

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: P299425

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299425
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
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-E1-5NQ-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25688.5 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

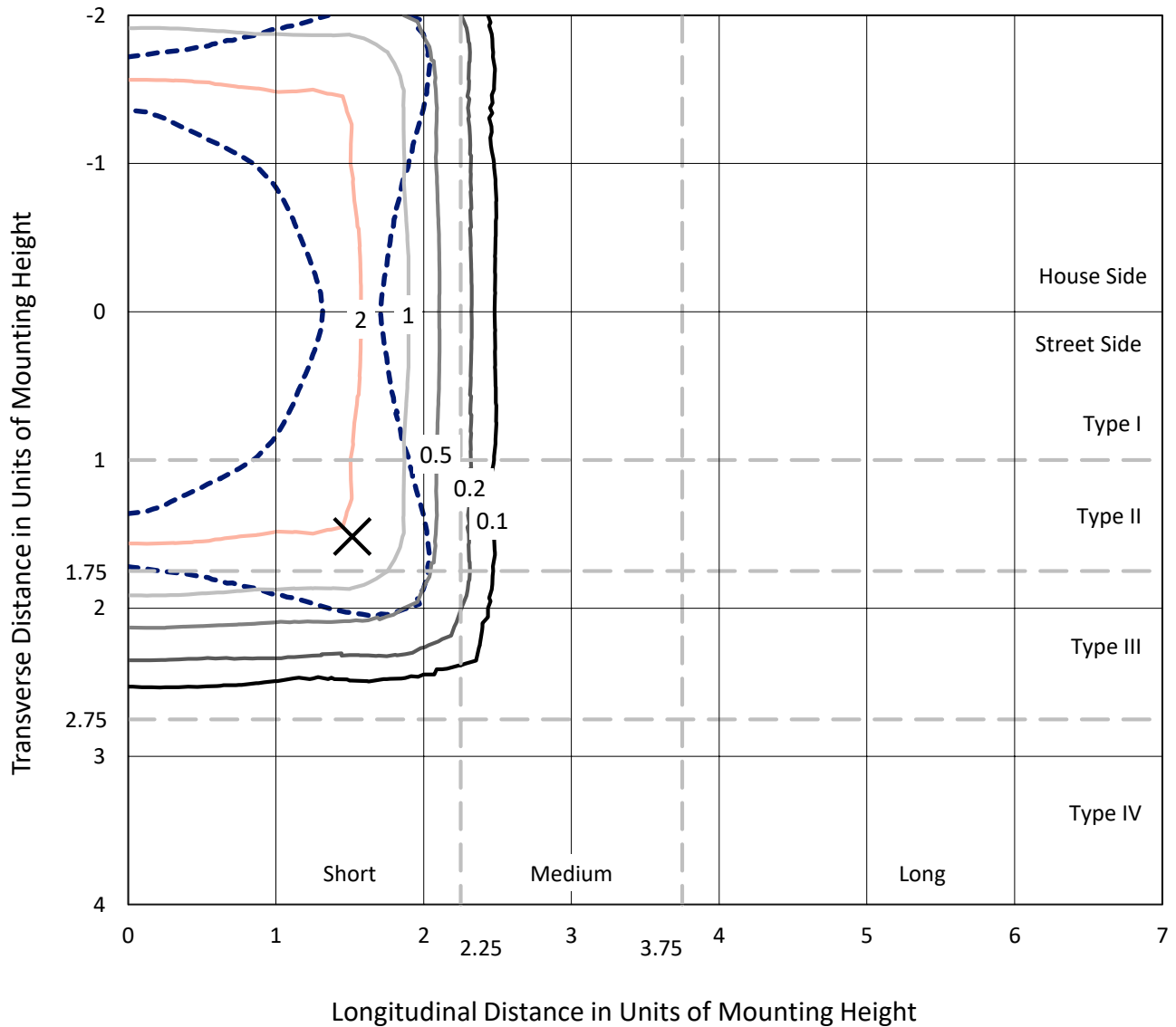
Input Watts (W): 249
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

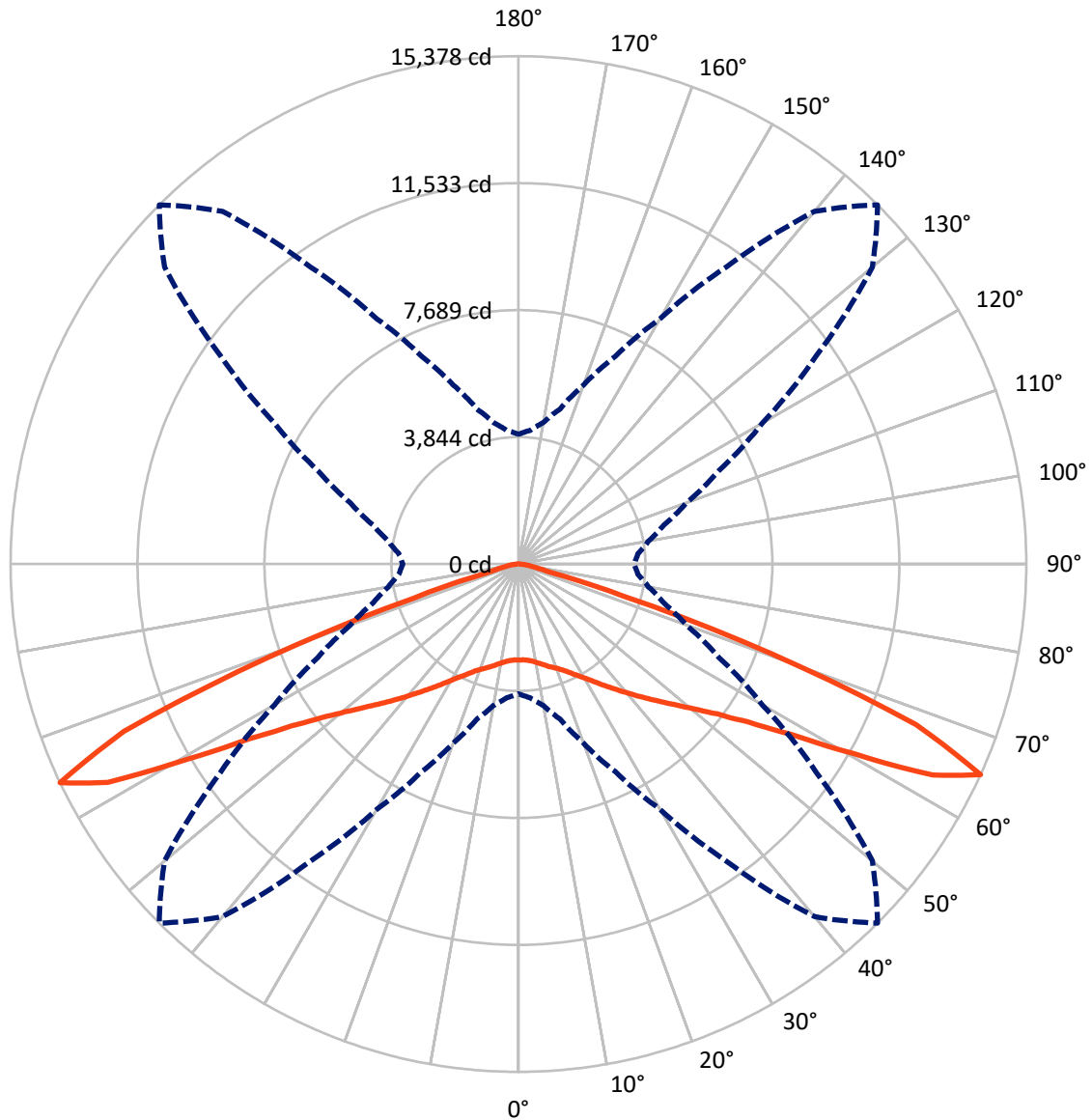
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12844.3	0.0	12844.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	12844.3	0.0	12844.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	25688.5	0.0	25688.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.3	1.1
10°-20°	908.6	3.5
20°-30°	1698.9	6.6
30°-40°	2873.4	11.2
40°-50°	4698.3	18.3
50°-60°	7471.0	29.1
60°-70°	6753.3	26.3
70°-80°	854.7	3.3
80°-90°	147.0	0.6
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°	25688.5	100.0
0°-180°	25688.5	100.0



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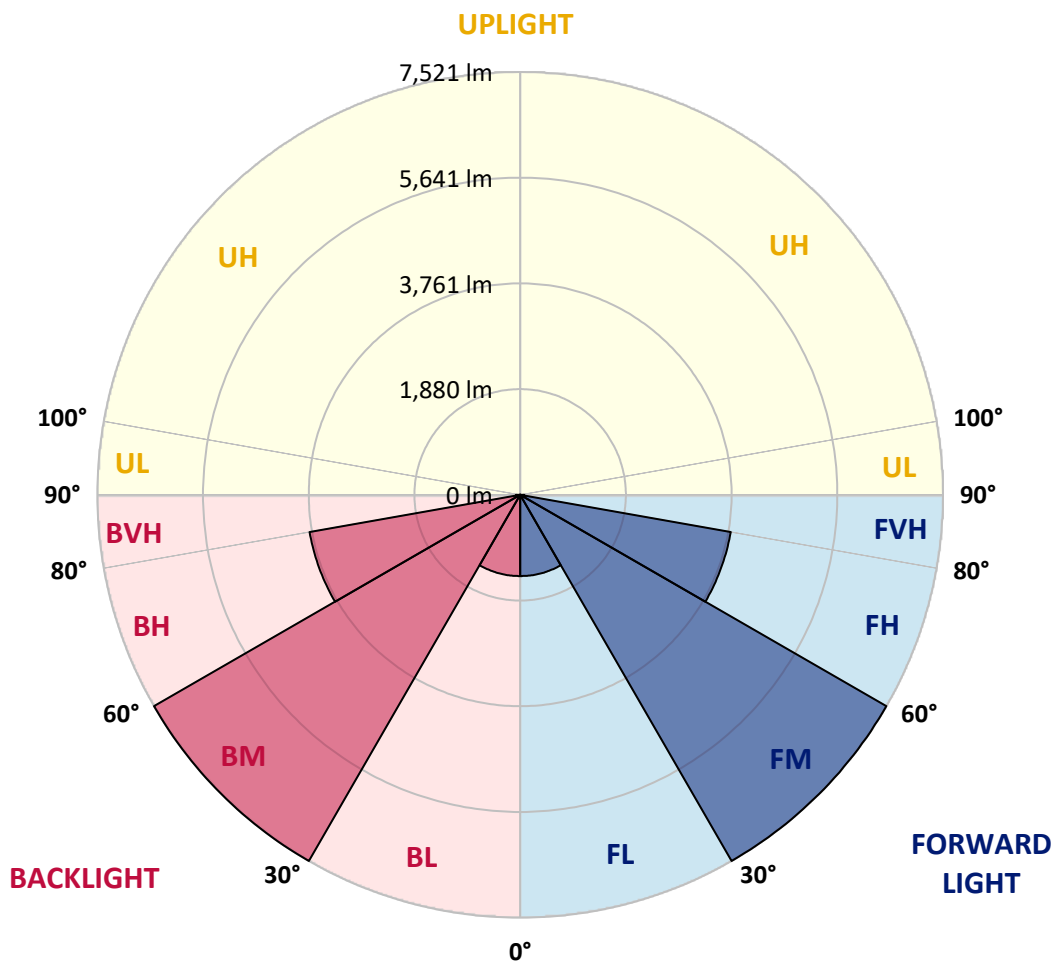
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1445.4	5.6			
FM	(30°-60°)	7521.3	29.3			
FH	(60°-80°)	3804.0	14.8			G2/5000
FVH	(80°-90°)	73.5	0.3			G1/100
