

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: P453161

Luminaire Tested: **GALN-SA4A-830-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453161
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-SA4A-830-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 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: 12392 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

Input Watts (W): 121
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

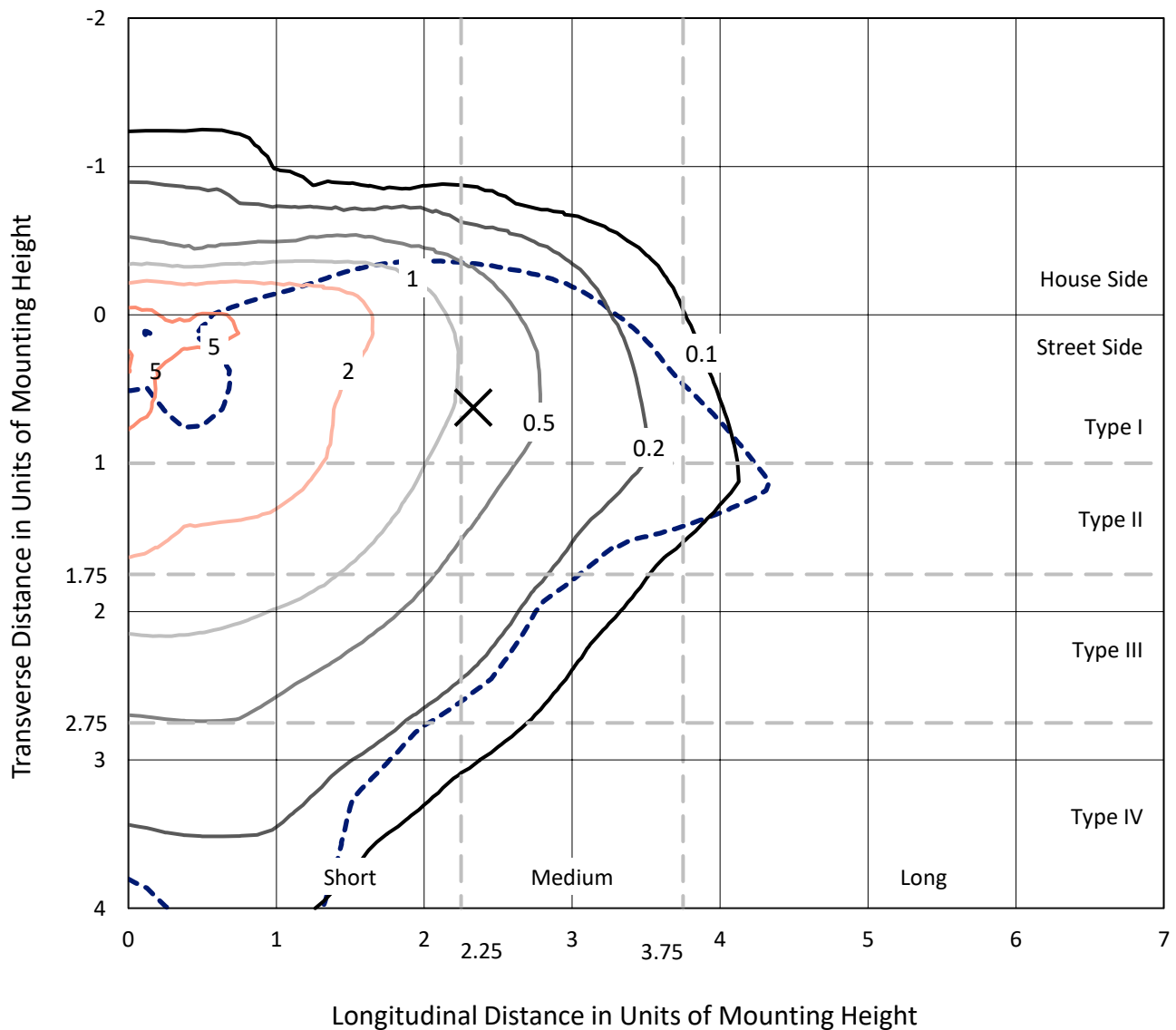


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Iso-Footcandle Lines of Horizontal Illumination

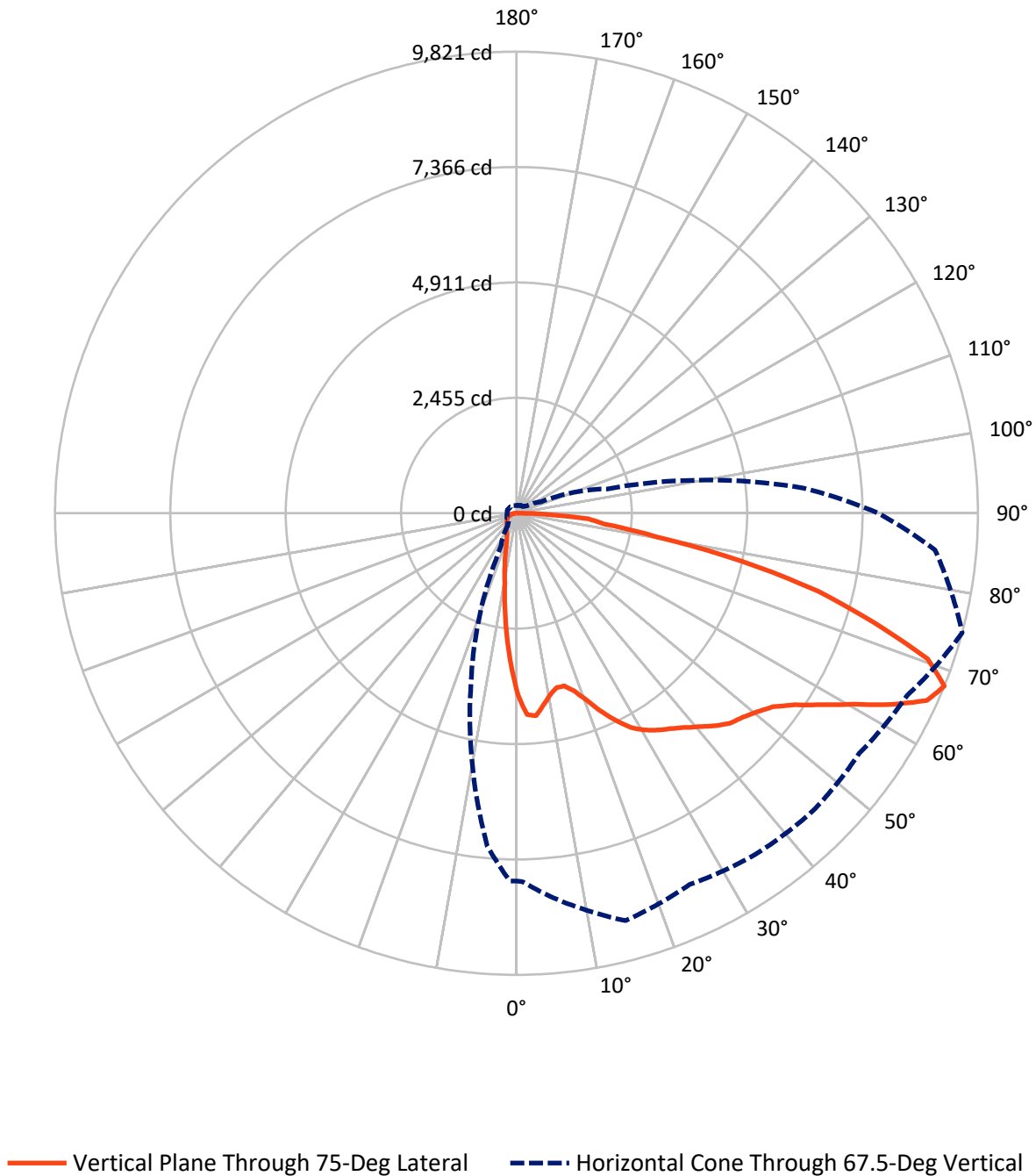
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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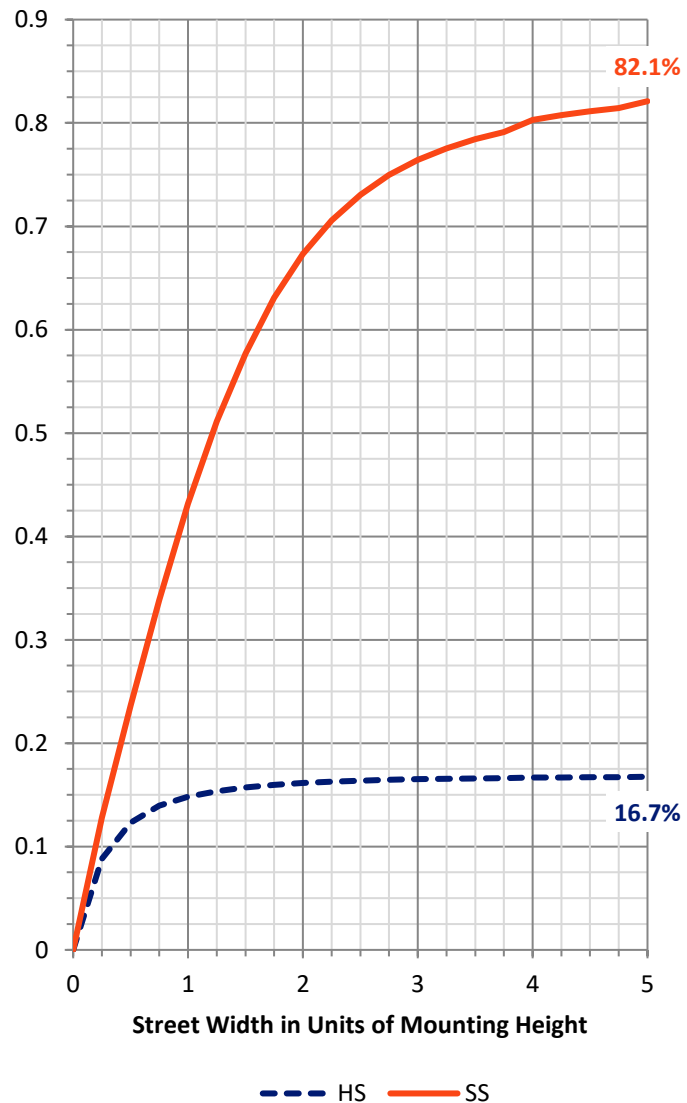
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2094.5	0.0	2094.5
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	10297.5	0.0	10297.5
	% Fixture	83.1	0.0	83.1
Total	Lumens	12392.0	0.0	12392.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.6	2.4
10°-20°	612.4	4.9
20°-30°	881.3	7.1
30°-40°	1269.3	10.2
40°-50°	1783.0	14.4
50°-60°	2486.6	20.1
60°-70°	2956.4	23.9
70°-80°	1741.2	14.1
80°-90°	368.2	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°	12392.0	100.0
0°-180°	12392.0	100.0

Coefficient of Utilization



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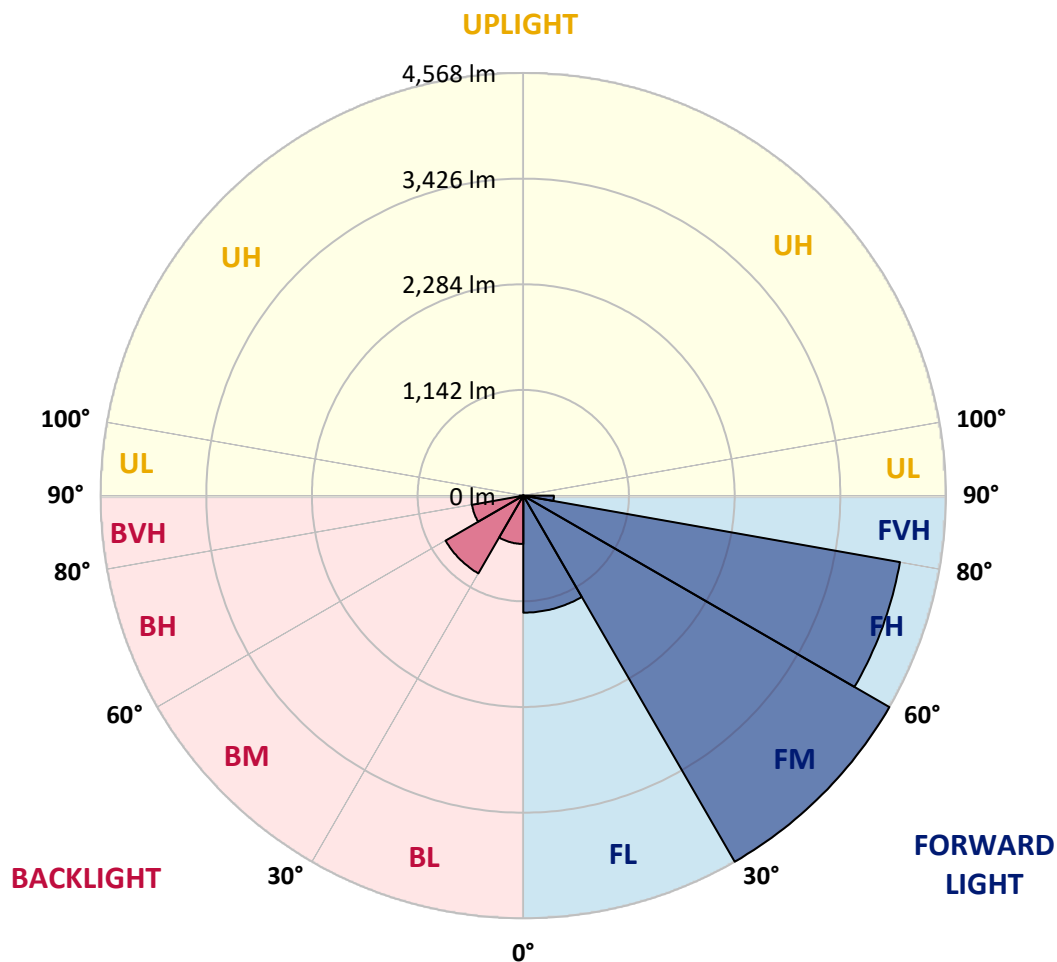
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1264.9	10.2			
FM	(30°-60°)	4568.5	36.9			
FH	(60°-80°)	4134.0	33.4			G2/5000
