

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: P454321

Luminaire Tested: **GALN-SA5B-830-U-SLL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454321
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-SA5B-830-U-SLL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3000K, 800mA 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: 19519 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G4

Input Watts (W): 204
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

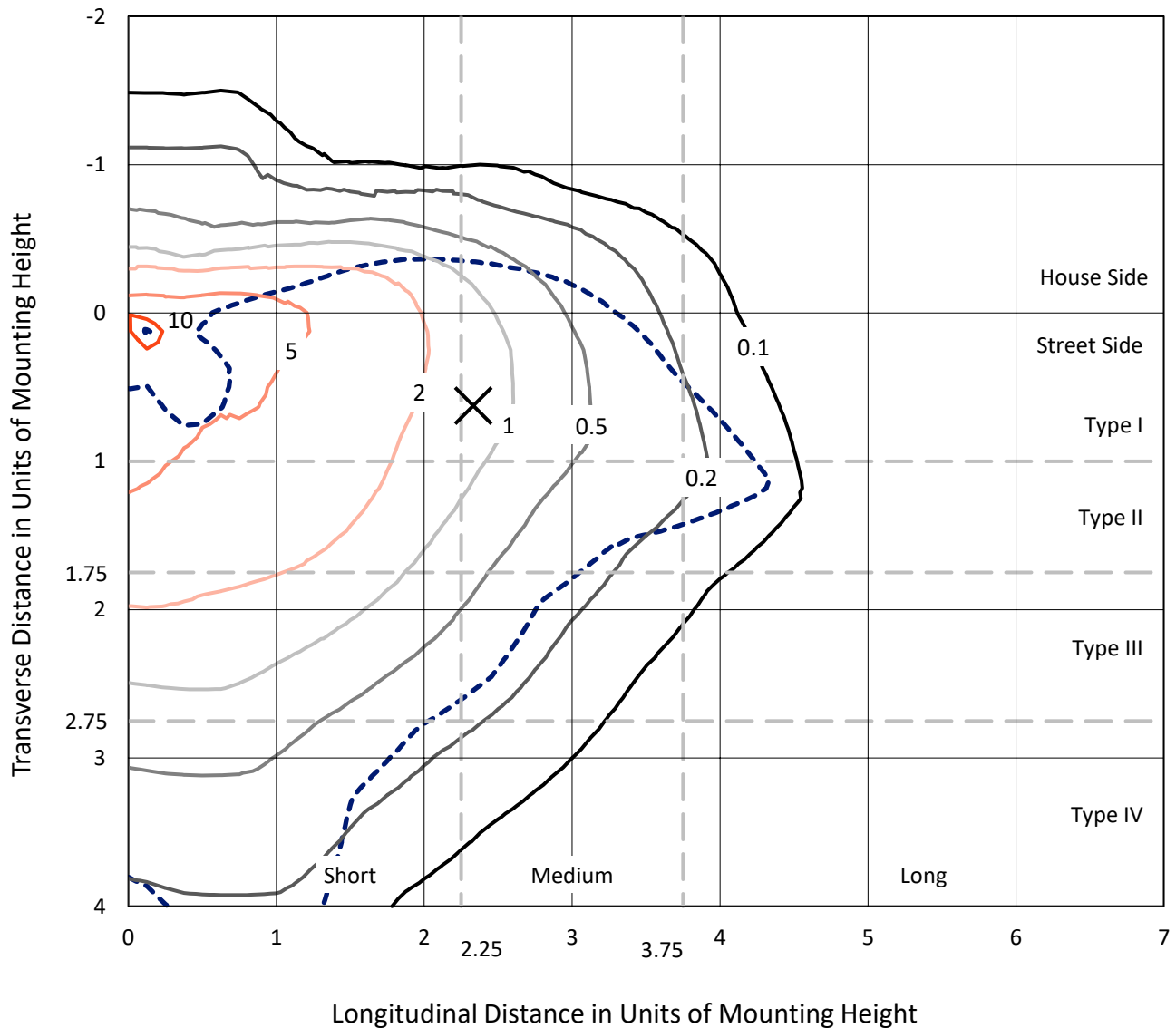


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

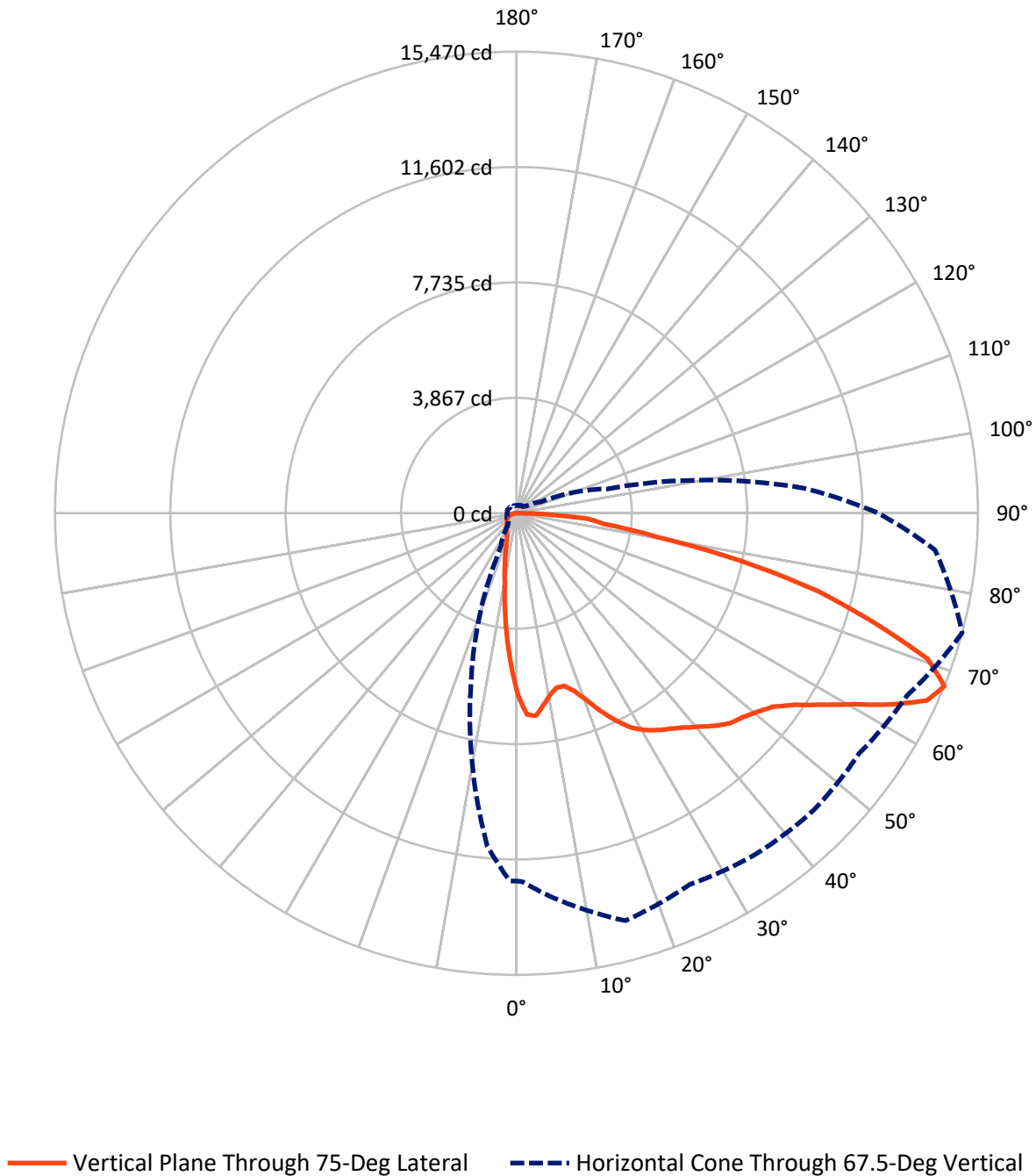


Based on 25 foot mounting height. Maximum calculated value = 12 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3299.1	0.0	3299.1
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	16219.9	0.0	16219.9
	% Fixture	83.1	0.0	83.1
Total	Lumens	19519.0	0.0	19519.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.5	2.4
10°-20°	964.6	4.9
20°-30°	1388.1	7.1
30°-40°	1999.3	10.2
40°-50°	2808.4	14.4
50°-60°	3916.8	20.1
60°-70°	4656.8	23.9
70°-80°	2742.6	14.1
80°-90°	579.9	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°	19519.0	100.0
0°-180°	19519.0	100.0

Coefficient of Utilization



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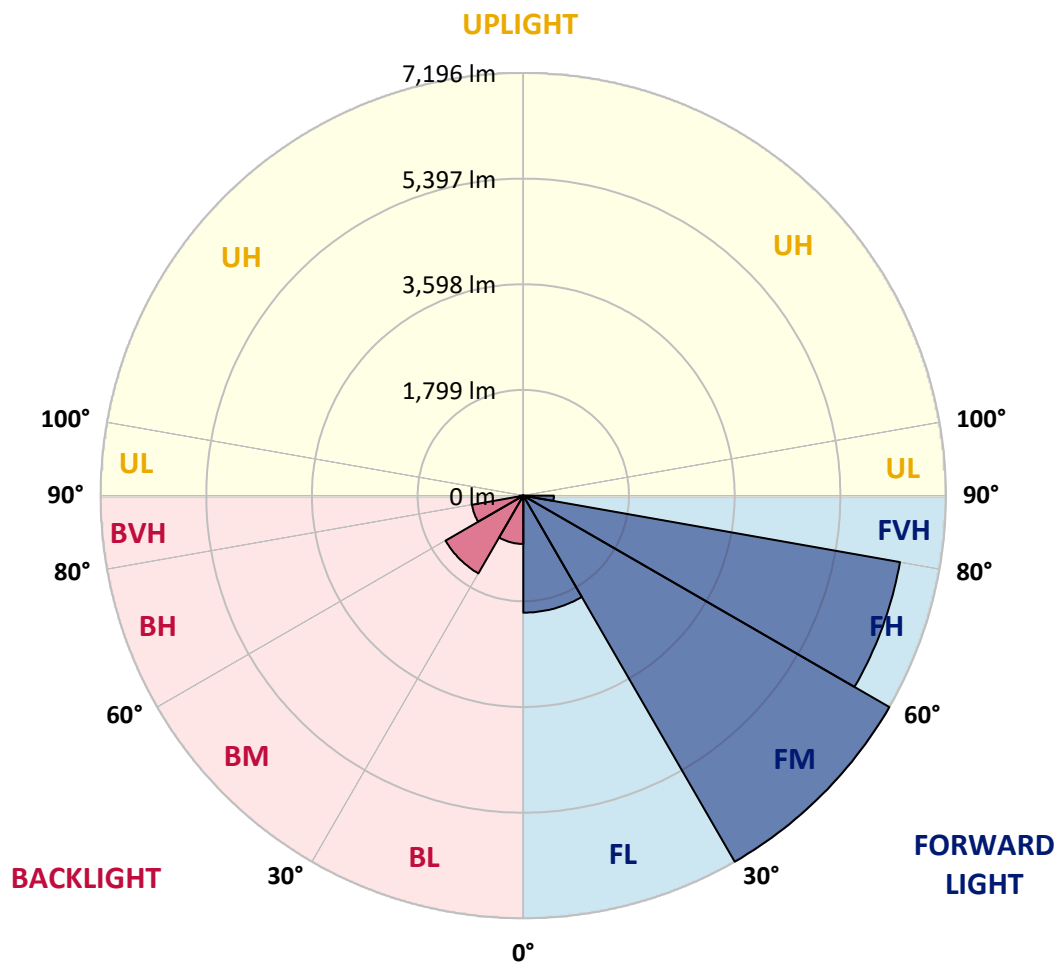
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1992.4	10.2			
FM	(30°-60°)	7195.9	36.9			
FH	(60°-80°)	6511.6	33.4			G3/7500
FVH	(80°-90°)	520.0	2.7			G4/750
BL	(0°-30°)	822.9	4.2	B2/1000		
BM	(30°-60°)	1528.5	7.8	B2/2500		
BH	(60°-80°)	887.7	4.5	B2/1000		G2/1000
