

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: P300427

Luminaire Tested: **GLNA-AF-03-LED-E1-AFL-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300427  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-AFL-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10634.2 lumens  
Efficiency: N/A  
Efficacy: 110.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

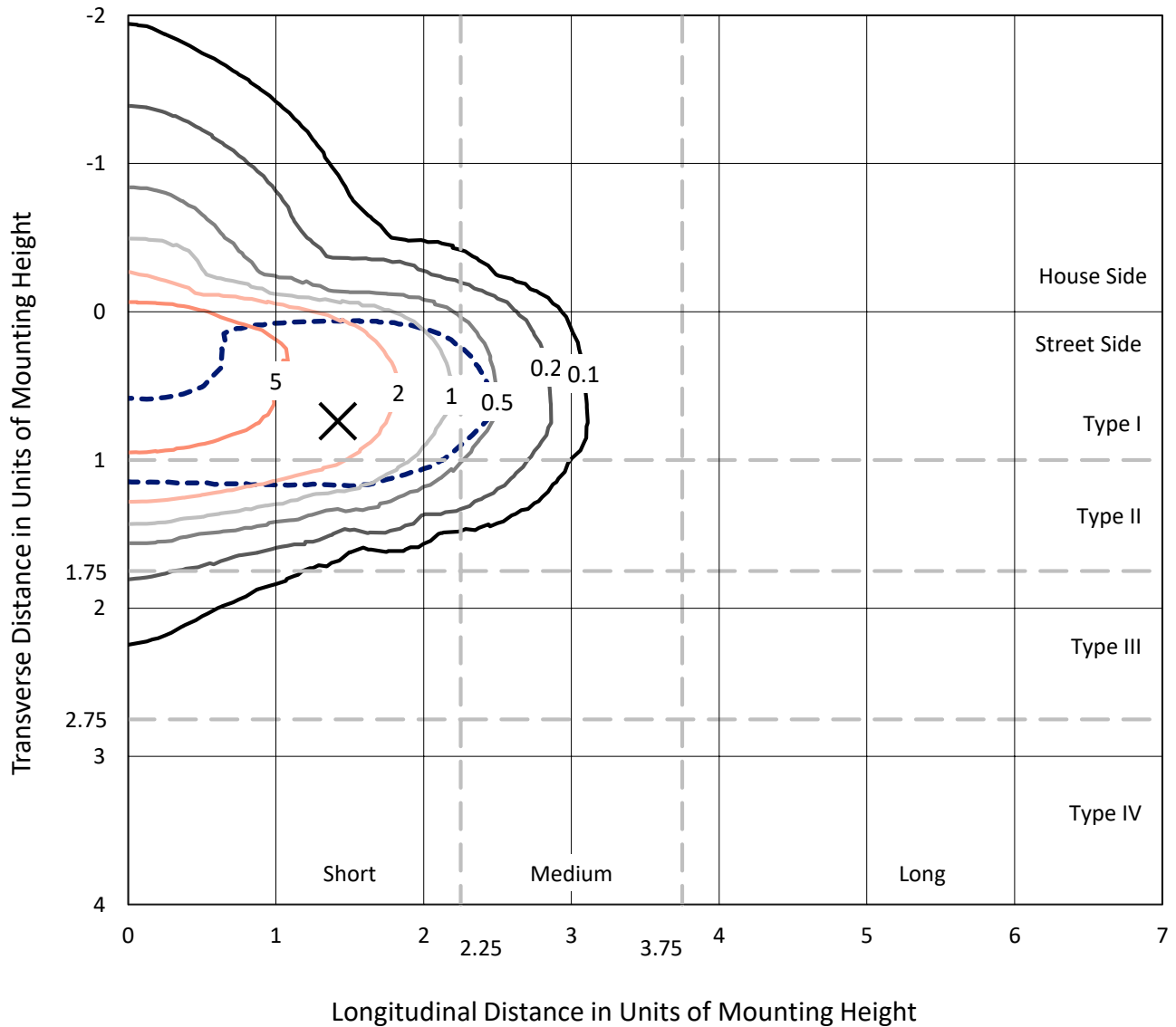
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P300427  
 CATALOG NUMBER: GLNA-AF-03-LED-E1-AFL-7027-600

