

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: P299738

Luminaire Tested: **GLNA-AF-08-LED-E1-5MQ-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299738
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-08-LED-E1-5MQ-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31824.2 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

Input Watts (W): 257
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

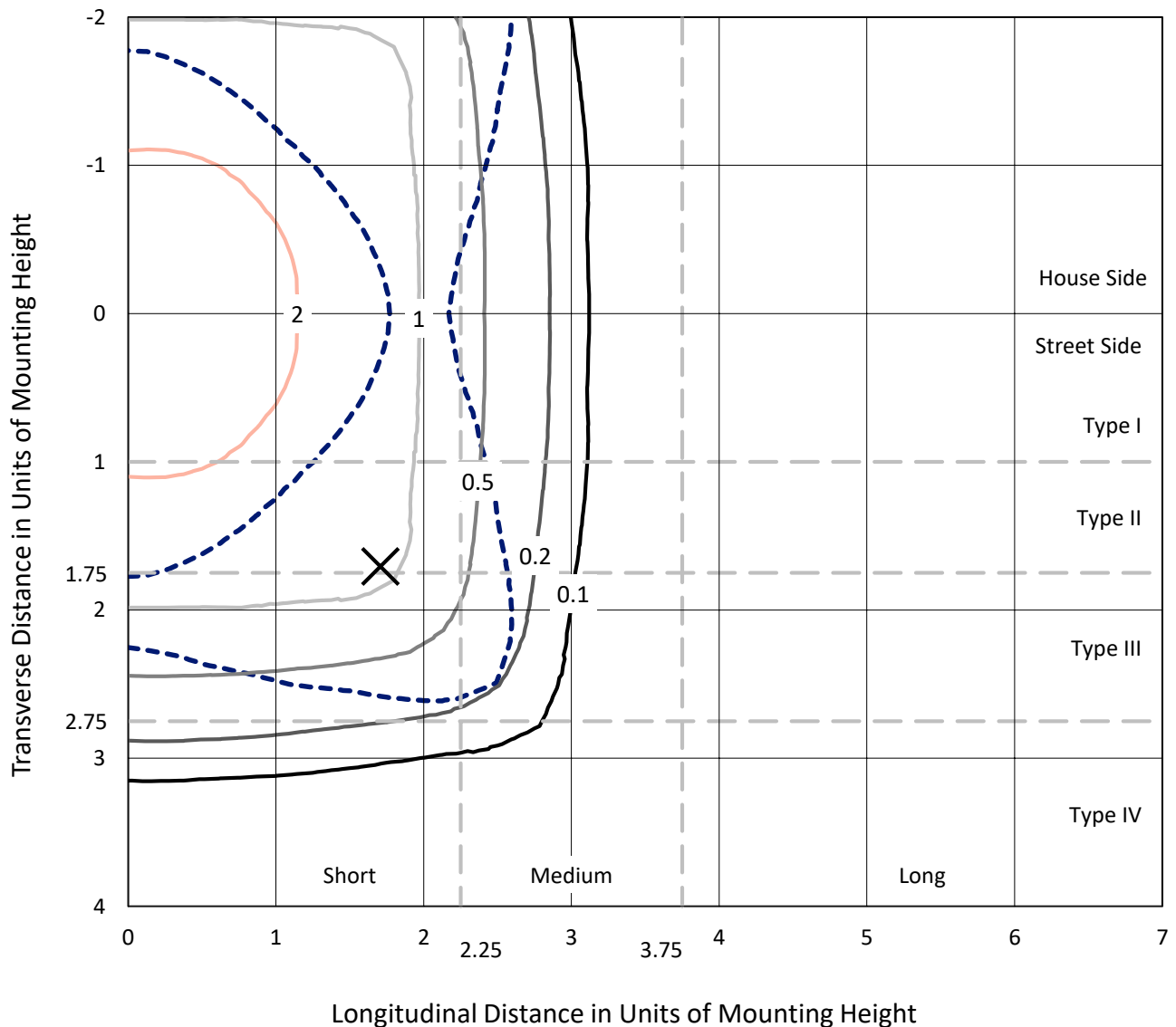


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

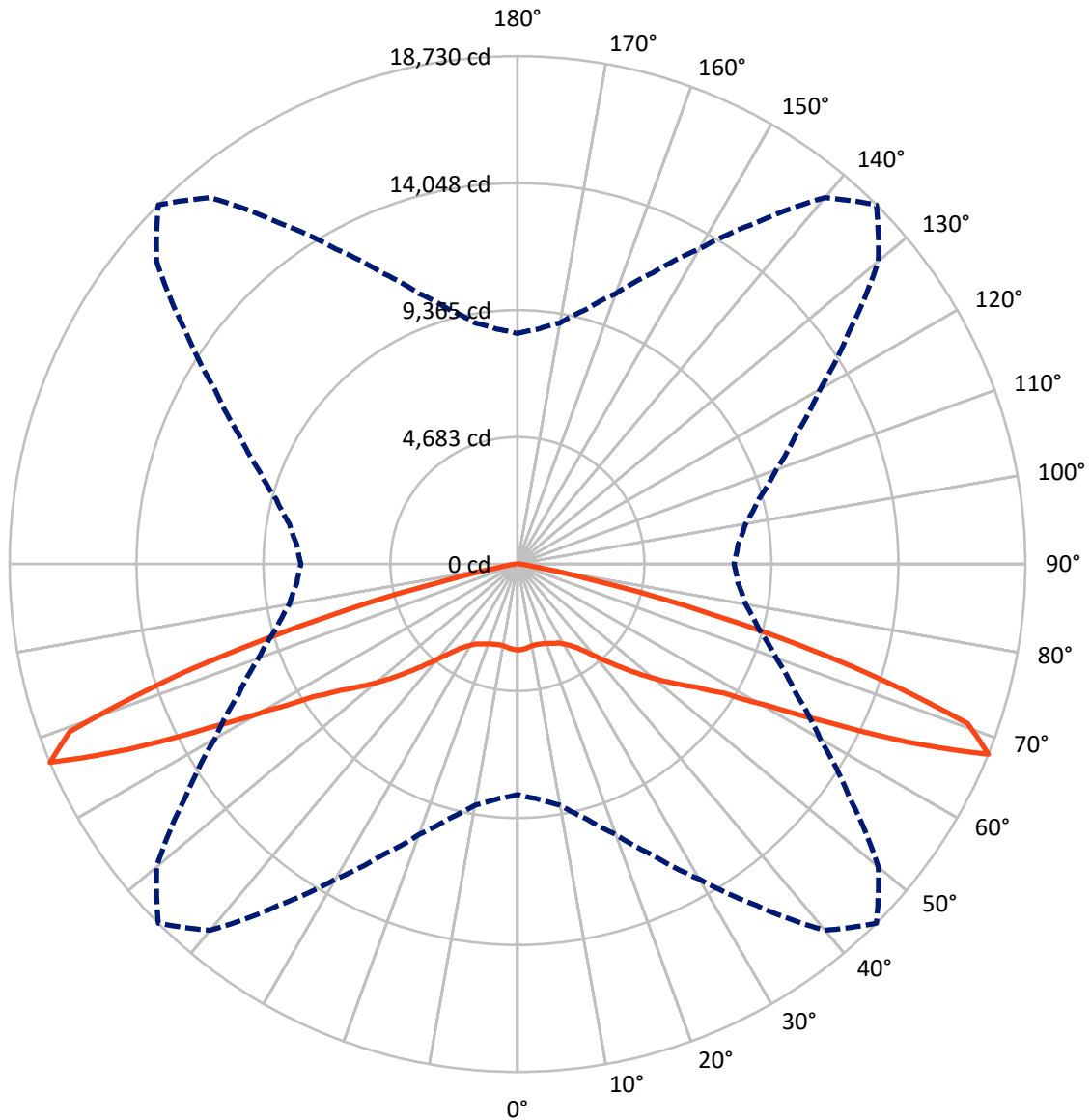


Based on 30 foot mounting height. Maximum calculated value = 3.5 fc
 Type V - Short - Full Cutoff

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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	15912.1	0.0	15912.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15912.1	0.0	15912.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	31824.2	0.0	31824.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.8	0.9
10°-20°	861.3	2.7
20°-30°	1464.3	4.6
30°-40°	2393.6	7.5
40°-50°	4273.1	13.4
50°-60°	7204.5	22.6
60°-70°	11180.3	35.1
70°-80°	3928.3	12.3
80°-90°	222.0	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°	31824.2	100.0
0°-180°	31824.2	100.0

