

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: P299852

Luminaire Tested: **GLNA-AF-07-LED-E1-5WQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299852
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: GLNA-AF-07-LED-E1-5WQ-7030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42746.7 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G4

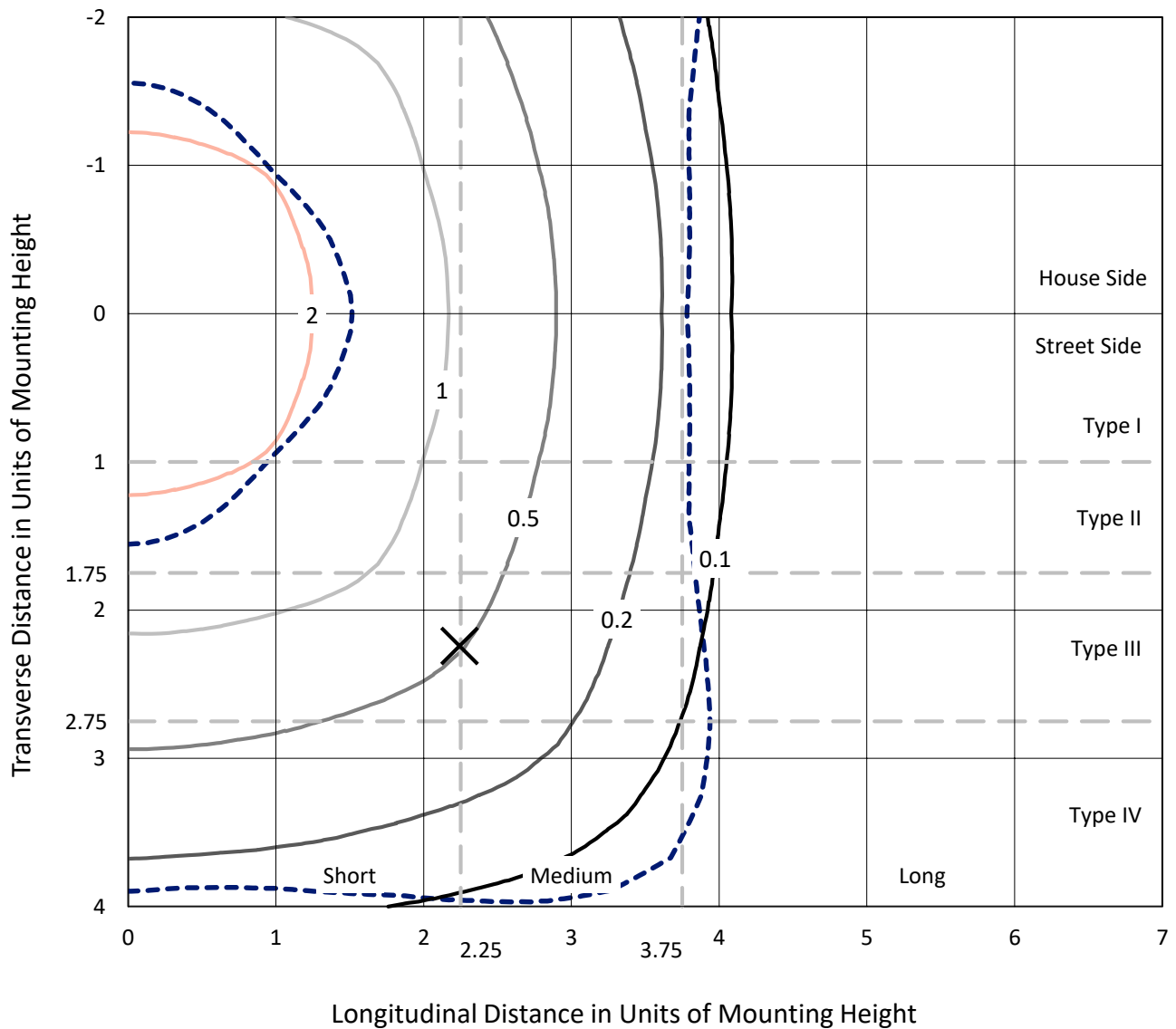
Input Watts (W): 391
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

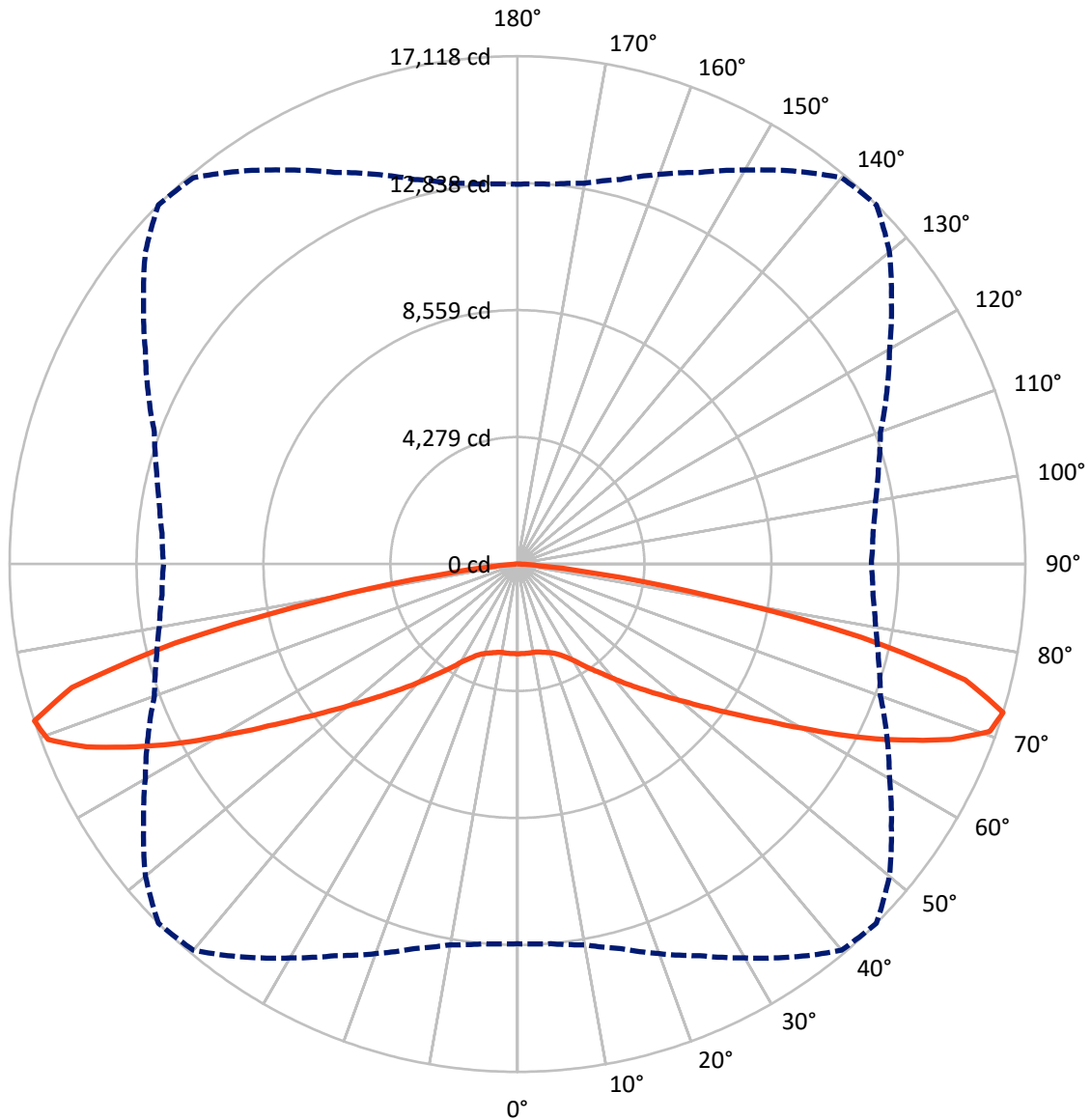
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.4 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	21373.4	0.0	21373.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21373.4	0.0	21373.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	42746.7	0.0	42746.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.1	0.7
10°-20°	877.9	2.1
20°-30°	1604.3	3.8
30°-40°	2766.0	6.5
40°-50°	4728.5	11.1
50°-60°	7664.3	17.9
60°-70°	12714.9	29.7
70°-80°	11198.8	26.2
80°-90°	902.9	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°	42746.7	100.0
0°-180°	42746.7	100.0



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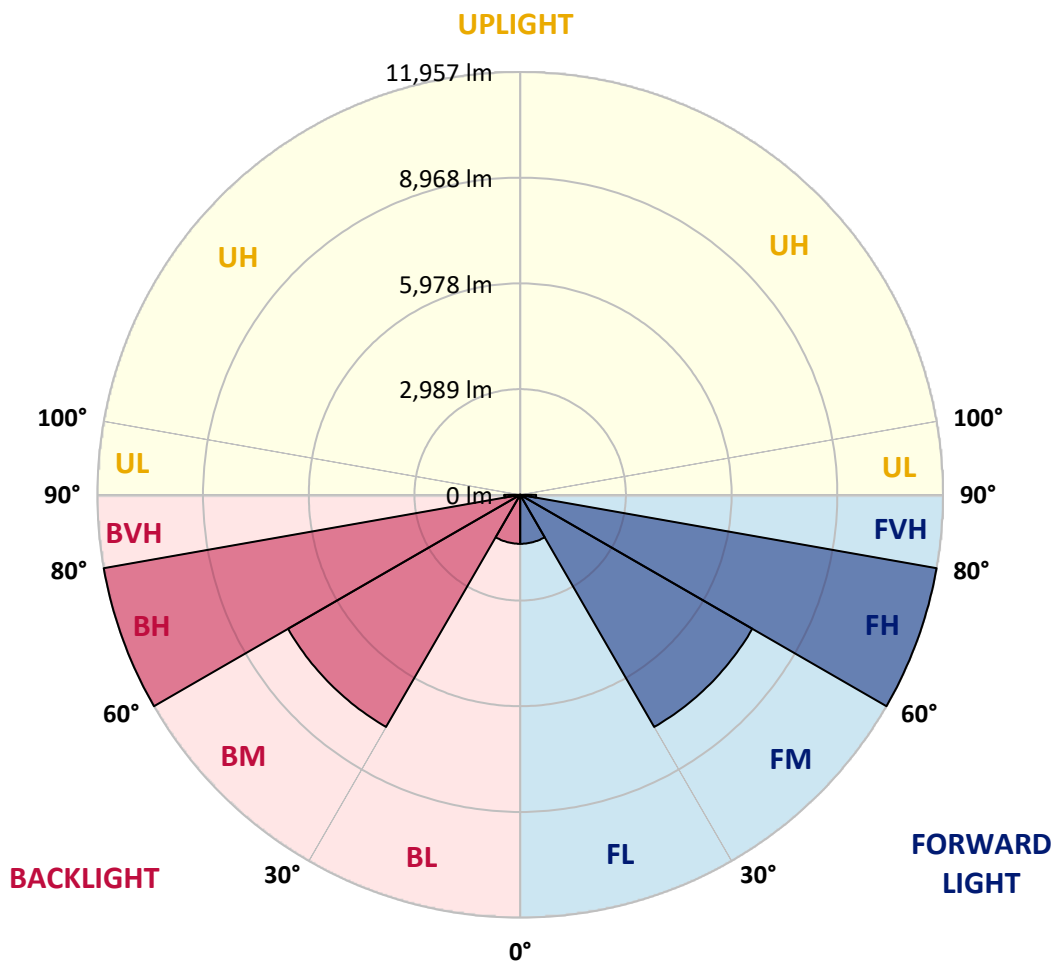
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1385.6	3.2			
FM	(30°-60°)	7579.4	17.7			
FH	(60°-80°)	11956.8	28.0			G4/12000
FVH	(80°-90°)	451.5	1.1			G3/500
