

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: P298928

Luminaire Tested: **GLNA-AF-03-LED-E1-SLL-7030-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P298928
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191289)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-SLL-7030-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Left OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12438.8 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 124
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: 25 FT

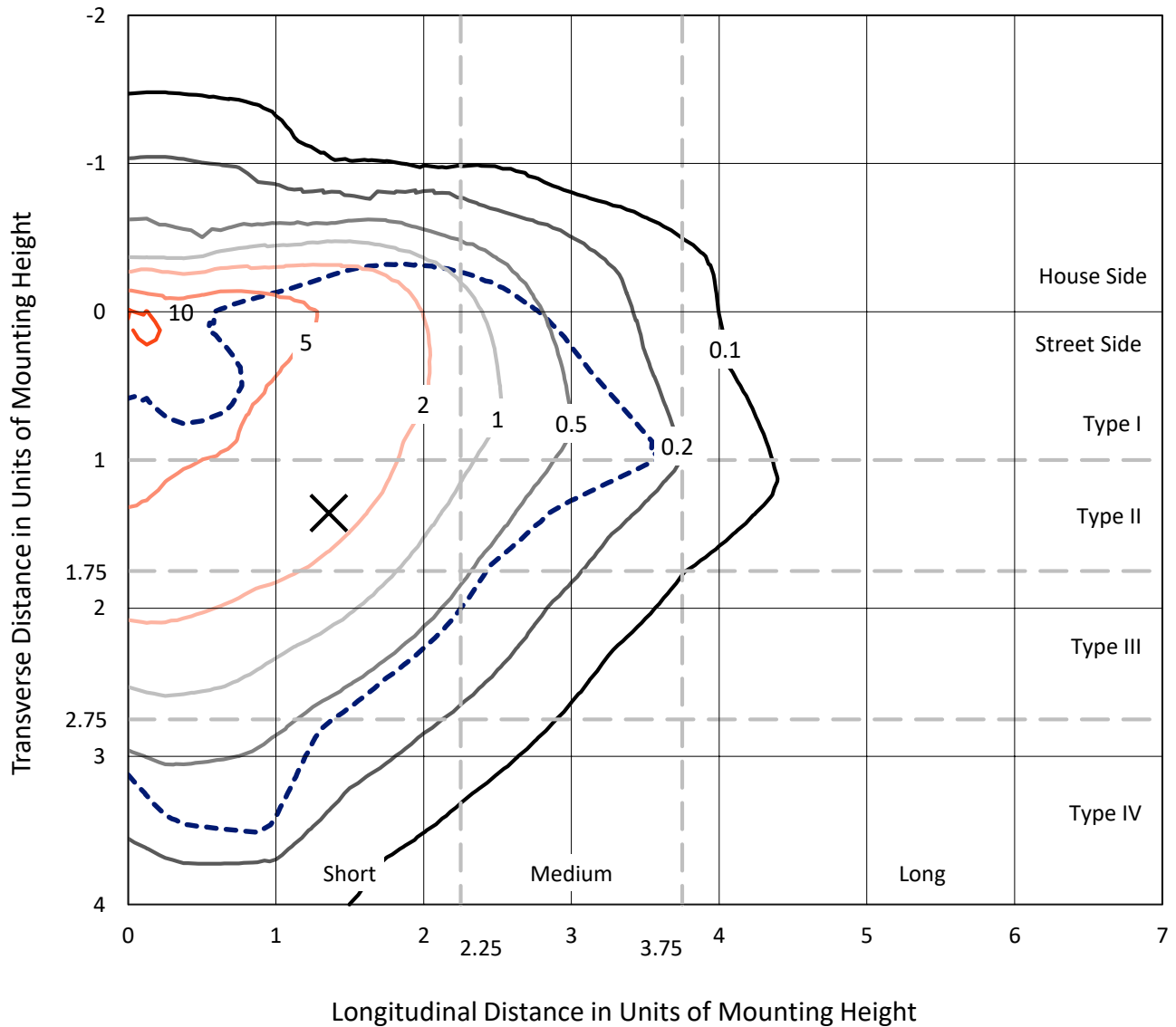


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

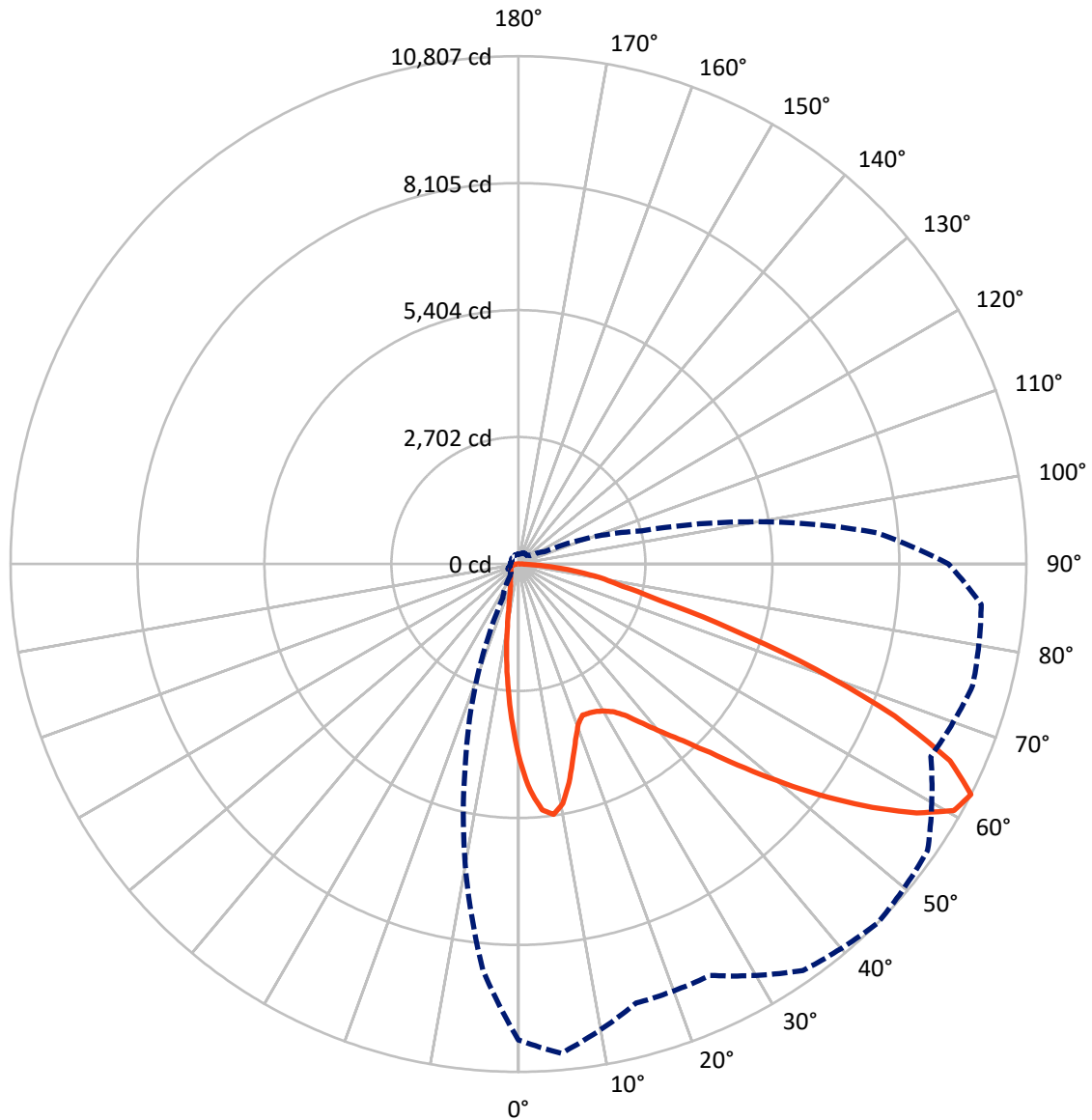


Based on 20 foot mounting height. Maximum calculated value = 12.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2058.4	0.0	2058.4
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	10380.3	0.0	10380.3
	% Fixture	83.5	0.0	83.5
Total	Lumens	12438.8	0.0	12438.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.9	2.5
10°-20°	561.0	4.5
20°-30°	817.9	6.6
30°-40°	1259.7	10.1
40°-50°	1853.9	14.9
50°-60°	2719.3	21.9
60°-70°	3039.8	24.4
70°-80°	1488.2	12.0
80°-90°	392.9	3.2
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°	12438.8	100.0
0°-180°	12438.8	100.0



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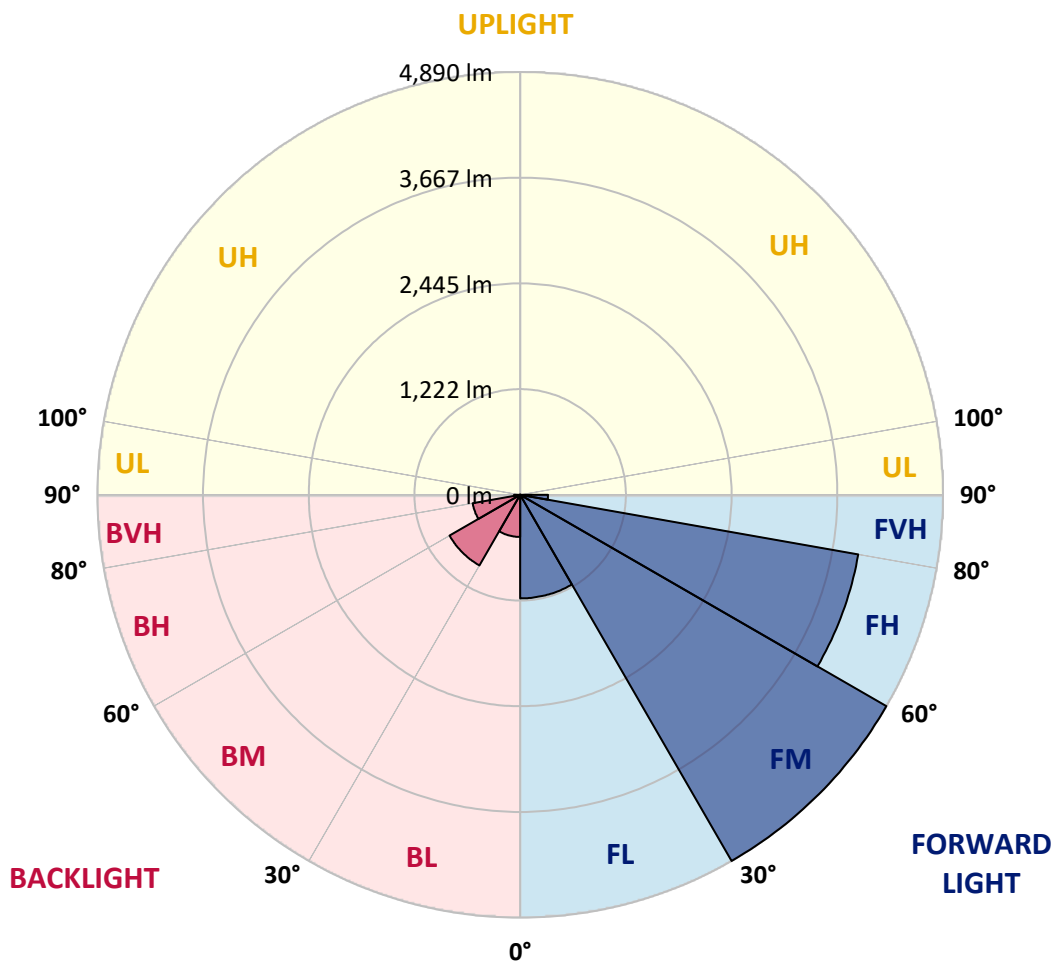
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1197.8	9.6			
FM (30°-60°)	4889.8	39.3			
FH (60°-80°)	3970.0	31.9			G2/5000
FVH (80°-90°)	322.7	2.6			G3/500
BL (0°-30°)	487.0	3.9	B1/500		
BM (30°-60°)	943.2	7.6	B1/1000		
BH (60°-80°)	558.0	4.5	B2/1000		G2/1000
BVH (80°-90°)	70.2	0.6			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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6