BL	(0°-30°)	1445.4	5.6	B3/2500		
BM	(30°-60°)	7521.3	29.3	B4/8500		
BH	(60°-80°)	3804.0	14.8	B4/5000		G2/5000
BVH	(80°-90°)	73.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7
2.5°	2909.1	2911.5	2913.9	2911.5	2913.9	2910.3	2907.9	2911.5	2907.9	2904.3	2906.7
5°	2934.3	2935.5	2935.5	2931.9	2935.5	2933.1	2929.5	2934.3	2930.7	2927.1	2929.5
7.5°	2976.4	2981.3	2977.6	2974.0	2976.4	2974.0	2971.6	2972.8	2971.6	2968.0	2969.2
10°	3033.0	3036.6	3034.2	3033.0	3035.4	3034.2	3031.8	3030.6	3031.8	3028.2	3028.2
12.5°	3101.6	3100.4	3099.2	3100.4	3104.0	3104.0	3102.8	3104.0	3106.4	3107.6	3105.2
15°	3168.9	3171.3	3171.3	3171.3	3178.6	3184.6	3188.2	3190.6	3195.4	3196.6	3191.8
17.5°	3253.2	3253.2	3252.0	3253.2	3260.4	3270.0	3273.6	3278.4	3283.2	3286.8	3280.8
20°	3347.0	3349.4	3349.4	3351.8	3361.4	3372.3	3372.3	3374.7	3372.3	3374.7	3371.1
22.5°	3461.3	3468.5	3468.5	3469.7	3479.3	3492.6	3489.0	3492.6	3486.6	3491.4	3486.6
25°	3610.5	3621.3	3618.9	3618.9	3626.1	3634.5	3635.7	3643.0	3641.8	3647.8	3644.2
27.5°	3778.9	3795.8	3800.6	3799.4	3804.2	3812.6	3815.0	3823.4	3818.6	3823.4	3821.0
30°	3981.0	3988.2	3997.9	4001.5	4007.5	4015.9	4015.9	4017.1	4011.1	4018.3	4021.9
32.5°	4190.4	4203.6	4213.2	4234.9	4245.7	4251.7	4250.5	4252.9	4246.9	4256.5	4263.8
35°	4467.1	4476.7	4492.3	4509.2	4523.6	4522.4	4518.8	4520.0	4520.0	4528.4	4535.7
