

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: P579518

Luminaire Tested: **CST-CA8-480-740-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579518  
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-CA8-480-740-U-T5N-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: 48138 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G4

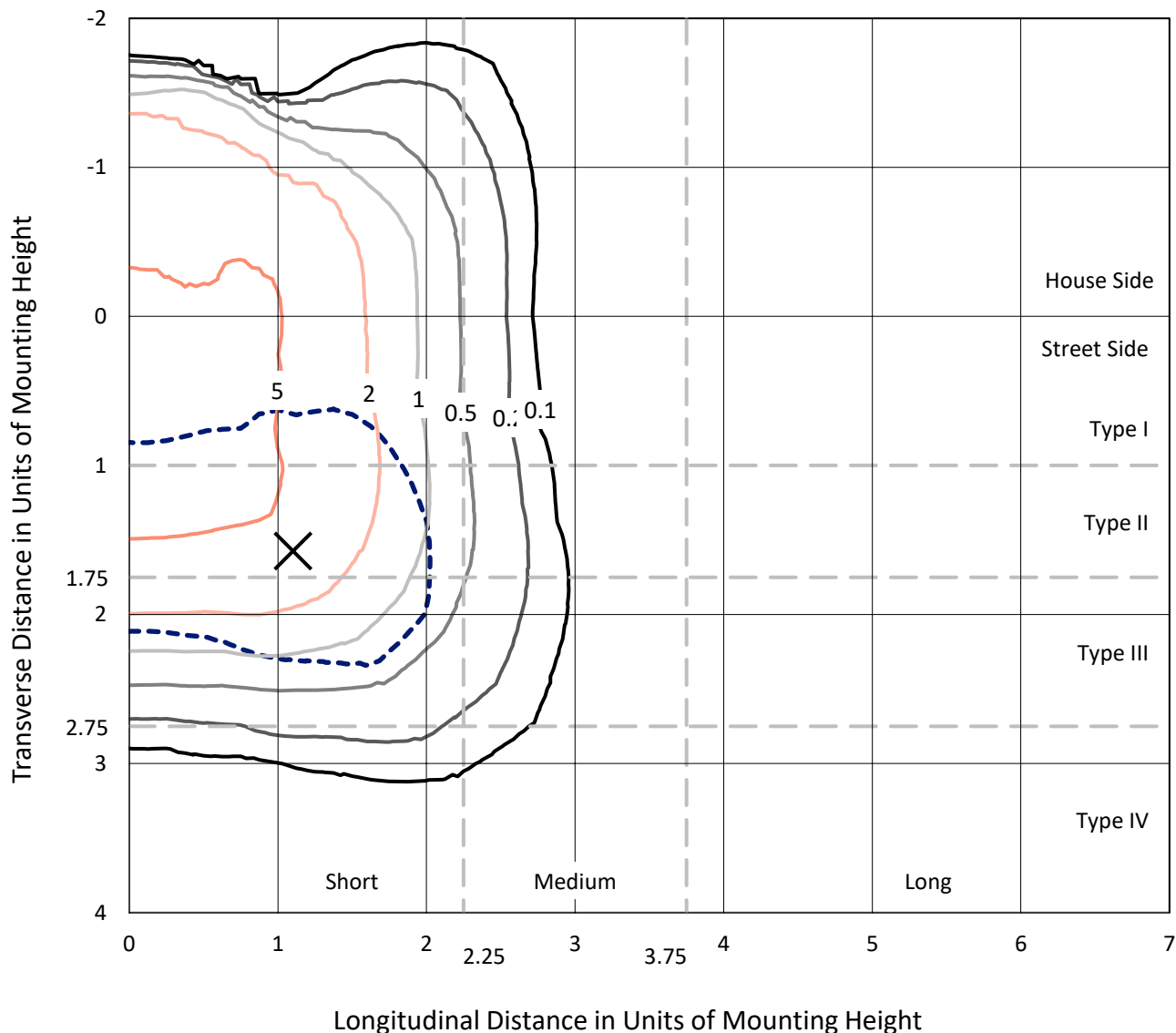
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

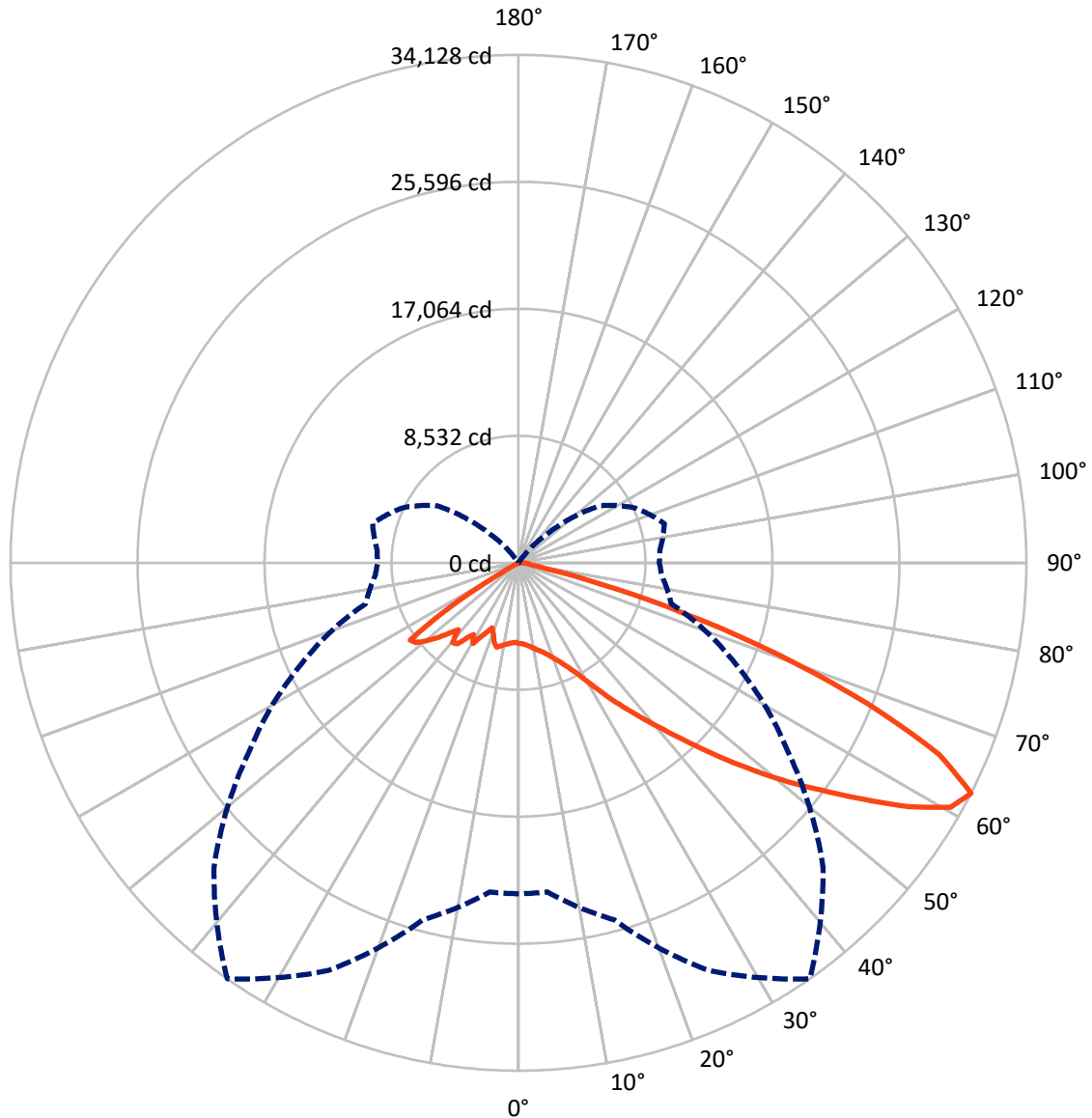
✕ Max cd  
 - - - 1/2 Max cd



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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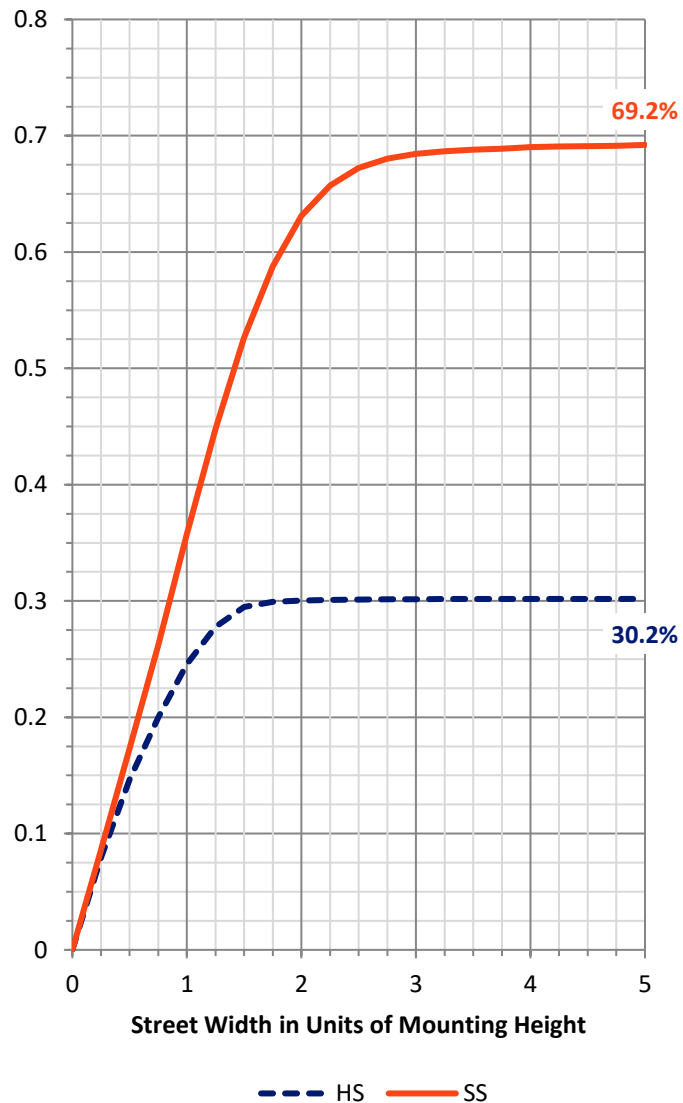
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14610.0	0.0	14610.1
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	33486.2	41.8	33527.9
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	48096.2	41.8	48138.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	534.9	1.1
10°-20°	1716.6	3.6
20°-30°	3137.5	6.5
30°-40°	5979.1	12.4
40°-50°	10262.6	21.3
50°-60°	13767.5	28.6
60°-70°	10466.0	21.7
70°-80°	1981.8	4.1
80°-90°	250.2	0.5
90°-100°	36.8	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°	48096.2	99.9
0°-180°	48138.0	100.0

**Coefficient of Utilization**



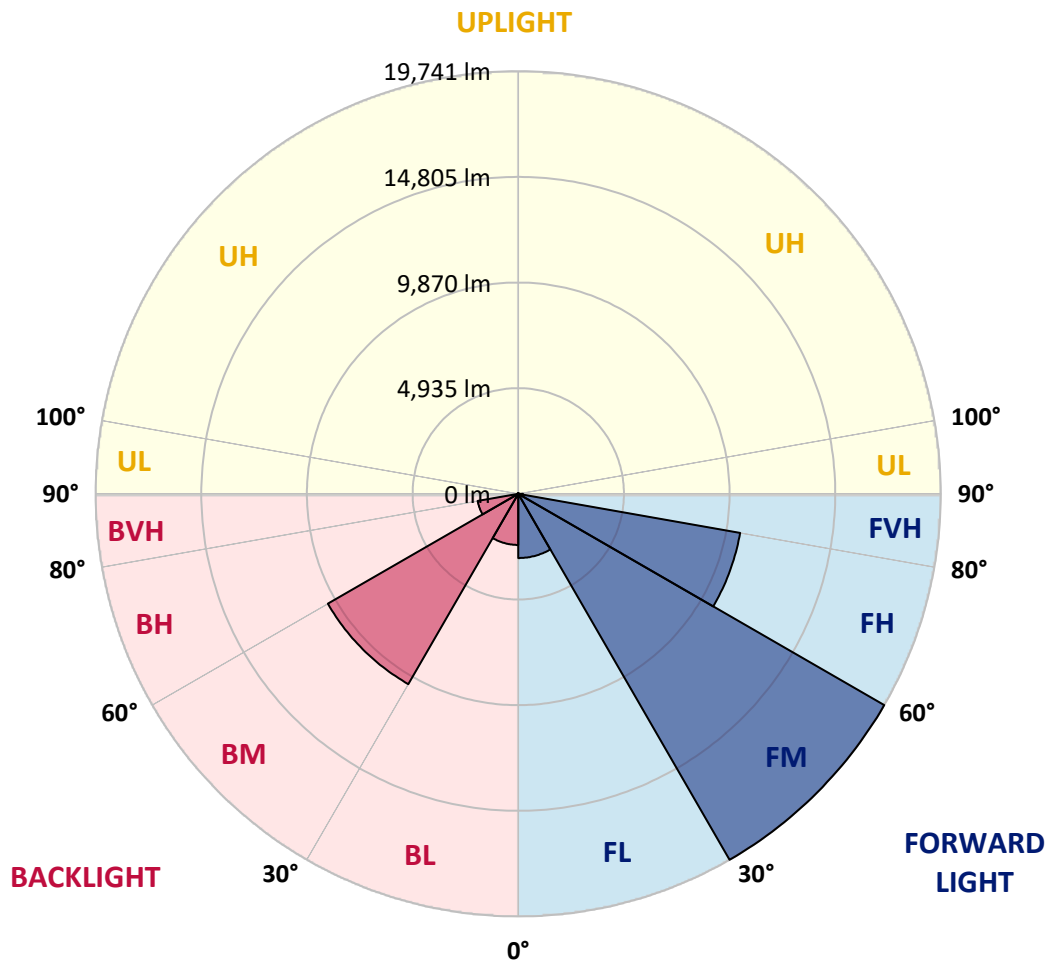
