

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: P510465

Luminaire Tested: **CST-CA10-310-727-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510465
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-CA10-310-727-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42633 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

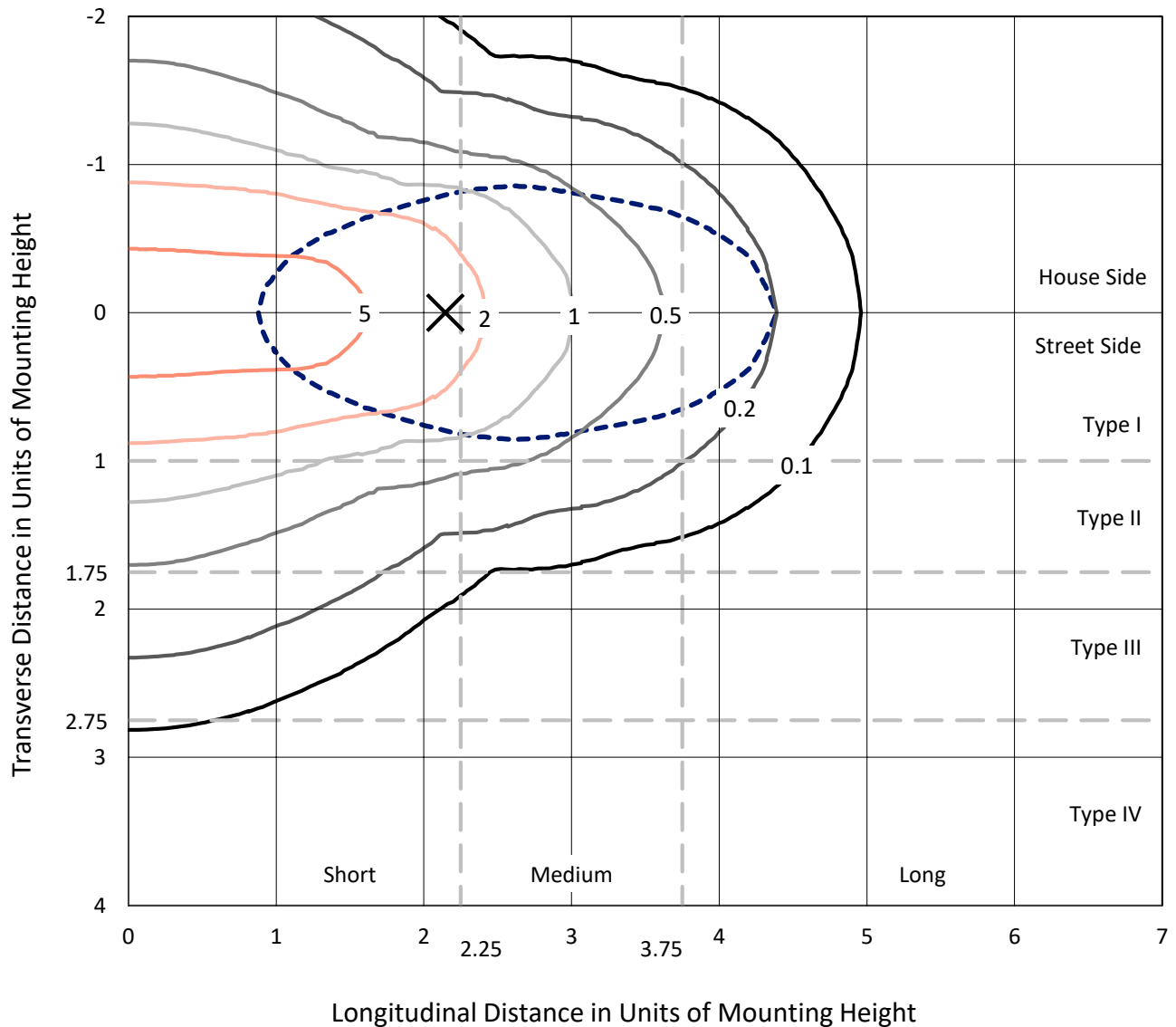
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

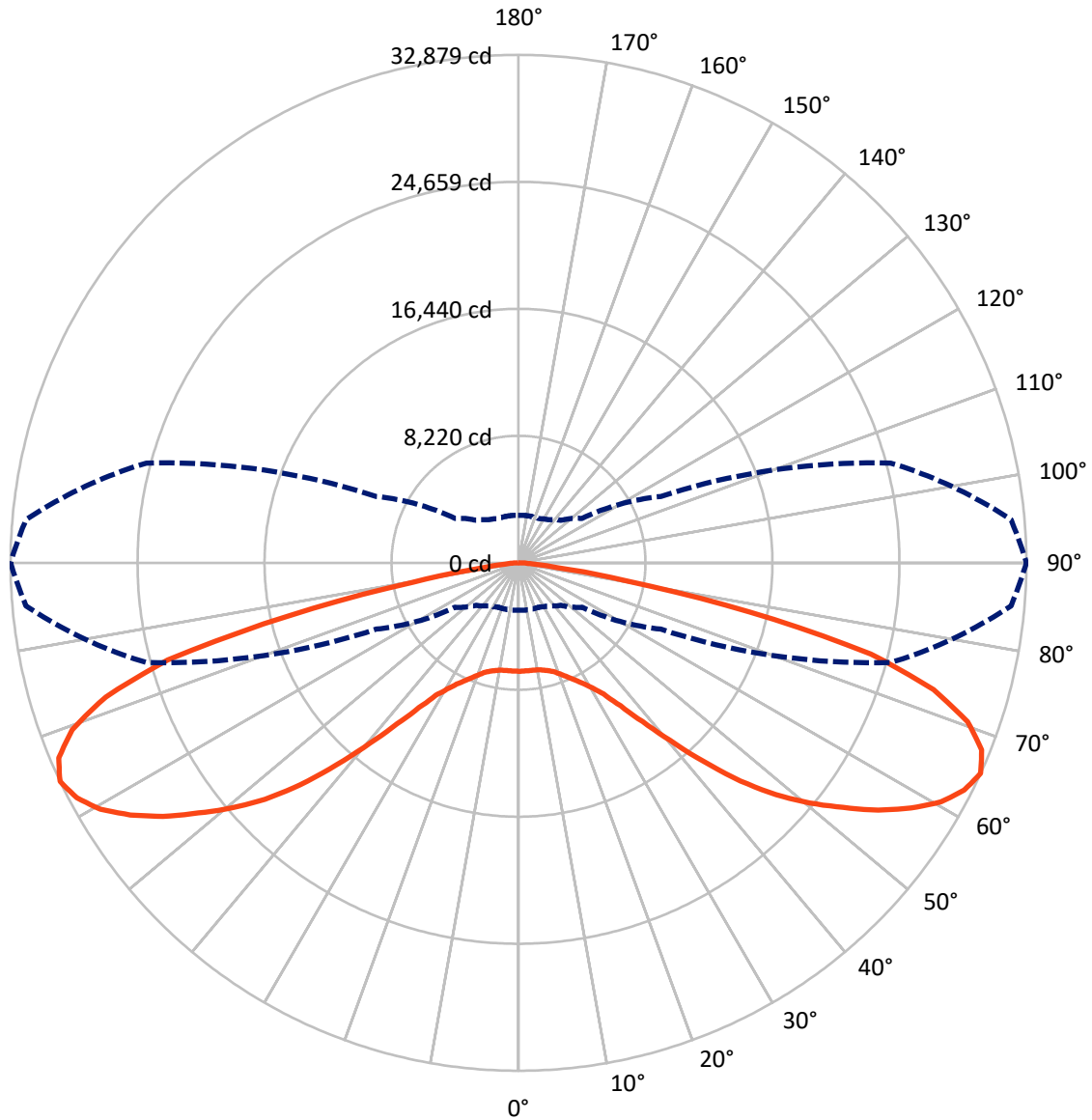
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.9 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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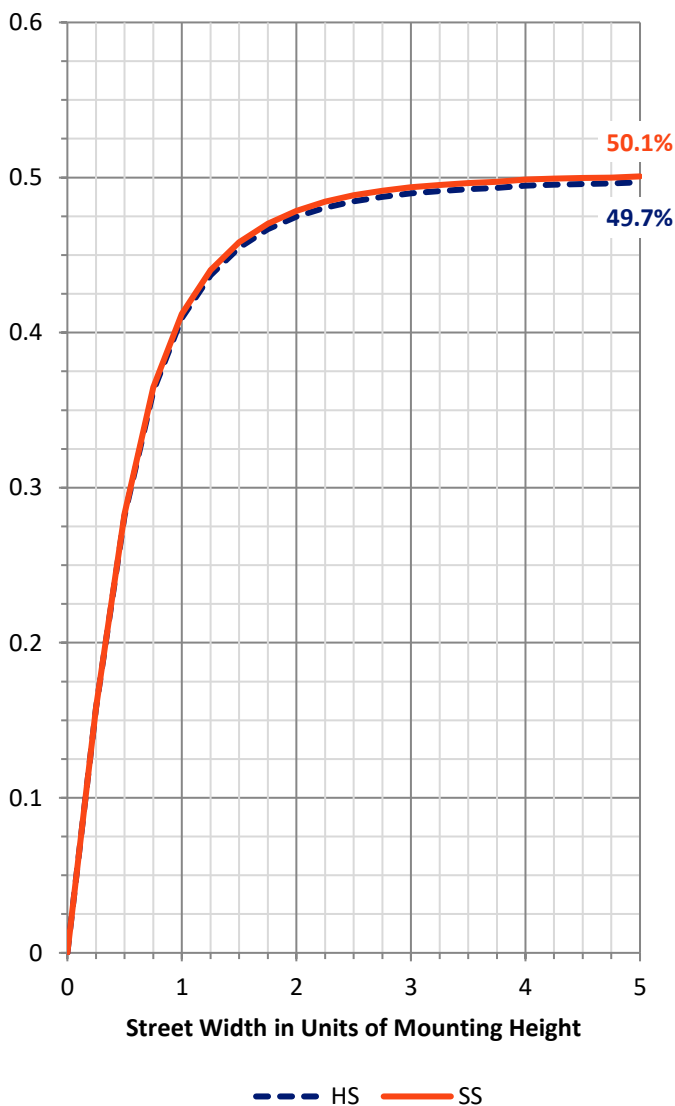
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21316.5	0.0	21316.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	21316.5	0.0	21316.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	42633.0	0.0	42633.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	666.5	1.6
10°-20°	1966.9	4.6
20°-30°	3240.0	7.6
30°-40°	4747.0	11.1
40°-50°	7018.9	16.5
50°-60°	9207.0	21.6
60°-70°	9605.6	22.5
70°-80°	5522.7	13.0
80°-90°	658.4	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°	42633.0	100.0
