

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: P456641

Luminaire Tested: **GALN-SA7D-830-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456641
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7D-830-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36908 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

Input Watts (W): 433
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



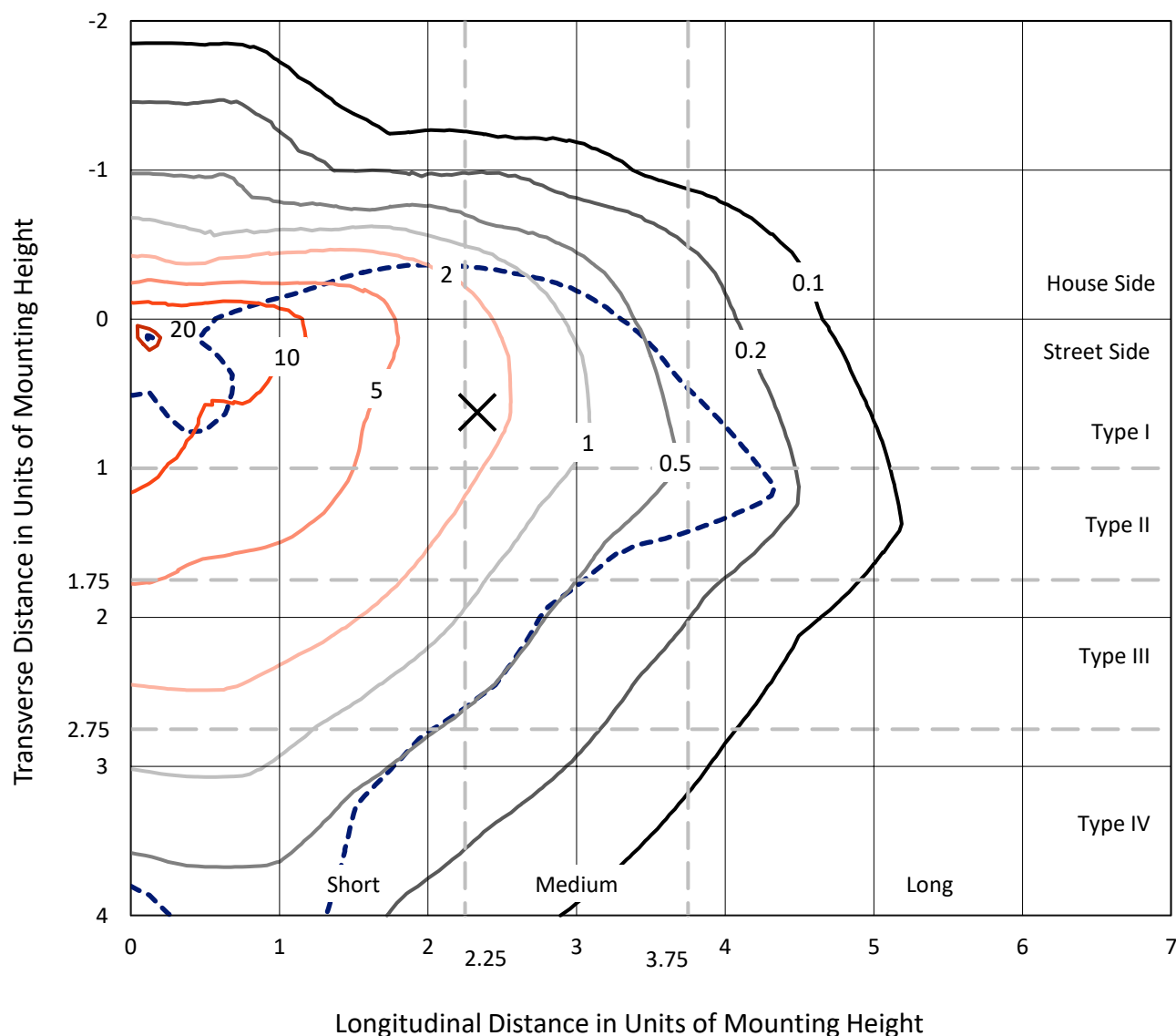
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

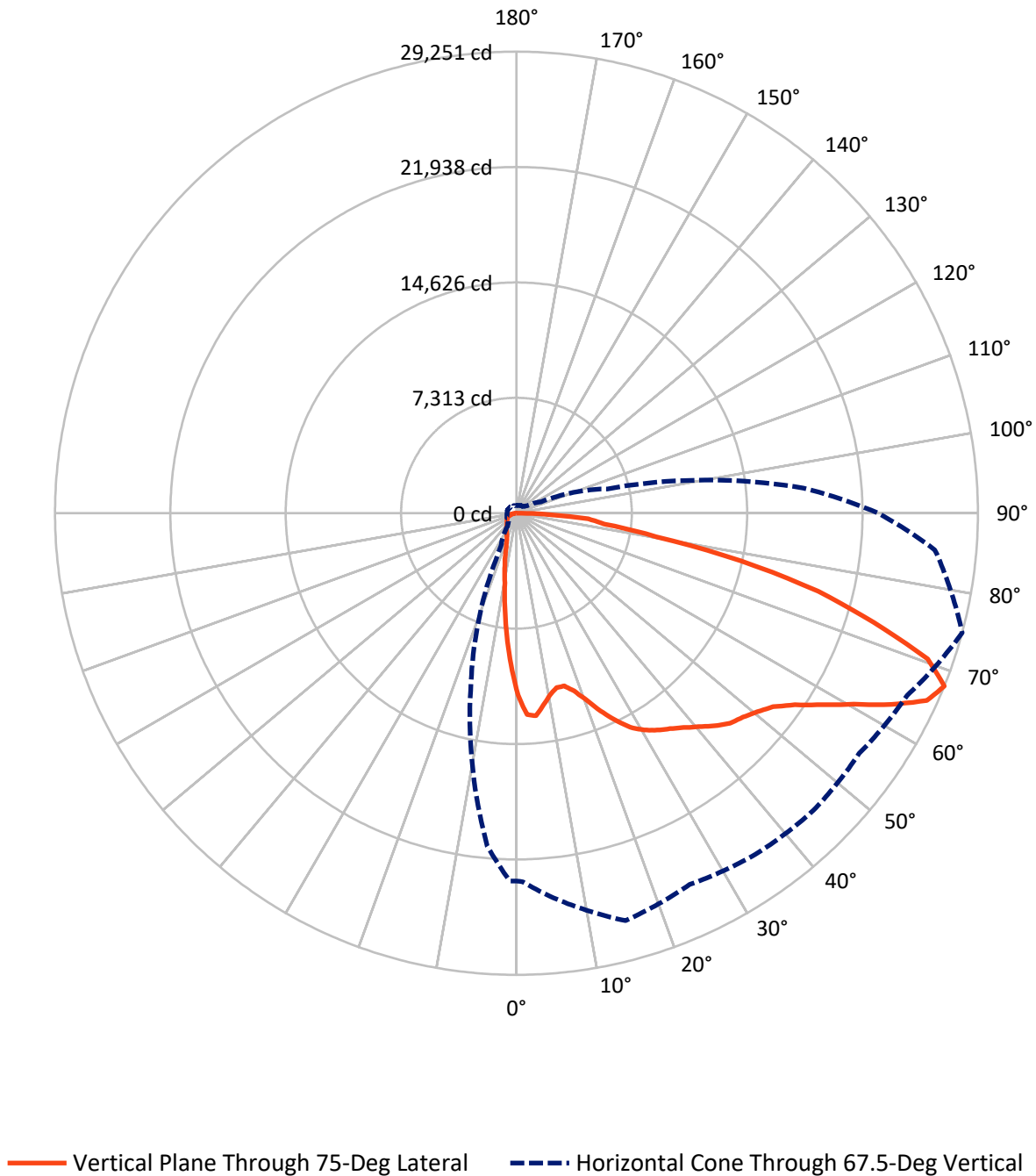


Based on 25 foot mounting height. Maximum calculated value = 22.7 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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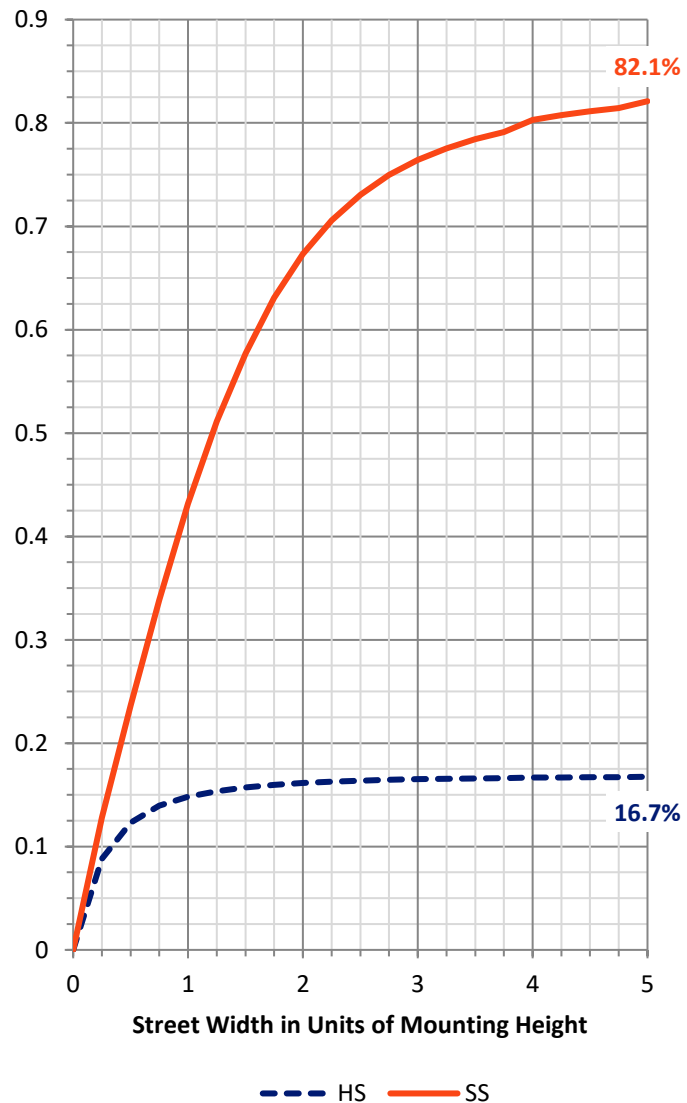
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6238.2	0.0	6238.2
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	30669.8	0.0	30669.8
	% Fixture	83.1	0.0	83.1
Total	Lumens	36908.0	0.0	36908.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	874.6	2.4
10°-20°	1824.0	4.9
20°-30°	2624.7	7.1
30°-40°	3780.4	10.2
40°-50°	5310.4	14.4
50°-60°	7406.1	20.1
60°-70°	8805.4	23.9
70°-80°	5185.9	14.1
80°-90°	1096.6	3.0
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°	36908.0	100.0
0°-180°	36908.0	100.0

Coefficient of Utilization



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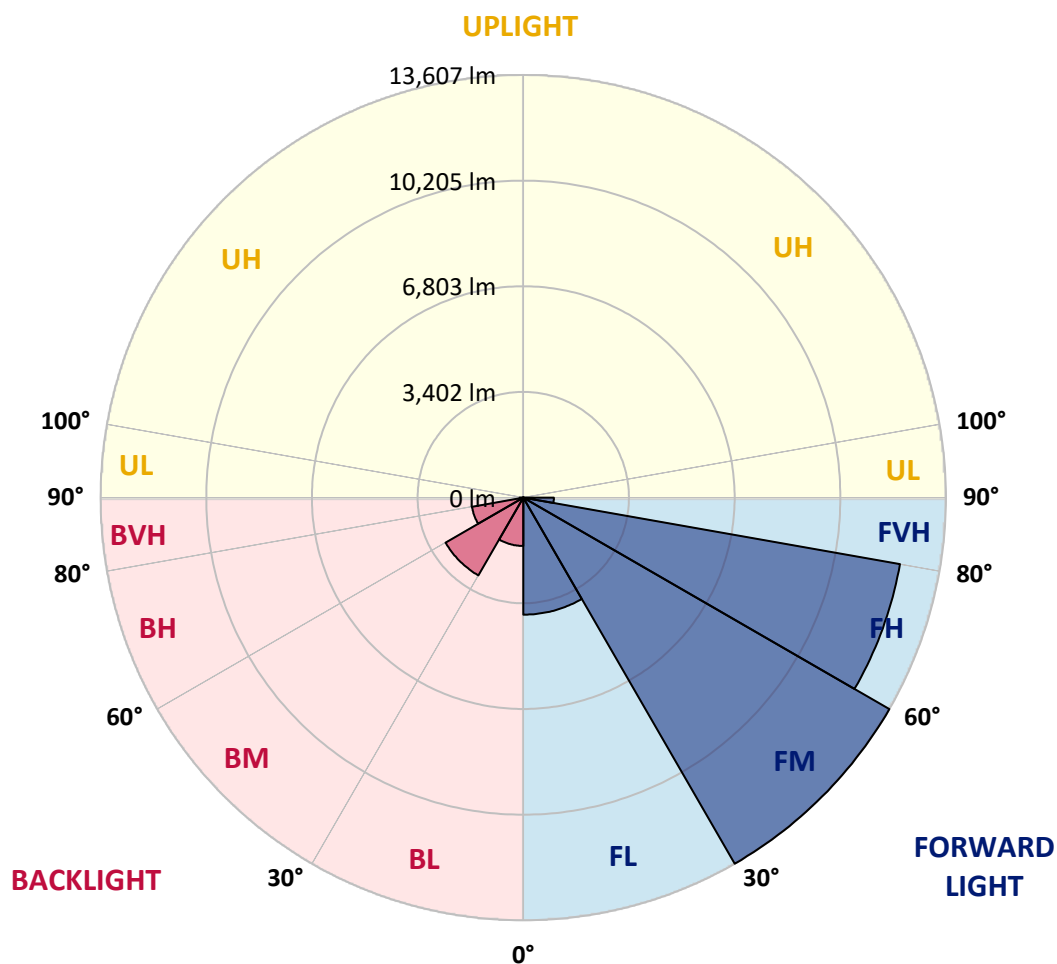
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3767.3	10.2			
FM	(30°-60°)	13606.6	36.9			
FH	(60°-80°)	12312.7	33.4			G5
FVH	(80°-90°)	983.2	2.7			G5
BL	(0°-30°)	1556.0	4.2	B3/2500		
BM	(30°-60°)	2890.2	7.8	B3/5000		
BH	(60°-80°)	1678.6	4.5	B3/2500		G3/2500
