

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: P579549

Luminaire Tested: **CST-CA6-230-750-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579549  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA6-230-750-U-T5N-HSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (6) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28929 lumens  
Efficiency: N/A  
Efficacy: 127.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G4

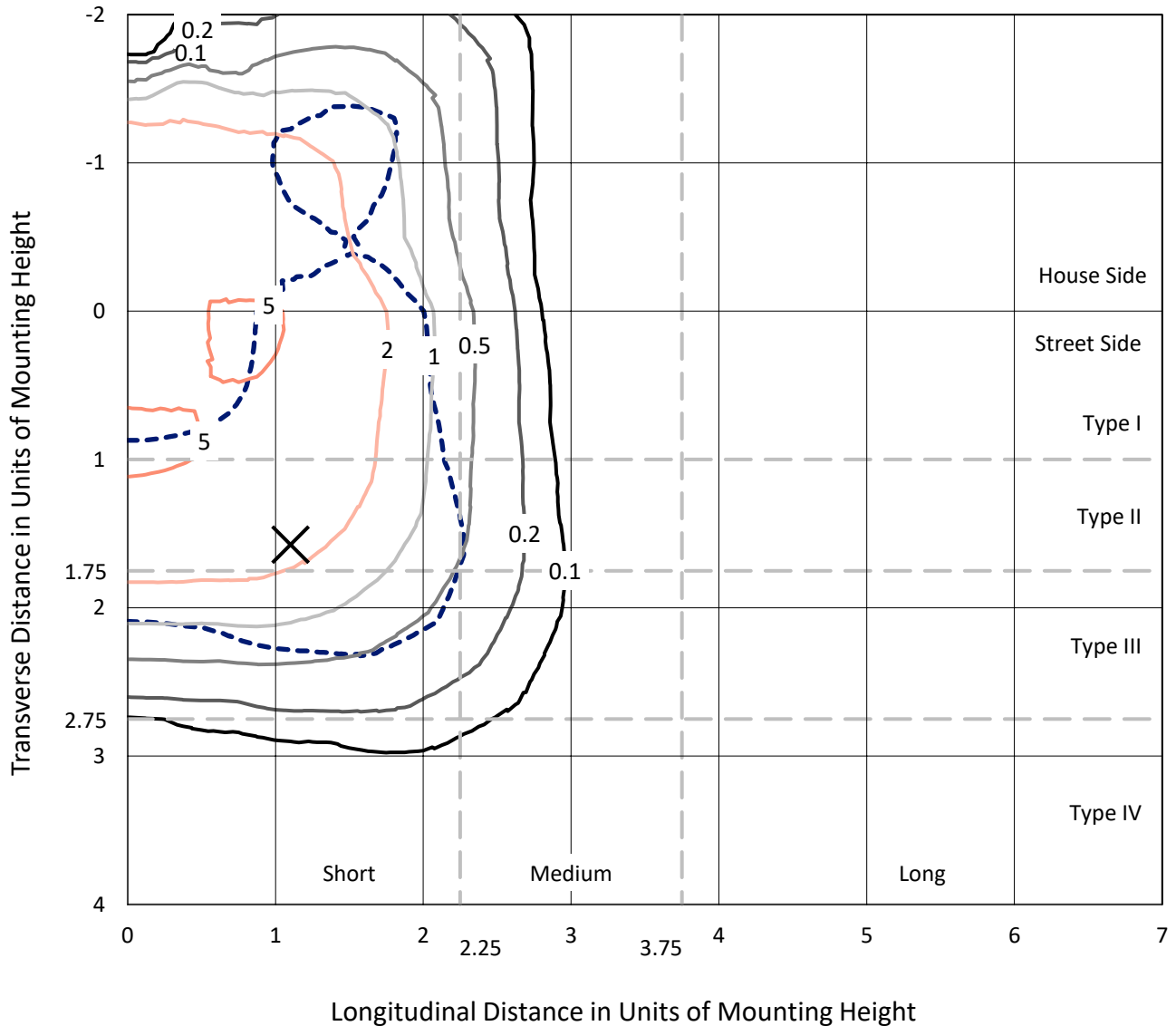
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

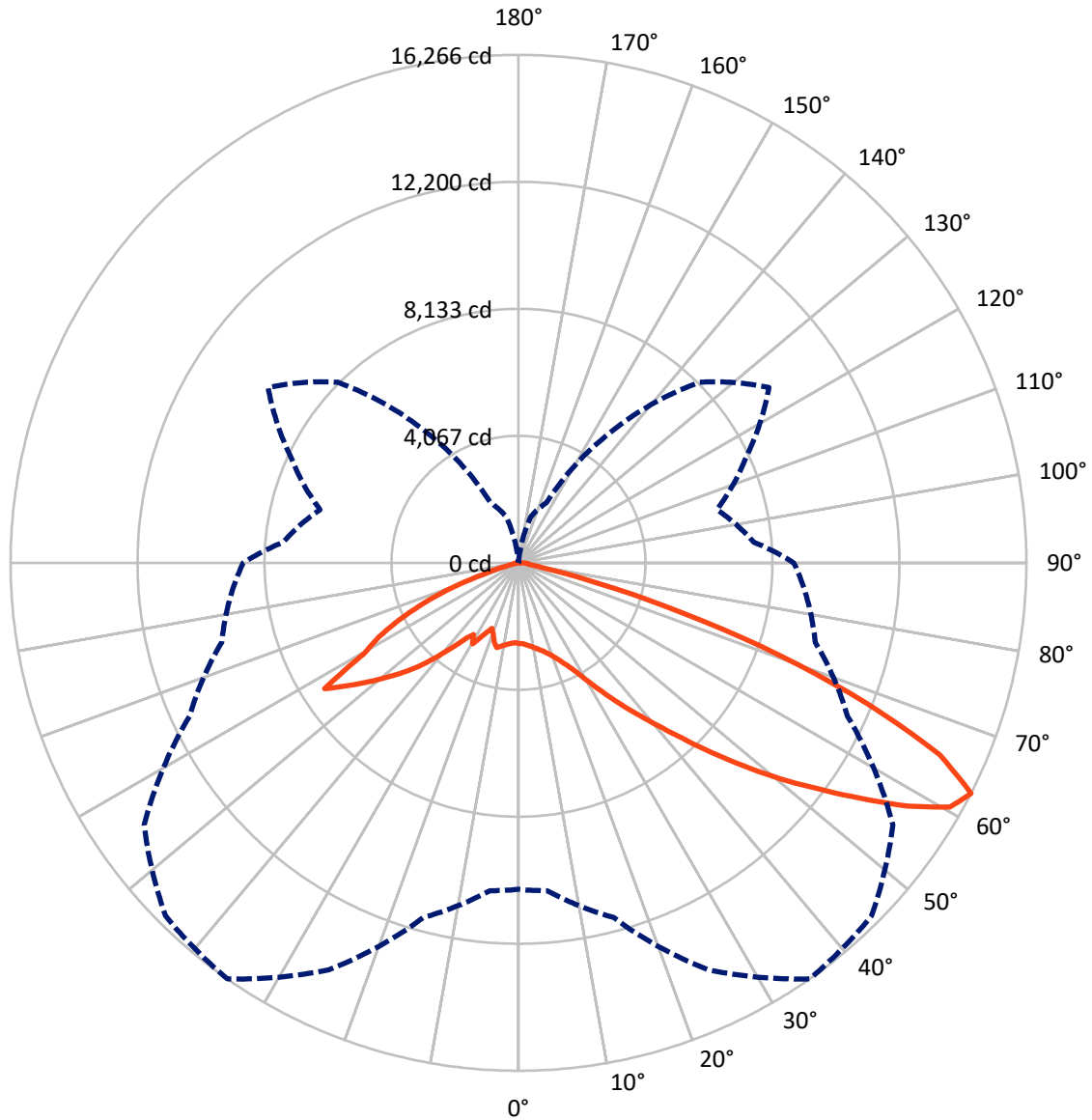
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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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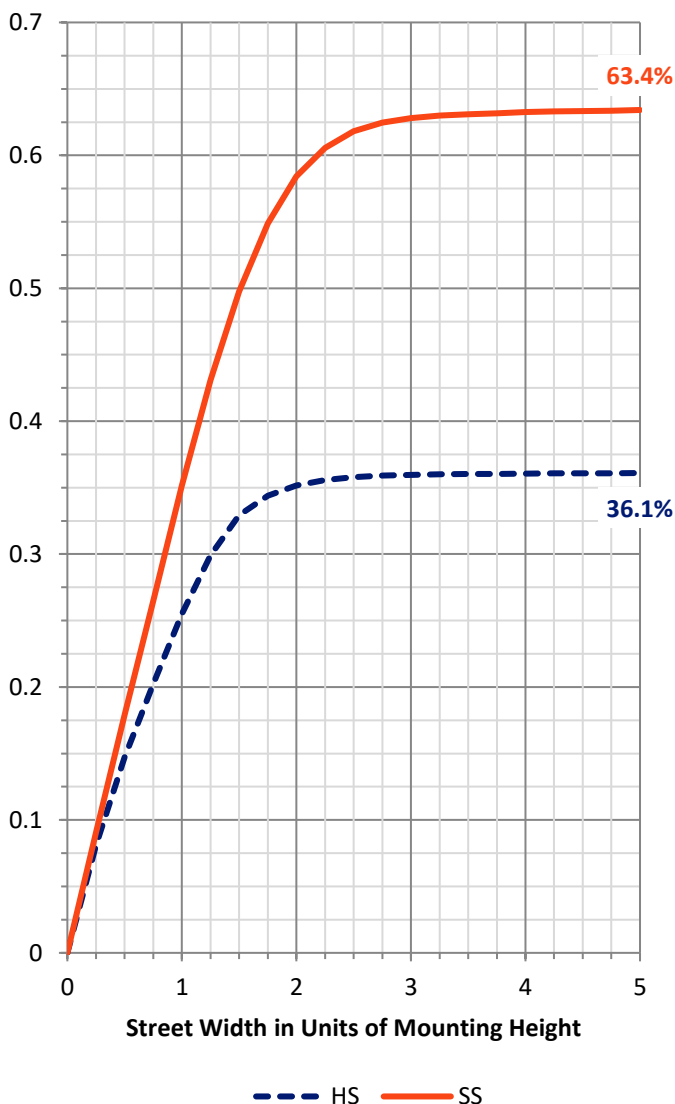
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10500.5	0.0	10500.6
	% Fixture	36.3	0.0	36.3
<b>Street Side</b>	Lumens	18414.7	13.7	18428.5
	% Fixture	63.7	0.0	63.7
<b>Total</b>	Lumens	28915.3	13.7	28929.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.5	0.9
10°-20°	822.5	2.8
20°-30°	1582.3	5.5
30°-40°	3156.5	10.9
40°-50°	5763.7	19.9
50°-60°	8612.9	29.8
60°-70°	7216.8	24.9
70°-80°	1350.6	4.7
80°-90°	155.5	0.5
90°-100°	12.4	0.0
100°-110°	1.3	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°	28915.3	100.0
0°-180°	28929.0	100.0