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3000.8	6.2			
FM	(30°-60°)	19740.6	41.0			
FH	(60°-80°)	10523.8	21.9			G4/12000
FVH	(80°-90°)	220.9	0.5			G2/225
BL	(0°-30°)	2388.2	5.0	B3/2500		
BM	(30°-60°)	10268.6	21.3	B5		
BH	(60°-80°)	1923.9	4.0	B3/2500		G3/2500
BVH	(80°-90°)	29.3	0.1			G1/100
UL	(90°-100°)	36.8	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°	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9
2.5°	5554.8	5514.0	5516.2	5552.5	5448.2	5486.7	5441.4	5486.7	5461.8	5479.9	5489.0
5°	5652.4	5611.5	5607.0	5645.6	5557.1	5584.3	5538.9	5570.7	5536.7	5559.3	5559.3
7.5°	5799.9	5759.0	5745.4	5774.9	5693.2	5713.6	5666.0	5684.1	5645.6	5675.1	5659.2
10°	5974.6	5929.2	5913.3	5929.2	5858.9	5870.2	5813.5	5833.9	5777.2	5811.2	5788.5
12.5°	6160.7	6101.7	6101.7	6115.3	6040.4	6042.7	5990.5	6001.8	5945.1	5981.4	5954.2
15°	6362.6	6296.8	6305.9	6319.5	6240.1	6253.7	6199.2	6217.4	6158.4	6194.7	6167.5
17.5°	6630.4	6560.0	6551.0	6591.8	6516.9	6541.9	6480.6	6503.3	6451.1	6462.5	6448.8
20°	7000.2	6911.7	6891.3	6945.8	6861.8	6880.0	6834.6	6880.0	6825.5	6743.8	6514.6
22.5°	7442.7	7365.6	7331.5	7367.8	7268.0	7299.8	7297.5	7370.1	7220.3	6705.3	6476.1
25°	8025.9	7973.7	7907.9	7912.4	7792.2	7839.8	7926.0	7982.8	7345.1	6893.6	6898.1
27.5°	8804.2	8752.0	8661.2	8627.2	8452.5	8568.2	8702.1	8148.4	7646.9	7762.7	7699.1