BVH	(80°-90°)	113.4	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9
2.5°	12432.7	12449.2	12555.7	12865.8	13078.8	13156.9	13211.3	13109.6	13010.2	12768.8	12404.3
5°	12394.8	12491.8	12768.8	13464.6	14013.7	14250.4	14321.4	14016.0	13511.9	12891.8	12146.3
7.5°	11670.6	11800.7	12226.8	13393.6	14361.6	14915.4	14842.1	14290.6	13381.8	12276.5	11235.1
10°	10811.4	10955.8	11469.4	12880.0	14127.3	14889.4	14889.4	14217.2	13010.2	11696.6	10496.7
12.5°	10129.8	10281.3	10868.2	12352.2	13639.7	14361.6	14482.3	13904.8	12742.7	11329.8	10011.5
15°	9905.0	10051.7	10683.6	12032.7	13123.8	13564.0	13604.2	13414.9	12612.5	11355.8	9990.2
17.5°	10184.2	10373.6	11012.6	12127.4	12650.4	12676.5	12707.2	12856.3	12626.7	11831.5	10420.9
20°	10991.3	11194.9	11862.3	12432.7	12236.2	11966.4	11983.0	12366.4	12794.8	12617.3	11450.5
22.5°	12155.8	12333.3	13017.3	12969.9	12061.1	11504.9	11388.9	11923.8	13043.3	13597.1	12546.3
25°	13412.5	13620.8	14406.6	13767.5	12110.8	11230.4	11157.0	11663.5	13301.3	14513.1	13812.5
27.5°	14851.5	15055.1	15675.2	14572.2	12371.1	11209.1	11121.5	11639.8	13533.2	15360.4	15021.9
30°	15921.3	16108.3	16529.6	15249.1	12690.7	11351.1	11242.2	11826.8	13732.0	15940.2	16200.6
32.5°	16761.5	16955.6	17185.2	15670.4	13111.9	11609.0	11407.9	12167.6	13992.4	16382.8	17073.9
35°	17637.2	17866.8	17850.2	16044.4	13504.8	11907.2	11710.8	12659.9	14401.8	16768.6	18181.6
37.5°	18747.2	18839.5	18721.2	16380.5	13975.8	12444.5	12335.6	13391.2	14984.1	17234.9	19476.2
40°	19873.8	20058.4	19450.2	16787.5	14548.6	13455.1	13443.3	14472.8	15675.2	17781.6	20730.6
42.5°	20839.5	20995.7	20131.8	17142.6	15242.0	14688.2	14778.1	15923.7	16581.6	18415.9	21738.8
