

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: P299438

Luminaire Tested: **GLNA-AF-08-LED-E1-5NQ-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299438
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-08-LED-E1-5NQ-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 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: 38321.4 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 334
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

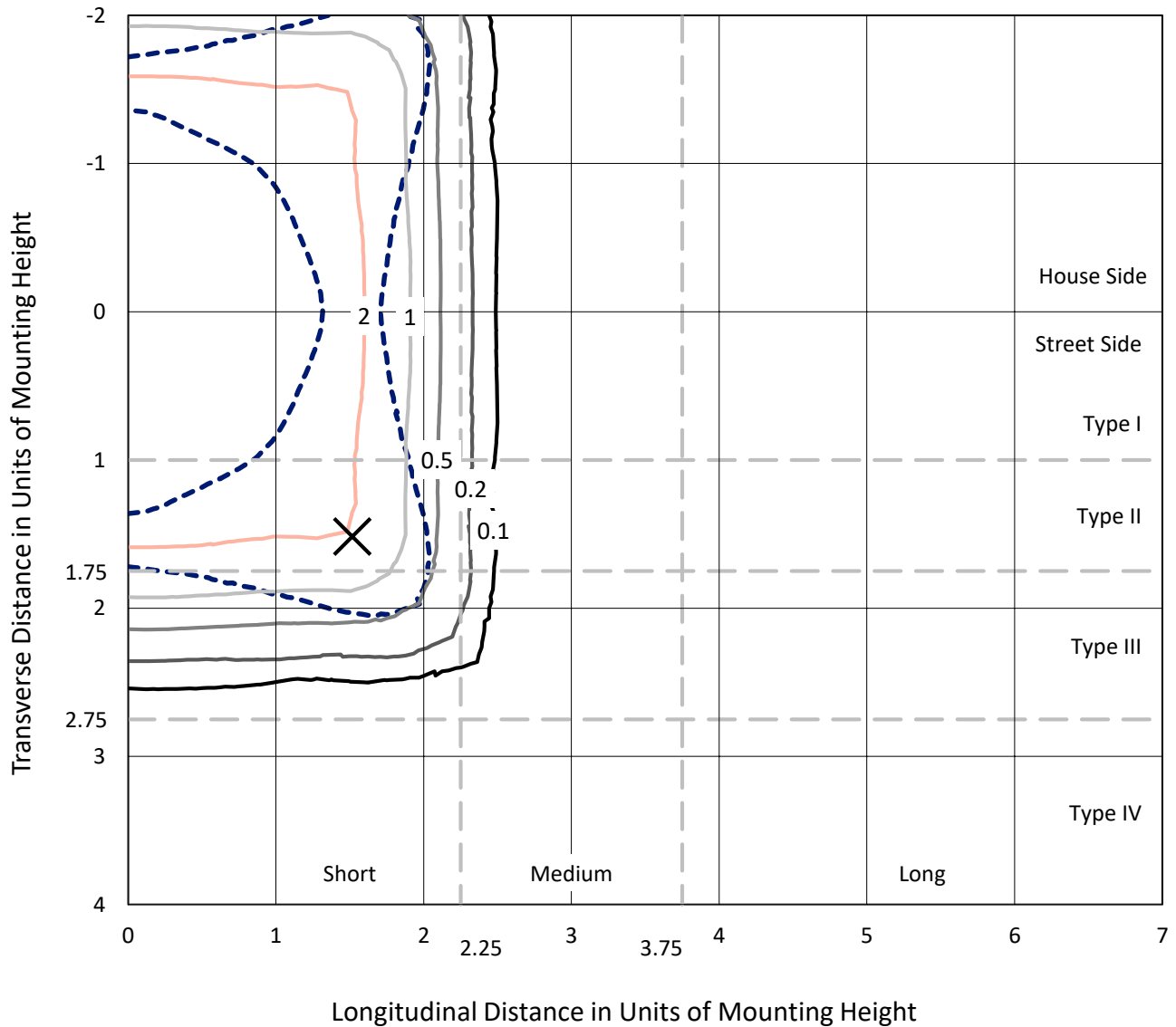


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Iso-Footcandle Lines of Horizontal Illumination

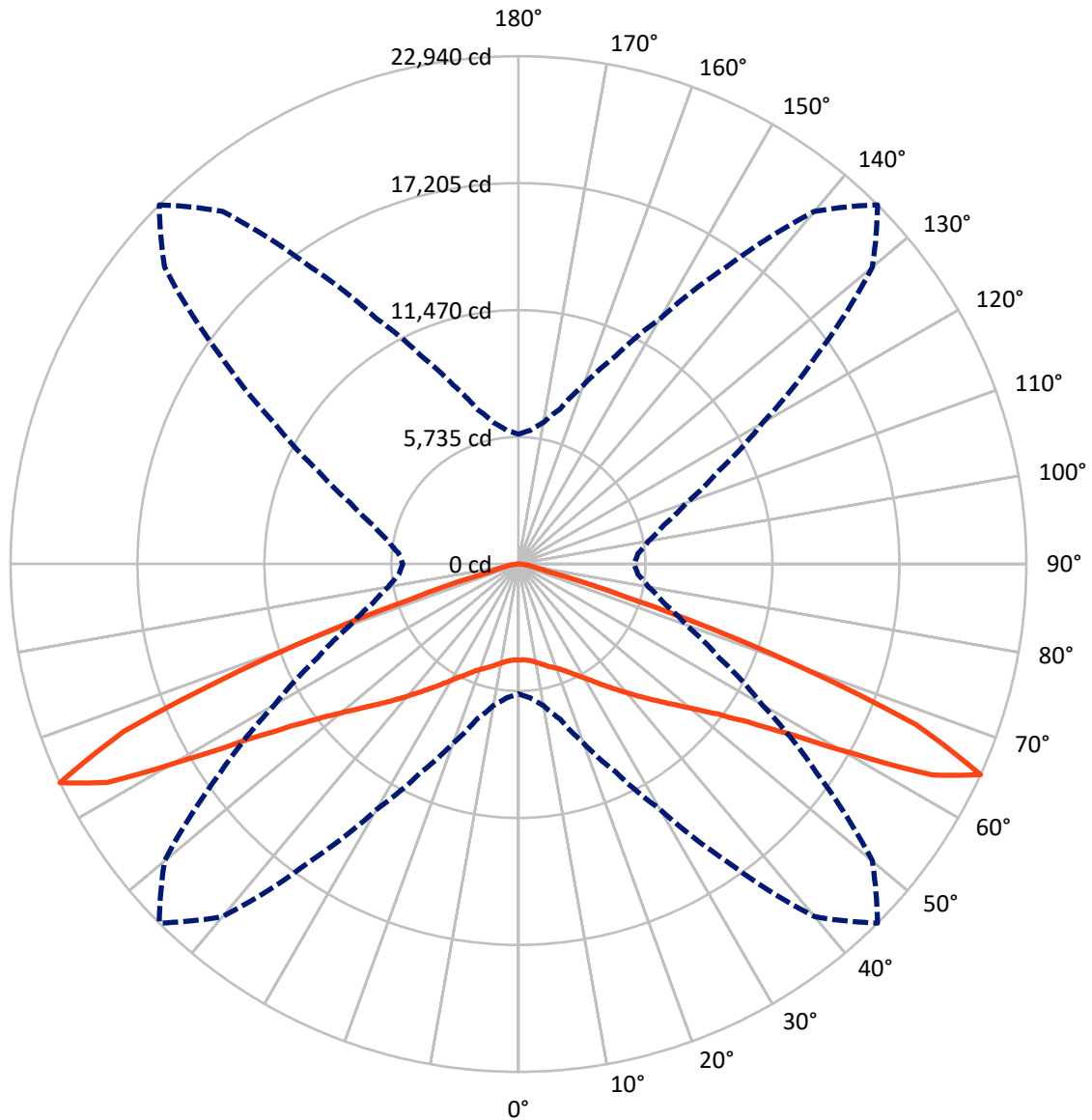
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.8 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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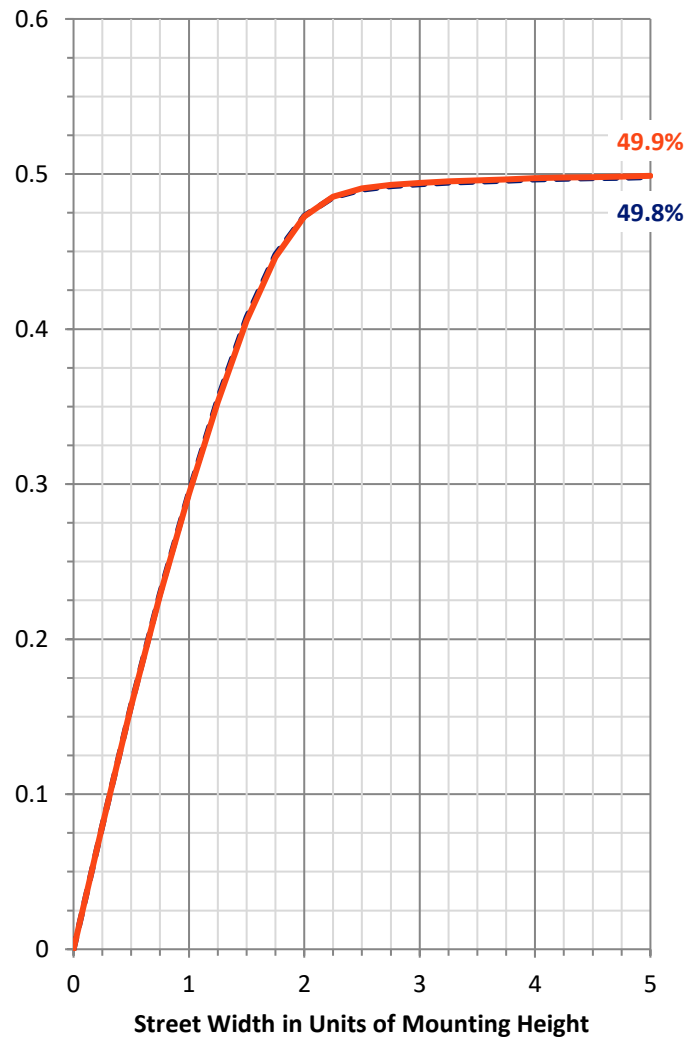
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	19160.7	0.0	19160.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	19160.7	0.0	19160.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	38321.4	0.0	38321.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.6	1.1
10°-20°	1355.4	3.5
20°-30°	2534.4	6.6
