

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: P300936

Luminaire Tested: **GLNA-AF-07-LED-E1-SL4-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300936
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-07-LED-E1-SL4-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27983.4 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

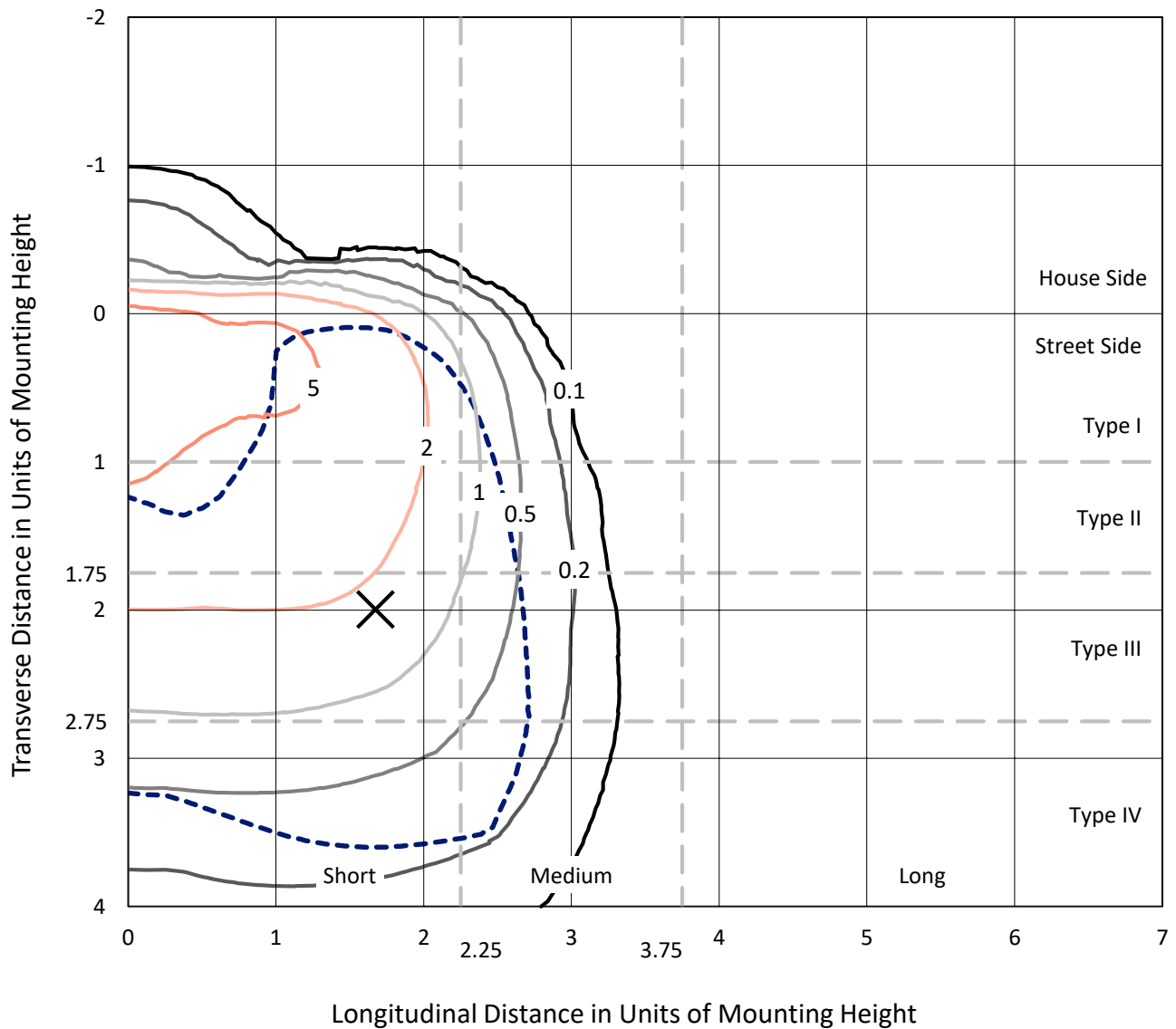
Input Watts (W): 295
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P300936
 CATALOG NUMBER: GLNA-AF-07-LED-E1-SL4-7027-800

