

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: P237528

Luminaire Tested: **CTN-10-3-D-E1-T3-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P237528  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-26)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: CTN-10-3-D-E1-T3-7030-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
(10) 70 CRI, 3000K LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28489 lumens  
Efficiency: N/A  
Efficacy: 134.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G4

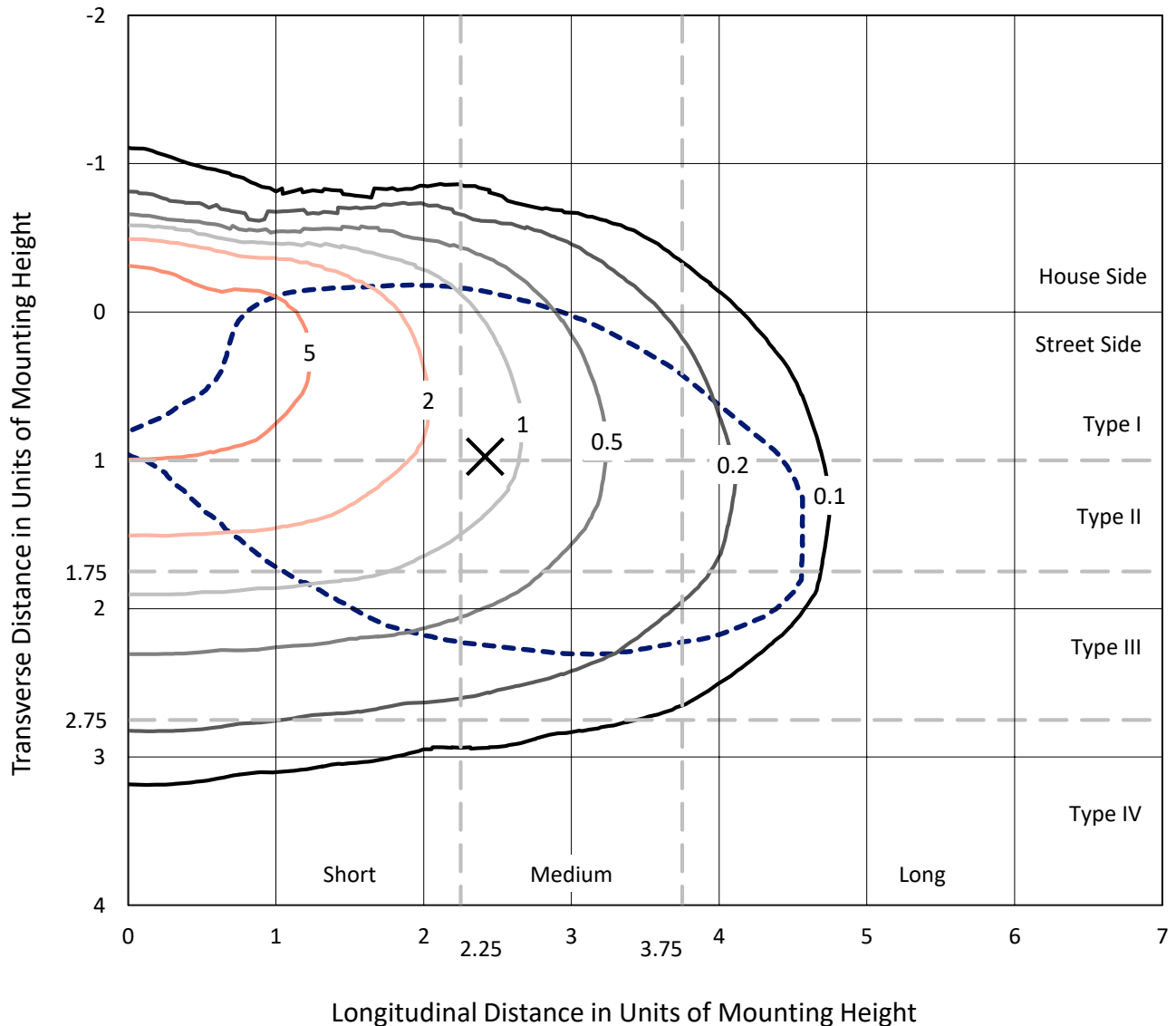
Input Watts (W): 212  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

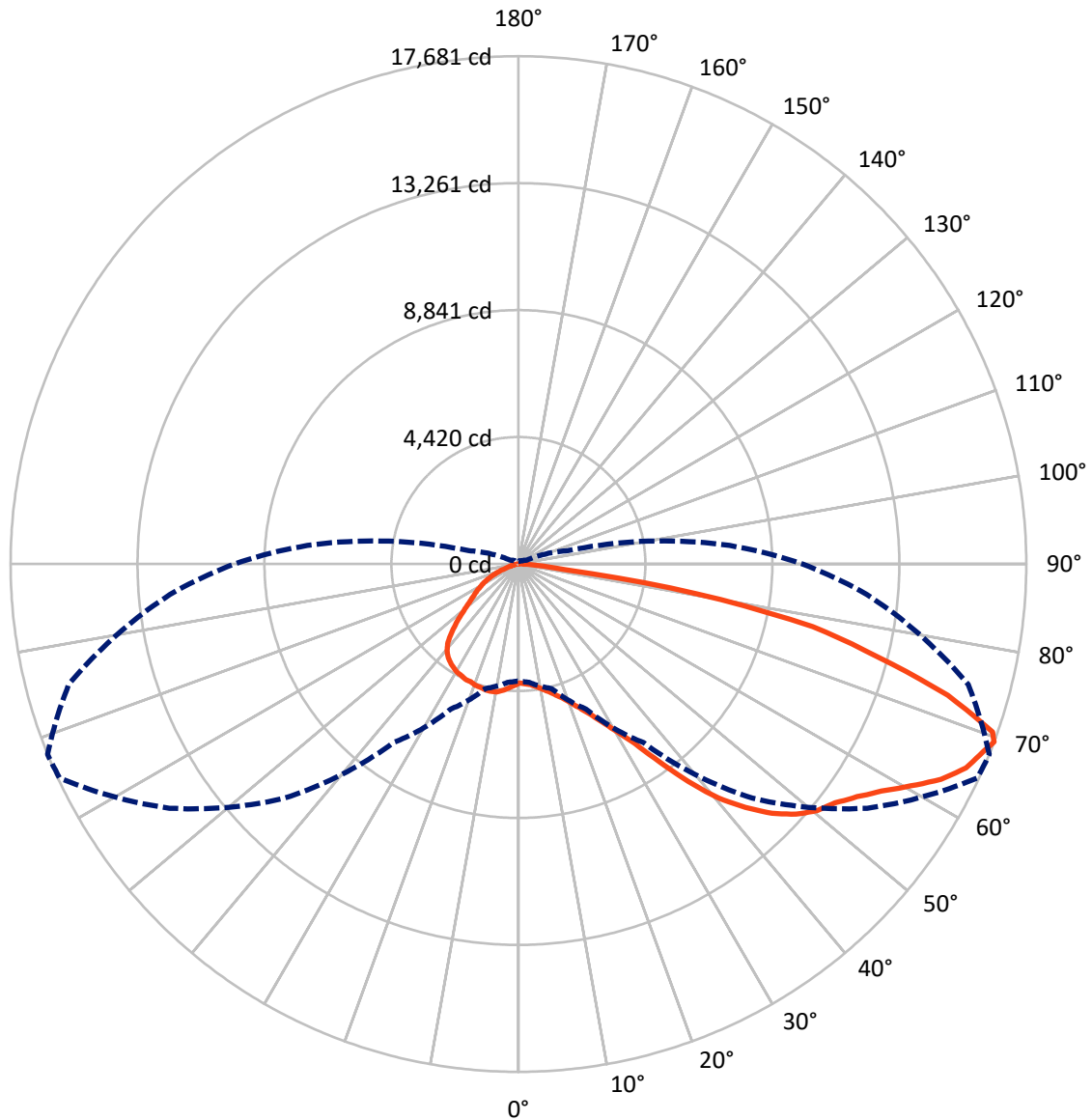
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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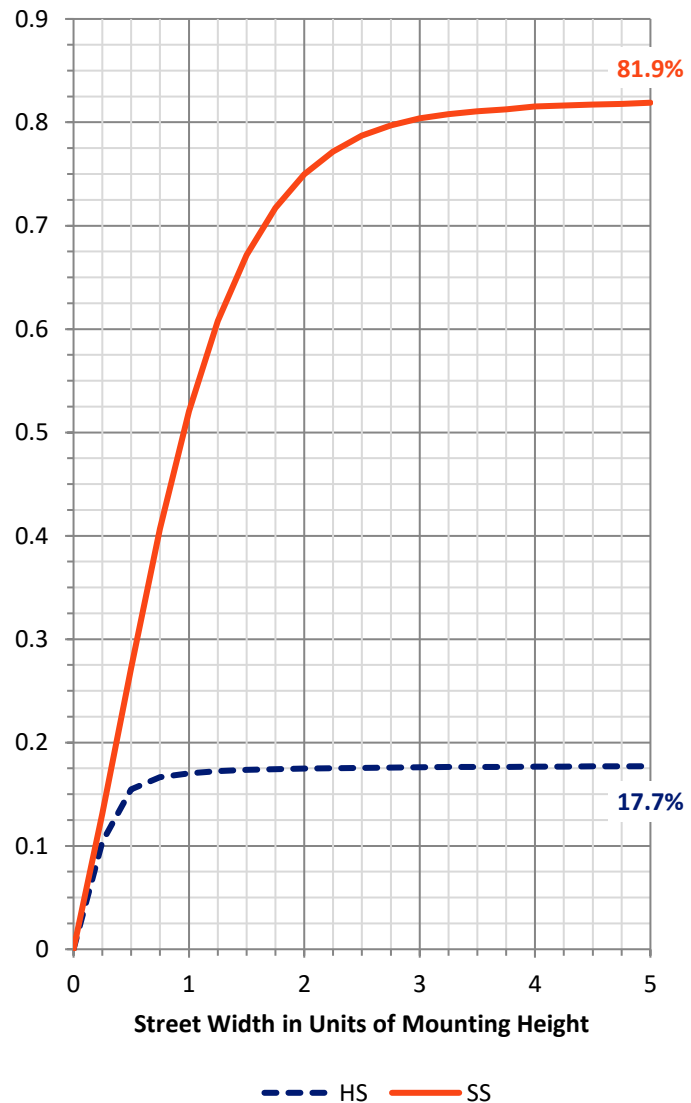
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5112.7	0.0	5112.7
	% Fixture	17.9	0.0	17.9
<b>Street Side</b>	Lumens	23376.3	0.0	23376.3
	% Fixture	82.1	0.0	82.1
<b>Total</b>	Lumens	28489.0	0.0	28489.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	416.2	1.5
10°-20°	1305.9	4.6
20°-30°	2232.3	7.8
30°-40°	3439.7	12.1
40°-50°	4936.2	17.3
50°-60°	5940.9	20.9
60°-70°	6234.4	21.9
70°-80°	3611.8	12.7
80°-90°	371.6	1.3