FVH	(80°-90°)	330.1	2.7			G3/500
BL	(0°-30°)	522.4	4.2	B2/1000		
BM	(30°-60°)	970.4	7.8	B1/1000		
BH	(60°-80°)	563.6	4.5	B2/1000		G2/1000
BVH	(80°-90°)	38.1	0.3			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6
2.5°	4174.3	4179.9	4215.6	4319.7	4391.3	4417.5	4435.8	4401.6	4368.2	4287.2	4164.8
5°	4161.6	4194.2	4287.2	4520.8	4705.1	4784.6	4808.5	4705.9	4536.7	4328.5	4078.2
7.5°	3918.4	3962.1	4105.2	4496.9	4822.0	5007.9	4983.3	4798.1	4493.0	4121.9	3772.2
10°	3630.0	3678.5	3850.9	4324.5	4743.3	4999.2	4999.2	4773.5	4368.2	3927.2	3524.3
12.5°	3401.1	3452.0	3649.1	4147.3	4579.6	4822.0	4862.5	4668.6	4278.4	3804.0	3361.4
15°	3325.6	3374.9	3587.1	4040.0	4406.4	4554.2	4567.7	4504.1	4234.7	3812.7	3354.2
17.5°	3419.4	3483.0	3697.5	4071.8	4247.4	4256.2	4266.5	4316.6	4239.5	3972.5	3498.9
20°	3690.4	3758.7	3982.8	4174.3	4108.4	4017.8	4023.3	4152.1	4295.9	4236.3	3844.5
22.5°	4081.3	4140.9	4370.6	4354.7	4049.6	3862.8	3823.9	4003.5	4379.3	4565.3	4212.5
25°	4503.3	4573.2	4837.1	4622.5	4066.2	3770.6	3746.0	3916.1	4466.0	4872.8	4637.6
27.5°	4986.5	5054.8	5263.0	4892.7	4153.7	3763.5	3734.1	3908.1	4543.8	5157.3	5043.7
30°	5345.6	5408.4	5549.9	5120.0	4260.9	3811.2	3774.6	3970.9	4610.6	5352.0	5439.4
32.5°	5627.7	5692.9	5770.0	5261.4	4402.4	3897.8	3830.2	4085.3	4698.0	5500.6	5732.6
35°	5921.8	5998.8	5993.3	5387.0	4534.3	3997.9	3931.9	4250.6	4835.5	5630.1	6104.5
37.5°	6294.5	6325.4	6285.7	5499.8	4692.4	4178.3	4141.7	4496.2	5031.0	5786.7	6539.2
40°	6672.7	6734.7	6530.5	5636.5	4884.7	4517.6	4513.6	4859.3	5263.0	5970.2	6960.4
42.5°	6996.9	7049.4	6759.3	5755.7	5117.6	4931.6	4961.8	5346.4	5567.3	6183.2	7298.9
