

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: P453136

Luminaire Tested: **GALN-SA4A-827-U-T2-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-11)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-827-U-T2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9942 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

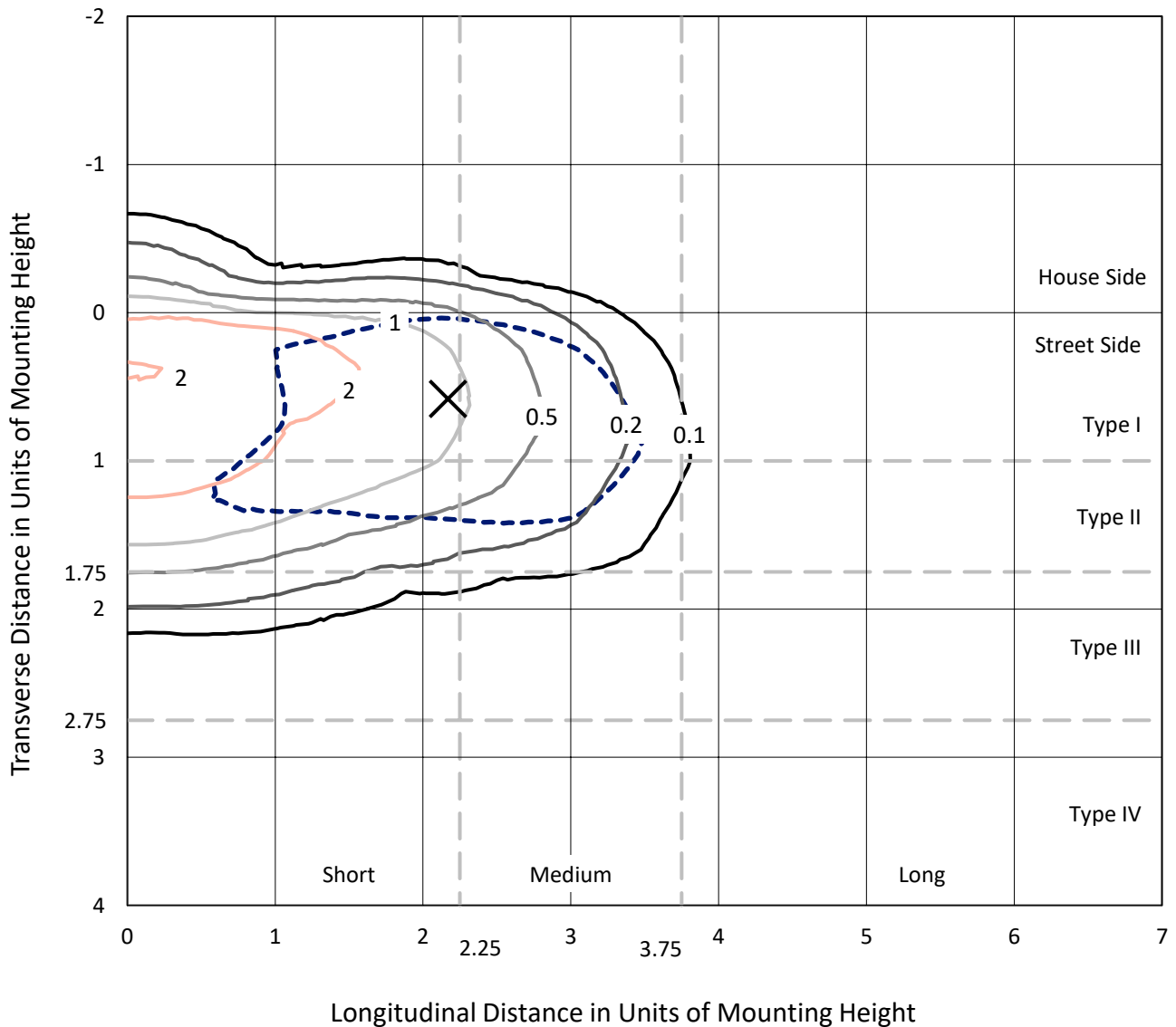
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

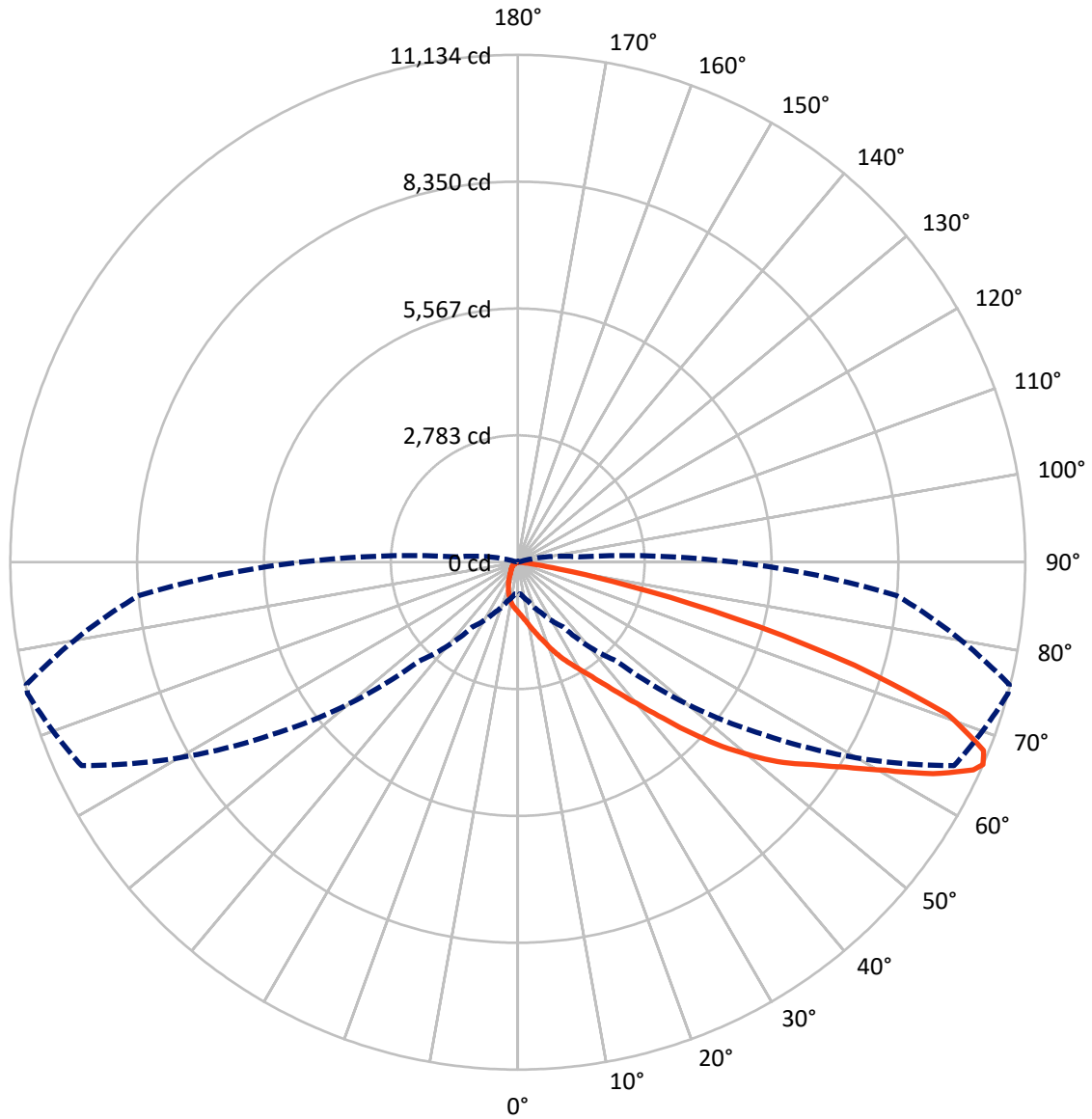
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	613.8	0.0	613.8
	% Fixture	6.2	0.0	6.2
Street Side	Lumens	9328.2	0.0	9328.2
	% Fixture	93.8	0.0	93.8
Total	Lumens	9942.0	0.0	9942.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	1.1
10°-20°	308.6	3.1
20°-30°	532.9	5.4
30°-40°	961.3	9.7
40°-50°	1736.6	17.5
50°-60°	2707.4	27.2
60°-70°	2571.9	25.9
70°-80°	963.9	9.7
80°-90°	54.4	0.5
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°	9942.0	100.0
0°-180°	9942.0	100.0



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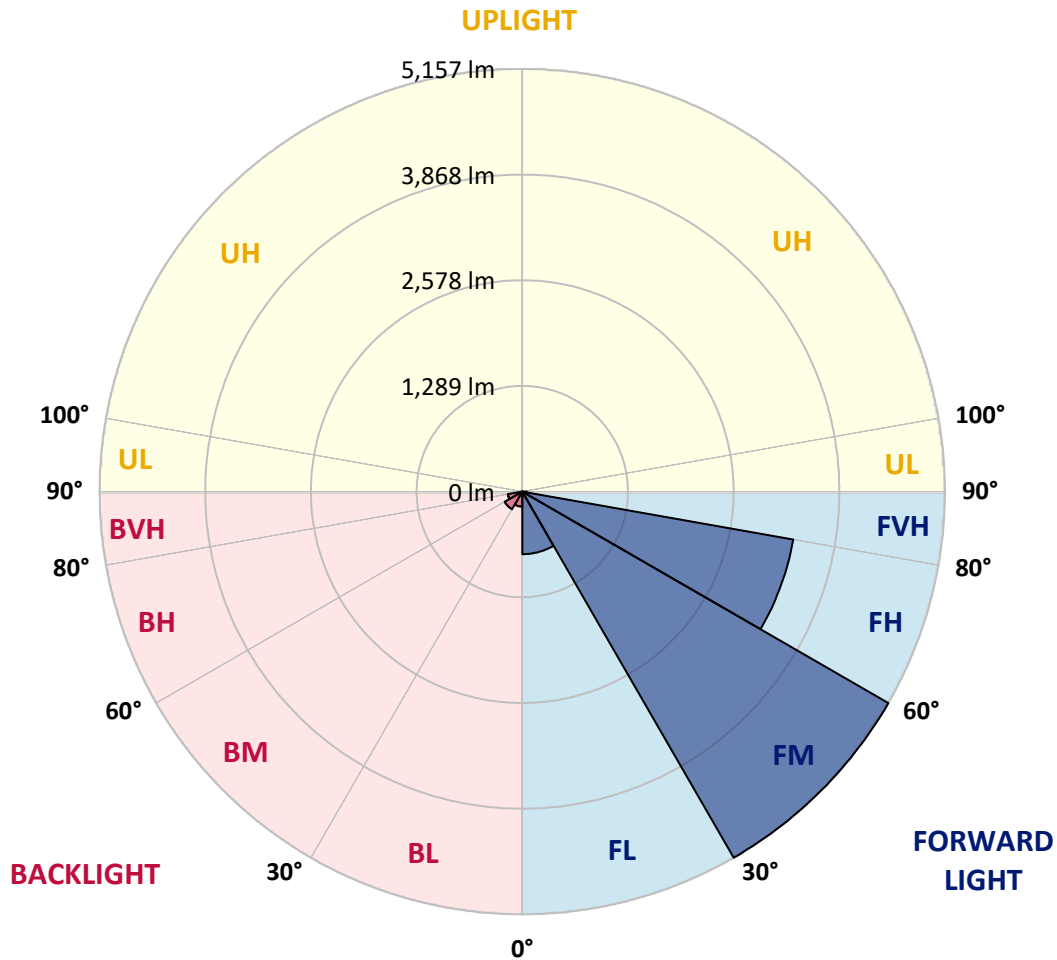
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	763.1	7.7			
FM	(30°-60°)	5156.9	51.9			
FH	(60°-80°)	3356.6	33.8			G2/5000
FVH	(80°-90°)	51.6	0.5			G1/100
BL	(0°-30°)	183.3	1.8	B1/500		
BM	(30°-60°)	248.4	2.5	B1/1000		
BH	(60°-80°)	179.2	1.8	B1/500		G1/500
BVH	(80°-90°)	2.8	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3
