

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: P579527

Luminaire Tested: **CST-CA10-310-750-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579527
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)
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-T5-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: 30428 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U2 - G4

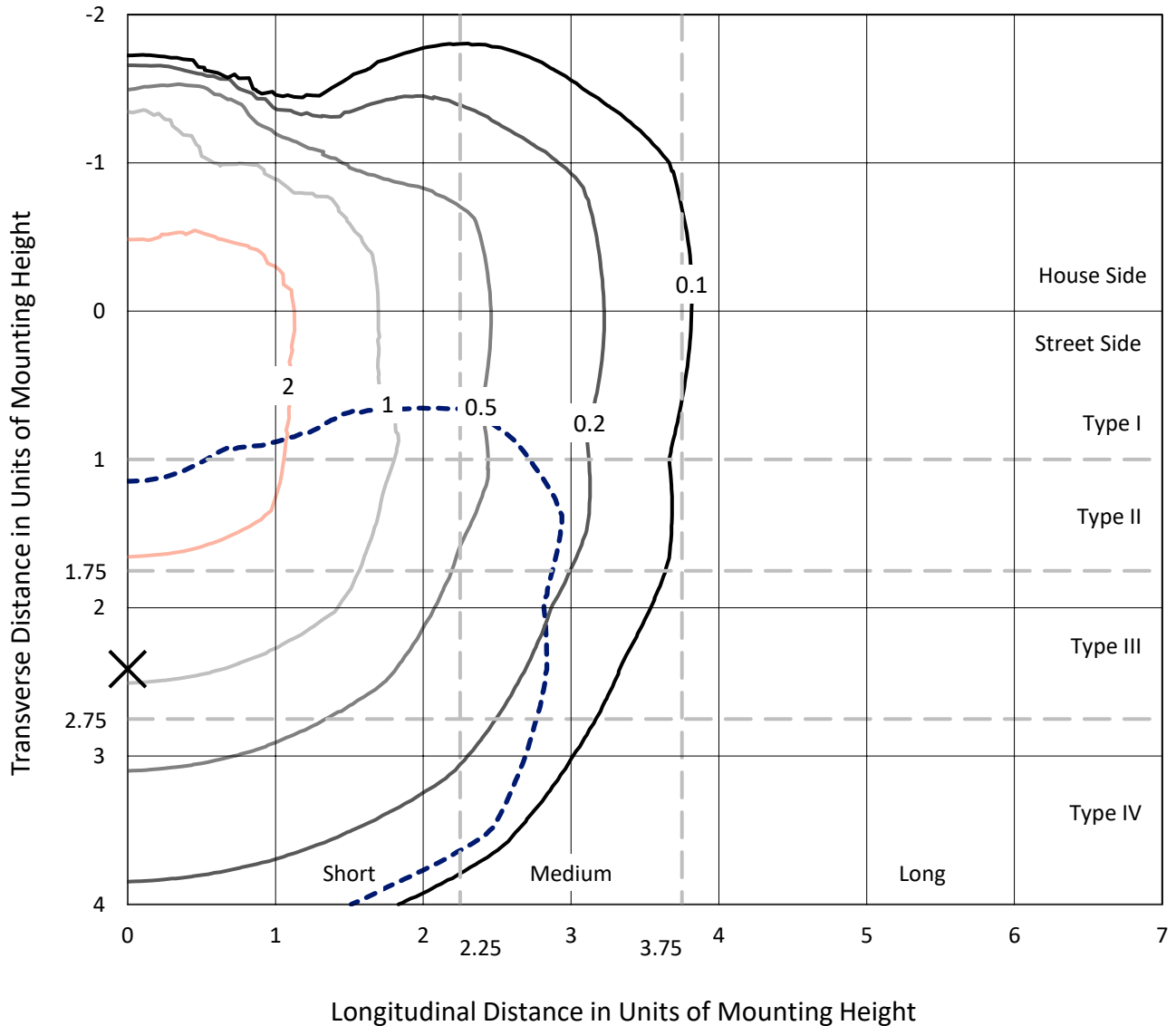
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

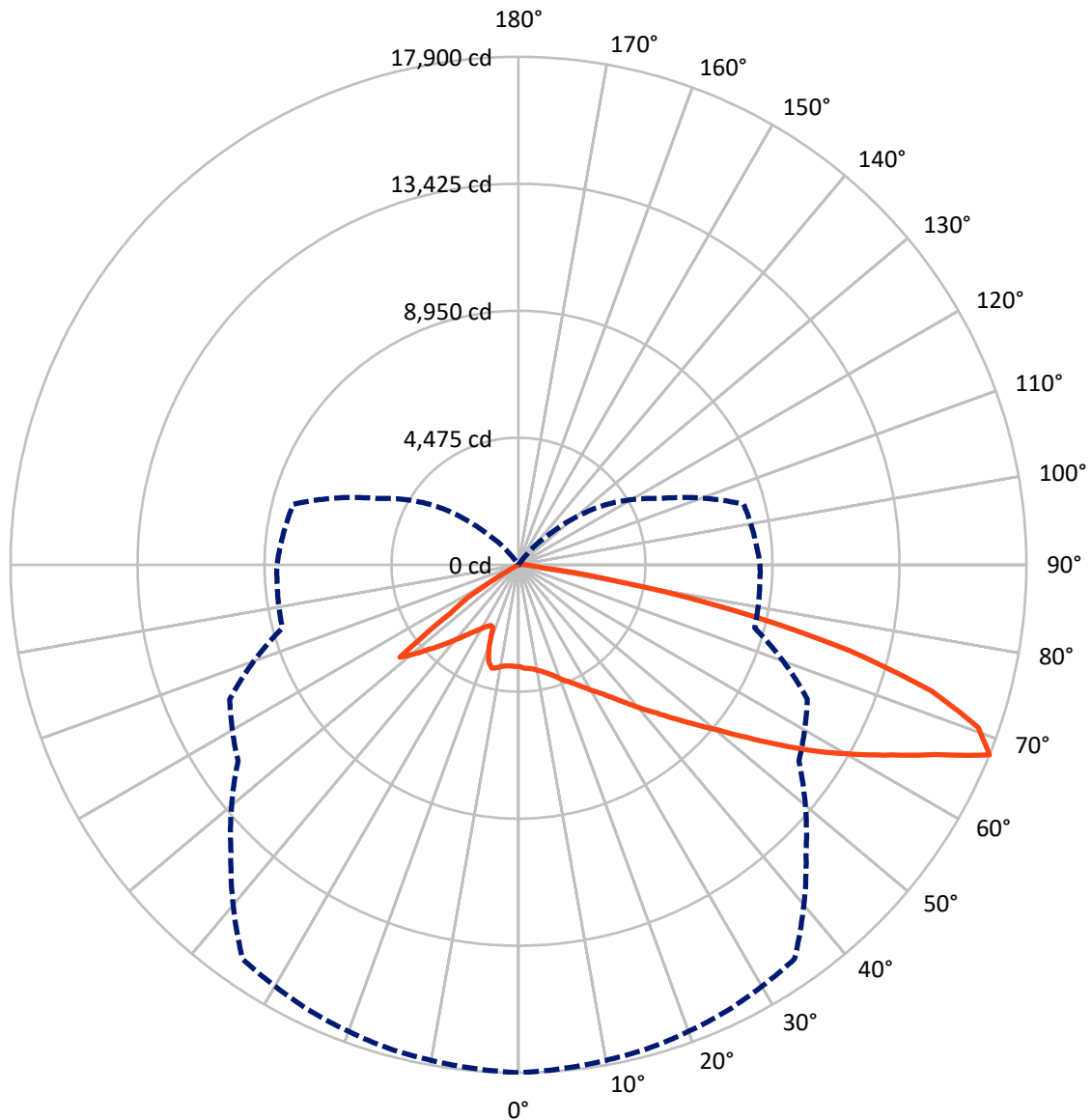
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4 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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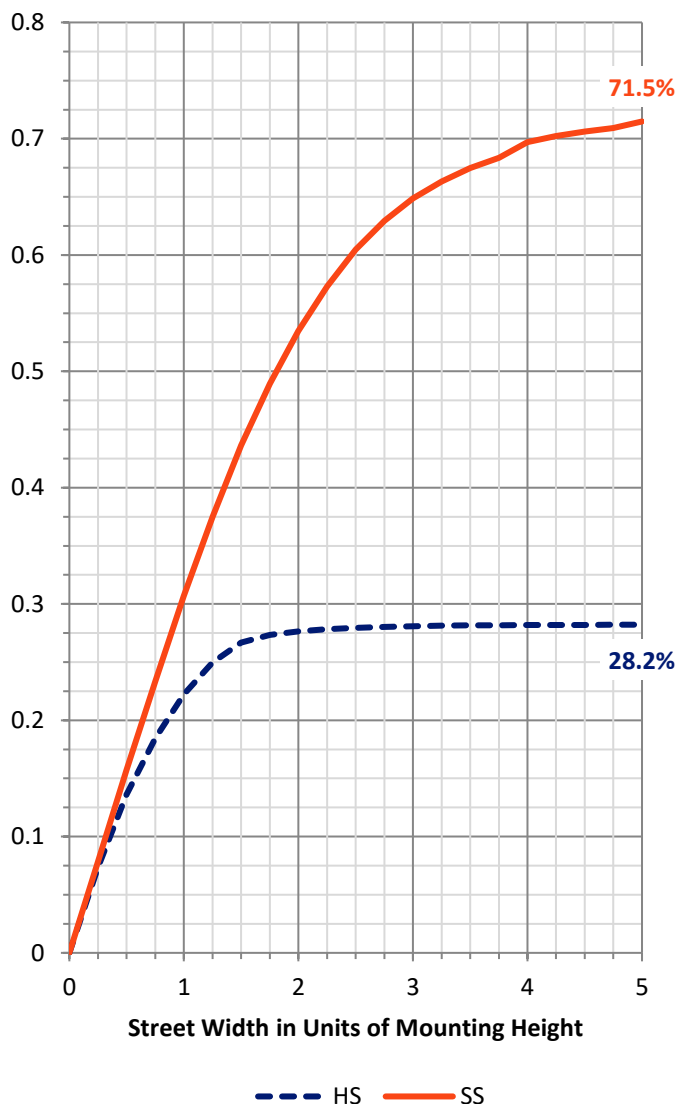
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8623.9	0.1	8624.0
	% Fixture	28.3	0.0	28.3
Street Side	Lumens	21765.3	38.7	21804.0
	% Fixture	71.5	0.1	71.7
Total	Lumens	30389.1	38.9	30428.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	345.6	1.1
10°-20°	1063.9	3.5
20°-30°	1761.7	5.8
30°-40°	2773.1	9.1
40°-50°	4340.0	14.3
50°-60°	6266.2	20.6
60°-70°	7762.8	25.5
70°-80°	5653.5	18.6
80°-90°	422.3	1.4
90°-100°	33.2	0.1
100°-110°	5.5	0.0
110°-120°	0.2	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°	30389.1	99.9
0°-180°	30428.0	100.0

Coefficient of Utilization



