



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S14-L45-840-SAF12125-(L40)-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] 21-JULY-2020  
[MANUFAC] WILLIAMS INDOOR  
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMINAIRE] 1x4' RECESSED TROFFER LUMINAIRE  
[MORE] WHITE REFLECTOR w/PAT12 LENS PRISMS DOWN  
[LUMCAT] 50G-S14-L45-840-SAF12125-(L40)-DIM-UNV  
[LAMPCAT] HLM 80 CRI 4000K CCT  
[ \_SEARCH\_SOURCETYPE]LED  
[ \_SEARCH\_APPLICATION]INDOOR,DIRECT  
[ \_SEARCH\_MOUNTING]RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4044
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	32
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	5263	4995	4686
55	4221	3835	3457
65	3385	2980	2754
75	2698	2495	2495
85	2749	2487	2749

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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>	1860.672	1860.672	1860.672	1860.672	1860.672
<b>5</b>	1855.736	1855.119	1855.736	1855.119	1856.970
<b>10</b>	1824.890	1824.890	1823.656	1823.656	1823.656
<b>15</b>	1753.942	1753.942	1750.858	1750.858	1750.241
<b>20</b>	1699.035	1697.801	1694.100	1691.632	1691.015
<b>25</b>	1549.737	1546.036	1541.717	1535.548	1535.548
<b>30</b>	1428.818	1423.883	1412.161	1398.588	1394.270
<b>35</b>	1304.815	1298.645	1279.520	1254.843	1245.589
<b>40</b>	1140.710	1130.222	1103.694	1071.614	1056.807
<b>45</b>	1006.219	989.561	955.013	911.211	895.788
<b>50</b>	820.522	800.780	762.530	716.260	702.687
<b>55</b>	654.567	636.059	594.724	552.156	536.115
<b>60</b>	502.801	484.293	449.745	417.047	404.091
<b>65</b>	386.817	371.394	340.547	320.189	314.636
<b>70</b>	277.003	266.515	243.689	237.519	238.136
<b>75</b>	188.782	183.229	174.592	170.274	174.592
<b>80</b>	125.854	122.153	116.600	119.685	121.536
<b>85</b>	64.778	61.693	58.609	64.161	64.778
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 50G-S14-L45-840-SAF12125-(L40)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	672.24	N.A.	16.60
0-30	1385.36	N.A.	34.30
0-40	2178.04	N.A.	53.90
0-60	3440.37	N.A.	85.10
0-80	3977.06	N.A.	98.30
0-90	4043.8	N.A.	100.00
10-90	3867.74	N.A.	95.60
20-40	1505.81	N.A.	37.20
20-50	2231.82	N.A.	55.20
40-70	1607.21	N.A.	39.70
60-80	536.69	N.A.	13.30
70-80	191.80	N.A.	4.70
80-90	66.74	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	4043.8	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	176.06
10-20	496.18
20-30	713.12
30-40	792.69
40-50	726.02
50-60	536.30
60-70	344.89
70-80	191.80
80-90	66.74
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	16.5	18.0	16.8	18.3	18.6	15.4	16.9	15.7	17.2	17.5
	3H	17.9	19.2	18.3	19.6	19.9	16.8	18.2	17.2	18.5	18.9
	4H	18.4	19.7	18.8	20.0	20.4	17.4	18.7	17.8	19.0	19.4
	6H	18.9	20.0	19.3	20.4	20.8	18.0	19.1	18.4	19.5	19.9
	8H	19.0	20.2	19.5	20.5	20.9	18.2	19.3	18.6	19.7	20.1
	12H	19.2	20.3	19.6	20.6	21.1	18.4	19.5	18.8	19.8	20.3

