

IES INDOOR REPORT

PHOTOMETRIC FILENAME : CL-4-L88-835-FAF12125-(L60)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 18716.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 6-19-2023

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4' CORNER MOUNT LUMINAIRE

[MORE] WITH ACRYLIC LENS

[LUMCAT] CL-4-L88/835-FAF12125-(L60)-DIM-UNV

[LAMPCAT] HLM 80 CRI, 3500K CCT

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] INDOOR, COMMERCIAL, EDUCATIONAL, OFFICE

[_SEARCH_MOUNTING] SURFACE

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5697
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	52.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	2.72
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.66
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.48 ft
Luminous Width (90-270)	3.77 ft
Luminous Height	0.48 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	11550	9515	4372
55	11193	9025	3682
65	10915	8422	3132
75	9764	7249	2631
85	8856	6200	1821

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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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0	1110.649	1110.649	1110.649	1110.649	1110.649	1110.649	1110.649	1110.649	1110.649
5	1377.009	1344.630	1282.317	1178.461	1086.212	1037.339	963.418	909.046	890.108
10	1632.984	1573.114	1434.435	1241.385	1050.779	909.046	781.364	702.556	672.621
15	1921.948	1842.529	1638.482	1352.572	1064.219	849.176	686.061	598.700	566.321
20	2141.878	2022.139	1731.342	1312.252	925.541	656.126	489.956	402.595	375.715
25	2348.980	2232.294	1883.460	1388.006	922.486	604.198	427.643	342.725	318.288
30	2509.651	2359.976	1967.767	1374.565	830.238	489.956	329.285	250.476	220.541
35	2591.514	2444.283	2008.698	1361.125	772.811	430.086	274.913	187.552	155.173
40	2664.824	2507.207	2030.691	1309.197	677.508	332.339	187.552	95.303	57.426
45	2743.633	2569.521	2030.691	1232.832	585.259	266.971	117.296	29.935	18.938
50	2705.756	2523.091	1970.821	1154.024	506.451	212.599	46.430	21.993	0.000
55	2618.394	2433.286	1859.023	1039.782	419.090	152.729	18.938	0.000	0.000
60	2504.153	2308.048	1733.785	936.537	351.278	89.805	0.000	0.000	0.000
65	2436.341	2229.240	1619.544	827.183	282.855	27.491	0.000	0.000	0.000
70	2267.117	2060.626	1458.872	712.941	231.538	0.000	0.000	0.000	0.000
75	2008.698	1810.150	1252.382	593.201	168.613	0.000	0.000	0.000	0.000
80	1821.147	1621.987	1083.158	482.014	117.296	0.000	0.000	0.000	0.000
85	1611.602	1415.497	917.599	392.209	65.368	0.000	0.000	0.000	0.000
90	1249.327	1088.656	691.559	288.353	0.000	0.000	0.000	0.000	0.000
95	1058.721	901.104	555.324	201.603	0.000	0.000	0.000	0.000	0.000
100	811.299	680.563	416.646	133.180	0.000	0.000	0.000	0.000	0.000
105	612.140	517.448	304.848	67.812	0.000	0.000	0.000	0.000	0.000
110	473.461	400.151	226.040	0.000	0.000	0.000	0.000	0.000	0.000
115	353.722	299.350	152.729	0.000	0.000	0.000	0.000	0.000	0.000
120	263.917	217.487	78.808	0.000	0.000	0.000	0.000	0.000	0.000
125	177.166	130.736	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130	100.801	57.426	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135	13.440	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : CL-4-L88-835-FAF12125-(L60)-DIM-UNV_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	426.71	N.A.	7.50
0-30	948.16	N.A.	16.60
0-40	1638.1	N.A.	28.80
0-60	3239.1	N.A.	56.90
0-80	4647.05	N.A.	81.60
0-90	5127.65	N.A.	90.00
10-90	5021.51	N.A.	88.10
20-40	1211.39	N.A.	21.30
20-50	2002.43	N.A.	35.20
40-70	2365.82	N.A.	41.50
60-80	1407.95	N.A.	24.70
70-80	643.14	N.A.	11.30
80-90	480.59	N.A.	8.40
90-110	458.91	N.A.	8.10
90-120	538.26	N.A.	9.40
90-130	565.86	N.A.	9.90
90-150	568.91	N.A.	10.00
90-180	568.91	N.A.	10.00
110-180	110.00	N.A.	1.90
0-180	5696.56	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	106.14
10-20	320.57
20-30	521.46
30-40	689.94
40-50	791.04
50-60	809.96
60-70	764.82
70-80	643.14
80-90	480.59
90-100	296.91
100-110	162.00
110-120	79.34
120-130	27.60
130-140	3.05
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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	67
2	92	82	73	66	88	79	71	65	74	67	62	69	63	59	64	60	56	53
3	83	70	61	53	79	68	59	52	63	56	50	59	53	48	55	50	46	43
4	75	62	52	44	72	60	50	43	56	48	41	52	45	40	49	43	38	35
5	69	54	44	37	66	53	43	36	49	41	35	46	39	34	43	37	32	30
6	63	49	39	32	60	47	38	31	44	36	30	41	34	29	39	33	28	26
7	58	44	34	28	56	42	34	27	40	32	26	38	31	25	35	29	25	22
8	54	40	31	24	52	39	30	24	36	29	23	34	27	22	32	26	22	20
9	50	36	28	22	48	35	27	21	33	26	21	31	25	20	30	24	19	17
10	47	33	25	19	45	32	24	19	31	24	19	29	23	18	28	22	17	16

