

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: P299665

Luminaire Tested: **GLNA-AF-06-LED-E1-5MQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299665
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-06-LED-E1-5MQ-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26162.1 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 249
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

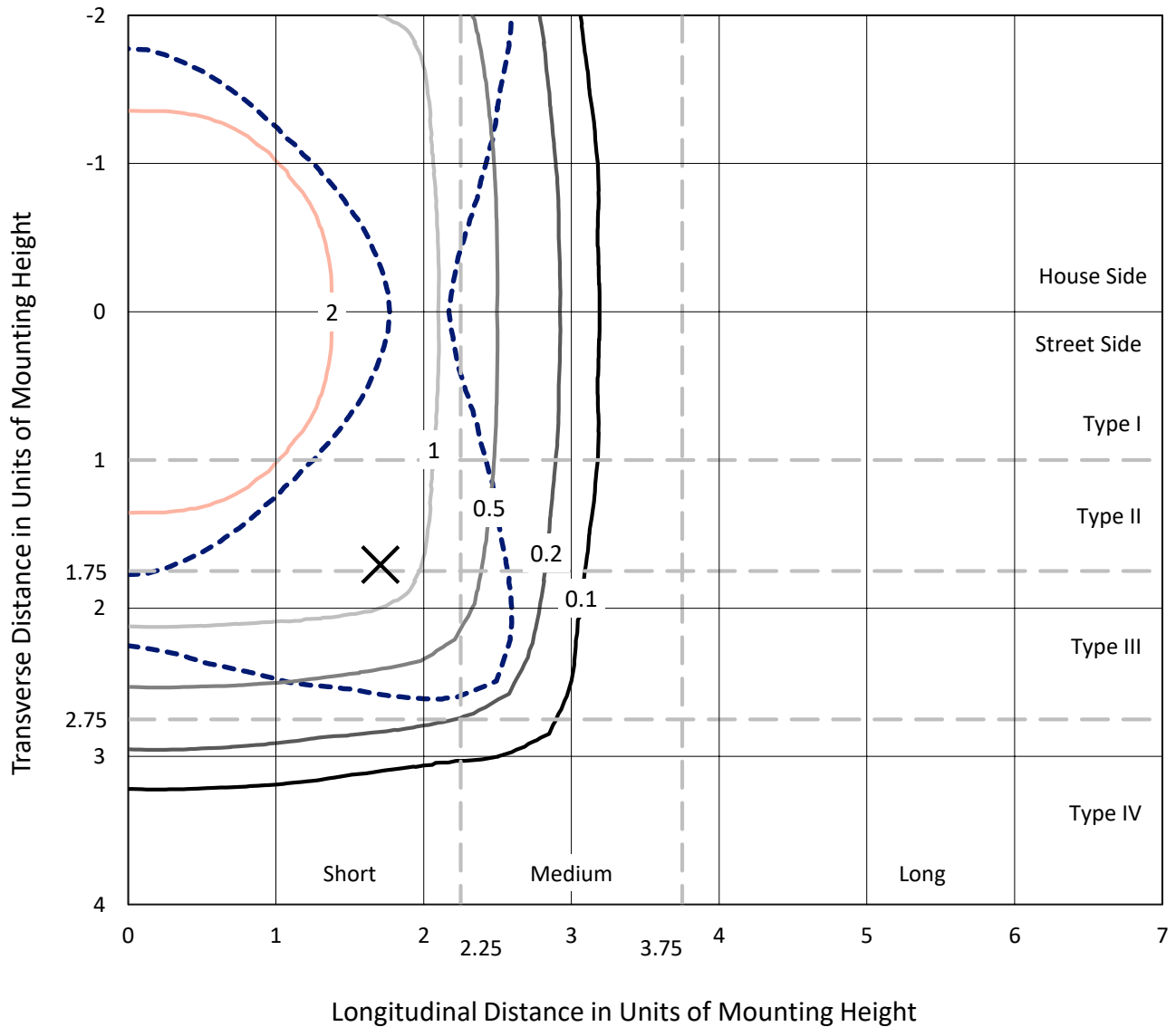


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

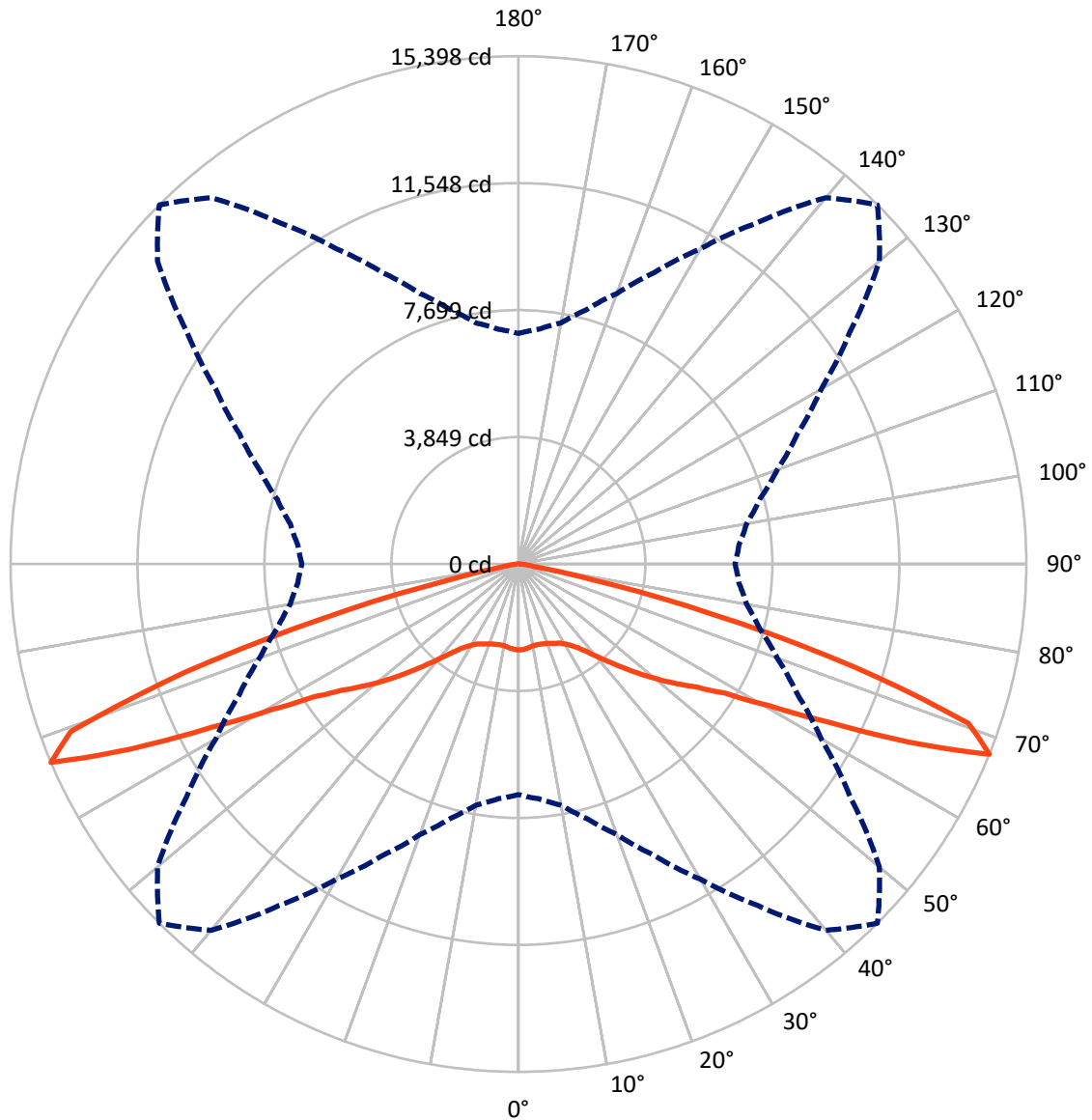


Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13081.0	0.0	13081.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	13081.0	0.0	13081.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	26162.1	0.0	26162.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.0	0.9
10°-20°	708.1	2.7
20°-30°	1203.7	4.6
30°-40°	1967.8	7.5
40°-50°	3512.8	13.4
50°-60°	5922.7	22.6
60°-70°	9191.1	35.1
70°-80°	3229.4	12.3
80°-90°	182.5	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°	26162.1	100.0
0°-180°	26162.1	100.0



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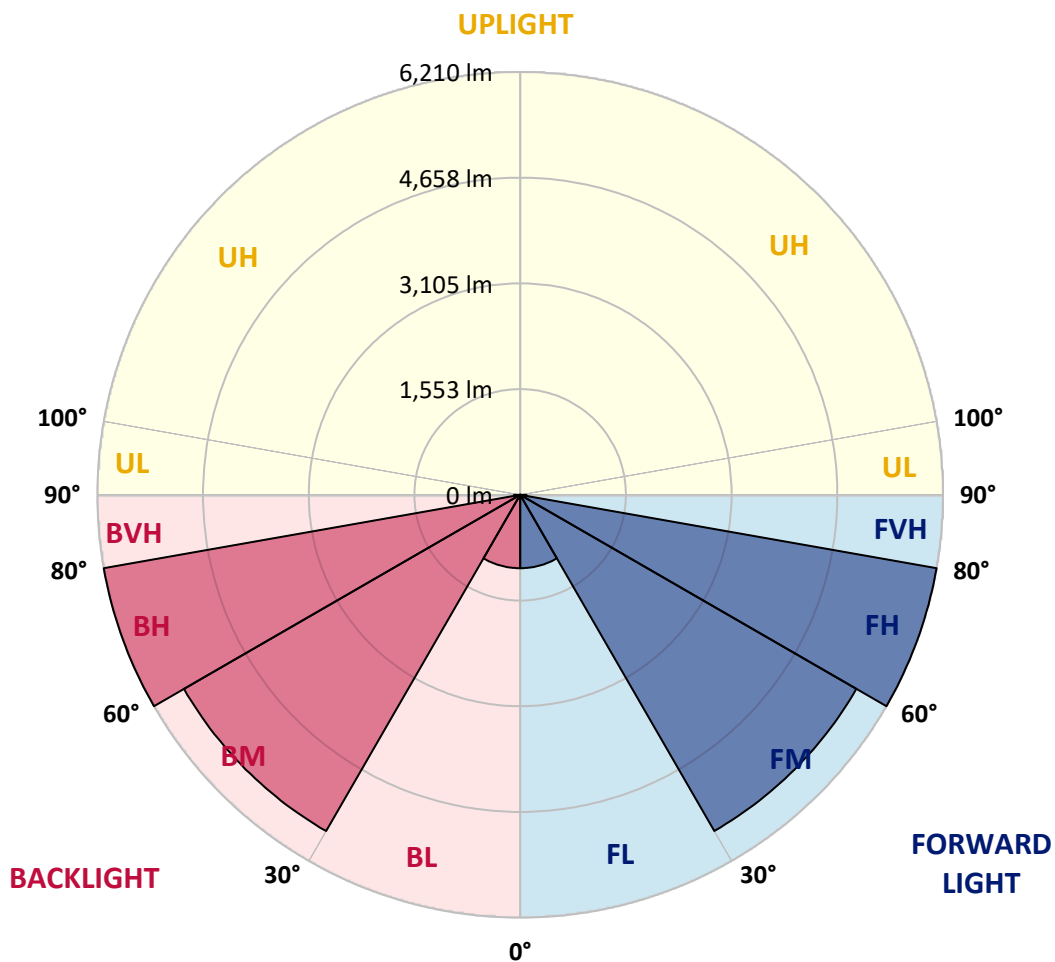
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1077.9	4.1			
FM	(30°-60°)	5701.6	21.8			
FH	(60°-80°)	6210.2	23.7			G3/7500
FVH	(80°-90°)	91.2	0.3			G1/100
