

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: P454060

Luminaire Tested: **GALN-SA5A-827-U-SLL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454060  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5A-827-U-SLL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14512 lumens  
Efficiency: N/A  
Efficacy: 94.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

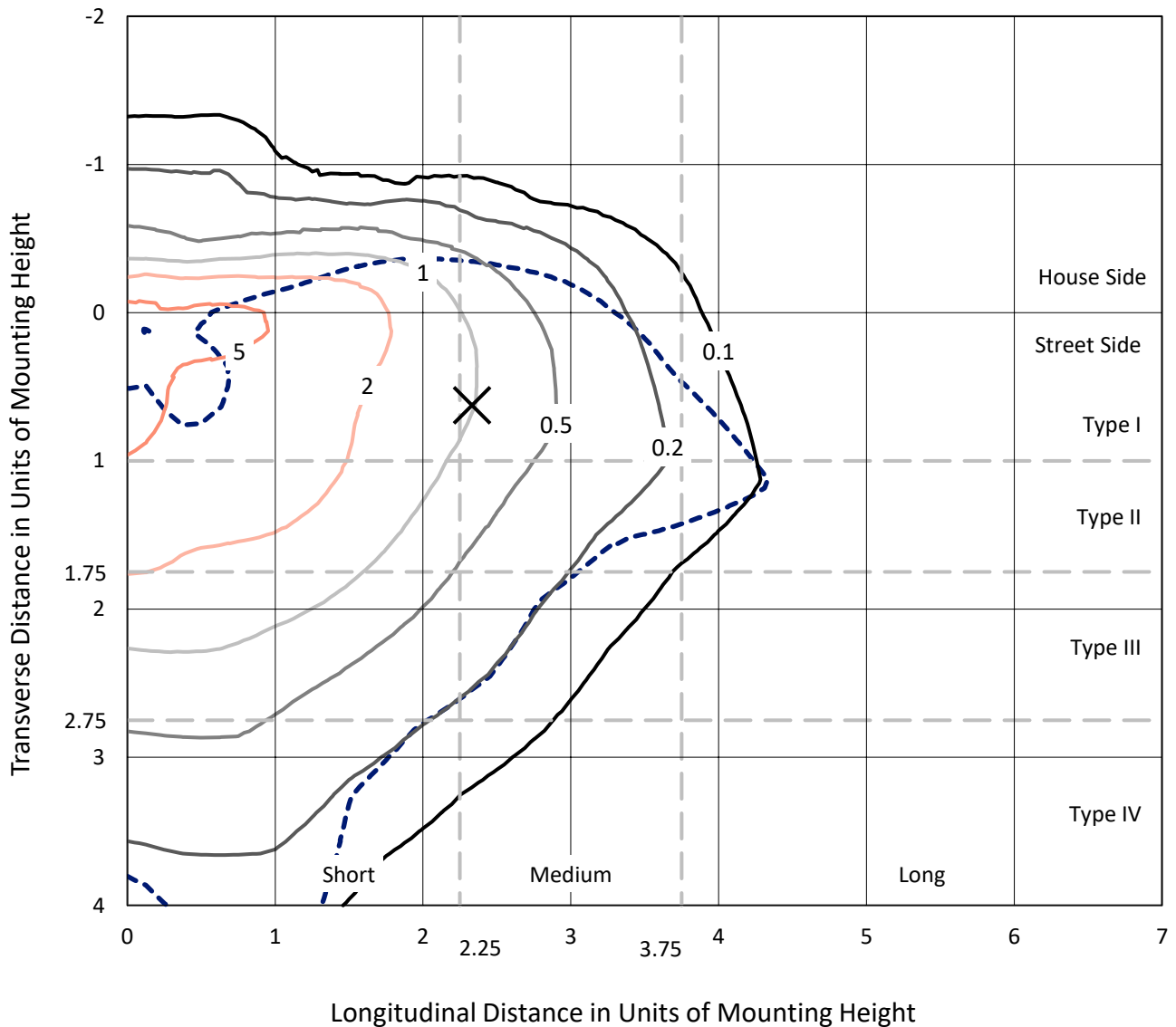
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

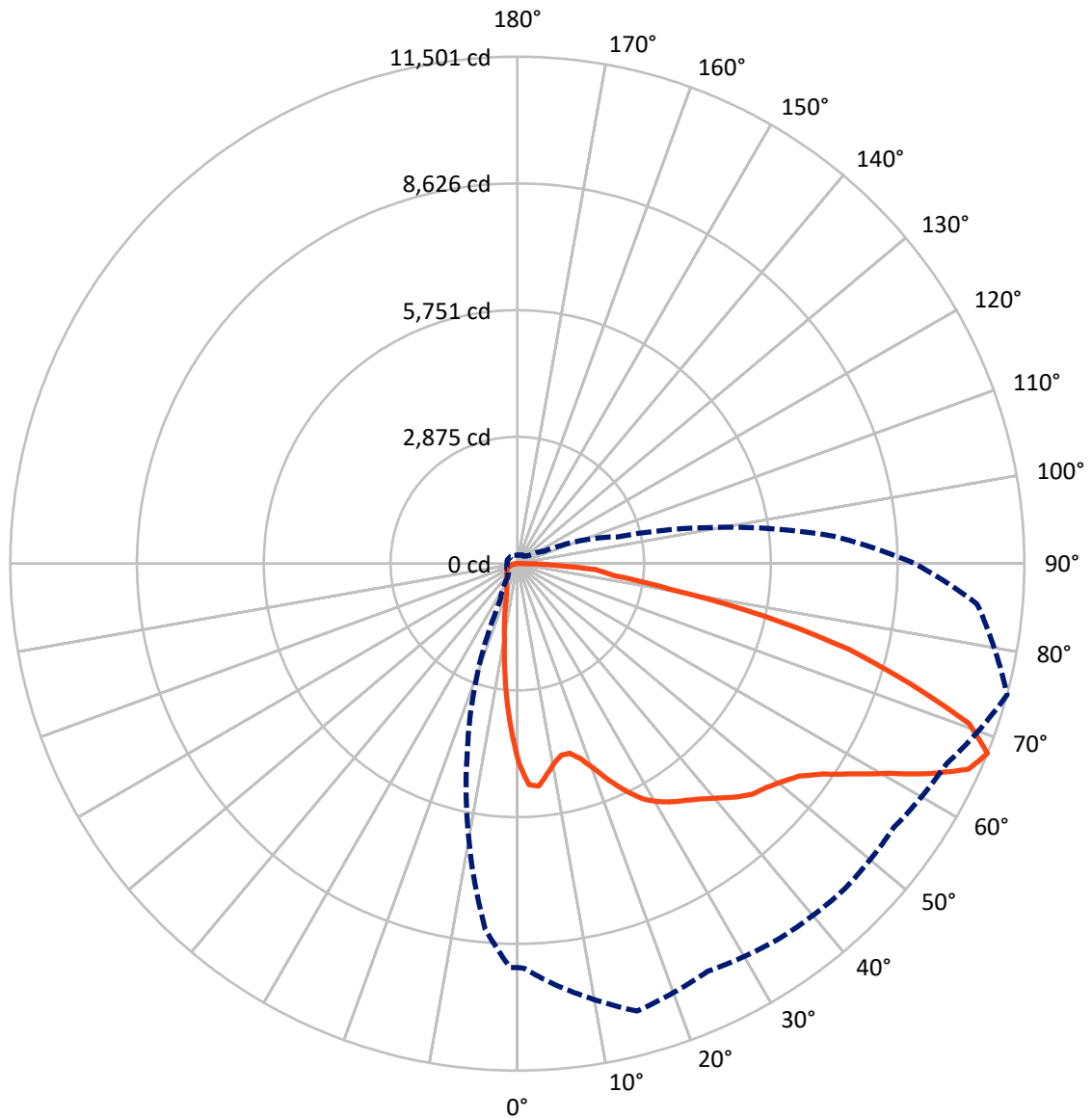
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2452.8	0.0	2452.8
	% Fixture	16.9	0.0	16.9
<b>Street Side</b>	Lumens	12059.2	0.0	12059.2
	% Fixture	83.1	0.0	83.1
<b>Total</b>	Lumens	14512.0	0.0	14512.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	343.9	2.4
10°-20°	717.2	4.9
20°-30°	1032.0	7.1
30°-40°	1486.4	10.2
40°-50°	2088.0	14.4
50°-60°	2912.0	20.1
60°-70°	3462.2	23.9
70°-80°	2039.1	14.1
80°-90°	431.2	3.0
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°	14512.0	100.0
0°-180°	14512.0	100.0

**Coefficient of Utilization**



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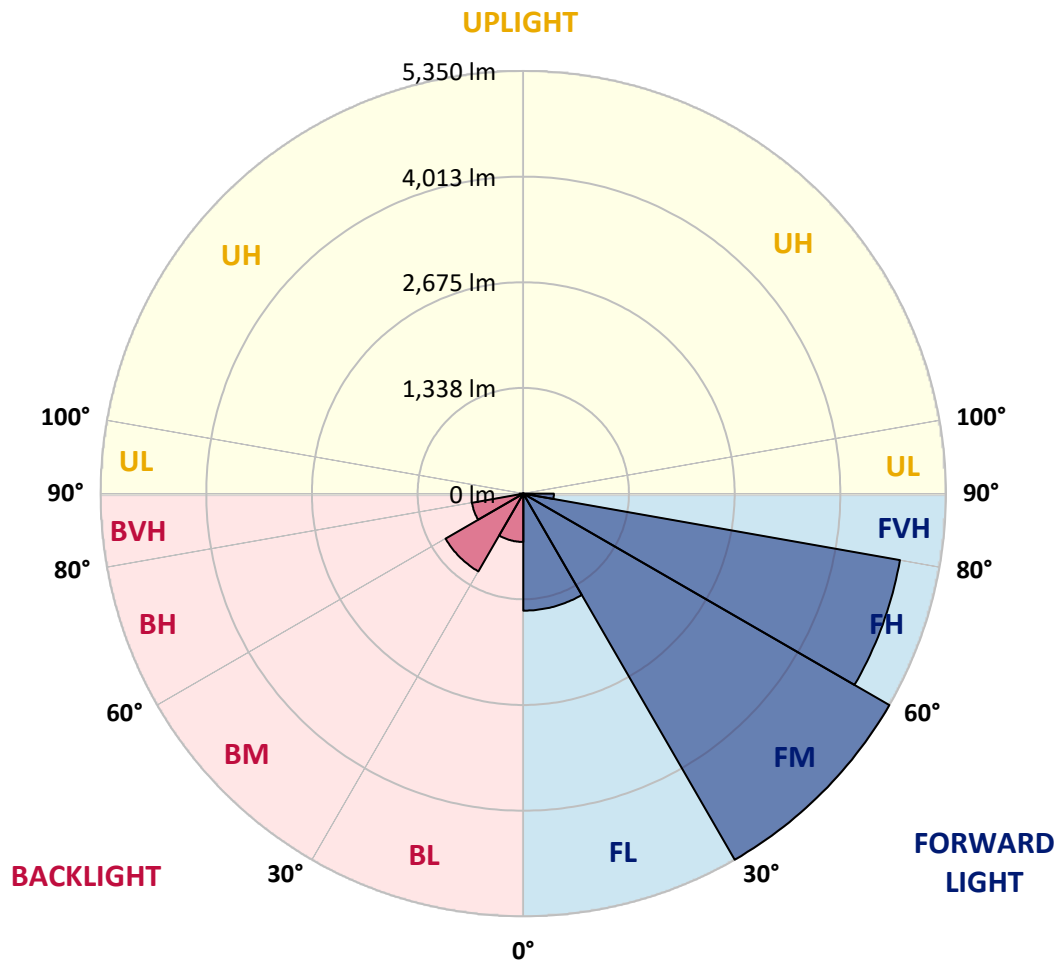
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1481.3	10.2			
FM	(30°-60°)	5350.0	36.9			
FH	(60°-80°)	4841.3	33.4			G2/5000
FVH	(80°-90°)	386.6	2.7			G3/500
BL	(0°-30°)	611.8	4.2	B2/1000		
BM	(30°-60°)	1136.4	7.8	B2/2500		
BH	(60°-80°)	660.0	4.5	B2/1000		G2/1000
BVH	(80°-90°)	44.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9
2.5°	4888.5	4895.0	4936.8	5058.8	5142.5	5173.2	5194.6	5154.6	5115.5	5020.6	4877.3
