

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: P938497

Luminaire Tested: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938497
REPORT IS A COMBINATION OF REPORTS P933623 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-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

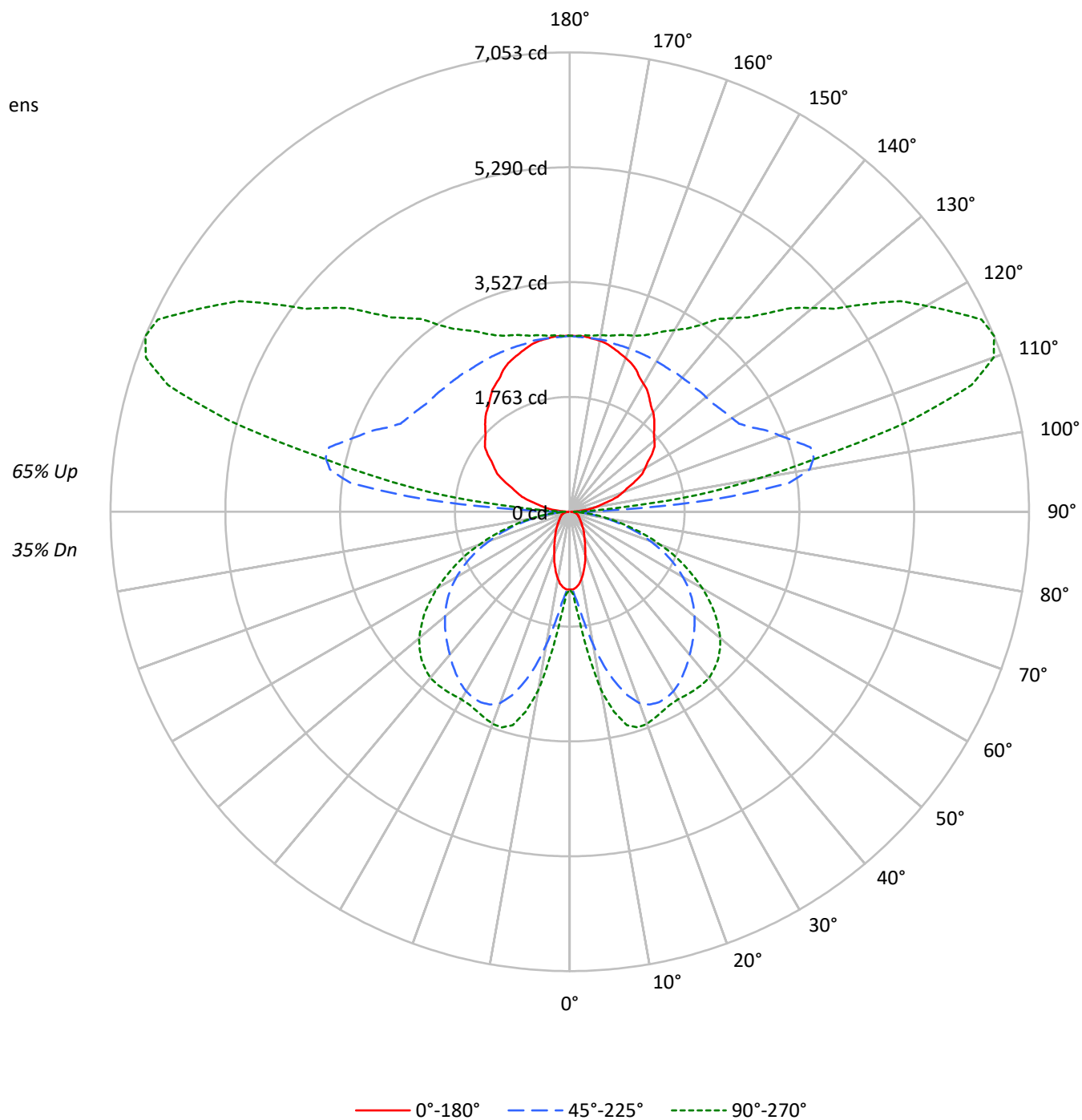
Lumens per Lamp: N/A
Luminaire Lumens: 26763.8 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 217.2
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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9

