

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: P579614

Luminaire Tested: **CST-CA8-480-760-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579614  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-6)  
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-T5N-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: 47981 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G4

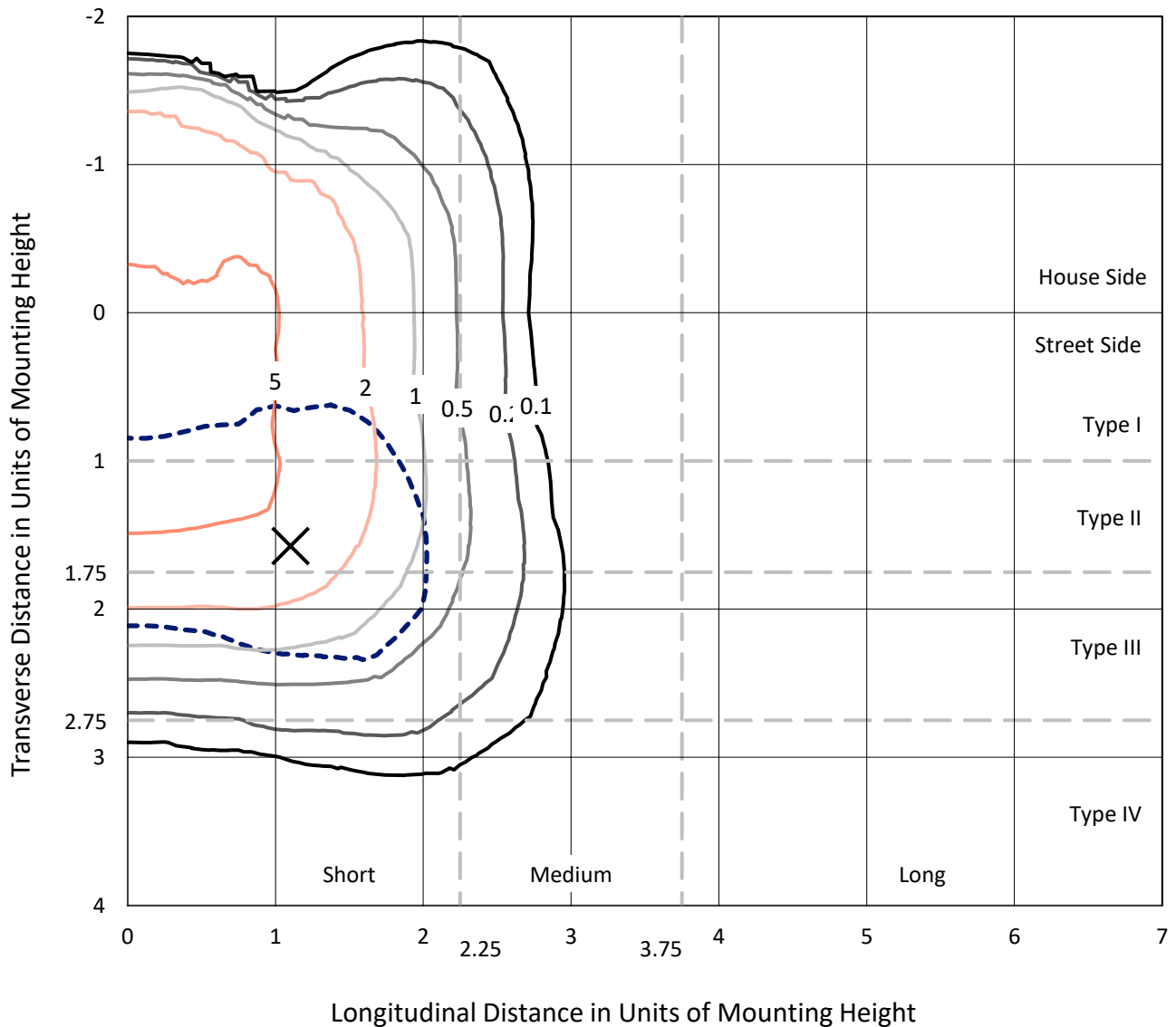
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

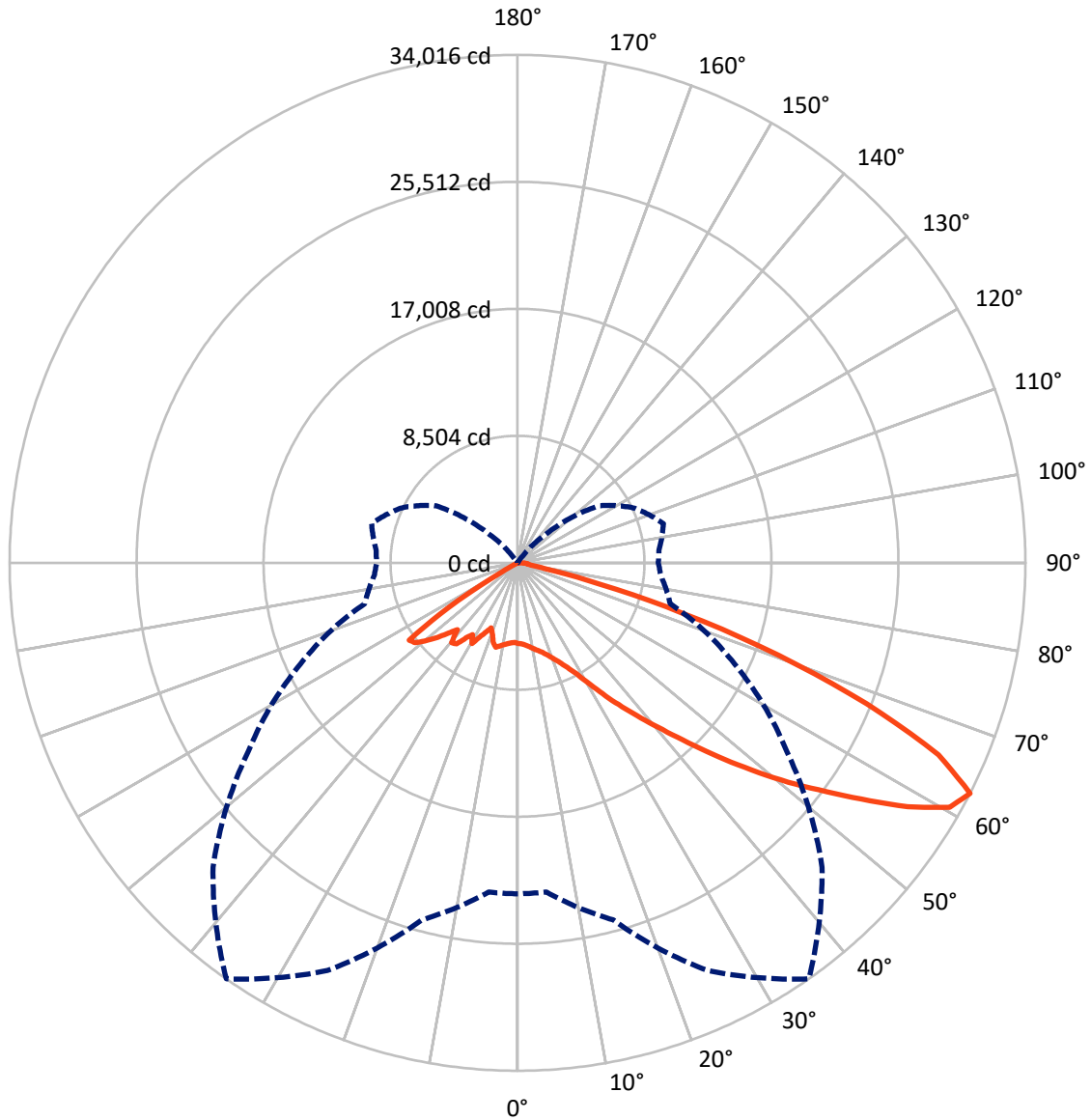
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

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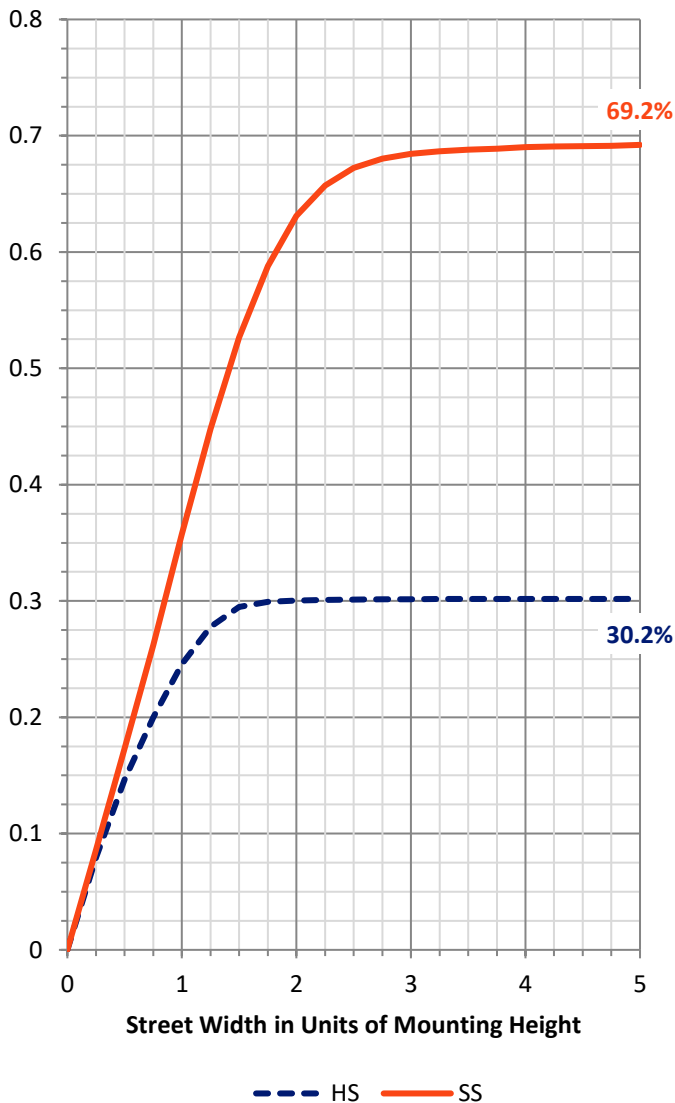
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14562.4	0.0	14562.4
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	33376.9	41.6	33418.6
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	47939.3	41.7	47981.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	533.1	1.1
10°-20°	1711.0	3.6
20°-30°	3127.3	6.5
30°-40°	5959.6	12.4
40°-50°	10229.1	21.3
50°-60°	13722.6	28.6
60°-70°	10431.9	21.7
70°-80°	1975.3	4.1
80°-90°	249.4	0.5
90°-100°	36.7	0.1
100°-110°	5.0	0.0
110°-120°	0.1	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°	47939.3	99.9
0°-180°	47981.0	100.0

**Coefficient of Utilization**

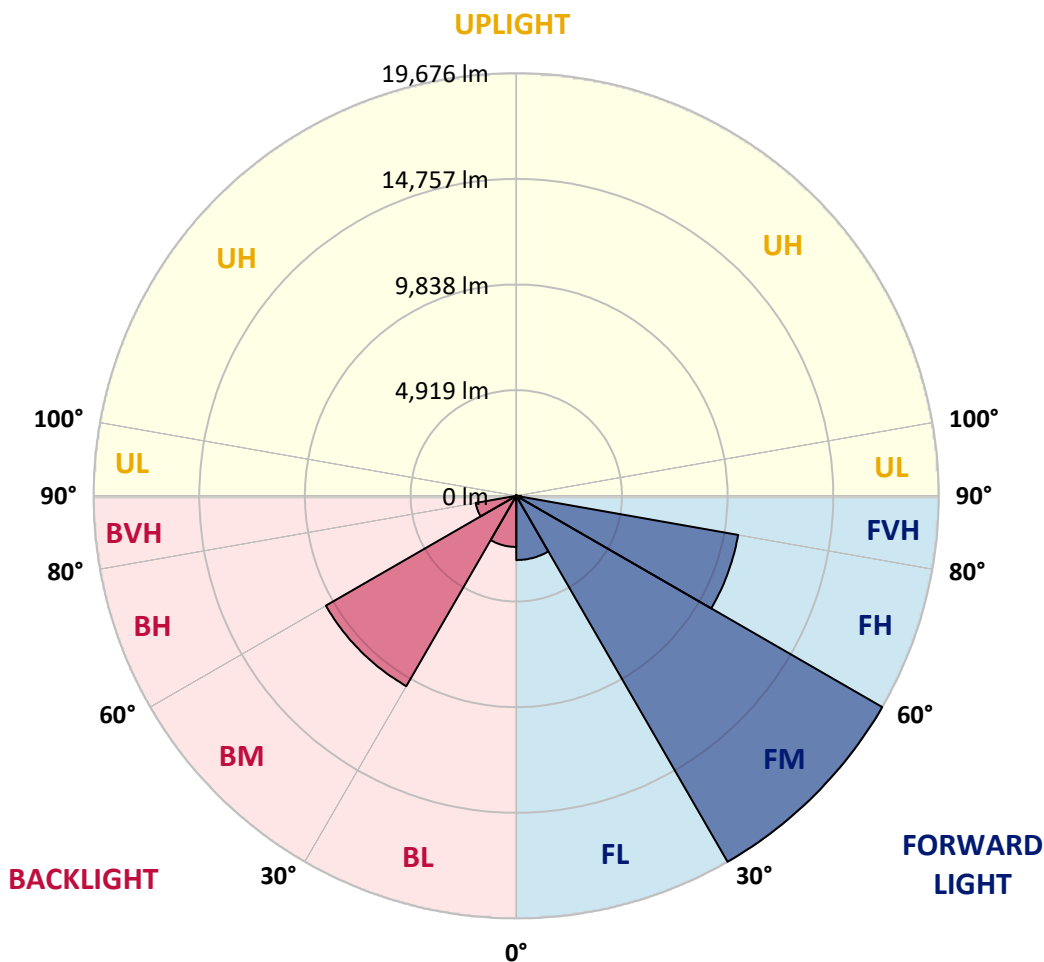