2.5°	1299.0	1282.8	1287.9	1280.6	1263.7	1238.7	1216.6	1185.0	1153.4	1148.3	1113.0
5°	1470.3	1465.8	1460.0	1438.6	1426.9	1388.7	1343.1	1288.7	1223.3	1211.5	1147.5
7.5°	1587.1	1584.9	1587.9	1576.9	1566.6	1532.0	1483.5	1409.2	1307.8	1301.2	1194.6
10°	1625.4	1631.3	1642.3	1659.9	1676.1	1665.1	1628.3	1535.7	1417.3	1398.2	1248.2
12.5°	1603.3	1609.9	1636.4	1683.4	1735.6	1765.8	1751.1	1683.4	1533.5	1518.0	1308.5
15°	1546.7	1554.8	1592.3	1665.1	1758.4	1843.7	1880.5	1831.9	1668.7	1643.7	1381.3
17.5°	1462.9	1474.7	1528.3	1624.6	1752.5	1899.6	2003.2	1987.1	1812.8	1789.3	1460.7
20°	1399.7	1408.5	1454.1	1564.4	1727.6	1930.4	2120.1	2165.7	1990.7	1950.3	1554.1
22.5°	1441.6	1444.5	1460.0	1526.1	1682.7	1938.5	2223.0	2351.7	2179.7	2143.6	1651.1
25°	1646.7	1617.3	1601.8	1587.1	1673.2	1931.2	2316.4	2545.8	2367.9	2329.6	1747.4
27.5°	1970.1	1956.9	1879.0	1774.6	1754.8	1940.7	2378.1	2729.5	2545.0	2503.8	1841.5
30°	2322.3	2299.5	2251.7	2098.8	1945.2	2008.4	2423.0	2908.2	2754.5	2700.1	1927.5
32.5°	2645.7	2660.4	2589.1	2431.8	2253.9	2152.5	2481.1	3103.0	2994.9	2927.3	2027.5
35°	3022.9	3052.3	2942.7	2792.0	2584.0	2412.7	2594.3	3322.8	3300.0	3214.7	2181.9
37.5°	3405.9	3423.5	3356.6	3144.9	2957.4	2743.5	2807.5	3594.0	3675.6	3602.9	2366.4
40°	3727.8	3752.1	3702.8	3514.7	3314.7	3126.5	3116.9	3889.6	4122.6	4047.6	2641.3
