

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: P299500

Luminaire Tested: **GLNA-AF-08-LED-E1-5NQ-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299500  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)  
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-E1-5NQ-600  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32305.2 lumens  
Efficiency: N/A  
Efficacy: 125.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G2

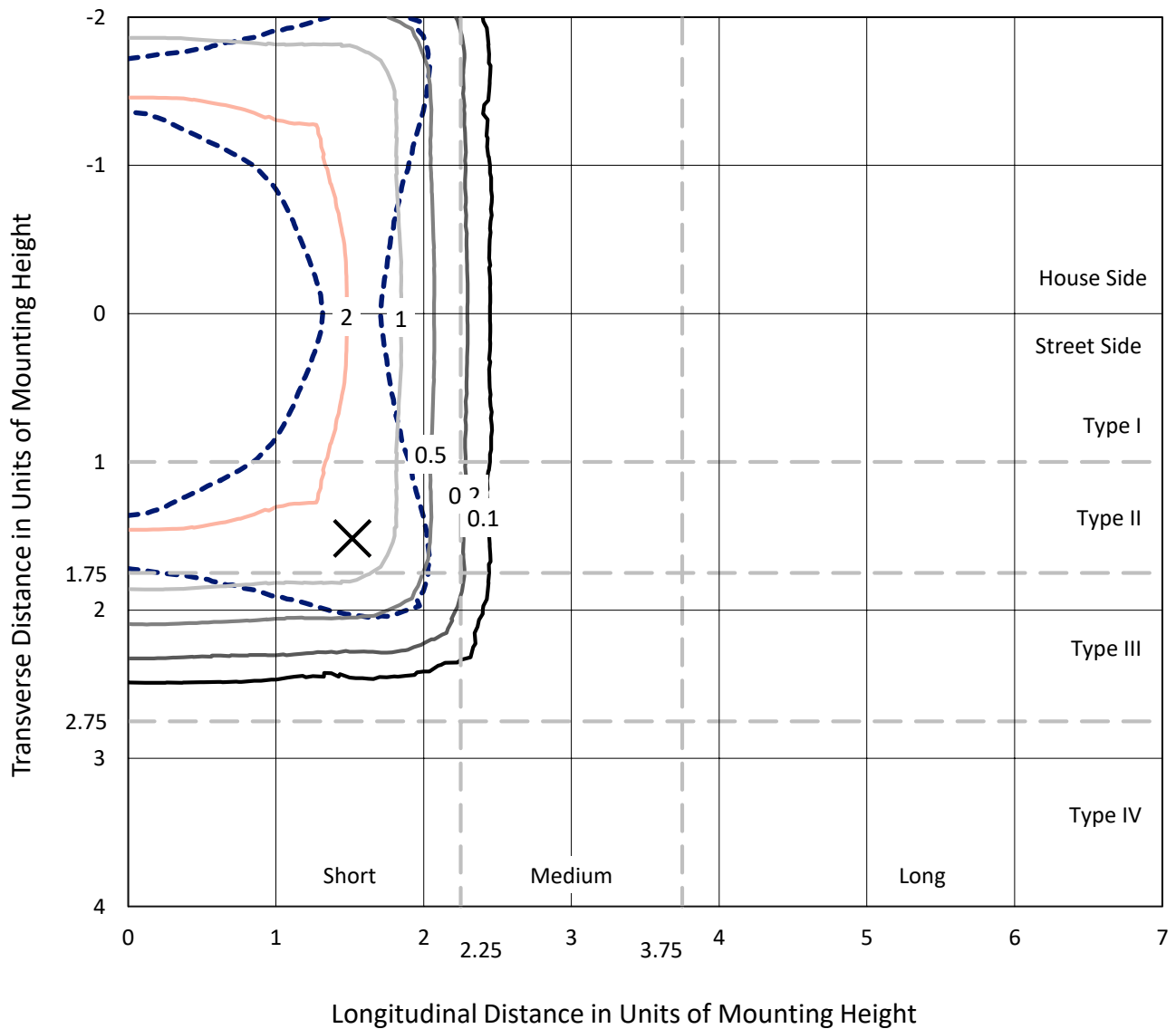
Input Watts (W): 257  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P299500  
 CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-600