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2991.0	6.2			
FM	(30°-60°)	19676.2	41.0			
FH	(60°-80°)	10489.5	21.9			G4/12000
FVH	(80°-90°)	220.2	0.5			G2/225
BL	(0°-30°)	2380.4	5.0	B3/2500		
BM	(30°-60°)	10235.1	21.3	B5		
BH	(60°-80°)	1917.7	4.0	B3/2500		G3/2500
BVH	(80°-90°)	29.2	0.1			G1/100
UL	(90°-100°)	36.7	0.1		U2/50	
UH	(100°-180°)	5.0	0.0		U1/10	

**BUG Rating: B5-U2-G4**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2
2.5°	5536.7	5496.0	5498.2	5534.4	5430.4	5468.8	5423.6	5468.8	5444.0	5462.1	5471.1
5°	5633.9	5593.2	5588.7	5627.2	5539.0	5566.1	5520.9	5552.5	5518.6	5541.2	5541.2
7.5°	5781.0	5740.2	5726.7	5756.1	5674.7	5695.0	5647.5	5665.6	5627.2	5656.6	5640.7
10°	5955.1	5909.9	5894.0	5909.9	5839.8	5851.1	5794.5	5814.9	5758.3	5792.3	5769.6
12.5°	6140.6	6081.8	6081.8	6095.3	6020.7	6023.0	5970.9	5982.2	5925.7	5961.9	5934.8
15°	6341.9	6276.3	6285.3	6298.9	6219.7	6233.3	6179.0	6197.1	6138.3	6174.5	6147.4
17.5°	6608.7	6538.6	6529.6	6570.3	6495.7	6520.5	6459.5	6482.1	6430.1	6441.4	6427.8
20°	6977.4	6889.2	6868.8	6923.1	6839.4	6857.5	6812.3	6857.5	6803.3	6721.8	6493.4
22.5°	7418.4	7341.5	7307.6	7343.8	7244.3	7276.0	7273.7	7346.1	7196.8	6683.4	6454.9
25°	7999.7	7947.7	7882.1	7886.6	7766.7	7814.2	7900.2	7956.7	7321.2	6871.1	6875.6
27.5°	8775.5	8723.5	8633.0	8599.1	8424.9	8540.3	8673.7	8121.8	7622.0	7737.3	7674.0
