

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: P721897

Luminaire Tested: **CST-CA8-430-727-U-T1**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721897
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-CA8-430-727-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: 57380 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

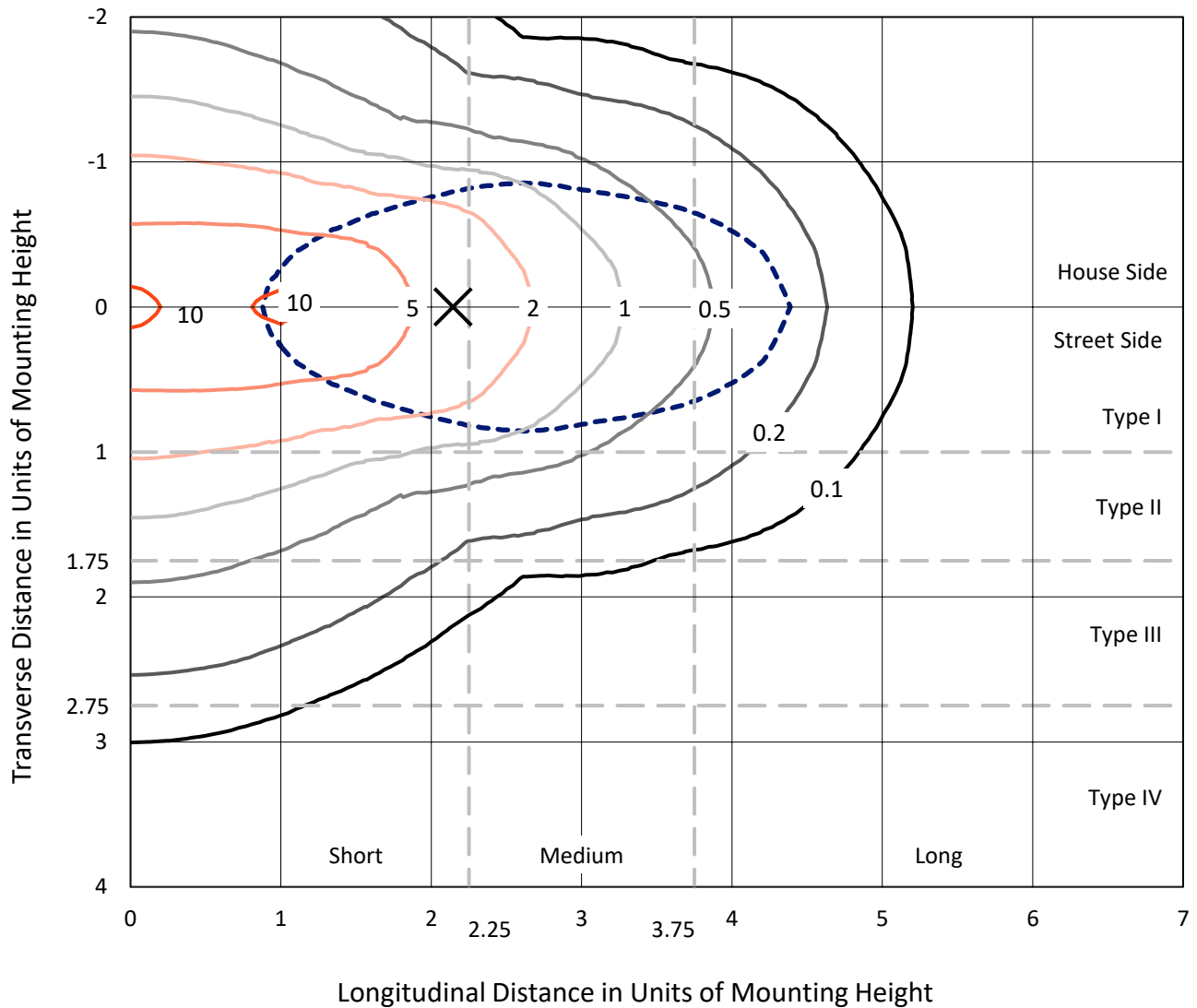
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

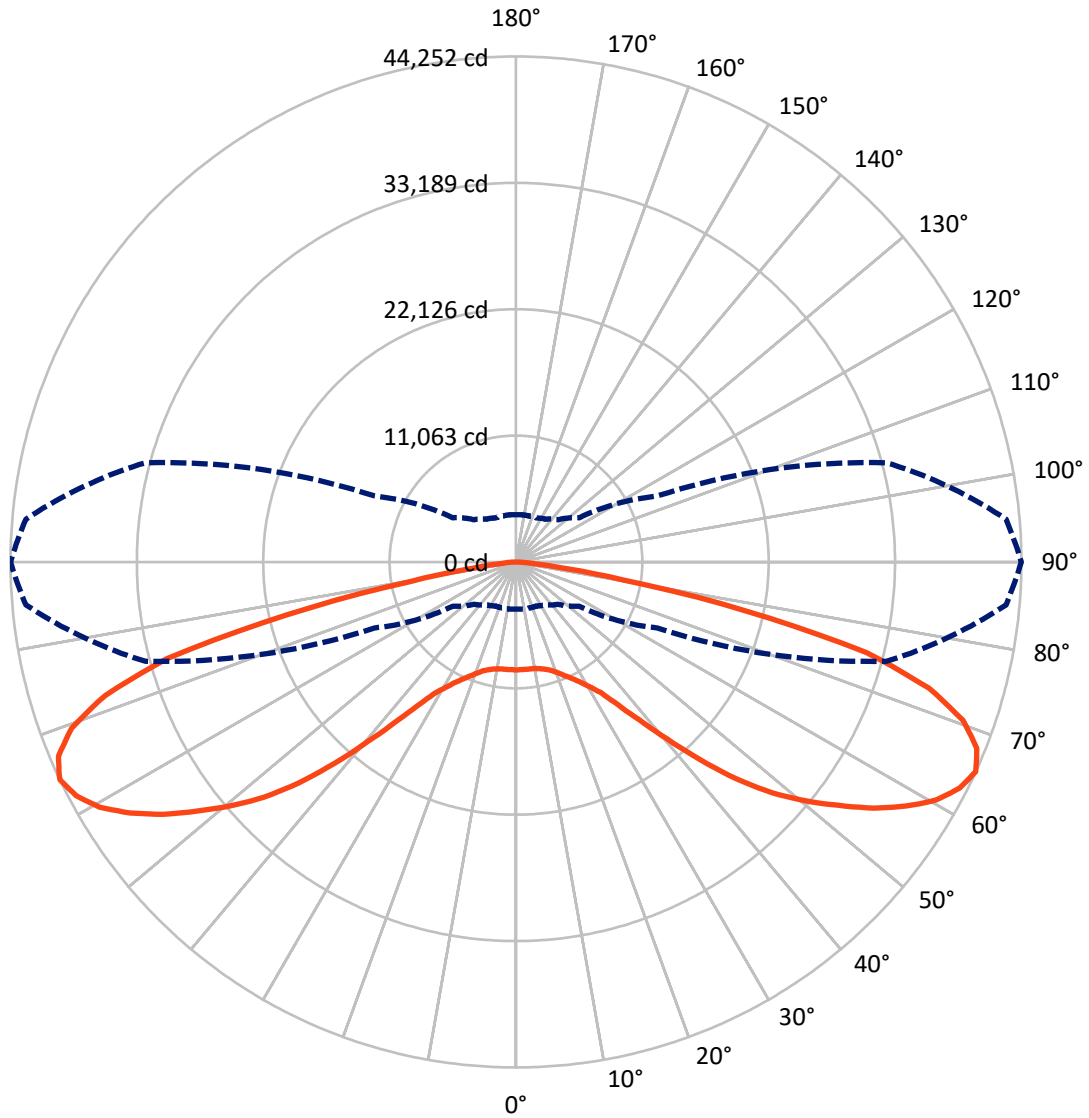
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.7 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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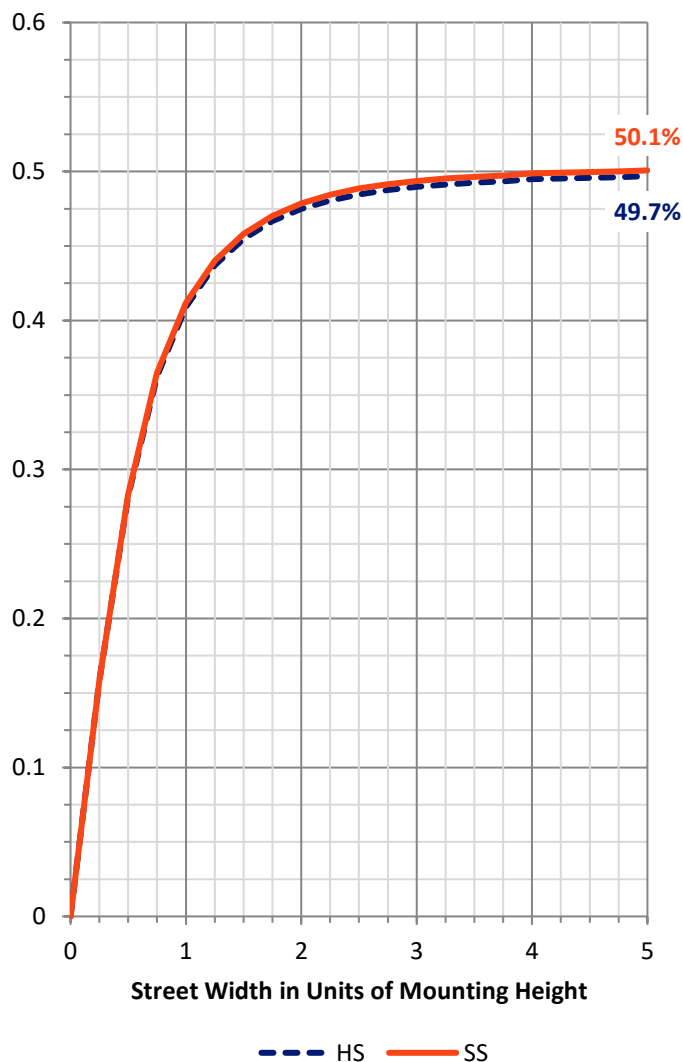
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	28690.0	0.0	28690.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	28690.0	0.0	28690.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	57380.0	0.0	57380.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	897.1	1.6
10°-20°	2647.3	4.6
20°-30°	4360.7	7.6
30°-40°	6389.0	11.1
40°-50°	9446.8	16.5
50°-60°	12391.8	21.6
60°-70°	12928.2	22.5
70°-80°	7433.0	13.0
80°-90°	886.1	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°	57380.0	100.0
