

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: P510855

Luminaire Tested: **CST-CA8-480-750-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510855
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-CA8-480-750-U-T1
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 75200 lumens
Efficiency: N/A
Efficacy: 156.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

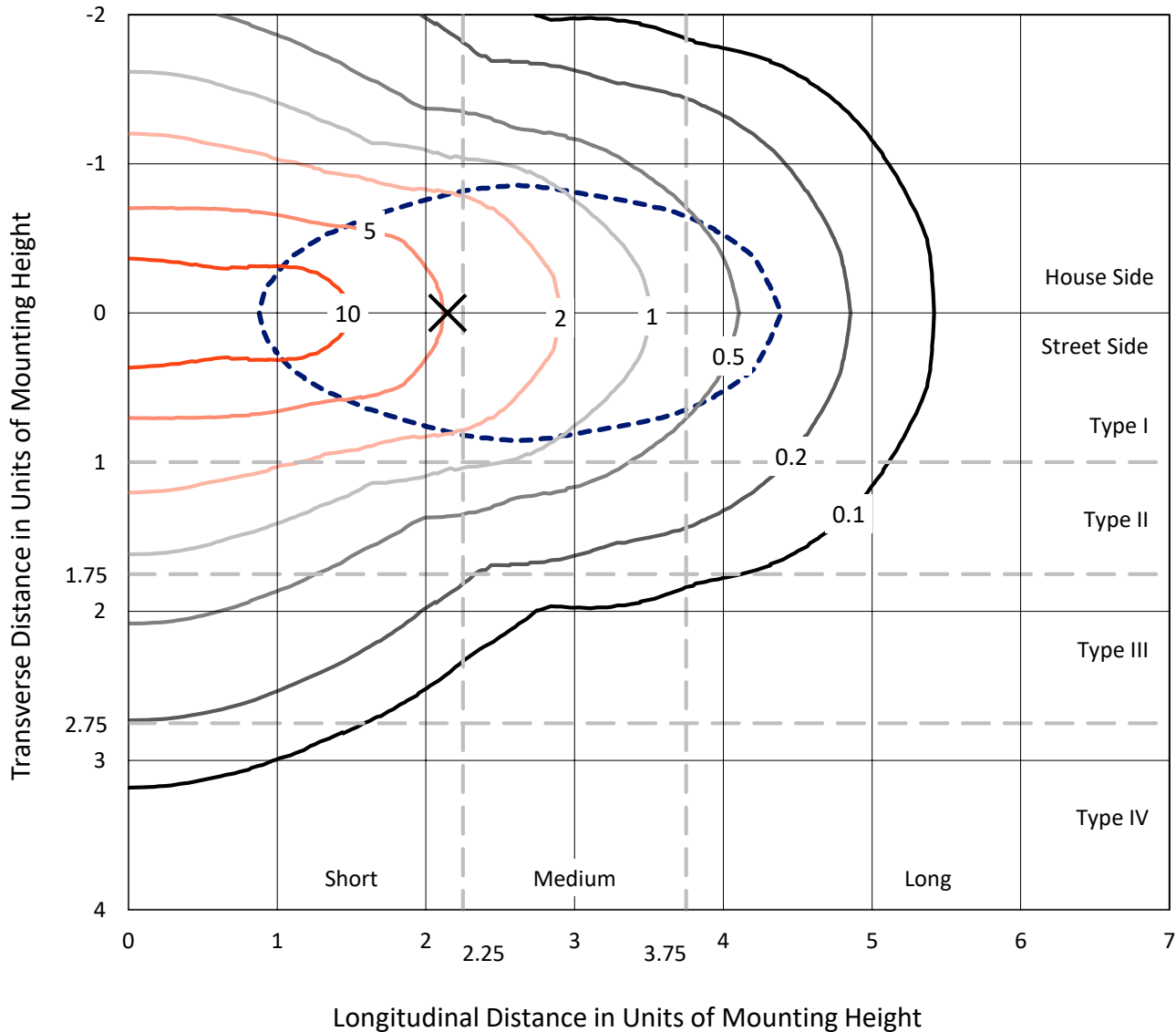
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

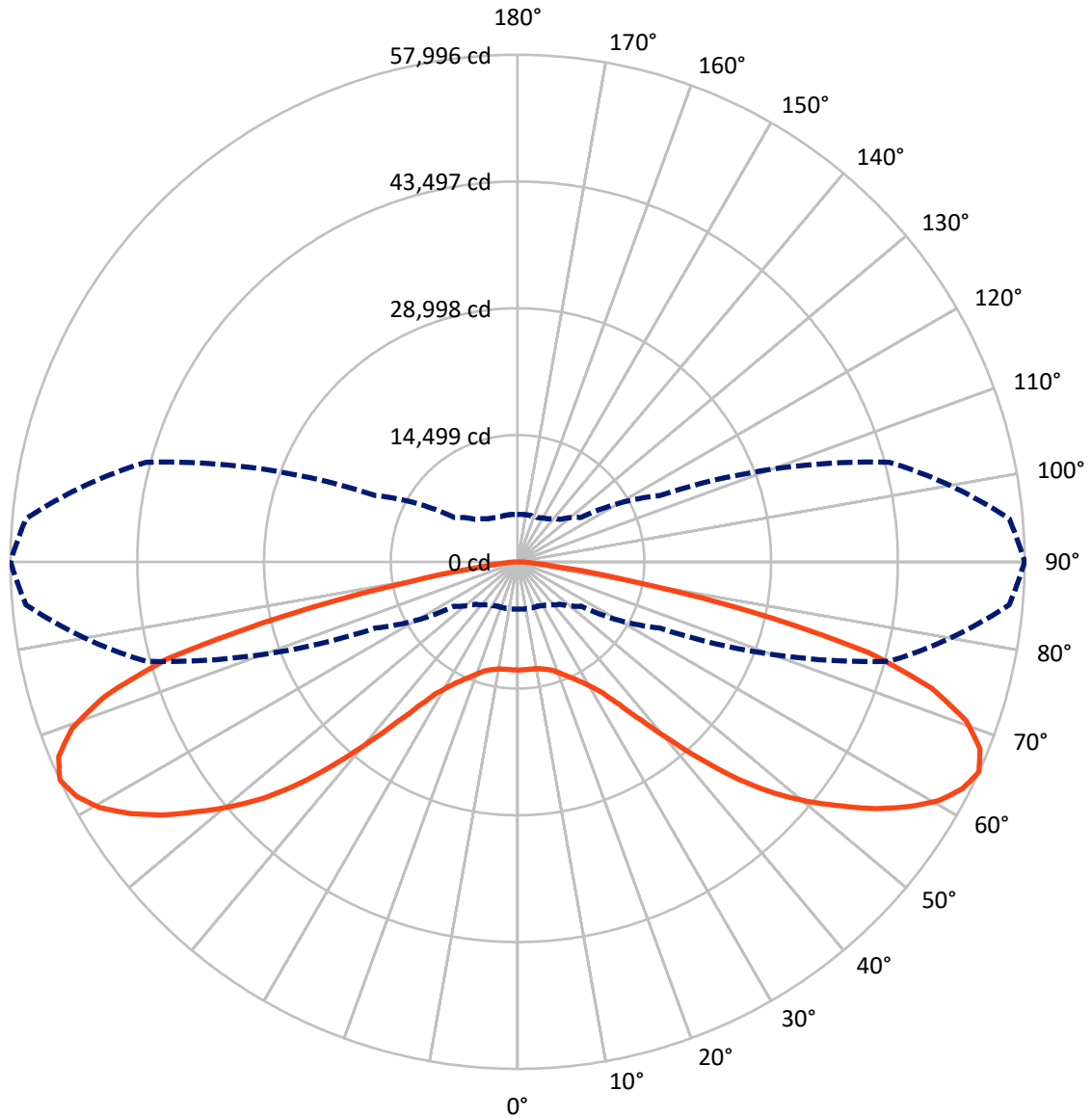
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14 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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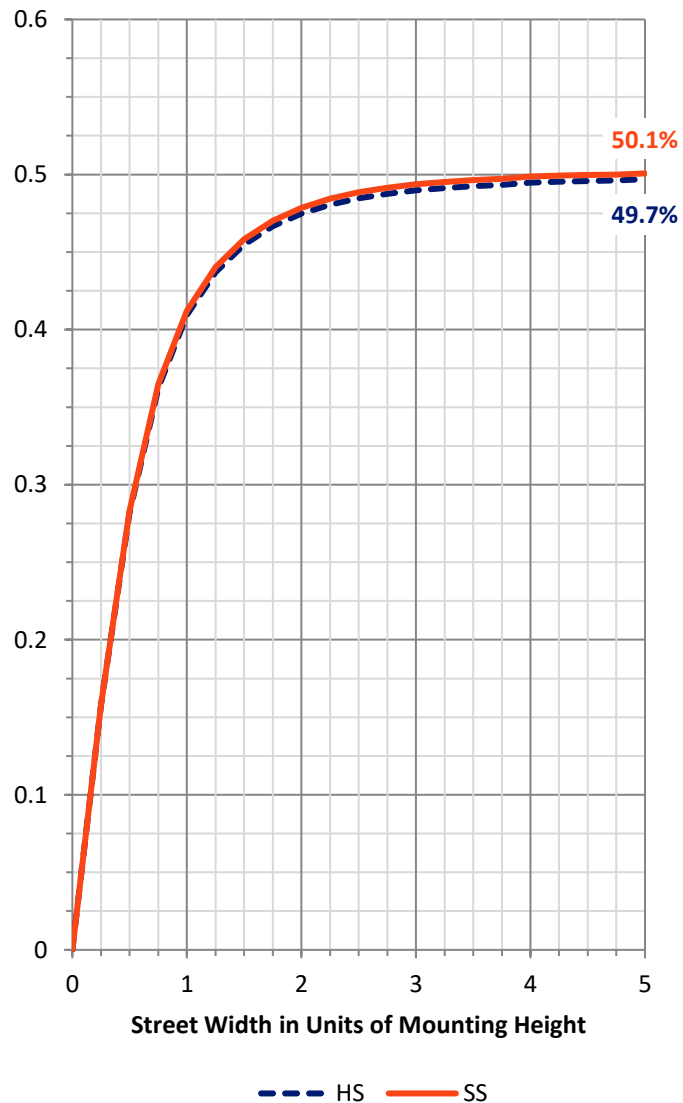
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	37600.0	0.0	37600.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	37600.0	0.0	37600.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	75200.0	0.0	75200.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1175.7	1.6
10°-20°	3469.4	4.6
20°-30°	5715.0	7.6
30°-40°	8373.2	11.1
40°-50°	12380.7	16.5
50°-60°	16240.2	21.6
60°-70°	16943.2	22.5
70°-80°	9741.4	13.0
80°-90°	1161.3	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°	75200.0	100.0
