

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: P459431

Luminaire Tested: **GALN-SA8D-735-U-T2R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459431  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA8D-735-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46590 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G4

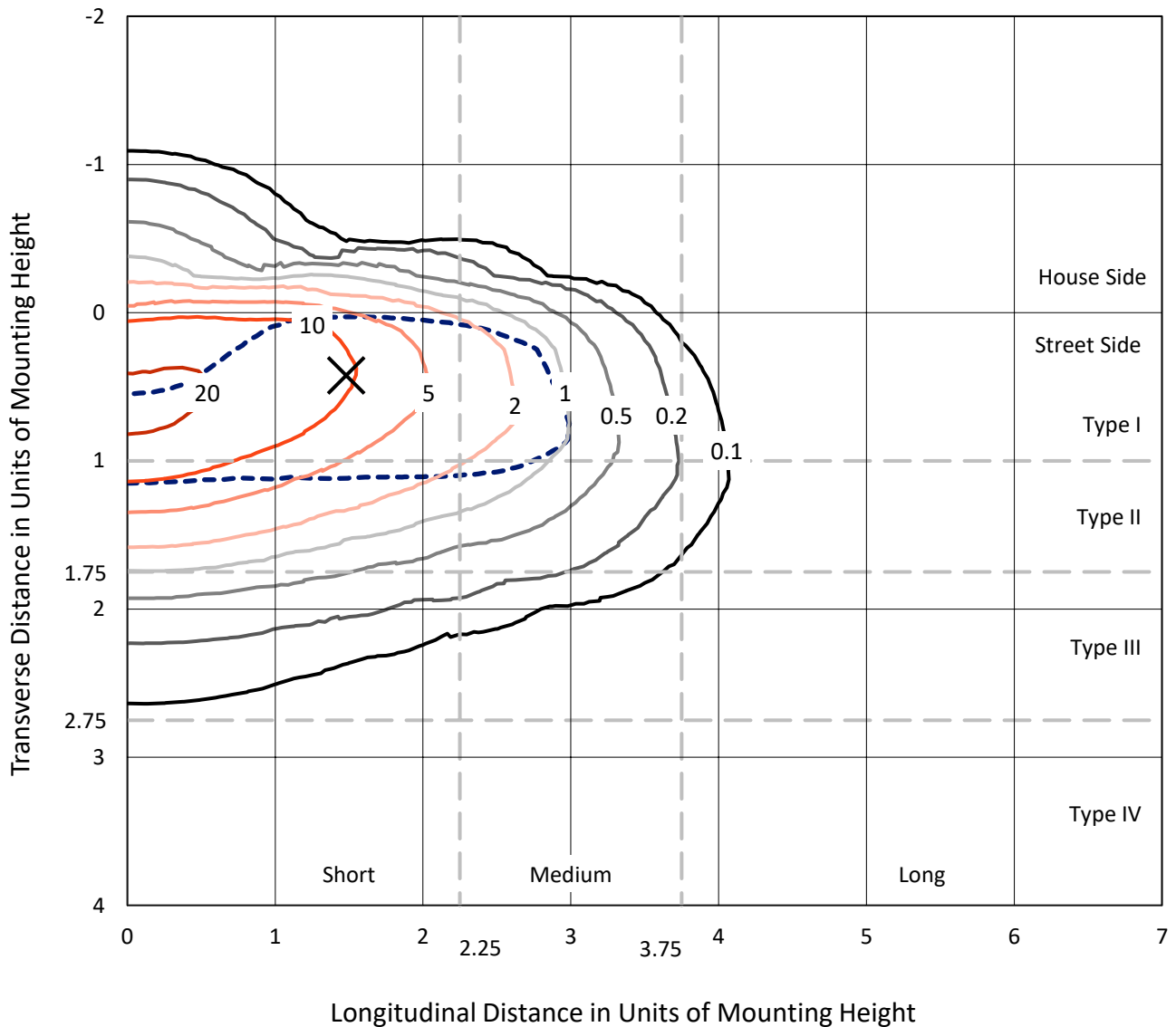
Input Watts (W): 493  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

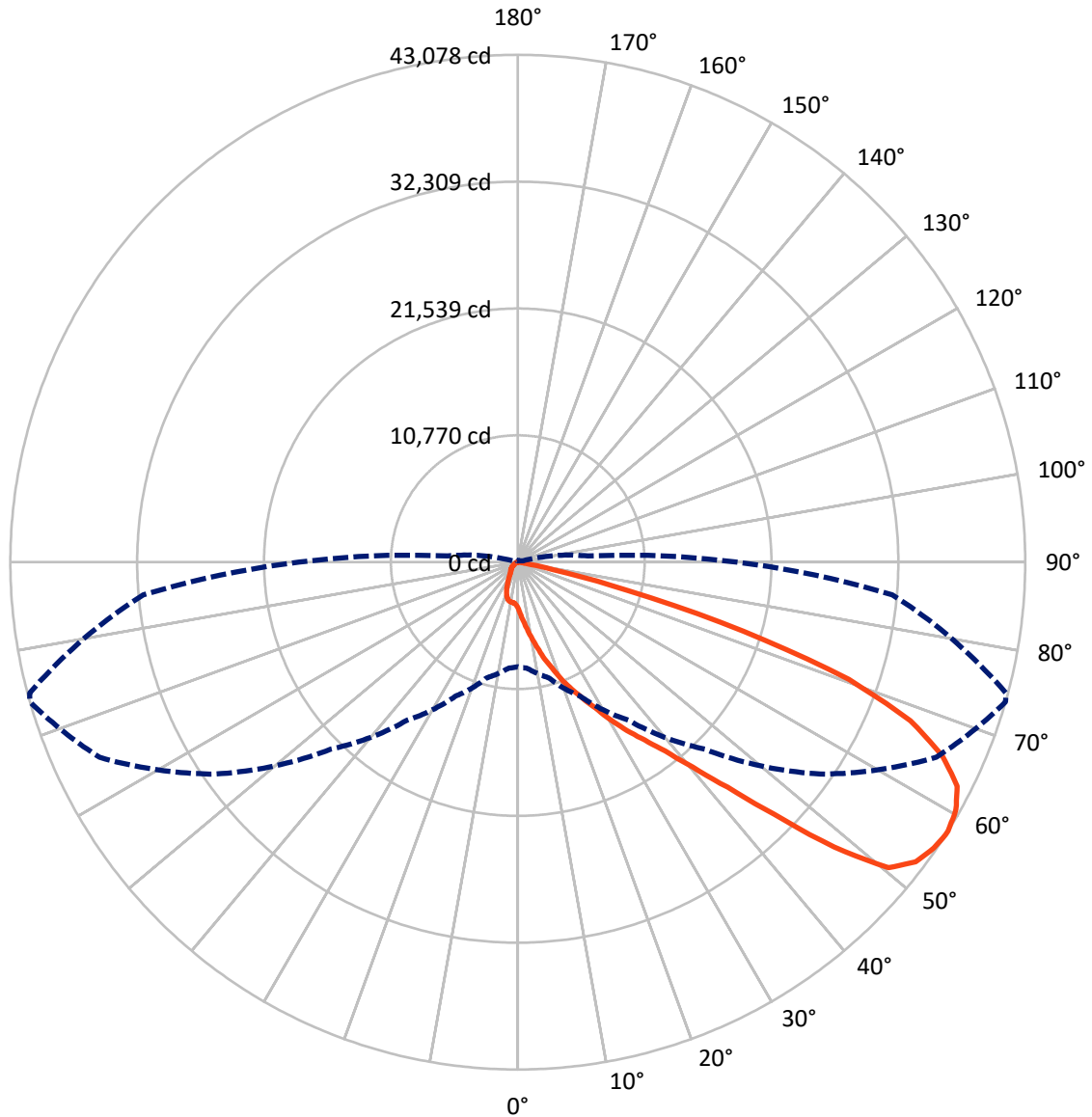
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 57-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2687.2	0.0	2687.2
	% Fixture	5.8	0.0	5.8
<b>Street Side</b>	Lumens	43902.8	0.0	43902.8
	% Fixture	94.2	0.0	94.2
<b>Total</b>	Lumens	46590.0	0.0	46590.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	471.0	1.0
10°-20°	1856.3	4.0
20°-30°	3972.1	8.5
30°-40°	7300.7	15.7
40°-50°	11192.1	24.0
50°-60°	11839.8	25.4
60°-70°	7731.7	16.6
70°-80°	2112.6	4.5
80°-90°	113.7	0.2
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°	46590.0	100.0
0°-180°	46590.0	100.0

**Coefficient of Utilization**



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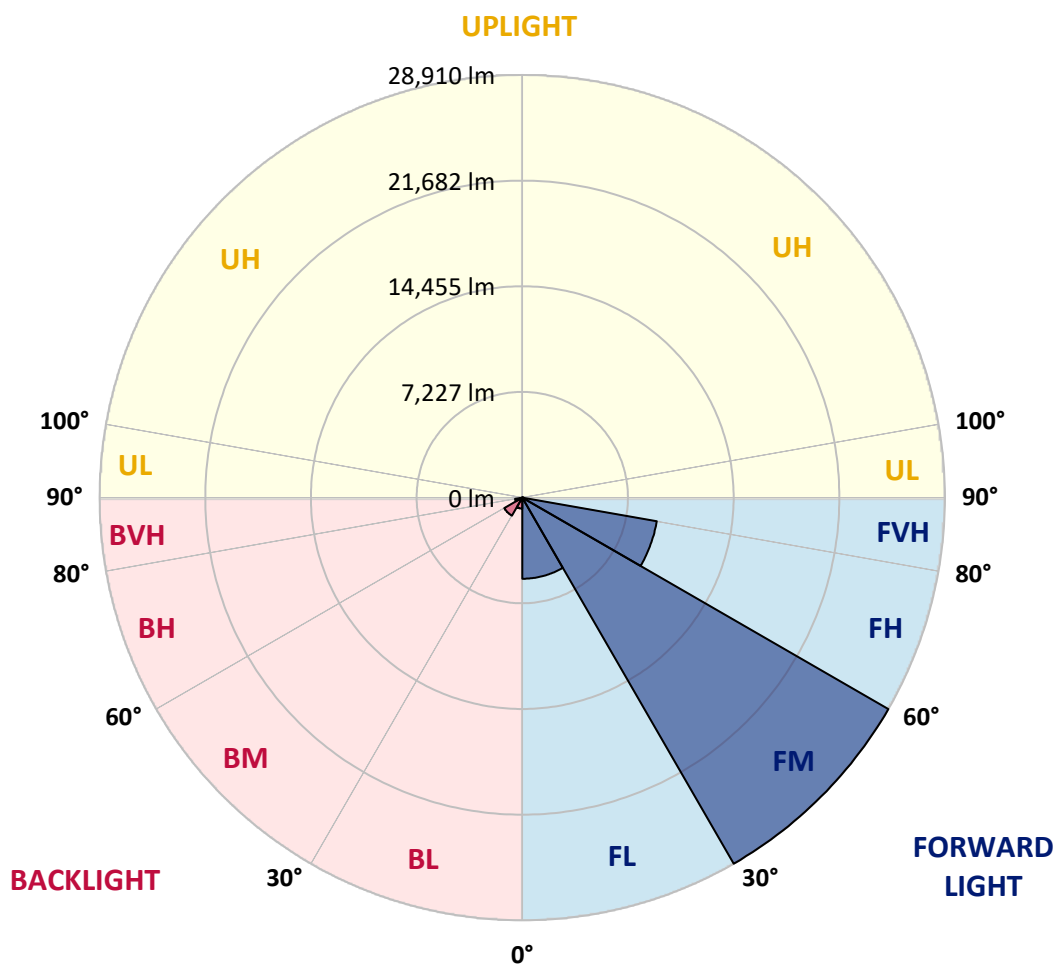
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5548.8	11.9			
FM	(30°-60°)	28910.0	62.1			
FH	(60°-80°)	9339.8	20.0			G4/12000
FVH	(80°-90°)	104.3	0.2			G2/225
BL	(0°-30°)	750.6	1.6	B2/1000		
BM	(30°-60°)	1422.6	3.1	B2/2500		
BH	(60°-80°)	504.5	1.1	B2/1000		G2/1000
