

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: P510845

Luminaire Tested: **CST-CA8-480-740-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510845
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-CA8-480-740-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 73845 lumens
Efficiency: N/A
Efficacy: 153.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

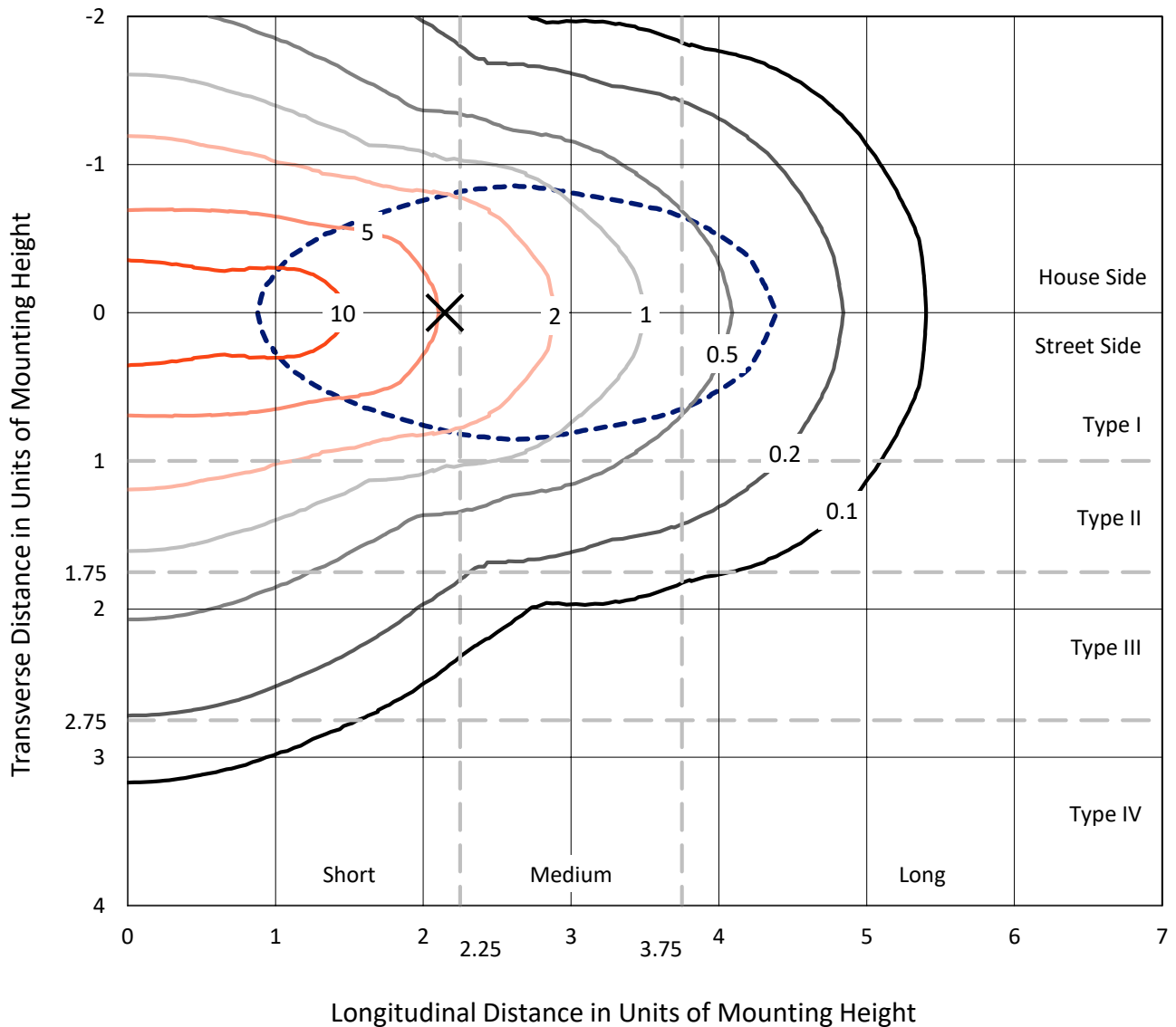
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

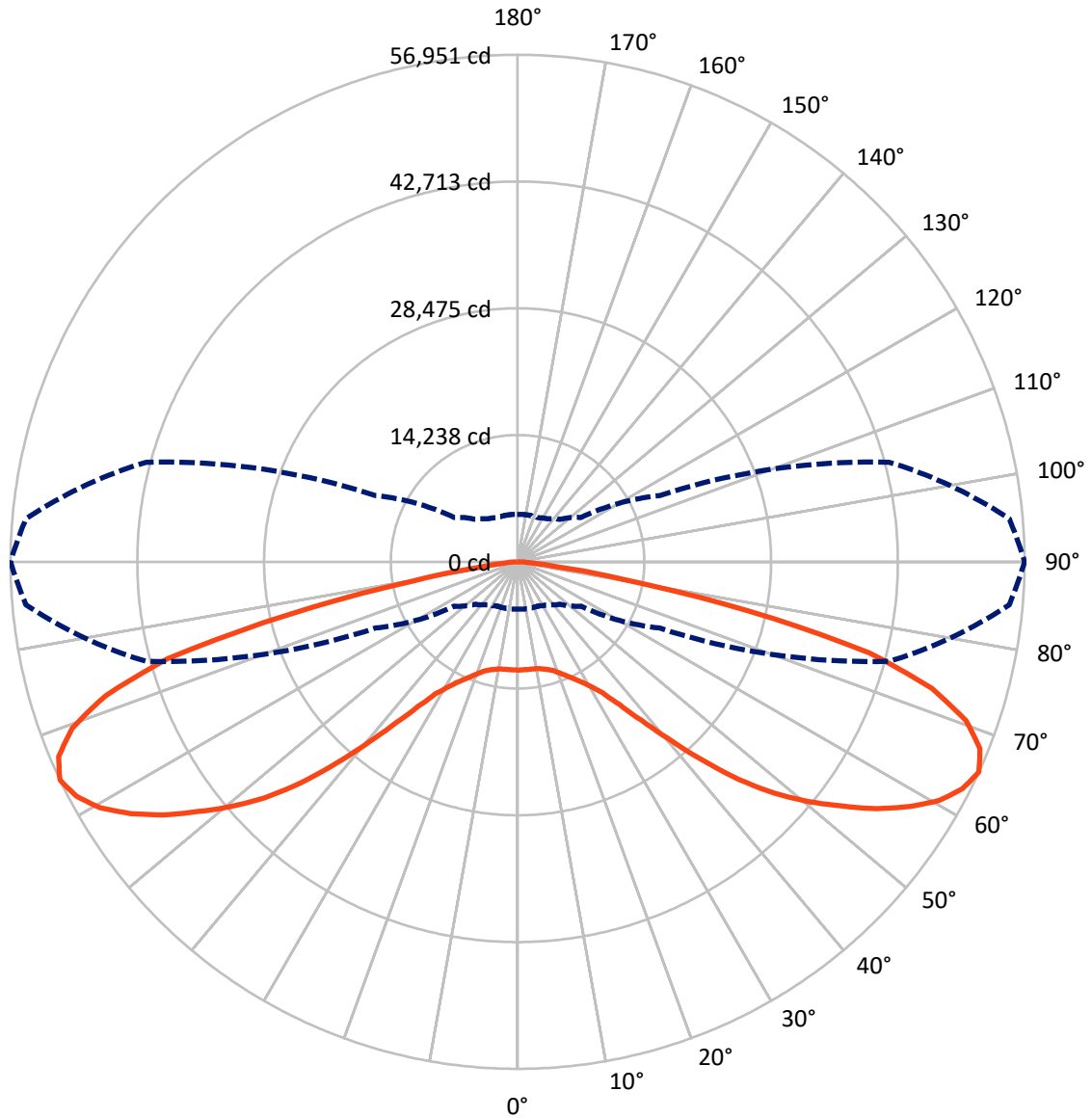
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.7 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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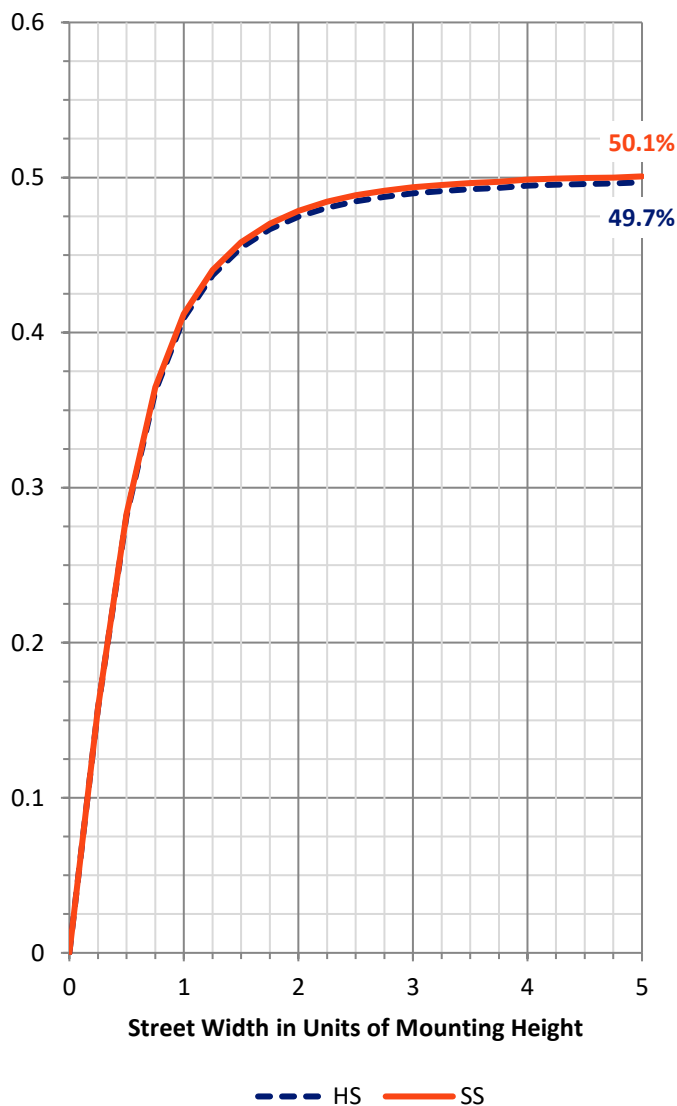
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	36922.5	0.0	36922.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	36922.5	0.0	36922.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	73845.0	0.0	73845.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1154.5	1.6
10°-20°	3406.9	4.6
20°-30°	5612.0	7.6
30°-40°	8222.3	11.1
40°-50°	12157.6	16.5
50°-60°	15947.6	21.6
60°-70°	16637.9	22.5
70°-80°	9565.8	13.0
80°-90°	1140.3	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°	73845.0	100.0
