

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: P579536

Luminaire Tested: **CST-CA10-630-750-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579536  
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-CA10-630-750-U-T5N-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 63645 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G5

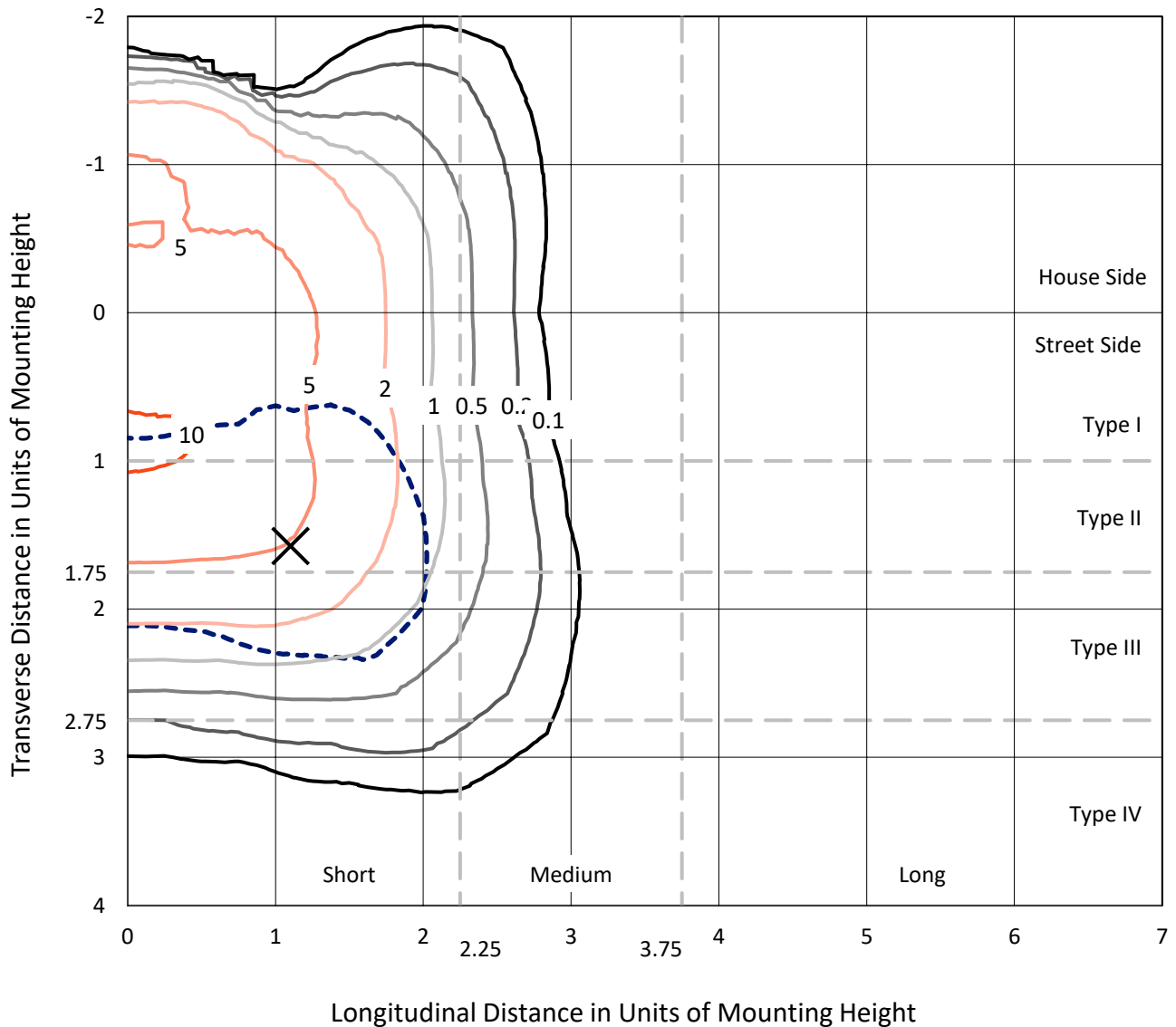
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

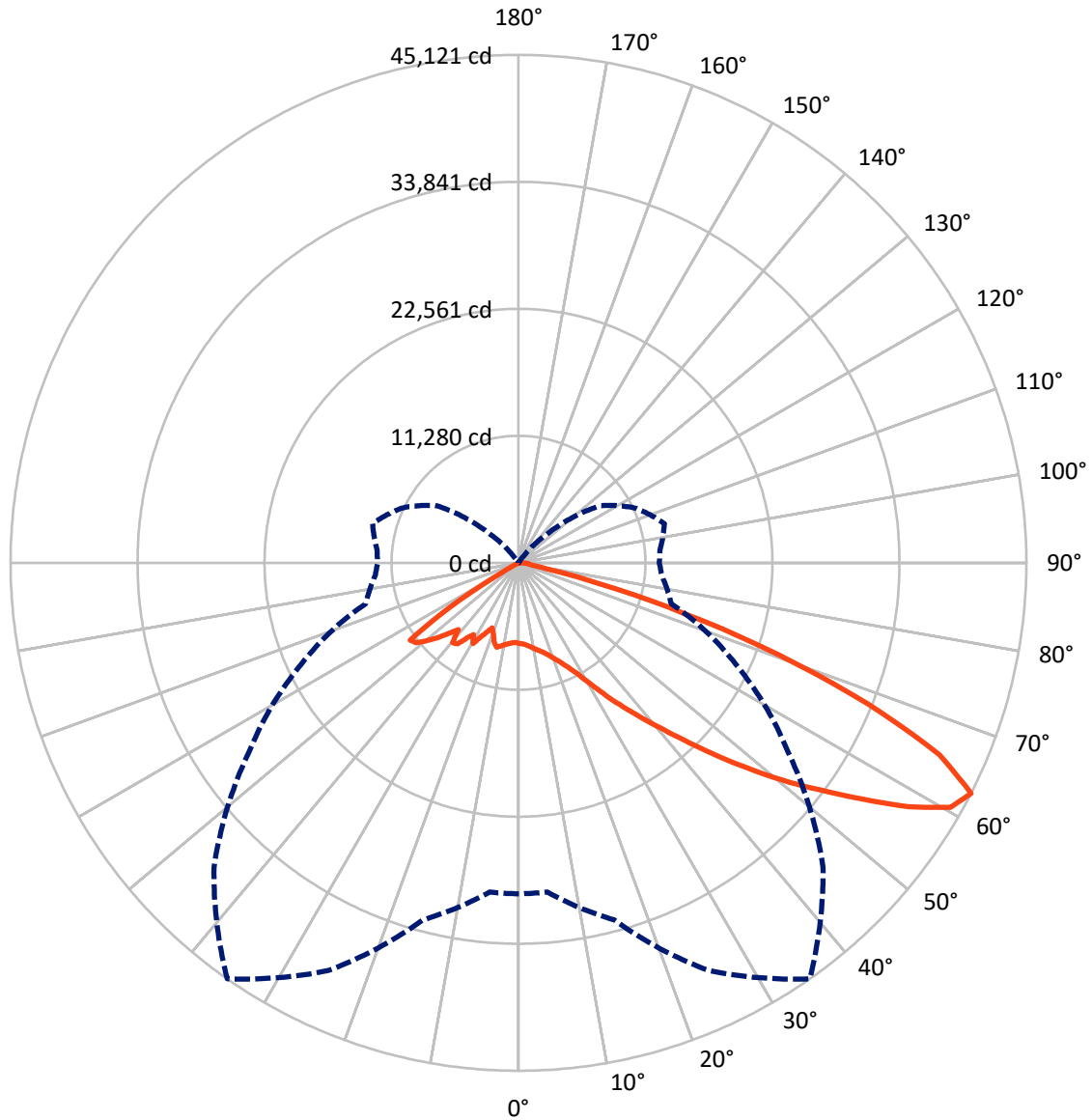
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.9 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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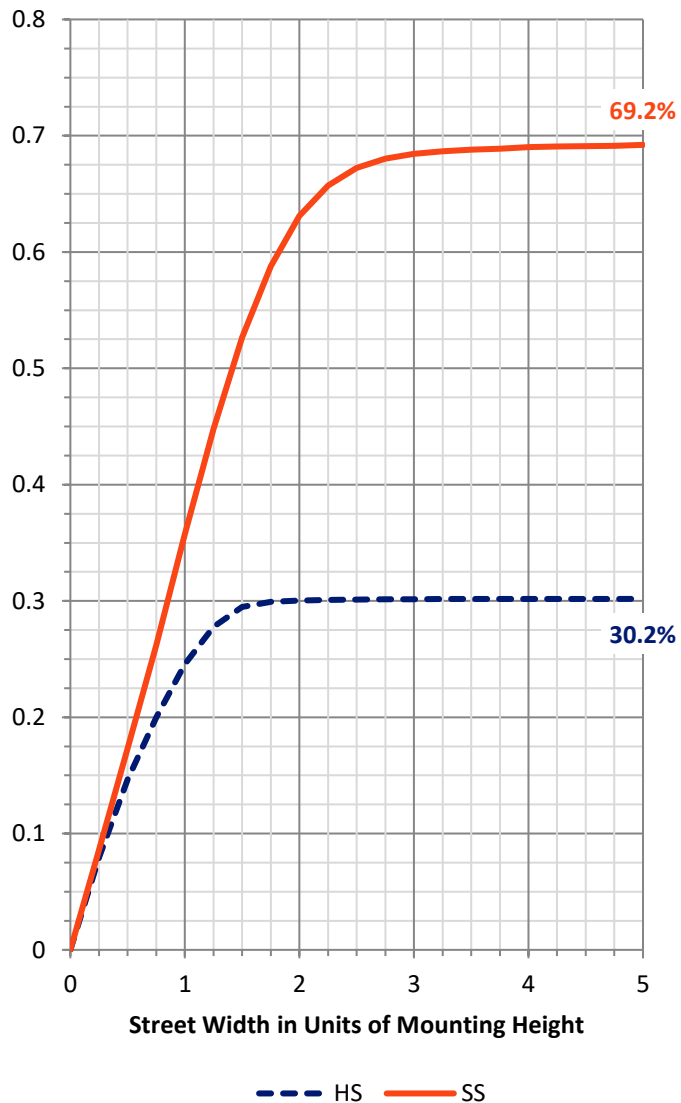
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	19316.4	0.0	19316.5
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	44273.3	55.2	44328.5
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	63589.7	55.3	63645.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	707.2	1.1
10°-20°	2269.6	3.6
20°-30°	4148.2	6.5
30°-40°	7905.1	12.4
40°-50°	13568.5	21.3
50°-60°	18202.5	28.6
60°-70°	13837.5	21.7
70°-80°	2620.1	4.1
80°-90°	330.8	0.5
90°-100°	48.6	0.1
100°-110°	6.6	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°	63589.7	99.9
0°-180°	63645.0	100.0

**Coefficient of Utilization**

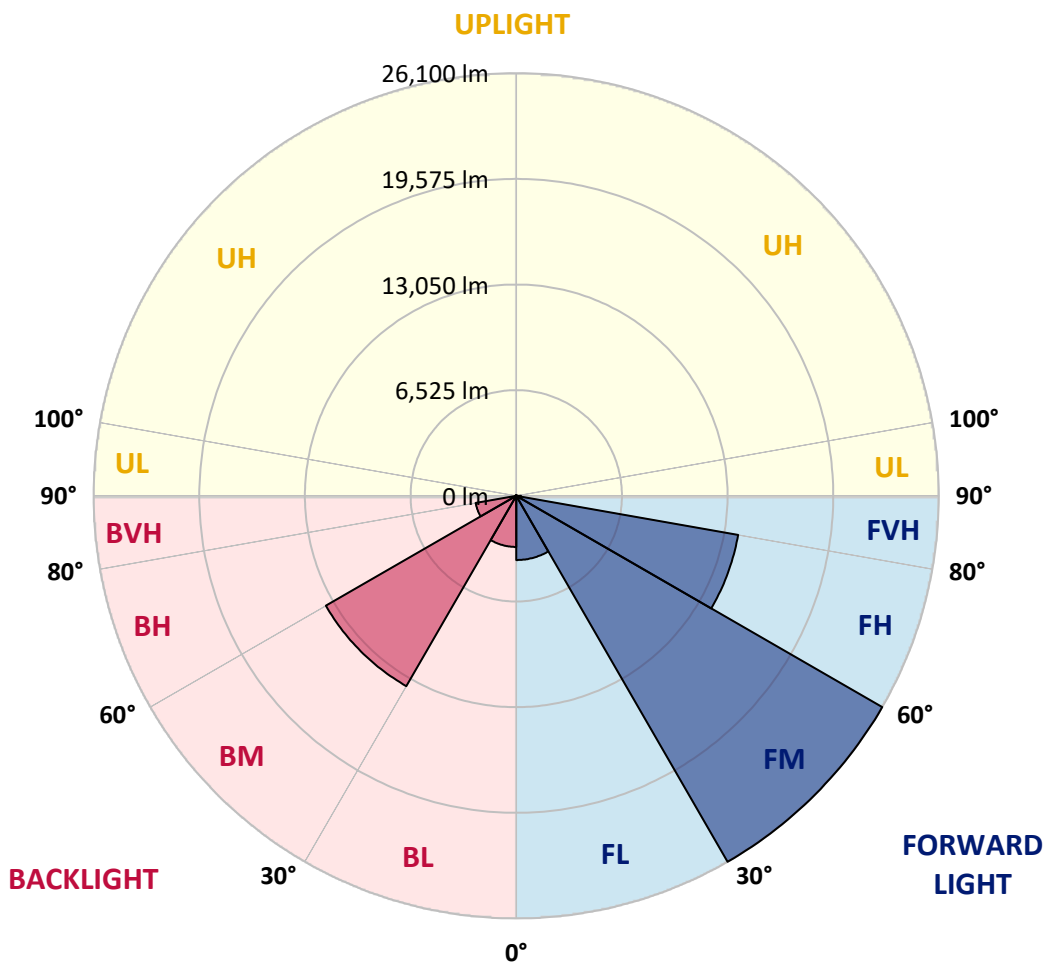


