

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: P510705

Luminaire Tested: **CTN-CA8-230-727-U-T1**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510705  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA8-230-727-U-T1  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31541 lumens  
Efficiency: N/A  
Efficacy: 138.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5

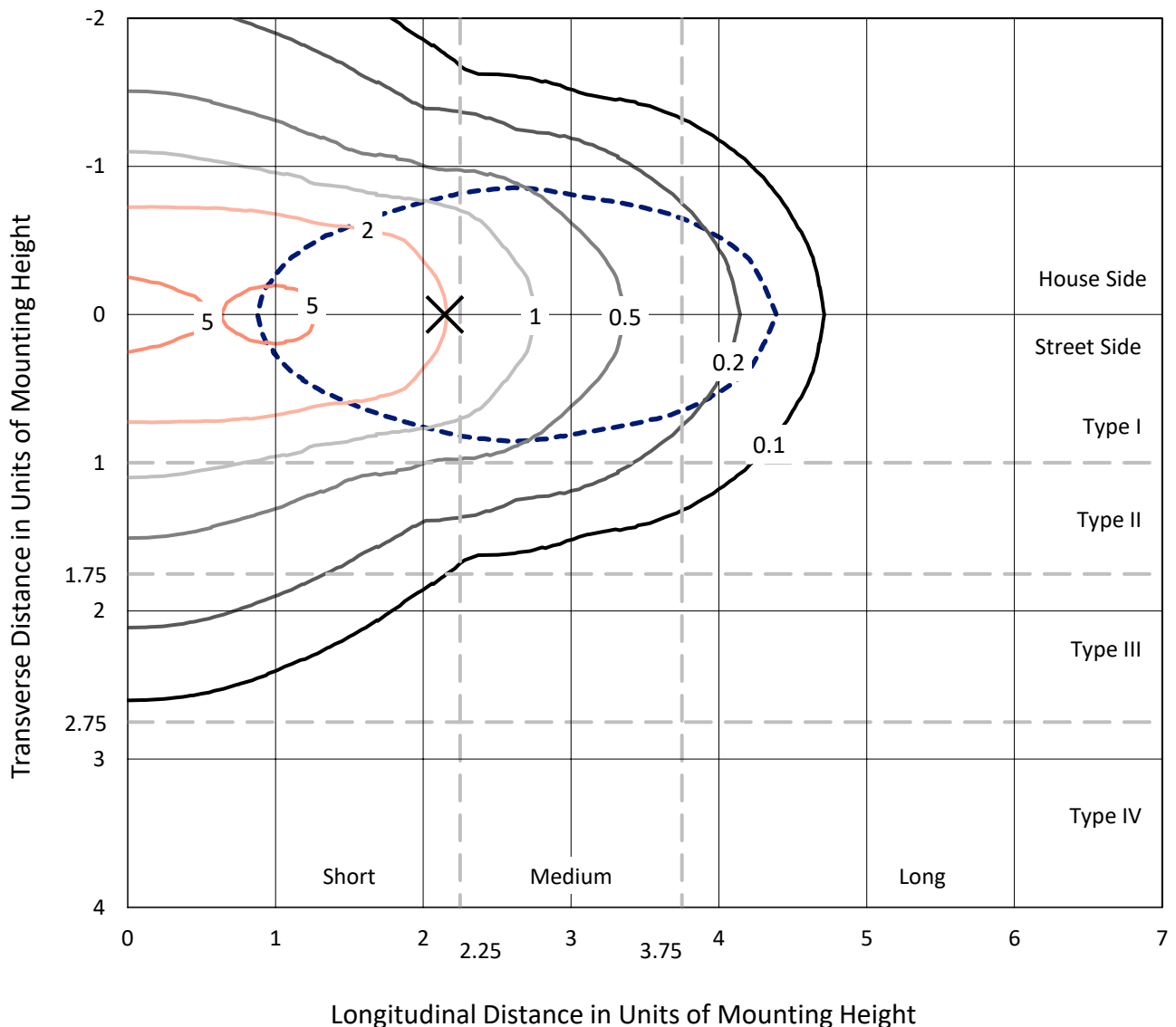
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

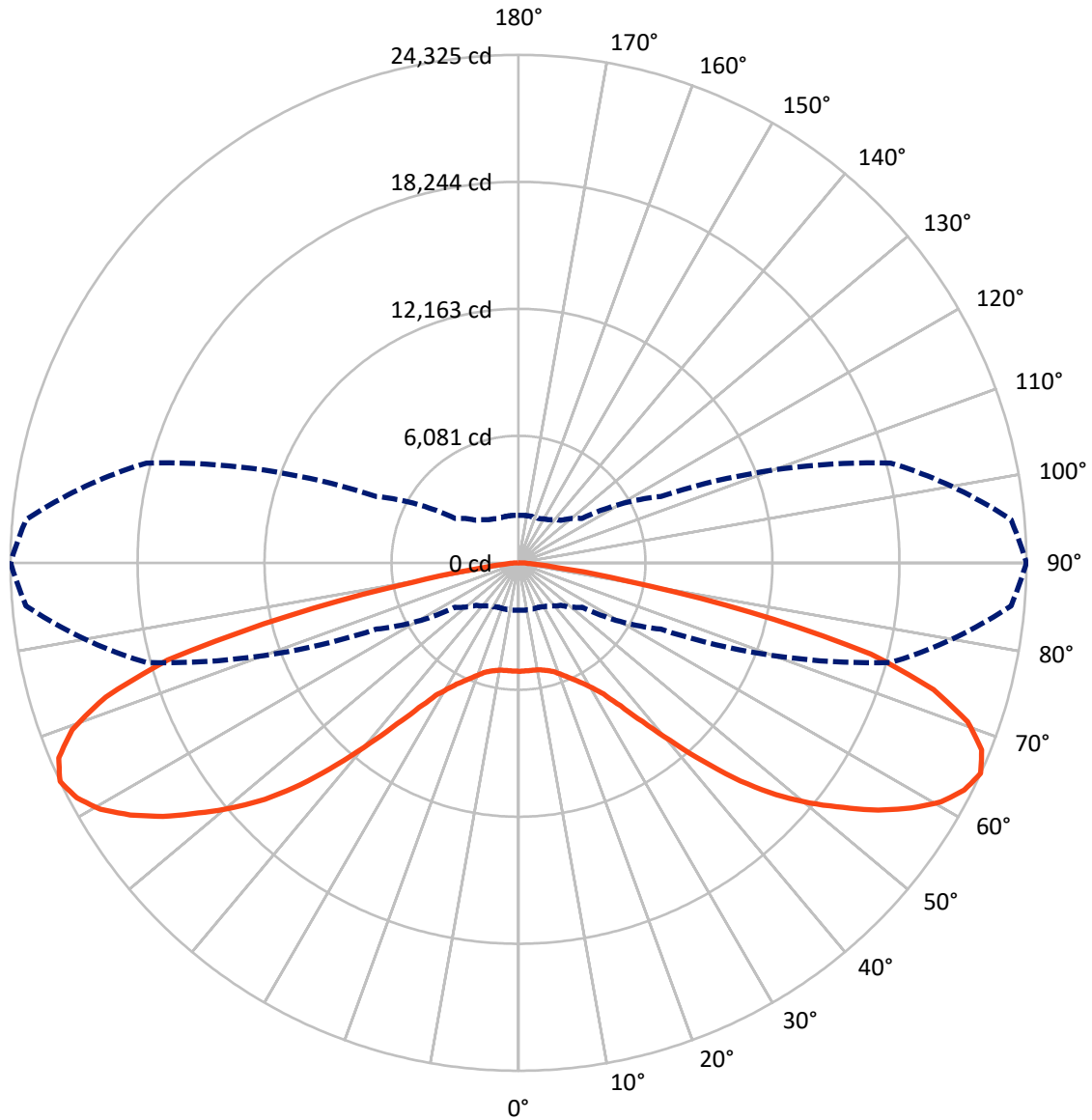
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.9 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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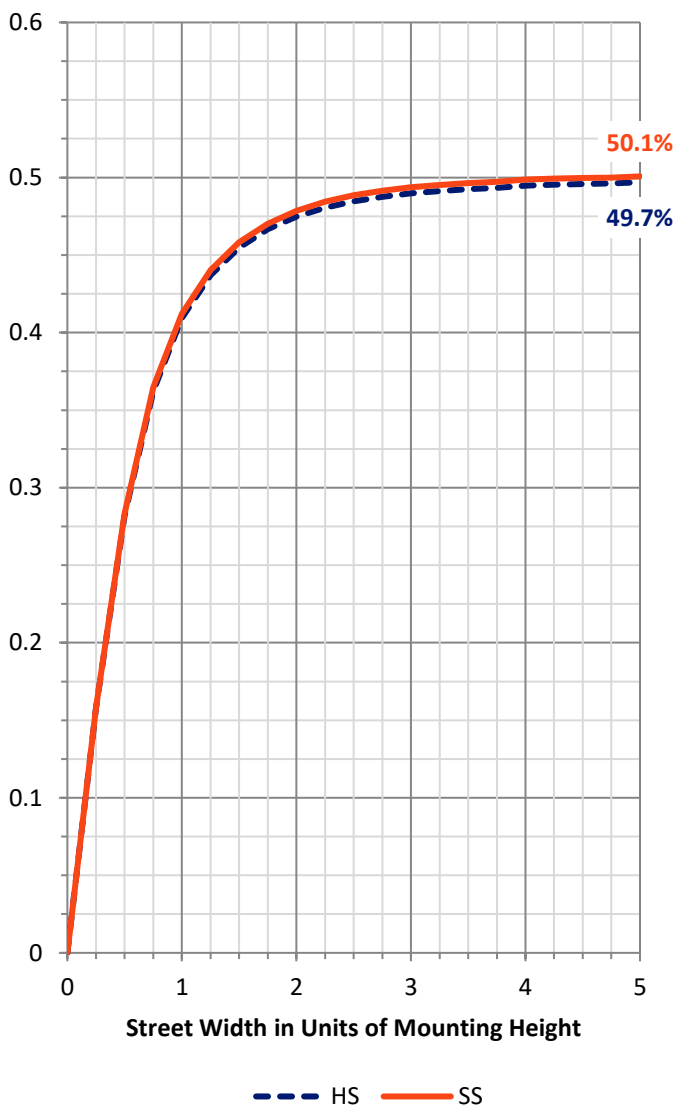
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15770.5	0.0	15770.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	15770.5	0.0	15770.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	31541.0	0.0	31541.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	493.1	1.6
10°-20°	1455.2	4.6
20°-30°	2397.0	7.6
30°-40°	3511.9	11.1
40°-50°	5192.8	16.5
50°-60°	6811.6	21.6
60°-70°	7106.4	22.5
70°-80°	4085.8	13.0
80°-90°	487.1	1.5
