

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: P522173

Luminaire Tested: **CTN-CA10-760-740-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522173  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 5/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-760-740-U-T5R-HSS-HM-EX90  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 90204 lumens  
Efficiency: N/A  
Efficacy: 118.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U2 - G5

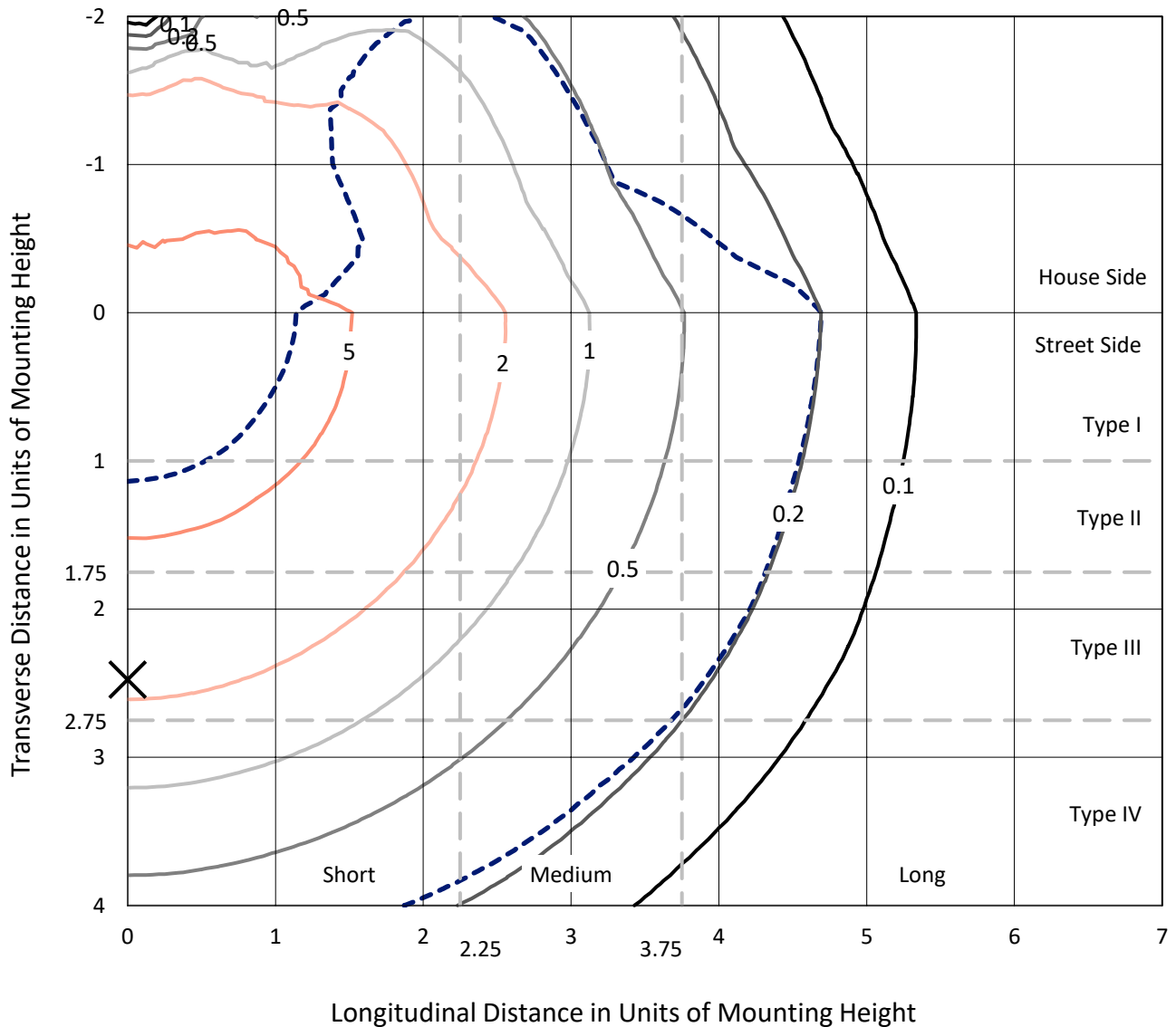
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P522173  
 CATALOG NUMBER: CTN-CA10-760-740-U-T5R-HSS-HM-EX90

