

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: P522246

Luminaire Tested: **CST-CA8-480-750-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522246  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-750-U-T5R-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 55753 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U2 - G5

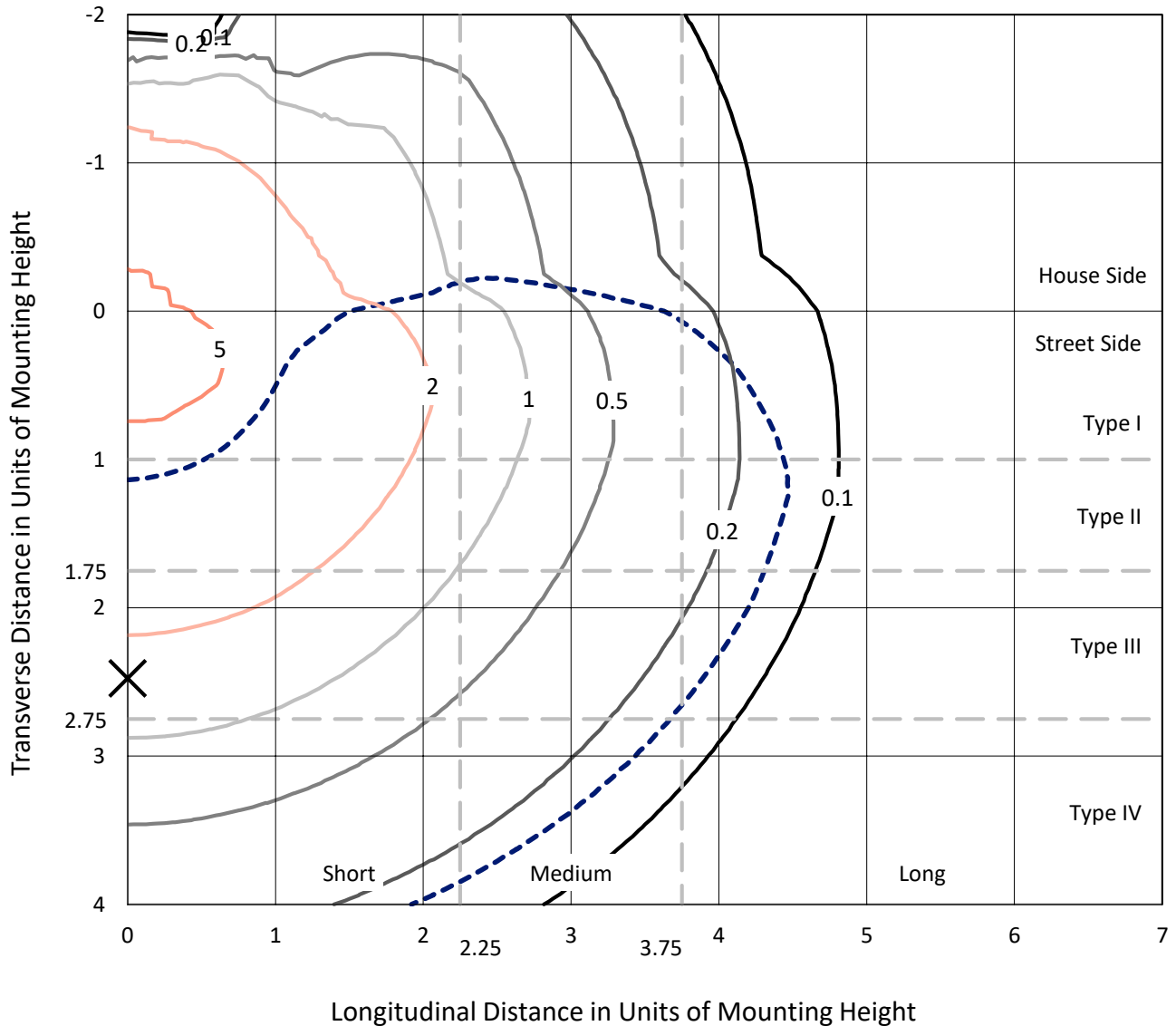
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

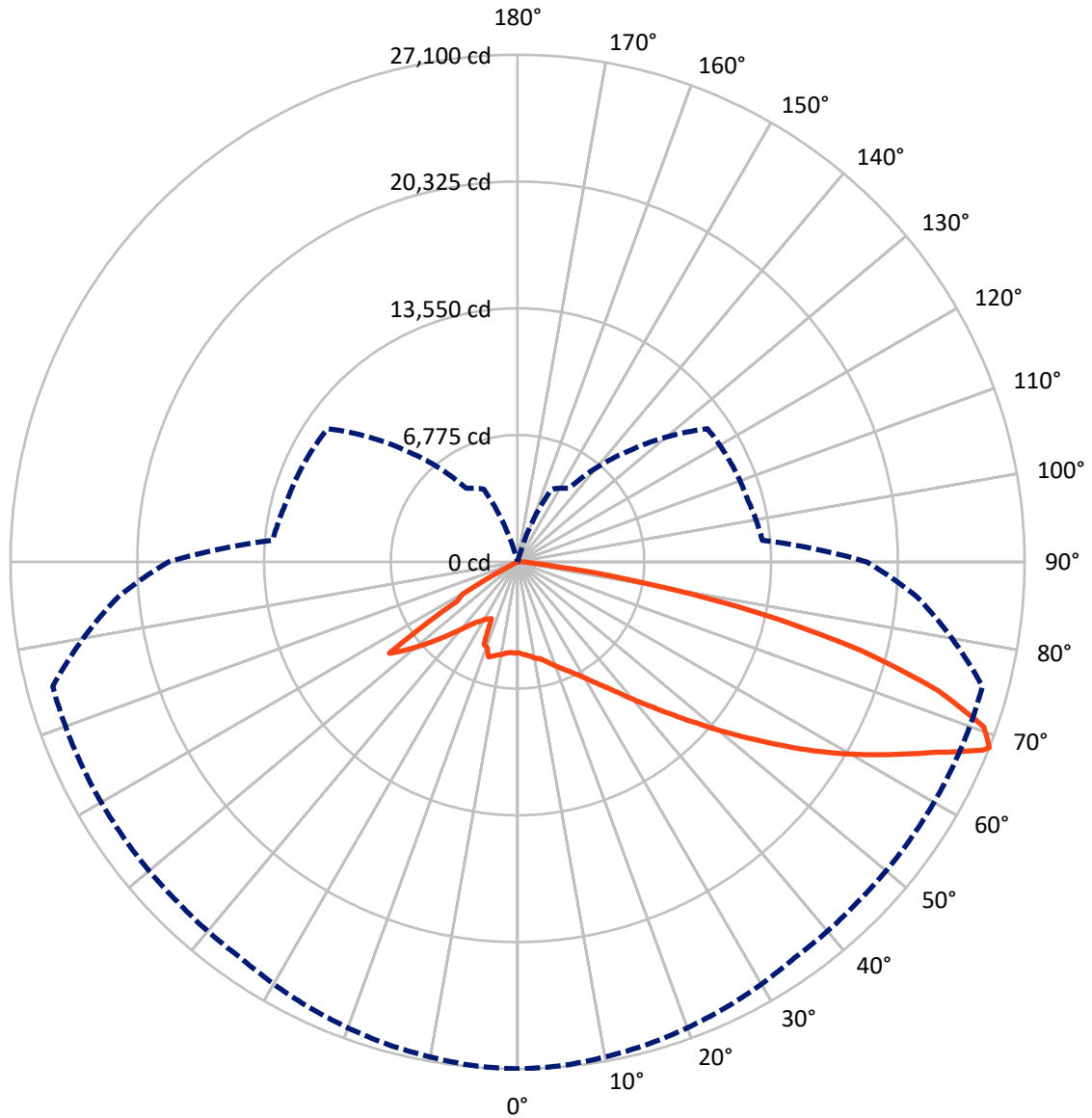
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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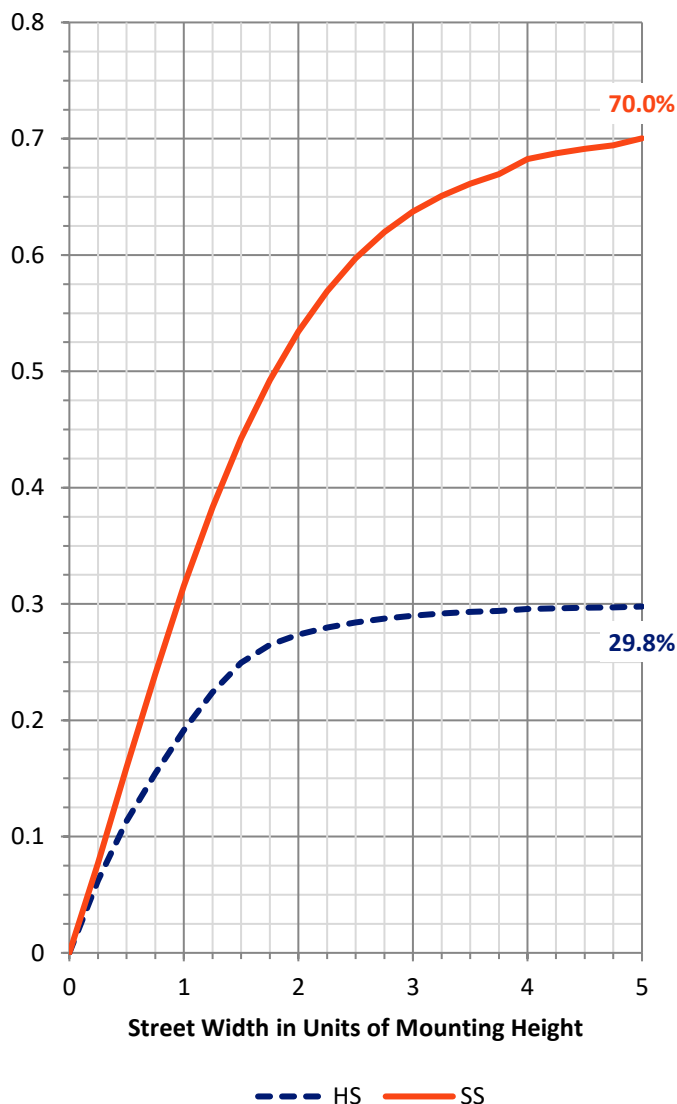
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	16619.3	2.6	16621.9
	% Fixture	29.8	0.0	29.8
<b>Street Side</b>	Lumens	39108.2	22.8	39131.1
	% Fixture	70.1	0.0	70.2
<b>Total</b>	Lumens	55727.6	25.4	55753.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	471.8	0.8
10°-20°	1501.4	2.7
20°-30°	2571.8	4.6
30°-40°	4172.0	7.5
40°-50°	7036.0	12.6
50°-60°	11468.8	20.6
60°-70°	15381.6	27.6
70°-80°	11947.5	21.4
80°-90°	1176.6	2.1
90°-100°	22.3	0.0
100°-110°	1.3	0.0
110°-120°	0.3	0.0
120°-130°	0.2	0.0
130°-140°	0.3	0.0
140°-150°	0.3	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	55727.6	100.0
0°-180°	55753.0	100.0

**Coefficient of Utilization**

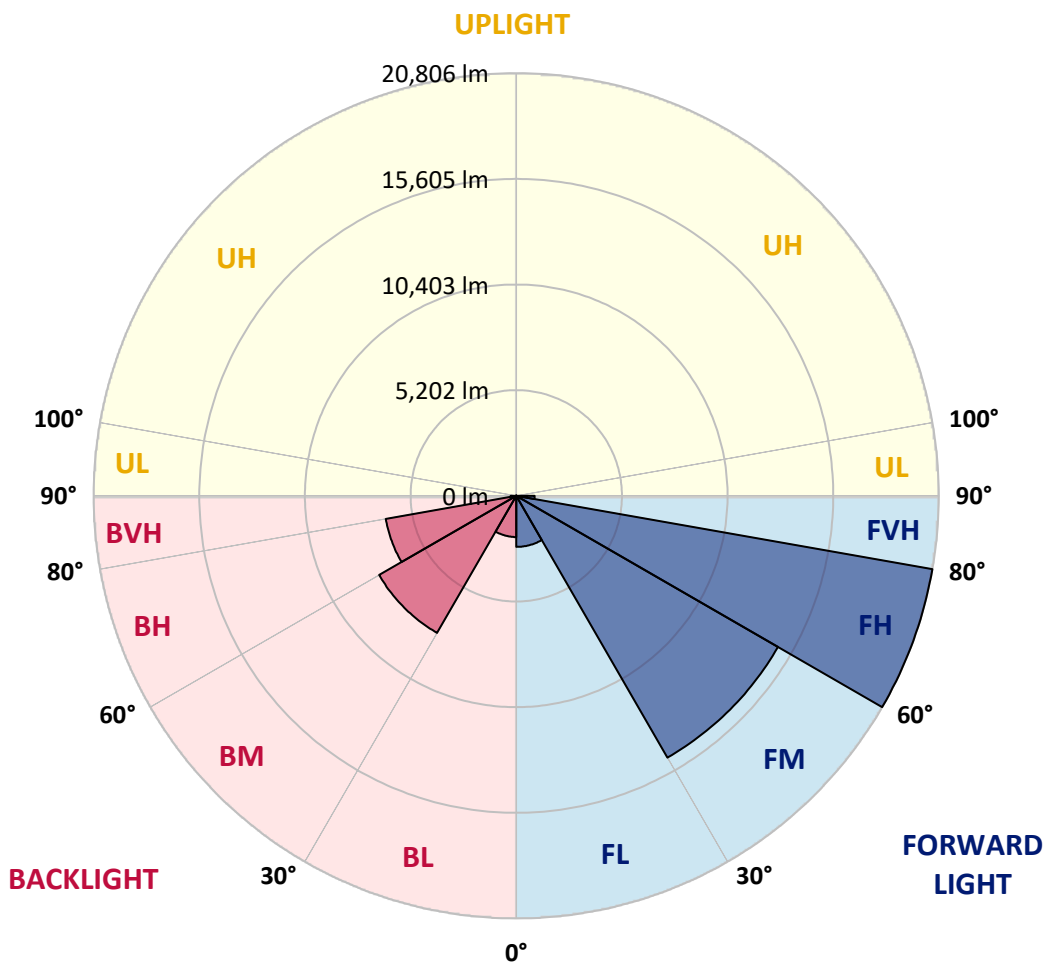


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2514.8	4.5			
FM (30°-60°)	14882.4	26.7			
