

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: P458962

Luminaire Tested: **GALN-SA4D-735-U-SLR-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458962
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-23)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4D-735-U-SLR-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20473 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

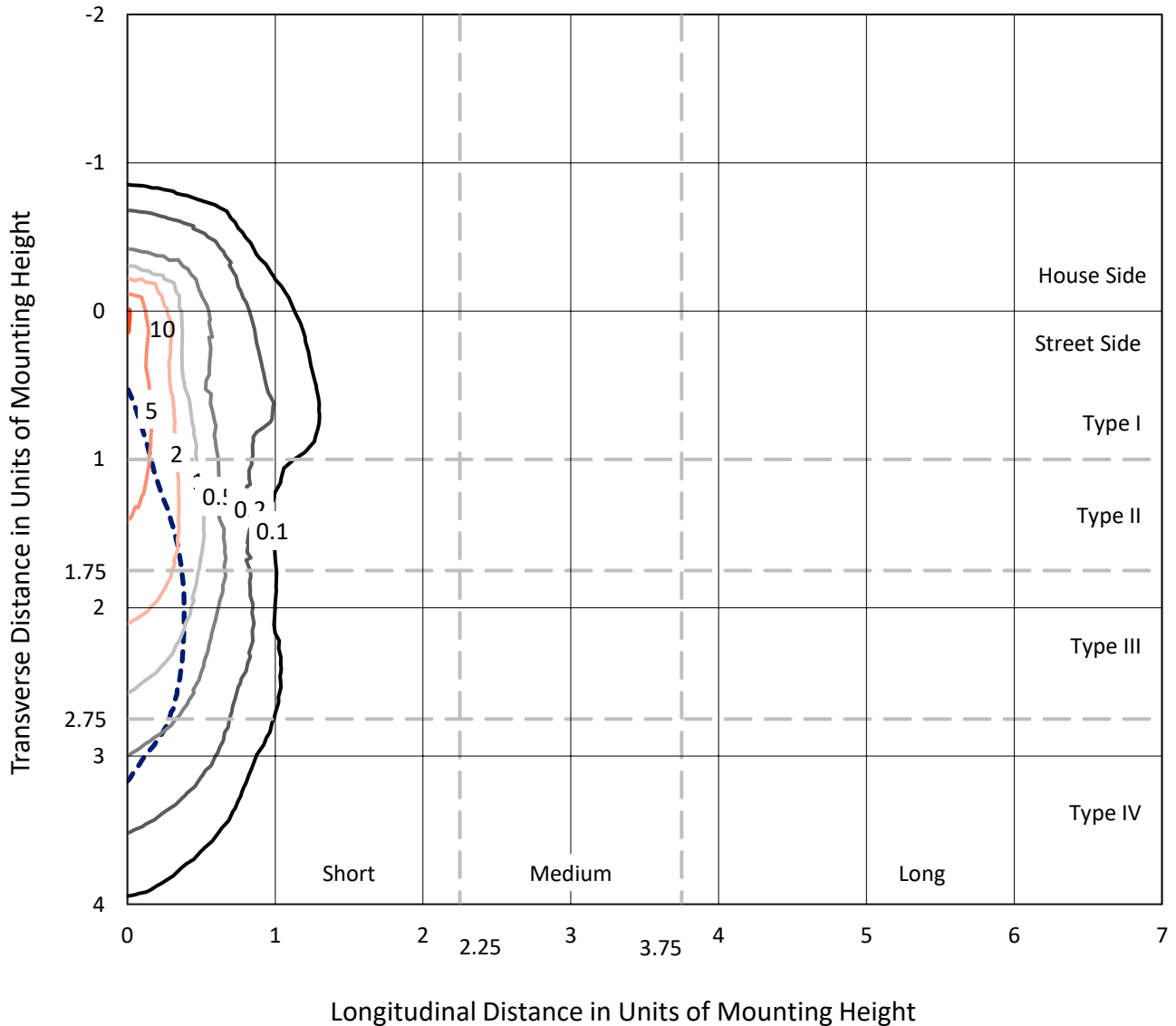
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P458962
 CATALOG NUMBER: GALN-SA4D-735-U-SLR-HSS

