

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: P269643

Luminaire Tested: **GLEON-AF-09-LED-E1-SL4-7027-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P269643  
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-09-LED-E1-SL4-7027-600-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 2700K, 615mA 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: 24722.5 lumens  
Efficiency: N/A  
Efficacy: 85.3 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G4

Input Watts (W): 290  
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: 25 FT

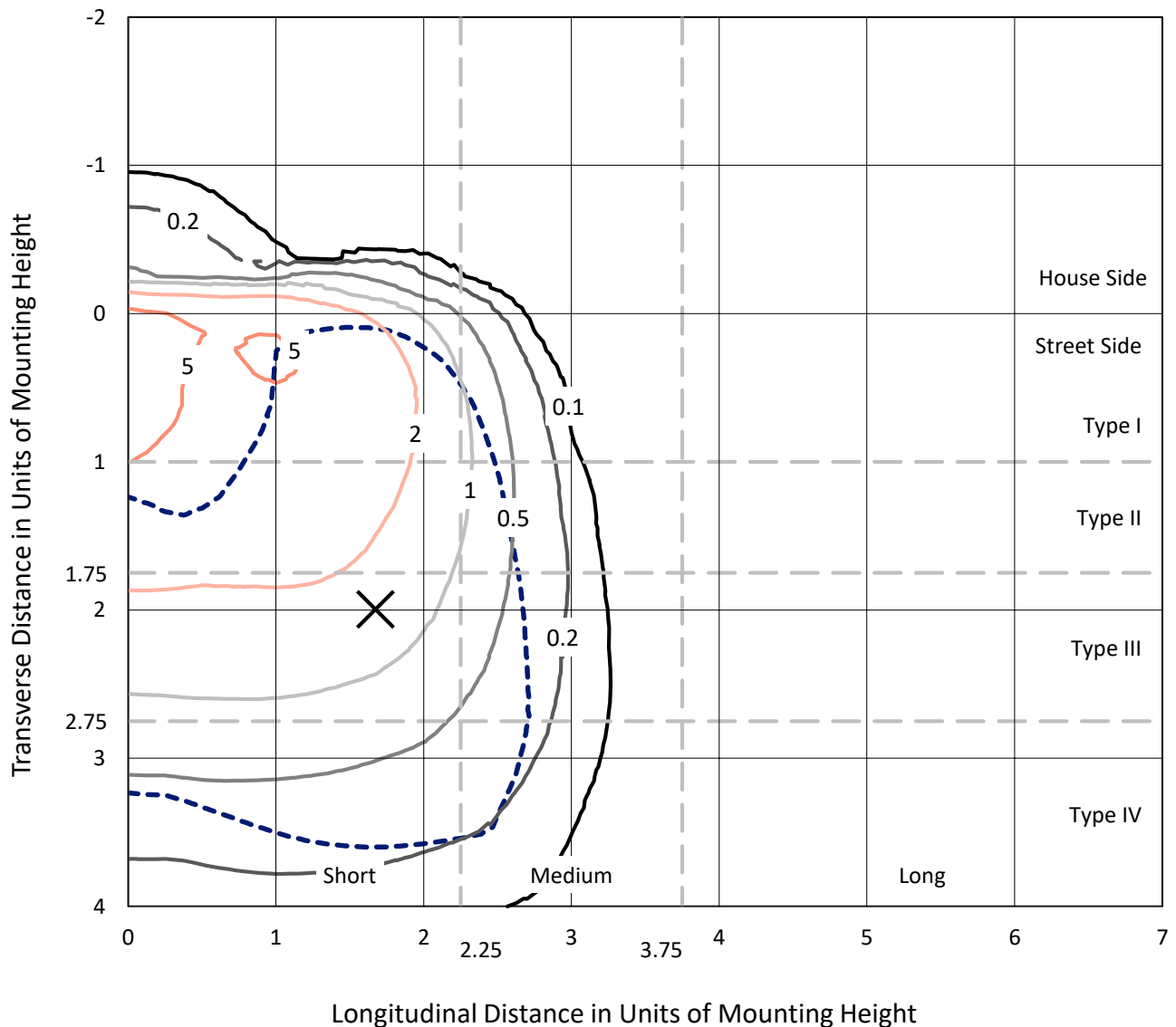


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

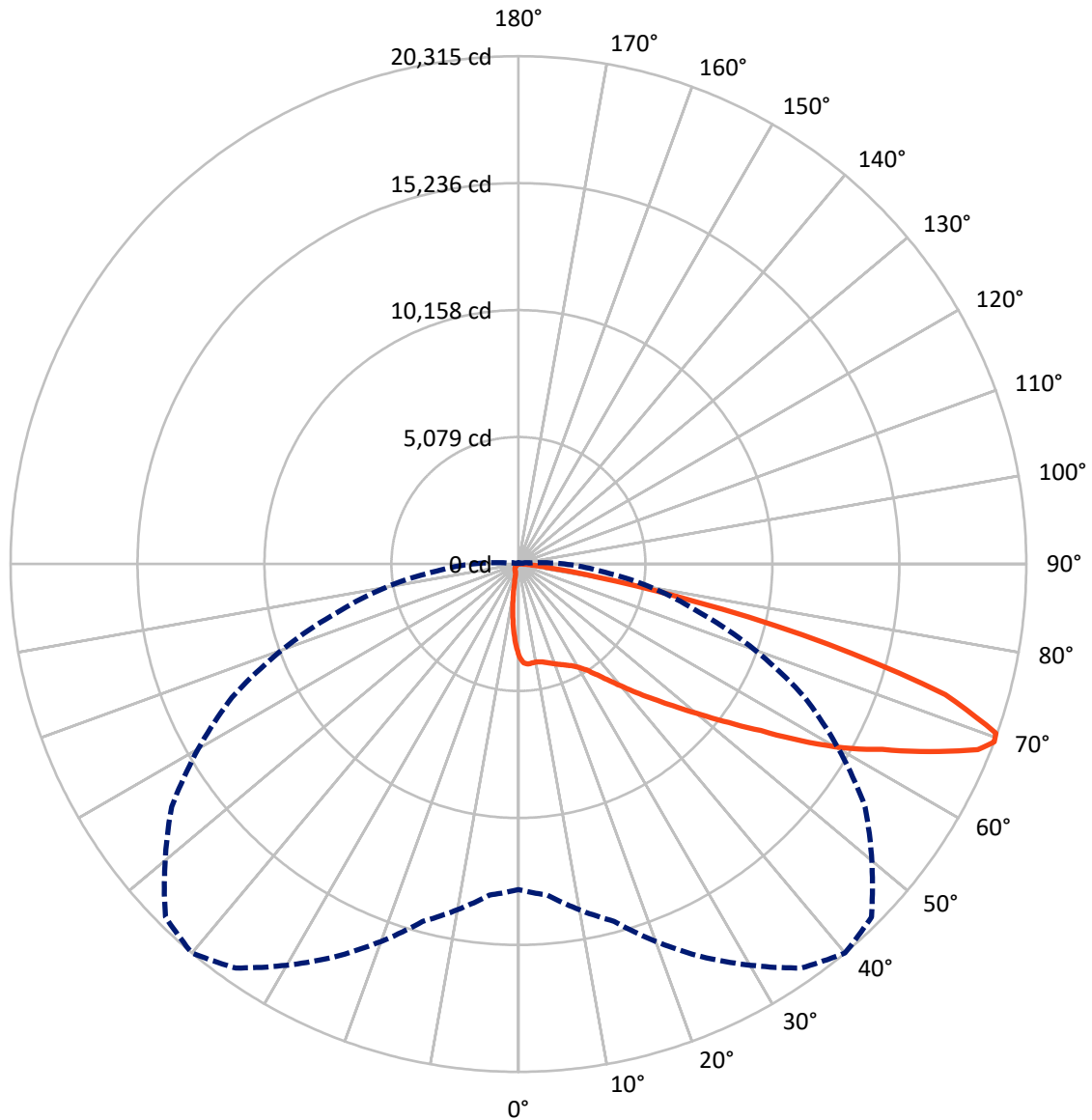


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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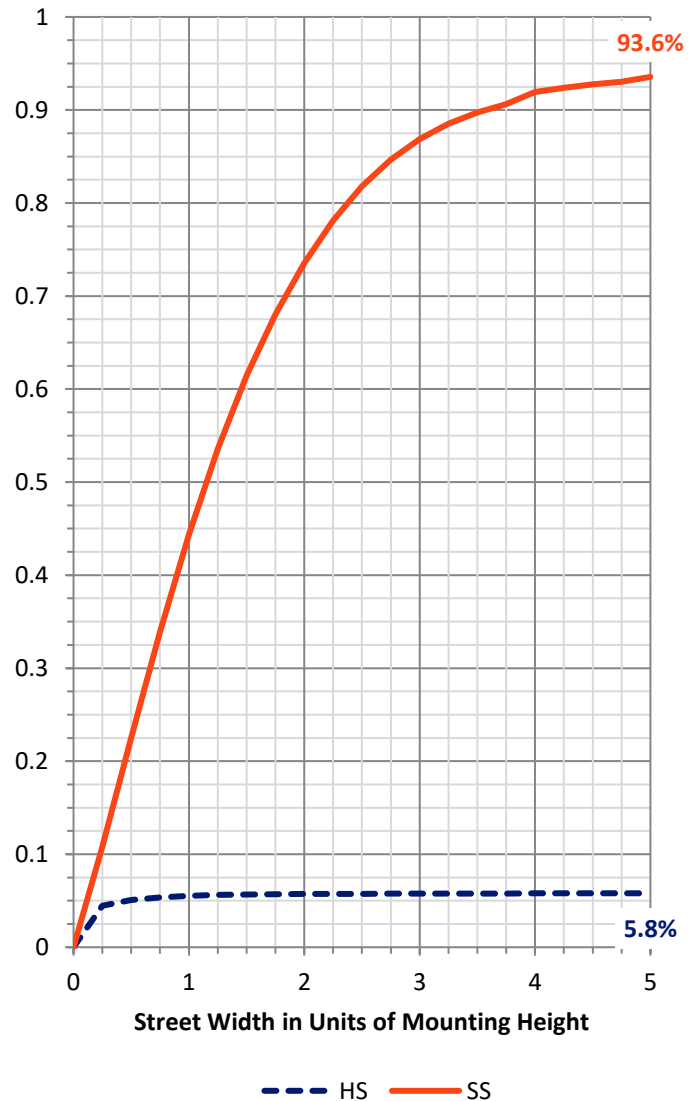
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1446.4	0.0	1446.4
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	23276.1	0.0	23276.1
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	24722.5	0.0	24722.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	299.5	1.2
10°-20°	736.5	3.0
20°-30°	1240.5	5.0
30°-40°	2030.7	8.2
40°-50°	3516.1	14.2
50°-60°	5538.3	22.4
60°-70°	7232.8	29.3
70°-80°	3725.2	15.1
