

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: P299611

Luminaire Tested: **GLNA-AF-07-LED-E1-SL2-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299611
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-07-LED-E1-SL2-7027-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 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: 27522.8 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - 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

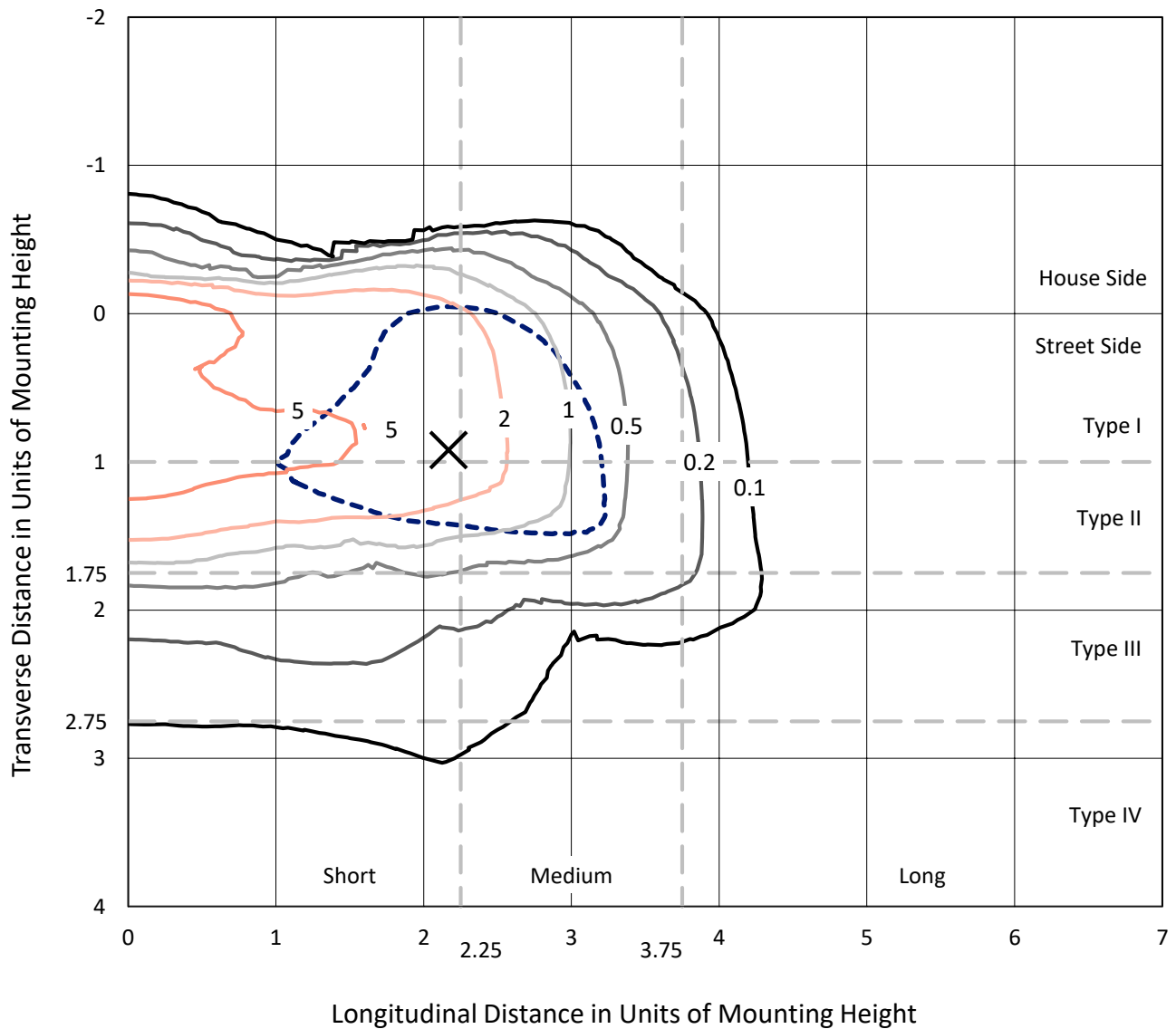


REPORT NUMBER: P299611

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

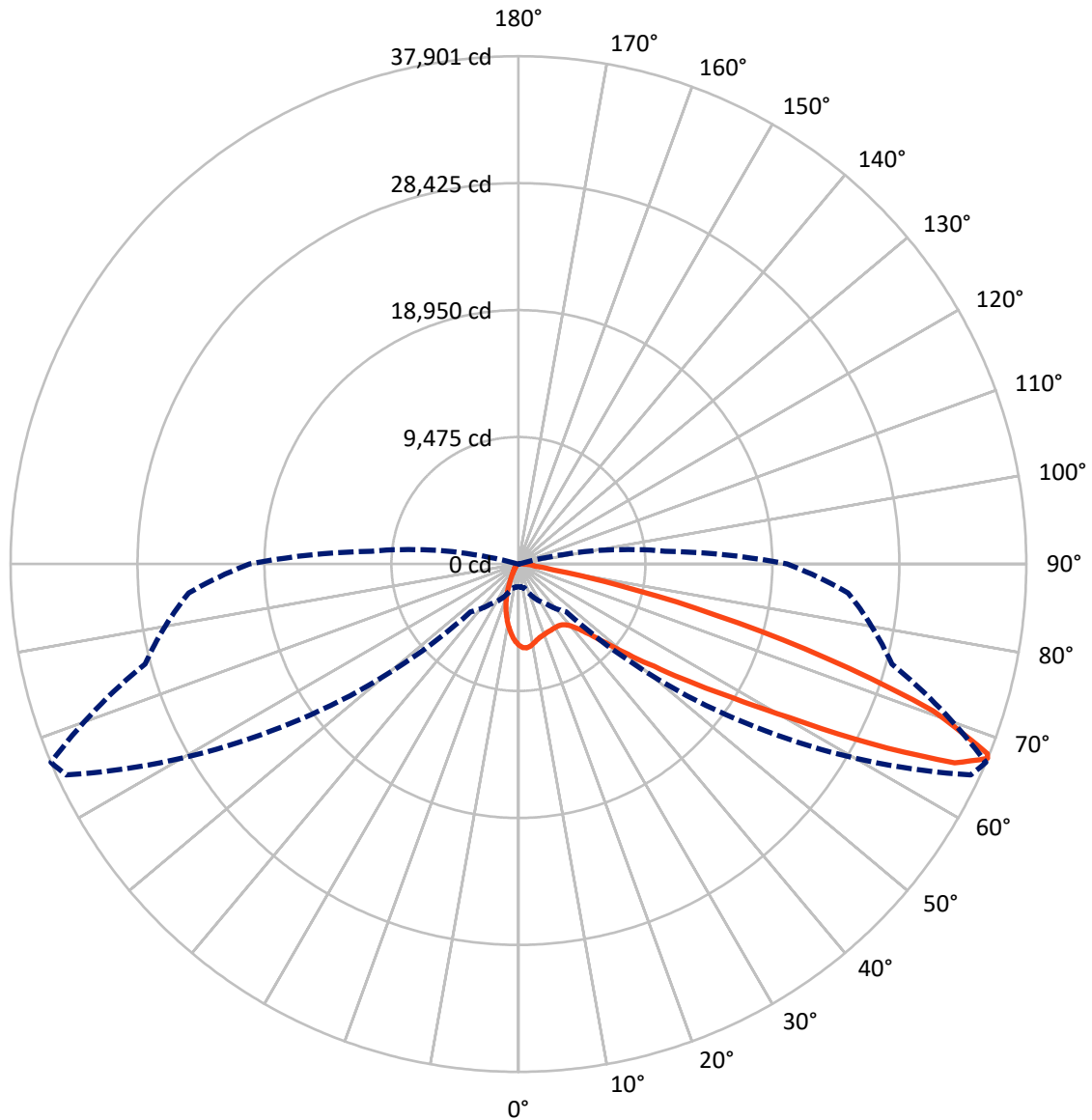
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.7 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299611
CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7027-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P299611

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7027-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2857.7	0.0	2857.7
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	24665.1	0.0	24665.1
	% Fixture	89.6	0.0	89.6
Total	Lumens	27522.8	0.0	27522.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	493.9	1.8
10°-20°	1051.2	3.8
20°-30°	1528.3	5.6
30°-40°	2384.3	8.7
40°-50°	4223.6	15.3
50°-60°	6683.4	24.3
60°-70°	7654.9	27.8
70°-80°	3175.2	11.5
80°-90°	328.0	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°	27522.8	100.0
0°-180°	27522.8	100.0