0°-180°	42633.0	100.0

Coefficient of Utilization

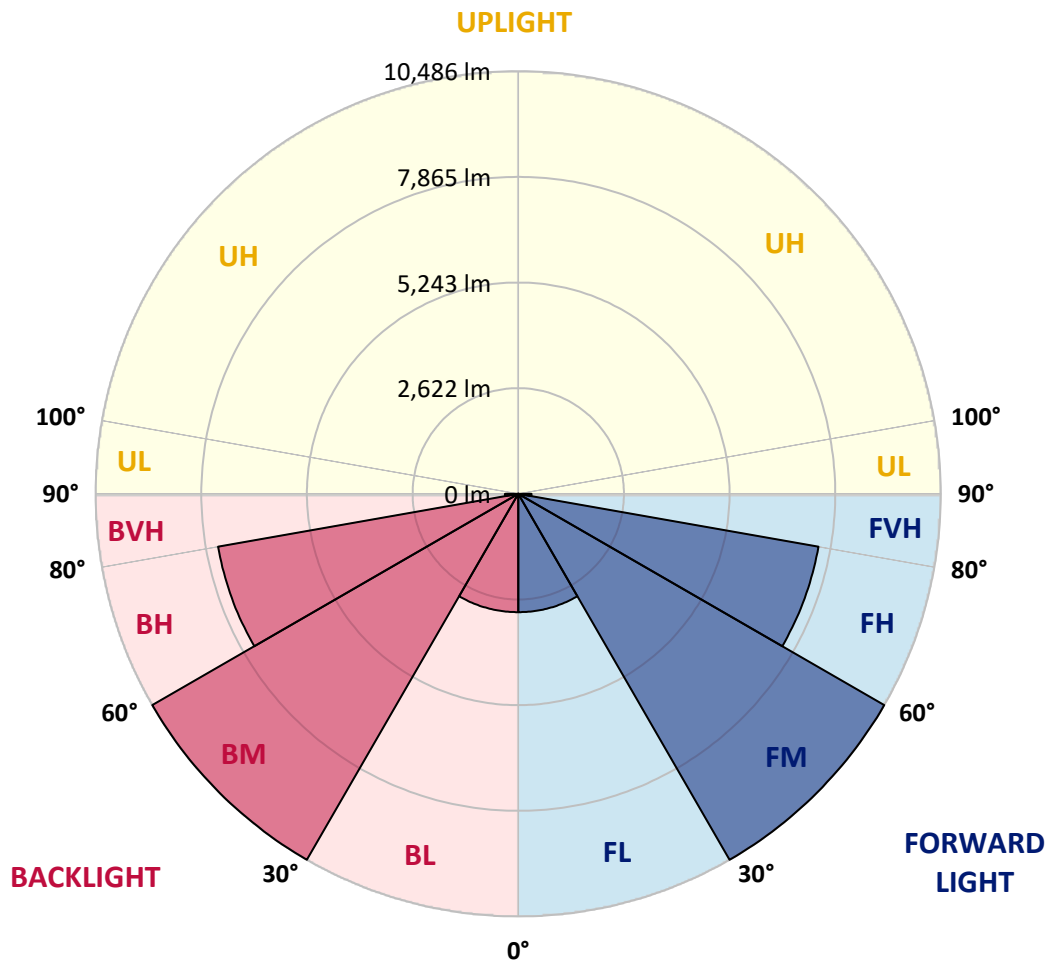


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2936.7	6.9			
FM (30°-60°)	10486.5	24.6			
FH (60°-80°)	7564.1	17.7			G4/12000
FVH (80°-90°)	329.2	0.8			G3/500
BL (0°-30°)	2936.7	6.9	B4/5000		
BM (30°-60°)	10486.5	24.6	B5		
BH (60°-80°)	7564.1	17.7	B5		G5
BVH (80°-90°)	329.2	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°	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7
2.5°	7022.0	7017.0	7015.3	7012.8	7017.0	7020.3	7028.7	7036.2	7034.5	7032.8	7034.5
5°	6982.8	6985.3	6986.2	6987.0	6990.3	6992.8	7004.5	7016.2	7014.5	7012.8	7021.2
7.5°	6927.8	6927.8	6926.2	6924.5	6931.2	6937.0	6948.7	6960.3	6969.5	6977.8	6991.2
10°	6847.8	6844.5	6843.7	6842.8	6850.3	6857.0	6878.7	6900.3	6918.7	6936.2	6958.7
12.5°	6750.3	6749.5	6751.2	6752.8	6768.7	6784.5	6821.2	6857.8	6894.5	6931.2	6963.7
15°	6634.5	6624.5	6632.9	6640.4	6666.2	6691.2	6762.0	6832.8	6888.7	6943.7	7007.0
17.5°	6457.9	6447.9	6460.4	6472.0	6523.7	6575.4	6675.4	6774.5	6879.5	6984.5	7075.3
20°	6190.4	6190.4	6222.1	6253.7	6341.2	6428.7	6566.2	6702.8	6844.5	6986.2	7117.8
