

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: P937597

Luminaire Tested: SQ4-FB-100U-075D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937597
REPORT IS A COMBINATION OF REPORTS P933558 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

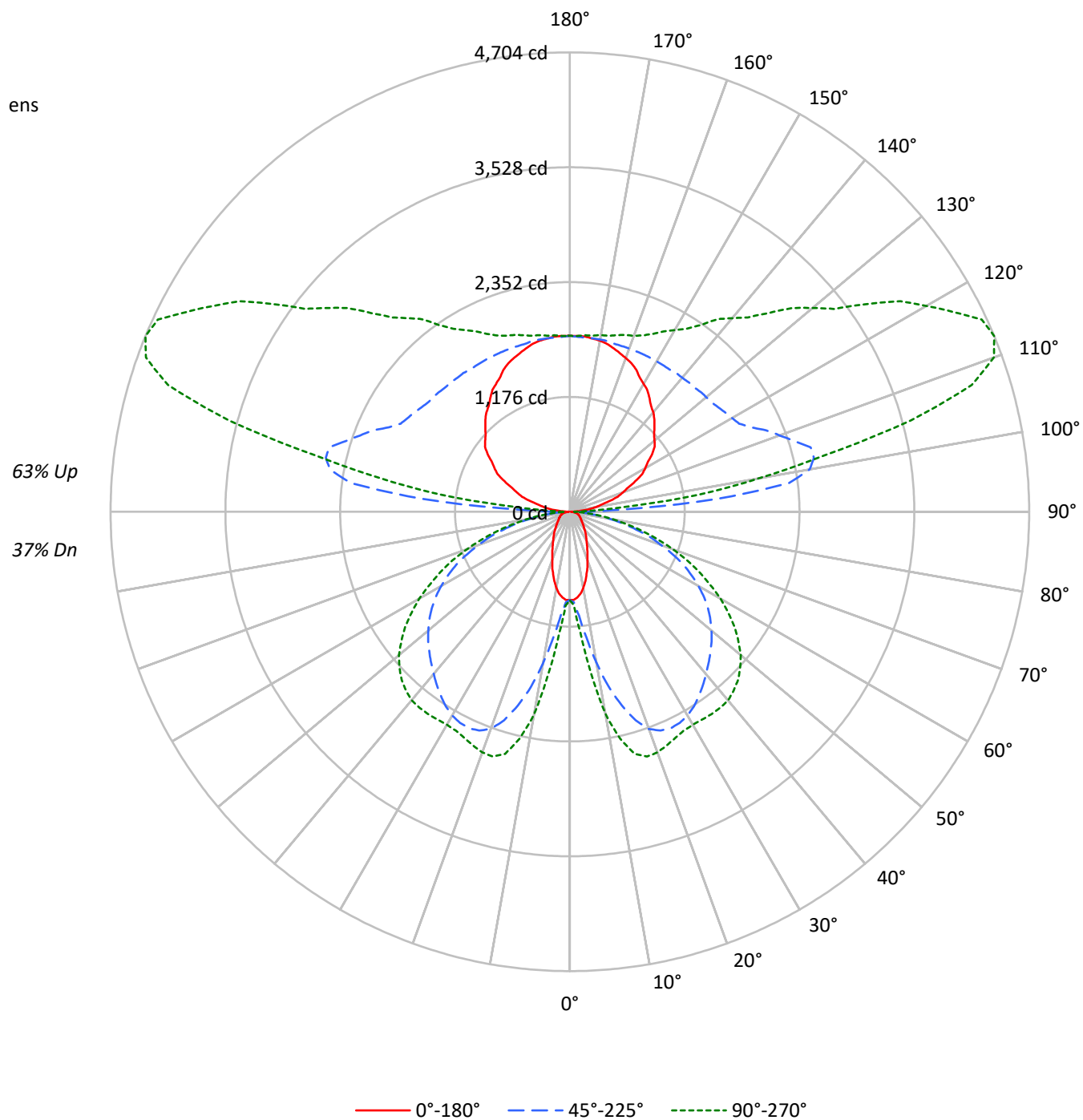
Lumens per Lamp: N/A
Luminaire Lumens: 18680.4 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 147.6
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2796	2796	2796
5°	2733	3233	3759
10°	2480	4714	6232
15°	2108	6160	7525
20°	1717	7140	7669
25°	1433	7474	7513
30°	1209	7523	7499
35°	1070	7400	7693
40°	933	7240	7893
45°	845	7123	7924
50°	776	7018	7793
55°	743	6864	7448
60°	762	6566	6902
65°	795	6111	6153
70°	848	5332	5198
75°	943	4352	4056
80°	1038	3022	2733
85°	943	1606	1399

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.0	0.6
10°-20°	518.3	2.8
20°-30°	906.6	4.9
30°-40°	1167.1	6.2
40°-50°	1303.6	7.0
50°-60°	1248.6	6.7
60°-70°	989.5	5.3
70°-80°	581.8	3.1
80°-90°	168.5	0.9
90°-100°	878.2	4.7
100°-110°	2308.8	12.4
110°-120°	2394.0	12.8
120°-130°	1920.3	10.3
130°-140°	1506.8	8.1
140°-150°	1156.5	6.2
150°-160°	832.9	4.5
160°-170°	509.6	2.7
170°-180°	172.2	0.9
0°-30°	1541.9	8.3
0°-40°	2709.0	14.5
0°-60°	5261.2	28.2
0°-90°	7001.1	37.5
90°-120°	5581.1	29.9
90°-150°	10164.6	54.4
90°-180°	11679.0	62.5
0°-180°	18680.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	881	945	1064	1204	1247	81
15°	660	1218	2052	2488	2567	184
25°	422	1381	2445	2552	2555	194
35°	285	1320	2302	2433	2529	178
45°	195	1052	2035	2332	2436	151
55°	140	669	1727	2006	2061	127
65°	110	355	1282	1442	1462	110
75°	81	218	704	773	776	85
85°	29	67	174	192	195	31
90°	12	34	92	46	46	12
95°	116	455	1513	780	531	129
105°	416	630	2552	3875	3615	441
115°	739	897	2045	4078	4655	730
125°	1028	1152	1860	3143	3707	913
135°	1225	1348	1802	2537	2877	948
145°	1421	1511	1779	2164	2334	890
155°	1606	1650	1779	1953	2010	738
165°	1733	1756	1779	1849	1872	489
175°	1802	1802	1791	1814	1814	171
180°	1802	1802	1802	1802	1802	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1
2.5°	904.1	904.1	909.9	912.8	918.6	921.5	927.3	933.1	950.6	953.5	959.3
5°	880.8	892.4	930.2	944.8	985.5	1040.7	1064.0	1101.8	1180.3	1203.6	1218.1
7.5°	845.9	872.1	965.1	988.4	1090.1	1235.6	1296.6	1378.0	1503.0	1564.1	1613.5
