

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: P651855

Luminaire Tested: **GALN-SA4A-840-U-T2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651855  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-840-U-T2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11373.7 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

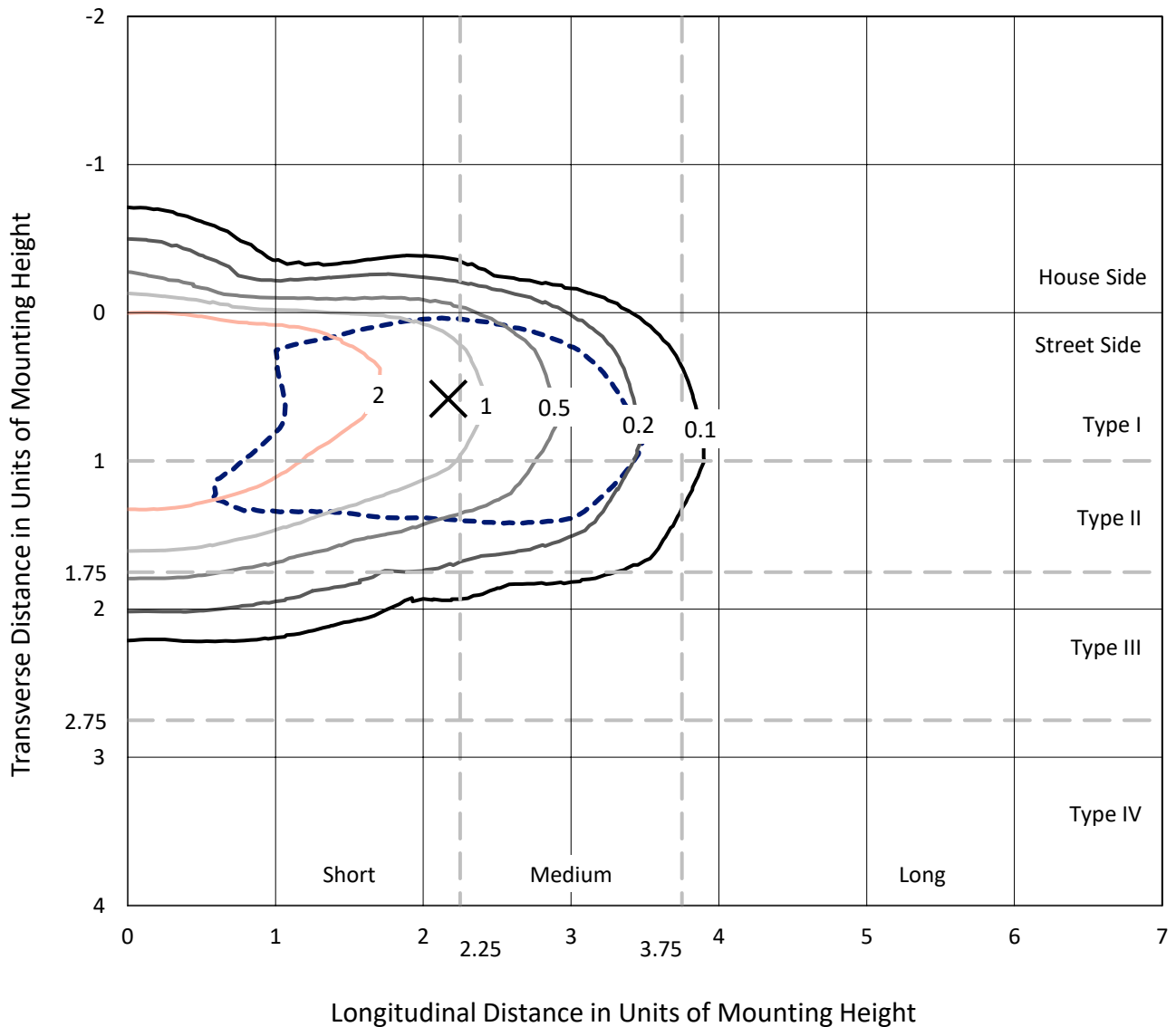
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

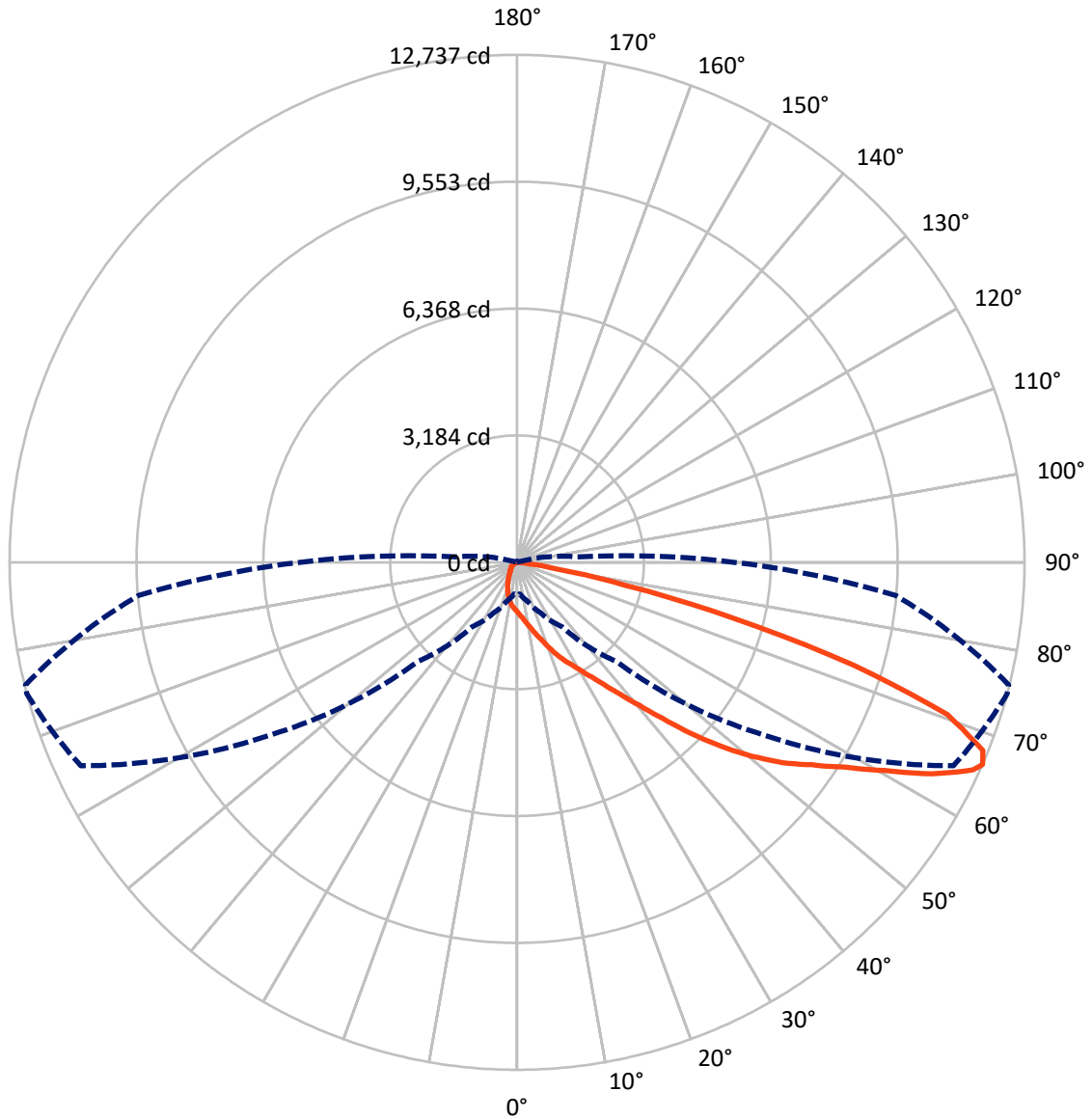
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	702.2	0.0	702.2
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	10671.5	0.0	10671.5
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	11373.7	0.0	11373.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.0	1.1
10°-20°	353.1	3.1
20°-30°	609.7	5.4
30°-40°	1099.7	9.7
40°-50°	1986.7	17.5
50°-60°	3097.3	27.2
60°-70°	2942.3	25.9
70°-80°	1102.7	9.7
80°-90°	62.2	0.5
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°	11373.7	100.0
0°-180°	11373.7	100.0

**Coefficient of Utilization**

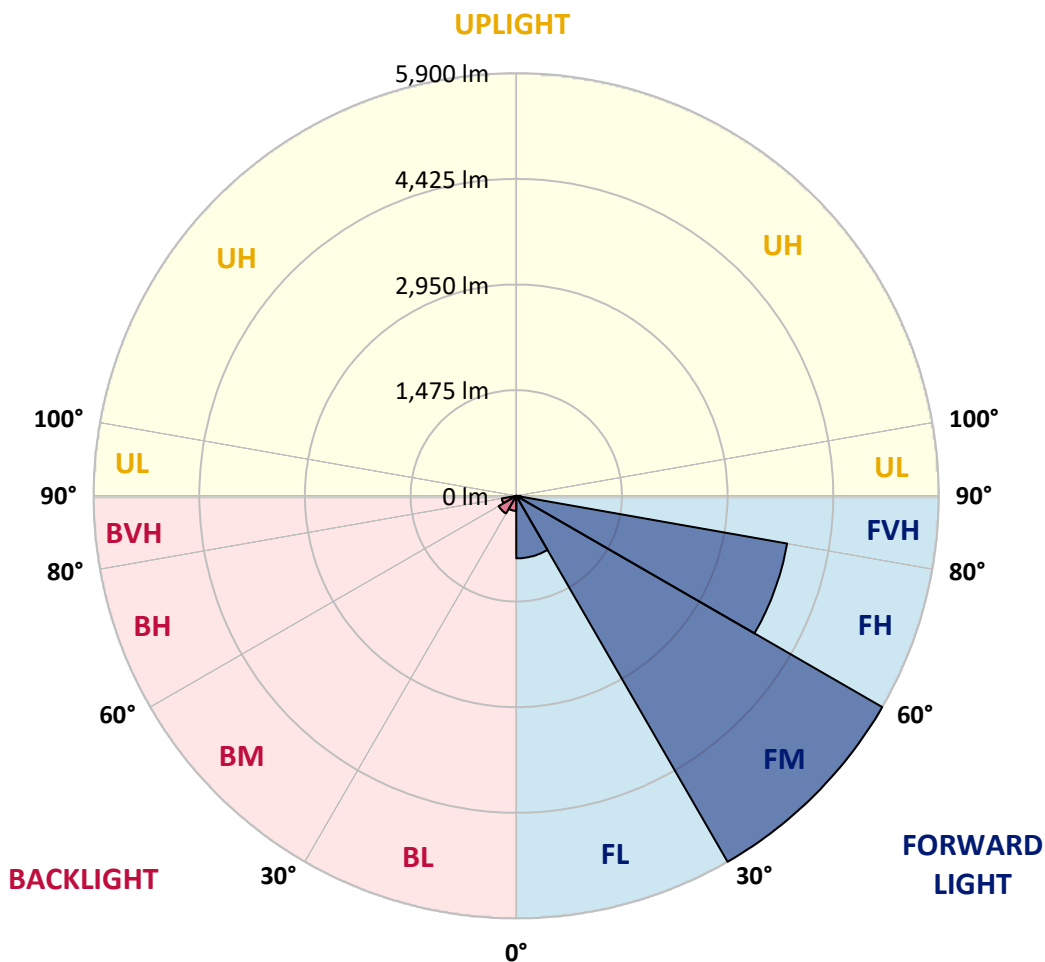


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	873.0	7.7			
FM (30°-60°)	5899.5	51.9			
FH (60°-80°)	3840.0	33.8			G2/5000
FVH (80°-90°)	59.0	0.5			G1/100
BL (0°-30°)	209.7	1.8	B1/500		
BM (30°-60°)	284.2	2.5	B1/1000		
BH (60°-80°)	205.0	1.8	B1/500		G1/500
