

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: P522250

Luminaire Tested: **CST-CA8-480-760-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522250  
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-CA8-480-760-U-T5R-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46849 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

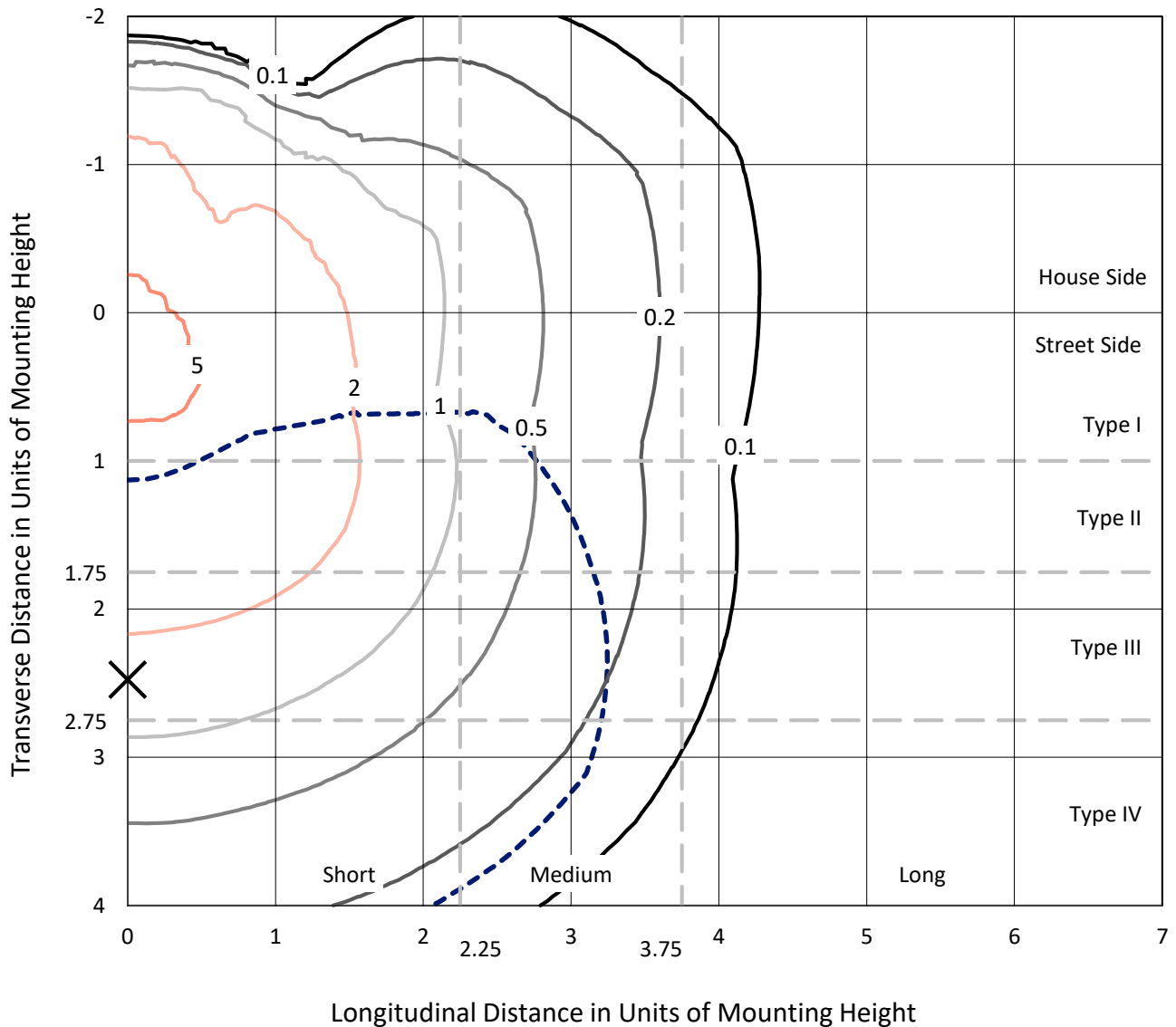
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

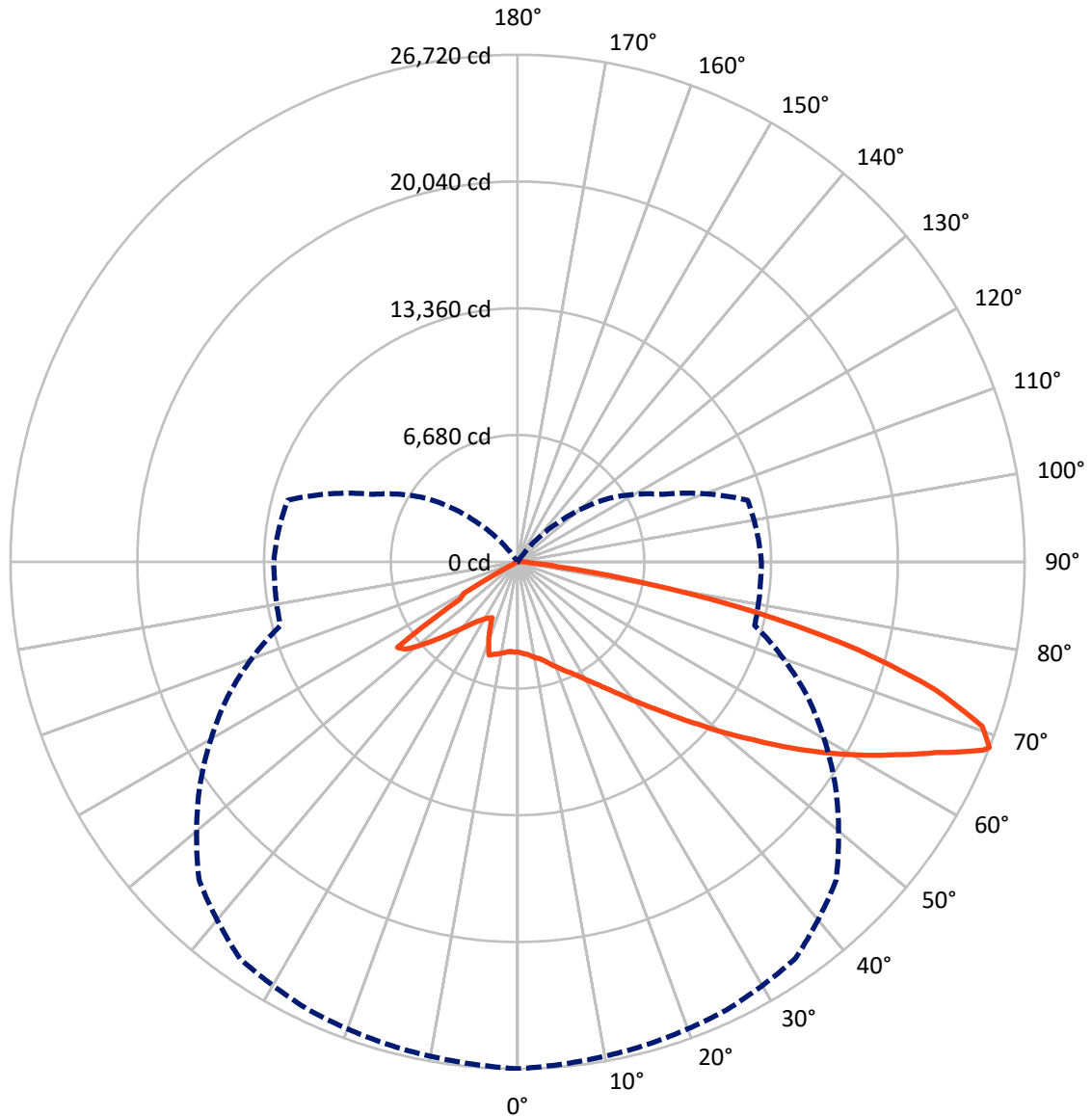
✕ Max cd  
 - - - 1/2 Max cd



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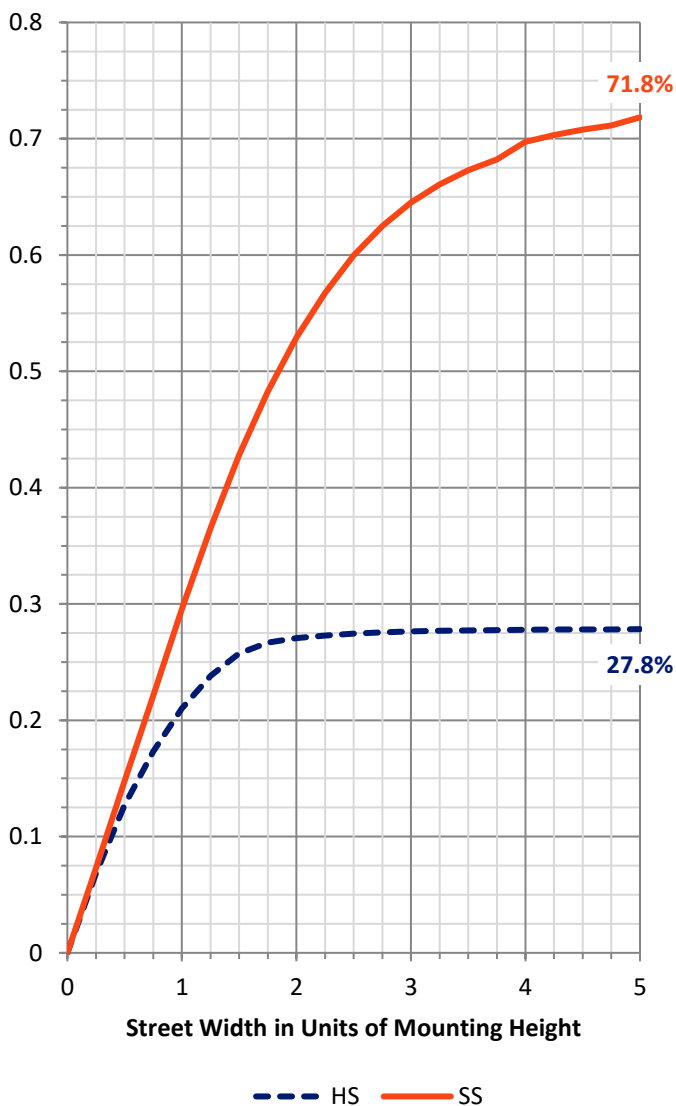
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13085.0	0.3	13085.3
	% Fixture	27.9	0.0	27.9
<b>Street Side</b>	Lumens	33736.9	26.8	33763.7
	% Fixture	72.0	0.1	72.1
<b>Total</b>	Lumens	46821.9	27.1	46849.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	460.7	1.0
10°-20°	1459.7	3.1
20°-30°	2471.2	5.3
30°-40°	3915.0	8.4
40°-50°	6400.8	13.7
50°-60°	9804.4	20.9
60°-70°	12055.2	25.7
70°-80°	9315.0	19.9
80°-90°	939.9	2.0
90°-100°	26.7	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°	46821.9	99.9
0°-180°	46849.0	100.0

**Coefficient of Utilization**

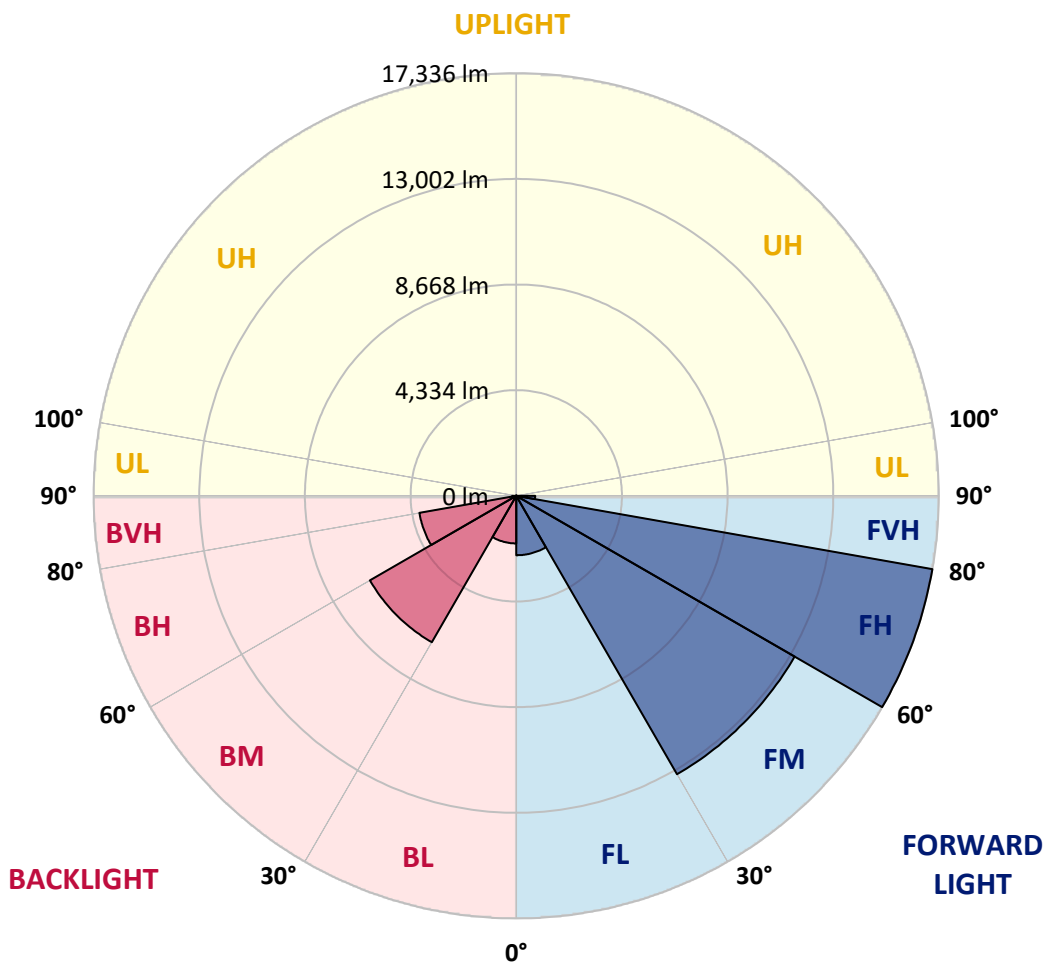


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2438.5	5.2			
