

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: P579564

Luminaire Tested: **CST-CA8-480-750-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579564  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-750-U-T5-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: 58426 lumens  
Efficiency: N/A  
Efficacy: 121.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U2 - G5

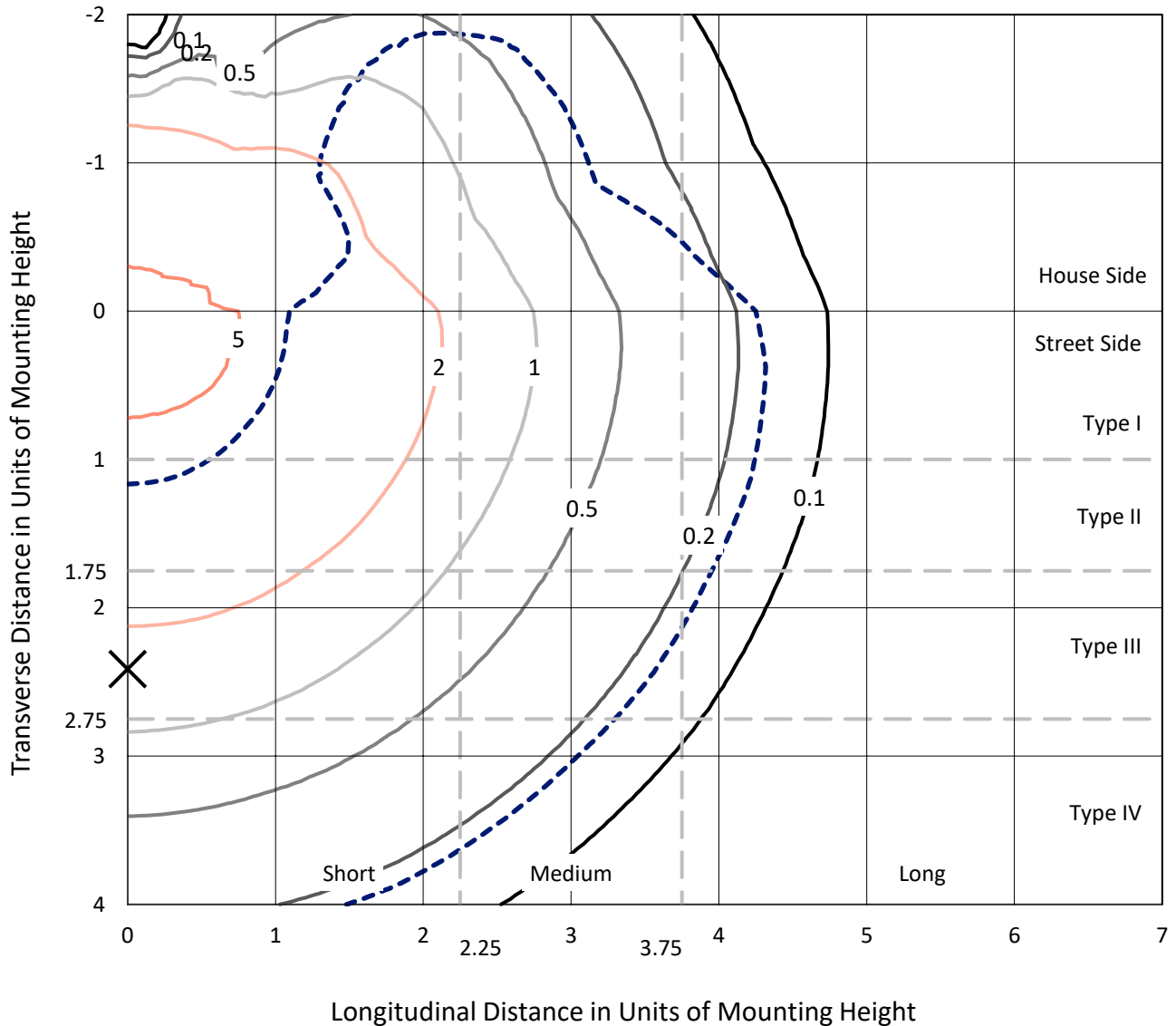
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

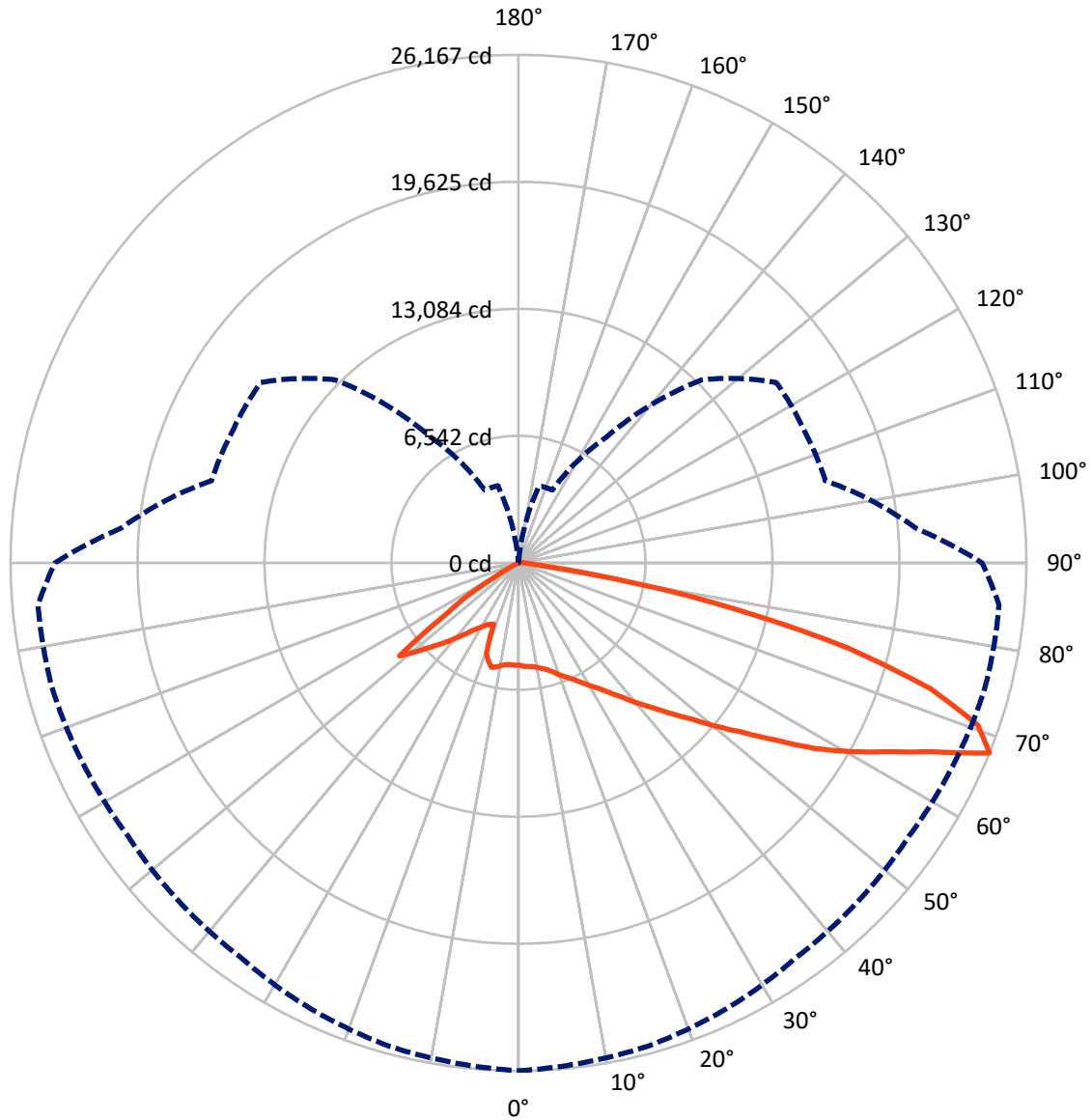
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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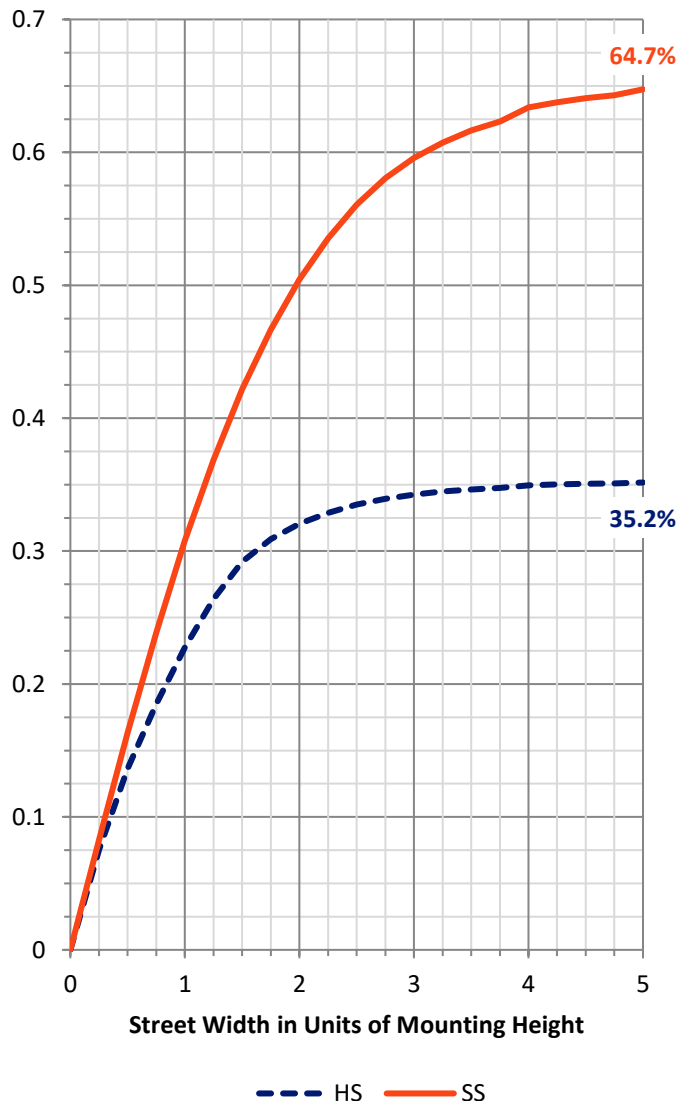
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	20565.9	1.2	20567.1
	% Fixture	35.2	0.0	35.2
<b>Street Side</b>	Lumens	37817.7	41.2	37858.9
	% Fixture	64.7	0.1	64.8
<b>Total</b>	Lumens	58383.6	42.4	58426.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	506.5	0.9
10°-20°	1573.5	2.7
20°-30°	2728.2	4.7
30°-40°	4476.5	7.7
40°-50°	7466.8	12.8
50°-60°	12084.1	20.7
60°-70°	16680.0	28.5
70°-80°	12033.9	20.6
80°-90°	834.1	1.4
90°-100°	36.2	0.1
100°-110°	6.0	0.0
110°-120°	0.2	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°	58383.6	99.9
0°-180°	58426.0	100.0

**Coefficient of Utilization**

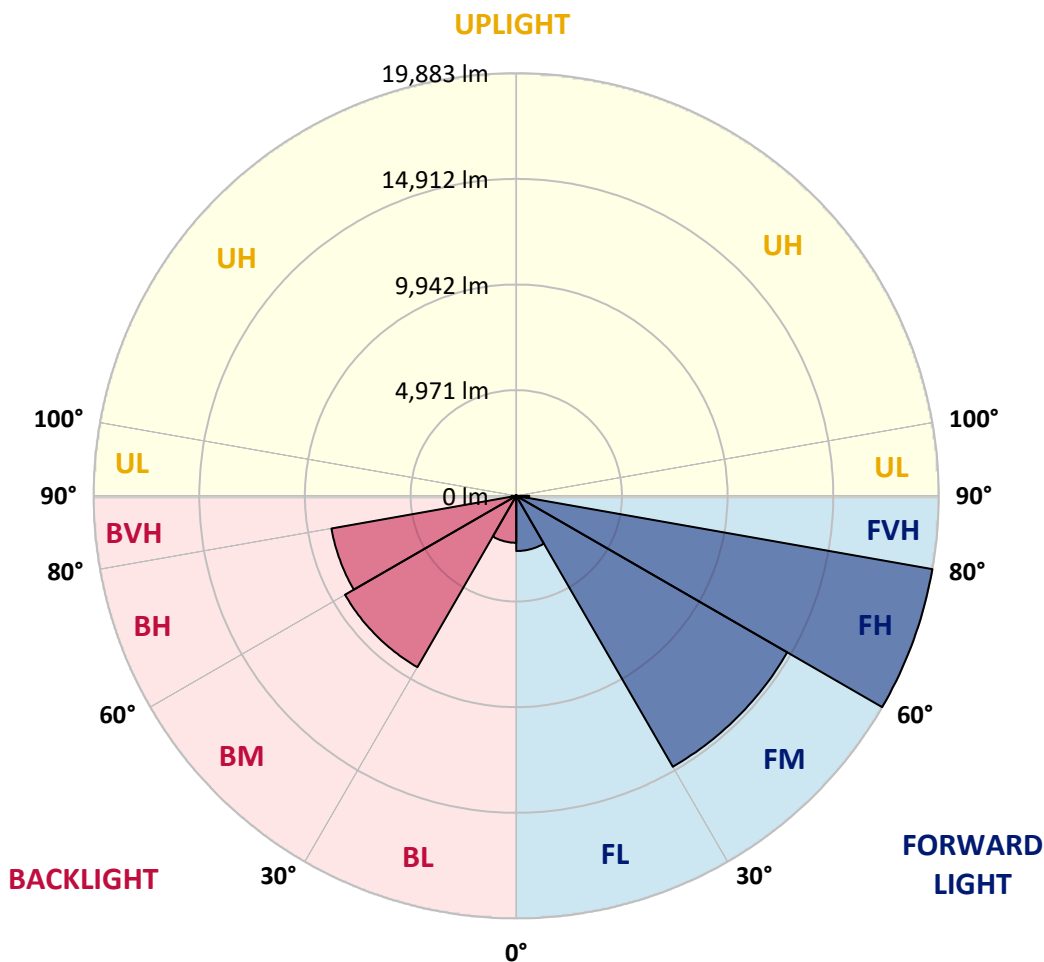


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2598.1	4.4			
