

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: P579643

Luminaire Tested: **CTN-CA6-230-727-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579643
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-5)
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-EX120
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: 22184 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U2 - G3

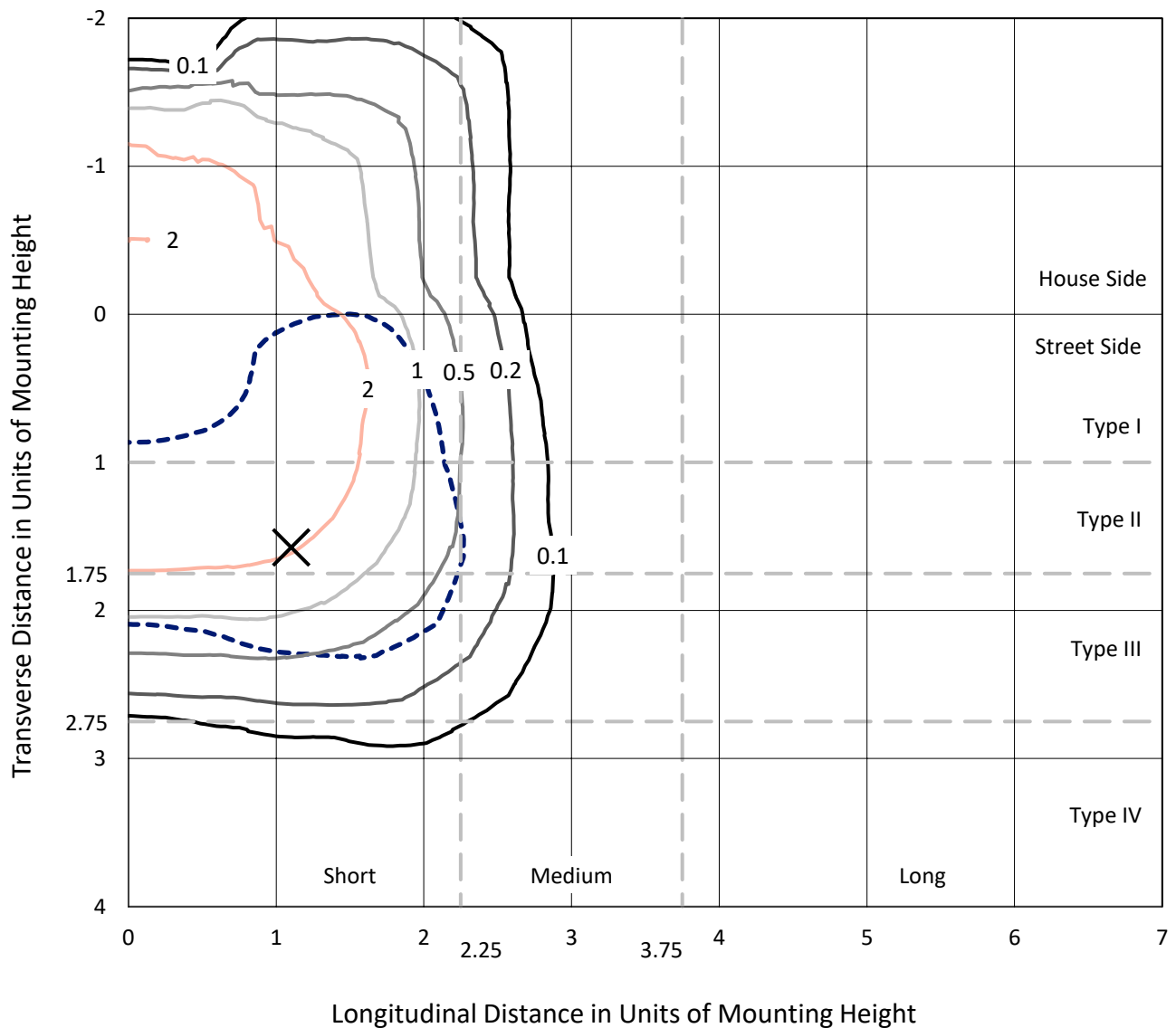
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

