

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: P579553

Luminaire Tested: **CST-CA8-230-750-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579553  
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: STREETWORKS  
Catalog Number: CST-CA8-230-750-U-T5N-HSS-HM-EX120  
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: 28674 lumens  
Efficiency: N/A  
Efficacy: 125.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G3

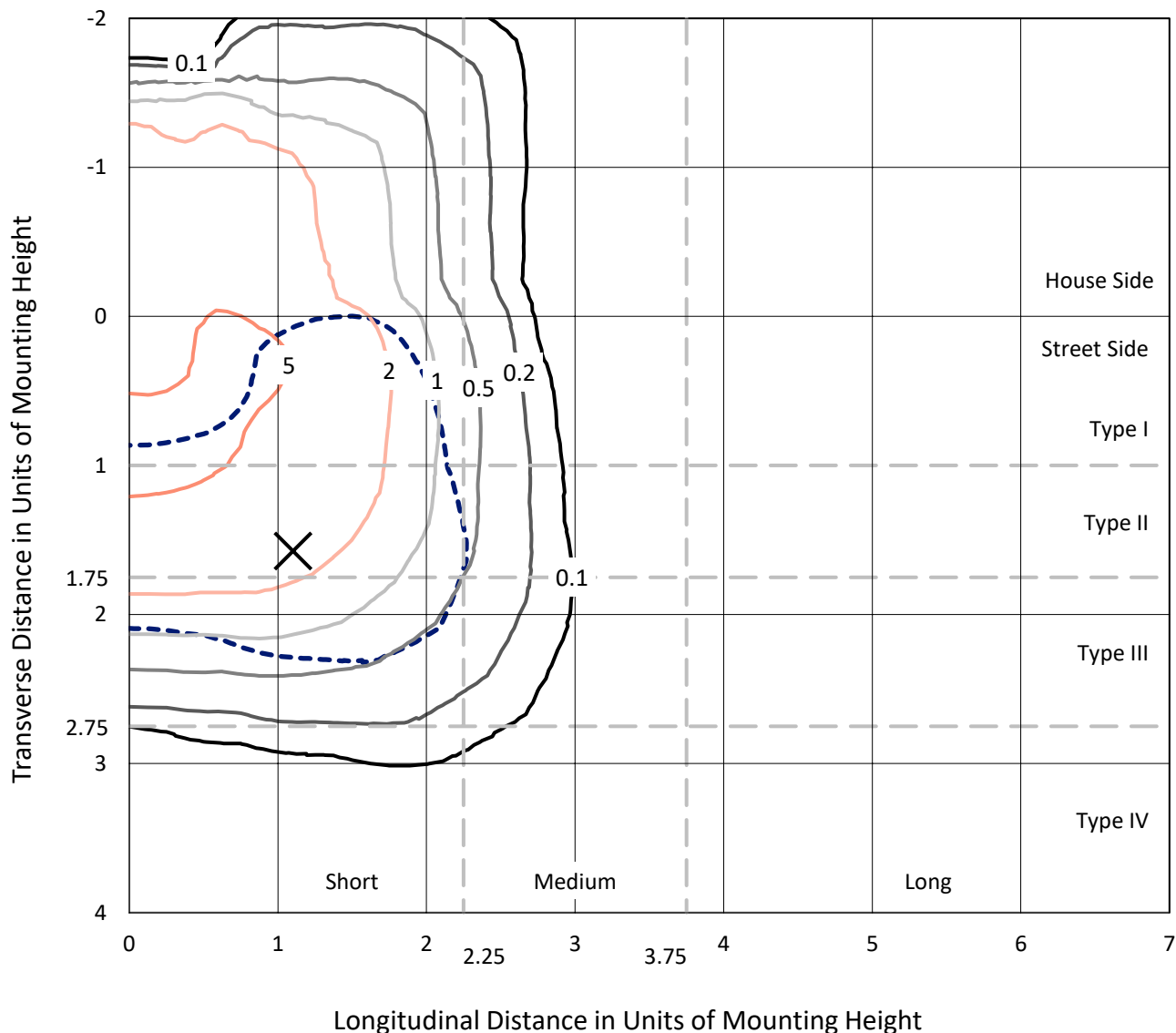
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

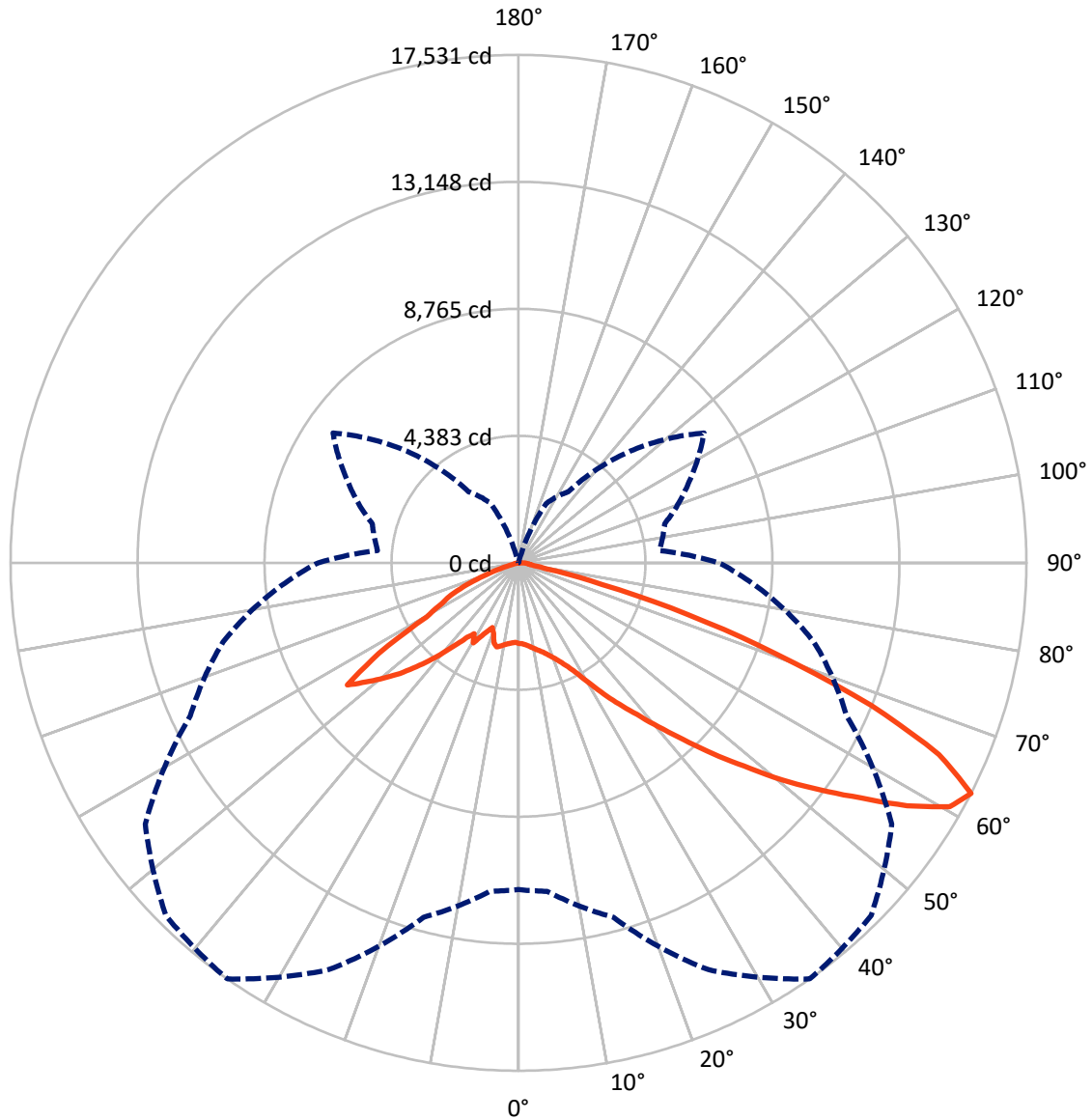
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 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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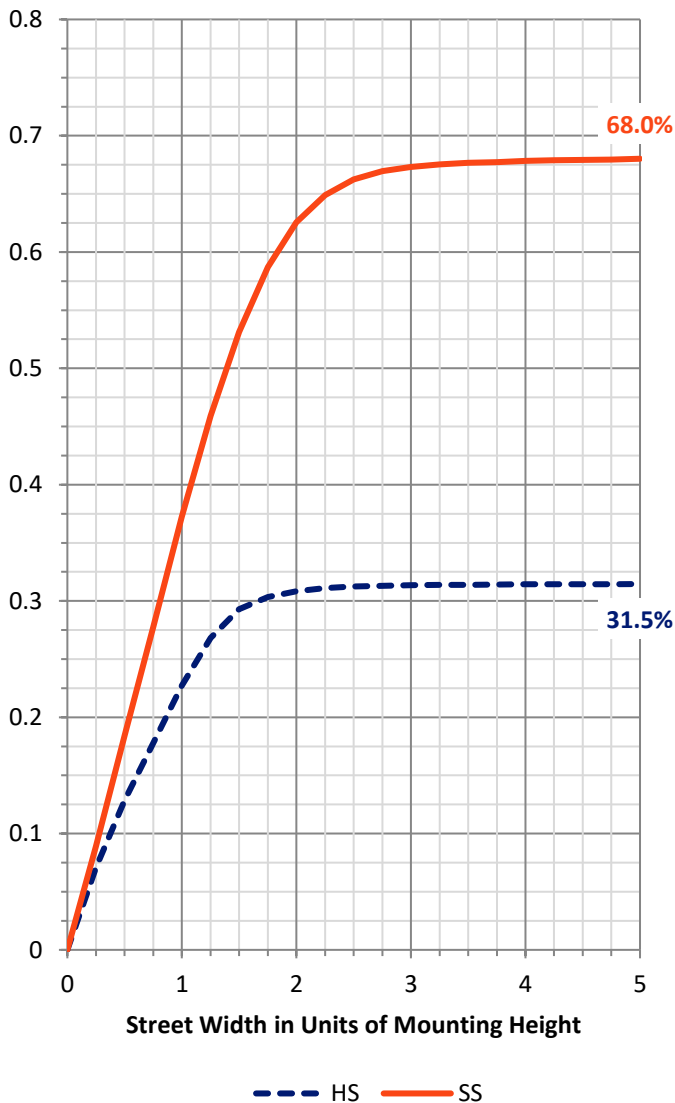
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9071.2	0.0	9071.2
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	19586.4	16.4	19602.8
	% Fixture	68.3	0.1	68.4
<b>Total</b>	Lumens	28657.6	16.4	28674.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	274.5	1.0
10°-20°	882.4	3.1
20°-30°	1638.6	5.7
30°-40°	3230.6	11.3
40°-50°	5799.3	20.2
50°-60°	8429.8	29.4
60°-70°	6928.0	24.2
70°-80°	1316.9	4.6
80°-90°	157.6	0.5
90°-100°	14.9	0.1
100°-110°	1.4	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°	28657.6	99.9
0°-180°	28674.0	100.0

