



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S14-L65-840-SAF12125-(L61)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 18123.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 02-13-2023

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO. 64836

[LUMINAIRE] 1x4' LED TROFFER

[MORE] WITH FROSTED ACRYLIC LENS

[LUMCAT] 50G-S14-L65-840-SAF12125-(L61)-DIM-UNV

[LAMPCAT] HLM 80 CRI, 4000K CCT

[\_SEARCH\_SOURCETYPE]LED

[\_SEARCH\_APPLICATION]INDOOR,CLASSROOM, COMMERCIAL, EDUCATIONAL,OFFICE, DIRECT

[\_SEARCH\_MOUNTING]RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6353
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	52.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.77 ft
Luminous Width (90-270)	0.77 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8269	7848	7361
55	6631	6025	5431
65	5318	4682	4326
75	4238	3920	3920
85	4319	3907	4319

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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>	2923.058	2923.058	2923.058	2923.058	2923.058
<b>5</b>	2915.305	2914.336	2915.305	2914.336	2917.243
<b>10</b>	2866.846	2866.846	2864.907	2864.907	2864.907
<b>15</b>	2755.390	2755.390	2750.544	2750.544	2749.574
<b>20</b>	2669.132	2667.194	2661.379	2657.502	2656.533
<b>25</b>	2434.590	2428.775	2421.990	2412.298	2412.298
<b>30</b>	2244.630	2236.876	2218.462	2197.140	2190.355
<b>35</b>	2049.824	2040.132	2010.087	1971.320	1956.782
<b>40</b>	1792.021	1775.545	1733.870	1683.472	1660.212
<b>45</b>	1580.739	1554.571	1500.297	1431.484	1407.255
<b>50</b>	1289.014	1258.001	1197.911	1125.222	1103.900
<b>55</b>	1028.304	999.229	934.293	867.420	842.221
<b>60</b>	789.885	760.809	706.535	655.168	634.815
<b>65</b>	607.678	583.449	534.989	503.006	494.284
<b>70</b>	435.164	418.687	382.828	373.136	374.105
<b>75</b>	296.570	287.848	274.279	267.495	274.279
<b>80</b>	197.713	191.898	183.176	188.022	190.929
<b>85</b>	101.764	96.918	92.072	100.795	101.764
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 50G-S14-L65-840-SAF12125-(L61)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1056.06	N.A.	16.60
0-30	2176.35	N.A.	34.30
0-40	3421.64	N.A.	53.90
0-60	5404.71	N.A.	85.10
0-80	6247.84	N.A.	98.30
0-90	6352.69	N.A.	100.00
10-90	6076.1	N.A.	95.60
20-40	2365.57	N.A.	37.20
20-50	3506.13	N.A.	55.20
40-70	2524.88	N.A.	39.70
60-80	843.13	N.A.	13.30
70-80	301.32	N.A.	4.70
80-90	104.85	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	6352.69	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	276.59
10-20	779.48
20-30	1120.29
30-40	1245.29
40-50	1140.55
50-60	842.52
60-70	541.81
70-80	301.32
80-90	104.85
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	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

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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	18.0	19.5	18.3	19.8	20.1	16.9	18.4	17.2	18.7	19.0
	3H	19.4	20.7	19.8	21.1	21.4	18.3	19.7	18.7	20.0	20.4
	4H	19.9	21.2	20.3	21.5	21.9	18.9	20.2	19.3	20.5	20.9
	6H	20.4	21.5	20.8	21.9	22.3	19.5	20.6	19.9	21.0	21.4
	8H	20.5	21.7	21.0	22.0	22.4	19.7	20.8	20.1	21.2	21.6
	12H	20.7	21.8	21.1	22.1	22.6	19.9	21.0	20.3	21.3	21.8

