

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: P579554

Luminaire Tested: **CST-CA8-230-750-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579554  
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-CA8-230-750-U-T5N-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24725 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G3

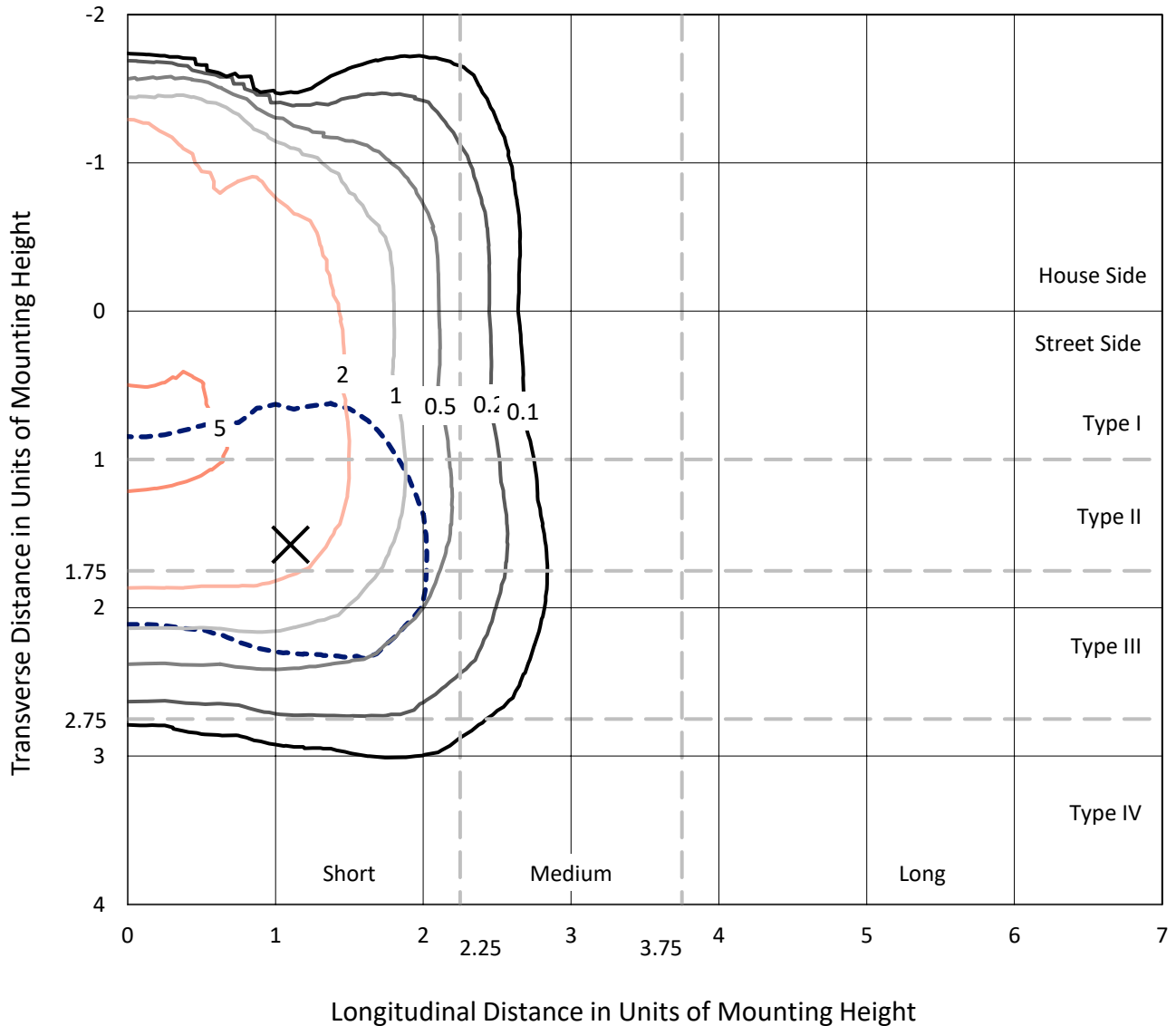
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P579554  
 CATALOG NUMBER: CST-CA8-230-750-U-T5N-HSS-HM-EX180

