

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: P452993

Luminaire Tested: **GALN-SA4A-727-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452993
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-727-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12113 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

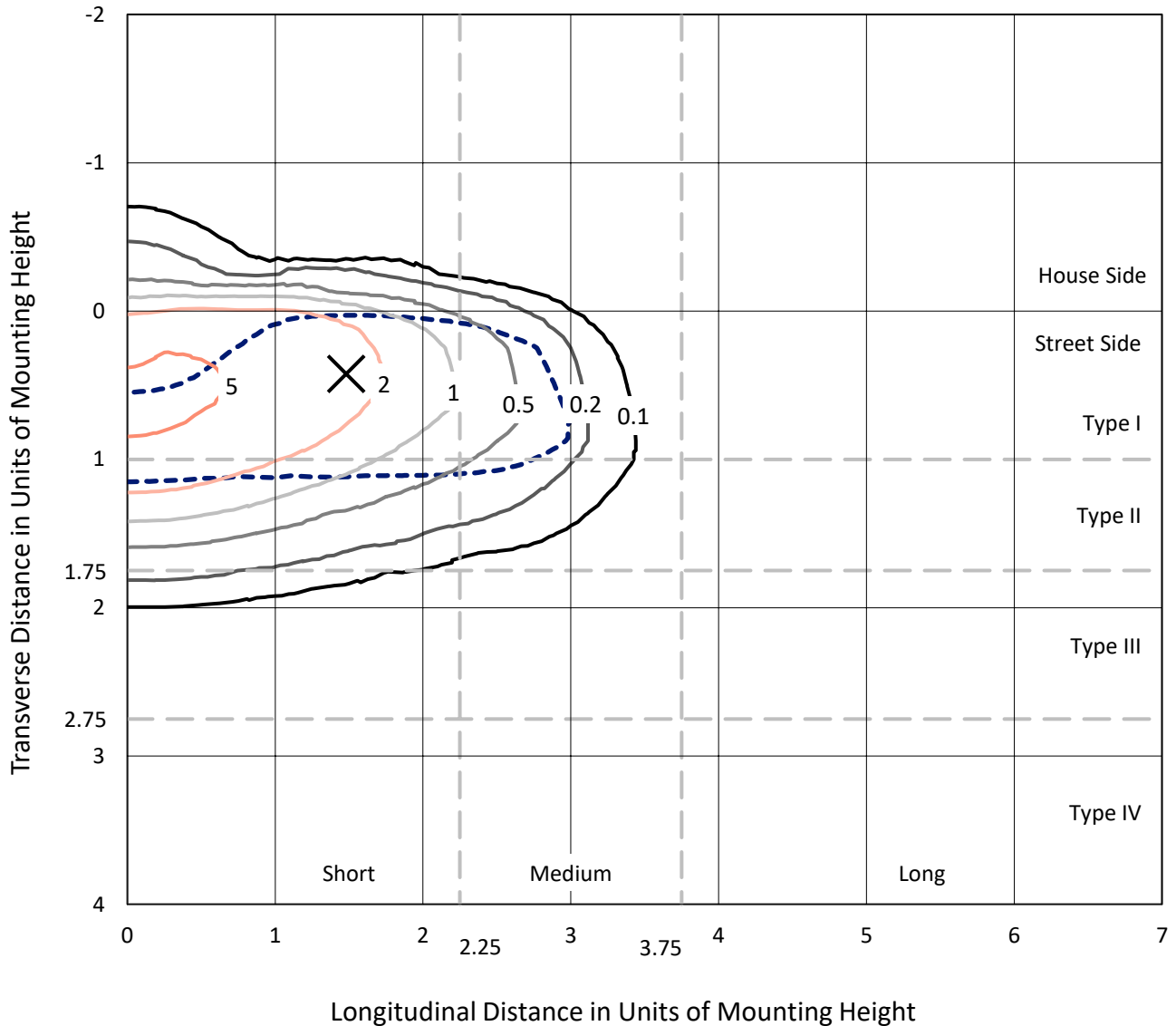
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P452993
 CATALOG NUMBER: GALN-SA4A-727-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

