

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: P937997

Luminaire Tested: SQ4-FB-125U-075D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937997
REPORT IS A COMBINATION OF REPORTS P933590 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

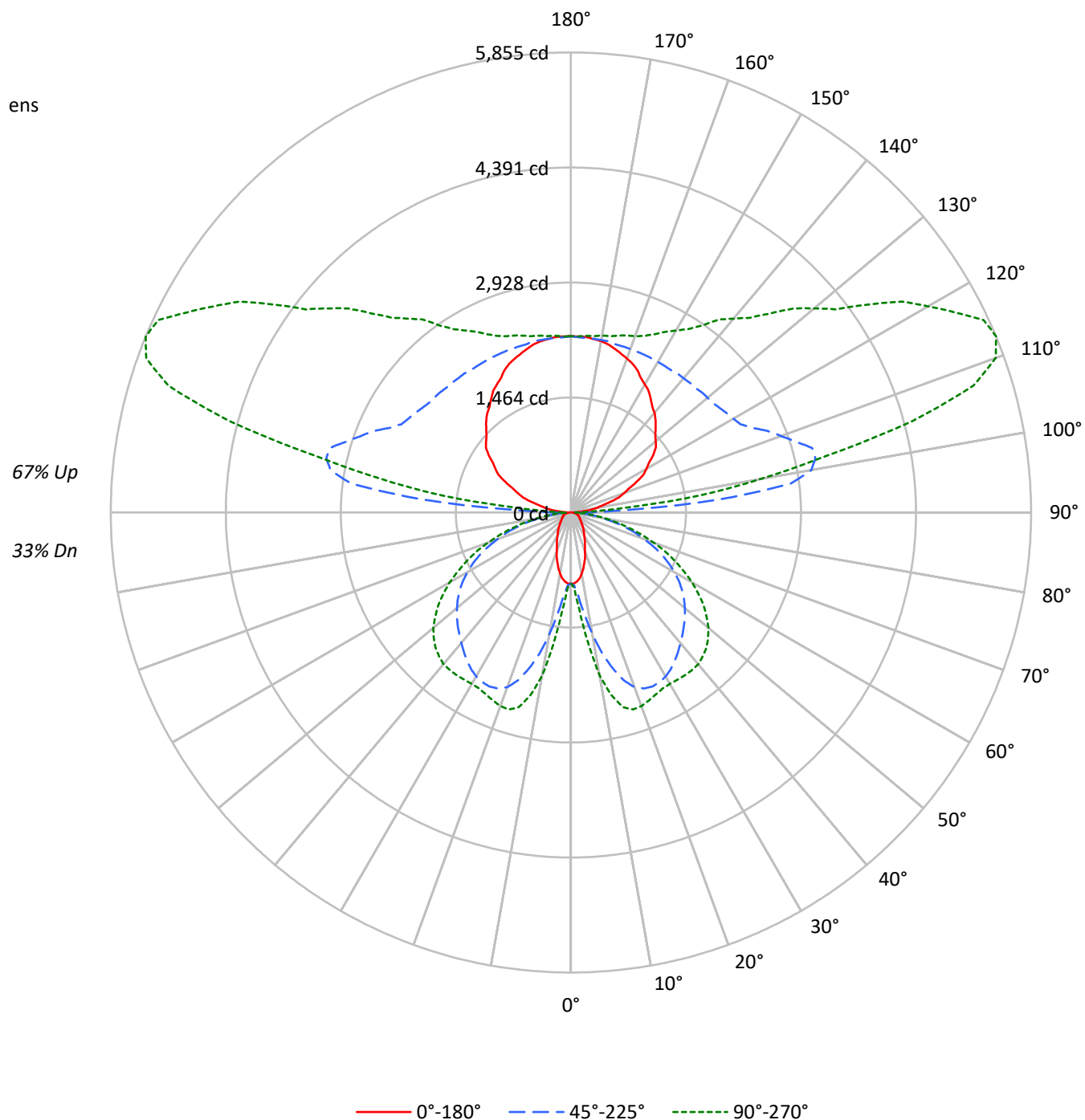
Lumens per Lamp: N/A
Luminaire Lumens: 21540.9 lumens
Efficiency: N/A
Efficacy: 129.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 166.8
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: P937997

