

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: P299486

Luminaire Tested: **GLNA-AF-06-LED-E1-5NQ-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299486
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-06-LED-E1-5NQ-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 3000K 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: 23320.3 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

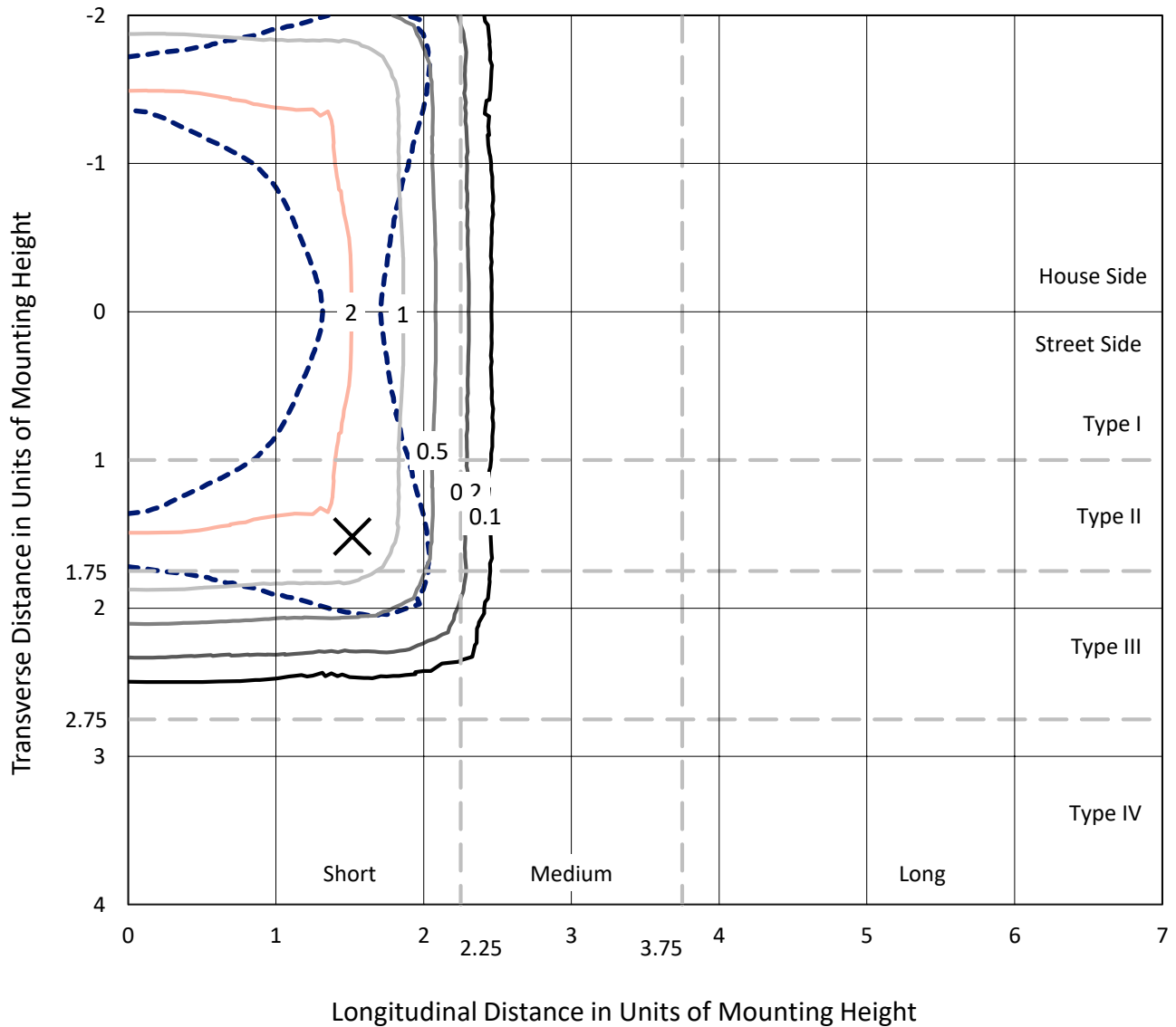
Input Watts (W): 193
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

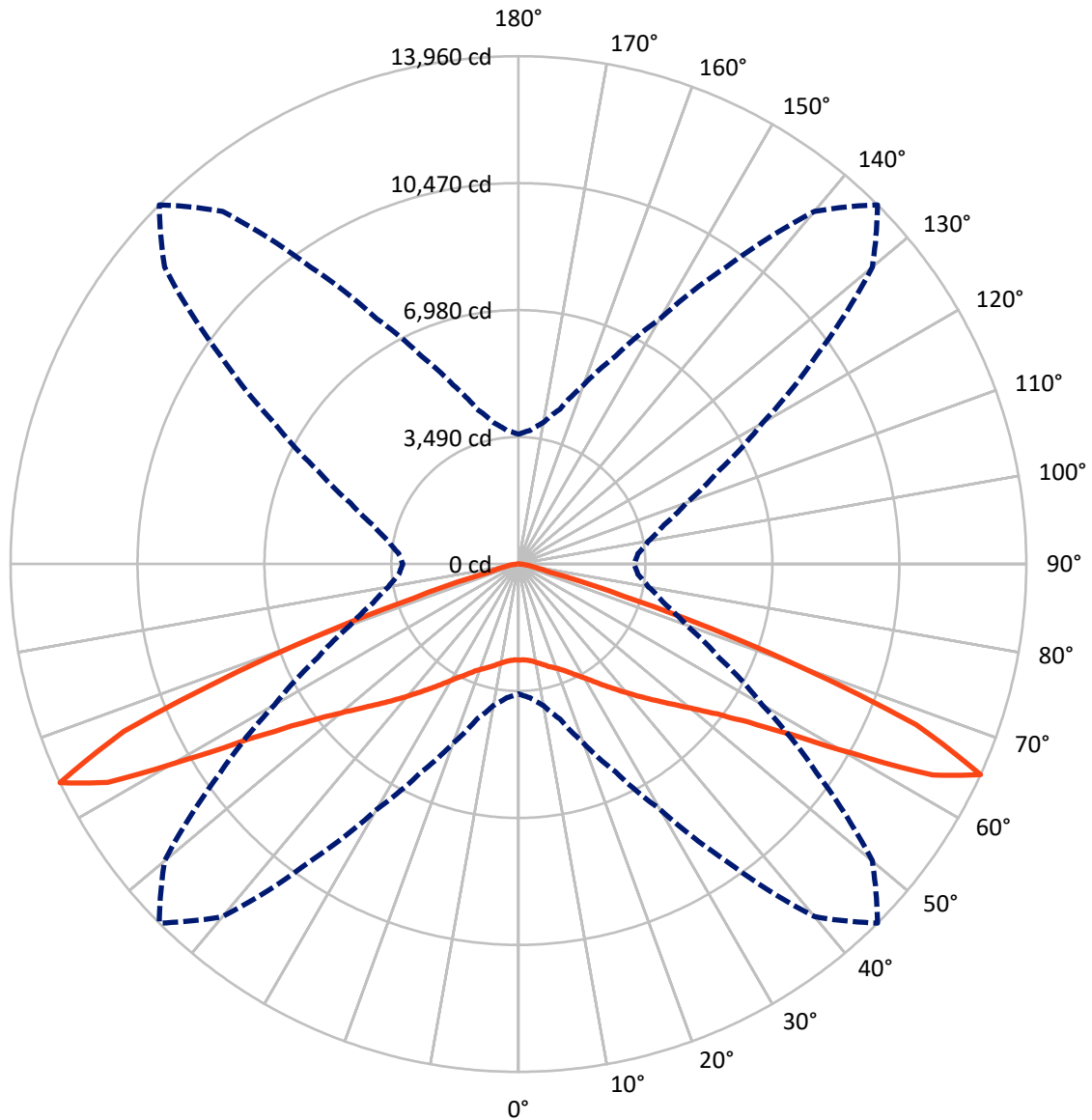
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11660.1	0.0	11660.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	11660.1	0.0	11660.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	23320.3	0.0	23320.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	1.1
10°-20°	824.8	3.5
20°-30°	1542.3	6.6
30°-40°	2608.5	11.2
40°-50°	4265.1	18.3
50°-60°	6782.3	29.1
60°-70°	6130.7	26.3
70°-80°	775.9	3.3
80°-90°	133.5	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°	23320.3	100.0
0°-180°	23320.3	100.0



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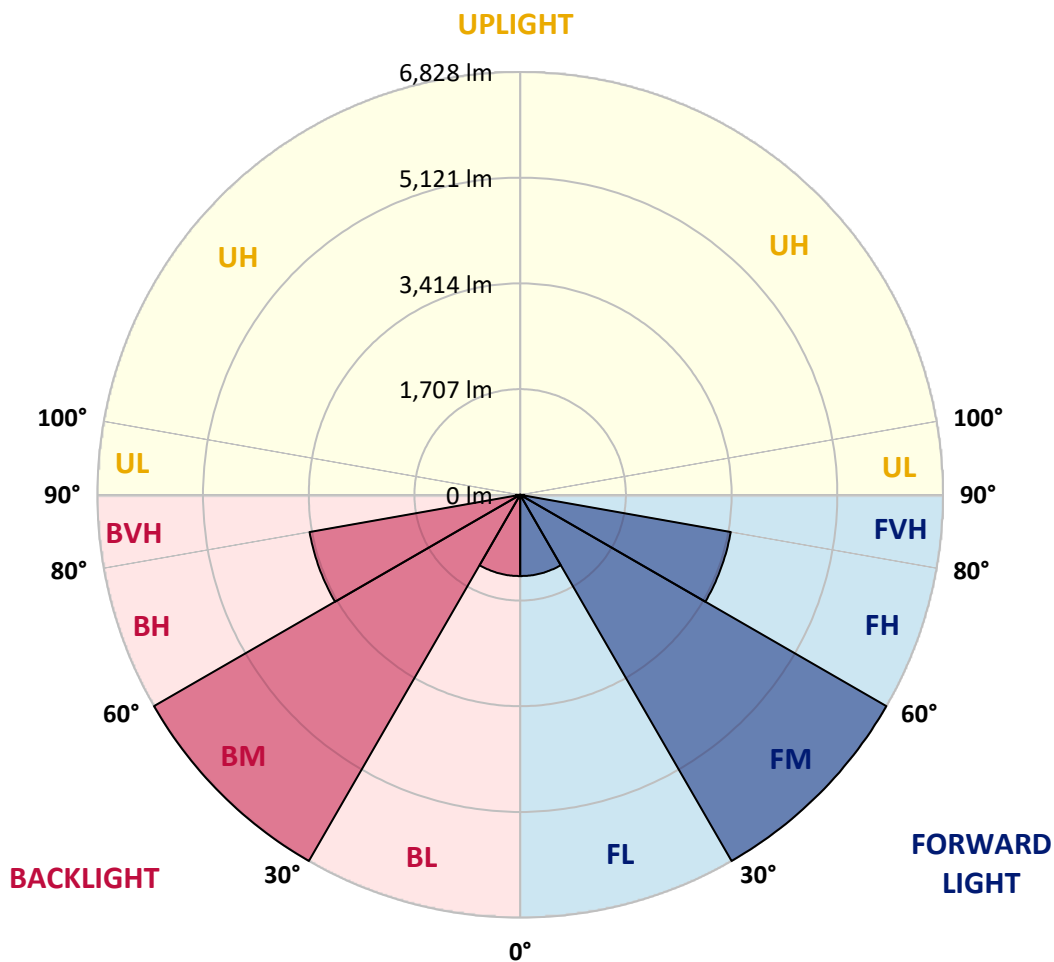
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1312.2	5.6			
FM	(30°-60°)	6827.9	29.3			
FH	(60°-80°)	3453.3	14.8			G2/5000
