

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: P189146

Luminaire Tested: A08-SI-A-1-LED-40K-D-120-S

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2019
Report Number: P189146
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-40K-D-120-S
Description: ARROWLINEAR LED LUMINAIRE, EXTRA SMALL HOUSING
8-FOOT LONG EXTRUDED HOUSING WITH WHITE REFLECTOR AND FROSTED LENS
Light Source: (238) 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

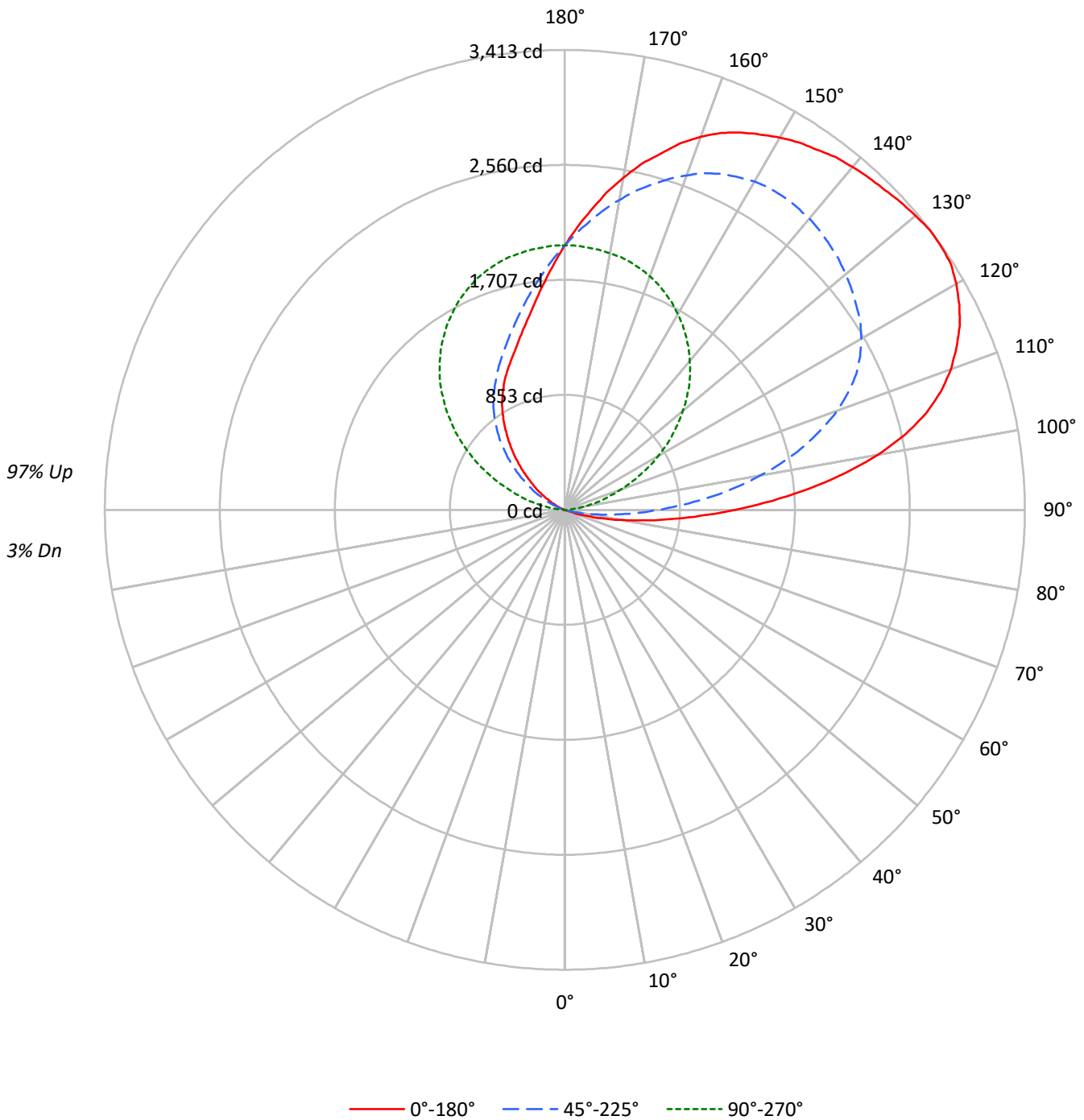
Lumens per Lamp: N/A
Luminaire Lumens: 8342.8 lumens
Efficiency: N/A
Efficacy: 101.5 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular w/ Sides (W: 8.32' x L: 0.29' x H: 0.11')
CIE Type: Indirect

