

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: P591372

Luminaire Tested: **CTN-CA8-480-730-U-T1-SSS-HM-EX180**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591372
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-730-U-T1-SSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE, 180D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44347 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

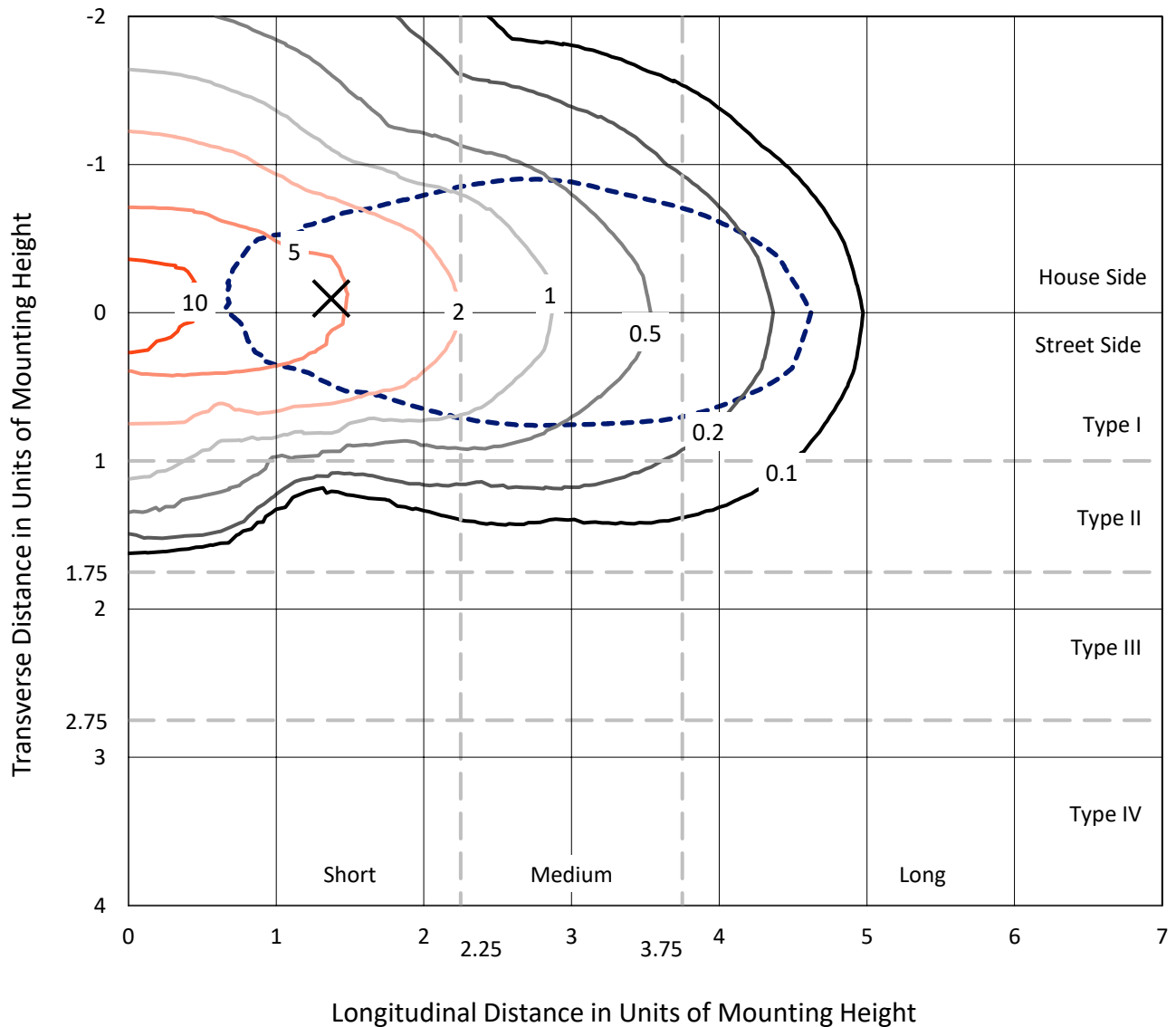
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591372
 CATALOG NUMBER: CTN-CA8-480-730-U-T1-SSS-HM-EX180

