

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: P938101

Luminaire Tested: SQ4-FB-125U-100D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938101
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-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

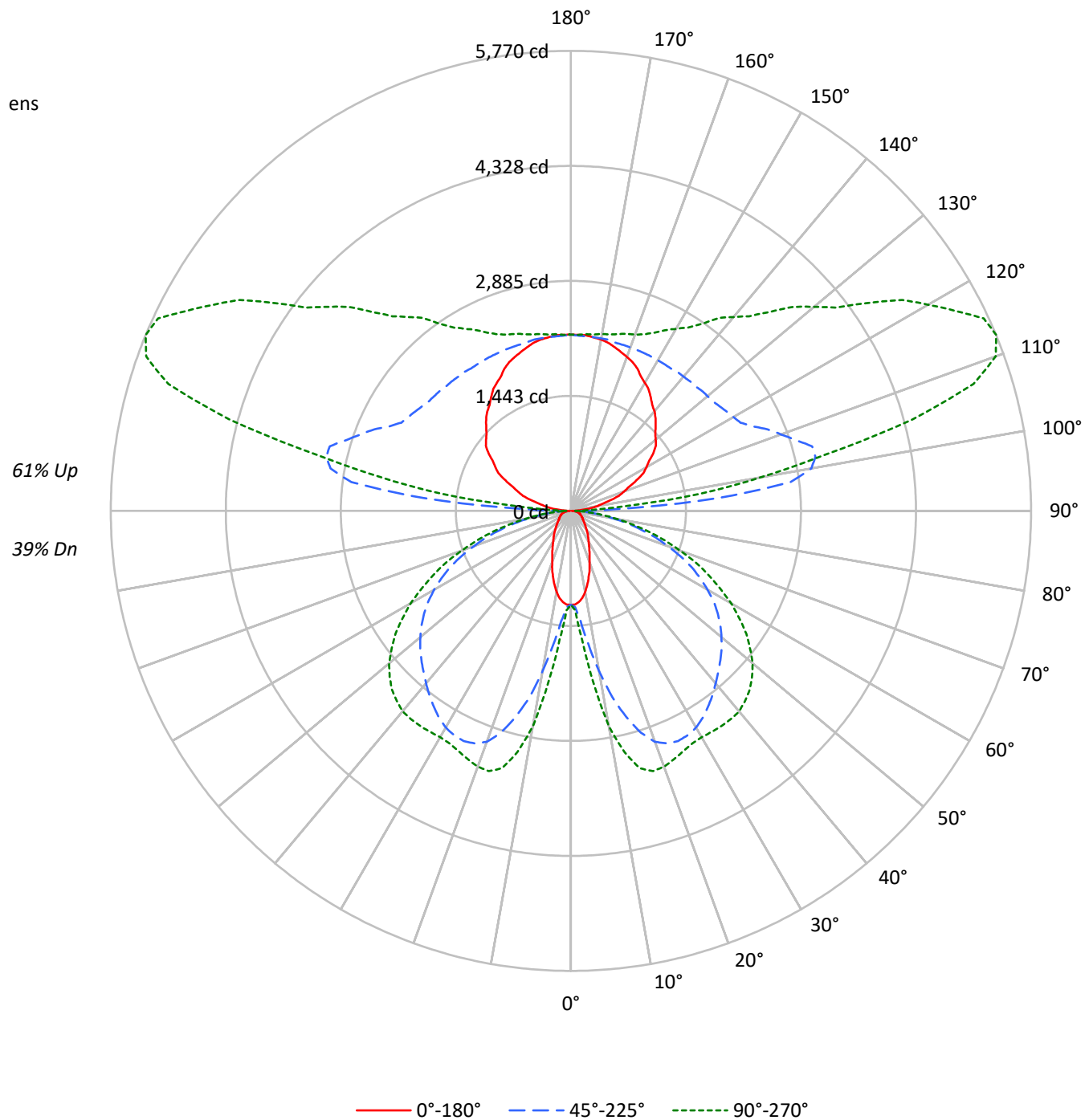
Lumens per Lamp: N/A
Luminaire Lumens: 23443.3 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46			39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38			32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31			26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26			21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22			18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16			13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14			11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13			10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11			9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3641	3641	3641
5°	3559	4210	4894
10°	3229	6138	8114
15°	2745	8021	9798
20°	2236	9297	9985
25°	1866	9731	9782
30°	1574	9795	9764
35°	1392	9635	10016
40°	1214	9426	10277
45°	1100	9274	10317
50°	1010	9138	10147
55°	968	8938	9697
60°	992	8549	8987
65°	1034	7956	8011
70°	1104	6944	6768
75°	1229	5666	5282
80°	1352	3934	3559
85°	1225	2091	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10317 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.3	0.6
10°-20°	674.9	2.9
20°-30°	1180.5	5.0
30°-40°	1519.6	6.5
40°-50°	1697.4	7.2
50°-60°	1625.7	6.9
60°-70°	1288.4	5.5
70°-80°	757.6	3.2
80°-90°	218.9	0.9
90°-100°	1077.4	4.6
100°-110°	2832.5	12.1
110°-120°	2937.0	12.5
120°-130°	2355.8	10.0
130°-140°	1848.5	7.9
140°-150°	1418.8	6.1
150°-160°	1021.8	4.4
160°-170°	625.2	2.7
170°-180°	211.2	0.9
0°-30°	2007.7	8.6
0°-40°	3527.3	15.0
0°-60°	6850.4	29.2
0°-90°	9115.3	38.9
90°-120°	6846.8	29.2
90°-150°	12469.9	53.2
90°-180°	14328.0	61.1
0°-180°	23443.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1147	1230	1385	1567	1624	106
15°	859	1586	2672	3240	3342	239
25°	549	1798	3183	3323	3327	253
35°	371	1718	2998	3168	3293	232
45°	254	1370	2650	3036	3172	196
55°	182	871	2248	2612	2684	166
65°	144	462	1669	1877	1904	143
75°	106	284	916	1007	1011	111
85°	38	87	227	250	254	40
90°	15	42	113	56	56	15
95°	142	558	1856	957	651	158
105°	510	773	3131	4754	4435	541
115°	906	1101	2508	5003	5711	895
125°	1261	1414	2281	3855	4548	1119
135°	1503	1654	2210	3112	3529	1163
145°	1743	1854	2182	2655	2863	1092
155°	1970	2025	2182	2396	2465	905