37.5°	4800.3	4802.7	4823.2	4847.3	4854.5	4847.3	4825.6	4820.8	4810.0	4820.8	4832.8
40°	5152.8	5161.3	5202.2	5217.8	5221.4	5208.2	5176.9	5158.9	5134.8	5148.0	5164.9
42.5°	5522.2	5539.0	5576.3	5604.0	5616.0	5607.6	5564.3	5536.6	5505.3	5512.6	5529.4
45°	5931.2	5951.7	6004.6	6031.1	6054.0	6040.7	5998.6	5956.5	5907.2	5910.8	5937.3
47.5°	6388.4	6408.9	6477.4	6522.0	6534.0	6531.6	6484.7	6426.9	6359.5	6357.1	6380.0
50°	6900.9	6921.4	7006.8	7075.4	7110.3	7106.7	7051.3	6969.5	6887.7	6888.9	6917.8
52.5°	7401.4	7426.7	7515.7	7633.6	7702.2	7751.5	7717.8	7640.8	7541.0	7543.4	7569.8
55°	7870.6	7912.7	8015.0	8175.0	8302.5	8440.9	8480.6	8478.2	8418.0	8434.9	8461.3
57.5°	8098.0	8160.6	8318.2	8570.8	8830.7	9112.2	9350.4	9528.5	9604.3	9718.6	9692.1
60°	7667.3	7767.2	7999.3	8371.1	8884.8	9471.9	10101.1	10715.9	11240.5	11636.3	11408.9
62.5°	6277.7	6407.7	6689.2	7165.6	7942.8	8882.4	10086.7	11540.0	13123.3	14078.6	13396.4
65°	3928.1	4062.8	4349.2	4859.3	5768.8	6937.0	8570.8	10979.4	13937.8	15377.9	13989.5
67.5°	1531.5	1604.9	1760.1	2086.2	2769.5	3809.0	5448.8	8182.2	11720.5	12982.6	11502.7
70°	767.6	774.8	803.7	863.8	1010.6	1312.6	1997.1	3793.3	6721.7	8118.5	6479.8
72.5°	554.6	555.8	570.3	596.7	643.7	711.0	841.0	1161.0	2186.0	3341.0	2048.9
75°	424.7	429.5	437.9	452.4	477.6	511.3	558.2	668.9	828.9	961.3	808.5
