

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: P579563

Luminaire Tested: **CST-CA8-480-750-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579563
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-750-U-T5-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44630 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G5

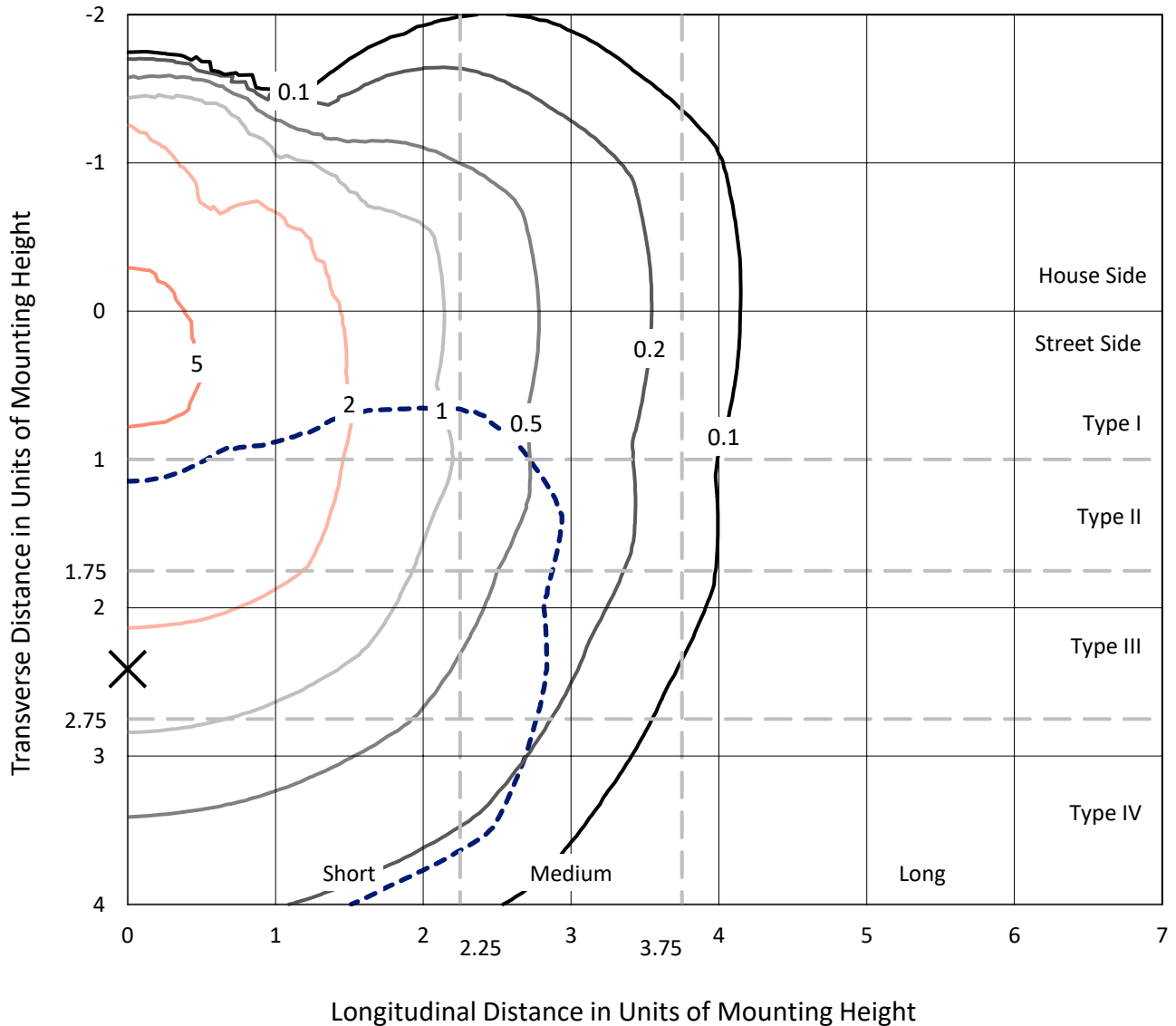
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

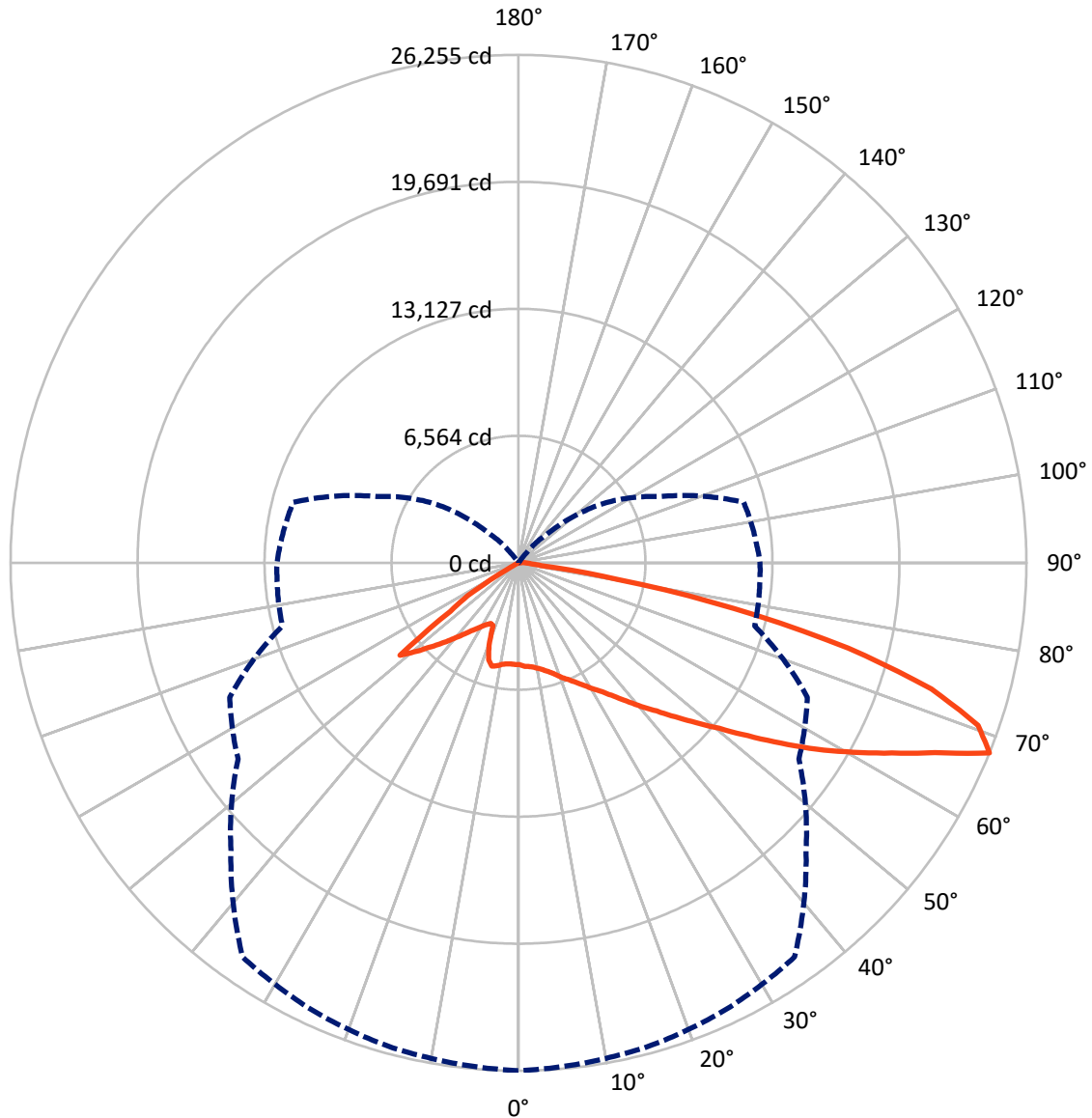
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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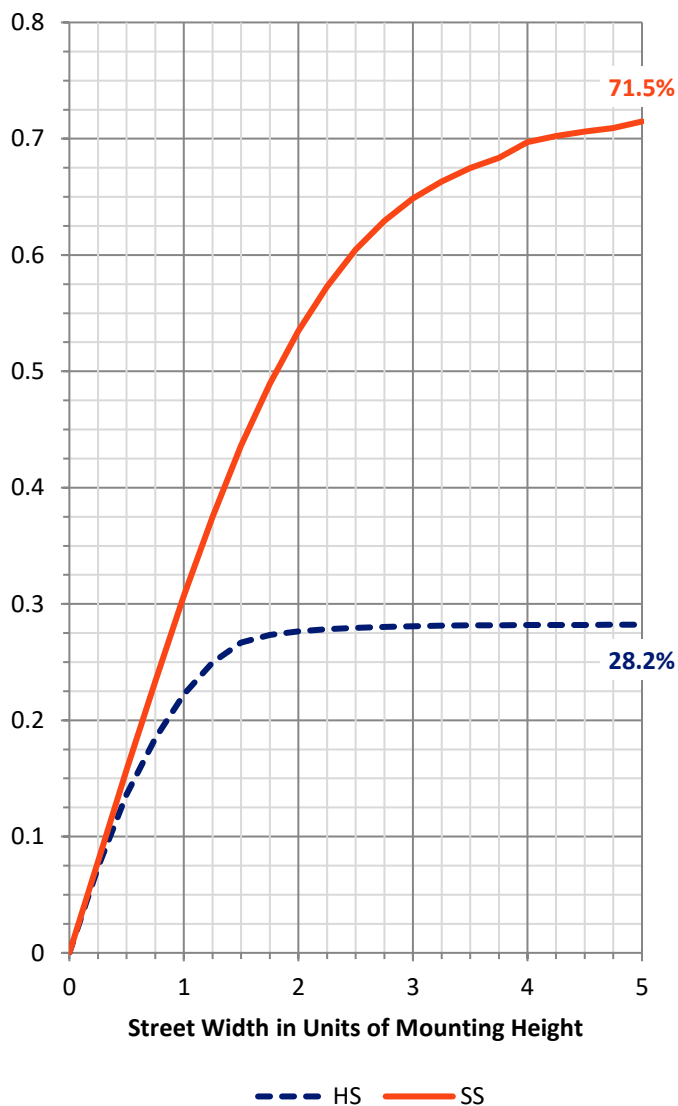
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12649.0	0.2	12649.2
	% Fixture	28.3	0.0	28.3
Street Side	Lumens	31924.0	56.8	31980.8
	% Fixture	71.5	0.1	71.7
Total	Lumens	44573.0	57.0	44630.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	506.9	1.1
10°-20°	1560.5	3.5
20°-30°	2583.9	5.8
30°-40°	4067.5	9.1
40°-50°	6365.6	14.3
50°-60°	9191.0	20.6
60°-70°	11386.0	25.5
70°-80°	8292.2	18.6
80°-90°	619.5	1.4
90°-100°	48.6	0.1
100°-110°	8.1	0.0
110°-120°	0.3	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°	44573.0	99.9
0°-180°	44630.0	100.0

Coefficient of Utilization



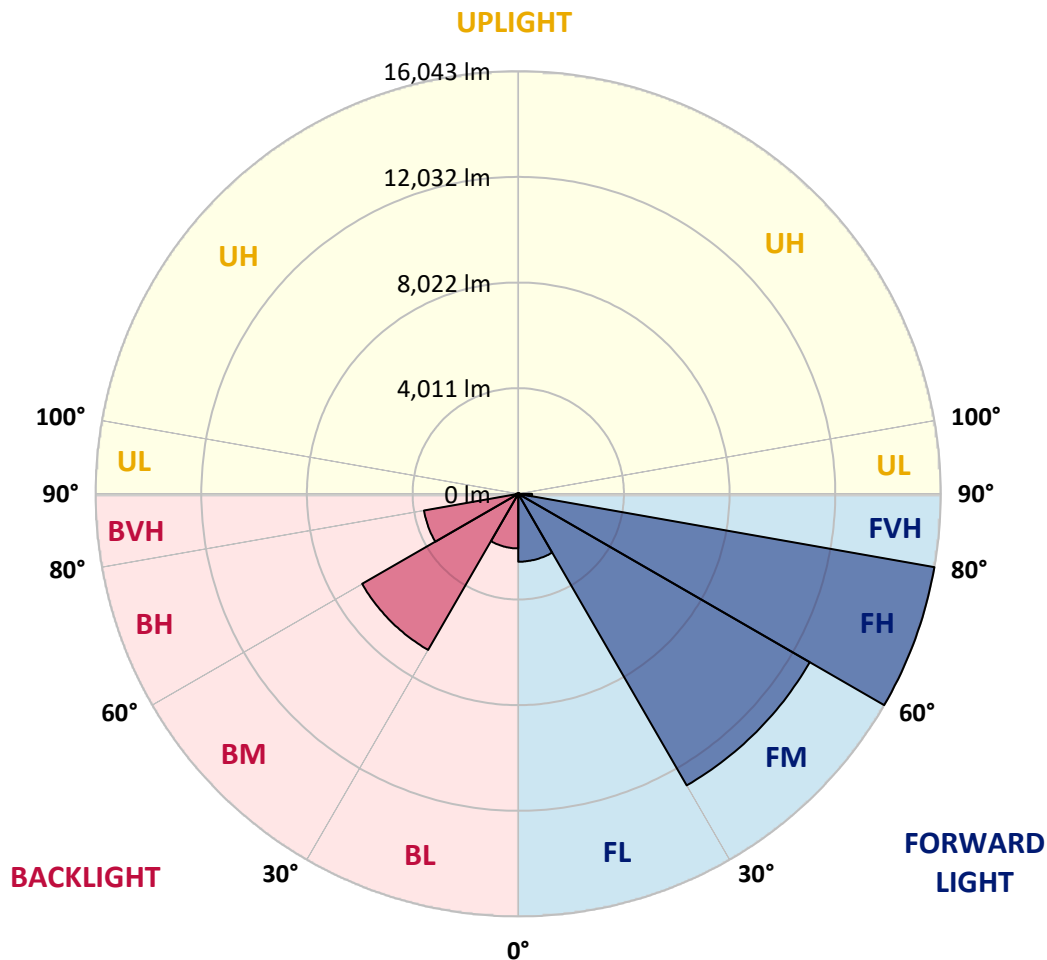
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2577.7	5.8			
FM (30°-60°)	12780.7	28.6			
FH (60°-80°)	16043.0	35.9			G5
FVH (80°-90°)	522.5	1.2			G4/750
BL (0°-30°)	2073.5	4.6	B3/2500		
BM (30°-60°)	6843.3	15.3	B4/8500		
