

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P937797

Luminaire Tested: SQ4-FB-100U-125D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937797
REPORT IS A COMBINATION OF REPORTS P933560 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

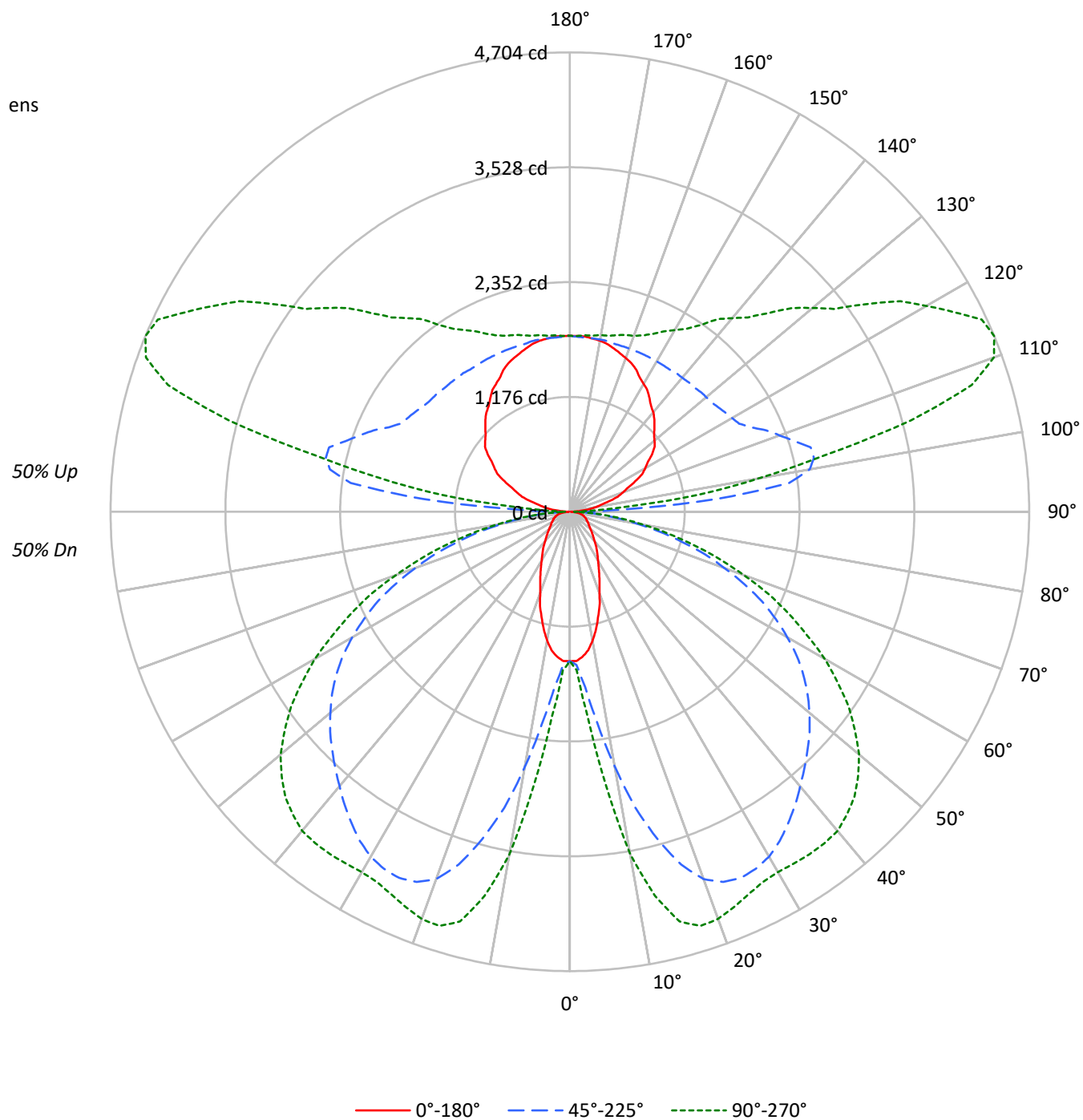
Lumens per Lamp: N/A
Luminaire Lumens: 23521.5 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 206.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4732	4732	4732
5°	4624	5471	6361
10°	4197	7977	10545
15°	3568	10424	12733
20°	2906	12082	12977
25°	2425	12647	12713
30°	2046	12730	12689
35°	1810	12522	13017
40°	1578	12251	13357
45°	1430	12053	13409
50°	1313	11876	13187
55°	1258	11615	12602
60°	1290	11110	11679
65°	1344	10340	10411
70°	1435	9024	8795
75°	1596	7364	6864
80°	1757	5113	4625
85°	1594	2718	2367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13409 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.9	0.8
10°-20°	877.1	3.7
20°-30°	1534.2	6.5
30°-40°	1974.9	8.4
40°-50°	2205.9	9.4
50°-60°	2112.8	9.0
60°-70°	1674.4	7.1
70°-80°	984.6	4.2
80°-90°	280.4	1.2
90°-100°	878.2	3.7
100°-110°	2308.8	9.8
110°-120°	2394.0	10.2
120°-130°	1920.3	8.2
130°-140°	1506.8	6.4
140°-150°	1156.5	4.9
150°-160°	832.9	3.5
160°-170°	509.6	2.2
170°-180°	172.2	0.7
0°-30°	2609.2	11.1
0°-40°	4584.1	19.5
0°-60°	8902.9	37.8
0°-90°	11842.2	50.3
90°-120°	5581.1	23.7
90°-150°	10164.6	43.2
90°-180°	11679.0	49.7
0°-180°	23521.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1530	1530	1530	1530	1530	
5°	1490	1599	1800	2037	2110	138
15°	1117	2061	3473	4211	4344	311
25°	713	2337	4137	4319	4324	329
35°	482	2233	3896	4118	4280	301
45°	330	1781	3444	3945	4122	255
55°	236	1131	2922	3394	3488	215
65°	187	600	2169	2440	2474	185
75°	138	369	1190	1308	1314	144
85°	49	113	295	325	330	52
90°	12	34	92	46	46	13
95°	116	455	1513	780	531	129
105°	416	630	2552	3875	3615	441
115°	739	897	2045	4078	4655	730
125°	1028	1152	1860	3143	3707	913
135°	1225	1348	1802	2537	2877	948
145°	1421	1511	1779	2164	2334	890
155°	1606	1650	1779	1953	2010	738
165°	1733	1756	1779	1849	1872	489
175°	1802	1802	1791	1814	1814	171
180°	1802	1802	1802	1802	1802	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0	1530.0
2.5°	1530.0	1530.0	1539.7	1544.7	1554.5	1559.4	1569.3	1579.1	1608.6	1613.6	1623.4
5°	1490.5	1510.2	1574.1	1598.8	1667.6	1761.2	1800.5	1864.5	1997.2	2036.6	2061.2