Iso-Footcandle Lines of Horizontal Illumination

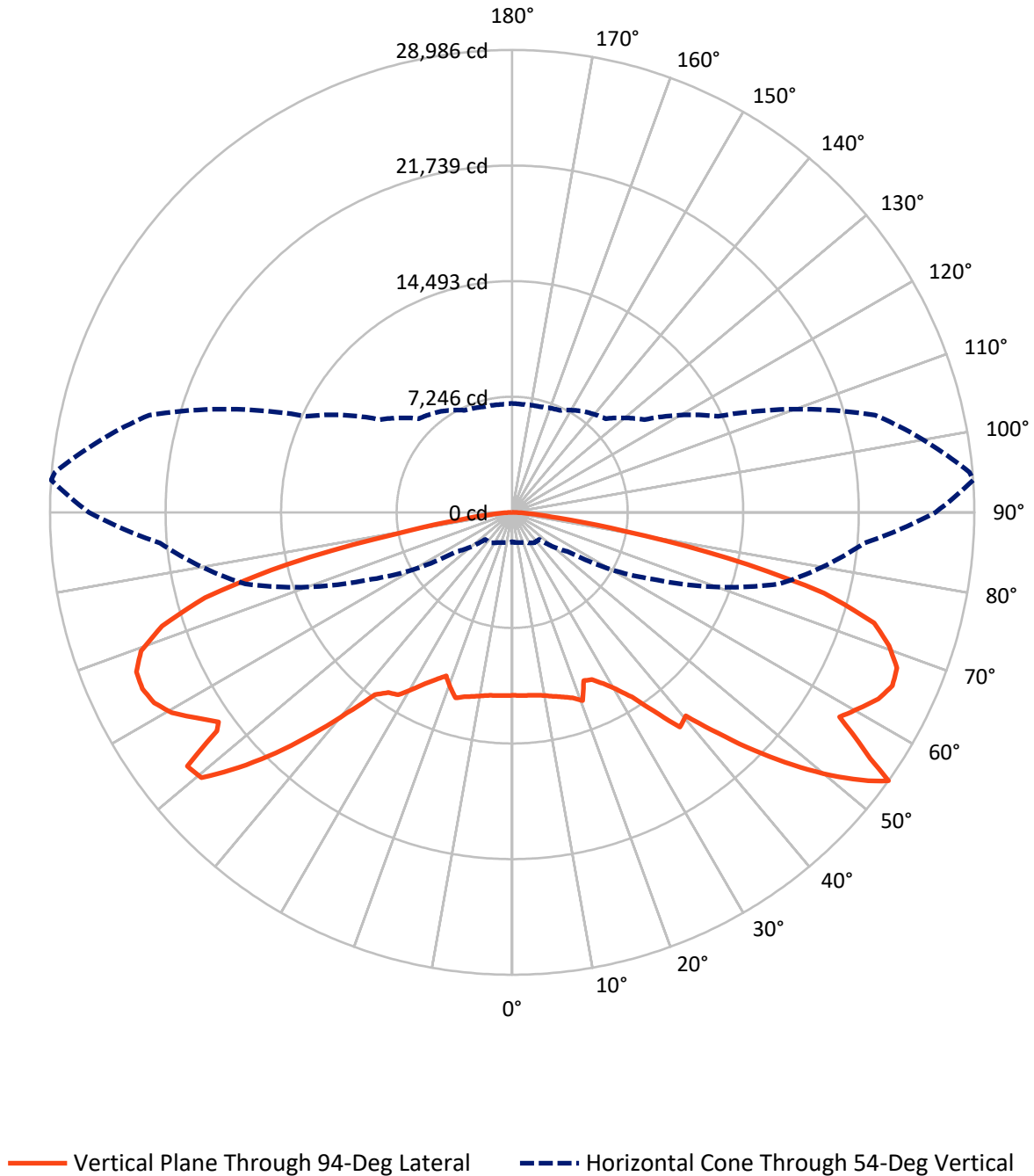
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.7 fc
 Type I - Short - N/A