Coefficient of Utilization



REPORT NUMBER: P299611

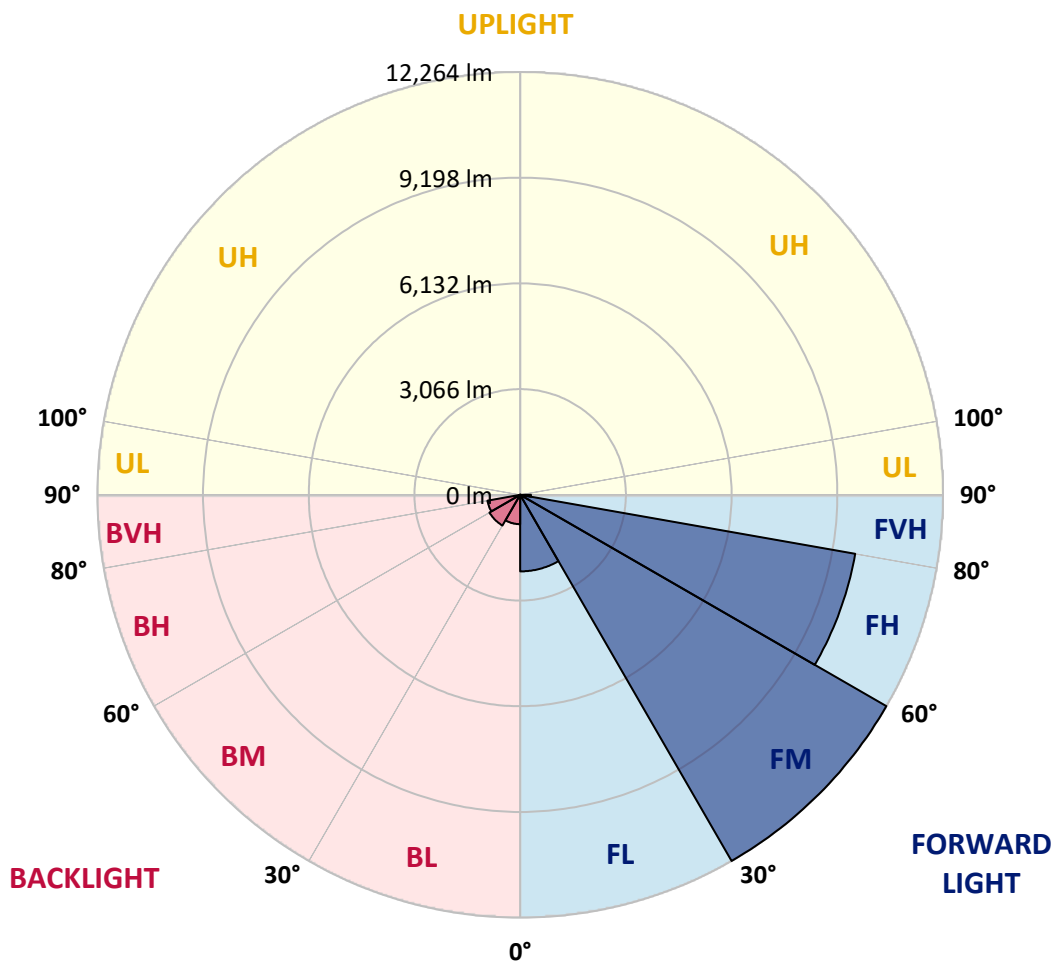
CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2220.7	8.1			
FM (30°-60°)	12264.2	44.6			
FH (60°-80°)	9867.0	35.9			G4/12000
FVH (80°-90°)	313.2	1.1			G3/500
BL (0°-30°)	852.7	3.1	B2/1000		
BM (30°-60°)	1027.0	3.7	B2/2500		
BH (60°-80°)	963.1	3.5	B2/1000		G2/1000
BVH (80°-90°)	14.8	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





