

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: P299675

Luminaire Tested: **GLNA-AF-07-LED-E1-SL2-7050-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299675  
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-07-LED-E1-SL2-7050-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 5000K CCT 800mA 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: 25591.8 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 295  
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

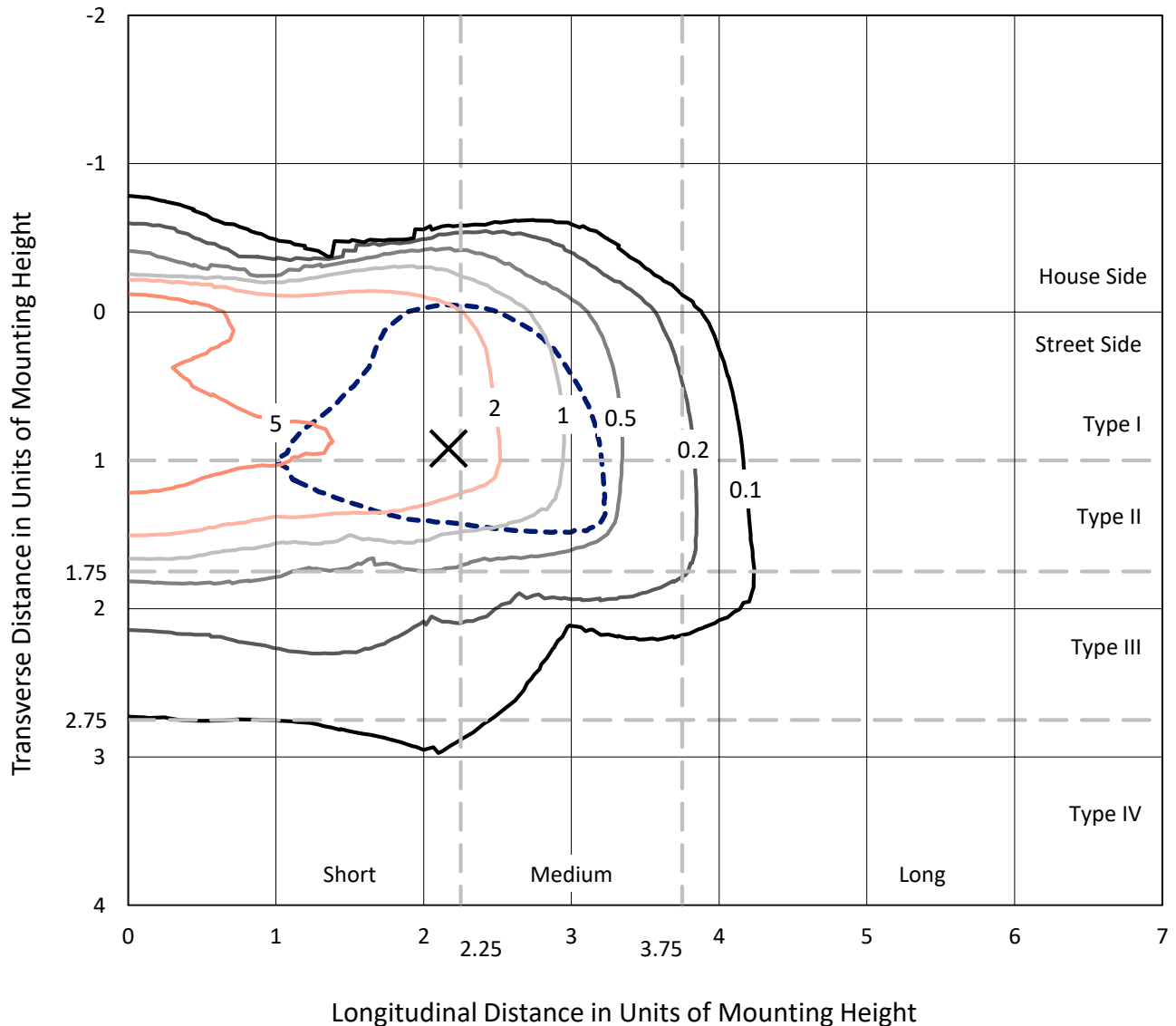


REPORT NUMBER: P299675

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7050-800-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

