

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: P522139

Luminaire Tested: **CST-CA10-310-750-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522139  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)  
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-EX180  
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: 32633 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U2 - G5

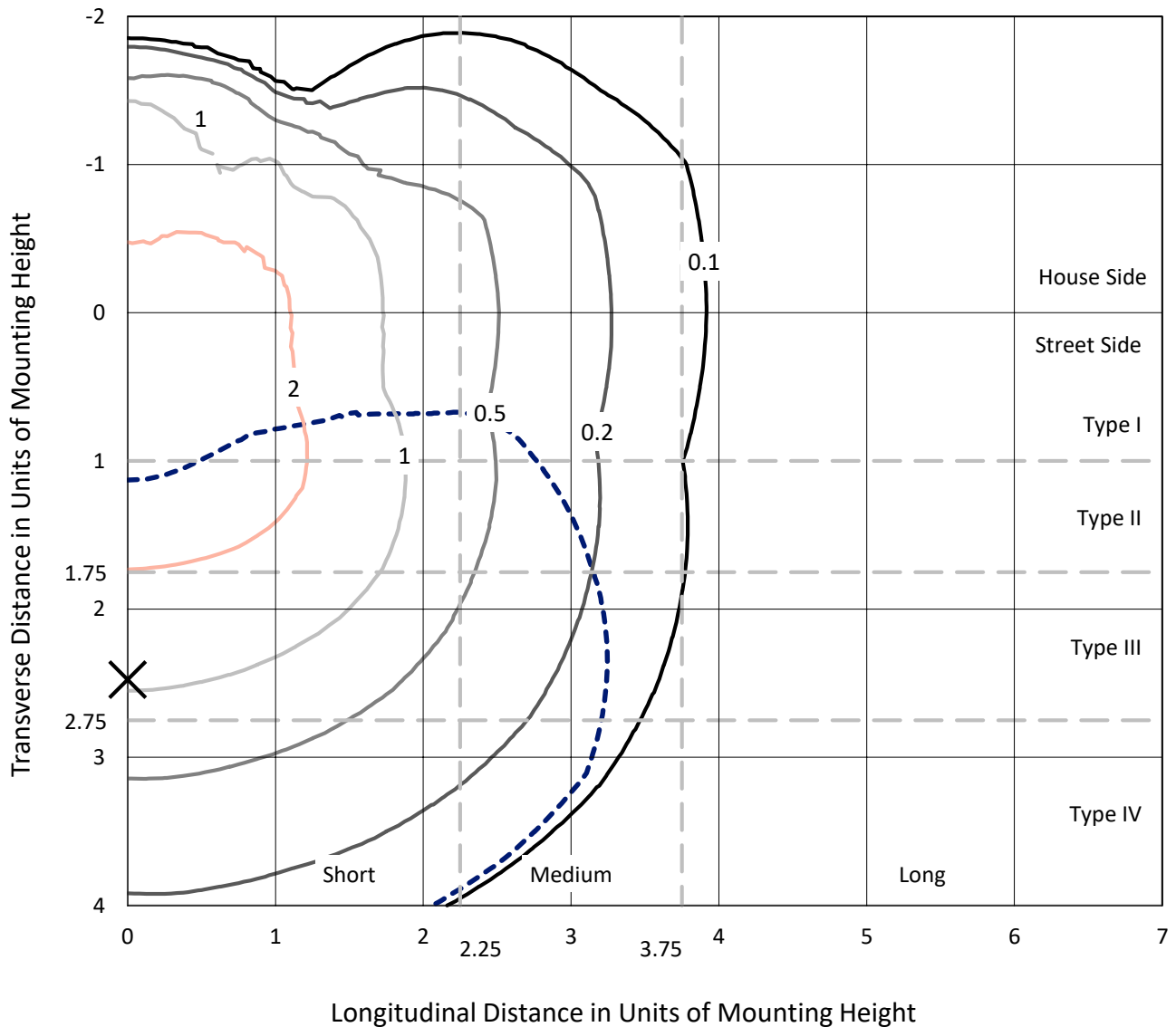
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

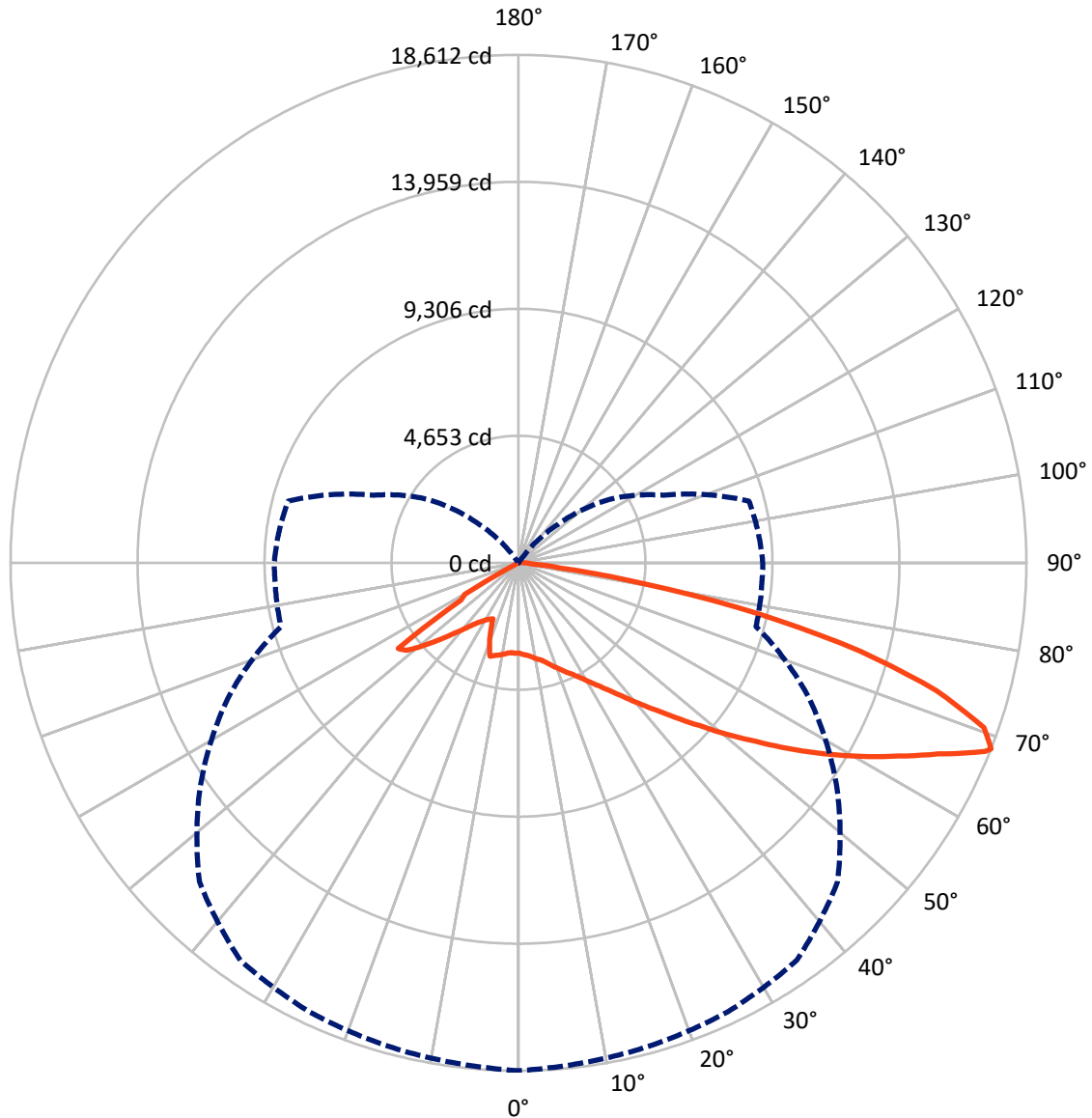
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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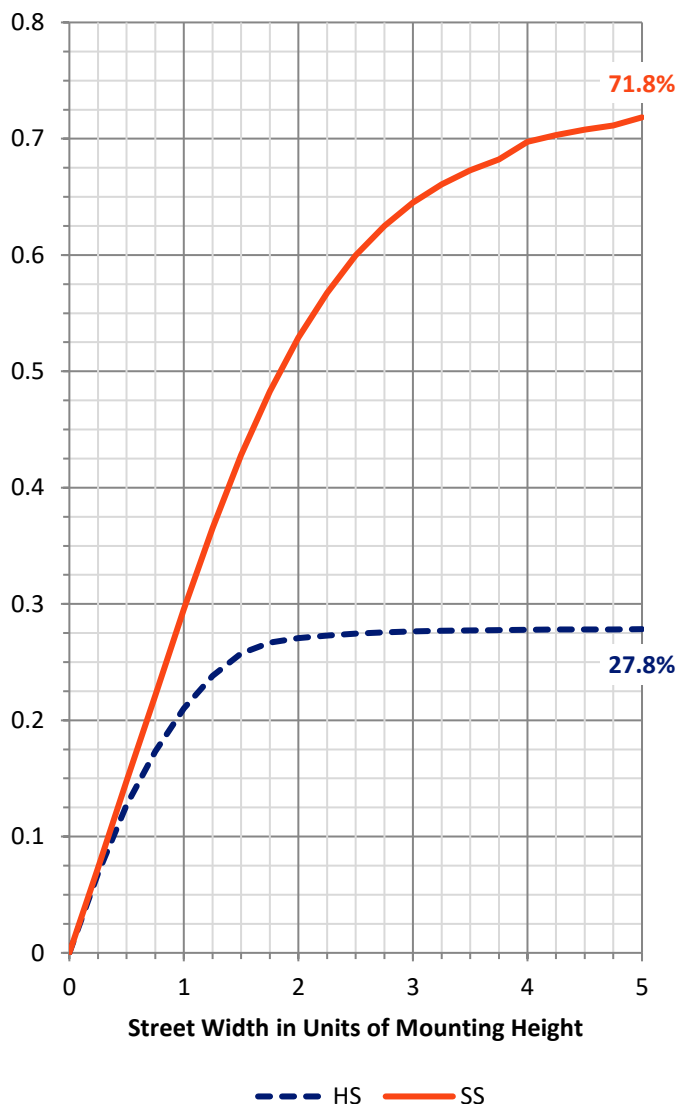
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9114.4	0.2	9114.6
	% Fixture	27.9	0.0	27.9
<b>Street Side</b>	Lumens	23499.7	18.7	23518.4
	% Fixture	72.0	0.1	72.1
<b>Total</b>	Lumens	32614.1	18.9	32633.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.9	1.0
10°-20°	1016.8	3.1
20°-30°	1721.4	5.3
30°-40°	2727.0	8.4
40°-50°	4458.5	13.7
50°-60°	6829.3	20.9
60°-70°	8397.2	25.7
70°-80°	6488.4	19.9
80°-90°	654.7	2.0
90°-100°	18.6	0.1
100°-110°	0.3	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°	32614.1	99.9
0°-180°	32633.0	100.0

**Coefficient of Utilization**

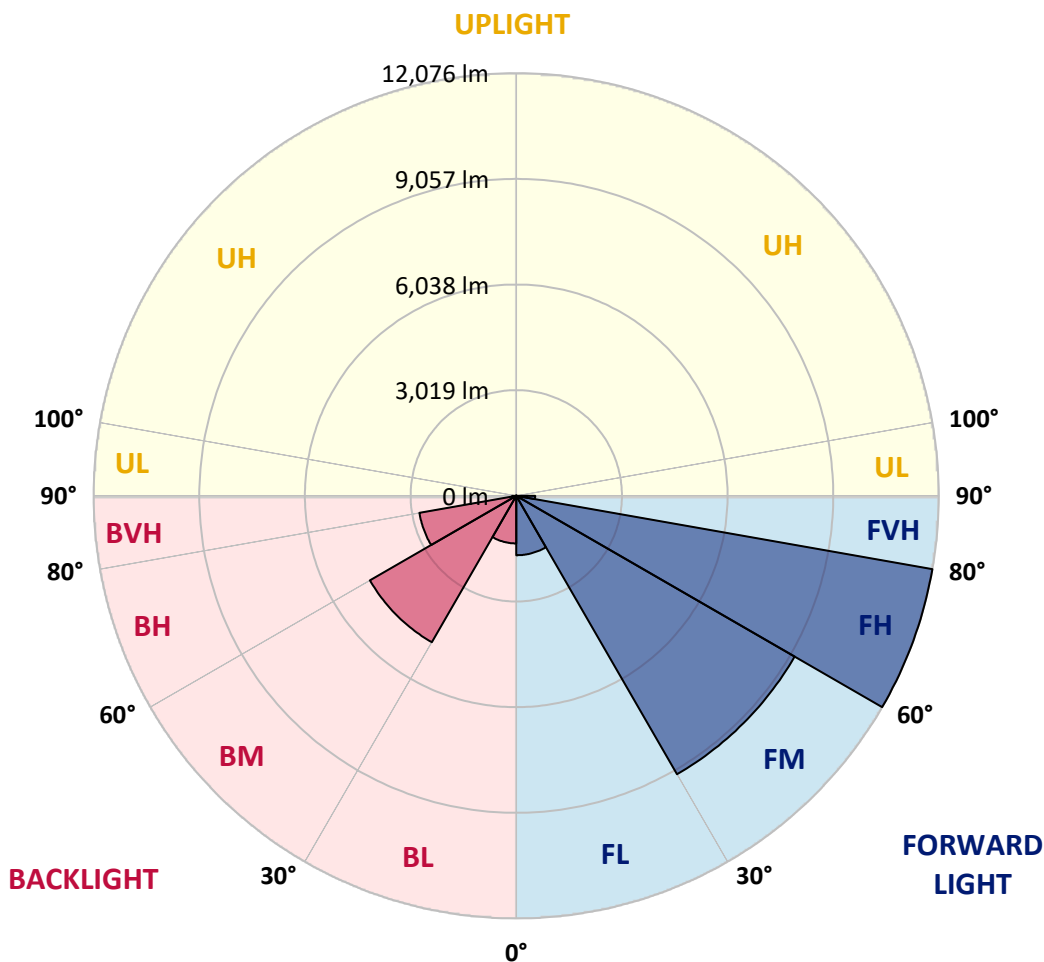


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1698.6	5.2			