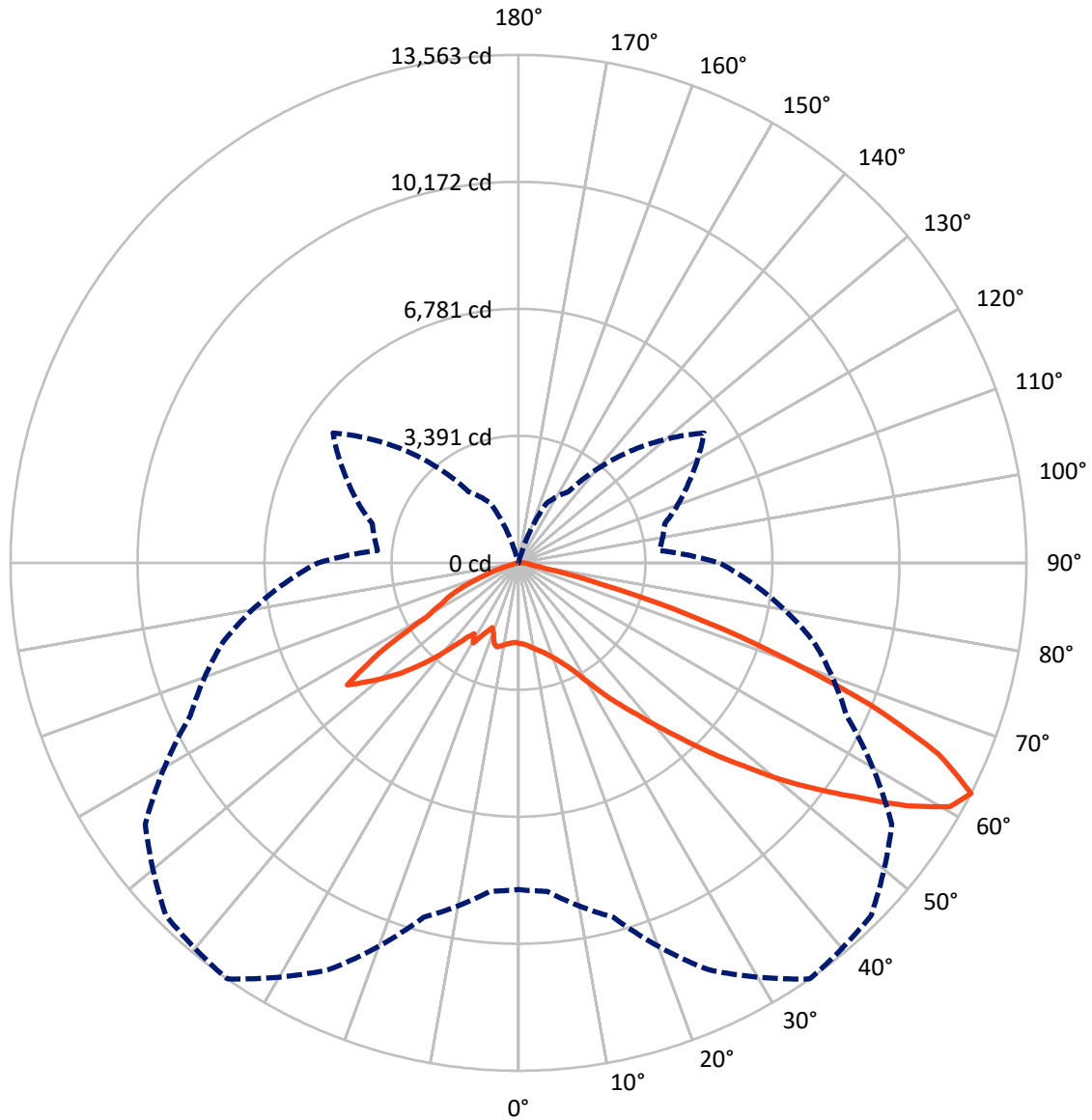
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Short - N/A

REPORT NUMBER: P579643
CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX120

Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX120

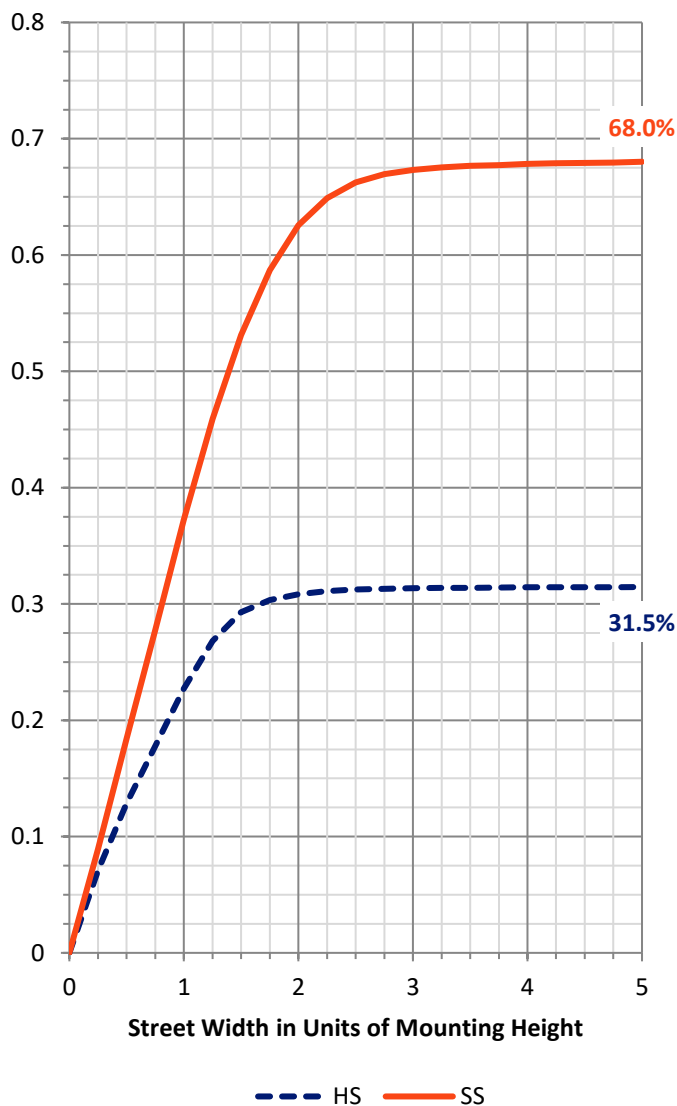
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7018.1	0.0	7018.1
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	15153.3	12.7	15165.9
	% Fixture	68.3	0.1	68.4
Total	Lumens	22171.3	12.7	22184.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.3	1.0
10°-20°	682.7	3.1
20°-30°	1267.7	5.7
30°-40°	2499.4	11.3
40°-50°	4486.7	20.2
50°-60°	6521.8	29.4
60°-70°	5359.9	24.2
70°-80°	1018.8	4.6
80°-90°	122.0	0.5
90°-100°	11.5	0.1
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°	22171.3	99.9
0°-180°	22184.0	100.0