BL	(0°-30°)	1077.9	4.1	B3/2500		
BM	(30°-60°)	5701.6	21.8	B4/8500		
BH	(60°-80°)	6210.2	23.7	B5		G3/7500
BVH	(80°-90°)	91.2	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-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2
2.5°	2597.5	2599.9	2599.9	2599.9	2598.7	2598.7	2596.3	2598.7	2597.5	2593.9	2595.1
5°	2575.9	2578.3	2578.3	2577.1	2580.7	2579.5	2575.9	2578.3	2577.1	2574.7	2575.9
7.5°	2544.6	2548.2	2548.2	2547.0	2550.6	2549.4	2547.0	2548.2	2548.2	2544.6	2544.6
10°	2509.7	2512.1	2512.1	2510.9	2516.9	2516.9	2515.7	2519.3	2520.5	2516.9	2514.5
12.5°	2477.2	2480.8	2480.8	2485.6	2491.7	2494.1	2500.1	2504.9	2509.7	2508.5	2503.7
15°	2458.0	2460.4	2465.2	2471.2	2480.8	2489.3	2498.9	2509.7	2519.3	2521.7	2514.5
17.5°	2445.9	2449.6	2456.8	2465.2	2478.4	2492.9	2507.3	2521.7	2535.0	2539.8	2531.4
20°	2442.3	2444.7	2452.0	2466.4	2484.4	2506.1	2526.6	2543.4	2561.4	2567.5	2561.4
22.5°	2449.6	2454.4	2462.8	2479.6	2503.7	2531.4	2555.4	2578.3	2601.1	2612.0	2603.6
25°	2482.0	2486.9	2497.7	2519.3	2545.8	2574.7	2602.4	2628.8	2649.3	2660.1	2654.1
27.5°	2542.2	2548.2	2561.4	2583.1	2612.0	2643.3	2673.3	2695.0	2711.8	2715.4	2708.2
30°	2632.4	2645.7	2661.3	2685.4	2719.1	2745.5	2775.6	2794.9	2815.3	2815.3	2809.3
32.5°	2773.2	2786.4	2803.3	2826.1	2852.6	2881.5	2907.9	2924.8	2946.4	2947.6	2933.2
