

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: P299605

Luminaire Tested: **GLNA-AF-06-LED-E1-SL2-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299605
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-06-LED-E1-SL2-7027-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23272.8 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G4

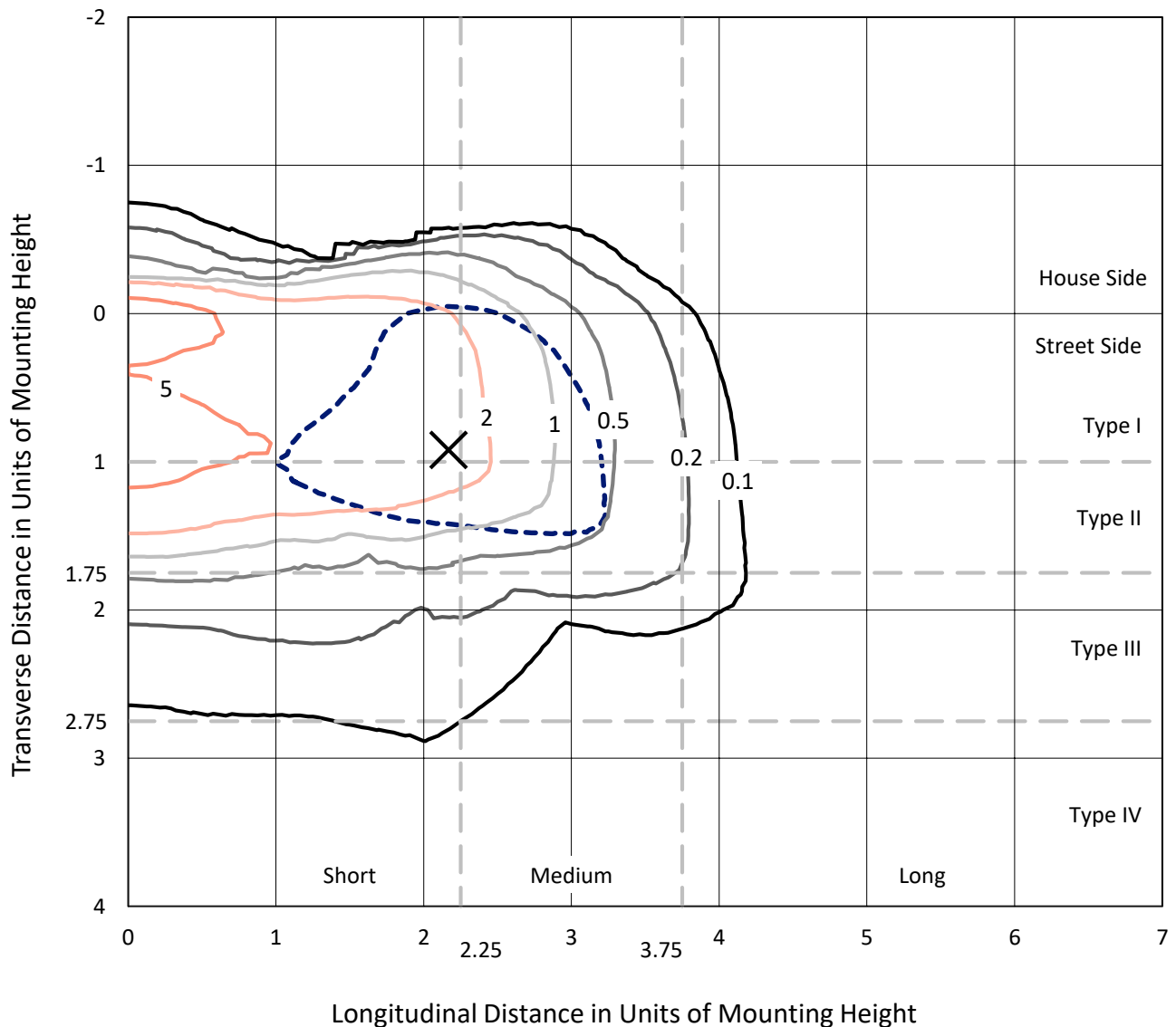
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

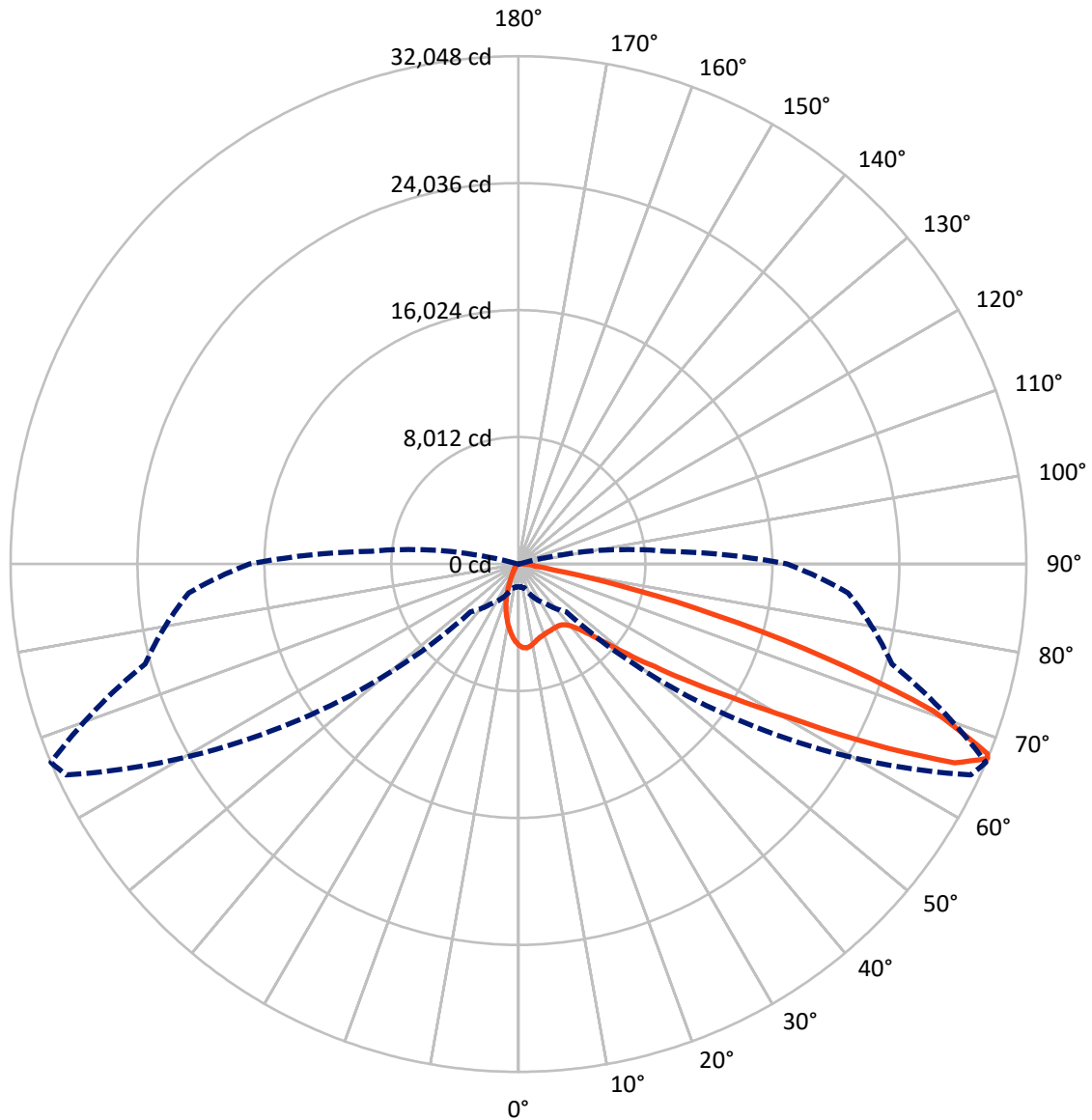
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2416.4	0.0	2416.4
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	20856.4	0.0	20856.4
	% Fixture	89.6	0.0	89.6
Total	Lumens	23272.8	0.0	23272.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	417.6	1.8
10°-20°	888.9	3.8
20°-30°	1292.3	5.6
30°-40°	2016.1	8.7
40°-50°	3571.4	15.3
50°-60°	5651.4	24.3
60°-70°	6472.9	27.8
70°-80°	2684.9	11.5
80°-90°	277.3	1.2
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°	23272.8	100.0
0°-180°	23272.8	100.0



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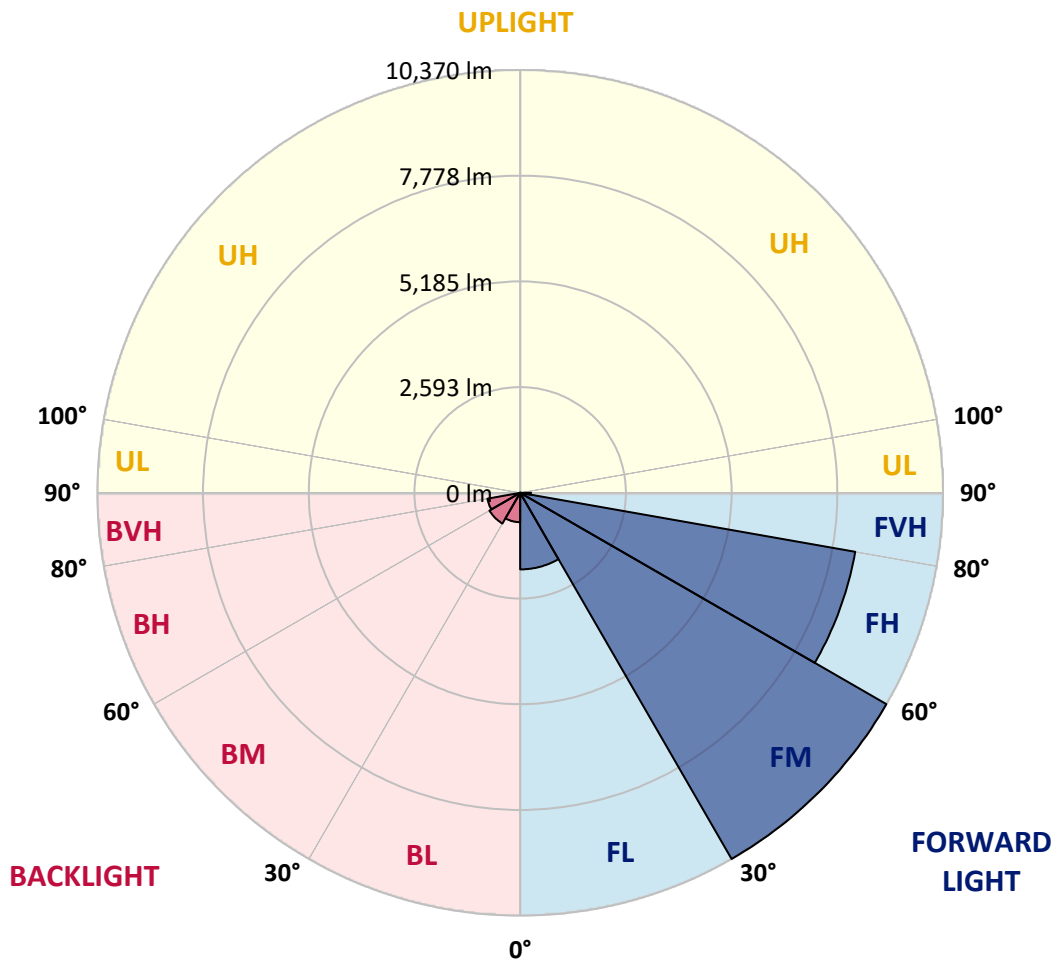
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1877.8	8.1			
FM	(30°-60°)	10370.4	44.6			
FH	(60°-80°)	8343.4	35.9			G4/12000
FVH	(80°-90°)	264.8	1.1			G3/500
BL	(0°-30°)	721.1	3.1	B2/1000		
BM	(30°-60°)	868.4	3.7	B1/1000		
BH	(60°-80°)	814.4	3.5	B2/1000		G2/1000
