



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GA24-LED-HO-CW-P12.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]LED-4099A  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]03/2/16  
[TEST DATE]05/24/13  
[MANUFACTURER]LSI INDUSTRIES, INC  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER]SCALED FROM ORIGINAL TEST DATA  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[SEARCH\_SOURCE TYPE] LED  
[SEARCH\_APPLICATION] Indoor  
[LUMCAT]GA24-LED-HO-CW-P12

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7442
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	55
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	2.00 ft
Luminous Height	0.00 ft

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3519	3411	3273
55	2833	2653	2343
65	2170	1742	1826
75	1898	1518	2012
85	2558	2505	2863

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GA24-LED-HO-CW-P12.IES**

**CANDELA TABULATION**

	<u><b>0.0</b></u>	<u><b>22.5</b></u>	<u><b>45.0</b></u>	<u><b>67.5</b></u>	<u><b>90.0</b></u>
<b>0.0</b>	2971.92	2971.92	2971.92	2971.92	2971.92
<b>2.5</b>	2975.40	2985.84	2975.40	2964.96	2964.96
<b>5.0</b>	2971.92	2987.00	2964.96	2966.12	2960.32
<b>7.5</b>	2961.48	2969.60	2954.52	2948.72	2948.72
<b>10.0</b>	2948.72	2960.32	2941.76	2931.32	2937.12
<b>12.5</b>	2930.16	2932.48	2919.72	2911.60	2911.60
<b>15.0</b>	2898.84	2902.32	2891.88	2886.08	2883.76
<b>17.5</b>	2871.00	2873.32	2860.56	2850.12	2846.64
<b>20.0</b>	2826.92	2836.20	2816.48	2804.88	2803.72
<b>22.5</b>	2788.64	2786.32	2768.92	2751.52	2745.72
<b>25.0</b>	2728.32	2727.16	2709.76	2686.56	2686.56
<b>27.5</b>	2654.08	2658.72	2635.52	2615.80	2612.32
<b>30.0</b>	2581.00	2577.52	2554.32	2529.96	2525.32
<b>32.5</b>	2489.36	2488.20	2460.36	2436.00	2431.36
<b>35.0</b>	2382.64	2386.12	2357.12	2323.48	2326.96
<b>37.5</b>	2268.96	2267.80	2248.08	2208.64	2200.52
<b>40.0</b>	2142.52	2137.88	2110.04	2064.80	2059.00
<b>42.5</b>	2002.16	1995.20	1958.08	1911.68	1898.92
<b>45.0</b>	1851.36	1839.76	1794.52	1749.28	1721.44
<b>47.5</b>	1692.44	1672.72	1635.60	1578.76	1545.12
<b>50.0</b>	1528.88	1510.32	1469.72	1400.12	1340.96
<b>52.5</b>	1365.32	1351.40	1301.52	1212.20	1150.72
<b>55.0</b>	1208.72	1197.12	1132.16	1044.00	999.92
<b>57.5</b>	1064.88	1042.84	960.48	902.48	867.68
<b>60.0</b>	926.84	900.16	807.36	763.28	747.04
<b>62.5</b>	805.04	752.84	667.00	643.80	650.76
<b>65.0</b>	682.08	628.72	547.52	549.84	574.20
<b>67.5</b>	575.36	522.00	448.92	475.60	513.88
<b>70.0</b>	489.52	438.48	373.52	419.92	467.48
<b>72.5</b>	419.92	372.36	322.48	377.00	425.72
<b>75.0</b>	365.40	323.64	292.32	341.04	387.44
<b>77.5</b>	320.16	285.36	270.28	306.24	349.16
<b>80.0</b>	273.76	250.56	245.92	274.92	301.60
<b>82.5</b>	221.56	208.80	211.12	234.32	245.92
<b>85.0</b>	165.88	162.40	162.40	185.60	185.60
<b>87.5</b>	105.56	106.72	107.88	121.80	120.64
<b>90.0</b>	39.44	48.72	45.24	69.60	55.68
<b>92.5</b>	22.04	16.24	6.96	16.24	13.92
<b>95.0</b>	19.72	18.56	16.24	16.24	30.16
<b>97.5</b>	13.92	17.40	10.44	13.92	4.64
<b>100.0</b>	10.44	13.92	12.76	11.60	6.96
<b>102.5</b>	13.92	11.60	12.76	22.04	15.08
<b>105.0</b>	11.60	17.40	13.92	13.92	3.48
<b>107.5</b>	17.40	20.88	18.56	16.24	12.76
<b>110.0</b>	15.08	17.40	10.44	11.60	18.56
<b>112.5</b>	17.40	8.12	15.08	17.40	20.88
<b>115.0</b>	12.76	16.24	20.88	20.88	19.72
<b>117.5</b>	22.04	22.04	23.20	23.20	22.04
<b>120.0</b>	22.04	17.40	13.92	19.72	12.76
<b>122.5</b>	18.56	20.88	16.24	22.04	17.40
<b>125.0</b>	18.56	20.88	11.60	18.56	24.36
<b>127.5</b>	19.72	15.08	11.60	22.04	5.80
<b>130.0</b>	19.72	15.08	22.04	8.12	8.12
<b>132.5</b>	18.56	17.40	16.24	25.52	26.68

