

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: P299750

Luminaire Tested: **GLNA-AF-10-LED-E1-5MQ-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299750  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-10-LED-E1-5MQ-7030-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 39304.1 lumens  
Efficiency: N/A  
Efficacy: 121.7 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G4  
  
Input Watts (W): 323  
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

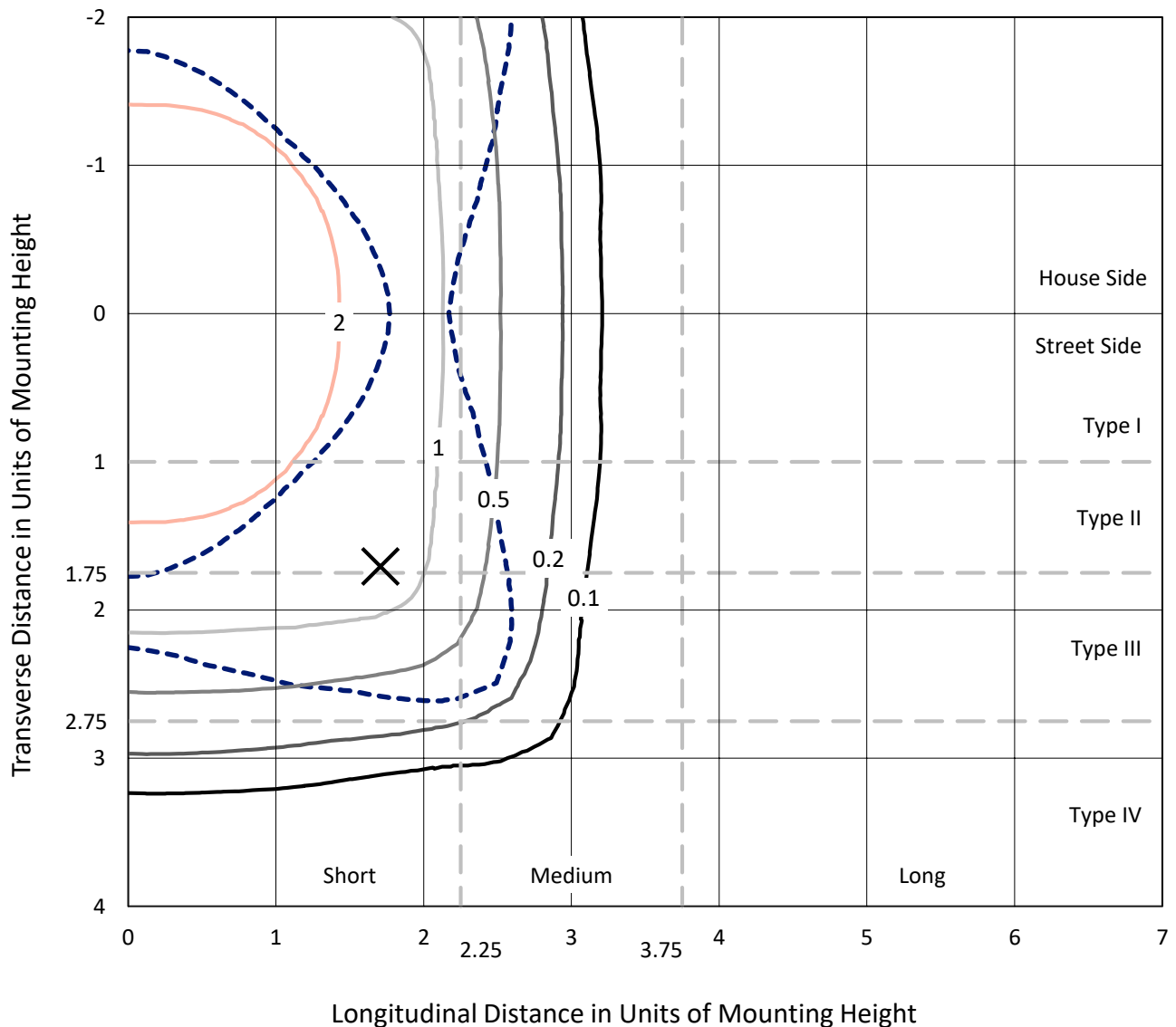


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

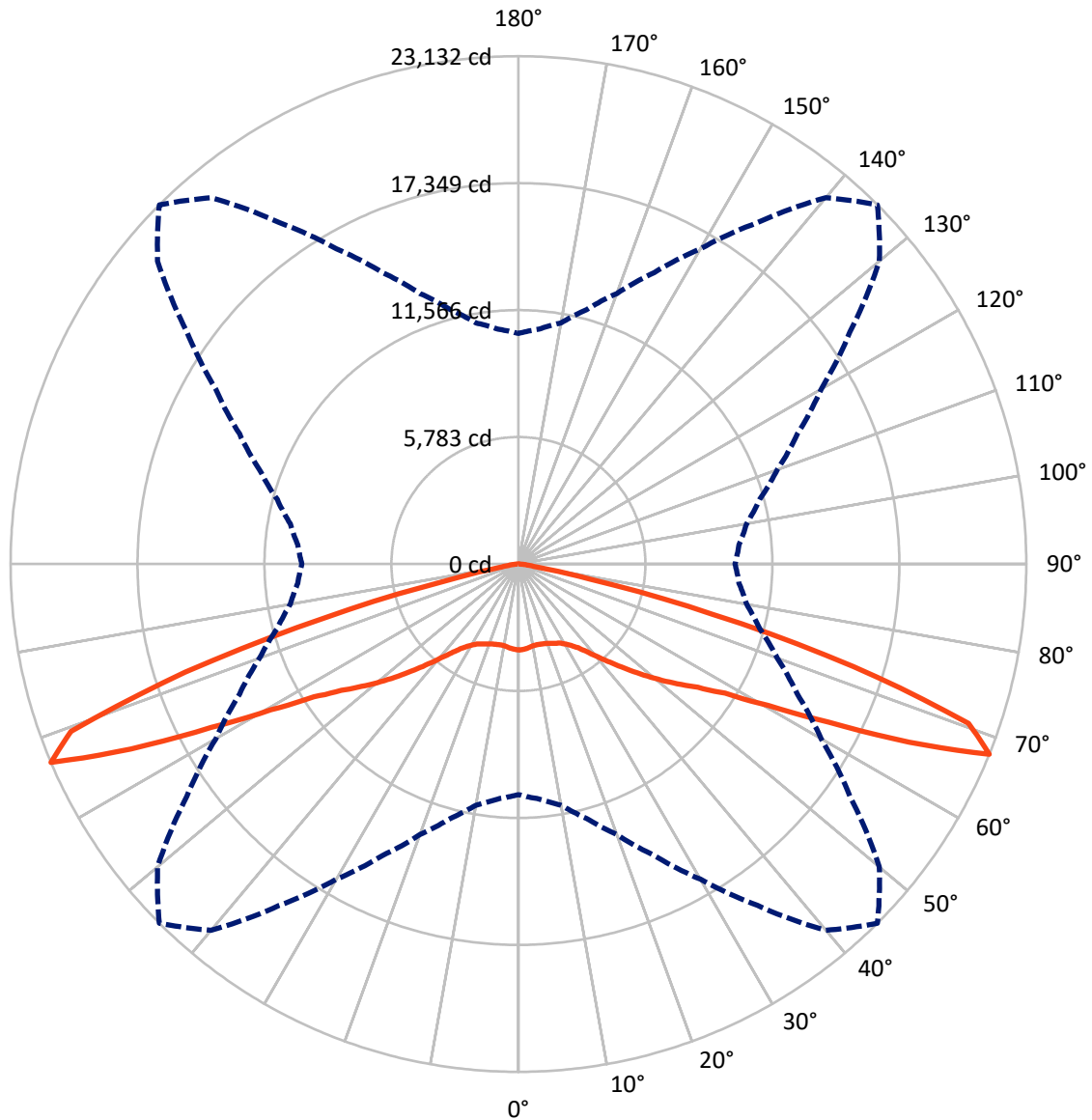


Based on 30 foot mounting height. Maximum calculated value = 4.4 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	19652.0	0.0	19652.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	19652.0	0.0	19652.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	39304.1	0.0	39304.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	366.6	0.9
10°-20°	1063.8	2.7
20°-30°	1808.4	4.6
30°-40°	2956.2	7.5
40°-50°	5277.4	13.4
50°-60°	8897.8	22.6
60°-70°	13808.1	35.1
70°-80°	4851.6	12.3
80°-90°	274.2	0.7
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°	39304.1	100.0
0°-180°	39304.1	100.0



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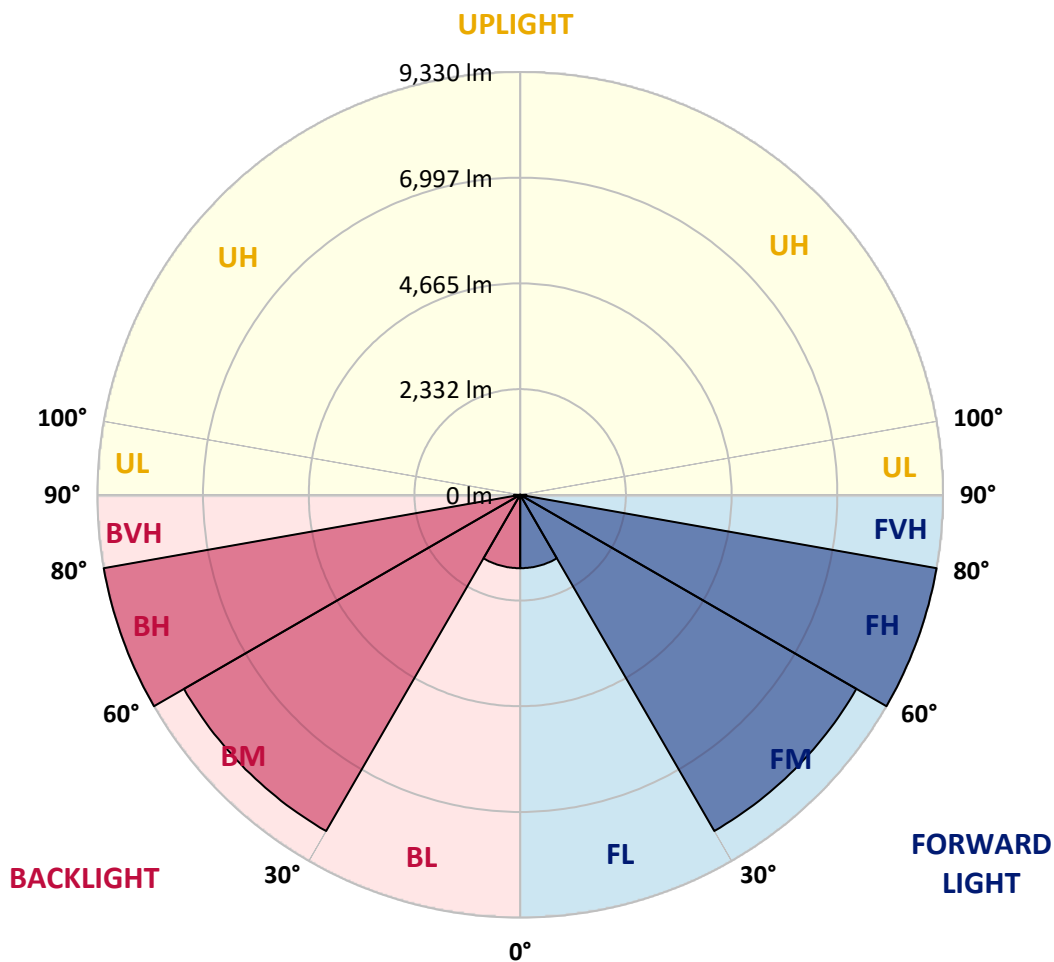
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1619.4	4.1			
