

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: P579611

Luminaire Tested: **CST-CA8-480-760-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579611
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-CA8-480-760-U-T5-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43684 lumens
Efficiency: N/A
Efficacy: 90.9 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

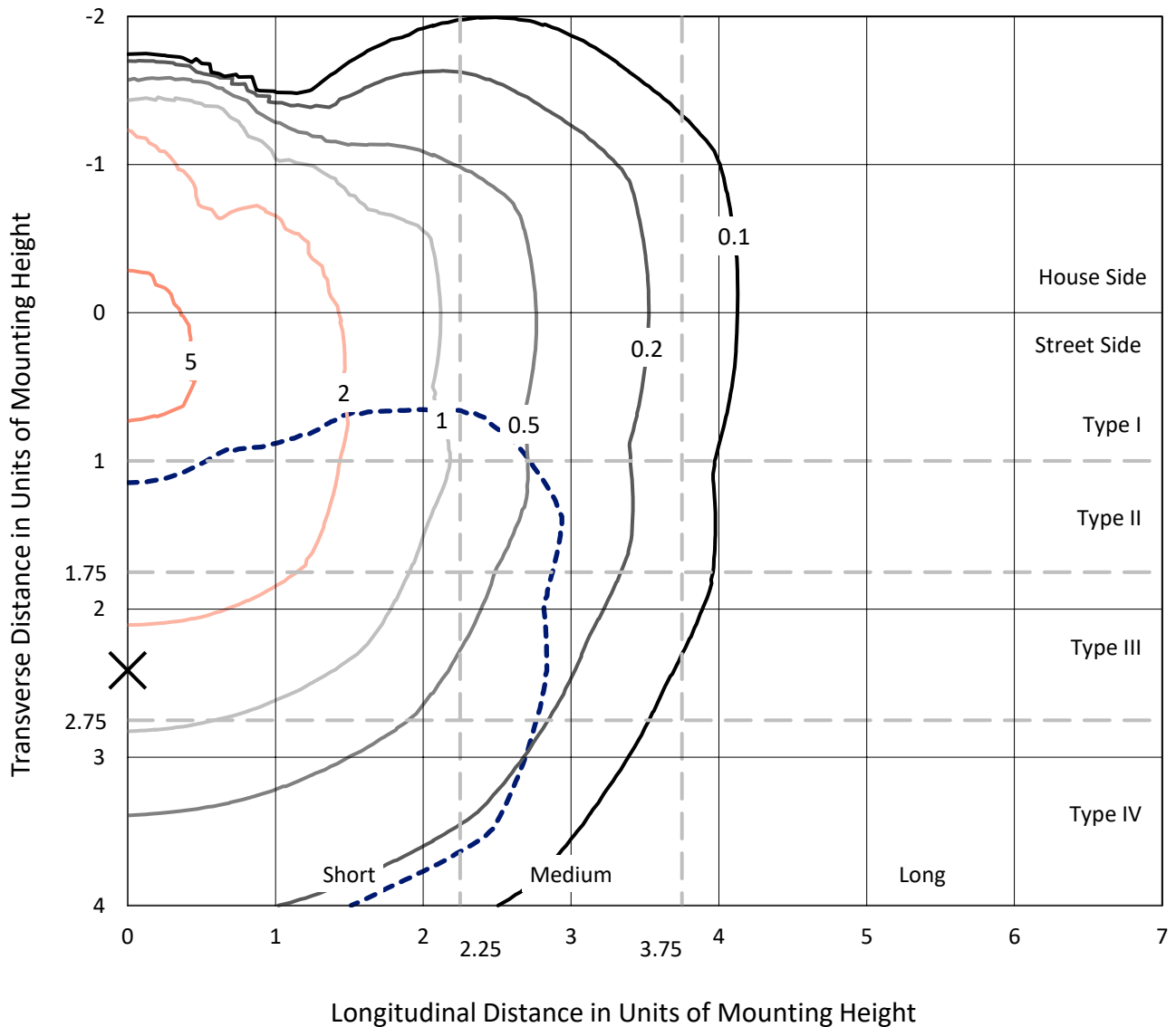




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Iso-Footcandle Lines of Horizontal Illumination

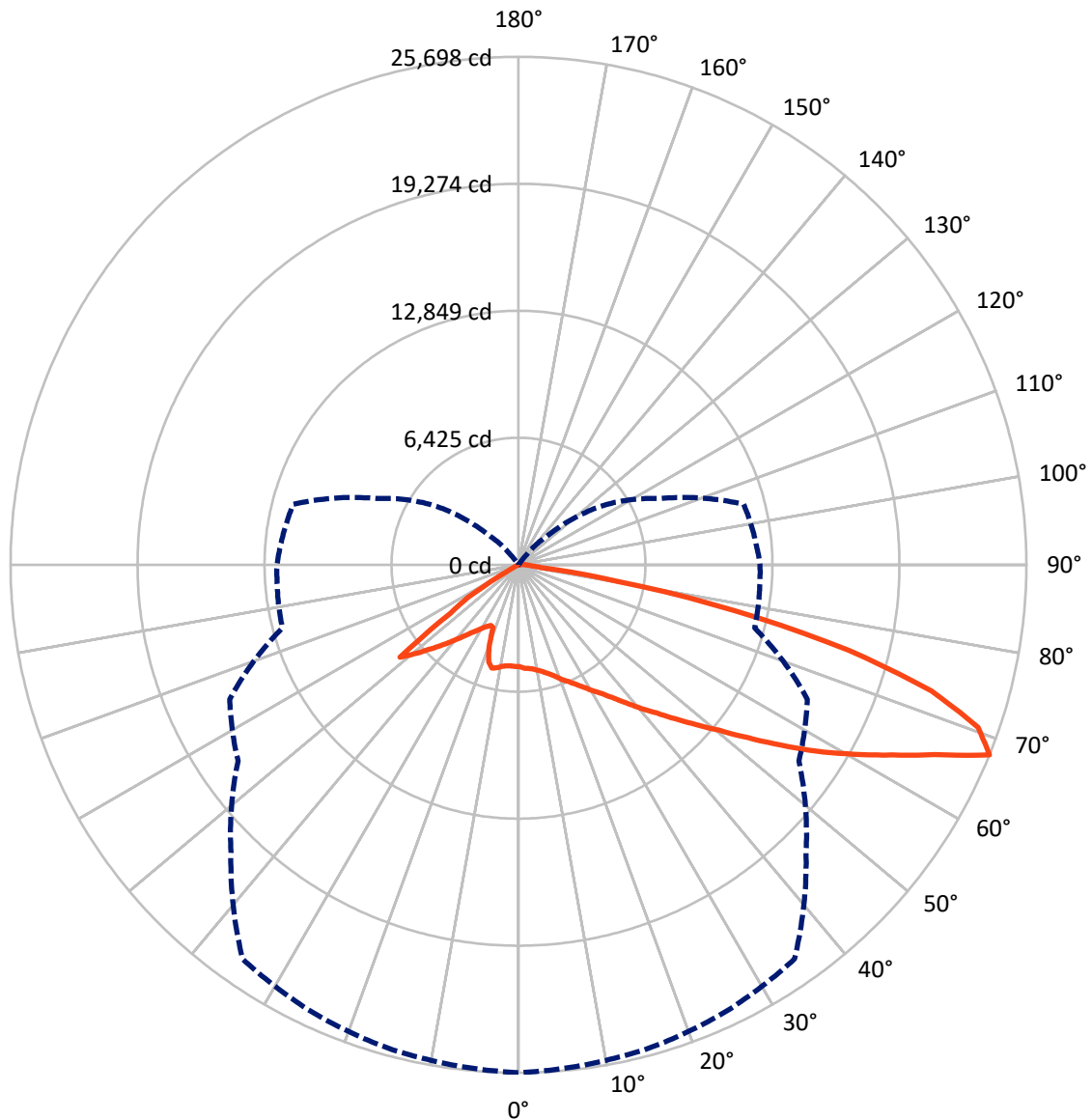
× Max cd
 - - - 1/2 Max cd



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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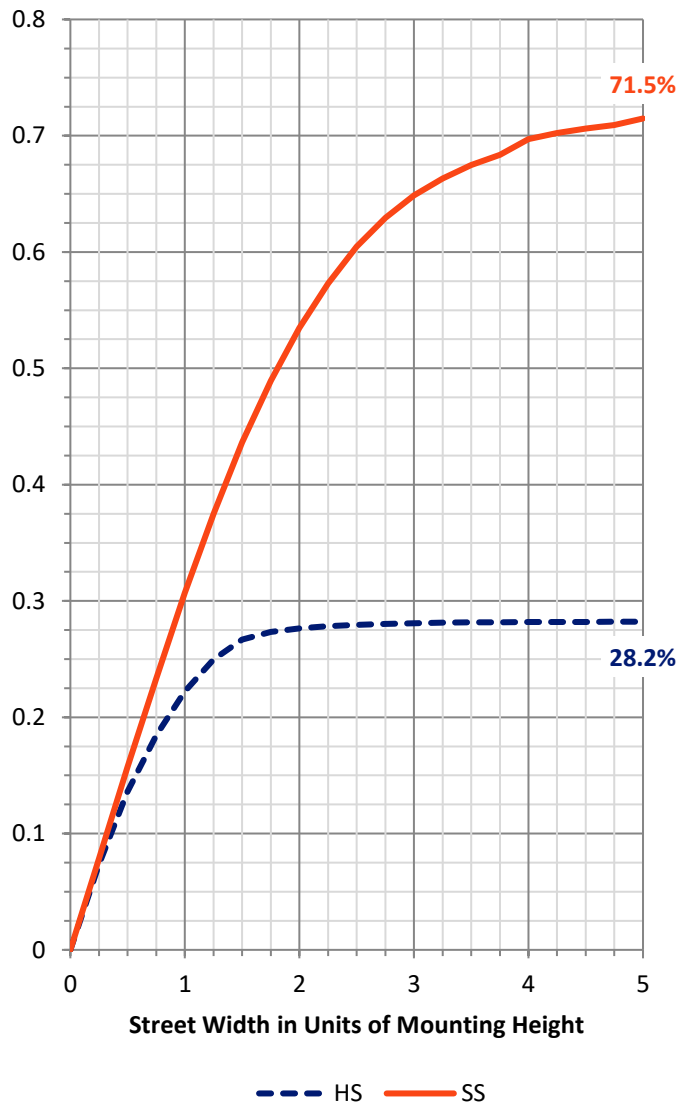
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12380.9	0.2	12381.0
	% Fixture	28.3	0.0	28.3
Street Side	Lumens	31247.3	55.6	31302.9
	% Fixture	71.5	0.1	71.7
Total	Lumens	43628.2	55.8	43684.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	496.1	1.1
10°-20°	1527.4	3.5
20°-30°	2529.1	5.8
30°-40°	3981.3	9.1
40°-50°	6230.7	14.3
50°-60°	8996.1	20.6
60°-70°	11144.7	25.5
70°-80°	8116.4	18.6
80°-90°	606.3	1.4
90°-100°	47.6	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°	43628.2	99.9
0°-180°	43684.0	100.0

Coefficient of Utilization



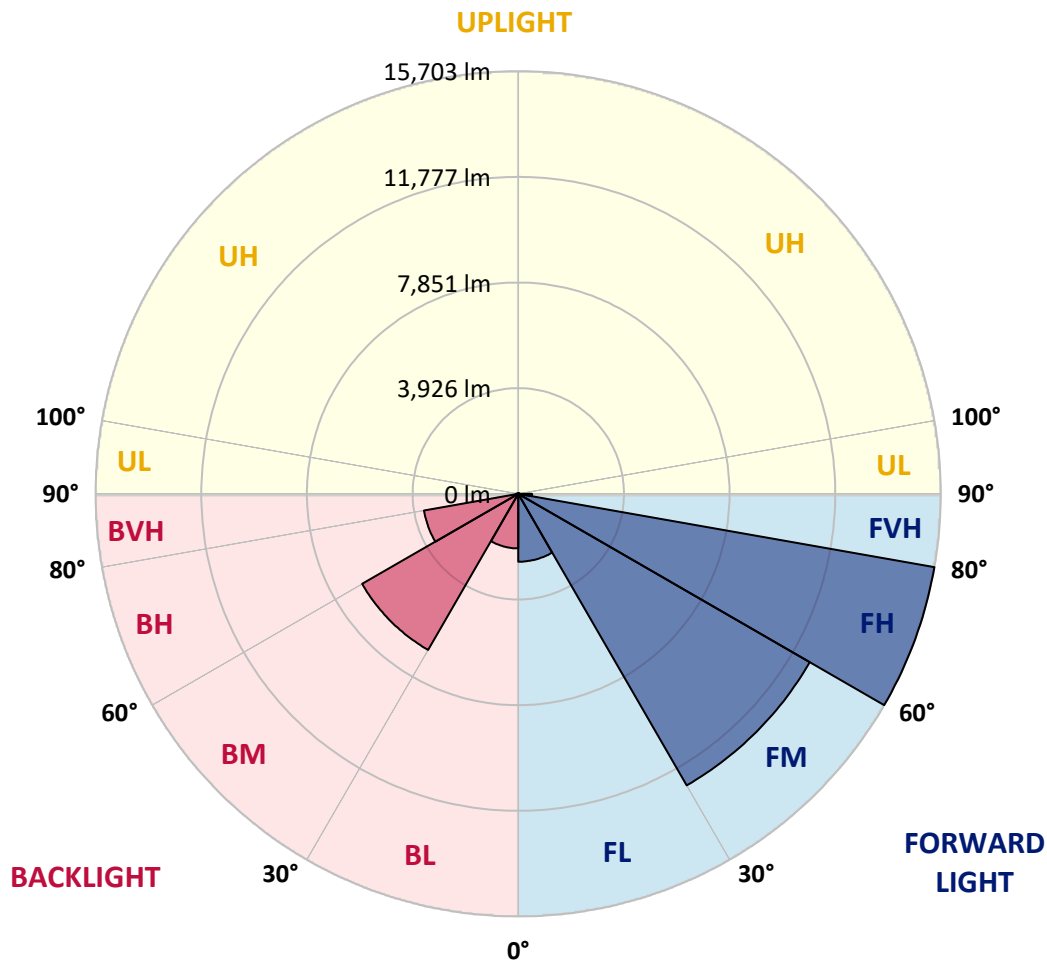
