

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: P579578

Luminaire Tested: **CST-CA10-310-760-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P579578  
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-CA10-310-760-U-T5N-HSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD  
Light Source: (10) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32713 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U2 - G3

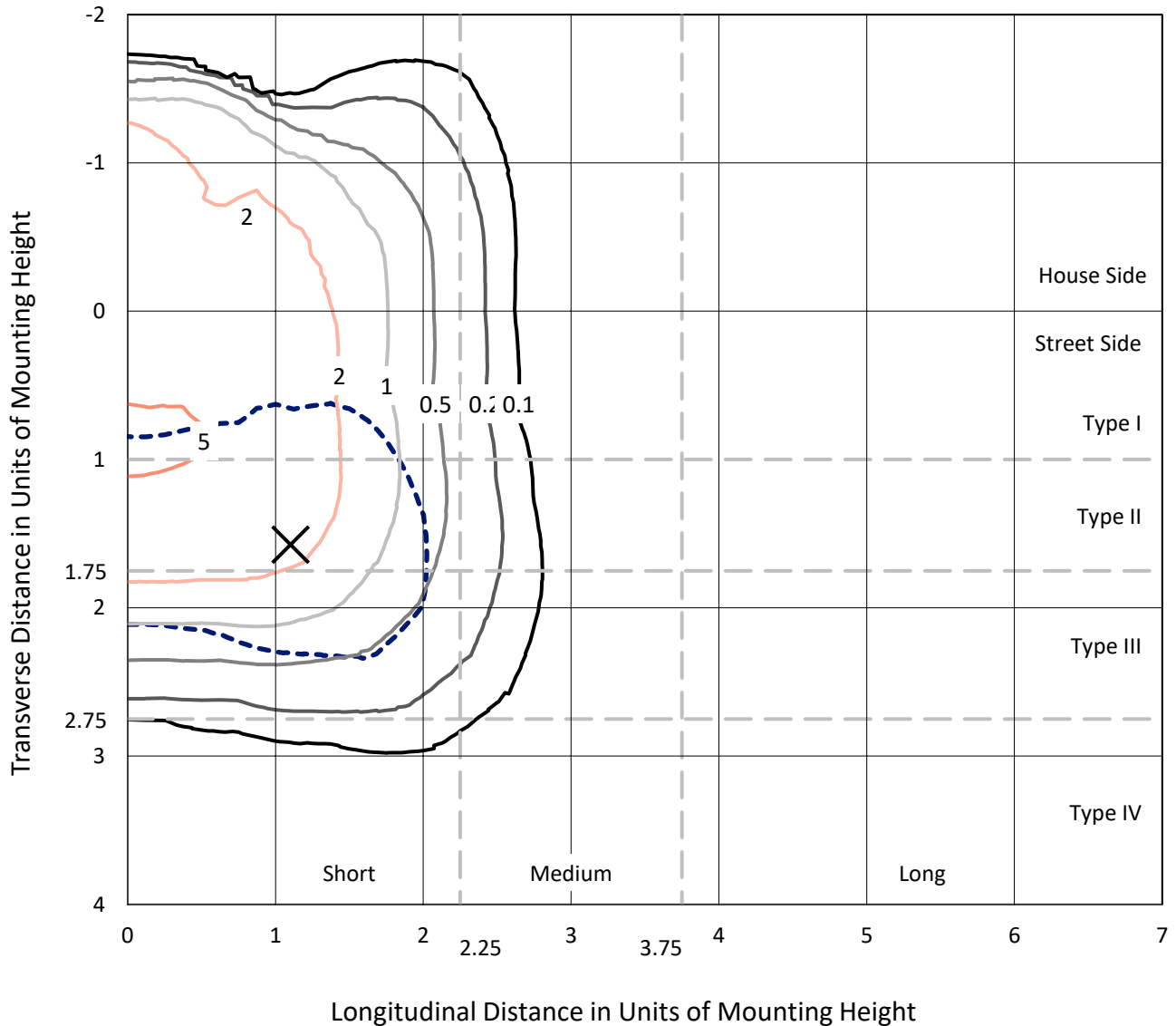
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

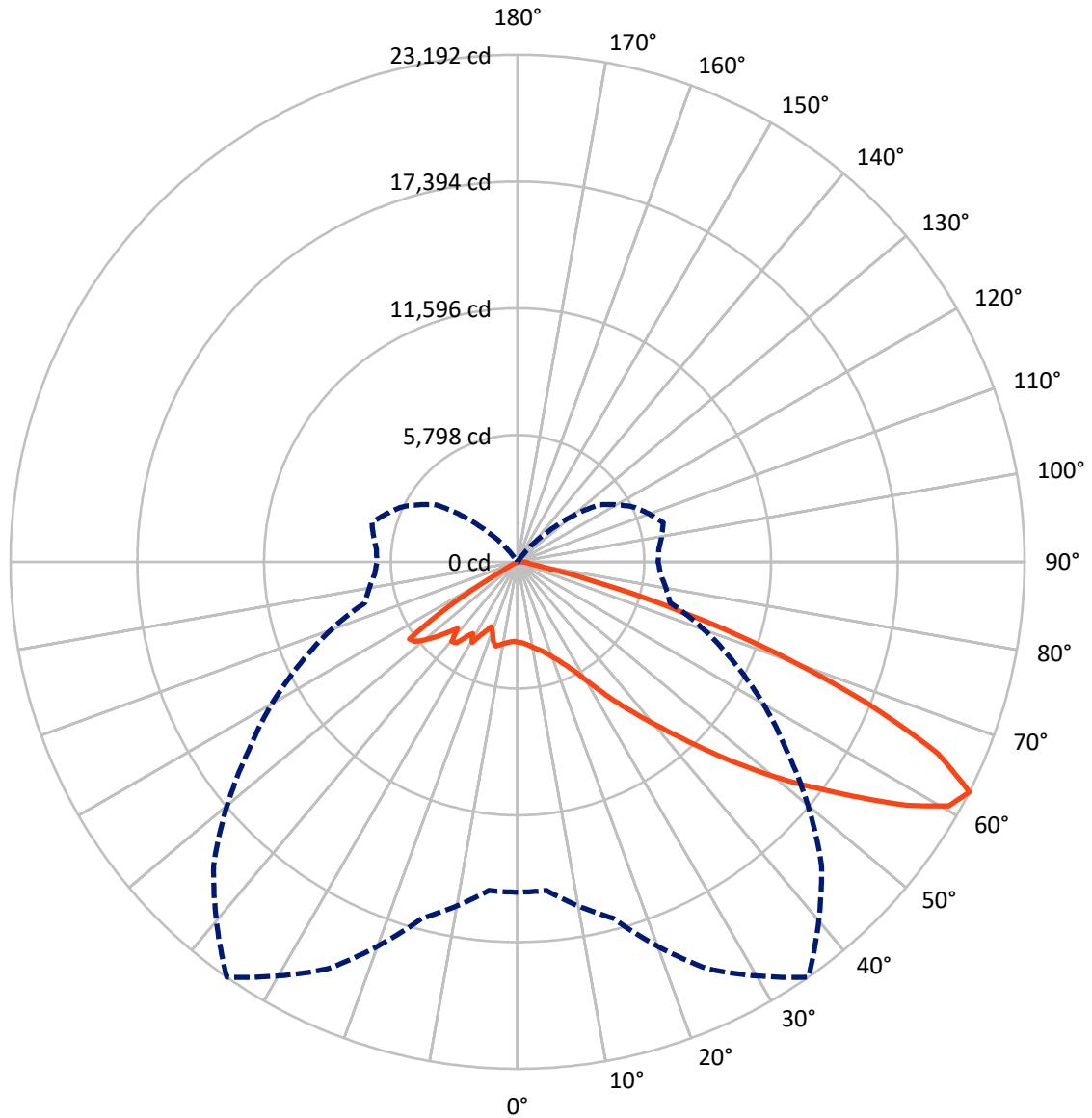
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.6 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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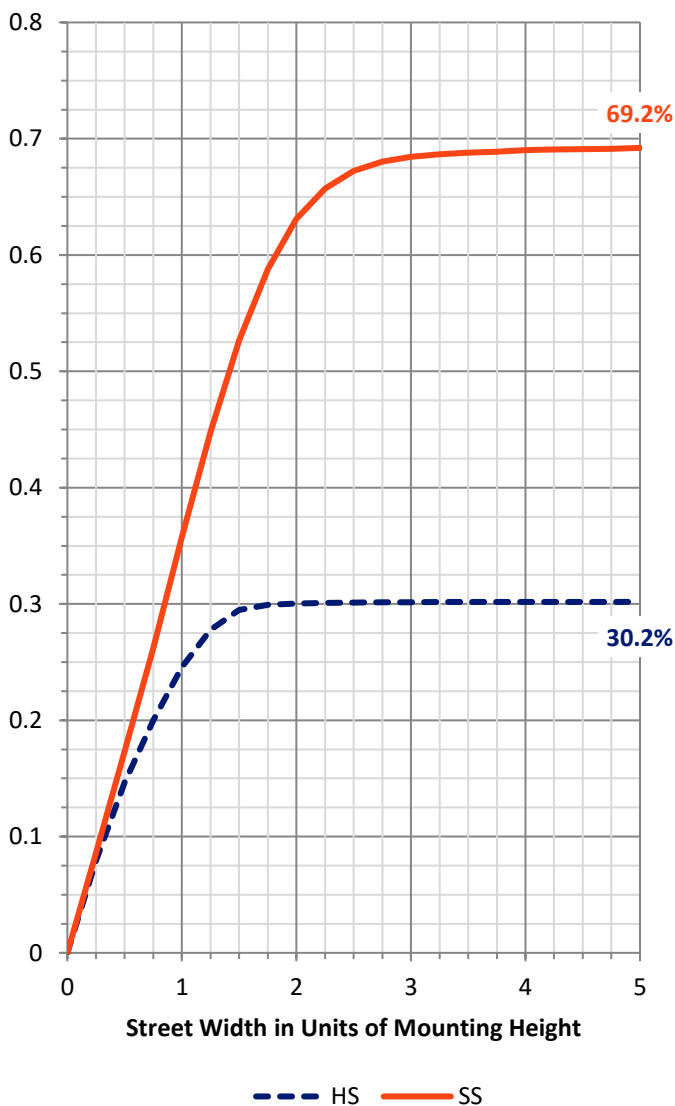
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9928.5	0.0	9928.5
	% Fixture	30.4	0.0	30.4
<b>Street Side</b>	Lumens	22756.1	28.4	22784.5
	% Fixture	69.6	0.1	69.6
<b>Total</b>	Lumens	32684.6	28.4	32713.0
	% Fixture	99.9	0.1	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	363.5	1.1
10°-20°	1166.6	3.6
20°-30°	2132.2	6.5
30°-40°	4063.2	12.4
40°-50°	6974.1	21.3
50°-60°	9355.9	28.6
60°-70°	7112.4	21.7
70°-80°	1346.7	4.1
80°-90°	170.1	0.5
90°-100°	25.0	0.1
100°-110°	3.4	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°	32684.6	99.9
