

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: P579601

Luminaire Tested: **CST-CA8-230-760-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579601  
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-CA8-230-760-U-T5N-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28066 lumens  
Efficiency: N/A  
Efficacy: 122.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G3

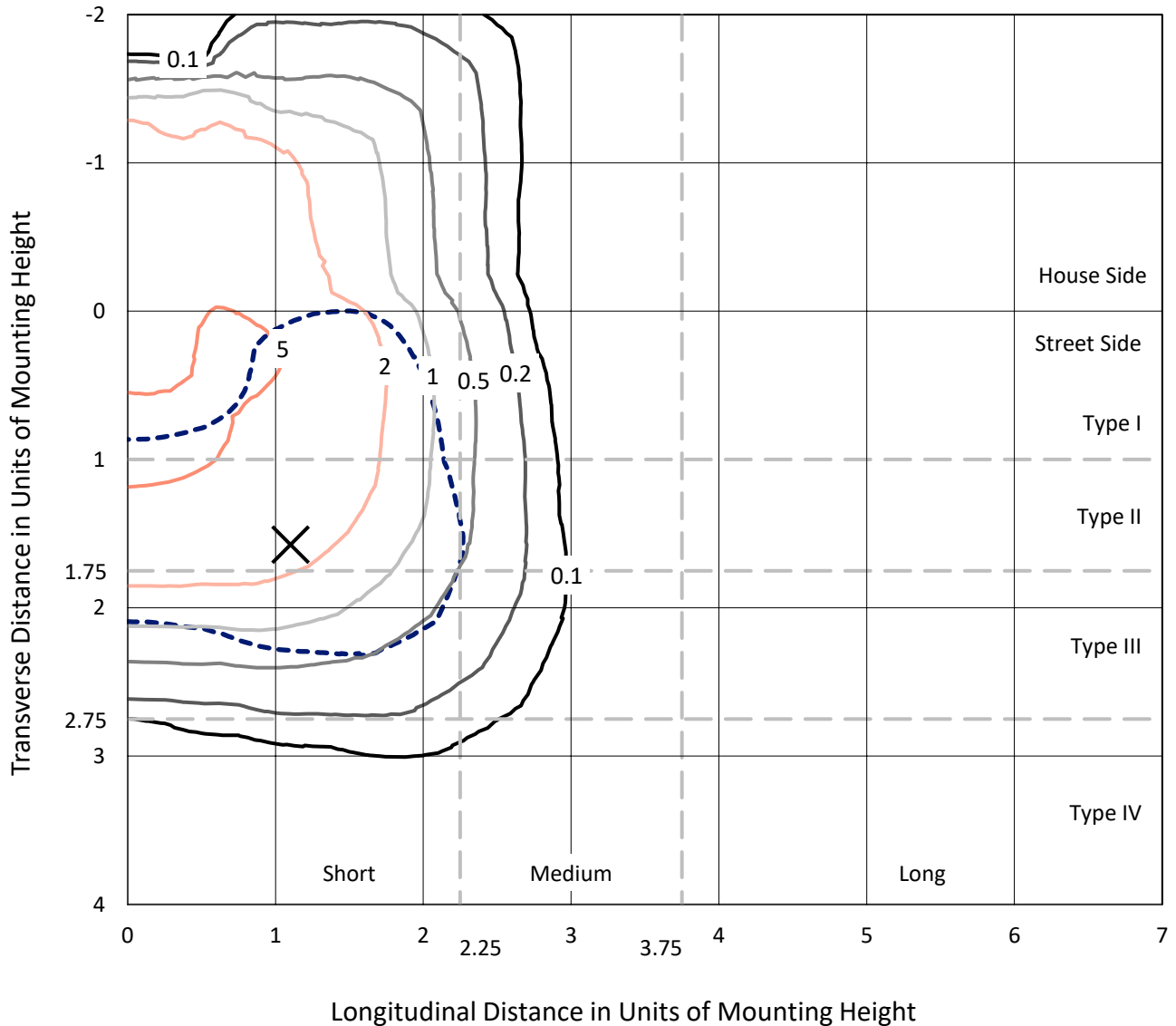
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

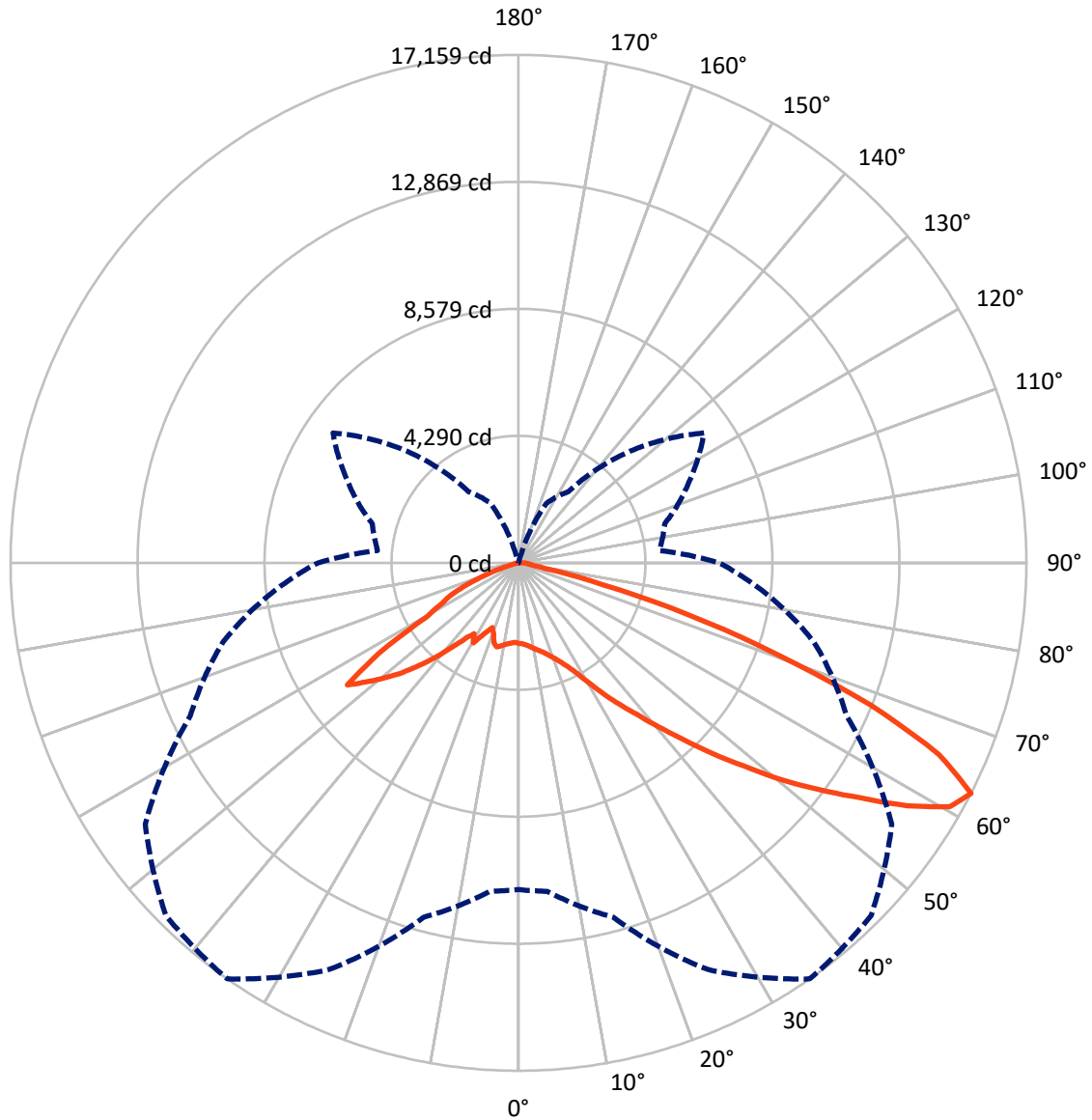
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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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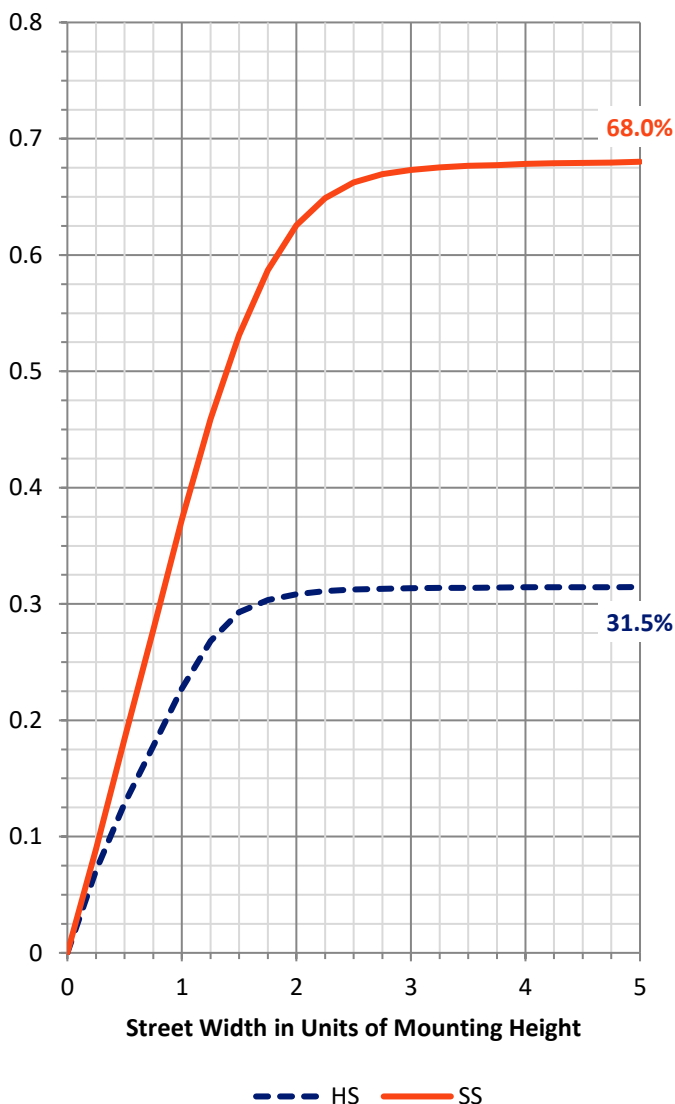
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8878.9	0.0	8878.9
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	19171.1	16.0	19187.1
	% Fixture	68.3	0.1	68.4
<b>Total</b>	Lumens	28050.0	16.0	28066.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	268.6	1.0
10°-20°	863.7	3.1
20°-30°	1603.8	5.7
30°-40°	3162.1	11.3
40°-50°	5676.3	20.2
50°-60°	8251.1	29.4
60°-70°	6781.1	24.2
70°-80°	1289.0	4.6
80°-90°	154.3	0.5
90°-100°	14.6	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°	28050.0	99.9
0°-180°	28066.0	100.0

**Coefficient of Utilization**

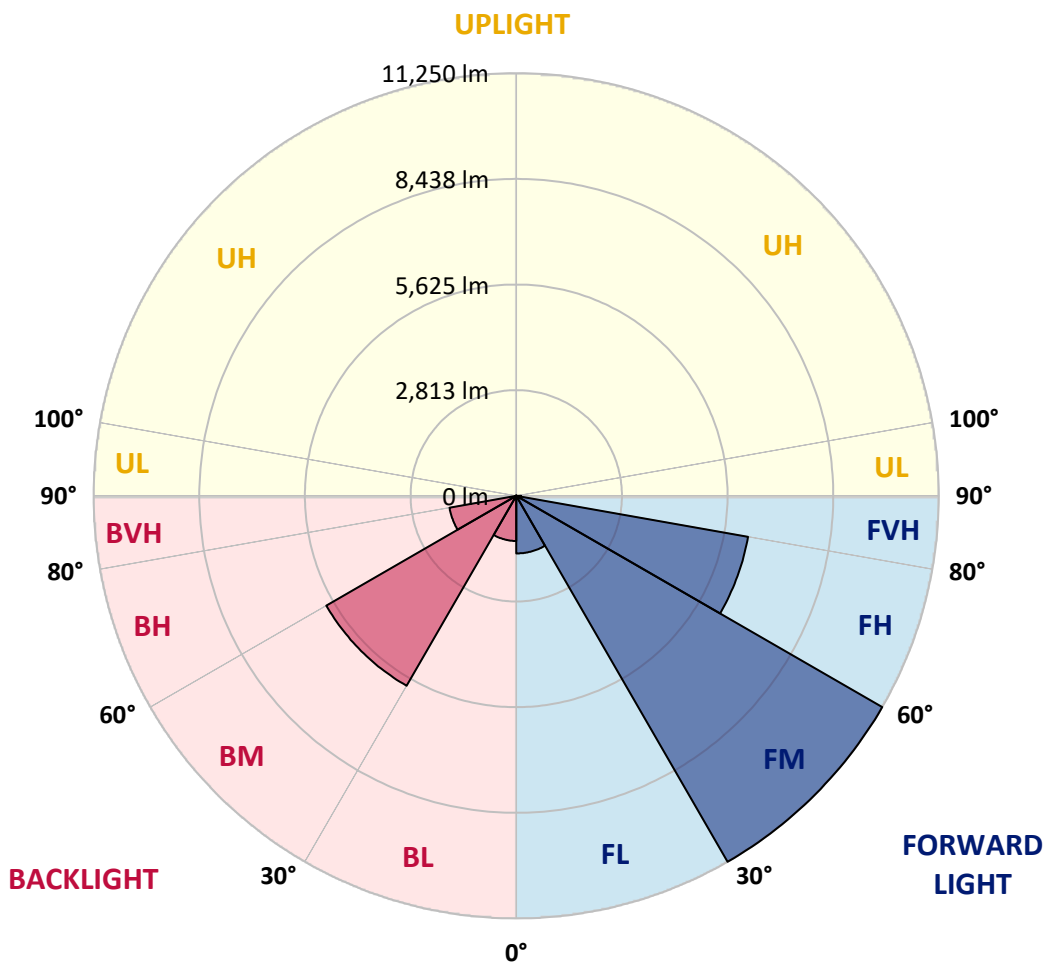


