

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: P300865

Luminaire Tested: **GLNA-AF-05-LED-E1-SL4-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300865  
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: GLNA-AF-05-LED-E1-SL4-7030  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Square Wide OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27248.7 lumens  
Efficiency: N/A  
Efficacy: 97.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

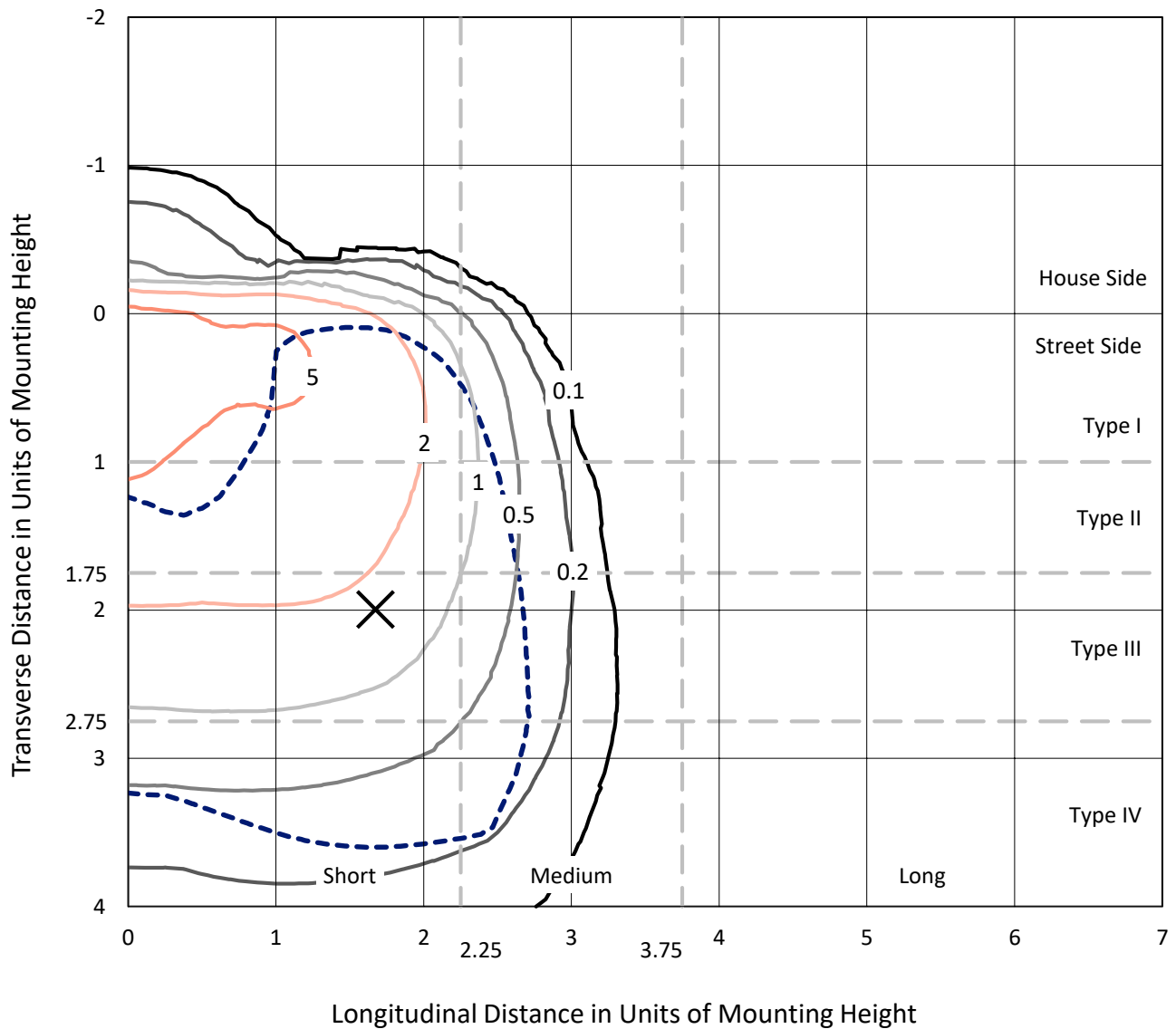
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

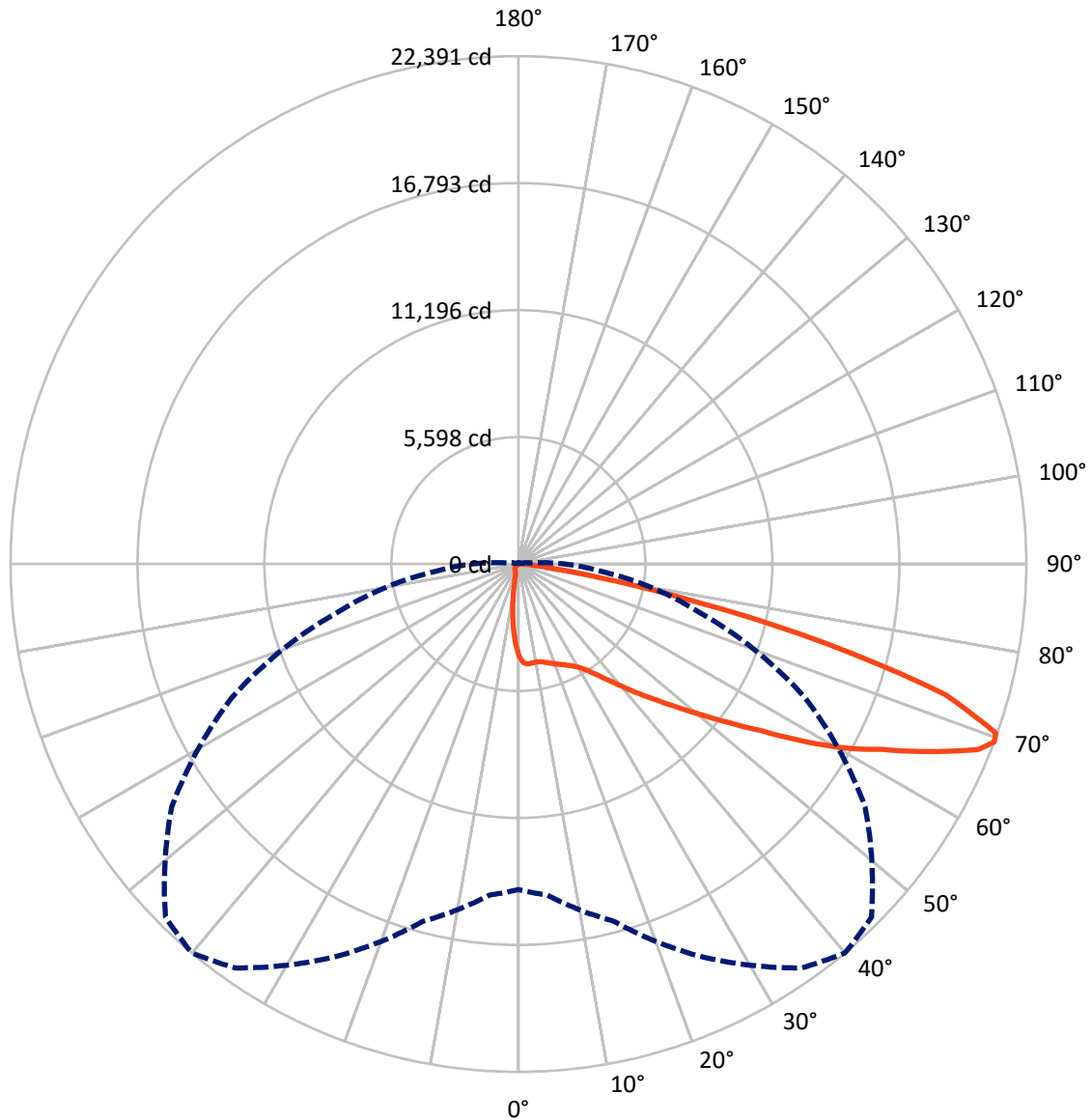
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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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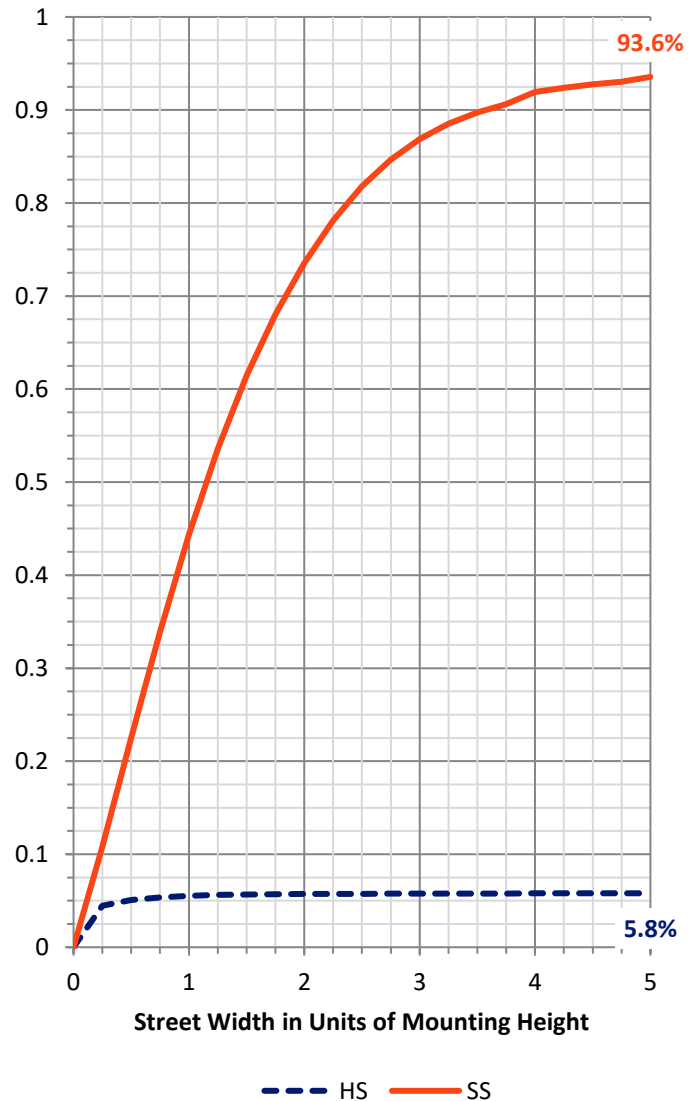
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1594.2	0.0	1594.2
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	25654.5	0.0	25654.5
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	27248.7	0.0	27248.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.1	1.2
10°-20°	811.7	3.0
20°-30°	1367.3	5.0
30°-40°	2238.2	8.2
40°-50°	3875.4	14.2
50°-60°	6104.2	22.4
60°-70°	7971.8	29.3
70°-80°	4105.8	15.1
