

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: P453125

Luminaire Tested: **GALN-SA4A-827-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453125  
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-827-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 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: 10884 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

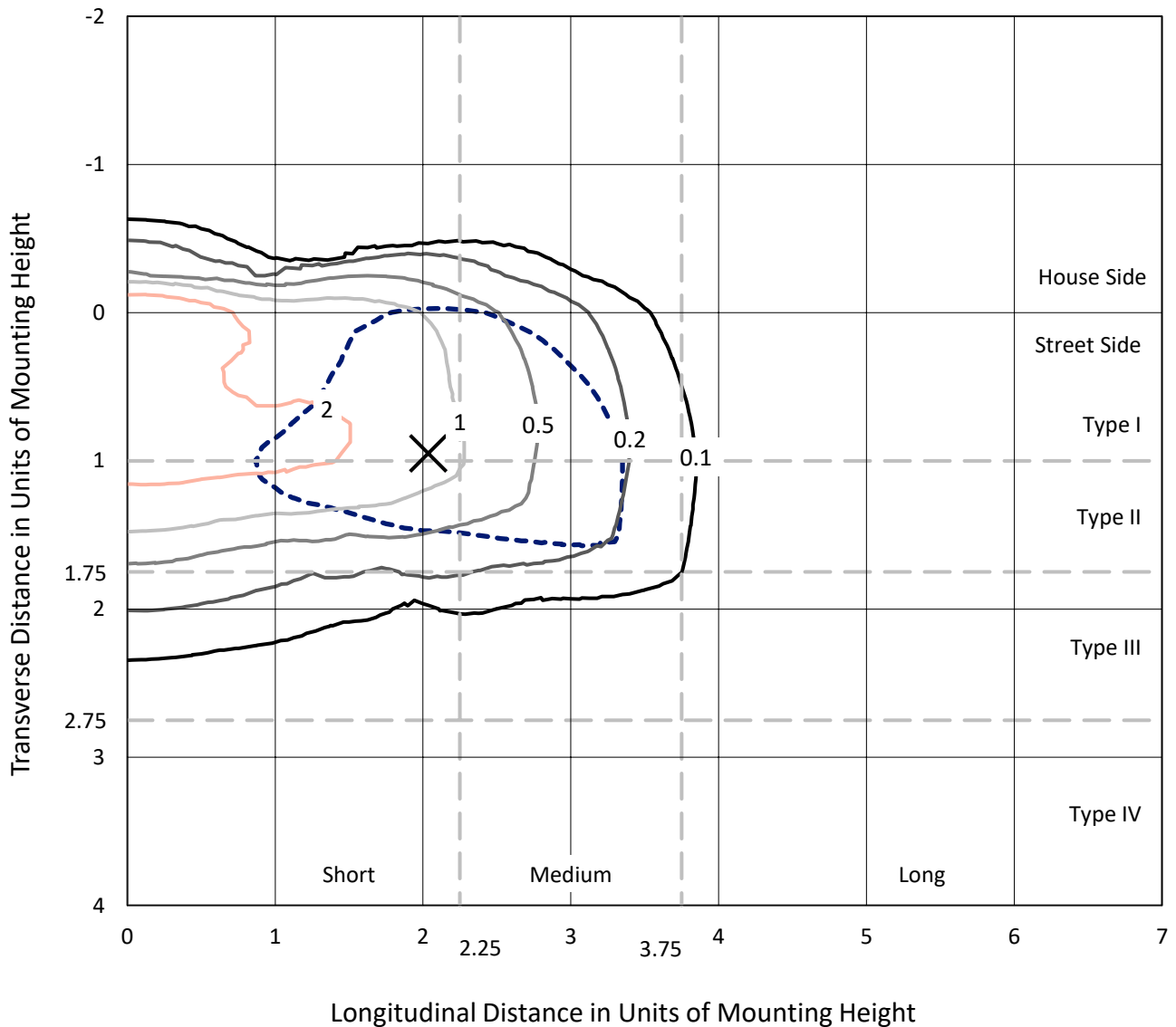
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

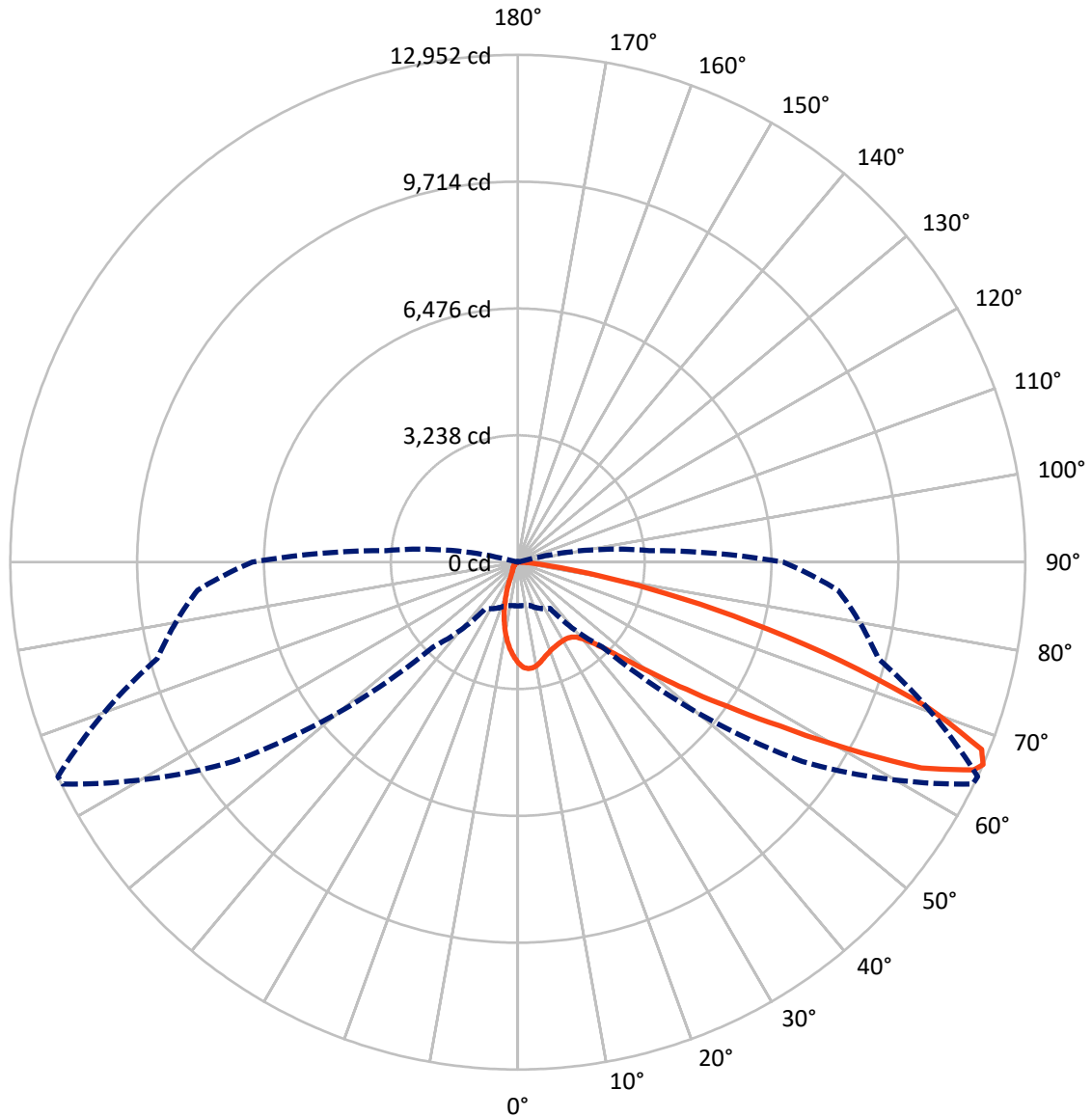
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 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	1125.6	0.0	1125.6
	% Fixture	10.3	0.0	10.3
<b>Street Side</b>	Lumens	9758.4	0.0	9758.4
	% Fixture	89.7	0.0	89.7
<b>Total</b>	Lumens	10884.0	0.0	10884.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.1	1.9
10°-20°	459.9	4.2
20°-30°	658.8	6.1
30°-40°	962.3	8.8
40°-50°	1613.6	14.8
50°-60°	2692.9	24.7
60°-70°	2858.4	26.3
70°-80°	1294.5	11.9
80°-90°	132.5	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°	10884.0	100.0
0°-180°	10884.0	100.0

**Coefficient of Utilization**



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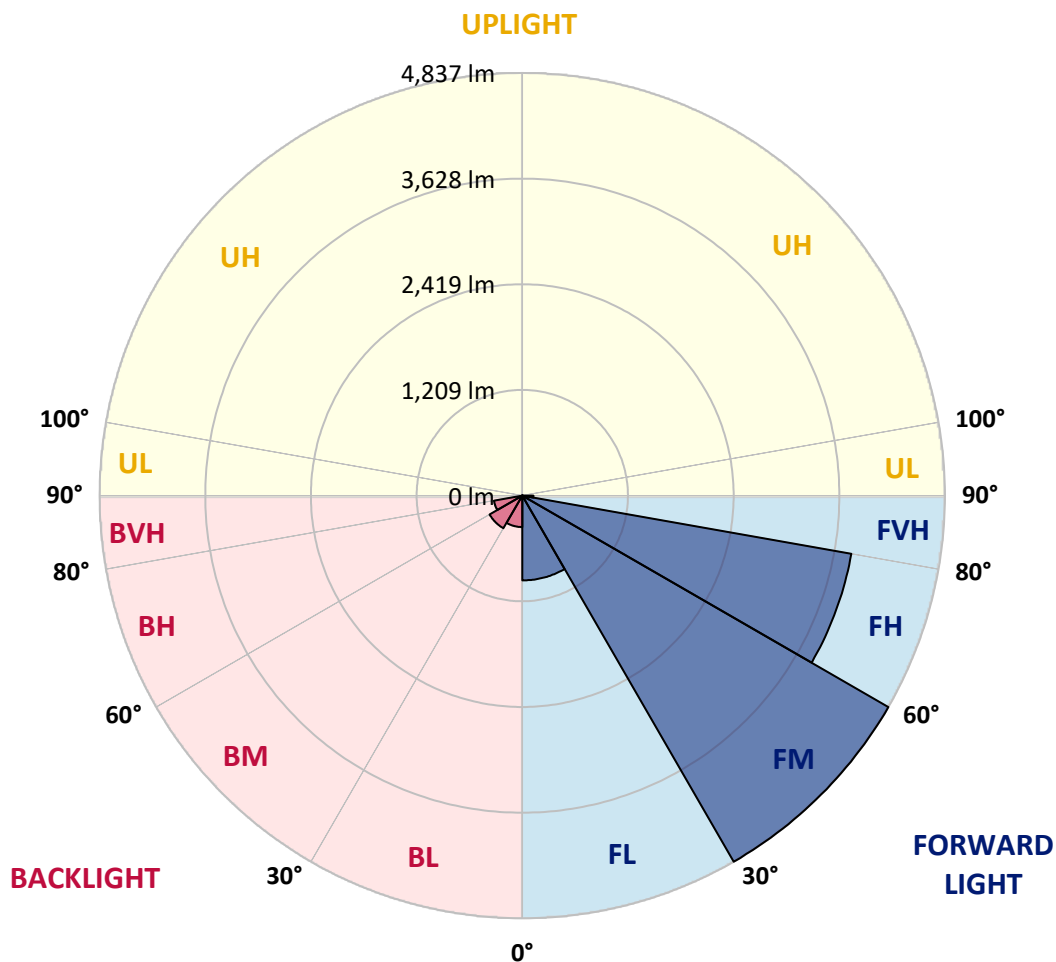
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	969.8	8.9			
FM (30°-60°)	4837.1	44.4			
FH (60°-80°)	3823.3	35.1			G2/5000
FVH (80°-90°)	128.2	1.2			G2/225
BL (0°-30°)	360.1	3.3	B1/500		
