

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: P191213

Luminaire Tested: **GLEON-AF-05-LED-E1-SL4-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191213  
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-05-LED-E1-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 1050mA 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: 24699.2 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G4

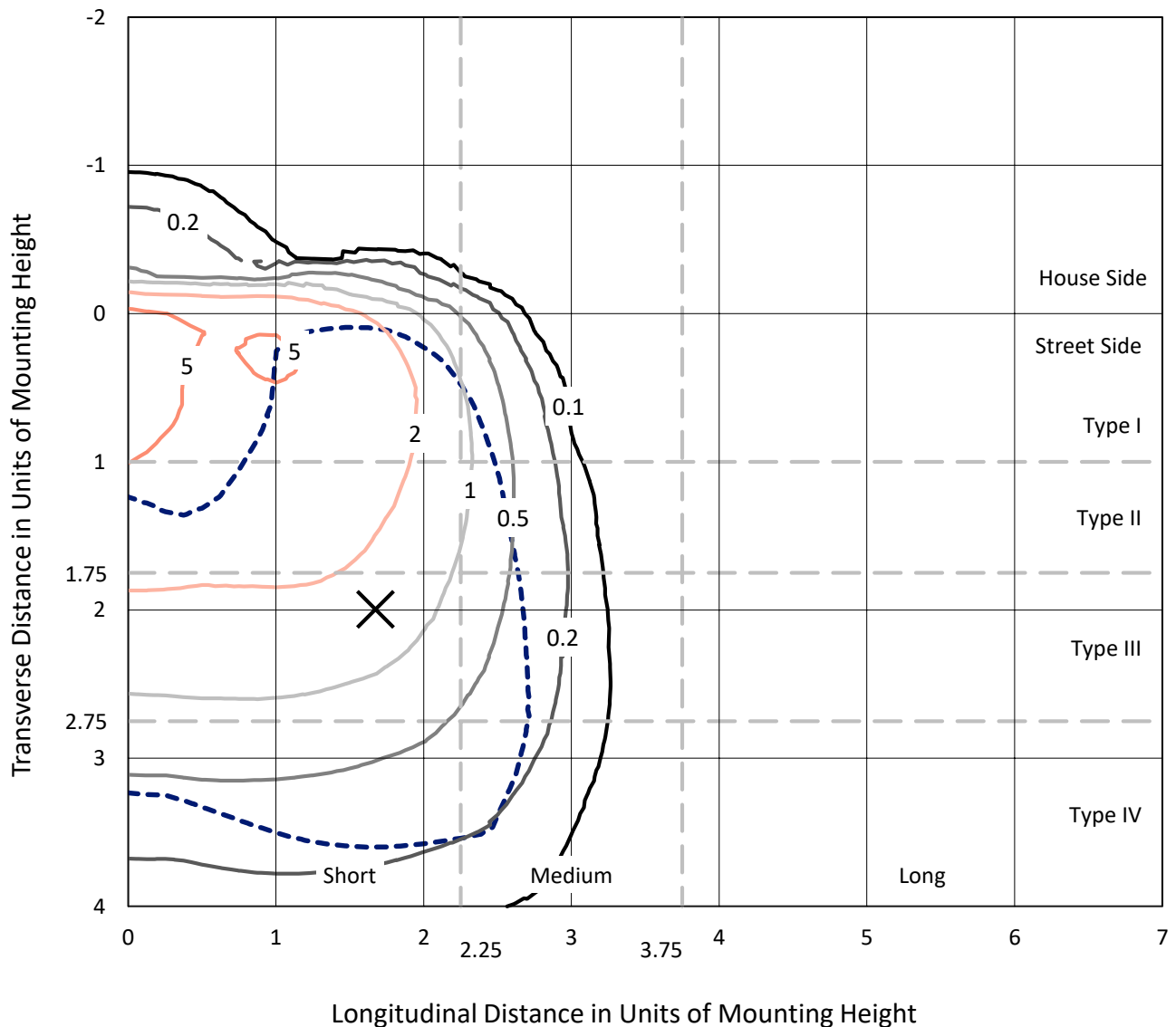
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

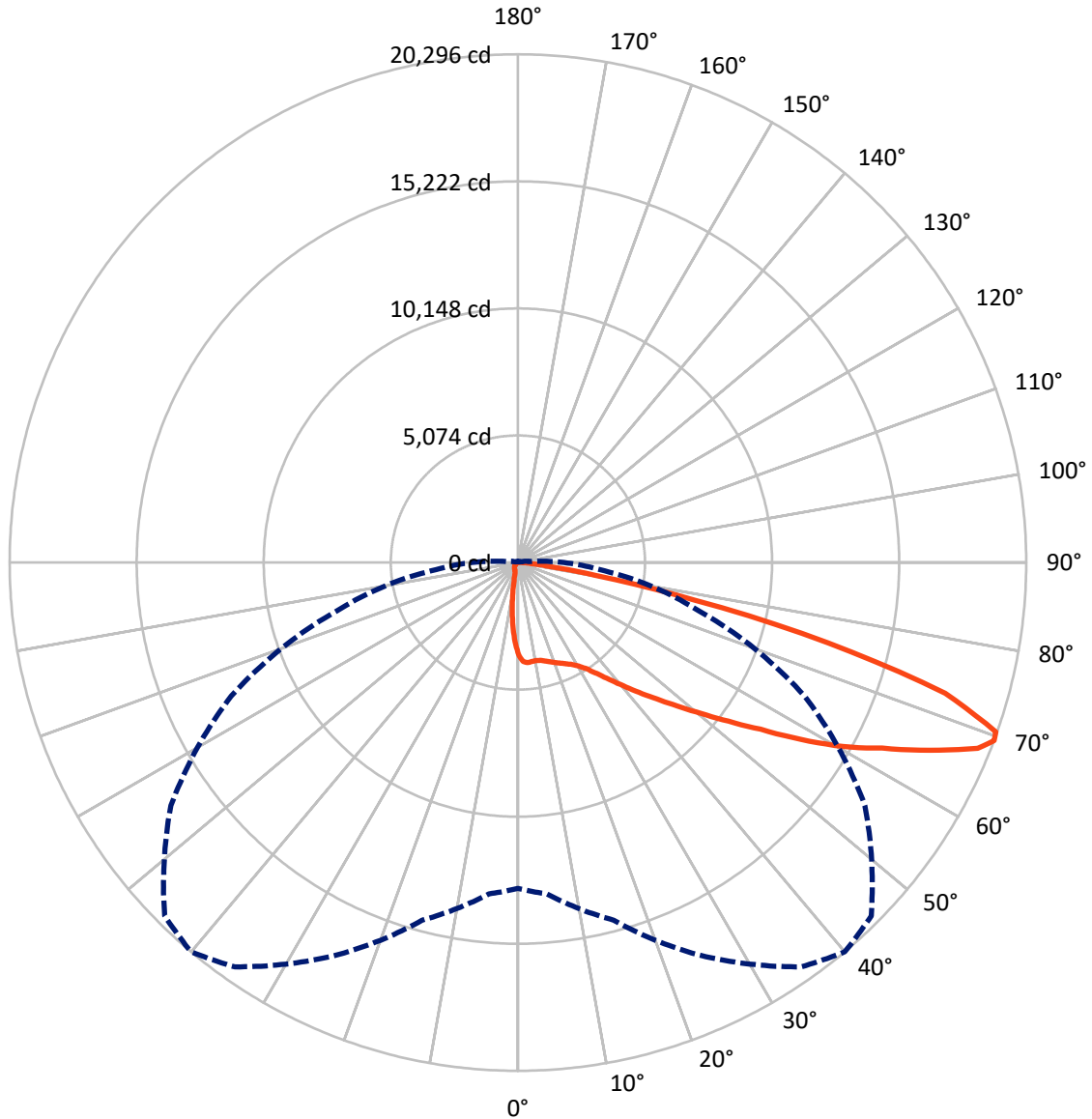
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 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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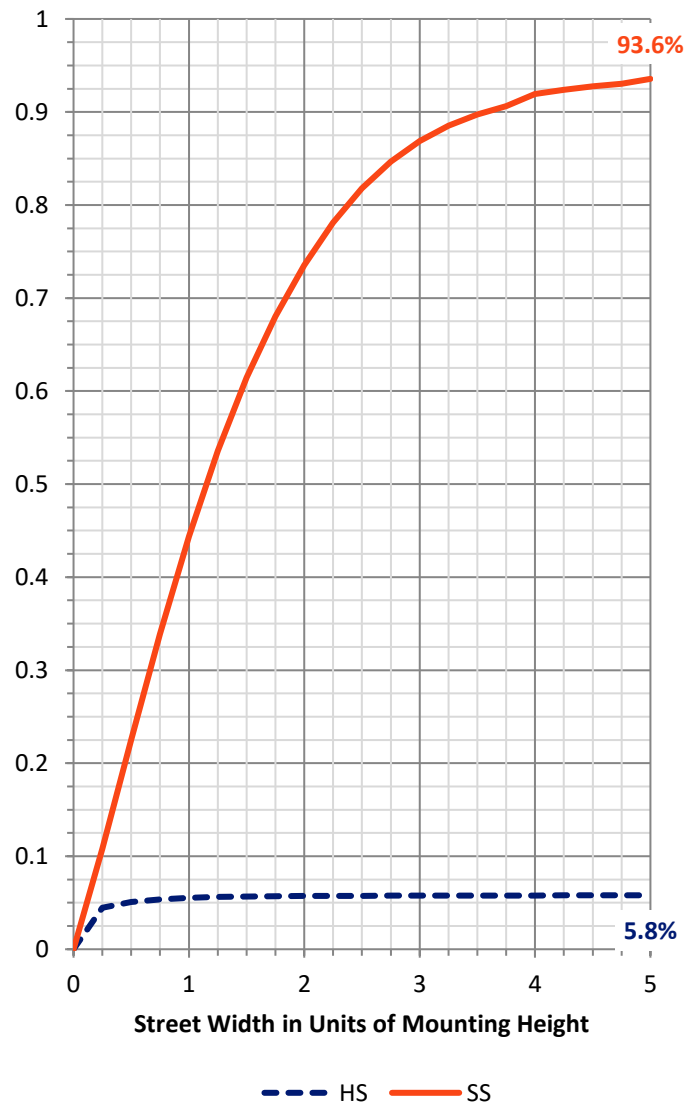
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1445.0	0.0	1445.0
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	23254.1	0.0	23254.1
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	24699.2	0.0	24699.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	299.2	1.2
10°-20°	735.8	3.0
20°-30°	1239.3	5.0
30°-40°	2028.8	8.2
40°-50°	3512.8	14.2
50°-60°	5533.0	22.4
60°-70°	7225.9	29.3
70°-80°	3721.7	15.1
80°-90°	402.6	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°	24699.2	100.0
