



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S24-L81-835-FVL-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 21039.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 23-APR-2020

[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] 4-56 LED 22"ARRAYS 2X4' RECESSED LUMINAIRE

[MORE] WHITE REFL w/ CLEAR POLYCARB LENS W/ PRISMATIC PAT12 OVERLAY

[LUMCAT] V50G-S24-L81/835-FVL-DIM-UNV

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7910
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	67.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.76 ft
Luminous Width (90-270)	1.77 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4287	4180	4141
55	3575	3485	3422
65	2926	2758	2799
75	2447	2372	2600
85	1946	2105	2359

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0</b>	3396.932	3396.932	3396.932	3396.932	3396.932
<b>5</b>	3411.205	3391.223	3367.816	3358.110	3360.394
<b>10</b>	3351.830	3334.703	3308.441	3302.161	3303.303
<b>15</b>	3257.630	3240.502	3216.524	3205.106	3207.389
<b>20</b>	3120.611	3105.767	3081.788	3067.516	3070.370
<b>25</b>	2945.340	2926.500	2903.093	2889.391	2892.816
<b>30</b>	2723.255	2706.699	2681.578	2674.727	2671.302
<b>35</b>	2467.486	2457.781	2430.948	2420.100	2417.817
<b>40</b>	2182.030	2172.895	2144.349	2120.942	2129.506
<b>45</b>	1877.162	1845.762	1830.347	1802.943	1813.220
<b>50</b>	1568.869	1552.312	1525.480	1504.927	1499.788
<b>55</b>	1269.711	1261.718	1237.739	1207.481	1215.474
<b>60</b>	1001.952	985.967	958.563	957.421	947.716
<b>65</b>	765.594	742.187	721.634	733.052	732.481
<b>70</b>	561.207	552.644	537.229	556.069	561.207
<b>75</b>	392.217	386.508	380.228	408.203	416.767
<b>80</b>	247.205	244.922	246.634	270.613	279.176
<b>85</b>	105.048	102.764	113.612	135.877	127.314
<b>90</b>	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1228.63	N.A.	15.50
0-30	2566.25	N.A.	32.40
0-40	4086.58	N.A.	51.70
0-60	6614.03	N.A.	83.60
0-80	7776.56	N.A.	98.30
0-90	7910.1	N.A.	100.00
10-90	7589.67	N.A.	95.90
20-40	2857.95	N.A.	36.10
20-50	4273.8	N.A.	54.00
40-70	3268.3	N.A.	41.30
60-80	1162.53	N.A.	14.70
70-80	421.68	N.A.	5.30
80-90	133.54	N.A.	1.70
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	7910.1	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	320.43
10-20	908.20
20-30	1337.62
30-40	1520.32
40-50	1415.85
50-60	1111.61
60-70	740.85
70-80	421.68
80-90	133.54
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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**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	111	111	111	106	106	106	102	102	102	100
1	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42
7	67	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	28

