

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: P591138

Luminaire Tested: **CTN-CA10-760-722-U-T3-SSS-HM-EX180**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591138  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-760-722-U-T3-SSS-HM-EX180  
Description: CELESTEON HIGH MAST LUMINAIRE, 180D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (10) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 44837 lumens  
Efficiency: N/A  
Efficacy: 58.8 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type II - Short  
BUG Rating: B5 - U0 - G4

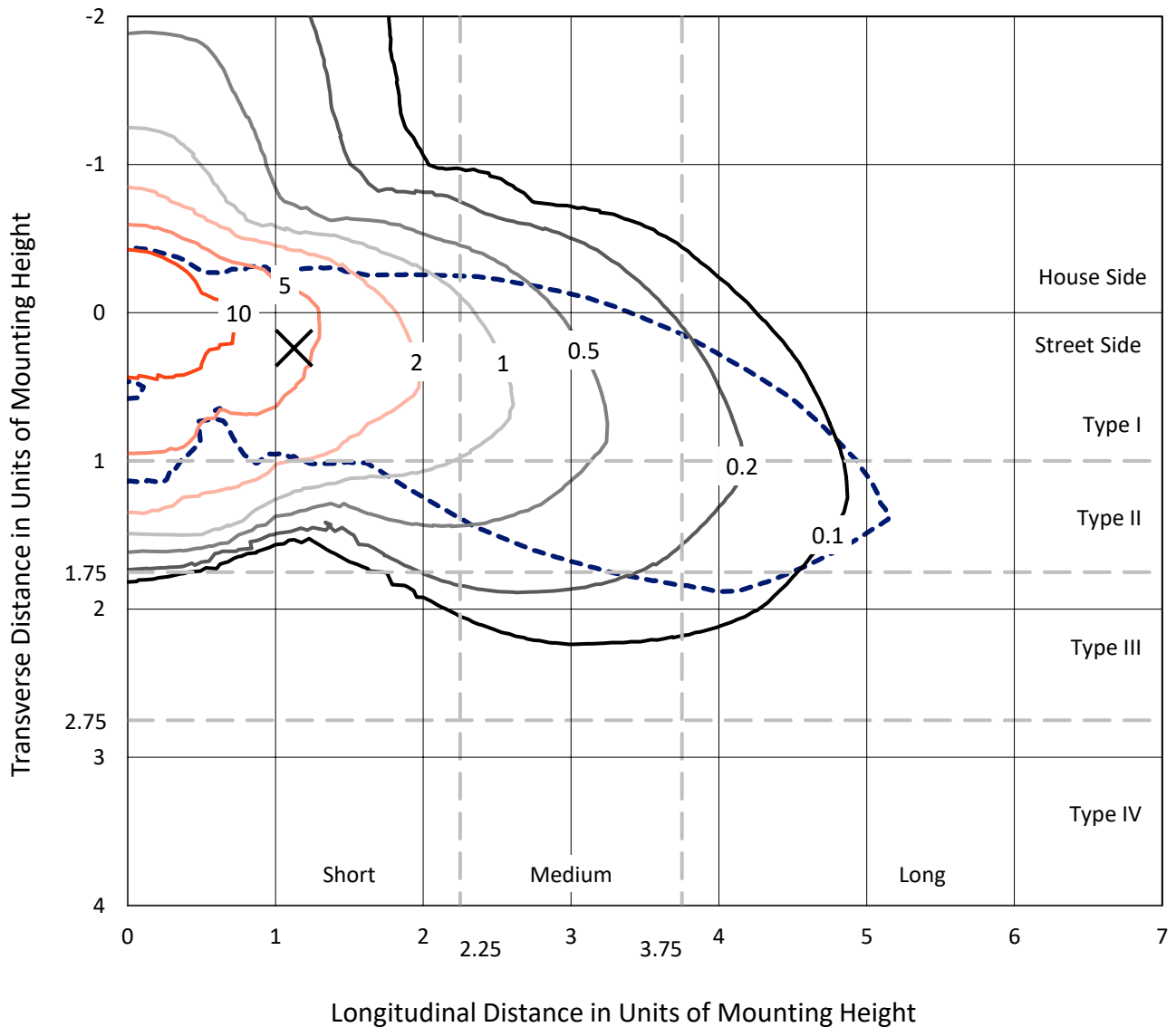
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P591138  
 CATALOG NUMBER: CTN-CA10-760-722-U-T3-SSS-HM-EX180