0°-180°	75200.0	100.0

Coefficient of Utilization

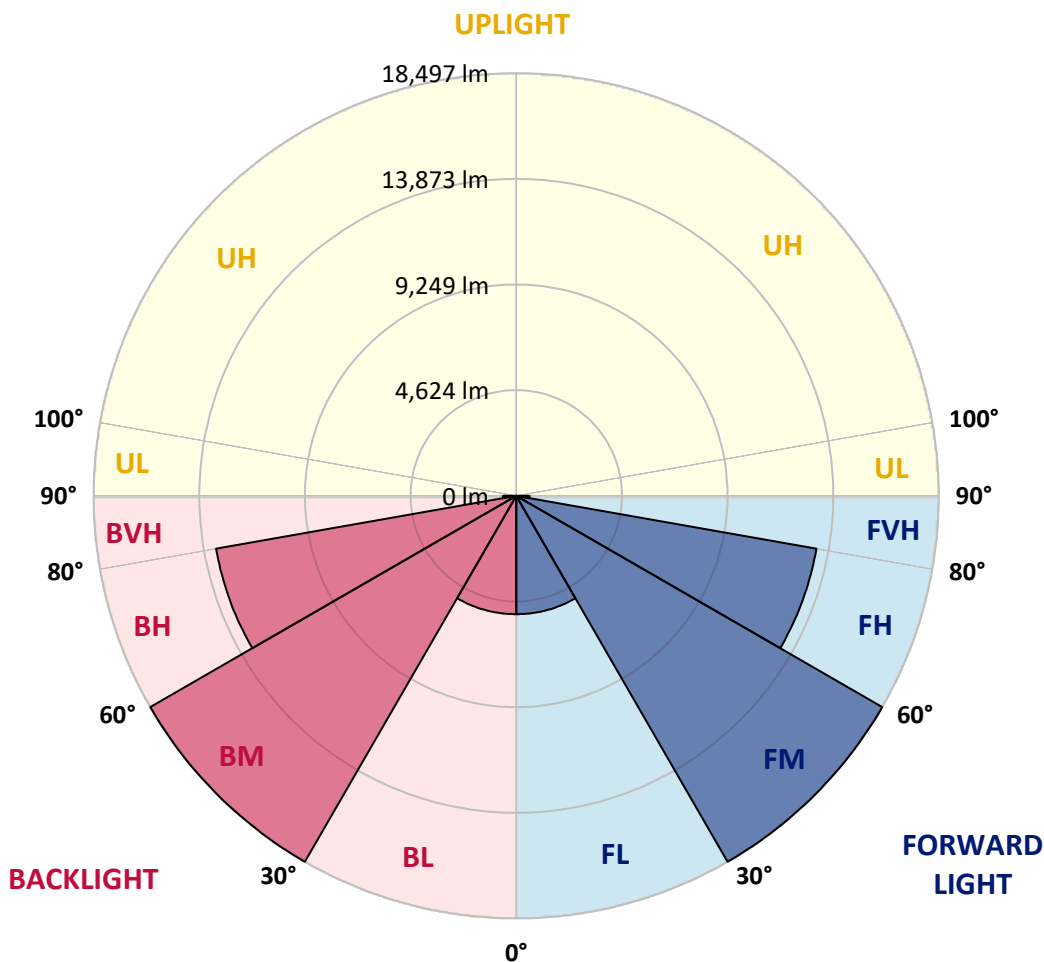


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5180.1	6.9			
FM (30°-60°)	18497.0	24.6			
FH (60°-80°)	13342.3	17.7			G5
FVH (80°-90°)	580.6	0.8			G4/750
BL (0°-30°)	5180.1	6.9	B5		
BM (30°-60°)	18497.0	24.6	B5		
BH (60°-80°)	13342.3	17.7	B5		G5
BVH (80°-90°)	580.6	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°	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0
2.5°	12386.0	12377.2	12374.3	12369.9	12377.2	12383.1	12397.8	12411.0	12408.1	12405.1	12408.1
5°	12317.0	12321.4	12322.8	12324.3	12330.2	12334.6	12355.2	12375.7	12372.8	12369.9	12384.6
7.5°	12219.9	12219.9	12217.0	12214.1	12225.8	12236.1	12256.7	12277.3	12293.4	12308.1	12331.7
10°	12078.8	12073.0	12071.5	12070.0	12083.3	12095.0	12133.2	12171.4	12203.8	12234.6	12274.3
12.5°	11906.9	11905.4	11908.4	11911.3	11939.2	11967.1	12031.8	12096.5	12161.2	12225.8	12283.2
15°	11702.6	11684.9	11699.6	11712.9	11758.4	11802.5	11927.5	12052.4	12150.9	12247.9	12359.6
17.5°	11391.0	11373.3	11395.4	11416.0	11507.1	11598.2	11774.6	11949.5	12134.7	12319.9	12480.1
20°	10919.2	10919.2	10975.0	11030.9	11185.2	11339.5	11582.1	11823.1	12073.0	12322.8	12555.1