REPORT NUMBER: P591372
CATALOG NUMBER: CTN-CA8-480-730-U-T1-SSS-HM-EX180

Luminous Intensity Polar Plot



REPORT NUMBER: P591372
 CATALOG NUMBER: CTN-CA8-480-730-U-T1-SSS-HM-EX180

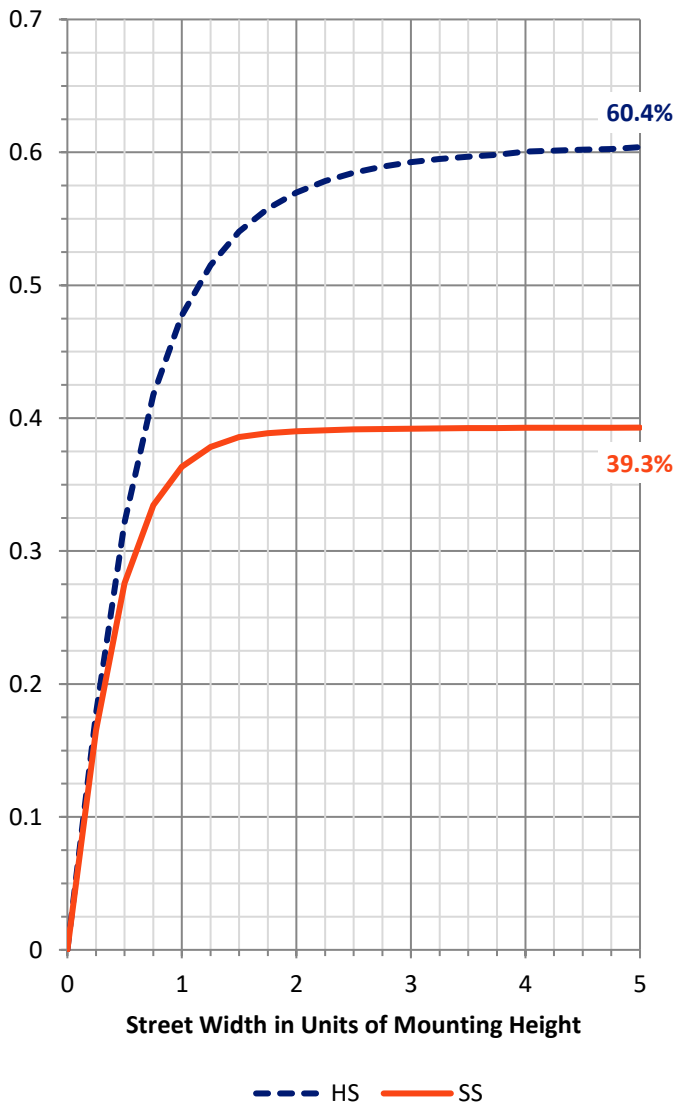
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	27011.0	0.0	27011.0
	% Fixture	60.9	0.0	60.9
Street Side	Lumens	17336.0	0.0	17336.0
	% Fixture	39.1	0.0	39.1
Total	Lumens	44347.0	0.0	44347.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1094.3	2.5
10°-20°	3131.2	7.1
20°-30°	4472.3	10.1
30°-40°	5917.4	13.3
40°-50°	7789.8	17.6
50°-60°	8594.3	19.4
60°-70°	7744.2	17.5
70°-80°	4897.6	11.0
80°-90°	705.8	1.6
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°	44347.0	100.0
0°-180°	44347.0	100.0