7.5°	1431.5	1475.8	1633.2	1672.6	1844.8	2090.7	2194.0	2331.8	2543.3	2646.6	2730.3
10°	1338.1	1431.5	1711.9	1805.3	2085.8	2459.6	2651.5	2843.3	3163.1	3305.7	3359.9
12.5°	1234.8	1387.2	1795.6	1923.5	2326.9	2872.9	3104.1	3315.6	3679.7	3871.5	3901.0
15°	1116.7	1323.3	1874.2	2061.2	2582.7	3217.3	3473.0	3733.8	4073.2	4211.0	4245.4
17.5°	1013.4	1274.1	1948.1	2144.8	2779.4	3527.2	3787.9	4004.3	4279.8	4373.3	4397.9
20°	885.5	1195.4	1997.2	2253.0	2986.1	3753.4	4004.3	4171.5	4358.6	4417.6	4427.4
22.5°	792.0	1111.7	2026.8	2292.4	3123.8	3891.2	4102.7	4235.5	4363.4	4383.1	4388.0
25°	713.3	1018.3	2021.8	2336.6	3241.8	3974.8	4137.1	4235.5	4309.3	4319.1	4319.1
27.5°	639.5	915.0	2002.1	2346.5	3330.4	3994.5	4122.4	4191.2	4225.7	4245.4	4245.4
30°	575.6	816.6	1952.9	2326.9	3369.7	3974.8	4078.1	4112.5	4147.0	4176.5	4191.2
32.5°	526.4	723.2	1879.2	2287.5	3374.6	3925.6	3999.5	4019.1	4068.2	4137.1	4161.8
35°	482.1	629.7	1795.6	2233.4	3345.2	3846.9	3896.1	3915.8	4014.2	4117.5	4151.9
37.5°	437.8	560.8	1687.3	2139.9	3300.9	3753.4	3787.9	3822.3	3974.8	4097.8	4137.1
40°	393.5	501.7	1559.4	2036.6	3232.0	3640.3	3669.8	3724.0	3925.6	4068.2	4107.6
42.5°	359.1	452.6	1421.7	1928.4	3143.4	3512.4	3556.7	3635.4	3866.6	4019.1	4063.4
45°	329.6	403.4	1274.1	1780.8	3030.3	3379.6	3443.5	3551.8	3797.7	3945.3	3984.6
47.5°	300.1	369.0	1121.6	1628.3	2907.3	3246.7	3330.4	3453.3	3704.3	3846.9	3881.3
50°	275.5	334.5	969.1	1466.0	2774.5	3104.1	3202.4	3330.4	3586.2	3719.0	3763.3
52.5°	255.8	305.0	826.5	1303.6	2622.0	2956.5	3069.7	3202.4	3443.5	3571.4	3600.9
55°	236.1	280.4	703.5	1131.4	2464.6	2799.1	2922.1	3050.0	3286.1	3394.3	3414.0
57.5°	226.3	260.8	600.2	969.1	2297.3	2622.0	2759.7	2877.8	3099.2	3182.8	3202.4
60°	211.5	245.9	521.4	831.4	2115.3	2454.8	2572.8	2690.9	2877.8	2946.6	2961.5
62.5°	196.8	236.1	462.4	698.6	1928.4	2258.0	2376.0	2484.2	2641.7	2690.9	2710.6
65°	186.9	226.3	418.1	600.2	1736.5	2051.4	2169.4	2262.9	2390.8	2439.9	2449.8
67.5°	177.1	216.5	383.7	516.6	1544.7	1844.8	1933.3	2021.8	2120.3	2169.4	2174.3
70°	162.3	206.6	354.2	457.5	1347.9	1608.6	1682.4	1775.9	1854.6	1879.2	1893.9
72.5°	152.5	191.9	334.5	413.2	1146.2	1382.4	1451.2	1505.3	1574.1	1598.8	1598.8
75°	137.7	172.2	314.8	369.0	939.5	1131.4	1190.5	1244.6	1298.7	1308.5	1293.8
77.5°	123.0	152.5	270.5	309.9	733.0	895.4	944.5	974.0	1018.3	1028.1	1033.1
80°	103.3	132.8	211.5	241.1	531.3	659.2	693.6	718.2	757.6	757.6	767.4
