

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: P937301

Luminaire Tested: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937301
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-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

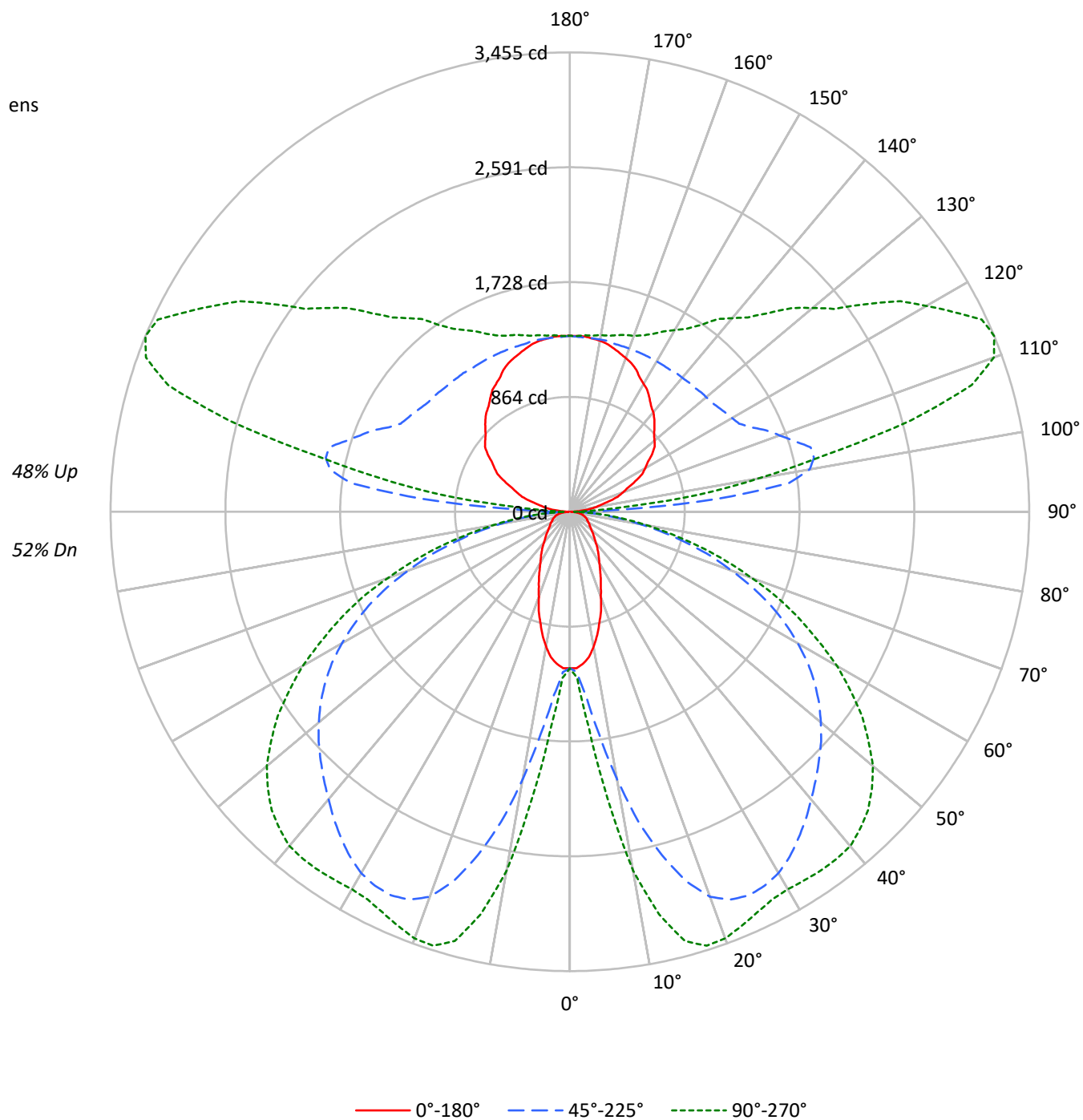
Lumens per Lamp: N/A
Luminaire Lumens: 17690.4 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P937301

