

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: P579515

Luminaire Tested: **CST-CA8-480-740-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579515  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/18/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-740-U-T5-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 43826 lumens  
Efficiency: N/A  
Efficacy: 91.2 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

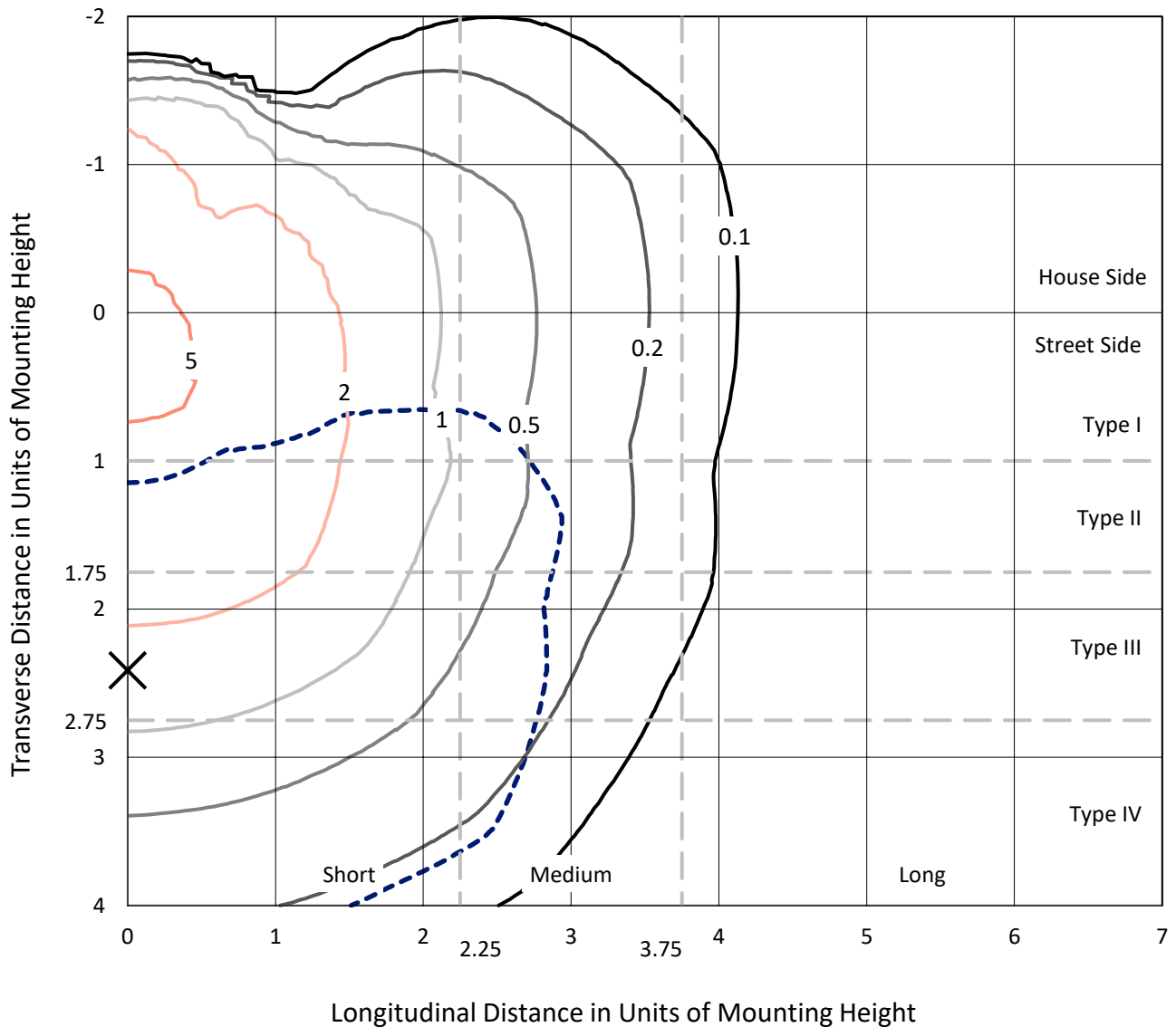




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### Iso-Footcandle Lines of Horizontal Illumination

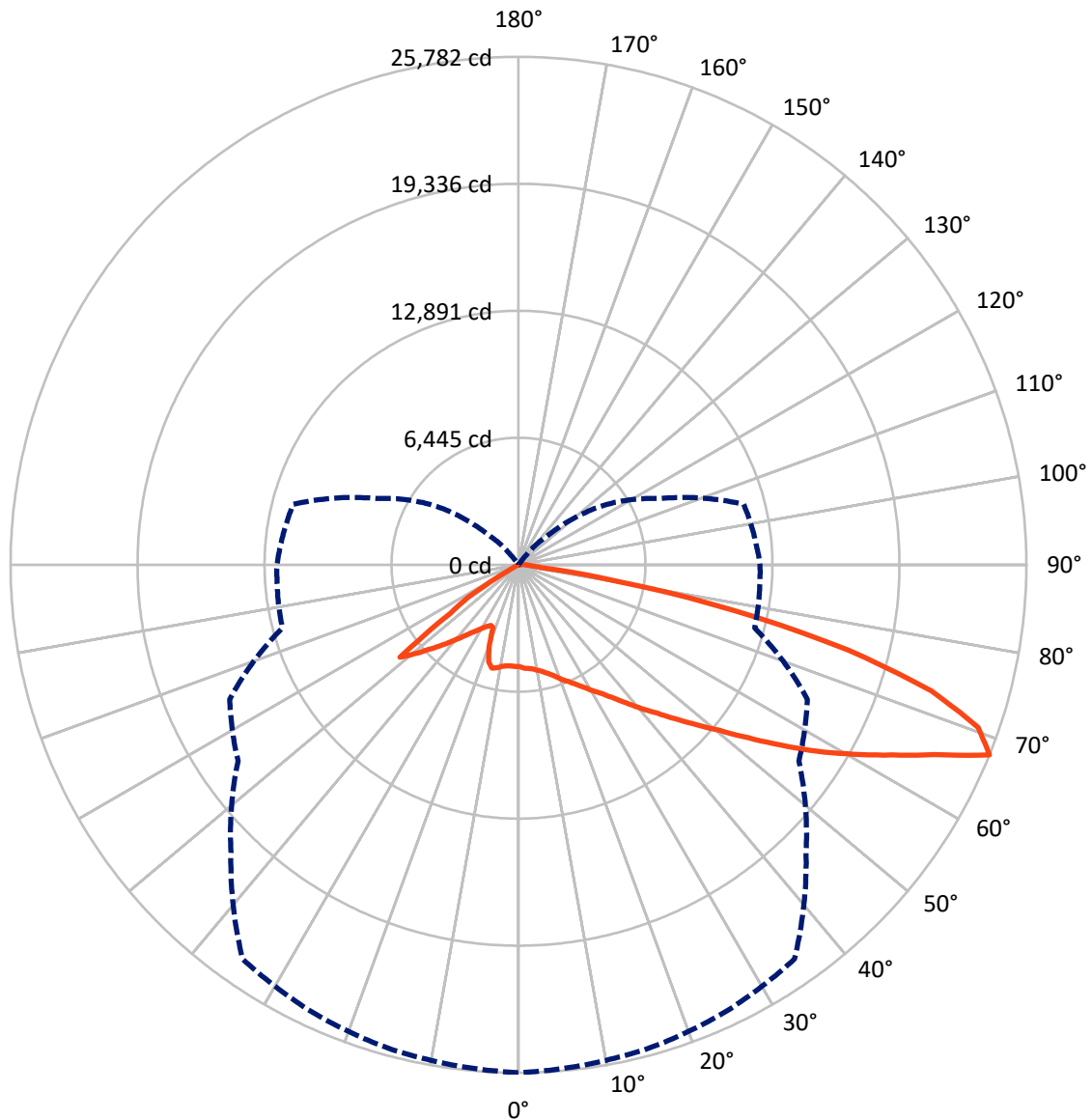
× Max cd  
 - - - 1/2 Max cd



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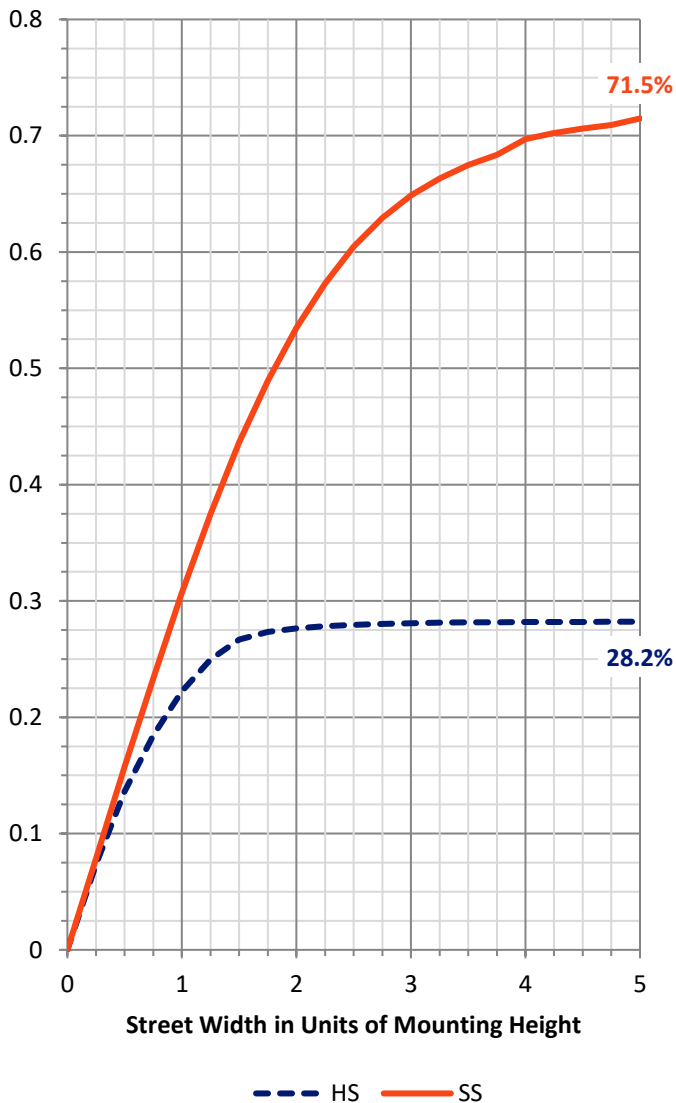
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12421.1	0.2	12421.3
	% Fixture	28.3	0.0	28.3
<b>Street Side</b>	Lumens	31348.9	55.8	31404.7
	% Fixture	71.5	0.1	71.7
<b>Total</b>	Lumens	43770.0	56.0	43826.0
	% Fixture	99.9	0.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	497.8	1.1
10°-20°	1532.4	3.5
20°-30°	2537.3	5.8
30°-40°	3994.2	9.1
40°-50°	6251.0	14.3
50°-60°	9025.4	20.6
60°-70°	11180.9	25.5
70°-80°	8142.8	18.6
80°-90°	608.3	1.4
90°-100°	47.8	0.1
100°-110°	8.0	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°	43770.0	99.9
0°-180°	43826.0	100.0

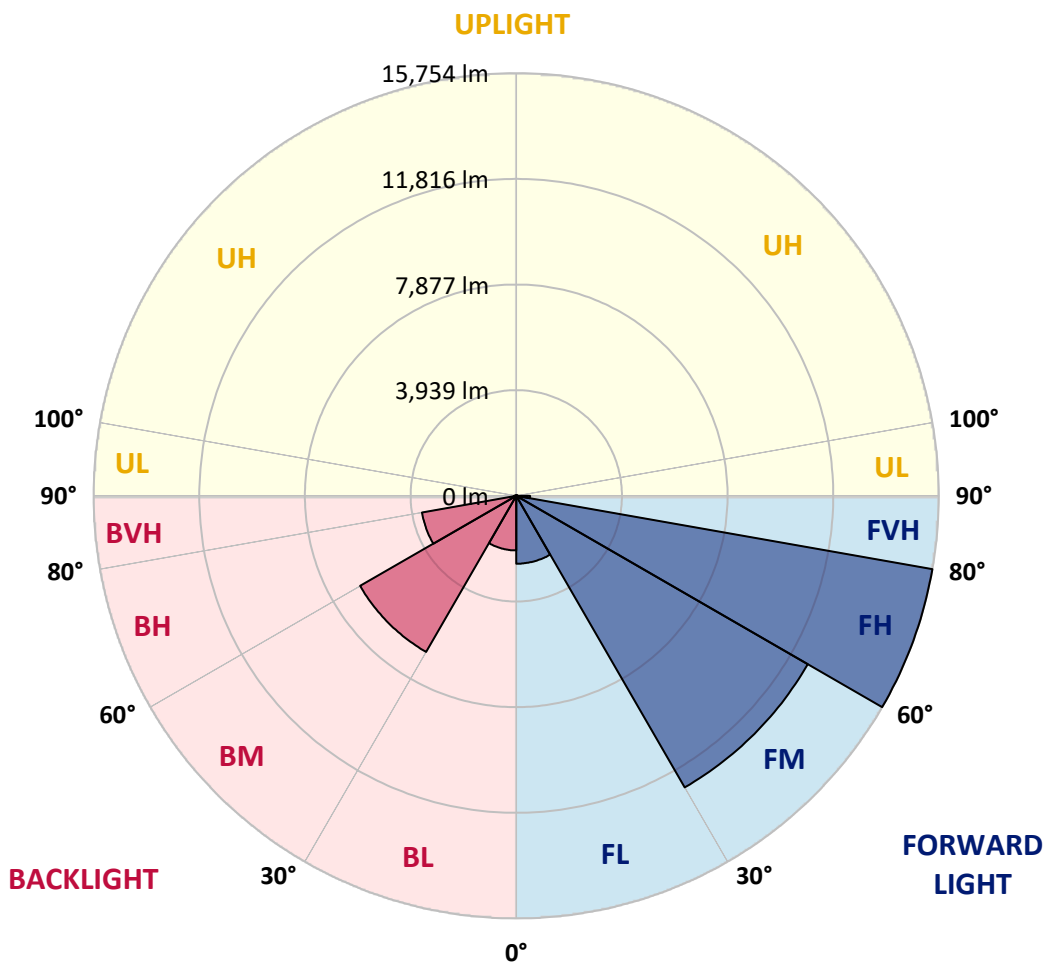