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2523.1	5.8			
FM (30°-60°)	12509.8	28.6			
FH (60°-80°)	15703.0	35.9			G5
FVH (80°-90°)	511.4	1.2			G4/750
BL (0°-30°)	2029.6	4.6	B3/2500		
BM (30°-60°)	6698.3	15.3	B4/8500		
BH (60°-80°)	3558.1	8.1	B4/5000		G4/5000
BVH (80°-90°)	94.9	0.2			G1/100
UL (90°-100°)	47.6	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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CATALOG NUMBER: CST-CA8-480-760-U-T5-HSS-HM-EX180

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9
2.5°	5239.0	5210.5	5210.5	5241.2	5155.8	5182.1	5147.0	5177.7	5160.2	5168.9	5179.9
5°	5269.6	5236.8	5239.0	5276.2	5199.6	5221.5	5179.9	5195.2	5179.9	5186.4	5186.4
7.5°	5326.6	5298.1	5298.1	5320.0	5243.4	5249.9	5212.7	5212.7	5193.0	5208.3	5195.2
10°	5433.8	5403.2	5387.9	5398.8	5330.9	5322.2	5271.8	5271.8	5241.2	5265.3	5245.6
12.5°	5563.0	5519.2	5514.8	5517.0	5440.4	5425.1	5368.2	5370.3	5313.4	5346.3	5322.2
15°	5718.4	5663.7	5659.3	5668.1	5587.1	5558.6	5495.1	5495.1	5431.6	5449.2	5416.3
17.5°	5917.7	5854.2	5843.2	5858.6	5777.6	5751.3	5676.9	5663.7	5593.7	5580.5	5552.1
20°	6180.4	6108.1	6086.2	6119.1	6016.2	5992.1	5902.3	5873.9	5779.7	5624.3	5420.7
22.5°	6416.8	6359.9	6346.8	6368.7	6274.5	6250.4	6162.9	6103.8	5876.1	5563.0	5374.7
25°	6686.1	6664.2	6657.7	6644.5	6559.1	6517.5	6434.3	6351.2	5834.5	5405.4	5401.0