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°	270	0	0	0	0
75°	1388	215	0	0	0
80°	3581	1645	0	0	0
85°	7612	4818	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 14923 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°	41.6	0.5
80°-90°	216.4	2.6
90°-100°	559.8	6.7
100°-110°	932.7	11.2
110°-120°	1187.8	14.2
120°-130°	1310.9	15.7
130°-140°	1295.4	15.5
140°-150°	1156.3	13.9
150°-160°	897.0	10.8
160°-170°	556.9	6.7
170°-180°	187.3	2.2
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	258.7	3.1
90°-120°	2680.3	32.1
90°-150°	6442.8	77.2
90°-180°	8084.0	96.9
0°-180°	8342.8	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°	193	25	0	0	0	223
85°	788	390	0	0	0	574
90°	1262	696	0	0	0	695
95°	1824	1082	50	4	4	1600
105°	2776	1845	294	13	17	2905
115°	3232	2386	620	134	50	3194
125°	3409	2641	977	361	226	3048
135°	3358	2780	1304	642	482	2602
145°	3262	2834	1568	922	784	2051
155°	3090	2750	1769	1166	1056	1430
165°	2734	2499	1899	1430	1308	782
175°	2230	2151	1954	1774	1702	221
180°	1962	1962	1962	1962	1962	



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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°	41.9	46.1	33.5	12.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	104.8	104.8	88.0	58.7	21.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	192.9	192.9	171.9	134.2	79.7	25.2	0.0	0.0	0.0	0.0	0.0
77.5°	301.9	297.7	272.5	226.4	159.3	83.9	12.6	0.0	0.0	0.0	0.0
80°	436.0	431.8	402.5	343.8	264.1	163.5	62.9	0.0	0.0	0.0	0.0
82.5°	595.4	591.2	553.4	486.3	389.9	268.3	134.2	29.3	0.0	0.0	0.0
85°	788.2	784.0	737.9	658.2	545.0	389.9	222.2	88.0	8.4	0.0	0.0
87.5°	1010.4	993.7	951.7	855.3	708.6	532.5	331.2	159.3	37.7	0.0	0.0
90°	1262.0	1245.2	1194.9	1081.7	905.6	696.0	461.2	247.4	88.0	8.4	0.0
92.5°	1538.7	1534.5	1459.0	1324.9	1119.4	876.3	612.1	352.2	155.1	41.9	16.8
95°	1823.8	1819.6	1735.8	1580.6	1350.0	1081.7	767.3	469.6	239.0	92.2	50.3
97.5°	2104.7	2100.5	1995.7	1836.4	1580.6	1282.9	935.0	599.5	331.2	155.1	100.6
100°	2360.5	2352.1	2243.1	2075.4	1807.0	1475.8	1102.7	729.5	427.6	222.2	155.1
102.5°	2586.9	2570.1	2465.3	2289.2	2016.7	1668.7	1266.2	863.7	536.7	301.9	222.2
105°	2775.5	2754.6	2658.1	2477.9	2196.9	1844.8	1429.7	1002.0	645.7	385.7	293.5
107.5°	2926.5	2909.7	2809.1	2637.2	2360.5	1999.9	1584.8	1136.2	758.9	473.8	364.8
110°	3048.0	3035.5	2943.2	2771.3	2498.8	2150.8	1727.4	1270.4	876.3	570.2	448.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	3144.5	3136.1	3048.0	2876.2	2620.4	2276.6	1853.1	1396.1	989.5	666.6	532.5
115°	3232.5	3224.1	3140.3	2976.8	2721.0	2385.6	1970.5	1517.7	1106.9	763.1	620.5
117.5°	3299.6	3291.2	3207.4	3048.0	2800.7	2469.5	2067.0	1630.9	1228.4	863.7	712.7
120°	3354.1	3341.5	3266.1	3110.9	2867.8	2540.7	2150.8	1739.9	1341.6	964.3	800.8
122.5°	3396.0	3383.5	3312.2	3152.9	2918.1	2599.4	2230.5	1844.8	1450.7	1060.7	893.0
125°	3408.6	3400.2	3333.1	3173.8	2943.2	2641.4	2301.8	1937.0	1547.1	1157.2	976.9
127.5°	3412.8	3404.4	3337.3	3182.2	2964.2	2683.3	2364.6	2020.9	1639.3	1245.2	1060.7
130°	3396.0	3396.0	3329.0	3182.2	2976.8	2721.0	2423.3	2100.5	1719.0	1329.1	1144.6
132.5°	3379.3	3375.1	3316.4	3178.0	2989.4	2754.6	2477.9	2167.6	1794.4	1408.7	1224.3
135°	3358.3	3358.3	3303.8	3178.0	3001.9	2779.7	2524.0	2226.3	1857.3	1480.0	1303.9
137.5°	3341.5	3341.5	3291.2	3173.8	3010.3	2804.9	2565.9	2272.4	1920.2	1551.3	1375.2
140°	3320.6	3320.6	3270.3	3165.4	3014.5	2821.6	2591.1	2310.1	1962.2	1614.2	1442.3
142.5°	3299.6	3299.6	3249.3	3152.9	3014.5	2830.0	2616.2	2339.5	2008.3	1672.9	1509.4
145°	3261.9	3266.1	3224.1	3131.9	3001.9	2834.2	2624.6	2356.3	2041.8	1727.4	1568.0
147.5°	3232.5	3232.5	3194.8	3106.7	2985.2	2830.0	2624.6	2364.6	2071.2	1773.5	1626.7
150°	3190.6	3190.6	3152.9	3081.6	2968.4	2813.3	2620.4	2368.8	2092.1	1815.4	1677.1
152.5°	3140.3	3144.5	3106.7	3039.7	2930.7	2783.9	2595.2	2360.5	2104.7	1853.1	1727.4
155°	3090.0	3094.2	3060.6	2993.5	2888.7	2750.4	2570.1	2352.1	2117.3	1886.7	1769.3
157.5°	3027.1	3031.3	2997.7	2930.7	2834.2	2704.3	2528.2	2335.3	2125.7	1911.8	1811.2
160°	2947.4	2951.6	2913.9	2855.2	2762.9	2641.4	2486.2	2310.1	2121.5	1937.0	1844.8
162.5°	2851.0	2851.0	2821.6	2767.1	2679.1	2574.3	2435.9	2280.8	2117.3	1953.8	1874.1
165°	2733.6	2742.0	2716.8	2666.5	2591.1	2498.8	2377.2	2243.1	2104.7	1966.3	1899.3
167.5°	2628.8	2624.6	2603.6	2565.9	2498.8	2423.3	2318.5	2205.3	2092.1	1978.9	1920.2
170°	2503.0	2498.8	2482.0	2448.5	2398.2	2335.3	2251.4	2163.4	2075.4	1978.9	1932.8
172.5°	2373.0	2364.6	2352.1	2331.1	2293.4	2247.3	2184.4	2117.3	2050.2	1978.9	1945.4
175°	2230.5	2230.5	2222.1	2205.3	2180.2	2150.8	2108.9	2062.8	2020.9	1974.7	1953.8
177.5°	2096.3	2096.3	2092.1	2083.7	2071.2	2058.6	2037.6	2016.7	1995.7	1970.5	1962.2
180°	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2	1962.2