FVH	(80°-90°)	66.7	0.3			G1/100
BL	(0°-30°)	1312.2	5.6	B3/2500		
BM	(30°-60°)	6827.9	29.3	B4/8500		
BH	(60°-80°)	3453.3	14.8	B4/5000		G2/5000
BVH	(80°-90°)	66.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7
2.5°	2640.9	2643.1	2645.3	2643.1	2645.3	2642.0	2639.8	2643.1	2639.8	2636.5	2638.7
5°	2663.8	2664.9	2664.9	2661.6	2664.9	2662.7	2659.5	2663.8	2660.5	2657.3	2659.5
7.5°	2702.0	2706.4	2703.1	2699.9	2702.0	2699.9	2697.7	2698.8	2697.7	2694.4	2695.5
10°	2753.4	2756.7	2754.5	2753.4	2755.6	2754.5	2752.3	2751.2	2752.3	2749.0	2749.0
12.5°	2815.6	2814.5	2813.5	2814.5	2817.8	2817.8	2816.7	2817.8	2820.0	2821.1	2818.9
15°	2876.8	2879.0	2879.0	2879.0	2885.5	2891.0	2894.3	2896.5	2900.8	2901.9	2897.5
17.5°	2953.2	2953.2	2952.2	2953.2	2959.8	2968.5	2971.8	2976.2	2980.6	2983.8	2978.4
20°	3038.4	3040.6	3040.6	3042.8	3051.5	3061.4	3061.4	3063.6	3061.4	3063.6	3060.3
22.5°	3142.2	3148.7	3148.7	3149.8	3158.6	3170.6	3167.3	3170.6	3165.1	3169.5	3165.1
25°	3277.6	3287.5	3285.3	3285.3	3291.8	3299.5	3300.6	3307.1	3306.0	3311.5	3308.2
27.5°	3430.5	3445.8	3450.2	3449.1	3453.5	3461.1	3463.3	3470.9	3466.6	3470.9	3468.8
30°	3614.0	3620.6	3629.3	3632.6	3638.0	3645.7	3645.7	3646.8	3641.3	3647.9	3651.2
32.5°	3804.1	3816.1	3824.8	3844.5	3854.3	3859.8	3858.7	3860.8	3855.4	3864.1	3870.7