0°-180°	32713.0	100.0

**Coefficient of Utilization**



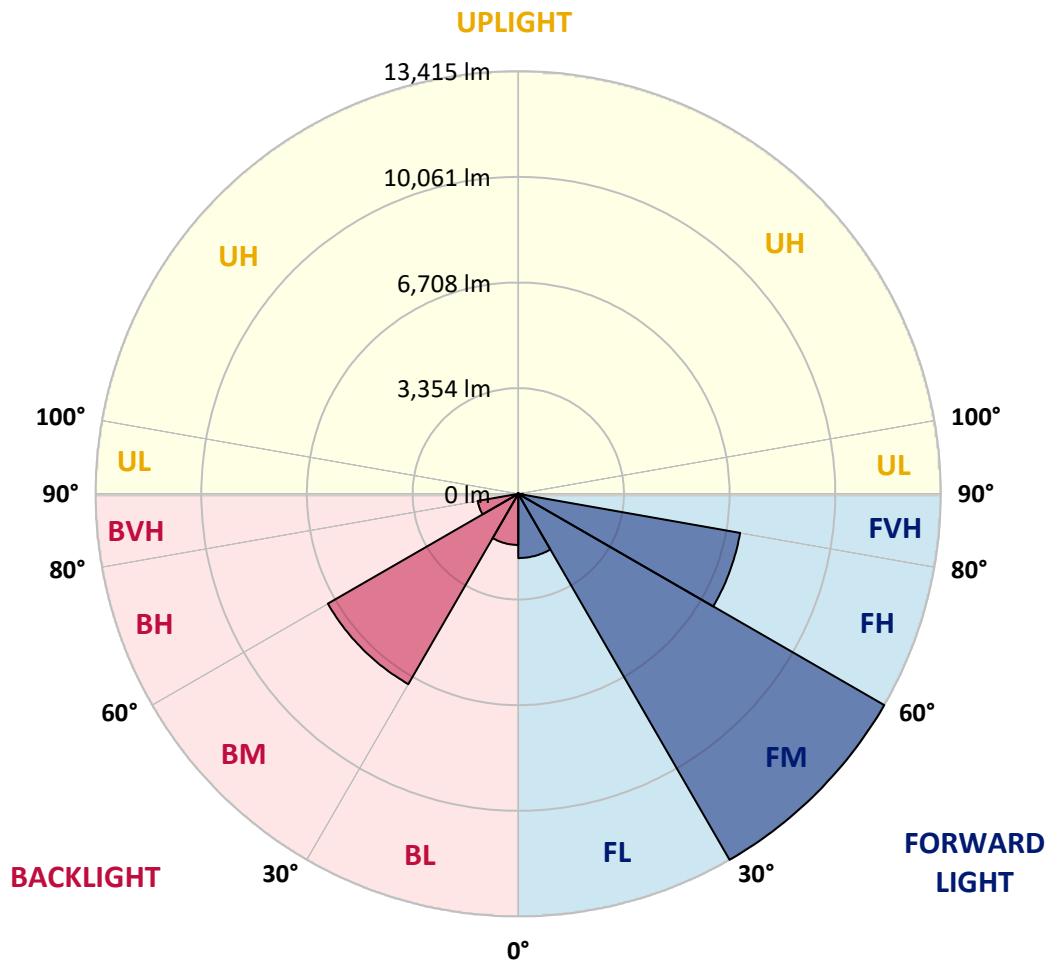
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2039.2	6.2			
FM (30°-60°)	13415.0	41.0			
FH (60°-80°)	7151.7	21.9			G3/7500
FVH (80°-90°)	150.1	0.5			G2/225
BL (0°-30°)	1622.9	5.0	B3/2500		
BM (30°-60°)	6978.2	21.3	B4/8500		
BH (60°-80°)	1307.4	4.0	B3/2500		G3/2500
BVH (80°-90°)	19.9	0.1			G1/100
UL (90°-100°)	25.0	0.1		U2/50	
UH (100°-180°)	3.4	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°	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9
2.5°	3774.9	3747.1	3748.6	3773.3	3702.4	3728.6	3697.8	3728.6	3711.6	3724.0	3730.1
5°	3841.2	3813.4	3810.3	3836.5	3776.4	3794.9	3764.1	3785.7	3762.5	3777.9	3777.9
7.5°	3941.4	3913.6	3904.4	3924.4	3868.9	3882.8	3850.4	3862.8	3836.5	3856.6	3845.8
10°	4060.1	4029.3	4018.5	4029.3	3981.5	3989.2	3950.7	3964.5	3926.0	3949.1	3933.7
12.5°	4186.6	4146.5	4146.5	4155.7	4104.9	4106.4	4070.9	4078.6	4040.1	4064.8	4046.3
15°	4323.8	4279.1	4285.3	4294.5	4240.6	4249.8	4212.8	4225.1	4185.0	4209.7	4191.2
17.5°	4505.8	4458.0	4451.8	4479.6	4428.7	4445.6	4404.0	4419.4	4384.0	4391.7	4382.4
20°	4757.1	4697.0	4683.1	4720.1	4663.1	4675.4	4644.6	4675.4	4638.4	4582.9	4427.1
22.5°	5057.8	5005.4	4982.3	5006.9	4939.1	4960.7	4959.1	5008.5	4906.7	4556.7	4400.9