BVH	(80°-90°)	12.5	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5
2.5°	5306.3	5317.1	5315.8	5323.9	5342.9	5344.3	5325.3	5288.6	5280.5	5233.0	5150.2
5°	4893.6	4924.8	4943.8	5021.2	5108.1	5212.6	5291.3	5319.8	5315.8	5281.8	5157.0
7.5°	4422.6	4453.8	4475.5	4566.5	4681.8	4861.0	5066.0	5234.3	5249.3	5285.9	5151.5
10°	4109.0	4114.4	4144.3	4231.2	4352.0	4535.2	4779.6	5074.1	5118.9	5253.3	5137.9
12.5°	3851.1	3855.2	3894.5	3988.2	4117.1	4301.8	4558.3	4899.0	4968.3	5212.6	5135.2
15°	3667.8	3682.8	3718.1	3815.8	3952.9	4136.1	4399.5	4770.1	4852.9	5197.7	5159.7
17.5°	3606.7	3623.0	3633.9	3704.5	3829.4	4008.5	4278.7	4685.9	4779.6	5205.8	5207.2
20°	3670.5	3682.8	3658.3	3676.0	3753.3	3913.5	4176.9	4614.0	4725.3	5215.3	5268.3
22.5°	3908.1	3913.5	3847.0	3769.6	3756.1	3844.3	4096.8	4557.0	4676.4	5241.1	5340.2
25°	4315.3	4305.8	4197.2	4030.3	3872.8	3832.1	4049.3	4521.7	4652.0	5268.3	5414.9
27.5°	4806.7	4820.3	4671.0	4428.0	4128.0	3913.5	4042.5	4506.7	4641.1	5287.3	5480.0
30°	5404.0	5423.0	5252.0	4946.5	4516.2	4114.4	4104.9	4504.0	4634.3	5275.0	5485.5
32.5°	6013.5	6036.6	5902.2	5587.3	5034.8	4451.1	4246.1	4533.9	4647.9	5233.0	5454.2
35°	6651.5	6684.1	6594.5	6324.4	5737.9	4937.0	4494.5	4624.8	4711.7	5228.9	5423.0
37.5°	7532.5	7562.4	7394.0	7107.6	6589.1	5588.6	4893.6	4795.9	4862.4	5294.1	5431.2
40°	8847.9	8843.8	8409.4	7970.9	7524.3	6416.7	5454.2	5105.4	5139.3	5490.9	5531.6
42.5°	10281.3	10274.5	9632.5	8966.0	8562.8	7436.1	6191.3	5640.2	5617.1	5853.3	5792.2
