

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: P579377

Luminaire Tested: **CTN-CA10-210-722-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579377  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-210-722-U-T5-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17541 lumens  
Efficiency: N/A  
Efficacy: 82.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U2 - G3

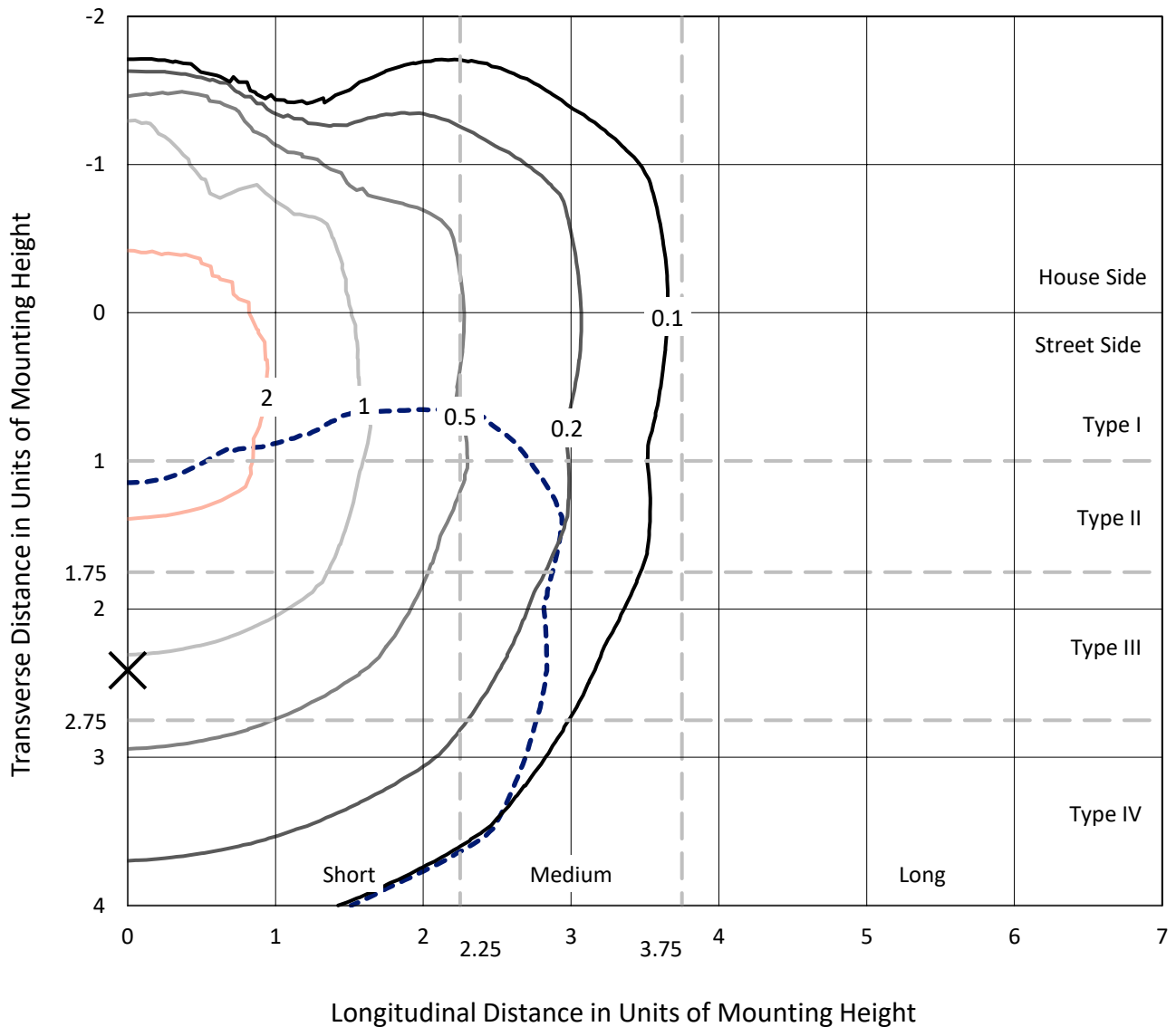
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

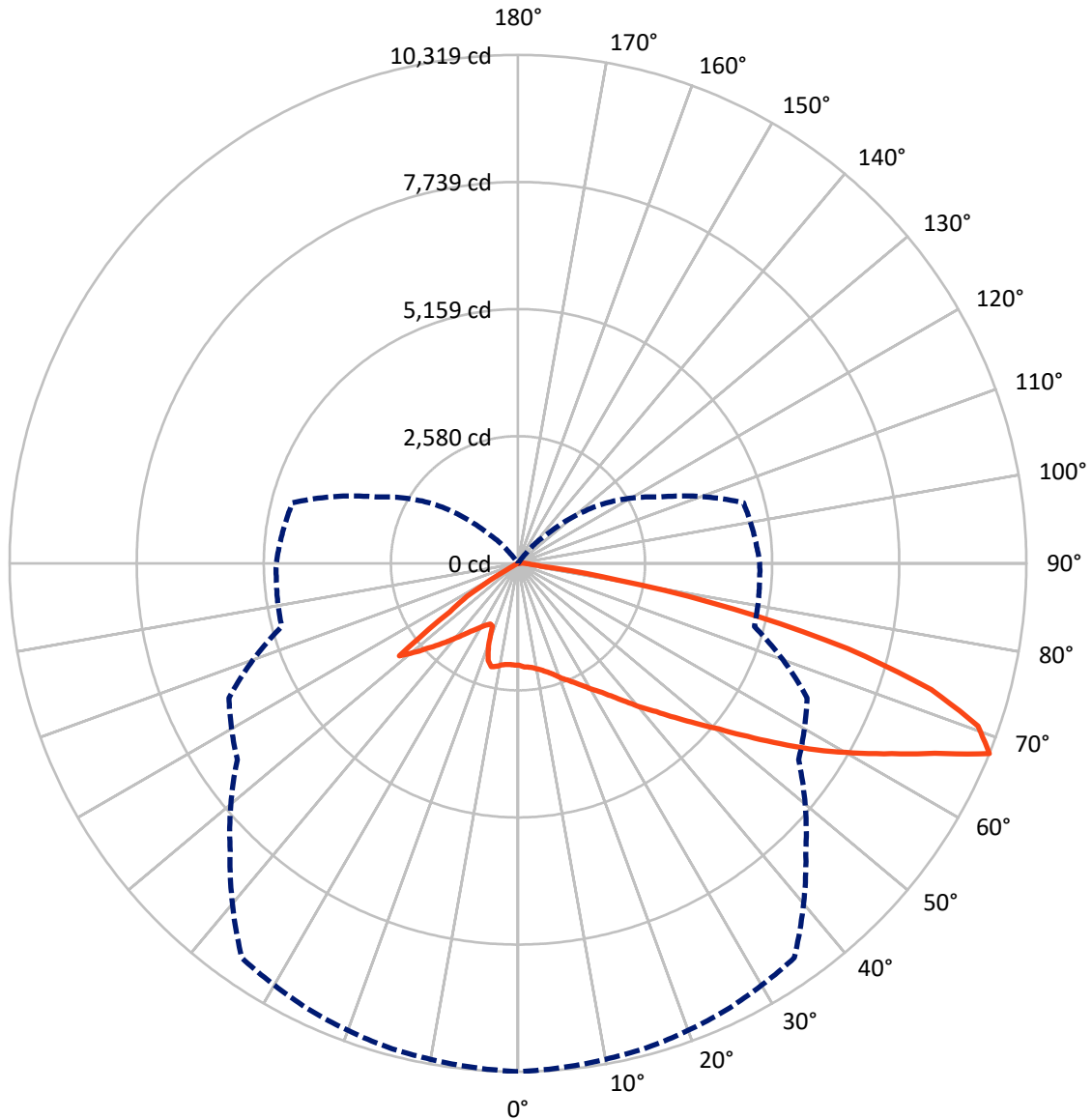
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical



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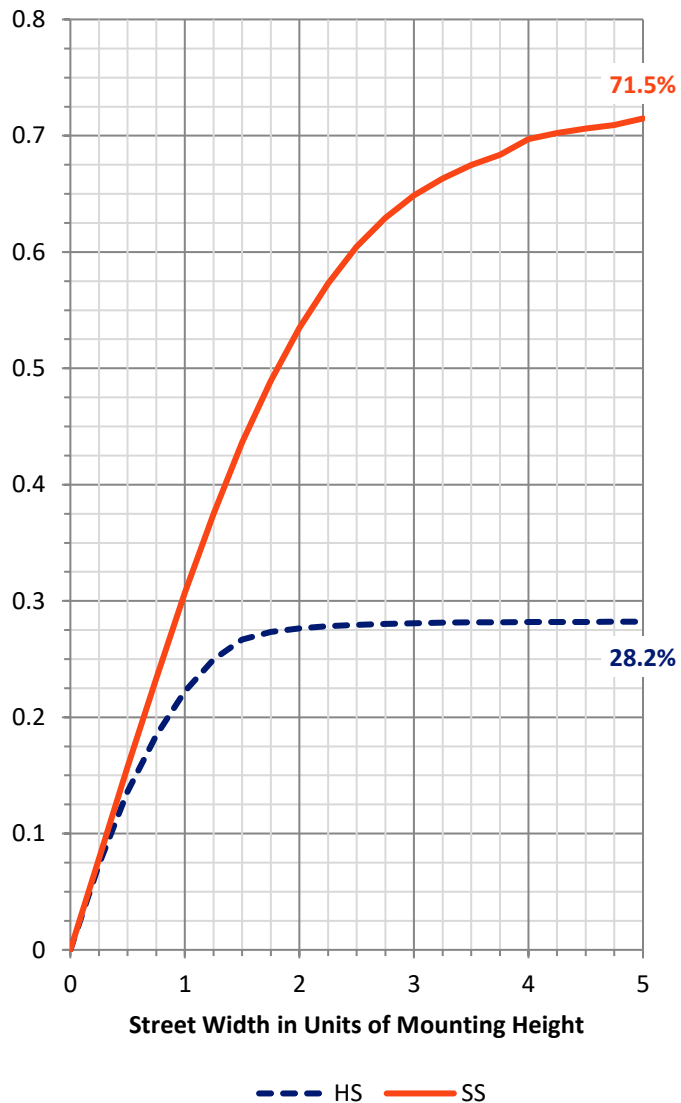
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4971.5	0.1	4971.5
	% Fixture	28.3	0.0	28.3
<b>Street Side</b>	Lumens	12547.1	22.3	12569.5
	% Fixture	71.5	0.1	71.7
<b>Total</b>	Lumens	17518.6	22.4	17541.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.2	1.1
10°-20°	613.3	3.5
20°-30°	1015.6	5.8
30°-40°	1598.7	9.1
40°-50°	2501.9	14.3
50°-60°	3612.3	20.6
60°-70°	4475.1	25.5
70°-80°	3259.1	18.6
80°-90°	243.5	1.4
90°-100°	19.1	0.1
100°-110°	3.2	0.0
110°-120°	0.1	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°	17518.6	99.9
0°-180°	17541.0	100.0

**Coefficient of Utilization**



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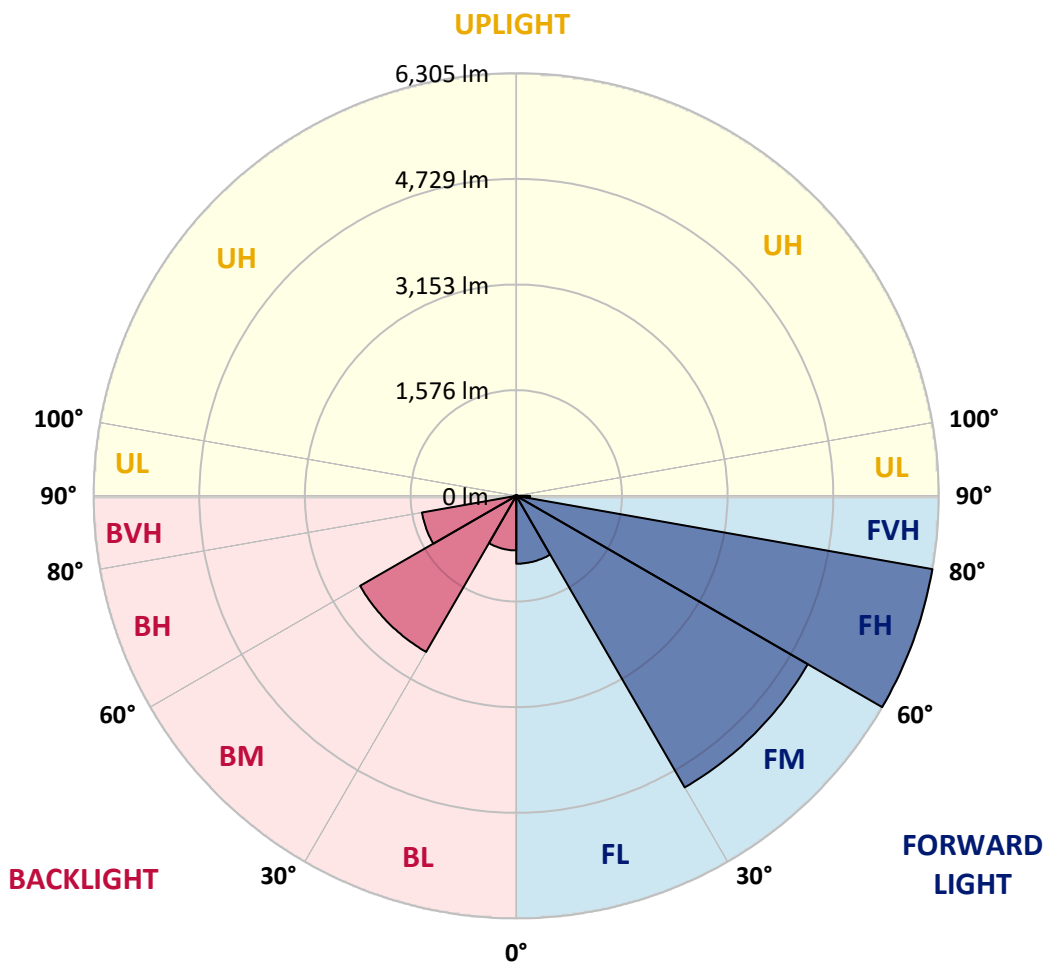
CATALOG NUMBER: CTN-CA10-210-722-U-T5-HSS-HM-EX180