BVH	(80°-90°)	9.4	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9
2.5°	5709.6	5658.2	5555.2	5519.8	5368.7	5133.8	4928.0	4651.3	4432.6	4410.1	4146.3
5°	7646.1	7530.3	7482.0	7250.4	6886.9	6546.0	5960.5	5516.6	5005.2	4966.6	4435.8
7.5°	9511.8	9350.9	9302.7	9083.9	8659.3	8122.2	7363.0	6555.6	5745.0	5671.0	4825.0
10°	10862.8	10885.3	10798.4	10653.7	10309.5	9762.7	8826.6	7723.3	6568.5	6475.2	5262.5
12.5°	11831.0	11827.8	11843.9	11840.7	11657.3	11242.4	10258.0	8987.4	7475.6	7292.2	5764.3
15°	12461.5	12471.1	12519.4	12686.6	12705.9	12448.6	11628.4	10196.9	8527.5	8299.1	6307.9
17.5°	13098.4	13165.9	13243.1	13400.8	13542.3	13439.4	12860.3	11457.9	9479.6	9309.1	6890.2
20°	14150.2	14243.5	14198.5	14295.0	14369.0	14378.6	13931.5	12622.3	10634.4	10348.1	7556.0
22.5°	15832.6	15829.4	15713.6	15539.9	15395.1	15388.7	14983.4	13818.9	11683.0	11406.4	8225.1
25°	17958.8	17968.5	17743.3	17247.9	16887.7	16447.0	15980.5	14867.6	12805.7	12464.7	8929.5
27.5°	20397.1	20335.9	19995.0	19313.0	18598.9	17846.2	17173.9	16086.7	13995.8	13712.8	9736.9
30°	22587.6	22565.1	22166.2	21333.1	20393.9	19637.9	18663.3	17614.6	15536.6	15189.2	10640.8
32.5°	24627.0	24659.2	24105.9	23243.8	22336.7	21465.0	20435.7	19075.0	17048.5	16556.3	11625.1
35°	26219.3	26251.5	25678.9	24961.6	24028.7	23305.0	22323.9	20631.9	18541.0	18126.1	12757.4
37.5°	27068.5	27110.3	26779.0	26238.6	25656.4	25292.9	24379.3	22635.9	20355.3	20104.3	14095.6
40°	27229.3	27277.6	27132.8	26988.1	26955.9	27216.5	26949.5	24996.9	22870.7	22478.3	16089.9
