

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: P579613

Luminaire Tested: **CST-CA8-480-760-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579613  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-5)  
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-EX120  
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: 55643 lumens  
Efficiency: N/A  
Efficacy: 115.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G5

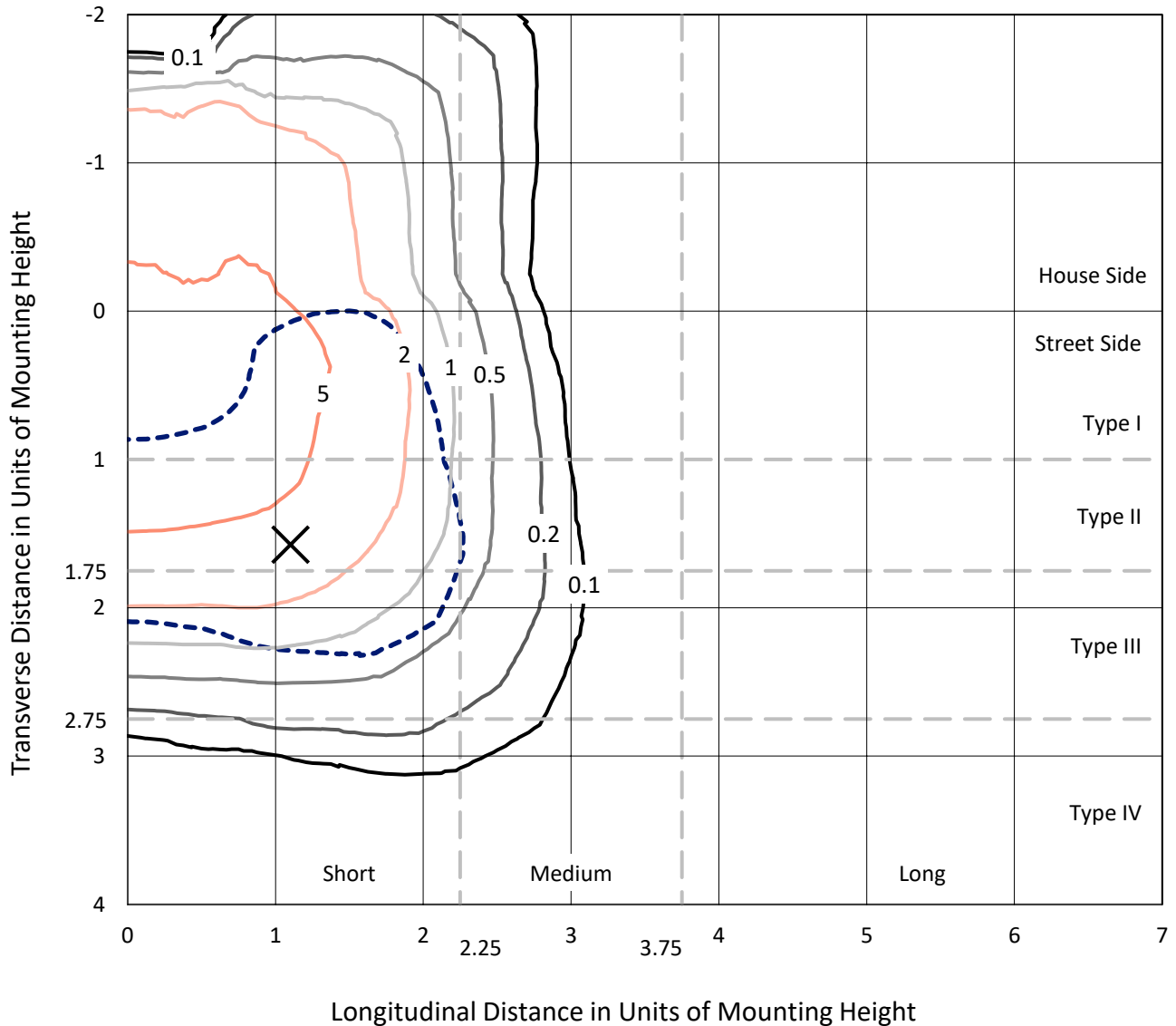
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

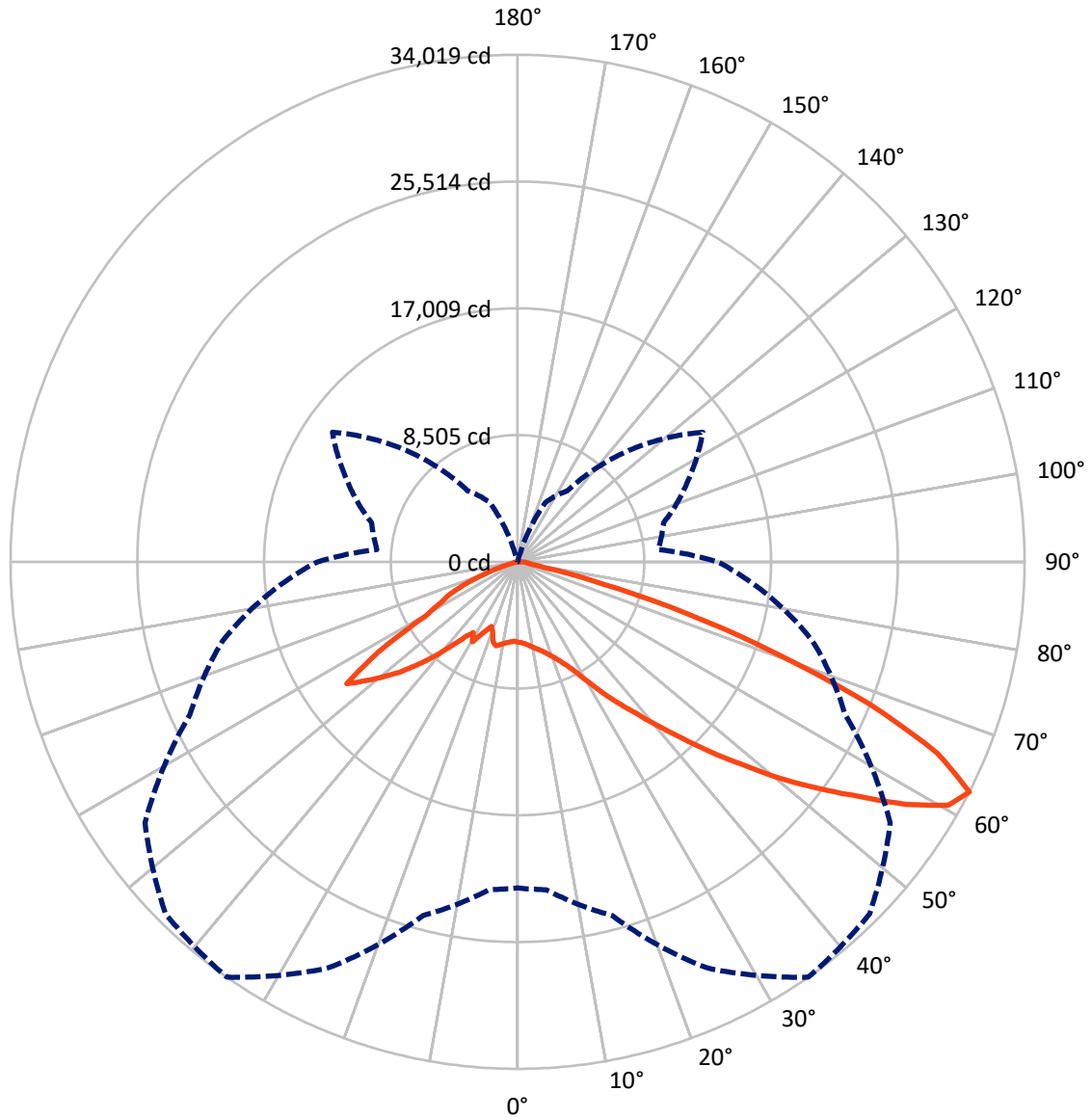
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.1 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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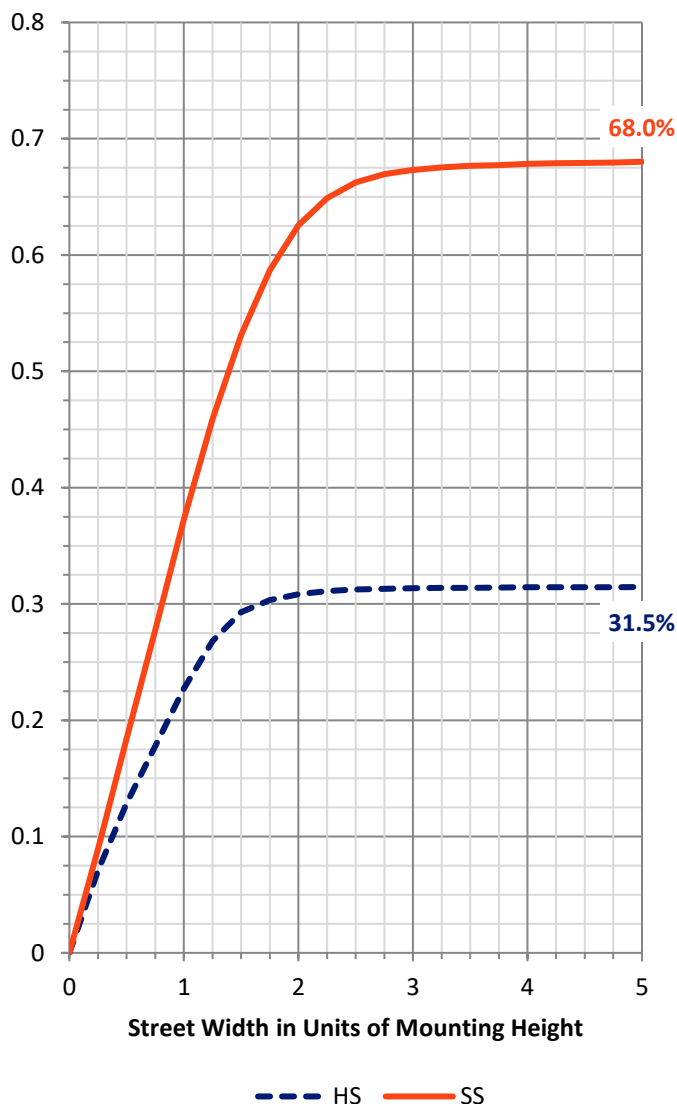
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17603.1	0.0	17603.1
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	38008.2	31.8	38039.9
	% Fixture	68.3	0.1	68.4
<b>Total</b>	Lumens	55611.2	31.8	55643.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	532.6	1.0
10°-20°	1712.4	3.1
20°-30°	3179.7	5.7
30°-40°	6269.0	11.3
40°-50°	11253.7	20.2
50°-60°	16358.4	29.4
60°-70°	13444.0	24.2
70°-80°	2555.5	4.6
80°-90°	305.9	0.5
90°-100°	29.0	0.1
100°-110°	2.8	0.0
110°-120°	0.0	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°	55611.2	99.9
0°-180°	55643.0	100.0