10°	790.7	845.9	1011.6	1066.9	1232.7	1453.6	1567.0	1680.3	1869.3	1953.6	1985.6
12.5°	729.7	819.8	1061.1	1136.7	1375.1	1697.8	1834.4	1959.4	2174.5	2287.9	2305.3
15°	659.9	782.0	1107.7	1218.1	1526.3	1901.3	2052.4	2206.5	2407.1	2488.5	2508.8
17.5°	598.8	752.9	1151.3	1267.5	1642.6	2084.4	2238.5	2366.4	2529.2	2584.4	2599.0
20°	523.3	706.4	1180.3	1331.5	1764.6	2218.1	2366.4	2465.2	2575.7	2610.6	2616.4
22.5°	468.0	657.0	1197.8	1354.8	1846.0	2299.5	2424.5	2503.0	2578.6	2590.2	2593.1
25°	421.5	601.7	1194.9	1380.9	1915.8	2349.0	2444.9	2503.0	2546.6	2552.4	2552.4
27.5°	377.9	540.7	1183.2	1386.7	1968.1	2360.6	2436.2	2476.9	2497.2	2508.8	2508.8
30°	340.1	482.6	1154.2	1375.1	1991.4	2349.0	2410.0	2430.3	2450.7	2468.1	2476.9
32.5°	311.0	427.3	1110.6	1351.9	1994.3	2319.9	2363.5	2375.1	2404.2	2444.9	2459.4
35°	284.9	372.1	1061.1	1319.9	1976.9	2273.4	2302.4	2314.1	2372.2	2433.3	2453.6
37.5°	258.7	331.4	997.1	1264.6	1950.7	2218.1	2238.5	2258.8	2349.0	2421.6	2444.9
40°	232.6	296.5	921.5	1203.6	1910.0	2151.3	2168.7	2200.7	2319.9	2404.2	2427.4
42.5°	212.2	267.4	840.1	1139.6	1857.7	2075.7	2101.9	2148.4	2285.0	2375.1	2401.3
45°	194.8	238.4	752.9	1052.3	1790.8	1997.2	2035.0	2099.0	2244.3	2331.5	2354.8
47.5°	177.3	218.0	662.8	962.2	1718.1	1918.7	1968.1	2040.8	2189.1	2273.4	2293.7
50°	162.8	197.7	572.7	866.3	1639.6	1834.4	1892.6	1968.1	2119.3	2197.8	2224.0
52.5°	151.2	180.2	488.4	770.4	1549.5	1747.2	1814.1	1892.6	2035.0	2110.6	2128.0
55°	139.5	165.7	415.7	668.6	1456.5	1654.2	1726.9	1802.4	1942.0	2005.9	2017.6
57.5°	133.7	154.1	354.7	572.7	1357.7	1549.5	1630.9	1700.7	1831.5	1880.9	1892.6
60°	125.0	145.4	308.1	491.3	1250.1	1450.7	1520.5	1590.2	1700.7	1741.4	1750.1
62.5°	116.3	139.5	273.3	412.8	1139.6	1334.4	1404.2	1468.1	1561.2	1590.2	1601.9
65°	110.5	133.7	247.1	354.7	1026.2	1212.3	1282.1	1337.3	1412.9	1442.0	1447.8
67.5°	104.7	127.9	226.7	305.2	912.8	1090.1	1142.5	1194.9	1253.0	1282.1	1285.0
70°	95.9	122.1	209.3	270.4	796.5	950.6	994.2	1049.4	1095.9	1110.6	1119.3
72.5°	90.1	113.4	197.7	244.2	677.3	816.9	857.6	889.5	930.2	944.8	944.8
75°	81.4	101.7	186.0	218.0	555.2	668.6	703.5	735.5	767.4	773.3	764.5
77.5°	72.7	90.1	159.9	183.1	433.1	529.1	558.1	575.6	601.7	607.6	610.5
80°	61.0	78.5	125.0	142.4	314.0	389.5	409.9	424.4	447.7	447.7	453.5
82.5°	46.5	61.0	90.1	101.7	212.2	267.4	284.9	293.6	308.1	308.1	308.1
