

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: P938205

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938205
REPORT IS A COMBINATION OF REPORTS P933592 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-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

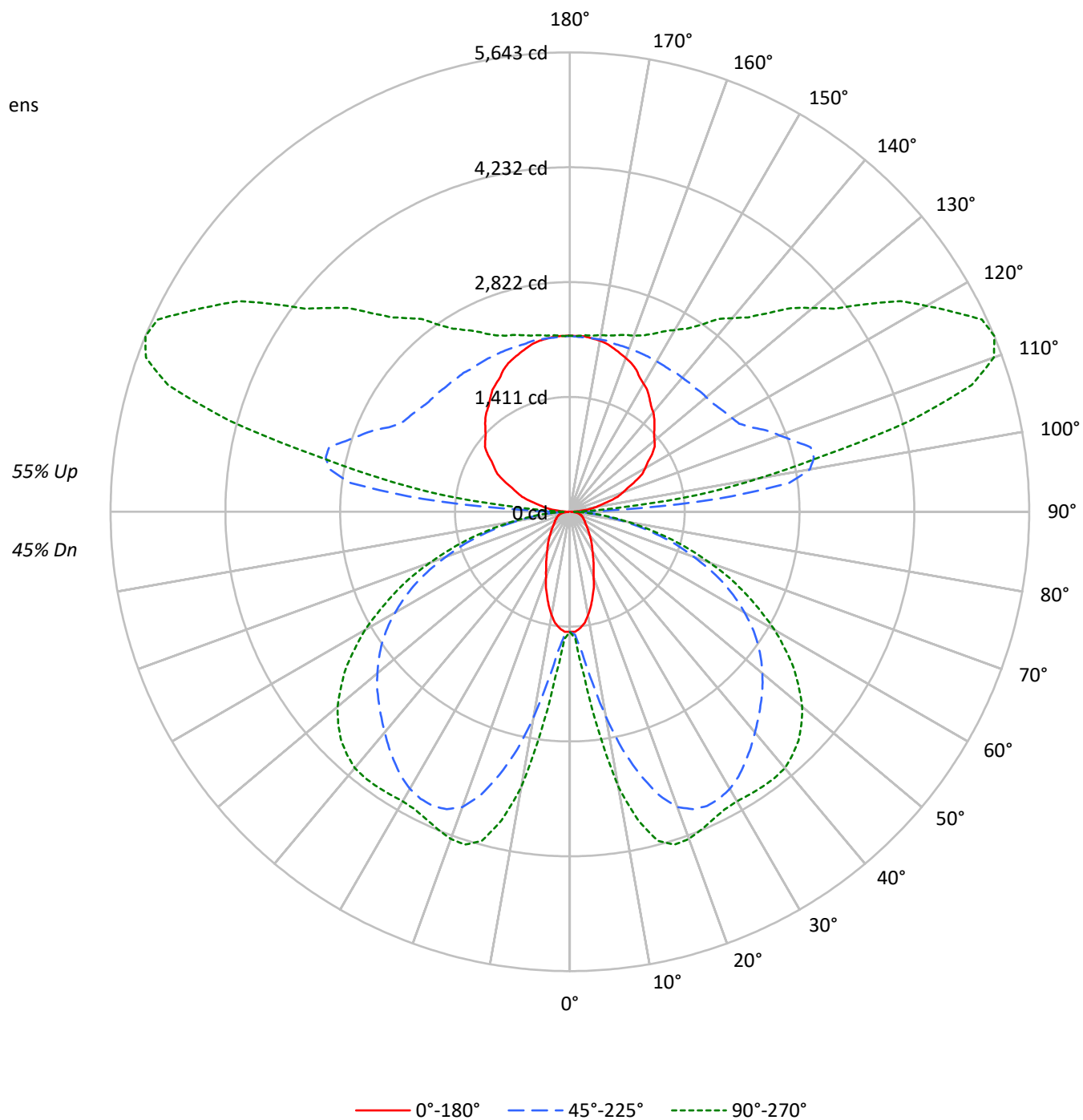
Lumens per Lamp: N/A
Luminaire Lumens: 25429.1 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 225.6
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

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	0.8
10°-20°	845.4	3.3
20°-30°	1478.8	5.8
30°-40°	1903.6	7.5
40°-50°	2126.3	8.4
50°-60°	2036.5	8.0
60°-70°	1613.9	6.3
70°-80°	949.0	3.7
80°-90°	271.9	1.1
90°-100°	1053.7	4.1
100°-110°	2770.2	10.9
110°-120°	2872.4	11.3
120°-130°	2304.0	9.1
130°-140°	1807.8	7.1
140°-150°	1387.6	5.5
150°-160°	999.3	3.9
160°-170°	611.4	2.4
170°-180°	206.6	0.8
0°-30°	2514.9	9.9
0°-40°	4418.6	17.4
0°-60°	8581.3	33.7
0°-90°	11416.1	44.9
90°-120°	6696.3	26.3
90°-150°	12195.7	48.0
90°-180°	14013.0	55.1
0°-180°	25429.1	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°	14	41	110	55	55	15
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°	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°	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°	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°	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)