

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: P579450

Luminaire Tested: **CTN-CA6-230-730-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-730-U-T5-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27312 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

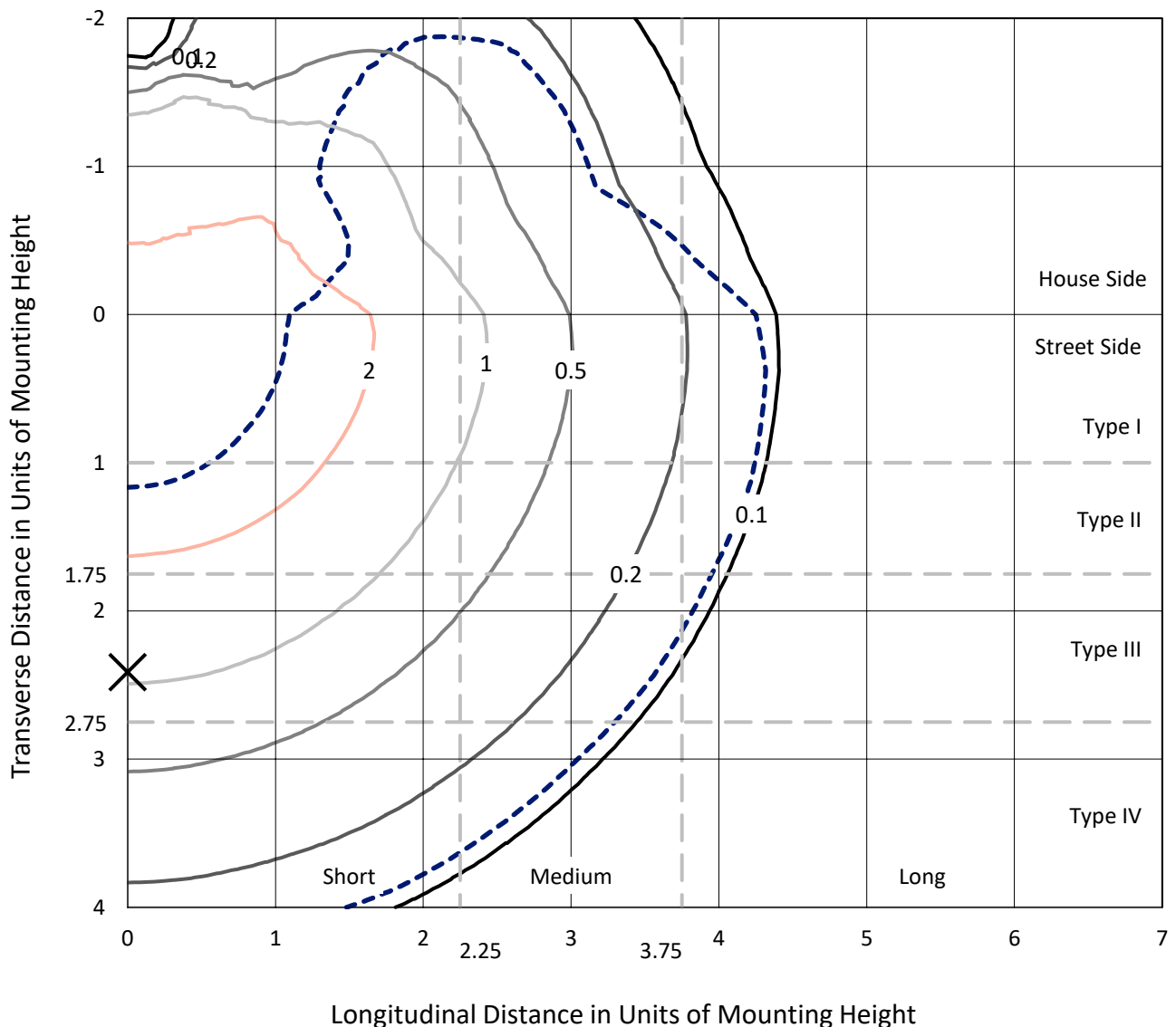
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

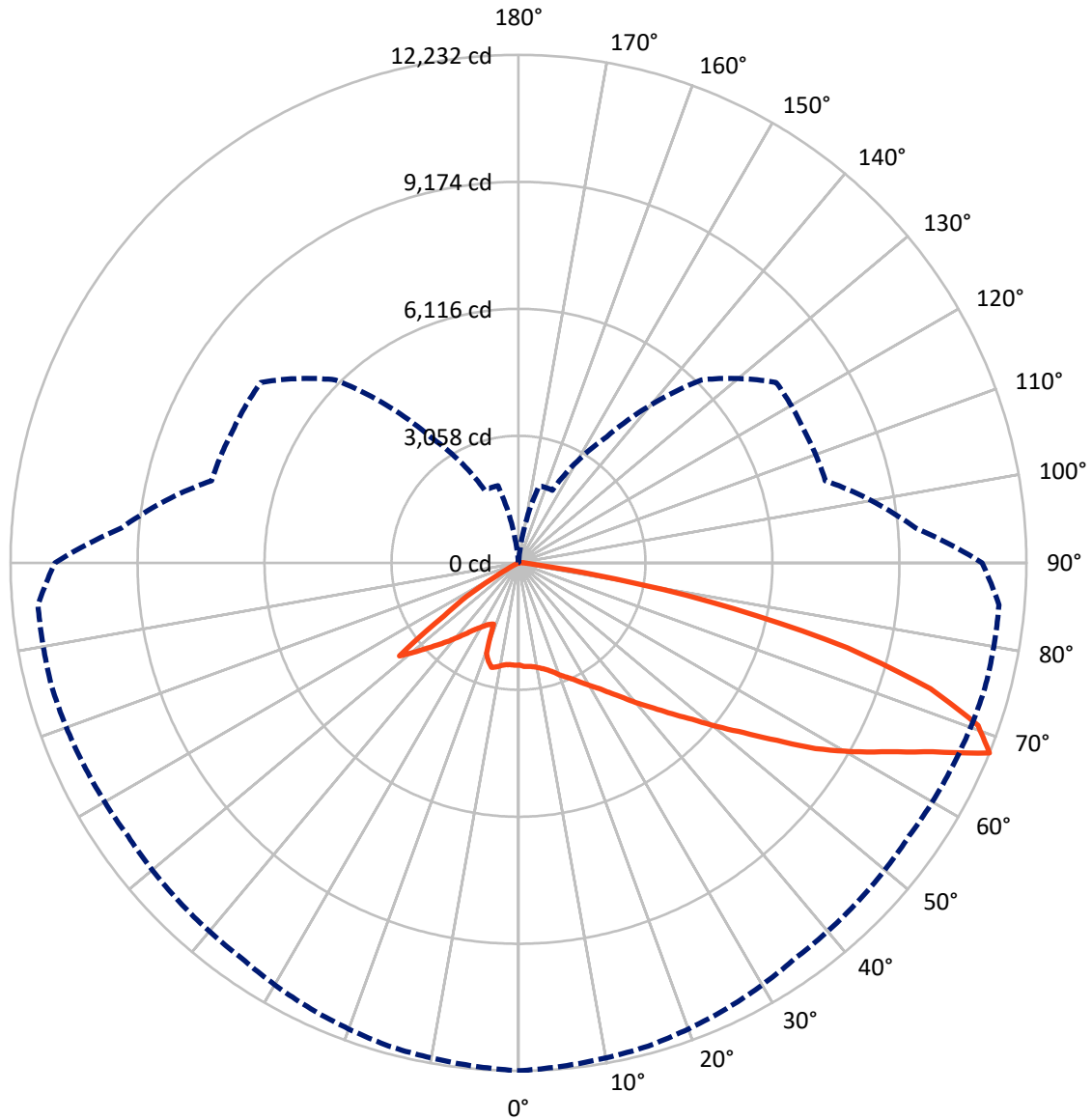
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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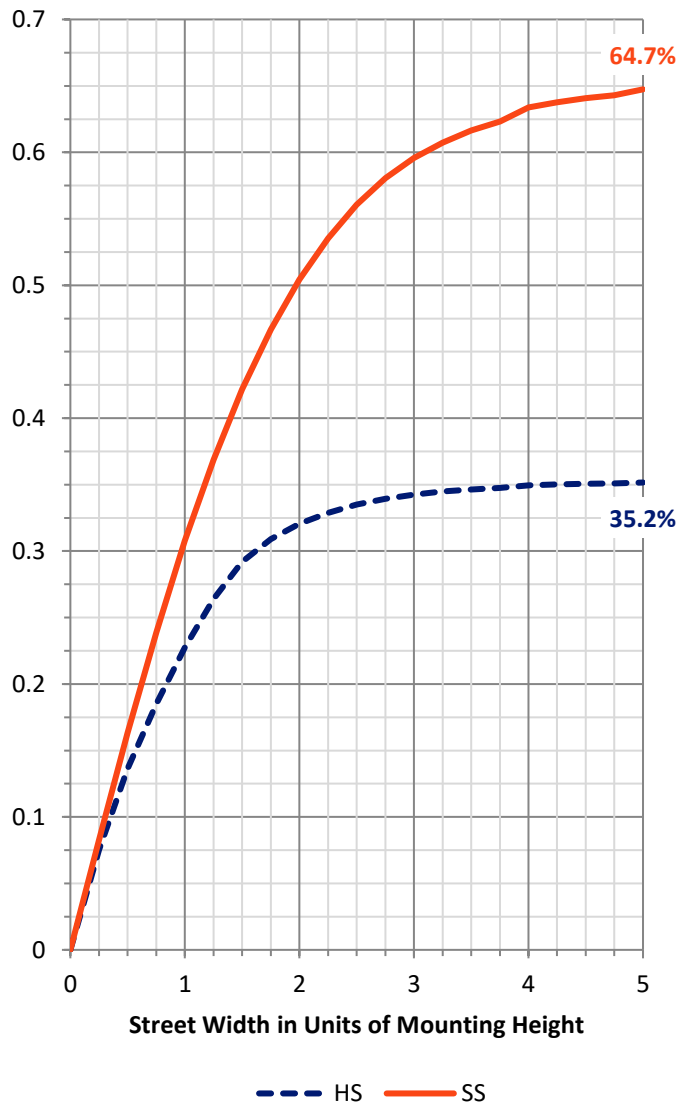
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9613.8	0.6	9614.3
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	17678.4	19.3	17697.6
	% Fixture	64.7	0.1	64.8
Total	Lumens	27292.2	19.8	27312.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.8	0.9
10°-20°	735.6	2.7
20°-30°	1275.3	4.7
30°-40°	2092.6	7.7
40°-50°	3490.5	12.8
50°-60°	5648.9	20.7
60°-70°	7797.3	28.5
70°-80°	5625.4	20.6
80°-90°	389.9	1.4
90°-100°	16.9	0.1
100°-110°	2.8	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°	27292.2	99.9
0°-180°	27312.0	100.0

Coefficient of Utilization

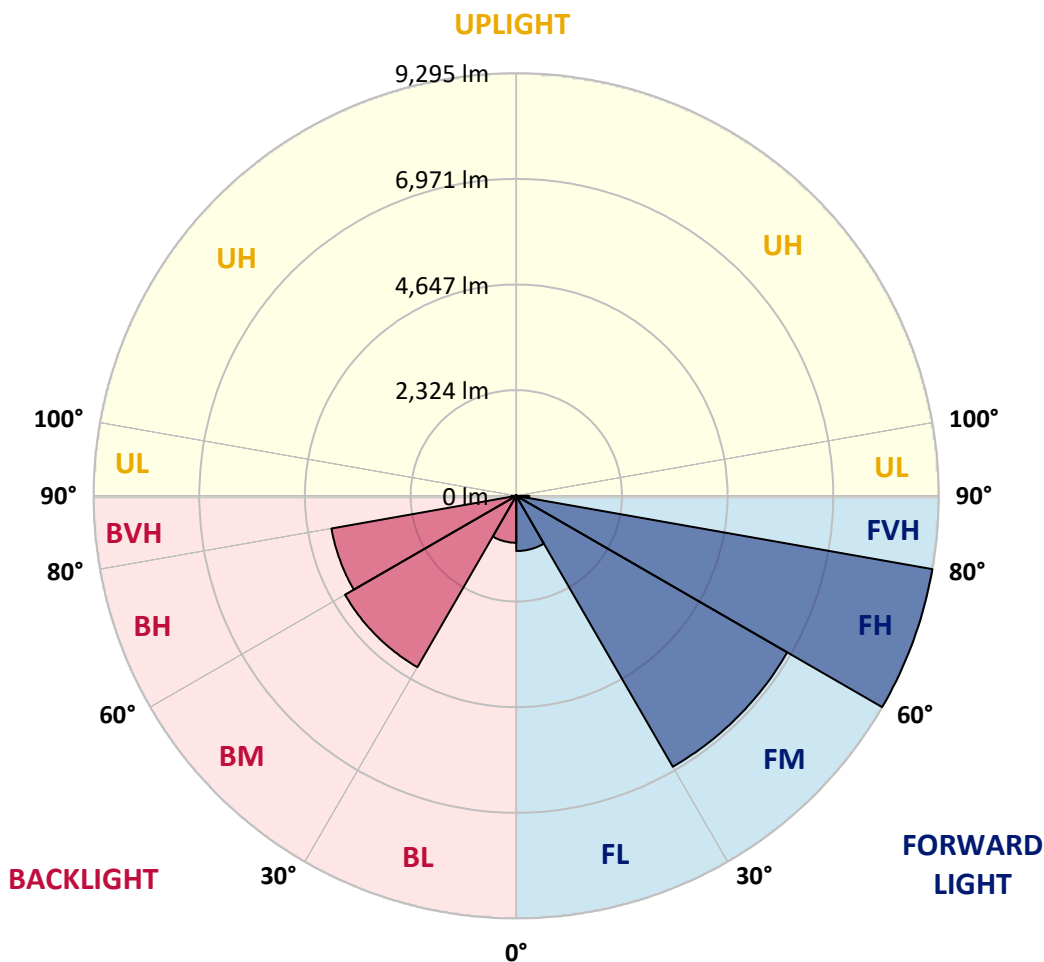


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1214.5	4.4			
FM	(30°-60°)	6881.9	25.2			
FH	(60°-80°)	9294.6	34.0			G4/12000
FVH	(80°-90°)	287.3	1.1			G3/500
