

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: P721867

Luminaire Tested: **CST-CA8-400-750-U-T1**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721867
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-CA8-400-750-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 64271 lumens
Efficiency: N/A
Efficacy: 160.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

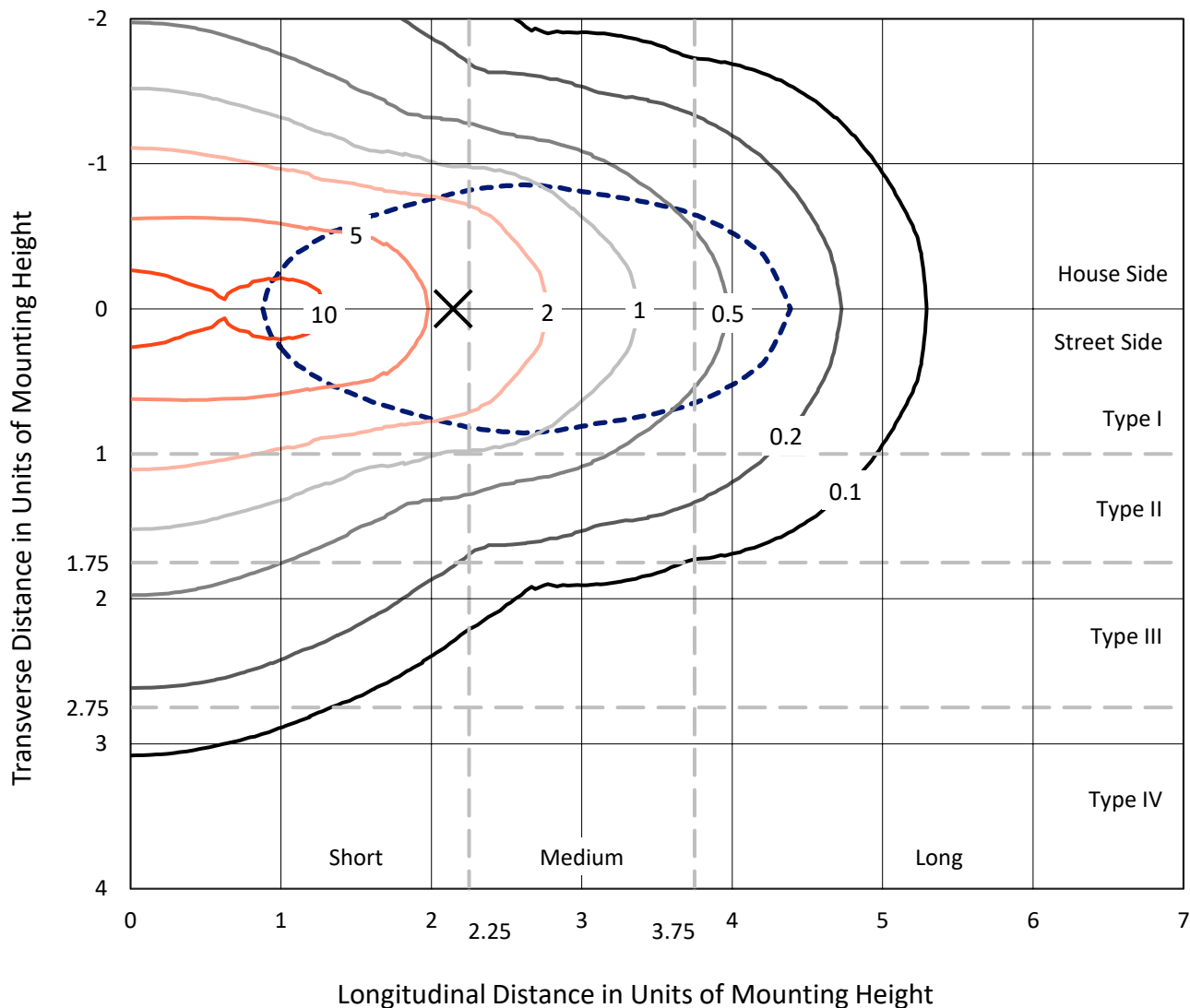
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

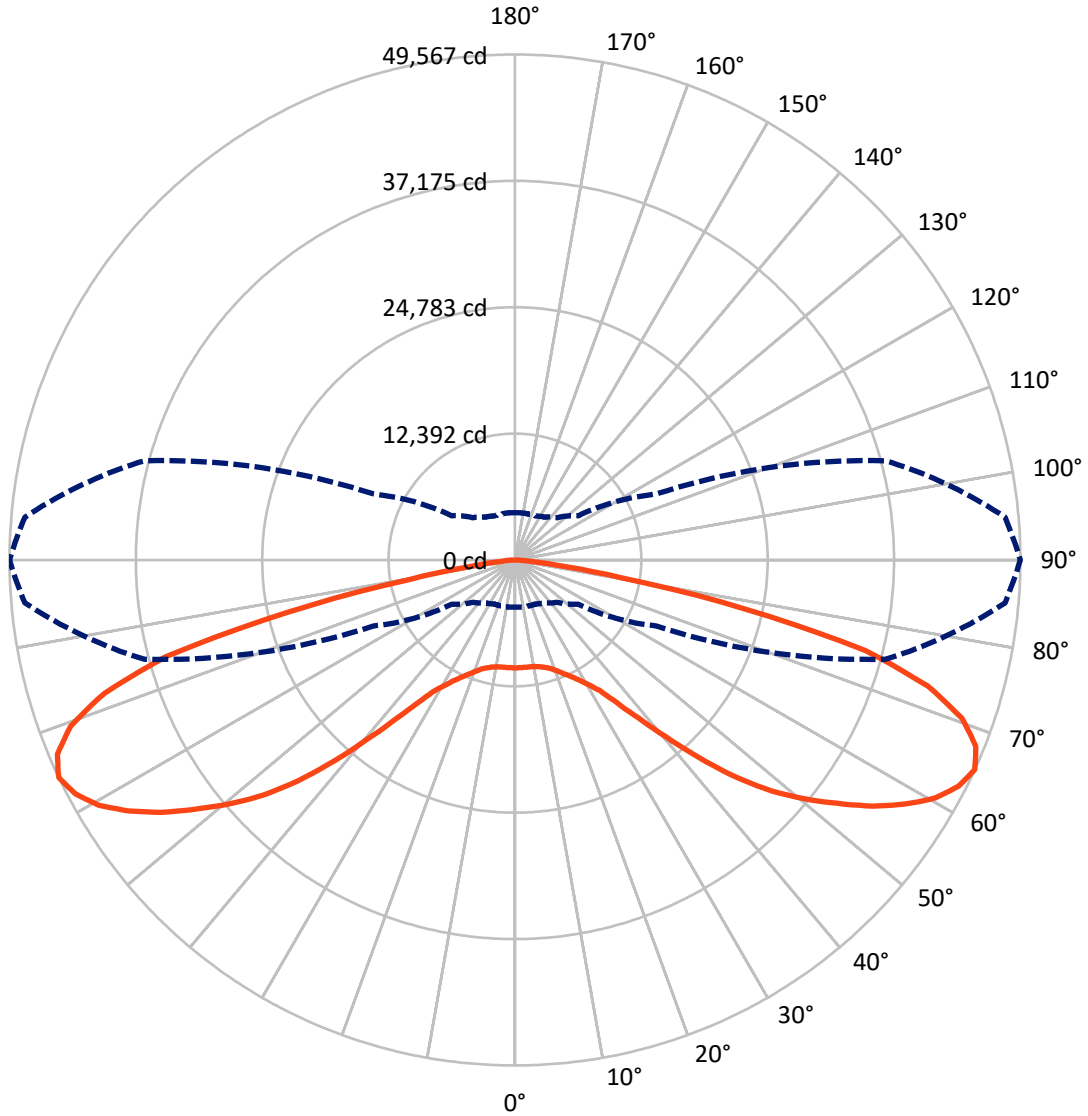
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.9 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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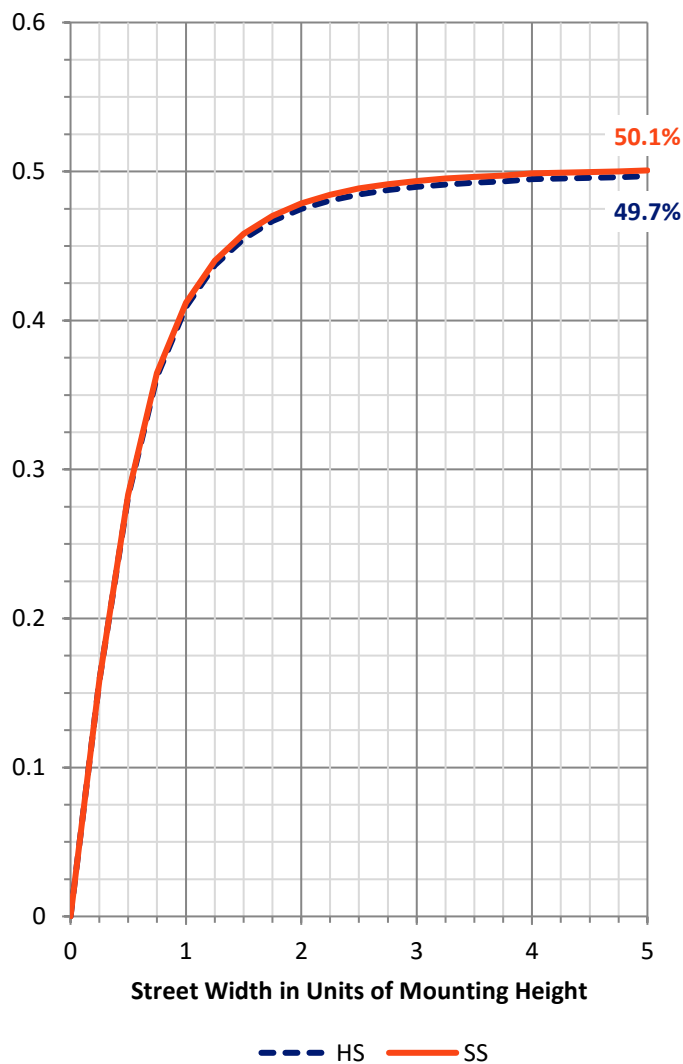
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	32135.5	0.0	32135.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	32135.5	0.0	32135.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	64271.0	0.0	64271.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1004.8	1.6
10°-20°	2965.2	4.6
20°-30°	4884.4	7.6
30°-40°	7156.3	11.1
40°-50°	10581.4	16.5
50°-60°	13880.0	21.6
60°-70°	14480.8	22.5
70°-80°	8325.6	13.0
80°-90°	992.5	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°	64271.0	100.0
0°-180°	64271.0	100.0