### UGR Viewed Endwise

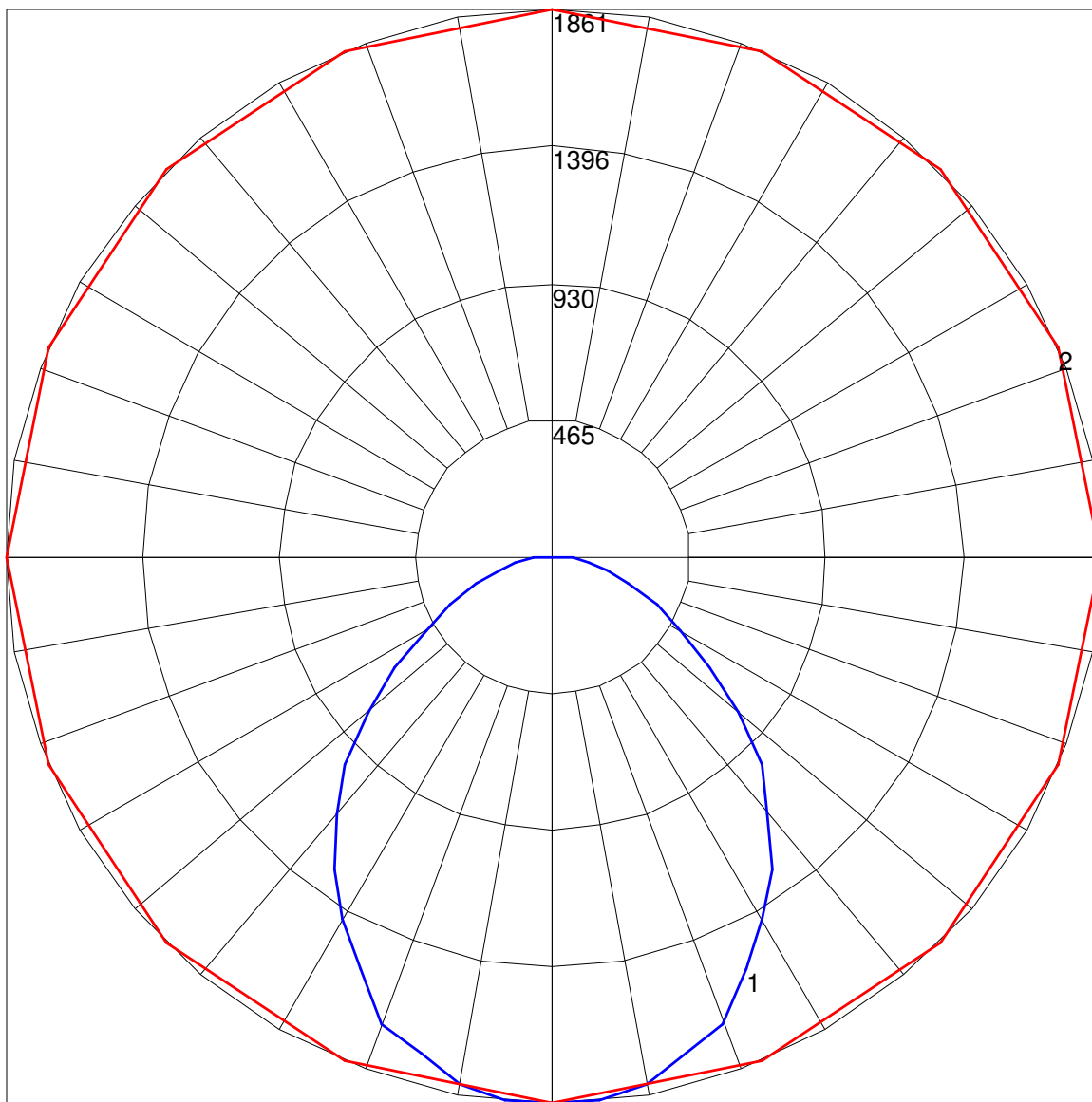
4H	2H	16.8	18.1	17.2	18.5	18.8	15.9	17.2	16.3	17.6	17.9
	3H	18.5	19.5	18.9	19.9	20.3	17.6	18.7	18.0	19.1	19.5
	4H	19.1	20.1	19.6	20.5	20.9	18.3	19.3	18.7	19.7	20.1
	6H	19.7	20.6	20.2	21.0	21.5	19.0	19.8	19.5	20.3	20.7
	8H	20.0	20.8	20.4	21.2	21.7	19.3	20.1	19.8	20.5	21.0
	12H	20.2	20.9	20.7	21.4	21.8	19.6	20.3	20.0	20.7	21.2

8H	4H	19.3	20.1	19.8	20.6	21.0	18.6	19.4	19.1	19.8	20.3
	6H	20.1	20.7	20.6	21.2	21.7	19.5	20.1	19.9	20.6	21.1
	8H	20.4	21.0	20.9	21.5	22.0	19.9	20.4	20.4	20.9	21.4
	12H	20.7	21.2	21.2	21.7	22.3	20.2	20.7	20.7	21.2	21.8

12H	4H	19.4	20.1	19.8	20.5	21.0	18.6	19.4	19.1	19.8	20.3
	6H	20.2	20.7	20.7	21.2	21.7	19.6	20.1	20.1	20.6	21.1
	8H	20.5	21.1	21.0	21.5	22.1	20.0	20.5	20.5	21.0	21.6

Maximum UGR = 22.3

POLAR GRAPH



Maximum Candela = 1860.672 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.)