

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: P579560

Luminaire Tested: **CST-CA8-330-750-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579560  
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-CA8-330-750-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: 33763 lumens  
Efficiency: N/A  
Efficacy: 101.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G3

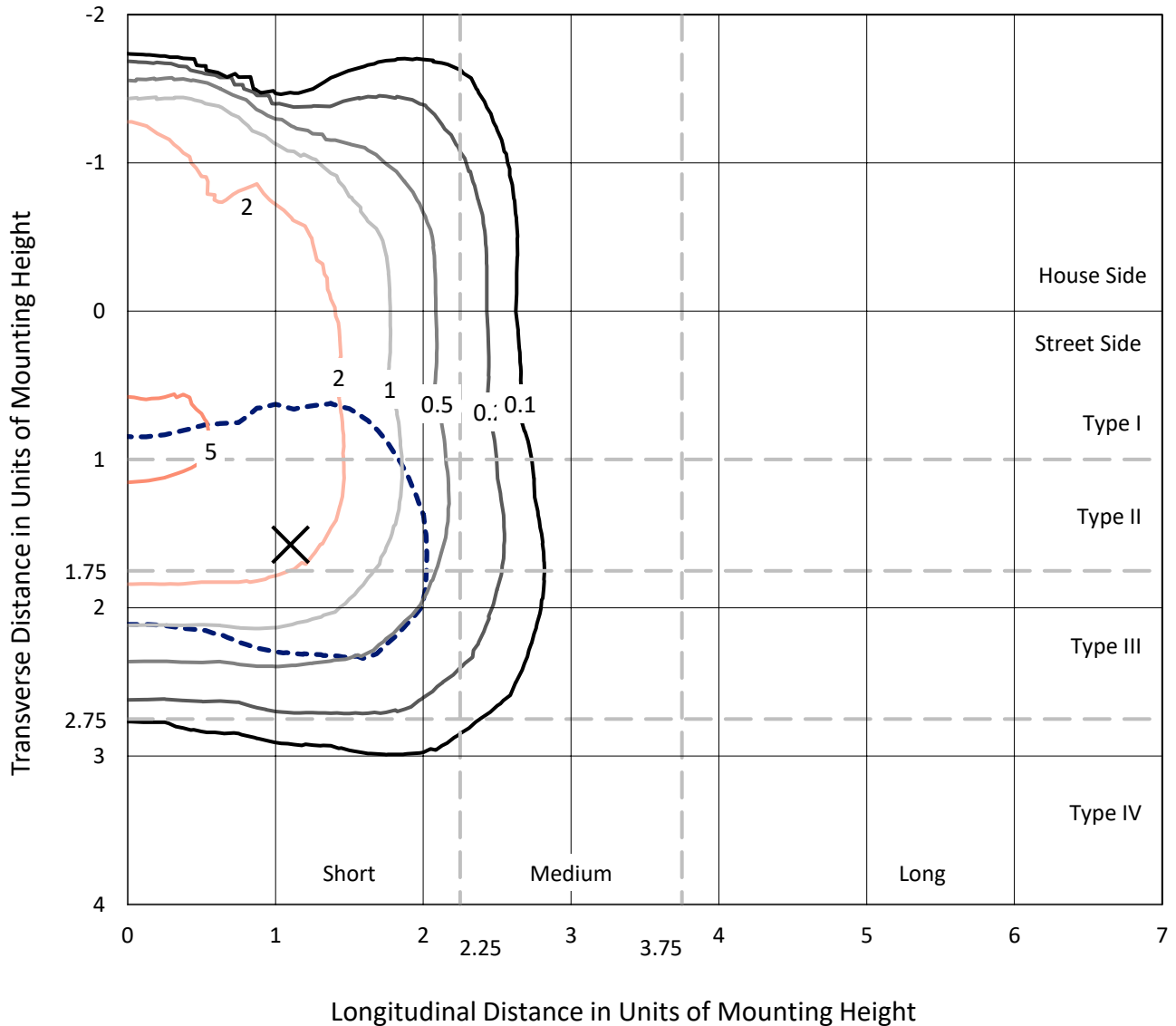
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

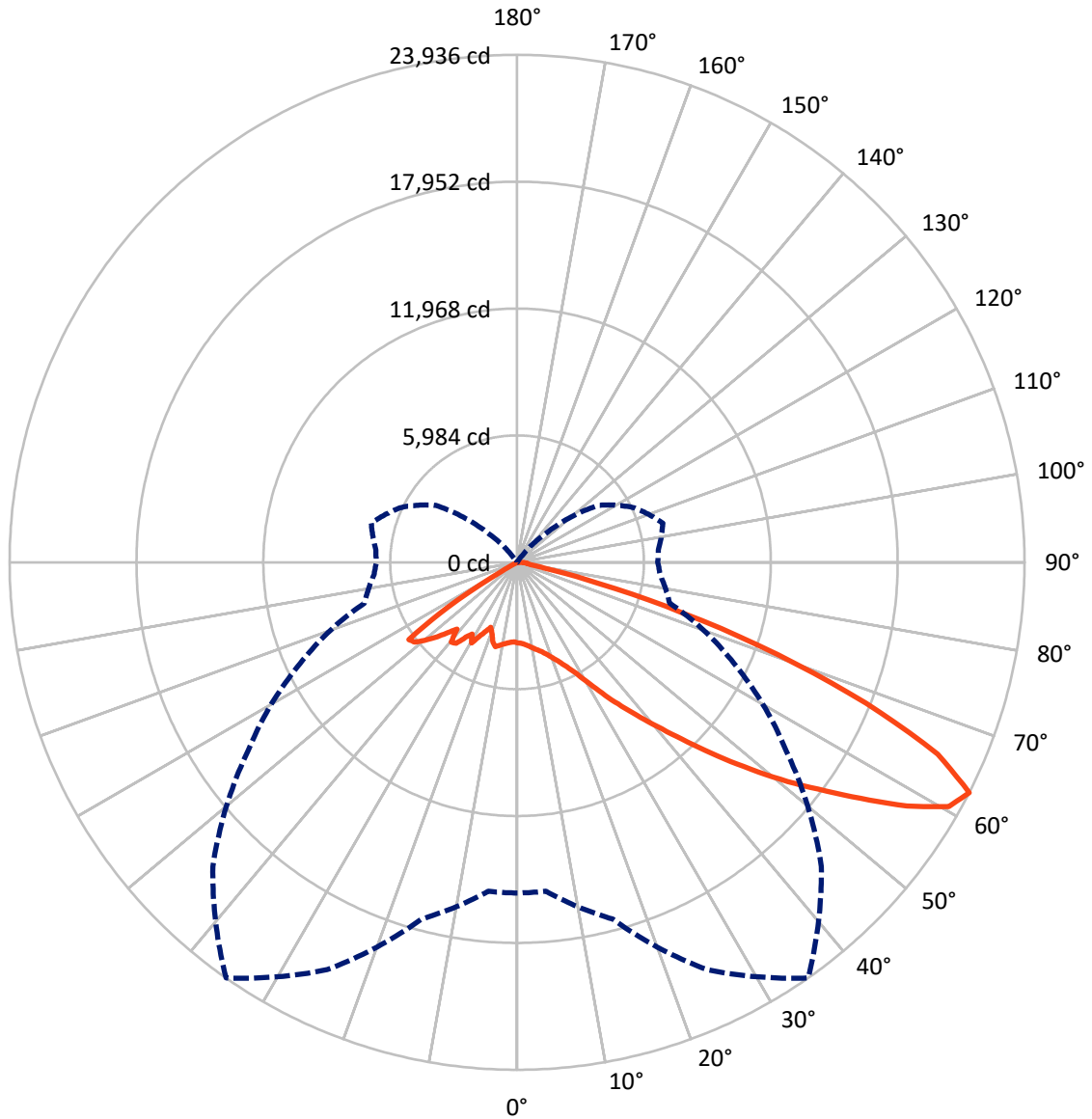
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.8 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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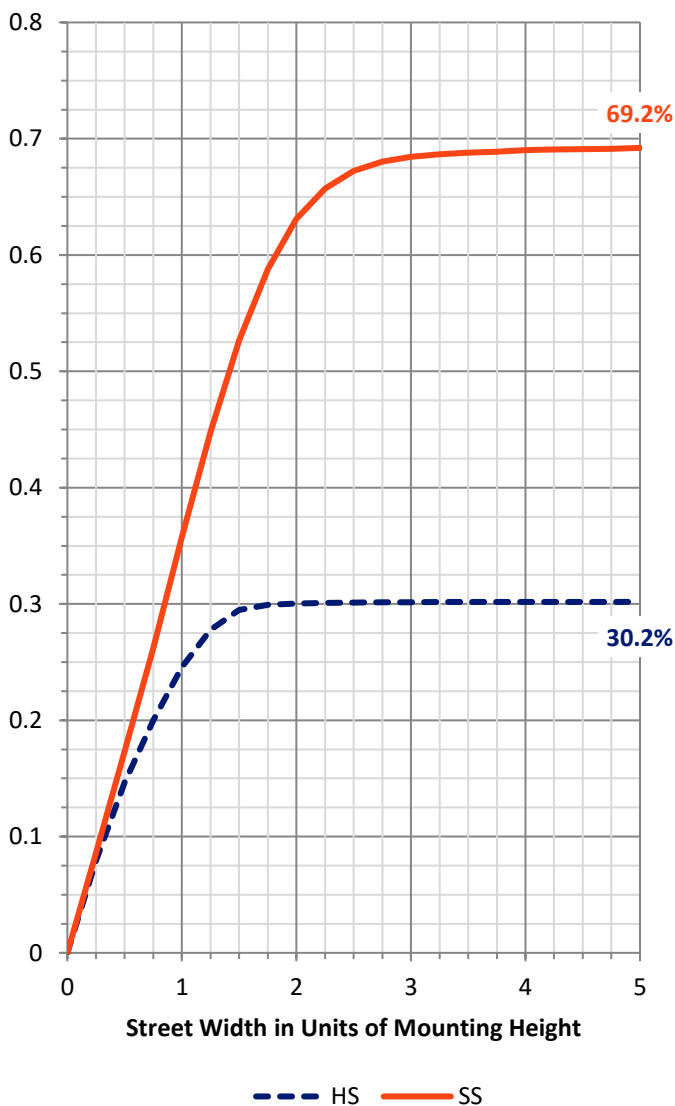
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10247.2	0.0	10247.2
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	23486.5	29.3	23515.8
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	33733.7	29.3	33763.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	375.1	1.1
10°-20°	1204.0	3.6
20°-30°	2200.6	6.5
30°-40°	4193.6	12.4
40°-50°	7198.0	21.3
50°-60°	9656.2	28.6
60°-70°	7340.7	21.7
70°-80°	1390.0	4.1
80°-90°	175.5	0.5
90°-100°	25.8	0.1
100°-110°	3.5	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°	33733.7	99.9
0°-180°	33763.0	100.0

