

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: P522138

Luminaire Tested: **CST-CA10-310-750-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522138
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-310-750-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38012 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G5

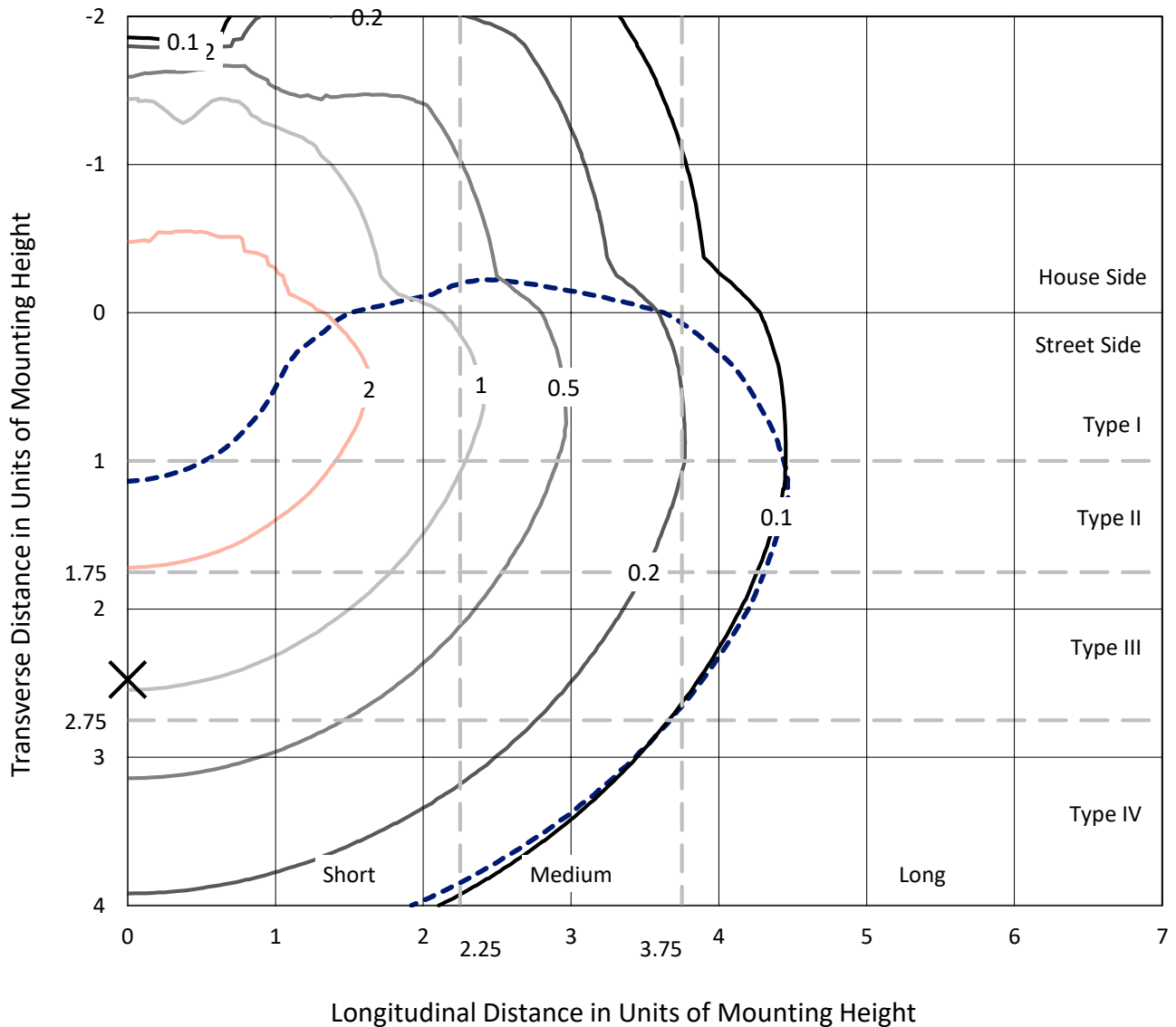
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P522138
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Iso-Footcandle Lines of Horizontal Illumination

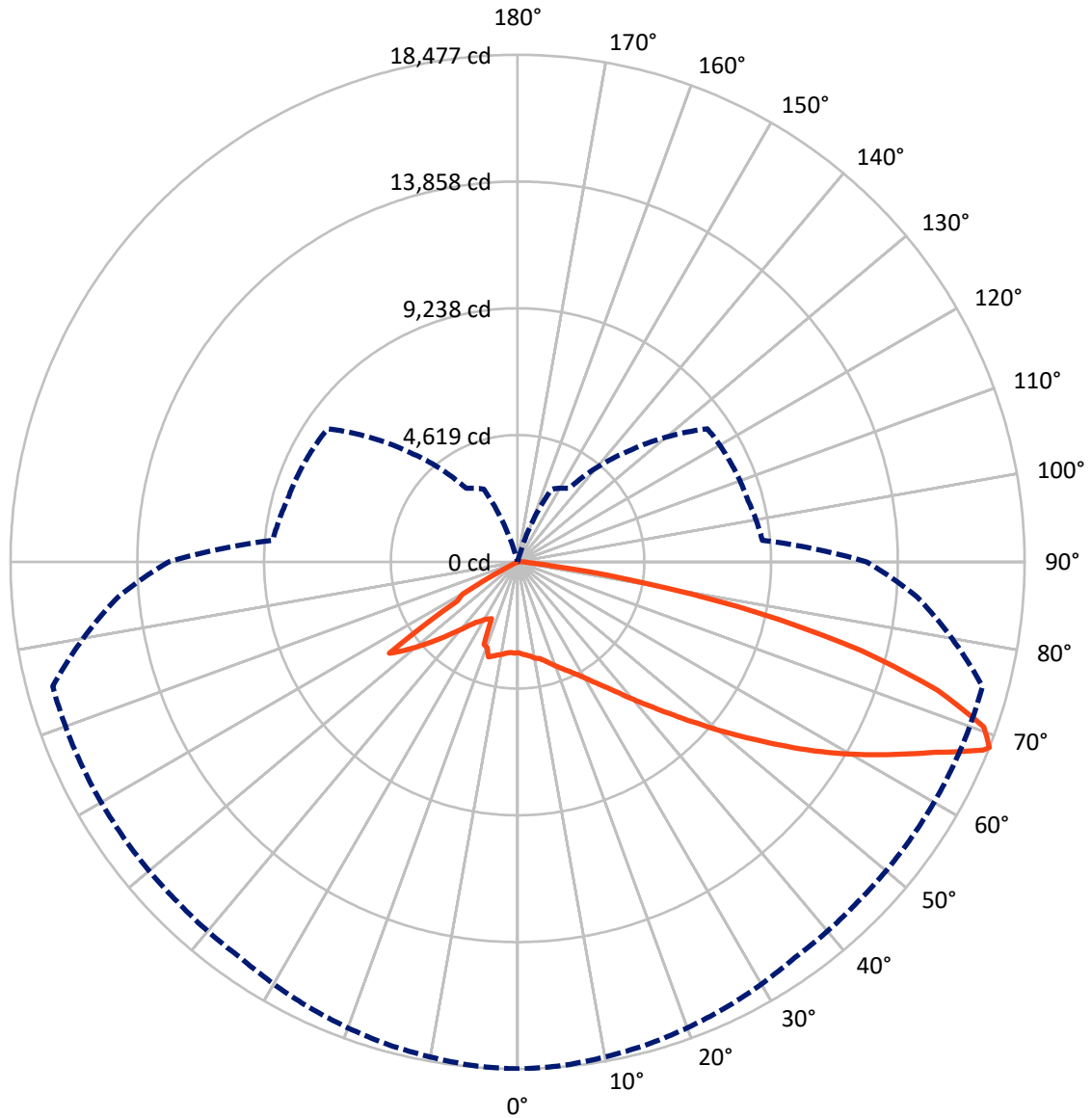
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P522138
CATALOG NUMBER: CST-CA10-310-750-U-T5R-HSS-HM-EX120

Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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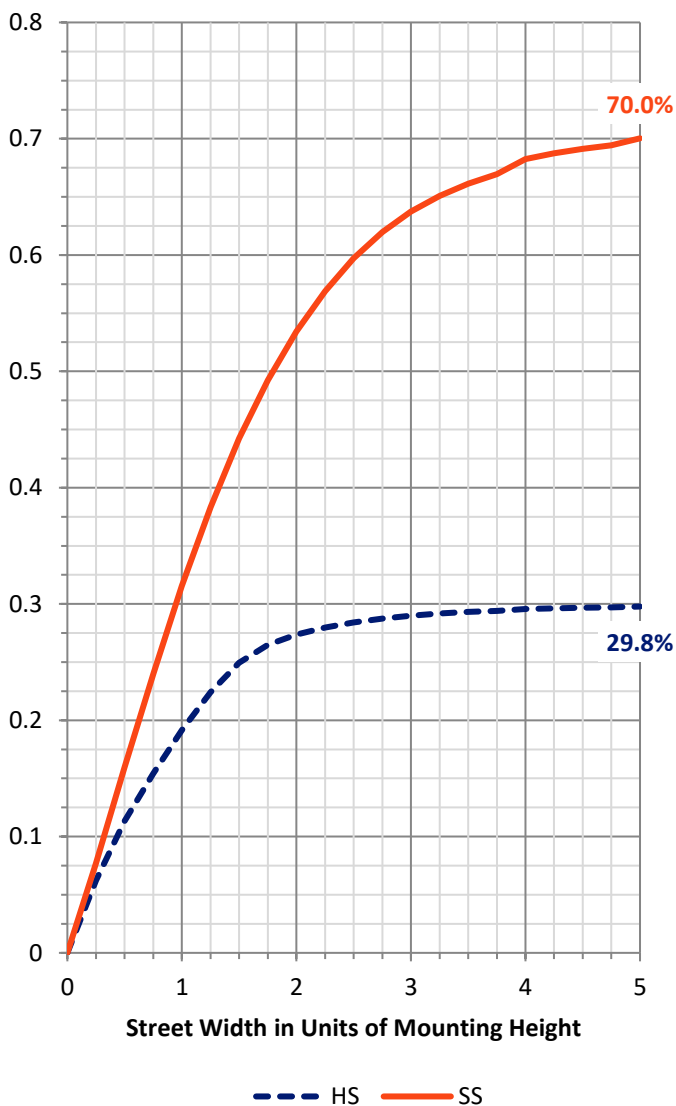
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11331.0	1.8	11332.7
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	26663.7	15.6	26679.3
	% Fixture	70.1	0.0	70.2
Total	Lumens	37994.7	17.4	38012.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.6	0.8
10°-20°	1023.7	2.7
20°-30°	1753.4	4.6
30°-40°	2844.5	7.5
40°-50°	4797.1	12.6
50°-60°	7819.4	20.6
60°-70°	10487.0	27.6
70°-80°	8145.7	21.4
80°-90°	802.2	2.1
90°-100°	15.2	0.0
100°-110°	0.9	0.0
110°-120°	0.2	0.0
120°-130°	0.2	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	37994.7	100.0
0°-180°	38012.0	100.0

