

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: P454785

Luminaire Tested: **GALN-SA5D-830-U-SLL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454785  
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-SA5D-830-U-SLL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 3000K, 1200mA 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: 26536 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

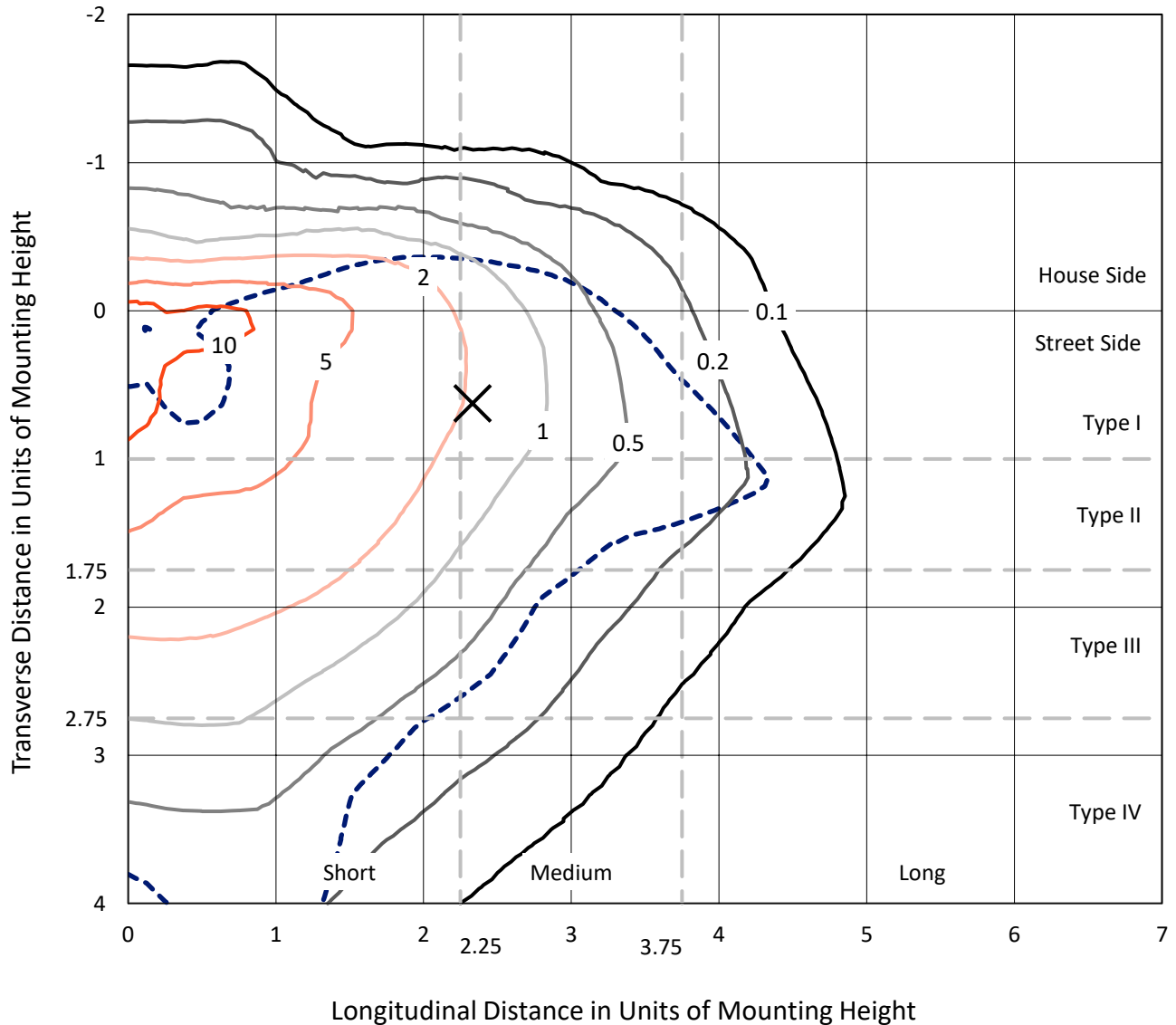
Input Watts (W): 309  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

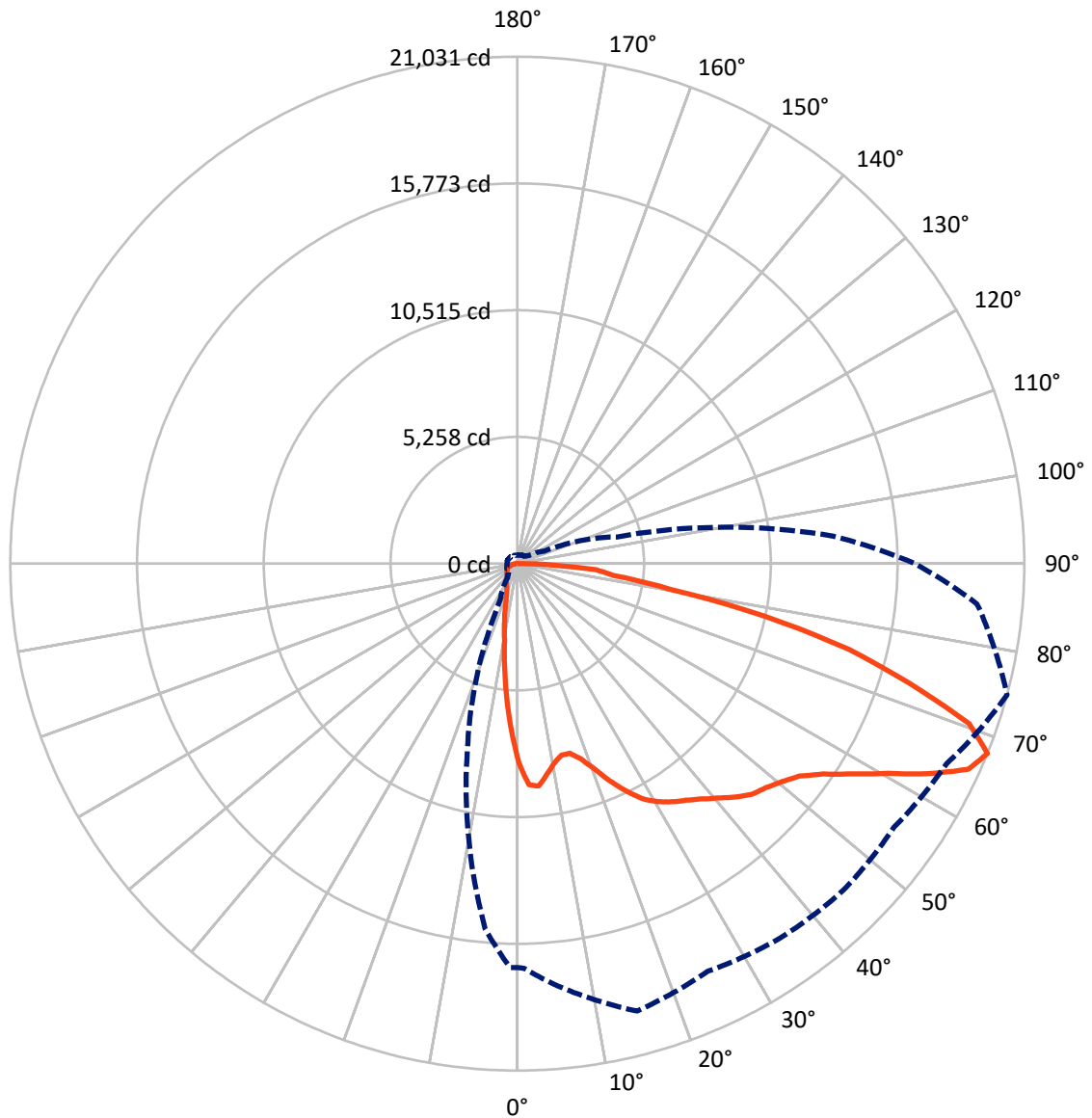
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.4 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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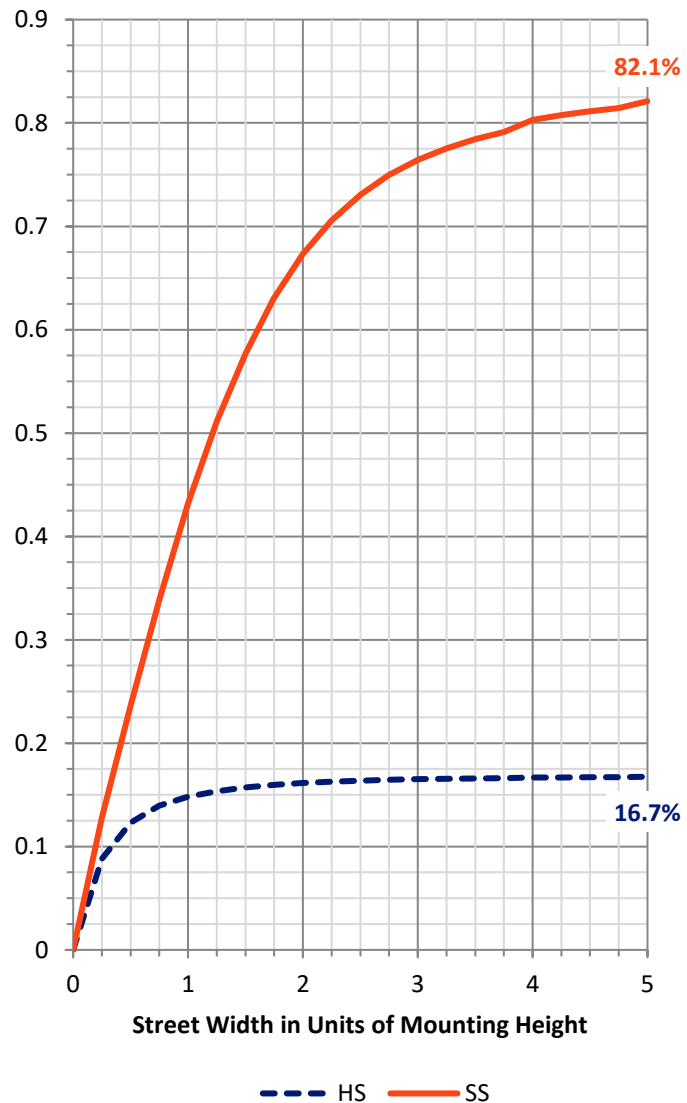
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4485.2	0.0	4485.2
	% Fixture	16.9	0.0	16.9
<b>Street Side</b>	Lumens	22050.8	0.0	22050.8
	% Fixture	83.1	0.0	83.1
<b>Total</b>	Lumens	26536.0	0.0	26536.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	628.8	2.4
10°-20°	1311.4	4.9
20°-30°	1887.1	7.1
30°-40°	2718.0	10.2
40°-50°	3818.0	14.4
50°-60°	5324.8	20.1
60°-70°	6330.9	23.9
70°-80°	3728.5	14.1
80°-90°	788.4	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°	26536.0	100.0
0°-180°	26536.0	100.0



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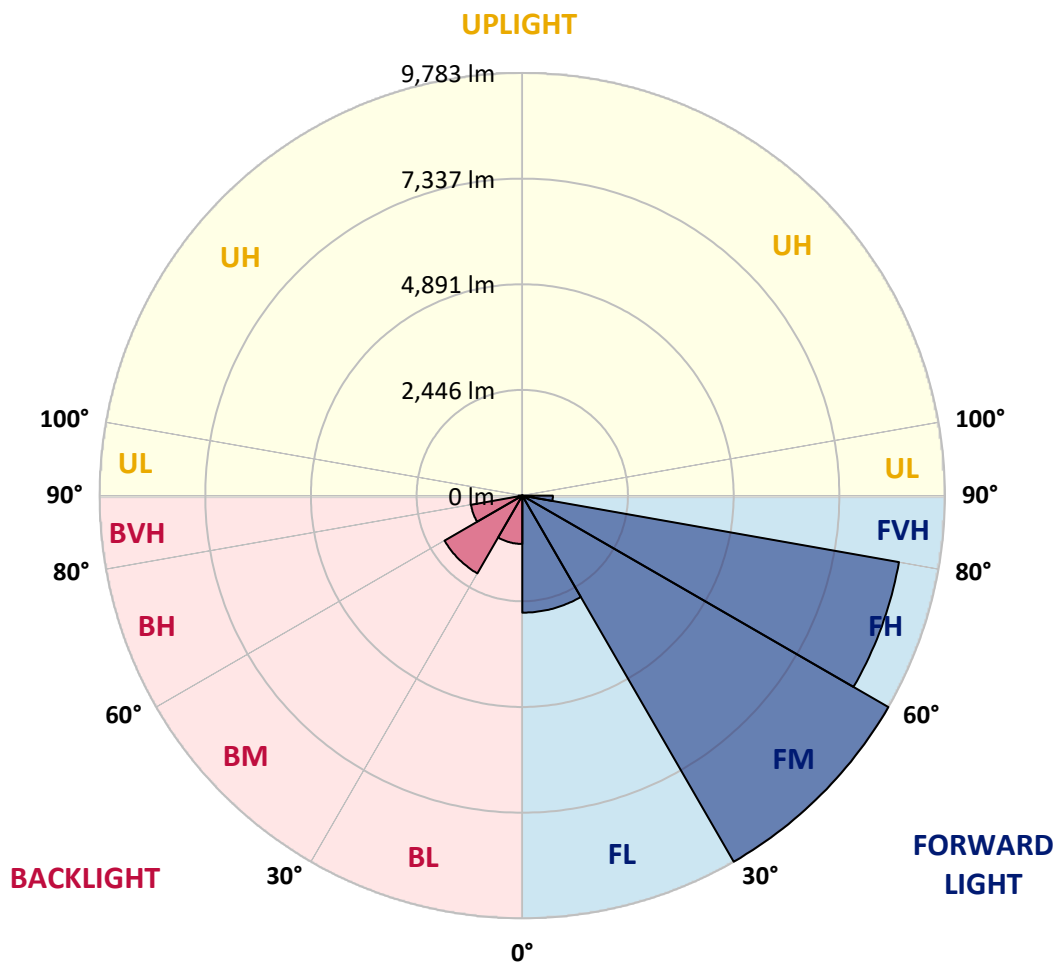
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2708.6	10.2			
FM	(30°-60°)	9782.8	36.9			
FH	(60°-80°)	8852.5	33.4			G4/12000
FVH	(80°-90°)	706.9	2.7			G4/750
BL	(0°-30°)	1118.7	4.2	B3/2500		
BM	(30°-60°)	2078.0	7.8	B2/2500		
