

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: P452957

Luminaire Tested: **GALN-SA4A-722-U-SLL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452957
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-21)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-722-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2200K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9551 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

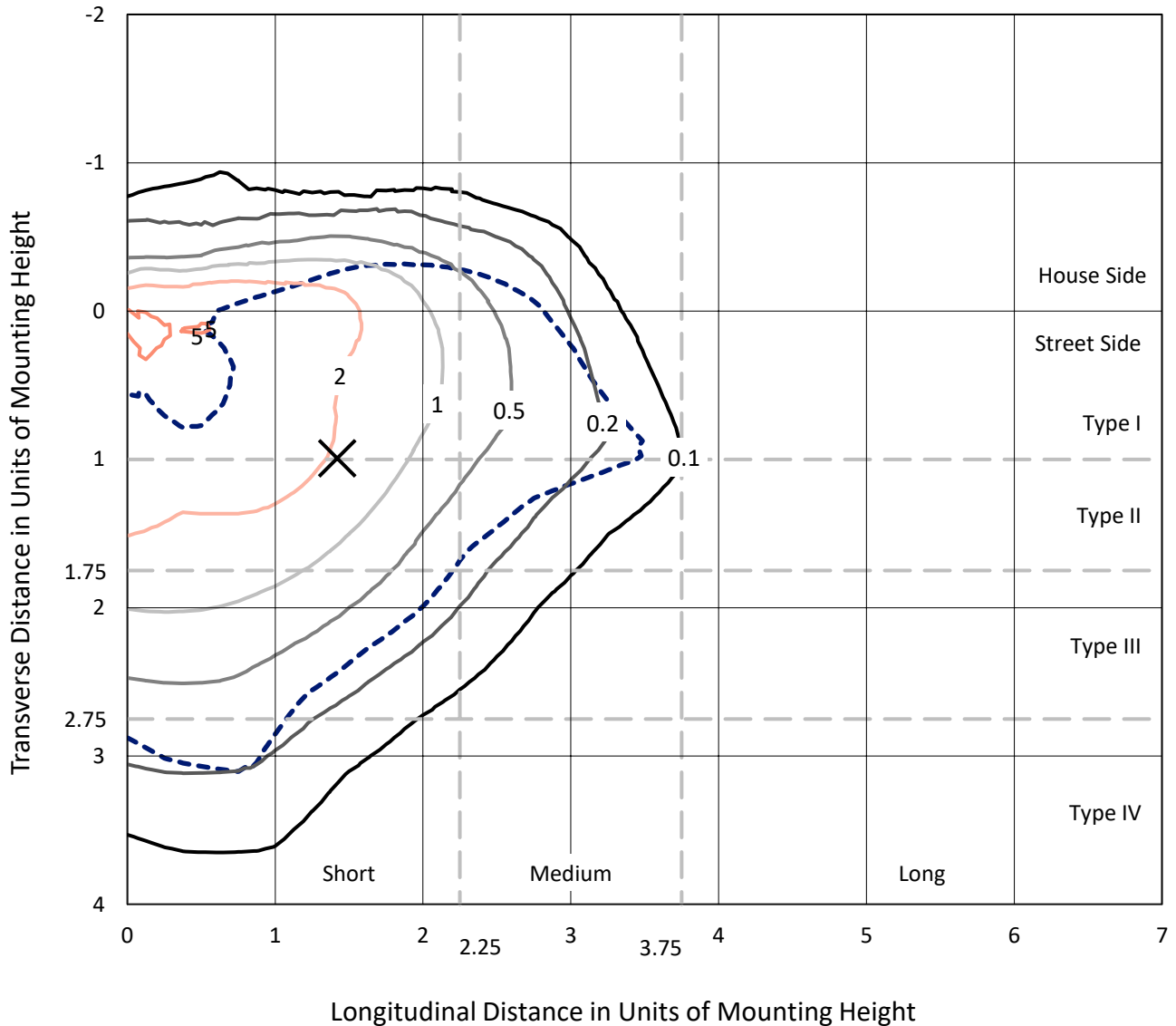
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

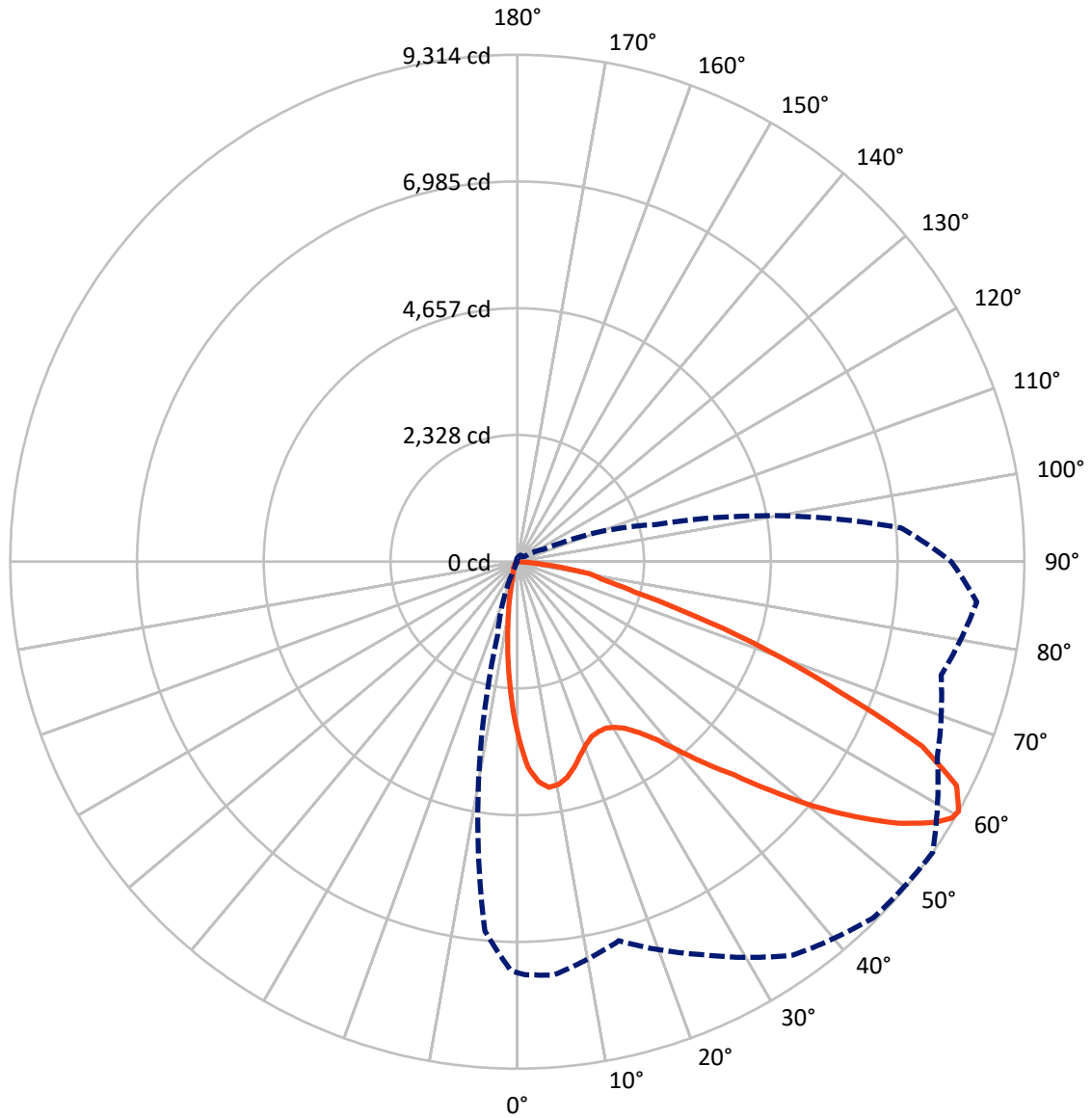
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1417.5	0.0	1417.5
	% Fixture	14.8	0.0	14.8
Street Side	Lumens	8133.6	0.0	8133.6
	% Fixture	85.2	0.0	85.2
Total	Lumens	9551.0	0.0	9551.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.5	2.5
10°-20°	471.6	4.9
20°-30°	698.0	7.3
30°-40°	1040.5	10.9
40°-50°	1523.8	16.0
50°-60°	2199.9	23.0
60°-70°	2314.2	24.2
70°-80°	952.0	10.0
80°-90°	111.5	1.2
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°	9551.0	100.0
0°-180°	9551.0	100.0



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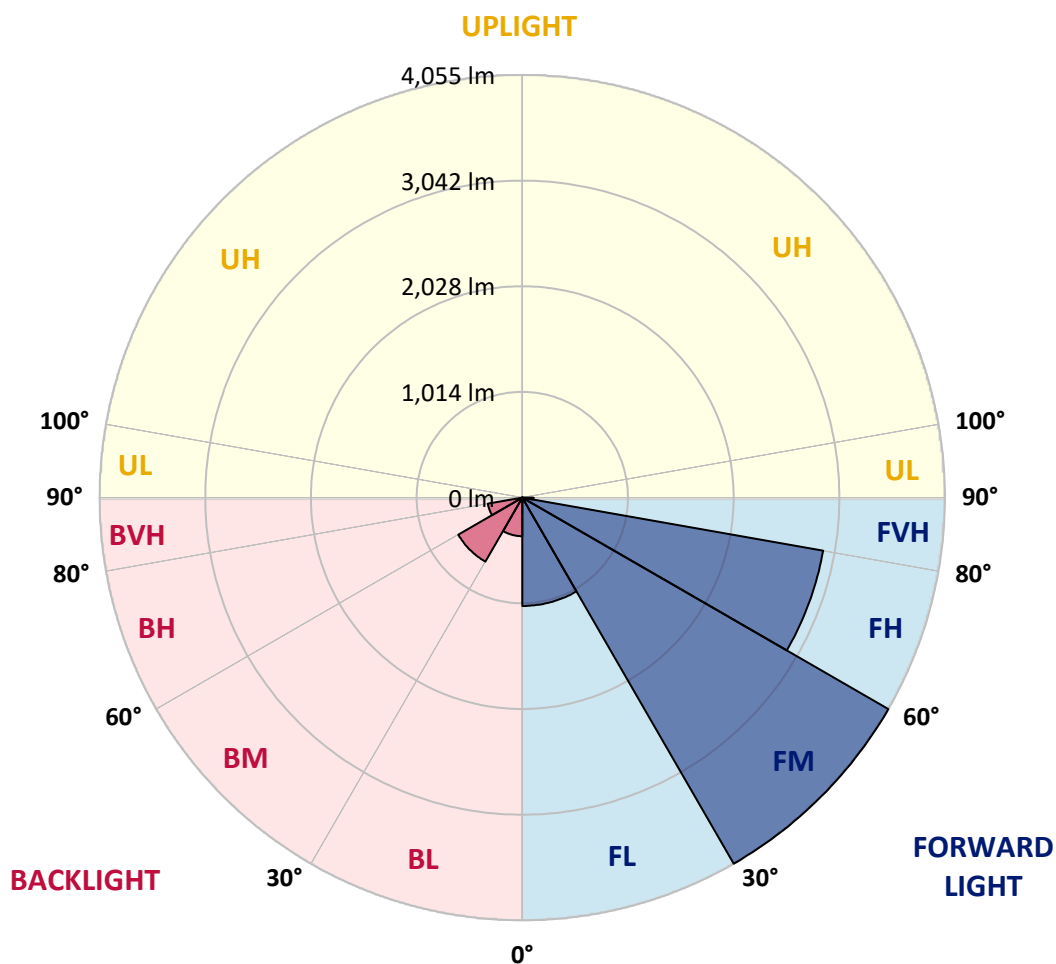
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1039.3	10.9			
FM	(30°-60°)	4055.4	42.5			
FH	(60°-80°)	2930.7	30.7			G2/5000
FVH	(80°-90°)	108.2	1.1			G2/225
BL	(0°-30°)	369.8	3.9	B1/500		
BM	(30°-60°)	708.9	7.4	B1/1000		
BH	(60°-80°)	335.5	3.5	B1/500		G1/500
BVH	(80°-90°)	3.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9
2.5°	3533.1	3527.3	3579.5	3664.7	3750.8	3795.6	3786.8	3783.1	3711.8	3659.6	3550.1
5°	3525.8	3555.9	3649.3	3880.1	4055.1	4139.7	4164.6	4059.5	3920.6	3719.1	3470.7