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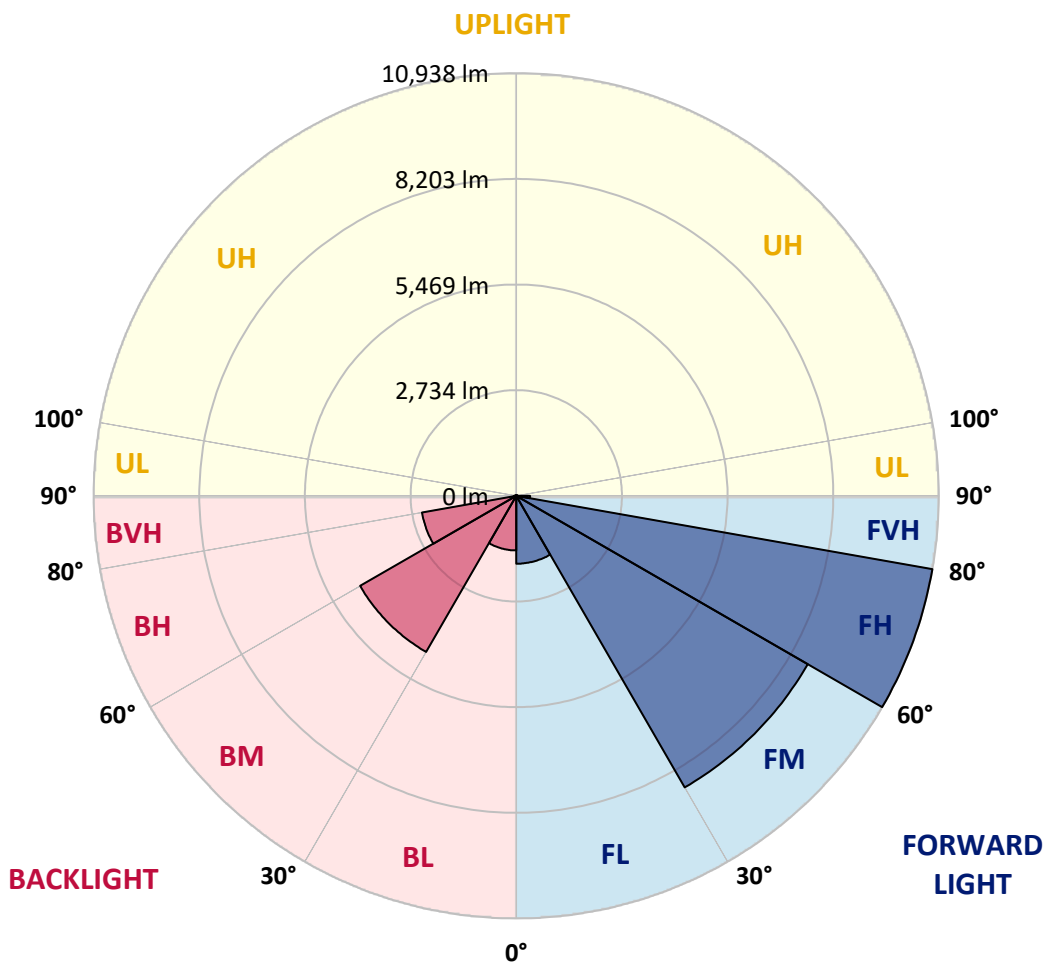
CATALOG NUMBER: CST-CA10-310-750-U-T5-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1757.5	5.8			
FM (30°-60°)	8713.7	28.6			
FH (60°-80°)	10937.9	35.9			G4/12000
FVH (80°-90°)	356.2	1.2			G3/500
BL (0°-30°)	1413.7	4.6	B3/2500		
BM (30°-60°)	4665.7	15.3	B3/5000		
BH (60°-80°)	2478.4	8.1	B3/2500		G3/2500
BVH (80°-90°)	66.1	0.2			G1/100
UL (90°-100°)	33.2	0.1		U2/50	
UH (100°-180°)	5.7	0.0		U1/10	

BUG Rating: B3-U2-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6
2.5°	3649.2	3629.4	3629.4	3650.7	3591.3	3609.6	3585.2	3606.5	3594.3	3600.4	3608.0
5°	3670.6	3647.7	3649.2	3675.1	3621.8	3637.0	3608.0	3618.7	3608.0	3612.6	3612.6
7.5°	3710.2	3690.4	3690.4	3705.6	3652.3	3656.8	3630.9	3630.9	3617.2	3627.9	3618.7
10°	3784.9	3763.6	3752.9	3760.5	3713.3	3707.2	3672.1	3672.1	3650.7	3667.5	3653.8
12.5°	3874.9	3844.4	3841.4	3842.9	3789.5	3778.8	3739.2	3740.7	3701.1	3723.9	3707.2
15°	3983.2	3945.0	3942.0	3948.1	3891.7	3871.9	3827.6	3827.6	3783.4	3795.6	3772.7
17.5°	4121.9	4077.7	4070.1	4080.8	4024.3	4006.0	3954.2	3945.0	3896.3	3887.1	3867.3
20°	4304.9	4254.6	4239.4	4262.2	4190.6	4173.8	4111.3	4091.4	4025.9	3917.6	3775.8
22.5°	4469.6	4430.0	4420.8	4436.1	4370.5	4353.7	4292.7	4251.6	4093.0	3874.9	3743.8
25°	4657.2	4642.0	4637.4	4628.2	4568.8	4539.8	4481.8	4423.9	4064.0	3765.1	3762.1
