

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: P938604

Luminaire Tested: SQ4-FB-150U-125D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938604
REPORT IS A COMBINATION OF REPORTS P933648 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-B40-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

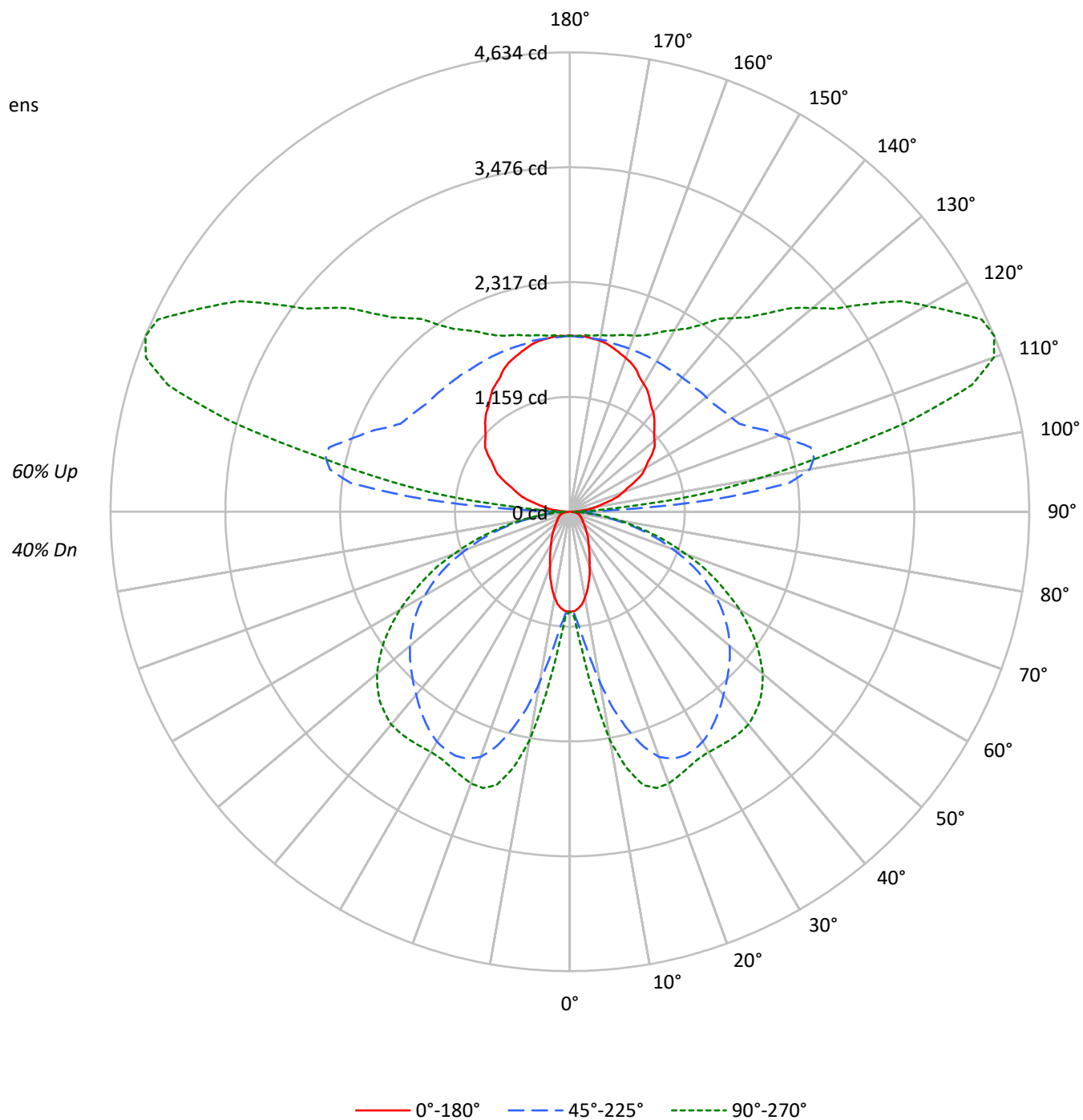
Lumens per Lamp: N/A
Luminaire Lumens: 19290.1 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 166.4
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4556	5391	6269
10°	4133	7858	10393
15°	3512	10266	12550
20°	2860	11897	12790
25°	2385	12449	12530
30°	2012	12528	12506
35°	1779	12320	12830
40°	1550	12050	13164
45°	1404	11851	13216
50°	1287	11673	12997
55°	1233	11413	12421
60°	1262	10911	11511
65°	1313	10149	10261
70°	1399	8851	8669
75°	1550	7217	6765
80°	1694	5004	4558
85°	1504	2656	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13216 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	0.7
10°-20°	576.3	3.0
20°-30°	1008.1	5.2
30°-40°	1297.7	6.7
40°-50°	1449.4	7.5
50°-60°	1388.2	7.2
60°-70°	1100.2	5.7
70°-80°	646.9	3.4
80°-90°	186.5	1.0
90°-100°	865.2	4.5
100°-110°	2274.7	11.8
110°-120°	2358.7	12.2
120°-130°	1891.9	9.8
130°-140°	1484.5	7.7
140°-150°	1139.4	5.9
150°-160°	820.6	4.3
160°-170°	502.1	2.6
170°-180°	169.6	0.9
0°-30°	1714.4	8.9
0°-40°	3012.1	15.6
0°-60°	5849.7	30.3
0°-90°	7783.4	40.3
90°-120°	5498.6	28.5
90°-150°	10014.5	51.9
90°-180°	11507.0	59.7
0°-180°	19290.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	979	1050	1183	1338	1387	90
15°	734	1354	2282	2767	2854	204
25°	469	1535	2718	2838	2841	216
35°	317	1468	2560	2705	2812	198
45°	217	1170	2263	2592	2709	168
55°	155	744	1920	2230	2292	141
65°	123	394	1425	1603	1626	122
75°	90	242	782	860	863	95
85°	32	74	194	213	217	34
90°	12	33	90	45	45	12
95°	114	448	1490	768	523	127
105°	410	621	2515	3818	3562	434
115°	728	884	2014	4018	4586	719
125°	1013	1135	1832	3096	3652	899
135°	1207	1328	1775	2499	2834	934
145°	1400	1489	1752	2132	2299	877
155°	1582	1626	1752	1924	1980	727
165°	1707	1730	1752	1822	1844	482
175°	1775	1775	1764	1787	1787	168
180°	1775	1775	1775	1775	1775	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2
2.5°	1005.2	1005.2	1011.7	1015.0	1021.4	1024.6	1031.1	1037.6	1057.0	1060.2	1066.6
5°	979.4	992.3	1034.4	1050.5	1095.8	1157.2	1183.1	1225.1	1312.3	1338.1	1354.3