82.5°	78.7	103.3	152.5	172.2	359.1	452.6	482.1	496.8	521.4	521.4	521.4
85°	49.2	64.0	98.4	113.2	216.5	275.5	295.2	300.1	319.8	324.7	324.7
87.5°	24.6	34.4	64.0	68.9	113.2	142.6	142.6	152.5	152.5	147.6	142.6
90°	12.1	21.8	31.4	33.8	53.2	79.0	91.9	81.7	61.2	45.9	45.9
92.5°	48.4	130.5	212.8	233.3	328.1	454.4	517.5	453.6	325.7	229.7	220.6
95°	116.1	266.6	417.1	454.7	807.3	1277.5	1512.6	1349.8	1024.1	779.9	752.1
97.5°	200.7	333.4	466.2	499.4	1087.4	1871.4	2263.5	2160.6	1954.8	1800.4	1747.8
100°	266.0	386.3	506.7	536.8	1189.4	2059.4	2494.5	2502.1	2517.1	2528.3	2465.6
102.5°	321.6	433.9	546.2	574.3	1236.2	2118.6	2559.8	2690.9	2953.1	3149.8	3096.1
105°	416.0	511.1	606.2	629.9	1270.8	2125.3	2552.5	2846.5	3434.4	3875.3	3846.4
107.5°	512.7	601.4	690.0	712.2	1277.2	2030.6	2407.4	2817.5	3637.5	4252.6	4259.5
110°	578.0	658.0	738.1	758.1	1267.5	1946.8	2286.5	2744.9	3661.7	4349.3	4379.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	642.1	718.4	794.7	813.8	1268.0	1873.7	2176.5	2645.7	3583.9	4287.6	4333.9
115°	738.8	809.2	879.6	897.2	1279.7	1789.6	2044.7	2496.6	3400.5	4078.4	4142.5
117.5°	834.3	898.3	962.2	978.2	1303.5	1737.1	1954.0	2361.8	3177.6	3789.5	3860.5
120°	889.9	950.1	1010.4	1025.4	1322.9	1719.5	1917.7	2290.4	3035.8	3594.8	3663.9
122.5°	944.4	1005.1	1065.8	1081.0	1350.7	1710.2	1889.9	2225.5	2896.7	3400.1	3468.2
125°	1027.8	1083.1	1138.5	1152.3	1388.1	1702.5	1859.7	2144.8	2714.9	3142.6	3205.3
127.5°	1095.5	1151.4	1207.3	1221.2	1425.6	1698.1	1834.3	2079.1	2568.6	2935.8	2988.7
130°	1131.8	1192.0	1252.1	1267.2	1453.0	1700.8	1824.6	2042.6	2478.4	2805.3	2854.2
132.5°	1169.3	1229.5	1289.6	1304.7	1475.1	1702.4	1816.1	2011.2	2401.4	2694.0	2737.8
135°	1224.9	1279.7	1334.5	1348.2	1499.3	1700.9	1801.7	1965.0	2291.7	2536.7	2574.5
137.5°	1281.7	1336.0	1390.2	1403.8	1535.6	1711.4	1799.2	1937.3	2213.6	2420.8	2451.7
140°	1328.9	1378.9	1428.8	1441.3	1557.8	1713.1	1790.7	1910.0	2148.7	2327.6	2356.5
142.5°	1365.1	1411.3	1457.6	1469.1	1576.3	1719.2	1790.7	1895.6	2105.2	2262.3	2287.1
145°	1420.7	1461.1	1501.4	1511.4	1600.5	1719.3	1778.7	1864.4	2035.8	2164.4	2183.2
147.5°	1476.4	1515.6	1554.9	1564.6	1636.0	1731.1	1778.7	1846.1	1981.0	2082.2	2097.8
150°	1512.6	1548.1	1583.5	1592.5	1654.6	1737.3	1778.7	1835.7	1949.5	2035.0	2047.6
152.5°	1550.1	1577.0	1603.9	1610.6	1666.6	1741.3	1778.7	1827.3	1924.5	1997.5	2007.0
