



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S24-L90-835-FAF12125-(L60)-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] 07-28-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2x4' LED TROFFER

[MORE] FROSTED ACRYLIC LENS

[LUMCAT] 50G-S24-L90-835-FAF12125-(L60)-DIM-UNV

[LAMPCAT] HLM 80 CRI, 3500K CCT

[_SEARCH_SOURCETYPE]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	6125
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	47.5
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	3322	3276	3230
55	2741	2650	2569
65	2204	2072	2045
75	1786	1711	1805
85	1784	1784	2105

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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	2758.075	2758.075	2758.075	2758.075	2758.075
5	2730.926	2729.145	2726.920	2725.585	2725.585
10	2681.523	2678.408	2680.633	2681.523	2681.523
15	2572.037	2572.037	2572.037	2575.152	2576.488
20	2476.348	2476.348	2479.463	2483.914	2479.463
25	2267.612	2265.386	2272.062	2276.068	2275.178
30	2089.140	2086.915	2091.366	2091.366	2095.816
35	1879.514	1878.624	1875.063	1874.173	1882.630
40	1663.212	1659.206	1650.305	1643.184	1649.415
45	1458.927	1453.586	1438.454	1425.547	1418.426
50	1199.898	1189.217	1177.200	1157.172	1145.155
55	976.475	960.008	943.985	919.507	915.056
60	755.722	742.815	722.342	703.204	700.979
65	578.586	567.904	543.871	536.750	536.750
70	421.478	415.247	394.774	402.340	403.230
75	287.068	282.617	275.051	284.842	290.183
80	193.604	190.488	190.488	198.945	205.175
85	96.579	93.464	96.579	109.486	113.937
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 50G-S24-L90-835-FAF12125-(L60)-DIM-UNV_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	987.12	N.A.	16.10
0-30	2037.35	N.A.	33.30
0-40	3210.5	N.A.	52.40
0-60	5156.27	N.A.	84.20
0-80	6016.78	N.A.	98.20
0-90	6124.93	N.A.	100.00
10-90	5865.89	N.A.	95.80
20-40	2223.39	N.A.	36.30
20-50	3323.78	N.A.	54.30
40-70	2498.4	N.A.	40.80
60-80	860.51	N.A.	14.00
70-80	307.88	N.A.	5.00
80-90	108.15	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	6124.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	259.04
10-20	728.08
20-30	1050.24
30-40	1173.15
40-50	1100.4
50-60	845.37
60-70	552.63
70-80	307.88
80-90	108.15
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

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	15.0	16.5	15.3	16.8	17.1	14.6	16.1	15.0	16.4	16.8
	3H	16.4	17.8	16.8	18.1	18.5	16.0	17.4	16.4	17.8	18.1
	4H	16.9	18.2	17.3	18.6	19.0	16.6	17.9	17.0	18.3	18.7
	6H	17.4	18.6	17.8	19.0	19.4	17.2	18.4	17.6	18.7	19.1
	8H	17.6	18.7	18.0	19.1	19.5	17.4	18.6	17.8	18.9	19.3
	12H	17.7	18.8	18.1	19.2	19.6	17.6	18.7	18.0	19.1	19.5