BVH	(80°-90°)	60.0	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-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2
2.5°	6575.1	6583.9	6640.2	6804.1	6916.8	6958.1	6986.9	6933.1	6880.5	6752.8	6560.1
5°	6555.1	6606.4	6752.8	7120.8	7411.2	7536.4	7573.9	7412.5	7145.9	6817.9	6423.6
7.5°	6172.0	6240.9	6466.2	7083.3	7595.2	7888.1	7849.3	7557.7	7077.0	6492.5	5941.7
10°	5717.7	5794.0	6065.7	6811.7	7471.3	7874.3	7874.3	7518.9	6880.5	6185.8	5551.2
12.5°	5357.2	5437.3	5747.7	6532.5	7213.4	7595.2	7659.0	7353.6	6739.1	5991.8	5294.6
15°	5238.3	5315.9	5650.1	6363.6	6940.6	7173.4	7194.7	7094.5	6670.2	6005.6	5283.4
17.5°	5386.0	5486.1	5824.1	6413.6	6690.2	6704.0	6720.3	6799.1	6677.7	6257.2	5511.2
20°	5812.8	5920.5	6273.4	6575.1	6471.2	6328.5	6337.3	6540.0	6766.6	6672.7	6055.6
22.5°	6428.6	6522.5	6884.3	6859.2	6378.6	6084.4	6023.1	6306.0	6898.0	7190.9	6635.2
25°	7093.3	7203.4	7619.0	7281.0	6404.9	5939.2	5900.4	6168.3	7034.5	7675.3	7304.8
27.5°	7854.3	7962.0	8289.9	7706.6	6542.5	5928.0	5881.7	6155.8	7157.1	8123.4	7944.4
30°	8420.1	8519.0	8741.8	8064.6	6711.5	6003.1	5945.5	6254.7	7262.3	8430.1	8567.8
32.5°	8864.4	8967.1	9088.5	8287.4	6934.3	6139.5	6033.1	6434.9	7399.9	8664.1	9029.6
35°	9327.5	9449.0	9440.2	8485.2	7142.1	6297.2	6193.3	6695.3	7616.5	8868.2	9615.4
37.5°	9914.6	9963.4	9900.8	8662.9	7391.2	6581.3	6523.8	7082.0	7924.4	9114.8	10300.1
40°	10510.4	10608.0	10286.3	8878.2	7694.1	7115.8	7109.6	7654.0	8289.9	9403.9	10963.5
42.5°	11021.1	11103.7	10646.8	9065.9	8060.8	7767.9	7815.5	8421.3	8769.3	9739.3	11496.7
45°	11405.3	11479.2	10979.8	9247.4	8544.0	8521.5	8801.8	9243.7	9373.9	10041.0	11809.6
