

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: P454088

Luminaire Tested: **GALN-SA5A-830-U-SLL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454088
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-SA5A-830-U-SLL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 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: 13069 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 154
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

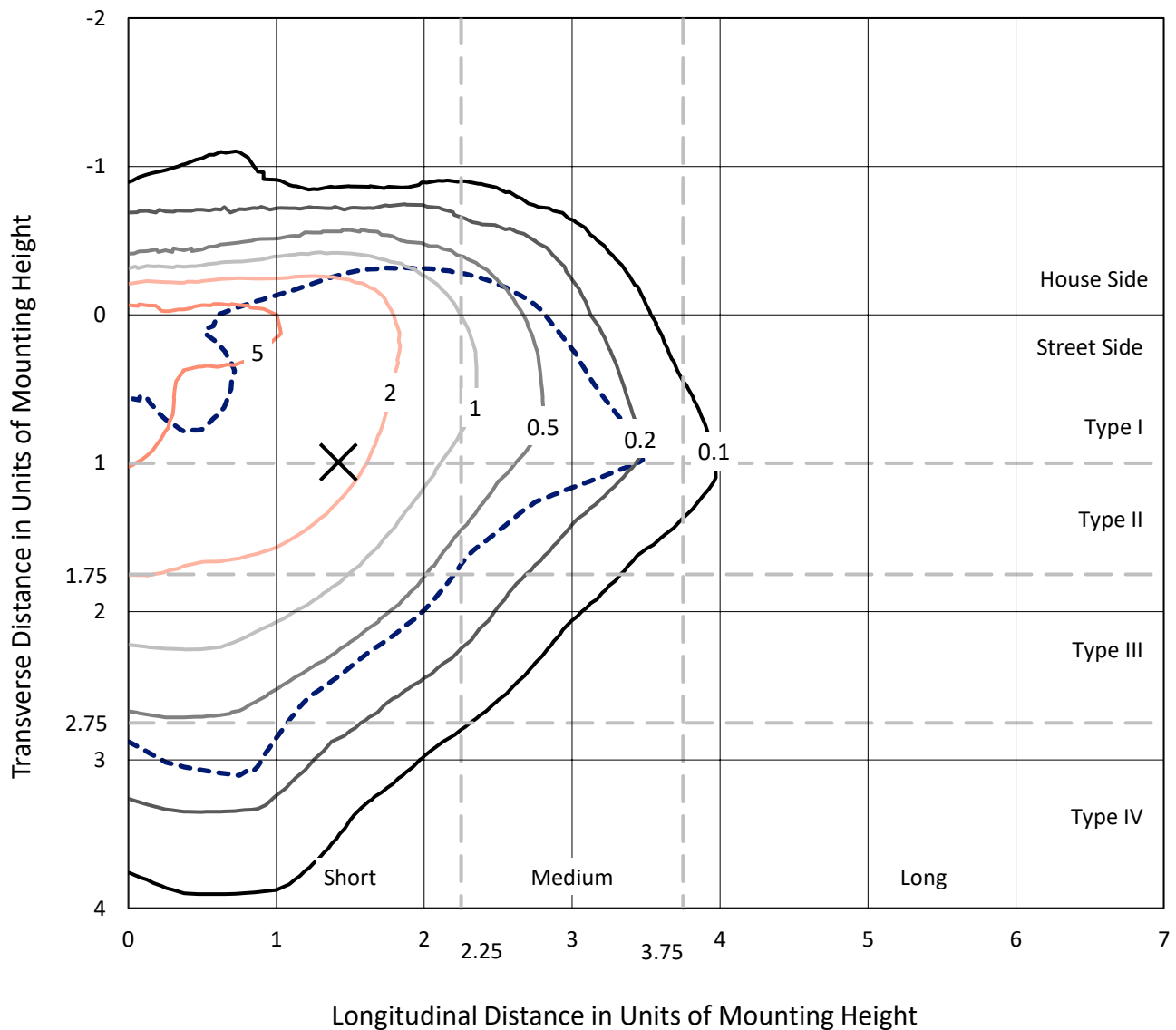


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Iso-Footcandle Lines of Horizontal Illumination

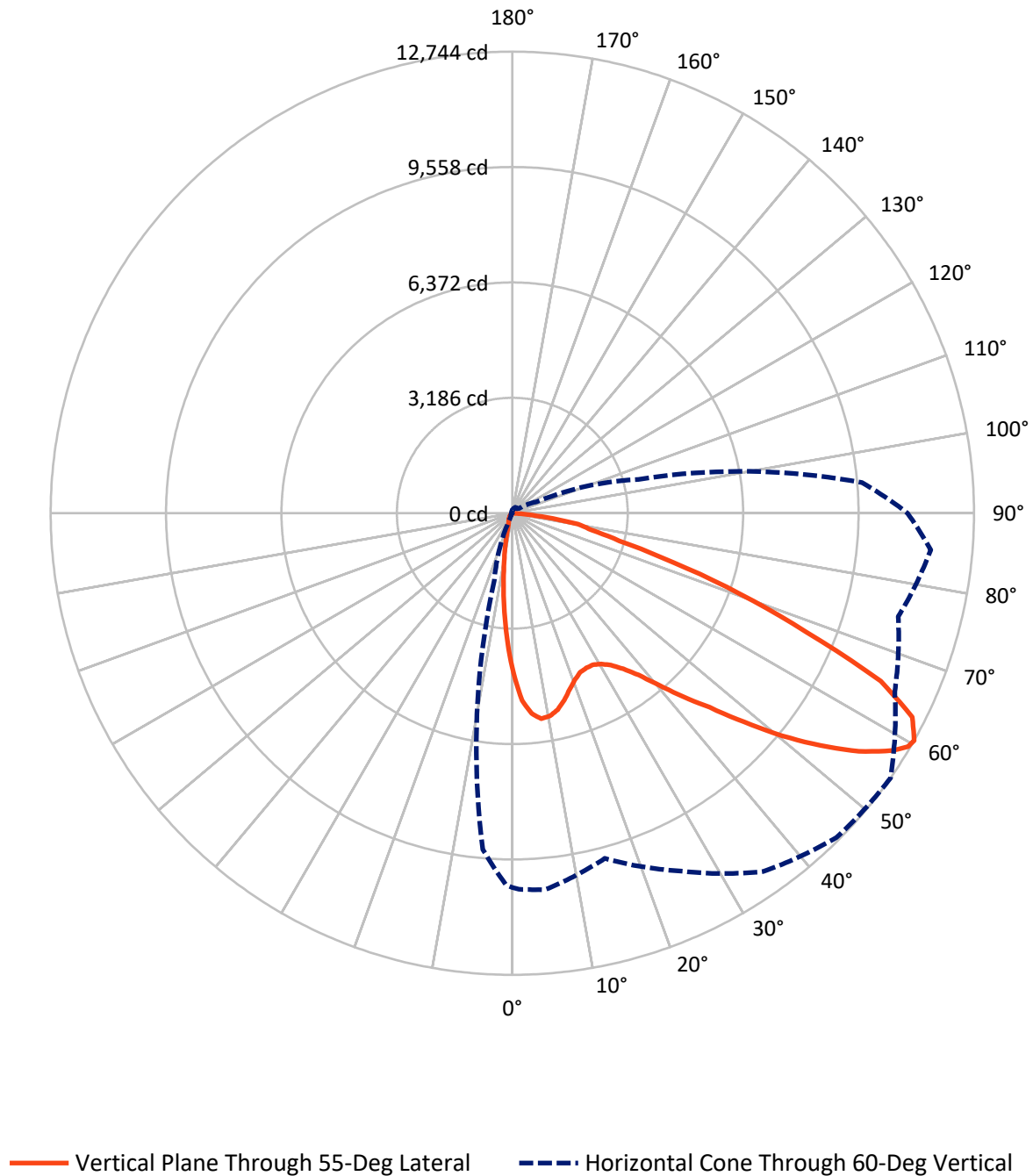
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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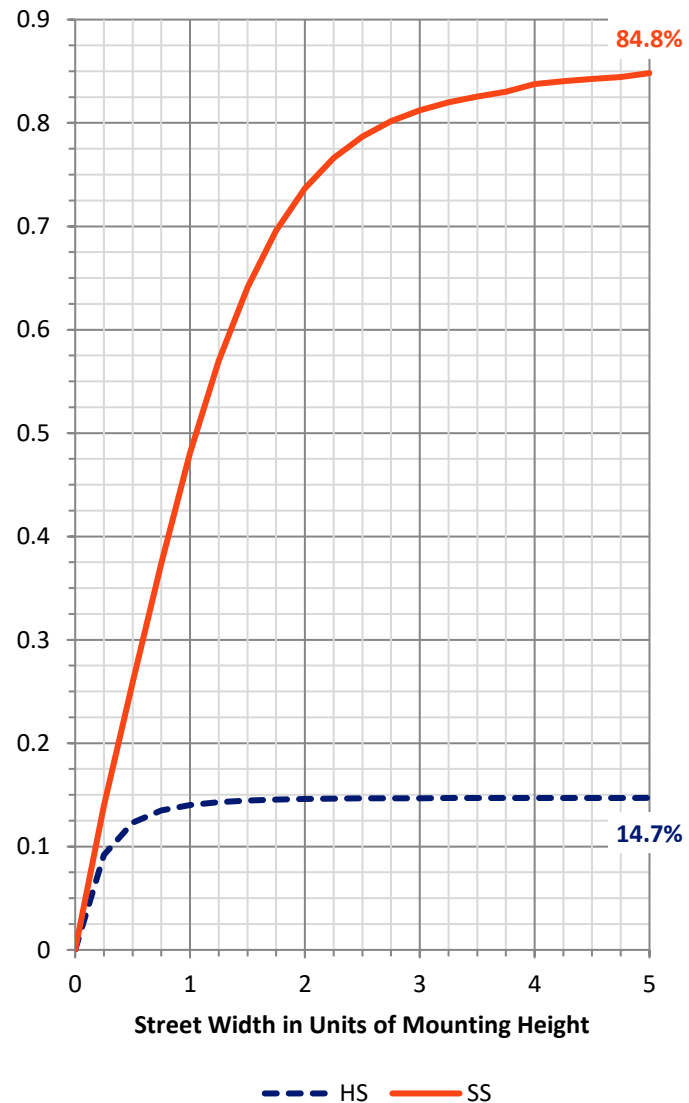
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1939.6	0.0	1939.6
	% Fixture	14.8	0.0	14.8
Street Side	Lumens	11129.4	0.0	11129.4
	% Fixture	85.2	0.0	85.2
Total	Lumens	13069.0	0.0	13069.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.7	2.5
10°-20°	645.3	4.9
20°-30°	955.1	7.3
30°-40°	1423.7	10.9
40°-50°	2085.1	16.0
50°-60°	3010.2	23.0
60°-70°	3166.6	24.2
70°-80°	1302.6	10.0
80°-90°	152.6	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°	13069.0	100.0
0°-180°	13069.0	100.0

Coefficient of Utilization



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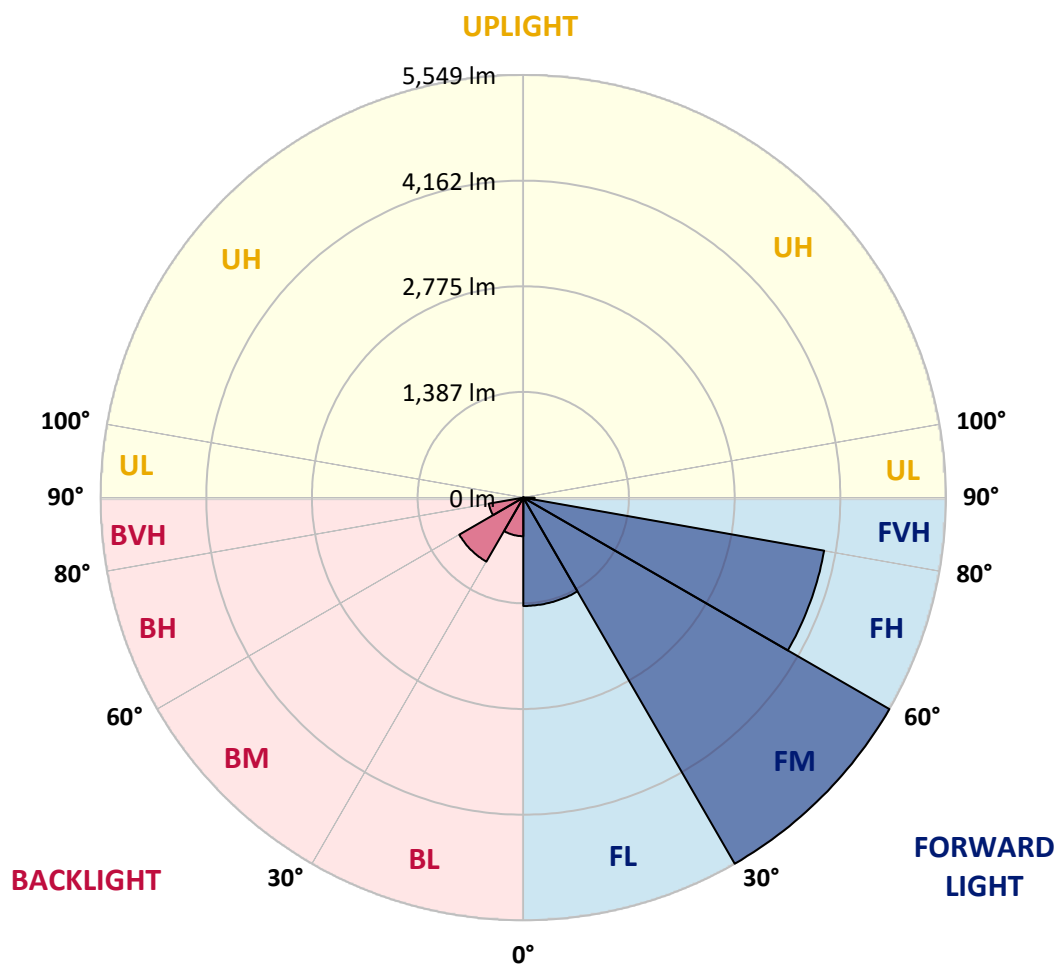
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1422.1	10.9			
FM	(30°-60°)	5549.1	42.5			
