

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: P190813

Luminaire Tested: **GLEON-AF-05-LED-E1-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190813
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: GLEON-AF-05-LED-E1-5MQ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31970.3 lumens
Efficiency: N/A
Efficacy: 114.6 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 - G4

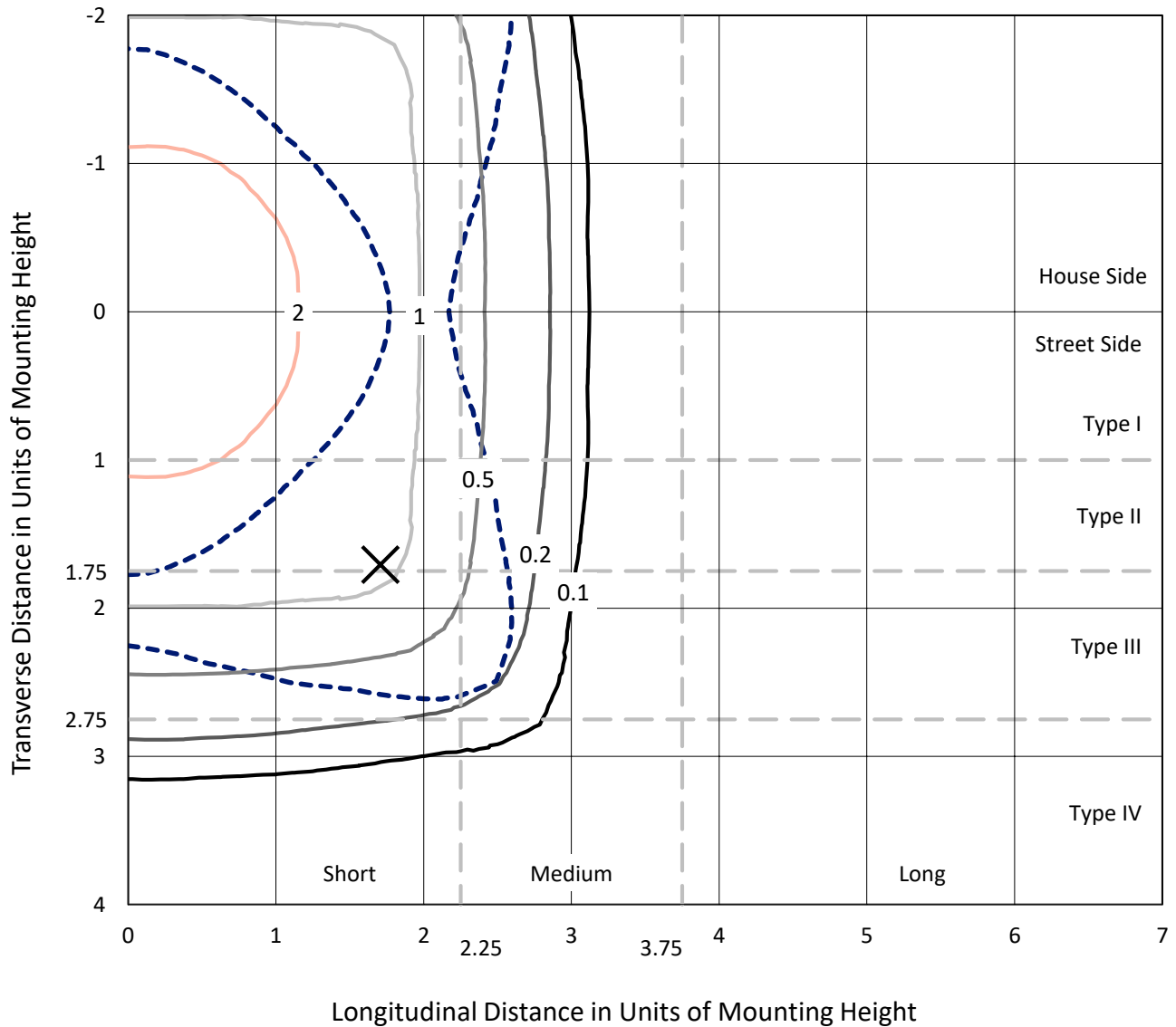
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

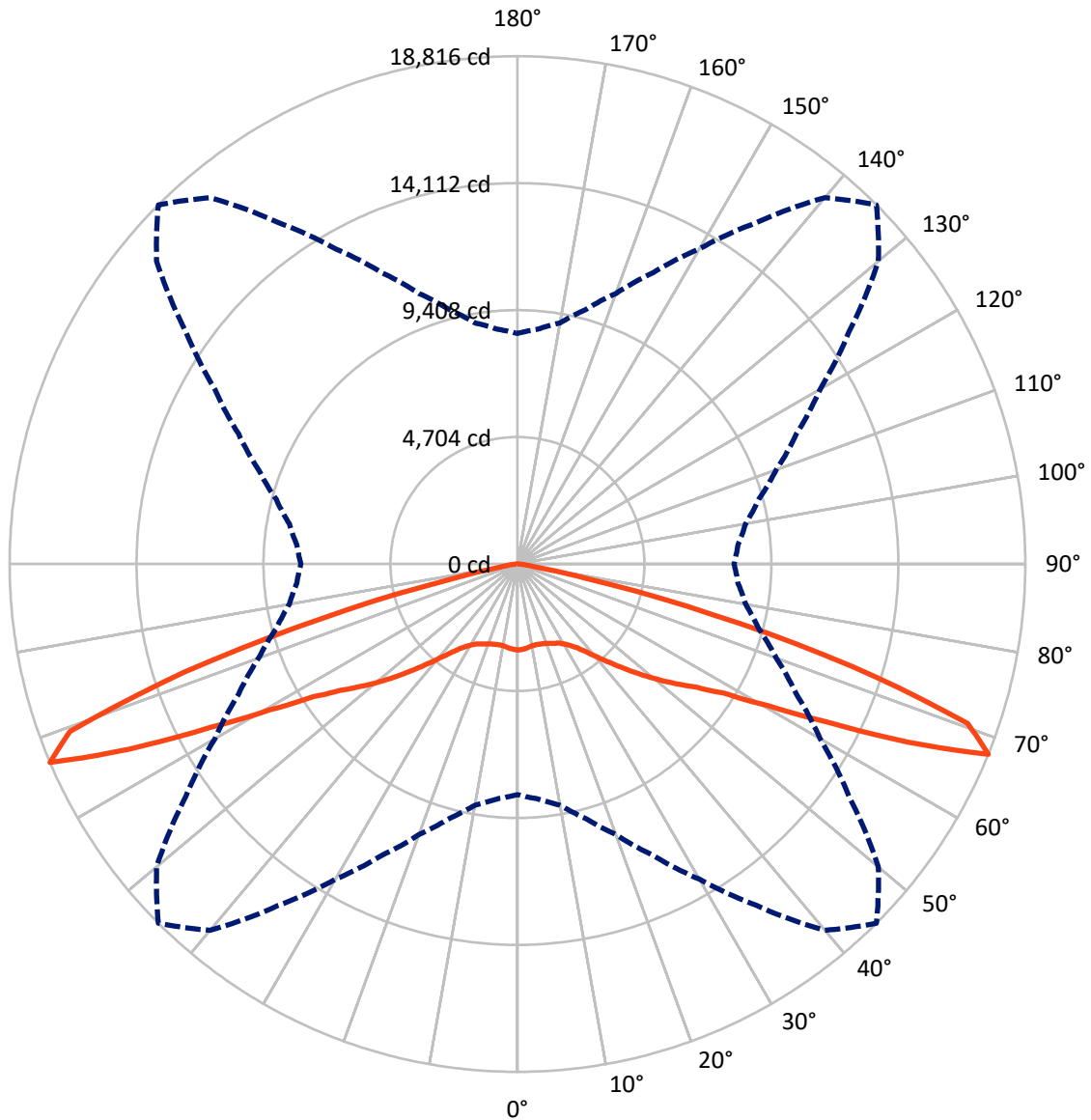
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.5 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	15985.2	0.0	15985.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15985.2	0.0	15985.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	31970.3	0.0	31970.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.2	0.9
10°-20°	865.3	2.7
20°-30°	1471.0	4.6
30°-40°	2404.6	7.5
40°-50°	4292.7	13.4
50°-60°	7237.6	22.6
60°-70°	11231.6	35.1
70°-80°	3946.3	12.3
80°-90°	223.0	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°	31970.3	100.0
0°-180°	31970.3	100.0



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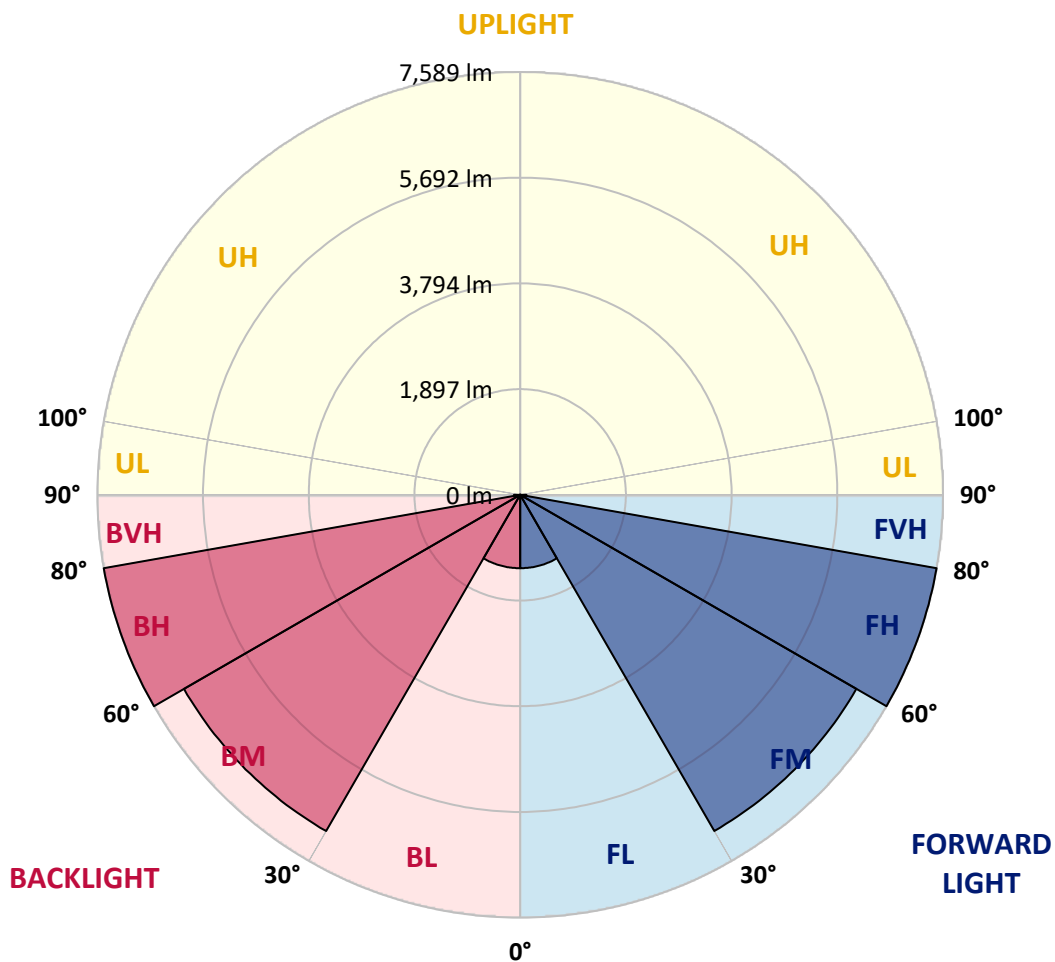
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1317.2	4.1			
FM	(30°-60°)	6967.4	21.8			
FH	(60°-80°)	7589.0	23.7			G4/12000
