

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: P937804

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937804
REPORT IS A COMBINATION OF REPORTS P933584 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-B40-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

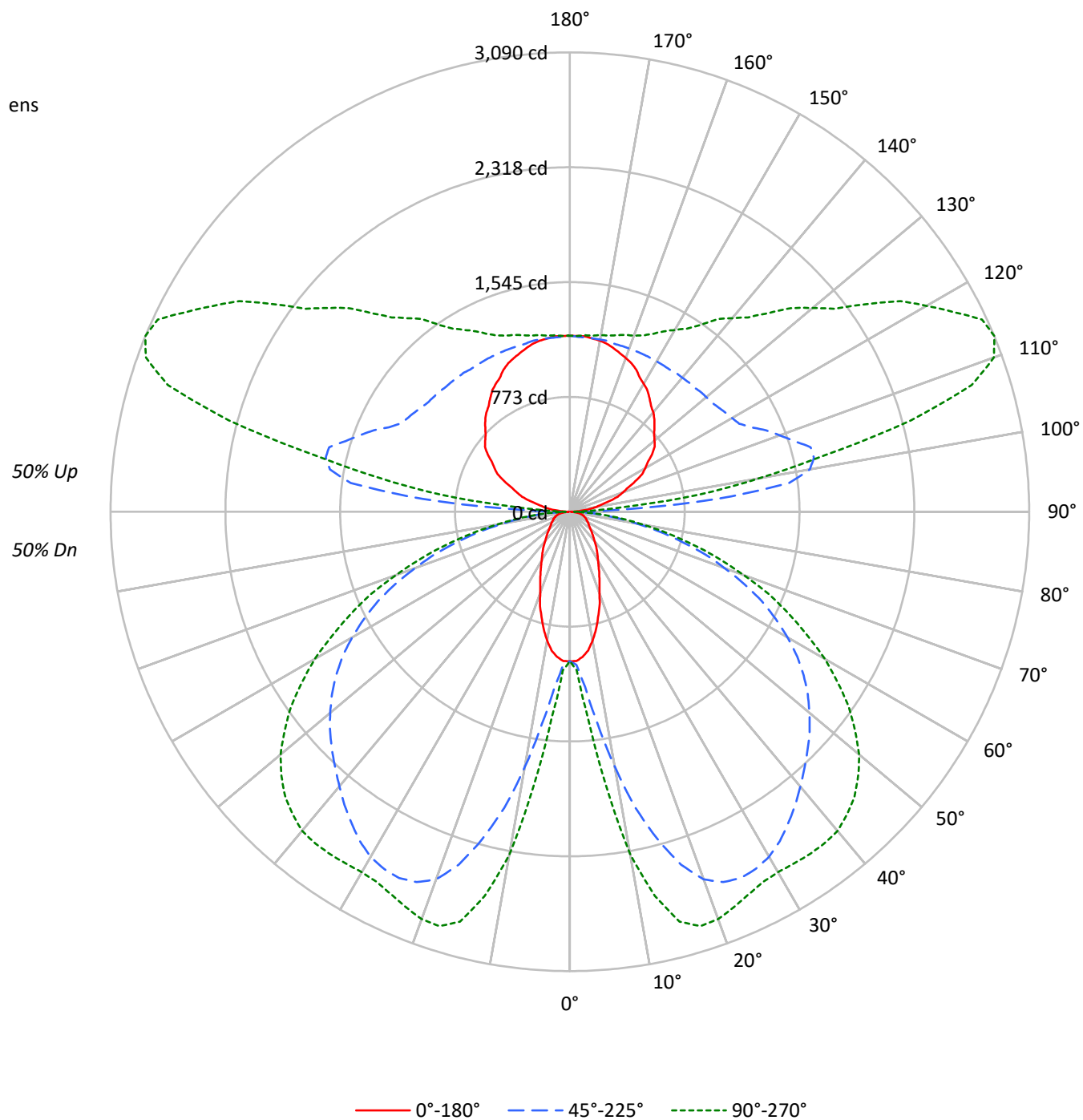
Lumens per Lamp: N/A
Luminaire Lumens: 15454.8 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 137.6
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4556	5391	6269
10°	4133	7858	10393
15°	3512	10266	12550
20°	2860	11897	12790
25°	2385	12449	12530
30°	2012	12528	12506
35°	1779	12320	12830
40°	1550	12050	13164
45°	1404	11851	13216
50°	1287	11673	12997
55°	1233	11413	12421
60°	1262	10911	11511
65°	1313	10149	10261
70°	1399	8851	8669
75°	1550	7217	6765
80°	1694	5004	4558
85°	1504	2656	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13216 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	0.8
10°-20°	576.3	3.7
20°-30°	1008.1	6.5
30°-40°	1297.7	8.4
40°-50°	1449.4	9.4
50°-60°	1388.2	9.0
60°-70°	1100.2	7.1
70°-80°	646.9	4.2
80°-90°	184.3	1.2
90°-100°	577.0	3.7
100°-110°	1517.0	9.8
110°-120°	1573.0	10.2
120°-130°	1261.7	8.2
130°-140°	990.0	6.4
140°-150°	759.9	4.9
150°-160°	547.2	3.5
160°-170°	334.8	2.2
170°-180°	113.1	0.7
0°-30°	1714.4	11.1
0°-40°	3012.1	19.5
0°-60°	5849.7	37.9
0°-90°	7781.1	50.3
90°-120°	3667.0	23.7
90°-150°	6678.5	43.2
90°-180°	7674.0	49.7
0°-180°	15454.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	979	1050	1183	1338	1387	90
15°	734	1354	2282	2767	2854	204
25°	469	1535	2718	2838	2841	216
35°	317	1468	2560	2705	2812	198
45°	217	1170	2263	2592	2709	168
55°	155	744	1920	2230	2292	141
65°	123	394	1425	1603	1626	122
75°	90	242	782	860	863	95
85°	32	74	194	213	217	34
90°	8	22	60	30	30	9
95°	76	299	994	512	349	85
105°	273	414	1677	2546	2375	290
115°	485	590	1343	2680	3059	479
125°	675	757	1222	2065	2436	600
135°	805	886	1184	1667	1890	623
145°	934	993	1169	1422	1533	585
155°	1055	1084	1169	1283	1320	485
165°	1138	1154	1169	1215	1230	321
175°	1184	1184	1177	1192	1192	112
180°	1184	1184	1184	1184	1184	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2
2.5°	1005.2	1005.2	1011.7	1015.0	1021.4	1024.6	1031.1	1037.6	1057.0	1060.2	1066.6
5°	979.4	992.3	1034.4	1050.5	1095.8	1157.2	1183.1	1225.1	1312.3	1338.1	1354.3