REPORT NUMBER: P299611

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8
2.5°	6275.3	6288.1	6286.5	6296.1	6318.6	6320.2	6297.7	6254.4	6244.8	6188.6	6090.7
5°	5787.2	5824.2	5846.6	5938.2	6040.9	6164.5	6257.6	6291.3	6286.5	6246.4	6098.7
7.5°	5230.2	5267.1	5292.8	5400.4	5536.8	5748.7	5991.1	6190.2	6207.8	6251.2	6092.3
10°	4859.4	4865.8	4901.1	5003.8	5146.7	5363.4	5652.4	6000.8	6053.7	6212.7	6076.2
12.5°	4554.3	4559.2	4605.7	4716.5	4869.0	5087.3	5390.7	5793.7	5875.5	6164.5	6073.0
15°	4337.6	4355.3	4397.0	4512.6	4674.7	4891.5	5202.9	5641.2	5739.1	6146.8	6101.9
17.5°	4265.4	4284.7	4297.5	4381.0	4528.7	4740.6	5060.0	5541.6	5652.4	6156.5	6158.1
20°	4340.8	4355.3	4326.4	4347.3	4438.8	4628.2	4939.6	5456.5	5588.2	6167.7	6230.3
22.5°	4621.8	4628.2	4549.5	4458.0	4442.0	4546.3	4844.9	5389.1	5530.4	6198.2	6315.4
25°	5103.4	5092.1	4963.7	4766.3	4580.0	4531.9	4788.7	5347.4	5501.5	6230.3	6403.7
27.5°	5684.5	5700.6	5524.0	5236.6	4881.8	4628.2	4780.7	5329.7	5488.7	6252.8	6480.8
30°	6390.9	6413.3	6211.1	5849.9	5341.0	4865.8	4854.5	5326.5	5480.6	6238.3	6487.2
32.5°	7111.7	7138.9	6980.0	6607.6	5954.2	5263.9	5021.5	5361.8	5496.7	6188.6	6450.3
35°	7866.2	7904.7	7798.7	7479.3	6785.8	5838.6	5315.3	5469.4	5572.1	6183.8	6413.3
37.5°	8908.0	8943.3	8744.3	8405.6	7792.3	6609.2	5787.2	5671.7	5750.3	6260.8	6423.0
40°	10463.6	10458.8	9945.1	9426.6	8898.4	7588.4	6450.3	6037.7	6077.8	6493.6	6541.8
42.5°	12158.8	12150.8	11391.5	10603.3	10126.5	8794.0	7322.0	6670.2	6642.9	6922.2	6850.0
45°	13465.6	13464.0	12844.3	11956.6	11605.0	10177.9	8448.9	7549.9	7508.2	7618.9	7418.3
47.5°	14022.6	14032.3	13720.8	13096.4	13244.1	12049.7	9869.6	8824.6	8761.9	8717.0	8412.0
50°	13589.2	13608.5	13634.1	13512.1	14446.4	14565.2	11775.2	10620.9	10590.4	10389.8	9913.0
52.5°	12173.3	12271.2	12573.0	12959.9	14863.8	16979.7	14762.7	12852.3	12688.6	12475.1	11950.1
55°	9787.8	9895.3	10468.4	11407.5	14242.6	18565.8	18949.4	15729.1	15456.2	14818.9	14061.2
57.5°	6477.5	6644.5	7476.1	8670.4	12438.2	18821.0	23126.5	19721.6	18771.2	17026.2	16172.2
60°	3568.7	3729.2	4631.4	5713.4	8983.5	17559.2	25935.9	24919.7	23240.5	19493.6	18735.9
62.5°	2197.7	2284.4	2950.6	3957.2	5387.5	13858.9	26517.0	31451.8	29507.7	22670.6	21832.6
65°	1749.8	1786.7	2112.6	3234.8	3862.4	8243.4	24640.4	36431.6	35783.0	26517.0	24605.0
67°	1698.4	1712.9	1867.0	2777.2	3640.9	5053.6	20643.1	37242.3	37900.5	28844.7	24691.7
67.5°	1709.7	1725.7	1871.8	2650.4	3634.5	4644.2	19265.7	36922.8	37754.4	29029.4	24308.0
70°	1648.7	1698.4	2143.1	2648.8	3456.3	3859.2	11537.6	31991.2	32856.5	26972.9	20625.4
72.5°	584.3	587.6	926.3	2143.1	3758.1	3901.0	5793.7	23452.4	24092.9	20633.4	14870.3
75°	346.8	295.4	308.2	610.0	3591.1	3788.6	3342.3	14985.8	15225.0	11823.3	7530.6
77.5°	239.2	208.7	215.1	269.7	1367.7	3735.6	2655.2	7814.8	7559.5	4146.6	1603.7
80°	136.5	120.4	128.4	236.0	497.7	3485.2	2504.3	3168.9	2701.8	703.1	443.1
82.5°	72.2	61.0	73.8	194.2	346.8	2172.0	2509.1	1531.5	1213.6	237.6	301.8
85°	25.7	20.9	35.3	133.2	231.2	666.2	2326.1	1287.5	1011.4	115.6	229.6
87.5°	4.8	4.8	14.4	54.6	93.1	203.9	1375.8	764.1	512.1	69.0	157.3
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: P299611