45°	11386.3	11384.9	10861.0	10110.3	9813.0	8606.2	7144.3	6384.1	6348.8	6442.5	6272.8
47.5°	11857.3	11865.5	11602.1	11074.1	11199.0	10189.0	8345.6	7461.9	7409.0	7371.0	7113.0
50°	11490.8	11507.1	11528.8	11425.7	12215.7	12316.1	9956.9	8980.9	8955.1	8785.4	8382.3
52.5°	10293.5	10376.3	10631.5	10958.7	12568.6	14357.7	12483.1	10867.7	10729.3	10548.7	10104.9
55°	8276.4	8367.3	8851.9	9646.0	12043.3	15698.9	16023.3	13300.3	13069.5	12530.6	11889.9
57.5°	5477.3	5618.5	6321.6	7331.6	10517.5	15914.7	19555.4	16676.3	15872.7	14397.1	13674.9
60°	3017.6	3153.4	3916.2	4831.2	7596.3	14847.8	21931.0	21071.7	19651.8	16483.5	15842.8
62.5°	1858.3	1931.7	2495.0	3346.1	4555.6	11718.9	22422.4	26595.2	24951.3	19169.9	18461.3
65°	1479.6	1510.8	1786.4	2735.3	3266.0	6970.5	20835.5	30806.0	30257.6	22422.4	20805.6
67°	1436.2	1448.4	1578.7	2348.4	3078.7	4273.3	17455.4	31491.5	32048.0	24390.7	20878.9
67.5°	1445.7	1459.3	1582.8	2241.1	3073.3	3927.1	16290.8	31221.3	31924.5	24546.8	20554.5
70°	1394.1	1436.2	1812.2	2239.8	2922.6	3263.3	9756.0	27051.3	27782.9	22807.9	17440.5
72.5°	494.1	496.8	783.2	1812.2	3177.8	3298.6	4899.0	19831.0	20372.6	17447.3	12574.1
75°	293.2	249.8	260.6	515.8	3036.6	3203.6	2826.2	12671.8	12874.1	9997.6	6367.8
77.5°	202.3	176.5	181.9	228.1	1156.5	3158.8	2245.2	6608.1	6392.2	3506.3	1356.1
80°	115.4	101.8	108.6	199.5	420.8	2947.0	2117.6	2679.6	2284.6	594.6	374.7