### Iso-Footcandle Lines of Horizontal Illumination

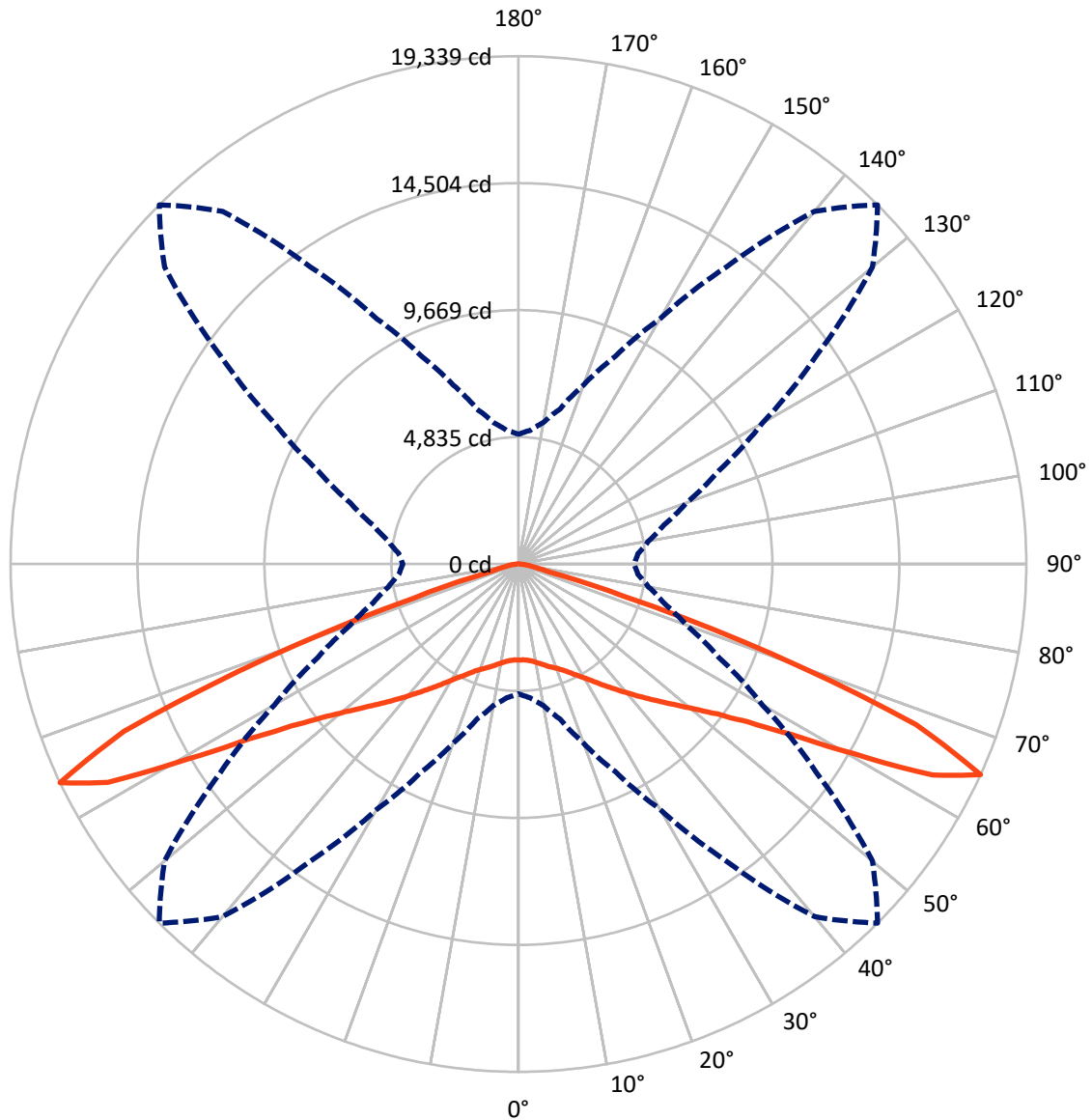
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.1 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P299500  
CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-600

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P299500

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	16152.6	0.0	16152.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	16152.6	0.0	16152.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	32305.2	0.0	32305.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	356.3	1.1
10°-20°	1142.6	3.5
20°-30°	2136.5	6.6
30°-40°	3613.5	11.2
40°-50°	5908.4	18.3
50°-60°	9395.3	29.1
60°-70°	8492.8	26.3
70°-80°	1074.8	3.3
80°-90°	184.9	0.6
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°	32305.2	100.0
0°-180°	32305.2	100.0