BL	(0°-30°)	1033.1	3.8	B3/2500		
BM	(30°-60°)	4350.0	15.9	B3/5000		
BH	(60°-80°)	4128.0	15.1	B4/5000		G4/5000
BVH	(80°-90°)	102.6	0.4			G2/225
UL	(90°-100°)	16.9	0.1		U2/50	
UH	(100°-180°)	2.9	0.0		U1/10	

BUG Rating: B4-U2-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3
2.5°	2498.9	2484.3	2485.3	2500.0	2460.2	2474.9	2458.2	2472.8	2465.5	2470.7	2477.0
5°	2506.2	2488.5	2490.6	2508.3	2477.0	2488.5	2468.6	2477.0	2470.7	2477.0	2478.0
7.5°	2525.1	2507.3	2508.3	2521.9	2489.5	2497.9	2479.1	2483.2	2472.8	2484.3	2481.2
10°	2564.8	2548.1	2541.8	2553.3	2525.1	2526.1	2504.2	2508.3	2492.7	2508.3	2502.1
12.5°	2618.1	2595.1	2597.2	2603.5	2569.0	2571.1	2544.9	2551.2	2525.1	2547.0	2539.7
15°	2683.0	2654.7	2657.9	2668.3	2634.9	2631.7	2607.7	2607.7	2584.7	2601.4	2594.1
17.5°	2772.9	2741.5	2739.4	2746.7	2719.5	2719.5	2692.4	2689.2	2666.2	2679.8	2677.7
20°	2890.0	2854.4	2848.2	2861.7	2827.2	2831.4	2796.9	2793.8	2768.7	2777.1	2778.1
22.5°	2995.6	2967.3	2966.3	2987.2	2946.4	2951.7	2920.3	2911.9	2891.0	2902.5	2905.7
25°	3116.9	3112.7	3109.5	3116.9	3076.1	3076.1	3054.1	3046.8	3033.2	3041.6	3049.9
27.5°	3269.5	3267.4	3259.1	3260.1	3225.6	3230.8	3206.8	3202.6	3196.3	3195.3	3191.1
30°	3437.9	3428.4	3416.9	3424.3	3408.6	3413.8	3392.9	3379.3	3377.2	3378.3	3372.0
32.5°	3625.0	3612.5	3605.2	3617.7	3624.0	3638.6	3637.6	3599.9	3599.9	3615.6	3587.4
