

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: P652332

Luminaire Tested: **GALN-SA4B-840-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P652332  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-840-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18896.4 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

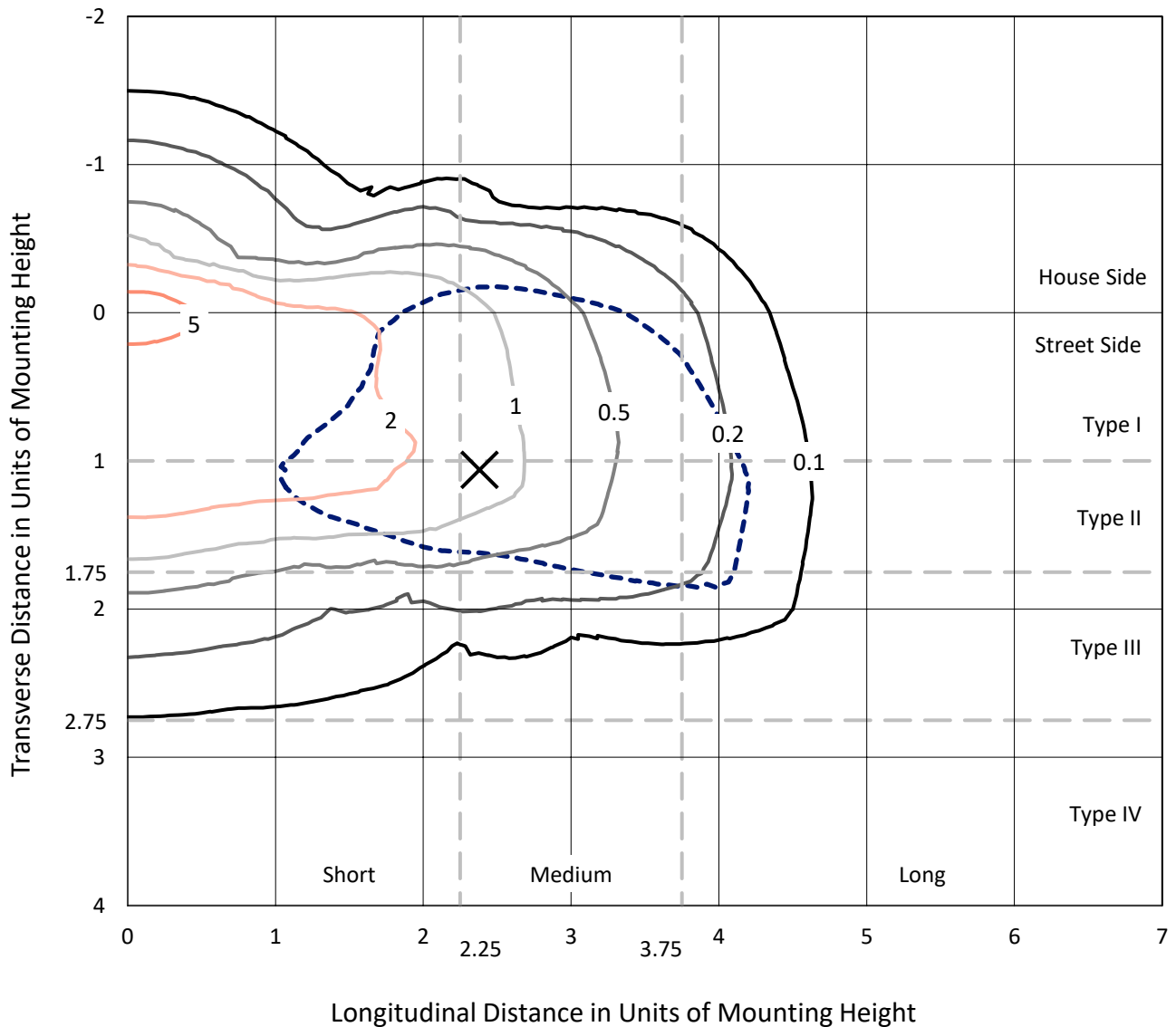
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

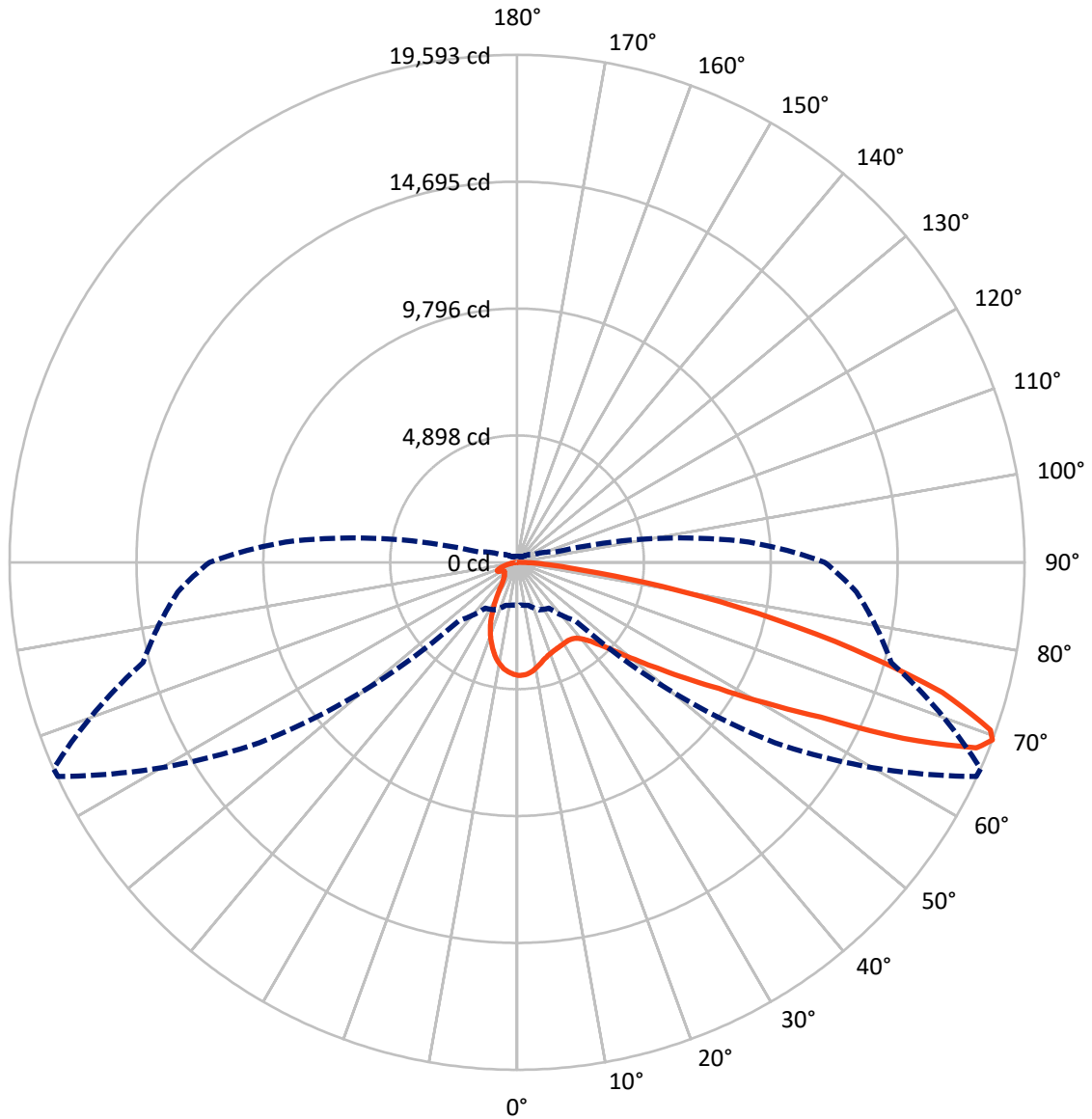
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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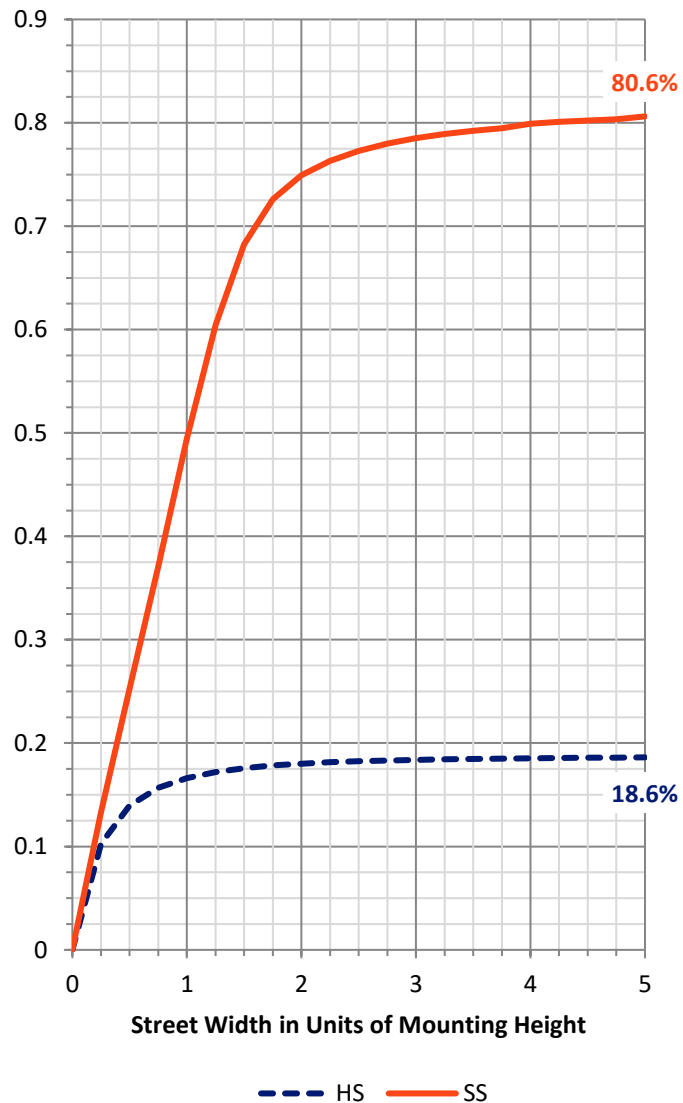
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3553.7	0.0	3553.7
	% Fixture	18.8	0.0	18.8
<b>Street Side</b>	Lumens	15342.7	0.0	15342.7
	% Fixture	81.2	0.0	81.2
<b>Total</b>	Lumens	18896.4	0.0	18896.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	378.9	2.0
10°-20°	898.8	4.8
20°-30°	1223.6	6.5
30°-40°	1644.3	8.7
40°-50°	2455.2	13.0
50°-60°	3905.4	20.7
60°-70°	4803.4	25.4
70°-80°	3125.3	16.5
80°-90°	461.5	2.4
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°	18896.4	100.0
0°-180°	18896.4	100.0

**Coefficient of Utilization**

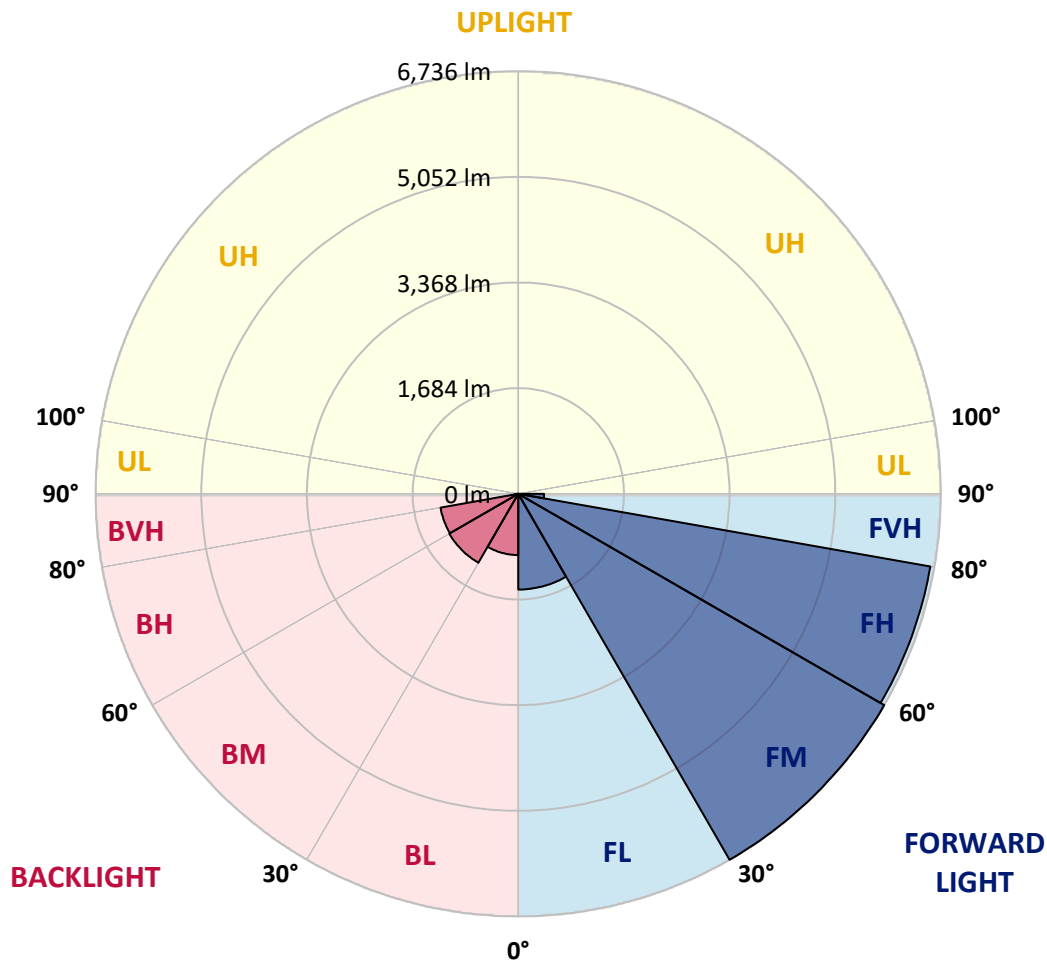