2.5°	4366.4	4436.4	4572.4	4674.1	4798.2	4826.8	4866.5	4827.5	4758.4	4666.8	4636.8
5°	4106.1	4255.2	4585.3	4876.1	5134.5	5254.8	5288.5	5189.1	4988.9	4725.6	4564.9
7.5°	3688.3	3900.3	4347.3	4775.5	5156.2	5381.3	5375.8	5145.3	4776.9	4348.0	4090.3
10°	3327.8	3570.0	4083.0	4561.6	4965.5	5183.7	5099.4	4805.1	4365.1	3871.4	3592.0
12.5°	3126.3	3363.6	3883.9	4364.4	4702.3	4777.5	4713.2	4424.6	4010.2	3511.2	3266.3
15°	3091.2	3352.0	3804.6	4195.7	4385.1	4319.6	4242.8	4113.6	3820.8	3394.9	3139.8
17.5°	3242.6	3529.6	3895.6	4078.1	4045.9	3931.6	3909.8	3924.3	3853.9	3524.0	3230.2
20°	3532.5	3877.0	4112.3	4022.8	3788.2	3630.8	3636.4	3855.9	4064.3	3851.7	3515.8
22.5°	3939.1	4332.5	4424.6	4052.1	3679.4	3492.8	3538.0	3893.6	4400.2	4330.5	3901.6
25°	4465.7	4824.1	4757.8	4158.7	3690.3	3509.8	3546.0	4023.5	4796.6	4809.1	4379.1
27.5°	4975.8	5308.3	5037.2	4300.3	3735.6	3550.2	3598.2	4227.7	5175.5	5328.7	4924.7
30°	5373.8	5605.1	5148.0	4429.5	3824.4	3628.8	3688.3	4421.9	5348.0	5679.4	5344.5
32.5°	5703.4	5869.4	5324.5	4589.5	3987.8	3752.5	3857.2	4657.9	5596.2	6013.3	5755.3
35°	6124.5	6171.7	5544.0	4768.0	4240.1	3968.0	4097.9	4889.0	5832.8	6350.2	6160.2
37.5°	6618.4	6557.5	5751.1	5012.2	4566.4	4305.0	4412.4	5142.7	6027.5	6732.5	6573.7
40°	7106.5	6960.0	6011.3	5390.8	5042.3	4702.3	4829.5	5413.5	6209.5	7115.4	6978.0
42.5°	7521.6	7304.7	6267.4	5807.3	5485.2	5140.7	5292.5	5686.3	6383.1	7442.1	7328.7
45°	7828.6	7559.1	6511.6	6207.3	6095.8	5723.1	5795.1	5998.6	6571.1	7715.1	7617.2
47.5°	8102.7	7814.8	6787.7	6610.8	6629.9	6480.7	6365.1	6362.4	6792.8	7938.0	7890.0
50°	8469.8	8169.7	7084.5	7026.3	7431.2	7332.0	7077.0	6787.1	7073.0	8191.0	8185.5
52.5°	8975.9	8732.0	7447.0	7474.3	8179.5	8244.3	7928.2	7297.4	7511.8	8655.2	8622.6
