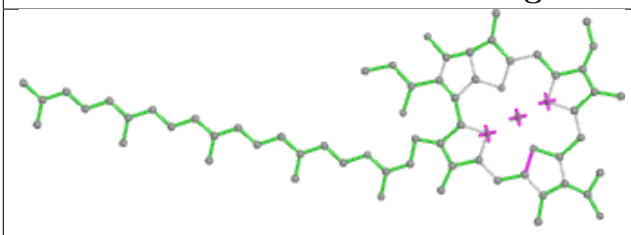


Torsions

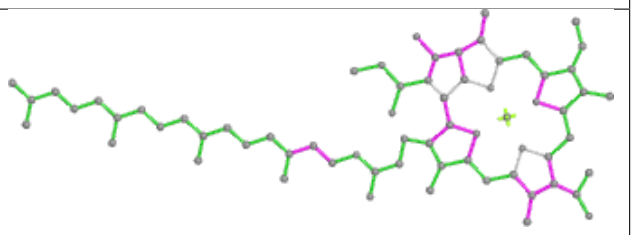


Rings

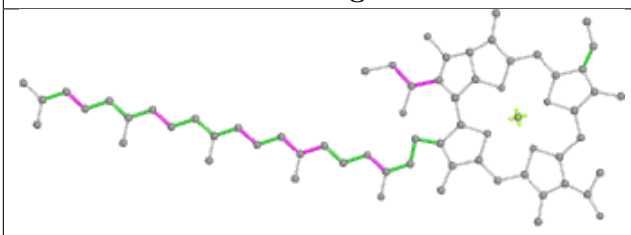
Ligand BCL V 403



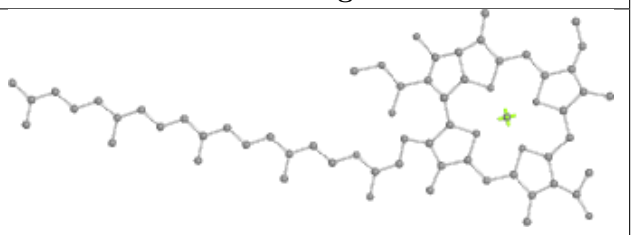
Bond lengths



Bond angles

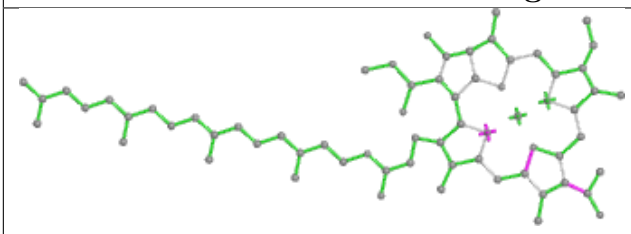


Torsions

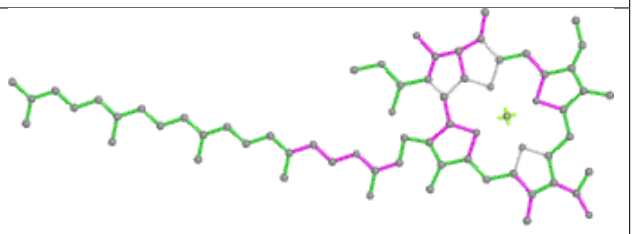


Rings

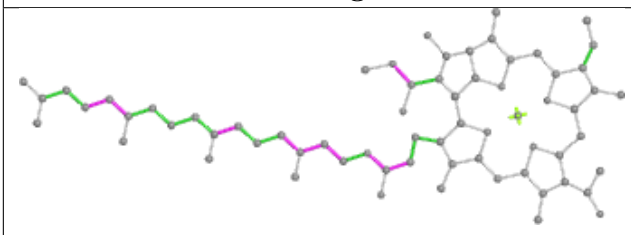
Ligand BCL A 806



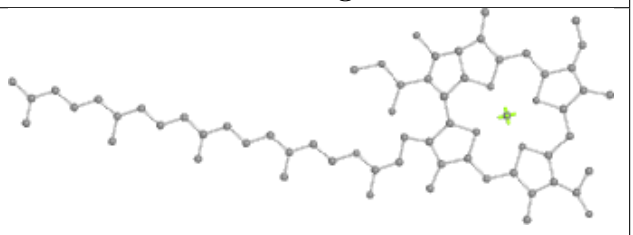
Bond lengths



Bond angles

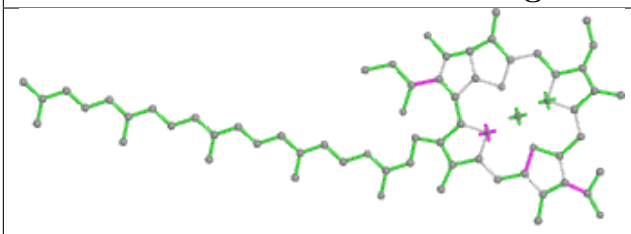


Torsions

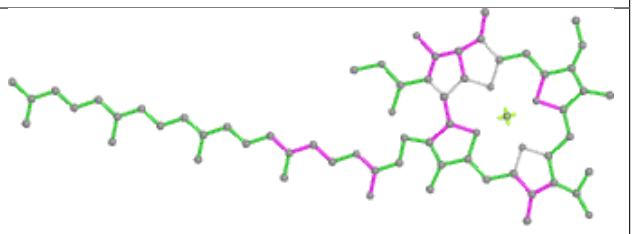


Rings

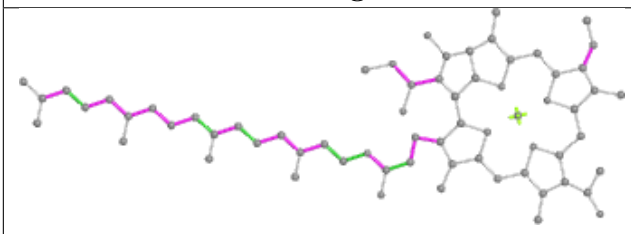
Ligand BCL A 813



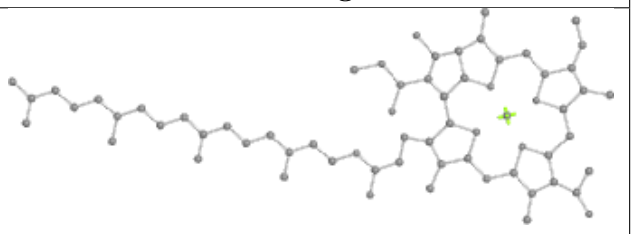
Bond lengths



Bond angles

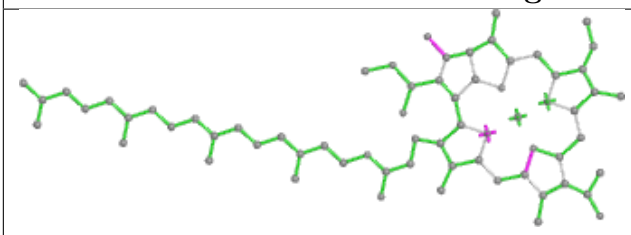


Torsions

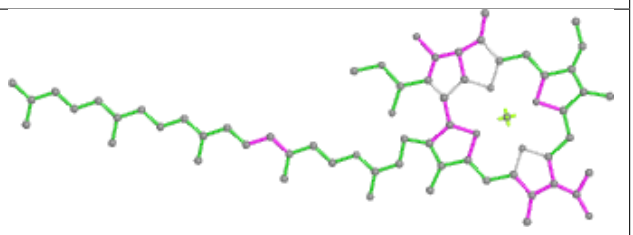


Rings

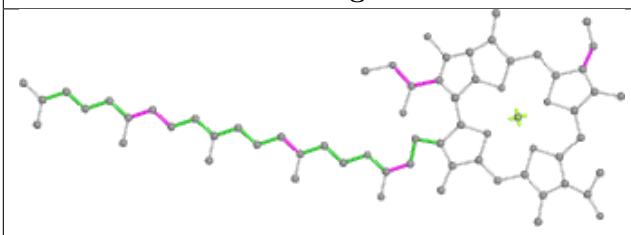
Ligand BCL V 405



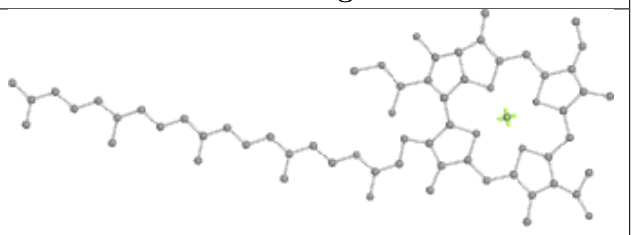
Bond lengths



Bond angles

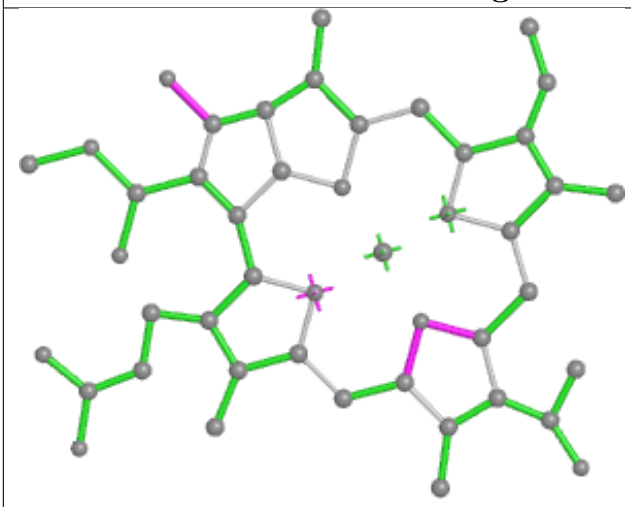


Torsions

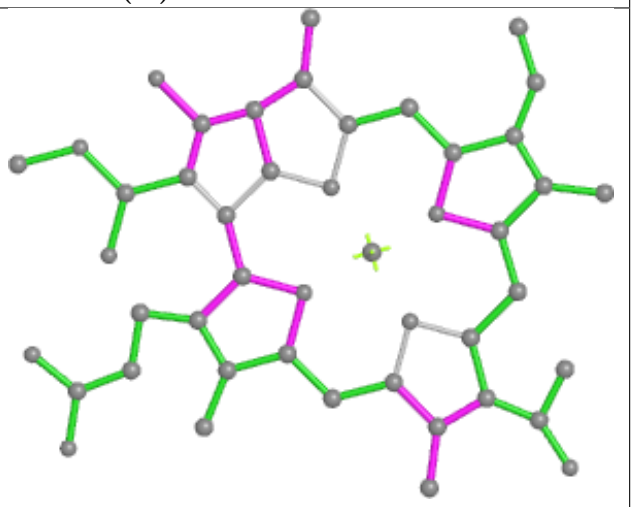


Rings

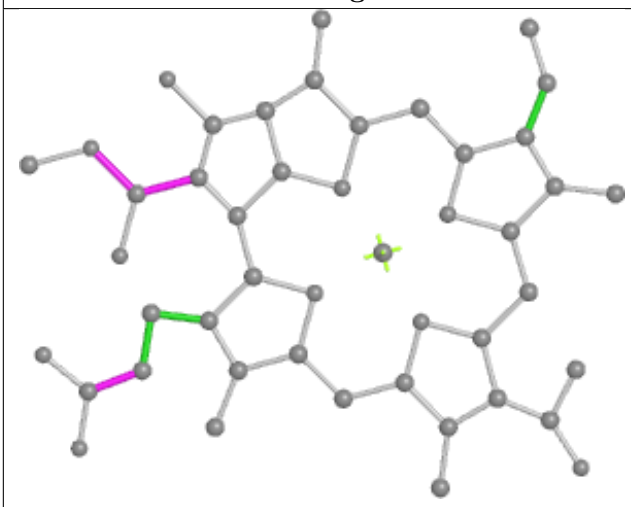
Ligand BCL X 407 (B)



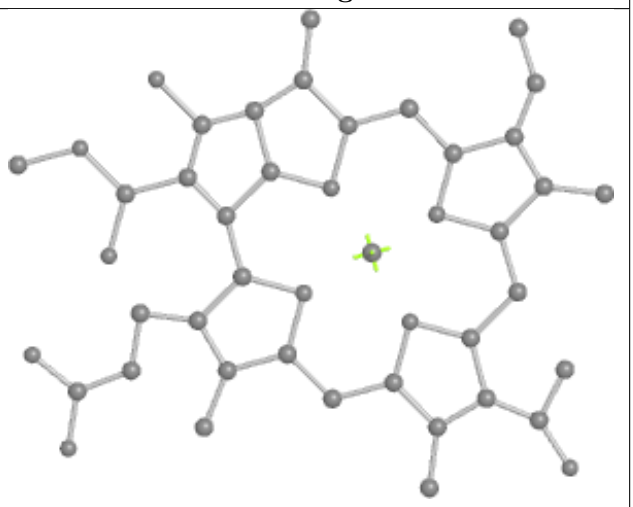
Bond lengths



Bond angles

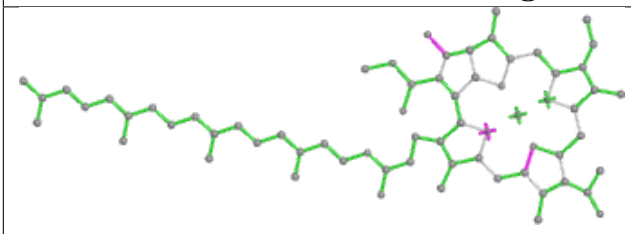


Torsions

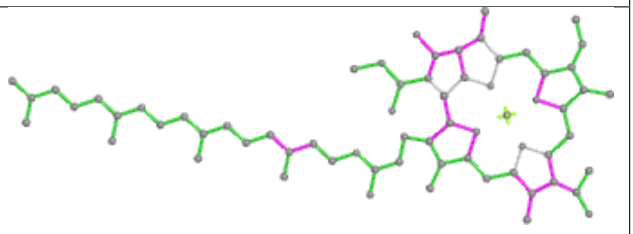


Rings

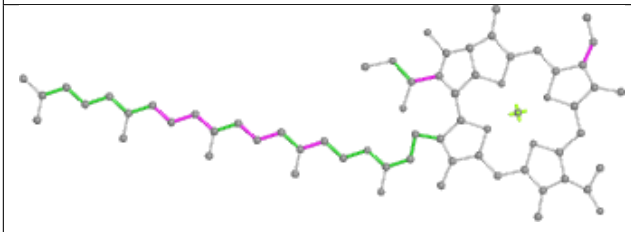
Ligand BCL W 406



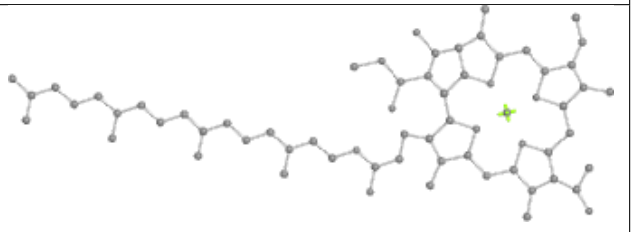
Bond lengths



Bond angles

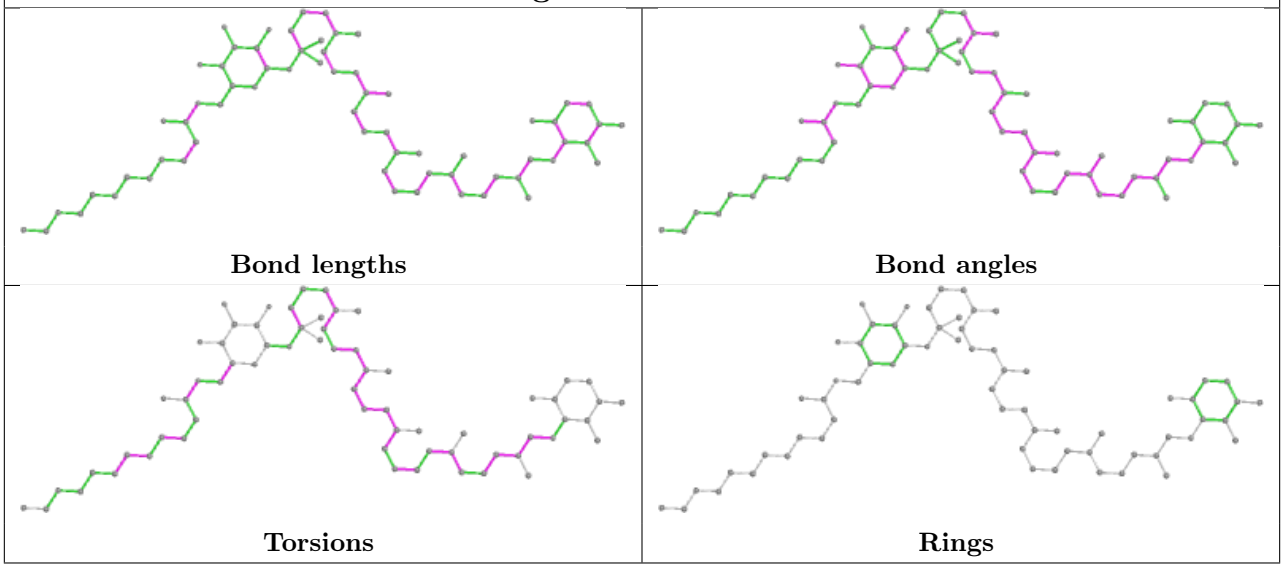


Torsions

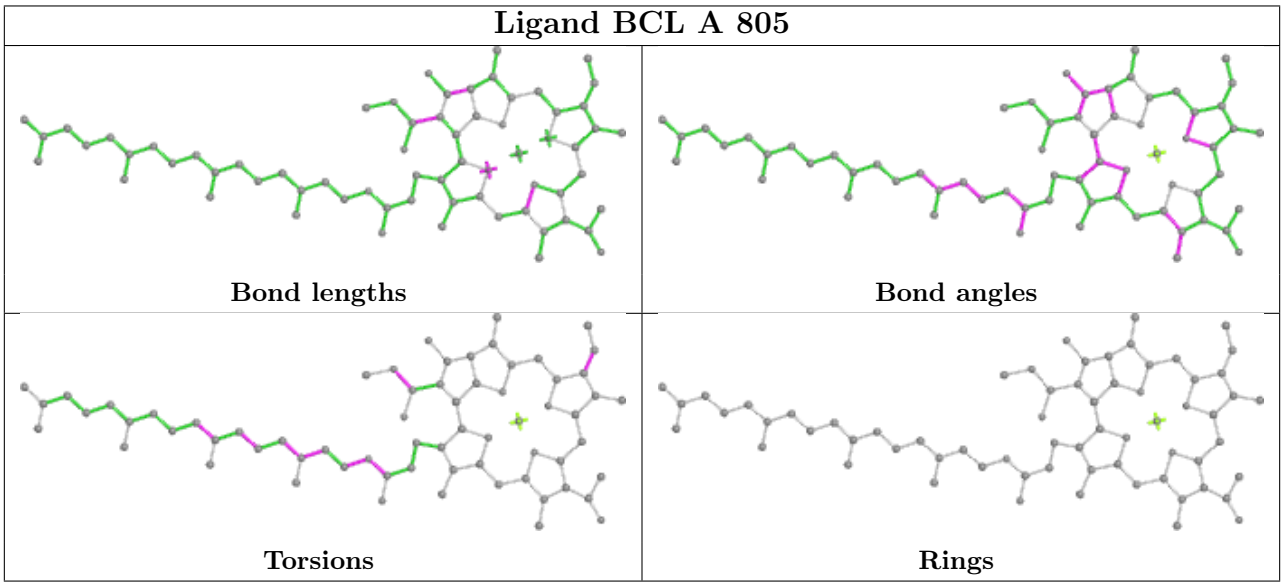


Rings

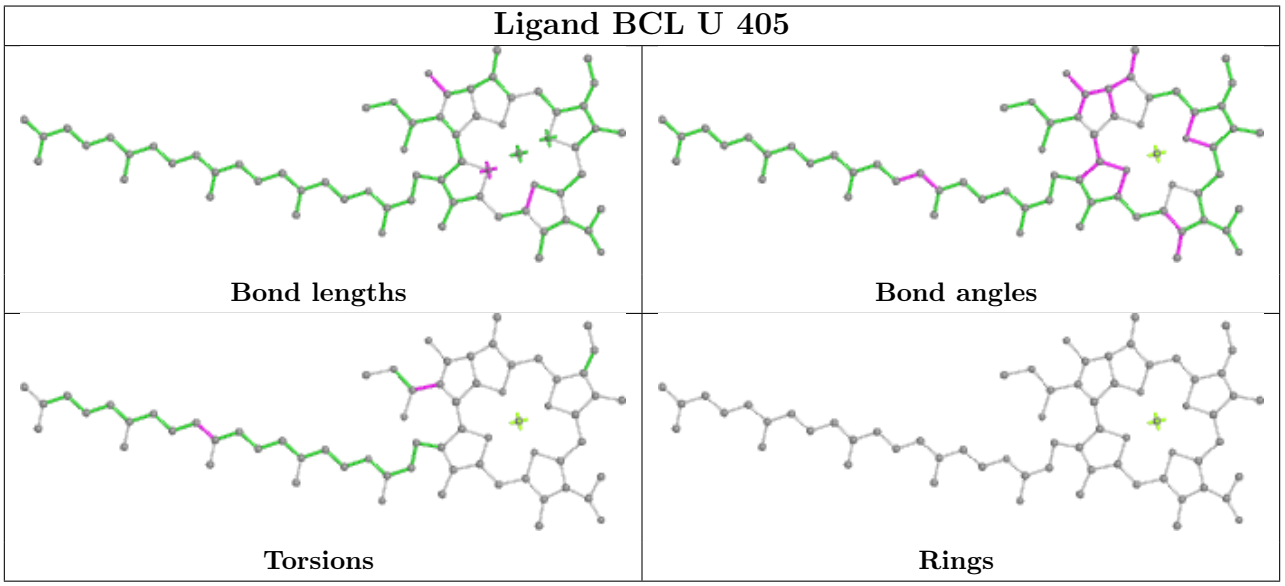
Ligand F39 A 815



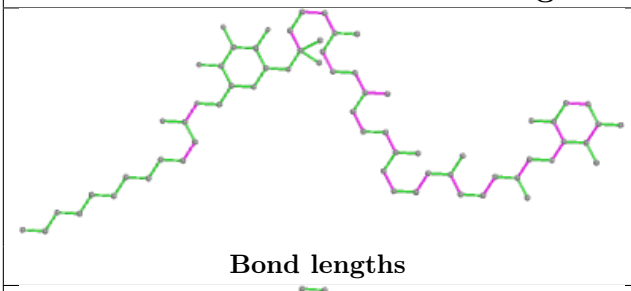
Ligand BCL A 805



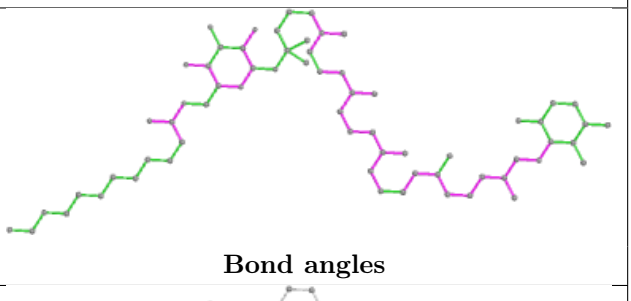
Ligand BCL U 405



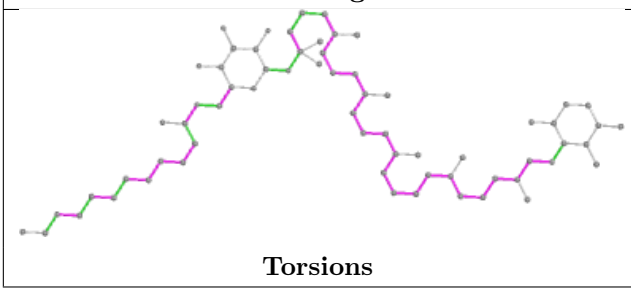
Ligand F39 a 815



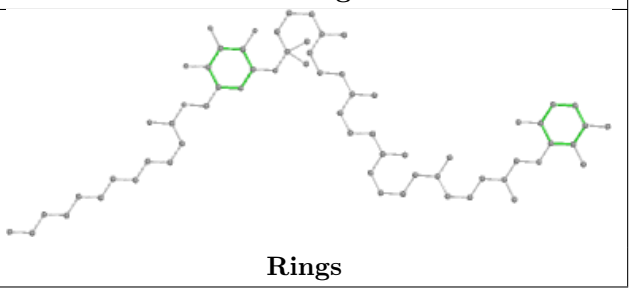
Bond lengths



Bond angles

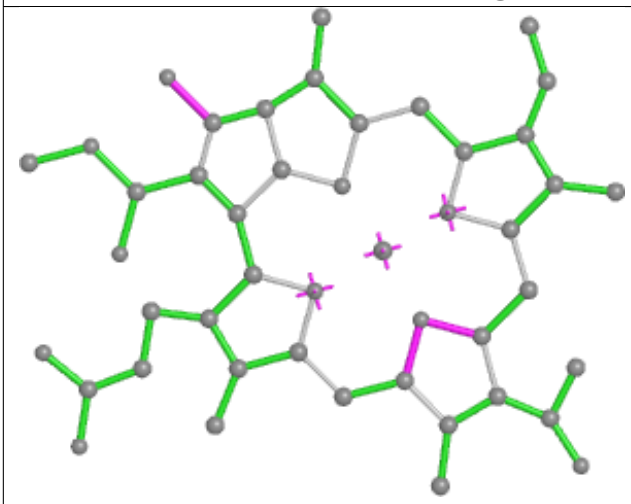


Torsions

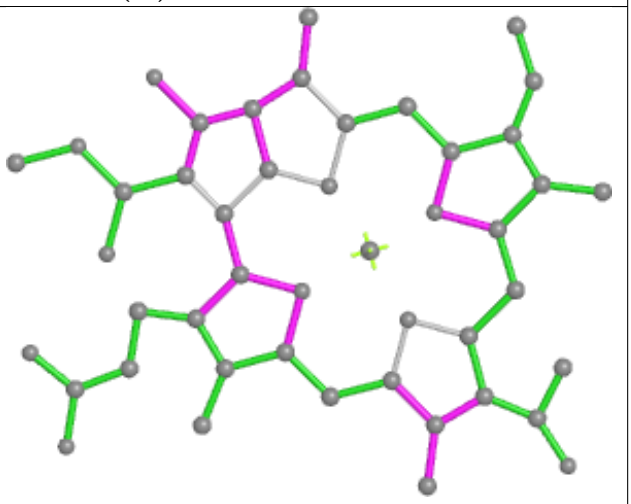


Rings

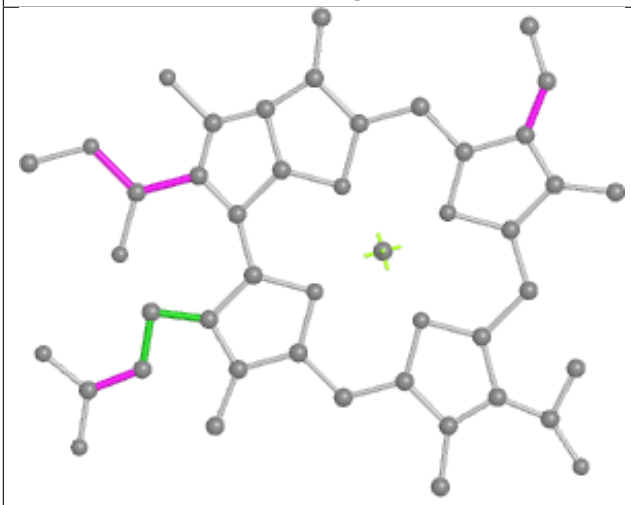
Ligand BCL U 407 (B)