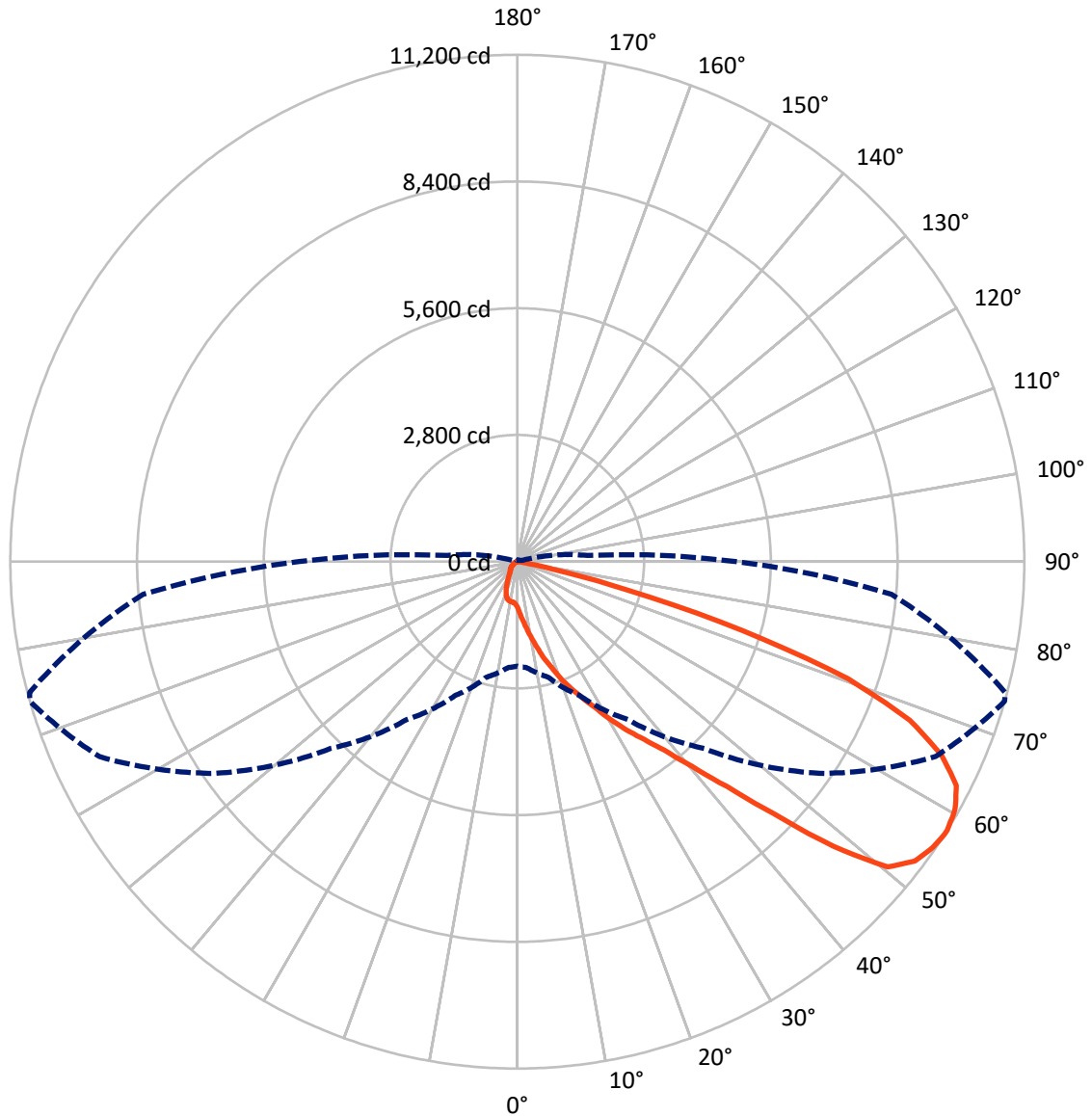
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Short - N/A

REPORT NUMBER: P452993
CATALOG NUMBER: GALN-SA4A-727-U-T2R-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

REPORT NUMBER: P452993

CATALOG NUMBER: GALN-SA4A-727-U-T2R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	698.6	0.0	698.6
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	11414.4	0.0	11414.4
	% Fixture	94.2	0.0	94.2
Total	Lumens	12113.0	0.0	12113.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.4	1.0
10°-20°	482.6	4.0
20°-30°	1032.7	8.5
30°-40°	1898.1	15.7
40°-50°	2909.9	24.0
50°-60°	3078.2	25.4
60°-70°	2010.2	16.6
70°-80°	549.2	4.5
80°-90°	29.6	0.2
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°	12113.0	100.0
0°-180°	12113.0	100.0