0°-180°	73845.0	100.0

Coefficient of Utilization

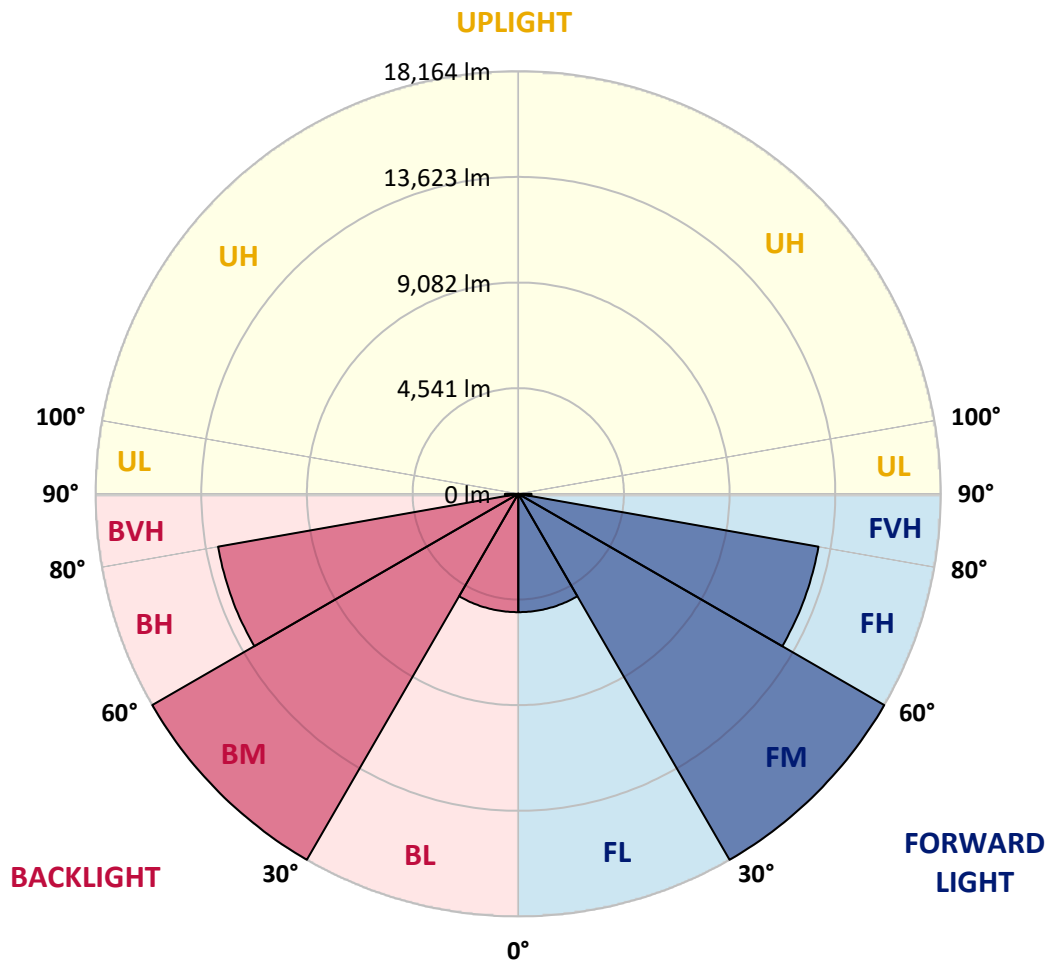


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5086.7	6.9			
FM (30°-60°)	18163.7	24.6			
FH (60°-80°)	13101.9	17.7			G5
FVH (80°-90°)	570.2	0.8			G4/750
BL (0°-30°)	5086.7	6.9	B5		
BM (30°-60°)	18163.7	24.6	B5		
BH (60°-80°)	13101.9	17.7	B5		G5
BVH (80°-90°)	570.2	0.8			G4/750
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°	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7
2.5°	12162.9	12154.2	12151.3	12147.0	12154.2	12160.0	12174.4	12187.4	12184.5	12181.6	12184.5
5°	12095.0	12099.4	12100.8	12102.2	12108.0	12112.3	12132.5	12152.8	12149.9	12147.0	12161.4
7.5°	11999.8	11999.8	11996.9	11994.0	12005.5	12015.6	12035.8	12056.1	12071.9	12086.4	12109.5
10°	11861.2	11855.4	11854.0	11852.5	11865.5	11877.1	11914.6	11952.1	11983.9	12014.2	12053.2
12.5°	11692.3	11690.9	11693.8	11696.7	11724.1	11751.5	11815.0	11878.5	11942.0	12005.5	12061.8
15°	11491.7	11474.4	11488.8	11501.8	11546.6	11589.9	11712.5	11835.2	11931.9	12027.2	12136.9
17.5°	11185.7	11168.4	11190.1	11210.3	11299.8	11389.2	11562.4	11734.2	11916.1	12097.9	12255.2
20°	10722.4	10722.4	10777.3	10832.1	10983.7	11135.2	11373.4	11610.1	11855.4	12100.8	12328.8