BL	(0°-30°)	1385.6	3.2	B3/2500		
BM	(30°-60°)	7579.4	17.7	B4/8500		
BH	(60°-80°)	11956.8	28.0	B5		G4/12000
BVH	(80°-90°)	451.5	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°	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1
2.5°	3027.1	3029.1	3031.1	3029.1	3029.1	3027.1	3025.2	3027.1	3025.2	3021.2	3023.2
5°	3036.9	3040.9	3040.9	3036.9	3038.9	3036.9	3033.0	3035.0	3031.1	3025.2	3025.2
7.5°	3048.7	3050.7	3050.7	3046.7	3048.7	3044.8	3040.9	3038.9	3035.0	3027.1	3021.2
10°	3066.3	3068.3	3066.3	3062.4	3062.4	3056.5	3046.7	3042.8	3035.0	3023.2	3017.3
12.5°	3085.9	3087.9	3085.9	3082.0	3080.1	3070.3	3062.4	3056.5	3050.7	3040.9	3031.1
15°	3113.4	3117.3	3113.4	3105.6	3099.7	3091.8	3087.9	3089.9	3091.8	3084.0	3074.2
17.5°	3164.4	3166.3	3160.5	3142.8	3135.0	3127.1	3127.1	3131.0	3136.9	3133.0	3123.2
20°	3258.5	3252.6	3238.9	3217.3	3207.5	3193.8	3191.8	3193.8	3193.8	3191.8	3184.0
22.5°	3376.1	3372.2	3354.5	3327.1	3313.4	3305.5	3293.8	3284.0	3282.0	3276.1	3268.3
25°	3517.3	3515.3	3493.7	3470.2	3460.4	3450.6	3440.8	3427.1	3415.3	3401.6	3393.8
27.5°	3697.6	3689.8	3658.4	3646.7	3632.9	3627.1	3613.3	3597.7	3587.9	3570.2	3560.4
30°	3895.7	3895.7	3870.2	3866.3	3866.3	3852.5	3836.8	3809.4	3791.8	3774.1	3768.2
32.5°	4093.7	4095.6	4070.2	4078.0	4083.9	4093.7	4097.6	4087.8	4076.0	4074.1	4062.3
35°	4379.9	4372.1	4346.6	4352.5	4350.5	4348.6	4348.6	4370.1	4374.0	4378.0	4354.4
