

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: P317583

Luminaire Tested: **GLEON-SA9D-827-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P317583  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA9D-827-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 53124 lumens  
Efficiency: N/A  
Efficacy: 92.4 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G5

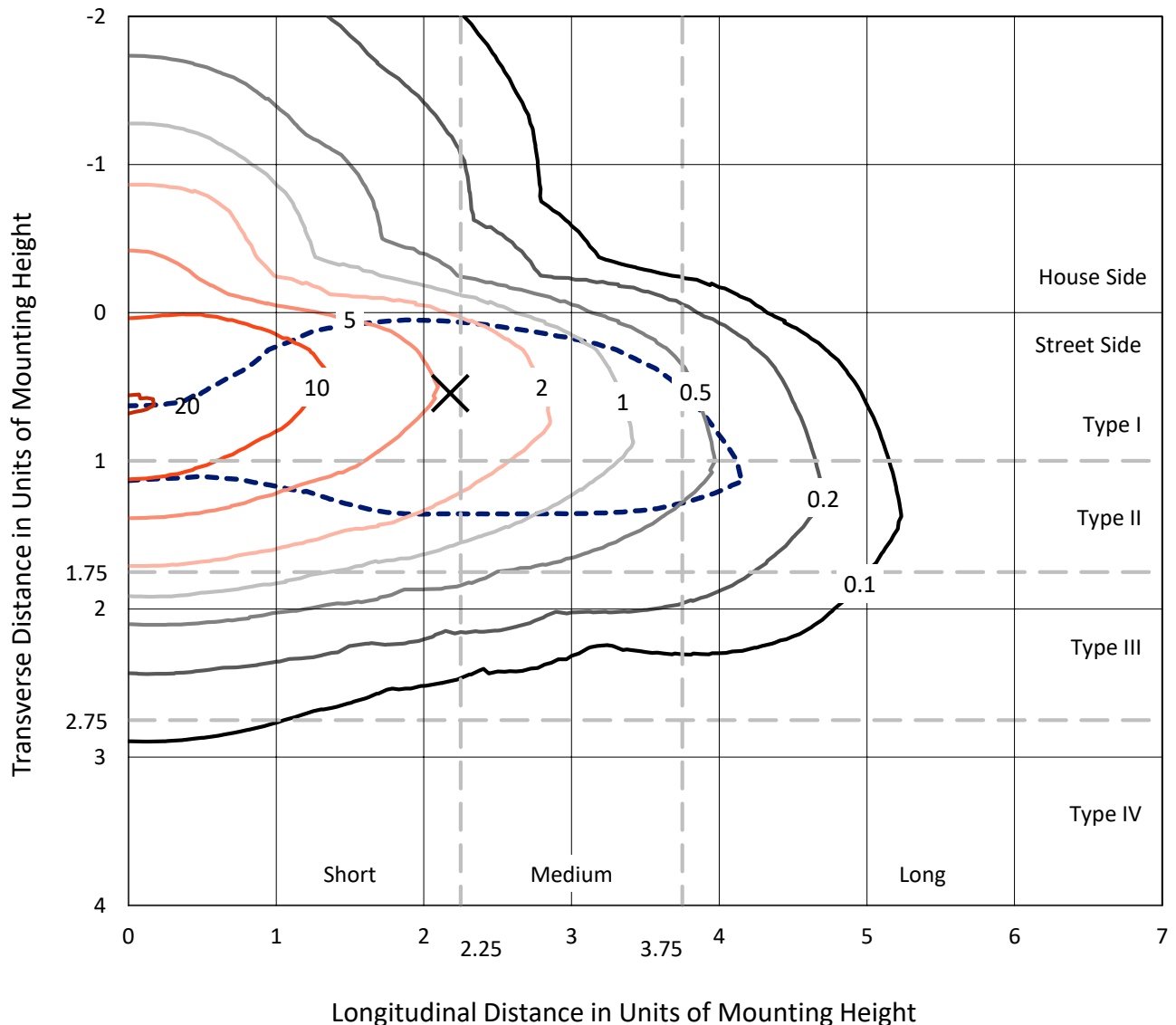
Input Watts (W): 575  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

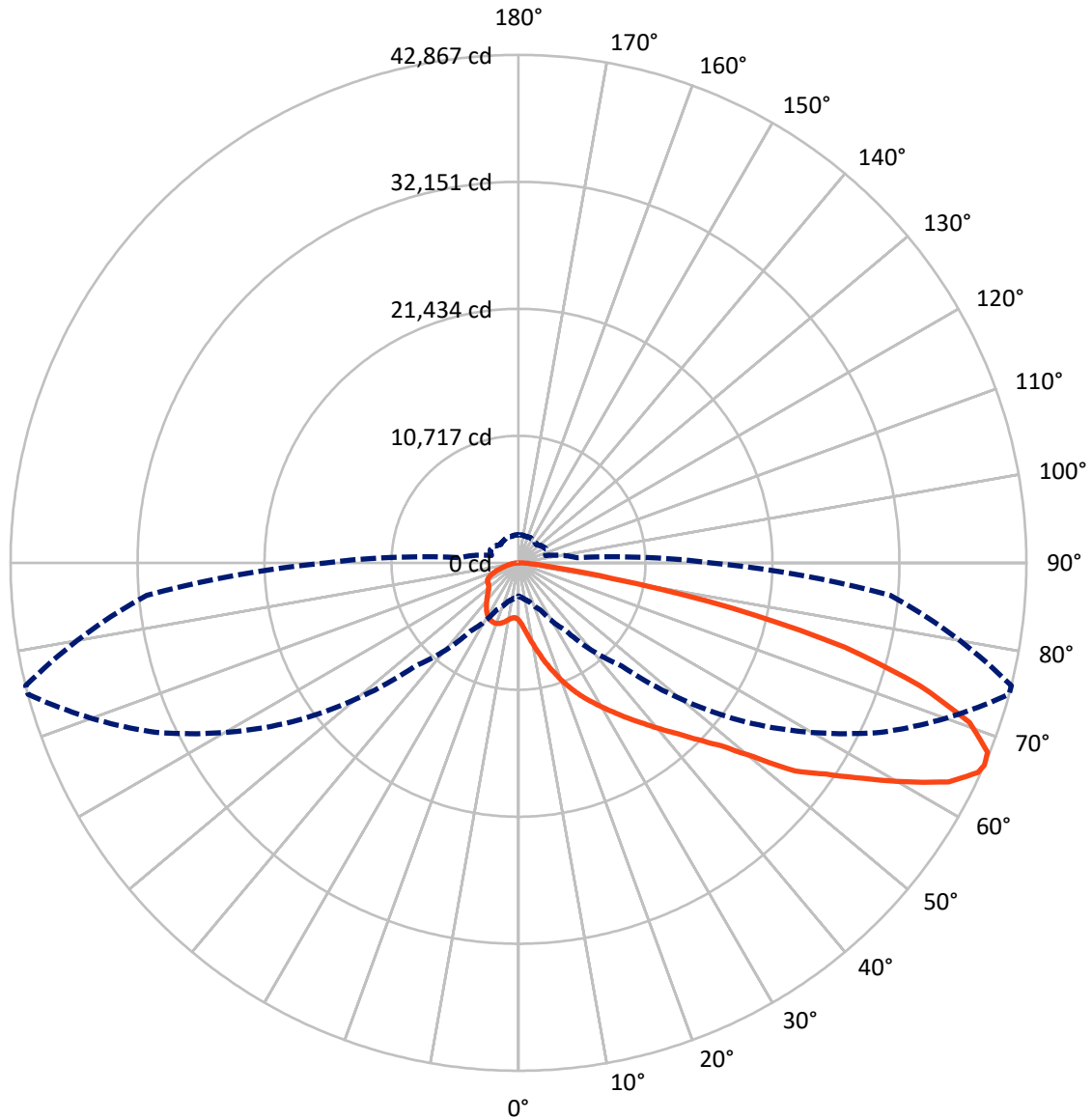
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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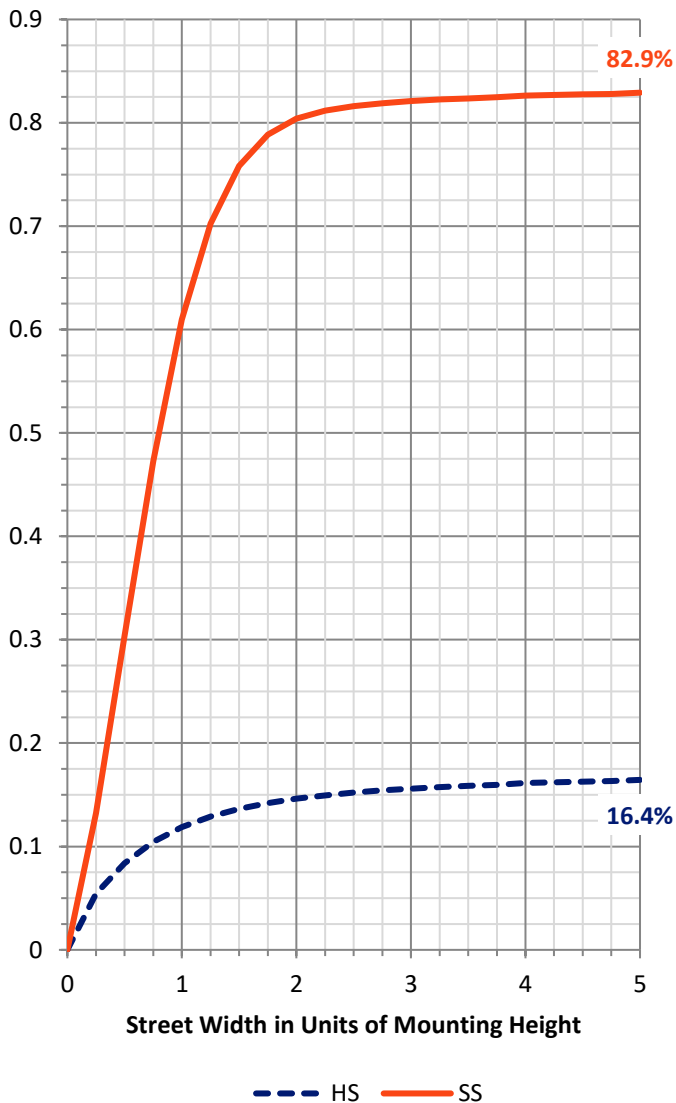
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8938.9	0.0	8938.9
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	44185.1	0.0	44185.1
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	53124.0	0.0	53124.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	586.7	1.1
10°-20°	2316.7	4.4
20°-30°	4501.9	8.5
30°-40°	7348.2	13.8
40°-50°	10039.4	18.9
50°-60°	11693.8	22.0
60°-70°	10483.7	19.7
70°-80°	5298.0	10.0
80°-90°	855.6	1.6
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°	53124.0	100.0
0°-180°	53124.0	100.0

**Coefficient of Utilization**

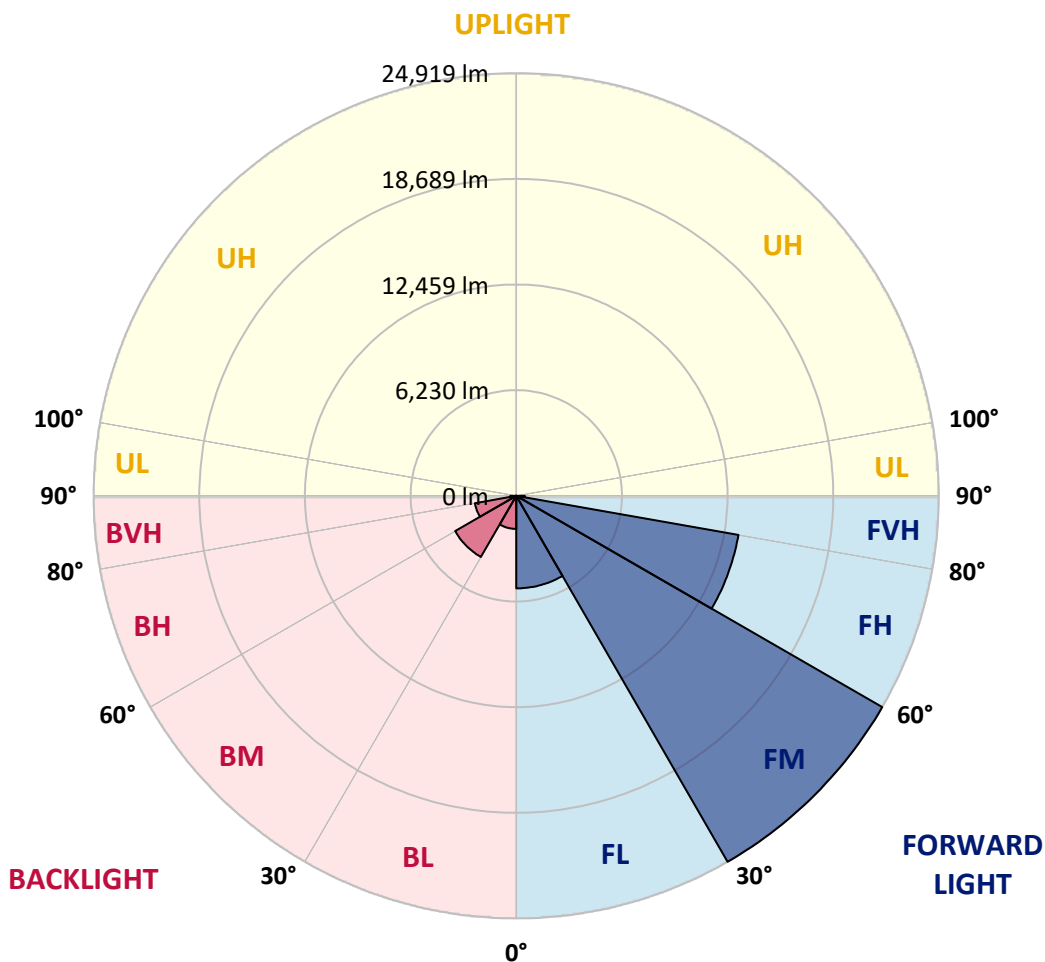