**Coefficient of Utilization**



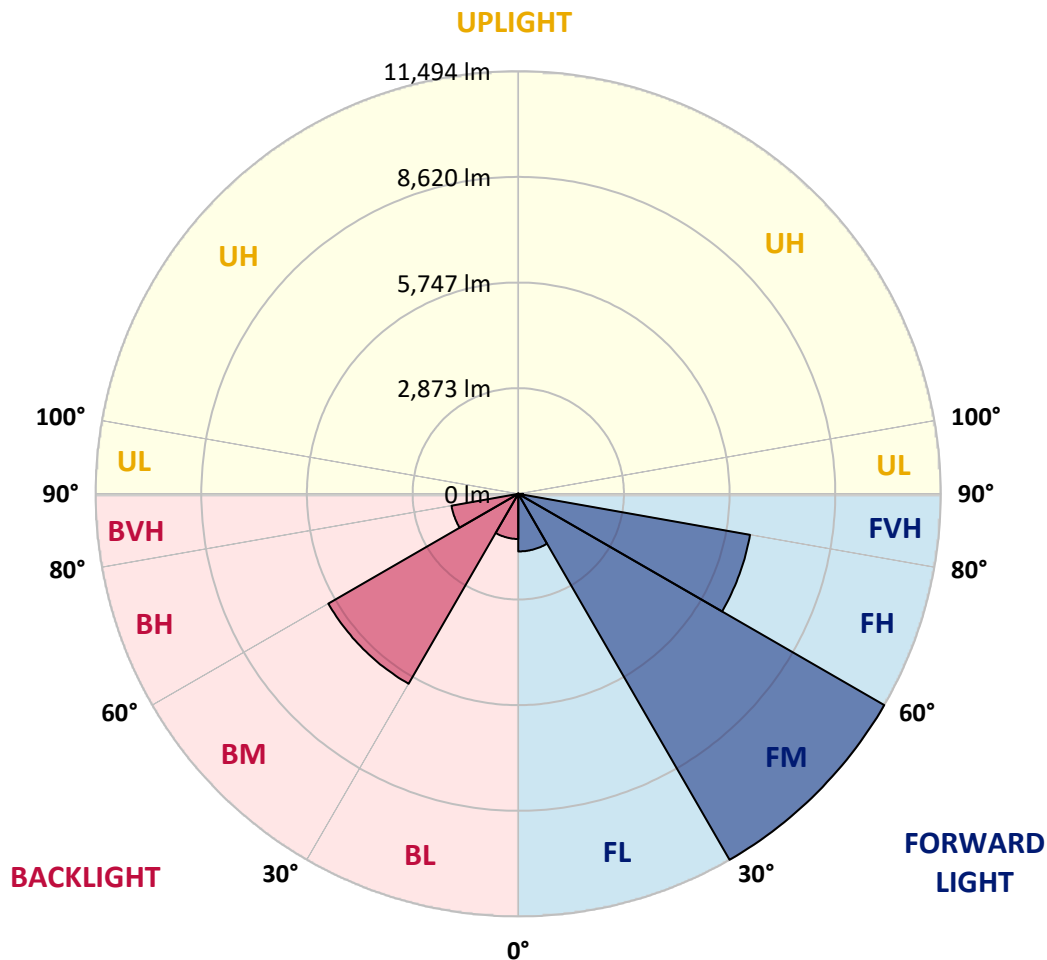
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 CATALOG NUMBER: CST-CA8-230-750-U-T5N-HSS-HM-EX120

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1567.2	5.5			
FM	(30°-60°)	11493.9	40.1			
FH	(60°-80°)	6400.7	22.3			G3/7500
FVH	(80°-90°)	124.6	0.4			G2/225
BL	(0°-30°)	1228.3	4.3	B3/2500		
BM	(30°-60°)	5965.8	20.8	B4/8500		
BH	(60°-80°)	1844.2	6.4	B3/2500		G3/2500
BVH	(80°-90°)	33.0	0.1			G1/100
UL	(90°-100°)	14.9	0.1		U2/50	
UH	(100°-180°)	1.5	0.0		U1/10	

**BUG Rating: B4-U2-G3**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3
2.5°	2854.4	2831.0	2833.4	2850.9	2798.4	2815.9	2791.4	2812.4	2803.1	2812.4	2818.2
5°	2911.5	2882.3	2881.2	2898.6	2856.7	2867.2	2839.2	2853.2	2840.4	2852.0	2852.0
7.5°	2981.4	2956.9	2951.1	2965.1	2927.8	2932.4	2904.5	2910.3	2895.1	2910.3	2898.6
10°	3068.8	3046.7	3037.3	3044.3	3010.5	3012.9	2982.6	2984.9	2962.7	2975.6	2966.2
12.5°	3160.9	3130.6	3125.9	3137.6	3102.6	3097.9	3072.3	3074.6	3050.2	3061.8	3054.8
15°	3256.5	3225.0	3226.2	3237.8	3202.8	3205.2	3178.4	3183.0	3158.6	3170.2	3160.9
17.5°	3383.5	3352.0	3349.7	3370.7	3341.5	3350.9	3322.9	3328.7	3311.2	3313.6	3303.1
20°	3565.3	3524.5	3516.4	3546.7	3508.2	3519.9	3504.7	3524.5	3517.5	3511.7	3503.5
22.5°	3782.1	3750.6	3734.3	3757.6	3712.2	3734.3	3742.5	3783.3	3793.8	3786.8	3658.6