Iso-Footcandle Lines of Horizontal Illumination

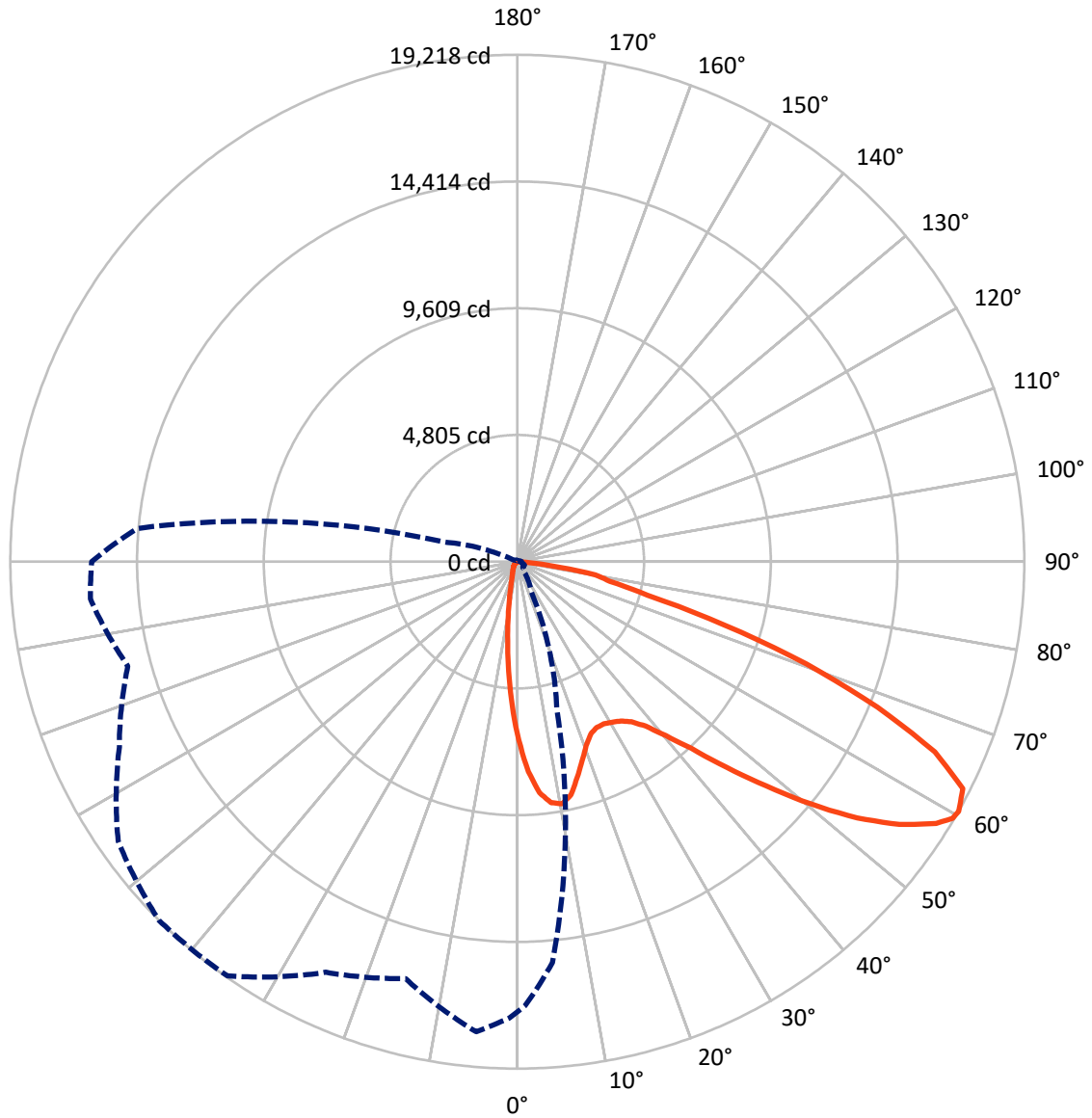
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P458962
CATALOG NUMBER: GALN-SA4D-735-U-SLR-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P458962

