

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: P938004

Luminaire Tested: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938004
REPORT IS A COMBINATION OF REPORTS P933614 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-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

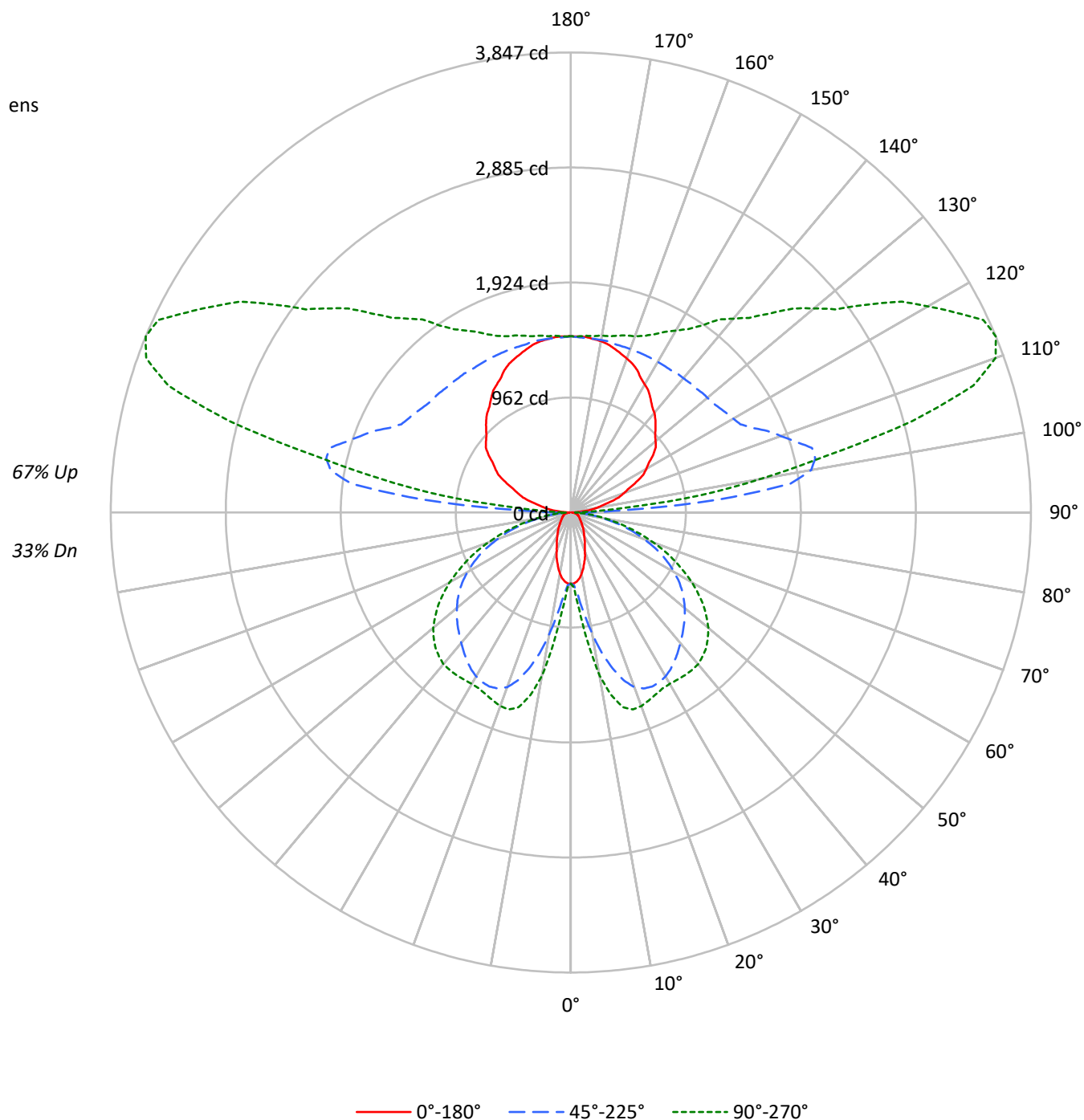
Lumens per Lamp: N/A
Luminaire Lumens: 14153.1 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 111.2
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

TEST NUMBER: P938004

CATALOG NUMBER: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-8

Luminous Intensity Polar Plot



TEST NUMBER: P938004

CATALOG NUMBER: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-8

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°	2692	3186	3704
10°	2442	4643	6142
15°	2076	6067	7416
20°	1690	7030	7558
25°	1410	7357	7405
30°	1189	7403	7391
35°	1051	7280	7582
40°	916	7121	7779
45°	829	7004	7810
50°	761	6898	7681
55°	729	6744	7340
60°	746	6447	6802
65°	776	5997	6063
70°	826	5230	5123
75°	916	4264	3998
80°	1000	2957	2694
85°	890	1569	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7810 cd/sqm