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1013.1	5.8			
FM (30°-60°)	5023.2	28.6			
FH (60°-80°)	6305.4	35.9			G3/7500
FVH (80°-90°)	205.4	1.2			G2/225
BL (0°-30°)	815.0	4.6	B2/1000		
BM (30°-60°)	2689.7	15.3	B3/5000		
BH (60°-80°)	1428.7	8.1	B3/2500		G3/2500
BVH (80°-90°)	38.1	0.2			G1/100
UL (90°-100°)	19.1	0.1		U2/50	
UH (100°-180°)	3.3	0.0		U1/10	

**BUG Rating: B3-U2-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9
2.5°	2103.7	2092.3	2092.3	2104.6	2070.3	2080.8	2066.8	2079.1	2072.0	2075.5	2079.9
5°	2116.0	2102.8	2103.7	2118.6	2087.9	2096.6	2079.9	2086.1	2079.9	2082.6	2082.6
7.5°	2138.8	2127.4	2127.4	2136.2	2105.4	2108.1	2093.1	2093.1	2085.2	2091.4	2086.1
10°	2181.9	2169.6	2163.5	2167.9	2140.6	2137.1	2116.9	2116.9	2104.6	2114.2	2106.3
12.5°	2233.8	2216.2	2214.4	2215.3	2184.6	2178.4	2155.5	2156.4	2133.6	2146.8	2137.1
15°	2296.2	2274.2	2272.5	2276.0	2243.5	2232.0	2206.5	2206.5	2181.0	2188.1	2174.9
17.5°	2376.2	2350.7	2346.3	2352.5	2319.9	2309.4	2279.5	2274.2	2246.1	2240.8	2229.4
20°	2481.7	2452.7	2443.9	2457.1	2415.8	2406.1	2370.0	2358.6	2320.8	2258.4	2176.6
22.5°	2576.6	2553.8	2548.5	2557.3	2519.5	2509.8	2474.7	2450.9	2359.5	2233.8	2158.2
25°	2684.8	2676.0	2673.3	2668.1	2633.8	2617.1	2583.7	2550.3	2342.8	2170.5	2168.7
27.5°	2818.4	2814.0	2801.7	2797.3	2759.5	2748.9	2705.0	2489.6	2283.0	2270.7	2263.7
30°	2964.3	2955.5	2943.2	2944.1	2918.6	2899.3	2794.6	2436.0	2398.2	2398.2	2379.7
32.5°	3126.1	3116.4	3104.1	3106.7	3096.2	3079.5	2764.8	2577.5	2548.5	2556.4	2533.6
