

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: P579405

Luminaire Tested: **CTN-CA6-230-722-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579405  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA6-230-722-U-T5N-HSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (6) 2200K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23918 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G3

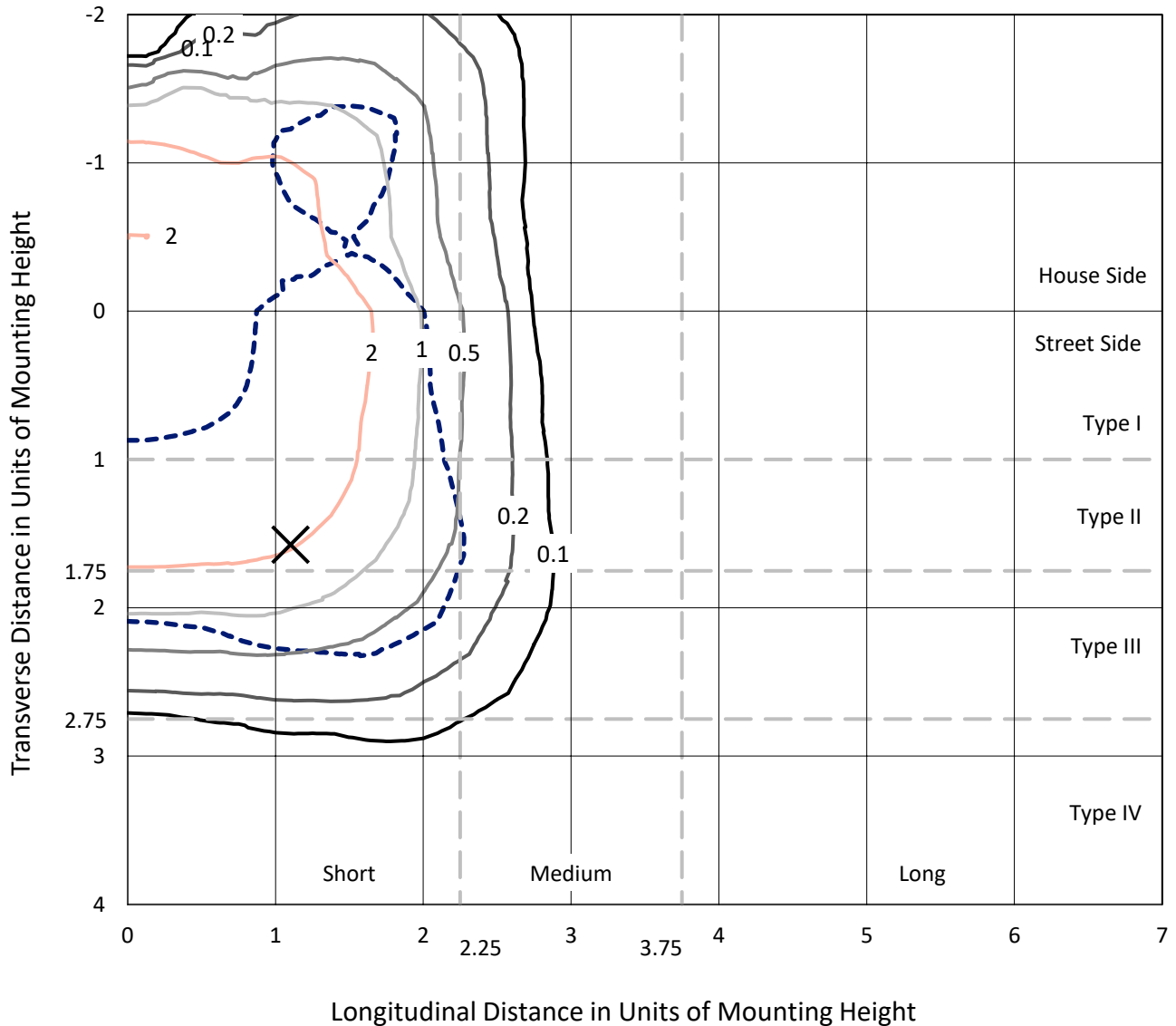
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

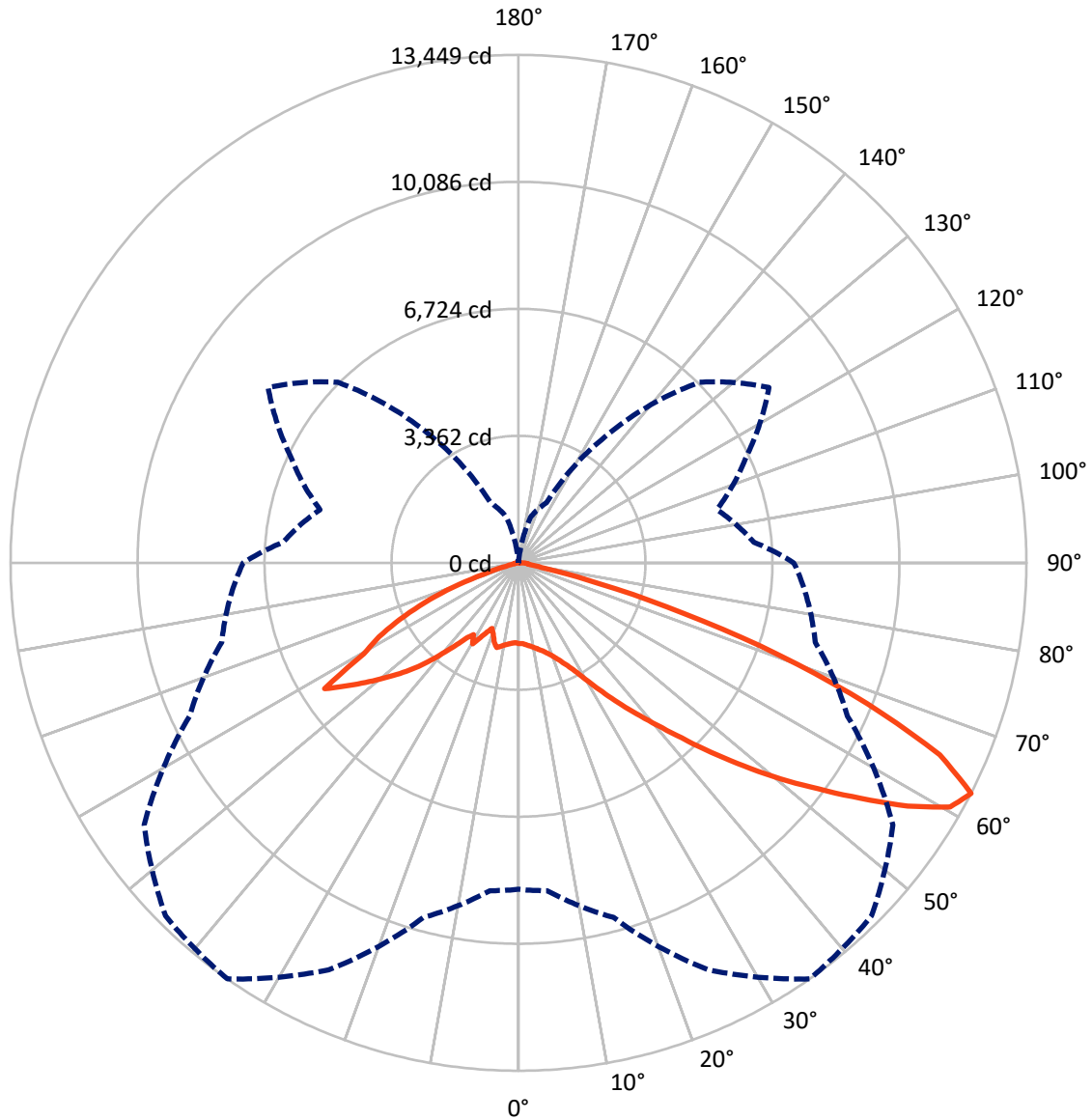
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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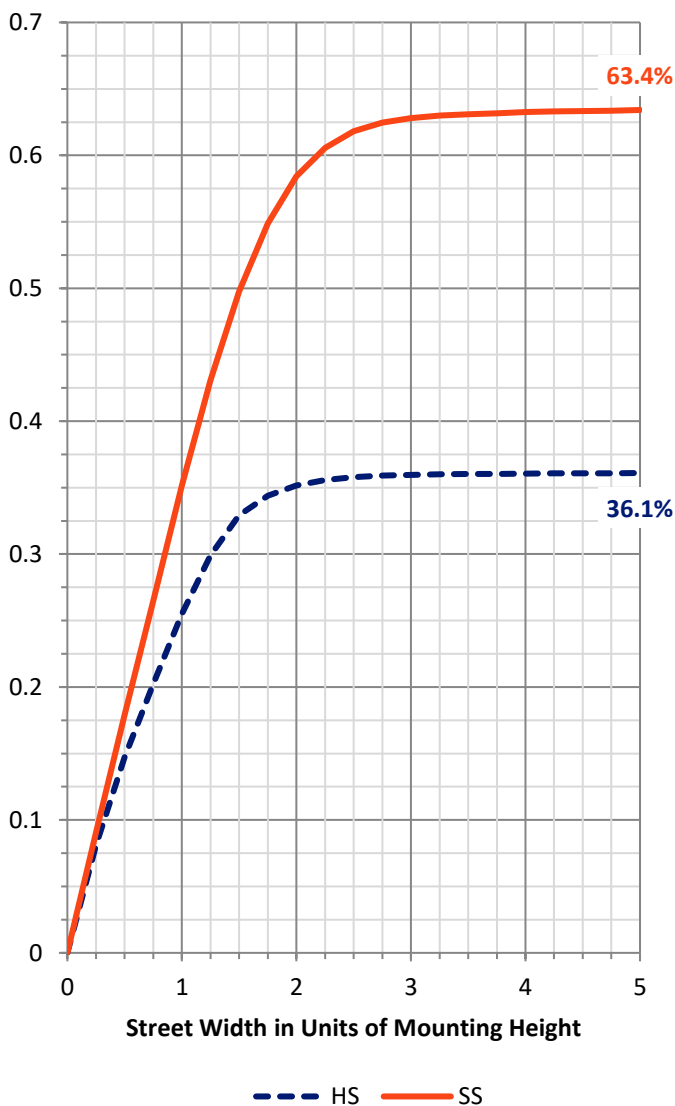
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8681.7	0.0	8681.7
	% Fixture	36.3	0.0	36.3
<b>Street Side</b>	Lumens	15225.0	11.3	15236.3
	% Fixture	63.7	0.0	63.7
<b>Total</b>	Lumens	23906.6	11.4	23918.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	210.4	0.9
10°-20°	680.0	2.8
20°-30°	1308.2	5.5
30°-40°	2609.8	10.9
40°-50°	4765.3	19.9
50°-60°	7121.0	29.8
60°-70°	5966.7	24.9
70°-80°	1116.6	4.7
80°-90°	128.5	0.5
90°-100°	10.2	0.0
100°-110°	1.1	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°	23906.6	100.0
0°-180°	23918.0	100.0

**Coefficient of Utilization**



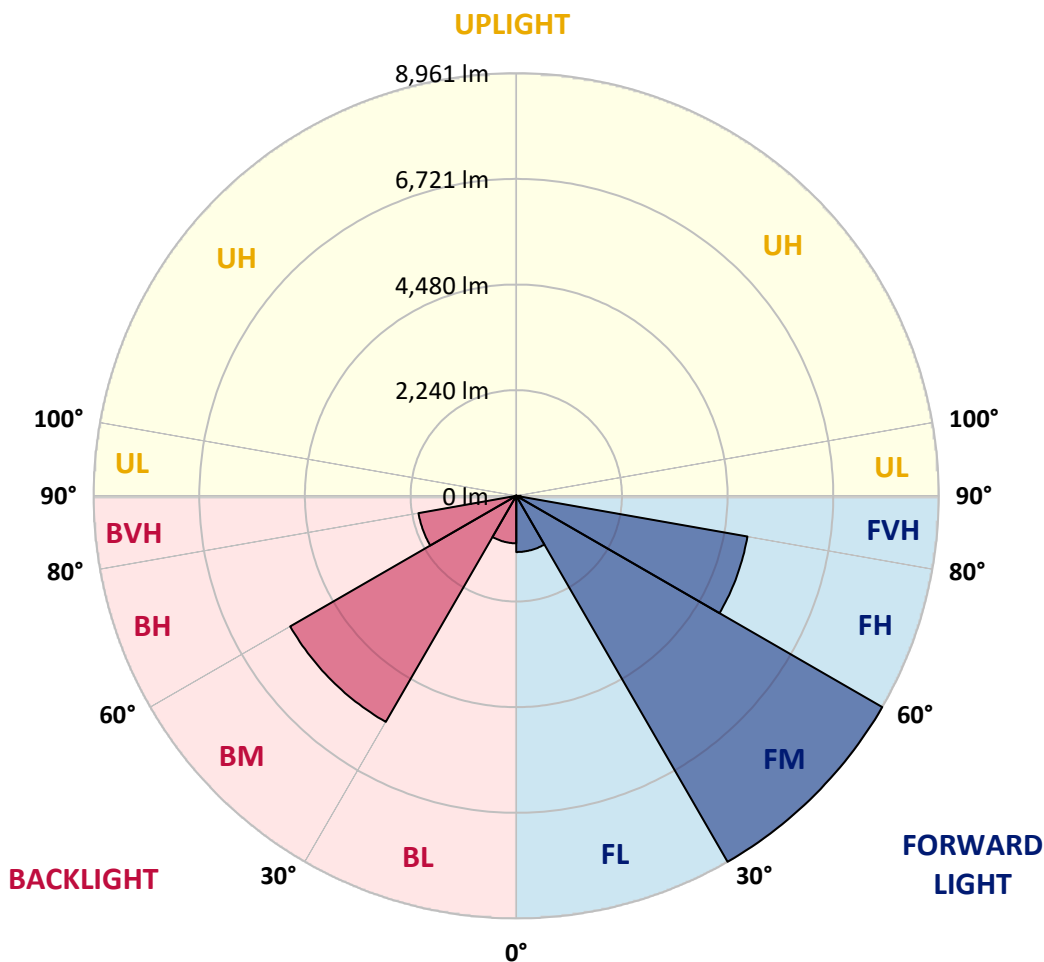