25°	4072.3	4056.0	4039.7	4029.2	3974.4	4009.4	4051.3	4118.9	4163.2	4180.7	4002.4
27.5°	4463.9	4472.1	4401.0	4389.3	4327.6	4382.3	4458.1	4567.7	4657.4	4690.0	4449.9
30°	4967.4	4977.9	4881.2	4853.2	4815.9	4862.5	5003.6	5123.6	5256.5	5311.3	4990.7
32.5°	5636.4	5627.1	5484.9	5431.3	5397.5	5416.2	5564.2	5728.5	5877.7	6001.2	5607.3
35°	6453.5	6424.3	6272.8	6124.8	5990.8	6047.9	6156.3	6355.6	6581.7	6763.5	6215.7
37.5°	7402.2	7374.2	7143.5	6902.2	6637.6	6662.1	6758.8	7084.0	7375.4	7423.2	6112.0
40°	8382.4	8370.7	8152.8	7846.3	7434.8	7319.4	7447.7	7843.9	8151.6	7318.3	6353.2
42.5°	9361.4	9305.5	9183.1	8876.6	8328.8	8074.7	8247.2	8643.5	8974.5	7672.6	6912.7
45°	10348.6	10291.5	10187.8	9962.8	9392.9	9023.4	9073.6	9513.0	9812.5	8336.9	7495.4
47.5°	11225.1	11183.1	11108.5	10982.7	10474.5	10140.0	10043.3	10351.0	10554.9	8876.6	7943.0
50°	11980.3	11944.2	11973.4	11931.4	11782.2	11431.4	11112.0	11092.2	11190.1	9356.8	8354.4
52.5°	12644.7	12595.7	12720.5	12868.5	13006.0	12927.9	12155.2	11795.0	11706.5	9716.9	8630.7
55°	13193.7	13176.2	13390.6	13790.4	14313.7	14518.8	13270.6	12444.2	12168.0	10022.3	8656.3
57.5°	13522.3	13564.3	14017.7	14791.6	15814.9	15911.6	14576.0	13134.2	12574.8	10207.6	8778.7
60°	12960.5	13102.7	13918.6	15542.2	17092.3	17134.3	15514.2	13271.7	12042.1	9540.9	8124.8
62.5°	11277.5	11380.1	12663.3	15494.4	17530.5	17211.2	15724.0	12495.5	10553.8	8093.4	6910.4