BH	(60°-80°)	1206.9	4.5	B3/2500		G3/2500
BVH	(80°-90°)	81.5	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5
2.5°	8938.8	8950.7	9027.3	9250.2	9403.4	9459.5	9498.7	9425.5	9354.0	9180.4	8918.4
5°	8911.6	8981.3	9180.4	9680.7	10075.5	10245.7	10296.7	10077.2	9714.8	9268.9	8732.9
7.5°	8390.9	8484.5	8790.8	9629.7	10325.7	10723.8	10671.1	10274.6	9621.2	8826.5	8077.8
10°	7773.2	7877.0	8246.2	9260.4	10157.2	10705.1	10705.1	10221.9	9354.0	8409.6	7546.9
12.5°	7283.1	7392.0	7814.0	8880.9	9806.7	10325.7	10412.4	9997.2	9161.7	8145.8	7198.0
15°	7121.4	7226.9	7681.3	8651.2	9435.7	9752.2	9781.1	9645.0	9068.1	8164.6	7182.7
17.5°	7322.2	7458.4	7917.8	8719.3	9095.4	9114.1	9136.2	9243.4	9078.3	8506.6	7492.4
20°	7902.5	8048.8	8528.7	8938.8	8797.6	8603.6	8615.5	8891.2	9199.2	9071.5	8232.6
22.5°	8739.7	8867.3	9359.1	9325.1	8671.6	8271.8	8188.4	8572.9	9377.8	9776.0	9020.5
25°	9643.3	9793.0	10358.0	9898.5	8707.4	8074.4	8021.6	8385.8	9563.3	10434.6	9930.9
27.5°	10677.9	10824.2	11270.1	10477.1	8894.6	8059.0	7996.1	8368.8	9730.1	11043.8	10800.4
30°	11447.0	11581.5	11884.4	10963.8	9124.3	8161.1	8082.9	8503.2	9873.0	11460.7	11647.8
32.5°	12051.1	12190.7	12355.7	11266.7	9427.2	8346.6	8202.0	8748.2	10060.2	11778.9	12275.8
35°	12680.8	12845.8	12833.9	11535.5	9709.7	8561.0	8419.8	9102.2	10354.6	12056.2	13072.1
37.5°	13478.8	13545.2	13460.1	11777.2	10048.3	8947.3	8869.0	9628.0	10773.2	12391.5	14002.9
40°	14288.8	14421.5	13984.2	12069.9	10460.1	9673.9	9665.4	10405.6	11270.1	12784.6	14904.8
42.5°	14983.1	15095.4	14474.3	12325.1	10958.7	10560.5	10625.1	11448.8	11921.8	13240.6	15629.7