**Coefficient of Utilization**



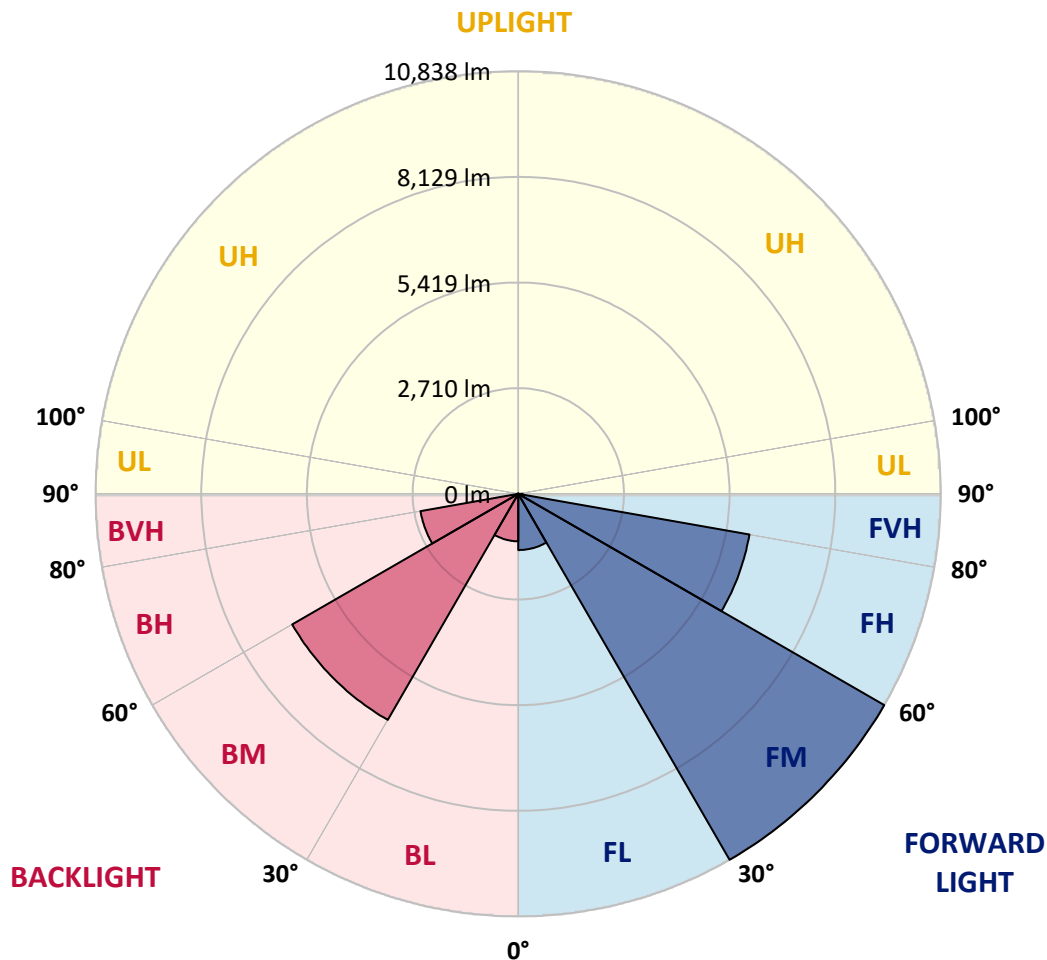
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1442.5	5.0			
FM	(30°-60°)	10838.1	37.5			
FH	(60°-80°)	6020.9	20.8			G3/7500
FVH	(80°-90°)	113.2	0.4			G2/225
BL	(0°-30°)	1216.8	4.2	B3/2500		
BM	(30°-60°)	6695.0	23.1	B4/8500		
BH	(60°-80°)	2546.4	8.8	B4/5000		G4/5000
BVH	(80°-90°)	42.2	0.1			G1/100
UL	(90°-100°)	12.4	0.0		U2/50	
UH	(100°-180°)	1.4	0.0		U1/10	

**BUG Rating: B4-U2-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5
2.5°	2643.8	2622.1	2625.3	2640.5	2592.8	2612.3	2591.7	2611.2	2604.7	2613.4	2619.9
5°	2681.7	2654.6	2656.8	2674.1	2637.3	2653.5	2632.9	2645.9	2635.1	2647.0	2648.1
7.5°	2733.8	2711.0	2707.8	2725.1	2693.7	2707.8	2687.1	2693.7	2682.8	2696.9	2692.6
10°	2803.2	2782.6	2777.2	2789.1	2764.1	2771.7	2750.0	2758.7	2742.5	2758.7	2751.1
12.5°	2880.2	2853.1	2854.1	2867.2	2842.2	2847.6	2830.3	2840.0	2820.5	2837.9	2832.5
15°	2971.3	2932.2	2939.8	2953.9	2930.1	2946.3	2925.7	2939.8	2921.4	2939.8	2933.3
17.5°	3089.5	3045.0	3050.4	3073.2	3053.7	3079.7	3055.8	3073.2	3064.5	3076.4	3074.3
20°	3239.1	3209.8	3204.4	3232.6	3204.4	3236.9	3223.9	3254.3	3256.5	3268.4	3273.8
22.5°	3438.6	3419.1	3406.1	3425.6	3400.7	3423.5	3441.9	3493.9	3513.5	3544.9	3547.1
25°	3704.3	3703.2	3674.0	3675.0	3643.6	3674.0	3726.0	3807.3	3859.4	3899.5	3884.3
