

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: P510725

Luminaire Tested: **CST-CA8-230-740-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510725
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-CA8-230-740-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: 37247 lumens
Efficiency: N/A
Efficacy: 163.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

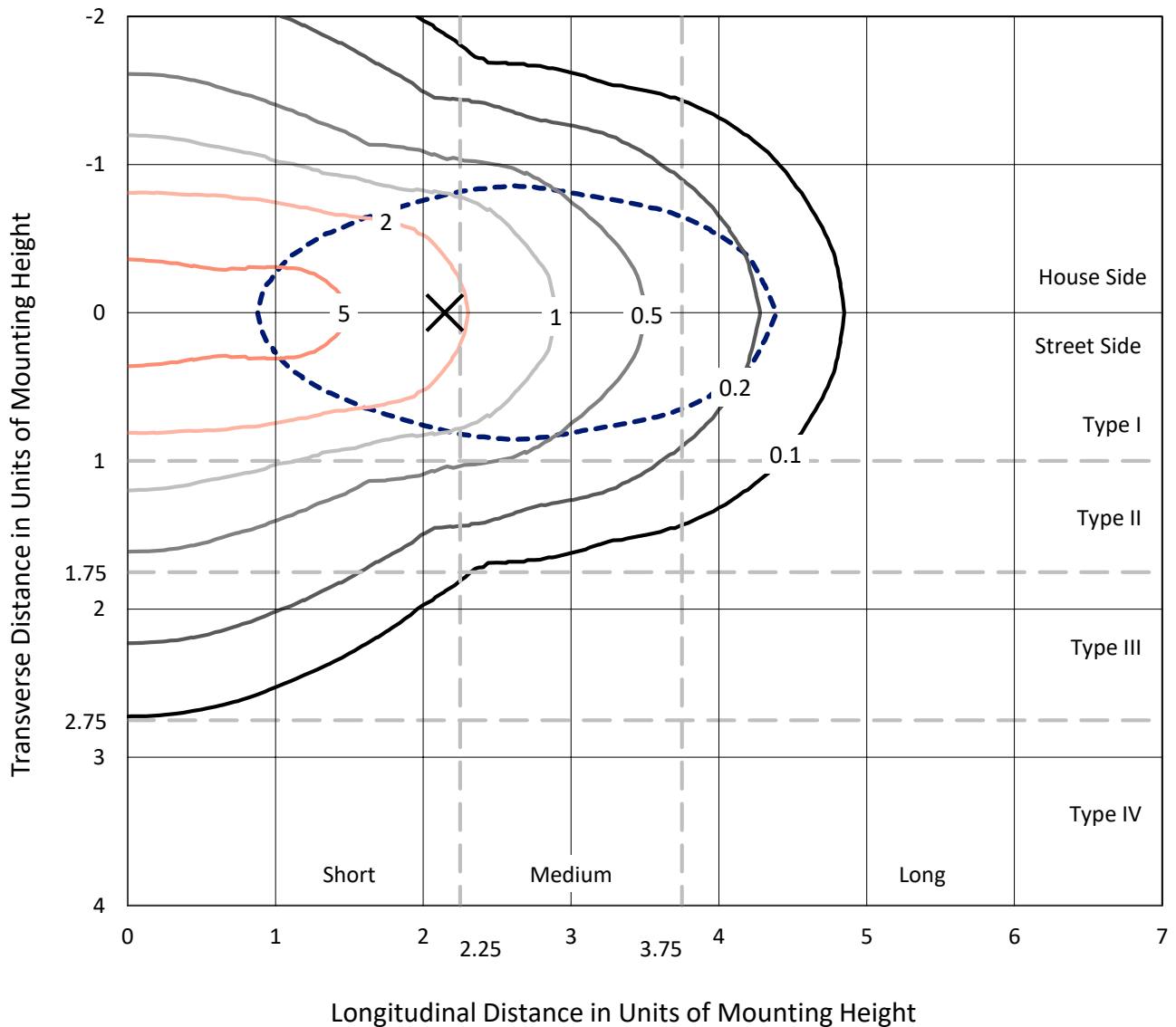
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

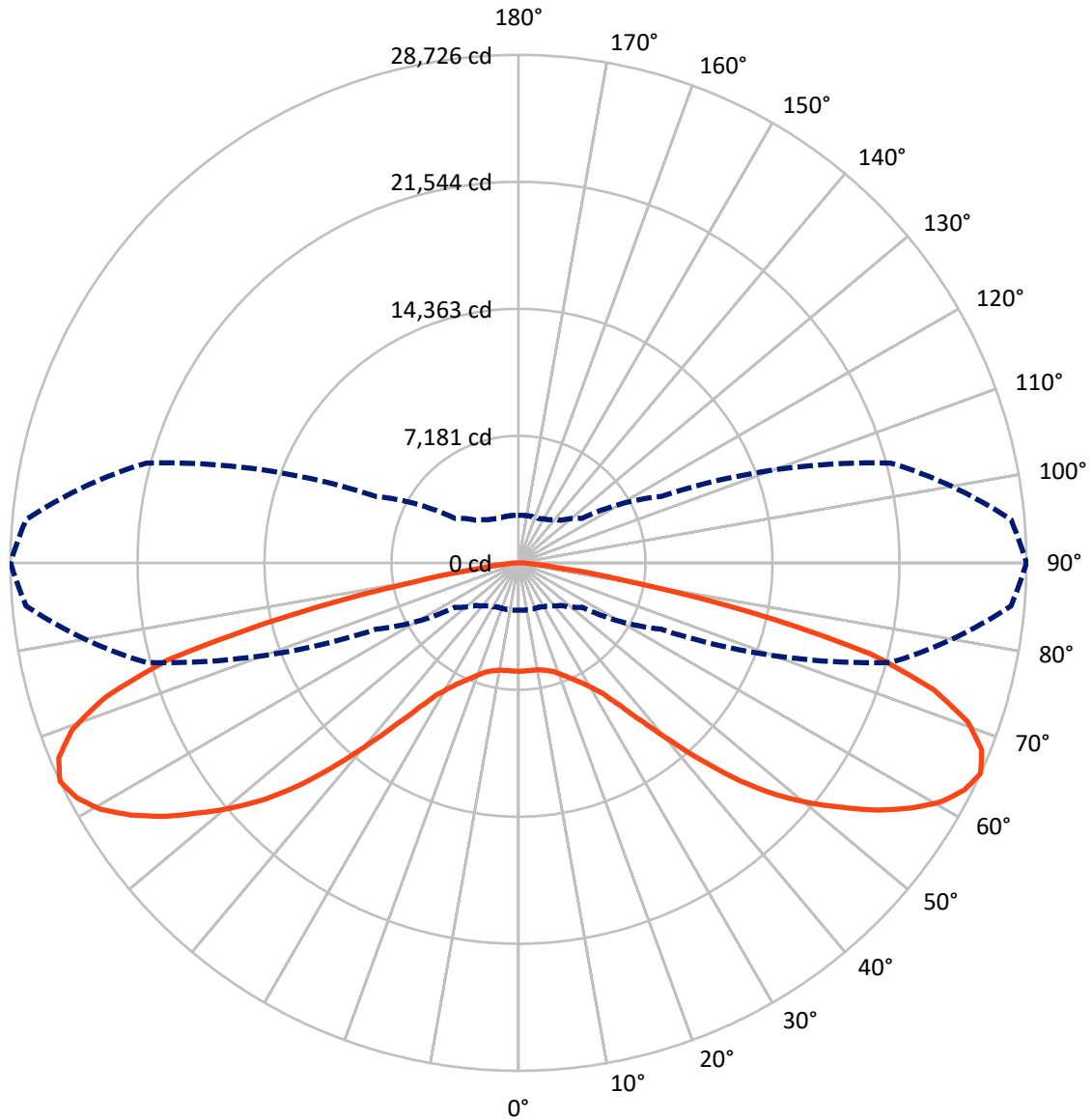
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.9 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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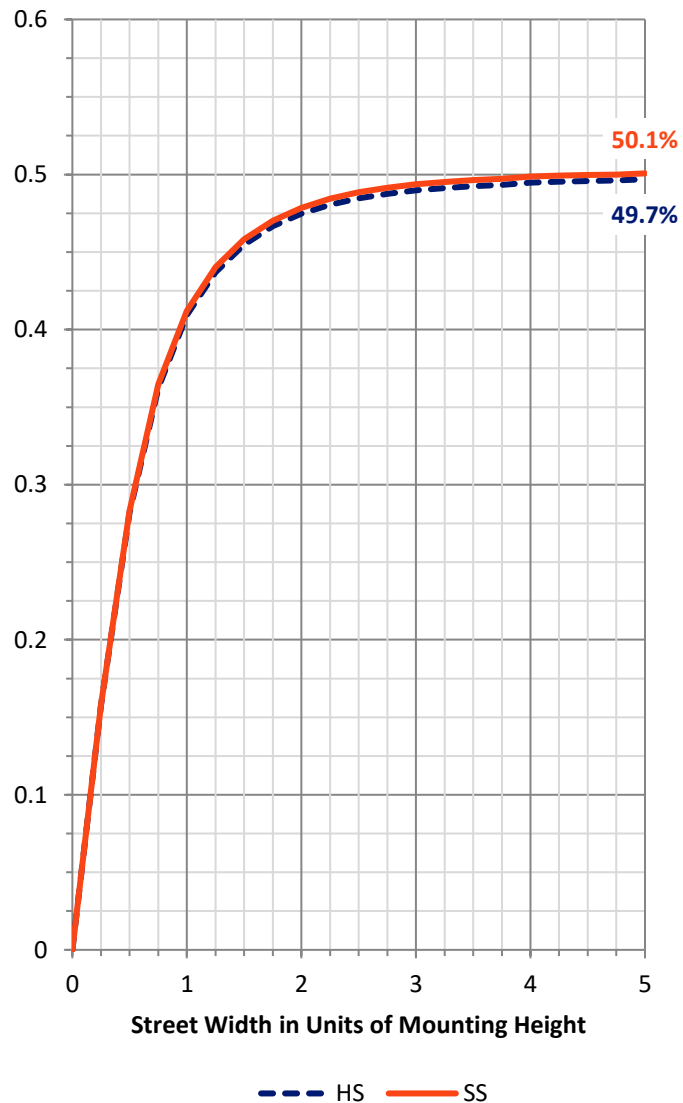
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18623.5	0.0	18623.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	18623.5	0.0	18623.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	37247.0	0.0	37247.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	582.3	1.6
10°-20°	1718.4	4.6
20°-30°	2830.7	7.6
30°-40°	4147.3	11.1
40°-50°	6132.2	16.5
50°-60°	8043.9	21.6
60°-70°	8392.0	22.5
70°-80°	4825.0	13.0