### Iso-Footcandle Lines of Horizontal Illumination

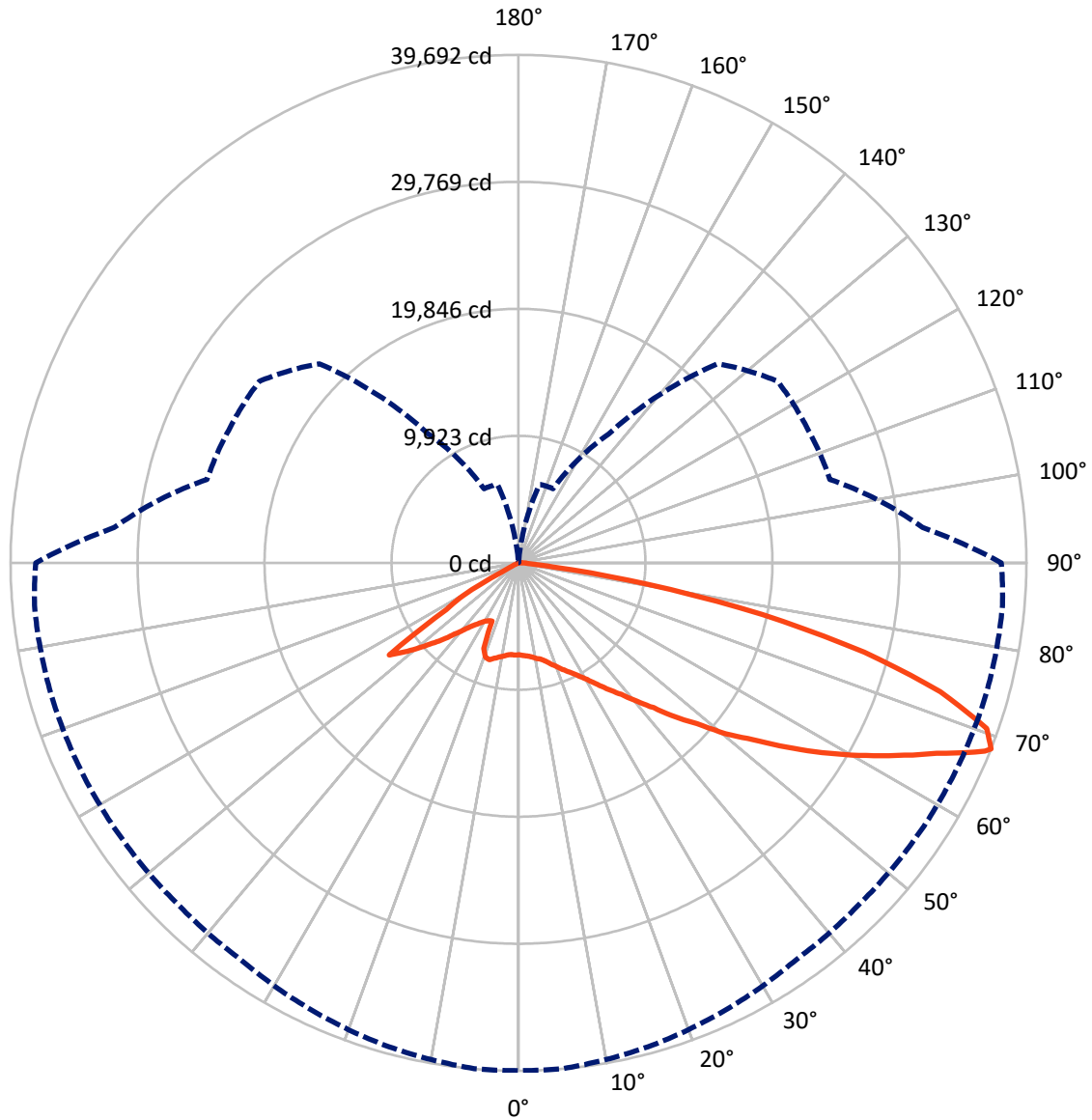
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P522173  
CATALOG NUMBER: CTN-CA10-760-740-U-T5R-HSS-HM-EX90

### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P522173  
 CATALOG NUMBER: CTN-CA10-760-740-U-T5R-HSS-HM-EX90

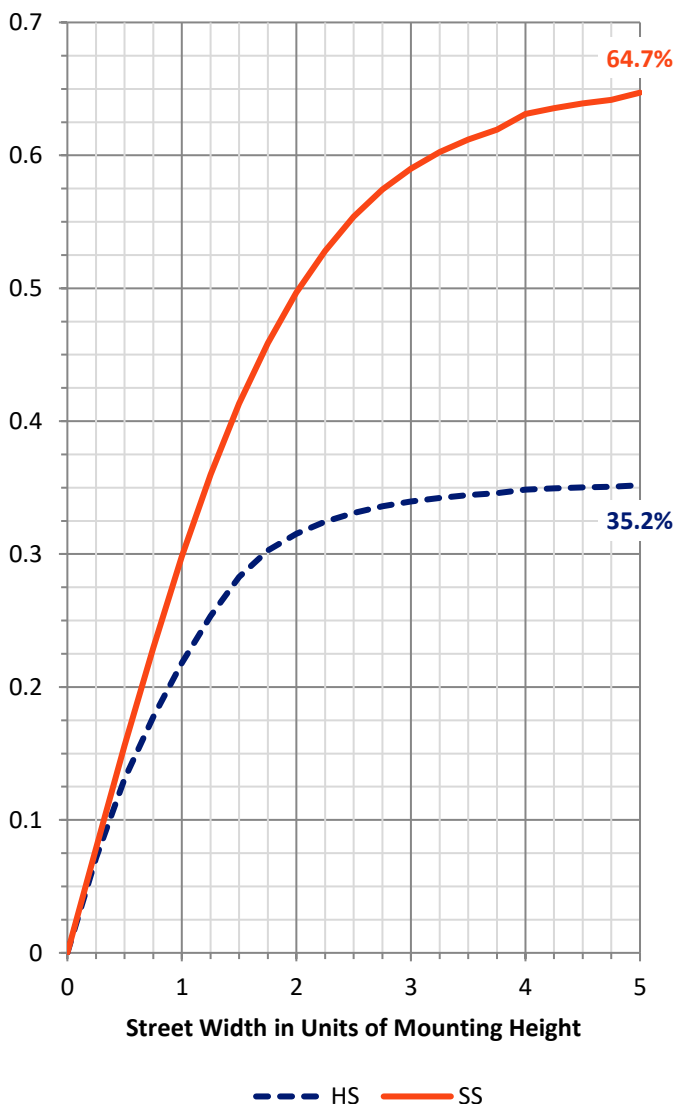
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	31745.7	5.5	31751.1
	% Fixture	35.2	0.0	35.2
<b>Street Side</b>	Lumens	58429.1	23.8	58452.9
	% Fixture	64.8	0.0	64.8
<b>Total</b>	Lumens	90174.8	29.3	90204.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	694.5	0.8
10°-20°	2225.1	2.5
20°-30°	3972.2	4.4
30°-40°	6461.8	7.2
40°-50°	11035.0	12.2
50°-60°	18412.4	20.4
60°-70°	25615.3	28.4
70°-80°	19855.8	22.0
80°-90°	1902.7	2.1
90°-100°	23.0	0.0
100°-110°	2.0	0.0
110°-120°	1.0	0.0
120°-130°	0.7	0.0
130°-140°	0.7	0.0
140°-150°	0.8	0.0
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-90°	90174.8	100.0
0°-180°	90204.0	100.0