30°-40°	4286.4	11.2
40°-50°	7008.8	18.3
50°-60°	11145.0	29.1
60°-70°	10074.4	26.3
70°-80°	1275.0	3.3
80°-90°	219.3	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°	38321.4	100.0
0°-180°	38321.4	100.0



--- HS — SS

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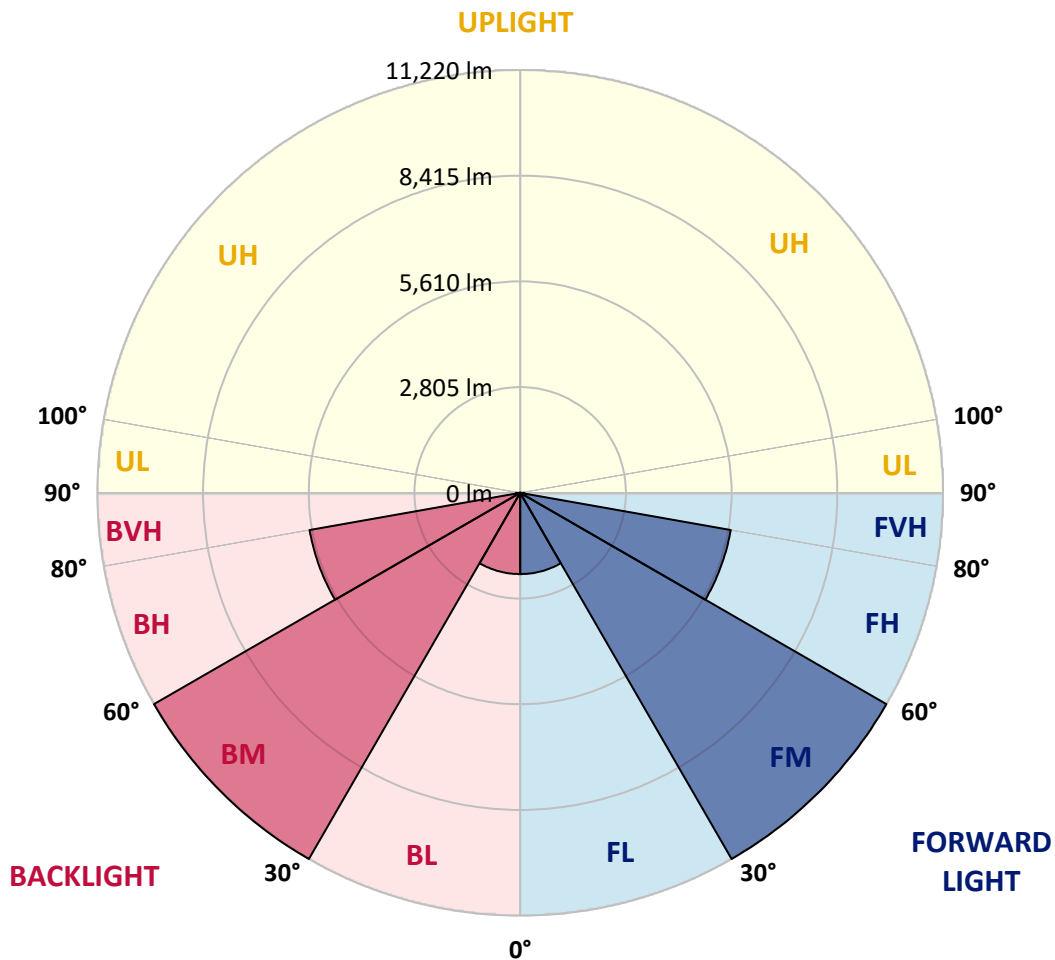
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2156.3	5.6			
FM	(30°-60°)	11220.1	29.3			
FH	(60°-80°)	5674.7	14.8			G3/7500
FVH	(80°-90°)	109.7	0.3			G2/225
BL	(0°-30°)	2156.3	5.6	B3/2500		
BM	(30°-60°)	11220.1	29.3	B5		
BH	(60°-80°)	5674.7	14.8	B5		G3/7500
BVH	(80°-90°)	109.7	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°	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1
2.5°	4339.7	4343.3	4346.9	4343.3	4346.9	4341.5	4337.9	4343.3	4337.9	4332.5	4336.1
5°	4377.4	4379.2	4379.2	4373.8	4379.2	4375.6	4370.2	4377.4	4372.0	4366.6	4370.2
7.5°	4440.2	4447.4	4442.0	4436.6	4440.2	4436.6	4433.0	4434.8	4433.0	4427.6	4429.4
10°	4524.5	4529.9	4526.3	4524.5	4528.1	4526.3	4522.7	4520.9	4522.7	4517.4	4517.4
12.5°	4626.8	4625.0	4623.2	4625.0	4630.4	4630.4	4628.6	4630.4	4634.0	4635.8	4632.2
15°	4727.3	4730.9	4730.9	4730.9	4741.7	4750.7	4756.1	4759.6	4766.8	4768.6	4761.4