30°	9798.1	9789.0	9605.2	9546.2	9355.6	9500.8	9385.1	8436.6	8609.0	8770.2	8672.6
32.5°	11121.0	11057.4	10791.9	10685.3	10485.6	10569.6	9548.5	9412.3	9668.7	9886.6	9784.4
35°	12720.7	12527.8	12257.8	12046.8	11699.6	11232.1	10170.2	10435.7	10819.2	11118.7	10624.0
37.5°	14579.1	14370.3	13948.3	13569.3	13022.5	11565.7	11107.3	11638.3	12119.4	11794.9	10653.5
40°	16492.0	16305.9	15908.8	15420.9	14497.4	12600.4	12244.2	12879.5	13426.4	11568.0	11000.7
42.5°	18391.2	18232.4	17912.4	17431.4	16242.4	13832.6	13489.9	14172.9	13657.8	12010.5	11992.3
45°	20306.4	20226.9	19863.9	19453.2	18309.5	15409.6	14885.4	15418.7	13142.7	13070.1	13027.0
47.5°	21858.4	21872.1	21745.0	21531.7	20515.1	17140.9	16457.9	14876.4	13769.0	13848.4	13868.9
50°	23458.2	23356.1	23349.3	23362.9	22938.5	19371.5	17529.0	14631.3	14588.2	14581.4	14563.2
52.5°	24740.2	24610.9	24878.6	25091.9	25343.8	21860.7	17367.8	15461.8	15214.5	15128.2	14599.5
55°	25784.0	25734.1	26169.8	26891.3	28012.3	24497.4	18792.9	16271.9	15777.2	13762.2	12414.4
57.5°	26417.1	26489.7	27388.3	28806.5	30905.4	26682.6	20451.6	17093.3	13508.1	12121.6	12035.4
60°	25205.4	25588.9	27118.3	30231.5	33351.5	28738.4	21686.0	17258.9	12155.7	11413.7	11241.2
62.5°	22239.7	22203.3	24831.0	30231.5	34127.6	28942.6	22076.3	16085.8	10619.5	9652.8	9460.0
