

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: P299995

Luminaire Tested: **GLNA-AF-07-LED-E1-SL3-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
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-SL3-7027-800-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22934.2 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B2 - U0 - G4

Input Watts (W): 295
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

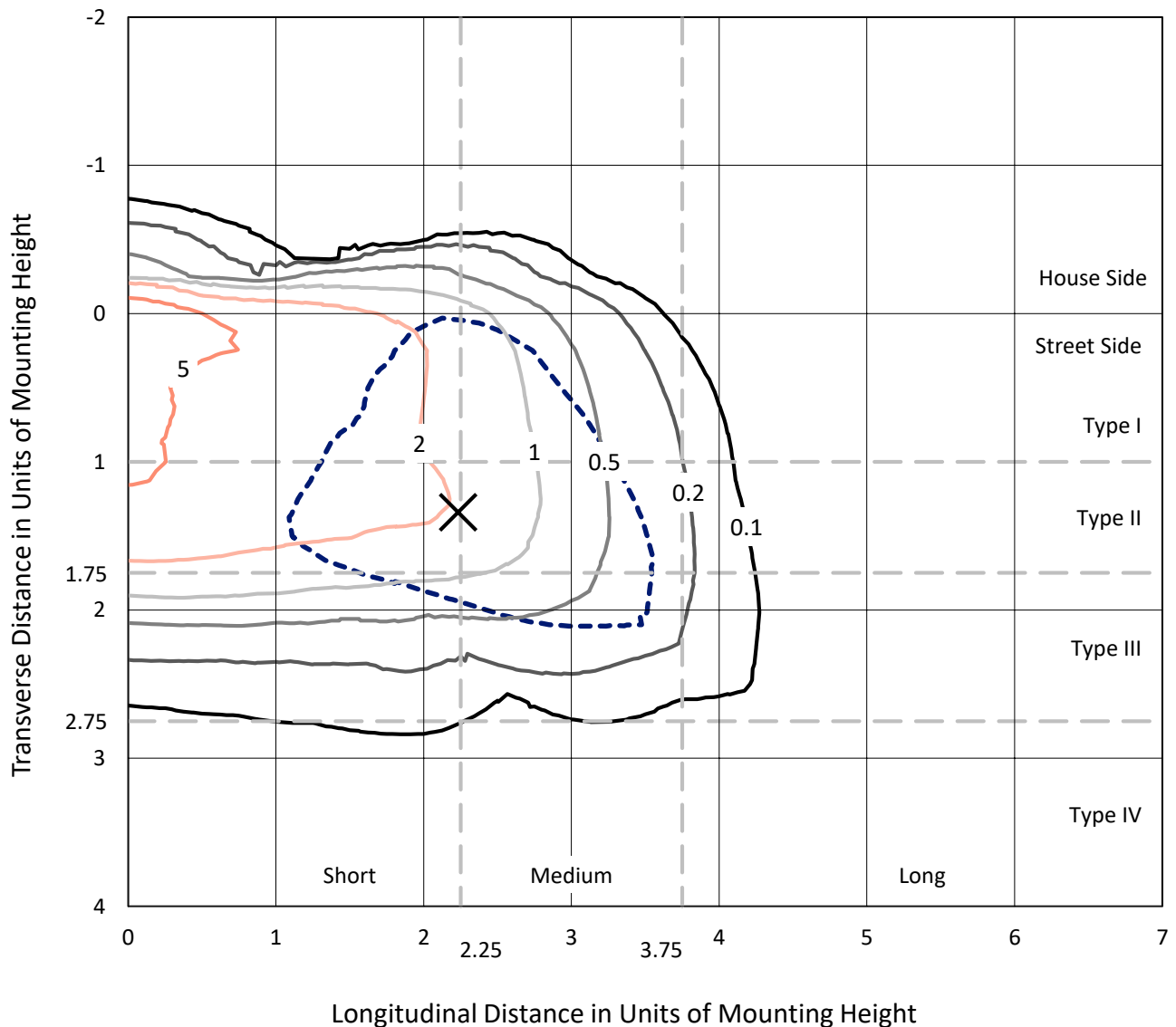


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

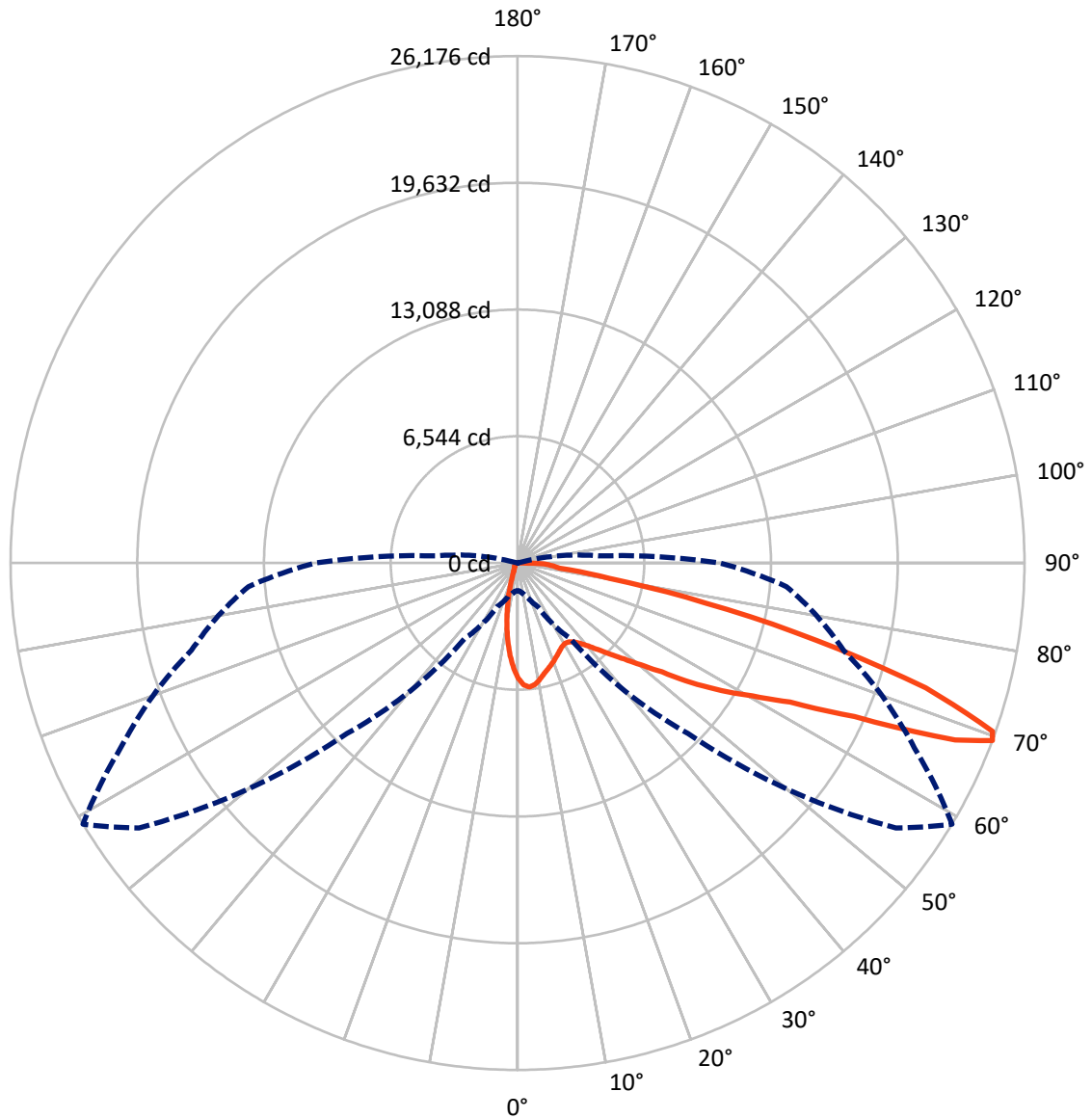


Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1867.7	0.0	1867.7
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	21066.5	0.0	21066.5
	% Fixture	91.9	0.0	91.9
Total	Lumens	22934.2	0.0	22934.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	484.5	2.1
10°-20°	1001.2	4.4
20°-30°	1347.2	5.9
30°-40°	1956.1	8.5
40°-50°	3257.1	14.2
50°-60°	5081.0	22.2
60°-70°	6287.3	27.4
70°-80°	3186.3	13.9
80°-90°	333.4	1.5
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°	22934.2	100.0
0°-180°	22934.2	100.0



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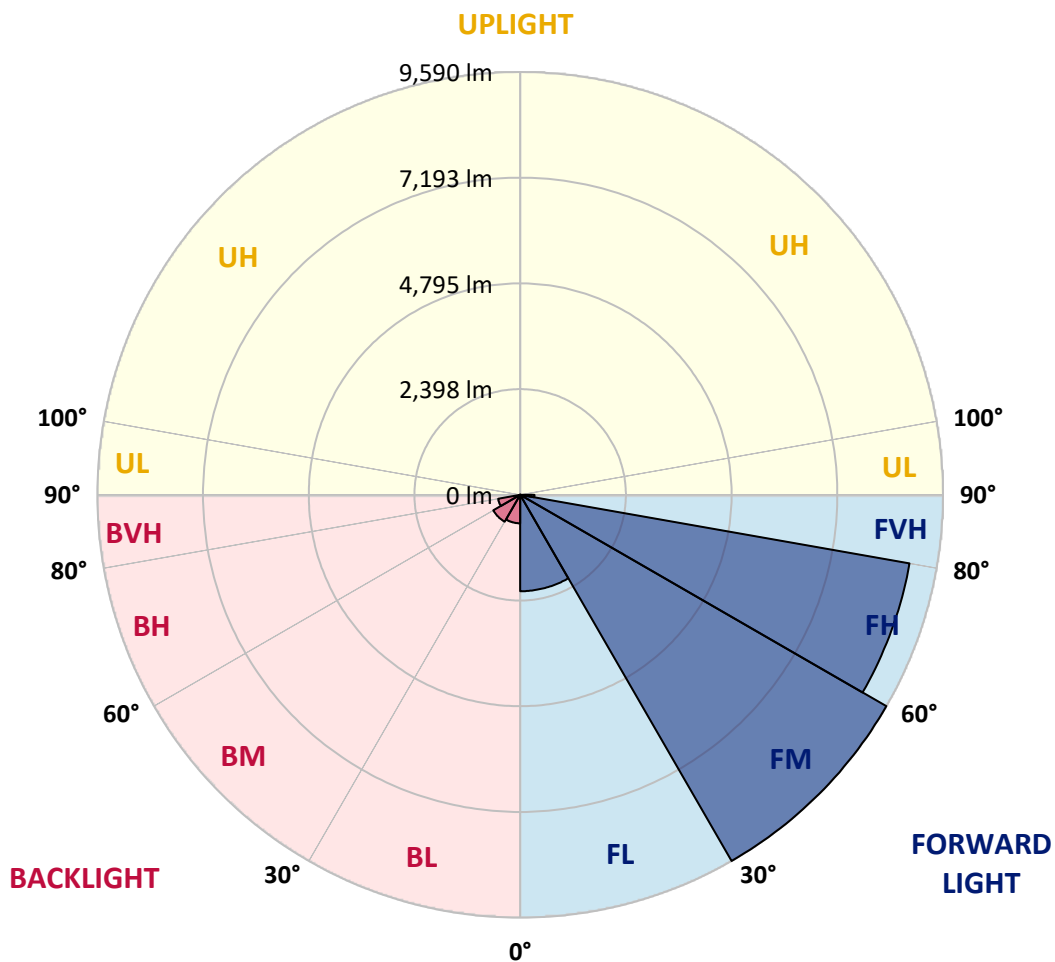
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2186.5	9.5			
FM	(30°-60°)	9590.4	41.8			
FH	(60°-80°)	8966.4	39.1			G4/12000
FVH	(80°-90°)	323.1	1.4			G3/500
BL	(0°-30°)	646.5	2.8	B2/1000		
BM	(30°-60°)	703.7	3.1	B1/1000		
BH	(60°-80°)	507.2	2.2	B2/1000		G2/1000
