

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: P721827

Luminaire Tested: **CST-CA8-400-722-U-T1**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721827
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-CA8-400-722-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51438 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

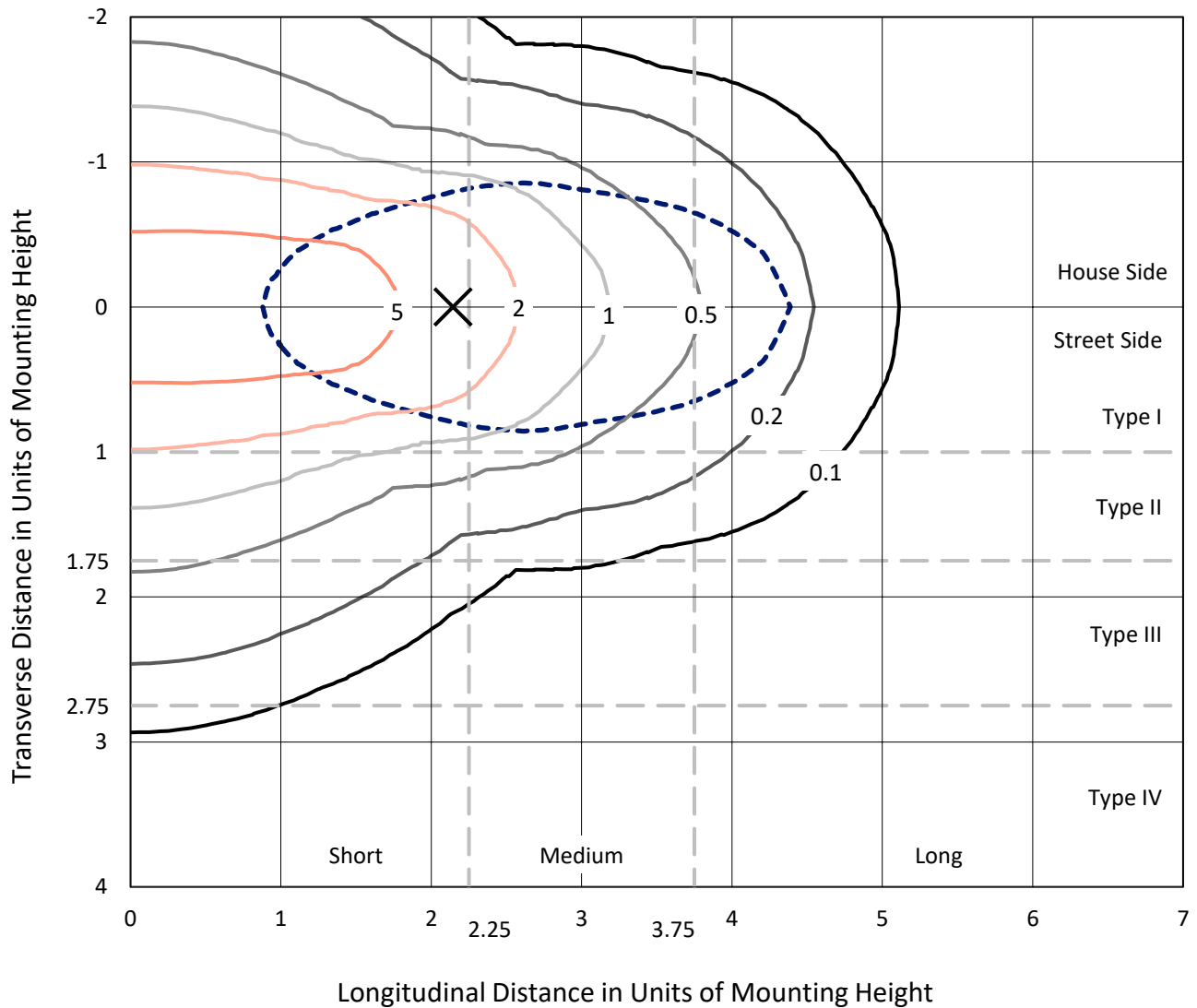
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

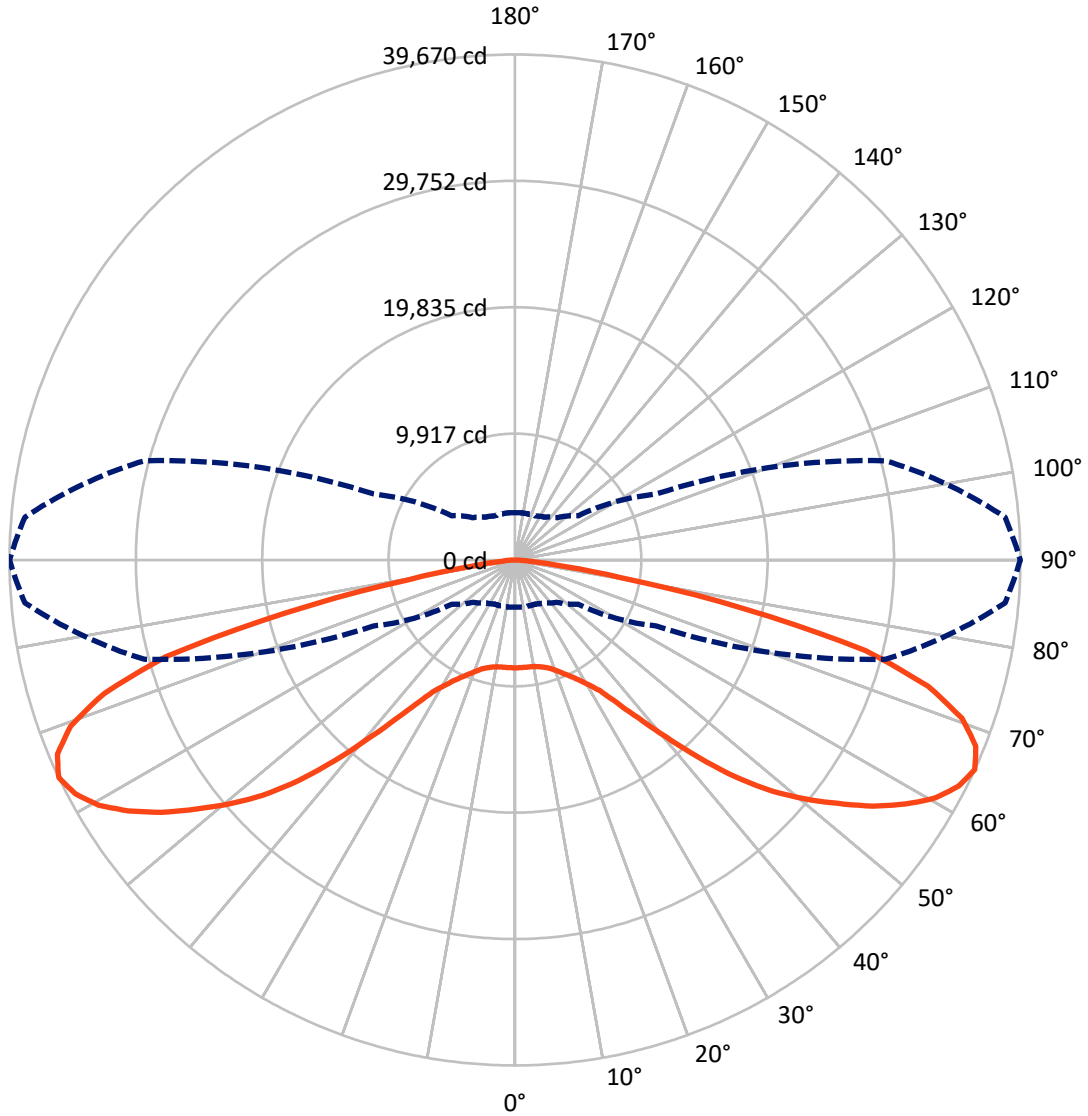
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.6 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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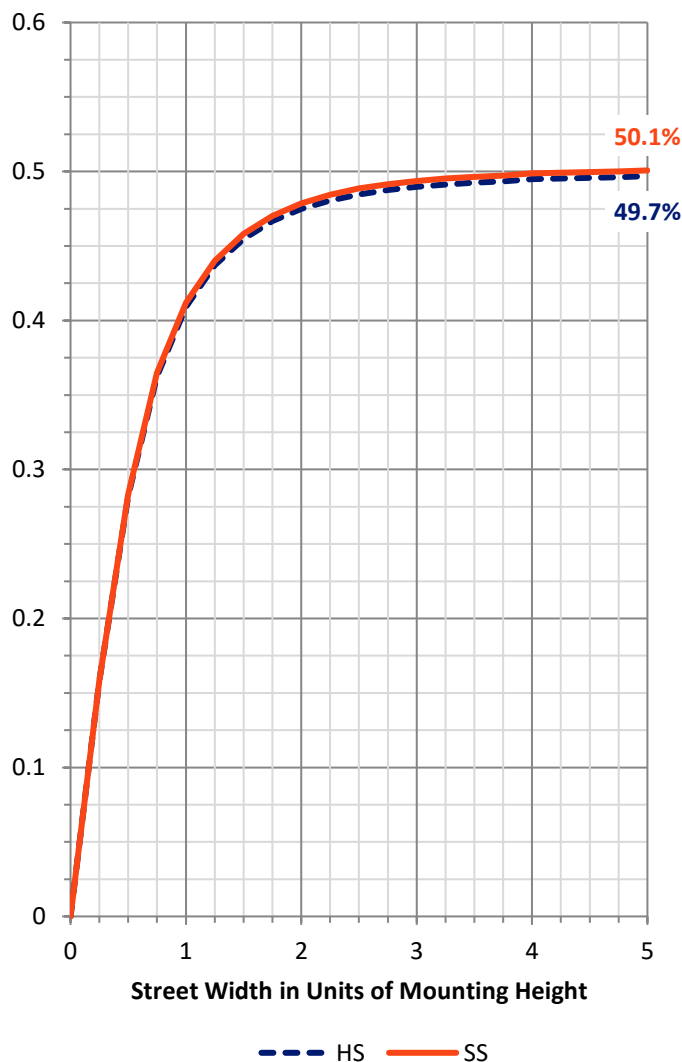
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	25719.0	0.0	25719.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	25719.0	0.0	25719.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	51438.0	0.0	51438.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	804.2	1.6
10°-20°	2373.1	4.6
20°-30°	3909.2	7.6
30°-40°	5727.4	11.1
40°-50°	8468.6	16.5
50°-60°	11108.6	21.6
60°-70°	11589.4	22.5
70°-80°	6663.3	13.0
80°-90°	794.3	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°	51438.0	100.0
