

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: P458870

Luminaire Tested: **GALN-SA4A-735-U-SL3**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458870  
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-735-U-SL3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3500K, 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: 16704 lumens  
Efficiency: N/A  
Efficacy: 138.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

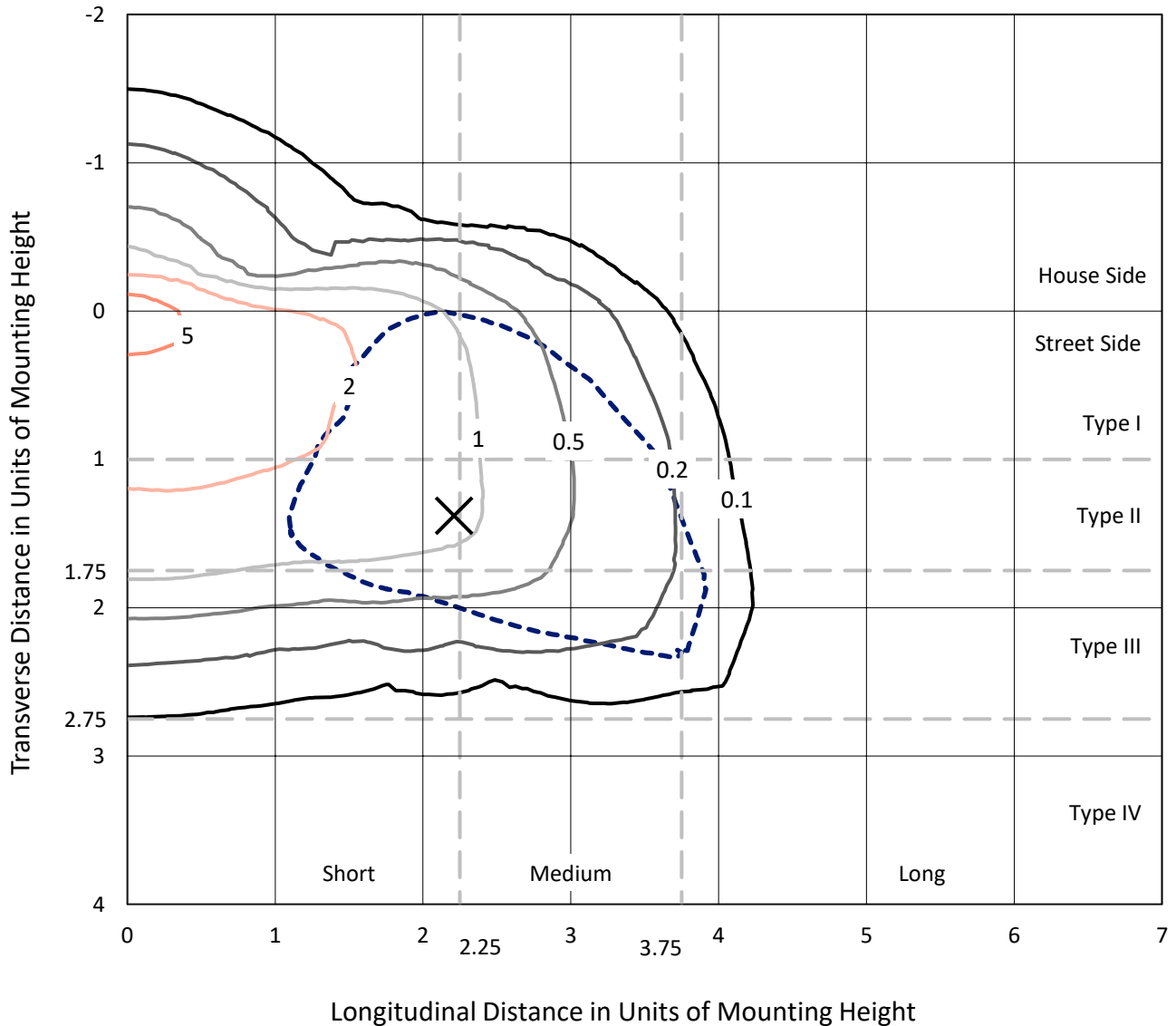
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

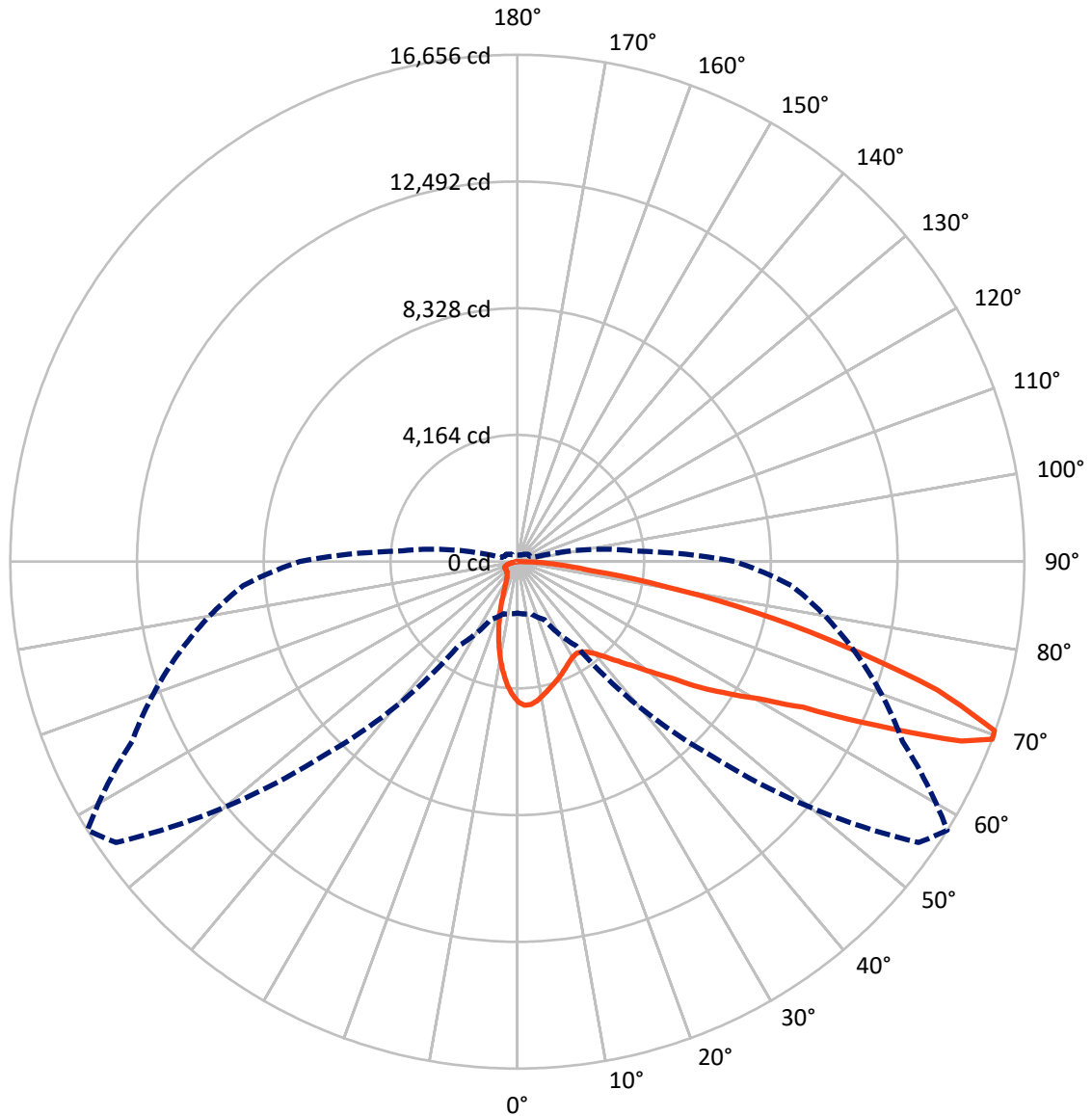
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 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	2448.0	0.0	2448.0
	% Fixture	14.7	0.0	14.7
<b>Street Side</b>	Lumens	14256.0	0.0	14256.0
	% Fixture	85.3	0.0	85.3
<b>Total</b>	Lumens	16704.0	0.0	16704.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	392.0	2.3
10°-20°	860.8	5.2
20°-30°	1112.2	6.7
30°-40°	1444.5	8.6
40°-50°	2100.0	12.6
50°-60°	3351.0	20.1
60°-70°	4476.5	26.8
70°-80°	2580.5	15.4
80°-90°	386.5	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°	16704.0	100.0
0°-180°	16704.0	100.0

**Coefficient of Utilization**



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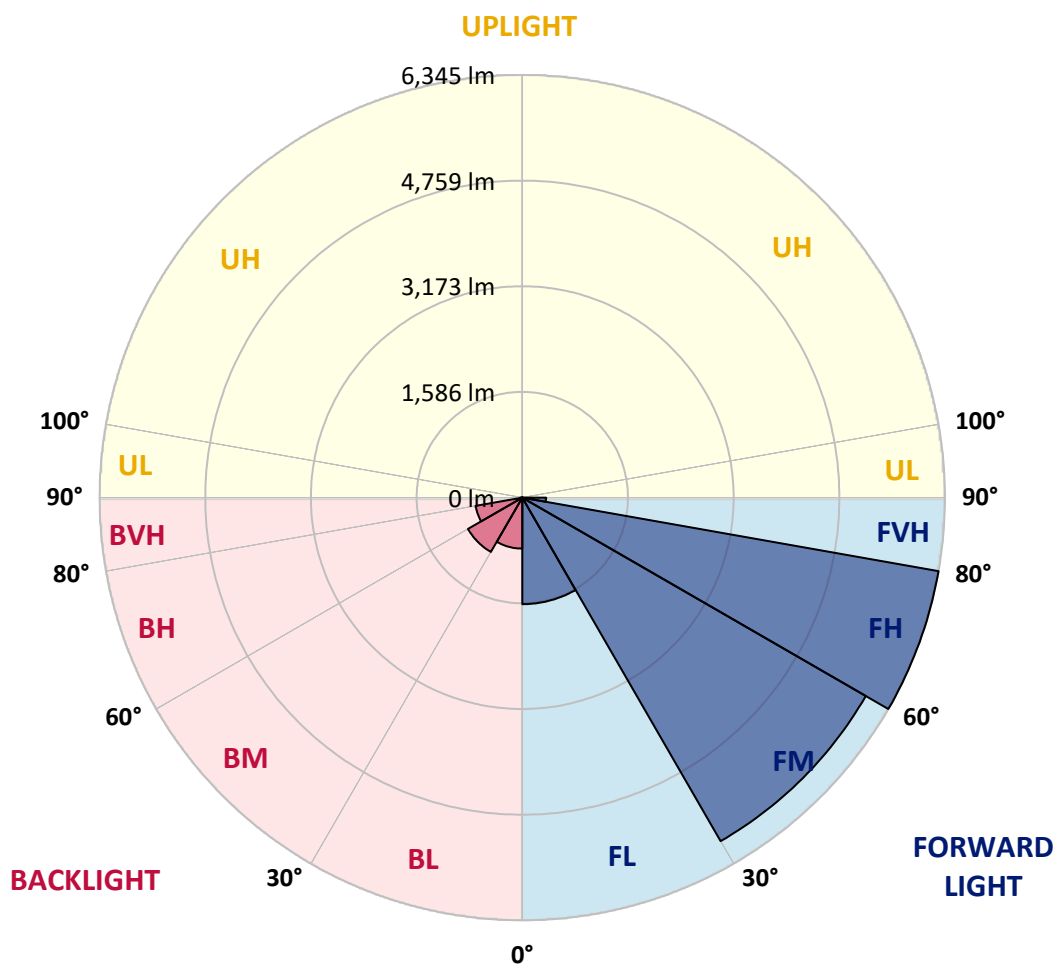
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1599.8	9.6			
FM	(30°-60°)	5954.1	35.6			
FH	(60°-80°)	6345.2	38.0			G3/7500
FVH	(80°-90°)	356.9	2.1			G3/500
BL	(0°-30°)	765.1	4.6	B2/1000		