37.5°	4734.8	4734.8	4709.3	4709.3	4697.5	4685.8	4670.1	4683.8	4705.4	4711.3	4695.6
40°	5140.6	5154.4	5123.0	5121.0	5124.9	5087.7	5070.1	5091.6	5105.3	5128.9	5111.2
42.5°	5619.0	5609.2	5577.8	5573.9	5552.4	5540.6	5524.9	5542.6	5564.1	5579.8	5585.7
45°	6077.8	6069.9	6034.7	6034.7	6013.1	6003.3	6011.1	6040.5	6050.3	6071.9	6093.5
47.5°	6530.7	6520.9	6497.4	6507.2	6509.1	6526.8	6552.2	6579.7	6607.1	6636.6	6646.4
50°	6993.4	6995.3	6969.9	6993.4	7022.8	7071.8	7140.4	7185.5	7242.4	7279.6	7291.4
52.5°	7414.9	7422.7	7450.2	7505.1	7563.9	7660.0	7777.6	7887.4	7981.5	8044.2	8040.3
55°	7920.7	7932.5	7999.2	8093.3	8189.3	8334.4	8508.9	8703.0	8859.8	8950.0	8893.2
57.5°	8567.7	8593.2	8667.7	8795.1	8938.3	9126.5	9365.7	9657.8	9900.9	10022.5	9930.3
60°	9455.9	9471.5	9561.7	9702.9	9875.4	10108.7	10428.3	10820.4	11163.5	11324.3	11218.4
62.5°	10626.3	10655.7	10728.3	10871.4	11047.9	11312.5	11702.7	12192.8	12620.2	12843.7	12604.6
65°	12024.2	12118.3	12179.1	12324.2	12488.9	12769.2	13177.0	13702.5	14161.2	14308.3	14031.9
67.5°	13408.4	13490.7	13596.6	13763.3	13929.9	14245.6	14623.9	15133.7	15637.6	15770.9	15341.5
70°	14014.2	14061.3	14225.9	14453.4	14772.9	15145.5	15582.7	16155.2	16778.6	16888.4	16343.4
72.5°	12800.6	12847.7	13032.0	13418.2	13975.0	14567.1	15329.8	16170.8	16994.3	17117.8	16366.9
75°	9681.3	9604.9	9877.4	10389.1	11140.0	11965.4	13032.0	14237.7	15427.8	15582.7	14686.7
