

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: P299437

Luminaire Tested: **GLNA-AF-08-LED-E1-5NQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299437
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-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 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: 34421.4 lumens
Efficiency: N/A
Efficacy: 103.1 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

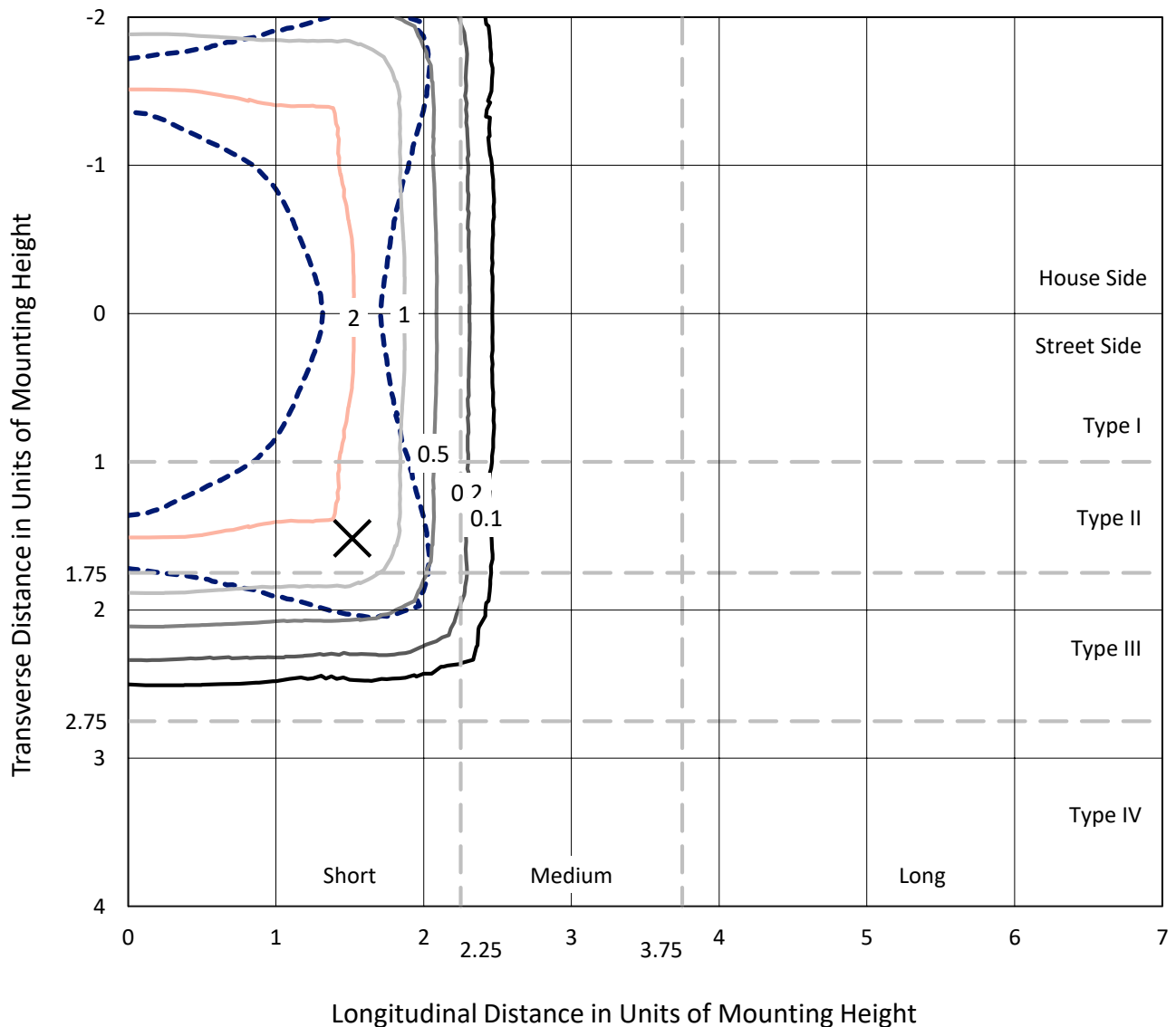
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

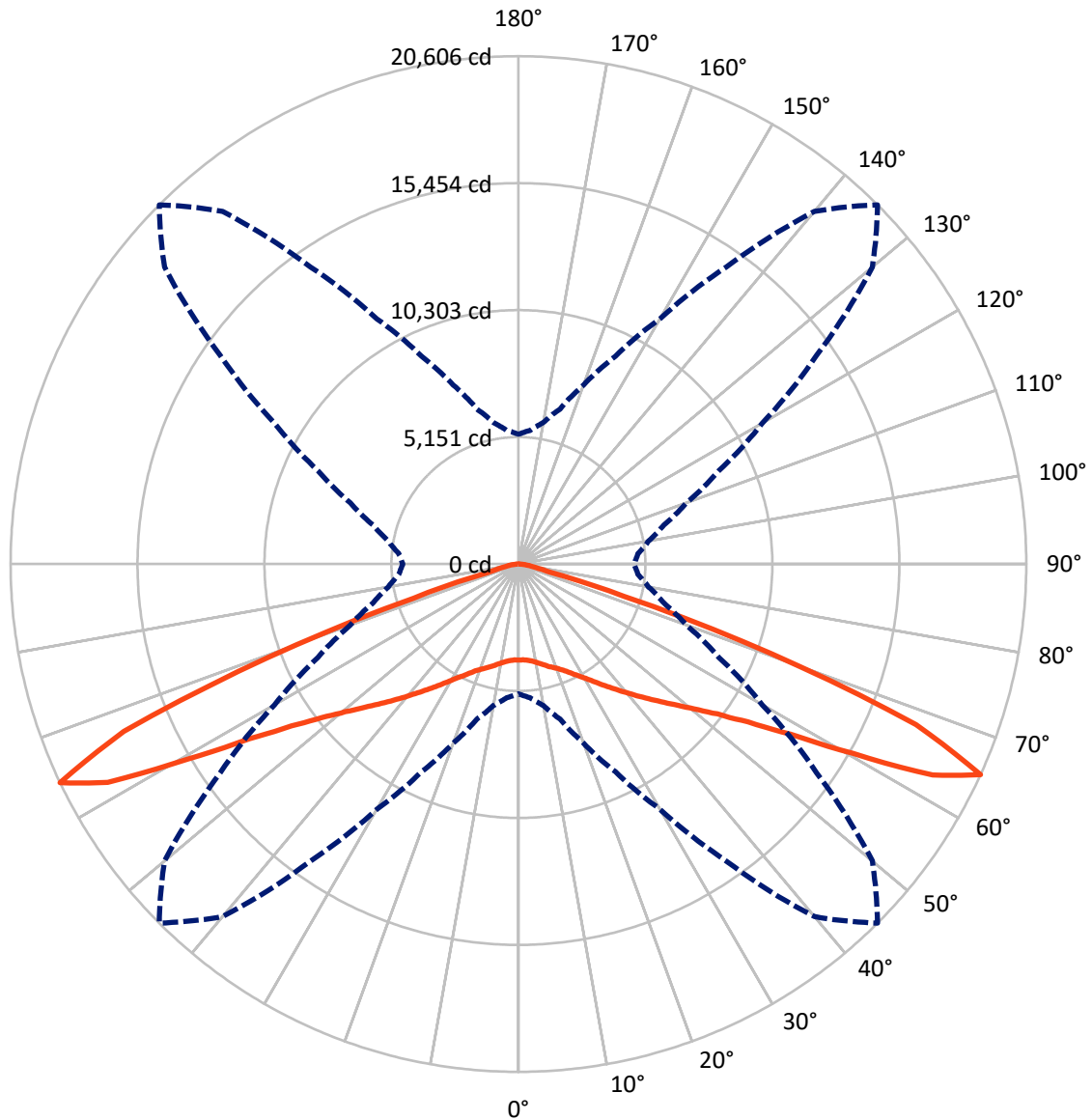
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.3 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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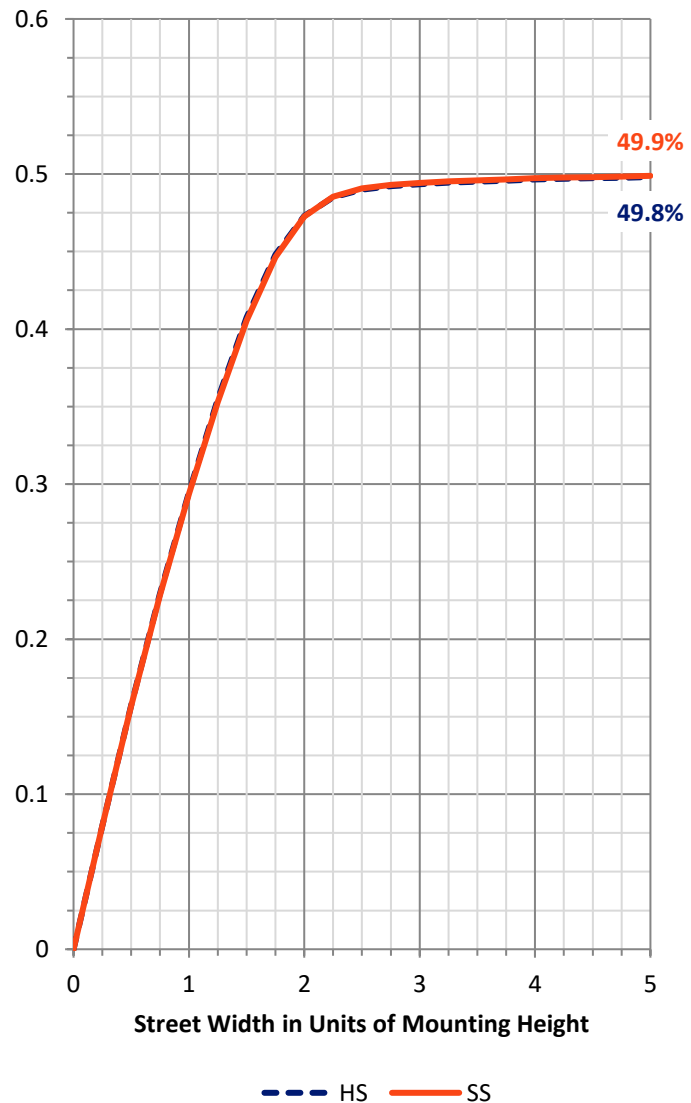
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17210.7	0.0	17210.7
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	17210.7	0.0	17210.7
	% Fixture	50.0	0.0	50.0
Total	Lumens	34421.4	0.0	34421.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.6	1.1
10°-20°	1217.5	3.5
20°-30°	2276.5	6.6
30°-40°	3850.2	11.2
40°-50°	6295.5	18.3
50°-60°	10010.8	29.1
