

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: P721847

Luminaire Tested: **CST-CA8-400-730-U-T1**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721847  
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-CA8-400-730-U-T1  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

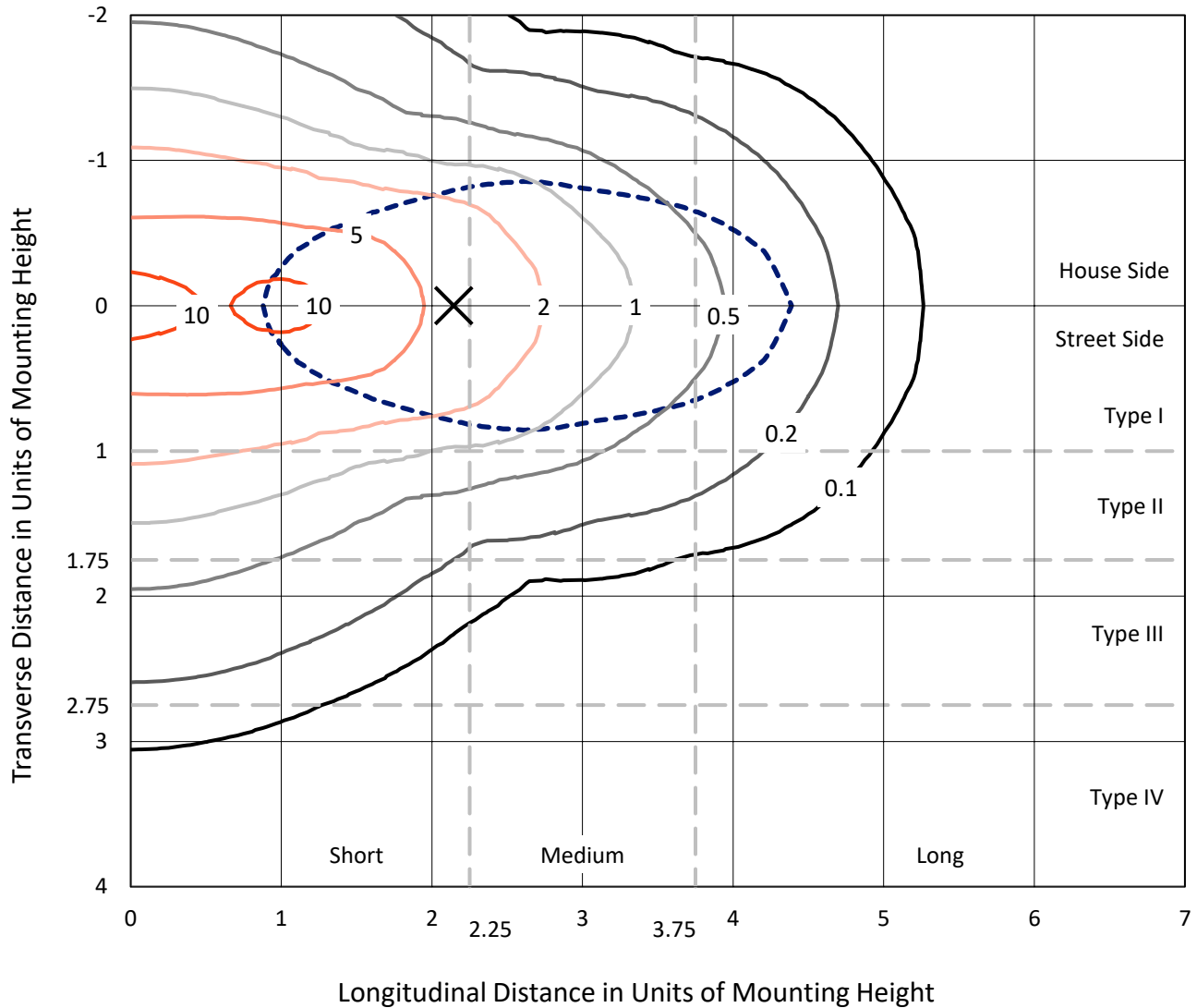
Lumens per Lamp: N/A  
Luminaire Lumens: 61971 lumens  
Efficiency: N/A  
Efficacy: 154.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5  
  
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

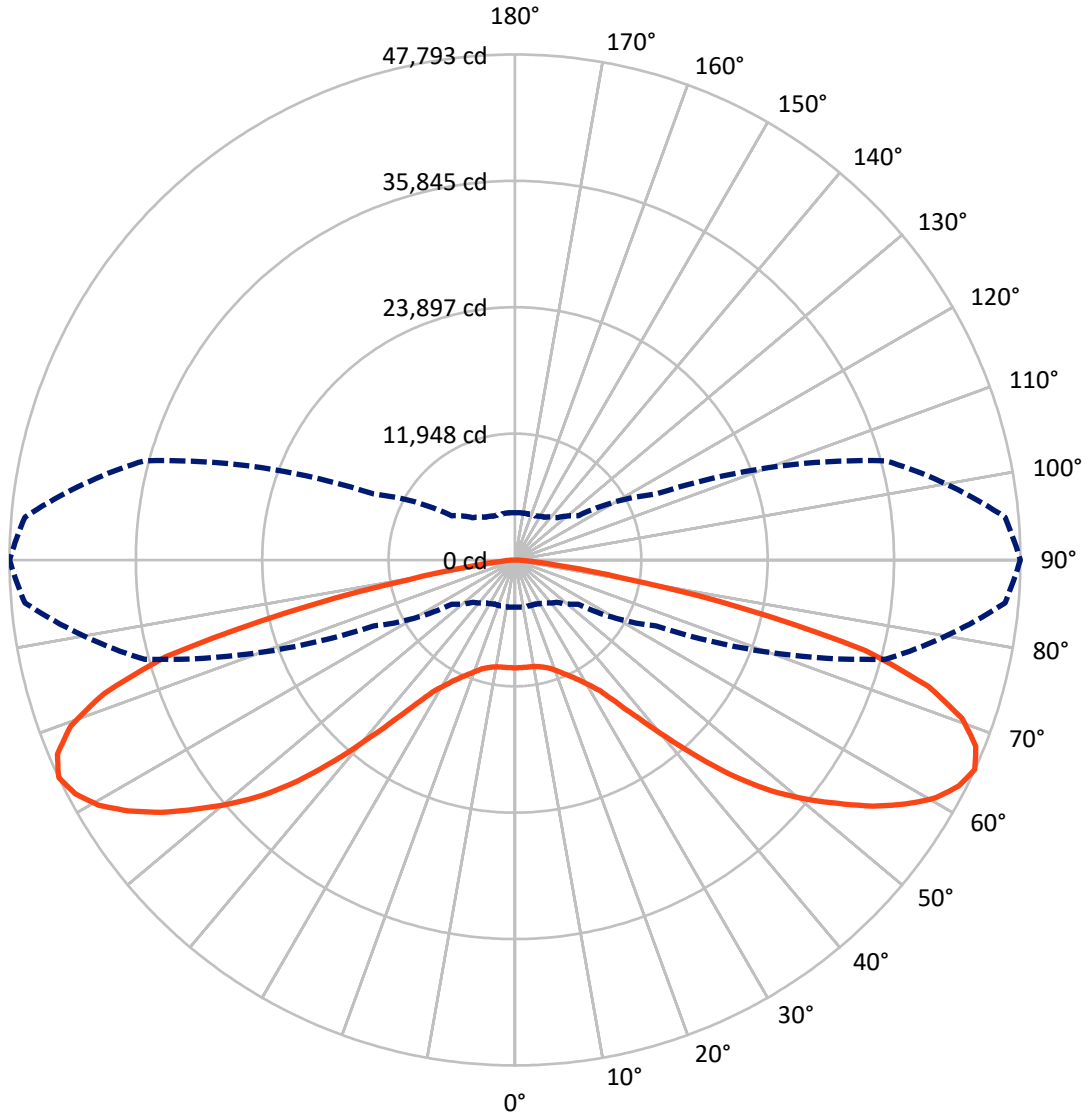
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.5 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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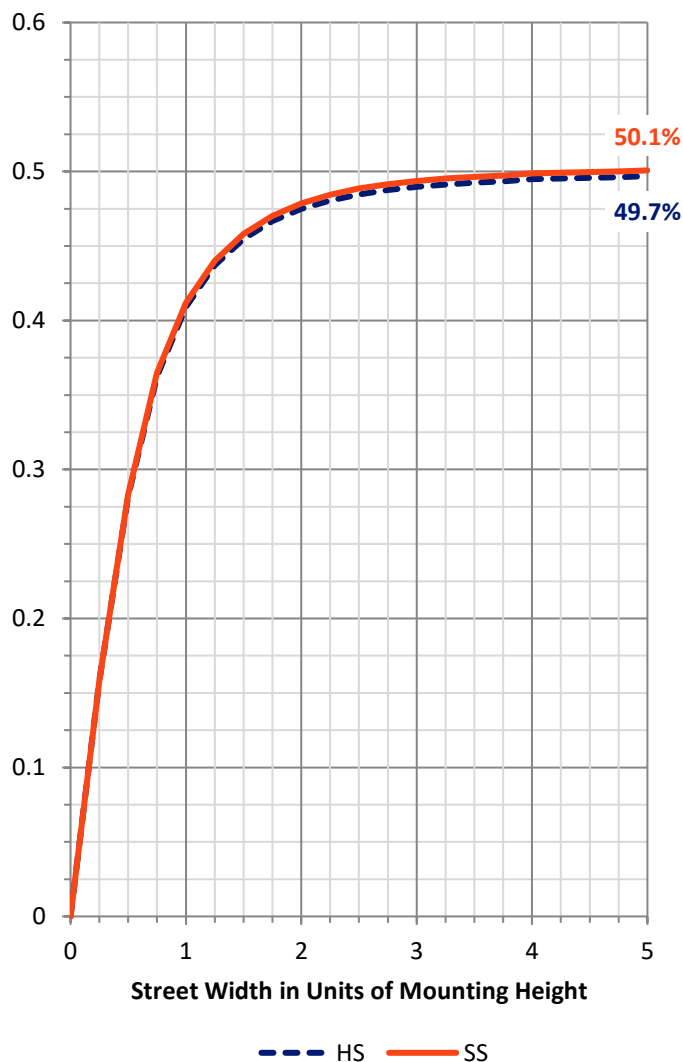
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	30985.5	0.0	30985.5
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	30985.5	0.0	30985.5
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	61971.0	0.0	61971.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	968.9	1.6
10°-20°	2859.1	4.6
20°-30°	4709.6	7.6
30°-40°	6900.2	11.1
40°-50°	10202.7	16.5
50°-60°	13383.3	21.6
60°-70°	13962.6	22.5
70°-80°	8027.7	13.0