### Iso-Footcandle Lines of Horizontal Illumination

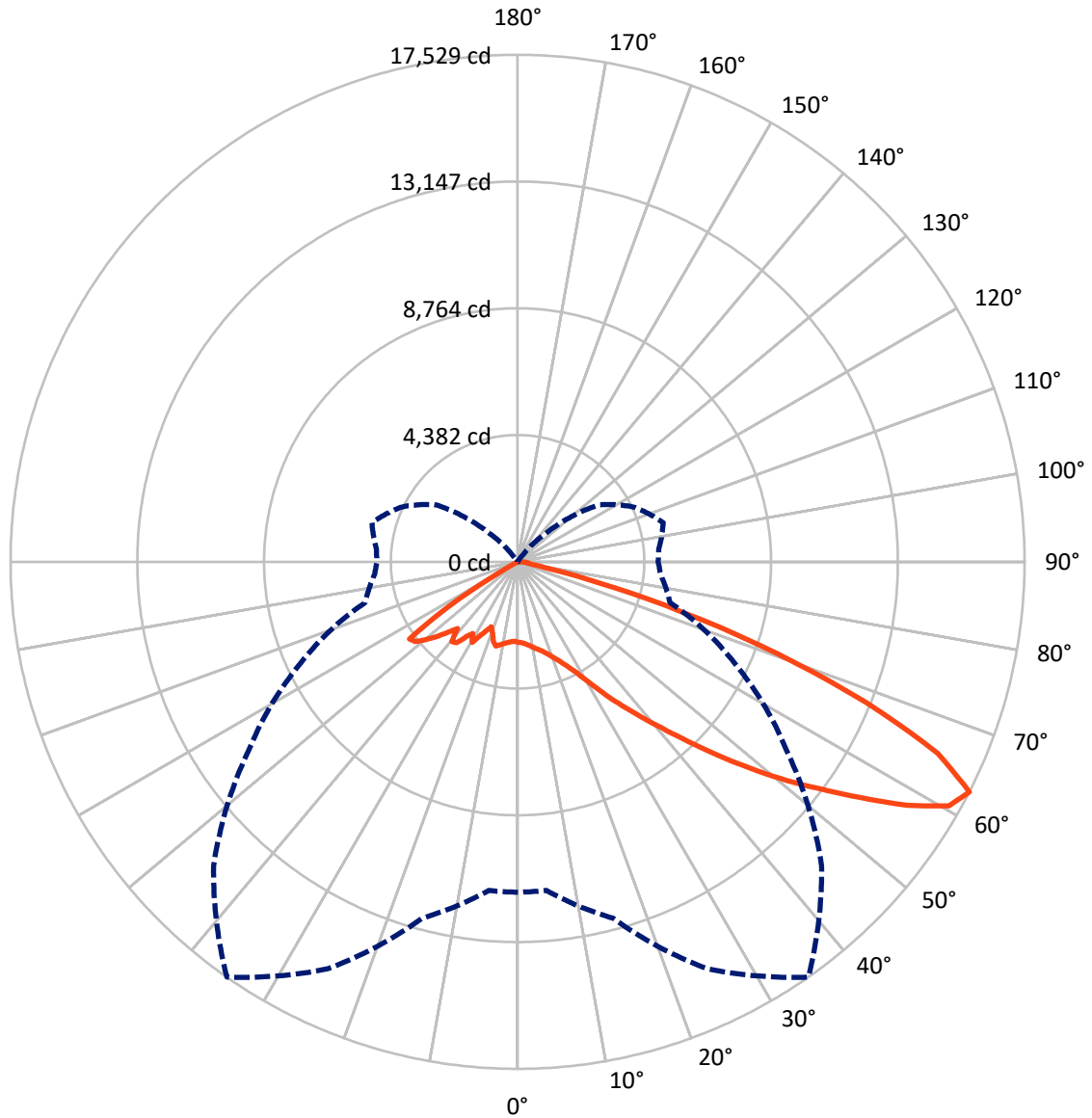
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc  
 Type III - Short - N/A

REPORT NUMBER: P579554  
CATALOG NUMBER: CST-CA8-230-750-U-T5N-HSS-HM-EX180

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P579554  
 CATALOG NUMBER: CST-CA8-230-750-U-T5N-HSS-HM-EX180