FH	(60°-80°)	4010.2	30.7			G2/5000
FVH	(80°-90°)	148.1	1.1			G2/225
BL	(0°-30°)	506.0	3.9	B2/1000		
BM	(30°-60°)	970.0	7.4	B1/1000		
BH	(60°-80°)	459.1	3.5	B1/500		G1/500
BVH	(80°-90°)	4.5	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1
2.5°	4834.5	4826.5	4897.9	5014.6	5132.3	5193.7	5181.6	5176.6	5079.0	5007.6	4857.7
5°	4824.5	4865.7	4993.5	5309.3	5548.8	5664.4	5698.6	5554.8	5364.7	5089.0	4749.0
7.5°	4535.8	4587.1	4795.3	5289.2	5714.7	5966.2	5957.2	5726.8	5334.5	4908.0	4423.1
10°	4177.7	4238.0	4482.5	5082.0	5634.3	5966.2	5984.3	5692.6	5204.7	4657.5	4147.5
12.5°	3925.2	3996.6	4267.2	4888.9	5427.0	5754.0	5775.1	5563.9	5107.2	4560.9	3997.6
15°	3839.7	3907.1	4181.7	4791.3	5206.7	5382.8	5377.8	5355.6	5068.9	4584.1	4005.7
17.5°	3986.5	4041.9	4351.7	4835.6	5000.5	4982.4	5008.6	5115.2	5077.0	4778.2	4259.1
20°	4365.8	4422.1	4755.1	4971.4	4842.6	4727.9	4740.0	4918.0	5151.4	5143.4	4655.5
22.5°	4887.9	4983.4	5285.2	5234.9	4821.5	4570.0	4544.8	4776.2	5278.2	5563.9	5190.6
25°	5548.8	5645.3	5880.7	5655.4	4925.1	4532.8	4509.6	4732.9	5432.1	5974.3	5793.2
27.5°	6104.0	6177.5	6411.9	6064.8	5078.0	4548.9	4510.6	4739.0	5556.8	6323.3	6301.2
30°	6548.7	6603.0	6740.8	6255.9	5209.8	4619.3	4575.0	4827.5	5612.1	6493.3	6712.6
32.5°	6906.8	6998.3	7041.6	6460.1	5398.9	4752.1	4676.6	4997.5	5746.9	6703.6	7144.2
35°	7316.2	7421.8	7366.5	6655.3	5648.3	4959.3	4866.7	5273.1	5951.1	6897.7	7645.1
37.5°	7835.3	7957.0	7740.7	6860.5	5911.9	5271.1	5227.9	5660.4	6261.0	7175.4	8182.3
