

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: P651400

Luminaire Tested: **GALN-SA5D-840-U-SL3-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651400  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5D-840-U-SL3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26951.5 lumens  
Efficiency: N/A  
Efficacy: 87.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4

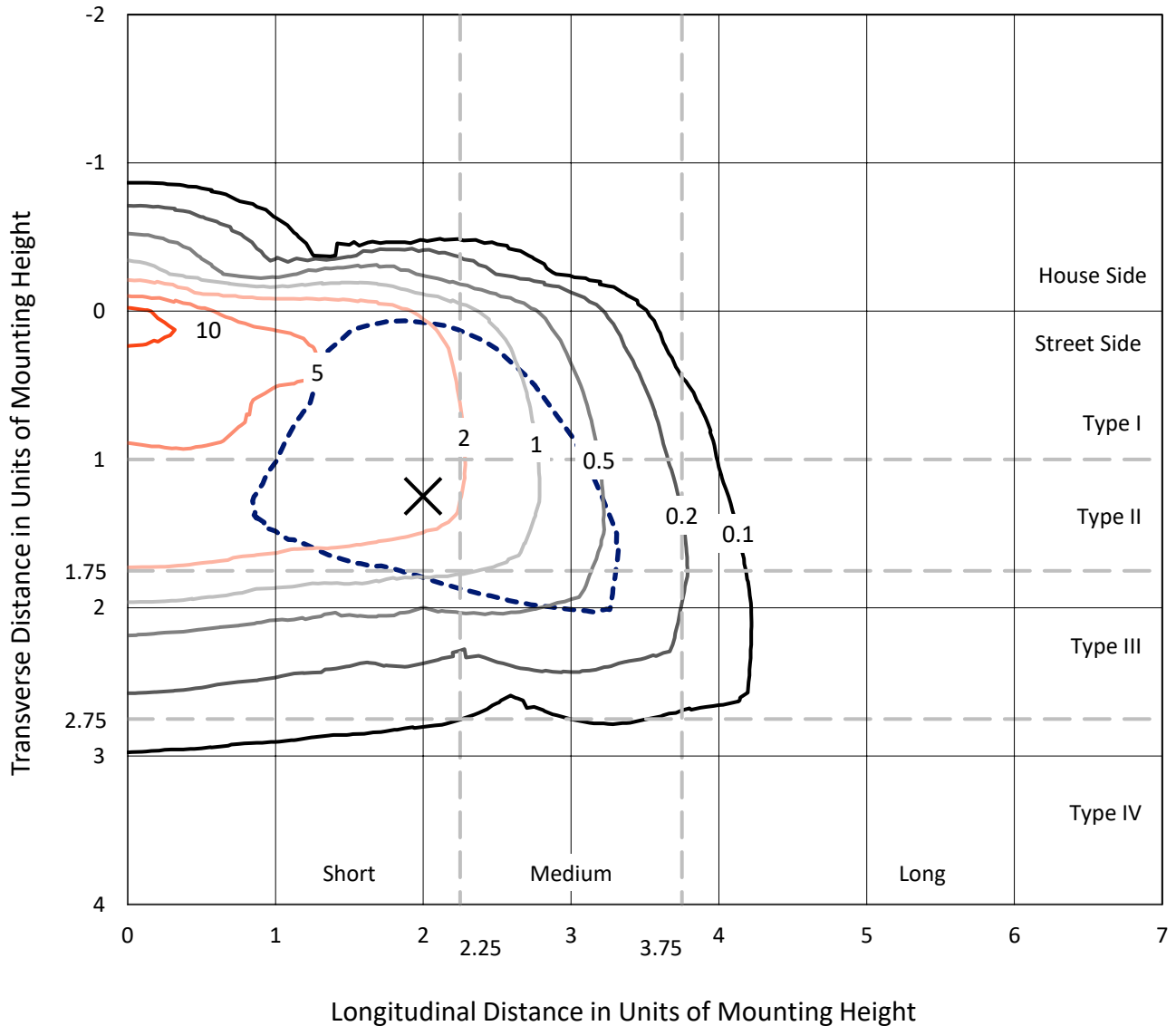
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

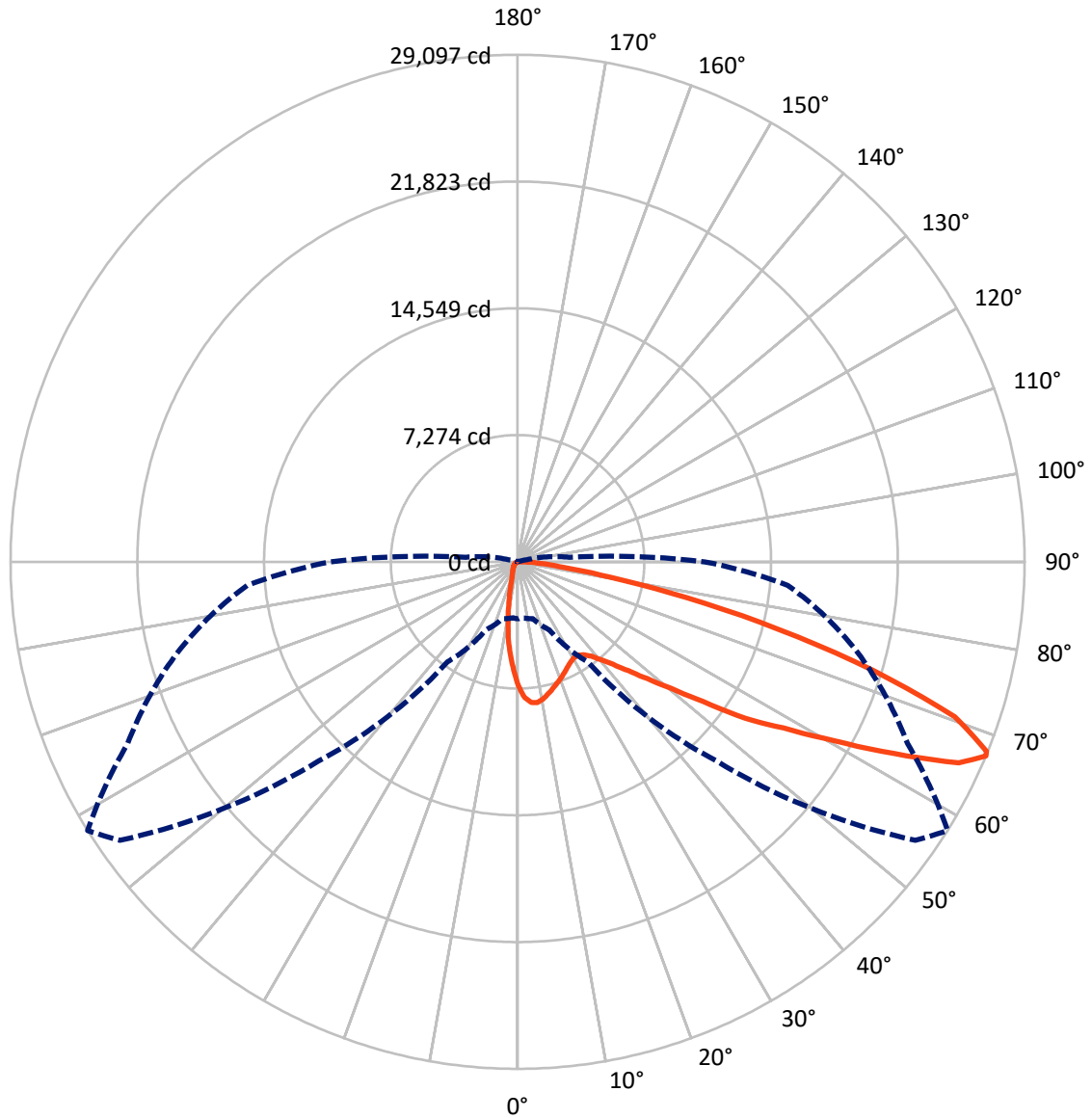
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.7 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1945.0	0.0	1945.0
	% Fixture	7.2	0.0	7.2
<b>Street Side</b>	Lumens	25006.6	0.0	25006.6
	% Fixture	92.8	0.0	92.8
<b>Total</b>	Lumens	26951.5	0.0	26951.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	579.8	2.2
10°-20°	1252.2	4.6
20°-30°	1696.8	6.3
30°-40°	2353.3	8.7
40°-50°	3753.3	13.9
50°-60°	6487.8	24.1
60°-70°	7411.1	27.5
70°-80°	3089.8	11.5
80°-90°	327.6	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°	26951.5	100.0
0°-180°	26951.5	100.0

**Coefficient of Utilization**

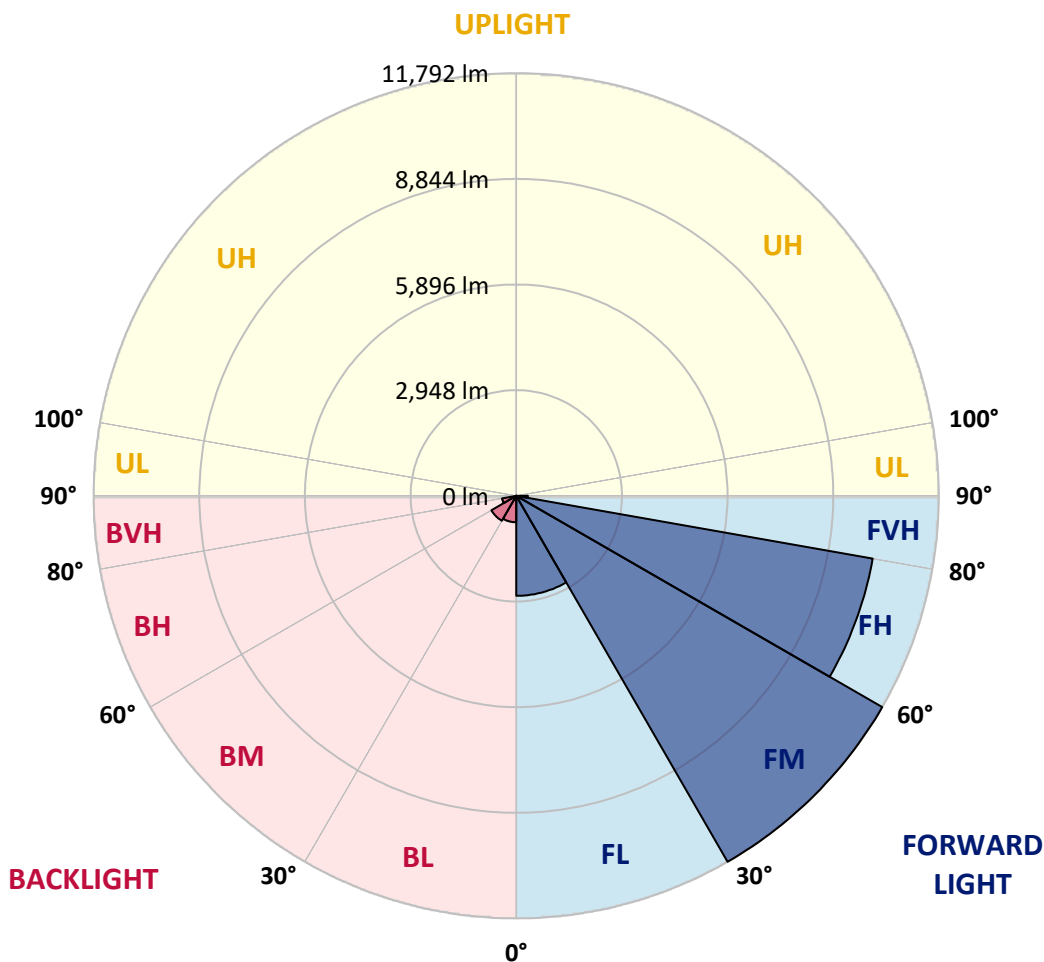


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2790.1	10.4			
FM (30°-60°)	11792.4	43.8			
FH (60°-80°)	10098.8	37.5			G4/12000
FVH (80°-90°)	325.2	1.2			G3/500
BL (0°-30°)	738.6	2.7	B2/1000		
BM (30°-60°)	802.0	3.0	B1/1000		
BH (60°-80°)	402.1	1.5	B1/500		G1/500
