

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: P721837

Luminaire Tested: **CST-CA8-400-727-U-T1**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721837  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-400-727-U-T1  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

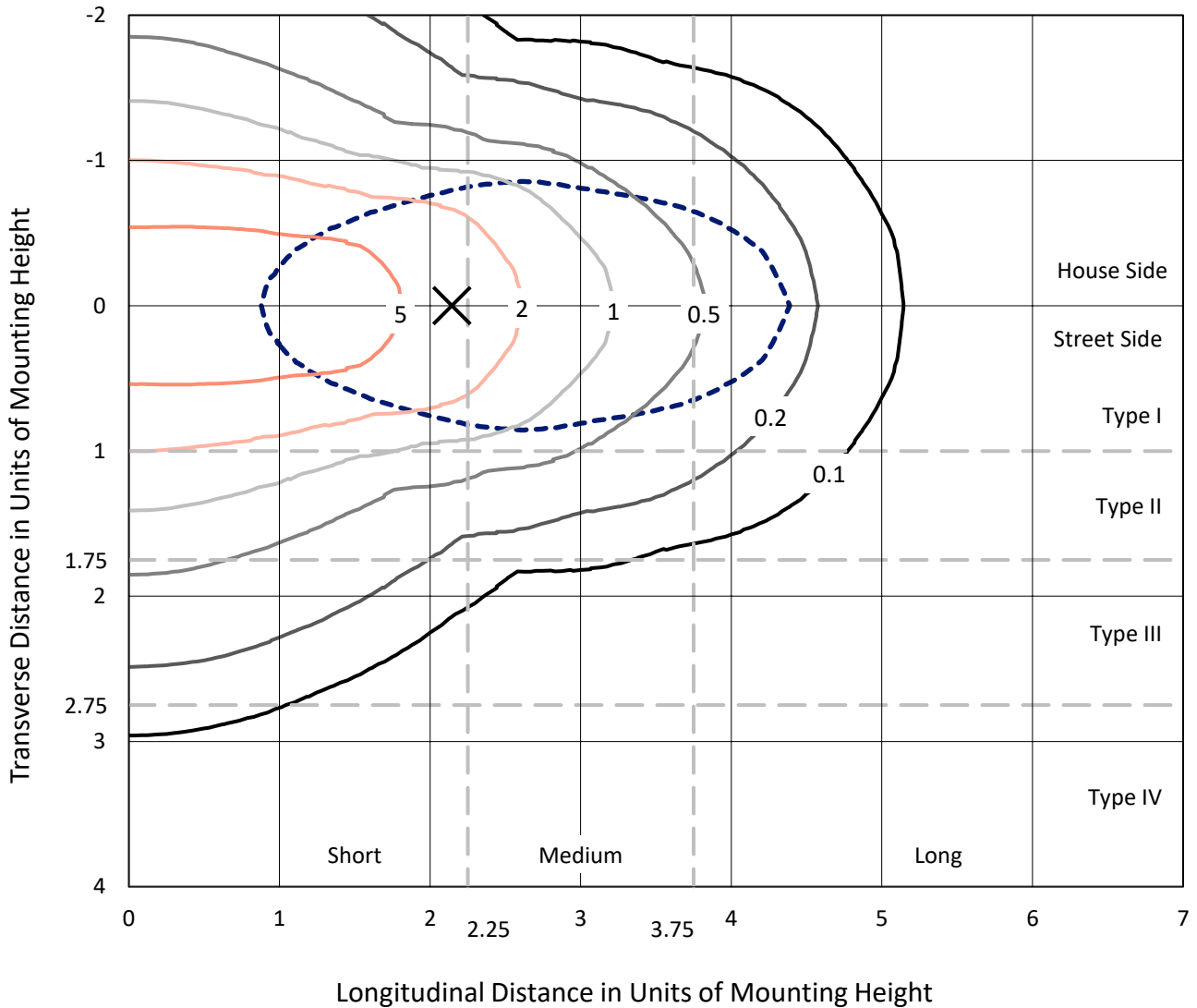
Lumens per Lamp: N/A  
Luminaire Lumens: 53445 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

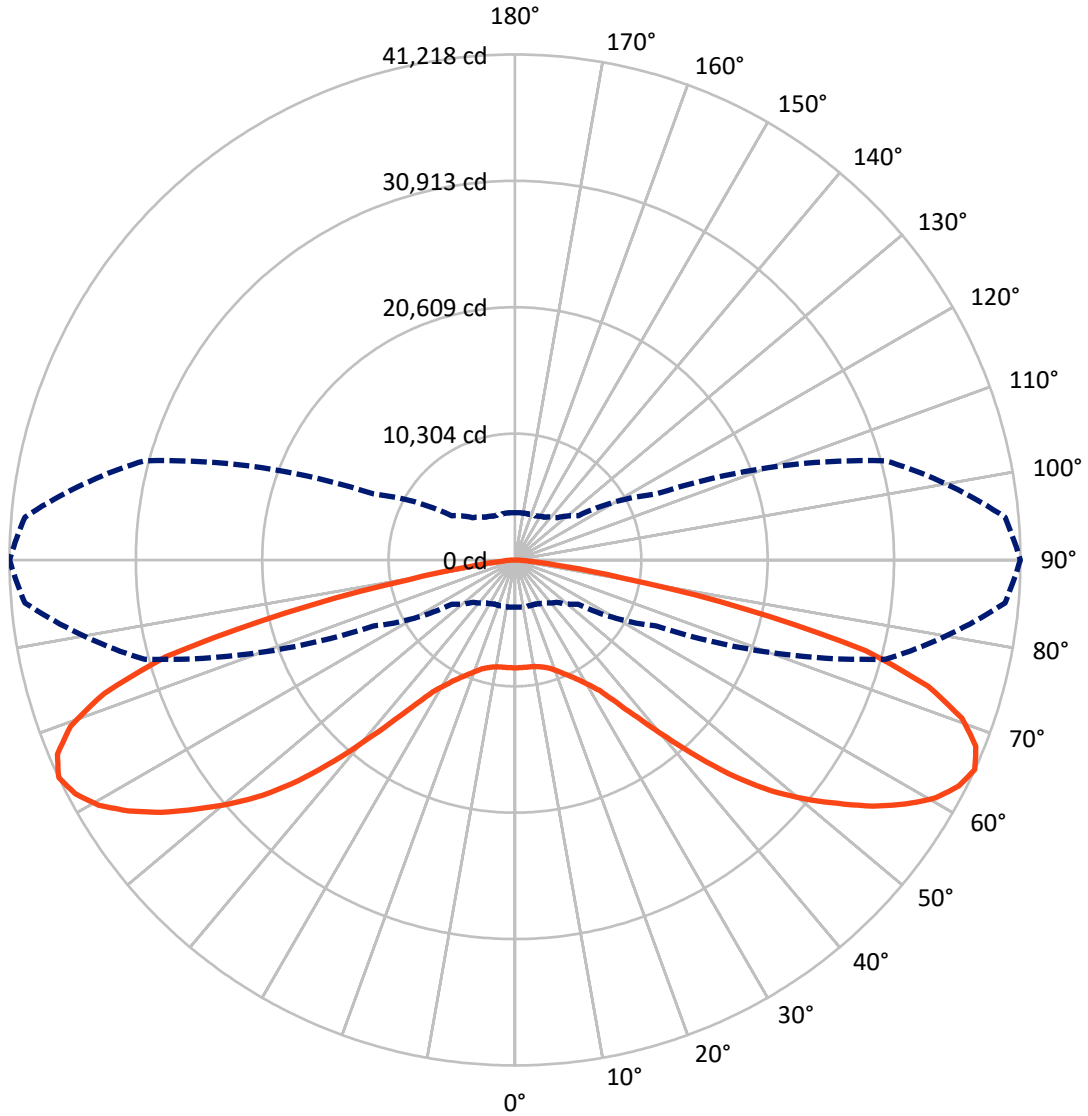
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.9 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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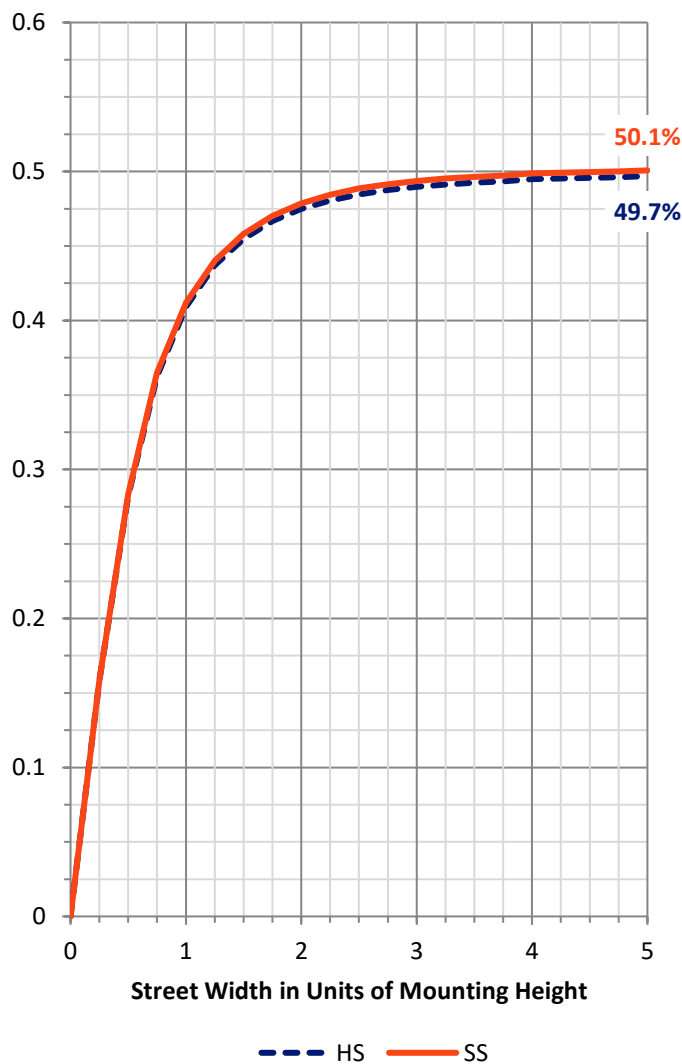
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	26722.5	0.0	26722.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	26722.5	0.0	26722.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	53445.0	0.0	53445.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	835.6	1.6
10°-20°	2465.7	4.6
20°-30°	4061.7	7.6
30°-40°	5950.9	11.1
40°-50°	8799.0	16.5
50°-60°	11542.0	21.6
60°-70°	12041.6	22.5
70°-80°	6923.2	13.0
80°-90°	825.3	1.5
90°-100°	0.0	0.0
100°-110°	0.0	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°	53445.0	100.0
0°-180°	53445.0	100.0

**Coefficient of Utilization**



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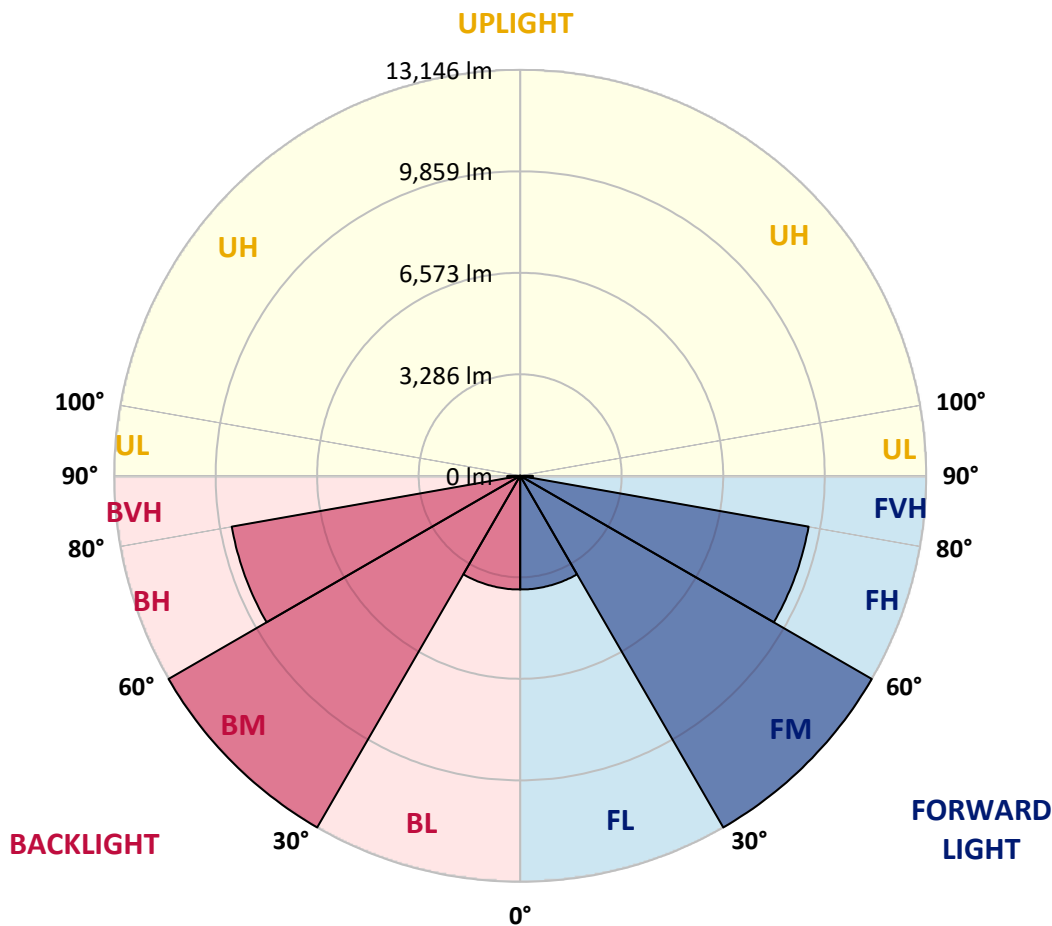
CATALOG NUMBER: CST-CA8-400-727-U-T1

