

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: P579567

Luminaire Tested: **CST-CA8-480-750-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579567
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-750-U-T5N-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59669 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G5

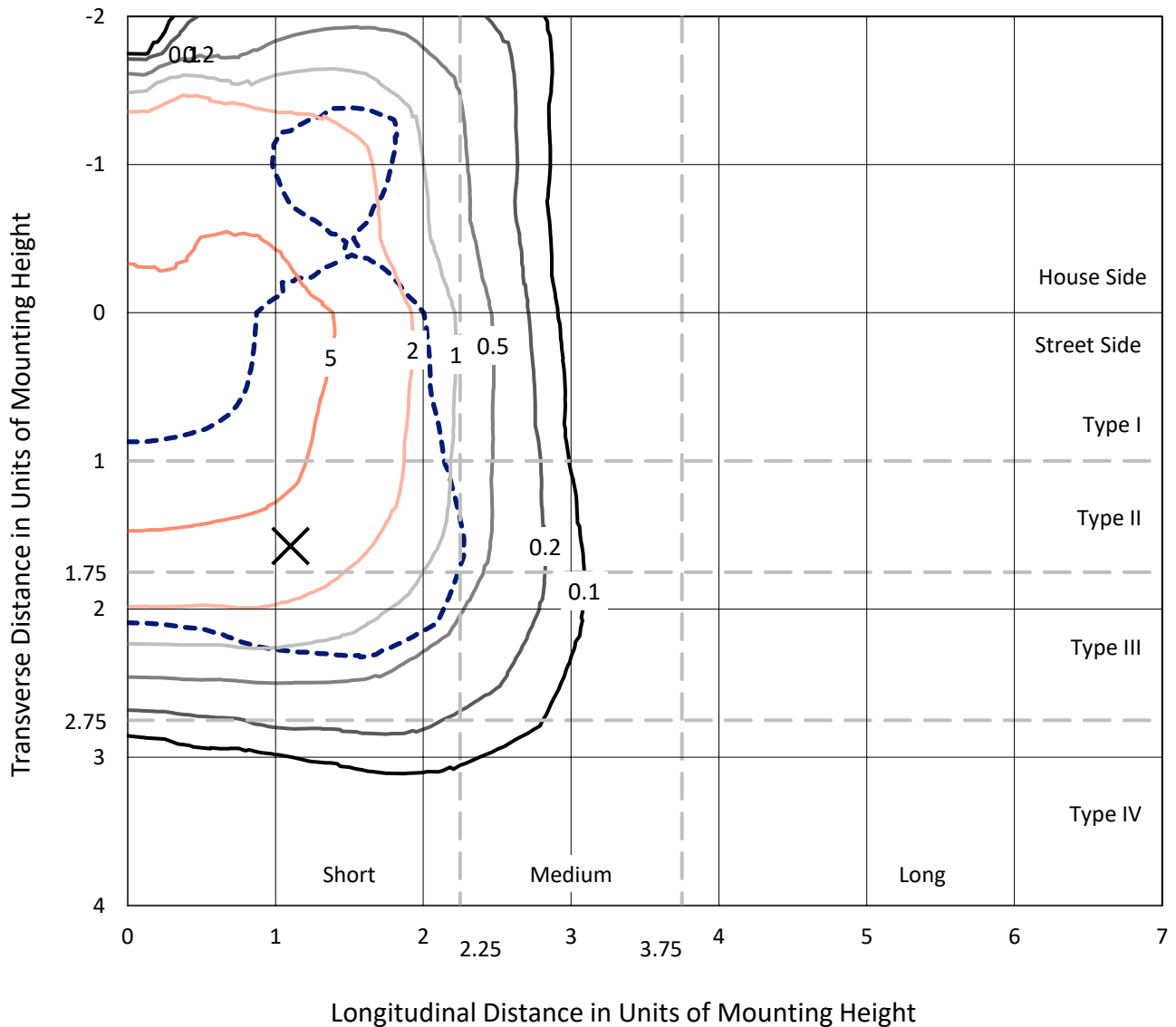
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

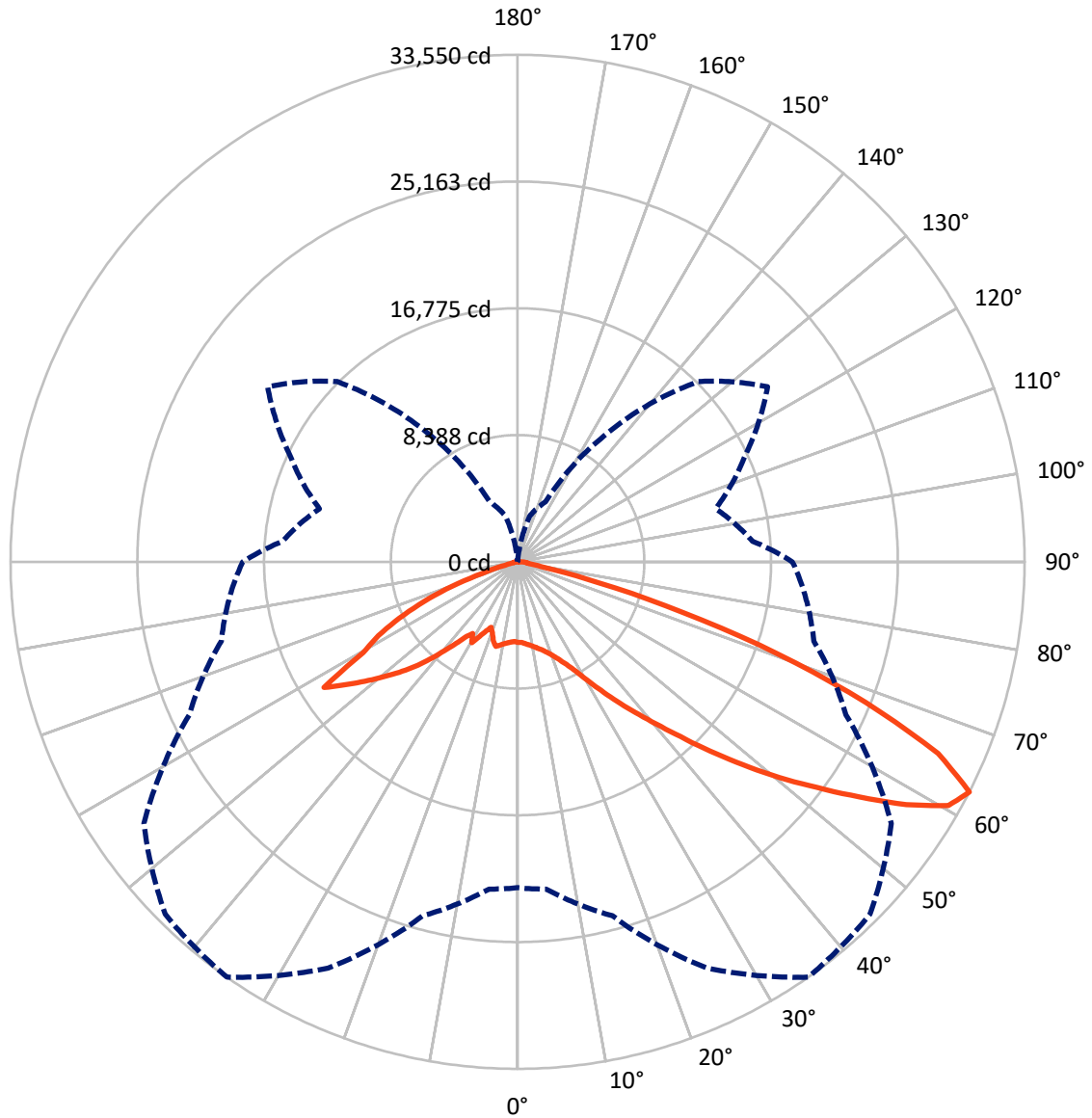
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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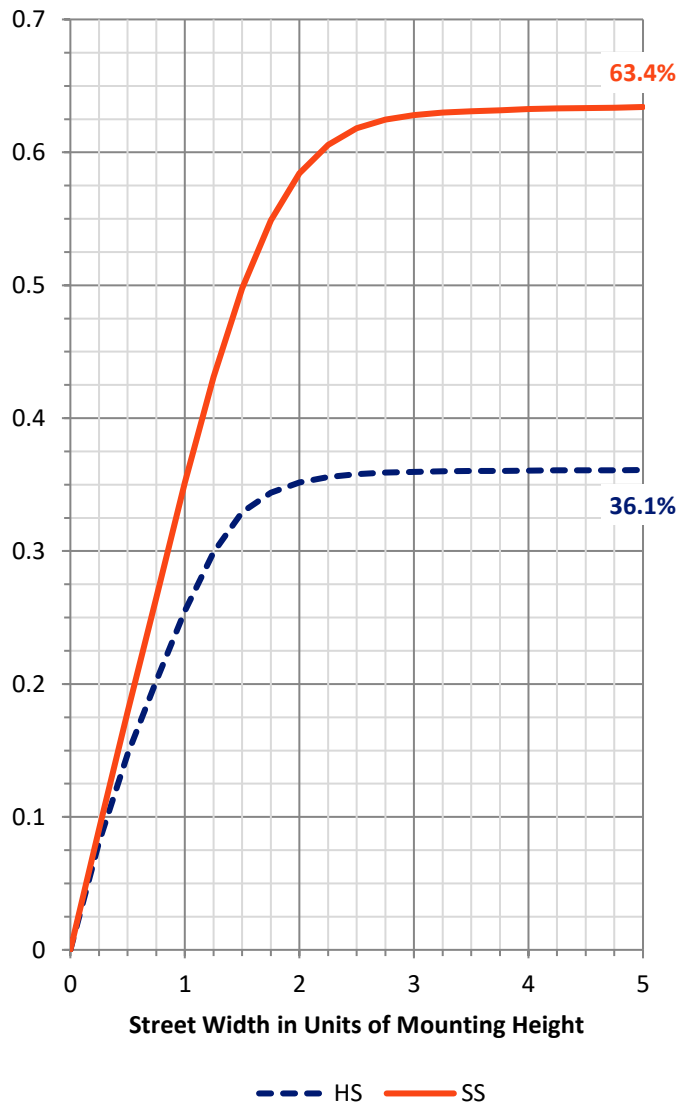
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21658.4	0.0	21658.5
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	37982.3	28.3	38010.5
	% Fixture	63.7	0.0	63.7
Total	Lumens	59640.7	28.3	59669.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	524.9	0.9
10°-20°	1696.4	2.8
20°-30°	3263.7	5.5
30°-40°	6510.7	10.9
40°-50°	11888.2	19.9
50°-60°	17765.1	29.8
60°-70°	14885.4	24.9
70°-80°	2785.7	4.7
80°-90°	320.7	0.5
90°-100°	25.5	0.0
100°-110°	2.7	0.0
110°-120°	0.1	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°	59640.7	100.0
0°-180°	59669.0	100.0

Coefficient of Utilization



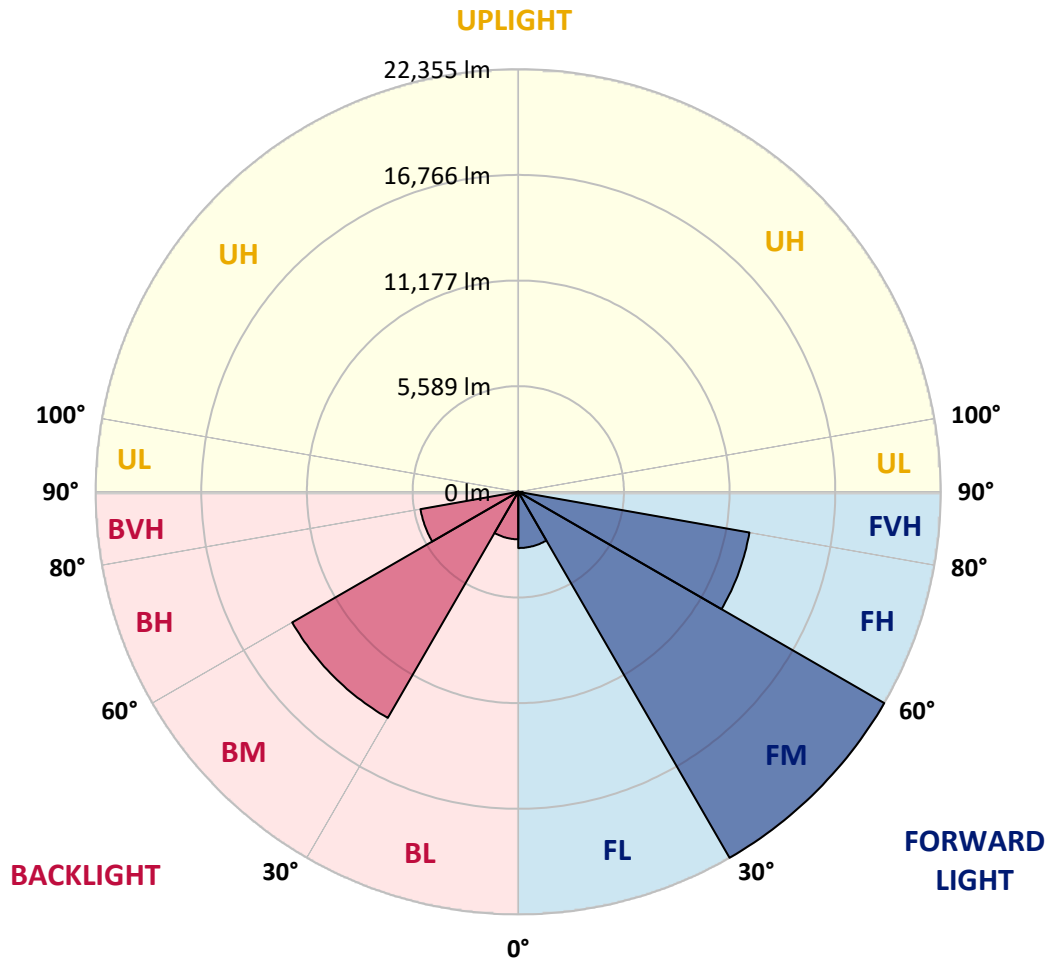
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2975.2	5.0			
FM (30°-60°)	22354.7	37.5			
FH (60°-80°)	12418.8	20.8			G5
FVH (80°-90°)	233.5	0.4			G3/500
BL (0°-30°)	2509.8	4.2	B4/5000		
BM (30°-60°)	13809.2	23.1	B5		