### Iso-Footcandle Lines of Horizontal Illumination

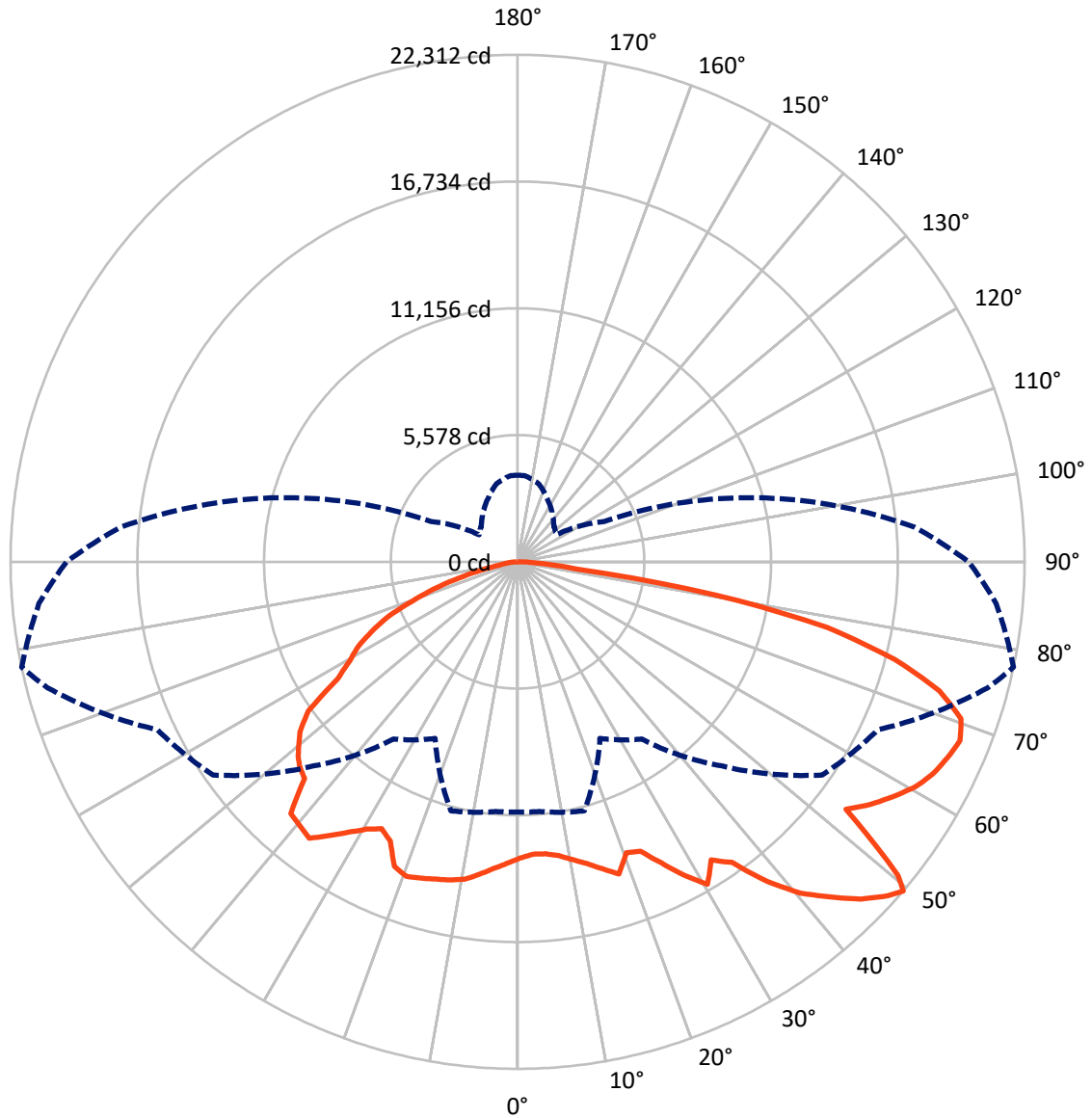
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.3 fc  
 Type II - Short - N/A

REPORT NUMBER: P591138  
CATALOG NUMBER: CTN-CA10-760-722-U-T3-SSS-HM-EX180

### Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral      - - - Horizontal Cone Through 49-Deg Vertical

