



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-22-L27-940-AF-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 20203.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 2023-07-21
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 2x2 RECESSED LED LUMINAIRE
 [MORE] WHITE REFLECTOR w/FROSTED ACRYLIC CENTER LENS
 [MORE] 0-10V DIMMING DRIVER
 [LUMCAT] LT-22-L27-940-AF-DIM-UNV
 [LAMPCAT] 22 INCH LED ARRAY
 [_SEARCH_SOURCETYPE] LED
 [_SEARCH_APPLICATION] Indoor, Classroom, Office, Direct
 [_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2341
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	21.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2024	2174	2341
55	1835	2139	2413
65	1617	2118	2616
75	1244	2245	3057
85	541	1825	1780

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L27-940-AF-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	778.965	778.965	778.965	778.965	778.965
5	778.294	774.939	774.268	771.584	773.597
10	764.875	761.520	764.204	761.520	763.533
15	744.747	743.405	747.431	748.772	750.785
20	712.541	717.238	723.277	729.986	731.328
25	675.640	685.033	693.755	704.490	707.174
30	636.054	646.789	659.537	675.640	681.007
35	592.443	601.836	617.268	641.422	646.789
40	542.793	552.186	573.656	599.152	607.874
45	489.117	497.840	525.348	552.186	565.605
50	426.049	437.455	472.344	499.853	519.310
55	359.625	375.728	419.339	449.532	473.015
60	296.557	314.672	364.993	403.237	426.049
65	233.488	252.946	305.950	357.613	377.741
70	171.761	192.561	251.604	307.963	328.762
75	110.035	135.530	198.599	254.287	270.390
80	54.346	85.210	136.872	187.193	181.826
85	16.103	32.876	54.346	91.919	53.004
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L27-940-AF-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	284.25	N.A.	12.10
0-30	604.17	N.A.	25.80
0-40	992.08	N.A.	42.40
0-60	1769.24	N.A.	75.60
0-80	2275.85	N.A.	97.20
0-90	2340.82	N.A.	100.00
10-90	2267.27	N.A.	96.90
20-40	707.83	N.A.	30.20
20-50	1112.95	N.A.	47.50
40-70	1080.03	N.A.	46.10
60-80	506.61	N.A.	21.60
70-80	203.74	N.A.	8.70
80-90	64.97	N.A.	2.80
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	2340.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	73.55
10-20	210.70
20-30	319.92
30-40	387.91
40-50	405.13
50-60	372.04
60-70	302.86
70-80	203.74
80-90	64.97
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 : LT-22-L27-940-AF-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	108	103	98	94	105	101	96	93	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	55	50	48
5	75	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	45	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	38	34	32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	39	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-22-L27-940-AF-DIM-UNV_.IES

