

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: P579559

Luminaire Tested: **CST-CA8-330-750-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579559
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-CA8-330-750-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: 39155 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G4

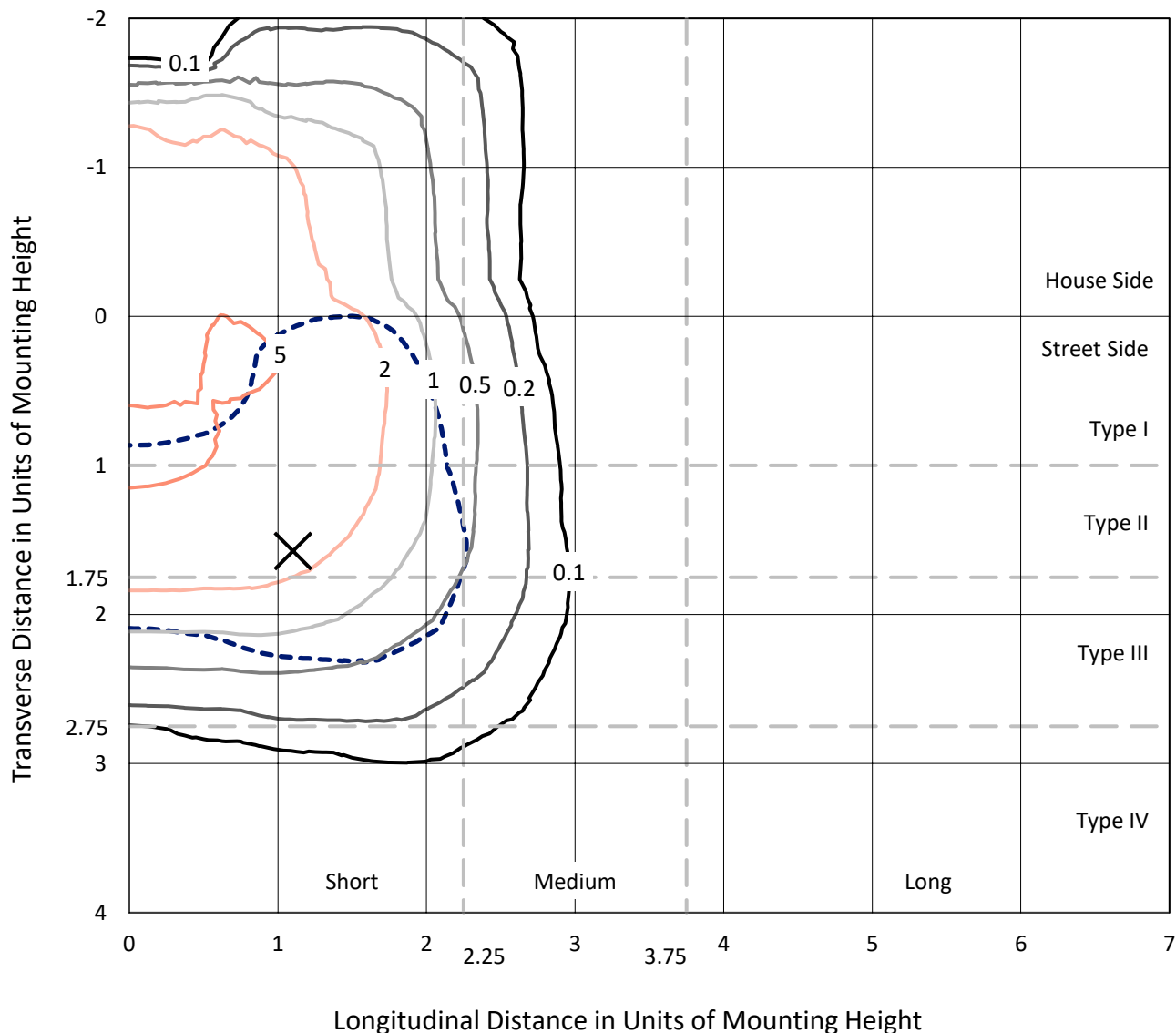
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P579559
 CATALOG NUMBER: CST-CA8-330-750-U-T5N-HSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

