



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S24-L59-840-FAF12125-(L30)-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] 07-12-2022

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO. 64836

[LUMINAIRE] 2x4' LED TROFFER

[MORE] FROSTED ACRYLIC LENS

[LUMCAT] 50G-S24-L59-840-FAF12125-(L30)-DIM-UNV

[LAMPCAT] HLM 80 CRI, 4000K CCT

[_SEARCH_SOURCE]TYPE]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	3185
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	148
Total Luminaire Watts	21.57
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	1728	1703	1680
55	1425	1378	1336
65	1146	1078	1063
75	929	890	939
85	928	928	1095

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	1434.198	1434.198	1434.198	1434.198	1434.198
5	1420.081	1419.155	1417.998	1417.304	1417.304
10	1394.392	1392.772	1393.929	1394.392	1394.392
15	1337.459	1337.459	1337.459	1339.079	1339.773
20	1287.700	1287.700	1289.320	1291.635	1289.320
25	1179.158	1178.001	1181.472	1183.555	1183.092
30	1086.353	1085.195	1087.510	1087.510	1089.824
35	977.347	976.884	975.033	974.570	978.967
40	864.870	862.787	858.158	854.455	857.696
45	758.642	755.864	747.996	741.284	737.581
50	623.947	618.392	612.144	601.729	595.480
55	507.767	499.204	490.872	478.143	475.829
60	392.975	386.264	375.618	365.666	364.509
65	300.865	295.310	282.813	279.110	279.110
70	219.168	215.928	205.282	209.217	209.679
75	149.275	146.961	143.026	148.118	150.895
80	100.674	99.054	99.054	103.451	106.691
85	50.221	48.601	50.221	56.933	59.247
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 50G-S24-L59-840-FAF12125-(L30)-DIM-UNV_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	513.30	N.A.	16.10
0-30	1059.42	N.A.	33.30
0-40	1669.46	N.A.	52.40
0-60	2681.26	N.A.	84.20
0-80	3128.73	N.A.	98.20
0-90	3184.96	N.A.	100.00
10-90	3050.26	N.A.	95.80
20-40	1156.16	N.A.	36.30
20-50	1728.37	N.A.	54.30
40-70	1299.17	N.A.	40.80
60-80	447.47	N.A.	14.00
70-80	160.10	N.A.	5.00
80-90	56.24	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	3184.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	134.70
10-20	378.60
20-30	546.12
30-40	610.04
40-50	572.21
50-60	439.59
60-70	287.37
70-80	160.10
80-90	56.24
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

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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	80	80	80	80	78	78	78	78	74	74	74	71	71	71	68	68	68	67
1	73	70	68	65	72	69	67	64	66	64	62	64	62	60	61	60	59	57
2	67	62	58	54	66	61	57	54	59	55	53	56	54	51	54	52	50	49
3	62	55	50	46	60	54	49	46	52	48	45	50	47	44	49	46	43	42
4	57	49	44	40	55	49	43	39	47	42	39	45	42	38	44	41	38	36
5	53	45	39	35	51	44	38	34	42	38	34	41	37	34	40	36	33	32
6	49	40	35	31	48	40	34	30	39	34	30	37	33	30	36	33	30	28
7	45	37	31	27	44	36	31	27	35	31	27	34	30	27	33	30	27	25
8	42	34	28	25	41	33	28	25	32	28	24	32	27	24	31	27	24	23
9	40	31	26	22	39	31	26	22	30	25	22	29	25	22	29	25	22	21
10	37	29	24	20	37	28	24	20	28	23	20	27	23	20	27	23	20	19

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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	14.1	15.6	14.4	15.9	16.2	13.7	15.2	14.1	15.5	15.9
	3H	15.5	16.9	15.9	17.2	17.6	15.1	16.5	15.5	16.9	17.2
	4H	16.0	17.3	16.4	17.7	18.1	15.7	17.0	16.1	17.4	17.8
	6H	16.5	17.7	16.9	18.1	18.5	16.3	17.5	16.7	17.8	18.2
	8H	16.7	17.8	17.1	18.2	18.6	16.5	17.7	16.9	18.0	18.4
	12H	16.8	17.9	17.2	18.3	18.7	16.7	17.8	17.1	18.2	18.6

