



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-24-L52-840-AF-(L50)-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
 [ISSUE DATE] 08-JAN-2024
 [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-L52-840-AF-(L50)-DIM-UNV
 [LAMPCAT] HLMX 80 CRI 4000K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5152
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	146
Total Luminaire Watts	35.2
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	2128	2366	2545
55	1936	2295	2566
65	1654	2281	2686
75	1219	2396	3005
85	467	1923	1768

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : LT-24-L52-840-AF-(L50)-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	1789.687	1789.687	1789.687	1789.687	1789.687
5	1806.846	1785.397	1774.244	1769.954	1769.954
10	1773.386	1751.079	1745.074	1745.932	1743.358
15	1720.193	1704.750	1702.176	1708.182	1711.614
20	1650.699	1636.972	1642.978	1659.279	1662.710
25	1559.756	1547.745	1569.194	1592.358	1597.506
30	1455.086	1452.512	1481.683	1512.569	1524.580
35	1332.399	1342.694	1385.592	1425.058	1439.643
40	1202.848	1221.723	1287.786	1333.257	1350.416
45	1047.559	1080.161	1164.240	1239.740	1252.609
50	918.008	958.332	1040.695	1114.479	1135.928
55	773.014	813.338	916.292	995.224	1024.394
60	630.595	675.208	785.026	880.258	907.713
65	486.459	548.231	670.918	763.577	790.174
70	351.760	421.254	548.231	646.896	668.344
75	219.636	304.573	431.550	519.919	541.368
80	105.528	197.329	313.152	354.334	342.323
85	28.312	97.806	116.681	103.812	107.244
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-24-L52-840-AF-(L50)-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	650.69	N.A.	12.60
0-30	1375.27	N.A.	26.70
0-40	2242.33	N.A.	43.50
0-60	3948.22	N.A.	76.60
0-80	5025.22	N.A.	97.50
0-90	5151.84	N.A.	100.00
10-90	4982.9	N.A.	96.70
20-40	1591.64	N.A.	30.90
20-50	2486.39	N.A.	48.30
40-70	2354.69	N.A.	45.70
60-80	1077.01	N.A.	20.90
70-80	428.20	N.A.	8.30
80-90	126.61	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	5151.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	168.93
10-20	481.76
20-30	724.58
30-40	867.06
40-50	894.75
50-60	811.13
60-70	648.81
70-80	428.20
80-90	126.61
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-L52-840-AF-(L50)-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-L52-840-AF-(L50)-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	14.0	15.7	14.4	16.0	16.3	15.7	17.4	16.1	17.7	18.0
	3H	15.6	17.1	16.0	17.4	17.8	18.1	19.6	18.5	19.9	20.3
	4H	16.1	17.5	16.5	17.9	18.3	19.1	20.6	19.5	20.9	21.3
	6H	16.4	17.8	16.8	18.1	18.5	20.0	21.3	20.4	21.7	22.1
	8H	16.5	17.8	16.9	18.2	18.6	20.2	21.5	20.6	21.9	22.3
	12H	16.5	17.8	17.0	18.1	18.6	20.3	21.6	20.8	21.9	22.4

