

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: P299444

Luminaire Tested: **GLNA-AF-09-LED-E1-5NQ-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299444
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-09-LED-E1-5NQ-7030-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3000K 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: 42747.5 lumens
Efficiency: N/A
Efficacy: 114.3 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): 374
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

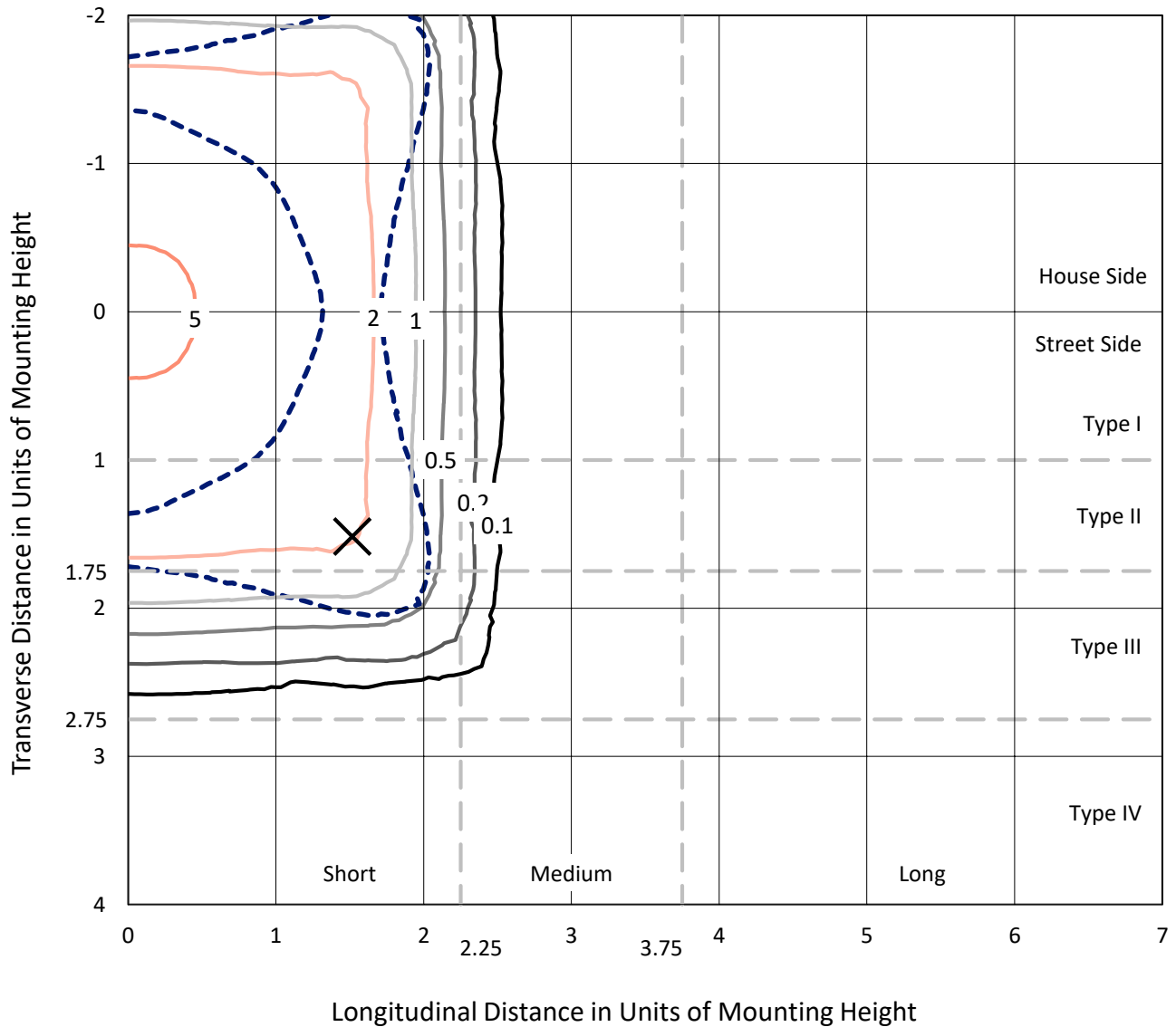


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

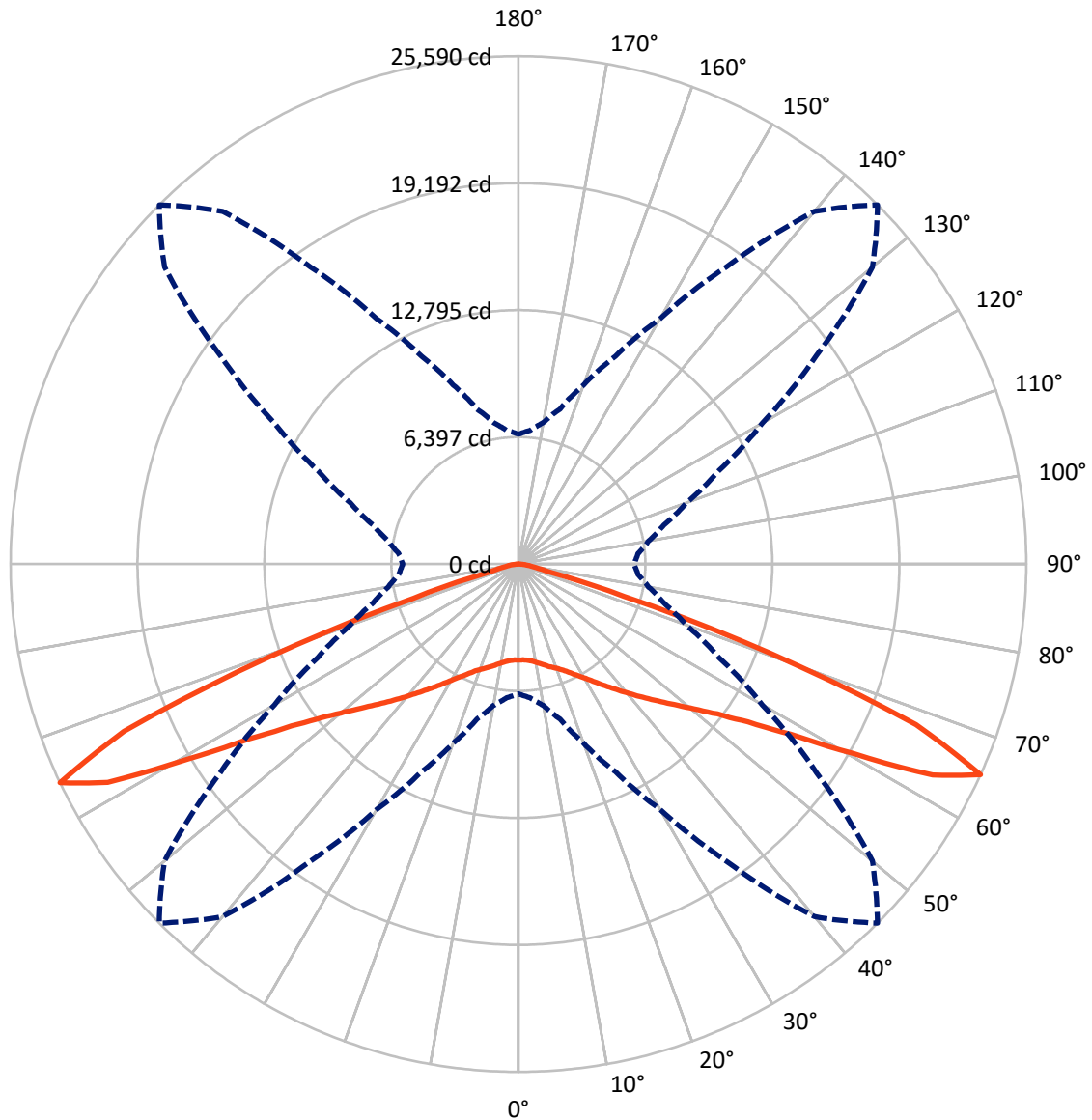


Based on 30 foot mounting height. Maximum calculated value = 5.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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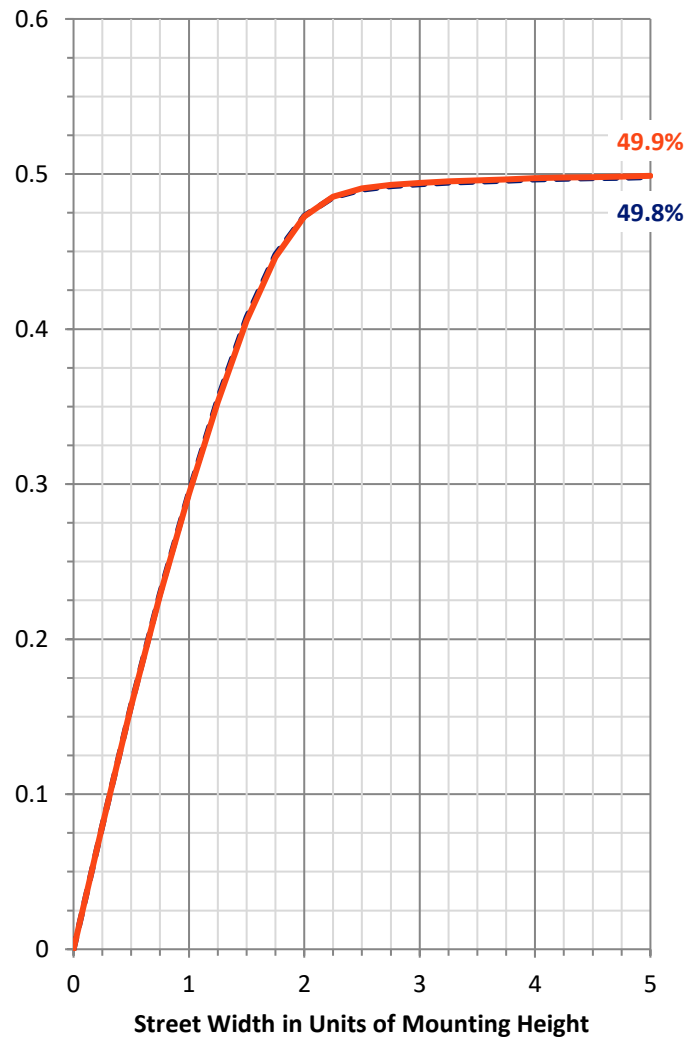
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21373.8	0.0	21373.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21373.8	0.0	21373.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	42747.5	0.0	42747.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.4	1.1
10°-20°	1512.0	3.5
20°-30°	2827.2	6.6
