

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: P651349

Luminaire Tested: **GALN-SA4D-840-U-SLL-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651349
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-23)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-840-U-SLL-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT
ELIMINATOR LEFT OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14228.1 lumens
Efficiency: N/A
Efficacy: 58.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G1

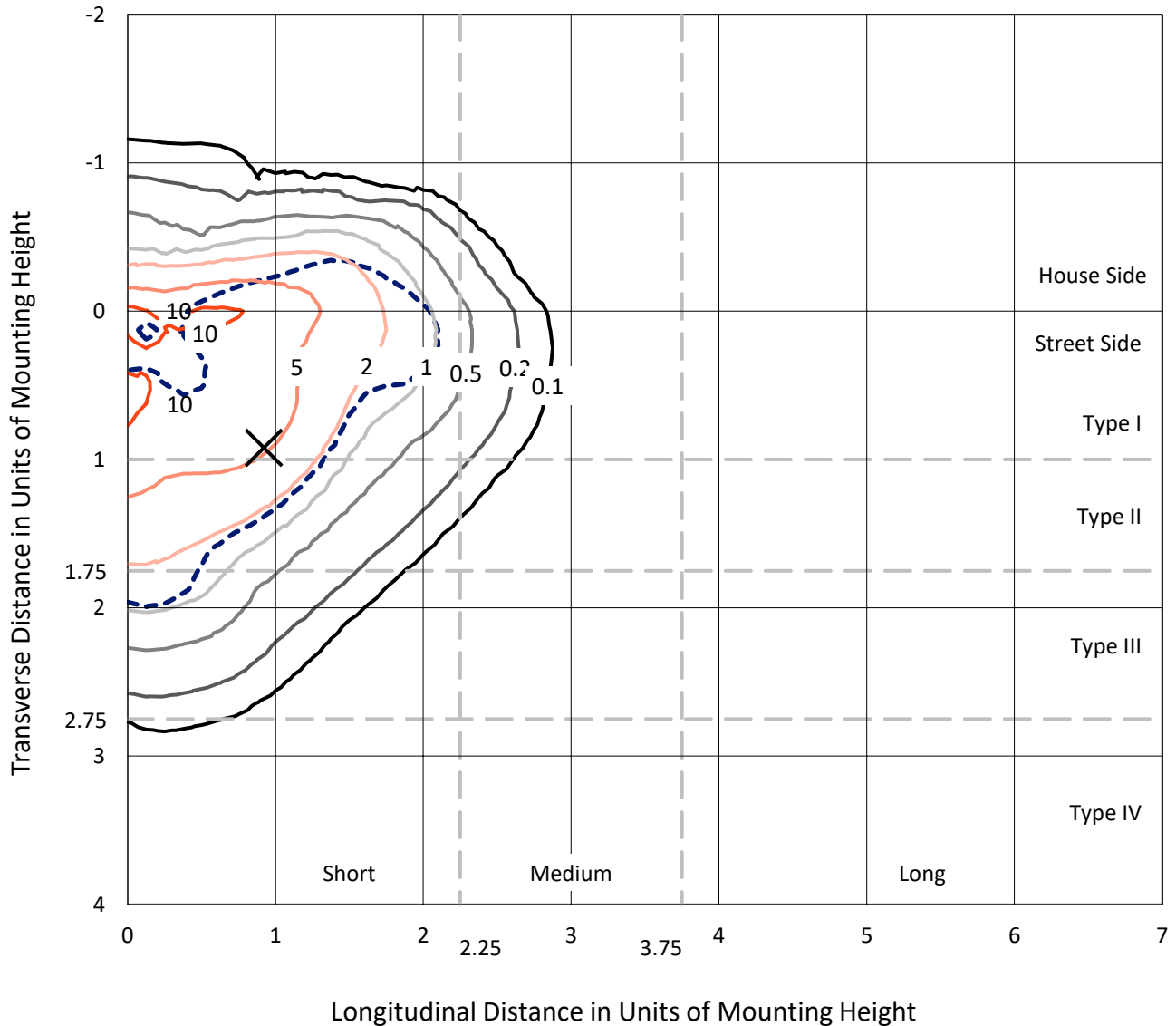
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

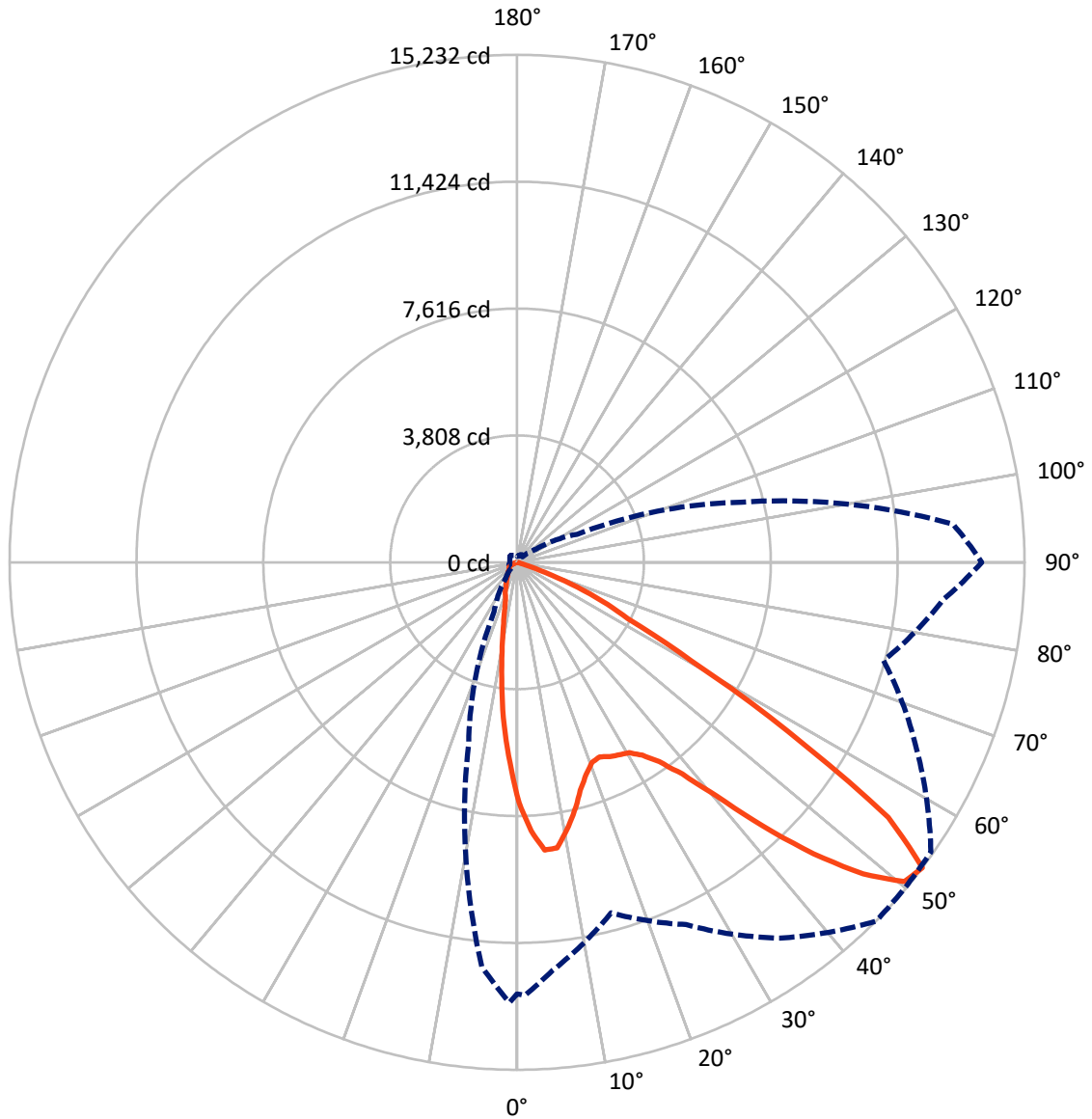
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 52.5-Deg Vertical

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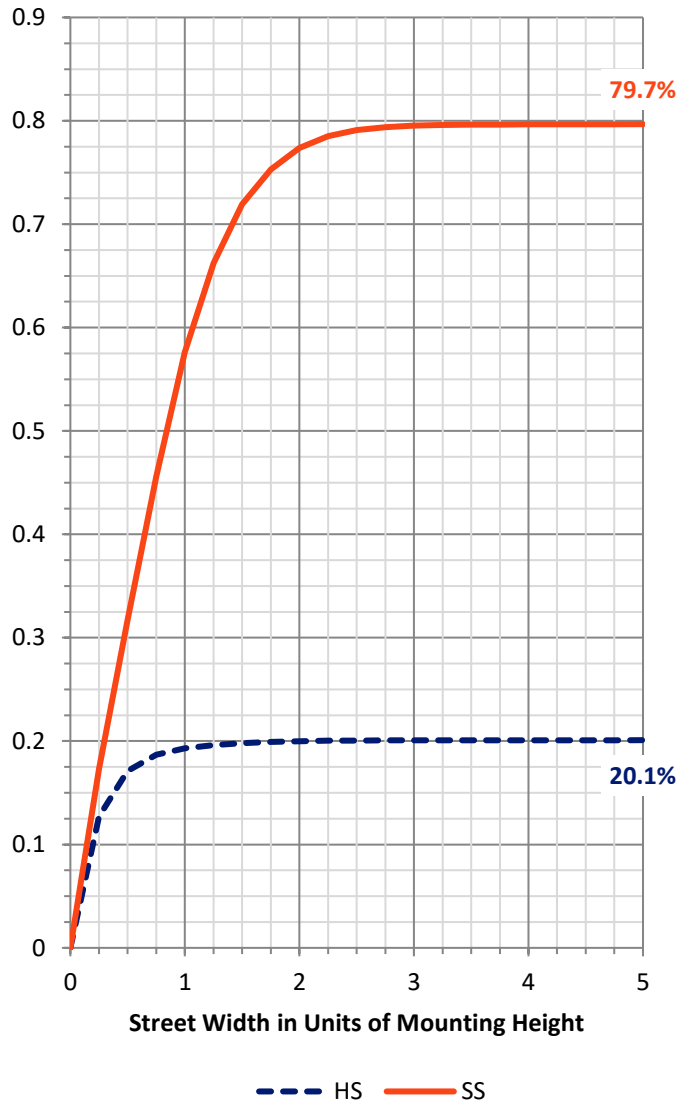
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2887.6	0.0	2887.6
	% Fixture	20.3	0.0	20.3
Street Side	Lumens	11340.5	0.0	11340.5
	% Fixture	79.7	0.0	79.7
Total	Lumens	14228.1	0.0	14228.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	526.1	3.7
10°-20°	1038.0	7.3
20°-30°	1579.7	11.1
30°-40°	2361.1	16.6
40°-50°	3362.4	23.6
50°-60°	3614.4	25.4
60°-70°	1601.6	11.3
70°-80°	129.6	0.9
80°-90°	15.1	0.1
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°	14228.1	100.0
0°-180°	14228.1	100.0

Coefficient of Utilization

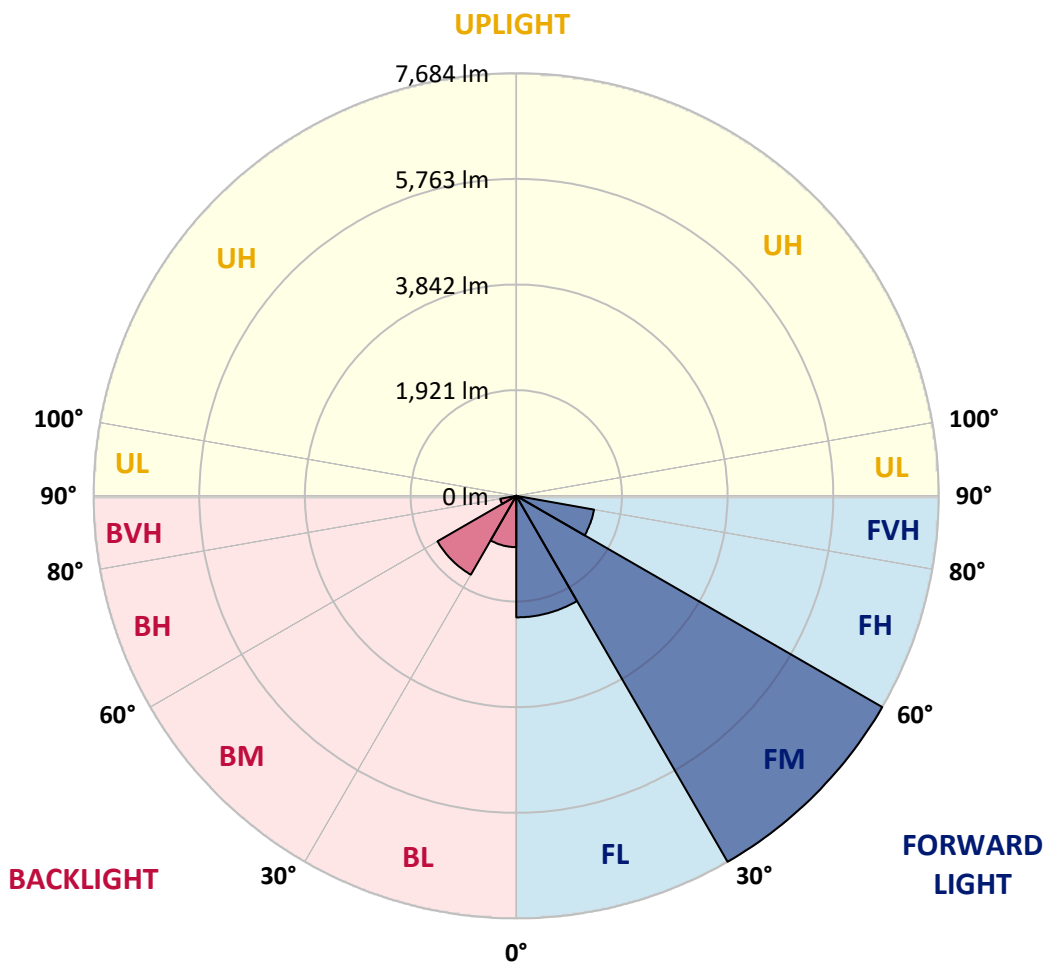


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2209.9	15.5			
FM (30°-60°)	7683.6	54.0			
FH (60°-80°)	1435.8	10.1			G1/1800