27.5°	7018.9	7007.9	6977.3	6966.3	6872.2	6845.9	6736.5	6200.1	5685.6	5655.0	5637.4
30°	7382.3	7360.4	7329.8	7332.0	7268.5	7220.3	6959.8	6066.5	5972.4	5972.4	5926.4
32.5°	7785.1	7761.1	7730.4	7737.0	7710.7	7669.1	6885.3	6419.0	6346.8	6366.5	6309.6
35°	8284.3	8244.9	8234.0	8260.2	8262.4	7993.1	7016.7	6898.5	6841.6	6828.4	6613.9
37.5°	8866.7	8833.8	8873.2	8934.5	8864.5	8076.3	7539.9	7502.7	7445.8	7128.4	6620.4
40°	9565.0	9505.9	9554.1	9593.5	9547.5	8571.1	8089.5	8102.6	8052.2	7110.8	6548.2
42.5°	10256.9	10199.9	10241.5	10340.1	10322.5	9184.1	8759.4	8787.8	8279.9	7152.4	7108.7
45°	11112.9	11093.2	11080.0	11161.0	11228.9	9917.5	9554.1	9551.9	8117.9	7813.6	7774.2
47.5°	12082.7	12056.5	12063.0	12165.9	12268.8	10793.2	10493.3	9613.2	8536.1	8566.7	8531.7
50°	13164.2	13135.8	13221.2	13370.0	13422.6	11776.2	11408.4	9446.8	9407.4	9440.3	9381.1
52.5°	14536.9	14473.5	14604.8	14764.6	14832.5	12938.8	11458.8	10429.8	10364.1	10370.7	10182.4
55°	16097.9	16047.6	16165.8	16345.3	16446.0	14237.0	12505.3	11386.5	11347.1	10230.6	9212.6
57.5°	17794.6	17737.7	17895.3	17947.9	17974.1	15579.0	13558.3	12424.3	10600.6	9341.7	9284.8
60°	19458.5	19397.2	19596.4	19605.2	19681.8	16918.9	14558.8	13424.8	10213.1	10046.7	9998.5
62.5°	21205.5	21128.9	21304.1	21297.5	21146.4	18144.9	15550.6	14385.9	10904.9	10773.5	10699.1
65°	23145.3	23088.3	23210.9	23013.9	22714.0	19412.5	16579.6	15432.4	11710.6	11686.5	11669.0