FH (60°-80°)	20806.4	37.3			G5
FVH (80°-90°)	904.7	1.6			G5
BL (0°-30°)	2030.2	3.6	B3/2500		
BM (30°-60°)	7794.4	14.0	B4/8500		
BH (60°-80°)	6522.7	11.7	B5		G5
BVH (80°-90°)	272.0	0.5			G3/500
UL (90°-100°)	22.3	0.0		U2/50	
UH (100°-180°)	3.1	0.0		U1/10	

**BUG Rating: B5-U2-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6
2.5°	4941.3	4927.5	4925.2	4952.9	4865.2	4909.1	4869.9	4902.1	4881.4	4897.5	4899.8
5°	5008.2	4982.8	4966.7	4999.0	4943.6	4964.4	4920.6	4934.4	4876.8	4909.1	4913.7
7.5°	5105.0	5063.5	5058.9	5068.2	5019.7	5035.9	4964.4	4980.5	4939.0	4920.6	4936.7
10°	5236.5	5197.3	5167.3	5188.1	5123.5	5132.7	5056.6	5058.9	5029.0	4994.4	5022.0
12.5°	5310.3	5314.9	5301.0	5317.2	5264.1	5234.2	5181.1	5162.7	5132.7	5091.2	5077.4
15°	5494.7	5485.5	5457.8	5483.2	5476.3	5448.6	5384.0	5342.5	5278.0	5254.9	5231.9
17.5°	5720.7	5690.7	5667.7	5699.9	5734.5	5676.9	5614.6	5557.0	5471.7	5425.6	5397.9
20°	5958.2	5937.4	5914.4	5965.1	5976.6	5932.8	5886.7	5801.4	5702.2	5642.3	5584.7
22.5°	6223.4	6181.9	6188.8	6255.6	6234.9	6214.1	6154.2	6085.0	5965.1	5889.0	5723.0
25°	6497.8	6474.7	6507.0	6536.9	6520.8	6477.0	6447.0	6396.3	6262.6	6170.3	5928.2
27.5°	6839.0	6802.1	6843.6	6855.2	6841.3	6829.8	6788.3	6749.1	6603.8	6500.1	6198.0
30°	7240.2	7196.4	7263.3	7247.1	7233.3	7242.5	7217.2	7131.8	7002.7	6862.1	6560.0
32.5°	7717.5	7659.9	7736.0	7701.4	7669.1	7733.7	7673.7	7593.0	7440.8	7277.1	6982.0