FVH (80°-90°)	11.2	0.1			G1/100
BL (0°-30°)	934.0	6.6	B2/1000		
BM (30°-60°)	1654.3	11.6	B2/2500		
BH (60°-80°)	295.4	2.1	B1/500		G1/500
BVH (80°-90°)	3.9	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-G1
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3
2.5°	7634.0	7656.5	7779.6	7933.5	8014.6	8199.3	8070.6	8104.1	8034.2	7787.9	7594.8
5°	7401.8	7398.9	7555.7	7936.3	8297.2	8663.8	8675.1	8479.1	8134.9	7757.1	7217.0
7.5°	6702.2	6811.3	6973.7	7580.9	8249.7	8524.0	8655.5	8426.0	7897.1	7357.0	6772.2
10°	6173.3	6229.2	6503.5	7236.6	7726.4	8092.9	8174.1	8042.6	7636.9	6962.4	6307.6
12.5°	5868.2	5896.3	6218.0	6833.7	7351.4	7622.8	7662.0	7723.6	7432.6	6800.1	6013.7
15°	5871.0	5893.4	6327.2	6842.1	7046.4	6973.7	7102.3	7099.6	7225.5	6769.3	6260.0
17.5°	6293.6	6318.8	6710.6	6965.2	6875.7	6705.0	6696.5	6825.3	7091.1	7152.7	6632.2
20°	7021.2	7080.0	7368.2	7354.2	6850.4	6506.3	6411.1	6509.1	7127.6	7477.3	7382.2
22.5°	8000.6	8081.8	8283.3	7897.1	6965.2	6371.9	6341.1	6531.5	7368.2	8202.1	8232.9
25°	9136.8	9273.9	9371.9	8876.5	7373.8	6604.2	6458.7	6786.1	7692.8	8988.4	9315.8
27.5°	9889.6	10032.3	10009.9	9301.9	7648.1	6665.8	6542.6	6847.7	7975.5	9176.0	9881.2
30°	10477.2	10564.0	10720.6	9531.4	7922.3	6839.3	6629.4	7108.0	8067.8	9500.6	10564.0
32.5°	11162.8	11221.5	11232.8	9937.1	8344.8	7057.6	6898.1	7432.6	8476.4	9811.2	11168.4
35°	11854.1	11940.8	11758.9	10438.1	8605.1	7463.4	7345.8	7995.1	8803.8	10133.0	11834.5
37.5°	12604.0	12648.8	12229.0	10645.1	8977.3	8123.7	8059.4	8602.3	9371.9	10715.1	12573.2