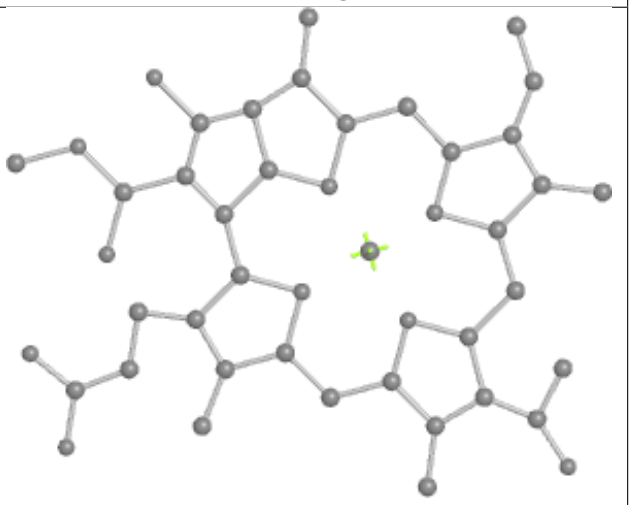
Bond lengths



Bond angles

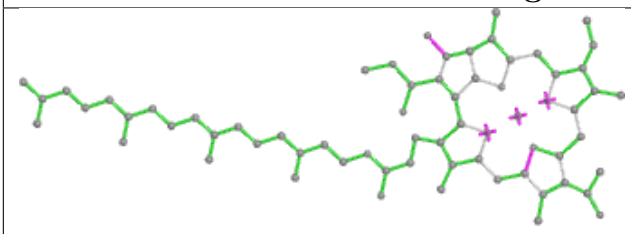


Torsions

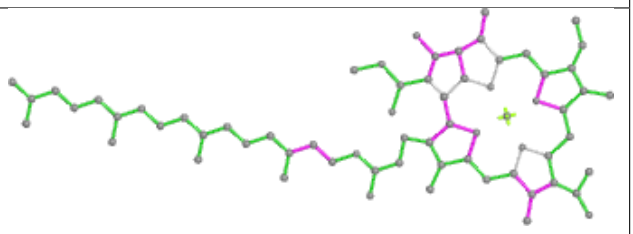


Rings

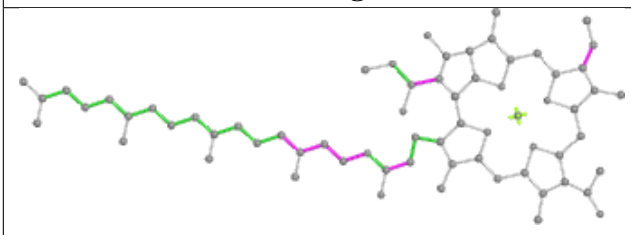
Ligand BCL A 807



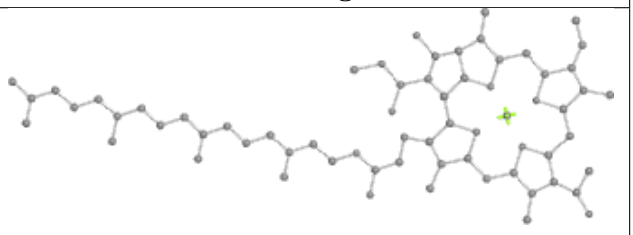
Bond lengths



Bond angles

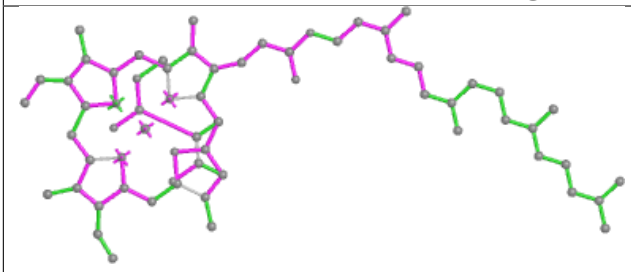


Torsions

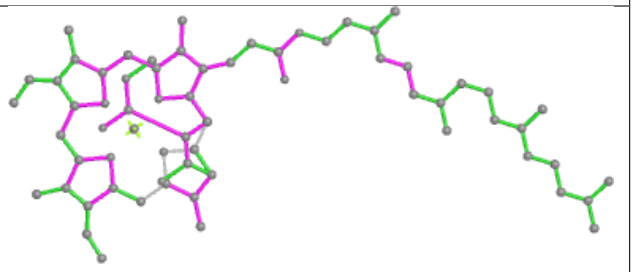


Rings

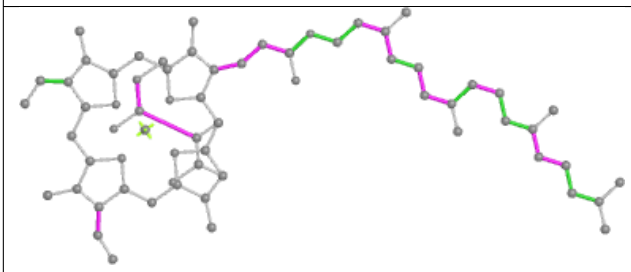
Ligand G2O A 802



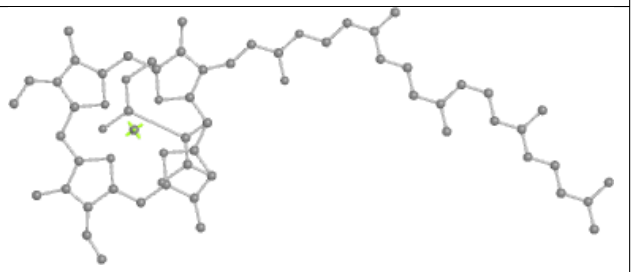
Bond lengths



Bond angles

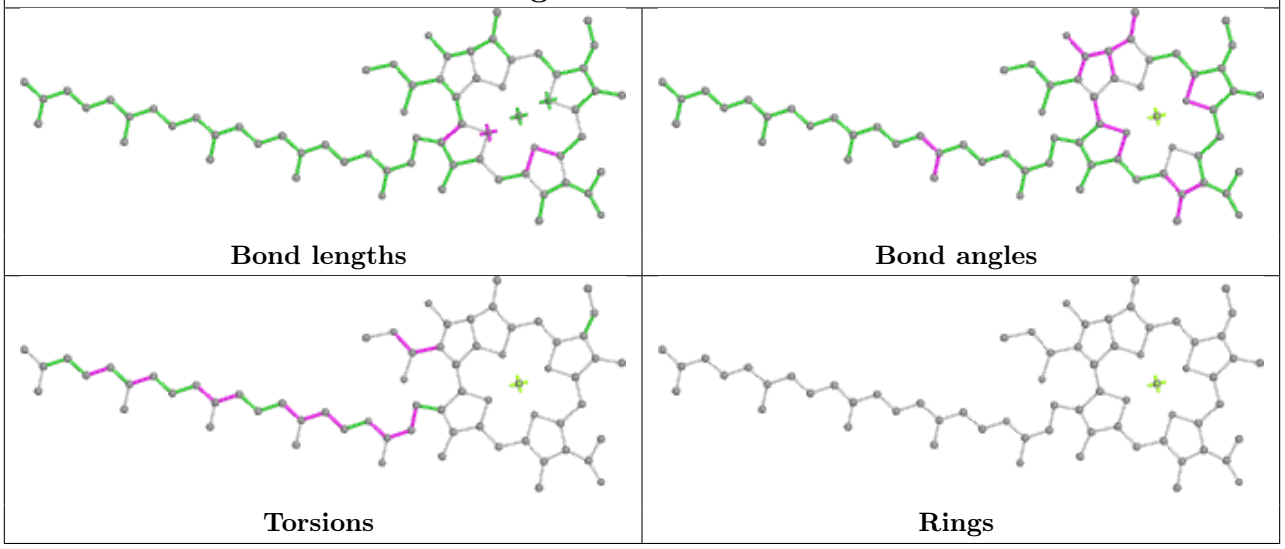


Torsions

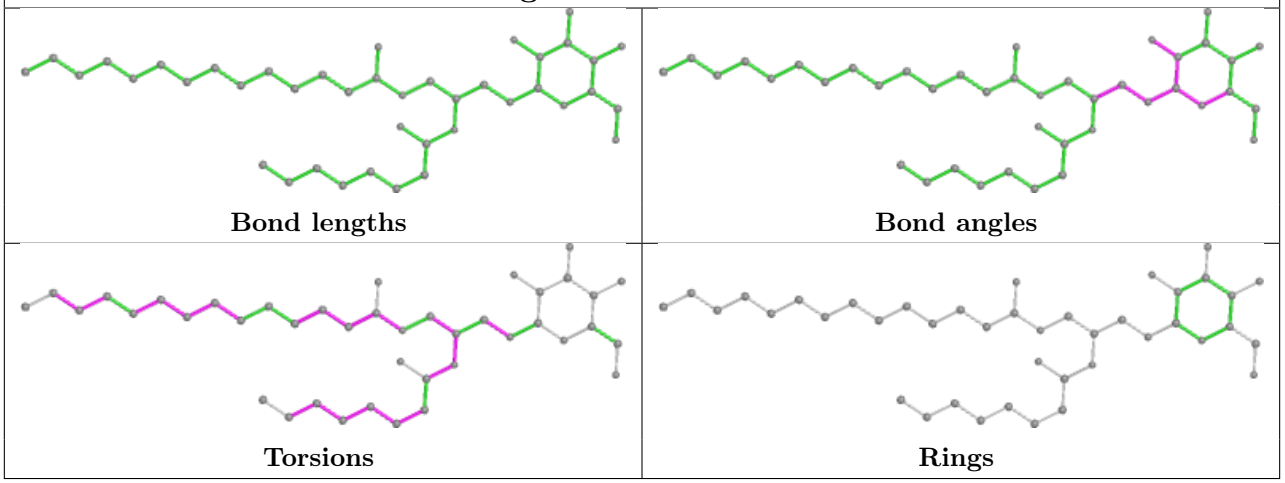


Rings

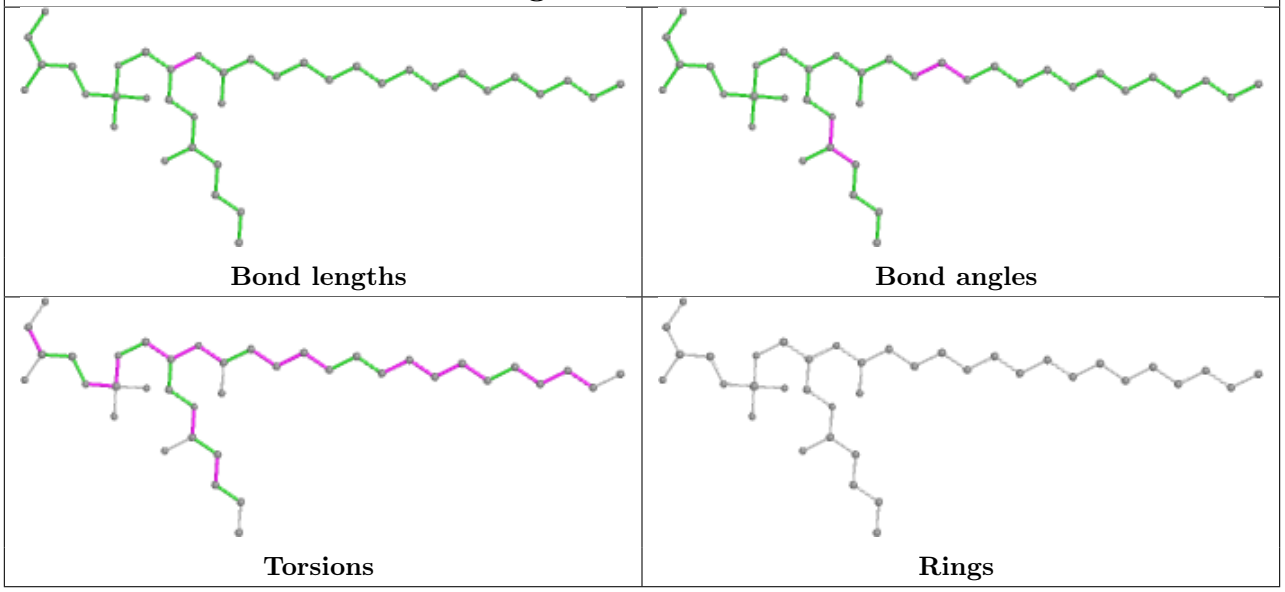
Ligand BCL a 809



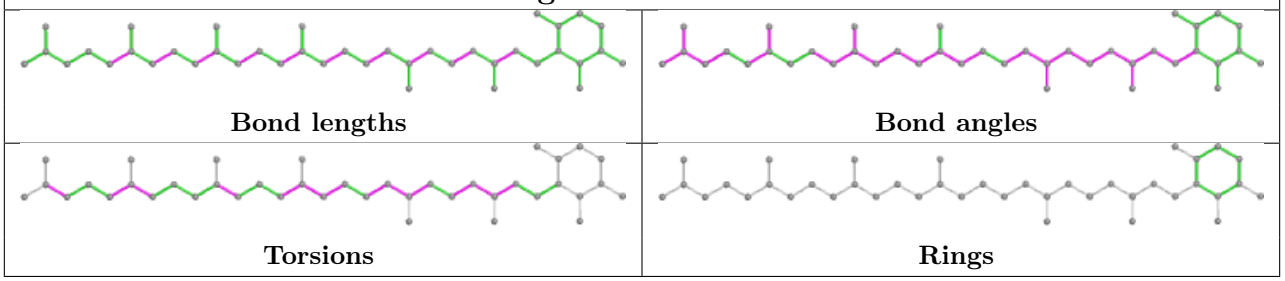
Ligand LMG A 821



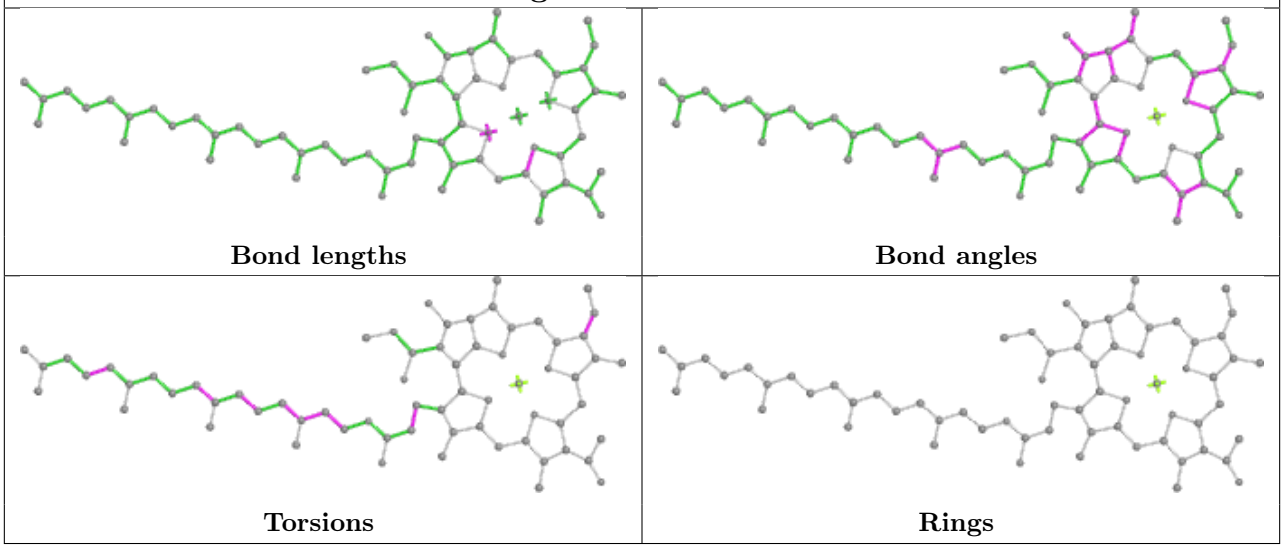
Ligand LHG a 821



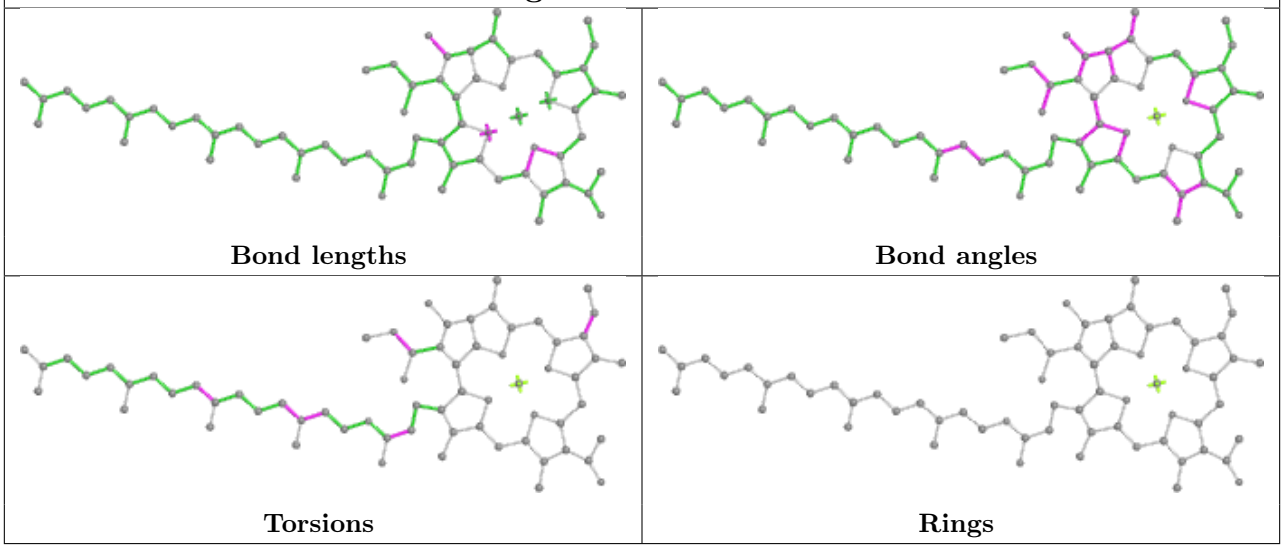
Ligand F26 a 817



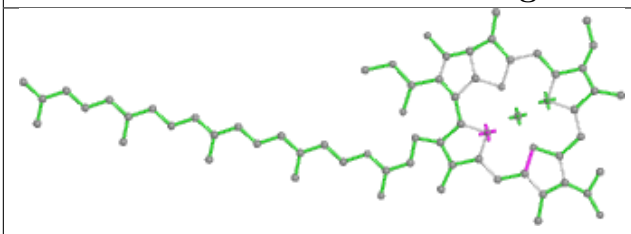
Ligand BCL a 814



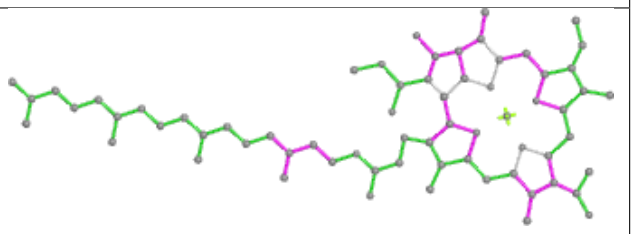
Ligand BCL V 404



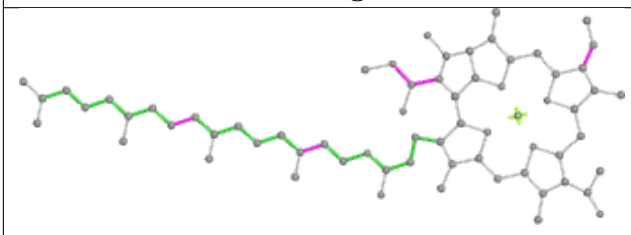
Ligand BCL W 404



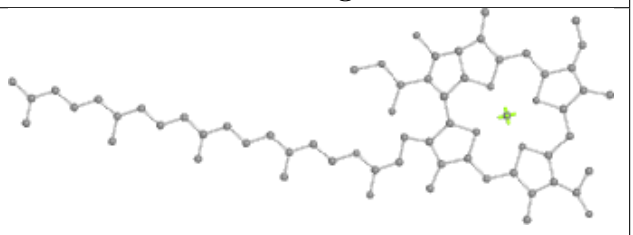
Bond lengths



Bond angles

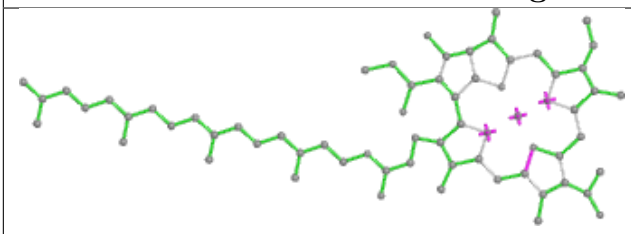


Torsions

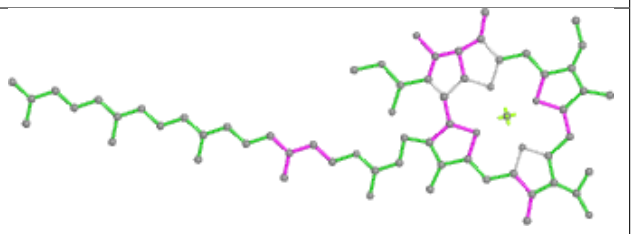


Rings

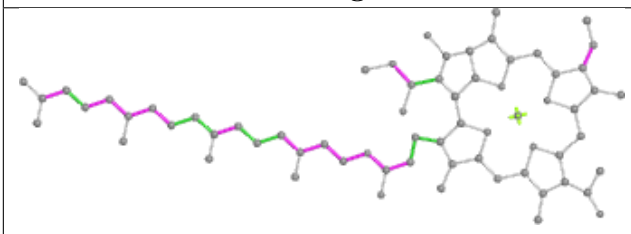
Ligand BCL a 806



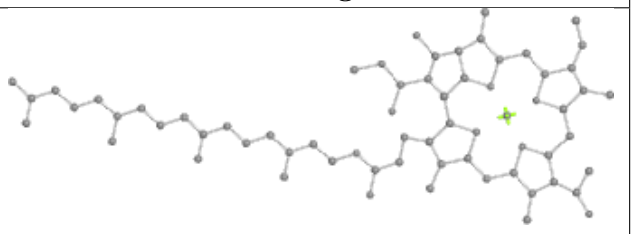
Bond lengths



Bond angles

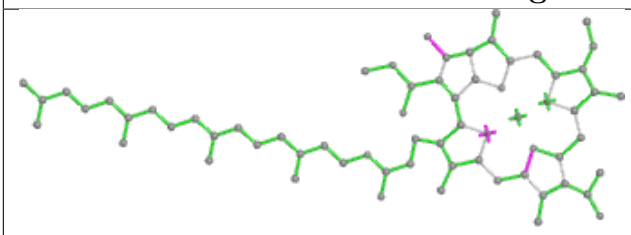


Torsions

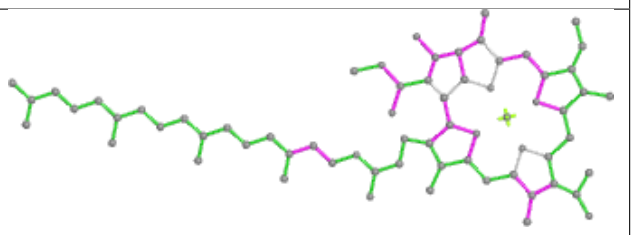


Rings

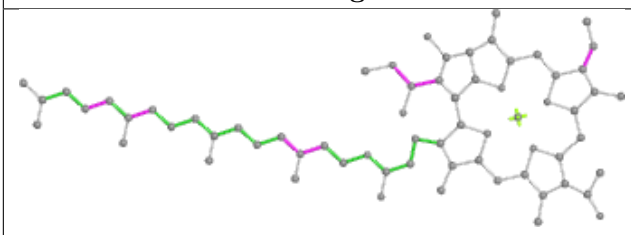
Ligand BCL a 803



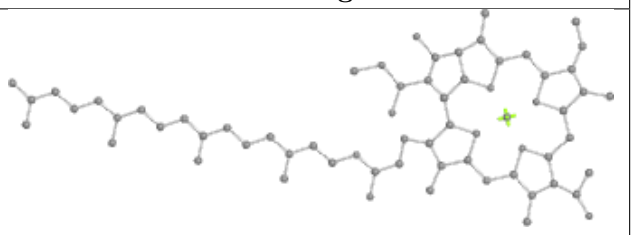
Bond lengths



Bond angles

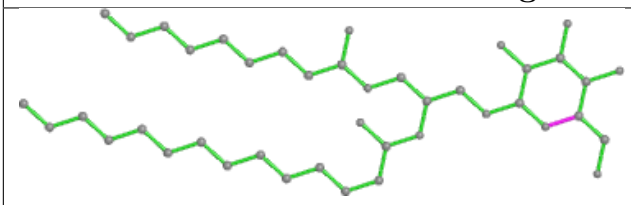


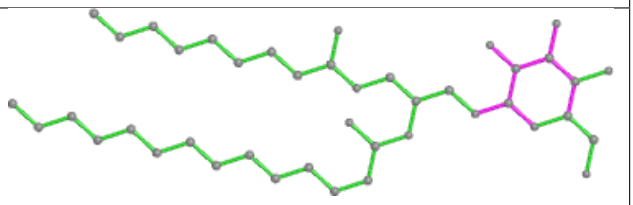
Torsions

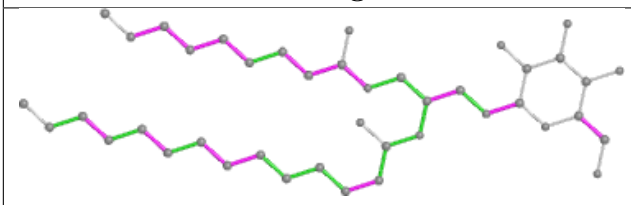


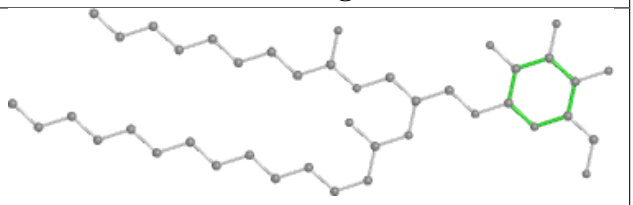
Rings

Ligand LMG A 820

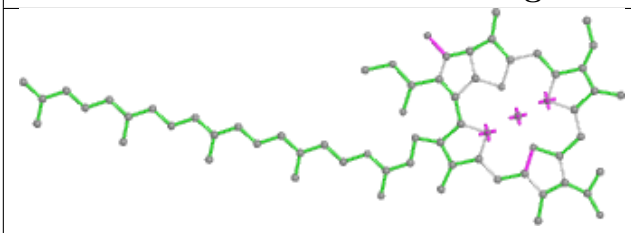

Bond lengths

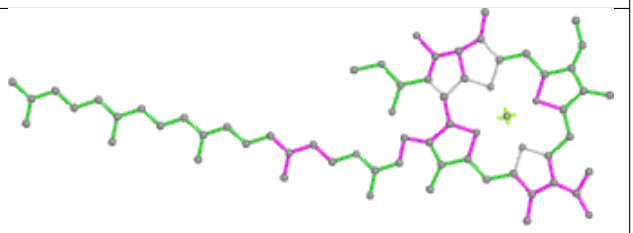

Bond angles

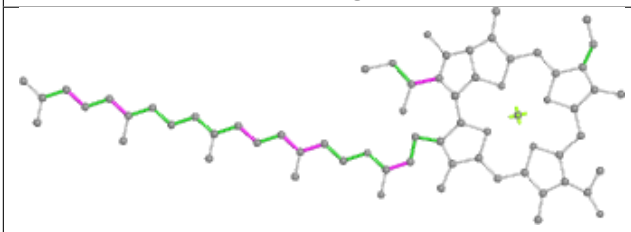

Torsions

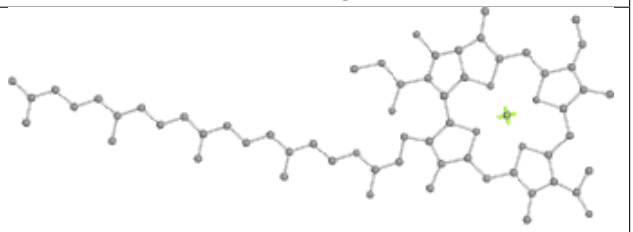

Rings

Ligand BCL V 402

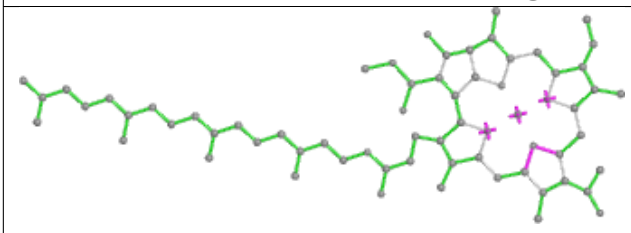

Bond lengths

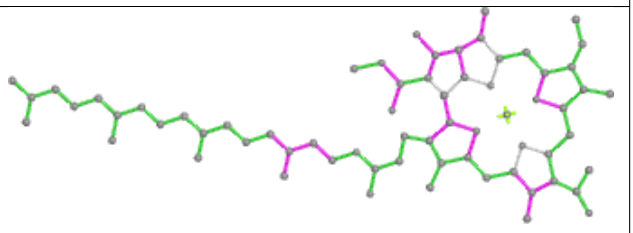

Bond angles

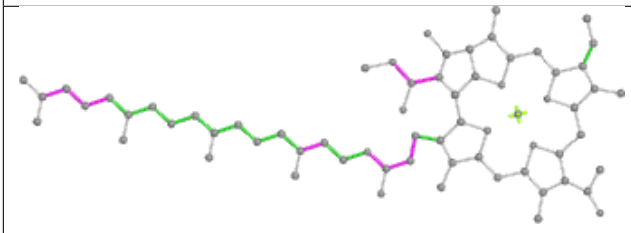

Torsions

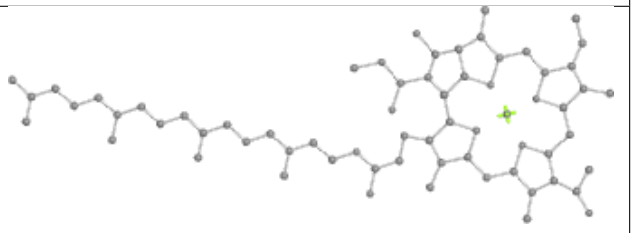