45°	15505.5	15605.9	14926.9	12571.8	11615.5	11584.9	11966.1	12566.7	12743.7	13650.7	16055.1
47.5°	15949.6	16046.6	15241.7	12946.2	12427.2	12808.4	13472.0	13732.4	13446.5	13885.5	16531.6
50°	16324.0	16352.9	15457.9	13392.0	13434.6	14307.5	14950.8	15119.2	14140.8	14222.5	16945.1
52.5°	16713.7	16676.2	15830.5	13953.6	14523.6	15730.1	16198.1	16373.3	14806.1	14637.7	17547.5
55°	17586.6	17622.4	16666.0	14661.5	15624.6	17127.2	17743.2	17574.7	15542.9	15401.7	18313.2
57.5°	18641.7	18611.0	17841.9	15769.3	16746.0	18427.2	18886.7	18616.1	16526.5	16451.6	19089.2
60°	19051.8	19092.6	18825.4	16960.4	17852.1	19565.7	20035.3	19615.0	17705.7	17671.7	19674.6
62.5°	18640.0	18869.7	19050.1	18020.6	18794.8	20402.9	20869.1	20389.3	18936.0	19182.8	20084.7
65°	17819.8	17869.1	18483.4	18919.0	19249.1	20540.7	20784.0	20528.8	19963.8	20559.4	20065.9
67.5°	16754.5	16797.1	17516.9	19213.4	18663.8	18975.2	19145.3	19070.5	19645.6	21030.8	19141.9
70°	15740.3	15706.3	16466.9	18463.0	16247.4	15774.4	15915.6	15680.8	16951.9	19878.8	17329.7
72.5°	13766.4	13888.9	14705.7	16376.7	12864.5	12095.4	12403.4	11795.9	13038.1	17025.1	14065.9
75°	10783.4	10812.3	12175.4	13744.3	9704.6	8491.3	8908.2	8654.6	9987.0	14202.0	9713.1
77.5°	7466.9	7402.2	8867.3	10497.5	6920.6	6216.2	6223.0	6102.1	6973.4	10456.7	6599.0
80°	4742.5	4643.8	5550.8	6485.0	4756.1	5088.0	4921.2	4916.1	4540.0	6451.0	3990.4
82.5°	2562.7	2671.6	3507.1	4065.3	3411.8	3932.5	3604.1	3498.6	3115.7	4038.0	2552.5
85°	1167.3	1269.4	1870.1	2765.2	2591.6	2620.6	1751.0	2065.8	2578.0	3279.1	1363.0
87.5°	114.0	146.3	386.3	1305.2	884.9	697.7	260.4	502.0	648.3	1165.6	108.9
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5
