

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: P453126

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

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453126  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
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  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13275 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

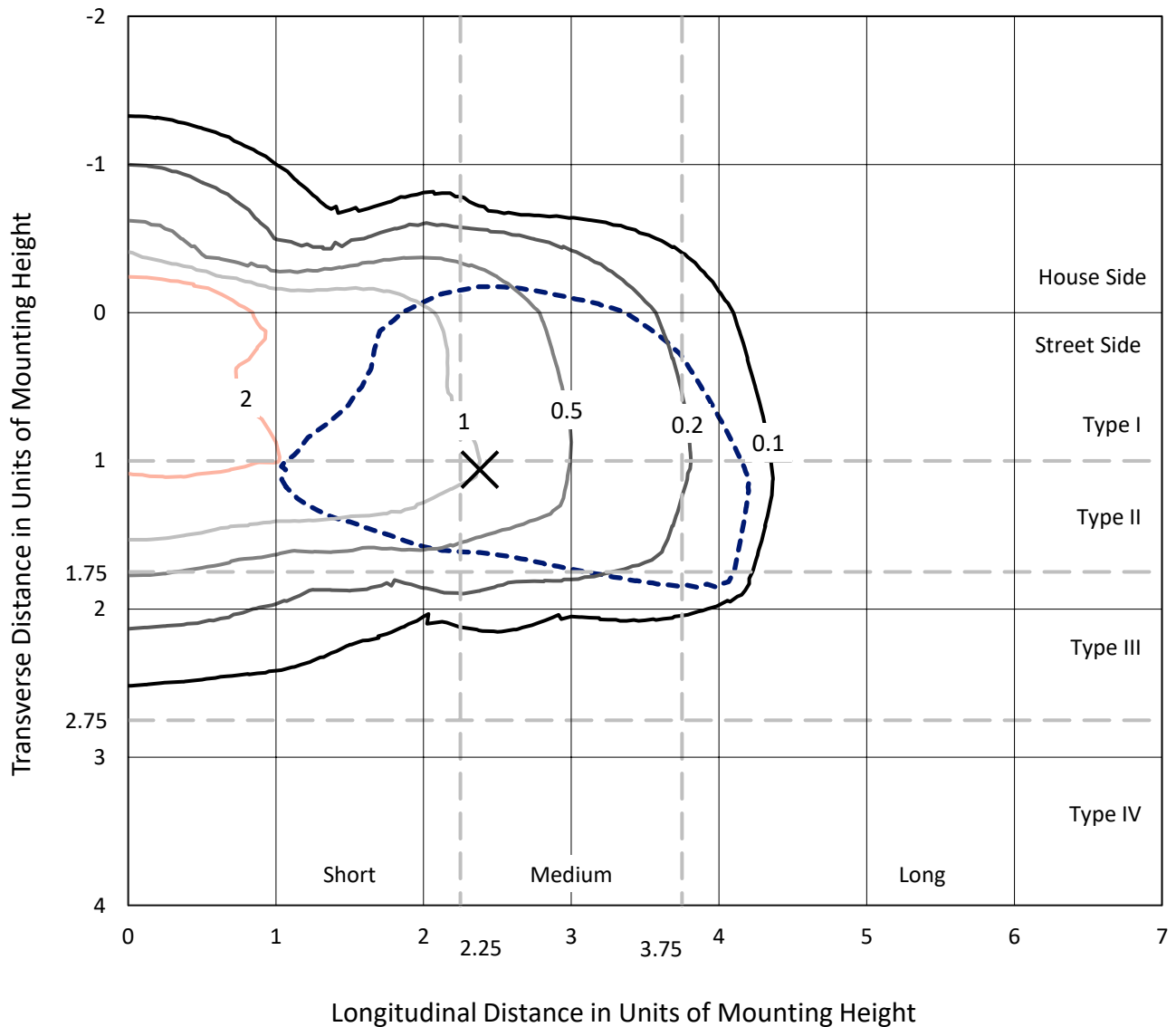
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

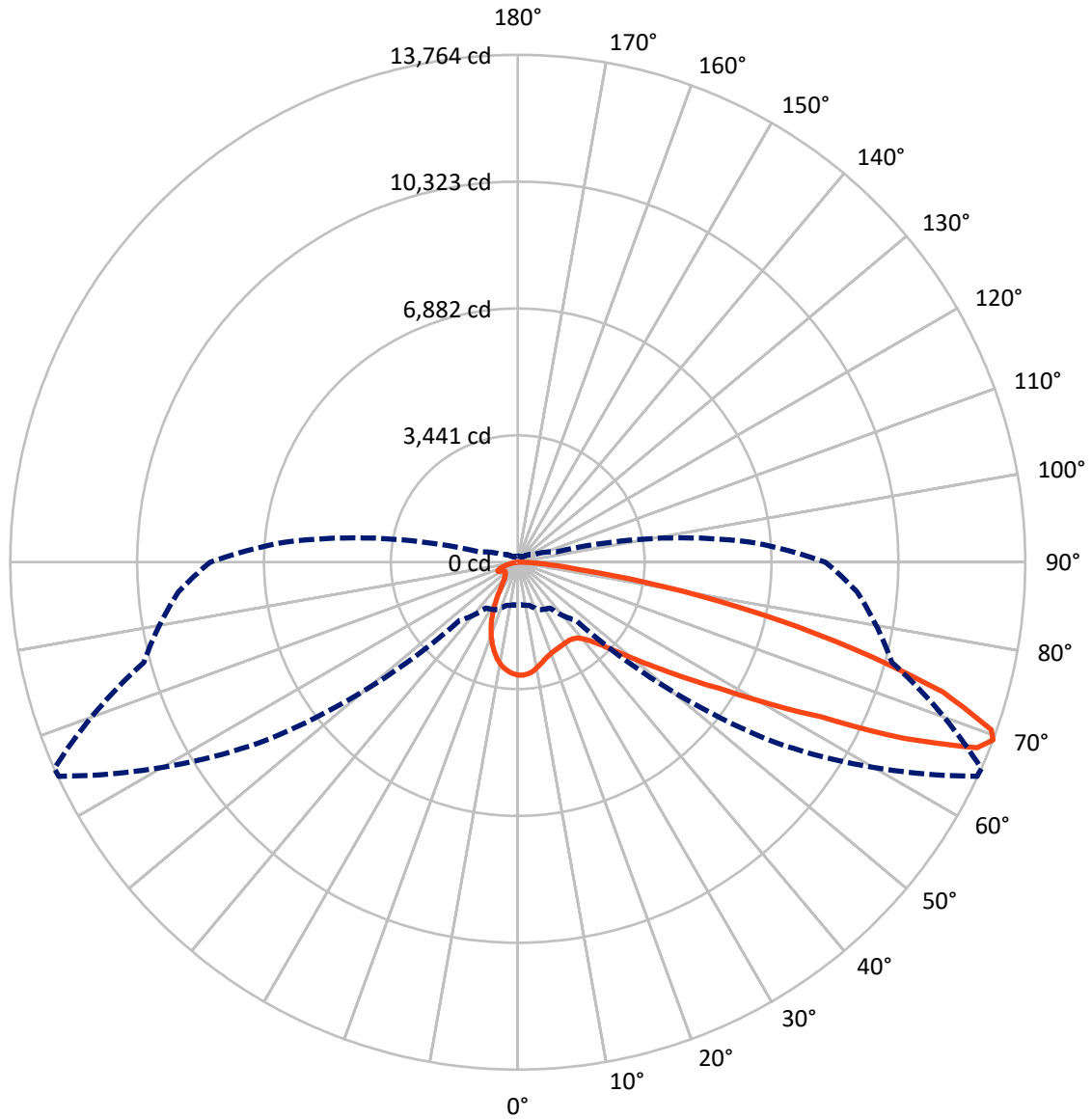
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2496.5	0.0	2496.5
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	10778.5	0.0	10778.5
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	13275.0	0.0	13275.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	266.2	2.0
10°-20°	631.4	4.8
20°-30°	859.6	6.5
30°-40°	1155.1	8.7
40°-50°	1724.8	13.0
50°-60°	2743.6	20.7
60°-70°	3374.5	25.4
70°-80°	2195.6	16.5
80°-90°	324.2	2.4
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°	13275.0	100.0
0°-180°	13275.0	100.0

**Coefficient of Utilization**



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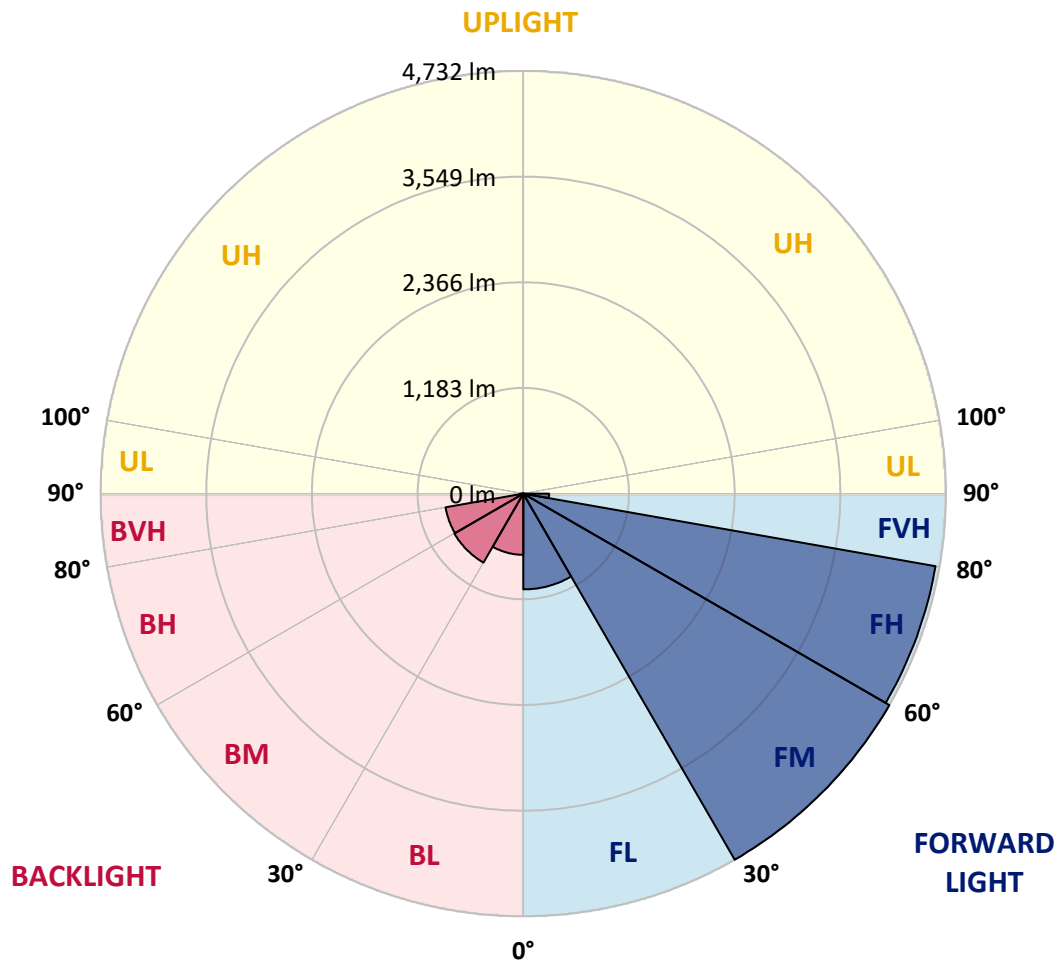
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1071.9	8.1			
FM (30°-60°)	4732.1	35.6			
FH (60°-80°)	4686.2	35.3			G2/5000
FVH (80°-90°)	288.3	2.2			G3/500
BL (0°-30°)	685.3	5.2	B2/1000		
BM (30°-60°)	891.4	6.7	B1/1000		
BH (60°-80°)	883.9	6.7	B2/1000		G2/1000