80°-90°	444.1	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°	27248.7	100.0
0°-180°	27248.7	100.0



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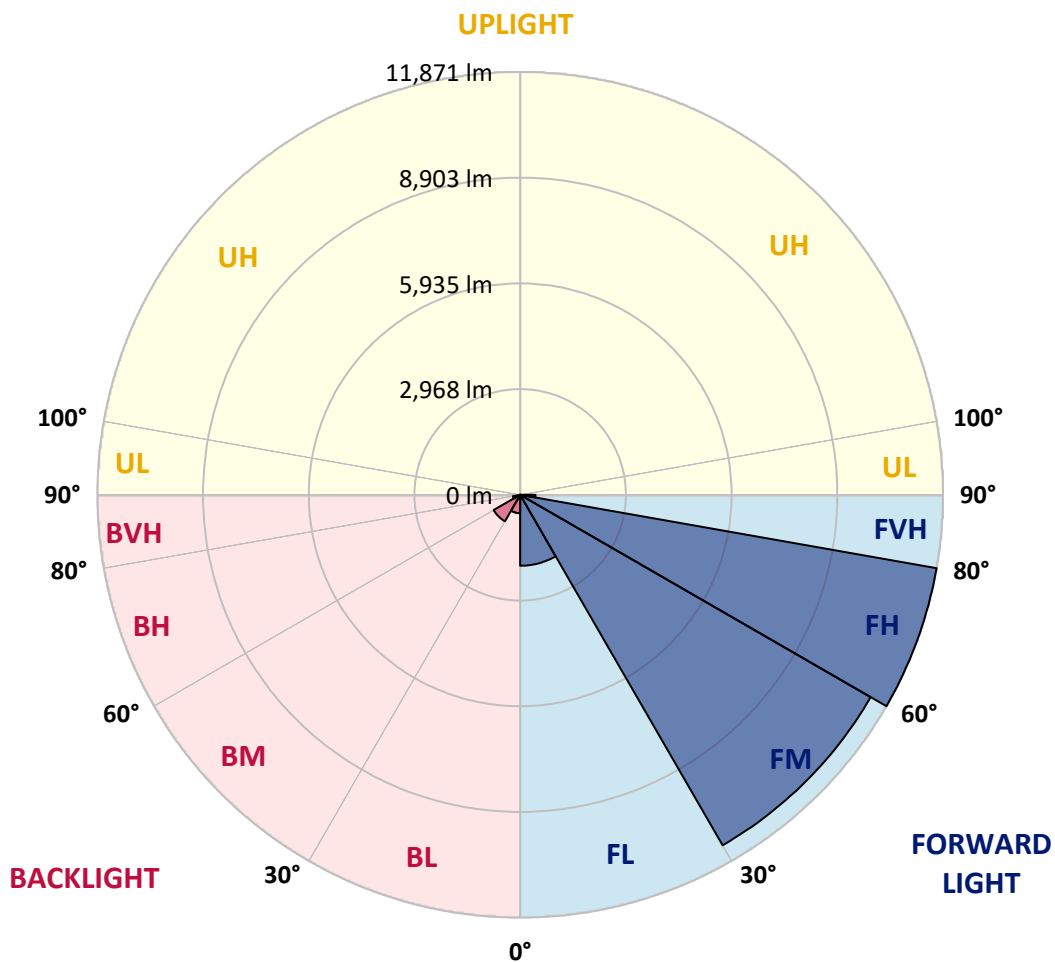
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1992.7	7.3			
FM	(30°-60°)	11361.0	41.7			
FH	(60°-80°)	11870.7	43.6			G4/12000
FVH	(80°-90°)	430.2	1.6			G3/500
BL	(0°-30°)	516.4	1.9	B2/1000		
BM	(30°-60°)	856.9	3.1	B1/1000		
BH	(60°-80°)	207.0	0.8	B1/500		G1/500
BVH	(80°-90°)	13.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1
2.5°	4470.1	4445.8	4431.2	4411.7	4387.4	4366.3	4358.2	4298.2	4241.4	4163.5	4074.3
5°	4552.8	4544.7	4518.8	4492.8	4463.6	4431.2	4413.3	4342.0	4260.9	4147.3	3991.6
7.5°	4560.9	4551.2	4518.8	4483.1	4442.5	4403.6	4372.8	4301.4	4226.8	4111.6	3921.9
10°	4547.9	4536.6	4512.3	4473.3	4423.1	4385.8	4354.9	4286.8	4223.6	4119.8	3908.9
12.5°	4533.4	4522.0	4510.6	4491.2	4447.4	4421.4	4395.5	4330.6	4273.8	4186.3	3955.9
15°	4547.9	4541.5	4554.4	4546.3	4522.0	4499.3	4473.3	4414.9	4363.0	4290.1	4041.9
17.5°	4609.6	4609.6	4650.1	4655.0	4632.3	4599.9	4562.5	4504.2	4460.4	4398.7	4144.1
20°	4753.9	4749.1	4801.0	4810.7	4755.6	4705.3	4650.1	4578.8	4544.7	4505.8	4244.6
22.5°	5002.1	4979.4	5010.2	5000.5	4891.8	4813.9	4745.8	4658.2	4640.4	4622.6	4356.6