**Coefficient of Utilization**



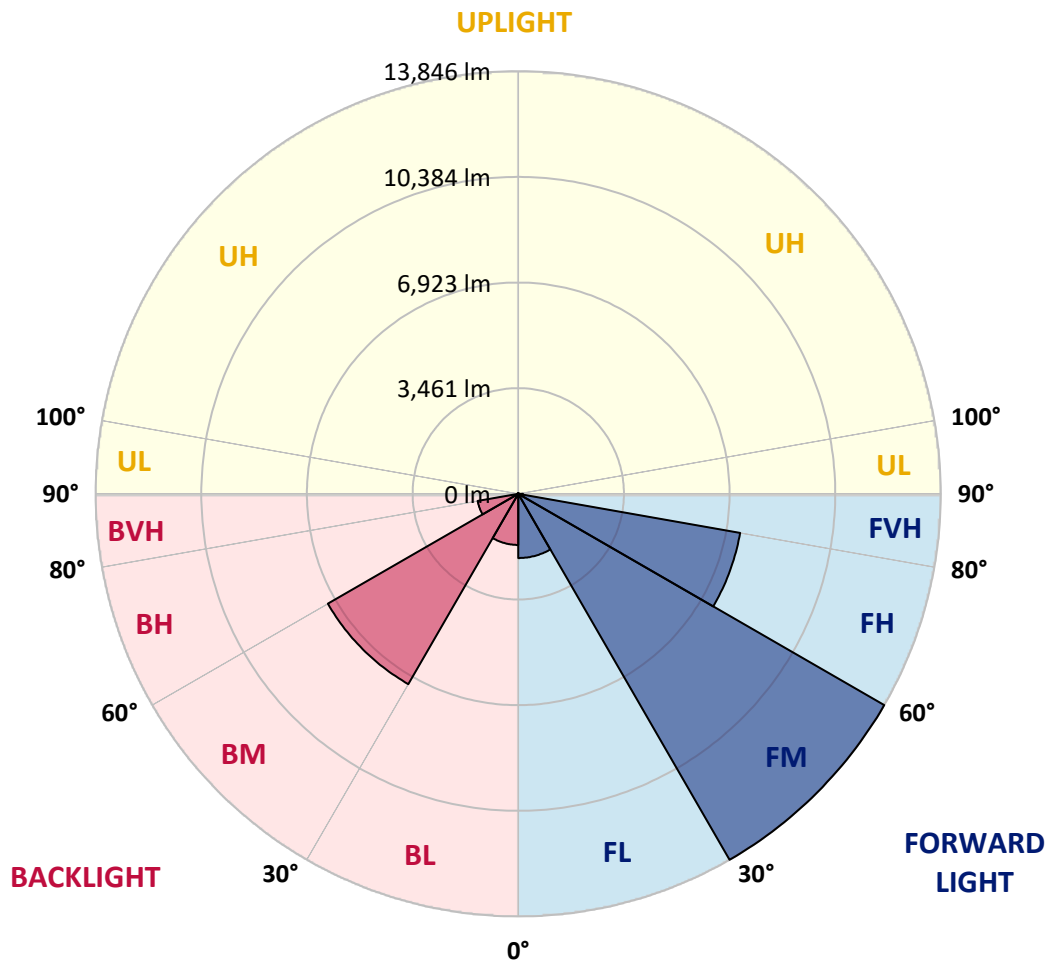
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2104.7	6.2			
FM	(30°-60°)	13845.6	41.0			
FH	(60°-80°)	7381.2	21.9			G3/7500
FVH	(80°-90°)	155.0	0.5			G2/225
BL	(0°-30°)	1675.0	5.0	B3/2500		
BM	(30°-60°)	7202.2	21.3	B4/8500		
BH	(60°-80°)	1349.4	4.0	B3/2500		G3/2500
BVH	(80°-90°)	20.6	0.1			G1/100
UL	(90°-100°)	25.8	0.1		U2/50	
UH	(100°-180°)	3.5	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°	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1
2.5°	3896.0	3867.4	3869.0	3894.4	3821.2	3848.3	3816.5	3848.3	3830.8	3843.5	3849.9
5°	3964.5	3935.8	3932.6	3959.7	3897.6	3916.7	3884.9	3907.2	3883.3	3899.2	3899.2
7.5°	4067.9	4039.3	4029.7	4050.4	3993.1	4007.4	3974.0	3986.7	3959.7	3980.4	3969.2
10°	4190.5	4158.6	4147.5	4158.6	4109.3	4117.2	4077.5	4091.8	4052.0	4075.9	4060.0
12.5°	4321.0	4279.6	4279.6	4289.1	4236.6	4238.2	4201.6	4209.6	4169.8	4195.2	4176.1
15°	4462.6	4416.5	4422.8	4432.4	4376.7	4386.2	4348.0	4360.7	4319.4	4344.8	4325.7
17.5°	4650.4	4601.1	4594.7	4623.3	4570.8	4588.3	4545.4	4561.3	4524.7	4532.6	4523.1
20°	4909.8	4847.8	4833.4	4871.6	4812.7	4825.5	4793.6	4825.5	4787.3	4730.0	4569.2
22.5°	5220.2	5166.1	5142.2	5167.6	5097.6	5119.9	5118.3	5169.2	5064.2	4702.9	4542.2
25°	5629.2	5592.6	5546.4	5549.6	5465.3	5498.7	5559.2	5598.9	5151.7	4835.0	4838.2
