



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 12-4-L130-840-FAF12125-(L94)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from BALLABS TEST NO. 18637.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 06-24-2021
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836
 [LUMINAIRE] 4' SURFACE MOUNT LUMINAIRE
 [MORE] WITH FROSTED ACRYLIC LENS
 [LUMCAT] 12-4-L130-840-FAF12125-(L94)-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	9795
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
Total Luminaire Watts	68
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)	3.77 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	5187	5070	5012
55	4335	4168	4096
65	3585	3430	3398
75	3043	2977	3166
85	3162	3205	3722

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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	4475.952	4475.952	4475.952	4475.952	4475.952
5	4370.129	4370.129	4364.315	4361.989	4364.315
10	4300.356	4294.542	4292.216	4294.542	4292.216
15	4091.036	4085.222	4080.570	4080.570	4080.570
20	3985.214	3972.422	3972.422	3968.933	3961.956
25	3651.465	3649.139	3638.673	3634.022	3638.673
30	3325.857	3321.205	3308.413	3300.273	3302.599
35	3001.411	2990.945	2972.339	2964.199	2964.199
40	2646.731	2629.287	2603.704	2580.446	2580.446
45	2274.607	2257.164	2223.440	2197.856	2197.856
50	1885.040	1867.596	1833.873	1808.289	1808.289
55	1541.988	1516.405	1482.681	1453.609	1457.097
60	1218.706	1193.122	1165.213	1146.607	1148.932
65	939.613	916.355	898.912	890.771	890.771
70	710.524	691.918	676.800	687.266	697.732
75	488.413	477.947	477.947	493.064	508.182
80	325.608	325.608	325.608	346.540	361.658
85	170.944	170.944	173.270	196.528	201.179
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 12-4-L130-840-FAF12125-(L94)-DIM-UNV_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1576.29	N.A.	16.10
0-30	3254.69	N.A.	33.20
0-40	5112.43	N.A.	52.20
0-60	8168.05	N.A.	83.40
0-80	9604.64	N.A.	98.10
0-90	9794.88	N.A.	100.00
10-90	9379.38	N.A.	95.80
20-40	3536.14	N.A.	36.10
20-50	5253.42	N.A.	53.60
40-70	3964.61	N.A.	40.50
60-80	1436.59	N.A.	14.70
70-80	527.60	N.A.	5.40
80-90	190.25	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	9794.88	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	415.51
10-20	1160.78
20-30	1678.4
30-40	1857.74
40-50	1717.27
50-60	1338.35
60-70	908.99
70-80	527.60
80-90	190.25
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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	65	73	68	64	62
4	85	74	65	59	83	72	64	59	70	63	58	67	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	48
6	73	60	52	45	71	59	51	45	57	50	45	56	49	44	54	49	44	42
7	68	55	46	41	66	54	46	40	52	45	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	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	16.5	18.1	16.9	18.4	18.7	16.2	17.8	16.6	18.1	18.4
	3H	18.1	19.5	18.5	19.8	20.2	17.8	19.2	18.2	19.5	19.9
	4H	18.6	20.0	19.0	20.3	20.7	18.5	19.8	18.9	20.1	20.5
	6H	19.1	20.4	19.6	20.7	21.1	19.1	20.3	19.5	20.7	21.1
	8H	19.4	20.5	19.8	20.9	21.3	19.4	20.5	19.8	20.9	21.3
	12H	19.5	20.6	19.9	21.0	21.4	19.6	20.7	20.0	21.1	21.5

