

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: P937800

Luminaire Tested: SQ4-FB-100U-125D-B35-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937800
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-B35-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

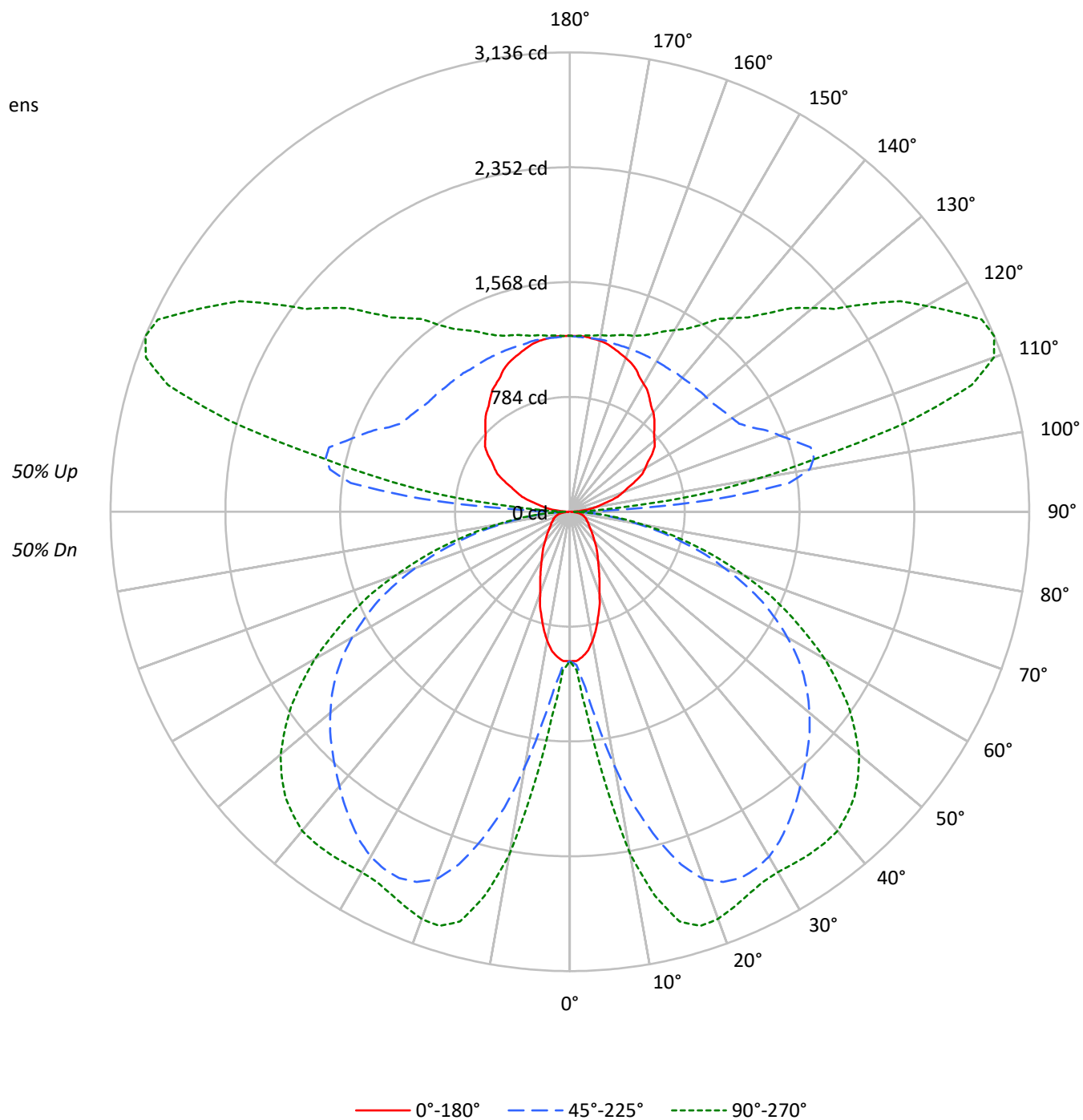
Lumens per Lamp: N/A
Luminaire Lumens: 15681.4 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

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°	4732	4732	4732
5°	4623	5470	6361
10°	4194	7973	10546
15°	3564	10416	12734
20°	2901	12071	12977
25°	2421	12632	12714
30°	2041	12711	12690
35°	1805	12500	13018
40°	1573	12226	13357
45°	1424	12025	13409
50°	1306	11844	13187
55°	1252	11580	12603
60°	1281	11071	11680
65°	1332	10298	10412
70°	1419	8981	8796
75°	1574	7323	6864
80°	1719	5078	4625
85°	1528	2695	2368

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13409 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	0.8
10°-20°	584.8	3.7
20°-30°	1022.8	6.5
30°-40°	1316.7	8.4
40°-50°	1470.7	9.4
50°-60°	1408.6	9.0
60°-70°	1116.3	7.1
70°-80°	656.4	4.2
80°-90°	186.9	1.2
90°-100°	585.5	3.7
100°-110°	1539.2	9.8
110°-120°	1596.0	10.2
120°-130°	1280.2	8.2
130°-140°	1004.5	6.4
140°-150°	771.0	4.9
150°-160°	555.2	3.5
160°-170°	339.7	2.2
170°-180°	114.8	0.7
0°-30°	1739.5	11.1
0°-40°	3056.2	19.5
0°-60°	5935.5	37.9
0°-90°	7895.2	50.3
90°-120°	3720.7	23.7
90°-150°	6776.4	43.2
90°-180°	7786.0	49.7
0°-180°	15681.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	994	1066	1200	1358	1407	92
15°	744	1374	2315	2807	2896	207
25°	476	1558	2758	2880	2883	219
35°	321	1489	2598	2745	2853	201
45°	220	1187	2296	2630	2748	170
55°	158	754	1948	2263	2325	143
65°	125	400	1446	1627	1650	123
75°	92	246	794	872	876	96
85°	33	75	197	216	220	35
90°	8	23	61	31	31	9
95°	77	303	1008	520	354	86
105°	277	420	1702	2584	2410	294
115°	492	598	1363	2719	3104	486
125°	685	768	1240	2095	2472	608
135°	817	899	1201	1691	1918	632
145°	947	1008	1186	1443	1556	593
155°	1070	1100	1186	1302	1340	492
165°	1155	1170	1186	1233	1248	326
175°	1201	1201	1194	1209	1209	114
180°	1201	1201	1201	1201	1201	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0
2.5°	1020.0	1020.0	1026.6	1029.9	1036.3	1039.6	1046.2	1052.8	1072.5	1075.8	1082.3
5°	993.7	1006.9	1049.5	1065.9	1111.8	1174.1	1200.4	1243.0	1331.5	1357.8	1374.1
