

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: P299666

Luminaire Tested: **GLNA-AF-06-LED-E1-SL2-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299666  
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-06-LED-E1-SL2-7030-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 3000K 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: 20931.9 lumens  
Efficiency: N/A  
Efficacy: 84.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 249  
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

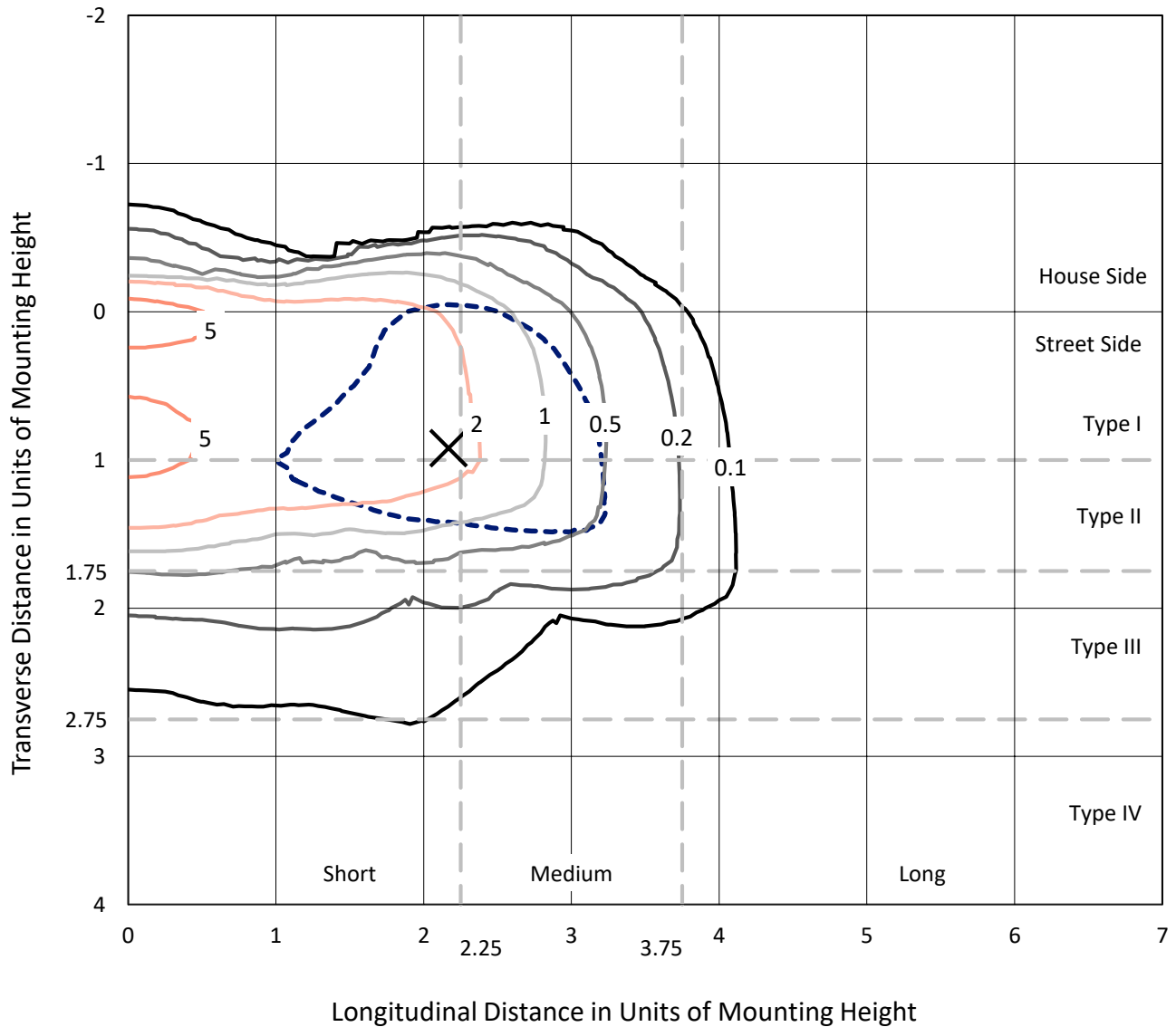


REPORT NUMBER: P299666

CATALOG NUMBER: GLNA-AF-06-LED-E1-SL2-7030-800-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