35°	3857.1	3837.3	3843.5	3860.3	3872.8	3910.5	3904.2	3878.0	3886.4	3893.7	3860.3
37.5°	4130.0	4116.4	4144.7	4176.0	4177.1	4230.4	4217.9	4224.1	4223.1	4213.7	4191.7
40°	4457.3	4435.3	4464.6	4488.7	4474.0	4537.8	4535.7	4563.9	4582.8	4615.2	4602.6
42.5°	4782.5	4765.7	4794.0	4846.3	4837.9	4911.1	4921.5	4965.4	4991.6	5041.8	5012.5
45°	5182.9	5173.5	5199.7	5240.4	5268.7	5365.9	5404.6	5423.4	5489.3	5549.9	5482.0
47.5°	5631.5	5644.0	5639.8	5714.1	5776.8	5895.0	5910.6	5971.3	6028.8	6095.7	6029.8
50°	6189.8	6168.9	6187.7	6258.8	6361.3	6447.0	6527.5	6614.3	6670.8	6739.8	6618.5
52.5°	6791.0	6808.8	6850.6	6960.4	7035.7	7137.1	7210.3	7313.8	7369.2	7428.8	7270.9
55°	7549.1	7563.7	7609.7	7722.6	7776.0	7891.0	7941.2	8044.7	8098.0	8124.1	7922.3
57.5°	8437.8	8388.7	8426.3	8484.9	8567.5	8691.9	8705.5	8802.7	8802.7	8836.2	8579.0
60°	9231.4	9197.9	9237.7	9321.3	9353.7	9466.7	9455.2	9534.6	9555.5	9530.4	9223.0
62.5°	10013.5	10019.8	10071.0	10098.2	10085.6	10152.6	10179.7	10263.4	10228.9	10237.2	9882.8
65°	10962.9	10977.5	10972.3	10922.1	10809.2	10940.9	10933.6	11066.4	11074.8	11150.0	10738.1
67.5°	12232.2	12167.4	12049.2	11847.4	11623.7	11546.3	11478.3	11544.2	11628.9	11615.3	11163.6
70°	11738.7	11633.1	11571.4	11395.7	11096.7	10942.0	10800.8	10812.3	10935.7	10947.2	10485.0