22.5°	5905.4	5897.1	5964.6	6032.1	6137.1	6241.2	6414.5	6587.9	6775.3	6962.0	7142.8
25°	5583.8	5597.9	5682.9	5767.1	5914.6	6061.2	6274.5	6487.0	6722.8	6958.7	7209.5
27.5°	5312.1	5314.6	5417.1	5519.6	5704.6	5888.7	6147.9	6407.0	6694.5	6982.0	7297.8
30°	5031.3	5077.1	5185.5	5293.0	5499.6	5706.3	6019.6	6332.0	6672.9	7013.7	7398.6
32.5°	4815.5	4826.3	4948.8	5070.5	5286.3	5502.1	5866.2	6230.4	6639.5	7048.7	7517.0
35°	4612.2	4629.7	4743.8	4858.0	5083.0	5307.1	5706.3	6104.6	6593.7	7082.0	7645.3
37.5°	4431.3	4453.0	4561.3	4669.7	4886.3	5103.0	5526.3	5949.6	6522.9	7096.2	7786.1
40°	4298.9	4317.2	4408.8	4500.5	4696.3	4891.3	5334.6	5777.1	6423.7	7070.3	7896.9
42.5°	4203.0	4211.4	4285.5	4359.7	4534.7	4709.7	5148.8	5587.1	6294.5	7002.0	7982.8
45°	4073.0	4091.4	4164.7	4237.2	4394.7	4551.3	4953.0	5354.6	6102.9	6850.3	7983.6
47.5°	3976.4	3988.0	4057.2	4125.5	4272.2	4418.8	4779.7	5140.5	5886.2	6631.2	7893.6
50°	3905.6	3899.7	3963.9	4027.2	4151.4	4274.7	4596.3	4917.1	5617.9	6318.7	7668.6
52.5°	3804.7	3811.4	3863.1	3914.7	4022.2	4128.9	4417.2	4704.7	5320.4	5935.4	7303.6
55°	3669.7	3700.6	3743.9	3786.4	3880.6	3974.7	4233.9	4493.0	5023.0	5552.1	6833.7