7.5°	940.6	969.7	1073.1	1099.0	1212.1	1373.8	1441.6	1532.1	1671.1	1739.0	1794.0
10°	879.2	940.6	1124.8	1186.2	1370.5	1616.1	1742.2	1868.3	2078.4	2172.1	2207.7
12.5°	811.3	911.5	1179.8	1263.8	1528.9	1887.7	2039.6	2178.5	2417.8	2543.8	2563.2
15°	733.7	869.5	1231.5	1354.3	1696.9	2113.9	2282.0	2453.3	2676.4	2766.8	2789.5
17.5°	665.8	837.2	1280.0	1409.3	1826.2	2317.6	2488.8	2631.1	2812.1	2873.5	2889.6
20°	581.8	785.5	1312.3	1480.3	1962.0	2466.3	2631.1	2740.9	2863.9	2902.6	2909.0
22.5°	520.4	730.5	1331.7	1506.2	2052.5	2556.7	2695.8	2783.0	2867.0	2880.0	2883.2
25°	468.7	669.1	1328.5	1535.4	2130.1	2611.7	2718.4	2783.0	2831.5	2838.0	2838.0
27.5°	420.2	601.2	1315.5	1541.8	2188.3	2624.6	2708.7	2753.9	2776.6	2789.5	2789.5
30°	378.2	536.5	1283.2	1528.9	2214.2	2611.7	2679.5	2702.2	2724.8	2744.2	2753.9
32.5°	345.9	475.1	1234.7	1503.0	2217.3	2579.4	2627.9	2640.8	2673.1	2718.4	2734.5
35°	316.8	413.7	1179.8	1467.5	2197.9	2527.7	2560.0	2572.9	2637.5	2705.4	2728.1
37.5°	287.6	368.4	1108.7	1406.0	2168.9	2466.3	2488.8	2511.5	2611.7	2692.5	2718.4
40°	258.6	329.7	1024.6	1338.1	2123.6	2391.9	2411.3	2446.8	2579.4	2673.1	2698.9
42.5°	236.0	297.4	934.2	1267.1	2065.5	2307.9	2337.0	2388.6	2540.6	2640.8	2669.9
45°	216.6	265.0	837.2	1170.1	1991.1	2220.6	2262.6	2333.7	2495.3	2592.3	2618.1
47.5°	197.2	242.4	737.0	1069.9	1910.3	2133.3	2188.3	2269.1	2433.9	2527.7	2550.3
50°	181.0	219.8	636.8	963.2	1823.0	2039.6	2104.2	2188.3	2356.4	2443.7	2472.7
52.5°	168.1	200.4	543.0	856.5	1722.8	1942.6	2017.0	2104.2	2262.6	2346.6	2366.0
55°	155.2	184.2	462.2	743.5	1619.4	1839.1	1920.0	2004.1	2159.2	2230.3	2243.2
57.5°	148.7	171.3	394.3	636.8	1509.5	1722.8	1813.4	1890.9	2036.3	2091.3	2104.2
60°	139.0	161.6	342.7	546.3	1389.9	1612.9	1690.4	1768.1	1890.9	1936.2	1945.8
62.5°	129.3	155.2	303.9	459.0	1267.1	1483.6	1561.2	1632.3	1735.7	1768.1	1781.0
65°	122.8	148.7	274.8	394.3	1141.0	1347.9	1425.4	1486.8	1570.9	1603.3	1609.7
67.5°	116.3	142.2	252.1	339.4	1015.0	1212.1	1270.2	1328.5	1393.2	1425.4	1428.7
70°	106.7	135.8	232.7	300.6	885.7	1057.0	1105.4	1166.8	1218.6	1234.7	1244.5
72.5°	100.2	126.1	219.8	271.5	753.1	908.3	953.6	989.1	1034.4	1050.5	1050.5
75°	90.5	113.2	206.9	242.4	617.4	743.5	782.2	817.8	853.3	859.8	850.1
77.5°	80.8	100.2	177.8	203.6	481.6	588.3	620.6	640.0	669.1	675.6	678.8
80°	67.9	87.3	139.0	158.3	349.1	433.1	455.7	472.0	497.7	497.7	504.2
