

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: P510825

Luminaire Tested: **CST-CA8-480-727-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510825
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-CA8-480-727-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 62532 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

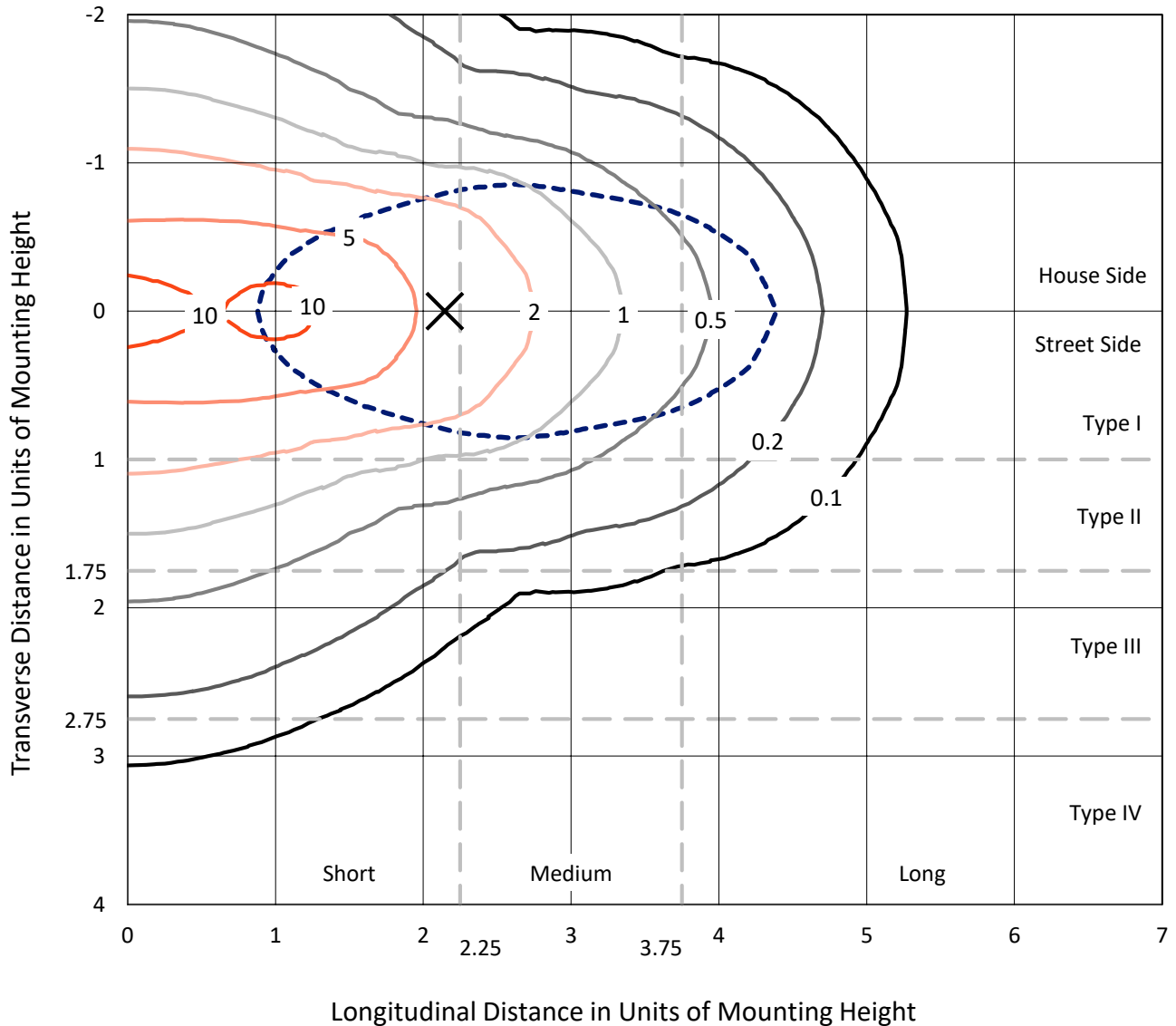
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

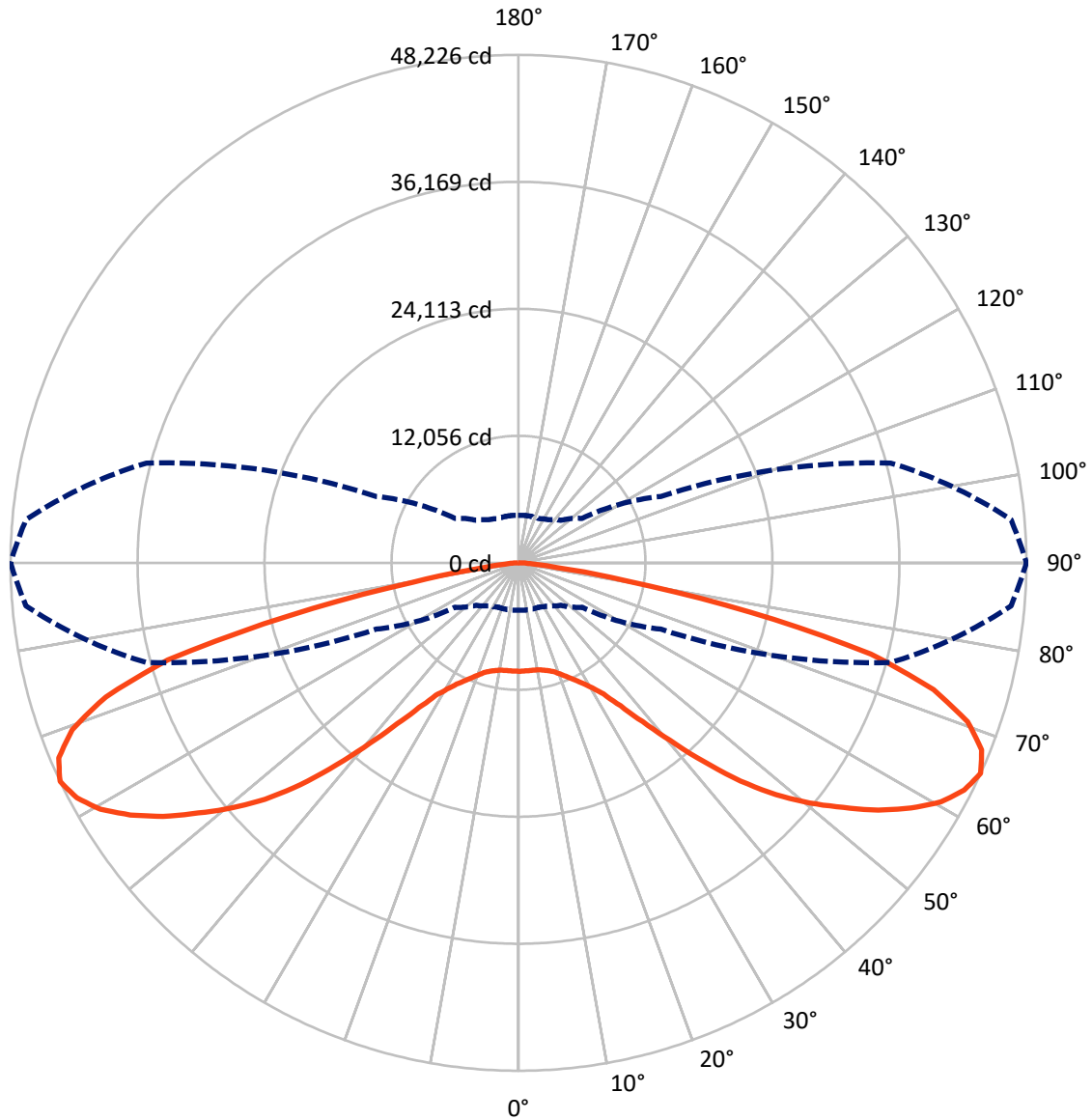
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.6 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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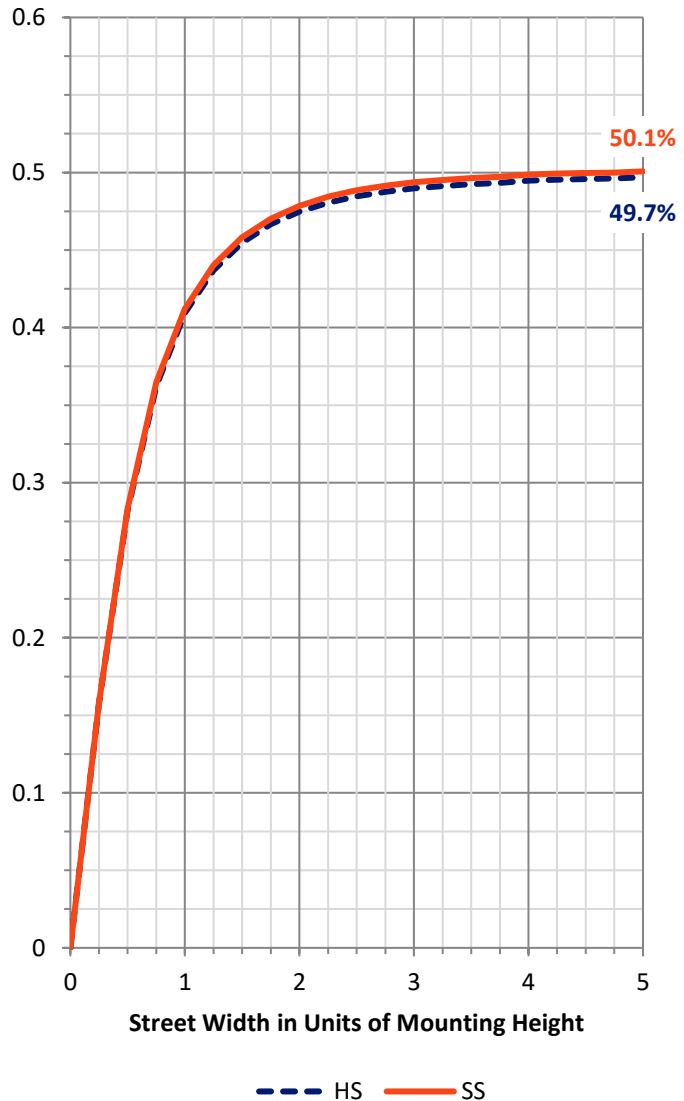
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	31266.0	0.0	31266.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	31266.0	0.0	31266.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	62532.0	0.0	62532.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	977.6	1.6
10°-20°	2885.0	4.6
20°-30°	4752.3	7.6
30°-40°	6962.7	11.1
40°-50°	10295.0	16.5
50°-60°	13504.4	21.6
60°-70°	14089.0	22.5
70°-80°	8100.4	13.0
80°-90°	965.6	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°	62532.0	100.0
0°-180°	62532.0	100.0

