

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: P192002

Luminaire Tested: **GLEON-AF-04-LED-E1-SL4-7050-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192002  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-SL4-7050-800-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5000K, 800mA 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: 15745 lumens  
Efficiency: N/A  
Efficacy: 92.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 171  
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: 25 FT

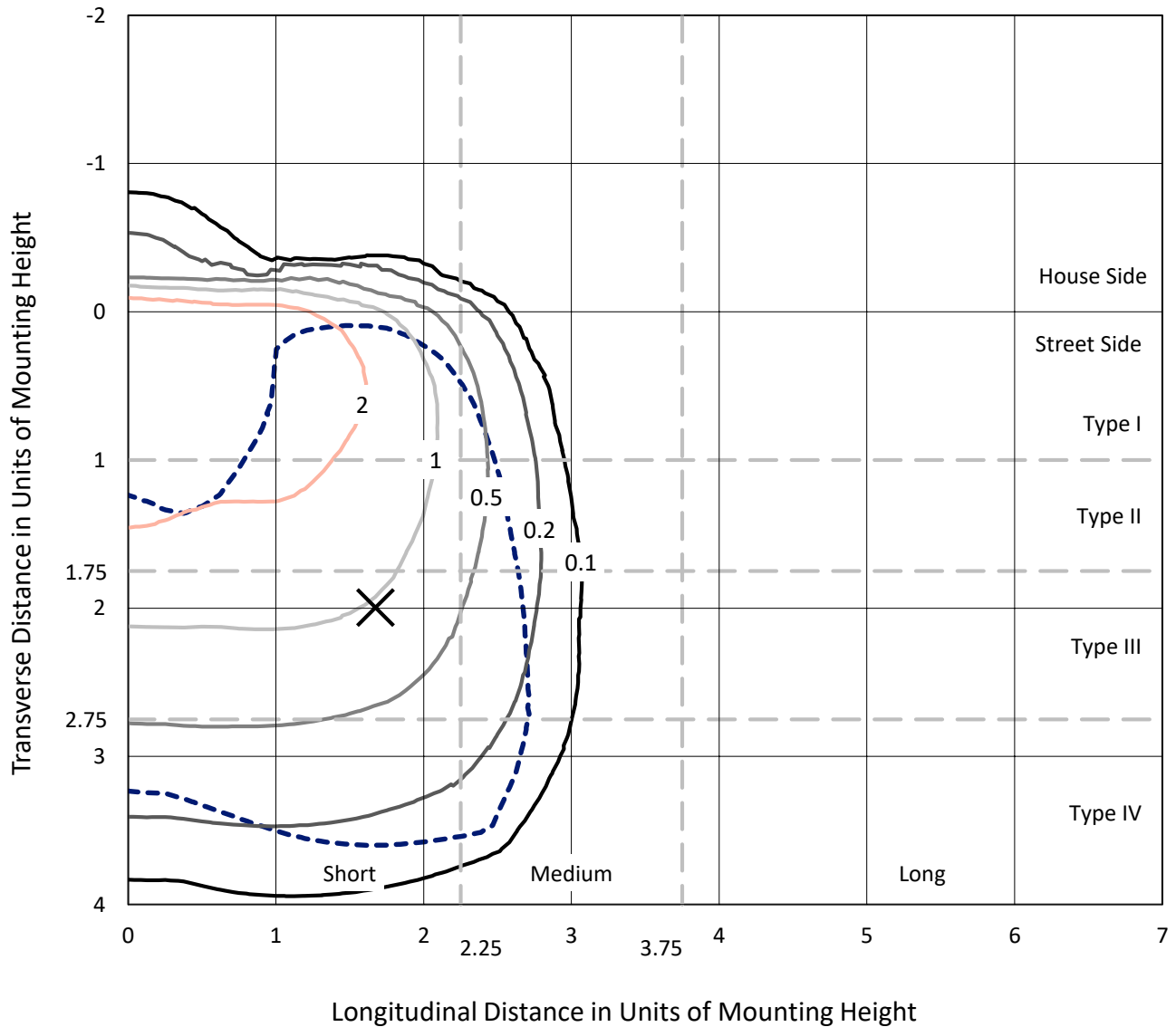


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

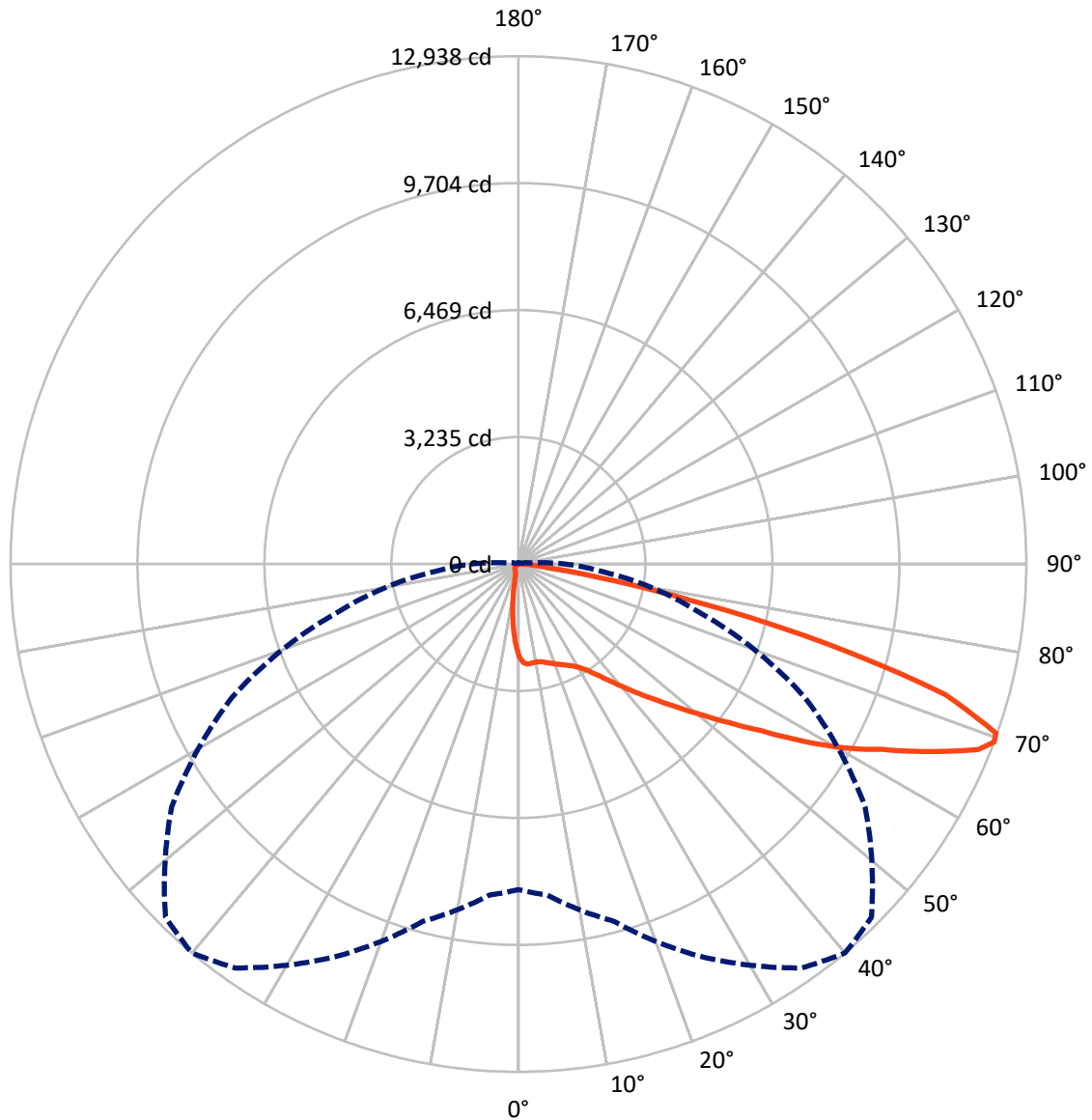


Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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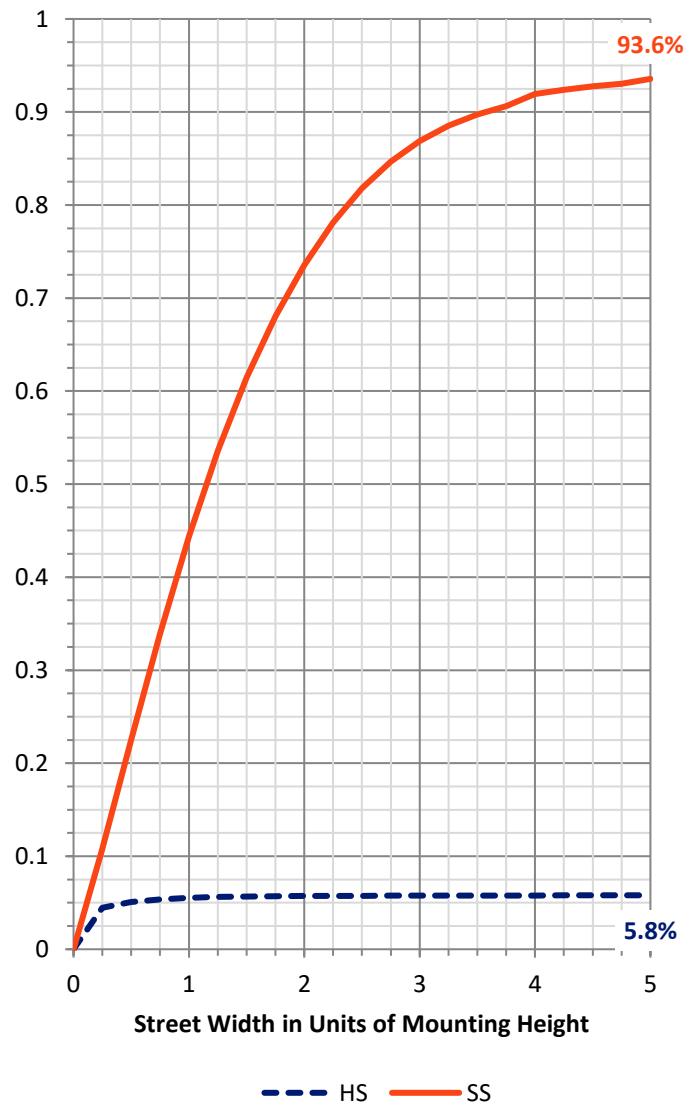
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	921.2	0.0	921.2
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	14823.8	0.0	14823.8
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	15745.0	0.0	15745.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.7	1.2
10°-20°	469.0	3.0
20°-30°	790.0	5.0
30°-40°	1293.3	8.2
40°-50°	2239.3	14.2
50°-60°	3527.2	22.4
60°-70°	4606.3	29.3
70°-80°	2372.5	15.1