BH (60°-80°)	5252.3	8.8	B5		G5
BVH (80°-90°)	87.1	0.1			G1/100
UL (90°-100°)	25.5	0.0		U2/50	
UH (100°-180°)	2.8	0.0		U1/10	

BUG Rating: B5-U2-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0
2.5°	5453.0	5408.3	5415.0	5446.3	5347.9	5388.2	5345.7	5385.9	5372.5	5390.4	5403.8
5°	5531.3	5475.4	5479.9	5515.7	5439.6	5473.2	5430.7	5457.5	5435.2	5459.8	5462.0
7.5°	5638.7	5591.7	5585.0	5620.8	5555.9	5585.0	5542.5	5555.9	5533.6	5562.6	5553.7
10°	5781.8	5739.3	5728.2	5752.8	5701.3	5717.0	5672.2	5690.1	5656.6	5690.1	5674.5
12.5°	5940.6	5884.7	5887.0	5913.8	5862.4	5873.5	5837.8	5857.9	5817.6	5853.4	5842.2
15°	6128.5	6048.0	6063.7	6092.7	6043.5	6077.1	6034.6	6063.7	6025.6	6063.7	6050.2
17.5°	6372.3	6280.6	6291.8	6338.8	6298.5	6352.2	6303.0	6338.8	6320.9	6345.5	6341.0
20°	6681.0	6620.6	6609.4	6667.6	6609.4	6676.5	6649.7	6712.3	6716.8	6741.4	6752.6
22.5°	7092.5	7052.3	7025.4	7065.7	7014.3	7061.2	7099.2	7206.6	7246.9	7311.7	7316.2
25°	7640.5	7638.3	7577.9	7580.1	7515.3	7577.9	7685.3	7853.0	7960.4	8043.1	8011.8
27.5°	8380.9	8394.3	8302.6	8266.8	8190.8	8284.7	8506.1	8714.1	8908.7	9025.0	9025.0
30°	9347.1	9360.5	9226.3	9154.8	9085.4	9248.7	9512.6	9783.3	10060.6	10228.4	10190.4
32.5°	10626.5	10584.0	10391.7	10261.9	10143.4	10331.3	10635.5	10941.9	11319.9	11561.4	11532.4
35°	12178.8	12024.4	11832.1	11590.5	11335.5	11483.2	11769.5	12154.2	12679.8	13042.1	12950.4
37.5°	13981.5	13829.4	13500.6	13084.6	12639.5	12657.4	12883.3	13549.9	14207.4	14502.7	14440.1
