

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: P457801

Luminaire Tested: **GALN-SA9A-830-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P457801
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-SA9A-830-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 615mA 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: 28397 lumens
Efficiency: N/A
Efficacy: 103.6 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): 274
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



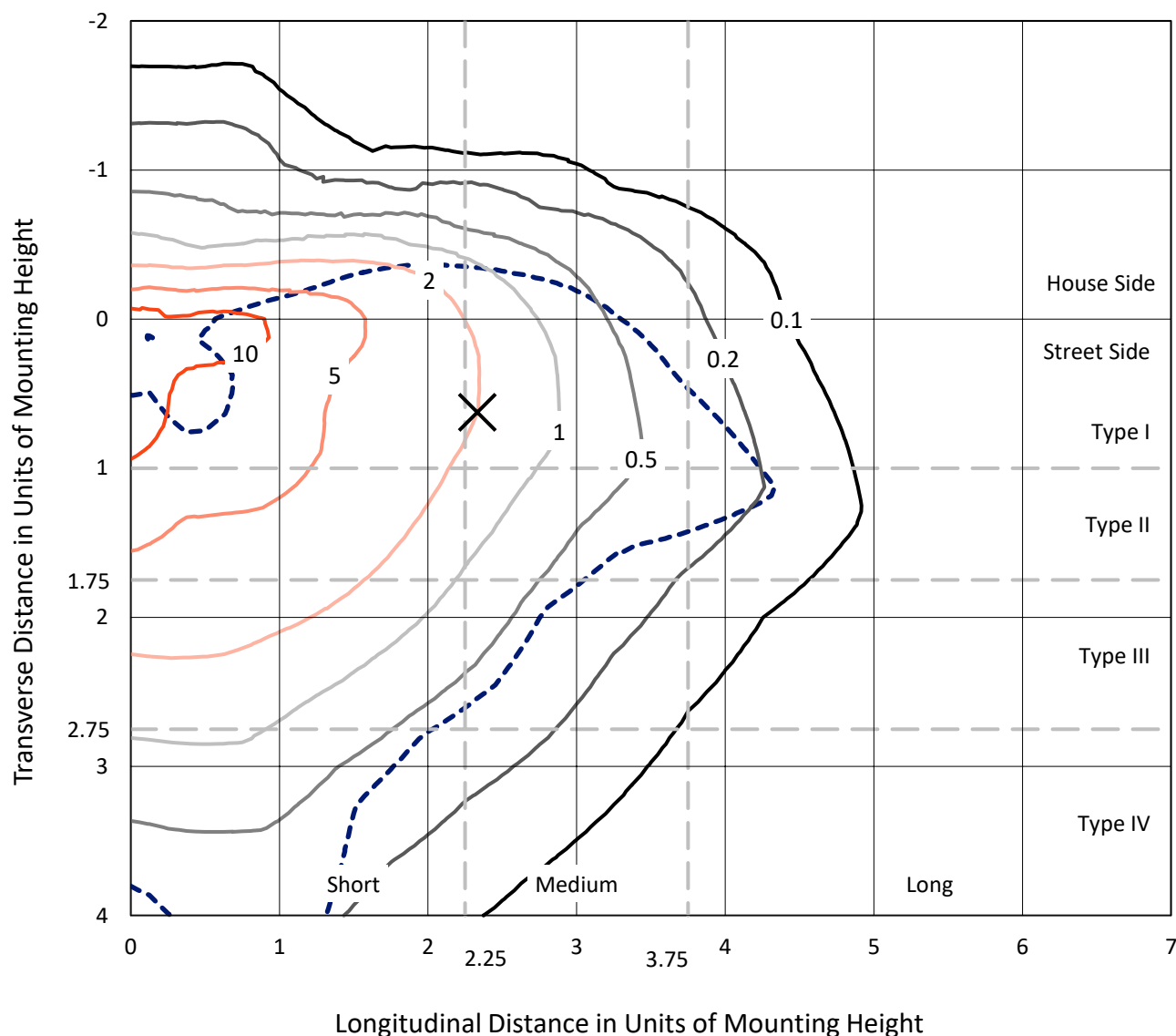
REPORT NUMBER: P457801

CATALOG NUMBER: GALN-SA9A-830-U-SLL

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

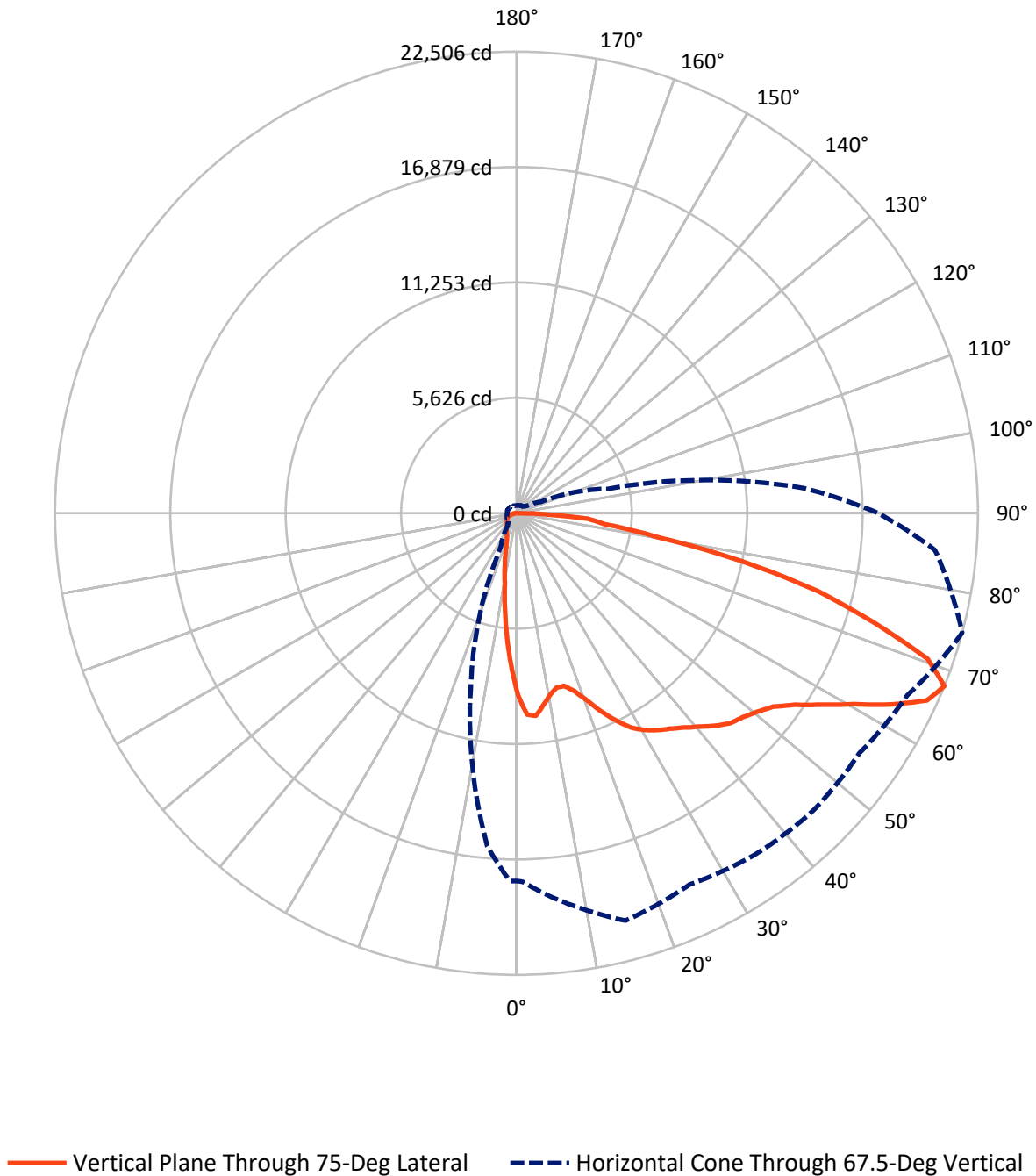
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 17.5 fc
 Type III - Medium - N/A