25°	5324.9	5311.9	5333.0	5237.3	5045.9	4940.5	4859.4	4760.4	4760.4	4778.3	4483.1
27.5°	5793.6	5744.9	5673.6	5504.9	5217.8	5083.2	4995.6	4890.2	4917.8	4984.3	4650.1
30°	6273.7	6220.2	6056.4	5796.9	5427.0	5285.9	5183.8	5073.5	5138.3	5260.0	4874.0
32.5°	6747.3	6687.3	6455.4	6127.7	5727.1	5586.0	5487.1	5365.4	5474.1	5678.4	5201.6
35°	7206.3	7152.8	6885.2	6499.2	6126.1	6009.3	5918.5	5813.1	5952.6	6238.0	5663.9
37.5°	7722.1	7663.7	7337.7	6919.2	6611.1	6526.7	6460.2	6354.8	6598.1	7016.6	6307.8
40°	8356.3	8257.3	7817.8	7401.0	7172.3	7131.7	7086.3	7071.7	7449.6	8028.7	7165.8
42.5°	9082.9	8920.7	8320.6	7908.6	7788.6	7817.8	7806.4	7871.3	8515.2	9287.3	8210.3
45°	9809.6	9600.3	8880.2	8450.4	8466.6	8568.8	8632.0	8891.5	9850.1	10730.8	9334.3
47.5°	10425.9	10219.9	9417.0	9035.9	9230.5	9431.6	9603.6	10095.0	11222.3	12151.7	10208.6
50°	10953.0	10758.4	9986.3	9679.8	10117.7	10442.1	10721.1	11449.3	12698.2	13233.5	10821.7
52.5°	11384.5	11254.7	10576.7	10417.8	11131.4	11606.7	12015.4	12888.0	14005.5	14112.6	11298.5
55°	11804.6	11712.1	11210.9	11295.3	12322.0	12969.1	13486.5	14414.3	15131.2	14845.7	11755.9
57.5°	12287.9	12203.6	11934.3	12407.9	13887.1	14701.4	15265.8	15767.0	16122.2	15595.1	12187.3
60°	12781.0	12732.3	12738.8	13643.8	15684.3	16466.0	16777.5	16907.2	17095.4	16300.6	12211.7