42.5°	3974.1	3992.5	3994.0	3860.9	3680.8	3595.5	3511.7	4266.7	4682.8	4596.0	2960.4
45°	4285.1	4311.5	4296.1	4205.7	4071.1	4055.7	4012.3	4722.5	5353.2	5243.7	3374.2
47.5°	4765.8	4783.5	4745.3	4638.7	4501.9	4526.2	4500.5	5233.4	6036.9	5942.8	3802.8
50°	5099.6	5129.0	5183.4	5226.0	5126.8	5037.1	4960.7	5710.5	6686.0	6601.5	4241.0
52.5°	5095.9	5144.4	5316.5	5531.1	5748.0	5720.8	5501.0	6237.6	7305.7	7201.3	4652.6
55°	4752.6	4846.7	5099.6	5480.4	6081.0	6380.2	6280.2	6847.7	7840.9	7770.3	5129.7
57.5°	4043.9	4101.3	4452.7	4984.9	5895.0	6690.4	7182.9	7674.7	8482.7	8449.6	5870.7
60°	2720.0	2745.7	3197.8	3855.8	5018.7	6380.9	7844.6	8675.3	9272.9	9256.7	6736.0
62.5°	1558.5	1569.5	1897.4	2452.4	3571.3	5407.6	7900.4	9909.5	10220.5	10229.3	7737.2
65°	838.8	844.7	1109.3	1439.4	2173.0	3854.3	7104.3	10585.9	10986.5	11003.4	8357.7
66°	724.1	696.2	882.9	1226.9	1729.0	3067.7	6600.7	10561.6	11133.5	11115.2	8335.6
67.5°	550.6	575.6	705.0	943.2	1281.3	2181.1	5449.5	10091.9	11021.8	10964.5	7996.7
70°	394.0	404.3	502.1	672.6	872.6	1196.8	3482.3	8381.9	10017.6	9940.4	6966.8
72.5°	254.4	265.4	355.8	486.7	630.7	653.5	1949.6	6056.0	7723.3	7712.2	5246.6
75°	181.6	191.9	235.2	348.5	474.2	404.3	938.8	4081.4	4909.9	4876.8	3245.6
77.5°	131.6	136.7	157.3	227.9	338.9	289.6	435.2	2179.7	2444.3	2559.7	1434.2
80°	75.7	80.1	109.5	138.9	229.4	197.7	208.0	874.8	902.0	858.6	448.4
