

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: P579561

Luminaire Tested: **CST-CA8-330-750-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579561  
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-CA8-330-750-U-T5N-HSS-HM-EX90  
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: 41098 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G4

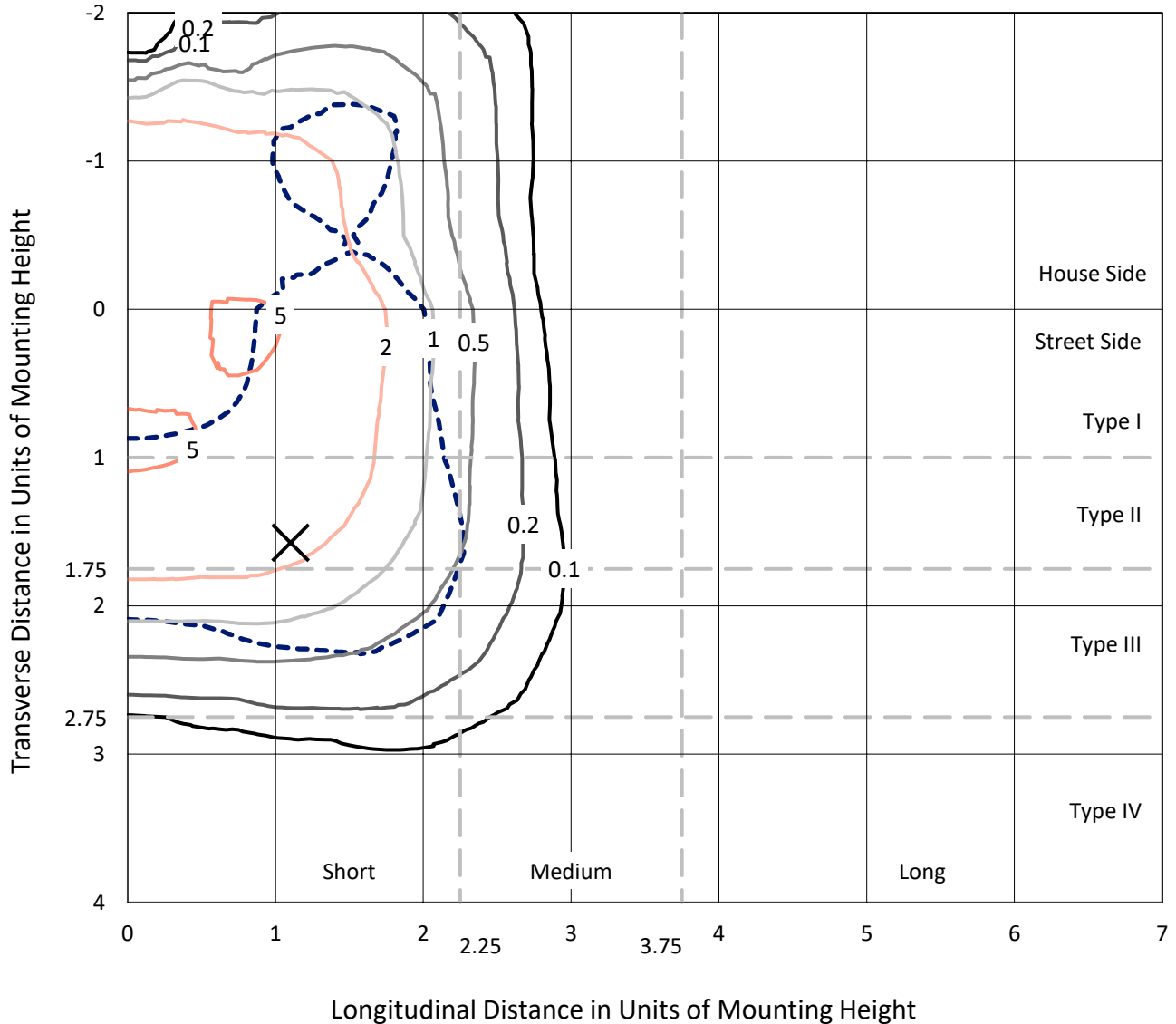
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

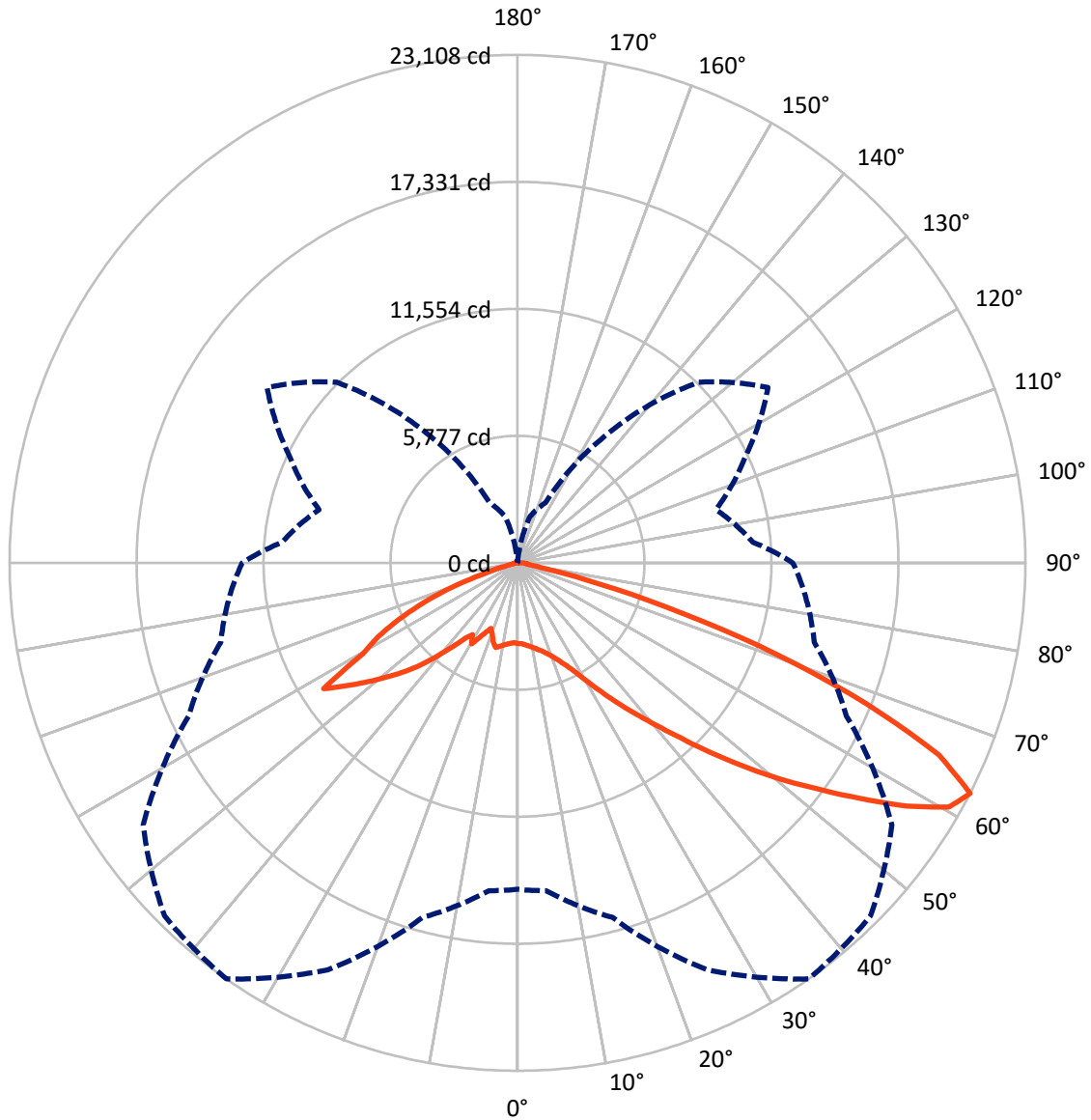
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.5 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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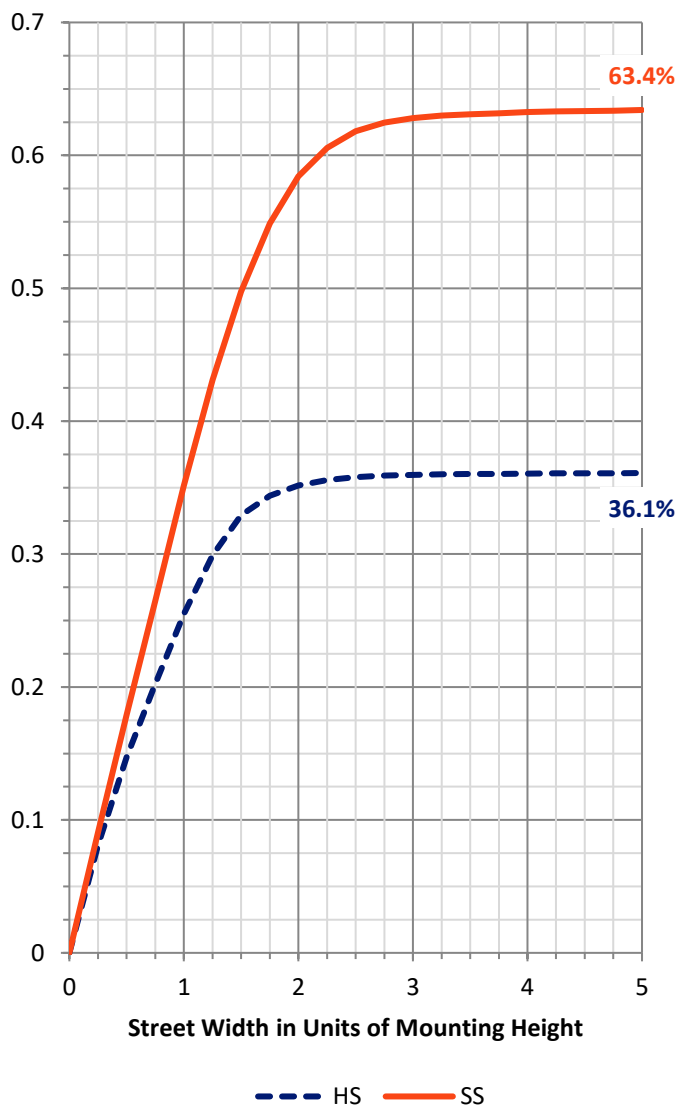
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14917.6	0.0	14917.6
	% Fixture	36.3	0.0	36.3
<b>Street Side</b>	Lumens	26160.9	19.5	26180.4
	% Fixture	63.7	0.0	63.7
<b>Total</b>	Lumens	41078.5	19.5	41098.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	361.5	0.9
10°-20°	1168.4	2.8
20°-30°	2247.9	5.5
30°-40°	4484.3	10.9
40°-50°	8188.2	19.9
50°-60°	12236.0	29.8
60°-70°	10252.6	24.9
70°-80°	1918.7	4.7
80°-90°	220.9	0.5
90°-100°	17.6	0.0
100°-110°	1.9	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°	41078.5	100.0
0°-180°	41098.0	100.0

**Coefficient of Utilization**

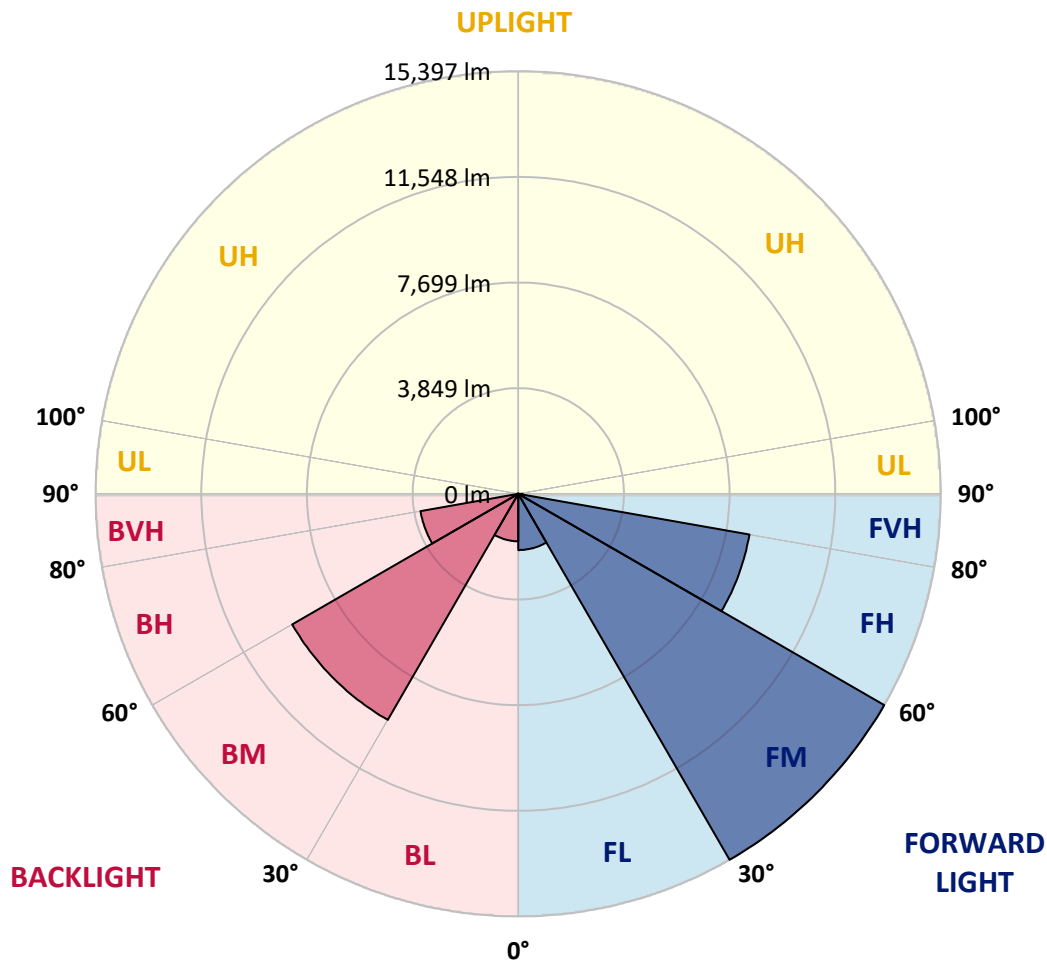