80°-90°	575.2	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°	37247.0	100.0
0°-180°	37247.0	100.0

Coefficient of Utilization

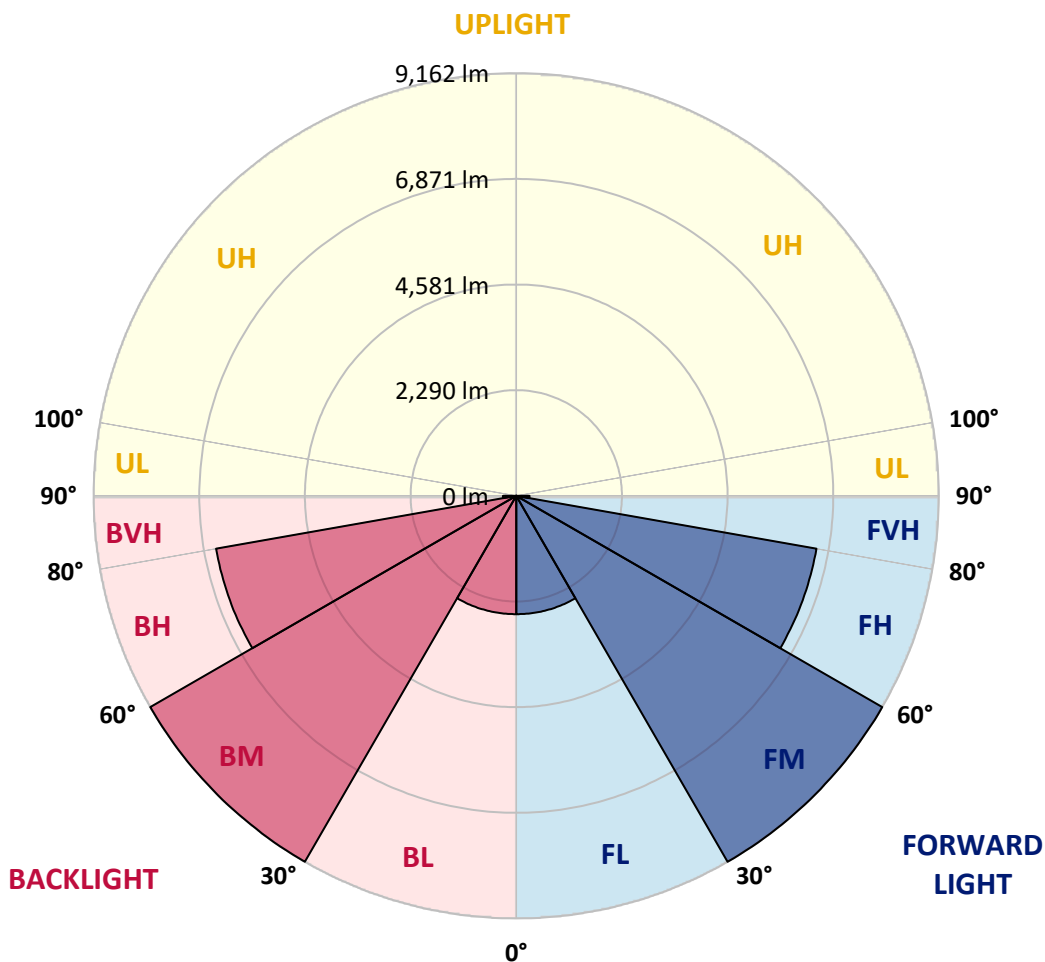


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2565.7	6.9			
FM (30°-60°)	9161.7	24.6			
FH (60°-80°)	6608.5	17.7			G3/7500
FVH (80°-90°)	287.6	0.8			G3/500
BL (0°-30°)	2565.7	6.9	B4/5000		
BM (30°-60°)	9161.7	24.6	B5		
BH (60°-80°)	6608.5	17.7	B5		G5
BVH (80°-90°)	287.6	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°	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3
2.5°	6134.9	6130.5	6129.1	6126.9	6130.5	6133.4	6140.7	6147.3	6145.8	6144.3	6145.8
5°	6100.7	6102.8	6103.6	6104.3	6107.2	6109.4	6119.6	6129.8	6128.3	6126.9	6134.1
7.5°	6052.6	6052.6	6051.2	6049.7	6055.5	6060.6	6070.8	6081.0	6089.0	6096.3	6107.9
10°	5982.7	5979.8	5979.1	5978.4	5984.9	5990.7	6009.7	6028.6	6044.6	6059.9	6079.5
12.5°	5897.5	5896.8	5898.3	5899.7	5913.6	5927.4	5959.4	5991.5	6023.5	6055.5	6083.9
15°	5796.4	5787.6	5794.9	5801.5	5824.0	5845.9	5907.7	5969.6	6018.4	6066.4	6121.8
17.5°	5642.0	5633.3	5644.2	5654.4	5699.5	5744.7	5832.0	5918.7	6010.4	6102.1	6181.5