67.5°	25698.0	25586.3	25338.9	24918.6	24345.0	20575.0	17315.2	16122.0	12365.2	12253.5	12218.5
70°	24671.2	24539.8	24351.6	23889.6	23305.1	19482.6	16132.9	15079.9	11561.7	11566.1	11482.9
72.5°	21844.8	21617.1	21439.8	20791.8	20469.9	17015.2	14057.5	13087.6	10000.7	10186.8	10147.4
75°	17232.0	16999.9	16708.7	16454.8	16419.7	13801.3	11334.0	10635.6	7973.4	8109.2	8207.7
77.5°	11169.8	11084.4	11452.2	11211.4	11428.1	9503.7	8096.0	7496.2	5495.1	5838.9	5792.9
80°	5112.0	5013.5	5604.6	5438.2	5519.2	4667.6	3956.1	3800.6	2487.0	2504.6	2557.1
82.5°	1155.9	1116.5	1158.1	1064.0	1037.7	877.9	772.8	700.6	440.0	466.3	490.4
85°	632.7	632.7	623.9	580.2	497.0	409.4	324.0	249.6	135.7	148.9	146.7
87.5°	444.4	433.5	431.3	385.3	330.6	280.2	223.3	159.8	76.6	52.5	48.2
90°	304.3	299.9	284.6	256.1	221.1	181.7	135.7	78.8	32.8	15.3	10.9
92.5°	221.1	216.7	205.8	181.7	151.1	122.6	89.8	52.5	26.3	10.9	2.2
95°	146.7	144.5	137.9	118.2	98.5	78.8	56.9	32.8	21.9	8.8	2.2
97.5°	100.7	98.5	92.0	78.8	63.5	50.4	35.0	24.1	17.5	6.6	2.2
100°	67.9	65.7	61.3	50.4	39.4	30.7	21.9	17.5	13.1	6.6	2.2
102.5°	43.8	41.6	37.2	30.7	21.9	17.5	15.3	13.1	8.8	4.4	2.2
105°	26.3	24.1	19.7	15.3	13.1	10.9	10.9	8.8	6.6	2.2	2.2
107.5°	13.1	10.9	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-CA8-480-760-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°	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9	5144.9
