

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: P591152

Luminaire Tested: **CTN-CA6-230-722-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591152  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-11)  
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-T4-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: 15238 lumens  
Efficiency: N/A  
Efficacy: 66.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G3

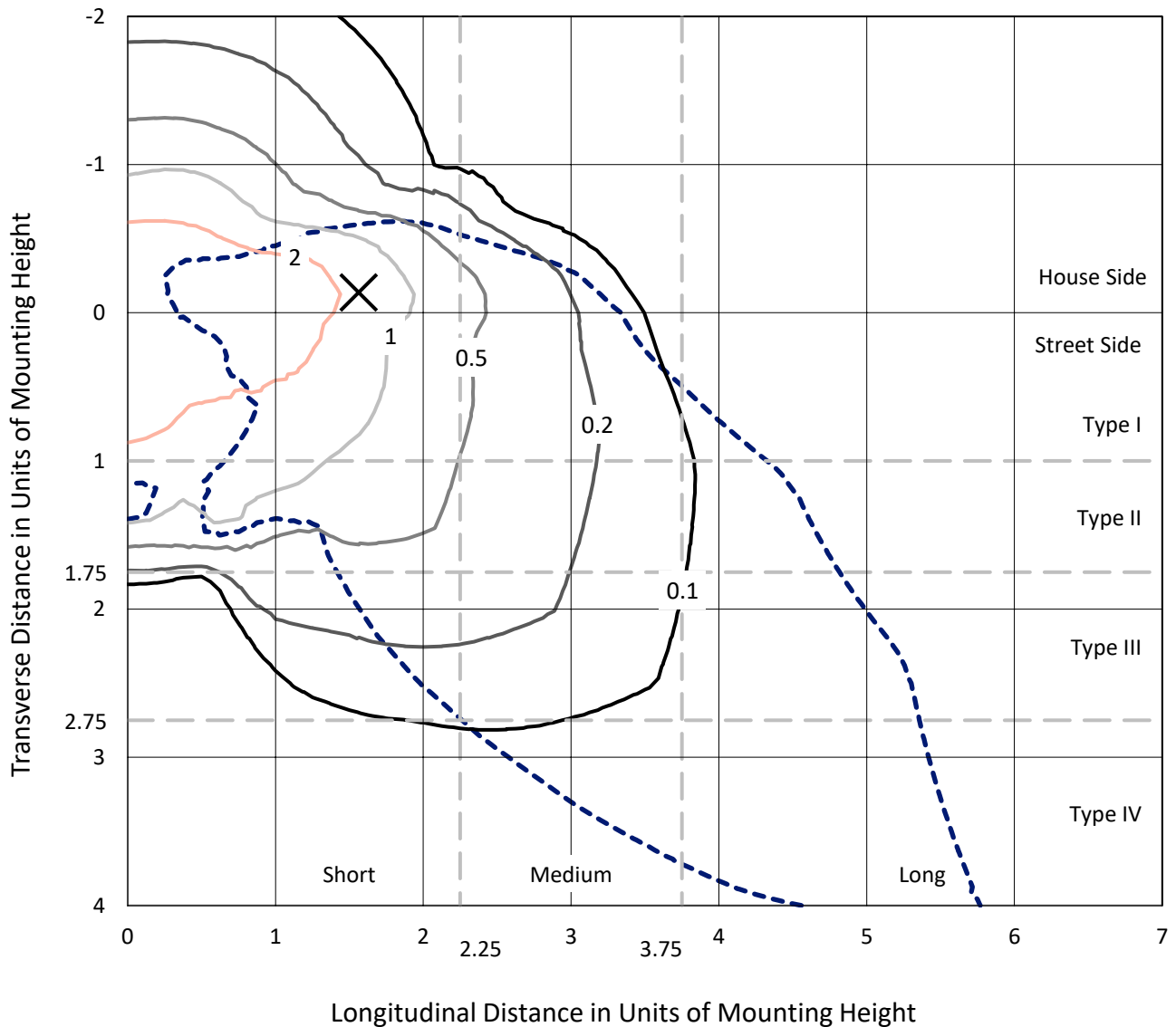
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P591152  
 CATALOG NUMBER: CTN-CA6-230-722-U-T4-SSS-HM-EX120

