

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: P300703

Luminaire Tested: **GLNA-AF-09-LED-E1-RW-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300703
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-09-LED-E1-RW-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 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: 31027.7 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B5 - U0 - G5

Input Watts (W): 290
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

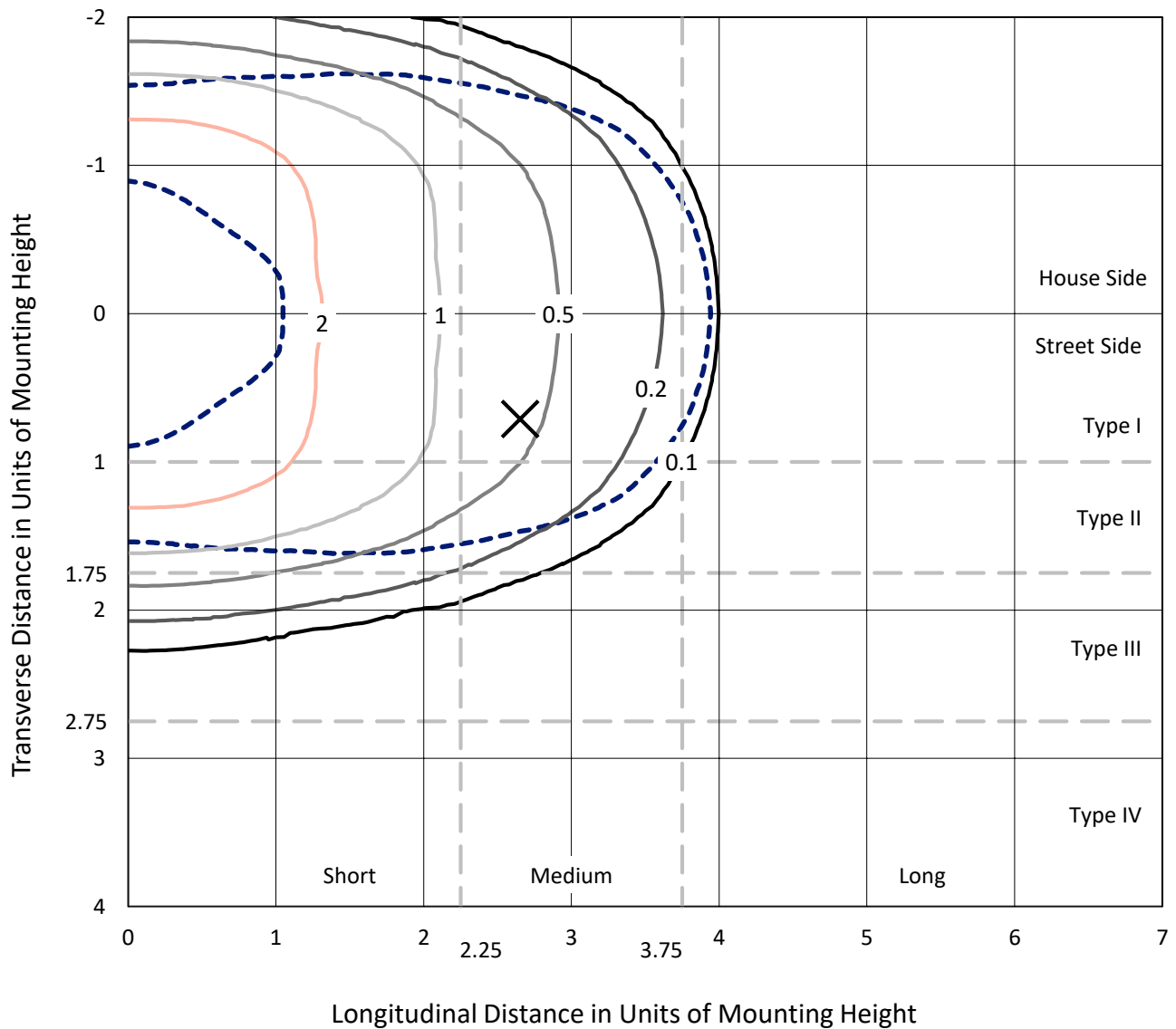


REPORT NUMBER: P300703

CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-7027-600

Iso-Footcandle Lines of Horizontal Illumination

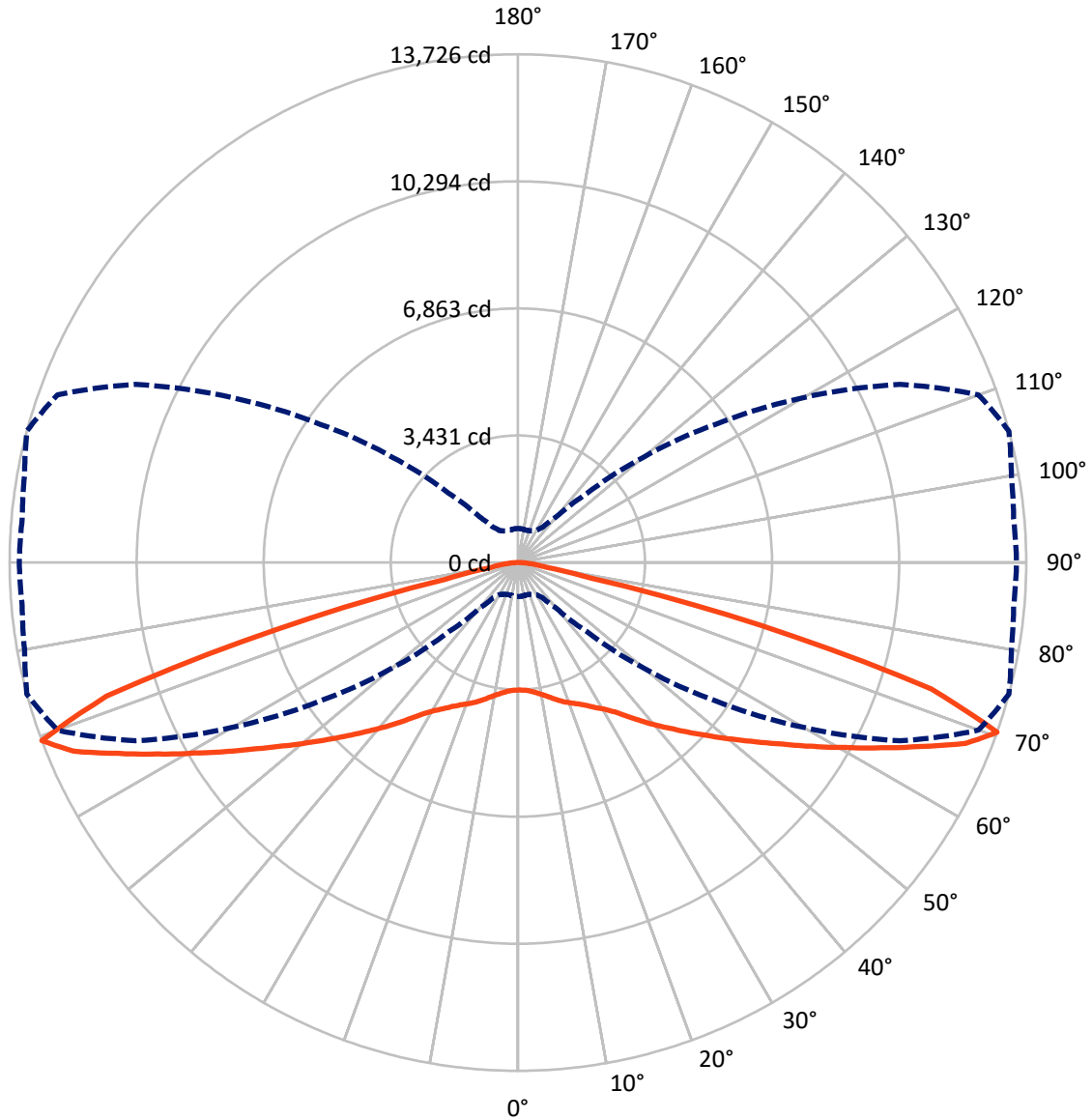
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.9 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P300703
CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-7027-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P300703

CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-7027-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15513.9	0.0	15513.9
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15513.9	0.0	15513.9
	% Fixture	50.0	0.0	50.0
Total	Lumens	31027.7	0.0	31027.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	330.1	1.1
10°-20°	1025.6	3.3
20°-30°	1930.4	6.2
30°-40°	3418.3	11.0
40°-50°	5716.6	18.4
50°-60°	7966.0	25.7
60°-70°	7387.2	23.8
70°-80°	2944.0	9.5
80°-90°	309.5	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°	31027.7	100.0
0°-180°	31027.7	100.0