80°-90°	957.0	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°	61971.0	100.0
0°-180°	61971.0	100.0

**Coefficient of Utilization**



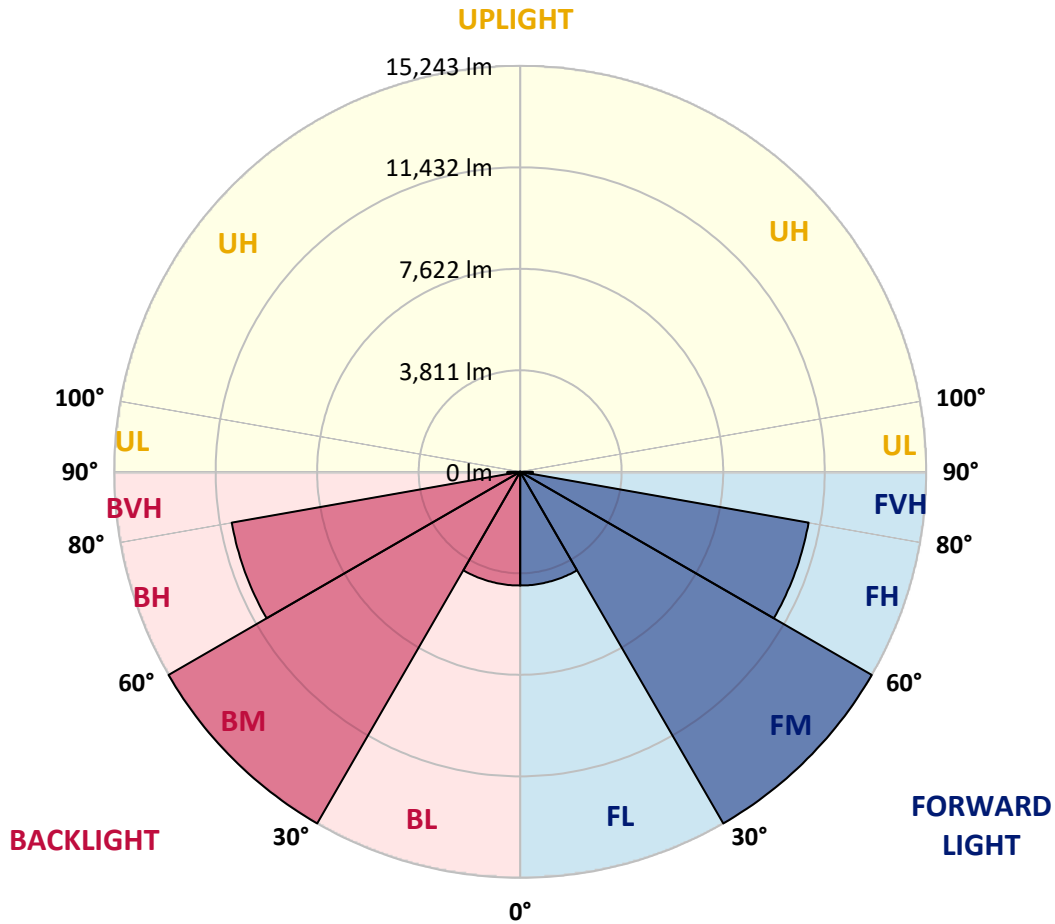
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4268.8	6.9			
FM (30°-60°)	15243.1	24.6			
FH (60°-80°)	10995.1	17.7			G4/12000
FVH (80°-90°)	478.5	0.8			G3/500
BL (0°-30°)	4268.8	6.9	B4/5000		
BM (30°-60°)	15243.1	24.6	B5		
BH (60°-80°)	10995.1	17.7	B5		G5
BVH (80°-90°)	478.5	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°	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5
2.5°	10207.1	10199.8	10197.4	10193.8	10199.8	10204.7	10216.8	10227.7	10225.3	10222.9	10225.3
5°	10150.2	10153.8	10155.0	10156.2	10161.1	10164.7	10181.7	10198.6	10196.2	10193.8	10205.9
7.5°	10070.2	10070.2	10067.8	10065.4	10075.1	10083.6	10100.5	10117.5	10130.8	10142.9	10162.3
10°	9954.0	9949.1	9947.9	9946.7	9957.6	9967.3	9998.8	10030.3	10056.9	10082.4	10115.1
12.5°	9812.3	9811.0	9813.5	9815.9	9838.9	9861.9	9915.2	9968.5	10021.8	10075.1	10122.3
15°	9643.9	9629.4	9641.5	9652.4	9689.9	9726.3	9829.2	9932.2	10013.3	10093.3	10185.3
17.5°	9387.1	9372.6	9390.7	9407.7	9482.8	9557.9	9703.2	9847.4	10000.0	10152.6	10284.6
