

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: P299618

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
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-E1-5MQ-7030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48309 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

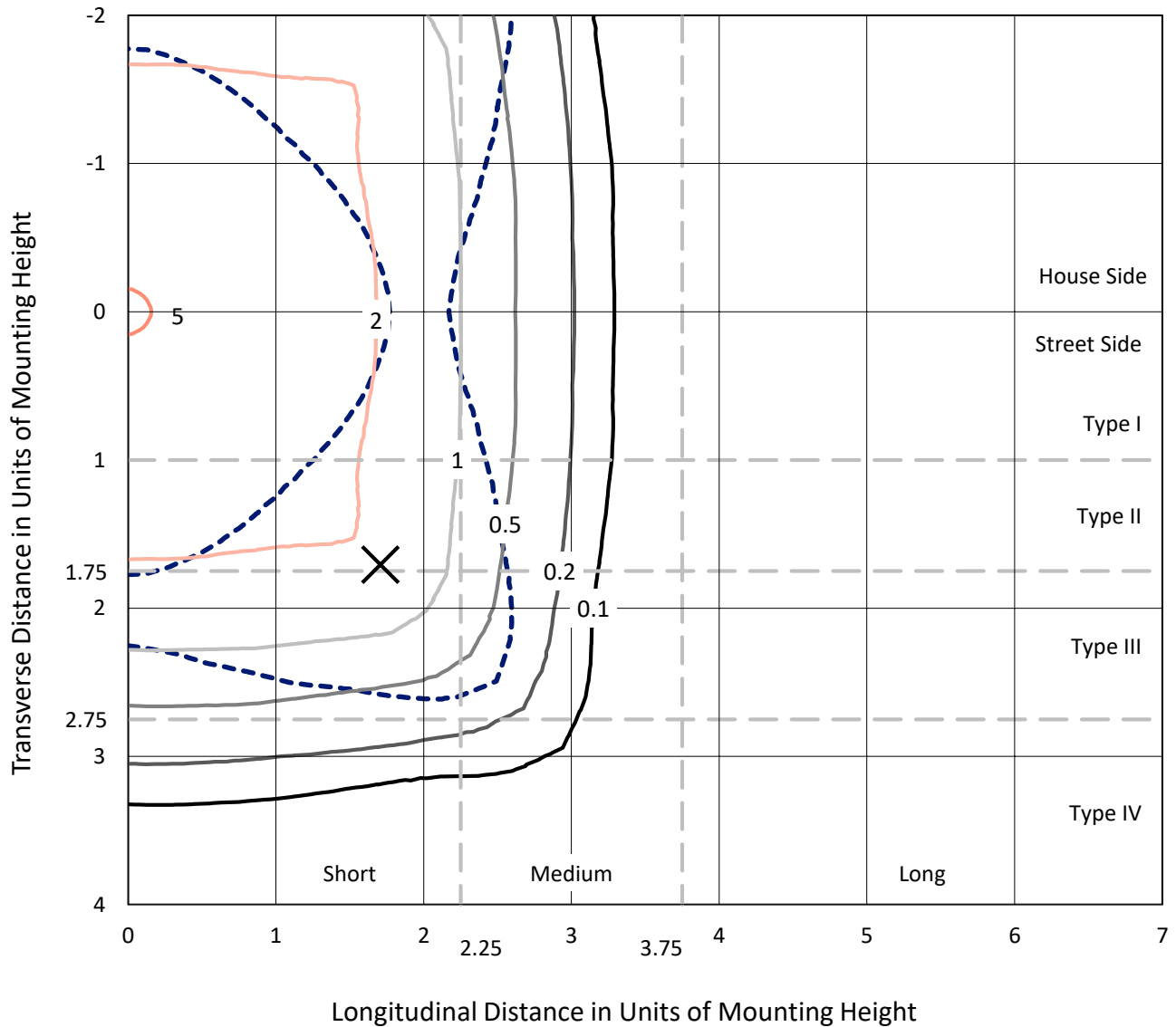
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

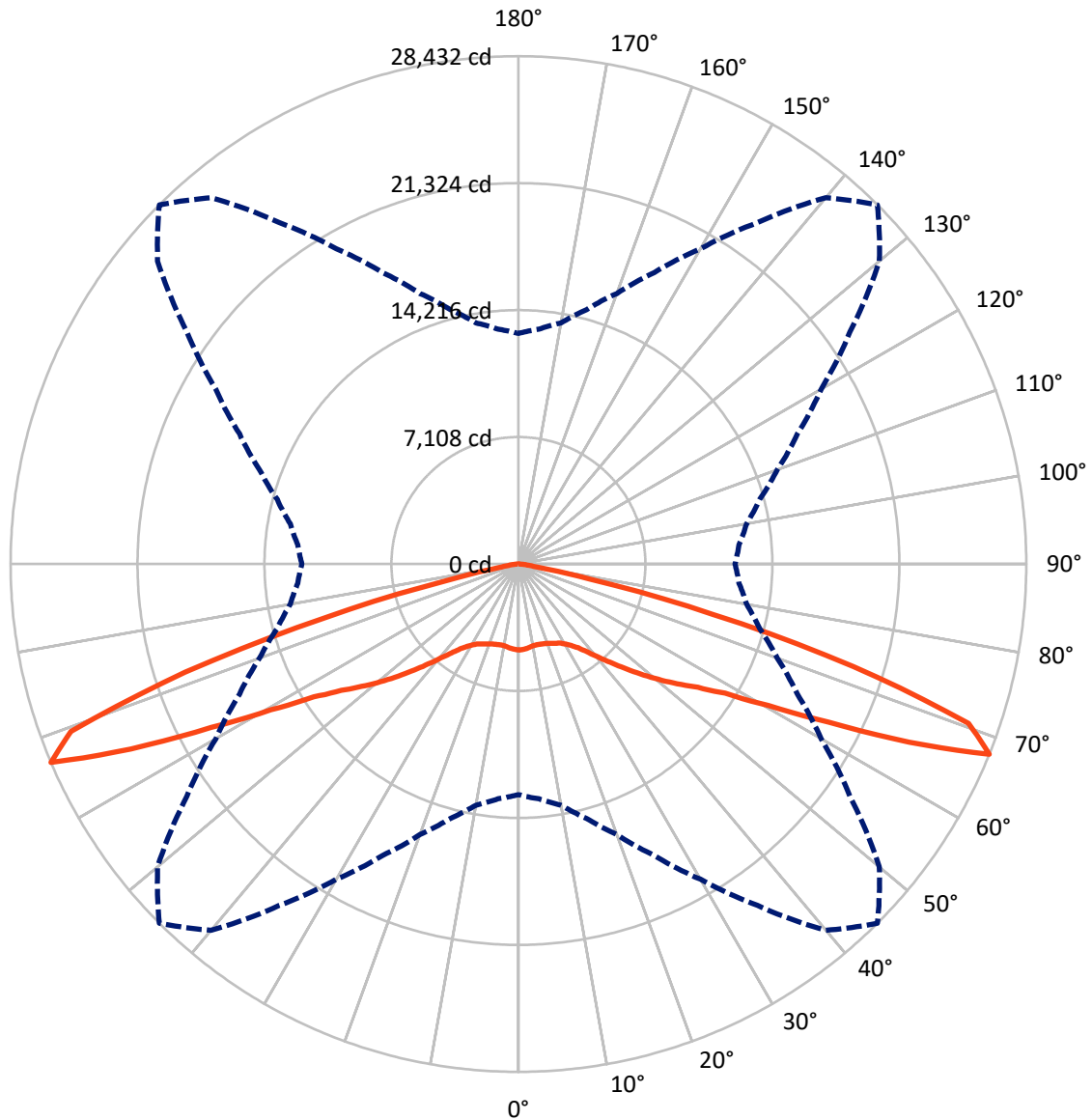
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.3 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	24154.5	0.0	24154.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	24154.5	0.0	24154.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	48309.0	0.0	48309.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	450.6	0.9
10°-20°	1307.5	2.7
20°-30°	2222.7	4.6
30°-40°	3633.5	7.5
40°-50°	6486.5	13.4
50°-60°	10936.4	22.6
60°-70°	16971.7	35.1
70°-80°	5963.1	12.3
80°-90°	337.0	0.7
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°	48309.0	100.0
0°-180°	48309.0	100.0



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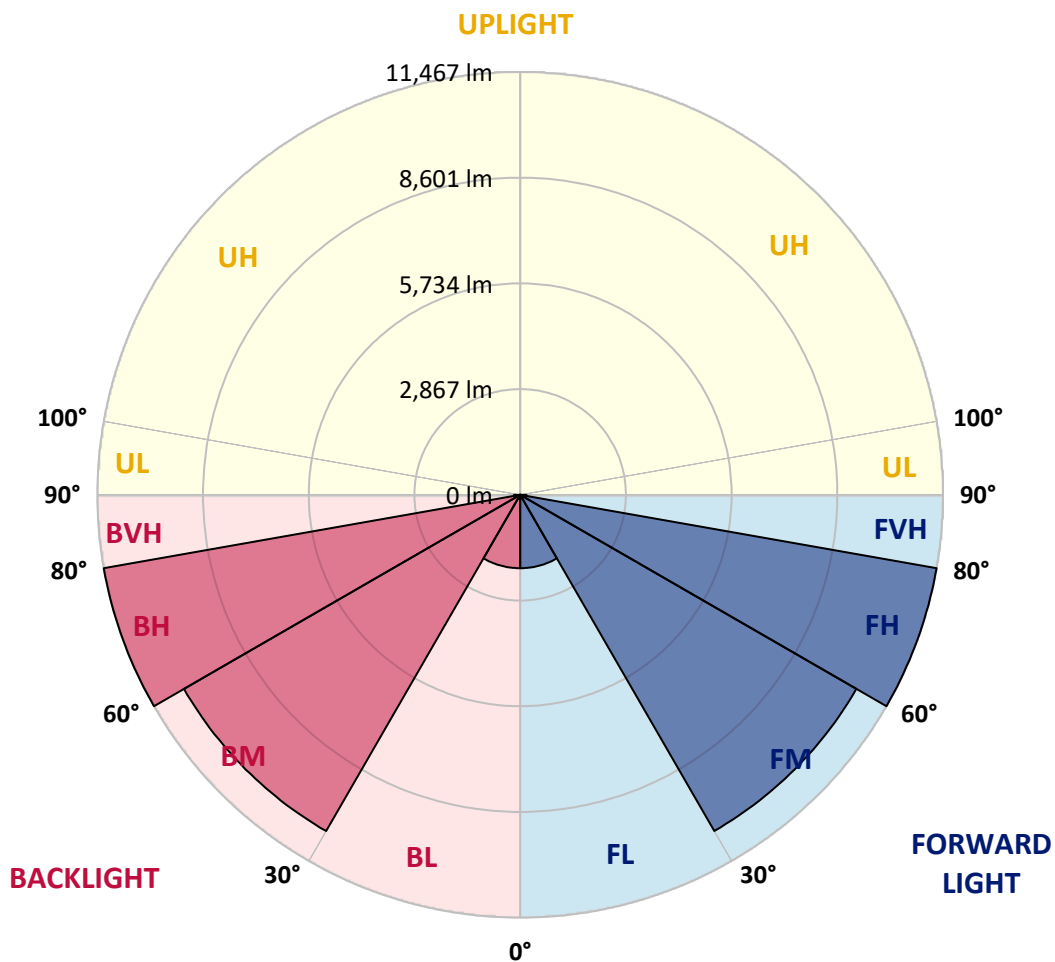
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1990.4	4.1			
FM	(30°-60°)	10528.2	21.8			
FH	(60°-80°)	11467.4	23.7			G4/12000
FVH	(80°-90°)	168.5	0.3			G2/225
BL	(0°-30°)	1990.4	4.1	B3/2500		
BM	(30°-60°)	10528.2	21.8	B5		
