

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: P452980

Luminaire Tested: **GALN-SA4A-727-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452980  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4A-727-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12382 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

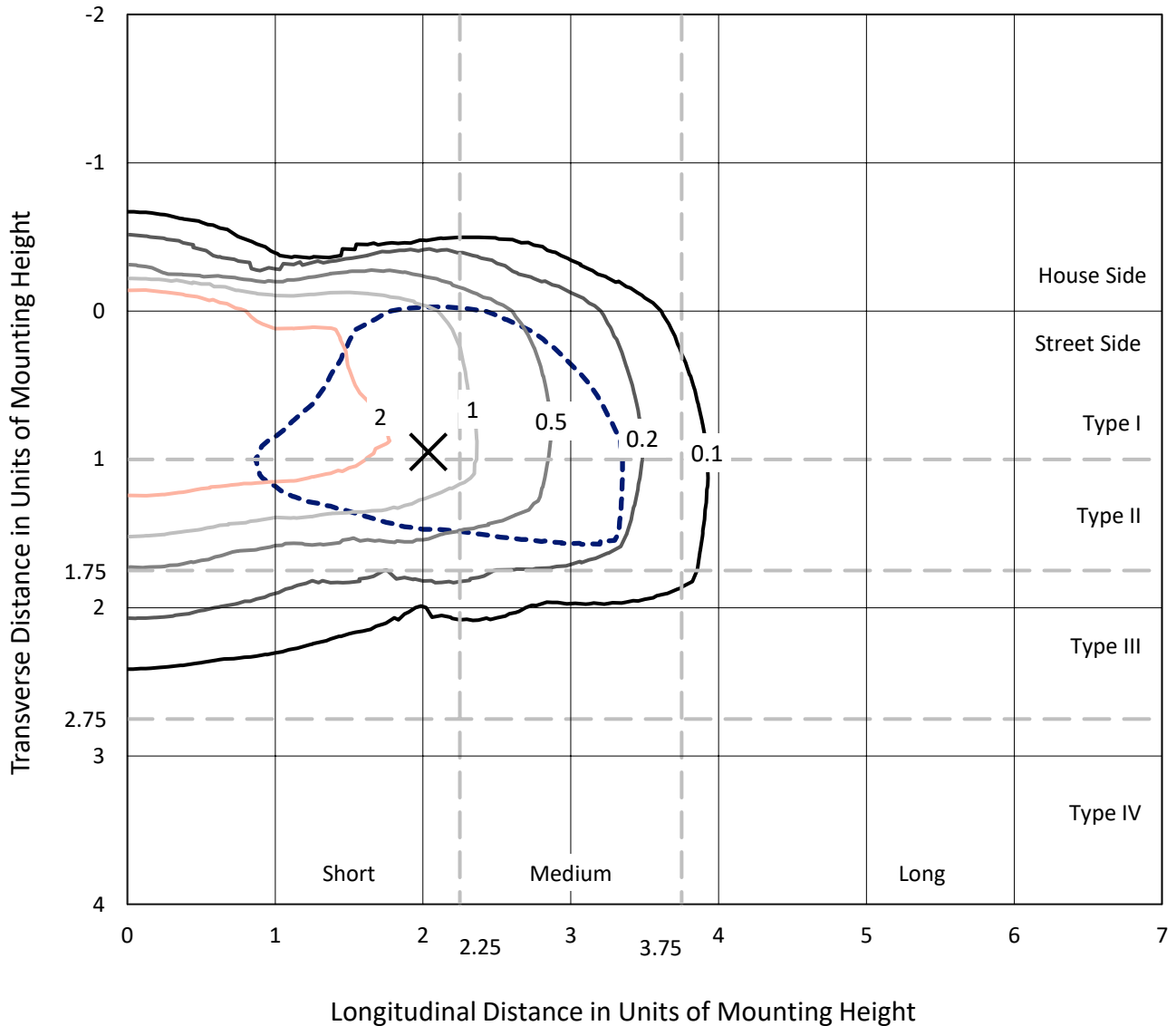
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

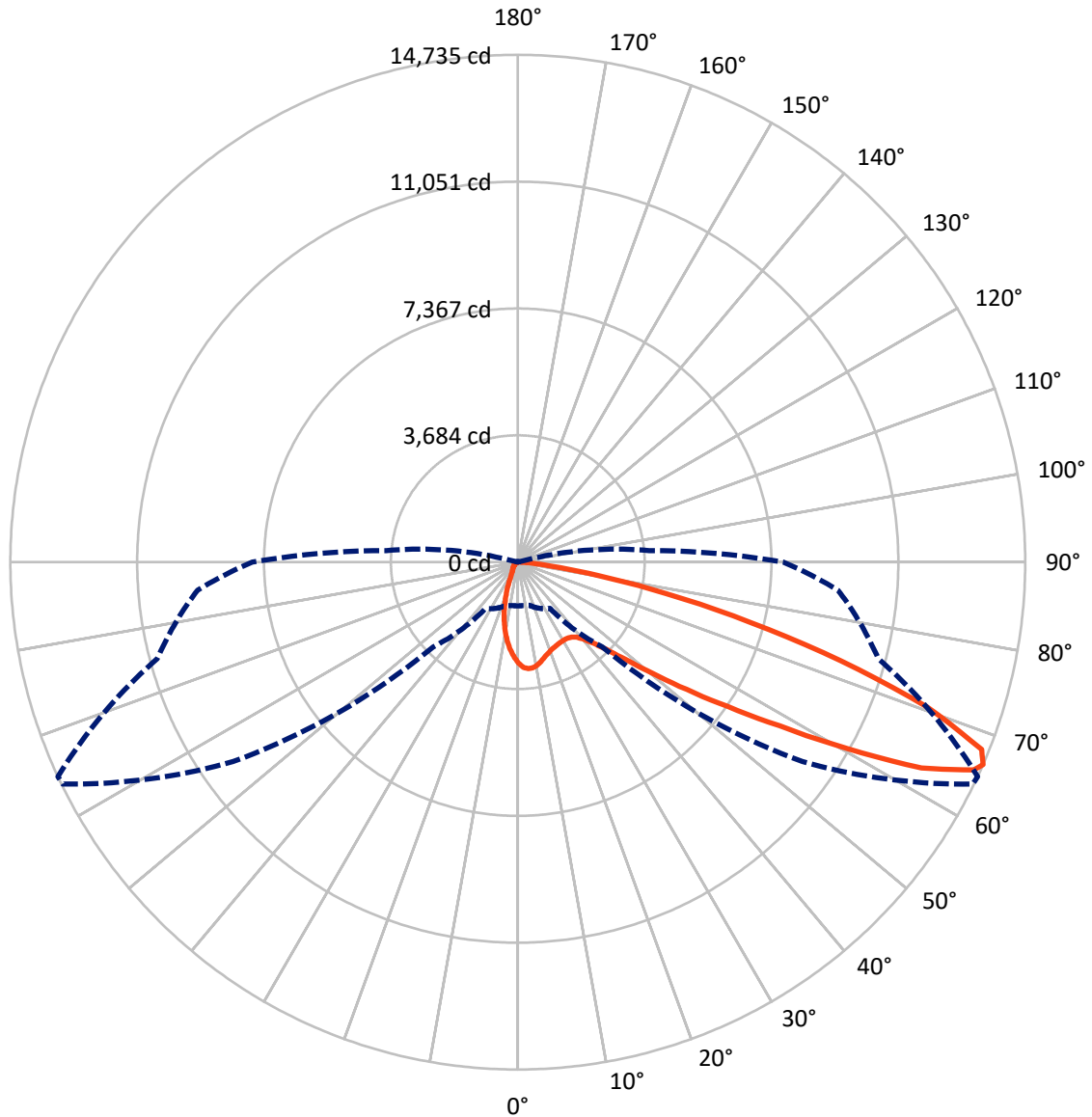
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1280.5	0.0	1280.5
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	11101.5	0.0	11101.5
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	12382.0	0.0	12382.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	240.1	1.9
10°-20°	523.2	4.2
20°-30°	749.5	6.1
30°-40°	1094.7	8.8
40°-50°	1835.7	14.8
50°-60°	3063.5	24.7
60°-70°	3251.8	26.3
70°-80°	1472.7	11.9
80°-90°	150.7	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°	12382.0	100.0
0°-180°	12382.0	100.0

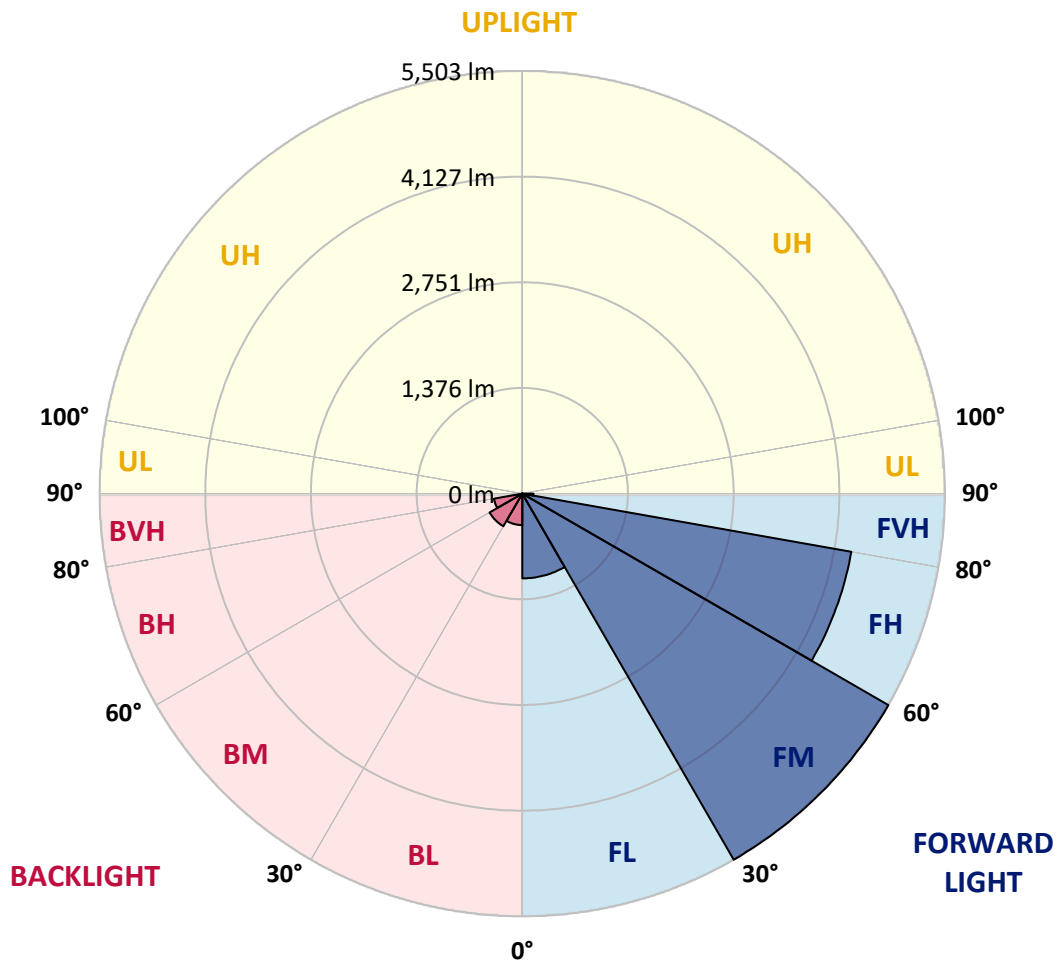


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1103.3	8.9			
FM (30°-60°)	5502.8	44.4			
FH (60°-80°)	4349.5	35.1			G2/5000
FVH (80°-90°)	145.9	1.2			G2/225
BL (0°-30°)	409.6	3.3	B1/500		
BM (30°-60°)	491.1	4.0	B1/1000		
BH (60°-80°)	375.0	3.0	B1/500		G1/500
BVH (80°-90°)	4.8	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°	64°	65°	75°	85°