FM (30°-60°)	9185.6	28.1			
FH (60°-80°)	12075.6	37.0			G5
FVH (80°-90°)	539.9	1.7			G4/750
BL (0°-30°)	1360.4	4.2	B3/2500		
BM (30°-60°)	4829.2	14.8	B3/5000		
BH (60°-80°)	2810.0	8.6	B4/5000		G4/5000
BVH (80°-90°)	114.8	0.4			G2/225
UL (90°-100°)	18.6	0.1		U2/50	
UH (100°-180°)	0.3	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°	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1
2.5°	3365.8	3359.5	3353.2	3367.4	3312.4	3335.9	3317.1	3334.4	3321.8	3335.9	3331.2
5°	3409.8	3403.5	3384.7	3400.4	3364.2	3373.7	3350.1	3356.4	3313.9	3339.1	3337.5
7.5°	3482.1	3464.9	3452.3	3452.3	3420.8	3419.3	3381.5	3383.1	3350.1	3346.9	3353.2
10°	3579.6	3567.0	3532.4	3535.6	3491.6	3485.3	3438.1	3436.6	3409.8	3394.1	3408.3
12.5°	3651.9	3664.5	3633.1	3633.1	3589.0	3557.6	3524.6	3502.6	3482.1	3458.6	3447.6
15°	3784.0	3796.6	3754.1	3752.5	3735.2	3697.5	3661.4	3614.2	3578.0	3567.0	3549.7
17.5°	3955.3	3947.5	3911.3	3912.9	3916.0	3854.7	3818.6	3757.3	3705.4	3667.6	3658.2
20°	4129.8	4129.8	4090.5	4103.1	4087.4	4030.8	4007.2	3922.3	3850.0	3809.1	3776.1
22.5°	4324.8	4316.9	4290.2	4316.9	4285.5	4228.9	4189.6	4104.7	4011.9	3780.8	3686.5
25°	4510.3	4505.6	4516.6	4524.4	4485.1	4414.4	4387.7	4298.0	4040.2	3736.8	3546.6
27.5°	4744.5	4728.8	4754.0	4769.7	4730.4	4669.1	4612.5	4511.9	3966.3	3727.4	3706.9
