

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: P937305

Luminaire Tested: SQ4-FB-075U-100D-B50-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937305
REPORT IS A COMBINATION OF REPORTS P933495 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

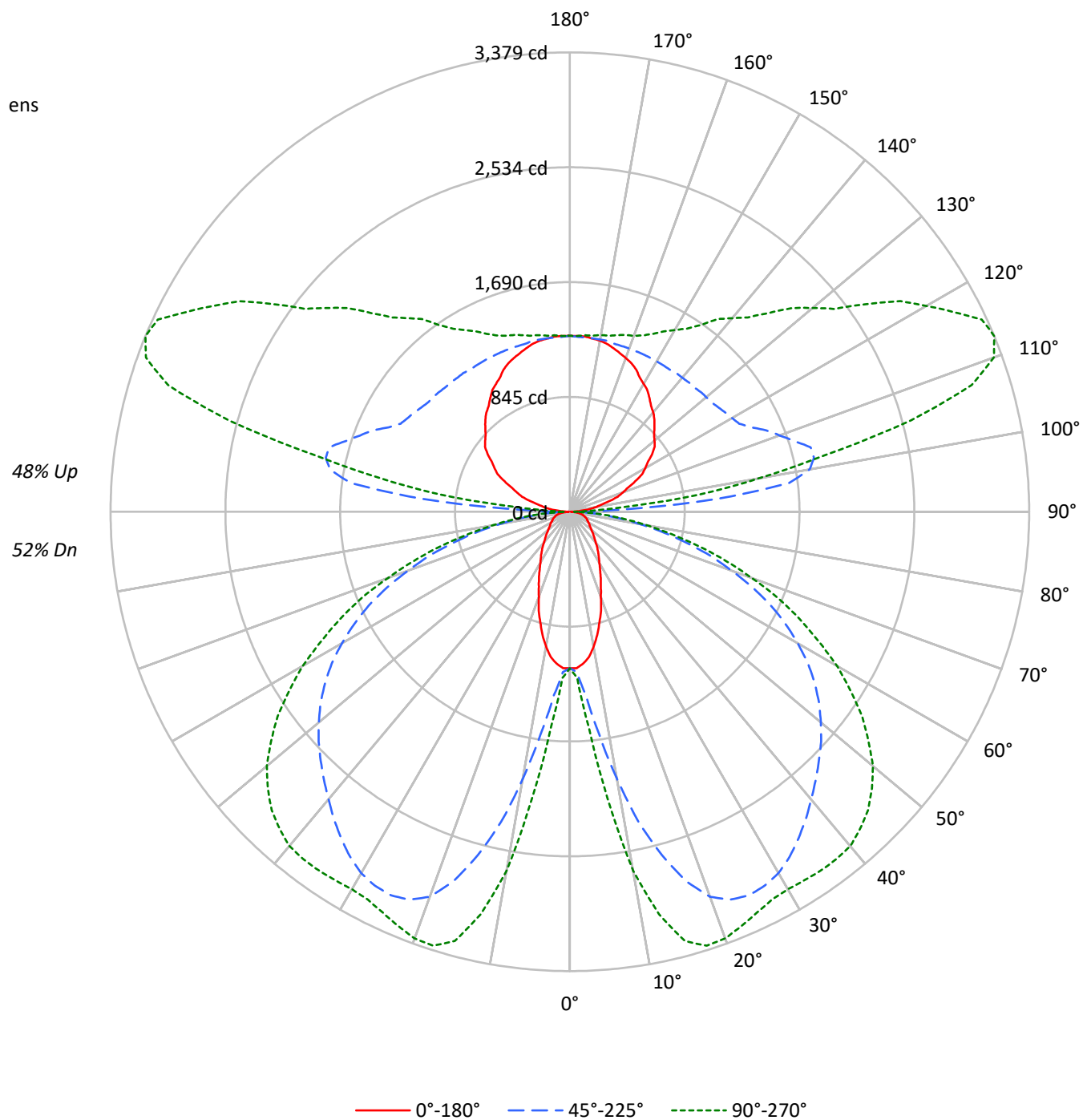
Lumens per Lamp: N/A
Luminaire Lumens: 17301.4 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 153.6
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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3561	3561	3561
5°	3480	4117	4787
10°	3158	6003	7935
15°	2685	7844	9582
20°	2187	9093	9766
25°	1825	9517	9567
30°	1539	9580	9549
35°	1362	9423	9796
40°	1188	9219	10051
45°	1076	9070	10091
50°	988	8937	9924
55°	947	8741	9484
60°	971	8361	8789
65°	1012	7781	7835
70°	1080	6791	6619
75°	1202	5542	5166
80°	1322	3848	3480
85°	1199	2045	1782

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10091 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.9	0.9
10°-20°	660.1	3.8
20°-30°	1154.5	6.7
30°-40°	1486.2	8.6
40°-50°	1660.1	9.6
50°-60°	1590.0	9.2
60°-70°	1260.1	7.3
70°-80°	740.9	4.3
80°-90°	210.8	1.2
90°-100°	630.9	3.6
100°-110°	1658.6	9.6
110°-120°	1719.8	9.9
120°-130°	1379.5	8.0
130°-140°	1082.4	6.3
140°-150°	830.8	4.8
150°-160°	598.3	3.5
160°-170°	366.1	2.1
170°-180°	123.7	0.7
0°-30°	1963.5	11.3
0°-40°	3449.8	19.9
0°-60°	6699.8	38.7
0°-90°	8911.6	51.5
90°-120°	4009.2	23.2
90°-150°	7301.8	42.2
90°-180°	8390.0	48.5
0°-180°	17301.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1122	1203	1355	1533	1588	104
15°	840	1551	2614	3169	3269	234
25°	537	1758	3113	3250	3254	247
35°	363	1681	2932	3098	3221	227
45°	248	1340	2591	2969	3102	192
55°	178	851	2199	2554	2625	162
65°	141	452	1632	1836	1862	139
75°	104	278	896	985	988	109
85°	37	85	222	244	248	39
90°	9	24	66	33	33	10
95°	83	327	1087	560	381	93
105°	299	452	1834	2784	2597	317
115°	531	644	1469	2930	3344	524
125°	738	828	1336	2258	2663	656
135°	880	968	1294	1822	2066	681
145°	1021	1086	1278	1555	1676	639
155°	1154	1186	1278	1403	1444	530
165°	1245	1261	1278	1328	1345	351
175°	1294	1294	1286	1303	1303	123
180°	1294	1294	1294	1294	1294	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3	1151.3
2.5°	1151.3	1151.3	1158.7	1162.5	1169.8	1173.6	1180.9	1188.3	1210.6	1214.3	1221.7
5°	1121.7	1136.5	1184.7	1203.2	1255.0	1325.3	1355.0	1403.1	1503.0	1532.6	1551.1