65°	7968.6	8087.5	9634.2	13972.2	15948.9	15960.6	14403.5	10805.5	8436.0	6265.8	5335.7
67.5°	4806.6	4998.9	6464.0	10143.5	13131.9	13370.8	12016.5	8180.8	6037.4	4091.0	3453.4
70°	1576.9	1752.9	2951.1	6003.6	9466.3	10489.7	9024.6	5315.9	3152.7	1729.6	1392.8
72.5°	624.7	705.1	1039.6	2655.0	6100.3	7003.6	5560.7	2568.8	1058.3	459.2	399.8
75°	417.3	425.4	480.2	904.4	2984.9	3829.9	2680.7	747.1	392.8	286.7	251.8
77.5°	363.6	364.8	389.3	476.7	972.0	1468.6	771.6	400.9	325.2	235.4	208.6
80°	333.3	338.0	353.2	406.8	445.2	498.8	381.1	334.5	282.1	216.8	197.0
82.5°	319.4	322.8	332.2	368.3	360.1	374.1	307.7	265.7	237.8	199.3	188.8
85°	291.4	297.2	303.0	325.2	296.0	256.4	237.8	178.3	170.2	150.4	138.7
87.5°	220.3	219.1	213.3	216.8	198.1	162.0	134.0	100.2	81.6	67.6	55.9
90°	92.1	93.2	89.7	85.1	74.6	61.8	46.6	28.0	14.0	4.7	2.3
92.5°	69.9	71.1	68.8	61.8	53.6	43.1	31.5	16.3	9.3	3.5	1.2
95°	43.1	44.3	42.0	37.3	32.6	24.5	16.3	10.5	5.8	2.3	0.0
97.5°	25.6	26.8	24.5	22.1	17.5	11.7	9.3	7.0	4.7	2.3	0.0
100°	15.2	15.2	14.0	11.7	8.2	7.0	5.8	4.7	3.5	1.2	0.0
102.5°	7.0	7.0	7.0	4.7	3.5	3.5	3.5	3.5	3.5	1.2	0.0
105°	2.3	2.3	1.2	1.2	1.2	2.3	2.3	2.3	2.3	1.2	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	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	1.2	1.2	0.0