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1192.6	5.0			
FM (30°-60°)	8960.8	37.5			
FH (60°-80°)	4978.0	20.8			G2/5000
FVH (80°-90°)	93.6	0.4			G1/100
BL (0°-30°)	1006.0	4.2	B3/2500		
BM (30°-60°)	5535.3	23.1	B4/8500		
BH (60°-80°)	2105.4	8.8	B3/2500		G3/2500
BVH (80°-90°)	34.9	0.1			G1/100
UL (90°-100°)	10.2	0.0		U2/50	
UH (100°-180°)	1.1	0.0		U1/10	

**BUG Rating: B4-U2-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1
2.5°	2185.8	2167.9	2170.6	2183.1	2143.7	2159.8	2142.8	2158.9	2153.5	2160.7	2166.1
5°	2217.2	2194.8	2196.6	2210.9	2180.4	2193.9	2176.9	2187.6	2178.7	2188.5	2189.4
7.5°	2260.2	2241.4	2238.7	2253.1	2227.1	2238.7	2221.7	2227.1	2218.1	2229.8	2226.2
10°	2317.6	2300.6	2296.1	2306.0	2285.3	2291.6	2273.7	2280.9	2267.4	2280.9	2274.6
12.5°	2381.3	2358.9	2359.8	2370.5	2349.9	2354.4	2340.0	2348.1	2332.0	2346.3	2341.8
15°	2456.6	2424.3	2430.6	2442.2	2422.5	2436.0	2418.9	2430.6	2415.3	2430.6	2425.2
17.5°	2554.3	2517.6	2522.0	2540.9	2524.7	2546.2	2526.5	2540.9	2533.7	2543.6	2541.8
20°	2678.0	2653.8	2649.3	2672.7	2649.3	2676.2	2665.5	2690.6	2692.4	2702.2	2706.7
22.5°	2843.0	2826.9	2816.1	2832.2	2811.6	2830.5	2845.7	2888.7	2904.9	2930.9	2932.7
25°	3062.7	3061.8	3037.6	3038.5	3012.5	3037.6	3080.6	3147.8	3190.9	3224.0	3211.5
27.5°	3359.4	3364.8	3328.0	3313.7	3283.2	3320.9	3409.6	3493.0	3571.0	3617.6	3617.6