FM	(30°-60°)	8565.7	21.8			
FH	(60°-80°)	9329.8	23.7			G4/12000
FVH	(80°-90°)	137.1	0.3			G2/225
BL	(0°-30°)	1619.4	4.1	B3/2500		
BM	(30°-60°)	8565.7	21.8	B5		
BH	(60°-80°)	9329.8	23.7	B5		G4/12000
BVH	(80°-90°)	137.1	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8
2.5°	3902.4	3906.0	3906.0	3906.0	3904.2	3904.2	3900.5	3904.2	3902.4	3896.9	3898.7
5°	3869.8	3873.4	3873.4	3871.6	3877.1	3875.2	3869.8	3873.4	3871.6	3868.0	3869.8
7.5°	3822.8	3828.3	3828.3	3826.4	3831.9	3830.1	3826.4	3828.3	3828.3	3822.8	3822.8
10°	3770.4	3774.0	3774.0	3772.2	3781.3	3781.3	3779.4	3784.9	3786.7	3781.3	3777.6
12.5°	3721.6	3727.0	3727.0	3734.3	3743.3	3746.9	3756.0	3763.2	3770.4	3768.6	3761.4
15°	3692.7	3696.3	3703.5	3712.6	3727.0	3739.7	3754.1	3770.4	3784.9	3788.5	3777.6
17.5°	3674.6	3680.0	3690.9	3703.5	3723.4	3745.1	3766.8	3788.5	3808.4	3815.6	3802.9
20°	3669.2	3672.8	3683.7	3705.3	3732.5	3765.0	3795.7	3821.0	3848.1	3857.2	3848.1
22.5°	3680.0	3687.3	3699.9	3725.2	3761.4	3802.9	3839.1	3873.4	3907.8	3924.0	3911.4
25°	3728.8	3736.1	3752.3	3784.9	3824.6	3868.0	3909.6	3949.4	3980.1	3996.3	3987.3
27.5°	3819.2	3828.3	3848.1	3880.7	3924.0	3971.0	4016.2	4048.8	4074.1	4079.5	4068.6
30°	3954.8	3974.7	3998.2	4034.3	4084.9	4124.7	4169.9	4198.8	4229.5	4229.5	4220.5
32.5°	4166.2	4186.1	4211.4	4245.8	4285.5	4328.9	4368.7	4394.0	4426.5	4428.3	4406.6