60°-70°	9049.1	26.3
70°-80°	1145.2	3.3
80°-90°	197.0	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°	34421.4	100.0
0°-180°	34421.4	100.0



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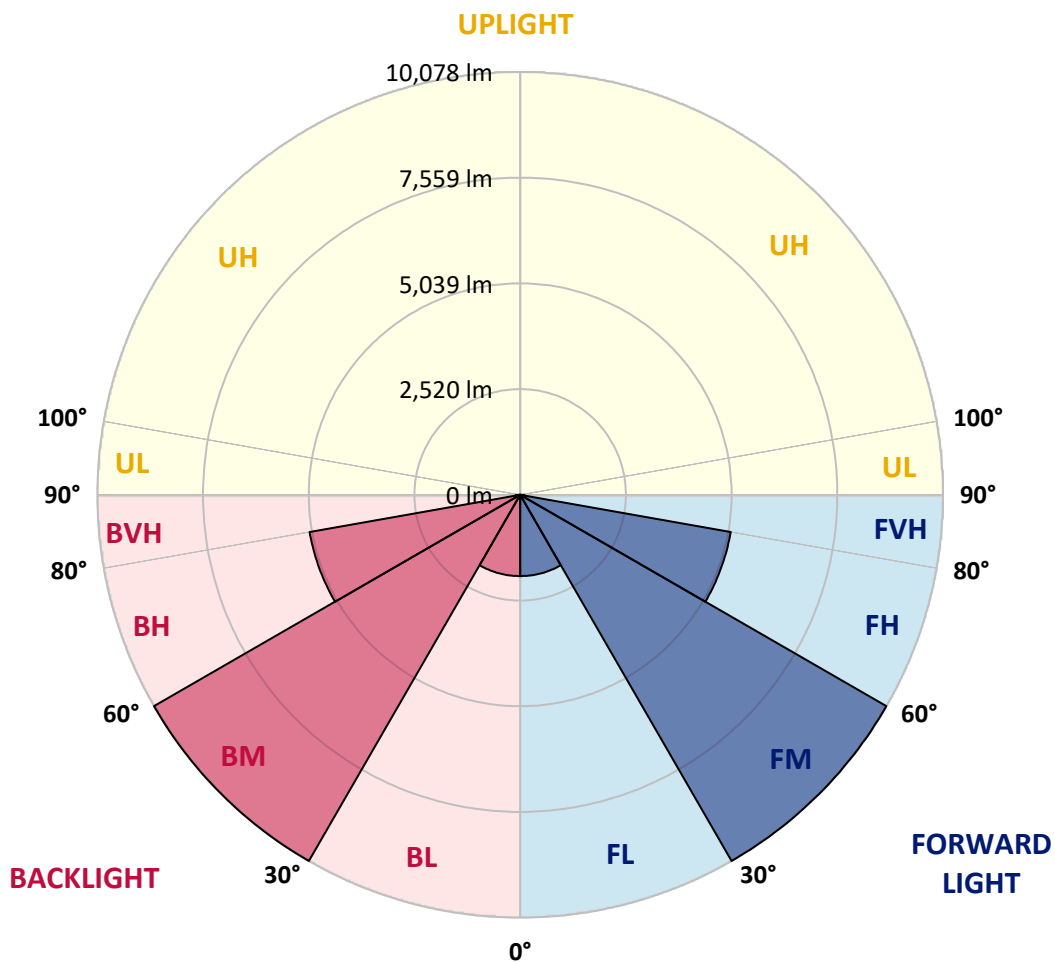
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1936.8	5.6			
FM (30°-60°)	10078.2	29.3			
FH (60°-80°)	5097.2	14.8			G3/7500
FVH (80°-90°)	98.5	0.3			G1/100
BL (0°-30°)	1936.8	5.6	B3/2500		
BM (30°-60°)	10078.2	29.3	B5		
BH (60°-80°)	5097.2	14.8	B5		G3/7500
BVH (80°-90°)	98.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8
2.5°	3898.0	3901.3	3904.5	3901.3	3904.5	3899.6	3896.4	3901.3	3896.4	3891.6	3894.8
5°	3931.9	3933.5	3933.5	3928.7	3933.5	3930.3	3925.4	3931.9	3927.0	3922.2	3925.4
7.5°	3988.3	3994.8	3989.9	3985.1	3988.3	3985.1	3981.9	3983.5	3981.9	3977.0	3978.6
10°	4064.1	4068.9	4065.7	4064.1	4067.3	4065.7	4062.5	4060.8	4062.5	4057.6	4057.6
12.5°	4156.0	4154.3	4152.7	4154.3	4159.2	4159.2	4157.6	4159.2	4162.4	4164.0	4160.8
15°	4246.2	4249.5	4249.5	4249.5	4259.1	4267.2	4272.0	4275.3	4281.7	4283.3	4276.9
17.5°	4359.1	4359.1	4357.5	4359.1	4368.8	4381.7	4386.5	4392.9	4399.4	4404.2	4396.2