30°	9766.1	9757.1	9573.9	9515.1	9325.1	9469.8	9354.5	8409.1	8581.0	8741.5	8644.3
32.5°	11084.7	11021.4	10756.7	10650.4	10451.4	10535.1	9517.3	9381.6	9637.2	9854.3	9752.5
35°	12679.2	12487.0	12217.8	12007.5	11661.4	11195.5	10137.0	10401.7	10783.9	11082.4	10589.4
37.5°	14531.6	14323.5	13902.8	13525.1	12980.0	11528.0	11071.1	11600.4	12079.8	11756.4	10618.8
40°	16438.2	16252.7	15856.9	15370.6	14450.1	12559.3	12204.2	12837.5	13382.6	11530.2	10964.8
42.5°	18331.2	18172.9	17854.0	17374.5	16189.4	13787.4	13445.9	14126.7	13613.3	11971.3	11953.2
45°	20240.1	20161.0	19799.1	19389.7	18249.8	15359.3	14836.9	15368.4	13099.9	13027.5	12984.5
47.5°	21787.1	21800.7	21674.1	21461.5	20448.2	17085.0	16404.3	14827.8	13724.1	13803.3	13823.6
50°	23381.7	23279.9	23273.1	23286.7	22863.7	19308.3	17471.8	14583.6	14540.6	14533.8	14515.7
52.5°	24659.5	24530.6	24797.5	25010.1	25261.2	21789.4	17311.2	15411.4	15164.8	15078.9	14551.9
55°	25699.9	25650.2	26084.4	26803.6	27920.9	24417.5	18731.6	16218.8	15725.7	13717.3	12373.9
57.5°	26330.9	26403.3	27299.0	28712.5	30804.6	26595.6	20384.9	17037.5	13464.0	12082.1	11996.2
60°	25123.2	25505.4	27029.8	30132.9	33242.8	28644.7	21615.3	17202.6	12116.0	11376.5	11204.6
62.5°	22167.1	22130.9	24750.0	30132.9	34016.3	28848.2	22004.3	16033.3	10584.8	9621.4	9429.1
65°	15689.6	15784.5	18582.3	27154.2	30987.8	26833.0	20296.7	13631.4	8443.0	7558.7	7298.6
