

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: P938605

Luminaire Tested: SQ4-FB-150U-125D-B50-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938605
REPORT IS A COMBINATION OF REPORTS P933624 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

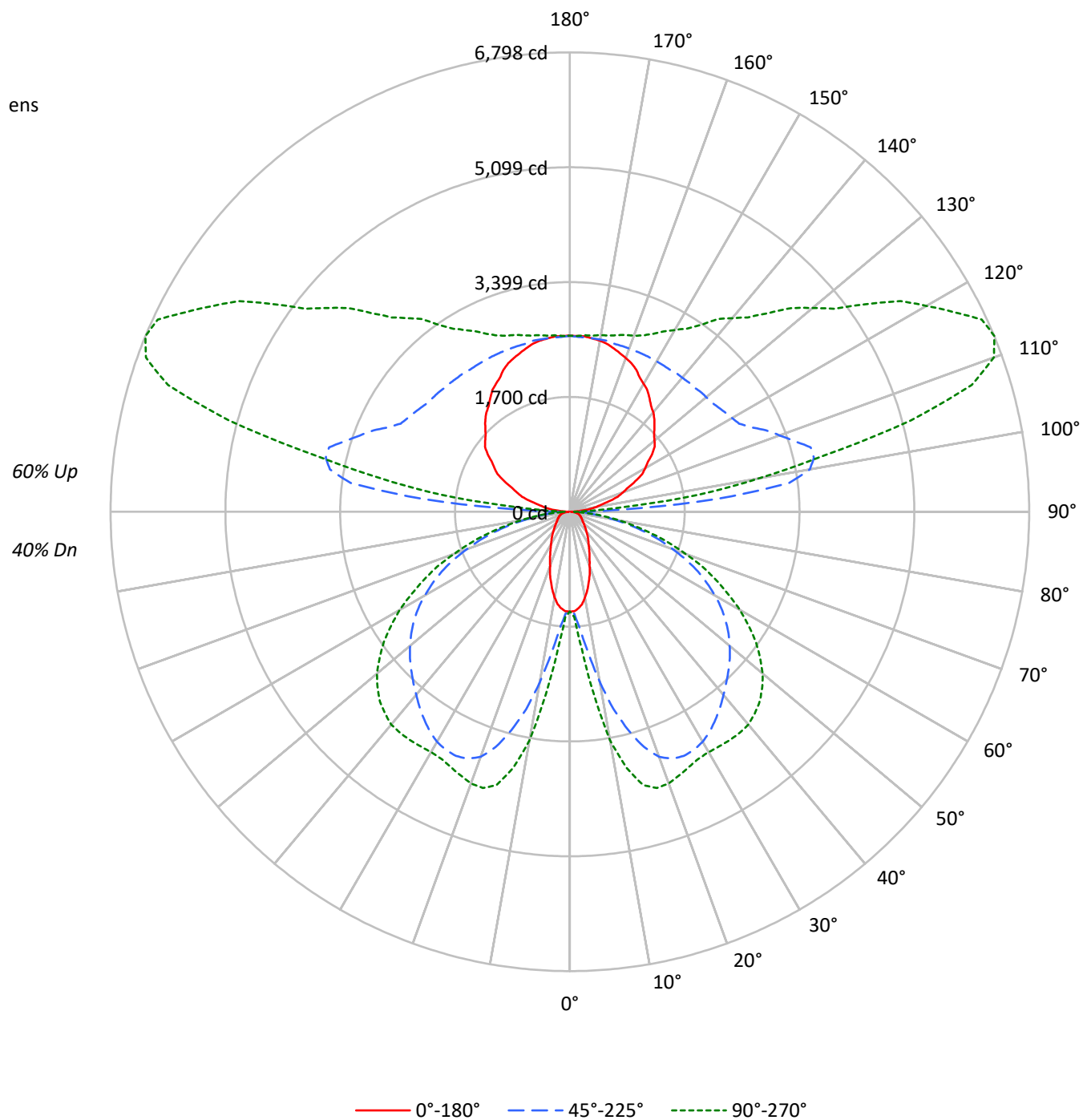
Lumens per Lamp: N/A
Luminaire Lumens: 28298.3 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 249.6
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°	4561	4561	4561
5°	4458	5273	6131
10°	4045	7688	10164
15°	3439	10047	12273
20°	2801	11646	12508
25°	2337	12190	12254
30°	1972	12270	12231
35°	1745	12069	12547
40°	1521	11808	12874
45°	1378	11618	12924
50°	1265	11447	12710
55°	1213	11196	12147
60°	1243	10709	11257
65°	1296	9966	10035
70°	1383	8698	8477
75°	1538	7098	6616
80°	1694	4929	4458
85°	1536	2620	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.8	0.7
10°-20°	845.4	3.0
20°-30°	1478.8	5.2
30°-40°	1903.6	6.7
40°-50°	2126.3	7.5
50°-60°	2036.5	7.2
60°-70°	1613.9	5.7
70°-80°	949.0	3.4
80°-90°	273.6	1.0
90°-100°	1269.3	4.5
100°-110°	3337.1	11.8
110°-120°	3460.2	12.2
120°-130°	2775.5	9.8
130°-140°	2177.8	7.7
140°-150°	1671.5	5.9
150°-160°	1203.8	4.3
160°-170°	736.5	2.6
170°-180°	248.8	0.9
0°-30°	2514.9	8.9
0°-40°	4418.6	15.6
0°-60°	8581.3	30.3
0°-90°	11417.8	40.3
90°-120°	8066.6	28.5
90°-150°	14691.3	51.9
90°-180°	16880.0	59.7
0°-180°	28298.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1475	1475	1475	1475	1475	
5°	1437	1541	1736	1963	2034	133
15°	1076	1987	3348	4059	4187	300
25°	688	2252	3988	4163	4168	317
35°	465	2153	3755	3969	4125	290
45°	318	1716	3319	3803	3974	246
55°	228	1090	2817	3272	3362	207
65°	180	578	2091	2352	2385	179
75°	133	356	1148	1261	1266	139
85°	47	109	284	313	318	50
90°	18	49	133	66	66	18
