

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: P456854

Luminaire Tested: **GALN-SA8A-827-U-T3R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P456854  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA8A-827-U-T3R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21254 lumens  
Efficiency: N/A  
Efficacy: 87.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G4

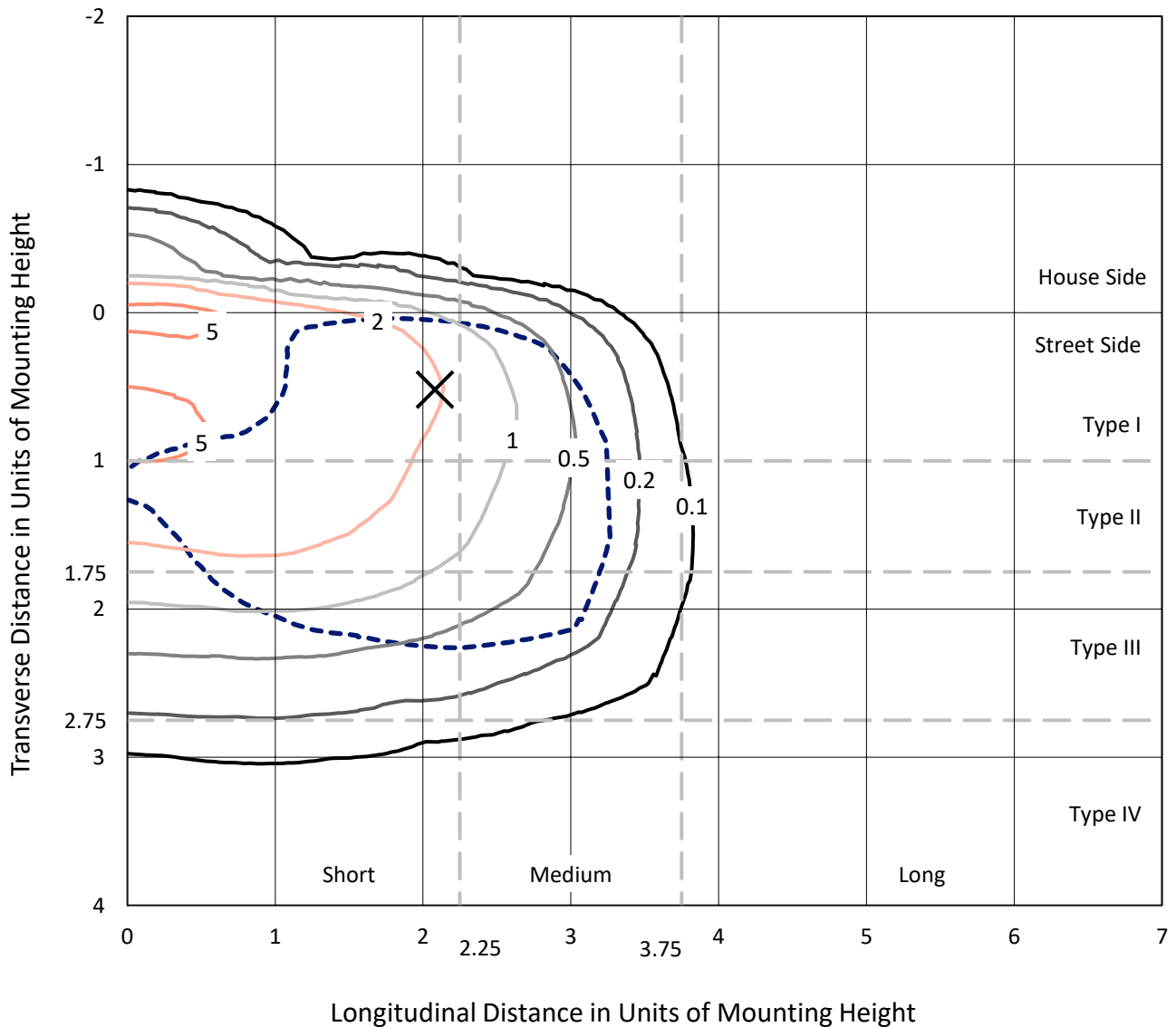
Input Watts (W): 244  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

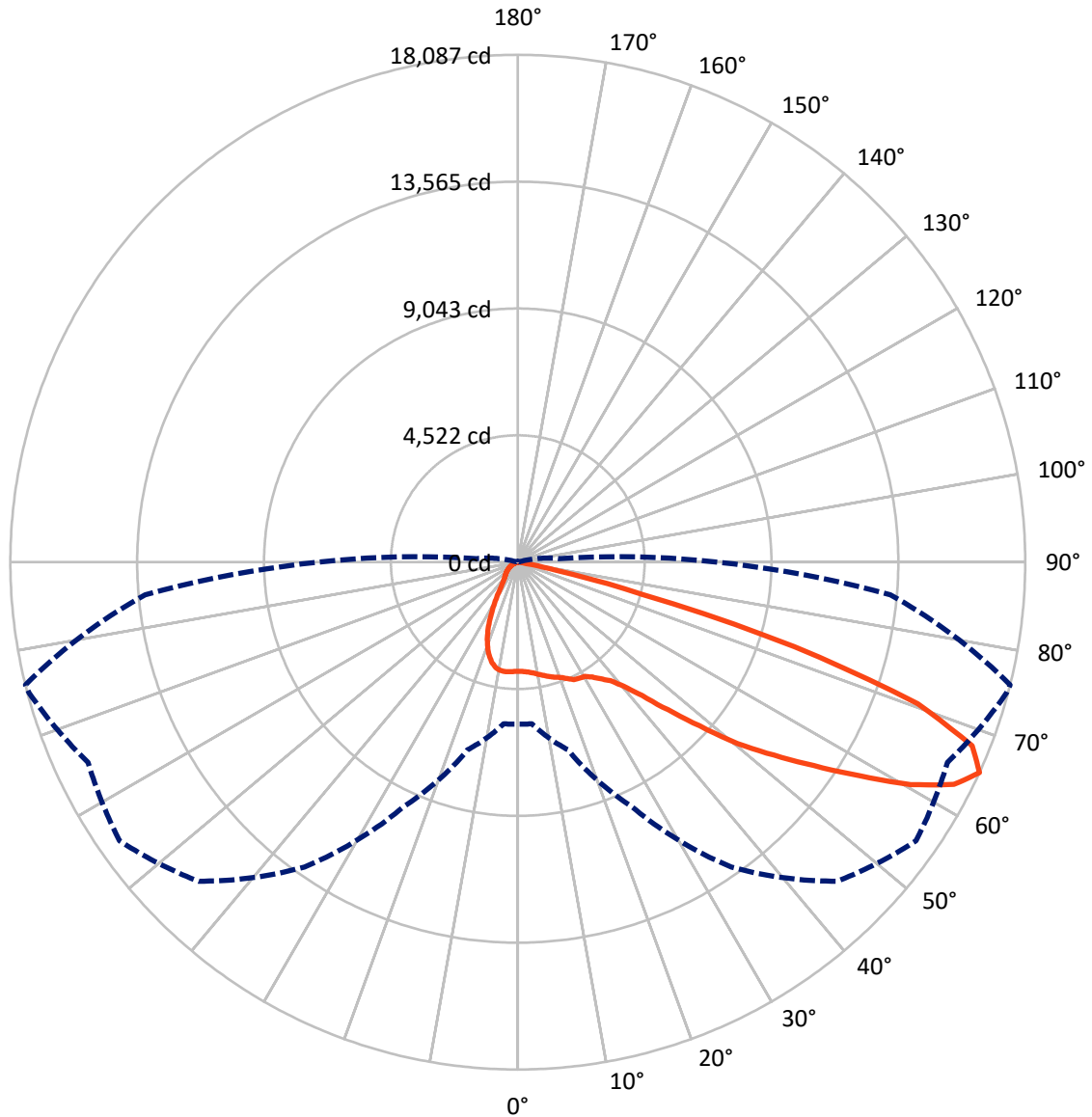
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1534.9	0.0	1534.9
	% Fixture	7.2	0.0	7.2
<b>Street Side</b>	Lumens	19719.0	0.0	19719.0
	% Fixture	92.8	0.0	92.8
<b>Total</b>	Lumens	21254.0	0.0	21254.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.3	1.5
10°-20°	713.1	3.4
20°-30°	1149.2	5.4
30°-40°	1998.1	9.4
40°-50°	3301.7	15.5
50°-60°	5100.5	24.0
60°-70°	6228.4	29.3
70°-80°	2363.8	11.1
80°-90°	78.9	0.4
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°	21254.0	100.0
0°-180°	21254.0	100.0

**Coefficient of Utilization**



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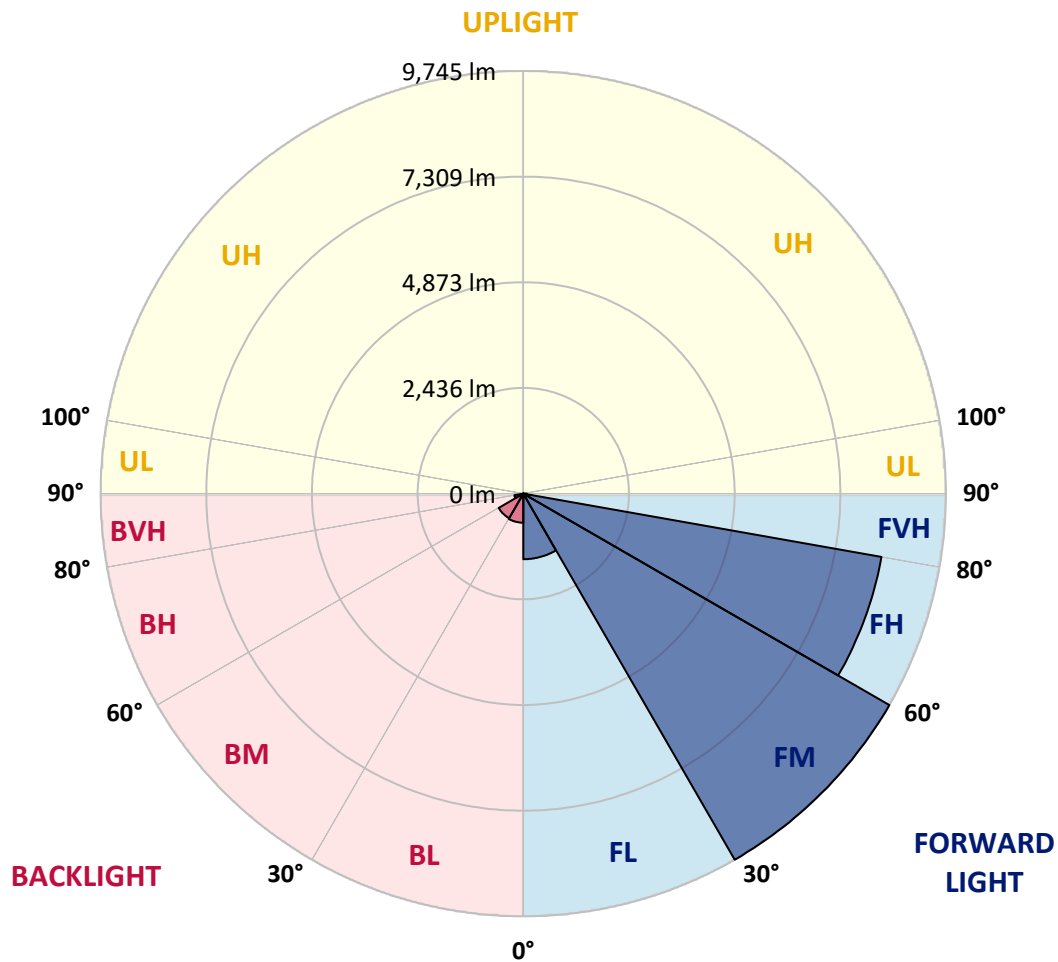
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1512.0	7.1			
FM (30°-60°)	9745.3	45.9			
FH (60°-80°)	8384.0	39.4			G4/12000
FVH (80°-90°)	77.8	0.4			G1/100
BL (0°-30°)	670.6	3.2	B2/1000		