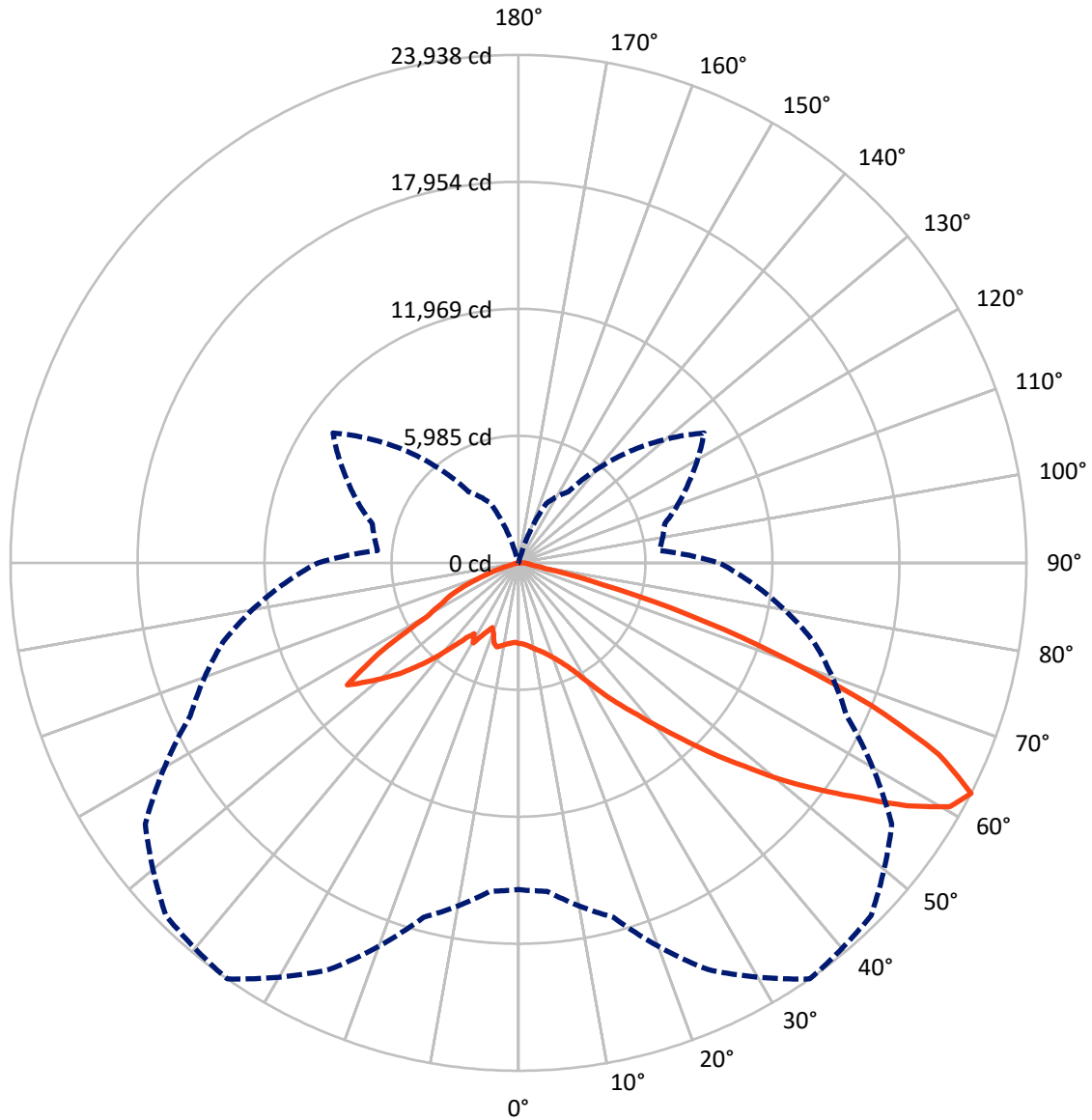
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Short - N/A

