

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: P299510

Luminaire Tested: **GLNA-AF-10-LED-E1-5NQ-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299510
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-10-LED-E1-5NQ-7030-600
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(10) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38592.6 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

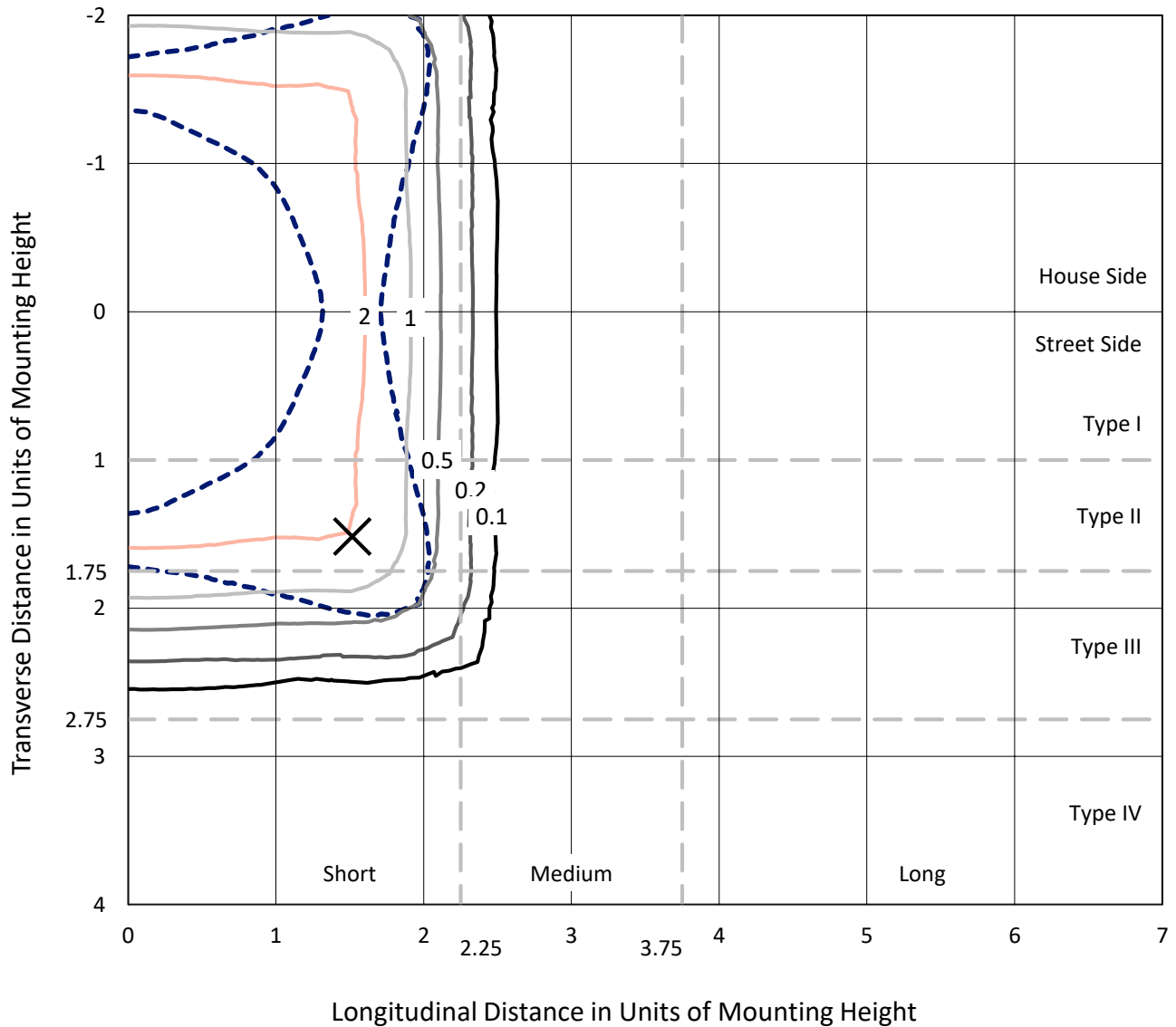
Input Watts (W): 323
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

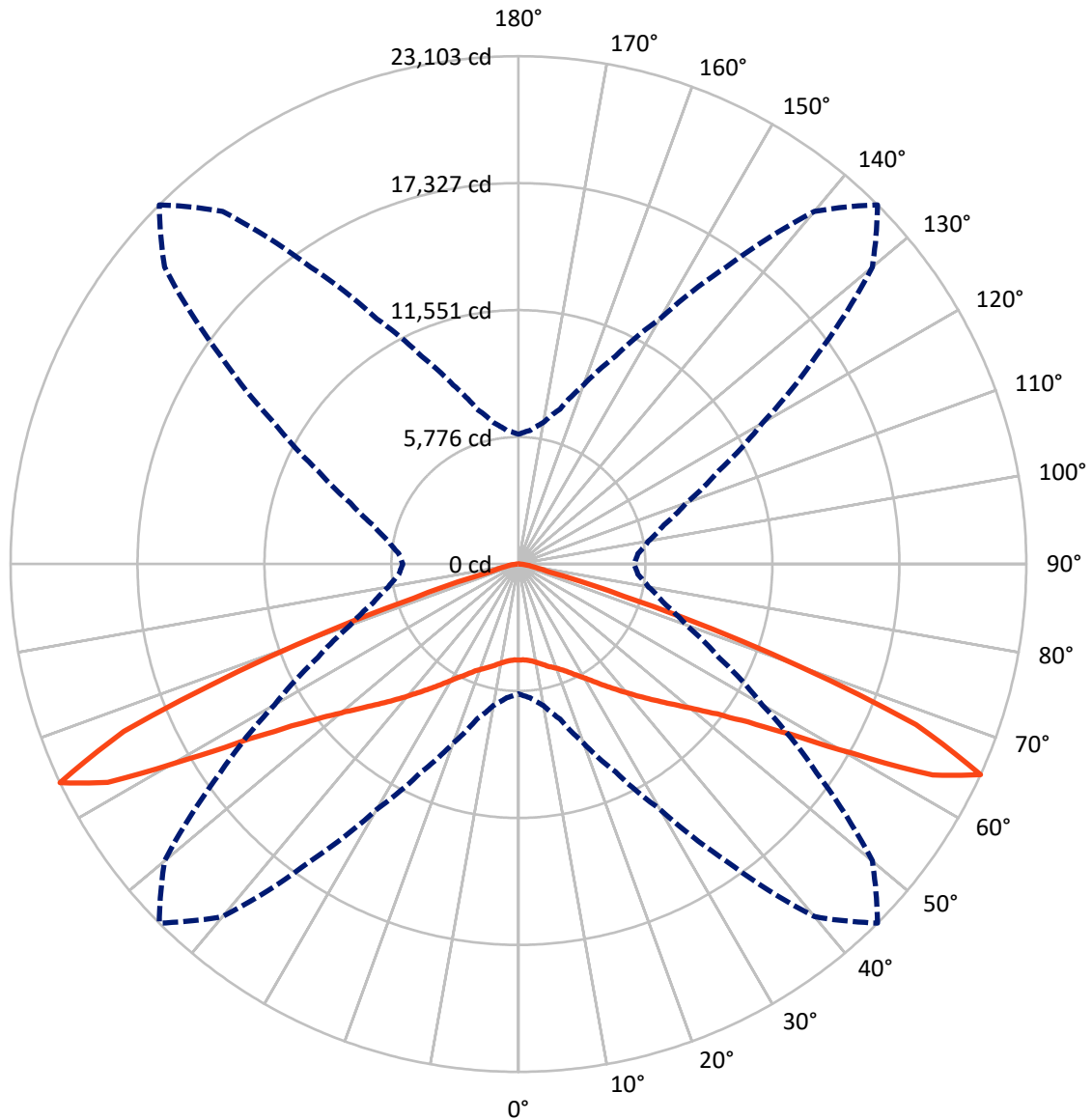
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.9 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	19296.3	0.0	19296.3
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	19296.3	0.0	19296.3
	% Fixture	50.0	0.0	50.0
Total	Lumens	38592.6	0.0	38592.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	425.6	1.1
10°-20°	1365.0	3.5
20°-30°	2552.4	6.6
30°-40°	4316.8	11.2
40°-50°	7058.4	18.3
50°-60°	11223.9	29.1
60°-70°	10145.7	26.3
70°-80°	1284.0	3.3
80°-90°	220.9	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°	38592.6	100.0
0°-180°	38592.6	100.0



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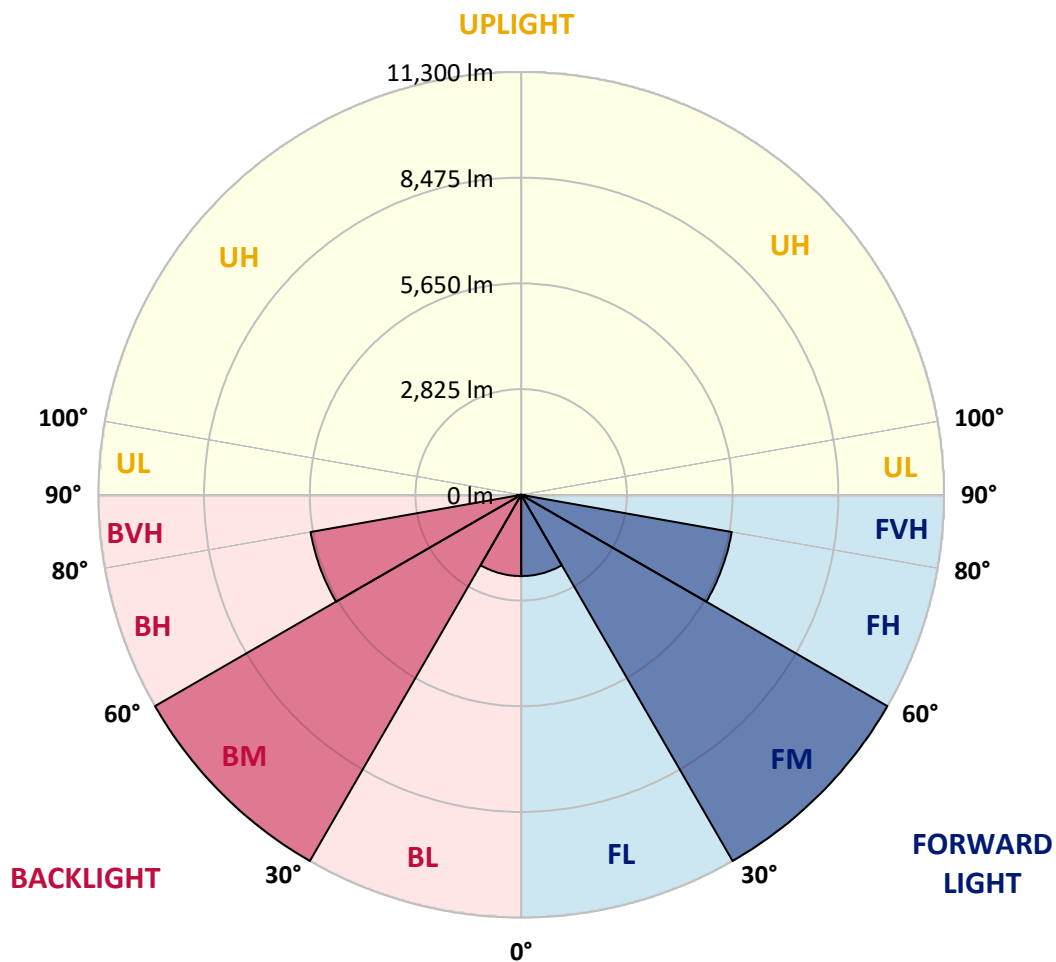
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2171.5	5.6			
FM (30°-60°)	11299.5	29.3			
FH (60°-80°)	5714.8	14.8			G3/7500