27.5°	4889.0	4881.4	4860.0	4852.4	4786.8	4768.5	4692.3	4318.7	3960.3	3938.9	3926.7
30°	5142.1	5126.9	5105.5	5107.1	5062.8	5029.3	4847.8	4225.6	4160.1	4160.1	4128.0
32.5°	5422.7	5406.0	5384.6	5389.2	5370.9	5341.9	4796.0	4471.2	4420.8	4434.6	4394.9
35°	5770.4	5743.0	5735.3	5753.6	5755.2	5567.6	4887.5	4805.1	4765.5	4756.3	4606.9
37.5°	6176.1	6153.2	6180.6	6223.3	6174.5	5625.5	5251.9	5226.0	5186.4	4965.2	4611.5
40°	6662.5	6621.3	6654.9	6682.3	6650.3	5970.2	5634.7	5643.8	5608.8	4953.0	4561.1
42.5°	7144.4	7104.7	7133.7	7202.3	7190.1	6397.2	6101.3	6121.2	5767.4	4982.0	4951.5
45°	7740.7	7726.9	7717.8	7774.2	7821.5	6908.0	6654.9	6653.4	5654.5	5442.6	5415.1
47.5°	8416.2	8397.9	8402.5	8474.2	8545.8	7518.0	7309.1	6696.1	5945.8	5967.1	5942.7
50°	9169.5	9149.7	9209.2	9312.9	9349.5	8202.7	7946.5	6580.2	6552.7	6575.6	6534.4
52.5°	10125.7	10081.5	10172.9	10284.3	10331.5	9012.5	7981.6	7264.9	7219.1	7223.7	7092.5
55°	11213.0	11177.9	11260.2	11385.3	11455.4	9916.8	8710.5	7931.3	7903.8	7126.1	6417.0
57.5°	12394.8	12355.2	12465.0	12501.5	12519.8	10851.6	9444.0	8654.1	7383.8	6507.0	6467.3
60°	13553.8	13511.1	13649.8	13655.9	13709.3	11784.8	10140.9	9351.0	7113.9	6998.0	6964.5
62.5°	14770.7	14717.3	14839.3	14834.7	14729.5	12638.8	10831.7	10020.5	7595.8	7504.3	7452.4
65°	16121.8	16082.1	16167.5	16030.3	15821.4	13521.7	11548.5	10749.4	8157.0	8140.2	8128.0
