

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P299650

Luminaire Tested: **GLNA-AF-03-LED-E1-SL2-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299650
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-SL2-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 4000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11045.8 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 124
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: 25 FT

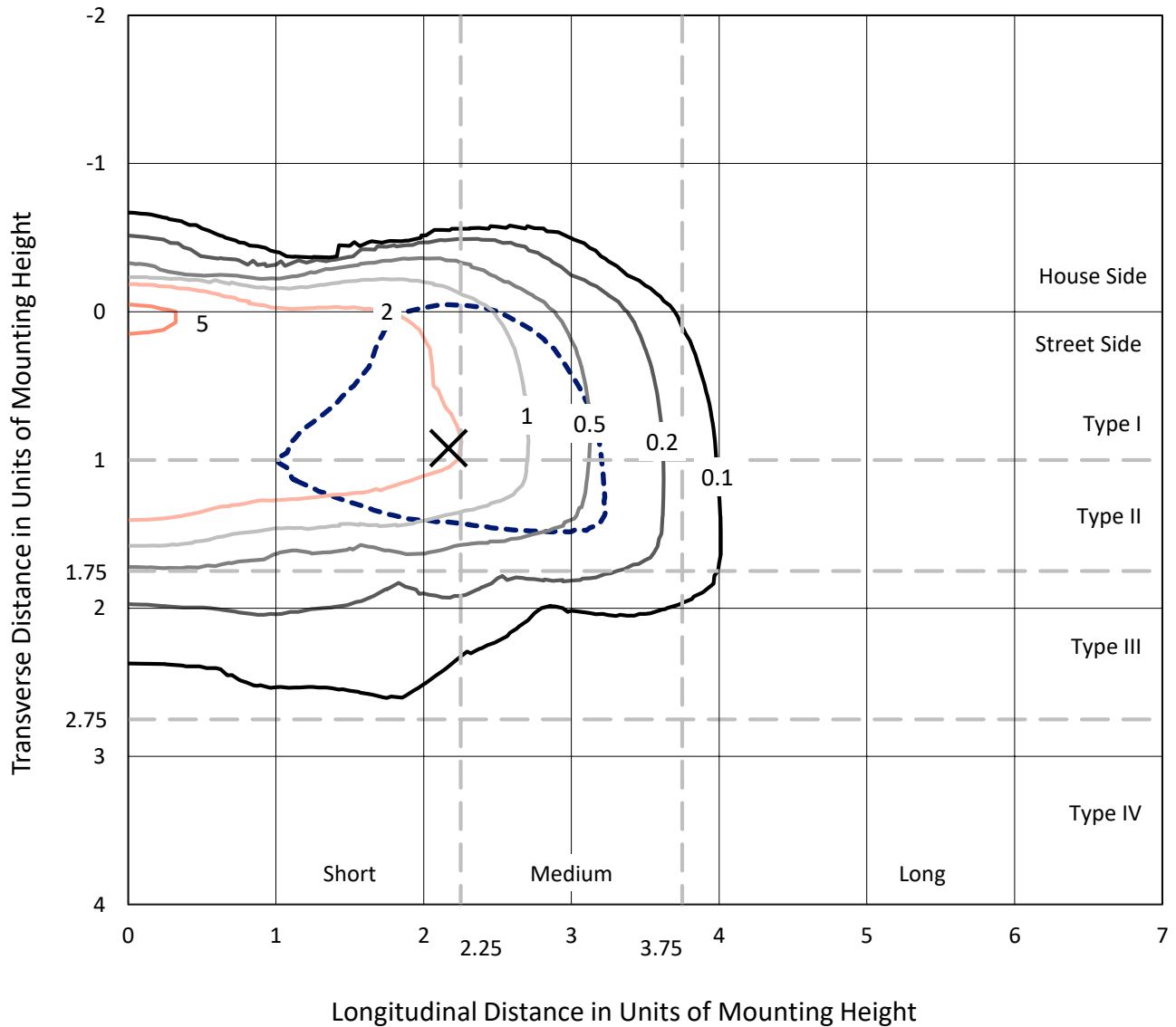


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

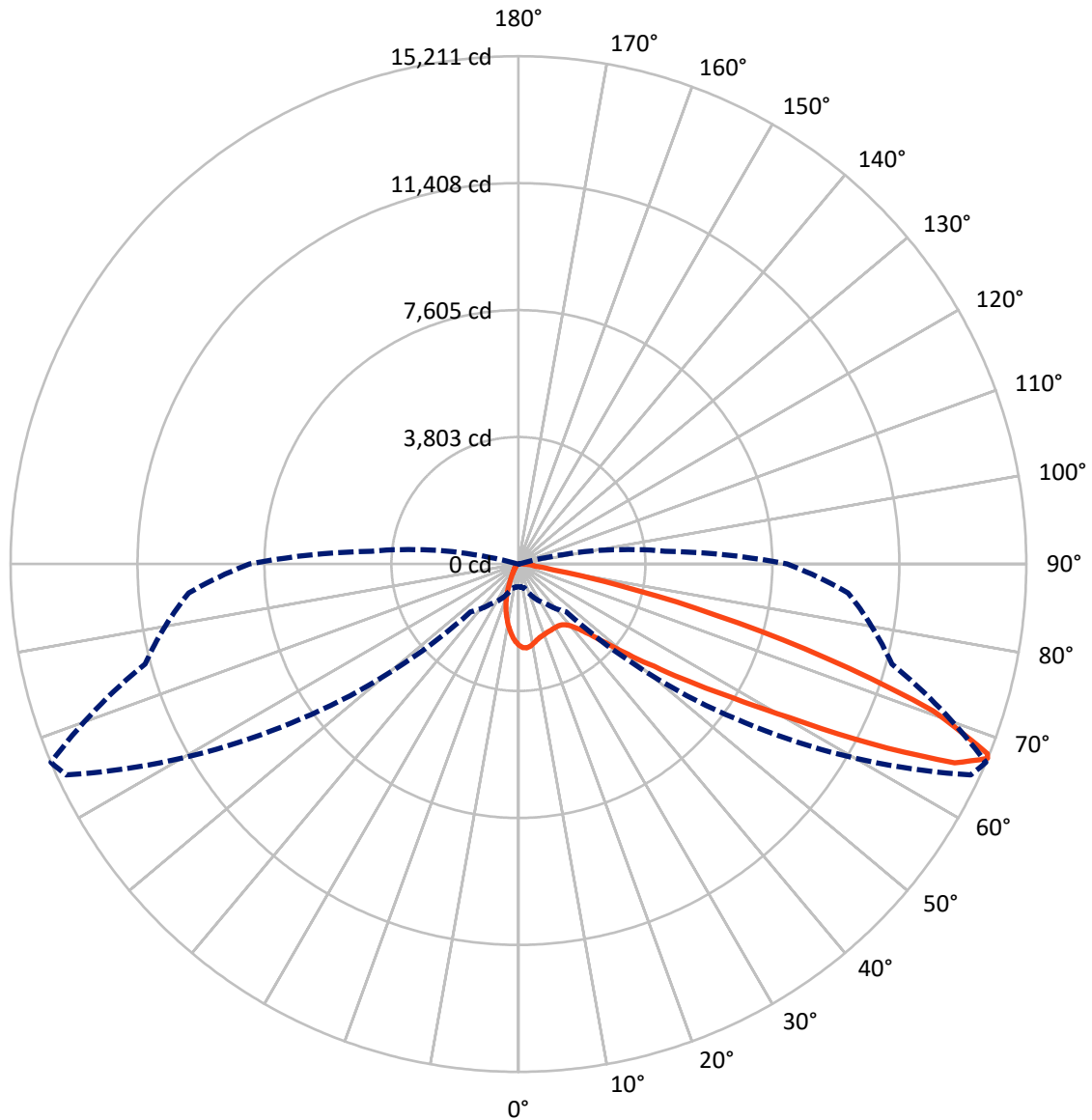


Based on 20 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1146.9	0.0	1146.9
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	9898.9	0.0	9898.9
	% Fixture	89.6	0.0	89.6
Total	Lumens	11045.8	0.0	11045.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.2	1.8
10°-20°	421.9	3.8
20°-30°	613.4	5.6
30°-40°	956.9	8.7
40°-50°	1695.1	15.3
50°-60°	2682.3	24.3
60°-70°	3072.2	27.8
70°-80°	1274.3	11.5
80°-90°	131.6	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	11045.8	100.0
0°-180°	11045.8	100.0

Coefficient of Utilization



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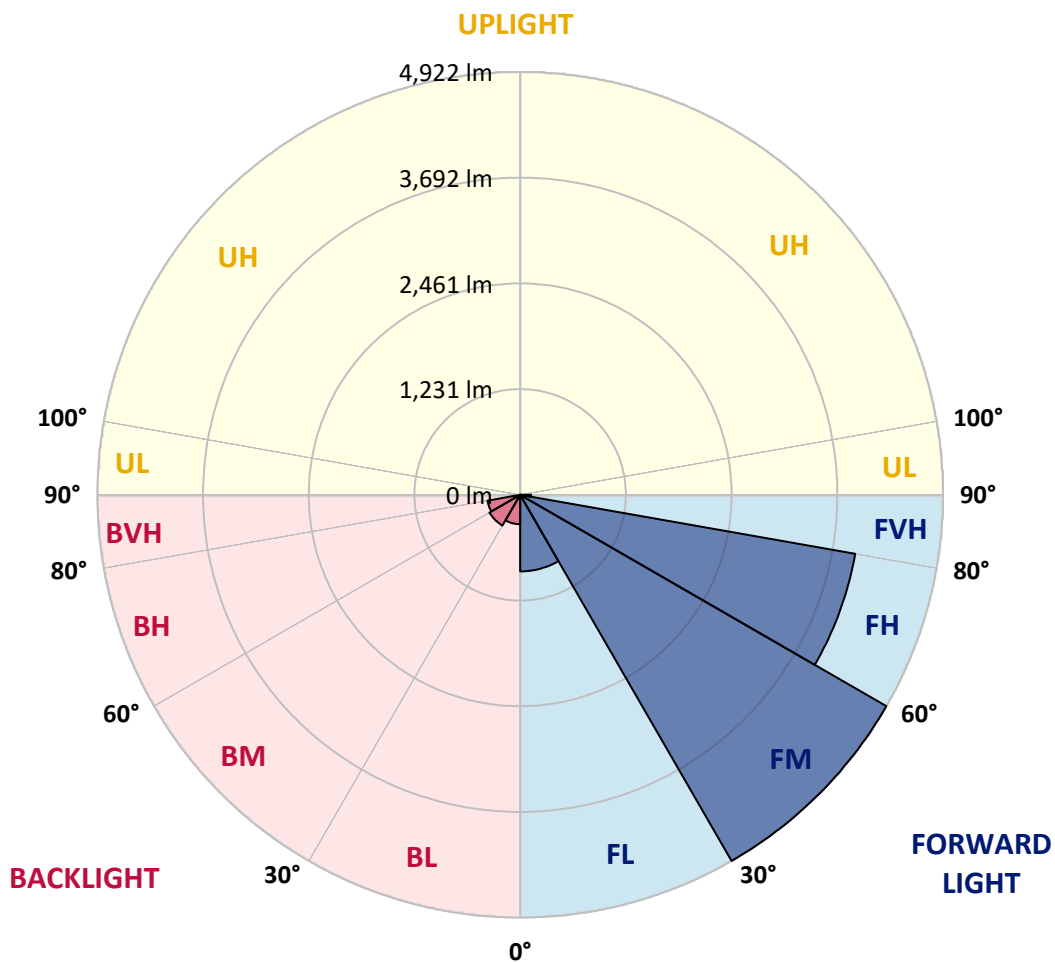
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	891.2	8.1			
FM	(30°-60°)	4922.0	44.6			
FH	(60°-80°)	3959.9	35.9			G2/5000
FVH	(80°-90°)	125.7	1.1			G2/225
