

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: P579530

Luminaire Tested: **CST-CA10-310-750-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579530
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-310-750-U-T5N-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33421 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

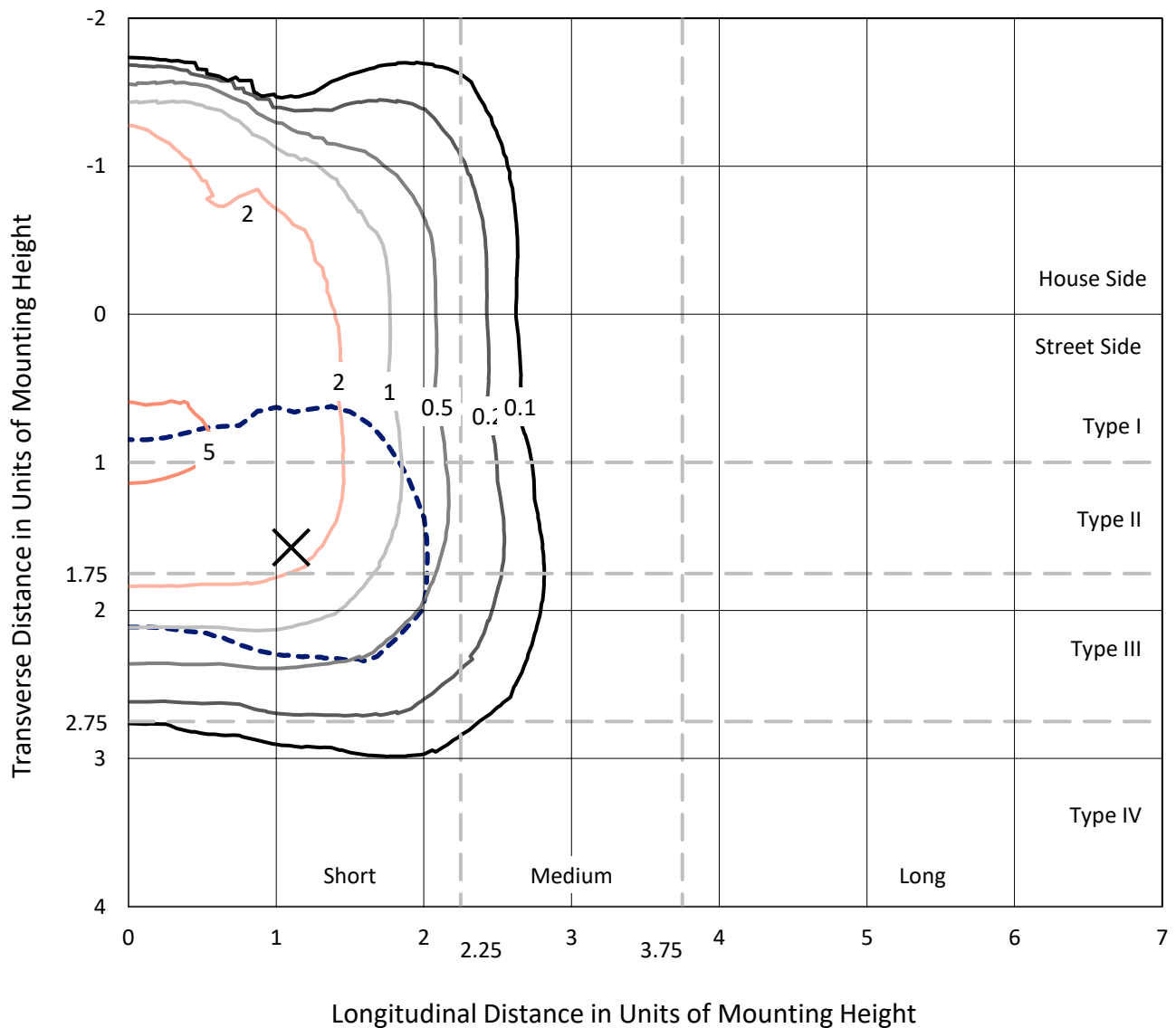
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

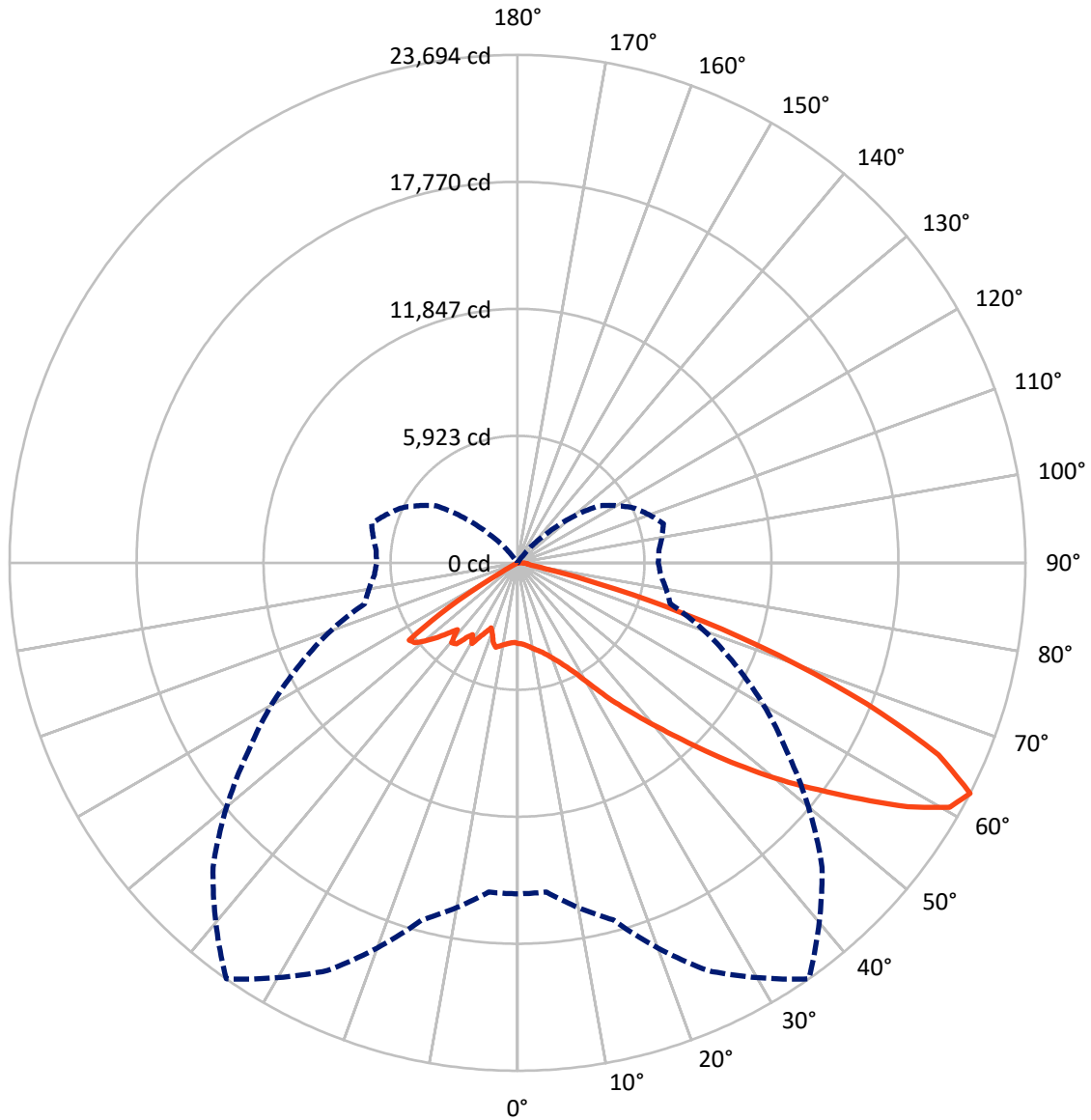
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 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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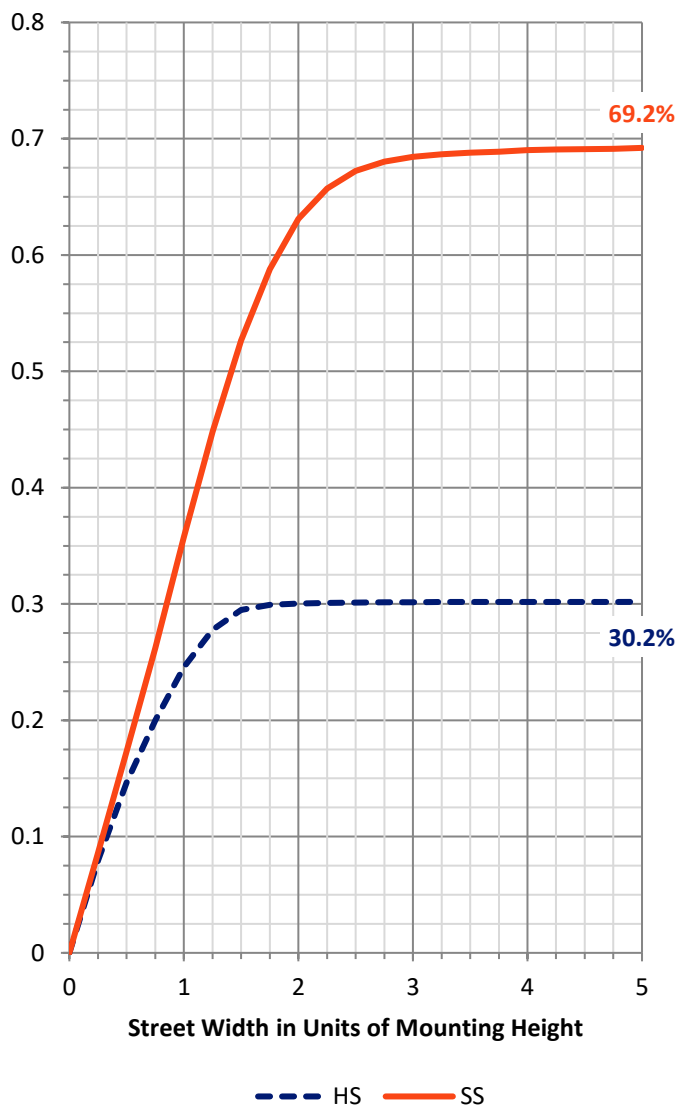
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10143.4	0.0	10143.4
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	23248.6	29.0	23277.6
	% Fixture	69.6	0.1	69.6
Total	Lumens	33392.0	29.0	33421.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.3	1.1
10°-20°	1191.8	3.6
20°-30°	2178.3	6.5
30°-40°	4151.1	12.4
40°-50°	7125.1	21.3
50°-60°	9558.4	28.6
60°-70°	7266.3	21.7
70°-80°	1375.9	4.1
80°-90°	173.7	0.5
90°-100°	25.5	0.1
100°-110°	3.5	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°	33392.0	99.9
0°-180°	33421.0	100.0

Coefficient of Utilization



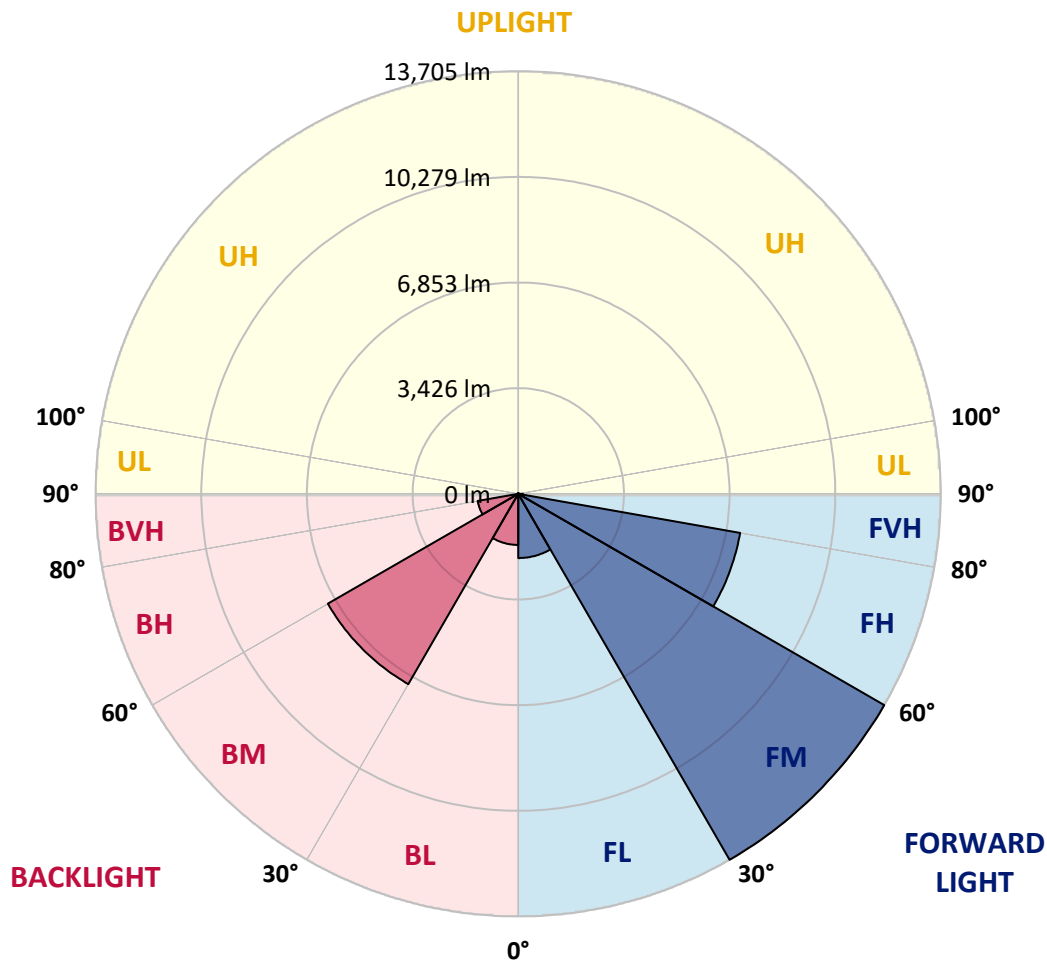