30°	5044.8	5010.2	5046.4	5054.2	5013.3	4975.6	4890.7	4387.7	3991.5	3922.3	3916.0
32.5°	5365.5	5324.6	5371.8	5378.1	5324.6	5293.2	5079.4	4323.2	4238.3	4158.1	4166.0
35°	5745.9	5745.9	5769.5	5772.7	5733.4	5679.9	4865.6	4637.6	4562.2	4488.3	4486.7
37.5°	6209.7	6195.5	6258.4	6296.2	6253.7	6101.2	5176.8	5069.9	4953.6	4859.3	4664.3
40°	6769.3	6794.5	6811.8	6849.5	6808.7	6465.9	5631.2	5510.1	5418.9	5103.0	4610.9
42.5°	7373.0	7379.3	7417.0	7464.2	7464.2	7102.6	6162.5	6058.8	5940.9	4989.8	4768.1
45°	8094.6	8080.5	8152.8	8228.2	8207.8	7833.6	6780.4	6703.3	6151.5	5318.3	5319.9
47.5°	8913.7	8896.4	9000.1	9099.2	8997.0	8644.8	7459.5	7399.8	5937.7	5874.8	5862.3
50°	9860.0	9817.6	9937.1	10069.1	9985.8	9550.3	8284.8	7137.2	6533.5	6483.2	6475.4
52.5°	10870.9	10837.9	10910.2	11135.0	11025.0	10498.3	9066.1	7363.6	7223.7	7167.1	7152.9
55°	12012.2	11947.8	12103.4	12274.8	12147.4	11546.9	9836.5	8115.0	7970.4	7872.9	7731.5
57.5°	13211.7	13119.0	13199.1	13414.5	13291.9	12620.6	10830.0	8888.5	8717.1	7214.2	6640.4
60°	14406.5	14364.0	14395.5	14585.7	14434.8	13664.5	11760.7	9663.5	7377.7	7135.6	7163.9
62.5°	15607.5	15514.8	15543.1	15738.0	15544.7	14658.0	12642.6	10367.8	7764.5	7679.6	7709.4
65°	16895.1	16785.0	16810.2	16866.8	16627.8	15549.4	13422.4	11032.8	8346.1	8256.5	8289.5
67.5°	18446.7	18346.1	18209.3	18041.1	17711.0	16495.8	14197.4	11732.4	9000.1	8949.8	8960.8