25°	5454.1	5418.7	5373.9	5377.0	5295.3	5327.7	5386.3	5424.8	4991.5	4684.7	4687.7
27.5°	5983.0	5947.6	5885.9	5862.8	5744.0	5822.7	5913.6	5537.4	5196.6	5275.2	5232.1
30°	6658.4	6652.3	6527.4	6487.3	6357.7	6456.4	6377.8	5733.2	5850.4	5959.9	5893.6
32.5°	7557.4	7514.3	7333.8	7261.4	7125.7	7182.7	6488.8	6396.3	6570.5	6718.6	6649.2
35°	8644.6	8513.5	8330.0	8186.6	7950.7	7633.0	6911.3	7091.7	7352.3	7555.9	7219.7
37.5°	9907.5	9765.6	9478.8	9221.3	8849.7	7859.7	7548.2	7909.0	8235.9	8015.4	7239.8
40°	11207.4	11081.0	10811.1	10479.6	9852.0	8562.8	8320.7	8752.5	9124.1	7861.2	7475.7
42.5°	12498.1	12390.1	12172.7	11845.8	11037.8	9400.2	9167.3	9631.5	9281.4	8161.9	8149.6
45°	13799.5	13745.6	13498.8	13219.7	12442.6	10471.9	10115.6	10478.0	8931.4	8882.0	8852.7
47.5°	14854.3	14863.5	14777.2	14632.2	13941.4	11648.4	11184.3	10109.5	9357.0	9410.9	9424.8
50°	15941.4	15872.0	15867.4	15876.6	15588.3	13164.2	11912.1	9942.9	9913.6	9909.0	9896.7
52.5°	16812.6	16724.7	16906.7	17051.7	17222.8	14855.8	11802.6	10507.3	10339.2	10280.6	9921.4
55°	17522.0	17488.0	17784.1	18274.5	19036.2	16647.6	12771.0	11057.8	10721.7	9352.3	8436.4
57.5°	17952.2	18001.5	18612.2	19575.9	21002.3	18132.6	13898.2	11616.0	9179.6	8237.5	8178.9
60°	17128.8	17389.4	18428.7	20544.3	22664.6	19529.7	14737.1	11728.6	8260.6	7756.4	7639.2
62.5°	15113.3	15088.7	16874.3	20544.3	23192.0	19668.5	15002.3	10931.4	7216.7	6559.8	6428.7