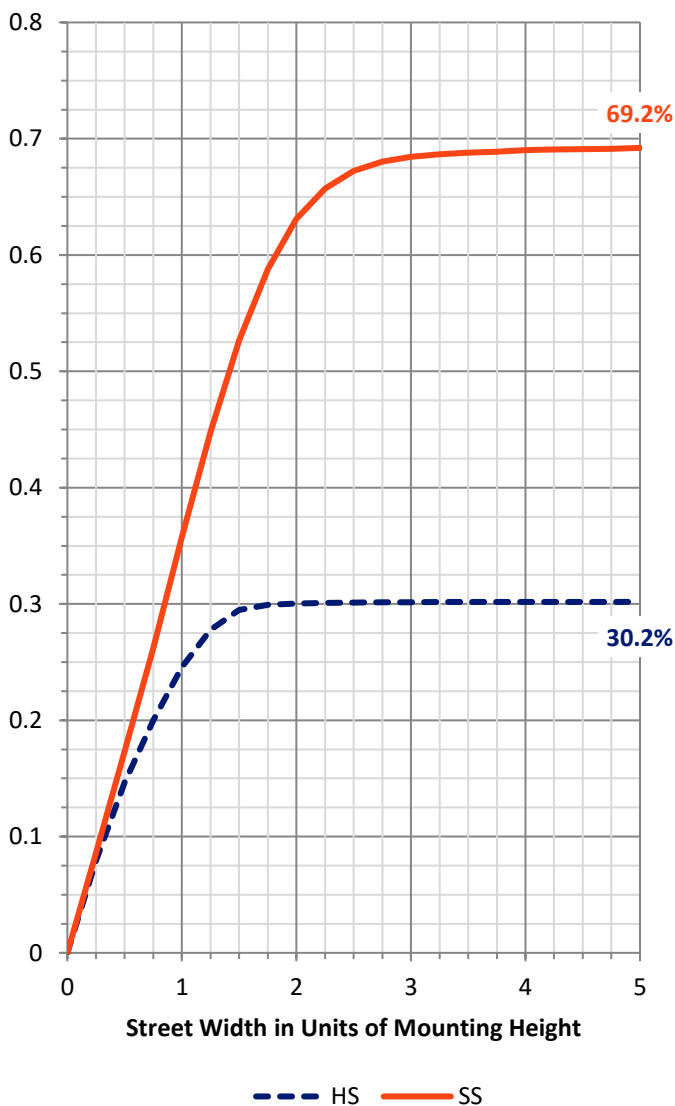
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7504.1	0.0	7504.1
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	17199.4	21.5	17220.9
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	24703.5	21.5	24725.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.7	1.1
10°-20°	881.7	3.6
20°-30°	1611.5	6.5
30°-40°	3071.0	12.4
40°-50°	5271.1	21.3
50°-60°	7071.4	28.6
60°-70°	5375.6	21.7
70°-80°	1017.9	4.1
80°-90°	128.5	0.5
90°-100°	18.9	0.1
100°-110°	2.6	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°	24703.5	99.9
0°-180°	24725.0	100.0

