

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: P452201

Luminaire Tested: **GALN-SA3A-827-U-SL4-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452201  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA3A-827-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8255 lumens  
Efficiency: N/A  
Efficacy: 88.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

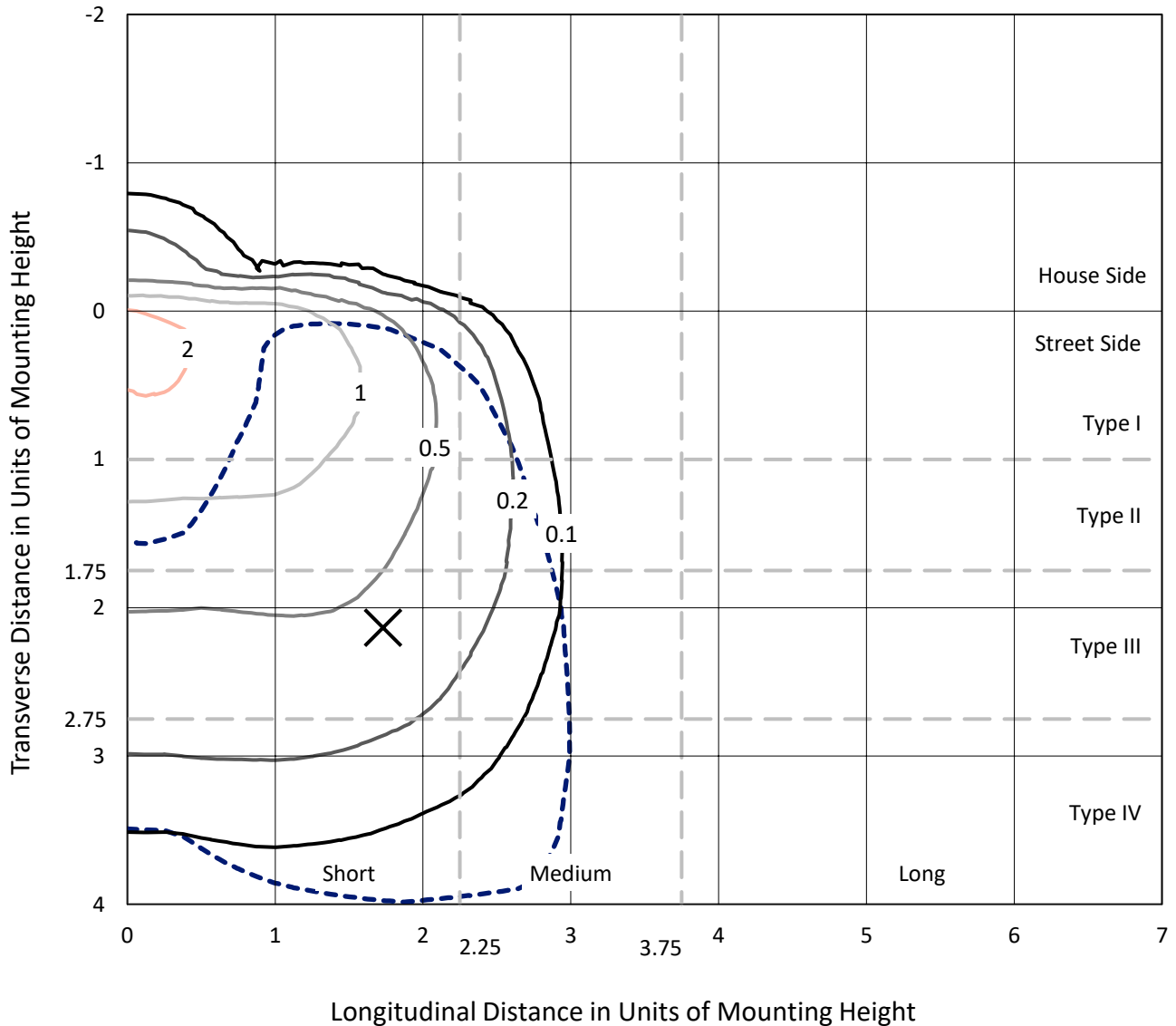
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

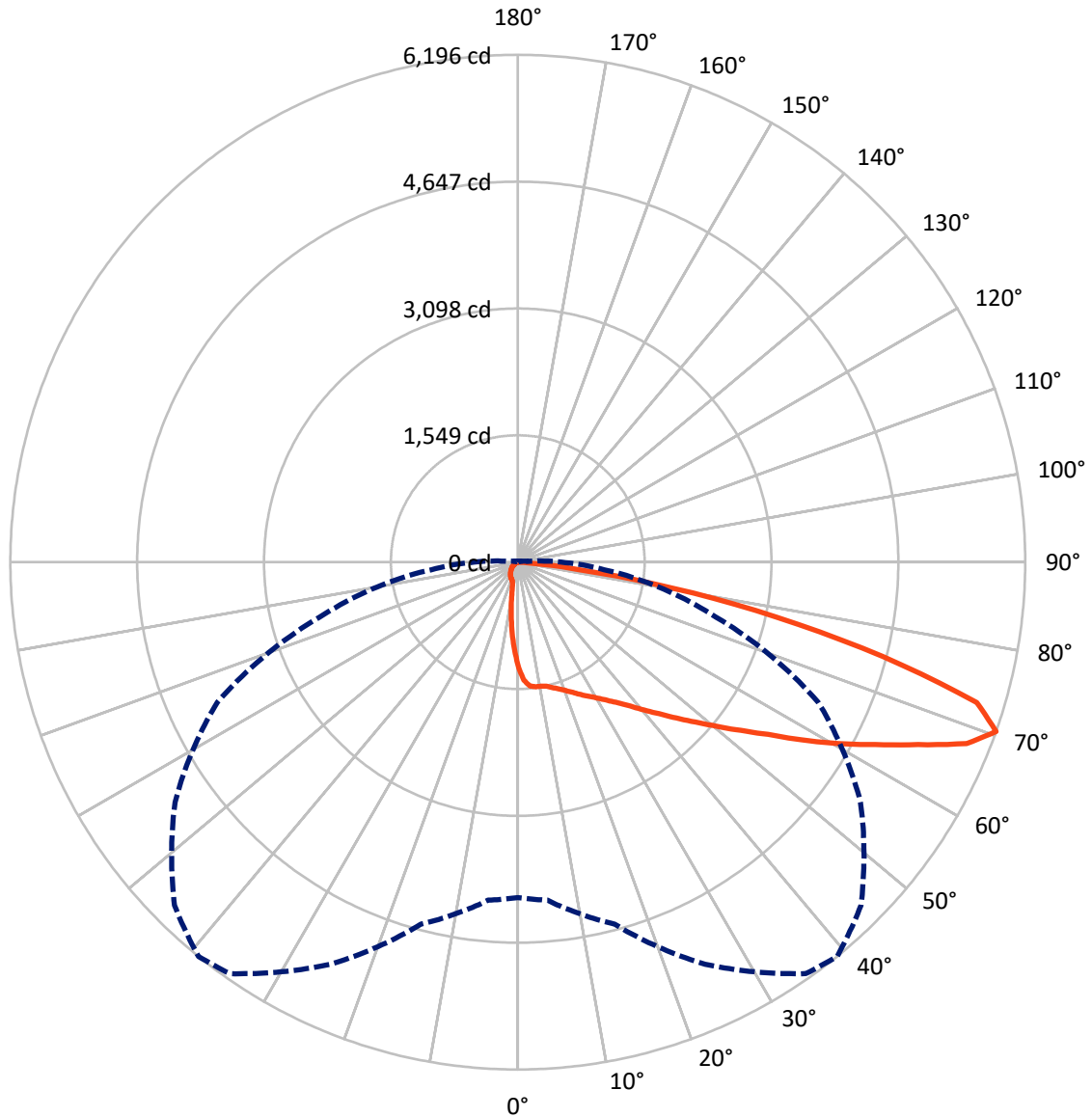
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	538.3	0.0	538.3
	% Fixture	6.5	0.0	6.5
<b>Street Side</b>	Lumens	7716.7	0.0	7716.7
	% Fixture	93.5	0.0	93.5
<b>Total</b>	Lumens	8255.0	0.0	8255.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.9	1.3
10°-20°	285.5	3.5
20°-30°	478.3	5.8
30°-40°	741.8	9.0
40°-50°	1175.5	14.2
50°-60°	1723.1	20.9
60°-70°	2208.6	26.8
70°-80°	1387.8	16.8
80°-90°	144.6	1.8
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°	8255.0	100.0
0°-180°	8255.0	100.0

**Coefficient of Utilization**



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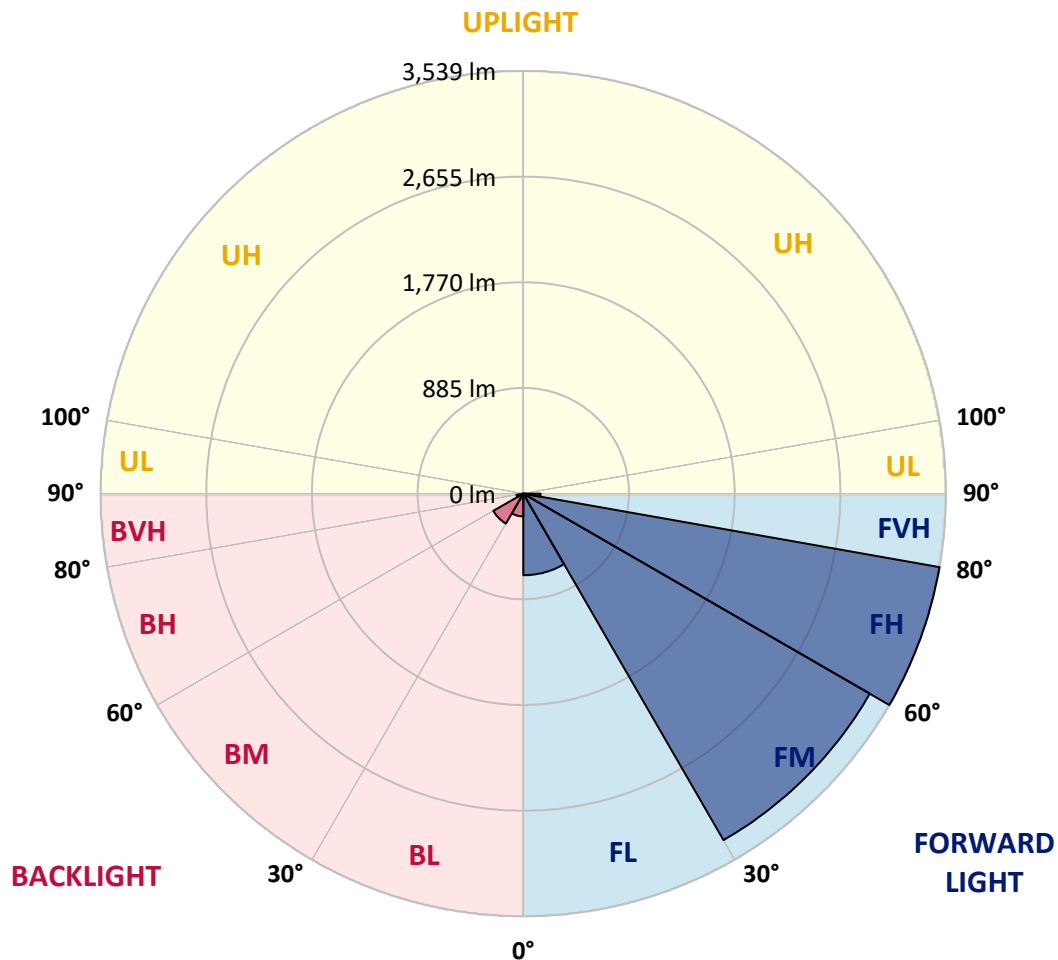
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	683.1	8.3			
FM (30°-60°)	3350.7	40.6			
FH (60°-80°)	3539.5	42.9			G2/5000
FVH (80°-90°)	143.5	1.7			G2/225
BL (0°-30°)	190.6	2.3	B1/500		