Coefficient of Utilization



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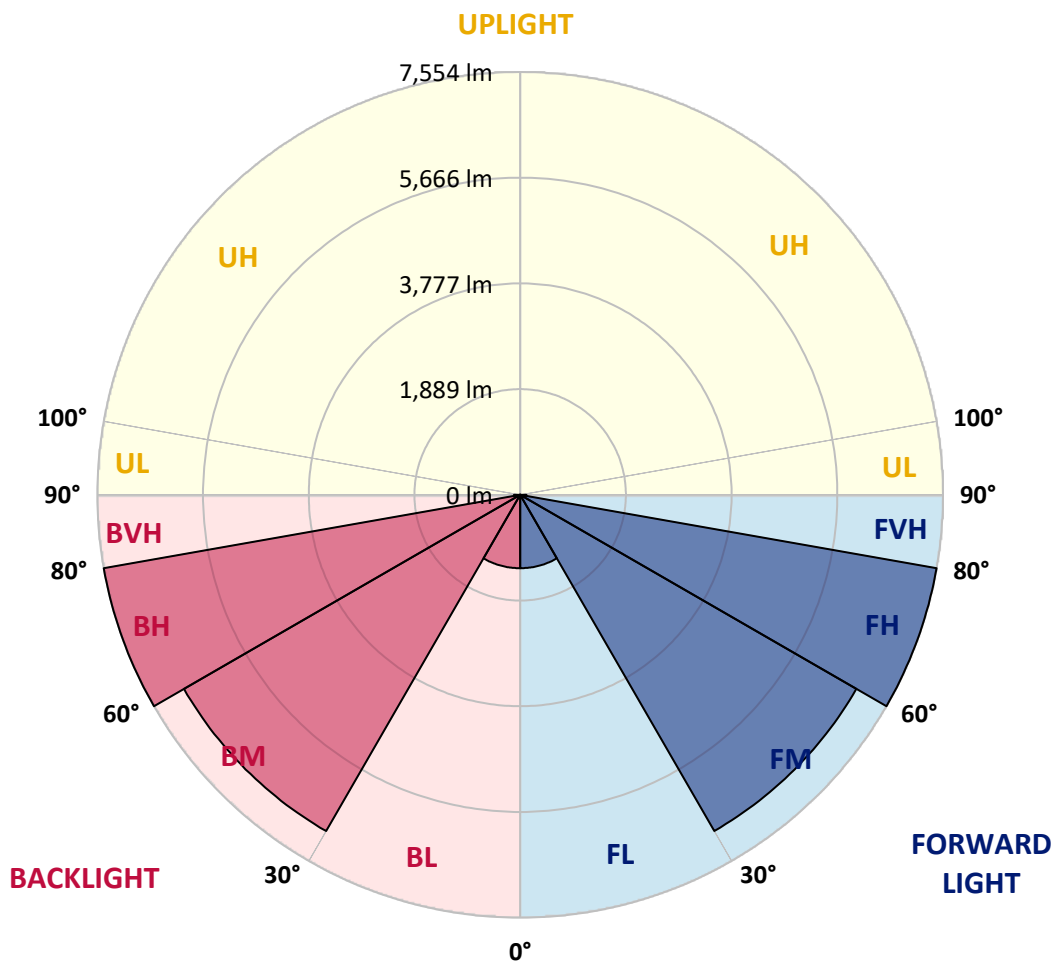
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1311.2	4.1			
FM	(30°-60°)	6935.6	21.8			
FH	(60°-80°)	7554.3	23.7			G4/12000
FVH	(80°-90°)	111.0	0.3			G2/225
BL	(0°-30°)	1311.2	4.1	B3/2500		
BM	(30°-60°)	6935.6	21.8	B4/8500		
BH	(60°-80°)	7554.3	23.7	B5		G4/12000
BVH	(80°-90°)	111.0	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°	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4
2.5°	3159.7	3162.6	3162.6	3162.6	3161.2	3161.2	3158.2	3161.2	3159.7	3155.3	3156.8
5°	3133.4	3136.3	3136.3	3134.8	3139.2	3137.8	3133.4	3136.3	3134.8	3131.9	3133.4
7.5°	3095.3	3099.7	3099.7	3098.2	3102.6	3101.2	3098.2	3099.7	3099.7	3095.3	3095.3
10°	3052.9	3055.8	3055.8	3054.3	3061.7	3061.7	3060.2	3064.6	3066.0	3061.7	3058.7
12.5°	3013.4	3017.7	3017.7	3023.6	3030.9	3033.8	3041.2	3047.0	3052.9	3051.4	3045.6
15°	2989.9	2992.9	2998.7	3006.0	3017.7	3028.0	3039.7	3052.9	3064.6	3067.5	3058.7
17.5°	2975.3	2979.7	2988.5	2998.7	3014.8	3032.4	3049.9	3067.5	3083.6	3089.5	3079.2
20°	2970.9	2973.8	2982.6	3000.2	3022.1	3048.5	3073.4	3093.9	3115.8	3123.1	3115.8
22.5°	2979.7	2985.6	2995.8	3016.3	3045.6	3079.2	3108.5	3136.3	3164.1	3177.3	3167.0
25°	3019.2	3025.1	3038.2	3064.6	3096.8	3131.9	3165.6	3197.8	3222.6	3235.8	3228.5
27.5°	3092.4	3099.7	3115.8	3142.1	3177.3	3215.3	3251.9	3278.3	3298.7	3303.1	3294.4
30°	3202.2	3218.3	3237.3	3266.5	3307.5	3339.7	3376.3	3399.7	3424.6	3424.6	3417.3
32.5°	3373.4	3389.5	3410.0	3437.8	3470.0	3505.1	3537.3	3557.8	3584.1	3585.6	3568.0
35°	3629.5	3636.8	3654.4	3671.9	3701.2	3731.9	3759.7	3772.9	3794.9	3796.3	3780.2
37.5°	3967.6	3969.0	3980.7	3986.6	4012.9	4046.6	4072.9	4081.7	4102.2	4099.3	4083.2
40°	4361.2	4368.6	4373.0	4381.7	4409.5	4441.7	4469.5	4473.9	4495.9	4491.5	4471.0
42.5°	4816.4	4819.3	4844.2	4857.4	4883.7	4899.8	4934.9	4939.3	4965.7	4954.0	4930.6