BL	(0°-30°)	342.2	3.1	B1/500		
BM	(30°-60°)	412.2	3.7	B1/1000		
BH	(60°-80°)	386.5	3.5	B1/500		G1/500
BVH	(80°-90°)	5.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0
2.5°	2518.5	2523.6	2523.0	2526.8	2535.9	2536.5	2527.5	2510.1	2506.2	2483.7	2444.4
5°	2322.6	2337.4	2346.4	2383.2	2424.4	2474.0	2511.4	2524.9	2523.0	2506.9	2447.6
7.5°	2099.0	2113.9	2124.2	2167.3	2222.1	2307.1	2404.4	2484.3	2491.4	2508.8	2445.0
10°	1950.2	1952.8	1967.0	2008.2	2065.5	2152.5	2268.5	2408.3	2429.6	2493.3	2438.6
12.5°	1827.8	1829.7	1848.4	1892.9	1954.1	2041.7	2163.5	2325.2	2358.0	2474.0	2437.3
15°	1740.8	1747.9	1764.7	1811.1	1876.1	1963.1	2088.1	2264.0	2303.3	2466.9	2448.9
17.5°	1711.8	1719.6	1724.7	1758.2	1817.5	1902.5	2030.8	2224.0	2268.5	2470.8	2471.4
20°	1742.1	1747.9	1736.3	1744.7	1781.4	1857.4	1982.4	2189.9	2242.7	2475.3	2500.4
22.5°	1854.9	1857.4	1825.9	1789.1	1782.7	1824.6	1944.4	2162.8	2219.5	2487.5	2534.6
25°	2048.1	2043.6	1992.1	1912.8	1838.1	1818.8	1921.9	2146.1	2207.9	2500.4	2570.0
27.5°	2281.4	2287.8	2216.9	2101.6	1959.2	1857.4	1918.6	2139.0	2202.8	2509.4	2600.9
30°	2564.9	2573.9	2492.7	2347.7	2143.5	1952.8	1948.3	2137.7	2199.6	2503.6	2603.5
32.5°	2854.1	2865.1	2801.3	2651.8	2389.6	2112.6	2015.3	2151.9	2206.0	2483.7	2588.7
35°	3156.9	3172.4	3129.9	3001.7	2723.3	2343.2	2133.2	2195.0	2236.3	2481.7	2573.9
37.5°	3575.1	3589.3	3509.4	3373.4	3127.3	2652.5	2322.6	2276.2	2307.8	2512.7	2577.7