0°-180°	57380.0	100.0

Coefficient of Utilization



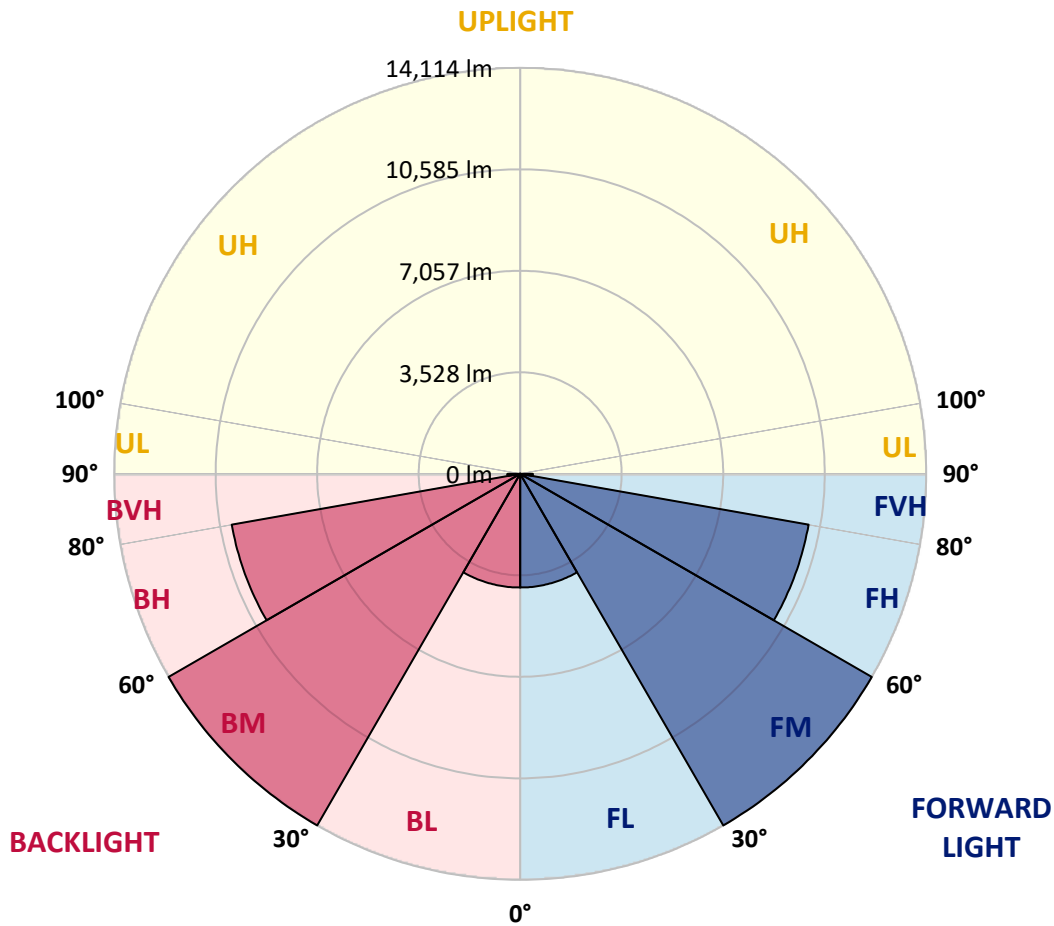
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3952.6	6.9			
FM (30°-60°)	14113.8	24.6			
FH (60°-80°)	10180.6	17.7			G4/12000
FVH (80°-90°)	443.0	0.8			G3/500
BL (0°-30°)	3952.6	6.9	B4/5000		
BM (30°-60°)	14113.8	24.6	B5		
BH (60°-80°)	10180.6	17.7	B5		G5
BVH (80°-90°)	443.0	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°	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2
2.5°	9450.9	9444.2	9442.0	9438.6	9444.2	9448.7	9459.9	9470.0	9467.8	9465.5	9467.8
5°	9398.2	9401.6	9402.7	9403.8	9408.3	9411.7	9427.4	9443.1	9440.8	9438.6	9449.8
7.5°	9324.2	9324.2	9322.0	9319.7	9328.7	9336.5	9352.2	9368.0	9380.3	9391.5	9409.4
10°	9216.5	9212.1	9210.9	9209.8	9219.9	9228.9	9258.0	9287.2	9311.9	9335.4	9365.7
12.5°	9085.3	9084.2	9086.5	9088.7	9110.0	9131.3	9180.7	9230.0	9279.4	9328.7	9372.4
15°	8929.4	8916.0	8927.2	8937.3	8972.1	9005.7	9101.0	9196.4	9271.5	9345.5	9430.8
17.5°	8691.7	8678.2	8695.0	8710.7	8780.3	8849.8	8984.4	9117.9	9259.2	9400.5	9522.7
20°	8331.7	8331.7	8374.3	8416.9	8534.7	8652.4	8837.5	9021.4	9212.1	9402.7	9579.9
