

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: P579661

Luminaire Tested: **CST-CA8-480-727-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579661  
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-CA8-480-727-U-T5N-HSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (8) 2700K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 47272 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B5 - U2 - G4

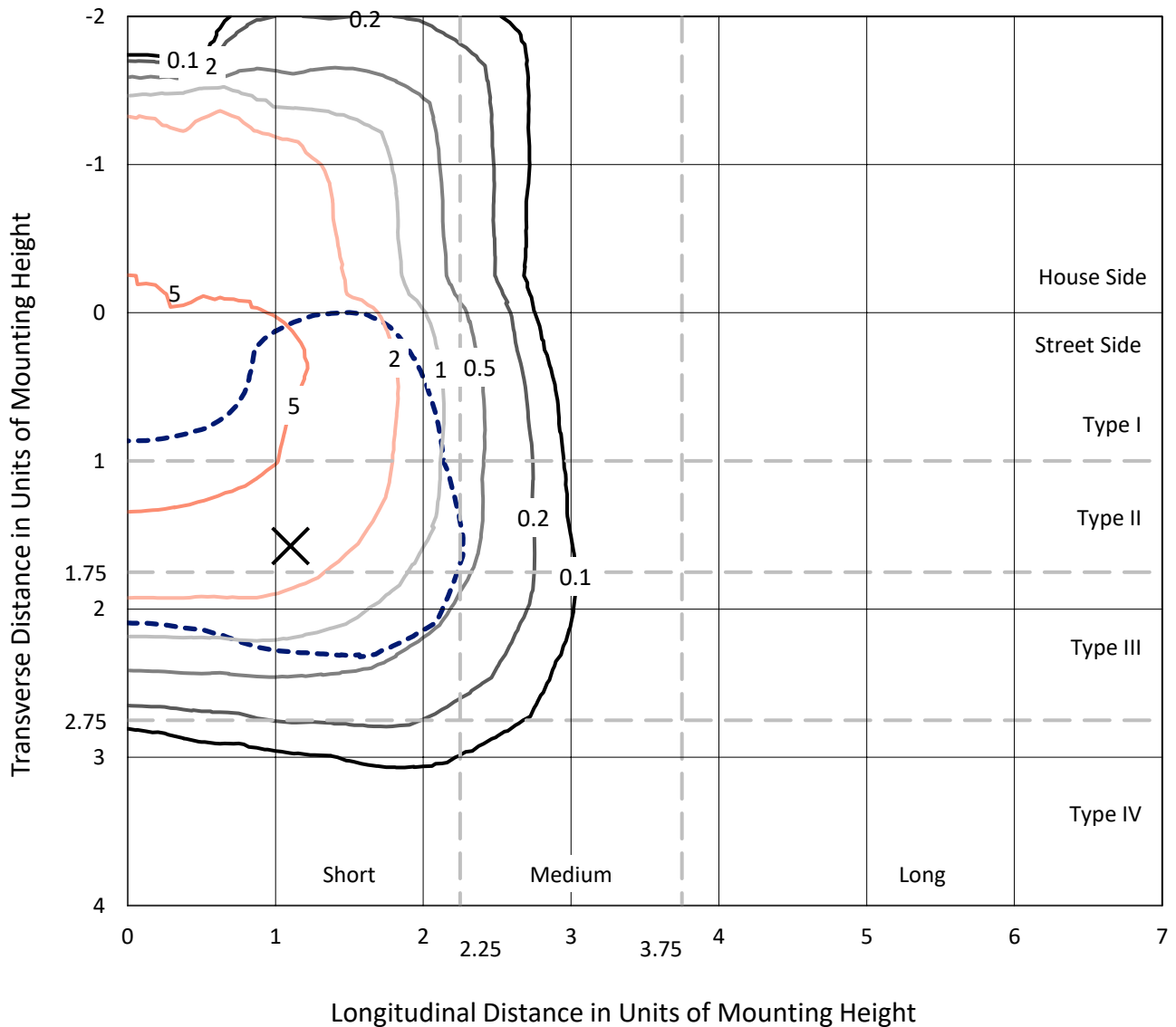
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

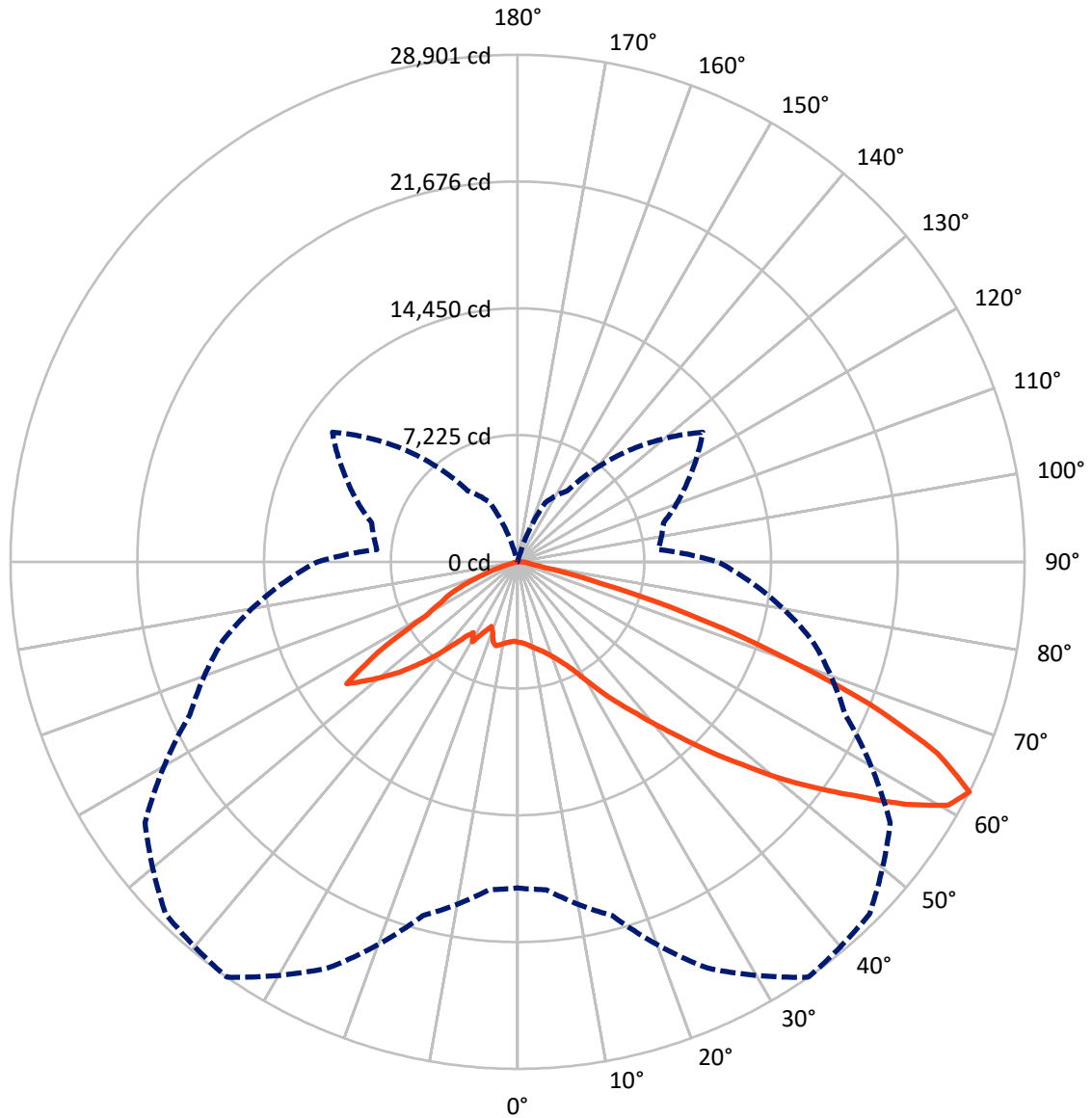
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.9 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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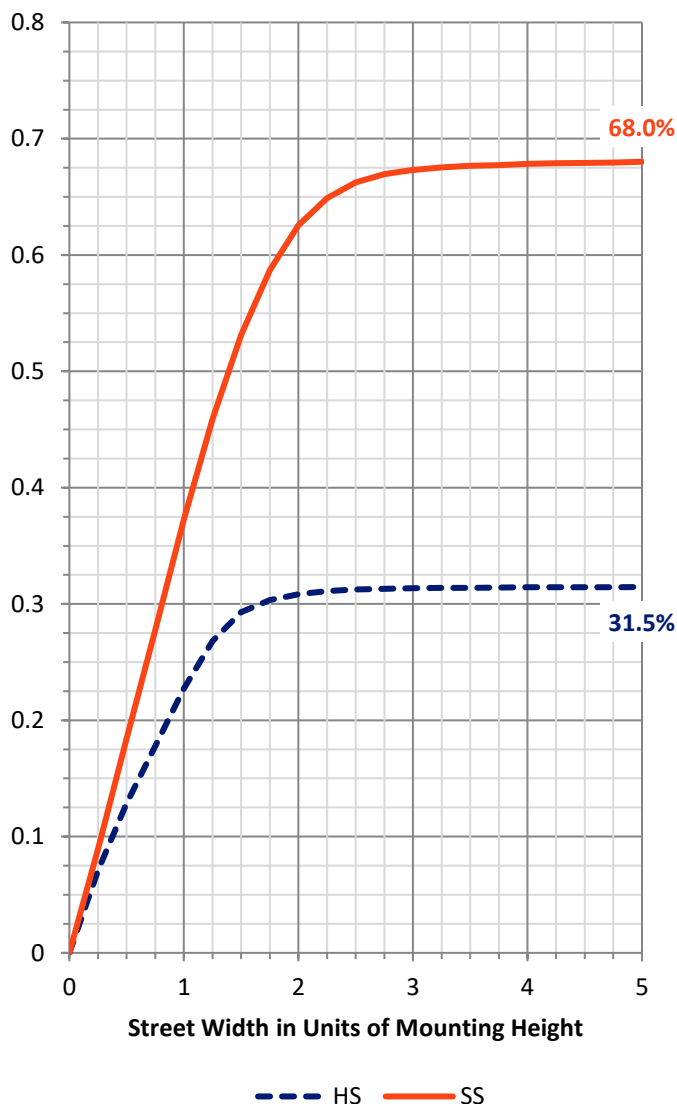
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14954.8	0.0	14954.8
	% Fixture	31.6	0.0	31.6
<b>Street Side</b>	Lumens	32290.2	27.0	32317.1
	% Fixture	68.3	0.1	68.4
<b>Total</b>	Lumens	47245.0	27.0	47272.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	452.5	1.0
10°-20°	1454.8	3.1
20°-30°	2701.4	5.7
30°-40°	5325.9	11.3
40°-50°	9560.6	20.2
50°-60°	13897.4	29.4
60°-70°	11421.4	24.2
70°-80°	2171.0	4.6
80°-90°	259.9	0.5
90°-100°	24.6	0.1
100°-110°	2.4	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°	47245.0	99.9
0°-180°	47272.0	100.0

