

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: P299621

Luminaire Tested: **GLNA-AF-08-LED-E1-SL2-7050-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299621  
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-SL2-7050-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 5000K 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: 35892.2 lumens  
Efficiency: N/A  
Efficacy: 80.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G5  
  
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

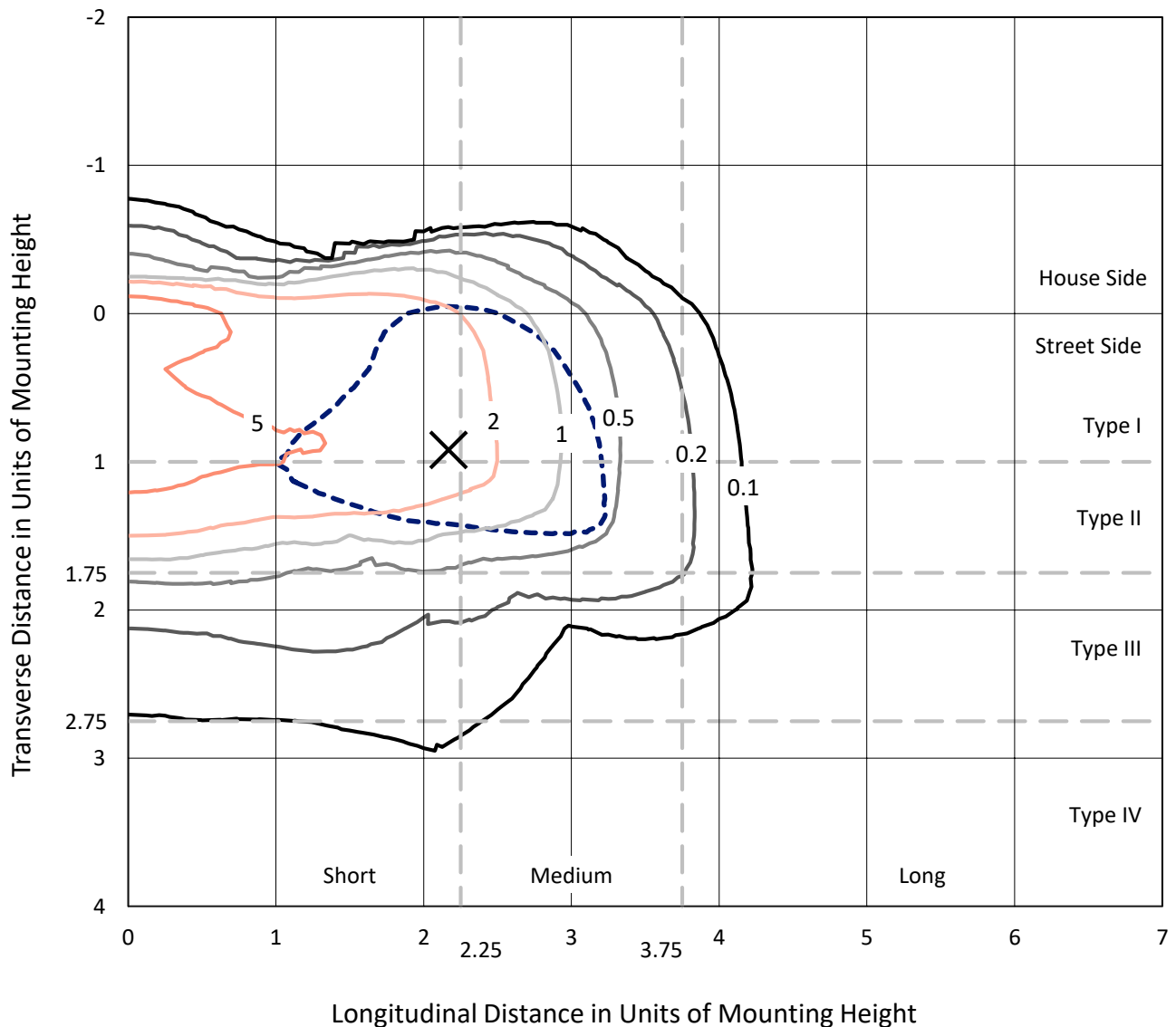


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### Iso-Footcandle Lines of Horizontal Illumination

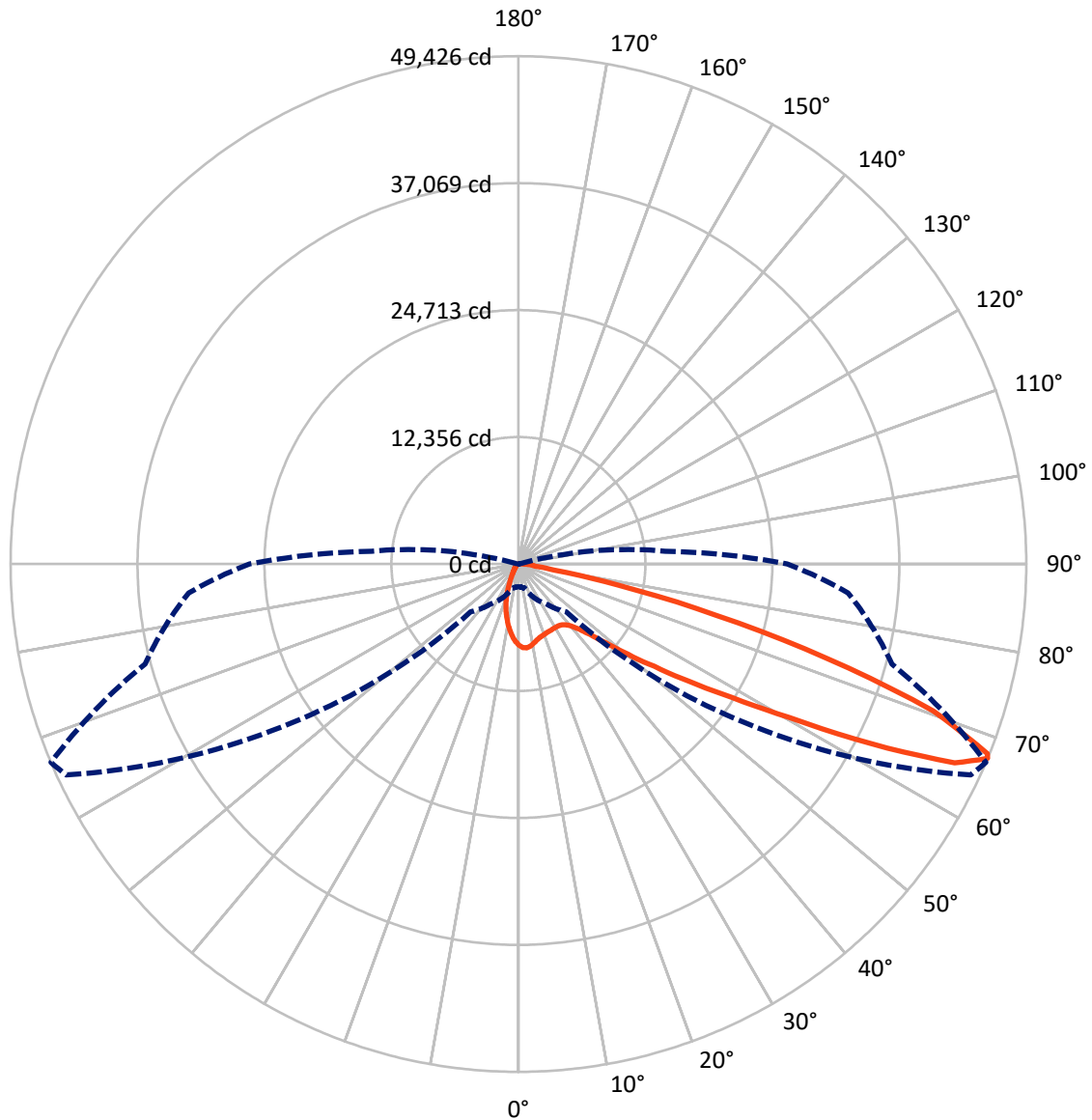
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.8 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3726.7	0.0	3726.7
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	32165.5	0.0	32165.5
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	35892.2	0.0	35892.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	644.1	1.8
10°-20°	1370.8	3.8
20°-30°	1993.1	5.6
30°-40°	3109.3	8.7
40°-50°	5507.9	15.3
50°-60°	8715.8	24.3
60°-70°	9982.7	27.8
70°-80°	4140.8	11.5
80°-90°	427.7	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°	35892.2	100.0
0°-180°	35892.2	100.0



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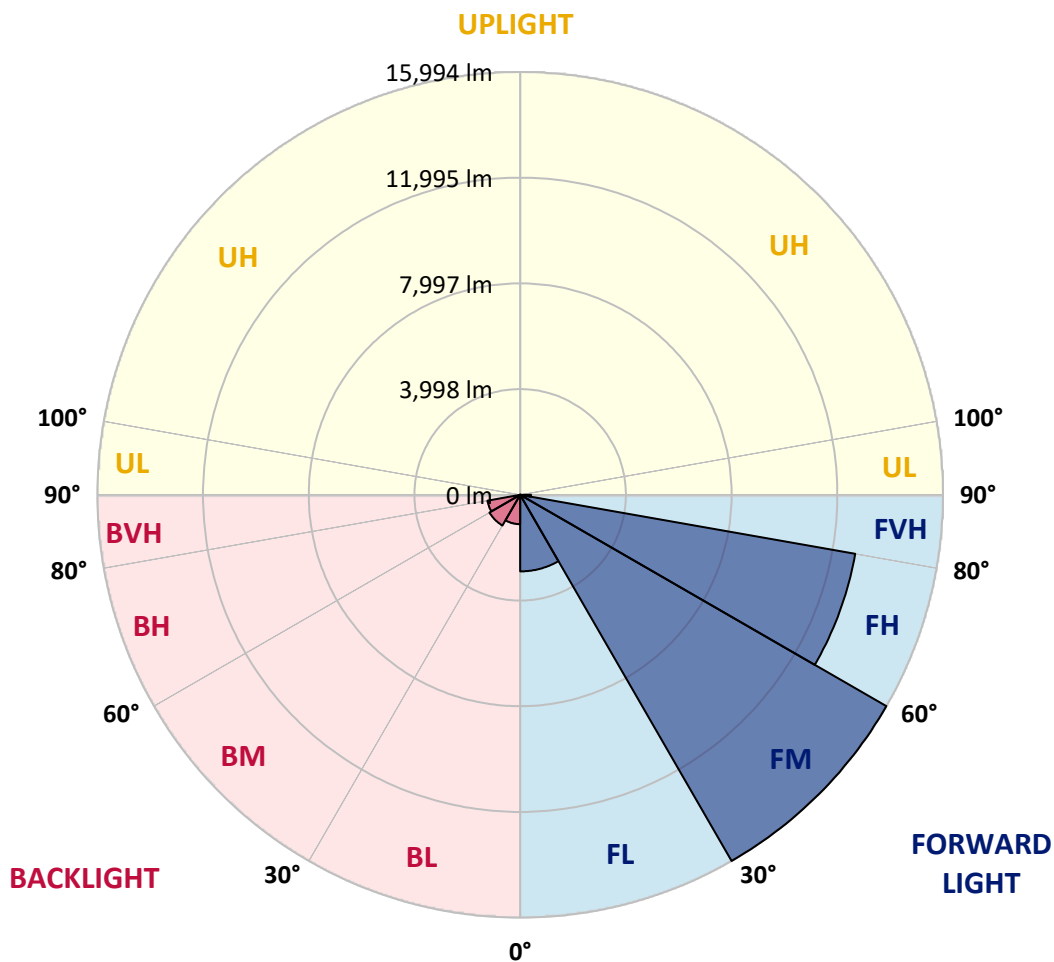
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2896.0	8.1			
FM (30°-60°)	15993.7	44.6			
FH (60°-80°)	12867.4	35.9			G5