REPORT NUMBER: P457801
CATALOG NUMBER: GALN-SA9A-830-U-SLL

Luminous Intensity Polar Plot



REPORT NUMBER: P457801

CATALOG NUMBER: GALN-SA9A-830-U-SLL

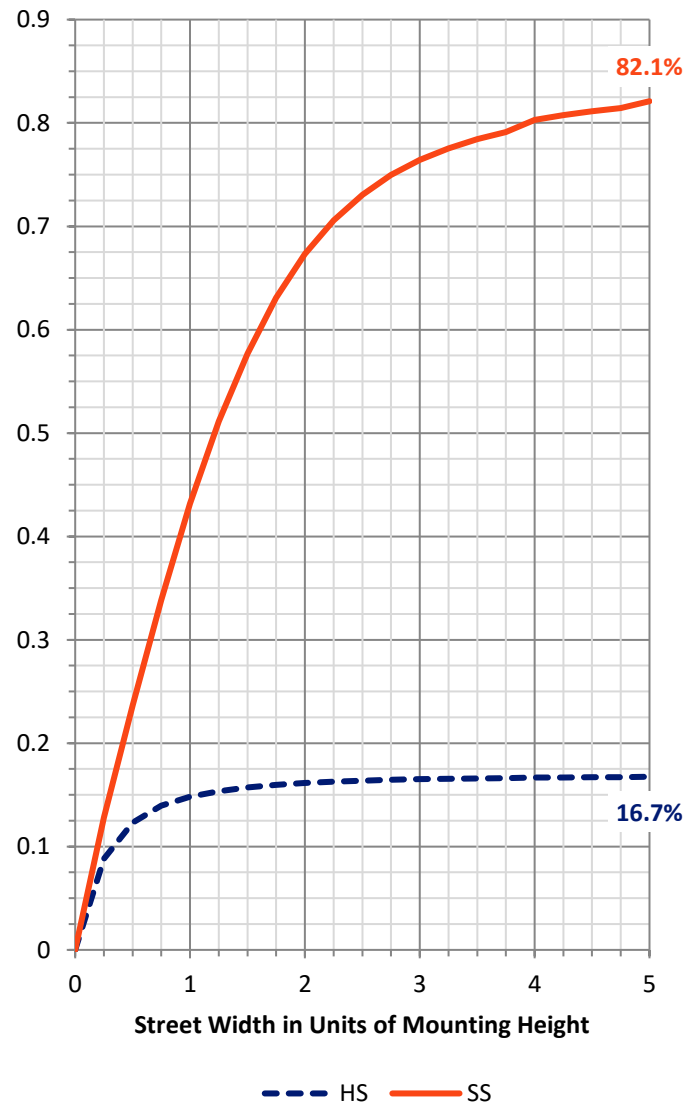
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4799.7	0.0	4799.7
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	23597.3	0.0	23597.3
	% Fixture	83.1	0.0	83.1
Total	Lumens	28397.0	0.0	28397.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	672.9	2.4
10°-20°	1403.4	4.9
20°-30°	2019.5	7.1
30°-40°	2908.6	10.2
40°-50°	4085.8	14.4
50°-60°	5698.3	20.1
60°-70°	6774.9	23.9
70°-80°	3990.0	14.1
80°-90°	843.7	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°	28397.0	100.0
0°-180°	28397.0	100.0

