

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: P299960

Luminaire Tested: **GLNA-AF-05-LED-E1-SL3-7030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299960  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-05-LED-E1-SL3-7030-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Medium OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18893.2 lumens  
Efficiency: N/A  
Efficacy: 116.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

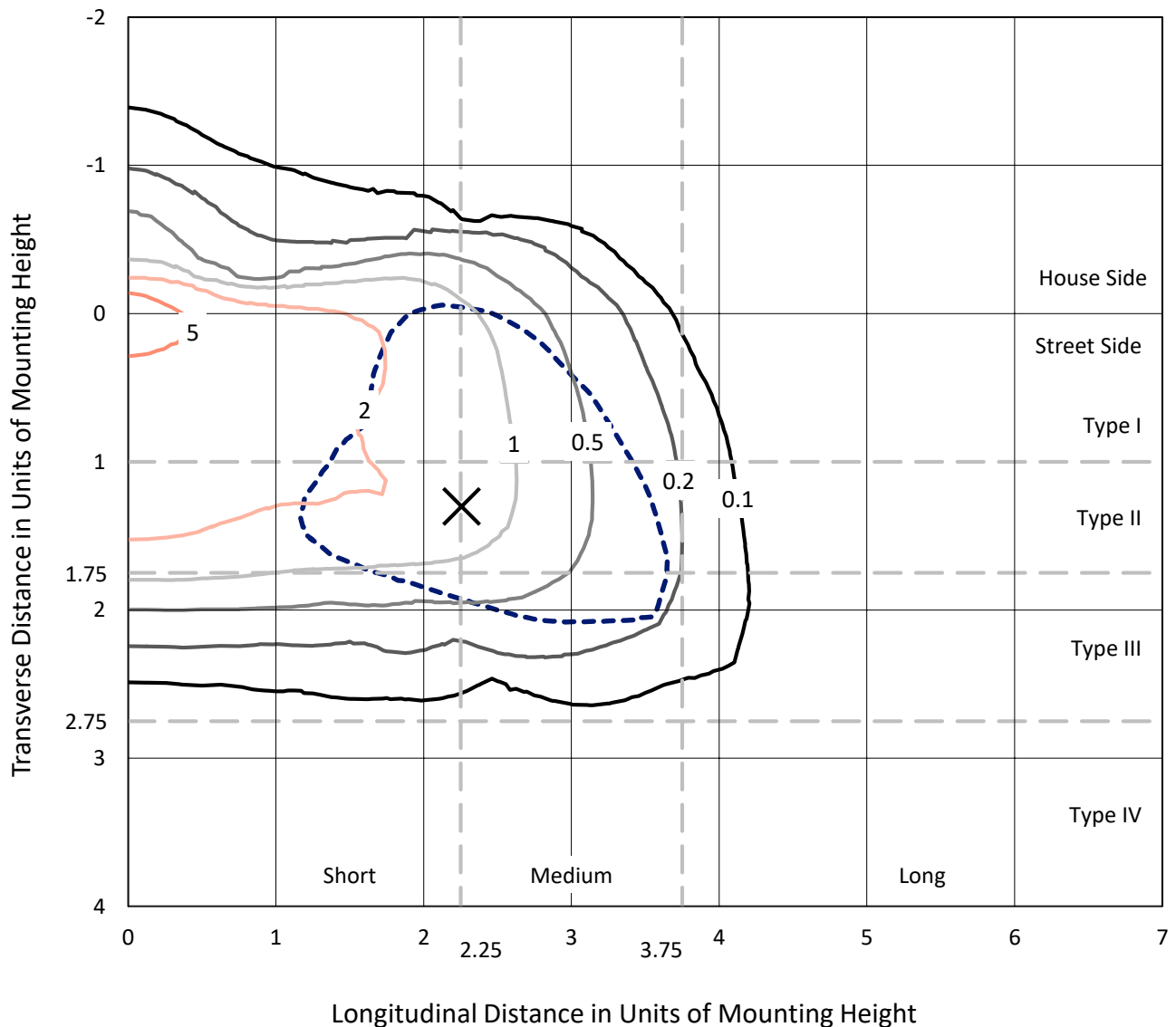
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

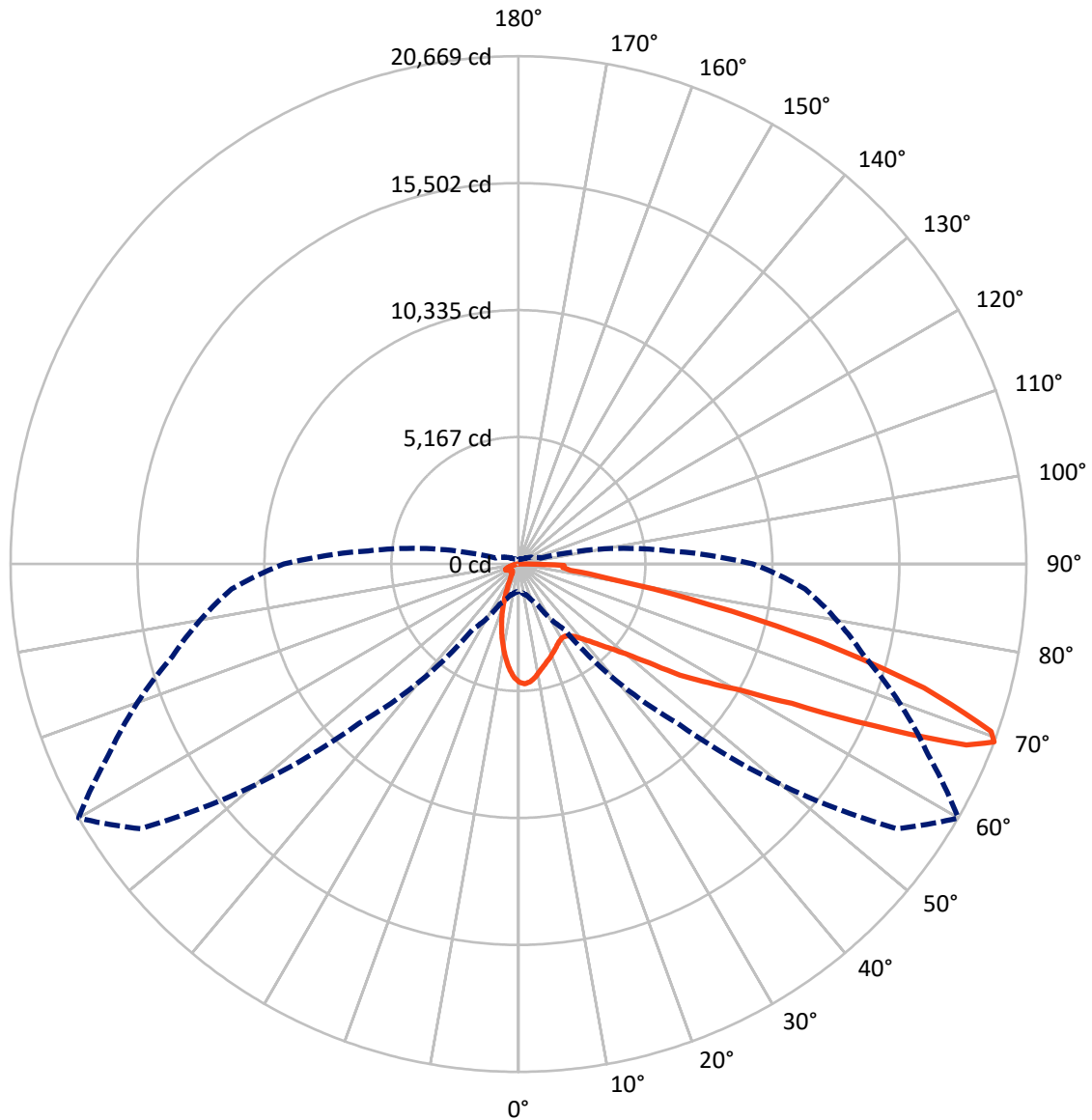
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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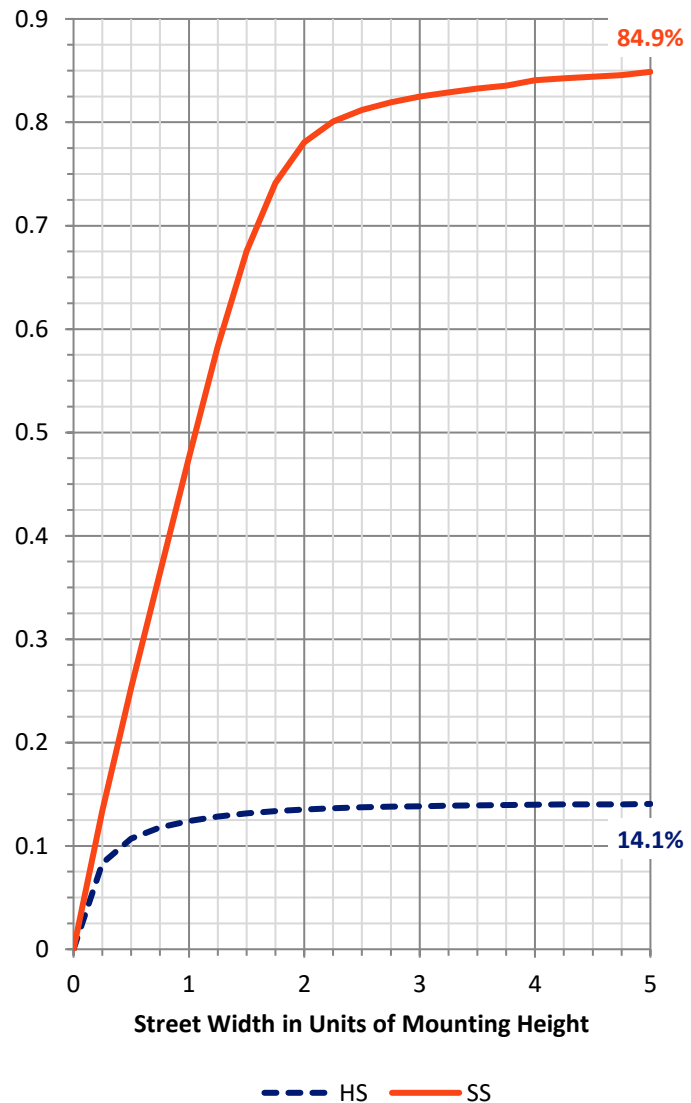
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2687.9	0.0	2687.9
	% Fixture	14.2	0.0	14.2
<b>Street Side</b>	Lumens	16205.3	0.0	16205.3
	% Fixture	85.8	0.0	85.8
<b>Total</b>	Lumens	18893.2	0.0	18893.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	407.1	2.2
10°-20°	867.3	4.6
20°-30°	1105.1	5.8
30°-40°	1519.2	8.0
40°-50°	2465.0	13.0
50°-60°	3953.3	20.9
60°-70°	5261.5	27.8
70°-80°	2840.8	15.0
80°-90°	474.0	2.5
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°	18893.2	100.0
0°-180°	18893.2	100.0

