

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: P458868

Luminaire Tested: **GALN-SA4A-735-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458868  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4A-735-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16822 lumens  
Efficiency: N/A  
Efficacy: 139.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

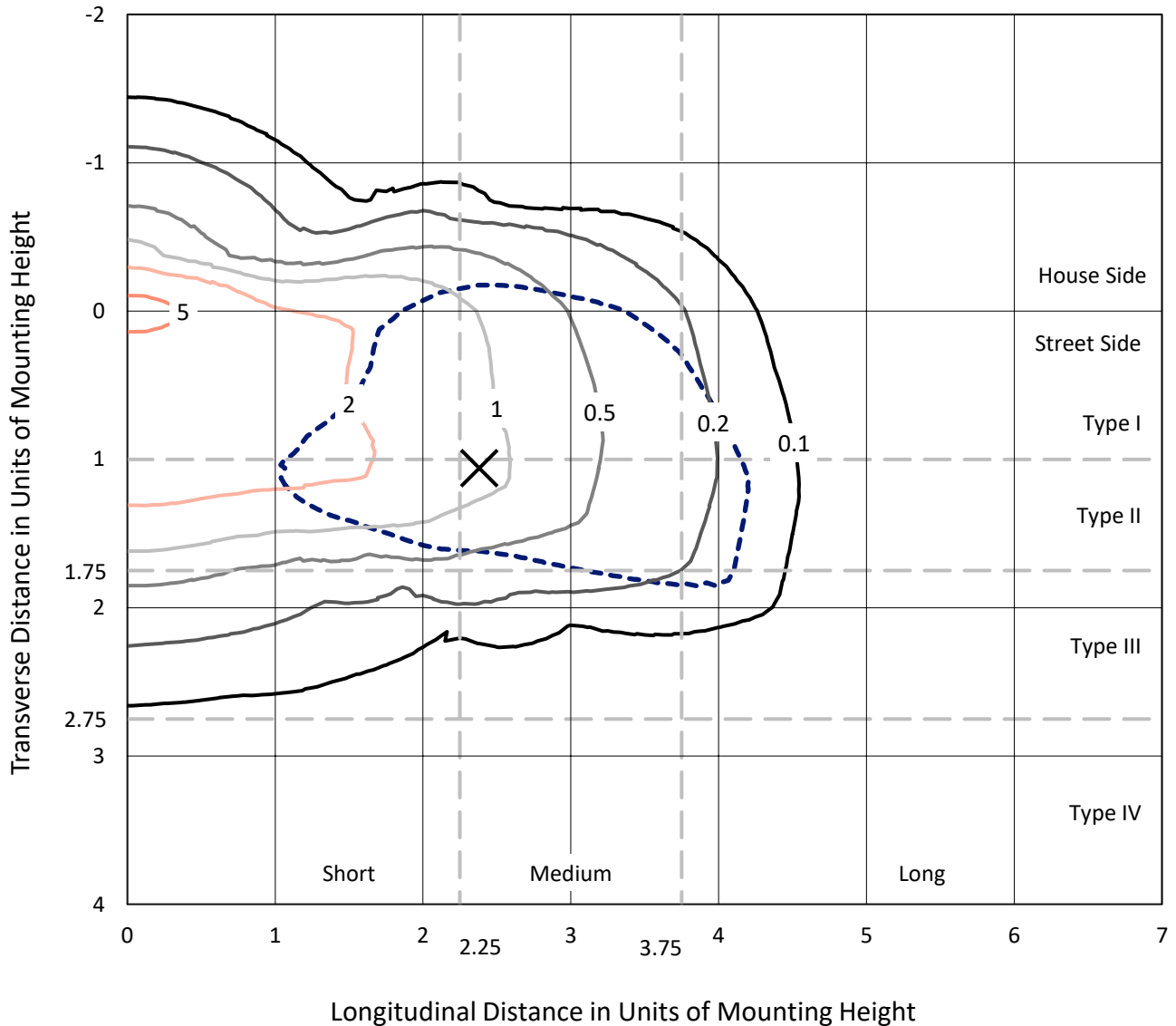
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P458868  
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### Iso-Footcandle Lines of Horizontal Illumination

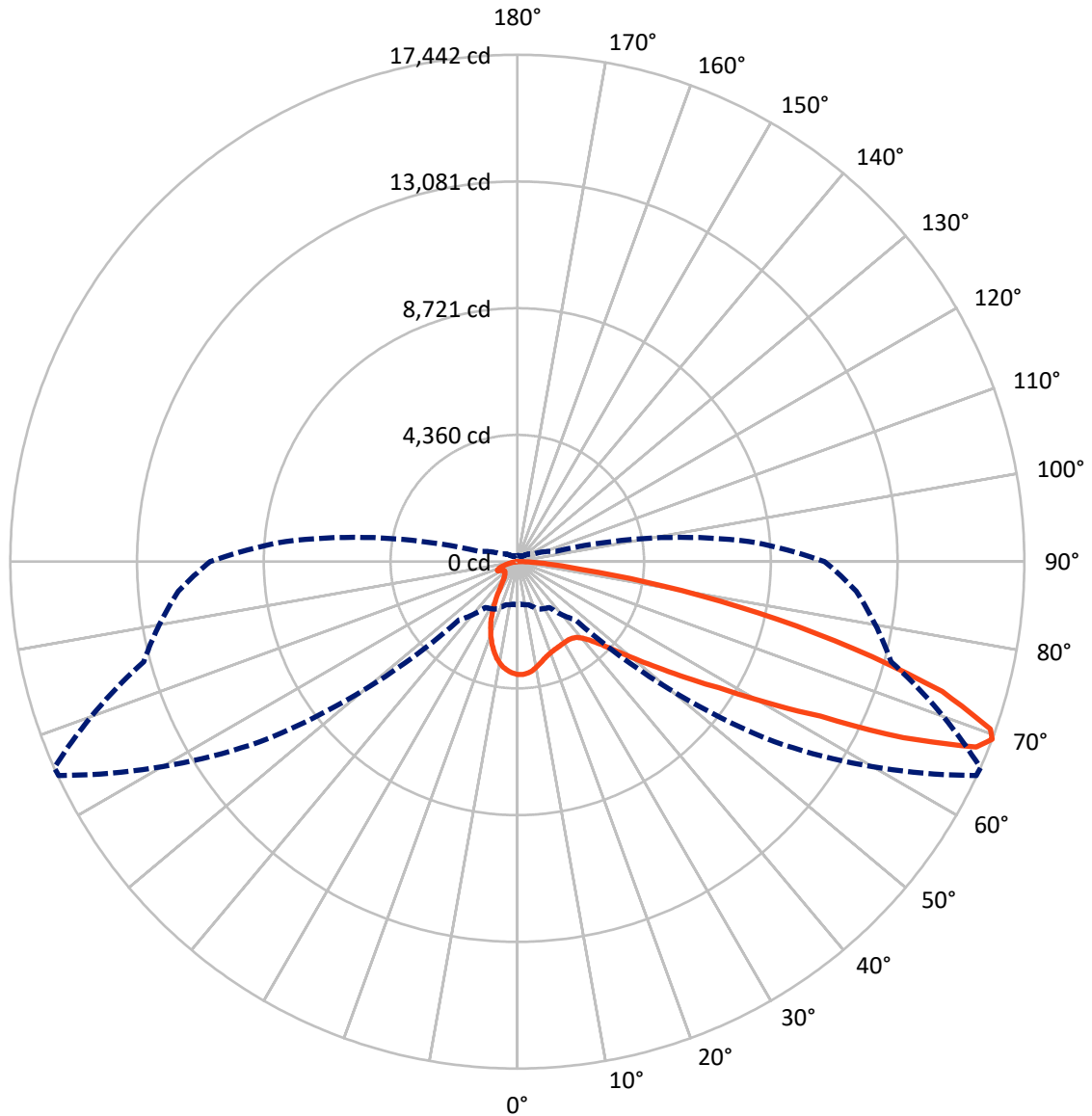
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc  
 Type III - Medium - N/A

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CATALOG NUMBER: GALN-SA4A-735-U-SL2

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical



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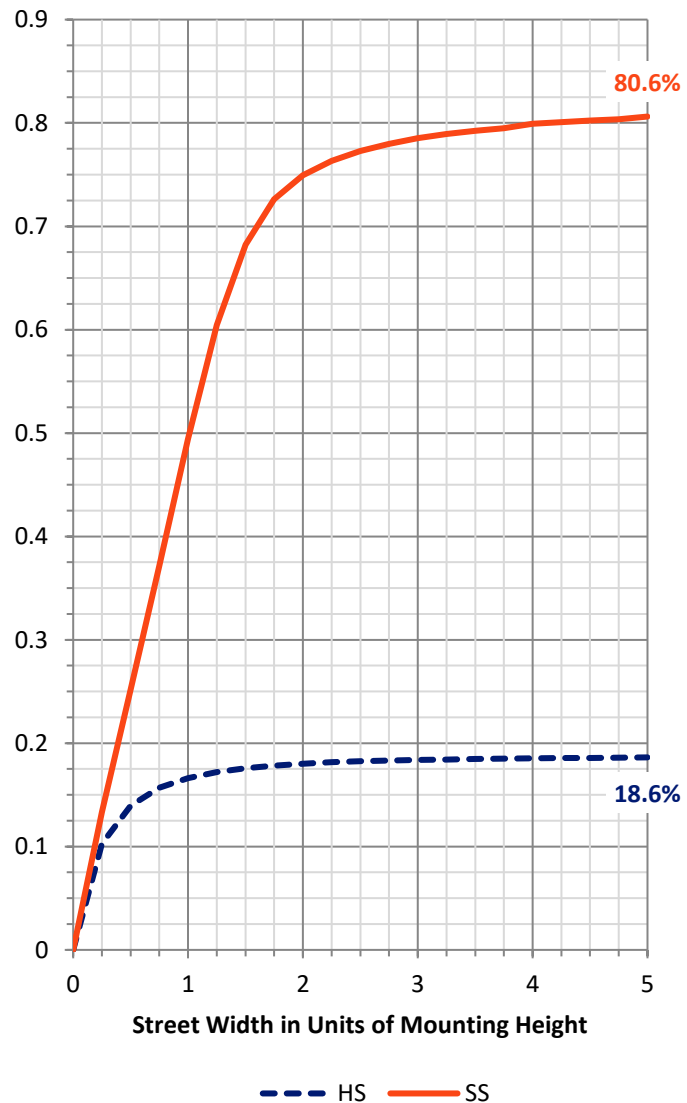
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3163.6	0.0	3163.6
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	13658.4	0.0	13658.4
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	16822.0	0.0	16822.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.3	2.0
10°-20°	800.1	4.8
20°-30°	1089.3	6.5
30°-40°	1463.8	8.7