### Iso-Footcandle Lines of Horizontal Illumination

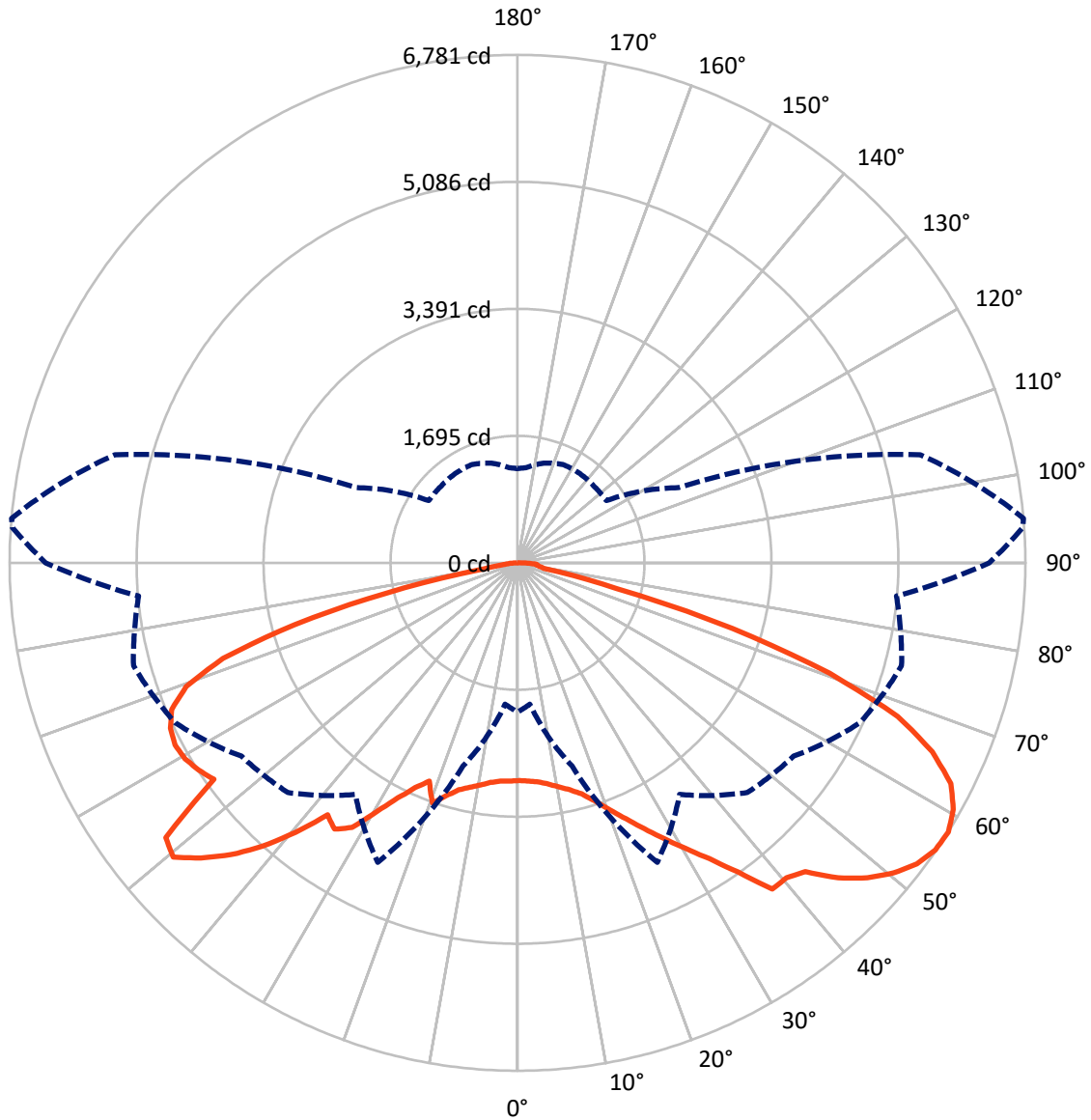
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type III - Short - N/A

REPORT NUMBER: P591152  
CATALOG NUMBER: CTN-CA6-230-722-U-T4-SSS-HM-EX120

### Luminous Intensity Polar Plot



— Vertical Plane Through 95-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P591152  
 CATALOG NUMBER: CTN-CA6-230-722-U-T4-SSS-HM-EX120

