

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: P651375

Luminaire Tested: **GALN-SA4D-840-U-T4FT**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651375  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-840-U-T4FT  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25679.9 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4

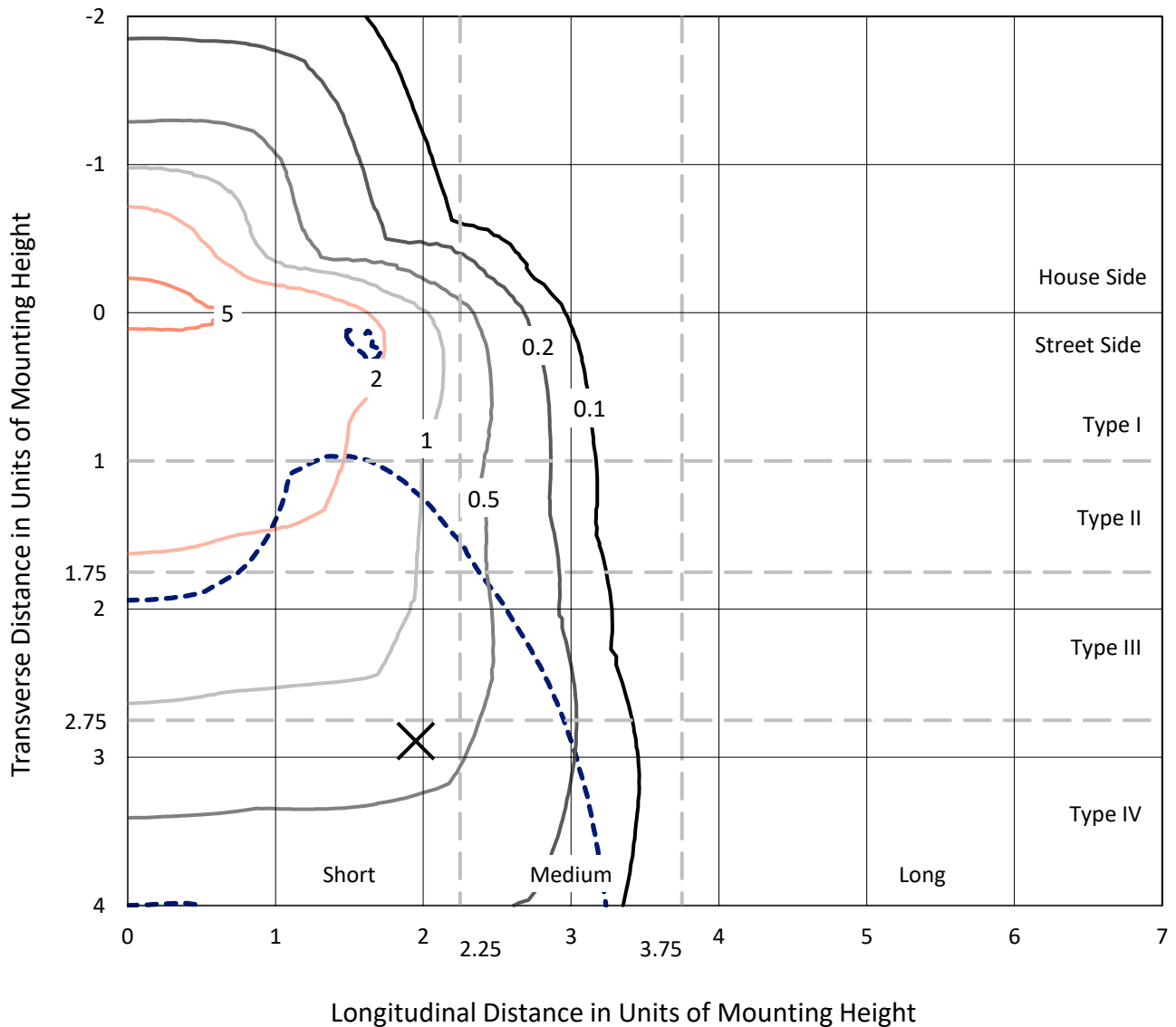
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

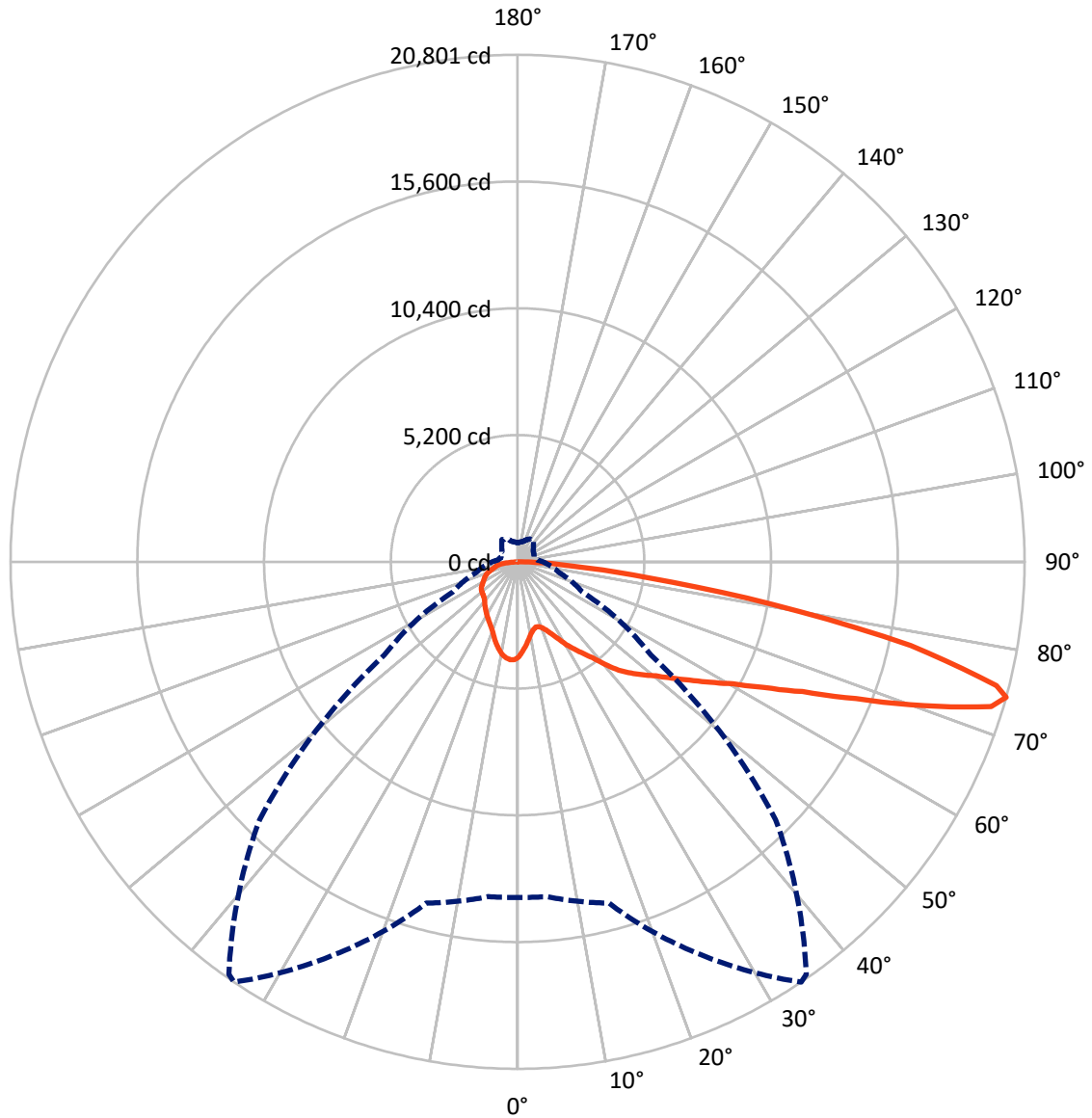
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

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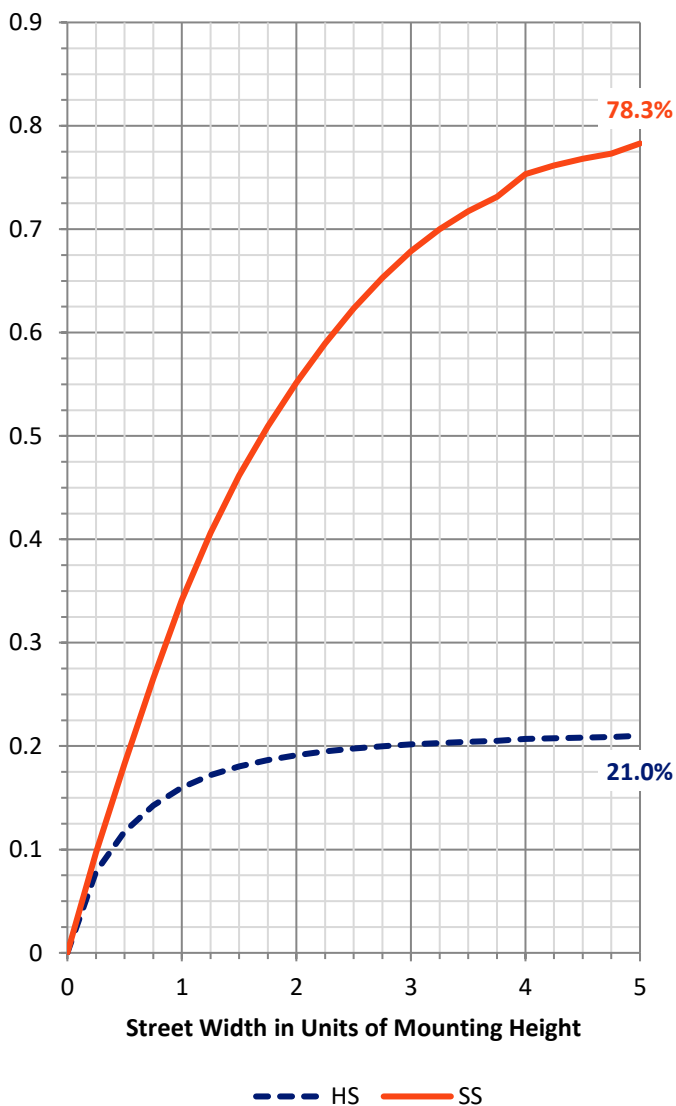
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5464.9	0.0	5464.9
	% Fixture	21.3	0.0	21.3
<b>Street Side</b>	Lumens	20215.1	0.0	20215.1
	% Fixture	78.7	0.0	78.7
<b>Total</b>	Lumens	25679.9	0.0	25679.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	356.6	1.4
10°-20°	976.1	3.8
20°-30°	1609.4	6.3
30°-40°	2410.7	9.4
40°-50°	3504.5	13.6
50°-60°	4894.9	19.1
60°-70°	6128.1	23.9
70°-80°	5067.5	19.7
80°-90°	732.2	2.9
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°	25679.9	100.0
0°-180°	25679.9	100.0

**Coefficient of Utilization**

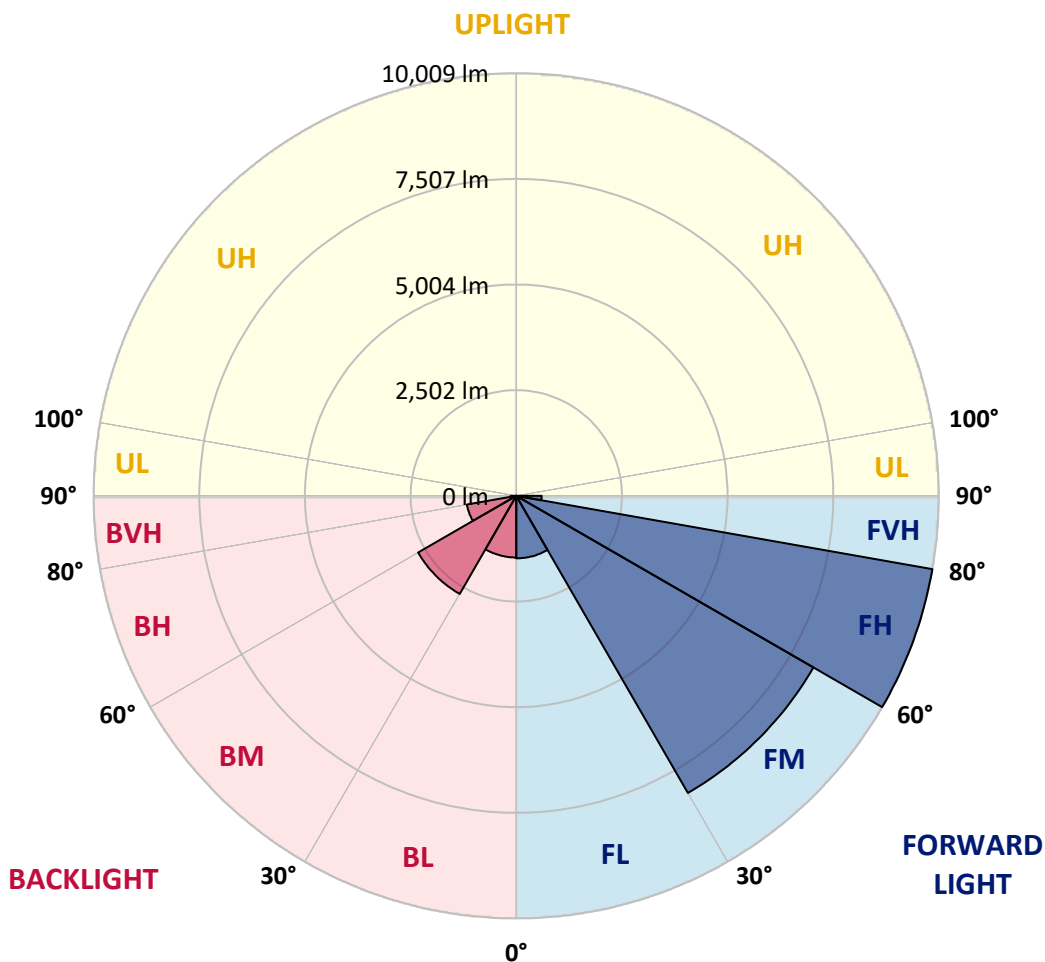