**Coefficient of Utilization**

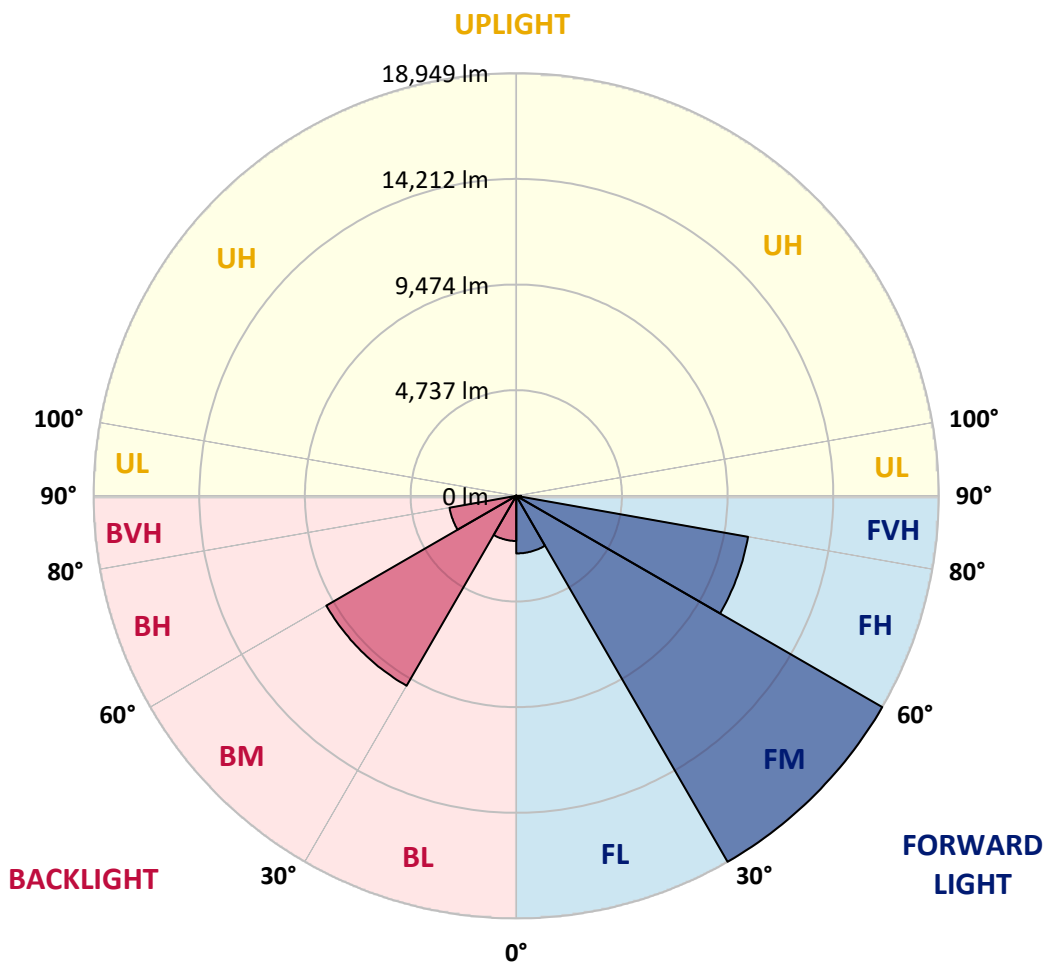


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2583.7	5.5			
FM	(30°-60°)	18948.8	40.1			
FH	(60°-80°)	10552.2	22.3			G4/12000
FVH	(80°-90°)	205.5	0.4			G2/225
BL	(0°-30°)	2024.9	4.3	B3/2500		
BM	(30°-60°)	9835.2	20.8	B5		
BH	(60°-80°)	3040.3	6.4	B4/5000		G4/5000
BVH	(80°-90°)	54.4	0.1			G1/100
UL	(90°-100°)	24.6	0.1		U2/50	
UH	(100°-180°)	2.4	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°	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5
2.5°	4705.7	4667.3	4671.1	4699.9	4613.5	4642.3	4601.9	4636.5	4621.1	4636.5	4646.1
5°	4799.8	4751.8	4749.9	4778.7	4709.5	4726.8	4680.7	4703.8	4682.6	4701.8	4701.8
7.5°	4915.1	4874.8	4865.2	4888.2	4826.7	4834.4	4788.3	4797.9	4772.9	4797.9	4778.7
10°	5059.2	5022.7	5007.4	5018.9	4963.2	4967.0	4917.0	4920.9	4884.4	4905.5	4890.1
12.5°	5211.0	5161.1	5153.4	5172.6	5115.0	5107.3	5065.0	5068.8	5028.5	5047.7	5036.2
15°	5368.6	5316.7	5318.6	5337.9	5280.2	5284.1	5239.9	5247.5	5207.2	5226.4	5211.0
17.5°	5578.0	5526.2	5522.3	5556.9	5508.9	5524.2	5478.1	5487.7	5458.9	5462.7	5445.5
20°	5877.8	5810.5	5797.1	5847.0	5783.6	5802.8	5777.9	5810.5	5799.0	5789.4	5775.9
22.5°	6235.2	6183.3	6156.4	6194.8	6119.9	6156.4	6169.9	6237.1	6254.4	6242.9	6031.5
25°	6713.6	6686.7	6659.8	6642.5	6552.2	6609.9	6679.0	6790.5	6863.5	6892.3	6598.3