BVH (80°-90°)	36.0	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6
2.5°	2958.2	2970.0	2983.2	2997.9	3025.9	3041.3	3052.3	3064.8	3066.3	3072.9	3067.8
5°	2739.9	2753.9	2773.7	2801.6	2843.6	2909.0	2976.6	3031.7	3038.4	3069.2	3078.1
7.5°	2557.6	2565.7	2581.8	2626.7	2686.2	2759.0	2857.5	2969.3	2985.4	3059.0	3084.7
10°	2409.1	2417.2	2436.3	2482.6	2541.4	2632.6	2740.6	2887.7	2900.9	3027.3	3086.2
12.5°	2298.1	2305.4	2326.0	2371.6	2439.2	2524.5	2643.6	2799.4	2818.6	2985.4	3072.2
15°	2213.5	2227.5	2244.4	2281.9	2353.2	2435.5	2551.0	2718.6	2734.0	2941.3	3062.6
17.5°	2177.5	2184.1	2195.9	2230.4	2282.6	2363.5	2479.7	2655.4	2673.7	2910.5	3060.4
20°	2179.0	2185.6	2187.8	2206.9	2244.4	2314.2	2428.9	2605.4	2627.4	2883.2	3064.1
22.5°	2229.0	2229.7	2221.6	2215.0	2229.7	2287.8	2392.9	2567.9	2593.6	2871.5	3067.0
25°	2306.2	2319.4	2307.6	2276.8	2249.6	2277.5	2378.9	2547.3	2571.5	2854.6	3063.4
27.5°	2431.1	2433.3	2423.8	2381.9	2311.3	2290.7	2373.1	2531.8	2552.4	2842.1	3045.0
30°	2598.7	2592.1	2583.3	2537.0	2426.0	2341.4	2385.6	2517.9	2539.2	2823.7	3022.9
32.5°	2768.6	2789.2	2781.1	2726.7	2582.6	2440.0	2426.0	2516.4	2534.1	2809.7	2998.7
35°	2948.7	2958.2	2996.5	2968.5	2820.8	2599.5	2501.7	2539.2	2553.2	2810.5	2981.8
37.5°	3089.8	3115.6	3205.2	3229.5	3090.6	2810.5	2624.5	2603.9	2609.8	2846.5	2988.4
40°	3260.4	3304.5	3419.9	3519.2	3428.0	3084.7	2833.3	2723.7	2731.1	2933.2	3031.7
42.5°	3476.5	3507.4	3662.5	3797.0	3782.3	3447.1	3086.2	2920.0	2923.7	3106.0	3153.0