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°	28489.0	100.0
0°-180°	28489.0	100.0

**Coefficient of Utilization**



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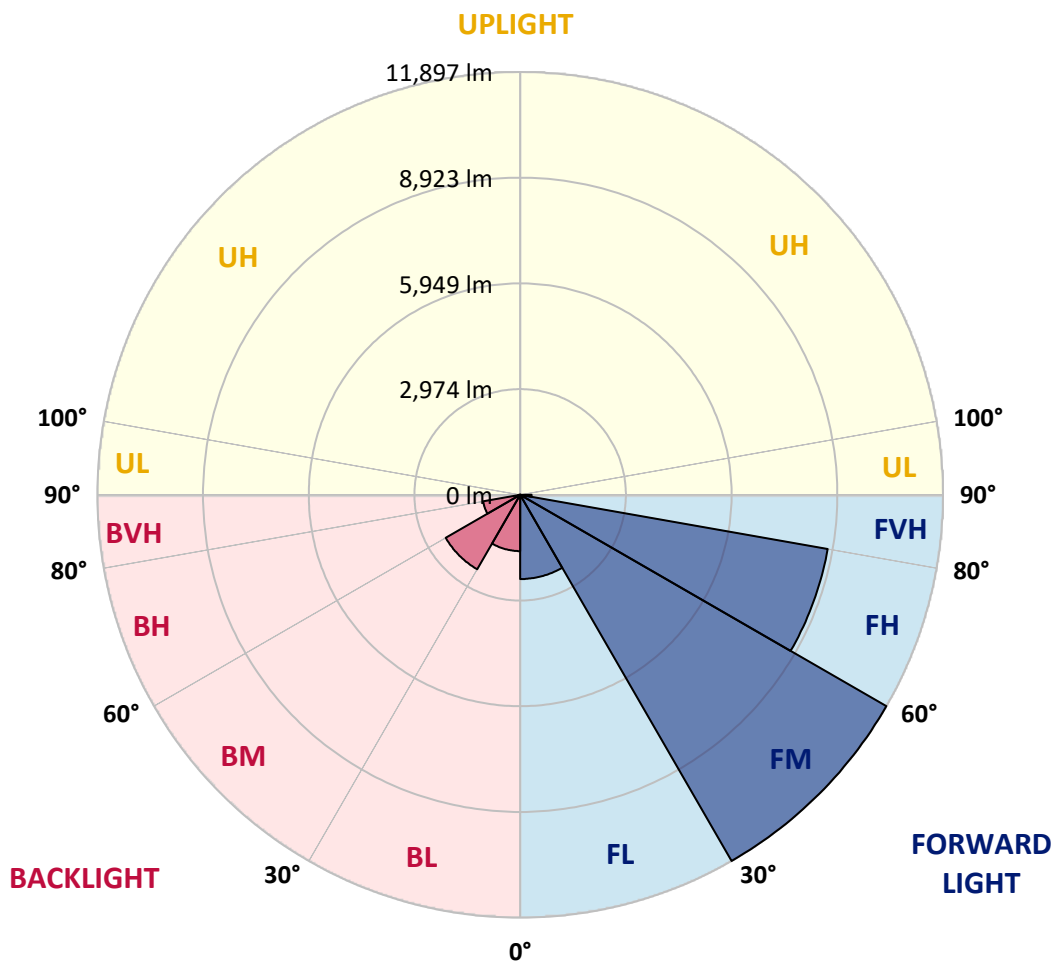
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2370.2	8.3			
FM (30°-60°)	11897.4	41.8			
FH (60°-80°)	8785.7	30.8			G4/12000
FVH (80°-90°)	323.0	1.1			G3/500
BL (0°-30°)	1584.2	5.6	B3/2500		
BM (30°-60°)	2419.4	8.5	B2/2500		
BH (60°-80°)	1060.5	3.7	B3/2500		G3/2500
BVH (80°-90°)	48.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9
2.5°	4190.3	4156.7	4160.7	4187.3	4108.3	4141.9	4121.2	4164.6	4171.5	4150.8	4169.5
5°	4273.2	4244.6	4243.6	4270.2	4182.4	4208.0	4175.5	4205.1	4214.0	4192.2	4224.8
7.5°	4434.1	4403.5	4397.6	4424.2	4312.7	4320.6	4276.1	4291.0	4298.8	4269.2	4301.8
10°	4665.1	4631.5	4609.8	4624.6	4499.2	4479.5	4403.5	4401.5	4413.4	4372.9	4425.2
12.5°	4923.7	4884.2	4852.6	4855.6	4712.4	4678.9	4578.2	4542.7	4550.6	4496.3	4559.4
15°	5205.0	5147.8	5118.1	5119.1	4958.2	4902.0	4772.7	4714.4	4709.5	4657.2	4693.7
17.5°	5543.6	5497.2	5459.7	5439.9	5269.2	5157.6	5003.6	4927.6	4900.0	4865.4	4846.7
20°	5941.4	5883.2	5843.7	5836.8	5627.5	5479.4	5275.1	5174.4	5141.8	5113.2	5029.3
22.5°	6384.6	6325.4	6271.1	6262.2	6040.1	5861.4	5587.0	5462.6	5434.0	5401.4	5233.6