22.5°	7948.1	7936.9	8027.7	8118.6	8259.9	8400.1	8633.4	8866.6	9119.0	9370.2	9613.6
25°	7515.2	7534.3	7648.7	7762.0	7960.5	8157.8	8444.9	8730.9	9048.3	9365.7	9703.3
27.5°	7149.6	7153.0	7290.9	7428.9	7677.8	7925.7	8274.5	8623.3	9010.2	9397.1	9822.2
30°	6771.7	6833.3	6979.1	7123.8	7401.9	7680.1	8101.8	8522.3	8981.0	9439.7	9957.9
32.5°	6481.2	6495.8	6660.6	6824.4	7114.8	7405.3	7895.4	8385.5	8936.2	9486.8	10117.1
35°	6207.5	6231.1	6384.7	6538.4	6841.2	7142.9	7680.1	8216.2	8874.5	9531.7	10289.8
37.5°	5964.2	5993.3	6139.1	6284.9	6576.5	6868.1	7437.8	8007.6	8779.2	9550.8	10479.4
40°	5785.9	5810.5	5933.9	6057.3	6320.8	6583.2	7179.9	7775.4	8645.7	9516.0	10628.5
42.5°	5656.9	5668.1	5767.9	5867.7	6103.2	6338.8	6929.8	7519.7	8471.9	9424.0	10744.0
45°	5481.9	5506.6	5605.3	5702.9	5914.8	6125.7	6666.2	7206.8	8213.9	9219.9	10745.2
47.5°	5351.8	5367.5	5460.6	5552.6	5750.0	5947.4	6433.0	6918.6	7922.3	8925.0	10624.0
50°	5256.5	5248.7	5335.0	5420.2	5587.3	5753.3	6186.2	6618.0	7561.2	8504.4	10321.2
52.5°	5120.8	5129.8	5199.3	5268.8	5413.5	5557.1	5945.1	6332.0	7160.8	7988.5	9830.0
55°	4939.1	4980.6	5038.9	5096.1	5222.9	5349.6	5698.4	6047.2	6760.4	7472.6	9197.5
