

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: 768837\_320MP

Luminaire Tested: **GSM-AM-320-MP-MT-3V-FG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 768837\_320MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GSM-AM-320-MP-MT-3V-FG  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-TYPE 3 DISTRIBUTION  
Light Source: 320 WATT PULSE-START CLEAR ED-28 VBU BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 34000 (1 lamp)  
Luminaire Lumens: 22106.4 lumens  
Efficiency: 65.0%  
Efficacy: 63.2 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type IV - Short - Full Cutoff  
BUG Rating: B4 - U0 - G4

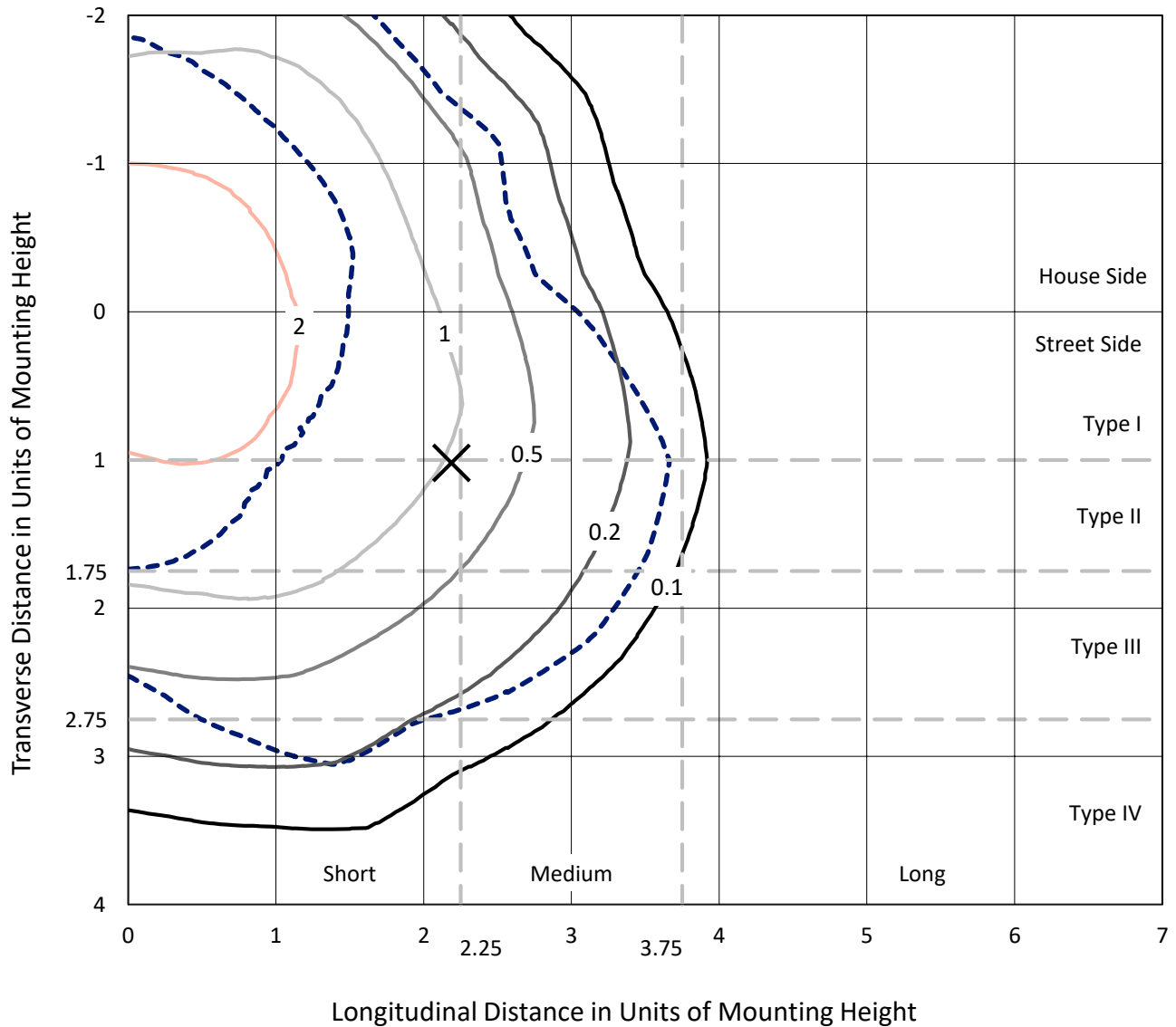
Input Watts (W): 350  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

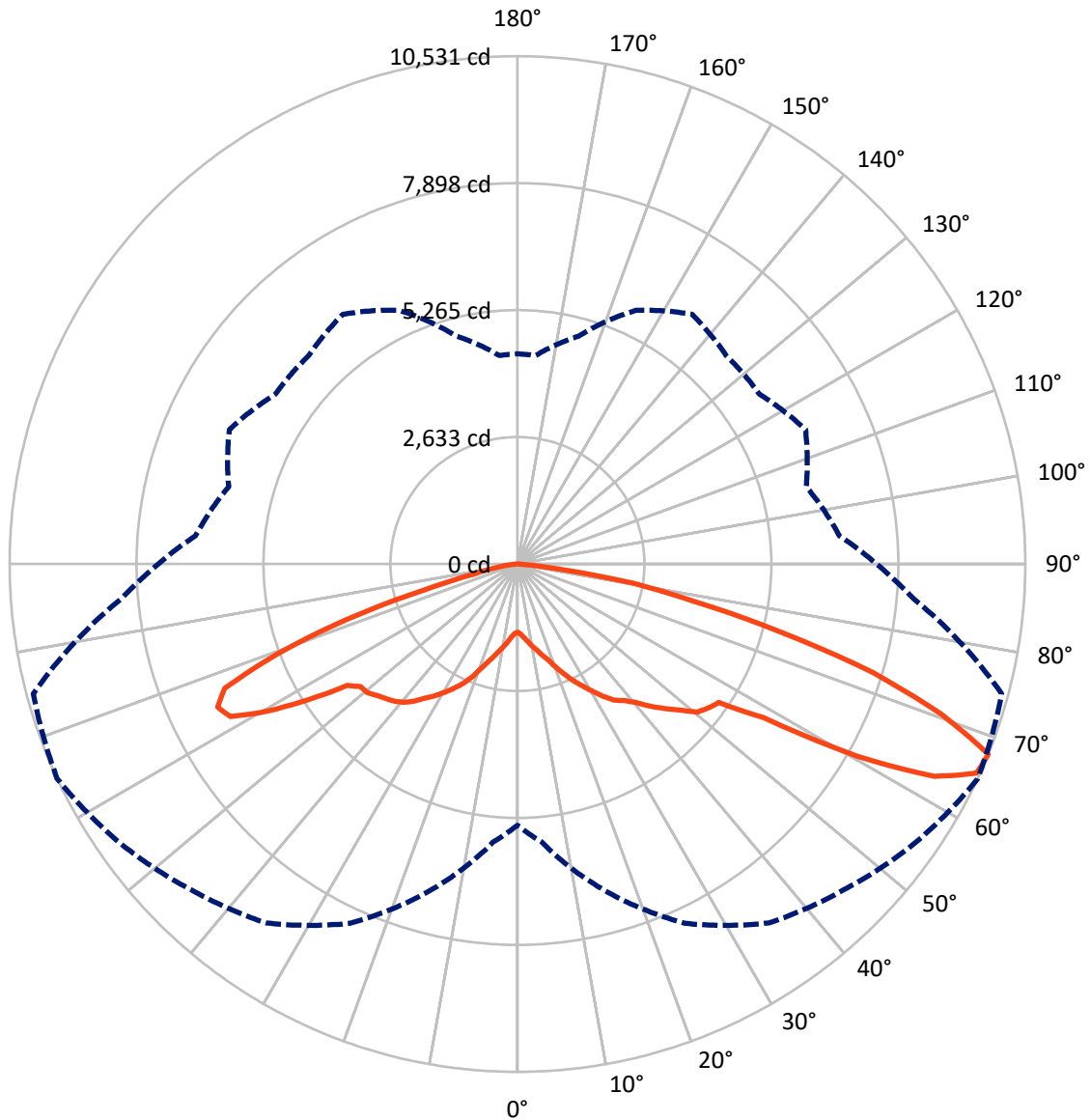
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
 Type IV - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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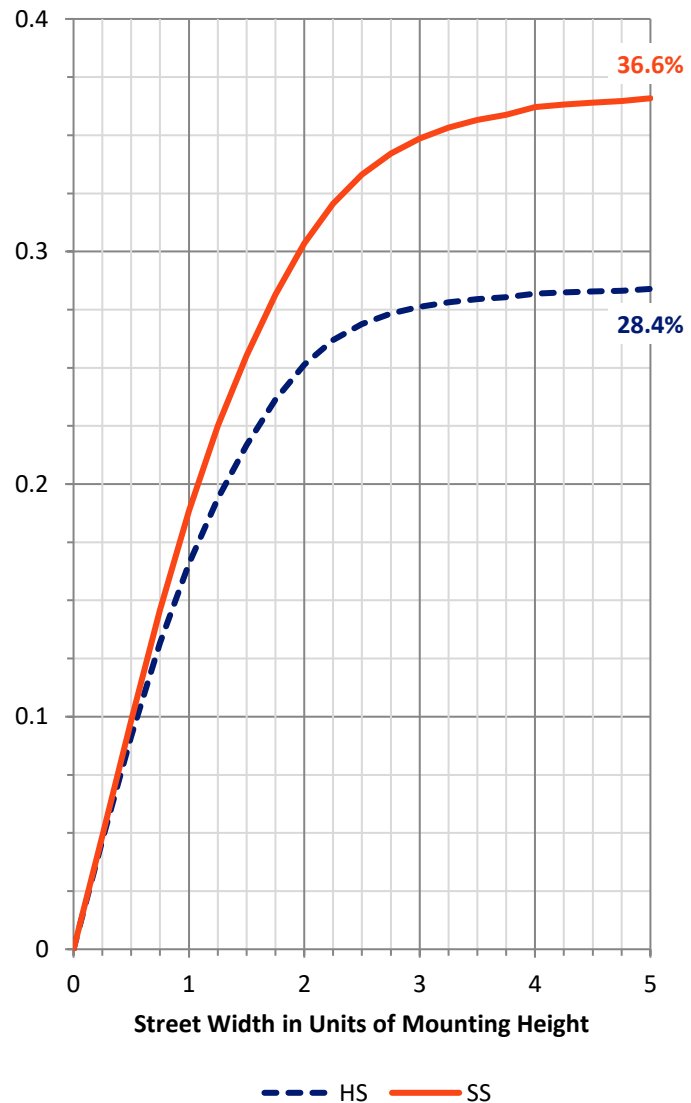
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9665.9	0.0	9665.9
	% Lamp	28.4	0.0	28.4
<b>Street Side</b>	Lumens	12440.4	0.0	12440.4
	% Lamp	36.6	0.0	36.6
<b>Total</b>	Lumens	22106.4	0.0	22106.4