2.5°	8811.2	8722.7	8421.5	8173.1	7909.3	7708.5	7446.5	7271.2	7150.4	6968.3	6946.2
5°	8406.2	8190.1	7666.0	7131.6	6670.5	6323.4	5971.1	5647.8	5457.2	5397.7	5321.1
7.5°	7723.8	7359.7	6685.8	6073.2	5544.0	5026.7	4628.5	4346.0	4157.1	4046.5	3913.8
10°	7162.3	6740.3	5920.1	5169.6	4734.0	4412.4	4061.9	3759.0	3525.8	3326.7	3217.8
12.5°	6784.5	6308.0	5385.7	4776.6	4439.6	4097.6	3687.5	3347.2	3003.4	2777.1	2680.1
15°	6670.5	6166.8	5220.7	4580.9	4097.6	3650.1	3190.6	2746.5	2406.1	2191.7	2120.3
17.5°	6949.6	6340.4	5219.0	4320.5	3696.0	3161.7	2572.9	2156.0	1807.2	1647.2	1596.2
20°	7470.3	6673.9	5234.3	4063.6	3260.4	2508.2	1871.8	1529.8	1363.0	1295.0	1269.4
22.5°	8196.9	7182.7	5280.2	3810.0	2783.9	1926.3	1402.2	1228.6	1169.0	1157.1	1152.0
25°	9092.0	7812.3	5435.1	3582.0	2382.3	1470.2	1172.4	1094.2	1060.1	1048.2	1046.5
27.5°	9915.6	8625.7	5622.3	3386.3	1994.3	1267.7	1060.1	993.8	959.7	958.0	961.4
30°	10659.2	9306.4	5778.8	3166.8	1700.0	1126.5	987.0	920.6	888.3	886.6	896.8
32.5°	11302.4	9866.2	5894.5	2950.7	1536.6	1039.7	920.6	849.1	821.9	816.8	821.9
35°	11989.9	10424.4	5841.8	2782.2	1443.0	968.2	871.2	801.5	769.1	753.8	753.8
37.5°	12774.3	10999.5	5751.6	2642.7	1400.5	908.7	828.7	760.6	728.3	713.0	711.3
40°	13630.3	11574.7	5627.4	2518.5	1357.9	873.0	799.8	728.3	689.2	673.9	670.5
42.5°	14385.8	12066.5	5525.3	2436.8	1288.2	879.8	774.3	704.5	655.1	634.7	633.0
45°	15042.7	12561.6	5506.6	2389.1	1230.3	869.5	767.4	685.8	627.9	605.8	602.4
47.5°	15556.6	13077.2	5613.8	2361.9	1167.3	815.1	811.7	673.9	604.1	580.3	576.9
50°	16182.8	13808.9	5858.8	2305.7	1109.5	764.0	857.6	672.2	585.4	554.7	546.2
