

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: P299917

Luminaire Tested: **GLNA-AF-08-LED-E1-5WQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299917
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
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-E1-5WQ-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35146.7 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G4

Input Watts (W): 334
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

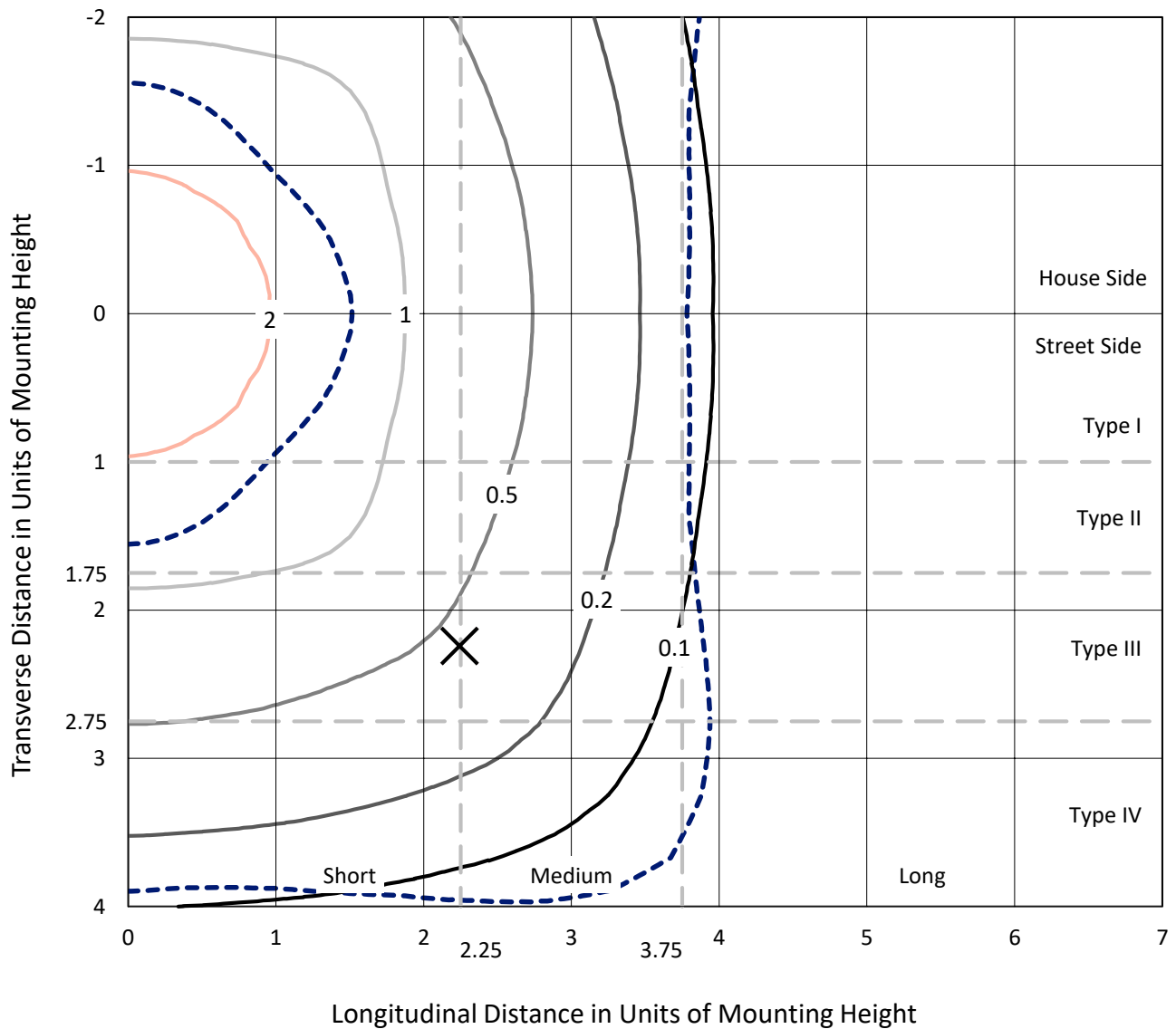


REPORT NUMBER: P299917

CATALOG NUMBER: GLNA-AF-08-LED-E1-5WQ-7027-800

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

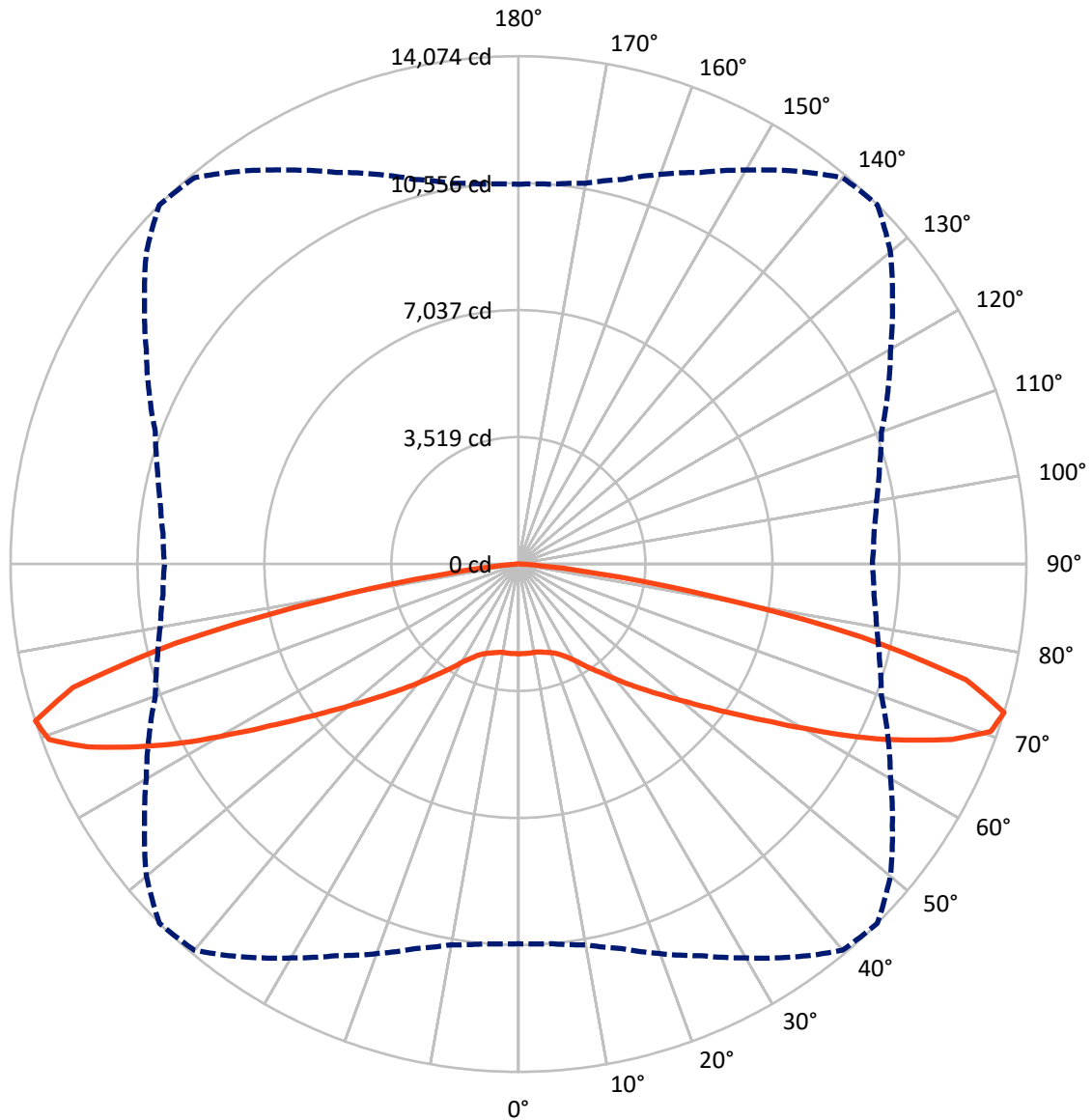


Based on 30 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P299917

CATALOG NUMBER: GLNA-AF-08-LED-E1-5WQ-7027-800

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P299917

CATALOG NUMBER: GLNA-AF-08-LED-E1-5WQ-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17573.3	0.0	17573.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	17573.3	0.0	17573.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	35146.7	0.0	35146.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.7	0.7
10°-20°	721.8	2.1
20°-30°	1319.0	3.8
30°-40°	2274.3	6.5
40°-50°	3887.8	11.1
50°-60°	6301.7	17.9
60°-70°	10454.3	29.7
70°-80°	9207.7	26.2
80°-90°	742.4	2.1
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°	35146.7	100.0
0°-180°	35146.7	100.0