Coefficient of Utilization

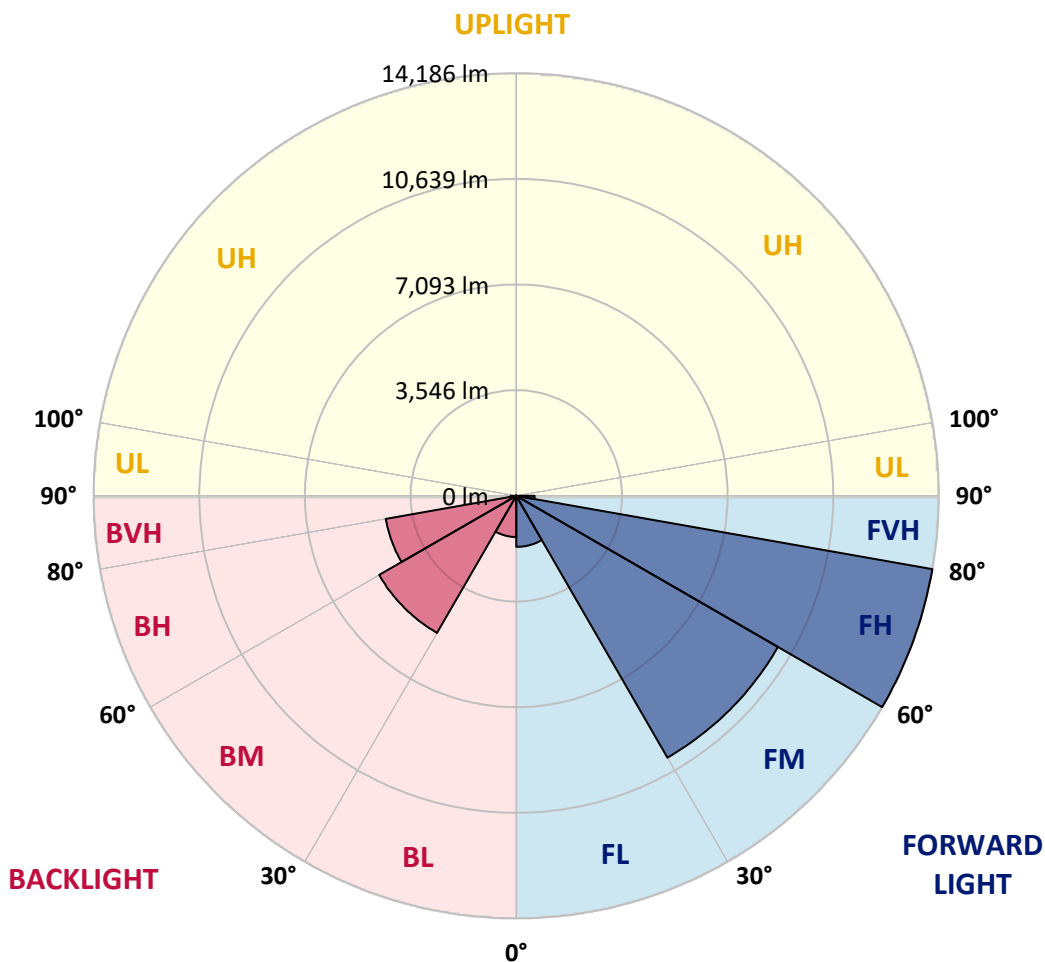


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 CATALOG NUMBER: CST-CA10-310-750-U-T5R-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1714.6	4.5			
FM (30°-60°)	10146.7	26.7			
FH (60°-80°)	14185.6	37.3			G5
FVH (80°-90°)	616.8	1.6			G4/750
BL (0°-30°)	1384.2	3.6	B3/2500		
BM (30°-60°)	5314.2	14.0	B4/8500		
BH (60°-80°)	4447.1	11.7	B4/5000		G4/5000
BVH (80°-90°)	185.4	0.5			G2/225
UL (90°-100°)	15.2	0.0		U2/50	
UH (100°-180°)	2.1	0.0		U1/10	

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°	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9
2.5°	3369.0	3359.5	3358.0	3376.8	3317.1	3347.0	3320.2	3342.2	3328.1	3339.1	3340.7
5°	3414.6	3397.3	3386.3	3408.3	3370.5	3384.7	3354.8	3364.3	3324.9	3347.0	3350.1
7.5°	3480.6	3452.3	3449.1	3455.4	3422.4	3433.4	3384.7	3395.7	3367.4	3354.8	3365.8
10°	3570.2	3543.5	3523.0	3537.2	3493.2	3499.4	3447.6	3449.1	3428.7	3405.1	3424.0
12.5°	3620.5	3623.6	3614.2	3625.2	3589.1	3568.6	3532.5	3519.9	3499.4	3471.2	3461.7
15°	3746.3	3740.0	3721.1	3738.4	3733.7	3714.8	3670.8	3642.5	3598.5	3582.8	3567.0
17.5°	3900.3	3879.9	3864.2	3886.2	3909.8	3870.5	3828.0	3788.7	3730.5	3699.1	3680.2
20°	4062.3	4048.1	4032.4	4067.0	4074.8	4045.0	4013.5	3955.4	3887.8	3846.9	3807.6
22.5°	4243.0	4214.7	4219.5	4265.1	4250.9	4236.8	4195.9	4148.7	4067.0	4015.1	3901.9
25°	4430.1	4414.4	4436.4	4456.8	4445.8	4416.0	4395.5	4360.9	4269.8	4206.9	4041.8
