

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: STREETWORKS

Report Number: P579428

Luminaire Tested: **CST-CA10-210-730-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579428  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA10-210-730-U-T5N-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23213 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U2 - G3

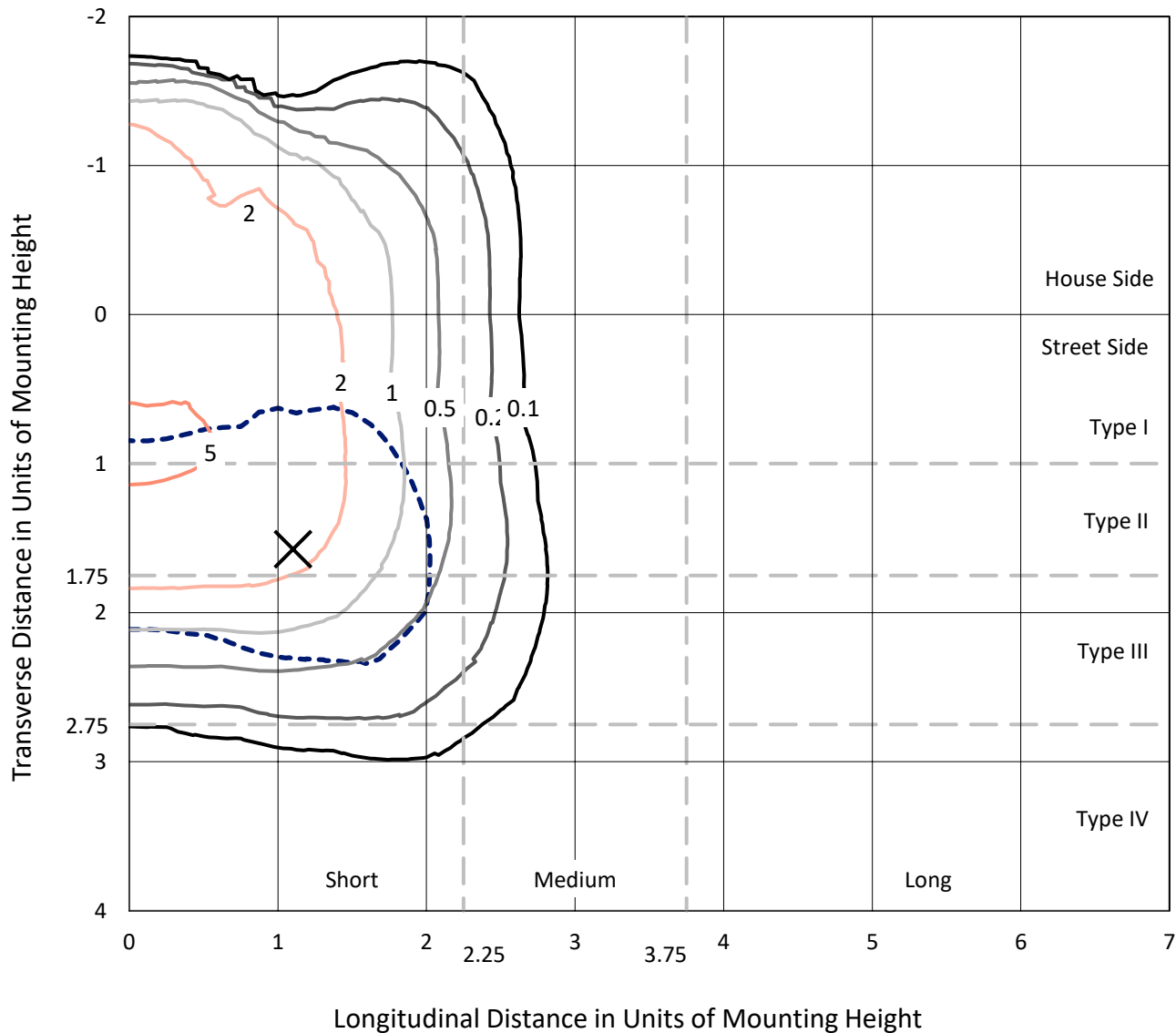
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