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°	31541.0	100.0
0°-180°	31541.0	100.0

**Coefficient of Utilization**

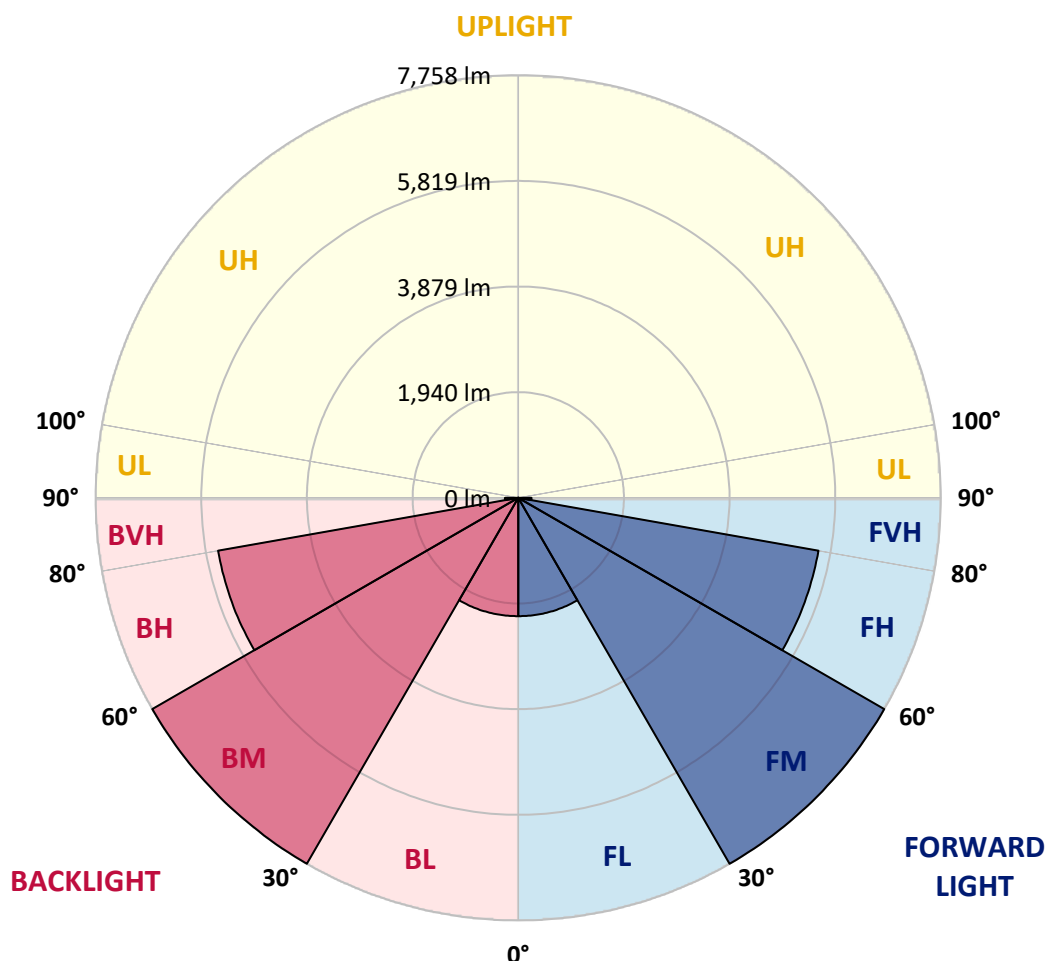


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2172.7	6.9			
FM (30°-60°)	7758.2	24.6			
FH (60°-80°)	5596.1	17.7			G3/7500
FVH (80°-90°)	243.5	0.8			G3/500
BL (0°-30°)	2172.7	6.9	B3/2500		
BM (30°-60°)	7758.2	24.6	B4/8500		
BH (60°-80°)	5596.1	17.7	B5		G5
BVH (80°-90°)	243.5	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**  
 Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3
2.5°	5195.1	5191.4	5190.1	5188.3	5191.4	5193.8	5200.0	5205.5	5204.3	5203.1	5204.3
5°	5166.1	5167.9	5168.5	5169.2	5171.6	5173.5	5182.1	5190.7	5189.5	5188.3	5194.4
7.5°	5125.4	5125.4	5124.2	5122.9	5127.9	5132.2	5140.8	5149.4	5156.2	5162.4	5172.2
10°	5066.2	5063.7	5063.1	5062.5	5068.1	5073.0	5089.0	5105.0	5118.6	5131.6	5148.2
12.5°	4994.1	4993.5	4994.7	4995.9	5007.6	5019.4	5046.5	5073.6	5100.7	5127.9	5151.9
15°	4908.4	4901.0	4907.2	4912.7	4931.8	4950.3	5002.7	5055.1	5096.4	5137.1	5184.0
17.5°	4777.7	4770.3	4779.5	4788.2	4826.4	4864.6	4938.6	5012.0	5089.6	5167.3	5234.5