FM (30°-60°)	14721.9	25.2			
FH (60°-80°)	19883.1	34.0			G5
FVH (80°-90°)	614.6	1.1			G4/750
BL (0°-30°)	2210.1	3.8	B3/2500		
BM (30°-60°)	9305.5	15.9	B5		
BH (60°-80°)	8830.7	15.1	B5		G5
BVH (80°-90°)	219.5	0.4			G2/225
UL (90°-100°)	36.2	0.1		U2/50	
UH (100°-180°)	6.3	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°	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2
2.5°	5345.7	5314.4	5316.6	5348.0	5263.0	5294.3	5258.5	5289.8	5274.2	5285.3	5298.8
5°	5361.4	5323.4	5327.8	5365.9	5298.8	5323.4	5280.9	5298.8	5285.3	5298.8	5301.0
7.5°	5401.6	5363.6	5365.9	5394.9	5325.6	5343.5	5303.2	5312.2	5289.8	5314.4	5307.7
10°	5486.6	5450.9	5437.4	5462.0	5401.6	5403.9	5356.9	5365.9	5332.3	5365.9	5352.4
12.5°	5600.7	5551.5	5556.0	5569.4	5495.6	5500.1	5444.1	5457.6	5401.6	5448.6	5433.0
15°	5739.4	5679.0	5685.7	5708.1	5636.5	5629.8	5578.3	5578.3	5529.1	5564.9	5549.3
17.5°	5931.7	5864.6	5860.2	5875.8	5817.7	5817.7	5759.5	5752.8	5703.6	5732.7	5728.2
20°	6182.3	6106.2	6092.8	6121.9	6048.1	6057.0	5983.2	5976.5	5922.8	5940.7	5942.9
22.5°	6408.2	6347.8	6345.5	6390.3	6303.0	6314.2	6247.1	6229.2	6184.5	6209.1	6215.8
25°	6667.6	6658.7	6652.0	6667.6	6580.4	6580.4	6533.4	6517.8	6488.7	6506.6	6524.5
27.5°	6994.2	6989.7	6971.8	6974.0	6900.2	6911.4	6860.0	6851.0	6837.6	6835.4	6826.4
30°	7354.3	7334.2	7309.6	7325.2	7291.7	7302.8	7258.1	7229.0	7224.6	7226.8	7213.4
