

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: P299617

Luminaire Tested: **GLNA-AF-08-LED-E1-SL2-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299617  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-08-LED-E1-SL2-7027-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

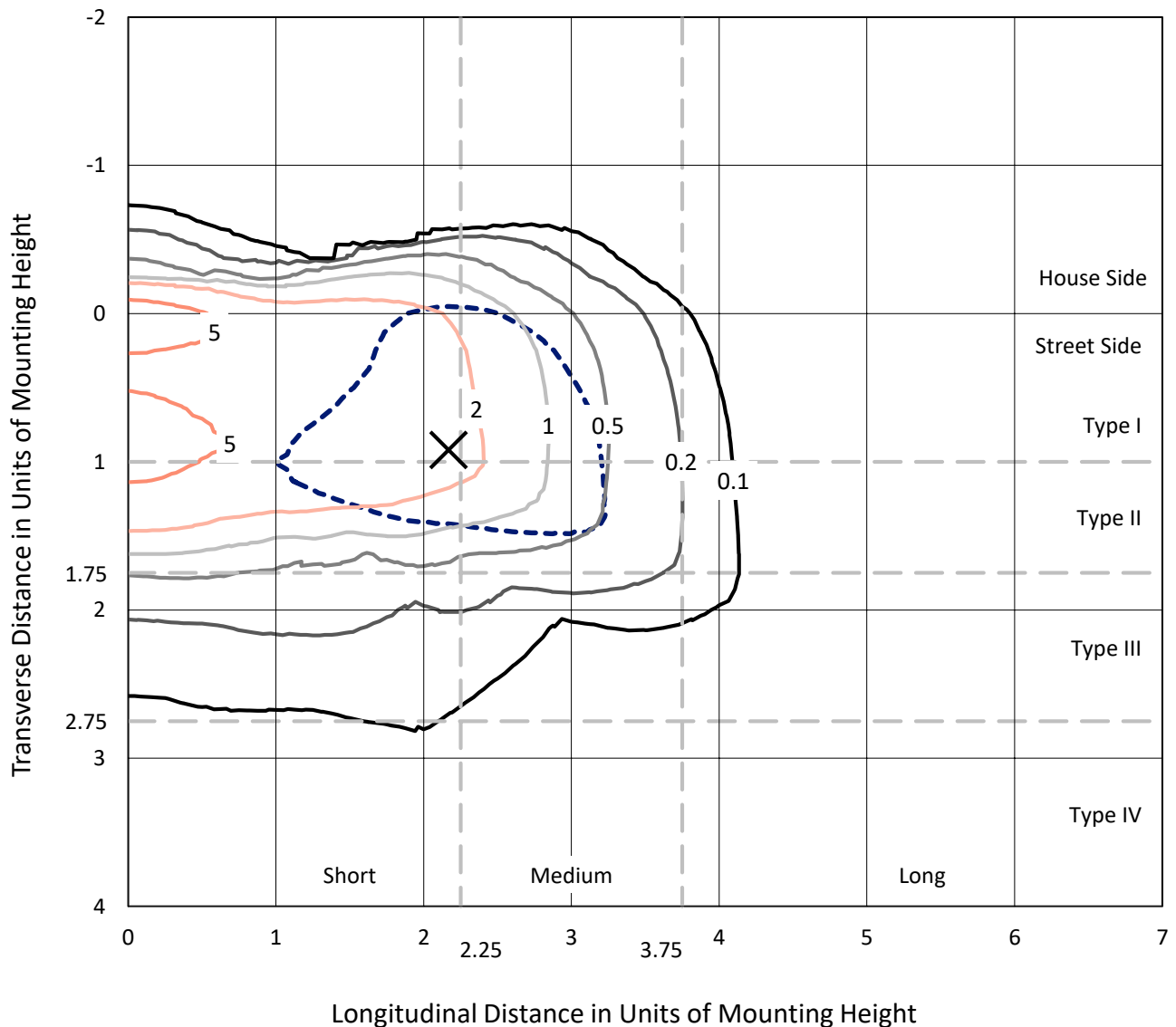
Lumens per Lamp: N/A  
Luminaire Lumens: 31184.5 lumens  
Efficiency: N/A  
Efficacy: 70.1 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (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: 25 FT