7.5°	954.4	983.9	1088.9	1115.1	1229.9	1393.9	1462.7	1554.6	1695.6	1764.5	1820.3
10°	892.1	954.4	1141.3	1203.6	1390.6	1639.8	1767.7	1895.7	2108.8	2204.0	2240.0
12.5°	823.2	924.9	1197.1	1282.4	1551.3	1915.3	2069.5	2210.5	2453.2	2581.1	2600.8
15°	744.5	882.3	1249.5	1374.1	1721.8	2144.9	2315.4	2489.3	2715.6	2807.4	2830.4
17.5°	675.6	849.4	1298.8	1430.0	1853.0	2351.6	2525.3	2669.7	2853.3	2915.6	2932.0
20°	590.3	797.0	1331.5	1502.0	1990.8	2502.4	2669.7	2781.1	2905.8	2945.2	2951.7
22.5°	528.0	741.2	1351.3	1528.3	2082.6	2594.2	2735.3	2823.8	2909.0	2922.2	2925.5
25°	475.6	678.9	1348.0	1557.9	2161.4	2650.0	2758.3	2823.8	2873.0	2879.6	2879.6
27.5°	426.4	610.0	1334.8	1564.5	2220.4	2663.1	2748.4	2794.3	2817.3	2830.4	2830.4
30°	383.7	544.4	1302.0	1551.3	2246.6	2650.0	2718.8	2741.8	2764.8	2784.4	2794.3
32.5°	351.0	482.1	1252.8	1525.0	2249.8	2617.2	2666.4	2679.5	2712.3	2758.3	2774.6
35°	321.4	419.8	1197.1	1489.0	2230.2	2564.7	2597.5	2610.6	2676.2	2745.1	2768.0
37.5°	291.9	373.8	1124.9	1426.7	2200.7	2502.4	2525.3	2548.3	2650.0	2732.0	2758.3
40°	262.4	334.5	1039.6	1357.8	2154.8	2427.0	2446.6	2482.7	2617.2	2712.3	2738.5
42.5°	239.4	301.7	947.9	1285.7	2095.8	2341.7	2371.2	2423.7	2577.8	2679.5	2709.0
45°	219.8	268.9	849.4	1187.2	2020.3	2253.1	2295.8	2367.9	2531.9	2630.4	2656.5
47.5°	200.1	245.9	747.8	1085.6	1938.3	2164.6	2220.4	2302.3	2469.6	2564.7	2587.7
50°	183.6	223.1	646.1	977.3	1849.7	2069.5	2135.1	2220.4	2390.9	2479.5	2508.9
52.5°	170.5	203.3	551.0	869.1	1748.1	1971.0	2046.5	2135.1	2295.8	2381.0	2400.7
55°	157.5	186.9	469.0	754.4	1643.1	1866.1	1948.2	2033.4	2190.8	2263.0	2276.1
57.5°	150.9	173.8	400.1	646.1	1531.6	1748.1	1839.9	1918.6	2066.2	2121.9	2135.1
60°	141.0	164.0	347.7	554.3	1410.3	1636.5	1715.2	1794.0	1918.6	1964.6	1974.3
62.5°	131.2	157.5	308.3	465.7	1285.7	1505.3	1584.1	1656.2	1761.2	1794.0	1807.1
65°	124.6	150.9	278.8	400.1	1157.8	1367.6	1446.3	1508.6	1593.9	1626.8	1633.2
67.5°	118.0	144.3	255.8	344.4	1029.9	1229.9	1288.9	1348.0	1413.6	1446.3	1449.6
70°	108.2	137.8	236.1	305.0	898.7	1072.5	1121.6	1183.9	1236.4	1252.8	1262.7
72.5°	101.6	127.9	223.1	275.5	764.2	921.6	967.5	1003.6	1049.5	1065.9	1065.9
75°	91.9	114.8	209.9	245.9	626.5	754.4	793.7	829.8	865.8	872.4	862.6
77.5°	82.0	101.6	180.4	206.6	488.7	596.9	629.7	649.4	678.9	685.5	688.8
80°	68.9	88.6	141.0	160.7	354.2	439.4	462.4	478.9	505.0	505.0	511.6
