

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-08-LED-E1-SL3-7027-600-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-08-LED-E1-SL3-7027-600-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 600mA 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: 21189.1 lumens
Efficiency: N/A
Efficacy: 82.4 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): 257
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

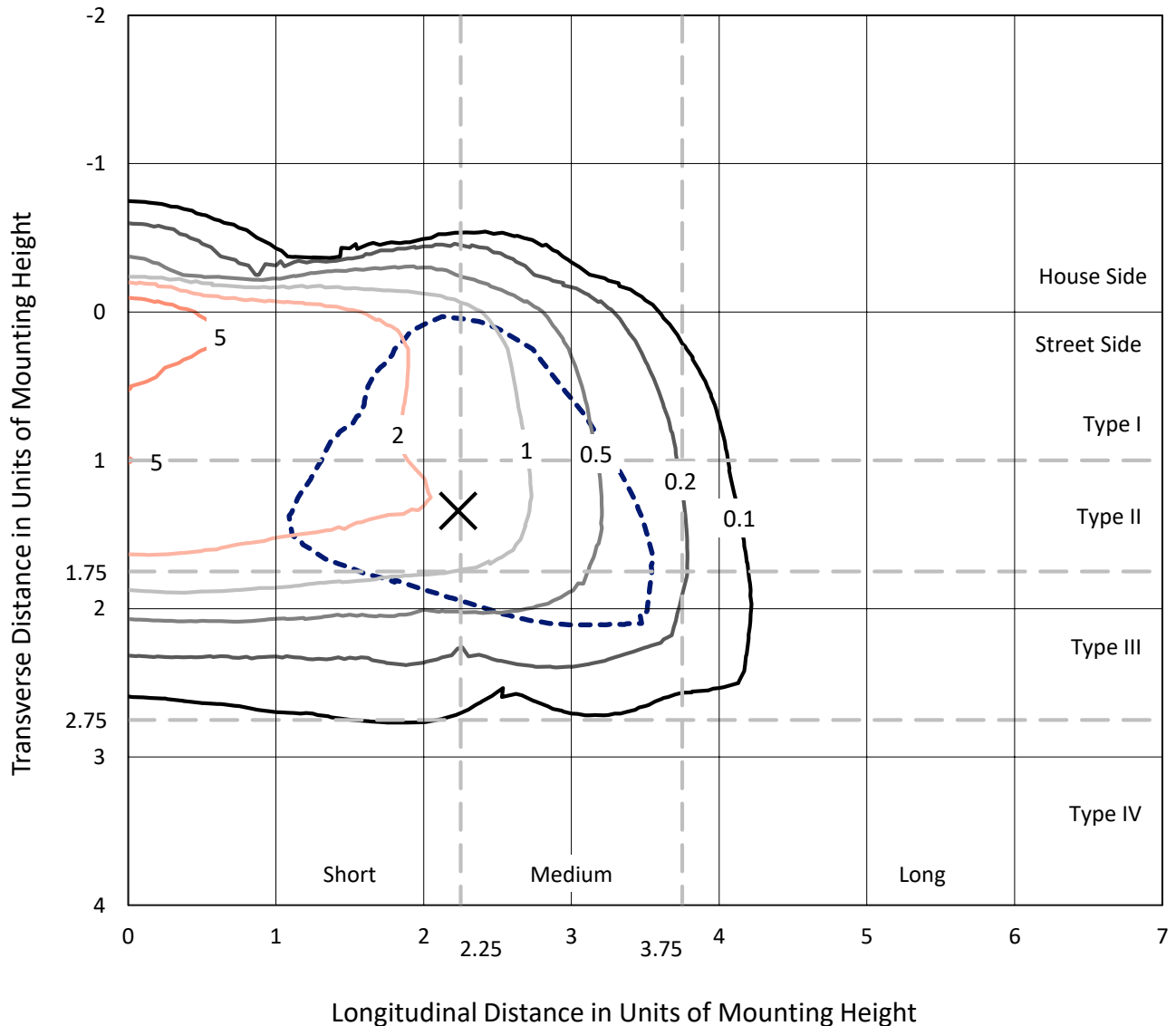


REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

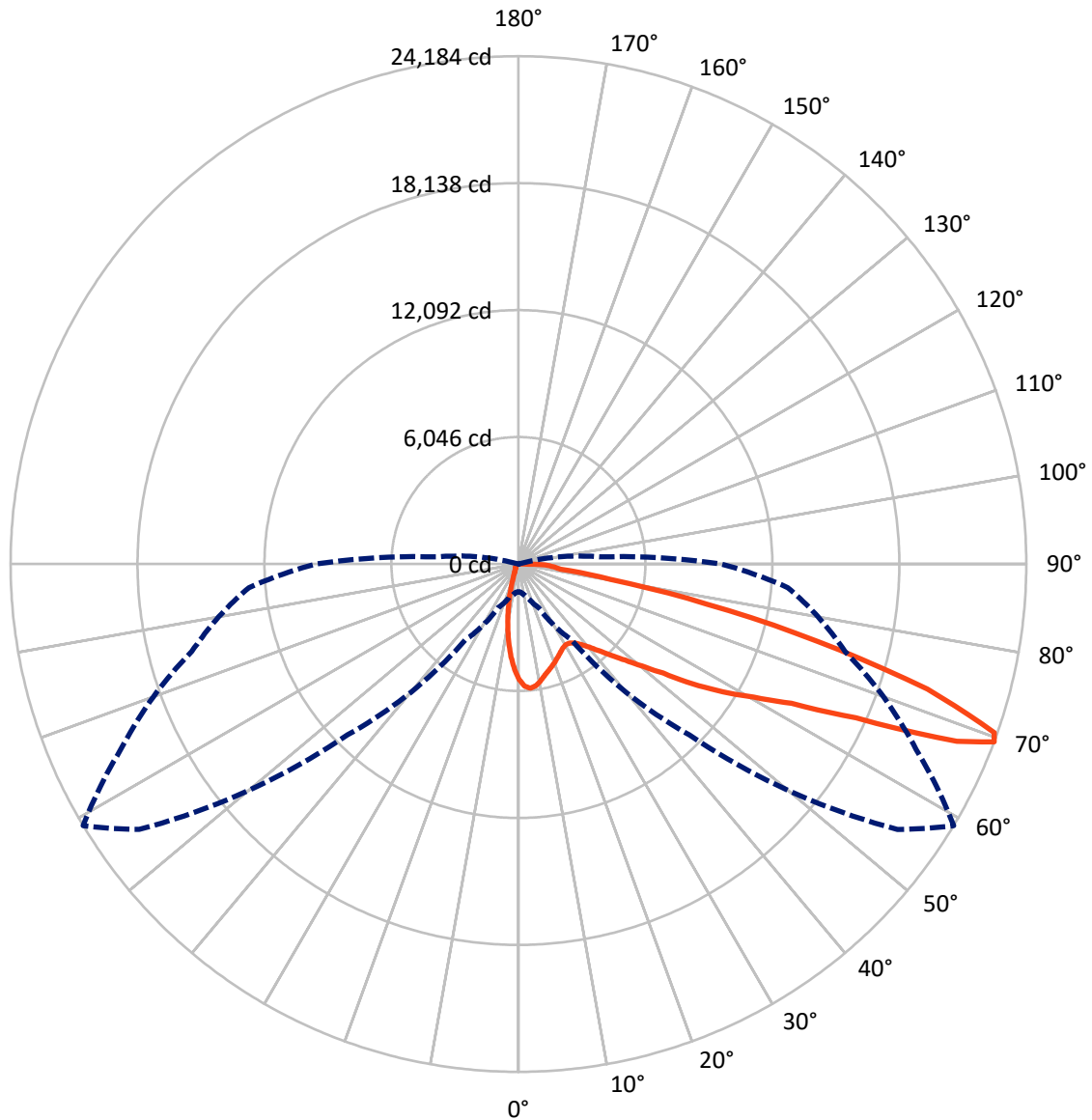


Based on 25 foot mounting height. Maximum calculated value = 8.9 fc
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027-600-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027-600-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1725.5	0.0	1725.5
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	19463.6	0.0	19463.6
	% Fixture	91.9	0.0	91.9
Total	Lumens	21189.1	0.0	21189.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	447.7	2.1
10°-20°	925.0	4.4
20°-30°	1244.7	5.9
30°-40°	1807.3	8.5
40°-50°	3009.2	14.2
50°-60°	4694.4	22.2
60°-70°	5808.9	27.4
70°-80°	2943.9	13.9
80°-90°	308.0	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°	21189.1	100.0
0°-180°	21189.1	100.0



