

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: P453128

Luminaire Tested: **GALN-SA4A-827-U-SL3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-16)  
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-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13181 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

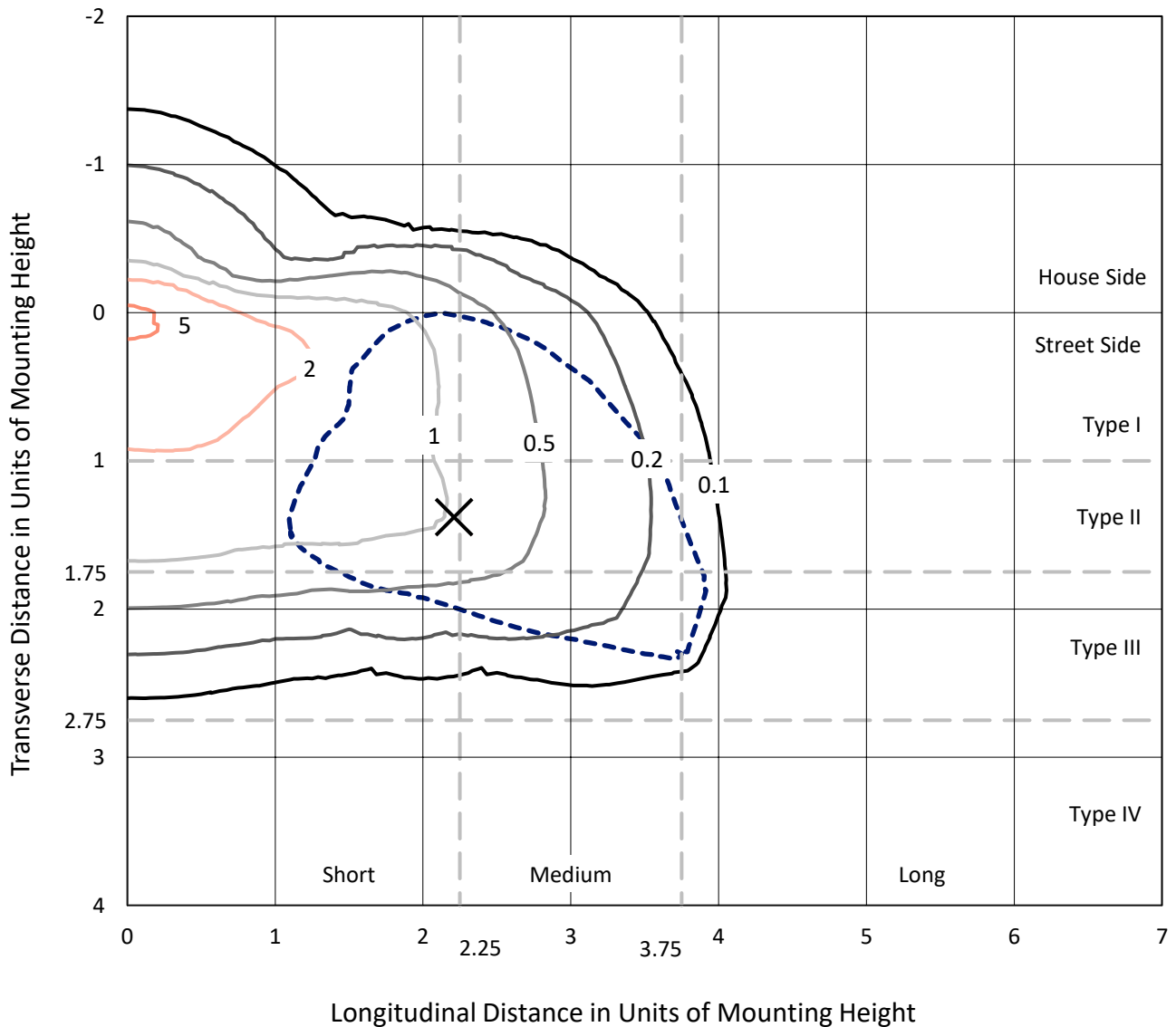
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

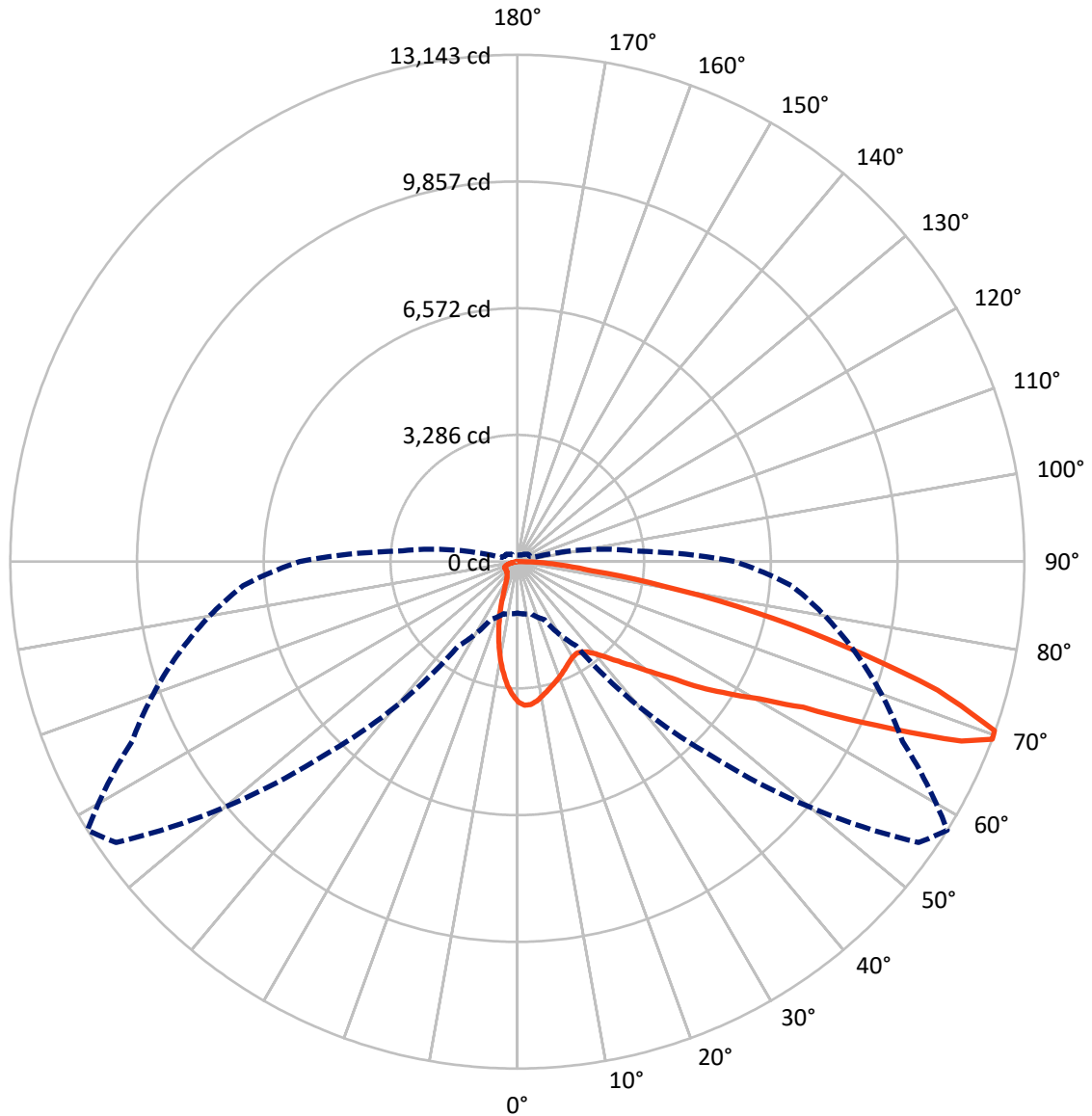
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1931.7	0.0	1931.7
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	11249.3	0.0	11249.3
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	13181.0	0.0	13181.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	309.3	2.3
10°-20°	679.2	5.2
20°-30°	877.6	6.7
30°-40°	1139.8	8.6
40°-50°	1657.1	12.6
50°-60°	2644.2	20.1
60°-70°	3532.4	26.8
70°-80°	2036.3	15.4
80°-90°	305.0	2.3
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°	13181.0	100.0
0°-180°	13181.0	100.0

**Coefficient of Utilization**



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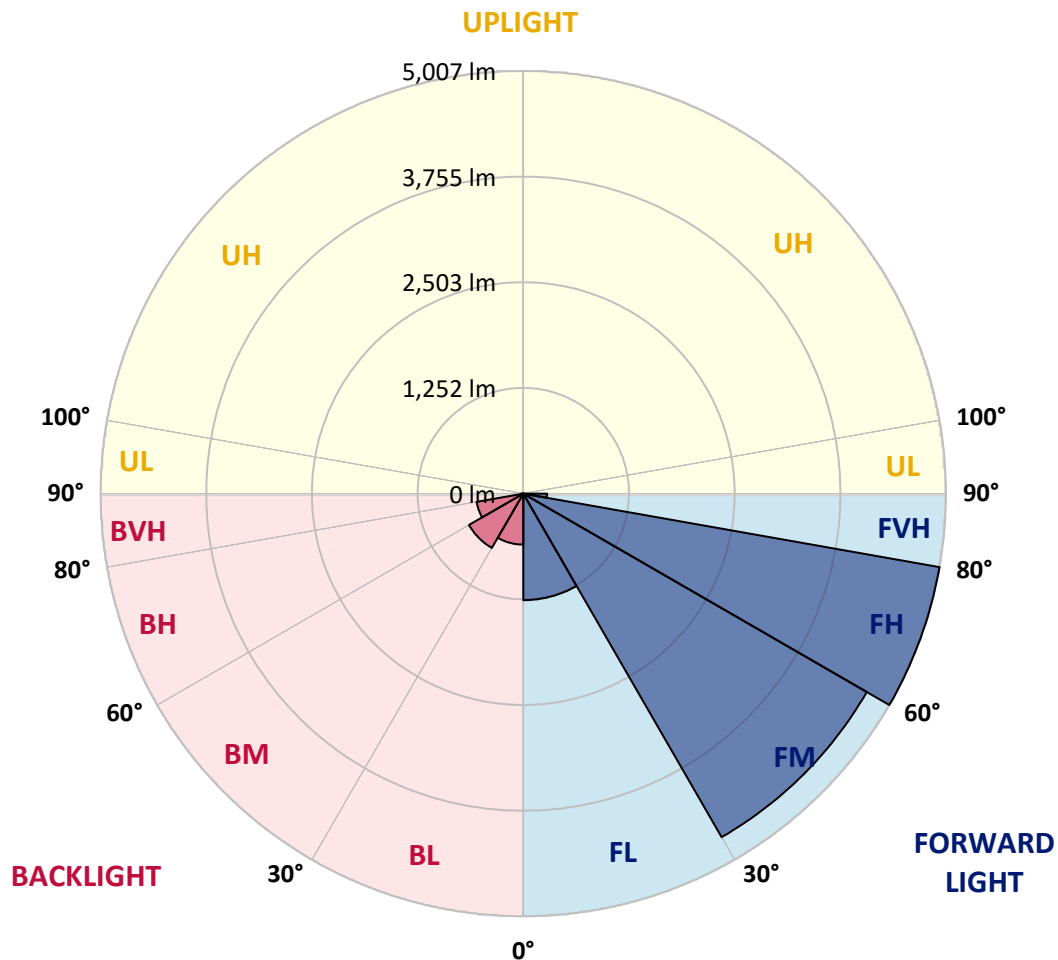
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1262.4	9.6			
FM	(30°-60°)	4698.3	35.6			
FH	(60°-80°)	5007.0	38.0			G3/7500
FVH	(80°-90°)	281.6	2.1			G3/500
BL	(0°-30°)	603.8	4.6	B2/1000		
BM	(30°-60°)	742.9	5.6	B1/1000		
BH	(60°-80°)	561.7	4.3	B2/1000		G2/1000
