

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: P938104

Luminaire Tested: SQ4-FB-125U-100D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938104
REPORT IS A COMBINATION OF REPORTS P933615 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-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

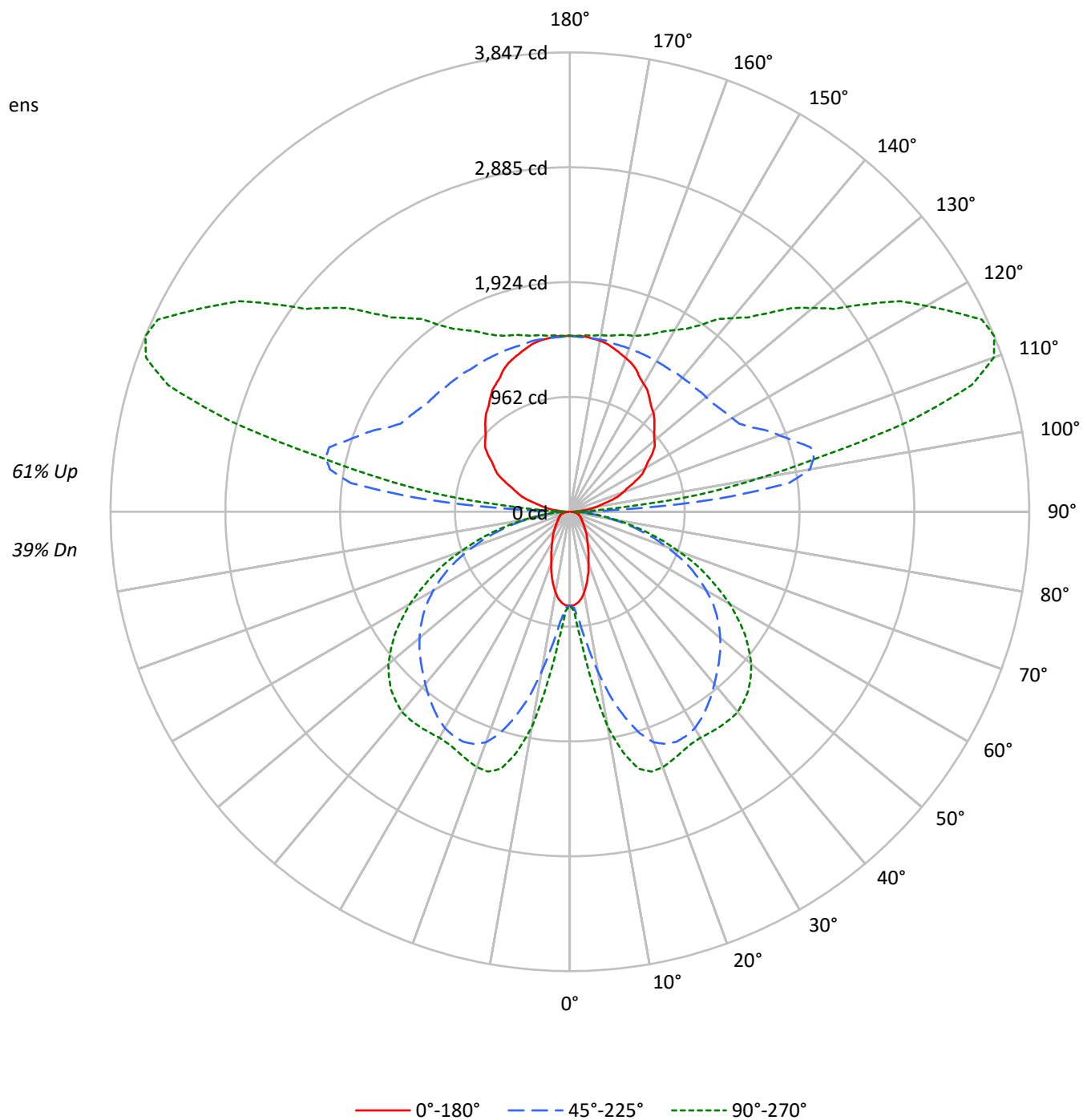
Lumens per Lamp: N/A
Luminaire Lumens: 15629.6 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 128.8
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					0
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°	3642	3642	3642
5°	3558	4209	4895
10°	3227	6135	8115
15°	2743	8015	9799
20°	2233	9289	9986
25°	1863	9720	9783
30°	1571	9782	9765
35°	1389	9619	10017
40°	1210	9408	10278
45°	1096	9254	10319
50°	1005	9115	10147
55°	962	8911	9698
60°	985	8519	8988
65°	1025	7925	8012
70°	1092	6911	6768
75°	1211	5634	5282
80°	1322	3907	3559
85°	1174	2074	1822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10319 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	0.6
10°-20°	450.0	2.9
20°-30°	787.1	5.0
30°-40°	1013.2	6.5
40°-50°	1131.7	7.2
50°-60°	1083.9	6.9
60°-70°	859.0	5.5
70°-80°	505.1	3.2
80°-90°	146.0	0.9
90°-100°	718.3	4.6
100°-110°	1888.3	12.1
110°-120°	1958.0	12.5
120°-130°	1570.5	10.0
130°-140°	1232.3	7.9
140°-150°	945.9	6.1
150°-160°	681.2	4.4
160°-170°	416.8	2.7
170°-180°	140.8	0.9
0°-30°	1338.6	8.6
0°-40°	2351.8	15.0
0°-60°	4567.4	29.2
0°-90°	6077.5	38.9
90°-120°	4564.6	29.2
90°-150°	8313.3	53.2
90°-180°	9552.0	61.1
0°-180°	15629.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	765	820	924	1045	1083	71
15°	573	1058	1782	2160	2228	159
25°	366	1199	2122	2216	2218	169
35°	247	1146	1999	2112	2196	154
45°	169	914	1767	2024	2115	131
55°	121	580	1499	1741	1789	110
65°	96	308	1113	1252	1270	95
75°	71	189	611	671	674	74
85°	25	58	152	167	169	27
90°	10	28	75	38	38	10