7.5°	940.6	969.7	1073.1	1099.0	1212.1	1373.8	1441.6	1532.1	1671.1	1739.0	1794.0
10°	879.2	940.6	1124.8	1186.2	1370.5	1616.1	1742.2	1868.3	2078.4	2172.1	2207.7
12.5°	811.3	911.5	1179.8	1263.8	1528.9	1887.7	2039.6	2178.5	2417.8	2543.8	2563.2
15°	733.7	869.5	1231.5	1354.3	1696.9	2113.9	2282.0	2453.3	2676.4	2766.8	2789.5
17.5°	665.8	837.2	1280.0	1409.3	1826.2	2317.6	2488.8	2631.1	2812.1	2873.5	2889.6
20°	581.8	785.5	1312.3	1480.3	1962.0	2466.3	2631.1	2740.9	2863.9	2902.6	2909.0
22.5°	520.4	730.5	1331.7	1506.2	2052.5	2556.7	2695.8	2783.0	2867.0	2880.0	2883.2
25°	468.7	669.1	1328.5	1535.4	2130.1	2611.7	2718.4	2783.0	2831.5	2838.0	2838.0
27.5°	420.2	601.2	1315.5	1541.8	2188.3	2624.6	2708.7	2753.9	2776.6	2789.5	2789.5
30°	378.2	536.5	1283.2	1528.9	2214.2	2611.7	2679.5	2702.2	2724.8	2744.2	2753.9
32.5°	345.9	475.1	1234.7	1503.0	2217.3	2579.4	2627.9	2640.8	2673.1	2718.4	2734.5
35°	316.8	413.7	1179.8	1467.5	2197.9	2527.7	2560.0	2572.9	2637.5	2705.4	2728.1
37.5°	287.6	368.4	1108.7	1406.0	2168.9	2466.3	2488.8	2511.5	2611.7	2692.5	2718.4
40°	258.6	329.7	1024.6	1338.1	2123.6	2391.9	2411.3	2446.8	2579.4	2673.1	2698.9
42.5°	236.0	297.4	934.2	1267.1	2065.5	2307.9	2337.0	2388.6	2540.6	2640.8	2669.9
45°	216.6	265.0	837.2	1170.1	1991.1	2220.6	2262.6	2333.7	2495.3	2592.3	2618.1
47.5°	197.2	242.4	737.0	1069.9	1910.3	2133.3	2188.3	2269.1	2433.9	2527.7	2550.3
50°	181.0	219.8	636.8	963.2	1823.0	2039.6	2104.2	2188.3	2356.4	2443.7	2472.7
52.5°	168.1	200.4	543.0	856.5	1722.8	1942.6	2017.0	2104.2	2262.6	2346.6	2366.0
55°	155.2	184.2	462.2	743.5	1619.4	1839.1	1920.0	2004.1	2159.2	2230.3	2243.2
57.5°	148.7	171.3	394.3	636.8	1509.5	1722.8	1813.4	1890.9	2036.3	2091.3	2104.2
60°	139.0	161.6	342.7	546.3	1389.9	1612.9	1690.4	1768.1	1890.9	1936.2	1945.8
62.5°	129.3	155.2	303.9	459.0	1267.1	1483.6	1561.2	1632.3	1735.7	1768.1	1781.0
65°	122.8	148.7	274.8	394.3	1141.0	1347.9	1425.4	1486.8	1570.9	1603.3	1609.7
67.5°	116.3	142.2	252.1	339.4	1015.0	1212.1	1270.2	1328.5	1393.2	1425.4	1428.7
70°	106.7	135.8	232.7	300.6	885.7	1057.0	1105.4	1166.8	1218.6	1234.7	1244.5
72.5°	100.2	126.1	219.8	271.5	753.1	908.3	953.6	989.1	1034.4	1050.5	1050.5
75°	90.5	113.2	206.9	242.4	617.4	743.5	782.2	817.8	853.3	859.8	850.1
77.5°	80.8	100.2	177.8	203.6	481.6	588.3	620.6	640.0	669.1	675.6	678.8
80°	67.9	87.3	139.0	158.3	349.1	433.1	455.7	472.0	497.7	497.7	504.2