0°-180°	51438.0	100.0

Coefficient of Utilization



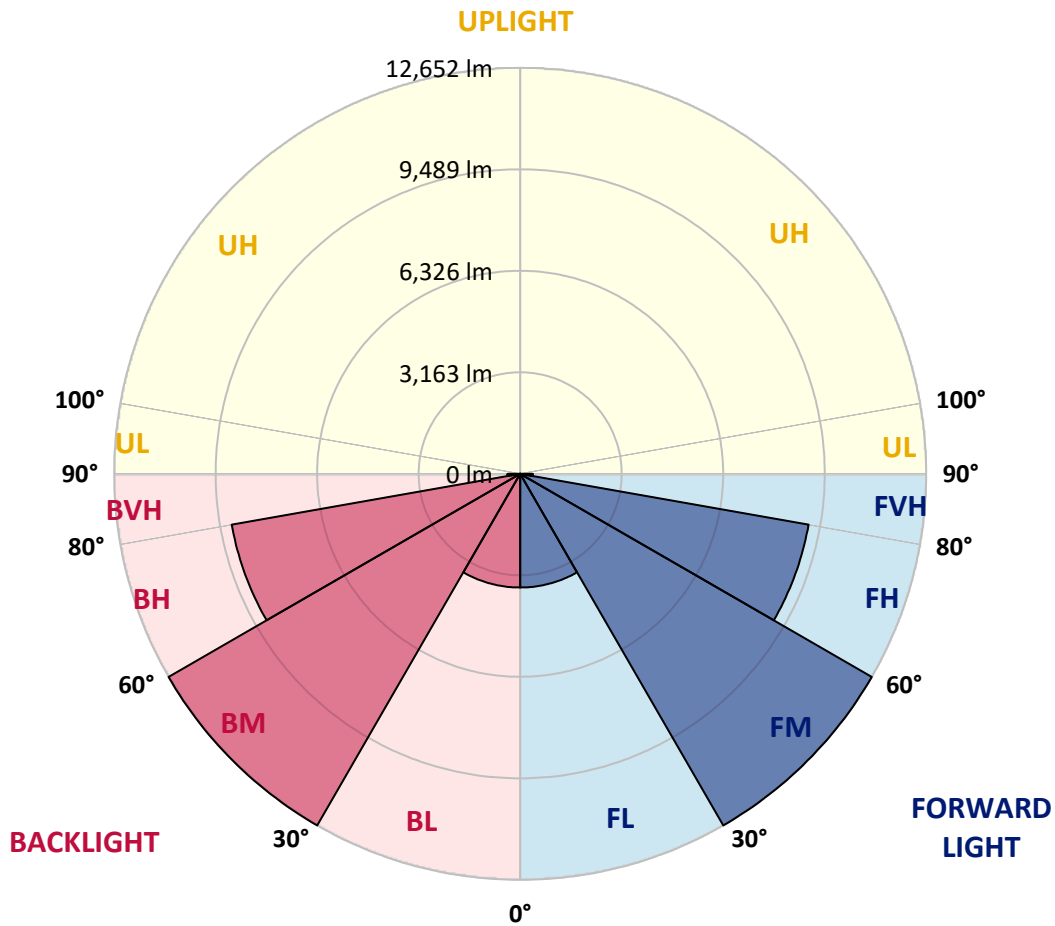
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3543.2	6.9			
FM (30°-60°)	12652.3	24.6			
FH (60°-80°)	9126.3	17.7			G4/12000
FVH (80°-90°)	397.2	0.8			G3/500
BL (0°-30°)	3543.2	6.9	B4/5000		
BM (30°-60°)	12652.3	24.6	B5		
BH (60°-80°)	9126.3	17.7	B5		G5
BVH (80°-90°)	397.2	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°	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3
2.5°	8472.2	8466.2	8464.2	8461.2	8466.2	8470.2	8480.3	8489.3	8487.3	8485.3	8487.3
5°	8425.0	8428.0	8429.0	8430.0	8434.0	8437.1	8451.1	8465.2	8463.2	8461.2	8471.2
7.5°	8358.6	8358.6	8356.6	8354.6	8362.7	8369.7	8383.8	8397.8	8408.9	8419.0	8435.0
10°	8262.1	8258.1	8257.1	8256.1	8265.1	8273.2	8299.3	8325.5	8347.6	8368.7	8395.8
12.5°	8144.5	8143.5	8145.5	8147.5	8166.6	8185.7	8230.0	8274.2	8318.4	8362.7	8401.9
15°	8004.8	7992.7	8002.7	8011.8	8043.0	8073.1	8158.6	8244.0	8311.4	8377.7	8454.2
17.5°	7791.6	7779.5	7794.6	7808.7	7871.0	7933.4	8054.0	8173.7	8300.3	8427.0	8536.6
20°	7468.9	7468.9	7507.1	7545.3	7650.9	7756.4	7922.3	8087.2	8258.1	8429.0	8587.9