CATALOG NUMBER: GALN-SA4D-735-U-SLR-HSS

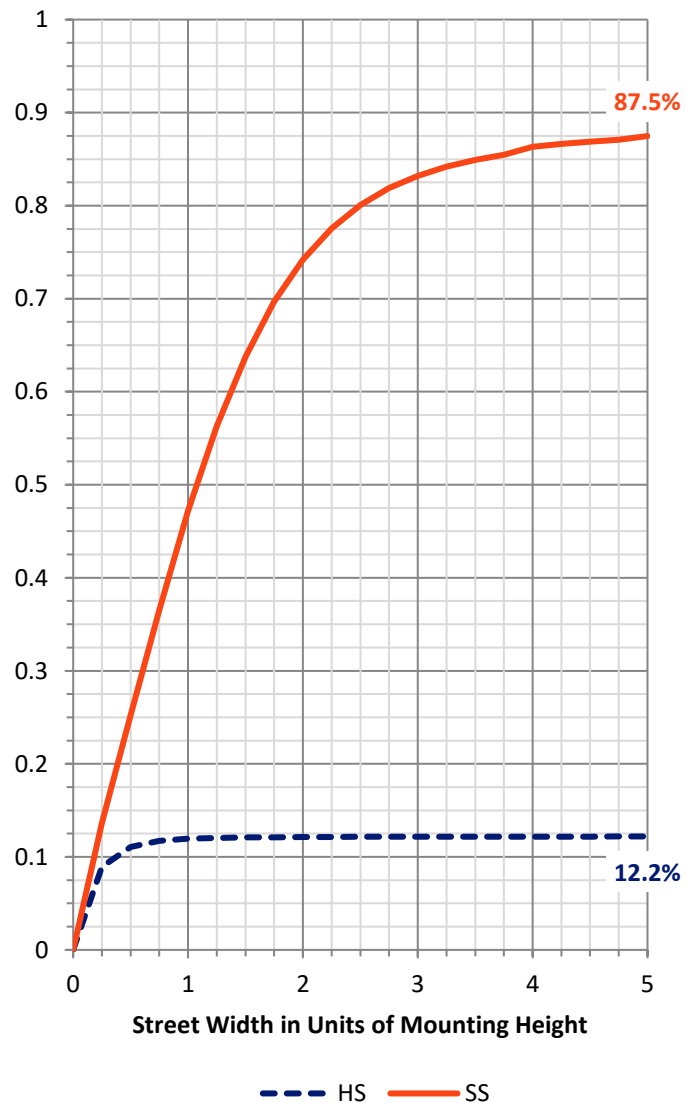
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2525.1	0.0	2525.1
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	17947.9	0.0	17947.9
	% Fixture	87.7	0.0	87.7
Total	Lumens	20473.0	0.0	20473.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	503.3	2.5
10°-20°	999.5	4.9
20°-30°	1465.6	7.2
30°-40°	2179.5	10.6
40°-50°	3171.9	15.5
50°-60°	4574.1	22.3
60°-70°	5031.1	24.6
70°-80°	2253.5	11.0
80°-90°	294.5	1.4
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°	20473.0	100.0
0°-180°	20473.0	100.0