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2531.3	5.8			
FM	(30°-60°)	12550.5	28.6			
FH	(60°-80°)	15754.0	35.9			G5
FVH	(80°-90°)	513.1	1.2			G4/750
BL	(0°-30°)	2036.2	4.6	B3/2500		
BM	(30°-60°)	6720.1	15.3	B4/8500		
BH	(60°-80°)	3569.7	8.1	B4/5000		G4/5000
BVH	(80°-90°)	95.2	0.2			G1/100
UL	(90°-100°)	47.8	0.1		U2/50	
UH	(100°-180°)	8.2	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°	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6
2.5°	5256.0	5227.5	5227.5	5258.2	5172.6	5198.9	5163.8	5194.5	5176.9	5185.7	5196.7
5°	5286.8	5253.8	5256.0	5293.4	5216.5	5238.4	5196.7	5212.1	5196.7	5203.3	5203.3
7.5°	5343.9	5315.3	5315.3	5337.3	5260.4	5267.0	5229.7	5229.7	5209.9	5225.3	5212.1
10°	5451.5	5420.8	5405.4	5416.4	5348.3	5339.5	5289.0	5289.0	5258.2	5282.4	5262.6
12.5°	5581.1	5537.2	5532.8	5535.0	5458.1	5442.7	5385.6	5387.8	5330.7	5363.6	5339.5
15°	5737.0	5682.1	5677.7	5686.5	5605.3	5576.7	5513.0	5513.0	5449.3	5466.9	5433.9
17.5°	5936.9	5873.2	5862.2	5877.6	5796.3	5770.0	5695.3	5682.1	5611.8	5598.7	5570.1
20°	6200.5	6128.0	6106.0	6139.0	6035.7	6011.6	5921.5	5893.0	5798.5	5642.6	5438.3
22.5°	6437.7	6380.6	6367.4	6389.4	6294.9	6270.8	6182.9	6123.6	5895.2	5581.1	5392.2
25°	6707.9	6685.9	6679.3	6666.1	6580.5	6538.7	6455.3	6371.8	5853.4	5422.9	5418.6
27.5°	7041.7	7030.7	7000.0	6989.0	6894.5	6868.2	6758.4	6220.2	5704.1	5673.3	5655.8