57.5°	4760.8	4791.1	4840.4	4889.8	4989.6	5088.3	5416.9	5745.5	6338.8	6932.0	8399.0
60°	4615.0	4622.9	4654.3	4684.5	4760.8	4837.1	5108.5	5379.9	5898.0	6415.0	7602.7
62.5°	4426.6	4428.8	4450.1	4471.4	4518.6	4564.5	4777.6	4989.6	5431.5	5873.3	6810.9
65°	4131.6	4149.6	4169.8	4188.8	4220.2	4250.5	4413.1	4575.7	4906.6	5237.4	5993.3
67.5°	3833.3	3817.6	3841.2	3864.7	3869.2	3873.7	3997.1	4120.4	4391.8	4663.2	5271.1
70°	3347.7	3360.0	3357.8	3354.4	3335.4	3315.2	3401.5	3487.9	3631.4	3773.9	4213.5
72.5°	2567.1	2550.3	2507.7	2464.0	2443.8	2423.6	2524.5	2624.3	2729.7	2835.2	3152.6
75°	1569.0	1617.2	1705.8	1793.3	1826.9	1860.6	1855.0	1848.2	1839.3	1830.3	2226.2
77.5°	1063.2	1089.0	1109.2	1128.2	1177.6	1225.8	1281.9	1338.0	1336.8	1335.7	1584.7
80°	676.3	656.1	665.1	674.0	702.1	730.1	815.3	899.4	923.0	945.4	1117.0
82.5°	423.9	427.3	438.5	448.6	417.2	385.8	452.0	517.0	573.1	628.0	707.7
85°	274.8	311.8	306.2	300.6	263.6	226.5	284.9	343.2	370.1	395.9	426.2
87.5°	88.6	103.2	106.5	108.8	108.8	107.7	120.0	132.3	136.8	140.2	151.4
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°	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2	9453.2
2.5°	9468.9	9457.7	9446.5	9443.1	9439.7	9437.5	9435.2	9433.0