32.5°	7754.7	7727.8	7712.2	7739.0	7752.4	7783.7	7781.5	7701.0	7701.0	7734.5	7674.1
35°	8251.2	8208.7	8222.1	8257.9	8284.8	8365.3	8351.9	8295.9	8313.8	8329.5	8257.9
37.5°	8835.0	8805.9	8866.3	8933.4	8935.6	9049.7	9022.9	9036.3	9034.1	9013.9	8967.0
40°	9535.1	9488.1	9550.7	9602.2	9570.9	9707.3	9702.8	9763.2	9803.5	9872.8	9846.0
42.5°	10230.7	10194.9	10255.3	10367.1	10349.2	10505.8	10528.2	10622.1	10678.0	10785.4	10722.8
45°	11087.3	11067.2	11123.1	11210.4	11270.8	11478.8	11561.5	11601.8	11742.7	11872.4	11727.0
47.5°	12046.9	12073.7	12064.8	12223.6	12357.8	12610.5	12644.1	12773.8	12896.8	13040.0	12899.1
50°	13241.3	13196.6	13236.8	13388.9	13608.1	13791.5	13963.8	14149.4	14270.2	14417.8	14158.3
52.5°	14527.4	14565.4	14654.9	14889.7	15050.8	15267.8	15424.3	15645.8	15764.3	15891.8	15554.0
55°	16149.0	16180.3	16278.7	16520.3	16634.4	16880.4	16987.8	17209.2	17323.3	17379.2	16947.5
57.5°	18050.2	17945.1	18025.6	18150.9	18327.6	18593.7	18622.8	18830.8	18830.8	18902.4	18352.2
60°	19747.9	19676.3	19761.3	19940.2	20009.6	20251.1	20226.5	20396.5	20441.3	20387.6	19730.0
62.5°	21420.9	21434.3	21543.9	21602.1	21575.3	21718.4	21776.6	21955.5	21881.7	21899.6	21141.3
65°	23451.9	23483.2	23472.0	23364.6	23123.1	23404.9	23389.2	23673.3	23691.2	23852.2	22971.0
67.5°	26167.2	26028.5	25775.8	25344.1	24865.5	24699.9	24554.6	24695.5	24876.6	24847.6	23881.3