BM	(30°-60°)	941.4	5.6	B1/1000		
BH	(60°-80°)	711.8	4.3	B2/1000		G2/1000
BVH	(80°-90°)	29.6	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°	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0
2.5°	4787.4	4800.5	4796.7	4792.1	4784.6	4764.1	4730.6	4725.0	4703.6	4657.9	4601.1
5°	4713.8	4725.0	4725.9	4732.5	4741.8	4738.0	4713.8	4711.0	4679.4	4617.9	4522.8
7.5°	4461.4	4476.3	4508.9	4545.2	4577.8	4608.6	4616.0	4620.7	4601.1	4530.3	4403.6
10°	4177.2	4192.1	4207.0	4261.1	4341.2	4417.6	4480.9	4489.3	4494.0	4428.8	4274.1
12.5°	3862.4	3893.1	3924.8	4004.9	4112.0	4232.2	4344.0	4361.7	4393.4	4344.0	4162.3
15°	3595.0	3626.7	3672.3	3744.0	3873.5	4046.8	4204.2	4233.1	4295.5	4270.4	4058.0
17.5°	3409.6	3420.8	3452.5	3534.4	3674.2	3856.8	4067.3	4125.1	4224.7	4218.2	3968.6
20°	3263.3	3277.3	3296.9	3347.2	3492.5	3685.4	3939.7	4014.2	4149.3	4171.6	3880.1
22.5°	3201.9	3212.1	3209.3	3236.3	3335.1	3528.8	3810.2	3898.7	4082.2	4140.0	3798.1
25°	3205.6	3214.9	3200.9	3194.4	3253.1	3391.0	3675.1	3787.8	4028.2	4118.5	3723.5
27.5°	3268.0	3274.5	3248.4	3222.4	3227.0	3305.3	3563.3	3688.1	3982.5	4127.9	3661.1
30°	3351.8	3364.0	3347.2	3315.5	3281.0	3284.8	3491.6	3614.6	3961.1	4160.5	3631.3
32.5°	3459.9	3471.1	3463.6	3438.5	3393.8	3344.4	3473.9	3587.5	3963.0	4226.6	3624.8
35°	3573.6	3595.9	3608.0	3606.2	3569.8	3484.1	3543.8	3637.8	4007.7	4337.5	3663.0
37.5°	3702.1	3720.8	3772.9	3806.5	3772.9	3673.2	3701.2	3766.4	4106.4	4497.7	3746.8
40°	3827.0	3854.9	3931.3	4035.6	4022.6	3935.0	3941.5	3984.4	4280.6	4736.2	3910.8