82.5°	51.8	67.9	100.2	113.2	236.0	297.4	316.8	326.4	342.7	342.7	342.7
85°	32.3	42.0	64.7	74.3	142.2	181.0	194.0	197.2	210.1	213.3	213.3
87.5°	16.1	22.6	42.0	45.3	74.3	93.8	93.8	100.2	100.2	96.9	93.8
90°	7.9	14.3	20.6	22.3	35.0	51.9	60.4	53.7	40.2	30.2	30.2
92.5°	31.8	85.9	139.9	153.4	215.5	298.5	340.0	298.0	214.0	151.0	145.0
95°	76.3	175.1	274.0	298.7	530.4	839.3	993.9	886.9	672.9	512.5	494.3
97.5°	131.9	219.1	306.4	328.1	714.5	1229.7	1487.2	1419.6	1284.4	1183.0	1148.4
100°	174.8	253.8	333.0	352.8	781.5	1353.1	1639.0	1643.9	1653.8	1661.2	1620.0
102.5°	211.3	285.1	358.9	377.3	812.1	1391.9	1681.9	1768.0	1940.4	2069.6	2034.2
105°	273.3	335.8	398.2	413.9	835.0	1396.4	1677.1	1870.2	2256.5	2546.2	2527.2
107.5°	336.8	395.1	453.3	468.0	839.3	1334.2	1581.8	1851.2	2390.0	2794.0	2798.6
110°	379.7	432.3	484.9	498.1	832.9	1279.1	1502.3	1803.5	2405.8	2857.6	2877.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	421.8	472.0	522.2	534.7	833.1	1231.1	1430.0	1738.3	2354.7	2817.2	2847.5
115°	485.4	531.6	578.0	589.5	840.8	1175.9	1343.4	1640.4	2234.3	2679.7	2721.8
117.5°	548.2	590.2	632.2	642.7	856.4	1141.3	1283.8	1551.8	2087.8	2489.8	2536.5
120°	584.7	624.3	663.8	673.7	869.1	1129.8	1260.0	1504.9	1994.6	2361.9	2407.3
122.5°	620.5	660.4	700.3	710.2	887.4	1123.6	1241.7	1462.2	1903.2	2234.0	2278.8
125°	675.3	711.7	748.1	757.1	912.0	1118.6	1221.8	1409.2	1783.8	2064.8	2106.1
127.5°	719.8	756.5	793.2	802.4	936.7	1115.7	1205.2	1366.0	1687.7	1928.9	1963.7
130°	743.6	783.1	822.6	832.6	954.6	1117.4	1198.8	1342.0	1628.4	1843.2	1875.2
132.5°	768.2	807.7	847.3	857.2	969.2	1118.6	1193.3	1321.4	1577.8	1770.0	1798.7
135°	804.8	840.8	876.9	885.9	985.2	1117.5	1183.7	1291.1	1505.7	1666.8	1691.6
137.5°	842.1	877.7	913.5	922.3	1009.0	1124.4	1182.1	1272.8	1454.4	1590.5	1610.8
140°	873.1	905.9	938.8	947.0	1023.5	1125.6	1176.6	1255.0	1411.8	1529.3	1548.3
142.5°	896.9	927.3	957.7	965.2	1035.7	1129.6	1176.6	1245.4	1383.1	1486.5	1502.8
145°	933.5	960.0	986.5	993.1	1051.6	1129.7	1168.6	1225.0	1337.6	1422.1	1434.4
147.5°	970.0	995.8	1021.6	1028.1	1074.9	1137.4	1168.6	1212.9	1301.6	1368.0	1378.3
150°	993.9	1017.2	1040.5	1046.3	1087.1	1141.4	1168.6	1206.1	1280.9	1337.1	1345.4
152.5°	1018.5	1036.2	1053.8	1058.2	1095.0	1144.1	1168.6	1200.6	1264.5	1312.5	1318.8
