

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: P937697

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937697
REPORT IS A COMBINATION OF REPORTS P933559 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

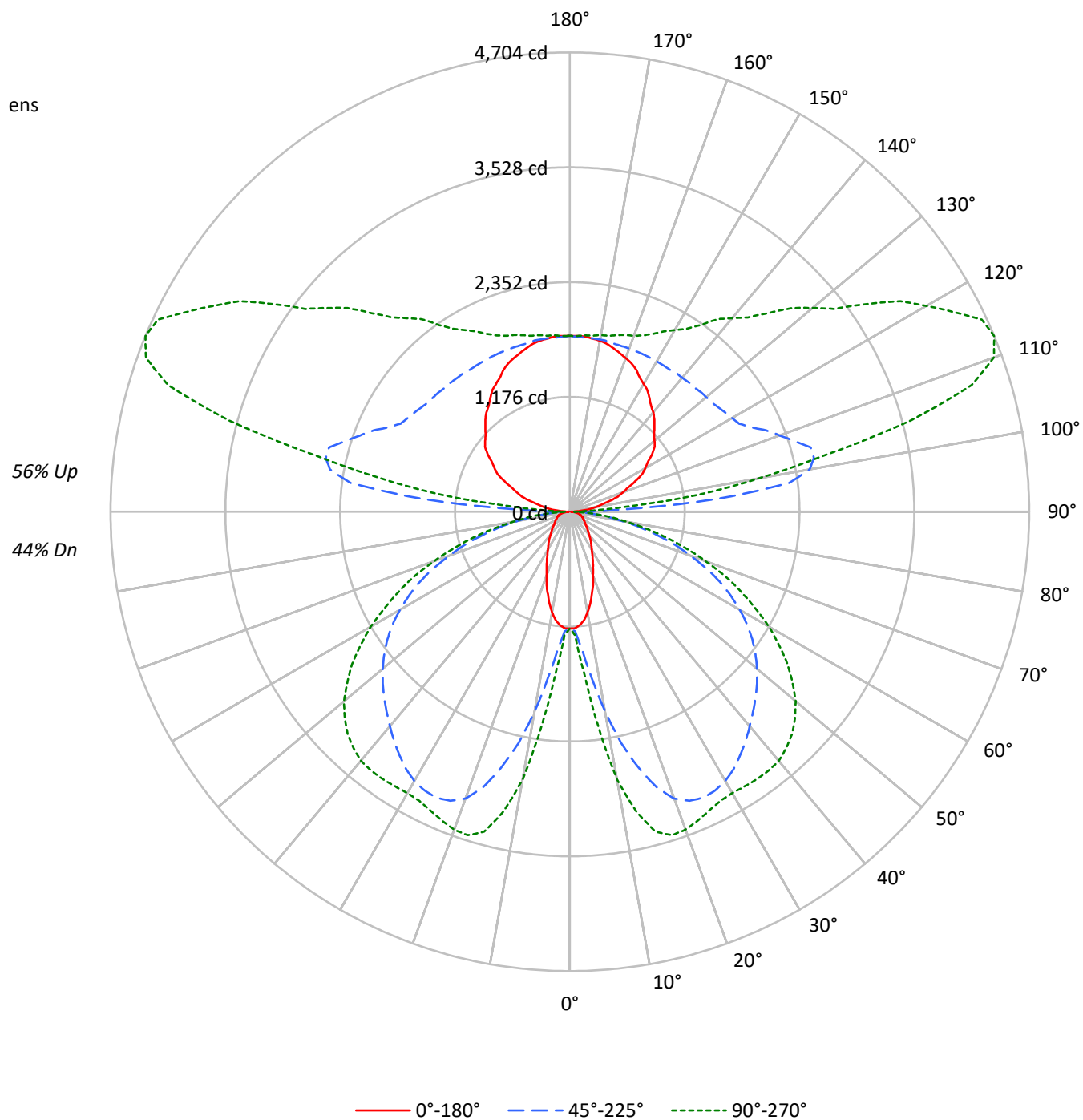
Lumens per Lamp: N/A
Luminaire Lumens: 20926.5 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 174
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	16	14
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12
10	44	32	25	20	41	30	23	19	25	20	16	21	16	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3611	4271	4966
10°	3276	6228	8233
15°	2785	8138	9941
20°	2269	9433	10132
25°	1893	9874	9926
30°	1597	9939	9907
35°	1413	9777	10163
40°	1232	9564	10428
45°	1117	9410	10469
50°	1025	9272	10295
55°	983	9069	9839
60°	1007	8674	9119
65°	1049	8073	8128
70°	1120	7046	6867
75°	1247	5750	5359
80°	1371	3993	3611
85°	1244	2121	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10469 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	0.7
10°-20°	684.8	3.3
20°-30°	1197.8	5.7
30°-40°	1541.9	7.4
40°-50°	1722.3	8.2
50°-60°	1649.5	7.9
60°-70°	1307.3	6.2
70°-80°	768.7	3.7
80°-90°	220.4	1.1
90°-100°	878.2	4.2
100°-110°	2308.8	11.0
110°-120°	2394.0	11.4
120°-130°	1920.3	9.2
130°-140°	1506.8	7.2
140°-150°	1156.5	5.5
150°-160°	832.9	4.0
160°-170°	509.6	2.4
170°-180°	172.2	0.8
0°-30°	2037.1	9.7
0°-40°	3579.0	17.1
0°-60°	6950.9	33.2
0°-90°	9247.3	44.2
90°-120°	5581.1	26.7
90°-150°	10164.6	48.6
90°-180°	11679.0	55.8
0°-180°	20926.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1164	1248	1406	1590	1648	107
15°	872	1609	2712	3288	3391	243
25°	557	1824	3230	3372	3376	257
35°	376	1744	3042	3215	3341	235
45°	257	1390	2688	3080	3218	199
55°	184	883	2281	2650	2723	168
65°	146	469	1694	1905	1932	145
75°	108	288	930	1022	1026	113
