

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\_400MP

Luminaire Tested: **GSM-AM-400-MP-MT-3V-FG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: 768837\_400MP  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GSM-AM-400-MP-MT-3V-FG  
Description: MEDIUM ARCHITECTURAL AREA LUMINAIRE-VERTICAL LAMP-TYPE 3 DISTRIBUTION  
Light Source: 400 WATT PULSE-START CLEAR ED-28 VBU BURN  
Ballast/Driver: -

**Summary**

Lumens per Lamp: 44000 (1 lamp)  
Luminaire Lumens: 28608.2 lumens  
Efficiency: 65.0%  
Efficacy: 63.3 lumens/watt  
Luminous Opening: Point Source (0' x 0' x 0')  
IES Classification: Type IV - Short - Full Cutoff  
BUG Rating: B5 - U0 - G5

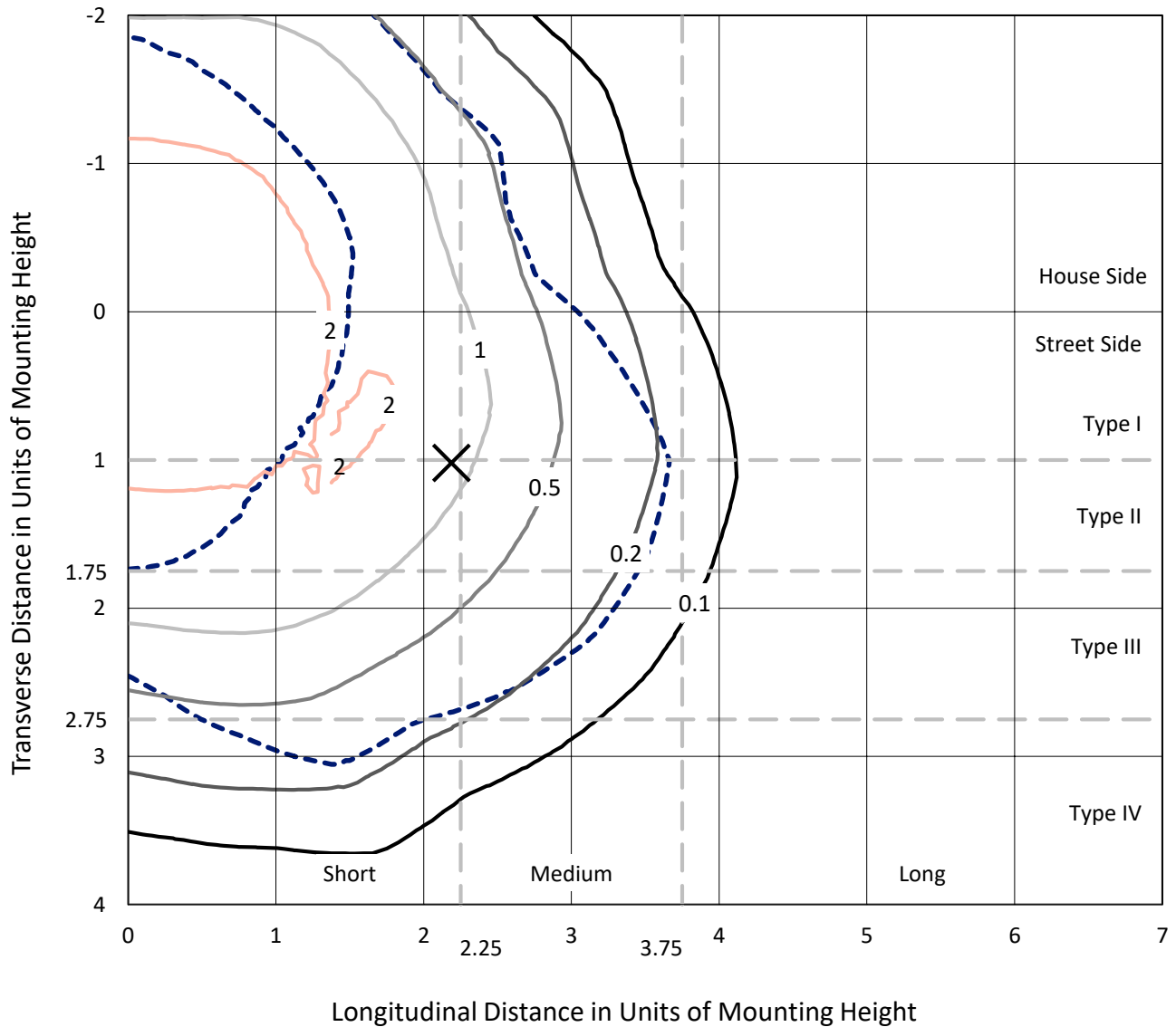
Input Watts (W): 452  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

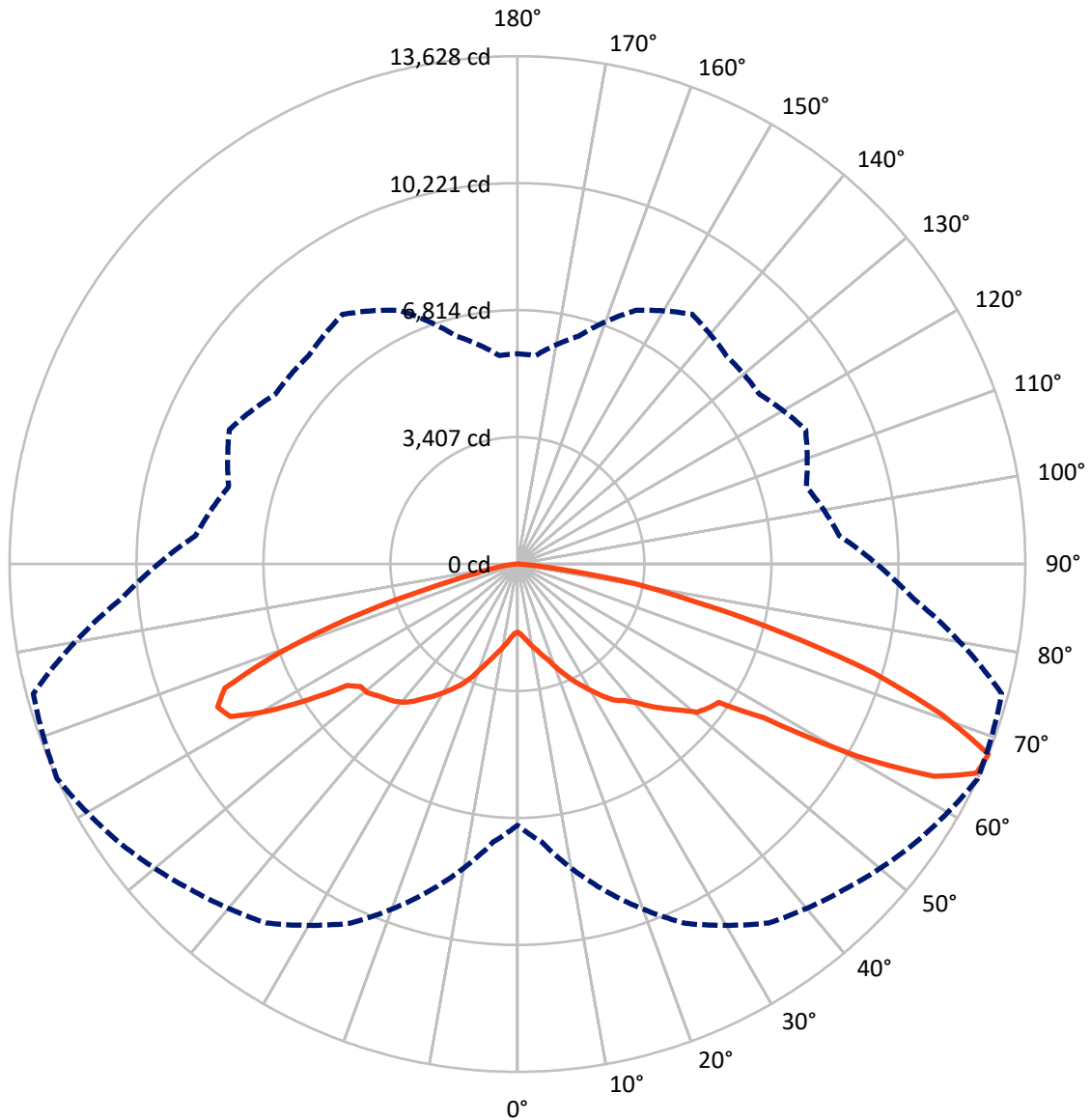
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 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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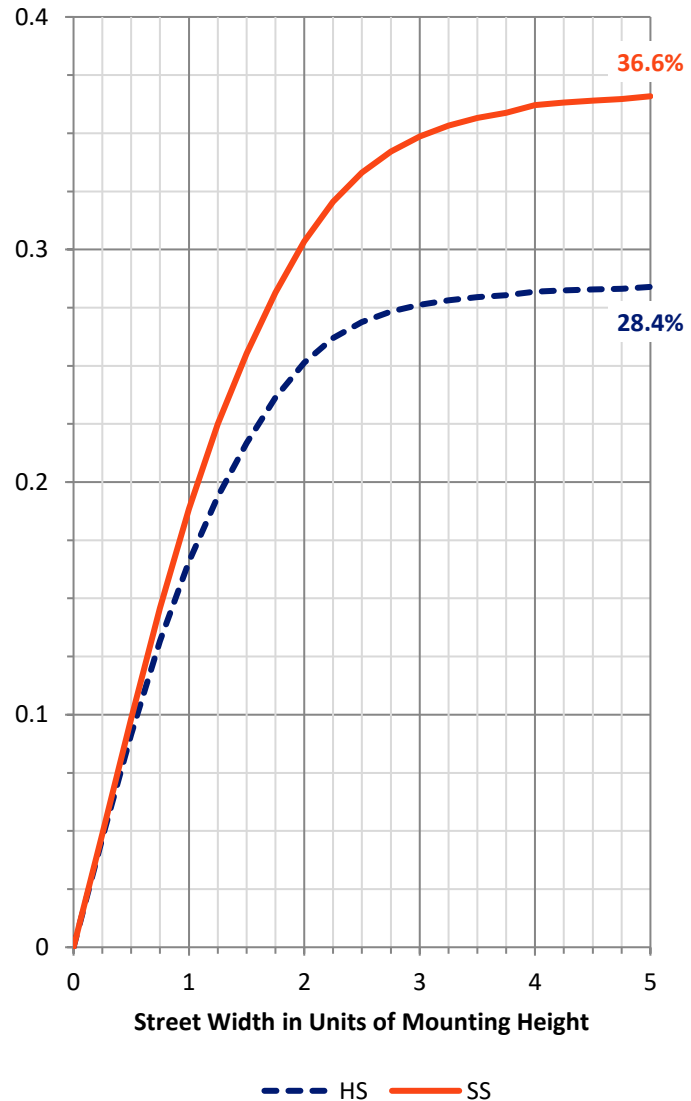
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12508.9	0.0	12508.9
	% Lamp	28.4	0.0	28.4
<b>Street Side</b>	Lumens	16099.4	0.0	16099.4
	% Lamp	36.6	0.0	36.6
<b>Total</b>	Lumens	28608.2	0.0	28608.2