TEST NUMBER: P938004

CATALOG NUMBER: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	0.5
10°-20°	340.6	2.4
20°-30°	595.7	4.2
30°-40°	766.8	5.4
40°-50°	856.5	6.1
50°-60°	820.4	5.8
60°-70°	650.1	4.6
70°-80°	382.3	2.7
80°-90°	111.8	0.8
90°-100°	718.3	5.1
100°-110°	1888.3	13.3
110°-120°	1958.0	13.8
120°-130°	1570.5	11.1
130°-140°	1232.3	8.7
140°-150°	945.9	6.7
150°-160°	681.2	4.8
160°-170°	416.8	2.9
170°-180°	140.8	1.0
0°-30°	1013.1	7.2
0°-40°	1780.0	12.6
0°-60°	3456.9	24.4
0°-90°	4601.1	32.5
90°-120°	4564.6	32.3
90°-150°	8313.3	58.7
90°-180°	9552.0	67.5
0°-180°	14153.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	579	621	699	791	819	53
15°	434	800	1349	1635	1687	121
25°	277	907	1606	1677	1679	128
35°	187	867	1513	1599	1662	117
45°	128	691	1337	1532	1601	99
55°	92	439	1135	1318	1354	84
65°	73	233	842	947	961	72
75°	54	143	462	508	510	56
85°	19	44	115	126	128	20
90°	10	28	75	38	38	9
95°	95	372	1237	638	434	105
105°	340	515	2088	3170	2957	361
115°	604	734	1672	3336	3807	597
125°	841	942	1521	2570	3032	746
135°	1002	1103	1474	2075	2353	775
145°	1162	1236	1455	1770	1909	728
155°	1313	1350	1455	1597	1644	603
165°	1417	1436	1455	1512	1531	400
175°	1474	1474	1465	1483	1483	140
180°	1474	1474	1474	1474	1474	