165°	2126	2154	2182	2268	2296	600
175°	2210	2210	2197	2225	2225	210
180°	2210	2210	2210	2210	2210	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2
2.5°	1177.2	1177.2	1184.8	1188.6	1196.1	1200.0	1207.5	1215.0	1237.8	1241.6	1249.1
5°	1147.0	1162.0	1211.3	1230.2	1283.2	1355.1	1385.4	1434.6	1536.8	1567.1	1586.0
7.5°	1101.5	1135.6	1256.7	1287.0	1419.4	1608.7	1688.2	1794.2	1957.0	2036.4	2100.8
10°	1029.6	1101.5	1317.2	1389.1	1605.0	1892.6	2040.3	2187.9	2433.9	2543.6	2585.3
12.5°	950.1	1067.4	1381.6	1480.1	1790.4	2210.5	2388.5	2551.3	2831.4	2979.0	3001.7
15°	859.2	1018.2	1442.1	1586.0	1987.3	2475.6	2672.4	2873.0	3134.2	3240.1	3266.7
17.5°	779.8	980.4	1499.0	1650.3	2138.6	2714.0	2914.7	3081.2	3293.1	3365.0	3384.0
20°	681.3	919.9	1536.8	1733.6	2297.6	2888.1	3081.2	3209.9	3353.7	3399.1	3406.7
22.5°	609.4	855.5	1559.5	1763.9	2403.6	2994.1	3156.8	3259.1	3357.5	3372.7	3376.4
25°	548.8	783.6	1555.7	1798.0	2494.5	3058.5	3183.4	3259.1	3315.9	3323.4	3323.4
27.5°	492.1	704.0	1540.6	1805.5	2562.6	3073.6	3172.0	3225.0	3251.5	3266.7	3266.7
30°	442.8	628.4	1502.7	1790.4	2592.9	3058.5	3137.9	3164.5	3190.9	3213.7	3225.0
32.5°	405.0	556.4	1446.0	1760.2	2596.6	3020.7	3077.4	3092.6	3130.4	3183.4	3202.3
35°	370.9	484.5	1381.6	1718.5	2573.9	2960.0	2997.9	3013.0	3088.8	3168.2	3194.8
37.5°	336.9	431.6	1298.3	1646.6	2539.9	2888.1	2914.7	2941.1	3058.5	3153.1	3183.4
40°	302.8	386.1	1200.0	1567.1	2486.9	2801.1	2823.7	2865.4	3020.7	3130.4	3160.7
42.5°	276.3	348.3	1094.0	1483.8	2418.7	2702.6	2736.7	2797.3	2975.2	3092.6	3126.6
45°	253.6	310.4	980.4	1370.2	2331.7	2600.5	2649.6	2732.9	2922.2	3035.8	3066.0
47.5°	230.9	283.9	863.0	1253.0	2237.1	2498.3	2562.6	2657.2	2850.3	2960.0	2986.6
50°	212.0	257.4	745.7	1128.0	2134.9	2388.5	2464.2	2562.6	2759.5	2861.7	2895.8
52.5°	196.8	234.6	635.9	1003.1	2017.5	2274.9	2362.0	2464.2	2649.6	2748.1	2770.8
55°	181.7	215.7	541.3	870.6	1896.4	2153.8	2248.5	2346.8	2528.6	2611.8	2626.9
57.5°	174.1	200.6	461.8	745.7	1767.7	2017.5	2123.5	2214.4	2384.7	2449.0	2464.2
60°	162.7	189.3	401.2	639.7	1627.6	1888.8	1979.7	2070.5	2214.4	2267.4	2278.7
62.5°	151.4	181.7	355.8	537.5	1483.8	1737.4	1828.3	1911.5	2032.7	2070.5	2085.6
65°	143.8	174.1	321.7	461.8	1336.2	1578.4	1669.2	1741.3	1839.6	1877.4	1885.1
67.5°	136.3	166.6	295.3	397.5	1188.6	1419.4	1487.6	1555.7	1631.4	1669.2	1673.1
70°	124.9	159.0	272.6	352.0	1037.1	1237.8	1294.6	1366.5	1427.1	1446.0	1457.3
72.5°	117.4	147.6	257.4	317.9	881.9	1063.7	1116.7	1158.3	1211.3	1230.2	1230.2