70°	25111.5	24885.6	24753.6	24377.9	23738.2	23407.1	23105.2	23129.8	23393.7	23418.3	22429.7
72.5°	22199.3	22085.2	21577.5	21248.7	20810.3	20555.3	20190.7	20273.5	20618.0	20676.1	19888.8
75°	17511.2	17406.0	16947.5	16840.2	16623.2	16748.4	16659.0	16692.5	16969.9	16714.9	16243.0
77.5°	11333.4	11358.0	11286.4	11530.2	11521.3	11528.0	11854.5	11888.1	12158.7	12002.2	11545.9
80°	5081.8	5155.6	5330.1	5683.5	5468.7	5585.1	5710.3	5672.3	5945.2	5327.8	5549.3
82.5°	1028.9	1064.7	1004.3	1049.0	979.7	1015.5	1066.9	988.6	979.7	908.1	843.2
85°	530.1	536.8	534.6	523.4	460.8	425.0	409.3	344.5	310.9	304.2	281.8
87.5°	344.5	348.9	337.7	335.5	295.2	270.6	241.6	203.5	170.0	118.5	98.4
90°	210.3	210.3	199.1	187.9	167.8	149.9	120.8	87.2	51.4	20.1	11.2
92.5°	140.9	140.9	136.4	129.7	116.3	100.7	78.3	51.4	24.6	8.9	4.5
95°	89.5	89.5	87.2	85.0	76.0	64.9	49.2	31.3	15.7	6.7	2.2
97.5°	58.2	58.2	58.2	55.9	51.4	44.7	33.6	20.1	11.2	4.5	2.2
100°	35.8	38.0	35.8	35.8	33.6	29.1	22.4	13.4	8.9	4.5	2.2
102.5°	20.1	20.1	22.4	22.4	20.1	17.9	13.4	11.2	6.7	4.5	2.2
105°	8.9	8.9	11.2	11.2	11.2	8.9	8.9	6.7	4.5	4.5	2.2
107.5°	2.2	2.2	2.2	4.5	6.7	6.7	6.7	6.7	4.5	2.2	2.2
110°	0.0	0.0	0.0	2.2	2.2	4.5	4.5	4.5	4.5	2.2	2.2



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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°	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2	5265.2
2.5°	5285.3	5258.5	5278.6	5245.1	5236.1	5207.1	5263.0	5271.9	5267.4	5276.4