0°-180°	24699.2	100.0

**Coefficient of Utilization**



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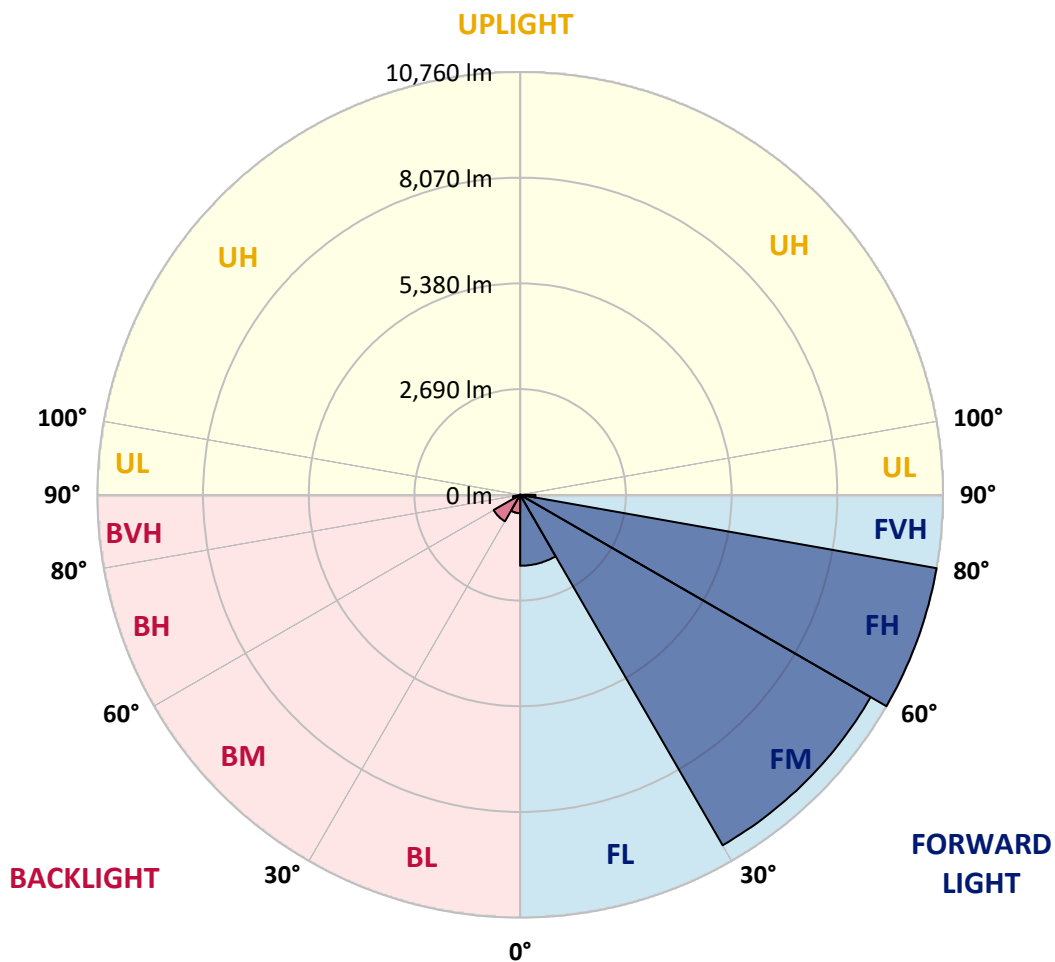
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1806.2	7.3			
FM	(30°-60°)	10298.0	41.7			
FH	(60°-80°)	10760.0	43.6			G4/12000
FVH	(80°-90°)	389.9	1.6			G3/500
BL	(0°-30°)	468.1	1.9	B1/500		
BM	(30°-60°)	776.7	3.1	B1/1000		
BH	(60°-80°)	187.6	0.8	B1/500		G1/500
BVH	(80°-90°)	12.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2
2.5°	4051.8	4029.8	4016.5	3998.9	3976.8	3957.8	3950.4	3896.0	3844.6	3774.0	3693.2
5°	4126.8	4119.5	4096.0	4072.5	4046.0	4016.5	4000.4	3935.7	3862.2	3759.2	3618.2
7.5°	4134.2	4125.4	4096.0	4063.6	4026.8	3991.6	3963.6	3899.0	3831.4	3726.9	3555.0
10°	4122.4	4112.2	4090.1	4054.8	4009.3	3975.4	3947.5	3885.7	3828.4	3734.3	3543.2
12.5°	4109.2	4098.9	4088.6	4070.9	4031.2	4007.7	3984.2	3925.4	3873.9	3794.5	3585.7
15°	4122.4	4116.6	4128.3	4121.0	4098.9	4078.3	4054.8	4001.9	3954.8	3888.6	3663.7
17.5°	4178.2	4178.2	4215.1	4219.5	4198.9	4169.4	4135.7	4082.7	4043.0	3987.2	3756.4
20°	4309.2	4304.7	4351.7	4360.6	4310.6	4265.0	4215.1	4150.3	4119.5	4084.2	3847.5
22.5°	4534.0	4513.5	4541.4	4532.6	4434.1	4363.5	4301.8	4222.4	4206.2	4190.0	3948.9