22.5°	7125.1	7115.0	7196.4	7277.9	7404.5	7530.2	7739.3	7948.4	8174.7	8399.9	8618.0
25°	6737.0	6754.1	6856.6	6958.2	7136.1	7313.1	7570.4	7826.8	8111.3	8395.8	8698.5
27.5°	6409.2	6412.2	6535.9	6659.6	6882.8	7104.9	7417.6	7730.3	8077.1	8424.0	8805.0
30°	6070.4	6125.7	6256.4	6386.1	6635.4	6884.8	7262.8	7639.8	8051.0	8462.2	8926.7
32.5°	5810.0	5823.1	5970.9	6117.7	6378.1	6638.5	7077.8	7517.1	8010.8	8504.4	9069.4
35°	5564.7	5585.8	5723.6	5861.3	6132.8	6403.2	6884.8	7365.3	7955.5	8544.6	9224.3
37.5°	5346.6	5372.7	5503.4	5634.1	5895.5	6156.9	6667.6	7178.3	7870.0	8561.7	9394.2
40°	5186.7	5208.8	5319.4	5430.0	5666.3	5901.5	6436.4	6970.2	7750.4	8530.6	9527.9
42.5°	5071.1	5081.1	5170.6	5260.1	5471.2	5682.3	6212.2	6741.0	7594.6	8448.1	9631.4
45°	4914.2	4936.4	5024.8	5112.3	5302.3	5491.3	5975.9	6460.5	7363.3	8265.1	9632.4
47.5°	4797.6	4811.7	4895.1	4977.6	5154.5	5331.5	5766.8	6202.1	7101.9	8000.7	9523.9
50°	4712.2	4705.1	4782.5	4858.9	5008.7	5157.5	5545.6	5932.7	6778.2	7623.7	9252.4
52.5°	4590.5	4598.6	4660.9	4723.2	4852.9	4981.6	5329.5	5676.3	6419.3	7161.2	8812.1
55°	4427.6	4464.8	4517.1	4568.4	4682.0	4795.6	5108.3	5421.0	6060.4	6698.8	8245.0
57.5°	4267.8	4294.9	4339.2	4383.4	4472.9	4561.4	4855.9	5150.5	5682.3	6214.2	7529.2
