

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: P591146

Luminaire Tested: **CTN-CA6-230-722-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591146  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-5)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA6-230-722-U-T2-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (6) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17198 lumens  
Efficiency: N/A  
Efficacy: 75.5 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

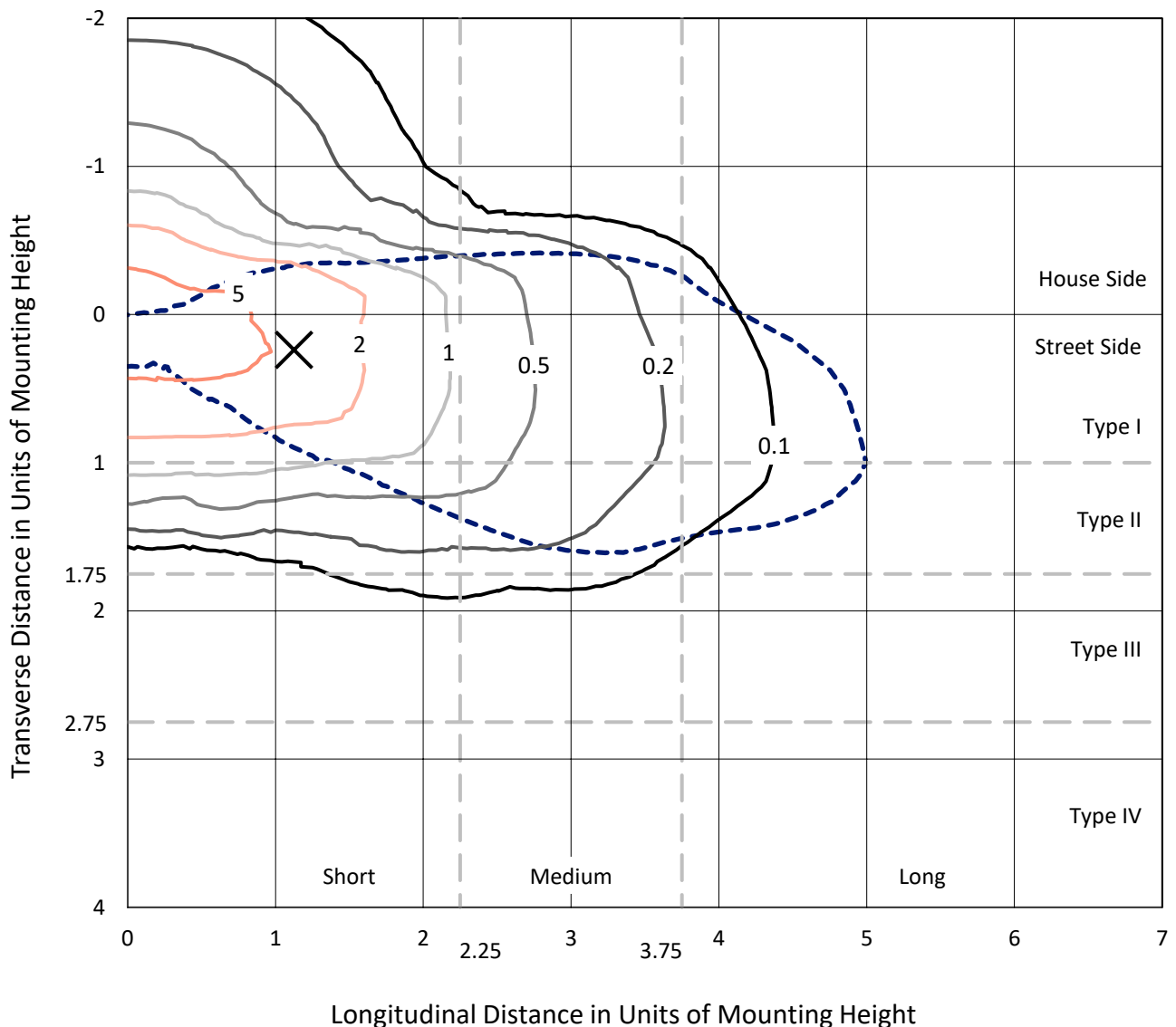
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P591146  
 CATALOG NUMBER: CTN-CA6-230-722-U-T2-SSS-HM-EX120

