



IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-830-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-L77-830-DIM-UNV
[LAMPCAT] HLM 80 CRI 3000K 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	7469
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	145
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	8103	7906	7886
55	7808	7636	7604
65	7437	7272	3887
75	5980	3322	636
85	2687	1175	882

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-830-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	2806.753	2806.753	2806.753	2806.753	2806.753
5	2773.411	2763.884	2755.548	2766.266	2778.174
10	2717.442	2707.916	2750.785	2757.930	2730.541
15	2654.329	2681.718	2651.947	2630.513	2630.513
20	2574.544	2634.085	2549.537	2536.438	2536.438
25	2470.943	2484.042	2442.364	2435.219	2435.219
30	2338.763	2318.519	2303.038	2294.703	2292.321
35	2198.246	2178.003	2160.140	2157.759	2152.995
40	2043.440	2010.097	2000.571	1996.999	1994.617
45	1864.818	1826.712	1819.567	1817.185	1814.804
50	1656.425	1629.036	1620.701	1618.319	1618.319
55	1457.559	1427.788	1425.407	1419.453	1419.453
60	1231.304	1208.678	1206.297	1201.533	1197.961
65	1022.911	1002.667	1000.285	770.458	534.676
70	781.175	763.313	610.889	414.404	422.740
75	503.715	503.715	279.842	241.736	53.587
80	266.743	172.668	48.823	40.488	40.488
85	76.212	40.488	33.343	25.007	25.007
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-830-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1013.17	N.A.	13.60
0-30	2142.53	N.A.	28.70
0-40	3498.12	N.A.	46.80
0-60	6178.58	N.A.	82.70
0-80	7420.72	N.A.	99.30
0-90	7469.33	N.A.	100.00
10-90	7205.95	N.A.	96.50
20-40	2484.95	N.A.	33.30
20-50	3892.13	N.A.	52.10
40-70	3566.15	N.A.	47.70
60-80	1242.13	N.A.	16.60
70-80	356.45	N.A.	4.80
80-90	48.61	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	7469.33	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	263.38
10-20	749.79
20-30	1129.36
30-40	1355.59
40-50	1407.18
50-60	1273.28
60-70	885.69
70-80	356.45
80-90	48.61
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 : 80-4-L77-830-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	42	39
7	66	53	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	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	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-830-DIM-UNV_.IES

