

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: P937297

Luminaire Tested: SQ4-FB-075U-100D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937297
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-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

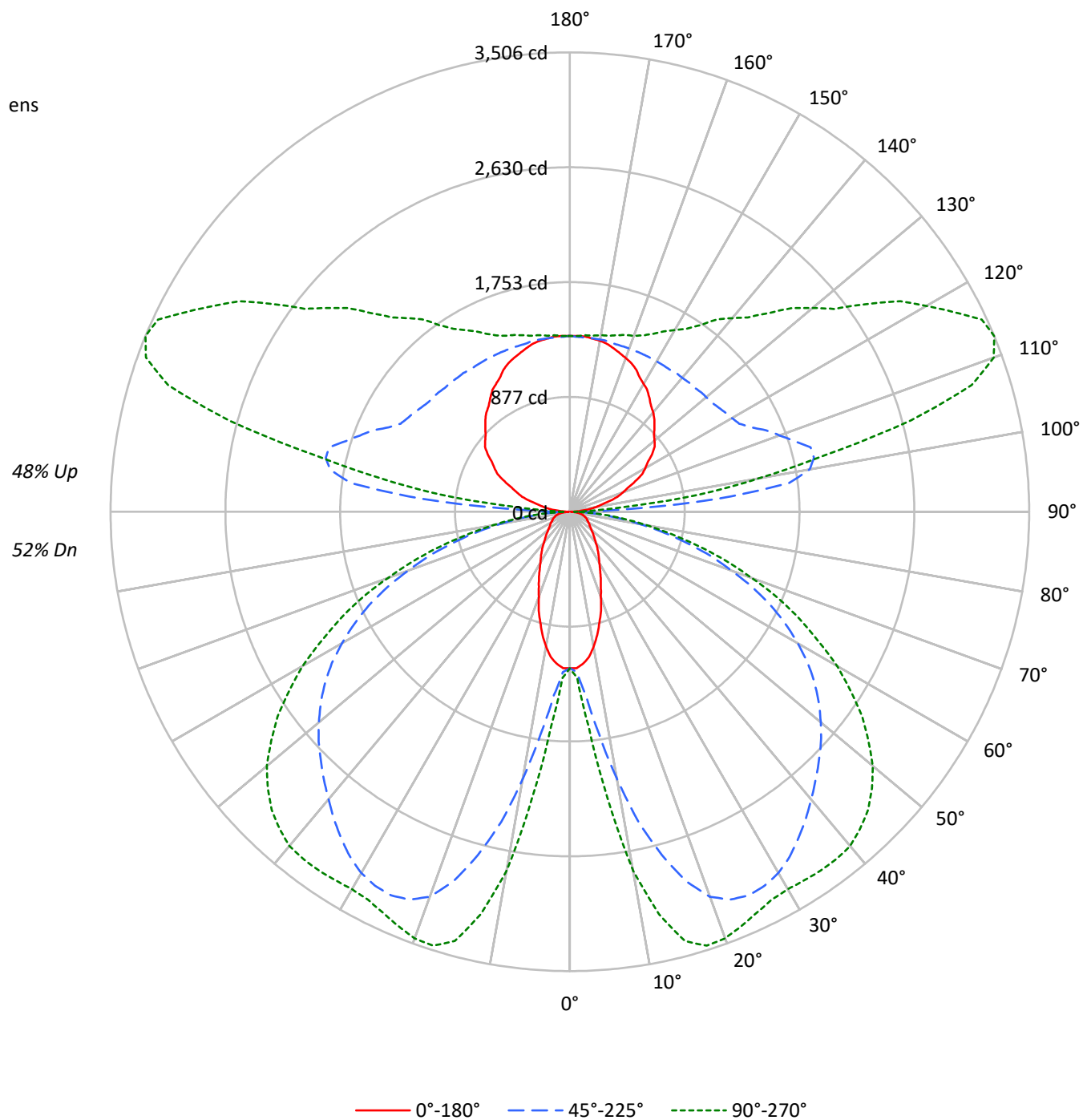
Lumens per Lamp: N/A
Luminaire Lumens: 17949.8 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

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°	3695	3695	3695
5°	3611	4271	4966
10°	3276	6228	8233
15°	2785	8138	9941
20°	2269	9433	10132
25°	1893	9874	9926
30°	1597	9939	9907
35°	1413	9777	10163
40°	1232	9564	10428
45°	1117	9410	10469
50°	1025	9272	10295
55°	983	9069	9839
60°	1007	8674	9119
65°	1049	8073	8128
70°	1120	7046	6867
75°	1247	5750	5359
80°	1371	3993	3611
85°	1244	2121	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10469 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	0.9
10°-20°	684.8	3.8
20°-30°	1197.8	6.7
30°-40°	1541.9	8.6
40°-50°	1722.3	9.6
50°-60°	1649.5	9.2
60°-70°	1307.3	7.3
70°-80°	768.7	4.3
80°-90°	218.7	1.2
90°-100°	654.5	3.6
100°-110°	1720.7	9.6
110°-120°	1784.2	9.9
120°-130°	1431.2	8.0
130°-140°	1122.9	6.3
140°-150°	861.9	4.8
150°-160°	620.7	3.5
160°-170°	379.8	2.1
170°-180°	128.3	0.7
0°-30°	2037.1	11.3
0°-40°	3579.0	19.9
0°-60°	6950.9	38.7
0°-90°	9245.5	51.5
90°-120°	4159.4	23.2
90°-150°	7575.4	42.2
90°-180°	8704.0	48.5
0°-180°	17949.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1164	1248	1406	1590	1648	107
15°	872	1609	2712	3288	3391	243
25°	557	1824	3230	3372	3376	257
35°	376	1744	3042	3215	3341	235
45°	257	1390	2688	3080	3218	199
55°	184	883	2281	2650	2723	168
65°	146	469	1694	1905	1932	145
75°	108	288	930	1022	1026	113
85°	38	88	230	254	257	41
90°	9	25	68	34	34	10
95°	86	339	1127	581	396	96
105°	310	470	1902	2888	2694	329
115°	551	669	1524	3040	3469	544
125°	766	859	1386	2342	2763	680
135°	913	1005	1343	1891	2144	706
145°	1059	1126	1326	1613	1739	663
155°	1197	1230	1326	1455	1498	550
165°	1291	1308	1326	1378	1395	364
175°	1343	1343	1335	1352	1352	127
180°	1343	1343	1343	1343	1343	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1194.5	1194.5	1202.1	1206.0	1213.7	1217.5	1225.2	1232.9	1255.9	1259.8	1267.5
5°	1163.8	1179.1	1229.1	1248.3	1302.0	1375.0	1405.7	1455.6	1559.3	1590.0	1609.2
7.5°	1117.6	1152.2	1275.1	1305.8	1440.2	1632.3	1713.0	1820.5	1985.7	2066.3	2131.6
