

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: P510645

Luminaire Tested: **CST-CA6-230-727-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510645
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA6-230-727-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30317 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

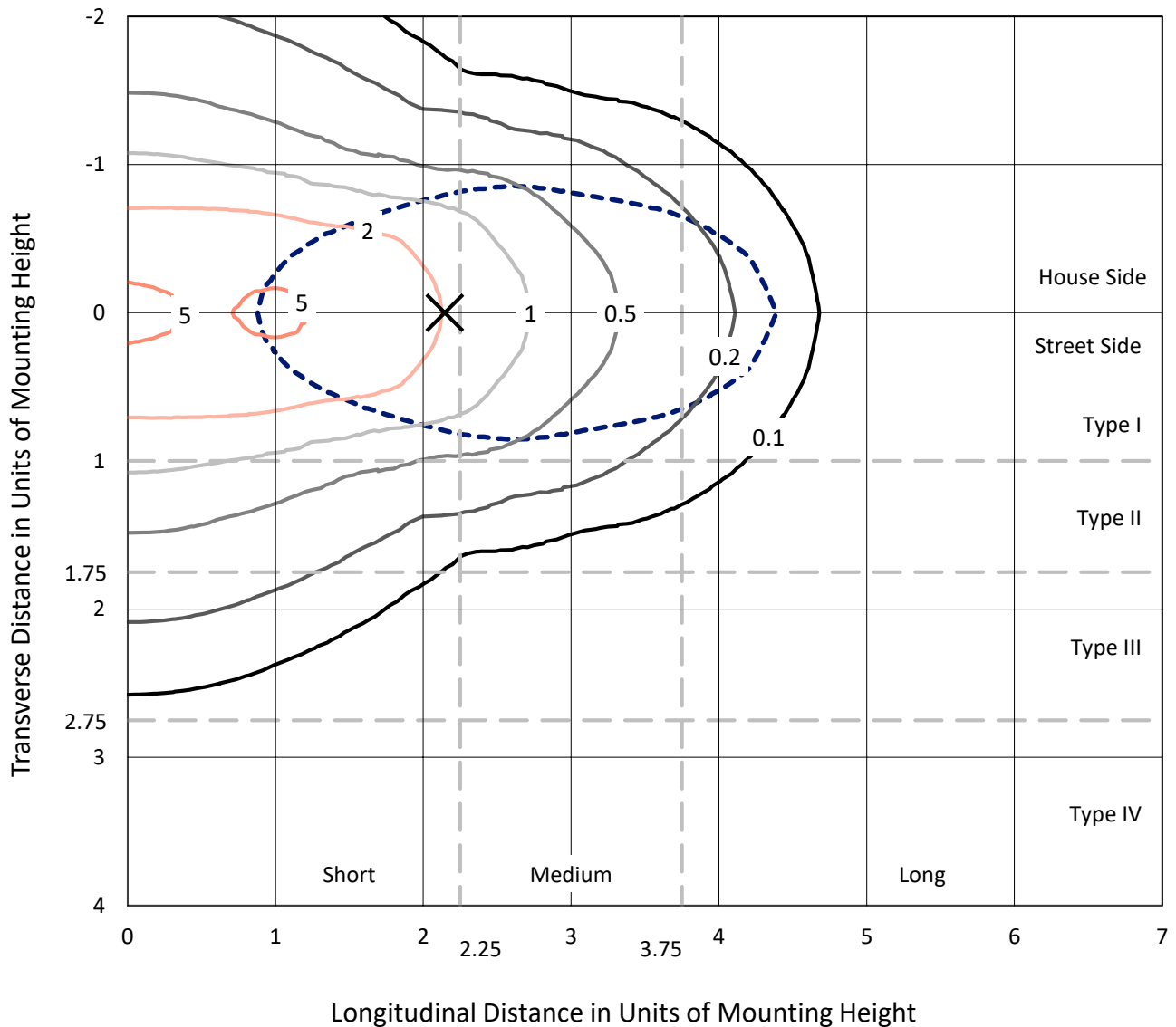
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

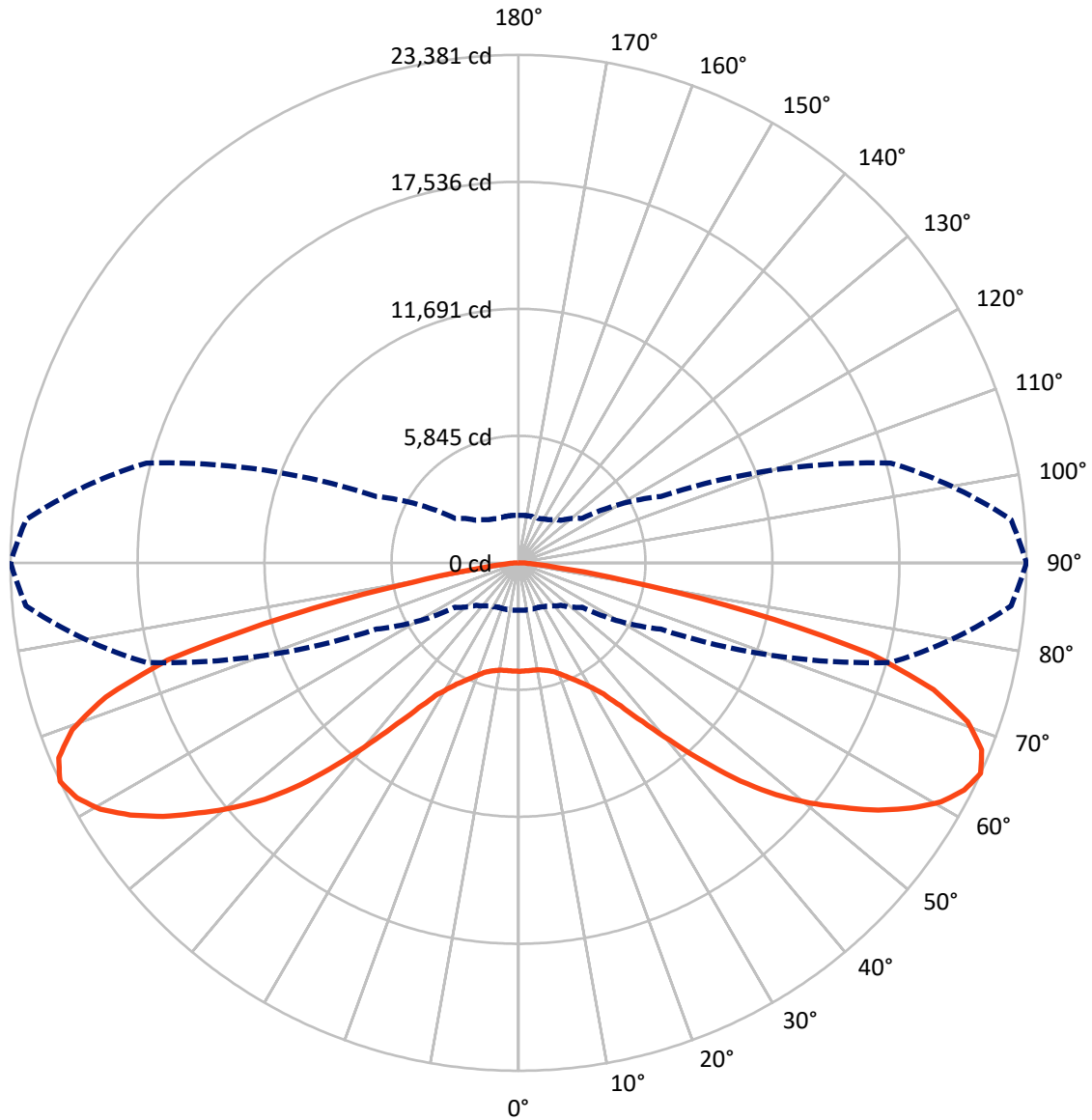
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.6 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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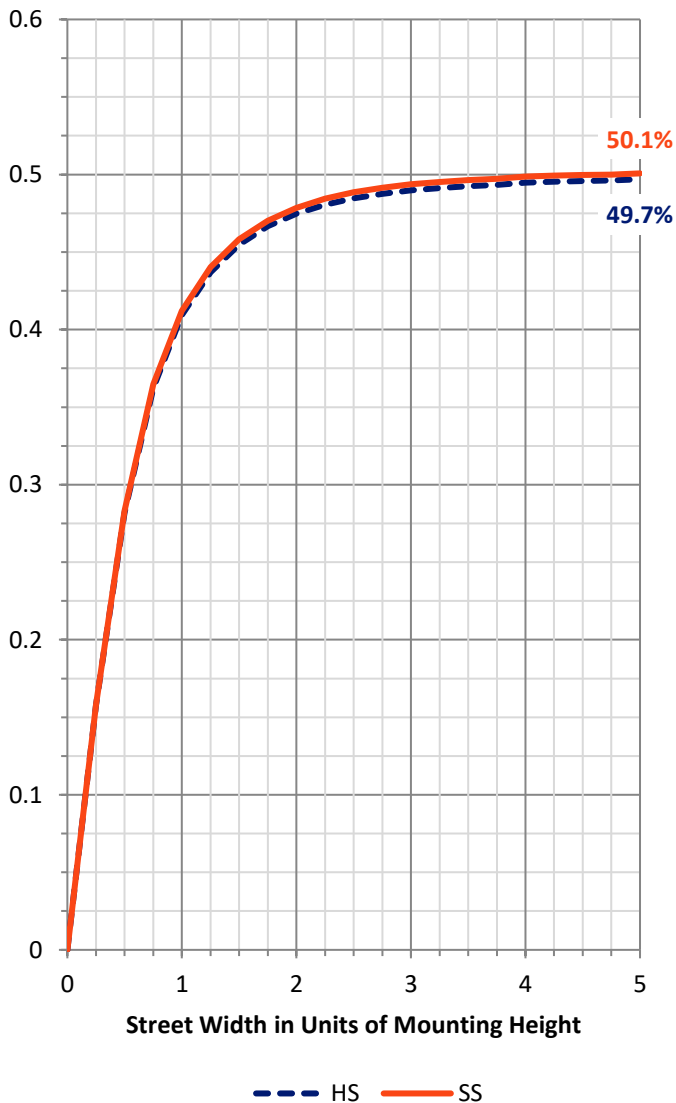
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15158.5	0.0	15158.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15158.5	0.0	15158.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	30317.0	0.0	30317.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.0	1.6
10°-20°	1398.7	4.6
20°-30°	2304.0	7.6
30°-40°	3375.7	11.1
40°-50°	4991.3	16.5
50°-60°	6547.3	21.6
60°-70°	6830.7	22.5
70°-80°	3927.3	13.0
80°-90°	468.2	1.5
90°-100°	0.0	0.0
100°-110°	0.0	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°	30317.0	100.0
0°-180°	30317.0	100.0

Coefficient of Utilization



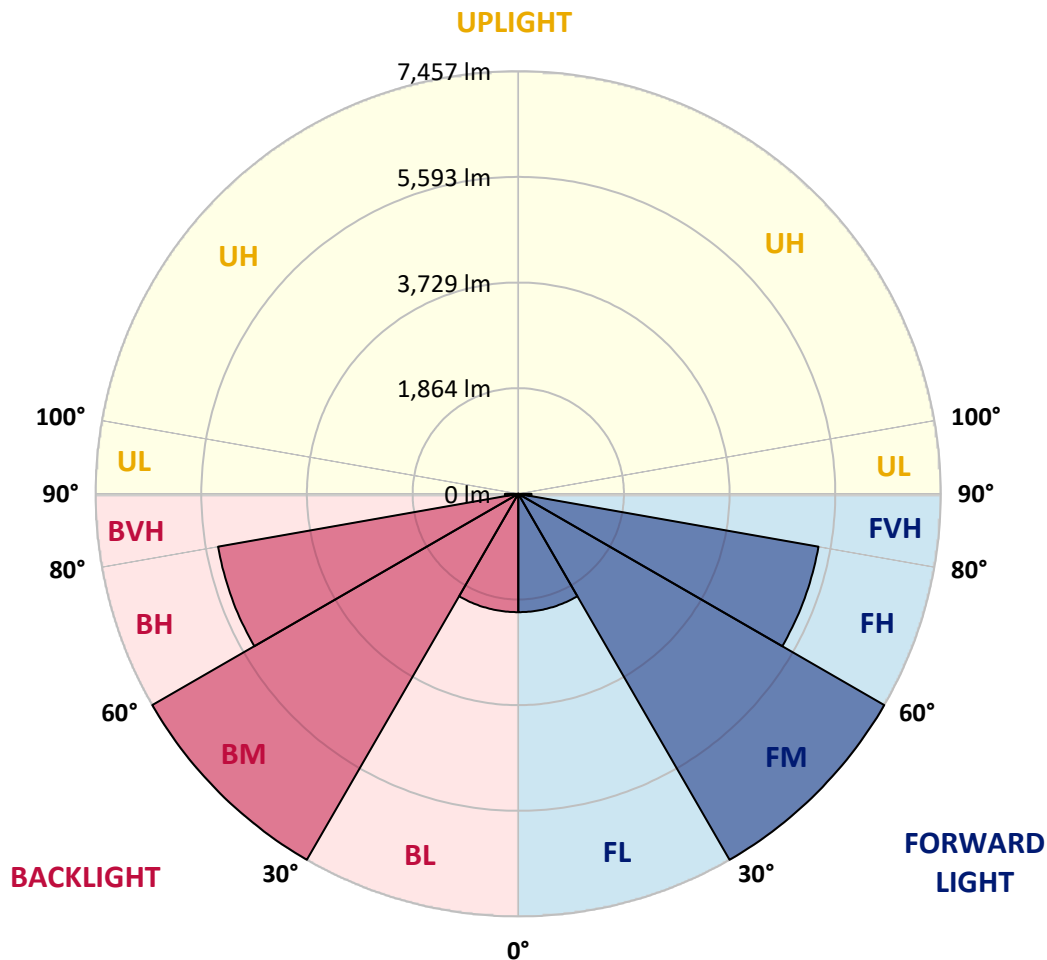
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2088.3	6.9			