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2049.2	5.0			
FM (30°-60°)	15397.2	37.5			
FH (60°-80°)	8553.7	20.8			G4/12000
FVH (80°-90°)	160.8	0.4			G2/225
BL (0°-30°)	1728.7	4.2	B3/2500		
BM (30°-60°)	9511.3	23.1	B5		
BH (60°-80°)	3617.6	8.8	B4/5000		G4/5000
BVH (80°-90°)	60.0	0.1			G1/100
UL (90°-100°)	17.6	0.0		U2/50	
UH (100°-180°)	1.9	0.0		U1/10	

**BUG Rating: B5-U2-G4**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3
2.5°	3755.9	3725.1	3729.7	3751.3	3683.5	3711.2	3681.9	3709.7	3700.4	3712.7	3722.0
5°	3809.8	3771.3	3774.4	3799.0	3746.6	3769.7	3740.5	3759.0	3743.5	3760.5	3762.0
7.5°	3883.7	3851.4	3846.8	3871.4	3826.7	3846.8	3817.5	3826.7	3811.3	3831.4	3825.2
10°	3982.3	3953.1	3945.4	3962.3	3926.9	3937.7	3906.8	3919.2	3896.1	3919.2	3908.4
12.5°	4091.7	4053.2	4054.7	4073.2	4037.8	4045.5	4020.8	4034.7	4007.0	4031.6	4023.9
15°	4221.1	4165.7	4176.4	4196.5	4162.6	4185.7	4156.4	4176.4	4150.3	4176.4	4167.2
17.5°	4389.0	4325.9	4333.6	4365.9	4338.2	4375.2	4341.3	4365.9	4353.6	4370.6	4367.5
20°	4601.6	4560.0	4552.3	4592.4	4552.3	4598.6	4580.1	4623.2	4626.3	4643.2	4650.9
22.5°	4885.1	4857.4	4838.9	4866.6	4831.2	4863.5	4889.7	4963.7	4991.4	5036.1	5039.2
25°	5262.5	5261.0	5219.4	5220.9	5176.3	5219.4	5293.3	5408.9	5482.8	5539.8	5518.3
27.5°	5772.5	5781.7	5718.5	5693.9	5641.5	5706.2	5858.7	6002.0	6136.0	6216.1	6216.1