FVH (80°-90°)	408.5	1.1			G3/500
BL (0°-30°)	1112.0	3.1	B3/2500		
BM (30°-60°)	1339.3	3.7	B2/2500		
BH (60°-80°)	1256.0	3.5	B3/2500		G3/2500
BVH (80°-90°)	19.3	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-G5**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6
2.5°	8183.5	8200.3	8198.2	8210.7	8240.0	8242.1	8212.8	8156.3	8143.7	8070.5	7942.8
5°	7547.1	7595.2	7624.6	7743.9	7877.9	8039.1	8160.5	8204.5	8198.2	8145.8	7953.2
7.5°	6820.6	6868.8	6902.3	7042.6	7220.5	7496.9	7813.0	8072.6	8095.6	8152.1	7944.9
10°	6337.0	6345.4	6391.5	6525.5	6711.8	6994.4	7371.2	7825.5	7894.6	8101.9	7923.9
12.5°	5939.3	5945.6	6006.3	6150.7	6349.6	6634.3	7030.0	7555.5	7662.2	8039.1	7919.7
15°	5656.7	5679.7	5734.1	5884.9	6096.3	6378.9	6785.1	7356.6	7484.3	8016.0	7957.4
17.5°	5562.5	5587.6	5604.3	5713.2	5905.8	6182.1	6598.7	7226.8	7371.2	8028.6	8030.7
20°	5660.8	5679.7	5642.0	5669.2	5788.5	6035.6	6441.7	7115.8	7287.5	8043.3	8124.9
22.5°	6027.2	6035.6	5933.0	5813.7	5792.7	5928.8	6318.2	7027.9	7212.1	8083.0	8235.9
25°	6655.3	6640.6	6473.1	6215.6	5972.8	5910.0	6244.9	6973.5	7174.5	8124.9	8351.0
27.5°	7413.1	7434.0	7203.8	6829.0	6366.4	6035.6	6234.5	6950.4	7157.7	8154.2	8451.5
30°	8334.3	8363.6	8099.8	7628.7	6965.1	6345.4	6330.8	6946.3	7147.2	8135.4	8459.9
32.5°	9274.2	9309.8	9102.6	8616.9	7764.8	6864.6	6548.5	6992.3	7168.2	8070.5	8411.7
35°	10258.2	10308.4	10170.3	9753.7	8849.3	7614.1	6931.6	7132.6	7266.6	8064.2	8363.6
37.5°	11616.9	11662.9	11403.3	10961.6	10161.9	8619.0	7547.1	7396.4	7498.9	8164.7	8376.1