### Iso-Footcandle Lines of Horizontal Illumination

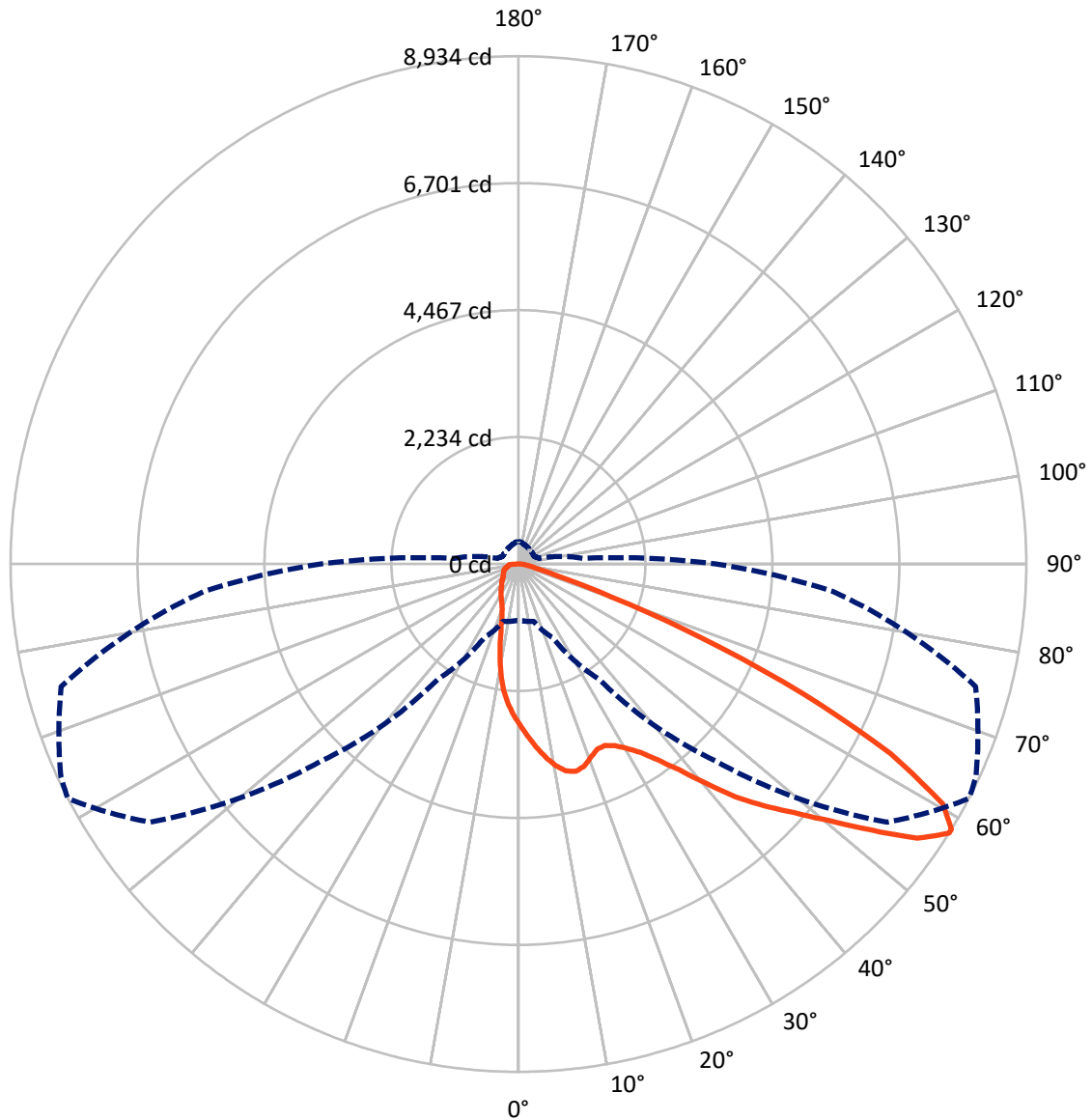
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.6 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P300427  
CATALOG NUMBER: GLNA-AF-03-LED-E1-AFL-7027-600

### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P300427

CATALOG NUMBER: GLNA-AF-03-LED-E1-AFL-7027-600

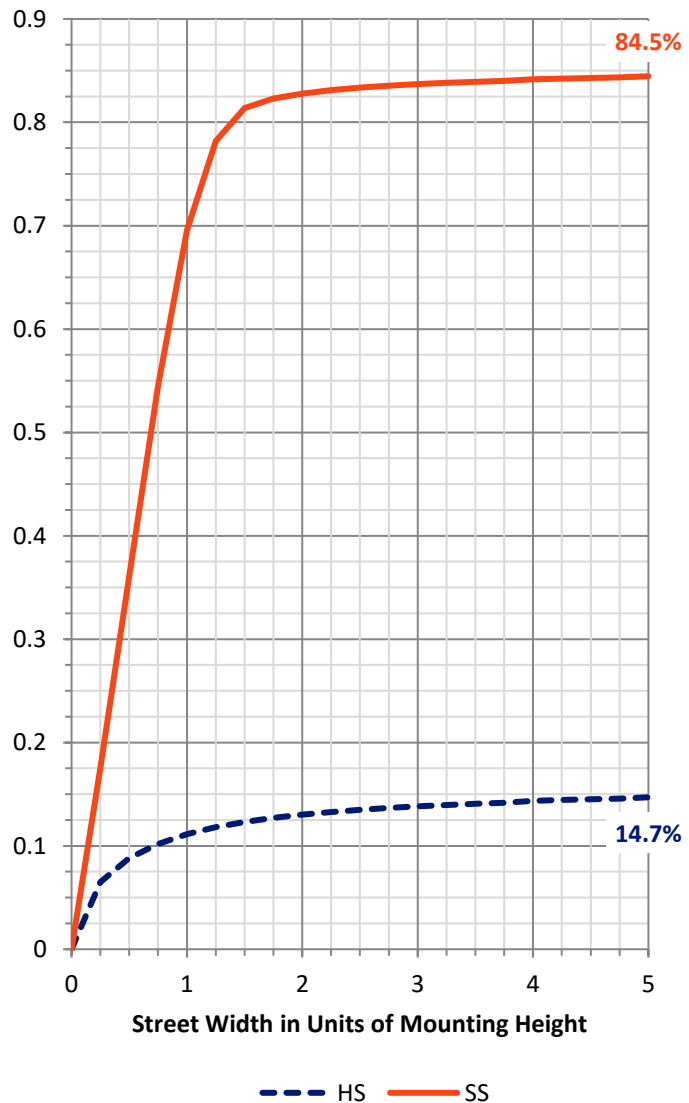
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1621.8	0.0	1621.8
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	9012.5	0.0	9012.5
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	10634.2	0.0	10634.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	252.6	2.4
10°-20°	645.8	6.1
20°-30°	1043.9	9.8
30°-40°	1657.2	15.6
40°-50°	2424.8	22.8
50°-60°	2536.2	23.8
60°-70°	1498.4	14.1
70°-80°	422.1	4.0
80°-90°	153.2	1.4
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°	10634.2	100.0
0°-180°	10634.2	100.0

