

IES INDOOR REPORT

PHOTOMETRIC FILENAME : WMAUD-2-L33-835U-L33-835D-AF-DIMU-DIMD-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 17320.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 8 AUG, 2023

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2' DIRECT/INDIRECT WALL MOUNT LUMINAIRE

[MORE] WHITE REFLECTOR w/FROSTED ACRYLIC LENS ON TOP & BOTTOM

[LUMCAT] WMAUD-2-L33-835U-L33-835D-AF-DIMU-DIMD-UNV

[LAMPCAT] HLM 80 CRI, 3500K CCT

[_SEARCH_SOURCE] LED

[_SEARCH_APPLICATION] Indoor, Corridor, Healthcare, Direct-Indirect

[_SEARCH_MOUNTING] Wall

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6782
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	127
Total Luminaire Watts	53.3
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.28 ft
Luminous Width (90-270)	1.98 ft
Luminous Height	0.46 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14322	13360	14587
55	11721	10680	11908
65	9477	8467	9406
75	7499	5982	6166
85	7726	5690	2145

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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	1214.742	1214.742	1214.742	1214.742	1214.742	1214.742	1214.742	1214.742	1214.742
5	1325.936	1311.250	1283.976	1246.212	1207.399	1185.370	1150.753	1125.577	1114.038
10	1399.366	1374.190	1322.789	1249.359	1167.537	1108.793	1042.706	999.697	983.962
15	1441.326	1414.052	1342.720	1239.918	1127.675	1037.461	950.394	893.748	872.768
20	1526.295	1479.090	1377.337	1231.526	1071.029	938.855	826.612	752.133	728.006
25	1486.433	1441.326	1325.936	1165.439	991.305	847.592	725.908	652.478	623.106
30	1484.335	1428.738	1295.515	1106.695	903.189	737.447	602.126	525.549	497.226
35	1468.600	1410.905	1259.849	1055.294	839.200	667.164	530.794	447.923	421.698
40	1403.562	1341.671	1179.076	961.933	734.300	557.019	421.698	344.072	317.847
45	1367.896	1297.613	1121.381	882.209	645.135	463.658	333.582	261.201	237.074
50	1255.653	1187.468	1010.187	782.554	553.872	379.738	257.005	188.820	169.938
55	1150.753	1082.568	905.287	681.850	461.560	295.818	183.575	123.782	104.900
60	1022.775	958.786	798.289	587.440	379.738	226.584	127.978	73.430	57.695
65	927.316	862.278	702.830	496.177	302.112	161.546	70.283	28.323	18.882
70	801.436	742.692	592.685	404.914	225.535	99.655	24.127	5.245	5.245
75	709.124	637.792	471.001	305.259	151.056	47.205	5.245	9.441	9.441
80	691.291	615.763	429.041	225.535	89.165	5.245	9.441	9.441	12.588
85	682.899	604.224	410.159	177.281	34.617	5.245	17.833	30.421	34.617
90	623.106	553.872	375.542	160.497	0.000	17.833	32.519	44.058	48.254
95	678.703	606.322	413.306	177.281	36.715	6.294	25.176	36.715	40.911
100	687.095	615.763	431.139	226.584	92.312	5.245	9.441	13.637	16.784
105	704.928	637.792	477.295	307.357	153.154	39.862	5.245	9.441	9.441
110	800.387	746.888	600.028	405.963	225.535	90.214	18.882	5.245	8.392
115	921.022	865.425	707.026	501.422	303.161	154.203	67.136	23.078	16.784
120	1014.383	956.688	800.387	590.587	381.836	223.437	122.733	70.283	55.597
125	1141.312	1079.421	911.581	687.095	469.952	295.818	186.722	123.782	104.900
130	1238.869	1181.174	1010.187	785.701	561.215	379.738	257.005	188.820	169.938
135	1350.063	1291.319	1121.381	885.356	650.380	463.658	333.582	259.103	237.074
140	1392.023	1338.524	1182.223	966.129	744.790	560.166	424.845	347.219	322.043
145	1456.012	1403.562	1259.849	1057.392	853.886	670.311	533.941	452.119	424.845
150	1468.600	1423.493	1295.515	1109.842	914.728	741.643	608.420	529.745	501.422
155	1474.894	1436.081	1323.838	1167.537	1003.893	847.592	729.055	653.527	626.253
160	1508.462	1472.796	1373.141	1231.526	1083.617	942.002	827.661	759.476	733.251
165	1437.130	1414.052	1343.769	1243.065	1144.459	1038.510	952.492	896.895	876.964
170	1387.827	1369.994	1319.642	1249.359	1185.370	1108.793	1044.804	1003.893	988.158
175	1323.838	1314.397	1286.074	1253.555	1227.330	1190.615	1157.047	1131.871	1121.381
180	1217.889	1217.889	1217.889	1217.889	1217.889	1217.889	1217.889	1217.889	1217.889