Rings

Ligand BCL V 401

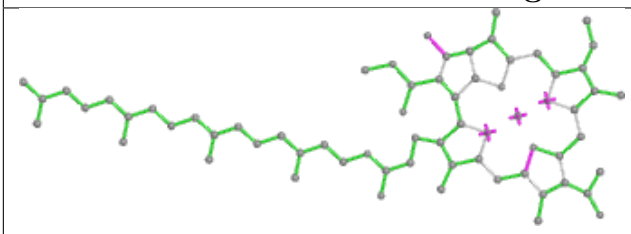

Bond lengths


Bond angles

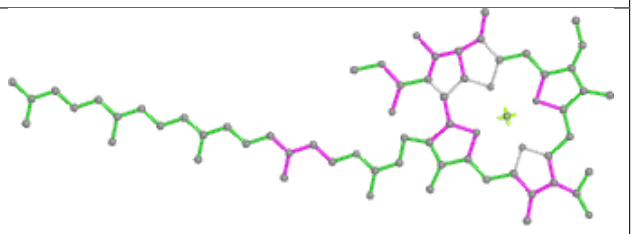

Torsions


Rings

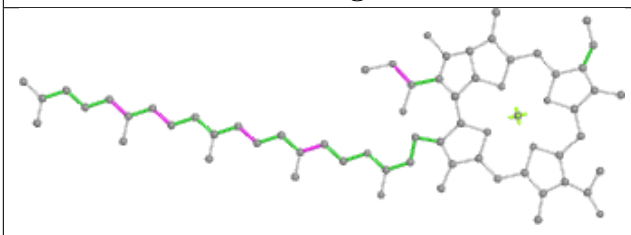
Ligand BCL X 409



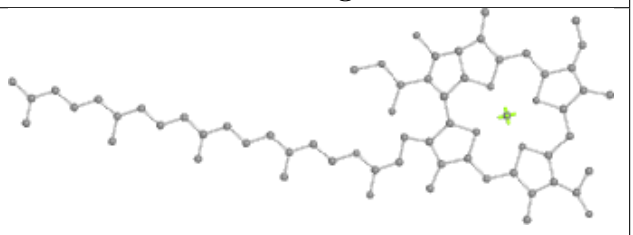
Bond lengths



Bond angles

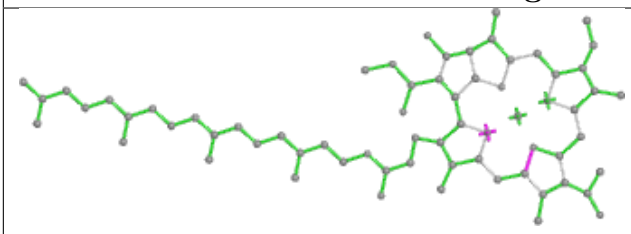


Torsions

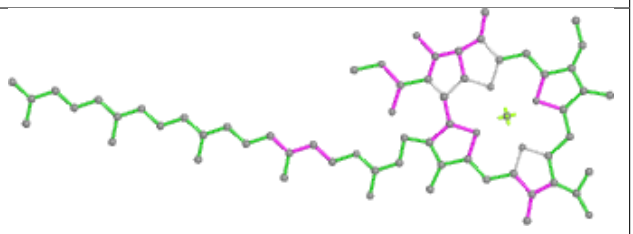


Rings

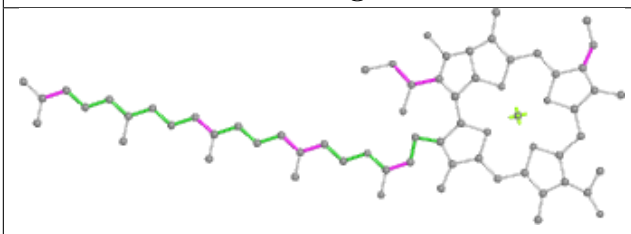
Ligand BCL U 402



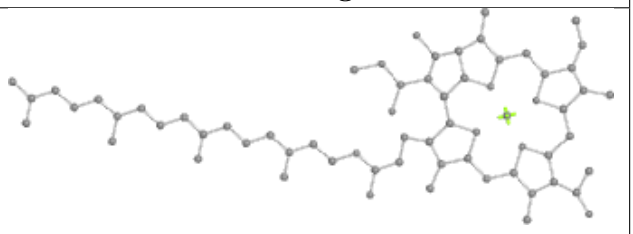
Bond lengths



Bond angles

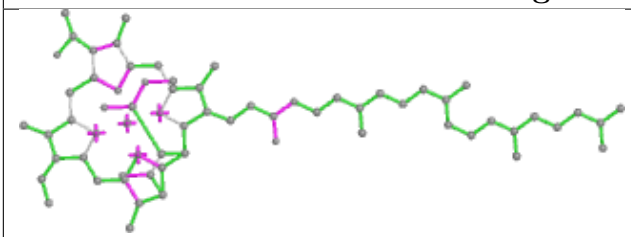


Torsions

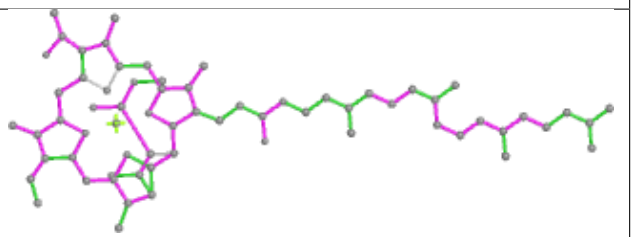


Rings

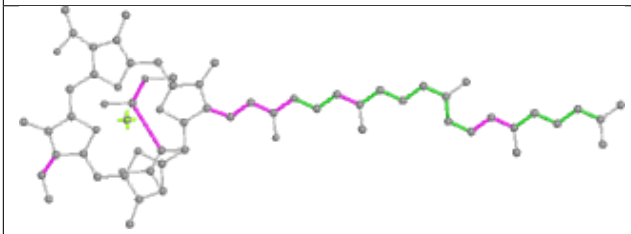
Ligand GS0 a 802



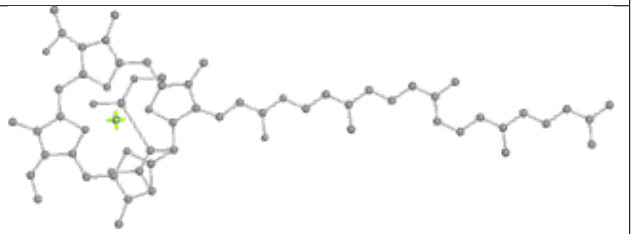
Bond lengths



Bond angles

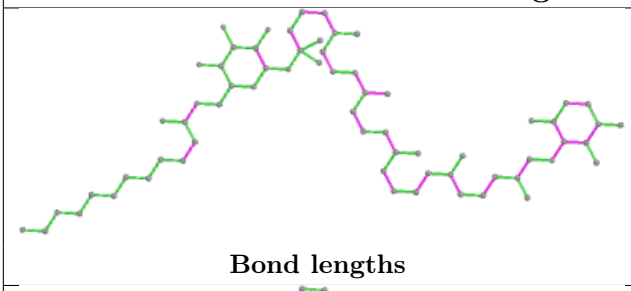


Torsions

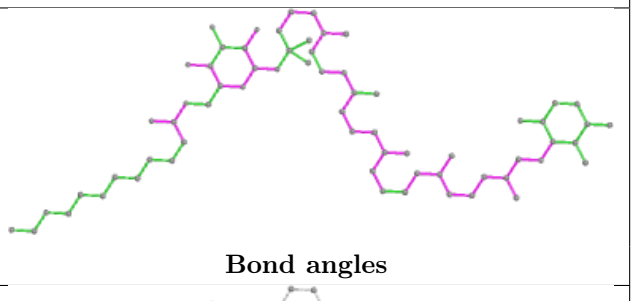


Rings

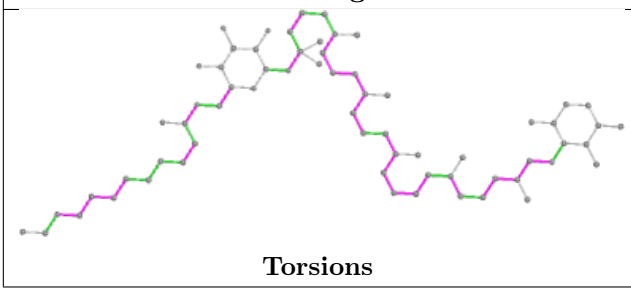
Ligand F39 C 301



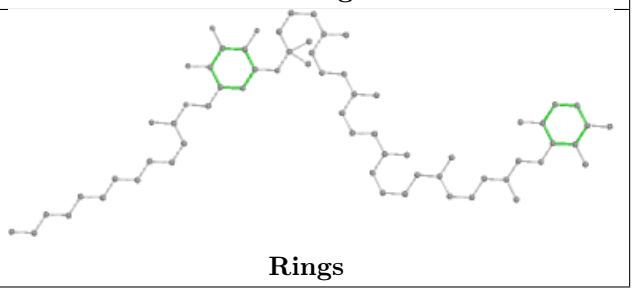
Bond lengths



Bond angles

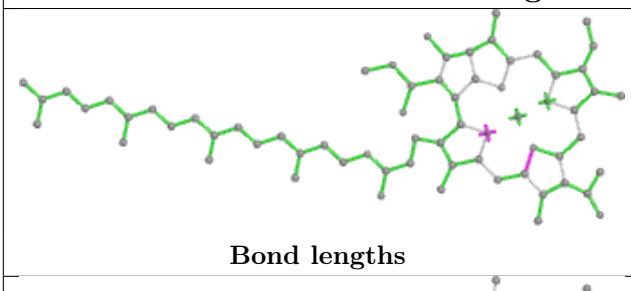


Torsions

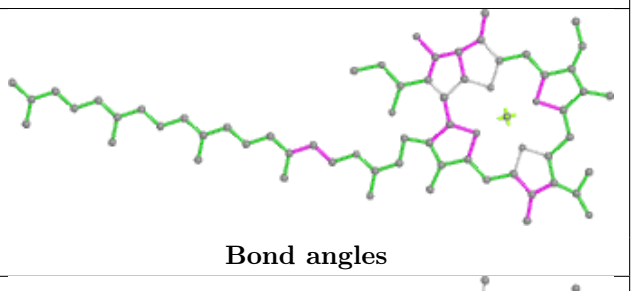


Rings

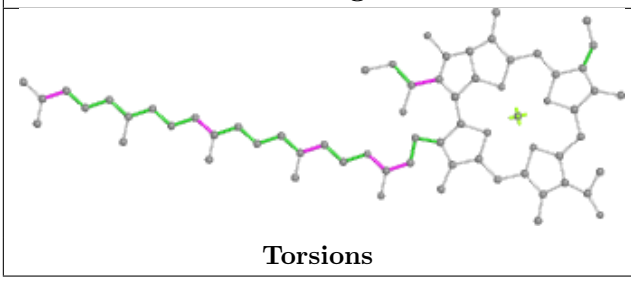
Ligand BCL V 406



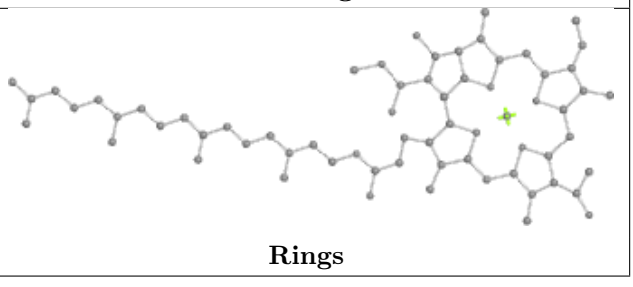
Bond lengths



Bond angles

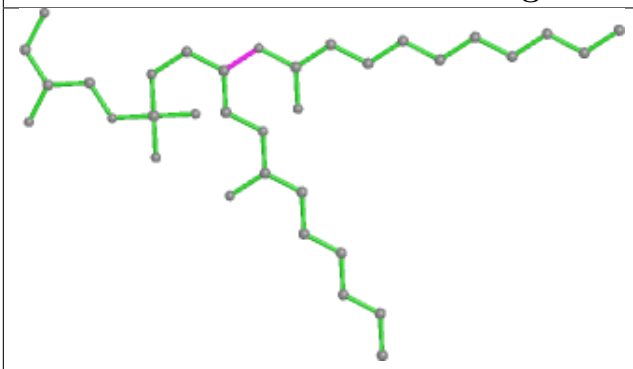


Torsions

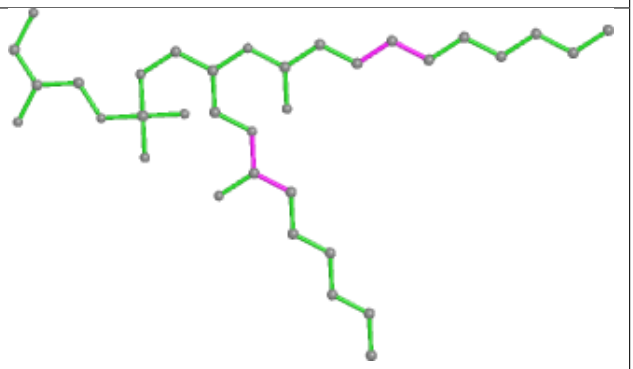


Rings

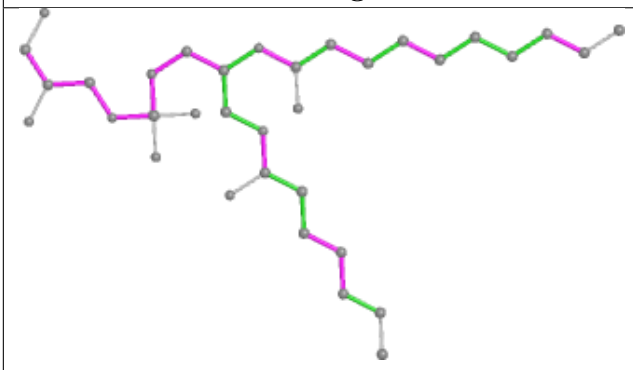
Ligand LHG A 819



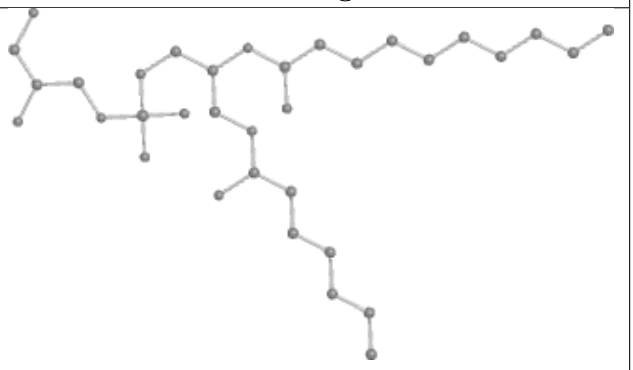
Bond lengths



Bond angles

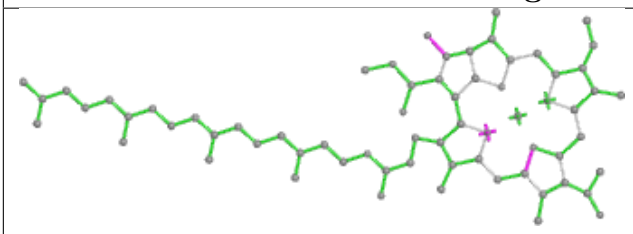


Torsions

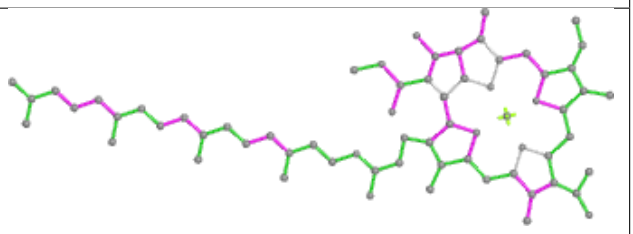


Rings

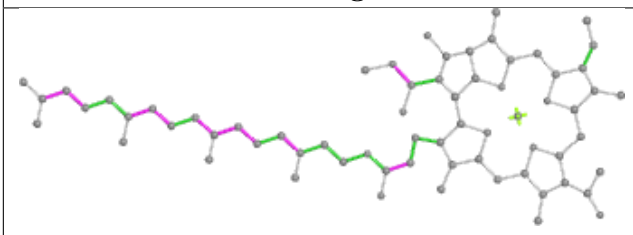
Ligand BCL A 804



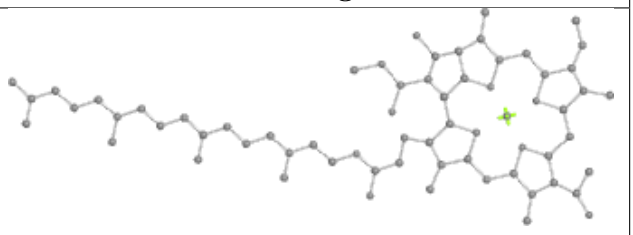
Bond lengths



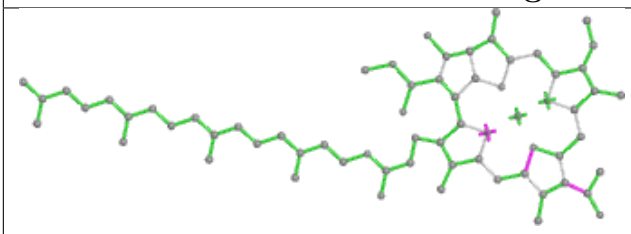
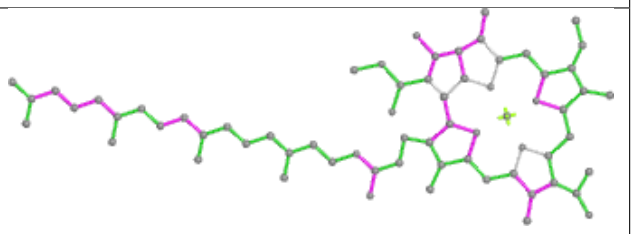
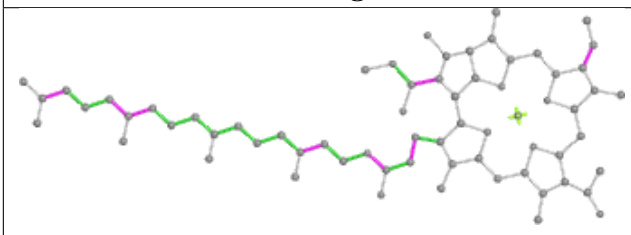
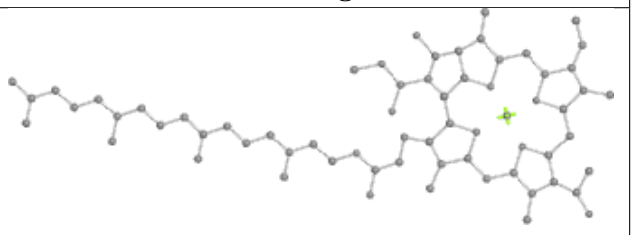
Bond angles

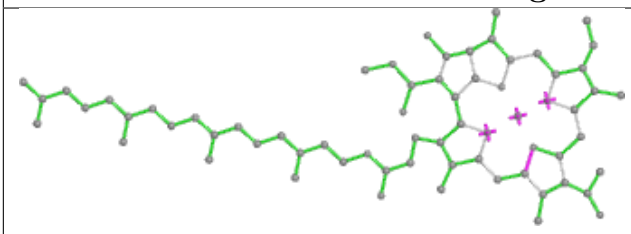
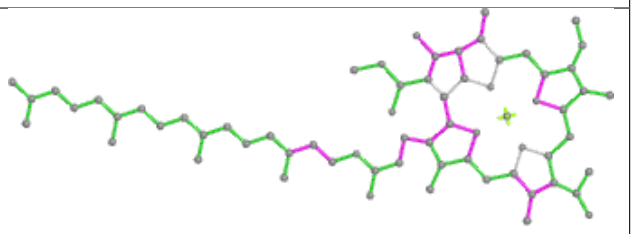
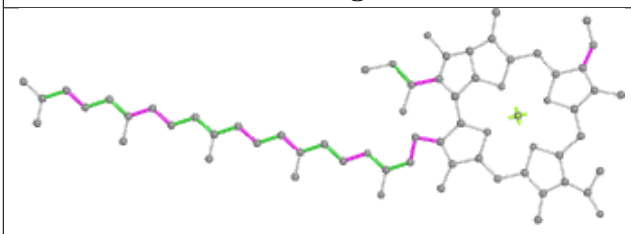
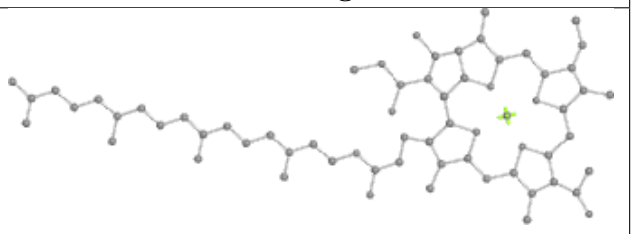


Torsions

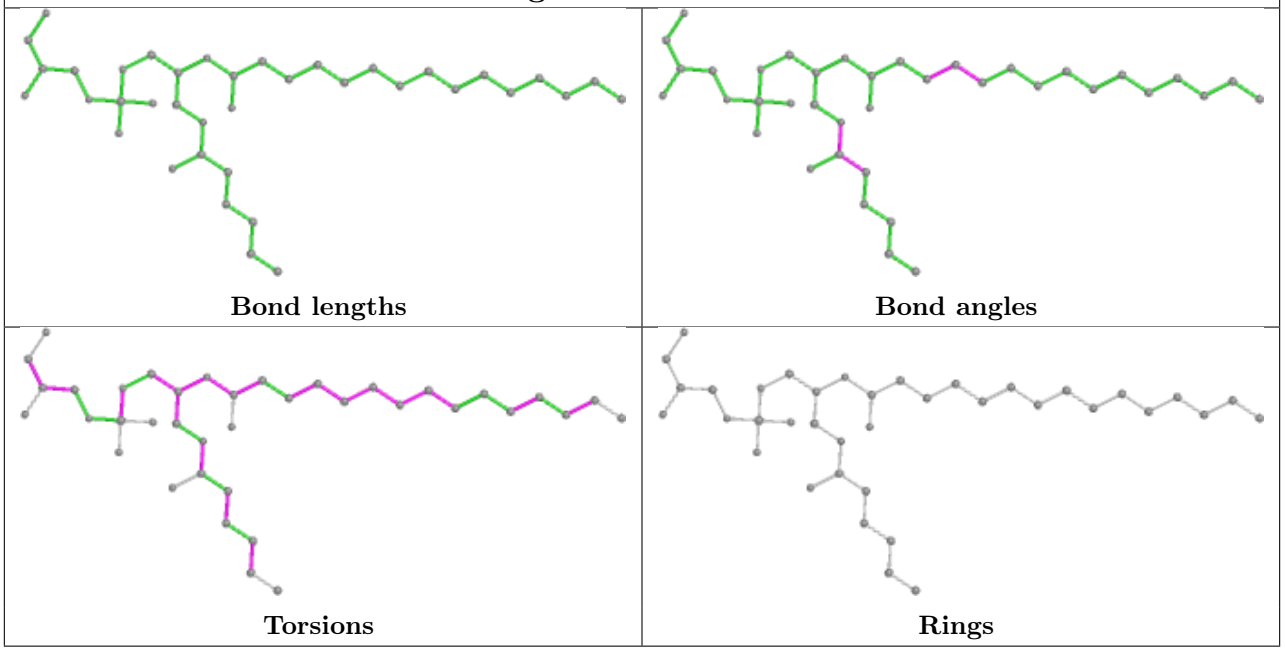


Rings

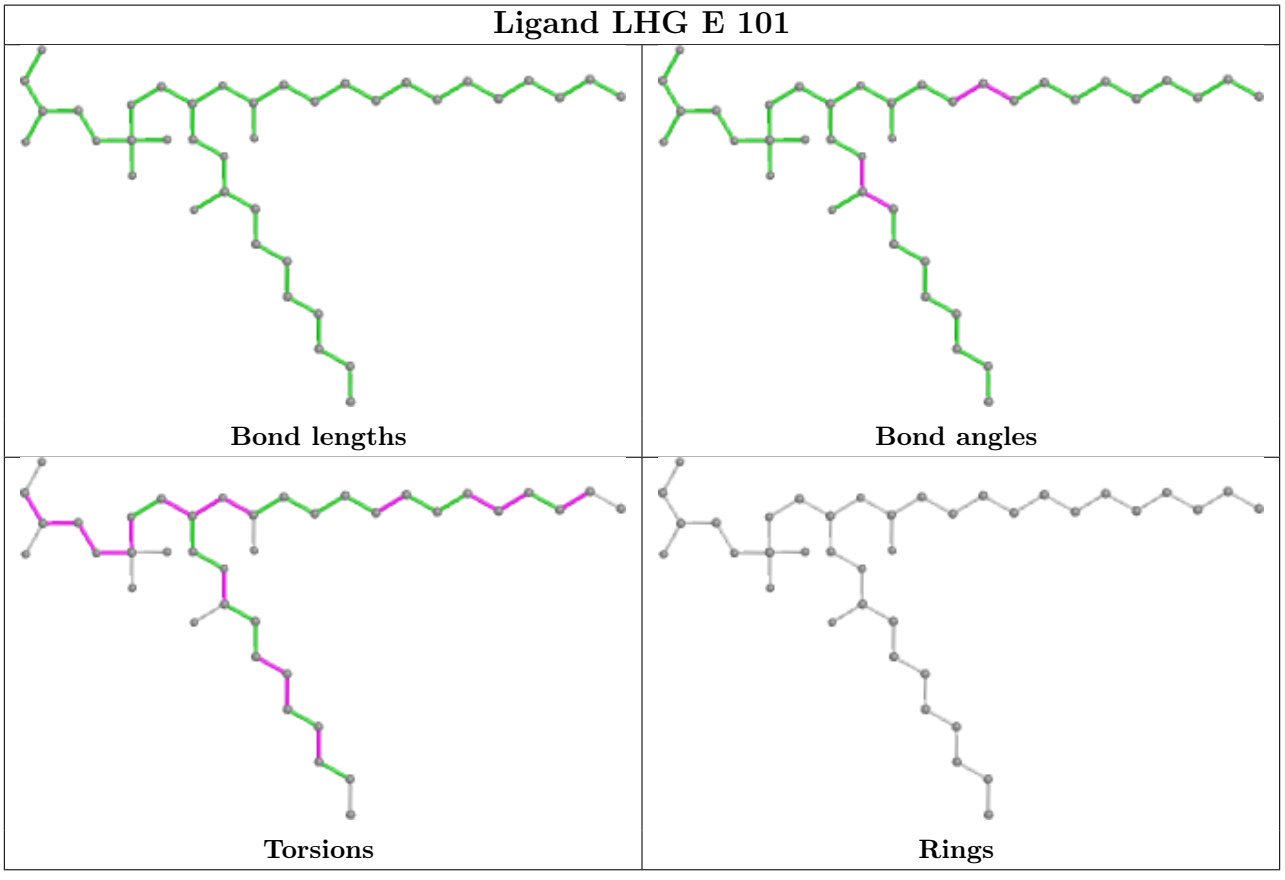
Ligand BCL A 803	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL a 813	
 Bond lengths	 Bond angles
 Torsions	 Rings

