

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: P950047

Luminaire Tested: **GALN-SB4C-840-U-SLL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950047
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4C-840-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21911 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

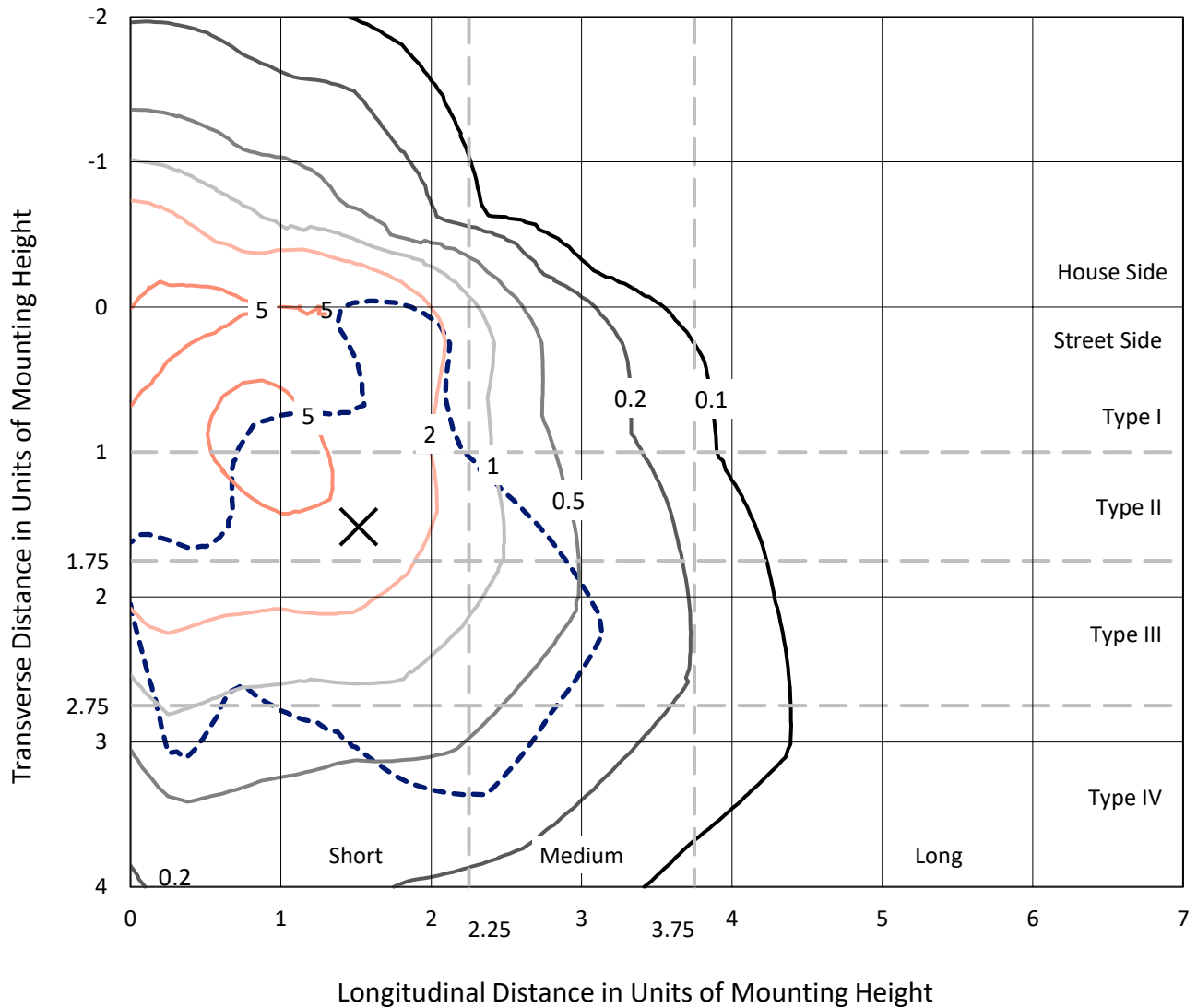
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P950047
 CATALOG NUMBER: GALN-SB4C-840-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

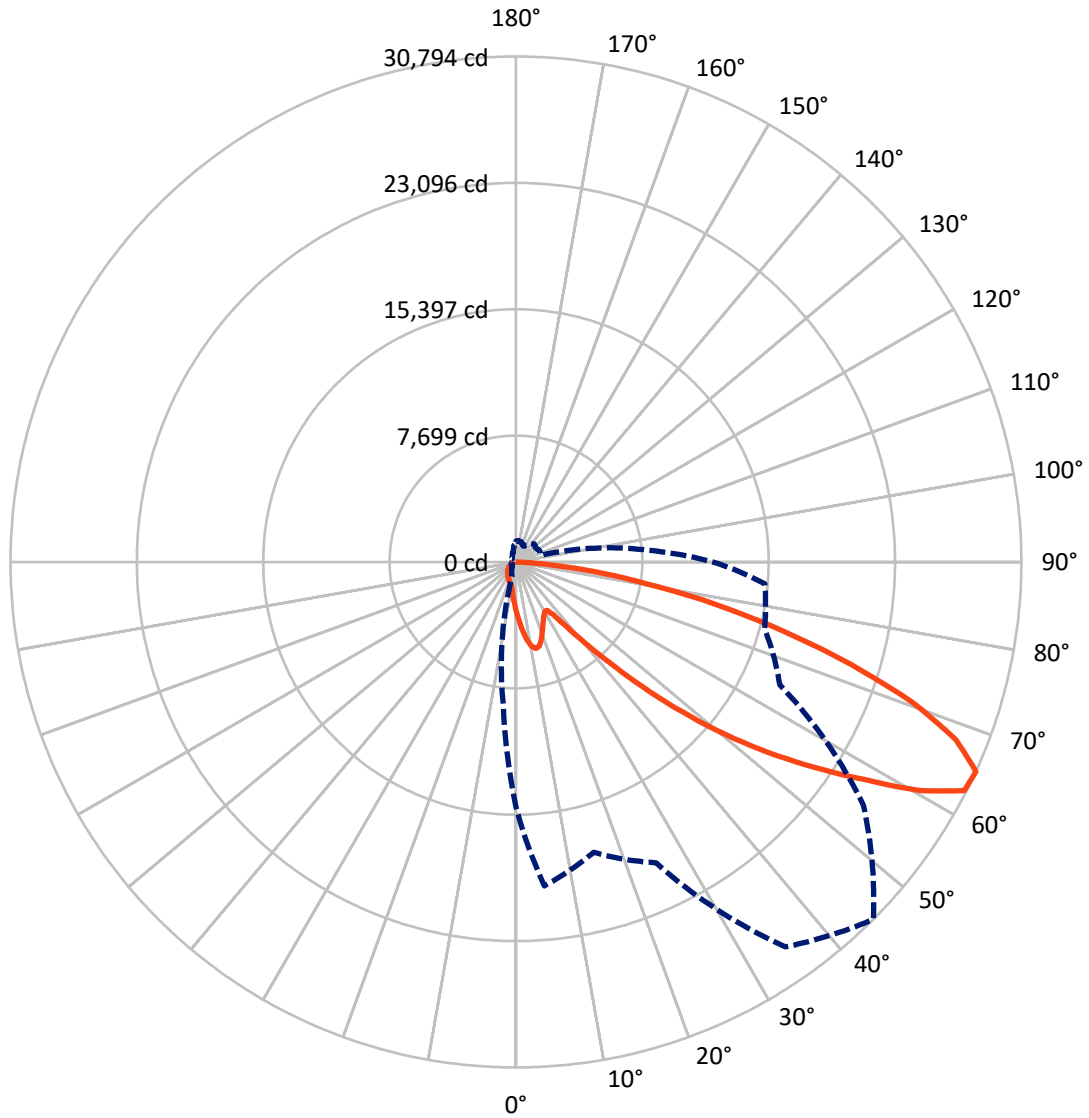
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Short - N/A

REPORT NUMBER: P950047
CATALOG NUMBER: GALN-SB4C-840-U-SLL-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P950047

CATALOG NUMBER: GALN-SB4C-840-U-SLL-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4355.2	0.0	4355.2
	% Fixture	19.9	0.0	19.9
Street Side	Lumens	17555.8	0.0	17555.8
	% Fixture	80.1	0.0	80.1
Total	Lumens	21911.0	0.0	21911.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	298.7	1.4
10°-20°	895.4	4.1
20°-30°	1319.1	6.0
30°-40°	1694.7	7.7
40°-50°	2740.9	12.5
50°-60°	4806.4	21.9
60°-70°	6014.2	27.4
70°-80°	3514.4	16.0
80°-90°	627.0	2.9
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°	21911.0	100.0
0°-180°	21911.0	100.0

Coefficient of Utilization



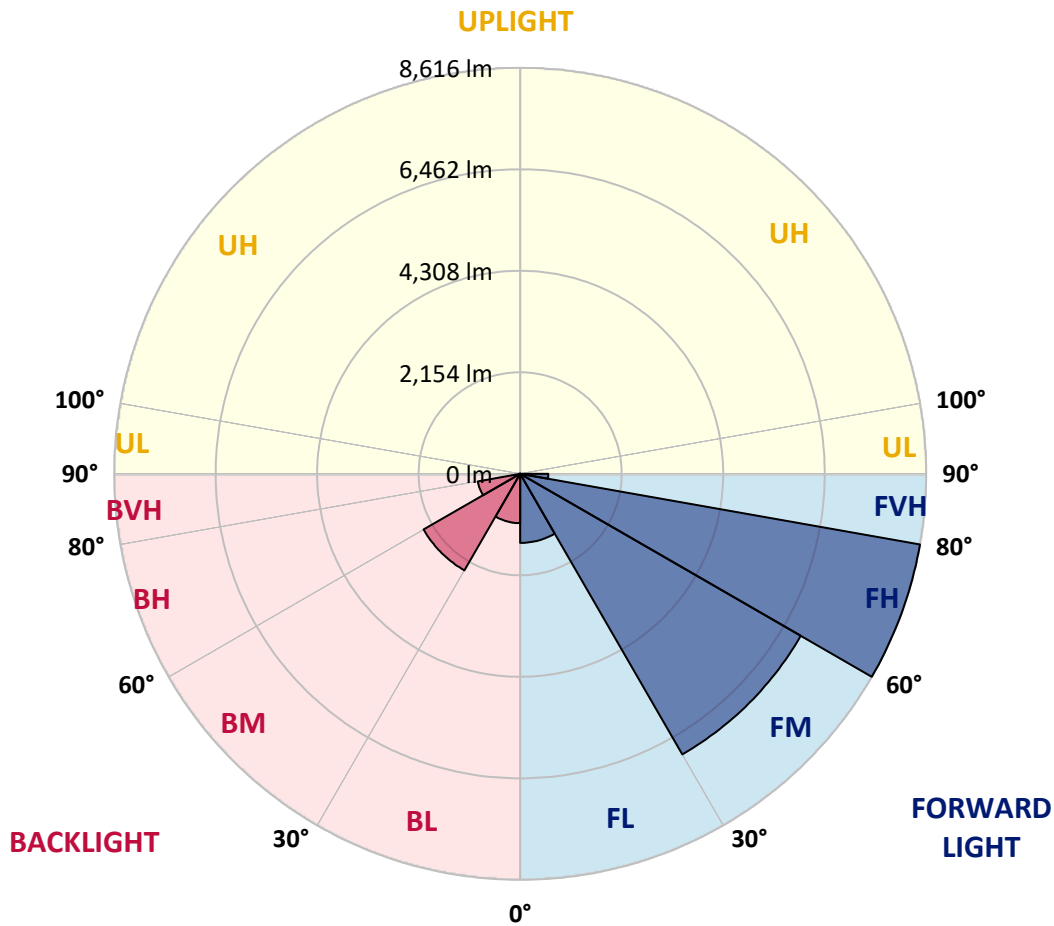
REPORT NUMBER: P950047
 CATALOG NUMBER: GALN-SB4C-840-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1466.1	6.7			
FM (30°-60°)	6875.9	31.4			
FH (60°-80°)	8616.1	39.3			G4/12000
FVH (80°-90°)	597.6	2.7			G4/750
BL (0°-30°)	1047.2	4.8	B3/2500		
