



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S14-L45-840-FAF12125-(L32)-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] 06-07-2021  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO. 64836  
 [LUMINAIRE] 1x4' LED TROFFER  
 [MORE] WITH FROSTED ACRYLIC LENS  
 [LUMCAT] 50G-S14-L45-840-FAF12125-(L32)-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	3312
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	28.2
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	4311	4091	3838
55	3457	3141	2831
65	2773	2441	2255
75	2210	2043	2043
85	2251	2037	2251

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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>	1523.873	1523.873	1523.873	1523.873	1523.873
<b>5</b>	1519.831	1519.326	1519.831	1519.326	1520.842
<b>10</b>	1494.568	1494.568	1493.558	1493.558	1493.558
<b>15</b>	1436.463	1436.463	1433.937	1433.937	1433.431
<b>20</b>	1391.495	1390.484	1387.452	1385.431	1384.926
<b>25</b>	1269.221	1266.189	1262.652	1257.600	1257.600
<b>30</b>	1170.189	1166.147	1156.547	1145.431	1141.895
<b>35</b>	1068.631	1063.579	1047.916	1027.705	1020.126
<b>40</b>	934.231	925.642	903.916	877.642	865.516
<b>45</b>	824.084	810.442	782.147	746.274	733.642
<b>50</b>	672.000	655.831	624.505	586.610	575.495
<b>55</b>	536.084	520.926	487.074	452.210	439.074
<b>60</b>	411.789	396.632	368.337	341.558	330.947
<b>65</b>	316.800	304.168	278.905	262.232	257.684
<b>70</b>	226.863	218.274	199.579	194.526	195.032
<b>75</b>	154.611	150.063	142.989	139.453	142.989
<b>80</b>	103.074	100.042	95.495	98.021	99.537
<b>85</b>	53.053	50.526	48.000	52.547	53.053
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 50G-S14-L45-840-FAF12125-(L32)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	550.56	N.A.	16.60
0-30	1134.59	N.A.	34.30
0-40	1783.8	N.A.	53.90
0-60	2817.63	N.A.	85.10
0-80	3257.17	N.A.	98.30
0-90	3311.84	N.A.	100.00
10-90	3167.65	N.A.	95.60
20-40	1233.24	N.A.	37.20
20-50	1827.84	N.A.	55.20
40-70	1316.29	N.A.	39.70
60-80	439.55	N.A.	13.30
70-80	157.09	N.A.	4.70
80-90	54.66	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	3311.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	144.19
10-20	406.36
20-30	584.04
30-40	649.20
40-50	594.60
50-60	439.23
60-70	282.46
70-80	157.09
80-90	54.66
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	15.8	17.3	16.1	17.6	17.9	14.7	16.2	15.0	16.5	16.8
	3H	17.2	18.5	17.6	18.9	19.2	16.1	17.5	16.5	17.8	18.2
	4H	17.7	19.0	18.1	19.3	19.7	16.7	18.0	17.1	18.3	18.7
	6H	18.2	19.3	18.6	19.7	20.1	17.3	18.4	17.7	18.8	19.2
	8H	18.3	19.5	18.8	19.8	20.2	17.5	18.6	17.9	19.0	19.4
	12H	18.5	19.6	18.9	19.9	20.4	17.7	18.8	18.1	19.1	19.6

