

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: P454286

Luminaire Tested: **GALN-SA5B-827-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454286  
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-SA5B-827-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 800mA 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: 20910 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

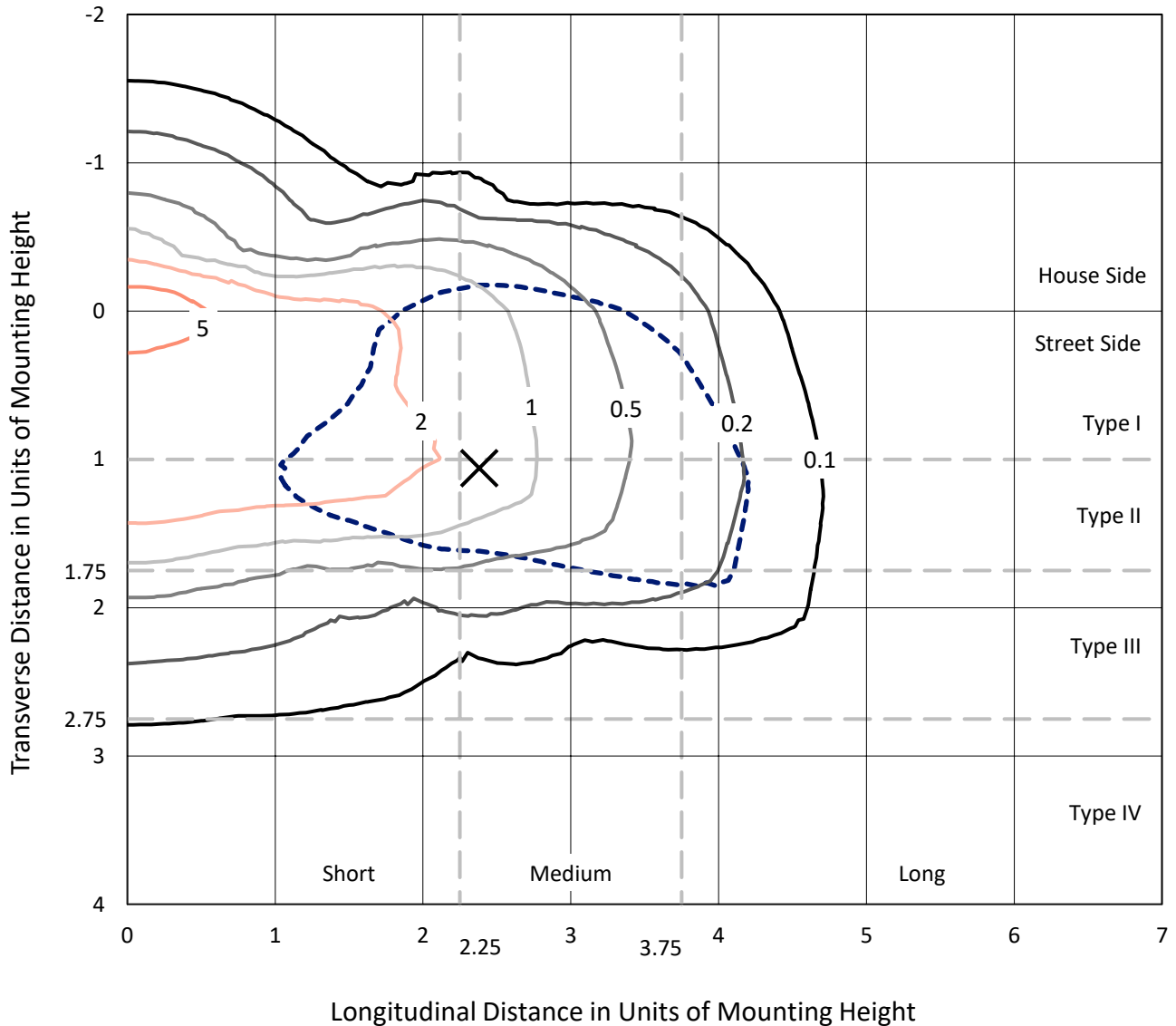
Input Watts (W): 204  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

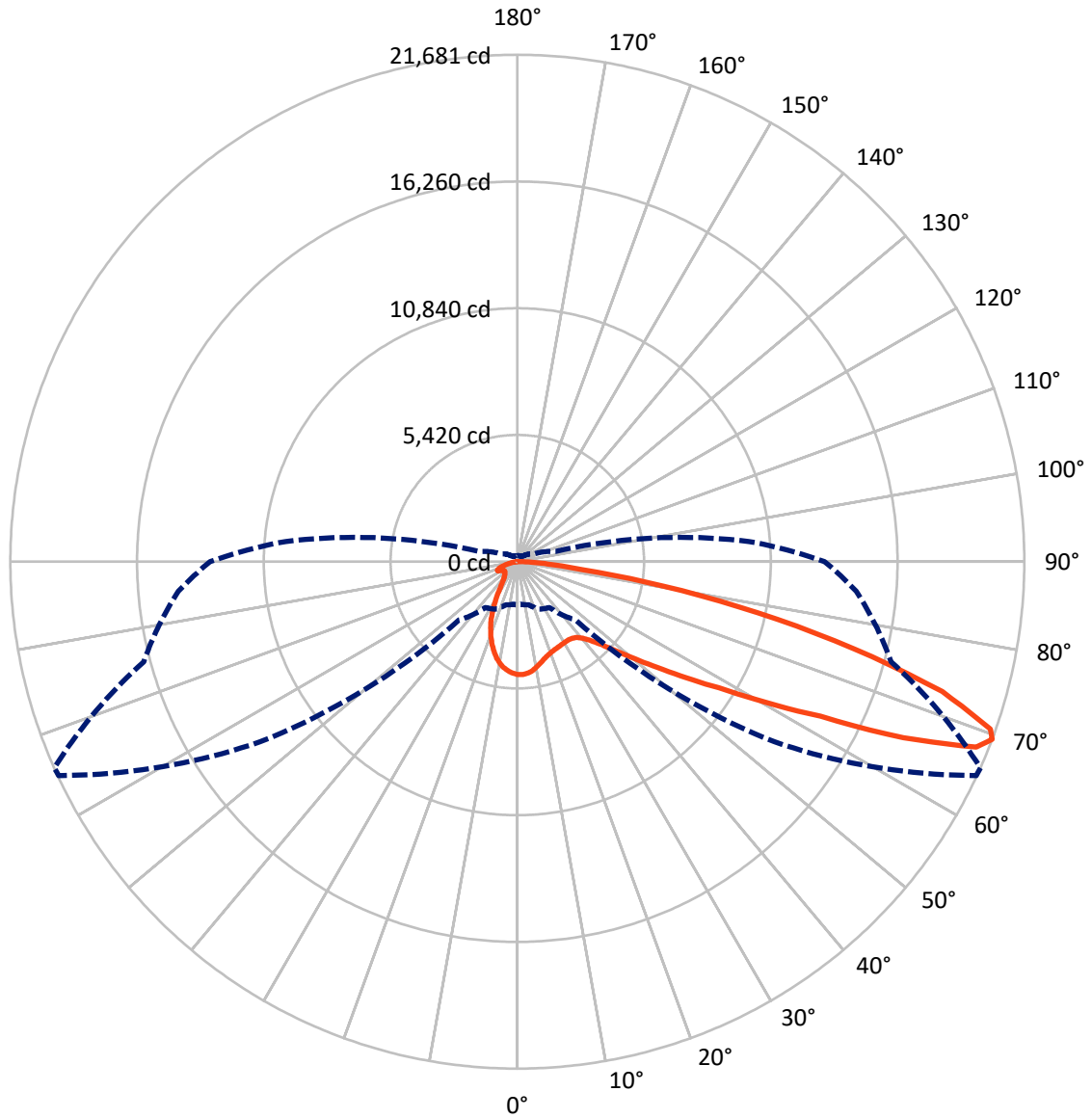
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



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



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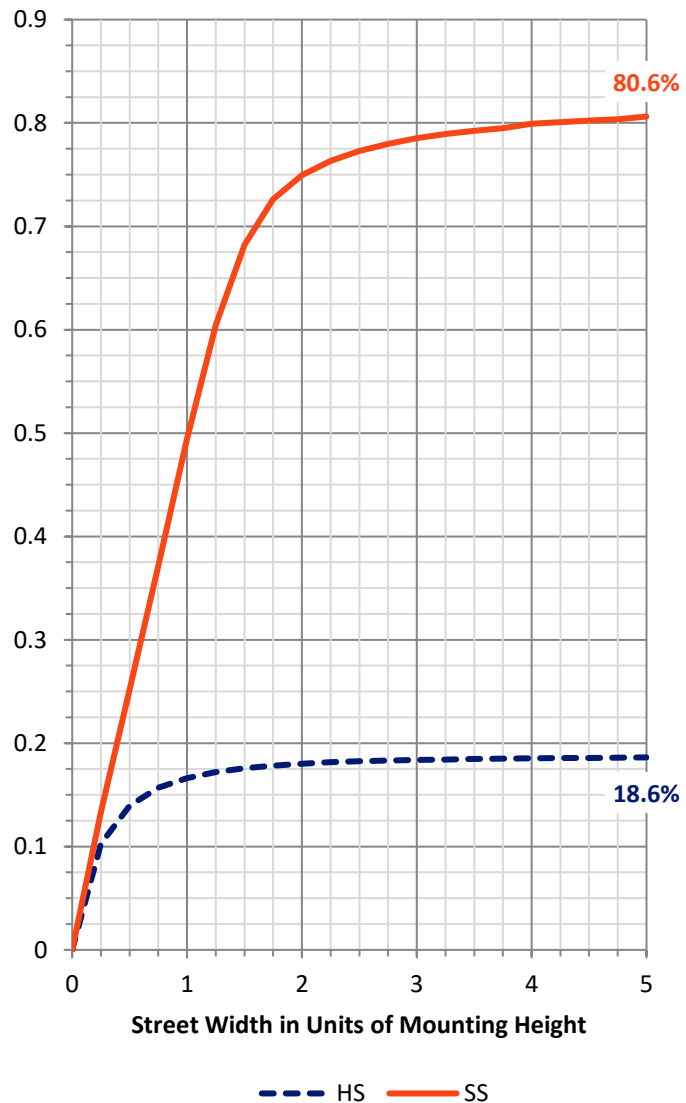
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3932.4	0.0	3932.4
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	16977.6	0.0	16977.6
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	20910.0	0.0	20910.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	419.3	2.0
10°-20°	994.6	4.8
20°-30°	1354.0	6.5
30°-40°	1819.5	8.7
40°-50°	2716.8	13.0
50°-60°	4321.5	20.7
60°-70°	5315.2	25.4
70°-80°	3458.3	16.5
80°-90°	510.7	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°	20910.0	100.0