40°-50°	2185.7	13.0
50°-60°	3476.6	20.7
60°-70°	4276.1	25.4
70°-80°	2782.2	16.5
80°-90°	410.9	2.4
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°	16822.0	100.0
0°-180°	16822.0	100.0



REPORT NUMBER: P458868

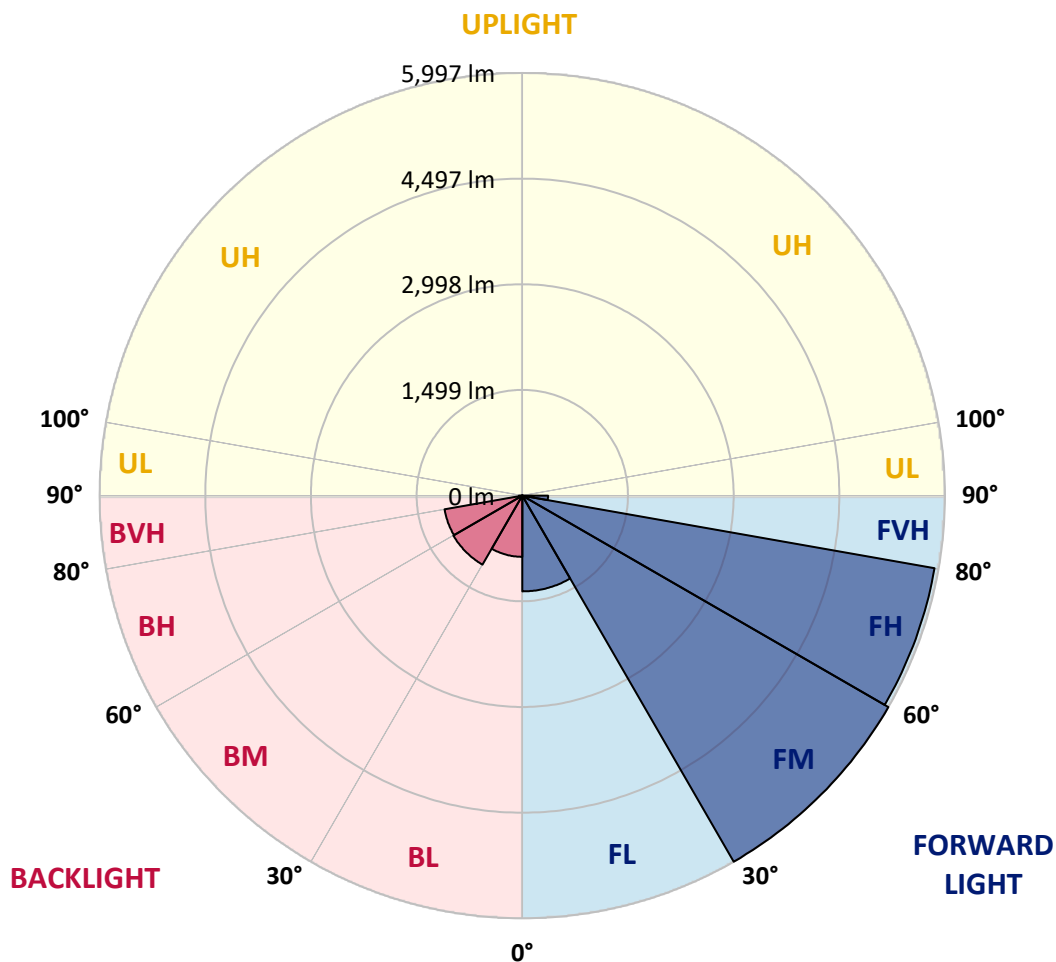
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1358.4	8.1			
FM	(30°-60°)	5996.5	35.6			
FH	(60°-80°)	5938.3	35.3			G3/7500
FVH	(80°-90°)	365.3	2.2			G3/500
BL	(0°-30°)	868.4	5.2	B2/1000		
BM	(30°-60°)	1129.5	6.7	B2/2500		
BH	(60°-80°)	1120.0	6.7	B3/2500		G3/2500
BVH	(80°-90°)	45.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7
2.5°	3748.7	3763.6	3780.3	3799.0	3834.4	3853.9	3867.9	3883.7	3885.6	3894.0	3887.5
5°	3472.0	3489.7	3514.8	3550.2	3603.3	3686.2	3771.9	3841.8	3850.2	3889.3	3900.5
7.5°	3240.9	3251.2	3271.7	3328.5	3404.0	3496.2	3621.0	3762.6	3783.1	3876.3	3908.9
10°	3052.8	3063.0	3087.2	3145.9	3220.5	3336.0	3472.9	3659.2	3676.0	3836.2	3910.8
12.5°	2912.1	2921.4	2947.5	3005.3	3091.0	3199.0	3349.9	3547.4	3571.7	3783.1	3893.1
15°	2805.0	2822.7	2844.1	2891.6	2982.0	3086.3	3232.6	3445.0	3464.5	3727.2	3880.9
17.5°	2759.3	2767.7	2782.6	2826.4	2892.5	2995.0	3142.2	3364.8	3388.1	3688.1	3878.1
20°	2761.2	2769.6	2772.4	2796.6	2844.1	2932.6	3077.9	3301.5	3329.4	3653.6	3882.8