67.5°	17899.9	17822.1	17649.8	17357.0	16957.5	14331.5	12060.8	11229.7	8612.9	8535.2	8510.8
70°	17184.7	17093.2	16962.0	16640.3	16233.1	13570.5	11237.4	10503.9	8053.3	8056.3	7998.4
72.5°	15216.0	15057.4	14933.8	14482.5	14258.3	11851.9	9791.7	9116.2	6966.0	7095.6	7068.1
75°	12002.9	11841.2	11638.4	11461.5	11437.1	9613.3	7894.7	7408.2	5553.9	5648.4	5717.0
77.5°	7780.3	7720.8	7977.0	7809.3	7960.2	6619.8	5639.3	5221.4	3827.6	4067.0	4035.0
80°	3560.8	3492.1	3903.9	3788.0	3844.4	3251.2	2755.6	2647.3	1732.3	1744.5	1781.1
82.5°	805.2	777.7	806.7	741.1	722.8	611.5	538.3	488.0	306.5	324.8	341.6
85°	440.7	440.7	434.6	404.1	346.2	285.2	225.7	173.8	94.5	103.7	102.2
87.5°	309.6	301.9	300.4	268.4	230.3	195.2	155.5	111.3	53.4	36.6	33.5
90°	212.0	208.9	198.2	178.4	154.0	126.6	94.5	54.9	22.9	10.7	7.6
92.5°	154.0	151.0	143.3	126.6	105.2	85.4	62.5	36.6	18.3	7.6	1.5
95°	102.2	100.6	96.1	82.3	68.6	54.9	39.6	22.9	15.2	6.1	1.5
97.5°	70.1	68.6	64.0	54.9	44.2	35.1	24.4	16.8	12.2	4.6	1.5
100°	47.3	45.7	42.7	35.1	27.4	21.3	15.2	12.2	9.1	4.6	1.5
102.5°	30.5	29.0	25.9	21.3	15.2	12.2	10.7	9.1	6.1	3.0	1.5
105°	18.3	16.8	13.7	10.7	9.1	7.6	7.6	6.1	4.6	1.5	1.5
107.5°	9.1	7.6	6.1	6.1	6.1	4.6	4.6	4.6	3.0	1.5	0.0
110°	1.5	1.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	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°	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6	3583.6