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1534.0	5.5			
FM (30°-60°)	11250.1	40.1			
FH (60°-80°)	6265.0	22.3			G3/7500
FVH (80°-90°)	122.0	0.4			G2/225
BL (0°-30°)	1202.2	4.3	B3/2500		
BM (30°-60°)	5839.3	20.8	B4/8500		
BH (60°-80°)	1805.1	6.4	B3/2500		G3/2500
BVH (80°-90°)	32.3	0.1			G1/100
UL (90°-100°)	14.6	0.1		U2/50	
UH (100°-180°)	1.4	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°	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2
2.5°	2793.8	2771.0	2773.3	2790.4	2739.1	2756.2	2732.2	2752.8	2743.6	2752.8	2758.5
5°	2849.7	2821.2	2820.1	2837.2	2796.1	2806.4	2779.0	2792.7	2780.1	2791.5	2791.5
7.5°	2918.2	2894.2	2888.5	2902.2	2865.7	2870.3	2842.9	2848.6	2833.8	2848.6	2837.2
10°	3003.7	2982.1	2972.9	2979.8	2946.7	2949.0	2919.3	2921.6	2899.9	2912.5	2903.3
12.5°	3093.9	3064.2	3059.6	3071.0	3036.8	3032.3	3007.2	3009.4	2985.5	2996.9	2990.0
15°	3187.4	3156.6	3157.7	3169.2	3134.9	3137.2	3111.0	3115.5	3091.6	3103.0	3093.9
17.5°	3311.8	3281.0	3278.7	3299.2	3270.7	3279.8	3252.4	3258.1	3241.0	3243.3	3233.0
20°	3489.7	3449.8	3441.8	3471.5	3433.8	3445.2	3430.4	3449.8	3442.9	3437.2	3429.3
22.5°	3701.9	3671.1	3655.1	3678.0	3633.5	3655.1	3663.1	3703.0	3713.3	3706.5	3581.0
25°	3986.0	3970.0	3954.0	3943.8	3890.1	3924.4	3965.4	4031.6	4075.0	4092.1	3917.5