80°-90°	256.6	1.6
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°	15745.0	100.0
0°-180°	15745.0	100.0



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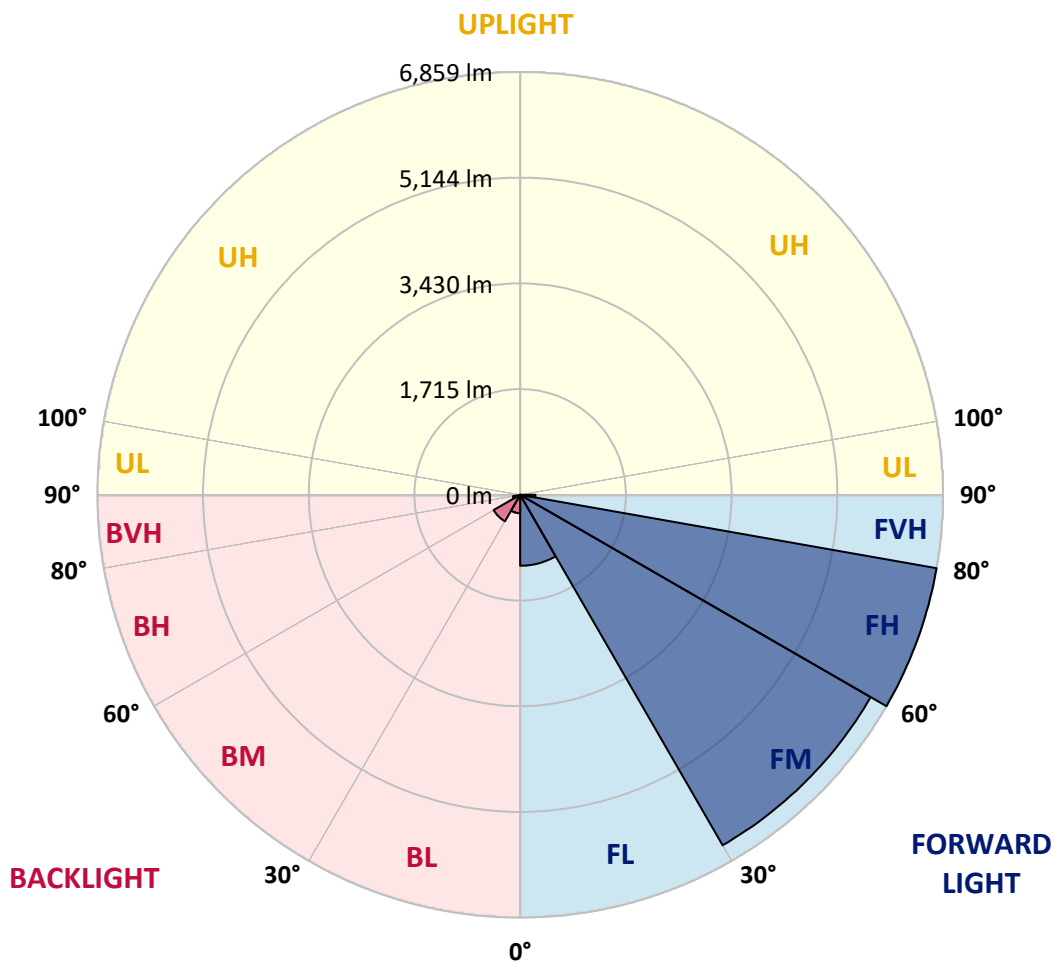
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1151.4	7.3			
FM	(30°-60°)	6564.7	41.7			
FH	(60°-80°)	6859.2	43.6			G3/7500
FVH	(80°-90°)	248.6	1.6			G3/500
BL	(0°-30°)	298.4	1.9	B1/500		
BM	(30°-60°)	495.1	3.1	B1/1000		
BH	(60°-80°)	119.6	0.8	B1/500		G1/500
BVH	(80°-90°)	8.1	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4
2.5°	2582.9	2568.9	2560.4	2549.2	2535.1	2523.0	2518.3	2483.6	2450.8	2405.8	2354.3
5°	2630.7	2626.0	2611.1	2596.1	2579.2	2560.4	2550.1	2508.9	2462.0	2396.4	2306.5
7.5°	2635.4	2629.8	2611.1	2590.4	2567.0	2544.5	2526.7	2485.5	2442.4	2375.8	2266.2
10°	2627.9	2621.4	2607.3	2584.8	2555.8	2534.2	2516.4	2477.0	2440.5	2380.5	2258.7
12.5°	2619.5	2612.9	2606.4	2595.1	2569.8	2554.8	2539.8	2502.3	2469.5	2418.9	2285.8
15°	2627.9	2624.2	2631.7	2627.0	2612.9	2599.8	2584.8	2551.1	2521.1	2478.9	2335.5
17.5°	2663.5	2663.5	2687.0	2689.8	2676.7	2657.9	2636.4	2602.6	2577.3	2541.7	2394.6
20°	2746.9	2744.1	2774.1	2779.7	2747.9	2718.8	2687.0	2645.7	2626.0	2603.6	2452.7
