

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: P938105

Luminaire Tested: SQ4-FB-125U-100D-B50-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938105
REPORT IS A COMBINATION OF REPORTS P933591 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

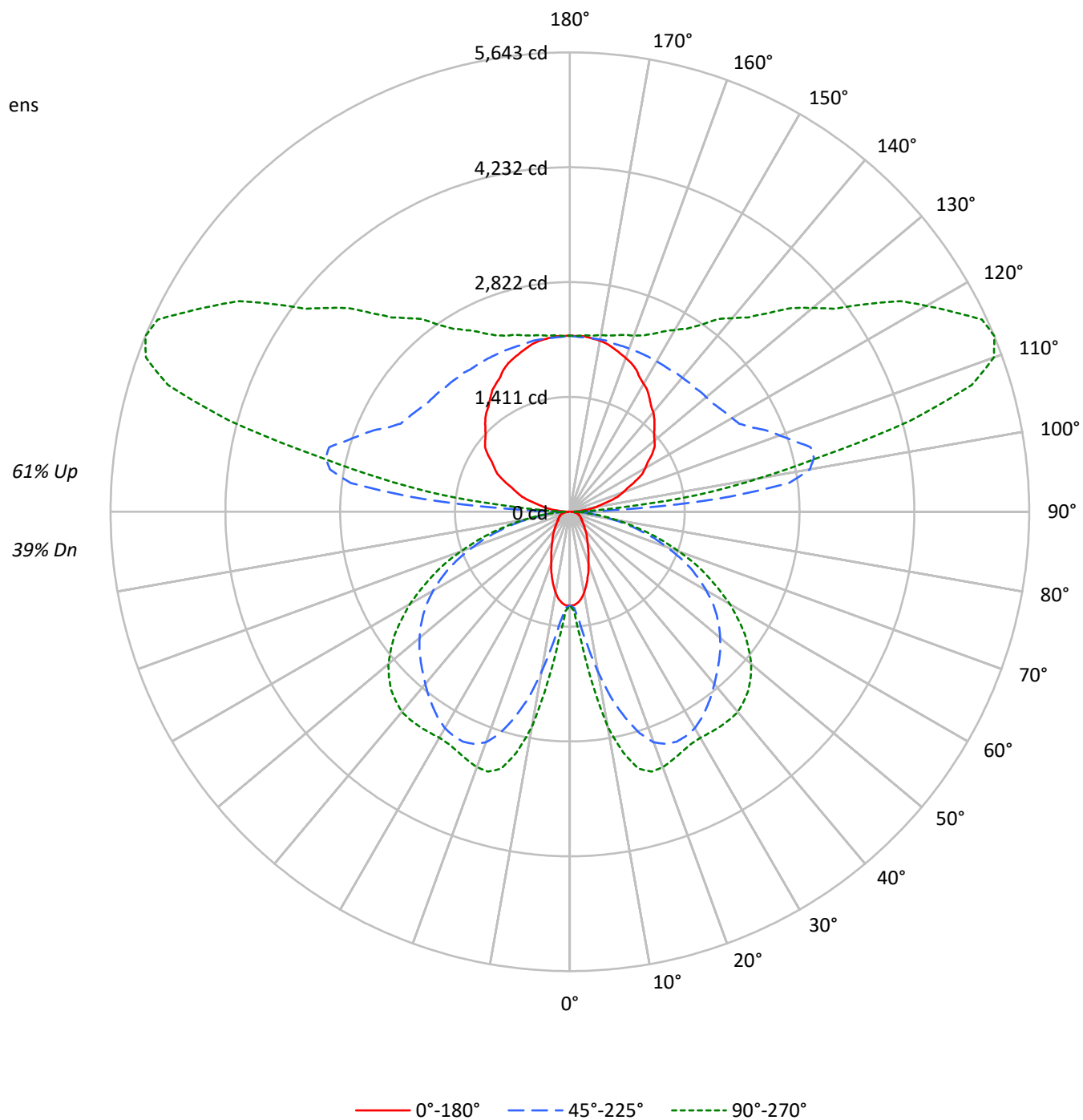
Lumens per Lamp: N/A
Luminaire Lumens: 22927.8 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 193.2
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3561	3561	3561
5°	3480	4117	4787
10°	3158	6003	7935
15°	2685	7844	9582
20°	2187	9093	9766
25°	1825	9517	9567
30°	1539	9580	9549
35°	1362	9423	9796
40°	1188	9219	10051
45°	1076	9070	10091
50°	988	8937	9924
55°	947	8741	9484
60°	971	8361	8789
65°	1012	7781	7835
70°	1080	6791	6619
75°	1202	5542	5166
80°	1322	3848	3480
85°	1199	2045	1782

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10091 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.9	0.6
10°-20°	660.1	2.9
20°-30°	1154.5	5.0
30°-40°	1486.2	6.5
40°-50°	1660.1	7.2
50°-60°	1590.0	6.9
60°-70°	1260.1	5.5
70°-80°	740.9	3.2
80°-90°	214.1	0.9
90°-100°	1053.7	4.6
100°-110°	2770.2	12.1
110°-120°	2872.4	12.5
120°-130°	2304.0	10.0
130°-140°	1807.8	7.9
140°-150°	1387.6	6.1
150°-160°	999.3	4.4
160°-170°	611.4	2.7
170°-180°	206.6	0.9
0°-30°	1963.5	8.6
0°-40°	3449.8	15.0
0°-60°	6699.8	29.2
0°-90°	8914.9	38.9
90°-120°	6696.3	29.2
90°-150°	12195.7	53.2
90°-180°	14013.0	61.1
0°-180°	22927.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1122	1203	1355	1533	1588	104
15°	840	1551	2614	3169	3269	234
25°	537	1758	3113	3250	3254	247
35°	363	1681	2932	3098	3221	227
45°	248	1340	2591	2969	3102	192
55°	178	851	2199	2554	2625	162
65°	141	452	1632	1836	1862	139
75°	104	278	896	985	988	109
85°	37	85	222	244	248	39
90°	14	41	110	55	55	14
95°	139	546	1815	936	637	155
105°	499	756	3062	4650	4338	529
115°	886	1076	2453	4893	5585	876
125°	1233	1383	2231	3770	4448	1095
135°	1470	1618	2162	3044	3451	1137
145°	1705	1814	2134	2597	2800	1068
155°	1927	1980	2134	2343	2411	885
165°	2079	2106	2134	2218	2246	587
175°	2162	2162	2149	2176	2176	205
180°	2162	2162	2162	2162	2162	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3
2.5°	1151.3	1151.3	1158.7	1162.5	1169.8	1173.6	1180.9	1188.3	1210.6	1214.3	1221.7
5°	1121.7	1136.5	1184.7	1203.2	1255.0	1325.3	1355.0	1403.1	1503.0	1532.6	1551.1