155°	1055.0	1068.1	1081.2	1084.4	1112.5	1149.9	1168.6	1194.0	1244.9	1283.0	1287.1
157.5°	1082.0	1094.7	1107.5	1110.7	1130.0	1155.7	1168.6	1188.4	1227.9	1257.6	1260.5
160°	1100.4	1110.3	1120.1	1122.6	1138.0	1158.4	1168.6	1185.6	1219.5	1244.9	1246.7
162.5°	1118.6	1126.0	1133.5	1135.3	1146.4	1161.2	1168.6	1183.0	1211.5	1233.0	1234.6
165°	1138.5	1145.1	1151.8	1153.5	1158.6	1165.3	1168.6	1178.9	1199.4	1214.8	1216.5
167.5°	1156.7	1159.8	1163.1	1163.9	1168.1	1173.7	1176.6	1183.2	1196.7	1206.7	1207.4
170°	1168.6	1171.8	1175.0	1175.8	1176.1	1176.4	1176.6	1183.2	1196.7	1206.7	1206.7
172.5°	1175.0	1175.7	1176.4	1176.6	1176.6	1176.6	1176.6	1181.9	1192.5	1200.4	1199.9
175°	1183.7	1183.7	1183.7	1183.7	1181.3	1178.2	1176.6	1179.9	1186.6	1191.6	1191.6
177.5°	1183.7	1183.7	1183.7	1183.7	1181.9	1179.4	1178.2	1180.9	1186.1	1190.1	1189.5
180°	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1005.2	1005.2
2.5°	1073.1	1066.6
5°	1380.2	1386.7
7.5°	1858.5	1855.4
10°	2311.1	2340.2
12.5°	2640.8	2647.3
15°	2841.2	2854.1
17.5°	2918.8	2922.0
20°	2922.0	2915.5
22.5°	2886.5	2880.0
25°	2844.5	2841.2
27.5°	2805.6	2808.8
30°	2789.5	2799.2
32.5°	2789.5	2805.6
35°	2796.0	2812.1
37.5°	2792.7	2812.1
40°	2779.8	2802.4
42.5°	2744.2	2760.4
45°	2689.3	2708.7
47.5°	2618.1	2631.1
50°	2527.7	2540.6
52.5°	2414.5	2417.8
55°	2278.7	2291.7
57.5°	2133.3	2136.5
60°	1971.7	1981.4
62.5°	1800.4	1800.4
65°	1619.4	1625.9
67.5°	1431.9	1448.1
70°	1241.2	1244.5
72.5°	1053.7	1053.7
75°	859.8	863.0
77.5°	675.6	675.6
80°	501.0	504.2
82.5°	345.9	352.3
85°	216.6	216.6
87.5°	100.2	90.5
90°	30.2	30.2
92.5°	121.0	96.9
95°	421.5	348.8
97.5°	1009.9	871.5
100°	1455.1	1290.2
102.5°	1893.0	1751.8
105°	2451.3	2375.4
107.5°	2817.1	2835.4
110°	2956.5	3035.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2968.9	3090.4
115°	2890.2	3058.7
117.5°	2723.3	2910.1
120°	2588.8	2770.3
122.5°	2457.8	2636.8
125°	2270.9	2435.8
127.5°	2102.8	2242.0
130°	2003.8	2132.3
132.5°	1913.9	2029.0
135°	1790.8	1890.0
137.5°	1692.0	1773.2
140°	1624.2	1700.1
142.5°	1568.1	1633.4
145°	1483.9	1533.3
147.5°	1419.2	1460.2
150°	1378.5	1411.8
152.5°	1343.8	1368.8
155°	1303.8	1320.4
157.5°	1272.2	1283.8
160°	1253.3	1260.0
162.5°	1240.9	1247.3
165°	1223.2	1229.8
167.5°	1210.3	1213.1
170°	1206.7	1206.7
172.5°	1197.4	1194.9
175°	1191.6	1191.6
177.5°	1186.6	1183.7
180°	1183.7	1183.7

(END OF REPORT)