BVH (80°-90°)	3.2	0.0			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°	75°	76°	85°
0°	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8
2.5°	1486.0	1467.5	1473.4	1465.0	1445.7	1417.1	1391.9	1355.7	1319.5	1313.6	1273.3
5°	1682.0	1677.0	1670.2	1645.8	1632.4	1588.6	1536.5	1474.3	1399.4	1386.0	1312.8
7.5°	1815.7	1813.2	1816.6	1803.9	1792.2	1752.6	1697.1	1612.2	1496.1	1488.6	1366.6
10°	1859.5	1866.2	1878.8	1899.0	1917.5	1904.9	1862.8	1756.8	1621.4	1599.6	1428.0
12.5°	1834.2	1841.8	1872.1	1925.9	1985.6	2020.1	2003.3	1925.9	1754.3	1736.7	1497.0
15°	1769.5	1778.7	1821.6	1904.9	2011.7	2109.2	2151.3	2095.8	1909.1	1880.5	1580.2
17.5°	1673.6	1687.0	1748.4	1858.6	2004.9	2173.1	2291.7	2273.2	2073.9	2047.0	1671.1
20°	1601.3	1611.4	1663.5	1789.6	1976.4	2208.5	2425.4	2477.6	2277.4	2231.2	1777.9
22.5°	1649.2	1652.6	1670.2	1745.9	1925.0	2217.7	2543.2	2690.4	2493.6	2452.4	1888.9
25°	1883.8	1850.2	1832.5	1815.7	1914.1	2209.3	2650.0	2912.4	2708.9	2665.1	1999.1
27.5°	2253.9	2238.7	2149.6	2030.2	2007.5	2220.2	2720.6	3122.6	2911.5	2864.4	2106.7
30°	2656.7	2630.6	2576.0	2401.1	2225.3	2297.6	2771.9	3327.0	3151.2	3089.0	2205.1
32.5°	3026.8	3043.6	2962.0	2782.0	2578.5	2462.4	2838.4	3549.9	3426.2	3348.9	2319.5
35°	3458.2	3491.8	3366.5	3194.1	2956.1	2760.2	2967.9	3801.2	3775.2	3677.6	2496.1
37.5°	3896.3	3916.5	3839.9	3597.8	3383.3	3138.6	3211.8	4111.6	4204.9	4121.7	2707.2
40°	4264.6	4292.4	4236.0	4020.7	3792.0	3576.8	3565.8	4449.6	4716.2	4630.5	3021.7