80°-90°	403.0	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°	24722.5	100.0
0°-180°	24722.5	100.0

**Coefficient of Utilization**



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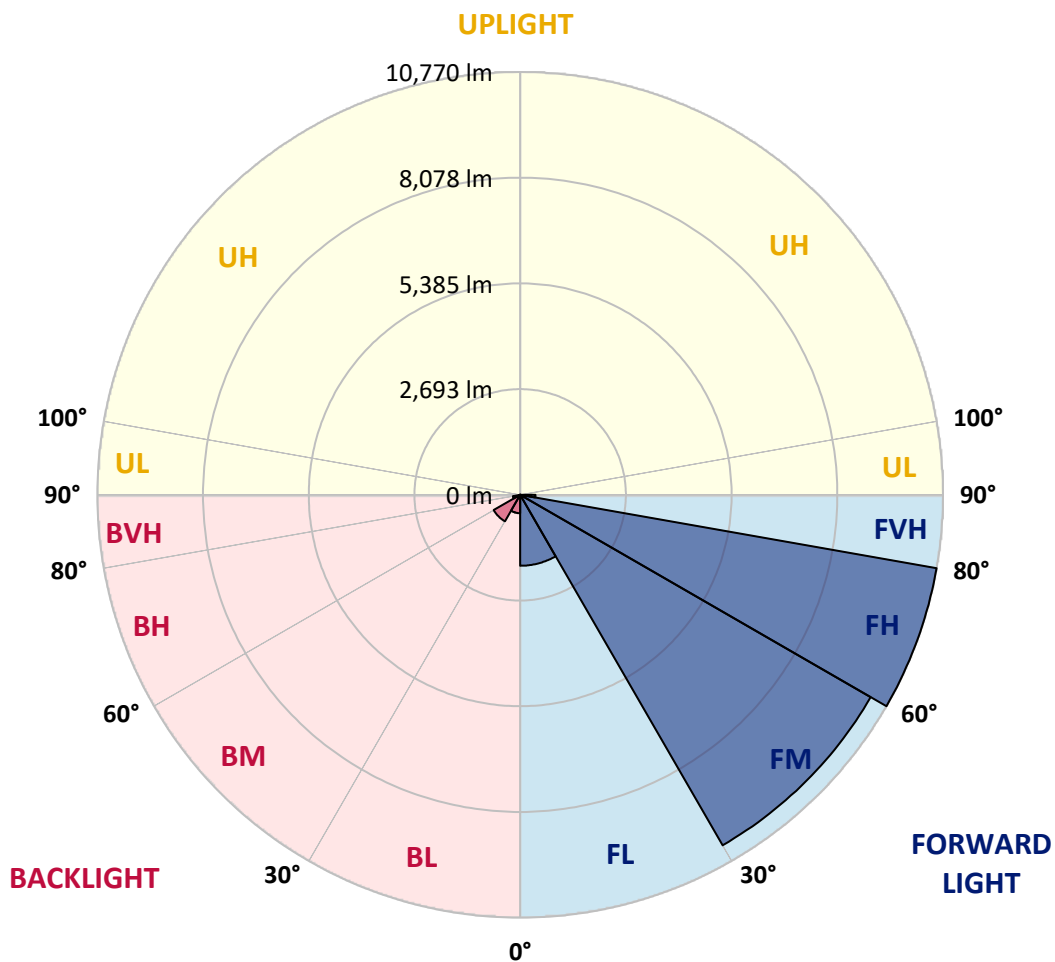
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1807.9	7.3			
FM (30°-60°)	10307.7	41.7			
FH (60°-80°)	10770.1	43.6			G4/12000
FVH (80°-90°)	390.3	1.6			G3/500
BL (0°-30°)	468.5	1.9	B1/500		
BM (30°-60°)	777.4	3.1	B1/1000		
BH (60°-80°)	187.8	0.8	B1/500		G1/500
BVH (80°-90°)	12.7	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°	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7
2.5°	4055.7	4033.6	4020.4	4002.7	3980.6	3961.4	3954.2	3899.7	3848.2	3777.6	3696.6
5°	4130.8	4123.4	4099.9	4076.2	4049.7	4020.4	4004.1	3939.4	3865.9	3762.8	3621.5
7.5°	4138.1	4129.2	4099.9	4067.4	4030.6	3995.3	3967.4	3902.6	3835.0	3730.4	3558.2
10°	4126.4	4116.0	4093.9	4058.6	4013.0	3979.1	3951.3	3889.4	3832.0	3737.8	3546.5
12.5°	4113.1	4102.7	4092.5	4074.8	4035.0	4011.6	3987.9	3929.1	3877.7	3798.2	3589.2
15°	4126.4	4120.4	4132.3	4124.8	4102.7	4082.2	4058.6	4005.6	3958.6	3892.4	3667.2
17.5°	4182.1	4182.1	4219.0	4223.4	4202.8	4173.4	4139.6	4086.6	4046.9	3990.9	3759.9
20°	4313.2	4308.8	4355.9	4364.8	4314.6	4269.0	4219.0	4154.3	4123.4	4088.0	3851.2