**Coefficient of Utilization**

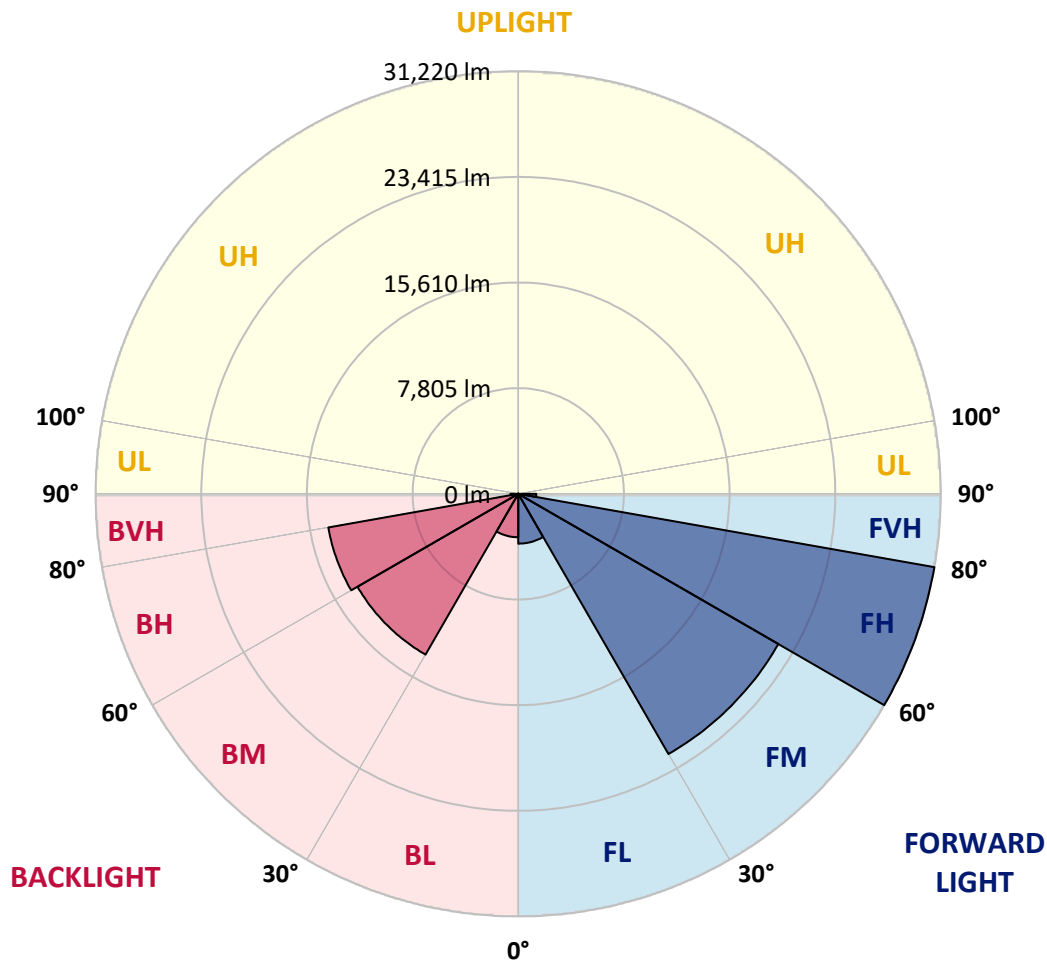


REPORT NUMBER: P522173  
 CATALOG NUMBER: CTN-CA10-760-740-U-T5R-HSS-HM-EX90

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3681.6	4.1			
FM (30°-60°)	22196.5	24.6			
FH (60°-80°)	31219.9	34.6			G5
FVH (80°-90°)	1331.1	1.5			G5
BL (0°-30°)	3210.1	3.6	B4/5000		
BM (30°-60°)	13712.7	15.2	B5		
BH (60°-80°)	14251.3	15.8	B5		G5
BVH (80°-90°)	571.6	0.6			G4/750
UL (90°-100°)	23.0	0.0		U2/50	
UH (100°-180°)	6.2	0.0		U1/10	