22.5°	10228.8	10214.4	10331.3	10448.2	10630.1	10810.5	11110.7	11410.9	11735.6	12058.9	12372.1
25°	9671.7	9696.2	9843.4	9989.2	10244.7	10498.7	10868.2	11236.2	11644.7	12053.2	12487.6
27.5°	9201.2	9205.5	9383.0	9560.6	9881.0	10199.9	10648.8	11097.7	11595.6	12093.6	12640.6
30°	8714.8	8794.1	8981.8	9168.0	9525.9	9883.9	10426.5	10967.8	11558.1	12148.4	12815.2
32.5°	8340.9	8359.7	8571.9	8782.6	9156.4	9530.2	10161.0	10791.7	11500.4	12209.0	13020.2
35°	7988.8	8019.1	8216.8	8414.6	8804.3	9192.5	9883.9	10573.8	11421.0	12266.8	13242.5
37.5°	7675.6	7713.1	7900.7	8088.4	8463.6	8838.9	9572.1	10305.3	11298.3	12291.3	13486.4
40°	7446.1	7477.8	7636.6	7795.4	8134.6	8472.3	9240.1	10006.5	11126.6	12246.6	13678.3
42.5°	7280.1	7294.5	7423.0	7551.5	7854.5	8157.6	8918.3	9677.5	10902.8	12128.2	13827.0
45°	7054.9	7086.7	7213.7	7339.3	7612.1	7883.4	8579.1	9274.8	10570.9	11865.5	13828.4
47.5°	6887.5	6907.7	7027.5	7145.9	7399.9	7653.9	8278.9	8903.8	10195.6	11485.9	13672.6
50°	6764.8	6754.7	6865.9	6975.6	7190.6	7404.2	7961.4	8517.0	9730.9	10944.7	13282.9
52.5°	6590.2	6601.7	6691.2	6780.7	6966.9	7151.7	7651.0	8149.0	9215.6	10280.8	12650.7
55°	6356.4	6409.8	6484.8	6558.4	6721.5	6884.6	7333.5	7782.4	8700.3	9616.8	11836.7