42.5°	4546.4	4567.4	4569.1	4416.8	4210.8	4113.2	4017.4	4881.1	5357.1	5257.8	3386.7
45°	4902.1	4932.4	4914.7	4811.3	4657.4	4639.7	4590.1	5402.5	6124.1	5998.8	3860.1
47.5°	5452.1	5472.3	5428.6	5306.6	5150.2	5178.0	5148.5	5987.0	6906.2	6798.6	4350.4
50°	5833.9	5867.6	5929.8	5978.6	5865.0	5762.4	5675.0	6532.8	7648.8	7552.1	4851.6
52.5°	5829.7	5885.2	6082.0	6327.6	6575.7	6544.6	6293.1	7135.8	8357.8	8238.4	5322.6
55°	5437.0	5544.6	5833.9	6269.6	6956.7	7299.0	7184.6	7833.8	8970.0	8889.3	5868.4
57.5°	4626.3	4691.9	5093.9	5702.7	6743.9	7653.9	8217.3	8780.0	9704.2	9666.4	6716.1
60°	3111.7	3141.1	3658.4	4411.0	5741.4	7299.8	8974.2	9924.6	10608.3	10589.8	7706.0
62.5°	1782.9	1795.5	2170.6	2805.6	4085.5	6186.3	9038.1	11336.5	11692.3	11702.3	8851.4
65°	959.6	966.3	1269.1	1646.7	2486.0	4409.3	8127.3	12110.2	12568.6	12587.9	9561.2
66°	828.4	796.4	1010.0	1403.6	1978.0	3509.5	7551.3	12082.5	12736.8	12715.8	9536.0
67.5°	629.9	658.5	806.5	1079.0	1465.9	2495.2	6234.2	11545.1	12608.9	12543.3	9148.3
70°	450.8	462.6	574.4	769.5	998.3	1369.1	3983.7	9589.0	11460.1	11371.8	7970.1
72.5°	291.0	303.6	407.0	556.7	721.6	747.6	2230.3	6928.1	8835.5	8822.8	6002.1
75°	207.7	219.5	269.1	398.6	542.4	462.6	1074.0	4669.1	5617.0	5579.1	3712.9
77.5°	150.5	156.4	180.0	260.7	387.7	331.4	497.9	2493.6	2796.3	2928.4	1640.8
80°	86.6	91.7	125.3	158.9	262.4	226.2	238.0	1000.8	1031.9	982.3	513.0