45°	21566.1	21705.7	20761.4	17485.7	16155.6	16113.0	16643.2	17478.6	17724.8	18986.3	22330.5
47.5°	22183.8	22318.7	21199.2	18006.4	17284.6	17814.7	18737.8	19099.9	18702.3	19312.9	22993.2
50°	22704.5	22744.7	21499.8	18626.5	18685.7	19899.9	20794.5	21028.8	19667.9	19781.5	23568.4
52.5°	23246.5	23194.4	22018.1	19407.6	20200.4	21878.5	22529.3	22773.1	20593.3	20359.0	24406.2
55°	24460.6	24510.3	23180.2	20392.1	21731.7	23821.6	24678.4	24444.1	21618.1	21421.7	25471.2
57.5°	25928.0	25885.4	24815.6	21932.9	23291.4	25629.8	26268.8	25892.5	22986.1	22882.0	26550.5
60°	26498.4	26555.2	26183.6	23589.7	24829.8	27213.2	27866.4	27281.8	24626.3	24579.0	27364.7
62.5°	25925.7	26245.2	26496.1	25064.2	26141.0	28377.6	29026.1	28358.7	26337.5	26680.7	27935.1
65°	24784.9	24853.5	25707.9	26313.8	26773.0	28569.4	28907.8	28552.8	27767.0	28595.4	27909.0
67.5°	23303.3	23362.4	24363.6	26723.3	25958.8	26391.9	26628.6	26524.5	27324.4	29251.0	26623.9
70°	21892.7	21845.3	22903.3	25679.5	22598.0	21940.0	22136.5	21809.8	23577.8	27648.7	24103.2
72.5°	19147.2	19317.6	20453.7	22777.9	17892.8	16823.0	17251.4	16406.5	18134.2	23679.6	19563.8
75°	14998.3	15038.5	16934.3	19116.4	13497.7	11810.2	12390.1	12037.4	13890.6	19753.1	13509.6
77.5°	10385.4	10295.5	12333.3	14600.6	9625.7	8645.8	8655.3	8487.3	9699.0	14543.8	9178.4
80°	6596.2	6458.9	7720.4	9019.8	6615.1	7076.7	6844.7	6837.6	6314.6	8972.4	5550.1
82.5°	3564.4	3715.8	4877.9	5654.2	4745.4	5469.6	5012.8	4866.1	4333.6	5616.4	3550.2
85°	1623.6	1765.6	2601.1	3846.0	3604.6	3644.8	2435.4	2873.3	3585.7	4560.8	1895.8
87.5°	158.6	203.5	537.3	1815.3	1230.7	970.4	362.1	698.2	901.7	1621.2	151.5
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°	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9