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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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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3
2.5°	2812.4	2790.2	2793.7	2773.9	2769.3	2748.3	2785.6	2789.1	2778.6	2789.1
5°	2847.4	2820.6	2827.5	2805.4	2799.6	2770.4	2800.7	2798.4	2790.2	2800.7
7.5°	2898.6	2868.3	2871.8	2846.2	2840.4	2807.7	2835.7	2827.5	2818.2	2831.0
10°	2963.9	2934.8	2935.9	2901.0	2897.5	2860.2	2896.3	2881.2	2867.2	2885.8
12.5°	3054.8	3014.0	3010.5	2972.1	2970.9	2932.4	2969.7	2956.9	2938.3	2967.4
15°	3159.7	3104.9	3091.0	3042.0	3040.8	3000.0	3037.3	3017.5	3008.2	3043.2
17.5°	3296.1	3227.3	3121.3	2954.6	2878.8	2891.6	3023.4	3071.1	2946.4	2965.1
20°	3378.8	3045.5	2890.5	2821.7	2785.6	2578.1	2297.2	2320.5	2596.8	2728.5
22.5°	3239.0	3139.9	3082.8	2986.1	2482.6	2411.5	2427.8	2423.1	2066.5	1960.4
25°	3530.4	3437.1	3333.4	2736.6	2632.9	2602.6	2610.8	2276.3	2081.6	2089.8
27.5°	3949.9	3829.9	3172.5	2913.8	2892.8	2848.5	2687.7	2285.6	2310.1	2326.4
30°	4480.2	4053.7	3378.8	3265.8	3223.8	3176.0	2494.2	2553.6	2599.1	2649.2
32.5°	4993.1	3942.9	3773.9	3656.2	3591.0	2883.5	2813.6	2923.1	2968.6	3011.7
35°	4946.5	4417.3	4198.2	4049.0	3926.6	3111.9	3173.7	3340.4	3460.4	3459.3
37.5°	5074.7	4933.6	4680.7	4491.9	3408.0	3486.1	3615.4	3805.4	3951.1	3949.9
40°	5609.6	5457.0	5219.2	4813.6	3776.3	3958.1	4135.3	4313.6	4418.5	4426.6
42.5°	6141.1	6023.4	5808.9	4251.8	4227.3	4479.1	4664.4	4777.5	4841.6	4863.7