40°	13645.5	13639.2	12969.3	12293.1	11604.3	9896.0	8411.7	7873.7	7926.0	8468.2	8531.0
42.5°	15856.2	15845.8	14855.5	13827.6	13205.8	11468.2	9548.5	8698.5	8662.9	9027.2	8933.0
45°	17560.3	17558.3	16750.2	15592.4	15134.0	13272.8	11018.1	9845.8	9791.3	9935.8	9674.1
47.5°	18286.8	18299.4	17893.2	17078.8	17271.4	15713.9	12870.9	11508.0	11426.4	11367.7	10970.0
50°	17721.5	17746.7	17780.2	17621.1	18839.5	18994.4	15355.9	13850.6	13810.9	13549.2	12927.4
52.5°	15875.1	16002.8	16396.4	16900.9	19383.8	22143.0	19251.9	16760.6	16547.1	16268.7	15584.1
55°	12764.1	12904.4	13651.8	14876.5	18573.6	24211.4	24711.8	20512.2	20156.3	19325.2	18337.0
57.5°	8447.3	8665.0	9749.5	11307.0	16220.5	24544.3	30159.1	25718.7	24479.4	22203.7	21090.0
60°	4653.9	4863.2	6039.8	7450.8	11715.3	22898.8	33822.7	32497.5	30307.7	25421.5	24433.3
62.5°	2866.0	2979.1	3847.9	5160.5	7025.8	18073.3	34580.6	41016.0	38480.8	29564.5	28471.7
65°	2281.9	2330.1	2755.1	4218.4	5037.0	10750.2	32133.3	47510.1	46664.3	34580.6	32087.2
67°	2214.9	2233.8	2434.7	3621.8	4748.1	6590.4	26920.4	48567.3	49425.6	37616.2	32200.2
67.5°	2229.6	2250.5	2441.0	3456.4	4739.7	6056.5	25124.2	48150.7	49235.1	37856.9	31699.9
70°	2150.0	2214.9	2794.8	3454.3	4507.3	5032.8	15046.0	41719.4	42847.8	35175.1	26897.4
72.5°	762.0	766.2	1208.0	2794.8	4900.9	5087.2	7555.5	30584.1	31419.4	26907.9	19392.2
75°	452.2	385.2	402.0	795.5	4683.2	4940.7	4358.7	19542.9	19854.8	15418.7	9820.6
77.5°	311.9	272.2	280.5	351.7	1783.7	4871.6	3462.7	10191.2	9858.3	5407.5	2091.4