FVH	(80°-90°)	111.5	0.3			G2/225
BL	(0°-30°)	1317.2	4.1	B3/2500		
BM	(30°-60°)	6967.4	21.8	B4/8500		
BH	(60°-80°)	7589.0	23.7	B5		G4/12000
BVH	(80°-90°)	111.5	0.3			G2/225
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°	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0
2.5°	3174.2	3177.2	3177.2	3177.2	3175.6	3175.6	3172.8	3175.6	3174.2	3169.8	3171.2
5°	3147.7	3150.7	3150.7	3149.3	3153.7	3152.1	3147.7	3150.7	3149.3	3146.3	3147.7
7.5°	3109.6	3114.0	3114.0	3112.4	3116.8	3115.4	3112.4	3114.0	3114.0	3109.6	3109.6
10°	3066.9	3069.9	3069.9	3068.3	3075.7	3075.7	3074.3	3078.7	3080.1	3075.7	3072.7
12.5°	3027.2	3031.6	3031.6	3037.4	3044.8	3047.8	3055.1	3061.0	3066.9	3065.4	3059.5
15°	3003.7	3006.7	3012.5	3019.9	3031.6	3041.8	3053.6	3066.9	3078.7	3081.5	3072.7
17.5°	2989.0	2993.4	3002.2	3012.5	3028.7	3046.3	3063.9	3081.5	3097.8	3103.6	3093.3
20°	2984.6	2987.5	2996.3	3013.9	3036.0	3062.5	3087.5	3108.0	3130.1	3137.5	3130.1
22.5°	2993.4	2999.3	3009.5	3030.1	3059.5	3093.3	3122.8	3150.7	3178.6	3191.8	3181.6
25°	3033.0	3039.0	3052.2	3078.7	3111.0	3146.3	3180.0	3212.5	3237.4	3250.6	3243.3
27.5°	3106.6	3114.0	3130.1	3156.5	3191.8	3230.1	3266.8	3293.3	3313.8	3318.2	3309.5
30°	3216.9	3233.0	3252.2	3281.5	3322.7	3355.1	3391.8	3415.3	3440.3	3440.3	3432.9
32.5°	3388.8	3405.0	3425.7	3453.6	3485.9	3521.2	3553.5	3574.1	3600.6	3602.0	3584.4