30°-40°	4781.5	11.2
40°-50°	7818.3	18.3
50°-60°	12432.3	29.1
60°-70°	11238.0	26.3
70°-80°	1422.2	3.3
80°-90°	244.6	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°	42747.5	100.0
0°-180°	42747.5	100.0



--- HS — SS

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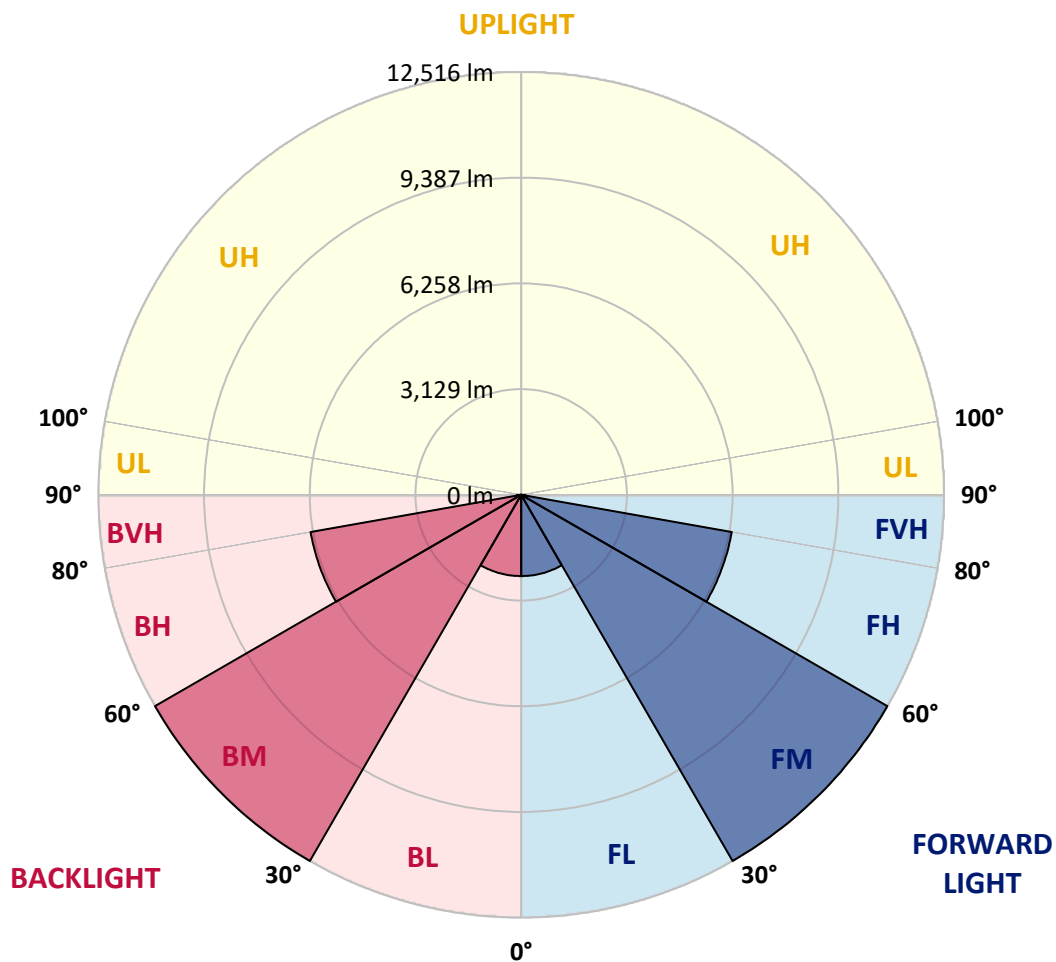
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2405.3	5.6			
FM (30°-60°)	12516.0	29.3			
FH (60°-80°)	6330.1	14.8			G3/7500
FVH (80°-90°)	122.3	0.3			G2/225
BL (0°-30°)	2405.3	5.6	B3/2500		
BM (30°-60°)	12516.0	29.3	B5		
BH (60°-80°)	6330.1	14.8	B5		G3/7500
BVH (80°-90°)	122.3	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°	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9
2.5°	4840.9	4844.9	4848.9	4844.9	4848.9	4842.9	4838.9	4844.9	4838.9	4832.9	4836.9
5°	4883.0	4885.0	4885.0	4878.9	4885.0	4880.9	4874.9	4883.0	4876.9	4870.9	4874.9
7.5°	4953.0	4961.0	4955.0	4949.0	4953.0	4949.0	4945.0	4947.0	4945.0	4939.0	4941.0
10°	5047.1	5053.1	5049.1	5047.1	5051.1	5049.1	5045.1	5043.1	5045.1	5039.1	5039.1
12.5°	5161.2	5159.2	5157.2	5159.2	5165.2	5165.2	5163.2	5165.2	5169.2	5171.2	5167.2
15°	5273.3	5277.4	5277.4	5277.4	5289.4	5299.4	5305.4	5309.4	5317.4	5319.4	5311.4