**Coefficient of Utilization**



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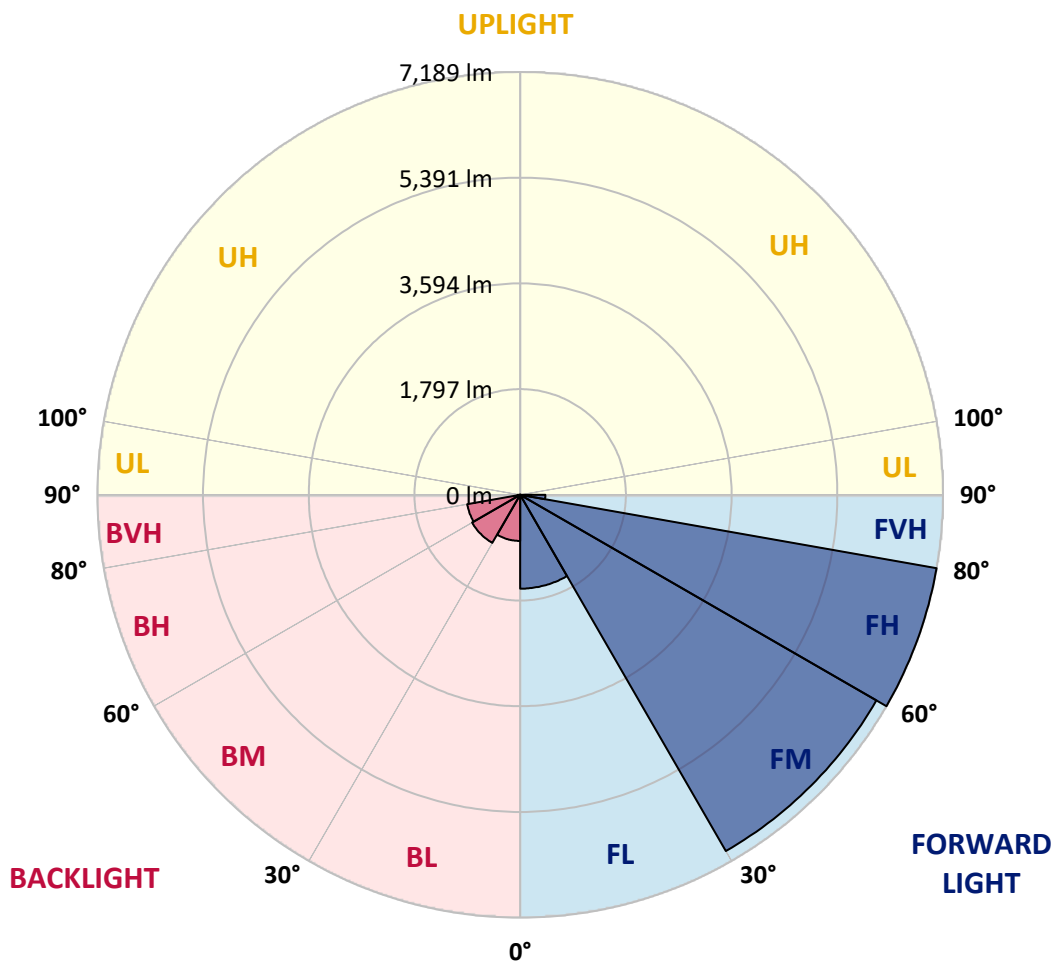
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1595.3	8.4			
FM	(30°-60°)	6993.2	37.0			
FH	(60°-80°)	7188.5	38.0			G3/7500
FVH	(80°-90°)	428.4	2.3			G3/500
BL	(0°-30°)	784.1	4.2	B2/1000		
BM	(30°-60°)	944.3	5.0	B1/1000		
BH	(60°-80°)	913.8	4.8	B2/1000		G2/1000
BVH	(80°-90°)	45.6	0.2			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°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3
2.5°	4912.8	4923.8	4919.2	4916.5	4924.7	4911.9	4885.5	4877.3	4864.5	4834.4	4783.3
5°	4728.5	4761.3	4759.5	4784.2	4825.2	4836.2	4824.3	4826.1	4802.4	4765.0	4680.1
7.5°	4410.0	4423.7	4431.0	4484.8	4559.6	4619.9	4671.0	4687.4	4676.5	4644.5	4535.0
10°	4081.4	4092.4	4109.7	4172.7	4267.6	4350.6	4447.4	4503.1	4526.8	4521.3	4399.0
12.5°	3799.4	3810.4	3833.2	3904.4	4017.5	4119.7	4260.3	4329.7	4386.2	4420.0	4288.6
15°	3546.6	3570.3	3592.2	3674.4	3801.2	3935.4	4094.2	4181.8	4269.4	4345.2	4190.9
17.5°	3349.5	3373.2	3386.0	3460.8	3595.9	3760.2	3946.3	4049.5	4159.0	4283.1	4094.2
20°	3235.4	3246.3	3240.9	3282.8	3404.2	3578.5	3799.4	3919.0	4051.3	4224.7	3997.5
22.5°	3203.4	3204.3	3184.3	3179.7	3258.2	3405.1	3642.4	3787.5	3950.0	4186.4	3914.4