	% Lamp	65.0	0.0	65.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	195.8	0.7	0.4
10°-20°	724.8	2.5	1.6
20°-30°	1544.8	5.4	3.5
30°-40°	2679.3	9.4	6.1
40°-50°	3936.5	13.8	8.9
50°-60°	5609.6	19.6	12.7
60°-70°	9267.3	32.4	21.1
70°-80°	4307.4	15.1	9.8
80°-90°	342.7	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°	28608.2	100.0	65.0
0°-180°	28608.2	100.0	65.0

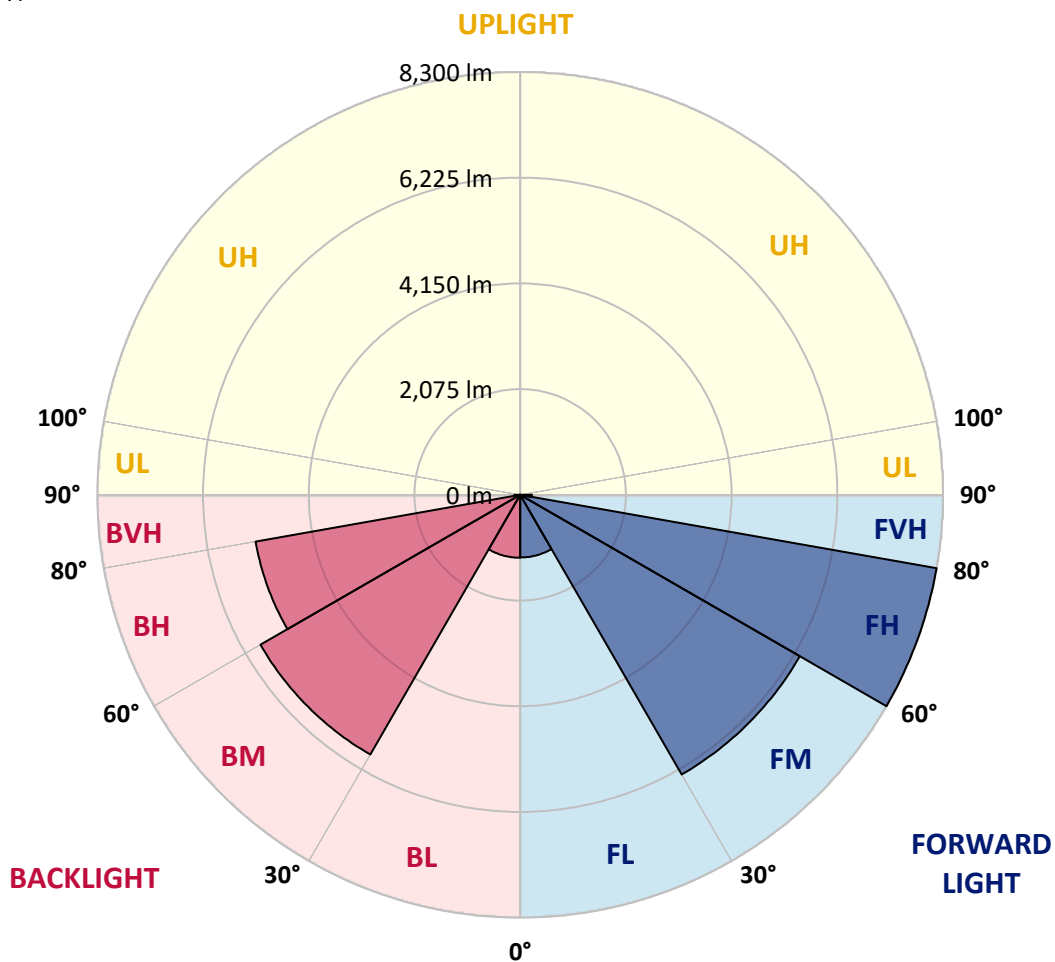


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1229.8	2.8			
FM	(30°-60°)	6339.0	14.4			
FH	(60°-80°)	8300.0	18.9			G4/12000
FVH	(80°-90°)	230.5	0.5			G3/500
BL	(0°-30°)	1235.7	2.8	B3/2500		
BM	(30°-60°)	5886.3	13.4	B4/8500		
BH	(60°-80°)	5274.6	12.0	B5		G5
BVH	(80°-90°)	112.2	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		15391.8	35.0			

**BUG Rating: B5-U0-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4
2.5°	1899.3	1899.3	1899.3	1905.4	1899.3	1905.4	1899.3	1893.2	1893.2	1876.1	1876.1
5°	1993.4	1999.6	2005.7	1999.6	1999.6	1999.6	2005.7	1999.6	1999.6	2005.7	1993.4
7.5°	2099.8	2099.8	2093.7	2099.8	2118.1	2118.1	2124.2	2112.0	2112.0	2105.9	2118.1
10°	2206.1	2218.3	2212.2	2218.3	2229.3	2253.8	2259.9	2253.8	2270.9	2259.9	2259.9
12.5°	2300.2	2312.4	2324.7	2341.8	2366.2	2389.4	2389.4	2383.3	2395.6	2383.3	2395.6
15°	2418.8	2435.9	2454.2	2471.3	2519.0	2542.2	2548.3	2554.4	2560.6	2554.4	2560.6