27.5°	4369.3	4377.3	4307.7	4296.3	4235.8	4289.4	4363.6	4470.8	4558.7	4590.6	4355.6
30°	4862.1	4872.4	4777.7	4750.3	4713.8	4759.4	4897.5	5015.0	5145.0	5198.6	4884.9
32.5°	5516.9	5507.8	5368.6	5316.1	5283.1	5301.3	5446.2	5607.0	5753.1	5874.0	5488.4
35°	6316.6	6288.1	6139.8	5994.9	5863.7	5919.6	6025.7	6220.8	6442.1	6620.1	6083.9
37.5°	7245.2	7217.9	6992.0	6755.8	6496.9	6520.8	6615.5	6933.8	7219.0	7265.8	5982.4
40°	8204.7	8193.3	7979.9	7679.9	7277.2	7164.2	7289.7	7677.6	7978.8	7163.1	6218.5
42.5°	9162.9	9108.2	8988.4	8688.4	8152.2	7903.5	8072.3	8460.2	8784.2	7509.9	6766.1
45°	10129.2	10073.3	9971.8	9751.6	9193.7	8832.1	8881.2	9311.2	9604.4	8160.2	7336.5
47.5°	10987.1	10946.0	10873.0	10749.8	10252.4	9925.0	9830.3	10131.5	10331.1	8688.4	7774.6
50°	11726.3	11691.0	11719.5	11678.4	11532.4	11189.0	10876.4	10857.0	10952.9	9158.4	8177.3
52.5°	12376.6	12328.7	12450.7	12595.6	12730.2	12653.8	11897.4	11544.9	11458.2	9510.9	8447.7
55°	12913.9	12896.8	13106.7	13498.0	14010.2	14211.0	12989.2	12180.4	11910.0	9809.8	8472.7
57.5°	13235.6	13276.7	13720.4	14477.9	15479.6	15574.3	14266.9	12855.7	12308.1	9991.2	8592.5
60°	12685.7	12824.9	13623.5	15212.6	16729.9	16771.0	15185.2	12990.3	11786.8	9338.6	7952.5
62.5°	11038.4	11138.8	12394.8	15165.8	17158.8	16846.2	15390.6	12230.6	10330.0	7921.7	6763.8