25°	3281.0	3278.3	3223.5	3178.8	3187.0	3272.8	3490.9	3659.8	3865.1	4178.2	3850.5
27.5°	3453.5	3461.7	3380.5	3296.5	3213.5	3210.7	3375.9	3553.9	3795.8	4215.6	3823.1
30°	3695.4	3709.0	3622.3	3515.6	3359.5	3230.8	3331.2	3490.9	3752.9	4293.2	3818.6
32.5°	3960.0	3974.6	3908.9	3796.7	3592.2	3354.9	3362.2	3496.4	3751.0	4401.8	3849.6
35°	4242.0	4258.5	4224.7	4129.8	3902.5	3584.0	3480.9	3584.9	3810.4	4567.9	3932.7
37.5°	4556.9	4582.5	4591.6	4501.2	4258.5	3886.1	3675.3	3752.9	3944.5	4798.8	4085.1
40°	5010.5	5046.1	5043.4	4913.8	4666.4	4294.1	3975.5	3995.6	4153.5	5107.2	4328.7
42.5°	5879.4	5886.7	5659.4	5377.4	5115.5	4723.0	4329.7	4313.2	4441.9	5497.9	4687.4
45°	6984.6	6954.5	6448.9	5904.0	5584.6	5215.9	4790.6	4710.2	4807.9	5974.3	5136.4
47.5°	7901.8	7832.4	7193.6	6441.6	6081.1	5751.6	5331.8	5191.2	5245.1	6514.6	5716.9
50°	8220.3	8168.3	7639.0	6888.8	6551.1	6405.0	5998.0	5799.0	5813.6	7158.9	6396.8
52.5°	8151.9	8144.6	7791.4	7183.5	6991.0	7091.4	6941.7	6672.5	6530.1	7874.4	7130.6
55°	7990.3	8005.9	7878.1	7526.7	7493.9	7754.0	8174.7	7975.7	7533.1	8596.3	7889.0
57.5°	7429.1	7469.2	7750.3	7958.4	8303.4	8690.3	9167.7	9111.1	8612.8	9376.7	8790.7
60°	5985.2	6078.3	6832.2	7874.4	9136.6	10346.8	10560.4	10429.0	9726.2	10345.0	9981.8
