

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: P522247

Luminaire Tested: **CST-CA8-480-750-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522247  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)  
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-EX180  
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: 47864 lumens  
Efficiency: N/A  
Efficacy: 99.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

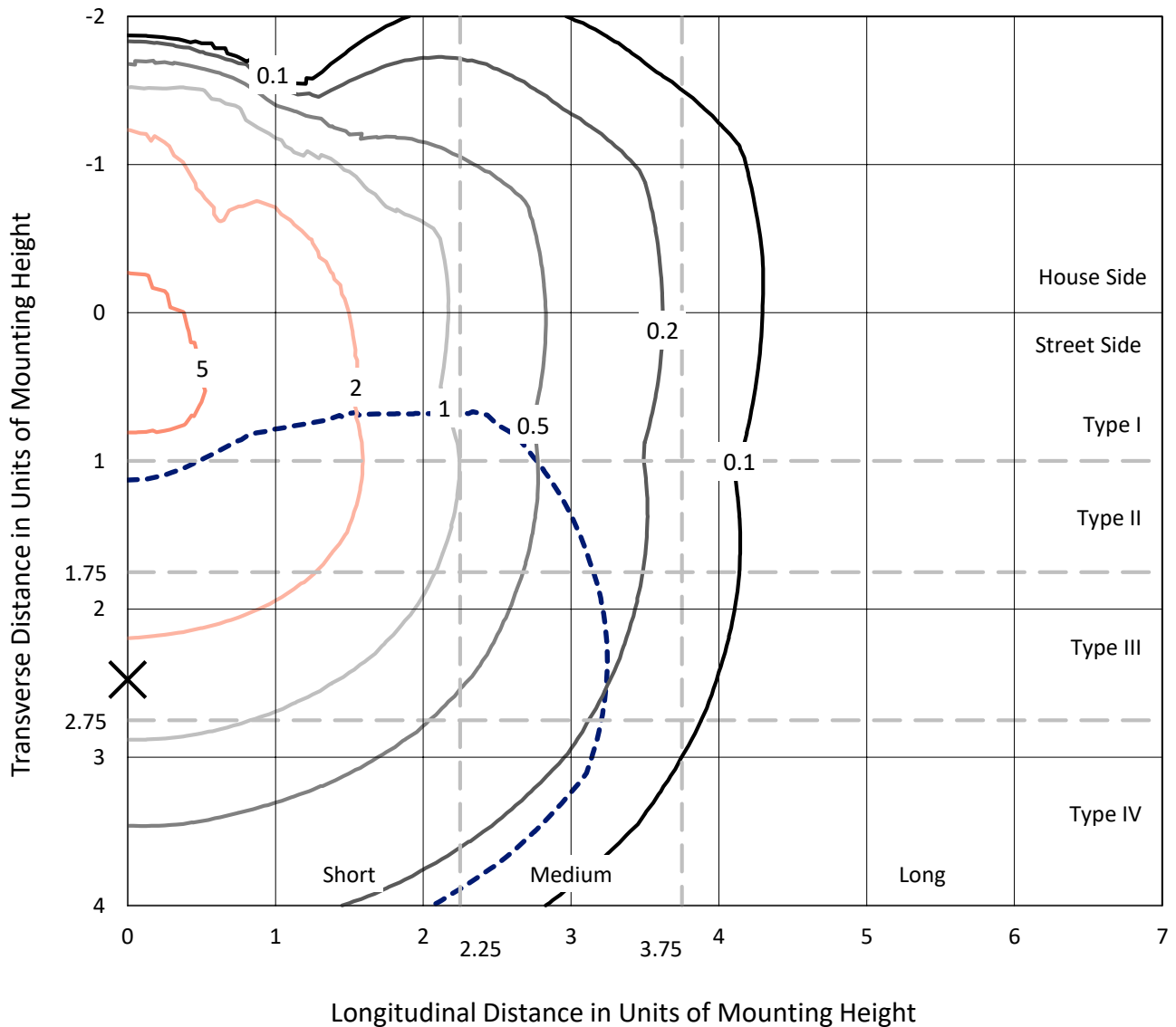
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