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL2-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8	6069.8
2.5°	6050.5	5981.5	5888.4	5774.4	5639.6	5520.8	5432.5	5341.0	5321.7	5289.6	5284.8
5°	6010.4	5891.6	5660.4	5395.5	5113.0	4857.8	4650.7	4466.1	4384.2	4313.5	4305.5
7.5°	5951.0	5772.8	5379.5	4952.5	4511.0	4109.7	3769.3	3528.5	3307.0	3201.0	3185.0
10°	5882.0	5626.7	5063.2	4470.9	3860.8	3294.2	2788.5	2364.7	2107.8	1955.3	1936.0
12.5°	5817.8	5483.8	4740.6	3971.6	3160.9	2403.2	1753.0	1348.5	1078.8	969.6	956.8
15°	5787.2	5368.3	4438.8	3461.1	2428.9	1529.9	958.4	741.7	653.4	627.7	626.1
17.5°	5784.0	5270.3	4143.4	2933.0	1701.7	889.4	624.5	569.9	552.2	545.8	545.8
20°	5782.4	5177.2	3848.0	2385.5	1080.4	592.4	520.1	507.3	494.4	486.4	486.4
22.5°	5800.1	5093.7	3539.8	1826.9	680.7	480.0	457.5	444.7	428.6	417.4	415.8
25°	5817.8	5029.5	3225.1	1300.3	492.8	417.4	394.9	377.3	354.8	340.3	338.7
27.5°	5821.0	4949.3	2888.0	870.1	412.6	364.4	335.5	308.2	282.5	268.1	266.5
30°	5772.8	4814.4	2514.0	587.6	364.4	316.3	277.7	248.8	224.7	213.5	213.5
32.5°	5678.1	4647.5	2103.0	443.1	324.3	271.3	229.6	202.3	186.2	181.4	179.8
35°	5593.0	4467.7	1680.8	375.6	290.6	229.6	187.8	170.2	160.5	158.9	157.3
37.5°	5543.2	4323.2	1284.3	340.3	258.5	192.6	158.9	146.1	141.3	138.1	139.7
40°	5581.8	4202.8	948.8	311.4	226.4	160.5	134.8	128.4	123.6	122.0	122.0
42.5°	5750.3	4181.9	704.7	285.8	195.9	133.2	117.2	112.4	109.2	107.6	109.2
45°	6193.4	4310.3	547.4	261.7	165.3	112.4	99.5	97.9	96.3	96.3	96.3
47.5°	6859.6	4575.2	455.9	234.4	138.1	96.3	86.7	85.1	83.5	85.1	85.1
50°	7988.2	5060.0	407.8	207.1	114.0	81.9	73.8	73.8	73.8	73.8	75.5
52.5°	9704.3	6013.6	375.6	179.8	93.1	69.0	62.6	62.6	64.2	64.2	65.8
55°	11616.2	7278.6	346.8	152.5	78.7	57.8	51.4	53.0	54.6	56.2	56.2
57.5°	13690.3	8680.1	322.7	125.2	67.4	46.6	43.3	44.9	46.6	49.8	49.8
60°	16193.1	10197.1	287.4	97.9	56.2	36.9	33.7	36.9	41.7	44.9	46.6
62.5°	18941.4	11664.4	242.4	77.1	46.6	28.9	27.3	33.7	40.1	43.3	44.9
65°	20819.6	12125.1	186.2	62.6	35.3	20.9	22.5	30.5	38.5	43.3	43.3
67°	20058.7	10993.4	152.5	53.0	28.9	16.1	20.9	30.5	38.5	41.7	43.3
67.5°	19530.6	10550.3	146.1	51.4	27.3	16.1	20.9	30.5	38.5	43.3	43.3
70°	15891.3	7925.6	122.0	38.5	22.5	14.4	17.7	28.9	36.9	41.7	41.7
72.5°	11041.5	4886.7	109.2	27.3	19.3	12.8	16.1	27.3	35.3	40.1	41.7
75°	5249.5	1769.1	93.1	20.9	17.7	11.2	14.4	27.3	35.3	40.1	40.1
77.5°	1070.8	411.0	75.5	17.7	14.4	11.2	12.8	25.7	33.7	38.5	38.5
80°	351.6	158.9	56.2	16.1	14.4	11.2	12.8	24.1	33.7	36.9	38.5
82.5°	253.6	80.3	36.9	16.1	14.4	11.2	11.2	24.1	32.1	36.9	36.9
85°	194.2	56.2	24.1	16.1	14.4	11.2	11.2	22.5	30.5	35.3	35.3
87.5°	128.4	22.5	19.3	16.1	14.4	11.2	11.2	22.5	28.9	33.7	35.3
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)