40°	8372.4	8442.8	8103.8	7110.0	6235.8	5724.8	5766.0	6235.8	6666.4	7508.3	8753.7
42.5°	8791.9	8858.3	8477.1	7319.2	6566.8	6263.0	6435.0	6929.9	7131.1	7849.3	9180.2
45°	9112.8	9169.1	8735.6	7547.6	7013.4	7042.6	7367.5	7645.1	7596.9	8057.6	9509.1
47.5°	9362.3	9410.6	8934.8	7793.0	7682.4	7996.2	8493.1	8610.8	8079.7	8282.9	9806.9
50°	9464.9	9479.0	8997.1	8105.9	8441.8	9211.4	9729.4	9658.0	8633.0	8533.4	10123.8
52.5°	9598.7	9595.7	9175.2	8403.6	9156.1	10297.8	10814.9	10652.9	9258.7	8908.6	10479.9
55°	9949.7	9953.8	9556.4	8826.1	9764.7	11175.0	11728.2	11610.6	9918.6	9542.3	10895.3
57.5°	10376.3	10391.4	10098.6	9320.0	10346.1	11810.7	12410.3	12365.0	10810.8	10247.5	11287.6
59°	10431.6	10461.8	10355.1	9668.1	10691.1	12005.9	12643.7	12687.9	11288.7	10712.2	11499.9
60°	10331.0	10381.3	10429.6	9865.2	10893.3	12076.3	12657.7	12744.2	11647.8	11028.1	11596.5
62.5°	9892.4	9971.9	10214.3	10471.8	11145.8	11857.0	12208.1	12389.1	12092.4	11858.0	11605.5
65°	9318.0	9359.3	9709.3	10579.5	10655.9	10833.0	10941.6	11174.0	11558.2	12177.9	11190.1
67.5°	8376.5	8498.2	8926.7	9954.8	9210.4	9001.1	8974.0	8742.6	9740.5	11415.4	10166.0
70°	6919.9	6974.2	7502.3	8161.2	6951.0	6629.1	6757.9	6671.4	7550.6	9827.0	8182.3
72.5°	5232.9	5355.6	5871.7	6505.4	4729.9	4312.5	4667.6	4635.4	5671.5	7897.6	5621.2
75°	3723.0	3802.5	4460.3	5091.1	3312.6	2806.6	2934.3	3054.0	3959.4	6235.8	3321.6
77.5°	2558.1	2626.5	3120.4	3366.9	2416.3	2314.7	2117.5	2233.2	2594.3	3699.8	1807.7
80°	1543.1	1540.1	1865.0	1925.4	1682.9	1954.5	1639.7	1840.9	1568.3	1583.3	700.1