35°	4055.3	4064.0	4078.2	4093.5	4106.6	4105.5	4102.2	4103.3	4103.3	4111.0	4117.5
37.5°	4357.8	4360.0	4378.5	4400.4	4406.9	4400.4	4380.7	4376.4	4366.5	4376.4	4387.3
40°	4677.8	4685.4	4722.6	4736.8	4740.1	4728.0	4699.6	4683.3	4661.4	4673.4	4688.7
42.5°	5013.1	5028.4	5062.2	5087.4	5098.3	5090.6	5051.3	5026.2	4997.8	5004.4	5019.7
45°	5384.4	5403.0	5451.1	5475.1	5495.8	5483.8	5445.6	5407.4	5362.6	5365.9	5389.9
47.5°	5799.5	5818.0	5880.3	5920.7	5931.6	5929.4	5886.8	5834.4	5773.3	5771.1	5791.8
50°	6264.7	6283.3	6360.8	6423.1	6454.8	6451.5	6401.3	6327.0	6252.7	6253.8	6280.0
52.5°	6719.1	6742.0	6822.8	6929.9	6992.1	7036.9	7006.3	6936.4	6845.8	6848.0	6872.0
55°	7145.0	7183.3	7276.1	7421.4	7537.1	7662.7	7698.8	7696.6	7642.0	7657.3	7681.3
57.5°	7351.5	7408.2	7551.3	7780.7	8016.6	8272.2	8488.4	8650.1	8718.9	8822.6	8798.6
60°	6960.5	7051.1	7261.9	7599.4	8065.7	8598.7	9169.9	9728.0	10204.2	10563.5	10357.1
62.5°	5699.0	5816.9	6072.5	6505.0	7210.6	8063.6	9156.8	10476.2	11913.5	12780.7	12161.4
65°	3566.0	3688.3	3948.2	4411.3	5237.0	6297.5	7780.7	9967.2	12652.9	13960.2	12699.8
67.5°	1390.3	1457.0	1597.9	1893.8	2514.2	3457.8	4946.5	7427.9	10640.0	11785.7	10442.3
70°	696.8	703.4	729.6	784.2	917.4	1191.6	1813.0	3443.6	6102.0	7370.0	5882.5
72.5°	503.5	504.6	517.7	541.7	584.3	645.5	763.4	1054.0	1984.5	3033.0	1860.0