Coefficient of Utilization



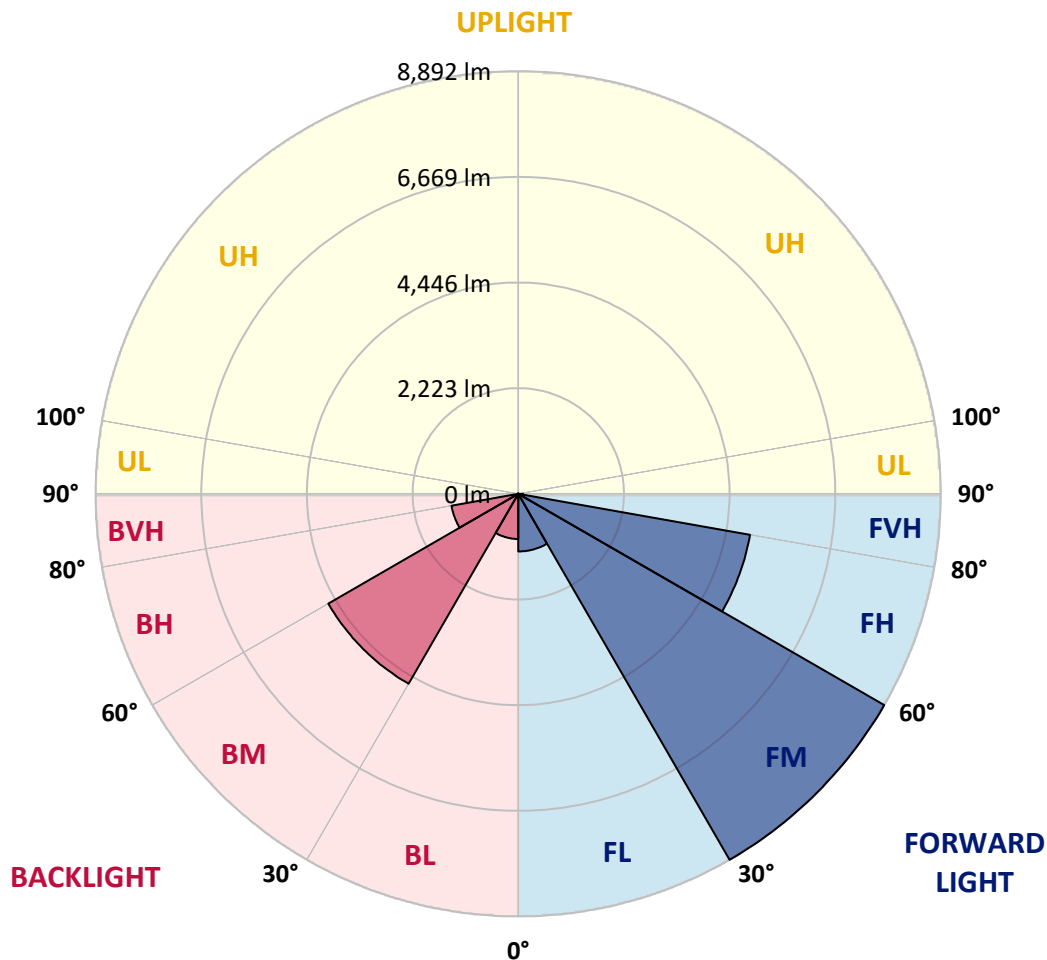
REPORT NUMBER: P579643
 CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1212.5	5.5			
FM (30°-60°)	8892.4	40.1			
FH (60°-80°)	4952.0	22.3			G2/5000
FVH (80°-90°)	96.4	0.4			G1/100
BL (0°-30°)	950.3	4.3	B2/1000		
BM (30°-60°)	4615.5	20.8	B3/5000		
BH (60°-80°)	1426.8	6.4	B3/2500		G3/2500
BVH (80°-90°)	25.5	0.1			G1/100
UL (90°-100°)	11.5	0.1		U2/50	
UH (100°-180°)	1.1	0.0		U1/10	