35°	3326.5	3310.7	3306.3	3316.8	3317.7	3209.6	2817.5	2770.0	2747.2	2741.9	2655.8
37.5°	3560.3	3547.2	3563.0	3587.6	3559.5	3243.0	3027.6	3012.7	2989.8	2862.3	2658.4
40°	3840.8	3817.0	3836.4	3852.2	3833.7	3441.7	3248.3	3253.5	3233.3	2855.3	2629.4
42.5°	4118.6	4095.7	4112.4	4152.0	4144.9	3687.8	3517.3	3528.7	3324.7	2872.0	2854.4
45°	4462.3	4454.4	4449.1	4481.6	4508.9	3982.3	3836.4	3835.5	3259.7	3137.5	3121.7
47.5°	4851.7	4841.2	4843.8	4885.1	4926.5	4333.9	4213.5	3860.1	3427.6	3439.9	3425.8
50°	5286.0	5274.6	5308.9	5368.6	5389.7	4728.7	4581.0	3793.3	3777.5	3790.7	3766.9
52.5°	5837.2	5811.7	5864.5	5928.6	5955.9	5195.5	4601.2	4188.0	4161.6	4164.3	4088.7
55°	6464.0	6443.8	6491.3	6563.3	6603.8	5716.8	5021.4	4572.2	4556.4	4108.0	3699.2
57.5°	7145.3	7122.4	7185.7	7206.8	7217.4	6255.7	5444.2	4988.9	4256.6	3751.1	3728.3
60°	7813.4	7788.8	7868.8	7872.3	7903.1	6793.7	5846.0	5390.6	4101.0	4034.2	4014.8
62.5°	8514.9	8484.2	8554.5	8551.9	8491.2	7286.0	6244.2	5776.5	4378.8	4326.0	4296.1
65°	9293.8	9271.0	9320.2	9241.1	9120.6	7795.0	6657.4	6196.8	4702.3	4692.6	4685.6
67.5°	10318.8	10274.0	10174.7	10005.9	9775.6	8261.8	6952.8	6473.7	4965.1	4920.3	4906.2
70°	9906.5	9853.8	9778.2	9592.7	9358.0	7823.1	6478.1	6055.2	4642.5	4644.3	4610.9
72.5°	8771.6	8680.2	8609.0	8348.8	8219.6	6832.3	5644.7	5255.2	4015.7	4090.4	4074.6
75°	6919.4	6826.2	6709.3	6607.3	6593.2	5541.8	4551.1	4270.7	3201.7	3256.2	3295.7