2.5°	12255.2	12132.1	11713.2	11367.6	11000.8	10721.5	10357.0	10113.2	9945.2	9691.9	9661.2
5°	11691.9	11391.3	10662.3	9919.2	9277.8	8794.9	8305.0	7855.3	7590.3	7507.4	7400.9
7.5°	10742.8	10236.3	9299.1	8447.0	7711.0	6991.5	6437.6	6044.7	5782.0	5628.2	5443.6
10°	9961.8	9374.8	8234.0	7190.3	6584.4	6137.1	5649.5	5228.2	4904.0	4627.0	4475.6
12.5°	9436.3	8773.6	7490.8	6643.5	6174.9	5699.2	5128.8	4655.4	4177.4	3862.6	3727.7
15°	9277.8	8577.2	7261.3	6371.4	5699.2	5076.7	4437.7	3820.0	3346.6	3048.4	2949.0
17.5°	9665.9	8818.6	7258.9	6009.2	5140.6	4397.5	3578.6	2998.7	2513.5	2291.0	2220.0
20°	10390.1	9282.5	7280.2	5651.9	4534.7	3488.6	2603.5	2127.7	1895.8	1801.1	1765.6
22.5°	11400.8	9990.2	7344.1	5299.2	3872.0	2679.2	1950.2	1708.8	1626.0	1609.4	1602.3
25°	12645.7	10865.9	7559.5	4982.1	3313.5	2044.9	1630.7	1521.8	1474.5	1457.9	1455.6
27.5°	13791.2	11997.2	7819.8	4709.9	2773.9	1763.2	1474.5	1382.2	1334.9	1332.5	1337.2
30°	14825.5	12943.9	8037.6	4404.6	2364.4	1566.8	1372.7	1280.4	1235.5	1233.1	1247.3
32.5°	15720.1	13722.6	8198.5	4104.0	2137.2	1446.1	1280.4	1181.0	1143.2	1136.1	1143.2
35°	16676.3	14498.9	8125.1	3869.7	2007.0	1346.7	1211.8	1114.8	1069.8	1048.5	1048.5
37.5°	17767.4	15298.8	7999.7	3675.6	1947.9	1263.9	1152.6	1057.9	1013.0	991.7	989.3
40°	18957.9	16098.8	7826.9	3502.8	1888.7	1214.2	1112.4	1013.0	958.5	937.2	932.5
42.5°	20008.7	16782.8	7684.9	3389.2	1791.6	1223.6	1076.9	979.8	911.2	882.8	880.4
45°	20922.3	17471.5	7658.9	3323.0	1711.2	1209.4	1067.4	953.8	873.3	842.6	837.8
47.5°	21637.1	18188.7	7808.0	3285.1	1623.6	1133.7	1129.0	937.2	840.2	807.1	802.3
50°	22508.0	19206.4	8148.8	3207.0	1543.1	1062.7	1192.9	934.9	814.2	771.6	759.7