57.5°	3537.2	3559.7	3596.4	3633.1	3707.2	3780.6	4024.7	4268.9	4709.7	5150.5	6240.4
60°	3428.9	3434.8	3458.1	3480.6	3537.2	3593.9	3795.6	3997.2	4382.2	4766.3	5648.8
62.5°	3288.9	3290.6	3306.4	3322.3	3357.3	3391.4	3549.7	3707.2	4035.5	4363.9	5060.5
65°	3069.8	3083.1	3098.1	3112.3	3135.6	3158.1	3278.9	3399.8	3645.6	3891.4	4453.0
67.5°	2848.1	2836.5	2854.0	2871.5	2874.8	2878.1	2969.8	3061.4	3263.1	3464.8	3916.4
70°	2487.3	2496.5	2494.8	2492.3	2478.2	2463.2	2527.3	2591.5	2698.1	2804.0	3130.6
72.5°	1907.4	1894.9	1863.2	1830.7	1815.7	1800.7	1875.7	1949.9	2028.2	2106.5	2342.3
75°	1165.7	1201.6	1267.4	1332.4	1357.4	1382.4	1378.2	1373.2	1366.6	1359.9	1654.0
77.5°	789.9	809.1	824.1	838.3	874.9	910.8	952.4	994.1	993.3	992.4	1177.4
80°	502.5	487.5	494.1	500.8	521.6	542.5	605.8	668.3	685.8	702.4	829.9
82.5°	315.0	317.5	325.8	333.3	310.0	286.6	335.8	384.1	425.8	466.6	525.8
85°	204.2	231.6	227.5	223.3	195.8	168.3	211.7	255.0	275.0	294.1	316.6
87.5°	65.8	76.7	79.2	80.8	80.8	80.0	89.2	98.3	101.7	104.2	112.5
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°	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7	7023.7