REPORT NUMBER: P299917

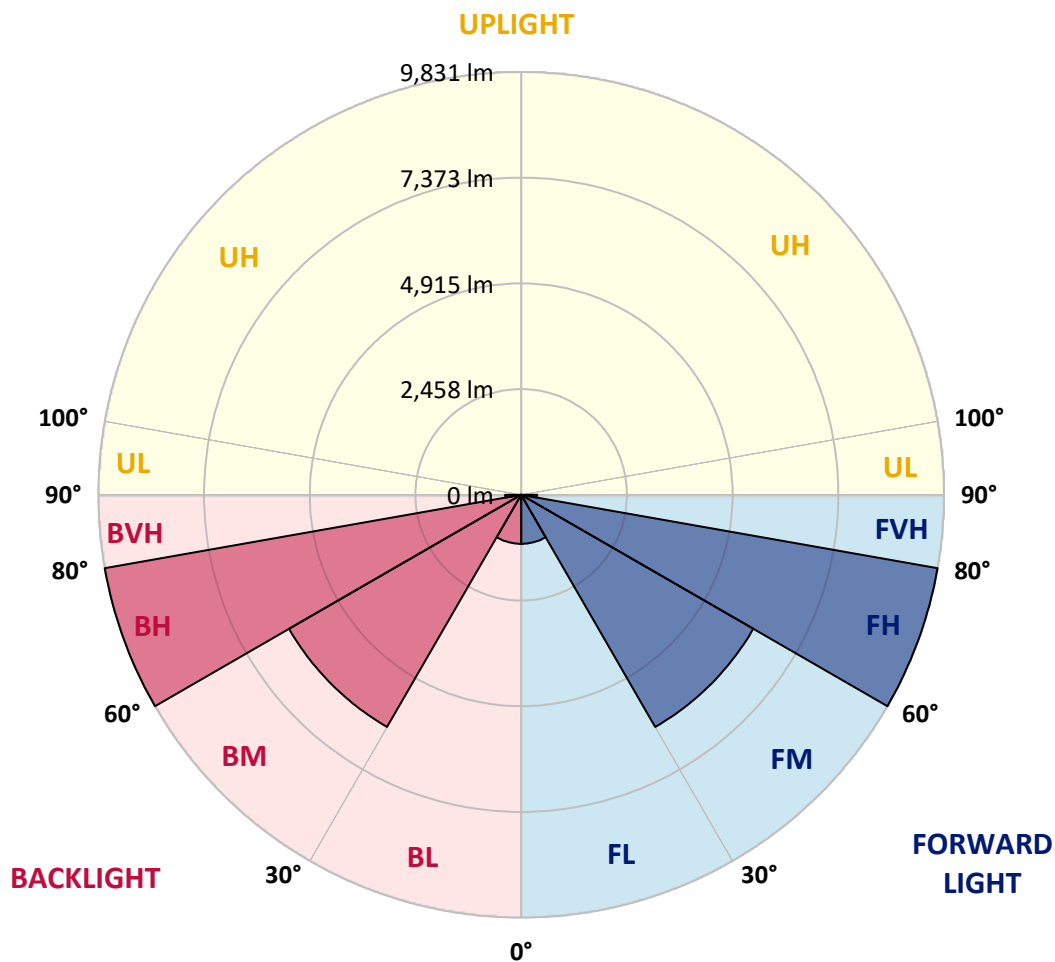
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1139.3	3.2			
FM (30°-60°)	6231.9	17.7			
FH (60°-80°)	9831.0	28.0			G4/12000
FVH (80°-90°)	371.2	1.1			G3/500
BL (0°-30°)	1139.3	3.2	B3/2500		
BM (30°-60°)	6231.9	17.7	B4/8500		
BH (60°-80°)	9831.0	28.0	B5		G4/12000
BVH (80°-90°)	371.2	1.1			G3/500
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