5°	4873.6	4911.7	5020.6	5294.2	5510.1	5603.2	5631.1	5511.0	5312.8	5069.0	4775.8
7.5°	4588.8	4640.0	4807.5	5266.3	5646.9	5864.7	5835.8	5619.0	5261.6	4827.0	4417.6
10°	4251.0	4307.8	4509.7	5064.3	5554.8	5854.4	5854.4	5590.1	5115.5	4599.0	4127.2
12.5°	3983.0	4042.5	4273.3	4856.8	5363.1	5646.9	5694.4	5467.3	5010.4	4454.8	3936.4
15°	3894.6	3952.3	4200.7	4731.2	5160.2	5333.3	5349.1	5274.7	4959.2	4465.0	3928.1
17.5°	4004.4	4078.8	4330.1	4768.4	4974.1	4984.3	4996.4	5055.0	4964.8	4652.1	4097.4
20°	4321.7	4401.7	4664.2	4888.5	4811.2	4705.1	4711.6	4862.4	5030.8	4961.0	4502.3
22.5°	4779.6	4849.4	5118.3	5099.7	4742.3	4523.7	4478.1	4688.4	5128.5	5346.3	4933.1
25°	5273.7	5355.6	5664.6	5413.3	4761.9	4415.7	4386.9	4586.0	5230.0	5706.5	5431.0
27.5°	5839.5	5919.6	6163.4	5729.7	4864.3	4407.3	4372.9	4576.7	5321.2	6039.6	5906.5
30°	6260.2	6333.7	6499.3	5995.9	4989.9	4463.2	4420.4	4650.2	5399.4	6267.6	6370.0
32.5°	6590.5	6666.8	6757.1	6161.5	5155.5	4564.6	4485.5	4784.2	5501.7	6441.6	6713.4
35°	6934.8	7025.1	7018.6	6308.5	5310.0	4681.9	4604.6	4977.8	5662.7	6593.3	7148.9
37.5°	7371.3	7407.6	7361.1	6440.7	5495.2	4893.1	4850.3	5265.3	5891.6	6776.6	7657.9
40°	7814.3	7886.9	7647.7	6600.8	5720.4	5290.5	5285.8	5690.6	6163.4	6991.6	8151.1
42.5°	8193.9	8255.4	7915.7	6740.3	5993.1	5775.3	5810.7	6261.1	6519.8	7241.0	8547.6
45°	8479.6	8534.5	8163.2	6875.3	6352.3	6335.5	6544.0	6872.5	6969.3	7465.3	8780.2
47.5°	8722.5	8775.6	8335.4	7080.0	6796.2	7004.6	7367.6	7510.0	7353.6	7593.7	9040.8
50°	8927.3	8943.1	8453.6	7323.8	7347.1	7824.5	8176.3	8268.4	7733.3	7778.0	9266.9