82.5°	42.9	48.8	74.8	108.5	164.0	152.2	109.3	301.1	317.9	309.5	129.5
85°	10.1	12.6	42.0	71.5	79.9	68.1	53.0	88.3	109.3	106.8	49.6
87.5°	0.8	1.7	15.1	12.6	13.5	22.7	18.5	22.7	35.3	32.8	17.7
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°	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8	1243.8
2.5°	1254.8	1238.8	1192.5	1147.1	1109.3	1069.8	1033.6	1012.6	1004.2	994.9	999.1
5°	1272.4	1233.7	1140.4	1059.7	980.6	913.3	859.5	825.0	808.2	805.7	801.5
7.5°	1296.0	1229.5	1084.9	958.7	855.3	780.4	719.1	669.4	654.3	640.8	629.9
10°	1324.6	1222.0	1015.9	852.8	742.6	648.4	567.7	508.8	478.5	470.1	476.0
12.5°	1354.9	1207.7	943.6	755.2	628.2	508.0	433.1	403.7	395.3	391.9	392.7
15°	1385.1	1190.0	867.9	661.0	500.4	405.4	370.9	363.3	359.9	358.3	356.6
17.5°	1412.9	1161.4	783.0	569.4	405.4	346.5	333.9	327.1	320.4	317.9	313.7
20°	1445.7	1128.6	706.4	466.8	343.1	313.7	298.6	285.9	275.8	269.1	268.3
22.5°	1476.8	1086.6	626.5	386.9	312.9	281.7	257.3	243.9	232.1	223.7	226.2
25°	1493.6	1035.3	555.1	337.2	285.1	249.8	222.9	206.0	193.4	189.2	188.4
27.5°	1493.6	972.2	485.3	308.6	259.9	221.2	193.4	177.5	169.0	163.2	164.0
30°	1481.8	902.4	420.5	286.8	238.0	196.0	169.9	155.6	148.9	144.7	143.8
32.5°	1472.6	836.0	365.0	265.8	215.3	174.1	151.4	140.4	133.7	129.5	129.5
35°	1486.9	778.8	322.1	244.7	194.3	157.3	137.1	127.0	120.3	116.9	116.1