**Coefficient of Utilization**

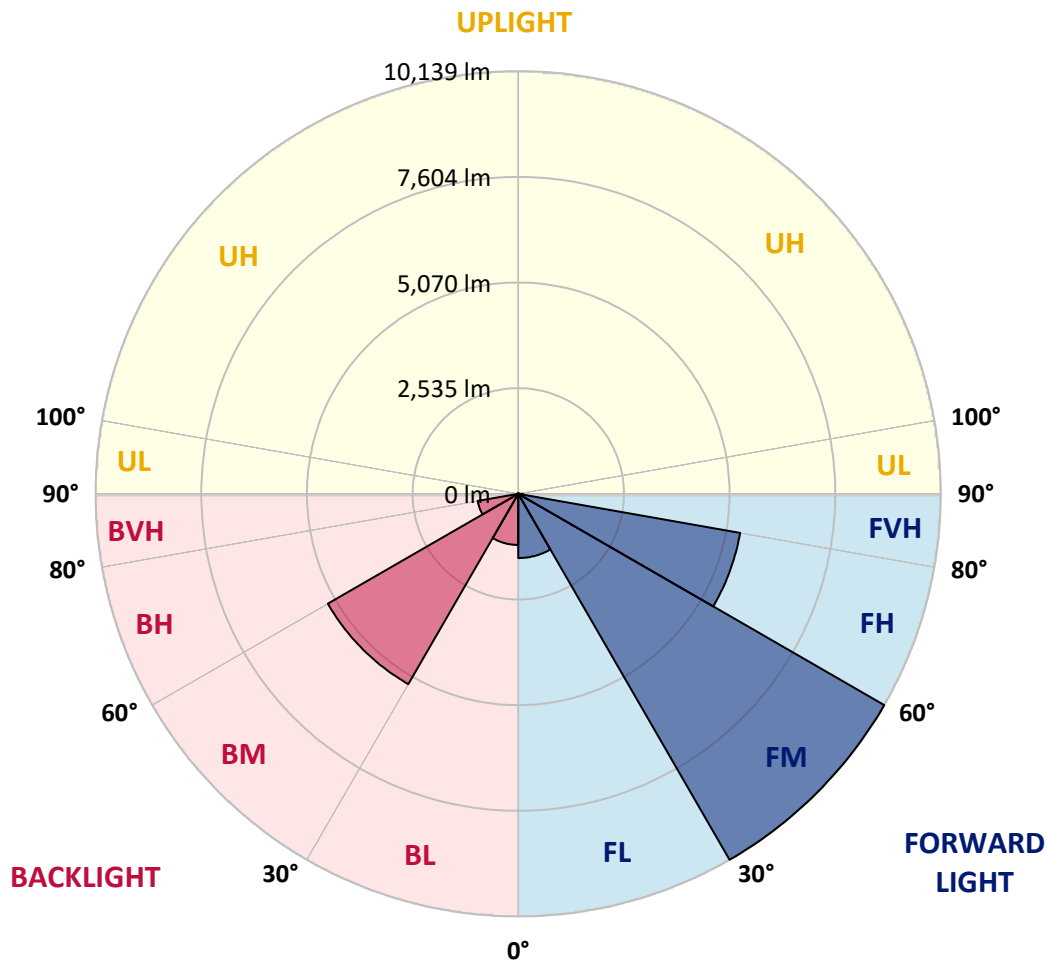


REPORT NUMBER: P579554  
 CATALOG NUMBER: CST-CA8-230-750-U-T5N-HSS-HM-EX180

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1541.3	6.2			
FM	(30°-60°)	10139.3	41.0			
FH	(60°-80°)	5405.3	21.9			G3/7500
FVH	(80°-90°)	113.5	0.5			G2/225
BL	(0°-30°)	1226.6	5.0	B3/2500		
BM	(30°-60°)	5274.2	21.3	B4/8500		
BH	(60°-80°)	988.2	4.0	B2/1000		G2/1000
BVH	(80°-90°)	15.1	0.1			G1/100
UL	(90°-100°)	18.9	0.1		U2/50	
UH	(100°-180°)	2.6	0.0		U1/10	

