

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: P190877

Luminaire Tested: **GLEON-AF-09-LED-E1-5WQ-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190877
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: GLEON-AF-09-LED-E1-5WQ-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37777.6 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G4

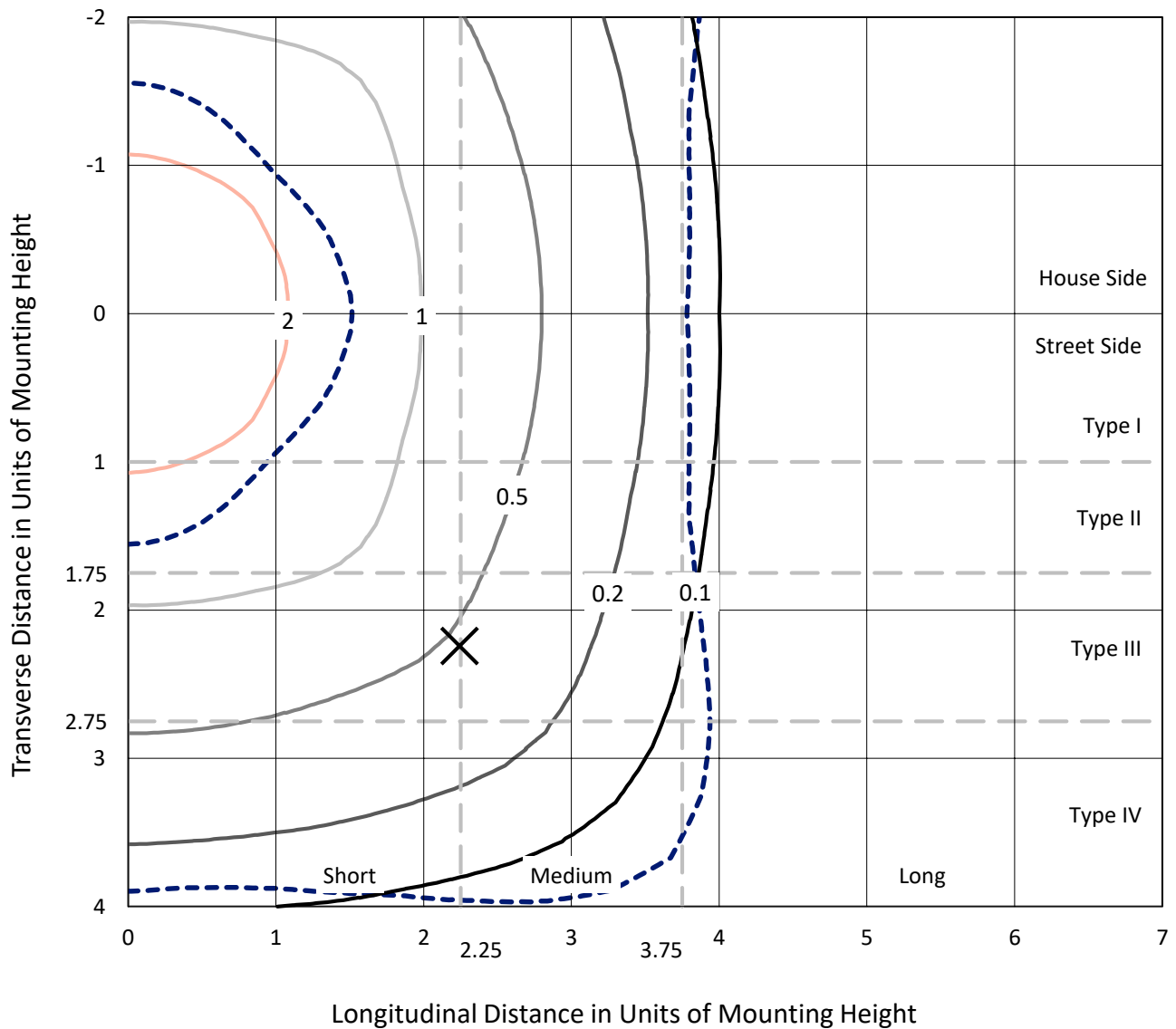
Input Watts (W): 290
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

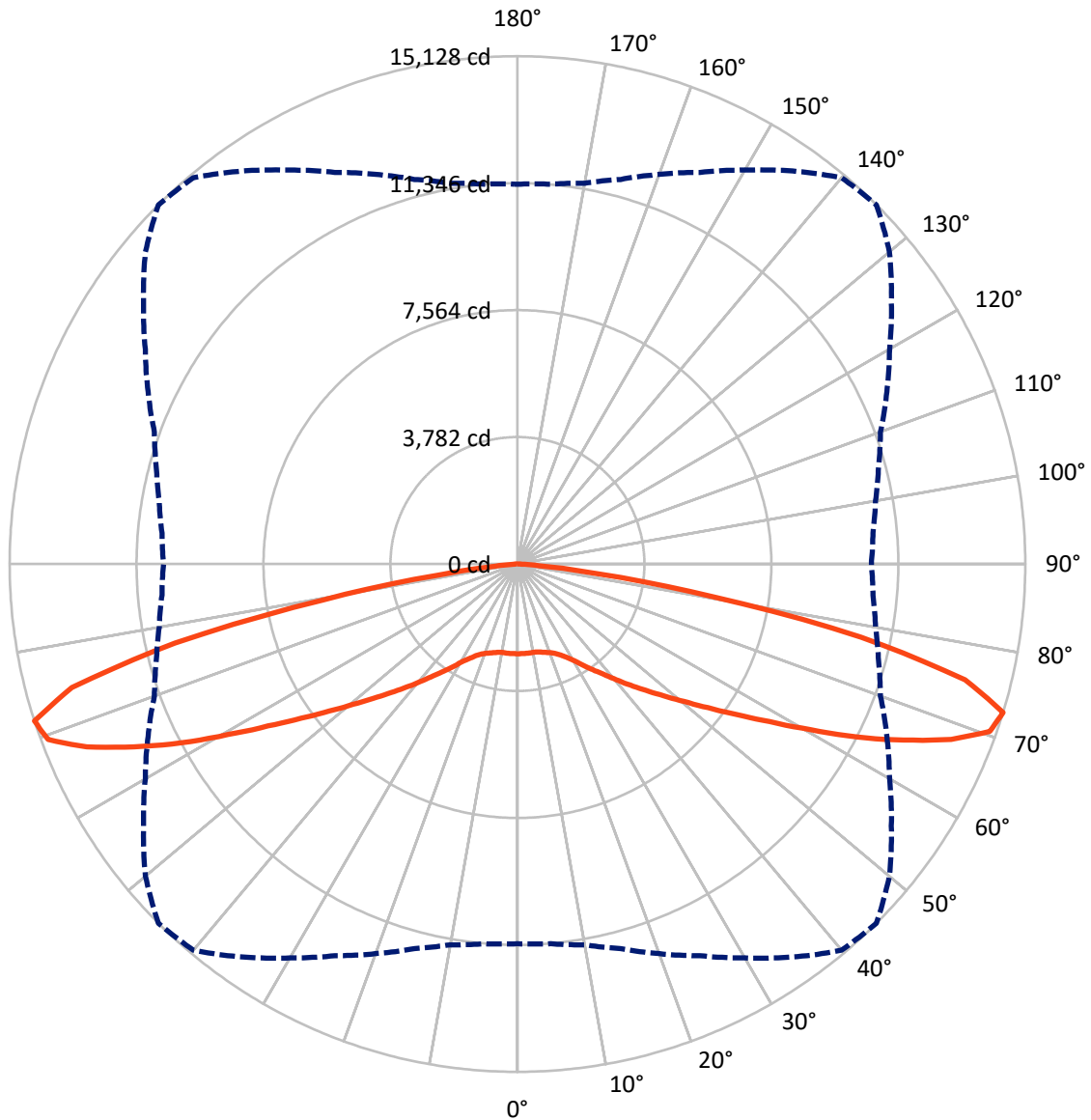
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18888.8	0.0	18888.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18888.8	0.0	18888.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	37777.6	0.0	37777.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.5	0.7
10°-20°	775.8	2.1
20°-30°	1417.8	3.8
30°-40°	2444.5	6.5
40°-50°	4178.9	11.1
50°-60°	6773.4	17.9
60°-70°	11236.8	29.7
70°-80°	9897.0	26.2
80°-90°	798.0	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°	37777.6	100.0
0°-180°	37777.6	100.0



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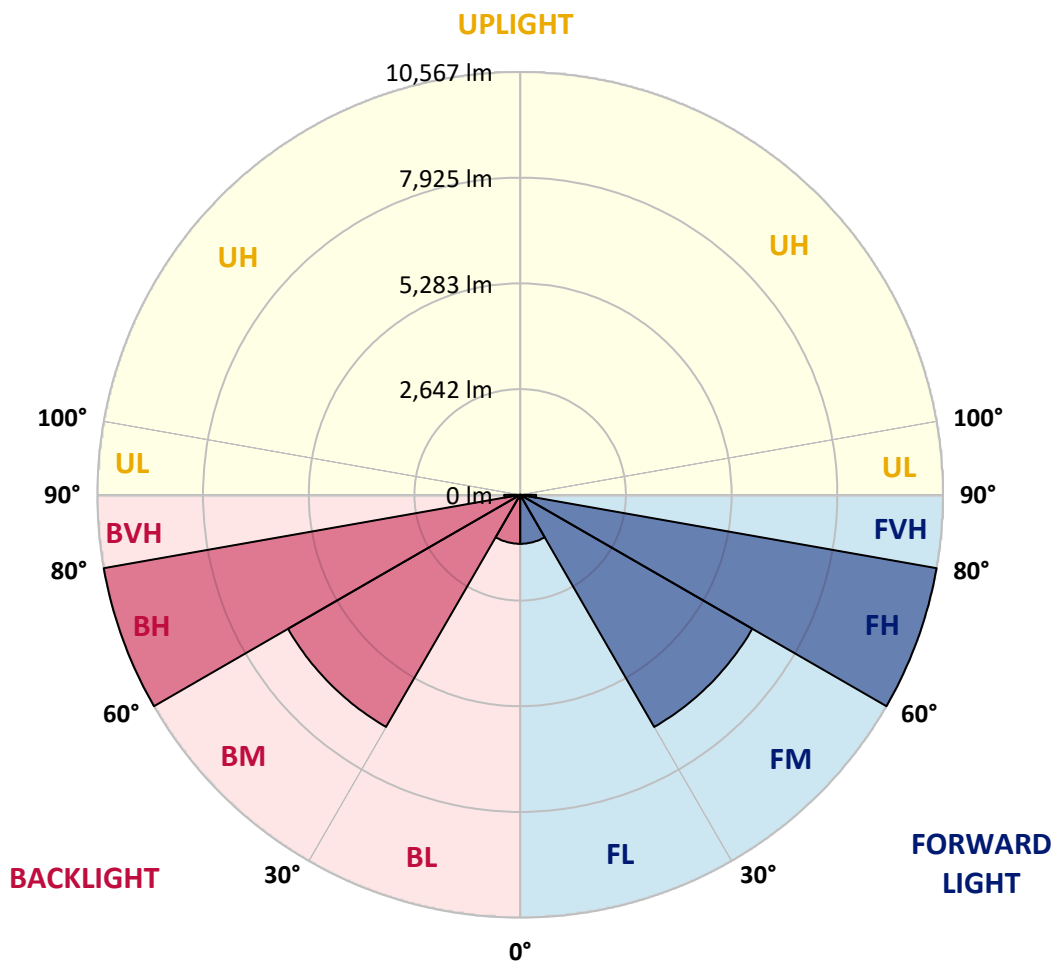
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1224.5	3.2			
FM	(30°-60°)	6698.4	17.7			
FH	(60°-80°)	10566.9	28.0			G4/12000
FVH	(80°-90°)	399.0	1.1			G3/500
BL	(0°-30°)	1224.5	3.2	B3/2500		