20°	4484.8	4488.1	4488.1	4491.3	4504.2	4518.7	4518.7	4521.9	4518.7	4521.9	4517.1
22.5°	4638.0	4647.6	4647.6	4649.3	4662.2	4679.9	4675.1	4679.9	4671.8	4678.3	4671.8
25°	4837.9	4852.4	4849.2	4849.2	4858.8	4870.1	4871.7	4881.4	4879.8	4887.8	4883.0
27.5°	5063.6	5086.1	5092.6	5091.0	5097.4	5108.7	5111.9	5123.2	5116.8	5123.2	5120.0
30°	5334.4	5344.1	5357.0	5361.8	5369.9	5381.1	5381.1	5382.8	5374.7	5384.4	5389.2
32.5°	5614.9	5632.6	5645.5	5674.5	5689.1	5697.1	5695.5	5698.7	5690.7	5703.6	5713.2
35°	5985.7	5998.6	6019.5	6042.1	6061.4	6059.8	6055.0	6056.6	6056.6	6067.9	6077.6
37.5°	6432.2	6435.5	6462.9	6495.1	6504.8	6495.1	6466.1	6459.6	6445.1	6459.6	6475.8
40°	6904.6	6915.9	6970.7	6991.6	6996.5	6978.7	6936.8	6912.6	6880.4	6898.1	6920.7
42.5°	7399.5	7422.0	7472.0	7509.1	7525.2	7513.9	7455.9	7418.8	7376.9	7386.6	7409.2
45°	7947.6	7975.0	8045.9	8081.4	8112.0	8094.3	8037.9	7981.4	7915.3	7920.2	7955.6
47.5°	8560.2	8587.6	8679.5	8739.1	8755.2	8752.0	8689.1	8611.8	8521.5	8518.3	8548.9
50°	9246.9	9274.3	9388.8	9480.7	9527.4	9522.6	9448.4	9338.8	9229.2	9230.8	9269.5
52.5°	9917.6	9951.4	10070.7	10228.7	10320.6	10386.7	10341.5	10238.4	10104.6	10107.8	10143.3