42.5°	26746.8	26811.2	26875.5	27197.2	27853.4	28808.7	29738.4	28200.8	26109.9	25582.4	18528.2
45°	25479.4	25473.0	25727.1	26560.3	28030.3	30069.7	32652.7	32212.0	30523.2	29896.0	21973.2
47.5°	23311.4	23279.2	23829.3	25016.2	27306.5	30301.3	35029.8	37082.1	36155.7	35576.7	25675.7
50°	20007.8	20165.5	21030.8	22687.4	25508.4	29600.0	35763.2	40276.2	40778.1	40163.7	28667.2
52.5°	16138.2	16131.7	17489.2	19737.6	22845.0	28056.0	35251.8	40855.3	42280.2	41810.6	30140.4
55°	11943.6	12027.2	13439.4	15707.1	19387.0	25238.2	33582.3	40260.2	42852.8	42521.5	31111.9
57°	8884.5	9032.5	10164.8	12564.4	16376.2	22449.3	31359.6	39195.4	43078.0	42897.9	31919.3
57.5°	8292.6	8299.1	9402.4	11583.3	15494.8	21378.2	30722.7	38751.5	43071.6	42971.8	32051.2
60°	5104.9	5265.7	6028.1	7829.4	11342.1	16685.0	26454.1	36200.7	42737.0	42881.8	32614.1
62.5°	3055.9	3123.4	3618.8	4718.9	7311.5	12178.4	21648.4	32935.7	41865.3	42306.0	32575.5
65°	1965.4	1981.5	2206.7	2856.4	4570.9	8231.5	16681.8	28622.2	39610.4	40421.0	31301.7
67.5°	1518.3	1544.0	1634.1	1875.3	2650.6	5127.4	11798.8	24019.1	35962.7	37008.1	28213.6
70°	1347.8	1360.7	1392.8	1470.0	1753.1	2895.0	7340.5	18763.0	29822.0	30117.9	22079.4
72.5°	1100.1	1135.5	1235.2	1260.9	1389.6	1807.8	4085.2	12593.4	20036.8	20110.8	12352.1
75°	852.4	858.9	1006.8	1080.8	1170.9	1244.9	1823.9	6349.8	9624.4	9109.7	4760.7
77.5°	636.9	665.9	733.4	826.7	955.4	891.0	817.0	2393.2	2988.3	2933.6	1383.2
80°	408.5	424.6	511.5	620.8	743.1	582.2	460.0	701.2	656.2	675.5	331.3