BM (30°-60°)	655.0	3.1	B1/1000		
BH (60°-80°)	208.3	1.0	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0
2.5°	3715.5	3717.0	3726.0	3748.5	3783.0	3811.5	3835.5	3874.5	3901.5	3904.5	3913.5
5°	3458.9	3440.9	3458.9	3517.4	3569.9	3649.4	3747.0	3844.5	3931.6	3937.6	3979.6
7.5°	3170.8	3185.8	3214.3	3274.3	3373.3	3494.9	3635.9	3810.0	3975.1	3990.1	4072.6
10°	2878.1	2911.1	2957.7	3049.2	3187.3	3344.8	3536.9	3786.0	4044.1	4065.1	4207.7
12.5°	2608.0	2623.0	2680.1	2803.1	2974.2	3196.3	3461.9	3772.5	4120.6	4146.1	4351.7
15°	2400.9	2420.5	2470.0	2581.0	2771.6	3056.7	3400.3	3768.0	4195.7	4231.7	4495.8
17.5°	2361.9	2373.9	2394.9	2470.0	2636.5	2945.7	3344.8	3766.5	4267.7	4311.2	4629.3
20°	2522.5	2512.0	2491.0	2483.5	2575.0	2860.1	3304.3	3778.5	4336.7	4386.2	4770.4
22.5°	2924.7	2938.2	2815.1	2669.6	2639.5	2846.6	3298.3	3835.5	4446.3	4504.8	4927.9
25°	3778.5	3675.0	3482.9	3134.7	2872.1	2929.2	3365.8	3970.6	4573.8	4638.3	5070.5
27.5°	4722.4	4690.9	4392.2	3819.0	3329.8	3103.2	3485.9	4074.1	4615.8	4681.8	5151.5
30°	5649.7	5687.2	5345.1	4711.9	3994.6	3425.9	3598.4	4113.1	4653.3	4722.4	5255.1
32.5°	6509.6	6554.6	6254.5	5627.2	4777.9	3984.1	3792.0	4264.7	4810.9	4881.4	5427.6
35°	7186.3	7192.3	6965.7	6466.1	5633.2	4662.3	4210.7	4530.3	5024.0	5106.5	5610.7
37.5°	7807.6	7798.6	7533.0	7102.3	6346.0	5336.1	4737.4	4836.4	5267.1	5352.6	5874.8
40°	8268.3	8274.3	8188.7	7783.6	7010.8	5958.9	5154.5	5123.0	5675.2	5808.8	6259.0