30°	3746.7	3752.1	3698.3	3669.6	3641.8	3707.3	3813.1	3921.6	4032.7	4100.0	4084.7
32.5°	4259.6	4242.5	4165.4	4113.4	4065.9	4141.2	4263.2	4386.0	4537.5	4634.3	4622.7
35°	4881.8	4819.9	4742.8	4646.0	4543.8	4603.0	4717.7	4871.9	5082.6	5227.9	5191.1
37.5°	5604.4	5543.5	5411.7	5244.9	5066.5	5073.7	5164.2	5431.4	5695.0	5813.3	5788.2
40°	6354.8	6307.3	6186.3	5972.0	5649.3	5574.8	5723.7	6045.5	6297.5	6446.3	6404.2
42.5°	7119.6	7071.2	6979.8	6764.6	6336.9	6157.6	6312.7	6663.3	6932.2	7078.4	7030.0
45°	7882.6	7827.0	7754.4	7564.3	7156.4	6893.7	6980.7	7302.5	7548.2	7714.0	7614.5
47.5°	8553.2	8516.5	8467.2	8390.1	8033.2	7742.7	7736.5	7948.9	8118.4	8227.8	8105.8
50°	9136.9	9110.9	9138.7	9122.5	8992.5	8728.1	8565.8	8551.4	8606.1	8685.9	8512.0
52.5°	9660.5	9614.8	9717.9	9846.1	9942.0	9888.2	9362.8	9067.9	9007.8	9034.7	8837.4
55°	10089.0	10067.5	10240.6	10562.4	11006.2	11124.6	10181.4	9569.9	9348.5	9334.1	9110.0
57.5°	10350.8	10381.3	10727.4	11340.6	12154.7	12192.4	11186.4	10107.0	9680.2	9526.0	9267.8
60°	9933.9	10051.4	10642.2	11907.3	13129.3	13152.6	11924.3	10205.6	9266.0	8920.8	8600.7
62.5°	8644.7	8714.6	9719.7	11888.4	13448.5	13220.7	12100.0	9610.3	8135.4	7584.9	7289.1
65°	6089.5	6220.4	7297.1	10696.0	12255.1	12283.8	11100.4	8309.4	6496.5	5887.7	5696.8
67.5°	3677.7	3803.2	4949.9	7721.2	9962.6	10284.5	9259.7	6291.2	4658.5	3889.3	3696.5