FM (30°-60°)	7457.1	24.6			
FH (60°-80°)	5379.0	17.7			G3/7500
FVH (80°-90°)	234.1	0.8			G3/500
BL (0°-30°)	2088.3	6.9	B3/2500		
BM (30°-60°)	7457.1	24.6	B4/8500		
BH (60°-80°)	5379.0	17.7	B5		G5
BVH (80°-90°)	234.1	0.8			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6
2.5°	4993.5	4989.9	4988.7	4986.9	4989.9	4992.3	4998.2	5003.5	5002.3	5001.2	5002.3
5°	4965.6	4967.4	4968.0	4968.6	4970.9	4972.7	4981.0	4989.3	4988.1	4986.9	4992.9
7.5°	4926.5	4926.5	4925.3	4924.1	4928.9	4933.0	4941.3	4949.6	4956.1	4962.0	4971.5
10°	4869.6	4867.2	4866.6	4866.1	4871.4	4876.1	4891.5	4906.9	4920.0	4932.4	4948.4
12.5°	4800.3	4799.7	4800.9	4802.1	4813.3	4824.6	4850.6	4876.7	4902.8	4928.9	4952.0
15°	4717.9	4710.8	4716.7	4722.1	4740.4	4758.2	4808.6	4858.9	4898.6	4937.8	4982.8
17.5°	4592.3	4585.2	4594.1	4602.4	4639.1	4675.8	4746.9	4817.5	4892.1	4966.8	5031.4
20°	4402.1	4402.1	4424.6	4447.1	4509.3	4571.6	4669.3	4766.5	4867.2	4968.0	5061.6
22.5°	4199.4	4193.5	4241.5	4289.5	4364.2	4438.2	4561.5	4684.7	4818.1	4950.8	5079.4
25°	3970.7	3980.8	4041.2	4101.1	4205.9	4310.2	4461.9	4613.0	4780.7	4948.4	5126.8
27.5°	3777.5	3779.3	3852.2	3925.1	4056.6	4187.6	4371.9	4556.1	4760.6	4965.0	5189.6
30°	3577.8	3610.4	3687.5	3763.9	3910.9	4057.8	4280.6	4502.8	4745.2	4987.5	5261.3
32.5°	3424.4	3432.1	3519.2	3605.7	3759.2	3912.6	4171.6	4430.5	4721.5	5012.4	5345.4