67.5°	9709.6	9702.8	12441.7	19998.1	25225.0	22465.7	17087.3	10449.1	5860.1	5025.5	4742.8
70°	3354.1	3449.1	5595.5	11702.1	18568.7	17600.7	12787.8	6597.4	3089.5	2202.9	1859.1
72.5°	1334.4	1366.1	2008.4	5217.8	11600.4	11758.7	7771.3	3204.9	925.0	588.0	551.9
75°	873.0	877.5	963.5	1884.0	5629.4	6326.0	3609.7	920.5	429.7	393.5	384.5
77.5°	753.2	755.4	800.6	954.4	1834.3	2460.8	1026.8	545.1	359.6	323.4	314.4
80°	698.9	701.1	723.8	821.0	884.3	839.1	547.3	438.8	303.1	287.2	285.0
82.5°	660.4	669.5	680.8	739.6	714.7	631.0	454.6	355.1	233.0	248.8	255.6
85°	608.4	617.4	624.2	658.2	597.1	461.4	352.8	266.9	149.3	162.8	160.6
87.5°	456.9	461.4	452.3	447.8	416.2	323.4	233.0	169.6	58.8	54.3	49.8
90°	219.4	217.1	208.1	192.2	167.4	131.2	97.3	54.3	24.9	11.3	4.5
92.5°	174.2	171.9	167.4	151.5	131.2	97.3	70.1	38.4	22.6	9.0	2.3
95°	117.6	113.1	108.6	97.3	81.4	58.8	40.7	27.1	18.1	6.8	2.3
97.5°	76.9	74.6	67.9	58.8	45.2	31.7	24.9	20.4	15.8	6.8	2.3
100°	47.5	47.5	43.0	33.9	22.6	18.1	15.8	15.8	11.3	4.5	0.0
102.5°	29.4	27.1	24.9	15.8	11.3	11.3	11.3	11.3	9.0	4.5	0.0
105°	15.8	15.8	11.3	9.0	6.8	4.5	6.8	9.0	6.8	2.3	0.0
107.5°	4.5	4.5	4.5	2.3	2.3	0.0	2.3	4.5	4.5	2.3	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	4.5	2.3	0.0



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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°	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2	5403.2