Coefficient of Utilization



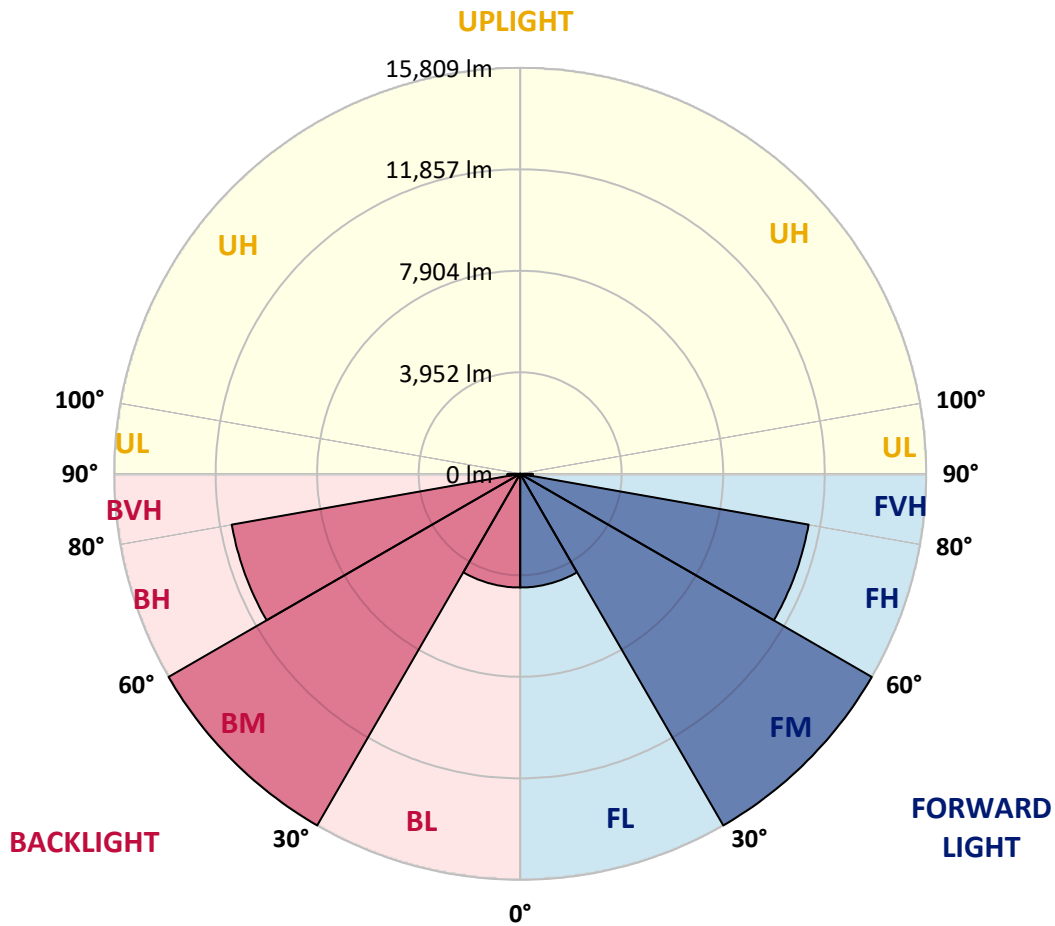
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4427.2	6.9			
FM (30°-60°)	15808.8	24.6			
FH (60°-80°)	11403.2	17.7			G4/12000
FVH (80°-90°)	496.3	0.8			G3/500
BL (0°-30°)	4427.2	6.9	B4/5000		
BM (30°-60°)	15808.8	24.6	B5		
BH (60°-80°)	11403.2	17.7	B5		G5
BVH (80°-90°)	496.3	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°	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5
2.5°	10585.9	10578.4	10575.9	10572.1	10578.4	10583.4	10596.0	10607.3	10604.8	10602.3	10604.8
5°	10526.9	10530.7	10531.9	10533.2	10538.2	10542.0	10559.6	10577.2	10574.6	10572.1	10584.7
7.5°	10444.0	10444.0	10441.5	10439.0	10449.0	10457.8	10475.4	10493.0	10506.8	10519.4	10539.5
10°	10323.4	10318.4	10317.1	10315.9	10327.2	10337.2	10369.9	10402.5	10430.2	10456.6	10490.5
12.5°	10176.4	10175.2	10177.7	10180.2	10204.1	10227.9	10283.2	10338.5	10393.7	10449.0	10498.0
15°	10001.8	9986.7	9999.3	10010.6	10049.5	10087.2	10194.0	10300.8	10385.0	10467.9	10563.3
17.5°	9735.5	9720.4	9739.3	9756.9	9834.7	9912.6	10063.4	10212.9	10371.1	10529.4	10666.3
20°	9332.3	9332.3	9380.0	9427.7	9559.6	9691.5	9898.8	10104.8	10318.4	10531.9	10730.4
22.5°	8902.6	8890.1	8991.8	9093.6	9251.9	9408.9	9670.2	9931.5	10214.1	10495.5	10768.1