155°	1605.7	1625.6	1645.6	1650.5	1693.2	1750.2	1778.7	1817.4	1894.7	1952.7	1959.0
157.5°	1646.8	1666.2	1685.6	1690.4	1719.9	1759.1	1778.7	1808.7	1868.9	1914.1	1918.5
160°	1674.6	1689.7	1704.8	1708.5	1731.9	1763.1	1778.7	1804.5	1856.0	1894.7	1897.2
162.5°	1702.4	1713.7	1725.0	1727.8	1744.8	1767.4	1778.7	1800.4	1843.9	1876.6	1879.0
165°	1732.7	1742.8	1753.1	1755.6	1763.3	1773.6	1778.7	1794.3	1825.4	1848.8	1851.3
167.5°	1760.5	1765.3	1770.2	1771.4	1777.8	1786.4	1790.7	1801.0	1821.4	1836.7	1837.8
170°	1778.7	1783.5	1788.4	1789.5	1789.9	1790.4	1790.7	1801.0	1821.4	1836.7	1836.7
172.5°	1788.3	1789.4	1790.4	1790.7	1790.7	1790.7	1790.7	1798.8	1814.9	1827.0	1826.1
175°	1801.7	1801.7	1801.7	1801.7	1798.0	1793.1	1790.7	1795.8	1806.0	1813.7	1813.7
177.5°	1801.7	1801.7	1801.7	1801.7	1798.9	1795.1	1793.1	1797.2	1805.2	1811.3	1810.2
180°	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1530.0	1530.0
2.5°	1633.2	1623.4
5°	2100.6	2110.4
7.5°	2828.6	2823.7
10°	3517.3	3561.6
12.5°	4019.1	4028.9
15°	4324.1	4343.7
17.5°	4442.2	4447.0
20°	4447.0	4437.2
22.5°	4393.0	4383.1
25°	4329.0	4324.1
27.5°	4270.0	4274.9
30°	4245.4	4260.1
32.5°	4245.4	4270.0
35°	4255.2	4279.8
37.5°	4250.3	4279.8
40°	4230.7	4265.1
42.5°	4176.5	4201.1
45°	4092.9	4122.4
47.5°	3984.6	4004.3
50°	3846.9	3866.6
52.5°	3674.7	3679.7
55°	3468.1	3487.8
57.5°	3246.7	3251.7
60°	3000.8	3015.5
62.5°	2740.0	2740.0
65°	2464.6	2474.4
67.5°	2179.3	2203.9
70°	1889.1	1893.9
72.5°	1603.7	1603.7
75°	1308.5	1313.5
77.5°	1028.1	1028.1
80°	762.5	767.4
82.5°	526.4	536.2
85°	329.6	329.6
87.5°	152.5	137.7
90°	45.9	45.9
92.5°	184.0	147.5
95°	641.5	530.8
97.5°	1537.1	1326.5
100°	2214.6	1963.7
102.5°	2881.1	2666.2
105°	3730.8	3615.3
107.5°	4287.5	4315.4
110°	4499.7	4620.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4518.7	4703.6
115°	4398.9	4655.2
117.5°	4144.8	4429.1
120°	3940.1	4216.3
122.5°	3740.6	4013.1
125°	3456.2	3707.2
127.5°	3200.5	3412.2
130°	3049.7	3245.4
132.5°	2913.0	3088.2
135°	2725.5	2876.6
137.5°	2575.2	2698.9
140°	2472.1	2587.6
142.5°	2386.6	2486.0
145°	2258.4	2333.6
147.5°	2160.1	2222.4
150°	2098.2	2148.7
152.5°	2045.2	2083.4
155°	1984.3	2009.6
157.5°	1936.3	1954.0
160°	1907.5	1917.7
162.5°	1888.7	1898.4
165°	1861.5	1871.7
167.5°	1842.1	1846.3
170°	1836.7	1836.7
172.5°	1822.3	1818.5
175°	1813.7	1813.7
177.5°	1805.9	1801.7
180°	1801.7	1801.7

(END OF REPORT)