Coefficient of Utilization

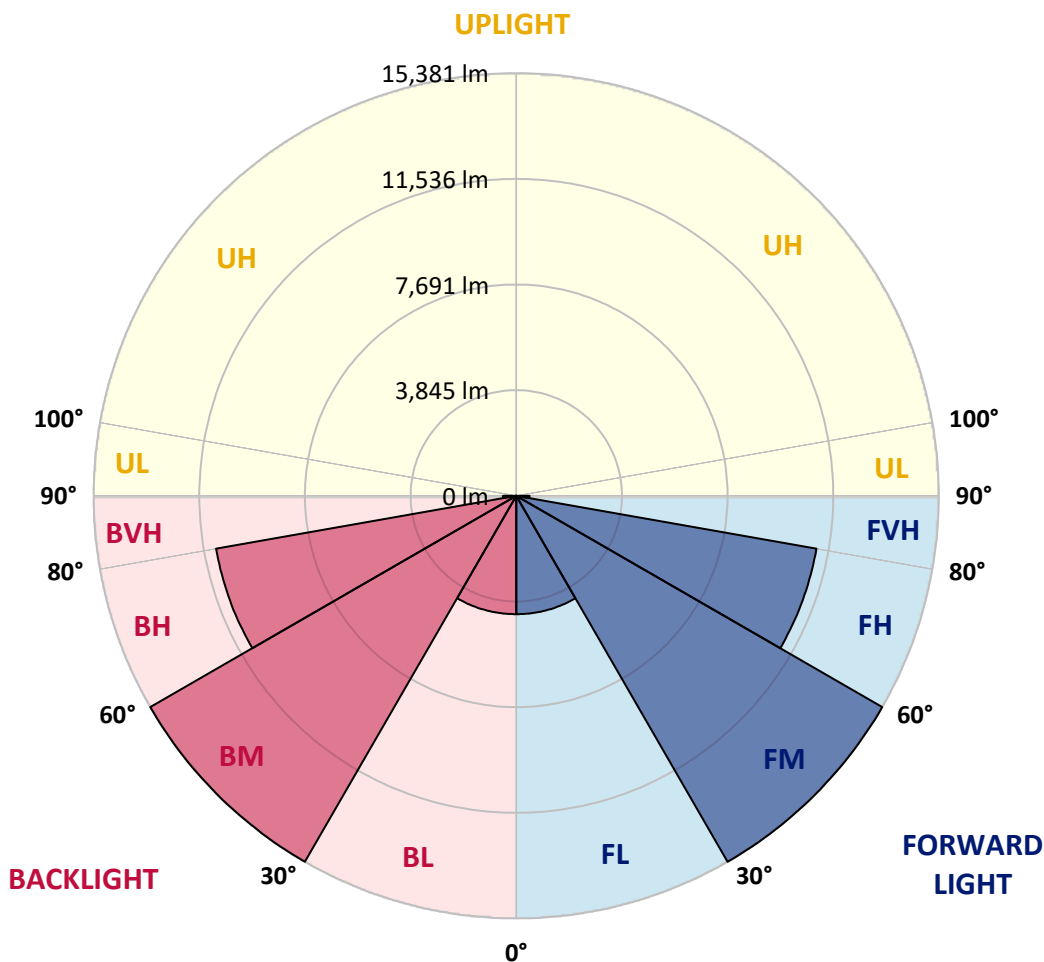


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4307.4	6.9			
FM (30°-60°)	15381.1	24.6			
FH (60°-80°)	11094.7	17.7			G4/12000
FVH (80°-90°)	482.8	0.8			G3/500
BL (0°-30°)	4307.4	6.9	B4/5000		
BM (30°-60°)	15381.1	24.6	B5		
BH (60°-80°)	11094.7	17.7	B5		G5
BVH (80°-90°)	482.8	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°	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0
2.5°	10299.5	10292.2	10289.7	10286.1	10292.2	10297.1	10309.3	10320.3	10317.8	10315.4	10317.8
5°	10242.1	10245.7	10247.0	10248.2	10253.1	10256.7	10273.9	10291.0	10288.5	10286.1	10298.3
7.5°	10161.4	10161.4	10159.0	10156.5	10166.3	10174.9	10192.0	10209.1	10222.5	10234.7	10254.3
10°	10044.1	10039.2	10038.0	10036.7	10047.7	10057.5	10089.3	10121.1	10148.0	10173.6	10206.6
12.5°	9901.1	9899.9	9902.3	9904.7	9928.0	9951.2	10005.0	10058.7	10112.5	10166.3	10214.0
15°	9731.2	9716.5	9728.7	9739.7	9777.6	9814.3	9918.2	10022.1	10104.0	10184.6	10277.5
17.5°	9472.1	9457.4	9475.8	9492.9	9568.6	9644.4	9791.1	9936.5	10090.5	10244.5	10377.7
20°	9079.8	9079.8	9126.2	9172.6	9301.0	9429.3	9631.0	9831.4	10039.2	10247.0	10440.1