REPORT NUMBER: P299995

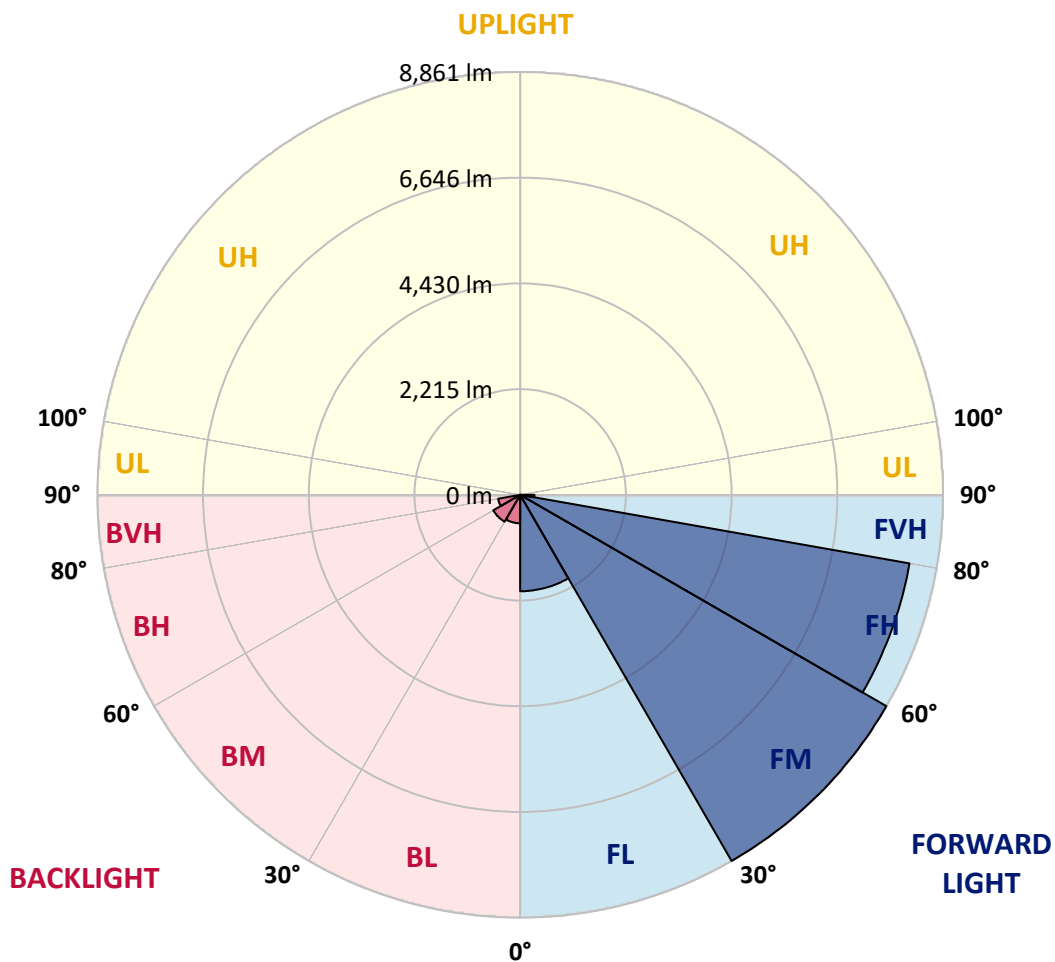
CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2020.2	9.5			
FM	(30°-60°)	8860.7	41.8			
FH	(60°-80°)	8284.2	39.1			G4/12000
FVH	(80°-90°)	298.6	1.4			G3/500
BL	(0°-30°)	597.3	2.8	B2/1000		
BM	(30°-60°)	650.2	3.1	B1/1000		
BH	(60°-80°)	468.6	2.2	B1/500		G1/500
BVH	(80°-90°)	9.5	0.0			G0/10
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





REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1
2.5°	6044.8	6042.6	6016.1	6004.1	5982.4	5937.0	5866.3	5829.3	5769.4	5664.9	5524.9
5°	5989.6	6018.6	6033.9	6035.3	6050.9	6033.9	5970.4	5939.6	5856.8	5688.9	5437.5
7.5°	5616.0	5626.5	5671.1	5709.2	5783.6	5854.3	5877.2	5863.7	5814.8	5635.2	5300.7
10°	5215.8	5226.4	5279.3	5329.4	5430.2	5539.1	5654.1	5678.4	5698.7	5558.3	5169.0
12.5°	4870.5	4881.4	4935.4	5001.1	5118.6	5252.8	5431.3	5470.9	5560.8	5485.4	5063.5
15°	4573.4	4578.1	4631.1	4712.3	4852.7	5025.0	5227.8	5291.3	5429.1	5433.9	4971.3
17.5°	4320.5	4332.5	4365.2	4442.8	4596.2	4809.5	5045.7	5136.8	5298.2	5390.7	4881.4
20°	4166.0	4178.0	4176.9	4220.0	4357.9	4585.4	4863.6	4972.4	5169.0	5346.4	4801.2
22.5°	4136.2	4136.2	4105.1	4098.9	4180.5	4371.0	4674.2	4807.0	5052.6	5327.2	4745.0
25°	4242.9	4237.8	4160.2	4096.7	4100.3	4213.9	4490.7	4648.8	4954.6	5340.3	4714.9
27.5°	4468.2	4462.0	4363.7	4242.9	4145.7	4144.6	4351.7	4521.9	4876.7	5402.7	4726.8
30°	4779.4	4777.3	4670.6	4518.2	4342.3	4180.5	4303.8	4458.4	4826.2	5515.1	4754.4
32.5°	5119.7	5116.1	5035.9	4875.6	4652.5	4342.3	4354.3	4483.8	4840.7	5664.9	4821.5
35°	5480.7	5474.5	5439.7	5299.6	5054.0	4640.5	4519.7	4620.2	4931.8	5889.1	4953.2
37.5°	5871.0	5877.2	5902.2	5768.0	5510.4	5058.8	4796.5	4864.7	5115.0	6193.5	5167.6
40°	6447.4	6446.3	6454.7	6278.4	6030.6	5570.3	5183.2	5205.0	5421.9	6597.2	5493.7
42.5°	7493.3	7420.4	7198.7	6839.2	6590.0	6155.0	5671.1	5648.3	5797.0	7096.8	5950.1
45°	8899.0	8743.0	8168.0	7479.1	7160.3	6814.2	6271.1	6198.2	6292.9	7697.2	6513.4
47.5°	10107.7	9945.9	9132.6	8145.2	7765.4	7439.6	6974.5	6842.8	6874.0	8369.4	7227.4
50°	10518.7	10439.7	9729.4	8725.2	8351.2	8226.8	7790.7	7630.0	7585.8	9146.8	8055.2
52.5°	10376.2	10370.4	9897.0	9101.4	8888.1	9041.6	8817.4	8631.6	8468.8	9966.6	8897.5
55°	10147.3	10177.4	9965.2	9430.8	9423.6	9785.6	10221.6	10067.1	9595.1	10856.8	9623.8
57.5°	9516.1	9644.1	9927.1	10054.0	10348.6	10719.0	11391.2	11482.2	10923.9	11538.5	10226.4
60°	7721.1	8002.6	8927.7	10143.6	11541.0	12463.5	12802.7	12880.3	12014.1	12105.1	11040.0
62.5°	5480.7	5768.0	6941.1	8998.4	11558.8	14755.5	14905.3	14599.8	13214.8	12945.3	12443.2
65°	2909.0	3131.0	4089.5	6495.3	10021.8	15287.7	18582.6	17672.1	15333.0	14597.3	14255.9
67.5°	1488.1	1555.2	1936.4	3178.9	6889.6	13579.0	21878.7	22519.7	18983.9	16236.6	14168.5
69°	1316.8	1356.4	1609.2	2298.1	4411.6	11501.5	22039.4	24184.1	20895.3	16099.9	12875.6
70°	1274.8	1309.6	1539.6	2080.1	3448.4	9645.2	21424.6	24037.9	21383.9	15580.0	11909.9
72.5°	1082.1	1111.9	1370.9	1838.1	2802.7	4787.8	17403.7	20369.3	19188.8	12978.7	8620.8
75°	723.7	822.0	1315.7	1723.1	2607.2	2720.0	11473.9	14719.6	13673.7	8753.9	4490.7
77.5°	173.8	186.8	371.5	1370.9	2384.5	2393.9	5901.1	9150.4	7463.5	3120.1	1061.5
80°	93.6	90.0	104.1	272.1	2220.1	2246.6	2656.5	4441.7	2664.9	517.7	349.7
82.5°	66.0	62.4	67.1	113.9	698.7	2046.4	1921.9	2010.4	1104.6	198.8	157.1
85°	23.9	22.9	37.0	103.0	219.1	1176.4	1974.5	1658.2	894.9	91.1	115.0
87.5°	8.3	7.3	14.5	56.2	67.1	501.0	1218.5	1253.4	352.2	55.1	54.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P299995