42.5°	3957.4	3990.9	4124.1	4278.8	4309.5	4241.5	4259.2	4297.4	4528.4	5066.9	4192.1
45°	4125.1	4165.1	4329.1	4521.9	4643.0	4601.1	4651.4	4670.0	4860.1	5497.3	4562.9
47.5°	4341.2	4387.8	4589.9	4830.3	5001.7	5039.9	5127.4	5116.3	5270.9	6006.9	5043.6
50°	4705.4	4731.5	4922.5	5167.5	5403.2	5575.5	5670.6	5688.3	5780.5	6502.5	5581.1
52.5°	5138.6	5161.9	5299.8	5514.1	5809.4	6174.6	6409.3	6351.6	6373.9	7106.1	6210.0
55°	5625.8	5665.0	5752.5	5895.1	6278.0	6815.5	7286.9	7300.8	7053.0	7683.7	6812.7
57.5°	6003.1	6069.3	6219.3	6422.4	6907.7	7528.1	8161.6	8170.9	7854.2	8300.4	7477.8
60°	5813.1	5891.3	6234.2	6728.8	7734.0	8771.8	9206.9	9153.8	8633.9	9002.8	8289.3
62.5°	4993.3	5007.3	5505.7	6278.9	7988.3	10435.6	10762.6	10538.1	9674.5	9893.4	9113.7
65°	3231.7	3323.0	3718.0	4801.4	7152.7	11358.8	13488.4	12969.5	11133.4	10904.2	9804.0
67.5°	2040.2	2016.9	2180.8	2741.7	4919.7	10545.6	15814.6	15732.6	13041.3	11542.3	9639.1
69°	1691.8	1717.8	1773.7	2101.7	3385.4	9003.8	16089.4	16655.8	13966.3	11492.0	9040.1
70°	1534.3	1546.4	1605.1	1863.2	2612.2	7541.2	15638.5	16630.7	14329.7	11281.5	8606.0
72.5°	1217.6	1216.7	1317.3	1550.2	1952.6	4304.9	12841.0	14438.6	13923.5	10301.5	7110.8
75°	925.1	940.0	1050.8	1311.7	1798.9	2352.3	8960.9	11119.4	11120.3	8136.5	4437.1
77.5°	667.0	676.3	805.8	1101.1	1694.6	1907.0	5968.7	7975.3	7497.4	3728.2	1394.6
80°	436.9	442.5	541.3	872.0	1527.8	1798.9	3539.1	4881.5	3536.3	989.3	461.1
82.5°	239.4	267.4	330.7	564.5	1226.0	1661.9	2151.0	2470.6	1326.6	440.6	240.3