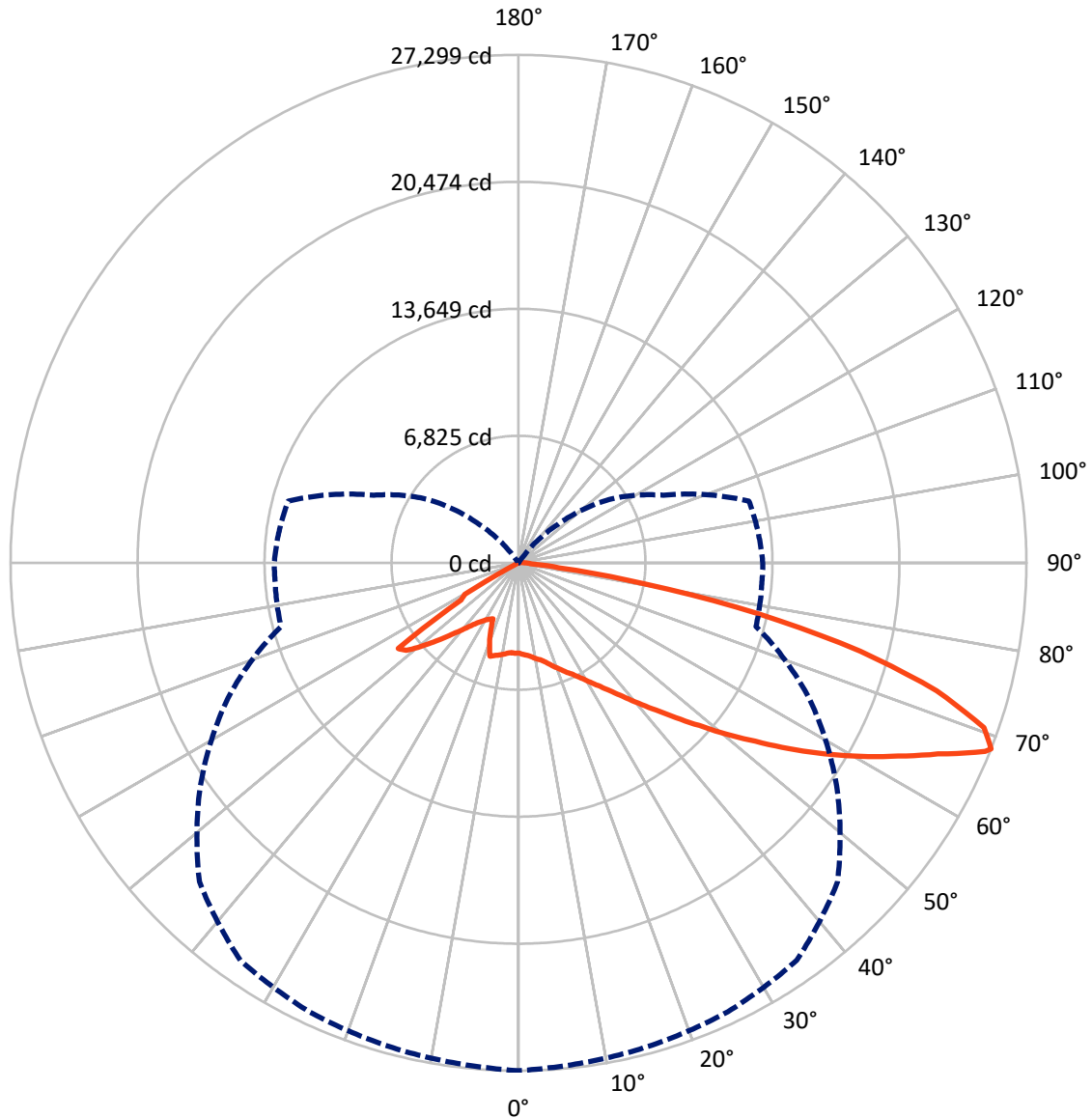
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.6 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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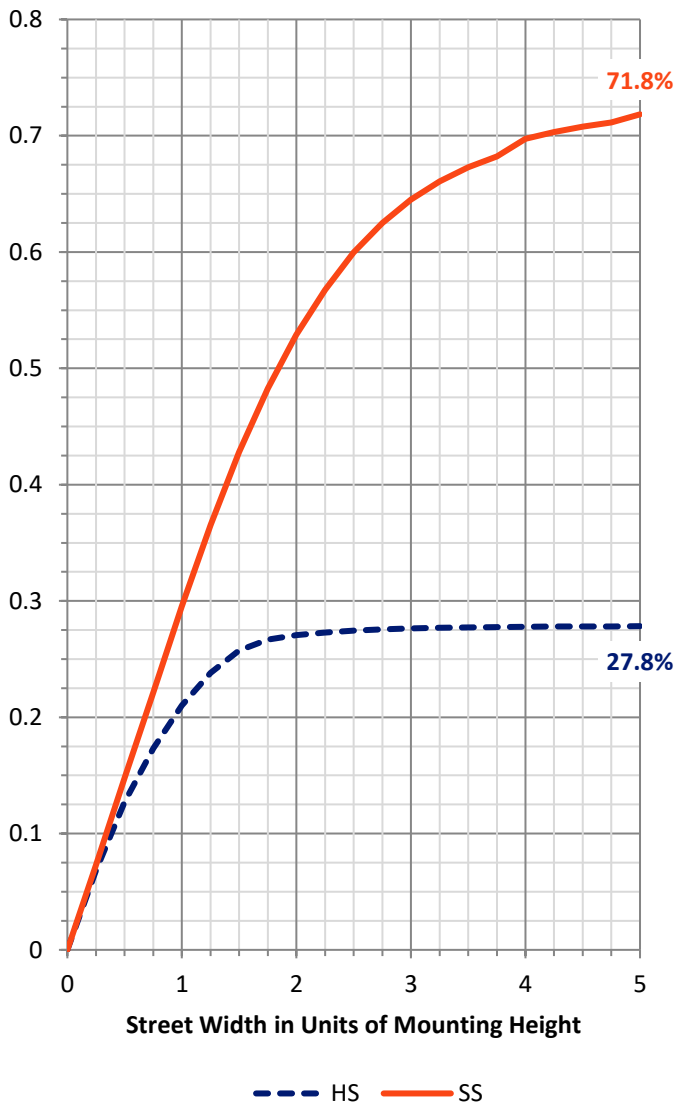
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13368.5	0.3	13368.8
	% Fixture	27.9	0.0	27.9
<b>Street Side</b>	Lumens	34467.8	27.4	34495.2
	% Fixture	72.0	0.1	72.1
<b>Total</b>	Lumens	47836.3	27.7	47864.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	470.7	1.0
10°-20°	1491.3	3.1
20°-30°	2524.8	5.3
30°-40°	3999.8	8.4
40°-50°	6539.5	13.7
50°-60°	10016.8	20.9
60°-70°	12316.4	25.7
70°-80°	9516.8	19.9
80°-90°	960.2	2.0
90°-100°	27.3	0.1
100°-110°	0.4	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°	47836.3	99.9
0°-180°	47864.0	100.0