### Iso-Footcandle Lines of Horizontal Illumination

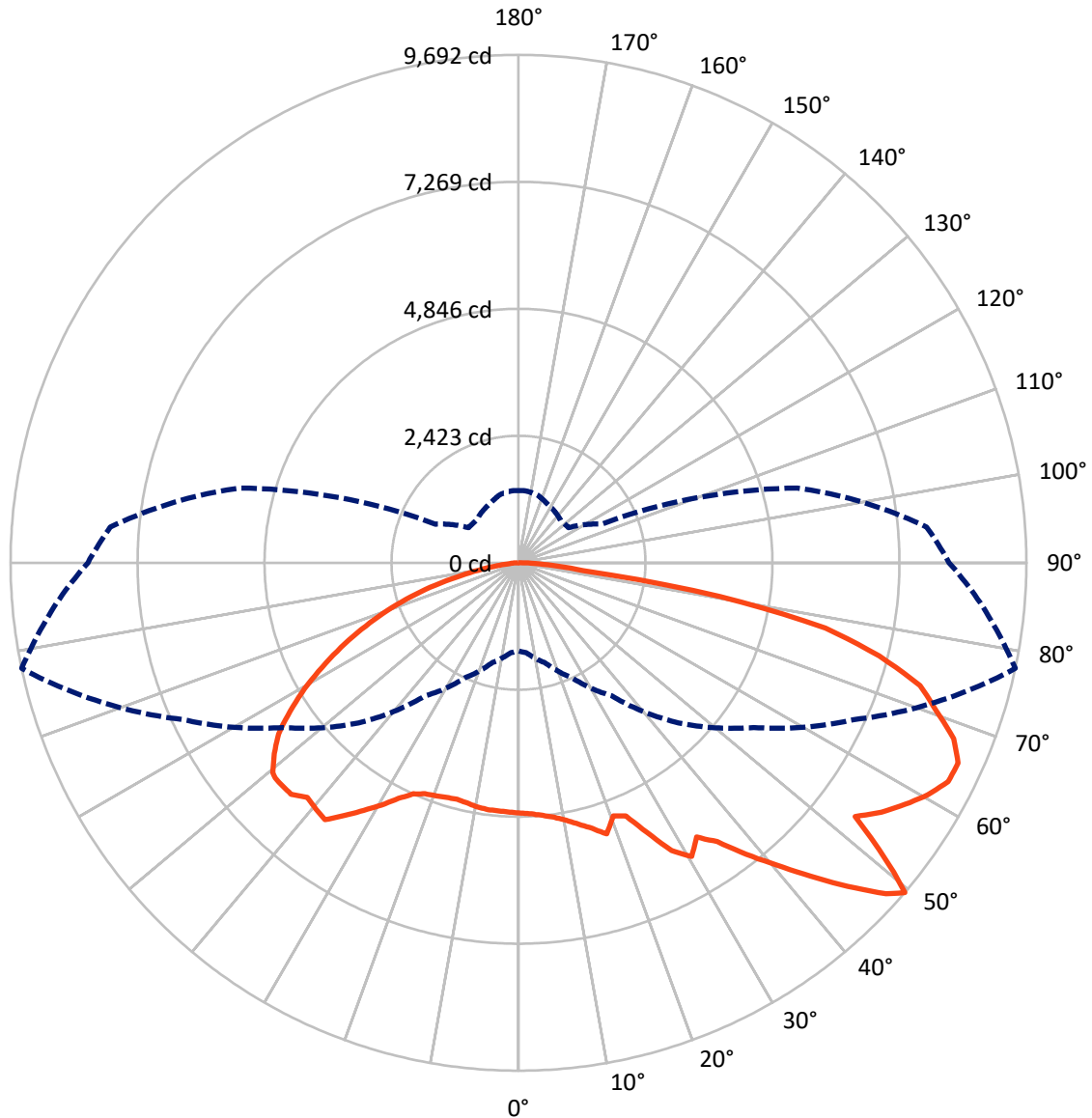
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 fc  
 Type II - Short - N/A

REPORT NUMBER: P591146  
CATALOG NUMBER: CTN-CA6-230-722-U-T2-SSS-HM-EX120

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P591146  
 CATALOG NUMBER: CTN-CA6-230-722-U-T2-SSS-HM-EX120