REPORT NUMBER: P579559
CATALOG NUMBER: CST-CA8-330-750-U-T5N-HSS-HM-EX120

Luminous Intensity Polar Plot



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



REPORT NUMBER: P579559
 CATALOG NUMBER: CST-CA8-330-750-U-T5N-HSS-HM-EX120

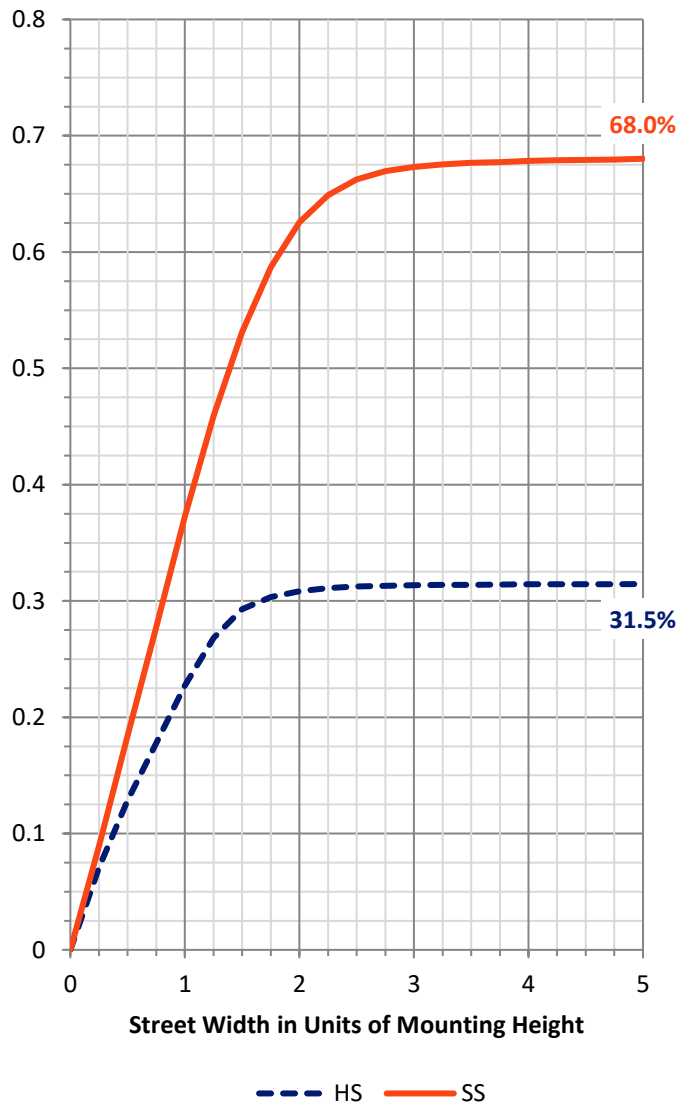
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12387.0	0.0	12387.0
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	26745.7	22.4	26768.0
	% Fixture	68.3	0.1	68.4
Total	Lumens	39132.6	22.4	39155.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	374.8	1.0
10°-20°	1205.0	3.1
20°-30°	2237.5	5.7
30°-40°	4411.4	11.3
40°-50°	7919.0	20.2
50°-60°	11511.1	29.4
60°-70°	9460.3	24.2
70°-80°	1798.2	4.6
80°-90°	215.3	0.5
90°-100°	20.4	0.1
100°-110°	2.0	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°	39132.6	99.9
0°-180°	39155.0	100.0

