



IES INDOOR REPORT

PHOTOMETRIC FILENAME : AT2-22-L30-835-D-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from BALLABS TEST NO. 18882.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 12-30-2020
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO 64836
 [LUMINAIRE] 2x2' RECESSED LUMINAIRE
 [MORE] WITH FROST CONCAVE ACRYLIC LENS w/DEEP ACRYLIC CENTER
 [MORE] DIFFUSER
 [LUMCAT] AT2-22-L30-835-D-DIM-UNV
 [LAMPCAT] HLM 80 CRI, 3500K CCT
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Office, Direct
 [_SEARCH_MOUNTING] Ceiling, Recessed
 [_SEARCH_CERTIFICATION] DLC

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3028
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	30.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.76 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	3188	3419	3657
55	2792	3015	3264
65	2378	2667	2909
75	1892	2266	2562
85	936	1405	1229

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AT2-22-L30-835-D-DIM-UNV_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	1238.326	1238.326	1238.326	1238.326	1238.326
5	1235.377	1229.480	1230.955	1229.480	1229.480
10	1205.893	1205.893	1208.842	1210.316	1211.790
15	1158.719	1163.141	1171.987	1177.883	1183.780
20	1102.699	1108.596	1123.338	1136.606	1146.925
25	1027.515	1039.309	1059.948	1076.164	1090.906
30	940.538	952.331	986.238	1006.877	1018.670
35	850.612	857.983	899.260	924.322	940.538
40	751.840	760.686	800.489	828.499	844.715
45	651.595	663.389	698.769	729.728	747.418
50	554.298	567.566	599.998	625.060	645.698
55	462.898	473.217	499.753	520.392	541.030
60	374.446	389.188	411.301	433.414	446.682
65	290.417	309.581	325.798	340.540	355.281
70	212.284	237.346	246.191	259.459	274.201
75	141.523	154.791	169.533	188.697	191.646
80	76.658	89.926	100.245	109.091	106.142
85	23.587	30.958	35.381	38.329	30.958
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AT2-22-L30-835-D-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	447.01	N.A.	14.80
0-30	934.02	N.A.	30.80
0-40	1492.38	N.A.	49.30
0-60	2479.89	N.A.	81.90
0-80	2983.86	N.A.	98.50
0-90	3028.39	N.A.	100.00
10-90	2911.63	N.A.	96.10
20-40	1045.37	N.A.	34.50
20-50	1584.03	N.A.	52.30
40-70	1311.03	N.A.	43.30
60-80	503.97	N.A.	16.60
70-80	180.45	N.A.	6.00
80-90	44.53	N.A.	1.50
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	3028.39	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	116.77
10-20	330.24
20-30	487.00
30-40	558.36
40-50	538.66
50-60	448.85
60-70	323.52
70-80	180.45
80-90	44.53
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AT2-22-L30-835-D-DIM-UNV_.IES

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	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	55	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	42	40
7	67	53	45	39	65	53	45	39	51	44	38	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	44	39	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	27

IES INDOOR REPORT
PHOTOMETRIC FILENAME : AT2-22-L30-835-D-DIM-UNV_.IES

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	15.2	16.8	15.5	17.1	17.4	UGR Viewed Endwise			
	3H	16.8	18.2	17.2	18.5	18.9	16.0	17.6	16.3	17.9
	4H	17.3	18.7	17.7	19.0	19.4	17.7	19.1	18.1	19.5
	6H	17.7	18.9	18.1	19.3	19.7	18.4	19.7	18.8	20.1
	8H	17.7	18.9	18.2	19.3	19.7	18.8	20.1	19.3	20.4
	12H	17.8	18.9	18.2	19.3	19.7	19.0	20.1	19.4	20.5