22.5°	4538.3	4517.8	4545.8	4536.9	4438.3	4367.6	4305.8	4226.3	4210.1	4193.9	3952.7
25°	4831.3	4819.4	4838.6	4751.8	4578.1	4482.5	4408.8	4319.1	4319.1	4335.3	4067.4
27.5°	5256.5	5212.3	5147.6	4994.5	4734.1	4612.0	4532.5	4436.8	4461.8	4522.2	4219.0
30°	5692.1	5643.5	5494.9	5259.4	4923.9	4796.0	4703.2	4603.2	4661.9	4772.3	4422.0
32.5°	6121.8	6067.3	5856.9	5559.6	5196.2	5068.1	4978.3	4867.9	4966.5	5152.0	4719.3
35°	6538.3	6489.6	6246.9	5896.7	5558.2	5452.3	5369.8	5274.2	5400.7	5659.7	5138.8
37.5°	7006.2	6953.2	6657.5	6277.7	5998.2	5921.6	5861.4	5765.6	5986.5	6366.1	5723.0
40°	7581.5	7491.9	7093.0	6714.8	6507.3	6470.5	6429.3	6416.1	6758.9	7284.4	6501.5
42.5°	8241.0	8093.6	7549.3	7175.4	7066.5	7093.0	7082.7	7141.5	7725.9	8426.3	7449.1
45°	8900.1	8710.2	8056.9	7666.9	7681.6	7774.4	7831.8	8067.1	8936.9	9736.0	8469.0
47.5°	9459.3	9272.5	8544.0	8198.2	8374.8	8557.3	8713.2	9159.1	10181.8	11025.1	9262.2
50°	9937.6	9761.1	9060.6	8782.4	9179.7	9474.1	9727.1	10387.9	11521.0	12006.7	9818.5
52.5°	10329.0	10211.4	9596.2	9452.0	10099.5	10530.7	10901.6	11693.1	12707.2	12804.3	10251.1
55°	10710.2	10626.3	10171.6	10248.1	11179.6	11766.8	12236.3	13078.0	13728.3	13469.4	10666.0
57.5°	11148.8	11072.1	10827.9	11257.6	12599.6	13338.5	13850.5	14305.2	14627.6	14149.3	11057.4