Iso-Footcandle Lines of Horizontal Illumination

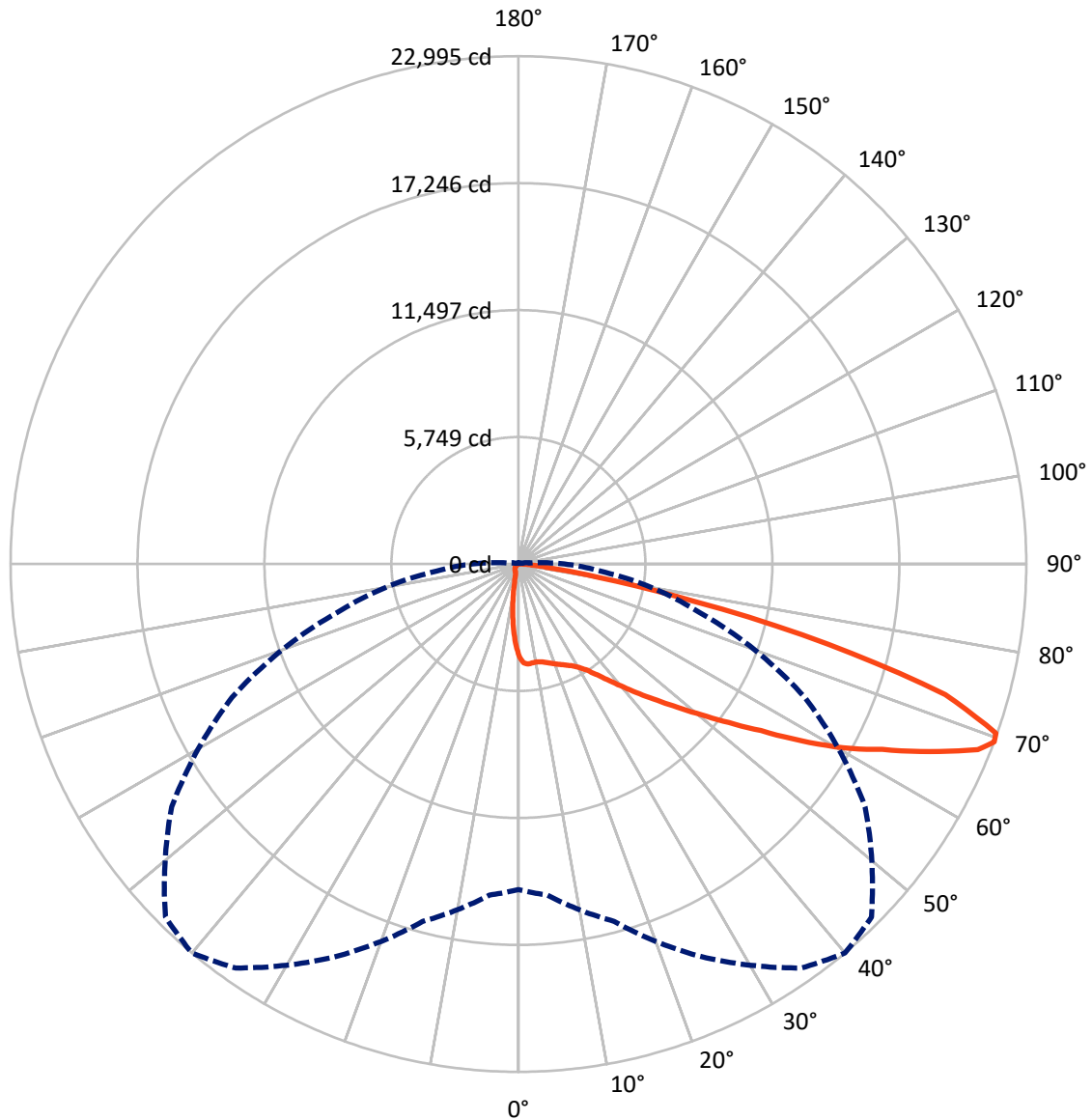
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P300936
CATALOG NUMBER: GLNA-AF-07-LED-E1-SL4-7027-800