BVH (80°-90°)	2.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6
2.5°	8291.8	8304.5	8257.6	8219.8	8122.5	8018.1	7879.4	7805.6	7679.5	7461.6	7220.2
5°	8486.4	8502.6	8495.4	8486.4	8448.5	8347.7	8171.2	8106.3	7920.9	7566.1	7130.2
7.5°	8054.1	8113.5	8120.8	8191.0	8257.6	8266.6	8200.0	8151.4	7980.2	7564.2	6969.9
10°	7481.4	7521.0	7578.7	7659.7	7820.0	7953.3	8018.1	8010.9	7911.8	7508.4	6782.6
12.5°	6903.3	6924.9	7013.1	7151.8	7348.2	7575.1	7748.0	7782.2	7784.0	7441.8	6625.9
15°	6406.1	6397.2	6465.6	6625.9	6901.5	7186.0	7495.8	7549.8	7636.3	7376.9	6480.0
17.5°	5981.2	6028.0	6038.8	6215.2	6469.2	6838.4	7232.9	7328.3	7501.2	7321.1	6359.4
20°	5718.2	5743.4	5766.8	5865.9	6094.6	6483.6	6986.1	7117.6	7375.1	7270.7	6224.3
22.5°	5640.8	5657.0	5637.1	5667.8	5829.9	6175.6	6717.7	6892.5	7254.5	7223.9	6114.4
25°	5700.2	5716.4	5669.6	5633.5	5689.4	5925.3	6458.5	6670.9	7157.2	7214.9	6031.6
27.5°	5844.3	5874.9	5810.0	5745.2	5712.8	5790.3	6254.9	6501.6	7090.6	7258.1	5993.7
30°	6069.4	6087.4	6038.8	5959.6	5885.7	5808.3	6148.6	6384.5	7072.6	7358.9	5990.2
32.5°	6314.3	6352.2	6325.2	6272.9	6177.5	5993.7	6179.2	6388.2	7115.8	7504.8	6035.2
35°	6616.9	6660.1	6685.4	6674.5	6552.1	6323.3	6373.8	6550.3	7231.1	7773.2	6157.6
37.5°	6914.1	6951.9	7094.2	7142.8	7034.7	6818.7	6752.0	6869.0	7485.0	8124.3	6379.2
40°	7254.5	7304.9	7504.8	7690.3	7638.0	7411.1	7288.7	7385.9	7874.0	8653.8	6798.8
42.5°	7580.4	7670.5	7974.9	8302.7	8351.3	8097.3	8016.3	8048.7	8450.4	9415.7	7384.1