25°	4826.6	4814.8	4834.0	4747.2	4573.7	4478.2	4404.7	4315.0	4315.0	4331.2	4063.6
27.5°	5251.5	5207.4	5142.7	4989.9	4729.6	4607.6	4528.2	4432.7	4457.6	4517.9	4215.1
30°	5686.7	5638.2	5489.7	5254.5	4919.3	4791.4	4698.7	4598.8	4657.6	4767.9	4417.9
32.5°	6116.0	6061.6	5851.4	5554.4	5191.3	5063.3	4973.7	4863.4	4961.9	5147.2	4714.9
35°	6532.1	6483.6	6240.9	5891.1	5552.9	5447.0	5364.8	5269.1	5395.6	5654.4	5133.9
37.5°	6999.5	6946.7	6651.1	6271.8	5992.5	5916.0	5855.8	5760.2	5980.8	6360.1	5717.6
40°	7574.4	7484.7	7086.3	6708.5	6501.2	6464.4	6423.3	6410.0	6752.6	7277.5	6495.3
42.5°	8233.1	8086.0	7542.1	7168.6	7059.9	7086.3	7076.1	7134.9	7718.5	8418.3	7442.1
45°	8891.7	8702.0	8049.3	7659.7	7674.4	7767.1	7824.3	8059.6	8928.5	9726.8	8460.9
47.5°	9450.4	9263.6	8535.9	8190.5	8366.8	8549.2	8705.0	9150.5	10172.2	11014.6	9253.4
50°	9928.2	9751.8	9052.0	8774.1	9171.1	9465.1	9717.9	10378.0	11510.1	11995.3	9809.1
52.5°	10319.2	10201.7	9587.1	9443.1	10089.9	10520.6	10891.2	11682.1	12695.1	12792.1	10241.4
55°	10700.1	10616.3	10162.0	10238.4	11169.1	11755.6	12224.7	13065.6	13715.4	13456.6	10656.0
57.5°	11138.2	11061.7	10817.7	11246.9	12587.8	13325.8	13837.5	14291.7	14613.7	14135.9	11047.1
60°	11585.1	11541.0	11546.9	12367.3	14216.8	14925.4	15207.7	15325.2	15495.9	14775.4	11069.0