Coefficient of Utilization



REPORT NUMBER: P457801

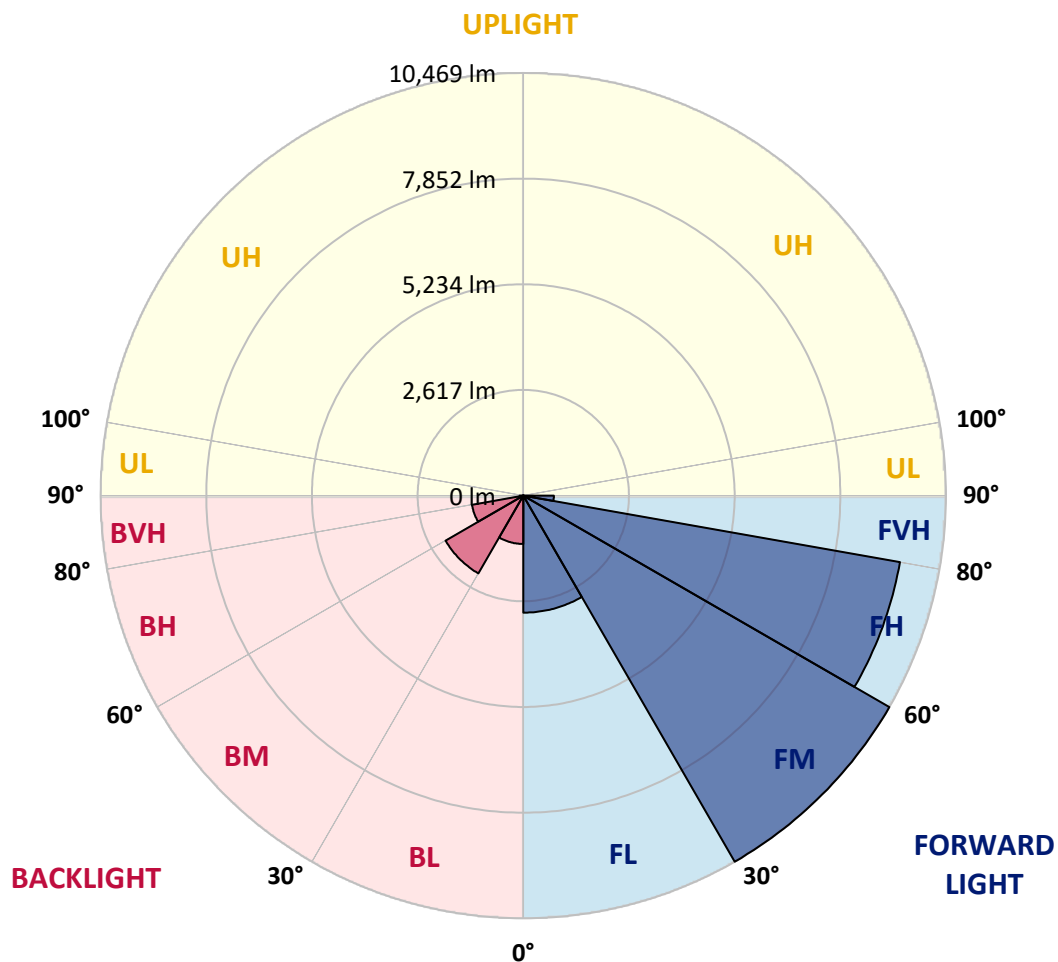
CATALOG NUMBER: GALN-SA9A-830-U-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2898.6	10.2			
FM	(30°-60°)	10468.9	36.9			
FH	(60°-80°)	9473.4	33.4			G4/12000
FVH	(80°-90°)	756.5	2.7			G5
BL	(0°-30°)	1197.2	4.2	B3/2500		
BM	(30°-60°)	2223.7	7.8	B2/2500		
BH	(60°-80°)	1291.5	4.5	B3/2500		G3/2500
BVH	(80°-90°)	87.3	0.3			G1/100
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