REPORT NUMBER: P458962

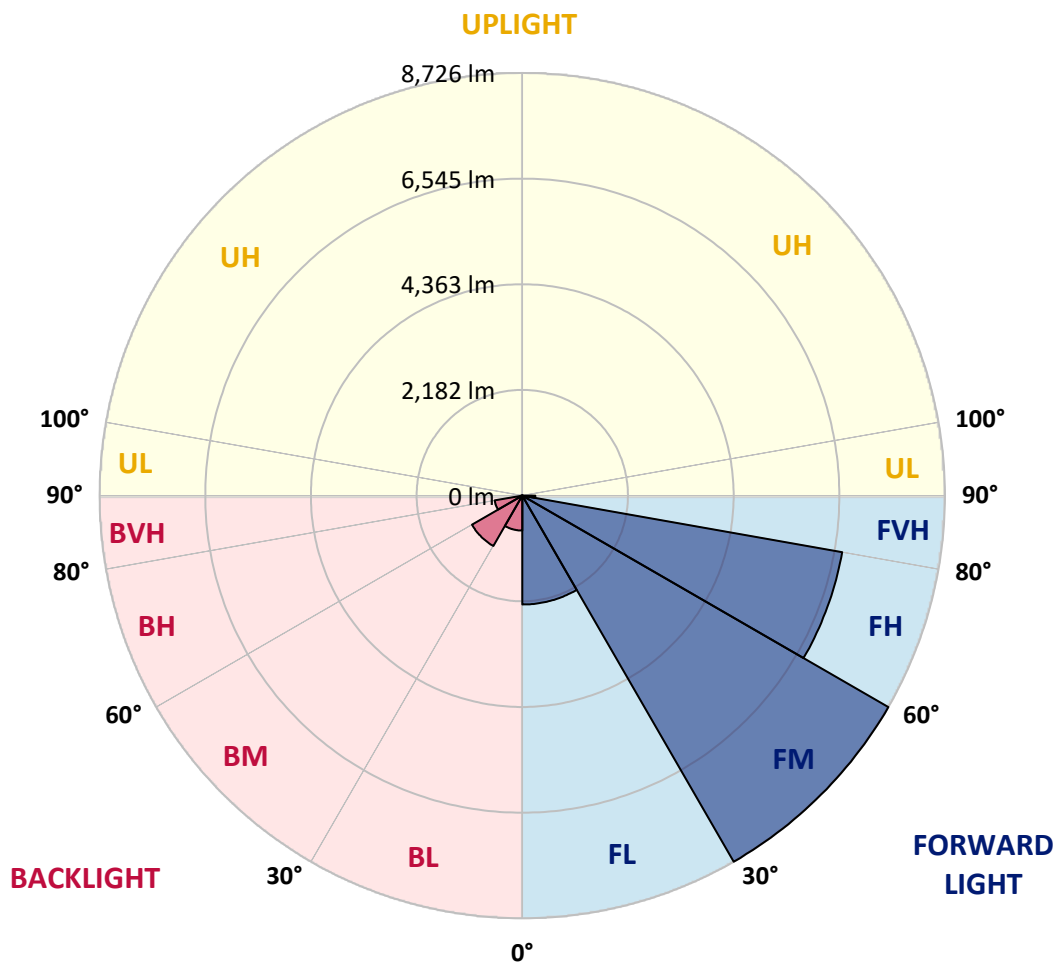
CATALOG NUMBER: GALN-SA4D-735-U-SLR-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2246.8	11.0			
FM	(30°-60°)	8726.2	42.6			
FH	(60°-80°)	6705.5	32.8			G3/7500
FVH	(80°-90°)	269.3	1.3			G3/500
BL	(0°-30°)	721.5	3.5	B2/1000		
BM	(30°-60°)	1199.4	5.9	B2/2500		
BH	(60°-80°)	579.1	2.8	B2/1000		G2/1000
BVH	(80°-90°)	25.2	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-G3