52.5°	9140.4	9119.9	8657.4	7630.9	7942.7	8602.5	8858.4	8954.3	8097.2	8005.0	9596.4
55°	9617.8	9637.3	9114.3	8018.1	8544.8	9366.5	9703.4	9611.3	8500.1	8422.9	10015.1
57.5°	10194.7	10178.0	9757.4	8623.9	9158.1	10077.5	10328.7	10180.8	9038.0	8997.1	10439.5
60°	10419.0	10441.4	10295.2	9275.3	9762.9	10700.1	10956.9	10727.0	9682.9	9664.3	10759.6
62.5°	10193.8	10319.4	10418.1	9855.1	10278.5	11157.9	11412.9	11150.5	10355.7	10490.7	10983.9
65°	9745.3	9772.3	10108.2	10346.4	10527.0	11233.3	11366.4	11226.8	10917.8	11243.5	10973.7
67.5°	9162.7	9186.0	9579.6	10507.4	10206.8	10377.1	10470.2	10429.3	10743.8	11501.3	10468.3
70°	8608.1	8589.5	9005.4	10097.0	8885.4	8626.7	8703.9	8575.5	9270.7	10871.3	9477.2
72.5°	7528.6	7595.6	8042.3	8956.1	7035.3	6614.7	6783.2	6450.9	7130.3	9310.7	7692.4
75°	5897.2	5913.0	6658.5	7516.5	5307.2	4643.7	4871.7	4733.0	5461.7	7766.8	5311.9
77.5°	4083.5	4048.1	4849.4	5740.9	3784.8	3399.5	3403.2	3337.1	3813.6	5718.5	3608.9
80°	2593.6	2539.6	3035.6	3546.5	2601.0	2782.5	2691.3	2688.5	2482.8	3527.9	2182.3
82.5°	1401.5	1461.0	1918.0	2223.2	1865.9	2150.6	1971.0	1913.3	1703.9	2208.3	1395.9
85°	638.4	694.2	1022.7	1512.2	1417.3	1433.1	957.6	1129.8	1409.9	1793.3	745.4
87.5°	62.4	80.0	211.2	713.8	483.9	381.5	142.4	274.5	354.6	637.5	59.6
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°	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9
2.5°	4818.7	4770.3	4605.5	4469.7	4325.4	4215.6	4072.3	3976.5	3910.4	3810.8	3798.7
5°	4597.2	4479.0	4192.4	3900.2	3648.0	3458.1	3265.5	3088.7	2984.4	2951.9	2910.0