52.5°	23667.8	20531.8	8610.3	3067.3	1427.2	996.4	1138.4	934.9	783.4	740.8	726.6
55°	25421.5	22221.7	9062.4	2870.9	1263.9	908.8	1027.2	906.5	738.4	700.6	691.1
57.5°	26583.6	23457.1	9351.1	2598.7	1060.3	844.9	885.2	861.5	693.5	653.2	653.2
60°	26642.8	23788.5	9213.9	2255.5	932.5	785.8	769.2	868.6	653.2	610.6	605.9
62.5°	25961.2	22976.7	8499.1	1947.9	863.9	721.9	695.8	762.1	613.0	570.4	563.3
65°	24896.1	20905.7	7258.9	1801.1	826.0	665.1	627.2	624.8	570.4	530.2	520.7
67.5°	22938.8	18269.1	5964.3	1715.9	807.1	601.2	565.7	553.8	520.7	487.6	482.8
70°	20053.7	15301.2	4783.3	1680.4	797.6	534.9	506.5	492.3	463.9	437.9	435.5
72.5°	15601.8	12411.4	3947.8	1656.7	792.9	473.4	442.6	423.7	407.1	383.4	383.4
75°	11206.7	9131.0	3012.9	1493.4	733.7	407.1	374.0	362.1	338.4	319.5	324.2
77.5°	7064.8	6148.9	1983.4	1098.2	568.0	326.6	298.2	291.1	272.2	246.1	262.7
80°	4771.4	4324.1	1157.4	691.1	357.4	239.0	229.6	227.2	205.9	177.5	179.9
82.5°	3247.2	3185.7	601.2	392.9	205.9	139.6	134.9	139.6	116.0	94.7	94.7
85°	1268.6	1732.5	284.0	153.8	66.3	21.3	30.8	33.1	18.9	9.5	11.8
87.5°	23.7	177.5	7.1	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°	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9
2.5°	9613.8	9592.5	9628.0	9476.6	9507.3	9564.1	9592.5	9609.1	9843.4	9789.0	9938.1
5°	7500.3	7479.0	7616.3	7635.2	7706.2	7692.0	7760.7	7777.2	7862.4	7893.2	8101.5
7.5°	5455.4	5547.7	5703.9	5784.4	5905.1	5943.0	5907.5	5995.0	5817.5	5945.3	5983.2
10°	4383.3	4272.0	4205.8	4390.4	4414.0	4589.2	4518.2	4461.4	4565.5	4570.2	4669.6
12.5°	3649.6	3410.5	3252.0	3304.0	3360.8	3436.6	3448.4	3562.0	3637.7	3708.7	3767.9
15°	2861.4	2778.6	2634.2	2563.2	2643.7	2674.5	2747.8	2842.5	2923.0	2944.3	3024.7