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1525.9	8.1			
FM (30°-60°)	6736.0	35.6			
FH (60°-80°)	6670.5	35.3			G3/7500
FVH (80°-90°)	410.3	2.2			G3/500
BL (0°-30°)	975.5	5.2	B2/1000		
BM (30°-60°)	1268.8	6.7	B2/2500		
BH (60°-80°)	1258.2	6.7	B3/2500		G3/2500
BVH (80°-90°)	51.2	0.3			G1/100
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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7
2.5°	4210.9	4227.7	4246.5	4267.4	4307.2	4329.2	4344.9	4362.7	4364.8	4374.2	4366.8
5°	3900.1	3920.0	3948.2	3988.0	4047.6	4140.8	4237.1	4315.6	4325.0	4368.9	4381.5
7.5°	3640.6	3652.1	3675.2	3739.0	3823.8	3927.3	4067.6	4226.6	4249.7	4354.3	4390.9
10°	3429.3	3440.7	3467.9	3533.9	3617.6	3747.3	3901.1	4110.5	4129.3	4309.3	4393.0
12.5°	3271.2	3281.7	3311.0	3375.9	3472.2	3593.5	3763.1	3984.9	4012.1	4249.7	4373.1
15°	3150.9	3170.7	3194.8	3248.2	3349.7	3466.9	3631.2	3869.8	3891.7	4186.8	4359.5
17.5°	3099.6	3109.0	3125.7	3174.9	3249.2	3364.3	3529.7	3779.8	3805.9	4142.9	4356.4
20°	3101.7	3111.1	3114.2	3141.5	3194.8	3294.2	3457.5	3708.6	3740.0	4104.2	4361.6
22.5°	3172.8	3173.9	3162.4	3153.0	3173.9	3256.6	3406.2	3655.2	3691.9	4087.4	4365.8
25°	3282.8	3301.6	3284.8	3240.9	3202.1	3241.9	3386.3	3626.0	3660.5	4063.4	4360.6
27.5°	3460.6	3463.7	3450.1	3390.5	3290.1	3260.7	3378.0	3604.0	3633.3	4045.6	4334.4