REPORT NUMBER: P299617  
 CATALOG NUMBER: GLNA-AF-08-LED-E1-SL2-7027-HSS

### Iso-Footcandle Lines of Horizontal Illumination

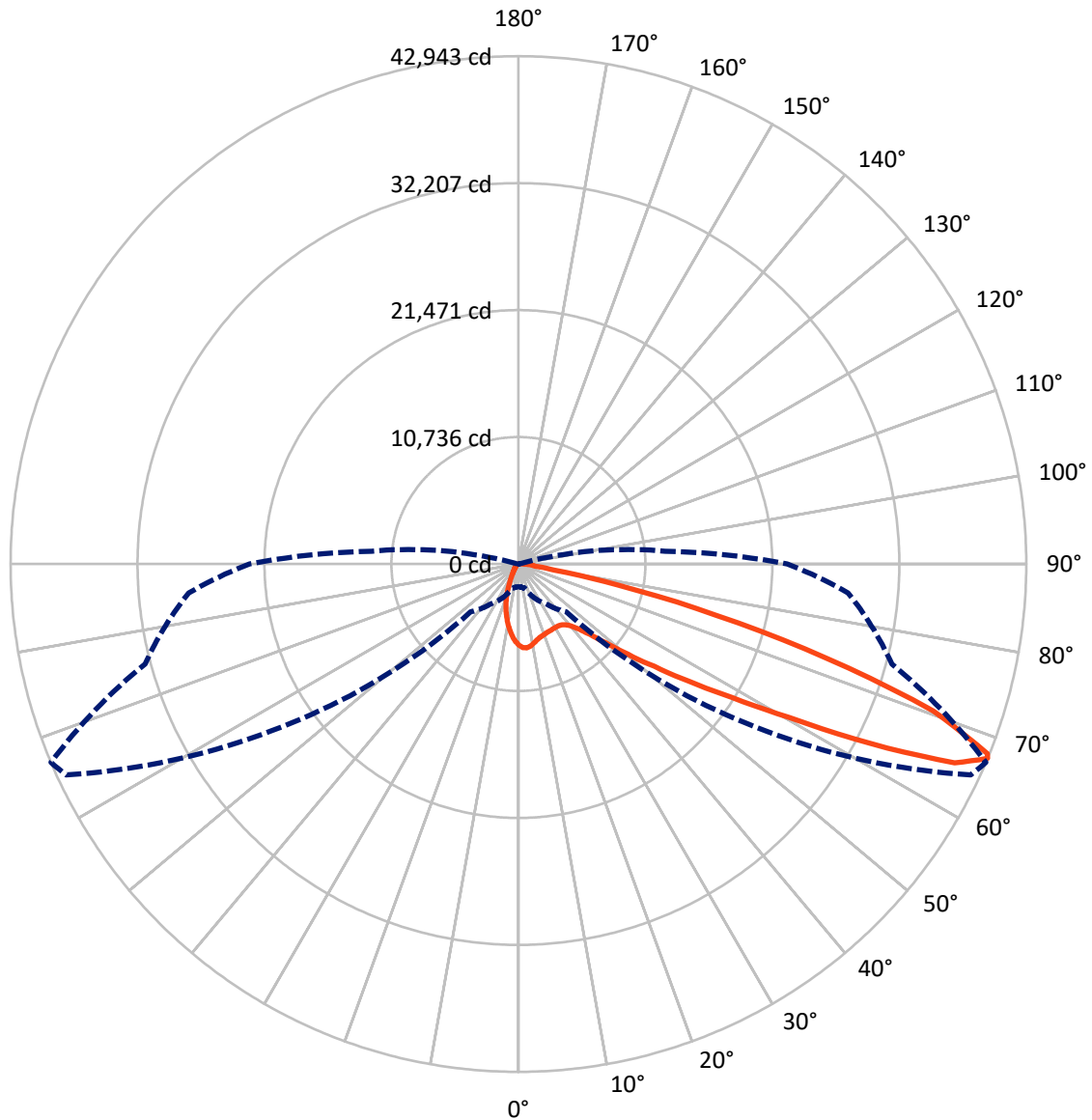
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.6 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299617  
CATALOG NUMBER: GLNA-AF-08-LED-E1-SL2-7027-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P299617

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL2-7027-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3237.9	0.0	3237.9
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	27946.6	0.0	27946.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	31184.5	0.0	31184.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	559.6	1.8
10°-20°	1191.0	3.8
20°-30°	1731.7	5.6
30°-40°	2701.5	8.7
40°-50°	4785.5	15.3
50°-60°	7572.6	24.3
60°-70°	8673.4	27.8
70°-80°	3597.7	11.5
80°-90°	371.6	1.2
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°	31184.5	100.0
0°-180°	31184.5	100.0