62.5°	13251.3	13343.8	13658.4	15019.3	17405.1	18005.3	18162.6	18290.7	18070.1	16412.5	11282.3
65°	14047.7	14198.6	14949.5	16860.2	19298.0	19940.3	20102.5	19662.9	18224.2	14965.7	9177.0
67.5°	14437.0	14712.7	16052.4	18576.2	21134.0	21847.7	21787.7	19752.1	16354.1	11412.0	5889.3
69°	14355.9	14649.5	16307.1	19101.7	21743.9	22391.0	22009.9	18660.5	13932.6	8267.1	3615.3
70°	14034.7	14331.6	16175.7	19082.2	21821.7	22334.3	21597.9	17312.7	11780.2	6045.0	2261.0
72.5°	11720.2	11976.5	14360.7	17247.8	20102.5	19685.6	18068.5	11994.3	5740.1	1646.3	509.3
75°	7214.4	7357.2	10304.2	12993.4	15183.1	14112.6	12038.1	5967.2	1711.2	465.5	282.2
77.5°	3811.6	3876.5	5641.1	7658.8	9624.7	7963.8	6169.9	2327.5	788.3	292.0	204.4
80°	2252.9	2301.5	3037.9	3501.8	4165.2	3479.1	2467.0	1428.9	564.4	183.3	181.7
82.5°	1289.5	1320.3	2202.6	1946.3	1641.4	1401.4	1227.8	1354.3	339.0	123.3	188.1
85°	473.6	480.1	1239.2	1480.8	976.4	580.7	609.9	1122.4	90.8	77.9	147.6
87.5°	220.6	215.7	637.4	906.7	570.9	368.2	475.2	246.5	35.7	50.3	40.5
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°	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1	4071.1
2.5°	4022.4	3962.4	3853.8	3741.8	3628.3	3540.7	3454.8	3386.6	3363.9	3321.8	3325.0