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3967.5	6.2			
FM	(30°-60°)	26099.8	41.0			
FH	(60°-80°)	13914.0	21.9			G5
FVH	(80°-90°)	292.1	0.5			G3/500
BL	(0°-30°)	3157.5	5.0	B4/5000		
BM	(30°-60°)	13576.5	21.3	B5		
BH	(60°-80°)	2543.7	4.0	B4/5000		G4/5000
BVH	(80°-90°)	38.8	0.1			G1/100
UL	(90°-100°)	48.6	0.1		U2/50	
UH	(100°-180°)	6.7	0.0		U1/10	

**BUG Rating: B5-U2-G5**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2
2.5°	7344.2	7290.2	7293.2	7341.2	7203.2	7254.2	7194.2	7254.2	7221.2	7245.2	7257.2
5°	7473.2	7419.2	7413.2	7464.2	7347.2	7383.2	7323.2	7365.2	7320.2	7350.2	7350.2
7.5°	7668.2	7614.2	7596.2	7635.2	7527.2	7554.2	7491.2	7515.2	7464.2	7503.2	7482.2
10°	7899.2	7839.2	7818.2	7839.2	7746.2	7761.2	7686.2	7713.2	7638.2	7683.2	7653.2
12.5°	8145.2	8067.2	8067.2	8085.2	7986.2	7989.2	7920.2	7935.2	7860.2	7908.2	7872.2
15°	8412.2	8325.2	8337.2	8355.2	8250.2	8268.2	8196.2	8220.2	8142.2	8190.2	8154.2
17.5°	8766.3	8673.3	8661.3	8715.3	8616.2	8649.3	8568.2	8598.2	8529.2	8544.2	8526.2
20°	9255.3	9138.3	9111.3	9183.3	9072.3	9096.3	9036.3	9096.3	9024.3	8916.3	8613.2
22.5°	9840.3	9738.3	9693.3	9741.3	9609.3	9651.3	9648.3	9744.3	9546.3	8865.3	8562.2
25°	10611.3	10542.3	10455.3	10461.3	10302.3	10365.3	10479.3	10554.3	9711.3	9114.3	9120.3
27.5°	11640.3	11571.3	11451.3	11406.3	11175.3	11328.3	11505.3	10773.3	10110.3	10263.3	10179.3