20°	8998.3	8998.3	9044.3	9090.4	9217.5	9344.7	9544.6	9743.2	9949.1	10155.0	10346.4
22.5°	8584.1	8571.9	8670.1	8768.2	8920.8	9072.2	9324.1	9576.1	9848.6	10119.9	10382.7
25°	8116.5	8137.1	8260.7	8383.0	8597.4	8810.6	9120.6	9429.5	9772.3	10115.1	10479.6
27.5°	7721.7	7725.3	7874.3	8023.3	8292.1	8559.8	8936.5	9313.2	9731.1	10149.0	10608.0
30°	7313.5	7380.1	7537.5	7693.8	7994.2	8294.6	8750.0	9204.2	9699.6	10195.0	10754.6
32.5°	6999.8	7015.5	7193.6	7370.4	7684.1	7997.8	8527.1	9056.4	9651.2	10245.9	10926.6
35°	6704.2	6729.6	6895.6	7061.5	7388.6	7714.4	8294.6	8873.5	9584.5	10294.3	11113.1
37.5°	6441.4	6472.9	6630.3	6787.8	7102.7	7417.6	8032.9	8648.3	9481.6	10314.9	11317.8
40°	6248.8	6275.4	6408.7	6541.9	6826.5	7110.0	7754.4	8397.5	9337.4	10277.4	11478.9
42.5°	6109.5	6121.6	6229.4	6337.2	6591.6	6845.9	7484.2	8121.4	9149.7	10178.0	11603.7
45°	5920.5	5947.2	6053.8	6159.2	6388.1	6615.8	7199.6	7783.4	8871.1	9957.6	11604.9
47.5°	5780.0	5797.0	5897.5	5996.8	6210.0	6423.2	6947.7	7472.1	8556.2	9639.0	11474.1
50°	5677.1	5668.6	5761.9	5853.9	6034.4	6213.7	6681.2	7147.5	8166.2	9184.8	11147.0
52.5°	5530.5	5540.2	5615.3	5690.4	5846.7	6001.7	6420.8	6838.7	7733.8	8627.7	10616.5
55°	5334.3	5379.1	5442.1	5503.9	5640.7	5777.6	6154.3	6531.0	7301.4	8070.5	9933.4