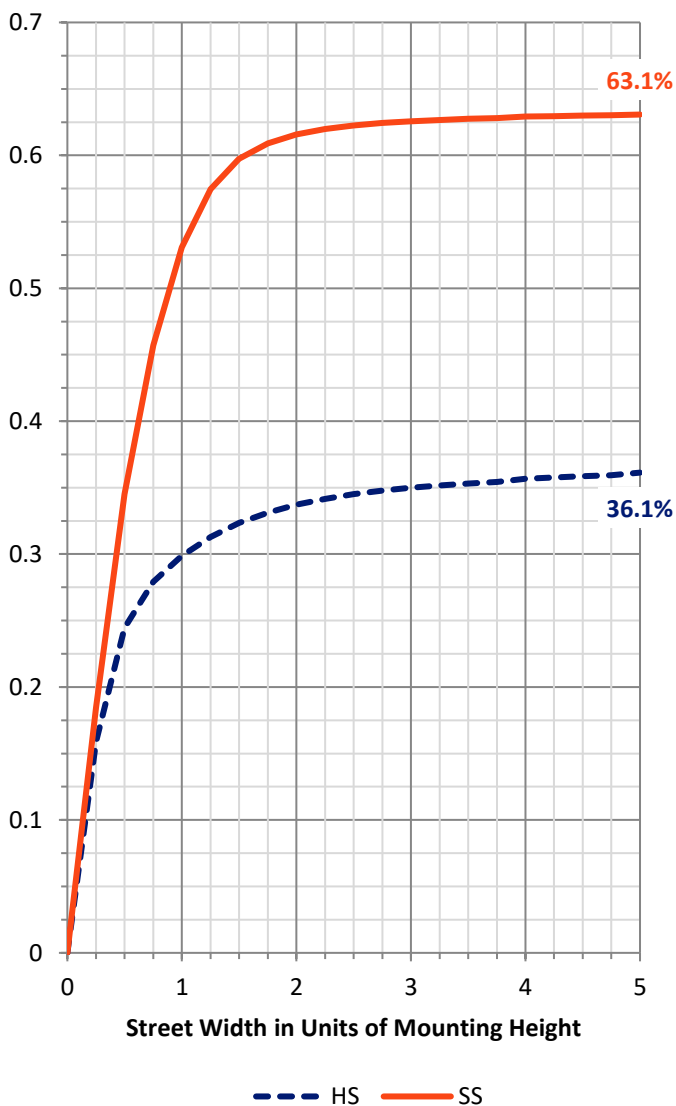
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6367.8	0.0	6367.8
	% Fixture	37.0	0.0	37.0
<b>Street Side</b>	Lumens	10830.2	0.0	10830.2
	% Fixture	63.0	0.0	63.0
<b>Total</b>	Lumens	17198.0	0.0	17198.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	462.9	2.7
10°-20°	1362.3	7.9
20°-30°	1944.7	11.3
30°-40°	2503.5	14.6
40°-50°	2936.6	17.1
50°-60°	3029.5	17.6
60°-70°	2750.7	16.0
70°-80°	1826.8	10.6
80°-90°	380.9	2.2
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°	17198.0	100.0
0°-180°	17198.0	100.0