30°	6438.0	6447.2	6354.8	6305.5	6257.7	6370.2	6552.0	6738.4	6929.4	7045.0	7018.8
32.5°	7319.2	7289.9	7157.4	7068.1	6986.4	7115.8	7325.3	7536.4	7796.8	7963.1	7943.1
35°	8388.3	8282.0	8149.5	7983.2	7807.5	7909.2	8106.4	8371.4	8733.4	8983.0	8919.8
37.5°	9630.0	9525.3	9298.8	9012.2	8705.7	8718.0	8873.6	9332.7	9785.6	9989.0	9945.8
40°	10919.5	10837.8	10629.8	10261.6	9707.0	9579.2	9834.9	10388.0	10820.9	11076.6	11004.2
42.5°	12233.6	12150.4	11993.2	11623.5	10888.6	10580.5	10847.1	11449.4	11911.6	12162.7	12079.5
45°	13544.6	13449.0	13324.3	12997.7	12296.7	11845.3	11994.8	12547.8	12969.9	13254.9	13083.9
47.5°	14696.9	14633.7	14549.0	14416.5	13803.4	13304.2	13293.5	13658.6	13949.7	14137.7	13928.2
50°	15699.8	15655.1	15702.9	15675.2	15451.8	14997.3	14718.5	14693.8	14787.8	14924.9	14626.0
52.5°	16599.5	16520.9	16698.1	16918.4	17083.2	16990.8	16088.0	15581.2	15478.0	15524.2	15185.3
55°	17335.9	17298.9	17596.2	18149.3	18911.9	19115.2	17494.5	16443.9	16063.4	16038.7	15653.6
57.5°	17785.7	17838.1	18432.7	19486.5	20885.3	20950.0	19221.5	17366.7	16633.4	16368.4	15924.7
60°	17069.4	17271.2	18286.4	20460.1	22559.9	22599.9	20489.4	17536.1	15921.6	15328.5	14778.5
62.5°	14854.0	14974.2	16701.2	20427.8	23108.3	22717.0	20791.3	16513.2	13979.0	13033.1	12524.7
65°	10463.5	10688.4	12538.6	18378.8	21057.9	21107.2	19073.6	14277.9	11162.9	10116.8	9788.7