BH	(60°-80°)	11467.4	23.7	B5		G4/12000
BVH	(80°-90°)	168.5	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-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2
2.5°	4796.4	4800.9	4800.9	4800.9	4798.6	4798.6	4794.2	4798.6	4796.4	4789.8	4792.0
5°	4756.4	4760.9	4760.9	4758.7	4765.3	4763.1	4756.4	4760.9	4758.7	4754.2	4756.4
7.5°	4698.7	4705.3	4705.3	4703.1	4709.8	4707.6	4703.1	4705.3	4705.3	4698.7	4698.7
10°	4634.2	4638.7	4638.7	4636.5	4647.6	4647.6	4645.4	4652.0	4654.2	4647.6	4643.1
12.5°	4574.3	4580.9	4580.9	4589.8	4600.9	4605.4	4616.5	4625.4	4634.2	4632.0	4623.1
15°	4538.7	4543.2	4552.0	4563.2	4580.9	4596.5	4614.3	4634.2	4652.0	4656.5	4643.1
17.5°	4516.5	4523.2	4536.5	4552.0	4576.5	4603.1	4629.8	4656.5	4680.9	4689.8	4674.2
20°	4509.8	4514.3	4527.6	4554.3	4587.6	4627.6	4665.3	4696.5	4729.8	4740.9	4729.8
22.5°	4523.2	4532.1	4547.6	4578.7	4623.1	4674.2	4718.7	4760.9	4803.1	4823.1	4807.5
25°	4583.1	4592.0	4612.0	4652.0	4700.9	4754.2	4805.3	4854.2	4892.0	4911.9	4900.8
27.5°	4694.2	4705.3	4729.8	4769.8	4823.1	4880.8	4936.4	4976.4	5007.5	5014.1	5000.8
30°	4860.8	4885.3	4914.2	4958.6	5020.8	5069.7	5125.2	5160.8	5198.5	5198.5	5187.4
32.5°	5120.8	5145.2	5176.3	5218.5	5267.4	5320.7	5369.6	5400.7	5440.7	5442.9	5416.2
35°	5509.6	5520.7	5547.3	5574.0	5618.4	5665.1	5707.3	5727.3	5760.6	5762.8	5738.4
37.5°	6022.7	6025.0	6042.7	6051.6	6091.6	6142.7	6182.7	6196.0	6227.1	6222.7	6198.2