0°	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2
2.5°	3094.3	3097.6	3101.8	3107.7	3111.9	3099.3	3081.7	3061.7	3057.5	3014.8	2963.0
5°	2928.7	2933.7	2970.5	2990.6	3035.7	3076.7	3102.7	3106.0	3104.3	3064.2	2981.4
7.5°	2692.9	2707.1	2743.0	2778.2	2862.6	2940.4	3032.4	3096.8	3101.0	3090.1	2987.2
10°	2501.4	2510.6	2529.0	2598.4	2668.6	2787.4	2916.2	3037.4	3047.5	3090.9	2982.2
12.5°	2351.7	2365.0	2387.6	2441.1	2525.6	2637.7	2784.0	2947.1	2968.0	3075.1	2968.0
15°	2247.1	2253.8	2276.4	2329.1	2411.0	2514.7	2662.8	2852.6	2871.0	3054.1	2965.5
17.5°	2197.8	2205.3	2221.2	2263.0	2330.8	2426.9	2571.6	2776.5	2799.9	3040.8	2974.7
20°	2211.2	2217.9	2218.7	2240.4	2286.4	2367.5	2504.7	2705.4	2735.5	3032.4	2989.8
22.5°	2287.3	2288.1	2278.1	2268.0	2283.9	2342.5	2463.7	2660.3	2691.2	3030.7	3007.3
25°	2401.0	2403.5	2386.8	2351.7	2319.9	2350.0	2454.5	2631.0	2658.6	3026.5	3018.2
27.5°	2558.2	2557.4	2552.4	2493.8	2403.5	2383.4	2462.1	2615.1	2638.5	3014.8	3022.4
30°	2778.2	2771.5	2760.6	2694.5	2556.6	2464.6	2493.8	2605.1	2626.8	2998.1	3011.5
32.5°	2994.8	3019.9	3018.2	2955.5	2783.2	2609.2	2559.9	2618.4	2634.3	2987.2	2995.6
35°	3247.3	3246.5	3310.9	3287.5	3085.9	2794.1	2672.8	2662.8	2675.3	2994.8	2988.1
37.5°	3481.5	3503.2	3603.6	3627.8	3443.9	3055.0	2832.5	2758.1	2762.3	3045.8	3006.5
40°	3773.4	3815.2	3964.9	4046.0	3883.8	3442.2	3068.4	2932.9	2933.7	3171.2	3075.9