67.5°	6319.4	6535.0	8505.4	13267.3	17118.7	17671.7	15910.9	10810.1	8004.7	6682.9	6351.7
70°	2052.0	2286.2	3876.0	7819.9	12592.5	13918.9	11973.2	7035.7	4191.9	2936.3	2580.4
72.5°	779.5	850.4	1261.7	3415.4	7843.0	9292.6	7405.5	3529.4	1298.7	773.4	679.4
75°	506.8	517.6	590.0	1197.0	3782.1	5116.2	3569.5	1033.7	520.7	462.2	428.3
77.5°	436.0	443.7	474.5	596.2	1204.7	1956.5	1024.5	528.4	434.4	385.1	362.0
80°	411.3	414.4	434.4	505.3	563.8	653.2	493.0	442.1	379.0	362.0	345.1
82.5°	389.8	400.5	411.3	459.1	457.5	469.9	395.9	346.6	322.0	338.9	332.8
85°	363.6	369.7	377.4	409.8	372.8	315.8	305.0	238.8	232.6	248.0	232.6
87.5°	255.7	271.1	261.9	275.8	258.8	201.8	171.0	135.6	107.8	89.4	86.3
90°	104.8	106.3	100.1	92.4	81.6	67.8	53.9	33.9	15.4	7.7	3.1
92.5°	81.6	81.6	78.6	70.9	61.6	50.8	38.5	21.6	10.8	4.6	1.5
95°	50.8	52.4	49.3	44.7	38.5	30.8	23.1	12.3	7.7	3.1	1.5
97.5°	32.4	32.4	29.3	26.2	21.6	15.4	10.8	9.2	6.2	3.1	0.0
100°	18.5	18.5	16.9	13.9	10.8	7.7	7.7	6.2	4.6	1.5	0.0
102.5°	10.8	10.8	7.7	6.2	4.6	4.6	4.6	4.6	3.1	1.5	0.0
105°	4.6	4.6	3.1	3.1	1.5	1.5	3.1	3.1	3.1	1.5	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.1	3.1	1.5	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.1	1.5	1.5



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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°	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3	3677.3