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5455.7	10.3			
FM (30°-60°)	24918.8	46.9			
FH (60°-80°)	13305.3	25.0			G5
FVH (80°-90°)	505.3	1.0			G4/750
BL (0°-30°)	1949.6	3.7	B3/2500		
BM (30°-60°)	4162.5	7.8	B3/5000		
BH (60°-80°)	2476.5	4.7	B3/2500		G3/2500
BVH (80°-90°)	350.3	0.7			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4
2.5°	6440.3	6342.9	6333.9	6191.4	6159.0	5886.6	5686.4	5477.2	5239.2	5192.3	5004.7
5°	8272.7	8263.6	8139.2	7906.6	7724.4	7259.1	6799.2	6312.3	5778.4	5691.9	5269.8
7.5°	9921.1	9906.6	9811.0	9560.4	9297.1	8725.3	8068.9	7322.2	6456.5	6328.5	5628.7
10°	11172.7	11167.3	11134.8	10950.9	10727.2	10179.0	9454.0	8435.0	7244.7	7069.7	6077.8
12.5°	12139.4	12150.2	12171.8	12106.9	12000.5	11533.4	10790.4	9614.5	8085.1	7912.0	6577.4
15°	12794.0	12826.5	12938.3	13030.3	13086.2	12799.5	12079.9	10821.0	9026.5	8819.1	7131.0
17.5°	13124.1	13160.2	13353.1	13630.9	13887.0	13858.1	13286.4	11971.6	9930.1	9729.9	7726.2
20°	13409.0	13436.1	13652.5	13986.2	14438.8	14639.0	14318.0	13079.0	10920.2	10682.1	8357.4
22.5°	14235.0	14269.3	14334.2	14523.6	14924.0	15291.9	15136.8	14126.8	11827.4	11605.5	8956.2
25°	15829.3	15870.8	15730.1	15569.6	15645.4	15901.5	15930.3	15082.7	12747.1	12496.5	9600.0
27.5°	17750.1	17809.6	17569.7	17156.7	16796.0	16696.8	16662.6	15865.4	13625.5	13335.1	10236.7