27.5°	4063.3	4069.8	4025.3	4007.9	3971.1	4016.6	4124.0	4224.8	4319.2	4375.6	4375.6
30°	4531.7	4538.2	4473.2	4438.5	4404.8	4484.0	4612.0	4743.2	4877.6	4959.0	4940.5
32.5°	5152.0	5131.4	5038.1	4975.2	4917.8	5008.9	5156.3	5304.9	5488.2	5605.3	5591.2
35°	5904.6	5829.7	5736.5	5619.4	5495.7	5567.3	5706.1	5892.6	6147.5	6323.1	6278.7
37.5°	6778.6	6704.9	6545.4	6343.7	6128.0	6136.6	6246.2	6569.3	6888.1	7031.3	7000.9
40°	7686.2	7628.8	7482.4	7223.2	6832.8	6742.8	6922.8	7312.1	7616.8	7796.8	7745.9
42.5°	8611.2	8552.7	8442.1	8181.8	7664.5	7447.7	7635.3	8059.3	8384.6	8561.3	8502.8
45°	9534.1	9466.8	9379.0	9149.1	8655.7	8338.0	8443.1	8832.4	9129.6	9330.2	9209.8
47.5°	10345.2	10300.7	10241.1	10147.8	9716.2	9364.9	9357.3	9614.3	9819.3	9951.6	9804.1
50°	11051.1	11019.7	11053.3	11033.8	10876.5	10556.6	10360.4	10343.0	10409.2	10505.7	10295.3
52.5°	11684.4	11629.1	11753.8	11908.9	12024.9	11959.9	11324.4	10967.6	10895.0	10927.5	10688.9
55°	12202.8	12176.7	12386.0	12775.3	13312.1	13455.3	12314.5	11574.9	11307.1	11289.7	11018.6
57.5°	12519.4	12556.3	12974.9	13716.6	14701.2	14746.8	13530.1	12224.5	11708.3	11521.8	11209.5
60°	12015.2	12157.2	12871.8	14401.9	15880.0	15908.2	14422.5	12343.7	11207.3	10789.8	10402.7
62.5°	10455.8	10540.4	11756.0	14379.2	16266.0	15990.6	14635.1	11623.7	9839.9	9174.0	8816.2
