

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: P591334

Luminaire Tested: **CTN-CA10-760-730-U-T4-SSS-HM-EX90**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591334  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-760-730-U-T4-SSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 66351 lumens  
Efficiency: N/A  
Efficacy: 87.1 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U0 - G5

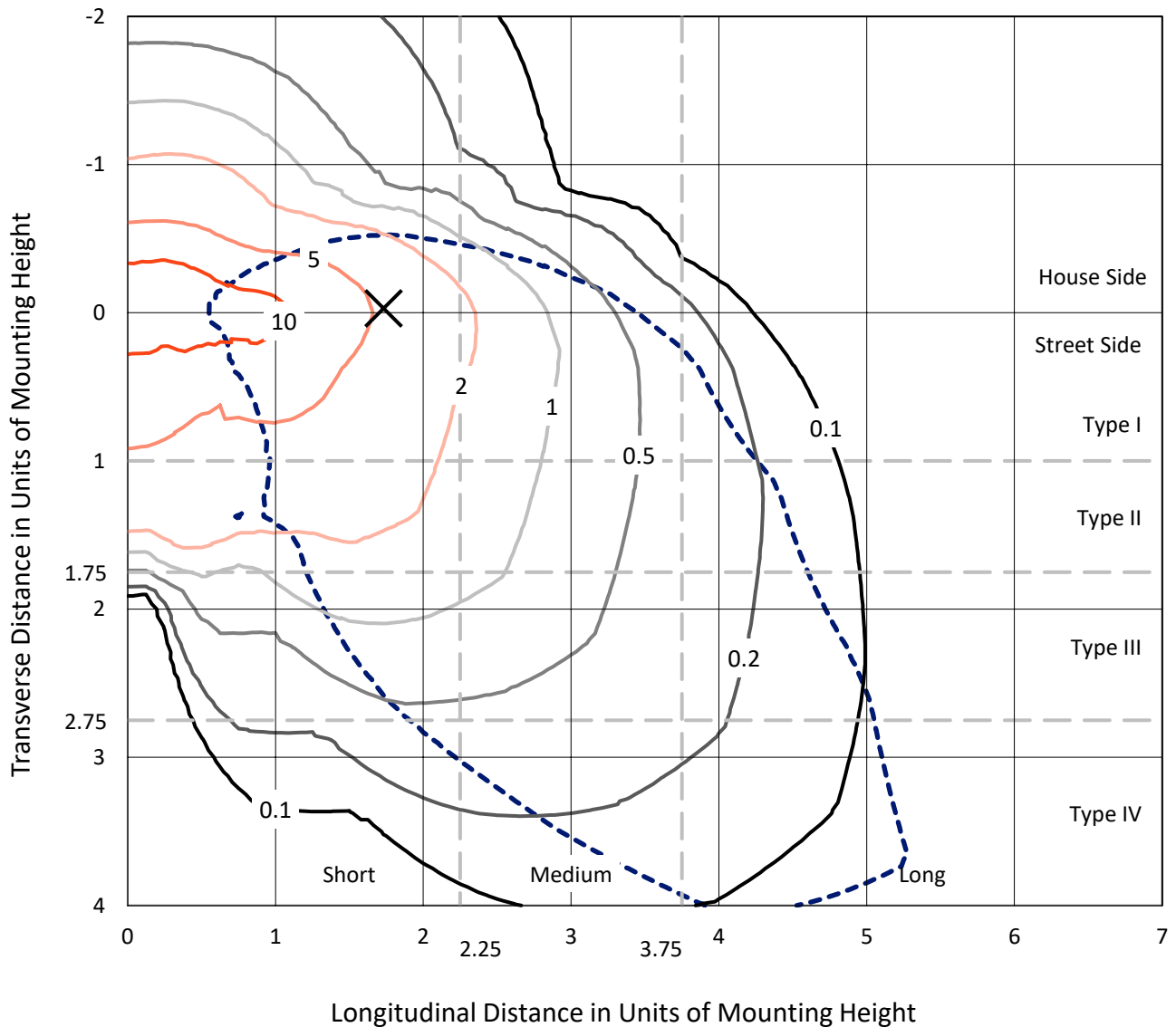
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P591334  
 CATALOG NUMBER: CTN-CA10-760-730-U-T4-SSS-HM-EX90

