

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: P938208

Luminaire Tested: SQ4-FB-125U-125D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938208
REPORT IS A COMBINATION OF REPORTS P933616 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-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

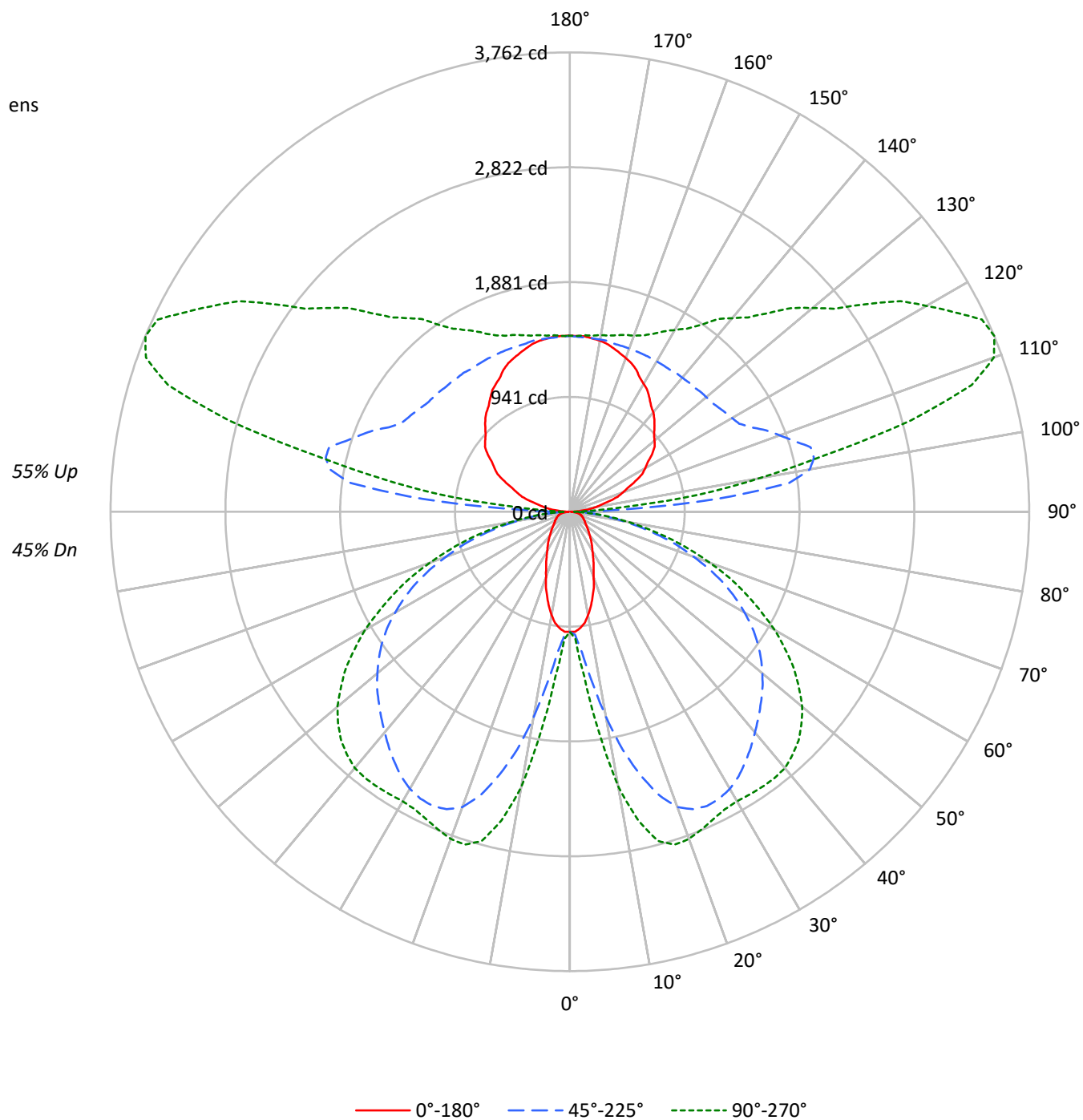
Lumens per Lamp: N/A
Luminaire Lumens: 16953.1 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 150.4
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°	4456	5272	6131
10°	4042	7685	10165
15°	3435	10040	12274
20°	2797	11635	12509
25°	2333	12176	12254
30°	1967	12252	12231
35°	1739	12049	12548
40°	1516	11785	12875
45°	1373	11591	12925
50°	1259	11417	12711
55°	1206	11162	12147
60°	1234	10671	11258
65°	1284	9926	10035
70°	1368	8656	8478
75°	1516	7058	6617
80°	1657	4895	4458
85°	1472	2597	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12925 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	0.8
10°-20°	563.6	3.3
20°-30°	985.9	5.8
30°-40°	1269.1	7.5
40°-50°	1417.6	8.4
50°-60°	1357.7	8.0
60°-70°	1076.0	6.3
70°-80°	632.7	3.7
80°-90°	181.3	1.1
90°-100°	702.5	4.1
100°-110°	1846.8	10.9
110°-120°	1914.9	11.3
120°-130°	1536.0	9.1
130°-140°	1205.2	7.1
140°-150°	925.0	5.5
150°-160°	666.2	3.9
160°-170°	407.6	2.4
170°-180°	137.7	0.8
0°-30°	1676.7	9.9
0°-40°	2945.8	17.4
0°-60°	5721.1	33.7
0°-90°	7611.1	44.9
90°-120°	4464.2	26.3
90°-150°	8130.5	48.0
90°-180°	9342.0	55.1
0°-180°	16953.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	958	1027	1157	1309	1356	88
15°	718	1324	2232	2706	2791	200
25°	458	1502	2659	2776	2779	211
35°	310	1435	2504	2646	2750	193
45°	212	1144	2213	2535	2649	164
55°	152	727	1878	2181	2241	138
65°	120	386	1394	1568	1590	119
75°	88	237	765	841	844	93
85°	32	73	190	209	212	34
90°	10	27	74	37	37	10
95°	93	364	1210	624	425	103
105°	333	504	2042	3100	2892	353
115°	591	718	1636	3262	3724	584
125°	822	922	1488	2514	2965	730
135°	980	1078	1441	2029	2301	758
145°	1136	1209	1423	1731	1867	712
155°	1284	1320	1423	1562	1607	590
165°	1386	1404	1423	1479	1497	391
175°	1441	1441	1432	1451	1451	137
180°	1441	1441	1441	1441	1441	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1
2.5°	983.1	983.1	989.5	992.7	998.9	1002.1	1008.4	1014.8	1033.8	1036.9	1043.2
5°	957.8	970.5	1011.6	1027.4	1071.7	1131.7	1157.0	1198.1	1283.4	1308.7	1324.5