60°	4137.1	4144.1	4172.3	4199.4	4267.8	4336.2	4579.5	4822.8	5287.2	5750.7	6815.4
62.5°	3968.2	3970.2	3989.3	4008.4	4050.6	4091.9	4282.9	4472.9	4869.0	5265.1	6105.6
65°	3703.8	3719.9	3738.0	3755.1	3783.2	3810.3	3956.1	4101.9	4398.5	4695.1	5372.7
67.5°	3436.4	3422.3	3443.4	3464.5	3468.5	3472.5	3583.1	3693.7	3937.0	4180.3	4725.2
70°	3001.0	3012.1	3010.1	3007.1	2990.0	2971.9	3049.3	3126.7	3255.4	3383.1	3777.2
72.5°	2301.3	2286.2	2248.0	2208.8	2190.7	2172.6	2263.1	2352.6	2447.1	2541.6	2826.1
75°	1406.5	1449.7	1529.2	1607.6	1637.7	1667.9	1662.9	1656.8	1648.8	1640.8	1995.7
77.5°	953.1	976.2	994.3	1011.4	1055.6	1098.9	1149.1	1199.4	1198.4	1197.4	1420.6
80°	606.2	588.1	596.2	604.2	629.4	654.5	730.9	806.3	827.4	847.5	1001.3
82.5°	380.0	383.0	393.1	402.1	374.0	345.8	405.2	463.5	513.7	563.0	634.4
85°	246.3	279.5	274.5	269.4	236.3	203.1	255.4	307.6	331.8	354.9	382.0
87.5°	79.4	92.5	95.5	97.5	97.5	96.5	107.6	118.6	122.7	125.7	135.7
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°	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3	8474.3
2.5°	8488.3	8478.3	8468.2	8465.2	8462.2	8460.2	8458.2	8456.2
5°	8480.3	8478.3	8476.3	8468.2	8460.2	8459.2	8458.2	8461.2