22.5°	10416.5	10401.8	10520.9	10639.9	10825.1	11008.8	11314.6	11620.3	11951.0	12280.2	12599.2
25°	9849.2	9874.1	10024.1	10172.5	10432.7	10691.4	11067.6	11442.4	11858.4	12274.3	12716.7
27.5°	9370.0	9374.4	9555.2	9736.0	10062.3	10387.1	10844.2	11301.3	11808.4	12315.5	12872.5
30°	8874.7	8955.5	9146.6	9336.2	9700.7	10065.2	10617.9	11169.0	11770.2	12371.3	13050.4
32.5°	8494.0	8513.1	8729.2	8943.8	9324.4	9705.1	10347.4	10989.7	11711.4	12433.1	13259.1
35°	8135.4	8166.2	8367.6	8569.0	8965.8	9361.2	10065.2	10767.8	11630.6	12491.9	13485.5
37.5°	7816.4	7854.6	8045.7	8236.8	8618.9	9001.1	9747.7	10494.4	11505.6	12516.8	13733.8
40°	7582.7	7615.1	7776.7	7938.4	8283.8	8627.7	9409.7	10190.2	11330.7	12471.3	13929.3
42.5°	7413.7	7428.4	7559.2	7690.0	7998.7	8307.3	9081.9	9855.0	11102.9	12350.8	14080.7
45°	7184.4	7216.7	7346.1	7474.0	7751.7	8028.1	8736.5	9445.0	10764.8	12083.3	14082.2
47.5°	7013.9	7034.5	7156.5	7277.0	7535.7	7794.4	8430.8	9067.2	10382.7	11696.7	13923.5
50°	6889.0	6878.7	6991.9	7103.6	7322.6	7540.1	8107.4	8673.3	9909.4	11145.5	13526.6
52.5°	6711.1	6722.9	6814.0	6905.1	7094.7	7282.9	7791.4	8298.5	9384.7	10469.4	12882.8
55°	6473.0	6527.4	6603.8	6678.8	6844.9	7011.0	7468.1	7925.2	8860.0	9793.3	12053.9