REPORT NUMBER: P591138  
 CATALOG NUMBER: CTN-CA10-760-722-U-T3-SSS-HM-EX180

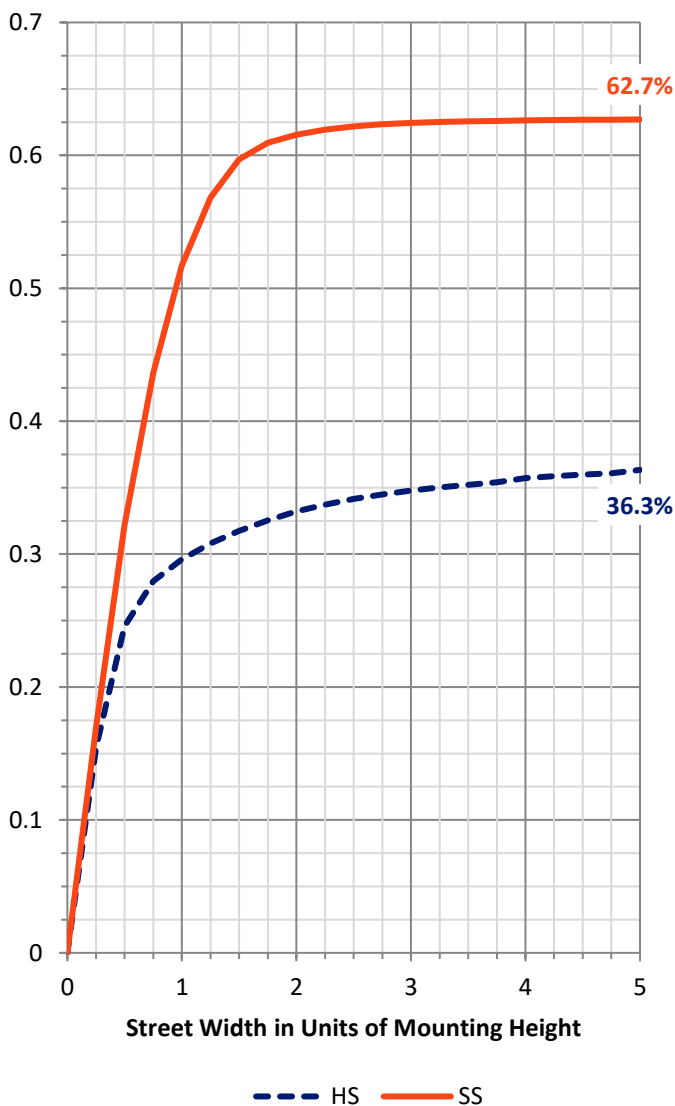
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	16770.0	0.0	16770.0
	% Fixture	37.4	0.0	37.4
<b>Street Side</b>	Lumens	28067.0	0.0	28067.0
	% Fixture	62.6	0.0	62.6
<b>Total</b>	Lumens	44837.0	0.0	44837.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1305.1	2.9
10°-20°	4006.1	8.9
20°-30°	5805.4	12.9
30°-40°	7133.5	15.9
40°-50°	8051.3	18.0
50°-60°	7650.7	17.1
60°-70°	5714.0	12.7
70°-80°	4243.6	9.5
80°-90°	927.3	2.1
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°	44837.0	100.0
0°-180°	44837.0	100.0