22.5°	2824.5	2825.5	2815.2	2806.8	2825.5	2899.1	3032.3	3254.0	3286.6	3638.7	3886.5
25°	2922.4	2939.1	2924.2	2885.1	2850.6	2886.0	3014.6	3227.9	3258.6	3617.3	3881.9
27.5°	3080.7	3083.5	3071.4	3018.3	2928.9	2902.8	3007.1	3208.3	3234.4	3601.5	3858.6
30°	3293.1	3284.7	3273.6	3214.9	3074.2	2967.1	3023.0	3190.6	3217.7	3578.2	3830.6
32.5°	3508.3	3534.4	3524.1	3455.2	3272.6	3091.9	3074.2	3188.8	3211.1	3560.5	3799.9
35°	3736.5	3748.7	3797.1	3761.7	3574.5	3294.0	3170.1	3217.7	3235.4	3561.4	3778.5
37.5°	3915.4	3948.0	4061.7	4092.4	3916.3	3561.4	3325.7	3299.6	3307.1	3607.1	3786.9
40°	4131.5	4187.4	4333.7	4459.4	4343.9	3908.9	3590.3	3451.5	3460.8	3717.0	3841.8
42.5°	4405.4	4444.5	4641.1	4811.6	4793.0	4368.2	3910.8	3700.2	3704.9	3935.9	3995.5
45°	4725.9	4781.8	5002.6	5258.7	5302.5	4888.0	4373.7	4076.6	4073.8	4275.9	4282.4
47.5°	5135.8	5170.2	5389.2	5668.6	5845.6	5541.0	4935.5	4616.9	4587.1	4771.5	4718.4
50°	5513.1	5567.1	5732.9	6038.5	6479.1	6305.8	5674.2	5317.4	5247.6	5419.9	5330.5
52.5°	5671.4	5728.3	5868.0	6247.1	7022.2	7295.2	6612.3	6153.1	6036.6	6168.9	6136.3
55°	5396.6	5470.2	5600.6	6061.8	7260.7	8436.3	7877.4	7119.1	7034.3	6977.5	6986.8
57.5°	4657.9	4727.7	4903.8	5412.4	6975.6	9264.5	9683.7	8360.9	8179.2	7917.5	7962.2
60°	3545.6	3589.4	3680.7	4244.3	6130.7	9479.7	11735.0	9930.6	9815.1	8853.7	8885.4