65°	15740.9	15836.2	18643.1	27243.1	31089.2	26920.8	20363.1	13676.0	8470.6	7583.4	7322.5
67.5°	9741.3	9734.5	12482.4	20063.6	25307.5	22539.2	17143.2	10483.3	5879.3	5042.0	4758.3
70°	3365.1	3460.4	5613.8	11740.4	18629.5	17658.3	12829.6	6619.0	3099.6	2210.1	1865.2
72.5°	1338.8	1370.5	2015.0	5234.9	11638.3	11797.2	7796.7	3215.3	928.1	590.0	553.7
75°	875.9	880.4	966.6	1890.2	5647.8	6346.7	3621.5	923.5	431.1	394.8	385.8
77.5°	755.6	757.9	803.3	957.6	1840.3	2468.8	1030.2	546.9	360.8	324.5	315.4
80°	701.2	703.4	726.1	823.7	887.2	841.8	549.1	440.2	304.1	288.2	285.9
82.5°	662.6	671.7	683.0	742.0	717.0	633.1	456.1	356.3	233.7	249.6	256.4
85°	610.4	619.5	626.3	660.3	599.0	462.9	354.0	267.8	149.8	163.4	161.1
87.5°	458.4	462.9	453.8	449.3	417.5	324.5	233.7	170.2	59.0	54.5	49.9
90°	220.1	217.8	208.8	192.9	167.9	131.6	97.6	54.5	25.0	11.3	4.5
92.5°	174.7	172.5	167.9	152.0	131.6	97.6	70.3	38.6	22.7	9.1	2.3
95°	118.0	113.5	108.9	97.6	81.7	59.0	40.8	27.2	18.2	6.8	2.3
97.5°	77.2	74.9	68.1	59.0	45.4	31.8	25.0	20.4	15.9	6.8	2.3
100°	47.7	47.7	43.1	34.0	22.7	18.2	15.9	15.9	11.3	4.5	0.0
102.5°	29.5	27.2	25.0	15.9	11.3	11.3	11.3	11.3	9.1	4.5	0.0
105°	15.9	15.9	11.3	9.1	6.8	4.5	6.8	9.1	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°	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9	5420.9
