

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: P189145

Luminaire Tested: A08-SI-A-1-LED-35K-D-120-S

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P189145  
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-35K-D-120-S  
Description: ARROWLINEAR LED LUMINAIRE, EXTRA SMALL HOUSING  
8-FOOT LONG EXTRUDED HOUSING WITH WHITE REFLECTOR AND FROSTED LENS  
Light Source: (238) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

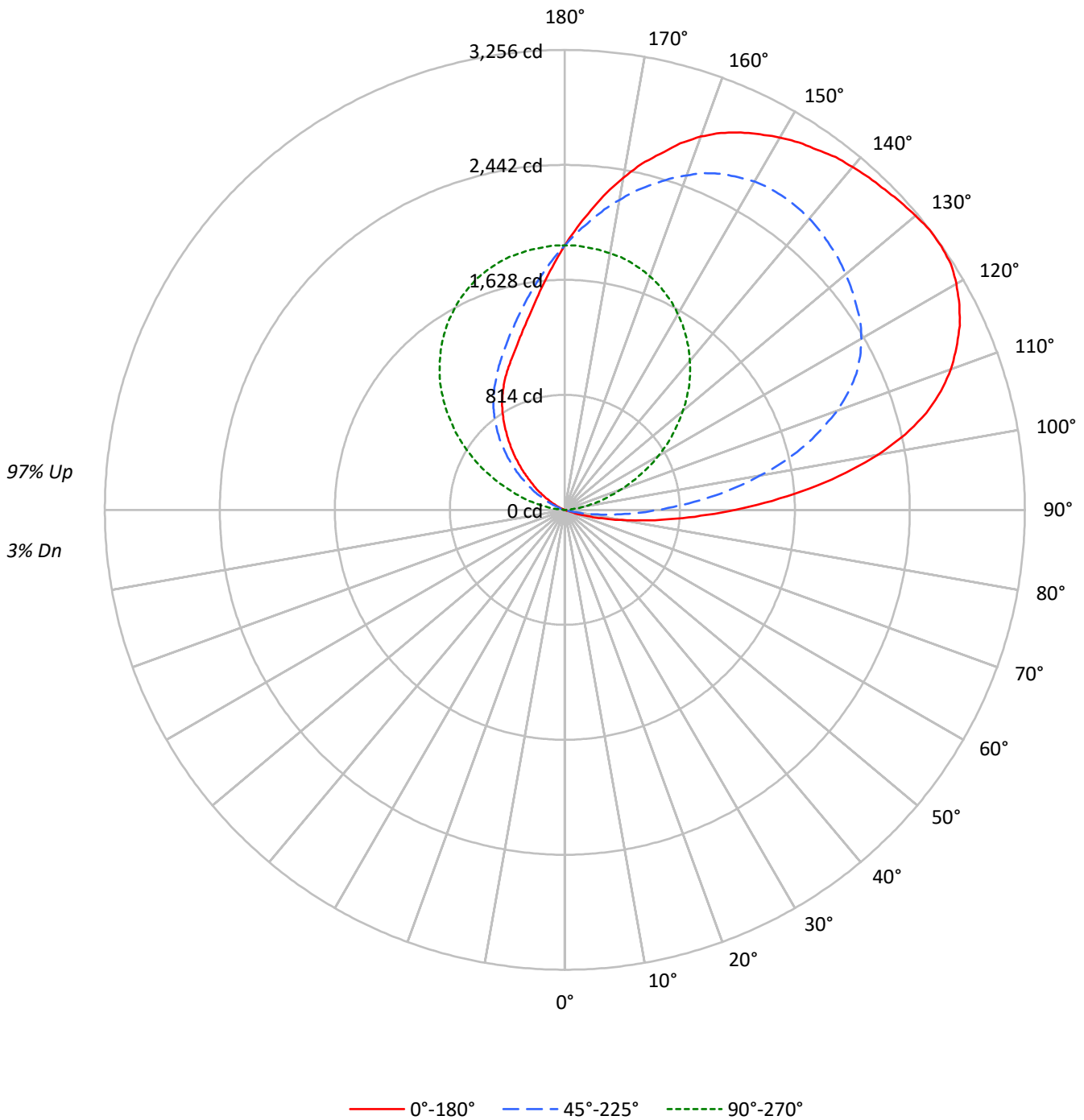
Lumens per Lamp: N/A  
Luminaire Lumens: 7960.0 lumens  
Efficiency: N/A  
Efficacy: 96.8 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular w/ Sides (W: 8.32' x L: 0.29' x H: 0.11')  
CIE Type: Indirect