BVH	(80°-90°)	23.4	0.2			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 Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5
2.5°	3777.7	3788.0	3785.1	3781.4	3775.5	3759.3	3732.9	3728.5	3711.6	3675.5	3630.7
5°	3719.6	3728.5	3729.2	3734.3	3741.7	3738.8	3719.6	3717.4	3692.4	3643.9	3568.9
7.5°	3520.4	3532.2	3557.9	3586.6	3612.3	3636.6	3642.5	3646.1	3630.7	3574.8	3474.9
10°	3296.2	3308.0	3319.7	3362.4	3425.6	3485.9	3535.9	3542.5	3546.2	3494.7	3372.7
12.5°	3047.8	3072.0	3097.0	3160.2	3244.8	3339.6	3427.8	3441.8	3466.8	3427.8	3284.5
15°	2836.8	2861.8	2897.8	2954.4	3056.6	3193.3	3317.5	3340.3	3389.6	3369.7	3202.1
17.5°	2690.5	2699.3	2724.3	2789.0	2899.3	3043.3	3209.5	3255.1	3333.7	3328.6	3131.6
20°	2575.1	2586.1	2601.5	2641.2	2755.9	2908.1	3108.8	3167.6	3274.2	3291.8	3061.7
22.5°	2526.6	2534.7	2532.4	2553.8	2631.7	2784.6	3006.6	3076.4	3221.2	3266.8	2997.0
25°	2529.5	2536.9	2525.8	2520.7	2567.0	2675.8	2900.0	2988.9	3178.6	3249.9	2938.2
27.5°	2578.8	2583.9	2563.3	2542.7	2546.4	2608.2	2811.8	2910.3	3142.6	3257.3	2889.0
30°	2644.9	2654.5	2641.2	2616.2	2589.0	2592.0	2755.2	2852.2	3125.7	3283.0	2865.4
32.5°	2730.2	2739.0	2733.1	2713.3	2678.0	2639.0	2741.2	2830.9	3127.1	3335.2	2860.3
35°	2819.9	2837.5	2847.1	2845.6	2816.9	2749.3	2796.3	2870.6	3162.4	3422.7	2890.4
37.5°	2921.3	2936.0	2977.2	3003.6	2977.2	2898.5	2920.6	2972.0	3240.4	3549.1	2956.6
40°	3019.8	3041.9	3102.2	3184.5	3174.2	3105.1	3110.2	3144.1	3377.8	3737.3	3086.0
42.5°	3122.7	3149.2	3254.3	3376.3	3400.6	3346.9	3360.9	3391.1	3573.4	3998.2	3308.0