30°	3699.2	3689.8	3677.3	3611.3	3453.3	3333.0	3395.7	3584.1	3614.4	4019.4	4303.0
32.5°	3940.9	3970.3	3958.8	3881.3	3676.2	3473.2	3453.3	3582.0	3607.1	3999.5	4268.5
35°	4197.3	4210.9	4265.4	4225.6	4015.3	3700.2	3561.0	3614.4	3634.3	4000.6	4244.4
37.5°	4398.3	4434.8	4562.5	4597.1	4399.3	4000.6	3735.8	3706.5	3714.9	4051.9	4253.9
40°	4641.1	4703.8	4868.1	5009.3	4879.7	4390.9	4033.0	3877.1	3887.6	4175.3	4315.6
42.5°	4948.7	4992.6	5213.4	5404.9	5384.0	4906.8	4393.0	4156.5	4161.8	4421.3	4488.2
45°	5308.6	5371.5	5619.5	5907.3	5956.4	5490.7	4913.1	4579.2	4576.1	4803.2	4810.5
47.5°	5769.1	5807.8	6053.8	6367.6	6566.5	6224.3	5544.1	5186.2	5152.7	5359.9	5300.3
50°	6192.9	6253.6	6439.9	6783.1	7278.1	7083.4	6373.9	5973.1	5894.7	6088.3	5987.8
52.5°	6370.8	6434.7	6591.6	7017.6	7888.2	8194.8	7427.7	6911.8	6781.0	6929.6	6893.0
55°	6062.1	6144.8	6291.3	6809.2	8156.0	9476.6	8848.8	7997.0	7901.8	7838.0	7848.4
57.5°	5232.3	5310.7	5508.6	6079.9	7835.8	10407.0	10877.9	9392.0	9187.8	8893.8	8944.0
60°	3982.8	4032.0	4134.5	4767.6	6886.7	10648.7	13182.2	11155.2	11025.4	9945.5	9981.1
62.5°	2828.5	2884.0	2955.2	3271.2	5041.8	9967.4	14986.3	13617.5	13153.9	11034.8	11000.3