0°-180°	20910.0	100.0



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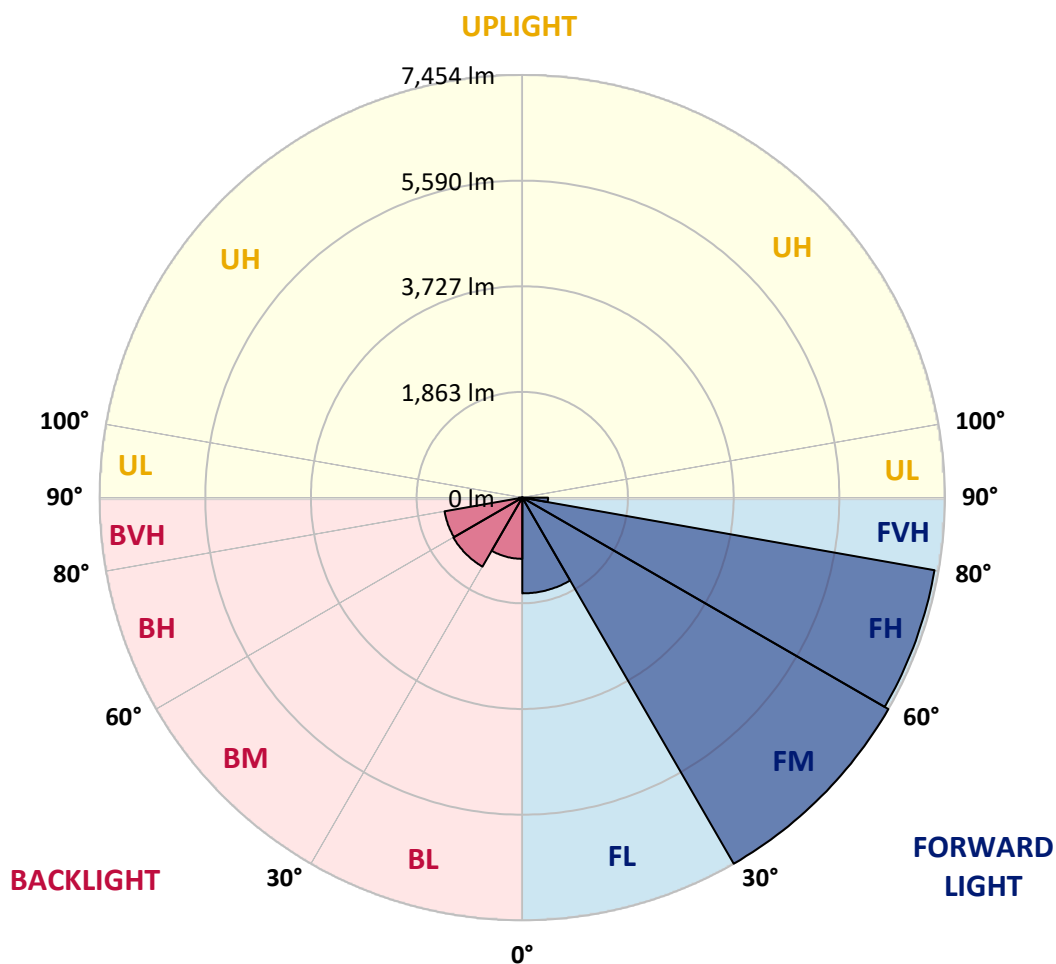
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1688.5	8.1			
FM	(30°-60°)	7453.8	35.6			
FH	(60°-80°)	7381.3	35.3			G3/7500
FVH	(80°-90°)	454.0	2.2			G3/500
BL	(0°-30°)	1079.5	5.2	B3/2500		
BM	(30°-60°)	1404.0	6.7	B2/2500		
BH	(60°-80°)	1392.2	6.7	B3/2500		G3/2500
BVH	(80°-90°)	56.7	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°	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7
2.5°	4659.6	4678.2	4699.0	4722.2	4766.2	4790.5	4807.9	4827.5	4829.9	4840.3	4832.2
5°	4315.7	4337.7	4369.0	4413.0	4479.0	4582.1	4688.6	4775.4	4785.9	4834.5	4848.4
7.5°	4028.5	4041.3	4066.8	4137.4	4231.2	4345.8	4501.0	4677.0	4702.5	4818.3	4858.8
10°	3794.6	3807.4	3837.5	3910.4	4003.1	4146.7	4316.9	4548.5	4569.3	4768.5	4861.1
12.5°	3619.8	3631.4	3663.8	3735.6	3842.1	3976.4	4164.0	4409.5	4439.6	4702.5	4839.1
15°	3486.6	3508.6	3535.3	3594.3	3706.6	3836.3	4018.1	4282.1	4306.5	4633.0	4824.1
17.5°	3429.9	3440.3	3458.8	3513.3	3595.5	3722.8	3905.8	4182.6	4211.5	4584.4	4820.6
20°	3432.2	3442.6	3446.1	3476.2	3535.3	3645.3	3825.9	4103.8	4138.6	4541.5	4826.4
22.5°	3510.9	3512.1	3499.4	3488.9	3512.1	3603.6	3769.2	4044.8	4085.3	4523.0	4831.0
