



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50F-S24-L130-840-FCPG-INVERTED LENS-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 18125.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUEDATE] 05-04-2021  
 [MANUFAC] WILLIAMS INDOOR  
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
 [LUMINAIRE] 2x4' RECESSED LED LUMINAIRE  
 [MORE] WHITE REFLECTOR w/INVERTED GLASS LENS  
 [LUMCAT] 50F-S24-L130-840-FCPG-INVERTED LENS-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	12698
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	125
Total Luminaire Watts	101.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.14
Spacing Criterion (90-270)	1.16
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.77 ft
Luminous Width (90-270)	1.77 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6888	6791	6696
55	5683	5494	5326
65	4570	4296	4240
75	3703	3548	3743
85	3699	3699	4364

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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>	5717.883	5717.883	5717.883	5717.883	5717.883
<b>5</b>	5661.599	5657.909	5653.295	5650.527	5650.527
<b>10</b>	5559.181	5552.722	5557.336	5559.181	5559.181
<b>15</b>	5332.201	5332.201	5332.201	5338.659	5341.427
<b>20</b>	5133.823	5133.823	5140.282	5149.509	5140.282
<b>25</b>	4701.084	4696.470	4710.310	4718.615	4716.769
<b>30</b>	4331.087	4326.473	4335.700	4335.700	4344.927
<b>35</b>	3896.502	3894.656	3887.275	3885.429	3902.960
<b>40</b>	3448.076	3439.772	3421.319	3406.556	3419.473
<b>45</b>	3024.564	3013.491	2982.120	2955.362	2940.599
<b>50</b>	2487.561	2465.416	2440.504	2398.983	2374.070
<b>55</b>	2024.372	1990.233	1957.016	1906.269	1897.042
<b>60</b>	1566.720	1539.962	1497.519	1457.843	1453.230
<b>65</b>	1199.491	1177.347	1127.522	1112.759	1112.759
<b>70</b>	873.783	860.866	818.422	834.108	835.953
<b>75</b>	595.132	585.905	570.220	590.519	601.591
<b>80</b>	401.368	394.909	394.909	412.441	425.358
<b>85</b>	200.223	193.764	200.223	226.981	236.208
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 50F-S24-L130-840-FCPG-INVERTED LENS-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	2046.43	N.A.	16.10
0-30	4223.73	N.A.	33.30
0-40	6655.83	N.A.	52.40
0-60	10689.68	N.A.	84.20
0-80	12473.65	N.A.	98.20
0-90	12697.85	N.A.	100.00
10-90	12160.83	N.A.	95.80
20-40	4609.4	N.A.	36.30
20-50	6890.68	N.A.	54.30
40-70	5179.54	N.A.	40.80
60-80	1783.97	N.A.	14.00
70-80	638.28	N.A.	5.00
80-90	224.20	N.A.	1.80
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	12697.85	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	537.03
10-20	1509.41
20-30	2177.29
30-40	2432.11
40-50	2281.28
50-60	1752.57
60-70	1145.69
70-80	638.28
80-90	224.20
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	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	78	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	54
5	79	66	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48
6	73	60	52	46	71	59	51	46	58	50	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	39	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30	28

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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	17.5	19.0	17.8	19.3	19.6	17.1	18.6	17.5	18.9	19.3
	3H	18.9	20.3	19.3	20.6	21.0	18.5	19.9	18.9	20.3	20.6
	4H	19.4	20.7	19.8	21.1	21.5	19.1	20.4	19.5	20.8	21.2
	6H	19.9	21.1	20.3	21.5	21.9	19.7	20.9	20.1	21.2	21.6
	8H	20.1	21.2	20.5	21.6	22.0	19.9	21.1	20.3	21.4	21.8
	12H	20.2	21.3	20.6	21.7	22.1	20.1	21.2	20.5	21.6	22.0

