

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: P579556

Luminaire Tested: **CST-CA8-330-750-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579556  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-2)  
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-T5-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: 36645 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

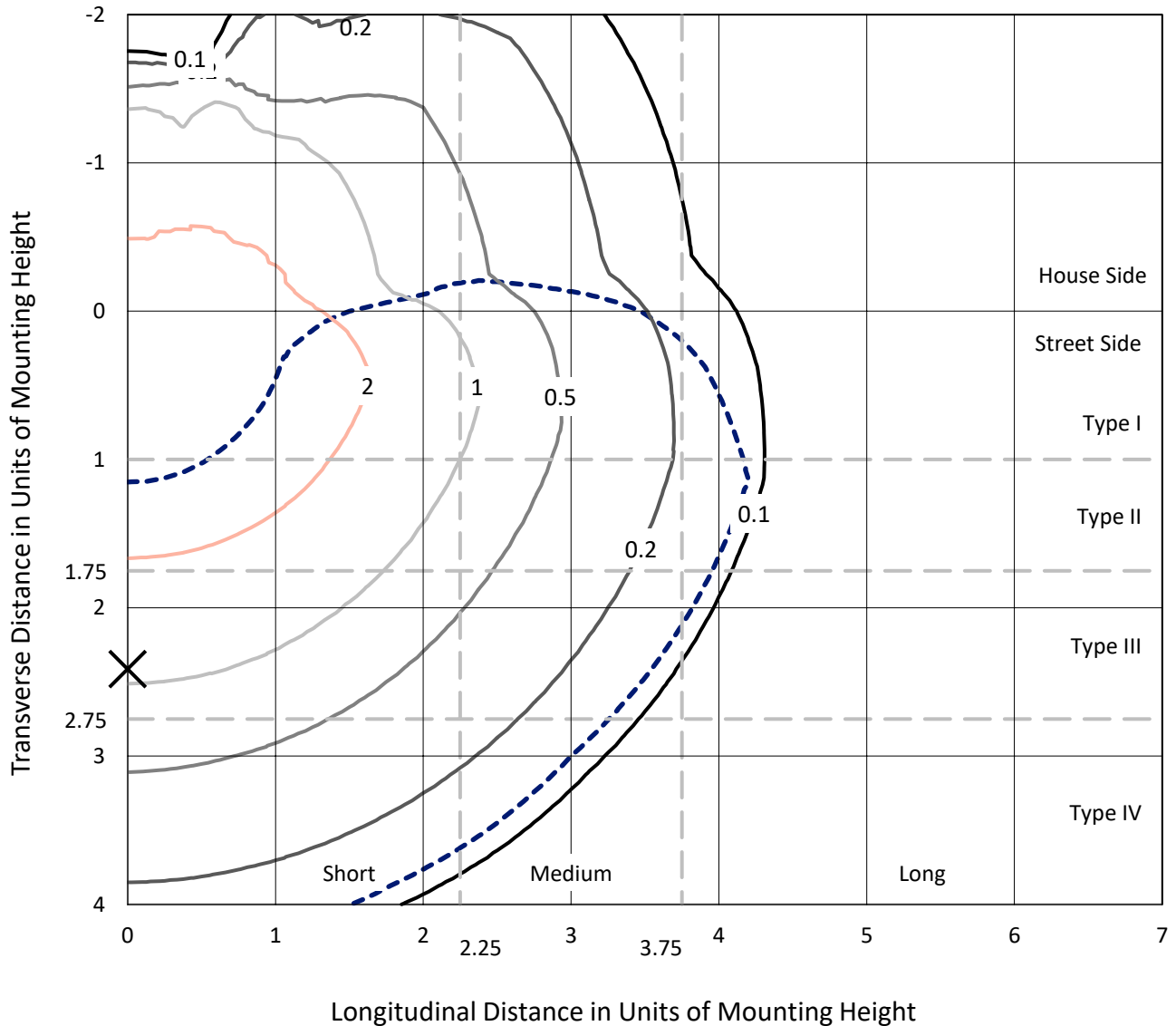
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