IES INDOOR REPORT**PHOTOMETRIC FILENAME : WMAUD-2-L33-835U-L33-835D-AF-DIMU-DIMD-UNV_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	438.01	N.A.	6.50
0-30	910.85	N.A.	13.40
0-40	1465.02	N.A.	21.60
0-60	2511.52	N.A.	37.00
0-80	3165.92	N.A.	46.70
0-90	3388.62	N.A.	50.00
10-90	3273.76	N.A.	48.30
20-40	1027.01	N.A.	15.10
20-50	1584.35	N.A.	23.40
40-70	1429.89	N.A.	21.10
60-80	654.39	N.A.	9.60
70-80	271.00	N.A.	4.00
80-90	222.71	N.A.	3.30
90-110	496.03	N.A.	7.30
90-120	878.64	N.A.	13.00
90-130	1368.2	N.A.	20.20
90-150	2481.01	N.A.	36.60
90-180	3393.53	N.A.	50.00
110-180	2897.51	N.A.	42.70
0-180	6782.16	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	114.86
10-20	323.15
20-30	472.84
30-40	554.17
40-50	557.35
50-60	489.16
60-70	383.39
70-80	271.00
80-90	222.71
90-100	224.64
100-110	271.39
110-120	382.61
120-130	489.56
130-140	557.28
140-150	555.53
150-160	473.44
160-170	323.81
170-180	115.27

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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	81	78	71	69	66	59	57	55	48	47	45	40
2	88	80	73	68	81	74	68	63	62	58	54	52	49	46	42	40	38	33
3	80	70	62	56	73	65	58	53	55	50	46	46	42	39	37	34	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	27	24
5	67	55	47	41	62	51	44	38	44	38	33	36	32	29	30	26	24	21
6	62	50	41	35	57	46	39	33	39	33	29	33	28	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	35	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12

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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	20.5	21.3	21.4	22.3	23.6	13.2	14.1	14.2	15.1	16.3
	3H	22.8	23.6	23.8	24.6	25.9	14.3	15.1	15.3	16.1	17.4
	4H	23.9	24.7	24.9	25.7	27.0	14.6	15.4	15.6	16.4	17.7
	6H	25.2	25.9	26.2	26.9	28.2	14.7	15.4	15.7	16.4	17.8
	8H	25.9	26.6	26.9	27.6	28.9	14.8	15.4	15.8	16.4	17.7
	12H	26.7	27.4	27.7	28.4	29.7	14.7	15.4	15.7	16.4	17.7