62.5°	2518.0	2567.4	2630.8	2912.1	4488.3	8873.3	13341.1	12122.6	11709.9	9823.5	9792.7
65°	2044.8	2011.3	2087.7	2219.0	2633.6	6876.9	13702.5	15165.1	14596.8	11100.6	10674.0
67.5°	1681.5	1646.1	1721.6	1955.4	2002.9	3991.8	12400.2	17140.0	17026.4	12489.6	11569.2
69°	1488.7	1470.0	1536.2	1802.6	1922.8	2834.8	10802.5	17414.9	17441.9	13308.5	11707.1
70°	1341.5	1348.9	1413.2	1725.3	1886.4	2337.3	9232.8	17035.7	17264.9	13717.4	11558.0
72.5°	987.5	1003.3	1092.7	1429.0	1852.0	1983.3	5494.4	14880.0	15285.3	13741.7	10573.4
75°	690.3	682.8	762.0	1076.0	1749.5	1965.6	3227.0	11507.7	11967.0	11877.6	8884.4
77.5°	451.8	463.9	527.3	760.2	1471.9	1950.7	2103.5	8164.3	8462.4	7943.5	5255.0
80°	318.6	317.7	353.1	518.9	1091.8	1874.3	1722.5	5146.0	5070.6	3121.7	1558.5
82.5°	182.6	195.6	236.6	365.2	730.4	1649.8	1584.6	2461.2	2247.0	889.7	526.3
85°	101.5	106.2	140.7	220.8	426.7	1242.7	1383.4	1119.8	1056.4	371.7	226.4
87.5°	32.6	35.4	58.7	111.8	193.8	586.9	783.5	517.0	477.0	134.1	91.3
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°	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7	3884.7
2.5°	3890.3	3901.4	3871.6	3842.7	3816.7	3780.3	3747.7	3720.7	3702.1	3699.3	3690.0
5°	3903.3	3904.2	3847.4	3771.0	3696.5	3614.5	3529.7	3469.2	3412.4	3380.7	3364.8