7.5°	1077.3	1110.6	1229.1	1258.7	1388.2	1573.3	1651.1	1754.7	1914.0	1991.7	2054.6
10°	1006.9	1077.3	1288.3	1358.6	1569.7	1851.0	1995.4	2139.8	2380.4	2487.7	2528.4
12.5°	929.2	1043.9	1351.2	1447.5	1751.1	2161.9	2335.9	2495.2	2769.1	2913.5	2935.7
15°	840.3	995.8	1410.4	1551.1	1943.6	2421.1	2613.6	2809.8	3065.3	3168.9	3194.8
17.5°	762.6	958.8	1466.0	1614.0	2091.6	2654.3	2850.6	3013.5	3220.7	3291.0	3309.6
20°	666.3	899.6	1503.0	1695.5	2247.1	2824.6	3013.5	3139.3	3279.9	3324.4	3331.8
22.5°	596.0	836.7	1525.2	1725.1	2350.8	2928.3	3087.4	3187.5	3283.7	3298.5	3302.2
25°	536.8	766.3	1521.5	1758.4	2439.6	2991.2	3113.4	3187.5	3242.9	3250.3	3250.3
27.5°	481.3	688.5	1506.7	1765.8	2506.3	3006.0	3102.3	3154.1	3180.0	3194.8	3194.8
30°	433.1	614.6	1469.6	1751.1	2535.9	2991.2	3068.9	3094.9	3120.8	3143.0	3154.1
32.5°	396.1	544.1	1414.2	1721.5	2539.5	2954.2	3009.7	3024.6	3061.6	3113.4	3131.9
35°	362.8	473.8	1351.2	1680.7	2517.3	2894.9	2932.0	2946.8	3020.8	3098.5	3124.5
37.5°	329.5	422.1	1269.8	1610.4	2484.1	2824.6	2850.6	2876.4	2991.2	3083.8	3113.4
40°	296.2	377.6	1173.6	1532.6	2432.2	2739.5	2761.7	2802.4	2954.2	3061.6	3091.2
42.5°	270.2	340.6	1069.9	1451.2	2365.5	2643.2	2676.6	2735.8	2909.8	3024.6	3057.8
45°	248.1	303.6	958.8	1340.1	2280.5	2543.3	2591.4	2672.8	2857.9	2969.0	2998.6
47.5°	225.8	277.7	844.1	1225.4	2187.9	2443.3	2506.3	2598.8	2787.6	2894.9	2920.9
50°	207.3	251.7	729.3	1103.2	2088.0	2335.9	2410.0	2506.3	2698.8	2798.7	2832.1
52.5°	192.5	229.5	622.0	981.1	1973.2	2224.9	2310.1	2410.0	2591.4	2687.7	2709.9
55°	177.7	211.0	529.4	851.4	1854.7	2106.5	2199.0	2295.2	2473.0	2554.4	2569.2
57.5°	170.3	196.2	451.7	729.3	1728.8	1973.2	2076.8	2165.7	2332.3	2395.1	2410.0
60°	159.2	185.1	392.4	625.6	1591.8	1847.3	1936.2	2025.0	2165.7	2217.5	2228.6
62.5°	148.0	177.7	348.0	525.7	1451.2	1699.2	1788.0	1869.5	1988.0	2025.0	2039.8
65°	140.7	170.3	314.7	451.7	1306.9	1543.7	1632.5	1703.0	1799.2	1836.2	1843.6
67.5°	133.3	162.9	288.8	388.7	1162.5	1388.2	1454.9	1521.5	1595.6	1632.5	1636.3
70°	122.2	155.5	266.6	344.3	1014.3	1210.6	1266.1	1336.5	1395.7	1414.2	1425.3
72.5°	114.8	144.4	251.7	310.9	862.5	1040.3	1092.1	1132.8	1184.7	1203.2	1203.2
75°	103.7	129.5	237.0	277.7	707.0	851.4	895.9	936.6	977.3	984.7	973.6
77.5°	92.6	114.8	203.6	233.2	551.6	673.8	710.8	733.0	766.3	773.7	777.5
80°	77.7	99.9	159.2	181.4	399.8	496.0	522.0	540.5	570.1	570.1	577.5