65°	2296.9	2259.3	2345.1	2492.6	2958.3	7724.9	15392.3	17035.2	16396.9	12469.5	11990.2
67.5°	1888.9	1849.1	1933.9	2196.5	2249.8	4484.0	13929.3	19253.7	19126.0	14029.8	12995.9
69°	1672.2	1651.3	1725.6	2024.9	2159.9	3184.4	12134.7	19562.4	19592.8	14949.6	13150.8
70°	1506.9	1515.2	1587.5	1938.0	2119.1	2625.5	10371.4	19136.5	19393.9	15409.1	12983.4
72.5°	1109.3	1127.0	1227.5	1605.3	2080.4	2227.9	6172.0	16715.0	17170.2	15436.2	11877.3
75°	775.4	767.1	856.0	1208.7	1965.2	2208.0	3624.9	12926.8	13442.7	13342.3	9980.1
77.5°	507.5	521.2	592.3	853.9	1653.4	2191.3	2362.9	9171.1	9506.0	8923.1	5903.1
80°	357.8	356.8	396.6	582.9	1226.4	2105.4	1934.9	5780.6	5695.8	3506.6	1750.7
82.5°	205.1	219.8	265.8	410.2	820.4	1853.2	1780.0	2764.7	2524.0	999.4	591.2
85°	114.0	119.3	158.0	248.0	479.3	1396.0	1554.0	1257.8	1186.7	417.6	254.3
87.5°	36.7	39.8	65.9	125.6	217.7	659.3	880.1	580.8	535.8	150.7	102.5
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°	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7	4363.7
2.5°	4370.0	4382.5	4349.1	4316.6	4287.3	4246.5	4209.9	4179.5	4158.6	4155.5	4145.0
5°	4384.6	4385.6	4321.8	4236.0	4152.4	4060.3	3965.0	3897.0	3833.2	3797.6	3779.8
7.5°	4395.1	4385.6	4270.6	4131.4	3970.3	3802.8	3635.4	3501.4	3397.8	3357.0	3372.7
