

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: McGRAW-EDISON

Report Number: P591236

Luminaire Tested: **CTN-CA10-760-727-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591236
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-760-727-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48953 lumens
Efficiency: N/A
Efficacy: 64.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B5 - U0 - G5

Input Watts (W): 761.9
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



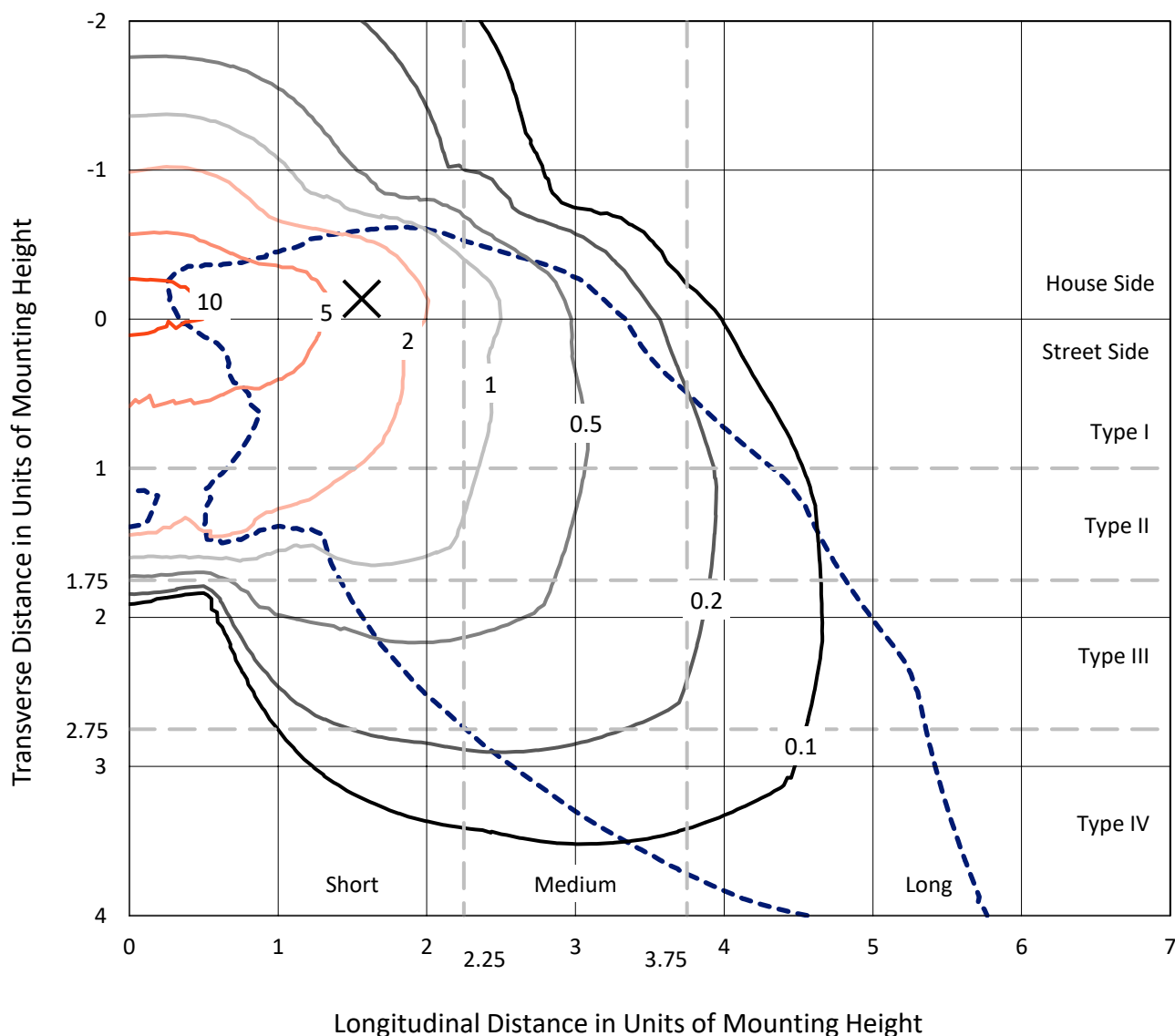
REPORT NUMBER: P591236

CATALOG NUMBER: CTN-CA10-760-727-U-T4-SSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