35°	4482.6	4491.6	4513.3	4535.0	4571.1	4609.1	4643.4	4659.7	4686.8	4688.6	4668.7
37.5°	4900.1	4901.9	4916.4	4923.6	4956.1	4997.7	5030.2	5041.1	5066.4	5062.8	5042.9
40°	5386.3	5395.3	5400.8	5411.6	5445.9	5485.7	5520.1	5525.5	5552.6	5547.2	5521.9
42.5°	5948.4	5952.0	5982.8	5999.0	6031.6	6051.5	6094.8	6100.3	6132.8	6118.3	6089.4
45°	6579.2	6611.8	6640.7	6673.2	6707.6	6731.1	6765.4	6758.2	6779.9	6758.2	6741.9
47.5°	7242.6	7266.1	7331.2	7381.8	7437.8	7457.7	7506.5	7484.8	7506.5	7475.8	7470.3
50°	7972.8	8014.4	8070.4	8128.3	8187.9	8220.4	8283.7	8256.6	8285.5	8256.6	8240.3
52.5°	8692.2	8703.0	8825.9	8910.9	8994.0	9032.0	9070.0	9057.3	9059.1	9057.3	9041.0
55°	9375.4	9400.7	9523.6	9639.3	9783.9	9890.6	9955.6	9948.4	9932.1	9915.9	9888.7
57.5°	10145.4	10170.7	10311.7	10454.5	10619.0	10770.8	10902.7	11038.3	11090.7	11105.2	11045.5
60°	11186.5	11184.7	11372.7	11546.2	11781.2	12007.1	12296.3	12590.9	12928.9	13086.2	12878.3
62.5°	12245.7	12289.1	12560.2	12867.5	13351.9	13823.6	14356.8	14881.0	15416.0	15851.6	15388.9
65°	12119.2	12285.5	12688.5	13384.4	14279.1	15341.9	16491.5	17707.9	18806.9	19562.4	18714.7
67.5°	10503.3	10740.1	11150.4	11996.3	13115.1	14647.8	16578.2	18984.0	21780.2	23132.2	21456.6
70°	7613.1	7880.6	8310.8	9136.8	10244.8	11701.6	13798.3	16686.7	20388.4	21751.3	19905.8
72.5°	3788.5	3933.1	4198.8	4724.8	5563.4	6745.5	8647.0	11423.3	14698.5	15949.2	14262.9