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°	258	0	0	0	0
75°	1324	205	0	0	0
80°	3417	1570	0	0	0
85°	7263	4597	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 90°  
 Luminance: 14239 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°	39.7	0.5
80°-90°	206.5	2.6
90°-100°	534.1	6.7
100°-110°	889.9	11.2
110°-120°	1133.3	14.2
120°-130°	1250.7	15.7
130°-140°	1235.9	15.5
140°-150°	1103.2	13.9
150°-160°	855.9	10.8
160°-170°	531.4	6.7
170°-180°	178.7	2.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	246.8	3.1
90°-120°	2557.3	32.1
90°-150°	6147.2	77.2
90°-180°	7713.0	96.9
0°-180°	7960.0	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°	184	24	0	0	0	213
85°	752	372	0	0	0	548
90°	1204	664	0	0	0	663
95°	1740	1032	48	4	4	1527
105°	2648	1760	280	12	16	2772
115°	3084	2276	592	128	48	3047
125°	3252	2520	932	344	216	2908
135°	3204	2652	1244	612	460	2483
145°	3112	2704	1496	880	748	1957
155°	2948	2624	1688	1112	1008	1364
165°	2608	2384	1812	1364	1248	746
175°	2128	2052	1864	1692	1624	211
180°	1872	1872	1872	1872	1872	



TEST NUMBER: P189145  
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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°	40.0	44.0	32.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	100.0	100.0	84.0	56.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	184.0	184.0	164.0	128.0	76.0	24.0	0.0	0.0	0.0	0.0	0.0
77.5°	288.0	284.0	260.0	216.0	152.0	80.0	12.0	0.0	0.0	0.0	0.0
80°	416.0	412.0	384.0	328.0	252.0	156.0	60.0	0.0	0.0	0.0	0.0
82.5°	568.0	564.0	528.0	464.0	372.0	256.0	128.0	28.0	0.0	0.0	0.0
85°	752.1	748.1	704.0	628.0	520.0	372.0	212.0	84.0	8.0	0.0	0.0
87.5°	964.1	948.1	908.1	816.1	676.0	508.0	316.0	152.0	36.0	0.0	0.0
90°	1204.1	1188.1	1140.1	1032.1	864.1	664.0	440.0	236.0	84.0	8.0	0.0
92.5°	1468.1	1464.1	1392.1	1264.1	1068.1	836.1	584.0	336.0	148.0	40.0	16.0
95°	1740.1	1736.1	1656.1	1508.1	1288.1	1032.1	732.0	448.0	228.0	88.0	48.0
97.5°	2008.1	2004.1	1904.1	1752.1	1508.1	1224.1	892.1	572.0	316.0	148.0	96.0
100°	2252.2	2244.2	2140.1	1980.1	1724.1	1408.1	1052.1	696.0	408.0	212.0	148.0
102.5°	2468.2	2452.2	2352.2	2184.1	1924.1	1592.1	1208.1	824.1	512.0	288.0	212.0
105°	2648.2	2628.2	2536.2	2364.2	2096.1	1760.1	1364.1	956.1	616.0	368.0	280.0
107.5°	2792.2	2776.2	2680.2	2516.2	2252.2	1908.1	1512.1	1084.1	724.0	452.0	348.0
110°	2908.2	2896.2	2808.2	2644.2	2384.2	2052.1	1648.1	1212.1	836.1	544.0	428.0



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CATALOG NUMBER: A08-SI-A-1-LED-35K-D-120-S