45°	8043.3	8127.9	8520.6	8965.4	9194.1	8996.0	8913.2	8907.8	9241.0	10487.3	8333.3
47.5°	8711.5	8787.1	9250.0	9689.4	10096.5	10123.5	9966.8	10020.9	10235.1	11740.8	9496.7
50°	9531.0	9709.3	10013.6	10471.0	11015.0	11454.4	11503.0	11431.0	11614.7	13192.4	10894.3
52.5°	10721.4	10789.9	11069.0	11445.4	12083.0	12828.6	13406.7	13307.6	13250.0	14575.5	12306.3
55°	11609.3	11701.2	12135.2	12652.1	13586.8	14570.2	15823.7	15857.9	15130.3	15904.7	13687.7
57.5°	11341.0	11481.4	12138.8	13178.0	15232.9	17030.3	17963.3	17986.6	16870.0	17196.0	15247.3
60°	9963.2	10029.9	10971.8	12358.5	15373.4	19695.8	20998.0	20808.9	18640.4	18640.4	16625.1
62.5°	7065.3	7169.8	7933.4	9974.0	13884.0	20621.6	24632.4	24241.6	21079.0	20021.9	17446.4
65°	4515.2	4414.2	4920.4	6296.3	10343.2	19254.6	27796.7	27820.2	23373.5	20574.7	16998.0
67°	3270.6	3231.0	3376.9	4304.4	7013.1	16185.6	27863.4	29097.1	24691.8	20225.3	15564.3
67.5°	2991.4	3022.1	3128.4	3883.0	6372.0	14728.7	27560.8	29021.5	24989.0	20014.6	15045.7
70°	2267.5	2215.3	2330.5	2746.5	3819.9	9291.4	23708.5	26617.1	24619.8	17923.6	12021.8
72.5°	1667.7	1662.3	1822.6	2245.9	2941.1	4949.2	17797.6	21342.0	20113.7	13648.1	7569.7
75°	1125.6	1176.1	1431.8	1876.7	2665.5	3209.4	12133.4	15483.3	13963.2	7749.7	3094.1
77.5°	641.2	644.8	922.2	1507.4	2393.6	2582.6	7189.6	9864.1	7391.4	2577.2	918.5
80°	277.4	304.4	457.4	1095.0	1984.7	2287.3	4122.5	5421.0	2989.7	545.7	297.1