40°	4199.4	4197.4	3991.3	3783.2	3571.2	3045.5	2588.7	2423.1	2439.2	2606.1	2625.4
42.5°	4879.7	4876.5	4571.8	4255.4	4064.1	3529.3	2938.5	2677.0	2666.0	2778.1	2749.1
45°	5404.2	5403.5	5154.8	4798.6	4657.5	4084.7	3390.8	3030.0	3013.3	3057.7	2977.2
47.5°	5627.7	5631.6	5506.6	5256.0	5315.3	4835.9	3961.0	3541.6	3516.4	3498.4	3376.0
50°	5453.8	5461.5	5471.8	5422.9	5797.8	5845.5	4725.8	4262.5	4250.3	4169.7	3978.4
52.5°	4885.5	4924.8	5046.0	5201.2	5965.3	6814.5	5924.7	5158.1	5092.3	5006.7	4796.0
55°	3928.1	3971.3	4201.3	4578.2	5716.0	7451.0	7605.0	6312.6	6203.1	5947.3	5643.2
57.5°	2599.6	2666.7	3000.4	3479.7	4991.8	7553.5	9281.4	7914.9	7533.5	6833.2	6490.4
60°	1432.2	1496.6	1858.7	2293.0	3605.4	7047.1	10408.9	10001.1	9327.2	7823.4	7519.3
62.5°	882.0	916.8	1184.2	1588.1	2162.2	5562.0	10642.1	12622.6	11842.4	9098.4	8762.1
65°	702.3	717.1	847.9	1298.2	1550.1	3308.3	9889.0	14621.2	14360.9	10642.1	9874.8
67°	681.6	687.4	749.3	1114.6	1461.2	2028.2	8284.7	14946.5	15210.7	11576.3	9909.6
67.5°	686.2	692.6	751.2	1063.7	1458.6	1863.9	7731.9	14818.3	15152.0	11650.4	9755.6
70°	661.7	681.6	860.1	1063.1	1387.1	1548.8	4630.4	12839.1	13186.4	10825.1	8277.6
72.5°	234.5	235.8	371.7	860.1	1508.2	1565.6	2325.2	9412.2	9669.3	8280.9	5967.9
75°	139.2	118.5	123.7	244.8	1441.2	1520.5	1341.4	6014.3	6110.3	4745.1	3022.3
77.5°	96.0	83.8	86.3	108.2	548.9	1499.2	1065.6	3136.3	3033.9	1664.2	643.6