40°	6620.4	6631.5	6638.1	6651.5	6693.7	6742.5	6784.7	6791.4	6824.7	6818.1	6787.0
42.5°	7311.3	7315.7	7353.5	7373.5	7413.5	7437.9	7491.2	7497.9	7537.9	7520.1	7484.6
45°	8086.6	8126.6	8162.1	8202.1	8244.3	8273.2	8315.4	8306.5	8333.2	8306.5	8286.5
47.5°	8901.9	8930.8	9010.8	9073.0	9141.9	9166.3	9226.3	9199.6	9226.3	9188.5	9181.9
50°	9799.5	9850.6	9919.4	9990.5	10063.8	10103.8	10181.6	10148.2	10183.8	10148.2	10128.2
52.5°	10683.6	10697.0	10848.0	10952.5	11054.7	11101.3	11148.0	11132.4	11134.6	11132.4	11112.4
55°	11523.4	11554.5	11705.6	11847.8	12025.5	12156.6	12236.5	12227.7	12207.7	12187.7	12154.3
57.5°	12469.8	12500.9	12674.2	12849.7	13051.9	13238.5	13400.7	13567.3	13631.7	13649.5	13576.2
60°	13749.4	13747.2	13978.3	14191.5	14480.4	14758.1	15113.5	15475.6	15891.1	16084.3	15828.9
62.5°	15051.3	15104.6	15437.9	15815.5	16410.9	16990.8	17646.1	18290.4	18948.0	19483.4	18914.7
65°	14895.8	15100.2	15595.6	16450.9	17550.6	18856.9	20269.8	21765.0	23115.7	24044.3	23002.4
67.5°	12909.7	13200.7	13705.0	14744.7	16119.9	18003.8	20376.5	23333.4	26770.2	28432.0	26372.5
70°	9357.4	9686.2	10214.9	11230.2	12592.0	14382.6	16959.7	20509.8	25059.6	26734.7	24466.4
72.5°	4656.5	4834.2	5160.8	5807.2	6838.1	8291.0	10628.1	14040.5	18066.0	19603.4	17530.6
75°	1581.8	1664.0	1719.5	1930.6	2257.1	2828.1	3990.0	6138.3	9364.0	11225.7	9230.7