42.5°	4149.7	4215.8	4355.4	4490.9	4403.9	3900.5	3422.1	3209.7	3208.0	3392.0	3234.8
45°	4607.1	4653.1	4812.0	5027.0	4971.8	4540.2	3937.3	3638.7	3617.0	3754.1	3516.6
47.5°	5001.9	5064.6	5226.0	5471.0	5721.9	5321.3	4552.8	4228.3	4214.1	4330.3	4000.0
50°	5174.2	5229.3	5399.1	5742.8	6350.8	6346.6	5469.4	5088.9	5064.6	5127.3	4747.6
52.5°	4985.1	5037.0	5208.4	5636.6	6646.9	7596.1	6797.4	6168.5	6139.2	6059.0	5640.8
55°	4337.9	4380.5	4633.9	5125.6	6533.1	8429.0	8627.2	7502.4	7388.7	7076.7	6651.9
57.5°	3453.9	3432.2	3589.4	4160.6	5865.8	8708.3	10505.5	9164.1	8960.9	7956.5	7507.4
60°	2393.5	2460.4	2523.9	2900.3	4410.6	8224.1	11673.8	11253.2	10985.6	8822.1	8327.0
62.5°	1759.6	1803.9	1845.7	2019.7	2773.2	6566.6	11880.4	13399.1	13161.6	9741.2	9108.9
65°	1391.6	1394.9	1411.7	1583.1	1827.3	4270.1	10887.7	14609.2	14548.2	10626.0	9425.9
66°	1267.8	1268.7	1294.6	1478.6	1640.0	3477.3	10092.4	14701.2	14734.7	10838.4	9333.0
67.5°	1108.1	1104.7	1142.4	1328.9	1493.6	2507.2	8669.0	14328.2	14526.4	11001.4	8999.4
70°	858.9	854.7	900.7	1114.8	1375.7	1672.6	5762.1	12302.7	12622.2	10667.8	7962.4
72.5°	572.0	575.4	654.0	879.8	1313.0	1472.7	3466.4	9359.0	9810.6	8809.5	6263.8
75°	333.7	339.5	429.0	654.0	1139.9	1404.1	1961.9	6673.6	6962.1	6083.2	3902.1
77.5°	174.8	177.3	240.0	431.5	873.9	1303.8	1307.1	4263.4	4398.9	2956.3	1544.6
80°	92.8	90.3	128.8	260.1	601.3	1144.9	1060.4	2257.2	2346.6	878.1	390.5