22.5°	8661.8	8649.5	8748.5	8847.5	9001.5	9154.3	9408.5	9662.7	9937.7	10211.5	10476.7
25°	8190.0	8210.8	8335.4	8458.9	8675.2	8890.3	9203.2	9514.9	9860.7	10206.6	10574.5
27.5°	7791.6	7795.2	7945.6	8095.9	8367.2	8637.3	9017.4	9397.5	9819.2	10240.9	10704.1
30°	7379.7	7446.9	7605.8	7763.4	8066.5	8369.7	8829.2	9287.5	9787.4	10287.3	10852.0
32.5°	7063.1	7079.0	7258.7	7437.1	7753.7	8070.2	8604.3	9138.4	9738.5	10338.6	11025.5
35°	6764.9	6790.6	6958.0	7125.5	7455.4	7784.2	8369.7	8953.9	9671.3	10387.5	11213.7
37.5°	6499.7	6531.5	6690.3	6849.2	7167.0	7484.8	8105.7	8726.5	9567.4	10408.3	11420.3
40°	6305.4	6332.2	6466.7	6601.1	6888.3	7174.3	7824.6	8473.5	9422.0	10370.4	11582.8
42.5°	6164.8	6177.0	6285.8	6394.6	6651.2	6907.9	7552.0	8194.9	9232.5	10270.2	11708.7
45°	5974.1	6001.0	6108.6	6214.9	6445.9	6675.7	7264.8	7853.9	8951.4	10047.7	11709.9
47.5°	5832.4	5849.5	5950.9	6051.1	6266.2	6481.4	7010.6	7539.8	8633.7	9726.3	11577.9
50°	5728.5	5719.9	5814.0	5906.9	6089.0	6269.9	6741.7	7212.2	8240.1	9268.0	11247.9
52.5°	5580.6	5590.4	5666.1	5741.9	5899.6	6056.0	6478.9	6900.6	7803.8	8705.8	10712.6
55°	5382.6	5427.8	5491.4	5553.7	5691.8	5829.9	6210.0	6590.1	7367.4	8143.5	10023.3
57.5°	5188.3	5221.3	5275.0	5328.8	5437.6	5545.1	5903.2	6261.4	6907.9	7554.4	9153.1