62.5°	4193.7	4290.4	5186.6	6817.6	8999.7	12217.8	13050.1	12483.4	11325.2	11771.5	11523.2
65°	2245.1	2291.7	2976.2	4730.3	7597.9	12603.8	16688.9	15826.4	13856.9	13530.2	12842.0
67.5°	1238.5	1264.0	1526.0	2388.4	4866.3	11098.9	19007.1	19658.7	17021.1	14701.1	12602.0
69°	1119.8	1143.6	1315.1	1808.9	3256.4	9176.8	18780.7	20669.0	18408.4	14585.2	11714.9
70°	1095.2	1117.1	1271.3	1667.4	2635.8	7564.1	18022.3	20410.7	18738.7	14170.0	10941.0
72.5°	985.7	1009.4	1159.1	1497.7	2252.4	3771.1	14275.8	17257.5	17012.9	12286.2	8298.8
75°	919.0	941.0	1194.7	1466.6	2156.6	2386.6	9411.3	12718.8	12506.2	8594.5	4474.8
77.5°	393.4	391.5	554.0	1241.2	2188.6	2310.9	5057.0	7945.6	7249.3	3673.5	1285.0
80°	262.8	258.3	262.8	365.1	2006.9	2323.6	2649.5	4033.0	3046.5	936.4	633.4
82.5°	226.3	222.7	230.9	222.7	705.5	2652.2	2252.4	2144.8	1448.4	532.1	314.0
85°	152.4	146.0	199.0	199.9	333.1	2356.5	2537.2	1811.6	1171.9	315.8	155.2
87.5°	73.0	71.2	115.9	141.5	195.3	957.4	2846.6	1856.4	1181.9	161.5	73.9
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°	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3	4814.3
2.5°	4767.7	4730.3	4693.8	4650.0	4604.4	4553.3	4527.7	4502.2	4495.8	4488.5	4462.9
5°	4636.3	4583.4	4492.1	4391.7	4285.9	4182.7	4104.2	4054.9	4017.5	3998.4	3964.6