77.5°	913.1	915.3	953.1	990.8	1046.4	1108.6	1264.1	1659.5	2870.3	4076.6	2970.3
80°	590.9	588.7	619.8	648.7	686.5	717.6	726.5	768.7	886.4	1050.8	939.7
82.5°	306.6	344.3	413.2	451.0	522.1	535.4	517.6	502.1	531.0	551.0	564.3
85°	168.8	146.6	219.9	284.4	315.5	319.9	319.9	302.1	313.2	306.6	333.2
87.5°	77.8	71.1	86.6	140.0	148.8	126.6	133.3	117.7	84.4	82.2	93.3
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°	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2	4814.2
2.5°	4792.0	4794.2	4794.2	4800.9	4803.1	4807.5	4812.0	4814.2
5°	4754.2	4760.9	4756.4	4763.1	4763.1	4767.5	4767.5	4769.8
7.5°	4698.7	4705.3	4705.3	4705.3	4703.1	4709.8	4709.8	4709.8
10°	4640.9	4645.4	4643.1	4638.7	4634.2	4640.9	4638.7	4636.5
12.5°	4623.1	4612.0	4603.1	4598.7	4589.8	4592.0	4585.4	4585.4
15°	4634.2	4614.3	4598.7	4592.0	4583.1	4578.7	4574.3	4576.5
17.5°	4663.1	4638.7	4618.7	4607.6	4596.5	4589.8	4580.9	4583.1
20°	4714.2	4685.3	4656.5	4634.2	4614.3	4603.1	4596.5	4594.3
22.5°	4789.8	4747.5	4705.3	4672.0	4645.4	4629.8	4623.1	4618.7
25°	4876.4	4829.7	4780.9	4743.1	4716.4	4696.5	4683.1	4683.1
27.5°	4985.3	4947.5	4903.1	4858.6	4834.2	4814.2	4805.3	4800.9
30°	5167.4	5131.9	5096.3	5054.1	5023.0	5003.0	4987.5	4974.2
32.5°	5400.7	5371.8	5342.9	5311.8	5283.0	5256.3	5231.9	5220.7
35°	5729.5	5707.3	5687.3	5651.7	5640.6	5625.1	5611.7	5600.6