22.5°	2890.3	2877.2	2895.0	2889.4	2826.6	2781.6	2742.3	2691.7	2681.3	2671.0	2517.3
25°	3076.8	3069.3	3081.5	3026.2	2915.6	2854.7	2807.9	2750.7	2750.7	2761.0	2590.4
27.5°	3347.7	3319.6	3278.3	3180.9	3015.0	2937.2	2886.6	2825.7	2841.6	2880.0	2687.0
30°	3625.1	3594.2	3499.5	3349.6	3135.9	3054.4	2995.3	2931.6	2969.1	3039.4	2816.3
32.5°	3898.8	3864.1	3730.1	3540.8	3309.3	3227.7	3170.6	3100.3	3163.1	3281.2	3005.6
35°	4164.0	4133.1	3978.4	3755.4	3539.8	3472.3	3419.9	3358.9	3439.5	3604.5	3272.7
37.5°	4462.0	4428.3	4239.9	3998.1	3820.0	3771.3	3732.9	3672.0	3812.5	4054.3	3644.8
40°	4828.5	4771.3	4517.3	4276.5	4144.3	4120.9	4094.6	4086.2	4304.6	4639.2	4140.6
42.5°	5248.3	5154.6	4807.9	4569.8	4500.5	4517.3	4510.8	4548.3	4920.3	5366.4	4744.1
45°	5668.2	5547.3	5131.2	4882.8	4892.2	4951.3	4987.8	5137.8	5691.6	6200.5	5393.6
47.5°	6024.4	5905.3	5441.4	5221.2	5333.6	5449.8	5549.2	5833.2	6484.5	7021.5	5898.8
50°	6328.9	6216.5	5770.4	5593.2	5846.3	6033.7	6194.9	6615.7	7337.4	7646.7	6253.0
52.5°	6578.2	6503.3	6111.5	6019.7	6432.0	6706.6	6942.8	7447.0	8092.8	8154.6	6528.6
55°	6821.0	6767.6	6478.0	6526.7	7119.9	7493.9	7792.9	8328.9	8743.2	8578.2	6792.9
57.5°	7100.3	7051.5	6896.0	7169.6	8024.3	8494.8	8821.0	9110.6	9315.8	9011.2	7042.2