FM	(30°-60°)	13187.2	28.1			
FH	(60°-80°)	17336.1	37.0			G5
FVH	(80°-90°)	775.1	1.7			G5
BL	(0°-30°)	1953.1	4.2	B3/2500		
BM	(30°-60°)	6933.0	14.8	B4/8500		
BH	(60°-80°)	4034.1	8.6	B4/5000		G4/5000
BVH	(80°-90°)	164.8	0.4			G2/225
UL	(90°-100°)	26.7	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°	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3
2.5°	4832.1	4823.0	4814.0	4834.3	4755.3	4789.2	4762.1	4786.9	4768.9	4789.2	4782.4
5°	4895.3	4886.2	4859.1	4881.7	4829.8	4843.4	4809.5	4818.5	4757.6	4793.7	4791.4
7.5°	4999.1	4974.3	4956.2	4956.2	4911.1	4908.8	4854.6	4856.9	4809.5	4805.0	4814.0
10°	5139.0	5121.0	5071.3	5075.8	5012.6	5003.6	4935.9	4933.6	4895.3	4872.7	4893.0
12.5°	5242.8	5260.9	5215.7	5215.7	5152.5	5107.4	5060.0	5028.4	4999.1	4965.2	4949.4
15°	5432.4	5450.5	5389.5	5387.3	5362.4	5308.3	5256.4	5188.7	5136.8	5121.0	5096.1
17.5°	5678.4	5667.1	5615.2	5617.5	5622.0	5534.0	5482.1	5394.0	5319.6	5265.4	5251.9
20°	5928.9	5928.9	5872.5	5890.6	5868.0	5786.7	5752.9	5631.0	5527.2	5468.5	5421.1
22.5°	6208.8	6197.5	6159.1	6197.5	6152.4	6071.1	6014.7	5892.8	5759.7	5427.9	5292.5
25°	6475.1	6468.3	6484.1	6495.4	6439.0	6337.4	6299.1	6170.4	5800.3	5364.7	5091.6
27.5°	6811.4	6788.8	6824.9	6847.5	6791.1	6703.1	6621.8	6477.4	5694.2	5351.2	5321.8
30°	7242.5	7192.8	7244.7	7256.0	7197.3	7143.2	7021.3	6299.1	5730.3	5631.0	5622.0
