

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: P299612

Luminaire Tested: **GLNA-AF-07-LED-E1-5MQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299612
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-07-LED-E1-5MQ-7030
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 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: 42636.5 lumens
Efficiency: N/A
Efficacy: 109.0 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

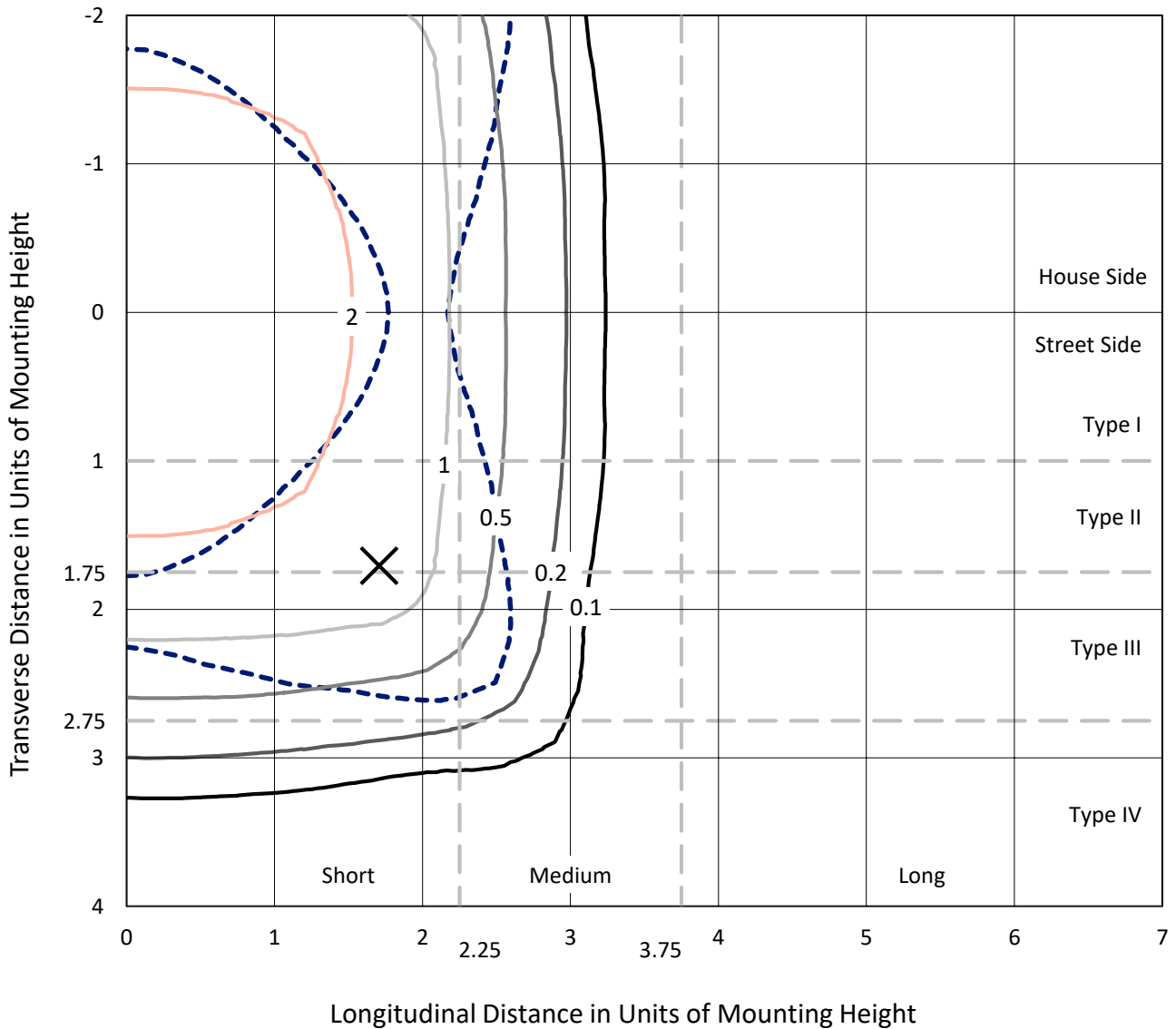
Input Watts (W): 391
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

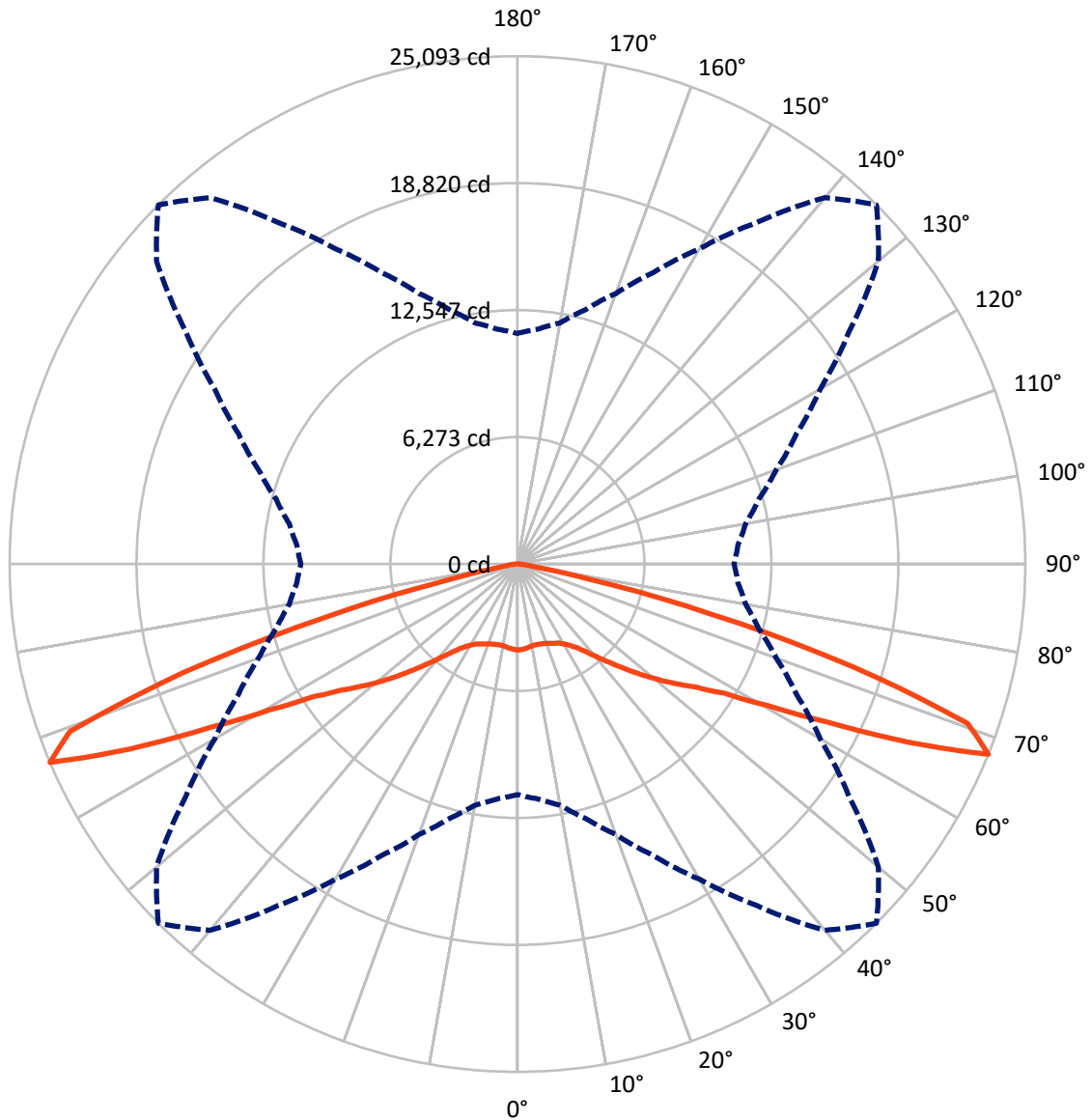
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 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	21318.2	0.0	21318.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21318.2	0.0	21318.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	42636.5	0.0	42636.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	397.7	0.9
10°-20°	1154.0	2.7
20°-30°	1961.7	4.6
30°-40°	3206.9	7.5
40°-50°	5724.8	13.4
50°-60°	9652.2	22.6
60°-70°	14978.8	35.1
70°-80°	5262.9	12.3
80°-90°	297.4	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°	42636.5	100.0
0°-180°	42636.5	100.0



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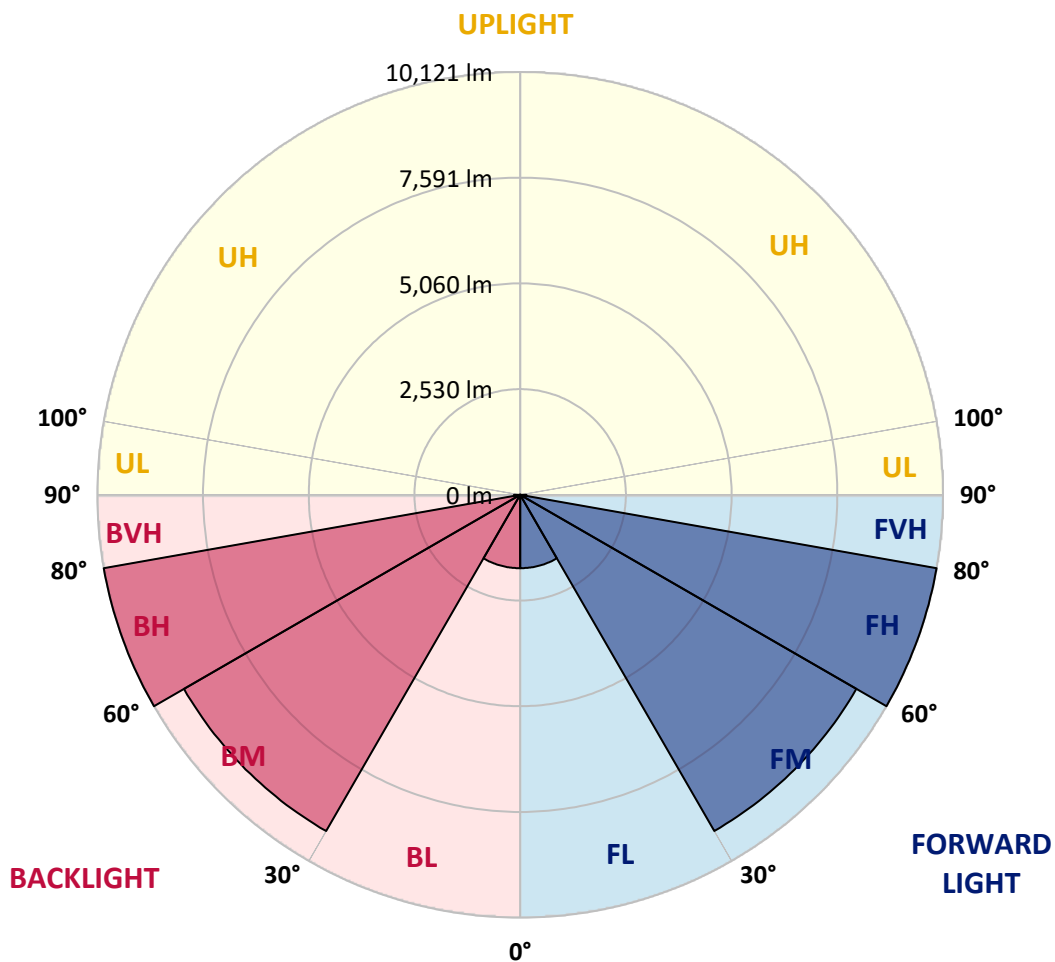
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1756.7	4.1			
FM	(30°-60°)	9292.0	21.8			