57.5°	5141.7	5174.4	5227.7	5281.0	5388.8	5495.4	5850.3	6205.2	6845.9	7486.7	9071.0
60°	4984.3	4992.7	5026.6	5059.3	5141.7	5224.1	5517.2	5810.3	6369.9	6928.3	8211.0
62.5°	4780.8	4783.2	4806.2	4829.2	4880.1	4929.7	5159.9	5388.8	5866.0	6343.3	7355.9
65°	4462.2	4481.6	4503.4	4524.0	4557.9	4590.6	4766.2	4941.9	5299.2	5656.5	6472.9
67.5°	4140.0	4123.1	4148.5	4173.9	4178.8	4183.6	4316.9	4450.1	4743.2	5036.3	5692.8
70°	3615.6	3628.9	3626.5	3622.8	3602.2	3580.4	3673.7	3767.0	3922.0	4075.8	4550.6
72.5°	2772.5	2754.4	2708.3	2661.1	2639.3	2617.5	2726.5	2834.3	2948.2	3062.0	3404.8
75°	1694.5	1746.6	1842.3	1936.8	1973.1	2009.4	2003.4	1996.1	1986.4	1976.7	2404.3
77.5°	1148.3	1176.1	1197.9	1218.5	1271.8	1323.9	1384.4	1445.0	1443.8	1442.6	1711.5
80°	730.4	708.6	718.3	728.0	758.2	788.5	880.6	971.4	996.9	1021.1	1206.4
82.5°	457.8	461.5	473.6	484.5	450.6	416.7	488.1	558.4	618.9	678.3	764.3
85°	296.8	336.7	330.7	324.6	284.6	244.7	307.7	370.6	399.7	427.6	460.3
87.5°	95.7	111.4	115.1	117.5	117.5	116.3	129.6	142.9	147.8	151.4	163.5
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°	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5	10209.5
2.5°	10226.5	10214.4	10202.3	10198.6	10195.0	10192.6	10190.2	10187.7