BM (30°-60°)	431.7	4.0	B1/1000		
BH (60°-80°)	329.6	3.0	B1/500		G1/500
BVH (80°-90°)	4.2	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°	64°	65°	75°	85°
0°	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0
2.5°	2719.9	2722.9	2726.6	2731.7	2735.4	2724.3	2708.9	2691.3	2687.6	2650.1	2604.5
5°	2574.4	2578.8	2611.1	2628.8	2668.5	2704.5	2727.3	2730.2	2728.8	2693.5	2620.7
7.5°	2367.1	2379.6	2411.2	2442.1	2516.3	2584.7	2665.5	2722.1	2725.8	2716.3	2625.8
10°	2198.7	2206.8	2223.0	2284.0	2345.8	2450.1	2563.4	2669.9	2678.8	2717.0	2621.4
12.5°	2067.2	2078.9	2098.8	2145.8	2220.1	2318.6	2447.2	2590.6	2608.9	2703.0	2608.9
15°	1975.3	1981.1	2001.0	2047.3	2119.3	2210.5	2340.6	2507.5	2523.7	2684.6	2606.7
17.5°	1931.9	1938.5	1952.5	1989.2	2048.8	2133.3	2260.5	2440.6	2461.2	2672.9	2614.8
20°	1943.7	1949.5	1950.3	1969.4	2009.8	2081.1	2201.7	2378.1	2404.6	2665.5	2628.0
22.5°	2010.5	2011.3	2002.5	1993.6	2007.6	2059.1	2165.7	2338.4	2365.6	2664.1	2643.5
25°	2110.5	2112.7	2098.0	2067.2	2039.2	2065.7	2157.6	2312.7	2336.9	2660.4	2653.0
27.5°	2248.7	2248.0	2243.6	2192.1	2112.7	2095.1	2164.2	2298.7	2319.3	2650.1	2656.7
30°	2442.1	2436.2	2426.6	2368.5	2247.3	2166.4	2192.1	2289.9	2309.0	2635.4	2647.2
32.5°	2632.5	2654.5	2653.0	2597.9	2446.5	2293.6	2250.2	2301.7	2315.6	2625.8	2633.2
35°	2854.5	2853.7	2910.3	2889.7	2712.6	2456.0	2349.4	2340.6	2351.6	2632.5	2626.6
37.5°	3060.3	3079.4	3167.6	3188.9	3027.2	2685.4	2489.8	2424.4	2428.1	2677.3	2642.7