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°	1474.7	1474.7	1474.7	1474.7	1474.7	1474.7	1474.7	1474.7	1474.7	1474.7	1474.7
2.5°	1474.7	1474.7	1484.1	1488.9	1498.3	1503.1	1512.6	1522.0	1550.5	1555.3	1564.7
5°	1436.7	1455.6	1517.3	1541.0	1607.4	1697.5	1735.5	1797.1	1925.1	1963.1	1986.7
7.5°	1379.8	1422.5	1574.3	1612.2	1778.1	2015.2	2114.8	2247.6	2451.5	2551.0	2631.6
10°	1289.8	1379.8	1650.1	1740.1	2010.4	2370.8	2555.7	2740.6	3048.9	3186.3	3238.6
12.5°	1190.2	1337.1	1730.7	1854.0	2242.8	2769.1	2992.0	3195.9	3546.8	3731.7	3760.1
15°	1076.3	1275.5	1806.5	1986.7	2489.4	3101.1	3347.5	3598.9	3926.1	4058.9	4092.0
17.5°	976.8	1228.1	1877.7	2067.3	2679.0	3399.8	3651.1	3859.7	4125.2	4215.3	4239.1
20°	853.5	1152.2	1925.1	2171.6	2878.2	3617.8	3859.7	4020.9	4201.1	4258.0	4267.4
22.5°	763.4	1071.6	1953.6	2209.6	3010.9	3750.7	3954.6	4082.5	4205.8	4224.8	4229.5
25°	687.5	981.5	1948.8	2252.2	3124.7	3831.3	3987.7	4082.5	4153.7	4163.1	4163.1
27.5°	616.4	882.0	1929.8	2261.8	3210.1	3850.2	3973.5	4039.8	4073.1	4092.0	4092.0
30°	554.8	787.1	1882.4	2242.8	3248.0	3831.3	3930.8	3964.0	3997.2	4025.6	4039.8
32.5°	507.3	697.0	1811.3	2204.9	3252.7	3783.8	3855.0	3874.0	3921.3	3987.7	4011.4
35°	464.7	606.9	1730.7	2152.7	3224.4	3708.0	3755.3	3774.4	3869.2	3968.8	4001.9
37.5°	422.0	540.5	1626.4	2062.6	3181.7	3617.8	3651.1	3684.3	3831.3	3949.8	3987.7
40°	379.3	483.6	1503.1	1963.1	3115.3	3508.9	3537.2	3589.5	3783.8	3921.3	3959.2
42.5°	346.1	436.3	1370.4	1858.8	3029.9	3385.6	3428.2	3504.1	3726.9	3874.0	3916.6
45°	317.7	388.8	1228.1	1716.5	2920.8	3257.5	3319.2	3423.5	3660.5	3802.8	3840.7
47.5°	289.3	355.7	1081.1	1569.5	2802.3	3129.5	3210.1	3328.6	3570.5	3708.0	3741.1
50°	265.5	322.4	934.1	1413.0	2674.3	2992.0	3086.8	3210.1	3456.6	3584.7	3627.4
52.5°	246.6	294.0	796.6	1256.5	2527.3	2849.7	2958.8	3086.8	3319.2	3442.4	3470.8