60°	5029.4	5037.9	5072.1	5105.1	5188.3	5271.4	5567.1	5862.9	6427.6	6991.0	8285.3
62.5°	4824.0	4826.5	4849.7	4872.9	4924.3	4974.4	5206.6	5437.6	5919.1	6400.7	7422.4
65°	4502.6	4522.2	4544.2	4564.9	4599.2	4632.2	4809.4	4986.6	5347.1	5707.7	6531.5
67.5°	4177.5	4160.4	4186.1	4211.7	4216.6	4221.5	4355.9	4490.4	4786.2	5081.9	5744.4
70°	3648.3	3661.7	3659.3	3655.6	3634.8	3612.8	3706.9	3801.1	3957.5	4112.7	4591.8
72.5°	2797.6	2779.3	2732.8	2685.2	2663.2	2641.2	2751.2	2860.0	2974.8	3089.7	3435.6
75°	1709.9	1762.4	1859.0	1954.3	1991.0	2027.6	2021.5	2014.2	2004.4	1994.6	2426.1
77.5°	1158.6	1186.8	1208.8	1229.5	1283.3	1335.9	1397.0	1458.1	1456.9	1455.6	1727.0
80°	737.0	715.0	724.8	734.5	765.1	795.7	888.5	980.2	1005.9	1030.3	1217.3
82.5°	462.0	465.7	477.9	488.9	454.7	420.4	492.5	563.4	624.5	684.4	771.2
85°	299.4	339.8	333.7	327.6	287.2	246.9	310.4	374.0	403.3	431.4	464.4
87.5°	96.6	112.4	116.1	118.6	118.6	117.3	130.8	144.2	149.1	152.8	165.0
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°	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0	10302.0
2.5°	10319.1	10306.9	10294.6	10291.0	10287.3	10284.9	10282.4	10280.0
5°	10309.3	10306.9	10304.4	10294.6	10284.9	10283.6	10282.4	10286.1