FH	(60°-80°)	10120.9	23.7			G4/12000
FVH	(80°-90°)	148.7	0.3			G2/225
BL	(0°-30°)	1756.7	4.1	B3/2500		
BM	(30°-60°)	9292.0	21.8	B5		
BH	(60°-80°)	10120.9	23.7	B5		G4/12000
BVH	(80°-90°)	148.7	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-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9
2.5°	4233.2	4237.1	4237.1	4237.1	4235.2	4235.2	4231.3	4235.2	4233.2	4227.3	4229.3
5°	4197.9	4201.8	4201.8	4199.9	4205.8	4203.8	4197.9	4201.8	4199.9	4196.0	4197.9
7.5°	4146.9	4152.8	4152.8	4150.9	4156.7	4154.8	4150.9	4152.8	4152.8	4146.9	4146.9
10°	4090.1	4094.0	4094.0	4092.0	4101.8	4101.8	4099.9	4105.8	4107.7	4101.8	4097.9
12.5°	4037.1	4043.0	4043.0	4050.9	4060.7	4064.6	4074.4	4082.2	4090.1	4088.1	4080.3
15°	4005.8	4009.7	4017.5	4027.3	4043.0	4056.8	4072.4	4090.1	4105.8	4109.7	4097.9
17.5°	3986.2	3992.0	4003.8	4017.5	4039.1	4062.6	4086.2	4109.7	4131.3	4139.1	4125.4
20°	3980.3	3984.2	3996.0	4019.5	4048.9	4084.2	4117.5	4145.0	4174.4	4184.2	4174.4
22.5°	3992.0	3999.9	4013.6	4041.1	4080.3	4125.4	4164.6	4201.8	4239.1	4256.7	4243.0
25°	4045.0	4052.8	4070.5	4105.8	4148.9	4196.0	4241.1	4284.2	4317.5	4335.2	4325.4
27.5°	4143.0	4152.8	4174.4	4209.7	4256.7	4307.7	4356.7	4392.0	4419.5	4425.4	4413.6
30°	4290.1	4311.6	4337.1	4376.3	4431.3	4474.4	4523.4	4554.8	4588.1	4588.1	4578.3
32.5°	4519.5	4541.1	4568.5	4605.8	4648.9	4695.9	4739.1	4766.5	4801.8	4803.8	4780.3