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 CATALOG NUMBER: CST-CA10-310-750-U-T5N-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2083.4	6.2			
FM (30°-60°)	13705.4	41.0			
FH (60°-80°)	7306.4	21.9			G3/7500
FVH (80°-90°)	153.4	0.5			G2/225
BL (0°-30°)	1658.1	5.0	B3/2500		
BM (30°-60°)	7129.2	21.3	B4/8500		
BH (60°-80°)	1335.7	4.0	B3/2500		G3/2500
BVH (80°-90°)	20.4	0.1			G1/100
UL (90°-100°)	25.5	0.1		U2/50	
UH (100°-180°)	3.5	0.0		U1/10	

BUG Rating: B4-U2-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6
2.5°	3856.6	3828.2	3829.8	3855.0	3782.5	3809.3	3777.8	3809.3	3792.0	3804.6	3810.9
5°	3924.3	3895.9	3892.8	3919.6	3858.1	3877.0	3845.5	3867.6	3844.0	3859.7	3859.7
7.5°	4026.7	3998.3	3988.9	4009.4	3952.7	3966.8	3933.8	3946.4	3919.6	3940.1	3929.0
10°	4148.0	4116.5	4105.5	4116.5	4067.7	4075.5	4036.2	4050.3	4011.0	4034.6	4018.8
12.5°	4277.2	4236.2	4236.2	4245.7	4193.7	4195.3	4159.0	4166.9	4127.5	4152.7	4133.8
15°	4417.4	4371.7	4378.0	4387.5	4332.3	4341.8	4304.0	4316.6	4275.6	4300.8	4281.9
17.5°	4603.3	4554.5	4548.2	4576.5	4524.5	4541.9	4499.3	4515.1	4478.8	4486.7	4477.3
20°	4860.1	4798.6	4784.5	4822.3	4764.0	4776.6	4745.1	4776.6	4738.8	4682.1	4523.0
22.5°	5167.3	5113.7	5090.1	5115.3	5046.0	5068.0	5066.5	5116.9	5012.9	4655.3	4496.2
25°	5572.2	5535.9	5490.2	5493.4	5409.9	5443.0	5502.8	5542.2	5099.5	4786.0	4789.2