5°	5289.8	5256.3	5280.9	5247.3	5245.1	5213.8	5271.9	5274.2	5258.5	5265.2
7.5°	5303.2	5271.9	5289.8	5251.8	5256.3	5218.2	5285.3	5283.1	5274.2	5289.8
10°	5352.4	5316.6	5323.4	5283.1	5294.3	5254.0	5336.8	5341.3	5332.3	5361.4
12.5°	5437.4	5388.2	5403.9	5356.9	5365.9	5325.6	5426.2	5433.0	5433.0	5479.9
15°	5553.7	5502.3	5535.8	5475.5	5477.7	5417.3	5493.3	5493.3	5502.3	5567.2
17.5°	5723.7	5661.1	5705.8	5649.9	5301.0	5169.0	5428.5	5587.3	5323.4	5301.0
20°	5934.0	5904.9	5929.5	5837.8	5271.9	4668.0	4198.3	4173.7	4694.8	4954.3
22.5°	6191.2	6162.1	6173.3	6057.0	4706.0	4281.1	4274.3	4229.6	3578.7	3399.8
25°	6493.2	6477.5	6452.9	5477.7	4864.8	4457.8	4404.1	3820.3	3446.8	3480.3
27.5°	6817.5	6770.5	5940.7	5690.2	5108.6	4634.5	4330.3	3567.5	3554.1	3585.4
30°	7179.8	6931.5	6081.6	5996.6	5392.7	4853.7	3768.8	3724.1	3724.1	3773.3
32.5°	7640.6	6473.0	6473.0	6428.3	5743.9	4260.9	3967.9	3941.1	3972.4	3992.5
35°	7571.2	6962.9	7034.4	7014.3	6220.3	4339.2	4287.8	4243.0	4249.7	4249.7
37.5°	7593.6	7618.2	7703.2	7616.0	5426.2	4679.2	4596.4	4587.5	4594.2	4609.8
40°	8295.9	8309.4	8340.7	8148.3	5831.1	5075.1	4961.0	4938.6	4961.0	4994.6
42.5°	9051.9	9090.0	9125.8	7410.2	6397.0	5524.7	5410.6	5368.1	5408.4	5444.1
45°	9946.6	10004.8	9456.8	8065.6	7036.7	6036.9	5916.1	5864.6	5889.2	5920.6
47.5°	10953.1	11044.9	8917.7	8899.9	7788.2	6643.0	6504.3	6405.9	6443.9	6441.7