**Coefficient of Utilization**

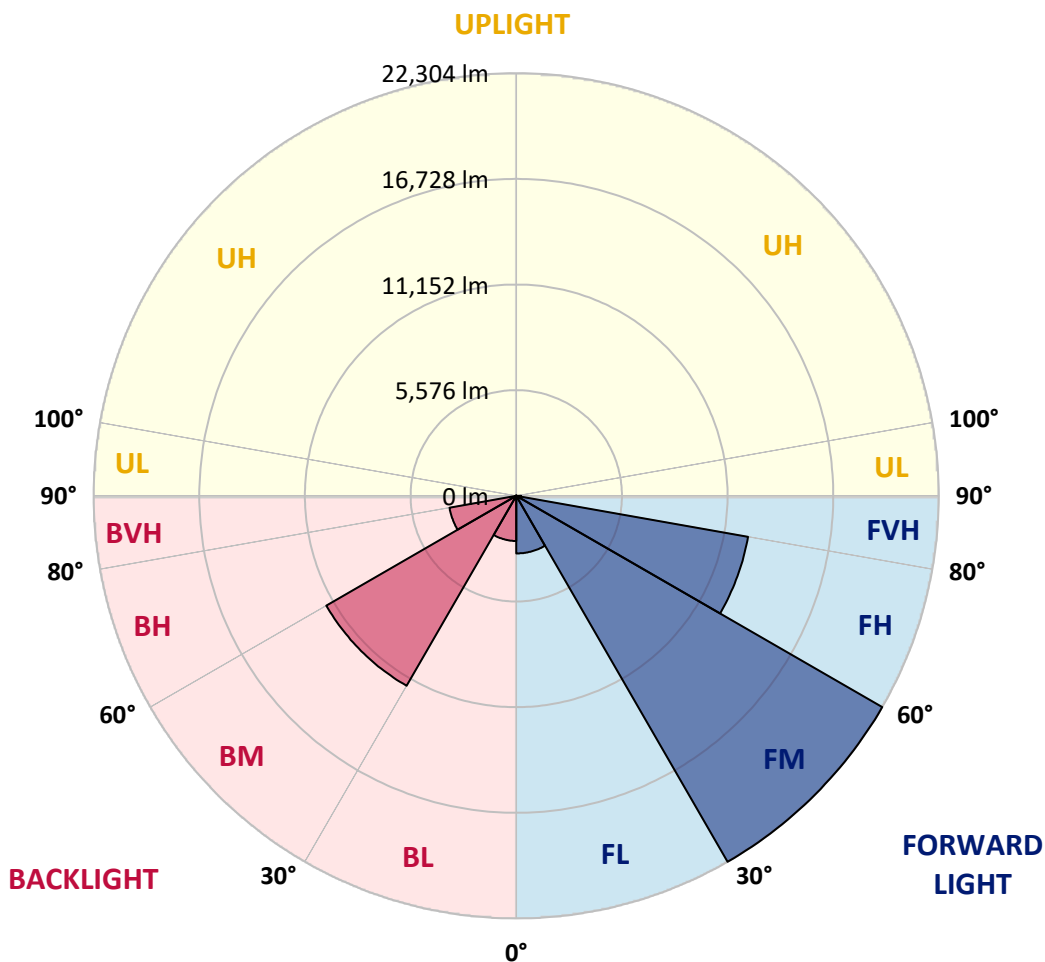


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3041.2	5.5			
FM	(30°-60°)	22304.3	40.1			
FH	(60°-80°)	12420.8	22.3			G5
FVH	(80°-90°)	241.9	0.4			G3/500
BL	(0°-30°)	2383.5	4.3	B3/2500		
BM	(30°-60°)	11576.8	20.8	B5		
BH	(60°-80°)	3578.7	6.4	B4/5000		G4/5000
BVH	(80°-90°)	64.0	0.1			G1/100
UL	(90°-100°)	29.0	0.1		U2/50	
UH	(100°-180°)	2.8	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°	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0
2.5°	5539.0	5493.7	5498.3	5532.2	5430.4	5464.3	5416.8	5457.6	5439.5	5457.6	5468.9
5°	5649.8	5593.3	5591.0	5624.9	5543.5	5563.9	5509.6	5536.7	5511.8	5534.5	5534.5
7.5°	5785.5	5738.0	5726.7	5753.8	5681.5	5690.5	5636.2	5647.5	5618.1	5647.5	5624.9
10°	5955.1	5912.2	5894.1	5907.6	5842.1	5846.6	5787.8	5792.3	5749.3	5774.2	5756.1
12.5°	6133.8	6075.0	6066.0	6088.6	6020.7	6011.7	5961.9	5966.4	5918.9	5941.6	5928.0
15°	6319.3	6258.2	6260.5	6283.1	6215.2	6219.8	6167.7	6176.8	6129.3	6151.9	6133.8
17.5°	6565.8	6504.7	6500.2	6540.9	6484.4	6502.5	6448.2	6459.5	6425.6	6430.1	6409.7
20°	6918.6	6839.5	6823.6	6882.4	6807.8	6830.4	6801.0	6839.5	6825.9	6814.6	6798.8
22.5°	7339.3	7278.2	7246.6	7291.8	7203.6	7246.6	7262.4	7341.6	7361.9	7348.4	7099.6
25°	7902.5	7870.8	7839.2	7818.8	7712.5	7780.4	7861.8	7993.0	8078.9	8112.8	7766.8