UGR Viewed Endwise

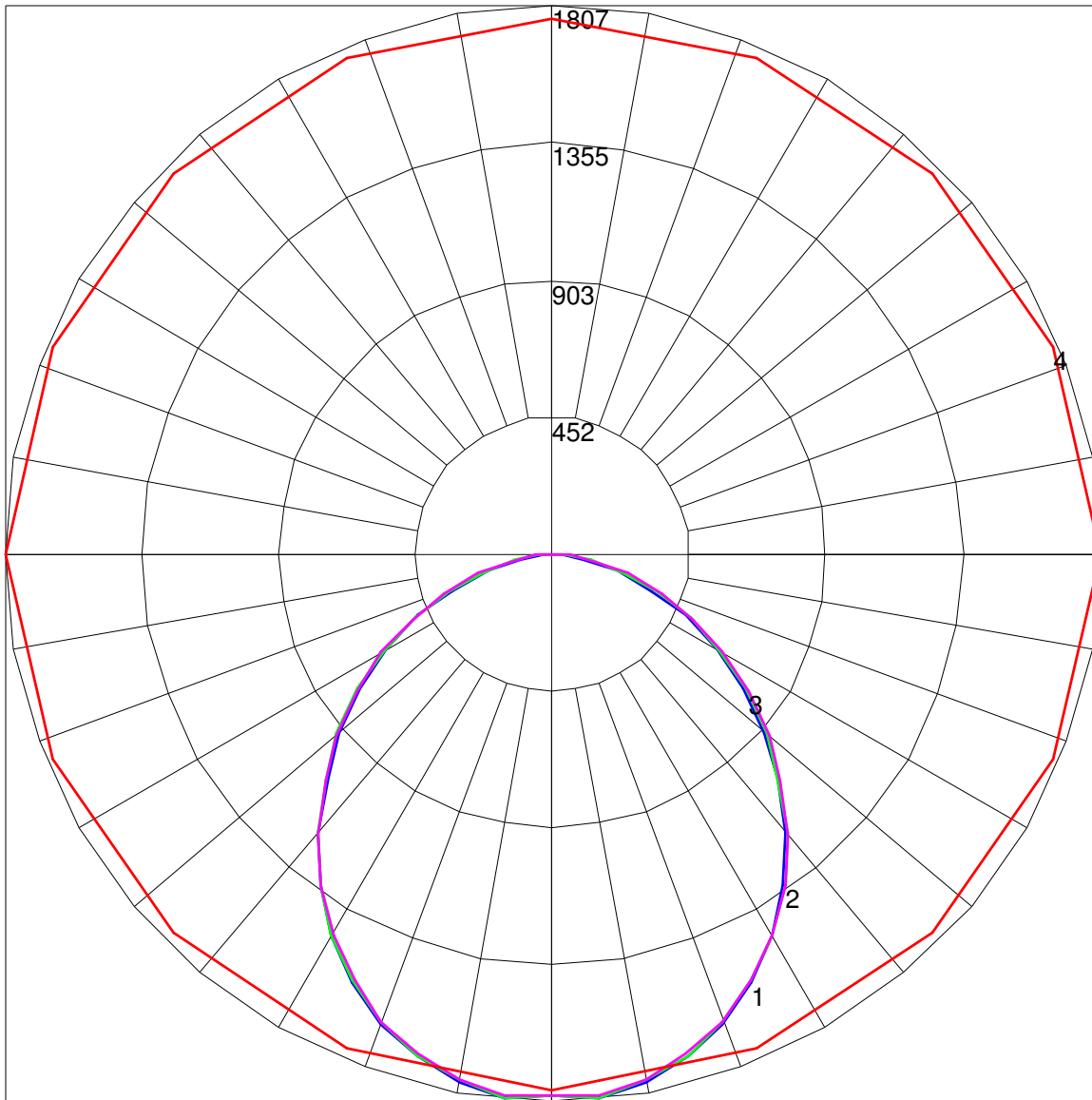
4H	2H	15.0	16.4	15.4	16.7	17.1	16.3	17.7	16.7	18.1	18.4
	3H	16.8	18.0	17.2	18.4	18.8	18.9	20.1	19.3	20.5	20.9
	4H	17.5	18.6	17.9	19.0	19.5	20.2	21.3	20.6	21.7	22.1
	6H	18.0	18.9	18.4	19.4	19.8	21.2	22.2	21.7	22.6	23.0
	8H	18.1	19.0	18.6	19.4	19.9	21.5	22.4	22.0	22.8	23.3
	12H	18.2	19.0	18.6	19.4	19.9	21.7	22.5	22.1	22.9	23.4

8H	4H	18.3	19.2	18.7	19.6	20.1	20.5	21.4	21.0	21.8	22.3
	6H	18.9	19.7	19.4	20.2	20.6	21.7	22.4	22.2	22.9	23.4
	8H	19.2	19.8	19.7	20.3	20.8	22.1	22.8	22.6	23.3	23.8
	12H	19.3	19.9	19.8	20.4	20.9	22.3	22.9	22.8	23.4	24.0

12H	4H	18.4	19.2	18.9	19.7	20.2	20.5	21.3	21.0	21.8	22.3
	6H	19.2	19.9	19.7	20.3	20.9	21.8	22.4	22.3	22.9	23.4
	8H	19.5	20.1	20.0	20.6	21.1	22.2	22.8	22.7	23.3	23.9

Maximum UGR = 24.0

POLAR GRAPH



Maximum Candela = 1806.846 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Vertical Plane Through Horizontal Angles (5 - 185)
3 - Vertical Plane Through Horizontal Angles (10 - 190)
4 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)