CATALOG NUMBER: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-12

Luminous Intensity Polar Plot



TEST NUMBER: P937301

CATALOG NUMBER: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-12

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°	3641	3641	3641
5°	3559	4210	4894
10°	3229	6138	8114
15°	2745	8021	9798
20°	2236	9297	9985
25°	1866	9731	9782
30°	1574	9795	9764
35°	1392	9635	10016
40°	1214	9426	10277
45°	1100	9274	10317
50°	1010	9138	10147
55°	968	8938	9697
60°	992	8549	8987
65°	1034	7956	8011
70°	1104	6944	6768
75°	1229	5666	5282
80°	1352	3934	3559
85°	1225	2091	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10317 cd/sqm

TEST NUMBER: P937301

CATALOG NUMBER: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.3	0.9
10°-20°	674.9	3.8
20°-30°	1180.5	6.7
30°-40°	1519.6	8.6
40°-50°	1697.4	9.6
50°-60°	1625.7	9.2
60°-70°	1288.4	7.3
70°-80°	757.6	4.3
80°-90°	215.5	1.2
90°-100°	645.1	3.6
100°-110°	1695.9	9.6
110°-120°	1758.4	9.9
120°-130°	1410.5	8.0
130°-140°	1106.7	6.3
140°-150°	849.4	4.8
150°-160°	611.7	3.5
160°-170°	374.3	2.1
170°-180°	126.5	0.7
0°-30°	2007.7	11.3
0°-40°	3527.3	19.9
0°-60°	6850.4	38.7
0°-90°	9111.9	51.5
90°-120°	4099.3	23.2
90°-150°	7466.0	42.2
90°-180°	8578.0	48.5
0°-180°	17690.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1147	1230	1385	1567	1624	106
15°	859	1586	2672	3240	3342	239
25°	549	1798	3183	3323	3327	253
35°	371	1718	2998	3168	3293	232
45°	254	1370	2650	3036	3172	196
55°	182	871	2248	2612	2684	166
65°	144	462	1669	1877	1904	143
75°	106	284	916	1007	1011	111
85°	38	87	227	250	254	40
90°	9	25	68	34	34	10
95°	85	334	1111	573	390	95
105°	306	463	1875	2846	2656	324
115°	543	659	1502	2996	3419	536
125°	755	846	1366	2308	2723	670
135°	900	990	1323	1863	2113	696
145°	1044	1110	1306	1590	1714	654
155°	1179	1212	1306	1434	1476	542
165°	1273	1290	1306	1358	1375	359
175°	1323	1323	1315	1332	1332	126
180°	1323	1323	1323	1323	1323	