27.5°	8662.4	8678.3	8540.3	8517.7	8397.8	8504.1	8651.1	8863.7	9037.9	9101.2	8635.3
30°	9639.5	9659.9	9472.1	9417.8	9345.5	9435.9	9709.6	9942.6	10200.4	10306.7	9684.7
32.5°	10937.7	10919.6	10643.7	10539.7	10474.1	10510.3	10797.5	11116.4	11405.9	11645.7	10881.2
35°	12523.2	12466.7	12172.6	11885.4	11625.3	11736.1	11946.5	12333.2	12772.0	13124.8	12061.8
37.5°	14364.3	14310.0	13862.1	13394.0	12880.6	12928.1	13115.8	13746.8	14312.2	14405.0	11860.5
40°	16266.4	16243.7	15820.8	15226.0	14427.6	14203.7	14452.5	15221.4	15818.5	14201.4	12328.7
42.5°	18166.2	18057.7	17820.2	17225.3	16162.3	15669.3	16004.0	16773.0	17415.3	14889.0	13414.3
45°	20081.9	19971.1	19769.8	19333.3	18227.3	17510.3	17607.6	18460.2	19041.5	16178.2	14545.2
47.5°	21782.7	21701.3	21556.6	21312.3	20326.2	19677.1	19489.3	20086.4	20482.2	17225.3	15413.7
50°	23248.3	23178.2	23234.8	23153.3	22863.8	22183.1	21563.3	21524.9	21714.9	18157.2	16212.1
52.5°	24537.5	24442.5	24684.5	24971.8	25238.7	25087.1	23587.6	22888.7	22716.8	18856.0	16748.1
55°	25602.8	25568.9	25985.0	26760.8	27776.3	28174.4	25752.1	24148.5	23612.5	19448.6	16797.9
57.5°	26240.6	26322.0	27201.8	28703.6	30689.4	30877.1	28285.2	25487.4	24401.8	19808.2	17035.4
60°	25150.4	25426.4	27009.6	30160.2	33168.3	33249.7	30105.9	25754.3	23368.2	18514.5	15766.5
62.5°	21884.5	22083.5	24573.7	30067.4	34018.7	33399.0	30513.0	24248.0	20480.0	15705.5	13409.8