20°	5408.3	5408.3	5436.0	5463.7	5540.1	5616.5	5736.7	5856.1	5979.8	6103.6	6218.6
22.5°	5159.4	5152.1	5211.0	5270.0	5361.7	5452.7	5604.2	5755.6	5919.4	6082.5	6240.4
25°	4878.3	4890.7	4965.0	5038.5	5167.4	5295.5	5481.9	5667.5	5873.5	6079.5	6298.7
27.5°	4641.0	4643.2	4732.7	4822.3	4983.9	5144.8	5371.2	5597.6	5848.8	6099.9	6375.8
30°	4395.7	4435.7	4530.4	4624.3	4804.8	4985.4	5259.1	5532.1	5829.8	6127.6	6463.9
32.5°	4207.1	4216.6	4323.6	4429.9	4618.4	4807.0	5125.1	5443.3	5800.7	6158.2	6567.3
35°	4029.5	4044.8	4144.5	4244.3	4440.8	4636.6	4985.4	5333.3	5760.7	6187.3	6679.4
37.5°	3871.5	3890.4	3985.1	4079.7	4269.0	4458.3	4828.1	5197.9	5698.8	6199.7	6802.5
40°	3755.8	3771.8	3851.9	3931.9	4103.0	4273.4	4660.7	5047.2	5612.2	6177.1	6899.3
42.5°	3672.0	3679.3	3744.1	3808.9	3961.8	4114.7	4498.3	4881.3	5499.3	6117.4	6974.3
45°	3558.5	3574.5	3638.6	3701.9	3839.5	3976.3	4327.2	4678.1	5331.9	5984.9	6975.0
47.5°	3474.0	3484.2	3544.6	3604.3	3732.5	3860.6	4175.8	4491.0	5142.6	5793.4	6896.4
50°	3412.1	3407.1	3463.1	3518.4	3626.9	3734.7	4015.7	4295.9	4908.2	5520.4	6699.8
52.5°	3324.1	3329.9	3375.0	3420.2	3514.1	3607.3	3859.1	4110.3	4648.3	5185.6	6380.9
55°	3206.1	3233.1	3270.9	3308.0	3390.3	3472.6	3699.0	3925.4	4388.4	4850.7	5970.3