27.5°	4662.8	4637.6	4665.9	4673.8	4664.4	4656.5	4628.2	4601.5	4502.4	4431.7	4225.8
30°	4936.3	4906.5	4952.1	4941.0	4931.6	4937.9	4920.6	4862.4	4774.4	4678.5	4472.6
32.5°	5261.8	5222.4	5274.3	5250.7	5228.7	5272.8	5231.9	5176.9	5073.1	4961.5	4760.3
35°	5639.0	5640.6	5667.3	5628.0	5620.2	5667.3	5640.6	5573.0	5477.1	5360.8	5074.7
37.5°	6096.5	6083.9	6151.5	6132.7	6104.4	6167.3	6175.1	6090.2	5917.3	5802.5	5464.5
40°	6653.0	6649.9	6671.9	6675.1	6667.2	6697.1	6711.2	6598.0	6486.4	6313.5	5156.4
42.5°	7247.3	7259.9	7299.2	7270.9	7308.6	7347.9	7352.6	7258.3	7097.9	6057.2	5477.1
45°	7961.0	8000.3	8027.0	8020.8	8038.0	8094.6	8099.4	8049.0	7891.8	6561.9	6058.8
47.5°	8780.1	8817.8	8825.7	8876.0	8860.2	8940.4	8929.4	8931.0	8762.8	7264.6	6692.3
50°	9721.7	9739.0	9803.5	9831.8	9792.5	9901.0	9872.7	9907.2	9699.7	8069.5	7373.1
52.5°	10721.6	10751.5	10778.2	10885.1	10834.8	10929.1	10891.4	10971.5	10731.0	8888.5	8129.2
55°	11858.2	11862.9	11908.5	12017.0	11950.9	12064.1	12009.1	12039.0	11847.2	9794.1	8916.8
57.5°	13062.4	13046.7	13064.0	13150.4	13090.7	13175.6	13153.6	13181.9	13002.7	10746.7	9492.2
60°	14254.0	14230.5	14255.6	14313.8	14232.0	14378.2	14299.6	14326.4	14133.0	11719.9	10312.8
62.5°	15452.0	15434.7	15406.4	15464.5	15345.1	15420.5	15453.5	15409.5	15239.7	12600.2	11026.6
65°	16737.9	16720.6	16616.9	16653.0	16439.2	16403.1	16415.7	16429.8	16316.6	13472.7	11809.5
67.5°	18300.6	18275.4	18080.5	17835.2	17527.1	17459.5	17465.8	17503.5	17519.3	14595.2	12726.0