40°	3316.9	3353.6	3485.2	3556.5	3413.9	3025.7	2697.1	2578.1	2578.8	2787.6	2703.8
42.5°	3647.7	3705.7	3828.5	3947.6	3871.1	3428.6	3008.1	2821.4	2819.9	2981.6	2843.4
45°	4049.8	4090.2	4229.9	4418.8	4370.3	3991.0	3460.9	3198.5	3179.4	3299.9	3091.2
47.5°	4396.7	4451.9	4593.7	4809.1	5029.7	4677.6	4002.0	3716.8	3704.3	3806.4	3516.1
50°	4548.2	4596.7	4745.9	5048.1	5582.5	5578.8	4807.7	4473.2	4451.9	4507.0	4173.3
52.5°	4382.0	4427.6	4578.3	4954.7	5842.7	6677.1	5975.0	5422.2	5396.5	5325.9	4958.4
55°	3813.1	3850.5	4073.3	4505.5	5742.7	7409.3	7583.5	6594.7	6494.8	6220.6	5847.1
57.5°	3036.0	3016.9	3155.1	3657.2	5156.1	7654.8	9234.5	8055.4	7876.8	6993.9	6599.2
60°	2103.9	2162.7	2218.6	2549.4	3877.0	7229.1	10261.5	9891.7	9656.5	7754.8	7319.6
62.5°	1546.7	1585.6	1622.4	1775.3	2437.6	5772.1	10443.1	11778.1	11569.3	8562.6	8006.9
65°	1223.2	1226.2	1240.9	1391.6	1606.2	3753.5	9570.5	12841.8	12788.1	9340.4	8285.5
66°	1114.4	1115.2	1138.0	1299.7	1441.6	3056.6	8871.4	12922.6	12952.0	9527.1	8203.9
67.5°	974.0	971.1	1004.2	1168.1	1312.9	2203.9	7620.2	12594.8	12769.0	9670.5	7910.6
70°	755.0	751.3	791.7	979.9	1209.3	1470.2	5065.0	10814.3	11095.1	9377.2	6999.1
72.5°	502.8	505.8	574.9	773.3	1154.1	1294.5	3047.1	8226.7	8623.7	7743.7	5506.0
75°	293.3	298.5	377.1	574.9	1002.0	1234.3	1724.6	5866.2	6119.9	5347.2	3430.1
77.5°	153.6	155.8	211.0	379.3	768.2	1146.0	1149.0	3747.6	3866.7	2598.6	1357.8