82.5°	102.7	120.7	201.7	673.6	1448.0	1883.8	2490.8	2588.0	1014.0	192.7	185.5
85°	0.0	3.6	73.8	315.2	754.6	841.1	1664.2	1534.5	448.4	91.8	120.7
87.5°	0.0	0.0	0.0	32.4	99.1	313.4	516.9	576.3	108.1	32.4	28.8
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°	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6	7144.6
2.5°	7090.6	6973.5	6680.0	6386.4	6168.5	5986.6	5712.8	5563.3	5484.1	5367.0	5374.2
5°	6912.3	6674.5	6157.6	5622.8	5190.5	4769.1	4264.8	4061.3	3890.2	3792.9	3728.1
7.5°	6647.5	6296.3	5530.9	4817.7	4153.1	3416.5	2863.6	2494.4	2245.9	2154.0	2065.7
10°	6357.5	5891.1	4895.1	3906.4	2984.3	2224.3	1756.0	1417.4	1296.7	1185.1	1195.9
12.5°	6089.2	5521.9	4311.6	3083.4	2091.0	1413.8	1102.2	963.5	923.9	911.3	911.3
15°	5869.5	5168.9	3684.8	2317.9	1433.6	1015.8	882.5	844.7	830.2	826.7	826.7
17.5°	5635.4	4833.9	3119.4	1712.8	1042.8	850.1	805.1	779.9	774.4	770.9	770.9
20°	5426.5	4497.1	2582.6	1275.1	842.9	765.4	736.6	720.4	715.0	711.4	713.2
22.5°	5228.3	4198.2	2078.4	963.5	742.0	697.0	668.2	651.9	641.2	632.2	633.9
25°	5051.8	3910.0	1671.3	788.9	668.2	628.6	599.7	576.3	552.9	542.1	540.3
27.5°	4927.6	3657.8	1302.1	675.4	601.6	558.3	522.3	493.5	462.9	446.7	443.0
30°	4824.9	3402.1	1030.1	596.1	534.9	493.5	448.4	407.0	374.6	358.4	351.2
32.5°	4758.3	3159.0	812.2	531.3	479.0	428.7	378.2	336.8	300.7	284.6	281.0
35°	4747.4	2955.4	664.6	477.3	428.7	374.6	322.4	277.4	246.7	230.5	226.9
37.5°	4824.9	2798.8	556.5	434.0	387.2	327.8	270.1	228.8	201.7	189.1	187.3