57.5°	6239.3	6279.0	6343.7	6408.3	6539.2	6668.5	7099.2	7529.8	8307.3	9084.9	11007.4
60°	6048.2	6058.5	6099.7	6139.4	6239.3	6339.3	6695.0	7050.6	7729.7	8407.3	9963.8
62.5°	5801.3	5804.3	5832.2	5860.1	5921.8	5982.1	6261.4	6539.2	7118.3	7697.4	8926.1
65°	5414.8	5438.3	5464.7	5489.7	5530.9	5570.6	5783.7	5996.8	6430.4	6864.0	7854.6
67.5°	5023.8	5003.2	5034.1	5064.9	5070.8	5076.7	5238.4	5400.1	5755.8	6111.4	6908.1
70°	4387.4	4403.5	4400.6	4396.2	4371.2	4344.7	4457.9	4571.1	4759.2	4945.9	5522.1
72.5°	3364.4	3342.3	3286.5	3229.2	3202.7	3176.2	3308.5	3439.3	3577.5	3715.7	4131.6
75°	2056.3	2119.5	2235.6	2350.2	2394.3	2438.4	2431.1	2422.2	2410.5	2398.7	2917.6
77.5°	1393.4	1427.2	1453.6	1478.6	1543.3	1606.5	1680.0	1753.5	1752.0	1750.5	2076.8
80°	886.3	859.8	871.6	883.4	920.1	956.8	1068.5	1178.8	1209.6	1239.0	1463.9
82.5°	555.6	560.0	574.7	587.9	546.8	505.6	592.3	677.6	751.1	823.1	927.4
85°	360.1	408.6	401.3	393.9	345.4	296.9	373.3	449.8	485.0	518.8	558.5
87.5°	116.1	135.2	139.6	142.6	142.6	141.1	157.3	173.4	179.3	183.7	198.4
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°	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0	12389.0
2.5°	12409.6	12394.9	12380.2	12375.7	12371.3	12368.4	12365.5	12362.5