Coefficient of Utilization



REPORT NUMBER: P452993

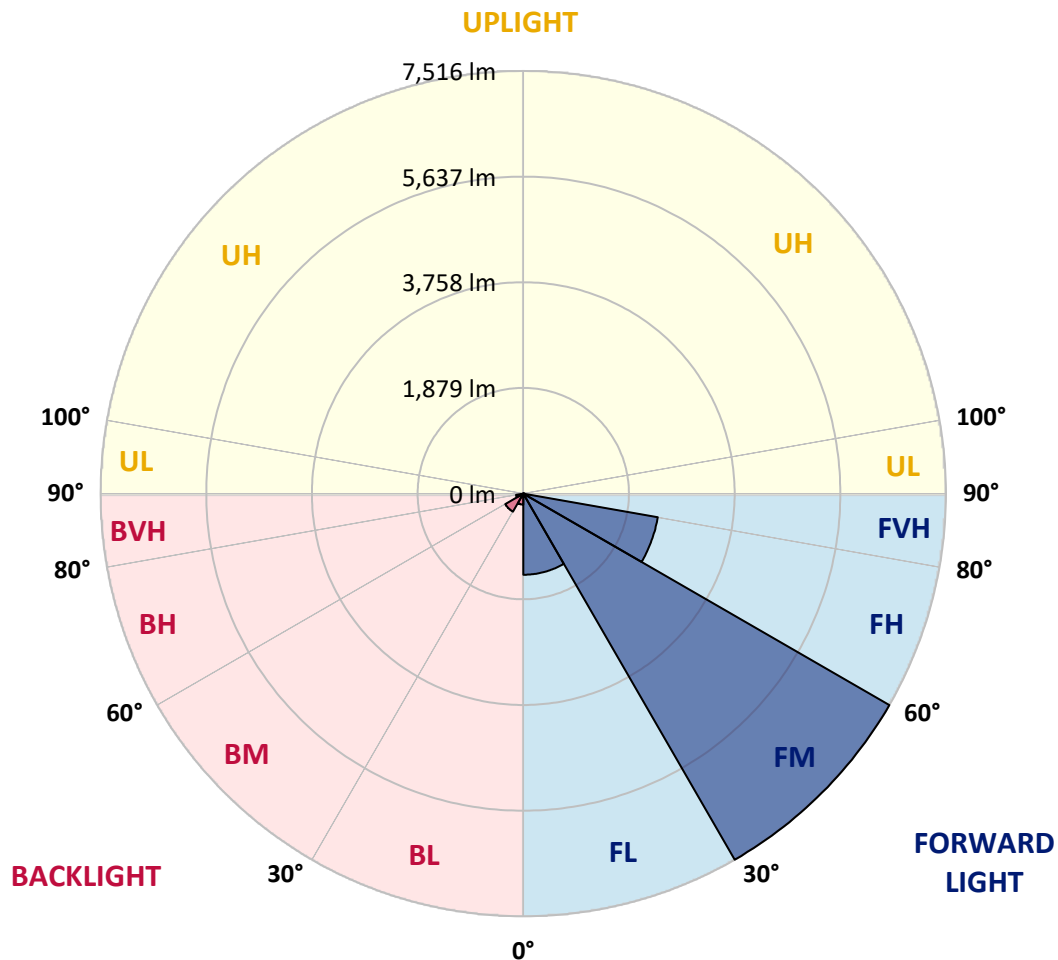
CATALOG NUMBER: GALN-SA4A-727-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1442.6	11.9			
FM (30°-60°)	7516.3	62.1			
FH (60°-80°)	2428.3	20.0			G2/5000
FVH (80°-90°)	27.1	0.2			G1/100
BL (0°-30°)	195.2	1.6	B1/500		
BM (30°-60°)	369.9	3.1	B1/1000		
BH (60°-80°)	131.2	1.1	B1/500		G1/500
BVH (80°-90°)	2.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