27.5°	7359.2	7372.7	7255.5	7236.3	7134.4	7224.7	7349.6	7530.3	7678.2	7732.0	7336.2
30°	8189.3	8206.6	8047.1	8001.0	7939.5	8016.4	8248.9	8446.8	8665.8	8756.2	8227.7
32.5°	9292.2	9276.9	9042.5	8954.1	8898.3	8929.1	9173.1	9444.0	9690.0	9893.7	9244.2
35°	10639.2	10591.2	10341.4	10097.3	9876.4	9970.5	10149.2	10477.8	10850.6	11150.3	10247.2
37.5°	12203.3	12157.2	11776.7	11379.0	10942.8	10983.1	11142.6	11678.7	12159.1	12237.9	10076.2
40°	13819.2	13800.0	13440.7	12935.4	12257.1	12066.9	12278.2	12931.5	13438.8	12064.9	10474.0
42.5°	15433.3	15341.0	15139.3	14633.9	13730.8	13312.0	13596.3	14249.6	14795.3	12649.1	11396.3
45°	17060.8	16966.6	16795.6	16424.8	15485.2	14876.0	14958.7	15683.1	16176.9	13744.3	12357.0
47.5°	18505.7	18436.5	18313.6	18106.0	17268.3	16716.8	16557.3	17064.6	17400.9	14633.9	13094.8
50°	19750.8	19691.3	19739.3	19670.1	19424.2	18845.8	18319.3	18286.7	18448.1	15425.6	13773.1
52.5°	20846.1	20765.4	20971.0	21215.0	21441.7	21313.0	20039.0	19445.3	19299.3	16019.3	14228.5
55°	21751.1	21722.3	22075.8	22734.9	23597.6	23935.8	21877.9	20515.6	20060.2	16522.7	14270.8
57.5°	22292.9	22362.1	23109.6	24385.4	26072.5	26232.0	24029.9	21653.1	20730.8	16828.3	14472.5
60°	21366.8	21601.2	22946.2	25622.8	28178.4	28247.6	25576.7	21879.8	19852.7	15729.2	13394.6
62.5°	18592.2	18761.3	20876.8	25544.1	28900.9	28374.4	25922.6	20600.1	17398.9	13342.7	11392.4