68°	18476.7	18431.1	18214.1	17929.6	17607.3	17528.7	17520.8	17528.7	17536.5	14604.6	12716.6
70°	18027.0	18009.7	17844.7	17500.4	17170.3	16981.6	16818.1	16811.8	16736.4	13857.9	12013.8
72.5°	15997.5	15975.5	15779.0	15535.3	15330.9	15035.4	14823.1	14835.7	14711.5	12248.1	10515.6
75°	12946.1	12944.5	12708.7	12504.3	12507.5	12485.5	12414.7	12538.9	12410.0	10388.3	8968.7
77.5°	9022.2	9053.6	9037.9	8918.4	9086.6	9319.3	9572.4	9811.3	9737.5	8206.3	7151.4
80°	4713.1	4801.1	5112.4	5126.6	5244.5	5470.8	5643.8	5804.1	5815.1	4656.5	4131.4
82.5°	1252.9	1279.7	1385.0	1355.1	1345.7	1391.3	1429.0	1433.7	1436.9	1213.6	1133.5
85°	389.9	400.9	388.3	371.0	344.3	314.4	306.6	250.0	198.1	163.5	143.1
87.5°	276.7	295.6	267.3	251.5	223.2	212.2	190.2	149.3	116.3	81.7	55.0
90°	143.1	146.2	130.5	111.6	103.8	97.5	83.3	59.7	29.9	15.7	14.1
92.5°	72.3	73.9	64.5	55.0	47.2	40.9	31.4	17.3	9.4	4.7	1.6
95°	28.3	29.9	26.7	23.6	18.9	14.1	12.6	9.4	6.3	3.1	1.6
97.5°	9.4	9.4	9.4	7.9	7.9	7.9	7.9	6.3	4.7	3.1	1.6
100°	0.0	0.0	0.0	1.6	3.1	4.7	4.7	4.7	3.1	1.6	1.6
102.5°	0.0	0.0	0.0	0.0	0.0	1.6	3.1	3.1	3.1	1.6	1.6
105°	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6	1.6
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
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	1.6
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	1.6	1.6	1.6
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: P522138