### UGR Viewed Endwise

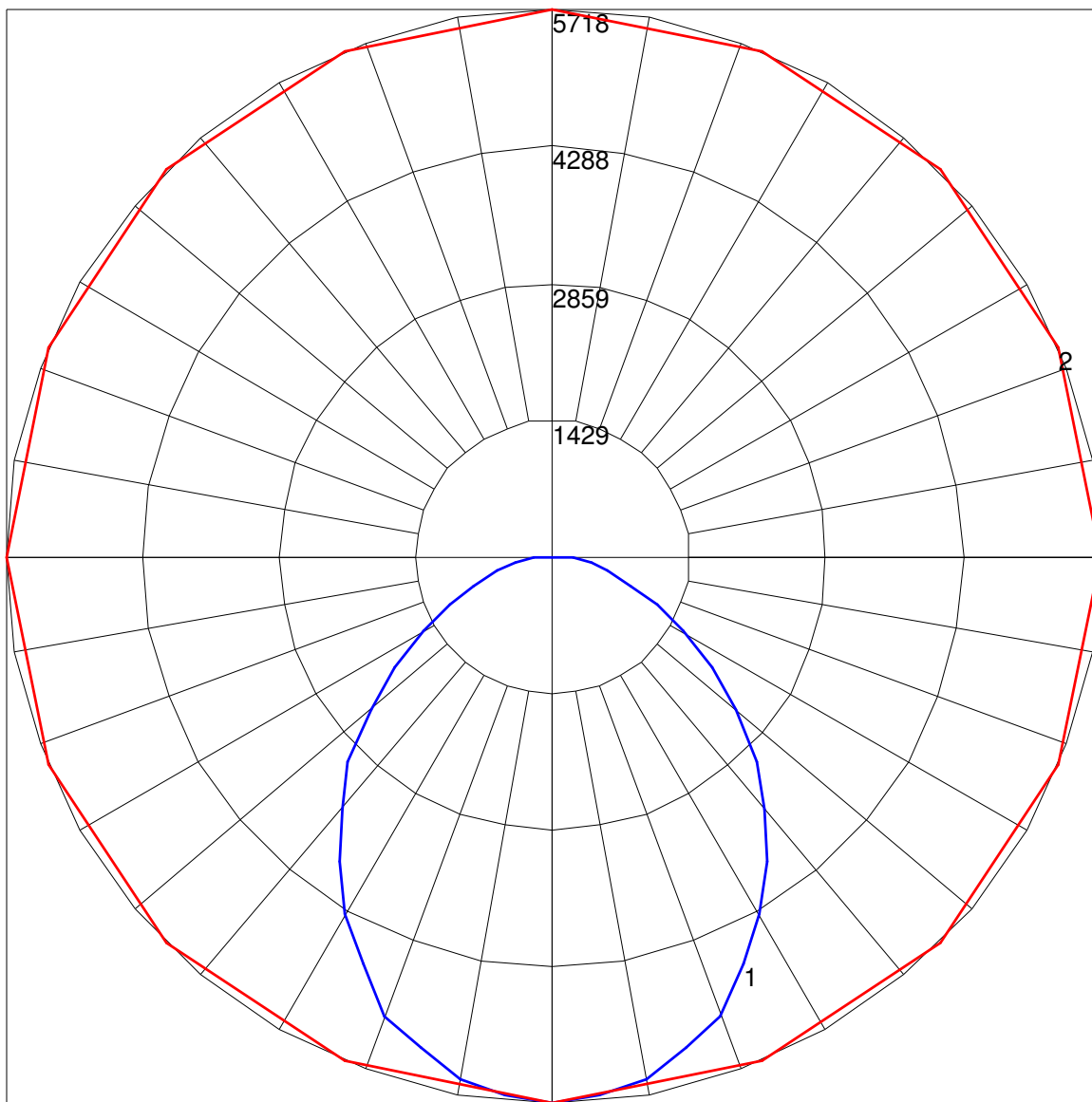
4H	2H	17.9	19.2	18.3	19.5	19.9	17.6	18.9	18.0	19.2	19.6
	3H	19.5	20.6	20.0	21.0	21.4	19.3	20.4	19.7	20.8	21.2
	4H	20.2	21.2	20.6	21.6	22.0	20.0	21.0	20.4	21.4	21.8
	6H	20.8	21.7	21.3	22.1	22.6	20.7	21.5	21.2	22.0	22.4
	8H	21.1	21.9	21.5	22.3	22.8	21.0	21.8	21.5	22.2	22.7
	12H	21.3	22.0	21.8	22.5	22.9	21.3	22.0	21.8	22.5	22.9

8H	4H	20.5	21.3	20.9	21.7	22.2	20.3	21.1	20.7	21.5	22.0
	6H	21.2	21.9	21.7	22.4	22.8	21.1	21.8	21.6	22.3	22.7
	8H	21.5	22.1	22.1	22.7	23.1	21.5	22.1	22.0	22.6	23.1
	12H	21.8	22.4	22.3	22.9	23.4	21.9	22.4	22.4	22.9	23.5

12H	4H	20.5	21.2	21.0	21.7	22.2	20.3	21.0	20.8	21.5	22.0
	6H	21.3	21.9	21.8	22.4	22.9	21.2	21.8	21.7	22.3	22.8
	8H	21.7	22.2	22.2	22.7	23.3	21.6	22.2	22.2	22.7	23.2

Maximum UGR = 23.5

POLAR GRAPH



Maximum Candela = 5717.883 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.)