BM (30°-60°)	2366.2	10.8	B2/2500		
BH (60°-80°)	912.5	4.2	B2/1000		G2/1000
BVH (80°-90°)	29.4	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Short



REPORT NUMBER: P950047
 CATALOG NUMBER: GALN-SB4C-840-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0
2.5°	3399.3	3424.9	3482.3	3512.5	3559.3	3562.3	3562.3	3521.5	3520.0	3437.0
5°	3799.3	3859.6	3995.5	4135.9	4166.1	4173.6	4158.5	4077.0	4016.6	3855.1
7.5°	4196.2	4312.5	4519.3	4706.4	4766.8	4766.8	4730.6	4597.8	4474.0	4240.0
10°	4525.3	4671.7	4952.5	5162.3	5231.7	5216.6	5142.7	4975.1	4804.5	4520.8
12.5°	4742.7	4907.2	5215.1	5384.2	5455.1	5415.9	5331.3	5168.3	4988.7	4689.8
15°	4851.3	5023.4	5290.6	5379.6	5360.0	5319.3	5308.7	5230.2	5094.4	4815.1
17.5°	4898.1	5058.1	5243.8	5187.9	5021.9	4990.2	5095.9	5195.5	5162.3	4923.8
20°	4941.9	5076.2	5132.1	4884.5	4594.7	4566.1	4768.3	5052.1	5197.0	5024.9
22.5°	5002.3	5085.3	4970.6	4564.5	4252.1	4185.7	4409.1	4836.2	5207.6	5153.2
25°	5085.3	5107.9	4792.5	4261.1	3947.2	3880.8	4089.1	4596.2	5189.5	5292.1
27.5°	5184.9	5138.1	4621.9	4007.6	3704.2	3642.3	3850.6	4365.3	5138.1	5431.0
30°	5314.7	5177.4	4452.8	3811.3	3530.6	3485.3	3686.1	4166.1	5074.7	5607.6
32.5°	5446.1	5194.0	4295.9	3696.6	3491.3	3507.9	3672.5	4058.9	5005.3	5776.6
35°	5587.9	5246.8	4218.9	3809.8	3818.9	3963.8	4031.7	4158.5	4994.7	6006.1
37.5°	5781.2	5364.5	4311.0	4372.8	4686.8	4987.2	4931.3	4646.1	5117.0	6348.7
40°	6058.9	5571.3	4712.5	5331.3	5975.9	6463.4	6250.6	5532.1	5491.3	6842.3
42.5°	6463.4	5900.4	5424.9	6502.7	7595.5	8398.5	7828.0	6674.7	6146.4	7547.2
45°	7061.2	6433.2	6286.8	7738.9	9592.5	10857.4	9671.0	7892.9	7064.2	8614.4
