

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: P453223

Luminaire Tested: **GALN-SA4B-727-U-T2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453223  
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-SA4B-727-U-T2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K, 800mA 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: 14073 lumens  
Efficiency: N/A  
Efficacy: 85.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

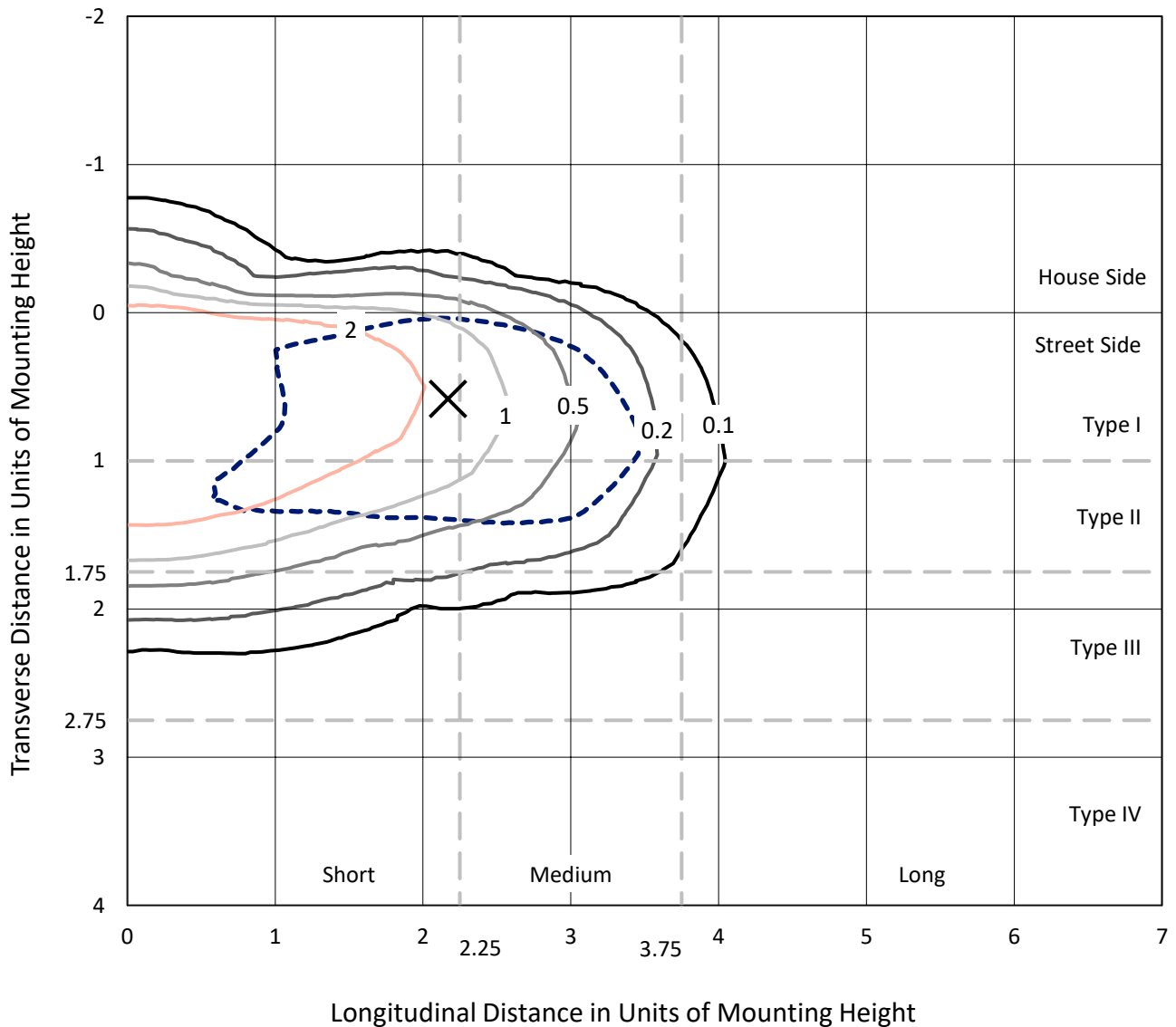
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P453223  
 CATALOG NUMBER: GALN-SA4B-727-U-T2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

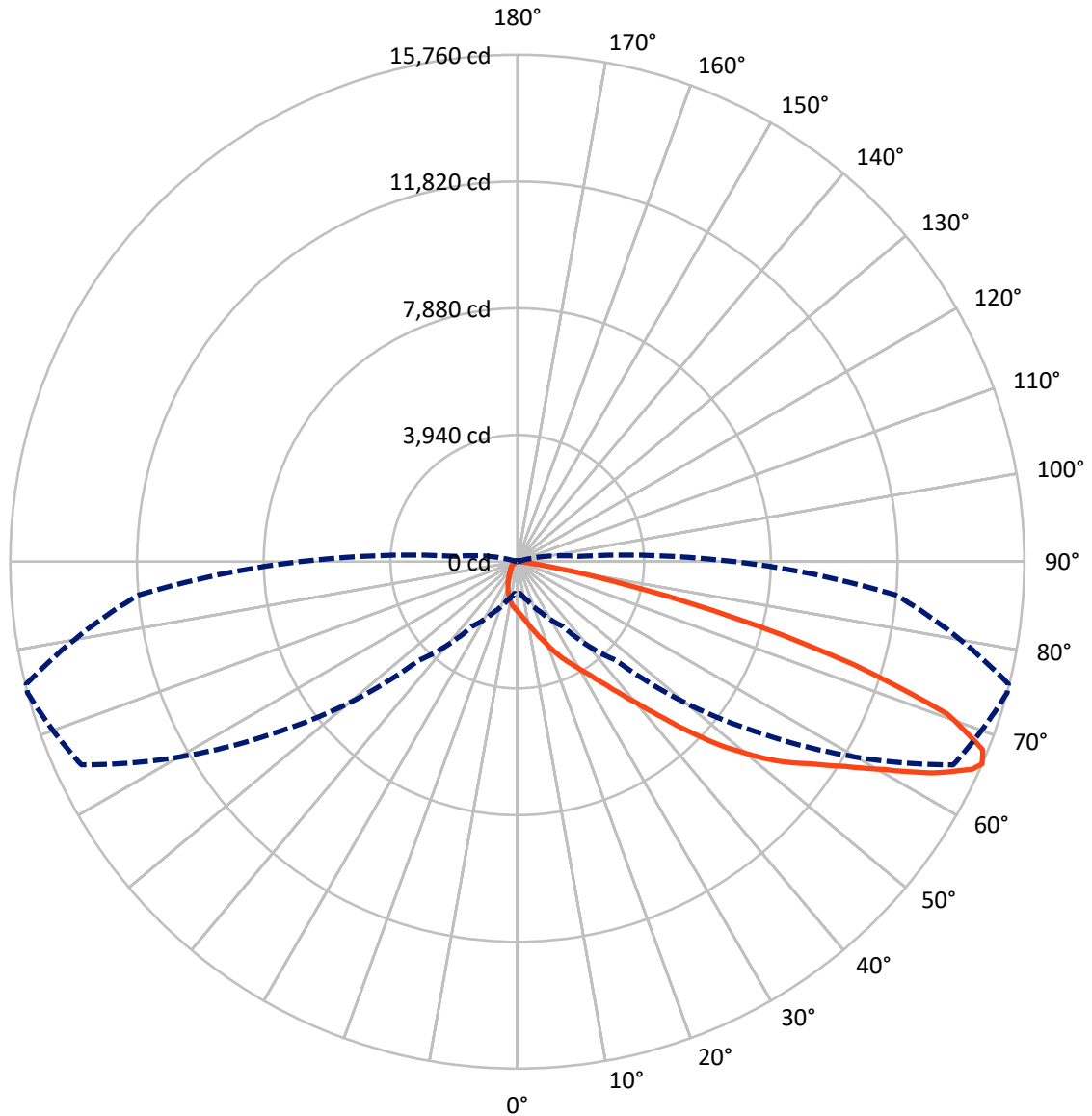
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P453223  
CATALOG NUMBER: GALN-SA4B-727-U-T2-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P453223

CATALOG NUMBER: GALN-SA4B-727-U-T2-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	868.8	0.0	868.8
	% Fixture	6.2	0.0	6.2
<b>Street Side</b>	Lumens	13204.2	0.0	13204.2
	% Fixture	93.8	0.0	93.8
<b>Total</b>	Lumens	14073.0	0.0	14073.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.4	1.1
10°-20°	436.9	3.1
20°-30°	754.4	5.4
30°-40°	1360.7	9.7
40°-50°	2458.2	17.5
50°-60°	3832.4	27.2
60°-70°	3640.6	25.9
70°-80°	1364.4	9.7
80°-90°	77.0	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°	14073.0	100.0
0°-180°	14073.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P453223

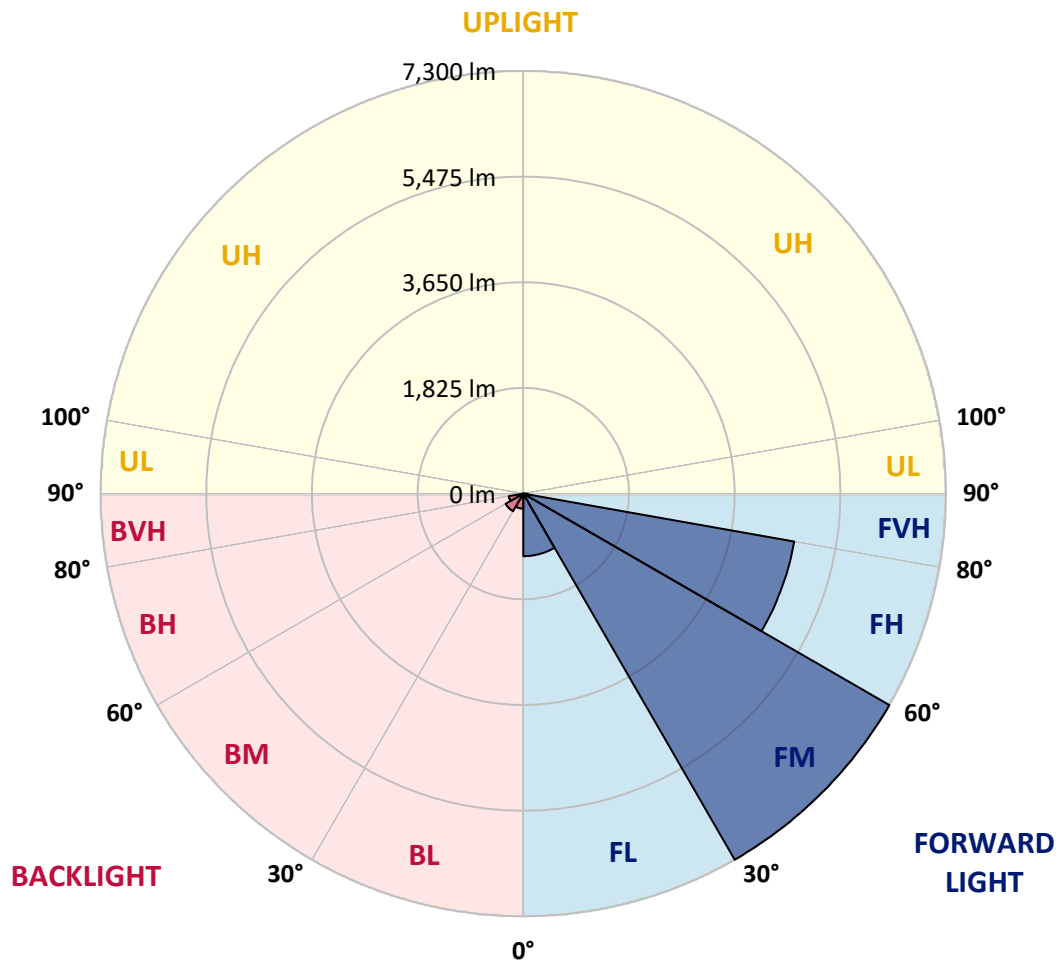