35°	2983.7	2989.8	3004.2	3018.6	3042.7	3068.0	3090.8	3101.6	3119.7	3120.9	3107.7
37.5°	3261.7	3262.9	3272.5	3277.3	3299.0	3326.6	3348.3	3355.5	3372.3	3369.9	3356.7
40°	3585.3	3591.3	3594.9	3602.1	3625.0	3651.5	3674.3	3677.9	3696.0	3692.4	3675.5
42.5°	3959.5	3961.9	3982.3	3993.2	4014.8	4028.0	4056.9	4060.5	4082.2	4072.6	4053.3
45°	4379.4	4401.0	4420.3	4441.9	4464.8	4480.4	4503.3	4498.5	4512.9	4498.5	4487.6
47.5°	4820.9	4836.5	4879.9	4913.5	4950.8	4964.1	4996.6	4982.1	4996.6	4976.1	4972.5
50°	5307.0	5334.6	5371.9	5410.4	5450.1	5471.8	5513.9	5495.9	5515.1	5495.9	5485.0
52.5°	5785.8	5793.0	5874.8	5931.4	5986.7	6012.0	6037.3	6028.8	6030.0	6028.8	6018.0
55°	6240.6	6257.4	6339.2	6416.2	6512.5	6583.5	6626.8	6622.0	6611.2	6600.3	6582.3
57.5°	6753.1	6770.0	6863.8	6958.9	7068.3	7169.4	7257.2	7347.5	7382.4	7392.0	7352.3
60°	7446.1	7444.9	7570.0	7685.5	7841.9	7992.3	8184.8	8380.9	8605.9	8710.6	8572.2
62.5°	8151.1	8180.0	8360.5	8565.0	8887.5	9201.5	9556.4	9905.3	10261.4	10551.4	10243.4
65°	8066.9	8177.6	8445.9	8909.1	9504.7	10212.1	10977.3	11787.0	12518.5	13021.4	12457.1
67.5°	6991.3	7148.9	7422.1	7985.1	8729.8	9750.1	11035.0	12636.4	14497.6	15397.5	14282.2
70°	5067.5	5245.6	5532.0	6081.8	6819.3	7789.0	9184.6	11107.2	13571.2	14478.4	13250.0
72.5°	2521.7	2618.0	2794.9	3145.0	3703.2	4490.0	5755.7	7603.7	9783.8	10616.3	9493.8