62.5°	12011.5	12095.3	12380.5	13613.9	15776.7	16320.6	16463.2	16579.4	16379.4	14876.9	10226.6
65°	12733.3	12870.1	13550.7	15282.7	17492.4	18074.5	18221.5	17823.1	16519.0	13565.5	8318.3
67.5°	13086.2	13336.1	14550.5	16838.1	19156.6	19803.5	19749.1	17904.0	14823.9	10344.3	5338.3
69°	13012.7	13278.7	14781.3	17314.5	19709.4	20296.0	19950.5	16914.6	12628.9	7493.5	3277.0
70°	12721.5	12990.7	14662.3	17296.8	19780.0	20244.5	19577.0	15692.8	10678.0	5479.4	2049.5
72.5°	10623.7	10855.9	13017.0	15634.0	18221.5	17843.7	16378.0	10872.0	5203.0	1492.3	461.7
75°	6539.4	6668.8	9340.2	11777.7	13762.5	12792.1	10911.7	5408.9	1551.1	422.0	255.8
77.5°	3454.9	3513.7	5113.3	6942.3	8724.1	7218.7	5592.6	2109.7	714.5	264.6	185.3
80°	2042.1	2086.2	2753.7	3174.1	3775.4	3153.6	2236.2	1295.3	511.6	166.1	164.7
82.5°	1168.8	1196.8	1996.5	1764.2	1487.9	1270.2	1113.0	1227.6	307.3	111.7	170.5
85°	429.3	435.2	1123.2	1342.3	885.1	526.3	552.8	1017.3	82.3	70.6	133.8
87.5°	200.0	195.5	577.8	821.8	517.5	333.7	430.8	223.5	32.3	45.6	36.7
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°	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2	3690.2
2.5°	3646.1	3591.7	3493.2	3391.7	3288.8	3209.4	3131.5	3069.8	3049.2	3011.0	3013.9