80°	81.6	79.4	113.2	228.6	528.5	1006.4	932.1	1984.1	2062.7	771.9	343.3
82.5°	30.9	33.8	60.3	150.0	312.4	722.6	802.7	877.0	849.8	169.8	144.1
85°	5.9	7.4	25.7	88.9	157.3	302.1	591.8	430.0	398.4	64.0	83.1
87.5°	0.7	1.5	7.4	21.3	22.8	102.2	175.0	119.1	102.9	23.5	34.6
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°	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0
2.5°	2582.5	2562.6	2496.5	2431.0	2364.1	2303.9	2262.7	2195.8	2178.9	2154.6	2140.7
5°	2577.3	2531.0	2403.8	2264.9	2135.5	1995.8	1889.3	1786.3	1731.2	1703.3	1693.0
7.5°	2562.6	2489.1	2290.6	2073.0	1865.7	1657.0	1475.4	1337.2	1248.2	1187.2	1146.0
10°	2533.2	2431.8	2159.0	1859.8	1546.7	1271.0	1040.9	866.0	730.7	688.1	689.5
12.5°	2503.1	2367.8	2012.0	1623.1	1235.0	887.3	643.2	505.0	440.3	419.0	414.6
15°	2475.1	2306.8	1867.9	1393.8	919.6	574.9	414.6	366.1	348.4	344.8	344.0
17.5°	2460.4	2250.2	1714.3	1131.3	641.8	390.3	332.3	319.0	313.9	310.2	308.7
20°	2447.9	2200.9	1567.3	885.8	438.9	319.8	297.7	285.2	276.4	272.7	270.5
22.5°	2439.1	2150.2	1415.1	685.9	335.9	283.8	263.9	247.7	235.2	230.8	227.9
25°	2425.9	2094.3	1261.5	501.4	283.0	252.1	229.4	210.2	194.1	186.0	184.5
27.5°	2406.8	2031.1	1093.1	371.2	252.9	224.2	196.3	172.8	156.6	147.8	148.5
30°	2375.9	1965.0	924.8	294.8	228.6	195.5	165.4	142.6	127.2	120.6	119.8
32.5°	2339.1	1884.8	770.4	252.9	206.6	169.8	138.2	118.4	106.6	101.4	100.7
35°	2304.6	1804.0	613.1	227.2	183.8	146.3	116.1	99.2	90.4	86.0	86.7