30°	19631.1	19733.9	19421.9	18886.3	18224.4	17759.1	17414.6	16631.9	14491.1	14213.4	10837.2
32.5°	21468.9	21427.4	20974.7	20451.7	19676.2	19093.7	18260.5	17454.3	15465.0	15145.8	11434.2
35°	22727.7	22742.2	22321.9	21701.5	20962.1	20514.8	19393.1	18341.6	16458.8	16164.8	12112.3
37.5°	23799.0	23732.3	23256.2	22677.2	22040.6	21849.4	20718.6	19319.1	17535.4	17214.4	12833.7
40°	24156.1	24078.6	23766.5	23349.9	22839.5	22823.3	22181.3	20426.5	18752.8	18435.4	13647.1
42.5°	23939.7	23840.5	23712.4	23598.8	23441.9	23514.1	23555.5	21725.0	20091.0	19735.7	14588.5
45°	23140.7	22991.0	23081.2	23328.3	23669.2	24076.7	24796.3	23162.4	21589.7	21292.1	15694.1
47.5°	21912.5	21777.3	22058.6	22587.1	23514.1	24545.7	25970.4	24749.5	23378.8	23083.0	17268.5
50°	20184.8	20224.5	20626.6	21587.9	22989.2	24762.1	27416.8	26850.5	25979.4	25703.5	19416.5
52.5°	17349.7	17356.9	18489.5	20067.6	22058.6	24650.3	28219.4	29535.9	29530.5	29196.9	21461.7
55°	14716.6	14877.1	15773.4	17870.9	20550.9	24203.0	28780.3	30841.7	31862.5	31471.1	23368.0
57.5°	12144.8	12238.6	13088.0	15194.5	18399.3	23010.9	29355.6	32408.9	34549.7	34302.6	25737.8
60°	9219.5	9363.8	10242.1	12188.1	15647.2	20895.4	29409.7	34044.7	37761.7	37512.8	28383.5
62.5°	5984.0	6232.9	7055.3	8878.6	12317.9	17852.9	28154.5	35114.2	40806.0	40717.7	30731.7
65°	3439.3	3626.8	4198.6	5605.3	8498.1	14033.0	25169.7	34703.0	42679.9	42629.4	31610.0