17.5°	2196.4	2210.6	2186.9	2144.3	2194.0	2217.7	2222.4	2224.8	2246.1	2231.9	2350.2
20°	1768.0	1817.7	1876.9	1886.3	1902.9	1914.7	1893.4	1813.0	1815.3	1865.0	1902.9
22.5°	1599.9	1609.4	1675.7	1697.0	1749.0	1727.7	1666.2	1628.3	1623.6	1635.4	1654.4
25°	1467.4	1481.6	1528.9	1562.1	1602.3	1564.4	1519.5	1484.0	1479.2	1491.1	1510.0
27.5°	1349.1	1370.4	1413.0	1446.1	1484.0	1448.5	1405.9	1375.1	1372.7	1370.4	1382.2
30°	1254.4	1278.1	1308.8	1346.7	1372.7	1342.0	1301.7	1285.2	1282.8	1278.1	1282.8
32.5°	1159.7	1197.6	1228.4	1247.3	1273.3	1249.7	1218.9	1209.4	1192.9	1178.7	1171.6
35°	1053.2	1093.5	1140.8	1164.5	1190.5	1166.8	1145.5	1105.3	1076.9	1074.5	1079.2
37.5°	991.7	1008.2	1046.1	1086.4	1112.4	1100.6	1060.3	1020.1	1013.0	1013.0	1017.7
40°	937.2	944.3	960.9	1013.0	1060.3	1024.8	975.1	963.3	963.3	960.9	963.3
42.5°	882.8	889.9	889.9	930.1	1005.9	949.1	911.2	911.2	911.2	913.6	920.7
45°	833.1	835.5	833.1	861.5	932.5	885.2	859.1	866.2	871.0	875.7	880.4
47.5°	790.5	792.9	790.5	814.2	849.7	830.7	816.5	826.0	835.5	842.6	847.3
50°	752.6	750.3	755.0	769.2	785.8	790.5	781.0	795.2	800.0	809.4	821.3
52.5°	719.5	717.1	721.9	729.0	752.6	752.6	752.6	764.5	773.9	783.4	800.0
55°	681.6	684.0	691.1	700.6	731.3	726.6	729.0	738.4	747.9	762.1	771.6
57.5°	646.1	650.9	660.3	674.5	705.3	702.9	705.3	710.0	721.9	729.0	738.4
60°	605.9	615.4	627.2	636.7	667.4	665.1	676.9	686.4	693.5	693.5	698.2
62.5°	565.7	579.9	591.7	598.8	631.9	634.3	650.9	658.0	662.7	658.0	665.1
65°	525.4	546.7	551.5	560.9	594.1	596.4	615.4	631.9	627.2	622.5	634.3
67.5°	485.2	511.2	508.9	520.7	553.8	558.6	575.1	603.5	594.1	589.3	598.8
70°	440.2	459.2	461.5	468.6	513.6	506.5	532.5	558.6	551.5	553.8	553.8