42.5°	8575.9	8631.4	8673.4	8467.8	7846.6	6725.7	5795.3	5736.8	6383.5	6494.6	6802.2
45°	8825.0	8924.0	9134.1	9123.6	8649.4	7666.5	6674.6	6554.6	7387.4	7506.0	7494.0
47.5°	9006.6	9107.1	9455.2	9665.3	9404.2	8578.9	7780.6	7677.0	8586.4	8715.4	8257.8
50°	9099.6	9219.6	9663.8	10070.5	9993.9	9458.2	9041.1	9047.1	10034.5	10159.0	9143.1
52.5°	8882.0	9038.1	9774.9	10507.1	10655.7	10300.1	10222.0	10420.1	11323.5	11430.0	9942.9
55°	8187.2	8383.8	9623.3	10879.3	11422.5	11293.5	11563.6	11865.2	12732.5	12801.6	10763.7
57.5°	7747.6	7956.1	9176.1	11195.9	12343.9	12542.0	12969.6	13190.2	14186.6	14362.2	11706.1
60°	7376.9	7540.5	8808.5	11263.4	13280.2	14069.6	14485.2	14713.3	15981.3	16095.4	12743.0
62.5°	6760.2	6947.7	8187.2	10792.3	13751.4	15292.5	16153.9	16051.8	17369.4	17448.9	13379.3
65°	5768.3	5784.8	6926.7	9608.3	13265.2	16086.4	17325.8	16898.2	18032.6	18086.6	13329.8
67.5°	4305.2	4464.3	5328.6	7552.5	11204.9	15408.1	17705.5	16920.7	17614.0	17463.9	12271.8
70°	2773.1	2894.6	3611.9	5237.1	8079.2	12858.6	16446.5	15760.7	15459.1	15126.0	10045.0
72.5°	1280.0	1436.1	2145.8	2992.2	4791.4	9159.6	13350.8	12804.6	11126.9	10304.6	6385.0
75°	558.2	597.2	1059.4	1578.6	2246.4	4843.9	8802.5	7948.6	5025.5	4590.3	2555.5
77.5°	340.6	366.1	555.2	846.3	882.3	1845.7	4741.9	3467.9	1553.1	1370.0	693.3
80°	231.1	259.6	403.7	442.7	301.6	514.7	1779.7	925.9	313.6	300.1	148.6
