

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: P938499

Luminaire Tested: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938499
REPORT IS A COMBINATION OF REPORTS P933639 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

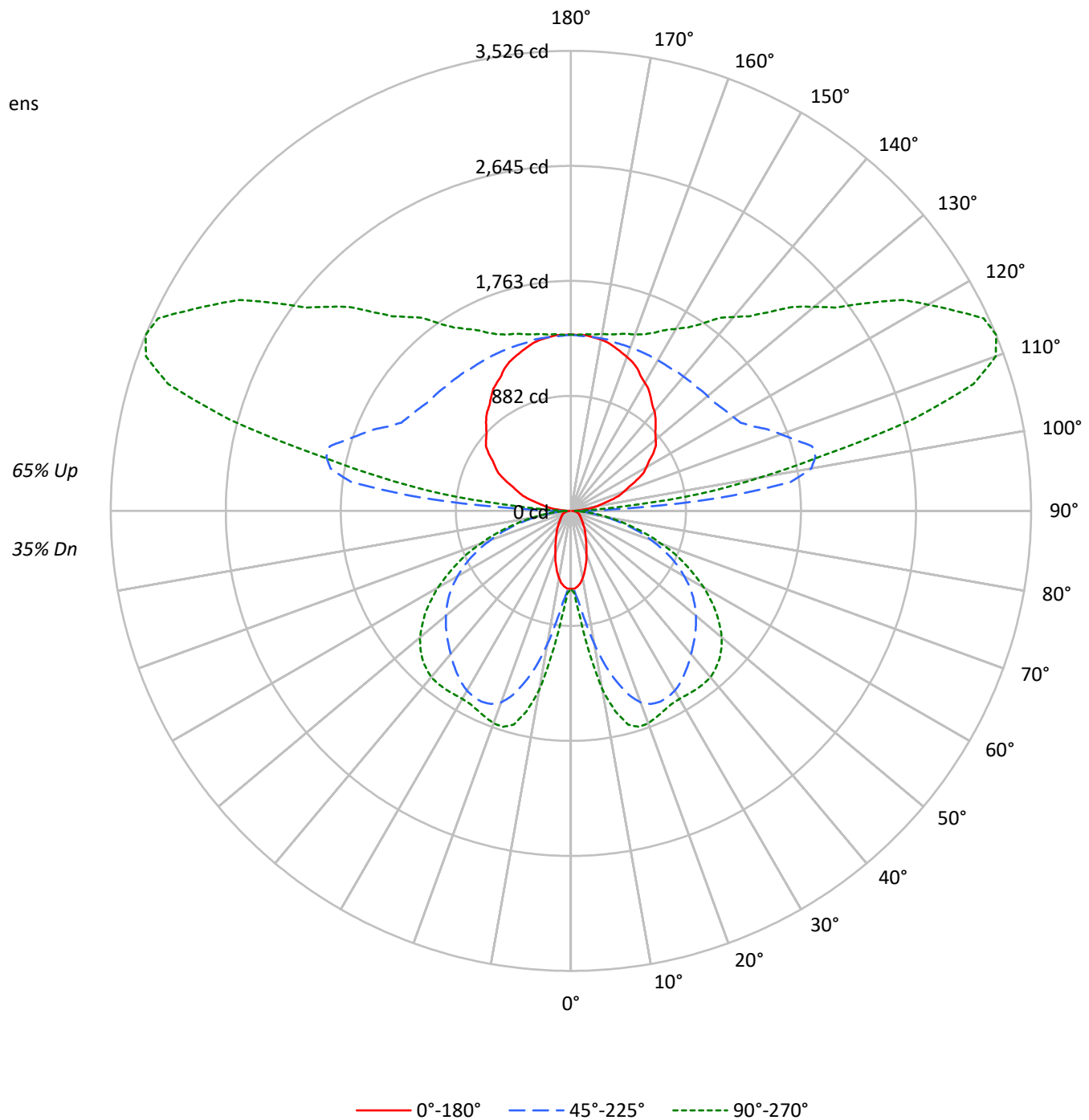
Lumens per Lamp: N/A
Luminaire Lumens: 13381.9 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 108.6
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

TEST NUMBER: P938499

CATALOG NUMBER: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6

Luminous Intensity Polar Plot



TEST NUMBER: P938499

CATALOG NUMBER: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6

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	50	30	10
RCR																				
0	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	35		
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35	28		
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29	23		
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24	19		
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20	16		
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14		
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15	12		
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10		
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11	9		
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10	8		
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3694	3694	3694
5°	3608	4269	4966
10°	3271	6222	8233
15°	2780	8126	9941
20°	2261	9415	10132
25°	1886	9849	9926
30°	1590	9909	9907
35°	1405	9742	10163
40°	1223	9526	10428
45°	1107	9366	10468
50°	1015	9222	10295
55°	971	9013	9839
60°	993	8613	9118
65°	1032	8007	8128
70°	1097	6979	6866
75°	1211	5684	5358
80°	1312	3937	3611
85°	1145	2085	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10468 cd/sqm