### Iso-Footcandle Lines of Horizontal Illumination

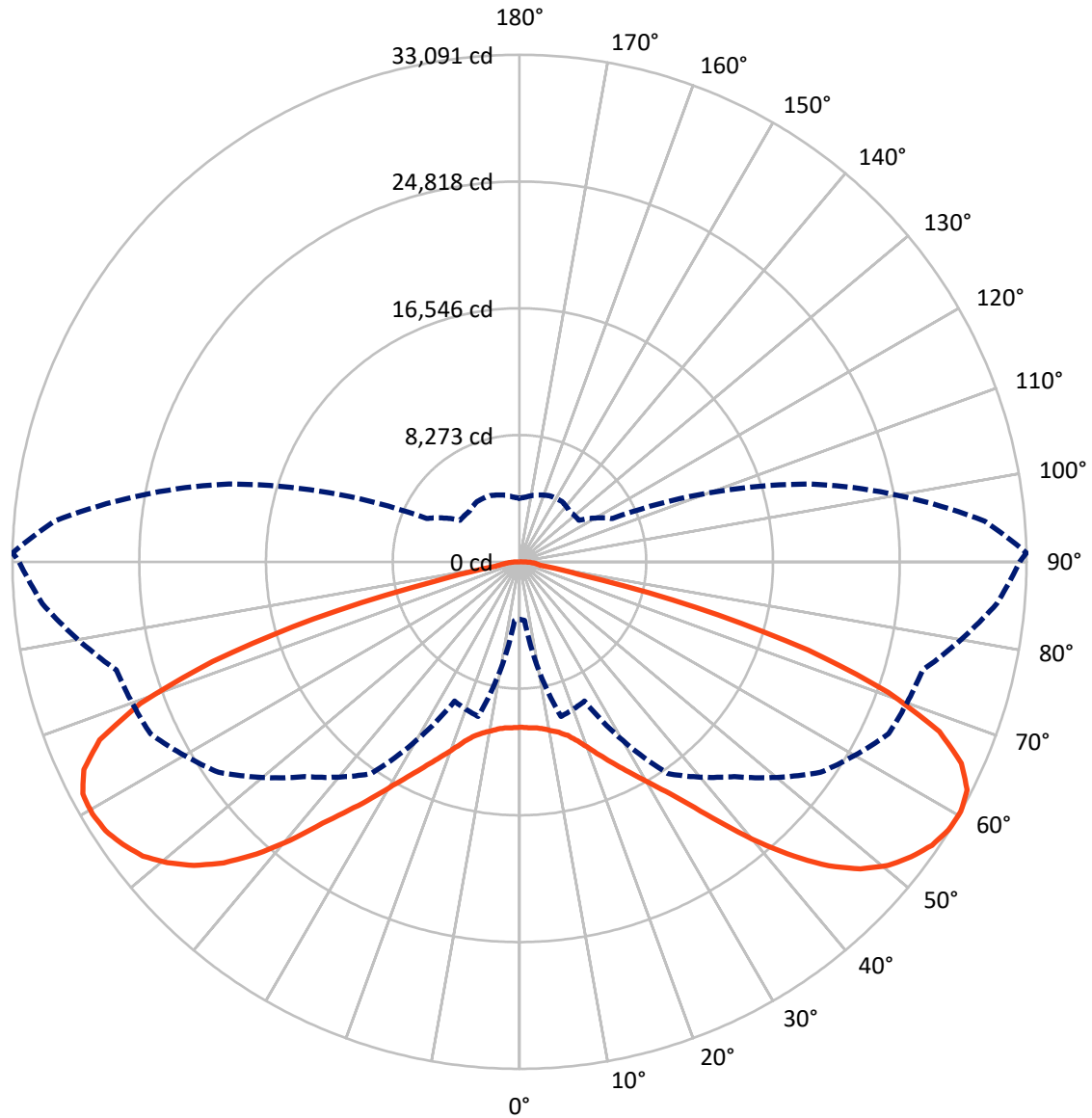
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.6 fc  
 Type IV - Short - N/A

REPORT NUMBER: P591334  
CATALOG NUMBER: CTN-CA10-760-730-U-T4-SSS-HM-EX90

### Luminous Intensity Polar Plot



— Vertical Plane Through 91-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P591334  
 CATALOG NUMBER: CTN-CA10-760-730-U-T4-SSS-HM-EX90