FVH (80°-90°)	110.4	0.3			G2/225
BL (0°-30°)	2171.5	5.6	B3/2500		
BM (30°-60°)	11299.5	29.3	B5		
BH (60°-80°)	5714.8	14.8	B5		G3/7500
BVH (80°-90°)	110.4	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-G3

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8
2.5°	4370.4	4374.0	4377.6	4374.0	4377.6	4372.2	4368.6	4374.0	4368.6	4363.2	4366.8
5°	4408.3	4410.1	4410.1	4404.7	4410.1	4406.5	4401.1	4408.3	4402.9	4397.5	4401.1
7.5°	4471.6	4478.8	4473.4	4468.0	4471.6	4468.0	4464.4	4466.2	4464.4	4458.9	4460.8
10°	4556.6	4562.0	4558.4	4556.6	4560.2	4558.4	4554.7	4552.9	4554.7	4549.3	4549.3
12.5°	4659.6	4657.8	4656.0	4657.8	4663.2	4663.2	4661.4	4663.2	4666.8	4668.6	4665.0
15°	4760.8	4764.4	4764.4	4764.4	4775.3	4784.3	4789.7	4793.3	4800.6	4802.4	4795.1
17.5°	4887.3	4887.3	4885.5	4887.3	4898.2	4912.6	4918.0	4925.3	4932.5	4937.9	4928.9
20°	5028.3	5031.9	5031.9	5035.5	5050.0	5066.2	5066.2	5069.9	5066.2	5069.9	5064.4
22.5°	5200.0	5210.8	5210.8	5212.7	5227.1	5247.0	5241.6	5247.0	5238.0	5245.2	5238.0
25°	5424.1	5440.4	5436.8	5436.8	5447.6	5460.3	5462.1	5472.9	5471.1	5480.2	5474.7
27.5°	5677.2	5702.5	5709.7	5707.9	5715.1	5727.8	5731.4	5744.0	5736.8	5744.0	5740.4
30°	5980.8	5991.7	6006.1	6011.5	6020.6	6033.2	6033.2	6035.0	6026.0	6036.8	6042.3
32.5°	6295.3	6315.2	6329.6	6362.2	6378.4	6387.5	6385.7	6389.3	6380.3	6394.7	6405.6