55°	9574.4	9431.9	7940.9	7989.3	9096.9	9143.5	8829.4	7935.1	8157.5	9327.5	9236.5
57.5°	10041.2	10011.2	8482.3	8607.5	9782.1	9991.5	9702.9	8673.8	8884.9	9893.6	9665.2
60°	10227.2	10372.8	9058.7	9231.0	10416.1	10647.6	10394.8	9322.4	9529.8	10128.2	9635.9
62.5°	10126.9	10452.1	9672.7	9658.3	10557.5	10807.0	10629.2	9683.6	10007.9	9886.0	9148.4
65°	9662.5	10167.0	10029.0	9548.2	10073.4	10093.8	10036.3	9522.2	10120.7	9120.9	8205.9
67.5°	8651.0	9377.3	9559.7	8604.8	8767.3	8634.1	8537.5	8638.8	9532.4	7974.2	6896.5
70°	7046.3	8139.1	8226.3	6882.3	6808.4	6718.7	6526.7	7082.5	8372.2	6535.6	5472.3
72.5°	5181.1	6329.8	6598.4	5047.7	4705.8	4724.0	4572.4	5337.4	6807.0	4854.8	4085.6
75°	3544.7	4583.3	5162.7	3522.1	3112.1	3119.4	3100.1	3782.0	5421.7	3377.1	3057.2
77.5°	2589.5	3274.6	3893.6	2367.8	2298.8	2256.4	2246.1	2646.1	4156.7	2452.1	2374.0
80°	2077.9	2419.3	2615.3	1641.0	1764.7	1761.4	1704.5	1819.5	2714.5	1793.5	1775.6
82.5°	1441.5	1859.2	2119.0	1286.1	1191.1	1171.1	1185.1	1355.1	1918.7	1226.0	1165.8
85°	760.5	1234.8	2098.5	1139.8	707.0	564.0	701.7	1109.6	1662.4	649.7	568.7
87.5°	97.2	356.9	1389.3	454.8	279.0	150.3	333.2	624.9	1067.5	132.5	115.6
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6
2.5°	4559.6	4468.5	4349.6	4239.2	4125.2	4011.5	3863.2	3770.2	3706.1	3693.6	3666.6
5°	4448.8	4146.5	3918.1	3720.5	3541.4	3288.1	3148.0	3031.7	2969.6	2963.6	2948.5
7.5°	3937.8	3520.7	3212.4	2932.7	2679.0	2474.6	2248.8	2143.8	2100.5	2110.7	2121.0
10°	3406.4	2940.3	2586.0	2300.1	2076.6	1904.3	1723.2	1600.9	1515.9	1498.8	1495.4
12.5°	3018.2	2506.7	2162.9	1960.9	1788.2	1626.0	1433.9	1289.4	1179.6	1141.8	1116.7
15°	2853.9	2294.8	1934.5	1717.0	1526.1	1320.3	1141.8	990.7	889.7	856.8	838.4