CATALOG NUMBER: GALN-SA4B-727-U-T2-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1080.2	7.7			
FM (30°-60°)	7299.7	51.9			
FH (60°-80°)	4751.3	33.8			G2/5000
FVH (80°-90°)	73.0	0.5			G1/100
BL (0°-30°)	259.5	1.8	B1/500		
BM (30°-60°)	351.7	2.5	B1/1000		
BH (60°-80°)	253.7	1.8	B1/500		G1/500
BVH (80°-90°)	4.0	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: P453223

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1838.7	1815.8	1823.1	1812.7	1788.8	1753.4	1722.2	1677.4	1632.7	1625.4	1575.4
5°	2081.2	2074.9	2066.6	2036.4	2019.8	1965.7	1901.1	1824.1	1731.5	1714.9	1624.3
7.5°	2246.6	2243.5	2247.7	2232.0	2217.5	2168.6	2099.9	1994.8	1851.2	1841.8	1690.9
10°	2300.7	2309.1	2324.7	2349.6	2372.5	2356.9	2304.9	2173.8	2006.2	1979.2	1766.9
12.5°	2269.5	2278.9	2316.3	2382.9	2456.8	2499.5	2478.7	2382.9	2170.7	2148.8	1852.2
15°	2189.4	2200.8	2253.9	2356.9	2489.1	2609.8	2661.8	2593.1	2362.1	2326.7	1955.3
17.5°	2070.8	2087.4	2163.4	2299.7	2480.7	2688.9	2835.6	2812.7	2566.1	2532.8	2067.6
20°	1981.3	1993.8	2058.3	2214.4	2445.4	2732.6	3001.0	3065.6	2817.9	2760.7	2199.8
22.5°	2040.6	2044.7	2066.6	2160.2	2381.9	2744.0	3146.7	3328.8	3085.3	3034.3	2337.1
25°	2330.9	2289.3	2267.4	2246.6	2368.4	2733.6	3278.9	3603.5	3351.7	3297.6	2473.5
27.5°	2788.8	2770.0	2659.7	2512.0	2483.9	2747.1	3366.3	3863.7	3602.5	3544.2	2606.7
30°	3287.2	3254.9	3187.3	2970.9	2753.4	2842.9	3429.8	4116.5	3899.1	3822.1	2728.4
32.5°	3745.1	3765.9	3664.9	3442.2	3190.4	3046.8	3512.0	4392.3	4239.3	4143.6	2869.9