82.5°	61.1	51.6	62.4	164.3	293.2	1836.6	2121.7	1295.0	1026.2	200.9	255.2
85°	21.7	17.6	29.9	112.7	195.5	563.3	1966.9	1088.7	855.2	97.7	194.1
87.5°	4.1	4.1	12.2	46.2	78.7	172.4	1163.3	646.1	433.0	58.4	133.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5	5132.5
2.5°	5116.2	5057.9	4979.1	4882.7	4768.7	4668.3	4593.6	4516.2	4499.9	4472.8	4468.7
5°	5082.3	4981.8	4786.4	4562.4	4323.5	4107.6	3932.5	3776.4	3707.2	3647.5	3640.7
7.5°	5032.1	4881.4	4548.8	4187.7	3814.4	3475.1	3187.3	2983.7	2796.3	2706.8	2693.2
10°	4973.7	4757.9	4281.4	3780.5	3264.7	2785.5	2357.9	1999.5	1782.3	1653.4	1637.1
12.5°	4919.4	4637.0	4008.5	3358.3	2672.8	2032.1	1482.3	1140.3	912.2	819.9	809.0
15°	4893.6	4539.3	3753.3	2926.7	2053.8	1293.6	810.4	627.1	552.5	530.8	529.4
17.5°	4890.9	4456.5	3503.6	2480.1	1438.9	752.0	528.0	481.9	467.0	461.5	461.5
20°	4889.5	4377.8	3253.8	2017.2	913.6	500.9	439.8	429.0	418.1	411.3	411.3
22.5°	4904.5	4307.2	2993.2	1544.8	575.6	405.9	386.9	376.0	362.4	352.9	351.6
25°	4919.4	4252.9	2727.1	1099.5	416.7	352.9	333.9	319.0	300.0	287.8	286.4
27.5°	4922.1	4185.0	2442.1	735.7	348.9	308.1	283.7	260.6	238.9	226.7	225.3
30°	4881.4	4071.0	2125.8	496.8	308.1	267.4	234.8	210.4	190.0	180.5	180.5
32.5°	4801.3	3929.8	1778.3	374.7	274.2	229.4	194.1	171.0	157.5	153.4	152.0
35°	4729.4	3777.8	1421.2	317.6	245.7	194.1	158.8	143.9	135.7	134.4	133.0
37.5°	4687.3	3655.6	1086.0	287.8	218.5	162.9	134.4	123.5	119.5	116.7	118.1