**Coefficient of Utilization**



REPORT NUMBER: P299617

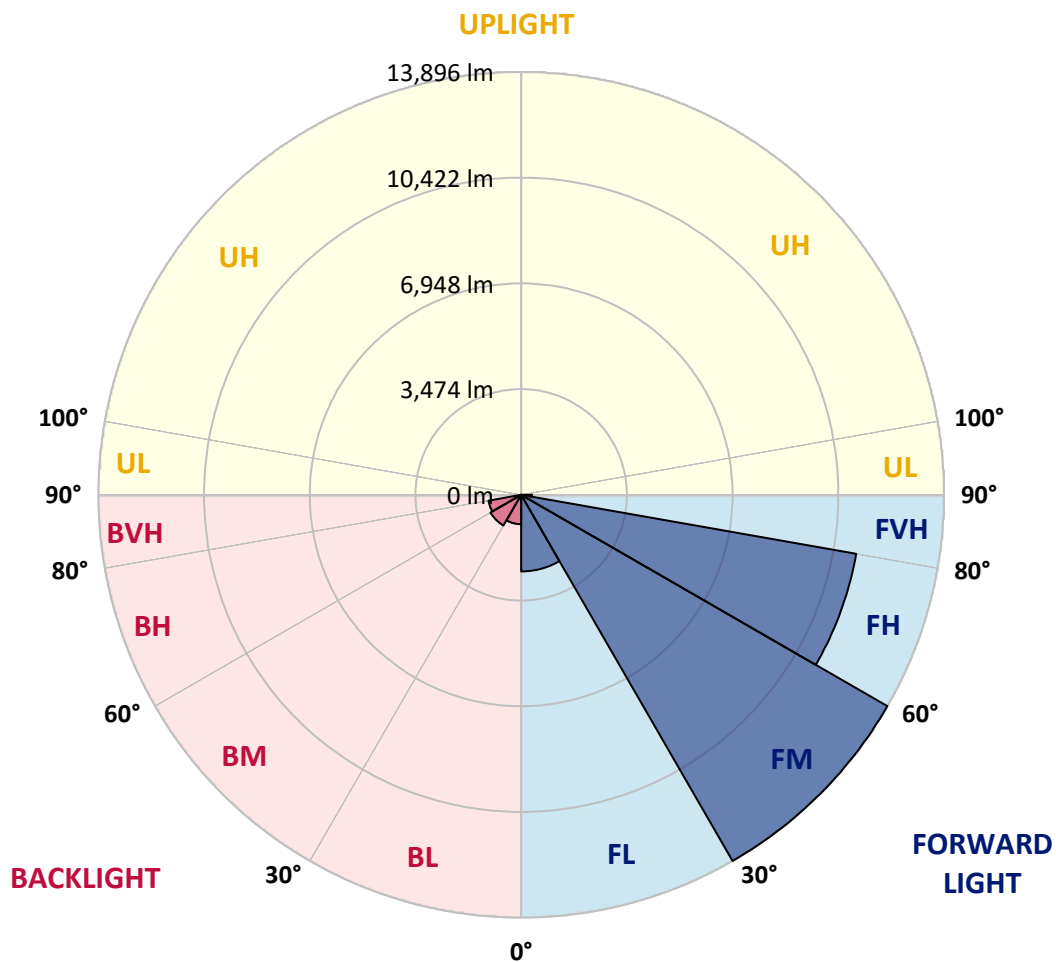
CATALOG NUMBER: GLNA-AF-08-LED-E1-SL2-7027-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2516.1	8.1			
FM (30°-60°)	13895.9	44.6			
FH (60°-80°)	11179.7	35.9			G4/12000
FVH (80°-90°)	354.9	1.1			G3/500
BL (0°-30°)	966.2	3.1	B2/1000		
BM (30°-60°)	1163.7	3.7	B2/2500		
BH (60°-80°)	1091.3	3.5	B3/2500		G3/2500
BVH (80°-90°)	16.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short





