

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: P579645

Luminaire Tested: **CTN-CA6-230-727-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579645  
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-CA6-230-727-U-T5N-HSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (6) 2700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24056 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G3

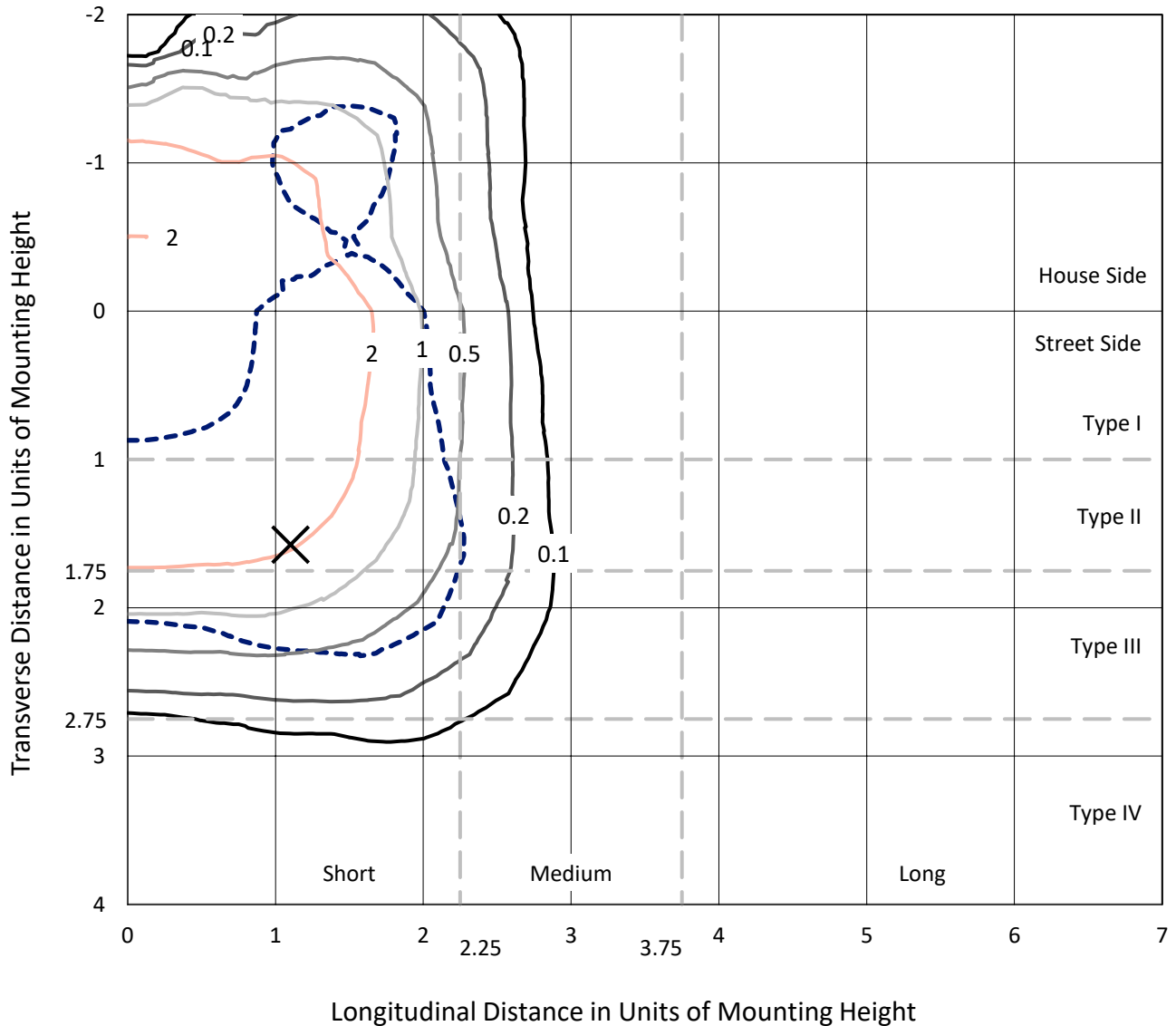
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P579645  
 CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX90