UGR Viewed Endwise

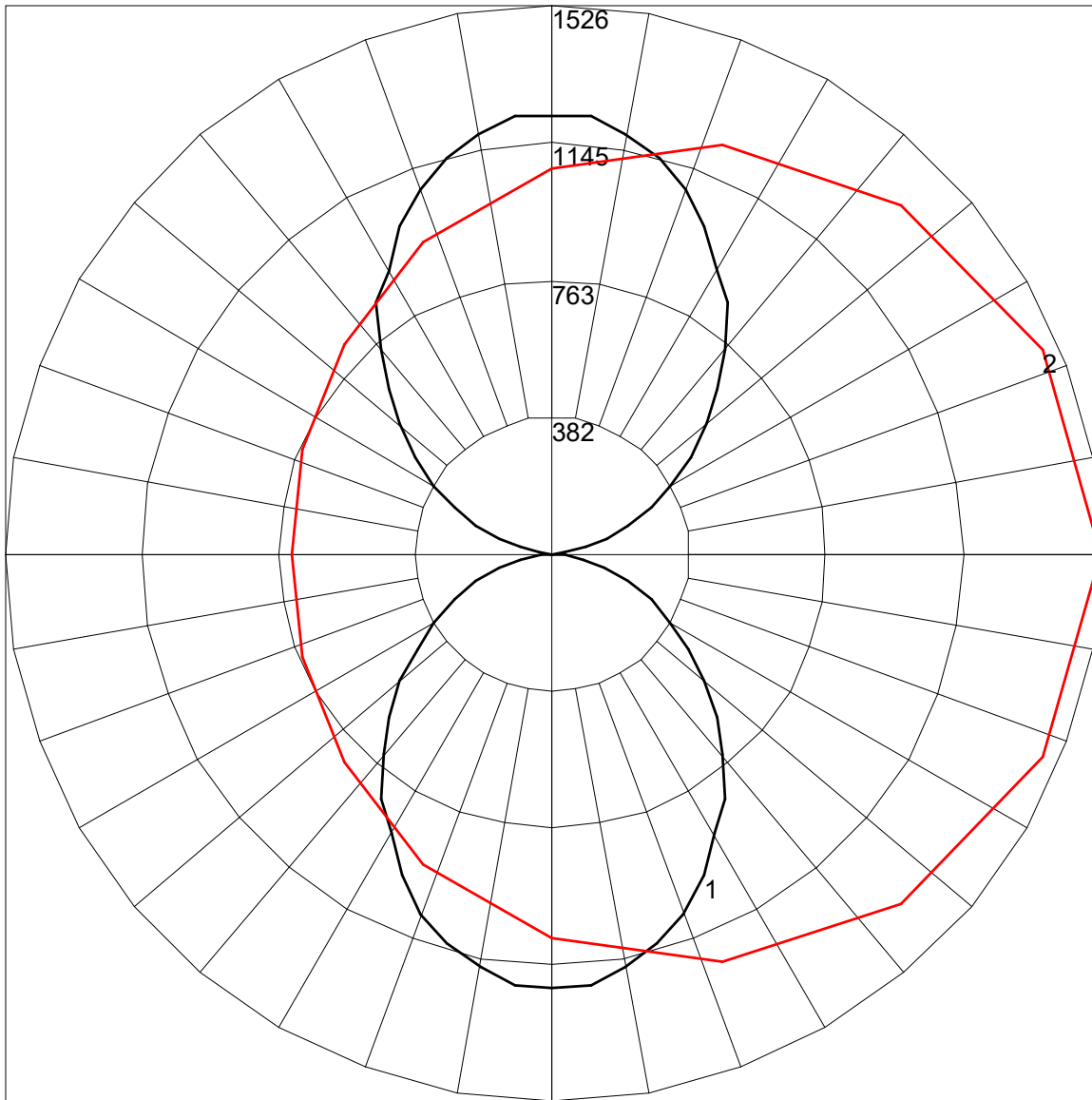
4H	2H	20.6	21.4	21.6	22.3	23.6	14.4	15.1	15.4	16.1	17.4
	3H	23.1	23.8	24.1	24.8	26.1	15.7	16.3	16.7	17.3	18.7
	4H	24.4	25.0	25.4	26.0	27.3	16.1	16.7	17.1	17.7	19.0
	6H	25.9	26.4	26.9	27.4	28.8	16.3	16.8	17.3	17.9	19.2
	8H	26.7	27.2	27.7	28.2	29.6	16.3	16.8	17.4	17.9	19.2
	12H	27.7	28.1	28.7	29.1	30.5	16.3	16.8	17.4	17.8	19.2

8H	4H	24.4	24.9	25.4	25.9	27.3	16.9	17.4	17.9	18.4	19.8
	6H	26.1	26.5	27.1	27.5	28.9	17.3	17.7	18.4	18.8	20.1
	8H	27.1	27.4	28.1	28.5	29.8	17.5	17.8	18.5	18.9	20.2
	12H	28.2	28.5	29.2	29.5	30.9	17.5	17.8	18.6	18.9	20.3

12H	4H	24.4	24.8	25.4	25.8	27.2	17.2	17.6	18.2	18.7	20.0
	6H	26.1	26.4	27.1	27.5	28.9	17.8	18.1	18.8	19.2	20.6
	8H	27.1	27.4	28.1	28.5	29.9	18.0	18.3	19.0	19.4	20.8

Maximum UGR = 30.9

POLAR GRAPH



Maximum Candela = 1526.295 Located At Horizontal Angle = 0, Vertical Angle = 20
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (20) (Through Max. Cd.)