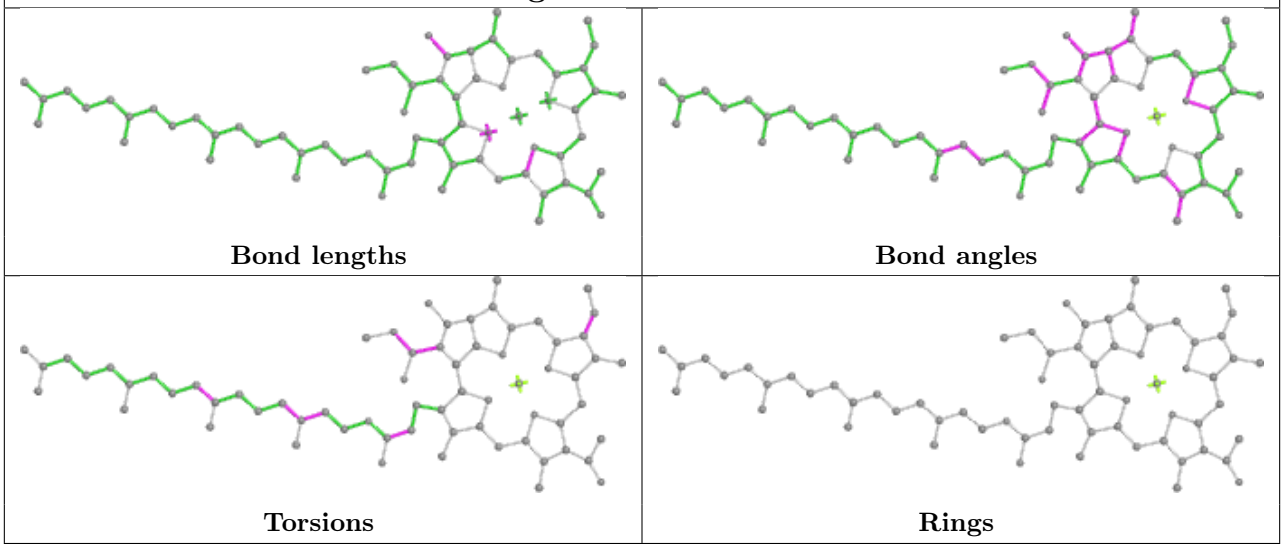
Ligand LHG a 820



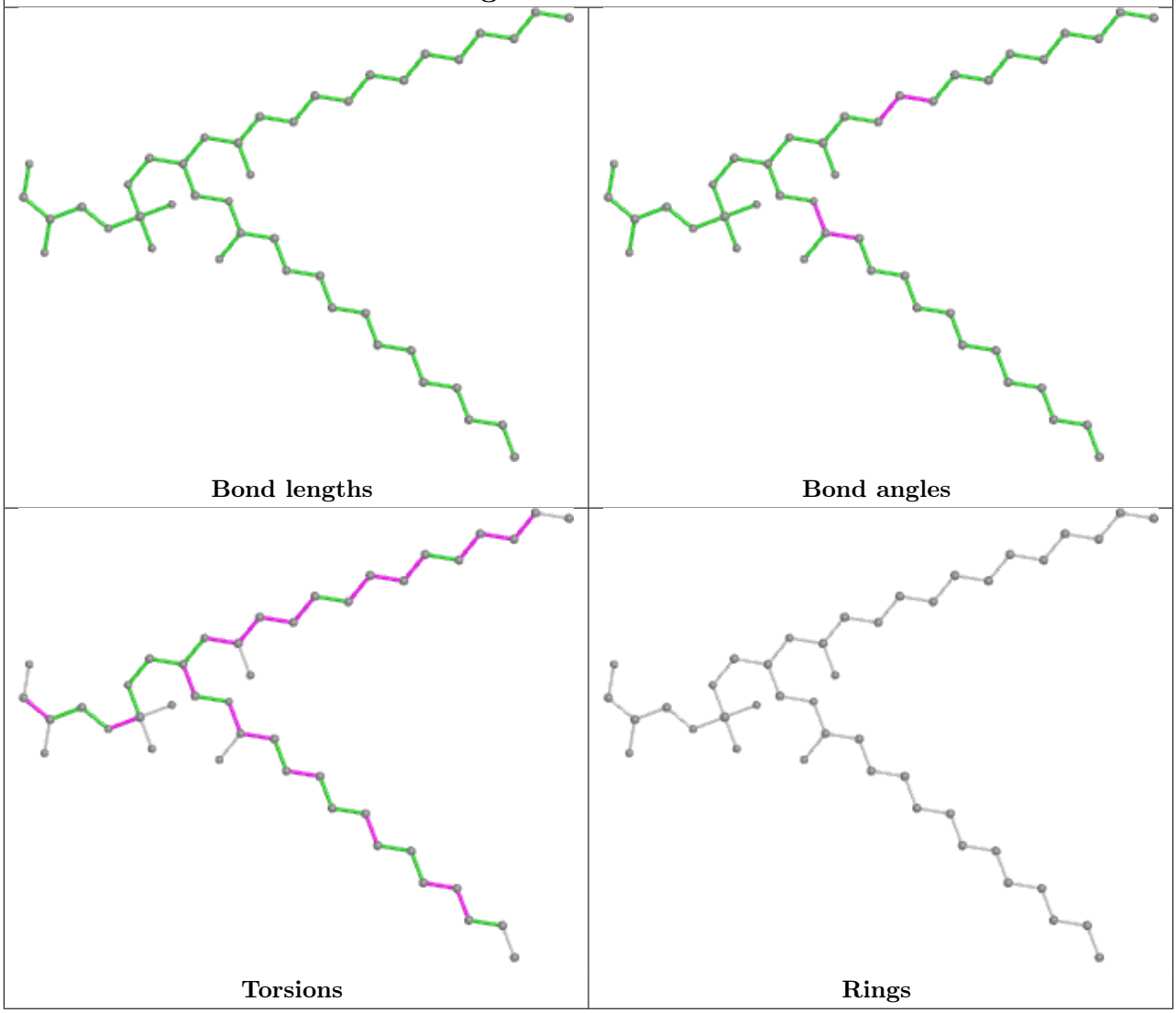
Ligand LHG E 101



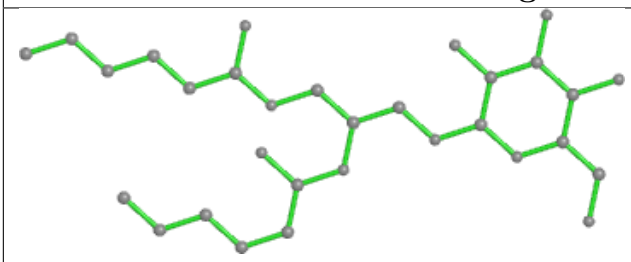
Ligand BCL Z 403



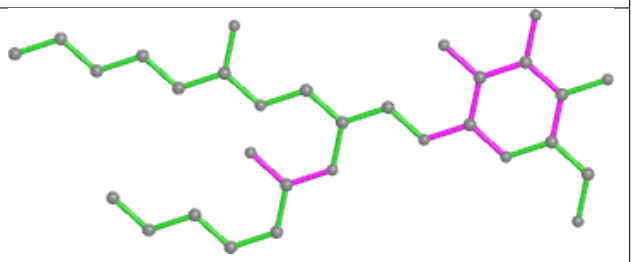
Ligand LHG E 102



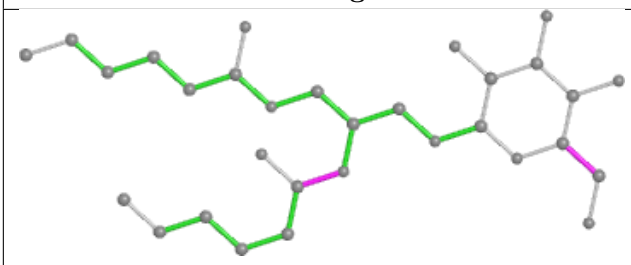
Ligand LMG A 823



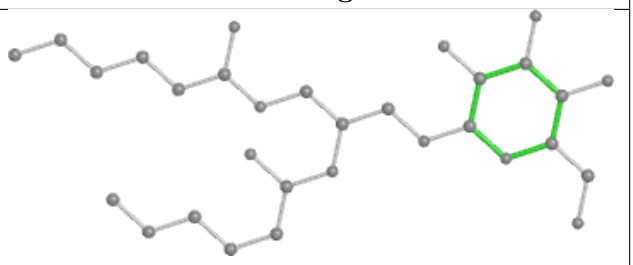
Bond lengths



Bond angles

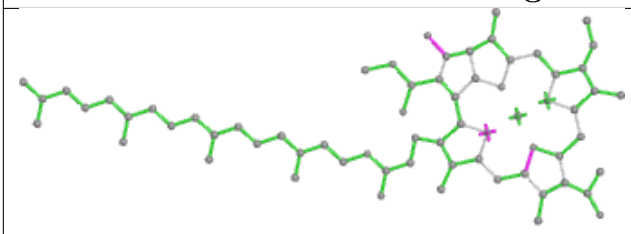


Torsions

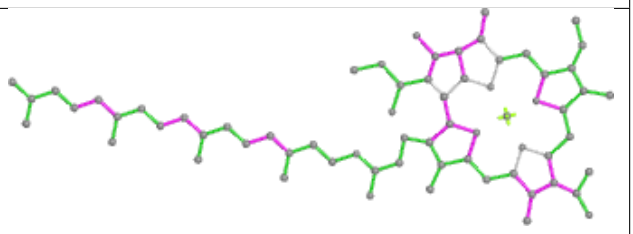


Rings

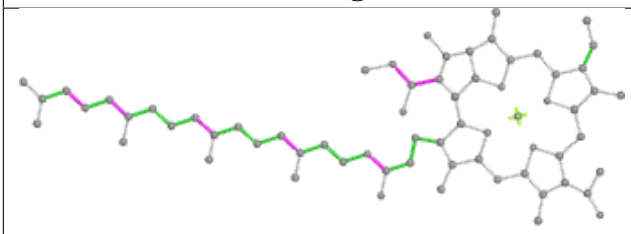
Ligand BCL V 407



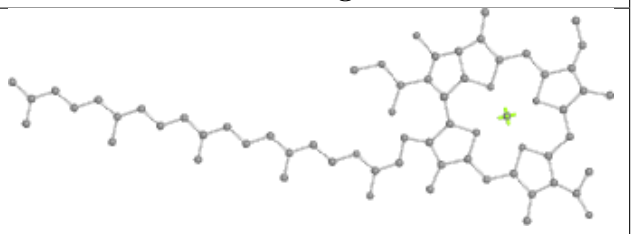
Bond lengths



Bond angles

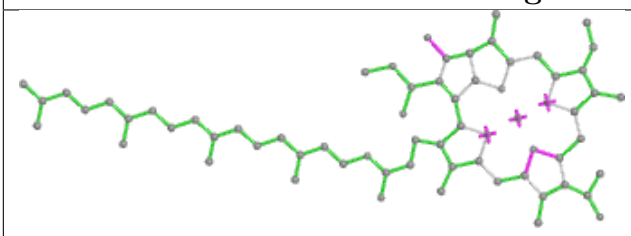


Torsions

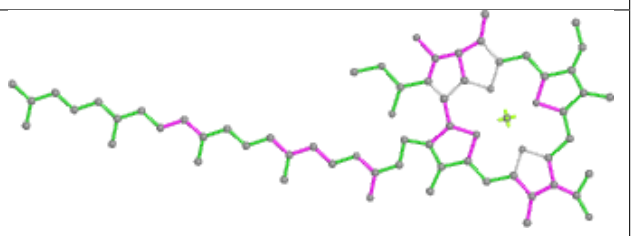


Rings

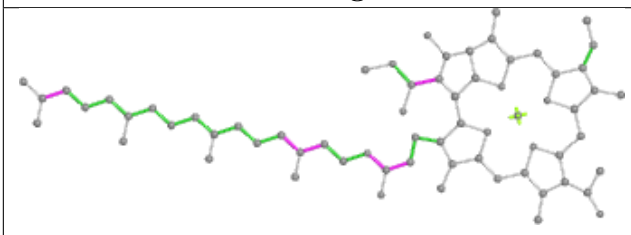
Ligand BCL X 406



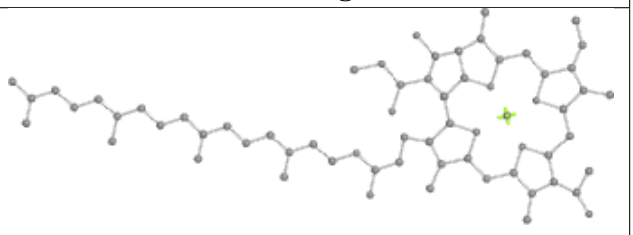
Bond lengths



Bond angles

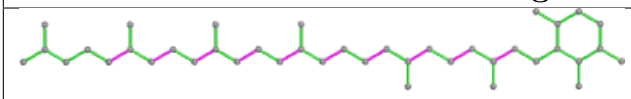


Torsions

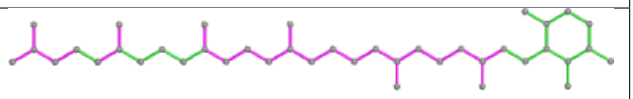


Rings

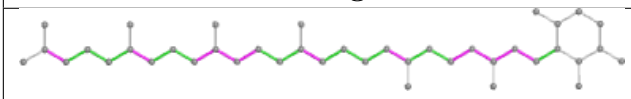
Ligand F26 A 816



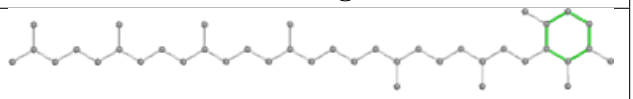
Bond lengths



Bond angles

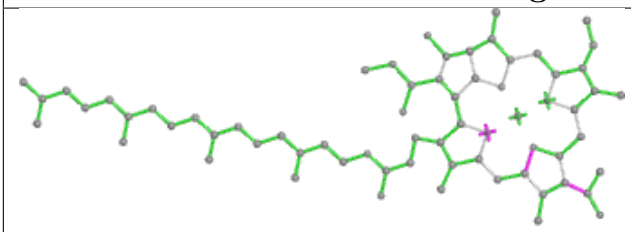


Torsions

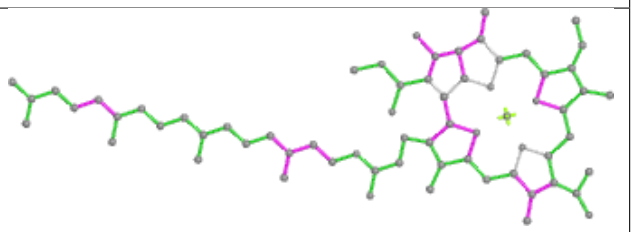


Rings

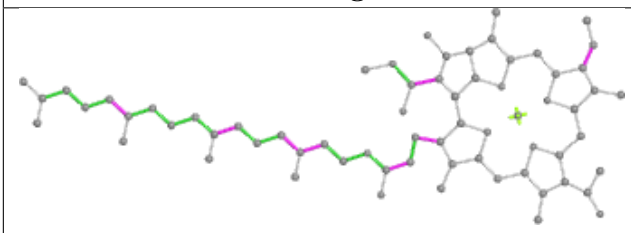
Ligand BCL a 810



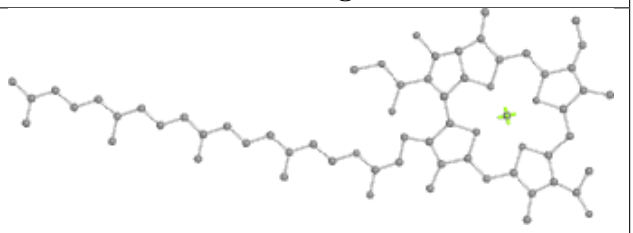
Bond lengths



Bond angles

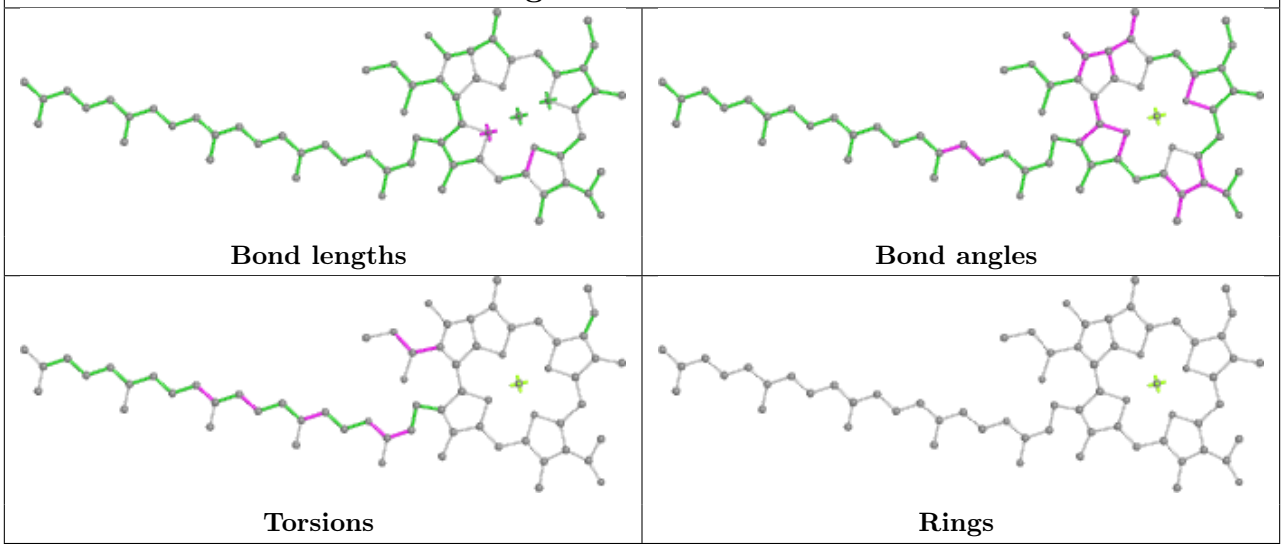


Torsions

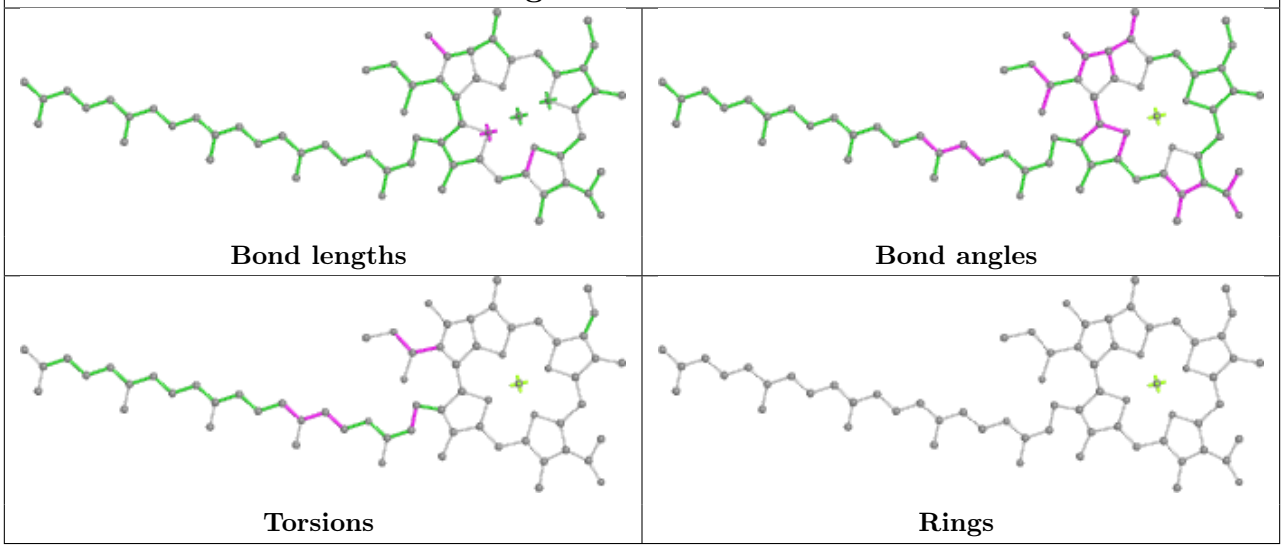


Rings

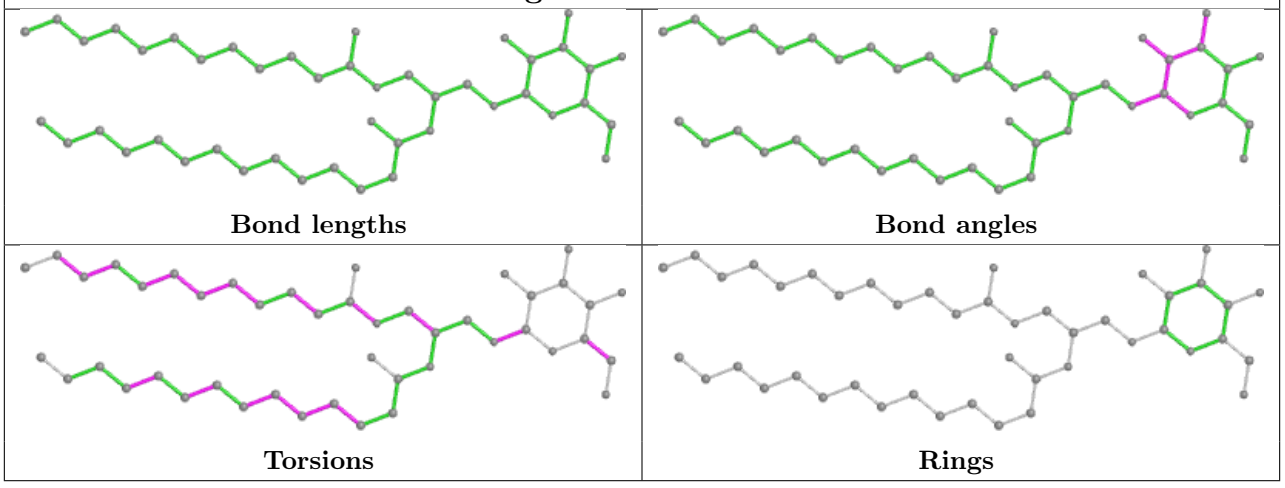
Ligand BCL Y 406



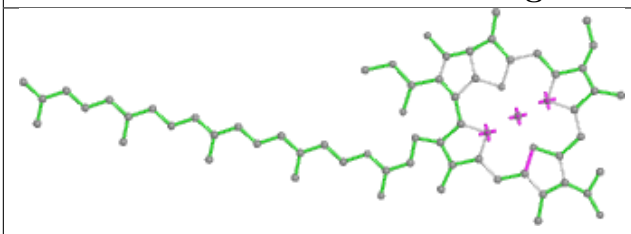
Ligand BCL A 808



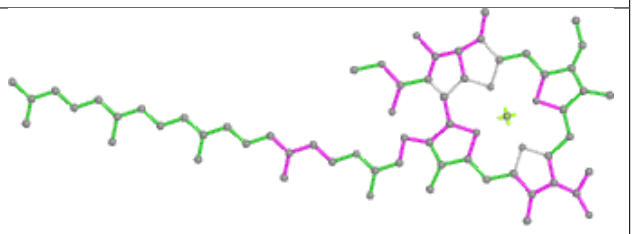
Ligand LMG a 822



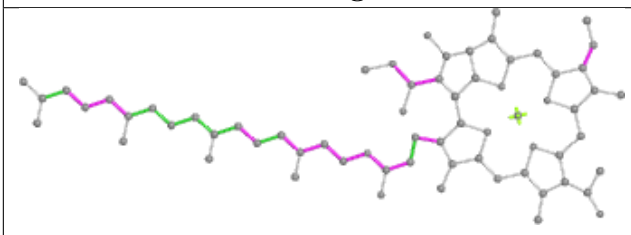
Ligand BCL B 301



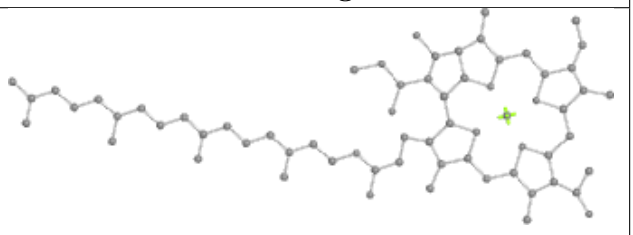
Bond lengths



Bond angles

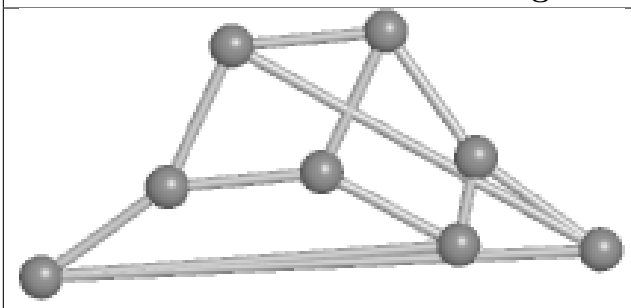


Torsions

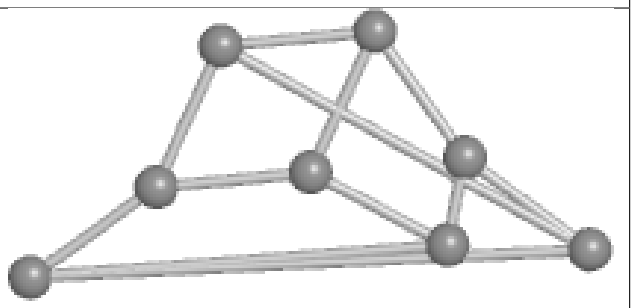


Rings

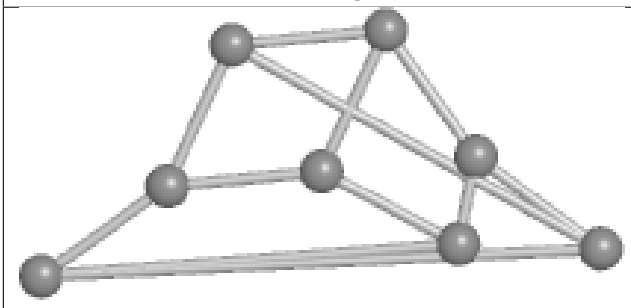
Ligand SF4 B 303



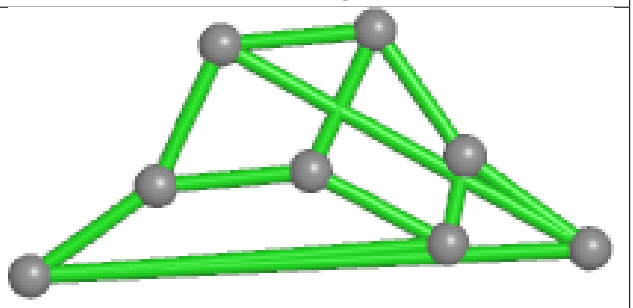
Bond lengths



Bond angles

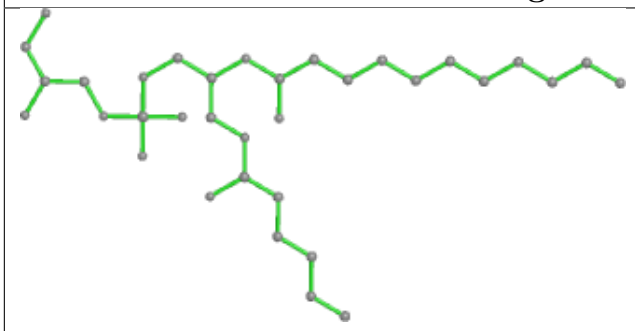


Torsions

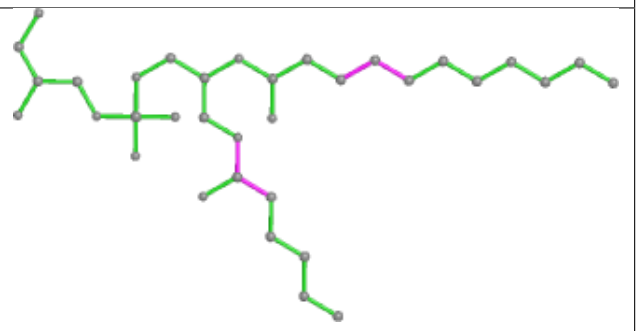


Rings

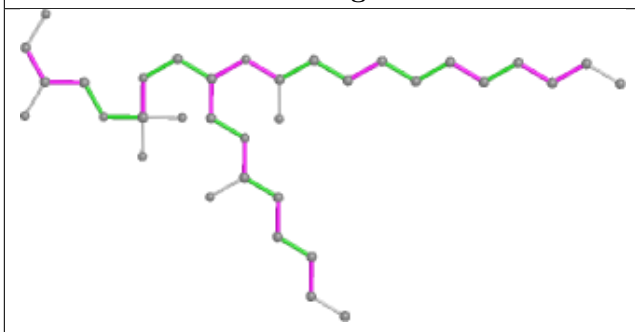
Ligand LHG a 819



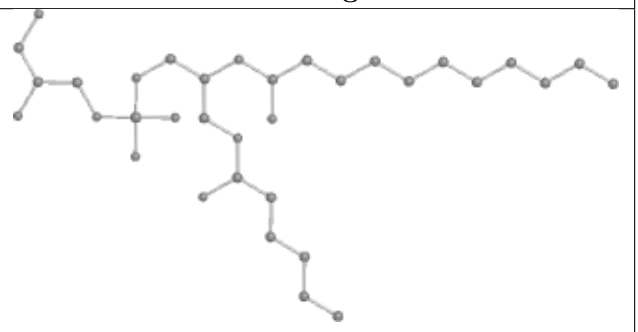
Bond lengths



Bond angles

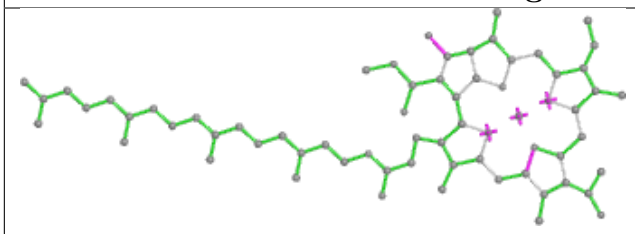


Torsions

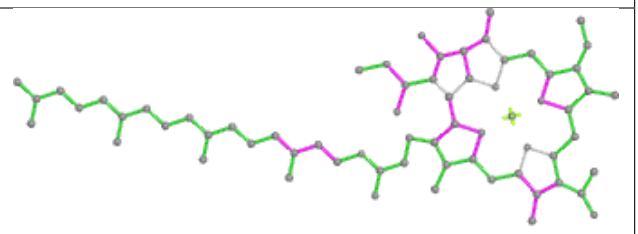


Rings