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	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9
2.5°	784.9	784.9	790.0	792.5	797.5	800.0	805.1	810.1	825.3	827.8	832.9
5°	764.7	774.8	807.6	820.2	855.6	903.5	923.7	956.5	1024.6	1044.9	1057.5
7.5°	734.4	757.1	837.9	858.1	946.4	1072.6	1125.6	1196.2	1304.8	1357.8	1400.7
10°	686.5	734.4	878.3	926.3	1070.1	1261.8	1360.3	1458.8	1622.7	1696.0	1723.7
12.5°	633.5	711.7	921.2	986.8	1193.8	1473.9	1592.5	1701.0	1887.7	1986.2	2001.3
15°	572.9	678.9	961.6	1057.5	1325.0	1650.5	1781.7	1915.5	2089.6	2160.3	2178.0
17.5°	519.9	653.7	999.4	1100.4	1425.9	1809.5	1943.3	2054.3	2195.6	2243.6	2256.3
20°	454.3	613.3	1024.6	1155.8	1531.9	1925.7	2054.3	2140.2	2236.0	2266.3	2271.4
22.5°	406.4	570.3	1039.8	1176.1	1602.6	1996.3	2104.8	2172.9	2238.6	2248.6	2251.2
25°	366.0	522.4	1037.2	1198.8	1663.1	2039.2	2122.5	2172.9	2210.8	2215.9	2215.9
27.5°	328.0	469.4	1027.2	1203.9	1708.6	2049.3	2114.9	2150.3	2167.9	2178.0	2178.0
30°	295.3	419.0	1001.9	1193.8	1728.7	2039.2	2092.2	2109.9	2127.5	2142.6	2150.3
32.5°	270.1	371.0	964.1	1173.5	1731.3	2014.0	2051.8	2061.9	2087.2	2122.5	2135.1
35°	247.3	323.1	921.2	1145.8	1716.1	1973.6	1998.8	2008.9	2059.4	2112.4	2130.0
37.5°	224.6	287.7	865.6	1097.9	1693.4	1925.7	1943.3	1961.0	2039.2	2102.2	2122.5
40°	201.9	257.5	800.0	1044.9	1658.1	1867.6	1882.7	1910.5	2014.0	2087.2	2107.3
42.5°	184.2	232.2	729.3	989.3	1612.7	1802.0	1824.7	1865.0	1983.6	2061.9	2084.7
45°	169.1	206.9	653.7	913.6	1554.6	1733.8	1766.7	1822.1	1948.3	2024.0	2044.3
47.5°	153.9	189.3	575.4	835.3	1491.5	1665.7	1708.6	1771.7	1900.4	1973.6	1991.3
50°	141.3	171.6	497.2	752.1	1423.4	1592.5	1643.0	1708.6	1839.8	1908.0	1930.6
52.5°	131.2	156.4	424.0	668.8	1345.1	1516.7	1574.8	1643.0	1766.7	1832.3	1847.4
55°	121.1	143.8	360.9	580.4	1264.4	1436.0	1499.1	1564.8	1685.9	1741.3	1751.5
57.5°	116.1	133.8	307.9	497.2	1178.6	1345.1	1415.8	1476.4	1590.0	1632.9	1643.0