35°	3279.8	3292.2	3373.4	3454.6	3614.6	3774.0	4057.8	4341.0	4688.9	5036.1	5436.7
37.5°	3151.2	3166.6	3243.6	3320.7	3474.7	3628.8	3929.8	4230.8	4638.5	5046.2	5536.8
40°	3057.0	3070.0	3135.2	3200.4	3339.6	3478.3	3793.5	4108.2	4568.0	5027.8	5615.6
42.5°	2988.8	2994.8	3047.5	3100.2	3224.7	3349.1	3661.4	3973.1	4476.2	4979.2	5676.7
45°	2896.4	2909.4	2961.6	3013.1	3125.1	3236.5	3522.1	3807.8	4339.9	4871.4	5677.3
47.5°	2827.7	2836.0	2885.1	2933.7	3038.0	3142.3	3398.9	3655.5	4185.8	4715.5	5613.3
50°	2777.3	2773.2	2818.8	2863.8	2952.1	3039.8	3268.5	3496.7	3995.0	4493.3	5453.3
52.5°	2705.6	2710.3	2747.1	2783.8	2860.3	2936.1	3141.1	3345.6	3783.5	4220.8	5193.7
55°	2609.6	2631.5	2662.3	2692.6	2759.5	2826.5	3010.8	3195.0	3571.9	3948.2	4859.5
57.5°	2515.4	2531.4	2557.5	2583.5	2636.3	2688.4	2862.0	3035.7	3349.1	3662.6	4437.6
60°	2438.4	2442.5	2459.1	2475.1	2515.4	2555.7	2699.1	2842.5	3116.2	3389.4	4016.9
62.5°	2338.8	2340.0	2351.3	2362.5	2387.4	2411.7	2524.3	2636.3	2869.7	3103.2	3598.6
65°	2183.0	2192.4	2203.1	2213.2	2229.8	2245.8	2331.7	2417.6	2592.4	2767.2	3166.6
67.5°	2025.3	2017.1	2029.5	2041.9	2044.3	2046.7	2111.9	2177.0	2320.4	2463.8	2785.0
70°	1768.8	1775.3	1774.1	1772.3	1762.3	1751.6	1797.2	1842.8	1918.7	1993.9	2226.2
72.5°	1356.4	1347.5	1325.0	1301.8	1291.2	1280.5	1333.8	1386.6	1442.3	1498.0	1665.7
75°	829.0	854.5	901.3	947.5	965.3	983.0	980.1	976.5	971.8	967.0	1176.2