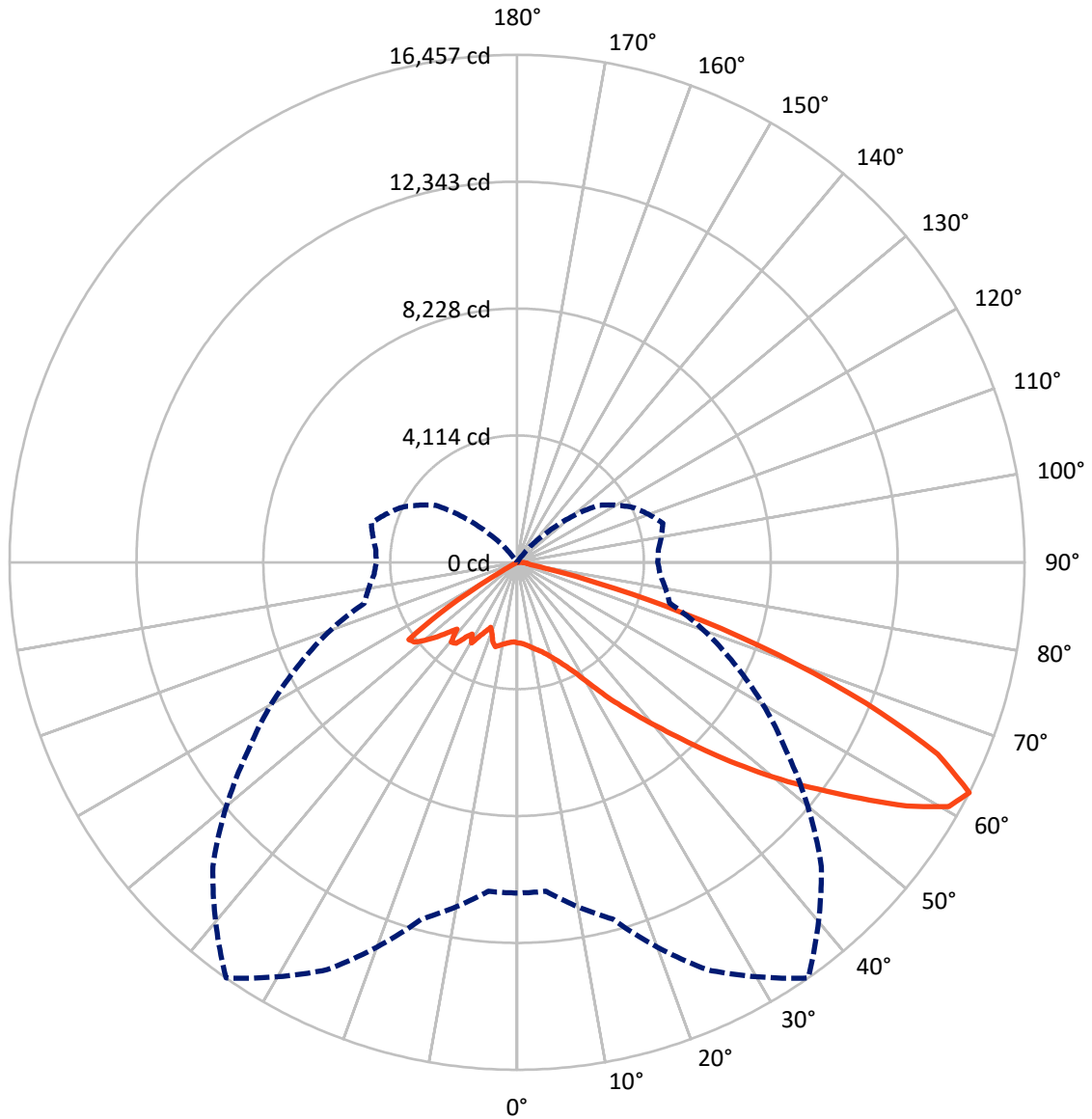
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 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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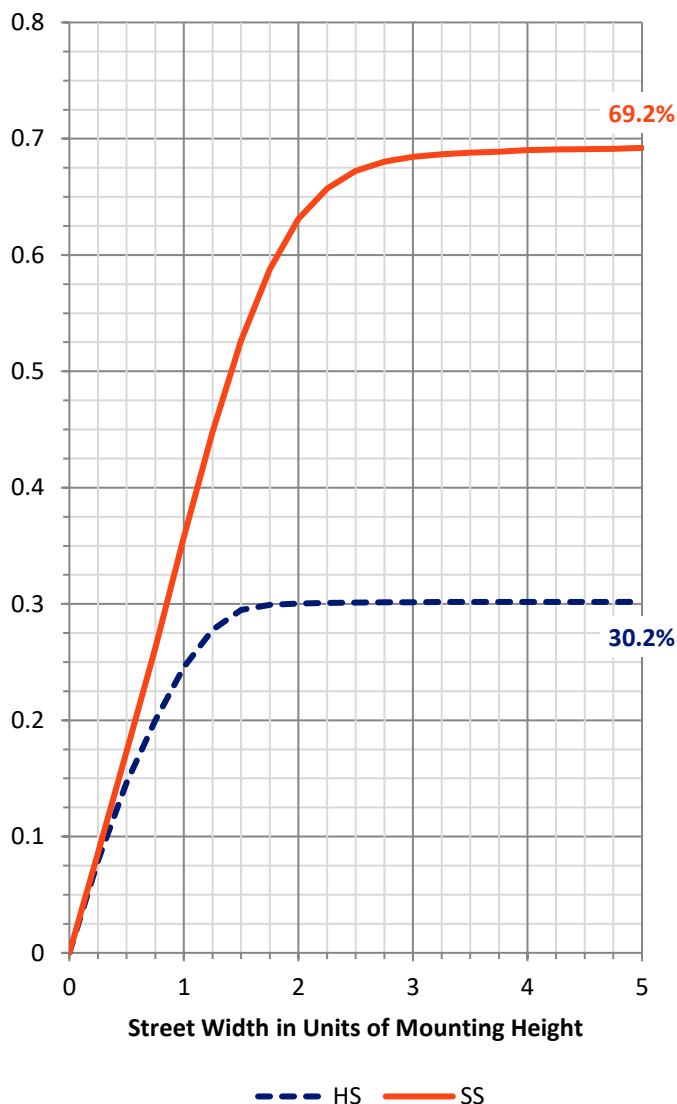
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7045.2	0.0	7045.2
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	16147.6	20.2	16167.8
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	23192.8	20.2	23213.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	257.9	1.1
10°-20°	827.8	3.6
20°-30°	1513.0	6.5
30°-40°	2883.2	12.4
40°-50°	4948.8	21.3
50°-60°	6638.9	28.6
60°-70°	5046.9	21.7
70°-80°	955.6	4.1
80°-90°	120.7	0.5
90°-100°	17.7	0.1
100°-110°	2.4	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°	23192.8	99.9
0°-180°	23213.0	100.0