17.5°	2548.3	2554.4	2596.0	2631.4	2690.1	2713.3	2719.4	2719.4	2742.7	2742.7	2748.8
20°	2654.7	2671.8	2737.8	2819.7	2896.7	2938.2	2949.2	2955.3	2967.6	2961.4	2967.6
22.5°	2773.2	2790.3	2878.3	2990.8	3084.9	3149.7	3191.2	3203.4	3191.2	3209.6	3215.7
25°	2878.3	2908.9	3020.1	3161.9	3297.6	3362.3	3421.0	3456.4	3433.2	3445.4	3451.6
27.5°	3044.6	3067.8	3215.7	3386.8	3527.3	3604.3	3681.3	3698.4	3687.4	3663.0	3669.1
30°	3245.0	3280.4	3439.3	3652.0	3781.6	3840.2	3934.3	3952.7	3905.0	3911.1	3894.0
32.5°	3468.7	3510.2	3693.6	3894.0	4070.0	4147.0	4224.0	4236.2	4153.1	4147.0	4111.6
35°	3704.6	3740.0	3940.4	4165.3	4365.8	4442.8	4501.4	4489.2	4382.9	4330.3	4301.0
37.5°	3905.0	3917.2	4165.3	4395.1	4618.8	4672.6	4708.0	4648.1	4572.3	4566.2	4512.4
40°	4046.8	4088.3	4376.8	4631.0	4866.9	4931.7	4943.9	4885.2	4819.2	4778.9	4719.0
42.5°	4200.8	4253.3	4607.8	4879.1	5126.0	5215.2	5203.0	5215.2	5044.1	5014.8	4902.3
45°	4318.1	4418.3	4819.2	5185.9	5409.6	5522.0	5415.7	5528.1	5332.6	5203.0	5096.7
47.5°	4637.1	4731.2	5061.2	5533.0	5699.2	5952.2	5704.1	5852.0	5628.3	5657.7	5580.7
50°	4754.4	4825.3	5132.1	5603.9	6100.1	6300.6	6117.2	6246.8	5929.0	6041.4	5810.4
52.5°	4672.6	4766.7	5102.8	5533.0	6277.3	6377.6	6288.3	6417.9	6046.3	5970.6	5845.9