REPORT NUMBER: P452993

CATALOG NUMBER: GALN-SA4A-727-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4
2.5°	1484.5	1471.1	1444.3	1435.1	1395.8	1334.8	1281.2	1209.3	1152.4	1146.6	1078.0
5°	1987.9	1957.8	1945.3	1885.1	1790.5	1701.9	1549.7	1434.3	1301.3	1291.3	1153.3
7.5°	2473.0	2431.2	2418.6	2361.7	2251.4	2111.7	1914.3	1704.4	1493.7	1474.4	1254.5
10°	2824.2	2830.1	2807.5	2769.9	2680.4	2538.2	2294.8	2008.0	1707.8	1683.5	1368.2
12.5°	3076.0	3075.1	3079.3	3078.5	3030.8	2922.9	2667.0	2336.7	1943.6	1895.9	1498.7
15°	3239.9	3242.4	3254.9	3298.4	3303.4	3236.5	3023.3	2651.1	2217.1	2157.7	1640.0
17.5°	3405.5	3423.0	3443.1	3484.1	3520.9	3494.1	3343.6	2978.9	2464.6	2420.3	1791.4
20°	3678.9	3703.2	3691.5	3716.6	3735.8	3738.3	3622.1	3281.7	2764.9	2690.4	1964.5
22.5°	4116.3	4115.5	4085.4	4040.2	4002.6	4000.9	3895.5	3592.8	3037.5	2965.6	2138.5
25°	4669.1	4671.6	4613.1	4484.3	4390.6	4276.1	4154.8	3865.4	3329.4	3240.7	2321.6
27.5°	5303.1	5287.2	5198.5	5021.2	4835.6	4639.9	4465.1	4182.4	3638.8	3565.2	2531.5
30°	5872.6	5866.7	5763.0	5546.4	5302.2	5105.7	4852.3	4579.7	4039.4	3949.1	2766.5
32.5°	6402.8	6411.2	6267.3	6043.2	5807.4	5580.7	5313.1	4959.3	4432.5	4304.5	3022.4
35°	6816.8	6825.2	6676.3	6489.8	6247.3	6059.1	5804.0	5364.1	4820.5	4712.6	3316.8
37.5°	7037.6	7048.4	6962.3	6821.8	6670.4	6575.9	6338.4	5885.1	5292.2	5227.0	3664.7
40°	7079.4	7091.9	7054.3	7016.7	7008.3	7076.0	7006.6	6499.0	5946.2	5844.2	4183.2
42.5°	6953.9	6970.7	6987.4	7071.0	7241.6	7490.0	7731.7	7332.0	6788.4	6651.2	4817.2
45°	6624.4	6622.8	6688.8	6905.4	7287.6	7817.9	8489.4	8374.8	7935.8	7772.7	5712.9
47.5°	6060.8	6052.4	6195.4	6504.0	7099.5	7878.1	9107.5	9641.0	9400.2	9249.6	6675.5
50°	5201.9	5242.8	5467.8	5898.5	6632.0	7695.8	9298.1	10471.5	10601.9	10442.2	7453.2
52.5°	4195.8	4194.1	4547.0	5131.6	5939.5	7294.3	9165.2	10622.0	10992.5	10870.4	7836.3
55°	3105.2	3127.0	3494.1	4083.7	5040.5	6561.7	8731.1	10467.3	11141.4	11055.2	8088.8
57°	2309.9	2348.4	2642.7	3266.6	4257.7	5836.6	8153.2	10190.5	11199.9	11153.1	8298.7
57.5°	2156.0	2157.7	2444.5	3011.6	4028.5	5558.1	7987.6	10075.1	11198.2	11172.3	8333.0
60°	1327.2	1369.0	1567.3	2035.6	2948.8	4338.0	6877.8	9411.9	11111.3	11148.9	8479.4
62.5°	794.5	812.1	940.9	1226.9	1900.9	3166.3	5628.4	8563.0	10884.6	10999.2	8469.3
65°	511.0	515.2	573.7	742.6	1188.4	2140.1	4337.1	7441.5	10298.4	10509.1	8138.2
67.5°	394.7	401.4	424.8	487.6	689.1	1333.1	3067.6	6244.8	9350.0	9621.8	7335.3
70°	350.4	353.8	362.1	382.2	455.8	752.7	1908.5	4878.2	7753.5	7830.4	5740.5
72.5°	286.0	295.2	321.1	327.8	361.3	470.0	1062.1	3274.2	5209.4	5228.6	3211.4
75°	221.6	223.3	261.8	281.0	304.4	323.7	474.2	1650.9	2502.2	2368.4	1237.7
77.5°	165.6	173.1	190.7	214.9	248.4	231.7	212.4	622.2	776.9	762.7	359.6
80°	106.2	110.4	133.0	161.4	193.2	151.4	119.6	182.3	170.6	175.6	86.1
82.5°	53.5	54.4	85.3	131.3	122.9	76.1	75.3	74.4	63.6	62.7	40.1
85°	5.9	12.5	55.2	75.3	55.2	25.1	35.1	34.3	33.5	34.3	23.4
87.5°	0.8	0.8	9.2	10.9	7.5	8.4	10.0	10.9	13.4	12.5	10.0
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: P452993