57.5°	6126.9	6165.9	6229.4	6292.9	6421.3	6548.3	6971.2	7394.1	8157.6	8921.2	10809.0
60°	5939.3	5949.4	5989.8	6028.7	6126.9	6225.0	6574.3	6923.6	7590.4	8255.8	9784.3
62.5°	5696.8	5699.7	5727.1	5754.5	5815.1	5874.3	6148.5	6421.3	6990.0	7558.7	8765.3
65°	5317.2	5340.3	5366.3	5390.8	5431.2	5470.2	5679.5	5888.7	6314.5	6740.3	7713.1
67.5°	4933.3	4913.1	4943.4	4973.7	4979.5	4985.2	5144.0	5302.8	5652.0	6001.3	6783.6
70°	4308.3	4324.2	4321.3	4317.0	4292.4	4266.5	4377.6	4488.7	4673.5	4856.8	5422.6
72.5°	3303.8	3282.1	3227.3	3171.0	3145.0	3119.0	3248.9	3377.4	3513.0	3648.7	4057.2
75°	2019.2	2081.3	2195.3	2307.9	2351.2	2394.5	2387.3	2378.6	2367.0	2355.5	2865.0
77.5°	1368.3	1401.5	1427.4	1452.0	1515.5	1577.5	1649.7	1721.9	1720.4	1719.0	2039.4
80°	870.3	844.3	855.9	867.4	903.5	939.6	1049.3	1157.5	1187.9	1216.7	1437.5
82.5°	545.6	549.9	564.3	577.3	536.9	496.5	581.7	665.4	737.5	808.3	910.7
85°	353.6	401.2	394.0	386.8	339.2	291.6	366.6	441.7	476.3	509.5	548.5
87.5°	114.0	132.8	137.1	140.0	140.0	138.6	154.4	170.3	176.1	180.4	194.8
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°	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7	12165.7
2.5°	12186.0	12171.5	12157.1	12152.8	12148.4	12145.5	12142.7	12139.8