80°	54.8	48.3	51.5	94.7	199.7	1398.7	1005.1	1271.8	1084.3	282.2	177.8
82.5°	29.0	24.5	29.6	78.0	139.2	871.7	1007.0	614.6	487.1	95.4	121.1
85°	10.3	8.4	14.2	53.5	92.8	267.4	933.6	516.7	405.9	46.4	92.1
87.5°	1.9	1.9	5.8	21.9	37.4	81.8	552.1	306.7	205.5	27.7	63.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0	2436.0
2.5°	2428.3	2400.6	2363.2	2317.5	2263.3	2215.7	2180.2	2143.5	2135.8	2122.9	2121.0
5°	2412.2	2364.5	2271.7	2165.4	2052.0	1949.6	1866.5	1792.4	1759.5	1731.2	1727.9
7.5°	2388.3	2316.8	2159.0	1987.6	1810.4	1649.3	1512.8	1416.1	1327.2	1284.7	1278.2
10°	2360.6	2258.2	2032.0	1794.3	1549.5	1322.1	1119.1	949.0	845.9	784.7	777.0
12.5°	2334.8	2200.8	1902.5	1593.9	1268.6	964.5	703.5	541.2	433.0	389.1	384.0
15°	2322.6	2154.5	1781.4	1389.1	974.8	614.0	384.6	297.7	262.2	251.9	251.3
17.5°	2321.3	2115.2	1662.9	1177.1	682.9	356.9	250.6	228.7	221.6	219.1	219.1
20°	2320.7	2077.8	1544.3	957.4	433.6	237.7	208.7	203.6	198.4	195.2	195.2
22.5°	2327.8	2044.3	1420.6	733.2	273.2	192.6	183.6	178.5	172.0	167.5	166.9
25°	2334.8	2018.5	1294.3	521.9	197.8	167.5	158.5	151.4	142.4	136.6	135.9
27.5°	2336.1	1986.3	1159.0	349.2	165.6	146.3	134.7	123.7	113.4	107.6	106.9
30°	2316.8	1932.2	1008.9	235.8	146.3	126.9	111.5	99.9	90.2	85.7	85.7
32.5°	2278.8	1865.2	844.0	177.8	130.1	108.9	92.1	81.2	74.7	72.8	72.2
35°	2244.7	1793.0	674.6	150.8	116.6	92.1	75.4	68.3	64.4	63.8	63.1