60°	7385.2	7357.1	7360.8	7883.8	9062.8	9514.5	9694.4	9769.4	9878.1	9418.9	7056.2
62.5°	7657.0	7710.4	7892.2	8678.5	10057.1	10403.9	10494.8	10568.9	10441.4	9483.6	6519.2
65°	8117.1	8204.3	8638.2	9742.2	11150.9	11522.0	11615.7	11361.7	10530.4	8647.6	5302.7
67.5°	8342.1	8501.4	9275.5	10733.8	12211.8	12624.1	12589.5	11413.3	9449.8	6594.2	3403.0
69°	8295.2	8464.8	9422.7	11037.5	12564.2	12938.1	12717.9	10782.5	8050.6	4776.9	2089.0
70°	8109.6	8281.1	9346.7	11026.2	12609.2	12905.3	12479.8	10003.7	6806.9	3493.0	1306.5
72.5°	6772.2	6920.3	8298.0	9966.2	11615.7	11374.9	10440.5	6930.6	3316.8	951.3	294.3
75°	4168.7	4251.2	5954.1	7507.9	8773.2	8154.6	6955.9	3448.0	988.8	269.0	163.1
77.5°	2202.4	2239.9	3259.6	4425.5	5561.4	4601.7	3565.1	1344.9	455.5	168.7	118.1
80°	1301.8	1329.9	1755.4	2023.4	2406.7	2010.3	1425.5	825.7	326.1	105.9	105.0
82.5°	745.1	762.9	1272.7	1124.6	948.5	809.7	709.5	782.6	195.9	71.2	108.7
85°	273.7	277.4	716.0	855.7	564.2	335.5	352.4	648.5	52.5	45.0	85.3
87.5°	127.5	124.6	368.3	523.9	329.9	212.7	274.6	142.5	20.6	29.1	23.4
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°	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4	2352.4
2.5°	2324.3	2289.6	2226.8	2162.1	2096.5	2045.9	1996.2	1956.9	1943.8	1919.4	1921.3