5°	3899.2	3788.9	3561.8	3331.5	3091.4	2893.6	2707.0	2556.2	2483.2	2408.6	2408.6
7.5°	3792.1	3631.5	3276.3	2901.7	2514.0	2188.0	1894.4	1673.9	1552.2	1454.9	1453.3
10°	3751.6	3534.2	3037.9	2501.0	1960.9	1516.5	1167.8	944.0	828.8	754.2	751.0
12.5°	3769.4	3500.2	2854.6	2131.2	1453.3	974.8	676.4	532.0	483.3	460.6	460.6
15°	3821.3	3490.4	2671.4	1769.5	1026.7	609.9	449.3	410.4	407.1	407.1	407.1
17.5°	3884.6	3493.7	2483.2	1417.6	699.1	436.3	387.6	382.8	386.0	386.0	386.0
20°	3949.4	3495.3	2280.5	1091.6	493.1	379.5	364.9	363.3	366.6	366.6	368.2
22.5°	4028.9	3503.4	2077.7	815.8	407.1	358.5	347.1	347.1	348.7	348.7	347.1
25°	4119.8	3519.6	1866.9	605.0	371.4	343.9	334.1	332.5	334.1	332.5	330.9
27.5°	4233.3	3542.3	1631.7	473.6	355.2	329.3	321.1	321.1	319.5	317.9	316.3
30°	4376.0	3568.3	1367.3	402.2	339.0	316.3	308.2	306.5	304.9	301.7	301.7
32.5°	4593.4	3625.1	1106.2	364.9	321.1	298.4	292.0	292.0	288.7	285.5	283.8
35°	4927.5	3737.0	872.6	342.2	301.7	279.0	270.9	270.9	267.6	266.0	264.4
37.5°	5389.7	3907.3	678.0	321.1	282.2	257.9	249.8	248.2	244.9	241.7	240.0
40°	6004.5	4118.1	533.6	301.7	262.8	236.8	230.3	227.1	220.6	215.7	215.7
42.5°	6776.5	4358.2	433.1	280.6	240.0	217.3	212.5	207.6	196.3	191.4	189.8
45°	7584.2	4573.9	366.6	256.3	217.3	197.9	194.6	186.5	171.9	167.1	167.1