Type IV Short





REPORT NUMBER: P458962

CATALOG NUMBER: GALN-SA4D-735-U-SLR-HSS

CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6
2.5°	7438.9	7406.2	7331.5	7104.3	6906.7	6648.3	6386.9	6181.5	6055.4	5823.5	5717.7
5°	7207.0	7222.6	7006.3	6539.4	6019.6	5664.8	5277.3	4969.1	4629.9	4415.1	4189.5
7.5°	6601.7	6570.5	6335.5	5685.0	5053.2	4539.6	4049.4	3651.0	3400.4	3199.7	3031.6
10°	6083.4	6060.1	5759.7	4922.5	4243.9	3859.5	3528.0	3179.4	2910.2	2616.1	2381.1
12.5°	5758.2	5705.2	5359.8	4485.1	3932.7	3574.7	3213.7	2851.1	2479.1	2181.9	1897.1
15°	5649.2	5573.0	5188.6	4334.2	3733.5	3279.0	2826.2	2409.1	1981.1	1652.7	1438.0
17.5°	5846.9	5720.8	5311.5	4307.7	3495.4	2893.1	2335.9	1792.8	1347.7	1097.2	964.9
20°	6299.7	6155.0	5622.8	4281.3	3230.8	2460.4	1775.7	1266.8	932.2	795.2	722.1
22.5°	6972.0	6772.8	6083.4	4323.3	2986.5	2038.7	1282.4	894.8	740.8	655.2	603.8
25°	7779.7	7613.2	6667.0	4472.7	2793.5	1707.2	991.3	731.4	624.1	571.1	532.2
27.5°	8665.3	8399.1	7421.8	4651.7	2617.6	1450.4	869.9	653.6	555.6	507.3	487.1
30°	9295.5	9088.6	8053.6	4776.2	2398.2	1257.5	795.2	644.3	557.1	499.6	462.2
32.5°	9918.0	9653.5	8582.8	4833.7	2237.9	1123.6	687.9	561.8	488.7	459.1	421.7
35°	10584.1	10307.1	9110.3	4802.6	2118.1	1034.9	624.1	501.1	418.6	368.8	331.5
37.5°	11258.0	10965.4	9634.8	4690.6	2043.4	999.1	574.3	476.2	395.3	343.9	303.5
40°	12057.9	11667.3	10126.6	4598.7	1965.6	980.4	541.6	460.7	378.2	323.7	283.2
42.5°	12711.5	12339.6	10591.9	4550.5	1912.6	936.9	541.6	448.2	367.3	306.6	264.6
45°	13330.9	12945.0	11094.6	4589.4	1890.9	882.4	547.8	446.6	359.5	294.1	252.1
47.5°	13849.2	13514.6	11611.3	4735.7	1862.8	823.3	515.1	468.4	354.8	283.2	239.7
50°	14460.8	14137.1	12294.5	5031.4	1813.0	764.1	474.7	504.2	353.3	273.9	228.8
52.5°	15322.9	14972.8	13237.5	5367.5	1733.7	673.9	437.3	499.6	347.0	258.3	217.9
55°	16376.5	16093.3	14330.0	5770.6	1624.7	572.7	378.2	443.5	328.4	231.9	199.2
57.5°	17051.9	16810.7	15148.6	5944.9	1458.2	468.4	333.0	371.9	300.4	207.0	177.4
59°	17131.3	16913.4	15319.8	5887.3	1349.3	428.0	311.3	319.0	292.6	193.0	165.0
60°	17064.4	16838.7	15251.3	5775.3	1248.1	400.0	292.6	283.2	294.1	185.2	155.6
62.5°	16634.9	16248.9	14586.8	5207.2	1090.9	367.3	259.9	231.9	259.9	166.5	138.5
65°	15805.4	15226.4	13271.8	4407.3	1028.7	348.6	221.0	194.5	197.6	146.3	119.8
67.5°	14356.5	13626.6	11521.0	3581.0	1002.2	350.2	186.8	174.3	152.5	124.5	105.8
70°	12065.7	11337.4	9244.2	2946.0	989.8	350.2	158.7	149.4	127.6	104.3	91.8
72.5°	8550.1	7765.7	6235.9	2314.2	891.7	348.6	135.4	135.4	104.3	87.2	74.7
75°	4830.6	4836.9	3920.2	1637.2	740.8	287.9	108.9	107.4	76.3	66.9	56.0
77.5°	2815.3	2765.5	2642.5	703.4	343.9	130.7	76.3	65.4	52.9	48.2	40.5
80°	1447.3	1190.5	1159.4	255.2	122.9	82.5	52.9	37.4	34.2	31.1	28.0
82.5°	428.0	429.5	382.8	102.7	68.5	54.5	26.5	20.2	18.7	17.1	17.1
85°	29.6	18.7	21.8	31.1	42.0	21.8	1.6	4.7	4.7	6.2	7.8
87.5°	3.1	1.6	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: P458962