47.5°	7889.8	7216.6	7094.4	9041.5	12019.7	13655.9	11714.8	9021.9	8108.7	10069.5
50°	8990.2	8271.7	7859.6	10466.5	14680.8	16508.7	13757.0	10111.7	9305.7	11847.6
52.5°	10442.3	9743.4	8751.7	11823.4	17417.4	19301.2	15808.4	11068.7	10791.0	13911.0
55°	12422.7	11957.8	9971.4	13118.5	20152.5	22110.3	17779.7	11971.4	12753.3	16362.3
57.5°	14880.0	15212.1	11729.9	14620.4	22611.4	25005.4	19760.1	13233.3	15301.2	19103.5
60°	16465.0	19539.7	15097.4	16840.8	25405.4	28279.3	22474.0	15633.3	17978.9	20086.1
62.5°	16081.6	20916.3	19130.6	19675.5	27974.4	30659.7	25133.7	18043.8	18483.1	18638.6
65°	14905.7	19805.3	18308.0	20226.5	28625.0	30794.1	25844.6	17732.9	15678.5	15216.7
67.5°	13287.6	18487.6	16353.3	18765.3	27449.1	28916.3	24520.8	15686.1	12116.3	11418.9
70°	11541.2	17029.5	15070.2	17126.1	25207.6	25643.9	22270.3	13796.3	8911.7	7711.7
72.5°	9883.8	15511.0	14191.7	15446.1	22217.4	21314.8	19340.4	12125.3	6489.1	5562.3
75°	8188.7	13271.0	12940.4	13450.6	18285.3	16789.5	16069.5	10039.3	5092.8	4024.2
77.5°	6318.5	10369.8	11130.6	10771.4	12871.0	12471.0	12455.9	7544.2	3720.8	2685.3
80°	4324.5	7227.2	8695.9	7598.5	8353.2	8149.5	9381.2	5061.1	2698.9	1616.6
82.5°	2541.9	4400.0	6052.9	3678.5	4618.9	4741.1	5586.4	2461.9	1587.9	372.8
85°	1030.9	1737.4	2366.8	1440.0	2227.9	1879.3	2120.8	691.3	442.3	9.1
87.5°	259.6	555.5	389.4	161.5	258.1	237.0	187.2	84.5	18.1	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P950047
 CATALOG NUMBER: GALN-SB4C-840-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

90°		95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
3034.0	0°	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0