75°	106.0	132.5	242.3	283.9	722.9	870.6	916.0	957.7	999.3	1006.9	995.5
77.5°	94.6	117.4	208.2	238.5	564.0	688.9	726.8	749.5	783.6	791.1	794.9
80°	79.5	102.2	162.7	185.5	408.8	507.2	533.7	552.7	582.9	582.9	590.5
82.5°	60.5	79.5	117.4	132.5	276.3	348.3	370.9	382.3	401.2	401.2	401.2
85°	37.8	49.2	75.7	87.1	166.6	212.0	227.1	230.9	246.0	249.8	249.8
87.5°	18.9	26.5	49.2	53.0	87.1	109.7	109.7	117.4	117.4	113.5	109.7
90°	14.8	26.6	38.6	41.5	65.2	96.8	112.7	100.2	75.2	56.3	56.3
92.5°	59.3	160.2	261.1	286.3	402.5	557.4	634.9	556.4	399.5	281.8	270.6
95°	142.4	327.0	511.6	557.7	990.3	1567.3	1855.7	1655.9	1256.4	956.8	922.8
97.5°	246.2	409.0	571.9	612.6	1334.0	2295.9	2776.9	2650.6	2398.1	2208.7	2144.1
100°	326.3	474.1	621.7	658.7	1459.1	2526.5	3060.2	3069.5	3087.9	3101.7	3024.8
102.5°	394.6	532.4	670.1	704.6	1516.5	2599.0	3140.3	3301.1	3622.9	3864.2	3798.3
105°	510.3	627.0	743.7	772.9	1559.0	2607.2	3131.3	3492.0	4213.3	4754.2	4718.8
107.5°	629.0	737.7	846.5	873.7	1567.0	2491.3	2953.4	3456.4	4462.4	5217.0	5225.6
110°	709.1	807.3	905.5	930.1	1555.0	2388.4	2805.0	3367.4	4492.1	5335.7	5372.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	787.7	881.3	974.9	998.3	1555.5	2298.6	2670.1	3245.7	4396.7	5260.0	5316.8
115°	906.3	992.6	1079.1	1100.6	1569.9	2195.5	2508.4	3062.9	4171.7	5003.4	5082.0
117.5°	1023.6	1102.0	1180.5	1200.1	1599.1	2131.1	2397.1	2897.6	3898.3	4648.8	4736.0
120°	1091.8	1165.6	1239.5	1257.9	1622.8	2109.4	2352.6	2809.9	3724.3	4410.1	4494.8
122.5°	1158.5	1233.0	1307.5	1326.1	1656.9	2098.0	2318.5	2730.2	3553.7	4171.2	4254.8
125°	1260.9	1328.8	1396.7	1413.7	1703.0	2088.6	2281.4	2631.1	3330.7	3855.2	3932.2
127.5°	1344.0	1412.5	1481.1	1498.2	1748.9	2083.1	2250.3	2550.5	3151.1	3601.6	3666.5
130°	1388.5	1462.3	1536.1	1554.5	1782.5	2086.5	2238.4	2505.7	3040.4	3441.4	3501.4
132.5°	1434.4	1508.2	1582.1	1600.6	1809.7	2088.6	2228.0	2467.3	2946.0	3305.0	3358.7
135°	1502.7	1569.9	1637.2	1654.0	1839.4	2086.7	2210.3	2410.7	2811.5	3112.2	3158.5
137.5°	1572.4	1639.0	1705.5	1722.2	1883.8	2099.5	2207.3	2376.7	2715.5	2969.7	3007.6
140°	1630.2	1691.5	1752.8	1768.2	1911.1	2101.6	2196.9	2343.2	2635.9	2855.4	2890.9
142.5°	1674.7	1731.4	1788.1	1802.3	1933.8	2109.2	2196.9	2325.4	2582.6	2775.4	2805.9
145°	1743.0	1792.4	1841.9	1854.2	1963.5	2109.2	2182.1	2287.2	2497.5	2655.2	2678.3
147.5°	1811.2	1859.3	1907.4	1919.5	2007.0	2123.7	2182.1	2264.8	2430.3	2554.3	2573.4
150°	1855.7	1899.2	1942.8	1953.6	2029.8	2131.3	2182.1	2252.0	2391.7	2496.5	2511.9