7.5°	10273.9	10273.9	10273.9	10284.9	10295.9	10291.0	10284.9	10292.2
10°	10238.4	10267.7	10297.1	10305.6	10314.2	10320.3	10326.4	10332.5
12.5°	10261.6	10311.7	10360.6	10388.7	10416.8	10431.5	10445.0	10448.6
15°	10370.4	10434.0	10497.5	10535.4	10572.1	10596.5	10621.0	10627.1
17.5°	10511.0	10608.7	10705.3	10760.3	10815.3	10843.4	10870.3	10861.7
20°	10632.0	10766.4	10900.8	11018.2	11135.5	11200.3	11263.8	11271.2
22.5°	10740.7	10966.8	11192.9	11344.5	11494.8	11609.7	11724.6	11736.8
25°	10941.2	11236.9	11532.7	11774.7	12016.7	12121.8	12225.7	12286.8
27.5°	11166.1	11562.1	11958.0	12281.9	12605.8	12765.9	12924.8	12933.4
30°	11415.4	11917.7	12418.8	12853.9	13287.8	13483.4	13677.7	13780.4
32.5°	11711.2	12349.2	12985.9	13557.9	14129.9	14426.9	14723.9	14827.8
35°	12038.7	12866.1	13692.4	14480.7	15267.8	15836.1	16404.4	16678.2
37.5°	12432.3	13485.8	14539.3	15723.7	16908.0	17877.2	18845.2	19121.4
40°	12795.3	14150.7	15504.9	17150.0	18795.1	20332.6	21868.9	22168.3
42.5°	13147.3	14787.5	16427.7	18671.6	20915.6	22973.8	25032.0	25810.5
45°	13370.9	15354.6	17337.0	20295.9	23254.9	26080.6	28905.1	29559.0
47.5°	13428.4	15759.1	18089.8	21755.2	25420.6	28746.2	32070.6	32910.3