55°	4612.7	4683.6	5132.1	5633.2	6518.1	6613.4	6724.7	6559.7	6353.1	6229.7	6188.1
57.5°	5179.8	5221.3	5628.3	6382.4	7338.2	7709.8	7976.2	7775.8	7757.4	7444.6	7456.8
60°	6807.8	6908.0	7202.6	8076.4	9185.0	10088.2	10365.7	10470.8	10217.8	9208.2	9350.0
62.5°	7869.9	7957.9	8548.2	9716.7	10973.1	11816.4	12169.7	12547.3	12559.6	10954.8	10742.1
65°	7880.9	8093.6	9255.9	10695.7	11975.3	12335.9	12860.2	13538.6	13385.8	10872.9	10228.8
67.5°	7008.2	7492.2	9072.6	10637.0	11757.8	12371.3	13037.4	13627.8	13450.6	10666.3	9633.6
70°	5639.3	6188.1	7769.7	9527.2	10076.0	10943.8	11710.1	12069.4	11693.0	9114.1	8058.1
72.5°	4129.9	4560.1	5975.4	7734.2	7834.4	9013.9	9752.1	9988.0	9581.0	7285.7	6306.7
75°	2418.8	2642.4	3658.1	5432.8	5261.7	6377.6	7191.6	7327.2	7037.6	5020.9	4076.1
77.5°	801.8	867.8	1392.1	3138.7	2625.3	3722.9	4624.9	4866.9	4583.3	3126.4	2366.2
80°	319.0	348.3	636.8	1686.7	1304.1	2435.9	2944.3	3174.1	2778.1	2182.9	1551.0
82.5°	141.8	158.9	235.9	407.0	513.3	920.3	955.8	1032.8	678.3	672.2	495.0
85°	47.7	47.7	64.8	106.3	112.4	141.8	158.9	188.2	106.3	135.7	123.4
87.5°	12.2	0.0	0.0	6.1	12.2	6.1	6.1	0.0	6.1	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°	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4	1828.4