68°	18611.8	18514.3	18349.2	18149.6	17778.6	16535.1	14230.4	11752.8	9009.6	8946.7	8949.8
70°	18097.7	18155.9	17968.8	17633.9	17324.3	15959.7	13691.2	11300.1	8608.7	8515.9	8492.3
72.5°	16027.3	16154.6	15896.8	15840.2	15459.8	14217.8	11980.8	9805.0	7487.8	7517.7	7432.8
75°	12939.7	13126.8	12814.0	12831.3	12614.3	11859.7	10040.8	8163.8	6148.4	6285.2	6310.3
77.5°	8998.5	9267.4	9130.6	9267.4	9160.5	8888.5	7770.8	6286.7	4691.1	4848.3	4909.6
80°	4692.6	5011.8	5192.6	5249.2	5283.7	5272.7	4731.9	3773.0	2711.8	2770.0	2766.8
82.5°	1484.0	1407.0	1452.6	1440.0	1400.7	1416.4	1276.5	998.3	691.7	762.5	729.4
85°	448.0	451.2	438.6	435.5	402.5	353.7	289.3	166.6	81.7	95.9	89.6
87.5°	330.1	333.3	308.1	292.4	273.5	237.4	183.9	103.8	39.3	37.7	29.9
90°	182.4	176.1	163.5	150.9	143.1	122.6	92.8	39.3	14.1	11.0	9.4
92.5°	99.0	94.3	88.0	83.3	72.3	58.2	37.7	12.6	6.3	1.6	0.0
95°	45.6	42.4	40.9	36.2	31.4	22.0	12.6	7.9	4.7	1.6	0.0
97.5°	20.4	18.9	17.3	14.1	11.0	6.3	6.3	4.7	3.1	1.6	0.0
100°	4.7	4.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.6	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0



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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	0.0	0.0	0.0
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°	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1	3306.1
