

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: P938405

Luminaire Tested: SQ4-FB-150U-075D-B50-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938405
REPORT IS A COMBINATION OF REPORTS P933622 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

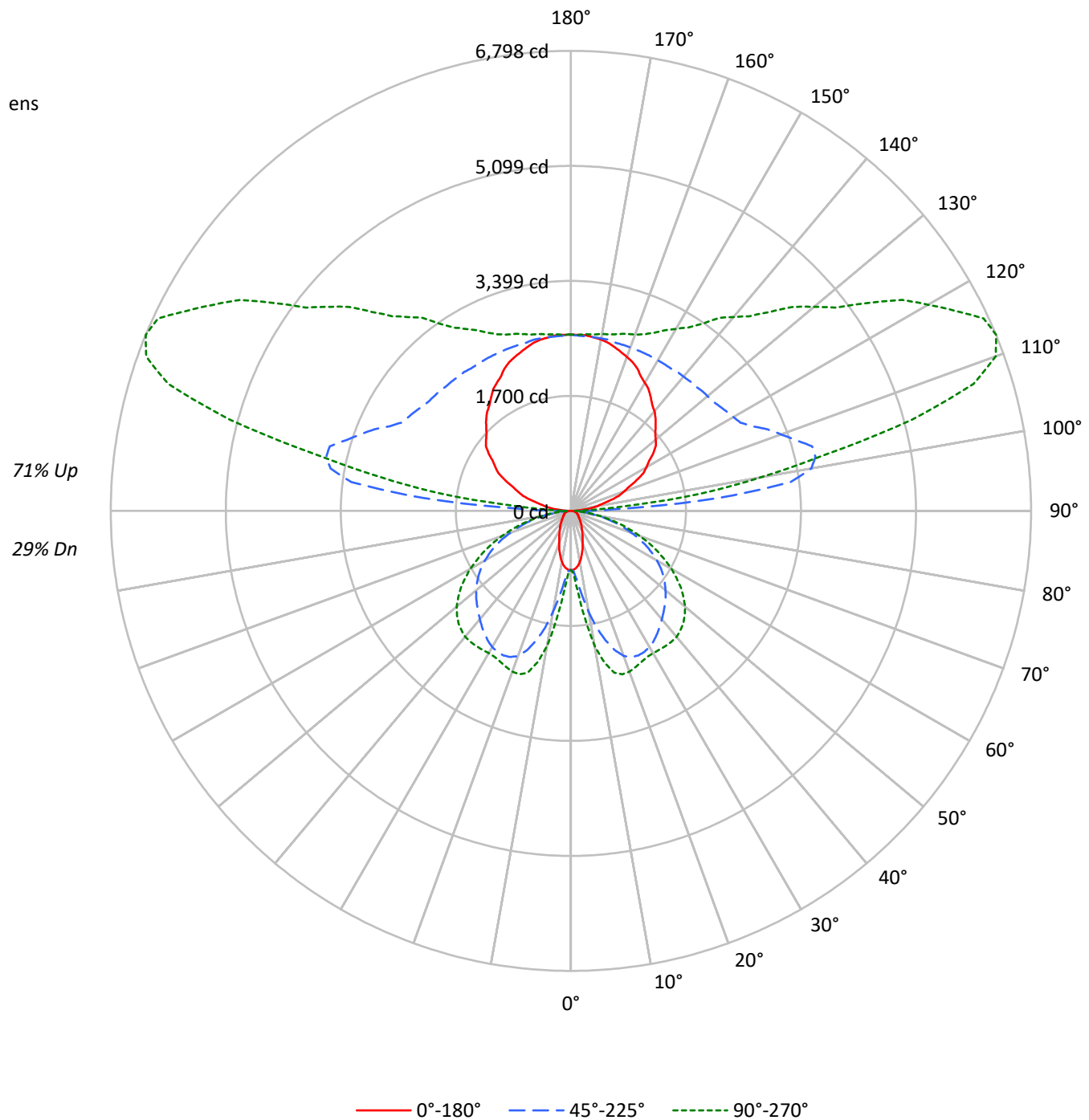
Lumens per Lamp: N/A
Luminaire Lumens: 23632.0 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 190.8
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2695	2695	2695
5°	2634	3116	3623
10°	2390	4544	6007
15°	2032	5938	7253
20°	1655	6882	7392
25°	1381	7204	7242
30°	1165	7251	7228
35°	1031	7133	7415
40°	899	6978	7608
45°	814	6866	7638
50°	748	6765	7512
55°	717	6616	7178
60°	735	6329	6653
65°	766	5890	5930
70°	818	5140	5010
75°	910	4195	3909
80°	1000	2913	2634
85°	907	1548	1348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.7	0.5
10°-20°	499.6	2.1
20°-30°	873.9	3.7
30°-40°	1125.0	4.8
40°-50°	1256.5	5.3
50°-60°	1203.5	5.1
60°-70°	953.8	4.0
70°-80°	560.8	2.4
80°-90°	165.7	0.7
90°-100°	1269.3	5.4
100°-110°	3337.1	14.1
110°-120°	3460.2	14.6
120°-130°	2775.5	11.7
130°-140°	2177.8	9.2
140°-150°	1671.5	7.1
150°-160°	1203.8	5.1
160°-170°	736.5	3.1
170°-180°	248.8	1.1
0°-30°	1486.2	6.3
0°-40°	2611.2	11.0
0°-60°	5071.2	21.5
0°-90°	6751.5	28.6
90°-120°	8066.6	34.1
90°-150°	14691.3	62.2
90°-180°	16880.0	71.4
0°-180°	23632.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	849	911	1026	1160	1202	78
15°	636	1174	1978	2399	2474	177
25°	406	1331	2357	2460	2463	187
35°	275	1272	2219	2345	2438	171
45°	188	1014	1962	2247	2348	145
55°	134	644	1664	1934	1987	123
65°	106	342	1236	1390	1410	106
75°	78	210	678	745	748	82
85°	28	64	168	185	188	30
90°	18	49	133	66	66	16
95°	168	657	2186	1127	767	186
105°	601	911	3689	5601	5225	637
115°	1068	1297	2955	5895	6728	1055
125°	1486	1666	2688	4542	5358	1319
135°	1770	1949	2604	3666	4158	1370
145°	2054	2184	2571	3128	3373	1286
155°	2321	2386	2571	2822	2905	1066
165°	2504	2538	2571	2672	2705	707
175°	2604	2604	2588	2622	2622	247
180°	2604	2604	2604	2604	2604	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4
2.5°	871.4	871.4	877.0	879.8	885.4	888.2	893.8	899.4	916.3	919.1	924.7
5°	849.0	860.2	896.6	910.6	949.9	1003.1	1025.5	1062.1	1137.7	1160.1	1174.1
7.5°	815.4	840.6	930.3	952.7	1050.8	1190.9	1249.8	1328.2	1448.7	1507.6	1555.2