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3681.5	6.9			
FM (30°-60°)	13145.9	24.6			
FH (60°-80°)	9482.4	17.7			G4/12000
FVH (80°-90°)	412.7	0.8			G3/500
BL (0°-30°)	3681.5	6.9	B4/5000		
BM (30°-60°)	13145.9	24.6	B5		
BH (60°-80°)	9482.4	17.7	B5		G5
BVH (80°-90°)	412.7	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G5**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9
2.5°	8802.8	8796.5	8794.5	8791.3	8796.5	8800.7	8811.2	8820.6	8818.5	8816.4	8818.5
5°	8753.7	8756.9	8757.9	8758.9	8763.1	8766.3	8780.9	8795.5	8793.4	8791.3	8801.8
7.5°	8684.8	8684.8	8682.7	8680.6	8689.0	8696.3	8710.9	8725.5	8737.0	8747.5	8764.2
10°	8584.5	8580.3	8579.3	8578.2	8587.6	8596.0	8623.1	8650.3	8673.3	8695.2	8723.4
12.5°	8462.3	8461.2	8463.3	8465.4	8485.3	8505.1	8551.1	8597.0	8643.0	8689.0	8729.7
15°	8317.1	8304.5	8315.0	8324.4	8356.8	8388.1	8476.9	8565.7	8635.7	8704.6	8784.0
17.5°	8095.6	8083.1	8098.8	8113.4	8178.1	8242.9	8368.3	8492.6	8624.2	8755.8	8869.7
20°	7760.3	7760.3	7800.0	7839.7	7949.4	8059.1	8231.4	8402.7	8580.3	8757.9	8922.9
22.5°	7403.1	7392.6	7477.2	7561.8	7693.5	7824.0	8041.3	8258.6	8493.6	8727.6	8954.3
25°	6999.8	7017.6	7124.1	7229.7	7414.5	7598.4	7865.8	8132.2	8427.8	8723.4	9037.9
27.5°	6659.3	6662.4	6790.9	6919.4	7151.3	7382.2	7707.0	8031.9	8392.3	8752.7	9148.6
30°	6307.3	6364.7	6500.5	6635.3	6894.3	7153.4	7546.2	7937.9	8365.1	8792.4	9275.0