5°	2253.0	2189.3	2058.1	1925.0	1786.3	1672.0	1564.2	1477.0	1434.9	1391.7	1391.7
7.5°	2191.2	2098.4	1893.2	1676.7	1452.7	1264.3	1094.7	967.2	896.9	840.7	839.7
10°	2167.8	2042.2	1755.4	1445.2	1133.1	876.3	674.8	545.5	478.9	435.8	433.9
12.5°	2178.1	2022.5	1649.5	1231.5	839.7	563.3	390.8	307.4	279.3	266.2	266.2
15°	2208.1	2016.9	1543.6	1022.5	593.3	352.4	259.6	237.1	235.2	235.2	235.2
17.5°	2244.6	2018.7	1434.9	819.1	403.9	252.1	224.0	221.2	223.1	223.1	223.1
20°	2282.1	2019.7	1317.7	630.7	284.9	219.3	210.9	209.9	211.8	211.8	212.7
22.5°	2328.0	2024.4	1200.6	471.4	235.2	207.1	200.6	200.6	201.5	201.5	200.6
25°	2380.5	2033.7	1078.7	349.6	214.6	198.7	193.1	192.1	193.1	192.1	191.2
27.5°	2446.1	2046.9	942.8	273.7	205.2	190.3	185.6	185.6	184.6	183.7	182.8
30°	2528.6	2061.9	790.1	232.4	195.9	182.8	178.1	177.1	176.2	174.3	174.3
32.5°	2654.2	2094.7	639.2	210.9	185.6	172.4	168.7	168.7	166.8	164.9	164.0
35°	2847.2	2159.3	504.2	197.8	174.3	161.2	156.5	156.5	154.6	153.7	152.8
37.5°	3114.3	2257.7	391.8	185.6	163.1	149.0	144.3	143.4	141.5	139.6	138.7
40°	3469.5	2379.6	308.3	174.3	151.8	136.8	133.1	131.2	127.5	124.6	124.6
42.5°	3915.6	2518.3	250.2	162.1	138.7	125.6	122.8	120.0	113.4	110.6	109.7
45°	4382.4	2642.9	211.8	148.1	125.6	114.3	112.5	107.8	99.3	96.5	96.5