BVH	(80°-90°)	10.3	0.0			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3
2.5°	6542.6	6540.2	6511.6	6498.6	6475.1	6426.0	6349.4	6309.4	6244.6	6131.5	5979.9
5°	6482.9	6514.3	6530.8	6532.4	6549.3	6530.8	6462.1	6428.7	6339.2	6157.4	5885.3
7.5°	6078.5	6089.9	6138.2	6179.4	6259.9	6336.4	6361.2	6346.7	6293.7	6099.3	5737.3
10°	5645.4	5656.8	5714.1	5768.3	5877.5	5995.2	6119.7	6146.0	6168.0	6016.1	5594.7
12.5°	5271.6	5283.4	5341.9	5413.0	5540.2	5685.4	5878.6	5921.4	6018.8	5937.1	5480.5
15°	4950.0	4955.1	5012.5	5100.4	5252.4	5438.9	5658.4	5727.1	5876.3	5881.4	5380.8
17.5°	4676.4	4689.3	4724.7	4808.7	4974.8	5205.6	5461.3	5559.8	5734.5	5834.7	5283.4
20°	4509.1	4522.1	4520.9	4567.6	4716.8	4963.0	5264.1	5381.9	5594.7	5786.8	5196.6
22.5°	4476.9	4476.9	4443.1	4436.5	4524.8	4730.9	5059.2	5202.9	5468.7	5765.9	5135.8
25°	4592.3	4586.8	4502.8	4434.1	4438.0	4560.9	4860.5	5031.7	5362.7	5780.1	5103.2
27.5°	4836.2	4829.5	4723.1	4592.3	4487.1	4485.9	4710.1	4894.3	5278.3	5847.6	5116.1
30°	5173.1	5170.7	5055.3	4890.4	4699.9	4524.8	4658.3	4825.6	5223.7	5969.3	5146.0
32.5°	5541.4	5537.4	5450.7	5277.1	5035.6	4699.9	4712.9	4853.0	5239.4	6131.5	5218.6
35°	5932.0	5925.4	5887.7	5736.1	5470.3	5022.7	4891.9	5000.7	5338.0	6374.1	5361.1
37.5°	6354.5	6361.2	6388.3	6243.0	5964.2	5475.4	5191.5	5265.3	5536.2	6703.6	5593.2
40°	6978.4	6977.2	6986.3	6795.4	6527.3	6029.0	5610.1	5633.6	5868.4	7140.6	5946.2