REPORT NUMBER: P300703

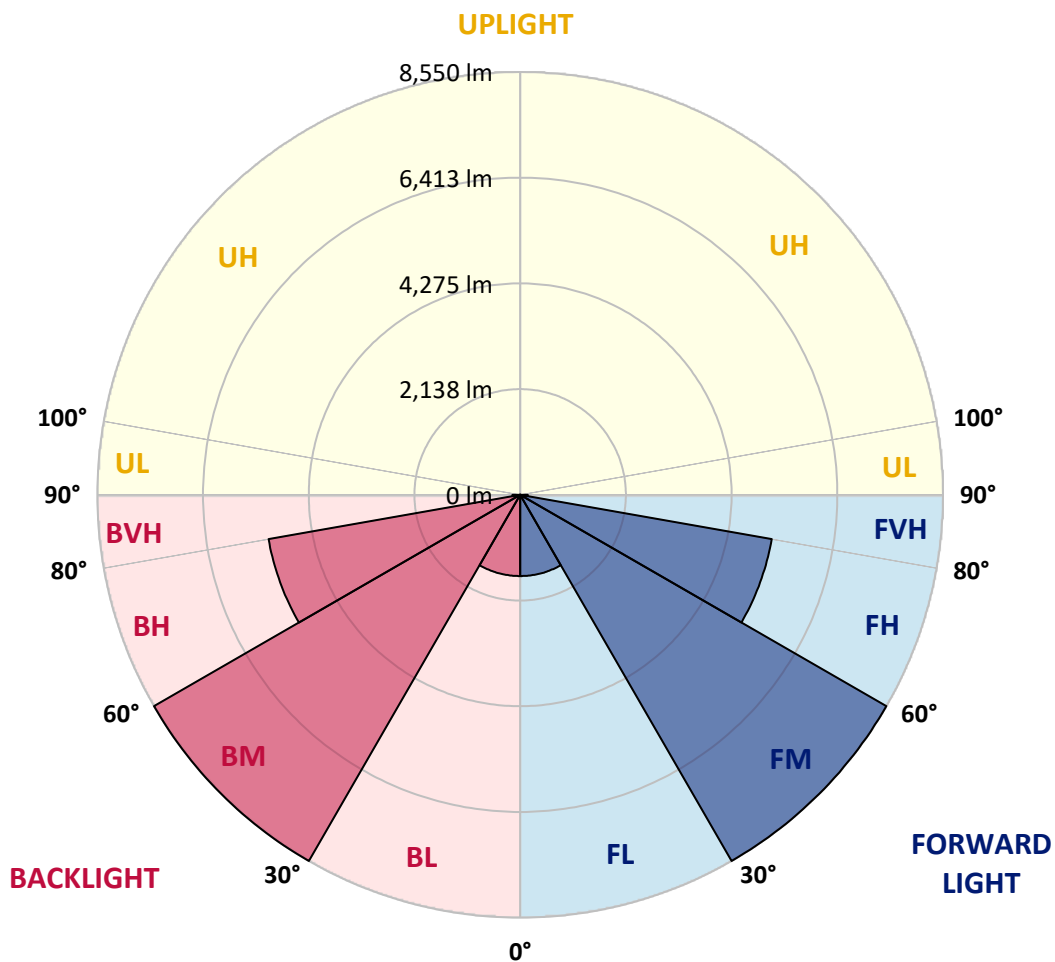
CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1643.0	5.3			
FM	(30°-60°)	8550.5	27.6			
FH	(60°-80°)	5165.6	16.6			G3/7500
FVH	(80°-90°)	154.7	0.5			G2/225
BL	(0°-30°)	1643.0	5.3	B3/2500		
BM	(30°-60°)	8550.5	27.6	B5		
BH	(60°-80°)	5165.6	16.6	B5		G5
BVH	(80°-90°)	154.7	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type II Medium