82.5°	37.5	42.6	65.4	94.8	143.4	133.1	95.6	263.2	277.9	270.5	113.2
85°	8.8	11.0	36.8	62.5	69.8	59.5	46.3	77.2	95.6	93.4	43.4
87.5°	0.7	1.5	13.2	11.0	11.8	19.8	16.2	19.8	30.9	28.7	15.4
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°	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3	1087.3
2.5°	1096.8	1082.8	1042.4	1002.7	969.6	935.1	903.5	885.1	877.7	869.7	873.3
5°	1112.3	1078.4	996.8	926.3	857.2	798.4	751.3	721.2	706.5	704.3	700.6
7.5°	1132.8	1074.8	948.3	838.0	747.6	682.2	628.5	585.2	571.9	560.2	550.6
10°	1157.8	1068.1	888.0	745.4	649.1	566.8	496.2	444.8	418.3	410.9	416.1
12.5°	1184.3	1055.6	824.8	660.1	549.1	444.0	378.6	352.9	345.5	342.6	343.3
15°	1210.8	1040.2	758.7	577.8	437.4	354.3	324.2	317.6	314.6	313.2	311.7
17.5°	1235.0	1015.2	684.4	497.7	354.3	302.9	291.8	286.0	280.1	277.9	274.2
20°	1263.7	986.5	617.5	408.0	299.9	274.2	261.0	249.9	241.1	235.2	234.5
22.5°	1290.9	949.8	547.7	338.2	273.5	246.3	224.9	213.2	202.9	195.5	197.7
25°	1305.6	904.9	485.2	294.8	249.2	218.3	194.8	180.1	169.1	165.4	164.7
27.5°	1305.6	849.8	424.2	269.8	227.2	193.3	169.1	155.1	147.8	142.6	143.4
30°	1295.3	788.8	367.6	250.7	208.0	171.3	148.5	136.0	130.1	126.4	125.7
32.5°	1287.2	730.7	319.0	232.3	188.2	152.2	132.3	122.8	116.9	113.2	113.2
35°	1299.7	680.7	281.6	213.9	169.8	137.5	119.8	111.0	105.1	102.2	101.4
37.5°	1332.8	635.2	252.9	194.1	152.9	125.0	111.0	100.7	94.8	91.2	89.7