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9	3313.9
2.5°	3332.8	3323.4	3328.1	3288.8	3298.2	3273.1	3326.5	3312.4	3306.1	3328.1
5°	3340.7	3306.1	3334.4	3307.7	3312.4	3276.2	3320.2	3302.9	3301.4	3313.9
7.5°	3343.8	3326.5	3353.2	3309.2	3323.4	3309.2	3342.2	3324.9	3340.7	3351.7
10°	3387.8	3378.4	3375.3	3359.5	3370.5	3339.1	3380.0	3380.0	3387.8	3417.7
12.5°	3452.3	3439.7	3431.8	3403.6	3414.6	3405.1	3438.1	3444.4	3458.6	3471.2
15°	3540.3	3518.3	3510.5	3485.3	3493.2	3491.6	3515.2	3516.7	3548.2	3546.6
17.5°	3653.5	3622.1	3631.5	3612.6	3614.2	3601.6	3589.1	3589.1	3617.4	3623.6
20°	3788.7	3609.5	3373.7	3241.6	3218.0	3235.3	3302.9	3414.6	3274.6	3313.9
22.5°	3545.0	3383.1	3372.1	3342.2	3323.4	2902.1	2793.6	2759.0	2939.8	3251.1
25°	3576.5	3507.3	3486.9	3449.1	2892.6	2887.9	2856.5	2804.6	2292.1	2281.1
27.5°	3743.1	3675.5	3642.5	3021.5	3009.0	3007.4	2960.2	2439.9	2322.0	2337.7
30°	3938.1	3859.5	3268.4	3174.0	3163.0	3137.9	2867.5	2410.0	2408.4	2410.0
32.5°	4162.9	3901.9	3362.7	3358.0	3364.3	3287.2	2540.5	2531.0	2529.5	2545.2
35°	4471.0	3620.5	3598.5	3622.1	3589.1	2842.3	2693.0	2688.3	2689.8	2682.0
37.5°	4266.6	3903.5	3898.8	3898.8	3821.7	2908.3	2878.5	2900.5	2897.3	2886.3
40°	4353.1	4246.2	4217.9	4208.5	3230.6	3137.9	3120.6	3148.9	3153.6	3161.5
42.5°	4772.8	4675.4	4661.2	4549.6	3515.2	3485.3	3431.8	3461.7	3458.6	3468.0
45°	5288.5	5222.4	5161.1	3944.3	3898.8	3861.0	3806.0	3840.6	3850.0	3843.7
47.5°	5889.0	5816.7	5373.4	4337.4	4335.8	4305.9	4244.6	4272.9	4268.2	4268.2