17.5°	5413.5	5413.5	5411.5	5413.5	5425.5	5441.5	5447.5	5455.5	5463.5	5469.5	5459.5
20°	5569.6	5573.7	5573.7	5577.7	5593.7	5611.7	5611.7	5615.7	5611.7	5615.7	5609.7
22.5°	5759.8	5771.9	5771.9	5773.9	5789.9	5811.9	5805.9	5811.9	5801.9	5809.9	5801.9
25°	6008.1	6026.1	6022.1	6022.1	6034.1	6048.1	6050.1	6062.1	6060.1	6070.2	6064.1
27.5°	6288.4	6316.4	6324.4	6322.4	6330.4	6344.4	6348.4	6362.5	6354.4	6362.5	6358.4
30°	6624.7	6636.7	6652.7	6658.8	6668.8	6682.8	6682.8	6684.8	6674.8	6686.8	6692.8
32.5°	6973.1	6995.1	7011.1	7047.1	7065.2	7075.2	7073.2	7077.2	7067.2	7083.2	7095.2
35°	7433.5	7449.6	7475.6	7503.6	7527.6	7525.6	7519.6	7521.6	7521.6	7535.6	7547.7
37.5°	7988.1	7992.1	8026.1	8066.2	8078.2	8066.2	8030.1	8022.1	8004.1	8022.1	8042.2
40°	8574.7	8588.7	8656.8	8682.8	8688.8	8666.8	8614.7	8584.7	8544.7	8566.7	8594.7
42.5°	9189.3	9217.3	9279.4	9325.5	9345.5	9331.5	9259.4	9213.3	9161.3	9173.3	9201.3
45°	9870.0	9904.0	9992.1	10036.2	10074.2	10052.2	9982.1	9912.1	9830.0	9836.0	9880.0
47.5°	10630.8	10664.8	10778.9	10853.0	10873.0	10869.0	10790.9	10694.8	10582.7	10578.7	10616.8
50°	11483.6	11517.7	11659.8	11773.9	11832.0	11826.0	11733.9	11597.8	11461.6	11463.6	11511.7