BM	(30°-60°)	6698.4	17.7	B4/8500		
BH	(60°-80°)	10566.9	28.0	B5		G4/12000
BVH	(80°-90°)	399.0	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2
2.5°	2675.2	2677.0	2678.7	2677.0	2677.0	2675.2	2673.5	2675.2	2673.5	2670.0	2671.7
5°	2683.9	2687.4	2687.4	2683.9	2685.7	2683.9	2680.4	2682.2	2678.7	2673.5	2673.5
7.5°	2694.2	2696.0	2696.0	2692.6	2694.2	2690.9	2687.4	2685.7	2682.2	2675.2	2670.0
10°	2709.9	2711.6	2709.9	2706.4	2706.4	2701.2	2692.6	2689.1	2682.2	2671.7	2666.5
12.5°	2727.2	2728.9	2727.2	2723.7	2722.1	2713.4	2706.4	2701.2	2696.0	2687.4	2678.7
15°	2751.4	2754.9	2751.4	2744.6	2739.4	2732.4	2728.9	2730.7	2732.4	2725.4	2716.9
17.5°	2796.5	2798.3	2793.1	2777.5	2770.6	2763.6	2763.6	2767.1	2772.3	2768.8	2760.1
20°	2879.7	2874.5	2862.3	2843.3	2834.6	2822.5	2820.8	2822.5	2822.5	2820.8	2813.8
22.5°	2983.6	2980.2	2964.6	2940.4	2928.2	2921.2	2910.9	2902.2	2900.5	2895.3	2888.4
25°	3108.4	3106.7	3087.6	3066.8	3058.1	3049.5	3040.8	3028.8	3018.3	3006.1	2999.3
27.5°	3267.8	3260.9	3233.1	3222.8	3210.6	3205.4	3193.3	3179.4	3170.7	3155.2	3146.5
30°	3442.8	3442.8	3420.2	3416.9	3416.9	3404.7	3390.9	3366.5	3351.0	3335.4	3330.2
32.5°	3617.8	3619.5	3597.0	3604.0	3609.2	3617.8	3621.2	3612.7	3602.2	3600.5	3590.0
35°	3870.7	3863.9	3841.3	3846.5	3844.8	3843.0	3843.0	3862.2	3865.6	3869.0	3848.2
37.5°	4184.4	4184.4	4161.9	4161.9	4151.4	4141.1	4127.2	4139.4	4158.4	4163.6	4149.7
