

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: AMETRIX

Report Number: P189144

Luminaire Tested: A08-SI-A-1-LED-30K-D-120-S

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P189144  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL87330-GONIOPHOTOMETRY)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: AMETRIX  
Catalog Number: A08-SI-A-1-LED-30K-D-120-S  
Description: ARROWLINEAR LED LUMINAIRE, EXTRA SMALL HOUSING  
8-FOOT LONG EXTRUDED HOUSING WITH WHITE REFLECTOR AND FROSTED LENS  
Light Source: (238) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

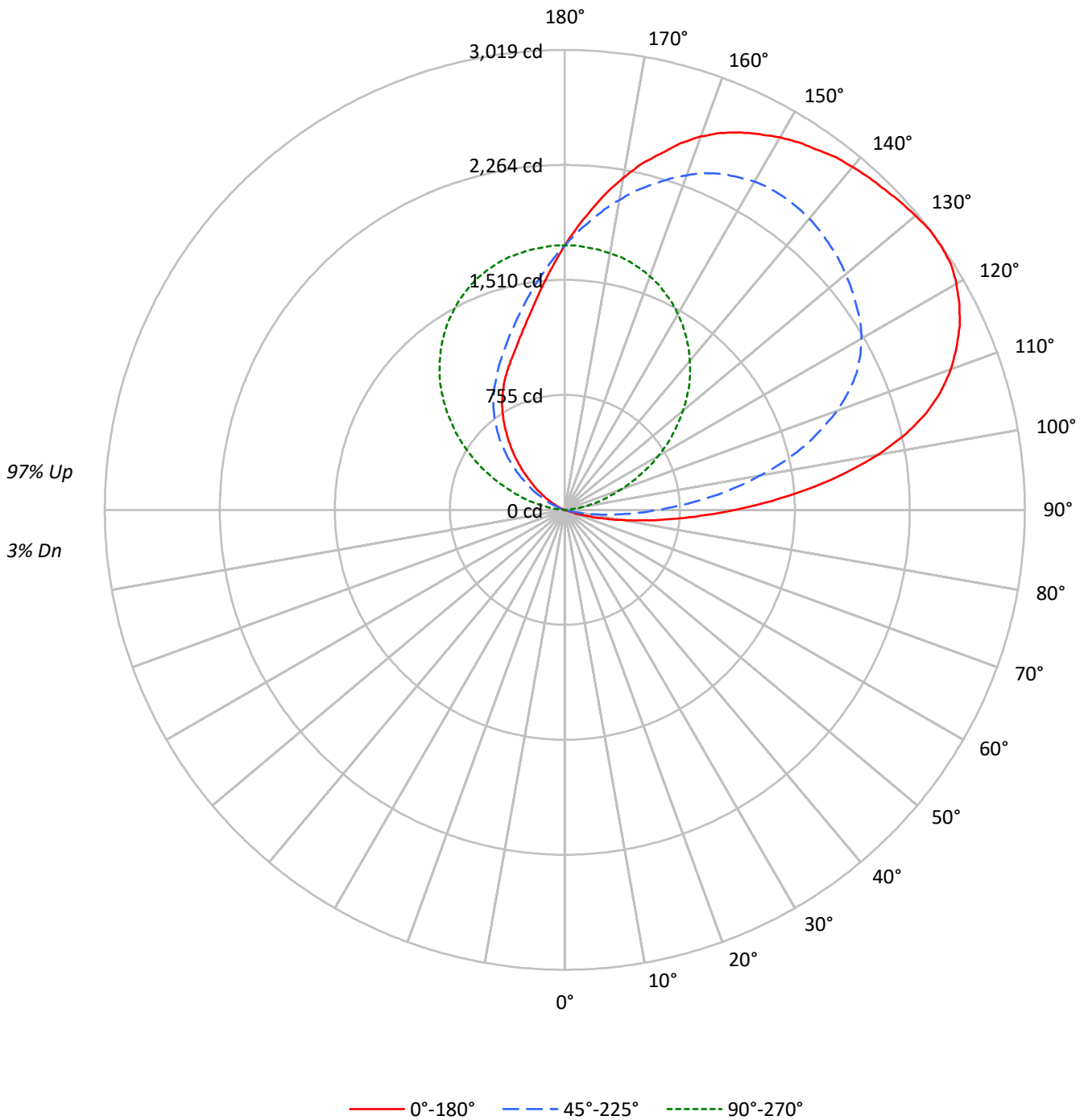
Lumens per Lamp: N/A  
Luminaire Lumens: 7380.9 lumens  
Efficiency: N/A  
Efficacy: 89.8 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular w/ Sides (W: 8.32' x L: 0.29' x H: 0.11')  
CIE Type: Indirect