45°	3729.4	3773.5	3947.7	4149.9	4184.5	3857.3	3451.5	3217.0	3214.8	3374.3	3379.5
47.5°	4052.9	4080.1	4252.8	4473.4	4613.1	4372.7	3894.8	3643.4	3619.9	3765.4	3723.5
50°	4350.6	4393.2	4524.1	4765.2	5113.0	4976.2	4477.8	4196.2	4141.1	4277.1	4206.5
52.5°	4475.6	4520.4	4630.7	4929.9	5541.5	5756.9	5218.1	4855.7	4763.8	4868.1	4842.4
55°	4258.7	4316.8	4419.7	4783.6	5729.7	6657.5	6216.4	5618.0	5551.1	5506.3	5513.6
57.5°	3675.7	3730.9	3869.8	4271.2	5504.8	7311.0	7641.9	6598.0	6454.6	6248.0	6283.3
60°	2798.0	2832.5	2904.6	3349.3	4838.0	7480.9	9260.7	7836.7	7745.5	6986.8	7011.8
62.5°	1987.1	2026.1	2076.1	2298.1	3541.9	7002.3	10528.1	9566.5	9240.8	7752.1	7727.9
65°	1613.6	1587.2	1647.5	1751.1	2078.3	5426.9	10813.3	11967.5	11519.0	8760.0	8423.3
67.5°	1326.9	1299.0	1358.6	1543.1	1580.6	3150.1	9785.6	13526.0	13436.3	9856.1	9129.8
69°	1174.8	1160.1	1212.3	1422.5	1517.3	2237.1	8524.8	13742.9	13764.2	10502.3	9238.6
70°	1058.6	1064.5	1115.2	1361.5	1488.7	1844.5	7286.0	13443.6	13624.5	10825.1	9121.0
72.5°	779.3	791.8	862.3	1127.7	1461.5	1565.1	4335.9	11742.5	12062.3	10844.2	8343.9
75°	544.7	538.9	601.4	849.1	1380.6	1551.2	2546.6	9081.3	9443.7	9373.1	7011.1
77.5°	356.5	366.1	416.1	599.9	1161.5	1539.4	1660.0	6442.8	6678.1	6268.6	4147.0
80°	251.4	250.7	278.6	409.5	861.6	1479.1	1359.3	4061.0	4001.4	2463.5	1229.9
82.5°	144.1	154.4	186.7	288.2	576.4	1301.9	1250.5	1942.3	1773.2	702.1	415.4
85°	80.1	83.8	111.0	174.2	336.7	980.7	1091.7	883.6	833.7	293.3	178.6