25°	6793.3	6786.4	6726.1	6716.3	6502.1	6270.1	5948.3	5789.4	5789.4	5750.9	5493.2
27.5°	7249.3	7259.2	7204.9	7193.0	6991.7	6735.0	6352.0	6200.0	6231.6	6162.5	5820.0
30°	7730.0	7709.3	7694.5	7707.3	7520.8	7249.3	6850.5	6722.2	6771.5	6692.6	6258.3
32.5°	8160.4	8144.6	8154.5	8203.8	8069.6	7818.9	7476.3	7396.4	7443.8	7493.1	7044.0
35°	8501.0	8467.4	8591.8	8700.4	8661.9	8424.0	8148.6	8317.4	8447.7	8672.7	8201.9
37.5°	8801.0	8776.4	8927.4	9149.5	9197.9	9065.6	8980.7	9451.5	9600.6	9903.6	9217.6
40°	8951.1	8946.1	9131.7	9420.9	9617.4	9703.3	9852.3	10493.9	10711.1	10794.0	9990.5
42.5°	8902.7	8918.5	9246.2	9692.4	10010.2	10378.4	10678.5	11384.3	11583.7	11515.6	10667.7
45°	8767.5	8775.4	9108.0	9803.9	10350.8	11072.4	11473.1	12209.5	12386.2	12146.3	11206.6
47.5°	8579.9	8582.9	8934.3	9726.9	10629.2	11700.2	12158.2	12868.9	13012.0	12673.5	11594.6
50°	8326.2	8331.2	8750.7	9630.2	10869.0	12214.5	12694.2	13380.2	13490.8	13047.6	11930.2
52.5°	8005.4	8048.9	8507.9	9475.2	11019.1	12579.7	13099.9	13755.3	13809.6	13494.7	12227.3
55°	7635.3	7680.7	8198.9	9265.0	11077.3	12787.0	13384.2	14217.3	14304.2	13994.2	12469.1
57.5°	7197.0	7259.2	7805.1	8923.4	10941.1	12873.8	13673.4	14787.8	14905.3	14516.4	12717.9
60°	6688.6	6765.6	7340.1	8497.0	10626.2	12965.6	14214.3	15552.8	15689.1	15078.1	12935.0