75°	1286.9	1353.8	1399.0	1570.7	1836.4	2300.9	3246.2	4994.1	7618.5	9133.2	7510.1
77.5°	742.9	744.7	775.4	806.1	851.3	901.9	1028.5	1350.2	2335.3	3316.7	2416.6
80°	480.8	479.0	504.3	527.8	558.5	583.8	591.0	625.4	721.2	854.9	764.6
82.5°	249.4	280.2	336.2	366.9	424.8	435.6	421.1	408.5	432.0	448.3	459.1
85°	137.4	119.3	178.9	231.4	256.7	260.3	260.3	245.8	254.9	249.4	271.1
87.5°	63.3	57.8	70.5	113.9	121.1	103.0	108.4	95.8	68.7	66.9	75.9
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°	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8	3916.8
2.5°	3898.7	3900.5	3900.5	3906.0	3907.8	3911.4	3915.0	3916.8
5°	3868.0	3873.4	3869.8	3875.2	3875.2	3878.9	3878.9	3880.7
7.5°	3822.8	3828.3	3828.3	3828.3	3826.4	3831.9	3831.9	3831.9
10°	3775.8	3779.4	3777.6	3774.0	3770.4	3775.8	3774.0	3772.2
12.5°	3761.4	3752.3	3745.1	3741.5	3734.3	3736.1	3730.6	3730.6
15°	3770.4	3754.1	3741.5	3736.1	3728.8	3725.2	3721.6	3723.4
17.5°	3793.9	3774.0	3757.8	3748.7	3739.7	3734.3	3727.0	3728.8
20°	3835.5	3812.0	3788.5	3770.4	3754.1	3745.1	3739.7	3737.9
22.5°	3896.9	3862.6	3828.3	3801.1	3779.4	3766.8	3761.4	3757.8
25°	3967.4	3929.5	3889.7	3859.0	3837.3	3821.0	3810.2	3810.2
27.5°	4056.0	4025.3	3989.1	3953.0	3933.1	3916.8	3909.6	3906.0
30°	4204.2	4175.3	4146.4	4112.0	4086.7	4070.5	4057.8	4047.0
32.5°	4394.0	4370.5	4347.0	4321.7	4298.2	4276.5	4256.6	4247.6