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





REPORT NUMBER: P579554

CATALOG NUMBER: CST-CA8-230-750-U-T5N-HSS-HM-EX180

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3
2.5°	2853.1	2832.1	2833.3	2851.9	2798.3	2818.1	2794.8	2818.1	2805.3	2814.6	2819.3
5°	2903.2	2882.2	2879.9	2899.7	2854.3	2868.3	2844.9	2861.3	2843.8	2855.4	2855.4
7.5°	2979.0	2958.0	2951.0	2966.2	2924.2	2934.7	2910.2	2919.5	2899.7	2914.9	2906.7
10°	3068.7	3045.4	3037.2	3045.4	3009.3	3015.1	2986.0	2996.5	2967.3	2984.8	2973.1
12.5°	3164.3	3134.0	3134.0	3141.0	3102.5	3103.7	3076.9	3082.7	3053.6	3072.2	3058.2
15°	3268.0	3234.2	3238.9	3245.9	3205.1	3212.1	3184.1	3193.4	3163.1	3181.8	3167.8
17.5°	3405.5	3369.4	3364.7	3385.7	3347.3	3360.1	3328.6	3340.3	3313.5	3319.3	3312.3
20°	3595.5	3550.1	3539.6	3567.5	3524.4	3533.7	3510.4	3533.7	3505.8	3463.8	3346.1
22.5°	3822.8	3783.2	3765.7	3784.3	3733.0	3749.4	3748.2	3785.5	3708.6	3444.0	3326.3
25°	4122.3	4095.5	4061.7	4064.0	4002.3	4026.7	4071.0	4100.2	3772.7	3540.7	3543.1
27.5°	4522.1	4495.3	4448.6	4431.2	4341.4	4400.9	4469.6	4185.2	3927.7	3987.1	3954.5
30°	5032.6	5027.9	4933.5	4903.2	4805.3	4879.9	4820.4	4333.3	4421.8	4504.6	4454.5
32.5°	5712.0	5679.4	5543.0	5488.3	5385.7	5428.8	4904.4	4834.4	4966.1	5078.0	5025.6
35°	6533.7	6434.6	6295.9	6187.5	6009.2	5769.1	5223.7	5360.1	5557.0	5710.9	5456.8
37.5°	7488.2	7381.0	7164.2	6969.6	6688.7	5940.5	5705.0	5977.8	6224.8	6058.2	5471.9
40°	8470.7	8375.2	8171.2	7920.6	7446.3	6471.9	6288.9	6615.3	6896.2	5941.6	5650.3
42.5°	9446.2	9364.7	9200.3	8953.2	8342.5	7104.8	6928.8	7279.6	7015.0	6168.9	6159.6
45°	10429.9	10389.1	10202.6	9991.7	9404.3	7914.8	7645.6	7919.5	6750.5	6713.2	6691.0
47.5°	11227.1	11234.1	11168.8	11059.3	10537.1	8804.1	8453.2	7640.9	7072.1	7112.9	7123.4
50°	12048.8	11996.3	11992.8	11999.8	11781.9	9949.7	9003.4	7515.0	7492.9	7489.4	7480.1
52.5°	12707.3	12640.8	12778.4	12887.9	13017.3	11228.3	8920.6	7941.6	7814.6	7770.3	7498.7
55°	13243.4	13217.7	13441.5	13812.1	14387.9	12582.6	9652.5	8357.7	8103.6	7068.7	6376.4
57.5°	13568.6	13605.8	14067.4	14795.8	15873.9	13704.9	10504.5	8779.6	6938.1	6226.0	6181.7
60°	12946.2	13143.1	13928.7	15527.7	17130.3	14760.8	11138.5	8864.7	6243.5	5862.4	5773.8
62.5°	11422.9	11404.2	12753.9	15527.7	17528.9	14865.7	11339.0	8262.1	5454.5	4958.0	4858.9
65°	8085.0	8133.9	9575.6	13992.8	15968.3	13827.3	10459.0	7024.4	4350.7	3895.0	3761.0
67.5°	5003.4	4999.9	6411.3	10305.2	12998.6	11576.7	8805.2	5384.5	3019.8	2589.7	2444.0
70°	1728.4	1777.4	2883.4	6030.2	9568.6	9069.8	6589.6	3399.7	1592.0	1135.2	958.0
72.5°	687.6	704.0	1034.9	2688.8	5977.8	6059.3	4004.6	1651.5	476.7	303.0	284.4
75°	449.9	452.2	496.5	970.8	2900.9	3259.9	1860.1	474.4	221.4	202.8	198.1
77.5°	388.1	389.3	412.6	491.8	945.2	1268.0	529.1	280.9	185.3	166.7	162.0
80°	360.1	361.3	373.0	423.1	455.7	432.4	282.0	226.1	156.2	148.0	146.9
82.5°	340.3	345.0	350.8	381.1	368.3	325.2	234.3	183.0	120.0	128.2	131.7
85°	313.5	318.2	321.7	339.2	307.7	237.8	181.8	137.5	76.9	83.9	82.7
87.5°	235.4	237.8	233.1	230.8	214.4	166.7	120.0	87.4	30.3	28.0	25.6
90°	113.1	111.9	107.2	99.1	86.2	67.6	50.1	28.0	12.8	5.8	2.3
92.5°	89.7	88.6	86.2	78.1	67.6	50.1	36.1	19.8	11.7	4.7	1.2
95°	60.6	58.3	55.9	50.1	42.0	30.3	21.0	14.0	9.3	3.5	1.2
97.5°	39.6	38.5	35.0	30.3	23.3	16.3	12.8	10.5	8.2	3.5	1.2
100°	24.5	24.5	22.1	17.5	11.7	9.3	8.2	8.2	5.8	2.3	0.0
102.5°	15.2	14.0	12.8	8.2	5.8	5.8	5.8	5.8	4.7	2.3	0.0
105°	8.2	8.2	5.8	4.7	3.5	2.3	3.5	4.7	3.5	1.2	0.0
107.5°	2.3	2.3	2.3	1.2	1.2	0.0	1.2	2.3	2.3	1.2	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.3	1.2	0.0



REPORT NUMBER: P579554  
 CATALOG NUMBER: CST-CA8-230-750-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