27.5°	6112.5	6076.3	6013.3	5989.6	5868.3	5948.7	6041.6	5657.2	5309.1	5389.4	5345.3
30°	6802.5	6796.2	6668.6	6627.7	6495.3	6596.2	6515.8	5857.3	5977.0	6088.9	6021.2
32.5°	7721.0	7676.9	7492.6	7418.5	7279.9	7338.2	6629.3	6534.7	6712.8	6864.0	6793.1
35°	8831.7	8697.7	8510.3	8363.8	8122.7	7798.2	7060.9	7245.2	7511.5	7719.4	7376.0
37.5°	10121.9	9977.0	9683.9	9420.9	9041.2	8029.8	7711.6	8080.2	8414.2	8188.9	7396.5
40°	11450.0	11320.8	11045.1	10706.4	10065.2	8748.2	8500.8	8941.9	9321.6	8031.4	7637.5
42.5°	12768.6	12658.3	12436.2	12102.2	11276.7	9603.6	9365.7	9839.9	9482.3	8338.6	8326.0
45°	14098.2	14043.1	13791.0	13505.8	12711.8	10698.5	10334.6	10704.8	9124.7	9074.3	9044.3
47.5°	15175.8	15185.2	15097.0	14948.9	14243.1	11900.5	11426.3	10328.3	9559.5	9614.6	9628.8
50°	16286.4	16215.5	16210.8	16220.2	15925.7	13449.1	12169.9	10158.1	10128.2	10123.5	10110.9
52.5°	17176.5	17086.7	17272.6	17420.7	17595.6	15177.3	12058.1	10734.7	10563.0	10503.1	10136.1
55°	17901.2	17866.5	18169.0	18670.0	19448.2	17007.9	13047.4	11297.1	10953.7	9554.8	8619.0
57.5°	18340.7	18391.1	19015.0	19999.6	21456.9	18525.0	14199.0	11867.4	9378.3	8415.8	8355.9
60°	17499.5	17765.7	18827.5	20989.0	23155.1	19952.4	15056.0	11982.4	8439.4	7924.2	7804.5
62.5°	15440.4	15415.2	17239.5	20989.0	23693.9	20094.1	15327.0	11168.0	7372.8	6701.7	6567.8