2.5°	3600.4	3576.0	3589.7	3568.4	3563.8	3540.9	3577.5	3582.1	3579.1	3585.2
5°	3605.0	3579.1	3594.3	3568.4	3568.4	3544.0	3579.1	3579.1	3569.9	3573.0
7.5°	3617.2	3591.3	3601.9	3573.0	3574.5	3545.5	3588.2	3583.6	3576.0	3586.7
10°	3652.3	3623.3	3621.8	3594.3	3600.4	3569.9	3623.3	3623.3	3615.7	3635.5
12.5°	3708.7	3666.0	3658.4	3624.8	3637.0	3611.1	3676.7	3679.7	3681.2	3713.3
15°	3768.2	3716.3	3723.9	3684.3	3679.7	3666.0	3725.5	3722.4	3720.9	3765.1
17.5°	3852.0	3608.0	3568.4	3540.9	3534.8	3501.3	3556.2	3661.4	3606.5	3576.0
20°	3719.4	3591.3	3434.2	3380.8	3370.1	3078.9	2848.6	2952.3	3092.6	3104.8
22.5°	3598.9	3553.1	3540.9	3457.1	2992.0	2894.4	2903.5	2865.4	2532.9	2388.1
25°	3748.3	3708.7	3656.8	3144.4	3034.7	2999.6	2988.9	2598.5	2336.2	2353.0
27.5°	3914.5	3870.3	3418.9	3152.1	3176.5	3127.7	2886.7	2424.7	2409.4	2438.4
30°	4121.9	3768.2	3336.6	3321.3	3344.2	3281.7	2565.0	2531.4	2526.8	2557.3
32.5°	4358.3	3634.0	3556.2	3556.2	3545.5	2870.0	2702.2	2679.3	2691.5	2723.6
35°	4269.9	3844.4	3835.3	3873.4	3617.2	2944.7	2921.8	2882.2	2891.3	2902.0
37.5°	4172.3	4190.6	4195.1	4175.3	2638.2	3158.2	3139.9	3132.2	3123.1	3126.1
40°	4535.2	4547.4	4542.8	4361.4	2847.1	3199.3	3386.9	3373.2	3371.7	3390.0
42.5°	4959.1	4992.7	4966.8	3847.5	3126.1	2690.0	3672.1	3664.5	3661.4	3699.5