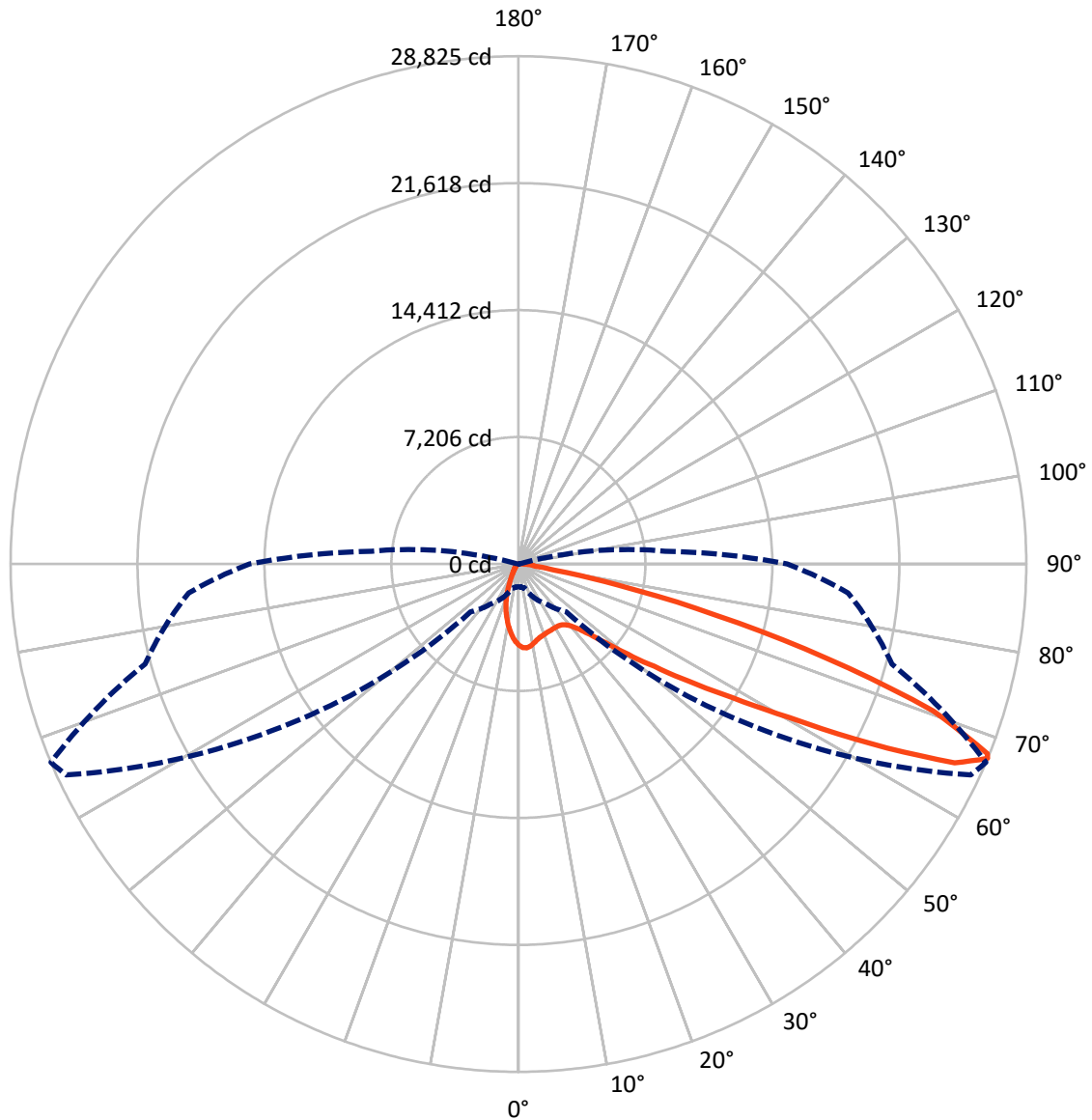


Based on 25 foot mounting height. Maximum calculated value = 7.4 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299666

CATALOG NUMBER: GLNA-AF-06-LED-E1-SL2-7030-800-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P299666

CATALOG NUMBER: GLNA-AF-06-LED-E1-SL2-7030-800-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2173.4	0.0	2173.4
	% Fixture	10.4	0.0	10.4
<b>Street Side</b>	Lumens	18758.6	0.0	18758.6
	% Fixture	89.6	0.0	89.6
<b>Total</b>	Lumens	20931.9	0.0	20931.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	375.6	1.8
10°-20°	799.5	3.8
20°-30°	1162.3	5.6
30°-40°	1813.3	8.7
40°-50°	3212.2	15.3
50°-60°	5082.9	24.3
60°-70°	5821.8	27.8
70°-80°	2414.8	11.5
80°-90°	249.4	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°	20931.9	100.0
0°-180°	20931.9	100.0