45°	3255.1	3286.7	3416.0	3568.2	3663.8	3630.7	3670.4	3685.1	3835.1	4337.9	3600.6
47.5°	3425.6	3462.4	3621.9	3811.5	3946.8	3976.9	4046.0	4037.2	4159.2	4740.0	3979.9
50°	3713.0	3733.6	3884.3	4077.6	4263.6	4399.6	4474.6	4488.6	4561.3	5131.0	4404.0
52.5°	4054.9	4073.2	4182.0	4351.1	4584.1	4872.3	5057.5	5012.0	5029.6	5607.4	4900.2
55°	4439.3	4470.2	4539.3	4651.8	4953.9	5378.0	5750.0	5761.0	5565.5	6063.2	5375.8
57.5°	4737.0	4789.2	4907.6	5067.8	5450.8	5940.4	6440.3	6447.6	6197.7	6549.8	5900.7
60°	4587.1	4648.8	4919.3	5309.7	6102.9	6921.8	7265.1	7223.2	6813.0	7104.1	6541.0
62.5°	3940.2	3951.2	4344.5	4954.6	6303.5	8234.7	8492.7	8315.5	7634.1	7806.8	7191.6
65°	2550.1	2622.1	2933.8	3788.7	5644.2	8963.2	10643.6	10234.2	8785.3	8604.4	7736.3
67.5°	1609.9	1591.5	1720.9	2163.4	3882.1	8321.4	12479.2	12414.5	10290.8	9108.0	7606.2
69°	1335.0	1355.5	1399.6	1658.4	2671.4	7104.8	12696.0	13143.0	11020.7	9068.3	7133.5
70°	1210.7	1220.3	1266.6	1470.2	2061.2	5950.7	12340.2	13123.1	11307.4	8902.1	6790.9
72.5°	960.8	960.1	1039.4	1223.2	1540.8	3396.9	10132.7	11393.4	10986.9	8128.8	5611.1
75°	730.0	741.7	829.2	1035.0	1419.5	1856.1	7071.0	8774.2	8775.0	6420.4	3501.3
77.5°	526.3	533.7	635.9	868.9	1337.2	1504.8	4709.8	6293.3	5916.1	2941.9	1100.5
80°	344.8	349.2	427.1	688.1	1205.6	1419.5	2792.7	3852.0	2790.5	780.7	363.9
82.5°	188.9	211.0	261.0	445.5	967.4	1311.4	1697.4	1949.5	1046.8	347.7	189.7