32.5°	6036.7	6050.3	6203.9	6356.4	6626.9	6897.5	7354.0	7810.4	8323.3	8836.2	9423.3
35°	5781.8	5803.8	5946.9	6090.0	6372.0	6653.0	7153.4	7652.7	8265.9	8878.0	9584.2
37.5°	5555.2	5582.3	5718.1	5853.9	6125.5	6397.1	6927.8	7458.4	8177.1	8895.8	9760.7
40°	5389.1	5412.1	5527.0	5641.9	5887.3	6131.8	6687.5	7242.2	8052.8	8863.4	9899.6
42.5°	5268.9	5279.4	5372.4	5465.3	5684.7	5904.1	6454.6	7004.0	7890.9	8777.7	10007.2
45°	5106.0	5129.0	5220.9	5311.8	5509.2	5705.6	6209.1	6712.6	7650.6	8587.6	10008.3
47.5°	4984.8	4999.4	5086.1	5171.8	5355.6	5539.5	5991.8	6444.1	7379.0	8312.9	9895.5
50°	4896.0	4888.7	4969.1	5048.5	5204.2	5358.8	5762.0	6164.2	7042.7	7921.2	9613.4
52.5°	4769.6	4778.0	4842.8	4907.5	5042.3	5176.0	5537.4	5897.8	6669.7	7440.7	9155.9
55°	4600.4	4639.1	4693.4	4746.6	4864.7	4982.7	5307.6	5632.5	6296.8	6960.1	8566.7
57.5°	4434.3	4462.5	4508.5	4554.4	4647.4	4739.3	5045.4	5351.5	5904.1	6456.7	7823.0
60°	4298.5	4305.8	4335.1	4363.3	4434.3	4505.3	4758.1	5010.9	5493.5	5975.1	7081.3
62.5°	4123.0	4125.1	4145.0	4164.8	4208.7	4251.5	4450.0	4647.4	5059.0	5470.6	6343.8
65°	3848.3	3865.0	3883.8	3901.6	3930.8	3959.0	4110.5	4262.0	4570.1	4878.3	5582.3
67.5°	3570.4	3555.8	3577.7	3599.7	3603.9	3608.0	3722.9	3837.8	4090.6	4343.4	4909.6
70°	3118.1	3129.6	3127.5	3124.4	3106.6	3087.8	3168.3	3248.7	3382.4	3515.1	3924.5
72.5°	2391.1	2375.4	2335.7	2295.0	2276.2	2257.4	2351.4	2444.4	2542.5	2640.7	2936.4