BM (30°-60°)	289.7	3.5	B1/1000		
BH (60°-80°)	56.9	0.7	B0/110		G0/110
BVH (80°-90°)	1.1	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1
2.5°	1488.3	1483.3	1476.7	1468.9	1446.7	1442.8	1429.5	1401.2	1367.4	1339.7	1301.4
5°	1558.8	1561.5	1556.5	1542.7	1526.6	1517.2	1500.5	1456.7	1412.9	1356.8	1294.2
7.5°	1574.9	1580.4	1574.3	1561.0	1545.5	1535.5	1522.2	1484.4	1433.4	1369.6	1283.6
10°	1573.2	1579.8	1576.0	1563.8	1551.0	1541.6	1527.1	1497.2	1456.1	1389.0	1287.0
12.5°	1570.4	1579.3	1578.7	1572.6	1562.1	1554.9	1546.0	1519.4	1481.1	1417.3	1305.3
15°	1562.7	1573.7	1583.7	1588.7	1589.3	1589.3	1578.2	1549.9	1513.3	1454.5	1329.1
17.5°	1566.0	1578.7	1603.7	1618.1	1628.1	1627.0	1615.3	1584.8	1544.3	1492.8	1354.1
20°	1586.5	1603.7	1638.6	1667.5	1677.5	1674.1	1658.6	1623.1	1577.1	1525.5	1378.5
22.5°	1637.0	1652.5	1696.3	1730.2	1737.4	1728.5	1706.3	1658.1	1616.5	1561.0	1407.9
25°	1712.4	1730.7	1771.2	1796.7	1796.7	1791.8	1760.7	1704.1	1660.8	1610.4	1446.2
27.5°	1804.0	1819.5	1859.4	1882.2	1868.9	1854.4	1823.4	1755.1	1713.5	1672.5	1492.2
30°	1896.6	1906.6	1948.7	1958.7	1944.9	1926.5	1893.3	1825.0	1788.4	1756.8	1558.8
32.5°	1984.2	2005.9	2040.8	2038.6	2019.7	2010.9	1980.4	1907.7	1887.2	1883.8	1652.0
35°	2071.9	2088.5	2119.6	2127.4	2110.7	2109.1	2086.9	2033.1	2033.6	2055.2	1797.3
37.5°	2147.3	2162.3	2198.9	2216.1	2219.4	2227.8	2218.9	2183.4	2233.9	2293.2	1989.8