27.5°	6175.1	6138.5	6074.8	6050.9	5928.4	6009.6	6103.5	5715.1	5363.4	5444.6	5400.0
30°	6872.2	6865.8	6736.9	6695.5	6561.8	6663.7	6582.5	5917.3	6038.2	6151.2	6082.8
32.5°	7800.0	7755.4	7569.2	7494.4	7354.4	7413.3	6697.1	6601.6	6781.4	6934.2	6862.6
35°	8922.0	8786.8	8597.4	8449.4	8205.8	7878.0	7133.2	7319.4	7588.3	7798.4	7451.5
37.5°	10225.5	10079.1	9783.0	9517.3	9133.7	8111.9	7790.5	8162.9	8500.3	8272.7	7472.2
40°	11567.1	11436.6	11158.1	10815.9	10168.2	8837.7	8587.8	9033.4	9417.0	8113.5	7715.7
42.5°	12899.2	12787.8	12563.4	12226.0	11392.1	9701.9	9461.6	9940.6	9579.3	8423.9	8411.2
45°	14242.5	14186.8	13932.1	13644.1	12841.9	10808.0	10440.3	10814.3	9218.1	9167.1	9136.9
47.5°	15331.1	15340.6	15251.5	15101.9	14388.9	12022.3	11543.3	10434.0	9657.3	9713.0	9727.3
50°	16453.1	16381.5	16376.7	16386.2	16088.6	13586.8	12294.4	10262.1	10231.8	10227.1	10214.3
52.5°	17352.3	17261.6	17449.4	17599.0	17775.6	15332.6	12181.5	10844.6	10671.1	10610.6	10239.8
55°	18084.4	18049.4	18354.9	18861.0	19647.2	17182.0	13180.9	11412.7	11065.8	9652.5	8707.2
57.5°	18528.4	18579.3	19209.6	20204.3	21676.4	18714.6	14344.3	11988.9	9474.3	8501.9	8441.4
60°	17678.5	17947.5	19020.2	21203.7	23392.1	20156.5	15210.1	12105.1	8525.7	8005.3	7884.4
62.5°	15598.4	15573.0	17415.9	21203.7	23936.4	20299.8	15483.8	11282.2	7448.3	6770.3	6635.0