20°	4579.8	4579.8	4603.2	4626.7	4691.4	4756.1	4857.8	4958.9	5063.7	5168.5	5265.9
22.5°	4369.0	4362.8	4412.7	4462.7	4540.4	4617.4	4745.6	4873.9	5012.6	5150.7	5284.4
25°	4131.0	4141.5	4204.4	4266.6	4375.8	4484.3	4642.1	4799.3	4973.7	5148.2	5333.8
27.5°	3930.0	3931.9	4007.7	4083.5	4220.4	4356.6	4548.4	4740.1	4952.8	5165.5	5399.1
30°	3722.3	3756.2	3836.3	3915.9	4068.7	4221.6	4453.4	4684.6	4936.7	5188.9	5473.7
32.5°	3562.6	3570.6	3661.3	3751.3	3910.9	4070.6	4340.0	4609.4	4912.1	5214.8	5561.2
35°	3412.2	3425.1	3509.6	3594.1	3760.5	3926.3	4221.6	4516.3	4878.2	5239.4	5656.2
37.5°	3278.4	3294.5	3374.6	3454.7	3615.0	3775.3	4088.5	4401.6	4825.8	5249.9	5760.4
40°	3180.4	3194.0	3261.8	3329.6	3474.5	3618.7	3946.7	4274.0	4752.4	5230.8	5842.4
42.5°	3109.5	3115.7	3170.5	3225.4	3354.9	3484.3	3809.2	4133.5	4656.9	5180.3	5905.9
45°	3013.3	3026.9	3081.2	3134.8	3251.3	3367.2	3664.3	3961.5	4515.1	5068.1	5906.5
47.5°	2941.8	2950.5	3001.6	3052.2	3160.7	3269.2	3536.1	3803.0	4354.8	4905.9	5839.9
50°	2889.4	2885.1	2932.6	2979.4	3071.3	3162.5	3400.5	3637.8	4156.3	4674.7	5673.4
52.5°	2814.8	2819.8	2858.0	2896.2	2975.7	3054.6	3267.9	3480.6	3936.2	4391.2	5403.4
55°	2715.0	2737.8	2769.8	2801.3	2870.9	2940.6	3132.3	3324.0	3716.1	4107.6	5055.7