82.5°	205.9	209.1	328.1	505.0	472.9	292.7	289.5	286.3	244.5	241.3	154.4
85°	22.5	48.3	212.3	289.5	212.3	96.5	135.1	131.9	128.7	131.9	90.1
87.5°	3.2	3.2	35.4	41.8	29.0	32.2	38.6	41.8	51.5	48.3	38.6
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°	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9	3901.9
2.5°	4017.7	3889.0	3650.9	3422.6	3252.1	3142.7	3001.2	2949.7	2875.7	2866.1	2830.7
5°	4191.4	3946.9	3531.9	3203.8	2940.1	2740.6	2566.9	2422.2	2306.4	2280.6	2293.5
7.5°	4439.0	4075.6	3496.5	3049.4	2682.7	2341.8	2065.1	1894.6	1772.4	1727.4	1733.8
10°	4718.9	4246.0	3490.1	2885.4	2325.7	1907.5	1605.1	1453.9	1383.2	1357.4	1328.5
12.5°	5050.2	4442.3	3474.0	2631.3	1933.2	1521.5	1306.0	1215.9	1148.4	1129.1	1129.1
15°	5423.3	4651.3	3396.8	2316.0	1569.7	1257.7	1113.0	1042.2	1019.7	1000.4	1000.4
17.5°	5812.6	4857.2	3236.0	1926.8	1302.8	1077.6	987.5	945.7	913.5	891.0	891.0
20°	6256.5	5059.9	2978.7	1582.6	1100.1	961.8	891.0	842.8	817.0	797.7	791.3
22.5°	6677.9	5223.9	2650.6	1299.5	958.6	865.3	801.0	749.5	723.8	714.1	714.1
25°	7115.3	5323.6	2254.9	1074.4	874.9	784.9	714.1	672.3	649.8	643.3	640.1
27.5°	7539.9	5381.5	1907.5	939.3	797.7	710.9	643.3	611.2	588.7	582.2	585.4
30°	8054.6	5391.2	1569.7	842.8	730.2	640.1	579.0	550.1	537.2	530.8	527.5
32.5°	8575.7	5378.3	1318.8	784.9	665.9	579.0	527.5	505.0	495.4	485.7	485.7
35°	9161.1	5310.8	1122.6	727.0	604.7	527.5	482.5	463.2	450.3	440.7	437.5
37.5°	9888.1	5275.4	1010.0	662.6	550.1	479.3	437.5	418.2	408.5	395.7	392.4