82.5°	59.2	77.7	114.8	129.5	270.2	340.6	362.8	373.9	392.4	392.4	392.4
85°	37.0	48.1	74.1	85.2	162.9	207.3	222.1	225.8	240.6	244.3	244.3
87.5°	18.5	25.9	48.1	51.8	85.2	107.3	107.3	114.8	114.8	111.1	107.3
90°	14.5	26.1	37.7	40.6	63.8	94.7	110.2	98.0	73.5	55.1	55.1
92.5°	58.0	156.6	255.4	280.0	393.7	545.2	620.9	544.1	390.7	275.6	264.7
95°	139.3	319.8	500.3	545.5	968.6	1532.8	1814.9	1619.5	1228.8	935.8	902.5
97.5°	240.8	400.0	559.4	599.2	1304.7	2245.4	2715.8	2592.3	2345.4	2160.2	2096.9
100°	319.1	463.6	608.0	644.2	1427.1	2471.0	2992.9	3002.0	3020.0	3033.5	2958.3
102.5°	385.9	520.7	655.4	689.1	1483.2	2541.9	3071.3	3228.6	3543.2	3779.2	3714.8
105°	499.0	613.2	727.3	755.9	1524.8	2549.9	3062.5	3415.2	4120.6	4649.6	4615.0
107.5°	615.1	721.5	827.9	854.5	1532.5	2436.5	2888.5	3380.4	4364.3	5102.3	5110.7
110°	693.5	789.5	885.6	909.6	1520.8	2335.8	2743.3	3293.4	4393.3	5218.4	5254.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	770.4	861.9	953.4	976.3	1521.3	2248.0	2611.4	3174.3	4300.0	5144.4	5199.9
115°	886.4	970.8	1055.3	1076.4	1535.4	2147.3	2453.2	2995.5	4080.0	4893.4	4970.3
117.5°	1001.1	1077.7	1154.5	1173.7	1563.9	2084.2	2344.4	2833.8	3812.6	4546.6	4631.9
120°	1067.7	1139.9	1212.2	1230.3	1587.1	2063.0	2300.9	2748.1	3642.4	4313.1	4396.0
122.5°	1133.0	1205.9	1278.7	1297.0	1620.5	2051.9	2267.6	2670.2	3475.5	4079.5	4161.3
125°	1233.2	1299.6	1366.0	1382.6	1665.5	2042.7	2231.2	2573.3	3257.4	3770.5	3845.7
127.5°	1314.4	1381.5	1448.5	1465.3	1710.4	2037.3	2200.8	2494.4	3081.8	3522.4	3585.9
130°	1357.9	1430.1	1502.3	1520.4	1743.3	2040.6	2189.2	2450.6	2973.6	3365.8	3424.4
132.5°	1402.9	1475.1	1547.4	1565.4	1769.9	2042.7	2179.0	2413.1	2881.2	3232.3	3284.9
135°	1469.6	1535.4	1601.2	1617.6	1799.0	2040.8	2161.6	2357.7	2749.7	3043.7	3089.0
137.5°	1537.8	1602.9	1668.0	1684.3	1842.4	2053.3	2158.8	2324.4	2655.8	2904.4	2941.4
140°	1594.3	1654.3	1714.3	1729.3	1869.0	2055.4	2148.6	2291.7	2577.9	2792.7	2827.3
142.5°	1637.9	1693.3	1748.8	1762.6	1891.3	2062.8	2148.6	2274.3	2525.8	2714.4	2744.2
145°	1704.6	1753.0	1801.4	1813.5	1920.3	2062.8	2134.1	2236.9	2442.6	2596.8	2619.4
147.5°	1771.3	1818.4	1865.5	1877.2	1962.9	2077.0	2134.1	2215.0	2376.8	2498.2	2516.8
150°	1814.9	1857.4	1900.0	1910.7	1985.1	2084.4	2134.1	2202.5	2339.1	2441.6	2456.7
152.5°	1859.9	1892.1	1924.4	1932.4	1999.7	2089.3	2134.1	2192.5	2309.1	2396.6	2408.1