70°	1194.2	1330.5	2255.8	4551.0	7328.5	8100.5	6968.1	4094.6	2439.6	1708.9	1501.7
72.5°	453.7	494.9	734.3	1987.7	4564.4	5408.1	4309.8	2054.0	755.8	450.1	395.4
75°	295.0	301.2	343.4	696.6	2201.1	2977.5	2077.3	601.6	303.0	269.0	249.2
77.5°	253.7	258.2	276.1	347.0	701.1	1138.6	596.2	307.5	252.8	224.1	210.7
80°	239.4	241.2	252.8	294.1	328.1	380.1	286.9	257.3	220.6	210.7	200.8
82.5°	226.8	233.1	239.4	267.2	266.3	273.5	230.4	201.7	187.4	197.2	193.7
85°	211.6	215.2	219.7	238.5	217.0	183.8	177.5	139.0	135.4	144.3	135.4
87.5°	148.8	157.8	152.4	160.5	150.6	117.4	99.5	78.9	62.8	52.0	50.2
90°	61.0	61.9	58.3	53.8	47.5	39.4	31.4	19.7	9.0	4.5	1.8
92.5°	47.5	47.5	45.7	41.2	35.9	29.6	22.4	12.6	6.3	2.7	0.9
95°	29.6	30.5	28.7	26.0	22.4	17.9	13.4	7.2	4.5	1.8	0.9
97.5°	18.8	18.8	17.0	15.2	12.6	9.0	6.3	5.4	3.6	1.8	0.0
100°	10.8	10.8	9.9	8.1	6.3	4.5	4.5	3.6	2.7	0.9	0.0
102.5°	6.3	6.3	4.5	3.6	2.7	2.7	2.7	2.7	1.8	0.9	0.0
105°	2.7	2.7	1.8	1.8	0.9	0.9	1.8	1.8	1.8	0.9	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8	1.8	0.9	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8	0.9	0.9



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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°	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1	2140.1
2.5°	2162.5	2146.4	2149.1	2133.8	2131.1	2115.9	2146.4	2150.0	2141.0	2149.1