17.5°	2889.0	2235.9	1777.1	1498.8	1254.8	1039.9	815.1	685.7	624.9	609.3	609.3
20°	3072.3	2225.1	1647.0	1297.9	993.3	744.5	560.0	486.1	466.4	464.4	469.7
22.5°	3329.4	2263.5	1550.3	1123.6	772.0	543.6	436.2	408.9	400.0	402.2	408.2
25°	3712.3	2392.7	1479.9	968.2	605.8	445.1	388.9	372.7	368.5	374.0	381.6
27.5°	4166.2	2521.8	1435.9	851.3	511.4	406.9	369.8	352.9	355.6	362.5	369.1
30°	4564.9	2627.9	1366.9	768.0	482.1	408.9	369.8	346.7	344.1	345.4	347.4
32.5°	4922.7	2699.6	1286.1	688.6	415.8	363.1	345.4	342.1	326.7	321.2	322.1
35°	5231.0	2699.6	1237.7	642.2	372.7	322.1	293.4	276.4	268.6	269.3	277.0
37.5°	5528.5	2645.5	1213.8	616.0	349.4	306.3	281.0	265.9	255.7	253.7	255.0
40°	5790.8	2566.9	1186.4	605.1	331.6	296.8	273.0	260.4	249.5	246.2	246.8
42.5°	6001.5	2503.2	1156.3	590.9	320.5	289.9	267.3	256.4	244.2	240.6	240.0
45°	6229.2	2482.1	1116.7	562.0	326.1	290.6	265.9	254.4	242.0	238.0	236.6
47.5°	6529.3	2548.5	1075.7	527.9	337.8	294.1	267.9	254.4	241.3	238.0	236.6
50°	6907.4	2704.3	1023.5	477.9	326.1	303.7	267.3	252.2	241.3	238.0	235.3
52.5°	7393.0	2915.0	955.4	420.6	319.2	326.7	265.9	248.2	238.0	233.3	228.4
55°	7983.1	3087.2	873.7	373.4	303.7	320.5	263.9	243.5	232.6	225.7	221.5
57.5°	8415.2	3149.4	769.4	342.7	281.7	310.3	261.0	237.3	225.7	220.2	214.9
60°	8329.8	3029.0	681.0	323.4	268.6	280.4	259.0	231.7	219.5	215.5	210.4
62.5°	7645.4	2714.5	624.2	314.5	260.4	255.7	261.0	226.4	214.2	209.8	208.4
65°	6619.0	2250.1	601.8	312.5	253.7	241.3	242.8	220.2	207.8	204.4	203.1
67.5°	5459.9	1816.2	582.0	319.2	244.8	231.1	224.4	212.0	201.6	198.2	195.6
70°	4305.6	1510.5	572.9	315.2	234.0	220.9	213.5	203.1	194.2	190.7	188.7
72.5°	3467.2	1275.9	568.0	311.0	219.5	207.1	200.2	191.3	181.8	180.5	178.5
75°	2934.3	1003.1	520.5	298.1	203.1	190.7	186.0	177.8	168.3	168.3	166.9
