

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: P938001

Luminaire Tested: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938001
REPORT IS A COMBINATION OF REPORTS P933590 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

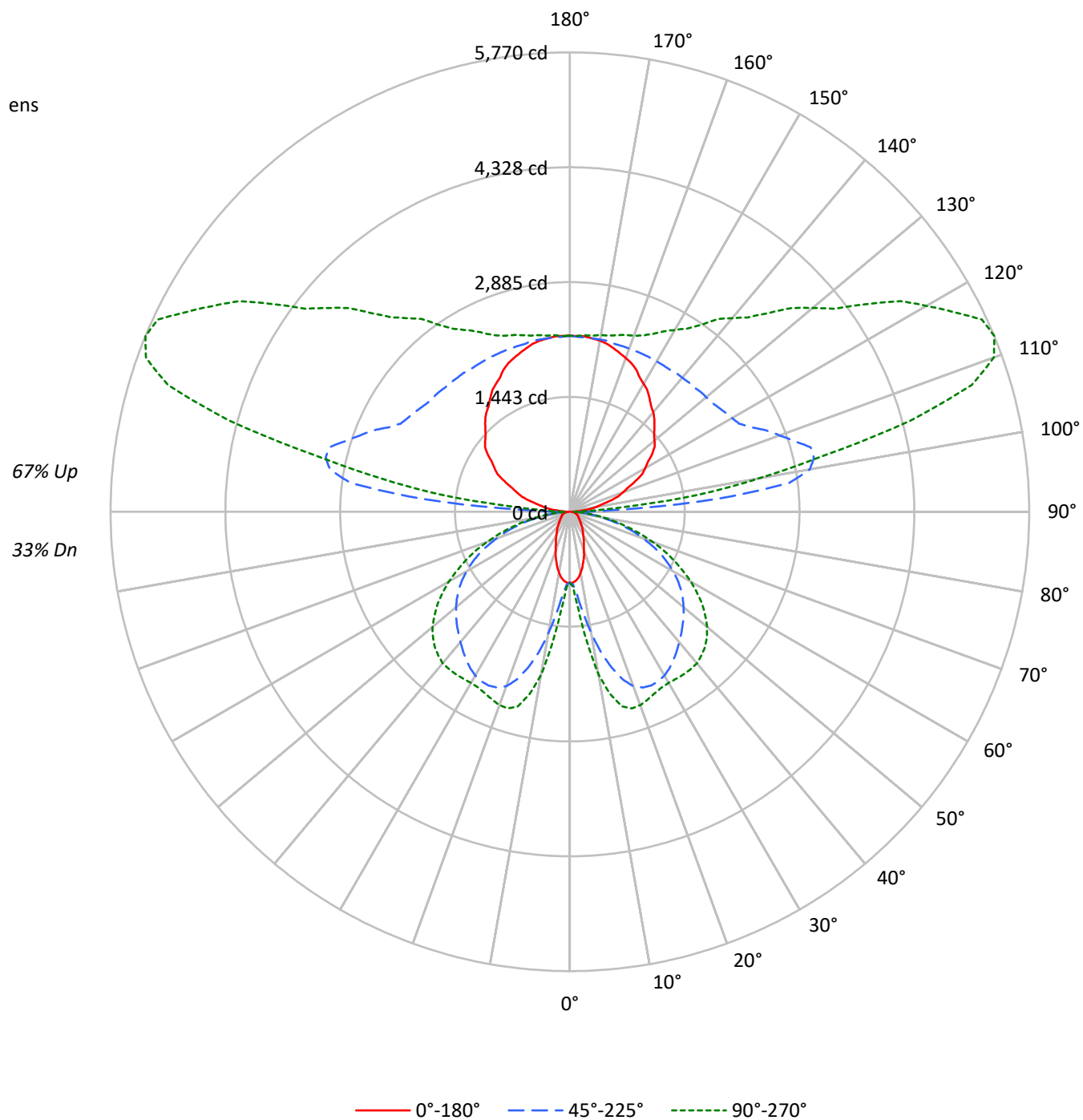
Lumens per Lamp: N/A
Luminaire Lumens: 21229.6 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 166.8
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	74	74	74	56	56	56	40	40	40
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2693	3186	3705
10°	2444	4646	6142
15°	2078	6071	7416
20°	1692	7037	7558
25°	1412	7366	7404
30°	1191	7414	7390
35°	1054	7293	7581
40°	919	7135	7779
45°	833	7020	7810
50°	764	6917	7680
55°	733	6765	7340
60°	751	6471	6802
65°	783	6023	6064
70°	835	5255	5123
75°	930	4289	3998
80°	1024	2978	2693
85°	927	1583	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	0.5
10°-20°	510.8	2.4
20°-30°	893.5	4.2
30°-40°	1150.3	5.4
40°-50°	1284.8	6.1
50°-60°	1230.5	5.8
60°-70°	975.2	4.6
70°-80°	573.4	2.7
80°-90°	167.7	0.8
90°-100°	1077.4	5.1
100°-110°	2832.5	13.3
110°-120°	2937.0	13.8
120°-130°	2355.8	11.1
130°-140°	1848.5	8.7
140°-150°	1418.8	6.7
150°-160°	1021.8	4.8
160°-170°	625.2	2.9
170°-180°	211.2	1.0
0°-30°	1519.6	7.2
0°-40°	2669.9	12.6
0°-60°	5185.2	24.4
0°-90°	6901.6	32.5
90°-120°	6846.8	32.3
90°-150°	12469.9	58.7
90°-180°	14328.0	67.5
0°-180°	21229.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	868	931	1049	1186	1229	80
15°	650	1200	2023	2452	2530	181
25°	415	1361	2410	2516	2518	191
35°	281	1301	2269	2398	2493	175
45°	192	1037	2006	2298	2401	148
55°	138	659	1702	1977	2031	125
65°	109	350	1264	1421	1441	108
75°	80	215	693	762	765	84
85°	29	66	172	189	192	30
90°	15	42	113	56	56	14