TEST NUMBER: P938499

CATALOG NUMBER: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	0.6
10°-20°	342.4	2.6
20°-30°	598.9	4.5
30°-40°	771.0	5.8
40°-50°	861.1	6.4
50°-60°	824.8	6.2
60°-70°	653.6	4.9
70°-80°	384.4	2.9
80°-90°	111.9	0.8
90°-100°	658.4	4.9
100°-110°	1731.1	12.9
110°-120°	1794.9	13.4
120°-130°	1439.7	10.8
130°-140°	1129.7	8.4
140°-150°	867.1	6.5
150°-160°	624.4	4.7
160°-170°	382.1	2.9
170°-180°	129.1	1.0
0°-30°	1018.6	7.6
0°-40°	1789.5	13.4
0°-60°	3475.4	26.0
0°-90°	4625.4	34.6
90°-120°	4184.4	31.3
90°-150°	7621.0	56.9
90°-180°	8757.0	65.4
0°-180°	13381.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	582	624	703	795	824	54
15°	436	805	1356	1644	1696	121
25°	278	912	1615	1686	1688	128
35°	188	872	1521	1607	1671	118
45°	129	695	1344	1540	1609	100
55°	92	442	1141	1325	1362	84
65°	73	234	847	952	966	72
75°	54	144	465	511	513	56
85°	19	44	115	127	129	20
90°	9	25	69	34	34	9
95°	87	341	1134	585	398	97
105°	312	472	1914	2906	2711	331
115°	554	673	1533	3058	3490	547
125°	770	864	1394	2356	2780	684
135°	918	1011	1351	1902	2157	711
145°	1065	1133	1334	1623	1750	667
155°	1204	1237	1334	1464	1507	553
165°	1299	1316	1334	1386	1403	367
175°	1351	1351	1343	1360	1360	128
180°	1351	1351	1351	1351	1351	