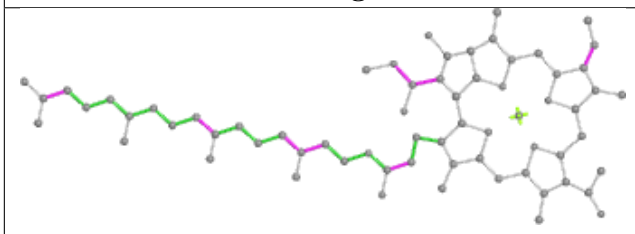
Ligand BCL Y 404



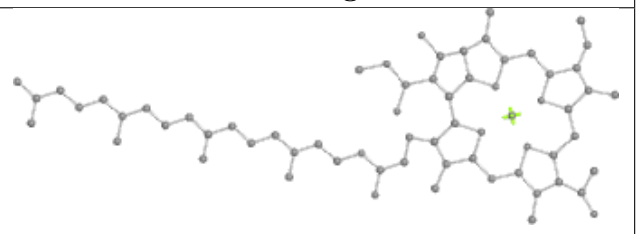
Bond lengths



Bond angles

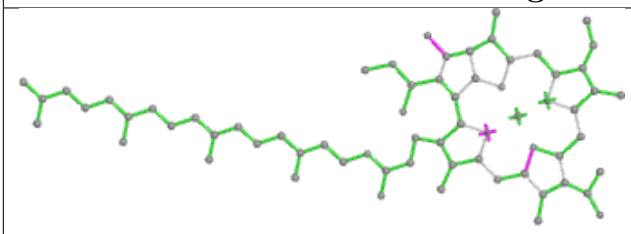


Torsions

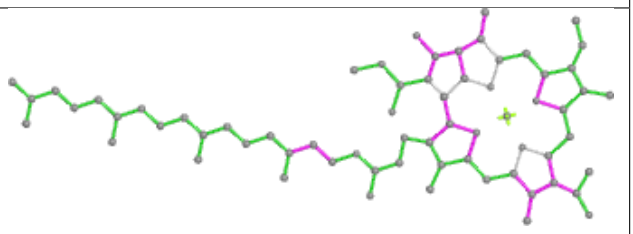


Rings

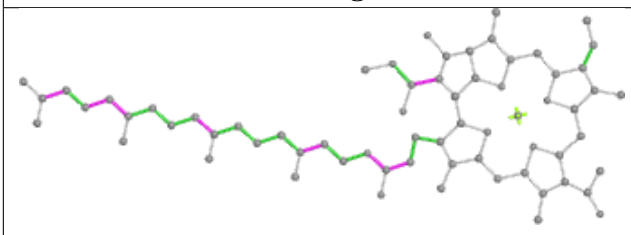
Ligand BCL Z 405



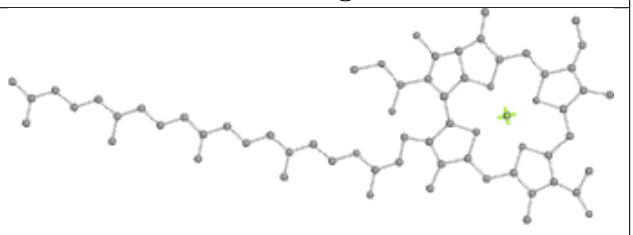
Bond lengths



Bond angles

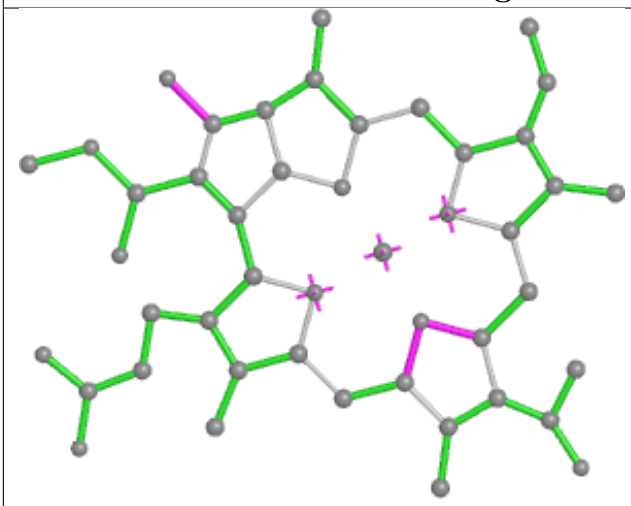


Torsions

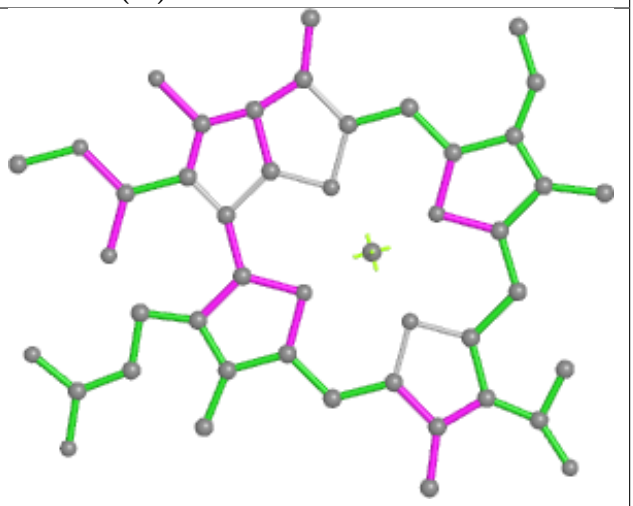


Rings

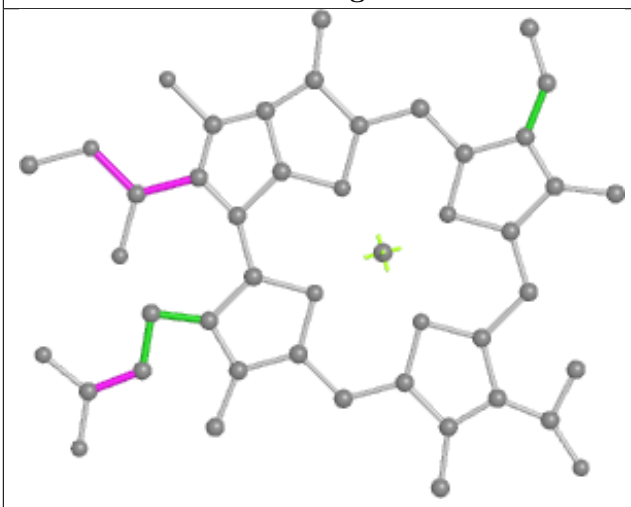
Ligand BCL Z 408 (B)



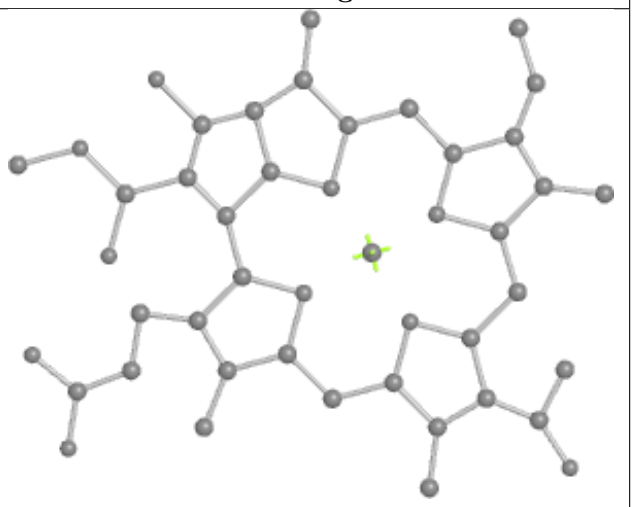
Bond lengths



Bond angles

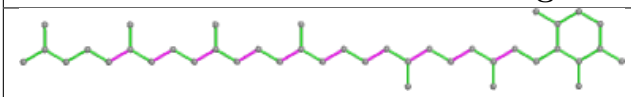


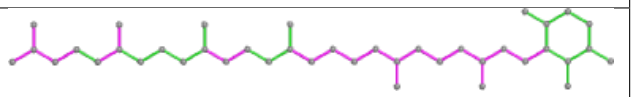
Torsions

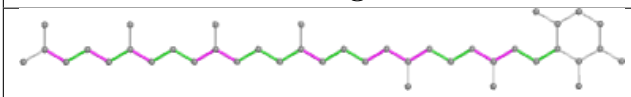


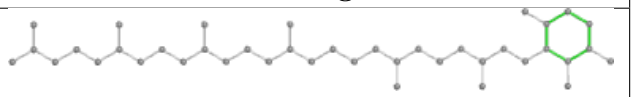
Rings

Ligand F26 a 816

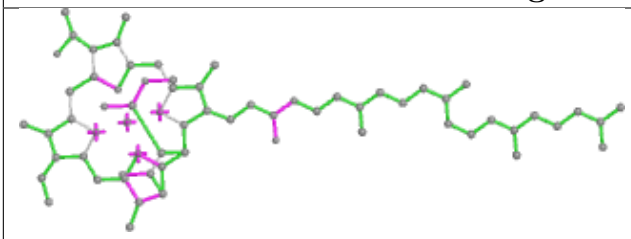

Bond lengths

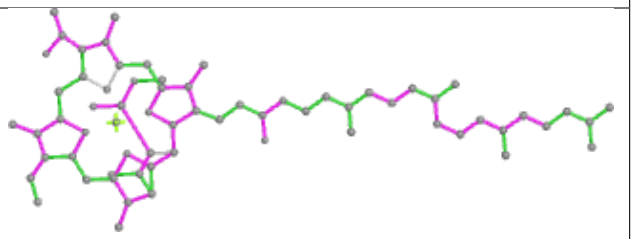

Bond angles

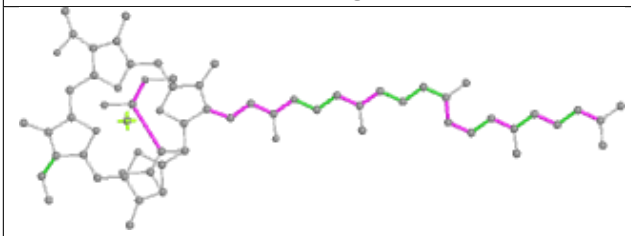

Torsions

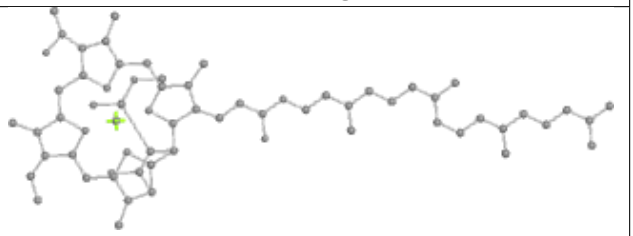

Rings

Ligand GS0 A 801

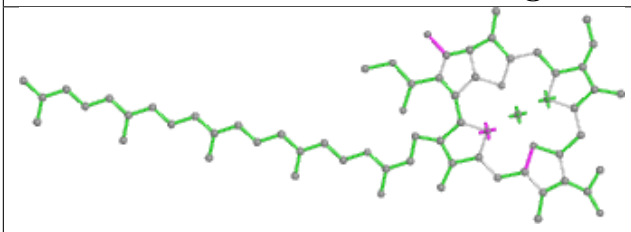

Bond lengths

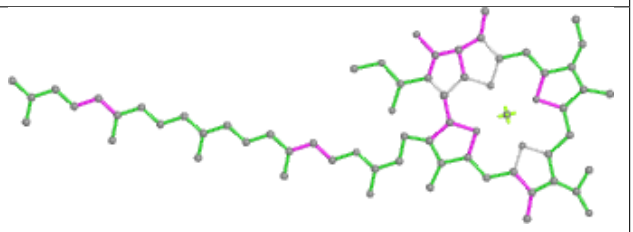

Bond angles

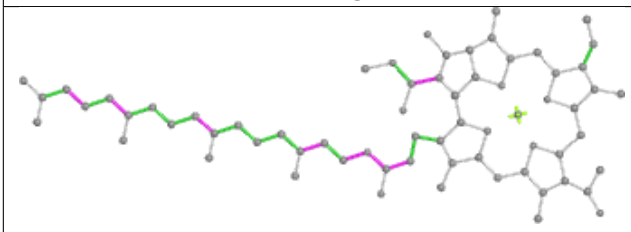

Torsions

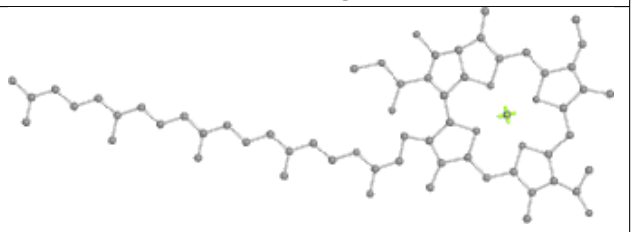

Rings

Ligand BCL Y 407

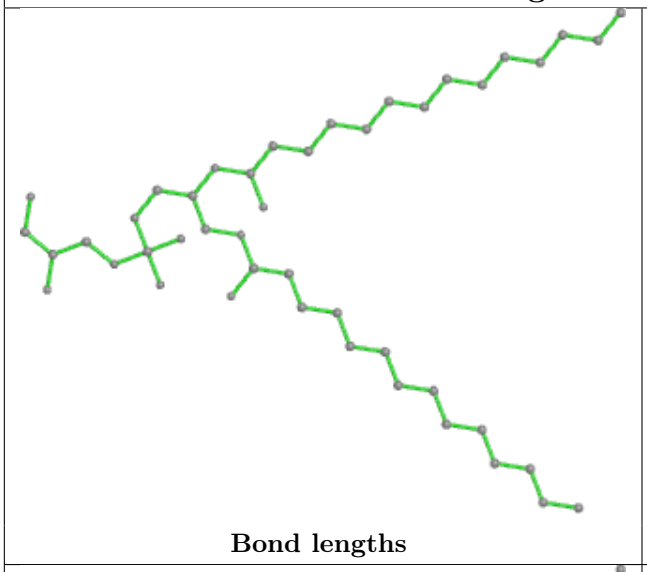

Bond lengths


Bond angles

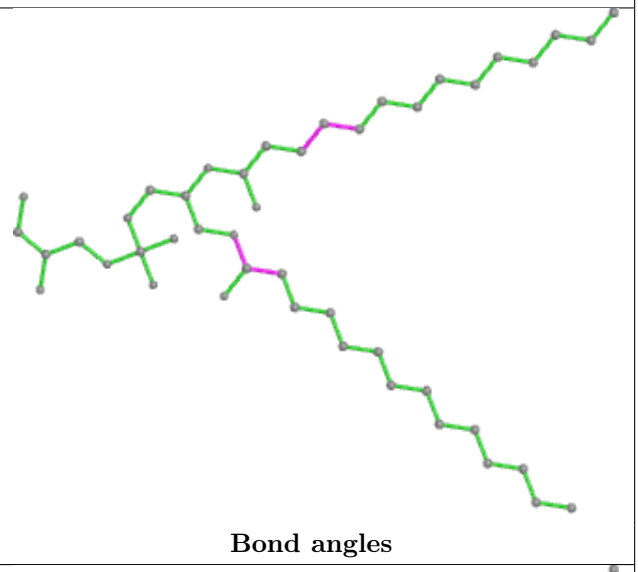

Torsions


Rings

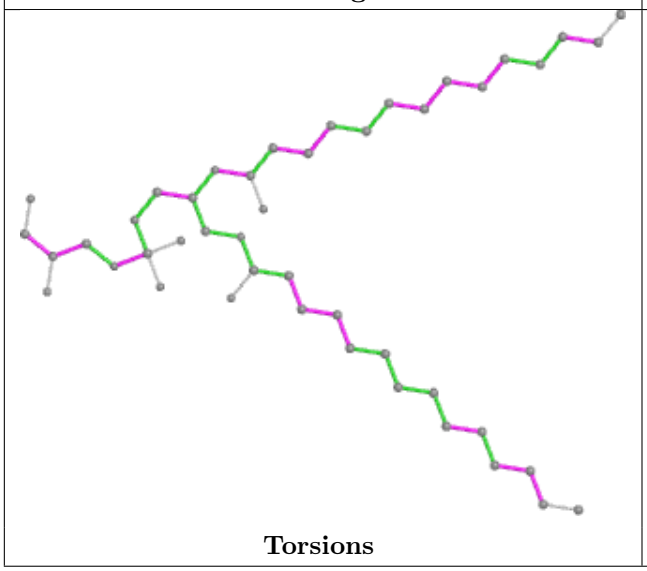
Ligand LHG a 818



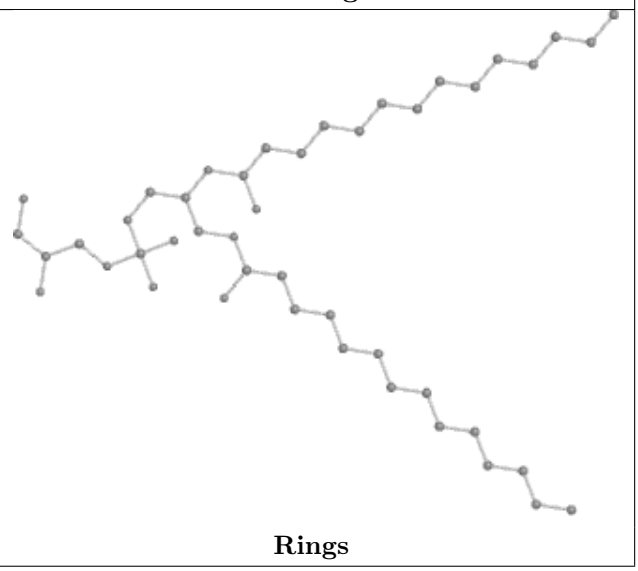
Bond lengths



Bond angles

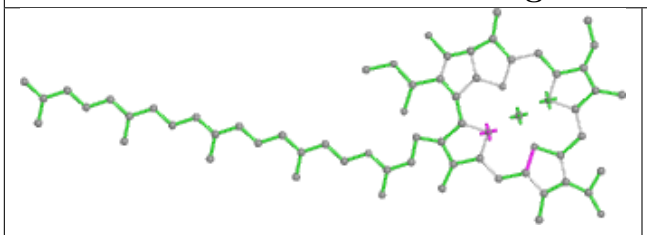


Torsions

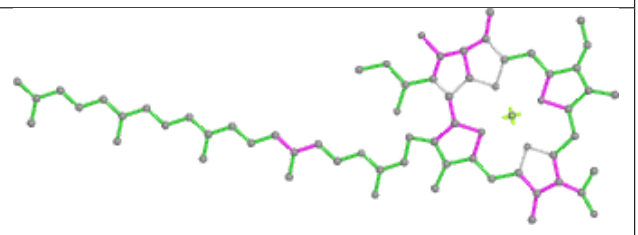


Rings

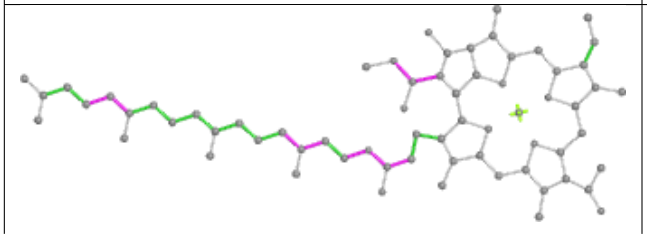
Ligand BCL V 408



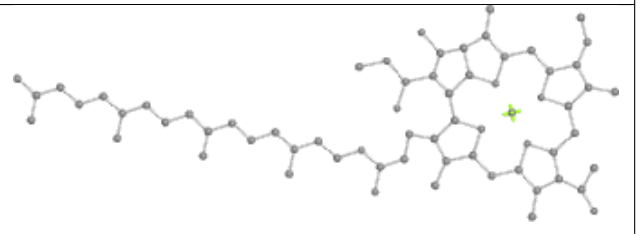
Bond lengths



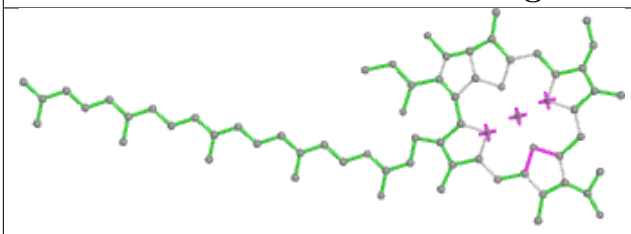
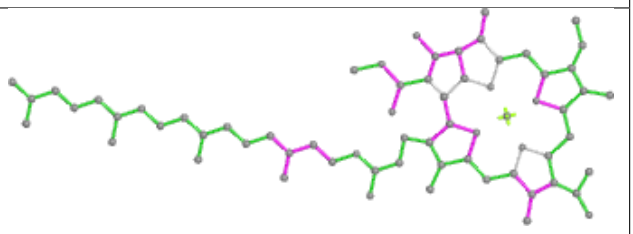
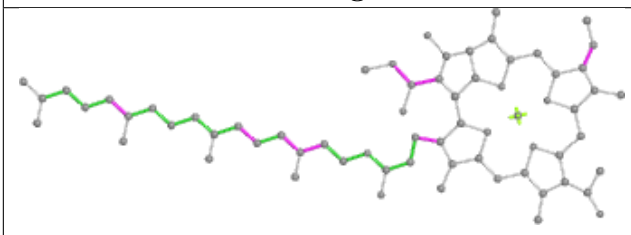
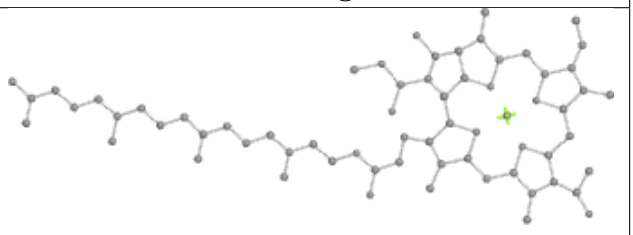
Bond angles

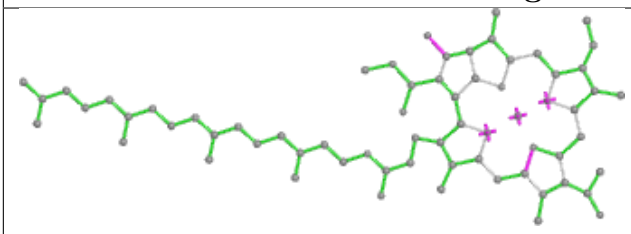
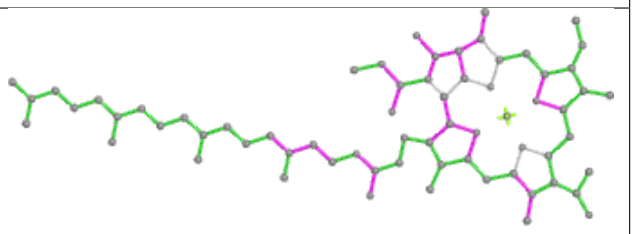
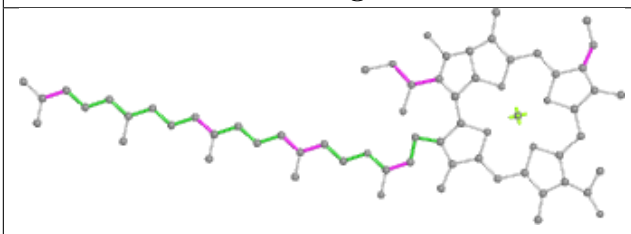
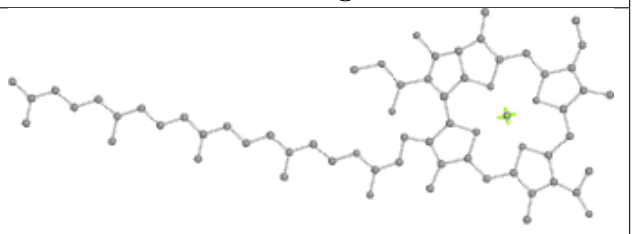


Torsions

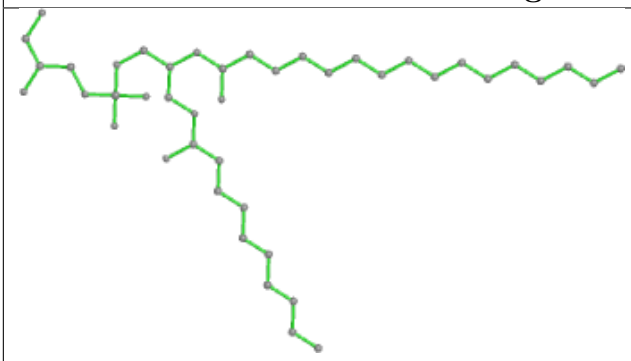


Rings

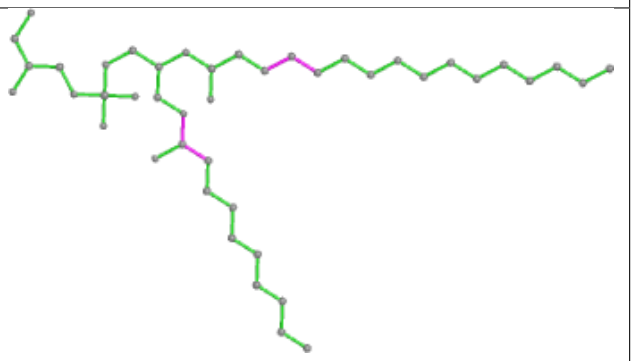
Ligand BCL A 809	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL X 402	
 Bond lengths	 Bond angles
 Torsions	 Rings