45°	7240.9	7287.8	6970.7	5870.9	5424.3	5410.0	5588.0	5868.5	5951.2	6374.7	7497.6
47.5°	7448.3	7493.6	7117.7	6045.7	5803.4	5981.4	6291.3	6412.9	6279.4	6484.4	7720.1
50°	7623.1	7636.6	7218.6	6253.9	6273.8	6681.5	6981.8	7060.5	6603.6	6641.7	7913.2
52.5°	7805.1	7787.6	7392.7	6516.2	6782.4	7345.8	7564.3	7646.2	6914.3	6835.6	8194.5
55°	8212.7	8229.4	7782.8	6846.7	7296.5	7998.2	8285.9	8207.2	7258.4	7192.4	8552.1
57.5°	8705.4	8691.1	8331.9	7364.1	7820.2	8605.3	8819.9	8693.5	7717.7	7682.7	8914.4
60°	8896.9	8916.0	8791.3	7920.3	8336.7	9136.9	9356.3	9160.0	8268.4	8252.5	9187.8
62.5°	8704.6	8811.9	8896.2	8415.4	8777.0	9527.9	9745.6	9521.5	8842.9	8958.1	9379.3
65°	8321.6	8344.7	8631.5	8835.0	8989.1	9592.3	9705.9	9586.7	9322.9	9601.0	9370.6
67.5°	7824.2	7844.0	8180.2	8972.4	8715.8	8861.2	8940.7	8905.7	9174.3	9821.1	8939.1
70°	7350.5	7334.7	7689.9	8622.0	7587.4	7366.4	7432.4	7322.7	7916.3	9283.1	8092.8
72.5°	6428.8	6486.0	6867.4	7647.7	6007.6	5648.4	5792.2	5508.5	6088.6	7950.5	6568.6
75°	5035.7	5049.2	5685.7	6418.4	4531.9	3965.3	4160.0	4041.6	4663.8	6632.2	4535.9
77.5°	3486.9	3456.7	4140.9	4902.2	3231.9	2902.9	2906.0	2849.6	3256.5	4883.1	3081.7
80°	2214.7	2168.6	2592.2	3028.4	2221.1	2376.0	2298.1	2295.8	2120.1	3012.5	1863.5
82.5°	1196.7	1247.6	1637.8	1898.4	1593.3	1836.4	1683.1	1633.8	1455.0	1885.7	1192.0
85°	545.1	592.8	873.3	1291.3	1210.3	1223.8	817.7	964.7	1203.9	1531.3	636.5
87.5°	53.2	68.3	180.4	609.5	413.2	325.8	121.6	234.4	302.8	544.3	50.9
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°	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6
