

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: P579565

Luminaire Tested: **CST-CA8-480-750-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579565
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-5)
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-EX120
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: 56848 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B5 - U2 - G5

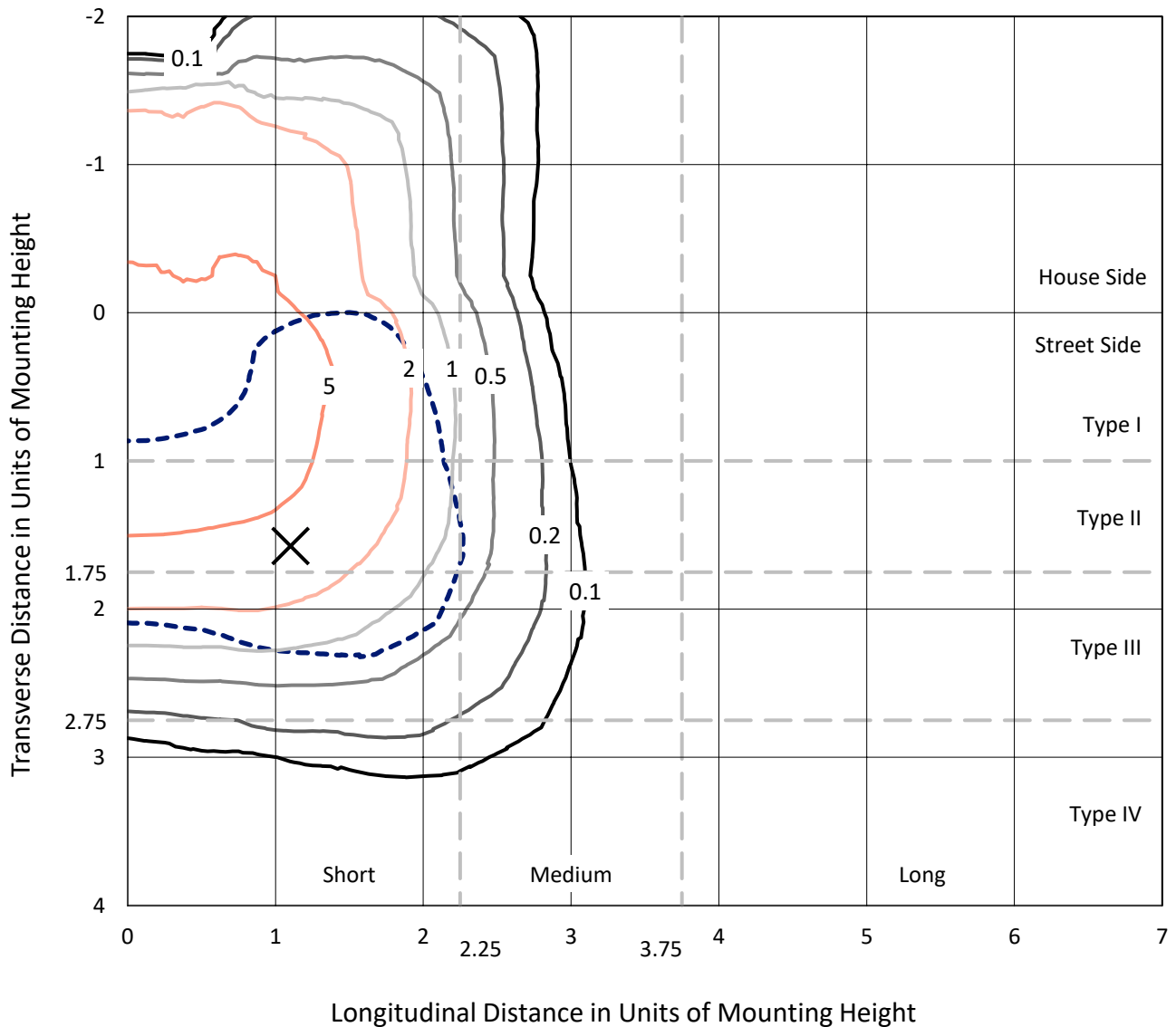
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

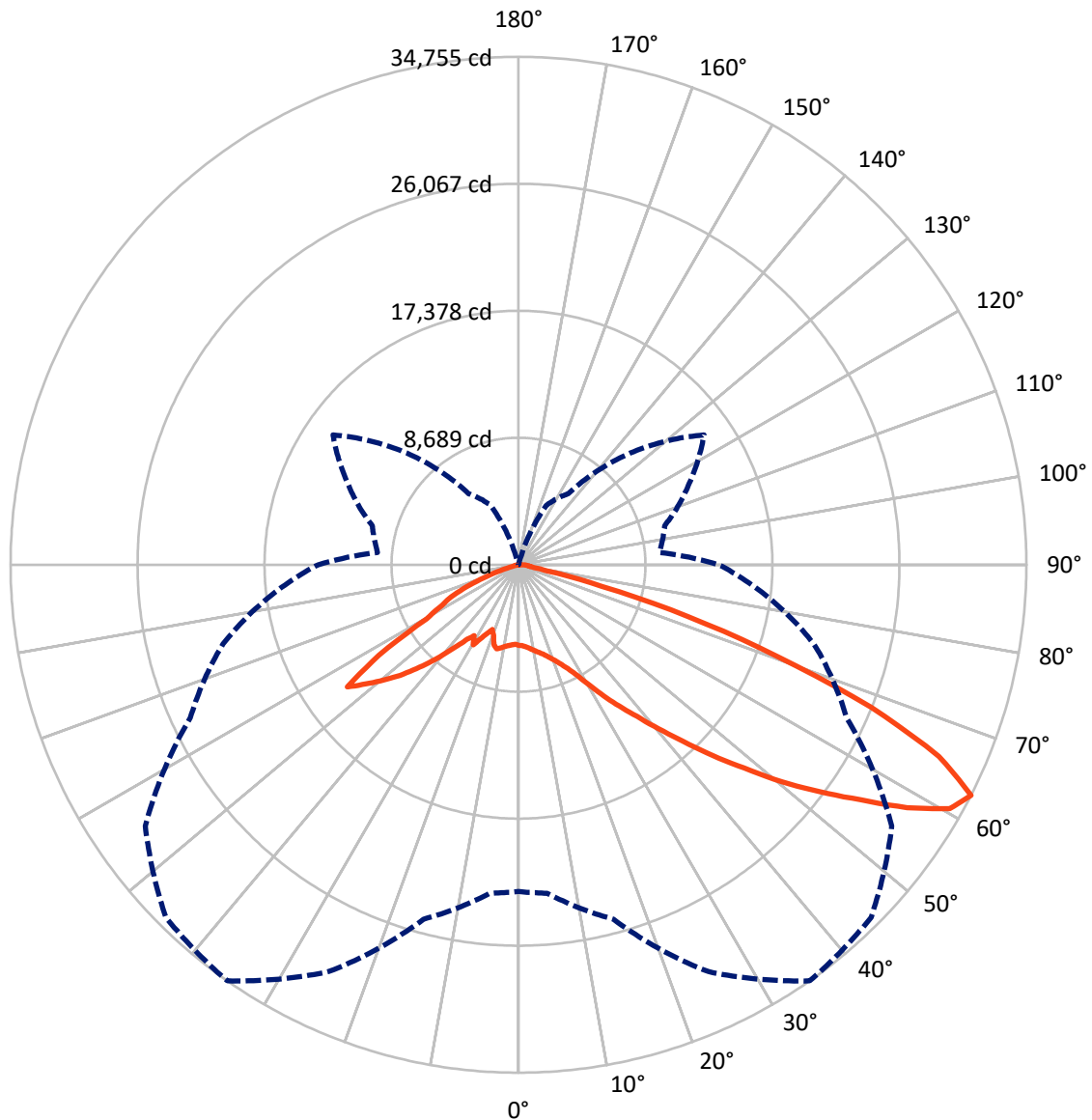
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.3 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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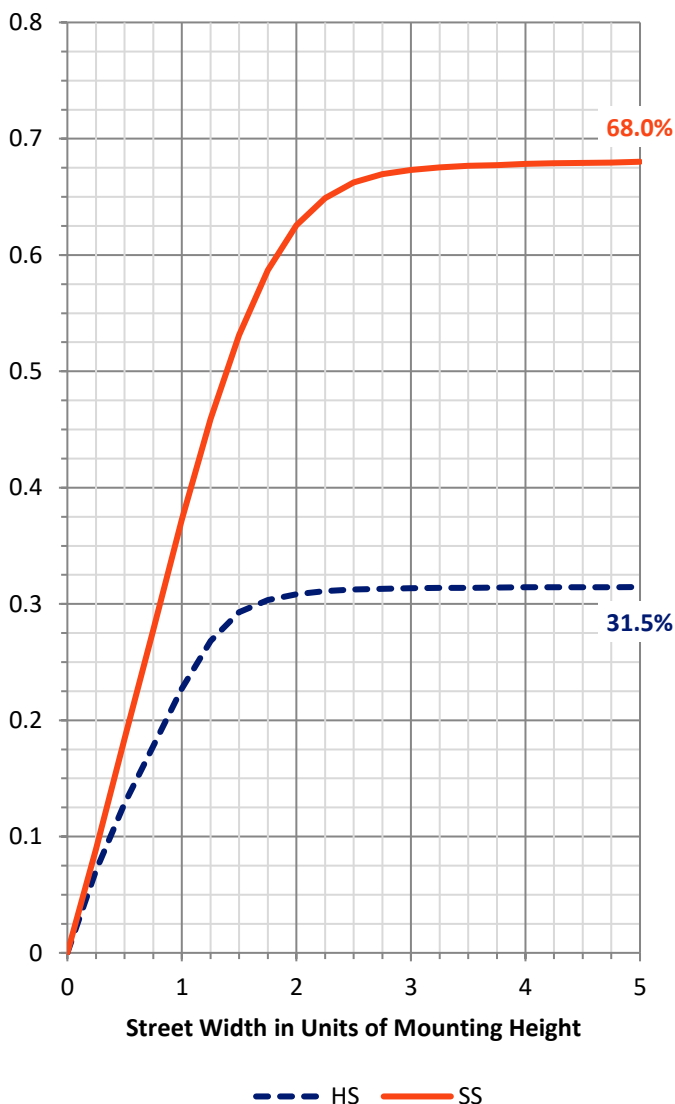
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17984.3	0.0	17984.3
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	38831.3	32.4	38863.7
	% Fixture	68.3	0.1	68.4
Total	Lumens	56815.5	32.5	56848.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	544.1	1.0
10°-20°	1749.5	3.1
20°-30°	3248.6	5.7
30°-40°	6404.8	11.3
40°-50°	11497.4	20.2
50°-60°	16712.7	29.4
60°-70°	13735.1	24.2
70°-80°	2610.8	4.6
80°-90°	312.5	0.5
90°-100°	29.6	0.1
100°-110°	2.8	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°	56815.5	99.9
0°-180°	56848.0	100.0

Coefficient of Utilization

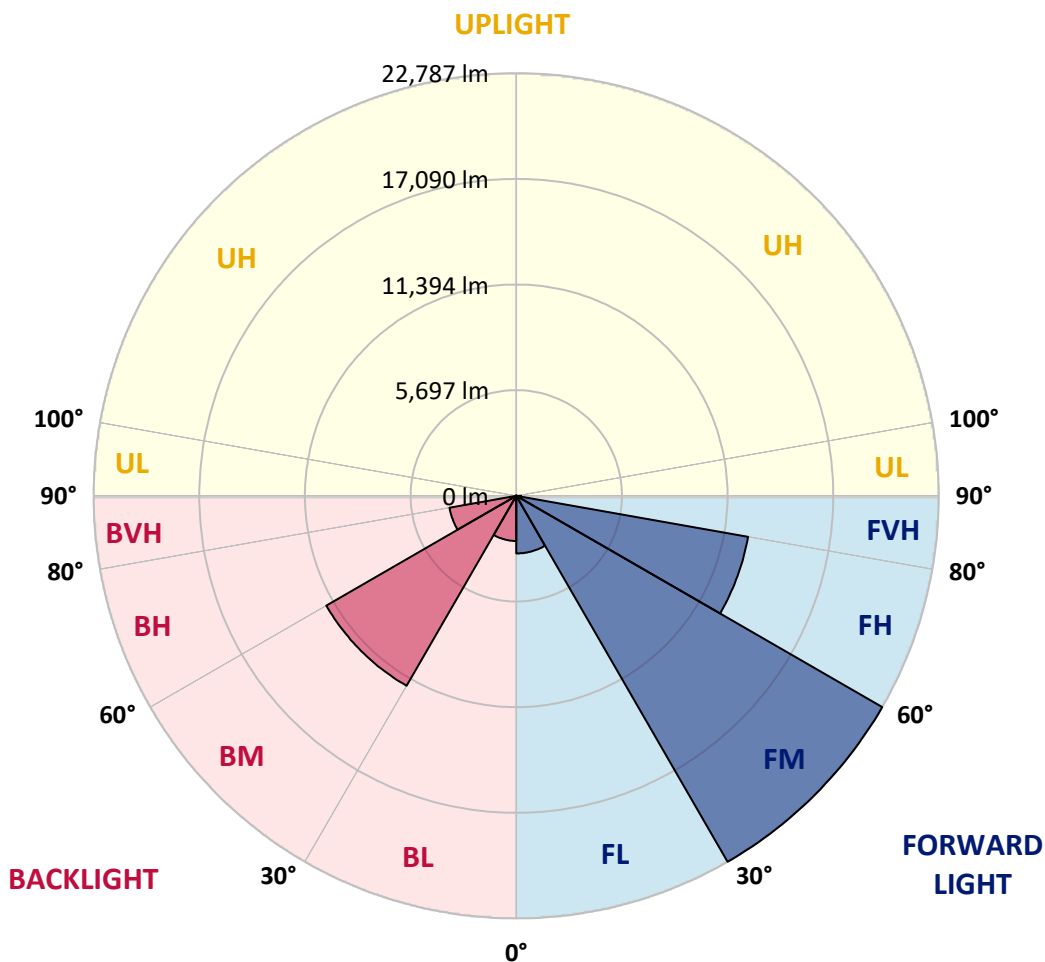