5°	12397.8	12394.9	12391.9	12380.2	12368.4	12366.9	12365.5	12369.9
7.5°	12355.2	12355.2	12355.2	12368.4	12381.6	12375.7	12368.4	12377.2
10°	12312.5	12347.8	12383.1	12393.4	12403.7	12411.0	12418.4	12425.7
12.5°	12340.5	12400.7	12459.5	12493.3	12527.1	12544.8	12560.9	12565.4
15°	12471.3	12547.7	12624.1	12669.7	12713.8	12743.2	12772.6	12779.9
17.5°	12640.3	12757.9	12874.0	12940.2	13006.3	13040.1	13072.4	13062.1
20°	12785.8	12947.5	13109.2	13250.3	13391.4	13469.3	13545.7	13554.5
22.5°	12916.6	13188.5	13460.5	13642.7	13823.5	13961.7	14099.8	14114.5
25°	13157.7	13513.4	13869.1	14160.1	14451.1	14577.5	14702.4	14775.9
27.5°	13428.1	13904.3	14380.6	14770.1	15159.6	15352.1	15543.2	15553.5
30°	13728.0	14332.1	14934.7	15457.9	15979.7	16214.9	16448.6	16572.0
32.5°	14083.7	14850.9	15616.7	16304.5	16992.4	17349.6	17706.7	17831.7
35°	14477.6	15472.6	16466.2	17414.2	18360.8	19044.2	19727.7	20056.9
37.5°	14950.8	16217.8	17484.8	18909.0	20333.3	21498.8	22662.9	22995.1
40°	15387.4	17017.4	18645.9	20624.3	22602.6	24451.7	26299.2	26659.3
42.5°	15810.7	17783.2	19755.6	22454.2	25152.8	27627.9	30103.1	31039.3
45°	16079.7	18465.1	20849.2	24407.6	27966.0	31364.1	34760.9	35547.2
47.5°	16148.7	18951.7	21754.6	26162.5	30570.5	34569.8	38567.7	39577.4