**Coefficient of Utilization**



REPORT NUMBER: P300427

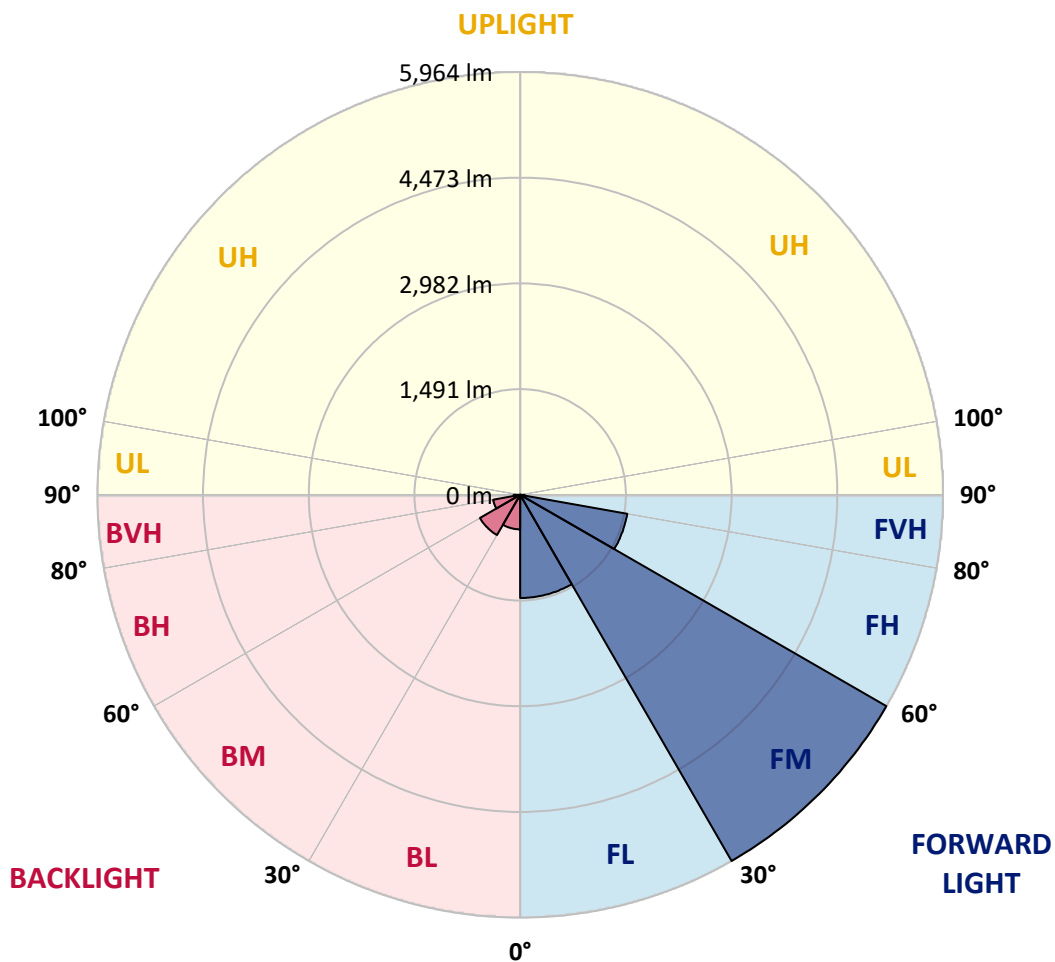
CATALOG NUMBER: GLNA-AF-03-LED-E1-AFL-7027-600

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1454.9	13.7			
FM	(30°-60°)	5963.6	56.1			
FH	(60°-80°)	1533.5	14.4			G1/1800
FVH	(80°-90°)	60.5	0.6			G1/100
BL	(0°-30°)	487.4	4.6	B1/500		
BM	(30°-60°)	654.6	6.2	B1/1000		
BH	(60°-80°)	387.0	3.6	B1/500		G1/500
BVH	(80°-90°)	92.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P300427