25°	8417.8	8439.1	8567.2	8694.1	8916.5	9137.6	9459.1	9779.5	10135.0	10490.5	10868.6
27.5°	8008.2	8012.0	8166.5	8321.0	8599.9	8877.5	9268.2	9658.9	10092.3	10525.6	11001.7
30°	7584.9	7654.0	7817.3	7979.3	8290.9	8602.4	9074.7	9545.8	10059.6	10573.4	11153.7
32.5°	7259.5	7275.9	7460.5	7643.9	7969.3	8294.6	8843.6	9392.6	10009.4	10626.1	11332.1
35°	6953.0	6979.4	7151.5	7323.6	7662.8	8000.7	8602.4	9202.9	9940.3	10676.4	11525.6
37.5°	6680.4	6713.1	6876.4	7039.7	7366.3	7692.9	8331.1	8969.2	9833.5	10697.7	11737.9
40°	6480.7	6508.3	6646.5	6784.7	7079.9	7373.9	8042.2	8709.2	9684.0	10658.8	11904.9
42.5°	6336.2	6348.8	6460.6	6572.4	6836.2	7100.0	7762.0	8422.8	9489.3	10555.8	12034.3
45°	6140.3	6167.9	6278.5	6387.7	6625.2	6861.3	7466.8	8072.3	9200.4	10327.2	12035.6
47.5°	5994.6	6012.1	6116.4	6219.4	6440.5	6661.6	7205.5	7749.5	8873.8	9996.8	11899.9
50°	5887.8	5879.0	5975.7	6071.2	6258.4	6444.3	6929.2	7412.8	8469.3	9525.7	11560.8
52.5°	5735.8	5745.8	5823.7	5901.6	6063.6	6224.4	6659.1	7092.5	8020.8	8947.9	11010.5
55°	5532.3	5578.8	5644.1	5708.1	5850.1	5992.0	6382.7	6773.4	7572.3	8370.0	10302.0
57.5°	5332.5	5366.5	5421.7	5477.0	5588.8	5699.4	6067.4	6435.5	7100.0	7764.5	9407.6
60°	5169.2	5178.0	5213.2	5247.1	5332.5	5418.0	5722.0	6026.0	6606.3	7185.4	8515.7