65°	13137.1	13333.1	15882.9	23034.6	26293.4	26312.7	23745.6	17814.0	13907.6	10329.8	8796.5
67.5°	7924.2	8241.2	10656.5	16722.6	21649.2	22043.1	19810.4	13486.8	9953.2	6744.4	5693.3
70°	2599.8	2889.9	4865.2	9897.5	15606.2	17293.3	14878.0	8763.8	5197.6	2851.5	2296.2
72.5°	1029.9	1162.5	1714.0	4377.1	10057.0	11546.1	9167.3	4234.9	1744.7	757.1	659.1
75°	687.9	701.3	791.6	1491.1	4920.9	6314.0	4419.4	1231.7	647.5	472.7	415.0
77.5°	599.5	601.4	641.8	785.9	1602.5	2421.1	1272.0	661.0	536.1	388.1	343.9
80°	549.5	557.2	582.2	670.6	734.0	822.4	628.3	551.5	465.0	357.4	324.7
82.5°	526.5	532.2	547.6	607.2	593.7	616.8	507.3	438.1	392.0	328.6	311.3
85°	480.4	490.0	499.6	536.1	488.1	422.7	392.0	294.0	280.5	247.9	228.7
87.5°	363.2	361.2	351.6	357.4	326.7	267.1	221.0	165.2	134.5	111.4	92.2
90°	151.8	153.7	148.0	140.3	123.0	101.8	76.9	46.1	23.1	7.7	3.8
92.5°	115.3	117.2	113.4	101.8	88.4	71.1	51.9	26.9	15.4	5.8	1.9
95°	71.1	73.0	69.2	61.5	53.8	40.4	26.9	17.3	9.6	3.8	0.0
97.5°	42.3	44.2	40.4	36.5	28.8	19.2	15.4	11.5	7.7	3.8	0.0
100°	25.0	25.0	23.1	19.2	13.5	11.5	9.6	7.7	5.8	1.9	0.0
102.5°	11.5	11.5	11.5	7.7	5.8	5.8	5.8	5.8	5.8	1.9	0.0
105°	3.8	3.8	1.9	1.9	1.9	3.8	3.8	3.8	3.8	1.9	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.8	3.8	1.9	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	1.9	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°	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5	4588.5