7.5°	3912.6	3904.2	3801.8	3677.9	3534.4	3385.3	3236.3	3117.0	3024.8	2988.5	3002.5
10°	3908.9	3882.8	3732.8	3534.4	3325.7	3103.1	2888.8	2721.1	2567.4	2488.2	2490.1
12.5°	3888.4	3845.5	3630.3	3373.2	3066.7	2768.6	2440.7	2214.4	2036.4	1931.2	1898.5
15°	3870.7	3796.2	3510.2	3154.3	2773.3	2347.6	1947.9	1668.5	1519.4	1436.5	1435.6
17.5°	3852.1	3748.7	3378.8	2922.4	2436.1	1888.3	1469.1	1255.8	1185.9	1194.3	1180.3
20°	3832.5	3692.8	3241.9	2664.3	2025.2	1408.5	1100.2	1013.6	1033.1	1071.3	1076.9
22.5°	3810.1	3633.1	3094.7	2380.2	1593.0	1060.1	892.4	879.4	929.7	989.3	997.7
25°	3775.7	3558.6	2909.3	2083.0	1228.7	854.3	781.6	790.9	840.3	890.6	896.2
27.5°	3727.2	3466.4	2722.1	1712.2	923.2	733.1	714.5	726.6	750.8	781.6	789.0
30°	3662.0	3362.1	2506.9	1391.8	739.7	672.6	665.1	671.7	685.6	698.7	702.4
32.5°	3596.8	3261.4	2289.8	1065.7	659.6	632.5	625.1	625.1	625.1	626.9	627.9
35°	3536.3	3166.4	2056.9	830.0	617.6	600.9	590.6	579.4	577.6	571.1	571.1
37.5°	3502.7	3079.8	1809.1	695.0	586.9	574.8	560.8	542.2	531.9	532.9	531.0
40°	3509.2	3023.0	1583.7	618.6	561.7	548.7	527.3	505.8	499.3	499.3	497.5
42.5°	3582.8	3004.3	1367.6	578.5	537.5	522.6	495.6	476.0	472.3	471.4	473.2
45°	3752.4	3050.0	1173.8	552.4	517.0	494.7	467.7	450.0	446.2	446.2	445.3
47.5°	4083.1	3198.1	1035.0	535.7	502.1	473.2	445.3	427.6	421.1	419.2	419.2