47.5°	11732.0	11803.4	11211.3	9522.8	9141.0	9421.4	9909.6	10101.1	9890.8	10213.7	12160.1
50°	12007.4	12028.7	11370.3	9850.7	9882.0	10524.1	10997.3	11121.2	10401.5	10461.6	12464.3
52.5°	12294.0	12266.5	11644.4	10263.8	10683.1	11570.6	11914.8	12043.7	10890.9	10767.0	12907.4
55°	12936.1	12962.4	12259.0	10784.5	11492.9	12598.2	13051.3	12927.4	11432.9	11329.0	13470.6
57.5°	13712.2	13689.7	13123.9	11599.3	12317.8	13554.5	13892.4	13693.4	12156.3	12101.3	14041.4
60°	14013.8	14043.9	13847.4	12475.5	13131.4	14391.8	14737.3	14428.1	13023.8	12998.7	14472.0
62.5°	13710.9	13879.9	14012.6	13255.3	13824.8	15007.7	15350.6	14997.7	13928.7	14110.2	14773.6
65°	13107.6	13143.9	13595.8	13916.2	14159.0	15109.1	15288.1	15100.3	14684.7	15122.8	14759.8
67.5°	12324.1	12355.4	12884.8	14132.7	13728.5	13957.5	14082.7	14027.6	14450.7	15469.5	14080.2
70°	11578.1	11553.0	12112.5	13580.8	11951.1	11603.1	11707.0	11534.3	12469.3	14622.2	12747.1
72.5°	10126.1	10216.2	10817.0	12046.2	9462.7	8897.0	9123.5	8676.7	9590.4	12523.1	10346.4
75°	7931.9	7953.2	8955.8	10109.8	7138.3	6245.9	6552.6	6366.1	7346.1	10446.5	7144.6
77.5°	5492.4	5444.8	6522.5	7721.6	5090.6	4572.4	4577.4	4488.5	5129.4	7691.6	4854.0
80°	3488.4	3415.8	4083.0	4770.2	3498.5	3742.5	3619.9	3616.1	3339.5	4745.1	2935.2
82.5°	1885.0	1965.1	2579.7	2990.3	2509.6	2892.6	2651.1	2573.5	2291.8	2970.2	1877.5
85°	858.7	933.8	1375.6	2034.0	1906.3	1927.6	1288.0	1519.5	1896.3	2412.0	1002.6
87.5°	83.9	107.6	284.1	960.0	650.9	513.2	191.5	369.2	476.9	857.4	80.1
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°	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2