30°	7406.3	7384.3	7353.6	7355.8	7292.1	7243.8	6982.4	6086.3	5991.8	5991.8	5945.7
32.5°	7810.5	7786.3	7755.5	7762.1	7735.8	7694.0	6907.7	6439.9	6367.4	6387.2	6330.1
35°	8311.2	8271.7	8260.7	8287.1	8289.3	8019.1	7039.5	6920.9	6863.8	6850.6	6635.4
37.5°	8895.5	8862.5	8902.1	8963.6	8893.3	8102.6	7564.5	7527.1	7470.0	7151.5	6642.0
40°	9596.1	9536.8	9585.2	9624.7	9578.6	8599.0	8115.8	8128.9	8078.4	7134.0	6569.5
42.5°	10290.2	10233.1	10274.8	10373.7	10356.1	9214.0	8787.9	8816.4	8306.8	7175.7	7131.8
45°	11149.0	11129.2	11116.1	11197.3	11265.4	9949.8	9585.2	9583.0	8144.3	7839.0	7799.5
47.5°	12122.0	12095.7	12102.2	12205.5	12308.7	10828.3	10527.4	9644.5	8563.8	8594.6	8559.4
50°	13207.0	13178.5	13264.1	13413.5	13466.2	11814.5	11445.5	9477.5	9438.0	9470.9	9411.6
52.5°	14584.2	14520.5	14652.3	14812.6	14880.7	12980.8	11496.0	10463.7	10397.8	10404.4	10215.5
55°	16150.2	16099.7	16218.3	16398.4	16499.5	14283.3	12545.9	11423.6	11384.0	10263.8	9242.5
57.5°	17852.5	17795.4	17953.5	18006.2	18032.6	15629.7	13602.4	12464.7	10635.0	9372.1	9315.0
60°	19521.7	19460.2	19660.1	19668.9	19745.8	16973.9	14606.2	13468.4	10246.3	10079.3	10031.0
62.5°	21274.5	21197.6	21373.3	21366.7	21215.2	18203.9	15601.1	14432.6	10940.3	10808.6	10733.9
65°	23220.5	23163.4	23286.4	23088.7	22787.8	19475.6	16633.4	15482.5	11748.6	11724.5	11706.9