40°	15853.6	15735.1	15433.1	14898.6	14093.4	13907.7	14279.0	15082.0	15710.5	16081.8	15976.7
42.5°	17761.5	17640.8	17412.6	16875.8	15808.9	15361.6	15748.5	16623.1	17294.1	17658.7	17537.9
45°	19665.0	19526.3	19345.1	18870.9	17853.2	17197.9	17414.9	18217.8	18830.7	19244.5	18996.2
47.5°	21338.0	21246.3	21123.3	20930.9	20040.7	19316.0	19300.4	19830.5	20253.2	20526.1	20221.9
50°	22794.1	22729.2	22798.6	22758.3	22434.0	21774.2	21369.3	21333.5	21470.0	21669.0	21235.1
52.5°	24100.3	23986.2	24243.5	24563.3	24802.6	24668.4	23357.7	22621.9	22472.0	22539.1	22047.0
55°	25169.5	25115.8	25547.5	26350.4	27457.6	27752.8	25399.8	23874.4	23321.9	23286.2	22727.0
57.5°	25822.6	25898.6	26762.0	28291.9	30322.8	30416.7	27907.2	25214.2	24149.5	23764.8	23120.6
60°	24782.5	25075.5	26549.5	29705.5	32754.1	32812.2	29748.0	25460.2	23116.2	22255.0	21456.5
62.5°	21566.1	21740.6	24247.9	29658.5	33550.3	32982.2	30186.3	23975.1	20295.7	18922.4	18184.3
65°	15191.6	15518.1	18204.4	26683.7	30573.3	30644.9	27692.4	20729.6	16207.0	14688.3	14211.9
67.5°	9174.9	9488.0	12348.8	19262.4	24854.1	25657.0	23100.5	15694.8	11621.8	9702.8	9221.9
70°	2979.3	3319.2	5627.5	11353.4	18282.7	20208.5	17383.5	10215.0	6086.0	4263.1	3746.5
72.5°	1131.8	1234.7	1831.8	4958.7	11387.0	13491.7	10751.8	5124.3	1885.5	1122.8	986.4
75°	735.9	751.5	856.7	1737.9	5491.1	7428.0	5182.4	1500.8	756.0	671.0	621.8
77.5°	633.0	644.2	688.9	865.6	1749.1	2840.6	1487.4	767.2	630.7	559.2	525.6
80°	597.2	601.7	630.7	733.6	818.6	948.4	715.7	641.9	550.2	525.6	501.0