TEST NUMBER: P937301

CATALOG NUMBER: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2
2.5°	1177.2	1177.2	1184.8	1188.6	1196.1	1200.0	1207.5	1215.0	1237.8	1241.6	1249.1
5°	1147.0	1162.0	1211.3	1230.2	1283.2	1355.1	1385.4	1434.6	1536.8	1567.1	1586.0
7.5°	1101.5	1135.6	1256.7	1287.0	1419.4	1608.7	1688.2	1794.2	1957.0	2036.4	2100.8
10°	1029.6	1101.5	1317.2	1389.1	1605.0	1892.6	2040.3	2187.9	2433.9	2543.6	2585.3
12.5°	950.1	1067.4	1381.6	1480.1	1790.4	2210.5	2388.5	2551.3	2831.4	2979.0	3001.7
15°	859.2	1018.2	1442.1	1586.0	1987.3	2475.6	2672.4	2873.0	3134.2	3240.1	3266.7
17.5°	779.8	980.4	1499.0	1650.3	2138.6	2714.0	2914.7	3081.2	3293.1	3365.0	3384.0
20°	681.3	919.9	1536.8	1733.6	2297.6	2888.1	3081.2	3209.9	3353.7	3399.1	3406.7
22.5°	609.4	855.5	1559.5	1763.9	2403.6	2994.1	3156.8	3259.1	3357.5	3372.7	3376.4
25°	548.8	783.6	1555.7	1798.0	2494.5	3058.5	3183.4	3259.1	3315.9	3323.4	3323.4
27.5°	492.1	704.0	1540.6	1805.5	2562.6	3073.6	3172.0	3225.0	3251.5	3266.7	3266.7
30°	442.8	628.4	1502.7	1790.4	2592.9	3058.5	3137.9	3164.5	3190.9	3213.7	3225.0
32.5°	405.0	556.4	1446.0	1760.2	2596.6	3020.7	3077.4	3092.6	3130.4	3183.4	3202.3
35°	370.9	484.5	1381.6	1718.5	2573.9	2960.0	2997.9	3013.0	3088.8	3168.2	3194.8
37.5°	336.9	431.6	1298.3	1646.6	2539.9	2888.1	2914.7	2941.1	3058.5	3153.1	3183.4
40°	302.8	386.1	1200.0	1567.1	2486.9	2801.1	2823.7	2865.4	3020.7	3130.4	3160.7
42.5°	276.3	348.3	1094.0	1483.8	2418.7	2702.6	2736.7	2797.3	2975.2	3092.6	3126.6
45°	253.6	310.4	980.4	1370.2	2331.7	2600.5	2649.6	2732.9	2922.2	3035.8	3066.0
47.5°	230.9	283.9	863.0	1253.0	2237.1	2498.3	2562.6	2657.2	2850.3	2960.0	2986.6
50°	212.0	257.4	745.7	1128.0	2134.9	2388.5	2464.2	2562.6	2759.5	2861.7	2895.8
52.5°	196.8	234.6	635.9	1003.1	2017.5	2274.9	2362.0	2464.2	2649.6	2748.1	2770.8
55°	181.7	215.7	541.3	870.6	1896.4	2153.8	2248.5	2346.8	2528.6	2611.8	2626.9
57.5°	174.1	200.6	461.8	745.7	1767.7	2017.5	2123.5	2214.4	2384.7	2449.0	2464.2
60°	162.7	189.3	401.2	639.7	1627.6	1888.8	1979.7	2070.5	2214.4	2267.4	2278.7
62.5°	151.4	181.7	355.8	537.5	1483.8	1737.4	1828.3	1911.5	2032.7	2070.5	2085.6
65°	143.8	174.1	321.7	461.8	1336.2	1578.4	1669.2	1741.3	1839.6	1877.4	1885.1
67.5°	136.3	166.6	295.3	397.5	1188.6	1419.4	1487.6	1555.7	1631.4	1669.2	1673.1
70°	124.9	159.0	272.6	352.0	1037.1	1237.8	1294.6	1366.5	1427.1	1446.0	1457.3
72.5°	117.4	147.6	257.4	317.9	881.9	1063.7	1116.7	1158.3	1211.3	1230.2	1230.2
75°	106.0	132.5	242.3	283.9	722.9	870.6	916.0	957.7	999.3	1006.9	995.5
77.5°	94.6	117.4	208.2	238.5	564.0	688.9	726.8	749.5	783.6	791.1	794.9
80°	79.5	102.2	162.7	185.5	408.8	507.2	533.7	552.7	582.9	582.9	590.5
82.5°	60.5	79.5	117.4	132.5	276.3	348.3	370.9	382.3	401.2	401.2	401.2
85°	37.8	49.2	75.7	87.1	166.6	212.0	227.1	230.9	246.0	249.8	249.8
87.5°	18.9	26.5	49.2	53.0	87.1	109.7	109.7	117.4	117.4	113.5	109.7
90°	8.9	15.9	23.0	24.8	39.1	58.1	67.5	60.0	45.0	33.7	33.7
92.5°	35.5	95.9	156.3	171.4	240.9	333.7	380.1	333.1	239.2	168.7	162.1
95°	85.3	195.8	306.4	334.0	593.0	938.4	1111.0	991.5	752.3	572.8	552.5
97.5°	147.5	245.0	342.5	366.8	798.8	1374.6	1662.6	1586.9	1435.7	1322.4	1283.7
100°	195.4	283.8	372.3	394.3	873.6	1512.6	1832.2	1837.7	1848.8	1857.1	1811.0
102.5°	236.3	318.8	401.2	421.8	907.9	1556.1	1880.2	1976.5	2169.1	2313.6	2274.1
105°	305.5	375.4	445.2	462.7	933.4	1561.0	1874.9	2090.8	2522.6	2846.5	2825.3
107.5°	376.6	441.7	506.8	523.1	938.2	1491.6	1768.3	2069.5	2671.8	3123.5	3128.7
110°	424.5	483.3	542.2	556.9	931.0	1430.0	1679.5	2016.2	2689.6	3194.6	3216.6