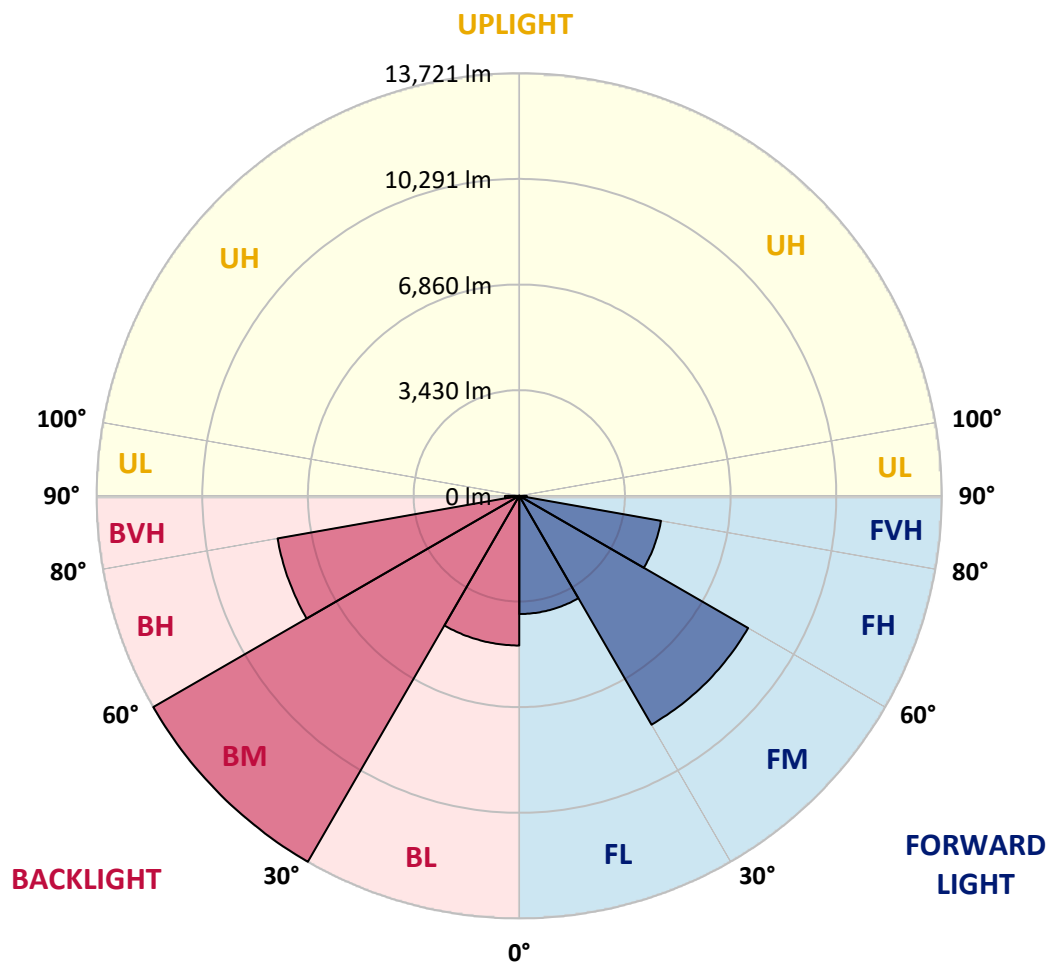


REPORT NUMBER: P591372
 CATALOG NUMBER: CTN-CA8-480-730-U-T1-SSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3837.9	8.7			
FM (30°-60°)	8580.7	19.3			
FH (60°-80°)	4673.0	10.5			G2/5000
FVH (80°-90°)	244.4	0.6			G3/500
BL (0°-30°)	4860.0	11.0	B4/5000		
BM (30°-60°)	13720.8	30.9	B5		
BH (60°-80°)	7968.8	18.0	B5		G5
BVH (80°-90°)	461.4	1.0			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