40°	2210.6	2231.6	2278.2	2308.2	2342.6	2373.1	2374.8	2382.5	2484.0	2586.1	2241.1
42.5°	2259.9	2289.3	2357.0	2412.5	2491.3	2530.1	2561.1	2603.9	2774.7	2927.3	2537.3
45°	2324.3	2358.1	2442.4	2529.5	2652.7	2716.5	2759.7	2874.0	3116.4	3324.4	2841.3
47.5°	2430.8	2448.5	2534.5	2661.6	2823.5	2914.5	2998.8	3171.9	3483.1	3669.5	3094.2
50°	2567.8	2579.5	2644.4	2820.8	3030.4	3150.3	3303.9	3507.5	3863.6	3955.7	3237.4
52.5°	2719.2	2723.1	2771.9	2996.1	3262.3	3413.2	3585.2	3836.5	4173.7	4159.9	3332.2
55°	2895.1	2889.5	2931.1	3186.3	3536.9	3709.4	3909.7	4173.2	4442.8	4304.6	3386.6
57.5°	3096.5	3081.5	3122.0	3438.7	3888.6	4095.0	4298.5	4463.8	4651.3	4426.1	3412.6
60°	3307.2	3277.3	3325.6	3722.2	4303.0	4498.8	4668.0	4712.4	4871.0	4522.6	3367.7
62.5°	3475.3	3475.9	3565.7	4023.9	4729.0	4900.4	4990.3	5030.2	5060.2	4501.6	3131.4
65°	3737.7	3746.6	3890.3	4442.8	5222.1	5370.8	5432.4	5302.6	5068.5	4239.7	2776.4
67.5°	4008.4	4036.7	4299.6	5019.7	5791.8	5911.7	5832.3	5355.3	4842.2	3642.3	2105.2
70°	4096.6	4143.2	4576.5	5416.9	6133.6	6195.7	5927.2	5109.5	4047.8	2435.2	1059.5
72.5°	3753.8	3829.2	4417.2	5272.1	5915.5	5861.7	5303.1	4285.2	2573.4	924.7	323.4
75°	2647.1	2680.4	3671.1	4373.4	4757.8	4605.3	4033.9	2762.5	1058.4	259.6	110.9
77.5°	1366.8	1350.7	2183.4	2901.7	3393.2	3235.1	2641.6	1430.1	401.1	108.2	68.8