7.5°	4224.0	4024.9	3656.3	3321.3	3031.9	2749.0	2531.2	2376.8	2273.5	2213.0	2140.4
10°	3916.9	3686.1	3237.6	2827.2	2588.9	2413.1	2221.3	2055.7	1928.2	1819.3	1759.8
12.5°	3710.3	3449.7	2945.4	2612.2	2427.9	2240.9	2016.6	1830.5	1642.5	1518.7	1465.7
15°	3648.0	3372.5	2855.1	2505.2	2240.9	1996.1	1744.9	1502.0	1315.9	1198.6	1159.5
17.5°	3800.6	3467.4	2854.2	2362.8	2021.3	1729.1	1407.1	1179.1	988.3	900.8	872.9
20°	4085.3	3649.8	2862.5	2222.3	1783.0	1371.7	1023.7	836.6	745.4	708.2	694.2
22.5°	4482.7	3928.1	2887.7	2083.6	1522.5	1053.4	766.8	671.9	639.3	632.8	630.0
25°	4972.2	4272.4	2972.3	1958.9	1302.8	804.0	641.2	598.4	579.8	573.3	572.3
27.5°	5422.6	4717.2	3074.7	1851.9	1090.7	693.3	579.8	543.5	524.9	523.9	525.8
30°	5829.3	5089.5	3160.3	1731.9	929.7	616.1	539.7	503.5	485.8	484.8	490.4
32.5°	6181.1	5395.6	3223.6	1613.7	840.3	568.6	503.5	464.4	449.5	446.7	449.5
35°	6557.0	5700.9	3194.8	1521.5	789.2	529.5	476.5	438.3	420.6	412.3	412.3
37.5°	6986.0	6015.4	3145.4	1445.2	765.9	496.9	453.2	416.0	398.3	389.9	389.0
40°	7454.1	6330.0	3077.5	1377.3	742.6	477.4	437.4	398.3	376.9	368.5	366.7
42.5°	7867.3	6598.9	3021.7	1332.6	704.5	481.1	423.4	385.3	358.3	347.1	346.2
45°	8226.5	6869.7	3011.4	1306.6	672.8	475.5	419.7	375.0	343.4	331.3	329.4
47.5°	8507.6	7151.7	3070.1	1291.7	638.4	445.8	443.9	368.5	330.4	317.3	315.5
50°	8850.0	7551.8	3204.1	1261.0	606.8	417.8	469.0	367.6	320.1	303.4	298.7
52.5°	9306.0	8073.0	3385.5	1206.1	561.2	391.8	447.6	367.6	308.0	291.3	285.7
55°	9995.6	8737.4	3563.3	1128.8	496.9	357.4	403.9	356.4	290.3	275.5	271.7