2.5°	3326.5	3317.1	3312.4	3282.5	3291.9	3265.2	3317.1	3304.5	3296.6	3318.6
5°	3329.7	3296.6	3317.1	3299.8	3306.1	3268.3	3309.2	3291.9	3290.4	3299.8
7.5°	3337.5	3315.5	3335.9	3301.4	3317.1	3301.4	3331.2	3313.9	3328.1	3337.5
10°	3380.0	3367.4	3357.9	3350.1	3361.1	3329.7	3367.4	3369.0	3373.7	3402.0
12.5°	3439.7	3427.1	3411.4	3391.0	3402.0	3389.4	3417.7	3425.5	3442.8	3457.0
15°	3523.0	3499.4	3493.1	3474.3	3485.3	3479.0	3485.3	3480.6	3513.6	3508.9
17.5°	3637.8	3611.1	3521.4	3430.3	3372.1	3389.4	3461.7	3556.0	3579.6	3582.8
20°	3680.2	3491.6	3482.1	3378.4	3331.2	3328.1	3178.7	2955.5	3023.1	3181.9
22.5°	3629.9	3372.1	3345.4	3324.9	3123.7	2793.6	2762.1	2729.1	2721.3	2744.8
25°	3516.7	3486.9	3463.3	3196.0	2878.5	2880.0	2834.4	2617.5	2279.5	2251.2
27.5°	3689.7	3648.8	3420.8	3008.9	3002.7	2999.5	2931.9	2375.4	2303.1	2320.4
30°	3886.2	3818.6	3222.8	3169.3	3167.7	3139.4	2628.5	2395.8	2395.8	2399.0
32.5°	4112.5	3692.8	3335.9	3361.1	3359.5	3225.9	2538.9	2523.2	2516.9	2532.6
35°	4285.5	3592.2	3579.6	3625.2	3593.8	2737.0	2697.7	2683.5	2677.2	2669.4
37.5°	4232.0	3881.4	3881.4	3909.7	3656.6	2914.6	2895.8	2895.8	2883.2	2876.9
40°	4313.8	4241.5	4205.3	4216.3	2656.8	3130.0	3144.1	3141.0	3139.4	3150.4
42.5°	4744.5	4680.1	4647.0	4257.2	2974.4	3111.1	3457.0	3455.4	3460.1	3455.4
45°	5293.2	5233.4	5147.0	3983.6	3376.8	2727.5	3810.7	3828.0	3829.6	3828.0