5°	9459.9	9457.7	9455.4	9446.5	9437.5	9436.4	9435.2	9438.6
7.5°	9427.4	9427.4	9427.4	9437.5	9447.6	9443.1	9437.5	9444.2
10°	9394.9	9421.8	9448.7	9456.5	9464.4	9470.0	9475.6	9481.2
12.5°	9416.2	9462.2	9507.0	9532.8	9558.6	9572.1	9584.4	9587.8
15°	9516.0	9574.3	9632.6	9667.4	9701.0	9723.5	9745.9	9751.5
17.5°	9645.0	9734.7	9823.3	9873.7	9924.2	9950.0	9974.7	9966.8
20°	9756.0	9879.4	10002.7	10110.4	10218.1	10277.5	10335.8	10342.5
22.5°	9855.8	10063.3	10270.8	10409.8	10547.8	10653.2	10758.6	10769.8
25°	10039.7	10311.1	10582.5	10804.6	11026.7	11123.1	11218.4	11274.5
27.5°	10246.1	10609.5	10972.8	11270.0	11567.2	11714.1	11859.9	11867.8
30°	10474.9	10935.8	11395.6	11794.9	12193.0	12372.5	12550.8	12645.0
32.5°	10746.3	11331.7	11916.0	12440.9	12965.7	13238.3	13510.8	13606.1
35°	11046.8	11806.1	12564.2	13287.6	14009.9	14531.4	15052.9	15304.1
37.5°	11408.0	12374.7	13341.5	14428.2	15514.9	16404.3	17292.5	17546.0
40°	11741.1	12984.8	14227.4	15737.0	17246.5	18657.4	20067.1	20341.9
42.5°	12064.1	13569.1	15074.2	17133.3	19192.4	21081.0	22969.6	23684.0
45°	12269.3	14089.5	15908.6	18623.7	21338.9	23931.8	26523.6	27123.7
47.5°	12322.0	14460.7	16599.4	19962.8	23326.2	26377.9	29428.4	30198.8