57.5°	10452.5	9223.2	3676.8	1021.8	416.9	332.2	348.0	338.7	272.7	256.8	256.8
60°	10475.8	9353.5	3622.8	886.9	366.7	309.0	302.4	341.5	256.8	240.1	238.2
62.5°	10207.8	9034.3	3341.8	765.9	339.7	283.8	273.6	299.7	241.0	224.3	221.5
65°	9789.0	8220.0	2854.2	708.2	324.8	261.5	246.6	245.7	224.3	208.5	204.7
67.5°	9019.4	7183.3	2345.1	674.7	317.3	236.4	222.4	217.8	204.7	191.7	189.8
70°	7885.0	6016.3	1880.7	660.7	313.6	210.3	199.1	193.6	182.4	172.2	171.2
72.5°	6134.5	4880.1	1552.2	651.4	311.8	186.1	174.0	166.6	160.1	150.8	150.8
75°	4406.4	3590.3	1184.7	587.2	288.5	160.1	147.0	142.4	133.1	125.6	127.5
77.5°	2777.8	2417.7	779.8	431.8	223.3	128.4	117.3	114.5	107.0	96.8	103.3
80°	1876.1	1700.2	455.1	271.7	140.5	94.0	90.3	89.3	81.0	69.8	70.7
82.5°	1276.8	1252.6	236.4	154.5	81.0	54.9	53.0	54.9	45.6	37.2	37.2
85°	498.8	681.2	111.7	60.5	26.1	8.4	12.1	13.0	7.4	3.7	4.7
87.5°	9.3	69.8	2.8	0.0	0.0	0.0	0.0	0.0	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





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**CANDELA DISTRIBUTION (continued):**

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9
2.5°	3780.1	3771.7	3785.7	3726.1	3738.2	3760.6	3771.7	3778.2	3870.4	3849.0	3907.6
5°	2949.1	2940.7	2994.7	3002.1	3030.0	3024.5	3051.4	3058.0	3091.5	3103.6	3185.5
7.5°	2145.0	2181.3	2242.8	2274.4	2321.9	2336.7	2322.8	2357.2	2287.4	2337.7	2352.6
10°	1723.5	1679.7	1653.7	1726.3	1735.6	1804.4	1776.5	1754.2	1795.1	1797.0	1836.1
12.5°	1435.0	1341.0	1278.6	1299.1	1321.5	1351.2	1355.9	1400.6	1430.3	1458.3	1481.5
15°	1125.1	1092.5	1035.8	1007.8	1039.5	1051.6	1080.4	1117.7	1149.3	1157.7	1189.3