35°	8270.9	8273.2	8312.4	8254.8	8243.2	8312.4	8273.2	8174.1	8033.4	7862.8	7443.1
37.5°	8941.9	8923.5	9022.6	8994.9	8953.4	9045.7	9057.2	8932.7	8679.0	8510.7	8015.0
40°	9758.2	9753.5	9785.8	9790.4	9778.9	9822.7	9843.5	9677.5	9513.7	9260.1	7563.0
42.5°	10629.7	10648.2	10705.8	10664.3	10719.7	10777.3	10784.2	10645.9	10410.7	8884.3	8033.4
45°	11676.6	11734.2	11773.4	11764.2	11789.6	11872.6	11879.5	11805.7	11575.1	9624.4	8886.6
47.5°	12877.9	12933.2	12944.8	13018.6	12995.5	13113.1	13097.0	13099.3	12852.5	10655.1	9815.8
50°	14259.1	14284.4	14379.0	14420.5	14362.8	14521.9	14480.4	14531.2	14226.8	11835.7	10814.2
52.5°	15725.6	15769.4	15808.6	15965.4	15891.6	16029.9	15974.6	16092.2	15739.4	13037.0	11923.3
55°	17392.7	17399.6	17466.5	17625.6	17528.7	17694.7	17614.0	17657.8	17376.5	14365.1	13078.5
57.5°	19158.9	19135.9	19161.2	19288.0	19200.4	19324.9	19292.6	19334.2	19071.3	15762.5	13922.4
60°	20906.7	20872.1	20909.0	20994.3	20874.4	21088.9	20973.6	21012.8	20729.2	17189.8	15126.1
62.5°	22663.7	22638.4	22596.9	22682.2	22506.9	22617.6	22666.0	22601.5	22352.4	18481.0	16172.9
65°	24549.9	24524.5	24372.3	24425.4	24111.8	24058.7	24077.2	24097.9	23931.9	19760.7	17321.2
67.5°	26841.8	26805.0	26519.0	26159.3	25707.4	25608.2	25617.5	25672.8	25695.9	21407.1	18665.5
68°	27100.1	27033.2	26715.0	26297.7	25825.0	25709.7	25698.2	25709.7	25721.2	21420.9	18651.6
70°	26440.6	26415.3	26173.2	25668.2	25184.0	24907.3	24667.5	24658.2	24547.6	20325.6	17620.9