60°	11596.1	11551.9	11557.9	12379.0	14230.2	14939.5	15222.0	15339.7	15510.5	14789.4	11079.5
62.5°	12022.8	12106.6	12392.2	13626.8	15791.6	16336.0	16478.8	16595.1	16394.8	14890.9	10236.4
65°	12745.4	12882.2	13563.6	15297.1	17509.0	18091.7	18238.7	17840.0	16534.7	13578.3	8326.2
67.5°	13098.5	13348.8	14564.3	16854.0	19174.7	19822.2	19767.8	17920.9	14837.9	10354.0	5343.3
69°	13025.0	13291.3	14795.4	17330.8	19728.0	20315.2	19969.4	16930.5	12640.9	7500.7	3280.2
70°	12733.7	13002.8	14676.1	17313.2	19798.6	20263.6	19595.5	15707.8	10688.2	5484.6	2051.4
72.5°	10633.6	10866.2	13029.3	15648.8	18238.7	17860.6	16393.3	10882.3	5208.0	1493.6	462.1
75°	6545.6	6675.0	9349.0	11788.8	13775.5	12804.3	10922.1	5413.9	1552.5	422.4	256.0
77.5°	3458.2	3517.0	5118.2	6948.7	8732.3	7225.4	5597.9	2111.7	715.2	264.9	185.4
80°	2044.1	2088.2	2756.3	3177.1	3779.0	3156.6	2238.2	1296.4	512.2	166.2	164.7
82.5°	1170.0	1197.9	1998.4	1765.9	1489.2	1271.5	1114.0	1228.8	307.6	111.8	170.7
85°	429.7	435.6	1124.3	1343.5	885.9	526.9	553.4	1018.3	82.5	70.6	133.8
87.5°	200.1	195.7	578.2	822.6	518.1	334.1	431.1	223.7	32.3	45.6	36.8
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°	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7	3693.7