62.5°	4958.2	4960.7	4984.6	5008.4	5061.2	5112.7	5351.4	5588.8	6083.7	6578.7	7628.9
65°	4627.8	4647.9	4670.5	4691.9	4727.1	4761.0	4943.1	5125.3	5495.8	5866.4	6713.1
67.5°	4293.7	4276.1	4302.5	4328.8	4333.9	4338.9	4477.1	4615.3	4919.3	5223.3	5904.1
70°	3749.7	3763.6	3761.0	3757.3	3735.9	3713.3	3810.0	3906.8	4067.6	4227.1	4719.5
72.5°	2875.4	2856.6	2808.8	2759.9	2737.2	2714.6	2827.7	2939.5	3057.6	3175.7	3531.2
75°	1757.4	1811.4	1910.7	2008.7	2046.3	2084.0	2077.7	2070.2	2060.2	2050.1	2493.5
77.5°	1190.9	1219.8	1242.4	1263.7	1319.0	1373.0	1435.8	1498.6	1497.4	1496.1	1775.0
80°	757.5	734.9	744.9	755.0	786.4	817.8	913.3	1007.5	1033.8	1059.0	1251.2
82.5°	474.8	478.6	491.2	502.5	467.3	432.1	506.2	579.1	641.9	703.5	792.7
85°	307.8	349.2	342.9	336.7	295.2	253.8	319.1	384.4	414.5	443.4	477.4
87.5°	99.2	115.6	119.3	121.9	121.9	120.6	134.4	148.2	153.3	157.0	169.6
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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 CATALOG NUMBER: CST-CA8-400-750-U-T1

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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CATALOG NUMBER: CST-CA8-400-750-U-T1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5	10588.5