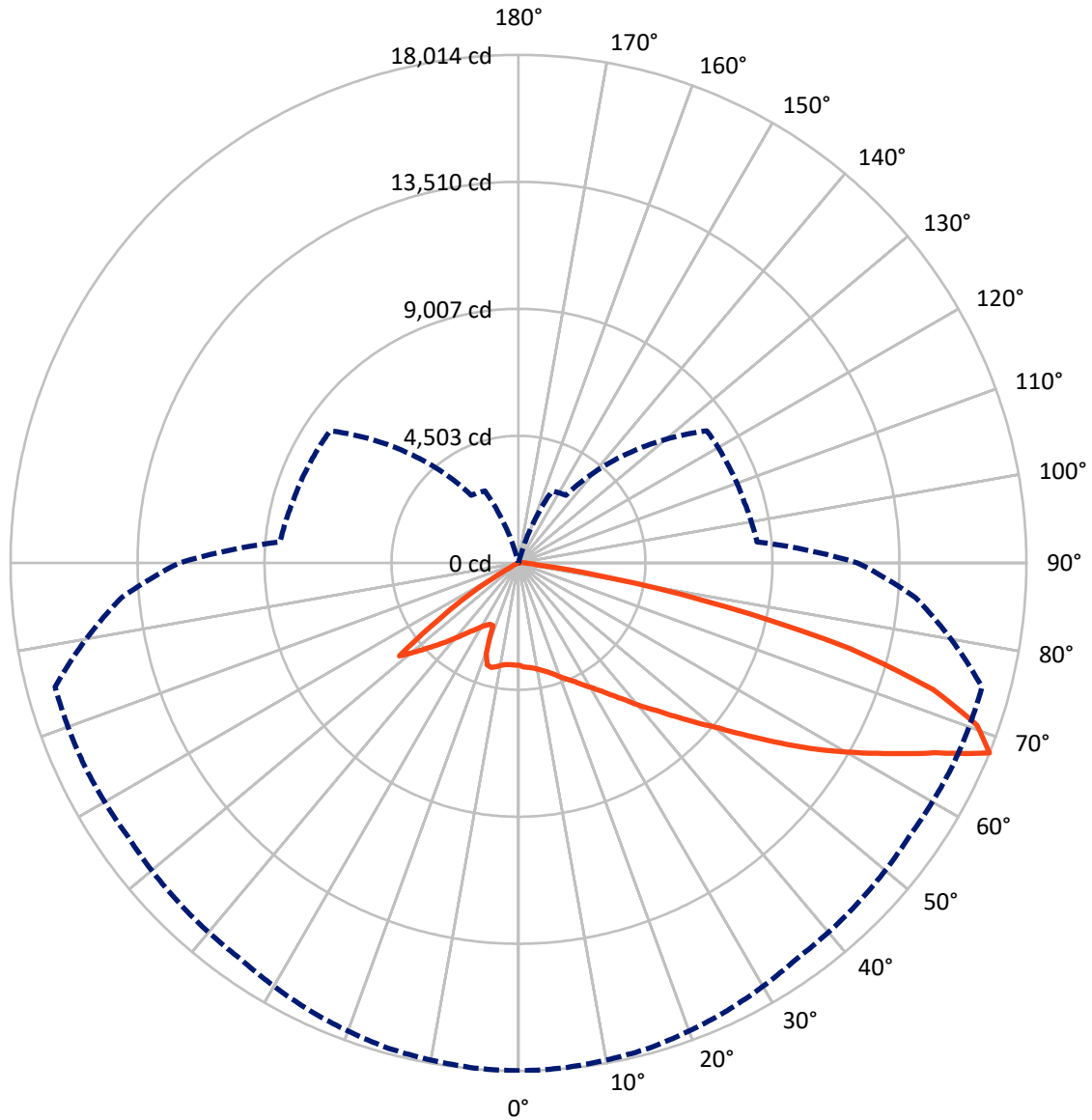
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