Input Watts (W): 82.2  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	96	96	96	96	82	82	82	82	57	57	57	34	34	34	13	13	13	3
1	86	82	78	74	74	70	67	64	48	46	45	28	27	26	10	9	9	1
2	78	71	65	60	67	61	56	52	42	39	36	25	23	21	8	8	7	0
3	71	62	55	50	61	54	48	43	37	33	30	22	20	18	7	7	6	0
4	65	55	47	42	55	47	41	36	33	29	26	19	17	15	7	6	5	0
5	59	49	41	35	51	42	36	31	29	25	22	17	15	13	6	5	4	0
6	55	43	36	30	46	37	31	26	26	22	19	15	13	11	5	4	4	0
7	50	39	31	26	43	33	27	23	23	19	16	14	11	10	5	4	3	0
8	46	35	28	23	40	30	24	20	21	17	14	12	10	8	4	3	3	0
9	43	32	25	20	37	27	21	17	19	15	12	11	9	7	4	3	2	0
10	40	29	22	17	34	25	19	15	17	13	11	10	8	7	4	3	2	0

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	0	0	0	0	0
5°	0	0	0	0	0
10°	0	0	0	0	0
15°	0	0	0	0	0
20°	0	0	0	0	0
25°	0	0	0	0	0
30°	0	0	0	0	0
35°	0	0	0	0	0
40°	0	0	0	0	0
45°	0	0	0	0	0
50°	0	0	0	0	0
55°	0	0	0	0	0
60°	0	0	0	0	0
65°	0	0	0	0	0
70°	239	0	0	0	0
75°	1227	190	0	0	0
80°	3169	1456	0	0	0
85°	6734	4263	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 13203 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.6	0.0
70°-80°	36.8	0.5
80°-90°	191.5	2.6
90°-100°	495.3	6.7
100°-110°	825.1	11.2
110°-120°	1050.8	14.2
120°-130°	1159.8	15.7
130°-140°	1146.0	15.5
140°-150°	1023.0	13.9
150°-160°	793.6	10.8
160°-170°	492.7	6.7
170°-180°	165.7	2.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	228.9	3.1
90°-120°	2371.2	32.1
90°-150°	5700.0	77.2
90°-180°	7152.0	96.9
0°-180°	7380.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	5
75°	171	22	0	0	0	198
85°	697	345	0	0	0	508
90°	1116	616	0	0	0	615
95°	1614	957	44	4	4	1416
105°	2456	1632	260	11	15	2570
115°	2860	2111	549	119	44	2825
125°	3016	2337	864	319	200	2697
135°	2971	2459	1154	568	427	2302
145°	2886	2508	1387	816	694	1815
155°	2734	2433	1565	1031	935	1265
165°	2418	2211	1680	1265	1157	691
175°	1973	1903	1728	1569	1506	196
180°	1736	1736	1736	1736	1736	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	37.1	40.8	29.7	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	92.7	92.7	77.9	51.9	18.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	170.6	170.6	152.1	118.7	70.5	22.3	0.0	0.0	0.0	0.0	0.0
77.5°	267.1	263.4	241.1	200.3	141.0	74.2	11.1	0.0	0.0	0.0	0.0
80°	385.8	382.1	356.1	304.2	233.7	144.7	55.6	0.0	0.0	0.0	0.0
82.5°	526.7	523.0	489.6	430.3	345.0	237.4	118.7	26.0	0.0	0.0	0.0
85°	697.3	693.6	652.8	582.4	482.2	345.0	196.6	77.9	7.4	0.0	0.0
87.5°	893.9	879.1	842.0	756.7	626.9	471.1	293.0	141.0	33.4	0.0	0.0
90°	1116.5	1101.6	1057.1	957.0	801.2	615.7	408.0	218.8	77.9	7.4	0.0
92.5°	1361.3	1357.6	1290.8	1172.1	990.4	775.2	541.6	311.6	137.2	37.1	14.8
95°	1613.5	1609.8	1535.6	1398.4	1194.4	957.0	678.8	415.4	211.4	81.6	44.5
97.5°	1862.0	1858.3	1765.6	1624.7	1398.4	1135.0	827.2	530.4	293.0	137.2	89.0