55°	10546.3	10602.7	10739.7	10954.1	11125.0	11310.4	11363.6	11360.4	11279.8	11302.3	11337.8
57.5°	10851.0	10934.8	11146.0	11484.5	11832.7	12209.9	12529.1	12767.7	12869.3	13022.4	12987.0
60°	10273.8	10407.6	10718.8	11216.9	11905.3	12692.0	13535.1	14358.9	15061.7	15592.1	15287.4
62.5°	8411.9	8586.0	8963.2	9601.6	10643.0	11902.0	13515.7	15463.1	17584.6	18864.6	17950.6
65°	5263.5	5444.0	5827.7	6511.2	7730.0	9295.3	11484.5	14711.9	18676.0	20605.7	18745.3
67.5°	2052.2	2150.5	2358.5	2795.4	3711.0	5103.9	7301.1	10963.8	15705.0	17396.0	15413.2
70°	1028.5	1038.2	1076.9	1157.5	1354.2	1758.8	2676.1	5082.9	9006.7	10878.4	8682.7
72.5°	743.2	744.8	764.1	799.6	862.5	952.7	1126.8	1555.7	2929.2	4476.8	2745.4
75°	569.1	575.5	586.8	606.1	640.0	685.1	748.0	896.3	1110.7	1288.1	1083.3
77.5°	438.5	451.4	459.4	477.2	498.1	528.8	546.5	602.9	701.3	738.3	727.1
80°	333.7	345.0	362.7	377.2	391.7	406.2	399.8	425.6	477.2	507.8	491.7
82.5°	212.8	225.7	277.3	290.2	296.6	306.3	295.0	296.6	319.2	338.5	319.2
85°	137.0	145.1	175.7	191.8	193.5	199.9	195.1	183.8	183.8	167.7	188.6
87.5°	62.9	64.5	79.0	93.5	96.7	87.1	85.4	82.2	66.1	62.9	67.7