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1480.3	5.8			
FM (30°-60°)	8126.2	31.6			
FH (60°-80°)	10008.7	39.0			G4/12000
FVH (80°-90°)	599.9	2.3			G4/750
BL (0°-30°)	1461.8	5.7	B3/2500		
BM (30°-60°)	2683.8	10.5	B3/5000		
BH (60°-80°)	1186.9	4.6	B3/2500		G3/2500
BVH (80°-90°)	132.4	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8
2.5°	3623.4	3642.0	3652.0	3687.5	3696.0	3707.4	3737.3	3777.1	3828.3	3873.9	3913.7
5°	3321.9	3350.4	3367.4	3398.7	3459.9	3465.6	3545.2	3636.3	3740.2	3836.9	3916.5
7.5°	3035.9	3067.2	3081.4	3138.4	3219.4	3232.2	3348.9	3492.6	3666.2	3812.7	3935.0
10°	2821.1	2836.8	2868.1	2910.7	3007.5	3016.0	3168.2	3360.3	3585.1	3801.3	3966.3
12.5°	2704.5	2713.0	2720.1	2765.6	2860.9	2873.8	3033.1	3250.7	3521.0	3809.8	4017.5
15°	2721.6	2724.3	2693.1	2701.6	2778.4	2796.9	2954.9	3178.2	3481.2	3831.2	4094.4
17.5°	2865.2	2855.3	2778.4	2738.6	2792.6	2801.2	2939.2	3149.7	3462.7	3871.0	4174.1
20°	3091.4	3077.2	2944.8	2856.7	2888.0	2895.1	2990.4	3171.1	3481.2	3936.5	4297.8
22.5°	3373.1	3367.4	3166.8	3060.1	3058.7	3058.7	3108.5	3247.9	3536.7	4026.1	4427.3
25°	3767.2	3737.3	3475.5	3337.5	3299.2	3296.3	3290.6	3374.5	3607.8	4121.4	4580.9
27.5°	4171.2	4120.0	3886.7	3674.7	3592.2	3582.2	3545.2	3553.8	3698.9	4229.6	4755.9