57.5°	2616.9	2633.6	2660.7	2687.8	2742.7	2797.0	2977.6	3158.2	3484.3	3810.4	4616.8
60°	2536.8	2541.1	2558.4	2575.0	2616.9	2658.9	2808.1	2957.2	3242.1	3526.2	4179.1
62.5°	2433.2	2434.5	2446.2	2457.9	2483.8	2509.1	2626.2	2742.7	2985.6	3228.5	3743.9
65°	2271.1	2281.0	2292.1	2302.5	2319.8	2336.4	2425.8	2515.2	2697.1	2878.9	3294.5
67.5°	2107.1	2098.5	2111.4	2124.4	2126.8	2129.3	2197.1	2264.9	2414.1	2563.3	2897.4
70°	1840.2	1847.0	1845.7	1843.9	1833.4	1822.3	1869.8	1917.2	1996.2	2074.4	2316.1
72.5°	1411.1	1401.9	1378.4	1354.4	1343.3	1332.2	1387.7	1442.6	1500.5	1558.5	1732.9
75°	862.5	889.0	937.7	985.7	1004.2	1022.7	1019.7	1016.0	1011.0	1006.1	1223.7
77.5°	584.4	598.6	609.7	620.2	647.3	673.8	704.6	735.5	734.8	734.2	871.1
80°	371.7	360.6	365.6	370.5	385.9	401.3	448.2	494.4	507.4	519.7	614.0
82.5°	233.0	234.9	241.0	246.6	229.3	212.1	248.4	284.2	315.0	345.2	389.0
85°	151.0	171.4	168.3	165.2	144.9	124.5	156.6	188.6	203.4	217.6	234.3
87.5°	48.7	56.7	58.6	59.8	59.8	59.2	66.0	72.7	75.2	77.1	83.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	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):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3	5196.3