**Coefficient of Utilization**

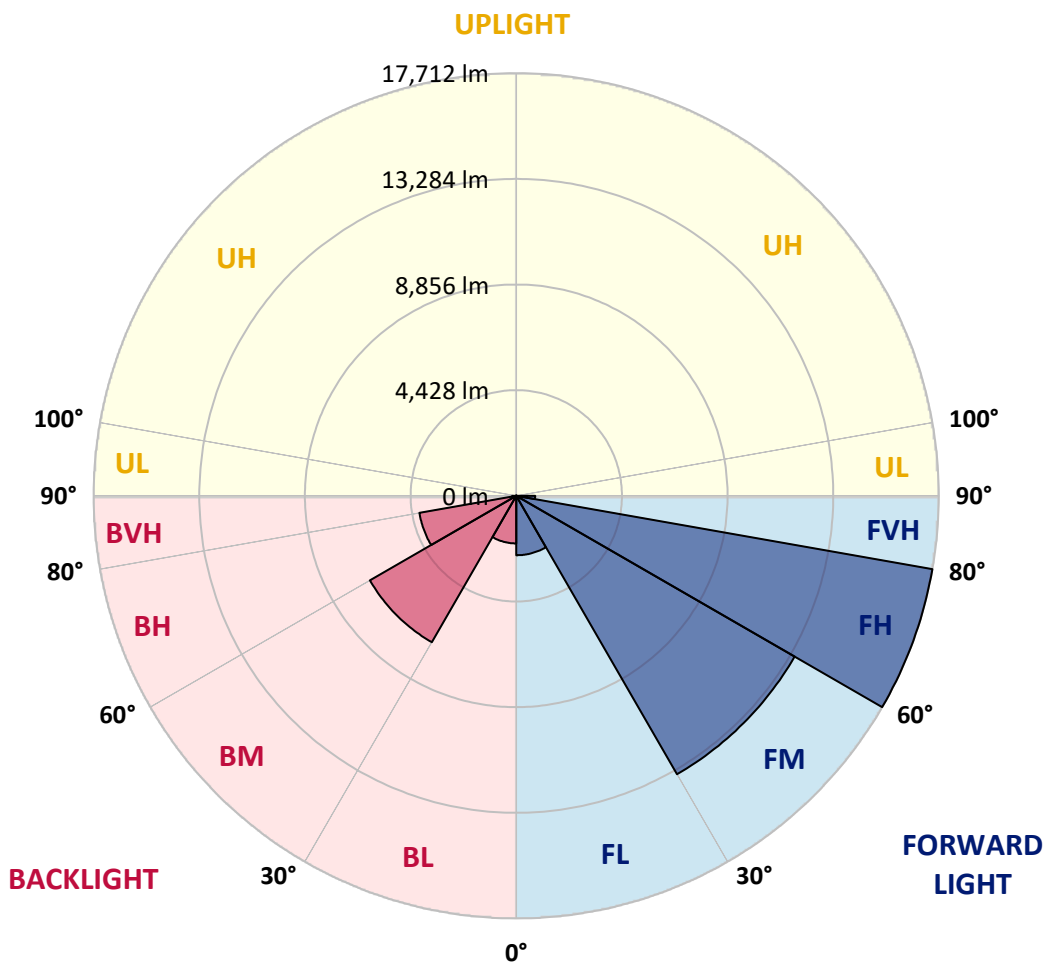


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2491.4	5.2			
FM (30°-60°)	13472.9	28.1			
FH (60°-80°)	17711.7	37.0			G5
FVH (80°-90°)	791.9	1.7			G5
BL (0°-30°)	1995.4	4.2	B3/2500		
BM (30°-60°)	7083.2	14.8	B4/8500		
BH (60°-80°)	4121.5	8.6	B4/5000		G4/5000
BVH (80°-90°)	168.3	0.4			G2/225
UL (90°-100°)	27.3	0.1		U2/50	
UH (100°-180°)	0.4	0.0		U1/10	