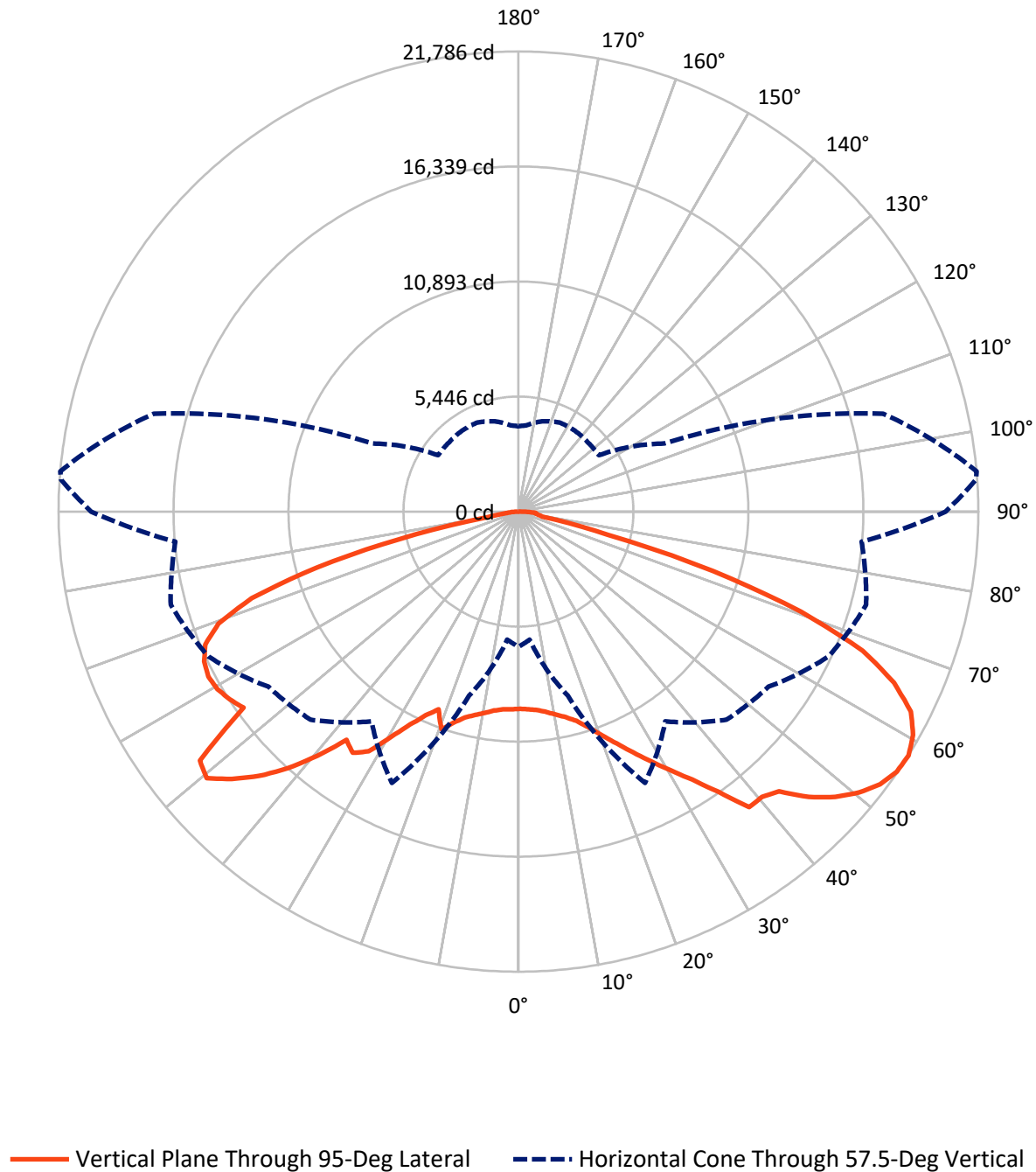


Based on 30 foot mounting height. Maximum calculated value = 11 fc

Type III - Short - N/A

REPORT NUMBER: P591236
CATALOG NUMBER: CTN-CA10-760-727-U-T4-SSS-HM-EX120

Luminous Intensity Polar Plot



REPORT NUMBER: P591236

CATALOG NUMBER: CTN-CA10-760-727-U-T4-SSS-HM-EX120

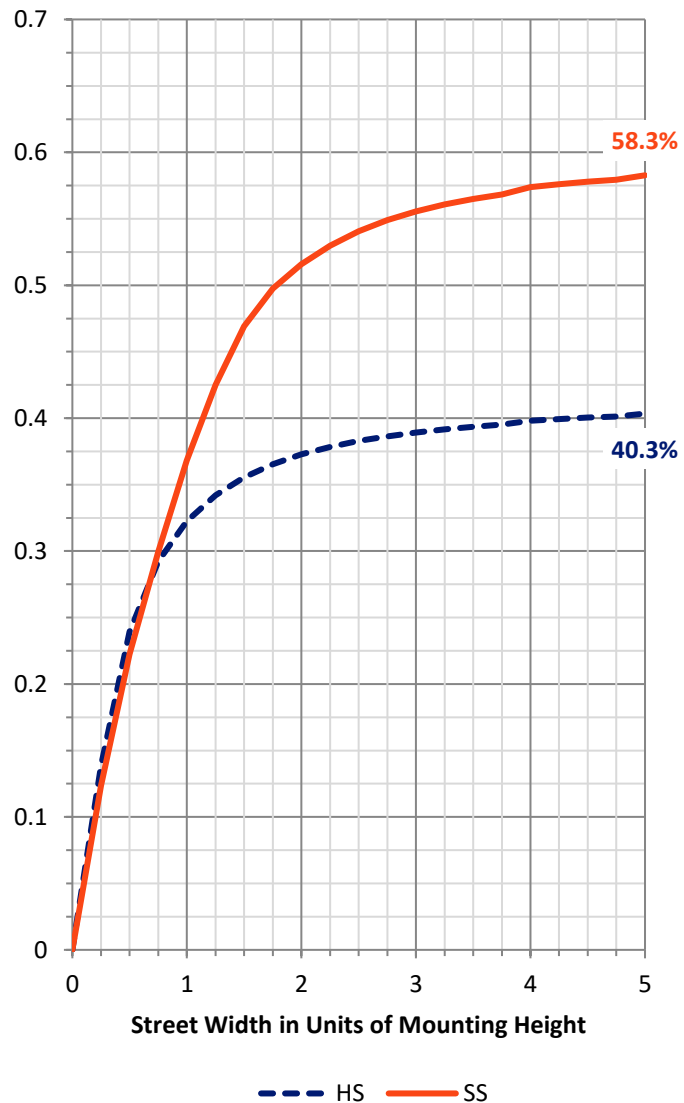
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20162.2	0.0	20162.2
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	28790.8	0.0	28790.8
	% Fixture	58.8	0.0	58.8
Total	Lumens	48953.0	0.0	48953.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	912.0	1.9
10°-20°	2789.1	5.7
20°-30°	4407.3	9.0
30°-40°	6090.1	12.4
40°-50°	8211.5	16.8
50°-60°	9673.0	19.8
60°-70°	8641.5	17.7
70°-80°	6452.4	13.2
80°-90°	1776.1	3.6
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°	48953.0	100.0
0°-180°	48953.0	100.0