REPORT NUMBER: P299666

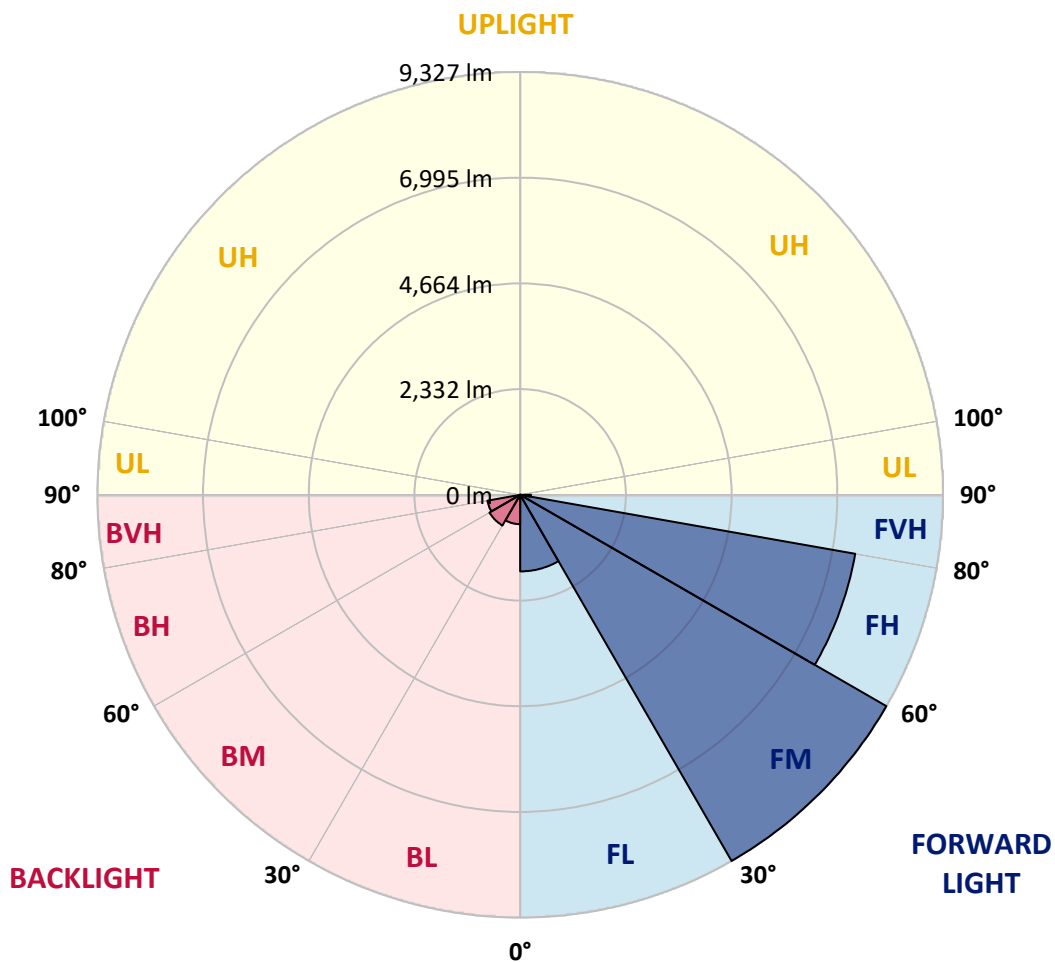
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1688.9	8.1			
FM (30°-60°)	9327.3	44.6			
FH (60°-80°)	7504.1	35.9			G4/12000
FVH (80°-90°)	238.2	1.1			G3/500
BL (0°-30°)	648.5	3.1	B2/1000		
BM (30°-60°)	781.1	3.7	B1/1000		
BH (60°-80°)	732.5	3.5	B2/1000		G2/1000
BVH (80°-90°)	11.2	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: P299666