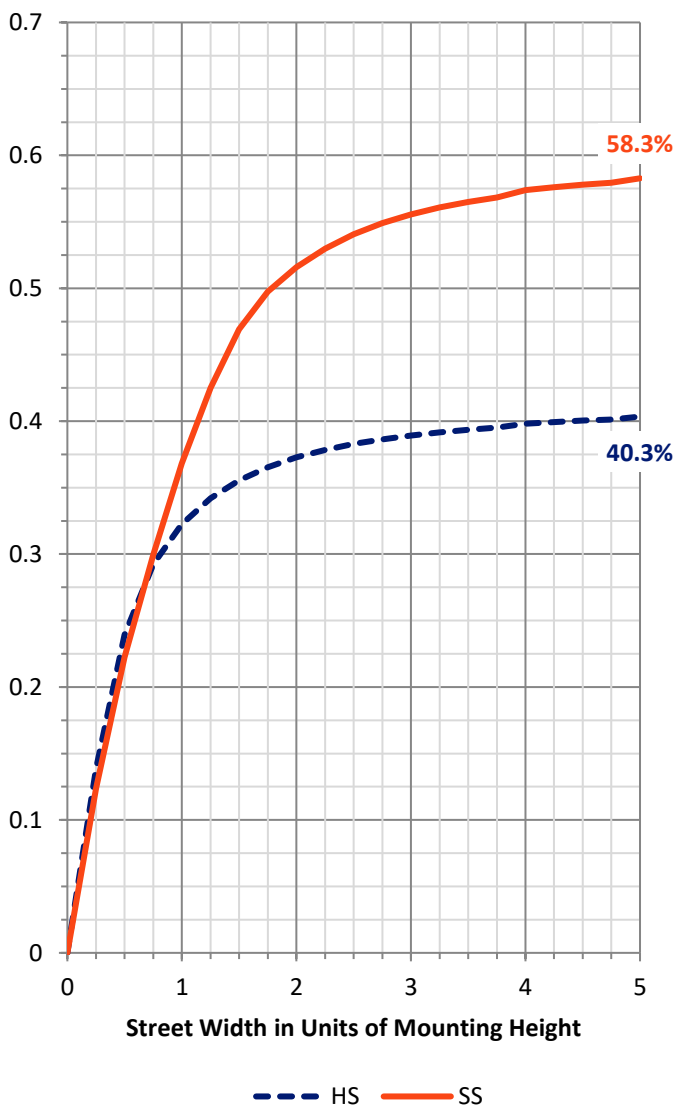
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6276.1	0.0	6276.1
	% Fixture	41.2	0.0	41.2
<b>Street Side</b>	Lumens	8961.9	0.0	8961.9
	% Fixture	58.8	0.0	58.8
<b>Total</b>	Lumens	15238.0	0.0	15238.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	283.9	1.9
10°-20°	868.2	5.7
20°-30°	1371.9	9.0
30°-40°	1895.7	12.4
40°-50°	2556.1	16.8
50°-60°	3011.0	19.8
60°-70°	2689.9	17.7
70°-80°	2008.5	13.2
80°-90°	552.8	3.6
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°	15238.0	100.0
0°-180°	15238.0	100.0