85°	29.1	37.8	58.1	66.9	127.9	162.8	174.4	177.3	189.0	191.9	191.9
87.5°	14.5	20.3	37.8	40.7	66.9	84.3	84.3	90.1	90.1	87.2	84.3
90°	12.1	21.8	31.4	33.8	53.2	79.0	91.9	81.7	61.2	45.9	45.9
92.5°	48.4	130.5	212.8	233.3	328.1	454.4	517.5	453.6	325.7	229.7	220.6
95°	116.1	266.6	417.1	454.7	807.3	1277.5	1512.6	1349.8	1024.1	779.9	752.1
97.5°	200.7	333.4	466.2	499.4	1087.4	1871.4	2263.5	2160.6	1954.8	1800.4	1747.8
100°	266.0	386.3	506.7	536.8	1189.4	2059.4	2494.5	2502.1	2517.1	2528.3	2465.6
102.5°	321.6	433.9	546.2	574.3	1236.2	2118.6	2559.8	2690.9	2953.1	3149.8	3096.1
105°	416.0	511.1	606.2	629.9	1270.8	2125.3	2552.5	2846.5	3434.4	3875.3	3846.4
107.5°	512.7	601.4	690.0	712.2	1277.2	2030.6	2407.4	2817.5	3637.5	4252.6	4259.5
110°	578.0	658.0	738.1	758.1	1267.5	1946.8	2286.5	2744.9	3661.7	4349.3	4379.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	642.1	718.4	794.7	813.8	1268.0	1873.7	2176.5	2645.7	3583.9	4287.6	4333.9
115°	738.8	809.2	879.6	897.2	1279.7	1789.6	2044.7	2496.6	3400.5	4078.4	4142.5
117.5°	834.3	898.3	962.2	978.2	1303.5	1737.1	1954.0	2361.8	3177.6	3789.5	3860.5
120°	889.9	950.1	1010.4	1025.4	1322.9	1719.5	1917.7	2290.4	3035.8	3594.8	3663.9
122.5°	944.4	1005.1	1065.8	1081.0	1350.7	1710.2	1889.9	2225.5	2896.7	3400.1	3468.2
125°	1027.8	1083.1	1138.5	1152.3	1388.1	1702.5	1859.7	2144.8	2714.9	3142.6	3205.3
127.5°	1095.5	1151.4	1207.3	1221.2	1425.6	1698.1	1834.3	2079.1	2568.6	2935.8	2988.7
130°	1131.8	1192.0	1252.1	1267.2	1453.0	1700.8	1824.6	2042.6	2478.4	2805.3	2854.2
132.5°	1169.3	1229.5	1289.6	1304.7	1475.1	1702.4	1816.1	2011.2	2401.4	2694.0	2737.8
135°	1224.9	1279.7	1334.5	1348.2	1499.3	1700.9	1801.7	1965.0	2291.7	2536.7	2574.5
137.5°	1281.7	1336.0	1390.2	1403.8	1535.6	1711.4	1799.2	1937.3	2213.6	2420.8	2451.7
140°	1328.9	1378.9	1428.8	1441.3	1557.8	1713.1	1790.7	1910.0	2148.7	2327.6	2356.5
142.5°	1365.1	1411.3	1457.6	1469.1	1576.3	1719.2	1790.7	1895.6	2105.2	2262.3	2287.1
145°	1420.7	1461.1	1501.4	1511.4	1600.5	1719.3	1778.7	1864.4	2035.8	2164.4	2183.2
147.5°	1476.4	1515.6	1554.9	1564.6	1636.0	1731.1	1778.7	1846.1	1981.0	2082.2	2097.8
150°	1512.6	1548.1	1583.5	1592.5	1654.6	1737.3	1778.7	1835.7	1949.5	2035.0	2047.6
152.5°	1550.1	1577.0	1603.9	1610.6	1666.6	1741.3	1778.7	1827.3	1924.5	1997.5	2007.0