10°	1044.7	1117.6	1336.5	1409.5	1628.5	1920.4	2070.2	2220.0	2469.6	2580.9	2623.2
12.5°	964.1	1083.1	1401.9	1501.8	1816.7	2242.9	2423.5	2588.7	2872.9	3022.7	3045.7
15°	871.8	1033.1	1463.3	1609.2	2016.4	2511.8	2711.6	2915.1	3180.2	3287.6	3314.6
17.5°	791.2	994.8	1520.9	1674.5	2170.0	2753.8	2957.4	3126.4	3341.4	3414.4	3433.7
20°	691.3	933.3	1559.3	1759.0	2331.3	2930.4	3126.4	3256.9	3402.8	3449.0	3456.6
22.5°	618.3	868.0	1582.4	1789.7	2438.9	3038.0	3203.1	3306.9	3406.7	3422.1	3425.9
25°	556.9	795.1	1578.5	1824.3	2531.0	3103.3	3230.1	3306.9	3364.5	3372.1	3372.1
27.5°	499.3	714.3	1563.2	1832.0	2600.2	3118.6	3218.5	3272.3	3299.2	3314.6	3314.6
30°	449.3	637.6	1524.7	1816.7	2630.9	3103.3	3183.9	3210.9	3237.7	3260.8	3272.3
32.5°	411.0	564.5	1467.2	1786.0	2634.7	3064.9	3122.5	3137.9	3176.3	3230.1	3249.3
35°	376.4	491.6	1401.9	1743.7	2611.6	3003.4	3041.9	3057.2	3134.0	3214.7	3241.6
37.5°	341.9	437.9	1317.4	1670.7	2577.2	2930.4	2957.4	2984.2	3103.3	3199.3	3230.1
40°	307.3	391.8	1217.5	1590.0	2523.4	2842.2	2865.1	2907.4	3064.9	3176.3	3207.0
42.5°	280.3	353.4	1110.0	1505.5	2454.2	2742.3	2776.9	2838.3	3018.8	3137.9	3172.4
45°	257.4	314.9	994.8	1390.3	2365.9	2638.6	2688.5	2773.0	2965.0	3080.3	3111.0
47.5°	234.3	288.1	875.7	1271.3	2269.9	2534.9	2600.2	2696.1	2892.1	3003.4	3030.4
50°	215.1	261.1	756.6	1144.6	2166.2	2423.5	2500.3	2600.2	2799.9	2903.6	2938.2
52.5°	199.7	238.1	645.3	1017.8	2047.1	2308.3	2396.6	2500.3	2688.5	2788.4	2811.5
55°	184.4	218.9	549.2	883.3	1924.2	2185.4	2281.4	2381.2	2565.6	2650.1	2665.4
57.5°	176.6	203.6	468.6	756.6	1793.6	2047.1	2154.7	2246.8	2419.7	2484.9	2500.3
60°	165.1	192.1	407.1	649.0	1651.5	1916.5	2008.7	2100.9	2246.8	2300.6	2312.1
62.5°	153.6	184.4	361.0	545.4	1505.5	1762.9	1855.1	1939.6	2062.5	2100.9	2116.2
65°	145.9	176.6	326.5	468.6	1355.8	1601.6	1693.7	1766.8	1866.6	1905.0	1912.7
67.5°	138.3	169.0	299.6	403.3	1206.0	1440.2	1509.4	1578.5	1655.3	1693.7	1697.6
70°	126.7	161.3	276.6	357.2	1052.3	1255.9	1313.6	1386.5	1448.0	1467.2	1478.7
72.5°	119.1	149.8	261.1	322.6	894.9	1079.3	1133.1	1175.3	1229.1	1248.3	1248.3
75°	107.6	134.4	245.8	288.1	733.5	883.3	929.5	971.7	1014.0	1021.6	1010.1
77.5°	96.0	119.1	211.2	242.0	572.3	699.0	737.4	760.5	795.1	802.7	806.6
80°	80.6	103.7	165.1	188.2	414.8	514.6	541.6	560.8	591.5	591.5	599.1