TEST NUMBER: P938004

CATALOG NUMBER: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0
2.5°	594.0	594.0	597.8	599.7	603.6	605.5	609.3	613.1	624.6	626.5	630.3
5°	578.7	586.4	611.2	620.8	647.5	683.8	699.1	723.9	775.5	790.7	800.3
7.5°	555.8	573.0	634.1	649.4	716.2	811.8	851.9	905.3	987.5	1027.6	1060.0
10°	519.5	555.8	664.7	701.0	809.8	955.0	1029.5	1104.1	1228.2	1283.6	1304.6
12.5°	479.4	538.6	697.2	746.8	903.4	1115.5	1205.3	1287.4	1428.8	1503.3	1514.7
15°	433.6	513.8	727.7	800.3	1002.8	1249.2	1348.6	1449.8	1581.6	1635.1	1648.4
17.5°	393.5	494.7	756.4	832.8	1079.1	1369.6	1470.8	1554.8	1661.8	1698.1	1707.6
20°	343.8	464.1	775.5	874.8	1159.5	1457.4	1554.8	1619.8	1692.4	1715.3	1719.1
22.5°	307.5	431.7	786.9	890.1	1212.9	1510.9	1593.0	1644.6	1694.3	1701.9	1703.8
25°	277.0	395.4	785.0	907.2	1258.8	1543.4	1606.4	1644.6	1673.3	1677.1	1677.1
27.5°	248.3	355.3	777.4	911.1	1293.2	1551.0	1600.7	1627.4	1640.8	1648.4	1648.4
30°	223.5	317.1	758.3	903.4	1308.4	1543.4	1583.5	1596.9	1610.2	1621.7	1627.4
32.5°	204.4	280.8	729.6	888.2	1310.4	1524.3	1552.9	1560.6	1579.7	1606.4	1616.0
35°	187.2	244.5	697.2	867.1	1298.9	1493.7	1512.8	1520.5	1558.7	1598.8	1612.1
37.5°	170.0	217.7	655.1	830.8	1281.7	1457.4	1470.8	1484.2	1543.4	1591.1	1606.4
40°	152.8	194.8	605.5	790.7	1255.0	1413.5	1425.0	1446.0	1524.3	1579.7	1594.9
42.5°	139.4	175.7	552.0	748.7	1220.6	1363.8	1381.0	1411.6	1501.4	1560.6	1577.8
45°	128.0	156.6	494.7	691.4	1176.7	1312.3	1337.1	1379.1	1474.6	1531.9	1547.2
47.5°	116.5	143.2	435.5	632.2	1128.9	1260.7	1293.2	1340.9	1438.3	1493.7	1507.1
50°	107.0	129.9	376.3	569.2	1077.2	1205.3	1243.5	1293.2	1392.5	1444.1	1461.2
52.5°	99.3	118.4	320.9	506.2	1018.0	1148.0	1191.9	1243.5	1337.1	1386.8	1398.2
55°	91.7	108.9	273.1	439.3	956.9	1086.9	1134.6	1184.3	1276.0	1318.0	1325.6
57.5°	87.9	101.2	233.0	376.3	892.0	1018.0	1071.5	1117.4	1203.4	1235.9	1243.5
60°	82.1	95.5	202.5	322.8	821.3	953.1	998.9	1044.8	1117.4	1144.2	1149.9
62.5°	76.4	91.7	179.5	271.2	748.7	876.7	922.5	964.6	1025.7	1044.8	1052.4
65°	72.6	87.9	162.4	233.0	674.2	796.5	842.3	878.6	928.3	947.4	951.2
67.5°	68.8	84.0	149.0	200.5	599.7	716.2	750.6	785.0	823.2	842.3	844.2
70°	63.0	80.2	137.5	177.6	523.3	624.6	653.2	689.5	720.1	729.6	735.4
72.5°	59.2	74.5	129.9	160.4	445.0	536.7	563.4	584.5	611.2	620.8	620.8
75°	53.5	66.8	122.2	143.2	364.8	439.3	462.2	483.2	504.2	508.1	502.3
77.5°	47.8	59.2	105.0	120.3	284.6	347.6	366.7	378.2	395.4	399.2	401.1
80°	40.1	51.6	82.1	93.6	206.3	255.9	269.3	278.9	294.1	294.1	298.0
82.5°	30.6	40.1	59.2	66.8	139.4	175.7	187.2	192.9	202.5	202.5	202.5
85°	19.1	24.8	38.2	43.9	84.0	107.0	114.6	116.5	124.2	126.1	126.1
87.5°	9.5	13.4	24.8	26.7	43.9	55.4	55.4	59.2	59.2	57.3	55.4
90°	9.9	17.9	25.7	27.7	43.5	64.7	75.2	66.8	50.0	37.5	37.5
92.5°	39.5	106.8	174.1	190.9	268.4	371.6	423.3	370.9	266.3	187.8	180.4
95°	94.9	218.0	341.1	371.9	660.3	1044.9	1237.1	1104.0	837.6	637.8	615.2
97.5°	164.2	272.7	381.3	408.5	889.4	1530.7	1851.3	1767.1	1598.8	1472.5	1429.4
100°	217.5	316.0	414.5	439.1	972.8	1684.3	2040.2	2046.3	2058.6	2067.9	2016.6
102.5°	263.0	354.9	446.7	469.8	1011.1	1732.8	2093.6	2200.8	2415.3	2576.1	2532.2
105°	340.2	418.0	495.7	515.2	1039.3	1738.2	2087.6	2328.0	2808.8	3169.5	3145.9
107.5°	419.3	491.8	564.3	582.5	1044.6	1660.8	1968.9	2304.3	2975.0	3478.0	3483.7
110°	472.7	538.2	603.8	620.1	1036.7	1592.3	1870.1	2245.0	2994.8	3557.1	3581.7