35°	4278.9	4320.5	4165.5	3952.1	3657.6	3415.2	3672.2	4703.4	4671.2	4550.5	3088.4
37.5°	4821.0	4846.0	4751.3	4451.6	4186.3	3883.5	3974.0	5087.4	5202.9	5099.9	3349.6
40°	5276.8	5311.1	5241.4	4975.0	4692.0	4425.6	4412.1	5505.7	5835.6	5729.4	3738.8
42.5°	5625.4	5651.4	5653.5	5465.1	5210.2	5089.5	4970.9	6039.5	6628.5	6505.7	4190.4
45°	6065.6	6103.0	6081.2	5953.2	5762.7	5740.9	5679.5	6684.7	7577.5	7422.5	4776.3
47.5°	6746.1	6771.1	6717.0	6566.1	6372.5	6406.9	6370.4	7407.9	8545.3	8412.1	5382.9
50°	7218.5	7260.1	7337.1	7397.5	7257.0	7130.1	7021.9	8083.2	9464.1	9344.4	6003.1
52.5°	7213.3	7282.0	7525.5	7829.3	8136.3	8097.8	7786.7	8829.3	10341.3	10193.5	6585.8
55°	6727.4	6860.6	7218.5	7757.5	8607.7	9031.2	8889.7	9693.0	11098.9	10999.0	7261.2
57.5°	5724.2	5805.4	6302.8	7056.2	8344.4	9470.3	10167.5	10863.7	12007.3	11960.5	8310.1
60°	3850.2	3886.6	4526.5	5457.9	7104.1	9032.3	11104.1	12279.9	13125.9	13103.0	9534.9
62.5°	2206.0	2221.6	2685.7	3471.4	5055.2	7654.5	11183.1	14027.1	14467.2	14479.7	10952.1
65°	1187.3	1195.6	1570.2	2037.5	3076.0	5455.8	10056.2	14984.4	15551.5	15575.4	11830.4
66°	1025.0	985.4	1249.7	1736.7	2447.5	4342.4	9343.4	14950.1	15759.6	15733.6	11799.2
67.5°	779.4	814.8	997.9	1335.1	1813.7	3087.4	7713.8	14285.1	15601.5	15520.3	11319.5
70°	557.8	572.3	710.7	952.1	1235.2	1694.1	4929.2	11864.7	14180.0	14070.8	9861.6
72.5°	360.0	375.7	503.6	688.9	892.8	925.1	2759.6	8572.3	10932.4	10916.8	7426.6
75°	257.0	271.6	333.0	493.2	671.2	572.3	1328.8	5777.3	6950.1	6903.2	4594.2