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3107.1	5.5			
FM	(30°-60°)	22787.3	40.1			
FH	(60°-80°)	12689.8	22.3			G5
FVH	(80°-90°)	247.1	0.4			G3/500
BL	(0°-30°)	2435.1	4.3	B3/2500		
BM	(30°-60°)	11827.6	20.8	B5		
BH	(60°-80°)	3656.2	6.4	B4/5000		G4/5000
BVH	(80°-90°)	65.4	0.1			G1/100
UL	(90°-100°)	29.6	0.1		U2/50	
UH	(100°-180°)	2.9	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°	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0
2.5°	5658.9	5612.7	5617.3	5652.0	5548.0	5582.7	5534.2	5575.7	5557.3	5575.7	5587.3
5°	5772.2	5714.4	5712.1	5746.7	5663.6	5684.3	5628.9	5656.6	5631.2	5654.3	5654.3
7.5°	5910.8	5862.3	5850.7	5878.4	5804.5	5813.7	5758.3	5769.8	5739.8	5769.8	5746.7
10°	6084.1	6040.2	6021.7	6035.6	5968.6	5973.2	5913.1	5917.7	5873.8	5899.2	5880.8
12.5°	6266.6	6206.6	6197.3	6220.4	6151.1	6141.9	6091.0	6095.7	6047.1	6070.2	6056.4
15°	6456.1	6393.7	6396.0	6419.2	6349.8	6354.5	6301.3	6310.6	6262.0	6285.1	6266.6
17.5°	6708.0	6645.6	6641.0	6682.6	6624.8	6643.3	6587.8	6599.4	6564.7	6569.3	6548.6
20°	7068.5	6987.6	6971.4	7031.5	6955.2	6978.3	6948.3	6987.6	6973.7	6962.2	6946.0
22.5°	7498.3	7435.9	7403.5	7449.7	7359.6	7403.5	7419.7	7500.6	7521.4	7507.5	7253.3
25°	8073.6	8041.3	8008.9	7988.1	7879.5	7948.8	8032.0	8166.1	8253.9	8288.5	7935.0
27.5°	8850.0	8866.2	8725.2	8702.1	8579.7	8688.3	8838.5	9055.7	9233.6	9298.3	8822.3