82.5°	52.5	68.9	101.6	114.8	239.4	301.7	321.4	331.2	347.7	347.7	347.7
85°	32.8	42.6	65.6	75.4	144.3	183.6	196.8	200.1	213.2	216.5	216.5
87.5°	16.4	23.0	42.6	45.9	75.4	95.2	95.2	101.6	101.6	98.4	95.2
90°	8.0	14.5	20.9	22.6	35.5	52.6	61.2	54.5	40.8	30.6	30.6
92.5°	32.3	87.1	142.0	155.6	218.7	302.9	345.0	302.3	217.2	153.2	147.1
95°	77.4	177.7	278.0	303.1	538.2	851.7	1008.4	899.9	682.8	520.0	501.6
97.5°	133.8	222.3	310.9	332.9	725.0	1247.7	1509.0	1440.4	1303.2	1200.3	1165.2
100°	177.3	257.6	337.9	357.9	792.9	1373.0	1663.0	1668.0	1678.0	1685.6	1643.7
102.5°	214.4	289.2	364.2	382.9	824.0	1412.3	1706.5	1793.9	1968.8	2099.9	2064.1
105°	277.3	340.7	404.1	420.0	847.2	1416.9	1701.7	1897.6	2289.6	2583.5	2564.3
107.5°	341.8	400.9	460.0	474.8	851.6	1353.8	1605.0	1878.3	2425.0	2835.0	2839.7
110°	385.3	438.7	492.1	505.4	845.1	1297.9	1524.3	1830.0	2441.1	2899.5	2919.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	428.0	478.9	529.8	542.5	845.4	1249.1	1451.0	1763.8	2389.3	2858.5	2889.3
115°	492.5	539.4	586.4	598.2	853.1	1193.1	1363.1	1664.5	2267.1	2719.0	2761.7
117.5°	556.2	598.8	641.5	652.1	869.0	1158.1	1302.6	1574.5	2118.4	2526.3	2573.7
120°	593.3	633.4	673.6	683.5	881.9	1146.3	1278.5	1527.0	2023.9	2396.5	2442.6
122.5°	629.6	670.1	710.6	720.6	900.4	1140.0	1259.9	1483.6	1931.1	2266.8	2312.2
125°	685.2	722.1	759.0	768.2	925.4	1135.0	1239.7	1429.9	1810.0	2095.1	2136.9
127.5°	730.3	767.5	804.9	814.2	950.4	1132.1	1222.9	1386.1	1712.4	1957.2	1992.5
130°	754.5	794.6	834.7	844.8	968.6	1133.8	1216.4	1361.6	1652.2	1870.2	1902.7
132.5°	779.5	819.6	859.7	869.8	983.4	1135.0	1210.8	1340.8	1600.9	1795.9	1825.1
135°	816.6	853.1	889.7	898.8	999.6	1133.9	1201.1	1310.0	1527.8	1691.2	1716.4
137.5°	854.5	890.6	926.8	935.9	1023.7	1140.9	1199.4	1291.5	1475.7	1613.8	1634.4
140°	885.9	919.2	952.5	960.9	1038.5	1142.1	1193.8	1273.4	1432.5	1551.8	1571.0
142.5°	910.1	940.9	971.7	979.4	1050.9	1146.1	1193.8	1263.7	1403.4	1508.2	1524.8
145°	947.2	974.0	1001.0	1007.7	1067.1	1146.2	1185.8	1242.9	1357.2	1442.9	1455.4
147.5°	984.2	1010.4	1036.5	1043.1	1090.7	1154.1	1185.8	1230.7	1320.7	1388.1	1398.5
150°	1008.4	1032.1	1055.7	1061.6	1103.0	1158.1	1185.8	1223.8	1299.7	1356.7	1365.1
152.5°	1033.4	1051.4	1069.3	1073.7	1111.1	1160.9	1185.8	1218.2	1283.1	1331.7	1338.1