REPORT NUMBER: P457801

CATALOG NUMBER: GALN-SA9A-830-U-SLL

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9
2.5°	9565.7	9578.4	9660.4	9898.9	10062.8	10122.9	10164.8	10086.5	10010.0	9824.3	9543.8
5°	9536.6	9611.2	9824.3	10359.6	10782.1	10964.2	11018.8	10783.9	10396.1	9919.0	9345.4
7.5°	8979.3	9079.5	9407.3	10305.0	11049.8	11475.9	11419.5	10995.2	10295.9	9445.5	8644.3
10°	8318.3	8429.4	8824.5	9909.9	10869.5	11455.9	11455.9	10938.7	10010.0	8999.4	8076.1
12.5°	7793.9	7910.4	8362.0	9503.8	10494.4	11049.8	11142.7	10698.4	9804.2	8717.1	7702.8
15°	7620.9	7733.8	8220.0	9257.9	10097.4	10436.1	10467.1	10321.4	9704.1	8737.1	7686.4
17.5°	7835.7	7981.4	8473.1	9330.8	9733.2	9753.3	9776.9	9891.7	9715.0	9103.2	8017.8
20°	8456.7	8613.3	9126.8	9565.7	9414.6	9207.0	9219.7	9514.7	9844.3	9707.7	8810.0
22.5°	9352.6	9489.2	10015.5	9979.1	9279.8	8851.9	8762.6	9174.2	10035.5	10461.6	9653.1
25°	10319.6	10479.8	11084.4	10592.7	9318.0	8640.6	8584.2	8973.9	10234.0	11166.4	10627.3
27.5°	11426.8	11583.4	12060.5	11211.9	9518.3	8624.2	8556.9	8955.7	10412.5	11818.3	11557.9
30°	12249.8	12393.7	12717.8	11732.7	9764.2	8733.5	8649.7	9099.5	10565.4	12264.4	12464.7
32.5°	12896.3	13045.6	13222.3	12056.8	10088.3	8932.0	8777.2	9361.7	10765.7	12604.9	13136.7
35°	13570.1	13746.7	13734.0	12344.5	10390.6	9161.4	9010.3	9740.5	11080.8	12901.8	13988.9
37.5°	14424.1	14495.1	14404.1	12603.1	10753.0	9574.8	9491.0	10303.2	11528.7	13260.5	14985.0
40°	15290.9	15432.9	14964.9	12916.3	11193.7	10352.4	10343.3	11135.4	12060.5	13681.1	15950.1
42.5°	16033.9	16154.1	15489.4	13189.5	11727.2	11301.1	11370.3	12251.7	12757.9	14169.2	16725.9
45°	16592.9	16700.4	15973.8	13453.5	12430.1	12397.3	12805.2	13448.1	13637.4	14608.0	17181.1
47.5°	17068.2	17172.0	16310.7	13854.1	13298.7	13706.6	14416.8	14695.4	14389.5	14859.3	17691.0
50°	17468.8	17499.8	16541.9	14331.2	14376.8	15310.9	15999.3	16179.6	15132.5	15219.9	18133.5
52.5°	17885.8	17845.8	16940.7	14932.2	15542.2	16833.3	17334.1	17521.6	15844.5	15664.2	18778.1
55°	18820.0	18858.2	17834.8	15689.7	16720.4	18328.3	18987.5	18807.3	16633.0	16481.8	19597.6
57.5°	19949.0	19916.2	19093.1	16875.2	17920.4	19719.6	20211.2	19921.7	17685.5	17605.4	20427.9
60°	20387.9	20431.6	20145.7	18149.9	19104.1	20937.8	21440.4	20990.6	18947.5	18911.0	21054.4
62.5°	19947.2	20193.0	20386.1	19284.4	20112.9	21833.7	22332.7	21819.2	20264.0	20528.1	21493.2
65°	19069.5	19122.3	19779.7	20245.8	20599.1	21981.2	22241.7	21968.5	21363.9	22001.3	21473.2
67.5°	17929.5	17975.1	18745.3	20560.9	19972.7	20305.9	20488.0	20407.9	21023.4	22505.7	20484.4
70°	16844.2	16807.8	17621.8	19757.8	17386.9	16880.6	17031.8	16780.5	18140.8	21272.9	18545.0
72.5°	14731.9	14863.0	15737.1	17525.3	13766.7	12943.6	13273.2	12623.1	13952.5	18219.1	15052.4
75°	11539.7	11570.6	13029.2	14708.2	10385.1	9086.8	9532.9	9261.6	10687.4	15198.0	10394.2
77.5°	7990.5	7921.3	9489.2	11233.7	7406.0	6652.1	6659.4	6530.1	7462.4	11190.0	7061.8
80°	5075.1	4969.5	5940.1	6939.8	5089.7	5444.8	5266.3	5260.9	4858.4	6903.4	4270.2
82.5°	2742.4	2859.0	3753.1	4350.4	3651.1	4208.3	3856.9	3744.0	3334.2	4321.2	2731.5
85°	1249.2	1358.5	2001.3	2959.1	2773.4	2804.3	1873.8	2210.7	2758.8	3509.1	1458.6
87.5°	122.0	156.6	413.4	1396.7	946.9	746.6	278.6	537.2	693.8	1247.4	116.5
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: P457801

