



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S14-L45-840-FAF12125-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] 11-19-2021

[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-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	4440
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	132
Total Luminaire Watts	33.7
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	5779	5485	5145
55	4634	4211	3796
65	3717	3272	3023
75	2962	2739	2739
85	3018	2731	3018

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : 50G-S14-L45-840-FAF12125-DIM-UNV\_.IES

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>	2042.874	2042.874	2042.874	2042.874	2042.874
<b>5</b>	2037.455	2036.778	2037.455	2036.778	2038.810
<b>10</b>	2003.588	2003.588	2002.233	2002.233	2002.233
<b>15</b>	1925.693	1925.693	1922.307	1922.307	1921.629
<b>20</b>	1865.410	1864.055	1859.991	1857.281	1856.604
<b>25</b>	1701.492	1697.428	1692.686	1685.913	1685.913
<b>30</b>	1568.732	1563.313	1550.444	1535.542	1530.801
<b>35</b>	1432.586	1425.812	1404.815	1377.721	1367.561
<b>40</b>	1252.412	1240.897	1211.771	1176.549	1160.293
<b>45</b>	1104.751	1086.462	1048.531	1000.439	983.506
<b>50</b>	900.870	879.194	837.199	786.398	771.497
<b>55</b>	718.664	698.343	652.961	606.224	588.613
<b>60</b>	552.037	531.716	493.785	457.886	443.661
<b>65</b>	424.696	407.762	373.895	351.542	345.446
<b>70</b>	304.128	292.613	267.551	260.778	261.455
<b>75</b>	207.268	201.172	191.689	186.947	191.689
<b>80</b>	138.178	134.114	128.018	131.405	133.437
<b>85</b>	71.121	67.735	64.348	70.444	71.121
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 50G-S14-L45-840-FAF12125-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	738.06	N.A.	16.60
0-30	1521.01	N.A.	34.30
0-40	2391.32	N.A.	53.90
0-60	3777.26	N.A.	85.10
0-80	4366.5	N.A.	98.30
0-90	4439.78	N.A.	100.00
10-90	4246.48	N.A.	95.60
20-40	1653.26	N.A.	37.20
20-50	2450.37	N.A.	55.20
40-70	1764.59	N.A.	39.70
60-80	589.25	N.A.	13.30
70-80	210.59	N.A.	4.70
80-90	73.28	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	4439.78	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	193.30
10-20	544.76
20-30	782.95
30-40	870.31
40-50	797.11
50-60	588.82
60-70	378.66
70-80	210.59
80-90	73.28
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

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 50G-S14-L45-840-FAF12125-DIM-UNV\_.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	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