CATALOG NUMBER: GLNA-AF-03-LED-E1-AFL-7027-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8
2.5°	3227.9	3201.8	3185.3	3170.8	3151.8	3111.2	3056.6	3022.1	3004.5	2944.9	2874.3
5°	3544.4	3521.3	3504.3	3484.8	3450.7	3387.1	3299.0	3228.9	3194.3	3075.1	2933.9
7.5°	3470.2	3479.8	3509.3	3560.9	3604.9	3596.4	3517.8	3428.7	3383.1	3217.4	3003.0
10°	3023.6	3040.1	3091.2	3211.8	3407.1	3607.4	3668.5	3606.9	3560.9	3358.1	3074.1
12.5°	2933.9	2933.4	2937.4	2969.5	3085.7	3367.6	3673.5	3735.6	3708.1	3492.3	3146.7
15°	2970.5	2971.5	2968.5	2982.0	3018.1	3129.7	3520.3	3785.2	3804.7	3627.5	3221.9
17.5°	3066.6	3064.1	3052.6	3052.6	3065.6	3109.2	3340.0	3739.1	3829.3	3747.2	3288.0
20°	3227.9	3216.4	3185.8	3157.8	3143.7	3167.3	3265.9	3633.0	3786.7	3851.8	3342.5
22.5°	3423.2	3414.2	3364.6	3304.5	3255.9	3255.4	3304.0	3540.3	3713.1	3950.5	3388.6
25°	3675.5	3661.0	3587.4	3491.3	3406.1	3373.6	3387.1	3535.8	3673.0	4057.6	3429.7
27.5°	3972.0	3945.5	3858.3	3719.6	3594.4	3528.8	3509.3	3617.5	3709.6	4190.3	3486.8
30°	4331.5	4301.0	4189.3	4008.6	3831.8	3724.1	3682.6	3762.2	3830.8	4352.1	3578.4
32.5°	4740.7	4696.6	4567.4	4368.1	4135.7	3971.5	3903.9	3953.5	4008.1	4546.9	3693.1
35°	5306.0	5253.4	5066.6	4791.7	4529.3	4303.5	4195.3	4231.4	4284.5	4837.3	3858.8
37.5°	5691.6	5668.1	5543.9	5285.5	5000.0	4740.2	4572.9	4593.9	4624.0	5200.3	4071.1
40°	5688.1	5697.6	5700.1	5702.6	5508.3	5259.4	5079.7	5057.6	5051.6	5599.0	4312.5
42.5°	5403.2	5442.2	5568.4	5824.3	5942.5	5828.3	5663.5	5600.0	5568.4	6068.7	4568.4
45°	4967.0	4988.0	5224.4	5724.1	6164.8	6391.6	6267.0	6066.7	6009.6	6500.3	4780.7
47.5°	4742.2	4765.2	4913.9	5458.7	6162.3	6846.8	6918.9	6537.4	6435.2	6875.9	4964.0
50°	4206.9	4254.9	4442.2	4997.0	5937.5	7056.2	7600.5	7098.2	6886.9	7241.4	5147.8
52.5°	3223.9	3298.0	3507.8	4237.9	5367.1	6952.5	8145.8	7778.2	7479.8	7620.0	5305.5
55°	2033.6	2088.7	2264.9	2993.0	4293.5	6413.2	8352.6	8513.9	8248.5	7978.5	5442.2
57.5°	1105.7	1130.2	1196.3	1652.5	2792.7	5220.9	8051.2	8932.5	8822.3	8283.0	5545.4
58°	989.5	1006.0	1047.1	1432.2	2476.7	4894.9	7917.5	8934.0	8878.9	8327.6	5553.4
60°	734.1	725.6	689.0	817.2	1378.6	3381.6	7109.2	8576.4	8738.2	8382.2	5514.3
62.5°	645.0	624.4	549.8	541.3	670.5	1557.9	5439.7	7346.6	7728.7	8070.7	5277.0
65°	605.9	583.9	487.7	456.7	483.7	659.0	3204.3	5509.8	5989.0	7126.3	4670.0
67.5°	576.9	548.3	448.2	405.6	407.6	435.7	1284.4	3470.2	4009.6	5410.7	3632.5
70°	548.8	517.8	414.6	365.6	354.0	344.5	510.8	1737.1	2226.4	3417.7	2316.0
72.5°	518.8	488.2	385.1	334.0	311.5	279.9	333.5	710.6	992.5	1616.9	1050.6
75°	475.2	447.7	355.5	306.0	273.9	231.8	251.9	371.1	445.2	644.0	506.3
77.5°	421.6	399.1	322.5	282.9	242.9	188.3	193.8	257.4	285.4	368.6	301.0
80°	303.0	311.0	286.9	254.4	216.3	152.7	148.7	187.8	202.8	236.9	195.8
82.5°	212.8	217.3	237.4	207.8	178.8	120.2	109.7	132.2	141.2	155.7	105.7
85°	146.7	141.7	162.7	144.7	129.2	80.1	75.1	89.6	95.1	96.6	54.6
87.5°	88.1	88.1	94.1	77.6	69.6	41.6	40.6	51.1	54.6	52.1	30.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P300427