CATALOG NUMBER: GALN-SA9A-830-U-SLL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9
2.5°	9429.1	9334.4	9012.1	8746.2	8464.0	8249.1	7968.7	7781.1	7651.8	7457.0	7433.3
5°	8995.7	8764.5	8203.6	7631.8	7138.3	6766.8	6389.9	6043.9	5839.9	5776.2	5694.3
7.5°	8265.5	7875.8	7154.7	6499.1	5932.8	5379.2	4953.1	4650.8	4448.7	4330.3	4188.3
10°	7664.6	7213.0	6335.2	5532.2	5066.0	4721.8	4346.7	4022.6	3773.1	3560.0	3443.5
12.5°	7260.3	6750.4	5763.5	5111.5	4751.0	4385.0	3946.1	3581.9	3214.1	2971.9	2868.1
15°	7138.3	6599.3	5586.8	4902.1	4385.0	3906.0	3414.4	2939.1	2574.9	2345.4	2269.0
17.5°	7436.9	6785.0	5585.0	4623.5	3955.2	3383.4	2753.3	2307.2	1933.9	1762.7	1708.1
20°	7994.2	7141.9	5601.4	4348.5	3489.0	2684.1	2003.1	1637.1	1458.6	1385.8	1358.5
22.5°	8771.7	7686.4	5650.6	4077.2	2979.2	2061.4	1500.5	1314.8	1251.0	1238.3	1232.8
25°	9729.6	8360.2	5816.3	3833.2	2549.4	1573.3	1254.7	1170.9	1134.5	1121.7	1119.9
27.5°	10610.9	9230.6	6016.6	3623.8	2134.2	1356.6	1134.5	1063.5	1027.0	1025.2	1028.9
30°	11406.7	9959.0	6184.1	3388.9	1819.2	1205.5	1056.2	985.2	950.6	948.7	959.7
32.5°	12095.1	10558.1	6307.9	3157.6	1644.4	1112.6	985.2	908.7	879.5	874.1	879.5
35°	12830.7	11155.4	6251.5	2977.3	1544.2	1036.1	932.4	857.7	823.1	806.7	806.7
37.5°	13670.2	11770.9	6155.0	2828.0	1498.7	972.4	886.8	814.0	779.4	763.0	761.2
40°	14586.2	12386.4	6022.0	2695.1	1453.2	934.2	855.9	779.4	737.5	721.1	717.5
42.5°	15394.7	12912.7	5912.8	2607.7	1378.5	941.5	828.6	753.9	701.1	679.2	677.4
45°	16097.6	13442.6	5892.7	2556.7	1316.6	930.5	821.3	733.9	671.9	648.3	644.6
47.5°	16647.5	13994.4	6007.5	2527.5	1249.2	872.3	868.6	721.1	646.5	621.0	617.3
50°	17317.7	14777.4	6269.7	2467.5	1187.3	817.6	917.8	719.3	626.4	593.6	584.5
52.5°	18210.0	15797.1	6624.8	2360.0	1098.1	766.6	875.9	719.3	602.7	570.0	559.0
55°	19559.3	17097.3	6972.6	2208.9	972.4	699.3	790.3	697.4	568.2	539.0	531.7
57.5°	20453.4	18047.9	7194.8	1999.5	815.8	650.1	681.1	662.8	533.6	502.6	502.6
60°	20499.0	18302.8	7089.1	1735.4	717.5	604.6	591.8	668.3	502.6	469.8	466.2
62.5°	19974.5	17678.2	6539.2	1498.7	664.7	555.4	535.4	586.4	471.6	438.9	433.4
65°	19155.1	16084.9	5585.0	1385.8	635.5	511.7	482.6	480.7	438.9	407.9	400.6
67.5°	17649.1	14056.3	4588.9	1320.2	621.0	462.5	435.2	426.1	400.6	375.1	371.5
70°	15429.3	11772.7	3680.2	1292.9	613.7	411.5	389.7	378.8	356.9	336.9	335.1
72.5°	12004.0	9549.3	3037.4	1274.7	610.0	364.2	340.5	326.0	313.2	295.0	295.0
75°	8622.4	7025.4	2318.1	1149.0	564.5	313.2	287.7	278.6	260.4	245.8	249.5
77.5°	5435.7	4730.9	1526.0	844.9	437.0	251.3	229.4	224.0	209.4	189.4	202.1
80°	3671.1	3327.0	890.5	531.7	275.0	183.9	176.6	174.8	158.4	136.6	138.4
82.5°	2498.4	2451.1	462.5	302.3	158.4	107.4	103.8	107.4	89.2	72.8	72.8
85°	976.1	1333.0	218.5	118.4	51.0	16.4	23.7	25.5	14.6	7.3	9.1
87.5°	18.2	136.6	5.5	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: P457801