47.5°	5868.6	5830.8	4945.7	4409.7	3813.9	2927.2	3642.5	4254.0	4246.2	4255.6
50°	6476.9	6307.2	4920.6	4914.3	4279.2	3257.3	3258.9	4626.6	4706.8	4731.9
52.5°	7154.5	5717.6	5453.5	4975.6	4750.8	3596.9	3562.3	4100.0	5194.1	5219.3
55°	6645.2	6039.9	6035.2	4428.5	4942.6	3923.9	3928.6	3890.9	4763.4	5414.2
57.5°	6612.1	6626.3	6615.3	4941.0	3606.3	3678.7	4280.8	4247.7	3084.4	2499.6
60°	7182.8	7203.2	6426.6	5335.6	3898.7	2262.2	2636.4	2240.2	2270.1	2293.7
62.5°	7728.3	7734.6	5227.1	3497.9	1932.1	91.2	44.0	36.2	34.6	34.6
65°	8332.0	8332.0	5602.9	3815.4	1866.1	34.6	6.3	4.7	17.3	17.3
67.5°	8915.2	8786.3	5878.0	4051.2	1899.1	4.7	0.0	0.0	0.0	0.0
68°	8882.2	8740.7	5852.8	4044.9	1894.3	3.1	0.0	0.0	0.0	0.0
70°	8388.6	8251.8	5552.6	3861.0	1823.6	3.1	0.0	0.0	0.0	0.0
72.5°	7404.5	7278.7	4917.4	3403.5	1644.4	1.6	0.0	0.0	0.0	0.0
75°	6267.9	6250.6	4247.7	2872.2	1410.2	1.6	0.0	0.0	0.0	0.0
77.5°	5043.2	4964.6	3320.2	2251.2	1136.6	0.0	0.0	0.0	0.0	0.0
80°	2809.3	2925.6	1943.1	1323.7	715.3	0.0	0.0	0.0	0.0	0.0
82.5°	759.3	710.6	424.5	287.7	136.8	0.0	0.0	0.0	0.0	0.0
85°	97.5	106.9	48.7	39.3	9.4	0.0	0.0	0.0	0.0	0.0
87.5°	50.3	59.7	15.7	12.6	3.1	0.0	0.0	0.0	0.0	0.0
90°	9.4	11.0	4.7	1.6	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



REPORT NUMBER: P522139  
 CATALOG NUMBER: CST-CA10-310-750-U-T5R-HSS-HM-EX180

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)