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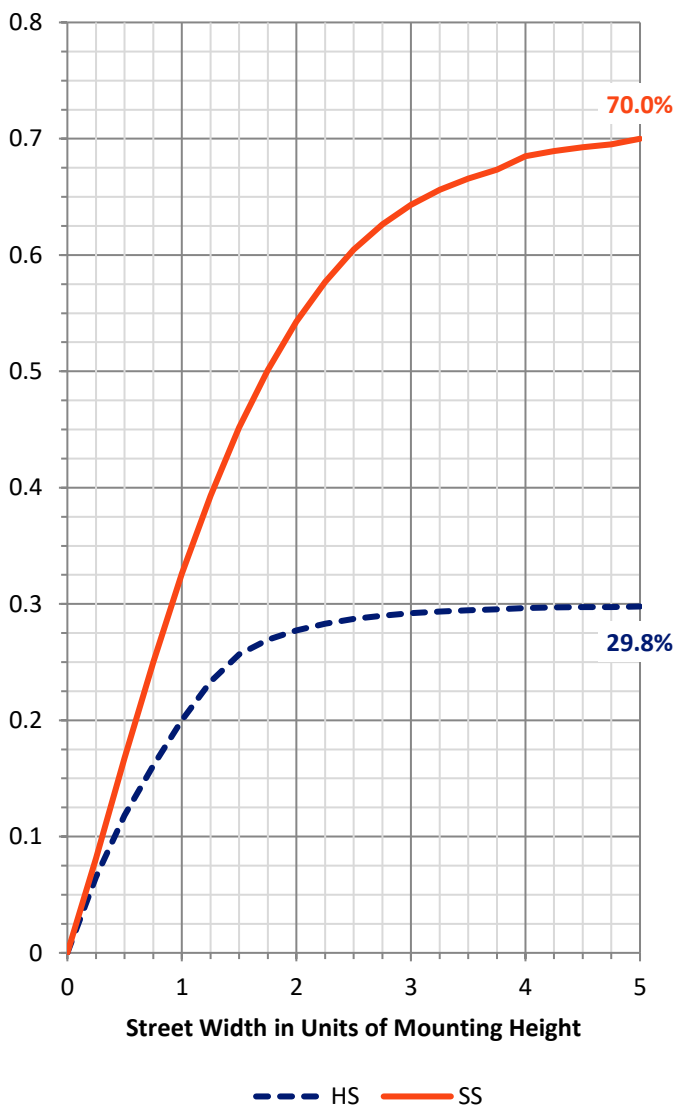
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10938.7	3.7	10942.4
	% Fixture	29.9	0.0	29.9
<b>Street Side</b>	Lumens	25661.3	41.2	25702.6
	% Fixture	70.0	0.1	70.1
<b>Total</b>	Lumens	36600.1	44.9	36645.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	350.1	1.0
10°-20°	1083.7	3.0
20°-30°	1818.7	5.0
30°-40°	2949.2	8.0
40°-50°	4819.3	13.2
50°-60°	7552.7	20.6
60°-70°	10115.3	27.6
70°-80°	7372.7	20.1
80°-90°	538.4	1.5
90°-100°	34.4	0.1
100°-110°	9.8	0.0