7.5°	3314.8	3352.3	3504.5	3865.4	4176.4	4360.2	4353.6	4185.2	3898.5	3586.8	3232.5
10°	3053.1	3097.2	3275.8	3714.0	4117.6	4360.2	4373.4	4160.2	3803.7	3403.8	3031.0
12.5°	2868.6	2920.8	3118.5	3572.8	3966.2	4205.1	4220.5	4066.1	3732.4	3333.2	2921.5
15°	2806.1	2855.3	3056.0	3501.5	3805.2	3933.8	3930.1	3914.0	3704.4	3350.1	2927.4
17.5°	2913.4	2953.8	3180.3	3533.9	3654.5	3641.2	3660.3	3738.3	3710.3	3492.0	3112.6
20°	3190.6	3231.7	3475.1	3633.1	3539.0	3455.2	3464.0	3594.2	3764.7	3758.8	3402.3
22.5°	3572.1	3642.0	3862.5	3825.7	3523.6	3339.8	3321.4	3490.5	3857.4	4066.1	3793.4
25°	4055.1	4125.7	4297.7	4133.0	3599.3	3312.6	3295.7	3458.9	3969.8	4366.1	4233.8
27.5°	4460.9	4514.6	4685.9	4432.2	3711.1	3324.4	3296.4	3463.3	4061.0	4621.2	4605.0
30°	4785.9	4825.6	4926.3	4571.9	3807.4	3375.8	3343.5	3528.0	4101.4	4745.4	4905.7
32.5°	5047.6	5114.5	5146.1	4721.2	3945.6	3472.9	3417.7	3652.2	4199.9	4899.1	5221.1
35°	5346.8	5424.0	5383.5	4863.8	4127.9	3624.3	3556.7	3853.7	4349.2	5041.0	5587.2
37.5°	5726.1	5815.1	5657.0	5013.7	4320.5	3852.2	3820.6	4136.7	4575.6	5243.9	5979.7
40°	6118.7	6170.1	5922.4	5196.1	4557.2	4183.8	4213.9	4557.2	4871.9	5487.2	6397.3
42.5°	6425.2	6473.8	6195.1	5349.0	4799.1	4577.1	4702.8	5064.5	5211.5	5736.4	6709.0
45°	6659.8	6700.9	6384.1	5515.9	5125.5	5146.8	5384.3	5587.2	5551.9	5888.6	6949.4
47.5°	6842.1	6877.4	6529.6	5695.2	5614.4	5843.7	6206.9	6292.9	5904.8	6053.3	7167.0
50°	6917.1	6927.4	6575.2	5923.9	6169.4	6731.8	7110.4	7058.2	6309.1	6236.3	7398.6
52.5°	7014.8	7012.6	6705.3	6141.5	6691.4	7525.8	7903.6	7785.3	6766.4	6510.5	7658.8
55°	7271.4	7274.3	6984.0	6450.2	7136.1	8166.8	8571.2	8485.1	7248.6	6973.7	7962.5