37.5°	1524.7	726.6	289.3	222.0	174.9	143.0	127.0	115.2	108.5	104.3	102.6
40°	1618.1	697.2	264.9	201.0	156.4	131.2	115.2	104.3	95.9	91.7	90.8
42.5°	1767.8	698.0	241.4	181.7	142.1	121.1	105.1	92.5	83.3	79.1	78.2
45°	1993.2	730.0	222.9	163.2	129.5	110.2	94.2	80.7	72.3	68.1	68.1
47.5°	2263.1	792.2	206.9	147.2	117.7	100.1	83.3	69.8	61.4	58.0	58.0
50°	2555.8	873.0	190.9	130.4	107.6	89.1	71.5	60.6	53.8	51.3	51.3
52.5°	2854.4	970.5	174.9	116.9	96.7	77.4	61.4	53.8	47.9	46.3	45.4
55°	3246.3	1095.0	158.1	102.6	84.9	66.4	54.7	47.1	40.4	37.8	37.0
57.5°	3849.2	1282.5	139.6	90.0	69.8	55.5	47.1	39.5	32.0	27.8	26.9
60°	4576.6	1511.3	120.3	79.1	56.3	45.4	37.8	30.3	23.5	18.5	17.7
62.5°	5257.8	1656.8	101.8	66.4	44.6	34.5	26.9	22.7	16.8	11.8	10.9
65°	5558.9	1608.0	84.1	53.8	35.3	24.4	17.7	16.0	10.1	5.0	4.2
66°	5458.8	1535.7	77.4	48.8	32.0	21.0	15.1	13.5	7.6	2.5	2.5
67.5°	5163.7	1364.9	67.3	42.0	27.8	16.8	11.8	10.1	4.2	0.8	0.0
70°	4424.4	1104.2	53.0	31.1	20.2	11.8	6.7	5.0	2.5	0.0	0.0
72.5°	3398.5	822.5	42.0	23.5	14.3	6.7	3.4	1.7	2.5	0.0	0.0
75°	2082.3	470.1	32.8	17.7	9.3	4.2	2.5	0.0	2.5	0.8	0.0
77.5°	924.3	211.1	21.9	11.8	6.7	3.4	1.7	0.0	1.7	0.8	0.0
80°	233.8	69.0	12.6	8.4	5.0	2.5	0.8	0.0	1.7	1.7	0.8
82.5°	63.9	25.2	9.3	6.7	4.2	2.5	0.8	0.0	1.7	1.7	1.7
85°	25.2	11.8	8.4	6.7	5.0	2.5	0.8	0.0	1.7	1.7	1.7
87.5°	11.8	8.4	8.4	7.6	5.9	2.5	0.8	0.0	1.7	0.8	1.7
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)