UGR Viewed Endwise

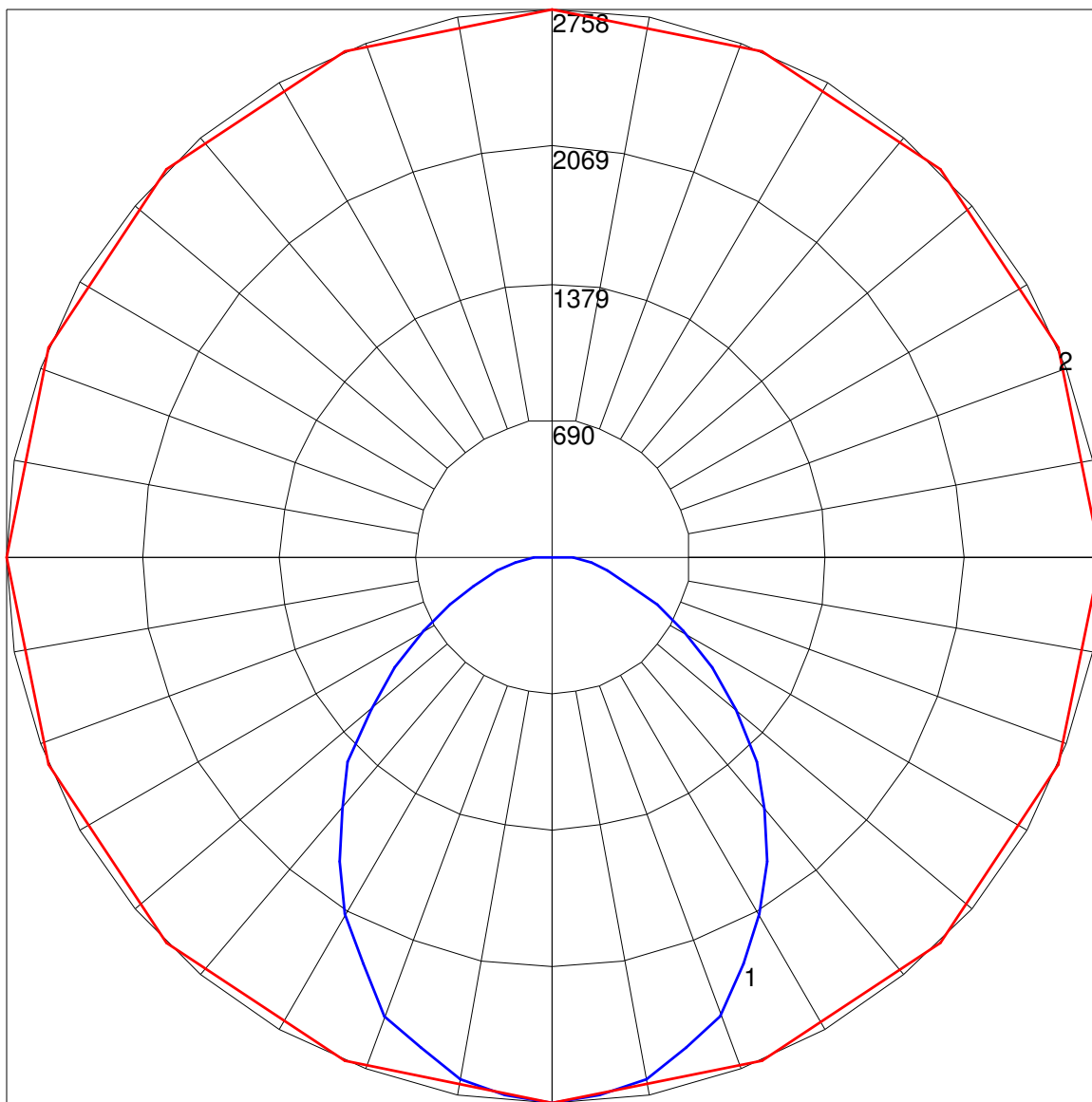
4H	2H	15.4	16.7	15.8	17.0	17.4	15.1	16.4	15.5	16.7	17.1
	3H	17.0	18.1	17.5	18.5	18.9	16.8	17.9	17.2	18.3	18.7
	4H	17.7	18.7	18.1	19.1	19.5	17.5	18.5	17.9	18.9	19.3
	6H	18.3	19.2	18.8	19.6	20.1	18.2	19.0	18.7	19.5	19.9
	8H	18.6	19.4	19.0	19.8	20.3	18.5	19.3	19.0	19.7	20.2
	12H	18.8	19.5	19.3	20.0	20.4	18.8	19.5	19.3	20.0	20.4

8H	4H	18.0	18.8	18.4	19.2	19.7	17.8	18.6	18.2	19.0	19.5
	6H	18.7	19.4	19.2	19.9	20.3	18.6	19.3	19.1	19.8	20.2
	8H	19.0	19.6	19.6	20.2	20.6	19.0	19.6	19.5	20.1	20.6
	12H	19.3	19.9	19.8	20.4	20.9	19.4	19.9	19.9	20.4	21.0

12H	4H	18.0	18.7	18.5	19.2	19.7	17.8	18.5	18.3	19.0	19.5
	6H	18.8	19.4	19.3	19.9	20.4	18.7	19.3	19.2	19.8	20.3
	8H	19.2	19.7	19.7	20.2	20.8	19.1	19.7	19.7	20.2	20.7

Maximum UGR = 21.0

POLAR GRAPH



Maximum Candela = 2758.075 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.)