UGR Viewed Endwise

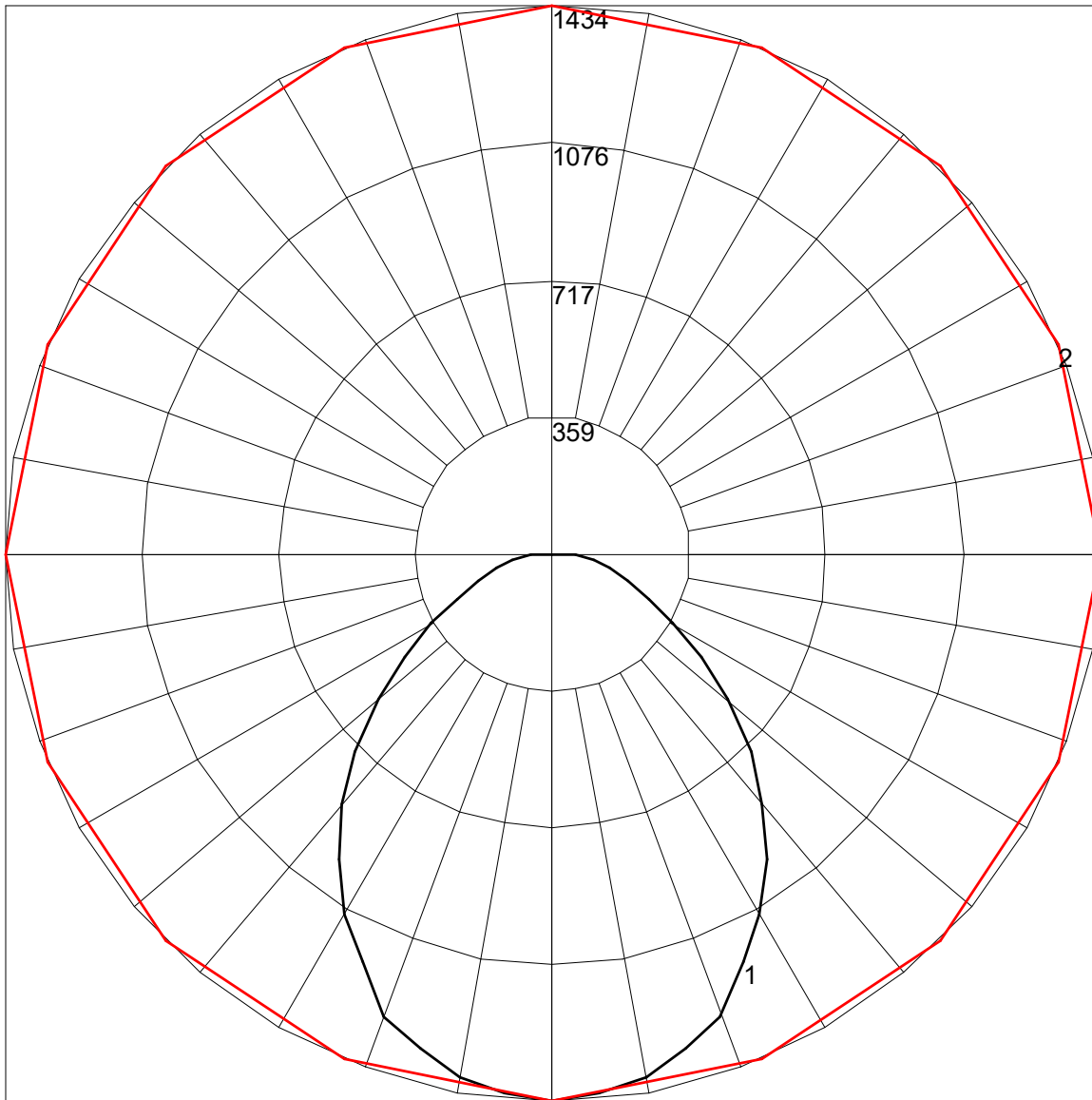
4H	2H	14.5	15.8	14.9	16.1	16.5	14.2	15.5	14.6	15.8	16.2
	3H	16.1	17.2	16.6	17.6	18.0	15.9	17.0	16.3	17.4	17.8
	4H	16.8	17.8	17.2	18.2	18.6	16.6	17.6	17.0	18.0	18.4
	6H	17.4	18.3	17.9	18.7	19.2	17.3	18.1	17.8	18.6	19.0
	8H	17.7	18.5	18.1	18.9	19.4	17.6	18.4	18.1	18.8	19.3
	12H	17.9	18.6	18.4	19.1	19.5	17.9	18.6	18.4	19.1	19.5

8H	4H	17.1	17.9	17.5	18.3	18.8	16.9	17.7	17.3	18.1	18.6
	6H	17.8	18.5	18.3	19.0	19.4	17.7	18.4	18.2	18.9	19.3
	8H	18.1	18.7	18.7	19.3	19.7	18.1	18.7	18.6	19.2	19.7
	12H	18.4	19.0	18.9	19.5	20.0	18.5	19.0	19.0	19.5	20.1

12H	4H	17.1	17.8	17.6	18.3	18.8	16.9	17.6	17.4	18.1	18.6
	6H	17.9	18.5	18.4	19.0	19.5	17.8	18.4	18.3	18.9	19.4
	8H	18.3	18.8	18.8	19.3	19.9	18.2	18.8	18.8	19.3	19.8

Maximum UGR = 20.1

POLAR GRAPH



Maximum Candela = 1434.198 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)