

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: P299605

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299605
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
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32383.6 lumens
Efficiency: N/A
Efficacy: 97.2 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

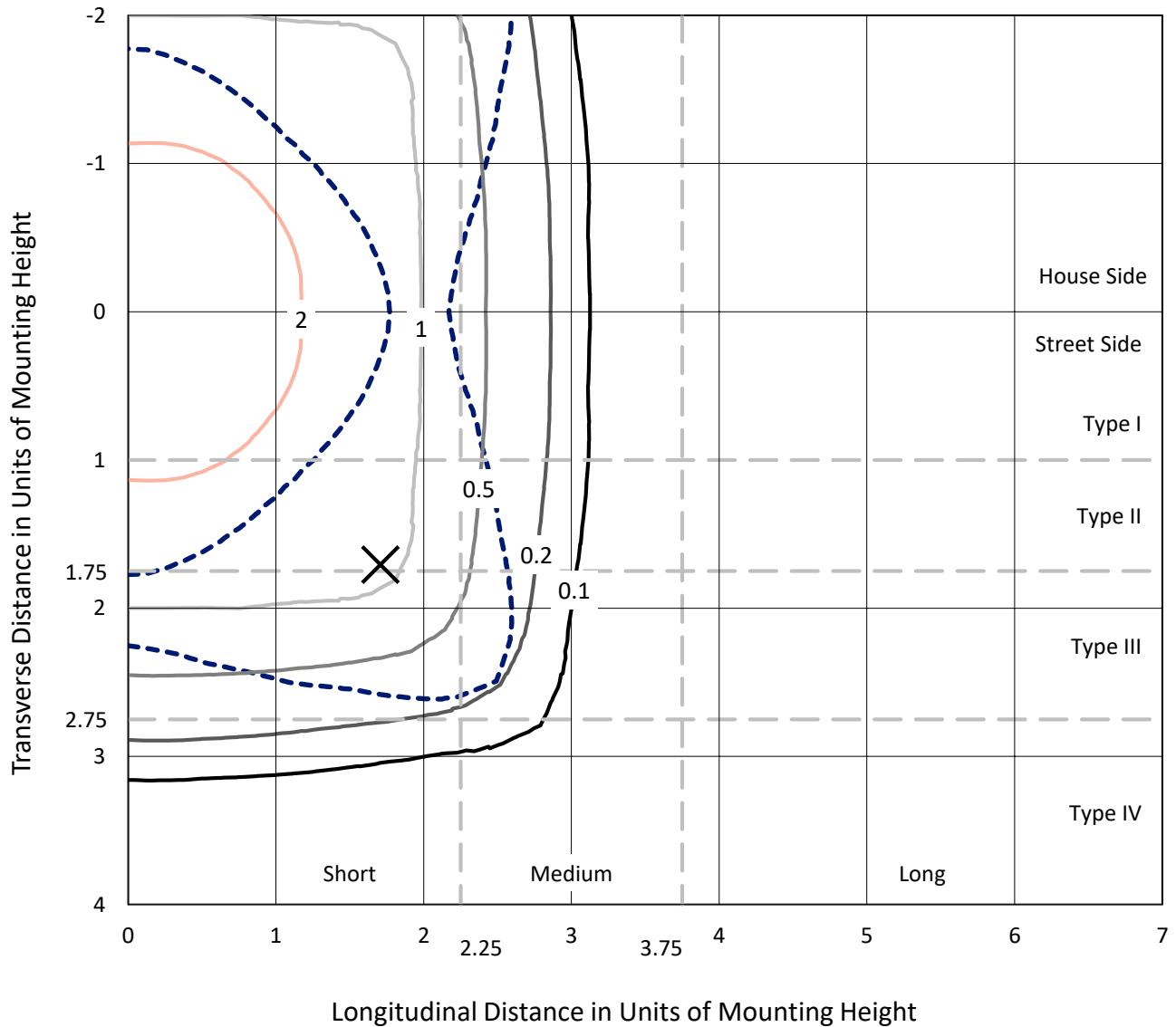
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

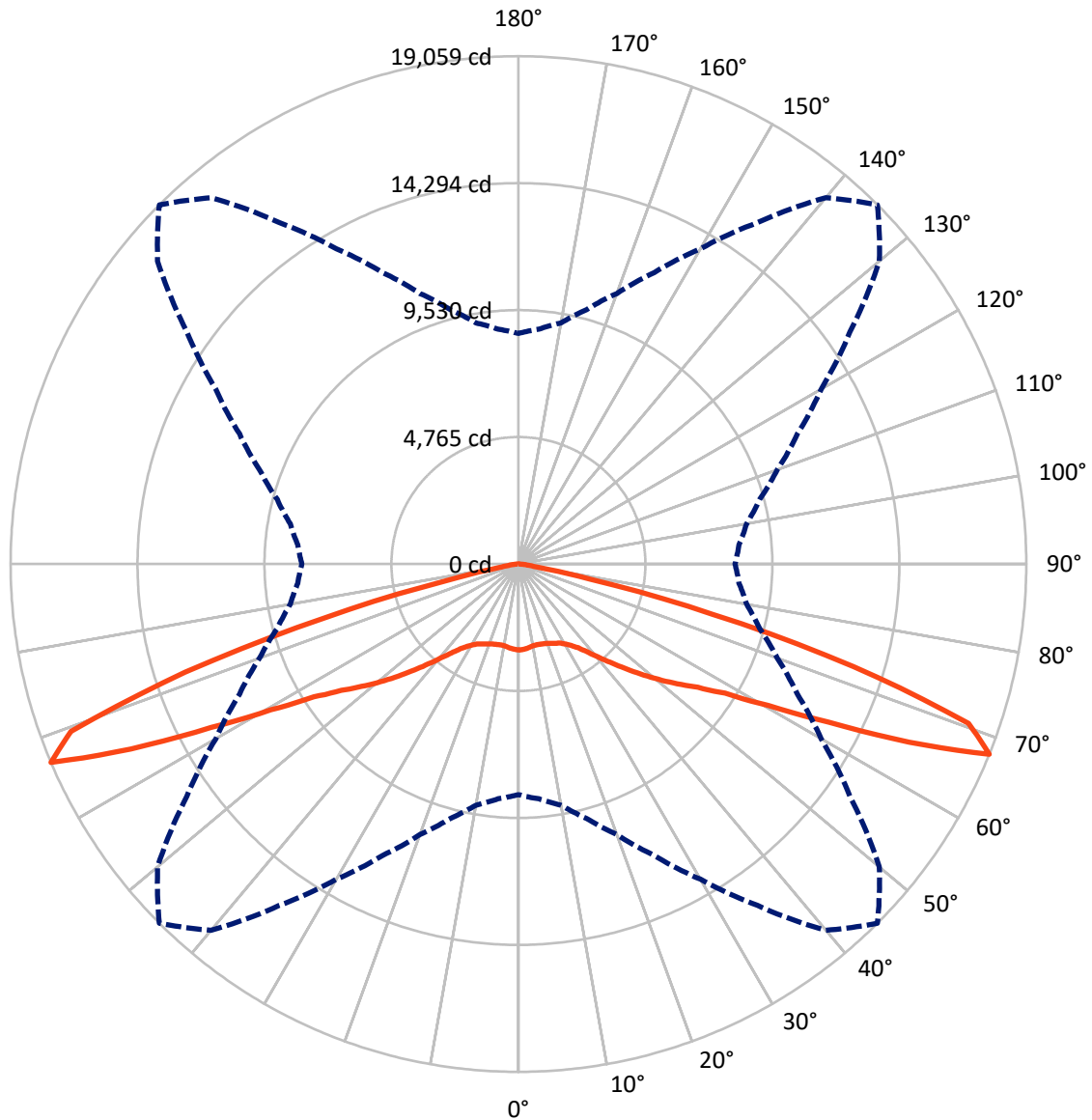
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.6 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	16191.8	0.0	16191.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	16191.8	0.0	16191.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	32383.6	0.0	32383.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.0	0.9
10°-20°	876.5	2.7
20°-30°	1490.0	4.6
30°-40°	2435.7	7.5
40°-50°	4348.2	13.4
50°-60°	7331.1	22.6
60°-70°	11376.8	35.1
70°-80°	3997.3	12.3
80°-90°	225.9	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°	32383.6	100.0
0°-180°	32383.6	100.0



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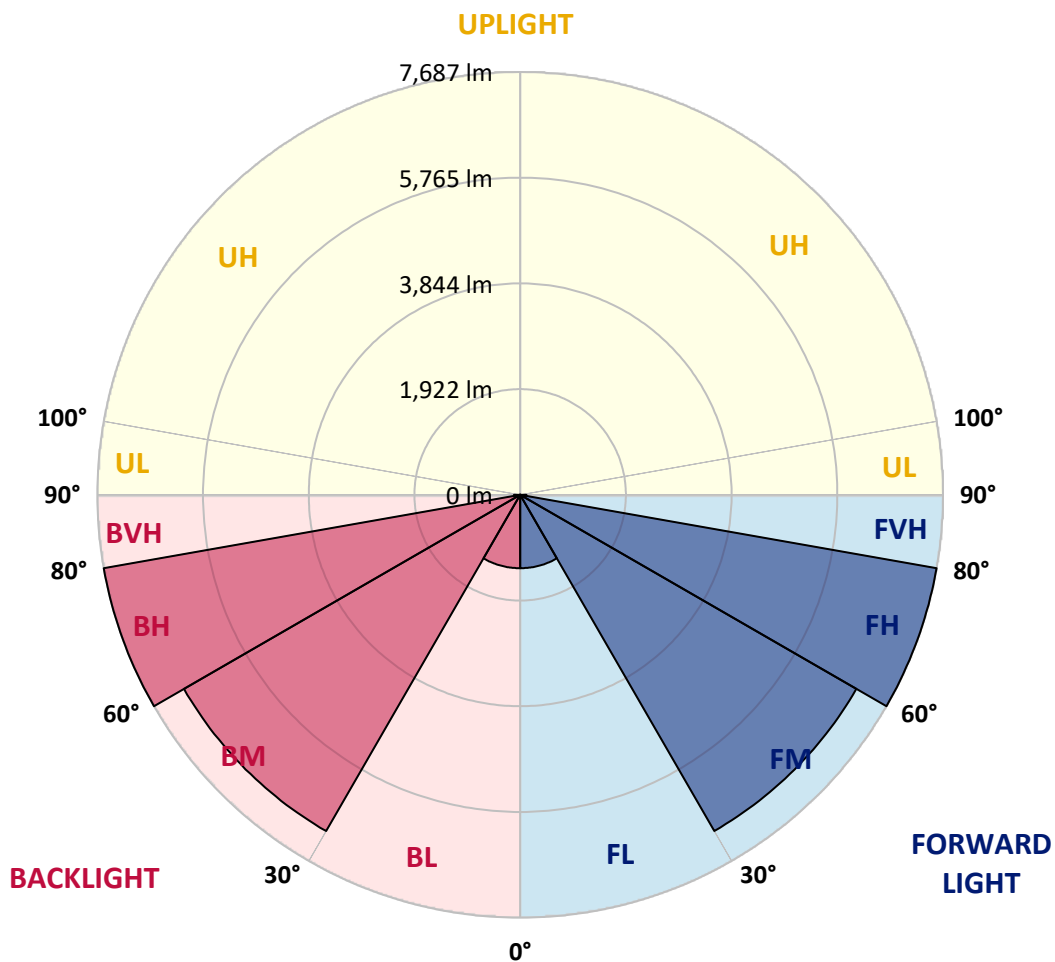
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1334.3	4.1			
FM	(30°-60°)	7057.5	21.8			
FH	(60°-80°)	7687.1	23.7			G4/12000
FVH	(80°-90°)	113.0	0.3			G2/225
BL	(0°-30°)	1334.3	4.1	B3/2500		