62.5°	6157.6	6206.9	6726.1	7915.6	10121.8	13036.7	14796.7	16495.5	16507.4	15570.6	13055.5
65°	5446.9	5499.2	5964.1	7181.2	9364.7	12810.7	15090.9	17156.9	17121.4	15956.6	13015.0
67.5°	4633.5	4682.8	5062.9	6268.1	8325.3	12176.9	14990.2	17420.5	17444.1	16236.9	12627.1
69°	4068.9	4134.0	4492.3	5574.2	7590.8	11528.4	14821.4	17625.8	17681.0	16211.2	12177.9
70°	3586.2	3670.1	4010.6	4961.2	6969.0	10939.1	14495.7	17509.3	17513.2	15951.6	11764.3
72.5°	2342.4	2393.7	2453.0	3219.0	5013.5	8668.8	12827.4	15528.2	15630.8	14234.1	10285.6
75°	1158.9	1204.3	1425.4	1702.8	2578.3	5807.1	10170.2	12721.8	12916.3	12088.1	8426.9
77.5°	639.6	648.5	726.5	1115.4	1336.5	2625.7	6951.2	10141.5	10482.1	9851.3	6051.9
80°	398.8	396.8	414.6	519.2	749.2	1244.7	2935.7	5691.7	6303.7	5143.8	2391.8
82.5°	310.9	305.0	306.0	335.6	316.9	586.3	1222.0	1657.4	1672.2	1484.6	930.8
85°	158.9	179.7	213.2	223.1	187.6	318.8	562.7	654.5	670.2	587.3	484.7
87.5°	53.3	54.3	57.3	56.3	50.3	109.6	208.3	242.8	216.2	122.4	165.8
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°	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9	4143.9
2.5°	4198.2	4189.3	4207.0	4247.5	4214.0	4244.6	4214.0	4316.6	4304.8	4297.9	4317.6
5°	4256.4	4255.4	4284.0	4349.2	4346.2	4400.5	4370.9	4472.6	4457.8	4455.8	4473.6