82.5°	112.5	142.6	298.6	247.6	130.6	165.1	517.7	198.1	91.5	85.5	52.5
85°	16.5	28.5	168.1	162.1	58.5	39.0	91.5	49.5	31.5	30.0	24.0
87.5°	0.0	0.0	57.0	25.5	6.0	6.0	10.5	10.5	12.0	10.5	12.0
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°	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0	3888.0
2.5°	3918.0	3925.5	3897.0	3856.5	3813.0	3769.5	3708.0	3652.4	3619.4	3638.9	3590.9
5°	3988.6	3982.6	3907.5	3784.5	3620.9	3424.4	3229.3	3062.7	3008.7	2927.7	2918.7
7.5°	4086.1	4069.6	3910.5	3628.4	3259.3	2890.1	2530.0	2291.4	2154.9	2039.3	2042.3
10°	4222.7	4174.6	3876.0	3353.8	2746.1	2189.4	1730.2	1415.1	1278.5	1235.0	1200.5
12.5°	4363.7	4270.7	3780.0	2983.2	2138.3	1496.1	1051.9	859.8	775.8	748.8	745.8
15°	4489.8	4342.7	3611.9	2537.5	1554.6	955.9	717.3	654.3	643.8	645.3	643.8
17.5°	4614.3	4399.7	3379.3	2064.8	1056.4	685.8	616.7	601.7	606.2	612.2	610.7
20°	4717.9	4411.7	3082.2	1575.6	747.3	601.7	579.2	576.2	580.7	585.2	585.2
22.5°	4830.4	4420.7	2729.6	1090.9	610.7	559.7	547.7	547.7	553.7	559.7	561.2
25°	4914.4	4371.2	2307.9	783.3	538.7	519.2	513.2	514.7	520.7	523.7	522.2
27.5°	4927.9	4231.7	1860.7	600.2	489.2	469.7	463.7	469.7	462.2	466.7	463.7
30°	4940.0	4054.6	1407.6	505.7	444.2	414.2	405.2	396.2	390.2	382.7	381.2
32.5°	4977.5	3846.0	1027.9	454.7	402.2	369.1	348.1	322.6	303.1	297.1	295.6
35°	4994.0	3595.4	754.8	414.2	364.6	328.6	291.1	255.1	226.6	216.1	223.6