3427.9	2.5°	3369.1	3334.4	3248.3	3162.3	3092.8	2999.3	2937.4	2863.4	2792.5	2729.1
3820.4	5°	3725.3	3610.6	3453.6	3310.2	3163.8	3021.9	2881.5	2733.6	2597.7	2514.7
4152.5	7.5°	4015.1	3812.8	3604.5	3421.9	3245.3	3079.3	2893.6	2714.0	2501.1	2387.9
4406.1	10°	4231.0	3965.3	3692.1	3482.3	3304.2	3142.7	2985.7	2804.5	2547.9	2406.0
4560.0	12.5°	4372.8	4057.4	3737.4	3497.4	3298.1	3172.8	3103.4	3032.5	2777.4	2611.3
4673.2	15°	4471.0	4122.3	3769.1	3462.7	3218.1	3126.0	3195.5	3277.0	3114.0	2922.3
4791.0	17.5°	4578.1	4206.8	3782.7	3369.1	3062.7	3023.4	3203.0	3391.7	3384.2	3194.0
4902.7	20°	4691.3	4280.8	3773.6	3218.1	2874.0	2908.7	3138.1	3357.0	3449.1	3346.4
5031.0	22.5°	4807.6	4351.7	3738.9	3021.9	2697.4	2806.0	3035.5	3227.2	3335.9	3304.2
5187.9	25°	4954.0	4451.3	3687.6	2810.6	2551.0	2701.9	2916.2	3071.7	3147.2	3145.7
5357.0	27.5°	5129.1	4584.2	3660.4	2640.0	2446.8	2584.2	2774.3	2913.2	2966.0	2966.0
5566.8	30°	5332.8	4741.1	3630.2	2528.3	2386.4	2461.9	2609.8	2745.7	2798.5	2798.5
5796.2	32.5°	5559.3	4892.1	3557.7	2460.4	2341.1	2342.6	2436.2	2560.0	2623.4	2632.5
6083.0	35°	5831.0	5053.6	3399.3	2406.0	2288.3	2226.4	2271.7	2374.3	2449.8	2469.4
6492.1	37.5°	6187.2	5251.3	3172.8	2326.0	2206.8	2104.2	2114.7	2193.2	2276.2	2306.4
7056.6	40°	6665.7	5483.8	2937.4	2211.3	2092.1	1969.8	1965.3	2022.6	2104.2	2137.4
7820.4	42.5°	7298.1	5763.0	2712.5	2101.1	1953.2	1827.9	1820.4	1865.7	1936.6	1971.3
8828.7	45°	8107.2	6105.7	2519.3	2015.1	1817.4	1693.6	1690.6	1728.3	1790.2	1826.4
10119.3	47.5°	9231.7	6448.3	2387.9	1969.8	1710.2	1583.4	1589.4	1622.6	1678.5	1704.2
11790.2	50°	10697.4	6552.5	2321.5	1969.8	1652.8	1485.3	1515.5	1542.6	1584.9	1600.0