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GA24-LED-HO-CW-P12.IES**

**CANDELA TABULATION - (Cont.)**

<b>135.0</b>	10.44	13.92	13.92	13.92	20.88
<b>137.5</b>	12.76	16.24	16.24	18.56	16.24
<b>140.0</b>	16.24	15.08	22.04	16.24	17.40
<b>142.5</b>	10.44	25.52	16.24	25.52	9.28
<b>145.0</b>	10.44	6.96	23.20	15.08	23.20
<b>147.5</b>	15.08	19.72	24.36	16.24	17.40
<b>150.0</b>	29.00	24.36	23.20	20.88	15.08
<b>152.5</b>	10.44	20.88	25.52	20.88	4.64
<b>155.0</b>	20.88	24.36	18.56	10.44	17.40
<b>157.5</b>	18.56	22.04	17.40	11.60	22.04
<b>160.0</b>	23.20	11.60	23.20	11.60	25.52
<b>162.5</b>	25.52	13.92	17.40	30.16	18.56
<b>165.0</b>	16.24	17.40	11.60	17.40	23.20
<b>167.5</b>	25.52	13.92	10.44	31.32	18.56
<b>170.0</b>	29.00	17.40	16.24	20.88	27.84
<b>172.5</b>	22.04	11.60	18.56	10.44	29.00
<b>175.0</b>	13.92	25.52	11.60	15.08	19.72
<b>177.5</b>	12.76	23.20	12.76	25.52	23.20
<b>180.0</b>	20.88	20.88	20.88	20.88	20.88

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GA24-LED-HO-CW-P12.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1099.72	N.A.	14.80
0-30	2345.64	N.A.	31.50
0-40	3814.08	N.A.	51.20
0-60	6197.64	N.A.	83.30
0-80	7150.58	N.A.	96.10
0-90	7331.61	N.A.	98.50
10-90	7049.03	N.A.	94.70
20-40	2714.36	N.A.	36.50
20-50	4092.07	N.A.	55.00
40-70	2979.45	N.A.	40.00
60-80	952.94	N.A.	12.80
70-80	357.05	N.A.	4.80
80-90	181.03	N.A.	2.40
90-110	37.00	N.A.	0.50
90-120	54.75	N.A.	0.70
90-130	70.20	N.A.	0.90
90-150	94.85	N.A.	1.30
90-180	110.67	N.A.	1.50
110-180	73.67	N.A.	1.00
0-180	7442.28	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	282.58
10-20	817.14
20-30	1245.92
30-40	1468.44
40-50	1377.71
50-60	1005.85
60-70	595.89
70-80	357.05
80-90	181.03
90-100	21.41
100-110	15.60
110-120	17.74
120-130	15.45
130-140	13.06
140-150	11.59
150-160	8.71
160-170	5.38
170-180	1.74