### UGR Viewed Endwise

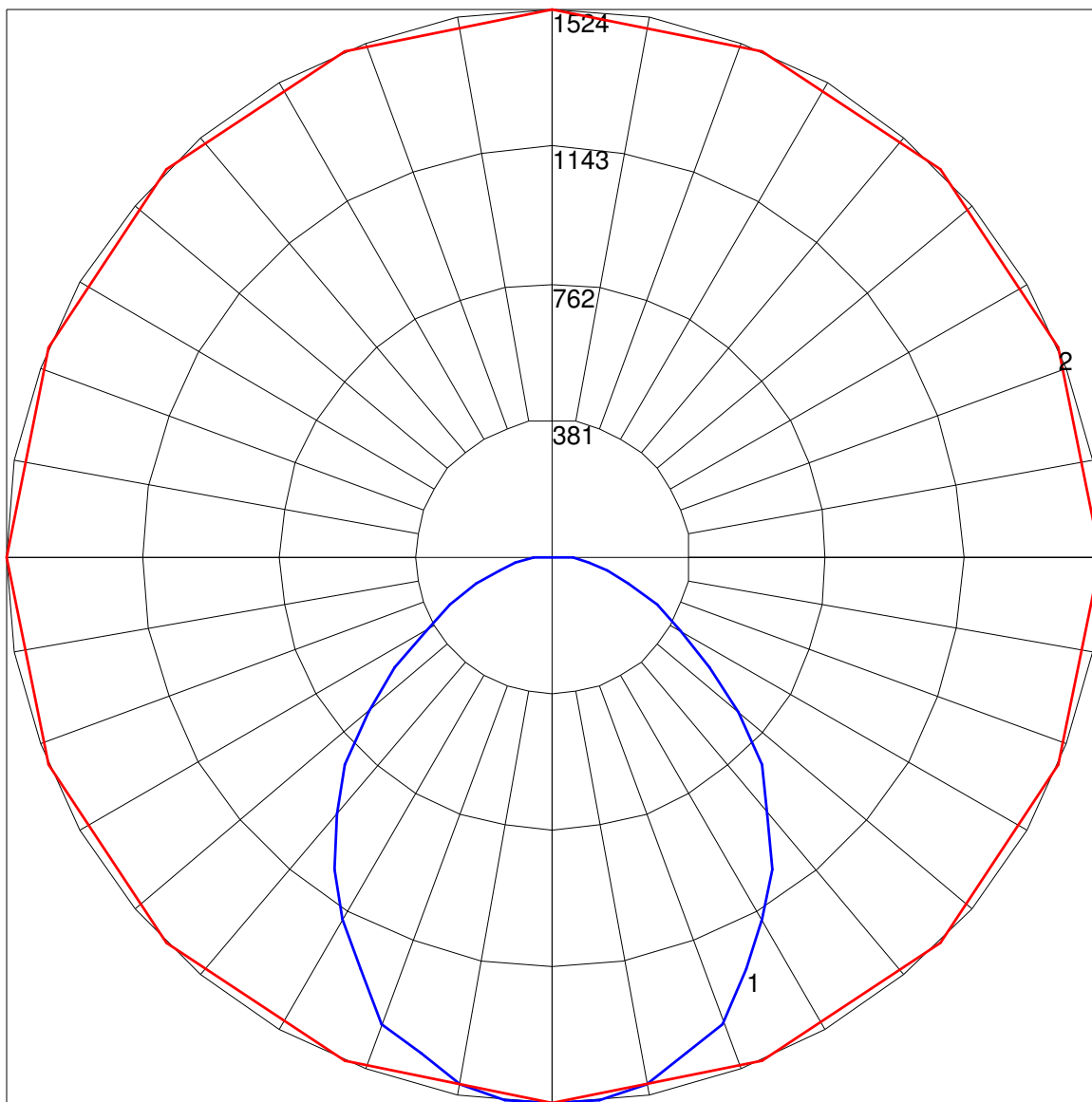
4H	2H	16.1	17.4	16.5	17.8	18.1	15.2	16.5	15.6	16.9	17.2
	3H	17.8	18.8	18.2	19.2	19.6	16.9	18.0	17.3	18.4	18.8
	4H	18.4	19.4	18.9	19.8	20.2	17.6	18.6	18.0	19.0	19.4
	6H	19.0	19.9	19.5	20.3	20.8	18.3	19.1	18.8	19.6	20.0
	8H	19.3	20.1	19.7	20.5	21.0	18.6	19.4	19.1	19.8	20.3
	12H	19.5	20.2	20.0	20.7	21.1	18.9	19.6	19.3	20.0	20.5

8H	4H	18.6	19.4	19.1	19.9	20.3	17.9	18.7	18.4	19.1	19.6
	6H	19.4	20.0	19.9	20.5	21.0	18.8	19.4	19.2	19.9	20.4
	8H	19.7	20.3	20.2	20.8	21.3	19.2	19.7	19.7	20.2	20.7
	12H	20.0	20.5	20.5	21.0	21.6	19.5	20.0	20.0	20.5	21.1

12H	4H	18.7	19.4	19.1	19.8	20.3	17.9	18.7	18.4	19.1	19.6
	6H	19.5	20.0	20.0	20.5	21.0	18.9	19.4	19.4	19.9	20.4
	8H	19.8	20.4	20.3	20.8	21.4	19.3	19.8	19.8	20.3	20.9

Maximum UGR = 21.6

POLAR GRAPH



Maximum Candela = 1523.873 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.)