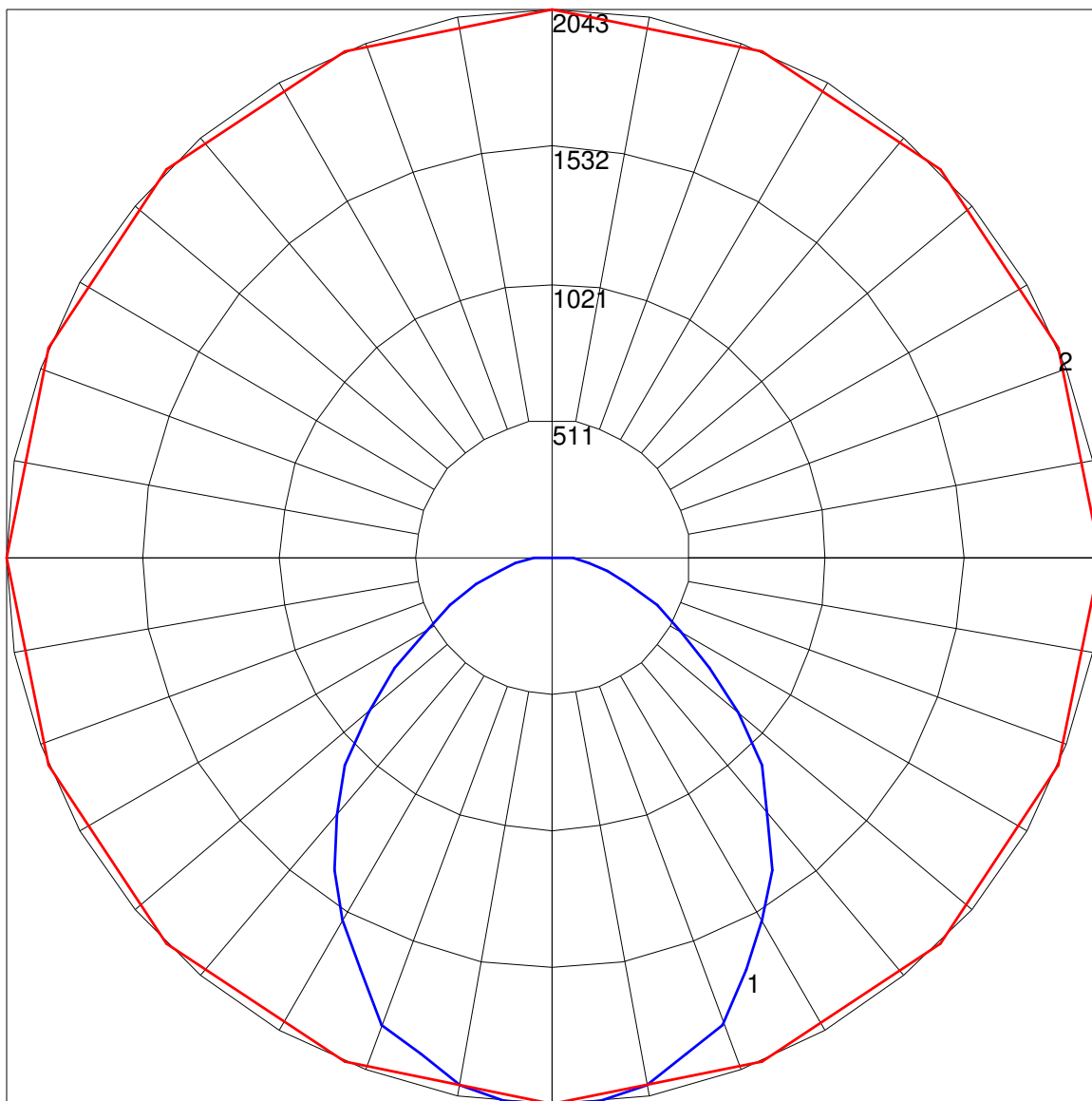
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 50G-S14-L45-840-FAF12125-DIM-UNV\_.IES**

**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	16.8	18.3	17.1	18.6	18.9	15.7	17.2	16.0	17.5	17.8
	3H	18.2	19.5	18.6	19.9	20.2	17.1	18.5	17.5	18.8	19.2
	4H	18.7	20.0	19.1	20.3	20.7	17.7	19.0	18.1	19.3	19.7
	6H	19.2	20.3	19.6	20.7	21.1	18.3	19.4	18.7	19.8	20.2
	8H	19.3	20.5	19.8	20.8	21.2	18.5	19.6	18.9	20.0	20.4
	12H	19.5	20.6	19.9	20.9	21.4	18.7	19.8	19.1	20.1	20.6
4H	2H	17.1	18.4	17.5	18.8	19.1	16.2	17.5	16.6	17.9	18.2
	3H	18.8	19.8	19.2	20.2	20.6	17.9	19.0	18.3	19.4	19.8
	4H	19.4	20.4	19.9	20.8	21.2	18.6	19.6	19.0	20.0	20.4
	6H	20.0	20.9	20.5	21.3	21.8	19.3	20.1	19.8	20.6	21.0
	8H	20.3	21.1	20.7	21.5	22.0	19.6	20.4	20.1	20.8	21.3
	12H	20.5	21.2	21.0	21.7	22.1	19.9	20.6	20.3	21.0	21.5
8H	4H	19.6	20.4	20.1	20.9	21.3	18.9	19.7	19.4	20.1	20.6
	6H	20.4	21.0	20.9	21.5	22.0	19.8	20.4	20.2	20.9	21.4
	8H	20.7	21.3	21.2	21.8	22.3	20.2	20.7	20.7	21.2	21.7
	12H	21.0	21.5	21.5	22.0	22.6	20.5	21.0	21.0	21.5	22.1
12H	4H	19.7	20.4	20.1	20.8	21.3	18.9	19.7	19.4	20.1	20.6
	6H	20.5	21.0	21.0	21.5	22.0	19.9	20.4	20.4	20.9	21.4
	8H	20.8	21.4	21.3	21.8	22.4	20.3	20.8	20.8	21.3	21.9

Maximum UGR = 22.6

POLAR GRAPH



Maximum Candela = 2042.874 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.)