

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: P300888

Luminaire Tested: **GLNA-AF-09-LED-E1-SL4-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300888
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-09-LED-E1-SL4-7027
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43779.4 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

Input Watts (W): 501
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

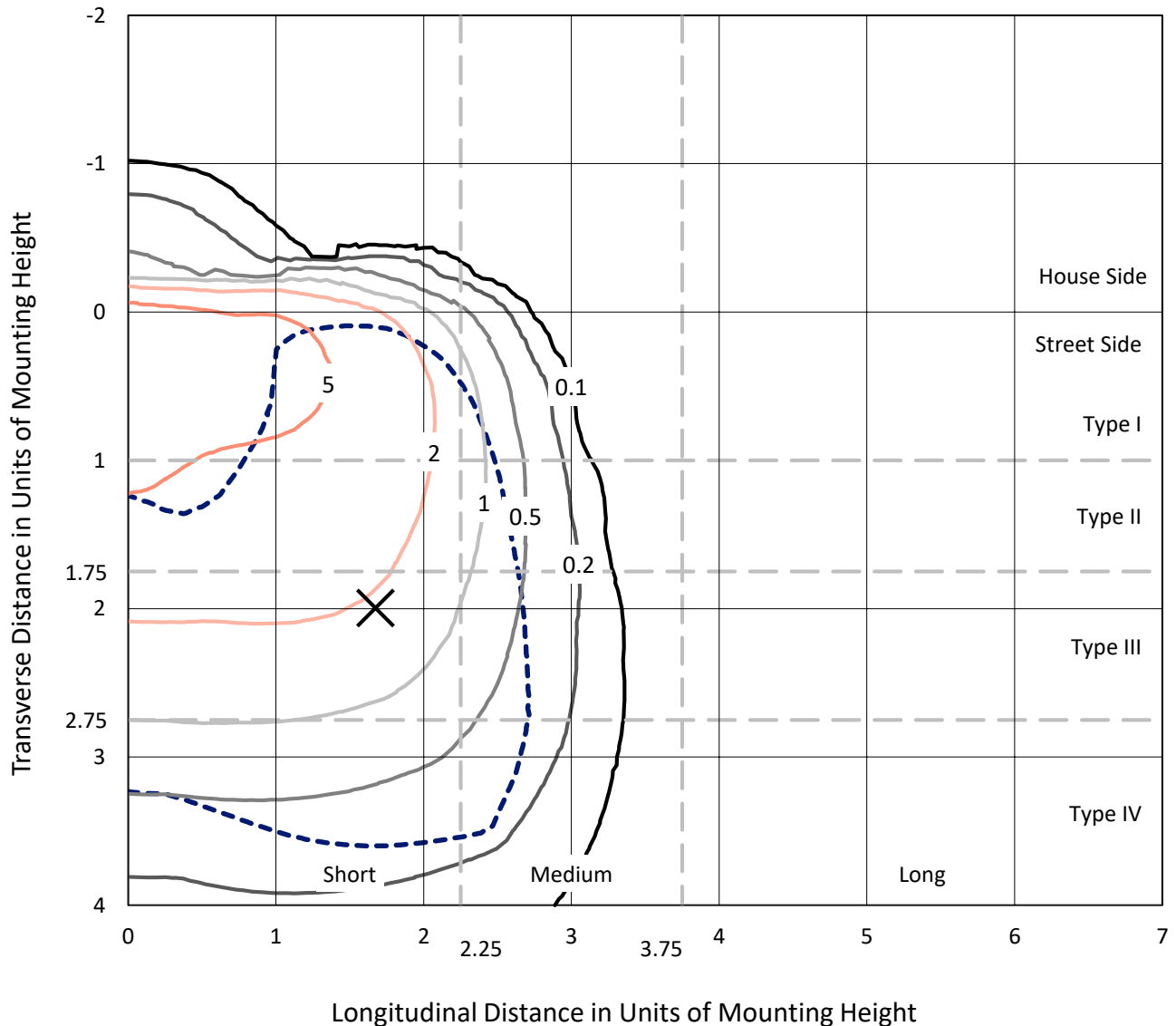


REPORT NUMBER: P300888

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027

Iso-Footcandle Lines of Horizontal Illumination

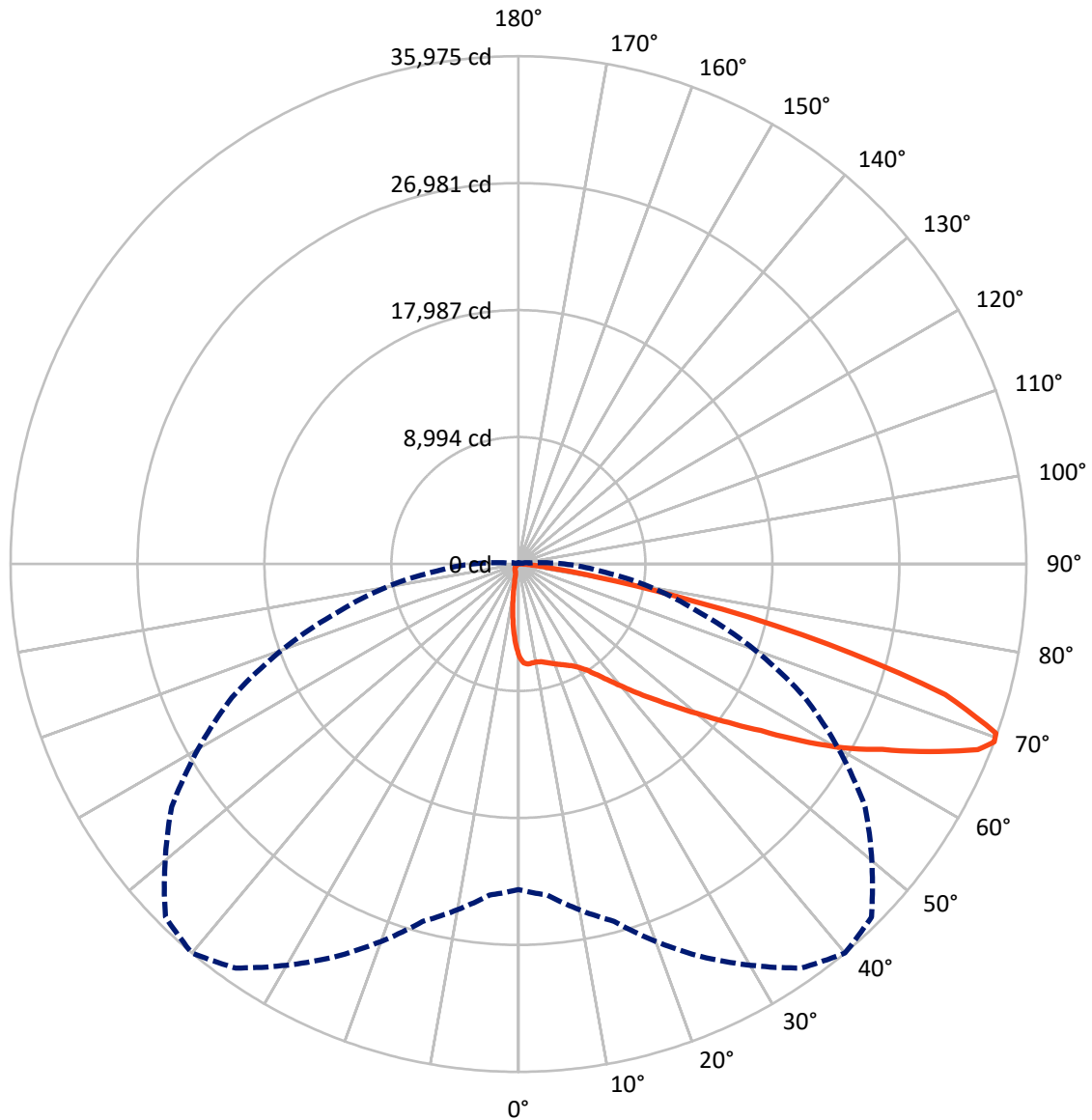
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P300888
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P300888

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2561.3	0.0	2561.3
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	41218.0	0.0	41218.0
	% Fixture	94.1	0.0	94.1
Total	Lumens	43779.4	0.0	43779.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.3	1.2
10°-20°	1304.2	3.0
20°-30°	2196.7	5.0
30°-40°	3596.1	8.2
40°-50°	6226.5	14.2
50°-60°	9807.3	22.4
60°-70°	12808.0	29.3
70°-80°	6596.7	15.1
80°-90°	713.6	1.6
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°	43779.4	100.0
0°-180°	43779.4	100.0