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P300936

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL4-7027-800

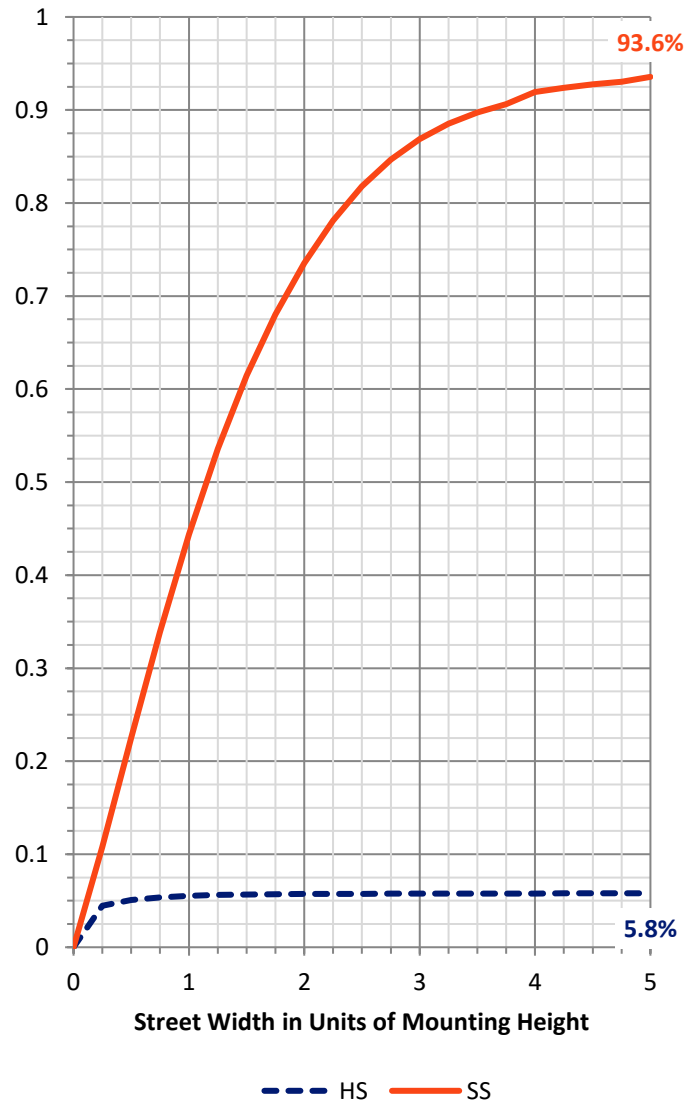
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1637.2	0.0	1637.2
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	26346.2	0.0	26346.2
	% Fixture	94.1	0.0	94.1
Total	Lumens	27983.4	0.0	27983.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.0	1.2
10°-20°	833.6	3.0
20°-30°	1404.1	5.0
30°-40°	2298.6	8.2
40°-50°	3979.9	14.2
50°-60°	6268.8	22.4
60°-70°	8186.8	29.3
70°-80°	4216.5	15.1
80°-90°	456.1	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°	27983.4	100.0
0°-180°	27983.4	100.0