40°	4543.0	4555.2	4527.5	4525.7	4529.2	4496.3	4480.7	4499.8	4511.8	4532.7	4517.0
42.5°	4965.8	4957.1	4929.4	4926.0	4906.9	4896.6	4882.6	4898.3	4917.3	4931.1	4936.4
45°	5371.3	5364.4	5333.2	5333.2	5314.1	5305.4	5312.4	5338.4	5347.0	5366.1	5385.1
47.5°	5771.5	5762.9	5742.0	5750.7	5752.5	5768.0	5790.6	5814.9	5839.1	5865.1	5873.8
50°	6180.5	6182.2	6159.6	6180.5	6206.4	6249.7	6310.4	6350.3	6400.5	6433.4	6443.8
52.5°	6552.9	6559.9	6584.1	6632.6	6684.7	6769.6	6873.5	6970.5	7053.7	7109.1	7105.6
55°	7000.0	7010.4	7069.3	7152.5	7237.4	7365.6	7519.8	7691.4	7830.0	7909.7	7859.3
57.5°	7571.8	7594.3	7660.2	7772.8	7899.2	8065.6	8277.0	8535.1	8750.0	8857.4	8776.0
60°	8356.7	8370.5	8450.2	8575.0	8727.4	8933.6	9216.1	9562.5	9865.8	10007.9	9914.3
62.5°	9391.1	9417.1	9481.1	9607.7	9763.6	9997.5	10342.3	10775.5	11153.2	11350.7	11139.3
65°	10626.4	10709.6	10763.3	10891.6	11037.1	11284.9	11645.3	12109.6	12515.1	12645.0	12400.7
67.5°	11849.8	11922.5	12016.1	12163.3	12310.6	12589.6	12924.0	13374.5	13819.8	13937.6	13558.1
70°	12385.1	12426.7	12572.3	12773.2	13055.6	13384.9	13771.3	14277.2	14828.2	14925.2	14443.6
72.5°	11312.6	11354.1	11517.0	11858.4	12350.5	12873.7	13547.8	14291.0	15018.8	15127.9	14464.3
75°	8556.0	8488.3	8729.1	9181.4	9845.0	10574.4	11517.0	12582.6	13634.4	13771.3	12979.4