17.5°	863.6	869.2	859.9	843.1	862.7	872.0	873.8	874.8	883.1	877.6	924.1
20°	695.2	714.7	738.0	741.7	748.2	752.9	744.5	712.8	713.8	733.3	748.2
22.5°	629.1	632.8	658.9	667.2	687.7	679.3	655.1	640.3	638.4	643.0	650.5
25°	577.0	582.6	601.2	614.2	630.0	615.1	597.4	583.5	581.6	586.3	593.7
27.5°	530.4	538.8	555.6	568.6	583.5	569.5	552.8	540.7	539.7	538.8	543.5
30°	493.2	502.5	514.6	529.5	539.7	527.7	511.8	505.3	504.4	502.5	504.4
32.5°	456.0	470.9	483.0	490.4	500.7	491.4	479.3	475.5	469.0	463.4	460.6
35°	414.1	429.9	448.6	457.9	468.1	458.8	450.4	434.6	423.4	422.5	424.4
37.5°	389.9	396.4	411.3	427.1	437.4	432.7	416.9	401.1	398.3	398.3	400.2
40°	368.5	371.3	377.8	398.3	416.9	403.0	383.4	378.8	378.8	377.8	378.8
42.5°	347.1	349.9	349.9	365.7	395.5	373.2	358.3	358.3	358.3	359.2	362.0
45°	327.6	328.5	327.6	338.7	366.7	348.0	337.8	340.6	342.5	344.3	346.2
47.5°	310.8	311.8	310.8	320.1	334.1	326.6	321.1	324.8	328.5	331.3	333.2
50°	295.9	295.0	296.9	302.4	309.0	310.8	307.1	312.7	314.5	318.3	322.9
52.5°	282.9	282.0	283.8	286.6	295.9	295.9	295.9	300.6	304.3	308.0	314.5
55°	268.0	268.9	271.7	275.5	287.6	285.7	286.6	290.3	294.1	299.7	303.4
57.5°	254.1	255.9	259.6	265.2	277.3	276.4	277.3	279.2	283.8	286.6	290.3
60°	238.2	242.0	246.6	250.3	262.4	261.5	266.2	269.9	272.7	272.7	274.5
62.5°	222.4	228.0	232.7	235.4	248.5	249.4	255.9	258.7	260.6	258.7	261.5
65°	206.6	215.0	216.8	220.6	233.6	234.5	242.0	248.5	246.6	244.7	249.4
67.5°	190.8	201.0	200.1	204.7	217.8	219.6	226.1	237.3	233.6	231.7	235.4
70°	173.1	180.5	181.5	184.3	201.9	199.1	209.4	219.6	216.8	217.8	217.8