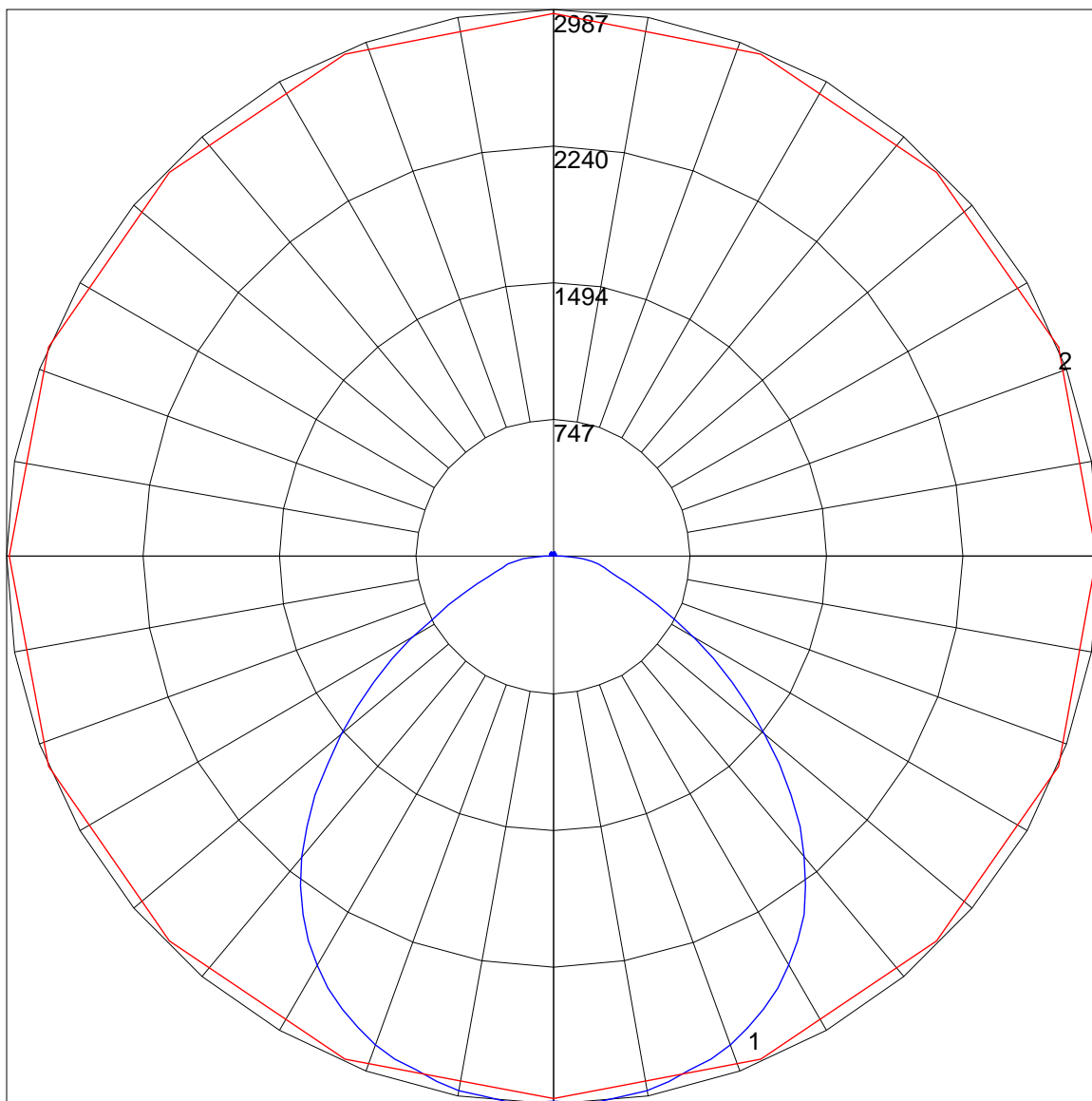
IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : GA24-LED-HO-CW-P12.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	109	105	101	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	100	92	86	81	97	90	84	80	87	82	77	83	79	75	80	77	74	71
3	92	82	74	68	89	80	73	68	77	71	66	74	69	65	72	67	64	61
4	85	73	65	59	82	72	64	58	69	63	57	67	61	56	64	60	55	53
5	78	66	57	51	76	65	57	51	63	56	50	60	54	49	58	53	49	47
6	72	60	51	45	70	59	51	45	57	50	44	55	49	44	53	48	43	41
7	67	54	46	40	66	54	46	40	52	45	40	50	44	39	49	43	39	37
8	63	50	42	36	61	49	41	36	48	41	36	46	40	35	45	39	35	33
9	59	46	38	33	57	45	38	32	44	37	32	43	36	32	42	36	32	30
10	55	42	35	30	54	42	34	29	41	34	29	40	33	29	39	33	29	27

POLAR GRAPH



Maximum Candela = 2987 Located At Horizontal Angle = 22.5, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (22.5 - 202.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)