



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S24-L130-840-SAF12125-(L100)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 18125.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUE DATE] 05-12-2020  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO. 64836  
 [LUMINAIRE] 2x4' RECESSED LED LUMINAIRE  
 [MORE] FROSTED ACRYLIC PAT 12 LENS  
 [LUMCAT] 50G-S24-L130-840-SAF12125-(L100)-DIM-UNV  
 [LAMPCAT] HLM 80 CRI 4000K CCT  
 [ \_SEARCH\_SOURCE TYPE] LED  
 [ \_SEARCH\_APPLICATION] INDOOR, DIRECT  
 [ \_SEARCH\_MOUNTING] RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	10430
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	134
Total Luminaire Watts	77.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.77 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	5657	5578	5500
55	4668	4513	4374
65	3754	3529	3482
75	3041	2914	3074
85	3038	3038	3585

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	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0</b>	4696.607	4696.607	4696.607	4696.607	4696.607
<b>5</b>	4650.376	4647.345	4643.555	4641.282	4641.282
<b>10</b>	4566.251	4560.946	4564.735	4566.251	4566.251
<b>15</b>	4379.812	4379.812	4379.812	4385.117	4387.391
<b>20</b>	4216.867	4216.867	4222.172	4229.751	4222.172
<b>25</b>	3861.419	3857.630	3868.998	3875.819	3874.303
<b>30</b>	3557.508	3553.718	3561.297	3561.297	3568.876
<b>35</b>	3200.544	3199.028	3192.965	3191.450	3205.849
<b>40</b>	2832.213	2825.392	2810.234	2798.108	2808.718
<b>45</b>	2484.344	2475.249	2449.481	2427.503	2415.376
<b>50</b>	2043.255	2025.066	2004.603	1970.498	1950.036
<b>55</b>	1662.798	1634.756	1607.472	1565.788	1558.210
<b>60</b>	1286.887	1264.908	1230.046	1197.457	1193.667
<b>65</b>	985.249	967.060	926.134	914.008	914.008
<b>70</b>	717.716	707.106	672.243	685.127	686.643
<b>75</b>	488.835	481.256	468.372	485.046	494.140
<b>80</b>	329.680	324.374	324.374	338.774	349.385
<b>85</b>	164.461	159.156	164.461	186.439	194.018
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 50G-S24-L130-840-SAF12125-(L100)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1680.92	N.A.	16.10
0-30	3469.32	N.A.	33.30
0-40	5467.03	N.A.	52.40
0-60	8780.39	N.A.	84.20
0-80	10245.72	N.A.	98.20
0-90	10429.88	N.A.	100.00
10-90	9988.77	N.A.	95.80
20-40	3786.11	N.A.	36.30
20-50	5659.93	N.A.	54.30
40-70	4254.42	N.A.	40.80
60-80	1465.33	N.A.	14.00
70-80	524.27	N.A.	5.00
80-90	184.16	N.A.	1.80
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	10429.88	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	441.11
10-20	1239.81
20-30	1788.41
30-40	1997.71
40-50	1873.82
50-60	1439.54
60-70	941.06
70-80	524.27
80-90	184.16
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	98	107	103	99	96	99	96	93	95	92	90	91	89	88	86
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	54
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48
6	73	60	52	46	71	59	51	46	58	50	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	39	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	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

X=2H	Y=2H	16.8	18.3	17.1	18.6	18.9	16.4	17.9	16.8	18.2	18.6
	3H	18.2	19.6	18.6	19.9	20.3	17.8	19.2	18.2	19.6	19.9
	4H	18.7	20.0	19.1	20.4	20.8	18.4	19.7	18.8	20.1	20.5
	6H	19.2	20.4	19.6	20.8	21.2	19.0	20.2	19.4	20.5	20.9
	8H	19.4	20.5	19.8	20.9	21.3	19.2	20.4	19.6	20.7	21.1
	12H	19.5	20.6	19.9	21.0	21.4	19.4	20.5	19.8	20.9	21.3