40°	13233.6	13275.6	12730.0	10899.8	9369.1	9047.2	9212.3	9760.8	10144.2	11092.9	12942.6
42.5°	13583.4	13681.4	12897.8	10759.8	10155.4	10093.9	10827.0	11020.1	11039.7	11199.2	13272.8
45°	13678.6	13633.8	12620.8	10874.6	10843.8	11814.9	12480.9	12735.5	11929.6	11395.0	13356.8
47.5°	13239.3	13298.0	12212.2	10773.9	11747.7	13118.9	13980.8	14453.8	12592.8	11224.4	13149.7
50°	12883.9	12808.3	12080.7	10701.1	11991.1	13734.5	15063.8	15170.1	13202.9	11434.2	12923.0
52.5°	12953.8	13001.4	12290.5	10894.1	11996.8	13771.0	15231.7	15158.9	13222.5	11386.7	12841.9
55°	13102.1	12892.2	12201.1	10468.9	11193.6	12755.1	13519.1	13407.1	12203.8	10880.2	12643.2
57.5°	11305.6	11630.2	11218.8	9346.6	9187.2	9609.7	9595.7	9939.9	9103.2	9363.4	11509.8
60°	9176.0	9231.9	9385.8	7995.1	6358.0	6212.5	6011.0	5792.7	6125.7	8006.2	10468.9
62.5°	8070.6	8003.5	8551.9	7273.1	4488.7	3758.3	3724.7	3859.0	4726.5	7636.9	9819.6
65°	5865.5	5949.4	6346.8	5644.4	3369.3	2868.4	2818.0	3215.4	3825.4	6120.1	7494.2
67.5°	3582.0	3744.3	3780.6	3481.2	2286.3	1816.1	1743.4	2104.4	2762.0	3959.8	4393.5
70°	1653.8	1849.8	2034.5	1900.2	1323.6	747.1	705.2	884.3	1393.6	2277.9	2331.1
72.5°	500.9	503.7	705.2	736.0	428.2	167.9	148.4	195.9	472.9	752.8	792.0
75°	36.4	39.2	95.1	109.2	81.2	42.0	44.7	53.2	100.8	167.9	125.9
77.5°	2.8	2.8	2.8	14.0	25.1	28.0	36.4	42.0	53.2	61.6	55.9
80°	2.8	0.0	2.8	11.2	19.6	28.0	33.6	39.2	42.0	47.6	42.0
82.5°	0.0	0.0	0.0	8.4	19.6	28.0	30.8	42.0	47.6	55.9	47.6
85°	0.0	0.0	0.0	8.4	19.6	30.8	28.0	14.0	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3