7.5°	919.9	948.4	1049.5	1074.8	1185.4	1343.6	1409.9	1498.4	1634.3	1700.7	1754.5
10°	859.8	919.9	1100.1	1160.1	1340.4	1580.6	1703.9	1827.2	2032.7	2124.4	2159.1
12.5°	793.4	891.5	1153.9	1236.1	1495.2	1846.1	1994.7	2130.6	2364.6	2487.9	2506.9
15°	717.6	850.4	1204.4	1324.5	1659.6	2067.4	2231.8	2399.4	2617.5	2706.0	2728.1
17.5°	651.2	818.7	1251.8	1378.3	1786.1	2266.6	2434.1	2573.3	2750.3	2810.3	2826.1
20°	569.0	768.2	1283.4	1447.8	1918.9	2412.1	2573.3	2680.7	2800.9	2838.8	2845.1
22.5°	508.9	714.4	1302.5	1473.1	2007.4	2500.5	2636.5	2721.8	2804.0	2816.7	2819.8
25°	458.4	654.4	1299.3	1501.6	2083.3	2554.3	2658.6	2721.8	2769.2	2775.6	2775.6
27.5°	411.0	588.0	1286.6	1507.9	2140.2	2566.9	2649.1	2693.4	2715.5	2728.1	2728.1
30°	369.9	524.7	1255.0	1495.2	2165.5	2554.3	2620.6	2642.8	2664.9	2683.8	2693.4
32.5°	338.3	464.7	1207.6	1469.9	2168.6	2522.6	2570.1	2582.7	2614.4	2658.6	2674.4
35°	309.8	404.6	1153.9	1435.2	2149.6	2472.1	2503.7	2516.3	2579.5	2645.9	2668.1
37.5°	281.3	360.3	1084.3	1375.1	2121.2	2412.1	2434.1	2456.2	2554.3	2633.3	2658.6
40°	252.9	322.4	1002.1	1308.7	2076.9	2339.3	2358.3	2393.0	2522.6	2614.4	2639.6
42.5°	230.8	290.8	913.6	1239.2	2020.1	2257.1	2285.6	2336.1	2484.7	2582.7	2611.2
45°	211.8	259.2	818.7	1144.3	1947.3	2171.7	2212.8	2282.4	2440.4	2535.3	2560.6
47.5°	192.9	237.0	720.8	1046.4	1868.3	2086.4	2140.2	2219.2	2380.4	2472.1	2494.2
50°	177.0	215.0	622.8	942.0	1782.9	1994.7	2058.0	2140.2	2304.6	2389.9	2418.3
52.5°	164.4	196.0	531.1	837.7	1684.9	1899.8	1972.6	2058.0	2212.8	2295.0	2314.0
55°	151.8	180.2	452.1	727.1	1583.8	1798.7	1877.8	1960.0	2111.7	2181.3	2193.9
57.5°	145.4	167.6	385.6	622.8	1476.3	1684.9	1773.5	1849.3	1991.6	2045.3	2058.0
60°	135.9	158.0	335.1	534.2	1359.3	1577.4	1653.3	1729.2	1849.3	1893.6	1903.0
62.5°	126.5	151.8	297.2	448.9	1239.2	1451.0	1526.9	1596.4	1697.5	1729.2	1741.8
65°	120.1	145.4	268.7	385.6	1115.9	1318.2	1394.1	1454.1	1536.3	1568.0	1574.3
67.5°	113.8	139.1	246.6	331.9	992.7	1185.4	1242.3	1299.3	1362.5	1394.1	1397.3
70°	104.3	132.8	227.6	294.0	866.2	1033.8	1081.1	1141.2	1191.8	1207.6	1217.1
72.5°	98.0	123.3	215.0	265.5	736.6	888.3	932.6	967.3	1011.6	1027.4	1027.4
75°	88.5	110.7	202.3	237.0	603.8	727.1	765.0	799.8	834.5	840.9	831.4
77.5°	79.0	98.0	173.9	199.1	471.0	575.3	606.9	626.0	654.4	660.7	663.9
80°	66.4	85.4	135.9	154.9	341.4	423.6	445.7	461.6	486.8	486.8	493.2