37.5°	5057.0	3352.3	585.2	384.2	331.6	286.6	238.6	193.6	166.6	160.6	163.6
40°	5186.0	3088.2	490.7	358.6	303.1	247.6	189.1	145.6	127.6	121.5	120.0
42.5°	5393.1	2825.6	436.7	334.6	274.6	208.6	148.6	114.0	99.0	94.5	94.5
45°	5645.2	2573.5	399.2	309.1	244.6	168.1	117.0	91.5	82.5	79.5	79.5
47.5°	5976.9	2352.9	367.6	283.6	211.6	133.6	94.5	79.5	73.5	75.0	76.5
50°	6313.0	2189.4	333.1	255.1	174.1	109.5	81.0	70.5	69.0	70.5	70.5
52.5°	6566.6	2093.3	286.6	216.1	136.6	91.5	72.0	66.0	64.5	61.5	61.5
55°	6908.7	2072.3	228.1	175.6	108.0	76.5	64.5	60.0	55.5	52.5	51.0
57.5°	7348.4	2096.3	175.6	136.6	84.0	63.0	57.0	49.5	43.5	37.5	37.5
60°	7621.5	2042.3	136.6	105.0	61.5	51.0	43.5	36.0	28.5	24.0	22.5
62.5°	7534.5	1814.2	108.0	78.0	43.5	37.5	28.5	24.0	16.5	12.0	10.5
65°	7085.8	1464.6	87.0	54.0	31.5	22.5	15.0	15.0	7.5	1.5	0.0
67.5°	6201.9	1084.9	69.0	36.0	18.0	10.5	7.5	4.5	0.0	0.0	0.0
70°	5048.0	783.3	54.0	22.5	10.5	7.5	3.0	1.5	0.0	0.0	0.0
72.5°	3205.3	448.7	42.0	13.5	7.5	3.0	0.0	0.0	0.0	0.0	0.0
75°	1239.5	175.6	28.5	9.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	351.1	82.5	16.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	91.5	36.0	9.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.5	15.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	25.5	6.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.0	1.5	0.0	0.0	0.0	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)