2.5°	7628.5	7519.3	7270.3	7144.3	6847.7	6805.7	6514.6	6467.1	6369.1	6316.0	6187.2
5°	6979.2	6847.7	6441.9	6100.5	5703.2	5426.1	5213.4	5020.3	4908.4	4804.9	4852.4
7.5°	6450.3	6067.0	5616.4	5045.5	4586.6	4289.9	3965.3	3699.5	3542.8	3436.4	3461.6
10°	5896.3	5647.1	5020.3	4379.5	3825.4	3615.5	3360.9	3156.6	2935.5	2745.2	2655.7
12.5°	5722.8	5353.3	4567.0	3914.9	3495.2	3290.9	2999.8	2764.8	2482.2	2249.9	2168.8
15°	5753.5	5398.1	4443.8	3747.1	3251.7	2899.2	2552.2	2261.1	1950.4	1788.2	1704.2
17.5°	6254.4	5638.7	4525.0	3570.7	2913.1	2423.4	1995.3	1625.9	1393.6	1225.7	1189.3
20°	6870.0	6159.3	4698.5	3442.0	2636.1	1928.1	1458.0	1139.0	945.9	917.9	909.5
22.5°	7771.2	7010.0	5070.7	3355.3	2297.5	1502.8	999.0	828.3	775.1	769.6	772.4
25°	9030.4	8076.2	5476.5	3282.5	2042.9	1158.6	817.1	702.4	685.6	677.2	691.2
27.5°	9576.1	8719.8	5692.0	3125.8	1810.6	1043.8	805.9	696.8	649.3	635.2	643.6
30°	10250.5	9148.0	6030.6	2857.1	1469.1	859.1	752.8	758.3	736.0	666.0	643.6
32.5°	11146.0	9682.4	6201.3	2666.9	1312.5	710.8	551.3	506.5	565.2	576.5	596.1
35°	11719.7	10225.4	6288.0	2555.0	1231.3	607.3	467.3	425.4	411.3	414.2	425.4
37.5°	12785.9	10958.6	6397.2	2437.4	1169.7	528.9	422.5	383.4	363.8	363.8	375.0
40°	13424.0	11540.6	6545.4	2373.0	1108.2	481.3	383.4	349.8	333.0	333.0	338.6
42.5°	13583.4	11828.8	6495.1	2350.7	1038.2	470.1	349.8	324.6	305.0	302.3	299.4
45°	13868.8	12268.2	6503.5	2325.4	965.5	428.2	330.2	302.3	274.3	271.5	268.6
47.5°	14182.3	12584.4	6520.3	2227.6	895.5	358.2	344.2	279.8	246.2	240.7	240.7