17.5°	4853.0	4853.0	4851.2	4853.0	4863.7	4878.1	4883.5	4890.7	4897.8	4903.2	4894.3
20°	4993.0	4996.6	4996.6	5000.1	5014.5	5030.7	5030.7	5034.2	5030.7	5034.2	5028.9
22.5°	5163.5	5174.2	5174.2	5176.0	5190.4	5210.1	5204.7	5210.1	5201.2	5208.3	5201.2
25°	5386.0	5402.2	5398.6	5398.6	5409.3	5421.9	5423.7	5434.5	5432.7	5441.6	5436.3
27.5°	5637.3	5662.4	5669.6	5667.8	5675.0	5687.5	5691.1	5703.7	5696.5	5703.7	5700.1
30°	5938.8	5949.6	5963.9	5969.3	5978.3	5990.8	5990.8	5992.6	5983.7	5994.4	5999.8
32.5°	6251.1	6270.8	6285.2	6317.5	6333.6	6342.6	6340.8	6344.4	6335.4	6349.8	6360.6
35°	6663.9	6678.2	6701.6	6726.7	6748.2	6746.4	6741.0	6742.8	6742.8	6755.4	6766.2
37.5°	7161.0	7164.6	7195.1	7231.0	7241.8	7231.0	7198.7	7191.5	7175.4	7191.5	7209.5
40°	7686.9	7699.4	7760.4	7783.8	7789.2	7769.4	7722.8	7695.8	7659.9	7679.7	7704.8
42.5°	8237.8	8263.0	8318.6	8359.9	8377.8	8365.3	8300.7	8259.4	8212.7	8223.5	8248.6
45°	8848.1	8878.6	8957.5	8997.0	9031.1	9011.4	8948.6	8885.8	8812.2	8817.6	8857.0
47.5°	9530.1	9560.6	9662.9	9729.3	9747.2	9743.6	9673.6	9587.5	9487.0	9483.4	9517.5
50°	10294.6	10325.1	10452.6	10554.9	10606.9	10601.5	10519.0	10396.9	10274.9	10276.7	10319.7