7.5°	4466.6	4389.0	4229.3	4055.9	3877.9	3715.4	3574.9	3486.4	3402.4	3363.2	3318.4
10°	4305.0	4189.1	3940.9	3685.3	3429.8	3184.3	2953.4	2790.0	2644.9	2563.7	2506.2
12.5°	4166.3	4007.5	3663.4	3317.5	2967.1	2617.5	2271.6	1999.6	1772.4	1652.8	1591.7
15°	4031.2	3839.6	3399.7	2960.7	2510.7	2035.2	1580.7	1272.2	1084.2	1009.4	983.8
17.5°	3908.9	3663.4	3135.0	2601.1	2039.8	1464.8	1062.3	892.6	820.5	795.8	787.6
20°	3776.6	3485.4	2860.3	2225.1	1548.8	1024.0	829.6	754.8	725.6	718.3	714.6
22.5°	3648.8	3310.2	2597.4	1822.6	1112.5	790.4	712.8	681.8	677.2	683.6	683.6
25°	3540.2	3153.2	2313.6	1401.8	816.8	665.3	637.9	630.6	648.0	671.7	676.3
27.5°	3459.0	3024.6	2011.5	1035.0	650.7	578.6	577.7	589.6	632.5	678.1	687.2
30°	3403.3	2902.3	1688.4	746.6	545.8	509.3	523.9	549.4	612.4	677.2	694.5
32.5°	3375.0	2811.9	1351.6	577.7	467.3	447.2	471.8	502.9	564.9	625.2	648.0
35°	3396.9	2745.3	1034.0	481.9	412.5	397.0	422.6	452.7	489.2	514.7	532.1
37.5°	3479.1	2718.8	780.3	431.7	375.1	360.5	380.6	397.9	412.5	419.8	428.0
40°	3656.1	2747.1	625.2	406.1	354.1	335.9	344.1	350.5	359.6	366.9	370.5
42.5°	3917.1	2832.0	560.4	396.1	343.2	316.7	314.9	317.6	329.5	343.2	345.9
45°	4282.2	2981.7	555.8	402.5	337.7	301.2	293.0	296.6	314.9	335.9	339.5
47.5°	4748.6	3209.8	592.3	421.6	342.2	293.0	279.3	283.8	306.7	334.9	339.5