75°	1461.4	1506.3	1588.8	1670.3	1701.6	1733.0	1727.8	1721.5	1713.1	1704.8	2073.5
77.5°	990.3	1014.3	1033.1	1050.9	1096.8	1141.7	1194.0	1246.2	1245.2	1244.1	1476.0
80°	629.9	611.1	619.4	627.8	653.9	680.0	759.4	837.8	859.7	880.6	1040.4
82.5°	394.9	398.0	408.4	417.8	388.6	359.3	421.0	481.6	533.8	585.0	659.1
85°	255.9	290.4	285.2	280.0	245.5	211.0	265.3	319.6	344.7	368.7	396.9
87.5°	82.5	96.1	99.2	101.3	101.3	100.3	111.8	123.3	127.4	130.6	141.0
90°	0.0	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	0.0
95°	0.0	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	0.0
100°	0.0	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	0.0
105°	0.0	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	0.0
110°	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):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9	8804.9
2.5°	8819.5	8809.1	8798.6	8795.5	8792.4	8790.3	8788.2	8786.1
5°	8811.2	8809.1	8807.0	8798.6	8790.3	8789.2	8788.2	8791.3
7.5°	8780.9	8780.9	8780.9	8790.3	8799.7	8795.5	8790.3	8796.5
10°	8750.6	8775.7	8800.7	8808.0	8815.4	8820.6	8825.8	8831.0
12.5°	8770.4	8813.3	8855.0	8879.1	8903.1	8915.6	8927.1	8930.3
15°	8863.4	8917.7	8972.0	9004.4	9035.8	9056.7	9077.5	9082.8
17.5°	8983.5	9067.1	9149.6	9196.6	9243.6	9267.7	9290.6	9283.3
20°	9086.9	9201.9	9316.8	9417.0	9517.3	9572.7	9627.0	9633.3
22.5°	9179.9	9373.2	9566.4	9695.9	9824.4	9922.6	10020.8	10031.3