57.5°	3090.4	3110.0	3142.1	3174.1	3238.9	3302.9	3516.3	3729.6	4114.7	4499.8	5452.0
60°	2995.7	3000.8	3021.2	3040.9	3090.4	3139.9	3316.1	3492.2	3828.6	4164.2	4935.1
62.5°	2873.4	2874.9	2888.7	2902.5	2933.1	2963.0	3101.3	3238.9	3525.7	3812.5	4421.2
65°	2682.0	2693.6	2706.7	2719.1	2739.5	2759.1	2864.7	2970.2	3185.0	3399.8	3890.4
67.5°	2488.3	2478.1	2493.4	2508.7	2511.6	2514.5	2594.6	2674.7	2850.9	3027.0	3421.6
70°	2173.1	2181.1	2179.6	2177.5	2165.1	2152.0	2208.0	2264.1	2357.3	2449.7	2735.1
72.5°	1666.4	1655.5	1627.8	1599.4	1586.3	1573.2	1638.7	1703.5	1772.0	1840.4	2046.4
75°	1018.5	1049.8	1107.3	1164.1	1185.9	1207.8	1204.1	1199.7	1193.9	1188.1	1445.1
77.5°	690.1	706.9	720.0	732.4	764.4	795.7	832.1	868.5	867.8	867.1	1028.7
80°	439.0	425.9	431.7	437.5	455.7	473.9	529.3	583.9	599.1	613.7	725.1
82.5°	275.2	277.4	284.6	291.2	270.8	250.4	293.4	335.6	372.0	407.7	459.4
85°	178.4	202.4	198.7	195.1	171.1	147.1	184.9	222.8	240.2	257.0	276.6
87.5°	57.5	67.0	69.2	70.6	70.6	69.9	77.9	85.9	88.8	91.0	98.3
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°	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3	6136.3