25°	3632.5	3653.4	3634.8	3586.2	3543.4	3587.4	3747.2	4012.3	4050.5	4496.4	4825.2
27.5°	3829.4	3832.9	3817.8	3751.8	3640.6	3608.2	3737.9	3988.0	4020.4	4476.7	4796.3
30°	4093.4	4083.0	4069.1	3996.1	3821.3	3688.1	3757.6	3966.0	3999.6	4447.7	4761.5
32.5°	4360.9	4393.3	4380.6	4294.9	4067.9	3843.3	3821.3	3963.7	3991.5	4425.7	4723.3
35°	4644.6	4659.6	4719.9	4675.8	4443.1	4094.6	3940.5	3999.6	4021.6	4426.9	4696.7
37.5°	4866.9	4907.4	5048.7	5086.9	4868.1	4426.9	4133.9	4101.5	4110.8	4483.6	4707.1
40°	5135.6	5205.0	5386.8	5543.2	5399.6	4858.8	4462.8	4290.2	4301.8	4620.3	4775.4
42.5°	5476.0	5524.6	5769.0	5980.9	5957.7	5429.7	4861.1	4599.4	4605.2	4892.4	4966.5
45°	5874.3	5943.8	6218.3	6536.7	6591.1	6075.8	5436.6	5067.2	5063.8	5315.0	5323.1
47.5°	6383.8	6426.7	6698.8	7046.2	7266.2	6887.6	6134.9	5738.9	5701.8	5931.1	5865.1
50°	6852.8	6920.0	7126.1	7505.9	8053.6	7838.2	7053.1	6609.6	6522.8	6737.0	6625.9
52.5°	7049.7	7120.3	7294.0	7765.3	8728.7	9068.0	8219.2	7648.3	7503.6	7668.0	7627.5
55°	6708.1	6799.6	6961.7	7534.9	9025.2	10486.5	9791.7	8849.1	8743.8	8673.1	8684.7
57.5°	5789.8	5876.7	6095.5	6727.8	8670.8	11515.9	12037.0	10392.7	10166.9	9841.5	9897.1
60°	4407.2	4461.6	4575.1	5275.7	7620.5	11783.4	14586.8	12343.9	12200.3	11005.3	11044.6
62.5°	3130.0	3191.3	3270.1	3619.8	5579.1	11029.6	16583.2	15068.6	14555.6	12210.7	12172.5
