



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 11-4-L52-840-FAF12125-EM10W-DIM-UNV\_EM MODE ONLY.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN from BALLABS TEST NO. 18638.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUE DATE] 10-20-2023  
 [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-EM10W-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	1210
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	121
Total Luminaire Watts	10
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	1532	1447	1377
55	1236	1134	1050
65	1014	911	867
75	848	795	828
85	878	878	985

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 11-4-L52-840-FAF12125-EM10W-DIM-UNV\_EM MODE ONLY.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>	560.438	560.438	560.438	560.438	560.438
<b>5</b>	556.734	556.503	555.577	555.577	555.577
<b>10</b>	546.780	546.317	545.623	545.623	545.391
<b>15</b>	520.622	520.390	519.696	519.001	518.307
<b>20</b>	509.279	508.353	505.575	504.417	503.954
<b>25</b>	462.286	460.666	457.425	455.110	453.952
<b>30</b>	423.627	421.312	416.220	411.821	409.043
<b>35</b>	385.200	381.959	375.246	368.533	365.292
<b>40</b>	336.587	332.420	323.623	313.669	311.586
<b>45</b>	294.919	289.826	278.483	267.371	265.056
<b>50</b>	240.750	235.426	224.314	213.666	210.425
<b>55</b>	193.063	187.507	177.090	167.367	163.895
<b>60</b>	150.237	144.681	135.885	128.014	126.162
<b>65</b>	116.671	112.273	104.865	100.467	99.772
<b>70</b>	85.883	82.642	78.012	77.318	78.012
<b>75</b>	59.724	58.104	56.021	57.410	58.336
<b>80</b>	40.048	39.122	38.890	40.974	41.668
<b>85</b>	20.834	20.603	20.834	23.381	23.381
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 11-4-L52-840-FAF12125-EM10W-DIM-UNV\_EM MODE ONLY.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	200.52	N.A.	16.60
0-30	412.27	N.A.	34.10
0-40	645.42	N.A.	53.30
0-60	1018.86	N.A.	84.20
0-80	1187.27	N.A.	98.10
0-90	1209.98	N.A.	100.00
10-90	1157.22	N.A.	95.60
20-40	444.90	N.A.	36.80
20-50	658.21	N.A.	54.40
40-70	479.76	N.A.	39.70
60-80	168.41	N.A.	13.90
70-80	62.09	N.A.	5.10
80-90	22.71	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	1209.98	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	52.76
10-20	147.75
20-30	211.75
30-40	233.15
40-50	213.31
50-60	160.14
60-70	106.32
70-80	62.09
80-90	22.71
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-EM10W-DIM-UNV\_EM MODE ONLY.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-EM10W-DIM-UNV\_EM MODE ONLY.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

X=2H	Y=2H	12.2	13.7	12.5	14.0	14.3	11.3	12.8	11.6	13.1	13.4
	3H	13.7	15.0	14.0	15.4	15.7	12.9	14.2	13.2	14.6	14.9
	4H	14.2	15.5	14.6	15.9	16.3	13.5	14.8	13.9	15.2	15.6
	6H	14.7	15.9	15.2	16.3	16.7	14.2	15.4	14.6	15.7	16.1
	8H	15.0	16.1	15.4	16.5	16.9	14.5	15.6	14.9	16.0	16.4
	12H	15.1	16.2	15.5	16.6	17.0	14.7	15.8	15.1	16.2	16.6

### UGR Viewed Endwise

4H	2H	12.6	13.9	13.0	14.2	14.6	11.8	13.1	12.2	13.5	13.9
	3H	14.3	15.4	14.7	15.8	16.2	13.7	14.7	14.1	15.1	15.5
	4H	15.0	16.0	15.5	16.4	16.9	14.5	15.5	14.9	15.9	16.3
	6H	15.7	16.5	16.2	17.0	17.4	15.3	16.1	15.7	16.6	17.0
	8H	16.0	16.8	16.4	17.2	17.7	15.6	16.4	16.1	16.9	17.3
	12H	16.2	16.9	16.7	17.4	17.9	16.0	16.7	16.4	17.1	17.6

8H	4H	15.3	16.1	15.8	16.5	17.0	14.8	15.6	15.3	16.0	16.5
	6H	16.1	16.8	16.6	17.2	17.7	15.8	16.4	16.3	16.9	17.4
	8H	16.5	17.1	17.0	17.6	18.0	16.2	16.8	16.7	17.3	17.8
	12H	16.8	17.3	17.3	17.8	18.4	16.7	17.2	17.2	17.7	18.3