82.5°	50.6	66.4	98.0	110.7	230.8	290.8	309.8	319.2	335.1	335.1	335.1
85°	31.6	41.1	63.2	72.7	139.1	177.0	189.7	192.9	205.5	208.7	208.7
87.5°	15.8	22.1	41.1	44.3	72.7	91.7	91.7	98.0	98.0	94.8	91.7
90°	9.7	17.5	25.1	27.1	42.6	63.2	73.5	65.3	48.9	36.7	36.7
92.5°	38.7	104.4	170.3	186.7	262.5	363.4	413.9	362.8	260.5	183.7	176.4
95°	92.8	213.2	333.6	363.7	645.8	1021.9	1209.9	1079.7	819.2	623.8	601.7
97.5°	160.6	266.8	372.9	399.5	869.8	1497.0	1810.6	1728.3	1563.6	1440.1	1398.0
100°	212.8	309.1	405.4	429.5	951.4	1647.3	1995.3	2001.3	2013.3	2022.4	1972.2
102.5°	257.2	347.1	436.9	459.4	988.8	1694.6	2047.5	2152.4	2362.2	2519.5	2476.5
105°	332.7	408.8	484.8	503.9	1016.5	1700.0	2041.7	2276.8	2747.1	3099.8	3076.7
107.5°	410.1	481.0	551.9	569.6	1021.6	1624.3	1925.6	2253.6	2909.6	3401.5	3407.1
110°	462.3	526.4	590.5	606.4	1014.0	1557.3	1829.0	2195.6	2928.9	3478.9	3503.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	513.6	574.6	635.7	650.9	1014.2	1498.7	1740.9	2116.2	2866.6	3429.6	3466.5
115°	590.9	647.3	703.5	717.6	1023.6	1431.5	1635.5	1997.0	2720.0	3262.3	3313.6
117.5°	667.3	718.5	769.6	782.4	1042.6	1389.5	1563.0	1889.2	2541.7	3031.1	3088.0
120°	711.8	760.0	808.1	820.1	1058.0	1375.3	1533.9	1832.0	2428.2	2875.4	2930.6
122.5°	755.3	803.9	852.5	864.6	1080.3	1367.8	1511.7	1780.1	2317.1	2719.7	2774.2
125°	822.1	866.4	910.6	921.7	1110.2	1361.8	1487.5	1715.6	2171.6	2513.7	2563.8
127.5°	876.3	921.0	965.7	976.9	1140.3	1358.2	1467.2	1663.0	2054.6	2348.3	2390.6
130°	905.2	953.4	1001.5	1013.6	1162.2	1360.4	1459.5	1633.8	1982.4	2243.8	2283.0
132.5°	935.2	983.4	1031.5	1043.6	1179.9	1361.8	1452.7	1608.7	1920.8	2154.8	2189.9
135°	979.8	1023.6	1067.5	1078.4	1199.3	1360.5	1441.1	1571.7	1833.1	2029.1	2059.3
137.5°	1025.2	1068.6	1112.0	1122.9	1228.3	1368.9	1439.1	1549.6	1770.6	1936.3	1961.0
140°	1062.9	1102.9	1142.8	1152.8	1246.0	1370.3	1432.4	1527.8	1718.7	1861.8	1884.9
142.5°	1091.9	1128.9	1165.8	1175.1	1260.8	1375.2	1432.4	1516.2	1683.8	1809.5	1829.4
145°	1136.4	1168.6	1200.9	1209.0	1280.2	1375.2	1422.7	1491.2	1628.4	1731.3	1746.3
147.5°	1180.9	1212.3	1243.7	1251.6	1308.6	1384.7	1422.7	1476.7	1584.5	1665.5	1677.9
150°	1209.9	1238.3	1266.7	1273.8	1323.4	1389.6	1422.7	1468.2	1559.4	1627.8	1637.9
152.5°	1239.9	1261.4	1282.8	1288.3	1333.1	1392.8	1422.7	1461.6	1539.4	1597.8	1605.5
155°	1284.4	1300.3	1316.2	1320.2	1354.4	1399.9	1422.7	1453.7	1515.6	1562.0	1567.1