77.5°	186.3	193.5	222.7	322.6	479.7	410.0	616.0	3085.3	3459.9	3623.3	2030.2
80°	107.2	113.4	155.0	196.7	324.7	279.9	294.5	1238.3	1276.8	1215.4	634.8
82.5°	53.1	60.4	92.6	134.2	202.9	188.3	135.3	372.5	393.3	382.9	160.2
85°	12.5	15.6	52.0	88.4	98.9	84.3	65.6	109.3	135.3	132.2	61.4
87.5°	1.0	2.1	18.7	15.6	16.6	28.1	22.9	28.1	43.7	40.6	21.9
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: P453223  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0	1539.0
2.5°	1552.5	1532.8	1475.5	1419.4	1372.5	1323.6	1278.9	1252.9	1242.5	1231.0	1236.2
5°	1574.4	1526.5	1411.0	1311.1	1213.3	1130.1	1063.5	1020.8	1000.0	996.9	991.7
7.5°	1603.5	1521.3	1342.4	1186.3	1058.3	965.7	889.7	828.3	809.6	792.9	779.4
10°	1638.9	1512.0	1257.0	1055.2	918.8	802.3	702.4	629.6	592.1	581.7	589.0
12.5°	1676.4	1494.3	1167.5	934.4	777.3	628.5	535.9	499.5	489.1	484.9	486.0
15°	1713.8	1472.4	1073.9	817.9	619.1	501.6	458.9	449.5	445.4	443.3	441.2
17.5°	1748.2	1437.0	968.8	704.5	501.6	428.7	413.1	404.8	396.5	393.3	388.1
20°	1788.8	1396.5	874.1	577.5	424.6	388.1	369.4	353.8	341.3	333.0	331.9
22.5°	1827.3	1344.4	775.2	478.7	387.1	348.6	318.4	301.8	287.2	276.8	279.9
25°	1848.1	1281.0	686.8	417.3	352.8	309.1	275.8	254.9	239.3	234.1	233.1
27.5°	1848.1	1202.9	600.4	381.9	321.5	273.7	239.3	219.6	209.2	201.9	202.9
30°	1833.5	1116.5	520.3	354.8	294.5	242.5	210.2	192.5	184.2	179.0	177.9
32.5°	1822.1	1034.3	451.6	328.8	266.4	215.4	187.3	173.8	165.5	160.2	160.2