52.5°	11041.2	11078.9	11211.7	11387.6	11489.9	11563.5	11513.2	11398.4	11249.4	11253.0	11292.5
55°	11741.2	11804.0	11956.5	12195.2	12385.5	12591.9	12651.1	12647.5	12557.8	12582.9	12622.4
57.5°	12080.4	12173.7	12408.8	12785.7	13173.4	13593.3	13948.7	14214.3	14327.4	14497.9	14458.4
60°	11437.9	11586.8	11933.2	12487.8	13254.1	14130.0	15068.6	15985.7	16768.2	17358.7	17019.5
62.5°	9364.9	9558.8	9978.7	10689.5	11848.9	13250.6	15047.1	17215.1	19577.0	21002.0	19984.4
65°	5859.8	6060.8	6488.0	7248.9	8605.8	10348.5	12785.7	16378.8	20792.0	22940.3	20869.2
67.5°	2284.7	2394.2	2625.7	3112.1	4131.5	5682.1	8128.4	12206.0	17484.3	19367.0	17159.5
70°	1145.0	1155.8	1198.9	1288.6	1507.6	1958.1	2979.3	5658.8	10027.2	12110.9	9666.5
72.5°	827.4	829.2	850.7	890.2	960.2	1060.7	1254.5	1731.9	3261.0	4984.0	3056.4
75°	633.5	640.7	653.3	674.8	712.5	762.8	832.8	997.9	1236.6	1434.0	1206.1
77.5°	488.2	502.5	511.5	531.2	554.6	588.7	608.4	671.2	780.7	822.0	809.4
80°	371.5	384.1	403.8	420.0	436.1	452.3	445.1	473.8	531.2	565.3	547.4
82.5°	236.9	251.3	308.7	323.1	330.2	341.0	328.4	330.2	355.4	376.9	355.4
85°	152.6	161.5	195.6	213.6	215.4	222.5	217.2	204.6	204.6	186.7	210.0