77.5°	4485.2	4450.9	4598.6	4501.9	4588.9	3816.2	3250.9	3010.0	2206.5	2344.6	2326.1
80°	2052.7	2013.1	2250.5	2183.7	2216.2	1874.2	1588.5	1526.1	998.7	1005.7	1026.8
82.5°	464.2	448.3	465.0	427.2	416.7	352.5	310.3	281.3	176.7	187.2	196.9
85°	254.1	254.1	250.5	233.0	199.6	164.4	130.1	100.2	54.5	59.8	58.9
87.5°	178.5	174.1	173.2	154.7	132.7	112.5	89.7	64.2	30.8	21.1	19.3
90°	122.2	120.4	114.3	102.9	88.8	73.0	54.5	31.6	13.2	6.2	4.4
92.5°	88.8	87.0	82.6	73.0	60.7	49.2	36.0	21.1	10.5	4.4	0.9
95°	58.9	58.0	55.4	47.5	39.6	31.6	22.9	13.2	8.8	3.5	0.9
97.5°	40.4	39.6	36.9	31.6	25.5	20.2	14.1	9.7	7.0	2.6	0.9
100°	27.3	26.4	24.6	20.2	15.8	12.3	8.8	7.0	5.3	2.6	0.9
102.5°	17.6	16.7	14.9	12.3	8.8	7.0	6.2	5.3	3.5	1.8	0.9
105°	10.5	9.7	7.9	6.2	5.3	4.4	4.4	3.5	2.6	0.9	0.9
107.5°	5.3	4.4	3.5	3.5	3.5	2.6	2.6	2.6	1.8	0.9	0.0
110°	0.9	0.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.9	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9	2065.9
2.5°	2075.5	2061.5	2069.4	2057.1	2054.4	2041.3	2062.4	2065.0	2063.2	2066.8
5°	2078.2	2063.2	2072.0	2057.1	2057.1	2043.0	2063.2	2063.2	2058.0	2059.7
7.5°	2085.2	2070.3	2076.4	2059.7	2060.6	2043.9	2068.5	2065.9	2061.5	2067.6
10°	2105.4	2088.7	2087.9	2072.0	2075.5	2058.0	2088.7	2088.7	2084.3	2095.8
12.5°	2138.0	2113.3	2109.0	2089.6	2096.6	2081.7	2119.5	2121.3	2122.1	2140.6
15°	2172.2	2142.4	2146.8	2123.9	2121.3	2113.3	2147.6	2145.9	2145.0	2170.5
17.5°	2220.6	2079.9	2057.1	2041.3	2037.7	2018.4	2050.1	2110.7	2079.1	2061.5