7.5°	4335.4	4354.1	4384.7	4451.8	4452.8	4497.3	4463.7	4543.7	4511.1	4503.2	4527.9
10°	4455.8	4460.7	4484.4	4530.8	4465.7	4485.4	4430.1	4493.3	4447.9	4443.0	4479.5
12.5°	4571.3	4578.2	4542.7	4527.9	4444.0	4418.3	4321.6	4355.1	4302.8	4297.9	4315.6
15°	4694.7	4648.3	4563.4	4515.0	4369.9	4277.1	4168.6	4102.4	4012.6	3971.1	3986.9
17.5°	4823.0	4733.2	4574.3	4456.8	4262.3	4127.1	3910.9	3798.4	3665.1	3597.0	3584.2
20°	4963.2	4836.8	4600.9	4427.2	4153.7	3887.2	3623.7	3366.0	3214.0	3143.9	3125.2
22.5°	5121.1	4967.1	4638.4	4328.5	3984.0	3660.2	3215.0	2890.2	2669.1	2601.0	2582.3
25°	5318.5	5113.2	4689.7	4303.8	3821.1	3289.0	2735.3	2367.1	2109.4	2005.8	1984.1
27.5°	5558.4	5314.6	4773.6	4186.3	3534.8	2875.4	2258.5	1835.0	1567.5	1445.1	1418.5
30°	5907.8	5572.2	4829.9	4117.2	3280.2	2446.0	1755.1	1282.3	1028.6	938.7	915.0
32.5°	6596.8	6014.4	4944.4	3958.3	2904.1	1946.6	1208.2	786.7	609.0	557.7	538.0
35°	7620.5	6847.6	5109.3	3769.8	2481.6	1384.9	717.6	456.0	366.2	347.5	341.5
37.5°	8553.3	7669.8	5428.1	3479.6	1926.8	851.9	415.6	292.2	269.5	272.4	272.4
40°	9257.1	8280.8	5800.2	3096.6	1306.9	477.8	285.3	242.8	247.8	248.8	247.8
42.5°	9916.5	8840.5	5979.9	2674.1	757.1	316.9	247.8	226.0	230.0	227.0	225.1
45°	10434.7	9241.3	6033.2	2105.5	414.6	283.3	233.0	210.3	208.3	210.3	212.2
47.5°	10771.3	9486.1	5911.8	1611.9	312.9	263.6	224.1	199.4	194.5	208.3	207.3