35°	4862.6	4872.4	4895.9	4919.5	4958.7	4999.9	5037.1	5054.8	5084.2	5086.1	5064.6
37.5°	5315.5	5317.5	5333.2	5341.0	5376.3	5421.4	5456.7	5468.5	5495.9	5492.0	5470.4
40°	5843.0	5852.8	5858.7	5870.4	5907.7	5950.8	5988.1	5994.0	6023.4	6017.5	5990.0
42.5°	6452.8	6456.7	6490.0	6507.7	6543.0	6564.5	6611.6	6617.5	6652.8	6637.1	6605.7
45°	7137.1	7172.4	7203.7	7239.0	7276.3	7301.8	7339.0	7331.2	7354.7	7331.2	7313.5
47.5°	7856.6	7882.1	7952.7	8007.6	8068.4	8090.0	8142.9	8119.4	8142.9	8109.6	8103.7
50°	8648.8	8693.9	8754.7	8817.4	8882.1	8917.4	8986.0	8956.6	8988.0	8956.6	8939.0
52.5°	9429.2	9440.9	9574.2	9666.4	9756.6	9797.8	9838.9	9825.2	9827.2	9825.2	9807.6
55°	10170.3	10197.8	10331.1	10456.6	10613.4	10729.1	10799.7	10791.9	10774.2	10756.6	10727.2
57.5°	11005.6	11033.0	11186.0	11340.9	11519.3	11684.0	11827.1	11974.2	12031.0	12046.7	11982.0
60°	12135.0	12133.0	12336.9	12525.1	12780.0	13025.1	13338.8	13658.4	14025.1	14195.7	13970.2
62.5°	13283.9	13331.0	13625.1	13958.4	14483.9	14995.7	15574.1	16142.7	16723.1	17195.6	16693.7
65°	13146.7	13327.1	13764.3	14519.2	15489.8	16642.7	17889.7	19209.3	20401.4	21221.0	20301.4
67.5°	11393.8	11650.7	12095.7	13013.4	14227.1	15889.8	17983.8	20593.5	23626.8	25093.4	23275.8
70°	8258.6	8548.8	9015.4	9911.5	11113.4	12693.8	14968.2	18101.5	22117.0	23595.4	21593.5
72.5°	4109.7	4266.5	4554.8	5125.3	6035.1	7317.4	9380.1	12391.8	15944.7	17301.5	15472.1