72.5°	10377.4	10324.0	10086.7	9933.0	9728.1	9608.9	9438.4	9477.1	9638.1	9665.3	9297.3
75°	8185.8	8136.7	7922.3	7872.2	7770.7	7829.3	7787.5	7803.1	7932.8	7813.6	7593.0
77.5°	5297.9	5309.4	5276.0	5390.0	5385.8	5388.9	5541.6	5557.2	5683.8	5610.6	5397.3
80°	2375.6	2410.1	2491.6	2656.8	2556.4	2610.8	2669.4	2651.6	2779.1	2490.6	2594.1
82.5°	481.0	497.7	469.5	490.4	458.0	474.7	498.7	462.1	458.0	424.5	394.2
85°	247.8	250.9	249.9	244.7	215.4	198.7	191.3	161.0	145.3	142.2	131.7
87.5°	161.0	163.1	157.9	156.8	138.0	126.5	112.9	95.1	79.5	55.4	46.0
90°	98.3	98.3	93.1	87.8	78.4	70.1	56.5	40.8	24.0	9.4	5.2
92.5°	65.9	65.9	63.8	60.6	54.4	47.1	36.6	24.0	11.5	4.2	2.1
95°	41.8	41.8	40.8	39.7	35.5	30.3	23.0	14.6	7.3	3.1	1.0
97.5°	27.2	27.2	27.2	26.1	24.0	20.9	15.7	9.4	5.2	2.1	1.0
100°	16.7	17.8	16.7	16.7	15.7	13.6	10.5	6.3	4.2	2.1	1.0
102.5°	9.4	9.4	10.5	10.5	9.4	8.4	6.3	5.2	3.1	2.1	1.0
105°	4.2	4.2	5.2	5.2	5.2	4.2	4.2	3.1	2.1	2.1	1.0
107.5°	1.0	1.0	1.0	2.1	3.1	3.1	3.1	3.1	2.1	1.0	1.0
110°	0.0	0.0	0.0	1.0	1.0	2.1	2.1	2.1	2.1	1.0	1.0



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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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CATALOG NUMBER: CTN-CA6-230-730-U-T5-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3	2461.3
2.5°	2470.7	2458.2	2467.6	2451.9	2447.7	2434.1	2460.2	2464.4	2462.3	2466.5