13793.3	52.5°	12104.2	6208.3	2261.1	1981.9	1660.4	1402.3	1467.2	1486.8	1523.0	1529.1
15649.9	55°	12794.0	5337.4	2178.1	1984.9	1707.2	1331.3	1427.9	1464.2	1477.7	1476.2
16727.6	57.5°	12557.0	4315.5	2037.7	1972.8	1738.9	1286.0	1379.6	1449.1	1458.1	1444.5
16522.3	60°	11725.3	3177.4	1930.6	1883.8	1726.8	1272.5	1305.7	1415.9	1429.4	1411.3
14940.4	62.5°	10330.6	2205.3	1847.6	1687.6	1674.0	1267.9	1189.4	1343.4	1376.6	1350.9
12009.1	65°	8132.9	1557.7	1590.9	1479.3	1559.3	1243.8	1068.7	1255.9	1301.1	1261.9
8712.5	67.5°	5503.4	1124.5	1289.1	1340.4	1373.6	1189.4	981.1	1156.2	1216.6	1165.3
5591.0	70°	2972.1	789.4	851.3	1129.1	1166.8	1095.9	902.6	1055.1	1124.5	1068.7
3974.4	72.5°	1755.5	567.5	596.2	907.2	972.1	964.5	815.1	937.4	1021.9	955.5
2742.7	75°	967.6	383.4	425.7	658.1	789.4	744.2	700.4	794.0	880.0	815.1
1719.3	77.5°	433.2	229.4	295.9	431.7	620.4	510.2	541.9	618.9	698.9	630.9
957.0	80°	167.5	128.3	196.2	235.5	451.3	282.3	348.7	455.9	513.2	458.9
208.3	82.5°	21.1	57.4	84.5	92.1	262.6	149.4	202.3	286.8	282.3	244.5
0.0	85°	0.0	10.6	12.1	6.0	113.2	54.3	66.4	93.6	87.5	66.4
0.0	87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	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

REPORT NUMBER: P950047
 CATALOG NUMBER: GALN-SB4C-840-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

185°		195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
3034.0	0°	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0
2717.0	2.5°	2643.0	2588.7	2561.5	2538.9	2560.0	2572.1	2572.1	2623.4	2653.6	2665.7
2461.9	5°	2329.1	2227.9	2160.0	2119.3	2132.8	2147.9	2164.5	2229.4	2273.2	2301.9