2.5°	5204.9	5198.8	5192.6	5190.7	5188.9	5187.7	5186.4	5185.2
5°	5200.0	5198.8	5197.5	5192.6	5187.7	5187.0	5186.4	5188.3
7.5°	5182.1	5182.1	5182.1	5187.7	5193.2	5190.7	5187.7	5191.4
10°	5164.2	5179.0	5193.8	5198.1	5202.5	5205.5	5208.6	5211.7
12.5°	5175.9	5201.2	5225.9	5240.1	5254.2	5261.6	5268.4	5270.3
15°	5230.8	5262.9	5294.9	5314.0	5332.5	5344.9	5357.2	5360.3
17.5°	5301.7	5351.0	5399.7	5427.5	5455.2	5469.4	5482.9	5478.6
20°	5362.7	5430.5	5498.4	5557.5	5616.7	5649.4	5681.5	5685.2
22.5°	5417.6	5531.6	5645.7	5722.1	5798.0	5855.9	5913.9	5920.0
25°	5518.7	5667.9	5817.1	5939.1	6061.2	6114.2	6166.6	6197.4
27.5°	5632.1	5831.9	6031.6	6195.0	6358.3	6439.1	6519.2	6523.6
30°	5757.9	6011.3	6264.0	6483.5	6702.3	6801.0	6899.0	6950.8
32.5°	5907.1	6228.9	6550.1	6838.6	7127.1	7276.9	7426.7	7479.1
35°	6072.3	6489.7	6906.4	7304.0	7701.0	7987.7	8274.4	8412.4
37.5°	6270.8	6802.2	7333.6	7931.0	8528.3	9017.2	9505.5	9644.8
40°	6453.9	7137.6	7820.6	8650.4	9480.2	10255.7	11030.6	11181.7
42.5°	6631.4	7458.8	8286.1	9417.9	10549.8	11587.9	12626.1	13018.8
45°	6744.3	7744.8	8744.7	10237.2	11729.7	13155.0	14579.7	14909.5