2.5°	6481.2	6416.1	6194.6	6011.8	5817.8	5670.1	5477.4	5348.4	5259.6	5125.6	5109.4
5°	6183.3	6024.3	5638.8	5245.8	4906.6	4651.3	4392.2	4154.3	4014.1	3970.3	3914.0
7.5°	5681.4	5413.5	4917.9	4467.3	4078.0	3697.5	3404.6	3196.8	3057.9	2976.5	2878.9
10°	5268.3	4957.9	4354.6	3802.6	3482.2	3245.6	2987.8	2765.0	2593.5	2447.0	2366.9
12.5°	4990.5	4640.0	3961.6	3513.5	3265.6	3014.1	2712.4	2462.1	2209.2	2042.7	1971.4
15°	4906.6	4536.1	3840.2	3369.5	3014.1	2684.9	2346.9	2020.2	1769.9	1612.2	1559.6
17.5°	5111.9	4663.8	3838.9	3178.0	2718.7	2325.6	1892.5	1585.9	1329.3	1211.6	1174.1
20°	5494.9	4909.1	3850.2	2989.0	2398.2	1845.0	1376.9	1125.3	1002.6	952.5	933.8
22.5°	6029.4	5283.4	3884.0	2802.5	2047.8	1416.9	1031.4	903.7	859.9	851.1	847.4
25°	6687.7	5746.5	3997.9	2634.8	1752.4	1081.5	862.4	804.8	779.8	771.0	769.8
27.5°	7293.6	6344.8	4135.6	2490.8	1467.0	932.5	779.8	731.0	705.9	704.7	707.2
30°	7840.5	6845.5	4250.7	2329.4	1250.4	828.6	726.0	677.2	653.4	652.1	659.6
32.5°	8313.7	7257.3	4335.8	2170.4	1130.3	764.8	677.2	624.6	604.6	600.8	604.6
35°	8819.4	7667.8	4297.0	2046.5	1061.4	712.2	640.9	589.5	565.8	554.5	554.5
37.5°	9396.4	8090.9	4230.7	1943.9	1030.1	668.4	609.6	559.5	535.7	524.5	523.2
40°	10026.0	8513.9	4139.3	1852.5	998.8	642.1	588.3	535.7	506.9	495.7	493.2
42.5°	10581.7	8875.7	4064.2	1792.4	947.5	647.1	569.5	518.2	481.9	466.9	465.6
45°	11064.9	9239.9	4050.4	1757.4	905.0	639.6	564.5	504.4	461.9	445.6	443.1
47.5°	11442.9	9619.2	4129.3	1737.3	858.7	599.6	597.1	495.7	444.3	426.8	424.3
50°	11903.5	10157.4	4309.5	1696.0	816.1	562.0	630.8	494.4	430.6	408.0	401.8