5°	3534.3	3434.4	3228.5	3019.8	2802.2	2622.8	2453.8	2317.0	2250.9	2183.3	2183.3
7.5°	3437.3	3291.8	2969.8	2630.2	2278.8	1983.3	1717.2	1517.2	1407.0	1318.8	1317.3
10°	3400.6	3203.6	2753.7	2267.1	1777.5	1374.6	1058.5	855.7	751.3	683.6	680.7
12.5°	3416.8	3172.7	2587.6	1931.8	1317.3	883.6	613.1	482.2	438.1	417.6	417.6
15°	3463.8	3163.9	2421.4	1604.0	930.7	552.8	407.2	371.9	369.0	369.0	369.0
17.5°	3521.1	3166.7	2250.9	1284.9	633.6	395.5	351.4	347.0	350.0	350.0	350.0
20°	3579.9	3168.3	2067.1	989.4	446.9	344.0	330.8	329.3	332.3	332.3	333.7
22.5°	3651.9	3175.6	1883.4	739.5	369.0	324.9	314.7	314.7	316.1	316.1	314.7
25°	3734.3	3190.3	1692.2	548.4	336.7	311.7	302.9	301.4	302.9	301.4	299.9
27.5°	3837.2	3210.9	1479.0	429.3	321.9	298.5	291.1	291.1	289.6	288.2	286.7
30°	3966.6	3234.5	1239.4	364.6	307.3	286.7	279.4	277.8	276.4	273.4	273.4
32.5°	4163.6	3285.9	1002.7	330.8	291.1	270.5	264.6	264.6	261.7	258.7	257.3
35°	4466.4	3387.3	790.9	310.3	273.4	252.9	245.5	245.5	242.5	241.1	239.7
37.5°	4885.4	3541.7	614.6	291.1	255.8	233.7	226.4	224.9	222.0	219.0	217.6
40°	5442.6	3732.8	483.7	273.4	238.1	214.6	208.8	205.8	200.0	195.5	195.5
42.5°	6142.4	3950.4	392.5	254.3	217.6	197.0	192.6	188.2	177.9	173.5	172.1
45°	6874.6	4145.9	332.3	232.3	197.0	179.3	176.5	169.1	155.8	151.4	151.4