**Coefficient of Utilization**



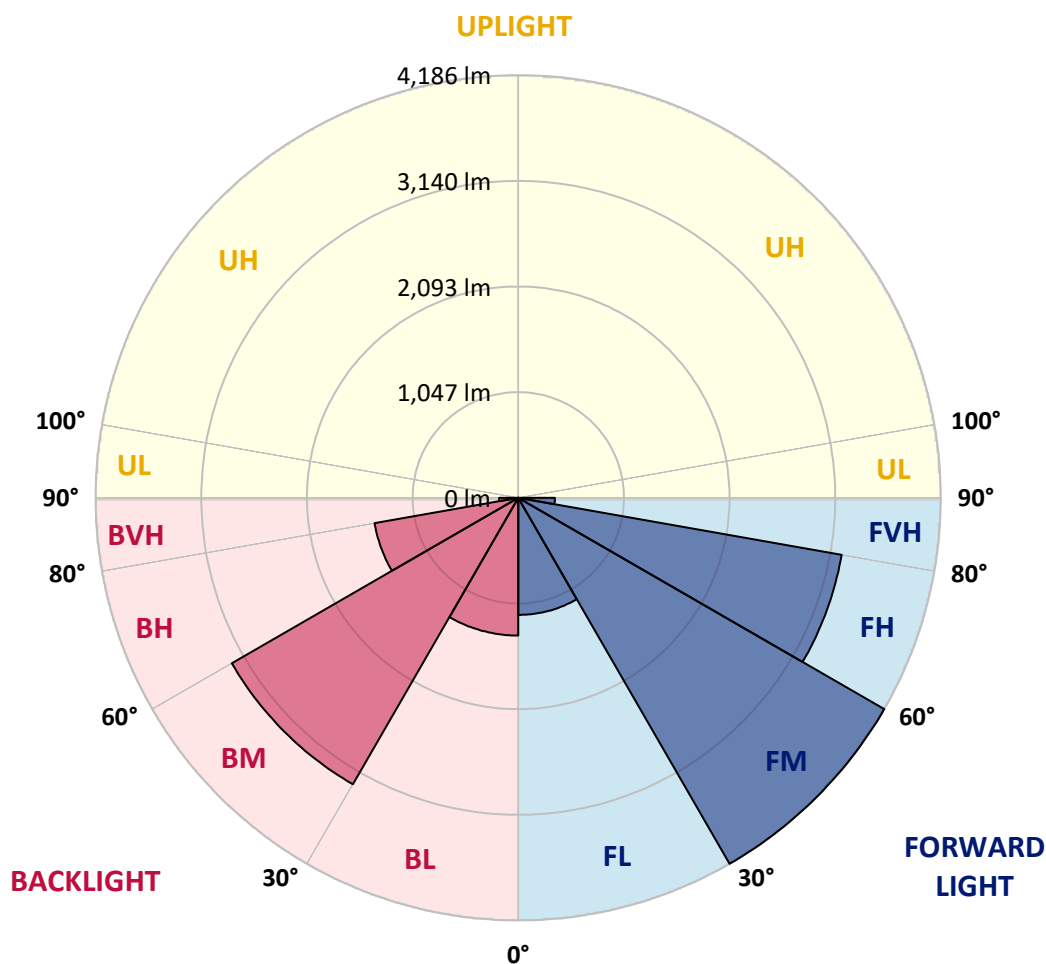
REPORT NUMBER: P591152  
 CATALOG NUMBER: CTN-CA6-230-722-U-T4-SSS-HM-EX120

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1159.8	7.6			
FM (30°-60°)	4186.2	27.5			
FH (60°-80°)	3252.8	21.3			G2/5000
FVH (80°-90°)	363.1	2.4			G3/500
BL (0°-30°)	1364.2	9.0	B3/2500		
BM (30°-60°)	3276.6	21.5	B3/5000		
BH (60°-80°)	1445.6	9.5	B3/2500		G3/2500
BVH (80°-90°)	189.7	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 III Short