2.5°	4114.7	4073.4	3932.7	3816.7	3693.6	3599.8	3477.4	3395.6	3339.1	3254.1	3243.8
5°	3925.6	3824.7	3579.9	3330.4	3115.0	2952.9	2788.4	2637.5	2548.5	2520.6	2484.9
7.5°	3606.9	3436.9	3122.2	2836.1	2589.0	2347.4	2161.5	2029.5	1941.3	1889.7	1827.7
10°	3344.7	3147.6	2764.6	2414.2	2210.7	2060.5	1896.8	1755.4	1646.5	1553.5	1502.7
12.5°	3168.3	2945.8	2515.1	2230.6	2073.3	1913.5	1722.0	1563.1	1402.6	1296.9	1251.6
15°	3115.0	2879.8	2438.0	2139.2	1913.5	1704.5	1490.0	1282.6	1123.6	1023.5	990.1
17.5°	3245.4	2960.9	2437.2	2017.6	1726.0	1476.5	1201.5	1006.8	843.9	769.2	745.4
20°	3488.5	3116.6	2444.4	1897.6	1522.6	1171.3	874.1	714.4	636.5	604.7	592.8
22.5°	3827.8	3354.2	2465.8	1779.2	1300.1	899.5	654.8	573.7	545.9	540.4	538.0
25°	4245.8	3648.3	2538.1	1672.7	1112.5	686.6	547.5	511.0	495.1	489.5	488.7
27.5°	4630.4	4028.1	2625.5	1581.4	931.3	592.0	495.1	464.1	448.2	447.4	449.0
30°	4977.7	4346.0	2698.6	1478.9	793.9	526.1	460.9	429.9	414.8	414.0	418.8
32.5°	5278.1	4607.4	2752.7	1377.9	717.6	485.5	429.9	396.5	383.8	381.4	383.8
35°	5599.1	4868.1	2728.0	1299.3	673.9	452.2	406.9	374.3	359.2	352.0	352.0
37.5°	5965.5	5136.6	2685.9	1234.1	654.0	424.3	387.0	355.2	340.1	333.0	332.2
40°	6365.2	5405.2	2627.9	1176.1	634.1	407.7	373.5	340.1	321.8	314.7	313.1
42.5°	6718.0	5634.9	2580.2	1137.9	601.6	410.8	361.6	329.0	305.9	296.4	295.6
45°	7024.7	5866.1	2571.5	1115.7	574.5	406.1	358.4	320.2	293.2	282.9	281.3
47.5°	7264.7	6106.9	2621.6	1103.0	545.1	380.6	379.0	314.7	282.1	271.0	269.4
50°	7557.2	6448.6	2736.0	1076.8	518.1	356.8	400.5	313.9	273.4	259.1	255.1