	% Lamp	65.0	0.0	65.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	151.3	0.7	0.4
10°-20°	560.1	2.5	1.6
20°-30°	1193.7	5.4	3.5
30°-40°	2070.3	9.4	6.1
40°-50°	3041.8	13.8	8.9
50°-60°	4334.7	19.6	12.7
60°-70°	7161.1	32.4	21.1
70°-80°	3328.4	15.1	9.8
80°-90°	264.8	1.2	0.8
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	22106.4	100.0	65.0
0°-180°	22106.4	100.0	65.0

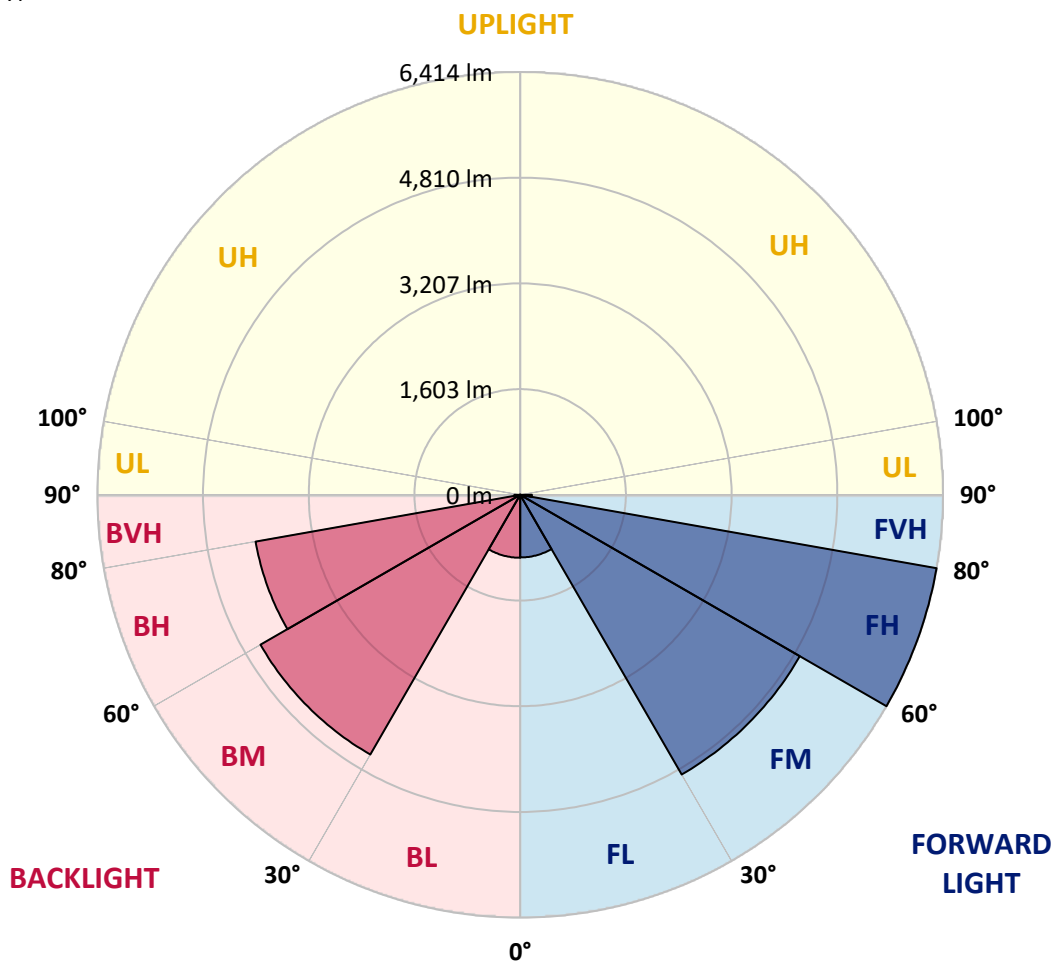


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	950.3	2.8			
FM	(30°-60°)	4898.4	14.4			
FH	(60°-80°)	6413.7	18.9			G3/7500
FVH	(80°-90°)	178.1	0.5			G2/225
BL	(0°-30°)	954.8	2.8	B2/1000		
BM	(30°-60°)	4548.5	13.4	B3/5000		
BH	(60°-80°)	4075.8	12.0	B4/5000		G4/5000
BVH	(80°-90°)	86.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		11893.6	35.0			

**BUG Rating: B4-U0-G4**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9
2.5°	1467.7	1467.7	1467.7	1472.4	1467.7	1472.4	1467.7	1462.9	1462.9	1449.7	1449.7
5°	1540.4	1545.1	1549.8	1545.1	1545.1	1545.1	1549.8	1545.1	1549.8	1549.8	1540.4
7.5°	1622.6	1622.6	1617.8	1622.6	1636.7	1636.7	1641.4	1632.0	1632.0	1627.3	1636.7
10°	1704.7	1714.2	1709.4	1714.2	1722.7	1741.6	1746.3	1741.6	1754.8	1746.3	1746.3
12.5°	1777.4	1786.9	1796.3	1809.6	1828.4	1846.4	1846.4	1841.7	1851.1	1841.7	1851.1