77.5°	5003.4	4993.6	5199.5	5834.7	6730.7	7669.8	8844.2	10206.8	11371.3	11841.9	11112.6
80°	1409.7	1425.3	1523.4	1839.0	2362.5	3040.9	3958.4	5234.7	6187.6	6673.8	6266.0
82.5°	552.9	596.0	633.3	692.1	760.7	860.7	1148.9	1709.6	2293.9	2740.9	2244.9
85°	198.0	211.7	300.0	354.9	360.7	380.4	433.3	505.8	609.7	727.4	598.0
87.5°	74.5	82.3	96.1	158.8	156.8	143.1	174.5	182.3	137.2	125.5	154.9
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°	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1	3027.1
2.5°	3019.3	3021.2	3021.2	3023.2	3025.2	3025.2	3029.1	3029.1
5°	3021.2	3021.2	3017.3	3019.3	3017.3	3017.3	3019.3	3019.3
7.5°	3017.3	3015.4	3011.4	3009.5	3005.6	3005.6	3005.6	3005.6
10°	3011.4	3009.5	3005.6	3003.6	3001.6	3001.6	3001.6	3001.6
12.5°	3027.1	3021.2	3017.3	3015.4	3015.4	3015.4	3015.4	3015.4
15°	3068.3	3054.6	3044.8	3044.8	3046.7	3050.7	3050.7	3054.6
17.5°	3119.3	3103.6	3093.8	3085.9	3089.9	3095.8	3099.7	3103.6
20°	3180.1	3172.2	3158.5	3150.6	3150.6	3158.5	3162.4	3164.4
22.5°	3264.4	3258.5	3252.6	3242.8	3242.8	3246.7	3254.6	3254.6
25°	3389.8	3385.9	3382.0	3374.2	3372.2	3372.2	3376.1	3380.0
27.5°	3546.7	3548.6	3544.7	3542.8	3536.9	3534.9	3540.8	3538.8
30°	3756.5	3766.3	3776.1	3768.2	3758.4	3752.5	3746.7	3738.8
32.5°	4040.7	4029.0	4021.1	4007.4	3989.8	3974.1	3962.3	3948.6
35°	4309.3	4289.7	4281.9	4293.7	4291.7	4281.9	4268.2	4256.4