30°	9848.2	9869.0	9677.3	9621.8	9547.9	9640.3	9919.9	10157.9	10421.3	10529.9	9894.5
32.5°	11174.6	11156.1	10874.2	10767.9	10700.9	10737.9	11031.3	11357.1	11652.9	11897.8	11116.8
35°	12794.4	12736.6	12436.2	12142.8	11877.1	11990.3	12205.2	12600.3	13048.6	13409.1	12323.0
37.5°	14675.3	14619.9	14162.3	13684.0	13159.5	13208.0	13399.8	14044.5	14622.2	14716.9	12117.4
40°	16618.6	16595.5	16163.4	15555.7	14740.0	14511.3	14765.4	15551.1	16161.1	14509.0	12595.7
42.5°	18559.6	18448.7	18206.1	17598.4	16512.3	16008.6	16350.6	17136.2	17792.5	15211.4	13704.8
45°	20516.8	20403.6	20197.9	19752.0	18622.0	17889.5	17988.9	18860.0	19453.9	16528.5	14860.2
47.5°	22254.5	22171.3	22023.4	21773.8	20766.4	20103.2	19911.4	20521.4	20925.8	17598.4	15747.5
50°	23751.8	23680.2	23737.9	23654.7	23359.0	22663.4	22030.3	21991.0	22185.1	18550.4	16563.2
52.5°	25068.9	24971.8	25219.1	25512.6	25785.2	25630.4	24098.4	23384.4	23208.8	19264.4	17110.8
55°	26157.2	26122.6	26547.8	27340.3	28377.8	28784.5	26309.7	24671.5	24123.8	19869.8	17161.6
57.5°	26808.9	26892.0	27790.9	29325.2	31354.0	31545.8	28897.7	26039.4	24930.3	20237.2	17404.3
60°	25695.1	25977.0	27594.5	30813.3	33886.6	33969.8	30757.9	26312.1	23874.3	18915.5	16108.0
62.5°	22358.4	22561.8	25105.9	30718.6	34755.4	34122.3	31173.8	24773.1	20923.5	16045.6	13700.2
65°	15798.3	16034.0	19100.3	27700.8	31619.8	31642.9	28555.8	21422.6	16724.9	12422.4	10578.4