65°	2541.7	2500.0	2595.0	2758.3	3273.6	8548.1	17032.5	18850.5	18144.1	13798.3	13267.9
67.5°	2090.1	2046.1	2139.9	2430.6	2489.6	4961.9	15413.6	21305.3	21164.1	15524.8	14380.7
69°	1850.4	1827.3	1909.5	2240.7	2390.0	3523.7	13427.7	21646.9	21680.5	16542.6	14552.1
70°	1667.5	1676.7	1756.6	2144.5	2344.9	2905.3	11476.6	21175.6	21460.5	17051.0	14366.8
72.5°	1227.4	1247.1	1358.3	1776.3	2302.0	2465.3	6829.7	18496.1	18999.8	17081.1	13142.9
75°	858.0	848.8	947.2	1337.4	2174.7	2443.3	4011.2	14304.3	14875.2	14764.0	11043.5
77.5°	561.6	576.7	655.4	944.9	1829.6	2424.8	2614.7	10148.4	10518.9	9873.9	6532.1
80°	396.0	394.9	438.9	645.0	1357.1	2329.8	2141.1	6396.6	6302.8	3880.3	1937.3
82.5°	227.0	243.2	294.1	453.9	907.8	2050.8	1969.7	3059.3	2793.0	1105.9	654.2
85°	126.2	132.0	174.9	274.4	530.3	1544.7	1719.6	1391.9	1313.1	462.0	281.4
87.5°	40.5	44.0	73.0	139.0	240.9	729.5	973.8	642.7	592.9	166.7	113.5
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°	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7	4828.7
2.5°	4835.6	4849.5	4812.5	4776.6	4744.2	4699.0	4658.5	4624.9	4601.7	4598.3	4586.7
5°	4851.9	4853.0	4782.4	4687.4	4594.8	4492.9	4387.5	4312.2	4241.6	4202.2	4182.6
7.5°	4863.4	4853.0	4725.6	4571.6	4393.3	4208.0	4022.8	3874.5	3759.9	3714.7	3732.1