37.5°	6182.7	6173.8	6173.8	6136.0	6127.2	6120.5	6107.2	6109.4
40°	6778.1	6787.0	6775.9	6762.5	6755.9	6738.1	6738.1	6753.6
42.5°	7482.3	7489.0	7513.4	7491.2	7515.7	7493.4	7480.1	7491.2
45°	8299.9	8324.3	8373.2	8351.0	8366.5	8328.8	8282.1	8284.3
47.5°	9217.4	9239.6	9259.6	9244.1	9246.3	9184.1	9121.9	9106.3
50°	10170.5	10179.3	10190.5	10168.2	10172.7	10103.8	10032.7	10034.9
52.5°	11112.4	11154.6	11199.1	11139.1	11125.7	11048.0	10948.0	10908.0
55°	12189.9	12249.9	12198.8	12094.4	11989.9	11885.5	11754.5	11732.2
57.5°	13518.4	13416.2	13256.3	13058.5	12914.1	12767.5	12634.2	12578.7
60°	15366.8	14982.4	14693.6	14400.4	14216.0	14036.0	13860.5	13833.9
62.5°	17979.4	17315.1	16739.7	16133.2	15637.8	15251.2	14942.4	14855.8
65°	21254.0	19683.3	18321.5	17050.7	15946.6	15113.5	14589.2	14358.2
67.5°	22662.5	19561.1	17226.2	15422.3	13978.3	12969.7	12403.2	12121.0
70°	19914.4	16222.1	13682.8	11876.6	10561.5	9486.2	8973.0	8670.9
72.5°	13700.6	10319.3	8159.9	6660.3	5609.5	4709.8	4354.3	4327.7
75°	6151.6	4074.4	2808.1	2163.8	1821.7	1584.0	1510.7	1455.1
77.5°	1721.7	1273.0	1135.2	1061.9	990.8	908.6	877.5	884.2
80°	837.5	790.9	759.8	713.1	648.7	579.8	548.7	562.1
82.5°	555.4	548.7	568.7	535.4	442.1	375.4	315.5	288.8
85°	337.7	342.1	348.8	351.0	297.7	208.8	142.2	160.0
87.5°	133.3	153.3	166.6	173.3	162.2	100.0	80.0	82.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)