CATALOG NUMBER: GALN-SA4A-727-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4	1014.4
2.5°	1044.6	1011.1	949.2	889.8	845.5	817.1	780.3	766.9	747.7	745.2	736.0
5°	1089.7	1026.2	918.3	833.0	764.4	712.5	667.4	629.7	599.6	592.9	596.3
7.5°	1154.1	1059.6	909.1	792.8	697.5	608.8	536.9	492.6	460.8	449.1	450.8
10°	1226.9	1103.9	907.4	750.2	604.7	495.9	417.3	378.0	359.6	352.9	345.4
12.5°	1313.0	1154.9	903.2	684.1	502.6	395.6	339.5	316.1	298.6	293.5	293.5
15°	1410.0	1209.3	883.1	602.1	408.1	327.0	289.4	271.0	265.1	260.1	260.1
17.5°	1511.2	1262.8	841.3	501.0	338.7	280.2	256.7	245.9	237.5	231.7	231.7
20°	1626.6	1315.5	774.4	411.5	286.0	250.1	231.7	219.1	212.4	207.4	205.7
22.5°	1736.2	1358.2	689.1	337.9	249.2	225.0	208.2	194.9	188.2	185.7	185.7
25°	1849.9	1384.1	586.3	279.3	227.5	204.1	185.7	174.8	168.9	167.3	166.4
27.5°	1960.3	1399.2	495.9	244.2	207.4	184.8	167.3	158.9	153.0	151.4	152.2
30°	2094.1	1401.7	408.1	219.1	189.8	166.4	150.5	143.0	139.7	138.0	137.2
32.5°	2229.6	1398.3	342.9	204.1	173.1	150.5	137.2	131.3	128.8	126.3	126.3
35°	2381.8	1380.8	291.9	189.0	157.2	137.2	125.4	120.4	117.1	114.6	113.7
37.5°	2570.8	1371.6	262.6	172.3	143.0	124.6	113.7	108.7	106.2	102.9	102.0
40°	2868.6	1412.5	253.4	157.2	128.8	112.9	102.9	97.0	93.7	90.3	89.5
42.5°	3239.9	1484.5	238.3	142.2	116.2	102.0	92.0	85.3	79.4	75.3	73.6
45°	3720.8	1579.0	214.9	126.3	105.4	90.3	81.1	72.8	65.2	61.9	61.1
47.5°	4225.1	1670.1	194.0	113.7	93.7	80.3	70.3	61.1	54.4	51.9	51.0
50°	4534.5	1688.5	180.6	99.5	82.0	69.4	59.4	51.0	46.8	44.3	44.3
52.5°	4675.8	1659.2	162.2	87.0	71.1	61.1	51.0	44.3	41.8	40.1	39.3
55°	4774.5	1614.1	138.0	75.3	61.1	51.9	45.2	40.1	36.8	35.1	34.3
57°	4832.2	1553.0	119.6	66.1	52.7	45.2	40.1	36.0	32.6	29.3	29.3
57.5°	4834.7	1529.6	114.6	65.2	50.2	43.5	39.3	35.1	30.9	27.6	26.8
60°	4760.3	1369.0	92.0	55.2	40.1	36.8	32.6	27.6	21.7	18.4	17.6
62.5°	4521.1	1165.0	76.1	46.8	32.6	28.4	23.4	20.9	15.1	10.9	10.9
65°	4159.0	945.0	65.2	37.6	26.8	20.9	15.9	15.1	9.2	5.0	4.2
67.5°	3635.5	736.0	55.2	30.9	22.6	15.1	10.9	10.0	5.0	1.7	0.0
70°	2769.9	501.8	46.0	25.1	16.7	10.9	7.5	5.9	3.3	0.8	0.0
72.5°	1596.5	276.0	38.5	19.2	12.5	8.4	5.9	3.3	3.3	0.0	0.0
75°	570.4	118.8	29.3	14.2	10.0	6.7	4.2	1.7	2.5	0.8	0.0
77.5°	181.5	63.6	19.2	10.9	8.4	5.0	3.3	1.7	1.7	0.8	0.0
80°	53.5	33.5	11.7	9.2	5.9	4.2	2.5	0.8	1.7	0.8	0.0
82.5°	29.3	16.7	9.2	6.7	5.9	3.3	2.5	0.8	0.8	0.8	0.0
85°	15.1	10.0	7.5	6.7	5.9	3.3	2.5	0.8	0.0	0.8	0.8
87.5°	8.4	7.5	7.5	6.7	5.9	4.2	2.5	0.8	0.0	0.0	0.0
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)