CATALOG NUMBER: GALN-SA4D-735-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6
2.5°	5601.0	5669.5	5541.8	5545.0	5439.1	5473.4	5348.9	5389.3	5316.2	5372.2	5537.2
5°	4214.4	4229.9	4127.2	4094.5	4110.1	4173.9	4198.8	4085.2	4133.4	4038.5	4032.3
7.5°	2969.3	2988.0	2928.9	2921.1	3033.2	3006.7	3054.9	2938.2	2827.7	2876.0	2787.3
10°	2306.4	2228.6	2107.2	2072.9	2051.2	2065.2	2065.2	1959.3	1943.8	1901.7	1965.6
12.5°	1820.8	1725.9	1610.7	1455.1	1416.2	1413.1	1355.5	1262.1	1232.6	1196.8	1249.7
15°	1322.8	1283.9	1187.4	1100.3	1011.6	994.5	901.1	824.8	723.7	709.7	705.0
17.5°	930.6	873.1	871.5	821.7	770.3	736.1	649.0	561.8	522.9	518.2	518.2
20°	697.2	677.0	644.3	638.1	622.5	583.6	505.8	459.1	440.4	442.0	448.2
22.5°	586.7	572.7	543.1	529.1	522.9	488.7	431.1	400.0	390.6	390.6	392.2
25°	524.5	512.0	479.3	457.5	449.8	424.9	379.7	356.4	348.6	348.6	348.6
27.5°	477.8	462.2	428.0	409.3	395.3	367.3	339.3	315.9	308.1	308.1	309.7
30°	445.1	428.0	396.8	371.9	350.2	325.3	301.9	281.7	272.3	270.8	272.3
32.5°	401.5	386.0	354.8	339.3	314.4	284.8	266.1	247.4	238.1	239.7	238.1
35°	312.8	308.1	286.4	291.0	277.0	252.1	235.0	214.8	203.9	202.3	205.4
37.5°	284.8	266.1	241.2	242.8	238.1	228.8	200.8	179.0	171.2	171.2	172.7
40°	263.0	244.3	216.3	202.3	203.9	203.9	174.3	151.0	143.2	141.6	144.7
42.5°	244.3	225.7	194.5	171.2	165.0	172.7	147.8	124.5	116.7	113.6	116.7
45°	231.9	211.7	175.9	149.4	130.7	140.1	121.4	102.7	93.4	93.4	91.8
47.5°	219.4	200.8	161.9	129.2	108.9	104.3	99.6	82.5	73.1	71.6	73.1
50°	208.5	189.9	146.3	112.1	91.8	80.9	80.9	65.4	59.1	56.0	57.6
52.5°	197.6	177.4	132.3	99.6	79.4	65.4	57.6	52.9	48.2	46.7	48.2
55°	182.1	161.9	118.3	85.6	68.5	54.5	45.1	43.6	40.5	37.4	40.5
57.5°	163.4	144.7	104.3	73.1	54.5	42.0	37.4	35.8	32.7	31.1	31.1
59°	152.5	135.4	96.5	63.8	48.2	37.4	34.2	32.7	29.6	26.5	28.0
60°	146.3	132.3	91.8	59.1	43.6	34.2	31.1	29.6	26.5	24.9	26.5
62.5°	129.2	118.3	80.9	48.2	34.2	24.9	21.8	23.3	21.8	20.2	21.8
65°	113.6	104.3	68.5	37.4	26.5	17.1	15.6	20.2	18.7	17.1	18.7
67.5°	101.2	90.3	57.6	28.0	18.7	9.3	10.9	17.1	17.1	15.6	17.1
70°	87.2	77.8	46.7	20.2	9.3	4.7	7.8	12.5	15.6	14.0	15.6
72.5°	71.6	60.7	35.8	14.0	4.7	0.0	4.7	10.9	15.6	14.0	15.6
75°	56.0	45.1	26.5	7.8	0.0	0.0	1.6	9.3	15.6	14.0	15.6
77.5°	40.5	32.7	15.6	1.6	0.0	0.0	1.6	9.3	15.6	14.0	15.6
80°	26.5	23.3	6.2	0.0	0.0	0.0	1.6	9.3	15.6	15.6	17.1
82.5°	17.1	12.5	0.0	0.0	0.0	0.0	3.1	12.5	17.1	18.7	18.7
85°	7.8	0.0	0.0	0.0	0.0	0.0	6.2	15.6	20.2	20.2	20.2
87.5°	0.0	0.0	0.0	0.0	0.0	3.1	10.9	18.7	23.3	23.3	23.3
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: P458962