Coefficient of Utilization



REPORT NUMBER: P300936

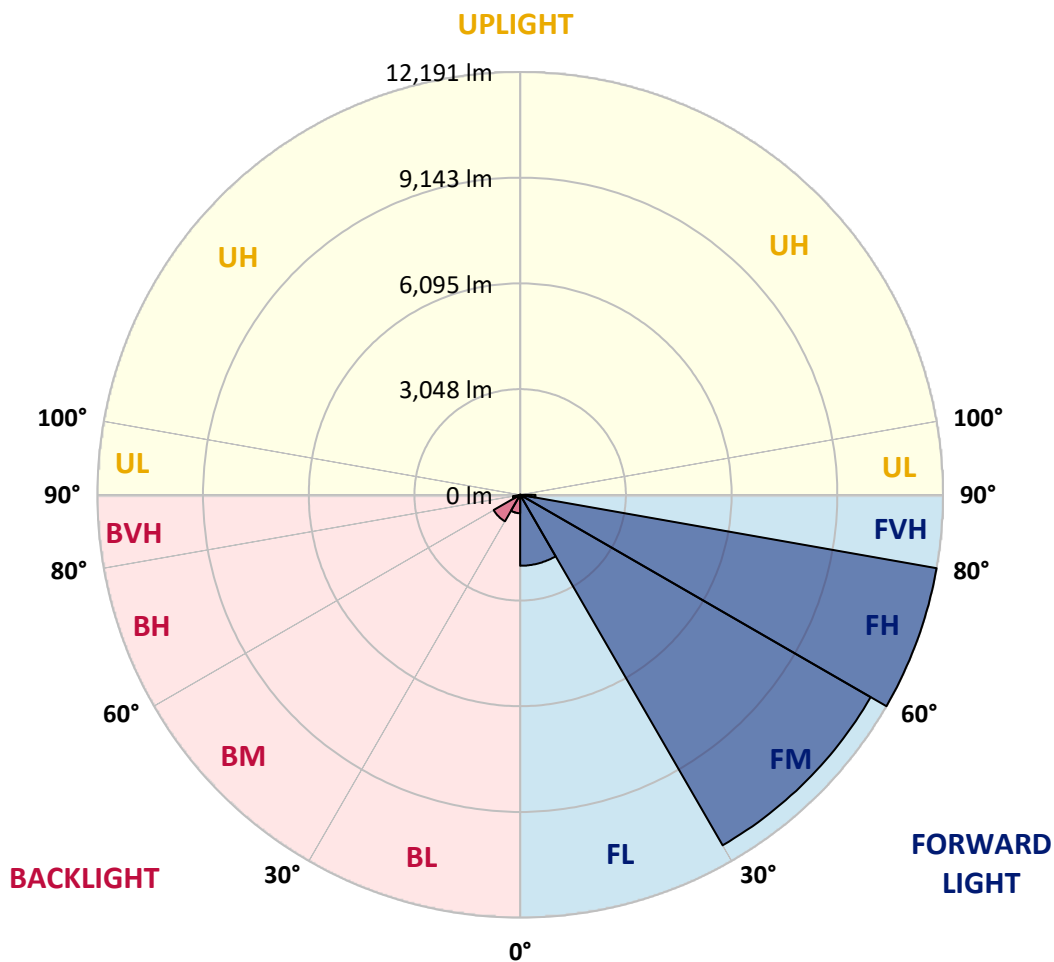
CATALOG NUMBER: GLNA-AF-07-LED-E1-SL4-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2046.4	7.3			
FM	(30°-60°)	11667.3	41.7			
FH	(60°-80°)	12190.7	43.6			G5
FVH	(80°-90°)	441.8	1.6			G3/500
BL	(0°-30°)	530.3	1.9	B2/1000		
BM	(30°-60°)	879.9	3.1	B1/1000		
BH	(60°-80°)	212.6	0.8	B1/500		G1/500
BVH	(80°-90°)	14.3	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short