10°	4858.8	4826.4	4640.0	4393.3	4133.9	3857.2	3590.8	3382.4	3191.3	3092.9	3095.2
12.5°	4833.3	4780.1	4512.6	4193.0	3812.0	3441.5	3033.9	2752.5	2531.3	2400.5	2359.9
15°	4811.3	4718.7	4363.2	3920.9	3447.3	2918.1	2421.3	2073.9	1888.6	1785.6	1784.4
17.5°	4788.2	4659.6	4199.9	3632.5	3028.1	2347.2	1826.1	1560.9	1474.1	1484.5	1467.1
20°	4763.9	4590.2	4029.7	3311.8	2517.4	1750.8	1367.6	1259.9	1284.2	1331.7	1338.6
22.5°	4736.1	4516.1	3846.7	2958.6	1980.1	1317.8	1109.3	1093.1	1155.6	1229.8	1240.2
25°	4693.2	4423.4	3616.3	2589.2	1527.4	1061.9	971.5	983.1	1044.5	1107.0	1114.0
27.5°	4633.0	4308.8	3383.6	2128.3	1147.5	911.3	888.2	903.2	933.3	971.5	980.8
30°	4551.9	4179.1	3116.1	1730.0	919.4	836.0	826.8	834.9	852.3	868.5	873.1
32.5°	4470.9	4054.0	2846.3	1324.7	819.8	786.3	777.0	777.0	777.0	779.3	780.5
35°	4395.6	3935.9	2556.8	1031.7	767.7	746.9	734.1	720.3	717.9	709.8	709.8
37.5°	4353.9	3828.2	2248.8	863.8	729.5	714.5	697.1	673.9	661.2	662.4	660.0
40°	4362.0	3757.6	1968.5	768.9	698.3	682.0	655.4	628.8	620.7	620.7	618.4
42.5°	4453.5	3734.4	1699.9	719.1	668.1	649.6	616.0	591.7	587.1	585.9	588.2
45°	4664.3	3791.2	1459.0	686.7	642.7	614.9	581.3	559.3	554.7	554.7	553.5
47.5°	5075.3	3975.3	1286.5	665.8	624.1	588.2	553.5	531.5	523.4	521.1	521.1