CATALOG NUMBER: SQ4-FB-125U-075D-B35-1D-UNV-W2A-W-12

Luminous Intensity Polar Plot



TEST NUMBER: P937997

CATALOG NUMBER: SQ4-FB-125U-075D-B35-1D-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	50	30	10
RCR																				
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	40	40	33
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	33	33	27
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	27	27	22
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	23	23	18
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	19	19	15
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	16	16	13
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	14	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	12	12	10
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	11	11	8
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	10	10	7
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	9	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2796	2796	2796
5°	2733	3233	3759
10°	2480	4714	6232
15°	2108	6160	7525
20°	1717	7140	7669
25°	1433	7474	7513
30°	1209	7523	7499
35°	1070	7400	7693
40°	933	7240	7893
45°	845	7123	7924
50°	776	7018	7793
55°	743	6864	7448
60°	762	6566	6902
65°	795	6111	6153
70°	848	5332	5198
75°	943	4352	4056
80°	1038	3022	2733
85°	943	1606	1399

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7924 cd/sqm

TEST NUMBER: P937997

CATALOG NUMBER: SQ4-FB-125U-075D-B35-1D-UNV-W2A-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.0	0.5
10°-20°	518.3	2.4
20°-30°	906.6	4.2
30°-40°	1167.1	5.4
40°-50°	1303.6	6.1
50°-60°	1248.6	5.8
60°-70°	989.5	4.6
70°-80°	581.8	2.7
80°-90°	170.2	0.8
90°-100°	1093.2	5.1
100°-110°	2874.0	13.3
110°-120°	2980.0	13.8
120°-130°	2390.3	11.1
130°-140°	1875.6	8.7
140°-150°	1439.6	6.7
150°-160°	1036.7	4.8
160°-170°	634.3	2.9
170°-180°	214.3	1.0
0°-30°	1541.9	7.2
0°-40°	2709.0	12.6
0°-60°	5261.2	24.4
0°-90°	7002.8	32.5
90°-120°	6947.2	32.3
90°-150°	12652.7	58.7
90°-180°	14538.0	67.5
0°-180°	21540.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	881	945	1064	1204	1247	81
15°	660	1218	2052	2488	2567	184
25°	422	1381	2445	2552	2555	194
35°	285	1320	2302	2433	2529	178
45°	195	1052	2035	2332	2436	151
55°	140	669	1727	2006	2061	127
65°	110	355	1282	1442	1462	110
75°	81	218	704	773	776	85
85°	29	67	174	192	195	31
90°	15	42	114	57	57	14
95°	144	566	1883	971	661	160
105°	518	784	3177	4824	4500	549
115°	920	1117	2545	5077	5795	908
125°	1279	1434	2315	3912	4615	1136
135°	1525	1678	2243	3158	3581	1180
145°	1768	1881	2214	2694	2905	1108
155°	1999	2054	2214	2431	2502	918
165°	2157	2185	2214	2301	2330	609
175°	2243	2243	2229	2258	2258	213
180°	2243	2243	2243	2243	2243	