82.5°	51.8	67.9	100.2	113.2	236.0	297.4	316.8	326.4	342.7	342.7	342.7
85°	32.3	42.0	64.7	74.3	142.2	181.0	194.0	197.2	210.1	213.3	213.3
87.5°	16.1	22.6	42.0	45.3	74.3	93.8	93.8	100.2	100.2	96.9	93.8
90°	11.9	21.5	30.9	33.3	52.4	77.8	90.5	80.5	60.4	45.3	45.3
92.5°	47.7	128.6	209.7	230.0	323.3	447.7	509.9	446.8	320.9	226.3	217.4
95°	114.4	262.6	410.8	447.9	795.3	1258.6	1490.3	1329.8	1009.1	768.4	741.1
97.5°	197.8	328.5	459.4	492.0	1071.4	1843.9	2230.1	2128.7	1925.9	1773.8	1722.0
100°	262.1	380.7	499.3	529.0	1171.9	2029.0	2457.6	2465.0	2479.8	2490.9	2429.1
102.5°	316.9	427.6	538.1	565.8	1217.9	2087.2	2522.0	2651.2	2909.5	3103.3	3050.4
105°	409.8	503.5	597.3	620.7	1252.0	2093.8	2514.8	2804.5	3383.7	3818.1	3789.6
107.5°	505.1	592.5	679.8	701.6	1258.4	2000.7	2371.8	2775.8	3583.8	4189.8	4196.7
110°	569.5	648.3	727.2	746.9	1248.9	1918.1	2252.7	2704.4	3607.6	4285.1	4314.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	632.6	707.8	782.9	801.7	1249.2	1845.9	2144.3	2606.5	3530.9	4224.3	4269.8
115°	727.9	797.2	866.6	883.9	1260.8	1763.2	2014.5	2459.7	3350.2	4018.2	4081.3
117.5°	822.0	885.0	948.0	963.8	1284.2	1711.5	1925.1	2327.0	3130.7	3733.5	3803.5
120°	876.8	936.1	995.4	1010.2	1303.3	1694.0	1889.4	2256.6	2991.0	3541.7	3609.7
122.5°	930.4	990.2	1050.0	1065.0	1330.7	1684.9	1862.0	2192.6	2853.9	3349.9	3417.0
125°	1012.6	1067.1	1121.6	1135.3	1367.6	1677.3	1832.2	2113.0	2674.8	3096.1	3157.9
127.5°	1079.3	1134.3	1189.5	1203.2	1404.5	1673.0	1807.1	2048.3	2530.7	2892.4	2944.6
130°	1115.1	1174.4	1233.7	1248.5	1431.5	1675.5	1797.6	2012.3	2441.7	2763.8	2812.0
132.5°	1152.0	1211.3	1270.6	1285.4	1453.4	1677.4	1789.3	1981.4	2365.8	2654.1	2697.3
135°	1206.7	1260.8	1314.8	1328.3	1477.2	1675.7	1775.0	1936.0	2257.9	2499.3	2536.5
137.5°	1262.8	1316.3	1369.7	1383.0	1512.9	1686.1	1772.7	1908.8	2180.8	2384.9	2415.4
140°	1309.2	1358.5	1407.7	1420.0	1534.8	1687.8	1764.3	1881.8	2116.9	2293.2	2321.7
142.5°	1344.9	1390.5	1436.0	1447.4	1553.0	1693.9	1764.3	1867.5	2074.0	2228.9	2253.3
145°	1399.7	1439.5	1479.2	1489.1	1576.9	1693.9	1752.3	1836.8	2005.7	2132.4	2150.9
147.5°	1454.6	1493.2	1531.9	1541.6	1611.8	1705.5	1752.3	1818.8	1951.6	2051.3	2066.7
150°	1490.3	1525.2	1560.2	1568.9	1630.0	1711.6	1752.3	1808.5	1920.7	2004.9	2017.3
152.5°	1527.2	1553.7	1580.2	1586.8	1642.0	1715.6	1752.3	1800.3	1896.1	1968.0	1977.3