35°	1839.8	963.6	398.5	302.8	240.4	194.6	169.6	157.1	148.8	144.6	143.6
37.5°	1886.6	899.1	358.0	274.7	216.4	176.9	157.1	142.6	134.2	129.0	127.0
40°	2002.1	862.6	327.8	248.7	193.5	162.3	142.6	129.0	118.6	113.4	112.4
42.5°	2187.3	863.7	298.6	224.8	175.9	149.8	130.1	114.5	103.0	97.8	96.8
45°	2466.2	903.2	275.8	201.9	160.2	136.3	116.5	99.9	89.5	84.3	84.3
47.5°	2800.2	980.2	256.0	182.1	145.7	123.8	103.0	86.4	76.0	71.8	71.8
50°	3162.3	1080.1	236.2	161.3	133.2	110.3	88.4	74.9	66.6	63.5	63.5
52.5°	3531.7	1200.8	216.4	144.6	119.7	95.7	76.0	66.6	59.3	57.2	56.2
55°	4016.6	1354.8	195.6	127.0	105.1	82.2	67.6	58.3	49.9	46.8	45.8
57.5°	4762.7	1586.9	172.7	111.3	86.4	68.7	58.3	48.9	39.5	34.3	33.3
60°	5662.9	1869.9	148.8	97.8	69.7	56.2	46.8	37.5	29.1	22.9	21.9
62.5°	6505.7	2049.9	125.9	82.2	55.2	42.7	33.3	28.1	20.8	14.6	13.5
65°	6878.3	1989.6	104.1	66.6	43.7	30.2	21.9	19.8	12.5	6.2	5.2
66°	6754.4	1900.1	95.7	60.4	39.5	26.0	18.7	16.6	9.4	3.1	3.1
67.5°	6389.2	1688.9	83.2	52.0	34.3	20.8	14.6	12.5	5.2	1.0	0.0
70°	5474.5	1366.3	65.6	38.5	25.0	14.6	8.3	6.2	3.1	0.0	0.0
72.5°	4205.0	1017.7	52.0	29.1	17.7	8.3	4.2	2.1	3.1	0.0	0.0
75°	2576.5	581.7	40.6	21.9	11.4	5.2	3.1	0.0	3.1	1.0	0.0
77.5°	1143.6	261.2	27.1	14.6	8.3	4.2	2.1	0.0	2.1	1.0	0.0
80°	289.3	85.3	15.6	10.4	6.2	3.1	1.0	0.0	2.1	2.1	1.0
82.5°	79.1	31.2	11.4	8.3	5.2	3.1	1.0	0.0	2.1	2.1	2.1
85°	31.2	14.6	10.4	8.3	6.2	3.1	1.0	0.0	2.1	2.1	2.1
87.5°	14.6	10.4	10.4	9.4	7.3	3.1	1.0	0.0	2.1	1.0	2.1
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)