82.5°	61.4	80.6	119.1	134.4	280.3	353.4	376.4	387.9	407.1	407.1	407.1
85°	38.4	49.9	76.8	88.4	169.0	215.1	230.4	234.3	249.6	253.5	253.5
87.5°	19.2	26.8	49.9	53.8	88.4	111.3	111.3	119.1	119.1	115.2	111.3
90°	9.0	16.2	23.4	25.2	39.6	58.9	68.5	60.9	45.6	34.2	34.2
92.5°	36.0	97.3	158.6	173.9	244.5	338.6	385.7	338.0	242.7	171.2	164.4
95°	86.5	198.6	310.9	338.9	601.7	952.1	1127.3	1006.0	763.3	581.2	560.6
97.5°	149.6	248.5	347.5	372.2	810.5	1394.8	1686.9	1610.2	1456.8	1341.8	1302.5
100°	198.3	288.0	377.7	400.1	886.4	1534.8	1859.0	1864.6	1875.9	1884.3	1837.5
102.5°	239.7	323.5	407.1	428.0	921.2	1578.9	1907.8	2005.4	2200.9	2347.5	2307.5
105°	310.0	380.9	451.7	469.5	947.1	1583.9	1902.3	2121.4	2559.6	2888.2	2866.7
107.5°	382.1	448.2	514.2	530.8	951.9	1513.5	1794.2	2099.8	2711.0	3169.3	3174.5
110°	430.7	490.4	550.1	565.0	944.7	1451.0	1704.1	2045.8	2729.0	3241.4	3263.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	478.5	535.4	592.3	606.5	945.1	1396.4	1622.1	1971.7	2671.0	3195.5	3229.9
115°	550.6	603.0	655.5	668.6	953.7	1333.8	1523.8	1860.7	2534.3	3039.6	3087.3
117.5°	621.8	669.5	717.1	729.0	971.4	1294.6	1456.2	1760.2	2368.1	2824.2	2877.2
120°	663.3	708.1	752.9	764.2	985.9	1281.4	1429.2	1706.9	2262.4	2679.1	2730.5
122.5°	703.8	749.0	794.3	805.6	1006.6	1274.5	1408.4	1658.5	2158.8	2534.0	2584.8
125°	766.0	807.3	848.6	858.8	1034.5	1268.8	1386.0	1598.5	2023.4	2342.1	2388.9
127.5°	816.5	858.1	899.8	910.2	1062.5	1265.5	1367.1	1549.5	1914.4	2188.0	2227.4
130°	843.5	888.4	933.1	944.4	1082.9	1267.5	1359.8	1522.2	1847.0	2090.6	2127.1
132.5°	871.4	916.3	961.1	972.3	1099.3	1268.8	1353.5	1498.8	1789.6	2007.8	2040.4
135°	912.9	953.7	994.6	1004.8	1117.5	1267.6	1342.7	1464.4	1708.0	1890.6	1918.7
137.5°	955.2	995.6	1036.2	1046.2	1144.5	1275.4	1340.9	1443.8	1649.7	1804.1	1827.1
140°	990.3	1027.5	1064.8	1074.1	1161.0	1276.8	1334.6	1423.6	1601.4	1734.7	1756.2
142.5°	1017.4	1051.8	1086.2	1094.9	1174.8	1281.3	1334.6	1412.7	1568.9	1686.1	1704.6
145°	1058.8	1088.9	1118.9	1126.5	1192.8	1281.3	1325.6	1389.4	1517.3	1613.1	1627.1
147.5°	1100.3	1129.6	1158.8	1166.1	1219.3	1290.1	1325.6	1375.9	1476.4	1551.8	1563.4
150°	1127.3	1153.8	1180.2	1186.8	1233.1	1294.8	1325.6	1368.0	1452.9	1516.6	1526.0
152.5°	1155.2	1175.3	1195.3	1200.3	1242.1	1297.8	1325.6	1361.8	1434.3	1488.7	1495.7
155°	1196.7	1211.5	1226.4	1230.0	1261.9	1304.4	1325.6	1354.5	1412.1	1455.3	1460.1