50°	11021.0	9653.9	5440.9	1226.0	305.0	246.8	213.2	186.6	188.5	205.3	203.3
52.5°	11202.7	9697.3	4924.7	983.2	291.2	234.9	203.3	180.6	178.7	191.5	192.5
55°	11346.8	9580.9	4602.9	773.9	279.4	223.1	195.4	174.7	164.8	168.8	167.8
57.5°	11436.6	9447.6	4235.7	645.6	268.5	210.3	184.6	158.9	144.1	145.1	144.1
60°	11416.9	9358.8	3814.2	529.1	254.7	198.4	169.8	142.1	127.3	123.4	123.4
62.5°	11377.4	9176.1	3378.9	461.0	242.8	194.5	152.0	129.3	118.5	114.5	114.5
65°	11108.9	8740.8	2796.5	394.8	231.0	183.6	142.1	124.4	111.5	107.6	107.6
67.5°	10442.6	8021.2	2165.7	343.5	222.1	165.8	139.2	121.4	107.6	102.7	102.7
69°	9879.9	7381.6	1778.8	315.9	213.2	157.9	139.2	122.4	105.6	99.7	99.7
70°	9440.7	6879.1	1471.8	299.1	204.3	153.0	139.2	123.4	104.6	97.7	96.7
72.5°	8101.2	5370.8	817.3	253.7	169.8	139.2	136.2	124.4	99.7	89.8	88.8
75°	6215.8	3775.7	486.6	214.2	143.1	127.3	129.3	119.4	91.8	80.9	80.9
77.5°	3884.3	1734.3	362.3	167.8	116.5	110.6	112.5	105.6	82.9	74.0	74.0
80°	1326.7	782.8	273.4	129.3	83.9	85.9	92.8	88.8	74.0	67.1	66.1
82.5°	726.5	509.3	193.5	89.8	58.2	71.1	71.1	72.1	64.2	59.2	58.2
85°	394.8	265.5	119.4	54.3	41.5	52.3	50.3	54.3	52.3	48.4	47.4
87.5°	137.2	90.8	39.5	19.7	16.8	17.8	20.7	27.6	26.7	27.6	28.6
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)