40°	5032.0	2699.7	482.6	398.0	349.4	284.6	230.5	194.5	167.5	154.9	154.9
42.5°	5426.5	2703.3	434.0	363.8	311.6	243.1	196.3	162.1	138.7	127.8	124.3
45°	6042.4	2825.8	392.6	329.6	275.6	210.8	167.5	133.3	109.8	100.8	100.8
47.5°	6867.3	3068.9	356.6	295.4	243.1	180.1	142.3	108.1	88.2	79.2	79.2
50°	7946.0	3459.7	326.0	266.5	216.1	154.9	115.3	88.2	68.5	61.2	59.5
52.5°	9073.5	3942.4	290.0	241.4	185.5	131.4	93.7	68.5	52.2	46.8	45.0
55°	10318.0	4414.2	255.7	216.1	151.3	109.8	73.8	54.0	37.8	32.4	32.4
57.5°	11573.3	4877.1	214.3	180.1	118.8	81.1	57.6	39.6	25.2	19.8	19.8
60°	12635.9	5026.7	181.9	145.9	90.1	57.6	41.5	25.2	14.4	9.0	9.0
62.5°	12781.8	4522.3	153.1	111.7	64.8	39.6	21.6	14.4	5.4	3.6	3.6
65°	11989.3	3674.1	127.8	84.7	43.2	19.8	9.0	5.4	1.8	0.0	0.0
67°	10743.0	2978.9	104.5	63.1	30.6	12.6	5.4	1.8	0.0	0.0	0.0
67.5°	10424.3	2840.2	100.8	59.5	27.0	10.8	3.6	1.8	0.0	0.0	0.0
70°	8180.2	2127.0	72.1	36.0	16.2	7.2	0.0	0.0	0.0	0.0	0.0
72.5°	5084.3	1203.1	52.2	21.6	10.8	3.6	0.0	0.0	0.0	0.0	0.0
75°	1921.7	421.4	36.0	14.4	7.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	598.0	160.3	21.6	10.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	201.7	61.2	14.4	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	124.3	25.2	9.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	77.5	10.8	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.4	3.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)