65°	10697.0	10761.8	12669.2	18513.5	21127.2	18294.5	13838.1	9293.8	5756.4	5153.4	4976.1
67.5°	6619.9	6615.3	8482.7	13634.5	17198.1	15316.9	11650.0	7124.1	3995.4	3426.4	3233.6
70°	2286.8	2351.6	3815.0	7978.4	12660.0	12000.0	8718.6	4498.1	2106.4	1501.9	1267.5
72.5°	909.8	931.4	1369.3	3557.4	7909.0	8017.0	5298.4	2185.0	630.7	400.9	376.3
75°	595.2	598.3	656.9	1284.5	3838.1	4313.0	2461.1	627.6	293.0	268.3	262.1
77.5°	513.5	515.0	545.9	650.7	1250.6	1677.7	700.1	371.6	245.2	220.5	214.3
80°	476.5	478.0	493.4	559.8	602.9	572.1	373.2	299.2	206.6	195.8	194.3
82.5°	450.3	456.4	464.1	504.2	487.3	430.2	309.9	242.1	158.8	169.6	174.2
85°	414.8	421.0	425.6	448.7	407.1	314.6	240.6	182.0	101.8	111.0	109.5
87.5°	311.5	314.6	308.4	305.3	283.7	220.5	158.8	115.7	40.1	37.0	33.9
90°	149.6	148.0	141.9	131.1	114.1	89.4	66.3	37.0	17.0	7.7	3.1
92.5°	118.7	117.2	114.1	103.3	89.4	66.3	47.8	26.2	15.4	6.2	1.5
95°	80.2	77.1	74.0	66.3	55.5	40.1	27.8	18.5	12.3	4.6	1.5
97.5°	52.4	50.9	46.3	40.1	30.8	21.6	17.0	13.9	10.8	4.6	1.5
100°	32.4	32.4	29.3	23.1	15.4	12.3	10.8	10.8	7.7	3.1	0.0
102.5°	20.0	18.5	17.0	10.8	7.7	7.7	7.7	7.7	6.2	3.1	0.0
105°	10.8	10.8	7.7	6.2	4.6	3.1	4.6	6.2	4.6	1.5	0.0