REPORT NUMBER: P299500

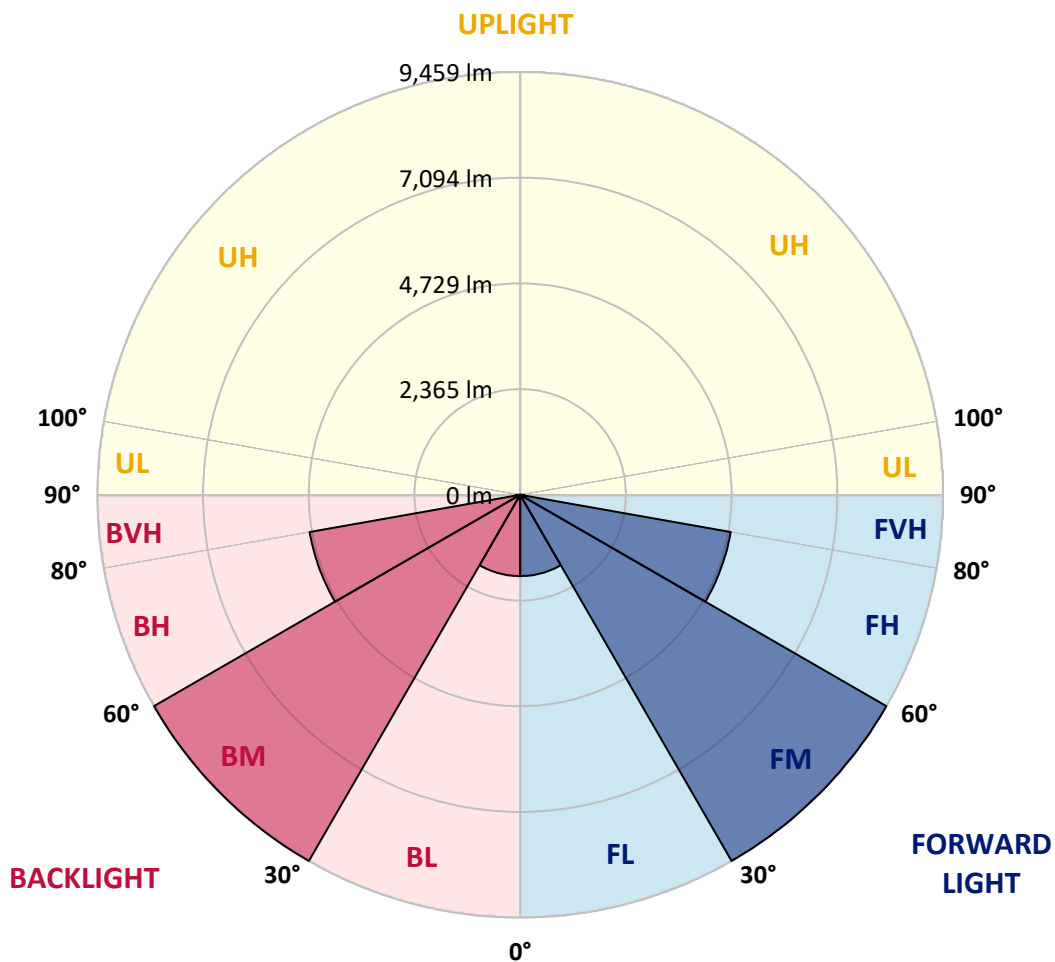
CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-600

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1817.7	5.6			
FM	(30°-60°)	9458.6	29.3			
FH	(60°-80°)	4783.8	14.8			G2/5000
FVH	(80°-90°)	92.4	0.3			G1/100
BL	(0°-30°)	1817.7	5.6	B3/2500		
BM	(30°-60°)	9458.6	29.3	B5		
BH	(60°-80°)	4783.8	14.8	B4/5000		G2/5000
BVH	(80°-90°)	92.4	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G2**