10°	762.1	815.4	975.1	1028.3	1188.1	1401.1	1510.4	1619.6	1801.8	1883.0	1913.9
12.5°	703.3	790.2	1022.7	1095.7	1325.4	1636.5	1768.2	1888.6	2096.0	2205.3	2222.1
15°	636.1	753.7	1067.7	1174.1	1471.1	1832.6	1978.3	2126.8	2320.1	2398.6	2418.2
17.5°	577.2	725.7	1109.7	1221.8	1583.2	2009.1	2157.6	2280.9	2437.8	2491.1	2505.1
20°	504.4	680.9	1137.7	1283.4	1700.9	2138.0	2280.9	2376.2	2482.7	2516.3	2521.9
22.5°	451.1	633.3	1154.5	1305.8	1779.4	2216.5	2337.0	2412.6	2485.5	2496.7	2499.5
25°	406.3	580.0	1151.7	1331.0	1846.6	2264.1	2356.6	2412.6	2454.6	2460.2	2460.2
27.5°	364.3	521.2	1140.5	1336.6	1897.0	2275.3	2348.2	2387.4	2407.0	2418.2	2418.2
30°	327.8	465.1	1112.5	1325.4	1919.5	2264.1	2323.0	2342.6	2362.2	2379.0	2387.4
32.5°	299.8	411.9	1070.5	1303.0	1922.3	2236.1	2278.1	2289.3	2317.3	2356.6	2370.6
35°	274.6	358.7	1022.7	1272.2	1905.5	2191.3	2219.3	2230.5	2286.5	2345.4	2365.0
37.5°	249.4	319.4	961.1	1219.0	1880.2	2138.0	2157.6	2177.2	2264.1	2334.2	2356.6
40°	224.2	285.8	888.2	1160.1	1841.0	2073.6	2090.4	2121.2	2236.1	2317.3	2339.8
42.5°	204.5	257.8	809.8	1098.5	1790.6	2000.7	2025.9	2070.8	2202.5	2289.3	2314.5
45°	187.7	229.8	725.7	1014.3	1726.1	1925.1	1961.5	2023.1	2163.2	2247.3	2269.7
47.5°	170.9	210.2	638.9	927.5	1656.1	1849.4	1897.0	1967.1	2110.0	2191.3	2210.9
50°	156.9	190.5	552.0	835.0	1580.4	1768.2	1824.2	1897.0	2042.8	2118.4	2143.6
52.5°	145.7	173.7	470.7	742.5	1493.6	1684.1	1748.5	1824.2	1961.5	2034.3	2051.2
55°	134.5	159.7	400.7	644.5	1403.9	1594.4	1664.5	1737.3	1871.8	1933.5	1944.7
57.5°	128.9	148.5	341.8	552.0	1308.6	1493.6	1572.0	1639.3	1765.4	1813.0	1824.2
60°	120.5	140.1	297.0	473.5	1205.0	1398.3	1465.5	1532.8	1639.3	1678.5	1686.9
62.5°	112.1	134.5	263.4	397.9	1098.5	1286.2	1353.5	1415.1	1504.8	1532.8	1544.0
65°	106.5	128.9	238.2	341.8	989.1	1168.5	1235.8	1289.0	1361.9	1389.9	1395.5
67.5°	100.9	123.3	218.6	294.2	879.8	1050.8	1101.3	1151.7	1207.8	1235.8	1238.6
70°	92.5	117.7	201.7	260.6	767.7	916.3	958.3	1011.5	1056.4	1070.5	1078.9
72.5°	86.9	109.3	190.5	235.4	652.9	787.4	826.6	857.4	896.6	910.6	910.6
75°	78.5	98.1	179.3	210.2	535.2	644.5	678.1	708.9	739.7	745.3	736.9
77.5°	70.0	86.9	154.1	176.5	417.5	510.0	538.0	554.8	580.0	585.6	588.4
80°	58.8	75.7	120.5	137.3	302.6	375.5	395.1	409.1	431.5	431.5	437.1
82.5°	44.8	58.8	86.9	98.1	204.5	257.8	274.6	283.0	297.0	297.0	297.0