85°	120.2	127.6	186.3	329.8	801.2	1375.0	1498.0	1416.9	684.7	218.9	124.8
87.5°	35.4	44.7	77.3	127.6	325.1	716.4	833.8	748.1	263.6	79.2	26.1
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°	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0	4616.0
2.5°	4577.8	4561.0	4486.5	4419.4	4358.0	4292.7	4237.8	4189.3	4194.0	4194.9	4145.6
5°	4473.5	4435.3	4293.7	4161.4	4049.6	3908.0	3786.9	3708.6	3669.5	3617.3	3636.0
7.5°	4331.9	4258.3	4061.7	3841.9	3636.0	3452.5	3253.1	3116.2	3028.6	2943.8	2955.0
10°	4185.6	4067.3	3781.3	3490.7	3224.2	2930.8	2676.4	2458.5	2296.4	2235.8	2195.7
12.5°	4035.6	3880.1	3516.7	3130.1	2762.2	2410.9	2050.4	1816.6	1637.7	1542.7	1554.8
15°	3898.7	3709.6	3241.0	2769.6	2291.7	1873.4	1513.8	1291.2	1166.3	1140.3	1155.2
17.5°	3772.0	3524.2	2982.9	2419.3	1861.3	1404.8	1137.5	1011.7	961.4	947.4	946.5
20°	3641.6	3366.8	2693.2	2044.8	1450.5	1089.0	933.4	874.8	865.4	871.0	872.0
22.5°	3509.3	3172.0	2395.1	1673.1	1155.2	890.6	816.1	800.2	807.7	820.7	822.6
25°	3387.2	3000.6	2108.2	1347.1	922.3	782.5	746.2	746.2	763.0	782.5	783.5
27.5°	3286.6	2834.8	1822.2	1069.5	772.3	704.3	692.2	698.7	722.0	736.9	737.8
30°	3203.7	2680.2	1552.0	857.1	679.1	641.9	639.1	650.2	667.0	681.0	681.9
32.5°	3141.3	2544.2	1299.6	720.1	614.8	594.4	593.4	601.8	611.1	614.8	618.6
35°	3117.1	2431.4	1068.5	633.5	572.0	559.0	559.0	558.0	561.7	563.6	565.5
37.5°	3136.6	2344.8	889.7	577.6	540.3	531.0	525.4	519.8	518.0	518.0	518.9