2.5°	1863.9	1863.9	1857.8	1840.7	1834.6	1840.7	1828.4	1828.4	1840.7	1828.4
5°	1993.4	1982.4	1953.1	1958.0	1940.9	1928.7	1923.8	1917.7	1917.7	1911.6
7.5°	2105.9	2093.7	2099.8	2082.7	2059.4	2047.2	2035.0	2017.9	2011.8	2005.7
10°	2259.9	2253.8	2247.7	2229.3	2195.1	2176.8	2147.4	2124.2	2124.2	2112.0
12.5°	2400.4	2389.4	2395.6	2383.3	2366.2	2318.6	2283.1	2259.9	2241.6	2229.3
15°	2560.6	2566.7	2566.7	2554.4	2536.1	2489.7	2448.1	2412.7	2395.6	2395.6
17.5°	2748.8	2748.8	2761.0	2748.8	2719.4	2684.0	2625.3	2571.6	2531.2	2525.1
20°	2967.6	2967.6	2990.8	2996.9	2955.3	2908.9	2831.9	2748.8	2696.2	2666.9
22.5°	3215.7	3220.6	3280.4	3262.1	3180.2	3126.4	3038.4	2919.9	2849.0	2831.9
25°	3456.4	3456.4	3527.3	3491.9	3403.9	3326.9	3232.8	3103.2	3026.2	3009.1
27.5°	3681.3	3687.4	3740.0	3727.8	3627.6	3527.3	3421.0	3297.6	3209.6	3185.1
30°	3875.7	3863.4	3946.6	3923.3	3863.4	3758.3	3652.0	3545.7	3445.4	3421.0
32.5°	4070.0	4070.0	4165.3	4153.1	4111.6	4034.6	3923.3	3810.9	3710.7	3693.6
35°	4259.4	4288.8	4365.8	4359.7	4353.6	4294.9	4230.1	4136.0	4046.8	4046.8
37.5°	4495.3	4536.9	4607.8	4589.4	4601.7	4566.2	4477.0	4389.0	4324.2	4318.1
40°	4719.0	4766.7	4808.2	4783.8	4783.8	4743.4	4648.1	4566.2	4524.7	4530.8
42.5°	4902.3	4967.1	4950.0	4902.3	4885.2	4825.3	4743.4	4607.8	4578.4	4566.2