80°	706.7	718.4	944.7	1520.5	2071.3	1906.0	1408.4	662.9	213.6	59.9	52.7
82.5°	396.1	371.7	543.1	664.0	968.5	759.4	540.3	469.3	93.2	36.1	49.9
85°	72.1	75.4	297.9	358.9	336.2	213.6	174.2	313.4	27.2	20.0	34.9
87.5°	1.1	1.1	57.7	103.2	65.5	30.0	54.9	44.9	5.5	7.8	6.1
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°	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1	1288.1
2.5°	1282.0	1260.9	1221.5	1182.7	1133.3	1092.8	1065.6	1037.3	1008.5	1010.7	1017.4
5°	1259.8	1223.2	1145.5	1063.4	984.6	913.6	843.7	781.0	755.5	732.2	733.3
7.5°	1237.6	1186.0	1072.3	943.6	824.3	703.4	615.7	543.6	505.4	476.5	468.2
10°	1227.6	1159.4	1005.2	828.2	659.0	527.0	414.4	355.6	310.1	295.7	299.5
12.5°	1232.0	1146.1	944.7	723.9	522.5	367.2	288.5	258.5	248.5	246.9	245.7
15°	1240.4	1136.6	885.3	608.5	383.9	272.9	242.4	236.9	235.8	234.6	235.2
17.5°	1251.5	1128.3	822.1	500.4	294.6	238.5	229.7	226.9	226.3	226.3	226.3
20°	1262.5	1118.9	751.6	403.8	245.7	225.2	219.7	218.0	217.5	217.5	216.9
22.5°	1275.3	1110.6	680.1	317.3	226.3	215.8	210.8	209.7	209.1	208.6	208.6
25°	1293.6	1100.0	604.1	259.6	214.1	206.9	201.9	200.8	200.3	198.0	198.6
27.5°	1318.0	1092.2	525.9	224.1	203.0	195.8	192.5	190.8	189.7	188.1	188.6
30°	1351.3	1085.6	442.7	204.7	190.3	184.2	180.8	179.7	178.6	177.0	177.0
32.5°	1409.0	1088.4	355.0	189.2	178.6	171.4	168.1	167.0	165.9	164.2	164.2
35°	1495.5	1104.5	284.0	175.8	164.8	157.5	154.2	154.2	152.5	150.3	149.8