77.5°	4421.8	4413.1	4595.0	5156.4	5948.3	6778.2	7816.1	9020.3	10049.5	10465.3	9820.7
80°	1245.7	1259.7	1346.3	1625.3	2087.8	2687.4	3498.3	4626.2	5468.3	5898.0	5537.6
82.5°	488.6	526.7	559.7	611.6	672.3	760.7	1015.4	1510.9	2027.2	2422.2	1983.9
85°	175.0	187.1	265.1	313.6	318.9	336.1	382.9	447.0	538.9	642.8	528.5
87.5°	65.9	72.7	84.9	140.3	138.6	126.4	154.2	161.1	121.3	110.9	136.9
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°	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2	2675.2
2.5°	2668.3	2670.0	2670.0	2671.7	2673.5	2673.5	2677.0	2677.0
5°	2670.0	2670.0	2666.5	2668.3	2666.5	2666.5	2668.3	2668.3
7.5°	2666.5	2664.9	2661.4	2659.7	2656.2	2656.2	2656.2	2656.2
10°	2661.4	2659.7	2656.2	2654.5	2652.7	2652.7	2652.7	2652.7
12.5°	2675.2	2670.0	2666.5	2664.9	2664.9	2664.9	2664.9	2664.9
15°	2711.6	2699.5	2690.9	2690.9	2692.6	2696.0	2696.0	2699.5
17.5°	2756.6	2742.8	2734.1	2727.2	2730.7	2735.9	2739.4	2742.8
20°	2810.4	2803.5	2791.3	2784.4	2784.4	2791.3	2794.8	2796.5
22.5°	2884.9	2879.7	2874.5	2865.8	2865.8	2869.3	2876.2	2876.2
25°	2995.8	2992.3	2988.9	2981.9	2980.2	2980.2	2983.6	2987.1
27.5°	3134.4	3136.2	3132.7	3130.9	3125.7	3124.0	3129.2	3127.5
30°	3319.8	3328.5	3337.1	3330.2	3321.5	3316.3	3311.1	3304.2
32.5°	3571.0	3560.6	3553.7	3541.6	3526.0	3512.1	3501.8	3489.6
35°	3808.4	3791.1	3784.1	3794.5	3792.8	3784.1	3772.0	3761.6