**Coefficient of Utilization**



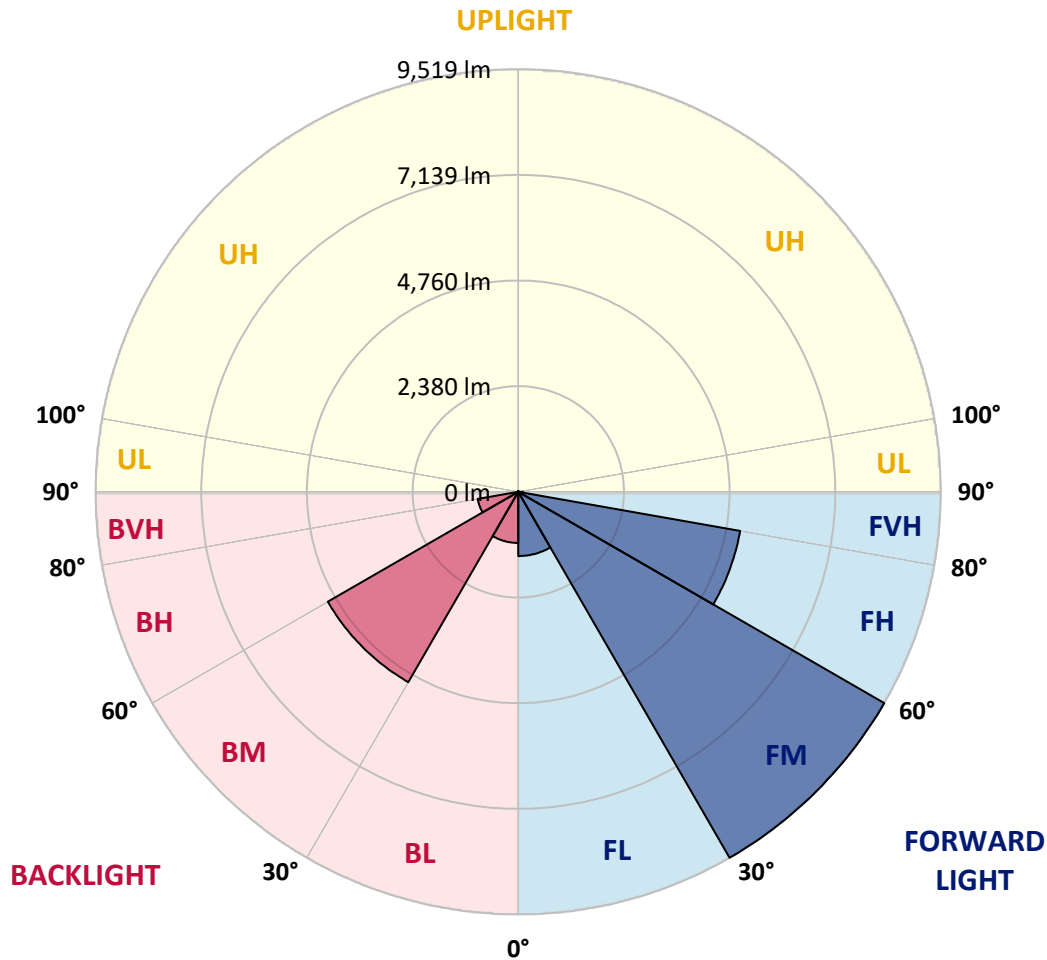
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 CATALOG NUMBER: CST-CA10-210-730-U-T5N-HSS-HM-EX180