REPORT NUMBER: P300936

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL4-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9
2.5°	4590.6	4565.6	4550.6	4530.7	4505.7	4484.0	4475.7	4414.1	4355.8	4275.8	4184.2
5°	4675.6	4667.2	4640.6	4613.9	4584.0	4550.6	4532.3	4459.0	4375.8	4259.2	4099.2
7.5°	4683.9	4673.9	4640.6	4603.9	4562.3	4522.3	4490.7	4417.4	4340.8	4222.5	4027.6
10°	4670.6	4658.9	4633.9	4594.0	4542.3	4504.0	4472.4	4402.4	4337.4	4230.8	4014.3
12.5°	4655.6	4643.9	4632.3	4612.3	4567.3	4540.7	4514.0	4447.4	4389.1	4299.1	4062.6
15°	4670.6	4663.9	4677.2	4668.9	4643.9	4620.6	4594.0	4534.0	4480.7	4405.7	4150.9
17.5°	4733.9	4733.9	4775.5	4780.5	4757.2	4723.9	4685.6	4625.6	4580.6	4517.3	4255.8
20°	4882.1	4877.1	4930.4	4940.4	4883.8	4832.1	4775.5	4702.2	4667.2	4627.3	4359.1
22.5°	5137.0	5113.6	5145.3	5135.3	5023.7	4943.7	4873.8	4783.8	4765.5	4747.2	4474.0
25°	5468.4	5455.1	5476.8	5378.5	5181.9	5073.7	4990.4	4888.8	4888.8	4907.1	4603.9
27.5°	5949.8	5899.9	5826.6	5653.3	5358.5	5220.3	5130.3	5022.0	5050.4	5118.6	4775.5
30°	6442.9	6387.9	6219.7	5953.2	5573.4	5428.5	5323.5	5210.3	5276.9	5401.8	5005.4
32.5°	6929.2	6867.6	6629.4	6293.0	5881.5	5736.6	5635.0	5510.1	5621.7	5831.6	5341.8
35°	7400.6	7345.7	7070.8	6674.4	6291.3	6171.4	6078.1	5969.8	6113.1	6406.2	5816.6
37.5°	7930.3	7870.4	7535.6	7105.8	6789.3	6702.7	6634.4	6526.1	6776.0	7205.7	6477.8
40°	8581.6	8480.0	8028.6	7600.5	7365.7	7324.0	7277.4	7262.4	7650.5	8245.1	7359.0
42.5°	9327.8	9161.3	8545.0	8121.9	7998.6	8028.6	8016.9	8083.6	8744.8	9537.7	8431.7
45°	10074.1	9859.2	9119.6	8678.2	8694.9	8799.8	8864.8	9131.3	10115.7	11020.2	9586.0
47.5°	10707.0	10495.5	9671.0	9279.5	9479.4	9685.9	9862.5	10367.2	11524.9	12479.3	10483.8
50°	11248.4	11048.5	10255.6	9940.8	10390.5	10723.7	11010.2	11758.1	13040.6	13590.3	11113.4
52.5°	11691.4	11558.2	10861.9	10698.7	11431.6	11919.6	12339.4	13235.5	14383.2	14493.1	11603.2
55°	12122.8	12027.9	11513.2	11599.8	12654.2	13318.8	13850.2	14802.9	15539.2	15246.0	12072.9
57.5°	12619.2	12532.6	12256.1	12742.5	14261.6	15097.8	15677.4	16192.1	16556.9	16015.5	12515.9
60°	13125.6	13075.6	13082.3	14011.7	16107.2	16910.0	17229.8	17363.1	17556.3	16740.1	12540.9
62.5°	13608.6	13703.6	14026.7	15424.2	17874.4	18490.8	18652.3	18783.9	18557.4	16855.1	11586.5
65°	14426.5	14581.4	15352.6	17314.8	19818.3	20477.9	20644.5	20193.1	18715.6	15369.3	9424.4
67.5°	14826.2	15109.4	16485.3	19077.1	21703.9	22436.8	22375.1	20284.7	16795.1	11719.7	6048.1
69°	14743.0	15044.5	16746.8	19616.8	22330.2	22994.8	22603.3	19163.7	14308.2	8490.0	3712.8
70°	14413.2	14718.0	16611.9	19596.8	22410.1	22936.5	22180.2	17779.5	12097.9	6208.0	2322.0
72.5°	12036.2	12299.4	14748.0	17712.9	20644.5	20216.4	18555.7	12317.7	5894.9	1690.7	523.0
75°	7409.0	7555.5	10582.1	13343.8	15592.5	14493.1	12362.7	6128.0	1757.3	478.1	289.8
77.5°	3914.4	3981.0	5793.2	7865.4	9884.2	8178.5	6336.3	2390.3	809.5	299.8	209.9
80°	2313.6	2363.6	3119.8	3596.2	4277.5	3572.9	2533.5	1467.5	579.7	188.2	186.6
82.5°	1324.2	1355.9	2262.0	1998.8	1685.7	1439.2	1260.9	1390.8	348.1	126.6	193.2
85°	486.4	493.0	1272.6	1520.8	1002.7	596.3	626.3	1152.7	93.3	80.0	151.6
87.5°	226.5	221.5	654.6	931.1	586.3	378.1	488.0	253.2	36.6	51.6	41.6
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: P300936