7.5°	8451.1	8451.1	8451.1	8460.2	8469.2	8465.2	8460.2	8466.2
10°	8422.0	8446.1	8470.2	8477.3	8484.3	8489.3	8494.4	8499.4
12.5°	8441.1	8482.3	8522.5	8545.6	8568.8	8580.8	8591.9	8594.9
15°	8530.6	8582.8	8635.1	8666.3	8696.4	8716.6	8736.7	8741.7
17.5°	8646.2	8726.6	8806.0	8851.3	8896.5	8919.6	8941.8	8934.7
20°	8745.7	8856.3	8966.9	9063.4	9159.9	9213.2	9265.5	9271.5
22.5°	8835.2	9021.2	9207.2	9331.8	9455.5	9550.0	9644.5	9654.6
25°	9000.1	9243.4	9486.7	9685.7	9884.8	9971.3	10056.7	10107.0
27.5°	9185.1	9510.8	9836.5	10103.0	10369.4	10501.1	10631.8	10638.8
30°	9390.1	9803.4	10215.6	10573.5	10930.4	11091.2	11251.1	11335.5
32.5°	9633.4	10158.3	10682.0	11152.6	11623.1	11867.4	12111.7	12197.1
35°	9902.9	10583.5	11263.2	11911.6	12559.1	13026.6	13494.1	13719.3
37.5°	10226.6	11093.2	11959.9	12934.1	13908.3	14705.5	15501.8	15729.0
40°	10525.2	11640.2	12754.1	14107.3	15460.6	16725.3	17989.1	18235.4
42.5°	10814.8	12164.0	13513.2	15359.0	17204.9	18897.9	20591.0	21231.4
45°	10998.7	12630.5	14261.2	16695.2	19129.2	21453.6	23777.0	24314.9
47.5°	11046.0	12963.2	14880.5	17895.6	20910.7	23646.3	26380.9	27071.6
50°	10881.1	13136.2	15391.2	19370.5	23348.7	26134.6	28919.4	29486.5