37.5°	4099.5	4096.0	4099.5	4118.5	4115.1	4123.7	4099.5	4097.7
40°	4466.8	4470.3	4494.5	4517.0	4529.2	4541.3	4527.5	4513.6
42.5°	4893.1	4891.3	4899.9	4931.1	4952.0	4965.8	4936.4	4932.9
45°	5343.6	5331.4	5338.4	5364.4	5385.1	5400.8	5367.8	5367.8
47.5°	5839.1	5818.3	5795.7	5825.2	5837.4	5847.8	5821.7	5813.1
50°	6391.8	6348.5	6299.9	6312.1	6312.1	6308.6	6275.7	6274.0
52.5°	7025.9	6946.2	6857.9	6825.0	6805.9	6785.1	6727.9	6700.2
55°	7755.4	7635.8	7497.2	7412.4	7367.3	7310.1	7214.9	7188.9
57.5°	8607.9	8420.7	8181.7	8077.7	7977.2	7883.7	7777.9	7748.4
60°	9618.0	9342.5	9025.5	8833.2	8724.0	8633.9	8524.8	8519.5
62.5°	10744.3	10309.4	9950.8	9777.5	9697.8	9618.0	9514.1	9528.0
65°	11889.6	11435.6	11099.4	10959.1	10884.6	10818.7	10714.8	10730.4
67.5°	13019.3	12601.7	12232.7	12088.8	12005.7	11922.5	11828.9	11844.5
70°	13830.2	13312.1	12896.2	12577.4	12378.2	12153.0	12007.4	11971.0
72.5°	13598.0	12799.3	12139.1	11506.7	11135.8	10834.4	10629.9	10541.5
75°	11768.2	10676.7	9827.7	9051.5	8614.8	8259.6	8001.4	7840.3
77.5°	8739.6	7512.9	6509.6	5615.6	4908.6	4433.9	4099.5	3882.9
80°	4783.9	3638.6	2659.7	1869.5	1374.0	1141.8	1008.4	944.3
82.5°	1490.1	961.7	708.7	611.6	568.4	544.1	504.2	440.1
85°	474.8	415.8	386.4	369.1	351.7	306.7	211.3	192.3
87.5°	183.6	188.8	187.1	176.8	180.2	129.9	103.9	91.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)