25°	9351.2	9604.0	9856.8	10063.6	10270.5	10360.3	10449.1	10501.3
27.5°	9543.4	9881.9	10220.3	10497.2	10774.0	10910.8	11046.6	11053.9
30°	9756.5	10185.9	10614.1	10986.0	11356.9	11524.0	11690.1	11777.8
32.5°	10009.3	10554.6	11098.8	11587.7	12076.6	12330.4	12584.3	12673.0
35°	10289.3	10996.5	11702.6	12376.4	13049.1	13534.8	14020.6	14254.6
37.5°	10625.6	11526.1	12426.5	13438.7	14450.9	15279.3	16106.6	16342.7
40°	10935.9	12094.3	13251.8	14657.8	16063.8	17377.9	18691.0	18946.9
42.5°	11236.7	12638.6	14040.4	15958.3	17876.2	19635.3	21394.4	22059.8
45°	11427.9	13123.3	14817.6	17346.6	19875.5	22290.6	24704.7	25263.6
47.5°	11477.0	13469.0	15461.1	18593.8	21726.6	24568.9	27410.2	28127.9
50°	11305.7	13648.7	15991.7	20126.2	24259.7	27154.3	30047.8	30637.0
52.5°	10871.1	13591.2	16311.4	21313.9	26316.5	29380.3	32444.1	32979.0
55°	10173.3	13242.4	16311.4	22291.7	28271.0	31448.6	34625.2	35437.9
57.5°	9189.3	12575.9	15962.5	22944.6	29926.6	33378.0	36829.3	37559.5
60°	8187.5	11783.1	15377.5	23305.0	31232.4	34888.5	38544.6	39397.0
62.5°	7216.1	10706.1	14195.0	22926.8	31658.6	35518.4	39377.1	40603.5
65°	6286.4	9510.0	12733.6	22004.4	31274.2	35697.0	40118.8	41217.7
67.5°	5475.8	8510.3	11544.9	20458.4	29372.0	34266.9	39160.9	40530.3
70°	4334.0	7126.2	9918.4	17717.4	25516.4	31249.1	36981.9	38672.0
72.5°	3232.0	5600.1	7967.1	13937.0	19906.9	26499.3	33090.7	35217.5
75°	2441.2	4473.0	6504.7	11016.3	15527.9	21109.2	26690.5	29537.0
77.5°	1707.9	3232.0	4755.0	8120.7	11486.4	14576.3	17666.2	19183.0
80°	1199.2	2044.3	2888.3	4507.4	6125.5	7496.0	8865.5	8756.9
82.5°	732.3	1087.4	1441.5	1955.5	2469.4	2800.6	3131.7	3117.1
85°	425.2	517.1	608.0	753.2	898.4	1062.4	1226.4	1090.6
87.5°	150.4	150.4	150.4	172.4	194.3	267.4	340.5	359.3
90°	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
95°	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
100°	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
105°	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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P721837  
 CATALOG NUMBER: CST-CA8-400-727-U-T1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	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
117.5°	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
122.5°	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
127.5°	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
132.5°	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
137.5°	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
142.5°	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
147.5°	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
152.5°	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
157.5°	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
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)