82.5°	35.1	38.5	68.6	170.6	355.4	822.1	913.2	997.7	966.8	193.2	163.9
85°	6.7	8.4	29.3	101.2	179.0	343.7	673.2	489.2	453.3	72.8	94.5
87.5°	0.8	1.7	8.4	24.3	25.9	116.2	199.0	135.5	117.1	26.8	39.3
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°	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2	2936.2
2.5°	2937.9	2915.3	2840.1	2765.6	2689.5	2620.9	2574.1	2498.0	2478.8	2451.2	2435.3
5°	2932.0	2879.4	2734.7	2576.6	2429.4	2270.5	2149.3	2032.2	1969.5	1937.7	1926.0
7.5°	2915.3	2831.7	2605.9	2358.3	2122.5	1885.0	1678.4	1521.2	1420.0	1350.6	1303.8
10°	2881.9	2766.5	2456.2	2115.8	1759.6	1446.0	1184.2	985.2	831.3	782.8	784.4
12.5°	2847.6	2693.7	2288.9	1846.5	1405.0	1009.4	731.8	574.5	500.9	476.7	471.7
15°	2815.8	2624.3	2125.0	1585.6	1046.2	654.0	471.7	416.5	396.4	392.2	391.4
17.5°	2799.1	2559.9	1950.2	1287.1	730.1	444.1	378.0	363.0	357.1	352.9	351.2
20°	2784.9	2503.9	1783.0	1007.7	499.3	363.8	338.7	324.5	314.4	310.3	307.8
22.5°	2774.8	2446.2	1609.9	780.3	382.2	322.8	300.2	281.8	267.6	262.6	259.3
25°	2759.8	2382.6	1435.1	570.4	322.0	286.8	260.9	239.2	220.8	211.6	209.9
27.5°	2738.0	2310.7	1243.6	422.3	287.7	255.1	223.3	196.5	178.1	168.1	168.9
30°	2702.9	2235.4	1052.1	335.4	260.1	222.5	188.2	162.2	144.7	137.2	136.3
32.5°	2661.1	2144.3	876.4	287.7	235.0	193.2	157.2	134.6	121.3	115.4	114.6
35°	2621.8	2052.3	697.5	258.4	209.1	166.4	132.1	112.9	102.9	97.8	98.7