65°	11040.3	11107.2	13075.9	19107.7	21805.3	18881.7	14282.3	9592.1	5941.1	5318.8	5135.8
67.5°	6832.4	6827.6	8754.9	14072.2	17750.2	15808.5	12023.9	7352.8	4123.6	3536.3	3337.4
70°	2360.2	2427.1	3937.4	8234.5	13066.3	12385.2	8998.4	4642.4	2174.0	1550.1	1308.2
72.5°	939.0	961.3	1413.3	3671.6	8162.9	8274.3	5468.4	2255.2	650.9	413.8	388.3
75°	614.3	617.5	678.0	1325.7	3961.3	4451.5	2540.1	647.7	302.4	276.9	270.6
77.5°	530.0	531.6	563.4	671.6	1290.7	1731.6	722.5	383.6	253.1	227.6	221.2
80°	491.8	493.4	509.3	577.7	622.3	590.5	385.1	308.8	213.3	202.1	200.5
82.5°	464.7	471.1	479.0	520.4	502.9	444.0	319.9	249.9	163.9	175.1	179.8
85°	428.1	434.5	439.3	463.1	420.2	324.7	248.3	187.8	105.0	114.6	113.0
87.5°	321.5	324.7	318.3	315.1	292.8	227.6	163.9	119.4	41.4	38.2	35.0
90°	154.4	152.8	146.4	135.3	117.8	92.3	68.4	38.2	17.5	8.0	3.2
92.5°	122.5	121.0	117.8	106.6	92.3	68.4	49.3	27.1	15.9	6.4	1.6
95°	82.8	79.6	76.4	68.4	57.3	41.4	28.6	19.1	12.7	4.8	1.6
97.5°	54.1	52.5	47.7	41.4	31.8	22.3	17.5	14.3	11.1	4.8	1.6
100°	33.4	33.4	30.2	23.9	15.9	12.7	11.1	11.1	8.0	3.2	0.0
102.5°	20.7	19.1	17.5	11.1	8.0	8.0	8.0	8.0	6.4	3.2	0.0
105°	11.1	11.1	8.0	6.4	4.8	3.2	4.8	6.4	4.8	1.6	0.0
107.5°	3.2	3.2	3.2	1.6	1.6	0.0	1.6	3.2	3.2	1.6	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.2	1.6	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°	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1	3802.1