32.5°	7702.9	7644.2	7711.9	7720.9	7644.2	7599.1	7292.1	6206.5	6084.7	5969.6	5980.8
35°	8249.0	8249.0	8282.9	8287.4	8231.0	8154.3	6985.2	6657.9	6549.6	6443.5	6441.3
37.5°	8914.8	8894.5	8984.8	9039.0	8978.0	8759.1	7432.0	7278.6	7111.6	6976.1	6696.3
40°	9718.3	9754.4	9779.2	9833.4	9774.7	9282.7	8084.3	7910.5	7779.6	7326.0	6619.5
42.5°	10585.0	10594.0	10648.1	10715.9	10715.9	10196.8	8847.1	8698.2	8528.9	7163.5	6845.2
45°	11620.9	11600.6	11704.4	11812.7	11783.4	11246.2	9734.1	9623.5	8831.3	7635.2	7637.4
47.5°	12796.7	12771.9	12920.9	13063.1	12916.4	12410.8	10709.1	10623.3	8524.4	8434.1	8416.1
50°	14155.4	14094.5	14266.0	14455.6	14336.0	13710.8	11894.0	10246.4	9379.8	9307.5	9296.3
52.5°	15606.6	15559.2	15663.0	15985.8	15827.8	15071.7	13015.7	10571.4	10370.5	10289.3	10269.0
55°	17245.1	17152.6	17376.0	17622.0	17439.2	16577.1	14121.5	11650.2	11442.6	11302.7	11099.5
57.5°	18967.2	18834.0	18949.1	19258.3	19082.3	18118.6	15547.9	12760.6	12514.6	10357.0	9533.2
60°	20682.4	20621.5	20666.6	20939.7	20723.0	19617.1	16884.0	13873.3	10591.7	10244.2	10284.8
62.5°	22406.7	22273.5	22314.2	22594.0	22316.4	21043.5	18150.2	14884.4	11146.9	11025.1	11067.9
65°	24255.1	24097.1	24133.2	24214.5	23871.4	22323.2	19269.6	15839.1	11982.0	11853.3	11900.7