CATALOG NUMBER: GLNA-AF-07-LED-E1-SL4-7027-800

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9	4180.9
2.5°	4130.9	4069.3	3957.7	3842.7	3726.1	3636.2	3547.9	3477.9	3454.6	3411.3	3414.7
5°	4004.3	3891.0	3657.8	3421.3	3174.8	2971.6	2780.0	2625.1	2550.2	2473.5	2473.5
7.5°	3894.4	3729.5	3364.7	2979.9	2581.8	2247.0	1945.5	1719.0	1594.1	1494.1	1492.5
10°	3852.7	3629.5	3119.8	2568.5	2013.8	1557.4	1199.3	969.4	851.2	774.5	771.2
12.5°	3871.0	3594.5	2931.6	2188.7	1492.5	1001.1	694.6	546.3	496.4	473.1	473.1
15°	3924.4	3584.6	2743.4	1817.3	1054.4	626.3	461.4	421.4	418.1	418.1	418.1
17.5°	3989.3	3587.9	2550.2	1455.8	717.9	448.1	398.1	393.1	396.4	396.4	396.4
20°	4055.9	3589.5	2342.0	1121.0	506.4	389.8	374.8	373.1	376.4	376.4	378.1
22.5°	4137.6	3597.9	2133.7	837.8	418.1	368.1	356.5	356.5	358.1	358.1	356.5
25°	4230.8	3614.5	1917.2	621.3	381.4	353.1	343.1	341.5	343.1	341.5	339.8
27.5°	4347.4	3637.9	1675.7	486.4	364.8	338.1	329.8	329.8	328.1	326.5	324.8
30°	4494.0	3664.5	1404.2	413.1	348.1	324.8	316.5	314.8	313.1	309.8	309.8
32.5°	4717.2	3722.8	1136.0	374.8	329.8	306.5	299.8	299.8	296.5	293.2	291.5
35°	5060.3	3837.7	896.1	351.5	309.8	286.5	278.2	278.2	274.8	273.2	271.5
37.5°	5535.1	4012.6	696.3	329.8	289.8	264.8	256.5	254.8	251.5	248.2	246.5
40°	6166.4	4229.2	548.0	309.8	269.8	243.2	236.5	233.2	226.5	221.5	221.5
42.5°	6959.2	4475.7	444.7	288.2	246.5	223.2	218.2	213.2	201.5	196.6	194.9
45°	7788.7	4697.2	376.4	263.2	223.2	203.2	199.9	191.6	176.6	171.6	171.6
47.5°	8386.7	4748.9	331.5	239.9	201.5	181.6	179.9	164.9	151.6	148.2	146.6
50°	8759.8	4647.3	294.8	216.5	181.6	161.6	156.6	138.3	129.9	126.6	124.9
52.5°	9011.3	4465.7	264.8	196.6	163.2	143.2	131.6	118.3	111.6	108.3	108.3
55°	9212.9	4209.2	234.9	178.2	148.2	128.3	111.6	101.6	94.9	91.6	91.6
57.5°	9269.5	3861.1	204.9	163.2	133.3	113.3	94.9	88.3	80.0	78.3	78.3
60°	8858.1	3233.1	181.6	144.9	119.9	98.3	83.3	75.0	66.6	65.0	63.3
62.5°	7773.7	2501.9	159.9	128.3	104.9	84.9	71.6	61.6	55.0	55.0	55.0
65°	5929.8	1677.3	139.9	111.6	91.6	71.6	61.6	50.0	46.6	46.6	48.3
67.5°	3549.6	912.8	119.9	94.9	78.3	60.0	51.6	43.3	41.6	43.3	43.3
69°	2080.4	536.4	108.3	84.9	68.3	53.3	45.0	38.3	41.6	43.3	43.3
70°	1284.2	361.5	99.9	76.6	61.6	48.3	41.6	36.6	40.0	41.6	41.6
72.5°	358.1	186.6	80.0	60.0	50.0	40.0	33.3	33.3	38.3	40.0	40.0
75°	233.2	138.3	61.6	45.0	38.3	31.6	28.3	31.6	36.6	38.3	38.3
77.5°	193.2	113.3	50.0	36.6	31.6	30.0	26.7	28.3	33.3	35.0	35.0
80°	176.6	80.0	40.0	33.3	28.3	26.7	25.0	23.3	30.0	31.6	31.6
82.5°	168.2	63.3	35.0	30.0	26.7	23.3	21.7	23.3	26.7	28.3	30.0
85°	104.9	41.6	31.6	28.3	23.3	21.7	21.7	21.7	25.0	26.7	26.7
87.5°	38.3	33.3	28.3	23.3	20.0	20.0	20.0	20.0	21.7	25.0	25.0
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)