2.5°	7035.3	7027.0	7018.7	7016.2	7013.7	7012.0	7010.3	7008.7
5°	7028.7	7027.0	7025.3	7018.7	7012.0	7011.2	7010.3	7012.8
7.5°	7004.5	7004.5	7004.5	7012.0	7019.5	7016.2	7012.0	7017.0
10°	6980.3	7000.3	7020.3	7026.2	7032.0	7036.2	7040.3	7044.5
12.5°	6996.2	7030.3	7063.7	7082.8	7102.0	7112.0	7121.2	7123.7
15°	7070.3	7113.7	7157.0	7182.8	7207.8	7224.5	7241.1	7245.3
17.5°	7166.1	7232.8	7298.6	7336.1	7373.6	7392.8	7411.1	7405.3
20°	7248.6	7340.3	7432.0	7512.0	7592.0	7636.1	7679.4	7684.4
22.5°	7322.8	7477.0	7631.1	7734.4	7836.9	7915.3	7993.6	8001.9
25°	7459.5	7661.1	7862.8	8027.8	8192.7	8264.4	8335.2	8376.9
27.5°	7612.8	7882.8	8152.7	8373.6	8594.4	8703.5	8811.9	8817.7
30°	7782.8	8125.2	8466.9	8763.5	9059.3	9192.7	9325.2	9395.2
32.5°	7984.4	8419.4	8853.5	9243.5	9633.5	9836.0	10038.4	10109.3
35°	8207.7	8771.9	9335.2	9872.6	10409.2	10796.7	11184.2	11370.8
37.5°	8476.1	9194.3	9912.6	10720.1	11527.5	12188.3	12848.2	13036.6
40°	8723.5	9647.6	10570.9	11692.5	12814.1	13862.3	14909.8	15113.9
42.5°	8963.5	10081.8	11200.0	12729.9	14259.8	15663.0	17066.3	17597.1
45°	9116.0	10468.4	11820.0	13837.3	15854.7	17781.2	19706.9	20152.7
47.5°	9155.2	10744.2	12333.3	14832.3	17331.3	19598.6	21865.1	22437.5