2.5°	5168.9	5133.9	5153.6	5123.0	5116.4	5083.6	5136.1	5142.7	5138.3	5147.0
5°	5175.5	5138.3	5160.2	5123.0	5123.0	5087.9	5138.3	5138.3	5125.1	5129.5
7.5°	5193.0	5155.8	5171.1	5129.5	5131.7	5090.1	5151.4	5144.9	5133.9	5149.2
10°	5243.4	5201.8	5199.6	5160.2	5168.9	5125.1	5201.8	5201.8	5190.8	5219.3
12.5°	5324.4	5263.1	5252.1	5204.0	5221.5	5184.3	5278.4	5282.8	5285.0	5330.9
15°	5409.8	5335.3	5346.3	5289.3	5282.8	5263.1	5348.5	5344.1	5341.9	5405.4
17.5°	5530.2	5179.9	5123.0	5083.6	5074.8	5026.6	5105.4	5256.5	5177.7	5133.9
20°	5339.7	5155.8	4930.3	4853.7	4838.3	4420.2	4089.6	4238.5	4439.9	4457.4
22.5°	5166.7	5101.1	5083.6	4963.1	4295.4	4155.3	4168.4	4113.7	3636.4	3428.4
25°	5381.3	5324.4	5249.9	4514.3	4356.7	4306.3	4291.0	3730.6	3354.0	3378.1
27.5°	5619.9	5556.4	4908.4	4525.3	4560.3	4490.3	4144.3	3481.0	3459.1	3500.7
30°	5917.7	5409.8	4790.2	4768.3	4801.1	4711.4	3682.4	3634.2	3627.7	3671.5
32.5°	6257.0	5217.1	5105.4	5105.4	5090.1	4120.3	3879.4	3846.6	3864.1	3910.1
35°	6130.0	5519.2	5506.1	5560.8	5193.0	4227.5	4194.7	4137.8	4150.9	4166.2
37.5°	5989.9	6016.2	6022.8	5994.3	3787.5	4534.0	4507.8	4496.8	4483.7	4488.1
40°	6511.0	6528.5	6521.9	6261.4	4087.4	4593.1	4862.4	4842.7	4840.5	4866.8
42.5°	7119.6	7167.8	7130.5	5523.6	4488.1	3861.9	5271.8	5260.9	5256.5	5311.2