65°	7365.3	7523.6	8825.9	12936.9	14822.7	14857.4	13426.0	10050.2	7857.6	7121.3	6890.3
67.5°	4448.2	4600.0	5987.0	9338.9	12049.9	12439.2	11199.7	7609.2	5634.5	4704.1	4471.0
70°	1444.4	1609.3	2728.4	5504.4	8863.9	9797.6	8428.0	4952.5	2950.7	2066.9	1816.4
72.5°	548.7	598.6	888.1	2404.1	5520.7	6541.1	5212.7	2484.4	914.2	544.4	478.2
75°	356.8	364.4	415.3	842.6	2662.2	3601.3	2512.6	727.6	366.5	325.3	301.5
77.5°	306.9	312.3	334.0	419.7	848.0	1377.2	721.1	371.9	305.8	271.1	254.8
80°	289.5	291.7	305.8	355.7	396.9	459.8	347.0	311.2	266.8	254.8	242.9
82.5°	274.4	281.9	289.5	323.2	322.1	330.7	278.7	244.0	226.6	238.6	234.2
85°	255.9	260.3	265.7	288.5	262.4	222.3	214.7	168.1	163.7	174.6	163.7
87.5°	180.0	190.9	184.3	194.1	182.2	142.1	120.4	95.4	75.9	62.9	60.7
90°	73.7	74.8	70.5	65.1	57.5	47.7	38.0	23.9	10.8	5.4	2.2
92.5°	57.5	57.5	55.3	49.9	43.4	35.8	27.1	15.2	7.6	3.3	1.1
95°	35.8	36.9	34.7	31.4	27.1	21.7	16.3	8.7	5.4	2.2	1.1
97.5°	22.8	22.8	20.6	18.4	15.2	10.8	7.6	6.5	4.3	2.2	0.0
100°	13.0	13.0	11.9	9.8	7.6	5.4	5.4	4.3	3.3	1.1	0.0
102.5°	7.6	7.6	5.4	4.3	3.3	3.3	3.3	3.3	2.2	1.1	0.0
105°	3.3	3.3	2.2	2.2	1.1	1.1	2.2	2.2	2.2	1.1	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	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	1.1



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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°	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5	2588.5