10°	4390.9	4361.6	4193.1	3970.3	3735.8	3485.8	3245.1	3056.7	2884.0	2795.1	2797.2
12.5°	4367.9	4319.8	4078.0	3789.2	3444.9	3110.0	2741.7	2487.4	2287.5	2169.3	2132.7
15°	4348.1	4264.3	3943.0	3543.3	3115.3	2637.0	2188.1	1874.2	1706.7	1613.6	1612.6
17.5°	4327.1	4210.9	3795.5	3282.8	2736.4	2121.2	1650.3	1410.6	1332.1	1341.6	1325.8
20°	4305.1	4148.1	3641.7	2992.9	2275.0	1582.3	1235.8	1138.5	1160.5	1203.4	1209.7
22.5°	4280.0	4081.2	3476.4	2673.7	1789.4	1190.9	1002.5	987.8	1044.4	1111.3	1120.7
25°	4241.2	3997.4	3268.0	2339.8	1380.2	959.6	878.0	888.4	943.9	1000.4	1006.7
27.5°	4186.8	3893.8	3057.7	1923.4	1037.0	823.6	802.7	816.3	843.4	878.0	886.3
30°	4113.6	3776.7	2816.0	1563.4	830.9	755.6	747.1	754.5	770.2	784.8	789.0
32.5°	4040.3	3663.6	2572.2	1197.2	740.9	710.6	702.2	702.2	702.2	704.3	705.3
35°	3972.3	3556.9	2310.6	932.4	693.8	675.0	663.5	650.9	648.8	641.5	641.5
37.5°	3934.7	3459.5	2032.2	780.6	659.3	645.6	630.0	609.1	597.5	598.5	596.4
40°	3942.0	3395.7	1779.0	694.8	631.0	616.4	592.3	568.3	560.9	560.9	558.8
42.5°	4024.7	3374.8	1536.2	649.8	603.8	587.1	556.7	534.7	530.6	529.5	531.6
45°	4215.1	3426.1	1318.5	620.6	580.8	555.6	525.3	505.4	501.2	501.2	500.2
47.5°	4586.6	3592.5	1162.6	601.7	564.1	531.6	500.2	480.3	473.0	470.9	470.9