52.5°	12316.5	12358.5	12506.7	12702.9	12817.0	12899.1	12843.0	12714.9	12548.7	12552.7	12596.8
55°	13097.3	13167.4	13337.5	13603.8	13816.0	14046.2	14112.3	14108.3	14008.2	14036.2	14080.3
57.5°	13475.7	13579.8	13842.0	14262.5	14694.9	15163.4	15559.8	15856.1	15982.2	16172.4	16128.4
60°	12758.9	12925.1	13311.5	13930.1	14785.0	15762.0	16809.0	17832.1	18705.0	19363.6	18985.3
62.5°	10446.6	10662.8	11131.3	11924.1	13217.4	14781.0	16785.0	19203.5	21838.1	23427.8	22292.6
65°	6536.6	6760.9	7237.3	8086.2	9599.7	11543.7	14262.5	18270.5	23193.5	25589.9	23279.6
67.5°	2548.6	2670.7	2929.0	3471.5	4608.7	6338.4	9067.2	13615.8	19503.8	21603.9	19141.4
70°	1277.3	1289.3	1337.4	1437.5	1681.7	2184.2	3323.4	6312.4	11185.3	13509.7	10782.9
72.5°	922.9	924.9	949.0	993.0	1071.1	1183.2	1399.4	1932.0	3637.7	5559.6	3409.5
75°	706.7	714.7	728.7	752.8	794.8	850.9	928.9	1113.1	1379.4	1599.6	1345.4
77.5°	544.6	560.6	570.6	592.6	618.6	656.7	678.7	748.8	870.9	916.9	902.9
80°	414.4	428.4	450.5	468.5	486.5	504.5	496.5	528.5	592.6	630.6	610.6
82.5°	264.3	280.3	344.3	360.4	368.4	380.4	366.4	368.4	396.4	420.4	396.4
85°	170.2	180.2	218.2	238.2	240.2	248.3	242.2	228.2	228.2	208.2	234.2