65°	15463.5	15694.1	18695.5	27113.6	30949.5	30972.1	27950.5	20968.5	16370.4	12159.1	10354.2
67.5°	9327.4	9700.6	12543.6	19683.8	25482.9	25946.6	23318.4	15875.1	11715.8	7938.7	6701.5
70°	3060.1	3401.6	5726.7	11650.2	18369.8	20355.6	17512.6	10315.8	6118.0	3356.4	2702.8
72.5°	1212.3	1368.3	2017.5	5152.2	11837.9	13590.7	10790.7	4984.9	2053.7	891.1	775.8
75°	809.7	825.5	931.8	1755.1	5792.3	7432.0	5202.0	1449.8	762.2	556.4	488.5
77.5°	705.7	707.9	755.4	925.0	1886.3	2849.8	1497.3	778.0	631.0	456.9	404.8
80°	646.9	655.9	685.3	789.3	864.0	968.0	739.6	649.1	547.3	420.7	382.2
82.5°	619.7	626.5	644.6	714.7	698.9	726.0	597.1	515.7	461.4	386.8	366.4
85°	565.4	576.7	588.0	631.0	574.5	497.6	461.4	346.0	330.2	291.8	269.1
87.5°	427.5	425.2	413.9	420.7	384.5	314.4	260.1	194.5	158.3	131.2	108.6
90°	178.7	180.9	174.2	165.1	144.8	119.9	90.5	54.3	27.1	9.0	4.5
92.5°	135.7	138.0	133.4	119.9	104.0	83.7	61.1	31.7	18.1	6.8	2.3
95°	83.7	85.9	81.4	72.4	63.3	47.5	31.7	20.4	11.3	4.5	0.0
97.5°	49.8	52.0	47.5	43.0	33.9	22.6	18.1	13.6	9.0	4.5	0.0
100°	29.4	29.4	27.1	22.6	15.8	13.6	11.3	9.0	6.8	2.3	0.0
102.5°	13.6	13.6	13.6	9.0	6.8	6.8	6.8	6.8	6.8	2.3	0.0
105°	4.5	4.5	2.3	2.3	2.3	4.5	4.5	4.5	4.5	2.3	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	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	2.3	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°	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0	5401.0