75°	1396.0	1468.6	1517.6	1703.9	1992.1	2496.0	3521.5	5417.5	8264.5	9907.6	8146.8
77.5°	805.9	807.8	841.2	874.5	923.5	978.4	1115.7	1464.7	2533.3	3597.9	2621.5
80°	521.6	519.6	547.0	572.5	605.9	633.3	641.2	678.4	782.3	927.4	829.4
82.5°	270.6	303.9	364.7	398.0	460.8	472.5	456.9	443.1	468.6	486.3	498.0
85°	149.0	129.4	194.1	251.0	278.4	282.3	282.3	266.7	276.5	270.6	294.1
87.5°	68.6	62.7	76.5	123.5	131.4	111.8	117.6	103.9	74.5	72.5	82.4
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°	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9	4248.9
2.5°	4229.3	4231.3	4231.3	4237.1	4239.1	4243.0	4246.9	4248.9
5°	4196.0	4201.8	4197.9	4203.8	4203.8	4207.7	4207.7	4209.7
7.5°	4146.9	4152.8	4152.8	4152.8	4150.9	4156.7	4156.7	4156.7
10°	4096.0	4099.9	4097.9	4094.0	4090.1	4096.0	4094.0	4092.0
12.5°	4080.3	4070.5	4062.6	4058.7	4050.9	4052.8	4046.9	4046.9
15°	4090.1	4072.4	4058.7	4052.8	4045.0	4041.1	4037.1	4039.1
17.5°	4115.6	4094.0	4076.4	4066.6	4056.8	4050.9	4043.0	4045.0
20°	4160.7	4135.2	4109.7	4090.1	4072.4	4062.6	4056.8	4054.8
22.5°	4227.3	4190.1	4152.8	4123.4	4099.9	4086.2	4080.3	4076.4
25°	4303.8	4262.6	4219.5	4186.2	4162.6	4145.0	4133.2	4133.2
27.5°	4399.9	4366.5	4327.3	4288.1	4266.5	4248.9	4241.1	4237.1
30°	4560.7	4529.3	4497.9	4460.7	4433.2	4415.6	4401.8	4390.1
32.5°	4766.5	4741.0	4715.6	4688.1	4662.6	4639.1	4617.5	4607.7
35°	5056.7	5037.1	5019.5	4988.1	4978.3	4964.6	4952.8	4943.0