50°	13913.7	12836.3	6665.8	2129.6	805.9	291.1	338.6	263.1	218.2	209.9	212.7
52.5°	13947.2	13132.9	6973.7	1992.5	694.0	232.3	274.3	249.0	198.7	184.7	187.5
55°	13409.9	12819.4	7015.6	1846.9	542.9	179.1	209.9	218.2	167.9	162.3	162.3
57.5°	11543.4	10855.0	6190.1	1497.1	358.2	148.4	151.1	190.3	145.5	139.9	142.7
60°	9878.4	8714.2	4981.2	987.8	223.9	117.6	109.2	193.1	128.8	125.9	134.3
62.5°	9005.3	7161.1	3777.9	612.8	153.9	89.6	75.5	156.7	111.9	111.9	123.1
65°	6506.3	4810.4	2196.8	321.9	109.2	70.0	55.9	89.6	92.3	95.1	100.8
67.5°	4029.7	2429.0	926.3	156.7	72.7	47.6	36.4	55.9	61.6	61.6	67.2
70°	1989.6	968.2	307.8	89.6	55.9	39.2	25.1	30.8	30.8	28.0	30.8
72.5°	615.6	291.1	78.4	55.9	39.2	25.1	14.0	11.2	5.6	0.0	2.8
75°	70.0	55.9	50.4	39.2	25.1	11.2	2.8	0.0	0.0	0.0	0.0
77.5°	42.0	47.6	47.6	39.2	25.1	8.4	0.0	0.0	0.0	0.0	0.0
80°	33.6	36.4	39.2	36.4	22.4	11.2	0.0	0.0	0.0	0.0	0.0
82.5°	42.0	47.6	53.2	47.6	30.8	14.0	5.6	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	8.4	2.8	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°	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3
2.5°	6134.1	6072.5	6159.3	6030.6	6027.8	6030.6	5994.1	5960.6	6013.7	6156.5	6170.5
5°	4681.8	4813.2	4855.3	4992.3	4916.8	4804.9	4827.3	4751.6	4936.4	5017.6	4953.2
7.5°	3408.5	3400.1	3682.7	3699.5	3735.9	3738.7	3733.0	3584.8	3433.6	3467.2	3567.9
10°	2644.5	2501.8	2638.9	2624.9	2714.4	2689.3	2725.7	2566.1	2619.3	2619.3	2683.6
12.5°	2154.8	2003.7	1978.5	1942.1	1978.5	1992.5	2006.5	1975.7	2065.2	2107.2	2152.0
15°	1645.5	1561.5	1539.1	1469.1	1480.3	1519.5	1553.1	1567.1	1539.1	1603.5	1609.1