42.5°	8110.4	8031.5	7791.6	7402.5	7132.7	6661.9	6138.2	6113.4	6274.4	7681.2	6440.1
45°	9631.9	9463.1	8840.7	8095.1	7750.0	7375.4	6787.6	6708.7	6811.2	8331.1	7049.9
47.5°	10940.2	10765.1	9884.8	8816.0	8404.9	8052.3	7548.9	7406.4	7440.2	9058.6	7822.6
50°	11385.0	11299.4	10530.6	9443.8	9039.0	8904.3	8432.4	8258.4	8210.5	9900.1	8718.6
52.5°	11230.7	11224.4	10712.0	9851.0	9620.1	9786.2	9543.5	9342.5	9166.2	10787.4	9630.3
55°	10983.0	11015.6	10785.9	10207.5	10199.6	10591.5	11063.5	10896.2	10385.4	11751.0	10416.4
57.5°	10299.8	10438.4	10744.6	10882.1	11200.9	11601.8	12329.3	12427.9	11823.6	12488.8	11068.6
60°	8357.0	8661.7	9662.9	10979.0	12491.5	13490.0	13857.1	13941.1	13003.5	13102.1	11949.3
62.5°	5932.0	6243.0	7512.8	9739.5	12510.7	15970.7	16132.9	15802.3	14303.1	14011.4	13468.0
65°	3148.6	3388.9	4426.2	7030.2	10847.1	16546.7	20113.1	19127.5	16595.8	15799.5	15430.0
67.5°	1610.6	1683.3	2095.9	3440.7	7457.0	14697.4	23680.6	24374.4	20547.3	17573.9	15335.4
69°	1425.3	1468.1	1741.8	2487.4	4774.9	12448.7	23854.5	26175.8	22616.2	17425.8	13936.0
70°	1379.7	1417.4	1666.4	2251.4	3732.5	10439.6	23189.0	26017.6	23145.0	16863.2	12890.8
72.5°	1171.2	1203.4	1483.8	1989.5	3033.5	5182.1	18837.0	22046.8	20769.2	14047.5	9330.7
75°	783.3	889.7	1424.1	1865.0	2821.9	2944.0	12418.9	15931.8	14799.8	9474.8	4860.5
77.5°	188.1	202.2	402.1	1483.8	2580.8	2591.0	6387.1	9904.0	8078.2	3377.1	1148.9
80°	101.3	97.4	112.7	294.5	2403.0	2431.6	2875.3	4807.5	2884.3	560.3	378.5