155°	1605.7	1625.6	1645.6	1650.5	1693.2	1750.2	1778.7	1817.4	1894.7	1952.7	1959.0
157.5°	1646.8	1666.2	1685.6	1690.4	1719.9	1759.1	1778.7	1808.7	1868.9	1914.1	1918.5
160°	1674.6	1689.7	1704.8	1708.5	1731.9	1763.1	1778.7	1804.5	1856.0	1894.7	1897.2
162.5°	1702.4	1713.7	1725.0	1727.8	1744.8	1767.4	1778.7	1800.4	1843.9	1876.6	1879.0
165°	1732.7	1742.8	1753.1	1755.6	1763.3	1773.6	1778.7	1794.3	1825.4	1848.8	1851.3
167.5°	1760.5	1765.3	1770.2	1771.4	1777.8	1786.4	1790.7	1801.0	1821.4	1836.7	1837.8
170°	1778.7	1783.5	1788.4	1789.5	1789.9	1790.4	1790.7	1801.0	1821.4	1836.7	1836.7
172.5°	1788.3	1789.4	1790.4	1790.7	1790.7	1790.7	1790.7	1798.8	1814.9	1827.0	1826.1
175°	1801.7	1801.7	1801.7	1801.7	1798.0	1793.1	1790.7	1795.8	1806.0	1813.7	1813.7
177.5°	1801.7	1801.7	1801.7	1801.7	1798.9	1795.1	1793.1	1797.2	1805.2	1811.3	1810.2
180°	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	904.1	904.1
2.5°	965.1	959.3
5°	1241.4	1247.2
7.5°	1671.6	1668.7
10°	2078.6	2104.8
12.5°	2375.1	2380.9
15°	2555.3	2567.0
17.5°	2625.1	2628.0
20°	2628.0	2622.2
22.5°	2596.0	2590.2
25°	2558.3	2555.3
27.5°	2523.4	2526.3
30°	2508.8	2517.6
32.5°	2508.8	2523.4
35°	2514.7	2529.2
37.5°	2511.7	2529.2
40°	2500.1	2520.5
42.5°	2468.1	2482.7
45°	2418.7	2436.2
47.5°	2354.8	2366.4
50°	2273.4	2285.0
52.5°	2171.6	2174.5
55°	2049.5	2061.2
57.5°	1918.7	1921.6
60°	1773.4	1782.1
62.5°	1619.3	1619.3
65°	1456.5	1462.3
67.5°	1287.9	1302.4
70°	1116.4	1119.3
72.5°	947.7	947.7
75°	773.3	776.2
77.5°	607.6	607.6
80°	450.6	453.5
82.5°	311.0	316.9
85°	194.8	194.8
87.5°	90.1	81.4
90°	45.9	45.9
92.5°	184.0	147.5
95°	641.5	530.8
97.5°	1537.1	1326.5
100°	2214.6	1963.7
102.5°	2881.1	2666.2
105°	3730.8	3615.3
107.5°	4287.5	4315.4
110°	4499.7	4620.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4518.7	4703.6
115°	4398.9	4655.2
117.5°	4144.8	4429.1
120°	3940.1	4216.3
122.5°	3740.6	4013.1
125°	3456.2	3707.2
127.5°	3200.5	3412.2
130°	3049.7	3245.4
132.5°	2913.0	3088.2
135°	2725.5	2876.6
137.5°	2575.2	2698.9
140°	2472.1	2587.6
142.5°	2386.6	2486.0
145°	2258.4	2333.6
147.5°	2160.1	2222.4
150°	2098.2	2148.7
152.5°	2045.2	2083.4
155°	1984.3	2009.6
157.5°	1936.3	1954.0
160°	1907.5	1917.7
162.5°	1888.7	1898.4
165°	1861.5	1871.7
167.5°	1842.1	1846.3
170°	1836.7	1836.7
172.5°	1822.3	1818.5
175°	1813.7	1813.7
177.5°	1805.9	1801.7
180°	1801.7	1801.7

(END OF REPORT)