65°	7799.7	7916.0	9429.9	13676.0	15610.8	15622.2	14098.1	10576.4	8257.1	6133.0	5222.6
67.5°	4704.7	4892.9	6326.9	9928.4	12853.4	13087.3	11761.7	8007.3	5909.4	4004.2	3380.2
70°	1543.5	1715.8	2888.5	5876.3	9265.6	10267.2	8833.2	5203.2	3085.9	1693.0	1363.3
72.5°	611.5	690.2	1017.6	2598.8	5971.0	6855.1	5442.8	2514.3	1035.8	449.5	391.3
75°	408.4	416.4	470.0	885.3	2921.6	3748.7	2623.8	731.3	384.5	280.6	246.4
77.5°	355.9	357.1	381.0	466.6	951.4	1437.4	755.2	392.4	318.3	230.4	204.2
80°	326.3	330.8	345.7	398.1	435.8	488.3	373.0	327.4	276.1	212.2	192.8
82.5°	312.6	316.0	325.1	360.5	352.5	366.2	301.2	260.1	232.7	195.1	184.8
85°	285.2	290.9	296.6	318.3	289.8	251.0	232.7	174.5	166.6	147.2	135.8
87.5°	215.6	214.5	208.8	212.2	193.9	158.6	131.2	98.1	79.9	66.2	54.8
90°	90.1	91.3	87.8	83.3	73.0	60.5	45.6	27.4	13.7	4.6	2.3
92.5°	68.4	69.6	67.3	60.5	52.5	42.2	30.8	16.0	9.1	3.4	1.1
95°	42.2	43.4	41.1	36.5	31.9	24.0	16.0	10.3	5.7	2.3	0.0
97.5°	25.1	26.2	24.0	21.7	17.1	11.4	9.1	6.8	4.6	2.3	0.0
100°	14.8	14.8	13.7	11.4	8.0	6.8	5.7	4.6	3.4	1.1	0.0
102.5°	6.8	6.8	6.8	4.6	3.4	3.4	3.4	3.4	3.4	1.1	0.0
105°	2.3	2.3	1.1	1.1	1.1	2.3	2.3	2.3	2.3	1.1	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.3	2.3	1.1	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1	1.1	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°	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2	2724.2