85°	28.0	36.4	56.0	64.4	123.3	156.9	168.1	170.9	182.1	184.9	184.9
87.5°	14.0	19.6	36.4	39.2	64.4	81.3	81.3	86.9	86.9	84.1	81.3
90°	17.5	31.5	45.5	48.9	76.9	114.1	132.8	118.1	88.5	66.4	66.4
92.5°	69.9	188.7	307.6	337.3	474.2	656.7	747.9	655.5	470.6	332.0	318.9
95°	167.7	385.2	602.7	657.1	1166.8	1846.5	2186.3	1950.9	1480.3	1127.2	1087.3
97.5°	290.1	481.9	673.8	721.8	1571.7	2705.0	3271.5	3122.8	2825.4	2602.2	2526.1
100°	384.4	558.4	732.4	776.0	1719.1	2976.6	3605.3	3616.2	3637.9	3654.3	3563.6
102.5°	464.9	627.2	789.5	830.1	1786.6	3062.0	3699.8	3889.3	4268.3	4552.6	4474.9
105°	601.2	738.7	876.2	910.6	1836.8	3071.7	3689.2	4114.1	4963.8	5601.1	5559.4
107.5°	741.0	869.2	997.3	1029.4	1846.1	2935.0	3479.5	4072.1	5257.4	6146.4	6156.5
110°	835.4	951.1	1066.8	1095.8	1832.1	2813.9	3304.8	3967.4	5292.4	6286.2	6329.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	928.0	1038.3	1148.6	1176.2	1832.7	2708.0	3145.7	3823.8	5180.0	6197.1	6263.9
115°	1067.8	1169.6	1271.4	1296.8	1849.6	2586.7	2955.3	3608.5	4914.9	5894.8	5987.4
117.5°	1205.9	1298.3	1390.7	1413.8	1883.9	2510.7	2824.1	3413.7	4592.8	5477.1	5579.8
120°	1286.2	1373.3	1460.2	1482.0	1911.9	2485.1	2771.7	3310.4	4387.7	5195.7	5295.5
122.5°	1364.9	1452.7	1540.4	1562.4	1952.2	2471.7	2731.6	3216.6	4186.7	4914.3	5012.8
125°	1485.5	1565.5	1645.5	1665.5	2006.3	2460.7	2687.9	3099.9	3924.0	4542.0	4632.7
127.5°	1583.3	1664.1	1744.9	1765.1	2060.4	2454.3	2651.2	3005.0	3712.6	4243.3	4319.8
130°	1635.8	1722.8	1809.7	1831.5	2100.0	2458.1	2637.1	2952.1	3582.1	4054.5	4125.2
132.5°	1690.0	1776.9	1863.9	1885.7	2132.0	2460.6	2624.9	2906.9	3470.8	3893.8	3957.1
135°	1770.3	1849.5	1928.8	1948.6	2167.1	2458.4	2604.0	2840.1	3312.3	3666.5	3721.1
137.5°	1852.5	1931.0	2009.4	2029.0	2219.5	2473.4	2600.4	2800.0	3199.3	3498.8	3543.4
140°	1920.7	1992.9	2065.2	2083.2	2251.5	2475.9	2588.2	2760.6	3105.6	3364.2	3405.9
142.5°	1973.1	2039.9	2106.6	2123.4	2278.3	2484.9	2588.2	2739.7	3042.6	3269.8	3305.8
145°	2053.5	2111.8	2170.0	2184.5	2313.2	2484.9	2570.7	2694.6	2942.4	3128.2	3155.4
147.5°	2133.8	2190.5	2247.2	2261.4	2364.5	2502.0	2570.7	2668.3	2863.2	3009.4	3032.0
150°	2186.3	2237.6	2288.9	2301.7	2391.3	2511.0	2570.7	2653.1	2817.8	2941.3	2959.5
152.5°	2240.5	2279.3	2318.1	2327.8	2408.8	2516.8	2570.7	2641.1	2781.6	2887.1	2900.9
155°	2320.9	2349.7	2378.3	2385.5	2447.3	2529.6	2570.7	2626.7	2738.6	2822.5	2831.6