100°	2088.3	2080.9	1984.5	1836.1	1598.7	1305.7	975.5	645.4	378.3	196.6	137.2
102.5°	2288.6	2273.8	2181.0	2025.3	1784.2	1476.3	1120.2	764.1	474.8	267.1	196.6
105°	2455.5	2437.0	2351.7	2192.2	1943.6	1632.1	1264.9	886.5	571.2	341.3	259.6
107.5°	2589.1	2574.2	2485.2	2333.1	2088.3	1769.3	1402.1	1005.2	671.4	419.1	322.7
110°	2696.6	2685.5	2603.9	2451.8	2210.7	1902.8	1528.2	1123.9	775.2	504.5	396.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	2781.9	2774.5	2696.6	2544.5	2318.3	2014.1	1639.5	1235.2	875.4	589.8	471.1
115°	2859.8	2852.4	2778.2	2633.6	2407.3	2110.6	1743.3	1342.7	979.2	675.1	549.0
117.5°	2919.2	2911.8	2837.6	2696.6	2477.8	2184.8	1828.7	1442.9	1086.8	764.1	630.6
120°	2967.4	2956.3	2889.5	2752.3	2537.1	2247.8	1902.8	1539.3	1187.0	853.1	708.5
122.5°	3004.5	2993.4	2930.3	2789.4	2581.6	2299.7	1973.3	1632.1	1283.4	938.4	790.1
125°	3015.6	3008.2	2948.9	2807.9	2603.9	2336.8	2036.4	1713.7	1368.7	1023.8	864.3
127.5°	3019.3	3011.9	2952.6	2815.3	2622.4	2373.9	2092.0	1787.9	1450.3	1101.6	938.4
130°	3004.5	3004.5	2945.1	2815.3	2633.6	2407.3	2143.9	1858.3	1520.8	1175.8	1012.6
132.5°	2989.7	2985.9	2934.0	2811.6	2644.7	2437.0	2192.2	1917.7	1587.6	1246.3	1083.1
135°	2971.1	2971.1	2922.9	2811.6	2655.8	2459.2	2233.0	1969.6	1643.2	1309.4	1153.6
137.5°	2956.3	2956.3	2911.8	2807.9	2663.2	2481.5	2270.1	2010.4	1698.8	1372.4	1216.6
140°	2937.7	2937.7	2893.2	2800.5	2667.0	2496.3	2292.3	2043.8	1735.9	1428.1	1276.0
142.5°	2919.2	2919.2	2874.7	2789.4	2667.0	2503.7	2314.6	2069.8	1776.7	1480.0	1335.3
145°	2885.8	2889.5	2852.4	2770.8	2655.8	2507.5	2322.0	2084.6	1806.4	1528.2	1387.3
147.5°	2859.8	2859.8	2826.5	2748.6	2641.0	2503.7	2322.0	2092.0	1832.4	1569.0	1439.2
150°	2822.7	2822.7	2789.4	2726.3	2626.2	2488.9	2318.3	2095.7	1850.9	1606.1	1483.7
152.5°	2778.2	2781.9	2748.6	2689.2	2592.8	2462.9	2296.0	2088.3	1862.0	1639.5	1528.2
155°	2733.7	2737.4	2707.8	2648.4	2555.7	2433.3	2273.8	2080.9	1873.2	1669.2	1565.3
157.5°	2678.1	2681.8	2652.1	2592.8	2507.5	2392.5	2236.7	2066.1	1880.6	1691.4	1602.4
160°	2607.6	2611.3	2577.9	2526.0	2444.4	2336.8	2199.6	2043.8	1876.9	1713.7	1632.1
162.5°	2522.3	2522.3	2496.3	2448.1	2370.2	2277.5	2155.1	2017.8	1873.2	1728.5	1658.0
165°	2418.4	2425.9	2403.6	2359.1	2292.3	2210.7	2103.1	1984.5	1862.0	1739.6	1680.3
167.5°	2325.7	2322.0	2303.4	2270.1	2210.7	2143.9	2051.2	1951.1	1850.9	1750.8	1698.8
170°	2214.4	2210.7	2195.9	2166.2	2121.7	2066.1	1991.9	1914.0	1836.1	1750.8	1710.0
172.5°	2099.4	2092.0	2080.9	2062.3	2029.0	1988.2	1932.5	1873.2	1813.8	1750.8	1721.1
175°	1973.3	1973.3	1965.9	1951.1	1928.8	1902.8	1865.8	1825.0	1787.9	1747.1	1728.5
177.5°	1854.6	1854.6	1850.9	1843.5	1832.4	1821.2	1802.7	1784.2	1765.6	1743.3	1735.9
180°	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9



