

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: P300697

Luminaire Tested: **GLNA-AF-08-LED-E1-RW-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300697  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24166)  
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-RW-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Rectangular  
Wide Type I OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

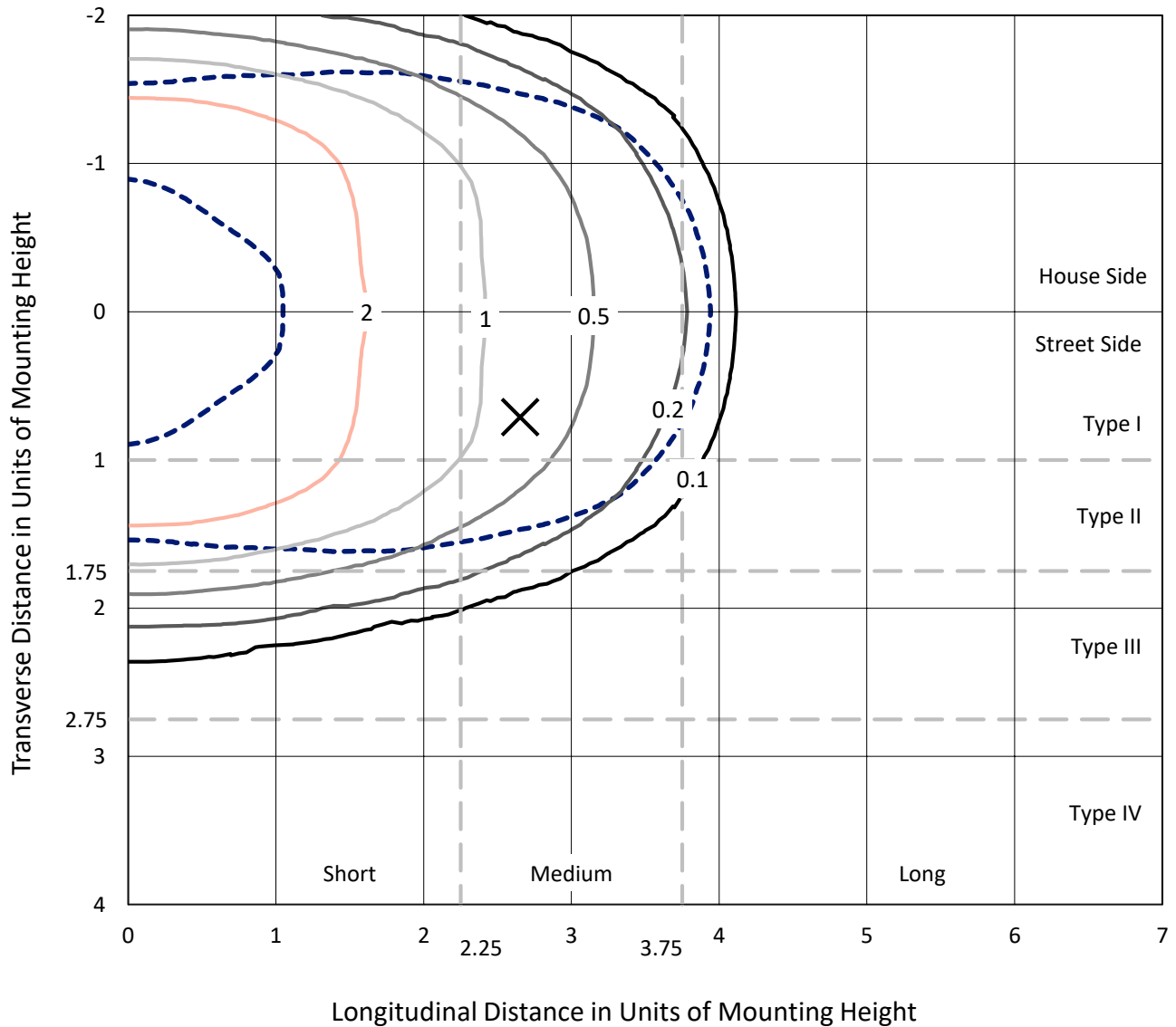
Lumens per Lamp: N/A  
Luminaire Lumens: 27815.1 lumens  
Efficiency: N/A  
Efficacy: 108.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B4 - U0 - G4  
  
Input Watts (W): 257  
Input Voltage (V): NR  
Input Current (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

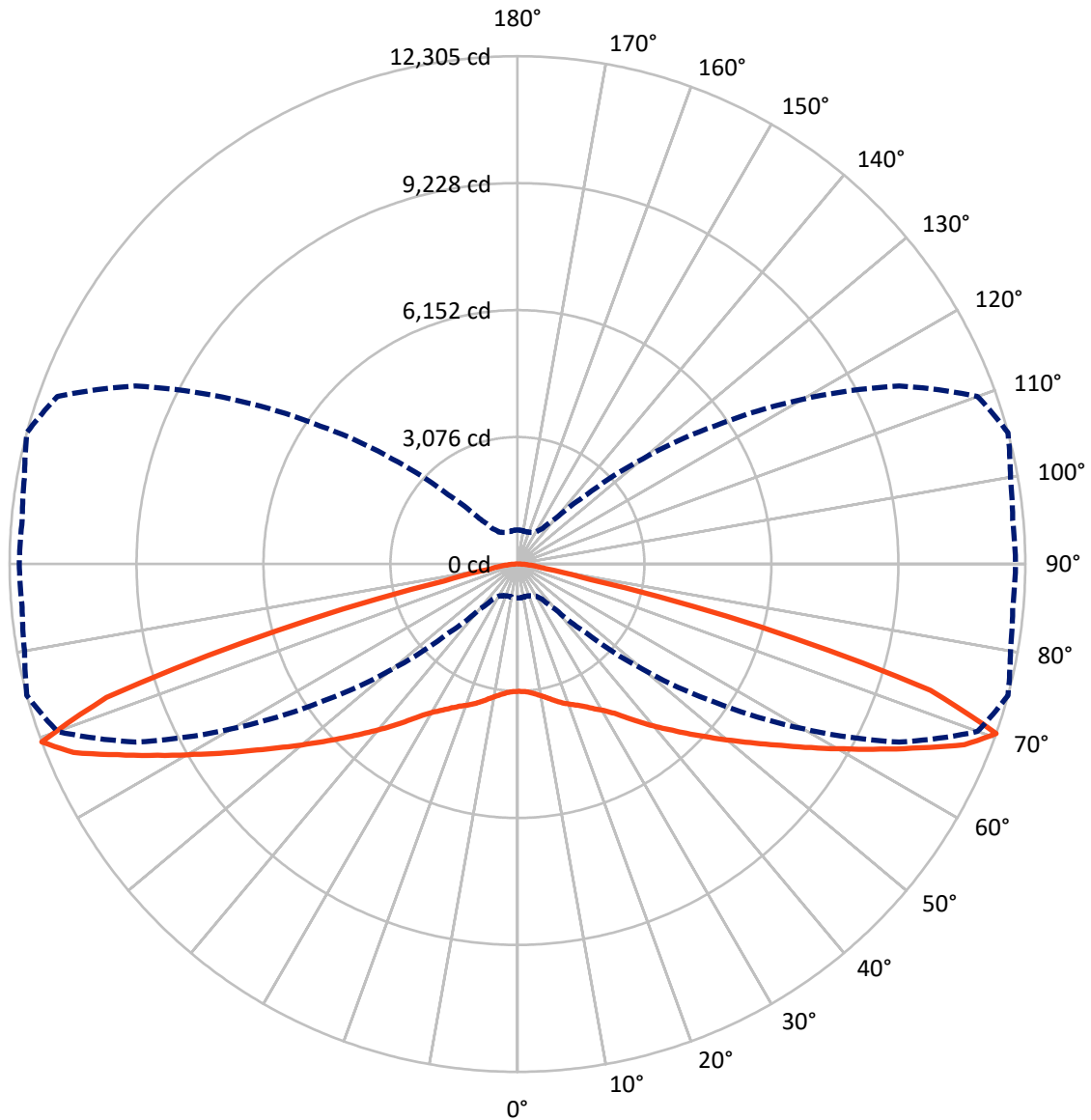
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13907.5	0.0	13907.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	13907.5	0.0	13907.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	27815.1	0.0	27815.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	295.9	1.1
10°-20°	919.4	3.3
20°-30°	1730.5	6.2
30°-40°	3064.4	11.0
40°-50°	5124.7	18.4
50°-60°	7141.2	25.7
60°-70°	6622.3	23.8
70°-80°	2639.2	9.5
80°-90°	277.4	1.0
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°	27815.1	100.0
0°-180°	27815.1	100.0