37.5°	2224.7	1735.0	515.4	136.6	103.7	77.3	63.8	58.6	56.7	55.4	56.1
40°	2240.1	1686.7	380.8	125.0	90.8	64.4	54.1	51.5	49.6	49.0	49.0
42.5°	2307.8	1678.3	282.8	114.7	78.6	53.5	47.0	45.1	43.8	43.2	43.8
45°	2485.6	1729.9	219.7	105.0	66.4	45.1	39.9	39.3	38.7	38.7	38.7
47.5°	2753.0	1836.2	183.0	94.1	55.4	38.7	34.8	34.1	33.5	34.1	34.1
50°	3205.9	2030.8	163.6	83.1	45.7	32.9	29.6	29.6	29.6	29.6	30.3
52.5°	3894.6	2413.5	150.8	72.2	37.4	27.7	25.1	25.1	25.8	25.8	26.4
55°	4662.0	2921.1	139.2	61.2	31.6	23.2	20.6	21.3	21.9	22.5	22.5
57.5°	5494.4	3483.6	129.5	50.3	27.1	18.7	17.4	18.0	18.7	20.0	20.0
60°	6498.8	4092.4	115.3	39.3	22.5	14.8	13.5	14.8	16.8	18.0	18.7
62.5°	7601.8	4681.3	97.3	30.9	18.7	11.6	11.0	13.5	16.1	17.4	18.0
65°	8355.6	4866.2	74.7	25.1	14.2	8.4	9.0	12.2	15.5	17.4	17.4
67°	8050.2	4412.0	61.2	21.3	11.6	6.4	8.4	12.2	15.5	16.8	17.4
67.5°	7838.2	4234.2	58.6	20.6	11.0	6.4	8.4	12.2	15.5	17.4	17.4
70°	6377.7	3180.8	49.0	15.5	9.0	5.8	7.1	11.6	14.8	16.8	16.8
72.5°	4431.3	1961.2	43.8	11.0	7.7	5.2	6.4	11.0	14.2	16.1	16.8
75°	2106.8	710.0	37.4	8.4	7.1	4.5	5.8	11.0	14.2	16.1	16.1
77.5°	429.7	164.9	30.3	7.1	5.8	4.5	5.2	10.3	13.5	15.5	15.5
80°	141.1	63.8	22.5	6.4	5.8	4.5	5.2	9.7	13.5	14.8	15.5
82.5°	101.8	32.2	14.8	6.4	5.8	4.5	4.5	9.7	12.9	14.8	14.8
85°	78.0	22.5	9.7	6.4	5.8	4.5	4.5	9.0	12.2	14.2	14.2
87.5°	51.5	9.0	7.7	6.4	5.8	4.5	4.5	9.0	11.6	13.5	14.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)