2.5°	3649.5	3595.0	3496.6	3395.0	3291.8	3212.5	3134.5	3072.7	3052.0	3013.9	3016.8
5°	3537.6	3437.6	3231.7	3022.6	2804.9	2625.2	2456.1	2319.2	2252.9	2185.2	2185.2
7.5°	3440.6	3294.9	2972.6	2632.7	2280.9	1985.2	1718.7	1518.7	1408.4	1320.0	1318.5
10°	3403.8	3206.6	2756.3	2269.2	1779.2	1375.9	1059.6	856.4	752.1	684.2	681.4
12.5°	3419.9	3175.7	2590.1	1933.6	1318.5	884.4	613.6	482.7	438.6	417.9	417.9
15°	3467.1	3166.9	2423.6	1605.5	931.5	553.4	407.7	372.3	369.4	369.4	369.4
17.5°	3524.4	3169.8	2252.9	1286.2	634.3	395.9	351.6	347.3	350.2	350.2	350.2
20°	3583.2	3171.2	2069.1	990.4	447.4	344.3	331.1	329.7	332.6	332.6	334.1
22.5°	3655.5	3178.7	1885.2	740.3	369.4	325.2	314.9	314.9	316.5	316.5	314.9
25°	3737.8	3193.4	1693.8	549.0	337.0	312.0	303.2	301.7	303.2	301.7	300.3
27.5°	3840.9	3214.0	1480.3	429.7	322.3	298.7	291.4	291.4	290.0	288.4	287.0
30°	3970.2	3237.5	1240.6	364.9	307.6	287.0	279.6	278.1	276.7	273.8	273.8
32.5°	4167.5	3289.0	1003.6	331.1	291.4	270.7	264.9	264.9	261.9	259.0	257.5
35°	4470.7	3390.6	791.6	310.5	273.8	253.1	245.7	245.7	242.8	241.4	239.8
37.5°	4890.1	3545.0	615.1	291.4	256.0	234.0	226.6	225.1	222.2	219.2	217.7
40°	5447.9	3736.3	484.1	273.8	238.4	214.9	208.9	206.0	200.1	195.7	195.7
42.5°	6148.3	3954.2	392.9	254.6	217.7	197.2	192.7	188.4	178.0	173.6	172.1