155°	1582.1	1601.6	1621.2	1626.1	1668.2	1724.3	1752.3	1790.4	1866.7	1923.9	1930.2
157.5°	1622.5	1641.6	1660.6	1665.4	1694.4	1733.0	1752.3	1782.0	1841.3	1885.8	1890.2
160°	1650.0	1664.8	1679.6	1683.3	1706.3	1737.0	1752.3	1777.7	1828.6	1866.7	1869.2
162.5°	1677.4	1688.4	1699.6	1702.4	1719.0	1741.3	1752.3	1773.8	1816.7	1848.9	1851.3
165°	1707.1	1717.1	1727.2	1729.7	1737.2	1747.3	1752.3	1767.7	1798.5	1821.5	1824.0
167.5°	1734.5	1739.2	1744.0	1745.3	1751.6	1760.1	1764.3	1774.3	1794.4	1809.5	1810.6
170°	1752.3	1757.1	1761.9	1763.1	1763.5	1764.0	1764.3	1774.3	1794.4	1809.5	1809.5
172.5°	1761.9	1762.9	1764.0	1764.3	1764.3	1764.3	1764.3	1772.2	1788.0	1800.0	1799.0
175°	1775.0	1775.0	1775.0	1775.0	1771.4	1766.7	1764.3	1769.3	1779.4	1786.9	1786.9
177.5°	1775.0	1775.0	1775.0	1775.0	1772.2	1768.5	1766.7	1770.7	1778.6	1784.5	1783.5
180°	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1005.2	1005.2
2.5°	1073.1	1066.6
5°	1380.2	1386.7
7.5°	1858.5	1855.4
10°	2311.1	2340.2
12.5°	2640.8	2647.3
15°	2841.2	2854.1
17.5°	2918.8	2922.0
20°	2922.0	2915.5
22.5°	2886.5	2880.0
25°	2844.5	2841.2
27.5°	2805.6	2808.8
30°	2789.5	2799.2
32.5°	2789.5	2805.6
35°	2796.0	2812.1
37.5°	2792.7	2812.1
40°	2779.8	2802.4
42.5°	2744.2	2760.4
45°	2689.3	2708.7
47.5°	2618.1	2631.1
50°	2527.7	2540.6
52.5°	2414.5	2417.8
55°	2278.7	2291.7
57.5°	2133.3	2136.5
60°	1971.7	1981.4
62.5°	1800.4	1800.4
65°	1619.4	1625.9
67.5°	1431.9	1448.1
70°	1241.2	1244.5
72.5°	1053.7	1053.7
75°	859.8	863.0
77.5°	675.6	675.6
80°	501.0	504.2
82.5°	345.9	352.3
85°	216.6	216.6
87.5°	100.2	90.5
90°	45.3	45.3
92.5°	181.4	145.4
95°	632.0	523.0
97.5°	1514.3	1306.8
100°	2181.9	1934.6
102.5°	2838.5	2626.8
105°	3675.8	3562.0
107.5°	4224.2	4251.7
110°	4433.3	4551.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4451.9	4634.0
115°	4333.9	4586.4
117.5°	4083.6	4363.7
120°	3881.9	4154.0
122.5°	3685.4	3953.9
125°	3405.2	3652.5
127.5°	3153.2	3361.8
130°	3004.7	3197.4
132.5°	2869.9	3042.5
135°	2685.3	2834.1
137.5°	2537.1	2658.9
140°	2435.5	2549.4
142.5°	2351.3	2449.3
145°	2225.1	2299.2
147.5°	2128.1	2189.5
150°	2067.2	2116.9
152.5°	2015.0	2052.6
155°	1955.1	1979.9
157.5°	1907.6	1925.1
160°	1879.3	1889.4
162.5°	1860.7	1870.3
165°	1834.1	1844.1
167.5°	1814.9	1819.1
170°	1809.5	1809.5
172.5°	1795.4	1791.7
175°	1786.9	1786.9
177.5°	1779.2	1775.0
180°	1775.0	1775.0

(END OF REPORT)