CATALOG NUMBER: GALN-SA4D-735-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6
2.5°	5565.2	5663.2	5801.7	6014.9	6187.7	6460.0	6668.6	6953.4	7241.3	7328.4	7463.8
5°	4096.1	4222.1	4536.5	4822.9	5003.4	5579.2	5943.4	6517.6	7032.7	7280.2	7549.4
7.5°	2844.8	2994.2	3233.9	3633.9	4013.6	4482.0	5070.3	5727.0	6481.8	6835.1	7214.8
10°	1996.7	2183.4	2521.1	2849.5	3327.3	3772.4	4352.9	5078.1	5910.7	6327.8	6804.0
12.5°	1260.6	1427.1	1873.7	2242.6	2838.6	3355.3	3890.7	4547.4	5512.3	5940.2	6439.8
15°	720.5	860.6	1069.2	1542.3	2203.7	2886.9	3554.5	4317.1	5308.4	5836.0	6376.0
17.5°	536.9	574.3	667.6	935.3	1537.6	2335.9	3244.8	4247.0	5446.9	6066.3	6682.6
20°	451.3	476.2	519.8	625.6	980.4	1799.0	2942.9	4259.5	5895.1	6673.2	7258.4
22.5°	404.6	420.2	456.0	524.5	669.2	1310.4	2589.6	4332.6	6438.2	7418.7	8094.1
25°	354.8	375.1	406.2	465.3	557.1	908.9	2241.0	4496.0	7199.3	8364.9	8999.9
27.5°	315.9	334.6	365.7	420.2	488.7	694.1	1834.8	4636.1	8002.3	9317.3	9837.1
30°	277.0	295.7	326.8	370.4	432.6	561.8	1397.5	4718.6	8782.0	10031.7	10431.6
32.5°	244.3	259.9	289.5	328.4	379.7	476.2	1101.8	4633.0	9378.0	10680.6	10948.3
35°	211.7	230.3	255.2	291.0	336.2	406.2	916.6	4337.3	9890.0	11348.2	11444.7
37.5°	177.4	199.2	225.7	258.3	294.1	373.5	736.1	4010.5	10437.8	12180.8	12022.1
40°	149.4	169.6	194.5	230.3	263.0	342.4	566.5	3661.9	11029.2	12962.1	12652.4
42.5°	121.4	143.2	172.7	205.4	259.9	298.8	438.9	3300.8	11559.9	13642.2	13222.0
45°	96.5	115.2	146.3	188.3	258.3	256.8	339.3	2944.4	11959.9	14127.7	13646.8
47.5°	76.3	91.8	122.9	183.6	238.1	217.9	272.3	2723.5	12380.0	14565.0	13972.1
50°	60.7	76.3	105.8	191.4	208.5	186.8	228.8	2759.2	12786.2	14787.6	14105.9
52.5°	51.4	66.9	91.8	151.0	160.3	163.4	200.8	2924.2	13310.7	15025.7	14372.1
55°	45.1	59.1	77.8	105.8	124.5	146.3	183.6	3044.0	14012.6	15536.1	14958.8
57.5°	35.8	51.4	70.0	90.3	102.7	127.6	169.6	3053.4	14647.5	16191.3	15738.5
59°	32.7	46.7	65.4	85.6	91.8	115.2	160.3	2974.0	14670.9	16289.4	16096.4
60°	29.6	45.1	62.3	79.4	87.2	108.9	152.5	2882.2	14459.2	16133.7	16244.2
62.5°	24.9	38.9	54.5	63.8	74.7	90.3	132.3	2549.2	13433.6	15428.8	15970.3
65°	21.8	34.2	46.7	52.9	62.3	77.8	116.7	2040.3	12300.7	14473.2	15186.0
67.5°	20.2	31.1	40.5	45.1	54.5	71.6	104.3	1441.1	10833.1	13260.9	14007.9
70°	18.7	29.6	35.8	42.0	48.2	60.7	88.7	840.4	8344.7	11135.0	11924.1
72.5°	18.7	28.0	31.1	35.8	42.0	54.5	82.5	454.4	5705.2	8494.1	9513.4
75°	18.7	26.5	28.0	31.1	37.4	49.8	73.1	238.1	3688.3	5901.3	7283.3
77.5°	18.7	24.9	28.0	29.6	35.8	43.6	63.8	149.4	2457.3	4133.4	4922.5
80°	20.2	24.9	26.5	29.6	34.2	40.5	52.9	99.6	1444.2	2486.9	2995.8
82.5°	21.8	24.9	28.0	31.1	35.8	38.9	46.7	62.3	666.1	1645.0	1861.3
85°	23.3	26.5	29.6	32.7	37.4	38.9	43.6	45.1	108.9	742.3	1003.8
87.5°	24.9	28.0	31.1	34.2	40.5	40.5	40.5	40.5	37.4	79.4	202.3
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: P458962