72.5°	153.5	160.1	160.1	165.6	184.3	179.6	188.0	199.1	199.1	198.2	198.2
75°	130.3	134.0	137.7	146.1	165.6	160.1	165.6	175.9	177.7	175.9	175.9
77.5°	105.2	110.7	112.6	123.8	137.7	136.8	142.4	147.0	150.8	148.9	148.9
80°	74.4	80.0	87.5	99.6	107.9	110.7	113.5	117.3	119.1	119.1	121.0
82.5°	41.9	50.3	56.8	68.9	72.6	86.5	85.6	88.4	85.6	75.4	83.8
85°	9.3	17.7	25.1	31.6	36.3	50.3	53.0	59.6	49.3	45.6	45.6
87.5°	0.0	0.0	0.0	0.0	0.0	7.4	14.9	20.5	17.7	14.9	14.9
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):**

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9	4533.9
2.5°	3956.9	4037.9	4135.6	4304.0	4422.2	4549.7	4678.1	4814.9	4851.2	4888.5
5°	3207.8	3366.9	3453.5	3679.6	3916.9	4218.4	4465.0	4734.9	4847.5	4873.6
7.5°	2429.8	2537.8	2764.8	2993.7	3287.8	3604.2	3982.0	4402.7	4533.9	4588.8
10°	1926.3	2073.4	2272.5	2518.2	2776.0	3116.6	3542.8	4034.2	4220.3	4251.0
12.5°	1639.7	1803.5	2020.3	2280.0	2523.8	2780.6	3210.6	3717.8	3916.9	3983.0
15°	1311.2	1509.4	1759.8	2033.4	2298.6	2579.6	3015.1	3587.5	3817.3	3894.6
17.5°	1030.2	1190.2	1461.0	1757.9	2072.5	2427.9	2974.2	3649.8	3932.7	4004.4
20°	788.2	902.7	1130.7	1444.3	1812.8	2278.1	2984.4	3885.3	4224.0	4321.7
22.5°	681.2	739.8	878.5	1177.2	1589.5	2147.8	3026.3	4208.2	4616.7	4779.6
25°	617.0	647.7	725.9	921.3	1376.4	2021.3	3122.2	4642.8	5165.8	5273.7
27.5°	562.1	584.4	632.8	773.3	1182.8	1904.0	3233.8	5124.8	5678.5	5839.5
30°	510.0	539.7	585.3	686.8	1059.0	1797.0	3374.4	5515.7	6110.3	6260.2
32.5°	470.0	499.7	541.6	626.3	953.9	1684.4	3458.1	5859.1	6463.0	6590.5