37.5°	5456.7	5448.9	5448.9	5415.5	5407.7	5401.8	5390.0	5392.0
40°	5982.2	5990.0	5980.2	5968.5	5962.6	5946.9	5946.9	5960.6
42.5°	6603.7	6609.6	6631.2	6611.6	6633.2	6613.5	6601.8	6611.6
45°	7325.3	7346.9	7390.0	7370.4	7384.1	7350.8	7309.6	7311.6
47.5°	8135.1	8154.7	8172.3	8158.6	8160.6	8105.7	8050.8	8037.0
50°	8976.2	8984.1	8993.9	8974.3	8978.2	8917.4	8854.7	8856.6
52.5°	9807.6	9844.8	9884.0	9831.1	9819.3	9750.7	9662.5	9627.2
55°	10758.5	10811.5	10766.4	10674.2	10582.1	10489.9	10374.2	10354.6
57.5°	11931.0	11840.8	11699.7	11525.2	11397.7	11268.3	11150.7	11101.7
60°	13562.4	13223.2	12968.3	12709.5	12546.7	12387.9	12233.0	12209.5
62.5°	15868.2	15281.9	14774.1	14238.8	13801.6	13460.4	13187.9	13111.4
65°	18758.3	17372.1	16170.1	15048.6	14074.1	13338.8	12876.1	12672.2
67.5°	20001.4	17264.2	15203.5	13611.4	12336.9	11446.7	10946.8	10697.7
70°	17576.0	14317.3	12076.1	10482.1	9321.3	8372.3	7919.4	7652.7
72.5°	12091.8	9107.6	7201.8	5878.3	4950.8	4156.7	3843.0	3819.5
75°	5429.3	3596.0	2478.4	1909.8	1607.8	1398.0	1333.3	1284.3
77.5°	1519.6	1123.5	1001.9	937.2	874.5	801.9	774.5	780.4
80°	739.2	698.0	670.6	629.4	572.5	511.8	484.3	496.1
82.5°	490.2	484.3	501.9	472.5	390.2	331.4	278.4	254.9
85°	298.0	302.0	307.8	309.8	262.7	184.3	125.5	141.2
87.5°	117.6	135.3	147.1	152.9	143.1	88.2	70.6	72.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)