BM	(30°-60°)	7057.5	21.8	B4/8500		
BH	(60°-80°)	7687.1	23.7	B5		G4/12000
BVH	(80°-90°)	113.0	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°	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2
2.5°	3215.2	3218.2	3218.2	3218.2	3216.7	3216.7	3213.8	3216.7	3215.2	3210.8	3212.3
5°	3188.4	3191.4	3191.4	3189.9	3194.4	3192.9	3188.4	3191.4	3189.9	3187.0	3188.4
7.5°	3149.7	3154.2	3154.2	3152.7	3157.2	3155.7	3152.7	3154.2	3154.2	3149.7	3149.7
10°	3106.5	3109.5	3109.5	3108.0	3115.5	3115.5	3114.0	3118.4	3119.9	3115.5	3112.5
12.5°	3066.3	3070.8	3070.8	3076.8	3084.2	3087.2	3094.6	3100.6	3106.5	3105.0	3099.1
15°	3042.5	3045.5	3051.4	3058.9	3070.8	3081.2	3093.1	3106.5	3118.4	3121.4	3112.5
17.5°	3027.6	3032.1	3041.0	3051.4	3067.8	3085.7	3103.6	3121.4	3137.8	3143.8	3133.3
20°	3023.1	3026.1	3035.1	3052.9	3075.3	3102.1	3127.4	3148.2	3170.6	3178.0	3170.6
22.5°	3032.1	3038.0	3048.5	3069.3	3099.1	3133.3	3163.1	3191.4	3219.7	3233.1	3222.7
25°	3072.3	3078.2	3091.6	3118.4	3151.2	3187.0	3221.2	3254.0	3279.3	3292.7	3285.2
27.5°	3146.7	3154.2	3170.6	3197.4	3233.1	3271.8	3309.1	3335.9	3356.7	3361.2	3352.3
30°	3258.4	3274.8	3294.2	3324.0	3365.7	3398.4	3435.7	3459.5	3484.8	3484.8	3477.4
32.5°	3432.7	3449.1	3469.9	3498.2	3531.0	3566.7	3599.5	3620.3	3647.1	3648.6	3630.7
35°	3693.3	3700.7	3718.6	3736.5	3766.3	3797.5	3825.8	3839.2	3861.6	3863.1	3846.7