75°	385.5	389.9	397.6	410.7	433.6	464.2	506.8	607.3	752.5	872.7	733.9
77.5°	297.1	305.8	311.3	323.3	337.5	358.2	370.2	408.5	475.1	500.2	492.6
80°	226.1	233.7	245.7	255.6	265.4	275.2	270.9	288.3	323.3	344.0	333.1
82.5°	144.2	152.9	187.9	196.6	201.0	207.5	199.9	201.0	216.3	229.4	216.3
85°	92.8	98.3	119.0	130.0	131.1	135.4	132.2	124.5	124.5	113.6	127.8
87.5°	42.6	43.7	53.5	63.3	65.5	59.0	57.9	55.7	44.8	42.6	45.9
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°	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7	2638.7
2.5°	2637.6	2639.8	2640.9	2644.2	2645.3	2645.3	2646.3	2648.5
5°	2658.4	2661.6	2662.7	2667.1	2668.2	2667.1	2669.3	2670.4
7.5°	2695.5	2701.0	2703.1	2707.5	2704.2	2708.6	2709.7	2709.7
10°	2750.1	2755.6	2756.7	2761.0	2758.8	2761.0	2761.0	2758.8
12.5°	2822.2	2823.3	2820.0	2823.3	2818.9	2821.1	2817.8	2815.6
15°	2901.9	2898.6	2891.0	2891.0	2884.4	2885.5	2884.4	2883.4
17.5°	2979.5	2972.9	2967.4	2965.3	2959.8	2958.7	2955.4	2955.4
20°	3064.7	3061.4	3058.1	3053.7	3048.3	3042.8	3041.7	3043.9
22.5°	3167.3	3166.2	3166.2	3164.0	3156.4	3150.9	3147.7	3147.7
25°	3304.9	3295.1	3295.1	3294.0	3290.7	3287.5	3280.9	3284.2
27.5°	3460.0	3454.6	3458.9	3457.8	3454.6	3454.6	3450.2	3450.2
30°	3651.2	3649.0	3655.5	3650.1	3639.1	3638.0	3633.7	3628.2
32.5°	3871.8	3869.6	3879.4	3872.9	3855.4	3845.6	3836.8	3832.5