65°	10928.5	10994.7	12943.4	18914.2	21584.5	18690.5	14137.6	9494.9	5880.9	5265.0	5083.8
67.5°	6763.2	6758.4	8666.2	13929.6	17570.4	15648.4	11902.1	7278.3	4081.8	3500.5	3303.6
70°	2336.3	2402.5	3897.5	8151.1	12934.0	12259.7	8907.3	4595.4	2152.0	1534.4	1295.0
72.5°	929.5	951.5	1398.9	3634.4	8080.2	8190.5	5413.1	2232.3	644.3	409.6	384.4
75°	608.1	611.3	671.1	1312.3	3921.2	4406.4	2514.3	641.2	299.3	274.1	267.8
77.5°	524.6	526.2	557.7	664.8	1277.6	1714.0	715.2	379.7	250.5	225.3	219.0
80°	486.8	488.4	504.1	571.9	616.0	584.5	381.2	305.6	211.1	200.1	198.5
82.5°	460.0	466.3	474.2	515.2	497.8	439.5	316.7	247.3	162.3	173.3	178.0
85°	423.8	430.1	434.8	458.4	415.9	321.4	245.8	185.9	104.0	113.4	111.9
87.5°	318.2	321.4	315.1	311.9	289.9	225.3	162.3	118.2	41.0	37.8	34.7
90°	152.8	151.2	144.9	133.9	116.6	91.4	67.7	37.8	17.3	7.9	3.2
92.5°	121.3	119.7	116.6	105.6	91.4	67.7	48.8	26.8	15.8	6.3	1.6
95°	81.9	78.8	75.6	67.7	56.7	41.0	28.4	18.9	12.6	4.7	1.6
97.5°	53.6	52.0	47.3	41.0	31.5	22.1	17.3	14.2	11.0	4.7	1.6
100°	33.1	33.1	29.9	23.6	15.8	12.6	11.0	11.0	7.9	3.2	0.0
102.5°	20.5	18.9	17.3	11.0	7.9	7.9	7.9	7.9	6.3	3.2	0.0
105°	11.0	11.0	7.9	6.3	4.7	3.2	4.7	6.3	4.7	1.6	0.0
107.5°	3.2	3.2	3.2	1.6	1.6	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	3.2	1.6	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°	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6	3763.6