67.5°	9529.4	9910.6	12815.2	20110.1	26034.8	26508.5	23823.4	16218.9	11969.5	8110.6	6846.6
70°	3126.4	3475.3	5850.7	11902.5	18767.6	20796.4	17891.8	10539.2	6250.5	3429.1	2761.3
72.5°	1238.5	1398.0	2061.2	5263.8	12094.3	13885.1	11024.4	5092.8	2098.1	910.4	792.6
75°	827.2	843.4	952.0	1793.1	5917.7	7593.0	5314.6	1481.2	778.7	568.4	499.1
77.5°	720.9	723.3	771.8	945.1	1927.1	2911.5	1529.7	794.9	644.7	466.8	413.6
80°	660.9	670.1	700.1	806.4	882.7	989.0	755.6	663.2	559.2	429.8	390.5
82.5°	633.1	640.1	658.6	730.2	714.0	741.7	610.0	526.8	471.4	395.1	374.3
85°	577.7	589.2	600.8	644.7	586.9	508.4	471.4	353.5	337.4	298.1	275.0
87.5°	436.7	434.4	422.9	429.8	392.8	321.2	265.7	198.7	161.7	134.0	110.9
90°	182.5	184.9	177.9	168.7	147.9	122.5	92.4	55.5	27.7	9.2	4.6
92.5°	138.6	141.0	136.3	122.5	106.3	85.5	62.4	32.3	18.5	6.9	2.3
95°	85.5	87.8	83.2	73.9	64.7	48.5	32.3	20.8	11.6	4.6	0.0
97.5°	50.8	53.1	48.5	43.9	34.7	23.1	18.5	13.9	9.2	4.6	0.0
100°	30.0	30.0	27.7	23.1	16.2	13.9	11.6	9.2	6.9	2.3	0.0
102.5°	13.9	13.9	13.9	9.2	6.9	6.9	6.9	6.9	6.9	2.3	0.0
105°	4.6	4.6	2.3	2.3	2.3	4.6	4.6	4.6	4.6	2.3	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	4.6	4.6	2.3	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	0.0



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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°	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0	5518.0
