



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-24-L82-940-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-L82-940-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	7064
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	64.3
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	2918	3244	3490
55	2655	3147	3518
65	2268	3127	3683
75	1672	3285	4121
85	640	2637	2424

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : LT-24-L82-940-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	2453.887	2453.887	2453.887	2453.887	2453.887
5	2477.414	2448.005	2432.713	2426.831	2426.831
10	2431.536	2400.951	2392.716	2393.893	2390.364
15	2358.602	2337.427	2333.898	2342.133	2346.838
20	2263.317	2244.495	2252.729	2275.080	2279.786
25	2138.623	2122.153	2151.562	2183.324	2190.382
30	1995.107	1991.577	2031.574	2073.923	2090.392
35	1826.887	1841.003	1899.821	1953.934	1973.932
40	1649.257	1675.137	1765.716	1828.063	1851.591
45	1436.336	1481.037	1596.321	1699.840	1717.486
50	1258.705	1313.994	1426.925	1528.092	1557.501
55	1059.900	1115.189	1256.352	1364.578	1404.574
60	864.625	925.795	1076.369	1206.945	1244.589
65	666.996	751.694	919.914	1046.960	1083.428
70	482.308	577.593	751.694	886.975	916.384
75	301.148	417.608	591.709	712.874	742.283
80	144.692	270.563	429.371	485.837	469.368
85	38.820	134.105	159.985	142.340	147.045
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-24-L82-940-AF-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	892.18	N.A.	12.60
0-30	1885.67	N.A.	26.70
0-40	3074.52	N.A.	43.50
0-60	5413.5	N.A.	76.60
0-80	6890.22	N.A.	97.50
0-90	7063.82	N.A.	100.00
10-90	6832.19	N.A.	96.70
20-40	2182.34	N.A.	30.90
20-50	3409.16	N.A.	48.30
40-70	3228.58	N.A.	45.70
60-80	1476.71	N.A.	20.90
70-80	587.11	N.A.	8.30
80-90	173.60	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	7063.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	231.63
10-20	660.55
20-30	993.48
30-40	1188.85
40-50	1226.82
50-60	1112.16
60-70	889.60
70-80	587.11
80-90	173.60
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-L82-940-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	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-L82-940-AF-DIM-UNV_.IES