Coefficient of Utilization



REPORT NUMBER: P579559

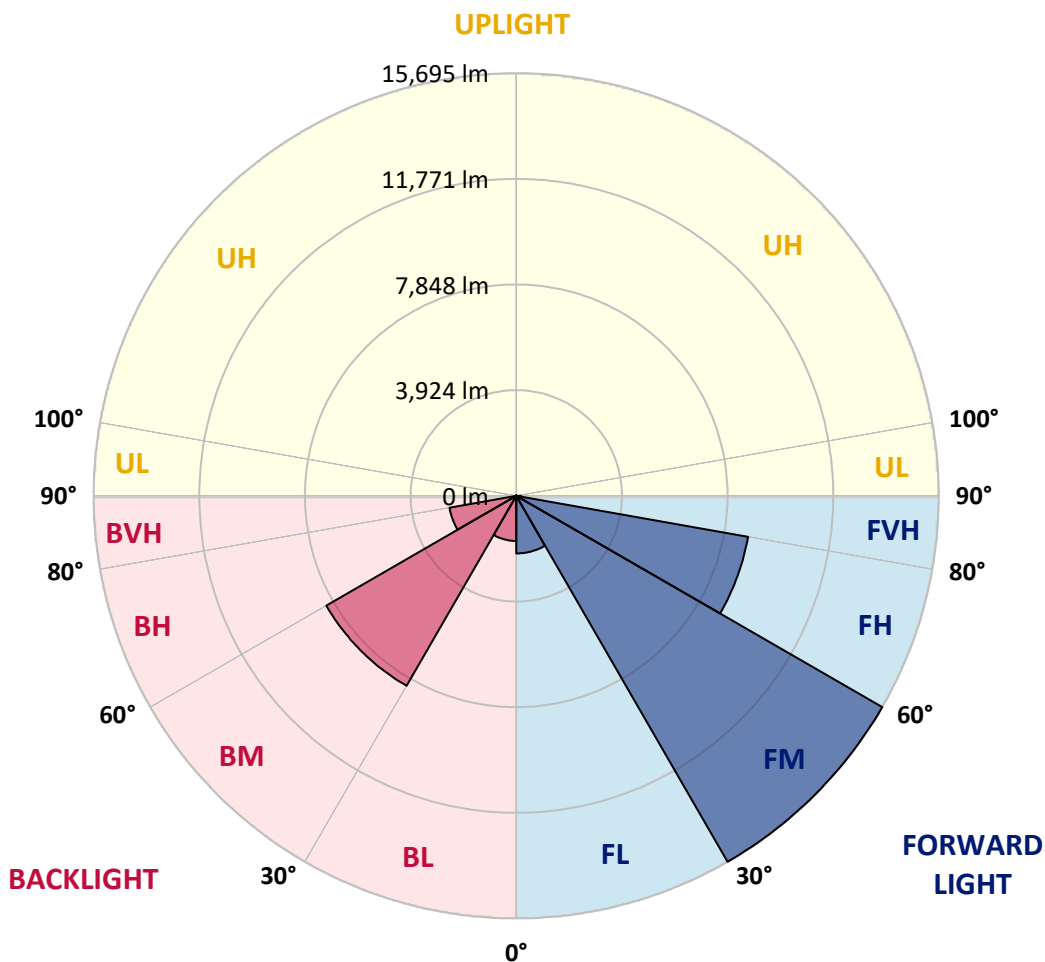
CATALOG NUMBER: CST-CA8-330-750-U-T5N-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2140.0	5.5			
FM (30°-60°)	15695.1	40.1			
FH (60°-80°)	8740.3	22.3			G4/12000
FVH (80°-90°)	170.2	0.4			G2/225
BL (0°-30°)	1677.2	4.3	B3/2500		
BM (30°-60°)	8146.4	20.8	B4/8500		
BH (60°-80°)	2518.2	6.4	B4/5000		G4/5000
BVH (80°-90°)	45.1	0.1			G1/100
UL (90°-100°)	20.4	0.1		U2/50	
UH (100°-180°)	2.0	0.0		U1/10	