CATALOG NUMBER: GALN-SA4D-735-U-SLR-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6	6766.6
2.5°	7635.0	7810.9	7933.8	7964.9	7876.2	7835.8	7723.7	7549.4	7443.6	7438.9
5°	8045.9	8458.3	8744.6	8792.9	8621.7	8332.2	7988.3	7544.7	7284.9	7207.0
7.5°	7975.8	8697.9	9158.6	9225.5	8937.6	8385.1	7719.1	7004.7	6721.5	6601.7
10°	7687.9	8568.8	9227.1	9332.9	8948.5	8170.4	7323.8	6527.0	6175.2	6083.4
12.5°	7442.0	8332.2	8917.4	9063.7	8772.6	7996.1	7087.2	6220.4	5843.8	5758.2
15°	7334.7	8052.1	8410.0	8484.7	8436.5	7887.1	7062.3	6173.7	5742.6	5649.2
17.5°	7442.0	7814.0	7859.1	7935.4	8042.8	7876.2	7302.0	6427.4	5962.0	5846.9
20°	7723.7	7607.0	7420.2	7452.9	7698.8	7921.4	7728.4	6989.2	6422.7	6299.7
22.5°	8203.0	7555.6	7132.3	7104.3	7415.6	8072.3	8354.0	7750.2	7093.4	6972.0
25°	8791.3	7684.8	7026.5	6965.8	7305.1	8293.3	9034.1	8682.4	7964.9	7779.7
27.5°	9432.5	7952.5	7026.5	6967.4	7295.7	8489.4	9616.1	9507.2	8867.6	8665.3
30°	9784.2	8173.5	7127.7	7060.8	7410.9	8603.0	9927.4	10240.2	9546.1	9295.5
32.5°	10098.6	8480.1	7325.3	7199.3	7652.1	8771.1	10206.0	10862.7	10086.1	9918.0
35°	10388.0	8808.4	7597.7	7451.4	7969.6	9001.4	10514.1	11516.3	10837.8	10584.1
37.5°	10707.1	9189.7	8022.5	7898.0	8500.3	9449.6	10879.8	12375.4	11577.0	11258.0
40°	11054.1	9631.7	8721.3	8668.4	9343.8	9957.0	11342.0	13292.0	12420.5	12057.9
42.5°	11407.4	10140.6	9577.2	9664.4	10299.3	10668.2	11816.7	13997.0	13111.5	12711.5
45°	11728.0	10791.1	10690.0	11121.0	11413.6	11362.3	12168.4	14493.5	13713.8	13330.9
47.5°	12132.6	11738.9	12036.1	12700.6	12708.4	12117.0	12434.5	14899.6	14232.0	13849.2
50°	12585.5	12857.8	13774.5	14451.4	14269.3	12859.4	12745.8	15380.5	14767.4	14460.8
52.5°	13109.9	14110.6	15380.5	16132.2	15707.3	13668.6	13264.0	15900.3	15617.1	15322.9
55°	13720.0	14965.0	16981.9	17581.1	17153.1	14674.0	14051.5	16605.3	16577.3	16376.5
57.5°	14409.4	15867.6	17909.4	18720.3	18339.0	15853.6	15151.7	17269.8	17164.0	17051.9
59°	14954.1	16331.4	18318.7	19159.1	18928.8	16680.0	15891.0	17683.8	17299.4	17131.3
60°	15284.0	16645.8	18469.7	19218.3	19165.3	17171.8	16359.4	17886.1	17297.8	17064.4
62.5°	16262.9	17195.1	18412.1	18955.2	19162.2	18114.9	17733.6	18108.6	16977.2	16634.9
65°	16611.5	17013.0	17458.1	17391.2	17568.6	18066.6	18611.3	17864.3	16292.5	15805.4
67.5°	15933.0	15016.4	15173.5	14726.9	14639.7	16062.2	18254.9	16669.1	14952.5	14356.5
70°	13430.5	11503.9	11424.5	11629.9	11066.6	13004.1	16392.1	14367.4	12741.1	12065.7
72.5°	10571.7	8129.9	7460.7	8217.1	8199.9	9921.2	13617.3	10195.1	8607.7	8550.1
75°	8313.5	5660.1	4967.6	5090.5	5327.1	7182.1	10845.6	6474.0	5300.6	4830.6
77.5°	5580.7	4010.5	3741.2	3590.3	3845.5	4611.2	6861.6	3510.9	2972.5	2815.3
80°	3216.8	2913.3	3308.6	3003.6	3140.5	2905.5	3412.9	1610.7	1336.8	1447.3
82.5°	2093.2	1659.0	1767.9	1313.5	1795.9	1811.5	1095.6	476.2	403.1	428.0
85°	1308.8	778.1	437.3	311.3	619.4	1139.2	342.4	29.6	34.2	29.6
87.5°	339.3	129.2	54.5	80.9	99.6	88.7	79.4	4.7	1.6	3.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)