50°	5164.2	3953.5	1046.5	585.0	543.1	509.6	477.2	454.1	442.6	441.6	440.5
52.5°	5966.9	4516.5	1001.5	572.4	520.1	486.6	451.0	429.1	414.4	411.2	409.1
55°	6905.5	5302.4	1063.2	563.0	496.0	460.4	423.8	400.8	387.2	380.9	379.9
57.5°	7992.8	6246.3	1297.6	550.4	474.1	432.2	396.6	373.6	358.9	351.6	349.5
60°	8969.2	7216.4	1706.7	543.1	455.2	401.8	365.2	344.3	330.7	323.4	322.3
62.5°	10041.8	8141.4	2195.4	563.0	446.8	372.6	335.9	317.1	305.5	298.2	298.2
65°	11187.7	9067.5	2518.8	630.0	459.4	349.5	304.5	288.8	278.4	273.2	272.1
67.5°	11959.9	9387.7	2075.1	699.0	490.8	324.4	274.2	261.6	255.3	250.1	250.1
69°	11876.2	8982.7	1531.0	716.8	500.2	311.8	257.4	248.0	239.6	237.6	235.5
70°	11611.4	8521.3	1282.9	705.3	492.9	300.3	247.0	235.5	228.2	226.1	225.0
72.5°	10342.1	7390.0	955.4	613.3	419.7	260.5	218.7	208.2	201.9	198.8	198.8
75°	8592.4	6040.1	746.1	487.6	328.6	219.8	187.3	179.0	173.8	171.6	170.6
77.5°	4815.8	3372.7	535.8	382.0	249.0	177.9	156.9	149.6	144.4	142.3	142.3
80°	1341.6	963.8	315.0	252.2	169.5	135.0	124.6	119.3	111.9	106.7	109.9
82.5°	505.4	417.6	180.0	151.7	107.8	90.0	86.9	82.7	79.6	72.2	72.2
85°	245.9	203.0	115.1	80.6	59.6	47.1	45.0	42.9	40.8	35.6	36.7
87.5°	84.8	90.0	50.2	29.3	17.8	11.5	9.4	5.2	5.2	5.2	5.2
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)