40°	4719.9	3553.8	802.3	263.3	191.4	135.7	114.0	108.6	104.5	103.2	103.2
42.5°	4862.4	3536.2	595.9	241.6	165.6	112.7	99.1	95.0	92.3	90.9	92.3
45°	5237.0	3644.8	462.9	221.3	139.8	95.0	84.2	82.8	81.4	81.4	81.4
47.5°	5800.4	3868.7	385.5	198.2	116.7	81.4	73.3	71.9	70.6	71.9	71.9
50°	6754.7	4278.7	344.8	175.1	96.4	69.2	62.4	62.4	62.4	62.4	63.8
52.5°	8205.8	5085.0	317.6	152.0	78.7	58.4	52.9	52.9	54.3	54.3	55.7
55°	9822.5	6154.7	293.2	129.0	66.5	48.9	43.4	44.8	46.2	47.5	47.5
57.5°	11576.3	7339.7	272.8	105.9	57.0	39.4	36.7	38.0	39.4	42.1	42.1
60°	13692.6	8622.5	243.0	82.8	47.5	31.2	28.5	31.2	35.3	38.0	39.4
62.5°	16016.5	9863.2	205.0	65.2	39.4	24.4	23.1	28.5	33.9	36.7	38.0
65°	17604.8	10252.8	157.5	52.9	29.9	17.6	19.0	25.8	32.6	36.7	36.7
67°	16961.3	9295.8	129.0	44.8	24.4	13.6	17.6	25.8	32.6	35.3	36.7
67.5°	16514.7	8921.2	123.5	43.4	23.1	13.6	17.6	25.8	32.6	36.7	36.7
70°	13437.4	6701.7	103.2	32.6	19.0	12.2	14.9	24.4	31.2	35.3	35.3
72.5°	9336.5	4132.1	92.3	23.1	16.3	10.9	13.6	23.1	29.9	33.9	35.3
75°	4438.9	1495.9	78.7	17.6	14.9	9.5	12.2	23.1	29.9	33.9	33.9
77.5°	905.4	347.5	63.8	14.9	12.2	9.5	10.9	21.7	28.5	32.6	32.6
80°	297.3	134.4	47.5	13.6	12.2	9.5	10.9	20.4	28.5	31.2	32.6
82.5°	214.5	67.9	31.2	13.6	12.2	9.5	9.5	20.4	27.1	31.2	31.2
85°	164.3	47.5	20.4	13.6	12.2	9.5	9.5	19.0	25.8	29.9	29.9
87.5°	108.6	19.0	16.3	13.6	12.2	9.5	9.5	19.0	24.4	28.5	29.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)