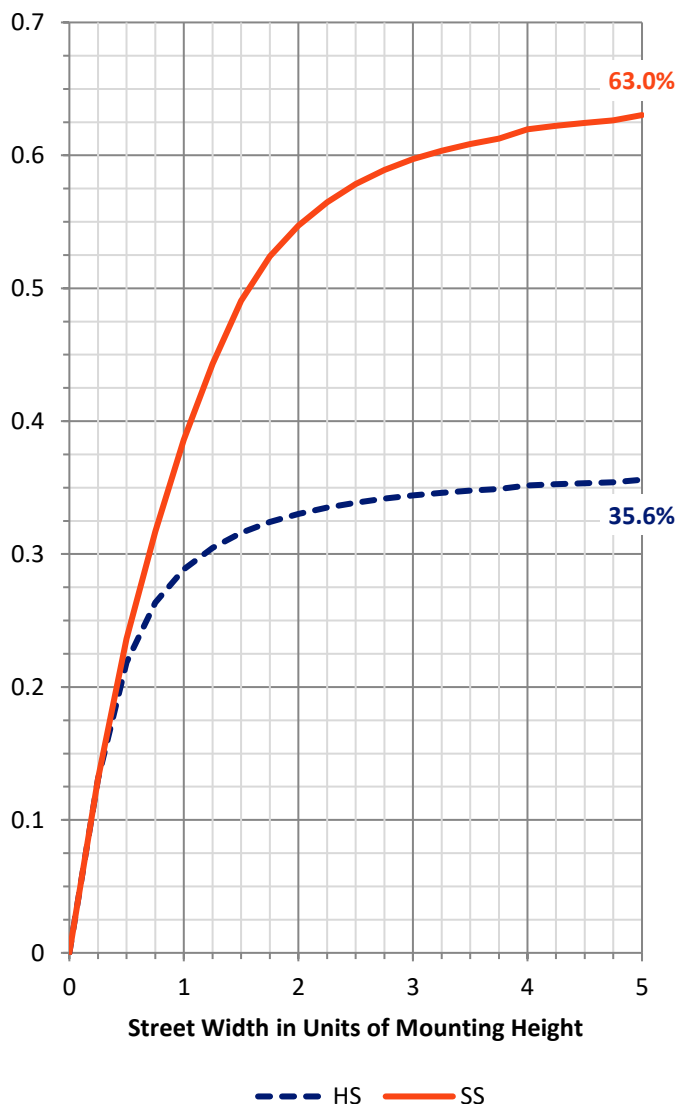
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	24096.2	0.0	24096.2
	% Fixture	36.3	0.0	36.3
<b>Street Side</b>	Lumens	42254.8	0.0	42254.8
	% Fixture	63.7	0.0	63.7
<b>Total</b>	Lumens	66351.0	0.0	66351.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1052.1	1.6
10°-20°	3226.8	4.9
20°-30°	5289.4	8.0
30°-40°	7470.3	11.3
40°-50°	10516.0	15.8
50°-60°	13232.3	19.9
60°-70°	13319.2	20.1
70°-80°	9798.7	14.8
80°-90°	2446.1	3.7
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°	66351.0	100.0
0°-180°	66351.0	100.0