TEST NUMBER: P937997

CATALOG NUMBER: SQ4-FB-125U-075D-B35-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1
2.5°	904.1	904.1	909.9	912.8	918.6	921.5	927.3	933.1	950.6	953.5	959.3
5°	880.8	892.4	930.2	944.8	985.5	1040.7	1064.0	1101.8	1180.3	1203.6	1218.1
7.5°	845.9	872.1	965.1	988.4	1090.1	1235.6	1296.6	1378.0	1503.0	1564.1	1613.5
10°	790.7	845.9	1011.6	1066.9	1232.7	1453.6	1567.0	1680.3	1869.3	1953.6	1985.6
12.5°	729.7	819.8	1061.1	1136.7	1375.1	1697.8	1834.4	1959.4	2174.5	2287.9	2305.3
15°	659.9	782.0	1107.7	1218.1	1526.3	1901.3	2052.4	2206.5	2407.1	2488.5	2508.8
17.5°	598.8	752.9	1151.3	1267.5	1642.6	2084.4	2238.5	2366.4	2529.2	2584.4	2599.0
20°	523.3	706.4	1180.3	1331.5	1764.6	2218.1	2366.4	2465.2	2575.7	2610.6	2616.4
22.5°	468.0	657.0	1197.8	1354.8	1846.0	2299.5	2424.5	2503.0	2578.6	2590.2	2593.1
25°	421.5	601.7	1194.9	1380.9	1915.8	2349.0	2444.9	2503.0	2546.6	2552.4	2552.4
27.5°	377.9	540.7	1183.2	1386.7	1968.1	2360.6	2436.2	2476.9	2497.2	2508.8	2508.8
30°	340.1	482.6	1154.2	1375.1	1991.4	2349.0	2410.0	2430.3	2450.7	2468.1	2476.9
32.5°	311.0	427.3	1110.6	1351.9	1994.3	2319.9	2363.5	2375.1	2404.2	2444.9	2459.4
35°	284.9	372.1	1061.1	1319.9	1976.9	2273.4	2302.4	2314.1	2372.2	2433.3	2453.6
37.5°	258.7	331.4	997.1	1264.6	1950.7	2218.1	2238.5	2258.8	2349.0	2421.6	2444.9
40°	232.6	296.5	921.5	1203.6	1910.0	2151.3	2168.7	2200.7	2319.9	2404.2	2427.4
42.5°	212.2	267.4	840.1	1139.6	1857.7	2075.7	2101.9	2148.4	2285.0	2375.1	2401.3
45°	194.8	238.4	752.9	1052.3	1790.8	1997.2	2035.0	2099.0	2244.3	2331.5	2354.8
47.5°	177.3	218.0	662.8	962.2	1718.1	1918.7	1968.1	2040.8	2189.1	2273.4	2293.7
50°	162.8	197.7	572.7	866.3	1639.6	1834.4	1892.6	1968.1	2119.3	2197.8	2224.0
52.5°	151.2	180.2	488.4	770.4	1549.5	1747.2	1814.1	1892.6	2035.0	2110.6	2128.0
55°	139.5	165.7	415.7	668.6	1456.5	1654.2	1726.9	1802.4	1942.0	2005.9	2017.6
57.5°	133.7	154.1	354.7	572.7	1357.7	1549.5	1630.9	1700.7	1831.5	1880.9	1892.6
60°	125.0	145.4	308.1	491.3	1250.1	1450.7	1520.5	1590.2	1700.7	1741.4	1750.1
62.5°	116.3	139.5	273.3	412.8	1139.6	1334.4	1404.2	1468.1	1561.2	1590.2	1601.9
65°	110.5	133.7	247.1	354.7	1026.2	1212.3	1282.1	1337.3	1412.9	1442.0	1447.8
67.5°	104.7	127.9	226.7	305.2	912.8	1090.1	1142.5	1194.9	1253.0	1282.1	1285.0
70°	95.9	122.1	209.3	270.4	796.5	950.6	994.2	1049.4	1095.9	1110.6	1119.3
72.5°	90.1	113.4	197.7	244.2	677.3	816.9	857.6	889.5	930.2	944.8	944.8
75°	81.4	101.7	186.0	218.0	555.2	668.6	703.5	735.5	767.4	773.3	764.5
77.5°	72.7	90.1	159.9	183.1	433.1	529.1	558.1	575.6	601.7	607.6	610.5
80°	61.0	78.5	125.0	142.4	314.0	389.5	409.9	424.4	447.7	447.7	453.5
82.5°	46.5	61.0	90.1	101.7	212.2	267.4	284.9	293.6	308.1	308.1	308.1
85°	29.1	37.8	58.1	66.9	127.9	162.8	174.4	177.3	189.0	191.9	191.9
87.5°	14.5	20.3	37.8	40.7	66.9	84.3	84.3	90.1	90.1	87.2	84.3
90°	15.0	27.0	39.1	42.2	66.2	98.3	114.3	101.6	76.3	57.2	57.2
92.5°	60.2	162.5	264.9	290.5	408.4	565.6	644.2	564.5	405.3	286.0	274.6
95°	144.5	331.8	519.1	565.9	1004.9	1590.2	1882.9	1680.1	1274.8	970.8	936.3
97.5°	249.8	415.0	580.3	621.6	1353.6	2329.6	2817.6	2689.5	2433.3	2241.1	2175.5
100°	331.1	481.0	630.8	668.3	1480.5	2563.6	3105.1	3114.5	3133.2	3147.2	3069.1
102.5°	400.4	540.2	679.9	714.9	1538.8	2637.1	3186.4	3349.5	3676.0	3920.9	3854.0
105°	517.7	636.1	754.6	784.2	1581.9	2645.5	3177.3	3543.1	4275.0	4823.9	4787.9
107.5°	638.2	748.6	858.9	886.5	1589.9	2527.8	2996.7	3507.1	4527.8	5293.5	5302.2
110°	719.5	819.1	918.8	943.7	1577.8	2423.4	2846.1	3416.8	4558.0	5413.9	5451.4