**Coefficient of Utilization**

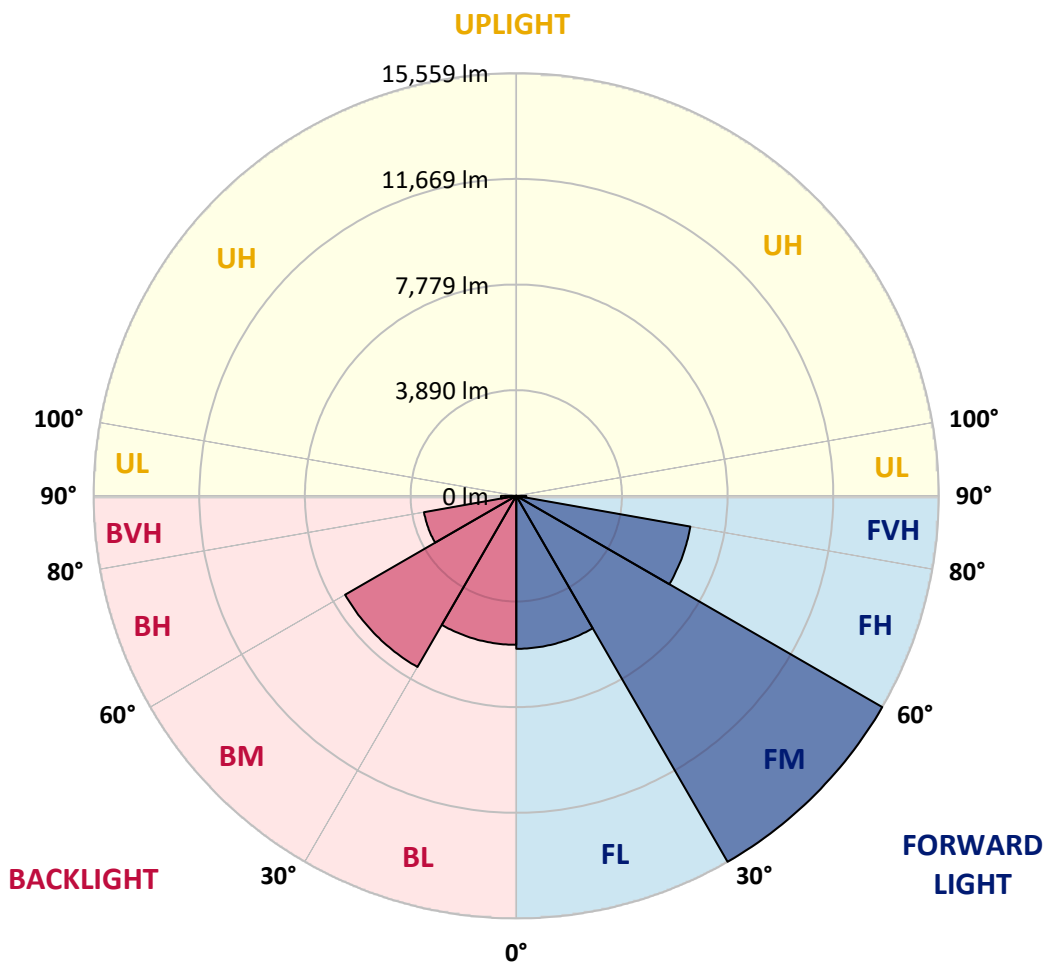


REPORT NUMBER: P591138  
 CATALOG NUMBER: CTN-CA10-760-722-U-T3-SSS-HM-EX180

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5631.8	12.6			
FM (30°-60°)	15558.6	34.7			
FH (60°-80°)	6510.0	14.5			G3/7500
FVH (80°-90°)	366.6	0.8			G3/500
BL (0°-30°)	5484.8	12.2	B5		
BM (30°-60°)	7277.0	16.2	B4/8500		
BH (60°-80°)	3447.6	7.7	B4/5000		G4/5000
BVH (80°-90°)	560.7	1.3			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B5-U0-G4**  
 Type II Short