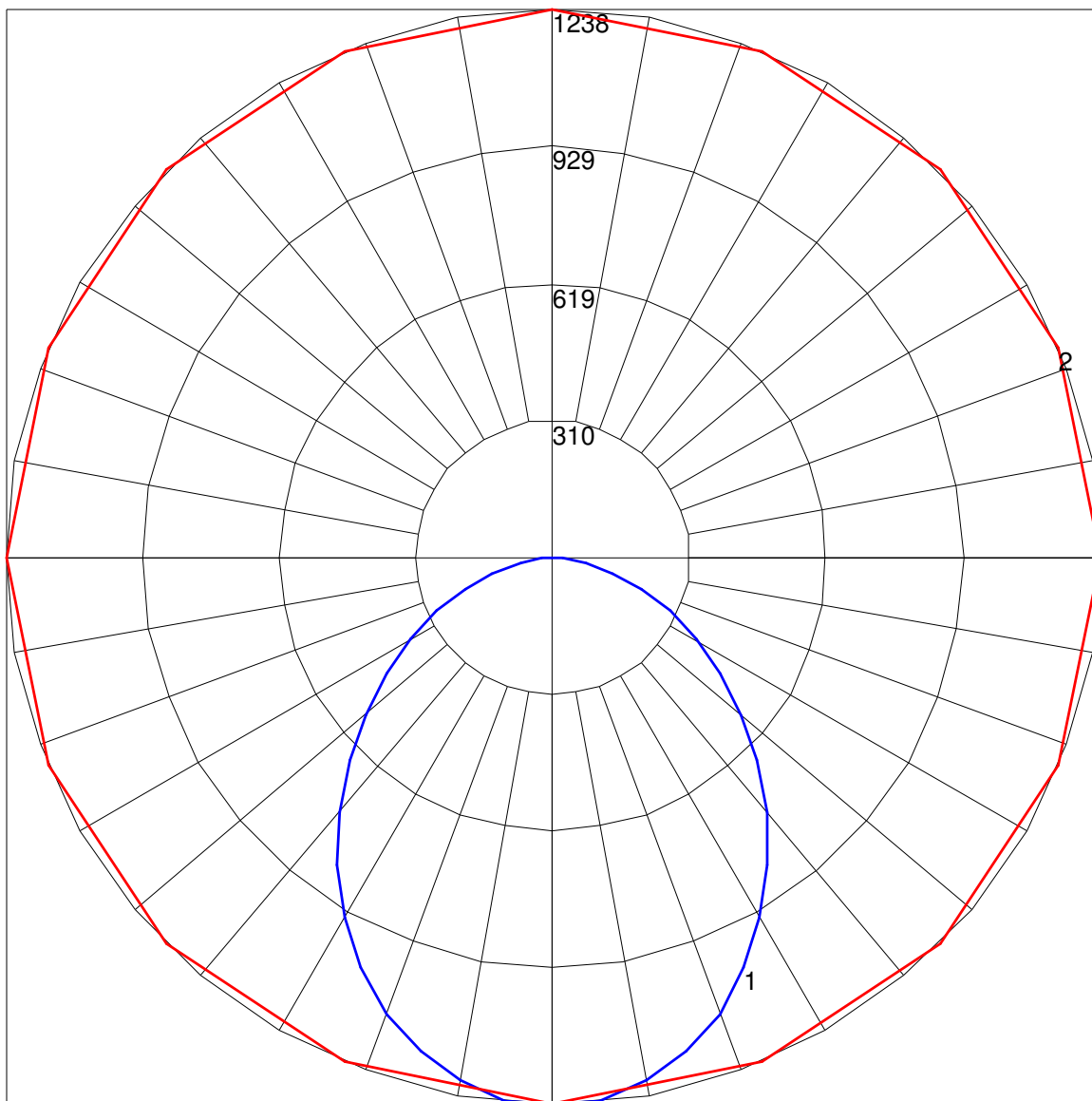
4H	2H	15.9	17.2	16.3	17.5	17.9	16.5	17.8	16.9	18.2
	3H	17.7	18.8	18.1	19.2	19.6	18.4	19.6	18.9	20.0
	4H	18.3	19.3	18.8	19.8	20.2	19.3	20.3	19.7	20.7
	6H	18.8	19.7	19.2	20.1	20.6	19.9	20.7	20.3	21.2
	8H	18.9	19.7	19.4	20.2	20.7	20.0	20.8	20.5	21.3
	12H	19.0	19.7	19.5	20.2	20.7	20.1	20.8	20.6	21.3

8H	4H	18.7	19.5	19.1	19.9	20.4	19.5	20.3	20.0	20.8
	6H	19.3	19.9	19.8	20.4	20.9	20.2	20.9	20.7	21.4
	8H	19.4	20.1	19.9	20.6	21.0	20.4	21.1	21.0	21.6
	12H	19.6	20.1	20.1	20.6	21.1	20.6	21.1	21.1	21.6

12H	4H	18.7	19.5	19.2	19.9	20.4	19.5	20.3	20.0	20.7
	6H	19.3	19.9	19.8	20.4	20.9	20.3	20.9	20.8	21.3
	8H	19.6	20.1	20.1	20.6	21.2	20.5	21.1	21.0	21.6

Maximum UGR = 22.2

POLAR GRAPH



Maximum Candela = 1238.326 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.)