REPORT NUMBER: P591372

CATALOG NUMBER: CTN-CA8-480-730-U-T1-SSS-HM-EX180

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0
2.5°	11488.6	11408.8	11419.6	11503.7	11324.7	11436.8	11385.0	11477.8	11441.1	11492.9	11531.7
5°	11387.2	11311.7	11331.1	11434.7	11292.3	11419.6	11346.2	11436.8	11449.7	11512.3	11549.0
7.5°	11303.1	11229.8	11242.7	11339.8	11249.2	11361.3	11318.2	11439.0	11441.1	11551.1	11579.1
10°	11219.0	11143.5	11160.8	11244.9	11186.6	11307.4	11335.4	11477.8	11510.1	11663.3	11665.4
12.5°	11040.0	10973.1	10981.7	11098.2	11100.4	11275.1	11331.1	11551.1	11618.0	11790.5	11807.8
15°	10334.7	10382.2	10563.4	10710.0	10845.9	11081.0	11272.9	11633.1	11723.6	11932.8	11982.4
17.5°	8626.7	8553.3	8158.7	8367.9	9021.3	9646.8	9978.9	10731.6	11574.8	12150.7	12215.4
20°	6049.5	6165.9	6784.9	7069.6	7535.4	8667.6	9707.2	10140.6	10414.5	11456.2	12269.3
22.5°	4798.6	4833.1	5719.5	6782.7	7132.1	7619.5	8853.1	10300.2	10729.4	11031.4	11165.1
25°	4466.5	4492.3	4634.7	6025.7	6979.0	7496.6	8037.9	9920.7	11100.4	11475.6	11635.2
27.5°	4188.2	4216.3	4356.5	4824.5	6838.8	7496.6	8111.2	8980.4	11460.5	12029.9	12165.8
30°	3981.2	3981.2	4125.7	4524.7	5732.4	7520.3	8264.3	9086.0	10899.8	12728.7	12849.4
32.5°	3791.4	3793.6	3951.0	4334.9	4966.8	7418.9	8480.0	9474.2	10464.1	13427.4	13740.1
35°	3621.0	3627.5	3769.9	4158.1	4772.7	5980.4	8719.4	9972.4	11300.9	13349.8	15094.5
37.5°	3476.5	3480.9	3603.8	3983.4	4608.8	4332.7	8874.7	10572.0	12424.6	14042.1	15377.0
40°	3373.0	3366.6	3455.0	3800.0	4369.4	3959.6	7511.7	11195.3	13759.5	16209.5	16705.5
42.5°	3269.5	3258.7	3347.1	3608.1	2989.1	3856.1	6959.6	11803.4	15297.2	18590.5	19032.6
45°	3148.7	3153.0	3239.3	3237.2	2829.5	3718.1	7020.0	10395.1	16942.8	21025.3	21588.2
47.5°	3084.0	3064.6	3107.8	2350.8	2698.0	3528.3	6994.1	9651.1	18394.2	23352.4	23911.0
50°	2963.3	2958.9	2178.2	2227.8	2566.4	3310.5	6588.6	9918.5	16597.7	25509.1	26074.1
52.5°	2782.1	2456.4	2020.8	2141.6	2434.9	3053.8	4705.8	10028.5	16552.4	25295.6	28090.6
54°	1848.3	1893.6	1956.1	2081.2	2340.0	2400.4	4304.7	10019.9	17339.6	22159.8	26548.6
55°	1058.9	1483.8	1904.3	2031.6	2273.1	1680.0	4149.4	9974.6	17842.1	22295.6	23932.5
57.5°	916.6	920.9	1048.1	1695.1	1166.8	1440.7	3709.5	9605.8	18782.4	23544.3	24012.3
60°	79.8	77.6	88.4	120.8	153.1	336.4	1867.7	6161.6	18124.6	24616.2	25343.0
62.5°	32.4	34.5	43.1	58.2	92.7	151.0	1544.2	5460.7	18402.8	25269.7	26065.5
65°	6.5	6.5	10.8	19.4	34.5	90.6	1315.6	4863.3	18260.5	25483.2	26546.4
67.5°	0.0	0.0	6.5	15.1	28.0	73.3	1138.7	4475.1	17447.4	25409.9	26367.4
70°	0.0	0.0	6.5	15.1	25.9	71.2	974.8	4130.0	15431.0	24642.1	25703.2
72.5°	0.0	0.0	6.5	12.9	23.7	64.7	834.6	3646.9	13080.2	22793.8	24238.8
75°	0.0	0.0	6.5	12.9	21.6	58.2	703.1	3129.3	10927.8	19645.1	21381.2
77.5°	0.0	0.0	6.5	12.9	19.4	51.8	552.1	2499.6	8581.4	14244.8	15176.5
80°	0.0	0.0	6.5	12.9	17.3	41.0	407.6	1578.7	4759.8	7224.8	7608.7
82.5°	0.0	0.0	4.3	10.8	15.1	25.9	194.1	597.4	2242.9	3308.3	3209.1
85°	0.0	0.0	4.3	10.8	12.9	19.4	84.1	151.0	746.2	1097.7	1022.3
87.5°	0.0	0.0	4.3	8.6	10.8	12.9	21.6	25.9	237.2	317.0	327.8
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: P591372