82.5°	565.9	581.5	597.2	666.5	664.3	682.2	574.8	503.3	467.5	492.1	483.1
85°	527.9	536.8	548.0	595.0	541.3	458.5	442.9	346.7	337.7	360.1	337.7
87.5°	371.3	393.7	380.2	400.4	375.8	293.0	248.3	196.8	156.6	129.7	125.3
90°	152.1	154.3	145.4	134.2	118.5	98.4	78.3	49.2	22.4	11.2	4.5
92.5°	118.5	118.5	114.1	102.9	89.5	73.8	55.9	31.3	15.7	6.7	2.2
95°	73.8	76.0	71.6	64.9	55.9	44.7	33.6	17.9	11.2	4.5	2.2
97.5°	47.0	47.0	42.5	38.0	31.3	22.4	15.7	13.4	8.9	4.5	0.0
100°	26.8	26.8	24.6	20.1	15.7	11.2	11.2	8.9	6.7	2.2	0.0
102.5°	15.7	15.7	11.2	8.9	6.7	6.7	6.7	6.7	4.5	2.2	0.0
105°	6.7	6.7	4.5	4.5	2.2	2.2	4.5	4.5	4.5	2.2	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.2	4.5	4.5	2.2	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	4.5	2.2	2.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0	5339.0
2.5°	5394.9	5354.6	5361.3	5323.3	5316.6	5278.6	5354.6	5363.6	5341.2	5361.3
5°	5457.5	5408.3	5424.0	5381.5	5374.8	5323.3	5390.4	5385.9	5368.1	5388.2
7.5°	5551.5	5500.0	5509.0	5462.0	5453.0	5397.1	5459.8	5439.6	5421.7	5446.3
10°	5683.4	5625.3	5629.7	5569.4	5576.1	5502.3	5578.3	5542.5	5520.1	5553.7
12.5°	5842.2	5777.4	5779.6	5717.0	5714.7	5643.2	5710.3	5690.1	5656.6	5708.0
15°	6048.0	5974.2	5967.5	5884.7	5862.4	5781.8	5844.5	5806.4	5784.1	5857.9
17.5°	6336.5	6253.8	6229.2	6128.5	5710.3	5468.7	5804.2	5918.3	5779.6	5757.2
20°	6721.2	6651.9	6596.0	6443.9	5741.6	4987.8	4430.9	4435.4	5021.4	5292.0
22.5°	7242.4	7159.6	7054.5	6837.6	5267.4	4672.4	4674.7	4668.0	4005.9	3726.3