47.5°	7402.4	4191.5	292.6	211.8	177.9	160.3	158.8	145.6	133.8	130.8	129.4
50°	7731.8	4101.8	260.2	191.1	160.3	142.6	138.2	122.0	114.7	111.7	110.3
52.5°	7953.7	3941.5	233.7	173.5	144.0	126.4	116.1	104.3	98.5	95.5	95.5
55°	8131.6	3715.2	207.2	157.3	130.8	113.2	98.5	89.7	83.8	80.8	80.8
57.5°	8181.7	3407.9	180.9	144.0	117.6	99.9	83.8	77.9	70.6	69.0	69.0
60°	7818.5	2853.6	160.3	127.9	105.9	86.7	73.6	66.2	58.8	57.4	55.9
62.5°	6861.3	2208.2	141.2	113.2	92.6	75.0	63.2	54.4	48.5	48.5	48.5
65°	5233.9	1480.5	123.5	98.5	80.8	63.2	54.4	44.1	41.1	41.1	42.7
67.5°	3133.0	805.7	105.9	83.8	69.0	52.9	45.6	38.3	36.7	38.3	38.3
69°	1836.3	473.4	95.5	75.0	60.3	47.1	39.7	33.9	36.7	38.3	38.3
70°	1133.5	319.1	88.2	67.6	54.4	42.7	36.7	32.3	35.3	36.7	36.7
72.5°	316.1	164.7	70.6	52.9	44.1	35.3	29.4	29.4	33.9	35.3	35.3
75°	205.8	122.0	54.4	39.7	33.9	27.9	25.0	27.9	32.3	33.9	33.9
77.5°	170.5	99.9	44.1	32.3	27.9	26.5	23.5	25.0	29.4	30.9	30.9
80°	155.8	70.6	35.3	29.4	25.0	23.5	22.1	20.6	26.5	27.9	27.9
82.5°	148.5	55.9	30.9	26.5	23.5	20.6	19.1	20.6	23.5	25.0	26.5
85°	92.6	36.7	27.9	25.0	20.6	19.1	19.1	19.1	22.1	23.5	23.5
87.5°	33.9	29.4	25.0	20.6	17.6	17.6	17.6	17.6	19.1	22.1	22.1
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)