REPORT NUMBER: P591152

CATALOG NUMBER: CTN-CA6-230-722-U-T4-SSS-HM-EX120

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3
2.5°	2869.1	2850.9	2851.8	2876.9	2839.6	2866.5	2863.0	2904.7	2898.6	2915.1	2920.3
5°	2845.7	2830.1	2830.9	2863.0	2837.9	2862.2	2845.7	2883.9	2897.7	2922.9	2928.1
7.5°	2851.8	2837.9	2843.1	2873.4	2842.2	2866.5	2868.2	2903.8	2910.8	2954.2	2961.1
10°	2867.4	2852.6	2856.1	2880.4	2860.4	2903.8	2898.6	2945.5	2947.2	3008.0	3016.6
12.5°	2846.5	2836.1	2836.1	2866.5	2876.9	2920.3	2933.3	2981.9	2992.3	3062.6	3073.9
15°	2809.2	2791.9	2817.0	2862.2	2883.0	2948.9	2973.2	3046.1	3058.3	3131.2	3155.5
17.5°	2745.0	2735.5	2828.3	2842.2	2763.2	2813.6	2916.8	3120.8	3162.4	3248.4	3293.5
20°	2553.2	2445.6	2197.4	2242.5	2485.5	2666.9	2699.0	2797.1	2975.9	3403.7	3474.0
22.5°	1877.2	1970.0	2298.1	2325.0	2317.2	2467.3	2804.9	2899.5	2984.5	3141.6	3608.5
25°	1944.0	1938.8	2099.3	2440.4	2428.2	2456.9	2598.3	3058.3	3143.3	3299.6	3785.6
27.5°	2003.9	2008.2	1996.1	2317.2	2544.5	2574.0	2617.4	2931.6	3343.0	3521.7	3979.1
30°	2122.8	2104.5	2071.6	2070.7	2646.1	2689.5	2763.2	2868.2	3526.9	3810.7	4221.2
32.5°	2323.2	2302.4	2259.0	2190.4	2286.8	2809.2	2910.8	3044.4	3254.4	4165.7	4505.0
35°	2471.6	2456.9	2427.4	2379.6	2302.4	2869.1	3054.8	3231.9	3509.6	4313.2	4877.3
37.5°	2654.7	2633.9	2600.1	2541.1	2482.9	2459.5	3193.7	3444.5	3865.4	4213.4	4958.0
40°	2862.2	2850.0	2788.4	2712.0	2647.8	2582.7	3289.1	3722.2	4322.8	4661.2	4884.3
42.5°	3018.4	3008.8	2972.4	2910.8	2848.3	2806.6	2915.1	4063.3	4820.9	5094.3	5258.3
45°	3154.6	3144.2	3144.2	3127.7	3110.4	3113.8	3160.7	4308.0	5293.9	5464.0	5612.4
47.5°	3259.6	3241.4	3168.5	3183.3	3208.4	3283.9	3426.3	3745.6	5674.9	5778.1	5910.0
50°	3515.7	3487.9	3251.8	3306.5	3388.1	3509.6	3692.7	4094.5	5299.1	6046.3	6149.6
52.5°	3751.7	3623.3	2686.0	3487.9	3579.9	3759.5	3976.5	4472.0	4877.3	5959.5	6332.7
55°	3347.3	3216.2	2699.9	3821.1	3805.5	4032.0	4243.8	4781.8	5106.4	4978.0	6286.7
57.5°	1992.6	1893.6	2809.2	4413.0	3772.5	4336.6	4499.8	5046.5	5307.8	5077.8	6298.8
60°	1031.9	1084.8	1043.2	2611.4	3248.4	4470.3	4764.5	5301.7	5444.0	5152.4	6306.7
62.5°	138.9	99.8	41.7	1910.1	2308.5	3724.8	5096.9	5544.7	5543.8	5177.6	6252.0
65°	8.7	9.5	19.1	1900.6	2546.3	4419.1	5647.1	5740.8	5593.3	5133.3	6069.7
67.5°	3.5	4.3	17.4	1887.6	2747.6	4645.6	6294.5	5803.3	5598.5	5014.4	5669.7
70°	3.5	4.3	17.4	1758.3	2884.7	4685.5	6403.9	5779.9	5534.3	4722.0	4925.9
72.5°	4.3	5.2	15.6	1527.4	2801.4	4577.0	6225.1	5732.1	5304.3	4133.6	3824.6
75°	4.3	5.2	15.6	1234.1	2478.6	4340.1	6083.6	5332.9	4649.9	3088.7	2480.3
77.5°	3.5	4.3	15.6	963.3	2066.3	3846.3	5518.6	4636.9	3677.1	1797.3	979.8
80°	3.5	4.3	15.6	670.8	1574.3	3152.9	4495.5	3611.1	2068.1	513.8	276.0
82.5°	3.5	4.3	14.8	418.3	1113.4	2318.9	3072.2	1664.5	443.5	200.5	215.2
85°	3.5	3.5	11.3	204.8	711.6	1540.4	1530.9	278.6	176.2	130.2	163.2
87.5°	1.7	2.6	6.1	93.7	397.5	812.3	610.1	106.7	75.5	52.9	91.1
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: P591152