5°	2187.6	2167.9	2174.2	2157.1	2154.4	2133.8	2160.7	2158.9	2151.8	2159.8
7.5°	2225.3	2204.7	2208.2	2189.4	2185.8	2163.4	2188.5	2180.4	2173.3	2183.1
10°	2278.2	2254.9	2256.7	2232.4	2235.1	2205.5	2236.0	2221.7	2212.7	2226.2
12.5°	2341.8	2315.8	2316.7	2291.6	2290.7	2262.0	2288.9	2280.9	2267.4	2288.0
15°	2424.3	2394.7	2392.0	2358.9	2349.9	2317.6	2342.7	2327.5	2318.5	2348.1
17.5°	2540.0	2506.8	2496.9	2456.6	2288.9	2192.1	2326.6	2372.3	2316.7	2307.8
20°	2694.2	2666.4	2644.0	2583.0	2301.5	1999.3	1776.1	1777.9	2012.8	2121.3
22.5°	2903.1	2869.9	2827.8	2740.8	2111.4	1872.9	1873.8	1871.1	1605.7	1493.7
25°	3189.1	3148.7	3062.7	2571.3	2241.4	2020.9	2015.5	1752.8	1606.6	1614.7
27.5°	3575.5	3493.0	2989.1	2785.6	2472.7	2212.7	2083.6	1764.4	1782.4	1794.9
30°	4066.8	3735.1	3230.3	3109.3	2750.7	2467.3	1926.7	1970.6	2006.5	2014.6
32.5°	4570.7	3745.8	3615.8	3487.6	3093.1	2245.0	2171.5	2254.9	2292.5	2297.0
35°	4566.2	4204.9	4037.2	3892.9	3410.5	2401.9	2448.5	2576.7	2672.7	2668.2
37.5°	4832.5	4711.4	4511.5	4328.6	3069.8	2705.8	2789.2	2934.5	3051.0	3047.4
40°	5389.2	5249.4	5037.8	4654.1	3398.9	3053.7	3170.3	3326.3	3408.7	3413.2
42.5°	5915.5	5799.9	5583.8	4348.3	3810.4	3472.4	3578.2	3683.1	3734.2	3750.3
45°	6439.1	6356.6	5637.6	4805.6	4308.0	3893.8	3963.7	3983.4	4037.2	4031.0
47.5°	6864.1	6772.6	5420.6	5379.4	4911.4	4293.6	4288.3	4262.3	4282.0	4286.5