Type V Short





REPORT NUMBER: P299500

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3
2.5°	3658.4	3661.4	3664.4	3661.4	3664.4	3659.9	3656.9	3661.4	3656.9	3652.3	3655.3
5°	3690.1	3691.7	3691.7	3687.1	3691.7	3688.6	3684.1	3690.1	3685.6	3681.1	3684.1
7.5°	3743.1	3749.2	3744.6	3740.1	3743.1	3740.1	3737.0	3738.6	3737.0	3732.5	3734.0
10°	3814.2	3818.7	3815.7	3814.2	3817.2	3815.7	3812.7	3811.2	3812.7	3808.2	3808.2
12.5°	3900.4	3898.9	3897.4	3898.9	3903.5	3903.5	3902.0	3903.5	3906.5	3908.0	3905.0
15°	3985.2	3988.2	3988.2	3988.2	3997.3	4004.8	4009.4	4012.4	4018.5	4020.0	4013.9
17.5°	4091.1	4091.1	4089.6	4091.1	4100.2	4112.3	4116.8	4122.9	4128.9	4133.4	4125.9
20°	4209.1	4212.1	4212.1	4215.1	4227.3	4240.9	4240.9	4243.9	4240.9	4243.9	4239.4
22.5°	4352.8	4361.9	4361.9	4363.4	4375.5	4392.2	4387.6	4392.2	4384.6	4390.7	4384.6
25°	4540.4	4554.1	4551.0	4551.0	4560.1	4570.7	4572.2	4581.3	4579.8	4587.3	4582.8
27.5°	4752.3	4773.4	4779.5	4778.0	4784.0	4794.6	4797.6	4808.2	4802.2	4808.2	4805.2
30°	5006.4	5015.5	5027.6	5032.2	5039.7	5050.3	5050.3	5051.8	5044.3	5053.3	5057.9
32.5°	5269.7	5286.3	5298.4	5325.7	5339.3	5346.9	5345.3	5348.4	5340.8	5352.9	5362.0
35°	5617.7	5629.8	5649.4	5670.6	5688.8	5687.3	5682.7	5684.2	5684.2	5694.8	5703.9
37.5°	6036.8	6039.8	6065.5	6095.8	6104.9	6095.8	6068.5	6062.5	6048.9	6062.5	6077.6
40°	6480.1	6490.7	6542.1	6561.8	6566.3	6549.7	6510.3	6487.6	6457.4	6474.0	6495.2
42.5°	6944.6	6965.7	7012.6	7047.4	7062.6	7052.0	6997.5	6962.7	6923.4	6932.5	6953.6
45°	7459.0	7484.7	7551.3	7584.5	7613.3	7596.6	7543.7	7490.7	7428.7	7433.2	7466.5
47.5°	8033.9	8059.6	8145.9	8201.8	8217.0	8213.9	8154.9	8082.3	7997.6	7994.6	8023.3
50°	8678.4	8704.1	8811.6	8897.8	8941.7	8937.1	8867.5	8764.7	8661.8	8663.3	8699.6
52.5°	9307.8	9339.6	9451.6	9599.8	9686.1	9748.1	9705.7	9608.9	9483.3	9486.4	9519.6
55°	9897.9	9950.8	10079.4	10280.7	10441.0	10615.0	10665.0	10661.9	10586.3	10607.5	10640.8
57.5°	10183.8	10262.5	10460.7	10778.4	11105.2	11459.3	11758.8	11982.8	12078.1	12221.8	12188.5
60°	9642.2	9767.8	10059.8	10527.3	11173.3	11911.7	12702.9	13476.1	14135.7	14633.5	14347.5
62.5°	7894.7	8058.1	8412.1	9011.3	9988.7	11170.3	12684.8	14512.5	16503.5	17704.8	16847.0
65°	4939.9	5109.3	5469.4	6110.9	7254.7	8723.8	10778.4	13807.4	17527.8	19338.8	17592.9
67.5°	1926.0	2018.3	2213.5	2623.5	3482.9	4790.1	6852.3	10289.7	14739.4	16326.5	14465.6
70°	965.3	974.4	1010.7	1086.3	1270.9	1650.7	2511.5	4770.4	8453.0	10209.6	8148.9
72.5°	697.5	699.0	717.2	750.4	809.4	894.2	1057.6	1460.0	2749.1	4201.5	2576.6
75°	534.1	540.1	550.7	568.9	600.7	643.0	702.0	841.2	1042.4	1208.9	1016.7
77.5°	411.5	423.6	431.2	447.8	467.5	496.3	512.9	565.9	658.1	692.9	682.4
80°	313.2	323.8	340.4	354.0	367.7	381.3	375.2	399.4	447.8	476.6	461.5
82.5°	199.7	211.8	260.2	272.3	278.4	287.5	276.9	278.4	299.6	317.7	299.6
85°	128.6	136.2	164.9	180.0	181.6	187.6	183.1	172.5	172.5	157.3	177.0
87.5°	59.0	60.5	74.1	87.8	90.8	81.7	80.2	77.2	62.0	59.0	63.5
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: P299500