50°	12138.1	14653.6	17169.2	21608.1	26045.9	29153.6	32260.2	32892.7
52.5°	11671.5	14591.9	17512.3	22883.2	28254.1	31543.5	34832.9	35407.1
55°	10922.4	14217.3	17512.3	23933.0	30352.5	33764.1	37174.6	38047.1
57.5°	9865.9	13501.8	17137.8	24633.9	32130.1	35835.5	39541.0	40324.9
60°	8790.4	12650.6	16509.7	25020.8	33531.9	37457.2	41382.5	42297.6
62.5°	7747.4	11494.3	15240.2	24614.8	33989.5	38133.5	42276.3	43593.0
65°	6749.2	10210.2	13671.2	23624.6	33576.8	38325.3	43072.6	44252.4
67.5°	5878.9	9136.9	12394.9	21964.7	31534.5	36789.9	42044.2	43514.5
70°	4653.1	7650.9	10648.7	19021.9	27395.1	33549.9	39704.7	41519.3
72.5°	3469.9	6012.4	8553.7	14963.1	21372.6	28450.4	35527.1	37810.5
75°	2621.0	4802.3	6983.6	11827.4	16671.2	22663.4	28655.6	31711.7
77.5°	1833.7	3469.9	5105.1	8718.6	12332.1	15649.5	18966.9	20595.4
80°	1287.5	2194.8	3101.0	4839.3	6576.5	8047.9	9518.2	9401.6
82.5°	786.2	1167.5	1547.7	2099.5	2651.2	3006.8	3362.3	3346.6
85°	456.5	555.1	652.7	808.6	964.5	1140.6	1316.6	1170.9
87.5°	161.5	161.5	161.5	185.0	208.6	287.1	365.6	385.8
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-CA8-430-727-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)