66°	2809.9	2927.1	3365.3	4380.7	7012.0	12323.3	23434.7	33835.5	42865.6	42867.4	31509.0
67.5°	2247.2	2299.5	2496.0	3136.3	5174.2	9767.8	20334.5	31922.0	42634.8	42697.9	30857.9
70°	1859.4	1886.5	1947.8	2102.9	2824.3	5890.2	14433.4	26949.7	40317.3	40366.0	28316.8
72.5°	1668.2	1684.5	1707.9	1729.6	1992.9	3291.4	8815.5	21559.1	35348.6	35411.8	24444.7
75°	1511.3	1520.4	1516.7	1518.5	1671.8	2097.5	4555.6	16096.3	28581.9	28455.6	18725.8
77.5°	1327.4	1336.4	1318.4	1322.0	1478.9	1612.3	2267.0	11268.3	19288.4	18397.5	10550.5
80°	1121.8	1129.0	1121.8	1134.4	1287.7	1217.4	1318.4	6339.3	8528.8	8067.1	3751.3
82.5°	847.6	878.3	899.9	950.4	1060.5	865.7	881.9	2469.0	2597.0	2472.6	1150.6
85°	371.5	452.7	678.1	726.8	797.1	519.4	578.9	1006.4	1056.9	1024.4	418.4
87.5°	97.4	106.4	335.5	422.0	441.9	234.5	301.2	458.1	483.3	458.1	138.9
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°	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4	4851.4
2.5°	4905.5	4817.2	4658.4	4517.8	4411.4	4339.2	4267.1	4231.0	4209.4	4187.7	4191.3
5°	5062.4	4883.9	4611.6	4418.6	4310.4	4241.8	4205.8	4191.3	4182.3	4160.7	4160.7
7.5°	5298.7	5046.2	4671.1	4472.7	4387.9	4335.6	4314.0	4306.8	4295.9	4270.7	4274.3
10°	5596.3	5242.8	4795.5	4602.5	4525.0	4467.3	4436.6	4425.8	4406.0	4377.1	4380.7