5°	2472.8	2457.1	2468.6	2452.9	2451.9	2437.2	2464.4	2465.5	2458.2	2461.3
7.5°	2479.1	2464.4	2472.8	2455.0	2457.1	2439.3	2470.7	2469.7	2465.5	2472.8
10°	2502.1	2485.3	2488.5	2469.7	2474.9	2456.1	2494.7	2496.8	2492.7	2506.2
12.5°	2541.8	2518.8	2526.1	2504.2	2508.3	2489.5	2536.6	2539.7	2539.7	2561.7
15°	2596.2	2572.1	2587.8	2559.6	2560.6	2532.4	2567.9	2567.9	2572.1	2602.4
17.5°	2675.6	2646.4	2667.3	2641.1	2478.0	2416.3	2537.6	2611.9	2488.5	2478.0
20°	2773.9	2760.3	2771.8	2729.0	2464.4	2182.1	1962.5	1951.0	2194.7	2316.0
22.5°	2894.2	2880.6	2885.8	2831.4	2199.9	2001.2	1998.1	1977.2	1672.9	1589.3
25°	3035.3	3028.0	3016.5	2560.6	2274.1	2083.8	2058.7	1785.8	1611.2	1626.9
27.5°	3186.9	3165.0	2777.1	2659.9	2388.1	2166.4	2024.2	1667.7	1661.4	1676.1
30°	3356.3	3240.2	2842.9	2803.2	2520.9	2268.9	1761.8	1740.9	1740.9	1763.9
32.5°	3571.7	3025.9	3025.9	3005.0	2685.0	1991.8	1854.9	1842.3	1856.9	1866.4
35°	3539.3	3254.9	3288.3	3278.9	2907.8	2028.4	2004.4	1983.5	1986.6	1986.6
37.5°	3549.7	3561.2	3601.0	3560.2	2536.6	2187.3	2148.7	2144.5	2147.6	2154.9
40°	3878.0	3884.3	3899.0	3809.0	2725.8	2372.4	2319.1	2308.6	2319.1	2334.8
42.5°	4231.5	4249.2	4266.0	3464.0	2990.4	2582.6	2529.3	2509.4	2528.2	2544.9
45°	4649.7	4676.9	4420.7	3770.4	3289.4	2822.0	2765.6	2741.5	2753.0	2767.6
47.5°	5120.2	5163.1	4168.7	4160.4	3640.7	3105.4	3040.5	2994.5	3012.3	3011.3