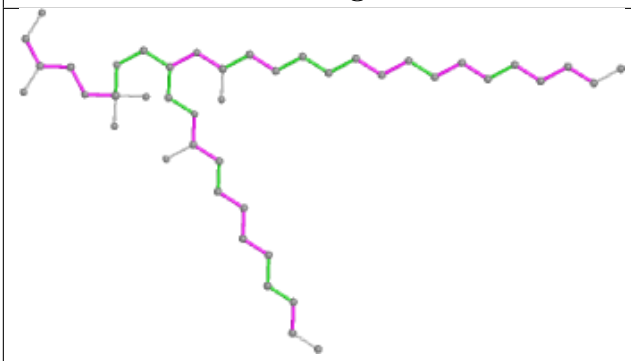
Ligand LHG Z 401



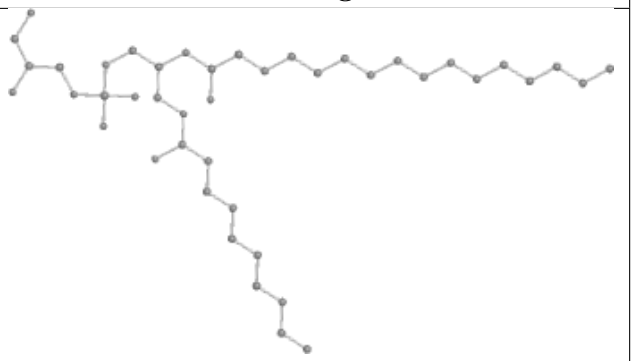
Bond lengths



Bond angles

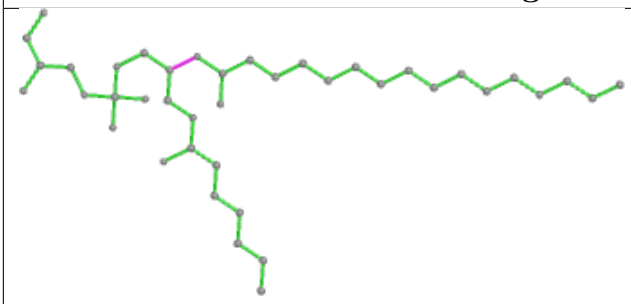


Torsions

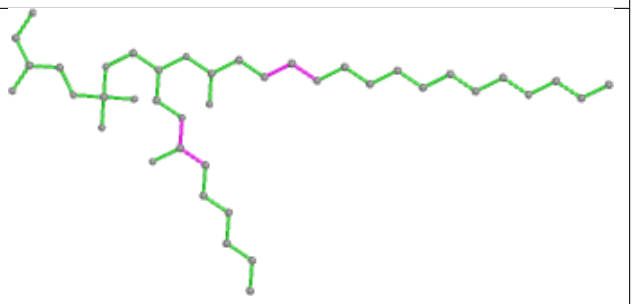


Rings

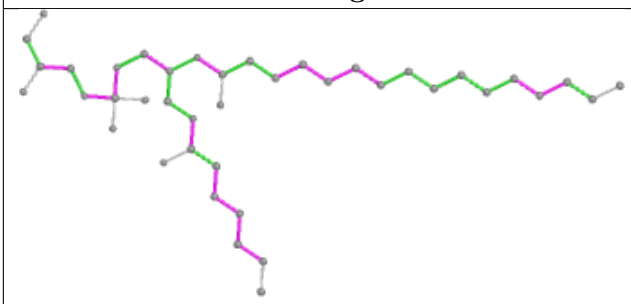
Ligand LHG A 818



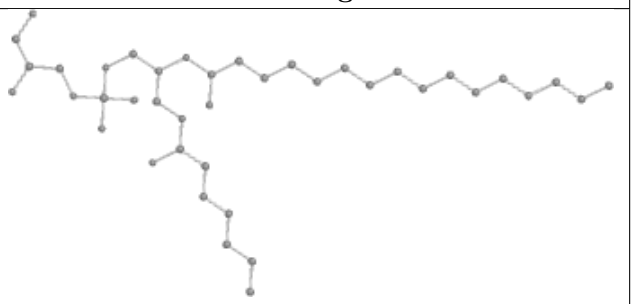
Bond lengths



Bond angles

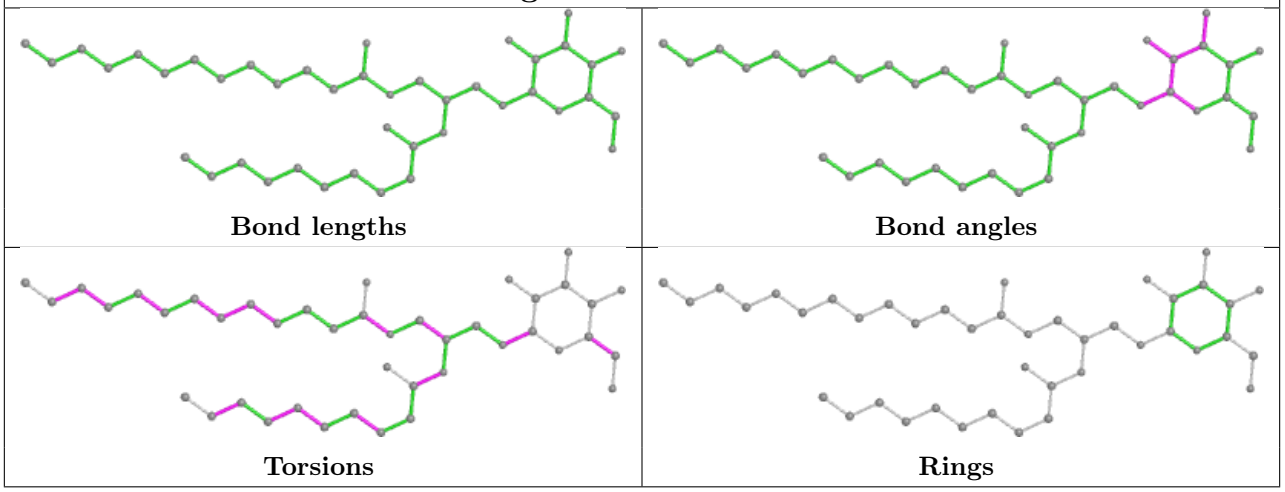


Torsions

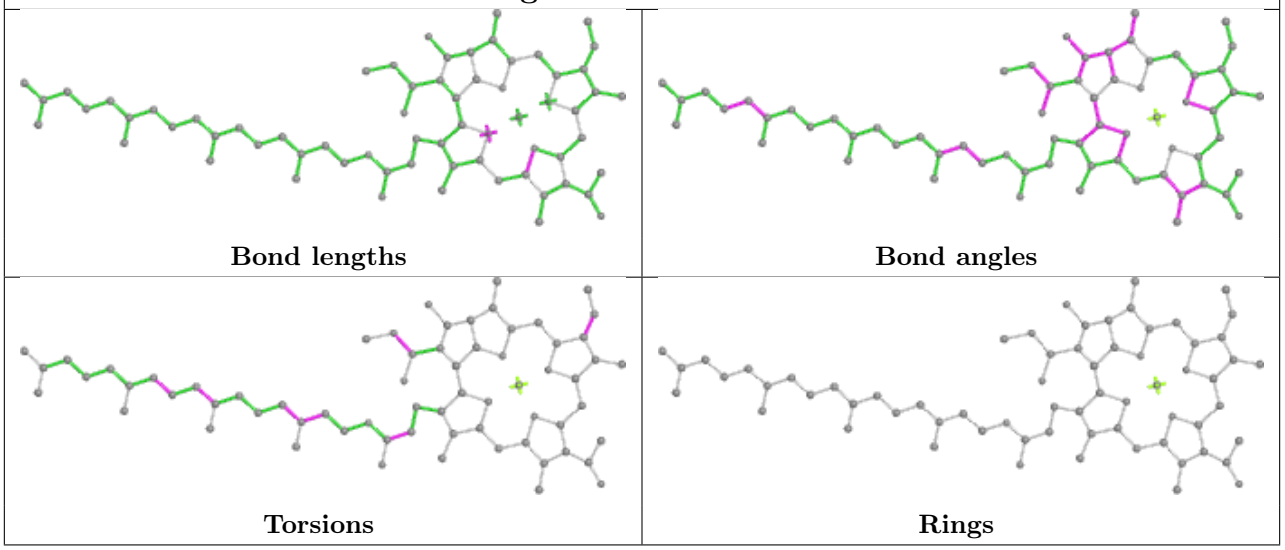


Rings

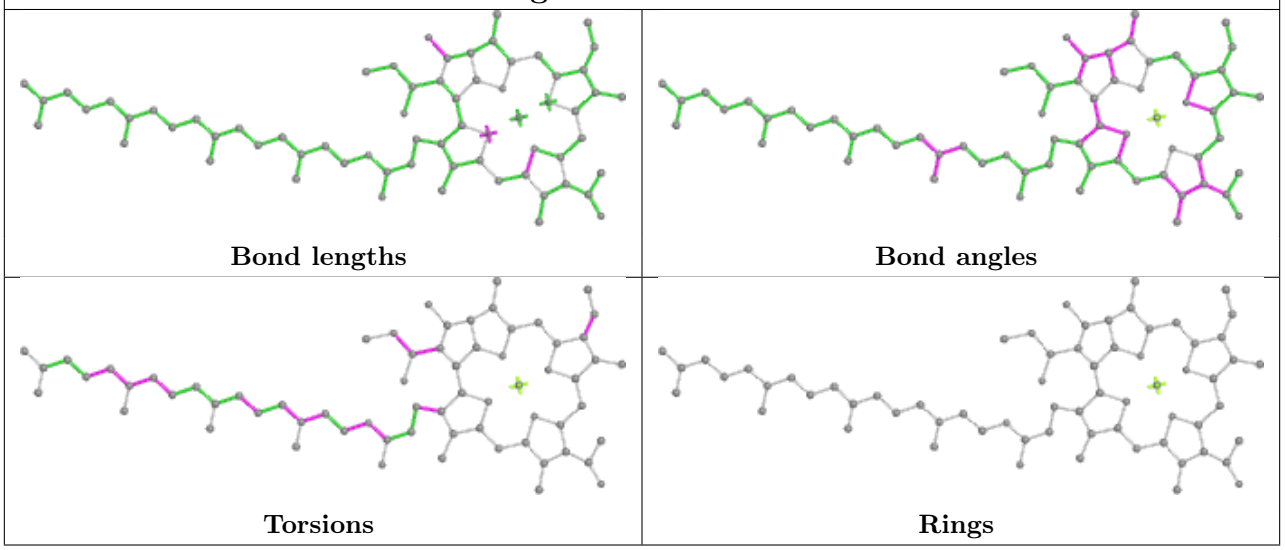
Ligand LMG C 302



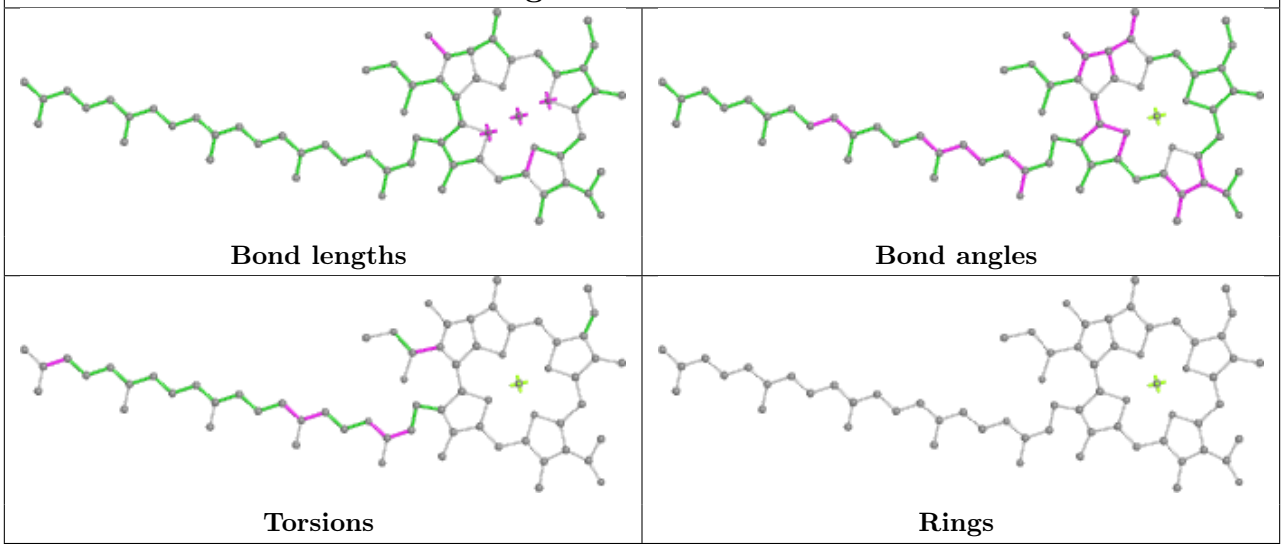
Ligand BCL W 403



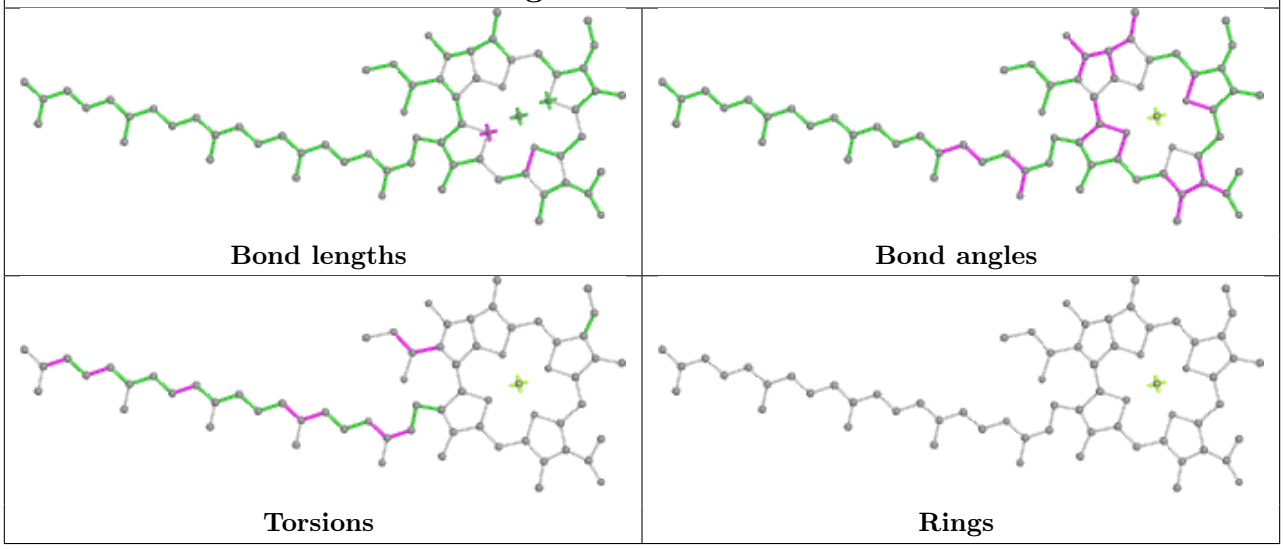
Ligand BCL a 807



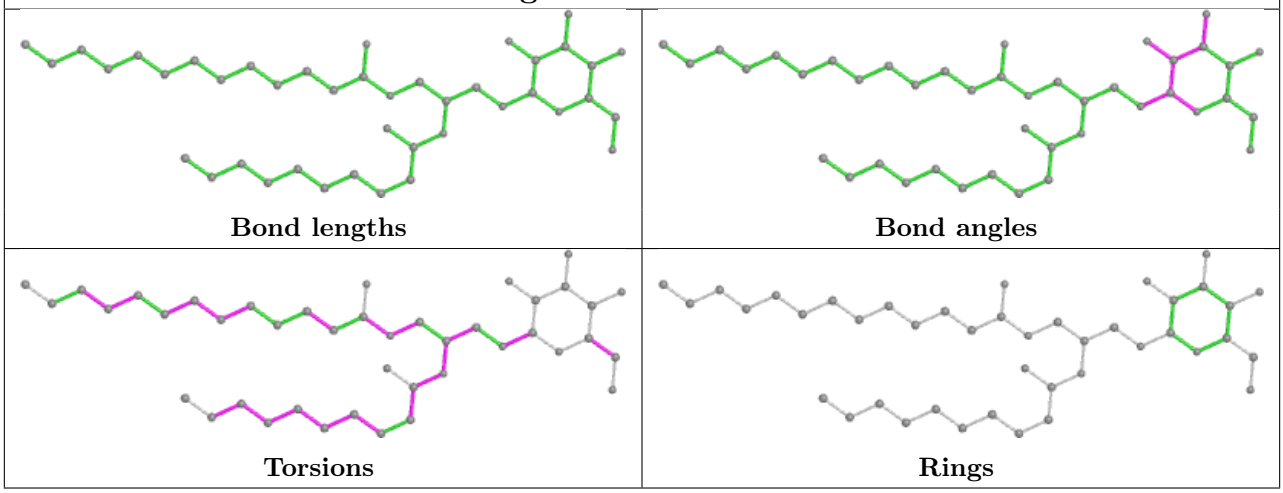
Ligand BCL U 406



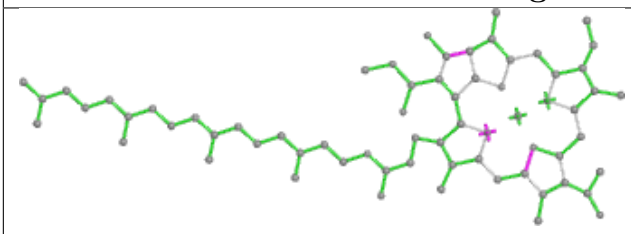
Ligand BCL U 404



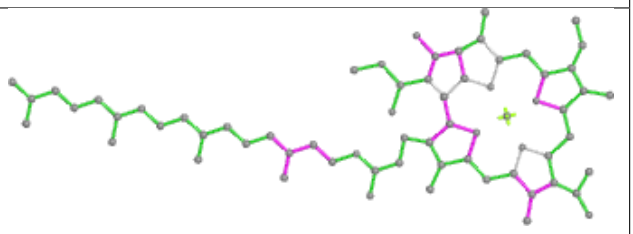
Ligand LMG A 822



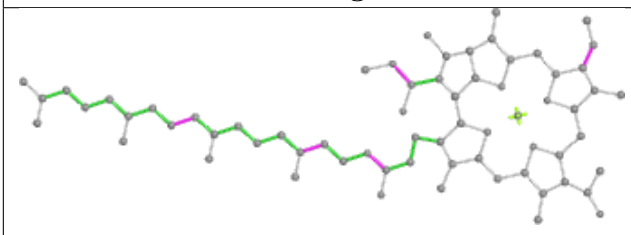
Ligand BCL a 805



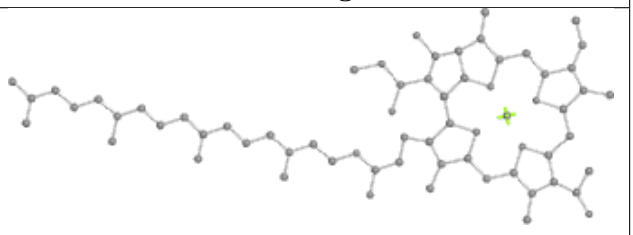
Bond lengths



Bond angles

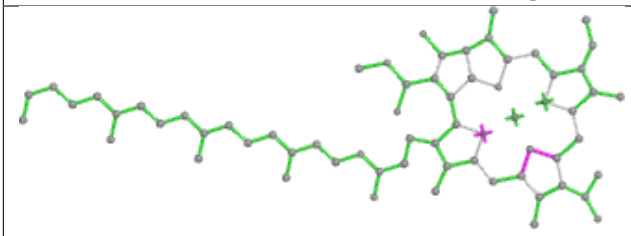


Torsions

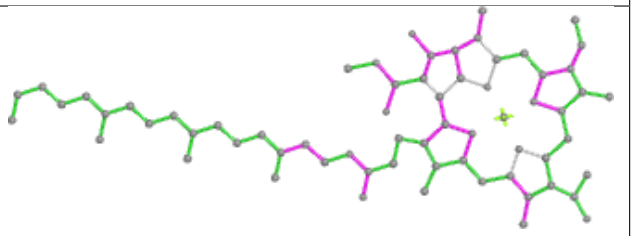


Rings

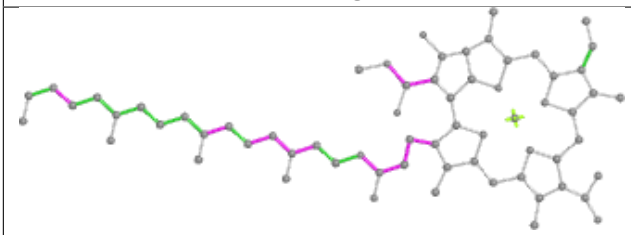
Ligand BCL A 814



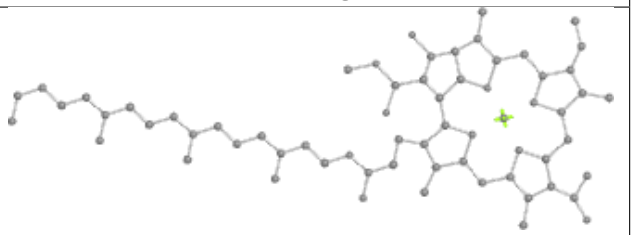
Bond lengths



Bond angles

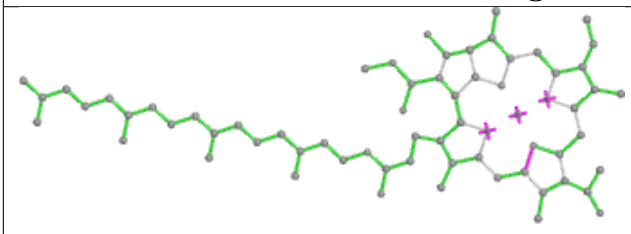


Torsions

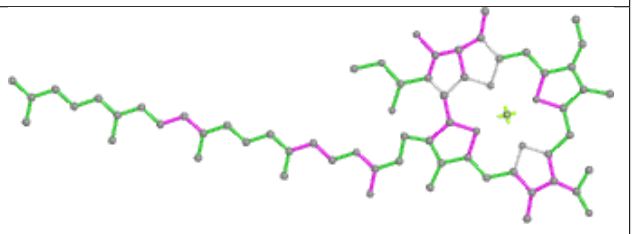


Rings

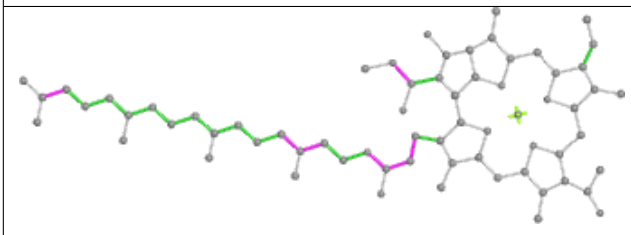
Ligand BCL Z 407



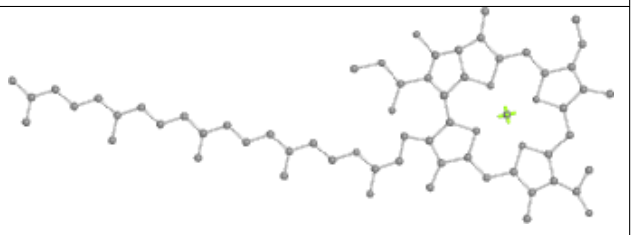
Bond lengths



Bond angles

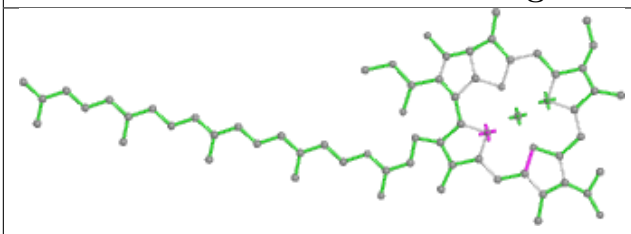


Torsions

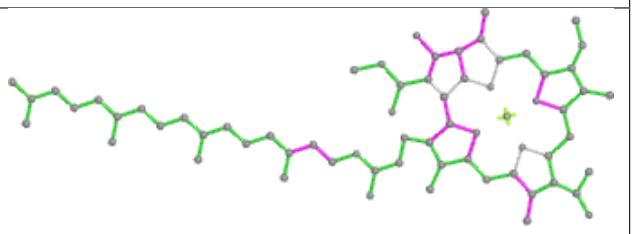


Rings

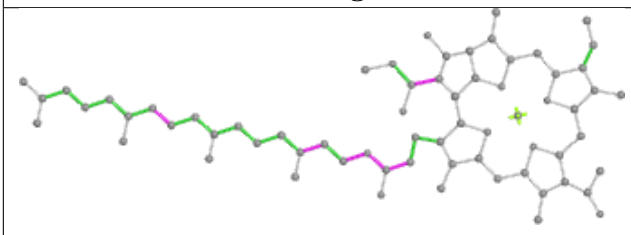
Ligand BCL Z 406



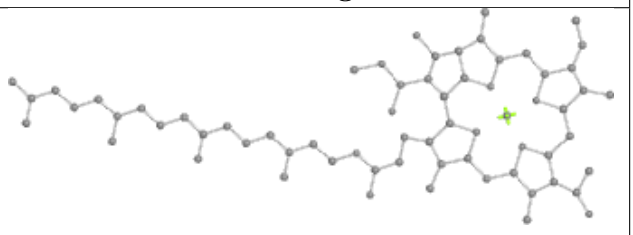
Bond lengths



Bond angles

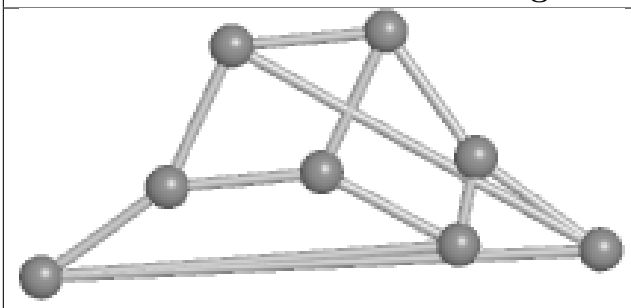


Torsions

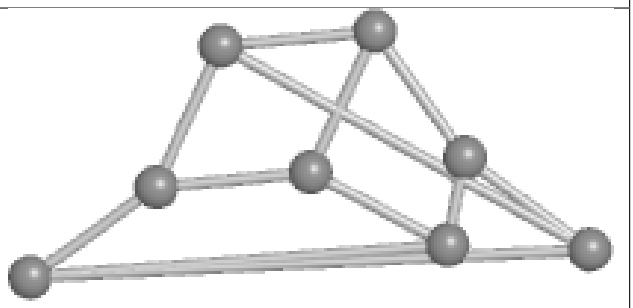


Rings

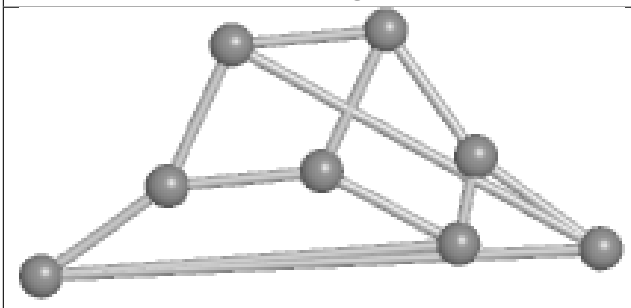
Ligand SF4 A 824



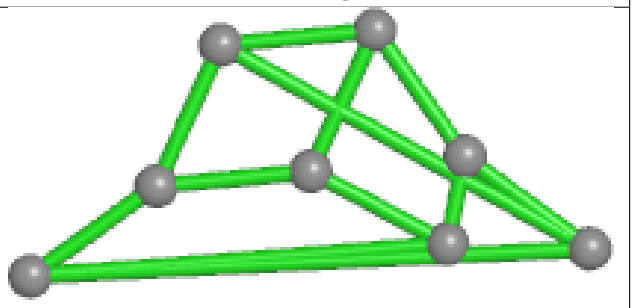
Bond lengths



Bond angles

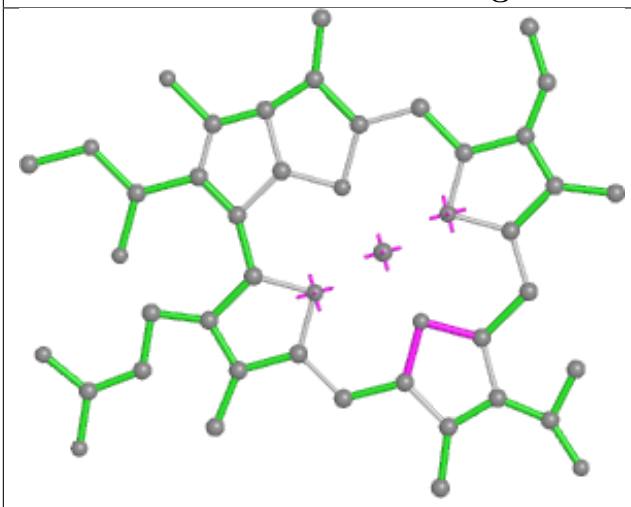


Torsions

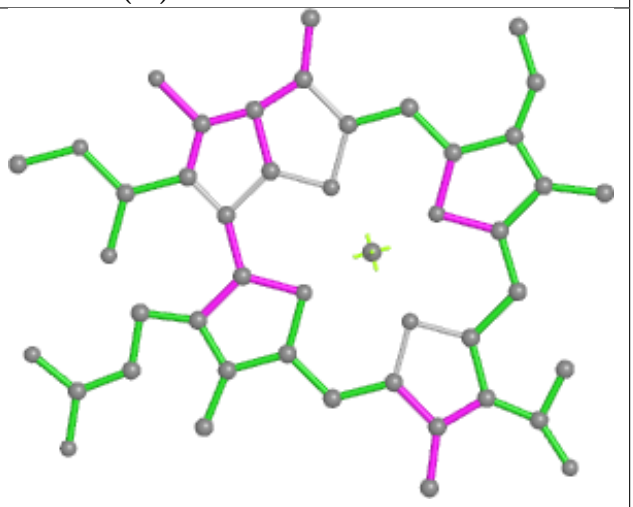


Rings

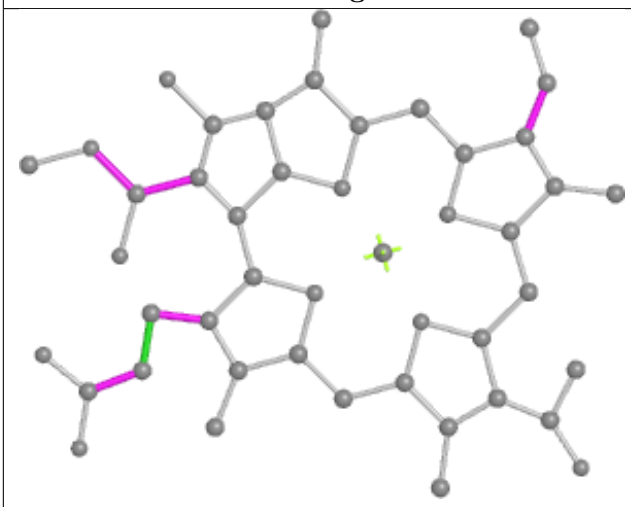
Ligand BCL V 409 (B)