72.5°	23463.8	23431.6	23143.3	22785.9	22486.2	22052.7	21741.4	21759.9	21577.7	17964.5	15423.5
75°	18988.3	18986.0	18640.1	18340.4	18345.0	18312.7	18208.9	18391.1	18202.0	15236.7	13154.6
77.5°	13233.0	13279.1	13256.1	13080.8	13327.5	13668.8	14040.0	14390.5	14282.1	12036.3	10489.1
80°	6912.8	7041.9	7498.5	7519.2	7692.2	8024.2	8277.8	8513.0	8529.2	6829.8	6059.6
82.5°	1837.7	1876.9	2031.4	1987.6	1973.8	2040.6	2096.0	2102.9	2107.5	1780.1	1662.5
85°	571.8	588.0	569.5	544.2	505.0	461.2	449.6	366.6	290.5	239.8	209.8
87.5°	405.8	433.5	392.0	368.9	327.4	311.3	279.0	219.1	170.6	119.9	80.7
90°	209.8	214.4	191.4	163.7	152.2	143.0	122.2	87.6	43.8	23.1	20.8
92.5°	106.1	108.4	94.5	80.7	69.2	60.0	46.1	25.4	13.8	6.9	2.3
95°	41.5	43.8	39.2	34.6	27.7	20.8	18.4	13.8	9.2	4.6	2.3
97.5°	13.8	13.8	13.8	11.5	11.5	11.5	11.5	9.2	6.9	4.6	2.3
100°	0.0	0.0	0.0	2.3	4.6	6.9	6.9	6.9	4.6	2.3	2.3
102.5°	0.0	0.0	0.0	0.0	0.0	2.3	4.6	4.6	4.6	2.3	2.3
105°	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
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	2.3
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
165°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
170°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
175°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
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°	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6	4860.6
2.5°	4888.3	4874.5	4881.4	4823.7	4837.6	4800.7	4879.1	4858.3	4849.1	4881.4