TEST NUMBER: P938004

CATALOG NUMBER: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	525.2	587.5	650.0	665.5	1037.0	1532.4	1780.0	2163.7	2931.1	3506.7	3544.5
115°	604.2	661.8	719.3	733.7	1046.6	1463.7	1672.3	2041.9	2781.2	3335.6	3388.1
117.5°	682.3	734.7	786.9	800.0	1066.1	1420.8	1598.1	1931.7	2598.8	3099.3	3157.4
120°	727.8	777.1	826.3	838.6	1081.8	1406.2	1568.4	1873.2	2482.8	2940.1	2996.5
122.5°	772.3	822.0	871.6	884.0	1104.6	1398.6	1545.7	1820.1	2369.2	2780.9	2836.5
125°	840.6	885.9	931.1	942.4	1135.2	1392.4	1520.9	1754.1	2220.5	2570.2	2621.5
127.5°	896.0	941.7	987.4	998.8	1166.0	1388.8	1500.2	1700.4	2100.8	2401.1	2444.3
130°	925.6	974.9	1024.0	1036.4	1188.3	1391.0	1492.3	1670.5	2027.0	2294.3	2334.3
132.5°	956.2	1005.5	1054.7	1067.0	1206.5	1392.4	1485.3	1644.9	1964.0	2203.3	2239.1
135°	1001.8	1046.6	1091.5	1102.6	1226.2	1391.1	1473.5	1607.1	1874.3	2074.7	2105.6
137.5°	1048.2	1092.6	1137.0	1148.1	1255.9	1399.6	1471.5	1584.4	1810.4	1979.8	2005.1
140°	1086.8	1127.7	1168.5	1178.8	1274.1	1401.1	1464.6	1562.2	1757.3	1903.7	1927.3
142.5°	1116.5	1154.3	1192.0	1201.5	1289.2	1406.1	1464.6	1550.3	1721.7	1850.2	1870.6
145°	1161.9	1194.9	1227.9	1236.2	1309.0	1406.1	1454.7	1524.8	1665.0	1770.2	1785.6
147.5°	1207.5	1239.6	1271.7	1279.7	1338.1	1415.8	1454.7	1509.9	1620.2	1703.0	1715.7
150°	1237.1	1266.1	1295.2	1302.4	1353.1	1420.8	1454.7	1501.3	1594.5	1664.4	1674.7
152.5°	1267.8	1289.7	1311.7	1317.2	1363.1	1424.1	1454.7	1494.5	1574.0	1633.7	1641.5
155°	1313.3	1329.6	1345.8	1349.9	1384.8	1431.4	1454.7	1486.4	1549.7	1597.1	1602.3
157.5°	1346.9	1362.7	1378.5	1382.5	1406.5	1438.6	1454.7	1479.3	1528.5	1565.4	1569.1
160°	1369.7	1382.0	1394.3	1397.4	1416.5	1442.0	1454.7	1475.8	1518.0	1549.6	1551.7
162.5°	1392.4	1401.6	1410.8	1413.1	1427.0	1445.4	1454.7	1472.4	1508.0	1534.8	1536.8
165°	1417.1	1425.5	1433.8	1435.9	1442.1	1450.5	1454.7	1467.5	1493.0	1512.1	1514.2
167.5°	1439.9	1443.8	1447.8	1448.7	1454.0	1461.1	1464.6	1472.9	1489.6	1502.1	1503.0
170°	1454.7	1458.7	1462.7	1463.6	1463.9	1464.4	1464.6	1472.9	1489.6	1502.1	1502.1
172.5°	1462.6	1463.4	1464.4	1464.6	1464.6	1464.6	1464.6	1471.2	1484.4	1494.3	1493.5
175°	1473.5	1473.5	1473.5	1473.5	1470.5	1466.6	1464.6	1468.8	1477.1	1483.4	1483.4
177.5°	1473.5	1473.5	1473.5	1473.5	1471.2	1468.1	1466.6	1469.8	1476.4	1481.4	1480.5
180°	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5

TEST NUMBER: P938004

CATALOG NUMBER: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	594.0	594.0
2.5°	634.1	630.3
5°	815.6	819.4
7.5°	1098.3	1096.4
10°	1365.7	1382.9
12.5°	1560.6	1564.4
15°	1679.0	1686.6
17.5°	1724.8	1726.7
20°	1726.7	1722.9
22.5°	1705.7	1701.9
25°	1680.9	1679.0
27.5°	1658.0	1659.9
30°	1648.4	1654.2
32.5°	1648.4	1658.0
35°	1652.2	1661.8
37.5°	1650.3	1661.8
40°	1642.7	1656.1
42.5°	1621.7	1631.2
45°	1589.2	1600.7
47.5°	1547.2	1554.8
50°	1493.7	1501.4
52.5°	1426.9	1428.8
55°	1346.6	1354.3
57.5°	1260.7	1262.6
60°	1165.2	1170.9
62.5°	1063.9	1063.9
65°	956.9	960.7
67.5°	846.1	855.7
70°	733.4	735.4
72.5°	622.7	622.7
75°	508.1	510.0
77.5°	399.2	399.2
80°	296.0	298.0
82.5°	204.4	208.2
85°	128.0	128.0
87.5°	59.2	53.5
90°	37.5	37.5
92.5°	150.5	120.6
95°	524.7	434.1
97.5°	1257.2	1084.9
100°	1811.3	1606.0
102.5°	2356.4	2180.6
105°	3051.3	2956.9
107.5°	3506.6	3529.4
110°	3680.2	3778.6

TEST NUMBER: P938004

CATALOG NUMBER: SQ4-FB-125U-075D-B40-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3695.7	3846.8
115°	3597.7	3807.3
117.5°	3389.9	3622.4
120°	3222.5	3448.3
122.5°	3059.4	3282.2
125°	2826.8	3032.0
127.5°	2617.6	2790.7
130°	2494.3	2654.2
132.5°	2382.4	2525.7
135°	2229.2	2352.6
137.5°	2106.2	2207.3
140°	2021.8	2116.3
142.5°	1951.8	2033.2
145°	1847.1	1908.6
147.5°	1766.7	1817.7
150°	1716.0	1757.3
152.5°	1672.7	1703.9
155°	1622.9	1643.6
157.5°	1583.6	1598.1
160°	1560.0	1568.4
162.5°	1544.7	1552.6
165°	1522.5	1530.9
167.5°	1506.5	1510.0
170°	1502.1	1502.1
172.5°	1490.4	1487.3
175°	1483.4	1483.4
177.5°	1477.0	1473.5
180°	1473.5	1473.5

(END OF REPORT)