### UGR Viewed Endwise

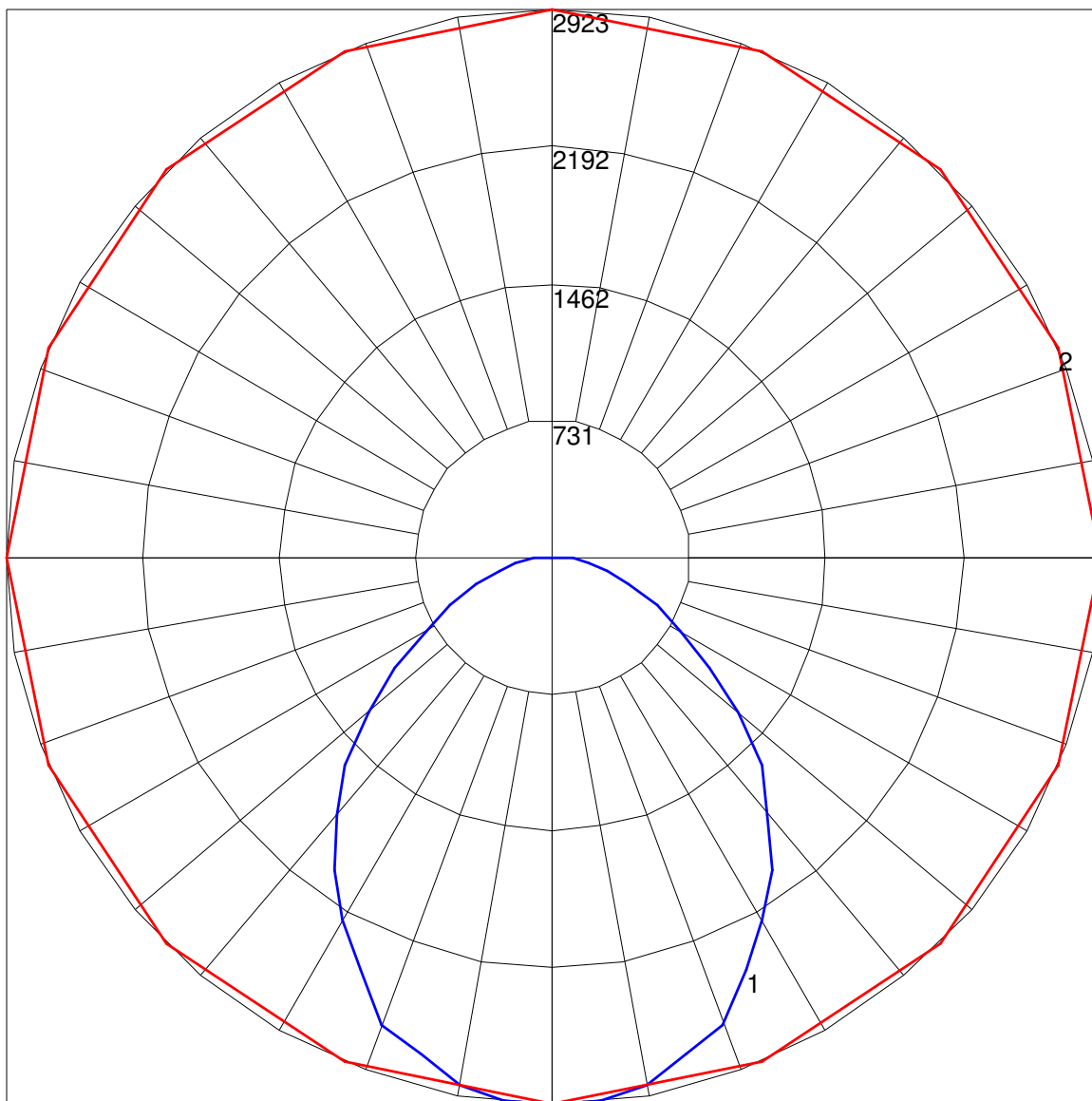
4H	2H	18.3	19.6	18.7	20.0	20.3	17.4	18.7	17.8	19.1	19.4
	3H	20.0	21.0	20.4	21.4	21.8	19.1	20.2	19.5	20.6	21.0
	4H	20.6	21.6	21.1	22.0	22.4	19.8	20.8	20.2	21.2	21.6
	6H	21.2	22.1	21.7	22.5	23.0	20.5	21.3	21.0	21.8	22.2
	8H	21.5	22.3	21.9	22.7	23.2	20.8	21.6	21.3	22.0	22.5
	12H	21.7	22.4	22.2	22.9	23.3	21.1	21.8	21.5	22.2	22.7

8H	4H	20.8	21.6	21.3	22.1	22.5	20.1	20.9	20.6	21.3	21.8
	6H	21.6	22.2	22.1	22.7	23.2	21.0	21.6	21.4	22.1	22.6
	8H	21.9	22.5	22.4	23.0	23.5	21.4	21.9	21.9	22.4	22.9
	12H	22.2	22.7	22.7	23.2	23.8	21.7	22.2	22.2	22.7	23.3

12H	4H	20.9	21.6	21.3	22.0	22.5	20.1	20.9	20.6	21.3	21.8
	6H	21.7	22.2	22.2	22.7	23.2	21.1	21.6	21.6	22.1	22.6
	8H	22.0	22.6	22.5	23.0	23.6	21.5	22.0	22.0	22.5	23.1

Maximum UGR = 23.8

POLAR GRAPH



Maximum Candela = 2923.058 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.)