**Coefficient of Utilization**

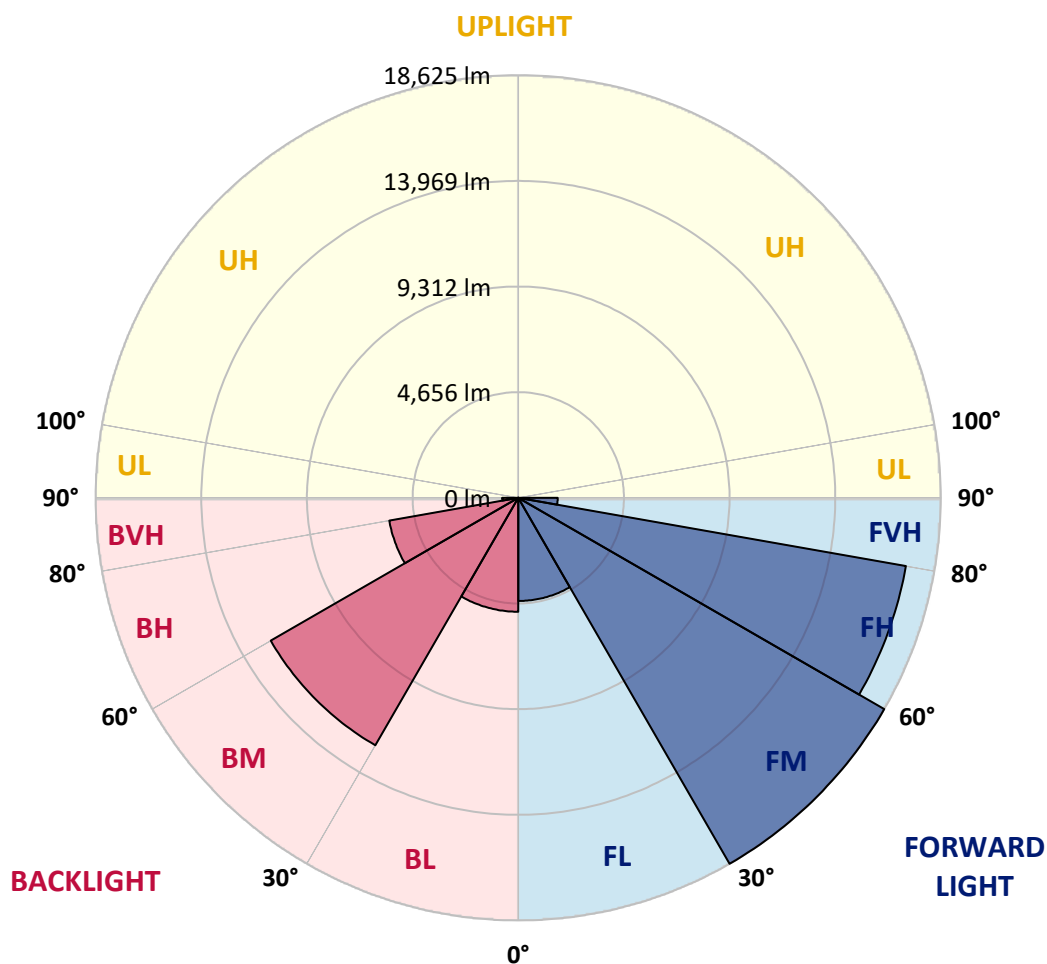


REPORT NUMBER: P591334  
 CATALOG NUMBER: CTN-CA10-760-730-U-T4-SSS-HM-EX90

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4545.8	6.9			
FM (30°-60°)	18624.7	28.1			
FH (60°-80°)	17346.9	26.1			G5
FVH (80°-90°)	1737.4	2.6			G5
BL (0°-30°)	5022.5	7.6	B5		
BM (30°-60°)	12594.0	19.0	B5		
BH (60°-80°)	5771.0	8.7	B5		G5
BVH (80°-90°)	708.7	1.1			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 IV Short