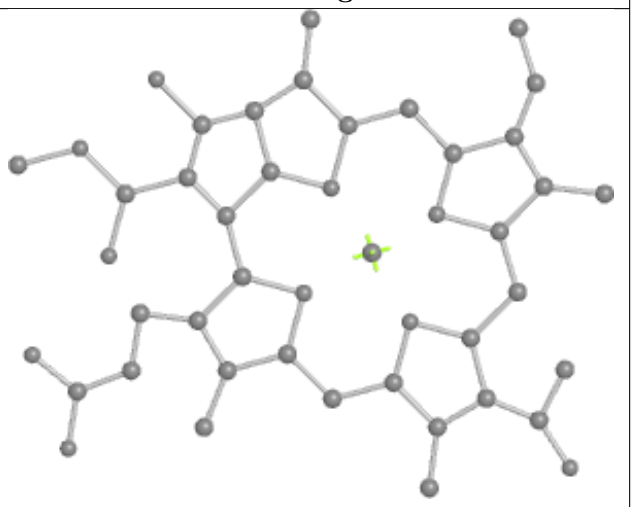
Bond lengths



Bond angles

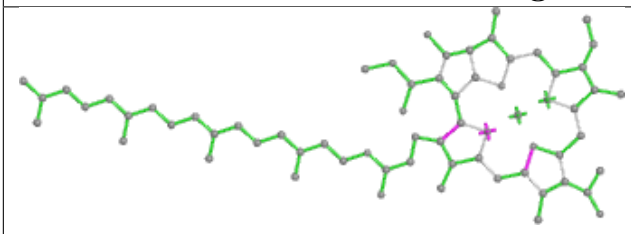


Torsions

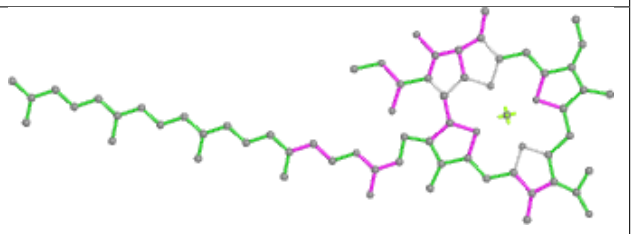


Rings

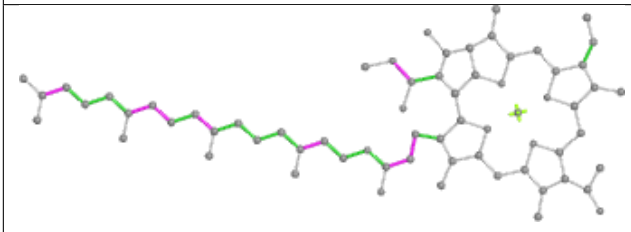
Ligand BCL a 811



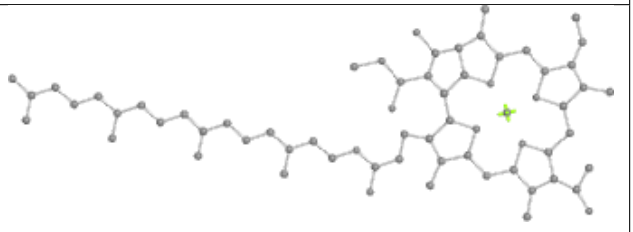
Bond lengths



Bond angles

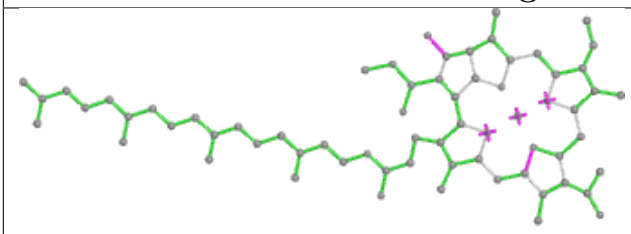


Torsions

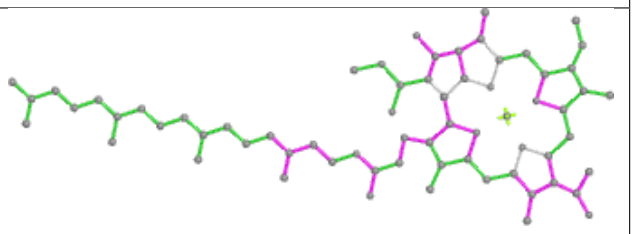


Rings

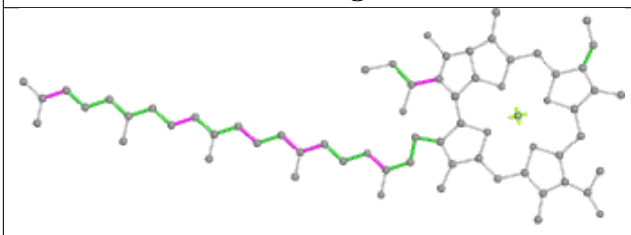
Ligand BCL W 401



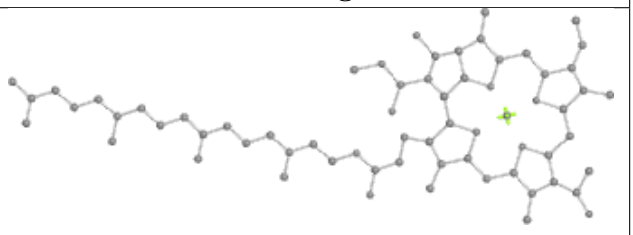
Bond lengths



Bond angles

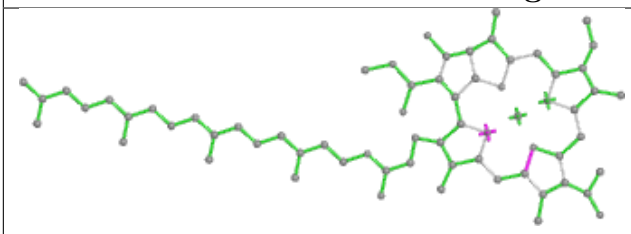


Torsions

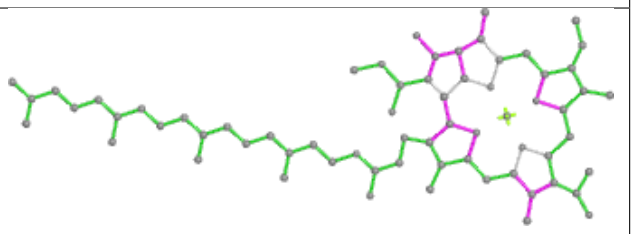


Rings

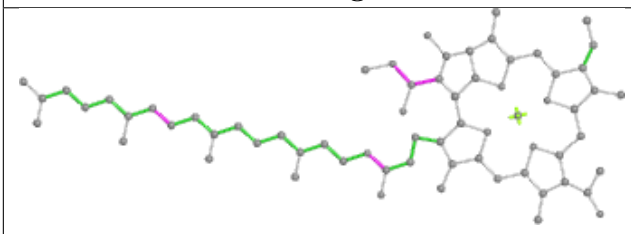
Ligand BCL X 405



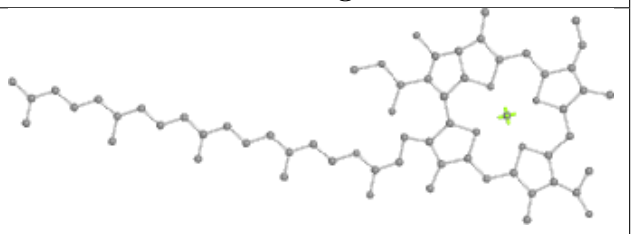
Bond lengths



Bond angles

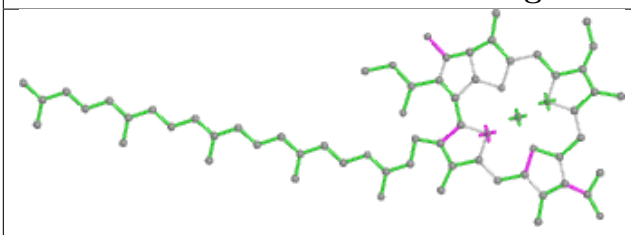


Torsions

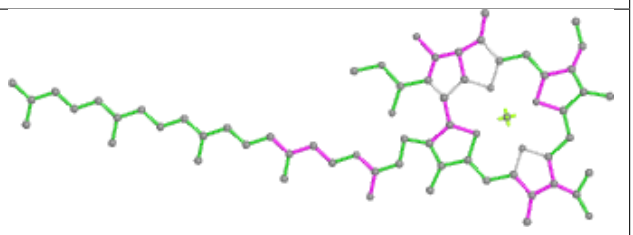


Rings

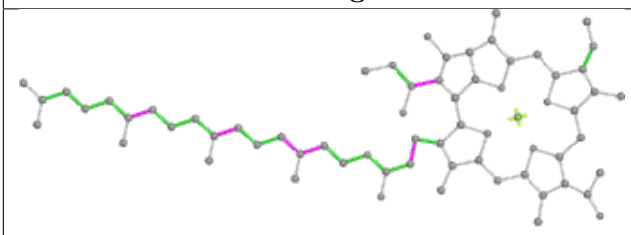
Ligand BCL A 811



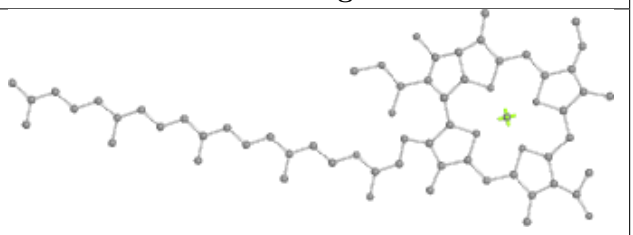
Bond lengths



Bond angles

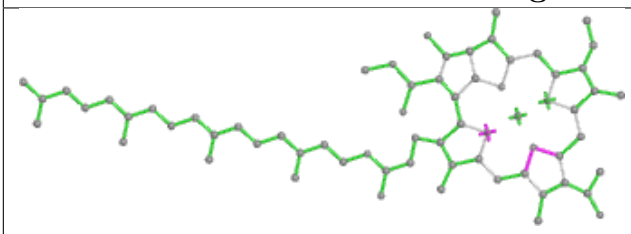


Torsions

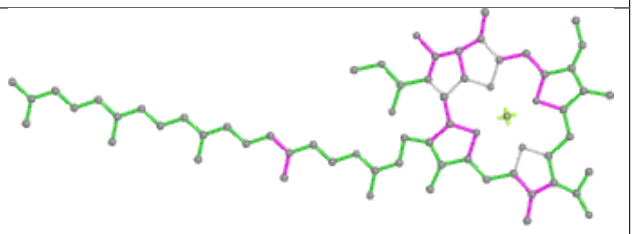


Rings

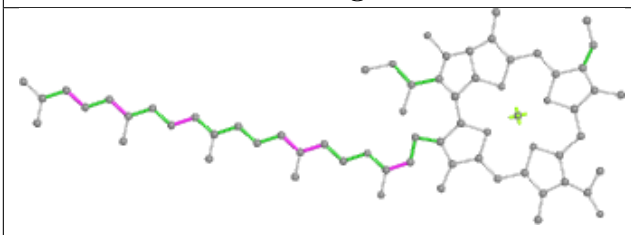
Ligand BCL a 804



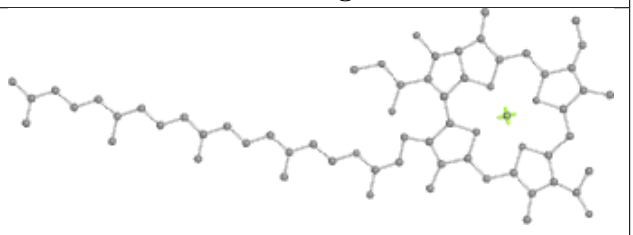
Bond lengths



Bond angles

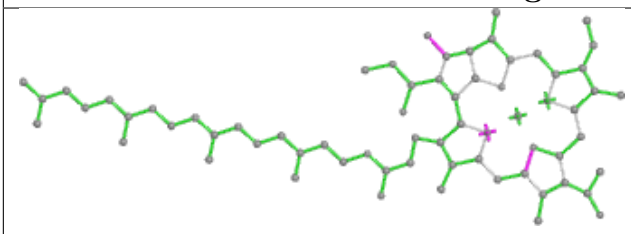


Torsions

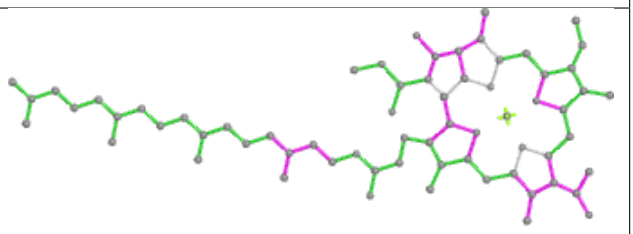


Rings

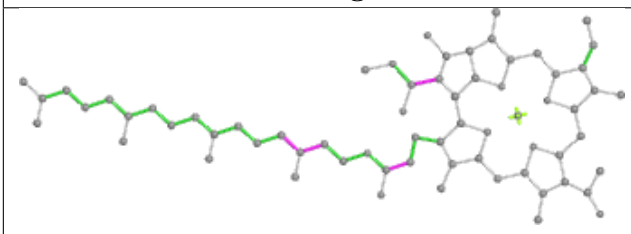
Ligand BCL X 401



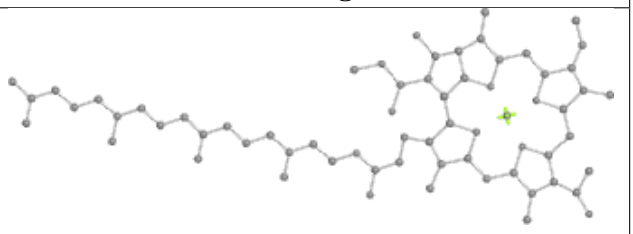
Bond lengths



Bond angles

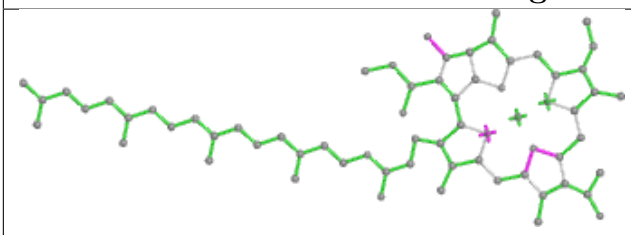


Torsions

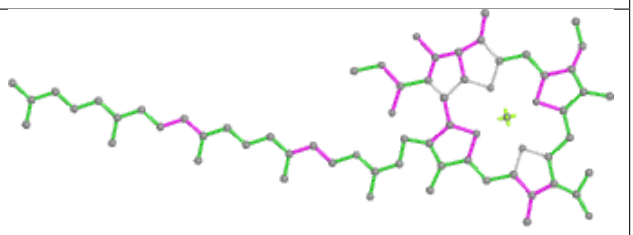


Rings

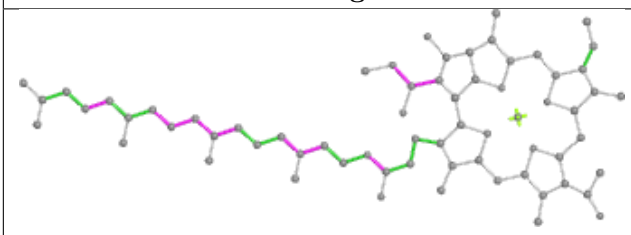
Ligand BCL a 812



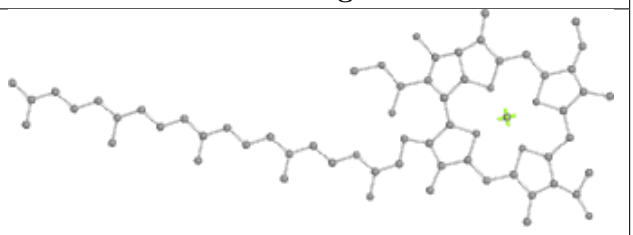
Bond lengths



Bond angles

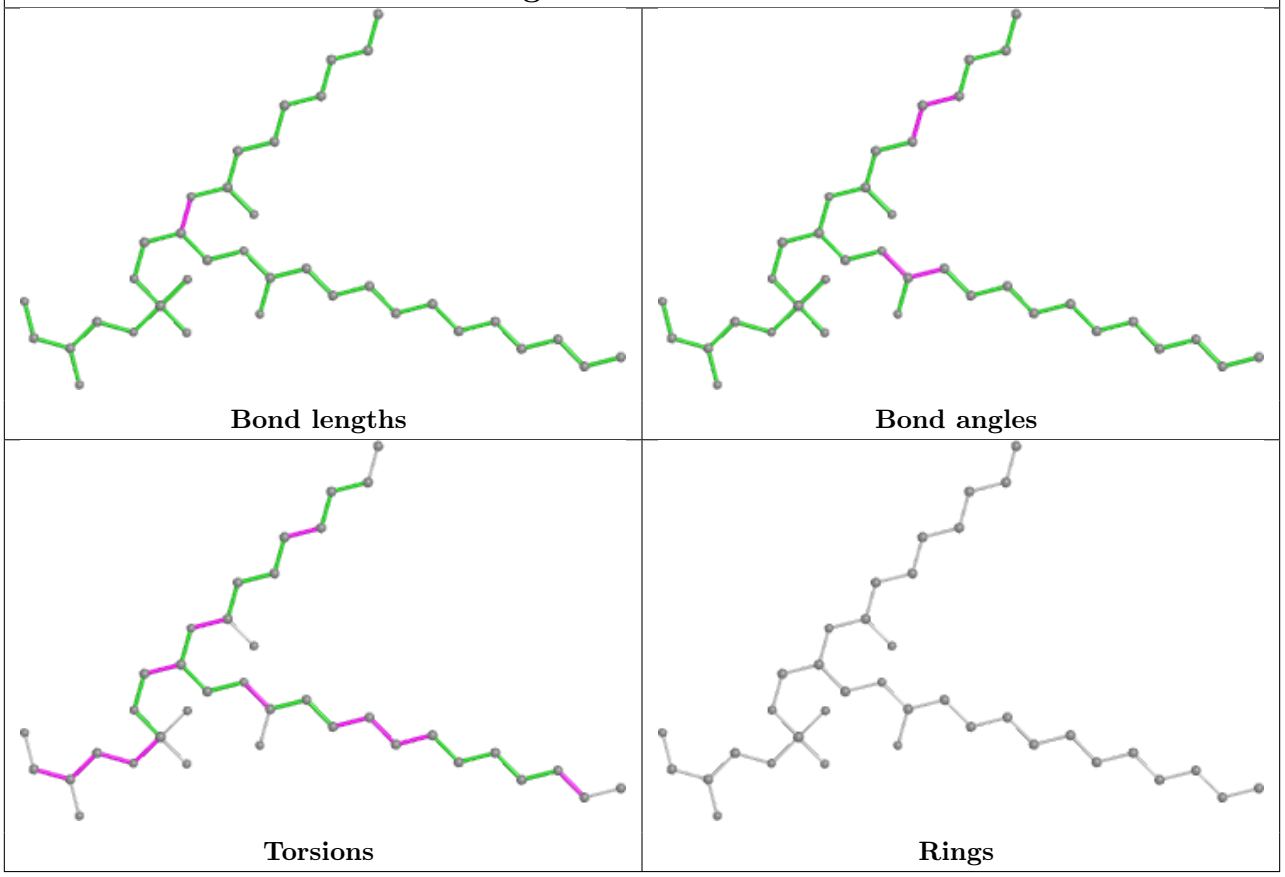


Torsions

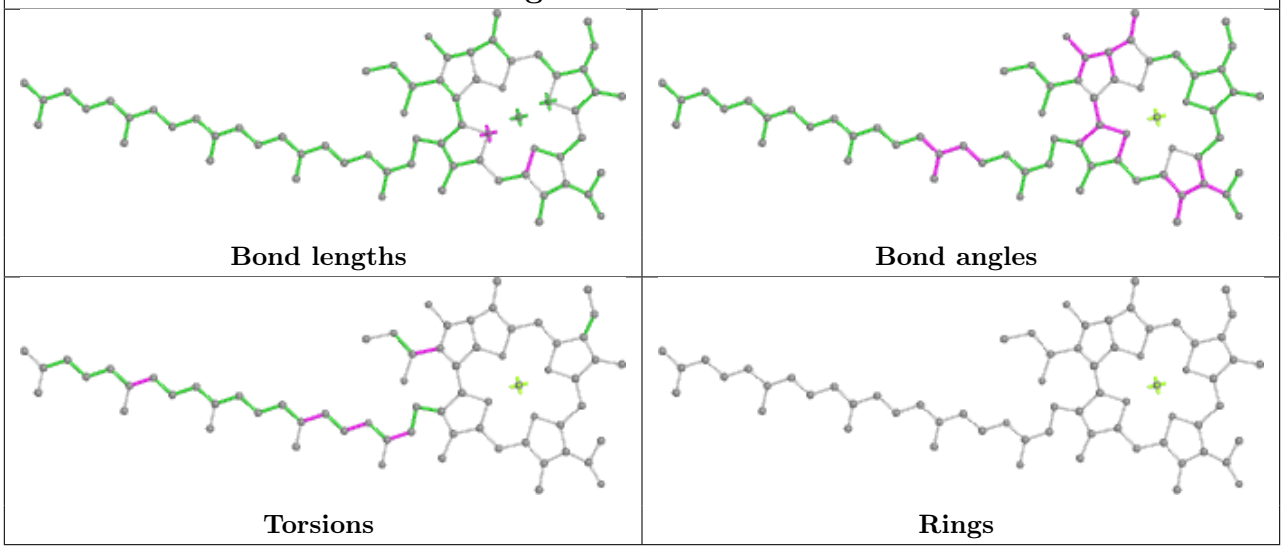


Rings

Ligand LHG A 817



Ligand BCL Y 405



5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

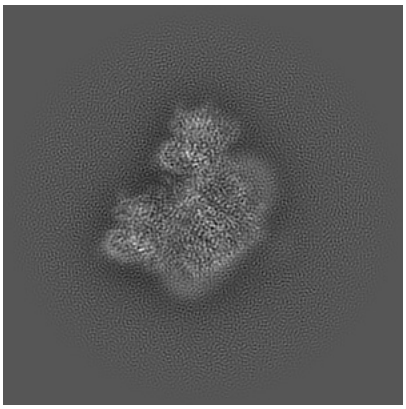
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-26471. These allow visual inspection of the internal detail of the map and identification of artifacts.

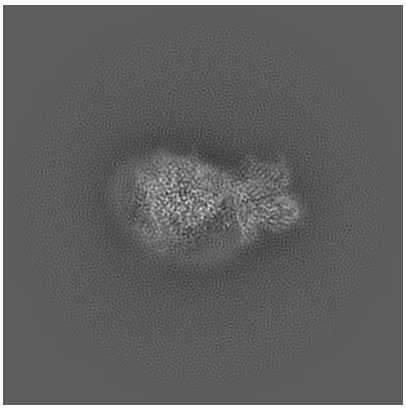
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

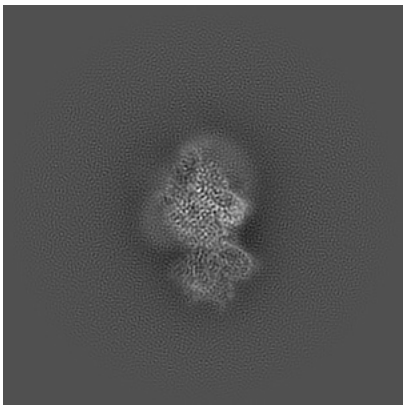
6.1.1 Primary map



X

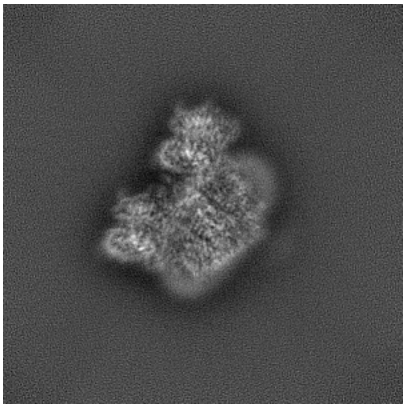


Y

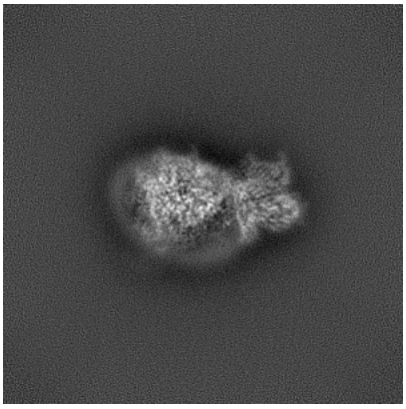


Z

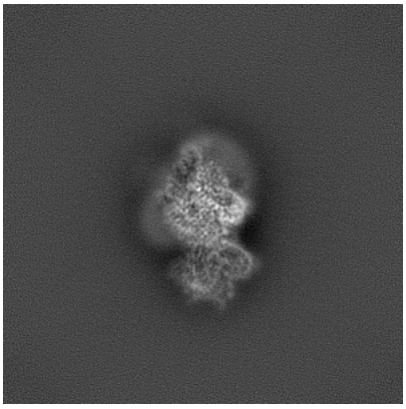
6.1.2 Raw map



X



Y

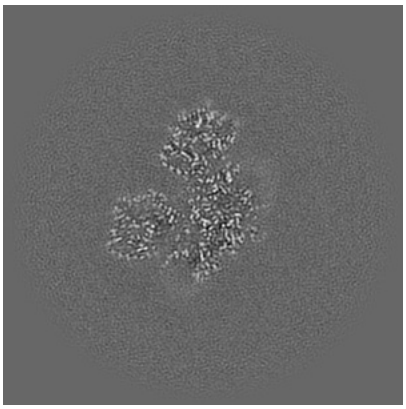


Z

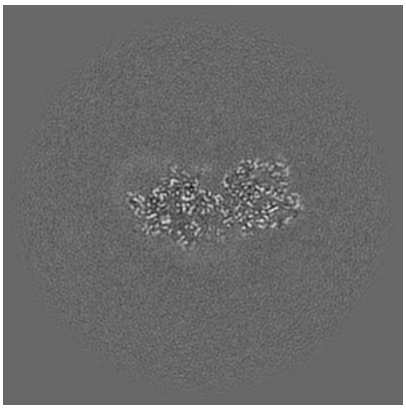
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

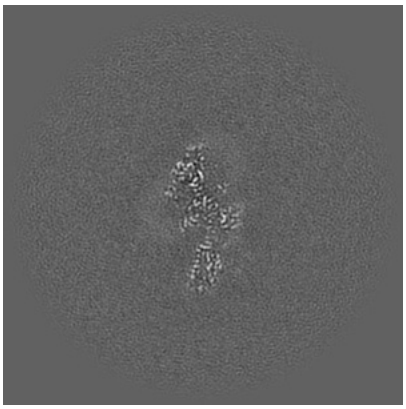
6.2.1 Primary map



X Index: 180

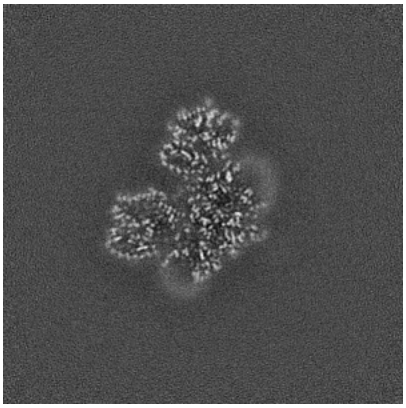


Y Index: 180

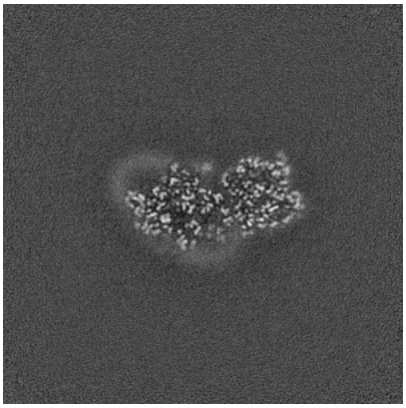


Z Index: 180

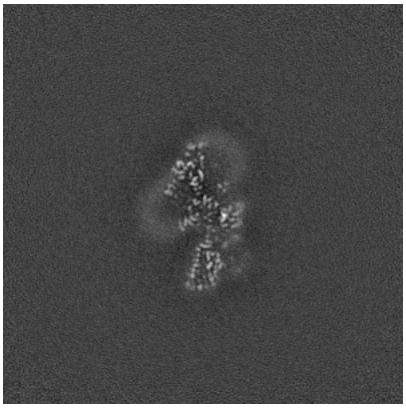
6.2.2 Raw map



X Index: 180



Y Index: 180

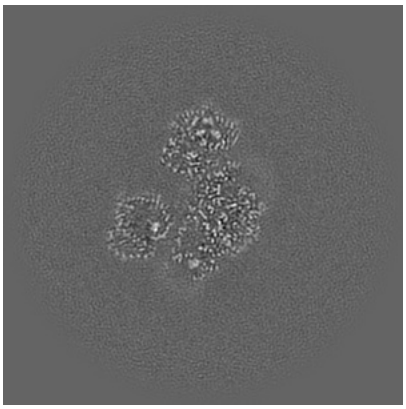


Z Index: 180

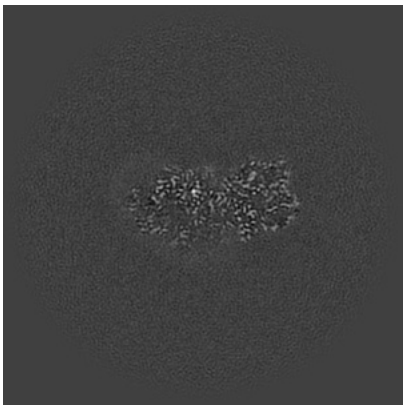
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