20°	2144.1	2070.3	1979.7	1949.0	1942.8	1774.9	1642.2	1701.9	1782.8	1789.8
22.5°	2074.7	2048.3	2041.3	1992.9	1724.8	1668.5	1673.8	1651.8	1460.2	1376.7
25°	2160.8	2138.0	2108.1	1812.7	1749.4	1729.2	1723.0	1498.0	1346.8	1356.4
27.5°	2256.6	2231.1	1970.9	1817.1	1831.2	1803.0	1664.1	1397.8	1389.0	1405.7
30°	2376.2	2172.2	1923.5	1914.7	1927.9	1891.8	1478.6	1459.3	1456.7	1474.2
32.5°	2512.5	2094.9	2050.1	2050.1	2043.9	1654.5	1557.8	1544.6	1551.6	1570.1
35°	2461.5	2216.2	2210.9	2232.9	2085.2	1697.5	1684.4	1661.5	1666.8	1672.9
37.5°	2405.2	2415.8	2418.4	2407.0	1520.8	1820.6	1810.1	1805.7	1800.4	1802.1
40°	2614.4	2621.5	2618.8	2514.2	1641.3	1844.3	1952.5	1944.6	1943.7	1954.2
42.5°	2858.8	2878.2	2863.2	2218.0	1802.1	1550.7	2116.9	2112.5	2110.7	2132.7
45°	3134.0	3152.4	2838.6	2375.3	1973.6	1605.2	2128.3	2291.8	2305.0	2324.3
47.5°	3432.0	3428.5	2619.7	2617.1	2174.9	1756.4	1769.6	2506.3	2528.3	2535.3
50°	3774.8	3211.3	2868.5	2771.8	2402.6	1926.1	1876.0	2299.7	2785.0	2792.0
52.5°	3701.9	3177.1	3154.2	2431.6	2606.5	2113.3	2064.1	2050.9	2887.0	3056.6
55°	3450.5	3476.8	3444.3	2668.1	1911.2	2280.4	2249.6	2236.4	2147.6	1700.2
57.5°	3730.0	3737.9	3709.8	2885.2	1943.7	1421.5	2214.4	1899.7	1234.3	1228.1
60°	4020.1	4033.3	2763.0	2119.5	1245.7	475.6	113.4	119.6	341.1	299.8
62.5°	4297.0	4310.2	2924.8	1936.7	786.8	35.2	22.9	15.8	17.6	17.6
65°	4658.3	4663.6	3130.5	2050.1	817.6	8.8	2.6	0.0	0.0	0.0
67.5°	4845.6	4737.5	3182.3	2101.9	839.5	5.3	1.8	0.0	0.0	0.0
70°	4562.5	4446.5	2962.6	1970.1	782.4	4.4	0.9	0.0	0.0	0.0
72.5°	4020.1	3963.8	2659.3	1746.8	692.7	2.6	0.9	0.0	0.0	0.0
75°	3331.8	3257.1	2204.8	1455.8	573.2	1.8	0.0	0.0	0.0	0.0
77.5°	2370.0	2378.8	1536.7	1061.1	390.3	1.8	0.0	0.0	0.0	0.0
80°	1037.3	1061.1	673.4	487.0	138.0	0.9	0.0	0.0	0.0	0.0
82.5°	197.8	182.0	87.9	69.4	17.6	0.0	0.0	0.0	0.0	0.0
85°	65.1	71.2	32.5	26.4	7.9	0.0	0.0	0.0	0.0	0.0
87.5°	22.9	29.0	9.7	7.9	1.8	0.0	0.0	0.0	0.0	0.0
90°	3.5	3.5	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
95°	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
100°	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
105°	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
110°	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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	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
117.5°	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
122.5°	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
127.5°	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
132.5°	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
137.5°	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
142.5°	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
147.5°	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
152.5°	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
157.5°	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
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)