85°	38	88	230	254	257	41
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°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1194.5	1194.5	1202.1	1206.0	1213.7	1217.5	1225.2	1232.9	1255.9	1259.8	1267.5
5°	1163.8	1179.1	1229.1	1248.3	1302.0	1375.0	1405.7	1455.6	1559.3	1590.0	1609.2
7.5°	1117.6	1152.2	1275.1	1305.8	1440.2	1632.3	1713.0	1820.5	1985.7	2066.3	2131.6
10°	1044.7	1117.6	1336.5	1409.5	1628.5	1920.4	2070.2	2220.0	2469.6	2580.9	2623.2
12.5°	964.1	1083.1	1401.9	1501.8	1816.7	2242.9	2423.5	2588.7	2872.9	3022.7	3045.7
15°	871.8	1033.1	1463.3	1609.2	2016.4	2511.8	2711.6	2915.1	3180.2	3287.6	3314.6
17.5°	791.2	994.8	1520.9	1674.5	2170.0	2753.8	2957.4	3126.4	3341.4	3414.4	3433.7
20°	691.3	933.3	1559.3	1759.0	2331.3	2930.4	3126.4	3256.9	3402.8	3449.0	3456.6
22.5°	618.3	868.0	1582.4	1789.7	2438.9	3038.0	3203.1	3306.9	3406.7	3422.1	3425.9
25°	556.9	795.1	1578.5	1824.3	2531.0	3103.3	3230.1	3306.9	3364.5	3372.1	3372.1
27.5°	499.3	714.3	1563.2	1832.0	2600.2	3118.6	3218.5	3272.3	3299.2	3314.6	3314.6
30°	449.3	637.6	1524.7	1816.7	2630.9	3103.3	3183.9	3210.9	3237.7	3260.8	3272.3
32.5°	411.0	564.5	1467.2	1786.0	2634.7	3064.9	3122.5	3137.9	3176.3	3230.1	3249.3
35°	376.4	491.6	1401.9	1743.7	2611.6	3003.4	3041.9	3057.2	3134.0	3214.7	3241.6
37.5°	341.9	437.9	1317.4	1670.7	2577.2	2930.4	2957.4	2984.2	3103.3	3199.3	3230.1
40°	307.3	391.8	1217.5	1590.0	2523.4	2842.2	2865.1	2907.4	3064.9	3176.3	3207.0
42.5°	280.3	353.4	1110.0	1505.5	2454.2	2742.3	2776.9	2838.3	3018.8	3137.9	3172.4
45°	257.4	314.9	994.8	1390.3	2365.9	2638.6	2688.5	2773.0	2965.0	3080.3	3111.0
47.5°	234.3	288.1	875.7	1271.3	2269.9	2534.9	2600.2	2696.1	2892.1	3003.4	3030.4
50°	215.1	261.1	756.6	1144.6	2166.2	2423.5	2500.3	2600.2	2799.9	2903.6	2938.2
52.5°	199.7	238.1	645.3	1017.8	2047.1	2308.3	2396.6	2500.3	2688.5	2788.4	2811.5