2.5°	3841.9	3811.7	3819.6	3789.4	3784.6	3752.8	3806.9	3810.1	3795.8	3811.7
5°	3891.3	3854.6	3869.0	3832.4	3826.0	3784.6	3827.6	3822.8	3811.7	3824.4
7.5°	3961.3	3924.7	3932.6	3889.7	3881.7	3835.5	3876.9	3861.0	3846.7	3864.2
10°	4058.4	4017.0	4023.3	3972.4	3966.1	3911.9	3959.7	3935.8	3915.1	3939.0
12.5°	4177.7	4123.6	4117.2	4063.1	4058.4	4007.4	4056.8	4032.9	4012.2	4050.4
15°	4314.6	4243.0	4233.4	4165.0	4157.0	4104.5	4152.3	4117.2	4101.3	4150.7
17.5°	4497.6	4244.6	4102.9	4002.7	3945.4	3916.7	4002.7	4118.8	4083.8	4085.4
20°	4422.8	4150.7	3961.3	3875.3	3813.3	3536.3	3154.4	3264.2	3487.0	3596.8
22.5°	4400.5	4305.0	4227.1	4082.2	3466.3	3310.3	3332.6	3307.2	2887.0	2726.3
25°	4827.1	4717.2	4548.5	3789.4	3611.1	3576.1	3588.9	3149.6	2832.9	2879.0
27.5°	5373.0	5260.0	4427.6	4002.7	3967.6	3921.5	3670.0	3121.0	3163.9	3208.5
30°	6060.5	5466.9	4617.0	4486.5	4421.2	4373.5	3440.9	3485.4	3557.0	3612.7
32.5°	6730.5	5449.3	5159.7	4997.4	4916.2	3989.9	3888.1	3991.5	4064.7	4107.7
35°	6738.5	6073.2	5767.6	5559.2	5043.5	4289.1	4383.0	4556.5	4736.3	4769.8
37.5°	6921.5	6779.9	6429.7	6167.1	3751.2	4787.3	4994.2	5193.1	5373.0	5384.1
40°	7650.4	7497.6	7169.8	6592.1	4142.7	4882.8	5667.4	5891.8	6043.0	6035.0