2.5°	3803.0	3773.1	3780.9	3751.0	3746.3	3714.8	3768.3	3771.5	3757.3	3773.1
5°	3851.8	3815.6	3829.8	3793.5	3787.2	3746.3	3788.8	3784.1	3773.1	3785.7
7.5°	3921.2	3884.9	3892.8	3850.3	3842.4	3796.7	3837.7	3821.9	3807.7	3825.1
10°	4017.3	3976.3	3982.6	3932.2	3925.9	3872.3	3919.6	3895.9	3875.5	3899.1
12.5°	4135.4	4081.8	4075.5	4022.0	4017.3	3966.8	4015.7	3992.0	3971.6	4009.4
15°	4270.9	4200.0	4190.5	4122.8	4114.9	4062.9	4110.2	4075.5	4059.8	4108.6
17.5°	4452.1	4201.6	4061.4	3962.1	3905.4	3877.0	3962.1	4077.1	4042.5	4044.0
20°	4378.0	4108.6	3921.2	3836.1	3774.6	3500.5	3122.4	3231.1	3451.7	3560.4
22.5°	4356.0	4261.4	4184.2	4040.9	3431.2	3276.8	3298.9	3273.7	2857.8	2698.6
25°	4778.2	4669.5	4502.5	3751.0	3574.6	3539.9	3552.5	3117.7	2804.2	2849.9
27.5°	5318.5	5206.7	4382.7	3962.1	3927.5	3881.8	3632.9	3089.3	3131.9	3176.0
30°	5999.1	5411.5	4570.2	4441.0	4376.4	4329.2	3406.0	3450.1	3521.0	3576.1
32.5°	6662.3	5394.1	5107.4	4946.7	4866.4	3949.5	3848.7	3951.1	4023.6	4066.1
35°	6670.2	6011.7	5709.2	5502.8	4992.4	4245.7	4338.6	4510.4	4688.4	4721.5
37.5°	6851.4	6711.2	6364.6	6104.6	3713.2	4738.8	4943.6	5140.5	5318.5	5329.6
40°	7572.9	7421.7	7097.1	6525.3	4100.7	4833.3	5610.0	5832.1	5981.8	5973.9
42.5°	8292.9	8188.9	7851.8	5799.0	4620.6	4187.4	6309.5	6456.0	6550.5	6616.7
45°	9017.6	8913.6	7774.6	6367.7	5239.8	4586.0	6139.3	6969.5	7073.5	7106.6