37.5°	4037.3	4038.8	4050.7	4056.7	4083.5	4117.7	4144.5	4153.5	4174.3	4171.3	4155.0
40°	4437.9	4445.4	4449.8	4458.8	4487.1	4519.8	4548.1	4552.6	4574.9	4570.4	4549.6
42.5°	4901.1	4904.0	4929.4	4942.8	4969.6	4985.9	5021.7	5026.2	5053.0	5041.0	5017.2
45°	5420.8	5447.6	5471.4	5498.2	5526.5	5545.9	5574.2	5568.2	5586.1	5568.2	5554.8
47.5°	5967.3	5986.7	6040.3	6082.0	6128.2	6144.6	6184.8	6166.9	6184.8	6159.5	6155.0
50°	6569.0	6603.2	6649.4	6697.1	6746.2	6773.0	6825.1	6802.8	6826.6	6802.8	6789.4
52.5°	7161.7	7170.6	7271.9	7341.9	7410.4	7441.7	7473.0	7462.5	7464.0	7462.5	7449.1
55°	7724.6	7745.5	7846.8	7942.1	8061.2	8149.1	8202.7	8196.7	8183.3	8169.9	8147.6
57.5°	8359.1	8379.9	8496.1	8613.7	8749.2	8874.3	8983.0	9094.7	9137.9	9149.8	9100.7
60°	9216.8	9215.4	9370.2	9513.2	9706.8	9893.0	10131.2	10374.0	10652.5	10782.0	10610.8
62.5°	10089.5	10125.3	10348.7	10601.8	11000.9	11389.6	11829.0	12260.8	12701.6	13060.6	12679.3
65°	9985.3	10122.3	10454.4	11027.8	11764.9	12640.6	13587.7	14590.0	15495.4	16117.9	15419.5
67.5°	8653.9	8849.0	9187.1	9884.0	10805.9	12068.7	13659.2	15641.4	17945.2	19059.2	17678.7
70°	6272.6	6493.0	6847.5	7528.1	8441.0	9641.3	11368.8	13748.6	16798.5	17921.4	16400.9
72.5°	3121.4	3240.6	3459.5	3892.8	4583.9	5557.8	7124.5	9411.9	12110.4	13141.0	11751.5
75°	1060.3	1115.4	1152.7	1294.1	1513.1	1895.8	2674.7	4114.7	6277.1	7525.1	6187.8