30°	4534.0	4501.3	4282.2	4047.4	3949.3	3926.5	3824.1	3777.1	3851.1	4424.4	5034.7
32.5°	4811.4	4791.5	4620.8	4407.3	4262.3	4258.0	4108.6	4070.2	4088.7	4660.6	5353.4
35°	5036.2	5043.3	4956.5	4771.6	4605.1	4580.9	4481.4	4433.0	4378.9	5002.0	5754.6
37.5°	5343.5	5359.1	5353.4	5194.1	4990.7	4996.4	4973.6	4893.9	4750.2	5383.3	6199.9
40°	5682.0	5693.4	5692.1	5630.8	5524.1	5529.8	5521.3	5430.3	5215.5	5868.4	6694.9
42.5°	6150.1	6096.1	5955.2	6016.3	6079.0	6106.0	6164.4	6077.6	5783.1	6386.3	7160.2
45°	6673.7	6571.2	6252.5	6281.0	6512.9	6564.1	6885.6	6766.1	6399.1	6981.0	7707.9
47.5°	7003.7	6902.7	6633.8	6628.1	6935.4	6985.2	7554.3	7510.1	6959.6	7622.6	8376.5
50°	7298.2	7284.0	6981.0	7053.5	7353.7	7427.6	8282.7	8241.4	7518.7	8379.4	9104.9
52.5°	7734.9	7619.7	7377.8	7527.2	7924.2	8020.9	9005.3	8884.4	8032.3	9048.1	9812.0
55°	7931.3	7904.2	7890.0	8019.4	8564.3	8634.0	9708.2	9430.7	8470.5	9614.2	10349.8
57.5°	8456.3	8406.5	8547.3	8635.5	9318.4	9425.0	10442.3	10001.3	8854.6	10063.8	10611.6
60°	9136.3	9109.2	9238.6	9398.0	10160.5	10322.8	11278.7	10487.8	9163.3	10290.1	10467.8
62.5°	10152.0	10149.2	10125.0	10466.4	11354.2	11503.5	12239.1	10961.5	9211.6	10120.7	9725.2
65°	11608.8	11557.6	11347.0	11719.8	12839.4	13014.4	13239.2	11226.1	8920.0	9251.5	8188.7