50°	5714.5	4374.8	1158.0	647.3	601.0	563.9	528.0	502.6	489.8	488.7	487.5
52.5°	6602.7	4997.8	1108.2	633.4	575.5	538.5	499.1	474.8	458.6	455.1	452.8
55°	7641.4	5867.4	1176.5	623.0	548.9	509.5	469.0	443.5	428.4	421.5	420.3
57.5°	8844.5	6911.9	1435.9	609.1	524.6	478.2	438.9	413.4	397.2	389.1	386.8
60°	9924.9	7985.3	1888.6	601.0	503.7	444.7	404.1	381.0	365.9	357.8	356.7
62.5°	11111.8	9008.9	2429.4	623.0	494.4	412.2	371.7	350.9	338.1	330.0	330.0
65°	12379.8	10033.7	2787.2	697.1	508.3	386.8	337.0	319.6	308.0	302.2	301.1
67.5°	13234.3	10388.1	2296.2	773.5	543.1	359.0	303.4	289.5	282.5	276.8	276.8
69°	13141.7	9939.9	1694.1	793.2	553.5	345.1	284.9	274.4	265.2	262.9	260.5
70°	12848.7	9429.3	1419.7	780.5	545.4	332.3	273.3	260.5	252.4	250.1	249.0
72.5°	11444.1	8177.5	1057.2	678.6	464.3	288.3	242.0	230.4	223.5	220.0	220.0
75°	9508.0	6683.8	825.6	539.6	363.6	243.2	207.3	198.0	192.2	189.9	188.7
77.5°	5328.9	3732.1	592.9	422.7	275.6	196.9	173.7	165.6	159.8	157.5	157.5
80°	1484.5	1066.5	348.5	279.1	187.6	149.4	137.8	132.0	123.9	118.1	121.6
82.5°	559.3	462.0	199.2	167.9	119.3	99.6	96.1	91.5	88.0	79.9	79.9
85°	272.1	224.6	127.4	89.2	66.0	52.1	49.8	47.5	45.2	39.4	40.5
87.5°	93.8	99.6	55.6	32.4	19.7	12.7	10.4	5.8	5.8	5.8	5.8
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)