52.5°	7946.5	6893.6	2891.0	1029.9	479.2	334.5	382.2	313.9	263.0	248.7	244.0
55°	8535.4	7461.0	3042.7	963.9	424.3	305.1	344.9	304.4	247.9	235.2	232.0
57.5°	8925.6	7875.8	3139.7	872.5	356.0	283.7	297.2	289.3	232.8	219.3	219.3
60°	8945.4	7987.1	3093.6	757.3	313.1	263.8	258.3	291.6	219.3	205.0	203.4
62.5°	8716.6	7714.5	2853.6	654.0	290.0	242.4	233.6	255.9	205.8	191.5	189.1
65°	8359.0	7019.2	2437.2	604.7	277.3	223.3	210.6	209.8	191.5	178.0	174.8
67.5°	7701.8	6133.9	2002.5	576.1	271.0	201.8	189.9	185.9	174.8	163.7	162.1
70°	6733.1	5137.4	1606.0	564.2	267.8	179.6	170.1	165.3	155.8	147.0	146.2
72.5°	5238.4	4167.2	1325.5	556.3	266.2	158.9	148.6	142.2	136.7	128.7	128.7
75°	3762.7	3065.8	1011.6	501.4	246.3	136.7	125.6	121.6	113.6	107.3	108.9
77.5°	2372.0	2064.5	665.9	368.7	190.7	109.7	100.1	97.7	91.4	82.6	88.2
80°	1602.0	1451.8	388.6	232.0	120.0	80.3	77.1	76.3	69.1	59.6	60.4
82.5°	1090.3	1069.6	201.8	131.9	69.1	46.9	45.3	46.9	38.9	31.8	31.8
85°	425.9	581.7	95.4	51.7	22.3	7.2	10.3	11.1	6.4	3.2	4.0
87.5°	7.9	59.6	2.4	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°	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6
2.5°	3227.9	3220.7	3232.7	3181.8	3192.1	3211.2	3220.7	3226.3	3305.0	3286.7	3336.8
5°	2518.3	2511.1	2557.2	2563.6	2587.4	2582.6	2605.7	2611.2	2639.8	2650.2	2720.1
7.5°	1831.7	1862.7	1915.1	1942.1	1982.7	1995.4	1983.5	2012.9	1953.3	1996.2	2008.9
10°	1471.7	1434.4	1412.1	1474.1	1482.0	1540.8	1517.0	1497.9	1532.9	1534.5	1567.9
12.5°	1225.4	1145.1	1091.9	1109.3	1128.4	1153.8	1157.8	1196.0	1221.4	1245.2	1265.1
15°	960.7	932.9	884.4	860.6	887.6	898.0	922.6	954.4	981.4	988.5	1015.6