Coefficient of Utilization



REPORT NUMBER: P591236

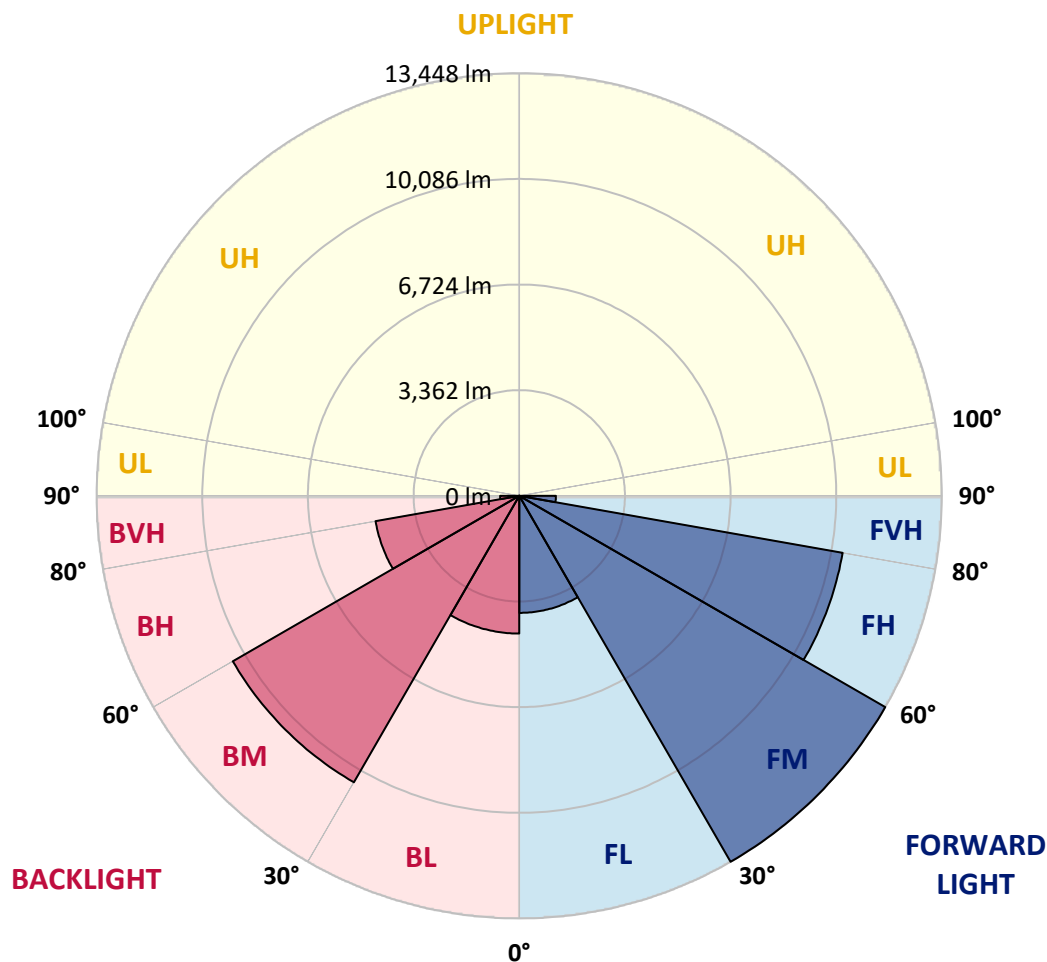
CATALOG NUMBER: CTN-CA10-760-727-U-T4-SSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3726.0	7.6			
FM	(30°-60°)	13448.3	27.5			
FH	(60°-80°)	10449.9	21.3			G4/12000
FVH	(80°-90°)	1166.6	2.4			G5
BL	(0°-30°)	4382.5	9.0	B4/5000		
BM	(30°-60°)	10526.3	21.5	B5		
BH	(60°-80°)	4644.0	9.5	B4/5000		G4/5000
BVH	(80°-90°)	609.5	1.2			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 III Short