**BUG Rating: B4-U2-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1
2.5°	4936.8	4927.5	4918.3	4939.1	4858.4	4892.9	4865.3	4890.6	4872.2	4892.9	4886.0
5°	5001.3	4992.1	4964.4	4987.5	4934.4	4948.3	4913.7	4922.9	4860.7	4897.6	4895.2
7.5°	5107.4	5082.0	5063.6	5063.6	5017.5	5015.2	4959.8	4962.1	4913.7	4909.1	4918.3
10°	5250.3	5231.9	5181.2	5185.8	5121.2	5112.0	5042.8	5040.5	5001.3	4978.3	4999.0
12.5°	5356.4	5374.9	5328.7	5328.7	5264.2	5218.1	5169.6	5137.4	5107.4	5072.8	5056.7
15°	5550.1	5568.5	5506.3	5504.0	5478.6	5423.3	5370.2	5301.1	5248.0	5231.9	5206.5
17.5°	5801.4	5789.9	5736.9	5739.2	5743.8	5653.9	5600.8	5510.9	5434.8	5379.5	5365.6
20°	6057.4	6057.4	5999.7	6018.2	5995.1	5912.1	5877.5	5753.0	5646.9	5587.0	5538.6
22.5°	6343.3	6331.8	6292.6	6331.8	6285.7	6202.6	6145.0	6020.5	5884.4	5545.5	5407.1
25°	6615.4	6608.5	6624.6	6636.1	6578.5	6474.7	6435.5	6304.1	5926.0	5480.9	5201.9
27.5°	6959.0	6935.9	6972.8	6995.8	6938.2	6848.3	6765.3	6617.7	5817.6	5467.1	5437.1
30°	7399.4	7348.6	7401.7	7413.2	7353.3	7297.9	7173.4	6435.5	5854.5	5753.0	5743.8
32.5°	7869.8	7809.8	7879.0	7888.2	7809.8	7763.7	7450.1	6341.0	6216.5	6098.9	6110.4
35°	8427.8	8427.8	8462.3	8467.0	8409.3	8330.9	7136.5	6802.2	6691.5	6583.1	6580.8
37.5°	9108.0	9087.2	9179.5	9234.8	9172.5	8948.9	7593.1	7436.3	7265.6	7127.3	6841.4
40°	9928.8	9965.7	9991.1	10046.4	9986.5	9483.8	8259.4	8081.9	7948.2	7484.7	6763.0
42.5°	10814.3	10823.5	10878.8	10948.0	10948.0	10417.7	9038.8	8886.6	8713.7	7318.7	6993.5
45°	11872.7	11851.9	11958.0	12068.6	12038.7	11489.9	9945.0	9832.0	9022.7	7800.6	7802.9
47.5°	13074.0	13048.6	13200.8	13346.1	13196.2	12679.7	10941.1	10853.5	8709.1	8616.8	8598.4
50°	14462.1	14399.8	14575.1	14768.8	14646.6	14007.8	12151.7	10468.4	9583.0	9509.2	9497.7
52.5°	15944.7	15896.3	16002.4	16332.1	16170.7	15398.2	13297.6	10800.4	10595.2	10512.2	10491.5
55°	17618.7	17524.2	17752.5	18003.8	17817.0	16936.2	14427.5	11902.6	11690.5	11547.5	11340.0
57.5°	19378.1	19242.0	19359.6	19675.5	19495.7	18511.1	15884.8	13037.1	12785.8	10581.4	9739.8
60°	21130.5	21068.3	21114.4	21393.4	21172.0	20042.2	17249.8	14173.9	10821.2	10466.1	10507.6
62.5°	22892.2	22756.1	22797.6	23083.5	22799.9	21499.4	18543.4	15206.9	11388.4	11263.9	11307.7
65°	24780.6	24619.2	24656.1	24739.1	24388.6	22806.8	19687.1	16182.2	12241.6	12110.2	12158.6
67.5°	27056.5	26908.9	26708.3	26461.6	25977.3	24194.9	20823.8	17208.3	13200.8	13127.0	13143.2
68°	27298.6	27155.6	26913.5	26620.7	26076.5	24252.6	20872.3	17238.3	13214.6	13122.4	13127.0
70°	26544.6	26629.9	26355.5	25864.4	25410.1	23408.7	20081.4	16574.2	12626.7	12490.6	12456.0
72.5°	23507.8	23694.6	23316.4	23233.4	22675.4	20853.8	17572.6	14381.4	10982.6	11026.4	10901.9
75°	18979.2	19253.6	18794.7	18820.1	18501.9	17395.1	14727.3	11974.1	9018.1	9218.7	9255.5
77.5°	13198.5	13592.8	13392.2	13592.8	13436.0	13037.1	11397.7	9221.0	6880.6	7111.1	7201.1
80°	6882.9	7350.9	7616.1	7699.1	7749.9	7733.7	6940.5	5534.0	3977.5	4062.8	4058.2
82.5°	2176.7	2063.7	2130.6	2112.1	2054.5	2077.5	1872.3	1464.2	1014.6	1118.3	1069.9
85°	657.2	661.8	643.3	638.7	590.3	518.8	424.3	244.4	119.9	140.7	131.4
87.5°	484.2	488.8	451.9	428.9	401.2	348.2	269.8	152.2	57.6	55.3	43.8
90°	267.5	258.3	239.8	221.4	209.8	179.9	136.0	57.6	20.8	16.1	13.8
92.5°	145.3	138.3	129.1	122.2	106.1	85.3	55.3	18.4	9.2	2.3	0.0
95°	66.9	62.3	60.0	53.0	46.1	32.3	18.4	11.5	6.9	2.3	0.0
97.5°	30.0	27.7	25.4	20.8	16.1	9.2	9.2	6.9	4.6	2.3	0.0
100°	6.9	6.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	2.3	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0