87.5°	78.1	80.1	98.1	116.1	120.1	108.1	106.1	102.1	82.1	78.1	84.1
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°	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9	4836.9
2.5°	4834.9	4838.9	4840.9	4846.9	4848.9	4848.9	4850.9	4854.9
5°	4872.9	4878.9	4880.9	4889.0	4891.0	4889.0	4893.0	4895.0
7.5°	4941.0	4951.0	4955.0	4963.0	4957.0	4965.0	4967.0	4967.0
10°	5041.1	5051.1	5053.1	5061.1	5057.1	5061.1	5061.1	5057.1
12.5°	5173.2	5175.2	5169.2	5175.2	5167.2	5171.2	5165.2	5161.2
15°	5319.4	5313.4	5299.4	5299.4	5287.4	5289.4	5287.4	5285.4
17.5°	5461.5	5449.5	5439.5	5435.5	5425.5	5423.5	5417.5	5417.5
20°	5617.7	5611.7	5605.7	5597.7	5587.7	5577.7	5575.7	5579.7
22.5°	5805.9	5803.9	5803.9	5799.9	5785.9	5775.9	5769.9	5769.9
25°	6058.1	6040.1	6040.1	6038.1	6032.1	6026.1	6014.1	6020.1
27.5°	6342.4	6332.4	6340.4	6338.4	6332.4	6332.4	6324.4	6324.4
30°	6692.8	6688.8	6700.8	6690.8	6670.8	6668.8	6660.8	6650.7
32.5°	7097.2	7093.2	7111.2	7099.2	7067.2	7049.1	7033.1	7025.1
35°	7547.7	7549.7	7571.7	7563.7	7527.6	7515.6	7487.6	7483.6
37.5°	8040.2	8072.2	8110.2	8118.2	8088.2	8080.2	8050.2	8034.1
40°	8618.7	8660.8	8718.8	8732.9	8700.8	8694.8	8652.8	8630.8
42.5°	9235.4	9307.4	9379.5	9391.5	9359.5	9327.5	9287.4	9271.4