57.5°	7583.1	7594.1	7380.2	6811.2	7561.1	8631.4	9069.6	9036.5	7900.7	7489.0	8249.2
59°	7623.5	7645.6	7567.7	7065.6	7813.2	8774.1	9240.1	9272.5	8249.9	7828.7	8404.3
60°	7550.0	7586.8	7622.1	7209.7	7961.0	8825.5	9250.4	9313.7	8512.3	8059.5	8474.9
62.5°	7229.5	7287.6	7464.8	7653.0	8145.5	8665.3	8921.8	9054.2	8837.3	8666.0	8481.5
65°	6809.7	6839.9	7095.7	7731.6	7787.5	7916.9	7996.3	8166.1	8446.9	8899.8	8177.9
67.5°	6121.6	6210.6	6523.8	7275.1	6731.1	6578.2	6558.3	6389.2	7118.5	8342.5	7429.5
70°	5057.1	5096.8	5482.8	5964.3	5079.9	4844.7	4938.8	4875.5	5518.1	7181.7	5979.7
72.5°	3824.3	3914.0	4291.1	4754.2	3456.7	3151.6	3411.1	3387.6	4144.8	5771.7	4108.0
75°	2720.8	2778.9	3259.7	3720.6	2420.9	2051.1	2144.4	2231.9	2893.6	4557.2	2427.5
77.5°	1869.5	1919.5	2280.4	2460.6	1765.8	1691.6	1547.5	1632.0	1896.0	2703.9	1321.1
80°	1127.7	1125.5	1363.0	1407.1	1229.9	1428.4	1198.3	1345.3	1146.1	1157.1	511.7
82.5°	732.2	724.9	833.7	908.7	684.4	719.7	483.0	696.2	746.9	322.7	161.7
85°	327.9	341.8	400.7	528.6	299.9	159.5	98.5	213.9	318.3	162.5	0.0
87.5°	33.8	26.5	70.6	128.7	41.2	4.4	14.7	7.4	0.0	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9
2.5°	3499.3	3456.7	3329.5	3210.4	3108.2	2983.3	2902.4	2775.2	2698.0	2674.5	2678.2
5°	3358.9	3236.1	2994.3	2800.9	2585.5	2462.8	2276.0	2096.7	1999.6	1963.6	1947.4
7.5°	3064.9	2933.3	2641.4	2337.8	2107.0	1891.6	1752.6	1594.5	1486.5	1397.5	1382.1
10°	2846.5	2673.8	2312.1	1985.7	1803.3	1641.6	1502.7	1344.6	1217.4	1116.0	1088.0
12.5°	2715.7	2522.3	2118.7	1845.2	1672.5	1506.3	1325.5	1142.4	1012.3	902.8	852.0
15°	2692.1	2467.9	2064.3	1744.5	1531.3	1330.6	1090.2	892.5	758.7	655.0	623.4