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3
2.5°	4772.5	4782.3	4781.1	4788.4	4805.5	4806.7	4789.6	4756.7	4749.3	4706.6	4632.1
5°	4401.4	4429.5	4446.6	4516.1	4594.3	4688.3	4759.1	4784.7	4781.1	4750.6	4638.2
7.5°	3977.7	4005.8	4025.3	4107.1	4210.9	4372.1	4556.4	4707.8	4721.3	4754.2	4633.4
10°	3695.7	3700.6	3727.4	3805.6	3914.2	4079.1	4298.8	4563.8	4604.1	4724.9	4621.1
12.5°	3463.7	3467.4	3502.8	3587.0	3703.0	3869.1	4099.8	4406.3	4468.5	4688.3	4618.7
15°	3298.9	3312.3	3344.1	3432.0	3555.3	3720.1	3957.0	4290.3	4364.8	4674.9	4640.7
17.5°	3244.0	3258.6	3268.4	3331.9	3444.2	3605.3	3848.3	4214.6	4298.8	4682.2	4683.4
20°	3301.3	3312.3	3290.4	3306.2	3375.8	3519.9	3756.7	4149.9	4250.0	4690.7	4738.4
22.5°	3515.0	3519.9	3460.1	3390.5	3378.3	3457.6	3684.7	4098.6	4206.0	4713.9	4803.1
25°	3881.3	3872.7	3775.1	3624.9	3483.3	3446.6	3642.0	4066.9	4184.1	4738.4	4870.2
27.5°	4323.2	4335.5	4201.2	3982.6	3712.8	3519.9	3635.9	4053.4	4174.3	4755.4	4928.8
30°	4860.4	4877.5	4723.7	4449.0	4062.0	3700.6	3692.0	4051.0	4168.2	4744.5	4933.7
32.5°	5408.6	5429.4	5308.5	5025.3	4528.4	4003.4	3819.0	4077.8	4180.4	4706.6	4905.6
35°	5982.5	6011.8	5931.2	5688.2	5160.8	4440.5	4042.4	4159.6	4237.8	4702.9	4877.5
37.5°	6774.8	6801.7	6650.3	6392.7	5926.3	5026.5	4401.4	4313.5	4373.3	4761.6	4884.9
40°	7957.9	7954.2	7563.5	7169.2	6767.5	5771.2	4905.6	4591.8	4622.4	4938.6	4975.2
42.5°	9247.2	9241.1	8663.6	8064.1	7701.5	6688.1	5568.6	5072.9	5052.1	5264.6	5209.6
45°	10241.0	10239.8	9768.5	9093.3	8260.0	7740.6	6425.7	5741.9	5710.2	5794.4	5641.8
47.5°	10664.7	10672.0	10435.1	9960.2	10072.5	9164.2	7506.2	6711.3	6663.7	6629.5	6397.6
50°	10335.0	10349.7	10369.2	10276.4	10987.0	11077.3	8955.4	8077.5	8054.3	7901.7	7539.1
52.5°	9258.2	9332.6	9562.2	9856.4	11304.4	12913.6	11227.5	9774.6	9650.1	9487.7	9088.5
55°	7443.9	7525.7	7961.6	8675.8	10831.9	14119.8	14411.6	11962.5	11754.9	11270.2	10694.0
57.5°	4926.4	5053.3	5685.8	6594.1	9459.6	14314.0	17588.4	14998.9	14276.1	12949.0	12299.5
60°	2714.1	2836.2	3522.3	4345.2	6832.2	13354.3	19725.0	18952.2	17675.1	14825.5	14249.2
62.5°	1671.4	1737.4	2244.0	3009.5	4097.4	10540.1	20167.0	23920.1	22441.6	17241.7	16604.4
65°	1330.8	1358.9	1606.7	2460.1	2937.5	6269.4	18739.8	27707.3	27214.1	20167.0	18712.9
67°	1291.7	1302.7	1419.9	2112.2	2769.0	3843.4	15699.7	28323.9	28824.5	21937.3	18778.8
67.5°	1300.3	1312.5	1423.6	2015.7	2764.1	3532.1	14652.1	28080.9	28713.4	22077.7	18487.0
70°	1253.9	1291.7	1629.9	2014.5	2628.6	2935.1	8774.7	24330.3	24988.4	20513.7	15686.3
72.5°	444.4	446.9	704.5	1629.9	2858.2	2966.8	4406.3	17836.3	18323.4	15692.4	11309.3
75°	263.7	224.6	234.4	463.9	2731.2	2881.3	2541.9	11397.2	11579.1	8992.0	5727.3
77.5°	181.9	158.7	163.6	205.1	1040.2	2841.1	2019.4	5943.4	5749.3	3153.6	1219.7
80°	103.8	91.6	97.7	179.5	378.5	2650.6	1904.6	2410.1	2054.8	534.8	337.0
82.5°	54.9	46.4	56.2	147.7	263.7	1651.9	1908.3	1164.7	923.0	180.7	229.5