50°	9018.5	10887.5	12756.6	16054.7	19351.9	21660.9	23969.1	24439.1
52.5°	8671.9	10841.7	13011.6	17002.1	20992.7	23436.6	25880.6	26307.3
55°	8115.2	10563.4	13011.6	17782.1	22551.7	25086.5	27620.5	28268.8
57.5°	7330.3	10031.8	12733.2	18302.8	23872.4	26625.6	29378.7	29961.2
60°	6531.2	9399.3	12266.6	18590.3	24914.0	27830.5	30746.9	31426.9
62.5°	5756.3	8540.2	11323.4	18288.7	25254.0	28333.0	31411.1	32389.3
65°	5014.6	7586.1	10157.6	17552.9	24947.4	28475.4	32002.7	32879.3
67.5°	4368.0	6788.7	9209.3	16319.7	23430.0	27334.7	31238.6	32331.0
70°	3457.3	5684.6	7911.9	14133.1	20354.4	24927.4	29500.4	30848.6
72.5°	2578.1	4467.2	6355.4	11117.5	15879.7	21138.5	26396.4	28093.0
75°	1947.4	3568.1	5188.8	8787.7	12386.6	16838.8	21291.0	23561.6
77.5°	1362.4	2578.1	3793.1	6477.9	9162.7	11627.5	14092.3	15302.2
80°	956.6	1630.7	2304.0	3595.6	4886.3	5979.6	7072.0	6985.3
82.5°	584.1	867.4	1149.9	1559.9	1969.9	2234.0	2498.2	2486.5
85°	339.1	412.5	485.0	600.8	716.6	847.4	978.3	869.9
87.5°	120.0	120.0	120.0	137.5	155.0	213.3	271.6	286.6
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-CA10-310-727-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)