110°-120°	0.7	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°	36600.1	99.9
0°-180°	36645.0	100.0

**Coefficient of Utilization**



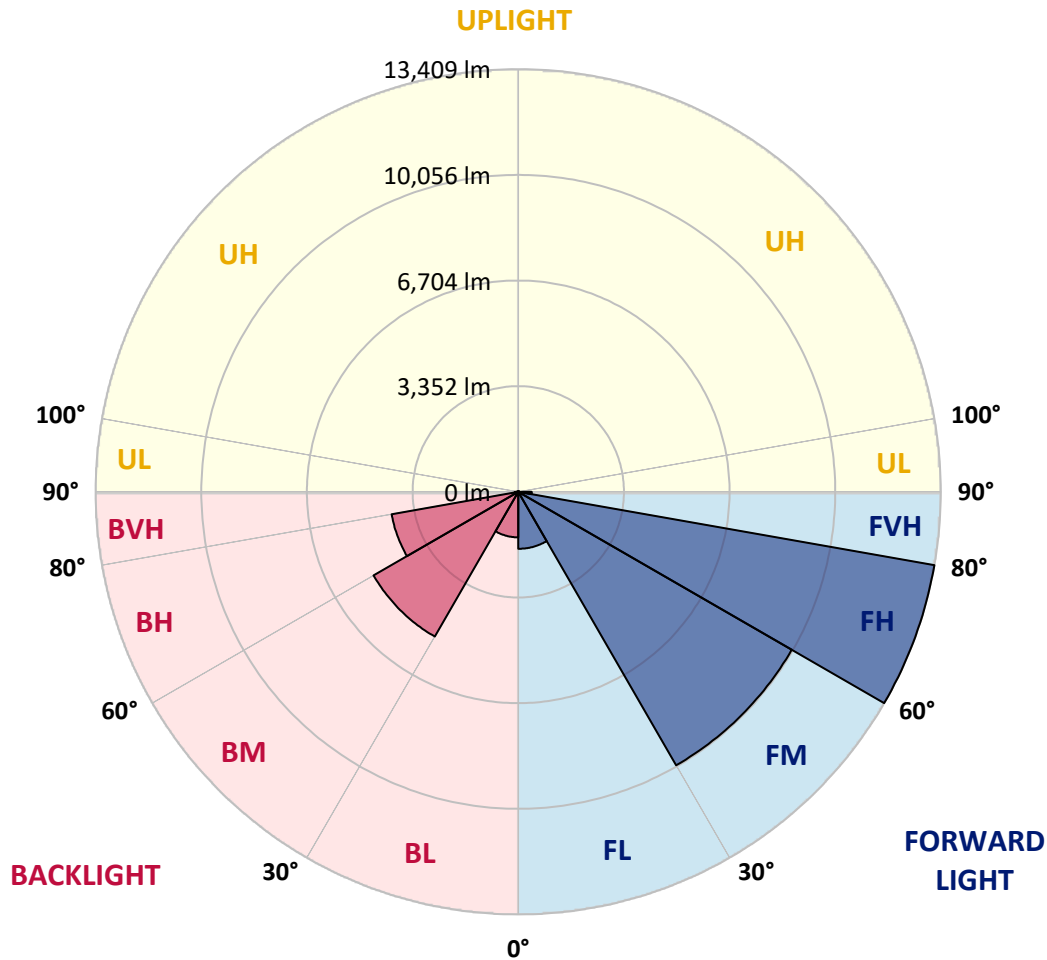
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1807.5	4.9			
FM	(30°-60°)	10019.4	27.3			
FH	(60°-80°)	13408.6	36.6			G5
FVH	(80°-90°)	425.8	1.2			G3/500
BL	(0°-30°)	1445.0	3.9	B3/2500		
BM	(30°-60°)	5301.7	14.5	B4/8500		
BH	(60°-80°)	4079.4	11.1	B4/5000		G4/5000
BVH	(80°-90°)	112.6	0.3			G2/225
UL	(90°-100°)	34.4	0.1		U2/50	
UH	(100°-180°)	10.5	0.0		U2/50	