REPORT NUMBER: P300888

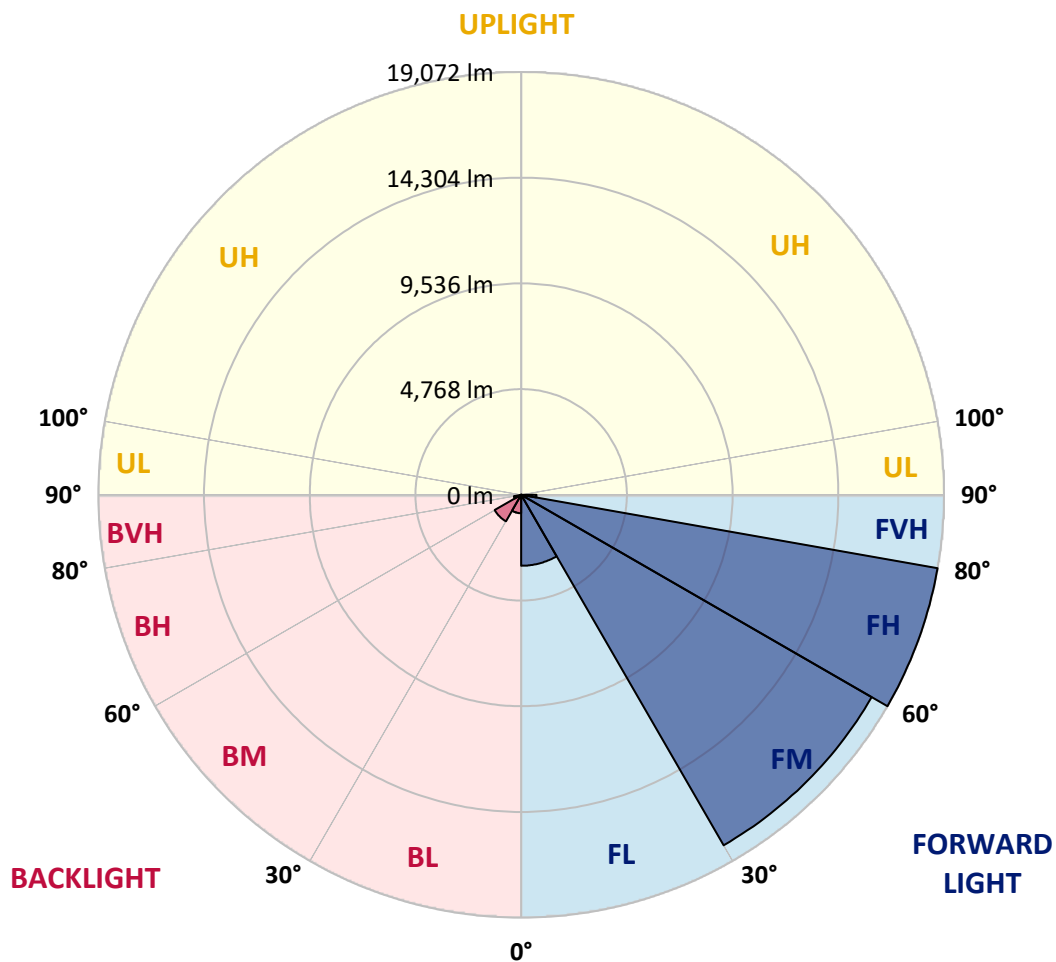
CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3201.5	7.3			
FM	(30°-60°)	18253.3	41.7			
FH	(60°-80°)	19072.1	43.6			G5
FVH	(80°-90°)	691.2	1.6			G4/750
BL	(0°-30°)	829.7	1.9	B2/1000		
BM	(30°-60°)	1376.7	3.1	B2/2500		
BH	(60°-80°)	332.6	0.8	B1/500		G1/500
BVH	(80°-90°)	22.4	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-G5