52.5°	12516.8	10858.3	4553.6	1622.2	754.8	527.0	602.1	494.4	414.3	391.8	384.3
55°	13444.3	11752.0	4792.7	1518.3	668.4	480.6	543.2	479.4	390.5	370.5	365.5
57.5°	14058.9	12405.4	4945.4	1374.3	560.8	446.9	468.1	455.6	366.7	345.5	345.5
60°	14090.2	12580.7	4872.8	1192.9	493.2	415.6	406.8	459.4	345.5	322.9	320.4
62.5°	13729.7	12151.3	4494.8	1030.1	456.9	381.8	368.0	403.0	324.2	301.7	297.9
65°	13166.4	11056.1	3838.9	952.5	436.8	351.7	331.7	330.4	301.7	280.4	275.4
67.5°	12131.3	9661.7	3154.2	907.5	426.8	317.9	299.2	292.9	275.4	257.8	255.3
70°	10605.5	8092.1	2529.7	888.7	421.8	282.9	267.9	260.3	245.3	231.6	230.3
72.5°	8251.1	6563.8	2087.8	876.2	419.3	250.3	234.1	224.1	215.3	202.8	202.8
75°	5926.7	4829.0	1593.4	789.8	388.0	215.3	197.8	191.5	179.0	169.0	171.5
77.5°	3736.3	3251.9	1048.9	580.8	300.4	172.7	157.7	154.0	143.9	130.2	138.9
80°	2523.4	2286.8	612.1	365.5	189.0	126.4	121.4	120.2	108.9	93.9	95.1
82.5°	1717.3	1684.8	317.9	207.8	108.9	73.8	71.3	73.8	61.3	50.1	50.1
85°	670.9	916.2	150.2	81.4	35.0	11.3	16.3	17.5	10.0	5.0	6.3
87.5°	12.5	93.9	3.8	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°	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2
2.5°	5084.3	5073.1	5091.8	5011.7	5028.0	5058.0	5073.1	5081.8	5205.7	5177.0	5255.8
5°	3966.6	3955.3	4027.9	4037.9	4075.5	4068.0	4104.3	4113.0	4158.1	4174.4	4284.5
7.5°	2885.1	2933.9	3016.6	3059.1	3122.9	3143.0	3124.2	3170.5	3076.6	3144.2	3164.3
10°	2318.1	2259.3	2224.2	2321.9	2334.4	2427.0	2389.5	2359.4	2414.5	2417.0	2469.6
12.5°	1930.1	1803.7	1719.8	1747.3	1777.4	1817.4	1823.7	1883.8	1923.8	1961.4	1992.7