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	3000.2	2992.2	2908.2	2744.2	2500.2	2172.1	1768.1	1332.1	944.1	636.0	508.0
115°	3084.2	3076.2	2996.2	2840.2	2596.2	2276.2	1880.1	1448.1	1056.1	728.0	592.0
117.5°	3148.2	3140.2	3060.2	2908.2	2672.2	2356.2	1972.1	1556.1	1172.1	824.1	680.0
120°	3200.2	3188.2	3116.2	2968.2	2736.2	2424.2	2052.1	1660.1	1280.1	920.1	764.1
122.5°	3240.2	3228.2	3160.2	3008.2	2784.2	2480.2	2128.1	1760.1	1384.1	1012.1	852.1
125°	3252.2	3244.2	3180.2	3028.2	2808.2	2520.2	2196.1	1848.1	1476.1	1104.1	932.1
127.5°	3256.2	3248.2	3184.2	3036.2	2828.2	2560.2	2256.2	1928.1	1564.1	1188.1	1012.1
130°	3240.2	3240.2	3176.2	3036.2	2840.2	2596.2	2312.2	2004.1	1640.1	1268.1	1092.1
132.5°	3224.2	3220.2	3164.2	3032.2	2852.2	2628.2	2364.2	2068.1	1712.1	1344.1	1168.1
135°	3204.2	3204.2	3152.2	3032.2	2864.2	2652.2	2408.2	2124.1	1772.1	1412.1	1244.1
137.5°	3188.2	3188.2	3140.2	3028.2	2872.2	2676.2	2448.2	2168.1	1832.1	1480.1	1312.1
140°	3168.2	3168.2	3120.2	3020.2	2876.2	2692.2	2472.2	2204.1	1872.1	1540.1	1376.1
142.5°	3148.2	3148.2	3100.2	3008.2	2876.2	2700.2	2496.2	2232.2	1916.1	1596.1	1440.1
145°	3112.2	3116.2	3076.2	2988.2	2864.2	2704.2	2504.2	2248.2	1948.1	1648.1	1496.1
147.5°	3084.2	3084.2	3048.2	2964.2	2848.2	2700.2	2504.2	2256.2	1976.1	1692.1	1552.1
150°	3044.2	3044.2	3008.2	2940.2	2832.2	2684.2	2500.2	2260.2	1996.1	1732.1	1600.1
152.5°	2996.2	3000.2	2964.2	2900.2	2796.2	2656.2	2476.2	2252.2	2008.1	1768.1	1648.1
155°	2948.2	2952.2	2920.2	2856.2	2756.2	2624.2	2452.2	2244.2	2020.1	1800.1	1688.1
157.5°	2888.2	2892.2	2860.2	2796.2	2704.2	2580.2	2412.2	2228.2	2028.1	1824.1	1728.1
160°	2812.2	2816.2	2780.2	2724.2	2636.2	2520.2	2372.2	2204.1	2024.1	1848.1	1760.1
162.5°	2720.2	2720.2	2692.2	2640.2	2556.2	2456.2	2324.2	2176.1	2020.1	1864.1	1788.1
165°	2608.2	2616.2	2592.2	2544.2	2472.2	2384.2	2268.2	2140.1	2008.1	1876.1	1812.1
167.5°	2508.2	2504.2	2484.2	2448.2	2384.2	2312.2	2212.2	2104.1	1996.1	1888.1	1832.1
170°	2388.2	2384.2	2368.2	2336.2	2288.2	2228.2	2148.1	2064.1	1980.1	1888.1	1844.1
172.5°	2264.2	2256.2	2244.2	2224.2	2188.1	2144.1	2084.1	2020.1	1956.1	1888.1	1856.1
175°	2128.1	2128.1	2120.1	2104.1	2080.1	2052.1	2012.1	1968.1	1928.1	1884.1	1864.1
177.5°	2000.1	2000.1	1996.1	1988.1	1976.1	1964.1	1944.1	1924.1	1904.1	1880.1	1872.1
180°	1872.1	1872.1	1872.1	1872.1	1872.1	1872.1	1872.1	1872.1	1872.1	1872.1	1872.1



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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	4.0	4.0
95°	0.0	4.0	4.0	4.0
97.5°	4.0	4.0	8.0	8.0
100°	12.0	8.0	8.0	8.0
102.5°	40.0	12.0	12.0	12.0
105°	72.0	12.0	16.0	16.0
107.5°	116.0	24.0	16.0	16.0
110°	164.0	48.0	20.0	20.0





TEST NUMBER: P189145

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**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
112.5°	216.0	84.0	36.0	28.0
115°	272.0	128.0	64.0	48.0
117.5°	332.0	172.0	104.0	80.0
120°	396.0	224.0	144.0	120.0
122.5°	464.0	284.0	196.0	164.0
125°	528.0	344.0	248.0	216.0
127.5°	596.0	408.0	304.0	272.0
130°	664.0	476.0	364.0	328.0
132.5°	732.0	544.0	432.0	392.0
135°	800.1	612.0	500.0	460.0
137.5°	864.1	684.0	572.0	532.0
140°	928.1	748.1	644.0	604.0
142.5°	996.1	816.1	716.0	676.0
145°	1056.1	880.1	784.1	748.1
147.5°	1120.1	940.1	856.1	820.1
150°	1180.1	996.1	920.1	888.1
152.5°	1240.1	1052.1	976.1	948.1
155°	1304.1	1112.1	1032.1	1008.1
157.5°	1364.1	1168.1	1088.1	1064.1
160°	1424.1	1228.1	1148.1	1120.1
162.5°	1484.1	1296.1	1208.1	1180.1
165°	1548.1	1364.1	1276.1	1248.1
167.5°	1604.1	1440.1	1352.1	1324.1
170°	1660.1	1520.1	1440.1	1412.1
172.5°	1712.1	1604.1	1540.1	1512.1
175°	1764.1	1692.1	1644.1	1624.1
177.5°	1820.1	1784.1	1752.1	1744.1
180°	1872.1	1872.1	1872.1	1872.1

(END OF REPORT)