55°	184.4	218.9	549.2	883.3	1924.2	2185.4	2281.4	2381.2	2565.6	2650.1	2665.4
57.5°	176.6	203.6	468.6	756.6	1793.6	2047.1	2154.7	2246.8	2419.7	2484.9	2500.3
60°	165.1	192.1	407.1	649.0	1651.5	1916.5	2008.7	2100.9	2246.8	2300.6	2312.1
62.5°	153.6	184.4	361.0	545.4	1505.5	1762.9	1855.1	1939.6	2062.5	2100.9	2116.2
65°	145.9	176.6	326.5	468.6	1355.8	1601.6	1693.7	1766.8	1866.6	1905.0	1912.7
67.5°	138.3	169.0	299.6	403.3	1206.0	1440.2	1509.4	1578.5	1655.3	1693.7	1697.6
70°	126.7	161.3	276.6	357.2	1052.3	1255.9	1313.6	1386.5	1448.0	1467.2	1478.7
72.5°	119.1	149.8	261.1	322.6	894.9	1079.3	1133.1	1175.3	1229.1	1248.3	1248.3
75°	107.6	134.4	245.8	288.1	733.5	883.3	929.5	971.7	1014.0	1021.6	1010.1
77.5°	96.0	119.1	211.2	242.0	572.3	699.0	737.4	760.5	795.1	802.7	806.6
80°	80.6	103.7	165.1	188.2	414.8	514.6	541.6	560.8	591.5	591.5	599.1
82.5°	61.4	80.6	119.1	134.4	280.3	353.4	376.4	387.9	407.1	407.1	407.1
85°	38.4	49.9	76.8	88.4	169.0	215.1	230.4	234.3	249.6	253.5	253.5
87.5°	19.2	26.8	49.9	53.8	88.4	111.3	111.3	119.1	119.1	115.2	111.3
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°	1194.5	1194.5
2.5°	1275.1	1267.5
5°	1640.0	1647.7
7.5°	2208.4	2204.6
10°	2746.1	2780.6
12.5°	3137.9	3145.6
15°	3376.0	3391.4
17.5°	3468.1	3472.0
20°	3472.0	3464.4
22.5°	3429.8	3422.1
25°	3379.9	3376.0
27.5°	3333.7	3337.6
30°	3314.6	3326.1
32.5°	3314.6	3333.7
35°	3322.2	3341.4
37.5°	3318.3	3341.4
40°	3303.0	3329.9
42.5°	3260.8	3280.0
45°	3195.5	3218.5
47.5°	3111.0	3126.4
50°	3003.4	3018.8
52.5°	2869.0	2872.9
55°	2707.7	2723.1
57.5°	2534.9	2538.7
60°	2342.8	2354.4
62.5°	2139.3	2139.3
65°	1924.2	1931.9
67.5°	1701.5	1720.7
70°	1474.8	1478.7
72.5°	1252.0	1252.0
75°	1021.6	1025.5
77.5°	802.7	802.7
80°	595.4	599.1
82.5°	411.0	418.6
85°	257.4	257.4
87.5°	119.1	107.6
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)