75°	856.6	901.1	931.2	1045.5	1222.4	1531.6	2160.8	3324.2	5071.2	6079.4	4999.0
77.5°	494.5	495.7	516.1	536.6	566.7	600.4	684.6	898.7	1554.4	2207.7	1608.6
80°	320.0	318.8	335.7	351.3	371.8	388.6	393.4	416.3	480.0	569.1	508.9
82.5°	166.0	186.5	223.8	244.2	282.7	290.0	280.3	271.9	287.5	298.4	305.6
85°	91.4	79.4	119.1	154.0	170.8	173.2	173.2	163.6	169.6	166.0	180.5
87.5°	42.1	38.5	46.9	75.8	80.6	68.6	72.2	63.8	45.7	44.5	50.5
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°	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2	2607.2
2.5°	2595.1	2596.3	2596.3	2599.9	2601.1	2603.6	2606.0	2607.2
5°	2574.7	2578.3	2575.9	2579.5	2579.5	2581.9	2581.9	2583.1
7.5°	2544.6	2548.2	2548.2	2548.2	2547.0	2550.6	2550.6	2550.6
10°	2513.3	2515.7	2514.5	2512.1	2509.7	2513.3	2512.1	2510.9
12.5°	2503.7	2497.7	2492.9	2490.5	2485.6	2486.9	2483.2	2483.2
15°	2509.7	2498.9	2490.5	2486.9	2482.0	2479.6	2477.2	2478.4
17.5°	2525.4	2512.1	2501.3	2495.3	2489.3	2485.6	2480.8	2482.0
20°	2553.0	2537.4	2521.7	2509.7	2498.9	2492.9	2489.3	2488.1
22.5°	2593.9	2571.1	2548.2	2530.2	2515.7	2507.3	2503.7	2501.3
25°	2640.9	2615.6	2589.1	2568.7	2554.2	2543.4	2536.2	2536.2
27.5°	2699.8	2679.4	2655.3	2631.2	2618.0	2607.2	2602.4	2599.9
30°	2798.5	2779.2	2760.0	2737.1	2720.3	2709.4	2701.0	2693.8
32.5°	2924.8	2909.1	2893.5	2876.7	2861.0	2846.6	2833.4	2827.3