50°	12089.4	10555.0	9852.7	9841.5	8627.0	7318.5	7175.4	7085.9	7115.0	7092.6
52.5°	13317.3	10843.5	10865.9	10863.7	9503.8	8045.4	7913.5	7801.6	7571.2	7783.7
55°	14574.4	11841.1	11926.1	11912.7	10423.0	8797.0	8656.0	8550.9	5587.3	4719.4
57.5°	15824.7	12883.4	12910.3	12941.6	11375.9	9521.7	8902.1	8177.4	3187.3	3171.6
60°	17059.4	13876.5	13930.2	13948.1	11890.3	7882.1	3639.1	3706.2	964.0	1151.9
62.5°	18338.7	14856.2	14905.4	14889.7	12402.5	7329.7	3822.5	3746.5	89.5	82.8
65°	19971.5	16084.1	16014.8	15963.4	13210.0	7821.8	4106.6	4086.5	29.1	20.1
67.5°	20544.1	16363.7	16222.8	16204.9	13326.3	7926.9	4129.0	4113.3	29.1	20.1
70°	19246.8	15301.3	15059.7	15066.4	12400.3	7414.7	3851.6	3829.2	26.8	20.1
72.5°	16855.8	13514.2	13413.5	12881.2	10738.4	6522.2	3415.4	3330.5	26.8	17.9
75°	13838.5	10917.4	10693.7	10096.5	8546.5	5184.7	2681.8	2572.2	24.6	15.7
77.5°	9606.6	7656.2	7229.0	6620.6	5717.0	3437.8	1802.8	1661.9	22.4	15.7
80°	4354.9	3142.6	3158.2	2420.1	1939.2	1165.3	572.6	518.9	20.1	13.4
82.5°	758.2	559.2	525.6	507.7	422.7	286.3	174.5	149.9	17.9	8.9
85°	263.9	212.5	234.9	277.4	246.0	172.2	107.4	102.9	11.2	4.5
87.5°	89.5	93.9	109.6	132.0	116.3	67.1	40.3	29.1	2.2	0.0
90°	8.9	11.2	11.2	11.2	6.7	0.0	0.0	0.0	0.0	0.0
92.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579564  
 CATALOG NUMBER: CST-CA8-480-750-U-T5-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)