87.5°	70.0	71.8	87.9	104.1	107.7	96.9	95.1	91.5	73.6	70.0	75.4
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°	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1	4336.1
2.5°	4334.3	4337.9	4339.7	4345.1	4346.9	4346.9	4348.7	4352.2
5°	4368.4	4373.8	4375.6	4382.8	4384.5	4382.8	4386.3	4388.1
7.5°	4429.4	4438.4	4442.0	4449.2	4443.8	4451.0	4452.7	4452.7
10°	4519.2	4528.1	4529.9	4537.1	4533.5	4537.1	4537.1	4533.5
12.5°	4637.6	4639.4	4634.0	4639.4	4632.2	4635.8	4630.4	4626.8
15°	4768.6	4763.2	4750.7	4750.7	4739.9	4741.7	4739.9	4738.1
17.5°	4896.0	4885.3	4876.3	4872.7	4863.7	4861.9	4856.6	4856.6
20°	5036.0	5030.7	5025.3	5018.1	5009.1	5000.1	4998.3	5001.9
22.5°	5204.7	5202.9	5202.9	5199.4	5186.8	5177.8	5172.4	5172.4
25°	5430.9	5414.7	5414.7	5412.9	5407.5	5402.2	5391.4	5396.8
27.5°	5685.7	5676.8	5683.9	5682.1	5676.8	5676.8	5669.6	5669.6
30°	5999.8	5996.2	6007.0	5998.0	5980.1	5978.3	5971.1	5962.1
32.5°	6362.3	6358.8	6374.9	6364.1	6335.4	6319.3	6304.9	6297.7
35°	6766.2	6768.0	6787.7	6780.5	6748.2	6737.4	6712.3	6708.7
37.5°	7207.7	7236.4	7270.5	7277.7	7250.7	7243.6	7216.6	7202.3
40°	7726.3	7764.0	7816.1	7828.6	7799.9	7794.5	7756.9	7737.1