45°	5085.7	5096.7	5055.1	5002.6	4979.3	4925.6	4802.1	4648.1	4589.4	4578.4
47.5°	5361.9	5238.4	5167.6	5102.8	5102.8	5002.6	4837.6	4624.9	4612.7	4554.0
50°	5628.3	5415.7	5309.3	5256.8	5309.3	5167.6	4885.2	4589.4	4554.0	4543.0
52.5°	5770.1	5374.1	5338.7	5297.1	5357.0	5215.2	4873.0	4578.4	4442.8	4389.0
55°	6164.9	5633.2	5610.0	5592.9	5603.9	5463.3	5161.4	4831.4	4624.9	4589.4
57.5°	7385.9	6707.6	6672.1	6655.0	6678.2	6465.6	6106.2	5739.6	5403.4	5403.4
60°	8901.4	8187.7	7775.8	8093.6	8253.7	8052.0	7373.7	6878.7	6619.6	6524.2
62.5°	9816.9	8901.4	8725.4	9026.1	9356.1	9214.3	8512.8	7438.4	6985.0	6926.3
65°	9214.3	8606.9	8913.7	8996.8	9108.0	9238.8	8625.2	7373.7	6678.2	6724.7
67.5°	8671.7	8022.7	8529.9	7934.7	7916.3	8176.7	7509.3	6329.9	5616.1	5639.3
70°	6901.9	6323.8	6872.6	5804.3	5745.7	6058.6	5563.6	4643.2	4282.7	4271.7
72.5°	5121.1	4495.3	4825.3	3616.6	3491.9	3681.3	3397.8	2949.2	2849.0	2867.3
75°	2873.4	2424.9	2536.1	1740.4	1657.3	1711.1	1681.8	1586.4	1481.3	1475.2
77.5°	1244.2	1085.3	1191.7	1049.9	1056.0	1068.2	1049.9	997.3	955.8	943.6
80°	790.8	684.4	719.9	719.9	696.7	713.8	701.6	672.2	649.0	636.8
82.5°	400.9	365.4	371.6	383.8	365.4	354.4	354.4	330.0	312.9	306.8
85°	112.4	106.3	106.3	106.3	106.3	100.2	100.2	88.0	83.1	83.1
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)