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°	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8	3894.8
2.5°	3893.2	3896.4	3898.0	3902.9	3904.5	3904.5	3906.1	3909.3
5°	3923.8	3928.7	3930.3	3936.7	3938.3	3936.7	3939.9	3941.6
7.5°	3978.6	3986.7	3989.9	3996.4	3991.5	3998.0	3999.6	3999.6
10°	4059.2	4067.3	4068.9	4075.4	4072.1	4075.4	4075.4	4072.1
12.5°	4165.6	4167.2	4162.4	4167.2	4160.8	4164.0	4159.2	4156.0
15°	4283.3	4278.5	4267.2	4267.2	4257.5	4259.1	4257.5	4255.9
17.5°	4397.8	4388.1	4380.0	4376.8	4368.8	4367.1	4362.3	4362.3
20°	4523.5	4518.7	4513.8	4507.4	4499.3	4491.3	4489.7	4492.9
22.5°	4675.1	4673.4	4673.4	4670.2	4658.9	4650.9	4646.0	4646.0
25°	4878.2	4863.7	4863.7	4862.1	4857.2	4852.4	4842.7	4847.5
27.5°	5107.1	5099.0	5105.5	5103.9	5099.0	5099.0	5092.6	5092.6
30°	5389.2	5386.0	5395.7	5387.6	5371.5	5369.9	5363.4	5355.4
32.5°	5714.8	5711.6	5726.1	5716.5	5690.7	5676.2	5663.3	5656.8
35°	6077.6	6079.2	6096.9	6090.5	6061.4	6051.8	6029.2	6026.0
37.5°	6474.1	6499.9	6530.6	6537.0	6512.8	6506.4	6482.2	6469.3
40°	6940.0	6973.9	7020.6	7031.9	7006.1	7001.3	6967.4	6949.7
42.5°	7436.6	7494.6	7552.6	7562.3	7536.5	7510.7	7478.5	7465.6