82.5°	71.5	67.5	72.6	123.3	756.2	2214.9	2080.2	2176.0	1195.6	215.2	170.0
85°	25.9	24.7	40.0	111.5	237.2	1273.3	2137.1	1794.8	968.6	98.6	124.5
87.5°	9.0	7.9	15.7	60.9	72.6	542.2	1318.9	1356.6	381.3	59.7	58.5
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°	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3	5969.3
2.5°	5916.3	5835.8	5688.2	5536.2	5396.1	5227.6	5143.2	5060.4	5025.4	5012.5	4951.6
5°	5745.1	5608.9	5295.2	4979.9	4689.3	4380.7	4177.3	4014.0	3917.8	3871.1	3797.2
7.5°	5526.0	5303.0	4826.7	4340.7	3887.9	3441.9	3111.3	2856.9	2681.7	2597.7	2521.2
10°	5313.2	5016.4	4339.5	3676.7	3061.8	2470.5	2013.9	1683.3	1472.0	1374.6	1312.6
12.5°	5122.8	4737.6	3868.7	3029.6	2257.7	1565.5	1101.0	837.9	706.8	661.2	639.2
15°	4952.8	4480.8	3423.8	2414.7	1528.9	894.8	601.9	512.4	491.6	491.6	488.8
17.5°	4791.8	4229.1	2994.3	1837.6	959.6	547.3	457.8	446.0	446.0	451.1	451.1
20°	4637.5	3989.2	2579.3	1318.9	604.3	434.3	413.8	411.1	413.8	420.1	420.1
22.5°	4505.2	3771.3	2191.7	905.0	448.8	391.5	381.3	377.3	378.5	382.4	385.2
25°	4406.6	3587.2	1826.2	613.3	386.4	356.5	345.1	338.5	333.4	333.4	335.7
27.5°	4344.6	3431.7	1472.0	446.0	347.5	324.3	305.9	295.7	283.9	277.6	280.0
30°	4299.0	3283.7	1139.8	364.4	311.4	287.8	264.6	247.8	230.9	223.0	225.8
32.5°	4282.1	3164.3	852.0	321.6	278.8	252.9	224.2	202.2	184.1	177.5	179.0
35°	4327.7	3069.7	623.9	290.6	252.9	220.3	188.1	163.3	149.2	145.3	146.5
37.5°	4447.1	3019.0	466.9	264.6	229.7	193.2	157.1	133.5	124.5	124.5	125.6