37.5°	2285.5	1731.9	477.8	206.6	165.4	125.7	100.0	85.3	77.2	73.5	72.8
40°	2298.0	1673.1	380.1	188.2	144.8	108.1	86.0	73.5	65.4	60.3	60.3
42.5°	2356.8	1647.4	306.5	170.5	125.7	93.4	75.0	63.2	54.4	49.3	50.0
45°	2536.2	1674.6	256.6	154.4	108.1	80.9	64.7	52.2	44.1	40.4	39.7
47.5°	2833.9	1776.8	222.0	137.5	92.6	69.1	54.4	43.4	35.3	32.3	31.6
50°	3354.3	1987.8	196.3	120.6	78.7	58.8	44.8	34.6	27.9	25.0	25.0
52.5°	4070.3	2447.9	177.9	101.4	66.2	50.0	36.8	27.9	22.1	19.8	19.1
55°	4818.7	2933.1	168.3	85.3	55.1	41.2	29.4	22.1	16.9	14.7	14.0
57.5°	5538.4	3313.9	157.3	69.1	44.1	31.6	22.8	16.9	11.8	10.3	9.6
60°	6228.7	3621.9	133.8	55.1	34.6	22.8	16.9	11.8	8.1	6.6	6.6
62.5°	6846.1	3801.3	105.1	44.1	26.5	16.2	11.0	8.8	5.9	4.4	4.4
65°	6918.2	3568.3	79.4	33.8	19.1	10.3	6.6	6.6	4.4	2.9	2.9
66°	6773.4	3370.5	69.8	30.9	16.9	8.8	5.9	5.1	3.7	2.2	2.2
67.5°	6449.9	3033.1	60.3	26.5	14.0	6.6	4.4	4.4	2.9	1.5	1.5
70°	5572.9	2477.3	47.8	19.8	10.3	5.1	2.9	2.9	2.2	1.5	1.5
72.5°	4247.5	1849.6	39.0	14.7	7.4	3.7	2.2	2.2	2.2	1.5	1.5
75°	2561.9	996.1	30.1	11.0	6.6	2.9	1.5	2.2	2.9	2.2	1.5
77.5°	943.9	338.9	23.5	8.8	5.1	2.9	1.5	1.5	2.9	2.2	2.2
80°	231.6	88.2	16.9	7.4	5.1	2.9	1.5	1.5	2.9	2.9	2.9
82.5°	107.3	37.5	11.8	6.6	5.1	2.9	1.5	1.5	2.2	2.9	2.9
85°	61.7	17.6	9.6	7.4	5.1	2.9	1.5	1.5	2.2	2.9	2.9
87.5°	25.0	8.8	8.8	7.4	5.9	3.7	1.5	1.5	1.5	2.2	2.2
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)