45°	7804.8	7850.8	7069.2	5915.5	4915.0	3997.7	5300.3	5707.5	5740.3	5788.5
47.5°	8547.0	8538.3	6524.1	6517.5	5416.3	4374.2	4407.1	6241.7	6296.4	6313.9
50°	9400.8	7997.5	7143.7	6902.9	5983.4	4796.8	4672.0	5727.2	6935.7	6953.2
52.5°	9219.1	7912.1	7855.2	6055.6	6491.3	5263.1	5140.5	5107.6	7189.7	7612.2
55°	8593.0	8658.7	8577.7	6644.5	4759.5	5679.0	5602.4	5569.6	5348.5	4234.1
57.5°	9289.2	9308.9	9238.8	7185.3	4840.5	3540.1	5514.8	4731.1	3073.8	3058.4
60°	10011.7	10044.5	6881.0	5278.4	3102.2	1184.4	282.4	297.7	849.4	746.6
62.5°	10701.3	10734.1	7283.8	4823.0	1959.4	87.6	56.9	39.4	43.8	43.8
65°	11601.1	11614.2	7796.1	5105.4	2036.0	21.9	6.6	0.0	0.0	0.0
67.5°	12067.4	11798.1	7925.3	5234.6	2090.8	13.1	4.4	0.0	0.0	0.0
70°	11362.5	11073.5	7377.9	4906.2	1948.5	10.9	2.2	0.0	0.0	0.0
72.5°	10011.7	9871.5	6622.6	4350.1	1725.2	6.6	2.2	0.0	0.0	0.0
75°	8297.4	8111.3	5490.8	3625.5	1427.4	4.4	0.0	0.0	0.0	0.0
77.5°	5902.3	5924.2	3826.9	2642.5	972.0	4.4	0.0	0.0	0.0	0.0
80°	2583.4	2642.5	1677.0	1212.9	343.7	2.2	0.0	0.0	0.0	0.0
82.5°	492.6	453.2	218.9	173.0	43.8	0.0	0.0	0.0	0.0	0.0
85°	162.0	177.3	81.0	65.7	19.7	0.0	0.0	0.0	0.0	0.0
87.5°	56.9	72.2	24.1	19.7	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



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 CATALOG NUMBER: CST-CA8-480-760-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)