45°	5327.2	5353.5	5376.9	5403.3	5431.1	5450.1	5477.9	5472.0	5489.6	5472.0	5458.9
47.5°	5864.3	5883.3	5936.0	5977.0	6022.3	6038.4	6077.9	6060.4	6077.9	6053.1	6048.7
50°	6455.5	6489.2	6534.6	6581.4	6629.7	6656.0	6707.2	6685.3	6708.7	6685.3	6672.1
52.5°	7038.0	7046.8	7146.3	7215.1	7282.4	7313.1	7343.9	7333.6	7335.1	7333.6	7320.5
55°	7591.2	7611.7	7711.2	7804.9	7922.0	8008.3	8061.0	8055.1	8042.0	8028.8	8006.8
57.5°	8214.7	8235.1	8349.3	8464.9	8598.1	8721.0	8827.9	8937.6	8980.1	8991.8	8943.5
60°	9057.6	9056.2	9208.4	9348.9	9539.1	9722.1	9956.2	10194.8	10468.5	10595.8	10427.5
62.5°	9915.3	9950.4	10169.9	10418.7	10810.9	11192.9	11624.6	12049.0	12482.2	12834.9	12460.3
65°	9812.8	9947.5	10273.8	10837.3	11561.7	12422.2	13353.0	14338.0	15227.8	15839.5	15153.1
67.5°	8504.4	8696.2	9028.4	9713.3	10619.2	11860.3	13423.3	15371.2	17635.3	18730.0	17373.3
70°	6164.3	6380.9	6729.2	7398.0	8295.2	9474.7	11172.4	13511.1	16508.4	17611.8	16117.6
72.5°	3067.5	3184.6	3399.7	3825.6	4504.7	5461.8	7001.4	9249.4	11901.2	12914.0	11548.5
75°	1042.0	1096.2	1132.8	1271.8	1486.9	1863.0	2628.5	4043.7	6168.7	7395.1	6080.9
77.5°	601.5	603.0	627.8	652.7	689.3	730.3	832.7	1093.2	1890.9	2685.5	1956.7
80°	389.3	387.8	408.3	427.3	452.2	472.7	478.6	506.4	583.9	692.2	619.1
82.5°	202.0	226.8	272.2	297.1	343.9	352.7	341.0	330.8	349.8	362.9	371.7
85°	111.2	96.6	144.9	187.3	207.8	210.7	210.7	199.0	206.4	202.0	219.5
87.5°	51.2	46.8	57.1	92.2	98.1	83.4	87.8	77.6	55.6	54.1	61.5
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°	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4	3171.4
2.5°	3156.8	3158.2	3158.2	3162.6	3164.1	3167.0	3170.0	3171.4
5°	3131.9	3136.3	3133.4	3137.8	3137.8	3140.7	3140.7	3142.1
7.5°	3095.3	3099.7	3099.7	3099.7	3098.2	3102.6	3102.6	3102.6
10°	3057.3	3060.2	3058.7	3055.8	3052.9	3057.3	3055.8	3054.3
12.5°	3045.6	3038.2	3032.4	3029.5	3023.6	3025.1	3020.7	3020.7