Type IV Short





REPORT NUMBER: P300888

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9
2.5°	7181.9	7142.8	7119.4	7088.1	7049.0	7015.1	7002.1	6905.7	6814.5	6689.4	6546.1
5°	7314.8	7301.8	7260.1	7218.4	7171.5	7119.4	7090.7	6976.1	6845.8	6663.3	6413.2
7.5°	7327.9	7312.2	7260.1	7202.8	7137.6	7075.1	7025.6	6910.9	6791.0	6606.0	6301.1
10°	7307.0	7288.8	7249.7	7187.1	7106.4	7046.4	6996.9	6887.5	6785.8	6619.0	6280.3
12.5°	7283.6	7265.3	7247.1	7215.8	7145.4	7103.7	7062.1	6957.8	6866.6	6725.9	6355.8
15°	7307.0	7296.6	7317.4	7304.4	7265.3	7228.8	7187.1	7093.3	7009.9	6892.7	6494.0
17.5°	7406.0	7406.0	7471.2	7479.0	7442.5	7390.4	7330.5	7236.6	7166.3	7067.3	6658.1
20°	7638.0	7630.1	7713.5	7729.2	7640.6	7559.8	7471.2	7356.5	7301.8	7239.3	6819.7
22.5°	8036.7	8000.2	8049.7	8034.1	7859.5	7734.4	7624.9	7484.2	7455.5	7426.9	6999.5
25°	8555.2	8534.4	8568.3	8414.5	8107.0	7937.6	7807.3	7648.4	7648.4	7677.0	7202.8
27.5°	9308.4	9230.2	9115.5	8844.5	8383.3	8167.0	8026.2	7856.9	7901.2	8008.0	7471.2
30°	10079.7	9993.7	9730.5	9313.6	8719.4	8492.7	8328.5	8151.3	8255.6	8451.0	7830.8
32.5°	10840.6	10744.2	10371.6	9845.2	9201.5	8974.8	8815.8	8620.4	8795.0	9123.3	8357.2
35°	11578.1	11492.1	11062.1	10441.9	9842.6	9654.9	9509.0	9339.6	9563.7	10022.4	9099.9
37.5°	12406.8	12313.0	11789.2	11116.9	10621.7	10486.2	10379.4	10210.0	10600.9	11273.2	10134.4
40°	13425.7	13266.8	12560.5	11890.8	11523.4	11458.2	11385.3	11361.8	11969.0	12899.3	11513.0
42.5°	14593.2	14332.6	13368.4	12706.5	12513.6	12560.5	12542.3	12646.5	13681.1	14921.5	13191.2
45°	15760.6	15424.5	14267.4	13576.9	13602.9	13767.1	13868.7	14285.7	15825.8	17240.8	14997.1
47.5°	16750.9	16419.9	15130.0	14517.6	14830.3	15153.4	15429.7	16219.3	18030.4	19523.6	16401.7
50°	17597.8	17285.1	16044.7	15552.1	16255.7	16776.9	17225.1	18395.2	20401.8	21261.7	17386.7
52.5°	18291.0	18082.5	16993.2	16737.8	17884.4	18648.0	19304.7	20706.7	22502.1	22674.1	18152.9
55°	18965.9	18817.4	18012.1	18147.6	19797.2	20837.0	21668.2	23158.8	24310.7	23852.0	18887.7
57.5°	19742.5	19607.0	19174.4	19935.3	22311.9	23620.1	24526.9	25332.2	25902.9	25055.9	19580.9
60°	20534.7	20456.5	20466.9	21921.0	25199.3	26455.3	26955.7	27164.1	27466.4	26189.5	19620.0
62.5°	21290.4	21438.9	21944.5	24130.8	27964.2	28928.3	29181.1	29387.0	29032.6	26369.3	18126.8
65°	22569.9	22812.2	24018.8	27088.6	31005.3	32037.2	32297.8	31591.6	29280.1	24044.8	14744.3
67.5°	23195.3	23638.3	25790.8	29845.6	33955.2	35101.8	35005.4	31734.9	26275.5	18335.3	9462.1
69°	23065.0	23536.7	26199.9	30690.0	34935.0	35974.8	35362.4	29981.1	22384.9	13282.4	5808.6
70°	22549.0	23025.9	25988.9	30658.7	35060.1	35883.6	34700.5	27815.6	18926.8	9712.3	3632.7
72.5°	18830.4	19242.1	23072.8	27711.4	32297.8	31628.1	29030.0	19270.8	9222.4	2645.0	818.3
75°	11591.1	11820.5	16555.4	20876.0	24394.0	22674.1	19341.2	9587.2	2749.2	747.9	453.4
77.5°	6123.9	6228.2	9063.4	12305.2	15463.5	12795.1	9912.9	3739.5	1266.5	469.1	328.3
80°	3619.6	3697.8	4880.9	5626.2	6692.0	5589.7	3963.6	2295.8	906.9	294.5	291.9
82.5°	2071.7	2121.2	3538.8	3127.1	2637.2	2251.5	1972.7	2175.9	544.6	198.1	302.3
85°	760.9	771.4	1990.9	2379.2	1568.8	932.9	979.8	1803.3	145.9	125.1	237.1
87.5°	354.4	346.6	1024.1	1456.7	917.3	591.5	763.5	396.1	57.3	80.8	65.1
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: P300888