35°	3646.1	3653.5	3671.2	3688.8	3718.2	3749.1	3777.0	3790.2	3812.3	3813.8	3797.6
37.5°	3985.8	3987.3	3999.0	4004.9	4031.3	4065.2	4091.6	4100.5	4121.1	4118.1	4101.9
40°	4381.3	4388.7	4393.1	4401.9	4429.8	4462.1	4490.0	4494.4	4516.5	4512.1	4491.6
42.5°	4838.5	4841.4	4866.5	4879.7	4906.2	4922.3	4957.6	4962.0	4988.4	4976.7	4953.2
45°	5351.6	5378.1	5401.6	5428.1	5456.0	5475.1	5503.1	5497.1	5514.8	5497.1	5483.9
47.5°	5891.2	5910.3	5963.2	6004.4	6049.9	6066.1	6105.8	6088.2	6105.8	6080.8	6076.4
50°	6485.2	6519.0	6564.6	6611.6	6660.1	6686.6	6738.1	6716.0	6739.5	6716.0	6702.8
52.5°	7070.3	7079.1	7179.1	7248.2	7315.8	7346.7	7377.6	7367.3	7368.7	7367.3	7354.1
55°	7626.0	7646.7	7746.6	7840.7	7958.4	8045.1	8098.0	8092.2	8078.9	8065.7	8043.6
57.5°	8252.3	8272.9	8387.6	8503.8	8637.6	8761.1	8868.4	8978.6	9021.3	9033.1	8984.6
60°	9099.2	9097.7	9250.6	9391.8	9582.9	9766.7	10001.9	10241.6	10516.5	10644.4	10475.3
62.5°	9960.8	9996.1	10216.6	10466.5	10860.6	11244.3	11678.0	12104.4	12539.5	12893.9	12517.4
65°	9857.9	9993.1	10321.0	10887.0	11614.8	12479.3	13414.4	14403.8	15297.7	15912.2	15222.7
67.5°	8543.5	8736.1	9069.8	9757.8	10667.9	11914.7	13484.8	15441.7	17716.2	18816.0	17453.0
70°	6192.5	6410.2	6760.1	7431.9	8333.3	9518.3	11223.7	13573.1	16584.1	17692.7	16191.6
72.5°	3081.5	3199.2	3415.3	3843.1	4525.3	5486.9	7033.5	9291.8	11955.8	12973.3	11601.5
