



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-24-L40-840-AF-(L32)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 19436.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 02-AUG-2023
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 2x4 RECESSED LED LUMINAIRE
 [MORE] WHITE REFLECTOR w/FROSTED ACRYLIC CENTER LENS
 [MORE] 0-10V DIMMING DRIVER
 [LUMCAT] LT-24-L40-840-AF-(L32)-DIM-UNV
 [LAMPCAT] HLMX 80 CRI 4000K CCT

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3274
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	142
Total Luminaire Watts	23.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 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	1380	1532	1654
55	1173	1430	1598
65	997	1411	1651
75	746	1395	1637
85	507	1324	891

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-24-L40-840-AF-(L32)-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	1203.754	1203.754	1203.754	1203.754	1203.754
5	1206.765	1206.012	1206.012	1205.260	1205.260
10	1182.675	1179.664	1182.675	1183.428	1183.428
15	1150.304	1152.562	1156.326	1159.338	1161.596
20	1082.550	1085.562	1093.090	1100.618	1103.629
25	1008.022	1011.033	1025.336	1036.629	1041.898
30	934.998	943.279	962.100	980.167	987.695
35	853.694	863.481	892.088	916.931	928.223
40	760.345	776.154	816.053	847.672	861.222
45	681.299	704.636	756.581	800.997	816.806
50	578.163	606.017	667.748	715.929	733.996
55	469.758	502.129	572.893	622.579	639.894
60	375.656	411.791	487.072	539.017	554.073
65	294.351	335.756	416.308	470.510	487.072
70	208.530	252.194	335.003	386.948	397.487
75	134.754	177.665	252.194	289.082	295.857
80	76.787	123.462	180.676	198.744	188.957
85	30.865	63.989	80.551	62.484	54.203
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-24-L40-840-AF-(L32)-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	438.30	N.A.	13.40
0-30	911.75	N.A.	27.80
0-40	1468.78	N.A.	44.90
0-60	2550.78	N.A.	77.90
0-80	3196.97	N.A.	97.60
0-90	3274.19	N.A.	100.00
10-90	3159.96	N.A.	96.50
20-40	1030.48	N.A.	31.50
20-50	1606.11	N.A.	49.10
40-70	1478.66	N.A.	45.20
60-80	646.19	N.A.	19.70
70-80	249.53	N.A.	7.60
80-90	77.22	N.A.	2.40
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	3274.19	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	114.23
10-20	324.06
20-30	473.45
30-40	557.03
40-50	575.63
50-60	506.37
60-70	396.66
70-80	249.53
80-90	77.22
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-L40-840-AF-(L32)-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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24