155°	1926.6	1950.5	1974.3	1980.3	2031.5	2099.9	2134.1	2180.5	2273.4	2342.9	2350.5
157.5°	1976.0	1999.1	2022.4	2028.2	2063.5	2110.6	2134.1	2170.1	2242.3	2296.5	2301.8
160°	2009.3	2027.3	2045.5	2049.9	2078.0	2115.4	2134.1	2165.0	2226.9	2273.4	2276.4
162.5°	2042.7	2056.2	2069.7	2073.1	2093.5	2120.6	2134.1	2160.2	2212.5	2251.6	2254.5
165°	2078.9	2091.1	2103.4	2106.5	2115.7	2127.9	2134.1	2152.8	2190.1	2218.2	2221.2
167.5°	2112.3	2118.1	2123.9	2125.3	2133.1	2143.4	2148.6	2160.8	2185.3	2203.7	2205.0
170°	2134.1	2139.9	2145.7	2147.1	2147.5	2148.2	2148.6	2160.8	2185.3	2203.7	2203.7
172.5°	2145.7	2147.0	2148.3	2148.6	2148.6	2148.6	2148.6	2158.3	2177.6	2192.1	2191.0
175°	2161.6	2161.6	2161.6	2161.6	2157.3	2151.5	2148.6	2154.7	2167.0	2176.1	2176.1
177.5°	2161.6	2161.6	2161.6	2161.6	2158.3	2153.7	2151.5	2156.3	2165.9	2173.2	2171.9
180°	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1151.3	1151.3
2.5°	1229.1	1221.7
5°	1580.8	1588.2
7.5°	2128.7	2124.9
10°	2647.0	2680.2
12.5°	3024.6	3032.0
15°	3254.1	3268.9
17.5°	3342.9	3346.6
20°	3346.6	3339.2
22.5°	3305.9	3298.5
25°	3257.8	3254.1
27.5°	3213.3	3217.1
30°	3194.8	3206.0
32.5°	3194.8	3213.3
35°	3202.2	3220.7
37.5°	3198.5	3220.7
40°	3183.7	3209.6
42.5°	3143.0	3161.5
45°	3080.1	3102.3
47.5°	2998.6	3013.5
50°	2894.9	2909.8
52.5°	2765.4	2769.1
55°	2609.9	2624.7
57.5°	2443.3	2447.0
60°	2258.2	2269.3
62.5°	2062.0	2062.0
65°	1854.7	1862.1
67.5°	1640.0	1658.5
70°	1421.5	1425.3
72.5°	1206.8	1206.8
75°	984.7	988.5
77.5°	773.7	773.7
80°	573.8	577.5
82.5°	396.1	403.5
85°	248.1	248.1
87.5°	114.8	103.7
90°	55.1	55.1
92.5°	220.8	177.0
95°	769.7	636.9
97.5°	1844.2	1591.4
100°	2657.1	2356.0
102.5°	3456.8	3199.0
105°	4476.4	4337.8
107.5°	5144.2	5177.7
110°	5398.9	5543.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5421.6	5643.4
115°	5277.8	5585.4
117.5°	4973.0	5314.1
120°	4727.3	5058.7
122.5°	4488.2	4815.1
125°	4146.9	4448.0
127.5°	3840.0	4094.0
130°	3659.1	3893.8
132.5°	3495.0	3705.2
135°	3270.1	3451.3
137.5°	3089.8	3238.1
140°	2966.0	3104.6
142.5°	2863.5	2982.7
145°	2709.6	2799.9
147.5°	2591.7	2666.5
150°	2517.4	2578.0
152.5°	2453.9	2499.7
155°	2380.9	2411.1
157.5°	2323.1	2344.4
160°	2288.7	2300.9
162.5°	2266.1	2277.7
165°	2233.5	2245.8
167.5°	2210.1	2215.3
170°	2203.7	2203.7
172.5°	2186.4	2181.9
175°	2176.1	2176.1
177.5°	2166.8	2161.6
180°	2161.6	2161.6

(END OF REPORT)