TEST NUMBER: P937301

CATALOG NUMBER: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	471.6	527.6	583.7	597.7	931.4	1376.3	1598.7	1943.2	2632.5	3149.3	3183.2
115°	542.6	594.3	646.1	658.9	939.9	1314.6	1501.8	1833.8	2497.7	2995.6	3042.7
117.5°	612.8	659.8	706.7	718.4	957.4	1275.9	1435.2	1734.8	2333.9	2783.3	2835.6
120°	653.7	697.9	742.0	753.1	971.6	1262.9	1408.5	1682.2	2229.7	2640.4	2691.1
122.5°	693.6	738.2	782.8	794.0	992.1	1256.1	1388.1	1634.6	2127.6	2497.4	2547.5
125°	754.9	795.6	836.3	846.4	1019.6	1250.5	1365.9	1575.4	1994.1	2308.2	2354.4
127.5°	804.7	845.7	886.8	897.0	1047.2	1247.2	1347.3	1527.1	1886.7	2156.4	2195.3
130°	831.3	875.5	919.7	930.7	1067.2	1249.1	1340.2	1500.2	1820.3	2060.4	2096.3
132.5°	858.8	903.0	947.2	958.2	1083.4	1250.5	1333.9	1477.2	1763.8	1978.8	2010.9
135°	899.7	939.9	980.2	990.2	1101.3	1249.3	1323.3	1443.3	1683.3	1863.3	1891.0
137.5°	941.4	981.3	1021.2	1031.1	1128.0	1257.0	1321.5	1423.0	1625.9	1778.0	1800.7
140°	976.0	1012.7	1049.4	1058.6	1144.2	1258.3	1315.3	1403.0	1578.2	1709.6	1730.8
142.5°	1002.7	1036.7	1070.6	1079.1	1157.8	1262.8	1315.3	1392.3	1546.2	1661.7	1679.9
145°	1043.5	1073.1	1102.7	1110.2	1175.6	1262.8	1306.4	1369.4	1495.3	1589.8	1603.6
147.5°	1084.4	1113.2	1142.1	1149.2	1201.7	1271.5	1306.4	1356.0	1455.0	1529.3	1540.8
150°	1111.0	1137.1	1163.2	1169.7	1215.2	1276.1	1306.4	1348.3	1431.9	1494.7	1503.9
152.5°	1138.6	1158.3	1178.0	1183.0	1224.1	1279.0	1306.4	1342.2	1413.6	1467.2	1474.1
155°	1179.4	1194.0	1208.6	1212.3	1243.7	1285.5	1306.4	1334.9	1391.7	1434.3	1439.0
157.5°	1209.6	1223.8	1238.1	1241.6	1263.2	1292.0	1306.4	1328.5	1372.7	1405.9	1409.1
160°	1230.0	1241.1	1252.2	1255.0	1272.2	1295.0	1306.4	1325.3	1363.3	1391.7	1393.6
162.5°	1250.5	1258.8	1267.0	1269.1	1281.5	1298.1	1306.4	1322.4	1354.4	1378.4	1380.2
165°	1272.7	1280.2	1287.6	1289.5	1295.2	1302.7	1306.4	1317.9	1340.7	1357.9	1359.8
167.5°	1293.1	1296.6	1300.2	1301.1	1305.9	1312.2	1315.3	1322.8	1337.8	1349.0	1349.8
170°	1306.4	1310.0	1313.6	1314.5	1314.7	1315.1	1315.3	1322.8	1337.8	1349.0	1349.0
172.5°	1313.5	1314.3	1315.1	1315.3	1315.3	1315.3	1315.3	1321.2	1333.1	1342.0	1341.3
175°	1323.3	1323.3	1323.3	1323.3	1320.7	1317.1	1315.3	1319.0	1326.6	1332.2	1332.2
177.5°	1323.3	1323.3	1323.3	1323.3	1321.2	1318.5	1317.1	1320.1	1326.0	1330.4	1329.6
180°	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3