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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	4.2	4.2
95°	0.0	4.2	4.2	4.2
97.5°	4.2	4.2	8.4	8.4
100°	12.6	8.4	8.4	8.4
102.5°	41.9	12.6	12.6	12.6
105°	75.5	12.6	16.8	16.8
107.5°	121.6	25.2	16.8	16.8
110°	171.9	50.3	21.0	21.0



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
112.5°	226.4	88.0	37.7	29.3
115°	285.1	134.2	67.1	50.3
117.5°	348.0	180.3	109.0	83.9
120°	415.1	234.8	150.9	125.8
122.5°	486.3	297.7	205.4	171.9
125°	553.4	360.6	259.9	226.4
127.5°	624.7	427.6	318.6	285.1
130°	696.0	498.9	381.5	343.8
132.5°	767.3	570.2	452.8	410.9
135°	838.5	641.5	524.1	482.2
137.5°	905.6	716.9	599.5	557.6
140°	972.7	784.0	675.0	633.1
142.5°	1044.0	855.3	750.5	708.6
145°	1106.9	922.4	821.8	784.0
147.5°	1173.9	985.3	897.2	859.5
150°	1236.8	1044.0	964.3	930.8
152.5°	1299.7	1102.7	1023.0	993.7
155°	1366.8	1165.6	1081.7	1056.5
157.5°	1429.7	1224.3	1140.4	1115.2
160°	1492.6	1287.1	1203.3	1173.9
162.5°	1555.5	1358.4	1266.2	1236.8
165°	1622.6	1429.7	1337.5	1308.1
167.5°	1681.2	1509.4	1417.1	1387.8
170°	1739.9	1593.2	1509.4	1480.0
172.5°	1794.4	1681.2	1614.2	1584.8
175°	1849.0	1773.5	1723.2	1702.2
177.5°	1907.7	1869.9	1836.4	1828.0
180°	1962.2	1962.2	1962.2	1962.2

(END OF REPORT)