85°	94.8	100.7	147.0	260.2	632.2	1085.0	1182.1	1118.1	540.3	172.8	98.5
87.5°	27.9	35.3	61.0	100.7	256.6	565.3	657.9	590.3	208.0	62.5	20.6
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°	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5	3642.5
2.5°	3612.3	3599.1	3540.3	3487.3	3438.8	3387.4	3344.0	3305.8	3309.5	3310.2	3271.2
5°	3530.0	3499.8	3388.1	3283.7	3195.5	3083.8	2988.2	2926.5	2895.6	2854.4	2869.1
7.5°	3418.2	3360.2	3205.1	3031.6	2869.1	2724.3	2567.0	2458.9	2389.8	2322.9	2331.8
10°	3302.8	3209.5	2983.8	2754.4	2544.2	2312.6	2112.0	1939.9	1812.0	1764.3	1732.6
12.5°	3184.5	3061.7	2775.0	2470.0	2179.6	1902.5	1618.0	1433.5	1292.3	1217.3	1226.9
15°	3076.4	2927.2	2557.4	2185.5	1808.4	1478.3	1194.5	1018.9	920.4	899.8	911.5
17.5°	2976.4	2780.9	2353.8	1909.1	1468.7	1108.5	897.6	798.3	758.6	747.6	746.9
20°	2873.5	2656.7	2125.2	1613.6	1144.6	859.3	736.6	690.3	682.9	687.3	688.1
22.5°	2769.1	2503.0	1890.0	1320.3	911.5	702.8	644.0	631.5	637.3	647.6	649.1
25°	2672.9	2367.8	1663.5	1063.0	727.8	617.5	588.8	588.8	602.1	617.5	618.2
27.5°	2593.5	2236.9	1437.9	843.9	609.4	555.7	546.2	551.3	569.7	581.5	582.2
30°	2528.0	2114.9	1224.7	676.3	535.9	506.5	504.3	513.1	526.3	537.4	538.1
32.5°	2478.8	2007.6	1025.5	568.2	485.2	469.0	468.3	474.9	482.2	485.2	488.1
35°	2459.7	1918.6	843.2	499.9	451.4	441.1	441.1	440.3	443.3	444.7	446.2
37.5°	2475.1	1850.3	702.0	455.8	426.4	419.0	414.6	410.2	408.7	408.7	409.5
40°	2540.5	1814.2	596.9	427.1	408.7	397.7	389.6	384.5	379.3	380.8	382.3