2.5°	2752.8	2731.1	2734.5	2715.1	2710.5	2690.0	2726.5	2729.9	2719.7	2729.9
5°	2787.0	2760.7	2767.6	2745.9	2740.2	2711.7	2741.4	2739.1	2731.1	2741.4
7.5°	2837.2	2807.5	2810.9	2785.8	2780.1	2748.2	2775.6	2767.6	2758.5	2771.0
10°	2901.1	2872.5	2873.7	2839.5	2836.0	2799.5	2834.9	2820.1	2806.4	2824.6
12.5°	2990.0	2950.1	2946.7	2909.0	2907.9	2870.3	2906.8	2894.2	2876.0	2904.5
15°	3092.7	3039.1	3025.4	2977.5	2976.4	2936.4	2972.9	2953.5	2944.4	2978.6
17.5°	3226.2	3158.9	3055.1	2891.9	2817.8	2830.3	2959.2	3006.0	2884.0	2902.2
20°	3307.2	2980.9	2829.2	2761.9	2726.5	2523.5	2248.5	2271.3	2541.7	2670.6
22.5°	3170.3	3073.3	3017.4	2922.7	2429.9	2360.3	2376.3	2371.7	2022.6	1918.8
25°	3455.5	3364.2	3262.7	2678.6	2577.1	2547.4	2555.4	2228.0	2037.5	2045.5
27.5°	3866.2	3748.7	3105.3	2852.0	2831.5	2788.1	2630.7	2237.1	2261.1	2277.0
30°	4385.2	3967.7	3307.2	3196.5	3155.5	3108.7	2441.3	2499.5	2544.0	2593.0
32.5°	4887.2	3859.3	3693.9	3578.7	3514.8	2822.3	2753.9	2861.1	2905.6	2947.8
35°	4841.6	4323.6	4109.2	3963.2	3843.4	3045.9	3106.4	3269.5	3387.0	3385.9
37.5°	4967.1	4829.0	4581.5	4396.7	3335.7	3412.1	3538.8	3724.7	3867.3	3866.2
40°	5490.7	5341.2	5108.5	4711.5	3696.2	3874.2	4047.6	4222.1	4324.8	4332.8
42.5°	6010.9	5895.7	5685.8	4161.7	4137.7	4384.1	4565.5	4676.2	4738.9	4760.6