2.5°	5575.7	5531.8	5538.8	5499.5	5490.2	5448.7	5522.6	5529.5	5508.7	5529.5
5°	5645.1	5591.9	5605.8	5561.9	5550.3	5492.6	5552.6	5548.0	5531.8	5552.6
7.5°	5746.7	5686.7	5693.6	5642.8	5631.2	5566.5	5622.0	5605.8	5587.3	5612.7
10°	5876.1	5818.4	5820.7	5751.4	5744.4	5670.5	5742.1	5712.1	5684.3	5721.3
12.5°	6056.4	5975.5	5968.6	5892.3	5890.0	5813.7	5887.7	5862.3	5825.3	5883.1
15°	6264.3	6155.7	6128.0	6031.0	6028.6	5947.8	6021.7	5982.4	5963.9	6033.3
17.5°	6534.7	6398.4	6188.1	5857.7	5707.5	5732.9	5994.0	6088.7	5841.5	5878.4
20°	6698.7	6037.9	5730.6	5594.2	5522.6	5111.3	4554.4	4600.6	5148.3	5409.4
22.5°	6421.5	6225.1	6111.8	5920.0	4921.8	4780.9	4813.2	4804.0	4096.9	3886.6
25°	6999.1	6814.3	6608.6	5425.5	5219.9	5159.8	5176.0	4512.8	4126.9	4143.1
27.5°	7831.0	7593.0	6289.8	5776.8	5735.2	5647.4	5328.5	4531.3	4579.8	4612.2
30°	8882.4	8036.7	6698.7	6474.6	6391.4	6296.7	4944.9	5062.8	5152.9	5252.2
32.5°	9899.1	7817.1	7482.1	7248.7	7119.3	5716.7	5578.1	5795.3	5885.4	5970.9
35°	9806.7	8757.6	8323.2	8027.4	7784.8	6169.6	6292.1	6622.5	6860.5	6858.2
37.5°	10060.8	9781.2	9279.8	8905.5	6756.5	6911.3	7167.8	7544.5	7833.3	7831.0
40°	11121.4	10818.7	10347.4	9543.2	7486.7	7847.2	8198.4	8551.9	8759.9	8776.1
42.5°	12175.1	11941.8	11516.6	8429.5	8380.9	8880.1	9247.5	9471.6	9598.7	9642.6
45°	13224.2	13004.7	11315.5	9323.7	9471.6	9966.1	10190.2	10234.1	10370.5	10365.8