BH (60°-80°)	3635.1	8.1	B4/5000		G4/5000
BVH (80°-90°)	96.9	0.2			G1/100
UL (90°-100°)	48.6	0.1		U2/50	
UH (100°-180°)	8.4	0.0		U1/10	

BUG Rating: B4-U2-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3
2.5°	5352.4	5323.4	5323.4	5354.7	5267.4	5294.3	5258.5	5289.8	5271.9	5280.9	5292.1
5°	5383.8	5350.2	5352.4	5390.5	5312.2	5334.5	5292.1	5307.7	5292.1	5298.8	5298.8
7.5°	5441.9	5412.8	5412.8	5435.2	5356.9	5363.6	5325.6	5325.6	5305.5	5321.1	5307.7
10°	5551.5	5520.2	5504.5	5515.7	5446.4	5437.4	5386.0	5386.0	5354.7	5379.3	5359.2
12.5°	5683.5	5638.7	5634.3	5636.5	5558.2	5542.6	5484.4	5486.6	5428.5	5462.0	5437.4
15°	5842.3	5786.4	5781.9	5790.8	5708.1	5679.0	5614.1	5614.1	5549.3	5567.2	5533.6
17.5°	6045.8	5981.0	5969.8	5985.4	5902.7	5875.8	5799.8	5786.4	5714.8	5701.4	5672.3
20°	6314.2	6240.4	6218.0	6251.6	6146.5	6121.9	6030.2	6001.1	5904.9	5746.1	5538.1
22.5°	6555.8	6497.6	6484.2	6506.6	6410.4	6385.8	6296.3	6235.9	6003.3	5683.5	5491.1
25°	6830.9	6808.5	6801.8	6788.4	6701.2	6658.7	6573.7	6488.7	5960.8	5522.4	5518.0
27.5°	7170.9	7159.7	7128.4	7117.2	7021.0	6994.2	6882.4	6334.4	5808.7	5777.4	5759.5
30°	7542.2	7519.8	7488.5	7490.7	7425.9	7376.7	7110.5	6197.9	6101.7	6101.7	6054.8
32.5°	7953.7	7929.1	7897.8	7904.5	7877.7	7835.2	7034.4	6558.0	6484.2	6504.3	6446.2
35°	8463.7	8423.4	8412.3	8439.1	8441.3	8166.2	7168.7	7047.9	6989.7	6976.3	6757.1
37.5°	9058.7	9025.1	9065.4	9128.0	9056.4	8251.2	7703.2	7665.2	7607.0	7282.7	6763.8
40°	9772.2	9711.8	9761.0	9801.3	9754.3	8756.7	8264.6	8278.1	8226.6	7264.8	6690.0