67.5°	13132.5	13129.6	12958.9	13442.6	14972.0	15152.6	14489.7	11167.8	8110.5	7494.5	5815.8
70°	14395.8	14334.6	14552.2	15841.2	17696.3	17905.5	15583.6	10480.6	6460.2	4949.4	3455.6
72.5°	14698.8	14701.6	15154.1	17690.6	20312.6	20345.3	15977.7	8494.6	4323.4	2730.1	1728.5
74°	13765.6	13789.7	14491.1	17783.1	20800.5	20652.6	14970.6	6676.4	2923.6	1782.6	1246.3
75°	12564.8	12412.6	13427.0	17167.1	20294.1	20134.7	13791.1	5357.7	2230.8	1424.1	1091.2
77.5°	6717.7	6872.8	8437.8	12811.0	16487.0	16303.5	9351.1	2569.3	1205.0	991.6	785.3
80°	2391.5	2637.6	3707.4	6703.5	10570.3	10627.2	4462.9	1178.0	847.9	731.2	554.8
82.5°	975.9	1003.0	1591.9	2974.8	5367.7	5418.9	1822.4	700.0	606.0	503.6	331.4
85°	381.3	392.7	704.2	1337.3	2290.5	2439.8	630.2	369.9	372.7	288.8	169.3
87.5°	128.0	145.1	288.8	445.3	778.2	762.5	183.5	109.6	133.7	125.2	52.6
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8	3920.8
2.5°	3933.6	3960.7	3979.1	3999.0	4017.5	4023.3	4019.0	4031.8	4033.2	4034.6	4036.0
5°	3956.4	3993.4	4029.0	4048.8	4057.4	4050.3	4026.1	4013.3	4001.9	3993.4	3996.2
7.5°	3987.7	4040.3	4073.0	4081.5	4058.8	4026.1	3966.3	3919.4	3889.5	3869.6	3868.2
10°	4036.0	4087.3	4114.3	4090.1	4027.5	3947.8	3854.0	3765.7	3698.9	3679.0	3677.5
12.5°	4097.3	4155.5	4154.1	4083.0	3973.5	3831.2	3679.0	3576.5	3485.5	3439.9	3458.4