15°	3052.9	3039.7	3029.5	3025.1	3019.2	3016.3	3013.4	3014.8
17.5°	3071.9	3055.8	3042.6	3035.3	3028.0	3023.6	3017.7	3019.2
20°	3105.6	3086.5	3067.5	3052.9	3039.7	3032.4	3028.0	3026.5
22.5°	3155.3	3127.5	3099.7	3077.8	3060.2	3049.9	3045.6	3042.6
25°	3212.4	3181.7	3149.5	3124.6	3107.0	3093.9	3085.1	3085.1
27.5°	3284.1	3259.2	3230.0	3200.7	3184.6	3171.4	3165.6	3162.6
30°	3404.1	3380.7	3357.3	3329.5	3309.0	3295.8	3285.6	3276.8
32.5°	3557.8	3538.8	3519.7	3499.2	3480.2	3462.7	3446.6	3439.2
35°	3774.4	3759.7	3746.6	3723.2	3715.8	3705.6	3696.8	3689.5
37.5°	4072.9	4067.1	4067.1	4042.2	4036.4	4032.0	4023.2	4024.6
40°	4465.2	4471.0	4463.7	4454.9	4450.5	4438.8	4438.8	4449.1
42.5°	4929.1	4933.5	4949.6	4934.9	4951.0	4936.4	4927.6	4934.9
45°	5467.7	5483.8	5516.0	5501.3	5511.6	5486.7	5456.0	5457.4
47.5°	6072.1	6086.7	6099.9	6089.6	6091.1	6050.1	6009.2	5998.9
50°	6699.9	6705.8	6713.1	6698.5	6701.4	6656.0	6609.2	6610.7
52.5°	7320.5	7348.3	7377.5	7338.0	7329.2	7278.0	7212.2	7185.8
55°	8030.3	8069.8	8036.1	7967.3	7898.5	7829.8	7743.4	7728.8
57.5°	8905.4	8838.1	8732.7	8602.5	8507.4	8410.8	8323.0	8286.4
60°	10123.1	9869.9	9679.6	9486.4	9365.0	9246.4	9130.8	9113.3
62.5°	11844.2	11406.6	11027.5	10628.0	10301.6	10047.0	9843.5	9786.5
65°	14001.4	12966.7	12069.5	11232.4	10505.0	9956.2	9610.8	9458.6
67.5°	14929.2	12886.2	11348.0	10159.7	9208.4	8543.9	8170.8	7984.9
70°	13118.9	10686.5	9013.7	7823.9	6957.5	6249.2	5911.1	5712.1
72.5°	9025.4	6798.0	5375.5	4387.6	3695.4	3102.6	2868.5	2850.9
75°	4052.4	2684.1	1849.9	1425.5	1200.1	1043.5	995.2	958.6
77.5°	1134.2	838.6	747.9	699.6	652.7	598.6	578.1	582.5
80°	551.7	521.0	500.5	469.8	427.3	382.0	361.5	370.3
82.5°	365.9	361.5	374.7	352.7	291.2	247.3	207.8	190.3
85°	222.5	225.4	229.8	231.2	196.1	137.6	93.7	105.4
87.5°	87.8	101.0	109.8	114.2	106.8	65.9	52.7	54.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)