CATALOG NUMBER: CTN-CA8-480-730-U-T1-SSS-HM-EX180

CANDELA DISTRIBUTION (continued):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0	11467.0
2.5°	11505.8	11505.8	11503.7	11559.7	11488.6	11495.0	11428.2	11600.7	11581.3	11527.4	11592.1
5°	11518.8	11529.5	11527.4	11555.4	11499.4	11533.9	11441.1	11611.5	11583.5	11540.3	11607.2
7.5°	11572.7	11592.1	11577.0	11626.6	11514.4	11549.0	11454.1	11602.9	11574.8	11512.3	11583.5
10°	11689.1	11708.5	11678.4	11702.1	11583.5	11566.2	11449.7	11605.0	11544.6	11497.2	11585.6
12.5°	11840.1	11863.8	11803.4	11799.1	11648.2	11613.7	11445.4	11551.1	11462.7	11423.9	11503.7
15°	12008.3	12036.4	11965.2	11950.1	11784.0	11669.7	11428.2	11451.9	11324.7	11272.9	11357.0
17.5°	12228.3	12254.2	12200.3	12191.6	11976.0	11781.9	11404.5	11326.8	11147.8	11104.7	11150.0
20°	12597.1	12614.3	12543.2	12478.5	12161.4	11842.3	11365.6	11162.9	10889.0	10798.4	10850.2
22.5°	11464.8	11602.9	13002.5	12761.0	12299.5	11904.8	11268.6	10930.0	10546.1	10375.7	10410.2
25°	11613.7	11626.6	12157.1	13095.3	12450.4	11945.8	11154.3	10641.0	10112.6	9864.6	9907.7
27.5°	12152.8	12137.7	11928.5	13131.9	12629.4	11969.5	11011.9	10336.9	9683.4	9385.8	9396.6
30°	12851.6	12827.9	12510.8	11872.5	12886.1	11978.1	10886.9	9987.5	9301.7	8984.7	8976.0
32.5°	13807.0	13740.1	13248.4	12366.3	11801.3	12036.4	10710.0	9655.4	8937.2	8624.5	8600.8
35°	15273.5	15150.6	14255.6	12993.9	11613.7	12036.4	10468.5	9297.4	8600.8	8303.2	8285.9
37.5°	17091.6	17123.9	15543.1	13697.0	11902.6	10908.4	10179.5	8963.1	8309.6	8046.5	8046.5
40°	16765.9	17195.1	17037.7	14417.3	12200.3	10727.3	9868.9	8641.8	8068.1	7867.5	7893.4
42.5°	18916.1	18750.1	18771.6	15139.8	12409.5	10541.8	9532.5	8344.1	7854.6	7684.2	7703.6
45°	21301.4	21113.8	17184.3	15786.8	12506.5	10265.7	9191.7	8037.9	7619.5	7477.2	7528.9
47.5°	23656.5	23488.3	18870.8	15629.4	12415.9	9843.0	8771.2	7772.6	7371.5	7270.1	7347.8
50°	25936.1	25698.8	20688.9	13970.9	12094.6	9258.6	8342.0	7494.4	7155.8	7095.4	7153.7
52.5°	27969.8	27654.9	22530.7	14221.1	10565.5	8667.6	7960.3	7227.0	6959.6	6892.7	6950.9
54°	28985.6	28793.7	23559.4	14249.1	10127.7	8301.0	7731.7	7056.6	6849.6	6793.5	6825.9
55°	27256.0	27639.8	24169.8	14225.4	9810.7	8078.9	7580.7	6944.5	6771.9	6711.5	6743.9
57.5°	24204.3	23790.2	22597.6	13934.2	8948.0	7522.5	7138.6	6659.8	6541.2	6463.5	6508.8
60°	24972.1	24896.6	20628.5	13293.7	8005.5	6899.2	6702.9	6327.7	6247.9	6183.2	6243.6
62.5°	25774.3	25724.7	20943.4	12299.5	7067.4	6286.7	6202.6	5939.5	5892.0	5864.0	5879.1
65°	26207.8	25890.8	20934.8	10968.8	6206.9	5659.1	5646.2	5449.9	5471.5	5458.5	5521.1
67.5°	26024.5	25685.9	20009.6	10009.1	5398.1	4943.1	4984.1	4902.1	4981.9	5005.6	5053.1
70°	25066.9	25176.9	17993.1	9083.9	4593.7	4162.4	4291.8	4281.0	4397.4	4488.0	4563.5
72.5°	23742.8	23320.0	15081.6	7720.9	3362.2	2961.1	3185.4	3336.4	3465.8	3573.6	3644.8
75°	20208.0	19711.9	11134.9	6019.3	2434.9	2042.4	2102.8	2169.6	2253.7	2501.7	2648.4
77.5°	13854.4	13647.4	8007.7	4539.8	1550.6	1231.5	1466.5	1600.2	1671.4	1660.6	1686.5
80°	7104.1	7067.4	4740.4	2715.2	1046.0	901.5	1067.6	1080.5	1194.8	1283.2	1287.5
82.5°	2864.1	3006.4	1893.6	1488.1	726.8	681.5	752.7	847.6	944.6	996.4	1009.3
85°	1013.6	989.9	575.8	698.8	461.5	476.6	532.7	640.5	741.9	754.8	726.8
87.5°	271.7	282.5	122.9	256.6	252.3	276.1	306.2	349.4	422.7	444.3	422.7
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)