67.5°	25781.5	25669.5	25421.3	24999.6	24424.1	20641.9	17371.4	16174.4	12405.4	12293.3	12258.2
70°	24751.4	24619.6	24430.7	23967.3	23380.8	19545.9	16185.4	15128.9	11599.3	11603.7	11520.2
72.5°	21915.8	21687.4	21509.5	20859.4	20536.5	17070.5	14103.2	13130.2	10033.2	10219.9	10180.4
75°	17288.0	17055.2	16763.0	16508.3	16473.1	13846.2	11370.8	10670.2	7999.3	8135.5	8234.4
77.5°	11206.1	11120.4	11489.4	11247.8	11465.3	9534.6	8122.3	7520.5	5513.0	5857.8	5811.7
80°	5128.6	5029.8	5622.8	5455.9	5537.2	4682.8	3968.9	3813.0	2495.1	2512.7	2565.4
82.5°	1159.7	1120.2	1161.9	1067.5	1041.1	880.8	775.3	702.9	441.5	467.8	492.0
85°	634.8	634.8	626.0	582.0	498.6	410.7	325.1	250.4	136.2	149.4	147.2
87.5°	445.9	434.9	432.7	386.6	331.7	281.1	224.0	160.3	76.9	52.7	48.3
90°	305.3	300.9	285.5	257.0	221.8	182.3	136.2	79.1	32.9	15.4	11.0
92.5°	221.8	217.4	206.5	182.3	151.6	123.0	90.1	52.7	26.4	11.0	2.2
95°	147.2	145.0	138.4	118.6	98.8	79.1	57.1	32.9	22.0	8.8	2.2
97.5°	101.0	98.8	92.2	79.1	63.7	50.5	35.1	24.2	17.6	6.6	2.2
100°	68.1	65.9	61.5	50.5	39.5	30.7	22.0	17.6	13.2	6.6	2.2
102.5°	43.9	41.7	37.3	30.7	22.0	17.6	15.4	13.2	8.8	4.4	2.2
105°	26.4	24.2	19.8	15.4	13.2	11.0	11.0	8.8	6.6	2.2	2.2
107.5°	13.2	11.0	8.8	8.8	8.8	6.6	6.6	6.6	4.4	2.2	0.0
110°	2.2	2.2	4.4	4.4	4.4	4.4	4.4	4.4	4.4	2.2	0.0



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 CATALOG NUMBER: CST-CA8-480-740-U-T5-HSS-HM-EX180