5°	12174.4	12171.5	12168.6	12157.1	12145.5	12144.1	12142.7	12147.0
7.5°	12132.5	12132.5	12132.5	12145.5	12158.5	12152.8	12145.5	12154.2
10°	12090.7	12125.3	12160.0	12170.1	12180.2	12187.4	12194.6	12201.8
12.5°	12118.1	12177.3	12235.0	12268.2	12301.4	12318.7	12334.6	12338.9
15°	12246.6	12321.6	12396.7	12441.4	12484.7	12513.6	12542.5	12549.7
17.5°	12412.6	12528.0	12642.0	12707.0	12771.9	12805.1	12836.9	12826.8
20°	12555.4	12714.2	12873.0	13011.5	13150.1	13226.6	13301.6	13310.3
22.5°	12683.9	12950.9	13217.9	13396.9	13574.4	13710.1	13845.8	13860.2
25°	12920.6	13269.9	13619.2	13904.9	14190.7	14314.8	14437.5	14509.7
27.5°	13186.2	13653.8	14121.4	14503.9	14886.4	15075.5	15263.1	15273.2
30°	13480.6	14073.8	14665.6	15179.4	15691.8	15922.7	16152.2	16273.4
32.5°	13829.9	14583.3	15335.3	16010.7	16686.2	17036.9	17387.7	17510.4
35°	14216.7	15193.8	16169.5	17100.5	18030.0	18701.1	19372.2	19695.5
37.5°	14681.5	15925.6	17169.7	18568.3	19966.9	21111.4	22254.6	22580.7
40°	15110.1	16710.8	18310.0	20252.7	22195.4	24011.1	25825.3	26178.9
42.5°	15525.8	17462.7	19399.7	22049.6	24699.5	27130.1	29560.6	30480.0
45°	15789.9	18132.4	20473.5	23967.8	27462.1	30799.0	34134.5	34906.7