30°	12954.4	12942.4	12699.4	12621.4	12369.4	12561.4	12408.4	11154.3	11382.3	11595.3	11466.3
32.5°	14703.4	14619.4	14268.4	14127.4	13863.4	13974.4	12624.4	12444.4	12783.4	13071.4	12936.4
35°	16818.5	16563.5	16206.5	15927.5	15468.4	14850.4	13446.4	13797.4	14304.4	14700.4	14046.4
37.5°	19275.6	18999.6	18441.5	17940.5	17217.5	15291.4	14685.4	15387.4	16023.5	15594.5	14085.4
40°	21804.6	21558.6	21033.6	20388.6	19167.6	16659.5	16188.5	17028.5	17751.5	15294.4	14544.4
42.5°	24315.7	24105.7	23682.7	23046.7	21474.6	18288.5	17835.5	18738.5	18057.5	15879.5	15855.5
45°	26847.8	26742.8	26262.8	25719.7	24207.7	20373.6	19680.6	20385.6	17376.5	17280.5	17223.5
47.5°	28899.8	28917.8	28749.8	28467.8	27123.8	22662.7	21759.6	19668.6	18204.5	18309.5	18336.5
50°	31014.9	30879.9	30870.9	30888.9	30327.9	25611.7	23175.7	19344.6	19287.6	19278.6	19254.6
52.5°	32709.9	32538.9	32893.0	33175.0	33508.0	28902.8	22962.7	20442.6	20115.6	20001.6	19302.6
55°	34090.0	34024.0	34600.0	35554.0	37036.1	32388.9	24846.7	21513.6	20859.6	18195.5	16413.5
57.5°	34927.0	35023.0	36211.0	38086.1	40861.2	35278.0	27039.8	22599.7	17859.5	16026.5	15912.5
60°	33325.0	33832.0	35854.0	39970.2	44095.3	37996.1	28671.8	22818.7	16071.5	15090.4	14862.4
62.5°	29403.9	29355.9	32830.0	39970.2	45121.3	38266.1	29187.8	21267.6	14040.4	12762.4	12507.4
