

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 82-4-L107-840-(L84)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 18636.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUE DATE] 06-28-2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4-72 LED 22"ARRAYS 4'SUSPENDED LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[LUMCAT] 82-4-L107-840-(L84)-DIM-UNV
[LAMPCAT] HLM 80 CRI 4000K CCT
[SEARCH_SOURCETYPE] LED
[SEARCH_APPLICATION] Indoor, Industrial, Linear
[SEARCH_MOUNTING] Surface, Suspended

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8455
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	160
Total Luminaire Watts	52.78
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	1.06 ft
Luminous Height	0.00 ft



LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7787	8004	8135
55	7702	8029	4482
65	7428	4585	4685
75	6388	2937	1714
85	4071	2753	2036

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 82-4-L107-840-(L84)-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	3231.809	3231.809	3231.809	3231.809	3231.809
5	3165.642	3160.062	3163.251	3160.062	3160.062
10	3126.580	3126.580	3128.174	3132.160	3132.160
15	3065.196	3068.385	3069.979	3071.574	3077.154
20	2941.632	2946.415	2950.401	2956.778	2959.967
25	2822.850	2830.025	2843.577	2898.584	2906.555
30	2586.085	2598.043	2631.525	2666.601	2649.860
35	2448.171	2460.926	2621.161	2504.772	2506.366
40	2304.677	2323.012	2362.872	2372.438	2374.032
45	2177.126	2205.825	2237.713	2264.020	2274.384
50	1965.871	2274.384	2033.632	1603.149	1172.667
55	1746.644	1800.055	1820.782	1009.243	1016.417
60	1465.236	1483.571	879.301	884.084	891.259
65	1241.225	1259.560	766.100	774.072	782.841
70	969.383	807.554	635.361	444.035	188.934
75	653.696	430.483	300.541	176.976	175.382
80	393.812	294.960	160.235	143.494	135.522
85	140.305	102.040	94.866	78.125	70.153
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 82-4-L107-840-(L84)-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1165.45	N.A.	13.80
0-30	2469.33	N.A.	29.20
0-40	4038.67	N.A.	47.80
0-60	7052.87	N.A.	83.40
0-80	8344.67	N.A.	98.70
0-90	8455.18	N.A.	100.00
10-90	8153.72	N.A.	96.40
20-40	2873.21	N.A.	34.00
20-50	4550.91	N.A.	53.80
40-70	3912.21	N.A.	46.30
60-80	1291.8	N.A.	15.30
70-80	393.79	N.A.	4.70
80-90	110.51	N.A.	1.30
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	8455.18	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	301.47
10-20	863.99
20-30	1303.88
30-40	1569.34
40-50	1677.69
50-60	1336.52
60-70	898.01
70-80	393.79
80-90	110.51
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 : 82-4-L107-840-(L84)-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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	55	64	59	55	53
5	77	65	56	50	75	64	56	49	62	54	49	60	53	48	58	52	48	46
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 82-4-L107-840-(L84)-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