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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	24.5	26.0	25.0	26.5	27.1	UGR Viewed Endwise	13.7	15.3	14.2	15.8	16.4
	3H	27.5	29.0	28.0	29.5	30.1		14.9	16.3	15.4	16.9	17.4
	4H	28.9	30.3	29.5	30.8	31.4		15.3	16.6	15.8	17.2	17.8
	6H	30.4	31.7	30.9	32.2	32.8		15.5	16.8	16.1	17.3	18.0
	8H	31.1	32.3	31.7	32.9	33.5		15.6	16.8	16.1	17.4	18.0
	12H	31.8	33.0	32.4	33.6	34.2		15.6	16.8	16.2	17.4	18.0

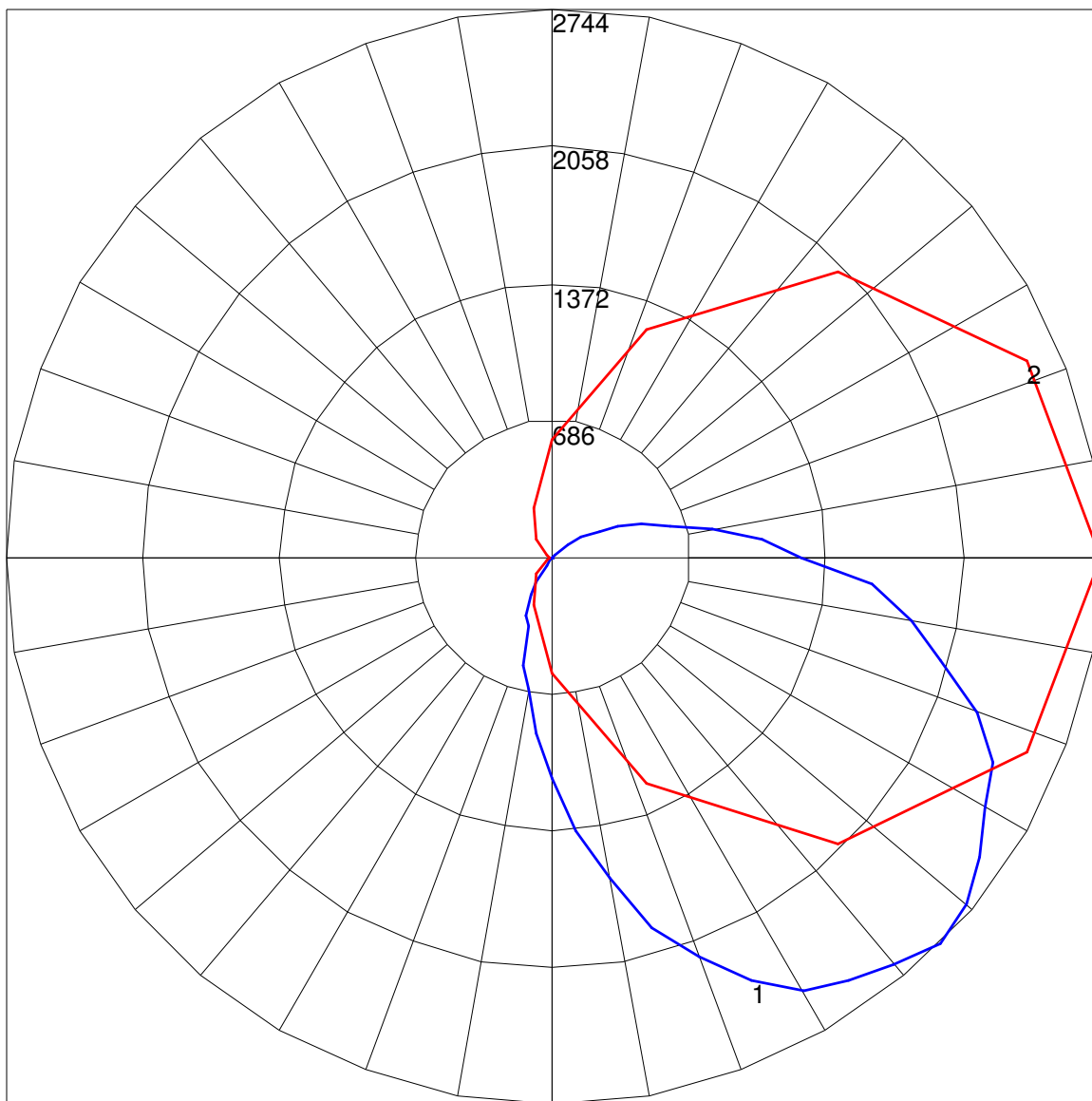
4H	2H	24.7	26.1	25.2	26.6	27.2	16.7	18.1	17.2	18.6	19.2
	3H	28.0	29.2	28.5	29.7	30.4	18.1	19.3	18.6	19.9	20.5
	4H	29.5	30.6	30.1	31.2	31.9	18.5	19.6	19.1	20.2	20.9
	6H	31.2	32.2	31.8	32.8	33.4	18.8	19.8	19.4	20.4	21.1
	8H	32.0	32.9	32.6	33.6	34.2	18.9	19.8	19.5	20.4	21.1
	12H	32.9	33.8	33.5	34.4	35.1	19.0	19.8	19.6	20.4	21.1

8H	4H	29.7	30.6	30.3	31.2	31.9	20.4	21.3	21.0	21.9	22.6
	6H	31.5	32.2	32.1	32.9	33.6	21.0	21.8	21.6	22.4	23.1
	8H	32.4	33.1	33.1	33.8	34.5	21.1	21.9	21.8	22.5	23.2
	12H	33.5	34.1	34.1	34.8	35.5	21.3	21.9	21.9	22.6	23.3

12H	4H	29.6	30.5	30.3	31.1	31.8	21.0	21.8	21.6	22.5	23.1
	6H	31.5	32.2	32.1	32.8	33.6	21.7	22.4	22.4	23.1	23.8
	8H	32.5	33.1	33.1	33.8	34.5	22.0	22.7	22.7	23.3	24.1

Maximum UGR = 35.5

POLAR GRAPH



Maximum Candela = 2743.633 Located At Horizontal Angle = 0, Vertical Angle = 45
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (45) (Through Max. Cd.)