17.5°	1194.9	1192.1	1206.1	1203.3	1192.1	1183.7	1180.9	1144.5	1133.3	1139.0	1161.3
20°	906.7	929.1	976.7	1024.3	1049.4	1018.6	976.7	915.1	889.9	895.5	898.3
22.5°	775.1	808.7	873.1	926.3	951.4	895.5	819.9	766.7	755.6	752.8	750.0
25°	702.4	741.6	789.1	805.9	803.2	769.6	713.6	691.2	685.6	680.0	654.8
27.5°	663.2	677.2	685.6	705.2	713.6	691.2	677.2	643.6	638.1	638.1	621.2
30°	640.8	632.4	643.6	629.7	640.8	624.0	626.9	626.9	612.8	618.5	618.5
32.5°	596.1	598.9	598.9	570.9	579.3	559.7	579.3	596.1	598.9	601.7	624.0
35°	436.6	486.9	512.1	512.1	520.5	506.5	503.7	484.2	458.9	433.8	422.5
37.5°	383.4	403.0	436.6	456.2	470.1	458.9	433.8	403.0	389.0	377.8	366.6
40°	341.4	358.2	380.6	403.0	430.9	417.0	377.8	363.8	347.0	347.0	335.8
42.5°	307.8	316.2	330.2	363.8	394.6	366.6	338.6	327.4	319.0	316.2	313.4
45°	277.0	279.8	293.8	321.9	358.2	330.2	302.3	288.2	291.1	293.8	291.1
47.5°	249.0	254.7	263.1	296.6	319.0	305.0	274.3	265.8	265.8	265.8	268.6
50°	215.5	229.5	246.2	274.3	291.1	282.7	257.4	246.2	240.7	240.7	243.5
52.5°	193.1	204.3	226.6	260.3	282.7	268.6	243.5	226.6	215.5	212.7	218.2
55°	167.9	187.5	223.9	249.0	279.8	265.8	237.8	218.2	198.7	195.9	195.9
57.5°	151.1	181.9	215.5	246.2	271.5	260.3	237.8	212.7	187.5	184.7	184.7
60°	142.7	176.3	209.9	237.8	271.5	254.7	235.1	207.1	179.1	179.1	176.3
62.5°	134.3	165.1	198.7	226.6	260.3	246.2	226.6	198.7	170.7	170.7	165.1
65°	111.9	142.7	165.1	190.3	226.6	212.7	193.1	173.5	151.1	145.5	148.4
67.5°	78.4	98.0	120.3	145.5	167.9	162.3	153.9	139.9	120.3	117.6	114.7