157.5°	1227.3	1241.8	1256.2	1259.8	1281.7	1311.0	1325.6	1348.0	1392.8	1426.5	1429.8
160°	1248.1	1259.3	1270.6	1273.4	1290.8	1314.0	1325.6	1344.8	1383.2	1412.1	1414.1
162.5°	1268.8	1277.2	1285.6	1287.7	1300.3	1317.2	1325.6	1341.8	1374.2	1398.6	1400.4
165°	1291.4	1298.9	1306.5	1308.4	1314.2	1321.8	1325.6	1337.2	1360.4	1377.8	1379.8
167.5°	1312.0	1315.6	1319.3	1320.2	1325.0	1331.4	1334.6	1342.2	1357.4	1368.8	1369.6
170°	1325.6	1329.2	1332.9	1333.7	1334.0	1334.4	1334.6	1342.2	1357.4	1368.8	1368.8
172.5°	1332.8	1333.5	1334.4	1334.6	1334.6	1334.6	1334.6	1340.6	1352.6	1361.6	1361.0
175°	1342.7	1342.7	1342.7	1342.7	1340.0	1336.4	1334.6	1338.4	1346.0	1351.8	1351.8
177.5°	1342.7	1342.7	1342.7	1342.7	1340.6	1337.8	1336.4	1339.4	1345.5	1349.9	1349.1
180°	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7	1342.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1194.5	1194.5
2.5°	1275.1	1267.5
5°	1640.0	1647.7
7.5°	2208.4	2204.6
10°	2746.1	2780.6
12.5°	3137.9	3145.6
15°	3376.0	3391.4
17.5°	3468.1	3472.0
20°	3472.0	3464.4
22.5°	3429.8	3422.1
25°	3379.9	3376.0
27.5°	3333.7	3337.6
30°	3314.6	3326.1
32.5°	3314.6	3333.7
35°	3322.2	3341.4
37.5°	3318.3	3341.4
40°	3303.0	3329.9
42.5°	3260.8	3280.0
45°	3195.5	3218.5
47.5°	3111.0	3126.4
50°	3003.4	3018.8
52.5°	2869.0	2872.9
55°	2707.7	2723.1
57.5°	2534.9	2538.7
60°	2342.8	2354.4
62.5°	2139.3	2139.3
65°	1924.2	1931.9
67.5°	1701.5	1720.7
70°	1474.8	1478.7
72.5°	1252.0	1252.0
75°	1021.6	1025.5
77.5°	802.7	802.7
80°	595.4	599.1
82.5°	411.0	418.6
85°	257.4	257.4
87.5°	119.1	107.6
90°	34.2	34.2
92.5°	137.2	110.0
95°	478.1	395.6
97.5°	1145.6	988.6
100°	1650.5	1463.5
102.5°	2147.2	1987.0
105°	2780.5	2694.4
107.5°	3195.4	3216.2
110°	3353.5	3443.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3367.7	3505.5
115°	3278.3	3469.4
117.5°	3089.0	3300.9
120°	2936.5	3142.3
122.5°	2787.8	2990.9
125°	2575.9	2762.9
127.5°	2385.3	2543.0
130°	2272.9	2418.7
132.5°	2170.9	2301.6
135°	2031.3	2143.8
137.5°	1919.2	2011.4
140°	1842.4	1928.4
142.5°	1778.7	1852.7
145°	1683.2	1739.2
147.5°	1609.8	1656.3
150°	1563.7	1601.4
152.5°	1524.2	1552.6
155°	1478.9	1497.7
157.5°	1443.0	1456.2
160°	1421.6	1429.2
162.5°	1407.6	1414.8
165°	1387.3	1395.0
167.5°	1372.9	1376.1
170°	1368.8	1368.8
172.5°	1358.2	1355.3
175°	1351.8	1351.8
177.5°	1345.9	1342.7
180°	1342.7	1342.7

(END OF REPORT)