**Coefficient of Utilization**

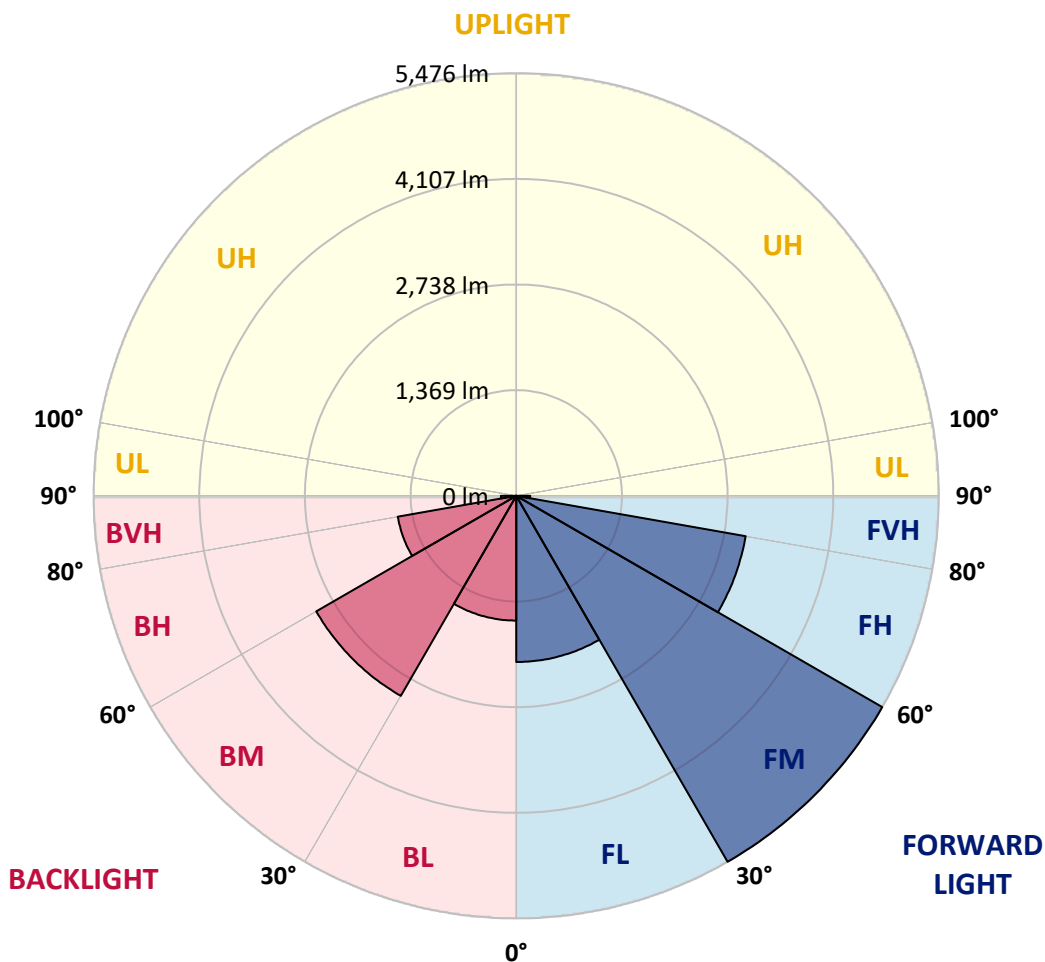


REPORT NUMBER: P591146  
 CATALOG NUMBER: CTN-CA6-230-722-U-T2-SSS-HM-EX120

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2153.4	12.5			
FM (30°-60°)	5476.3	31.8			
FH (60°-80°)	3018.9	17.6			G2/5000
FVH (80°-90°)	181.5	1.1			G2/225
BL (0°-30°)	1616.5	9.4	B3/2500		
BM (30°-60°)	2993.2	17.4	B3/5000		
BH (60°-80°)	1558.7	9.1	B3/2500		G3/2500
BVH (80°-90°)	199.4	1.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type II Short