TEST NUMBER: P938499

CATALOG NUMBER: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	597.2	597.2	601.1	603.0	606.8	608.7	612.6	616.5	627.9	629.8	633.7
5°	581.9	589.5	614.5	624.1	651.0	687.5	702.8	727.8	779.7	795.1	804.7
7.5°	558.8	576.1	637.6	652.9	720.2	816.2	856.5	910.3	992.8	1033.1	1065.8
10°	522.3	558.8	668.3	704.8	814.3	960.2	1035.1	1110.0	1234.8	1290.5	1311.6
12.5°	482.0	541.6	701.0	750.9	908.3	1121.5	1211.7	1294.3	1436.4	1511.3	1522.9
15°	436.0	516.6	731.7	804.7	1008.1	1255.9	1355.8	1457.6	1590.0	1643.8	1657.3
17.5°	395.6	497.4	760.5	837.3	1085.0	1376.9	1478.7	1563.2	1670.7	1707.2	1716.8
20°	345.6	466.7	779.7	879.6	1165.7	1465.2	1563.2	1628.5	1701.5	1724.5	1728.3
22.5°	309.2	434.0	791.2	894.9	1219.4	1519.0	1601.6	1653.4	1703.4	1711.1	1713.0
25°	278.5	397.5	789.3	912.2	1265.5	1551.7	1615.0	1653.4	1682.3	1686.1	1686.1
27.5°	249.6	357.2	781.6	916.0	1300.1	1559.3	1609.2	1636.2	1649.6	1657.3	1657.3
30°	224.7	318.8	762.4	908.3	1315.4	1551.7	1592.0	1605.4	1618.9	1630.3	1636.2
32.5°	205.5	282.3	733.5	892.9	1317.4	1532.5	1561.3	1568.9	1588.1	1615.0	1624.6
35°	188.2	245.8	701.0	871.8	1305.8	1501.8	1520.9	1528.6	1567.0	1607.4	1620.7
37.5°	170.9	218.9	658.7	835.4	1288.6	1465.2	1478.7	1492.2	1551.7	1599.6	1615.0
40°	153.6	195.8	608.7	795.1	1261.6	1421.0	1432.6	1453.7	1532.5	1588.1	1603.5
42.5°	140.2	176.6	554.9	752.8	1227.1	1371.1	1388.4	1419.1	1509.4	1568.9	1586.3
45°	128.7	157.5	497.4	695.2	1183.0	1319.3	1344.3	1386.5	1482.5	1540.1	1555.5
47.5°	117.2	144.0	437.9	635.7	1134.9	1267.5	1300.1	1348.1	1446.0	1501.8	1515.1
50°	107.6	130.6	378.3	572.3	1083.1	1211.7	1250.2	1300.1	1399.9	1451.8	1469.1
52.5°	99.9	119.1	322.6	508.9	1023.6	1154.2	1198.3	1250.2	1344.3	1394.2	1405.7
55°	92.2	109.5	274.6	441.7	962.1	1092.6	1140.7	1190.6	1282.8	1325.0	1332.8
57.5°	88.4	101.7	234.3	378.3	896.8	1023.6	1077.3	1123.5	1209.8	1242.5	1250.2
60°	82.6	96.0	203.6	324.5	825.8	958.2	1004.4	1050.4	1123.5	1150.3	1156.0
62.5°	76.8	92.2	180.5	272.7	752.8	881.4	927.5	969.8	1031.2	1050.4	1058.1
65°	73.0	88.4	163.3	234.3	677.9	800.8	846.9	883.3	933.3	952.5	956.3
67.5°	69.1	84.5	149.8	201.6	603.0	720.2	754.7	789.3	827.7	846.9	848.8
70°	63.4	80.6	138.3	178.6	526.2	627.9	656.8	693.2	723.9	733.5	739.3
72.5°	59.5	74.9	130.6	161.3	447.5	539.6	566.5	587.6	614.5	624.1	624.1
75°	53.8	67.2	122.9	144.0	366.8	441.7	464.7	485.9	507.0	510.9	505.0
77.5°	48.0	59.5	105.6	121.0	286.1	349.5	368.7	380.2	397.5	401.4	403.3
80°	40.3	51.8	82.6	94.1	207.4	257.4	270.7	280.3	295.7	295.7	299.6
82.5°	30.7	40.3	59.5	67.2	140.2	176.6	188.2	194.0	203.6	203.6	203.6
85°	19.2	25.0	38.4	44.2	84.5	107.6	115.2	117.2	124.8	126.7	126.7
87.5°	9.6	13.5	25.0	26.8	44.2	55.7	55.7	59.5	59.5	57.7	55.7
90°	9.1	16.4	23.5	25.4	39.9	59.2	68.9	61.2	45.9	34.5	34.5
92.5°	36.2	97.9	159.6	175.0	246.0	340.7	388.0	340.0	244.2	172.3	165.4
95°	87.0	199.8	312.7	340.9	605.3	957.9	1134.1	1012.0	767.8	584.7	564.0
97.5°	150.5	250.0	349.5	374.4	815.3	1403.2	1697.1	1620.0	1465.6	1349.9	1310.4
100°	199.4	289.7	379.9	402.5	891.8	1544.1	1870.3	1875.9	1887.2	1895.7	1848.7
102.5°	241.2	325.4	409.6	430.6	926.8	1588.4	1919.2	2017.5	2214.1	2361.5	2321.2
105°	311.8	383.1	454.5	472.3	952.8	1593.4	1913.8	2134.1	2574.9	2905.5	2883.8
107.5°	384.4	450.9	517.3	533.9	957.6	1522.5	1805.0	2112.4	2727.3	3188.4	3193.6
110°	433.3	493.4	553.4	568.4	950.4	1459.6	1714.3	2058.0	2745.4	3260.9	3283.5