77.5°	2263.5	725.4	432.8	263.9	186.0	172.3	168.3	162.0	151.2	153.2	152.5
80°	1671.9	473.2	338.5	218.9	164.9	151.8	149.6	143.6	131.9	134.7	134.7
82.5°	1145.4	310.3	243.5	179.1	140.7	128.5	128.5	122.3	109.4	110.8	115.0
85°	575.1	213.5	181.8	138.7	109.4	103.2	103.2	98.6	85.5	86.1	91.7
87.5°	175.1	128.5	120.3	99.2	78.6	77.2	73.7	70.4	62.2	61.5	65.0
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6
2.5°	3624.6	3585.5	3538.7	3434.6	3399.7	3397.5	3429.3	3396.2	3459.2	3432.6	3461.9
5°	2922.9	2885.0	2832.2	2699.6	2618.8	2564.0	2538.3	2461.7	2517.0	2476.6	2510.3
7.5°	2149.8	2158.7	2123.8	2045.9	1870.1	1782.0	1730.1	1683.4	1723.8	1719.6	1784.0
10°	1511.2	1534.9	1510.5	1432.0	1289.4	1241.1	1250.6	1269.0	1321.9	1348.9	1448.2
12.5°	1087.9	1086.6	1070.8	1000.4	906.8	912.1	951.2	983.1	1031.7	1060.6	1161.6
15°	812.2	800.0	793.1	735.6	682.3	694.1	713.2	716.5	747.4	764.5	846.6
17.5°	614.0	620.2	627.5	586.7	546.3	538.7	523.9	505.2	514.3	517.6	558.5
20°	487.5	512.1	530.7	501.9	461.0	438.8	419.8	407.5	407.5	406.9	418.4
22.5°	426.0	443.7	463.7	443.7	406.9	387.6	376.7	367.1	365.8	365.8	376.7
25°	392.7	405.5	424.6	411.1	383.6	369.1	358.9	346.7	342.1	340.5	348.1
27.5°	376.0	381.6	391.1	378.7	355.6	348.7	346.1	335.2	328.7	325.4	333.2
30°	348.1	346.7	347.4	335.2	316.5	315.9	320.5	322.7	320.5	319.9	331.6
32.5°	322.1	319.2	318.5	307.7	290.6	286.6	290.6	294.8	299.4	306.3	319.9
35°	289.2	296.1	300.1	290.6	269.9	257.7	253.0	245.5	241.3	241.3	257.0
37.5°	263.3	279.0	285.2	276.4	253.7	236.6	228.4	227.1	227.7	230.4	245.5
40°	254.4	265.9	271.3	262.6	240.0	224.4	219.5	218.2	219.5	223.7	238.6
42.5°	248.8	257.0	256.4	245.5	227.1	216.2	213.5	212.0	213.5	217.5	234.0
45°	244.2	249.5	244.2	231.1	214.2	208.4	209.1	208.4	209.8	214.2	229.7