17.5°	2834.0	2565.7	2056.2	1639.4	1346.8	1062.3	812.3	648.4	497.7	439.6	416.8
20°	3086.9	2738.4	2055.5	1517.4	1157.1	818.2	570.5	422.7	361.7	333.8	320.5
22.5°	3431.7	2973.7	2094.5	1412.2	960.1	603.6	407.3	336.7	301.4	278.6	273.5
25°	3852.9	3322.2	2190.0	1340.9	809.4	473.4	336.0	288.2	258.8	248.5	244.1
27.5°	4227.1	3655.9	2295.2	1267.4	701.3	419.0	311.7	263.9	240.4	232.3	225.7
30°	4549.9	3958.8	2345.9	1170.4	614.6	383.8	316.1	282.3	251.4	227.2	216.1
32.5°	4818.9	4191.1	2379.0	1082.1	541.1	313.9	250.0	218.3	204.4	195.6	188.2
35°	5155.6	4442.5	2359.1	1032.2	503.6	286.0	227.9	188.2	164.7	147.0	139.7
37.5°	5508.5	4694.0	2324.6	991.0	486.7	265.4	216.9	178.6	152.9	134.5	125.0
40°	5873.9	4927.0	2284.1	952.8	471.2	252.2	210.3	170.6	144.8	125.0	114.7
42.5°	6208.4	5154.2	2267.9	927.8	446.2	254.4	205.1	166.9	136.7	116.2	107.3
45°	6478.9	5369.6	2290.0	914.5	419.0	250.7	206.6	162.5	130.1	110.3	101.5
47.5°	6767.8	5673.9	2361.3	901.3	392.6	233.0	217.6	161.7	127.2	106.6	97.0
50°	7103.8	6063.5	2524.5	869.0	360.2	213.9	231.6	161.0	123.5	102.2	92.6
52.5°	7551.5	6506.1	2692.9	812.3	313.2	195.6	221.3	158.8	116.2	97.0	87.5
55°	7953.6	6972.2	2835.5	745.4	253.6	169.1	199.2	149.2	103.7	88.2	79.4
57.5°	8119.8	7235.4	2831.1	652.8	202.9	148.5	163.9	136.7	90.4	77.9	70.6
59°	8058.8	7202.3	2736.2	584.4	185.3	137.5	136.0	135.3	84.5	70.6	64.7
60°	7972.7	7081.7	2634.1	550.6	174.2	130.1	125.0	133.8	79.4	66.2	60.3
62.5°	7643.4	6581.8	2295.2	493.3	159.5	110.3	100.0	113.2	70.6	57.3	52.2
65°	7166.3	5813.6	1943.0	477.1	155.1	91.2	83.1	80.9	60.3	48.5	44.1
67.5°	6235.6	4919.7	1574.0	466.1	156.6	76.5	72.8	61.0	50.0	40.4	37.5
70°	4992.4	3836.0	1288.7	453.6	158.1	62.5	61.0	48.5	40.4	33.8	30.9