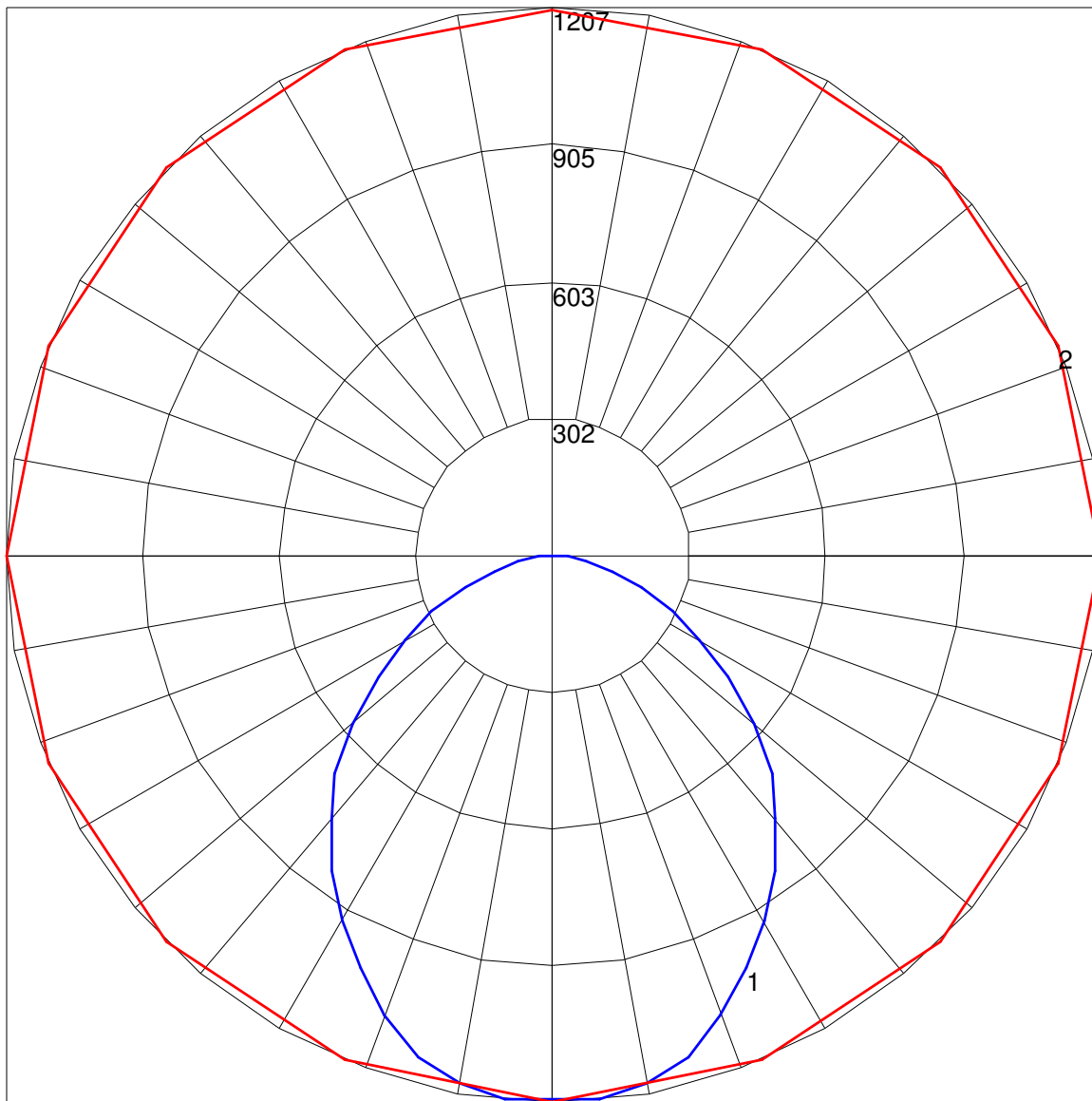
IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-24-L40-840-AF-(L32)-DIM-UNV_.IES

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	12.1	13.8	12.5	14.1	14.4	13.9	15.6	14.3	15.9	16.2
	3H	13.7	15.2	14.1	15.5	15.9	16.2	17.7	16.6	18.0	18.4
	4H	14.2	15.6	14.6	16.0	16.3	17.1	18.5	17.5	18.9	19.2
	6H	14.6	15.9	15.0	16.2	16.6	17.8	19.1	18.2	19.5	19.9
	8H	14.7	15.9	15.1	16.3	16.7	18.0	19.3	18.5	19.7	20.1
	12H	14.8	16.0	15.2	16.3	16.8	18.1	19.3	18.6	19.7	20.1
4H	2H	13.1	14.6	13.5	14.9	15.3	14.5	15.9	14.9	16.3	16.6
	3H	14.9	16.1	15.3	16.5	16.9	17.0	18.2	17.4	18.6	19.0
	4H	15.6	16.7	16.0	17.1	17.5	18.1	19.2	18.5	19.6	20.0
	6H	16.1	17.0	16.5	17.5	17.9	19.0	19.9	19.4	20.4	20.8
	8H	16.3	17.1	16.7	17.6	18.1	19.3	20.2	19.7	20.6	21.1
	12H	16.4	17.2	16.9	17.6	18.1	19.4	20.2	19.9	20.7	21.1
8H	4H	16.3	17.2	16.7	17.6	18.1	18.4	19.3	18.9	19.7	20.2
	6H	17.0	17.7	17.5	18.2	18.7	19.5	20.2	20.0	20.7	21.2
	8H	17.3	17.9	17.8	18.4	18.9	19.8	20.5	20.4	21.0	21.5
	12H	17.5	18.1	18.0	18.5	19.1	20.1	20.6	20.6	21.1	21.7
12H	4H	16.4	17.2	16.9	17.7	18.1	18.4	19.2	18.9	19.7	20.2
	6H	17.2	17.9	17.7	18.3	18.9	19.6	20.2	20.1	20.7	21.2
	8H	17.6	18.2	18.1	18.6	19.2	20.0	20.6	20.5	21.1	21.6

Maximum UGR = 21.7

POLAR GRAPH



Maximum Candela = 1206.765 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.)