



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 11-4-L52-840-FAF12125-(L40)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN from BALLABS TEST NO. 18638.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUEDATE] 06-23-2021  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836  
 [LUMINAIRE] 4' SURFACE MNT LUMINAIRE  
 [MORE] WITH FROSTED ACRYLIC LENS  
 [LUMCAT] 11-4-L52-840-FAF12125-(L40)-DIM-UNV  
 [LAMPCAT] HLM 80 CRI, 4000K CCT  
 [ \_SEARCH\_SOURCETYPE] LED  
 [ \_SEARCH\_APPLICATION] INDOOR, EDUCATION, OFFICE  
 [ \_SEARCH\_MOUNTING] SURFACE

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4168
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	32.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.22
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.80 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	5277	4983	4743
55	4259	3907	3616
65	3493	3140	2987
75	2920	2739	2852
85	3025	3025	3394

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : 11-4-L52-840-FAF12125-(L40)-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>	1930.501	1930.501	1930.501	1930.501	1930.501
<b>5</b>	1917.742	1916.945	1913.755	1913.755	1913.755
<b>10</b>	1883.454	1881.859	1879.467	1879.467	1878.670
<b>15</b>	1793.348	1792.551	1790.159	1787.767	1785.374
<b>20</b>	1754.276	1751.086	1741.517	1737.530	1735.936
<b>25</b>	1592.404	1586.822	1575.659	1567.685	1563.698
<b>30</b>	1459.239	1451.265	1433.722	1418.571	1409.002
<b>35</b>	1326.870	1315.707	1292.582	1269.458	1258.294
<b>40</b>	1159.417	1145.064	1114.763	1080.474	1073.298
<b>45</b>	1015.885	998.342	959.270	920.995	913.021
<b>50</b>	829.294	810.954	772.679	735.998	724.835
<b>55</b>	665.030	645.892	610.010	576.519	564.558
<b>60</b>	517.511	498.374	468.073	440.961	434.582
<b>65</b>	401.889	386.738	361.221	346.071	343.679
<b>70</b>	295.835	284.671	268.723	266.331	268.723
<b>75</b>	205.729	200.147	192.970	197.755	200.944
<b>80</b>	137.950	134.760	133.963	141.139	143.532
<b>85</b>	71.766	70.968	71.766	80.537	80.537
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 11-4-L52-840-FAF12125-(L40)-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	690.71	N.A.	16.60
0-30	1420.11	N.A.	34.10
0-40	2223.23	N.A.	53.30
0-60	3509.6	N.A.	84.20
0-80	4089.69	N.A.	98.10
0-90	4167.93	N.A.	100.00
10-90	3986.18	N.A.	95.60
20-40	1532.52	N.A.	36.80
20-50	2267.28	N.A.	54.40
40-70	1652.6	N.A.	39.70
60-80	580.09	N.A.	13.90
70-80	213.87	N.A.	5.10
80-90	78.24	N.A.	1.90
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	4167.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	181.75
10-20	508.96
20-30	729.40
30-40	803.12
40-50	734.76
50-60	551.61
60-70	366.22
70-80	213.87
80-90	78.24
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 : 11-4-L52-840-FAF12125-(L40)-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	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	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	76	70	66	73	69	65	63
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	66	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	31	40	34	30	29

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 11-4-L52-840-FAF12125-(L40)-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