TEST NUMBER: P937997

CATALOG NUMBER: SQ4-FB-125U-075D-B35-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	799.2	894.2	989.2	1012.9	1578.3	2332.3	2709.2	3293.2	4461.2	5337.2	5394.7
115°	919.6	1007.2	1094.9	1116.8	1592.9	2227.7	2545.2	3107.8	4232.9	5076.8	5156.5
117.5°	1038.6	1118.1	1197.8	1217.6	1622.5	2162.3	2432.3	2940.0	3955.5	4717.0	4805.5
120°	1107.8	1182.7	1257.7	1276.4	1646.6	2140.3	2387.1	2851.1	3778.9	4474.7	4560.7
122.5°	1175.5	1251.1	1326.7	1345.6	1681.2	2128.8	2352.5	2770.3	3605.7	4232.4	4317.2
125°	1279.4	1348.3	1417.2	1434.4	1727.9	2119.2	2314.8	2669.7	3379.5	3911.8	3989.9
127.5°	1363.7	1433.2	1502.8	1520.2	1774.5	2113.7	2283.3	2587.9	3197.3	3654.4	3720.3
130°	1408.8	1483.7	1558.6	1577.3	1808.6	2117.1	2271.2	2542.5	3085.0	3491.9	3552.7
132.5°	1455.4	1530.3	1605.3	1624.0	1836.3	2119.2	2260.7	2503.5	2989.2	3353.4	3408.0
135°	1524.7	1592.9	1661.2	1678.2	1866.4	2117.3	2242.7	2446.0	2852.7	3157.8	3204.8
137.5°	1595.5	1663.0	1730.5	1747.4	1911.4	2130.2	2239.6	2411.6	2755.4	3013.2	3051.7
140°	1654.1	1716.3	1778.5	1794.1	1939.1	2132.4	2229.1	2377.5	2674.5	2897.3	2933.3
142.5°	1699.2	1756.8	1814.4	1828.7	1962.1	2140.1	2229.1	2359.5	2620.5	2816.1	2847.0
145°	1768.5	1818.7	1868.9	1881.4	1992.3	2140.1	2214.1	2320.8	2534.1	2694.1	2717.6
147.5°	1837.7	1886.5	1935.4	1947.6	2036.5	2154.9	2214.1	2298.0	2465.9	2591.8	2611.2
150°	1882.9	1927.1	1971.2	1982.3	2059.5	2162.5	2214.1	2285.0	2426.8	2533.1	2548.8
152.5°	1929.6	1963.0	1996.5	2004.9	2074.6	2167.6	2214.1	2274.6	2395.7	2486.5	2498.4
155°	1998.8	2023.6	2048.3	2054.5	2107.7	2178.6	2214.1	2262.2	2358.5	2430.7	2438.6
157.5°	2050.0	2074.0	2098.2	2104.2	2140.8	2189.6	2214.1	2251.5	2326.4	2382.6	2388.1
160°	2084.6	2103.3	2122.1	2126.8	2155.8	2194.7	2214.1	2246.1	2310.4	2358.5	2361.7
162.5°	2119.2	2133.3	2147.3	2150.8	2171.9	2200.0	2214.1	2241.2	2295.4	2336.0	2339.0
165°	2156.8	2169.5	2182.2	2185.4	2195.0	2207.7	2214.1	2233.4	2272.2	2301.3	2304.5
167.5°	2191.5	2197.5	2203.5	2205.0	2213.0	2223.8	2229.1	2241.8	2267.2	2286.3	2287.6
170°	2214.1	2220.1	2226.1	2227.5	2228.0	2228.7	2229.1	2241.8	2267.2	2286.3	2286.3
172.5°	2226.1	2227.4	2228.8	2229.1	2229.1	2229.1	2229.1	2239.2	2259.2	2274.2	2273.1
175°	2242.7	2242.7	2242.7	2242.7	2238.1	2232.1	2229.1	2235.5	2248.2	2257.7	2257.7
177.5°	2242.7	2242.7	2242.7	2242.7	2239.2	2234.4	2232.1	2237.1	2247.1	2254.7	2253.3
180°	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7