2.5°	4636.5	4600.0	4605.8	4573.1	4565.4	4530.8	4592.3	4598.1	4580.8	4598.1
5°	4694.2	4650.0	4661.5	4625.0	4615.4	4567.3	4617.3	4613.5	4600.0	4617.3
7.5°	4778.7	4728.7	4734.5	4692.2	4682.6	4628.8	4674.9	4661.5	4646.1	4667.3
10°	4886.3	4838.3	4840.2	4782.5	4776.8	4715.3	4774.9	4749.9	4726.8	4757.6
12.5°	5036.2	4968.9	4963.2	4899.8	4897.8	4834.4	4895.9	4874.8	4844.0	4892.1
15°	5209.1	5118.8	5095.7	5015.0	5013.1	4945.9	5007.4	4974.7	4959.3	5017.0
17.5°	5433.9	5320.6	5145.7	4870.9	4746.0	4767.2	4984.3	5063.1	4857.5	4888.2
20°	5570.4	5020.8	4765.3	4651.9	4592.3	4250.3	3787.2	3825.7	4281.0	4498.2
22.5°	5339.8	5176.4	5082.3	4922.8	4092.7	3975.5	4002.4	3994.7	3406.8	3231.9
25°	5820.1	5666.4	5495.4	4511.6	4340.6	4290.6	4304.1	3752.6	3431.8	3445.2
27.5°	6511.9	6314.0	5230.3	4803.7	4769.1	4696.1	4430.9	3768.0	3808.4	3835.3
30°	7386.1	6682.9	5570.4	5384.0	5314.8	5236.0	4112.0	4209.9	4284.9	4367.5
32.5°	8231.6	6500.3	6221.7	6027.7	5920.1	4753.7	4638.4	4819.1	4894.0	4965.1
35°	8154.7	7282.4	6921.1	6675.2	6473.4	5130.3	5232.2	5506.9	5704.9	5702.9
37.5°	8366.1	8133.6	7716.6	7405.4	5618.4	5747.1	5960.4	6273.6	6513.8	6511.9
40°	9248.1	8996.3	8604.4	7935.7	6225.6	6525.3	6817.4	7111.4	7284.3	7297.8
42.5°	10124.2	9930.2	9576.6	7009.5	6969.2	7384.2	7689.7	7876.1	7981.8	8018.3