BUG Rating: B4-U2-G4

Type III Short





REPORT NUMBER: P579559

CATALOG NUMBER: CST-CA8-330-750-U-T5N-HSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6
2.5°	3897.7	3865.9	3869.0	3892.9	3821.3	3845.2	3811.7	3840.4	3827.7	3840.4	3848.3
5°	3975.7	3935.9	3934.3	3958.2	3900.9	3915.2	3877.0	3896.1	3878.6	3894.5	3894.5
7.5°	4071.2	4037.7	4029.8	4048.9	3997.9	4004.3	3966.1	3974.1	3953.4	3974.1	3958.2
10°	4190.5	4160.3	4147.6	4157.1	4110.9	4114.1	4072.8	4075.9	4045.7	4063.2	4050.5
12.5°	4316.3	4274.9	4268.5	4284.4	4236.7	4230.3	4195.3	4198.5	4165.1	4181.0	4171.4
15°	4446.8	4403.8	4405.4	4421.3	4373.6	4376.7	4340.1	4346.5	4313.1	4329.0	4316.3
17.5°	4620.2	4577.3	4574.1	4602.7	4562.9	4575.7	4537.5	4545.4	4521.6	4524.7	4510.4
20°	4868.5	4812.8	4801.7	4843.1	4790.5	4806.5	4785.8	4812.8	4803.3	4795.3	4784.2
22.5°	5164.5	5121.6	5099.3	5131.1	5069.1	5099.3	5110.4	5166.1	5180.5	5170.9	4995.8
25°	5560.8	5538.6	5516.3	5502.0	5427.2	5474.9	5532.2	5624.5	5685.0	5708.9	5465.3
27.5°	6095.6	6106.7	6009.7	5993.7	5909.4	5984.2	6087.6	6237.2	6359.8	6404.4	6076.5
30°	6783.1	6797.5	6665.4	6627.2	6576.2	6639.9	6832.5	6996.4	7177.8	7252.6	6815.0
32.5°	7696.7	7684.0	7489.8	7416.6	7370.4	7395.9	7598.0	7822.4	8026.1	8194.8	7656.9
35°	8812.4	8772.6	8565.7	8363.5	8180.5	8258.5	8406.5	8678.7	8987.4	9235.7	8487.7
37.5°	10107.9	10069.7	9754.5	9425.1	9063.8	9097.2	9229.3	9673.4	10071.3	10136.5	8346.0
40°	11446.4	11430.4	11132.8	10714.2	10152.4	9994.9	10169.9	10711.1	11131.2	9993.3	8675.5
42.5°	12783.2	12706.9	12539.7	12121.2	11373.1	11026.2	11261.7	11802.9	12254.9	10477.1	9439.4
45°	14131.3	14053.3	13911.7	13604.5	12826.2	12321.7	12390.1	12990.2	13399.2	11384.3	10235.2
47.5°	15328.1	15270.8	15169.0	14997.1	14303.2	13846.4	13714.3	14134.5	14413.0	12121.2	10846.3
50°	16359.4	16310.1	16349.9	16292.6	16088.9	15609.8	15173.7	15146.7	15280.4	12776.9	11408.2
52.5°	17266.6	17199.8	17370.1	17572.2	17760.0	17653.4	16598.2	16106.4	15985.4	13268.7	11785.4
55°	18016.2	17992.4	18285.2	18831.1	19545.7	19825.8	18121.3	16992.9	16615.7	13685.7	11820.4
57.5°	18465.0	18522.3	19141.5	20198.2	21595.6	21727.7	19903.8	17935.1	17171.1	13938.7	11987.5
60°	17697.9	17892.1	19006.2	21223.2	23339.9	23397.2	21185.0	18122.9	16443.8	13028.3	11094.6
62.5°	15399.7	15539.8	17292.1	21157.9	23938.4	23502.3	21471.5	17062.9	14411.4	11051.7	9436.2
65°	10881.4	11043.7	13155.7	19079.4	21778.6	21794.5	19668.3	14755.2	11519.6	8556.1	7286.1
67.5°	6563.5	6826.1	8826.7	13851.2	17931.9	18258.1	16408.8	11171.0	8244.2	5586.3	4715.7
70°	2153.4	2393.7	4029.8	8198.0	12926.5	14323.9	12323.3	7259.0	4305.1	2361.8	1901.9
72.5°	853.1	962.9	1419.7	3625.5	8330.1	9563.6	7593.2	3507.8	1445.1	627.1	545.9
75°	569.8	580.9	655.7	1235.0	4075.9	5229.8	3660.5	1020.2	536.3	391.5	343.8
77.5°	496.6	498.2	531.6	650.9	1327.3	2005.3	1053.6	547.5	444.0	321.5	284.9
80°	455.2	461.5	482.2	555.4	608.0	681.2	520.4	456.8	385.2	296.0	269.0
82.5°	436.1	440.9	453.6	502.9	491.8	510.9	420.2	362.9	324.7	272.2	257.8
85°	397.9	405.8	413.8	444.0	404.3	350.1	324.7	243.5	232.4	205.3	189.4
87.5°	300.8	299.2	291.3	296.0	270.6	221.2	183.0	136.9	111.4	92.3	76.4
90°	125.7	127.3	122.5	116.2	101.9	84.4	63.7	38.2	19.1	6.4	3.2
92.5°	95.5	97.1	93.9	84.4	73.2	58.9	43.0	22.3	12.7	4.8	1.6
95°	58.9	60.5	57.3	50.9	44.6	33.4	22.3	14.3	8.0	3.2	0.0
97.5°	35.0	36.6	33.4	30.2	23.9	15.9	12.7	9.5	6.4	3.2	0.0
100°	20.7	20.7	19.1	15.9	11.1	9.5	8.0	6.4	4.8	1.6	0.0
102.5°	9.5	9.5	9.5	6.4	4.8	4.8	4.8	4.8	4.8	1.6	0.0
105°	3.2	3.2	1.6	1.6	1.6	3.2	3.2	3.2	3.2	1.6	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	3.2	3.2	1.6	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	0.0