45°	6528.8	6420.4	5586.5	4603.1	4676.2	4920.3	5030.9	5052.6	5119.9	5117.6
47.5°	6940.6	6848.2	5139.3	5127.9	5309.3	5478.1	5442.8	5415.4	5432.5	5441.6
50°	7320.5	5961.8	5540.9	5707.4	5983.5	6004.0	5856.9	4639.6	5743.9	5724.6
52.5°	6800.3	5818.1	5915.1	6305.2	6775.2	6536.8	6249.3	4067.0	5386.9	5899.1
55°	5950.4	6048.5	6267.6	6922.4	7386.7	7103.8	6623.5	4187.9	3575.3	2910.2
57.5°	6069.1	6224.2	6640.6	7545.3	7950.3	5626.4	6182.0	2952.4	1998.7	1997.5
60°	5651.5	5886.5	6632.6	7824.8	6435.3	3604.9	2476.7	67.3	387.9	384.5
62.5°	4777.7	5111.9	6328.0	7647.9	5331.0	2929.6	2206.3	5.7	2.3	2.3
65°	3695.1	4088.6	5276.2	6622.4	4722.9	2523.5	1638.2	0.0	0.0	0.0
67.5°	2423.1	2788.1	3962.0	5501.0	3920.9	1907.4	1100.9	0.0	0.0	0.0
70°	1009.6	1460.2	2461.9	3975.7	2884.0	1249.2	522.5	0.0	0.0	0.0
72.5°	292.0	444.9	1108.9	2374.0	1789.9	653.7	193.9	0.0	0.0	0.0
75°	192.8	203.1	335.4	954.9	870.4	239.6	78.7	0.0	0.0	0.0
77.5°	162.0	166.6	213.3	266.9	279.5	94.7	63.9	0.0	0.0	0.0
80°	149.4	150.6	191.7	198.5	149.4	78.7	62.7	0.0	0.0	0.0
82.5°	139.2	135.8	163.1	157.4	124.3	68.4	58.2	0.0	0.0	0.0
85°	95.8	98.1	110.7	140.3	75.3	34.2	41.1	0.0	0.0	0.0
87.5°	29.7	34.2	43.4	44.5	13.7	4.6	0.0	0.0	0.0	0.0
90°	1.1	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: P579601  
 CATALOG NUMBER: CST-CA8-230-760-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)