### UGR Viewed Endwise

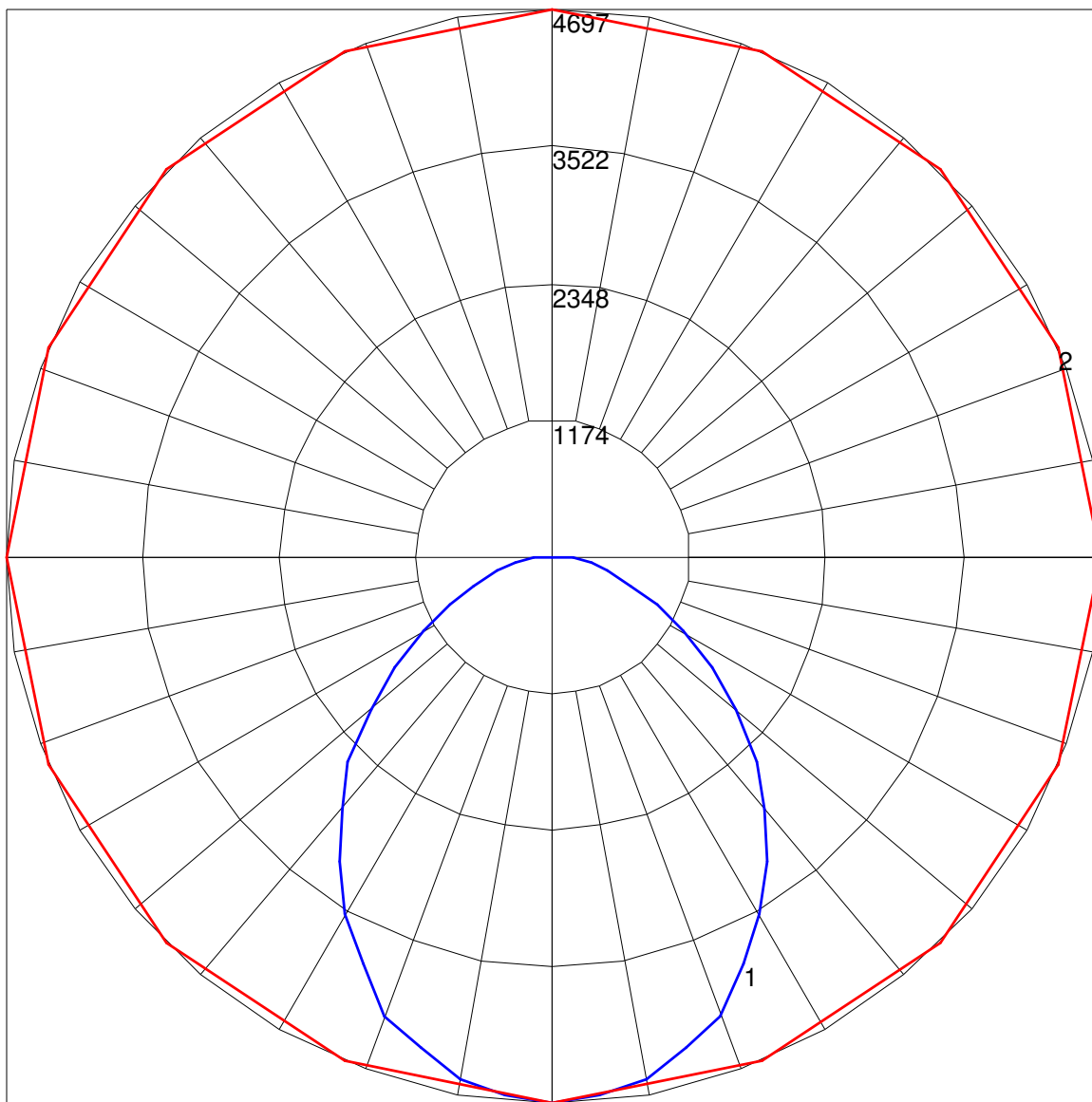
4H	2H	17.2	18.5	17.6	18.8	19.2	16.9	18.2	17.3	18.5	18.9
	3H	18.8	19.9	19.3	20.3	20.7	18.6	19.7	19.0	20.1	20.5
	4H	19.5	20.5	19.9	20.9	21.3	19.3	20.3	19.7	20.7	21.1
	6H	20.1	21.0	20.6	21.4	21.9	20.0	20.8	20.5	21.3	21.7
	8H	20.4	21.2	20.8	21.6	22.1	20.3	21.1	20.8	21.5	22.0
	12H	20.6	21.3	21.1	21.8	22.2	20.6	21.3	21.1	21.8	22.2

8H	4H	19.8	20.6	20.2	21.0	21.5	19.6	20.4	20.0	20.8	21.3
	6H	20.5	21.2	21.0	21.7	22.1	20.4	21.1	20.9	21.6	22.0
	8H	20.8	21.4	21.4	22.0	22.4	20.8	21.4	21.3	21.9	22.4
	12H	21.1	21.7	21.6	22.2	22.7	21.2	21.7	21.7	22.2	22.8

12H	4H	19.8	20.5	20.3	21.0	21.5	19.6	20.3	20.1	20.8	21.3
	6H	20.6	21.2	21.1	21.7	22.2	20.5	21.1	21.0	21.6	22.1
	8H	21.0	21.5	21.5	22.0	22.6	20.9	21.5	21.5	22.0	22.5

Maximum UGR = 22.8

POLAR GRAPH



Maximum Candela = 4696.607 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)