**BUG Rating: B4-U2-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1
2.5°	3700.4	3678.9	3680.4	3700.4	3640.3	3660.4	3634.2	3654.2	3640.3	3645.0	3654.2
5°	3723.5	3700.4	3702.0	3726.6	3672.7	3689.6	3654.2	3665.0	3652.7	3658.8	3658.8
7.5°	3769.8	3743.6	3742.0	3757.4	3702.0	3708.1	3675.8	3677.3	3658.8	3671.2	3665.0
10°	3839.1	3817.5	3802.1	3811.3	3762.0	3759.0	3717.4	3718.9	3695.8	3709.7	3698.9
12.5°	3923.8	3894.5	3891.5	3894.5	3840.6	3828.3	3785.2	3788.2	3746.6	3768.2	3755.9
15°	4031.6	3985.4	3985.4	4002.4	3933.1	3923.8	3871.4	3874.5	3831.4	3848.3	3836.0
17.5°	4164.1	4119.5	4111.8	4124.1	4064.0	4051.7	3997.8	3994.7	3946.9	3951.5	3940.8
20°	4335.1	4290.5	4272.0	4302.8	4227.3	4218.1	4153.4	4147.2	4096.4	4082.5	4076.3
22.5°	4493.8	4458.4	4449.1	4483.0	4404.5	4396.8	4335.1	4327.4	4279.7	4259.6	4137.9
25°	4672.5	4664.8	4661.7	4672.5	4598.6	4583.2	4535.4	4524.6	4484.6	4459.9	4312.0
27.5°	4903.6	4900.5	4891.3	4892.8	4825.0	4811.2	4766.5	4758.8	4717.2	4689.5	4500.0
30°	5145.5	5145.5	5125.4	5136.2	5102.3	5080.8	5045.3	5017.6	4991.4	4962.1	4723.4
32.5°	5424.3	5422.8	5404.3	5436.6	5412.0	5412.0	5390.4	5361.2	5314.9	5301.1	5011.4
35°	5783.3	5760.2	5752.5	5804.8	5797.1	5811.0	5803.3	5772.5	5734.0	5701.6	5350.4
37.5°	6180.7	6174.6	6197.7	6230.0	6247.0	6283.9	6260.8	6259.3	6253.1	6171.5	5259.5
40°	6670.6	6644.4	6676.8	6693.7	6681.4	6741.5	6721.5	6738.4	6784.6	6128.3	5253.3
42.5°	7159.0	7135.9	7159.0	7242.2	7223.7	7296.1	7286.9	7353.1	7379.3	6219.2	5680.0
45°	7759.8	7733.6	7752.1	7850.7	7859.9	7947.8	7995.5	8058.7	8071.0	6807.7	6194.6
47.5°	8450.0	8406.8	8442.3	8488.5	8628.7	8711.9	8758.1	8835.1	8913.7	7516.4	6780.0
50°	9211.0	9207.9	9246.4	9326.6	9486.8	9570.0	9650.1	9730.2	9859.6	8306.7	7436.3
52.5°	10178.5	10158.5	10224.7	10300.2	10441.9	10569.8	10665.3	10748.5	10887.1	9106.3	8146.5
55°	11284.6	11215.3	11341.6	11469.5	11529.6	11680.5	11746.8	11816.1	11948.6	9947.4	8560.9
57.5°	12478.5	12461.6	12549.4	12595.6	12725.0	12819.0	12854.4	12929.9	12928.4	10822.4	9266.5
60°	13654.0	13635.5	13738.7	13766.4	13869.7	13954.4	13942.1	14009.9	14034.5	11643.6	9958.2
62.5°	14891.1	14860.2	14955.8	14961.9	14900.3	15037.4	15023.5	15080.5	15059.0	12446.2	10639.1
65°	16243.7	16266.8	16297.6	16171.3	16023.4	16142.0	16138.9	16246.8	16323.8	13567.7	11551.1
67.5°	18013.8	17984.5	17825.8	17520.8	17161.8	17041.7	16913.8	16992.4	17014.0	14125.4	12017.9
70°	17249.7	17185.0	17114.1	16802.9	16370.0	16065.0	15866.2	15949.4	16037.2	13349.0	11287.7
72.5°	15387.1	15226.9	14897.2	14623.0	14373.4	14076.1	13834.2	13979.0	14171.6	11840.7	9995.2
75°	12139.6	11990.2	11749.9	11563.4	11429.4	11426.3	11415.6	11528.0	11500.3	9614.6	8126.5
77.5°	7517.9	7830.7	8052.5	7893.8	7949.3	7835.3	8086.4	8234.3	8368.3	6892.5	5789.4
80°	3470.9	3551.0	3943.8	3842.2	3760.5	3737.4	3752.8	4010.1	4085.6	3093.4	2591.2
82.5°	791.8	759.5	787.2	730.2	727.1	693.3	697.9	697.9	673.2	570.0	477.6
85°	400.5	409.8	412.9	395.9	349.7	314.3	291.2	246.5	212.6	181.8	154.1
87.5°	268.1	275.8	280.4	257.3	231.1	201.8	183.3	149.4	118.6	73.9	57.0
90°	183.3	181.8	177.2	164.8	147.9	126.3	101.7	70.9	41.6	15.4	10.8
92.5°	130.9	127.9	126.3	115.5	103.2	86.3	66.2	44.7	23.1	10.8	6.2
95°	86.3	84.7	84.7	78.6	69.3	57.0	44.7	29.3	16.9	9.2	6.2
97.5°	60.1	58.5	58.5	55.5	49.3	41.6	30.8	20.0	13.9	9.2	6.2
100°	41.6	41.6	41.6	38.5	35.4	29.3	23.1	15.4	12.3	9.2	6.2
102.5°	27.7	27.7	29.3	27.7	24.6	20.0	15.4	12.3	10.8	7.7	6.2
105°	18.5	18.5	18.5	18.5	16.9	13.9	12.3	10.8	9.2	7.7	6.2
107.5°	12.3	12.3	12.3	12.3	10.8	9.2	9.2	9.2	7.7	7.7	6.2
110°	7.7	7.7	7.7	9.2	7.7	7.7	7.7	7.7	7.7	6.2	6.2