REPORT NUMBER: P591146

CATALOG NUMBER: CTN-CA6-230-722-U-T2-SSS-HM-EX120

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7
2.5°	4971.0	4932.8	4944.9	4965.8	4871.2	4892.0	4851.2	4867.7	4817.4	4798.3	4807.0
5°	5322.4	5281.7	5296.4	5303.4	5166.2	5110.7	4983.1	4956.2	4877.2	4842.5	4839.1
7.5°	5496.0	5451.8	5455.2	5459.6	5350.2	5358.0	5242.6	5104.6	4958.0	4905.0	4881.6
10°	5781.5	5719.9	5699.1	5690.4	5542.9	5481.3	5380.6	5305.1	5076.0	4996.1	4936.3
12.5°	5957.7	5912.6	5912.6	5903.9	5747.7	5700.0	5520.3	5440.5	5214.8	5120.2	5017.0
15°	5989.8	5959.4	5998.5	5990.7	5888.3	5832.7	5752.9	5586.3	5355.4	5257.4	5135.9
17.5°	5627.1	5546.3	5391.9	5415.3	5416.2	5529.0	5474.3	5588.9	5521.2	5441.3	5310.3
20°	4621.2	4649.0	4896.3	4836.5	4813.9	5053.4	5298.1	5305.1	5170.6	5157.6	5334.6
22.5°	4025.9	3927.0	4202.1	4602.1	4627.3	4947.5	5233.1	5576.7	5361.5	5246.1	5110.7
25°	3428.8	3465.3	3880.1	4398.2	4764.4	4835.6	5163.6	5712.1	5804.1	5697.4	5414.4
27.5°	3325.6	3323.8	3504.3	4078.8	4830.4	5097.7	5206.2	5635.7	6277.1	6217.2	5859.6
30°	3303.0	3289.1	3383.7	3861.0	4524.0	5333.7	5540.3	5693.9	6239.8	6506.2	6357.8
32.5°	3204.1	3191.9	3292.6	3542.5	4278.4	5506.4	5858.8	6087.9	6113.0	6238.9	6883.7
35°	3048.7	3058.3	3198.0	3469.6	3923.5	5091.6	6185.1	6531.3	6622.5	6535.7	6625.1
37.5°	2889.9	2900.3	3037.4	3345.5	3861.9	4918.0	6396.0	6960.1	7149.2	7056.4	6643.3
40°	2692.9	2709.4	2868.2	3214.5	3790.7	4526.6	5962.9	7446.9	7703.8	7582.3	7122.3
42.5°	2469.0	2475.9	2656.5	3014.9	3700.5	4550.1	5516.0	7896.5	8241.9	8175.0	7594.4
45°	2274.6	2274.6	2438.6	2758.0	3494.8	4505.8	5326.8	7561.5	8902.3	8807.7	8067.4
47.5°	2009.9	2033.3	2226.0	2542.8	3252.7	4403.4	5435.3	6809.1	9517.6	9438.6	8542.1
49°	1683.6	1723.5	1977.8	2424.7	3097.3	4318.4	5478.7	7074.6	9093.2	9692.0	8850.2
50°	1550.0	1570.8	1573.4	2340.6	2981.9	4241.1	5498.6	7278.6	8377.2	9283.3	9066.3
52.5°	1341.7	1210.6	1076.1	2107.1	2750.2	3955.6	5510.8	7832.2	8205.4	8043.1	8897.9
55°	566.7	742.0	943.3	1723.5	2500.2	3602.4	5470.8	8440.6	8582.9	8404.1	7629.2
57.5°	428.7	456.5	506.8	1337.3	1791.2	3199.7	5336.3	8825.9	8901.4	8698.3	7939.0
60°	62.5	64.2	90.3	542.4	1025.8	2284.1	4852.1	8814.6	9138.3	8982.1	8206.3
62.5°	26.0	26.9	34.7	444.3	790.6	1758.2	4429.4	8667.1	9368.3	9200.8	8457.1
65°	4.3	5.2	14.8	393.1	653.5	1642.8	3966.0	8696.6	9286.7	9217.3	8554.3
67.5°	3.5	4.3	13.9	353.2	538.9	1504.0	3508.7	8227.1	8989.1	8958.7	8294.8
70°	3.5	4.3	14.8	319.4	466.0	1325.2	2943.7	7577.1	8443.2	8455.3	7859.1
72.5°	4.3	4.3	14.8	285.5	405.3	1132.5	2329.3	6709.3	7947.7	8014.5	7239.5
75°	4.3	4.3	13.9	248.2	348.0	944.2	1677.5	4933.7	7127.5	7107.6	6349.1
77.5°	4.3	4.3	13.9	197.0	289.0	776.7	1092.6	2778.8	5902.2	5986.3	5308.6
80°	4.3	4.3	13.9	144.1	226.5	582.3	662.2	1422.4	3151.1	3900.9	3651.9
82.5°	4.3	4.3	13.9	97.2	155.3	335.9	381.8	720.3	1131.7	1240.1	1451.0
85°	3.5	3.5	10.4	58.1	79.8	118.9	184.0	383.6	618.8	646.5	630.9
87.5°	1.7	1.7	5.2	20.8	34.7	43.4	82.4	154.5	227.4	232.6	202.2
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: P591146