7.5°	1077.3	1110.6	1229.1	1258.7	1388.2	1573.3	1651.1	1754.7	1914.0	1991.7	2054.6
10°	1006.9	1077.3	1288.3	1358.6	1569.7	1851.0	1995.4	2139.8	2380.4	2487.7	2528.4
12.5°	929.2	1043.9	1351.2	1447.5	1751.1	2161.9	2335.9	2495.2	2769.1	2913.5	2935.7
15°	840.3	995.8	1410.4	1551.1	1943.6	2421.1	2613.6	2809.8	3065.3	3168.9	3194.8
17.5°	762.6	958.8	1466.0	1614.0	2091.6	2654.3	2850.6	3013.5	3220.7	3291.0	3309.6
20°	666.3	899.6	1503.0	1695.5	2247.1	2824.6	3013.5	3139.3	3279.9	3324.4	3331.8
22.5°	596.0	836.7	1525.2	1725.1	2350.8	2928.3	3087.4	3187.5	3283.7	3298.5	3302.2
25°	536.8	766.3	1521.5	1758.4	2439.6	2991.2	3113.4	3187.5	3242.9	3250.3	3250.3
27.5°	481.3	688.5	1506.7	1765.8	2506.3	3006.0	3102.3	3154.1	3180.0	3194.8	3194.8
30°	433.1	614.6	1469.6	1751.1	2535.9	2991.2	3068.9	3094.9	3120.8	3143.0	3154.1
32.5°	396.1	544.1	1414.2	1721.5	2539.5	2954.2	3009.7	3024.6	3061.6	3113.4	3131.9
35°	362.8	473.8	1351.2	1680.7	2517.3	2894.9	2932.0	2946.8	3020.8	3098.5	3124.5
37.5°	329.5	422.1	1269.8	1610.4	2484.1	2824.6	2850.6	2876.4	2991.2	3083.8	3113.4
40°	296.2	377.6	1173.6	1532.6	2432.2	2739.5	2761.7	2802.4	2954.2	3061.6	3091.2
42.5°	270.2	340.6	1069.9	1451.2	2365.5	2643.2	2676.6	2735.8	2909.8	3024.6	3057.8
45°	248.1	303.6	958.8	1340.1	2280.5	2543.3	2591.4	2672.8	2857.9	2969.0	2998.6
47.5°	225.8	277.7	844.1	1225.4	2187.9	2443.3	2506.3	2598.8	2787.6	2894.9	2920.9
50°	207.3	251.7	729.3	1103.2	2088.0	2335.9	2410.0	2506.3	2698.8	2798.7	2832.1
52.5°	192.5	229.5	622.0	981.1	1973.2	2224.9	2310.1	2410.0	2591.4	2687.7	2709.9
55°	177.7	211.0	529.4	851.4	1854.7	2106.5	2199.0	2295.2	2473.0	2554.4	2569.2
57.5°	170.3	196.2	451.7	729.3	1728.8	1973.2	2076.8	2165.7	2332.3	2395.1	2410.0
60°	159.2	185.1	392.4	625.6	1591.8	1847.3	1936.2	2025.0	2165.7	2217.5	2228.6
62.5°	148.0	177.7	348.0	525.7	1451.2	1699.2	1788.0	1869.5	1988.0	2025.0	2039.8
65°	140.7	170.3	314.7	451.7	1306.9	1543.7	1632.5	1703.0	1799.2	1836.2	1843.6
67.5°	133.3	162.9	288.8	388.7	1162.5	1388.2	1454.9	1521.5	1595.6	1632.5	1636.3
70°	122.2	155.5	266.6	344.3	1014.3	1210.6	1266.1	1336.5	1395.7	1414.2	1425.3
72.5°	114.8	144.4	251.7	310.9	862.5	1040.3	1092.1	1132.8	1184.7	1203.2	1203.2
75°	103.7	129.5	237.0	277.7	707.0	851.4	895.9	936.6	977.3	984.7	973.6
77.5°	92.6	114.8	203.6	233.2	551.6	673.8	710.8	733.0	766.3	773.7	777.5
80°	77.7	99.9	159.2	181.4	399.8	496.0	522.0	540.5	570.1	570.1	577.5
