



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AT3-24-P100-835-D-POE_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 19260.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 16-JAN-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4-22" LED ARRAYS 2x4' LUMINAIRE

[MORE] WHITE REFLECTOR w/FROSTED ACRYLIC CONCAVE LENS IN DOOR

[LUMCAT] AT3-24-P27-835-D-PoE

[_SEARCH_SOURCETYPE]LED

[_SEARCH_APPLICATION]INDOOR,COMMERCIAL,DIRECT,OFFICE,ARCHITECTURAL

[_SEARCH_MOUNTING]RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9646
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	119
Total Luminaire Watts	81.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.12
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.76 ft
Luminous Width (90-270)	1.88 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4394	4912	5239
55	3745	4340	4617
65	3400	4153	4461
75	2891	3954	3954
85	2562	1826	1708

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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	3843.620	3843.620	3843.620	3843.620	3843.620
5	3823.290	3824.645	3824.645	3826.001	3827.356
10	3746.038	3750.104	3759.591	3771.789	3779.921
15	3607.798	3617.285	3638.970	3671.497	3686.405
20	3400.438	3420.767	3472.268	3534.612	3560.363
25	3121.247	3146.997	3222.894	3306.922	3344.871
30	2827.147	3103.628	2931.505	2922.018	3134.800
35	2528.982	2575.062	2706.526	2835.279	2884.070
40	2243.015	2295.871	2453.086	2579.128	2619.787
45	2037.010	2102.064	2276.897	2392.097	2428.690
50	1714.449	1788.991	1951.626	2046.497	2070.892
55	1408.153	1485.404	1631.776	1709.028	1736.134
60	1145.225	1225.188	1349.875	1420.350	1443.390
65	941.931	1030.025	1150.646	1217.056	1236.030
70	712.886	806.401	916.180	969.037	978.524
75	490.617	584.133	670.872	679.003	670.872
80	317.139	412.010	403.878	280.546	254.796
85	146.372	168.057	104.358	98.937	97.581
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1389.16	N.A.	14.40
0-30	2878.47	N.A.	29.80
0-40	4574.94	N.A.	47.40
0-60	7726.97	N.A.	80.10
0-80	9485.24	N.A.	98.30
0-90	9646.43	N.A.	100.00
10-90	9283.37	N.A.	96.20
20-40	3185.78	N.A.	33.00
20-50	4897.13	N.A.	50.80
40-70	4254.13	N.A.	44.10
60-80	1758.27	N.A.	18.20
70-80	656.17	N.A.	6.80
80-90	161.19	N.A.	1.70
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	9646.43	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	363.06
10-20	1026.1
20-30	1489.31
30-40	1696.47
40-50	1711.34
50-60	1440.68
60-70	1102.1
70-80	656.17
80-90	161.19
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	436	436	436	436	426	426	426	426	407	407	407	390	390	390	374	374	374	366
1	399	382	367	353	389	374	360	347	358	347	336	344	335	326	331	323	316	309
2	364	334	310	289	354	327	305	286	314	295	279	302	287	273	291	278	267	259
3	333	295	265	242	323	289	262	240	278	255	235	268	248	231	258	242	227	219
4	305	262	230	206	297	257	227	205	248	222	202	239	217	199	231	212	196	188
5	281	235	202	178	273	231	200	177	223	196	175	216	192	174	209	188	172	164
6	260	212	180	156	253	208	178	156	202	175	154	196	172	153	190	168	152	144
7	242	193	161	139	235	190	160	138	184	157	137	179	154	136	174	152	135	128
8	225	176	146	124	219	174	144	124	169	142	123	164	140	122	160	138	122	115
9	211	162	132	112	206	160	132	112	156	130	111	152	128	111	148	126	110	104
10	198	150	121	102	193	148	121	102	144	119	102	141	118	101	138	116	101	94