47.5°	15857.8	18610.2	21362.6	25691.1	30019.6	33946.9	37872.7	38864.3
50°	15621.1	18858.4	22095.8	27808.4	33519.7	37519.1	41517.1	42331.1
52.5°	15020.6	18779.0	22537.4	29449.5	36361.6	40594.8	44828.1	45567.1
55°	14056.5	18297.0	22537.4	30800.4	39062.0	43452.6	47841.7	48964.6
57.5°	12696.9	17376.1	22055.4	31702.5	41349.7	46118.4	50887.1	51896.0
60°	11312.7	16280.6	21247.1	32200.5	43153.8	48205.4	53257.1	54434.8
62.5°	9970.5	14792.6	19613.3	31678.0	43742.7	49075.8	54407.4	56101.8
65°	8685.9	13140.0	17594.1	30403.5	43211.6	49322.6	55432.1	56950.5
67.5°	7565.9	11758.7	15951.6	28267.4	40583.3	47346.7	54108.6	56000.8
70°	5988.3	9846.3	13704.3	24480.2	35256.0	43176.9	51097.9	53433.2
72.5°	4465.6	7737.6	11008.2	19256.8	27505.3	36614.1	45721.5	48660.1
75°	3373.0	6180.3	8987.6	15221.3	21455.0	29166.6	36878.3	40811.3
77.5°	2359.8	4465.6	6570.0	11220.4	15870.7	20140.1	24409.4	26505.1
80°	1656.9	2824.6	3990.8	6227.9	8463.6	10357.3	12249.5	12099.4
82.5°	1011.8	1502.5	1991.8	2701.9	3412.0	3869.5	4327.1	4306.9
85°	587.4	714.4	840.0	1040.6	1241.3	1467.9	1694.5	1506.8
87.5°	207.8	207.8	207.8	238.1	268.5	369.5	470.5	496.5
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-CA8-480-740-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)