TEST NUMBER: P938499

CATALOG NUMBER: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	481.4	538.6	595.7	610.1	950.7	1404.8	1631.8	1983.5	2687.0	3214.7	3249.3
115°	553.9	606.7	659.5	672.7	959.4	1341.8	1533.0	1871.8	2549.5	3057.8	3105.8
117.5°	625.5	673.5	721.4	733.4	977.3	1302.4	1465.0	1770.8	2382.4	2841.1	2894.4
120°	667.3	712.4	757.6	768.8	991.8	1289.2	1437.8	1717.3	2276.1	2695.2	2746.9
122.5°	708.0	753.6	799.1	810.5	1012.6	1282.2	1417.0	1668.6	2171.8	2549.2	2600.3
125°	770.5	812.0	853.6	864.0	1040.7	1276.5	1394.3	1608.1	2035.5	2356.1	2403.1
127.5°	821.3	863.2	905.1	915.6	1068.8	1273.1	1375.2	1558.7	1925.8	2201.1	2240.8
130°	848.6	893.7	938.9	950.1	1089.4	1275.2	1368.0	1531.4	1858.2	2103.2	2139.8
132.5°	876.7	921.8	967.0	978.2	1106.0	1276.5	1361.6	1507.9	1800.4	2019.8	2052.6
135°	918.3	959.4	1000.6	1010.9	1124.1	1275.2	1350.8	1473.3	1718.2	1902.0	1930.2
137.5°	961.0	1001.7	1042.4	1052.5	1151.4	1283.1	1348.9	1452.5	1659.6	1814.9	1838.1
140°	996.3	1033.8	1071.2	1080.6	1167.9	1284.4	1342.6	1432.1	1611.0	1745.2	1766.8
142.5°	1023.5	1058.1	1092.8	1101.5	1181.9	1289.1	1342.6	1421.2	1578.3	1696.1	1714.7
145°	1065.2	1095.5	1125.7	1133.2	1200.0	1289.1	1333.5	1397.8	1526.4	1622.8	1636.8
147.5°	1106.9	1136.3	1165.7	1173.1	1226.6	1297.9	1333.5	1384.1	1485.2	1561.1	1572.8
150°	1134.1	1160.7	1187.2	1193.9	1240.4	1302.5	1333.5	1376.3	1461.6	1525.7	1535.2
152.5°	1162.2	1182.4	1202.5	1207.6	1249.5	1305.5	1333.5	1370.0	1442.9	1497.6	1504.8
155°	1203.9	1218.8	1233.7	1237.4	1269.5	1312.2	1333.5	1362.5	1420.6	1464.1	1468.8
157.5°	1234.7	1249.2	1263.8	1267.4	1289.4	1318.8	1333.5	1356.1	1401.3	1435.1	1438.4
160°	1255.6	1266.9	1278.1	1280.9	1298.5	1321.8	1333.5	1352.9	1391.6	1420.6	1422.5
162.5°	1276.5	1284.9	1293.3	1295.5	1308.1	1325.1	1333.5	1349.8	1382.5	1407.0	1408.8
165°	1299.1	1306.8	1314.4	1316.3	1322.0	1329.7	1333.5	1345.3	1368.6	1386.2	1388.1
167.5°	1320.0	1323.6	1327.2	1328.1	1333.0	1339.4	1342.6	1350.3	1365.6	1377.0	1377.8
170°	1333.5	1337.1	1340.8	1341.7	1342.0	1342.5	1342.6	1350.3	1365.6	1377.0	1377.0
172.5°	1340.8	1341.6	1342.5	1342.6	1342.6	1342.6	1342.6	1348.7	1360.8	1369.8	1369.1
175°	1350.8	1350.8	1350.8	1350.8	1348.1	1344.5	1342.6	1346.4	1354.1	1359.8	1359.8
177.5°	1350.8	1350.8	1350.8	1350.8	1348.7	1345.8	1344.4	1347.4	1353.5	1358.1	1357.3
180°	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8

TEST NUMBER: P938499

CATALOG NUMBER: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	597.2	597.2
2.5°	637.6	633.7
5°	820.0	823.8
7.5°	1104.2	1102.3
10°	1373.1	1390.3
12.5°	1568.9	1572.8
15°	1688.0	1695.7
17.5°	1734.1	1736.0
20°	1736.0	1732.2
22.5°	1714.8	1711.1
25°	1689.9	1688.0
27.5°	1666.9	1668.8
30°	1657.3	1663.0
32.5°	1657.3	1666.9
35°	1661.2	1670.7
37.5°	1659.2	1670.7
40°	1651.5	1664.9
42.5°	1630.3	1640.0
45°	1597.8	1609.2
47.5°	1555.5	1563.2
50°	1501.8	1509.4
52.5°	1434.5	1436.4
55°	1353.9	1361.5
57.5°	1267.5	1269.4
60°	1171.4	1177.1
62.5°	1069.7	1069.7
65°	962.1	965.9
67.5°	850.7	860.3
70°	737.4	739.3
72.5°	626.1	626.1
75°	510.9	512.7
77.5°	401.4	401.4
80°	297.7	299.6
82.5°	205.5	209.3
85°	128.7	128.7
87.5°	59.5	53.8
90°	34.5	34.5
92.5°	138.0	110.6
95°	480.9	398.0
97.5°	1152.4	994.5
100°	1660.5	1472.3
102.5°	2160.1	1999.0
105°	2797.2	2710.6
107.5°	3214.6	3235.5
110°	3373.7	3464.0

TEST NUMBER: P938499

CATALOG NUMBER: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3387.9	3526.5
115°	3298.0	3490.2
117.5°	3107.6	3320.8
120°	2954.1	3161.2
122.5°	2804.6	3008.8
125°	2591.3	2779.5
127.5°	2399.5	2558.4
130°	2286.5	2433.2
132.5°	2183.9	2315.3
135°	2043.5	2156.7
137.5°	1930.8	2023.5
140°	1853.4	1940.0
142.5°	1789.4	1863.9
145°	1693.2	1749.6
147.5°	1619.5	1666.3
150°	1573.1	1611.0
152.5°	1533.3	1562.0
155°	1487.7	1506.7
157.5°	1451.8	1465.0
160°	1430.1	1437.8
162.5°	1416.0	1423.3
165°	1395.7	1403.3
167.5°	1381.1	1384.3
170°	1377.0	1377.0
172.5°	1366.3	1363.5
175°	1359.8	1359.8
177.5°	1354.0	1350.8
180°	1350.8	1350.8

(END OF REPORT)