50°	5651.3	4934.1	4605.8	4600.5	4032.8	3421.1	3354.2	3312.4	3326.0	3315.5
52.5°	6225.4	5069.0	5079.4	5078.4	4442.7	3760.9	3699.3	3647.0	3539.3	3638.6
55°	6813.0	5535.3	5575.0	5568.7	4872.4	4112.3	4046.4	3997.2	2611.9	2206.2
57.5°	7397.5	6022.5	6035.1	6049.7	5317.8	4451.0	4161.4	3822.6	1489.9	1482.6
60°	7974.6	6486.8	6511.9	6520.2	5558.3	3684.6	1701.2	1732.5	450.6	538.5
62.5°	8572.7	6944.7	6967.7	6960.4	5797.7	3426.4	1786.9	1751.3	41.8	38.7
65°	9336.0	7518.7	7486.3	7462.3	6175.2	3656.4	1919.7	1910.3	13.6	9.4
67.5°	9603.6	7649.4	7583.6	7575.2	6229.5	3705.5	1930.1	1922.8	13.6	9.4
70°	8997.2	7152.8	7039.9	7043.0	5796.7	3466.1	1800.5	1790.0	12.5	9.4
72.5°	7879.5	6317.4	6270.3	6021.5	5019.8	3048.9	1596.6	1556.9	12.5	8.4
75°	6469.0	5103.5	4998.9	4719.7	3995.2	2423.6	1253.6	1202.4	11.5	7.3
77.5°	4490.8	3579.0	3379.3	3094.9	2672.5	1607.1	842.7	776.9	10.5	7.3
80°	2035.7	1469.0	1476.4	1131.3	906.5	544.7	267.7	242.6	9.4	6.3
82.5°	354.5	261.4	245.7	237.3	197.6	133.8	81.6	70.1	8.4	4.2
85°	123.4	99.3	109.8	129.7	115.0	80.5	50.2	48.1	5.2	2.1
87.5°	41.8	43.9	51.2	61.7	54.4	31.4	18.8	13.6	1.0	0.0
90°	4.2	5.2	5.2	5.2	3.1	0.0	0.0	0.0	0.0	0.0
92.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579450
 CATALOG NUMBER: CTN-CA6-230-730-U-T5-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)