42.5°	10479.0	10420.8	10463.3	10564.0	10546.1	9383.0	8949.1	8978.1	8459.2	7307.3	7262.6
45°	11353.5	11333.4	11320.0	11402.7	11472.1	10132.3	9761.0	9758.8	8293.7	7982.8	7942.6
47.5°	12344.4	12317.6	12324.3	12429.4	12534.5	11027.0	10720.5	9821.4	8720.9	8752.2	8716.5
50°	13449.3	13420.3	13507.5	13659.6	13713.3	12031.3	11655.5	9651.4	9611.1	9644.7	9584.3
52.5°	14851.7	14786.9	14921.1	15084.4	15153.7	13218.9	11706.9	10655.7	10588.6	10595.3	10402.9
55°	16446.5	16395.1	16515.9	16699.3	16802.2	14545.3	12776.1	11633.1	11592.9	10452.1	9412.1
57.5°	18180.0	18121.8	18282.9	18336.5	18363.4	15916.4	13851.9	12693.3	10830.1	9544.0	9485.9
60°	19879.9	19817.2	20020.8	20029.7	20108.0	17285.3	14874.1	13715.5	10434.2	10264.3	10215.0
62.5°	21664.8	21586.5	21765.4	21758.7	21604.4	18537.8	15887.3	14697.4	11141.0	11006.8	10930.8
65°	23646.5	23588.3	23713.6	23512.3	23205.9	19832.9	16938.6	15766.6	11964.2	11939.6	11921.7
67.5°	26254.5	26140.4	25887.7	25458.2	24872.2	21020.6	17690.1	16471.1	12632.9	12518.9	12483.1
70°	25205.5	25071.3	24878.9	24407.0	23809.8	19904.5	16482.3	15406.4	11812.1	11816.5	11731.5
72.5°	22317.9	22085.3	21904.1	21242.0	20913.2	17383.7	14361.9	13371.0	10217.3	10407.4	10367.1
75°	17605.1	17368.0	17070.6	16811.1	16775.3	14100.2	11579.4	10865.9	8146.1	8284.8	8385.4
77.5°	11411.7	11324.5	11700.2	11454.2	11675.6	9709.6	8271.3	7658.5	5614.1	5965.3	5918.3
80°	5222.7	5122.1	5726.0	5556.0	5638.7	4768.7	4041.7	3882.9	2540.9	2558.8	2612.5
82.5°	1181.0	1140.7	1183.2	1087.0	1060.2	896.9	789.6	715.7	449.6	476.4	501.0
