



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-24-L64-830-AF-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 20802.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 2023-07-24
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 2x4' RECESSED LED LUMINAIRE
 [LUMINAIRE] WHITE REFLECTOR w/FROSTED CENTER LENS
 [LUMINAIRE] 0-10V DIMMING DRIVER
 [LUMCAT] LT-24-L64-830-AF-DIM-UNV
 [LAMPCAT] 22 INCH LED ARRAYS
 [_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	6332
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	131
Total Luminaire Watts	48.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.93 ft
Luminous Width (90-270)	1.91 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2616	2907	3128
55	2380	2821	3154
65	2033	2803	3302
75	1498	2944	3694
85	574	2364	2173

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : LT-24-L64-830-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	2199.606	2199.606	2199.606	2199.606	2199.606
5	2220.695	2194.333	2180.625	2175.353	2175.353
10	2179.571	2152.155	2144.774	2145.828	2142.665
15	2114.194	2095.214	2092.051	2099.432	2103.650
20	2028.783	2011.912	2019.293	2039.328	2043.545
25	1917.010	1902.248	1928.609	1957.080	1963.406
30	1788.366	1785.202	1821.054	1859.015	1873.777
35	1637.578	1650.231	1702.955	1751.460	1769.386
40	1478.354	1501.552	1582.746	1638.632	1659.722
45	1287.497	1327.566	1430.904	1523.696	1539.513
50	1128.273	1177.833	1279.061	1369.745	1396.106
55	950.069	999.629	1126.164	1223.175	1259.026
60	775.029	829.861	964.832	1081.877	1115.620
65	597.879	673.801	824.589	938.470	971.159
70	432.329	517.740	673.801	795.064	821.425
75	269.942	374.334	530.394	639.003	665.365
80	129.699	242.526	384.878	435.492	420.730
85	34.797	120.209	143.407	127.590	131.808
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-24-L64-830-AF-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	799.73	N.A.	12.60
0-30	1690.27	N.A.	26.70
0-40	2755.93	N.A.	43.50
0-60	4852.54	N.A.	76.60
0-80	6176.23	N.A.	97.50
0-90	6331.84	N.A.	100.00
10-90	6124.21	N.A.	96.70
20-40	1956.19	N.A.	30.90
20-50	3055.89	N.A.	48.30
40-70	2894.02	N.A.	45.70
60-80	1323.69	N.A.	20.90
70-80	526.27	N.A.	8.30
80-90	155.61	N.A.	2.50
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	6331.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	207.63
10-20	592.11
20-30	890.54
30-40	1065.66
40-50	1099.69
50-60	996.92
60-70	797.41
70-80	526.27
80-90	155.61
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-24-L64-830-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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	90	82	77	95	88	81	76	84	79	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57
4	82	69	60	53	79	68	60	53	65	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	62	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-24-L64-830-AF-DIM-UNV_.IES