**BUG Rating: B5-U2-G5**  
 Type IV Short





REPORT NUMBER: P522173

CATALOG NUMBER: CTN-CA10-760-740-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7
2.5°	7260.2	7250.0	7243.2	7287.3	7161.7	7212.7	7178.7	7222.8	7212.7	7233.0	7236.4
5°	7311.1	7294.1	7270.4	7317.9	7243.2	7277.2	7239.8	7260.2	7195.7	7250.0	7256.8
7.5°	7426.5	7379.0	7375.6	7389.2	7338.2	7362.0	7297.5	7321.3	7287.3	7267.0	7287.3
10°	7599.6	7558.9	7514.7	7541.9	7457.0	7487.6	7419.7	7440.1	7423.1	7379.0	7419.7
12.5°	7718.4	7732.0	7701.4	7721.8	7647.1	7620.0	7596.2	7592.8	7582.6	7518.1	7508.0
15°	7983.1	7989.9	7935.6	7949.2	7932.2	7918.7	7884.7	7857.6	7803.3	7762.5	7735.4
17.5°	8329.4	8292.0	8241.1	8254.7	8302.2	8241.1	8220.7	8169.8	8091.8	8023.9	8010.3
20°	8692.5	8668.8	8621.3	8648.4	8645.0	8604.3	8614.5	8529.6	8417.6	8359.9	8315.8
22.5°	9096.4	9062.5	9028.6	9079.5	9038.7	9011.6	9001.4	8943.7	8804.5	8740.0	8729.9
25°	9500.3	9483.4	9507.1	9490.2	9432.5	9412.1	9425.7	9405.3	9242.4	9164.3	9116.8
27.5°	10006.1	9965.4	10002.7	9982.3	9921.2	9924.6	9928.0	9931.4	9748.1	9646.3	9578.4
30°	10583.1	10569.5	10617.0	10552.5	10494.8	10532.2	10562.7	10494.8	10335.3	10186.0	10162.2
32.5°	11333.2	11248.4	11302.7	11221.2	11133.0	11221.2	11275.5	11139.7	11010.8	10820.7	10854.6
35°	12164.8	12137.6	12137.6	12032.4	11984.9	12124.1	12178.4	12046.0	11845.7	11679.4	11638.7
37.5°	13047.3	13074.4	13159.3	13115.2	13071.0	13155.9	13278.1	13101.6	12843.6	12667.1	12619.6
40°	14218.3	14286.2	14343.9	14286.2	14235.2	14289.6	14428.7	14197.9	14018.0	13923.0	13821.2
42.5°	15477.5	15592.9	15555.6	15562.4	15606.5	15684.6	15823.7	15613.3	15406.2	15402.9	15253.5
45°	17181.4	17181.4	17103.3	17178.0	17171.2	17364.7	17425.8	17310.4	17137.3	17086.4	16957.4
47.5°	18773.3	18939.6	18909.1	19017.7	18932.8	19095.7	19302.8	19204.3	19004.1	18824.2	18797.0
50°	20993.1	20952.4	20911.6	21074.5	21061.0	21173.0	21363.1	21302.0	21023.6	20820.0	20782.6