157.5°	2380.3	2408.2	2436.2	2443.2	2485.7	2542.3	2570.7	2614.3	2701.2	2766.5	2773.0
160°	2420.5	2442.2	2464.0	2469.4	2503.2	2548.2	2570.7	2608.0	2682.5	2738.5	2742.2
162.5°	2460.6	2477.0	2493.2	2497.3	2521.8	2554.4	2570.7	2602.2	2665.2	2712.3	2715.8
165°	2504.3	2519.1	2533.8	2537.6	2548.6	2563.4	2570.7	2593.3	2638.3	2672.1	2675.8
167.5°	2544.6	2551.6	2558.5	2560.3	2569.6	2582.0	2588.2	2603.0	2632.5	2654.6	2656.2
170°	2570.7	2577.7	2584.8	2586.5	2587.1	2587.8	2588.2	2603.0	2632.5	2654.6	2654.6
172.5°	2584.8	2586.2	2587.8	2588.2	2588.2	2588.2	2588.2	2599.9	2623.2	2640.7	2639.3
175°	2604.0	2604.0	2604.0	2604.0	2598.8	2591.8	2588.2	2595.6	2610.3	2621.5	2621.5
177.5°	2604.0	2604.0	2604.0	2604.0	2599.9	2594.5	2591.8	2597.5	2609.2	2617.9	2616.3
180°	2604.0	2604.0	2604.0	2604.0	2604.0	2604.0	2604.0	2604.0	2604.0	2604.0	2604.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	871.4	871.4
2.5°	930.3	924.7
5°	1196.5	1202.2
7.5°	1611.2	1608.4
10°	2003.5	2028.7
12.5°	2289.3	2294.9
15°	2463.1	2474.3
17.5°	2530.3	2533.1
20°	2533.1	2527.5
22.5°	2502.3	2496.7
25°	2465.9	2463.1
27.5°	2432.2	2435.0
30°	2418.2	2426.6
32.5°	2418.2	2432.2
35°	2423.8	2437.8
37.5°	2421.0	2437.8
40°	2409.8	2429.4
42.5°	2379.0	2393.0
45°	2331.4	2348.2
47.5°	2269.7	2280.9
50°	2191.3	2202.5
52.5°	2093.2	2096.0
55°	1975.5	1986.7
57.5°	1849.4	1852.2
60°	1709.3	1717.7
62.5°	1560.8	1560.8
65°	1403.9	1409.5
67.5°	1241.4	1255.4
70°	1076.1	1078.9
72.5°	913.5	913.5
75°	745.3	748.1
77.5°	585.6	585.6
80°	434.3	437.1
82.5°	299.8	305.4
85°	187.7	187.7
87.5°	86.9	78.5
90°	66.4	66.4
92.5°	266.0	213.2
95°	927.2	767.2
97.5°	2221.6	1917.1
100°	3200.9	2838.1
102.5°	4164.2	3853.5
105°	5392.4	5225.4
107.5°	6196.9	6237.3
110°	6503.7	6677.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	6531.1	6798.3
115°	6357.8	6728.3
117.5°	5990.7	6401.5
120°	5694.7	6094.0
122.5°	5406.6	5800.4
125°	4995.5	5358.3
127.5°	4625.8	4931.8
130°	4407.9	4690.6
132.5°	4210.2	4463.4
135°	3939.3	4157.6
137.5°	3722.1	3900.7
140°	3572.9	3739.9
142.5°	3449.4	3593.1
145°	3264.2	3373.0
147.5°	3122.1	3212.1
150°	3032.5	3105.6
152.5°	2956.0	3011.1
155°	2868.0	2904.6
157.5°	2798.5	2824.1
160°	2757.0	2771.7
162.5°	2729.8	2743.8
165°	2690.6	2705.3
167.5°	2662.4	2668.6
170°	2654.6	2654.6
172.5°	2633.9	2628.5
175°	2621.5	2621.5
177.5°	2610.2	2604.0
180°	2604.0	2604.0

(END OF REPORT)