UGR Viewed Endwise

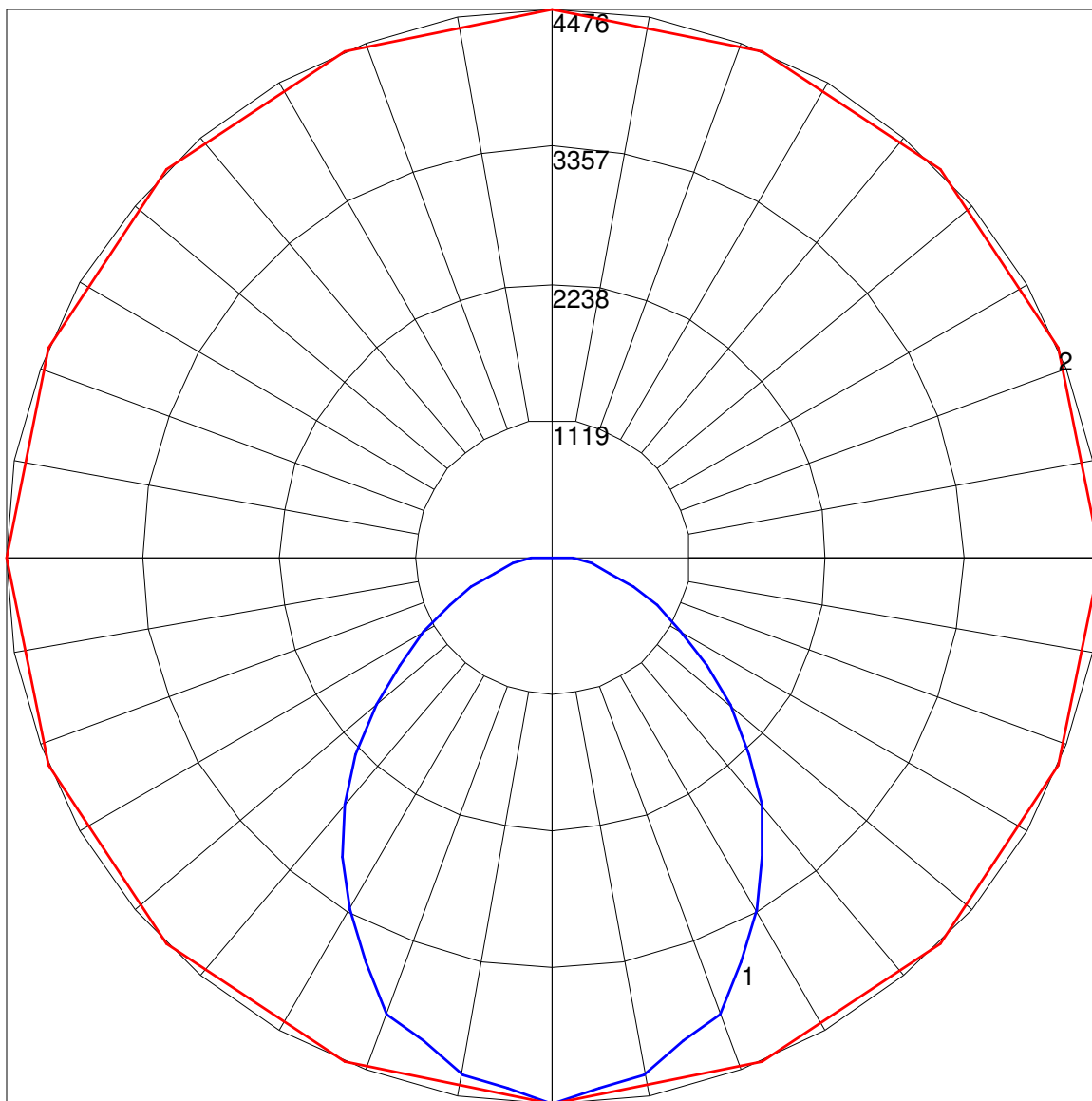
4H	2H	17.0	18.3	17.4	18.7	19.0	16.7	18.1	17.1	18.4	18.8
	3H	18.8	19.9	19.2	20.3	20.7	18.6	19.7	19.0	20.1	20.5
	4H	19.5	20.5	19.9	20.9	21.3	19.4	20.4	19.8	20.8	21.2
	6H	20.1	21.0	20.6	21.4	21.9	20.1	21.0	20.6	21.5	21.9
	8H	20.4	21.2	20.9	21.7	22.1	20.5	21.3	20.9	21.7	22.2
	12H	20.6	21.4	21.1	21.8	22.3	20.8	21.5	21.3	22.0	22.5

8H	4H	19.8	20.6	20.2	21.0	21.5	19.7	20.5	20.1	20.9	21.4
	6H	20.6	21.2	21.1	21.7	22.2	20.6	21.3	21.1	21.8	22.2
	8H	20.9	21.5	21.5	22.0	22.5	21.0	21.6	21.6	22.2	22.6
	12H	21.3	21.8	21.8	22.3	22.9	21.5	22.0	22.0	22.5	23.1

12H	4H	19.8	20.5	20.3	21.0	21.5	19.7	20.4	20.2	20.9	21.4
	6H	20.7	21.3	21.2	21.7	22.3	20.7	21.3	21.2	21.7	22.3
	8H	21.1	21.6	21.6	22.1	22.7	21.2	21.7	21.7	22.2	22.8

Maximum UGR = 23.1

POLAR GRAPH



Maximum Candela = 4475.952 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.)