35°	6711.0	6725.5	6749.0	6774.3	6796.0	6794.2	6788.7	6790.5	6790.5	6803.2	6814.0
37.5°	7211.7	7215.3	7246.0	7282.2	7293.0	7282.2	7249.6	7242.4	7226.1	7242.4	7260.5
40°	7741.3	7753.9	7815.4	7838.9	7844.3	7824.4	7777.4	7750.3	7714.1	7734.0	7759.3
42.5°	8296.1	8321.4	8377.5	8419.0	8437.1	8424.5	8359.4	8317.8	8270.8	8281.7	8307.0
45°	8910.7	8941.4	9020.9	9060.7	9095.0	9075.1	9011.9	8948.6	8874.5	8879.9	8919.7
47.5°	9597.5	9628.2	9731.2	9798.1	9816.2	9812.6	9742.1	9655.3	9554.1	9550.5	9584.8
50°	10367.5	10398.2	10526.5	10629.5	10682.0	10676.5	10593.4	10470.5	10347.6	10349.4	10392.8
52.5°	11119.4	11157.3	11291.1	11468.2	11571.2	11645.3	11594.7	11479.0	11329.0	11332.6	11372.4
55°	11824.3	11887.5	12041.2	12281.5	12473.1	12681.0	12740.6	12737.0	12646.6	12671.9	12711.7
57.5°	12165.9	12259.9	12496.6	12876.2	13266.6	13689.5	14047.4	14314.9	14428.8	14600.5	14560.7
60°	11518.8	11668.8	12017.7	12576.2	13347.9	14230.0	15175.2	16098.8	16886.9	17481.5	17139.9
62.5°	9431.2	9626.4	10049.4	10765.1	11932.7	13344.3	15153.6	17336.9	19715.5	21150.6	20125.8
65°	5901.3	6103.7	6533.9	7300.2	8666.7	10421.7	12876.2	16494.7	20939.2	23102.7	21016.9
67.5°	2300.9	2411.1	2644.3	3134.1	4160.7	5722.3	8185.9	12292.4	17608.1	19504.1	17280.9
70°	1153.1	1164.0	1207.4	1297.7	1518.2	1971.9	3000.3	5698.9	10098.2	12196.6	9734.9
72.5°	833.2	835.0	856.7	896.5	967.0	1068.2	1263.4	1744.2	3284.1	5019.3	3078.1
