



IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-940-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM BALLABS TEST NO. 18635.0
[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
[ISSUEDATE] 2024-01-08
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
[LUMINAIRE] 4'SUSPENDED INDUSTRIAL LED LUMINAIRE
[MORE] WHITE REFLECTOR w/OPEN BOTTOM
[MORE] 0-10V DIMMING DRIVER
[LUMCAT] 80-4-L77-940-DIM-UNV
[LAMPCAT] HLM 90 CRI 4000K CCT
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] INDOOR
[_SEARCH_MOUNTING] SUSPENDED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6458
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	51.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.88 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7006	6836	6818
55	6751	6602	6574
65	6430	6287	3361
75	5170	2872	550
85	2323	1016	762

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-940-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	2426.673	2426.673	2426.673	2426.673	2426.673
5	2397.845	2389.609	2382.402	2391.668	2401.963
10	2349.456	2341.219	2378.284	2384.461	2360.781
15	2294.889	2318.569	2292.830	2274.298	2274.298
20	2225.909	2277.387	2204.288	2192.963	2192.963
25	2136.337	2147.662	2111.627	2105.450	2105.450
30	2022.056	2004.553	1991.169	1983.962	1981.903
35	1900.568	1883.065	1867.622	1865.563	1861.444
40	1766.725	1737.897	1729.661	1726.572	1724.513
45	1612.291	1579.345	1573.168	1571.109	1569.049
50	1432.118	1408.438	1401.231	1399.172	1399.172
55	1260.181	1234.442	1232.383	1227.235	1227.235
60	1064.565	1045.003	1042.944	1038.826	1035.737
65	884.392	866.889	864.830	666.125	462.272
70	675.391	659.948	528.164	358.287	365.494
75	435.504	435.504	241.947	209.001	46.330
80	230.621	149.286	42.212	35.005	35.005
85	65.892	35.005	28.828	21.621	21.621
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-940-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	875.97	N.A.	13.60
0-30	1852.4	N.A.	28.70
0-40	3024.42	N.A.	46.80
0-60	5341.9	N.A.	82.70
0-80	6415.83	N.A.	99.30
0-90	6457.86	N.A.	100.00
10-90	6230.14	N.A.	96.50
20-40	2148.45	N.A.	33.30
20-50	3365.07	N.A.	52.10
40-70	3083.23	N.A.	47.70
60-80	1073.93	N.A.	16.60
70-80	308.18	N.A.	4.80
80-90	42.03	N.A.	0.70
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	6457.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	227.72
10-20	648.25
20-30	976.43
30-40	1172.02
40-50	1216.62
50-60	1100.86
60-70	765.75
70-80	308.18
80-90	42.03
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 : 80-4-L77-940-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	98	107	103	99	96	99	96	93	95	92	90	91	89	88	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	41	39
7	66	53	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-940-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	19.0	20.6	19.4	20.9	21.2	18.9	20.5	19.3	20.9	21.2
	3H	20.9	22.3	21.3	22.7	23.0	19.6	21.1	20.0	21.4	21.8
	4H	21.5	22.9	21.9	23.2	23.6	19.7	21.0	20.1	21.4	21.8
	6H	21.9	23.1	22.3	23.5	23.9	19.6	20.9	20.0	21.3	21.6
	8H	21.9	23.1	22.4	23.5	23.9	19.6	20.8	20.0	21.2	21.6
	12H	22.0	23.1	22.4	23.5	23.9	19.6	20.7	20.0	21.1	21.5