5°	4899.8	4849.1	4890.6	4851.4	4858.3	4805.3	4869.9	4844.5	4842.2	4860.6
7.5°	4904.4	4879.1	4918.3	4853.7	4874.5	4853.7	4902.1	4876.8	4899.8	4916.0
10°	4969.0	4955.2	4950.6	4927.5	4943.6	4897.5	4957.5	4957.5	4969.0	5012.8
12.5°	5063.5	5045.1	5033.6	4992.1	5008.2	4994.4	5042.8	5052.0	5072.8	5091.2
15°	5192.7	5160.4	5148.9	5112.0	5123.5	5121.2	5155.8	5158.1	5204.2	5201.9
17.5°	5358.7	5312.6	5326.4	5298.7	5301.0	5282.6	5264.1	5264.1	5305.7	5314.9
20°	5557.0	5294.1	4948.3	4754.6	4720.0	4745.3	4844.5	5008.2	4803.0	4860.6
22.5°	5199.6	4962.1	4945.9	4902.1	4874.5	4256.5	4097.4	4046.7	4311.9	4768.4
25°	5245.7	5144.2	5114.3	5058.9	4242.7	4235.8	4189.6	4113.6	3361.9	3345.7
27.5°	5490.1	5391.0	5342.5	4431.8	4413.3	4411.0	4341.8	3578.6	3405.7	3428.7
30°	5776.0	5660.7	4793.8	4655.4	4639.3	4602.4	4205.8	3534.8	3532.5	3534.8
32.5°	6105.8	5723.0	4932.1	4925.2	4934.4	4821.4	3726.2	3712.3	3710.0	3733.1
35°	6557.7	5310.3	5278.0	5312.6	5264.1	4168.9	3949.8	3942.9	3945.2	3933.7
37.5°	6257.9	5725.3	5718.4	5718.4	5605.4	4265.7	4221.9	4254.2	4249.6	4233.5
40°	6384.8	6228.0	6186.5	6172.6	4738.4	4602.4	4577.0	4618.5	4625.4	4637.0
42.5°	7000.4	6857.5	6836.7	6673.0	5155.8	5112.0	5033.6	5077.4	5072.8	5086.6
45°	7756.7	7659.9	7569.9	5785.3	5718.4	5663.1	5582.3	5633.1	5646.9	5637.7
47.5°	8637.5	8531.5	7881.2	6361.7	6359.4	6315.6	6225.7	6267.2	6260.3	6260.3
50°	9523.0	9407.7	7159.5	7095.0	7071.9	7002.7	6928.9	6935.9	6938.2	6961.2