2.5°	5477.7	5434.5	5445.9	5402.8	5396.0	5350.6	5427.7	5432.3	5411.9	5434.5
5°	5548.0	5495.8	5516.2	5464.0	5455.0	5396.0	5457.2	5450.4	5434.5	5452.7
7.5°	5647.8	5595.7	5607.0	5545.7	5534.4	5468.6	5527.6	5504.9	5484.5	5509.4
10°	5786.3	5727.3	5736.3	5663.7	5654.6	5577.5	5645.6	5611.5	5582.0	5616.1
12.5°	5956.4	5879.3	5870.2	5793.1	5786.3	5713.6	5784.0	5750.0	5720.5	5774.9
15°	6151.6	6049.5	6035.9	5938.3	5926.9	5852.1	5920.1	5870.2	5847.5	5917.9
17.5°	6412.5	6051.7	5849.8	5706.8	5625.2	5584.3	5706.8	5872.5	5822.6	5824.8
20°	6305.9	5917.9	5647.8	5525.3	5436.8	5042.0	4497.4	4654.0	4971.6	5128.2
22.5°	6274.1	6138.0	6026.8	5820.3	4942.1	4719.8	4751.5	4715.2	4116.2	3887.0
25°	6882.2	6725.7	6485.1	5402.8	5148.6	5098.7	5116.9	4490.6	4039.0	4104.8
27.5°	7660.6	7499.4	6312.7	5706.8	5656.9	5591.1	5232.6	4449.7	4511.0	4574.5
30°	8640.8	7794.4	6582.7	6396.7	6303.6	6235.5	4905.8	4969.4	5071.5	5150.9
32.5°	9596.1	7769.5	7356.5	7125.0	7009.3	5688.7	5543.5	5691.0	5795.3	5856.6
35°	9607.5	8659.0	8223.3	7926.0	7190.8	6115.3	6249.2	6496.5	6752.9	6800.6
37.5°	9868.4	9666.5	9167.2	8792.8	5348.3	6825.5	7120.5	7404.1	7660.6	7676.4
40°	10907.7	10689.8	10222.4	9398.7	5906.5	6961.7	8080.3	8400.3	8615.9	8604.5
42.5°	11944.7	11794.9	11309.3	8352.6	6655.3	6031.3	9087.8	9298.9	9435.0	9530.3