BUG Rating: B3-U2-G3

Type III Short





REPORT NUMBER: P579643

CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3
2.5°	2208.3	2190.3	2192.1	2205.6	2165.0	2178.5	2159.6	2175.8	2168.6	2175.8	2180.4
5°	2252.5	2229.9	2229.0	2242.6	2210.1	2218.2	2196.6	2207.4	2197.5	2206.5	2206.5
7.5°	2306.6	2287.7	2283.1	2294.0	2265.1	2268.7	2247.1	2251.6	2239.9	2251.6	2242.6
10°	2374.2	2357.1	2349.9	2355.3	2329.1	2330.9	2307.5	2309.3	2292.2	2302.1	2294.9
12.5°	2445.5	2422.0	2418.4	2427.4	2400.4	2396.8	2376.9	2378.7	2359.8	2368.8	2363.4
15°	2519.4	2495.1	2496.0	2505.0	2477.9	2479.7	2459.0	2462.6	2443.7	2452.7	2445.5
17.5°	2617.7	2593.3	2591.5	2607.8	2585.2	2592.4	2570.8	2575.3	2561.8	2563.6	2555.5
20°	2758.4	2726.8	2720.5	2743.9	2714.2	2723.2	2711.5	2726.8	2721.4	2716.9	2710.6
22.5°	2926.1	2901.7	2889.1	2907.1	2872.0	2889.1	2895.4	2927.0	2935.1	2929.7	2830.5
25°	3150.6	3138.0	3125.4	3117.2	3074.9	3101.9	3134.4	3186.7	3220.9	3234.5	3096.5
27.5°	3453.6	3459.9	3404.9	3395.9	3348.1	3390.5	3449.1	3533.8	3603.3	3628.5	3442.8
30°	3843.1	3851.2	3776.4	3754.7	3725.9	3762.0	3871.1	3963.9	4066.7	4109.1	3861.2
32.5°	4360.7	4353.5	4243.5	4202.0	4175.9	4190.3	4304.8	4431.9	4547.4	4642.9	4338.2
35°	4992.8	4970.3	4853.0	4738.5	4634.8	4679.0	4762.9	4917.1	5092.0	5232.7	4808.9
37.5°	5726.8	5705.2	5526.6	5340.0	5135.3	5154.2	5229.1	5480.6	5706.1	5743.0	4728.6
40°	6485.1	6476.1	6307.5	6070.4	5752.1	5662.8	5762.0	6068.6	6306.6	5661.9	4915.3
42.5°	7242.6	7199.3	7104.6	6867.5	6443.7	6247.1	6380.5	6687.1	6943.2	5936.0	5348.1
45°	8006.3	7962.2	7881.9	7707.9	7266.9	6981.1	7019.9	7359.8	7591.6	6450.0	5798.9
47.5°	8684.4	8652.0	8594.3	8496.9	8103.7	7844.9	7770.1	8008.1	8165.9	6867.5	6145.2
50°	9268.7	9240.8	9263.3	9230.9	9115.5	8844.0	8597.0	8581.6	8657.4	7239.0	6463.5
52.5°	9782.7	9744.9	9841.3	9955.9	10062.3	10001.8	9404.0	9125.4	9056.8	7517.6	6677.2
55°	10207.4	10193.9	10359.8	10669.1	11074.0	11232.7	10266.9	9627.6	9413.9	7753.9	6697.1
57.5°	10461.7	10494.2	10844.9	11443.7	12235.4	12310.2	11276.9	10161.4	9728.6	7897.2	6791.7
60°	10027.1	10137.1	10768.3	12024.4	13223.7	13256.1	12002.8	10267.9	9316.5	7381.5	6285.9
62.5°	8725.0	8804.4	9797.2	11987.4	13562.7	13315.7	12165.1	9667.3	8165.0	6261.5	5346.3
65°	6165.0	6257.0	7453.6	10809.8	12339.1	12348.1	11143.4	8359.8	6526.6	4847.6	4128.1
67.5°	3718.7	3867.5	5000.9	7847.6	10159.6	10344.5	9296.7	6329.2	4670.9	3165.0	2671.8
70°	1220.0	1356.2	2283.1	4644.7	7323.7	8115.5	6982.0	4112.7	2439.1	1338.1	1077.6
72.5°	483.3	545.5	804.3	2054.1	4719.6	5418.4	4302.1	1987.4	818.8	355.3	309.3
75°	322.8	329.1	371.5	699.7	2309.3	2963.0	2073.9	578.0	303.9	221.8	194.8
77.5°	281.3	282.2	301.2	368.8	752.0	1136.2	596.9	310.2	251.6	182.1	161.4
80°	257.9	261.5	273.2	314.7	344.5	385.9	294.9	258.8	218.2	167.7	152.4
82.5°	247.1	249.8	257.0	284.9	278.6	289.5	238.1	205.6	184.0	154.2	146.1
85°	225.4	229.9	234.4	251.6	229.0	198.4	184.0	138.0	131.7	116.3	107.3
87.5°	170.4	169.5	165.0	167.7	153.3	125.3	103.7	77.5	63.1	52.3	43.3
90°	71.2	72.1	69.4	65.8	57.7	47.8	36.1	21.6	10.8	3.6	1.8
92.5°	54.1	55.0	53.2	47.8	41.5	33.4	24.3	12.6	7.2	2.7	0.9
95°	33.4	34.3	32.5	28.9	25.2	18.9	12.6	8.1	4.5	1.8	0.0
97.5°	19.8	20.7	18.9	17.1	13.5	9.0	7.2	5.4	3.6	1.8	0.0
100°	11.7	11.7	10.8	9.0	6.3	5.4	4.5	3.6	2.7	0.9	0.0
102.5°	5.4	5.4	5.4	3.6	2.7	2.7	2.7	2.7	2.7	0.9	0.0
105°	1.8	1.8	0.9	0.9	0.9	1.8	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	0.9	0.9	0.0



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 CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX120