15°	1513.3	1469.5	1393.1	1355.6	1398.1	1414.4	1453.2	1503.3	1545.8	1557.1	1599.7
17.5°	1161.6	1169.1	1156.6	1134.0	1160.3	1172.8	1175.3	1176.6	1187.8	1180.3	1242.9
20°	935.0	961.3	992.6	997.6	1006.4	1012.6	1001.3	958.8	960.0	986.3	1006.4
22.5°	846.1	851.1	886.2	897.5	925.0	913.7	881.2	861.2	858.7	864.9	874.9
25°	776.0	783.6	808.6	826.1	847.4	827.4	803.6	784.8	782.3	788.6	798.6
27.5°	713.5	724.7	747.3	764.8	784.8	766.0	743.5	727.2	726.0	724.7	731.0
30°	663.4	675.9	692.2	712.2	726.0	709.7	688.4	679.7	678.4	675.9	678.4
32.5°	613.3	633.4	649.6	659.6	673.4	660.9	644.6	639.6	630.8	623.3	619.6
35°	557.0	578.3	603.3	615.8	629.6	617.1	605.8	584.5	569.5	568.3	570.8
37.5°	524.5	533.2	553.2	574.5	588.3	582.0	560.8	539.5	535.7	535.7	538.2
40°	495.7	499.4	508.2	535.7	560.8	542.0	515.7	509.4	509.4	508.2	509.4
42.5°	466.9	470.6	470.6	491.9	532.0	501.9	481.9	481.9	481.9	483.1	486.9
45°	440.6	441.8	440.6	455.6	493.2	468.1	454.4	458.1	460.6	463.1	465.6
47.5°	418.1	419.3	418.1	430.6	449.4	439.3	431.8	436.8	441.8	445.6	448.1
50°	398.0	396.8	399.3	406.8	415.6	418.1	413.1	420.6	423.1	428.1	434.3
52.5°	380.5	379.3	381.8	385.5	398.0	398.0	398.0	404.3	409.3	414.3	423.1
55°	360.5	361.7	365.5	370.5	386.8	384.3	385.5	390.5	395.5	403.0	408.0
57.5°	341.7	344.2	349.2	356.7	373.0	371.7	373.0	375.5	381.8	385.5	390.5
60°	320.4	325.4	331.7	336.7	353.0	351.7	358.0	363.0	366.7	366.7	369.2
62.5°	299.2	306.7	312.9	316.7	334.2	335.5	344.2	348.0	350.5	348.0	351.7
65°	277.9	289.1	291.6	296.6	314.2	315.4	325.4	334.2	331.7	329.2	335.5
67.5°	256.6	270.4	269.1	275.4	292.9	295.4	304.2	319.2	314.2	311.7	316.7
70°	232.8	242.8	244.1	247.8	271.6	267.9	281.6	295.4	291.6	292.9	292.9