40°	4672.4	3017.8	375.0	246.6	208.9	167.3	129.6	112.7	107.6	110.3	111.5
42.5°	5001.9	3086.6	326.7	229.7	190.8	142.5	107.6	95.8	94.6	97.4	98.6
45°	5451.8	3212.2	300.8	215.2	171.2	119.4	90.7	82.8	82.8	86.8	88.3
47.5°	6003.1	3396.3	278.8	201.0	151.6	99.7	77.7	72.6	73.8	77.7	78.9
50°	6667.1	3628.8	256.8	185.3	137.4	82.8	67.5	63.6	64.8	69.9	71.5
52.5°	7423.3	3941.3	238.7	171.2	119.4	68.7	56.9	54.6	56.9	62.4	63.6
55°	8071.5	4221.3	216.7	159.4	95.8	56.9	46.7	46.7	49.5	55.8	56.9
57.5°	8695.4	4514.2	197.1	137.4	75.4	45.5	38.9	40.0	44.0	50.7	51.8
60°	9611.1	5010.9	173.9	115.4	56.9	36.1	32.6	33.8	38.9	45.5	46.7
62.5°	11165.9	5767.1	150.4	95.8	44.0	28.7	25.9	28.7	34.9	42.8	44.0
65°	12569.2	6074.6	123.3	80.5	33.8	22.0	22.0	25.9	33.8	41.6	42.8
67.5°	11787.1	5113.4	95.8	63.6	25.9	16.9	18.1	24.7	32.6	41.6	42.8
69°	10424.2	4181.2	81.7	50.7	22.0	15.7	16.9	24.7	32.6	40.0	41.6
70°	9362.1	3530.2	72.6	42.8	19.6	15.7	16.9	23.2	32.6	40.0	41.6
72.5°	6270.5	1906.3	58.5	31.0	18.1	14.1	14.1	23.2	31.0	38.9	40.0
75°	2694.7	526.5	46.7	22.0	15.7	13.0	13.0	22.0	29.8	37.7	40.0
77.5°	492.8	133.5	37.7	19.6	15.7	13.0	11.8	20.8	28.7	36.1	37.7
80°	195.9	66.0	29.8	16.9	14.1	11.8	10.2	19.6	27.1	34.9	36.1
82.5°	118.2	37.7	24.7	15.7	14.1	10.2	9.0	16.9	25.9	33.8	34.9
85°	95.8	25.9	19.6	15.7	13.0	10.2	7.9	15.7	23.2	32.6	33.8
87.5°	46.7	18.1	18.1	14.1	13.0	10.2	7.9	14.1	22.0	31.0	32.6
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)