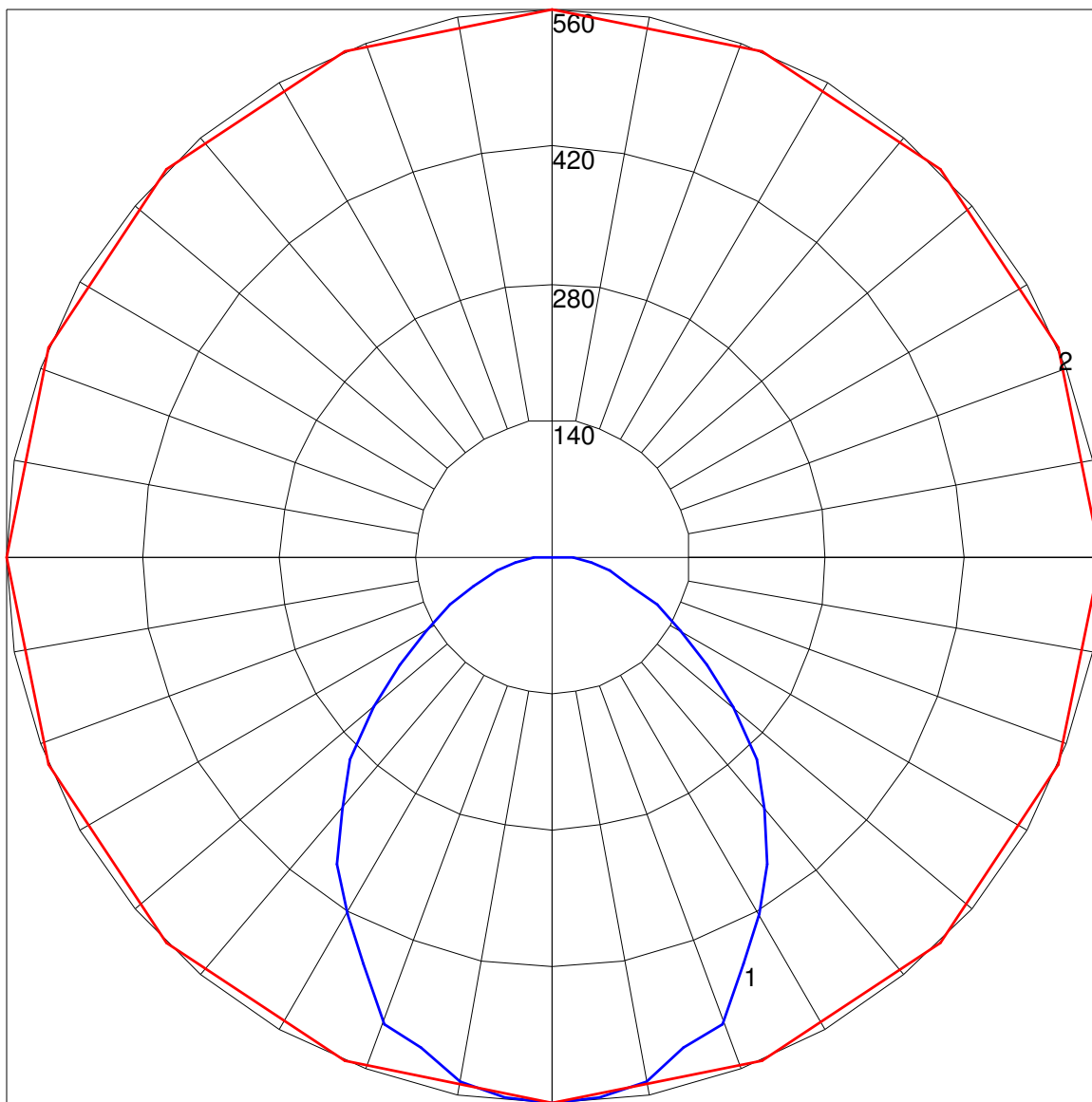
12H	4H	15.3	16.0	15.8	16.5	17.0	14.9	15.6	15.3	16.0	16.5
	6H	16.2	16.8	16.7	17.2	17.8	15.9	16.5	16.4	16.9	17.5
	8H	16.6	17.1	17.1	17.6	18.2	16.4	16.9	16.9	17.4	18.0

Maximum UGR = 18.4

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : 11-4-L52-840-FAF12125-EM10W-DIM-UNV\_EM MODE ONLY.IES

## POLAR GRAPH



Maximum Candela = 560.438 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.)