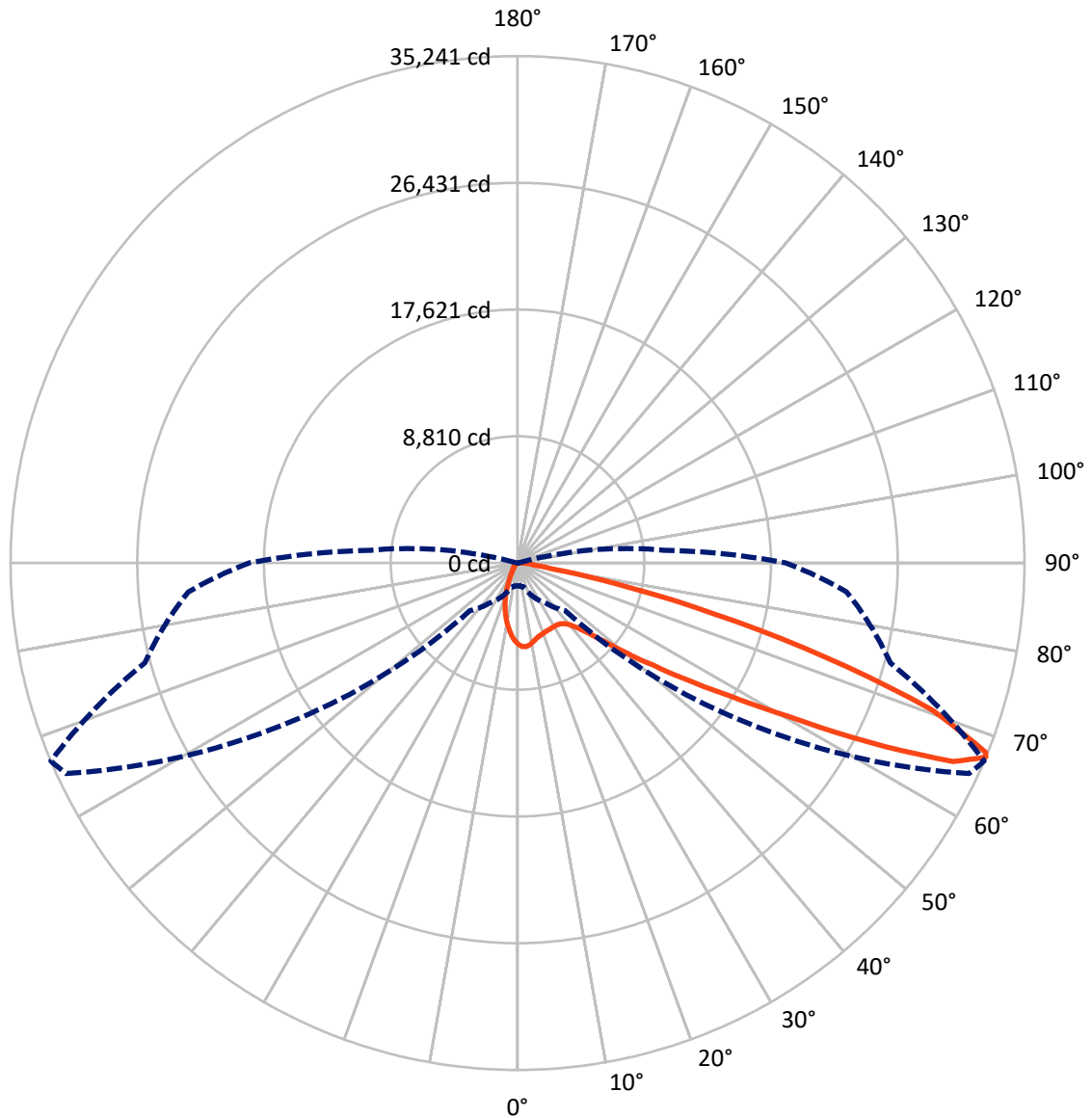


Based on 25 foot mounting height. Maximum calculated value = 9 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299675

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7050-800-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P299675

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7050-800-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2657.2	0.0	2657.2
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	22934.6	0.0	22934.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	25591.8	0.0	25591.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	459.2	1.8
10°-20°	977.4	3.8
20°-30°	1421.1	5.6
30°-40°	2217.0	8.7
40°-50°	3927.3	15.3
50°-60°	6214.5	24.3
60°-70°	7117.9	27.8
70°-80°	2952.4	11.5
80°-90°	305.0	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°	25591.8	100.0
0°-180°	25591.8	100.0