REPORT NUMBER: P591138

CATALOG NUMBER: CTN-CA10-760-722-U-T3-SSS-HM-EX180

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4
2.5°	12756.6	12686.8	12705.6	12813.0	12606.3	12756.6	12694.9	12839.8	12888.1	12882.7	13092.0
5°	12861.3	12770.0	12796.9	12869.3	12643.9	12759.3	12711.0	12866.6	12906.9	12909.6	13194.0
7.5°	13245.0	13140.3	13113.5	13118.9	12906.9	12992.7	12869.3	12990.1	13062.5	13054.5	13371.1
10°	13803.1	13687.7	13628.7	13609.9	13352.3	13314.7	13164.5	13207.4	13314.7	13328.2	13650.2
12.5°	14377.4	14286.1	14200.2	14157.3	13803.1	13719.9	13499.9	13537.5	13618.0	13634.1	13969.5
15°	14884.5	14798.6	14785.2	14736.9	14377.4	14216.3	13950.7	13910.4	13972.2	14023.1	14315.6
17.5°	14388.1	14278.1	14208.3	14224.4	14041.9	13634.1	13470.4	13746.8	14262.0	14441.8	14718.1
20°	12987.4	13121.5	13065.2	12847.8	12652.0	13312.1	13172.5	13113.5	13432.8	13663.6	14331.7
22.5°	11409.6	11409.6	11946.2	12321.9	12397.0	12767.3	13529.4	13795.1	13829.9	13829.9	13636.7
25°	10161.8	10516.0	11425.7	12853.2	12861.3	12786.1	12998.1	14455.2	14696.7	14669.8	14345.2
27.5°	10644.8	10585.8	11197.6	12190.4	13593.8	13507.9	13094.7	13752.1	15743.2	15619.7	15203.8
30°	11071.5	11012.4	11122.5	12354.1	13803.1	14291.5	13937.3	13741.4	15799.5	16470.4	16220.8
32.5°	11471.3	11404.2	11530.3	11718.2	13135.0	15069.7	14820.1	14691.3	14994.5	15646.6	17372.0
35°	11793.3	11804.0	11948.9	12225.3	12874.7	14806.7	15705.6	15753.9	16285.2	16245.0	17117.0
37.5°	12032.1	12053.6	12179.7	12507.1	12748.6	12230.7	16548.2	17106.3	17924.7	17844.2	17202.9
40°	12045.5	12093.8	12346.1	12748.6	13033.0	10891.7	16392.5	18598.2	19408.6	19172.5	18375.5
42.5°	11796.0	11820.1	12241.4	12923.0	9890.8	11329.1	15201.1	20084.8	20447.1	20157.3	19271.8
45°	11573.3	11567.9	12018.7	12630.5	9346.1	11841.6	15168.9	19652.8	21402.3	21176.9	20047.3
47.5°	11259.3	11256.6	11696.7	9504.4	9464.1	12394.4	15968.6	17041.9	22193.9	21952.4	20753.0
49°	11007.1	11033.9	11345.2	8573.3	9517.8	12702.9	16357.7	17487.3	21418.4	22312.0	21144.7
50°	10870.2	10897.1	10137.7	8479.4	9533.9	12880.0	16561.6	17814.7	19277.1	21702.9	21397.0
52.5°	10247.7	10011.6	7859.5	8283.5	9539.3	13089.3	14240.5	18509.7	18372.8	18091.1	20259.2
55°	6174.4	6987.4	7116.2	8060.8	9453.4	9507.1	13910.4	19317.4	19258.4	18847.8	17444.4
57.5°	3743.3	3705.7	5495.5	7440.9	6330.0	7972.2	14455.2	20385.4	20036.5	19489.1	17742.3
60°	1320.2	1167.3	1178.0	1269.2	2356.0	5965.1	11530.3	15351.4	20197.5	20111.7	18013.3
62.5°	104.7	99.3	99.3	104.7	150.3	2240.6	9142.1	15399.7	20755.7	20532.9	18075.0
65°	13.4	13.4	13.4	29.5	77.8	2025.9	9155.6	15649.3	21171.6	20790.5	17911.3
67.5°	0.0	0.0	8.1	21.5	61.7	1792.5	8887.2	15796.8	21544.6	21005.2	17761.0
70°	0.0	0.0	5.4	18.8	53.7	1483.9	8559.9	15925.6	21370.1	20702.0	17004.3
72.5°	0.0	0.0	5.4	16.1	45.6	979.4	7588.5	14973.1	20127.8	19403.3	15450.7
75°	0.0	0.0	5.4	13.4	42.9	558.1	6217.3	13228.9	17911.3	17143.9	13019.6
77.5°	0.0	0.0	2.7	10.7	37.6	305.9	4296.0	10950.7	14796.0	13953.4	9754.0
80°	0.0	0.0	2.7	10.7	34.9	209.3	1953.5	7113.5	9861.3	8806.7	5345.2
82.5°	0.0	0.0	2.7	10.7	26.8	142.2	788.9	1993.7	3051.0	2608.2	1701.2
85°	0.0	0.0	2.7	8.1	18.8	91.2	389.1	818.4	1231.7	1183.4	861.4
87.5°	0.0	0.0	2.7	8.1	13.4	26.8	115.4	268.3	480.3	488.4	367.6
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: P591138