2285.3	7.5°	2081.5	1927.6	1832.5	1782.6	1790.2	1800.8	1814.3	1877.7	1921.5	1959.3
2252.1	10°	1959.3	1741.9	1616.6	1556.2	1545.7	1539.6	1535.1	1572.8	1606.0	1636.2
2387.9	12.5°	1965.3	1661.9	1509.4	1435.5	1403.8	1367.6	1338.9	1344.9	1366.0	1403.8
2631.0	15°	2042.3	1636.2	1453.6	1361.5	1308.7	1266.4	1231.7	1224.2	1231.7	1237.7
2908.7	17.5°	2146.4	1633.2	1405.3	1290.6	1236.2	1201.5	1169.8	1159.2	1160.8	1168.3
3092.8	20°	2229.4	1624.2	1350.9	1222.6	1174.3	1144.2	1112.5	1101.9	1104.9	1106.4
3111.0	22.5°	2273.2	1610.6	1290.6	1154.7	1114.0	1083.8	1055.1	1053.6	1053.6	1062.6
3012.8	25°	2273.2	1581.9	1236.2	1089.8	1053.6	1026.4	991.7	997.7	1000.8	1012.8
2860.4	27.5°	2218.9	1527.6	1192.5	1034.0	996.2	969.1	937.4	944.9	949.4	963.0
2709.4	30°	2149.4	1462.6	1142.6	981.1	937.4	917.7	890.6	893.6	899.6	914.7
2569.1	32.5°	2075.5	1385.7	1101.9	928.3	884.5	869.4	839.2	843.8	849.8	866.4
2430.2	35°	1994.0	1295.1	1053.6	880.0	836.2	824.2	789.4	792.5	801.5	819.6
2280.8	37.5°	1907.9	1221.1	1005.3	833.2	787.9	775.9	739.6	742.6	753.2	774.3
2123.8	40°	1823.4	1148.7	954.0	783.4	738.1	727.5	688.3	691.3	703.4	726.0
1965.3	42.5°	1731.3	1092.8	887.6	732.1	683.8	673.2	637.0	641.5	655.1	677.7
1818.9	45°	1621.1	1056.6	813.6	683.8	629.4	618.9	585.7	594.7	609.8	632.5
1693.6	47.5°	1507.9	1041.5	751.7	632.5	573.6	564.5	537.4	552.5	569.1	587.2
1586.4	50°	1399.2	1021.9	688.3	584.2	525.3	516.2	498.1	517.7	534.3	550.9
1509.4	52.5°	1275.5	979.6	630.9	541.9	484.5	481.5	472.5	490.6	505.7	520.8
1443.0	55°	1147.2	911.7	581.1	504.2	449.8	452.8	448.3	463.4	475.5	489.1
1382.6	57.5°	1035.5	825.7	541.9	463.4	419.6	428.7	422.6	430.2	437.7	454.3