2.5°	5459.8	5416.8	5428.1	5385.2	5378.4	5333.1	5410.0	5414.6	5394.2	5416.8
5°	5529.9	5477.9	5498.2	5446.2	5437.2	5378.4	5439.4	5432.7	5416.8	5434.9
7.5°	5629.4	5577.4	5588.7	5527.6	5516.3	5450.7	5509.5	5486.9	5466.6	5491.5
10°	5767.4	5708.6	5717.6	5645.3	5636.2	5559.3	5627.2	5593.2	5563.8	5597.8
12.5°	5937.0	5860.1	5851.1	5774.2	5767.4	5695.0	5765.1	5731.2	5701.8	5756.1
15°	6131.5	6029.7	6016.2	5918.9	5907.6	5833.0	5900.8	5851.1	5828.5	5898.6
17.5°	6391.6	6032.0	5830.7	5688.2	5606.8	5566.1	5688.2	5853.3	5803.6	5805.8
20°	6285.3	5898.6	5629.4	5507.3	5419.1	5025.5	4482.7	4638.8	4955.4	5111.5
22.5°	6253.7	6118.0	6007.1	5801.3	4926.0	4704.4	4736.0	4699.9	4102.8	3874.3
25°	6859.8	6703.7	6464.0	5385.2	5131.8	5082.1	5100.2	4475.9	4025.9	4091.5
27.5°	7635.6	7475.0	6292.1	5688.2	5638.5	5572.9	5215.5	4435.2	4496.3	4559.6
30°	8612.6	7769.0	6561.2	6375.8	6283.1	6215.2	4889.8	4953.2	5054.9	5134.1
32.5°	9564.8	7744.1	7332.5	7101.8	6986.5	5670.1	5525.4	5672.4	5776.4	5837.5
35°	9576.1	8630.7	8196.5	7900.2	7167.4	6095.3	6228.8	6475.3	6730.9	6778.4
37.5°	9836.2	9634.9	9137.3	8764.2	5330.9	6803.3	7097.3	7380.0	7635.6	7651.4
40°	10872.1	10655.0	10189.0	9368.0	5887.3	6939.0	8054.0	8372.9	8587.8	8576.4
42.5°	11905.7	11756.4	11272.4	8325.4	6633.6	6011.7	9058.2	9268.5	9404.2	9499.2