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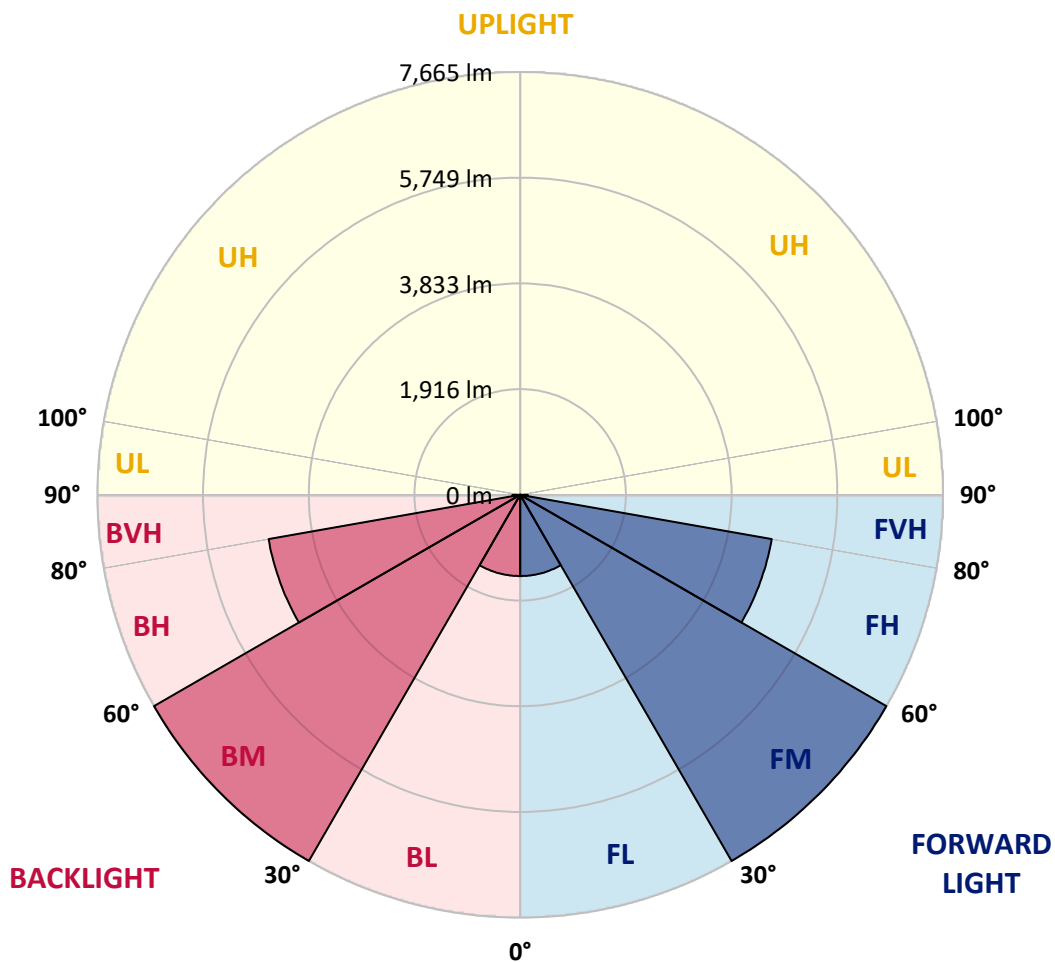
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1472.9	5.3			
FM	(30°-60°)	7665.1	27.6			
FH	(60°-80°)	4630.8	16.6			G2/5000
FVH	(80°-90°)	138.7	0.5			G2/225
BL	(0°-30°)	1472.9	5.3	B3/2500		
BM	(30°-60°)	7665.1	27.6	B4/8500		
BH	(60°-80°)	4630.8	16.6	B4/5000		G4/5000
BVH	(80°-90°)	138.7	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3
2.5°	3080.1	3077.5	3080.1	3078.8	3081.4	3081.4	3084.0	3089.3	3089.3	3093.2	3091.9
5°	3049.8	3048.5	3052.5	3056.4	3060.4	3068.3	3076.1	3088.0	3097.2	3103.7	3110.3
7.5°	2990.7	2990.7	2995.9	3005.2	3014.4	3031.4	3049.8	3073.5	3097.2	3116.9	3134.0
10°	2942.1	2944.7	2951.3	2967.0	2982.8	3009.1	3034.1	3068.3	3101.1	3134.0	3160.3
12.5°	2913.1	2917.1	2928.9	2952.6	2978.9	3014.4	3052.5	3095.9	3132.7	3172.1	3198.4
15°	2922.3	2925.0	2942.1	2971.0	3005.2	3049.8	3101.1	3152.4	3195.8	3237.8	3273.3
17.5°	2973.6	2977.5	2997.3	3030.1	3065.6	3118.2	3173.4	3231.3	3285.2	3332.5	3375.9
20°	3065.6	3069.6	3094.5	3130.0	3172.1	3226.0	3281.2	3341.7	3402.2	3452.1	3500.8
22.5°	3195.8	3202.3	3226.0	3261.5	3308.8	3366.7	3432.4	3496.8	3554.6	3600.7	3644.0
25°	3366.7	3381.1	3403.5	3442.9	3492.9	3545.4	3616.4	3682.2	3737.4	3780.8	3812.3
27.5°	3608.5	3628.3	3645.4	3683.5	3732.1	3782.1	3853.1	3910.9	3963.5	4005.6	4029.2
30°	3929.3	3949.0	3966.1	4002.9	4047.6	4094.9	4162.0	4213.3	4246.1	4279.0	4277.7