2.5°	6146.5	6139.2	6132.0	6129.8	6127.6	6126.1	6124.7	6123.2
5°	6140.7	6139.2	6137.8	6132.0	6126.1	6125.4	6124.7	6126.9
7.5°	6119.6	6119.6	6119.6	6126.1	6132.7	6129.8	6126.1	6130.5
10°	6098.5	6115.9	6133.4	6138.5	6143.6	6147.3	6150.9	6154.5
12.5°	6112.3	6142.2	6171.3	6188.0	6204.8	6213.5	6221.5	6223.7
15°	6177.1	6215.0	6252.8	6275.4	6297.2	6311.8	6326.3	6330.0
17.5°	6260.8	6319.1	6376.6	6409.3	6442.1	6458.8	6474.9	6469.8
20°	6332.9	6413.0	6493.1	6562.9	6632.8	6671.4	6709.3	6713.6
22.5°	6397.7	6532.4	6667.0	6757.3	6846.9	6915.3	6983.7	6991.0
25°	6517.1	6693.3	6869.4	7013.6	7157.7	7220.3	7282.2	7318.6
27.5°	6651.0	6886.9	7122.8	7315.7	7508.6	7604.0	7698.6	7703.7
30°	6799.5	7098.8	7397.2	7656.4	7914.8	8031.3	8147.1	8208.2
32.5°	6975.7	7355.7	7735.0	8075.7	8416.4	8593.3	8770.2	8832.1
35°	7170.8	7663.7	8155.8	8625.4	9094.2	9432.7	9771.2	9934.3
37.5°	7405.2	8032.8	8660.3	9365.8	10071.2	10648.5	11225.1	11389.6
40°	7621.5	8428.8	9235.4	10215.3	11195.2	12111.0	13026.1	13204.5
42.5°	7831.1	8808.1	9785.1	11121.7	12458.3	13684.3	14910.2	15374.0
45°	7964.3	9145.9	10326.7	12089.2	13851.7	15534.8	17217.3	17606.7
47.5°	7998.6	9386.9	10775.2	12958.4	15141.7	17122.6	19102.8	19602.9