REPORT NUMBER: P579554

CATALOG NUMBER: CST-CA8-230-750-U-T5N-HSS-HM-EX180

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3
2.5°	2813.5	2791.3	2797.2	2775.0	2771.5	2748.2	2787.8	2790.2	2779.7	2791.3
5°	2849.6	2822.8	2833.3	2806.5	2801.8	2771.5	2803.0	2799.5	2791.3	2800.7
7.5°	2900.9	2874.1	2879.9	2848.4	2842.6	2808.8	2839.1	2827.5	2817.0	2829.8
10°	2972.0	2941.7	2946.3	2909.0	2904.4	2864.8	2899.7	2882.2	2867.1	2884.6
12.5°	3059.4	3019.8	3015.1	2975.5	2972.0	2934.7	2970.8	2953.3	2938.2	2966.2
15°	3159.6	3107.2	3100.2	3050.1	3044.2	3005.8	3040.7	3015.1	3003.4	3039.6
17.5°	3293.7	3108.3	3004.6	2931.2	2889.2	2868.3	2931.2	3016.3	2990.6	2991.8
20°	3238.9	3039.6	2900.9	2838.0	2792.5	2589.7	2310.0	2390.4	2553.6	2634.0
22.5°	3222.6	3152.6	3095.5	2989.5	2538.4	2424.2	2440.5	2421.9	2114.2	1996.5
25°	3534.9	3454.5	3330.9	2775.0	2644.5	2618.8	2628.2	2306.5	2074.6	2108.4
27.5°	3934.7	3851.9	3242.4	2931.2	2905.5	2871.7	2687.6	2285.5	2317.0	2349.6
30°	4438.2	4003.4	3381.1	3285.5	3237.7	3202.7	2519.8	2552.4	2604.9	2645.6
32.5°	4928.8	3990.6	3778.5	3659.6	3600.2	2921.9	2847.3	2923.0	2976.6	3008.1
35°	4934.7	4447.5	4223.7	4071.0	3693.4	3141.0	3209.7	3336.8	3468.5	3493.0
37.5°	5068.7	4965.0	4708.6	4516.2	2747.0	3505.8	3657.3	3803.0	3934.7	3942.8
40°	5602.5	5490.6	5250.5	4827.4	3033.8	3575.7	4150.3	4314.6	4425.3	4419.5
42.5°	6135.1	6058.2	5808.8	4290.1	3418.4	3097.9	4667.8	4776.1	4846.1	4895.0
45°	6671.2	6594.3	5751.7	4710.9	3876.4	3392.7	4541.9	5156.1	5233.0	5257.5
47.5°	7089.6	6899.7	5270.3	5269.1	4448.6	3770.3	3750.5	5498.7	5566.3	5548.9
50°	7476.6	6159.6	5696.9	5452.1	5040.7	4125.8	3988.3	4627.0	5868.2	5842.6
52.5°	6802.9	5977.8	6062.8	4959.1	5516.2	4479.0	4256.3	4149.1	5332.1	6018.6
55°	6083.8	6200.4	6437.0	5448.6	4002.3	4593.2	4483.6	4270.3	3597.8	3027.9
57.5°	6208.5	6382.2	6393.8	5902.0	4142.1	2869.4	3674.8	3216.7	2032.6	2037.3
60°	5792.4	6018.6	4673.6	3934.7	2227.2	597.9	58.3	51.3	354.3	431.2
62.5°	4897.4	5212.0	4461.5	3427.7	1428.9	22.1	5.8	1.2	0.0	0.0
65°	3792.5	4171.3	3770.3	2958.0	1268.0	7.0	0.0	0.0	0.0	0.0
67.5°	2501.1	2842.6	2864.8	2474.3	1057.1	3.5	0.0	0.0	0.0	0.0
70°	1047.8	1475.5	1783.2	1839.1	831.0	1.2	0.0	0.0	0.0	0.0
72.5°	303.0	468.5	857.8	1104.9	528.0	0.0	0.0	0.0	0.0	0.0
75°	201.6	215.6	248.2	497.7	263.4	0.0	0.0	0.0	0.0	0.0
77.5°	166.7	170.2	142.2	136.4	75.8	0.0	0.0	0.0	0.0	0.0
80°	151.5	149.2	114.2	80.4	28.0	0.0	0.0	0.0	0.0	0.0
82.5°	139.9	132.9	82.7	42.0	18.6	0.0	0.0	0.0	0.0	0.0
85°	94.4	93.2	37.3	25.6	3.5	0.0	0.0	0.0	0.0	0.0
87.5°	25.6	32.6	8.2	3.5	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: P579554  
 CATALOG NUMBER: CST-CA8-230-750-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)