35°	4117.5	4118.6	4130.6	4126.2	4106.6	4100.0	4084.7	4082.6
37.5°	4386.2	4403.7	4424.4	4428.8	4412.4	4408.0	4391.6	4382.9
40°	4701.8	4724.8	4756.4	4764.1	4746.6	4743.3	4720.4	4708.4
42.5°	5038.2	5077.5	5116.9	5123.4	5105.9	5088.5	5066.6	5057.9
45°	5413.9	5460.9	5512.2	5525.3	5499.1	5478.4	5450.0	5450.0
47.5°	5835.5	5894.5	5952.4	5988.4	5964.4	5942.5	5908.7	5886.8
50°	6333.5	6414.4	6489.7	6526.9	6488.6	6447.1	6388.1	6368.5
52.5°	6958.3	7045.6	7111.2	7091.5	7032.5	6974.6	6910.2	6884.0
55°	7755.6	7785.0	7785.0	7710.8	7592.8	7495.6	7394.0	7360.2
57.5°	8752.7	8639.1	8464.4	8242.7	7964.2	7721.7	7557.9	7480.3
60°	9924.6	9378.5	8761.5	8155.3	7657.3	7246.6	7003.0	6891.6
62.5°	10705.5	9277.0	8040.6	7067.5	6351.0	5856.3	5519.9	5388.8
65°	10005.4	7737.0	6081.2	4917.0	4136.1	3632.6	3299.5	3177.1
67.5°	7328.5	4848.2	3238.3	2320.9	1700.5	1356.5	1220.0	1163.2
70°	3289.6	1707.1	1046.3	816.9	704.5	646.6	621.4	612.7
72.5°	991.7	717.6	605.1	546.1	501.3	472.9	452.2	450.0
75°	598.5	498.0	442.3	407.4	379.0	356.1	345.1	341.9
77.5°	418.3	365.9	339.7	314.5	292.7	275.2	265.4	257.8
80°	293.8	268.7	256.7	242.5	228.3	211.9	197.7	191.1
82.5°	196.6	191.1	191.1	182.4	170.4	155.1	126.7	120.1
85°	126.7	125.6	127.8	124.5	115.8	99.4	81.9	77.5
87.5°	59.0	60.1	66.6	65.5	63.3	52.4	41.5	39.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)