37.5°	2600.0	1970.3	543.6	235.0	188.2	143.0	113.7	97.0	87.8	83.6	82.8
40°	2614.3	1903.4	432.4	214.1	164.7	122.9	97.8	83.6	74.4	68.6	68.6
42.5°	2681.2	1874.1	348.7	194.0	143.0	106.2	85.3	71.9	61.9	56.0	56.9
45°	2885.2	1905.1	291.9	175.6	122.9	92.0	73.6	59.4	50.2	46.0	45.2
47.5°	3223.9	2021.3	252.6	156.4	105.4	78.6	61.9	49.3	40.1	36.8	36.0
50°	3816.0	2261.3	223.3	137.2	89.5	66.9	51.0	39.3	31.8	28.4	28.4
52.5°	4630.6	2784.9	202.4	115.4	75.3	56.9	41.8	31.8	25.1	22.6	21.7
55°	5481.9	3336.8	191.5	97.0	62.7	46.8	33.5	25.1	19.2	16.7	15.9
57.5°	6300.6	3770.0	179.0	78.6	50.2	36.0	25.9	19.2	13.4	11.7	10.9
60°	7085.9	4120.4	152.2	62.7	39.3	25.9	19.2	13.4	9.2	7.5	7.5
62.5°	7788.4	4324.5	119.6	50.2	30.1	18.4	12.5	10.0	6.7	5.0	5.0
65°	7870.4	4059.4	90.3	38.5	21.7	11.7	7.5	7.5	5.0	3.3	3.3
66°	7705.6	3834.4	79.4	35.1	19.2	10.0	6.7	5.9	4.2	2.5	2.5
67.5°	7337.6	3450.5	68.6	30.1	15.9	7.5	5.0	5.0	3.3	1.7	1.7
70°	6339.9	2818.3	54.4	22.6	11.7	5.9	3.3	3.3	2.5	1.7	1.7
72.5°	4832.1	2104.1	44.3	16.7	8.4	4.2	2.5	2.5	2.5	1.7	1.7
75°	2914.5	1133.2	34.3	12.5	7.5	3.3	1.7	2.5	3.3	2.5	1.7
77.5°	1073.8	385.5	26.8	10.0	5.9	3.3	1.7	1.7	3.3	2.5	2.5
80°	263.4	100.4	19.2	8.4	5.9	3.3	1.7	1.7	3.3	3.3	3.3
82.5°	122.1	42.7	13.4	7.5	5.9	3.3	1.7	1.7	2.5	3.3	3.3
85°	70.2	20.1	10.9	8.4	5.9	3.3	1.7	1.7	2.5	3.3	3.3
87.5°	28.4	10.0	10.0	8.4	6.7	4.2	1.7	1.7	1.7	2.5	2.5
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)