47.5°	14058.4	13871.2	10409.8	10386.6	10754.0	11096.0	11024.4	10968.9	11003.6	11022.1
50°	14827.8	12075.8	11223.1	11560.5	12119.7	12161.3	11863.2	9397.7	11634.4	11595.1
52.5°	13774.1	11784.6	11981.0	12771.3	13723.3	13240.4	12658.1	8237.7	10911.2	11948.7
55°	12052.7	12251.4	12695.0	14021.4	14961.9	14388.8	13416.0	8482.6	7241.8	5894.6
57.5°	12293.0	12607.2	13450.6	15283.0	16103.3	11396.4	12521.7	5980.1	4048.4	4046.1
60°	11447.3	11923.3	13434.5	15849.2	13034.7	7301.8	5016.6	136.3	785.6	778.7
62.5°	9677.3	10354.3	12817.5	15491.0	10798.0	5933.9	4468.9	11.6	4.6	4.6
65°	7484.4	8281.6	10687.0	13413.7	9566.3	5111.3	3318.2	0.0	0.0	0.0
67.5°	4907.9	5647.4	8025.1	11142.2	7941.9	3863.5	2229.8	0.0	0.0	0.0
70°	2045.0	2957.7	4986.5	8052.8	5841.5	2530.2	1058.3	0.0	0.0	0.0
72.5°	591.5	901.2	2246.0	4808.6	3625.5	1324.0	392.8	0.0	0.0	0.0
75°	390.5	411.3	679.3	1934.1	1763.1	485.2	159.4	0.0	0.0	0.0
77.5°	328.1	337.4	432.1	540.7	566.1	191.8	129.4	0.0	0.0	0.0
80°	302.7	305.0	388.2	402.1	302.7	159.4	127.1	0.0	0.0	0.0
82.5°	281.9	275.0	330.4	318.9	251.9	138.6	117.8	0.0	0.0	0.0
85°	194.1	198.7	224.1	284.2	152.5	69.3	83.2	0.0	0.0	0.0
87.5°	60.1	69.3	87.8	90.1	27.7	9.2	0.0	0.0	0.0	0.0
90°	2.3	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: P579565
 CATALOG NUMBER: CST-CA8-480-750-U-T5N-HSS-HM-EX120

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)