UGR TABLE - CORRECTED

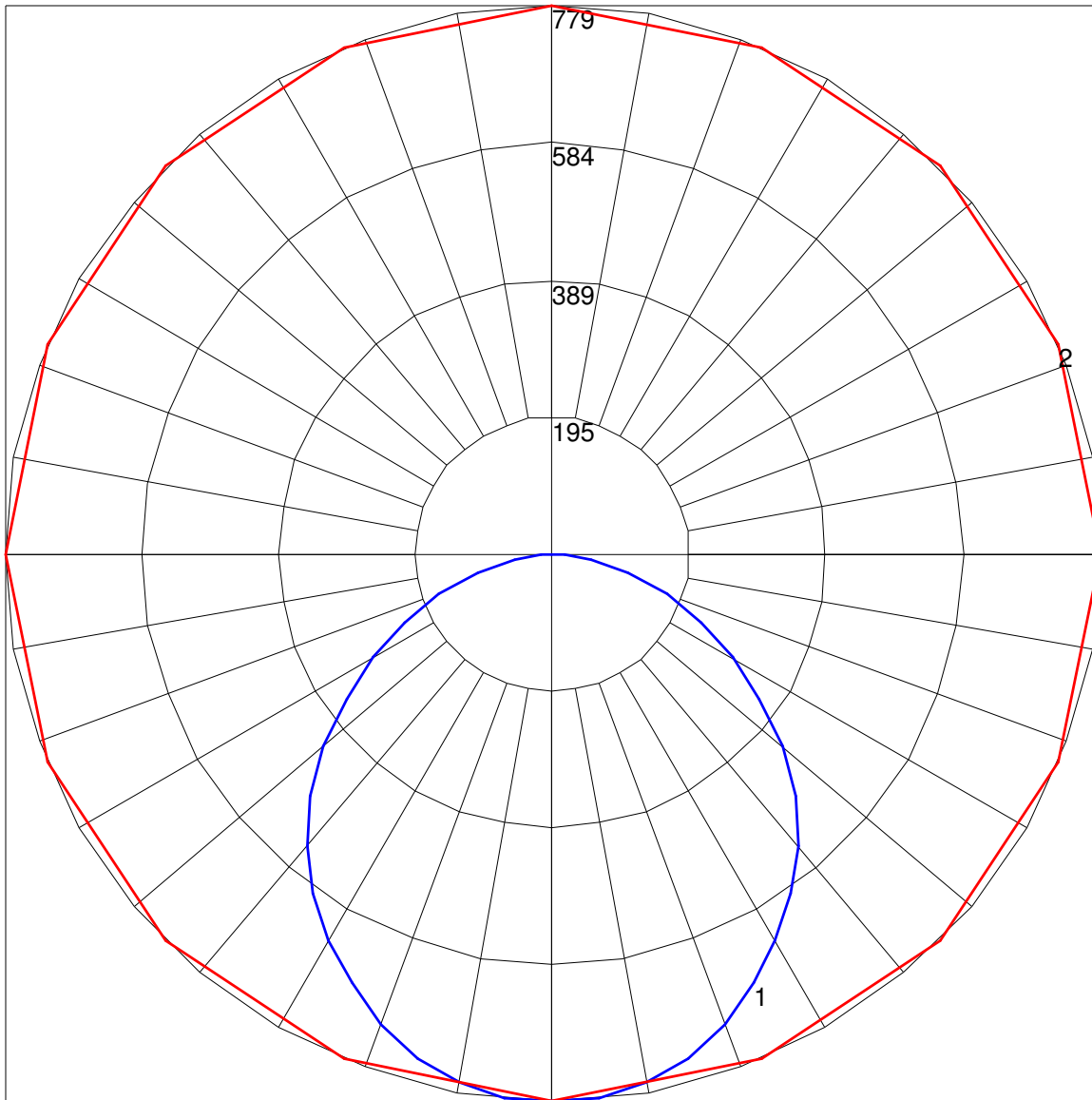
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	13.9	15.6	14.3	15.9	16.2	15.5	17.2	15.9	17.5	17.8
	3H	15.5	17.1	15.9	17.4	17.7	18.1	19.6	18.4	19.9	20.3
	4H	16.1	17.5	16.5	17.9	18.3	19.2	20.7	19.6	21.0	21.4
	6H	16.4	17.8	16.8	18.1	18.5	20.2	21.5	20.6	21.9	22.3
	8H	16.5	17.8	16.9	18.2	18.6	20.5	21.8	20.9	22.2	22.6
	12H	16.5	17.8	17.0	18.1	18.6	20.6	21.9	21.1	22.3	22.7
4H	2H	14.8	16.3	15.2	16.6	17.0	16.1	17.5	16.5	17.9	18.2
	3H	16.7	17.9	17.1	18.3	18.7	18.9	20.1	19.3	20.5	20.9
	4H	17.4	18.5	17.8	18.9	19.4	20.2	21.4	20.7	21.8	22.2
	6H	17.9	18.8	18.3	19.3	19.7	21.4	22.4	21.9	22.9	23.3
	8H	18.0	18.9	18.4	19.3	19.8	21.8	22.7	22.3	23.2	23.6
	12H	18.0	18.9	18.5	19.3	19.8	22.0	22.9	22.5	23.3	23.8
8H	4H	18.1	19.1	18.6	19.5	20.0	20.5	21.5	21.0	21.9	22.4
	6H	18.8	19.5	19.3	20.0	20.5	21.9	22.7	22.4	23.2	23.7
	8H	19.0	19.7	19.5	20.2	20.6	22.5	23.2	23.0	23.7	24.1
	12H	19.1	19.7	19.6	20.2	20.7	22.8	23.4	23.3	23.9	24.5
12H	4H	18.3	19.1	18.8	19.6	20.1	20.6	21.4	21.0	21.9	22.3
	6H	19.1	19.7	19.6	20.2	20.7	22.0	22.7	22.5	23.1	23.7
	8H	19.3	19.9	19.8	20.4	21.0	22.6	23.2	23.1	23.7	24.2

Maximum UGR = 24.5

POLAR GRAPH



Maximum Candela = 778.965 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.)