77.5°	561.7	575.4	586.0	596.1	622.2	647.7	677.3	706.9	706.3	705.7	837.3
80°	357.3	346.6	351.4	356.1	370.9	385.8	430.8	475.2	487.7	499.5	590.2
82.5°	224.0	225.8	231.7	237.0	220.4	203.8	238.8	273.2	302.8	331.8	373.9
85°	145.2	164.7	161.8	158.8	139.3	119.7	150.5	181.3	195.5	209.2	225.2
87.5°	46.8	54.5	56.3	57.5	57.5	56.9	63.4	69.9	72.3	74.1	80.0
90°	0.0	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	0.0
95°	0.0	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	0.0
100°	0.0	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	0.0
105°	0.0	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	0.0
110°	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):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
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):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6	4994.6
2.5°	5002.9	4997.0	4991.1	4989.3	4987.5	4986.3	4985.2	4984.0
5°	4998.2	4997.0	4995.8	4991.1	4986.3	4985.7	4985.2	4986.9
7.5°	4981.0	4981.0	4981.0	4986.3	4991.7	4989.3	4986.3	4989.9
10°	4963.8	4978.0	4992.3	4996.4	5000.6	5003.5	5006.5	5009.4
12.5°	4975.1	4999.4	5023.1	5036.7	5050.3	5057.4	5064.0	5065.7
15°	5027.8	5058.6	5089.4	5107.8	5125.6	5137.4	5149.3	5152.3
17.5°	5096.0	5143.4	5190.2	5216.8	5243.5	5257.1	5270.2	5266.0
20°	5154.6	5219.8	5285.0	5341.9	5398.8	5430.2	5461.0	5464.5