35°	3102.8	3090.8	3080.0	3060.7	3054.7	3046.3	3039.1	3033.1
37.5°	3348.3	3343.5	3343.5	3323.0	3318.2	3314.6	3307.4	3308.6
40°	3670.7	3675.5	3669.5	3662.3	3658.7	3649.1	3649.1	3657.5
42.5°	4052.1	4055.7	4069.0	4056.9	4070.2	4058.1	4050.9	4056.9
45°	4494.9	4508.1	4534.6	4522.5	4531.0	4510.5	4485.2	4486.4
47.5°	4991.7	5003.8	5014.6	5006.2	5007.4	4973.7	4940.0	4931.6
50°	5507.9	5512.7	5518.7	5506.7	5509.1	5471.8	5433.3	5434.5
52.5°	6018.0	6040.9	6064.9	6032.4	6025.2	5983.1	5929.0	5907.3
55°	6601.5	6634.0	6606.3	6549.8	6493.2	6436.7	6365.7	6353.7
57.5°	7321.0	7265.6	7179.0	7071.9	6993.7	6914.3	6842.1	6812.1
60°	8322.0	8113.8	7957.4	7798.6	7698.8	7601.3	7506.3	7491.8
62.5°	9736.9	9377.1	9065.5	8737.1	8468.8	8259.4	8092.2	8045.3
65°	11510.3	10659.7	9922.1	9234.0	8636.0	8184.8	7900.9	7775.8
67.5°	12273.0	10593.5	9329.0	8352.1	7570.0	7023.8	6717.0	6564.2
70°	10784.8	8785.2	7410.0	6431.9	5719.6	5137.3	4859.4	4695.8
72.5°	7419.6	5588.5	4419.1	3607.0	3037.9	2550.6	2358.1	2343.7
75°	3331.4	2206.5	1520.7	1171.8	986.6	857.8	818.1	788.0
77.5°	932.4	689.4	614.8	575.1	536.6	492.1	475.2	478.8
80°	453.6	428.3	411.5	386.2	351.3	314.0	297.2	304.4
82.5°	300.8	297.2	308.0	290.0	239.4	203.3	170.8	156.4
85°	182.9	185.3	188.9	190.1	161.2	113.1	77.0	86.6
87.5°	72.2	83.0	90.2	93.8	87.8	54.1	43.3	44.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)