12.5°	5946.1	5486.3	4959.6	4757.6	4663.9	4586.3	4535.8	4505.1	4470.9	4433.0	4434.8
15°	6328.5	5751.4	5136.4	4896.5	4768.5	4660.2	4579.1	4526.8	4472.7	4425.8	4424.0
17.5°	6716.2	6007.5	5271.6	4972.3	4799.1	4656.6	4546.6	4465.5	4398.7	4341.0	4335.6
20°	7134.7	6238.3	5347.4	4965.0	4741.4	4571.9	4425.8	4324.8	4250.9	4193.1	4184.1
22.5°	7560.3	6454.7	5360.0	4891.1	4613.4	4406.0	4252.7	4140.8	4065.1	4005.6	3983.9
25°	7949.8	6622.5	5307.7	4748.6	4434.8	4211.2	4061.5	3947.9	3886.5	3816.2	3794.6
27.5°	8305.1	6739.7	5203.1	4566.5	4234.6	4014.6	3873.9	3776.5	3709.8	3655.7	3637.7
30°	8624.3	6802.8	5031.8	4350.0	4029.0	3828.8	3709.8	3643.1	3585.4	3516.8	3504.2
32.5°	8927.3	6802.8	4811.7	4113.8	3825.2	3664.7	3594.4	3552.9	3488.0	3421.2	3403.2
35°	9230.3	6761.3	4552.0	3866.7	3637.7	3547.5	3543.9	3495.2	3396.0	3305.8	3282.4
37.5°	9549.5	6676.6	4259.9	3635.9	3484.4	3495.2	3525.8	3417.6	3277.0	3148.9	3114.6
40°	9910.2	6559.3	3956.9	3435.7	3356.3	3471.7	3477.2	3305.8	3031.7	2914.5	2883.8
42.5°	10334.1	6442.1	3675.5	3258.9	3255.3	3401.4	3385.2	3064.1	2900.0	2840.5	2824.3
45°	10891.3	6375.4	3408.6	3091.2	3176.0	3287.8	3228.3	2930.7	2862.2	2827.9	2813.5
47.5°	11769.7	6409.6	3163.3	2957.7	3096.6	3174.2	2936.1	2876.6	2827.9	2786.4	2772.0
50°	12869.8	6389.8	2965.0	2865.8	3006.4	3055.1	2804.4	2806.2	2781.0	2734.1	2712.5