REPORT NUMBER: P299675

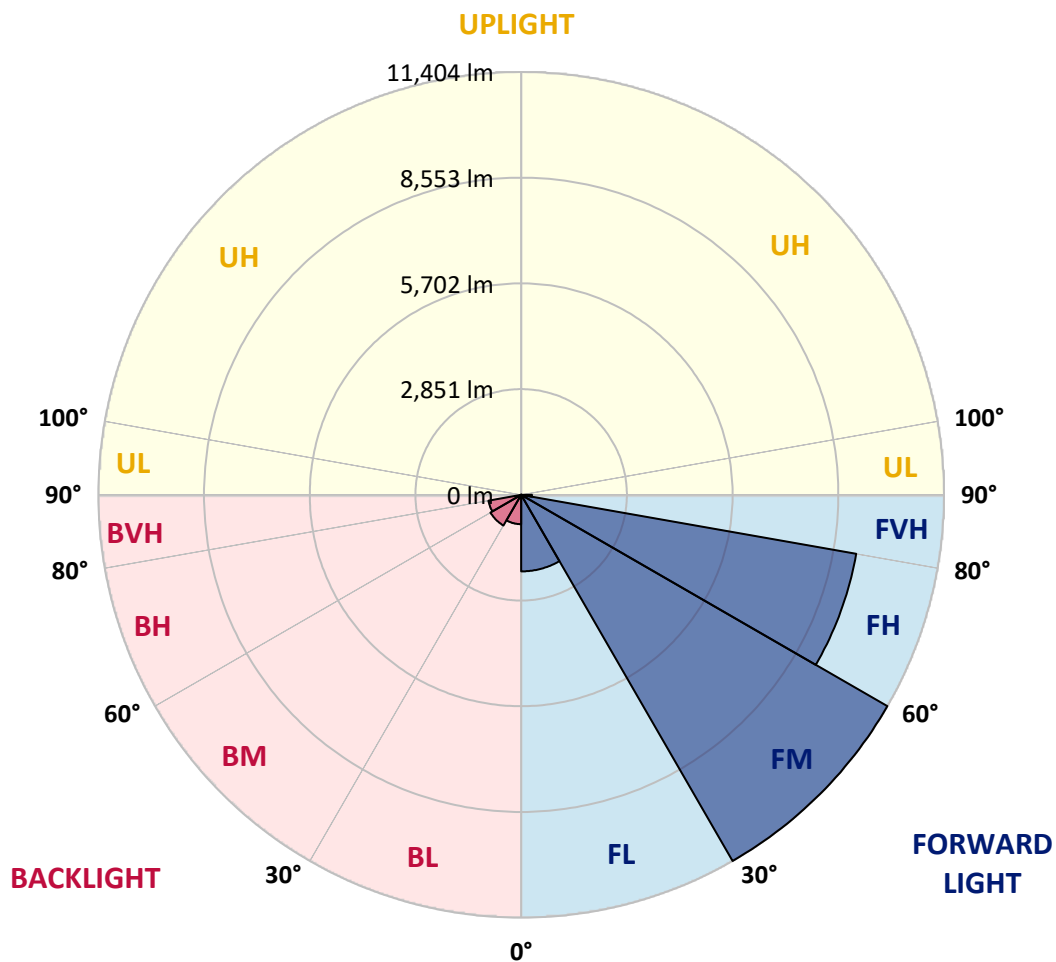
CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7050-800-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2064.9	8.1			
FM (30°-60°)	11403.8	44.6			
FH (60°-80°)	9174.7	35.9			G4/12000
FVH (80°-90°)	291.2	1.1			G3/500
BL (0°-30°)	792.9	3.1	B2/1000		
BM (30°-60°)	955.0	3.7	B1/1000		
BH (60°-80°)	895.6	3.5	B2/1000		G2/1000
BVH (80°-90°)	13.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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