50°	6492.7	6414.1	4881.3	4837.3	4821.6	4774.4	4724.1	4728.8	4730.4	4746.1
52.5°	7167.1	5728.7	5403.2	5315.2	5327.8	5296.3	5247.6	3972.6	5224.0	5238.2
55°	6698.6	5995.9	5977.0	5860.7	5890.6	5849.7	5818.3	3919.2	5195.7	5741.2
57.5°	6623.2	6572.9	6557.1	6437.7	6475.4	6087.1	6377.9	4288.6	3593.8	2625.4
60°	7200.1	7146.7	7137.2	7031.9	7028.8	4837.3	5797.8	2941.4	2298.4	2314.1
62.5°	7759.8	7673.3	7696.9	7572.7	5338.8	2947.6	2598.6	66.0	105.3	111.6
65°	8383.9	8239.3	8262.9	8148.1	5507.0	3108.0	2809.3	34.6	29.9	28.3
67.5°	8984.4	8731.3	8610.3	8489.2	5719.2	3273.1	2927.2	9.4	0.0	0.0
68°	8954.6	8687.3	8563.1	8448.4	5697.2	3268.4	2920.9	9.4	0.0	0.0
70°	8449.9	8209.4	8091.5	8003.5	5439.4	3156.7	2803.0	9.4	0.0	0.0
72.5°	7387.2	7253.6	7178.1	7101.1	4832.6	2823.5	2513.8	9.4	0.0	0.0
75°	6277.3	6239.6	6192.4	6022.6	4027.7	2311.0	2065.7	9.4	0.0	0.0
77.5°	4974.1	4972.5	4857.7	4658.1	3032.5	1696.3	1523.3	7.9	0.0	0.0
80°	2689.8	2931.9	2843.9	2741.7	1719.9	922.8	878.8	6.3	0.0	0.0
82.5°	756.2	715.3	687.0	643.0	361.6	201.2	196.5	6.3	0.0	0.0
85°	105.3	116.3	128.9	146.2	83.3	53.5	47.2	3.1	0.0	0.0
87.5°	59.7	67.6	83.3	86.5	31.4	25.2	7.9	0.0	0.0	0.0
90°	12.6	14.1	15.7	15.7	6.3	6.3	0.0	0.0	0.0	0.0
92.5°	0.0	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P522138
 CATALOG NUMBER: CST-CA10-310-750-U-T5R-HSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.6	1.6	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)