CATALOG NUMBER: CTN-CA6-230-722-U-T2-SSS-HM-EX120

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7	4775.7
2.5°	4807.0	4779.2	4754.0	4758.4	4704.5	4688.9	4629.0	4660.3	4629.9	4603.0	4628.2
5°	4814.8	4780.9	4734.9	4690.7	4567.4	4510.2	4438.1	4456.3	4415.6	4383.4	4411.2
7.5°	4837.3	4795.7	4724.5	4598.7	4452.0	4360.9	4279.3	4359.1	4349.6	4325.3	4353.9
10°	4847.7	4812.2	4689.8	4542.3	4337.5	4280.2	4206.4	4205.5	4208.1	4212.5	4241.1
12.5°	4875.5	4821.7	4628.2	4456.3	4266.3	4150.0	4096.2	4139.6	4061.5	4015.5	4035.4
15°	4941.5	4843.4	4586.5	4335.7	4156.1	4059.7	3887.9	3902.7	3886.2	3841.0	3861.0
17.5°	5071.6	4904.1	4584.8	4259.3	4015.5	3858.4	3708.3	3637.1	3614.5	3618.0	3635.4
20°	5231.3	5011.8	4588.3	4161.3	3868.8	3686.6	3454.9	3405.4	3330.8	3332.5	3336.8
22.5°	5129.8	5135.9	4590.0	4049.3	3685.7	3457.5	3211.9	3114.7	3057.4	3042.6	3064.3
25°	5404.9	5377.1	4616.9	3989.4	3493.0	3186.7	2929.8	2805.7	2719.8	2712.9	2737.2
27.5°	5771.1	5720.8	4755.7	3860.1	3289.1	2862.1	2583.6	2489.8	2416.1	2390.0	2407.4
30°	6216.3	6157.3	4947.5	3759.5	3014.0	2513.3	2274.6	2210.4	2137.5	2089.8	2094.1
32.5°	6681.5	6555.6	5144.5	3674.4	2732.0	2207.8	2003.8	1946.6	1860.6	1799.0	1813.8
35°	7150.1	6971.3	5364.1	3524.3	2387.4	1938.7	1773.9	1696.6	1626.3	1570.8	1561.2
37.5°	6779.5	7457.3	5576.7	3384.6	2117.5	1733.9	1547.4	1492.7	1451.0	1407.6	1406.8
40°	6809.9	6965.3	5702.6	3137.2	1816.4	1523.9	1336.5	1355.6	1372.9	1339.9	1339.9
42.5°	7111.1	6889.8	5652.2	2809.2	1592.5	1313.9	1228.0	1305.2	1359.9	1336.5	1335.6
45°	7535.4	7248.2	5738.1	2439.5	1374.7	1184.6	1197.6	1292.2	1363.4	1359.0	1357.3
47.5°	7985.8	7656.1	5573.3	2000.4	1224.5	1144.7	1197.6	1273.1	1358.2	1378.1	1373.8
49°	8217.6	7817.5	5507.3	1744.4	1164.6	1139.5	1199.4	1257.5	1348.6	1379.0	1374.7
50°	8359.0	7904.3	5422.2	1598.6	1132.5	1140.3	1202.8	1248.0	1339.9	1373.8	1371.2
52.5°	8677.5	8036.2	5000.5	1345.1	1080.5	1142.9	1225.4	1238.4	1307.8	1344.3	1363.4
55°	8352.9	8337.3	4462.4	1228.9	1052.7	1136.9	1234.9	1247.1	1280.9	1300.9	1315.6
57.5°	8302.6	8468.4	3784.6	1166.4	1028.4	1128.2	1223.7	1246.2	1266.2	1262.7	1256.6
60°	8462.3	8582.9	3086.0	1104.8	1000.6	1114.3	1186.3	1219.3	1225.4	1216.7	1202.8
62.5°	8487.4	8614.2	2371.8	1042.3	970.2	1080.5	1131.7	1164.6	1164.6	1142.9	1137.7
65°	8370.3	8418.9	1747.8	970.2	933.8	1041.4	1067.4	1091.7	1103.0	1074.4	1076.1
67.5°	8034.4	7753.3	1326.9	884.3	889.5	987.6	1005.8	1022.3	1024.9	1008.4	1006.7
70°	7359.3	7008.7	948.5	754.2	808.8	902.6	930.3	955.5	946.8	918.2	913.8
72.5°	6341.3	6029.7	644.8	604.0	711.6	821.0	838.3	839.2	821.8	842.7	857.4
75°	5455.2	4709.8	480.8	481.6	570.2	708.2	762.0	766.3	774.1	888.7	912.1
77.5°	4334.8	3068.7	409.6	380.1	437.4	589.3	674.3	705.6	936.4	1015.4	1005.0
80°	2662.5	1842.4	317.6	301.1	355.8	453.0	579.7	721.2	955.5	898.2	867.8
82.5°	1247.1	840.9	229.1	230.8	264.7	330.6	458.2	839.2	825.3	681.3	672.6
85°	482.5	290.7	138.9	157.1	177.9	223.9	351.5	827.9	641.3	577.1	534.6
87.5°	124.1	56.4	60.7	64.2	79.0	118.0	191.8	433.9	337.6	295.9	290.7
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)