1310.2	60°	922.3	723.0	498.1	415.1	389.4	400.0	383.4	381.9	384.9	389.4
1203.0	62.5°	769.8	615.9	443.8	372.8	356.2	360.8	329.1	304.9	304.9	309.4
1053.6	65°	618.9	516.2	383.4	324.5	310.9	307.9	262.6	229.4	226.4	240.0
880.0	67.5°	508.7	428.7	323.0	270.2	261.1	264.2	230.9	197.7	194.7	209.8
717.0	70°	421.1	345.7	258.1	208.3	217.4	230.9	197.7	166.0	161.5	175.1
582.6	72.5°	335.1	270.2	197.7	154.0	179.6	196.2	161.5	131.3	128.3	140.4
449.8	75°	246.0	193.2	134.3	111.7	138.9	154.0	117.7	93.6	89.1	99.6
300.4	77.5°	152.5	108.7	84.5	66.4	95.1	102.6	61.9	54.3	52.8	60.4
182.6	80°	70.9	46.8	40.8	22.6	34.7	40.8	25.7	28.7	30.2	36.2
92.1	82.5°	19.6	7.5	1.5	0.0	0.0	12.1	6.0	12.1	15.1	22.6
7.5	85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	7.5	13.6
0.0	87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P950047
 CATALOG NUMBER: GALN-SB4C-840-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

285°		295°	305°	315°	325°	335°	345°	355°	360°
3034.0	0°	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0	3034.0
2750.2	2.5°	2813.6	2874.0	2970.6	3070.2	3168.3	3267.9	3364.5	3399.3
2433.2	5°	2552.5	2691.3	2883.0	3088.3	3299.6	3514.0	3710.2	3799.3
2105.7	7.5°	2261.1	2460.4	2748.7	3070.2	3406.8	3743.4	4052.8	4196.2
1781.1	10°	1950.2	2202.3	2531.3	2966.0	3449.1	3914.0	4339.6	4525.3
1495.9	12.5°	1654.3	1918.5	2282.3	2803.0	3415.9	4012.1	4523.8	4742.7
1295.1	15°	1406.8	1640.8	2033.2	2609.8	3308.7	4018.1	4611.3	4851.3
1183.4	17.5°	1221.1	1373.6	1779.6	2395.5	3168.3	3962.3	4641.5	4898.1
1123.0	20°	1129.1	1171.3	1450.6	2120.8	3037.0	3909.4	4671.7	4941.9
1074.7	22.5°	1074.7	1085.3	1186.4	1766.0	2880.0	3892.8	4724.5	5002.3