52.5°	13697.6	6234.7	2836.9	2813.5	2927.1	2844.1	2721.5	2737.7	2725.1	2656.6	2633.1
55°	14496.5	6101.2	2772.0	2793.6	2869.4	2580.8	2624.1	2663.8	2651.1	2584.4	2573.6
57.5°	15490.3	6076.0	2732.3	2799.0	2820.7	2449.2	2530.3	2582.6	2573.6	2544.7	2539.3
60°	16707.6	6083.2	2696.2	2808.1	2766.6	2351.8	2441.9	2508.7	2514.1	2508.7	2505.1
62.5°	17376.7	5886.6	2606.1	2782.8	2671.0	2267.0	2350.0	2447.4	2449.2	2460.0	2458.2
65°	16808.6	5298.7	2438.3	2694.4	2510.5	2196.7	2270.6	2377.0	2350.0	2398.7	2398.7
66°	16256.8	4959.6	2355.4	2636.7	2441.9	2169.6	2245.4	2340.9	2306.7	2373.4	2373.4
67.5°	15129.6	4387.9	2205.7	2514.1	2344.6	2131.7	2216.5	2281.4	2234.5	2333.7	2326.5
70°	13070.0	3394.2	1904.5	2236.3	2184.0	2075.8	2176.8	2162.4	2093.9	2245.4	2216.5
72.5°	11019.4	2579.0	1529.4	1872.0	1940.6	2005.5	2120.9	2010.9	1924.3	2030.7	1967.6
75°	8550.4	1938.8	1208.3	1455.4	1639.4	1895.5	2054.2	1836.0	1711.5	1700.7	1666.4
77.5°	4622.4	1331.0	957.7	1111.0	1302.1	1758.4	2009.1	1648.4	1460.8	1417.6	1390.5
80°	1830.6	865.7	696.2	842.2	910.8	1560.0	1900.9	1430.2	1204.7	1161.5	1120.0
82.5°	755.7	512.2	449.1	564.5	593.4	1334.6	1706.1	1172.3	930.6	1287.7	1367.1
85°	324.6	281.3	266.9	292.2	335.5	936.0	1358.0	894.5	1004.6	896.3	712.4
87.5°	97.4	119.0	113.6	111.8	122.6	223.6	723.2	497.8	737.6	279.5	209.2
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)