52.5°	17016.6	14761.9	6190.6	2205.3	1026.1	716.4	818.5	672.2	563.2	532.6	522.4
55°	18277.5	15976.9	6515.6	2064.1	908.7	653.4	738.5	651.7	530.9	503.7	496.9
57.5°	19113.0	16865.1	6723.2	1868.4	762.3	607.5	636.4	619.4	498.6	469.7	469.7
60°	19155.6	17103.4	6624.6	1621.7	670.5	565.0	553.0	624.5	469.7	439.0	435.6
62.5°	18665.5	16519.7	6110.7	1400.5	621.1	519.0	500.3	547.9	440.7	410.1	405.0
65°	17899.7	15030.7	5219.0	1295.0	593.9	478.2	450.9	449.2	410.1	381.2	374.4
67.5°	16492.5	13135.1	4288.2	1233.7	580.3	432.2	406.7	398.2	374.4	350.5	347.1
70°	14418.1	11001.2	3439.0	1208.2	573.5	384.6	364.2	353.9	333.5	314.8	313.1
72.5°	11217.3	8923.5	2838.4	1191.2	570.1	340.3	318.2	304.6	292.7	275.7	275.7
75°	8057.3	6565.0	2166.2	1073.7	527.5	292.7	268.9	260.4	243.3	229.7	233.1
77.5°	5079.4	4420.9	1426.0	789.6	408.4	234.8	214.4	209.3	195.7	177.0	188.9
80°	3430.5	3108.9	832.1	496.9	257.0	171.9	165.1	163.4	148.0	127.6	129.3
82.5°	2334.7	2290.4	432.2	282.5	148.0	100.4	97.0	100.4	83.4	68.1	68.1
85°	912.1	1245.6	204.2	110.6	47.6	15.3	22.1	23.8	13.6	6.8	8.5
87.5°	17.0	127.6	5.1	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°	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5
2.5°	6912.1	6896.8	6922.3	6813.4	6835.6	6876.4	6896.8	6908.7	7077.2	7038.1	7145.3
5°	5392.6	5377.2	5475.9	5489.5	5540.6	5530.4	5579.7	5591.6	5652.9	5675.0	5824.8
7.5°	3922.3	3988.7	4101.0	4158.9	4245.6	4272.9	4247.3	4310.3	4182.7	4274.6	4301.8
10°	3151.5	3071.5	3023.8	3156.6	3173.6	3299.5	3248.5	3207.6	3282.5	3285.9	3357.4
12.5°	2624.0	2452.1	2338.1	2375.5	2416.4	2470.8	2479.3	2561.0	2615.4	2666.5	2709.0
15°	2057.3	1997.7	1893.9	1842.9	1900.8	1922.9	1975.6	2043.7	2101.5	2116.9	2174.7