### Iso-Footcandle Lines of Horizontal Illumination

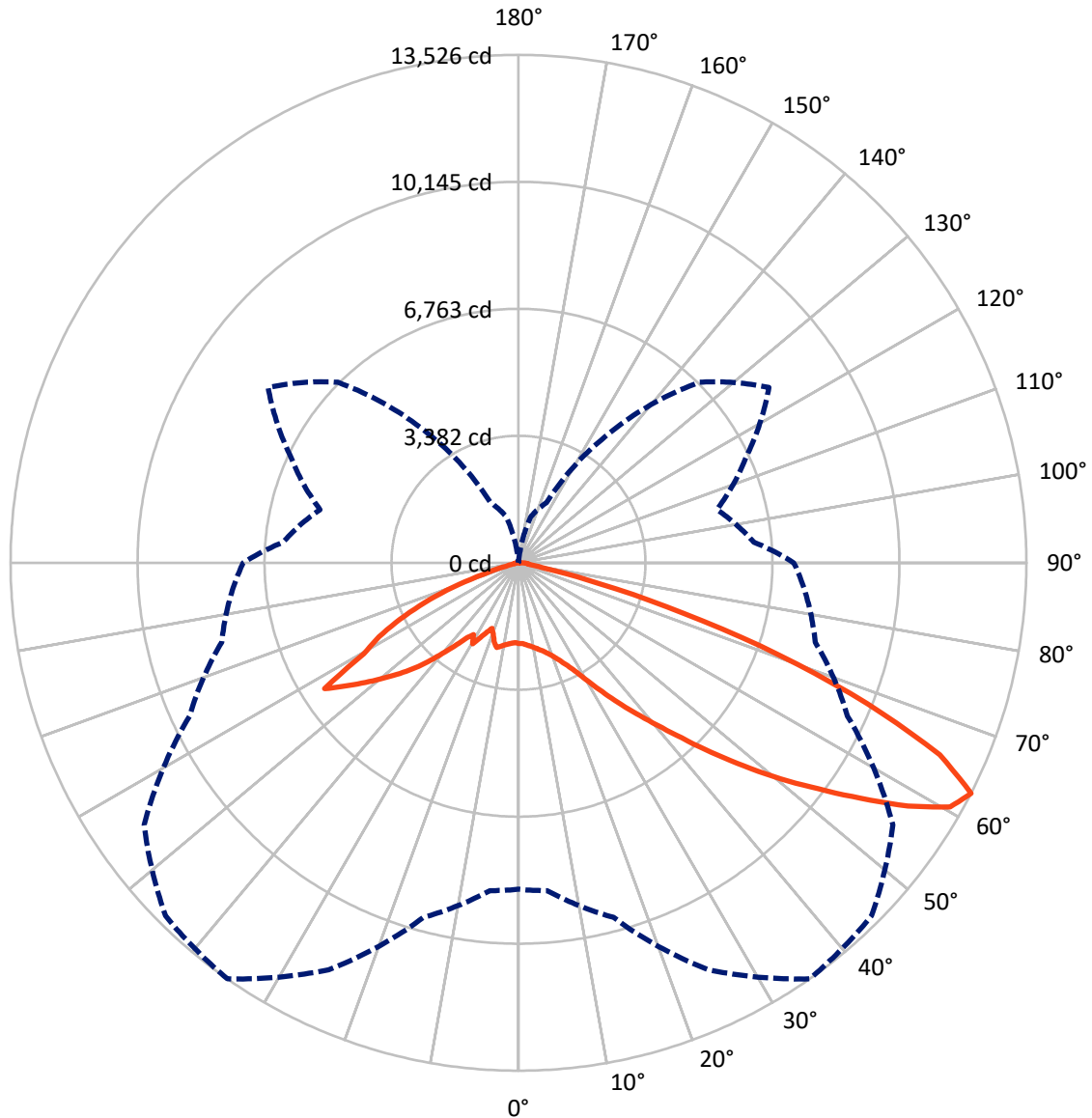
✕ Max cd  
 - - - 1/2 Max cd



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

REPORT NUMBER: P579645  
CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX90

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P579645  
 CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX90