35°	4661.5	4643.4	4627.2	4598.2	4589.2	4576.5	4565.7	4556.7
37.5°	5030.2	5023.0	5023.0	4992.3	4985.0	4979.6	4968.8	4970.6
40°	5514.6	5521.9	5512.8	5502.0	5496.6	5482.1	5482.1	5494.8
42.5°	6087.6	6093.0	6112.9	6094.8	6114.7	6096.6	6085.8	6094.8
45°	6752.8	6772.6	6812.4	6794.3	6807.0	6776.3	6738.3	6740.1
47.5°	7499.2	7517.3	7533.6	7520.9	7522.7	7472.1	7421.5	7408.9
50°	8274.7	8281.9	8290.9	8272.9	8276.5	8220.4	8162.6	8164.4
52.5°	9041.0	9075.4	9111.5	9062.7	9051.9	8988.6	8907.3	8874.7
55°	9917.7	9966.5	9924.9	9839.9	9755.0	9670.0	9563.4	9545.3
57.5°	10998.5	10915.4	10785.3	10624.4	10506.9	10387.6	10279.2	10234.0
60°	12502.4	12189.7	11954.7	11716.1	11566.1	11419.7	11276.9	11255.2
62.5°	14628.0	14087.5	13619.4	13125.9	12722.9	12408.4	12157.1	12086.6
65°	17292.2	16014.3	14906.3	13872.4	12974.1	12296.3	11869.7	11681.8
67.5°	18438.1	15914.9	14015.2	12547.6	11372.7	10552.1	10091.2	9861.6
70°	16202.3	13198.2	11132.3	9662.8	8592.8	7718.0	7300.4	7054.6
72.5°	11146.8	8395.8	6638.9	5418.8	4563.9	3831.9	3542.7	3521.0
75°	5004.9	3314.9	2284.7	1760.5	1482.1	1288.7	1229.1	1183.9
77.5°	1400.8	1035.7	923.6	864.0	806.1	739.3	714.0	719.4
80°	681.4	643.5	618.2	580.2	527.8	471.8	446.4	457.3
82.5°	451.9	446.4	462.7	435.6	359.7	305.5	256.7	235.0
85°	274.7	278.4	283.8	285.6	242.2	169.9	115.7	130.1
87.5°	108.4	124.7	135.6	141.0	131.9	81.3	65.1	66.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)