87.5°	25.7	27.9	46.3	88.2	152.9	463.1	618.3	408.0	376.4	105.9	72.0
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°	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6	3065.6
2.5°	3070.0	3078.8	3055.3	3032.5	3011.9	2983.2	2957.5	2936.2	2921.5	2919.3	2911.9
5°	3080.3	3081.0	3036.2	2975.9	2917.1	2852.4	2785.5	2737.7	2692.8	2667.9	2655.4
7.5°	3087.6	3081.0	3000.1	2902.4	2789.2	2671.5	2553.9	2459.8	2387.0	2358.4	2369.4
10°	3084.7	3064.1	2945.7	2789.2	2624.5	2448.8	2279.7	2147.4	2026.1	1963.6	1965.1
12.5°	3068.5	3034.7	2864.9	2662.0	2420.1	2184.9	1926.1	1747.4	1607.0	1524.0	1498.2
15°	3054.5	2995.7	2770.0	2489.2	2188.5	1852.6	1537.2	1316.6	1199.0	1133.6	1132.9
17.5°	3039.8	2958.2	2666.4	2306.2	1922.4	1490.1	1159.3	991.0	935.8	942.5	931.4
20°	3024.4	2914.1	2558.3	2102.5	1598.2	1111.5	868.2	799.8	815.3	845.4	849.8
22.5°	3006.8	2867.1	2442.2	1878.3	1257.1	836.6	704.3	694.0	733.7	780.7	787.3
25°	2979.6	2808.3	2295.9	1643.8	969.7	674.1	616.8	624.1	663.1	702.8	707.2
27.5°	2941.3	2735.5	2148.1	1351.2	728.5	578.6	563.9	573.4	592.5	616.8	622.7
30°	2889.9	2653.1	1978.3	1098.3	583.7	530.8	524.9	530.0	541.1	551.4	554.3
32.5°	2838.4	2573.8	1807.0	841.0	520.5	499.2	493.3	493.3	493.3	494.8	495.5
35°	2790.6	2498.8	1623.2	655.0	487.4	474.2	466.1	457.3	455.8	450.6	450.6
37.5°	2764.2	2430.4	1427.7	548.4	463.1	453.6	442.6	427.9	419.8	420.5	419.0
40°	2769.3	2385.6	1249.8	488.1	443.3	433.0	416.1	399.2	394.0	394.0	392.6