2.5°	2615.6	2596.1	2599.3	2580.9	2577.6	2559.2	2596.1	2600.4	2589.6	2599.3
5°	2645.9	2622.1	2629.7	2609.1	2605.8	2580.9	2613.4	2611.2	2602.6	2612.3
7.5°	2691.5	2666.5	2670.9	2648.1	2643.8	2616.7	2647.0	2637.3	2628.6	2640.5
10°	2755.5	2727.3	2729.4	2700.2	2703.4	2667.6	2704.5	2687.1	2676.3	2692.6
12.5°	2832.5	2801.0	2802.1	2771.7	2770.6	2735.9	2768.5	2758.7	2742.5	2767.4
15°	2932.2	2896.4	2893.2	2853.1	2842.2	2803.2	2833.5	2815.1	2804.3	2840.0
17.5°	3072.1	3032.0	3020.1	2971.3	2768.5	2651.4	2814.0	2869.3	2802.1	2791.2
20°	3258.6	3225.0	3197.9	3124.2	2783.7	2418.2	2148.2	2150.4	2434.5	2565.7
22.5°	3511.3	3471.2	3420.2	3315.0	2553.8	2265.3	2266.4	2263.1	1942.2	1806.6
25°	3857.2	3808.4	3704.3	3110.1	2711.0	2444.2	2437.7	2120.0	1943.2	1953.0
27.5°	4324.6	4224.8	3615.4	3369.2	2990.8	2676.3	2520.1	2134.1	2155.8	2171.0
30°	4918.8	4517.6	3907.1	3760.7	3326.9	2984.3	2330.4	2383.5	2426.9	2436.7
32.5°	5528.3	4530.6	4373.4	4218.3	3741.2	2715.3	2626.4	2727.3	2772.8	2778.2
35°	5522.9	5085.8	4883.1	4708.5	4125.1	2905.1	2961.5	3116.6	3232.6	3227.2
37.5°	5844.9	5698.5	5456.7	5235.5	3713.0	3272.7	3373.6	3549.2	3690.2	3685.9
40°	6518.3	6349.2	6093.3	5629.1	4111.0	3693.5	3834.4	4023.1	4122.9	4128.3
42.5°	7154.9	7015.0	6753.7	5259.3	4608.7	4199.9	4327.8	4454.7	4516.5	4536.1