REPORT NUMBER: P591334

CATALOG NUMBER: CTN-CA10-760-730-U-T4-SSS-HM-EX90

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2
2.5°	10684.5	10616.6	10619.8	10720.0	10568.1	10665.1	10642.4	10797.6	10768.5	10823.5	10836.4
5°	10610.1	10555.2	10555.2	10674.8	10571.3	10655.4	10584.3	10720.0	10768.5	10849.3	10865.5
7.5°	10639.2	10581.0	10603.7	10707.1	10590.7	10678.0	10671.5	10791.2	10820.2	10956.0	10975.4
10°	10690.9	10639.2	10645.7	10733.0	10655.4	10817.0	10787.9	10959.3	10956.0	11169.4	11185.6
12.5°	10600.4	10561.6	10561.6	10678.0	10723.3	10894.6	10952.8	11130.6	11150.0	11389.2	11408.6
15°	10458.2	10393.5	10490.5	10665.1	10758.8	11027.1	11127.4	11408.6	11460.3	11686.6	11735.1
17.5°	10160.8	10189.8	10461.4	10338.6	9911.8	10309.5	11411.9	11770.7	11883.8	12152.2	12268.6
20°	9239.4	8880.6	8169.3	8363.3	9242.6	10377.4	11809.5	12229.8	12478.7	12795.5	12992.7
22.5°	6979.7	7206.0	8534.6	8673.7	8712.5	9468.9	12365.5	12792.3	13122.0	13522.9	13784.7
25°	7238.3	7215.7	7671.5	9097.2	9136.0	9569.1	11641.4	13526.1	13823.5	14379.6	14641.4
27.5°	7477.5	7477.5	7451.7	8589.6	9575.6	10002.3	12019.6	12986.2	14744.9	15349.4	15656.5
30°	7875.2	7888.1	7742.6	7739.4	9937.7	10400.0	12750.2	13228.7	15559.6	16704.0	16775.1
32.5°	8664.0	8618.7	8437.7	8159.6	8596.1	10862.3	13464.7	14104.8	14774.0	18226.6	18162.0
35°	9232.9	9197.4	9068.1	8874.1	8673.7	11072.4	14133.9	15022.9	16118.8	18676.0	19917.4
37.5°	9921.5	9863.3	9717.9	9488.3	9359.0	9559.4	14822.5	16060.7	17799.9	19209.4	21899.1
40°	10674.8	10658.6	10435.5	10138.1	9960.3	10109.0	15349.4	17353.8	19885.1	21475.6	24084.5
42.5°	11253.4	11240.5	11056.2	10884.9	10800.9	11101.5	14040.1	19067.2	22270.9	23534.9	26189.1
45°	11773.9	11754.5	11748.1	11689.9	11757.8	12488.4	15475.5	20124.3	24614.7	25306.5	28102.9
47.5°	12168.3	12110.1	11945.3	11961.4	12152.2	13383.9	16969.1	18530.5	26515.6	26868.0	29596.5
50°	13105.9	13047.7	12478.7	12498.1	12866.6	14496.0	18255.7	20376.5	24747.2	28219.3	30740.9
52.5°	13943.2	13461.5	13151.1	13164.0	13668.4	15679.2	19717.0	22287.1	24327.0	29289.4	31665.5
55°	12042.3	11731.9	14751.4	14331.1	14609.1	16969.1	21136.2	23942.3	25481.1	30107.3	32195.7
57.5°	7066.9	7028.2	16235.2	16600.5	16277.2	18362.4	22571.6	25319.4	26493.0	30870.2	32551.3
60°	3750.1	3840.6	10442.0	10034.7	16872.1	19817.2	23961.7	26570.5	27243.0	31264.6	32648.3
62.5°	345.9	307.1	6863.3	7797.6	15123.1	21718.1	25610.4	27844.3	27750.5	31474.7	32476.9
65°	67.9	90.5	6734.0	7703.8	16804.2	24870.1	28303.3	28823.8	28025.3	31222.6	31578.2
67.5°	51.7	77.6	6362.2	7619.8	17835.5	26082.4	31403.6	29169.7	28041.5	30417.6	29599.7
70°	51.7	80.8	5615.4	7121.9	18323.6	26134.1	32137.5	29034.0	27679.4	28594.3	25872.3
72.5°	51.7	80.8	4716.7	6171.5	17492.8	25012.3	30850.8	28280.7	26331.3	24621.2	20179.3
75°	51.7	74.4	3701.6	5014.1	15119.9	23282.8	28642.8	25002.6	22164.2	18016.5	12947.4
77.5°	51.7	71.1	2728.5	3924.6	12617.7	20534.9	24908.9	20551.0	16707.2	9433.4	4765.2
80°	48.5	71.1	1661.7	2767.3	9721.1	16565.0	19574.7	15184.6	8780.3	2372.9	1377.2
82.5°	48.5	67.9	792.0	1771.6	6830.9	11835.4	12772.9	6504.4	1868.6	1095.9	1095.9
85°	42.0	61.4	423.5	963.4	4464.5	7758.8	6161.8	1102.4	730.6	740.3	843.8
87.5°	25.9	32.3	200.4	433.2	2573.3	4147.7	2372.9	404.1	303.9	320.0	478.5
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: P591334