32.5°	4318.4	4339.5	4346.0	4385.5	4431.5	4482.7	4543.2	4572.1	4598.4	4602.4	4578.7
35°	4753.6	4764.1	4790.4	4842.9	4895.5	4937.6	4995.4	5009.9	5009.9	4990.2	4937.6
37.5°	5230.8	5237.3	5274.1	5333.3	5387.2	5430.6	5470.0	5498.9	5484.5	5442.4	5354.3
40°	5754.0	5765.8	5818.4	5871.0	5931.4	5972.2	6014.2	6019.5	6005.0	5943.3	5823.6
42.5°	6253.5	6264.0	6316.6	6399.4	6478.3	6534.8	6574.3	6582.1	6536.1	6479.6	6331.1
45°	6683.4	6711.0	6779.3	6876.6	6991.0	7071.2	7125.1	7147.4	7106.7	7033.1	6860.8
47.5°	7023.9	7051.5	7148.7	7264.4	7406.4	7536.5	7625.9	7673.3	7662.7	7607.5	7419.5
50°	7273.6	7299.9	7405.1	7547.1	7712.7	7874.4	8026.9	8139.9	8179.4	8154.4	7982.2
52.5°	7302.5	7345.9	7469.5	7660.1	7875.7	8096.6	8313.5	8505.4	8635.5	8655.3	8527.7
55°	6899.0	6942.3	7113.2	7395.9	7716.6	8076.8	8423.9	8747.3	9003.6	9135.1	9068.0
57.5°	5947.2	6024.8	6204.9	6536.1	7008.1	7547.1	8100.5	8675.0	9196.9	9545.2	9612.3
60°	4557.7	4649.7	4831.1	5183.4	5709.3	6352.1	7090.9	7940.1	8861.6	9645.1	10113.1
62.5°	2923.6	3010.4	3201.0	3507.3	3935.9	4632.6	5425.3	6433.6	7671.9	8909.0	10023.7
65°	1502.6	1549.9	1649.8	1835.2	2169.1	2689.6	3400.8	4406.5	5822.3	7348.6	8960.2
67.5°	951.8	961.0	983.3	1009.6	1095.1	1275.2	1606.4	2233.5	3398.2	4990.2	6876.6
70°	822.9	822.9	812.4	808.5	819.0	844.0	895.2	1041.2	1434.2	2368.9	3966.1