CATALOG NUMBER: GLNA-AF-08-LED-E1-SL3-7027-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1	5515.1
2.5°	5466.1	5391.8	5255.4	5115.0	4985.5	4829.9	4751.9	4675.3	4643.0	4631.1	4574.8
5°	5308.0	5182.1	4892.3	4601.0	4332.5	4047.4	3859.5	3708.5	3619.7	3576.5	3508.3
7.5°	5105.6	4899.5	4459.5	4010.4	3592.1	3180.0	2874.6	2639.5	2477.7	2400.1	2329.3
10°	4908.9	4634.7	4009.3	3396.9	2828.8	2282.5	1860.6	1555.2	1360.0	1270.0	1212.7
12.5°	4733.0	4377.1	3574.3	2799.1	2085.9	1446.3	1017.2	774.1	653.0	610.9	590.6
15°	4575.9	4139.9	3163.3	2231.0	1412.6	826.7	556.1	473.4	454.2	454.2	451.6
17.5°	4427.2	3907.3	2766.4	1697.7	886.6	505.7	423.0	412.1	412.1	416.8	416.8
20°	4284.6	3685.7	2383.0	1218.5	558.3	401.2	382.4	379.8	382.4	388.2	388.2
22.5°	4162.4	3484.4	2025.0	836.2	414.6	361.7	352.2	348.6	349.7	353.3	355.9
25°	4071.3	3314.2	1687.2	566.6	357.0	329.4	318.9	312.7	308.0	308.0	310.2
27.5°	4014.0	3170.6	1360.0	412.1	321.0	299.6	282.6	273.2	262.3	256.5	258.7
30°	3971.9	3033.8	1053.1	336.6	287.7	265.9	244.5	228.9	213.3	206.1	208.6
32.5°	3956.3	2923.5	787.2	297.1	257.6	233.6	207.1	186.8	170.1	164.0	165.4
35°	3998.4	2836.1	576.4	268.4	233.6	203.5	173.8	150.9	137.9	134.2	135.3
37.5°	4108.7	2789.3	431.3	244.5	212.2	178.5	145.1	123.3	115.0	115.0	116.1
40°	4316.9	2788.2	346.4	227.8	193.0	154.5	119.7	104.1	99.4	101.9	103.0
42.5°	4621.3	2851.7	301.8	212.2	176.3	131.7	99.4	88.5	87.4	90.0	91.1
45°	5037.0	2967.8	277.9	198.8	158.2	110.3	83.8	76.5	76.5	80.2	81.6
47.5°	5546.3	3137.9	257.6	185.7	140.0	92.1	71.8	67.1	68.2	71.8	72.9
50°	6159.8	3352.7	237.2	171.2	127.0	76.5	62.4	58.8	59.9	64.6	66.0
52.5°	6858.4	3641.4	220.6	158.2	110.3	63.5	52.6	50.4	52.6	57.7	58.8
55°	7457.4	3900.1	200.2	147.3	88.5	52.6	43.2	43.2	45.7	51.5	52.6
57.5°	8033.8	4170.7	182.1	127.0	69.7	42.1	35.9	37.0	40.6	46.8	47.9
60°	8879.8	4629.6	160.7	106.7	52.6	33.4	30.1	31.2	35.9	42.1	43.2
62.5°	10316.3	5328.3	138.9	88.5	40.6	26.5	23.9	26.5	32.3	39.5	40.6
65°	11612.8	5612.3	113.9	74.4	31.2	20.3	20.3	23.9	31.2	38.5	39.5
67.5°	10890.2	4724.3	88.5	58.8	23.9	15.6	16.7	22.9	30.1	38.5	39.5
69°	9631.1	3863.1	75.5	46.8	20.3	14.5	15.6	22.9	30.1	37.0	38.5
70°	8649.8	3261.6	67.1	39.5	18.1	14.5	15.6	21.4	30.1	37.0	38.5
72.5°	5793.4	1761.2	54.1	28.7	16.7	13.1	13.1	21.4	28.7	35.9	37.0
75°	2489.7	486.5	43.2	20.3	14.5	12.0	12.0	20.3	27.6	34.8	37.0
77.5°	455.3	123.3	34.8	18.1	14.5	12.0	10.9	19.2	26.5	33.4	34.8
80°	181.0	60.9	27.6	15.6	13.1	10.9	9.4	18.1	25.0	32.3	33.4
82.5°	109.2	34.8	22.9	14.5	13.1	9.4	8.3	15.6	23.9	31.2	32.3
85°	88.5	23.9	18.1	14.5	12.0	9.4	7.3	14.5	21.4	30.1	31.2
87.5°	43.2	16.7	16.7	13.1	12.0	9.4	7.3	13.1	20.3	28.7	30.1
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)