15°	1869.1	1882.3	1896.4	1909.7	1946.5	1964.4	1969.2	1973.9	1978.6	1973.9	1978.6
17.5°	1969.2	1973.9	2006.0	2033.4	2078.7	2096.7	2101.4	2101.4	2119.3	2119.3	2124.1
20°	2051.3	2064.6	2115.6	2178.8	2238.3	2270.4	2278.9	2283.7	2293.1	2288.4	2293.1
22.5°	2142.9	2156.2	2224.2	2311.1	2383.8	2433.8	2465.9	2475.4	2465.9	2480.1	2484.8
25°	2224.2	2247.8	2333.7	2443.3	2548.1	2598.2	2643.5	2670.9	2652.9	2662.4	2667.1
27.5°	2352.6	2370.6	2484.8	2617.1	2725.7	2785.2	2844.7	2857.9	2849.4	2830.5	2835.2
30°	2507.5	2534.9	2657.7	2822.0	2922.1	2967.4	3040.2	3054.3	3017.5	3022.2	3009.0
32.5°	2680.3	2712.4	2854.1	3009.0	3145.0	3204.5	3264.0	3273.4	3209.2	3204.5	3177.1
35°	2862.6	2890.0	3044.9	3218.7	3373.6	3433.1	3478.4	3468.9	3386.8	3346.2	3323.5
37.5°	3017.5	3026.9	3218.7	3396.2	3569.1	3610.6	3638.0	3591.7	3533.2	3528.4	3486.9
40°	3127.1	3159.2	3382.1	3578.5	3760.8	3810.8	3820.3	3774.9	3723.9	3692.8	3646.5
42.5°	3246.1	3286.7	3560.6	3770.2	3961.0	4029.9	4020.5	4029.9	3897.7	3875.1	3788.2
45°	3336.7	3414.2	3723.9	4007.3	4180.1	4267.0	4184.8	4271.7	4120.6	4020.5	3938.3
47.5°	3583.2	3655.9	3910.9	4275.5	4403.9	4599.4	4407.7	4522.0	4349.2	4371.8	4312.3
50°	3673.9	3728.7	3965.7	4330.3	4713.7	4868.6	4726.9	4827.1	4581.5	4668.4	4489.9