85°	19.5	15.9	26.9	101.3	175.8	506.7	1769.1	979.2	769.2	87.9	174.6
87.5°	3.7	3.7	11.0	41.5	70.8	155.1	1046.3	581.2	389.5	52.5	119.6
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°	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3	4616.3
2.5°	4601.6	4549.1	4478.3	4391.6	4289.1	4198.7	4131.6	4062.0	4047.3	4022.9	4019.2
5°	4571.1	4480.7	4304.9	4103.5	3888.6	3694.5	3537.0	3396.6	3334.3	3280.6	3274.5
7.5°	4525.9	4390.4	4091.3	3766.5	3430.8	3125.5	2866.7	2683.6	2515.1	2434.5	2422.3
10°	4473.4	4279.3	3850.8	3400.2	2936.3	2505.3	2120.7	1798.4	1603.1	1487.1	1472.4
12.5°	4424.6	4170.6	3605.3	3020.5	2404.0	1827.7	1333.2	1025.6	820.5	737.4	727.7
15°	4401.4	4082.7	3375.8	2632.3	1847.2	1163.5	728.9	564.1	496.9	477.4	476.2
17.5°	4398.9	4008.2	3151.2	2230.6	1294.2	676.4	474.9	433.4	420.0	415.1	415.1
20°	4397.7	3937.4	2926.5	1814.3	821.7	450.5	395.6	385.8	376.0	369.9	369.9
22.5°	4411.1	3873.9	2692.1	1389.4	517.7	365.1	348.0	338.2	326.0	317.4	316.2
25°	4424.6	3825.1	2452.8	988.9	374.8	317.4	300.3	286.9	269.8	258.8	257.6
27.5°	4427.0	3764.1	2196.4	661.7	313.8	277.1	255.2	234.4	214.9	203.9	202.7
30°	4390.4	3661.5	1911.9	446.9	277.1	240.5	211.2	189.2	170.9	162.4	162.4
32.5°	4318.4	3534.5	1599.4	337.0	246.6	206.3	174.6	153.8	141.6	138.0	136.7
35°	4253.7	3397.8	1278.3	285.7	221.0	174.6	142.8	129.4	122.1	120.9	119.6
37.5°	4215.8	3287.9	976.7	258.8	196.6	146.5	120.9	111.1	107.4	105.0	106.2
40°	4245.1	3196.3	721.6	236.9	172.1	122.1	102.6	97.7	94.0	92.8	92.8
42.5°	4373.3	3180.5	536.0	217.3	149.0	101.3	89.1	85.5	83.0	81.8	83.0
45°	4710.3	3278.1	416.3	199.0	125.8	85.5	75.7	74.5	73.3	73.3	73.3
47.5°	5217.0	3479.6	346.7	178.3	105.0	73.3	65.9	64.7	63.5	64.7	64.7
50°	6075.3	3848.3	310.1	157.5	86.7	62.3	56.2	56.2	56.2	56.2	57.4
52.5°	7380.4	4573.5	285.7	136.7	70.8	52.5	47.6	47.6	48.8	48.8	50.1
55°	8834.5	5535.6	263.7	116.0	59.8	44.0	39.1	40.3	41.5	42.7	42.7
57.5°	10411.9	6601.5	245.4	95.2	51.3	35.4	33.0	34.2	35.4	37.8	37.8
60°	12315.3	7755.2	218.5	74.5	42.7	28.1	25.6	28.1	31.7	34.2	35.4
62.5°	14405.5	8871.1	184.4	58.6	35.4	22.0	20.8	25.6	30.5	33.0	34.2
65°	15834.0	9221.5	141.6	47.6	26.9	15.9	17.1	23.2	29.3	33.0	33.0
67°	15255.3	8360.8	116.0	40.3	22.0	12.2	15.9	23.2	29.3	31.7	33.0
67.5°	14853.6	8023.8	111.1	39.1	20.8	12.2	15.9	23.2	29.3	33.0	33.0
70°	12085.8	6027.6	92.8	29.3	17.1	11.0	13.4	22.0	28.1	31.7	31.7
72.5°	8397.4	3716.5	83.0	20.8	14.7	9.8	12.2	20.8	26.9	30.5	31.7
75°	3992.4	1345.4	70.8	15.9	13.4	8.5	11.0	20.8	26.9	30.5	30.5
77.5°	814.3	312.6	57.4	13.4	11.0	8.5	9.8	19.5	25.6	29.3	29.3
80°	267.4	120.9	42.7	12.2	11.0	8.5	9.8	18.3	25.6	28.1	29.3
82.5°	192.9	61.0	28.1	12.2	11.0	8.5	8.5	18.3	24.4	28.1	28.1
85°	147.7	42.7	18.3	12.2	11.0	8.5	8.5	17.1	23.2	26.9	26.9
87.5°	97.7	17.1	14.7	12.2	11.0	8.5	8.5	17.1	22.0	25.6	26.9
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)