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°	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0
2.5°	891.0	891.0	896.7	899.6	905.3	908.2	913.9	919.7	936.9	939.7	945.4
5°	868.1	879.6	916.8	931.1	971.2	1025.7	1048.6	1085.9	1163.3	1186.2	1200.5
7.5°	833.7	859.5	951.2	974.1	1074.4	1217.7	1277.9	1358.1	1481.3	1541.5	1590.2
10°	779.3	833.7	997.0	1051.5	1214.9	1432.6	1544.3	1656.1	1842.3	1925.4	1956.9
12.5°	719.1	807.9	1045.7	1120.3	1355.2	1673.3	1807.9	1931.1	2143.1	2254.9	2272.0
15°	650.4	770.7	1091.7	1200.5	1504.2	1873.8	2022.8	2174.6	2372.3	2452.5	2472.6
17.5°	590.2	742.0	1134.6	1249.2	1618.8	2054.3	2206.1	2332.2	2492.6	2547.1	2561.4
20°	515.7	696.2	1163.3	1312.3	1739.2	2186.1	2332.2	2429.6	2538.5	2572.9	2578.6
22.5°	461.3	647.5	1180.5	1335.2	1819.4	2266.3	2389.5	2466.9	2541.4	2552.8	2555.7
25°	415.4	593.1	1177.6	1361.0	1888.1	2315.0	2409.6	2466.9	2509.8	2515.6	2515.6
27.5°	372.4	532.9	1166.2	1366.7	1939.7	2326.5	2401.0	2441.1	2461.1	2472.6	2472.6
30°	335.2	475.6	1137.5	1355.2	1962.6	2315.0	2375.2	2395.2	2415.3	2432.5	2441.1
32.5°	306.6	421.2	1094.5	1332.3	1965.5	2286.4	2329.3	2340.8	2369.5	2409.6	2423.9
35°	280.8	366.7	1045.7	1300.8	1948.3	2240.5	2269.2	2280.6	2337.9	2398.1	2418.2
37.5°	255.0	326.6	982.7	1246.4	1922.5	2186.1	2206.1	2226.2	2315.0	2386.6	2409.6
40°	229.2	292.2	908.2	1186.2	1882.4	2120.2	2137.4	2168.9	2286.4	2369.5	2392.4
42.5°	209.1	263.6	828.0	1123.2	1830.8	2045.7	2071.5	2117.3	2252.0	2340.8	2366.6
45°	192.0	234.9	742.0	1037.1	1764.9	1968.4	2005.6	2068.6	2211.9	2297.8	2320.7
47.5°	174.8	214.9	653.2	948.3	1693.3	1891.0	1939.7	2011.3	2157.4	2240.5	2260.6
50°	160.4	194.8	564.4	853.8	1616.0	1807.9	1865.2	1939.7	2088.7	2166.0	2191.8
52.5°	149.0	177.6	481.3	759.2	1527.1	1722.0	1787.9	1865.2	2005.6	2080.1	2097.3