25°	7955.9	7855.2	7640.5	6414.8	5591.7	5041.5	5028.1	4372.7	4008.1	4028.3
27.5°	8919.9	8714.1	7457.1	6949.4	6168.8	5520.1	5198.1	4401.8	4446.5	4477.8
30°	10145.6	9318.0	8058.8	7756.8	6862.2	6155.4	4806.6	4916.2	5005.7	5025.8
32.5°	11402.6	9344.9	9020.6	8700.7	7716.6	5600.7	5417.3	5625.3	5719.2	5730.4
35°	11391.5	10490.1	10071.8	9711.7	8508.4	5992.1	6108.4	6428.2	6667.6	6656.4
37.5°	12055.7	11753.8	11255.0	10798.7	7658.4	6750.3	6958.3	7320.7	7611.4	7602.5
40°	13444.7	13095.8	12568.0	11610.6	8479.3	7618.2	7908.9	8298.1	8503.9	8515.1
42.5°	14757.7	14469.1	13930.1	10847.9	9505.9	8662.7	8926.6	9188.3	9315.8	9356.1
45°	16063.9	15858.1	14064.3	11988.6	10747.3	9713.9	9888.4	9937.6	10071.8	10056.1
47.5°	17124.1	16895.9	13523.0	13420.1	12252.6	10711.5	10698.1	10633.2	10682.4	10693.6
50°	18092.6	15343.7	14610.0	14952.3	13831.7	11729.2	11474.2	11342.2	11275.1	11246.1
52.5°	18857.5	15348.2	15625.5	16535.8	15614.3	12834.1	12286.1	11914.8	10431.9	11592.8
55°	19508.4	15981.1	16587.3	18229.0	17150.9	13990.5	13019.8	12357.7	6962.8	5582.8
57.5°	19881.9	16462.0	17540.1	19814.8	18492.9	15276.6	11986.4	10364.8	3936.6	3932.1
60°	18439.3	15598.7	17513.3	20646.9	18106.0	11850.0	4880.5	4084.2	744.8	764.9
62.5°	15609.8	13570.0	16609.6	20190.6	16862.4	10425.2	4377.2	3144.8	24.6	20.1
65°	12093.8	10825.6	13986.0	17759.3	15341.4	8698.5	3263.3	2265.8	6.7	0.0
67.5°	7911.2	7629.3	10320.1	14726.4	12512.0	6739.1	2189.7	1084.8	4.5	0.0
70°	3372.9	3907.5	6537.8	10677.9	9577.5	4636.7	1055.7	391.4	2.2	0.0
72.5°	943.9	1250.3	2909.9	6256.0	6023.4	2438.0	411.6	165.5	2.2	0.0
75°	559.2	480.9	834.3	2496.1	2932.3	856.7	190.1	127.5	2.2	0.0
77.5°	465.2	375.8	478.7	637.5	888.0	308.7	161.0	114.1	0.0	0.0
80°	436.2	333.3	413.8	445.1	438.4	257.2	158.8	114.1	0.0	0.0
82.5°	413.8	290.8	342.2	342.2	366.8	237.1	149.9	111.8	0.0	0.0
85°	310.9	203.5	228.1	295.2	263.9	167.8	109.6	89.5	0.0	0.0
87.5°	118.5	73.8	89.5	93.9	76.0	38.0	8.9	8.9	0.0	0.0
90°	2.2	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
95°	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
100°	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
105°	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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579567
 CATALOG NUMBER: CST-CA8-480-750-U-T5N-HSS-HM-EX90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	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
117.5°	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
122.5°	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
127.5°	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
132.5°	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
137.5°	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
142.5°	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
147.5°	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
152.5°	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
157.5°	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
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)