45°	12988.4	12838.7	11198.1	9171.8	7547.1	6605.4	8842.8	10038.6	10188.4	10236.0
47.5°	13803.1	13433.2	10261.0	10258.7	8661.2	7340.6	7302.0	10705.7	10837.3	10803.3
50°	14556.4	11992.3	11091.5	10614.9	9813.9	8032.7	7764.9	9008.4	11425.0	11375.1
52.5°	13244.9	11638.3	11804.0	9655.1	10739.7	8720.2	8286.8	8078.1	10381.2	11717.7
55°	11844.8	12071.7	12532.4	10608.1	7792.2	8942.6	8729.3	8314.1	7004.8	5895.2
57.5°	12087.6	12425.7	12448.4	11490.8	8064.5	5586.6	7154.5	6262.8	3957.3	3966.4
60°	11277.5	11717.7	9099.2	7660.6	4336.3	1164.1	113.5	99.8	689.8	839.6
62.5°	9534.8	10147.5	8686.2	6673.5	2781.9	43.1	11.3	2.3	0.0	0.0
65°	7383.7	8121.2	7340.6	5759.0	2468.8	13.6	0.0	0.0	0.0	0.0
67.5°	4869.5	5534.4	5577.5	4817.3	2058.1	6.8	0.0	0.0	0.0	0.0
70°	2039.9	2872.7	3471.8	3580.7	1617.9	2.3	0.0	0.0	0.0	0.0
72.5°	590.0	912.2	1670.1	2151.1	1027.9	0.0	0.0	0.0	0.0	0.0
75°	392.6	419.8	483.3	968.9	512.8	0.0	0.0	0.0	0.0	0.0
77.5°	324.5	331.3	276.8	265.5	147.5	0.0	0.0	0.0	0.0	0.0
80°	295.0	290.4	222.4	156.6	54.5	0.0	0.0	0.0	0.0	0.0
82.5°	272.3	258.7	161.1	81.7	36.3	0.0	0.0	0.0	0.0	0.0
85°	183.8	181.5	72.6	49.9	6.8	0.0	0.0	0.0	0.0	0.0
87.5°	49.9	63.5	15.9	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: P579518  
 CATALOG NUMBER: CST-CA8-480-740-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)