82.5°	1001.9	991.9	1140.7	1243.3	936.5	984.8	660.9	952.6	1022.0	441.6	221.3
85°	448.6	467.8	548.2	723.3	410.4	218.3	134.8	292.7	435.6	222.3	0.0
87.5°	46.3	36.2	96.6	176.0	56.3	6.0	20.1	10.1	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°	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1
2.5°	4788.3	4729.9	4555.9	4392.9	4253.1	4082.1	3971.4	3797.4	3691.8	3659.6	3664.6
5°	4596.1	4428.1	4097.2	3832.6	3537.9	3369.9	3114.4	2868.9	2736.2	2686.9	2664.7
7.5°	4193.8	4013.7	3614.3	3198.9	2883.0	2588.3	2398.2	2181.9	2034.0	1912.3	1891.2
10°	3895.0	3658.6	3163.7	2717.0	2467.6	2246.3	2056.1	1839.9	1665.8	1527.0	1488.8
12.5°	3715.9	3451.4	2899.1	2524.9	2288.5	2061.2	1813.7	1563.2	1385.2	1235.3	1165.9
15°	3683.7	3376.9	2824.7	2387.1	2095.4	1820.8	1491.8	1221.2	1038.1	896.3	853.0
17.5°	3877.9	3510.7	2813.6	2243.2	1842.9	1453.6	1111.6	887.2	681.0	601.6	570.4
20°	4223.9	3747.1	2812.6	2076.3	1583.3	1119.6	780.6	578.4	494.9	456.7	438.6
22.5°	4695.7	4069.0	2865.9	1932.4	1313.8	825.9	557.3	460.7	412.4	381.3	374.2
25°	5272.1	4545.8	2996.7	1834.8	1107.5	647.8	459.7	394.3	354.1	340.0	334.0
27.5°	5784.2	5002.5	3140.5	1734.2	959.7	573.4	426.5	361.1	328.9	317.9	308.8
30°	6225.8	5417.0	3210.0	1601.5	841.0	525.1	432.6	386.3	344.0	310.8	295.7
32.5°	6593.9	5734.9	3255.2	1480.7	740.4	429.5	342.0	298.8	279.7	267.6	257.5
35°	7054.7	6078.9	3228.1	1412.3	689.1	391.3	311.8	257.5	225.3	201.2	191.1
37.5°	7537.5	6422.9	3180.8	1356.0	665.9	363.1	296.8	244.4	209.2	184.1	171.0
40°	8037.5	6741.8	3125.5	1303.7	644.8	345.0	287.7	233.4	198.2	171.0	156.9