42.5°	8377.7	8272.7	7932.1	5858.4	4667.9	4230.2	6374.0	6522.0	6617.5	6684.4
45°	9109.8	9004.8	7854.1	6432.9	5293.4	4632.9	6202.1	7040.9	7145.9	7179.3
47.5°	9681.2	9421.8	7196.8	7195.2	6074.8	5148.5	5121.5	7508.8	7601.1	7577.2
50°	10209.6	8411.2	7779.3	7445.1	6883.3	5634.0	5446.2	6318.3	8013.3	7978.3
52.5°	9289.7	8162.9	8279.1	6771.9	7532.6	6116.2	5812.2	5665.8	7281.2	8218.6
55°	8307.7	8466.9	8789.9	7440.3	5465.3	6272.2	6122.6	5831.3	4913.0	4134.8
57.5°	8478.0	8715.1	8731.0	8059.4	5656.2	3918.3	5018.0	4392.6	2775.6	2782.0
60°	7909.8	8218.6	6382.0	5373.0	3041.4	816.4	79.6	70.0	483.8	588.9
62.5°	6687.5	7117.3	6092.3	4680.6	1951.2	30.2	8.0	1.6	0.0	0.0
65°	5178.8	5696.0	5148.5	4039.3	1731.6	9.5	0.0	0.0	0.0	0.0
67.5°	3415.4	3881.7	3911.9	3378.8	1443.5	4.8	0.0	0.0	0.0	0.0
70°	1430.8	2014.9	2435.0	2511.4	1134.7	1.6	0.0	0.0	0.0	0.0
72.5°	413.8	639.8	1171.4	1508.8	721.0	0.0	0.0	0.0	0.0	0.0
75°	275.3	294.4	339.0	679.6	359.7	0.0	0.0	0.0	0.0	0.0
77.5°	227.6	232.4	194.2	186.2	103.4	0.0	0.0	0.0	0.0	0.0
80°	206.9	203.7	156.0	109.8	38.2	0.0	0.0	0.0	0.0	0.0
82.5°	191.0	181.4	113.0	57.3	25.5	0.0	0.0	0.0	0.0	0.0
85°	128.9	127.3	50.9	35.0	4.8	0.0	0.0	0.0	0.0	0.0
87.5°	35.0	44.6	11.1	4.8	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: P579560  
 CATALOG NUMBER: CST-CA8-330-750-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)