75°	1046.8	1101.2	1137.9	1277.7	1493.7	1871.6	2640.5	4062.2	6197.0	7429.1	6108.8
77.5°	604.3	605.7	630.8	655.7	692.4	733.7	836.6	1098.2	1899.5	2697.8	1965.7
80°	391.1	389.6	410.2	429.3	454.3	474.9	480.8	508.7	586.7	695.4	622.0
82.5°	202.9	227.9	273.4	298.5	345.6	354.4	342.6	332.3	351.4	364.6	373.5
85°	111.7	97.1	145.6	188.2	208.8	211.8	211.8	200.0	207.4	202.9	220.5
87.5°	51.5	47.1	57.4	92.6	98.5	83.8	88.2	77.9	55.9	54.4	61.8
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°	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0	3186.0
2.5°	3171.2	3172.8	3172.8	3177.2	3178.6	3181.6	3184.5	3186.0
5°	3146.3	3150.7	3147.7	3152.1	3152.1	3155.1	3155.1	3156.5
7.5°	3109.6	3114.0	3114.0	3114.0	3112.4	3116.8	3116.8	3116.8
10°	3071.3	3074.3	3072.7	3069.9	3066.9	3071.3	3069.9	3068.3
12.5°	3059.5	3052.2	3046.3	3043.4	3037.4	3039.0	3034.6	3034.6
15°	3066.9	3053.6	3043.4	3039.0	3033.0	3030.1	3027.2	3028.7
17.5°	3086.0	3069.9	3056.6	3049.2	3041.8	3037.4	3031.6	3033.0
20°	3119.8	3100.7	3081.5	3066.9	3053.6	3046.3	3041.8	3040.4
22.5°	3169.8	3141.9	3114.0	3091.9	3074.3	3063.9	3059.5	3056.6
25°	3227.1	3196.3	3163.9	3138.9	3121.3	3108.0	3099.2	3099.2
27.5°	3299.2	3274.2	3244.8	3215.3	3199.2	3186.0	3180.0	3177.2
30°	3419.7	3396.2	3372.7	3344.7	3324.2	3311.0	3300.7	3291.9
32.5°	3574.1	3555.0	3535.9	3515.3	3496.2	3478.5	3462.4	3455.0