42.5°	2827.4	2370.9	1079.2	456.5	424.2	412.4	391.1	375.7	372.7	372.0	373.5
45°	2961.2	2406.9	926.3	435.9	408.0	390.4	369.0	355.1	352.1	352.1	351.4
47.5°	3222.2	2523.8	816.7	422.7	396.2	373.5	351.4	337.4	332.3	330.8	330.8
50°	3628.0	2777.4	735.1	410.9	381.5	358.0	335.2	319.1	311.0	310.2	309.5
52.5°	4191.8	3172.9	703.5	402.1	365.4	341.8	316.8	301.4	291.1	288.9	287.4
55°	4851.2	3725.0	746.9	395.5	348.5	323.5	297.7	281.6	272.0	267.6	266.9
57.5°	5615.1	4388.1	911.6	386.7	333.0	303.6	278.6	262.4	252.2	247.0	245.5
60°	6301.0	5069.6	1199.0	381.5	319.8	282.3	256.6	241.9	232.3	227.2	226.4
62.5°	7054.5	5719.4	1542.3	395.5	313.9	261.7	236.0	222.7	214.7	209.5	209.5
65°	7859.5	6370.1	1769.5	442.6	322.7	245.5	213.9	202.9	195.5	191.9	191.1
67.5°	8402.0	6595.0	1457.8	491.1	344.8	227.9	192.6	183.8	179.4	175.7	175.7
69°	8343.2	6310.5	1075.5	503.6	351.4	219.1	180.8	174.2	168.3	166.9	165.4
70°	8157.2	5986.3	901.3	495.5	346.3	211.0	173.5	165.4	160.3	158.8	158.1
72.5°	7265.5	5191.6	671.2	430.8	294.8	183.1	153.6	146.3	141.9	139.7	139.7
75°	6036.3	4243.3	524.2	342.6	230.8	154.4	131.6	125.7	122.0	120.6	119.8
77.5°	3383.2	2369.4	376.4	268.3	175.0	125.0	110.3	105.1	101.5	100.0	100.0
80°	942.5	677.1	221.3	177.2	119.1	94.8	87.5	83.8	78.7	75.0	77.2
82.5°	355.1	293.3	126.4	106.6	75.7	63.2	61.0	58.1	55.9	50.7	50.7
85°	172.8	142.6	80.9	56.6	41.9	33.1	31.6	30.1	28.7	25.0	25.7
87.5°	59.5	63.2	35.3	20.6	12.5	8.1	6.6	3.7	3.7	3.7	3.7
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)