77.5°	327.2	336.9	342.9	356.1	371.8	394.6	407.8	450.0	523.3	551.0	542.6
80°	249.0	257.5	270.7	281.5	292.4	303.2	298.4	317.6	356.1	379.0	366.9
82.5°	158.8	168.4	206.9	216.6	221.4	228.6	220.2	221.4	238.2	252.6	238.2
85°	102.3	108.3	131.1	143.2	144.4	149.2	145.6	137.2	137.2	125.1	140.8
87.5°	46.9	48.1	59.0	69.8	72.2	65.0	63.8	61.4	49.3	46.9	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°	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7	2906.7
2.5°	2905.5	2907.9	2909.1	2912.7	2913.9	2913.9	2915.1	2917.5
5°	2928.3	2931.9	2933.1	2937.9	2939.2	2937.9	2940.4	2941.6
7.5°	2969.2	2975.2	2977.6	2982.5	2978.9	2983.7	2984.9	2984.9
10°	3029.4	3035.4	3036.6	3041.4	3039.0	3041.4	3041.4	3039.0
12.5°	3108.8	3110.0	3106.4	3110.0	3105.2	3107.6	3104.0	3101.6
15°	3196.6	3193.0	3184.6	3184.6	3177.4	3178.6	3177.4	3176.2
17.5°	3282.0	3274.8	3268.8	3266.4	3260.4	3259.2	3255.6	3255.6
20°	3375.9	3372.3	3368.7	3363.8	3357.8	3351.8	3350.6	3353.0
22.5°	3489.0	3487.8	3487.8	3485.4	3476.9	3470.9	3467.3	3467.3
25°	3640.6	3629.7	3629.7	3628.5	3624.9	3621.3	3614.1	3617.7
27.5°	3811.4	3805.4	3810.2	3809.0	3805.4	3805.4	3800.6	3800.6
30°	4021.9	4019.5	4026.7	4020.7	4008.7	4007.5	4002.7	3996.7
32.5°	4265.0	4262.5	4273.4	4266.2	4246.9	4236.1	4226.5	4221.6