CATALOG NUMBER: CTN-CA10-760-730-U-T4-SSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2	10791.2
2.5°	10846.1	10829.9	10865.5	10978.7	10959.3	11040.1	10975.4	11088.6	11111.2	11078.9	11130.6
5°	10881.7	10904.3	11023.9	11130.6	11072.4	11201.7	11237.3	11395.7	11392.5	11363.4	11428.0
7.5°	10998.1	11059.5	11179.1	11311.6	11340.7	11444.2	11431.3	11631.7	11609.1	11596.1	11660.8
10°	11198.5	11292.2	11405.4	11625.2	11554.1	11728.7	11609.1	11744.8	11731.9	11699.6	11757.8
12.5°	11421.6	11550.9	11686.6	11887.1	11858.0	11854.8	11748.1	11790.1	11754.5	11676.9	11725.4
15°	11757.8	11916.2	12103.7	12233.0	12061.7	11997.0	11828.9	11738.4	11615.5	11434.5	11463.6
17.5°	12281.5	12469.0	12669.4	12692.1	12427.0	12258.9	11851.5	11528.2	11208.2	10965.7	10988.4
20°	12986.2	13157.6	13306.3	13199.6	12840.8	12465.8	11851.5	11340.7	10742.7	10296.5	10264.2
22.5°	13810.6	13862.3	14004.6	13742.7	13125.3	12601.5	11819.2	11059.5	10086.4	9491.6	9420.4
25°	14699.6	14693.2	14631.7	14088.6	13303.1	12527.2	11573.5	10577.8	9336.4	8715.7	8664.0
27.5°	15666.2	15585.4	15165.2	14379.6	13228.7	12258.9	11108.0	9766.3	8654.3	8120.8	8104.7
30°	16755.7	16542.3	15692.1	14408.7	12950.7	11728.7	10351.5	8948.4	8046.5	7571.3	7526.0
32.5°	18026.2	17609.2	16112.4	14314.9	12449.6	10920.5	9430.1	8305.1	7548.6	7028.2	6927.9
35°	19684.6	18954.0	16500.3	14007.8	11706.0	9960.3	8579.9	7732.9	7086.3	6552.9	6446.2
37.5°	21769.8	20696.5	17085.5	13558.4	10855.8	9103.6	7991.5	7354.7	6766.3	6135.9	6006.6
40°	24084.5	22746.1	17770.8	13122.0	10047.6	8466.8	7606.8	7176.9	6559.4	5867.6	5744.7
42.5°	26276.4	24808.7	18798.8	12556.3	9278.2	7956.0	7467.8	7125.1	6462.4	5751.2	5618.6
45°	28300.1	26622.3	19859.2	11987.3	8495.9	7538.9	7351.4	6973.2	6313.7	5615.4	5463.5
47.5°	29952.1	28051.2	20796.7	11398.9	7807.3	7212.4	7128.4	6682.2	6051.8	5395.6	5253.3
50°	31151.5	29147.1	21346.3	10852.6	7144.5	6885.9	6737.2	6268.4	5683.3	5137.0	5033.5
52.5°	32001.7	30094.3	21621.1	10791.2	6543.2	6446.2	6281.4	5841.7	5372.9	4949.4	4826.6
55°	32658.0	30611.6	21385.1	10432.3	5974.3	5893.4	5722.1	5450.5	5169.3	4774.9	4694.1
57.5°	33013.6	30847.6	20845.2	8799.7	5369.7	5230.7	5208.1	5149.9	4904.2	4513.0	4451.6
60°	33091.1	30472.6	19623.2	6691.9	4736.1	4645.6	4816.9	4742.5	4522.7	4231.8	4144.5
62.5°	32787.3	29670.8	17305.3	5004.4	4209.1	4357.8	4532.4	4419.3	4163.9	3879.4	3824.4
65°	31691.3	27831.3	13946.4	3895.5	3966.7	4222.1	4377.2	4241.5	3931.1	3607.8	3572.3
67.5°	29548.0	24967.1	9181.2	3504.4	3853.5	4108.9	4283.5	4066.9	3753.3	3404.2	3362.1
70°	25529.6	19736.4	4374.0	3268.4	3636.9	3889.1	4028.1	3782.4	3478.5	3135.8	3090.6
72.5°	19717.0	13413.0	2414.9	3009.8	3368.6	3601.4	3701.6	3410.6	3129.4	2987.1	2974.2
75°	11867.7	5764.1	2182.2	2754.4	3022.7	3239.3	3417.1	3197.3	2951.6	2673.5	2602.4
77.5°	3918.2	1674.6	2052.8	2450.5	2754.4	3016.2	3100.3	2886.9	2579.8	2343.8	2324.4
80°	1373.9	1403.0	1913.8	2039.9	2398.8	2618.6	2712.3	2466.6	2321.2	2075.5	2027.0
82.5°	1118.6	1257.6	1545.3	1538.8	1894.4	2153.1	2295.3	2233.9	2043.1	1845.9	1826.5
85°	914.9	1150.9	979.5	1076.5	1357.8	1639.0	1910.6	1917.1	1771.6	1571.2	1438.6
87.5°	543.1	588.4	488.2	549.6	717.7	921.4	1066.8	1018.3	834.1	704.8	688.6
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)