15°	4176.9	4221.0	4179.8	4051.7	3878.1	3683.2	3495.4	3356.0	3253.6	3205.2	3208.1
17.5°	4269.3	4307.8	4198.3	3996.2	3744.4	3494.0	3276.4	3144.1	3062.9	3027.4	3024.6
20°	4384.6	4396.0	4198.3	3899.5	3572.2	3273.5	3065.8	2973.4	2927.8	2909.4	2915.0
22.5°	4508.3	4485.6	4175.5	3762.9	3346.1	3043.1	2903.6	2862.3	2839.6	2836.8	2839.6
25°	4647.8	4583.8	4128.6	3578.0	3109.9	2843.8	2762.8	2769.9	2774.1	2774.1	2784.1
27.5°	4818.5	4690.5	4050.3	3344.7	2833.9	2658.9	2636.2	2686.0	2708.7	2713.0	2720.1
30°	5043.3	4807.2	3920.8	3053.0	2599.2	2492.5	2532.3	2599.2	2624.8	2640.4	2637.6
32.5°	5310.7	4935.2	3745.8	2761.3	2410.0	2375.8	2424.2	2492.5	2520.9	2529.5	2518.1
35°	5625.1	5080.3	3515.4	2488.2	2245.0	2264.9	2321.7	2343.1	2368.7	2368.7	2374.4
37.5°	5963.7	5197.0	3233.6	2237.8	2116.9	2189.5	2230.8	2210.8	2199.4	2185.2	2192.3
40°	6308.0	5283.8	2868.1	1990.3	1988.9	2111.2	2122.6	2065.7	2020.2	2006.0	1998.8
42.5°	6608.2	5337.7	2538.0	1798.2	1867.9	2034.4	2043.0	1951.9	1879.3	1836.7	1822.4
45°	6962.5	5400.4	2215.0	1638.9	1755.6	1973.2	1994.5	1872.2	1765.5	1675.9	1653.2
47.5°	7447.6	5542.6	1960.4	1515.1	1674.4	1934.8	1964.7	1806.8	1665.9	1549.3	1530.8
50°	7995.3	5737.6	1762.7	1431.2	1611.9	1900.7	1937.7	1739.9	1573.4	1444.0	1429.8