REPORT NUMBER: P299617

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL2-7027-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3
2.5°	7110.2	7124.7	7122.9	7133.8	7159.3	7161.1	7135.6	7086.5	7075.6	7011.9	6901.0
5°	6557.2	6599.0	6624.5	6728.2	6844.6	6984.7	7090.2	7128.4	7122.9	7077.4	6910.1
7.5°	5926.0	5967.9	5997.0	6118.9	6273.5	6513.6	6788.2	7013.8	7033.8	7082.9	6902.8
10°	5505.9	5513.1	5553.2	5669.6	5831.5	6077.0	6404.4	6799.1	6859.2	7039.2	6884.6
12.5°	5160.3	5165.7	5218.5	5344.0	5516.8	5764.2	6107.9	6564.5	6657.3	6984.7	6881.0
15°	4914.7	4934.7	4982.0	5113.0	5296.7	5542.3	5895.1	6391.7	6502.6	6964.6	6913.7
17.5°	4832.9	4854.7	4869.3	4963.8	5131.2	5371.3	5733.2	6278.9	6404.4	6975.6	6977.4
20°	4918.4	4934.7	4902.0	4925.6	5029.3	5243.9	5596.8	6182.5	6331.7	6988.3	7059.2
22.5°	5236.7	5243.9	5154.8	5051.1	5033.0	5151.2	5489.5	6106.1	6266.2	7022.9	7155.6
25°	5782.3	5769.6	5624.1	5400.4	5189.4	5134.8	5425.8	6058.8	6233.4	7059.2	7255.7
27.5°	6440.8	6459.0	6258.9	5933.3	5531.3	5243.9	5416.7	6038.8	6218.9	7084.7	7343.0
30°	7241.1	7266.6	7037.4	6628.1	6051.6	5513.1	5500.4	6035.2	6209.8	7068.3	7350.3
32.5°	8057.8	8088.7	7908.7	7486.7	6746.4	5964.2	5689.6	6075.2	6228.0	7011.9	7308.4
35°	8912.7	8956.4	8836.3	8474.4	7688.6	6615.4	6022.4	6197.1	6313.5	7006.5	7266.6
37.5°	10093.2	10133.2	9907.7	9523.9	8829.0	7488.5	6557.2	6426.2	6515.4	7093.8	7277.5
40°	11855.7	11850.3	11268.2	10680.7	10082.3	8598.0	7308.4	6841.0	6886.4	7357.5	7412.1
42.5°	13776.5	13767.4	12907.1	12014.0	11473.8	9964.0	8296.1	7557.6	7526.7	7843.2	7761.3
45°	15257.1	15255.3	14553.2	13547.3	13149.0	11532.0	9573.0	8554.4	8507.1	8632.6	8405.2
47.5°	15888.3	15899.2	15546.3	14838.8	15006.1	13652.8	11182.7	9998.6	9927.7	9876.7	9531.1
50°	15397.2	15419.0	15448.1	15309.9	16368.5	16503.1	13341.8	12034.0	11999.4	11772.1	11231.8
52.5°	13792.9	13903.8	14245.8	14684.1	16841.4	19238.7	16726.8	14562.3	14376.8	14134.8	13540.0
55°	11090.0	11211.8	11861.2	12925.3	16137.5	21035.8	21470.5	17821.8	17512.6	16790.5	15931.9
57.5°	7339.3	7528.5	8470.7	9824.0	14093.0	21325.0	26203.4	22345.4	21268.6	19291.5	18323.8
60°	4043.5	4225.4	5247.6	6473.5	10178.7	19895.4	29386.5	28235.1	26332.5	22087.2	21228.6
62.5°	2490.1	2588.3	3343.2	4483.6	6104.3	15702.7	30044.9	35636.3	33433.6	25686.8	24737.3
65°	1982.6	2024.5	2393.7	3665.1	4376.3	9340.2	27918.6	41278.6	40543.7	30044.9	27878.6
67°	1924.4	1940.8	2115.4	3146.7	4125.3	5726.0	23389.5	42197.1	42942.9	32682.4	27976.8
67.5°	1937.2	1955.3	2120.9	3003.0	4118.0	5262.1	21828.9	41835.2	42777.4	32891.5	27542.1
70°	1868.0	1924.4	2428.3	3001.2	3916.1	4372.7	13072.6	36247.5	37227.9	30561.5	23369.5
72.5°	662.1	665.7	1049.5	2428.3	4258.1	4420.0	6564.5	26572.6	27298.4	23378.6	16848.7
75°	392.9	334.7	349.2	691.2	4068.9	4292.7	3787.0	16979.6	17250.6	13396.4	8532.6
77.5°	271.0	236.5	243.7	305.6	1549.7	4232.6	3008.5	8854.5	8565.3	4698.3	1817.1
80°	154.6	136.4	145.5	267.4	563.9	3948.9	2837.5	3590.6	3061.2	796.7	502.0
82.5°	81.9	69.1	83.7	220.1	392.9	2461.0	2843.0	1735.3	1375.1	269.2	342.0
85°	29.1	23.6	40.0	151.0	261.9	754.9	2635.6	1458.8	1145.9	131.0	260.1
87.5°	5.5	5.5	16.4	61.8	105.5	231.0	1558.8	865.8	580.2	78.2	178.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299617