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 CATALOG NUMBER: CST-CA8-330-750-U-T5-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





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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1	3631.1
2.5°	3646.5	3624.9	3635.7	3614.2	3604.9	3584.9	3623.4	3626.5	3623.4	3629.6
5°	3651.1	3626.5	3638.8	3614.2	3609.5	3586.4	3624.9	3624.9	3615.7	3620.3
7.5°	3661.9	3635.7	3645.0	3615.7	3615.7	3588.0	3634.2	3631.1	3623.4	3634.2
10°	3698.9	3668.1	3668.1	3640.3	3643.4	3614.2	3671.2	3671.2	3665.0	3683.5
12.5°	3755.9	3717.4	3718.9	3680.4	3686.6	3663.5	3732.8	3735.9	3735.9	3766.7
15°	3829.8	3771.3	3777.5	3735.9	3748.2	3720.5	3782.1	3779.0	3786.7	3831.4
17.5°	3920.7	3856.0	3802.1	3666.5	3586.4	3589.5	3772.8	3857.6	3759.0	3788.2
20°	3959.2	3645.0	3474.0	3424.7	3413.9	3242.9	2893.2	2947.1	3276.8	3420.0
22.5°	3700.4	3600.3	3583.3	3520.2	3053.4	2924.0	2945.6	2914.7	2591.2	2407.9
25°	3826.8	3760.5	3722.0	3165.9	3061.1	3038.0	3022.6	2729.9	2378.6	2395.6
27.5°	4005.5	3919.2	3457.0	3179.7	3199.7	3164.3	3075.0	2455.7	2444.9	2472.6
30°	4216.5	3999.3	3369.2	3343.0	3366.1	3319.9	2585.1	2560.4	2560.4	2588.1
32.5°	4475.3	3628.0	3575.6	3578.7	3563.3	3039.5	2720.6	2714.5	2733.0	2756.1
35°	4402.9	3869.9	3874.5	3900.7	3865.3	2973.3	2933.2	2910.1	2925.5	2934.8
37.5°	4261.2	4233.5	4233.5	4204.2	3299.9	3205.9	3162.8	3159.7	3158.1	3158.1
40°	4618.6	4592.4	4560.1	4509.2	3452.4	3477.0	3412.3	3404.6	3409.3	3426.2
42.5°	5025.3	5014.5	5011.4	3869.9	3769.8	3788.2	3718.9	3698.9	3698.9	3737.4
45°	5504.4	5490.6	5150.1	4136.4	4119.5	4141.0	4064.0	4016.2	4042.4	4070.2
47.5°	6054.4	6054.4	4560.1	4535.4	4535.4	4547.7	4470.7	4406.0	4432.2	4441.4
50°	6656.8	5715.5	5017.6	4994.5	5016.1	5009.9	4929.8	4329.0	4885.1	4889.7
52.5°	6824.7	5558.3	5519.8	5493.6	5519.8	5515.2	5432.0	3611.1	5284.1	5359.6
55°	6049.8	6054.4	6046.7	6008.2	6035.9	6025.1	5943.5	3942.3	3896.1	3472.4
57.5°	6541.2	6547.4	6544.3	6538.1	6562.8	4768.0	6156.1	3561.8	2175.3	2176.8
60°	7075.8	7045.0	7035.7	7021.9	5951.2	3380.0	2565.0	248.0	850.4	838.1
62.5°	7561.1	7550.3	7517.9	7510.2	5050.0	2662.1	2600.5	57.0	44.7	43.1
65°	8235.8	8140.3	8114.1	8032.5	5382.7	2834.6	2776.1	16.9	1.5	0.0
67.5°	8486.9	8292.8	8198.9	8155.7	5476.7	2924.0	2811.5	16.9	1.5	0.0
70°	8012.5	7772.1	7653.5	7605.7	5117.7	2733.0	2622.0	16.9	1.5	0.0
72.5°	7105.1	6927.9	6880.1	6727.6	4512.3	2398.7	2301.6	16.9	0.0	0.0
75°	5827.9	5763.2	5704.7	5542.9	3668.1	1905.7	1819.4	15.4	0.0	0.0
77.5°	4241.2	4145.6	4037.8	3862.2	2475.7	1244.8	1200.1	13.9	0.0	0.0
80°	1911.8	1833.3	1807.1	1532.9	878.1	405.2	357.4	12.3	0.0	0.0
82.5°	371.3	334.3	317.4	305.0	197.2	109.4	95.5	9.2	0.0	0.0
85°	126.3	140.2	163.3	180.2	110.9	66.2	55.5	6.2	0.0	0.0
87.5°	49.3	66.2	80.1	83.2	41.6	27.7	15.4	3.1	0.0	0.0
90°	9.2	12.3	10.8	7.7	4.6	1.5	0.0	0.0	0.0	0.0
92.5°	4.6	6.2	4.6	4.6	3.1	1.5	0.0	0.0	0.0	0.0
95°	6.2	6.2	6.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0
97.5°	6.2	6.2	6.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0
100°	6.2	6.2	6.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0
102.5°	6.2	6.2	6.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0
105°	6.2	7.7	6.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0
107.5°	6.2	7.7	6.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0
110°	6.2	7.7	6.2	4.6	3.1	1.5	0.0	0.0	0.0	0.0



REPORT NUMBER: P579556  
 CATALOG NUMBER: CST-CA8-330-750-U-T5-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)