CATALOG NUMBER: CTN-CA10-760-722-U-T3-SSS-HM-EX180

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4	13038.4
2.5°	13191.3	13215.5	13296.0	13416.7	13435.5	13599.2	13572.3	13878.2	13907.8	13980.2	14060.7
5°	13330.8	13414.0	13596.5	13872.9	14074.1	14321.0	14296.8	14643.0	14677.9	14659.1	14782.5
7.5°	13534.8	13658.2	13942.6	14315.6	14382.7	14688.6	14648.4	14948.9	14954.3	14914.0	15034.8
10°	13832.6	13977.5	14240.5	14452.5	14613.5	14798.6	14771.8	15040.1	15013.3	14967.7	15093.8
12.5°	14119.7	14200.2	14361.3	14610.8	14640.3	14715.5	14669.8	14919.4	14892.6	14828.2	14946.2
15°	14377.4	14417.6	14420.3	14543.7	14476.6	14533.0	14412.2	14592.0	14530.3	14506.2	14589.3
17.5°	14707.4	14632.3	14522.3	14514.2	14286.1	14208.3	14015.1	14063.4	13934.6	13923.9	13969.5
20°	14750.3	14906.0	14589.3	14262.0	13878.2	13682.4	13317.4	13320.1	13175.2	13118.9	13145.7
22.5°	13575.0	13958.7	14667.2	14041.9	13389.9	12949.8	12480.2	12338.0	12064.3	11948.9	11903.3
25°	14033.9	13534.8	13481.1	13671.6	12756.6	12085.8	11404.2	10985.6	10660.9	10398.0	10416.7
27.5°	14745.0	14095.6	12783.4	12861.3	11959.7	11017.8	9990.1	9399.7	9069.7	8814.8	8785.3
30°	15686.8	14871.1	12933.7	11146.6	11044.6	9676.1	8415.0	7762.9	7427.5	7336.3	7279.9
32.5°	16856.8	15794.2	13271.8	10754.8	9139.5	8224.4	6810.3	6284.4	6126.1	6118.0	6053.6
35°	18246.7	17015.1	13583.1	10234.3	7881.0	6697.6	5441.8	5095.7	5119.8	5122.5	5176.2
37.5°	17358.5	18168.9	13972.2	9740.5	6654.7	4977.6	4376.5	4159.2	4228.9	4341.6	4395.3
40°	17372.0	16540.1	14425.7	8916.7	5170.8	3796.9	3423.9	3375.6	3673.5	3901.6	3957.9
42.5°	18069.6	16432.8	14259.3	7977.6	3786.2	2887.3	2852.4	3112.7	3542.0	3796.9	3842.5
45°	18818.3	16942.6	11844.3	6646.6	2745.1	2441.8	2710.2	3072.4	3539.3	3810.3	3837.2
47.5°	19529.4	17264.6	11353.2	5195.0	2205.7	2302.3	2667.2	3072.4	3558.1	3834.5	3850.6
49°	19846.0	17524.9	10897.1	4202.1	2068.9	2248.6	2643.1	3077.8	3563.5	3799.6	3807.7
50°	20033.8	17672.5	10529.4	3896.2	2001.8	2213.8	2632.4	3085.8	3555.4	3759.4	3767.4
52.5°	20326.3	17911.3	9684.2	3104.6	1875.7	2133.3	2616.3	3118.0	3525.9	3646.7	3641.3
55°	16762.8	16741.4	8978.5	2605.5	1779.1	2060.8	2610.9	3144.9	3539.3	3662.8	3657.4
57.5°	16065.2	13746.8	7564.3	2130.6	1698.6	1999.1	2616.3	3185.1	3780.8	3995.5	3968.7
60°	16116.2	13537.5	6437.3	1848.8	1604.6	1948.1	2632.4	3364.9	4368.5	4585.8	4518.7
62.5°	15939.1	13024.9	5761.1	1661.0	1505.4	1902.5	2643.1	3614.5	4443.6	4462.4	4347.0
65°	15517.8	12380.9	4851.5	1454.4	1400.7	1859.6	2640.4	3705.7	4100.1	3947.2	3909.6
67.5°	14736.9	11696.7	3839.9	1274.6	1288.0	1795.2	2702.1	3547.4	3880.1	3756.7	3700.3
70°	13811.2	10237.0	2707.5	1108.2	1186.0	1722.7	2694.1	3509.8	3764.7	3582.3	3504.4
72.5°	12163.6	8605.5	1822.0	955.3	1057.2	1639.5	2557.2	3397.1	3689.6	3568.8	3461.5
75°	9668.1	6440.0	1057.2	823.8	931.1	1518.8	2423.1	3327.3	3729.8	3499.1	3276.4
77.5°	6609.1	3668.1	788.9	689.6	802.3	1363.1	2197.7	3093.9	3606.4	3407.8	3110.0
80°	2962.4	1325.6	603.8	560.8	673.5	1105.5	1894.4	2737.0	3415.9	3415.9	3206.6
82.5°	1178.0	834.5	418.6	440.1	550.1	842.6	1500.0	2361.3	3010.7	3147.6	3364.9
85°	665.5	488.4	268.3	319.3	421.3	652.1	1092.1	1835.4	2452.6	2718.2	2946.3
87.5°	263.0	185.2	107.3	179.8	244.2	335.4	477.6	898.9	1320.2	1626.1	1797.8
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)