67.5°	26482.7	26338.3	26141.9	25900.4	25426.5	23681.9	20382.2	16843.4	12920.9	12848.6	12864.4
68°	26719.7	26579.7	26342.8	26056.1	25523.5	23738.3	20429.6	16872.7	12934.4	12844.1	12848.6
70°	25981.7	26065.2	25796.6	25315.9	24871.3	22912.3	19655.5	16222.7	12358.9	12225.7	12191.9
72.5°	23009.3	23192.1	22822.0	22740.7	22194.6	20411.6	17200.0	14076.4	10749.7	10792.6	10670.7
75°	18576.7	18845.3	18396.2	18421.0	18109.5	17026.2	14414.9	11720.2	8826.8	9023.2	9059.3
77.5°	12918.6	13304.5	13108.2	13304.5	13151.1	12760.6	11156.0	9025.4	6734.6	6960.3	7048.4
80°	6736.9	7195.1	7454.6	7535.9	7585.5	7569.7	6793.3	5416.6	3893.2	3976.7	3972.2
82.5°	2130.5	2019.9	2085.4	2067.3	2010.9	2033.5	1832.6	1433.1	993.0	1094.6	1047.2
85°	643.2	647.7	629.7	625.2	577.8	507.8	415.3	239.2	117.4	137.7	128.6
87.5°	474.0	478.5	442.4	419.8	392.7	340.8	264.1	149.0	56.4	54.2	42.9
90°	261.8	252.8	234.7	216.7	205.4	176.0	133.2	56.4	20.3	15.8	13.5
92.5°	142.2	135.4	126.4	119.6	103.8	83.5	54.2	18.1	9.0	2.3	0.0
95°	65.5	60.9	58.7	51.9	45.1	31.6	18.1	11.3	6.8	2.3	0.0
97.5°	29.3	27.1	24.8	20.3	15.8	9.0	9.0	6.8	4.5	2.3	0.0
100°	6.8	6.8	4.5	4.5	4.5	4.5	4.5	4.5	4.5	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°	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3	4746.3
2.5°	4775.6	4762.1	4755.3	4712.4	4726.0	4687.6	4762.1	4744.0	4732.8	4764.4