CATALOG NUMBER: GALN-SA9A-830-U-SLL

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9
2.5°	7396.9	7380.5	7407.8	7291.3	7314.9	7358.6	7380.5	7393.2	7573.5	7531.6	7646.4
5°	5770.7	5754.3	5860.0	5874.5	5929.2	5918.2	5971.0	5983.8	6049.4	6073.0	6233.3
7.5°	4197.4	4268.4	4388.6	4450.5	4543.4	4572.5	4545.2	4612.6	4476.0	4574.3	4603.5
10°	3372.5	3286.9	3235.9	3377.9	3396.2	3530.9	3476.3	3432.6	3512.7	3516.3	3592.8
12.5°	2808.0	2624.1	2502.0	2542.1	2585.8	2644.1	2653.2	2740.6	2798.9	2853.5	2899.0
15°	2201.6	2137.8	2026.8	1972.1	2034.1	2057.7	2114.2	2187.0	2248.9	2265.3	2327.2
17.5°	1689.9	1700.8	1682.6	1649.8	1688.1	1706.3	1709.9	1711.7	1728.1	1717.2	1808.2
20°	1360.3	1398.5	1444.1	1451.3	1464.1	1473.2	1456.8	1394.9	1396.7	1434.9	1464.1
22.5°	1231.0	1238.3	1289.3	1305.7	1345.7	1329.3	1282.0	1252.8	1249.2	1258.3	1272.9
25°	1129.0	1139.9	1176.4	1201.9	1232.8	1203.7	1169.1	1141.8	1138.1	1147.2	1161.8
27.5°	1038.0	1054.4	1087.1	1112.6	1141.8	1114.4	1081.7	1058.0	1056.2	1054.4	1063.5
30°	965.1	983.3	1007.0	1036.1	1056.2	1032.5	1001.5	988.8	987.0	983.3	987.0
32.5°	892.3	921.4	945.1	959.7	979.7	961.5	937.8	930.5	917.8	906.9	901.4
35°	810.3	841.3	877.7	895.9	916.0	897.8	881.4	850.4	828.6	826.7	830.4
37.5°	763.0	775.7	804.9	835.8	855.9	846.8	815.8	784.8	779.4	779.4	783.0
40°	721.1	726.6	739.3	779.4	815.8	788.5	750.3	741.1	741.1	739.3	741.1
42.5°	679.2	684.7	684.7	715.7	773.9	730.2	701.1	701.1	701.1	702.9	708.4
45°	641.0	642.8	641.0	662.8	717.5	681.1	661.0	666.5	670.1	673.8	677.4
47.5°	608.2	610.0	608.2	626.4	653.7	639.2	628.2	635.5	642.8	648.3	651.9
50°	579.1	577.3	580.9	591.8	604.6	608.2	600.9	611.9	615.5	622.8	631.9
52.5°	553.6	551.8	555.4	560.9	579.1	579.1	579.1	588.2	595.5	602.7	615.5
55°	524.4	526.3	531.7	539.0	562.7	559.0	560.9	568.2	575.4	586.4	593.6
57.5°	497.1	500.8	508.1	519.0	542.7	540.8	542.7	546.3	555.4	560.9	568.2
60°	466.2	473.5	482.6	489.8	513.5	511.7	520.8	528.1	533.6	533.6	537.2
62.5°	435.2	446.1	455.2	460.7	486.2	488.0	500.8	506.2	509.9	506.2	511.7
65°	404.3	420.7	424.3	431.6	457.1	458.9	473.5	486.2	482.6	478.9	488.0
67.5°	373.3	393.3	391.5	400.6	426.1	429.8	442.5	464.4	457.1	453.4	460.7
70°	338.7	353.3	355.1	360.6	395.2	389.7	409.7	429.8	424.3	426.1	426.1
72.5°	300.5	313.2	313.2	324.1	360.6	351.5	367.8	389.7	389.7	387.9	387.9
75°	254.9	262.2	269.5	285.9	324.1	313.2	324.1	344.2	347.8	344.2	344.2
77.5°	205.8	216.7	220.3	242.2	269.5	267.7	278.6	287.7	295.0	291.4	291.4
80°	145.7	156.6	171.2	194.8	211.2	216.7	222.2	229.4	233.1	233.1	236.7
82.5°	81.9	98.3	111.1	134.8	142.0	169.4	167.5	173.0	167.5	147.5	163.9
85°	18.2	34.6	49.2	61.9	71.0	98.3	103.8	116.5	96.5	89.2	89.2
87.5°	0.0	0.0	0.0	0.0	0.0	14.6	29.1	40.1	34.6	29.1	29.1
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: P457801