65°	20811.6	20937.6	24648.7	36019.0	41104.2	35593.0	26922.8	18081.5	11199.3	10026.3	9681.3
67.5°	12879.4	12870.4	16503.5	26526.8	33460.0	29799.9	22665.7	13860.4	7773.2	6666.2	6291.2
70°	4449.1	4575.1	7422.2	15522.4	24630.7	23346.7	16962.5	8751.3	4098.1	2922.1	2466.1
72.5°	1770.1	1812.1	2664.1	6921.2	15387.4	15597.5	10308.3	4251.1	1227.0	780.0	732.0
75°	1158.0	1164.0	1278.0	2499.1	7467.2	8391.2	4788.1	1221.0	570.0	522.0	510.0
77.5°	999.0	1002.0	1062.0	1266.0	2433.1	3264.1	1362.0	723.0	477.0	429.0	417.0
80°	927.0	930.0	960.0	1089.0	1173.0	1113.0	726.0	582.0	402.0	381.0	378.0
82.5°	876.0	888.0	903.0	981.0	948.0	837.0	603.0	471.0	309.0	330.0	339.0
85°	807.0	819.0	828.0	873.0	792.0	612.0	468.0	354.0	198.0	216.0	213.0
87.5°	606.0	612.0	600.0	594.0	552.0	429.0	309.0	225.0	78.0	72.0	66.0
90°	291.0	288.0	276.0	255.0	222.0	174.0	129.0	72.0	33.0	15.0	6.0
92.5°	231.0	228.0	222.0	201.0	174.0	129.0	93.0	51.0	30.0	12.0	3.0
95°	156.0	150.0	144.0	129.0	108.0	78.0	54.0	36.0	24.0	9.0	3.0
97.5°	102.0	99.0	90.0	78.0	60.0	42.0	33.0	27.0	21.0	9.0	3.0
100°	63.0	63.0	57.0	45.0	30.0	24.0	21.0	21.0	15.0	6.0	0.0
102.5°	39.0	36.0	33.0	21.0	15.0	15.0	15.0	15.0	12.0	6.0	0.0
105°	21.0	21.0	15.0	12.0	9.0	6.0	9.0	12.0	9.0	3.0	0.0
107.5°	6.0	6.0	6.0	3.0	3.0	0.0	3.0	6.0	6.0	3.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	6.0	3.0	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°	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2	7167.2