35°	437.4	462.5	506.2	577.9	873.8	1598.8	3441.4	6131.7	6804.6	6934.8
37.5°	414.1	435.5	479.3	532.3	813.3	1509.4	3433.0	6491.9	7220.5	7371.3
40°	392.7	415.0	455.1	502.5	752.9	1404.3	3437.6	6849.2	7663.5	7814.3
42.5°	376.0	401.1	433.7	494.1	690.5	1319.6	3437.6	7160.1	8048.8	8193.9
45°	362.0	389.0	420.6	493.2	641.2	1255.4	3414.4	7427.1	8355.9	8479.6
47.5°	349.9	379.7	425.3	476.5	629.1	1208.9	3393.9	7641.2	8606.2	8722.5
50°	341.5	376.9	452.3	456.9	632.8	1194.9	3492.5	7911.0	8826.8	8927.3
52.5°	335.0	377.8	451.3	428.1	626.3	1204.2	3698.2	8332.6	9132.9	9140.4
55°	322.0	376.9	428.1	395.5	599.3	1220.0	3962.5	8944.9	9612.2	9617.8
57.5°	309.0	366.7	397.4	367.6	544.4	1220.0	4280.8	9524.7	10190.1	10194.7
60°	295.9	381.5	349.0	343.4	472.7	1197.7	4616.7	9779.7	10371.6	10419.0
62.5°	282.9	384.3	311.8	322.0	420.6	1143.7	4867.0	9497.7	10125.9	10193.8
65°	268.0	309.9	287.6	299.7	393.6	1053.4	4787.9	8981.2	9664.3	9745.3
67.5°	250.3	262.4	261.5	276.4	384.3	920.4	4371.0	8328.0	9167.4	9162.7
70°	228.9	235.4	238.2	254.1	366.7	817.1	3642.4	7480.2	8503.8	8608.1
72.5°	206.6	212.2	215.0	228.9	349.0	758.4	2827.2	6312.3	7365.7	7528.6
75°	182.4	186.1	189.8	201.9	330.4	671.9	2013.8	4818.7	5641.3	5897.2
77.5°	157.3	157.3	161.9	174.0	278.2	554.6	1351.2	3379.9	3822.0	4083.5
80°	127.5	128.4	126.6	139.6	204.7	379.7	767.7	2257.6	2543.3	2593.6
82.5°	97.7	94.9	95.9	102.4	152.6	258.7	409.5	1402.4	1429.4	1401.5
85°	61.4	61.4	59.6	67.0	97.7	134.9	223.3	858.9	671.0	638.4
87.5°	25.1	20.5	23.3	27.0	46.5	54.9	87.5	176.8	67.9	62.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)