Type II Short





REPORT NUMBER: P299675

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7050-800-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9
2.5°	5835.0	5846.9	5845.4	5854.4	5875.3	5876.8	5855.9	5815.6	5806.6	5754.4	5663.3
5°	5381.2	5415.5	5436.4	5521.5	5617.1	5732.0	5818.6	5849.9	5845.4	5808.1	5670.8
7.5°	4863.2	4897.6	4921.5	5021.5	5148.4	5345.4	5570.8	5755.9	5772.3	5812.6	5664.8
10°	4518.4	4524.4	4557.2	4652.8	4785.6	4987.1	5255.8	5579.7	5629.0	5776.8	5649.9
12.5°	4234.8	4239.3	4282.6	4385.6	4527.4	4730.4	5012.5	5387.2	5463.3	5732.0	5646.9
15°	4033.3	4049.7	4088.5	4196.0	4346.8	4548.3	4837.9	5245.4	5336.4	5715.6	5673.8
17.5°	3966.1	3984.0	3996.0	4073.6	4210.9	4408.0	4705.0	5152.8	5255.8	5724.5	5726.0
20°	4036.3	4049.7	4022.8	4042.3	4127.3	4303.5	4593.1	5073.7	5196.1	5735.0	5793.2
22.5°	4297.5	4303.5	4230.3	4145.3	4130.3	4227.4	4505.0	5011.0	5142.4	5763.3	5872.3
25°	4745.3	4734.9	4615.5	4431.9	4258.7	4213.9	4452.8	4972.2	5115.5	5793.2	5954.4
27.5°	5285.7	5300.6	5136.4	4869.2	4539.3	4303.5	4445.3	4955.8	5103.6	5814.1	6026.1
30°	5942.5	5963.4	5775.3	5439.4	4966.2	4524.4	4514.0	4952.8	5096.1	5800.7	6032.0
32.5°	6612.7	6638.1	6490.3	6144.0	5536.5	4894.6	4669.2	4985.6	5111.0	5754.4	5997.7
35°	7314.3	7350.1	7251.6	6954.5	6309.7	5429.0	4942.4	5085.7	5181.2	5749.9	5963.4
37.5°	8283.0	8315.9	8130.8	7815.8	7245.6	6145.5	5381.2	5273.7	5346.9	5821.6	5972.3
40°	9729.5	9725.0	9247.3	8765.2	8274.1	7056.0	5997.7	5614.1	5651.4	6038.0	6082.8
42.5°	11305.8	11298.3	10592.3	9859.3	9416.0	8177.1	6808.2	6202.2	6176.8	6436.6	6369.4
45°	12520.8	12519.3	11943.2	11117.7	10790.8	9463.8	7856.1	7020.2	6981.4	7084.4	6897.8
47.5°	13038.8	13047.8	12758.2	12177.5	12314.8	11204.3	9177.2	8205.4	8147.2	8105.4	7821.8
50°	12635.8	12653.7	12677.6	12564.1	13432.9	13543.3	10949.0	9875.8	9847.4	9660.8	9217.5
52.5°	11319.2	11410.3	11690.9	12050.6	13821.0	15788.4	13726.9	11950.6	11798.4	11599.8	11111.7
55°	9101.0	9201.1	9734.0	10607.2	13243.3	17263.2	17619.9	14625.6	14371.8	13779.2	13074.6
57.5°	6023.1	6178.3	6951.5	8062.1	11565.5	17500.5	21504.0	18337.9	17454.2	15831.7	15037.5
60°	3318.3	3467.6	4306.5	5312.6	8353.2	16327.2	24116.2	23171.3	21609.9	18126.0	17421.4
62.5°	2043.5	2124.1	2743.6	3679.5	5009.5	12886.6	24656.6	29245.1	27437.5	21080.0	20300.8
65°	1627.1	1661.4	1964.4	3007.8	3591.5	7665.1	22911.6	33875.5	33272.5	24656.6	22878.7
67°	1579.3	1592.7	1736.0	2582.4	3385.5	4699.0	19194.7	34629.3	35241.4	26821.0	22959.4
67.5°	1589.7	1604.7	1740.5	2464.5	3379.5	4318.4	17914.0	34332.3	35105.5	26992.7	22602.6
70°	1533.0	1579.3	1992.8	2463.0	3213.8	3588.5	10728.1	29746.7	30551.3	25080.5	19178.3
72.5°	543.3	546.3	861.3	1992.8	3494.4	3627.3	5387.2	21807.0	22402.6	19185.8	13827.0
75°	322.4	274.7	286.6	567.2	3339.2	3522.8	3107.8	13934.4	14156.8	10993.8	7002.3
77.5°	222.4	194.1	200.0	250.8	1271.8	3473.5	2468.9	7266.5	7029.2	3855.7	1491.2
80°	126.9	112.0	119.4	219.4	462.7	3240.7	2328.6	2946.6	2512.2	653.8	412.0
82.5°	67.2	56.7	68.7	180.6	322.4	2019.6	2333.1	1424.0	1128.5	220.9	280.6
85°	23.9	19.4	32.8	123.9	215.0	619.5	2162.9	1197.2	940.4	107.5	213.5
87.5°	4.5	4.5	13.4	50.8	86.6	189.6	1279.3	710.5	476.2	64.2	146.3
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: P299675