42.5°	8279.1	8343.7	8408.3	8419.1	8390.4	8361.7	8325.8	8311.4
45°	8896.5	8973.7	9058.0	9079.6	9036.5	9002.4	8955.7	8955.7
47.5°	9589.3	9686.2	9781.3	9840.6	9801.1	9765.2	9709.5	9673.6
50°	10407.7	10540.5	10664.3	10725.4	10662.5	10594.3	10497.4	10465.1
52.5°	11434.3	11577.9	11685.5	11653.2	11556.3	11461.2	11355.3	11312.2
55°	12744.4	12792.9	12792.9	12670.9	12477.0	12317.3	12150.4	12094.7
57.5°	14383.0	14196.4	13909.2	13544.9	13087.2	12688.8	12419.6	12292.2
60°	16308.8	15411.4	14397.4	13401.3	12582.9	11908.1	11507.9	11324.8
62.5°	17592.0	15244.5	13212.9	11613.8	10436.4	9623.4	9070.6	8855.2
65°	16441.6	12713.9	9993.1	8079.9	6796.7	5969.3	5421.9	5220.9
67.5°	12042.7	7966.8	5321.4	3813.8	2794.4	2229.1	2004.7	1911.4
70°	5405.8	2805.2	1719.4	1342.5	1157.6	1062.5	1021.2	1006.8
72.5°	1629.6	1179.1	994.3	897.4	823.8	777.1	743.0	739.4
75°	983.5	818.4	726.9	669.4	622.8	585.1	567.1	561.8
77.5°	687.4	601.2	558.2	516.9	481.0	452.3	436.1	423.6
80°	482.8	441.5	421.8	398.4	375.1	348.2	324.8	314.1
82.5°	323.1	314.1	314.1	299.7	280.0	254.9	208.2	197.4
85°	208.2	206.4	210.0	204.6	190.2	163.3	134.6	127.4
87.5°	96.9	98.7	109.5	107.7	104.1	86.1	68.2	64.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)