TEST NUMBER: P937301

CATALOG NUMBER: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1177.2	1177.2
2.5°	1256.7	1249.1
5°	1616.3	1623.9
7.5°	2176.5	2172.7
10°	2706.5	2740.5
12.5°	3092.6	3100.1
15°	3327.2	3342.4
17.5°	3418.0	3421.9
20°	3421.9	3414.3
22.5°	3380.2	3372.7
25°	3331.0	3327.2
27.5°	3285.6	3289.4
30°	3266.7	3278.0
32.5°	3266.7	3285.6
35°	3274.2	3293.1
37.5°	3270.4	3293.1
40°	3255.3	3281.8
42.5°	3213.7	3232.6
45°	3149.3	3172.0
47.5°	3066.0	3081.2
50°	2960.0	2975.2
52.5°	2827.6	2831.4
55°	2668.6	2683.7
57.5°	2498.3	2502.0
60°	2309.0	2320.4
62.5°	2108.4	2108.4
65°	1896.4	1904.0
67.5°	1676.9	1695.8
70°	1453.5	1457.3
72.5°	1234.0	1234.0
75°	1006.9	1010.7
77.5°	791.1	791.1
80°	586.8	590.5
82.5°	405.0	412.6
85°	253.6	253.6
87.5°	117.4	106.0
90°	33.7	33.7
92.5°	135.2	108.4
95°	471.2	389.9
97.5°	1129.0	974.3
100°	1626.7	1442.3
102.5°	2116.2	1958.3
105°	2740.4	2655.5
107.5°	3149.2	3169.7
110°	3305.1	3393.5

TEST NUMBER: P937301

CATALOG NUMBER: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3319.0	3454.8
115°	3231.0	3419.3
117.5°	3044.3	3253.2
120°	2894.0	3096.9
122.5°	2747.5	2947.7
125°	2538.7	2723.0
127.5°	2350.8	2506.3
130°	2240.0	2383.8
132.5°	2139.6	2268.3
135°	2002.0	2112.8
137.5°	1891.5	1982.3
140°	1815.7	1900.5
142.5°	1753.0	1826.0
145°	1658.8	1714.0
147.5°	1586.5	1632.4
150°	1541.1	1578.2
152.5°	1502.2	1530.2
155°	1457.5	1476.0
157.5°	1422.2	1435.2
160°	1401.1	1408.5
162.5°	1387.2	1394.4
165°	1367.3	1374.8
167.5°	1353.0	1356.2
170°	1349.0	1349.0
172.5°	1338.5	1335.8
175°	1332.2	1332.2
177.5°	1326.5	1323.3
180°	1323.3	1323.3

(END OF REPORT)