N4C2 -- isomer 25 -- PBE1PBE/cc-pVDZ = -294.764839
Triplet energy = -294.706565 (.6 kcal/mol above singlet)

N	-0.080765	2.860792	0.000000
C	0.080765	1.707313	0.000000
N	0.476606	0.411189	0.000000
N	-0.476606	-0.411189	0.000000
C	-0.080765	-1.707313	0.000000
N	0.080765	-2.860792	0.000000

R12 = 1.1647 A
R23 = 1.3552 A
R34 = 1.2589 A
R45 = 1.3552 A
R56 = 1.1647 A
A123 = 170.9889 deg
A234 = 113.8029 deg
A345 = 113.8029 deg
A456 = 170.9889 deg

N4C2 -- isomer 23 -- PBE1PBE/cc-pVDZ = -294.720195
Triplet energy = -294.692462 (.4 kcal/mol above singlet)

N	2.010798	-2.153346	0.000000
C	1.093914	-1.427053	0.000000
C	-0.161223	-0.764489	0.000000
N	0.000000	0.558238	0.000000
N	-1.056771	1.297211	0.000000
N	-1.753476	2.176362	0.000000

R12 = 1.1697 A
R23 = 1.4193 A
R34 = 1.3325 A
R45 = 1.2895 A
R56 = 1.1217 A
A123 = 169.4448 deg
A234 = 110.8794 deg
A345 = 118.0148 deg
A456 = 163.3600 deg

N4C2 -- isomer 15 -- PBE1PBE/cc-pVDZ = -294.718116
Triplet energy = -294.640366 (.8 kcal/mol above singlet)

C	-2.324611	-1.710881	0.000000
N	-1.328619	-1.058213	0.000000
N	-0.067167	-0.637627	0.000000
N	0.000000	0.615391	0.000000
C	1.271881	1.075608	0.000000
N	2.298126	1.624969	0.000000

R12 = 1.1908 A
R23 = 1.3297 A
R34 = 1.2548 A
R45 = 1.3526 A
R56 = 1.1640 A
A123 = 165.2026 deg
A234 = 111.5075 deg

A345 = 112.9605 deg
A456 = 171.7315 deg

N4C2 -- isomer 34 -- PBE1PBE/cc-pVDZ = -294.710068
Triplet energy = -294.690860 (.1 kcal/mol above singlet)

N	-0.019372	2.902185	0.000000
N	0.019372	1.769929	0.000000
C	0.443699	0.506313	0.000000
C	-0.443699	-0.506313	0.000000
N	-0.019372	-1.769929	0.000000
N	0.019372	-2.902185	0.000000

R12 = 1.1329 A
R23 = 1.3330 A
R34 = 1.3464 A
R45 = 1.3330 A
R56 = 1.1329 A
A123 = 163.3975 deg
A234 = 120.2085 deg
A345 = 120.2085 deg
A456 = 163.3975 deg

N4C2 -- isomer 13 -- PBE1PBE/cc-pVDZ = -294.697946
Triplet energy = -294.655520 (.6 kcal/mol above singlet)

C	2.244203	-1.889722	0.000000
N	1.237985	-1.249151	0.000000
C	-0.043072	-0.796602	0.000000
N	0.000000	0.564107	0.000000
N	-1.123659	1.144076	0.000000
N	-2.001009	1.843532	0.000000

R12 = 1.1928 A
R23 = 1.3586 A
R34 = 1.3614 A
R45 = 1.2645 A
R56 = 1.1220 A
A123 = 166.9751 deg
A234 = 107.6434 deg
A345 = 115.4872 deg
A456 = 168.7370 deg

N4C2 -- isomer 14 -- PBE1PBE/cc-pVDZ = -294.695671
Triplet energy = -294.637593 (.4 kcal/mol above singlet)

C	2.407415	-1.682332	0.000000
N	1.370842	-1.104931	0.000000
N	0.116897	-0.683823	0.000000
C	0.000000	0.600830	0.000000
N	-1.341139	1.002391	0.000000
N	-2.210098	1.713365	0.000000

R12 = 1.1865 A
R23 = 1.3228 A
R34 = 1.2900 A
R45 = 1.4000 A

R56 = 1.1228 A
A123 = 169.4443 deg
A234 = 113.7627 deg
A345 = 111.8680 deg
A456 = 157.3790 deg

N4C2 -- isomer 16 -- PBE1PBE/cc-pVDZ = -294.666983
Triplet energy = -294.572786 (.1 kcal/mol above singlet)

C	-0.054867	2.838780	0.000000
N	0.054867	1.654989	0.000000
N	0.484513	0.398606	0.000000
N	-0.484513	-0.398606	0.000000
N	-0.054867	-1.654989	0.000000
C	0.054867	-2.838780	0.000000

R12 = 1.1889 A
R23 = 1.3278 A
R34 = 1.2548 A
R45 = 1.3278 A
R56 = 1.1889 A
A123 = 166.4169 deg
A234 = 110.5648 deg
A345 = 110.5648 deg
A456 = 166.4169 deg

N4C2 -- isomer 12 -- PBE1PBE/cc-pVDZ = -294.618248
Triplet energy = -294.597540 (.0 kcal/mol above singlet)

C	2.509839	-1.697213	0.000000
C	1.355368	-1.102026	0.000000
N	0.146880	-0.696885	0.000000
N	0.000000	0.645906	0.000000
N	-1.226348	0.974822	0.000000
N	-2.233567	1.475505	0.000000

R12 = 1.2989 A
R23 = 1.2746 A
R34 = 1.3508 A
R45 = 1.2697 A
R56 = 1.1248 A
A123 = 171.2602 deg
A234 = 114.7760 deg
A345 = 111.2563 deg
A456 = 168.5822 deg