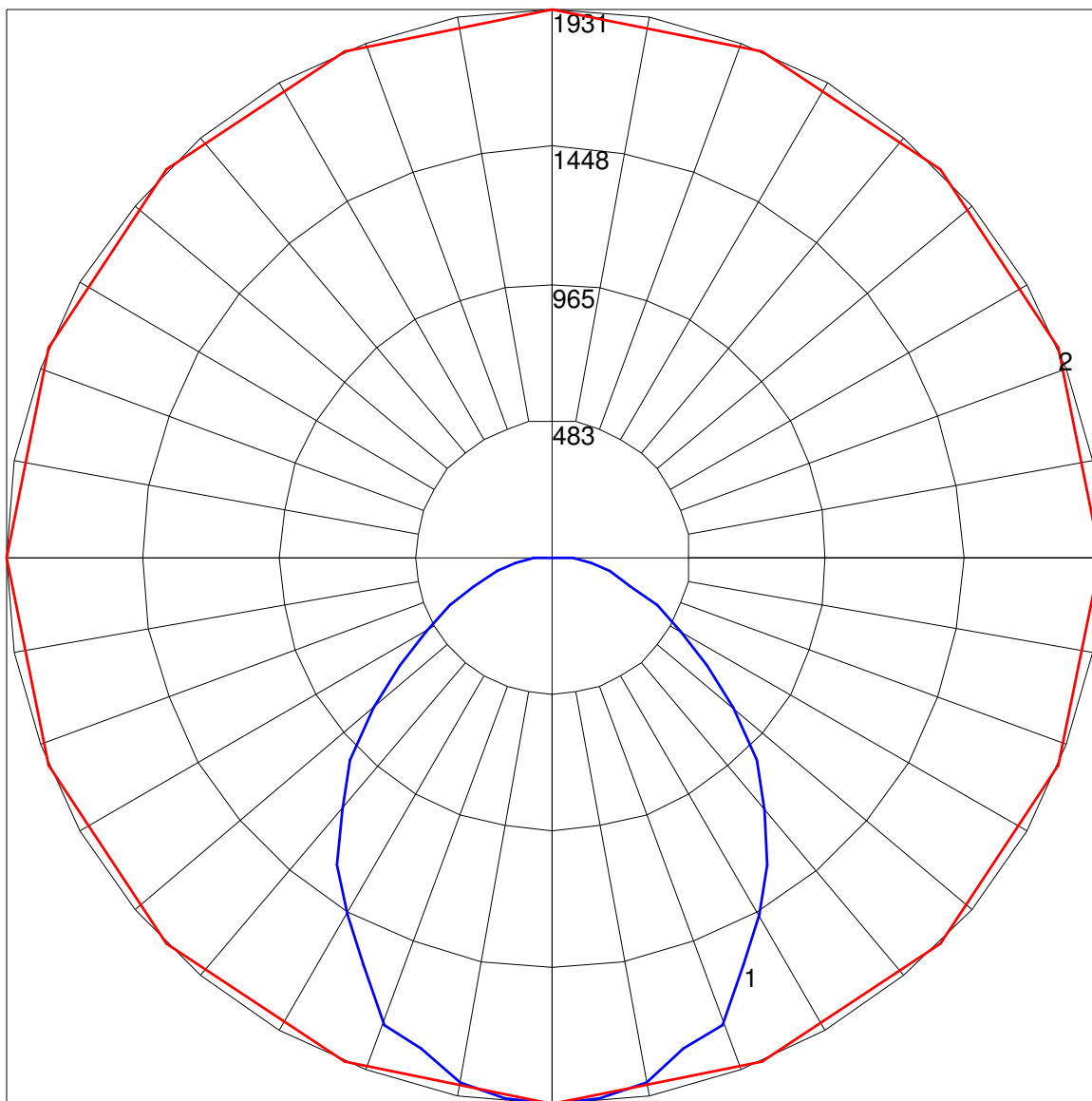
Reflectances

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	16.5	18.0	16.8	18.3	18.6	15.6	17.1	15.9	17.4	17.7
	3H	18.0	19.3	18.3	19.7	20.0	17.2	18.5	17.5	18.9	19.2
	4H	18.5	19.8	18.9	20.2	20.6	17.8	19.1	18.2	19.5	19.9
	6H	19.0	20.2	19.5	20.6	21.0	18.5	19.7	18.9	20.0	20.4
	8H	19.3	20.4	19.7	20.8	21.2	18.8	19.9	19.2	20.3	20.7
	12H	19.4	20.5	19.8	20.9	21.3	19.0	20.1	19.4	20.5	20.9
4H	2H	16.9	18.2	17.3	18.5	18.9	16.1	17.4	16.5	17.8	18.2
	3H	18.6	19.7	19.0	20.1	20.5	18.0	19.0	18.4	19.4	19.8
	4H	19.3	20.3	19.8	20.7	21.2	18.8	19.8	19.2	20.2	20.6
	6H	20.0	20.8	20.5	21.3	21.7	19.6	20.4	20.0	20.9	21.3
	8H	20.3	21.1	20.7	21.5	22.0	19.9	20.7	20.4	21.2	21.6
	12H	20.5	21.2	21.0	21.7	22.2	20.3	21.0	20.7	21.4	21.9
8H	4H	19.6	20.4	20.1	20.8	21.3	19.1	19.9	19.6	20.3	20.8
	6H	20.4	21.1	20.9	21.5	22.0	20.1	20.7	20.6	21.2	21.7
	8H	20.8	21.4	21.3	21.9	22.3	20.5	21.1	21.0	21.6	22.1
	12H	21.1	21.6	21.6	22.1	22.7	21.0	21.5	21.5	22.0	22.6
12H	4H	19.6	20.3	20.1	20.8	21.3	19.2	19.9	19.6	20.3	20.8
	6H	20.5	21.1	21.0	21.5	22.1	20.2	20.8	20.7	21.2	21.8
	8H	20.9	21.4	21.4	21.9	22.5	20.7	21.2	21.2	21.7	22.3

Maximum UGR = 22.7

POLAR GRAPH



Maximum Candela = 1930.501 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.)