CATALOG NUMBER: GLNA-AF-09-LED-E1-SL4-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9	6540.9
2.5°	6462.7	6366.3	6191.7	6011.9	5829.4	5688.7	5550.6	5441.2	5404.7	5336.9	5342.1
5°	6264.6	6087.4	5722.6	5352.6	4966.9	4649.0	4349.3	4106.9	3989.7	3869.8	3869.8
7.5°	6092.6	5834.7	5264.0	4662.0	4039.2	3515.4	3043.7	2689.3	2493.9	2337.5	2334.9
10°	6027.5	5678.3	4880.9	4018.3	3150.6	2436.5	1876.3	1516.6	1331.6	1211.8	1206.5
12.5°	6056.2	5623.6	4586.4	3424.2	2334.9	1566.2	1086.7	854.7	776.6	740.1	740.1
15°	6139.6	5607.9	4292.0	2843.1	1649.5	979.8	721.8	659.3	654.1	654.1	654.1
17.5°	6241.2	5613.2	3989.7	2277.6	1123.2	701.0	622.8	615.0	620.2	620.2	620.2
20°	6345.4	5615.8	3663.9	1753.8	792.2	609.8	586.3	583.7	588.9	588.9	591.5
22.5°	6473.1	5628.8	3338.2	1310.8	654.1	575.9	557.7	557.7	560.3	560.3	557.7
25°	6619.0	5654.9	2999.4	972.0	596.8	552.5	536.8	534.2	536.8	534.2	531.6
27.5°	6801.5	5691.3	2621.6	760.9	570.7	529.0	516.0	516.0	513.4	510.8	508.2
30°	7030.8	5733.0	2196.8	646.3	544.6	508.2	495.1	492.5	489.9	484.7	484.7
32.5°	7380.0	5824.2	1777.2	586.3	516.0	479.5	469.1	469.1	463.9	458.6	456.0
35°	7916.8	6004.0	1402.0	549.8	484.7	448.2	435.2	435.2	430.0	427.4	424.8
37.5°	8659.5	6277.7	1089.3	516.0	453.4	414.3	401.3	398.7	393.5	388.3	385.7
40°	9647.1	6616.4	857.3	484.7	422.2	380.5	370.0	364.8	354.4	346.6	346.6
42.5°	10887.5	7002.1	695.8	450.8	385.7	349.2	341.4	333.6	315.3	307.5	304.9
45°	12185.3	7348.7	588.9	411.7	349.2	317.9	312.7	299.7	276.2	268.4	268.4
47.5°	13120.8	7429.5	518.6	375.3	315.3	284.0	281.4	258.0	237.1	231.9	229.3
50°	13704.5	7270.5	461.2	338.8	284.0	252.8	245.0	216.3	203.3	198.1	195.4
52.5°	14098.0	6986.5	414.3	307.5	255.4	224.1	205.9	185.0	174.6	169.4	169.4
55°	14413.4	6585.2	367.4	278.8	231.9	200.7	174.6	159.0	148.5	143.3	143.3
57.5°	14502.0	6040.5	320.5	255.4	208.5	177.2	148.5	138.1	125.1	122.5	122.5
60°	13858.3	5058.1	284.0	226.7	187.6	153.7	130.3	117.3	104.2	101.6	99.0
62.5°	12161.8	3914.1	250.2	200.7	164.2	132.9	112.1	96.4	86.0	86.0	86.0
65°	9277.1	2624.2	218.9	174.6	143.3	112.1	96.4	78.2	73.0	73.0	75.6
67.5°	5553.2	1428.0	187.6	148.5	122.5	93.8	80.8	67.8	65.1	67.8	67.8
69°	3254.8	839.1	169.4	132.9	106.8	83.4	70.4	59.9	65.1	67.8	67.8
70°	2009.2	565.5	156.4	119.9	96.4	75.6	65.1	57.3	62.5	65.1	65.1
72.5°	560.3	291.9	125.1	93.8	78.2	62.5	52.1	52.1	59.9	62.5	62.5
75°	364.8	216.3	96.4	70.4	59.9	49.5	44.3	49.5	57.3	59.9	59.9
77.5°	302.3	177.2	78.2	57.3	49.5	46.9	41.7	44.3	52.1	54.7	54.7
80°	276.2	125.1	62.5	52.1	44.3	41.7	39.1	36.5	46.9	49.5	49.5
82.5°	263.2	99.0	54.7	46.9	41.7	36.5	33.9	36.5	41.7	44.3	46.9
85°	164.2	65.1	49.5	44.3	36.5	33.9	33.9	33.9	39.1	41.7	41.7
87.5°	59.9	52.1	44.3	36.5	31.3	31.3	31.3	31.3	33.9	39.1	39.1
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)