REPORT NUMBER: P300703

CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7
2.5°	3435.8	3432.9	3435.8	3434.4	3437.3	3437.3	3440.2	3446.1	3446.1	3450.5	3449.0
5°	3402.1	3400.6	3405.0	3409.4	3413.8	3422.6	3431.4	3444.6	3454.9	3462.2	3469.6
7.5°	3336.1	3336.1	3342.0	3352.2	3362.5	3381.6	3402.1	3428.5	3454.9	3476.9	3496.0
10°	3281.9	3284.8	3292.1	3309.7	3327.3	3356.6	3384.5	3422.6	3459.3	3496.0	3525.3
12.5°	3249.6	3254.0	3267.2	3293.6	3322.9	3362.5	3405.0	3453.4	3494.5	3538.5	3567.8
15°	3259.9	3262.8	3281.9	3314.1	3352.2	3402.1	3459.3	3516.5	3564.9	3611.8	3651.4
17.5°	3317.1	3321.4	3343.4	3380.1	3419.7	3478.4	3539.9	3604.5	3664.6	3717.4	3765.8
20°	3419.7	3424.1	3452.0	3491.6	3538.5	3598.6	3660.2	3727.6	3795.1	3850.8	3905.1
22.5°	3564.9	3572.2	3598.6	3638.2	3691.0	3755.5	3828.8	3900.7	3965.2	4016.5	4064.9
25°	3755.5	3771.6	3796.6	3840.6	3896.3	3954.9	4034.1	4107.5	4169.0	4217.4	4252.6
27.5°	4025.3	4047.3	4066.4	4108.9	4163.2	4218.9	4298.1	4362.6	4421.3	4468.2	4494.6
30°	4383.1	4405.1	4424.2	4465.3	4515.1	4567.9	4642.7	4699.9	4736.5	4773.2	4771.7
32.5°	4817.2	4840.7	4848.0	4892.0	4943.3	5000.5	5068.0	5100.2	5129.6	5133.9	5107.6
35°	5302.6	5314.3	5343.6	5402.3	5461.0	5507.9	5572.4	5588.5	5588.5	5566.5	5507.9
37.5°	5834.9	5842.2	5883.3	5949.3	6009.4	6057.8	6101.8	6134.1	6117.9	6071.0	5972.7
40°	6418.5	6431.7	6490.4	6549.0	6616.5	6662.0	6708.9	6714.8	6698.6	6629.7	6496.3
42.5°	6975.8	6987.5	7046.2	7138.6	7226.5	7289.6	7333.6	7342.4	7291.1	7228.0	7062.3
45°	7455.3	7486.1	7562.3	7670.9	7798.4	7887.9	7948.0	7972.9	7927.5	7845.4	7653.3
47.5°	7835.1	7865.9	7974.4	8103.5	8261.8	8407.0	8506.7	8559.5	8547.8	8486.2	8276.5
50°	8113.7	8143.1	8260.4	8418.7	8603.5	8783.9	8954.0	9080.1	9124.1	9096.2	8904.1
52.5°	8146.0	8194.4	8332.2	8544.9	8785.3	9031.7	9273.7	9487.8	9632.9	9654.9	9512.7
55°	7695.8	7744.2	7934.8	8250.1	8607.9	9009.7	9396.8	9757.6	10043.5	10190.2	10115.4
57.5°	6634.1	6720.6	6921.5	7291.1	7817.5	8418.7	9036.1	9676.9	10259.1	10647.7	10722.5
60°	5084.1	5186.7	5389.1	5782.1	6368.7	7085.8	7909.9	8857.2	9885.2	10759.2	11281.2
62.5°	3261.3	3358.1	3570.7	3912.4	4390.5	5167.7	6051.9	7176.7	8558.0	9938.0	11181.5
65°	1676.1	1728.9	1840.4	2047.1	2419.6	3000.3	3793.6	4915.5	6494.8	8197.3	9995.1
67.5°	1061.7	1072.0	1096.9	1126.2	1221.5	1422.4	1792.0	2491.5	3790.7	5566.5	7670.9
70°	918.0	918.0	906.2	901.9	913.6	941.4	998.6	1161.4	1599.9	2642.5	4424.2
72.5°	840.3	831.5	810.9	794.8	791.9	791.9	803.6	828.5	898.9	1076.4	1731.8
75°	774.3	749.3	721.5	702.4	695.1	687.8	686.3	690.7	705.3	733.2	827.1
77.5°	693.6	661.4	629.1	610.0	601.2	591.0	582.2	571.9	564.6	573.4	614.4
80°	596.8	560.2	535.2	523.5	514.7	500.1	481.0	463.4	447.3	444.3	469.3
82.5°	481.0	438.5	439.9	444.3	428.2	407.7	387.1	368.1	340.2	325.5	340.2
85°	388.6	366.6	356.3	384.2	360.7	329.9	297.7	264.0	220.0	184.8	200.9
87.5°	151.0	151.0	225.8	347.5	312.3	255.2	218.5	186.2	115.8	89.5	90.9
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: P300703