72.5°	206.5	215.3	215.3	222.8	247.8	241.6	252.8	267.9	267.9	266.6	266.6
75°	175.2	180.2	185.2	196.5	222.8	215.3	222.8	236.6	239.1	236.6	236.6
77.5°	141.4	149.0	151.5	166.5	185.2	184.0	191.5	197.8	202.8	200.3	200.3
80°	100.1	107.6	117.7	133.9	145.2	149.0	152.7	157.7	160.2	160.2	162.7
82.5°	56.3	67.6	76.4	92.6	97.6	116.4	115.2	118.9	115.2	101.4	112.7
85°	12.5	23.8	33.8	42.6	48.8	67.6	71.3	80.1	66.3	61.3	61.3
87.5°	0.0	0.0	0.0	0.0	0.0	10.0	20.0	27.5	23.8	20.0	20.0
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-SA5B-830-U-SLL

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2	6098.2
2.5°	5322.2	5431.1	5562.5	5789.0	5948.0	6119.5	6292.2	6476.2	6525.0	6575.1
5°	4314.5	4528.6	4645.0	4949.2	5268.3	5673.9	6005.6	6368.6	6520.0	6555.1
7.5°	3268.1	3413.3	3718.7	4026.7	4422.2	4847.8	5355.9	5921.7	6098.2	6172.0
10°	2591.0	2788.7	3056.6	3387.1	3733.8	4191.9	4765.2	5426.0	5676.4	5717.7
12.5°	2205.5	2425.8	2717.4	3066.6	3394.6	3740.0	4318.3	5000.5	5268.3	5357.2
15°	1763.6	2030.2	2366.9	2734.9	3091.7	3469.7	4055.5	4825.2	5134.4	5238.3
17.5°	1385.6	1600.9	1965.1	2364.4	2787.5	3265.6	4000.4	4909.1	5289.6	5386.0
20°	1060.2	1214.1	1520.8	1942.6	2438.3	3064.1	4014.1	5225.8	5681.4	5812.8
22.5°	916.2	995.1	1181.6	1583.4	2137.9	2888.9	4070.5	5660.1	6209.6	6428.6
25°	829.9	871.2	976.3	1239.2	1851.2	2718.7	4199.4	6244.6	6948.1	7093.3
27.5°	756.0	786.1	851.1	1040.1	1590.9	2560.9	4349.6	6893.0	7637.8	7854.3
30°	685.9	726.0	787.3	923.7	1424.4	2417.0	4538.6	7418.7	8218.5	8420.1
32.5°	632.1	672.2	728.5	842.4	1283.0	2265.5	4651.3	7880.6	8692.9	8864.4