17.5°	1579.1	1589.3	1572.3	1541.7	1577.4	1594.5	1597.9	1599.6	1614.9	1604.7	1689.7
20°	1271.1	1306.9	1349.4	1356.2	1368.1	1376.6	1361.3	1303.5	1305.2	1340.9	1368.1
22.5°	1150.3	1157.1	1204.8	1220.1	1257.5	1242.2	1198.0	1170.7	1167.3	1175.8	1189.5
25°	1055.0	1065.2	1099.3	1123.1	1152.0	1124.8	1092.5	1066.9	1063.5	1072.0	1085.7
27.5°	969.9	985.3	1015.9	1039.7	1066.9	1041.4	1010.8	988.7	987.0	985.3	993.8
30°	901.9	918.9	941.0	968.2	987.0	964.8	935.9	924.0	922.3	918.9	922.3
32.5°	833.8	861.0	883.2	896.8	915.5	898.5	876.4	869.5	857.6	847.4	842.3
35°	757.2	786.2	820.2	837.2	855.9	838.9	823.6	794.7	774.3	772.6	776.0
37.5°	713.0	724.9	752.1	781.1	799.8	791.3	762.3	733.4	728.3	728.3	731.7
40°	673.9	679.0	690.9	728.3	762.3	736.8	701.1	692.6	692.6	690.9	692.6
42.5°	634.7	639.8	639.8	668.8	723.2	682.4	655.1	655.1	655.1	656.8	661.9
45°	599.0	600.7	599.0	619.4	670.5	636.4	617.7	622.8	626.2	629.6	633.0
47.5°	568.4	570.1	568.4	585.4	610.9	597.3	587.1	593.9	600.7	605.8	609.2
50°	541.1	539.4	542.8	553.0	565.0	568.4	561.5	571.8	575.2	582.0	590.5
52.5°	517.3	515.6	519.0	524.1	541.1	541.1	541.1	549.6	556.4	563.2	575.2
55°	490.1	491.8	496.9	503.7	525.8	522.4	524.1	530.9	537.7	547.9	554.7
57.5°	464.6	468.0	474.8	485.0	507.1	505.4	507.1	510.5	519.0	524.1	530.9
60°	435.6	442.4	450.9	457.7	479.9	478.2	486.7	493.5	498.6	498.6	502.0
62.5°	406.7	416.9	425.4	430.5	454.3	456.0	468.0	473.1	476.5	473.1	478.2
65°	377.8	393.1	396.5	403.3	427.1	428.8	442.4	454.3	450.9	447.5	456.0
67.5°	348.8	367.6	365.9	374.4	398.2	401.6	413.5	433.9	427.1	423.7	430.5
70°	316.5	330.1	331.8	336.9	369.3	364.2	382.9	401.6	396.5	398.2	398.2