REPORT NUMBER: P579559
 CATALOG NUMBER: CST-CA8-330-750-U-T5N-HSS-HM-EX120

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



REPORT NUMBER: P579559

CATALOG NUMBER: CST-CA8-330-750-U-T5N-HSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6	3800.6
2.5°	3840.4	3810.1	3814.9	3787.9	3781.5	3752.9	3803.8	3808.6	3794.2	3808.6
5°	3888.1	3851.5	3861.1	3830.8	3822.9	3783.1	3824.5	3821.3	3810.1	3824.5
7.5°	3958.2	3916.8	3921.6	3886.5	3878.6	3834.0	3872.2	3861.1	3848.3	3865.9
10°	4047.3	4007.5	4009.1	3961.3	3956.6	3905.6	3955.0	3934.3	3915.2	3940.7
12.5°	4171.4	4115.7	4110.9	4058.4	4056.8	4004.3	4055.2	4037.7	4012.3	4052.1
15°	4314.7	4239.9	4220.8	4153.9	4152.3	4096.6	4147.6	4120.5	4107.8	4155.5
17.5°	4500.9	4407.0	4262.1	4034.6	3931.1	3948.6	4128.5	4193.7	4023.4	4048.9
20°	4613.9	4158.7	3947.0	3853.1	3803.8	3520.5	3136.9	3168.8	3546.0	3725.8
22.5°	4422.9	4287.6	4209.6	4077.5	3390.0	3292.9	3315.2	3308.8	2821.8	2677.0
25°	4820.8	4693.5	4551.8	3736.9	3595.3	3553.9	3565.0	3108.3	2842.5	2853.6
27.5°	5393.7	5229.8	4332.2	3978.9	3950.2	3889.7	3670.1	3121.0	3154.4	3176.7
30°	6117.9	5535.4	4613.9	4459.5	4402.2	4336.9	3405.9	3487.1	3549.1	3617.6
32.5°	6818.2	5384.2	5153.4	4992.7	4903.5	3937.5	3842.0	3991.6	4053.7	4112.5
35°	6754.5	6031.9	5732.7	5529.0	5361.9	4249.4	4333.8	4561.4	4725.3	4723.7
37.5°	6929.6	6737.0	6391.6	6133.8	4653.7	4760.3	4937.0	5196.4	5395.3	5393.7
40°	7660.1	7451.6	7126.9	6573.1	5156.6	5404.9	5646.8	5890.3	6033.5	6044.7
42.5°	8385.8	8225.1	7932.2	5805.9	5772.5	6116.3	6369.3	6523.7	6611.3	6641.5
45°	9108.4	8957.2	7793.8	6421.9	6523.7	6864.3	7018.7	7048.9	7142.8	7139.6
47.5°	9682.9	9554.0	7169.9	7154.0	7407.0	7642.6	7593.2	7555.0	7578.9	7591.6
50°	10212.9	8317.4	7730.1	7962.5	8347.6	8376.3	8171.0	6472.8	8013.4	7986.3
52.5°	9487.2	8116.9	8252.1	8796.4	9452.2	9119.5	8718.5	5673.8	7515.3	8229.9
55°	8301.5	8438.3	8743.9	9657.5	10305.2	9910.5	9240.5	5842.5	4987.9	4060.0
57.5°	8467.0	8683.4	9264.4	10526.4	11091.4	7849.5	8624.6	4118.9	2788.4	2786.8
60°	7884.5	8212.3	9253.2	10916.4	8977.9	5029.3	3455.2	93.9	541.1	536.3
62.5°	6665.4	7131.7	8828.3	10669.7	7437.3	4087.1	3078.0	8.0	3.2	3.2
65°	5155.0	5704.1	7360.9	9238.9	6589.0	3520.5	2285.5	0.0	0.0	0.0
67.5°	3380.4	3889.7	5527.4	7674.4	5470.1	2661.1	1535.8	0.0	0.0	0.0
70°	1408.5	2037.2	3434.5	5546.5	4023.4	1742.7	728.9	0.0	0.0	0.0
72.5°	407.4	620.7	1547.0	3312.0	2497.1	912.0	270.6	0.0	0.0	0.0
75°	269.0	283.3	467.9	1332.1	1214.3	334.2	109.8	0.0	0.0	0.0
77.5°	226.0	232.4	297.6	372.4	389.9	132.1	89.1	0.0	0.0	0.0
80°	208.5	210.1	267.4	276.9	208.5	109.8	87.5	0.0	0.0	0.0
82.5°	194.2	189.4	227.6	219.6	173.5	95.5	81.2	0.0	0.0	0.0
85°	133.7	136.9	154.4	195.8	105.0	47.7	57.3	0.0	0.0	0.0
87.5°	41.4	47.7	60.5	62.1	19.1	6.4	0.0	0.0	0.0	0.0
90°	1.6	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: P579559
 CATALOG NUMBER: CST-CA8-330-750-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)