42.5°	8495.2	7052.6	3103.3	1269.5	610.6	348.1	280.7	228.3	187.1	158.9	146.9
45°	8865.3	7347.4	3133.5	1251.4	573.4	343.0	282.7	222.3	178.1	150.9	138.8
47.5°	9260.7	7763.8	3231.1	1233.3	537.2	318.9	297.8	221.3	174.0	145.9	132.8
50°	9720.4	8297.0	3454.4	1189.0	492.9	292.7	316.9	220.3	169.0	139.8	126.7
52.5°	10333.0	8902.6	3684.8	1111.6	428.5	267.6	302.8	217.3	158.9	132.8	119.7
55°	10883.3	9540.3	3879.9	1020.0	347.0	231.4	272.6	204.2	141.8	120.7	108.6
57.5°	11110.6	9900.5	3873.9	893.3	277.6	203.2	224.3	187.1	123.7	106.6	96.6
59°	11027.1	9855.2	3744.1	799.7	253.5	188.1	186.1	185.1	115.7	96.6	88.5
60°	10909.4	9690.2	3604.3	753.4	238.4	178.1	171.0	183.1	108.6	90.5	82.5
62.5°	10458.8	9006.2	3140.5	675.0	218.3	150.9	136.8	154.9	96.6	78.5	71.4
65°	9805.9	7955.0	2658.7	652.9	212.3	124.7	113.7	110.7	82.5	66.4	60.4
67.5°	8532.4	6731.7	2153.7	637.8	214.3	104.6	99.6	83.5	68.4	55.3	51.3
70°	6831.3	5249.0	1763.4	620.7	216.3	85.5	83.5	66.4	55.3	46.3	42.2
72.5°	4150.5	3111.4	1388.2	539.2	210.2	68.4	74.4	50.3	40.2	33.2	31.2
75°	2566.2	2129.6	861.1	419.5	138.8	50.3	52.3	31.2	27.2	21.1	21.1
77.5°	1486.8	1344.9	307.8	150.9	61.4	30.2	23.1	16.1	15.1	9.1	9.1
80°	616.6	493.9	106.6	51.3	33.2	14.1	5.0	1.0	0.0	0.0	0.0
82.5°	180.1	159.9	29.2	23.1	10.1	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°	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1
2.5°	3579.1	3545.9	3530.8	3582.2	3534.9	3595.2	3549.0	3569.1	3628.4	3654.6	3722.0
5°	2678.8	2644.6	2628.5	2706.0	2702.0	2740.2	2736.2	2771.4	2801.5	2734.1	2803.6