2.5°	7242.2	7185.2	7200.2	7143.2	7134.2	7074.2	7176.2	7182.2	7155.2	7185.2
5°	7335.2	7266.2	7293.2	7224.2	7212.2	7134.2	7215.2	7206.2	7185.2	7209.2
7.5°	7467.2	7398.2	7413.2	7332.2	7317.2	7230.2	7308.2	7278.2	7251.2	7284.2
10°	7650.2	7572.2	7584.2	7488.2	7476.2	7374.2	7464.2	7419.2	7380.2	7425.2
12.5°	7875.2	7773.2	7761.2	7659.2	7650.2	7554.2	7647.2	7602.2	7563.2	7635.2
15°	8133.2	7998.2	7980.2	7851.2	7836.2	7737.2	7827.2	7761.2	7731.2	7824.2
17.5°	8478.2	8001.2	7734.2	7545.2	7437.2	7383.2	7545.2	7764.2	7698.2	7701.2
20°	8337.2	7824.2	7467.2	7305.2	7188.2	6666.2	5946.2	6153.2	6573.2	6780.2
22.5°	8295.2	8115.2	7968.2	7695.2	6534.2	6240.2	6282.2	6234.2	5442.2	5139.1
25°	9099.3	8892.3	8574.2	7143.2	6807.2	6741.2	6765.2	5937.2	5340.2	5427.2
27.5°	10128.3	9915.3	8346.2	7545.2	7479.2	7392.2	6918.2	5883.2	5964.2	6048.2
30°	11424.3	10305.3	8703.3	8457.2	8334.2	8244.2	6486.2	6570.2	6705.2	6810.2
32.5°	12687.4	10272.3	9726.3	9420.3	9267.3	7521.2	7329.2	7524.2	7662.2	7743.2
35°	12702.4	11448.3	10872.3	10479.3	9507.3	8085.2	8262.2	8589.2	8928.3	8991.3
37.5°	13047.4	12780.4	12120.4	11625.3	7071.2	9024.3	9414.3	9789.3	10128.3	10149.3
40°	14421.4	14133.4	13515.4	12426.4	7809.2	9204.3	10683.3	11106.3	11391.3	11376.3
42.5°	15792.5	15594.5	14952.4	11043.3	8799.3	7974.2	12015.3	12294.4	12474.4	12600.4