5°	4780.2	4732.8	4762.1	4737.3	4746.3	4692.1	4750.8	4726.0	4723.7	4737.3
7.5°	4791.4	4759.8	4789.2	4739.5	4762.1	4739.5	4782.4	4757.6	4777.9	4791.4
10°	4852.4	4834.3	4820.8	4809.5	4825.3	4780.2	4834.3	4836.6	4843.4	4884.0
12.5°	4938.1	4920.1	4897.5	4868.2	4884.0	4865.9	4906.5	4917.8	4942.7	4963.0
15°	5057.8	5023.9	5014.9	4987.8	5003.6	4994.6	5003.6	4996.8	5044.2	5037.4
17.5°	5222.5	5184.1	5055.5	4924.6	4841.1	4865.9	4969.7	5105.2	5139.0	5143.5
20°	5283.5	5012.6	4999.1	4850.1	4782.4	4777.9	4563.5	4243.0	4340.1	4568.0
22.5°	5211.2	4841.1	4802.7	4773.4	4484.5	4010.5	3965.4	3918.0	3906.7	3940.6
25°	5048.7	5005.8	4972.0	4588.3	4132.4	4134.7	4069.2	3757.8	3272.5	3231.9
27.5°	5297.0	5238.3	4911.1	4319.7	4310.7	4306.2	4209.2	3410.2	3306.4	3331.2
30°	5579.1	5482.1	4626.7	4550.0	4547.7	4507.1	3773.6	3439.5	3439.5	3444.1
32.5°	5904.1	5301.5	4789.2	4825.3	4823.0	4631.2	3644.9	3622.4	3613.3	3635.9
35°	6152.4	5157.1	5139.0	5204.5	5159.3	3929.3	3872.9	3852.6	3843.5	3832.3
37.5°	6075.6	5572.3	5572.3	5613.0	5249.6	4184.3	4157.2	4157.2	4139.2	4130.2
40°	6193.0	6089.2	6037.3	6053.1	3814.2	4493.5	4513.8	4509.3	4507.1	4522.9
42.5°	6811.4	6718.9	6671.5	6111.7	4270.1	4466.4	4963.0	4960.7	4967.5	4960.7
45°	7599.1	7513.3	7389.2	5719.0	4847.9	3915.8	5470.8	5495.6	5497.9	5495.6
47.5°	8425.1	8370.9	7100.3	6330.7	5475.3	4202.4	5229.3	6107.2	6095.9	6109.5