REPORT NUMBER: P299917

CATALOG NUMBER: GLNA-AF-08-LED-E1-5WQ-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9
2.5°	2488.9	2490.5	2492.2	2490.5	2490.5	2488.9	2487.3	2488.9	2487.3	2484.1	2485.7
5°	2497.0	2500.2	2500.2	2497.0	2498.6	2497.0	2493.8	2495.4	2492.2	2487.3	2487.3
7.5°	2506.7	2508.3	2508.3	2505.1	2506.7	2503.4	2500.2	2498.6	2495.4	2488.9	2484.1
10°	2521.2	2522.8	2521.2	2517.9	2517.9	2513.1	2505.1	2501.8	2495.4	2485.7	2480.9
12.5°	2537.3	2538.9	2537.3	2534.1	2532.5	2524.4	2517.9	2513.1	2508.3	2500.2	2492.2
15°	2559.9	2563.1	2559.9	2553.4	2548.6	2542.1	2538.9	2540.5	2542.1	2535.7	2527.6
17.5°	2601.8	2603.4	2598.5	2584.0	2577.6	2571.1	2571.1	2574.4	2579.2	2576.0	2567.9
20°	2679.1	2674.3	2663.0	2645.3	2637.2	2626.0	2624.3	2626.0	2626.0	2624.3	2617.9
22.5°	2775.9	2772.6	2758.1	2735.6	2724.3	2717.8	2708.2	2700.1	2698.5	2693.7	2687.2
25°	2891.9	2890.3	2872.6	2853.2	2845.2	2837.1	2829.1	2817.8	2808.1	2796.8	2790.4
27.5°	3040.2	3033.8	3008.0	2998.3	2987.0	2982.2	2970.9	2958.0	2950.0	2935.5	2927.4
30°	3203.0	3203.0	3182.1	3178.9	3178.9	3167.6	3154.7	3132.1	3117.6	3103.1	3098.3
32.5°	3365.9	3367.5	3346.5	3353.0	3357.8	3365.9	3369.1	3361.0	3351.4	3349.7	3340.1
35°	3601.2	3594.8	3573.8	3578.6	3577.0	3575.4	3575.4	3593.2	3596.4	3599.6	3580.3
37.5°	3893.0	3893.0	3872.0	3872.0	3862.4	3852.7	3839.8	3851.1	3868.8	3873.6	3860.7
40°	4226.7	4238.0	4212.2	4210.5	4213.8	4183.1	4168.6	4186.4	4197.7	4217.0	4202.5
42.5°	4620.0	4611.9	4586.1	4582.9	4565.2	4555.5	4542.6	4557.1	4574.9	4587.8	4592.6
45°	4997.2	4990.8	4961.7	4961.7	4944.0	4936.0	4942.4	4966.6	4974.6	4992.4	5010.1
47.5°	5369.6	5361.5	5342.2	5350.2	5351.8	5366.4	5387.3	5409.9	5432.4	5456.6	5464.7
50°	5750.0	5751.6	5730.7	5750.0	5774.2	5814.5	5870.9	5908.0	5954.7	5985.4	5995.0
52.5°	6096.6	6103.0	6125.6	6170.7	6219.1	6298.1	6394.8	6485.1	6562.5	6614.0	6610.8
55°	6512.5	6522.2	6577.0	6654.3	6733.3	6852.6	6996.1	7155.7	7284.6	7358.8	7312.0
57.5°	7044.4	7065.4	7126.7	7231.4	7349.1	7503.9	7700.5	7940.7	8140.6	8240.6	8164.8
60°	7774.7	7787.6	7861.7	7977.8	8119.7	8311.5	8574.2	8896.6	9178.7	9310.9	9223.9
62.5°	8737.1	8761.2	8820.9	8938.6	9083.6	9301.3	9622.0	10025.0	10376.5	10560.2	10363.6
65°	9886.4	9963.8	10013.8	10133.0	10268.5	10499.0	10834.3	11266.3	11643.5	11764.4	11537.1
67.5°	11024.5	11092.2	11179.2	11316.3	11453.3	11712.8	12023.9	12443.0	12857.3	12966.9	12613.9
70°	11522.6	11561.3	11696.7	11883.7	12146.4	12452.7	12812.2	13282.9	13795.5	13885.8	13437.6
72.5°	10524.8	10563.4	10715.0	11032.5	11490.4	11977.2	12604.2	13295.8	13972.8	14074.4	13457.0
75°	7960.1	7897.2	8121.3	8542.0	9159.4	9838.0	10715.0	11706.4	12684.8	12812.2	12075.5
77.5°	4113.8	4105.8	4275.0	4797.3	5534.0	6306.2	7271.7	8392.1	9349.6	9736.5	9136.8
80°	1159.0	1171.9	1252.5	1512.1	1942.5	2500.2	3254.6	4304.0	5087.5	5487.3	5152.0
82.5°	454.6	490.0	520.7	569.0	625.5	707.7	944.6	1405.7	1886.0	2253.6	1845.7
85°	162.8	174.1	246.6	291.8	296.6	312.7	356.3	415.9	501.3	598.1	491.7
87.5°	61.3	67.7	79.0	130.6	129.0	117.7	143.5	149.9	112.8	103.2	127.3
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: P299917