52.5°	3610.6	3683.3	3943.1	4275.5	4850.7	4928.1	4859.2	4959.3	4672.2	4613.6	4517.3
55°	3564.3	3619.1	3965.7	4352.9	5036.7	5110.4	5196.3	5068.8	4909.2	4813.8	4781.7
57.5°	4002.6	4034.7	4349.2	4931.9	5670.4	5957.6	6163.4	6008.6	5994.4	5752.6	5762.1
60°	5260.6	5338.0	5565.6	6240.9	7097.5	7795.4	8009.8	8091.1	7895.6	7115.4	7225.0
62.5°	6081.3	6149.3	6605.4	7508.3	8479.2	9130.9	9403.8	9695.7	9705.1	8465.1	8300.7
65°	6089.8	6254.1	7152.3	8264.8	9253.7	9532.3	9937.4	10461.6	10343.6	8401.8	7904.1
67.5°	5415.4	5789.4	7010.6	8219.5	9085.6	9559.7	10074.4	10530.6	10393.6	8242.2	7444.1
70°	4357.7	4781.7	6003.8	7361.9	7786.0	8456.6	9048.7	9326.4	9035.5	7042.7	6226.7
72.5°	3191.3	3523.7	4617.4	5976.4	6053.9	6965.3	7535.7	7718.0	7403.5	5629.8	4873.3
75°	1869.1	2041.9	2826.7	4198.1	4065.8	4928.1	5557.1	5661.9	5438.1	3879.8	3149.7
77.5°	619.6	670.6	1075.7	2425.3	2028.7	2876.8	3573.8	3760.8	3541.7	2415.9	1828.4
80°	246.5	269.2	492.1	1303.3	1007.7	1882.3	2275.2	2452.7	2146.7	1686.8	1198.5
82.5°	109.6	122.8	182.3	314.5	396.7	711.2	738.6	798.1	524.2	519.4	382.5
85°	36.8	36.8	50.1	82.2	86.9	109.6	122.8	145.4	82.2	104.8	95.4
87.5°	9.4	0.0	0.0	4.7	9.4	4.7	4.7	0.0	4.7	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9	1412.9
2.5°	1440.3	1440.3	1435.6	1422.3	1417.6	1422.3	1412.9	1412.9	1422.3	1412.9