52.5°	22944.7	23158.6	23107.7	23352.1	23216.3	23375.8	23603.2	23593.0	23253.6	23053.4	22995.7
55°	25408.9	25551.5	25541.3	25792.5	25605.8	25816.2	26006.3	26026.7	25656.7	25371.6	25459.8
57.5°	27974.9	28093.7	28025.9	28232.9	28049.6	28338.1	28453.5	28378.9	28161.6	27801.8	27934.2
60°	30544.3	30646.2	30724.2	30741.2	30636.0	30805.7	30914.3	30978.8	30636.0	30225.3	30384.8
62.5°	33154.5	33269.9	33202.0	33229.2	32937.3	33168.1	33303.8	33320.8	32927.1	32563.9	32675.9
65°	35903.8	36063.3	35818.9	35656.0	35296.2	35292.8	35472.7	35503.3	35224.9	34967.0	34922.9
67.5°	39308.2	39379.4	38856.7	38310.3	37702.7	37570.3	37695.9	37767.2	37926.7	37919.9	37719.7
68°	39691.7	39678.1	39148.6	38496.9	37845.3	37692.5	37753.6	37845.3	37950.5	37970.8	37729.9
70°	38819.4	38653.1	38351.0	37529.6	36884.7	36484.2	36270.4	36440.1	36154.9	36158.3	35706.9
72.5°	34481.6	34461.2	33904.6	33497.3	32923.7	32258.4	31952.9	31949.5	31976.7	31779.8	31314.8
75°	27930.8	27958.0	27309.7	27028.0	26851.5	26725.9	26790.4	26990.6	27011.0	27007.6	26844.7
77.5°	19479.3	19591.3	19418.2	18960.0	19452.1	19873.0	20684.2	21098.3	20965.9	21363.1	21614.2
80°	10209.7	10433.8	10440.5	10763.0	11160.1	11543.7	12242.9	12870.8	12409.2	12205.5	11995.1
82.5°	2684.8	2766.3	2888.5	2701.8	2759.5	2817.2	3360.3	3309.3	3054.8	3190.5	3394.2
85°	767.1	790.8	756.9	685.6	627.9	577.0	590.6	498.9	434.5	431.1	417.5
87.5°	539.7	580.4	512.5	441.2	397.1	370.0	356.4	302.1	244.4	213.8	169.7
90°	251.2	247.8	213.8	166.3	146.0	139.2	139.2	108.6	61.1	37.3	33.9
92.5°	105.2	108.6	88.2	71.3	61.1	47.5	37.3	23.8	13.6	6.8	3.4
95°	37.3	40.7	33.9	27.2	23.8	20.4	17.0	13.6	6.8	3.4	3.4
97.5°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	6.8	6.8	3.4	3.4
100°	0.0	0.0	0.0	3.4	6.8	6.8	6.8	6.8	3.4	3.4	3.4
102.5°	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
105°	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4