72.5°	280.8	292.7	292.7	302.9	336.9	328.4	343.7	364.2	364.2	362.5	362.5
75°	238.2	245.0	251.8	267.2	302.9	292.7	302.9	321.6	325.0	321.6	321.6
77.5°	192.3	202.5	205.9	226.3	251.8	250.1	260.4	268.9	275.7	272.3	272.3
80°	136.1	146.3	160.0	182.1	197.4	202.5	207.6	214.4	217.8	217.8	221.2
82.5°	76.6	91.9	103.8	125.9	132.7	158.3	156.6	161.7	156.6	137.8	153.1
85°	17.0	32.3	45.9	57.9	66.4	91.9	97.0	108.9	90.2	83.4	83.4
87.5°	0.0	0.0	0.0	0.0	0.0	13.6	27.2	37.4	32.3	27.2	27.2
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°	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5	8290.5
2.5°	7235.4	7383.5	7562.2	7870.2	8086.3	8319.4	8554.2	8804.4	8870.7	8938.8
5°	5865.6	6156.6	6314.9	6728.4	7162.3	7713.6	8164.6	8658.0	8863.9	8911.6
7.5°	4443.0	4640.4	5055.6	5474.2	6012.0	6590.5	7281.4	8050.5	8290.5	8390.9
10°	3522.4	3791.3	4155.4	4604.7	5076.0	5698.9	6478.2	7376.7	7717.0	7773.2
12.5°	2998.3	3297.8	3694.3	4169.1	4614.9	5084.6	5870.7	6798.1	7162.3	7283.1
15°	2397.6	2760.1	3217.8	3718.1	4203.1	4717.0	5513.4	6559.9	6980.2	7121.4
17.5°	1883.7	2176.4	2671.6	3214.4	3789.6	4439.6	5438.5	6673.9	7191.2	7322.2
20°	1441.3	1650.6	2067.5	2641.0	3314.8	4165.7	5457.2	7104.4	7723.8	7902.5
22.5°	1245.6	1352.8	1606.4	2152.6	2906.4	3927.4	5533.8	7694.9	8441.9	8739.7
25°	1128.2	1184.4	1327.3	1684.6	2516.8	3696.0	5709.1	8489.6	9445.9	9643.3
27.5°	1027.8	1068.6	1157.1	1414.1	2162.8	3481.6	5913.3	9371.0	10383.5	10677.9
30°	932.5	987.0	1070.3	1255.8	1936.5	3285.9	6170.2	10085.7	11173.1	11447.0
32.5°	859.3	913.8	990.4	1145.2	1744.2	3080.0	6323.4	10713.6	11818.0	12051.1