2.5°	10606.0	10593.5	10580.9	10577.2	10573.4	10570.9	10568.4	10565.8
5°	10596.0	10593.5	10591.0	10580.9	10570.9	10569.6	10568.4	10572.1
7.5°	10559.6	10559.6	10559.6	10570.9	10582.2	10577.2	10570.9	10578.4
10°	10523.1	10553.3	10583.4	10592.2	10601.0	10607.3	10613.6	10619.9
12.5°	10547.0	10598.5	10648.8	10677.6	10706.5	10721.6	10735.4	10739.2
15°	10658.8	10724.1	10789.4	10828.4	10866.1	10891.2	10916.3	10922.6
17.5°	10803.3	10903.8	11003.0	11059.5	11116.1	11145.0	11172.6	11163.8
20°	10927.6	11065.8	11204.0	11324.6	11445.2	11511.8	11577.1	11584.6
22.5°	11039.4	11271.8	11504.2	11660.0	11814.5	11932.6	12050.7	12063.2
25°	11245.4	11549.4	11853.4	12102.2	12350.9	12458.9	12565.7	12628.5
27.5°	11476.6	11883.6	12290.6	12623.5	12956.4	13120.9	13284.2	13293.0
30°	11732.8	12249.1	12764.2	13211.4	13657.3	13858.3	14058.1	14163.6
32.5°	12036.8	12692.6	13347.1	13935.0	14522.9	14828.1	15133.4	15240.1
35°	12373.5	13224.0	14073.1	14883.4	15692.4	16276.5	16860.6	17142.0
37.5°	12778.0	13860.8	14943.7	16160.9	17378.2	18374.3	19369.3	19653.1
40°	13151.1	14544.2	15936.1	17626.9	19317.7	20898.0	22477.1	22784.8
42.5°	13512.9	15198.7	16884.5	19190.9	21497.2	23612.7	25728.1	26528.3
45°	13742.8	15781.6	17819.1	20860.4	23901.6	26805.9	29709.0	30381.0