40°	3219.6	2299.2	756.4	541.3	518.0	504.0	493.7	487.2	480.7	482.6	484.4
42.5°	3395.6	2307.5	666.1	517.0	498.4	478.8	463.9	456.5	451.8	457.4	456.5
45°	3676.0	2391.4	608.3	500.3	478.8	453.7	439.7	432.3	432.3	440.6	443.4
47.5°	4068.2	2551.6	577.6	487.2	463.9	434.1	420.1	414.6	416.4	430.4	431.3
50°	4547.1	2830.2	572.0	480.7	456.5	420.1	404.3	398.7	403.4	418.3	420.1
52.5°	5075.3	3188.8	599.0	481.6	450.0	411.8	391.3	382.9	387.5	399.7	403.4
55°	5701.3	3637.8	668.9	485.4	440.6	407.1	382.0	363.3	368.9	377.3	378.2
57.5°	6340.4	4204.2	791.8	486.3	433.2	398.7	366.1	341.9	341.9	347.5	350.3
60°	7121.0	4821.0	953.9	487.2	434.1	386.6	344.7	317.7	313.9	316.7	317.7
62.5°	7896.1	5337.1	981.0	484.4	443.4	374.5	321.4	293.4	286.9	286.0	284.1
65°	8238.0	5241.1	804.0	471.4	453.7	367.0	302.8	270.2	259.0	255.3	255.3
67.5°	7680.9	4433.4	604.6	453.7	447.2	359.6	285.1	250.6	237.6	230.1	230.1
69°	7157.4	3943.4	543.1	441.6	430.4	347.5	273.9	240.3	224.5	216.1	213.3
70°	6753.1	3606.2	517.0	431.3	414.6	333.5	265.5	232.9	215.2	205.9	204.0
72.5°	5389.2	2829.2	452.8	392.2	353.1	280.4	235.7	209.6	192.8	182.6	179.8
75°	3105.9	1533.4	375.4	341.0	284.1	218.0	199.4	182.6	169.5	160.2	157.4
77.5°	955.8	592.5	272.0	269.2	208.7	168.6	159.3	152.8	143.5	133.2	131.4
80°	402.4	301.8	184.5	181.7	138.8	117.4	114.6	113.7	109.9	101.5	98.7
82.5°	220.8	170.5	128.6	111.8	83.8	68.0	70.8	71.7	68.9	60.6	55.0
85°	108.1	93.2	62.4	50.3	38.2	24.2	23.3	27.9	26.1	18.6	20.5
87.5°	21.4	26.1	16.8	7.5	3.7	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)