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: P579643

CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3	2153.3
2.5°	2175.8	2158.7	2161.4	2146.1	2142.5	2126.2	2155.1	2157.8	2149.7	2157.8
5°	2202.9	2182.2	2187.6	2170.4	2165.9	2143.4	2166.8	2165.0	2158.7	2166.8
7.5°	2242.6	2219.1	2221.8	2202.0	2197.5	2172.2	2193.9	2187.6	2180.4	2190.3
10°	2293.1	2270.5	2271.4	2244.4	2241.7	2212.8	2240.8	2229.0	2218.2	2232.7
12.5°	2363.4	2331.8	2329.1	2299.4	2298.5	2268.7	2297.6	2287.7	2273.2	2295.8
15°	2444.6	2402.2	2391.4	2353.5	2352.6	2321.0	2349.9	2334.5	2327.3	2354.4
17.5°	2550.1	2496.9	2414.8	2285.9	2227.2	2237.2	2339.1	2376.0	2279.5	2294.0
20°	2614.1	2356.2	2236.3	2183.1	2155.1	1994.6	1777.3	1795.3	2009.0	2110.9
22.5°	2505.9	2429.2	2385.0	2310.2	1920.7	1865.7	1878.3	1874.7	1598.7	1516.7
25°	2731.3	2659.2	2578.9	2117.2	2037.0	2013.5	2019.8	1761.1	1610.5	1616.8
27.5°	3055.9	2963.0	2454.5	2254.3	2238.1	2203.8	2079.4	1768.3	1787.2	1799.8
30°	3466.2	3136.2	2614.1	2526.6	2494.1	2457.2	1929.7	1975.7	2010.8	2049.6
32.5°	3863.0	3050.5	2919.8	2828.7	2778.2	2230.8	2176.7	2261.5	2296.7	2330.0
35°	3826.9	3417.5	3248.0	3132.6	3037.9	2407.6	2455.4	2584.3	2677.2	2676.3
37.5°	3926.1	3817.0	3621.3	3475.2	2636.6	2697.0	2797.1	2944.1	3056.8	3055.9
40°	4340.0	4221.8	4037.9	3724.1	2921.6	3062.2	3199.3	3337.3	3418.4	3424.7
42.5°	4751.1	4660.1	4494.2	3289.5	3270.5	3465.3	3608.7	3696.1	3745.7	3762.9
45°	5160.5	5074.9	4415.7	3638.4	3696.1	3889.1	3976.6	3993.7	4046.9	4045.1
47.5°	5486.0	5413.0	4062.2	4053.2	4196.6	4330.0	4302.1	4280.5	4294.0	4301.2
50°	5786.3	4712.4	4379.6	4511.3	4729.5	4745.7	4629.4	3667.3	4540.1	4524.8
52.5°	5375.1	4598.8	4675.4	4983.8	5355.3	5166.8	4939.6	3214.6	4257.9	4662.8
55°	4703.4	4780.9	4954.0	5471.6	5838.6	5615.0	5235.4	3310.2	2826.0	2300.3
57.5°	4797.1	4919.8	5248.9	5964.0	6284.1	4447.3	4886.4	2333.6	1579.8	1578.9
60°	4467.1	4652.9	5242.6	6184.9	5086.6	2849.4	1957.6	53.2	306.6	303.9
62.5°	3776.4	4040.6	5001.8	6045.1	4213.7	2315.6	1743.9	4.5	1.8	1.8
65°	2920.7	3231.8	4170.4	5234.5	3733.1	1994.6	1294.9	0.0	0.0	0.0
67.5°	1915.2	2203.8	3131.7	4348.1	3099.2	1507.7	870.2	0.0	0.0	0.0
70°	798.0	1154.2	1945.9	3142.5	2279.5	987.4	413.0	0.0	0.0	0.0
72.5°	230.8	351.7	876.5	1876.5	1414.8	516.7	153.3	0.0	0.0	0.0
75°	152.4	160.5	265.1	754.7	688.0	189.4	62.2	0.0	0.0	0.0
77.5°	128.0	131.7	168.6	211.0	220.9	74.8	50.5	0.0	0.0	0.0
80°	118.1	119.0	151.5	156.9	118.1	62.2	49.6	0.0	0.0	0.0
82.5°	110.0	107.3	128.9	124.4	98.3	54.1	46.0	0.0	0.0	0.0
85°	75.7	77.5	87.5	110.9	59.5	27.1	32.5	0.0	0.0	0.0
87.5°	23.4	27.1	34.3	35.2	10.8	3.6	0.0	0.0	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: P579643
 CATALOG NUMBER: CTN-CA6-230-727-U-T5N-HSS-HM-EX120

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)