47.5°	8166.5	4624.2	322.8	233.6	196.3	176.8	175.2	160.6	147.6	144.4	142.7
50°	8529.8	4525.2	287.1	210.9	176.8	157.3	152.5	134.6	126.5	123.3	121.6
52.5°	8774.8	4348.4	257.9	191.4	159.0	139.5	128.1	115.2	108.7	105.4	105.4
55°	8971.0	4098.7	228.7	173.5	144.4	124.9	108.7	98.9	92.5	89.2	89.2
57.5°	9026.2	3759.7	199.5	159.0	129.8	110.3	92.5	86.0	77.9	76.2	76.2
60°	8625.5	3148.2	176.8	141.1	116.8	95.7	81.1	73.0	64.9	63.3	61.6
62.5°	7569.6	2436.2	155.7	124.9	102.2	82.7	69.7	60.0	53.5	53.5	53.5
65°	5774.1	1633.3	136.2	108.7	89.2	69.7	60.0	48.7	45.4	45.4	47.0
67.5°	3456.4	888.8	116.8	92.5	76.2	58.4	50.3	42.2	40.5	42.2	42.2
69°	2025.8	522.3	105.4	82.7	66.5	51.9	43.8	37.3	40.5	42.2	42.2
70°	1250.5	352.0	97.3	74.6	60.0	47.0	40.5	35.7	38.9	40.5	40.5
72.5°	348.7	181.7	77.9	58.4	48.7	38.9	32.4	32.4	37.3	38.9	38.9
75°	227.1	134.6	60.0	43.8	37.3	30.8	27.6	30.8	35.7	37.3	37.3
77.5°	188.1	110.3	48.7	35.7	30.8	29.2	26.0	27.6	32.4	34.1	34.1
80°	171.9	77.9	38.9	32.4	27.6	26.0	24.3	22.7	29.2	30.8	30.8
82.5°	163.8	61.6	34.1	29.2	26.0	22.7	21.1	22.7	26.0	27.6	29.2
85°	102.2	40.5	30.8	27.6	22.7	21.1	21.1	21.1	24.3	26.0	26.0
87.5°	37.3	32.4	27.6	22.7	19.5	19.5	19.5	19.5	21.1	24.3	24.3
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)