75°	638.0	645.3	657.9	679.6	717.6	768.2	838.7	1004.9	1245.3	1444.1	1214.6
77.5°	491.6	506.1	515.1	535.0	558.5	592.8	612.7	676.0	786.2	827.8	815.2
80°	374.1	386.8	406.7	422.9	439.2	455.5	448.2	477.2	535.0	569.3	551.3
82.5°	238.6	253.0	310.9	325.3	332.6	343.4	330.8	332.6	357.9	379.6	357.9
85°	153.6	162.7	197.0	215.1	216.9	224.1	218.7	206.0	206.0	188.0	211.5
87.5°	70.5	72.3	88.6	104.8	108.4	97.6	95.8	92.2	74.1	70.5	75.9
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°	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8	4366.8
2.5°	4365.0	4368.6	4370.4	4375.8	4377.6	4377.6	4379.4	4383.0
5°	4399.3	4404.7	4406.5	4413.8	4415.6	4413.8	4417.4	4419.2
7.5°	4460.8	4469.8	4473.4	4480.6	4475.2	4482.4	4484.3	4484.3
10°	4551.1	4560.2	4562.0	4569.2	4565.6	4569.2	4569.2	4565.6
12.5°	4670.4	4672.2	4666.8	4672.2	4665.0	4668.6	4663.2	4659.6
15°	4802.4	4796.9	4784.3	4784.3	4773.4	4775.3	4773.4	4771.6
17.5°	4930.7	4919.8	4910.8	4907.2	4898.2	4896.3	4890.9	4890.9
20°	5071.7	5066.2	5060.8	5053.6	5044.6	5035.5	5033.7	5037.3
22.5°	5241.6	5239.8	5239.8	5236.1	5223.5	5214.5	5209.0	5209.0
25°	5469.3	5453.0	5453.0	5451.2	5445.8	5440.4	5429.5	5435.0
27.5°	5726.0	5716.9	5724.2	5722.3	5716.9	5716.9	5709.7	5709.7
30°	6042.3	6038.7	6049.5	6040.5	6022.4	6020.6	6013.3	6004.3
32.5°	6407.4	6403.8	6420.0	6409.2	6380.3	6364.0	6349.5	6342.3