37.5°	1637.0	1145.5	228.0	163.1	151.4	144.8	140.9	139.8	138.1	134.8	134.2
40°	1804.0	1209.3	191.9	150.3	139.2	132.6	129.3	125.9	121.5	118.2	117.6
42.5°	2013.6	1274.7	166.4	137.6	127.6	121.5	117.6	112.1	105.4	101.0	100.4
45°	2232.2	1334.7	149.2	125.9	116.5	111.5	107.1	98.2	89.9	84.3	83.8
47.5°	2395.3	1345.8	135.4	114.8	107.1	102.1	96.0	84.9	73.8	68.8	67.1
50°	2472.4	1291.9	120.9	103.7	97.6	92.1	84.3	71.6	59.4	53.3	52.1
52.5°	2499.6	1198.8	109.3	93.7	88.2	81.5	72.1	57.7	46.6	40.5	39.9
55°	2488.5	1081.2	98.7	84.3	77.1	69.3	59.9	46.0	34.4	29.4	28.3
57.5°	2430.2	931.4	88.2	74.9	66.0	58.2	47.7	34.4	23.3	18.9	18.3
60°	2273.2	727.2	77.7	64.3	56.0	47.7	37.7	24.4	14.4	10.5	10.5
62.5°	2008.1	539.7	67.7	53.8	47.2	38.3	26.6	15.5	7.8	5.5	5.0
65°	1678.0	398.3	56.6	45.5	39.4	30.0	18.9	9.4	3.9	1.7	1.1
67.5°	1171.0	245.7	47.2	37.2	32.2	21.6	11.6	3.9	1.7	0.0	0.0
70°	532.0	117.0	36.1	28.3	24.4	15.5	6.1	2.2	1.1	0.0	0.0
72.5°	165.3	61.6	25.5	20.5	16.6	10.0	3.3	1.7	1.1	0.0	0.0
75°	76.6	39.4	16.1	11.1	9.4	5.0	2.2	1.1	0.6	0.0	0.0
77.5°	57.1	30.5	9.4	6.1	5.0	3.3	1.7	1.1	0.6	0.0	0.0
80°	49.9	15.5	5.5	3.9	2.8	2.2	1.1	0.6	0.0	0.0	0.0
82.5°	44.9	7.8	3.3	2.2	1.7	1.1	0.6	0.6	0.0	0.0	0.0
85°	24.4	4.4	2.2	1.7	1.1	0.6	0.6	0.0	0.0	0.0	0.0
87.5°	4.4	2.2	1.7	1.1	1.1	0.6	0.6	0.6	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)