40°	1414.4	609.4	231.6	175.7	136.7	114.7	100.7	91.2	83.8	80.1	79.4
42.5°	1545.2	610.2	211.0	158.8	124.2	105.9	91.9	80.9	72.8	69.1	68.4
45°	1742.3	638.1	194.8	142.6	113.2	96.3	82.3	70.6	63.2	59.5	59.5
47.5°	1978.2	692.5	180.8	128.6	102.9	87.5	72.8	61.0	53.7	50.7	50.7
50°	2234.1	763.1	166.9	113.9	94.1	77.9	62.5	52.9	47.0	44.8	44.8
52.5°	2495.0	848.3	152.9	102.2	84.5	67.6	53.7	47.0	41.9	40.4	39.7
55°	2837.6	957.1	138.2	89.7	74.2	58.1	47.8	41.2	35.3	33.1	32.3
57.5°	3364.7	1121.1	122.0	78.7	61.0	48.5	41.2	34.6	27.9	24.3	23.5
60°	4000.6	1321.0	105.1	69.1	49.3	39.7	33.1	26.5	20.6	16.2	15.4
62.5°	4596.0	1448.2	89.0	58.1	39.0	30.1	23.5	19.8	14.7	10.3	9.6
65°	4859.2	1405.6	73.5	47.0	30.9	21.3	15.4	14.0	8.8	4.4	3.7
66°	4771.7	1342.3	67.6	42.6	27.9	18.4	13.2	11.8	6.6	2.2	2.2
67.5°	4513.7	1193.1	58.8	36.8	24.3	14.7	10.3	8.8	3.7	0.7	0.0
70°	3867.5	965.2	46.3	27.2	17.6	10.3	5.9	4.4	2.2	0.0	0.0
72.5°	2970.7	719.0	36.8	20.6	12.5	5.9	2.9	1.5	2.2	0.0	0.0
75°	1820.2	410.9	28.7	15.4	8.1	3.7	2.2	0.0	2.2	0.7	0.0
77.5°	807.9	184.5	19.1	10.3	5.9	2.9	1.5	0.0	1.5	0.7	0.0
80°	204.4	60.3	11.0	7.4	4.4	2.2	0.7	0.0	1.5	1.5	0.7
82.5°	55.9	22.1	8.1	5.9	3.7	2.2	0.7	0.0	1.5	1.5	1.5
85°	22.1	10.3	7.4	5.9	4.4	2.2	0.7	0.0	1.5	1.5	1.5
87.5°	10.3	7.4	7.4	6.6	5.1	2.2	0.7	0.0	1.5	0.7	1.5
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)