5°	10216.8	10214.4	10212.0	10202.3	10192.6	10191.4	10190.2	10193.8
7.5°	10181.7	10181.7	10181.7	10192.6	10203.5	10198.6	10192.6	10199.8
10°	10146.6	10175.6	10204.7	10213.2	10221.7	10227.7	10233.8	10239.8
12.5°	10169.6	10219.2	10267.7	10295.5	10323.4	10337.9	10351.3	10354.9
15°	10277.4	10340.4	10403.3	10440.9	10477.2	10501.4	10525.7	10531.7
17.5°	10416.7	10513.6	10609.2	10663.8	10718.3	10746.1	10772.8	10764.3
20°	10536.6	10669.8	10803.0	10919.3	11035.6	11099.8	11162.8	11170.1
22.5°	10644.4	10868.5	11092.5	11242.7	11391.7	11505.6	11619.4	11631.5
25°	10843.0	11136.1	11429.3	11669.1	11908.9	12013.1	12116.0	12176.6
27.5°	11065.9	11458.3	11850.8	12171.7	12492.7	12651.4	12808.9	12817.3
30°	11313.0	11810.8	12307.4	12738.6	13168.6	13362.4	13555.0	13656.7
32.5°	11606.1	12238.4	12869.4	13436.3	14003.1	14297.5	14591.8	14694.8
35°	11930.7	12750.7	13569.5	14350.8	15130.8	15694.0	16257.3	16528.6
37.5°	12320.7	13364.8	14408.9	15582.6	16756.3	17716.8	18676.1	18949.8
40°	12680.5	14023.7	15365.8	16996.1	18626.4	20150.2	21672.7	21969.5
42.5°	13029.3	14654.8	16280.3	18504.1	20727.9	22767.7	24807.4	25579.0
45°	13251.0	15216.8	17181.4	20113.8	23046.3	25846.6	28645.8	29293.8