40°	11033.3	5433.0	974.7	604.7	495.4	434.3	395.7	373.1	360.3	347.4	344.2
42.5°	12461.5	5709.6	916.8	546.8	447.1	392.4	353.8	328.1	305.6	289.5	283.1
45°	14311.1	6073.1	826.7	485.7	405.3	347.4	312.0	279.9	250.9	238.0	234.8
47.5°	16250.7	6423.7	746.3	437.5	360.3	308.8	270.2	234.8	209.1	199.4	196.2
50°	17440.9	6494.5	694.8	382.8	315.2	267.0	228.4	196.2	180.1	170.5	170.5
52.5°	17984.5	6381.9	624.0	334.5	273.4	234.8	196.2	170.5	160.8	154.4	151.2
55°	18364.1	6208.2	530.8	289.5	234.8	199.4	173.7	154.4	141.5	135.1	131.9
57°	18586.1	5973.4	460.0	254.1	202.7	173.7	154.4	138.3	125.5	112.6	112.6
57.5°	18595.7	5883.3	440.7	250.9	193.0	167.3	151.2	135.1	119.0	106.2	102.9
60°	18309.4	5265.7	353.8	212.3	154.4	141.5	125.5	106.2	83.6	70.8	67.6
62.5°	17389.5	4480.9	292.7	180.1	125.5	109.4	90.1	80.4	57.9	41.8	41.8
65°	15996.6	3634.9	250.9	144.8	102.9	80.4	61.1	57.9	35.4	19.3	16.1
67.5°	13983.0	2830.7	212.3	119.0	86.9	57.9	41.8	38.6	19.3	6.4	0.0
70°	10653.7	1930.0	176.9	96.5	64.3	41.8	29.0	22.5	12.9	3.2	0.0
72.5°	6140.7	1061.5	148.0	74.0	48.3	32.2	22.5	12.9	12.9	0.0	0.0
75°	2193.8	456.8	112.6	54.7	38.6	25.7	16.1	6.4	9.7	3.2	0.0
77.5°	698.0	244.5	74.0	41.8	32.2	19.3	12.9	6.4	6.4	3.2	0.0
80°	205.9	128.7	45.0	35.4	22.5	16.1	9.7	3.2	6.4	3.2	0.0
82.5°	112.6	64.3	35.4	25.7	22.5	12.9	9.7	3.2	3.2	3.2	0.0
85°	57.9	38.6	29.0	25.7	22.5	12.9	9.7	3.2	0.0	3.2	3.2
87.5°	32.2	29.0	29.0	25.7	22.5	16.1	9.7	3.2	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)