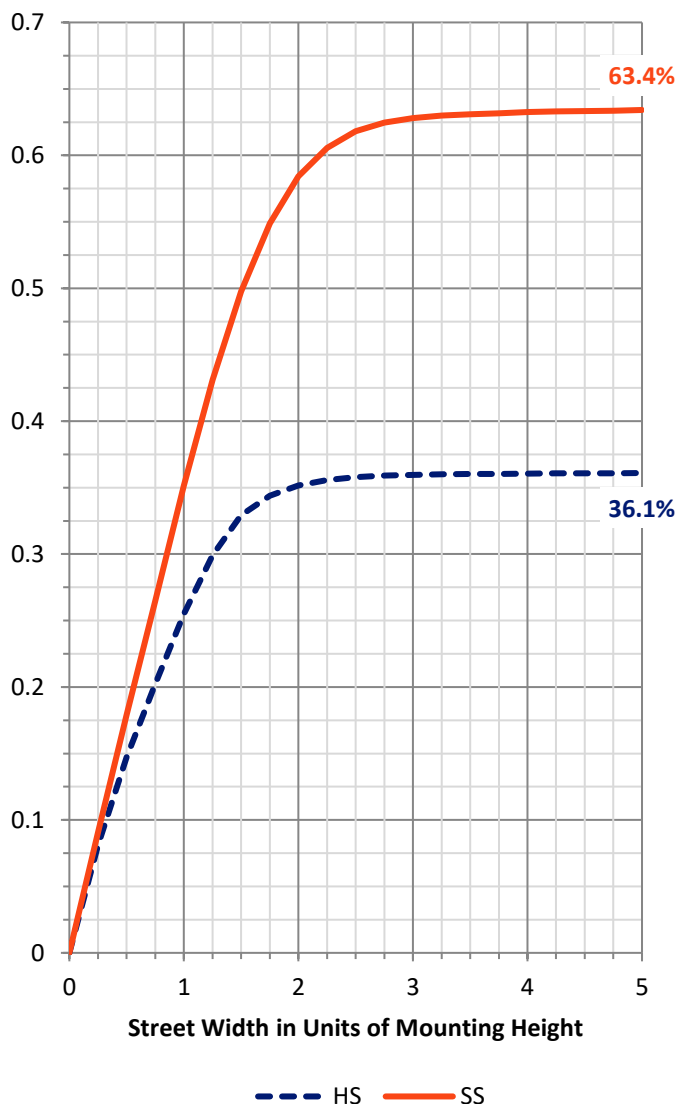
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8731.7	0.0	8731.8
	% Fixture	36.3	0.0	36.3
<b>Street Side</b>	Lumens	15312.8	11.4	15324.2
	% Fixture	63.7	0.0	63.7
<b>Total</b>	Lumens	24044.6	11.4	24056.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.6	0.9
10°-20°	683.9	2.8
20°-30°	1315.8	5.5
30°-40°	2624.8	10.9
40°-50°	4792.8	19.9
50°-60°	7162.1	29.8
60°-70°	6001.2	24.9
70°-80°	1123.1	4.7
80°-90°	129.3	0.5
90°-100°	10.3	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°	24044.6	100.0
0°-180°	24056.0	100.0