22.5°	5207.4	5317.0	5426.6	5500.1	5573.0	5628.7	5684.4	5690.3
25°	5304.5	5447.9	5591.3	5708.7	5826.0	5876.9	5927.3	5956.9
27.5°	5413.6	5605.6	5797.5	5954.6	6111.6	6189.2	6266.3	6270.4
30°	5534.5	5778.0	6020.9	6231.9	6442.2	6537.1	6631.3	6681.0
32.5°	5677.9	5987.2	6295.9	6573.2	6850.5	6994.5	7138.5	7188.9
35°	5836.7	6237.8	6638.4	7020.6	7402.2	7677.7	7953.3	8086.0
37.5°	6027.5	6538.2	7049.0	7623.2	8197.4	8667.3	9136.6	9270.5
40°	6203.4	6860.6	7517.1	8314.7	9112.3	9857.7	10602.6	10747.7
42.5°	6374.1	7169.3	7964.5	9052.4	10140.4	11138.2	12136.1	12513.6
45°	6482.5	7444.3	8405.4	9839.9	11274.5	12644.5	14013.9	14330.9
47.5°	6510.4	7640.4	8770.4	10547.5	12324.5	13936.9	15548.6	15955.7
50°	6413.2	7742.3	9071.4	11416.7	13761.5	15403.4	17044.8	17379.0
52.5°	6166.7	7709.7	9252.7	12090.5	14928.2	16666.2	18404.1	18707.5
55°	5770.9	7511.8	9252.7	12645.1	16036.9	17839.4	19641.4	20102.4
57.5°	5212.7	7133.8	9054.8	13015.4	16976.1	18933.9	20891.7	21305.9
60°	4644.4	6684.0	8723.0	13219.9	17716.8	19790.7	21864.6	22348.2
62.5°	4093.4	6073.1	8052.2	13005.4	17958.5	20148.0	22336.9	23032.6
65°	3566.0	5394.6	7223.2	12482.1	17740.5	20249.3	22757.6	23381.0
67.5°	3106.2	4827.5	6548.9	11605.2	16661.4	19438.1	22214.2	22991.1
70°	2458.5	4042.4	5626.3	10050.3	14474.3	17726.2	20978.2	21936.9
72.5°	1833.4	3176.7	4519.4	7905.9	11292.3	15031.9	18770.9	19977.4
75°	1384.8	2537.3	3689.8	6249.1	8808.3	11974.3	15140.3	16755.1
77.5°	968.8	1833.4	2697.3	4606.5	6515.7	8268.5	10021.3	10881.7
80°	680.3	1159.6	1638.4	2556.9	3474.7	4252.2	5029.0	4967.4
82.5°	415.4	616.8	817.7	1109.3	1400.8	1588.6	1776.5	1768.2
85°	241.2	293.3	344.9	427.2	509.6	602.6	695.7	618.6
87.5°	85.3	85.3	85.3	97.8	110.2	151.7	193.2	203.8
90°	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
95°	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
100°	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
105°	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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: CST-CA6-230-727-U-T1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	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
117.5°	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
122.5°	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
127.5°	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
132.5°	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
137.5°	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
142.5°	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
147.5°	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
152.5°	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
157.5°	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
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)