70°	39.2	53.2	72.7	98.0	117.6	111.9	106.3	95.1	83.9	81.2	81.2
72.5°	5.6	16.8	30.8	44.7	61.6	64.3	61.6	58.8	55.9	53.2	55.9
75°	0.0	0.0	0.0	11.2	25.1	30.8	36.4	42.0	42.0	36.4	44.7
77.5°	0.0	0.0	0.0	0.0	2.8	14.0	28.0	36.4	44.7	39.2	53.2
80°	0.0	0.0	0.0	0.0	2.8	16.8	28.0	39.2	44.7	39.2	55.9
82.5°	0.0	0.0	0.0	0.0	2.8	19.6	28.0	36.4	42.0	39.2	50.4
85°	0.0	0.0	0.0	0.0	8.4	16.8	11.2	5.6	2.8	2.8	8.4
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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CATALOG NUMBER: GALN-SA4D-840-U-SLL-GRSBK

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3	7214.3
2.5°	6248.8	6447.5	6660.2	6741.4	6993.2	7183.5	7312.2	7589.3	7631.2	7634.0
5°	5020.3	5121.1	5484.8	5655.6	6030.6	6321.6	6632.2	7080.0	7379.4	7401.8
7.5°	3567.9	3847.8	4001.7	4446.6	4908.4	5364.6	5826.3	6346.8	6693.8	6702.2
10°	2871.2	3053.1	3327.3	3660.3	4049.2	4513.8	5129.4	5733.9	6086.5	6173.3
12.5°	2311.5	2630.5	2943.9	3288.1	3584.8	3934.5	4597.7	5403.7	5694.7	5868.2
15°	1779.8	2070.8	2440.2	2843.2	3179.0	3646.3	4401.9	5322.5	5812.3	5871.0
17.5°	1312.5	1572.7	1914.1	2294.7	2798.4	3461.6	4435.4	5733.9	6195.6	6293.6
20°	943.1	1094.1	1362.8	1805.0	2445.8	3246.2	4469.1	6150.9	6853.3	7021.2
22.5°	747.1	808.7	985.1	1376.8	2051.2	3019.4	4706.9	6948.4	7757.1	8000.6
25°	649.3	682.8	766.7	1085.8	1802.2	2997.1	5087.5	7905.5	8960.5	9136.8
27.5°	626.9	632.4	705.2	996.2	1667.9	2848.8	5233.0	8585.5	9710.4	9889.6
30°	660.4	750.0	755.6	842.3	1418.8	2555.0	5308.6	9243.1	10345.6	10477.2
32.5°	570.9	542.9	562.5	652.0	1248.1	2384.2	5451.3	9816.8	11070.5	11162.8