2.5°	3715.8	3688.1	3692.7	3666.5	3661.9	3635.7	3688.1	3694.3	3678.8	3692.7
5°	3759.0	3725.1	3735.8	3706.6	3702.0	3666.5	3712.7	3709.7	3697.3	3711.2
7.5°	3823.7	3788.2	3794.4	3762.0	3755.9	3717.4	3760.5	3746.6	3734.3	3751.3
10°	3914.6	3874.5	3877.6	3836.0	3840.6	3789.8	3842.1	3817.5	3802.1	3825.2
12.5°	4023.9	3979.3	3980.8	3937.7	3936.1	3886.8	3933.0	3919.2	3896.1	3931.5
15°	4165.7	4114.8	4110.2	4053.2	4037.8	3982.3	4025.5	3999.3	3983.9	4034.7
17.5°	4364.4	4307.4	4290.4	4221.1	3933.0	3766.7	3997.7	4076.3	3980.8	3965.4
20°	4629.4	4581.6	4543.1	4438.3	3954.6	3435.4	3051.8	3054.9	3458.5	3645.0
22.5°	4988.3	4931.3	4858.9	4709.5	3628.0	3218.2	3219.8	3215.1	2759.1	2566.6
25°	5479.8	5410.4	5262.5	4418.3	3851.4	3472.4	3463.2	3011.8	2760.7	2774.5
27.5°	6143.7	6002.0	5136.2	4786.5	4248.9	3802.1	3580.3	3031.8	3062.6	3084.2
30°	6988.0	6418.0	5550.6	5342.6	4726.4	4239.6	3310.7	3386.1	3447.8	3461.6
32.5°	7853.8	6436.4	6213.1	5992.8	5314.9	3857.6	3731.2	3874.5	3939.2	3946.9
35°	7846.0	7225.2	6937.1	6689.1	5860.3	4127.1	4207.3	4427.6	4592.4	4584.7
37.5°	8303.6	8095.6	7752.1	7437.8	5274.9	4649.4	4792.7	5042.2	5242.5	5236.3
40°	9260.3	9020.0	8656.4	7997.0	5840.2	5247.1	5447.4	5715.5	5857.2	5864.9
42.5°	10164.6	9965.9	9594.6	7471.7	6547.4	5966.6	6148.4	6328.6	6416.4	6444.1
45°	11064.3	10922.5	9687.0	8257.4	7402.4	6690.6	6810.8	6844.7	6937.1	6926.3