47.5°	6773.2	7948.9	9124.5	10973.3	12822.1	14499.5	16176.4	16599.9
50°	6672.1	8054.9	9437.6	11877.7	14317.1	16025.3	17733.0	18080.7
52.5°	6415.7	8021.0	9626.3	12578.6	15530.9	17339.0	19147.2	19462.8
55°	6003.9	7815.1	9626.3	13155.6	16684.3	18559.7	20434.4	20914.0
57.5°	5423.1	7421.8	9420.4	13540.9	17661.5	19698.3	21735.1	22166.1
60°	4831.9	6953.9	9075.2	13753.6	18432.1	20589.7	22747.4	23250.4
62.5°	4258.6	6318.3	8377.3	13530.4	18683.6	20961.5	23238.7	23962.5
65°	3710.0	5612.4	7514.9	12986.1	18456.7	21066.9	23676.4	24325.0
67.5°	3231.6	5022.4	6813.3	12073.7	17334.1	20222.9	23111.1	23919.3
70°	2557.8	4205.6	5853.5	10456.1	15058.7	18441.9	21825.1	22822.6
72.5°	1907.4	3304.9	4701.9	8225.0	11748.2	15638.8	19528.8	20783.9
75°	1440.7	2639.8	3838.8	6501.4	9163.9	12457.8	15751.6	17431.5
77.5°	1007.9	1907.4	2806.2	4792.5	6778.8	8602.3	10425.9	11321.0
80°	707.7	1206.4	1704.6	2660.1	3615.0	4423.8	5232.0	5167.9
82.5°	432.2	641.8	850.7	1154.0	1457.4	1652.8	1848.2	1839.6
85°	250.9	305.2	358.8	444.5	530.2	627.0	723.7	643.6
87.5°	88.8	88.8	88.8	101.7	114.7	157.8	201.0	212.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: CTN-CA8-230-727-U-T1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)