72.5°	3033.2	2273.8	1014.5	394.0	153.6	50.0	54.4	36.8	29.4	24.3	22.8
75°	1875.4	1556.3	629.3	306.6	101.5	36.8	38.2	22.8	19.8	15.4	15.4
77.5°	1086.6	982.9	225.0	110.3	44.8	22.1	16.9	11.8	11.0	6.6	6.6
80°	450.6	361.0	77.9	37.5	24.3	10.3	3.7	0.7	0.0	0.0	0.0
82.5°	131.6	116.9	21.3	16.9	7.4	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9
2.5°	2615.7	2591.4	2580.4	2617.9	2583.3	2627.4	2593.6	2608.3	2651.7	2670.8	2720.1
5°	1957.7	1932.7	1921.0	1977.6	1974.6	2002.6	1999.6	2025.3	2047.4	1998.1	2048.9
7.5°	1363.7	1346.8	1374.7	1418.8	1465.9	1450.5	1450.5	1415.9	1427.7	1420.3	1418.1
10°	1037.3	979.2	964.5	963.1	980.7	984.4	964.5	916.7	934.4	939.5	970.4
12.5°	816.0	771.2	702.8	671.9	663.8	670.5	605.0	563.1	583.0	571.2	601.4
15°	585.2	548.4	508.0	473.4	463.9	450.6	379.3	329.3	323.5	325.7	330.8
17.5°	417.6	392.6	392.6	355.8	336.0	296.3	260.2	238.2	236.0	238.2	241.9
20°	308.0	294.8	293.3	283.8	261.7	235.2	210.3	205.8	204.4	208.0	209.5
22.5°	265.4	251.4	239.7	238.9	218.3	196.3	184.5	178.6	179.4	180.8	184.5
25°	237.5	222.8	210.3	202.9	188.2	172.8	161.7	158.8	158.8	161.0	161.7
27.5°	217.6	199.2	188.2	177.9	164.7	151.4	141.9	139.7	138.2	139.7	143.4
30°	203.6	185.3	171.3	155.9	145.6	133.1	125.0	122.0	121.3	122.0	125.0
32.5°	174.2	163.2	152.2	138.2	125.7	117.6	108.8	103.7	103.7	105.1	108.1
35°	131.6	125.7	125.0	121.3	111.0	102.2	91.9	86.7	86.7	89.7	91.2
37.5°	116.2	105.1	103.7	102.2	97.8	86.0	76.5	72.0	71.3	73.5	76.5
40°	105.9	93.4	86.7	85.3	86.0	72.8	62.5	58.1	58.1	58.8	61.8
42.5°	97.8	83.1	71.3	69.8	72.8	61.0	50.7	46.3	46.3	46.3	50.0
45°	91.2	74.3	60.3	52.9	57.3	50.0	41.2	36.8	35.3	36.8	38.2