152.5°	1901.7	1934.6	1967.7	1975.9	2044.7	2136.2	2182.1	2241.8	2361.0	2450.5	2462.3
155°	1969.9	1994.3	2018.7	2024.8	2077.2	2147.1	2182.1	2229.5	2324.5	2395.6	2403.4
157.5°	2020.4	2044.1	2067.9	2073.8	2109.9	2158.0	2182.1	2218.9	2292.8	2348.2	2353.6
160°	2054.5	2072.9	2091.4	2096.0	2124.7	2163.0	2182.1	2213.7	2277.0	2324.5	2327.6
162.5°	2088.6	2102.4	2116.3	2119.7	2140.5	2168.2	2182.1	2208.8	2262.2	2302.2	2305.2
165°	2125.6	2138.1	2150.7	2153.8	2163.3	2175.8	2182.1	2201.2	2239.4	2268.0	2271.2
167.5°	2159.8	2165.7	2171.7	2173.1	2181.0	2191.6	2196.9	2209.4	2234.4	2253.2	2254.6
170°	2182.1	2188.0	2193.9	2195.4	2195.8	2196.5	2196.9	2209.4	2234.4	2253.2	2253.2
172.5°	2193.9	2195.3	2196.6	2196.9	2196.9	2196.9	2196.9	2206.8	2226.6	2241.4	2240.2
175°	2210.3	2210.3	2210.3	2210.3	2205.8	2199.8	2196.9	2203.2	2215.7	2225.1	2225.1
177.5°	2210.3	2210.3	2210.3	2210.3	2206.8	2202.1	2199.8	2204.8	2214.6	2222.1	2220.8
180°	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3	2210.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1177.2	1177.2
2.5°	1256.7	1249.1
5°	1616.3	1623.9
7.5°	2176.5	2172.7
10°	2706.5	2740.5
12.5°	3092.6	3100.1
15°	3327.2	3342.4
17.5°	3418.0	3421.9
20°	3421.9	3414.3
22.5°	3380.2	3372.7
25°	3331.0	3327.2
27.5°	3285.6	3289.4
30°	3266.7	3278.0
32.5°	3266.7	3285.6
35°	3274.2	3293.1
37.5°	3270.4	3293.1
40°	3255.3	3281.8
42.5°	3213.7	3232.6
45°	3149.3	3172.0
47.5°	3066.0	3081.2
50°	2960.0	2975.2
52.5°	2827.6	2831.4
55°	2668.6	2683.7
57.5°	2498.3	2502.0
60°	2309.0	2320.4
62.5°	2108.4	2108.4
65°	1896.4	1904.0
67.5°	1676.9	1695.8
70°	1453.5	1457.3
72.5°	1234.0	1234.0
75°	1006.9	1010.7
77.5°	791.1	791.1
80°	586.8	590.5
82.5°	405.0	412.6
85°	253.6	253.6
87.5°	117.4	106.0
90°	56.3	56.3
92.5°	225.8	181.0
95°	787.0	651.2
97.5°	1885.6	1627.2
100°	2716.9	2409.0
102.5°	3534.6	3270.9
105°	4577.0	4435.3
107.5°	5259.9	5294.1
110°	5520.3	5667.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5543.5	5770.3
115°	5396.5	5711.0
117.5°	5084.8	5433.6
120°	4833.6	5172.5
122.5°	4589.1	4923.3
125°	4240.1	4548.0
127.5°	3926.3	4186.1
130°	3741.4	3981.4
132.5°	3573.6	3788.5
135°	3343.6	3528.9
137.5°	3159.2	3310.9
140°	3032.7	3174.4
142.5°	2927.8	3049.8
145°	2770.6	2862.9
147.5°	2649.9	2726.4
150°	2574.0	2636.0
152.5°	2509.1	2555.9
155°	2434.4	2465.3
157.5°	2375.4	2397.1
160°	2340.1	2352.6
162.5°	2317.0	2328.9
165°	2283.7	2296.3
167.5°	2259.8	2265.1
170°	2253.2	2253.2
172.5°	2235.6	2231.0
175°	2225.1	2225.1
177.5°	2215.5	2210.3
180°	2210.3	2210.3

(END OF REPORT)