50°	7879.2	9512.1	11145.0	14026.4	16907.1	18924.4	20941.0	21351.6
52.5°	7576.3	9472.0	11367.8	14854.2	18340.6	20475.8	22611.0	22983.8
55°	7090.0	9228.9	11367.8	15535.6	19702.7	21917.2	24131.1	24697.5
57.5°	6404.2	8764.4	11124.6	15990.6	20856.5	23261.9	25667.2	26176.1
60°	5706.1	8211.9	10716.9	16241.7	21766.5	24314.6	26862.6	27456.6
62.5°	5029.0	7461.3	9892.8	15978.2	22063.6	24753.5	27442.8	28297.5
65°	4381.1	6627.7	8874.3	15335.4	21795.7	24878.0	27959.7	28725.5
67.5°	3816.2	5931.0	8045.9	14257.9	20470.0	23881.4	27292.1	28246.5
70°	3020.5	4966.4	6912.4	12347.6	17782.9	21778.2	25773.5	26951.4
72.5°	2252.4	3902.8	5552.5	9713.0	13873.5	18468.0	23061.7	24543.9
75°	1701.3	3117.3	4533.3	7677.5	10821.8	14711.5	18601.2	20585.0
77.5°	1190.3	2252.4	3313.9	5659.5	8005.1	10158.5	12312.0	13369.0
80°	835.7	1424.7	2012.9	3141.3	4269.0	5224.1	6178.6	6102.8
82.5°	510.3	757.9	1004.6	1362.8	1721.0	1951.8	2182.6	2172.4
85°	296.3	360.4	423.7	524.9	626.1	740.4	854.7	760.0
87.5°	104.8	104.8	104.8	120.1	135.4	186.4	237.3	250.4
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-CA8-230-740-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)