155°	1070.5	1083.7	1097.0	1100.3	1128.8	1166.8	1185.8	1211.5	1263.2	1301.9	1306.0
157.5°	1097.9	1110.8	1123.7	1126.9	1146.5	1172.7	1185.8	1205.8	1245.9	1276.1	1279.0
160°	1116.5	1126.6	1136.5	1139.1	1154.7	1175.4	1185.8	1203.0	1237.4	1263.2	1264.9
162.5°	1135.0	1142.5	1150.1	1151.9	1163.2	1178.2	1185.8	1200.3	1229.3	1251.1	1252.7
165°	1155.1	1161.9	1168.7	1170.5	1175.6	1182.4	1185.8	1196.1	1217.0	1232.6	1234.3
167.5°	1173.7	1176.9	1180.1	1180.9	1185.2	1190.9	1193.8	1200.6	1214.3	1224.4	1225.1
170°	1185.8	1189.0	1192.3	1193.0	1193.3	1193.6	1193.8	1200.6	1214.3	1224.4	1224.4
172.5°	1192.3	1192.9	1193.6	1193.8	1193.8	1193.8	1193.8	1199.2	1210.0	1218.0	1217.5
175°	1201.1	1201.1	1201.1	1201.1	1198.7	1195.5	1193.8	1197.2	1204.0	1209.1	1209.1
177.5°	1201.1	1201.1	1201.1	1201.1	1199.2	1196.7	1195.5	1198.2	1203.5	1207.6	1206.9
180°	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1020.0	1020.0
2.5°	1088.9	1082.3
5°	1400.4	1407.0
7.5°	1885.8	1882.6
10°	2345.0	2374.5
12.5°	2679.5	2686.1
15°	2882.9	2896.0
17.5°	2961.6	2964.8
20°	2964.8	2958.3
22.5°	2928.8	2922.2
25°	2886.2	2882.9
27.5°	2846.7	2850.0
30°	2830.4	2840.2
32.5°	2830.4	2846.7
35°	2836.9	2853.3
37.5°	2833.6	2853.3
40°	2820.6	2843.5
42.5°	2784.4	2800.9
45°	2728.7	2748.4
47.5°	2656.5	2669.7
50°	2564.7	2577.8
52.5°	2449.9	2453.2
55°	2312.1	2325.3
57.5°	2164.6	2167.8
60°	2000.6	2010.5
62.5°	1826.8	1826.8
65°	1643.1	1649.7
67.5°	1452.9	1469.3
70°	1259.4	1262.7
72.5°	1069.2	1069.2
75°	872.4	875.7
77.5°	685.5	685.5
80°	508.3	511.6
82.5°	351.0	357.5
85°	219.8	219.8
87.5°	101.6	91.9
90°	30.6	30.6
92.5°	122.8	98.4
95°	427.7	353.9
97.5°	1024.7	884.3
100°	1476.5	1309.1
102.5°	1920.8	1777.4
105°	2487.2	2410.2
107.5°	2858.4	2877.0
110°	2999.8	3080.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3012.4	3135.7
115°	2932.6	3103.5
117.5°	2763.2	2952.7
120°	2626.8	2810.9
122.5°	2493.8	2675.4
125°	2304.2	2471.5
127.5°	2133.6	2274.8
130°	2033.2	2163.6
132.5°	1942.0	2058.7
135°	1817.1	1917.7
137.5°	1716.8	1799.2
140°	1648.0	1725.0
142.5°	1591.1	1657.4
145°	1505.6	1555.7
147.5°	1440.0	1481.6
150°	1398.8	1432.5
152.5°	1363.5	1388.9
155°	1322.9	1339.7
157.5°	1290.8	1302.6
160°	1271.7	1278.5
162.5°	1259.1	1265.6
165°	1241.1	1247.9
167.5°	1228.0	1230.9
170°	1224.4	1224.4
172.5°	1214.9	1212.4
175°	1209.1	1209.1
177.5°	1204.0	1201.1
180°	1201.1	1201.1

(END OF REPORT)