45°	17172.5	16974.5	14805.4	12126.4	9978.3	8733.3	11691.3	13272.4	13470.4	13533.4
47.5°	18249.5	17760.5	13566.4	13563.4	11451.3	9705.3	9654.3	14154.4	14328.4	14283.4
50°	19245.6	15855.5	14664.4	14034.4	12975.4	10620.3	10266.3	11910.3	15105.4	15039.4
52.5°	17511.5	15387.4	15606.5	12765.4	14199.4	11529.3	10956.3	10680.3	13725.4	15492.4
55°	15660.5	15960.5	16569.5	14025.4	10302.3	11823.3	11541.3	10992.3	9261.3	7794.2
57.5°	15981.5	16428.5	16458.5	15192.4	10662.3	7386.2	9459.3	8280.2	5232.2	5244.2
60°	14910.4	15492.4	12030.3	10128.3	5733.2	1539.0	150.0	132.0	912.0	1110.0
62.5°	12606.4	13416.4	11484.3	8823.3	3678.1	57.0	15.0	3.0	0.0	0.0
65°	9762.3	10737.3	9705.3	7614.2	3264.1	18.0	0.0	0.0	0.0	0.0
67.5°	6438.2	7317.2	7374.2	6369.2	2721.1	9.0	0.0	0.0	0.0	0.0
70°	2697.1	3798.1	4590.1	4734.1	2139.1	3.0	0.0	0.0	0.0	0.0
72.5°	780.0	1206.0	2208.1	2844.1	1359.0	0.0	0.0	0.0	0.0	0.0
75°	519.0	555.0	639.0	1281.0	678.0	0.0	0.0	0.0	0.0	0.0
77.5°	429.0	438.0	366.0	351.0	195.0	0.0	0.0	0.0	0.0	0.0
80°	390.0	384.0	294.0	207.0	72.0	0.0	0.0	0.0	0.0	0.0
82.5°	360.0	342.0	213.0	108.0	48.0	0.0	0.0	0.0	0.0	0.0
85°	243.0	240.0	96.0	66.0	9.0	0.0	0.0	0.0	0.0	0.0
87.5°	66.0	84.0	21.0	9.0	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: P579536  
 CATALOG NUMBER: CST-CA10-630-750-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)