REPORT NUMBER: P522173  
 CATALOG NUMBER: CTN-CA10-760-740-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4
145°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4
150°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4
160°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4
165°	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4
167.5°	0.0	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4
170°	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
172.5°	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
175°	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
177.5°	0.0	0.0	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





REPORT NUMBER: P522173

CATALOG NUMBER: CTN-CA10-760-740-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7	7178.7
2.5°	7229.6	7212.7	7205.9	7121.0	7144.8	7093.9	7212.7	7178.7	7171.9	7219.4
5°	7246.6	7168.5	7216.1	7161.7	7175.3	7100.7	7195.7	7155.0	7158.4	7182.1
7.5°	7256.8	7212.7	7260.2	7165.1	7202.5	7175.3	7243.2	7202.5	7243.2	7263.6
10°	7358.6	7338.2	7304.3	7277.2	7304.3	7239.8	7324.7	7317.9	7341.6	7402.7
12.5°	7497.8	7474.0	7440.1	7392.6	7412.9	7389.2	7453.6	7460.4	7504.6	7535.1
15°	7704.8	7674.3	7657.3	7609.8	7616.6	7599.6	7636.9	7643.7	7732.0	7721.8
17.5°	7996.7	7962.8	7976.4	7932.2	7915.3	7874.5	7806.6	7782.9	7888.1	7918.7
20°	8315.8	8278.4	8295.4	8258.1	7942.4	7300.9	7732.0	8027.3	7803.3	7786.3
22.5°	8679.0	8638.2	8651.8	8594.1	8203.8	7002.2	6092.6	6017.9	6873.2	7219.4
25°	9079.5	9025.2	9018.4	8943.7	7660.7	6340.4	6238.5	6106.2	5481.6	4986.1
27.5°	9575.0	9493.6	9452.8	8326.0	7606.4	6588.1	6435.4	5963.6	5057.3	5087.9
30°	10111.3	9992.5	9228.8	8485.5	8003.5	6880.0	6676.4	5227.1	5233.8	5220.3
32.5°	10722.3	10457.5	9042.1	8974.2	8478.7	7192.3	5542.7	5481.6	5488.4	5508.8
35°	11523.3	9707.4	9670.1	9673.5	9059.1	6958.1	5872.0	5814.3	5821.0	5834.6
37.5°	11693.0	10464.3	10471.1	10393.0	9676.8	6357.3	6272.5	6269.1	6255.5	6241.9
40°	11828.8	11418.1	11319.6	11194.1	8970.9	6846.1	6818.9	6798.6	6808.8	6835.9
42.5°	12891.1	12582.3	12487.2	12337.9	9201.7	7586.0	7497.8	7474.0	7501.2	7487.6
45°	14303.1	14045.2	13858.5	11407.9	10165.6	8390.4	8319.2	8288.6	8298.8	8383.7
47.5°	15796.6	15643.8	15073.6	12324.3	11289.1	9340.8	9269.5	9222.0	9239.0	9218.6
50°	17422.4	17283.2	13953.5	13705.8	12531.4	10365.9	10260.6	10243.7	10250.5	10247.1
52.5°	19187.4	16278.6	15463.9	15206.0	13841.5	11438.4	11401.1	11309.5	11329.8	11309.5
55°	21257.8	17147.5	17127.1	16825.0	15314.6	12684.1	12640.0	12511.0	11699.8	12409.2
57.5°	23223.1	18807.2	18807.2	18515.3	16821.6	13923.0	13851.7	13756.7	8315.8	6706.9
60°	25375.0	20470.4	20422.9	20181.9	18274.3	15104.2	12276.8	12249.6	5023.4	5040.4
62.5°	27235.0	21953.6	22038.5	21814.5	19672.7	11309.5	5688.7	5573.3	495.6	763.7
65°	29319.0	23593.0	23694.9	23464.1	21186.6	11995.1	6174.0	6116.3	112.0	101.8
67.5°	31681.4	25229.0	24998.2	24743.7	22072.4	12351.5	6415.0	6364.1	30.5	20.4
68°	31701.8	25195.1	24896.4	24723.3	21987.6	12283.6	6394.7	6347.1	30.5	20.4
70°	30072.6	23925.7	23627.0	23671.1	20935.4	11747.3	6129.9	6041.7	30.5	20.4
72.5°	26383.1	21291.8	20955.8	20718.2	18566.2	10443.9	5495.2	5328.9	30.5	20.4
75°	22574.8	18043.5	17486.9	16964.2	14937.8	8546.6	4507.5	4320.8	30.5	20.4
77.5°	17792.4	13753.3	12962.4	12619.6	11224.6	6313.2	3350.1	3146.4	30.5	17.0
80°	9833.0	7891.5	7219.4	7009.0	6418.4	3709.9	1921.1	1798.9	27.2	17.0
82.5°	2542.3	1907.5	1663.2	1605.5	1507.0	879.1	468.4	444.6	23.8	13.6
85°	363.2	268.1	295.3	349.6	336.0	227.4	162.9	139.2	20.4	10.2
87.5°	190.1	159.5	186.7	210.4	213.8	132.4	67.9	37.3	10.2	0.0
90°	30.5	30.5	33.9	37.3	37.3	17.0	13.6	0.0	0.0	0.0
92.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
100°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
105°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	3.4	6.8	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P522173  
 CATALOG NUMBER: CTN-CA10-760-740-U-T5R-HSS-HM-EX90

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0
115°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	3.4	3.4	3.4	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)