CATALOG NUMBER: CTN-CA6-230-722-U-T4-SSS-HM-EX120

**CANDELA DISTRIBUTION (continued):**

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3	2907.3
2.5°	2922.0	2917.7	2929.9	2961.1	2959.4	2982.8	2964.6	3000.2	3006.2	2998.4	3010.6
5°	2937.7	2939.4	2972.4	3005.4	2993.2	3031.4	3039.2	3092.1	3093.9	3086.9	3102.6
7.5°	2976.7	2982.8	3015.8	3054.8	3072.2	3104.3	3100.0	3168.5	3162.4	3159.0	3177.2
10°	3031.4	3042.7	3078.3	3139.9	3132.1	3181.5	3159.0	3205.0	3203.2	3196.3	3216.2
12.5°	3098.2	3109.5	3154.6	3213.6	3214.5	3218.0	3199.8	3223.2	3215.4	3198.9	3214.5
15°	3188.5	3201.5	3263.1	3306.5	3269.2	3259.6	3224.9	3211.9	3182.4	3139.0	3152.0
17.5°	3330.8	3341.2	3410.6	3434.9	3370.7	3332.5	3233.6	3159.8	3076.5	3015.8	3027.1
20°	3510.4	3520.0	3576.4	3570.3	3484.4	3390.7	3237.1	3112.1	2956.8	2837.9	2834.4
22.5°	3708.3	3714.4	3768.2	3714.4	3561.7	3425.4	3230.1	3038.3	2777.1	2623.5	2607.0
25°	3926.1	3931.4	3930.5	3810.7	3605.9	3405.4	3165.9	2915.1	2580.1	2416.1	2398.7
27.5°	4170.0	4170.9	4075.4	3885.4	3586.8	3331.7	3041.8	2693.8	2399.6	2257.3	2244.3
30°	4429.5	4427.8	4208.2	3892.3	3513.1	3191.9	2850.0	2484.7	2237.3	2110.6	2092.4
32.5°	4725.4	4710.7	4326.2	3868.0	3378.5	2991.5	2602.7	2309.3	2109.7	1964.8	1937.9
35°	5104.7	5068.2	4426.9	3783.8	3178.9	2720.7	2373.6	2156.6	1986.5	1839.0	1812.1
37.5°	5574.2	5527.3	4584.8	3664.9	2948.9	2496.8	2205.2	2053.3	1898.0	1729.6	1694.9
40°	5438.8	5529.1	4773.2	3536.5	2726.8	2318.0	2106.3	2003.9	1844.2	1657.6	1624.6
42.5°	5648.0	5636.7	5030.9	3384.6	2513.3	2178.3	2066.3	1989.1	1815.5	1626.3	1588.2
45°	6003.8	6001.2	5308.6	3237.1	2305.0	2066.3	2036.0	1949.2	1774.8	1587.3	1545.6
47.5°	6292.8	6284.1	5574.2	3074.8	2112.3	1978.7	1974.4	1868.5	1701.9	1527.4	1489.2
50°	6494.1	6507.1	5721.7	2918.6	1930.1	1888.4	1871.9	1754.8	1599.4	1455.4	1425.9
52.5°	6652.9	6677.2	5785.9	2903.8	1770.4	1772.1	1743.5	1636.8	1515.3	1399.0	1367.7
55°	6731.0	6768.4	5720.0	2808.4	1614.2	1624.6	1596.8	1529.1	1457.1	1350.4	1327.8
57.5°	6763.1	6781.4	5567.2	2375.3	1446.7	1445.0	1453.6	1446.7	1379.0	1274.0	1257.5
60°	6708.5	6684.2	5234.9	1805.1	1276.6	1284.4	1340.0	1333.0	1273.1	1193.3	1170.7
62.5°	6540.1	6492.4	4626.5	1334.8	1140.4	1203.7	1262.7	1242.8	1169.9	1097.0	1079.6
65°	6219.0	6084.5	3686.6	1042.3	1075.3	1162.0	1216.7	1187.2	1103.9	1018.0	1007.6
67.5°	5642.8	5474.4	2419.6	934.7	1047.5	1126.5	1183.7	1134.3	1053.6	960.7	946.0
70°	4604.8	4420.0	1145.6	871.3	985.0	1063.1	1104.8	1054.4	972.0	879.1	868.7
72.5°	3211.0	3001.0	617.0	802.8	913.0	980.7	1008.4	946.8	874.8	834.0	831.4
75°	1600.3	1367.7	559.8	732.5	820.1	879.1	926.0	883.5	820.1	745.5	726.4
77.5°	426.1	366.2	526.8	654.4	746.3	813.2	840.1	795.8	722.9	659.6	648.3
80°	295.9	302.0	492.1	542.4	650.9	710.8	735.9	679.5	643.1	580.6	563.2
82.5°	250.8	263.8	397.5	408.8	517.2	581.5	625.7	616.2	564.1	513.8	506.8
85°	235.2	249.9	254.3	282.9	370.6	446.1	522.4	526.8	492.1	427.8	407.0
87.5°	135.4	133.6	122.4	144.1	203.1	247.3	299.4	285.5	232.6	201.3	197.0
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)