45°	10996.6	10814.1	9409.5	7753.1	7876.1	8287.3	8473.7	8510.2	8623.6	8619.7
47.5°	11690.2	11534.6	8656.2	8637.0	8942.5	9226.9	9167.3	9121.2	9150.1	9165.4
50°	12330.1	10041.6	9332.6	9613.1	10078.1	10112.7	9864.8	7814.6	9674.6	9642.0
52.5°	11453.9	9799.5	9962.8	10620.0	11411.6	11010.0	10525.8	6850.1	9073.2	9935.9
55°	10022.4	10187.7	10556.6	11659.5	12441.5	11965.0	11156.1	7053.7	6021.9	4901.7
57.5°	10222.2	10483.6	11184.9	12708.6	13390.7	9476.7	10412.5	4972.8	3366.4	3364.5
60°	9519.0	9914.8	11171.4	13179.4	10839.0	6071.9	4171.5	113.4	653.3	647.5
62.5°	8047.1	8610.1	10658.4	12881.6	8979.0	4934.3	3716.1	9.6	3.8	3.8
65°	6223.7	6886.6	8886.8	11154.2	7954.9	4250.3	2759.2	0.0	0.0	0.0
67.5°	4081.2	4696.1	6673.3	9265.3	6604.1	3212.7	1854.2	0.0	0.0	0.0
70°	1700.5	2459.5	4146.5	6696.3	4857.5	2104.0	880.0	0.0	0.0	0.0
72.5°	491.9	749.4	1867.7	3998.6	3014.8	1101.0	326.7	0.0	0.0	0.0
75°	324.7	342.0	564.9	1608.3	1466.1	403.5	132.6	0.0	0.0	0.0
77.5°	272.8	280.5	359.3	449.6	470.8	159.5	107.6	0.0	0.0	0.0
80°	251.7	253.6	322.8	334.3	251.7	132.6	105.7	0.0	0.0	0.0
82.5°	234.4	228.7	274.8	265.2	209.4	115.3	98.0	0.0	0.0	0.0
85°	161.4	165.2	186.4	236.3	126.8	57.6	69.2	0.0	0.0	0.0
87.5°	50.0	57.6	73.0	74.9	23.1	7.7	0.0	0.0	0.0	0.0
90°	1.9	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: P579661  
 CATALOG NUMBER: CST-CA8-480-727-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)