CATALOG NUMBER: GLNA-AF-03-LED-E1-AFL-7027-600

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8	2824.8
2.5°	2832.3	2796.7	2721.1	2660.5	2583.9	2504.3	2459.7	2412.1	2379.6	2356.1	2393.6
5°	2853.8	2781.2	2625.0	2476.7	2313.0	2142.7	2013.5	1893.4	1809.7	1757.7	1806.7
7.5°	2887.9	2776.2	2527.3	2273.9	1980.0	1696.6	1443.2	1284.4	1191.8	1146.2	1174.8
10°	2926.9	2768.2	2412.6	1999.0	1578.4	1221.3	1032.1	968.0	946.9	938.4	942.4
12.5°	2959.5	2751.2	2271.9	1666.5	1185.3	964.5	909.9	908.4	912.9	913.9	915.4
15°	2982.5	2726.1	2063.1	1320.0	947.9	878.8	875.8	884.8	893.3	896.9	898.9
17.5°	2998.0	2674.5	1827.3	1043.6	849.3	837.3	844.3	855.8	864.8	867.3	869.3
20°	2996.5	2598.9	1546.3	870.3	795.7	795.7	807.7	816.7	817.2	814.2	815.7
22.5°	2981.0	2495.3	1273.9	778.2	748.1	756.6	768.7	760.1	725.1	702.1	703.6
25°	2955.0	2371.6	1040.6	719.6	704.1	719.1	715.6	651.5	601.4	578.9	578.9
27.5°	2931.9	2225.4	861.3	668.5	660.0	678.5	616.4	558.3	537.3	526.8	523.3
30°	2915.4	2067.6	741.6	619.4	618.4	604.9	534.8	518.8	515.3	506.8	503.8
32.5°	2919.4	1907.9	665.0	576.4	579.9	517.8	495.7	499.3	496.2	487.2	483.2
35°	2952.5	1756.2	614.9	537.3	526.8	467.7	472.7	479.2	478.2	465.7	461.7
37.5°	3011.5	1612.4	581.9	504.8	459.7	442.7	450.7	460.7	458.2	449.7	446.7
40°	3073.6	1477.2	554.8	479.2	420.1	425.6	432.7	438.2	440.7	443.2	441.2
42.5°	3134.2	1336.0	521.8	453.2	403.6	409.6	412.6	418.1	431.7	441.2	440.7
45°	3170.3	1203.3	487.7	416.1	390.6	394.1	392.1	403.1	419.6	435.2	435.7
47.5°	3210.3	1100.2	460.7	382.1	378.1	380.6	374.6	385.6	400.6	419.6	421.6
50°	3258.9	1038.6	439.2	355.0	361.0	361.0	359.5	369.6	390.6	412.6	416.6
52.5°	3314.0	1026.5	421.1	335.5	344.0	343.5	345.0	360.0	383.1	404.6	408.1
55°	3381.1	1059.1	401.6	321.0	327.5	329.5	334.5	351.5	371.1	395.6	397.1
57.5°	3459.2	1125.2	386.1	309.5	312.5	319.0	327.0	342.5	363.5	390.6	392.1
58°	3472.2	1139.2	383.6	308.5	309.5	317.0	326.0	341.0	362.0	391.6	393.1
60°	3472.7	1185.8	378.1	304.0	297.9	310.5	320.5	335.5	359.5	395.1	398.6
62.5°	3349.6	1185.3	374.1	297.4	285.9	301.5	313.0	330.5	357.0	403.6	410.6
65°	2949.5	1077.1	355.0	287.4	276.4	293.4	306.5	327.0	364.0	440.7	445.2
67.5°	2307.0	882.8	319.5	273.4	263.9	285.4	302.5	326.5	371.6	449.2	452.2
70°	1525.3	660.5	280.4	257.4	250.9	275.9	304.5	343.5	363.0	431.2	423.1
72.5°	791.7	463.7	248.9	237.4	235.9	267.4	333.5	341.5	354.5	405.6	395.6
75°	415.6	322.0	221.3	215.3	217.8	265.4	393.6	332.5	343.5	388.1	407.1
77.5°	254.4	259.9	197.8	195.3	200.3	259.4	393.1	321.0	327.5	357.0	378.1
80°	170.3	210.8	179.8	180.3	183.8	237.4	353.0	303.0	308.0	337.5	359.0
82.5°	107.7	124.7	163.2	171.8	167.3	195.8	300.0	275.9	282.9	386.1	408.1
85°	54.6	78.1	141.7	165.2	150.7	137.2	243.4	241.9	245.4	278.4	290.9
87.5°	25.0	43.1	110.7	144.2	113.7	85.6	176.8	179.3	193.3	197.8	197.8
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)