**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°	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6	5161.6
2.5°	5185.7	5150.6	5170.4	5139.6	5133.0	5100.1	5152.8	5159.4	5155.0	5163.8
5°	5192.3	5155.0	5176.9	5139.6	5139.6	5104.5	5155.0	5155.0	5141.8	5146.2
7.5°	5209.9	5172.6	5187.9	5146.2	5148.4	5106.7	5168.2	5161.6	5150.6	5166.0
10°	5260.4	5218.7	5216.5	5176.9	5185.7	5141.8	5218.7	5218.7	5207.7	5236.3
12.5°	5341.7	5280.2	5269.2	5220.9	5238.4	5201.1	5295.6	5299.9	5302.1	5348.3
15°	5427.3	5352.7	5363.6	5306.5	5299.9	5280.2	5365.8	5361.4	5359.3	5422.9
17.5°	5548.1	5196.7	5139.6	5100.1	5091.3	5043.0	5122.0	5273.6	5194.5	5150.6
20°	5357.1	5172.6	4946.3	4869.5	4854.1	4434.6	4102.9	4252.3	4454.3	4471.9
22.5°	5183.5	5117.6	5100.1	4979.3	4309.4	4168.8	4182.0	4127.1	3648.2	3439.6
25°	5398.8	5341.7	5267.0	4529.0	4370.9	4320.3	4305.0	3742.7	3364.9	3389.1
27.5°	5638.2	5574.5	4924.4	4540.0	4575.1	4504.8	4157.8	3492.3	3470.3	3512.1
30°	5936.9	5427.3	4805.8	4783.8	4816.7	4726.7	3694.4	3646.0	3639.5	3683.4
32.5°	6277.4	5234.1	5122.0	5122.0	5106.7	4133.7	3892.0	3859.1	3876.7	3922.8
35°	6150.0	5537.2	5524.0	5578.9	5209.9	4241.3	4208.3	4151.2	4164.4	4179.8
37.5°	6009.4	6035.7	6042.3	6013.8	3799.8	4548.8	4522.4	4511.4	4498.3	4502.7
40°	6532.1	6549.7	6543.1	6281.7	4100.7	4608.1	4878.2	4858.5	4856.3	4882.6
42.5°	7142.7	7191.1	7153.7	5541.6	4502.7	3874.5	5289.0	5278.0	5273.6	5328.5