1030.9	25°	1030.9	1034.0	1061.1	1399.2	2640.0	3882.3	4806.1	5085.3
985.7	27.5°	987.2	987.2	1002.3	1127.6	2314.0	3837.0	4911.7	5184.9
940.4	30°	943.4	943.4	954.0	997.7	1932.1	3747.9	5038.5	5314.7
895.1	32.5°	898.1	898.1	907.2	938.9	1542.6	3636.2	5154.7	5446.1
848.3	35°	852.8	849.8	861.9	895.1	1227.2	3494.4	5271.0	5587.9
801.5	37.5°	804.5	803.0	815.1	852.8	1059.6	3329.8	5358.5	5781.2
754.7	40°	753.2	753.2	766.8	807.5	1011.3	3123.0	5497.4	6058.9
706.4	42.5°	706.4	703.4	718.5	768.3	975.1	2925.3	5746.4	6463.4
662.6	45°	661.1	655.1	668.7	730.6	911.7	2855.9	6211.3	7061.2
620.4	47.5°	618.9	603.8	615.9	685.3	854.3	3115.5	6972.1	7889.8
582.6	50°	584.2	555.5	566.0	640.0	810.6	3678.5	7959.3	8990.2
547.9	52.5°	547.9	510.2	516.2	584.2	771.3	4214.4	9029.5	10442.3
513.2	55°	510.2	467.9	470.9	528.3	715.5	4294.4	10074.0	12422.7
474.0	57.5°	467.9	428.7	428.7	477.0	674.7	3722.3	10877.0	14880.0
425.7	60°	421.1	395.5	387.9	436.2	710.9	2626.4	10970.6	16465.0
363.8	62.5°	369.8	356.2	345.7	397.0	738.1	1556.2	10217.4	16081.6
286.8	65°	310.9	307.9	300.4	436.2	621.9	919.2	8771.4	14905.7
244.5	67.5°	261.1	256.6	256.6	457.4	472.5	578.1	6852.9	13287.6
208.3	70°	224.9	208.3	208.3	345.7	286.8	400.0	4784.9	11541.2
172.1	72.5°	188.7	170.6	158.5	276.2	214.3	292.8	2990.2	9883.8
131.3	75°	150.9	137.4	122.3	182.6	160.0	221.9	1737.4	8188.7
83.0	77.5°	108.7	102.6	86.0	134.3	116.2	160.0	1034.0	6318.5
51.3	80°	55.8	57.4	54.3	77.0	78.5	108.7	588.7	4324.5
33.2	82.5°	33.2	25.7	28.7	37.7	45.3	61.9	221.9	2541.9
24.2	85°	21.1	13.6	13.6	18.1	22.6	24.2	67.9	1030.9
12.1	87.5°	10.6	4.5	6.0	9.1	7.5	6.0	3.0	259.6
0.0	90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)