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1447.0	6.2			
FM (30°-60°)	9519.3	41.0			
FH (60°-80°)	5074.8	21.9			G3/7500
FVH (80°-90°)	106.5	0.5			G2/225
BL (0°-30°)	1151.6	5.0	B3/2500		
BM (30°-60°)	4951.7	21.3	B3/5000		
BH (60°-80°)	927.8	4.0	B2/1000		G2/1000
BVH (80°-90°)	14.1	0.1			G1/100
UL (90°-100°)	17.7	0.1		U2/50	
UH (100°-180°)	2.4	0.0		U1/10	

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

Type III Short





REPORT NUMBER: P579428

CATALOG NUMBER: CST-CA10-210-730-U-T5N-HSS-HM-EX180

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1
2.5°	2678.6	2658.9	2660.0	2677.5	2627.2	2645.8	2623.9	2645.8	2633.8	2642.5	2646.9
5°	2725.7	2706.0	2703.8	2722.4	2679.7	2692.9	2671.0	2686.3	2669.9	2680.8	2680.8
7.5°	2796.8	2777.1	2770.5	2784.8	2745.4	2755.2	2732.2	2741.0	2722.4	2736.6	2729.0
10°	2881.1	2859.2	2851.5	2859.2	2825.3	2830.7	2803.4	2813.2	2785.9	2802.3	2791.3
12.5°	2970.8	2942.3	2942.3	2948.9	2912.8	2913.9	2888.7	2894.2	2866.8	2884.3	2871.2
15°	3068.2	3036.4	3040.8	3047.4	3009.1	3015.6	2989.4	2998.1	2969.7	2987.2	2974.1
17.5°	3197.3	3163.4	3159.0	3178.7	3142.6	3154.6	3125.1	3136.0	3110.8	3116.3	3109.7
20°	3375.6	3333.0	3323.1	3349.4	3308.9	3317.6	3295.8	3317.6	3291.4	3252.0	3141.5
22.5°	3589.0	3551.8	3535.4	3552.9	3504.8	3520.1	3519.0	3554.0	3481.8	3233.4	3122.9
25°	3870.2	3845.1	3813.3	3815.5	3757.5	3780.5	3822.1	3849.4	3542.0	3324.2	3326.4
27.5°	4245.5	4220.4	4176.6	4160.2	4075.9	4131.7	4196.3	3929.3	3687.5	3743.3	3712.7
30°	4724.8	4720.4	4631.8	4603.3	4511.4	4581.5	4525.7	4068.3	4151.4	4229.1	4182.1
32.5°	5362.7	5332.1	5204.1	5152.6	5056.3	5096.8	4604.4	4538.8	4662.4	4767.5	4718.2
35°	6134.1	6041.1	5910.9	5809.2	5641.7	5416.3	4904.3	5032.3	5217.2	5361.6	5123.1
37.5°	7030.3	6929.6	6726.1	6543.4	6279.7	5577.2	5356.2	5612.2	5844.2	5687.7	5137.3
40°	7952.7	7863.0	7671.5	7436.3	6990.9	6076.2	5904.4	6210.7	6474.4	5578.3	5304.7
42.5°	8868.6	8792.0	8637.7	8405.7	7832.4	6670.3	6505.1	6834.4	6586.1	5791.7	5782.9
45°	9792.1	9753.8	9578.7	9380.7	8829.2	7430.8	7178.0	7435.2	6337.7	6302.7	6281.9
47.5°	10540.5	10547.1	10485.8	10383.0	9892.8	8265.7	7936.3	7173.6	6639.7	6678.0	6687.8
50°	11311.9	11262.7	11259.4	11266.0	11061.4	9341.3	8452.8	7055.5	7034.7	7031.4	7022.6
52.5°	11930.2	11867.8	11996.9	12099.8	12221.2	10541.6	8375.1	7455.9	7336.7	7295.1	7040.1
55°	12433.5	12409.4	12619.5	12967.5	13508.0	11813.1	9062.3	7846.6	7608.0	6636.4	5986.4
57.5°	12738.8	12773.8	13207.1	13891.0	14903.1	12866.8	9862.1	8242.7	6513.8	5845.3	5803.7
60°	12154.5	12339.4	13076.9	14578.2	16082.7	13858.2	10457.4	8322.6	5861.7	5503.9	5420.7
62.5°	10724.4	10706.8	11973.9	14578.2	16456.9	13956.7	10645.6	7756.9	5120.9	4654.8	4561.8
65°	7590.5	7636.5	8990.0	13137.1	14991.8	12981.7	9819.4	6594.8	4084.7	3656.9	3531.0
67.5°	4697.4	4694.2	6019.3	9675.0	12203.7	10868.8	8266.8	5055.3	2835.1	2431.3	2294.6
70°	1622.7	1668.7	2707.1	5661.4	8983.5	8515.1	6186.7	3191.8	1494.7	1065.8	899.4
72.5°	645.6	660.9	971.7	2524.3	5612.2	5688.8	3759.7	1550.5	447.5	284.5	267.0
75°	422.4	424.6	466.1	911.5	2723.5	3060.5	1746.4	445.3	207.9	190.4	186.0
77.5°	364.4	365.5	387.4	461.8	887.4	1190.5	496.8	263.7	174.0	156.5	152.1
80°	338.1	339.2	350.1	397.2	427.8	406.0	264.8	212.3	146.6	139.0	137.9
82.5°	319.5	323.9	329.4	357.8	345.8	305.3	219.9	171.8	112.7	120.4	123.6
85°	294.3	298.7	302.0	318.4	288.9	223.2	170.7	129.1	72.2	78.8	77.7
87.5°	221.0	223.2	218.8	216.7	201.3	156.5	112.7	82.1	28.4	26.3	24.1
90°	106.1	105.0	100.7	93.0	81.0	63.5	47.1	26.3	12.0	5.5	2.2
92.5°	84.3	83.2	81.0	73.3	63.5	47.1	33.9	18.6	10.9	4.4	1.1
95°	56.9	54.7	52.5	47.1	39.4	28.4	19.7	13.1	8.8	3.3	1.1
97.5°	37.2	36.1	32.8	28.4	21.9	15.3	12.0	9.8	7.7	3.3	1.1
100°	23.0	23.0	20.8	16.4	10.9	8.8	7.7	7.7	5.5	2.2	0.0
102.5°	14.2	13.1	12.0	7.7	5.5	5.5	5.5	5.5	4.4	2.2	0.0
105°	7.7	7.7	5.5	4.4	3.3	2.2	3.3	4.4	3.3	1.1	0.0
107.5°	2.2	2.2	2.2	1.1	1.1	0.0	1.1	2.2	2.2	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.2	1.1	0.0



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 CATALOG NUMBER: CST-CA10-210-730-U-T5N-HSS-HM-EX180