47.5°	13801.8	16197.4	18592.9	22360.2	26127.6	29545.7	32962.5	33825.5
50°	13595.8	16413.4	19231.1	24203.1	29173.8	32654.8	36134.4	36842.9
52.5°	13073.2	16344.3	19615.5	25631.4	31647.3	35331.7	39016.1	39659.3
55°	12234.1	15924.8	19615.5	26807.2	33997.6	37819.0	41639.1	42616.4
57.5°	11050.7	15123.3	19195.9	27592.3	35988.7	40139.2	44289.6	45167.7
60°	9846.0	14169.9	18492.4	28025.7	37558.9	41955.6	46352.3	47377.3
62.5°	8677.8	12874.7	17070.4	27570.9	38071.5	42713.1	47353.5	48828.2
65°	7559.8	11436.4	15313.0	26461.7	37609.2	42927.9	48245.4	49566.9
67.5°	6585.0	10234.2	13883.5	24602.6	35321.7	41208.2	47093.4	48740.3
70°	5211.9	8569.8	11927.6	21306.3	30685.0	37579.0	44473.0	46505.5
72.5°	3886.7	6734.5	9581.0	16760.1	23939.3	31867.1	39793.7	42351.3
75°	2935.7	5379.0	7822.3	13247.8	18673.3	25385.2	32097.0	35520.1
77.5°	2053.9	3886.7	5718.2	9765.6	13813.1	17528.9	21244.7	23068.7
80°	1442.1	2458.4	3473.4	5420.5	7366.3	9014.4	10661.3	10530.7
82.5°	880.6	1307.7	1733.5	2351.6	2969.6	3367.9	3766.1	3748.5
85°	511.3	621.8	731.1	905.7	1080.3	1277.5	1474.8	1311.5
87.5°	180.9	180.9	180.9	207.3	233.7	321.6	409.5	432.1
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: P721867
 CATALOG NUMBER: CST-CA8-400-750-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)