42.5°	2679.5	1820.9	525.6	408.0	393.3	377.8	366.1	360.2	356.5	360.9	360.2
45°	2900.7	1887.0	480.0	394.8	377.8	358.0	347.0	341.1	341.1	347.7	349.9
47.5°	3210.2	2013.5	455.8	384.5	366.1	342.6	331.5	327.1	328.6	339.6	340.4
50°	3588.1	2233.3	451.4	379.3	360.2	331.5	319.0	314.6	318.3	330.1	331.5
52.5°	4004.9	2516.3	472.7	380.1	355.1	324.9	308.7	302.1	305.8	315.4	318.3
55°	4498.9	2870.6	527.8	383.0	347.7	321.2	301.4	286.7	291.1	297.7	298.5
57.5°	5003.1	3317.5	624.8	383.7	341.8	314.6	288.9	269.8	269.8	274.2	276.4
60°	5619.2	3804.2	752.7	384.5	342.6	305.1	272.0	250.7	247.7	249.9	250.7
62.5°	6230.8	4211.4	774.1	382.3	349.9	295.5	253.6	231.6	226.4	225.7	224.2
65°	6500.6	4135.7	634.4	372.0	358.0	289.6	238.9	213.2	204.4	201.4	201.4
67.5°	6061.0	3498.4	477.1	358.0	352.9	283.8	224.9	197.7	187.5	181.6	181.6
69°	5647.8	3111.7	428.6	348.4	339.6	274.2	216.1	189.7	177.2	170.5	168.3
70°	5328.8	2845.6	408.0	340.4	327.1	263.2	209.5	183.8	169.8	162.5	161.0
72.5°	4252.6	2232.5	357.3	309.5	278.6	221.3	186.0	165.4	152.2	144.1	141.9
75°	2450.8	1210.0	296.2	269.0	224.2	172.0	157.3	144.1	133.8	126.4	124.2
77.5°	754.2	467.5	214.7	212.4	164.7	133.1	125.7	120.6	113.2	105.1	103.7
80°	317.6	238.2	145.6	143.3	109.5	92.6	90.4	89.7	86.7	80.1	77.9
82.5°	174.2	134.5	101.4	88.2	66.2	53.7	55.9	56.6	54.4	47.8	43.4
85°	85.3	73.5	49.3	39.7	30.1	19.1	18.4	22.1	20.6	14.7	16.2
87.5°	16.9	20.6	13.2	5.9	2.9	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)