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9	2488.9
2.5°	2482.5	2484.1	2484.1	2485.7	2487.3	2487.3	2490.5	2490.5
5°	2484.1	2484.1	2480.9	2482.5	2480.9	2480.9	2482.5	2482.5
7.5°	2480.9	2479.3	2476.0	2474.4	2471.2	2471.2	2471.2	2471.2
10°	2476.0	2474.4	2471.2	2469.6	2468.0	2468.0	2468.0	2468.0
12.5°	2488.9	2484.1	2480.9	2479.3	2479.3	2479.3	2479.3	2479.3
15°	2522.8	2511.5	2503.4	2503.4	2505.1	2508.3	2508.3	2511.5
17.5°	2564.7	2551.8	2543.7	2537.3	2540.5	2545.4	2548.6	2551.8
20°	2614.7	2608.2	2596.9	2590.5	2590.5	2596.9	2600.2	2601.8
22.5°	2684.0	2679.1	2674.3	2666.3	2666.3	2669.5	2675.9	2675.9
25°	2787.2	2783.9	2780.7	2774.3	2772.6	2772.6	2775.9	2779.1
27.5°	2916.1	2917.7	2914.5	2912.9	2908.1	2906.4	2911.3	2909.7
30°	3088.6	3096.7	3104.7	3098.3	3090.2	3085.4	3080.5	3074.1
32.5°	3322.3	3312.7	3306.2	3294.9	3280.4	3267.5	3257.9	3246.6
35°	3543.2	3527.1	3520.6	3530.3	3528.7	3520.6	3509.3	3499.7
37.5°	3814.0	3810.8	3814.0	3831.7	3828.5	3836.6	3814.0	3812.4
40°	4155.7	4159.0	4181.5	4202.5	4213.8	4225.1	4212.2	4199.3
42.5°	4552.3	4550.7	4558.7	4587.8	4607.1	4620.0	4592.6	4589.4
45°	4971.4	4960.1	4966.6	4990.8	5010.1	5024.6	4994.0	4994.0
47.5°	5432.4	5413.1	5392.1	5419.6	5430.8	5440.5	5416.3	5408.3
50°	5946.7	5906.4	5861.2	5872.5	5872.5	5869.3	5838.7	5837.1
52.5°	6536.7	6462.5	6380.3	6349.7	6331.9	6312.6	6259.4	6233.6
55°	7215.3	7104.1	6975.1	6896.1	6854.2	6801.0	6712.4	6688.2
57.5°	8008.4	7834.3	7611.9	7515.2	7421.7	7334.6	7236.3	7208.9
60°	8948.2	8691.9	8396.9	8218.0	8116.4	8032.6	7931.1	7926.2
62.5°	9996.0	9591.4	9257.7	9096.5	9022.4	8948.2	8851.5	8864.4
65°	11061.6	10639.2	10326.5	10195.9	10126.6	10065.3	9968.6	9983.1
67.5°	12112.6	11724.1	11380.7	11246.9	11169.6	11092.2	11005.1	11019.6
70°	12867.0	12385.0	11998.1	11701.5	11516.1	11306.6	11171.2	11137.3
72.5°	12651.0	11907.9	11293.7	10705.3	10360.3	10079.8	9889.6	9807.4
75°	10948.7	9933.2	9143.3	8421.1	8014.9	7684.4	7444.2	7294.3
77.5°	8130.9	6989.6	6056.3	5224.5	4566.8	4125.1	3814.0	3612.5
80°	4450.7	3385.2	2474.4	1739.4	1278.3	1062.3	938.2	878.5
82.5°	1386.3	894.7	659.3	569.0	528.7	506.2	469.1	409.4
85°	441.7	386.9	359.5	343.4	327.2	285.3	196.7	178.9
87.5°	170.9	175.7	174.1	164.4	167.6	120.9	96.7	85.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)