7.5°	1866.0	1842.9	1881.1	1941.5	2005.8	1984.7	1984.7	1937.4	1953.5	1943.5	1940.5
10°	1419.4	1339.9	1319.8	1317.8	1341.9	1347.0	1319.8	1254.4	1278.5	1285.6	1327.8
12.5°	1116.6	1055.2	961.7	919.4	908.4	917.4	827.9	770.5	797.7	781.6	822.9
15°	800.7	750.4	695.1	647.8	634.7	616.6	519.1	450.7	442.6	445.6	452.7
17.5°	571.4	537.2	537.2	486.9	459.7	405.4	356.1	325.9	322.9	325.9	331.0
20°	421.5	403.4	401.4	388.3	358.1	321.9	287.7	281.7	279.7	284.7	286.7
22.5°	363.1	344.0	327.9	326.9	298.8	268.6	252.5	244.4	245.4	247.5	252.5
25°	324.9	304.8	287.7	277.6	257.5	236.4	221.3	217.3	217.3	220.3	221.3
27.5°	297.8	272.6	257.5	243.4	225.3	207.2	194.1	191.1	189.1	191.1	196.2
30°	278.6	253.5	234.4	213.3	199.2	182.1	171.0	167.0	166.0	167.0	171.0
32.5°	238.4	223.3	208.2	189.1	172.0	161.0	148.9	141.8	141.8	143.8	147.9
35°	180.1	172.0	171.0	166.0	151.9	139.8	125.7	118.7	118.7	122.7	124.7
37.5°	158.9	143.8	141.8	139.8	133.8	117.7	104.6	98.6	97.6	100.6	104.6
40°	144.9	127.8	118.7	116.7	117.7	99.6	85.5	79.5	79.5	80.5	84.5
42.5°	133.8	113.7	97.6	95.6	99.6	83.5	69.4	63.4	63.4	63.4	68.4
45°	124.7	101.6	82.5	72.4	78.5	68.4	56.3	50.3	48.3	50.3	52.3
47.5°	118.7	92.5	72.4	58.3	58.3	54.3	45.3	38.2	36.2	37.2	40.2
50°	113.7	84.5	61.4	47.3	42.2	43.3	34.2	29.2	27.2	27.2	30.2
52.5°	105.6	76.5	53.3	40.2	32.2	29.2	25.1	21.1	20.1	21.1	23.1
55°	95.6	69.4	46.3	33.2	25.1	20.1	18.1	15.1	14.1	15.1	18.1
57.5°	84.5	58.3	37.2	26.2	17.1	13.1	12.1	10.1	8.0	9.1	11.1
59°	77.5	52.3	32.2	21.1	13.1	9.1	9.1	7.0	5.0	6.0	9.1