52.5°	8497.5	5842.8	1591.9	1355.8	1550.7	1838.1	1902.1	1691.5	1482.4	1338.7	1325.9
55°	8772.1	5672.1	1424.1	1281.8	1466.8	1756.9	1852.3	1624.6	1394.2	1283.2	1264.7
57.5°	8809.1	5319.2	1271.8	1202.1	1378.6	1657.4	1759.8	1543.6	1337.3	1244.8	1229.2
60°	8523.1	4792.9	1153.8	1136.7	1288.9	1545.0	1655.9	1472.4	1279.0	1202.1	1186.5
62.5°	7811.8	4221.0	1071.3	1077.0	1197.8	1426.9	1579.1	1404.1	1223.5	1155.2	1141.0
65°	6588.3	3484.1	991.6	1015.8	1116.8	1334.4	1509.4	1347.3	1168.0	1119.6	1106.8
67.5°	4576.6	2515.3	926.1	951.8	1040.0	1240.6	1428.4	1286.1	1105.4	1079.8	1059.9
70°	2533.8	1547.9	849.3	879.2	960.3	1135.3	1337.3	1193.6	1014.3	1003.0	974.6
72.5°	1331.6	985.9	762.5	795.2	852.2	1000.1	1197.8	1092.6	924.7	876.3	839.4
74°	1040.0	808.0	704.2	738.3	776.7	920.5	1115.3	1020.0	860.7	803.8	775.3
75°	906.3	719.9	654.4	698.5	732.7	866.4	1051.3	968.8	825.1	771.1	745.5
77.5°	640.2	539.2	534.9	587.5	606.0	759.7	947.5	882.0	735.5	678.6	654.4
80°	449.6	404.0	423.9	456.7	482.3	671.5	879.2	762.5	603.2	536.3	527.8
82.5°	293.1	264.6	303.0	332.9	341.4	495.1	709.9	579.0	439.6	357.1	331.4
85°	135.1	132.3	173.6	169.3	167.9	241.9	421.1	338.6	253.2	189.2	177.9
87.5°	34.1	32.7	42.6	35.6	42.6	37.0	38.4	9.9	1.4	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

(END OF REPORT)