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL2-7027-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3	6877.3
2.5°	6855.5	6777.3	6671.8	6542.7	6389.9	6255.3	6155.2	6051.6	6029.7	5993.3	5987.9
5°	6810.0	6675.4	6413.5	6113.4	5793.3	5504.1	5269.4	5060.2	4967.5	4887.4	4878.3
7.5°	6742.7	6540.8	6095.2	5611.4	5111.2	4656.4	4270.8	3998.0	3747.0	3626.9	3608.7
10°	6664.5	6375.3	5736.9	5065.7	4374.5	3732.4	3159.5	2679.3	2388.2	2215.4	2193.6
12.5°	6591.8	6213.4	5371.3	4500.0	3581.5	2722.9	1986.3	1527.9	1222.3	1098.6	1084.1
15°	6557.2	6082.5	5029.3	3921.6	2752.0	1733.4	1085.9	840.3	740.3	711.2	709.4
17.5°	6553.6	5971.5	4694.6	3323.2	1928.1	1007.7	707.6	645.7	625.7	618.4	618.4
20°	6551.8	5866.0	4360.0	2702.9	1224.1	671.2	589.3	574.8	560.2	551.1	551.1
22.5°	6571.8	5771.4	4010.7	2069.9	771.2	543.9	518.4	503.8	485.7	472.9	471.1
25°	6591.8	5698.7	3654.2	1473.3	558.4	472.9	447.5	427.4	402.0	385.6	383.8
27.5°	6595.4	5607.7	3272.2	985.9	467.5	412.9	380.2	349.2	320.1	303.8	301.9
30°	6540.8	5454.9	2848.4	665.7	412.9	358.3	314.7	281.9	254.6	241.9	241.9
32.5°	6433.5	5265.8	2382.8	502.0	367.4	307.4	260.1	229.2	211.0	205.5	203.7
35°	6337.1	5062.1	1904.4	425.6	329.2	260.1	212.8	192.8	181.9	180.1	178.3
37.5°	6280.7	4898.4	1455.1	385.6	292.8	218.3	180.1	165.5	160.1	156.4	158.2
40°	6324.4	4761.9	1075.0	352.9	256.5	181.9	152.8	145.5	140.1	138.2	138.2
42.5°	6515.4	4738.3	798.5	323.8	221.9	151.0	132.8	127.3	123.7	121.9	123.7
45°	7017.4	4883.8	620.3	296.5	187.3	127.3	112.8	111.0	109.1	109.1	109.1
47.5°	7772.2	5183.9	516.6	265.6	156.4	109.1	98.2	96.4	94.6	96.4	96.4
50°	9051.0	5733.2	462.0	234.6	129.1	92.8	83.7	83.7	83.7	83.7	85.5
52.5°	10995.4	6813.7	425.6	203.7	105.5	78.2	70.9	70.9	72.8	72.8	74.6
55°	13161.7	8247.0	392.9	172.8	89.1	65.5	58.2	60.0	61.8	63.7	63.7
57.5°	15511.8	9834.9	365.6	141.9	76.4	52.7	49.1	50.9	52.7	56.4	56.4
60°	18347.5	11553.8	325.6	111.0	63.7	41.8	38.2	41.8	47.3	50.9	52.7
62.5°	21461.4	13216.3	274.7	87.3	52.7	32.7	30.9	38.2	45.5	49.1	50.9
65°	23589.6	13738.3	211.0	70.9	40.0	23.6	25.5	34.6	43.7	49.1	49.1
67°	22727.4	12456.0	172.8	60.0	32.7	18.2	23.6	34.6	43.7	47.3	49.1
67.5°	22129.0	11953.9	165.5	58.2	30.9	18.2	23.6	34.6	43.7	49.1	49.1
70°	18005.5	8980.0	138.2	43.7	25.5	16.4	20.0	32.7	41.8	47.3	47.3
72.5°	12510.5	5536.8	123.7	30.9	21.8	14.6	18.2	30.9	40.0	45.5	47.3
75°	5947.9	2004.5	105.5	23.6	20.0	12.7	16.4	30.9	40.0	45.5	45.5
77.5°	1213.2	465.6	85.5	20.0	16.4	12.7	14.6	29.1	38.2	43.7	43.7
80°	398.3	180.1	63.7	18.2	16.4	12.7	14.6	27.3	38.2	41.8	43.7
82.5°	287.4	90.9	41.8	18.2	16.4	12.7	12.7	27.3	36.4	41.8	41.8
85°	220.1	63.7	27.3	18.2	16.4	12.7	12.7	25.5	34.6	40.0	40.0
87.5°	145.5	25.5	21.8	18.2	16.4	12.7	12.7	25.5	32.7	38.2	40.0
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)