60°	74.4	48.3	27.2	18.1	11.1	7.0	7.0	5.0	3.0	4.0	7.0
62.5°	63.4	40.2	21.1	11.1	5.0	1.0	3.0	1.0	0.0	1.0	3.0
65°	53.3	32.2	14.1	5.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
67.5°	44.3	24.1	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	35.2	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	24.1	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	15.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.0	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: P454088

CATALOG NUMBER: GALN-SA5A-830-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1	4425.1
2.5°	3726.0	3869.8	3958.4	4125.4	4296.4	4428.1	4593.1	4741.0	4802.4	4834.5
5°	2874.0	3074.2	3244.2	3498.7	3735.1	4022.8	4314.5	4658.5	4790.3	4824.5
7.5°	2016.9	2221.1	2399.2	2693.9	3030.9	3416.2	3852.7	4289.3	4481.5	4535.8
10°	1456.6	1674.9	1892.2	2186.9	2501.8	2919.2	3373.9	3914.1	4135.4	4177.7
12.5°	919.4	1153.8	1506.9	1871.0	2204.0	2540.0	3015.8	3603.3	3847.7	3925.2
15°	533.1	708.2	974.8	1449.6	1873.1	2317.7	2836.7	3486.6	3760.2	3839.7
17.5°	357.1	417.5	600.5	963.7	1523.0	2112.5	2791.5	3582.2	3884.9	3986.5
20°	300.8	327.9	392.3	587.5	1172.9	1929.4	2803.6	3841.7	4239.0	4365.8
22.5°	264.6	289.7	331.0	422.5	818.8	1702.0	2860.9	4212.9	4725.9	4887.9
25°	233.4	258.5	294.7	350.1	550.2	1439.5	2986.6	4756.1	5370.7	5548.8
27.5°	207.2	230.4	261.5	308.8	423.5	1146.8	3098.3	5285.2	5959.2	6104.0
30°	183.1	202.2	232.4	268.6	352.1	884.2	3154.6	5747.9	6387.7	6548.7
32.5°	158.9	177.0	206.2	235.4	289.7	674.0	3115.4	6087.9	6804.2	6906.8