REPORT NUMBER: P591236

CATALOG NUMBER: CTN-CA10-760-727-U-T4-SSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9
2.5°	9217.2	9158.6	9161.4	9242.3	9122.4	9208.8	9197.7	9331.5	9312.0	9364.9	9381.7
5°	9141.9	9091.7	9094.5	9197.7	9116.8	9194.9	9141.9	9264.6	9309.2	9390.0	9406.8
7.5°	9161.4	9116.8	9133.5	9231.1	9130.8	9208.8	9214.4	9328.7	9351.0	9490.4	9512.7
10°	9211.6	9164.2	9175.4	9253.4	9189.3	9328.7	9312.0	9462.5	9468.1	9663.3	9691.1
12.5°	9144.7	9111.2	9111.2	9208.8	9242.3	9381.7	9423.5	9579.6	9613.1	9838.9	9875.2
15°	9024.8	8969.0	9049.9	9194.9	9261.8	9473.7	9551.7	9785.9	9825.0	10059.2	10137.2
17.5°	8818.5	8787.8	9086.1	9130.8	8877.0	9038.7	9370.5	10025.7	10159.5	10435.5	10580.5
20°	8202.3	7856.6	7059.3	7204.2	7984.9	8567.6	8670.7	8985.8	9560.1	10934.6	11160.4
22.5°	6030.5	6328.8	7382.7	7469.1	7444.0	7926.3	9010.9	9314.8	9588.0	10092.6	11592.6
25°	6245.2	6228.4	6744.2	7839.9	7800.9	7892.9	8347.3	9825.0	10098.2	10600.0	12161.3
27.5°	6437.5	6451.5	6412.4	7444.0	8174.5	8269.3	8408.7	9417.9	10739.4	11313.8	12783.1
30°	6819.5	6760.9	6655.0	6652.2	8500.7	8640.1	8877.0	9214.4	11330.5	12242.2	13560.9
32.5°	7463.5	7396.6	7257.2	7037.0	7346.4	9024.8	9351.0	9780.4	10455.1	13382.5	14472.6
35°	7940.3	7892.9	7798.1	7644.7	7396.6	9217.2	9813.8	10382.6	11274.7	13856.4	15668.7
37.5°	8528.5	8461.6	8352.9	8163.3	7976.5	7901.2	10259.9	11065.6	12417.8	13535.8	15927.9
40°	9194.9	9155.8	8957.9	8712.6	8506.2	8297.1	10566.6	11957.8	13887.1	14974.4	15691.0
42.5°	9696.7	9666.1	9549.0	9351.0	9150.3	9016.4	9364.9	13053.5	15487.4	16365.7	16892.6
45°	10134.4	10101.0	10101.0	10048.0	9992.2	10003.4	10154.0	13839.7	17006.9	17553.3	18030.1
47.5°	10471.8	10413.2	10179.0	10226.4	10307.3	10549.9	11007.1	12033.1	18230.8	18562.6	18986.4
50°	11294.3	11205.0	10446.7	10622.3	10884.4	11274.7	11863.0	13153.9	17023.6	19424.1	19755.9
52.5°	12052.6	11640.0	8628.9	11205.0	11500.6	12077.7	12774.7	14366.6	15668.7	19145.3	20344.2
55°	10753.4	10332.4	8673.5	12275.6	12225.5	12953.1	13633.4	15362.0	16404.7	15992.1	20196.4
57.5°	6401.3	6083.5	9024.8	14177.1	12119.5	13931.7	14455.9	16212.3	17051.5	16312.7	20235.4
60°	3315.0	3485.0	3351.2	8389.1	10435.5	14361.1	15306.2	17032.0	17489.2	16552.5	20260.5
62.5°	446.1	320.6	133.8	6136.4	7416.1	11966.2	16374.0	17812.6	17809.8	16633.3	20084.9
65°	27.9	30.7	61.3	6105.8	8180.0	14196.6	18141.6	18442.7	17968.8	16491.1	19499.4
67.5°	11.2	13.9	55.8	6063.9	8826.9	14924.3	20221.5	18643.5	17985.5	16109.2	18214.1
70°	11.2	13.9	55.8	5648.5	9267.4	15052.5	20572.8	18568.2	17779.2	15169.6	15824.8
72.5°	13.9	16.7	50.2	4906.9	8999.7	14704.0	19998.4	18414.8	17040.4	13279.3	12286.8
75°	13.9	16.7	50.2	3964.6	7962.6	13942.9	19544.0	17132.4	14938.2	9922.5	7968.2
77.5°	11.2	13.9	50.2	3094.7	6638.3	12356.5	17729.0	14896.4	11812.8	5774.0	3147.7
80°	11.2	13.9	50.2	2155.1	5057.5	10128.9	14441.9	11600.9	6643.8	1650.5	886.6
82.5°	11.2	13.9	47.4	1343.8	3577.0	7449.6	9869.6	5347.4	1424.7	644.0	691.4
85°	11.2	11.2	36.2	658.0	2286.2	4948.7	4918.1	895.0	566.0	418.2	524.1
87.5°	5.6	8.4	19.5	301.1	1276.9	2609.6	1960.0	342.9	242.6	170.1	292.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P591236