50°	15907.7	19204.5	22501.2	28318.7	34134.7	38207.6	42278.9	43107.9
52.5°	15296.2	19123.6	22951.0	29989.9	37028.8	41339.7	45650.6	46403.2
55°	14314.4	18632.7	22951.0	31365.6	39778.8	44249.9	48719.6	49863.1
57.5°	12929.9	17695.0	22460.1	32284.2	42108.4	46964.6	51820.9	52848.3
60°	11520.3	16579.4	21637.0	32791.3	43945.7	49090.0	54234.3	55433.7
62.5°	10153.4	15064.0	19973.2	32259.3	44545.3	49976.3	55405.7	57131.3
65°	8845.3	13381.1	17916.9	30961.4	44004.5	50227.6	56449.3	57995.5
67.5°	7704.7	11974.5	16244.3	28786.1	41327.9	48215.4	55101.5	57028.4
70°	6098.2	10027.0	13955.8	24929.3	35902.9	43969.2	52035.5	54413.6
72.5°	4547.6	7879.6	11210.2	19610.1	28010.1	37286.0	46560.4	49553.0
75°	3434.9	6293.7	9152.5	15500.6	21848.6	29701.8	37555.0	41560.2
77.5°	2403.1	4547.6	6690.5	11426.3	16162.0	20509.6	24857.3	26991.5
80°	1687.3	2876.4	4064.0	6342.2	8618.9	10547.3	12474.2	12321.4
82.5°	1030.3	1530.1	2028.3	2751.5	3474.6	3940.5	4406.5	4385.9
85°	598.2	727.6	855.4	1059.7	1264.0	1494.8	1725.5	1534.5
87.5°	211.7	211.7	211.7	242.5	273.4	376.3	479.2	505.6
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



REPORT NUMBER: P510855
 CATALOG NUMBER: CST-CA8-480-750-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)