77.5°	612.1	613.6	638.9	664.2	701.4	743.1	847.4	1112.5	1924.1	2732.7	1991.1
80°	396.1	394.6	415.5	434.9	460.2	481.0	487.0	515.3	594.2	704.4	629.9
82.5°	205.5	230.8	277.0	302.3	350.0	358.9	347.0	336.6	355.9	369.3	378.3
85°	113.2	98.3	147.4	190.6	211.5	214.4	214.4	202.5	210.0	205.5	223.4
87.5°	52.1	47.7	58.1	93.8	99.8	84.9	89.4	78.9	56.6	55.1	62.5
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°	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2	3227.2
2.5°	3212.3	3213.8	3213.8	3218.2	3219.7	3222.7	3225.7	3227.2
5°	3187.0	3191.4	3188.4	3192.9	3192.9	3195.9	3195.9	3197.4
7.5°	3149.7	3154.2	3154.2	3154.2	3152.7	3157.2	3157.2	3157.2
10°	3111.0	3114.0	3112.5	3109.5	3106.5	3111.0	3109.5	3108.0
12.5°	3099.1	3091.6	3085.7	3082.7	3076.8	3078.2	3073.8	3073.8
15°	3106.5	3093.1	3082.7	3078.2	3072.3	3069.3	3066.3	3067.8
17.5°	3125.9	3109.5	3096.1	3088.7	3081.2	3076.8	3070.8	3072.3
20°	3160.1	3140.8	3121.4	3106.5	3093.1	3085.7	3081.2	3079.7
22.5°	3210.8	3182.5	3154.2	3131.9	3114.0	3103.6	3099.1	3096.1
25°	3268.9	3237.6	3204.8	3179.5	3161.6	3148.2	3139.3	3139.3
27.5°	3341.8	3316.5	3286.7	3256.9	3240.6	3227.2	3221.2	3218.2
30°	3464.0	3440.1	3416.3	3388.0	3367.2	3353.7	3343.3	3334.4
32.5°	3620.3	3601.0	3581.6	3560.8	3541.4	3523.5	3507.1	3499.7
35°	3840.7	3825.8	3812.4	3788.6	3781.2	3770.7	3761.8	3754.4