35°	135.8	154.9	179.1	206.2	250.5	544.2	2919.2	6470.2	7235.7	7316.2
37.5°	116.7	132.8	157.9	179.1	226.3	435.6	2681.8	6814.2	7719.6	7835.3
40°	98.6	114.7	139.8	158.9	208.2	343.0	2467.6	7196.5	8229.6	8372.4
42.5°	80.5	99.6	121.7	152.9	179.1	261.5	2208.0	7506.3	8612.9	8791.9
45°	64.4	85.5	109.6	151.9	155.9	199.2	1957.6	7747.7	8951.9	9112.8
47.5°	51.3	72.4	105.6	141.8	127.8	157.9	1814.7	8000.2	9233.5	9362.3
50°	41.2	60.4	110.7	124.7	106.6	133.8	1810.7	8281.9	9379.4	9464.9
52.5°	33.2	49.3	93.6	95.6	90.5	117.7	1919.3	8598.8	9528.3	9598.7
55°	28.2	41.2	61.4	70.4	81.5	106.6	2000.8	9086.7	9883.4	9949.7
57.5°	22.1	35.2	47.3	56.3	72.4	97.6	2011.9	9462.9	10333.0	10376.3
59°	19.1	30.2	42.2	50.3	66.4	91.5	1966.6	9486.0	10362.2	10431.6
60°	16.1	27.2	37.2	47.3	61.4	86.5	1917.3	9318.0	10253.5	10331.0
62.5°	12.1	21.1	27.2	38.2	50.3	74.4	1683.9	8731.6	9838.1	9892.4
65°	8.0	15.1	20.1	28.2	39.2	64.4	1372.1	7971.1	9196.3	9318.0
67.5°	5.0	11.1	16.1	21.1	32.2	54.3	977.8	6835.4	8298.0	8376.5
70°	3.0	7.0	12.1	17.1	25.1	43.3	580.4	5402.9	6903.8	6919.9
72.5°	2.0	5.0	8.0	12.1	20.1	39.2	281.7	3521.8	5040.8	5232.9
75°	1.0	3.0	5.0	9.1	16.1	32.2	134.8	2352.9	3667.7	3723.0
77.5°	0.0	1.0	3.0	6.0	12.1	25.1	78.5	1545.1	2500.8	2558.1
80°	0.0	0.0	2.0	5.0	9.1	16.1	47.3	911.4	1514.9	1543.1
82.5°	0.0	0.0	1.0	4.0	6.0	12.1	24.1	400.4	991.9	1001.9
85°	0.0	0.0	1.0	4.0	5.0	8.0	9.1	54.3	440.6	448.6
87.5°	0.0	0.0	1.0	5.0	5.0	5.0	5.0	3.0	37.2	46.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)