5°	1540.4	1531.9	1509.2	1513.0	1499.8	1490.3	1486.6	1481.8	1481.8	1477.1
7.5°	1627.3	1617.8	1622.6	1609.3	1591.4	1581.9	1572.5	1559.3	1554.6	1549.8
10°	1746.3	1741.6	1736.8	1722.7	1696.2	1682.1	1659.4	1641.4	1641.4	1632.0
12.5°	1854.9	1846.4	1851.1	1841.7	1828.4	1791.6	1764.2	1746.3	1732.1	1722.7
15°	1978.6	1983.3	1983.3	1973.9	1959.7	1923.8	1891.7	1864.3	1851.1	1851.1
17.5°	2124.1	2124.1	2133.5	2124.1	2101.4	2074.0	2028.7	1987.1	1955.9	1951.2
20°	2293.1	2293.1	2311.1	2315.8	2283.7	2247.8	2188.3	2124.1	2083.4	2060.8
22.5°	2484.8	2488.6	2534.9	2520.7	2457.4	2415.9	2347.9	2256.3	2201.5	2188.3
25°	2670.9	2670.9	2725.7	2698.3	2630.3	2570.8	2498.1	2397.9	2338.4	2325.2
27.5°	2844.7	2849.4	2890.0	2880.6	2803.1	2725.7	2643.5	2548.1	2480.1	2461.2
30°	2994.8	2985.4	3049.6	3031.7	2985.4	2904.2	2822.0	2739.8	2662.4	2643.5
32.5°	3145.0	3145.0	3218.7	3209.2	3177.1	3117.6	3031.7	2944.8	2867.3	2854.1
35°	3291.4	3314.1	3373.6	3368.8	3364.1	3318.8	3268.7	3196.0	3127.1	3127.1
37.5°	3473.7	3505.8	3560.6	3546.4	3555.8	3528.4	3459.5	3391.5	3341.4	3336.7
40°	3646.5	3683.3	3715.4	3696.6	3696.6	3665.4	3591.7	3528.4	3496.3	3501.1
42.5°	3788.2	3838.2	3825.0	3788.2	3774.9	3728.7	3665.4	3560.6	3537.9	3528.4