82.5°	59.2	77.7	114.8	129.5	270.2	340.6	362.8	373.9	392.4	392.4	392.4
85°	37.0	48.1	74.1	85.2	162.9	207.3	222.1	225.8	240.6	244.3	244.3
87.5°	18.5	25.9	48.1	51.8	85.2	107.3	107.3	114.8	114.8	111.1	107.3
90°	8.7	15.6	22.5	24.3	38.2	56.8	66.0	58.7	44.0	33.0	33.0
92.5°	34.7	93.8	152.9	167.7	235.6	326.3	371.7	325.8	234.0	165.0	158.5
95°	83.4	191.5	299.6	326.6	579.9	917.7	1086.6	969.7	735.7	560.2	540.3
97.5°	144.2	239.6	334.9	358.7	781.2	1344.4	1626.0	1552.0	1404.2	1293.3	1255.5
100°	191.1	277.6	364.1	385.6	854.4	1479.4	1791.9	1797.3	1808.1	1816.3	1771.1
102.5°	231.1	311.8	392.4	412.5	888.0	1521.9	1838.9	1933.0	2121.4	2262.7	2224.1
105°	298.8	367.2	435.4	452.5	912.9	1526.7	1833.6	2044.8	2467.2	2783.9	2763.1
107.5°	368.3	432.0	495.7	511.6	917.6	1458.8	1729.4	2024.0	2613.1	3054.8	3059.9
110°	415.2	472.7	530.2	544.6	910.6	1398.6	1642.5	1971.9	2630.4	3124.3	3145.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	461.2	516.0	570.9	584.6	910.9	1346.0	1563.5	1900.5	2574.6	3080.1	3113.2
115°	530.7	581.2	631.9	644.5	919.2	1285.7	1468.8	1793.5	2442.8	2929.8	2975.8
117.5°	599.3	645.3	691.2	702.6	936.3	1247.8	1403.6	1696.6	2282.6	2722.1	2773.2
120°	639.3	682.6	725.7	736.6	950.3	1235.1	1377.6	1645.2	2180.7	2582.3	2631.9
122.5°	678.4	722.0	765.6	776.5	970.2	1228.5	1357.6	1598.6	2080.9	2442.5	2491.4
125°	738.3	778.1	817.9	827.8	997.1	1223.0	1335.9	1540.7	1950.3	2257.5	2302.6
127.5°	787.0	827.2	867.3	877.3	1024.1	1219.8	1317.7	1493.6	1845.2	2109.0	2147.0
130°	813.0	856.3	899.4	910.3	1043.7	1221.7	1310.7	1467.2	1780.3	2015.1	2050.2
132.5°	839.9	883.2	926.3	937.2	1059.6	1223.0	1304.6	1444.7	1725.0	1935.2	1966.7
135°	879.9	919.2	958.7	968.5	1077.1	1221.9	1294.2	1411.6	1646.3	1822.3	1849.4
137.5°	920.7	959.7	998.7	1008.4	1103.1	1229.3	1292.5	1391.7	1590.1	1738.9	1761.2
140°	954.5	990.4	1026.4	1035.3	1119.0	1230.6	1286.4	1372.1	1543.5	1672.0	1692.8
142.5°	980.6	1013.9	1047.0	1055.3	1132.4	1235.0	1286.4	1361.7	1512.2	1625.2	1643.0
145°	1020.6	1049.5	1078.5	1085.8	1149.8	1235.0	1277.7	1339.3	1462.5	1554.8	1568.4
147.5°	1060.6	1088.8	1117.0	1124.0	1175.3	1243.5	1277.7	1326.2	1423.0	1495.7	1506.9
150°	1086.6	1112.1	1137.6	1144.0	1188.5	1248.0	1277.7	1318.6	1400.4	1461.8	1470.9
152.5°	1113.5	1132.8	1152.1	1156.9	1197.2	1250.9	1277.7	1312.6	1382.5	1434.9	1441.7
155°	1153.5	1167.8	1182.1	1185.6	1216.3	1257.3	1277.7	1305.5	1361.1	1402.8	1407.4