35°	6814.0	6815.8	6835.7	6828.5	6796.0	6785.1	6759.8	6756.2
37.5°	7258.7	7287.6	7321.9	7329.2	7302.0	7294.8	7267.7	7253.2
40°	7781.0	7819.0	7871.4	7884.0	7855.1	7849.7	7811.7	7791.9
42.5°	8337.7	8402.8	8467.8	8478.7	8449.8	8420.9	8384.7	8370.2
45°	8959.5	9037.2	9122.1	9143.8	9100.5	9066.1	9019.1	9019.1
47.5°	9657.1	9754.7	9850.5	9910.2	9870.4	9834.3	9778.2	9742.1
50°	10481.3	10615.1	10739.8	10801.2	10738.0	10669.3	10571.7	10539.2
52.5°	11515.2	11659.8	11768.2	11735.7	11638.1	11542.3	11435.7	11392.3
55°	12834.6	12883.4	12883.4	12760.5	12565.3	12404.4	12236.4	12180.3
57.5°	14484.8	14296.8	14007.6	13640.7	13179.8	12778.6	12507.5	12379.1
60°	16424.2	15520.5	14499.3	13496.1	12671.9	11992.4	11589.3	11404.9
62.5°	17716.5	15352.4	13306.4	11695.9	10510.3	9691.5	9134.8	8917.9
65°	16557.9	12803.9	10063.8	8137.1	6844.8	6011.5	5460.3	5257.8
67.5°	12127.9	8023.2	5359.1	3840.8	2814.2	2244.8	2018.9	1924.9
70°	5444.0	2825.0	1731.5	1352.0	1165.8	1070.0	1028.4	1014.0
72.5°	1641.2	1187.5	1001.3	903.7	829.6	782.6	748.3	744.7
75°	990.5	824.2	732.0	674.2	627.2	589.2	571.2	565.7
77.5°	692.2	605.5	562.1	520.5	484.4	455.5	439.2	426.6
80°	486.2	444.6	424.7	401.3	377.8	350.6	327.1	316.3
82.5°	325.3	316.3	316.3	301.8	282.0	256.7	209.7	198.8
85°	209.7	207.9	211.5	206.0	191.6	164.5	135.6	128.3
87.5°	97.6	99.4	110.3	108.4	104.8	86.8	68.7	65.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)