TEST NUMBER: P937997

CATALOG NUMBER: SQ4-FB-125U-075D-B35-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	904.1	904.1
2.5°	965.1	959.3
5°	1241.4	1247.2
7.5°	1671.6	1668.7
10°	2078.6	2104.8
12.5°	2375.1	2380.9
15°	2555.3	2567.0
17.5°	2625.1	2628.0
20°	2628.0	2622.2
22.5°	2596.0	2590.2
25°	2558.3	2555.3
27.5°	2523.4	2526.3
30°	2508.8	2517.6
32.5°	2508.8	2523.4
35°	2514.7	2529.2
37.5°	2511.7	2529.2
40°	2500.1	2520.5
42.5°	2468.1	2482.7
45°	2418.7	2436.2
47.5°	2354.8	2366.4
50°	2273.4	2285.0
52.5°	2171.6	2174.5
55°	2049.5	2061.2
57.5°	1918.7	1921.6
60°	1773.4	1782.1
62.5°	1619.3	1619.3
65°	1456.5	1462.3
67.5°	1287.9	1302.4
70°	1116.4	1119.3
72.5°	947.7	947.7
75°	773.3	776.2
77.5°	607.6	607.6
80°	450.6	453.5
82.5°	311.0	316.9
85°	194.8	194.8
87.5°	90.1	81.4
90°	57.2	57.2
92.5°	229.1	183.6
95°	798.6	660.8
97.5°	1913.3	1651.1
100°	2756.7	2444.3
102.5°	3586.4	3318.8
105°	4644.1	4500.3
107.5°	5337.0	5371.7
110°	5601.2	5751.0

TEST NUMBER: P937997

CATALOG NUMBER: SQ4-FB-125U-075D-B35-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5624.8	5854.9
115°	5475.6	5794.7
117.5°	5159.3	5513.2
120°	4904.5	5248.3
122.5°	4656.3	4995.5
125°	4302.3	4614.7
127.5°	3983.8	4247.4
130°	3796.3	4039.8
132.5°	3626.0	3844.0
135°	3392.7	3580.6
137.5°	3205.5	3359.4
140°	3077.2	3221.0
142.5°	2970.8	3094.5
145°	2811.2	2904.9
147.5°	2688.8	2766.4
150°	2611.7	2674.6
152.5°	2545.9	2593.3
155°	2470.1	2501.5
157.5°	2410.2	2432.3
160°	2374.4	2387.1
162.5°	2351.0	2363.0
165°	2317.2	2330.0
167.5°	2292.9	2298.3
170°	2286.3	2286.3
172.5°	2268.3	2263.7
175°	2257.7	2257.7
177.5°	2248.0	2242.7
180°	2242.7	2242.7

(END OF REPORT)