50°	4597.3	3519.5	931.6	520.8	483.5	453.7	424.8	404.3	394.1	393.1	392.2
52.5°	5311.8	4020.7	891.5	509.6	463.0	433.2	401.5	381.9	368.9	366.1	364.2
55°	6147.5	4720.3	946.5	501.2	441.6	409.9	377.3	356.8	344.7	339.1	338.2
57.5°	7115.4	5560.6	1155.2	490.0	422.0	384.7	353.1	332.6	319.5	313.0	311.1
60°	7984.5	6424.1	1519.4	483.5	405.2	357.7	325.1	306.5	294.4	287.9	286.9
62.5°	8939.4	7247.7	1954.4	501.2	397.8	331.6	299.0	282.3	272.0	265.5	265.5
65°	9959.5	8072.1	2242.3	560.8	409.0	311.1	271.1	257.1	247.8	243.1	242.2
67.5°	10647.0	8357.2	1847.3	622.3	436.9	288.8	244.1	232.9	227.3	222.6	222.6
69°	10572.4	7996.6	1362.9	638.1	445.3	277.6	229.2	220.8	213.3	211.5	209.6
70°	10336.8	7585.8	1142.1	627.9	438.8	267.4	219.9	209.6	203.1	201.2	200.3
72.5°	9206.8	6578.8	850.5	545.9	373.6	232.0	194.7	185.4	179.8	177.0	177.0
75°	7649.2	5377.1	664.2	434.1	292.5	195.6	166.8	159.3	154.6	152.8	151.8
77.5°	4287.1	3002.5	477.0	340.0	221.7	158.4	139.7	133.2	128.6	126.7	126.7
80°	1194.3	858.0	280.4	224.5	150.9	120.2	110.9	106.2	99.7	95.0	97.8
82.5°	450.0	371.7	160.2	135.1	96.0	80.1	77.3	73.6	70.8	64.3	64.3
85°	218.9	180.7	102.5	71.7	53.1	41.9	40.1	38.2	36.3	31.7	32.6
87.5°	75.5	80.1	44.7	26.1	15.8	10.2	8.4	4.7	4.7	4.7	4.7
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)