157.5°	1317.3	1332.7	1348.2	1352.1	1375.6	1407.0	1422.7	1446.8	1494.9	1531.0	1534.6
160°	1339.5	1351.6	1363.6	1366.6	1385.3	1410.2	1422.7	1443.3	1484.6	1515.5	1517.6
162.5°	1361.8	1370.7	1379.8	1382.0	1395.6	1413.6	1422.7	1440.0	1474.9	1501.0	1503.0
165°	1386.0	1394.2	1402.3	1404.4	1410.4	1418.6	1422.7	1435.2	1460.1	1478.8	1480.9
167.5°	1408.2	1412.0	1415.9	1416.9	1422.0	1428.9	1432.4	1440.5	1456.9	1469.1	1469.9
170°	1422.7	1426.6	1430.5	1431.4	1431.7	1432.2	1432.4	1440.5	1456.9	1469.1	1469.1
172.5°	1430.4	1431.3	1432.2	1432.4	1432.4	1432.4	1432.4	1438.8	1451.7	1461.4	1460.7
175°	1441.1	1441.1	1441.1	1441.1	1438.2	1434.3	1432.4	1436.5	1444.6	1450.8	1450.8
177.5°	1441.1	1441.1	1441.1	1441.1	1438.8	1435.8	1434.3	1437.5	1444.0	1448.8	1448.0
180°	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1	1441.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	983.1	983.1
2.5°	1049.5	1043.2
5°	1349.8	1356.2
7.5°	1817.7	1814.6
10°	2260.3	2288.8
12.5°	2582.7	2589.0
15°	2778.7	2791.4
17.5°	2854.6	2857.8
20°	2857.8	2851.4
22.5°	2823.0	2816.7
25°	2781.9	2778.7
27.5°	2743.9	2747.1
30°	2728.1	2737.6
32.5°	2728.1	2743.9
35°	2734.5	2750.3
37.5°	2731.3	2750.3
40°	2718.7	2740.8
42.5°	2683.8	2699.7
45°	2630.1	2649.1
47.5°	2560.6	2573.3
50°	2472.1	2484.7
52.5°	2361.4	2364.6
55°	2228.6	2241.3
57.5°	2086.4	2089.5
60°	1928.3	1937.9
62.5°	1760.8	1760.8
65°	1583.8	1590.1
67.5°	1400.4	1416.2
70°	1213.9	1217.1
72.5°	1030.6	1030.6
75°	840.9	844.1
77.5°	660.7	660.7
80°	490.0	493.2
82.5°	338.3	344.6
85°	211.8	211.8
87.5°	98.0	88.5
90°	36.7	36.7
92.5°	147.2	118.0
95°	513.1	424.6
97.5°	1229.5	1061.0
100°	1771.4	1570.7
102.5°	2304.6	2132.6
105°	2984.2	2891.9
107.5°	3429.5	3451.8
110°	3599.3	3695.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3614.4	3762.2
115°	3518.6	3723.6
117.5°	3315.3	3542.8
120°	3151.6	3372.5
122.5°	2992.2	3210.1
125°	2764.6	2965.4
127.5°	2560.0	2729.3
130°	2439.4	2595.9
132.5°	2330.0	2470.1
135°	2180.1	2300.9
137.5°	2059.8	2158.8
140°	1977.4	2069.7
142.5°	1908.9	1988.5
145°	1806.4	1866.6
147.5°	1727.8	1777.7
150°	1678.3	1718.7
152.5°	1635.9	1666.4
155°	1587.2	1607.4
157.5°	1548.8	1563.0
160°	1525.7	1533.9
162.5°	1510.7	1518.5
165°	1489.0	1497.2
167.5°	1473.4	1476.8
170°	1469.1	1469.1
172.5°	1457.6	1454.6
175°	1450.8	1450.8
177.5°	1444.5	1441.1
180°	1441.1	1441.1

(END OF REPORT)