50°	9298.5	9054.8	7064.2	7055.1	6143.3	4676.3	4678.6	6642.1	6757.2	6793.3
52.5°	10271.2	8208.4	7829.3	7143.2	6820.4	5163.8	5114.2	5886.0	7456.9	7493.0
55°	9540.0	8671.1	8664.3	6357.7	7095.8	5633.3	5640.0	5585.9	6838.5	7772.8
57.5°	9492.6	9512.9	9497.1	7093.5	5177.4	5281.2	6145.6	6098.2	4428.1	3588.5
60°	10311.9	10341.2	9226.3	7660.0	5597.2	3247.7	3784.9	3216.1	3259.0	3292.8
62.5°	11095.0	11104.0	7504.3	5021.6	2773.8	130.9	63.2	51.9	49.7	49.7
65°	11961.7	11961.7	8043.7	5477.5	2679.0	49.7	9.0	6.8	24.8	24.8
67.5°	12799.0	12613.9	8438.6	5816.1	2726.4	6.8	0.0	0.0	0.0	0.0
68°	12751.6	12548.5	8402.5	5807.1	2719.6	4.5	0.0	0.0	0.0	0.0
70°	12042.9	11846.6	7971.4	5543.0	2618.0	4.5	0.0	0.0	0.0	0.0
72.5°	10630.1	10449.5	7059.6	4886.2	2360.7	2.3	0.0	0.0	0.0	0.0
75°	8998.3	8973.5	6098.2	4123.4	2024.5	2.3	0.0	0.0	0.0	0.0
77.5°	7240.2	7127.4	4766.6	3231.9	1631.8	0.0	0.0	0.0	0.0	0.0
80°	4033.1	4200.1	2789.6	1900.3	1026.9	0.0	0.0	0.0	0.0	0.0
82.5°	1090.1	1020.1	609.4	413.0	196.4	0.0	0.0	0.0	0.0	0.0
85°	139.9	153.5	70.0	56.4	13.5	0.0	0.0	0.0	0.0	0.0
87.5°	72.2	85.8	22.6	18.1	4.5	0.0	0.0	0.0	0.0	0.0
90°	13.5	15.8	6.8	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: P522250  
 CATALOG NUMBER: CST-CA8-480-760-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)