47.5°	13307.9	15617.7	17927.6	21560.1	25192.6	28488.4	31782.9	32615.0
50°	13109.2	15826.1	18542.9	23337.0	28129.8	31486.2	34841.3	35524.4
52.5°	12605.4	15759.4	18913.5	24714.1	30514.8	34067.3	37619.9	38240.0
55°	11796.3	15354.9	18913.5	25847.9	32781.0	36465.6	40149.0	41091.3
57.5°	10655.3	14582.1	18509.0	26604.9	34700.8	38702.7	42704.7	43551.3
60°	9493.7	13662.8	17830.7	27022.8	36214.9	40454.2	44693.5	45681.9
62.5°	8367.2	12414.0	16459.5	26584.3	36709.0	41184.6	45658.9	47080.9
65°	7289.2	11027.1	14765.0	25514.8	36263.3	41391.7	46518.9	47793.1
67.5°	6349.3	9868.0	13386.6	23722.1	34057.6	39733.5	45408.2	46996.1
70°	5025.4	8263.1	11500.7	20543.8	29586.9	36234.2	42881.5	44841.3
72.5°	3747.6	6493.5	9238.1	16160.4	23082.6	30726.7	38369.6	40835.7
75°	2830.7	5186.5	7542.4	12773.7	18005.1	24476.7	30948.4	34249.0
77.5°	1980.4	3747.6	5513.6	9416.2	13318.8	16901.6	20484.5	22243.2
80°	1390.5	2370.4	3349.1	5226.5	7102.7	8691.9	10279.8	10153.8
82.5°	849.1	1260.9	1671.5	2267.4	2863.4	3247.3	3631.3	3614.3
85°	493.0	599.6	704.9	873.3	1041.7	1231.8	1422.0	1264.5
87.5°	174.4	174.4	174.4	199.9	225.3	310.1	394.9	416.7
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-CA8-400-730-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)