35°	799.8	845.7	925.7	1056.7	1597.9	2923.4	6292.7	11212.2	12442.5	12680.8
37.5°	757.2	796.4	876.4	973.3	1487.2	2760.1	6277.4	11870.8	13203.2	13478.8
40°	718.1	758.9	832.1	918.9	1376.6	2567.8	6285.9	12524.2	14013.1	14288.8
42.5°	687.5	733.4	793.0	903.6	1262.6	2413.0	6285.9	13092.6	14717.6	14983.1
45°	661.9	711.3	769.1	901.9	1172.4	2295.5	6243.4	13580.9	15279.2	15505.5
47.5°	639.8	694.3	777.7	871.2	1150.3	2210.5	6205.9	13972.3	15736.9	15949.6
50°	624.5	689.2	827.0	835.5	1157.1	2184.9	6386.3	14465.8	16140.2	16324.0
52.5°	612.6	690.9	825.3	782.8	1145.2	2201.9	6762.4	15236.6	16700.1	16713.7
55°	588.8	689.2	782.8	723.2	1095.9	2230.9	7245.7	16356.3	17576.4	17586.6
57.5°	565.0	670.5	726.6	672.2	995.5	2230.9	7827.6	17416.5	18633.1	18641.7
60°	541.1	697.7	638.1	627.9	864.4	2190.0	8441.9	17882.7	18965.0	19051.8
62.5°	517.3	702.8	570.1	588.8	769.1	2091.3	8899.7	17367.1	18515.7	18640.0
65°	490.1	566.7	525.8	547.9	719.8	1926.3	8755.0	16422.7	17671.7	17819.8
67.5°	457.7	479.9	478.2	505.4	702.8	1682.9	7992.7	15228.1	16763.0	16754.5
70°	418.6	430.5	435.6	464.6	670.5	1494.1	6660.3	13677.9	15549.7	15740.3
72.5°	377.8	388.0	393.1	418.6	638.1	1386.9	5169.6	11542.3	13468.6	13766.4
75°	333.5	340.3	347.1	369.3	604.1	1228.6	3682.4	8811.2	10315.4	10783.4
77.5°	287.6	287.6	296.1	318.2	508.8	1014.2	2470.8	6180.4	6988.7	7466.9
80°	233.1	234.8	231.4	255.2	374.4	694.3	1403.9	4128.2	4650.6	4742.5
82.5°	178.7	173.6	175.3	187.2	279.1	473.1	748.7	2564.4	2613.7	2562.7
85°	112.3	112.3	108.9	122.5	178.7	246.7	408.4	1570.6	1226.9	1167.3
87.5°	45.9	37.4	42.5	49.3	85.1	100.4	160.0	323.3	124.2	114.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)