72.5°	753.3	745.4	727.0	712.5	709.9	709.9	720.4	742.7	805.8	964.9	1552.5
75°	694.1	671.8	646.8	629.7	623.1	616.5	615.2	619.2	632.3	657.3	741.4
77.5°	621.8	592.9	564.0	546.9	539.0	529.8	521.9	512.7	506.1	514.0	550.8
80°	535.0	502.2	479.8	469.3	461.4	448.3	431.2	415.4	400.9	398.3	420.7
82.5°	431.2	393.1	394.4	398.3	383.9	365.5	347.1	330.0	305.0	291.8	305.0
85°	348.4	328.6	319.4	344.4	323.4	295.8	266.9	236.6	197.2	165.6	180.1
87.5°	135.4	135.4	202.4	311.6	280.0	228.7	195.9	167.0	103.9	80.2	81.5
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3	3085.3
2.5°	3090.6	3093.2	3091.9	3090.6	3090.6	3089.3	3090.6	3090.6
5°	3114.3	3120.8	3120.8	3123.5	3123.5	3124.8	3126.1	3124.8
7.5°	3149.8	3161.6	3169.5	3178.7	3180.0	3181.3	3183.9	3181.3
10°	3185.2	3208.9	3226.0	3243.1	3251.0	3253.6	3256.2	3256.2
12.5°	3229.9	3262.8	3293.0	3323.3	3337.7	3345.6	3345.6	3350.9
15°	3303.6	3336.4	3371.9	3412.7	3437.7	3450.8	3454.7	3454.7
17.5°	3407.4	3436.3	3466.6	3506.0	3537.6	3554.6	3558.6	3557.3
20°	3528.4	3556.0	3573.1	3598.0	3625.6	3645.4	3650.6	3650.6
22.5°	3666.4	3682.2	3684.8	3692.7	3715.0	3741.3	3753.2	3755.8
25°	3818.9	3822.8	3812.3	3812.3	3826.8	3851.7	3863.6	3864.9
27.5°	4016.1	3996.4	3970.1	3960.9	3970.1	3999.0	4013.4	4018.7
30°	4261.9	4214.6	4154.1	4121.2	4116.0	4154.1	4180.4	4184.3
32.5°	4543.2	4474.9	4394.7	4327.6	4310.5	4334.2	4365.8	4364.4
35°	4877.1	4795.6	4698.3	4612.9	4573.5	4597.1	4641.8	4647.1