52.5°	10512.2	8402.3	7925.0	7795.9	7814.4	7768.2	7696.8	5826.8	7662.2	7682.9
55°	9825.0	8794.3	8766.7	8596.0	8639.8	8579.9	8533.8	5748.4	7620.7	8420.8
57.5°	9714.3	9640.6	9617.5	9442.3	9497.6	8928.1	9354.6	6290.2	5271.1	3850.7
60°	10560.6	10482.2	10468.3	10313.9	10309.2	7095.0	8503.8	4314.2	3371.1	3394.1
62.5°	11381.4	11254.6	11289.2	11107.0	7830.5	4323.4	3811.5	96.8	154.5	163.7
65°	12296.8	12084.7	12119.3	11951.0	8077.2	4558.6	4120.5	50.7	43.8	41.5
67.5°	13177.7	12806.4	12628.9	12451.3	8388.5	4800.7	4293.4	13.8	0.0	0.0
68°	13133.8	12741.9	12559.7	12391.4	8356.2	4793.8	4284.2	13.8	0.0	0.0
70°	12393.7	12040.9	11868.0	11738.8	7978.1	4630.1	4111.2	13.8	0.0	0.0
72.5°	10835.0	10639.0	10528.3	10415.3	7088.0	4141.2	3687.0	13.8	0.0	0.0
75°	9207.1	9151.7	9082.6	8833.5	5907.5	3389.5	3029.8	13.8	0.0	0.0
77.5°	7295.6	7293.3	7124.9	6832.1	4447.9	2488.0	2234.3	11.5	0.0	0.0
80°	3945.2	4300.3	4171.2	4021.3	2522.5	1353.5	1288.9	9.2	0.0	0.0
82.5°	1109.1	1049.1	1007.6	943.1	530.3	295.1	288.2	9.2	0.0	0.0
85°	154.5	170.6	189.1	214.4	122.2	78.4	69.2	4.6	0.0	0.0
87.5°	87.6	99.1	122.2	126.8	46.1	36.9	11.5	0.0	0.0	0.0
90°	18.4	20.8	23.1	23.1	9.2	9.2	0.0	0.0	0.0	0.0
92.5°	0.0	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P522246  
 CATALOG NUMBER: CST-CA8-480-750-U-T5R-HSS-HM-EX120

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.3	2.3	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)