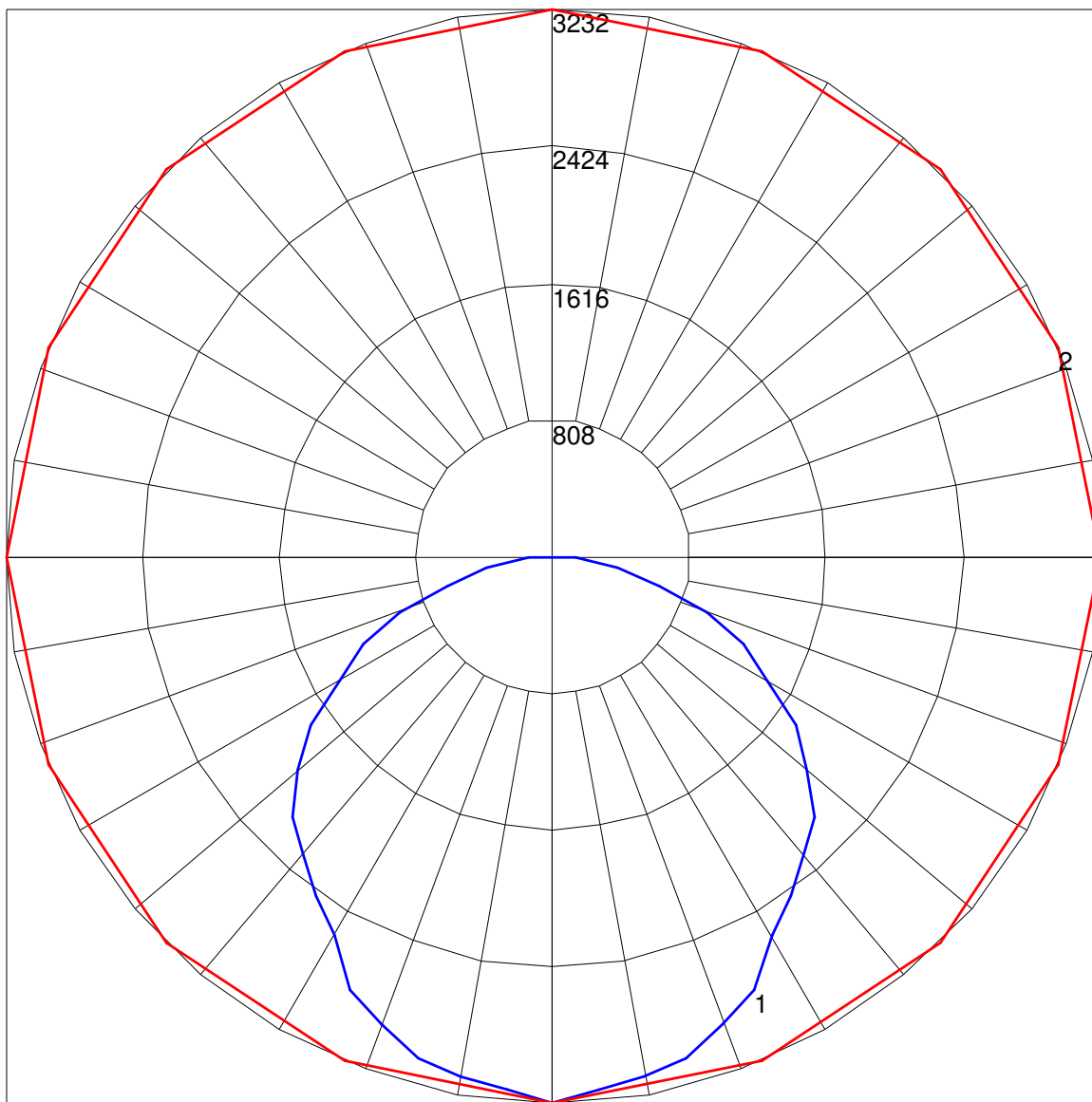
X=2H	Y=2H	19.8	21.4	20.2	21.8	22.1	16.1	17.7	16.4	18.0	18.3
	3H	21.6	23.0	22.0	23.4	23.7	17.2	18.6	17.6	19.0	19.3
	4H	22.2	23.5	22.6	23.9	24.2	17.4	18.7	17.8	19.1	19.4
	6H	22.6	23.9	23.0	24.2	24.6	17.6	18.8	18.0	19.2	19.5
	8H	22.7	23.9	23.2	24.3	24.7	17.6	18.8	18.1	19.2	19.6
	12H	22.8	24.0	23.3	24.3	24.8	17.7	18.8	18.1	19.2	19.7

UGR Viewed Endwise

4H	2H	20.0	21.4	20.4	21.7	22.1	16.9	18.2	17.3	18.5	18.9
	3H	22.0	23.1	22.4	23.5	23.9	18.2	19.3	18.6	19.7	20.1
	4H	22.6	23.6	23.1	24.0	24.5	18.4	19.4	18.8	19.8	20.3
	6H	23.2	24.1	23.7	24.5	25.0	18.7	19.5	19.1	20.0	20.4
	8H	23.4	24.2	23.9	24.7	25.1	18.8	19.6	19.2	20.0	20.5
	12H	23.5	24.3	24.0	24.7	25.2	18.9	19.6	19.4	20.1	20.6
8H	4H	22.7	23.5	23.1	23.9	24.4	18.8	19.6	19.2	20.0	20.5
	6H	23.3	24.0	23.8	24.5	24.9	19.1	19.8	19.6	20.3	20.8
	8H	23.6	24.2	24.1	24.7	25.2	19.3	19.9	19.8	20.4	20.9
	12H	23.7	24.3	24.3	24.8	25.3	19.5	20.0	20.0	20.5	21.0
12H	4H	22.6	23.4	23.1	23.8	24.3	18.8	19.6	19.3	20.1	20.5
	6H	23.3	23.9	23.8	24.4	24.9	19.2	19.8	19.7	20.3	20.8
	8H	23.6	24.1	24.1	24.6	25.2	19.4	20.0	19.9	20.5	21.0

Maximum UGR = 25.3

POLAR GRAPH



Maximum Candela = 3231.809 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.)