47.5°	9583.1	9326.3	7123.9	7122.4	6013.3	5096.4	5069.6	7432.7	7524.1	7500.4
50°	10106.1	8326.0	7700.5	7369.7	6813.6	5576.9	5391.0	6254.3	7932.1	7897.4
52.5°	9195.6	8080.2	8195.2	6703.3	7456.3	6054.2	5753.3	5608.4	7207.4	8135.3
55°	8223.6	8381.1	8700.9	7365.0	5409.9	6208.6	6060.5	5772.2	4863.2	4092.9
57.5°	8392.1	8626.9	8642.6	7977.8	5598.9	3878.6	4967.2	4348.1	2747.5	2753.8
60°	7829.7	8135.3	6317.3	5318.5	3010.6	808.2	78.8	69.3	478.9	582.9
62.5°	6619.8	7045.2	6030.6	4633.2	1931.4	29.9	7.9	1.6	0.0	0.0
65°	5126.3	5638.3	5096.4	3998.3	1714.0	9.5	0.0	0.0	0.0	0.0
67.5°	3380.8	3842.4	3872.3	3344.6	1428.9	4.7	0.0	0.0	0.0	0.0
70°	1416.3	1994.4	2410.4	2486.0	1123.3	1.6	0.0	0.0	0.0	0.0
72.5°	409.6	633.3	1159.5	1493.5	713.7	0.0	0.0	0.0	0.0	0.0
75°	272.5	291.4	335.6	672.7	356.0	0.0	0.0	0.0	0.0	0.0
77.5°	225.3	230.0	192.2	184.3	102.4	0.0	0.0	0.0	0.0	0.0
80°	204.8	201.7	154.4	108.7	37.8	0.0	0.0	0.0	0.0	0.0
82.5°	189.0	179.6	111.9	56.7	25.2	0.0	0.0	0.0	0.0	0.0
85°	127.6	126.0	50.4	34.7	4.7	0.0	0.0	0.0	0.0	0.0
87.5°	34.7	44.1	11.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0
90°	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
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: P579530
 CATALOG NUMBER: CST-CA10-310-750-U-T5N-HSS-HM-EX180

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)