45°	7991.1	8060.4	8136.2	8155.5	8116.9	8086.2	8044.3	8044.3
47.5°	8613.4	8700.4	8785.9	8839.1	8803.6	8771.4	8721.4	8689.1
50°	9348.5	9467.8	9579.0	9633.8	9577.4	9516.1	9429.1	9400.1
52.5°	10270.6	10399.6	10496.3	10467.3	10380.2	10294.8	10199.7	10161.0
55°	11447.4	11491.0	11491.0	11381.3	11207.2	11063.8	10913.8	10863.9
57.5°	12919.3	12751.6	12493.7	12166.4	11755.3	11397.5	11155.6	11041.2
60°	14649.0	13843.0	12932.2	12037.5	11302.3	10696.2	10336.7	10172.3
62.5°	15801.7	13693.1	11868.2	10431.8	9374.3	8644.0	8147.5	7954.0
65°	14768.3	11420.0	8976.1	7257.6	6105.0	5361.8	4870.1	4689.6
67.5°	10817.1	7156.1	4779.8	3425.7	2510.0	2002.2	1800.7	1716.9
70°	4855.6	2519.7	1544.4	1205.8	1039.8	954.4	917.3	904.4
72.5°	1463.8	1059.1	893.1	806.0	739.9	698.0	667.4	664.2
75°	883.4	735.1	652.9	601.3	559.4	525.5	509.4	504.6
77.5°	617.4	540.0	501.4	464.3	432.0	406.2	391.7	380.5
80°	433.7	396.6	378.8	357.9	336.9	312.7	291.8	282.1
82.5°	290.2	282.1	282.1	269.2	251.5	228.9	187.0	177.3
85°	187.0	185.4	188.6	183.8	170.9	146.7	120.9	114.5
87.5°	87.1	88.7	98.3	96.7	93.5	77.4	61.3	58.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)