45°	3929.8	3938.3	3906.2	3865.6	3847.7	3806.1	3710.7	3591.7	3546.4	3537.9
47.5°	4143.3	4047.9	3993.1	3943.1	3943.1	3865.6	3738.1	3573.8	3564.3	3519.0
50°	4349.2	4184.8	4102.7	4062.1	4102.7	3993.1	3774.9	3546.4	3519.0	3510.5
52.5°	4458.7	4152.7	4125.3	4093.2	4139.5	4029.9	3765.5	3537.9	3433.1	3391.5
55°	4763.8	4352.9	4335.0	4321.8	4330.3	4221.7	3988.4	3733.4	3573.8	3546.4
57.5°	5707.3	5183.1	5155.7	5142.5	5160.4	4996.1	4718.4	4435.1	4175.4	4175.4
60°	6878.4	6326.8	6008.6	6254.1	6377.8	6222.0	5697.8	5315.3	5115.1	5041.4
62.5°	7585.8	6878.4	6742.4	6974.7	7229.7	7120.2	6578.1	5747.9	5397.5	5352.2
65°	7120.2	6650.8	6887.8	6952.1	7038.0	7139.1	6664.9	5697.8	5160.4	5196.3
67.5°	6700.8	6199.3	6591.3	6131.3	6117.2	6318.3	5802.7	4891.3	4339.7	4357.7
70°	5333.3	4886.6	5310.6	4485.2	4439.8	4681.6	4299.1	3587.9	3309.3	3300.8
72.5°	3957.2	3473.7	3728.7	2794.6	2698.3	2844.7	2625.6	2278.9	2201.5	2215.7
75°	2220.4	1873.8	1959.7	1344.9	1280.7	1322.2	1299.6	1225.9	1144.7	1139.9
77.5°	961.4	838.7	920.8	811.3	816.0	825.4	811.3	770.7	738.6	729.1
80°	611.1	528.9	556.3	556.3	538.3	551.6	542.1	519.4	501.5	492.1
82.5°	309.8	282.4	287.1	296.6	282.4	273.9	273.9	255.0	241.8	237.1
85°	86.9	82.2	82.2	82.2	82.2	77.4	77.4	68.0	64.2	64.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)