45°	12946.1	12796.8	11161.6	9141.9	7522.5	6583.9	8813.9	10005.8	10155.1	10202.6
47.5°	13758.0	13389.4	10227.5	10225.2	8633.0	7316.7	7278.2	10670.8	10802.0	10768.0
50°	14508.9	11953.2	11055.3	10580.3	9781.9	8006.5	7739.6	8979.0	11387.8	11338.0
52.5°	13201.7	11600.4	11765.5	9623.6	10704.7	8691.8	8259.8	8051.7	10347.4	11679.5
55°	11806.2	12032.4	12491.5	10573.5	7766.7	8913.4	8700.8	8286.9	6981.9	5875.9
57.5°	12048.2	12385.2	12407.8	11453.4	8038.2	5568.4	7131.2	6242.3	3944.4	3953.5
60°	11240.7	11679.5	9069.5	7635.6	4322.1	1160.3	113.1	99.5	687.6	836.8
62.5°	9503.7	10114.4	8657.9	6651.7	2772.9	43.0	11.3	2.3	0.0	0.0
65°	7359.6	8094.7	7316.7	5740.2	2460.8	13.6	0.0	0.0	0.0	0.0
67.5°	4853.7	5516.3	5559.3	4801.6	2051.4	6.8	0.0	0.0	0.0	0.0
70°	2033.3	2863.3	3460.4	3569.0	1612.6	2.3	0.0	0.0	0.0	0.0
72.5°	588.0	909.2	1664.6	2144.1	1024.6	0.0	0.0	0.0	0.0	0.0
75°	391.3	418.4	481.7	965.8	511.1	0.0	0.0	0.0	0.0	0.0
77.5°	323.4	330.2	275.9	264.6	147.0	0.0	0.0	0.0	0.0	0.0
80°	294.0	289.5	221.6	156.1	54.3	0.0	0.0	0.0	0.0	0.0
82.5°	271.4	257.8	160.6	81.4	36.2	0.0	0.0	0.0	0.0	0.0
85°	183.2	180.9	72.4	49.8	6.8	0.0	0.0	0.0	0.0	0.0
87.5°	49.8	63.3	15.8	6.8	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	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: P579614  
 CATALOG NUMBER: CST-CA8-480-760-U-T5N-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)