UGR TABLE - CORRECTED

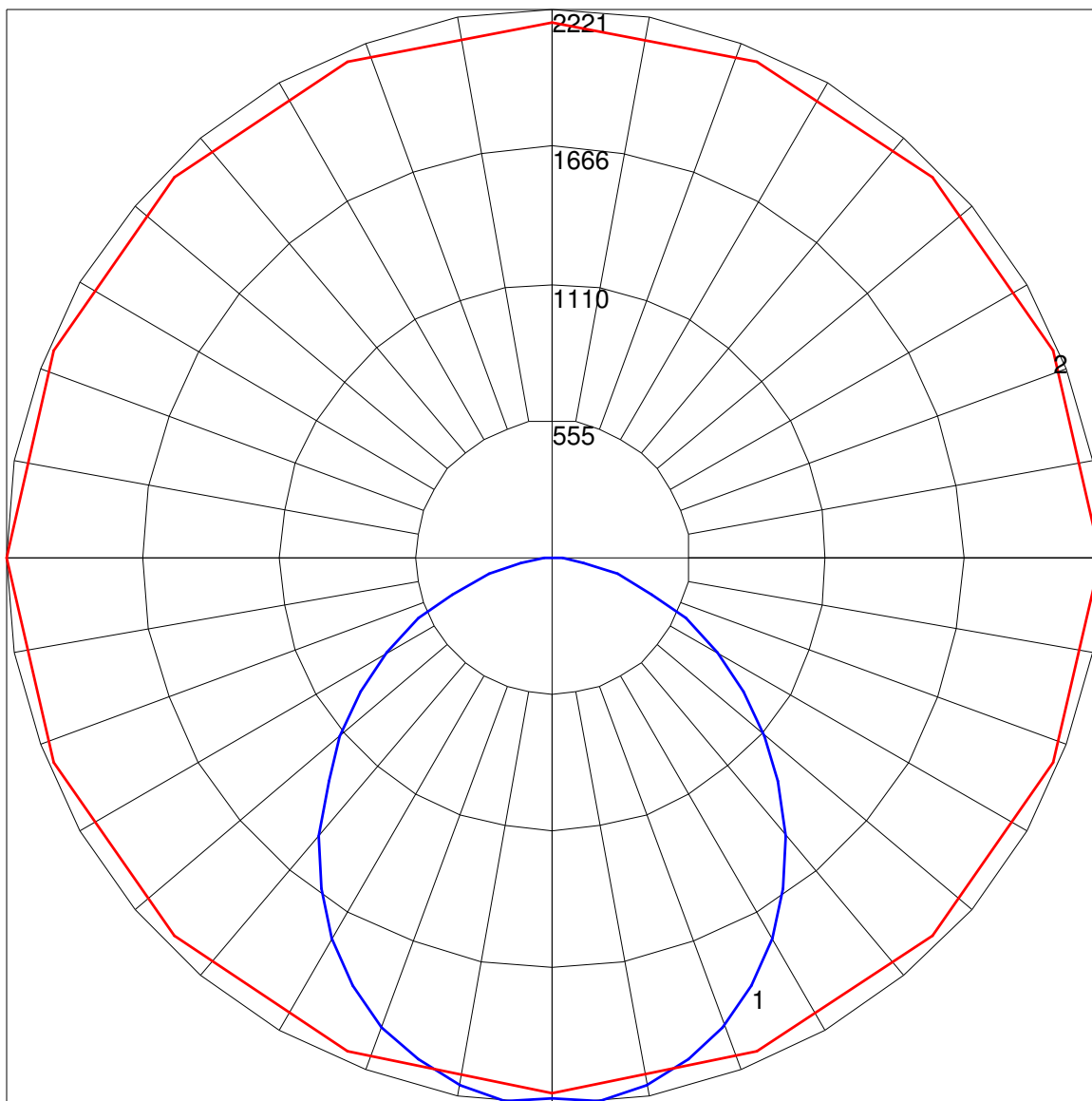
Reflectances

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	14.7	16.4	15.1	16.7	17.0	16.4	18.1	16.8	18.4	18.7
	3H	16.3	17.8	16.7	18.1	18.5	18.8	20.3	19.2	20.6	21.0
	4H	16.8	18.2	17.2	18.6	19.0	19.8	21.3	20.2	21.6	22.0
	6H	17.1	18.5	17.5	18.8	19.2	20.7	22.0	21.1	22.4	22.8
	8H	17.2	18.5	17.6	18.9	19.3	20.9	22.2	21.3	22.6	23.0
	12H	17.2	18.5	17.7	18.8	19.3	21.0	22.3	21.5	22.6	23.1
4H	2H	15.7	17.1	16.1	17.4	17.8	17.0	18.4	17.4	18.8	19.1
	3H	17.5	18.7	17.9	19.1	19.5	19.6	20.8	20.0	21.2	21.6
	4H	18.2	19.3	18.6	19.7	20.2	20.9	22.0	21.3	22.4	22.8
	6H	18.7	19.6	19.1	20.1	20.5	21.9	22.9	22.4	23.3	23.7
	8H	18.8	19.7	19.3	20.1	20.6	22.2	23.1	22.7	23.5	24.0
	12H	18.9	19.7	19.3	20.1	20.6	22.4	23.2	22.8	23.6	24.1
8H	4H	19.0	19.9	19.4	20.3	20.8	21.2	22.1	21.7	22.5	23.0
	6H	19.6	20.4	20.1	20.9	21.3	22.4	23.1	22.9	23.6	24.1
	8H	19.9	20.5	20.4	21.0	21.5	22.8	23.5	23.3	24.0	24.5
	12H	20.0	20.6	20.5	21.1	21.6	23.0	23.6	23.5	24.1	24.7
12H	4H	19.1	19.9	19.6	20.4	20.9	21.2	22.0	21.7	22.5	23.0
	6H	19.9	20.6	20.4	21.0	21.6	22.5	23.1	23.0	23.6	24.1
	8H	20.2	20.8	20.7	21.3	21.8	22.9	23.5	23.4	24.0	24.6

Maximum UGR = 24.7

POLAR GRAPH



Maximum Candela = 2220.695 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)