50°	13227.9	15969.3	18710.7	23548.2	28384.5	31771.2	35156.7	35846.0
52.5°	12719.5	15902.1	19084.7	24937.9	30791.0	34375.7	37960.4	38586.2
55°	11903.0	15493.9	19084.7	26081.8	33077.7	36795.7	40512.4	41463.3
57.5°	10751.7	14714.1	18676.5	26845.7	35014.9	39053.1	43091.3	43945.6
60°	9579.6	13786.5	17992.1	27267.4	36542.7	40820.4	45098.1	46095.4
62.5°	8443.0	12526.4	16608.5	26824.9	37041.4	41557.4	46072.2	47507.1
65°	7355.2	11126.9	14898.7	25745.7	36591.6	41766.4	46940.0	48225.7
67.5°	6406.8	9957.3	13507.8	23936.9	34365.9	40093.2	45819.2	47421.5
70°	5070.9	8337.9	11604.8	20729.8	29854.8	36562.2	43269.7	45247.2
72.5°	3781.5	6552.2	9321.8	16306.7	23291.6	31004.9	38717.0	41205.4
75°	2856.3	5233.5	7610.7	12889.4	18168.1	24698.3	31228.5	34559.1
77.5°	1998.3	3781.5	5563.5	9501.4	13439.4	17054.6	20669.9	22444.6
80°	1403.1	2391.9	3379.4	5273.8	7167.0	8770.5	10372.8	10245.7
82.5°	856.8	1272.3	1686.6	2288.0	2889.3	3276.7	3664.2	3647.1
85°	497.4	605.0	711.3	881.2	1051.1	1243.0	1434.9	1276.0
87.5°	176.0	176.0	176.0	201.7	227.3	312.9	398.4	420.4
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



REPORT NUMBER: P510825
 CATALOG NUMBER: CST-CA8-480-727-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)