72.5°	390.5	407.1	407.1	421.3	468.6	456.8	478.1	506.5	506.5	504.1	504.1
75°	331.3	340.8	350.3	371.6	421.3	407.1	421.3	447.3	452.1	447.3	447.3
77.5°	267.4	281.6	286.4	314.8	350.3	347.9	362.1	374.0	383.4	378.7	378.7
80°	189.3	203.5	222.5	253.2	274.5	281.6	288.7	298.2	302.9	302.9	307.7
82.5°	106.5	127.8	144.4	175.1	184.6	220.1	217.7	224.8	217.7	191.7	213.0
85°	23.7	45.0	63.9	80.5	92.3	127.8	134.9	151.5	125.4	116.0	116.0
87.5°	0.0	0.0	0.0	0.0	0.0	18.9	37.9	52.1	45.0	37.9	37.9
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: P456641

CATALOG NUMBER: GALN-SA7D-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9	11530.9
2.5°	10063.5	10269.4	10518.0	10946.3	11246.9	11571.2	11897.8	12245.7	12338.0	12432.7
5°	8158.3	8563.0	8783.1	9358.2	9961.8	10728.6	11355.8	12042.2	12328.5	12394.8
7.5°	6179.7	6454.2	7031.7	7613.9	8361.8	9166.5	10127.4	11197.2	11530.9	11670.6
10°	4899.2	5273.2	5779.7	6404.5	7060.1	7926.3	9010.3	10260.0	10733.3	10811.4
12.5°	4170.3	4586.8	5138.3	5798.6	6418.7	7071.9	8165.4	9455.3	9961.8	10129.8
15°	3334.8	3838.9	4475.6	5171.4	5845.9	6560.7	7668.4	9123.9	9708.5	9905.0
17.5°	2620.0	3027.1	3715.8	4470.8	5270.8	6174.9	7564.2	9282.5	10002.0	10184.2
20°	2004.7	2295.8	2875.6	3673.2	4610.5	5793.9	7590.3	9881.3	10742.8	10991.3
22.5°	1732.5	1881.6	2234.2	2994.0	4042.5	5462.5	7696.8	10702.6	11741.6	12155.8
25°	1569.2	1647.3	1846.1	2343.1	3500.5	5140.6	7940.5	11807.8	13138.0	13412.5
27.5°	1429.5	1486.3	1609.4	1966.8	3008.2	4842.4	8224.5	13033.8	14442.1	14851.5
30°	1297.0	1372.7	1488.7	1746.7	2693.4	4570.2	8581.9	14027.9	15540.3	15921.3
32.5°	1195.2	1271.0	1377.5	1592.8	2425.9	4283.9	8794.9	14901.2	16437.3	16761.5