157.5°	1183.0	1196.9	1210.8	1214.3	1235.4	1263.6	1277.7	1299.3	1342.5	1374.9	1378.1
160°	1203.0	1213.8	1224.7	1227.4	1244.2	1266.5	1277.7	1296.2	1333.3	1361.1	1363.0
162.5°	1223.0	1231.1	1239.1	1241.2	1253.3	1269.6	1277.7	1293.3	1324.6	1348.0	1349.8
165°	1244.7	1252.0	1259.3	1261.2	1266.7	1274.1	1277.7	1288.9	1311.2	1328.1	1329.9
167.5°	1264.6	1268.1	1271.6	1272.5	1277.2	1283.3	1286.4	1293.7	1308.3	1319.4	1320.1
170°	1277.7	1281.2	1284.7	1285.6	1285.8	1286.2	1286.4	1293.7	1308.3	1319.4	1319.4
172.5°	1284.6	1285.4	1286.2	1286.4	1286.4	1286.4	1286.4	1292.2	1303.8	1312.5	1311.8
175°	1294.2	1294.2	1294.2	1294.2	1291.6	1288.2	1286.4	1290.0	1297.4	1302.9	1302.9
177.5°	1294.2	1294.2	1294.2	1294.2	1292.2	1289.5	1288.2	1291.1	1296.9	1301.2	1300.4
180°	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2	1294.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1151.3	1151.3
2.5°	1229.1	1221.7
5°	1580.8	1588.2
7.5°	2128.7	2124.9
10°	2647.0	2680.2
12.5°	3024.6	3032.0
15°	3254.1	3268.9
17.5°	3342.9	3346.6
20°	3346.6	3339.2
22.5°	3305.9	3298.5
25°	3257.8	3254.1
27.5°	3213.3	3217.1
30°	3194.8	3206.0
32.5°	3194.8	3213.3
35°	3202.2	3220.7
37.5°	3198.5	3220.7
40°	3183.7	3209.6
42.5°	3143.0	3161.5
45°	3080.1	3102.3
47.5°	2998.6	3013.5
50°	2894.9	2909.8
52.5°	2765.4	2769.1
55°	2609.9	2624.7
57.5°	2443.3	2447.0
60°	2258.2	2269.3
62.5°	2062.0	2062.0
65°	1854.7	1862.1
67.5°	1640.0	1658.5
70°	1421.5	1425.3
72.5°	1206.8	1206.8
75°	984.7	988.5
77.5°	773.7	773.7
80°	573.8	577.5
82.5°	396.1	403.5
85°	248.1	248.1
87.5°	114.8	103.7
90°	33.0	33.0
92.5°	132.3	106.0
95°	460.8	381.4
97.5°	1104.2	952.9
100°	1590.9	1410.6
102.5°	2069.7	1915.3
105°	2680.1	2597.1
107.5°	3080.0	3100.0
110°	3232.4	3318.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3246.0	3378.8
115°	3159.9	3344.1
117.5°	2977.4	3181.7
120°	2830.4	3028.8
122.5°	2687.1	2882.9
125°	2482.9	2663.1
127.5°	2299.1	2451.2
130°	2190.8	2331.4
132.5°	2092.5	2218.4
135°	1957.9	2066.4
137.5°	1849.9	1938.7
140°	1775.8	1858.8
142.5°	1714.5	1785.8
145°	1622.4	1676.3
147.5°	1551.7	1596.5
150°	1507.2	1543.5
152.5°	1469.2	1496.5
155°	1425.5	1443.6
157.5°	1390.9	1403.6
160°	1370.3	1377.6
162.5°	1356.7	1363.7
165°	1337.2	1344.6
167.5°	1323.3	1326.4
170°	1319.4	1319.4
172.5°	1309.1	1306.4
175°	1302.9	1302.9
177.5°	1297.3	1294.2
180°	1294.2	1294.2

(END OF REPORT)