UGR TABLE - CORRECTED

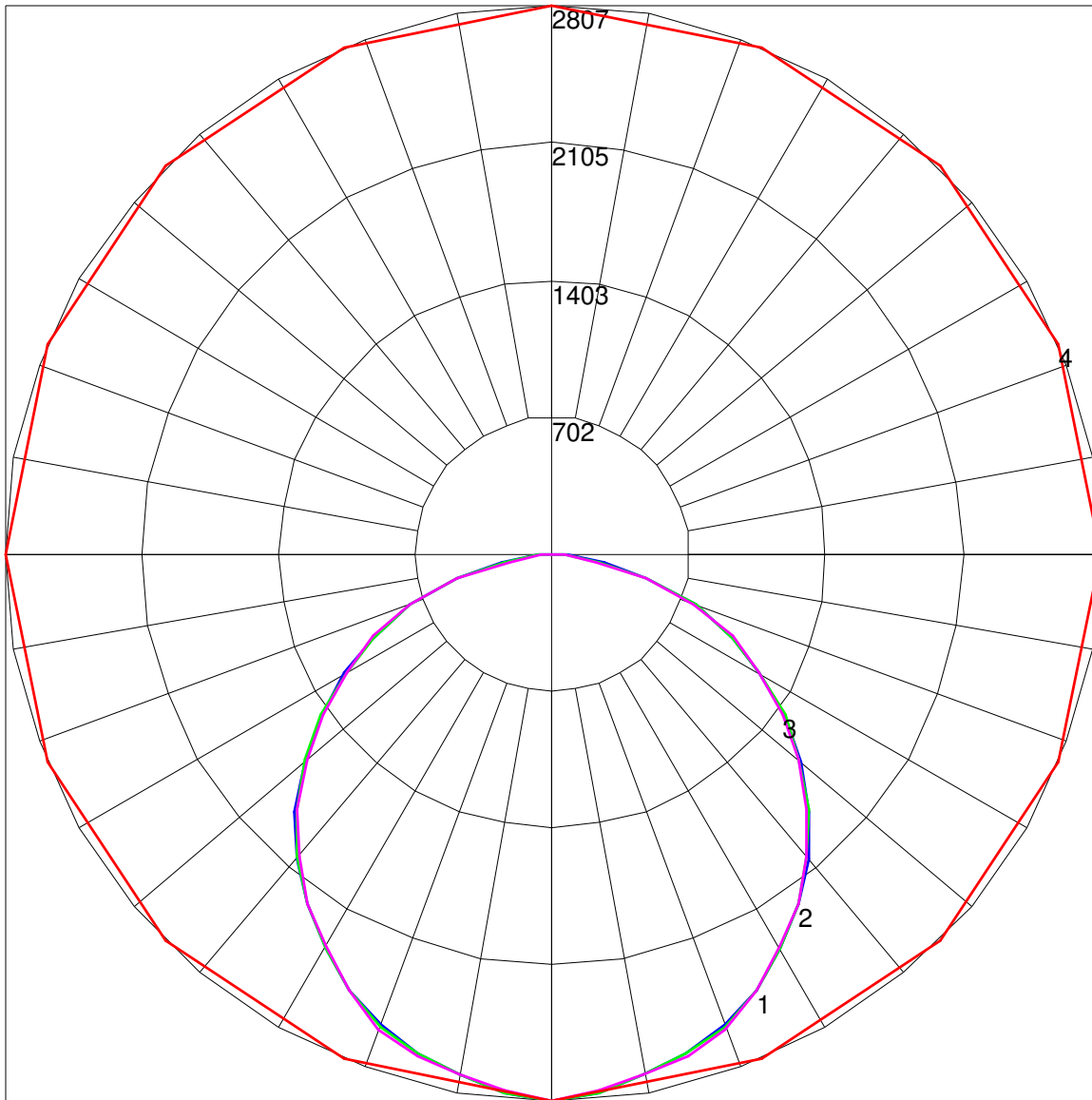
Reflectances

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	19.5	21.1	19.9	21.4	21.7	19.4	21.0	19.8	21.4	21.7
	3H	21.4	22.8	21.8	23.2	23.5	20.1	21.6	20.5	21.9	22.3
	4H	22.0	23.4	22.4	23.7	24.1	20.2	21.5	20.6	21.9	22.3
	6H	22.4	23.6	22.8	24.0	24.4	20.1	21.4	20.5	21.8	22.1
	8H	22.4	23.6	22.9	24.0	24.4	20.1	21.3	20.5	21.7	22.1
	12H	22.5	23.6	22.9	24.0	24.4	20.1	21.2	20.5	21.6	22.0
4H	2H	20.2	21.5	20.6	21.9	22.3	20.1	21.5	20.5	21.8	22.2
	3H	22.2	23.3	22.6	23.7	24.1	20.9	22.1	21.4	22.5	22.9
	4H	22.9	23.9	23.3	24.3	24.8	21.1	22.1	21.5	22.5	22.9
	6H	23.3	24.2	23.8	24.6	25.1	21.0	21.9	21.5	22.4	22.8
	8H	23.4	24.2	23.9	24.7	25.1	21.0	21.9	21.5	22.3	22.8
	12H	23.5	24.2	23.9	24.7	25.1	21.0	21.7	21.5	22.2	22.7
8H	4H	23.0	23.8	23.4	24.2	24.7	21.2	22.1	21.7	22.5	23.0
	6H	23.4	24.0	23.9	24.5	25.0	21.2	21.9	21.7	22.4	22.9
	8H	23.5	24.1	24.0	24.6	25.1	21.2	21.8	21.7	22.3	22.8
	12H	23.5	24.1	24.0	24.6	25.1	21.2	21.7	21.7	22.2	22.8
12H	4H	22.9	23.7	23.4	24.1	24.6	21.2	22.0	21.7	22.4	22.9
	6H	23.4	24.0	23.9	24.4	25.0	21.2	21.8	21.8	22.3	22.8
	8H	23.5	24.0	24.0	24.5	25.1	21.2	21.7	21.7	22.2	22.8

Maximum UGR = 25.1

POLAR GRAPH



Maximum Candela = 2806.753 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.)