50°	7252.3	6150.4	5856.4	5993.5	5544.4	4701.6	4599.4	4546.5	4519.6	4507.9
52.5°	7558.9	6152.2	6263.4	6628.3	6258.9	5144.5	4924.8	4776.0	4181.6	4646.9
55°	7819.8	6406.0	6648.9	7307.0	6874.9	5608.0	5218.9	4953.5	2791.0	2237.8
57.5°	7969.6	6598.7	7030.9	7942.7	7412.8	6123.5	4804.7	4154.7	1578.0	1576.2
60°	7391.3	6252.6	7020.1	8276.2	7257.7	4750.0	1956.3	1637.1	298.6	306.6
62.5°	6257.1	5439.5	6657.9	8093.3	6759.2	4178.9	1754.6	1260.6	9.9	8.1
65°	4847.7	4339.4	5606.2	7118.7	6149.5	3486.7	1308.1	908.2	2.7	0.0
67.5°	3171.1	3058.2	4136.7	5903.0	5015.4	2701.3	877.7	434.8	1.8	0.0
70°	1352.0	1566.3	2620.7	4280.2	3839.1	1858.6	423.2	156.9	0.9	0.0
72.5°	378.4	501.2	1166.4	2507.7	2414.4	977.3	165.0	66.3	0.9	0.0
75°	224.1	192.8	334.4	1000.6	1175.4	343.4	76.2	51.1	0.9	0.0
77.5°	186.5	150.6	191.9	255.5	355.9	123.7	64.6	45.7	0.0	0.0
80°	174.8	133.6	165.9	178.4	175.7	103.1	63.7	45.7	0.0	0.0
82.5°	165.9	116.6	137.2	137.2	147.0	95.0	60.1	44.8	0.0	0.0
85°	124.6	81.6	91.4	118.3	105.8	67.2	43.9	35.9	0.0	0.0
87.5°	47.5	29.6	35.9	37.7	30.5	15.2	3.6	3.6	0.0	0.0
90°	0.9	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
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



REPORT NUMBER: P579405  
 CATALOG NUMBER: CTN-CA6-230-722-U-T5N-HSS-HM-EX90

**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)