47.5°	240.0	242.0	235.3	222.2	204.4	203.1	205.8	207.8	209.1	212.9	229.1
50°	234.0	234.0	227.7	214.2	196.2	196.9	200.2	205.1	205.8	209.8	223.1
52.5°	226.4	225.7	221.5	208.4	189.3	191.3	191.3	196.9	198.2	203.1	216.9
55°	220.2	218.9	216.9	204.4	183.4	186.7	184.7	186.7	190.0	194.9	209.8
57.5°	214.9	212.0	212.0	200.9	178.5	179.8	175.1	177.8	181.8	186.0	201.6
60°	209.1	206.4	207.8	196.2	170.9	169.6	167.6	172.9	174.5	179.1	194.9
62.5°	203.1	200.9	201.6	190.7	165.6	162.0	162.0	166.9	167.6	174.5	189.3
65°	198.2	195.6	194.9	185.3	159.4	155.4	157.4	159.4	160.7	167.6	181.8
67.5°	193.6	188.0	188.0	180.5	152.5	148.3	152.5	151.8	154.0	160.0	171.6
70°	187.3	179.8	180.5	177.1	145.6	140.7	144.3	143.6	144.9	148.9	160.7
72.5°	177.8	171.6	172.9	171.6	138.7	131.9	133.2	133.2	133.2	136.7	148.9
75°	165.6	160.7	164.9	168.3	130.5	121.0	122.3	122.3	120.3	122.3	137.4
77.5°	150.3	147.6	161.4	156.7	121.0	109.4	109.4	108.1	104.1	106.8	123.0
80°	134.1	131.9	148.9	131.2	110.1	95.2	93.7	90.1	86.1	88.1	104.8
82.5°	117.0	115.0	125.2	100.6	95.2	78.6	75.2	69.0	65.0	67.0	81.9
85°	95.9	95.9	96.6	75.9	72.4	60.2	56.2	47.9	43.1	44.4	58.8
87.5°	68.4	70.4	65.0	51.9	43.1	33.5	30.9	26.0	21.8	25.3	30.9
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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CATALOG NUMBER: GLNA-AF-03-LED-E1-SLL-7030-800

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6	4202.6
2.5°	3612.4	3687.6	3773.1	3882.3	3976.2	4129.8	4277.6	4366.4
5°	2701.0	2826.2	2981.8	3182.4	3369.1	3649.2	3927.6	4106.1
7.5°	1932.9	2067.0	2235.3	2485.4	2749.6	3107.0	3475.0	3688.3
10°	1599.5	1736.9	1878.3	2047.3	2263.5	2652.4	3087.2	3327.8
12.5°	1323.2	1470.1	1622.6	1800.4	2000.6	2348.0	2849.3	3126.3