**Coefficient of Utilization**

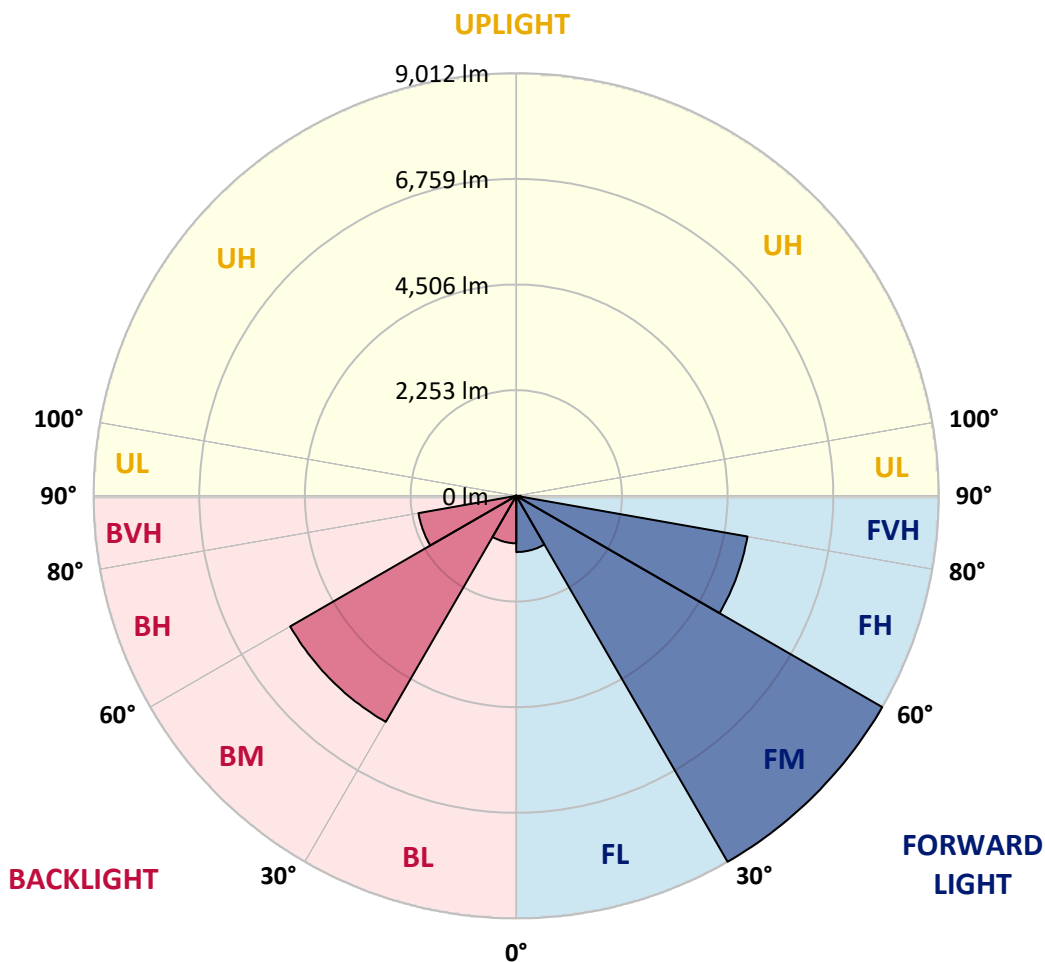


REPORT NUMBER: P579645  
 CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX90

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1199.5	5.0			
FM	(30°-60°)	9012.5	37.5			
FH	(60°-80°)	5006.7	20.8			G3/7500
FVH	(80°-90°)	94.1	0.4			G1/100
BL	(0°-30°)	1011.8	4.2	B3/2500		
BM	(30°-60°)	5567.3	23.1	B4/8500		
BH	(60°-80°)	2117.5	8.8	B3/2500		G3/2500
BVH	(80°-90°)	35.1	0.1			G1/100
UL	(90°-100°)	10.3	0.0		U2/50	
UH	(100°-180°)	1.1	0.0		U1/10	