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**UGR TABLE - CORRECTED**

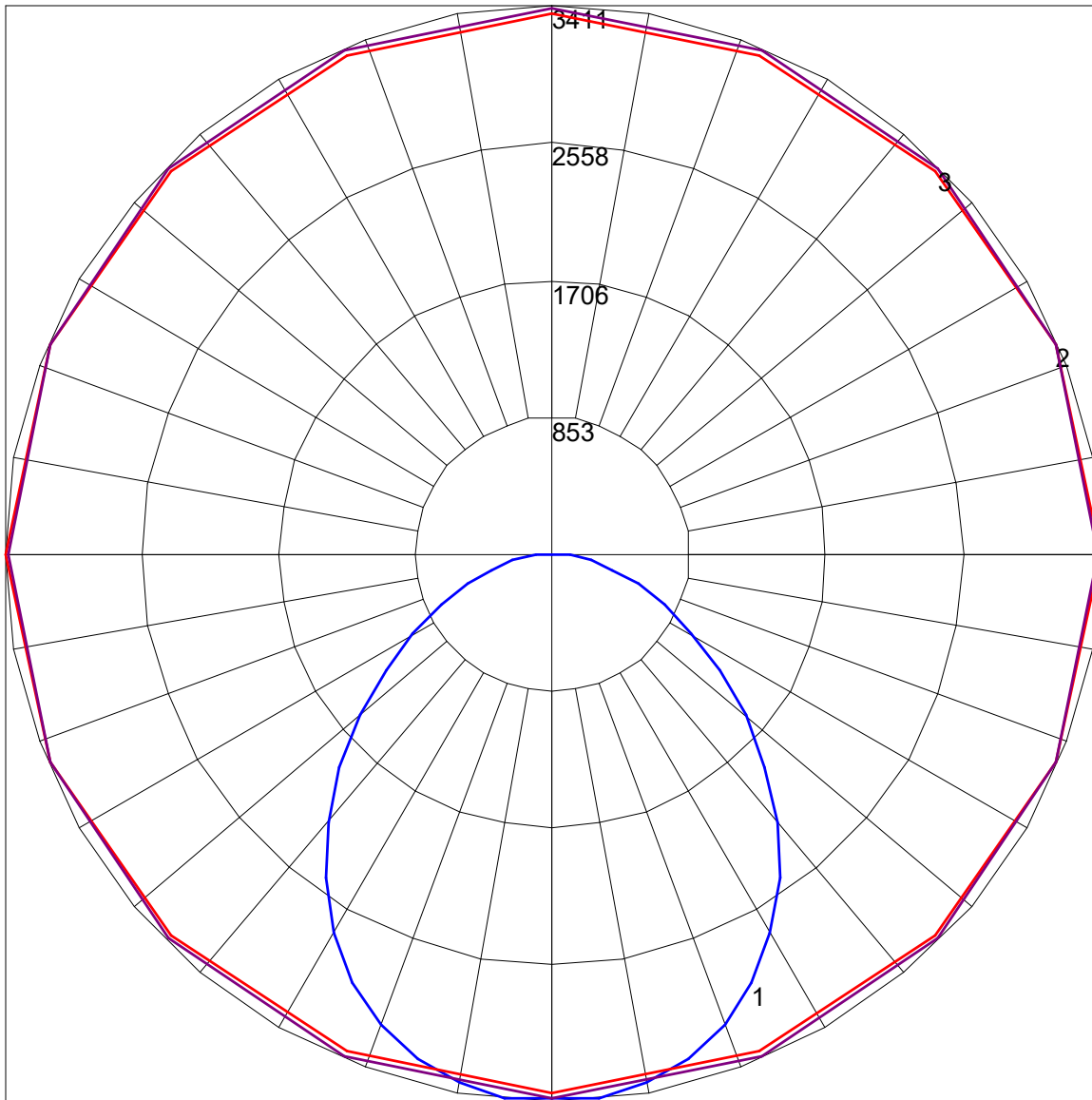
Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	16.0	17.5	16.4	17.9	18.2	15.7	17.3	16.1	17.6	17.9
	3H	17.4	18.8	17.8	19.2	19.5	17.3	18.7	17.6	19.0	19.3
	4H	18.0	19.3	18.4	19.7	20.1	17.9	19.2	18.3	19.6	20.0
	6H	18.5	19.7	18.9	20.0	20.4	18.5	19.7	18.9	20.1	20.5
	8H	18.6	19.8	19.1	20.2	20.6	18.7	19.8	19.1	20.2	20.6
	12H	18.7	19.8	19.1	20.2	20.6	18.8	19.9	19.3	20.3	20.8
4H	2H	16.4	17.8	16.8	18.1	18.5	16.2	17.5	16.6	17.9	18.3
	3H	18.1	19.2	18.5	19.6	20.0	18.0	19.1	18.4	19.5	19.9
	4H	18.8	19.8	19.3	20.2	20.7	18.8	19.8	19.2	20.2	20.6
	6H	19.4	20.3	19.9	20.7	21.2	19.5	20.4	20.0	20.8	21.3
	8H	19.6	20.4	20.1	20.9	21.3	19.8	20.6	20.2	21.0	21.5
	12H	19.8	20.5	20.3	21.0	21.4	20.0	20.7	20.5	21.2	21.7
8H	4H	19.1	19.9	19.5	20.3	20.8	19.1	19.9	19.5	20.3	20.8
	6H	19.8	20.5	20.3	21.0	21.5	19.9	20.6	20.4	21.1	21.6
	8H	20.1	20.7	20.6	21.2	21.7	20.3	20.9	20.8	21.4	21.9
	12H	20.3	20.8	20.8	21.3	21.9	20.6	21.1	21.1	21.6	22.2
12H	4H	19.1	19.9	19.6	20.3	20.8	19.1	19.8	19.6	20.3	20.8
	6H	19.9	20.5	20.4	21.0	21.5	20.0	20.6	20.5	21.1	21.6
	8H	20.2	20.7	20.7	21.2	21.8	20.4	20.9	20.9	21.4	22.0

Maximum UGR = 22.2

POLAR GRAPH



Maximum Candela = 3411.205 Located At Horizontal Angle = 0, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)  
# 3 - Horizontal Cone Through Vertical Angle (0)