CATALOG NUMBER: GLNA-AF-08-LED-E1-5NQ-600

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3	3655.3
2.5°	3653.8	3656.9	3658.4	3662.9	3664.4	3664.4	3665.9	3669.0
5°	3682.6	3687.1	3688.6	3694.7	3696.2	3694.7	3697.7	3699.2
7.5°	3734.0	3741.6	3744.6	3750.7	3746.1	3752.2	3753.7	3753.7
10°	3809.7	3817.2	3818.7	3824.8	3821.8	3824.8	3824.8	3821.8
12.5°	3909.5	3911.0	3906.5	3911.0	3905.0	3908.0	3903.5	3900.4
15°	4020.0	4015.4	4004.8	4004.8	3995.8	3997.3	3995.8	3994.3
17.5°	4127.4	4118.3	4110.8	4107.7	4100.2	4098.6	4094.1	4094.1
20°	4245.4	4240.9	4236.3	4230.3	4222.7	4215.1	4213.6	4216.7
22.5°	4387.6	4386.1	4386.1	4383.1	4372.5	4364.9	4360.4	4360.4
25°	4578.3	4564.6	4564.6	4563.1	4558.6	4554.1	4545.0	4549.5
27.5°	4793.1	4785.5	4791.6	4790.1	4785.5	4785.5	4779.5	4779.5
30°	5057.9	5054.8	5063.9	5056.4	5041.2	5039.7	5033.7	5026.1
32.5°	5363.5	5360.5	5374.1	5365.0	5340.8	5327.2	5315.1	5309.0
35°	5703.9	5705.4	5722.1	5716.0	5688.8	5679.7	5658.5	5655.5
37.5°	6076.1	6100.3	6129.1	6135.1	6112.4	6106.4	6083.7	6071.6
40°	6513.4	6545.1	6589.0	6599.6	6575.4	6570.8	6539.1	6522.4
42.5°	6979.4	7033.8	7088.3	7097.4	7073.2	7048.9	7018.7	7006.6
45°	7499.8	7564.9	7636.0	7654.1	7617.8	7589.1	7549.7	7549.7
47.5°	8083.8	8165.5	8245.7	8295.6	8262.4	8232.1	8185.2	8154.9
50°	8773.7	8885.7	8990.1	9041.5	8988.6	8931.1	8849.4	8822.2
52.5°	9639.2	9760.2	9851.0	9823.7	9742.0	9661.9	9572.6	9536.3
55°	10743.6	10784.5	10784.5	10681.6	10518.2	10383.5	10242.8	10195.9
57.5°	12125.0	11967.6	11725.6	11418.4	11032.6	10696.7	10469.8	10362.4
60°	13748.4	12991.9	12137.1	11297.4	10607.5	10038.6	9701.2	9546.9
62.5°	14830.2	12851.2	11138.5	9790.5	8797.9	8112.6	7646.6	7465.0
65°	13860.4	10717.9	8424.2	6811.4	5729.6	5032.2	4570.7	4401.2
67.5°	10152.1	6716.1	4486.0	3215.1	2355.7	1879.1	1690.0	1611.3
70°	4557.1	2364.8	1449.4	1131.7	975.9	895.7	860.9	848.8
72.5°	1373.8	994.0	838.2	756.5	694.5	655.1	626.4	623.3
75°	829.1	689.9	612.8	564.3	525.0	493.2	478.1	473.6
77.5°	579.5	506.8	470.5	435.7	405.5	381.3	367.7	357.1
80°	407.0	372.2	355.5	335.9	316.2	293.5	273.8	264.8
82.5°	272.3	264.8	264.8	252.7	236.0	214.8	175.5	166.4
85°	175.5	174.0	177.0	172.5	160.4	137.7	113.5	107.4
87.5°	81.7	83.2	92.3	90.8	87.8	72.6	57.5	54.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)