47.5°	86.7	67.6	52.9	42.6	42.6	39.7	33.1	27.9	26.5	27.2	29.4
50°	83.1	61.8	44.8	34.6	30.9	31.6	25.0	21.3	19.8	19.8	22.1
52.5°	77.2	55.9	39.0	29.4	23.5	21.3	18.4	15.4	14.7	15.4	16.9
55°	69.8	50.7	33.8	24.3	18.4	14.7	13.2	11.0	10.3	11.0	13.2
57.5°	61.8	42.6	27.2	19.1	12.5	9.6	8.8	7.4	5.9	6.6	8.1
59°	56.6	38.2	23.5	15.4	9.6	6.6	6.6	5.1	3.7	4.4	6.6
60°	54.4	35.3	19.8	13.2	8.1	5.1	5.1	3.7	2.2	2.9	5.1
62.5°	46.3	29.4	15.4	8.1	3.7	0.7	2.2	0.7	0.0	0.7	2.2
65°	39.0	23.5	10.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.7
67.5°	32.3	17.6	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	25.7	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	17.6	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	11.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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



REPORT NUMBER: P452957

CATALOG NUMBER: GALN-SA4A-722-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9	3233.9
2.5°	2723.0	2828.1	2892.8	3014.9	3139.8	3236.1	3356.7	3464.8	3509.6	3533.1
5°	2100.3	2246.6	2370.9	2556.9	2729.6	2939.9	3153.1	3404.5	3500.8	3525.8
7.5°	1474.0	1623.2	1753.3	1968.7	2215.0	2496.6	2815.6	3134.7	3275.1	3314.8
10°	1064.5	1224.0	1382.8	1598.2	1828.3	2133.4	2465.7	2860.5	3022.2	3053.1
12.5°	671.9	843.2	1101.3	1367.4	1610.7	1856.3	2204.0	2633.3	2812.0	2868.6
15°	389.6	517.5	712.4	1059.4	1368.9	1693.8	2073.1	2548.0	2748.0	2806.1
17.5°	261.0	305.1	438.9	704.3	1113.0	1543.8	2040.1	2617.9	2839.2	2913.4
20°	219.8	239.7	286.7	429.3	857.2	1410.0	2048.9	2807.6	3097.9	3190.6
22.5°	193.3	211.7	241.9	308.8	598.4	1243.9	2090.8	3078.8	3453.8	3572.1
25°	170.6	188.9	215.4	255.8	402.1	1052.0	2182.7	3475.8	3925.0	4055.1