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7050-800-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9	5643.9
2.5°	5626.0	5561.8	5475.3	5369.3	5243.9	5133.4	5051.3	4966.2	4948.3	4918.5	4914.0
5°	5588.7	5478.2	5263.3	5017.0	4754.3	4516.9	4324.4	4152.7	4076.6	4010.9	4003.4
7.5°	5533.5	5367.8	5002.1	4605.0	4194.5	3821.3	3504.9	3281.0	3075.0	2976.5	2961.5
10°	5469.3	5231.9	4708.0	4157.2	3590.0	3063.0	2592.8	2198.8	1959.9	1818.1	1800.2
12.5°	5409.6	5099.1	4408.0	3693.0	2939.1	2234.6	1630.0	1253.9	1003.1	901.6	889.7
15°	5381.2	4991.6	4127.3	3218.3	2258.5	1422.6	891.1	689.6	607.5	583.6	582.2
17.5°	5378.2	4900.6	3852.7	2727.2	1582.3	827.0	580.7	529.9	513.5	507.5	507.5
20°	5376.7	4814.0	3578.0	2218.2	1004.6	550.8	483.6	471.7	459.8	452.3	452.3
22.5°	5393.2	4736.4	3291.4	1698.7	632.9	446.3	425.4	413.5	398.6	388.1	386.6
25°	5409.6	4676.7	2998.9	1209.1	458.3	388.1	367.2	350.8	329.9	316.5	315.0
27.5°	5412.6	4602.0	2685.4	809.0	383.6	338.8	312.0	286.6	262.7	249.3	247.8
30°	5367.8	4476.6	2337.6	546.3	338.8	294.1	258.2	231.4	209.0	198.5	198.5
32.5°	5279.7	4321.4	1955.4	412.0	301.5	252.3	213.5	188.1	173.2	168.7	167.2
35°	5200.6	4154.2	1562.9	349.3	270.2	213.5	174.6	158.2	149.3	147.8	146.3
37.5°	5154.3	4019.9	1194.2	316.5	240.3	179.1	147.8	135.8	131.4	128.4	129.9
40°	5190.1	3907.9	882.2	289.6	210.5	149.3	125.4	119.4	114.9	113.4	113.4
42.5°	5346.9	3888.5	655.3	265.7	182.1	123.9	109.0	104.5	101.5	100.0	101.5
45°	5758.9	4007.9	509.0	243.3	153.7	104.5	92.5	91.1	89.6	89.6	89.6
47.5°	6378.3	4254.2	423.9	217.9	128.4	89.6	80.6	79.1	77.6	79.1	79.1
50°	7427.7	4705.0	379.1	192.6	106.0	76.1	68.7	68.7	68.7	68.7	70.2
52.5°	9023.4	5591.7	349.3	167.2	86.6	64.2	58.2	58.2	59.7	59.7	61.2
55°	10801.2	6767.9	322.4	141.8	73.1	53.7	47.8	49.3	50.8	52.2	52.2
57.5°	12729.8	8071.1	300.0	116.4	62.7	43.3	40.3	41.8	43.3	46.3	46.3
60°	15057.0	9481.7	267.2	91.1	52.2	34.3	31.3	34.3	38.8	41.8	43.3
62.5°	17612.5	10846.0	225.4	71.7	43.3	26.9	25.4	31.3	37.3	40.3	41.8
65°	19358.9	11274.4	173.2	58.2	32.8	19.4	20.9	28.4	35.8	40.3	40.3
67°	18651.4	10222.1	141.8	49.3	26.9	14.9	19.4	28.4	35.8	38.8	40.3
67.5°	18160.3	9810.1	135.8	47.8	25.4	14.9	19.4	28.4	35.8	40.3	40.3
70°	14776.3	7369.5	113.4	35.8	20.9	13.4	16.4	26.9	34.3	38.8	38.8
72.5°	10266.9	4543.8	101.5	25.4	17.9	11.9	14.9	25.4	32.8	37.3	38.8
75°	4881.2	1645.0	86.6	19.4	16.4	10.4	13.4	25.4	32.8	37.3	37.3
77.5°	995.6	382.1	70.2	16.4	13.4	10.4	11.9	23.9	31.3	35.8	35.8
80°	326.9	147.8	52.2	14.9	13.4	10.4	11.9	22.4	31.3	34.3	35.8
82.5°	235.8	74.6	34.3	14.9	13.4	10.4	10.4	22.4	29.9	34.3	34.3
85°	180.6	52.2	22.4	14.9	13.4	10.4	10.4	20.9	28.4	32.8	32.8
87.5°	119.4	20.9	17.9	14.9	13.4	10.4	10.4	20.9	26.9	31.3	32.8
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)