80°	177.9	157.0	167.5	307.7	649.0	4545.0	3265.9	4132.6	3523.4	917.0	577.8
82.5°	94.2	79.6	96.3	253.3	452.2	2832.5	3272.2	1997.2	1582.7	309.8	393.6
85°	33.5	27.2	46.1	173.8	301.5	868.8	3033.5	1679.0	1318.9	150.7	299.4
87.5°	6.3	6.3	18.8	71.2	121.4	265.9	1794.1	996.5	667.8	90.0	205.2
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°	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6	7915.6
2.5°	7890.4	7800.4	7679.0	7530.3	7354.5	7199.6	7084.4	6965.1	6940.0	6898.1	6891.8
5°	7838.1	7683.2	7381.7	7036.3	6667.8	6335.0	6064.9	5824.1	5717.4	5625.3	5614.8
7.5°	7760.6	7528.3	7015.3	6458.5	5882.8	5359.4	4915.6	4601.5	4312.6	4174.5	4153.5
10°	7670.6	7337.7	6602.9	5830.4	5034.9	4295.9	3636.4	3083.7	2748.8	2549.9	2524.8
12.5°	7586.9	7151.4	6182.1	5179.3	4122.1	3134.0	2286.1	1758.5	1406.8	1264.5	1247.7
15°	7547.1	7000.7	5788.5	4513.6	3167.5	1995.1	1249.8	967.2	852.1	818.6	816.5
17.5°	7542.9	6873.0	5403.3	3824.8	2219.1	1159.8	814.4	743.2	720.2	711.8	711.8
20°	7540.8	6751.6	5018.1	3111.0	1408.9	772.5	678.3	661.5	644.8	634.3	634.3
22.5°	7563.8	6642.7	4616.2	2382.4	887.6	626.0	596.6	579.9	559.0	544.3	542.2
25°	7586.9	6559.0	4205.9	1695.7	642.7	544.3	515.0	492.0	462.7	443.8	441.7
27.5°	7591.1	6454.3	3766.2	1134.7	538.0	475.2	437.5	402.0	368.5	349.6	347.5
30°	7528.3	6278.4	3278.4	766.2	475.2	412.4	362.2	324.5	293.1	278.4	278.4
32.5°	7404.7	6060.7	2742.5	577.8	422.9	353.8	299.4	263.8	242.8	236.6	234.5
35°	7293.8	5826.2	2191.9	489.9	378.9	299.4	244.9	221.9	209.4	207.3	205.2