107.5°	3.1	3.1	3.1	1.5	1.5	0.0	1.5	3.1	3.1	1.5	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.1	1.5	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°	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9	3683.9
2.5°	3722.4	3693.1	3700.8	3671.5	3666.9	3636.1	3688.5	3691.6	3677.7	3693.1
5°	3770.2	3734.8	3748.6	3713.2	3707.0	3666.9	3708.6	3703.9	3693.1	3705.5
7.5°	3838.1	3802.6	3810.3	3768.7	3761.0	3716.3	3756.4	3740.9	3727.1	3744.0
10°	3932.2	3892.1	3898.2	3848.9	3842.7	3790.3	3836.5	3813.4	3793.4	3816.5
12.5°	4047.8	3995.4	3989.2	3936.8	3932.2	3882.8	3930.6	3907.5	3887.4	3924.4
15°	4180.4	4111.0	4101.8	4035.5	4027.8	3976.9	4023.1	3989.2	3973.8	4021.6
17.5°	4357.7	4112.6	3975.3	3878.2	3822.7	3794.9	3878.2	3990.7	3956.8	3958.4
20°	4285.3	4021.6	3838.1	3754.8	3694.7	3426.4	3056.3	3162.7	3378.6	3485.0
22.5°	4263.7	4171.2	4095.6	3955.3	3358.5	3207.4	3229.0	3204.3	2797.2	2641.5
25°	4676.9	4570.5	4407.1	3671.5	3498.8	3464.9	3477.3	3051.7	2744.8	2789.5
27.5°	5205.9	5096.4	4289.9	3878.2	3844.3	3799.5	3555.9	3023.9	3065.5	3108.7
30°	5872.0	5296.8	4473.4	4347.0	4283.7	4237.5	3333.8	3377.0	3446.4	3500.4
32.5°	6521.2	5279.9	4999.2	4841.9	4763.3	3865.8	3767.2	3867.4	3938.3	3980.0
35°	6528.9	5884.3	5588.3	5386.3	4886.7	4155.7	4246.7	4414.8	4589.1	4621.4
37.5°	6706.2	6569.0	6229.8	5975.3	3634.5	4638.4	4838.9	5031.6	5205.9	5216.7
40°	7412.5	7264.5	6946.8	6387.0	4013.9	4730.9	5491.1	5708.6	5855.0	5847.3