**BUG Rating: B4-U2-G3**  
 Type III Short





REPORT NUMBER: P579645

CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX90

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4
2.5°	2198.4	2180.4	2183.1	2195.7	2156.1	2172.3	2155.2	2171.4	2166.0	2173.2	2178.6
5°	2230.0	2207.5	2209.3	2223.7	2193.0	2206.6	2189.4	2200.2	2191.2	2201.1	2202.0
7.5°	2273.3	2254.3	2251.6	2266.1	2239.9	2251.6	2234.5	2239.9	2230.9	2242.6	2239.0
10°	2331.0	2313.9	2309.3	2319.3	2298.5	2304.8	2286.8	2294.0	2280.5	2294.0	2287.7
12.5°	2395.0	2372.5	2373.4	2384.2	2363.5	2368.0	2353.5	2361.7	2345.4	2359.8	2355.3
15°	2470.8	2438.3	2444.6	2456.3	2436.5	2450.0	2432.9	2444.6	2429.3	2444.6	2439.2
17.5°	2569.0	2532.1	2536.6	2555.5	2539.3	2560.9	2541.1	2555.5	2548.3	2558.2	2556.4
20°	2693.5	2669.1	2664.6	2688.1	2664.6	2691.7	2680.9	2706.1	2707.9	2717.8	2722.3
22.5°	2859.4	2843.2	2832.4	2848.6	2827.8	2846.8	2862.1	2905.4	2921.6	2947.8	2949.6
25°	3080.3	3079.4	3055.1	3056.0	3029.8	3055.1	3098.4	3166.0	3209.3	3242.6	3230.0
27.5°	3378.8	3384.2	3347.2	3332.8	3302.2	3340.0	3429.3	3513.2	3591.6	3638.5	3638.5
30°	3768.4	3773.8	3719.7	3690.8	3662.9	3728.7	3835.1	3944.2	4056.0	4123.6	4108.3
32.5°	4284.2	4267.0	4189.5	4137.2	4089.4	4165.1	4287.8	4411.3	4563.7	4661.1	4649.4
35°	4910.0	4847.7	4770.2	4672.8	4570.0	4629.5	4744.9	4900.0	5111.9	5258.0	5221.1
37.5°	5636.8	5575.4	5442.9	5275.2	5095.7	5102.9	5194.0	5462.7	5727.8	5846.9	5821.6
40°	6391.5	6343.7	6222.0	6006.5	5681.8	5607.0	5756.7	6080.4	6333.8	6483.5	6441.1
42.5°	7160.7	7112.0	7020.0	6803.6	6373.5	6193.1	6349.1	6701.7	6972.2	7119.2	7070.5
45°	7928.1	7872.2	7799.1	7608.0	7197.7	6933.5	7020.9	7344.7	7591.7	7758.5	7658.5
47.5°	8602.6	8565.6	8516.0	8438.5	8079.6	7787.4	7781.1	7994.8	8165.2	8275.2	8152.6
50°	9189.6	9163.5	9191.4	9175.2	9044.4	8778.4	8615.2	8600.8	8655.8	8736.0	8561.1
52.5°	9716.2	9670.2	9773.9	9902.9	9999.4	9945.3	9416.8	9120.2	9059.8	9086.8	8888.4
55°	10147.3	10125.6	10299.6	10623.4	11069.7	11188.8	10240.1	9625.1	9402.4	9388.0	9162.6
57.5°	10410.6	10441.2	10789.3	11406.1	12224.9	12262.7	11251.0	10165.3	9736.1	9581.0	9321.3
60°	9991.3	10109.4	10703.6	11976.0	13205.0	13228.5	11993.1	10264.5	9319.5	8972.3	8650.4
62.5°	8694.6	8764.9	9775.7	11957.0	13526.1	13297.0	12169.8	9665.7	8182.4	7628.7	7331.1
65°	6124.6	6256.3	7339.2	10757.7	12325.8	12354.7	11164.4	8357.3	6534.0	5921.7	5729.6
67.5°	3698.9	3825.2	4978.5	7765.8	10020.1	10343.8	9313.1	6327.5	4685.4	3911.7	3717.9
70°	1201.1	1338.2	2268.8	4577.2	7370.8	8147.2	7008.3	4118.2	2453.6	1718.7	1510.4
72.5°	456.3	497.8	738.5	1999.2	4590.7	5439.3	4334.7	2065.9	760.2	452.7	397.7
75°	296.7	303.0	345.4	700.6	2213.8	2994.7	2089.3	605.1	304.8	270.5	250.7
77.5°	255.2	259.7	277.7	349.0	705.2	1145.2	599.7	309.3	254.3	225.4	211.9
80°	240.8	242.6	254.3	295.8	330.0	382.3	288.6	258.8	221.8	211.9	202.0
82.5°	228.1	234.5	240.8	268.7	267.8	275.0	231.7	202.9	188.5	198.4	194.8
85°	212.8	216.4	220.9	239.9	218.2	184.9	178.5	139.8	136.2	145.2	136.2
87.5°	149.7	158.7	153.3	161.4	151.5	118.1	100.1	79.4	63.1	52.3	50.5
90°	61.3	62.2	58.6	54.1	47.8	39.7	31.6	19.8	9.0	4.5	1.8
92.5°	47.8	47.8	46.0	41.5	36.1	29.8	22.5	12.6	6.3	2.7	0.9
95°	29.8	30.7	28.9	26.2	22.5	18.0	13.5	7.2	4.5	1.8	0.9
97.5°	18.9	18.9	17.1	15.3	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



REPORT NUMBER: P579645  
 CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX90