37.5°	4638.7	4634.8	4638.7	4660.3	4656.4	4666.2	4638.7	4636.8
40°	5054.4	5058.3	5085.7	5111.2	5124.9	5138.7	5123.0	5107.3
42.5°	5536.7	5534.7	5544.5	5579.8	5603.3	5619.0	5585.7	5581.8
45°	6046.4	6032.7	6040.5	6069.9	6093.5	6111.1	6073.9	6073.9
47.5°	6607.1	6583.6	6558.1	6591.5	6605.2	6616.9	6587.5	6577.7
50°	7232.6	7183.6	7128.7	7142.4	7142.4	7138.5	7101.2	7099.3
52.5°	7950.1	7860.0	7760.0	7722.7	7701.1	7677.6	7612.9	7581.6
55°	8775.5	8640.3	8483.4	8387.3	8336.4	8271.7	8163.8	8134.4
57.5°	9740.1	9528.4	9257.8	9140.2	9026.5	8920.6	8801.0	8767.7
60°	10883.2	10571.4	10212.6	9995.0	9871.5	9769.6	9646.0	9640.2
62.5°	12157.5	11665.4	11259.6	11063.5	10973.4	10883.2	10765.5	10781.2
65°	13453.5	12939.8	12559.5	12400.7	12316.3	12241.8	12124.2	12141.9
67.5°	14731.8	14259.3	13841.7	13678.9	13584.8	13490.7	13384.9	13402.5
70°	15649.3	15063.1	14592.6	14231.8	14006.4	13751.5	13586.8	13545.6
72.5°	15386.6	14482.8	13735.8	13020.2	12600.6	12259.5	12028.1	11928.2
75°	13316.2	12081.1	11120.4	10242.1	9748.0	9346.1	9053.9	8871.6
77.5°	9889.2	8501.1	7365.9	6354.2	5554.3	5017.1	4638.7	4393.7
80°	5413.2	4117.2	3009.5	2115.5	1554.7	1292.0	1141.1	1068.5
82.5°	1686.1	1088.1	801.9	692.1	643.1	615.6	570.5	498.0
85°	537.2	470.5	437.2	417.6	398.0	347.0	239.2	217.6
87.5°	207.8	213.7	211.7	200.0	203.9	147.0	117.6	103.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)