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UGR TABLE - CORRECTED

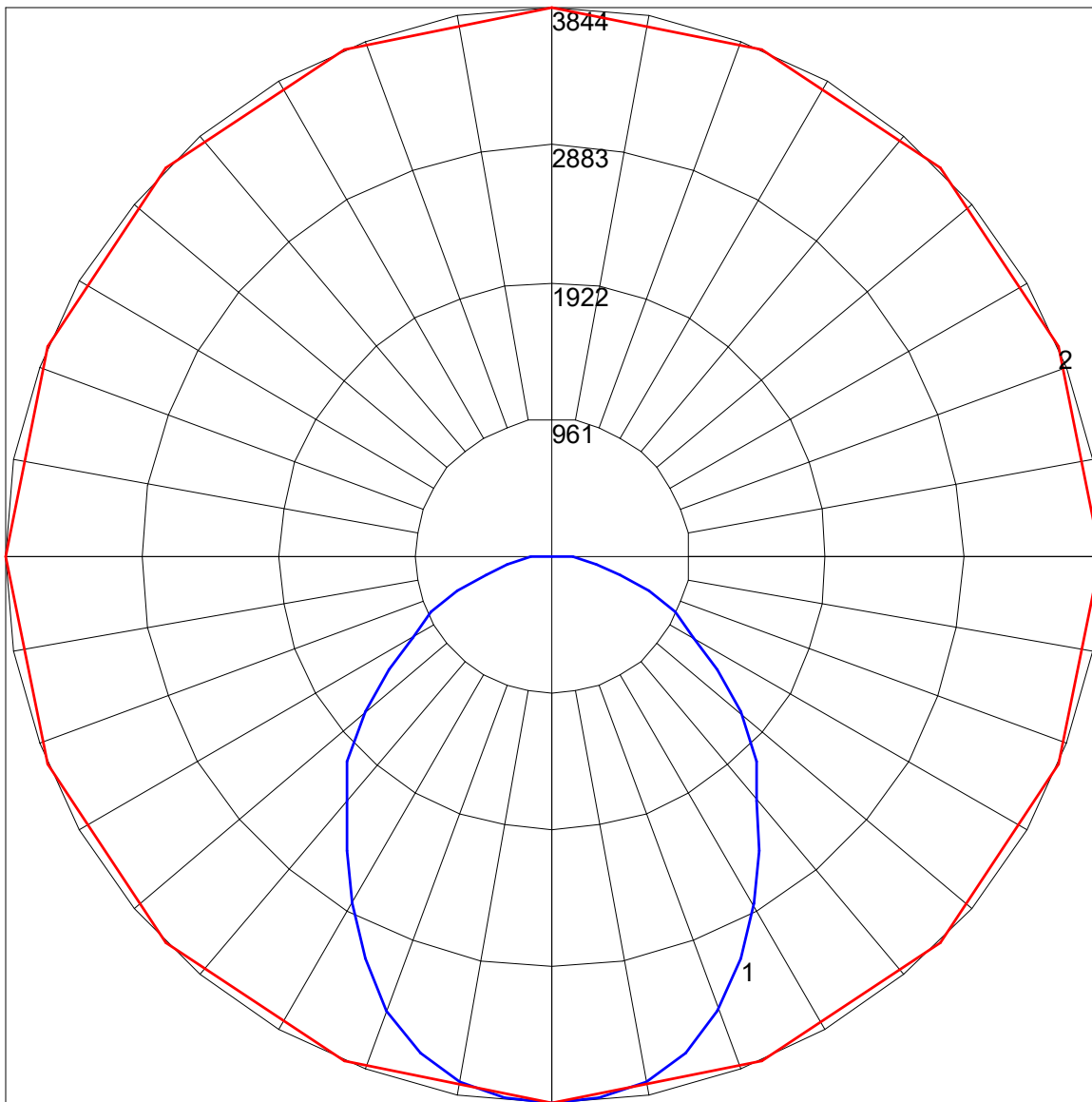
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	11.8	13.4	12.2	13.7	14.0	12.9	14.5	13.2	14.8	15.1
	3H	13.6	15.0	13.9	15.3	15.7	14.9	16.4	15.3	16.7	17.0
	4H	14.2	15.6	14.6	15.9	16.3	15.6	17.0	16.0	17.4	17.7
	6H	14.7	16.0	15.1	16.4	16.8	16.0	17.2	16.4	17.6	18.0
	8H	14.9	16.1	15.4	16.5	16.9	16.0	17.2	16.4	17.6	18.0
	12H	15.1	16.2	15.5	16.6	17.0	16.1	17.2	16.5	17.6	18.0
4H	2H	12.6	14.0	13.0	14.4	14.7	13.5	14.8	13.9	15.2	15.6
	3H	14.7	15.8	15.1	16.2	16.6	15.7	16.9	16.2	17.3	17.7
	4H	15.5	16.5	15.9	16.9	17.3	16.6	17.7	17.1	18.1	18.5
	6H	16.1	17.1	16.6	17.5	17.9	17.0	17.9	17.5	18.4	18.8
	8H	16.4	17.2	16.8	17.7	18.1	17.1	18.0	17.6	18.4	18.9
	12H	16.5	17.3	17.0	17.8	18.3	17.2	17.9	17.6	18.4	18.9
8H	4H	15.9	16.8	16.4	17.2	17.7	16.9	17.8	17.4	18.2	18.7
	6H	16.8	17.5	17.3	18.0	18.5	17.4	18.1	17.9	18.6	19.1
	8H	17.1	17.7	17.6	18.3	18.7	17.5	18.2	18.0	18.7	19.2
	12H	17.4	17.9	17.9	18.4	19.0	17.6	18.2	18.1	18.7	19.2
12H	4H	16.0	16.7	16.4	17.2	17.7	17.0	17.7	17.4	18.2	18.7
	6H	16.9	17.5	17.4	18.0	18.5	17.5	18.1	18.0	18.6	19.1
	8H	17.2	17.8	17.7	18.3	18.9	17.7	18.2	18.2	18.7	19.3

Maximum UGR = 19.3

POLAR GRAPH



Maximum Candela = 3843.62 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.)