47.5°	4718.8	2672.0	186.5	135.0	113.4	102.2	101.2	92.8	85.3	83.4	82.5
50°	4928.8	2614.8	165.9	121.8	102.2	90.9	88.1	77.8	73.1	71.2	70.3
52.5°	5070.3	2512.6	149.0	110.6	91.8	80.6	74.0	66.5	62.8	60.9	60.9
55°	5183.7	2368.3	132.1	100.3	83.4	72.2	62.8	57.2	53.4	51.5	51.5
57.5°	5215.5	2172.4	115.3	91.8	75.0	63.7	53.4	49.7	45.0	44.0	44.0
60°	4984.1	1819.1	102.2	81.5	67.5	55.3	46.9	42.2	37.5	36.6	35.6
62.5°	4373.9	1407.7	90.0	72.2	59.0	47.8	40.3	34.7	30.9	30.9	30.9
65°	3336.4	943.8	78.7	62.8	51.5	40.3	34.7	28.1	26.2	26.2	27.2
67.5°	1997.2	513.6	67.5	53.4	44.0	33.7	29.1	24.4	23.4	24.4	24.4
69°	1170.6	301.8	60.9	47.8	38.4	30.0	25.3	21.6	23.4	24.4	24.4
70°	722.6	203.4	56.2	43.1	34.7	27.2	23.4	20.6	22.5	23.4	23.4
72.5°	201.5	105.0	45.0	33.7	28.1	22.5	18.7	18.7	21.6	22.5	22.5
75°	131.2	77.8	34.7	25.3	21.6	17.8	15.9	17.8	20.6	21.6	21.6
77.5°	108.7	63.7	28.1	20.6	17.8	16.9	15.0	15.9	18.7	19.7	19.7
80°	99.3	45.0	22.5	18.7	15.9	15.0	14.1	13.1	16.9	17.8	17.8
82.5°	94.7	35.6	19.7	16.9	15.0	13.1	12.2	13.1	15.0	15.9	16.9
85°	59.0	23.4	17.8	15.9	13.1	12.2	12.2	12.2	14.1	15.0	15.0
87.5°	21.6	18.7	15.9	13.1	11.2	11.2	11.2	11.2	12.2	14.1	14.1
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)