CATALOG NUMBER: CTN-CA10-760-727-U-T4-SSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9	9339.9
2.5°	9387.3	9373.3	9412.3	9512.7	9507.1	9582.4	9523.9	9638.2	9657.7	9632.6	9671.6
5°	9437.4	9443.0	9549.0	9654.9	9615.9	9738.5	9763.6	9933.7	9939.3	9917.0	9967.2
7.5°	9562.9	9582.4	9688.4	9813.8	9869.6	9972.7	9958.8	10179.0	10159.5	10148.4	10206.9
10°	9738.5	9774.8	9889.1	10087.0	10062.0	10220.9	10148.4	10296.1	10290.6	10268.3	10332.4
12.5°	9953.2	9989.5	10134.4	10324.0	10326.8	10338.0	10279.4	10354.7	10329.6	10276.6	10326.8
15°	10243.2	10285.0	10482.9	10622.3	10502.5	10471.8	10360.3	10318.4	10223.7	10084.3	10126.1
17.5°	10700.4	10733.9	10956.9	11035.0	10828.7	10706.0	10388.1	10151.2	9883.5	9688.4	9724.6
20°	11277.5	11308.2	11489.4	11469.9	11193.9	10892.8	10399.3	9997.8	9498.8	9116.8	9105.7
22.5°	11913.2	11932.7	12105.6	11932.7	11442.0	11004.3	10377.0	9760.8	8921.7	8428.2	8375.2
25°	12613.0	12629.7	12626.9	12242.2	11584.2	10940.2	10170.7	9364.9	8288.8	7761.8	7706.1
27.5°	13396.4	13399.2	13092.5	12481.9	11522.9	10703.2	9772.0	8654.0	7708.9	7251.6	7209.8
30°	14230.0	14224.5	13519.1	12504.3	11285.9	10254.3	9155.8	7982.1	7187.5	6780.5	6721.9
32.5°	15180.7	15133.4	13898.3	12426.2	10853.7	9610.3	8361.3	7418.9	6777.7	6312.1	6225.6
35°	16399.1	16282.0	14221.7	12155.8	10212.5	8740.4	7625.2	6928.2	6381.8	5907.8	5821.4
37.5°	17907.4	17756.9	14729.1	11773.8	9473.7	8021.1	7084.3	6596.4	6097.4	5556.5	5445.0
40°	17472.5	17762.5	15334.1	11361.2	8759.9	7446.8	6766.5	6437.5	5924.5	5325.1	5219.2
42.5°	18144.4	18108.2	16162.1	10873.3	8074.1	6997.9	6638.3	6390.1	5832.5	5224.7	5102.1
45°	19287.5	19279.1	17054.3	10399.3	7405.0	6638.3	6540.7	6261.9	5701.5	5099.3	4965.5
47.5°	20215.9	20188.0	17907.4	9877.9	6786.0	6356.7	6342.7	6002.6	5467.3	4906.9	4784.2
50°	20862.7	20904.5	18381.4	9376.1	6200.5	6066.7	6013.8	5637.4	5138.3	4675.5	4580.7
52.5°	21372.9	21451.0	18587.7	9328.7	5687.6	5693.1	5601.1	5258.2	4867.9	4494.3	4393.9
55°	21623.9	21743.7	18375.8	9022.0	5185.7	5219.2	5129.9	4912.5	4681.1	4338.2	4265.7
57.5°	21727.0	21785.6	17885.1	7630.8	4647.6	4642.0	4669.9	4647.6	4430.2	4092.8	4039.8
60°	21551.4	21473.3	16817.3	5799.1	4101.2	4126.3	4304.7	4282.4	4090.0	3833.5	3761.0
62.5°	21010.5	20857.1	14862.9	4288.0	3663.5	3867.0	4056.6	3992.4	3758.2	3524.1	3468.3
65°	19978.9	19546.8	11843.5	3348.4	3454.4	3733.2	3908.8	3814.0	3546.4	3270.3	3236.9
67.5°	18127.7	17586.8	7773.0	3002.7	3365.1	3618.8	3802.9	3643.9	3384.7	3086.3	3038.9
70°	14793.2	14199.4	3680.2	2799.2	3164.4	3415.3	3549.1	3387.4	3122.6	2824.3	2790.8
72.5°	10315.7	9641.0	1982.3	2578.9	2933.0	3150.5	3239.7	3041.7	2810.3	2679.3	2670.9
75°	5141.1	4393.9	1798.3	2353.1	2634.7	2824.3	2974.8	2838.2	2634.7	2394.9	2333.6
77.5°	1368.9	1176.5	1692.3	2102.2	2397.7	2612.4	2698.8	2556.6	2322.4	2118.9	2082.6
80°	950.7	970.2	1580.8	1742.5	2091.0	2283.4	2364.2	2183.0	2065.9	1865.2	1809.4
82.5°	805.7	847.6	1276.9	1313.2	1661.7	1868.0	2010.2	1979.5	1812.2	1650.5	1628.2
85°	755.6	802.9	816.9	908.9	1190.5	1433.0	1678.4	1692.3	1580.8	1374.5	1307.6
87.5°	434.9	429.4	393.1	462.8	652.4	794.6	961.9	917.3	747.2	646.8	632.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)