2.5°	5457.6	5414.6	5421.4	5382.9	5373.9	5333.2	5405.5	5412.3	5392.0	5412.3
5°	5525.4	5473.4	5487.0	5444.0	5432.7	5376.1	5434.9	5430.4	5414.6	5434.9
7.5°	5624.9	5566.1	5572.9	5523.1	5511.8	5448.5	5502.8	5487.0	5468.9	5493.7
10°	5751.6	5695.0	5697.3	5629.4	5622.7	5550.3	5620.4	5591.0	5563.9	5600.0
12.5°	5928.0	5848.8	5842.1	5767.4	5765.2	5690.5	5762.9	5738.0	5701.8	5758.4
15°	6131.6	6025.3	5998.1	5903.1	5900.9	5821.7	5894.1	5855.6	5837.5	5905.4
17.5°	6396.2	6262.7	6056.9	5733.5	5586.5	5611.4	5866.9	5959.7	5717.7	5753.8
20°	6556.8	5909.9	5609.1	5475.6	5405.5	5002.9	4457.9	4503.1	5039.1	5294.7
22.5°	6285.3	6093.1	5982.3	5794.6	4817.5	4679.5	4711.2	4702.1	4010.0	3804.2
25°	6850.8	6669.8	6468.5	5310.5	5109.2	5050.4	5066.3	4417.2	4039.5	4055.3
27.5°	7665.0	7432.0	6156.4	5654.3	5613.6	5527.7	5215.6	4435.3	4482.8	4514.4
30°	8694.1	7866.3	6556.8	6337.4	6255.9	6163.2	4840.1	4955.5	5043.7	5140.9
32.5°	9689.3	7651.4	7323.5	7095.0	6968.4	5595.5	5459.8	5672.4	5760.6	5844.3
35°	9598.8	8572.0	8146.8	7857.3	7619.8	6038.8	6158.7	6482.1	6715.1	6712.8
37.5°	9847.6	9573.9	9083.1	8716.7	6613.3	6764.8	7015.9	7384.6	7667.3	7665.0
40°	10885.7	10589.4	10128.0	9340.9	7328.0	7680.8	8024.6	8370.7	8574.2	8590.1
42.5°	11917.1	11688.6	11272.5	8250.8	8203.3	8691.8	9051.4	9270.8	9395.2	9438.2
45°	12943.9	12729.0	11075.7	9126.1	9270.8	9754.8	9974.2	10017.2	10150.6	10146.1