55°	227.6	270.3	678.1	1090.5	2375.5	2698.0	2816.6	2939.9	3167.4	3271.7	3290.7
57.5°	218.1	251.3	578.5	934.1	2214.3	2527.3	2660.0	2773.9	2987.2	3067.8	3086.8
60°	203.9	237.0	502.6	801.4	2038.9	2366.1	2479.9	2593.7	2773.9	2840.2	2854.5
62.5°	189.7	227.6	445.7	673.3	1858.8	2176.4	2290.2	2394.5	2546.3	2593.7	2612.7
65°	180.2	218.1	403.0	578.5	1673.8	1977.3	2091.0	2181.2	2304.5	2351.8	2361.3
67.5°	170.7	208.7	369.9	497.9	1488.9	1778.1	1863.4	1948.8	2043.7	2091.0	2095.8
70°	156.4	199.1	341.4	440.9	1299.2	1550.5	1621.6	1711.7	1787.6	1811.3	1825.5
72.5°	147.0	184.9	322.4	398.3	1104.8	1332.4	1398.8	1451.0	1517.3	1541.0	1541.0
75°	132.7	166.0	303.5	355.7	905.6	1090.5	1147.5	1199.6	1251.7	1261.3	1247.1
77.5°	118.5	147.0	260.8	298.7	706.5	863.0	910.4	938.9	981.5	991.0	995.7
80°	99.6	128.1	203.9	232.4	512.1	635.4	668.6	692.3	730.2	730.2	739.7
82.5°	75.8	99.6	147.0	166.0	346.1	436.3	464.7	478.9	502.6	502.6	502.6
85°	47.4	61.6	94.8	109.1	208.7	265.5	284.5	289.3	308.2	313.0	313.0
87.5°	23.7	33.2	61.6	66.4	109.1	137.5	137.5	147.0	147.0	142.2	137.5
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°	1474.7	1474.7
2.5°	1574.3	1564.7
5°	2024.7	2034.2
7.5°	2726.4	2721.7
10°	3390.2	3432.9
12.5°	3874.0	3883.4
15°	4167.9	4186.8
17.5°	4281.7	4286.4
20°	4286.4	4277.0
22.5°	4234.3	4224.8
25°	4172.6	4167.9
27.5°	4115.8	4120.5
30°	4092.0	4106.2
32.5°	4092.0	4115.8
35°	4101.5	4125.2
37.5°	4096.8	4125.2
40°	4077.8	4111.0
42.5°	4025.6	4049.4
45°	3945.0	3973.5
47.5°	3840.7	3859.7
50°	3708.0	3726.9
52.5°	3542.0	3546.8
55°	3342.9	3361.8
57.5°	3129.5	3134.2
60°	2892.4	2906.6
62.5°	2641.1	2641.1
65°	2375.5	2385.1
67.5°	2100.6	2124.3
70°	1820.8	1825.5
72.5°	1545.8	1545.8
75°	1261.3	1266.0
77.5°	991.0	991.0
80°	735.0	739.7
82.5°	507.3	516.9
85°	317.7	317.7
87.5°	147.0	132.7
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)