45°	5436.5	5468.5	4924.1	4120.4	3423.5	2784.6	3691.9	3975.5	3998.4	4032.0
47.5°	5953.4	5947.3	4544.4	4539.8	3772.7	3046.9	3069.7	4347.6	4385.8	4398.0
50°	6548.1	5570.6	4975.9	4808.2	4167.7	3341.2	3254.2	3989.3	4831.0	4843.2
52.5°	6421.6	5511.2	5471.5	4218.0	4521.5	3666.0	3580.6	3557.7	5007.9	5302.3
55°	5985.4	6031.2	5974.8	4628.2	3315.2	3955.7	3902.3	3879.5	3725.5	2949.3
57.5°	6470.4	6484.1	6435.3	5004.9	3371.7	2465.8	3841.4	3295.4	2141.0	2130.4
60°	6973.6	6996.5	4792.9	3676.7	2160.9	825.0	196.7	207.4	591.7	520.0
62.5°	7454.0	7476.8	5073.5	3359.5	1364.8	61.0	39.6	27.4	30.5	30.5
65°	8080.7	8089.9	5430.4	3556.2	1418.2	15.2	4.6	0.0	0.0	0.0
67.5°	8405.5	8218.0	5520.3	3646.2	1456.3	9.1	3.0	0.0	0.0	0.0
70°	7914.5	7713.2	5139.1	3417.4	1357.2	7.6	1.5	0.0	0.0	0.0
72.5°	6973.6	6876.0	4613.0	3030.1	1201.7	4.6	1.5	0.0	0.0	0.0
75°	5779.6	5649.9	3824.6	2525.3	994.3	3.0	0.0	0.0	0.0	0.0
77.5°	4111.3	4126.5	2665.6	1840.6	677.1	3.0	0.0	0.0	0.0	0.0
80°	1799.4	1840.6	1168.1	844.8	239.4	1.5	0.0	0.0	0.0	0.0
82.5°	343.1	315.7	152.5	120.5	30.5	0.0	0.0	0.0	0.0	0.0
85°	112.8	123.5	56.4	45.7	13.7	0.0	0.0	0.0	0.0	0.0
87.5°	39.6	50.3	16.8	13.7	3.0	0.0	0.0	0.0	0.0	0.0
90°	6.1	6.1	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



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 CATALOG NUMBER: CST-CA10-310-750-U-T5-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)