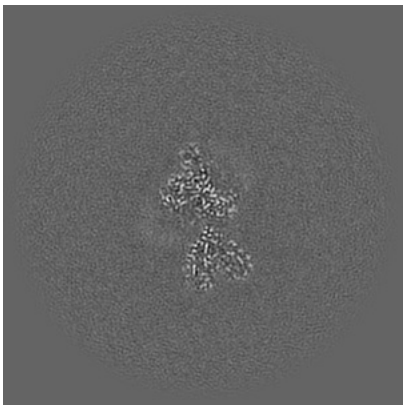
6.3.1 Primary map



X Index: 177

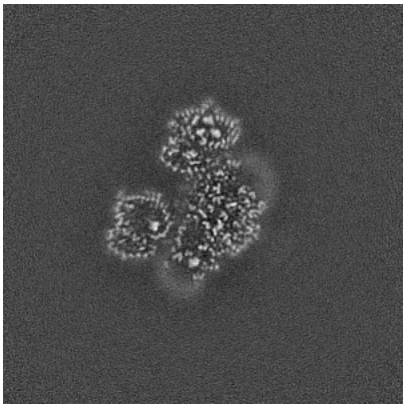


Y Index: 176

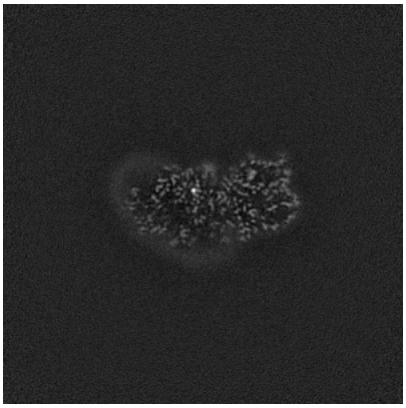


Z Index: 165

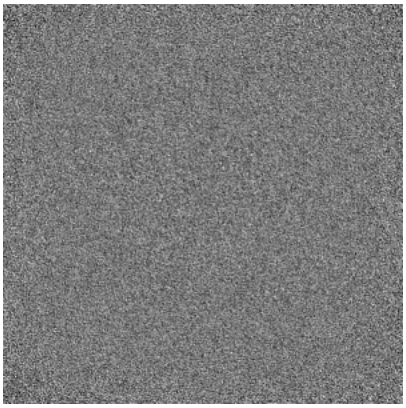
6.3.2 Raw map



X Index: 177



Y Index: 176



Z Index: 359

The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

6.4.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.428. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.4.2 Raw map

X Y Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

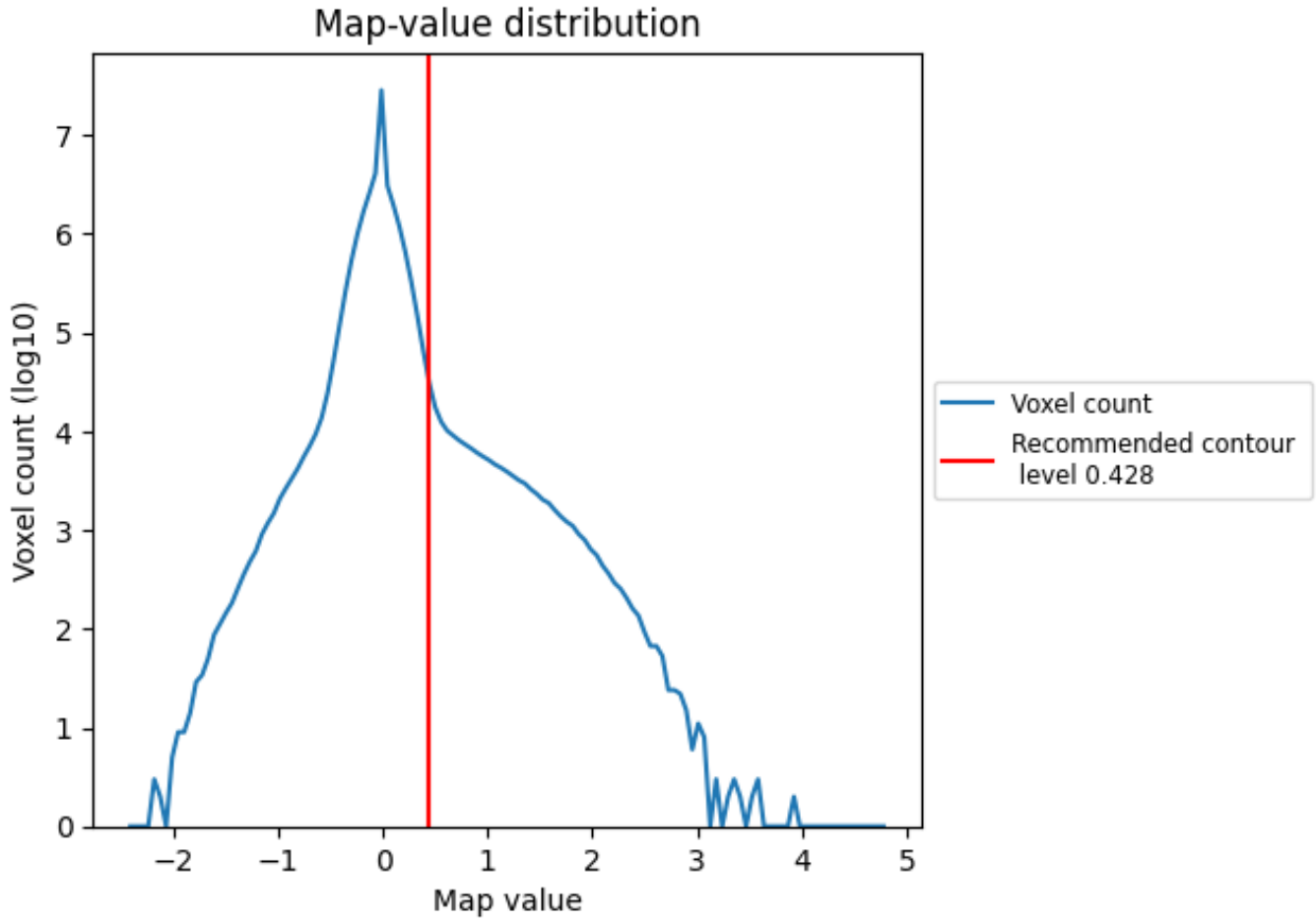
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

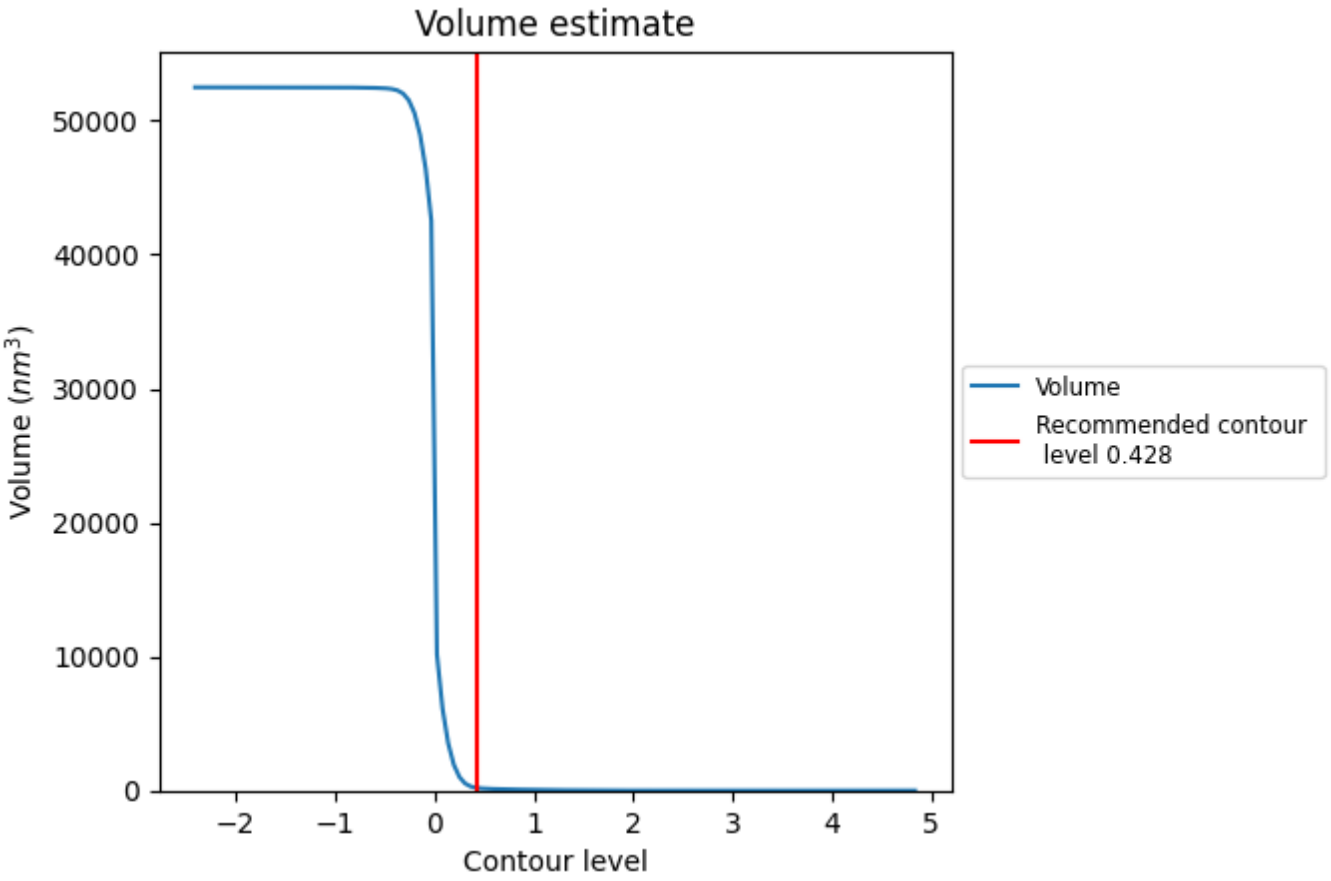
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

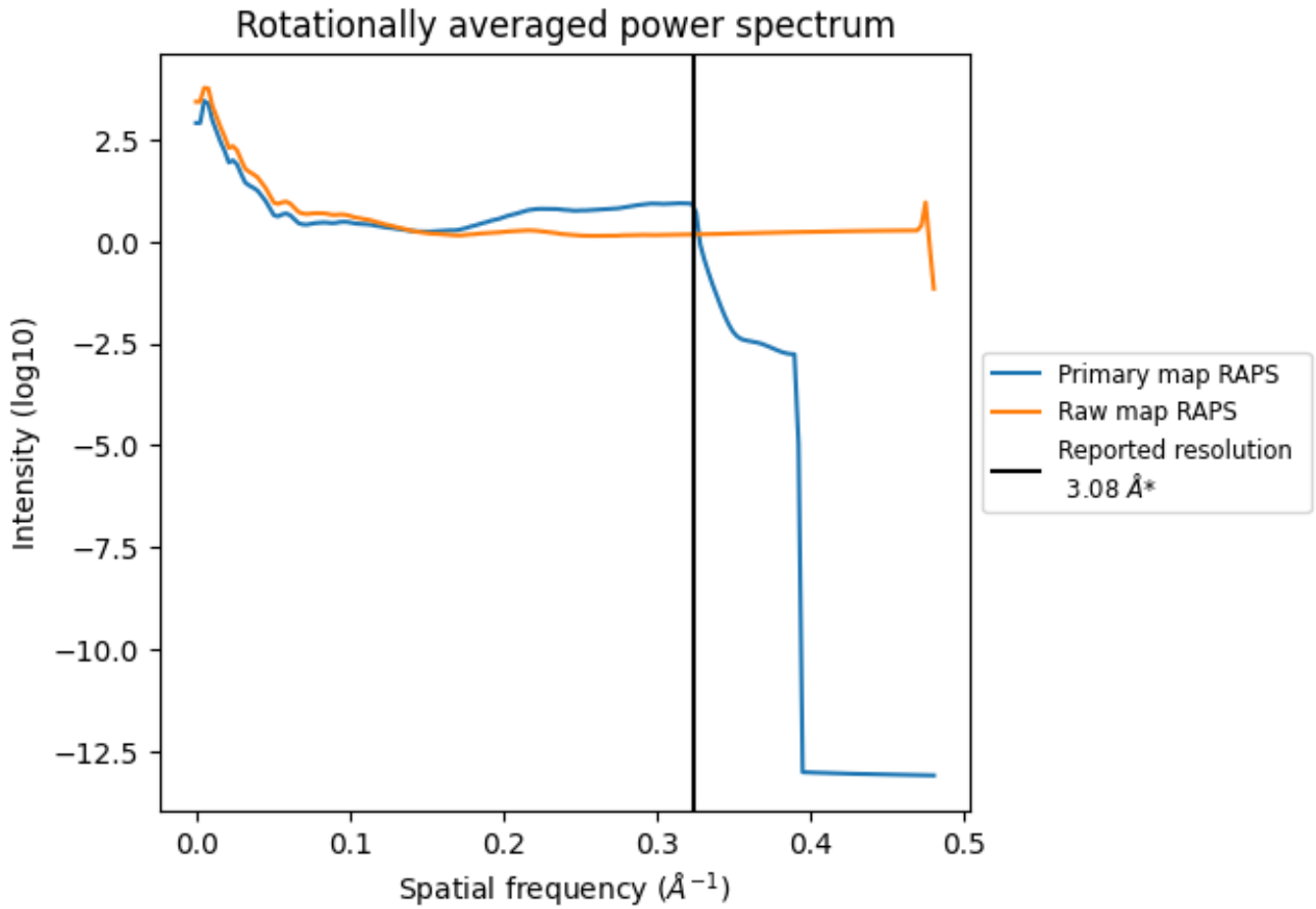
7.2 Volume estimate



The volume at the recommended contour level is 198 nm^3; this corresponds to an approximate mass of 179 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)

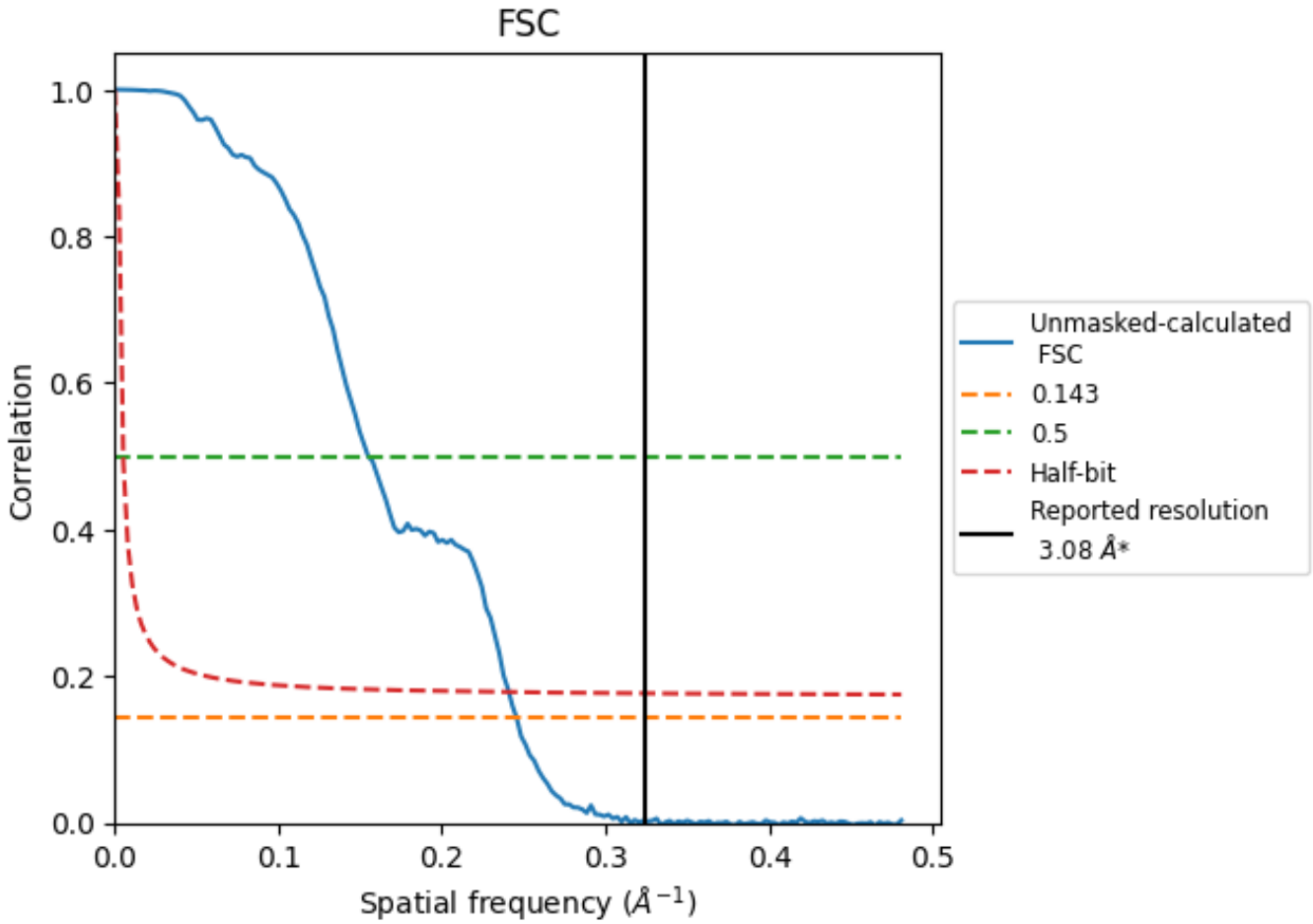


*Reported resolution corresponds to spatial frequency of 0.325 $Å^{-1}$

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.325 Å^{-1}

8.2 Resolution estimates (i)

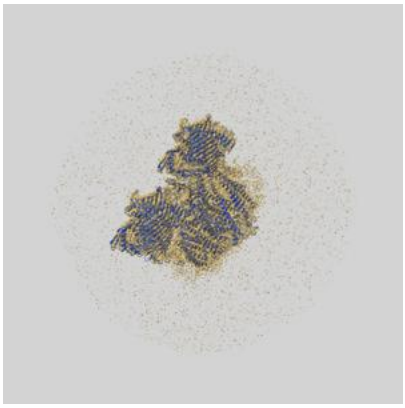
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.08	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	4.07	6.46	4.15

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 4.07 differs from the reported value 3.08 by more than 10 %

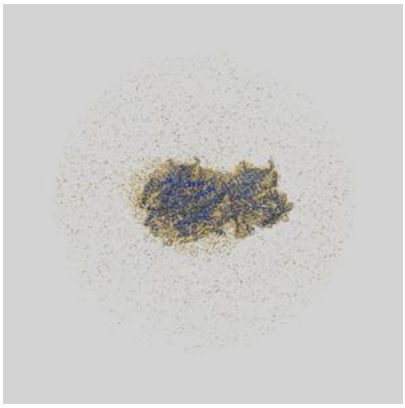
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-26471 and PDB model 7UEB. Per-residue inclusion information can be found in section 3 on page 15.

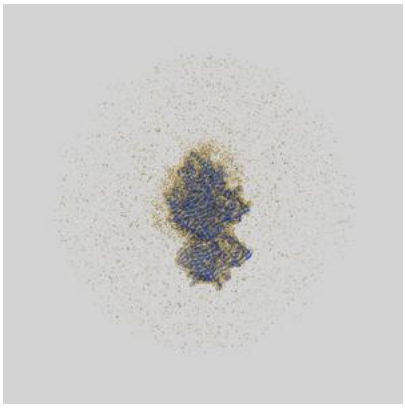
9.1 Map-model overlay



X



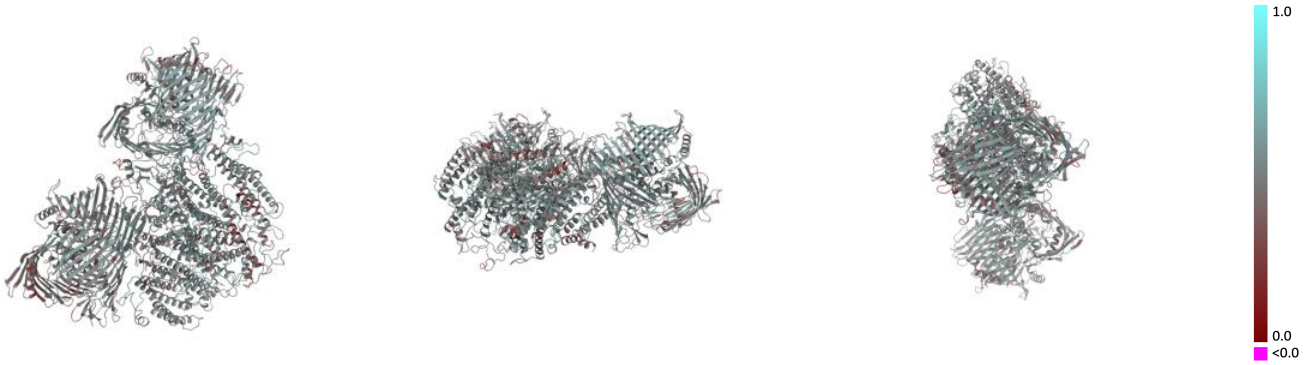
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.428 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

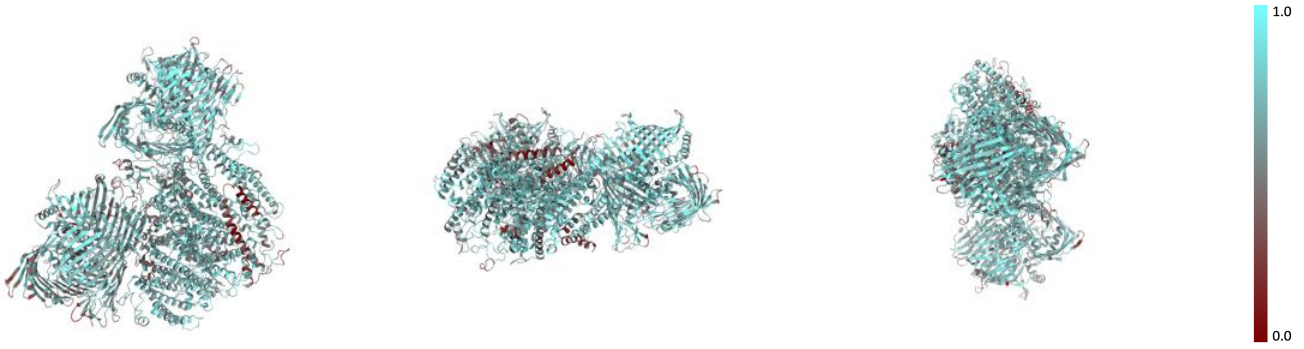
9.2 Q-score mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

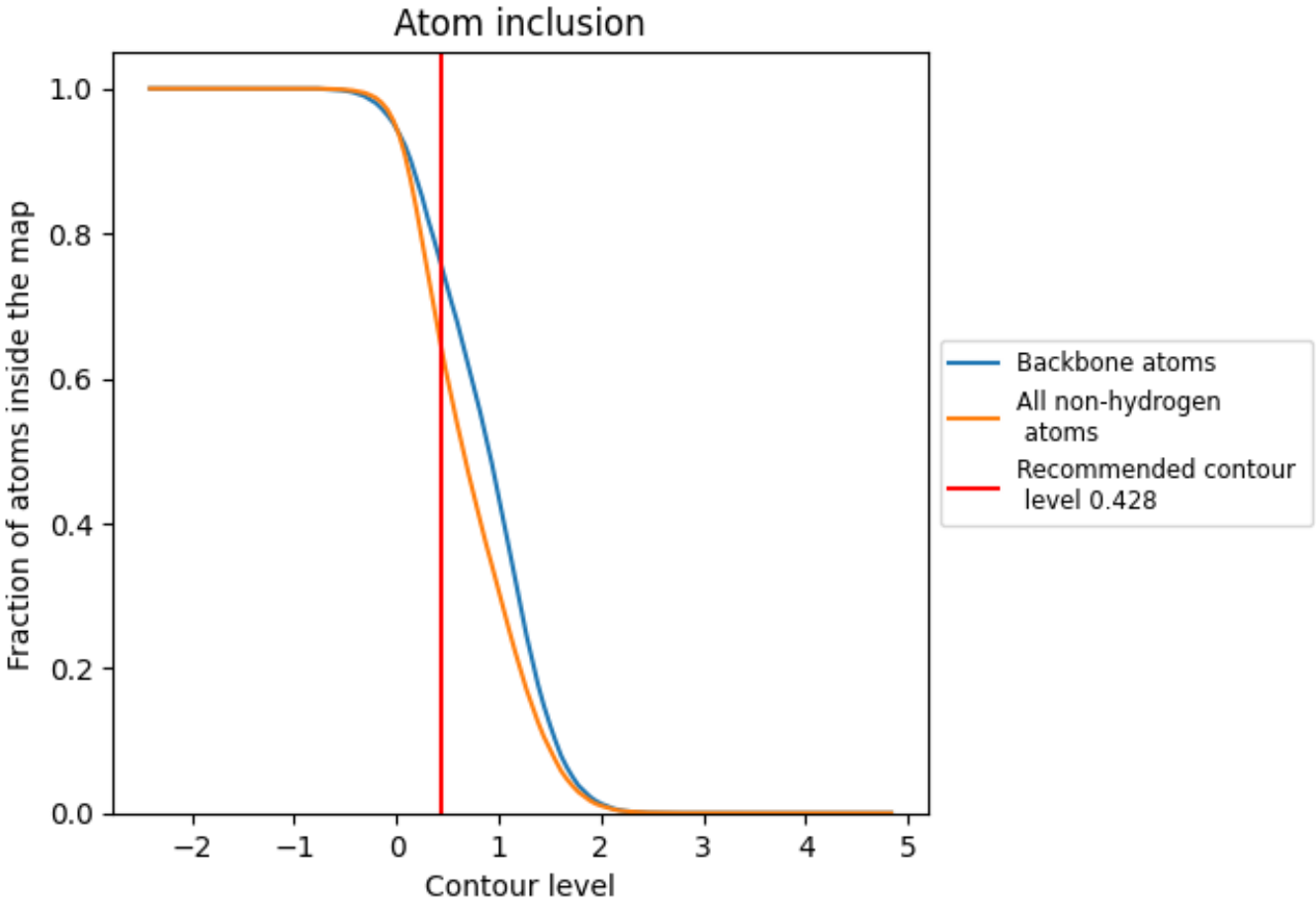
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.428).

9.4 Atom inclusion (i)



At the recommended contour level, 76% of all backbone atoms, 65% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.428) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6495	0.4970
A	0.6795	0.5170
B	0.6411	0.4920
C	0.5494	0.4680
D	0.5262	0.4370
E	0.4120	0.3720
F	0.3405	0.3920
U	0.7044	0.5110
V	0.7104	0.5230
W	0.6780	0.4930
X	0.6249	0.4710
Y	0.6317	0.4870
Z	0.6693	0.5120
a	0.6683	0.5140
c	0.3479	0.3940