UGR TABLE - CORRECTED

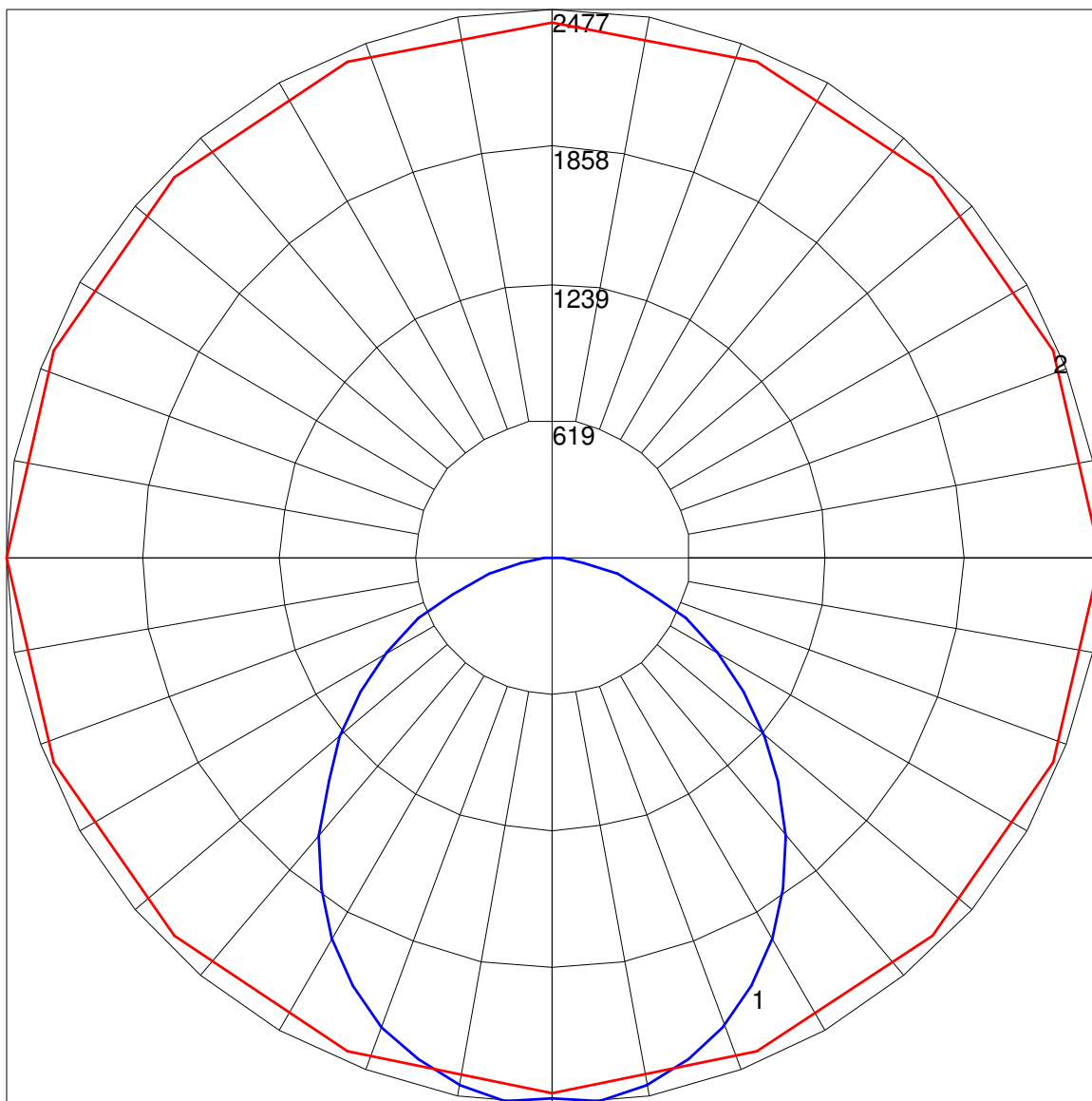
Reflectances

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	15.1	16.8	15.5	17.1	17.4	16.8	18.5	17.2	18.8	19.1
	3H	16.7	18.2	17.1	18.5	18.9	19.2	20.7	19.6	21.0	21.4
	4H	17.2	18.6	17.6	19.0	19.4	20.2	21.7	20.6	22.0	22.4
	6H	17.5	18.9	17.9	19.2	19.6	21.1	22.4	21.5	22.8	23.2
	8H	17.6	18.9	18.0	19.3	19.7	21.3	22.6	21.7	23.0	23.4
	12H	17.6	18.9	18.1	19.2	19.7	21.4	22.7	21.9	23.0	23.5
4H	2H	16.1	17.5	16.5	17.8	18.2	17.4	18.8	17.8	19.2	19.5
	3H	17.9	19.1	18.3	19.5	19.9	20.0	21.2	20.4	21.6	22.0
	4H	18.6	19.7	19.0	20.1	20.6	21.3	22.4	21.7	22.8	23.2
	6H	19.1	20.0	19.5	20.5	20.9	22.3	23.3	22.8	23.7	24.1
	8H	19.2	20.1	19.7	20.5	21.0	22.6	23.5	23.1	23.9	24.4
	12H	19.3	20.1	19.7	20.5	21.0	22.8	23.6	23.2	24.0	24.5
8H	4H	19.4	20.3	19.8	20.7	21.2	21.6	22.5	22.1	22.9	23.4
	6H	20.0	20.8	20.5	21.3	21.7	22.8	23.5	23.3	24.0	24.5
	8H	20.3	20.9	20.8	21.4	21.9	23.2	23.9	23.7	24.4	24.9
	12H	20.4	21.0	20.9	21.5	22.0	23.4	24.0	23.9	24.5	25.1
12H	4H	19.5	20.3	20.0	20.8	21.3	21.6	22.4	22.1	22.9	23.4
	6H	20.3	21.0	20.8	21.4	22.0	22.9	23.5	23.4	24.0	24.5
	8H	20.6	21.2	21.1	21.7	22.2	23.3	23.9	23.8	24.4	25.0

Maximum UGR = 25.1

POLAR GRAPH



Maximum Candela = 2477.414 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.)