UGR Viewed Endwise

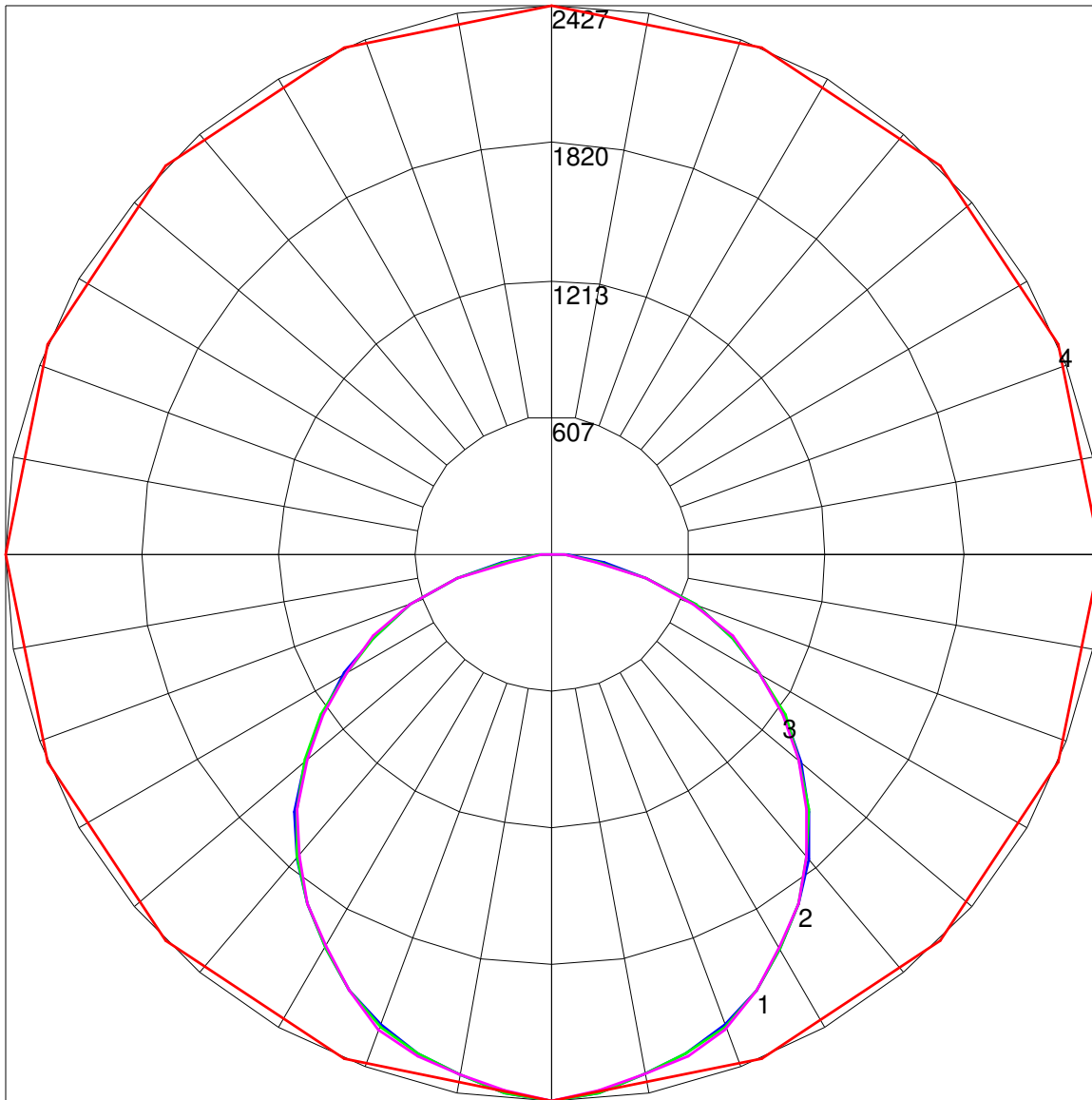
4H	2H	19.7	21.0	20.1	21.4	21.8	19.6	21.0	20.0	21.3	21.7
	3H	21.7	22.8	22.1	23.2	23.6	20.4	21.6	20.9	22.0	22.4
	4H	22.4	23.4	22.8	23.8	24.3	20.6	21.6	21.0	22.0	22.4
	6H	22.8	23.7	23.3	24.1	24.6	20.5	21.4	21.0	21.9	22.3
	8H	22.9	23.7	23.4	24.2	24.6	20.5	21.4	21.0	21.8	22.3
	12H	23.0	23.7	23.4	24.2	24.6	20.5	21.2	21.0	21.7	22.2

8H	4H	22.5	23.3	22.9	23.7	24.2	20.8	21.6	21.2	22.0	22.5
	6H	22.9	23.5	23.4	24.0	24.5	20.7	21.4	21.2	21.9	22.4
	8H	23.0	23.6	23.5	24.1	24.6	20.7	21.3	21.2	21.8	22.3
	12H	23.0	23.6	23.5	24.1	24.6	20.7	21.2	21.2	21.7	22.3

12H	4H	22.4	23.2	22.9	23.6	24.1	20.7	21.5	21.2	22.0	22.4
	6H	22.9	23.5	23.4	23.9	24.5	20.7	21.3	21.3	21.8	22.3
	8H	23.0	23.5	23.5	24.0	24.6	20.7	21.2	21.2	21.7	22.3

Maximum UGR = 24.6

POLAR GRAPH



Maximum Candela = 2426.673 Located At Horizontal Angle = 0, Vertical Angle = 0

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 (0) (Through Max. Cd.)