85°	646.4	646.4	637.5	592.7	507.7	418.3	331.0	255.0	138.7	152.1	149.9
87.5°	454.1	442.9	440.6	393.7	337.7	286.3	228.1	163.3	78.3	53.7	49.2
90°	310.9	306.4	290.8	261.7	225.9	185.6	138.7	80.5	33.6	15.7	11.2
92.5°	225.9	221.4	210.3	185.6	154.3	125.3	91.7	53.7	26.8	11.2	2.2
95°	149.9	147.6	140.9	120.8	100.7	80.5	58.2	33.6	22.4	8.9	2.2
97.5°	102.9	100.7	93.9	80.5	64.9	51.4	35.8	24.6	17.9	6.7	2.2
100°	69.3	67.1	62.6	51.4	40.3	31.3	22.4	17.9	13.4	6.7	2.2
102.5°	44.7	42.5	38.0	31.3	22.4	17.9	15.7	13.4	8.9	4.5	2.2
105°	26.8	24.6	20.1	15.7	13.4	11.2	11.2	8.9	6.7	2.2	2.2
107.5°	13.4	11.2	8.9	8.9	8.9	6.7	6.7	6.7	4.5	2.2	0.0
110°	2.2	2.2	4.5	4.5	4.5	4.5	4.5	4.5	4.5	2.2	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3	5256.3
2.5°	5280.9	5245.1	5265.2	5233.9	5227.2	5193.6	5247.3	5254.0	5249.6	5258.5
5°	5287.6	5249.6	5271.9	5233.9	5233.9	5198.1	5249.6	5249.6	5236.1	5240.6
7.5°	5305.5	5267.4	5283.1	5240.6	5242.8	5200.3	5263.0	5256.3	5245.1	5260.7
10°	5356.9	5314.4	5312.2	5271.9	5280.9	5236.1	5314.4	5314.4	5303.2	5332.3
12.5°	5439.7	5377.0	5365.9	5316.7	5334.5	5296.5	5392.7	5397.2	5399.4	5446.4
15°	5526.9	5450.9	5462.0	5403.9	5397.2	5377.0	5464.3	5459.8	5457.6	5522.4
17.5°	5649.9	5292.1	5233.9	5193.6	5184.7	5135.5	5216.0	5370.3	5289.8	5245.1
20°	5455.3	5267.4	5037.1	4958.8	4943.1	4515.9	4178.2	4330.3	4536.0	4553.9
22.5°	5278.6	5211.5	5193.6	5070.6	4388.4	4245.3	4258.7	4202.8	3715.2	3502.7
25°	5497.8	5439.7	5363.6	4612.1	4451.1	4399.6	4383.9	3811.4	3426.6	3451.2