55°	137.5	163.3	409.7	658.9	1435.5	1630.3	1701.9	1776.4	1913.9	1976.9	1988.4
57.5°	131.8	151.8	349.5	564.4	1338.1	1527.1	1607.4	1676.1	1805.0	1853.8	1865.2
60°	123.2	143.2	303.7	484.2	1232.0	1429.7	1498.5	1567.3	1676.1	1716.2	1724.8
62.5°	114.6	137.5	269.3	406.8	1123.2	1315.1	1383.9	1446.9	1538.6	1567.3	1578.7
65°	108.9	131.8	243.5	349.5	1011.3	1194.8	1263.6	1318.0	1392.5	1421.1	1426.9
67.5°	103.1	126.1	223.5	300.8	899.6	1074.4	1126.0	1177.6	1234.9	1263.6	1266.4
70°	94.5	120.3	206.3	266.4	785.0	936.9	979.8	1034.3	1080.1	1094.5	1103.1
72.5°	88.8	111.7	194.8	240.7	667.5	805.1	845.2	876.7	916.8	931.1	931.1
75°	80.2	100.3	183.4	214.9	547.2	658.9	693.3	724.8	756.4	762.1	753.5
77.5°	71.6	88.8	157.6	180.5	426.9	521.4	550.1	567.3	593.1	598.8	601.6
80°	60.2	77.4	123.2	140.4	309.4	383.9	404.0	418.3	441.2	441.2	446.9
82.5°	45.8	60.2	88.8	100.3	209.1	263.6	280.8	289.4	303.7	303.7	303.7
85°	28.6	37.2	57.3	65.9	126.1	160.4	171.9	174.8	186.2	189.1	189.1
87.5°	14.3	20.1	37.2	40.1	65.9	83.1	83.1	88.8	88.8	86.0	83.1
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°	891.0	891.0
2.5°	951.2	945.4
5°	1223.5	1229.2
7.5°	1647.5	1644.6
10°	2048.6	2074.4
12.5°	2340.8	2346.5
15°	2518.4	2529.9
17.5°	2587.2	2590.1
20°	2590.1	2584.3
22.5°	2558.5	2552.8
25°	2521.3	2518.4
27.5°	2486.9	2489.8
30°	2472.6	2481.2
32.5°	2472.6	2486.9
35°	2478.3	2492.6
37.5°	2475.5	2492.6
40°	2464.0	2484.1
42.5°	2432.5	2446.8
45°	2383.8	2401.0
47.5°	2320.7	2332.2
50°	2240.5	2252.0
52.5°	2140.3	2143.1
55°	2019.9	2031.4
57.5°	1891.0	1893.9
60°	1747.7	1756.3
62.5°	1595.9	1595.9
65°	1435.5	1441.2
67.5°	1269.3	1283.6
70°	1100.3	1103.1
72.5°	934.0	934.0
75°	762.1	765.0
77.5°	598.8	598.8
80°	444.1	446.9
82.5°	306.6	312.3
85°	192.0	192.0
87.5°	88.8	80.2
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)