50°	5313.5	3528.3	653.5	449.9	362.3	294.8	274.7	277.4	301.2	332.2	336.8
52.5°	5980.7	3980.1	720.1	477.3	383.3	306.7	278.4	272.0	293.9	321.3	326.7
55°	6722.7	4559.6	788.5	502.0	394.3	321.3	285.7	264.7	280.2	303.0	307.6
57.5°	7633.5	5370.1	907.2	525.7	401.6	331.3	293.0	257.4	262.8	279.3	282.9
60°	8866.5	6516.4	1116.2	564.9	418.0	334.9	292.1	251.0	245.5	254.6	256.5
62.5°	10344.1	7761.3	1290.5	614.2	445.4	337.7	286.6	246.4	230.9	230.9	232.7
65°	11221.2	8094.4	1193.8	655.3	468.2	334.9	280.2	241.9	220.0	209.9	210.8
67.5°	10477.3	7118.7	1023.1	663.5	467.3	322.2	270.1	233.6	209.0	193.5	192.6
69°	9545.5	6142.2	946.4	641.6	445.4	305.7	257.4	224.5	200.8	184.4	183.4
70°	8794.4	5546.2	896.2	617.9	421.6	293.9	247.3	216.3	194.4	178.9	177.1
72.5°	6394.1	3634.2	765.7	531.2	347.7	246.4	213.6	189.8	173.4	164.3	162.5
75°	3195.2	1733.1	621.5	430.8	266.5	197.1	175.2	158.8	150.6	148.8	147.9
77.5°	1049.6	794.0	444.5	321.3	198.0	154.2	141.5	129.6	127.8	133.2	131.4
80°	576.8	461.8	282.0	212.6	135.1	113.2	111.3	105.0	107.7	116.8	115.0
82.5°	293.9	240.0	174.3	127.8	91.3	81.2	88.5	84.9	88.5	96.7	95.8
85°	145.1	131.4	110.4	77.6	60.2	52.0	63.0	65.7	67.5	73.9	73.9
87.5°	84.0	77.6	58.4	36.5	30.1	27.4	36.5	35.6	42.0	45.6	44.7
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)