17.5°	737.4	742.2	734.3	720.0	736.6	744.6	746.2	747.0	754.1	749.4	789.1
20°	593.6	610.3	630.2	633.3	638.9	642.9	635.7	608.7	609.5	626.2	638.9
22.5°	537.2	540.4	562.6	569.8	587.2	580.1	559.4	546.7	545.1	549.1	555.5
25°	492.7	497.5	513.3	524.5	538.0	525.3	510.2	498.2	496.7	500.6	507.0
27.5°	453.0	460.1	474.4	485.5	498.2	486.3	472.0	461.7	460.9	460.1	464.1
30°	421.2	429.1	439.4	452.2	460.9	450.6	437.1	431.5	430.7	429.1	430.7
32.5°	389.4	402.1	412.4	418.8	427.5	419.6	409.2	406.1	400.5	395.7	393.4
35°	353.6	367.1	383.0	391.0	399.7	391.8	384.6	371.1	361.6	360.8	362.4
37.5°	333.0	338.5	351.2	364.7	373.5	369.5	356.0	342.5	340.1	340.1	341.7
40°	314.7	317.1	322.6	340.1	356.0	344.1	327.4	323.4	323.4	322.6	323.4
42.5°	296.4	298.8	298.8	312.3	337.7	318.7	305.9	305.9	305.9	306.7	309.1
45°	279.7	280.5	279.7	289.3	313.1	297.2	288.5	290.8	292.4	294.0	295.6
47.5°	265.4	266.2	265.4	273.4	285.3	278.9	274.2	277.3	280.5	282.9	284.5
50°	252.7	251.9	253.5	258.3	263.8	265.4	262.2	267.0	268.6	271.8	275.7
52.5°	241.6	240.8	242.4	244.8	252.7	252.7	252.7	256.7	259.9	263.0	268.6
55°	228.9	229.7	232.0	235.2	245.5	244.0	244.8	247.9	251.1	255.9	259.1
57.5°	216.9	218.5	221.7	226.5	236.8	236.0	236.8	238.4	242.4	244.8	247.9
60°	203.4	206.6	210.6	213.8	224.1	223.3	227.3	230.4	232.8	232.8	234.4
62.5°	189.9	194.7	198.7	201.0	212.2	213.0	218.5	220.9	222.5	220.9	223.3
65°	176.4	183.6	185.2	188.3	199.5	200.3	206.6	212.2	210.6	209.0	213.0
67.5°	162.9	171.6	170.9	174.8	185.9	187.5	193.1	202.6	199.5	197.9	201.0
70°	147.8	154.2	155.0	157.3	172.4	170.1	178.8	187.5	185.2	185.9	185.9