42.5°	8117.2	8015.4	7685.4	5676.2	4522.7	4098.7	6175.8	6319.2	6411.7	6476.5
45°	8826.5	8724.7	7609.9	6232.8	5128.8	4488.8	6009.3	6821.9	6923.7	6956.1
47.5°	9380.1	9128.8	6973.0	6971.5	5885.9	4988.4	4962.2	7275.2	7364.7	7341.6
50°	9892.1	8149.6	7537.4	7213.6	6669.2	5458.7	5276.8	6121.8	7764.1	7730.1
52.5°	9000.8	7909.0	8021.6	6561.3	7298.4	5926.0	5631.5	5489.6	7054.7	7963.0
55°	8049.3	8203.5	8516.6	7208.9	5295.3	6077.1	5932.1	5650.0	4760.2	4006.2
57.5°	8214.3	8444.1	8459.5	7808.8	5480.3	3796.5	4862.0	4256.0	2689.3	2695.5
60°	7663.8	7963.0	6183.5	5205.9	2946.8	791.1	77.1	67.8	468.8	570.5
62.5°	6479.6	6895.9	5902.9	4535.1	1890.5	29.3	7.7	1.5	0.0	0.0
65°	5017.7	5518.9	4988.4	3913.6	1677.7	9.3	0.0	0.0	0.0	0.0
67.5°	3309.2	3761.0	3790.3	3273.7	1398.6	4.6	0.0	0.0	0.0	0.0
70°	1386.3	1952.2	2359.3	2433.3	1099.5	1.5	0.0	0.0	0.0	0.0
72.5°	400.9	619.9	1134.9	1461.8	698.5	0.0	0.0	0.0	0.0	0.0
75°	266.8	285.3	328.5	658.4	348.5	0.0	0.0	0.0	0.0	0.0
77.5°	220.5	225.1	188.1	180.4	100.2	0.0	0.0	0.0	0.0	0.0
80°	200.5	197.4	151.1	106.4	37.0	0.0	0.0	0.0	0.0	0.0
82.5°	185.0	175.8	109.5	55.5	24.7	0.0	0.0	0.0	0.0	0.0
85°	124.9	123.4	49.3	33.9	4.6	0.0	0.0	0.0	0.0	0.0
87.5°	33.9	43.2	10.8	4.6	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: P579578  
 CATALOG NUMBER: CST-CA10-310-760-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)