35°	397.4	417.0	461.7	565.2	1091.4	2205.1	5487.7	10449.3	11758.9	11854.1
37.5°	366.6	377.8	414.2	481.3	959.8	2104.4	5437.3	10911.0	12472.5	12604.0
40°	341.4	355.4	375.0	436.6	861.9	1992.5	5367.3	11327.9	12909.0	13233.6
42.5°	321.9	333.0	349.8	417.0	777.9	1880.6	5269.4	11915.6	13300.8	13583.4
45°	299.4	316.2	335.8	405.8	730.4	1805.0	5196.6	11879.2	13527.5	13678.6
47.5°	277.0	305.0	327.4	377.8	716.4	1768.6	5227.4	11742.1	13342.8	13239.3
50°	254.7	291.1	330.2	313.4	682.8	1695.8	5263.8	11929.6	12903.5	12883.9
52.5°	235.1	277.0	307.8	257.4	607.3	1625.9	5616.4	12175.8	13214.0	12953.8
55°	207.1	249.0	246.2	207.1	492.5	1572.7	5893.4	12181.5	13004.1	13102.1
57.5°	187.5	221.1	193.1	173.5	363.8	1315.2	5442.9	10214.2	11132.1	11305.6
60°	173.5	215.5	145.5	137.1	237.8	948.6	4751.6	7911.1	8848.6	9176.0
62.5°	159.5	204.3	114.7	111.9	165.1	674.4	3906.5	6621.0	7625.7	8070.6
65°	139.9	145.5	92.3	86.8	117.6	363.8	2378.6	4558.6	5700.4	5865.5
67.5°	114.7	111.9	75.5	70.0	78.4	176.3	1049.4	2283.5	3304.9	3582.0
70°	92.3	92.3	64.3	55.9	55.9	81.2	274.3	909.5	1494.4	1653.8
72.5°	67.2	70.0	50.4	44.7	42.0	39.2	44.7	181.9	391.7	500.9
75°	58.8	61.6	50.4	39.2	30.8	25.1	19.6	16.8	22.4	36.4
77.5°	64.3	64.3	53.2	36.4	28.0	19.6	11.2	5.6	5.6	2.8
80°	81.2	83.9	70.0	47.6	33.6	22.4	14.0	5.6	2.8	2.8
82.5°	86.8	95.1	78.4	58.8	42.0	25.1	14.0	2.8	0.0	0.0
85°	22.4	36.4	61.6	53.2	42.0	25.1	14.0	2.8	0.0	0.0
87.5°	0.0	2.8	8.4	8.4	11.2	11.2	8.4	2.8	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

(END OF REPORT)