45°	6670.3	6559.5	5707.5	4702.9	4777.5	5026.9	5139.9	5162.1	5230.8	5228.5
47.5°	7091.0	6996.6	5250.7	5239.0	5424.3	5596.8	5560.7	5532.7	5550.2	5559.5
50°	7479.1	6091.0	5660.9	5831.1	6113.1	6134.1	5983.8	4740.2	5868.4	5848.6
52.5°	6947.6	5944.1	6043.2	6441.8	6922.0	6678.4	6384.7	4155.1	5503.6	6026.9
55°	6079.3	6179.6	6403.4	7072.4	7546.7	7257.7	6767.0	4278.6	3652.7	2973.2
57.5°	6200.6	6359.1	6784.5	7708.7	8122.5	5748.3	6315.9	3016.4	2042.0	2040.8
60°	5774.0	6014.1	6776.3	7994.3	6574.7	3683.0	2530.3	68.8	396.3	392.8
62.5°	4881.2	5222.7	6465.1	7813.6	5446.5	2993.0	2254.1	5.8	2.3	2.3
65°	3775.1	4177.2	5390.5	6765.8	4825.2	2578.1	1673.7	0.0	0.0	0.0
67.5°	2475.6	2848.5	4047.8	5620.1	4005.9	1948.7	1124.7	0.0	0.0	0.0
70°	1031.5	1491.9	2515.2	4061.8	2946.4	1276.2	533.8	0.0	0.0	0.0
72.5°	298.4	454.6	1132.9	2425.4	1828.7	667.8	198.1	0.0	0.0	0.0
75°	197.0	207.5	342.7	975.5	889.3	244.8	80.4	0.0	0.0	0.0
77.5°	165.5	170.2	218.0	272.7	285.6	96.7	65.3	0.0	0.0	0.0
80°	152.7	153.8	195.8	202.8	152.7	80.4	64.1	0.0	0.0	0.0
82.5°	142.2	138.7	166.7	160.8	127.0	69.9	59.4	0.0	0.0	0.0
85°	97.9	100.2	113.1	143.4	76.9	35.0	42.0	0.0	0.0	0.0
87.5°	30.3	35.0	44.3	45.5	14.0	4.7	0.0	0.0	0.0	0.0
90°	1.2	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: P579553  
 CATALOG NUMBER: CST-CA8-230-750-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)