35°	588.3	622.1	680.9	777.3	1175.3	2150.4	4628.7	8247.3	9152.3	9327.5
37.5°	557.0	585.8	644.6	716.0	1094.0	2030.2	4617.5	8731.7	9711.8	9914.6
40°	528.2	558.3	612.1	675.9	1012.6	1888.8	4623.7	9212.4	10307.6	10510.4
42.5°	505.7	539.5	583.3	664.6	928.7	1774.9	4623.7	9630.4	10825.8	11021.1
45°	486.9	523.2	565.8	663.4	862.4	1688.5	4592.4	9989.7	11238.9	11405.3
47.5°	470.6	510.7	572.0	640.9	846.1	1625.9	4564.9	10277.6	11575.6	11732.0
50°	459.4	506.9	608.3	614.6	851.1	1607.2	4697.6	10640.6	11872.2	12007.4
52.5°	450.6	508.2	607.1	575.8	842.4	1619.7	4974.2	11207.6	12284.0	12294.0
55°	433.1	506.9	575.8	532.0	806.1	1641.0	5329.7	12031.2	12928.6	12936.1
57.5°	415.6	493.2	534.5	494.4	732.2	1641.0	5757.7	12811.0	13705.9	13712.2
60°	398.0	513.2	469.4	461.9	635.9	1610.9	6209.6	13153.9	13950.0	14013.8
62.5°	380.5	516.9	419.3	433.1	565.8	1538.3	6546.3	12774.7	13619.6	13710.9
65°	360.5	416.8	386.8	403.0	529.5	1416.9	6439.9	12080.0	12998.7	13107.6
67.5°	336.7	353.0	351.7	371.7	516.9	1237.9	5879.2	11201.3	12330.3	12324.1
70°	307.9	316.7	320.4	341.7	493.2	1099.0	4899.1	10061.0	11437.9	11578.1
72.5°	277.9	285.4	289.1	307.9	469.4	1020.1	3802.6	8490.2	9907.1	10126.1
75°	245.3	250.3	255.3	271.6	444.3	903.7	2708.6	6481.2	7587.7	7931.9
77.5°	211.5	211.5	217.8	234.1	374.3	746.0	1817.4	4546.1	5140.7	5492.4
80°	171.5	172.7	170.2	187.8	275.4	510.7	1032.6	3036.6	3420.8	3488.4
82.5°	131.4	127.7	128.9	137.7	205.3	348.0	550.7	1886.3	1922.6	1885.0
85°	82.6	82.6	80.1	90.1	131.4	181.5	300.4	1155.3	902.5	858.7
87.5°	33.8	27.5	31.3	36.3	62.6	73.8	117.7	237.8	91.4	83.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)