CATALOG NUMBER: GALN-SA9A-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9	8871.9
2.5°	7742.9	7901.3	8092.5	8422.1	8653.4	8902.9	9154.1	9421.8	9492.9	9565.7
5°	6277.0	6588.4	6757.7	7200.2	7664.6	8254.6	8737.1	9265.2	9485.6	9536.6
7.5°	4754.6	4965.9	5410.2	5858.1	6433.6	7052.7	7792.0	8615.1	8871.9	8979.3
10°	3769.5	4057.2	4446.9	4927.6	5432.0	6098.5	6932.5	7894.0	8258.2	8318.3
12.5°	3208.6	3529.1	3953.4	4461.4	4938.5	5441.1	6282.4	7274.9	7664.6	7793.9
15°	2565.8	2953.7	3443.5	3978.9	4497.9	5047.8	5900.0	7019.9	7469.7	7620.9
17.5°	2015.8	2329.1	2859.0	3439.9	4055.4	4751.0	5819.9	7141.9	7695.5	7835.7
20°	1542.4	1766.4	2212.5	2826.2	3547.3	4457.8	5839.9	7602.7	8265.5	8456.7
22.5°	1333.0	1447.7	1719.0	2303.6	3110.3	4202.9	5921.9	8234.5	9034.0	9352.6
25°	1207.3	1267.4	1420.4	1802.8	2693.3	3955.2	6109.4	9085.0	10108.4	10319.6
27.5°	1099.9	1143.6	1238.3	1513.2	2314.5	3725.8	6328.0	10028.2	11111.7	11426.8
30°	997.9	1056.2	1145.4	1343.9	2072.3	3516.3	6602.9	10793.0	11956.7	12249.8
32.5°	919.6	977.9	1059.8	1225.5	1866.5	3296.0	6766.8	11465.0	12646.8	12896.3
35°	855.9	905.0	990.6	1130.8	1709.9	3128.5	6734.0	11998.5	13315.1	13570.1
37.5°	810.3	852.2	937.8	1041.6	1591.6	2953.7	6717.7	12703.3	14129.1	14424.1
40°	768.5	812.2	890.5	983.3	1473.2	2747.9	6726.8	13402.5	14995.9	15290.9
42.5°	735.7	784.8	848.6	966.9	1351.2	2582.2	6726.8	14010.7	15749.8	16033.9
45°	708.4	761.2	823.1	965.1	1254.7	2456.5	6681.2	14533.4	16350.7	16592.9
47.5°	684.7	743.0	832.2	932.4	1231.0	2365.5	6641.2	14952.2	16840.6	17068.2
50°	668.3	737.5	885.0	894.1	1238.3	2338.2	6834.2	15480.3	17272.2	17468.8
52.5°	655.6	739.3	883.2	837.7	1225.5	2356.4	7236.6	16305.2	17871.3	17885.8
55°	630.1	737.5	837.7	773.9	1172.7	2387.3	7753.8	17503.4	18809.1	18820.0
57.5°	604.6	717.5	777.6	719.3	1065.3	2387.3	8376.6	18637.9	19939.9	19949.0
60°	579.1	746.6	682.9	671.9	925.1	2343.6	9034.0	19136.9	20295.0	20387.9
62.5°	553.6	752.1	610.0	630.1	823.1	2238.0	9523.8	18585.1	19814.3	19947.2
65°	524.4	606.4	562.7	586.4	770.3	2061.4	9369.0	17574.4	18911.0	19069.5
67.5°	489.8	513.5	511.7	540.8	752.1	1801.0	8553.2	16296.1	17938.6	17929.5
70°	448.0	460.7	466.2	497.1	717.5	1598.8	7127.4	14637.2	16640.3	16844.2
72.5°	404.3	415.2	420.7	448.0	682.9	1484.1	5532.2	12351.8	14413.2	14731.9
75°	356.9	364.2	371.5	395.2	646.5	1314.8	3940.6	9429.1	11038.9	11539.7
77.5°	307.7	307.7	316.9	340.5	544.5	1085.3	2644.1	6613.9	7478.8	7990.5
80°	249.5	251.3	247.7	273.1	400.6	743.0	1502.3	4417.7	4976.8	5075.1
82.5°	191.2	185.7	187.6	200.3	298.6	506.2	801.2	2744.2	2797.1	2742.4
85°	120.2	120.2	116.5	131.1	191.2	264.0	437.0	1680.8	1312.9	1249.2
87.5°	49.2	40.1	45.5	52.8	91.0	107.4	171.2	346.0	132.9	122.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)