52.5°	10462.9	13080.9	15698.8	20513.6	25328.3	28277.0	31225.8	31740.5
55°	9791.3	12745.1	15698.8	21454.6	27209.3	30267.6	33325.0	34107.2
57.5°	8844.2	12103.6	15363.0	22082.9	28802.8	32124.6	35446.3	36149.1
60°	7880.1	11340.6	14800.0	22429.8	30059.5	33578.3	37097.1	37917.5
62.5°	6945.1	10304.0	13662.0	22065.8	30469.7	34184.6	37898.4	39078.7
65°	6050.3	9152.9	12255.5	21178.1	30099.8	34356.5	38612.2	39669.9
67.5°	5270.1	8190.7	11111.3	19690.2	28269.0	32980.1	37690.3	39008.3
70°	4171.3	6858.6	9546.0	17052.1	24558.2	30075.6	35593.1	37219.8
72.5°	3110.6	5389.8	7668.0	13413.6	19159.3	25504.2	31848.1	33895.0
75°	2349.5	4305.0	6260.4	10602.6	14944.8	20316.5	25688.2	28427.8
77.5°	1643.8	3110.6	4576.4	7815.7	11055.0	14028.9	17002.8	18462.6
80°	1154.2	1967.5	2779.8	4338.2	5895.5	7214.5	8532.6	8428.0
82.5°	704.8	1046.6	1387.4	1882.1	2376.7	2695.4	3014.1	3000.0
85°	409.2	497.7	585.1	724.9	864.6	1022.5	1180.3	1049.6
87.5°	144.8	144.8	144.8	165.9	187.0	257.4	327.8	345.8
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



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 CATALOG NUMBER: CST-CA8-400-722-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)