72.5°	131.1	136.7	136.7	141.4	157.3	153.4	160.5	170.1	170.1	169.3	169.3
75°	111.3	114.4	117.6	124.8	141.4	136.7	141.4	150.2	151.8	150.2	150.2
77.5°	89.8	94.6	96.2	105.7	117.6	116.8	121.6	125.6	128.7	127.1	127.1
80°	63.6	68.3	74.7	85.0	92.2	94.6	96.9	100.1	101.7	101.7	103.3
82.5°	35.8	42.9	48.5	58.8	62.0	73.9	73.1	75.5	73.1	64.4	71.5
85°	7.9	15.1	21.5	27.0	31.0	42.9	45.3	50.9	42.1	38.9	38.9
87.5°	0.0	0.0	0.0	0.0	0.0	6.4	12.7	17.5	15.1	12.7	12.7
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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CATALOG NUMBER: GALN-SA4A-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6	3871.6
2.5°	3378.9	3448.0	3531.4	3675.3	3776.2	3885.1	3994.7	4111.5	4142.5	4174.3
5°	2739.2	2875.1	2949.0	3142.1	3344.7	3602.2	3812.7	4043.2	4139.4	4161.6
7.5°	2074.8	2167.0	2360.9	2556.4	2807.5	3077.7	3400.3	3759.5	3871.6	3918.4
10°	1644.9	1770.5	1940.5	2150.3	2370.5	2661.3	3025.2	3444.8	3603.8	3630.0
12.5°	1400.2	1540.0	1725.2	1946.9	2155.1	2374.4	2741.6	3174.6	3344.7	3401.1
15°	1119.7	1288.9	1502.7	1736.3	1962.8	2202.8	2574.7	3063.4	3259.7	3325.6
17.5°	879.7	1016.4	1247.6	1501.1	1769.7	2073.3	2539.7	3116.6	3358.2	3419.4
20°	673.1	770.8	965.5	1233.3	1548.0	1945.3	2548.5	3317.7	3606.9	3690.4
22.5°	581.7	631.7	750.2	1005.2	1357.3	1834.1	2584.2	3593.4	3942.3	4081.3
25°	526.9	553.1	619.8	786.7	1175.3	1726.0	2666.1	3964.5	4411.1	4503.3
27.5°	480.0	499.0	540.4	660.4	1010.0	1625.9	2761.4	4376.2	4849.0	4986.5
30°	435.5	460.9	499.8	586.5	904.3	1534.5	2881.4	4709.9	5217.7	5345.6
32.5°	401.3	426.7	462.5	534.8	814.5	1438.3	2952.9	5003.1	5518.9	5627.7