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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	0.0	0.0	0.0
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°	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1	4849.1
2.5°	4879.1	4865.3	4858.4	4814.5	4828.4	4789.2	4865.3	4846.8	4835.3	4867.6
5°	4883.7	4835.3	4865.3	4839.9	4849.1	4793.8	4853.7	4828.4	4826.1	4839.9
7.5°	4895.2	4863.0	4892.9	4842.2	4865.3	4842.2	4886.0	4860.7	4881.4	4895.2
10°	4957.5	4939.1	4925.2	4913.7	4929.8	4883.7	4939.1	4941.4	4948.3	4989.8
12.5°	5045.1	5026.7	5003.6	4973.6	4989.8	4971.3	5012.8	5024.4	5049.7	5070.5
15°	5167.3	5132.7	5123.5	5095.9	5112.0	5102.8	5112.0	5105.1	5153.5	5146.6
17.5°	5335.7	5296.5	5165.0	5031.3	4946.0	4971.3	5077.4	5215.8	5250.3	5255.0
20°	5397.9	5121.2	5107.4	4955.2	4886.0	4881.4	4662.4	4334.9	4434.1	4667.0
22.5°	5324.1	4946.0	4906.8	4876.8	4581.7	4097.4	4051.3	4002.9	3991.4	4026.0
25°	5158.1	5114.3	5079.7	4687.7	4222.0	4224.3	4157.4	3839.2	3343.4	3301.9
27.5°	5411.8	5351.8	5017.5	4413.3	4404.1	4399.5	4300.3	3484.1	3378.0	3403.4
30°	5700.0	5600.8	4726.9	4648.5	4646.2	4604.7	3855.3	3514.1	3514.1	3518.7
32.5°	6032.0	5416.4	4892.9	4929.8	4927.5	4731.5	3723.9	3700.8	3691.6	3714.7
35°	6285.7	5268.8	5250.3	5317.2	5271.1	4014.4	3956.8	3936.0	3926.8	3915.3
37.5°	6207.3	5693.1	5693.1	5734.6	5363.3	4275.0	4247.3	4247.3	4228.9	4219.6
40°	6327.2	6221.1	6168.1	6184.2	3896.8	4590.9	4611.6	4607.0	4604.7	4620.9
42.5°	6959.0	6864.4	6816.0	6244.2	4362.6	4563.2	5070.5	5068.2	5075.1	5068.2
45°	7763.7	7676.1	7549.2	5842.9	4952.9	4000.6	5589.3	5614.7	5617.0	5614.7
47.5°	8607.6	8552.3	7254.1	6467.8	5593.9	4293.4	5342.6	6239.5	6228.0	6241.8
50°	9500.0	9250.9	7217.2	7208.0	6276.4	4777.7	4780.0	6786.0	6903.6	6940.5
52.5°	10493.8	8386.3	7998.9	7297.9	6968.2	5275.7	5225.0	6013.6	7618.4	7655.3
55°	9746.7	8858.9	8852.0	6495.5	7249.5	5755.3	5762.2	5706.9	6986.6	7941.2
57.5°	9698.3	9719.0	9702.9	7247.2	5289.5	5395.6	6278.7	6230.3	4524.0	3666.2
60°	10535.3	10565.3	9426.2	7825.9	5718.4	3318.1	3866.9	3285.8	3329.6	3364.2
62.5°	11335.4	11344.6	7666.8	5130.4	2833.8	133.7	64.6	53.0	50.7	50.7
65°	12220.8	12220.8	8217.9	5596.2	2737.0	50.7	9.2	6.9	25.4	25.4
67.5°	13076.3	12887.2	8621.5	5942.1	2785.4	6.9	0.0	0.0	0.0	0.0
68°	13027.9	12820.3	8584.6	5932.9	2778.5	4.6	0.0	0.0	0.0	0.0
70°	12303.8	12103.2	8144.1	5663.1	2674.7	4.6	0.0	0.0	0.0	0.0
72.5°	10860.4	10675.9	7212.6	4992.1	2411.9	2.3	0.0	0.0	0.0	0.0
75°	9193.3	9167.9	6230.3	4212.7	2068.3	2.3	0.0	0.0	0.0	0.0
77.5°	7397.1	7281.8	4869.9	3301.9	1667.1	0.0	0.0	0.0	0.0	0.0
80°	4120.5	4291.1	2850.0	1941.5	1049.1	0.0	0.0	0.0	0.0	0.0
82.5°	1113.7	1042.2	622.6	422.0	200.6	0.0	0.0	0.0	0.0	0.0
85°	143.0	156.8	71.5	57.6	13.8	0.0	0.0	0.0	0.0	0.0
87.5°	73.8	87.6	23.1	18.4	4.6	0.0	0.0	0.0	0.0	0.0
90°	13.8	16.1	6.9	2.3	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



REPORT NUMBER: P522247  
 CATALOG NUMBER: CST-CA8-480-750-U-T5R-HSS-HM-EX180

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)