45°	9924.1	10010.2	10104.2	10128.3	10080.2	10042.2	9990.1	9990.1
47.5°	10696.8	10805.0	10911.1	10977.1	10933.1	10893.0	10831.0	10790.9
50°	11609.8	11757.9	11896.1	11964.1	11894.1	11818.0	11709.9	11673.8
52.5°	12754.9	12915.1	13035.2	12999.2	12891.1	12785.0	12666.8	12618.8
55°	14216.4	14270.5	14270.5	14134.3	13918.1	13739.9	13553.7	13491.7
57.5°	16044.3	15836.1	15515.7	15109.3	14598.8	14154.4	13854.0	13711.9
60°	18192.4	17191.4	16060.3	14949.2	14036.2	13283.5	12837.0	12632.8
62.5°	19623.9	17005.2	14738.9	12955.1	11641.8	10734.9	10118.3	9878.0
65°	18340.6	14182.4	11147.3	9013.1	7581.7	6658.8	6048.1	5823.9
67.5°	13433.6	8887.0	5936.0	4254.3	3117.2	2486.5	2236.3	2132.2
70°	6030.1	3129.2	1917.9	1497.5	1291.3	1185.2	1139.2	1123.1
72.5°	1817.8	1315.3	1109.1	1001.0	918.9	866.9	828.8	824.8
75°	1097.1	912.9	810.8	746.8	694.7	652.7	632.6	626.6
77.5°	766.8	670.7	622.6	576.6	536.5	504.5	486.5	472.5
80°	538.5	492.5	470.5	444.5	418.4	388.4	362.4	350.4
82.5°	360.4	350.4	350.4	334.3	312.3	284.3	232.2	220.2
85°	232.2	230.2	234.2	228.2	212.2	182.2	150.2	142.1
87.5°	108.1	110.1	122.1	120.1	116.1	96.1	76.1	72.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)