47.5°	11794.5	11637.4	9314.2	9243.3	8439.2	7377.7	7368.5	7323.8	7357.7	7365.4
50°	12461.6	10568.2	10062.9	10298.6	9526.8	8078.7	7903.0	7812.2	7765.9	7745.9
52.5°	12988.4	10571.3	10762.3	11389.3	10754.6	8839.7	8462.3	8206.5	7185.2	7984.7
55°	13436.7	11007.3	11424.8	12555.5	11813.0	9636.2	8967.6	8511.6	4795.7	3845.2
57.5°	13694.0	11338.5	12081.0	13647.8	12737.3	10522.0	8255.8	7138.9	2711.4	2708.3
60°	12700.3	10743.8	12062.5	14220.9	12470.8	8161.9	3361.5	2813.1	513.0	526.9
62.5°	10751.5	9346.6	11440.2	13906.6	11614.2	7180.5	3014.9	2166.0	16.9	13.9
65°	8329.8	7456.3	9633.1	12232.0	10566.7	5991.2	2247.7	1560.6	4.6	0.0
67.5°	5448.9	5254.8	7108.1	10143.0	8617.9	4641.7	1508.2	747.2	3.1	0.0
70°	2323.2	2691.4	4503.0	7354.6	6596.7	3193.6	727.1	269.6	1.5	0.0
72.5°	650.1	861.2	2004.3	4308.9	4148.7	1679.2	283.5	114.0	1.5	0.0
75°	385.1	331.2	574.6	1719.3	2019.7	590.0	130.9	87.8	1.5	0.0
77.5°	320.4	258.8	329.7	439.1	611.6	212.6	110.9	78.6	0.0	0.0
80°	300.4	229.5	285.0	306.6	301.9	177.2	109.4	78.6	0.0	0.0
82.5°	285.0	200.3	235.7	235.7	252.7	163.3	103.2	77.0	0.0	0.0
85°	214.1	140.2	157.1	203.4	181.8	115.5	75.5	61.6	0.0	0.0
87.5°	81.6	50.8	61.6	64.7	52.4	26.2	6.2	6.2	0.0	0.0
90°	1.5	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: P579561  
 CATALOG NUMBER: CST-CA8-330-750-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)