37.5°	4144.5	4138.6	4138.6	4113.3	4107.3	4102.8	4093.9	4095.4
40°	4543.6	4549.6	4542.2	4533.2	4528.8	4516.8	4516.8	4527.3
42.5°	5015.7	5020.2	5036.6	5021.7	5038.1	5023.2	5014.2	5021.7
45°	5563.8	5580.1	5612.9	5598.0	5608.4	5583.1	5551.9	5553.3
47.5°	6178.8	6193.7	6207.1	6196.7	6198.2	6156.5	6114.8	6104.4
50°	6817.7	6823.7	6831.1	6816.2	6819.2	6773.0	6725.4	6726.9
52.5°	7449.1	7477.4	7507.2	7467.0	7458.1	7405.9	7338.9	7312.1
55°	8171.4	8211.6	8177.4	8107.4	8037.4	7967.4	7879.5	7864.6
57.5°	9062.0	8993.5	8886.2	8753.7	8656.9	8558.6	8469.3	8432.0
60°	10301.0	10043.4	9849.8	9653.2	9529.6	9409.0	9291.3	9273.4
62.5°	12052.3	11607.1	11221.4	10814.8	10482.7	10223.6	10016.6	9958.5
65°	14247.5	13194.6	12281.7	11429.8	10689.7	10131.2	9779.8	9624.9
67.5°	15191.6	13112.7	11547.5	10338.2	9370.2	8694.1	8314.4	8125.2
70°	13349.5	10874.4	9172.2	7961.4	7079.8	6359.0	6015.0	5812.5
72.5°	9184.1	6917.5	5469.9	4464.7	3760.3	3157.2	2918.9	2901.0
75°	4123.7	2731.2	1882.4	1450.5	1221.2	1061.8	1012.7	975.4
77.5°	1154.2	853.3	761.0	711.9	664.2	609.1	588.2	592.7
80°	561.4	530.2	509.3	478.0	434.9	388.7	367.8	376.8
82.5°	372.3	367.8	381.2	358.9	296.4	251.7	211.5	193.6
85°	226.4	229.3	233.8	235.3	199.6	140.0	95.3	107.2
87.5°	89.4	102.8	111.7	116.2	108.7	67.0	53.6	55.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)