35°	1112.4	1176.3	1287.5	1469.8	2222.4	4066.1	8752.3	15594.7	17305.9	17637.2
37.5°	1053.2	1107.7	1218.9	1353.8	2068.6	3838.9	8731.0	16510.6	18363.8	18747.2
40°	998.8	1055.6	1157.4	1278.1	1914.7	3571.5	8742.9	17419.5	19490.4	19873.8
42.5°	956.2	1020.1	1102.9	1256.8	1756.1	3356.1	8742.9	18210.0	20470.2	20839.5
45°	920.7	989.3	1069.8	1254.4	1630.7	3192.8	8683.7	18889.2	21251.3	21566.1
47.5°	889.9	965.6	1081.6	1211.8	1599.9	3074.4	8631.6	19433.6	21887.9	22183.8
50°	868.6	958.5	1150.3	1162.1	1609.4	3038.9	8882.5	20120.0	22448.9	22704.5
52.5°	852.0	960.9	1147.9	1088.7	1592.8	3062.6	9405.6	21192.1	23227.5	23246.5
55°	818.9	958.5	1088.7	1005.9	1524.2	3102.8	10077.7	22749.5	24446.4	24460.6
57.5°	785.8	932.5	1010.6	934.9	1384.6	3102.8	10887.2	24224.0	25916.2	25928.0
60°	752.6	970.4	887.5	873.3	1202.3	3046.0	11741.6	24872.4	26377.7	26498.4
62.5°	719.5	977.5	792.9	818.9	1069.8	2908.8	12378.2	24155.3	25752.9	25925.7
65°	681.6	788.1	731.3	762.1	1001.1	2679.2	12177.1	22841.8	24579.0	24784.9
67.5°	636.7	667.4	665.1	702.9	977.5	2340.7	11116.7	21180.3	23315.1	23303.3
70°	582.2	598.8	605.9	646.1	932.5	2078.0	9263.6	19024.1	21627.6	21892.7
72.5°	525.4	539.6	546.7	582.2	887.5	1928.9	7190.3	16053.8	18733.0	19147.2
75°	463.9	473.4	482.8	513.6	840.2	1708.8	5121.7	12255.2	14347.4	14998.3
77.5°	400.0	400.0	411.8	442.6	707.7	1410.6	3436.6	8596.1	9720.3	10385.4
80°	324.2	326.6	321.9	355.0	520.7	965.6	1952.6	5741.8	6468.4	6596.2
82.5°	248.5	241.4	243.8	260.3	388.2	658.0	1041.4	3566.7	3635.4	3564.4
85°	156.2	156.2	151.5	170.4	248.5	343.2	568.0	2184.5	1706.4	1623.6
87.5°	63.9	52.1	59.2	68.6	118.3	139.6	222.5	449.7	172.8	158.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)