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	0.6
10°-20°	684.8	2.6
20°-30°	1197.8	4.5
30°-40°	1541.9	5.8
40°-50°	1722.3	6.4
50°-60°	1649.5	6.2
60°-70°	1307.3	4.9
70°-80°	768.7	2.9
80°-90°	223.9	0.8
90°-100°	1316.9	4.9
100°-110°	3462.1	12.9
110°-120°	3589.9	13.4
120°-130°	2879.5	10.8
130°-140°	2259.4	8.4
140°-150°	1734.2	6.5
150°-160°	1248.9	4.7
160°-170°	764.1	2.9
170°-180°	258.2	1.0
0°-30°	2037.1	7.6
0°-40°	3579.0	13.4
0°-60°	6950.9	26.0
0°-90°	9250.7	34.6
90°-120°	8368.8	31.3
90°-150°	15241.9	56.9
90°-180°	17513.0	65.4
0°-180°	26763.8	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°	18	51	138	69	69	18
95°	174	682	2268	1170	796	193
105°	624	945	3828	5811	5421	661
115°	1108	1345	3066	6116	6980	1094
125°	1541	1728	2789	4712	5559	1368
135°	1837	2022	2702	3804	4313	1421
145°	2130	2266	2667	3246	3499	1335
155°	2408	2475	2667	2928	3013	1106
165°	2598	2633	2667	2772	2807	733
175°	2702	2702	2685	2720	2720	256
180°	2702	2702	2702	2702	2702	