27.5°	5741.6	5676.8	5014.7	4623.3	4659.1	4587.5	4234.1	3556.4	3534.0	3576.5
30°	6045.8	5526.9	4893.9	4871.6	4905.1	4813.4	3762.1	3712.9	3706.2	3751.0
32.5°	6392.5	5330.1	5216.0	5216.0	5200.3	4209.5	3963.4	3929.9	3947.8	3994.8
35°	6262.8	5638.7	5625.3	5681.2	5305.5	4319.1	4285.5	4227.4	4240.8	4256.5
37.5°	6119.6	6146.5	6153.2	6124.1	3869.5	4632.2	4605.4	4594.2	4580.8	4585.3
40°	6652.0	6669.9	6663.2	6397.0	4175.9	4692.6	4967.7	4947.6	4945.4	4972.2
42.5°	7273.8	7323.0	7285.0	5643.2	4585.3	3945.6	5386.0	5374.8	5370.3	5426.3
45°	7973.9	8020.8	7222.3	6043.6	5021.4	4084.2	5415.1	5831.1	5864.6	5913.9
47.5°	8732.1	8723.2	6665.4	6658.7	5533.6	4468.9	4502.5	6376.9	6432.8	6450.7
50°	9604.4	8170.7	7298.4	7052.3	6112.9	4900.6	4773.1	5851.2	7085.9	7103.8
52.5°	9418.8	8083.5	8025.3	6186.7	6631.8	5377.0	5251.8	5218.2	7345.4	7777.0
55°	8779.1	8846.2	8763.4	6788.4	4862.6	5802.0	5723.7	5690.2	5464.3	4325.8
57.5°	9490.4	9510.5	9438.9	7340.9	4945.4	3616.8	5634.3	4833.5	3140.3	3124.7
60°	10228.5	10262.0	7030.0	5392.7	3169.4	1210.1	288.5	304.2	867.8	762.7
62.5°	10933.0	10966.6	7441.5	4927.5	2001.9	89.5	58.2	40.3	44.7	44.7
65°	11852.3	11865.7	7964.9	5216.0	2080.1	22.4	6.7	0.0	0.0	0.0
67.5°	12328.7	12053.6	8096.9	5348.0	2136.1	13.4	4.5	0.0	0.0	0.0
70°	11608.5	11313.3	7537.7	5012.5	1990.7	11.2	2.2	0.0	0.0	0.0
72.5°	10228.5	10085.3	6766.0	4444.3	1762.5	6.7	2.2	0.0	0.0	0.0
75°	8477.1	8287.0	5609.7	3704.0	1458.3	4.5	0.0	0.0	0.0	0.0
77.5°	6030.2	6052.5	3909.8	2699.7	993.1	4.5	0.0	0.0	0.0	0.0
80°	2639.3	2699.7	1713.3	1239.1	351.2	2.2	0.0	0.0	0.0	0.0
82.5°	503.3	463.0	223.7	176.7	44.7	0.0	0.0	0.0	0.0	0.0
85°	165.5	181.2	82.8	67.1	20.1	0.0	0.0	0.0	0.0	0.0
87.5°	58.2	73.8	24.6	20.1	4.5	0.0	0.0	0.0	0.0	0.0
90°	8.9	8.9	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
95°	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
100°	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
105°	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
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P579563
 CATALOG NUMBER: CST-CA8-480-750-U-T5-HSS-HM-EX180

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	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
117.5°	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
122.5°	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
127.5°	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
132.5°	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
137.5°	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
142.5°	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
147.5°	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
152.5°	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
157.5°	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
162.5°	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
167.5°	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
172.5°	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
177.5°	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

(END OF REPORT)