**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°	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1	2614.1
2.5°	2641.4	2620.6	2626.1	2605.3	2602.0	2580.1	2617.4	2619.5	2609.7	2620.6
5°	2675.3	2650.2	2660.0	2634.9	2630.5	2602.0	2631.6	2628.3	2620.6	2629.4
7.5°	2723.5	2698.3	2703.8	2674.3	2668.8	2637.0	2665.5	2654.6	2644.7	2656.7
10°	2790.2	2761.8	2766.2	2731.1	2726.8	2689.6	2722.4	2706.0	2691.8	2708.2
12.5°	2872.3	2835.1	2830.7	2793.5	2790.2	2755.2	2789.1	2772.7	2758.5	2784.8
15°	2966.4	2917.2	2910.6	2863.5	2858.1	2822.0	2854.8	2830.7	2819.8	2853.7
17.5°	3092.2	2918.3	2820.9	2751.9	2712.5	2692.9	2751.9	2831.8	2807.7	2808.8
20°	3040.8	2853.7	2723.5	2664.4	2621.7	2431.3	2168.7	2244.2	2397.4	2472.9
22.5°	3025.5	2959.8	2906.2	2806.6	2383.2	2276.0	2291.3	2273.8	1984.9	1874.4
25°	3318.7	3243.2	3127.3	2605.3	2482.8	2458.7	2467.4	2165.4	1947.7	1979.4
27.5°	3694.1	3616.4	3044.1	2751.9	2727.9	2696.1	2523.2	2145.7	2175.3	2205.9
30°	4166.8	3758.6	3174.3	3084.6	3039.7	3006.9	2365.7	2396.3	2445.6	2483.9
32.5°	4627.4	3746.6	3547.4	3435.8	3380.0	2743.2	2673.2	2744.3	2794.6	2824.2
35°	4632.9	4175.5	3965.4	3822.1	3467.6	2948.9	3013.5	3132.7	3256.4	3279.3
37.5°	4758.7	4661.3	4420.6	4240.1	2579.1	3291.4	3433.6	3570.4	3694.1	3701.7
40°	5259.9	5154.8	4929.4	4532.2	2848.2	3357.0	3896.5	4050.8	4154.7	4149.2
42.5°	5759.9	5687.7	5453.5	4027.8	3209.3	2908.4	4382.3	4484.1	4549.7	4595.7
45°	6263.3	6191.0	5399.9	4422.8	3639.3	3185.2	4264.1	4840.8	4913.0	4936.0
47.5°	6656.1	6477.7	4948.0	4946.9	4176.6	3539.8	3521.2	5162.5	5225.9	5209.5
50°	7019.4	5782.9	5348.5	5118.7	4732.5	3873.5	3744.4	4344.0	5509.3	5485.3
52.5°	6386.9	5612.2	5692.1	4655.9	5178.9	4205.1	3996.1	3895.4	5006.0	5650.5
55°	5711.8	5821.2	6043.3	5115.4	3757.5	4312.3	4209.4	4009.2	3377.8	2842.8
57.5°	5828.9	5991.9	6002.8	5541.1	3888.8	2693.9	3450.0	3020.0	1908.3	1912.7
60°	5438.2	5650.5	4387.8	3694.1	2091.0	561.3	54.7	48.1	332.6	404.9
62.5°	4597.9	4893.3	4188.6	3218.1	1341.5	20.8	5.5	1.1	0.0	0.0
65°	3560.6	3916.2	3539.8	2777.1	1190.5	6.6	0.0	0.0	0.0	0.0
67.5°	2348.2	2668.8	2689.6	2323.0	992.4	3.3	0.0	0.0	0.0	0.0
70°	983.7	1385.3	1674.1	1726.7	780.2	1.1	0.0	0.0	0.0	0.0
72.5°	284.5	439.9	805.3	1037.3	495.7	0.0	0.0	0.0	0.0	0.0
75°	189.3	202.4	233.1	467.2	247.3	0.0	0.0	0.0	0.0	0.0
77.5°	156.5	159.8	133.5	128.0	71.1	0.0	0.0	0.0	0.0	0.0
80°	142.2	140.1	107.2	75.5	26.3	0.0	0.0	0.0	0.0	0.0
82.5°	131.3	124.7	77.7	39.4	17.5	0.0	0.0	0.0	0.0	0.0
85°	88.6	87.5	35.0	24.1	3.3	0.0	0.0	0.0	0.0	0.0
87.5°	24.1	30.6	7.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	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: P579428  
 CATALOG NUMBER: CST-CA10-210-730-U-T5N-HSS-HM-EX180

**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)