60°	108.5	126.2	267.5	426.5	1085.3	1259.4	1319.9	1380.5	1476.4	1511.8	1519.3
62.5°	100.9	121.1	237.2	358.4	989.3	1158.4	1219.0	1274.5	1355.2	1380.5	1390.6
65°	95.9	116.1	214.5	307.9	890.9	1052.4	1113.0	1160.9	1226.5	1251.8	1256.9
67.5°	90.8	111.1	196.8	265.0	792.5	946.4	991.9	1037.2	1087.7	1113.0	1115.5
70°	83.3	106.0	181.7	234.7	691.5	825.3	863.1	911.1	951.5	964.1	971.6
72.5°	78.2	98.5	171.6	212.0	588.0	709.2	744.5	772.3	807.6	820.2	820.2
75°	70.7	88.3	161.5	189.3	482.1	580.4	610.7	638.5	666.3	671.4	663.7
77.5°	63.1	78.2	138.8	159.0	376.1	459.4	484.6	499.7	522.4	527.4	530.0
80°	53.0	68.2	108.5	123.7	272.6	338.2	355.8	368.4	388.7	388.7	393.7
82.5°	40.4	53.0	78.2	88.3	184.2	232.2	247.3	254.9	267.5	267.5	267.5
85°	25.2	32.9	50.5	58.1	111.1	141.3	151.5	153.9	164.1	166.6	166.6
87.5°	12.6	17.7	32.9	35.3	58.1	73.2	73.2	78.2	78.2	75.7	73.2
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

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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

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	784.9	784.9
2.5°	837.9	832.9
5°	1077.6	1082.7
7.5°	1451.1	1448.6
10°	1804.5	1827.2
12.5°	2061.9	2067.0
15°	2218.4	2228.5
17.5°	2278.9	2281.5
20°	2281.5	2276.4
22.5°	2253.7	2248.6
25°	2220.9	2218.4
27.5°	2190.6	2193.2
30°	2178.0	2185.6
32.5°	2178.0	2190.6
35°	2183.0	2195.6
37.5°	2180.6	2195.6
40°	2170.4	2188.1
42.5°	2142.6	2155.2
45°	2099.8	2114.9
47.5°	2044.3	2054.3
50°	1973.6	1983.6
52.5°	1885.3	1887.7
55°	1779.3	1789.4
57.5°	1665.7	1668.2
60°	1539.5	1547.1
62.5°	1405.8	1405.8
65°	1264.4	1269.5
67.5°	1118.0	1130.6
70°	969.1	971.6
72.5°	822.7	822.7
75°	671.4	673.8
77.5°	527.4	527.4
80°	391.2	393.7
82.5°	270.1	275.1
85°	169.1	169.1
87.5°	78.2	70.7
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

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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)