37.5°	7228.9	5637.8	1674.8	443.8	337.1	251.2	207.3	190.5	184.2	180.0	182.1
40°	7279.1	5480.8	1237.3	406.1	295.2	209.4	175.9	167.5	161.2	159.1	159.1
42.5°	7498.9	5453.6	919.1	372.6	255.4	173.8	152.8	146.5	142.4	140.3	142.4
45°	8076.8	5621.1	713.9	341.2	215.6	146.5	129.8	127.7	125.6	125.6	125.6
47.5°	8945.6	5966.5	594.6	305.7	180.0	125.6	113.0	111.0	108.9	111.0	111.0
50°	10417.3	6598.7	531.8	270.1	148.6	106.8	96.3	96.3	96.3	96.3	98.4
52.5°	12655.3	7842.3	489.9	234.5	121.4	90.0	81.6	81.6	83.7	83.7	85.8
55°	15148.6	9492.0	452.2	198.9	102.6	75.4	67.0	69.1	71.2	73.3	73.3
57.5°	17853.4	11319.6	420.8	163.3	87.9	60.7	56.5	58.6	60.7	64.9	64.9
60°	21117.2	13298.0	374.7	127.7	73.3	48.2	44.0	48.2	54.4	58.6	60.7
62.5°	24701.3	15211.4	316.1	100.5	60.7	37.7	35.6	44.0	52.3	56.5	58.6
65°	27150.7	15812.3	242.8	81.6	46.1	27.2	29.3	39.8	50.2	56.5	56.5
67°	26158.4	14336.3	198.9	69.1	37.7	20.9	27.2	39.8	50.2	54.4	56.5
67.5°	25469.6	13758.5	190.5	67.0	35.6	20.9	27.2	39.8	50.2	56.5	56.5
70°	20723.6	10335.6	159.1	50.2	29.3	18.8	23.0	37.7	48.2	54.4	54.4
72.5°	14399.1	6372.6	142.4	35.6	25.1	16.7	20.9	35.6	46.1	52.3	54.4
75°	6845.8	2307.0	121.4	27.2	23.0	14.7	18.8	35.6	46.1	52.3	52.3
77.5°	1396.4	535.9	98.4	23.0	18.8	14.7	16.7	33.5	44.0	50.2	50.2
80°	458.5	207.3	73.3	20.9	18.8	14.7	16.7	31.4	44.0	48.2	50.2
82.5°	330.8	104.7	48.2	20.9	18.8	14.7	14.7	31.4	41.9	48.2	48.2
85°	253.3	73.3	31.4	20.9	18.8	14.7	14.7	29.3	39.8	46.1	46.1
87.5°	167.5	29.3	25.1	20.9	18.8	14.7	14.7	29.3	37.7	44.0	46.1
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)