45°	6881.1	4149.9	332.6	232.5	197.2	179.5	176.5	169.2	155.9	151.5	151.5
47.5°	7409.4	4195.4	292.8	211.9	178.0	160.3	158.9	145.6	133.8	131.0	129.4
50°	7739.1	4105.8	260.5	191.2	160.3	142.7	138.2	122.1	114.8	111.8	110.4
52.5°	7961.3	3945.4	234.0	173.6	144.2	126.5	116.2	104.6	98.6	95.7	95.7
55°	8139.4	3718.8	207.5	157.5	131.0	113.2	98.6	89.8	83.9	80.9	80.9
57.5°	8189.4	3411.1	181.0	144.2	117.7	100.2	83.9	78.1	70.6	69.2	69.2
60°	7825.9	2856.3	160.3	128.0	106.0	86.9	73.7	66.3	58.8	57.4	56.0
62.5°	6867.9	2210.3	141.3	113.2	92.7	75.1	63.3	54.4	48.6	48.6	48.6
65°	5238.8	1481.8	123.5	98.6	80.9	63.3	54.4	44.1	41.2	41.2	42.7
67.5°	3136.0	806.4	106.0	83.9	69.2	53.0	45.6	38.3	36.8	38.3	38.3
69°	1838.0	473.9	95.7	75.1	60.4	47.2	39.7	33.9	36.8	38.3	38.3
70°	1134.6	319.3	88.4	67.7	54.4	42.7	36.8	32.3	35.4	36.8	36.8
72.5°	316.5	164.7	70.6	53.0	44.1	35.4	29.5	29.5	33.9	35.4	35.4
75°	206.0	122.1	54.4	39.7	33.9	27.9	25.1	27.9	32.3	33.9	33.9
77.5°	170.7	100.2	44.1	32.3	27.9	26.5	23.5	25.1	29.5	30.9	30.9
80°	155.9	70.6	35.4	29.5	25.1	23.5	22.1	20.7	26.5	27.9	27.9
82.5°	148.6	56.0	30.9	26.5	23.5	20.7	19.1	20.7	23.5	25.1	26.5
85°	92.7	36.8	27.9	25.1	20.7	19.1	19.1	19.1	22.1	23.5	23.5
87.5°	33.9	29.5	25.1	20.7	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)