37.5°	5262.3	5155.8	5044.1	4936.3	4874.5	4881.1	4928.4	4944.2
40°	5692.2	5554.1	5413.5	5268.9	5180.8	5163.7	5221.5	5230.8
42.5°	6152.3	5974.8	5797.3	5618.6	5505.5	5479.2	5546.3	5542.3
45°	6642.6	6416.5	6208.8	6011.6	5877.5	5838.1	5893.3	5893.3
47.5°	7169.8	6891.1	6643.9	6420.5	6274.5	6218.0	6270.6	6274.5
50°	7728.5	7432.7	7142.2	6893.7	6718.9	6646.6	6714.9	6725.4
52.5°	8284.5	7996.6	7703.5	7419.5	7207.9	7119.8	7198.7	7232.9
55°	8848.5	8565.9	8285.9	8008.5	7757.4	7653.5	7737.7	7781.1
57.5°	9444.0	9182.4	8915.5	8635.5	8393.7	8232.0	8321.3	8379.2
60°	10142.1	9918.6	9641.2	9332.3	9087.8	8923.4	8974.7	9026.0
62.5°	10694.2	10780.9	10545.6	10188.1	9873.9	9663.5	9713.5	9767.4
65°	10427.3	11317.3	11526.3	11164.8	10729.7	10402.3	10381.3	10408.9
67.5°	8715.7	10444.4	11705.1	12049.5	11685.4	11230.5	11146.4	11187.2
70°	5830.2	7983.5	10207.8	11864.2	12304.6	12128.4	12045.6	12070.6
72.5°	2800.1	4649.7	6925.3	9127.2	10468.1	11083.3	11280.5	11376.5
75°	1024.1	1845.7	3337.7	5029.6	6072.1	7029.1	7653.5	7908.6
77.5°	617.9	745.4	1066.1	1605.1	1818.1	2035.0	1950.9	1992.9
80°	457.5	516.6	585.0	657.3	681.0	681.0	654.7	633.6
82.5°	320.8	358.9	391.7	431.2	441.7	422.0	347.1	276.1
85°	206.4	223.5	237.9	262.9	256.3	244.5	164.3	145.9
87.5°	94.7	107.8	113.1	124.9	119.6	114.4	81.5	68.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)