45°	7788.2	7688.4	6818.7	5812.4	5210.5	4709.6	4794.1	4818.0	4883.1	4875.5
47.5°	8302.2	8191.6	6556.3	6506.4	5940.4	5193.2	5186.7	5155.2	5179.1	5184.5
50°	8771.7	7439.0	7083.3	7249.2	6705.9	5686.6	5563.0	5499.0	5466.5	5452.4
52.5°	9142.6	7441.2	7575.6	8017.0	7570.2	6222.3	5956.6	5776.6	5057.6	5620.5
55°	9458.1	7748.0	8041.9	8837.9	8315.2	6782.9	6312.3	5991.3	3375.7	2706.7
57.5°	9639.2	7981.2	8503.9	9606.7	8965.8	7406.5	5811.3	5025.1	1908.5	1906.4
60°	8939.8	7562.6	8490.9	10010.1	8778.2	5745.2	2366.2	1980.1	361.1	370.9
62.5°	7568.0	6579.1	8052.8	9788.9	8175.3	5054.4	2122.2	1524.7	11.9	9.8
65°	5863.4	5248.5	6780.8	8610.1	7437.9	4217.2	1582.1	1098.5	3.3	0.0
67.5°	3835.5	3698.9	5003.4	7139.7	6066.1	3267.3	1061.6	525.9	2.2	0.0
70°	1635.3	1894.4	3169.7	5176.9	4643.4	2248.0	511.8	189.8	1.1	0.0
72.5°	457.6	606.2	1410.8	3033.1	2920.3	1182.0	199.5	80.2	1.1	0.0
75°	271.1	233.1	404.5	1210.2	1421.7	415.3	92.2	61.8	1.1	0.0
77.5°	225.6	182.2	232.1	309.1	430.5	149.6	78.1	55.3	0.0	0.0
80°	211.5	161.6	200.6	215.8	212.5	124.7	77.0	55.3	0.0	0.0
82.5°	200.6	141.0	165.9	165.9	177.8	114.9	72.7	54.2	0.0	0.0
85°	150.7	98.7	110.6	143.1	128.0	81.3	53.1	43.4	0.0	0.0
87.5°	57.5	35.8	43.4	45.5	36.9	18.4	4.3	4.3	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: P579549  
 CATALOG NUMBER: CST-CA6-230-750-U-T5N-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)