45°	7830.2	7876.3	7092.2	5934.7	4931.0	4010.7	5317.5	5726.1	5759.0	5807.3
47.5°	8574.8	8566.0	6545.3	6538.7	5433.9	4388.4	4421.4	6262.0	6316.9	6334.5
50°	9431.4	8023.5	7166.9	6925.3	6002.8	4812.3	4687.1	5745.8	6958.2	6975.8
52.5°	9249.1	7937.8	7880.7	6075.3	6512.4	5280.2	5157.2	5124.2	7213.0	7636.9
55°	8620.9	8686.8	8605.6	6666.1	4775.0	5697.5	5620.6	5587.7	5365.8	4247.9
57.5°	9319.4	9339.2	9268.9	7208.6	4856.3	3551.6	5532.8	4746.5	3083.8	3068.4
60°	10044.2	10077.2	6903.3	5295.6	3112.3	1188.3	283.3	298.7	852.2	749.0
62.5°	10736.1	10769.0	7307.5	4838.7	1965.8	87.9	57.1	39.5	43.9	43.9
65°	11638.8	11652.0	7821.4	5122.0	2042.7	22.0	6.6	0.0	0.0	0.0
67.5°	12106.6	11836.5	7951.0	5251.6	2097.6	13.2	4.4	0.0	0.0	0.0
70°	11399.4	11109.5	7401.9	4922.2	1954.8	11.0	2.2	0.0	0.0	0.0
72.5°	10044.2	9903.6	6644.2	4364.3	1730.8	6.6	2.2	0.0	0.0	0.0
75°	8324.4	8137.7	5508.6	3637.3	1432.1	4.4	0.0	0.0	0.0	0.0
77.5°	5921.5	5943.5	3839.3	2651.1	975.2	4.4	0.0	0.0	0.0	0.0
80°	2591.8	2651.1	1682.5	1216.8	344.8	2.2	0.0	0.0	0.0	0.0
82.5°	494.2	454.7	219.6	173.5	43.9	0.0	0.0	0.0	0.0	0.0
85°	162.5	177.9	81.3	65.9	19.8	0.0	0.0	0.0	0.0	0.0
87.5°	57.1	72.5	24.2	19.8	4.4	0.0	0.0	0.0	0.0	0.0
90°	8.8	8.8	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: P579515  
 CATALOG NUMBER: CST-CA8-480-740-U-T5-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)