15°	1012.6	1176.7	1356.5	1581.6	1832.4	2233.9	2790.4	3091.2
17.5°	694.1	877.5	1098.1	1375.8	1682.8	2196.9	2895.9	3242.6
20°	477.9	611.3	847.3	1172.7	1542.0	2192.2	3098.1	3532.5
22.5°	400.0	459.5	631.7	986.0	1435.9	2251.0	3412.2	3939.1
25°	369.8	405.5	504.5	824.0	1358.7	2386.4	3844.4	4465.7
27.5°	352.3	384.2	458.2	718.1	1297.9	2543.6	4264.8	4975.8
30°	358.9	391.8	445.1	663.9	1215.1	2674.8	4638.1	5373.8
32.5°	323.4	337.8	381.6	616.0	1155.6	2784.9	4964.9	5703.4
35°	275.7	300.8	340.5	593.6	1156.9	2858.8	5321.1	6124.5
37.5°	262.6	287.9	316.5	585.3	1172.7	2937.6	5730.0	6618.4
40°	254.4	277.7	302.3	580.7	1187.8	3009.3	6130.9	7106.5
42.5°	248.8	269.9	300.8	564.0	1195.3	3073.7	6460.3	7521.6
45°	248.2	269.9	306.3	547.6	1206.9	3142.7	6736.7	7828.6
47.5°	248.8	279.0	296.1	527.9	1206.9	3258.1	7060.8	8102.7
50°	246.2	294.1	285.2	499.9	1178.9	3477.0	7505.1	8469.8
52.5°	244.8	292.1	263.9	456.8	1130.3	3824.4	8074.7	8975.9
55°	241.3	281.7	248.8	392.7	1073.7	4203.3	8684.7	9574.4
57.5°	238.0	249.5	240.6	336.5	986.0	4469.9	9104.5	10041.2
60°	266.6	218.2	234.0	309.0	869.0	4542.9	9088.3	10227.2
62.5°	246.8	204.4	225.1	303.0	787.1	4337.8	8668.3	10126.9
65°	193.6	195.6	216.2	320.5	765.1	3794.4	7924.2	9662.5
67.5°	177.1	186.7	207.1	343.4	767.4	3037.9	6812.6	8651.0
70°	166.9	177.1	196.9	354.9	772.7	2264.8	5386.0	7046.3
72.5°	155.4	164.3	185.3	356.9	737.0	1645.0	4151.3	5181.1
75°	141.4	149.6	168.9	311.0	610.6	1141.2	3175.6	3544.7
77.5°	125.9	131.9	148.3	240.0	453.5	730.3	2383.6	2589.5
80°	107.4	110.8	124.5	175.8	310.3	456.8	1885.9	2077.9
82.5°	86.1	87.5	96.6	131.9	201.6	293.4	1263.0	1441.5
85°	60.8	60.8	66.4	95.9	137.4	186.0	685.7	760.5
87.5°	28.6	29.3	29.3	52.6	71.7	94.6	158.0	97.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)