**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





REPORT NUMBER: P579645

CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4	2152.4
2.5°	2175.0	2158.8	2161.5	2146.1	2143.4	2128.1	2158.8	2162.4	2153.3	2161.5
5°	2200.2	2180.4	2186.7	2169.6	2166.9	2146.1	2173.2	2171.4	2164.2	2172.3
7.5°	2238.1	2217.4	2221.0	2202.0	2198.4	2175.9	2201.1	2193.0	2185.8	2195.7
10°	2291.3	2267.9	2269.7	2245.3	2248.0	2218.3	2248.9	2234.5	2225.5	2239.0
12.5°	2355.3	2329.2	2330.1	2304.8	2303.9	2275.1	2302.1	2294.0	2280.5	2301.2
15°	2438.3	2408.5	2405.8	2372.5	2363.5	2331.0	2356.2	2340.9	2331.9	2361.7
17.5°	2554.6	2521.3	2511.3	2470.8	2302.1	2204.7	2340.0	2386.0	2330.1	2321.1
20°	2709.7	2681.8	2659.2	2597.9	2314.8	2010.9	1786.3	1788.1	2024.4	2133.5
22.5°	2919.8	2886.5	2844.1	2756.6	2123.6	1883.7	1884.6	1881.9	1615.0	1502.3
25°	3207.5	3166.9	3080.3	2586.2	2254.3	2032.5	2027.1	1762.9	1615.9	1624.0
27.5°	3596.1	3513.2	3006.4	2801.7	2487.0	2225.5	2095.6	1774.6	1792.7	1805.3
30°	4090.3	3756.6	3249.0	3127.2	2766.5	2481.6	1937.8	1982.0	2018.1	2026.2
32.5°	4597.1	3767.5	3636.7	3507.8	3111.0	2258.0	2184.0	2267.9	2305.7	2310.3
35°	4592.5	4229.1	4060.5	3915.3	3430.2	2415.8	2462.6	2591.6	2688.1	2683.6
37.5°	4860.4	4738.6	4537.5	4353.6	3087.5	2721.4	2805.3	2951.4	3068.6	3065.0
40°	5420.3	5279.7	5066.9	4680.9	3418.5	3071.3	3188.5	3345.4	3428.4	3432.9
42.5°	5949.7	5833.3	5616.0	4373.4	3832.4	3492.4	3598.8	3704.3	3755.7	3772.0
45°	6476.3	6393.3	5670.1	4833.3	4332.8	3916.2	3986.6	4006.4	4060.5	4054.2
47.5°	6903.7	6811.7	5451.9	5410.4	4939.7	4318.4	4313.0	4286.9	4306.7	4311.2
50°	7294.2	6185.9	5890.1	6028.1	5576.3	4728.7	4625.9	4572.7	4545.7	4533.9
52.5°	7602.5	6187.7	6299.5	6666.5	6295.0	5174.2	4953.2	4803.6	4205.7	4673.7
55°	7865.0	6442.9	6687.3	7349.2	6914.5	5640.4	5249.0	4982.1	2807.1	2250.7
57.5°	8015.5	6636.8	7071.4	7988.5	7455.6	6158.9	4832.4	4178.7	1587.1	1585.3
60°	7433.9	6288.7	7060.6	8323.9	7299.6	4777.4	1967.6	1646.6	300.3	308.4
62.5°	6293.2	5470.8	6696.3	8140.0	6798.2	4203.0	1764.7	1267.8	9.9	8.1
65°	4875.7	4364.4	5638.6	7159.8	6185.0	3506.9	1315.6	913.5	2.7	0.0
67.5°	3189.4	3075.8	4160.6	5937.0	5044.3	2716.9	882.8	437.3	1.8	0.0
70°	1359.8	1575.3	2635.8	4304.9	3861.2	1869.3	425.6	157.8	0.9	0.0
72.5°	380.5	504.1	1173.2	2522.2	2428.4	982.9	165.9	66.7	0.9	0.0
75°	225.4	193.9	336.3	1006.3	1182.2	345.4	76.6	51.4	0.9	0.0
77.5°	187.6	151.5	193.0	257.0	358.0	124.4	64.9	46.0	0.0	0.0
80°	175.8	134.4	166.8	179.4	176.7	103.7	64.0	46.0	0.0	0.0
82.5°	166.8	117.2	138.0	138.0	147.9	95.6	60.4	45.1	0.0	0.0
85°	125.3	82.1	92.0	119.0	106.4	67.6	44.2	36.1	0.0	0.0
87.5°	47.8	29.8	36.1	37.9	30.7	15.3	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: P579645  
 CATALOG NUMBER: CTN-CA6-230-727-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)