47.5°	13760.4	13577.2	10189.1	10166.5	10526.1	10860.8	10790.7	10736.4	10770.4	10788.5
50°	14513.5	11819.8	10985.2	11315.4	11862.8	11903.5	11611.7	9198.5	11387.8	11349.4
52.5°	13482.2	11534.8	11727.1	12500.6	13432.4	12959.7	12389.8	8063.1	10679.9	11695.4
55°	11797.2	11991.7	12425.9	13724.2	14644.7	14083.8	13131.6	8302.8	7088.3	5769.7
57.5°	12032.4	12340.0	13165.5	14959.1	15762.0	11154.9	12256.3	5853.4	3962.6	3960.3
60°	11204.6	11670.5	13149.7	15513.2	12758.4	7147.1	4910.2	133.4	769.0	762.2
62.5°	9472.1	10134.8	12545.8	15162.6	10569.1	5808.1	4374.2	11.3	4.5	4.5
65°	7325.7	8106.0	10460.5	13129.3	9363.6	5002.9	3247.8	0.0	0.0	0.0
67.5°	4803.9	5527.7	7855.0	10906.1	7773.6	3781.6	2182.6	0.0	0.0	0.0
70°	2001.6	2895.0	4880.8	7882.1	5717.7	2476.6	1035.9	0.0	0.0	0.0
72.5°	579.0	882.1	2198.4	4706.7	3548.7	1296.0	384.5	0.0	0.0	0.0
75°	382.2	402.6	664.9	1893.1	1725.7	475.0	156.1	0.0	0.0	0.0
77.5°	321.2	330.2	422.9	529.2	554.1	187.7	126.7	0.0	0.0	0.0
80°	296.3	298.5	380.0	393.5	296.3	156.1	124.4	0.0	0.0	0.0
82.5°	275.9	269.1	323.4	312.1	246.5	135.7	115.3	0.0	0.0	0.0
85°	190.0	194.5	219.4	278.2	149.3	67.9	81.4	0.0	0.0	0.0
87.5°	58.8	67.9	85.9	88.2	27.1	9.0	0.0	0.0	0.0	0.0
90°	2.3	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: P579613  
 CATALOG NUMBER: CST-CA8-480-760-U-T5N-HSS-HM-EX120

**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)