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**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
0°	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	3.7	3.7
95°	0.0	3.7	3.7	3.7
97.5°	3.7	3.7	7.4	7.4
100°	11.1	7.4	7.4	7.4
102.5°	37.1	11.1	11.1	11.1
105°	66.8	11.1	14.8	14.8
107.5°	107.6	22.3	14.8	14.8
110°	152.1	44.5	18.5	18.5



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**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
112.5°	200.3	77.9	33.4	26.0
115°	252.2	118.7	59.3	44.5
117.5°	307.9	159.5	96.4	74.2
120°	367.2	207.7	133.5	111.3
122.5°	430.3	263.4	181.8	152.1
125°	489.6	319.0	230.0	200.3
127.5°	552.7	378.3	281.9	252.2
130°	615.7	441.4	337.5	304.2
132.5°	678.8	504.5	400.6	363.5
135°	741.9	567.5	463.7	426.6
137.5°	801.2	634.3	530.4	493.3
140°	860.5	693.6	597.2	560.1
142.5°	923.6	756.7	664.0	626.9
145°	979.2	816.0	727.0	693.6
147.5°	1038.6	871.7	793.8	760.4
150°	1094.2	923.6	853.1	823.5
152.5°	1149.9	975.5	905.1	879.1
155°	1209.2	1031.2	957.0	934.7
157.5°	1264.9	1083.1	1008.9	986.7
160°	1320.5	1138.7	1064.6	1038.6
162.5°	1376.1	1201.8	1120.2	1094.2
165°	1435.5	1264.9	1183.3	1157.3
167.5°	1487.4	1335.3	1253.7	1227.8
170°	1539.3	1409.5	1335.3	1309.4
172.5°	1587.6	1487.4	1428.1	1402.1
175°	1635.8	1569.0	1524.5	1506.0
177.5°	1687.7	1654.3	1624.7	1617.2
180°	1735.9	1735.9	1735.9	1735.9

(END OF REPORT)