TEST NUMBER: P938497

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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°	18.1	32.7	47.2	50.8	79.7	118.4	137.8	122.5	91.9	68.9	68.9
92.5°	72.5	195.7	319.1	349.9	492.0	681.3	776.0	680.0	488.3	344.5	330.8
95°	174.0	399.6	625.3	681.7	1210.6	1915.7	2268.2	2024.0	1535.8	1169.5	1128.0
97.5°	301.0	500.0	699.0	748.8	1630.6	2806.3	3394.1	3239.9	2931.2	2699.7	2620.8
100°	398.8	579.4	759.9	805.0	1783.5	3088.1	3740.4	3751.7	3774.3	3791.2	3697.1
102.5°	482.3	650.7	819.1	861.2	1853.6	3176.8	3838.4	4035.0	4428.2	4723.2	4642.6
105°	623.7	766.4	909.0	944.7	1905.6	3186.8	3827.5	4268.3	5149.8	5811.0	5767.7
107.5°	768.8	901.8	1034.7	1067.9	1915.2	3045.0	3609.9	4224.7	5454.4	6376.7	6387.2
110°	866.7	986.7	1106.8	1136.8	1900.8	2919.3	3428.6	4116.0	5490.7	6521.8	6566.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	962.8	1077.2	1191.7	1220.3	1901.4	2809.5	3263.6	3967.1	5374.1	6429.3	6498.6
115°	1107.9	1213.4	1319.0	1345.4	1918.9	2683.6	3066.0	3743.7	5099.1	6115.6	6211.8
117.5°	1251.1	1346.9	1442.8	1466.8	1954.5	2604.8	2930.0	3541.6	4764.9	5682.3	5788.9
120°	1334.4	1424.7	1514.9	1537.5	1983.5	2578.2	2875.6	3434.4	4552.1	5390.4	5493.9
122.5°	1416.0	1507.1	1598.2	1620.9	2025.3	2564.4	2833.9	3337.1	4343.6	5098.5	5200.6
125°	1541.2	1624.1	1707.2	1727.9	2081.5	2552.9	2788.6	3216.1	4071.1	4712.2	4806.3
127.5°	1642.6	1726.5	1810.3	1831.2	2137.6	2546.2	2750.5	3117.6	3851.7	4402.3	4481.6
130°	1697.1	1787.3	1877.5	1900.1	2178.7	2550.2	2736.0	3062.7	3716.3	4206.4	4279.8
132.5°	1753.3	1843.5	1933.7	1956.3	2211.9	2552.8	2723.3	3015.8	3600.9	4039.7	4105.4
135°	1836.6	1918.8	2001.1	2021.6	2248.3	2550.5	2701.6	2946.5	3436.5	3803.9	3860.5
137.5°	1921.9	2003.3	2084.7	2105.1	2302.6	2566.1	2697.9	2905.0	3319.2	3629.9	3676.2
140°	1992.7	2067.6	2142.6	2161.3	2335.9	2568.7	2685.2	2864.1	3221.9	3490.2	3533.6
142.5°	2047.0	2116.3	2185.6	2202.9	2363.7	2578.0	2685.2	2842.4	3156.6	3392.4	3429.7
145°	2130.4	2190.9	2251.3	2266.4	2399.9	2578.0	2667.1	2795.6	3052.6	3245.5	3273.7
147.5°	2213.8	2272.6	2331.4	2346.1	2453.1	2595.8	2667.1	2768.2	2970.5	3122.2	3145.6
150°	2268.2	2321.4	2374.6	2387.9	2480.9	2605.1	2667.1	2752.5	2923.4	3051.5	3070.4
152.5°	2324.4	2364.7	2405.0	2415.0	2499.1	2611.1	2667.1	2740.0	2885.9	2995.3	3009.6
155°	2407.9	2437.7	2467.5	2474.9	2539.0	2624.3	2667.1	2725.1	2841.2	2928.2	2937.7
157.5°	2469.5	2498.5	2527.4	2534.7	2578.8	2637.6	2667.1	2712.2	2802.4	2870.2	2876.9
160°	2511.2	2533.7	2556.3	2561.9	2597.0	2643.7	2667.1	2705.7	2783.1	2841.1	2845.0
162.5°	2552.8	2569.8	2586.6	2590.9	2616.3	2650.1	2667.1	2699.7	2765.0	2814.0	2817.6
165°	2598.2	2613.5	2628.8	2632.7	2644.1	2659.4	2667.1	2690.4	2737.1	2772.2	2776.1
167.5°	2639.9	2647.2	2654.4	2656.2	2665.9	2678.8	2685.2	2700.5	2731.1	2754.1	2755.7
170°	2667.1	2674.3	2681.6	2683.5	2684.0	2684.8	2685.2	2700.5	2731.1	2754.1	2754.1
172.5°	2681.6	2683.2	2684.8	2685.2	2685.2	2685.2	2685.2	2697.3	2721.5	2739.7	2738.2
175°	2701.6	2701.6	2701.6	2701.6	2696.1	2688.9	2685.2	2692.9	2708.2	2719.7	2719.7
177.5°	2701.6	2701.6	2701.6	2701.6	2697.3	2691.7	2688.9	2694.9	2707.0	2716.0	2714.4
180°	2701.6	2701.6	2701.6	2701.6	2701.6	2701.6	2701.6	2701.6	2701.6	2701.6	2701.6

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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°	68.9	68.9
92.5°	276.0	221.2
95°	961.9	795.9
97.5°	2304.9	1989.0
100°	3320.9	2944.5
102.5°	4320.3	3997.9
105°	5594.5	5421.3
107.5°	6429.1	6471.0
110°	6747.4	6928.0

TEST NUMBER: P938497

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	6775.8	7053.1
115°	6596.1	6980.5
117.5°	6215.2	6641.4
120°	5908.1	6322.3
122.5°	5609.3	6017.8
125°	5182.7	5559.1
127.5°	4799.2	5116.6
130°	4573.1	4866.4
132.5°	4368.0	4630.7
135°	4087.0	4313.4
137.5°	3861.6	4046.8
140°	3706.8	3880.1
142.5°	3578.7	3727.7
145°	3386.6	3499.3
147.5°	3239.1	3332.5
150°	3146.1	3221.9
152.5°	3066.8	3124.0
155°	2975.5	3013.4
157.5°	2903.4	2930.0
160°	2860.3	2875.6
162.5°	2832.1	2846.6
165°	2791.4	2806.7
167.5°	2762.1	2768.6
170°	2754.1	2754.1
172.5°	2732.6	2727.0
175°	2719.7	2719.7
177.5°	2708.0	2701.6
180°	2701.6	2701.6

(END OF REPORT)