CATALOG NUMBER: GLNA-AF-09-LED-E1-RW-7027-600

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7	3441.7
2.5°	3447.6	3450.5	3449.0	3447.6	3447.6	3446.1	3447.6	3447.6
5°	3474.0	3481.3	3481.3	3484.2	3484.2	3485.7	3487.2	3485.7
7.5°	3513.6	3526.7	3535.5	3545.8	3547.3	3548.7	3551.7	3548.7
10°	3553.1	3579.5	3598.6	3617.7	3626.5	3629.4	3632.3	3632.3
12.5°	3603.0	3639.7	3673.4	3707.1	3723.3	3732.0	3732.0	3737.9
15°	3685.1	3721.8	3761.4	3806.8	3834.7	3849.4	3853.8	3853.8
17.5°	3801.0	3833.2	3867.0	3911.0	3946.1	3965.2	3969.6	3968.1
20°	3935.9	3966.7	3985.7	4013.6	4044.4	4066.4	4072.3	4072.3
22.5°	4089.9	4107.5	4110.4	4119.2	4144.1	4173.4	4186.6	4189.6
25°	4260.0	4264.4	4252.6	4252.6	4268.8	4296.6	4309.8	4311.3
27.5°	4479.9	4457.9	4428.6	4418.3	4428.6	4460.9	4477.0	4482.9
30°	4754.1	4701.4	4633.9	4597.2	4591.4	4633.9	4663.2	4667.6
32.5°	5068.0	4991.7	4902.3	4827.5	4808.4	4834.8	4870.0	4868.5
35°	5440.4	5349.5	5241.0	5145.7	5101.7	5128.1	5177.9	5183.8
37.5°	5870.1	5751.3	5626.7	5506.4	5437.5	5444.8	5497.6	5515.2
40°	6349.6	6195.6	6038.7	5877.4	5779.2	5760.1	5824.6	5834.9
42.5°	6862.9	6664.9	6466.9	6267.5	6141.4	6112.1	6186.8	6182.4
45°	7409.8	7157.6	6925.9	6706.0	6556.4	6512.4	6574.0	6574.0
47.5°	7997.9	7687.0	7411.3	7162.0	6999.2	6936.2	6994.8	6999.2
50°	8621.1	8291.2	7967.1	7689.9	7494.9	7414.2	7490.5	7502.2
52.5°	9241.4	8920.3	8593.2	8276.5	8040.4	7942.2	8030.1	8068.3
55°	9870.5	9555.2	9242.9	8933.5	8653.4	8537.5	8631.4	8679.8
57.5°	10534.8	10243.0	9945.3	9632.9	9363.1	9182.7	9282.5	9347.0
60°	11313.5	11064.2	10754.8	10410.1	10137.4	9954.1	10011.3	10068.5
62.5°	11929.4	12026.1	11763.7	11364.8	11014.3	10779.7	10835.4	10895.5
65°	11631.7	12624.4	12857.6	12454.3	11969.0	11603.8	11580.3	11611.1
67.5°	9722.4	11650.7	13057.0	13441.2	13035.0	12527.7	12433.8	12479.3
70°	6503.6	8905.6	11386.8	13234.5	13725.7	13529.2	13436.8	13464.7
72.5°	3123.5	5186.7	7725.1	10181.4	11677.1	12363.4	12583.4	12690.4
75°	1142.3	2058.9	3723.3	5610.5	6773.4	7841.0	8537.5	8822.0
77.5°	689.2	831.5	1189.3	1790.5	2028.1	2270.0	2176.2	2223.1
80°	510.3	576.3	652.6	733.2	759.6	759.6	730.3	706.8
82.5°	357.8	400.3	437.0	481.0	492.7	470.7	387.1	307.9
85°	230.2	249.3	265.4	293.3	286.0	272.8	183.3	162.8
87.5°	105.6	120.2	126.1	139.3	133.4	127.6	90.9	76.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)