35°	3791.7	3777.0	3763.7	3740.2	3732.8	3722.6	3713.8	3706.5
37.5°	4091.6	4085.8	4085.8	4060.7	4054.9	4050.5	4041.7	4043.1
40°	4485.6	4491.6	4484.2	4475.4	4470.9	4459.1	4459.1	4469.5
42.5°	4951.7	4956.1	4972.3	4957.6	4973.8	4959.1	4950.3	4957.6
45°	5492.7	5508.9	5541.2	5526.6	5536.8	5511.9	5481.0	5482.5
47.5°	6100.0	6114.7	6127.9	6117.6	6119.1	6077.9	6036.7	6026.4
50°	6730.7	6736.5	6743.9	6729.2	6732.1	6686.6	6639.6	6641.0
52.5°	7354.1	7382.0	7411.4	7371.7	7362.9	7311.4	7245.3	7218.8
55°	8067.1	8106.8	8073.0	8003.9	7934.8	7865.7	7778.9	7764.3
57.5°	8946.3	8878.7	8772.8	8642.0	8546.4	8449.4	8361.2	8324.4
60°	10169.6	9915.2	9724.1	9530.0	9408.0	9288.9	9172.7	9155.1
62.5°	11898.6	11458.9	11078.1	10676.7	10348.9	10093.0	9888.8	9831.4
65°	14065.6	13026.2	12124.9	11284.0	10553.3	10001.9	9654.9	9502.1
67.5°	14997.8	12945.3	11400.1	10206.3	9250.6	8583.2	8208.3	8021.6
70°	13179.1	10735.6	9055.1	7859.8	6989.4	6277.8	5938.2	5738.2
72.5°	9066.8	6829.2	5400.2	4407.7	3712.3	3116.8	2881.7	2864.0
75°	4071.0	2696.4	1858.4	1432.0	1205.5	1048.3	999.7	963.0
77.5°	1139.5	842.4	751.3	702.8	655.7	601.3	580.7	585.1
80°	554.2	523.4	502.8	472.0	429.3	383.7	363.1	371.9
82.5°	367.5	363.1	376.3	354.4	292.6	248.5	208.8	191.1
85°	223.5	226.4	230.8	232.3	197.0	138.2	94.1	105.9
87.5°	88.2	101.5	110.3	114.7	107.3	66.2	52.9	54.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)