35°	4535.7	4536.9	4550.1	4545.3	4523.6	4516.4	4499.6	4497.2
37.5°	4831.6	4850.9	4873.7	4878.5	4860.5	4855.7	4837.6	4828.0
40°	5179.3	5204.6	5239.5	5247.9	5228.6	5225.0	5199.8	5186.5
42.5°	5549.9	5593.2	5636.5	5643.7	5624.4	5605.2	5581.1	5571.5
45°	5963.7	6015.5	6072.0	6086.4	6057.6	6034.7	6003.4	6003.4
47.5°	6428.1	6493.1	6556.8	6596.5	6570.1	6546.0	6508.7	6484.7
50°	6976.7	7065.8	7148.8	7189.7	7147.6	7101.8	7036.9	7015.2
52.5°	7664.9	7761.1	7833.3	7811.7	7746.7	7682.9	7612.0	7583.1
55°	8543.1	8575.6	8575.6	8493.8	8363.9	8256.8	8144.9	8107.6
57.5°	9641.6	9516.4	9324.0	9079.7	8772.9	8505.9	8325.4	8240.0
60°	10932.5	10330.9	9651.2	8983.5	8434.9	7982.5	7714.2	7591.5
62.5°	11792.7	10219.1	8857.2	7785.2	6996.0	6451.0	6080.4	5936.0
65°	11021.5	8522.7	6698.8	5416.3	4556.1	4001.5	3634.5	3499.8
67.5°	8072.7	5340.5	3567.2	2556.6	1873.2	1494.2	1343.9	1281.3
70°	3623.7	1880.4	1152.6	899.9	776.0	712.2	684.6	674.9
72.5°	1092.4	790.4	666.5	601.5	552.2	520.9	498.1	495.7
75°	659.3	548.6	487.3	448.8	417.5	392.2	380.2	376.6
77.5°	460.8	403.0	374.2	346.5	322.4	303.2	292.4	283.9
80°	323.6	296.0	282.7	267.1	251.4	233.4	217.8	210.5
82.5°	216.6	210.5	210.5	200.9	187.7	170.8	139.6	132.3
85°	139.6	138.4	140.8	137.2	127.5	109.5	90.2	85.4
87.5°	65.0	66.2	73.4	72.2	69.8	57.7	45.7	43.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)