27.5°	151.4	168.4	191.1	225.7	309.5	838.1	2264.3	3862.5	4355.1	4460.9
30°	133.8	147.8	169.8	196.3	257.3	646.2	2305.4	4200.7	4668.2	4785.9
32.5°	116.2	129.4	150.7	172.0	211.7	492.6	2276.8	4449.2	4972.6	5047.6
35°	99.2	113.2	130.9	150.7	183.1	397.7	2133.4	4728.5	5288.0	5346.8
37.5°	85.3	97.0	115.4	130.9	165.4	318.3	1959.9	4979.9	5641.6	5726.1
40°	72.0	83.8	102.2	116.2	152.2	250.7	1803.3	5259.3	6014.3	6118.7
42.5°	58.8	72.8	89.0	111.7	130.9	191.1	1613.7	5485.7	6294.4	6425.2
45°	47.0	62.5	80.1	111.0	113.9	145.6	1430.6	5662.2	6542.1	6659.8
47.5°	37.5	52.9	77.2	103.7	93.4	115.4	1326.2	5846.7	6748.0	6842.1
50°	30.1	44.1	80.9	91.2	77.9	97.8	1323.3	6052.5	6854.6	6917.1
52.5°	24.3	36.0	68.4	69.8	66.2	86.0	1402.7	6284.1	6963.4	7014.8
55°	20.6	30.1	44.8	51.5	59.5	77.9	1462.2	6640.6	7222.9	7271.4
57.5°	16.2	25.7	34.6	41.2	52.9	71.3	1470.3	6915.6	7551.5	7583.1
59°	14.0	22.1	30.9	36.8	48.5	66.9	1437.2	6932.5	7572.8	7623.5
60°	11.8	19.8	27.2	34.6	44.8	63.2	1401.2	6809.7	7493.4	7550.0
62.5°	8.8	15.4	19.8	27.9	36.8	54.4	1230.6	6381.1	7189.8	7229.5
65°	5.9	11.0	14.7	20.6	28.7	47.0	1002.7	5825.4	6720.8	6809.7
67.5°	3.7	8.1	11.8	15.4	23.5	39.7	714.6	4995.4	6064.3	6121.6
70°	2.2	5.1	8.8	12.5	18.4	31.6	424.2	3948.5	5045.4	5057.1
72.5°	1.5	3.7	5.9	8.8	14.7	28.7	205.8	2573.8	3683.9	3824.3
75°	0.7	2.2	3.7	6.6	11.8	23.5	98.5	1719.5	2680.4	2720.8
77.5°	0.0	0.7	2.2	4.4	8.8	18.4	57.3	1129.2	1827.6	1869.5
80°	0.0	0.0	1.5	3.7	6.6	11.8	34.6	666.0	1107.1	1127.7
82.5°	0.0	0.0	0.7	2.9	4.4	8.8	17.6	292.6	724.9	732.2
85°	0.0	0.0	0.7	2.9	3.7	5.9	6.6	39.7	322.0	327.9
87.5°	0.0	0.0	0.7	3.7	3.7	3.7	3.7	2.2	27.2	33.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)