35°	373.5	394.9	432.3	493.5	746.2	1365.2	2938.6	5236.0	5810.5	5921.8
37.5°	353.6	371.9	409.2	454.5	694.5	1288.9	2931.5	5543.5	6165.7	6294.5
40°	335.3	354.4	388.6	429.1	642.9	1199.1	2935.5	5848.7	6544.0	6672.7
42.5°	321.0	342.5	370.3	422.0	589.6	1126.8	2935.5	6114.1	6873.0	6996.9
45°	309.1	332.2	359.2	421.2	547.5	1072.0	2915.6	6342.1	7135.2	7240.9
47.5°	298.8	324.2	363.2	406.9	537.2	1032.3	2898.1	6524.9	7349.0	7448.3
50°	291.6	321.8	386.2	390.2	540.4	1020.3	2982.3	6755.4	7537.3	7623.1
52.5°	286.1	322.6	385.4	365.5	534.8	1028.3	3158.0	7115.3	7798.7	7805.1
55°	275.0	321.8	365.5	337.7	511.8	1041.8	3383.6	7638.2	8208.0	8212.7
57.5°	263.8	313.1	339.3	313.9	464.9	1041.8	3655.4	8133.3	8701.5	8705.4
60°	252.7	325.8	298.0	293.2	403.7	1022.7	3942.3	8351.0	8856.4	8896.9
62.5°	241.6	328.2	266.2	275.0	359.2	976.6	4156.0	8110.2	8646.6	8704.6
65°	228.9	264.6	245.5	255.9	336.1	899.5	4088.5	7669.2	8252.5	8321.6
67.5°	213.8	224.1	223.3	236.0	328.2	785.9	3732.5	7111.4	7828.1	7824.2
70°	195.5	201.0	203.4	216.9	313.1	697.7	3110.3	6387.4	7261.5	7350.5
72.5°	176.4	181.2	183.6	195.5	298.0	647.6	2414.2	5390.1	6289.7	6428.8
75°	155.8	158.9	162.1	172.4	282.1	573.7	1719.6	4114.7	4817.2	5035.7
77.5°	134.3	134.3	138.3	148.6	237.6	473.6	1153.8	2886.2	3263.6	3486.9
80°	108.9	109.7	108.1	119.2	174.8	324.2	655.6	1927.8	2171.8	2214.7
82.5°	83.4	81.1	81.8	87.4	130.3	220.9	349.6	1197.5	1220.6	1196.7
85°	52.4	52.4	50.9	57.2	83.4	115.2	190.7	733.5	572.9	545.1
87.5°	21.5	17.5	19.9	23.0	39.7	46.9	74.7	151.0	58.0	53.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)