



IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-850-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-L77-850-DIM-UNV
[LAMPCAT] HLM 80 CRI 5000K 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	8014
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	156
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	8694	8483	8461
55	8377	8192	8158
65	7979	7803	4171
75	6416	3564	683
85	2883	1261	946

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-850-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	3011.414	3011.414	3011.414	3011.414	3011.414
5	2975.640	2965.419	2956.475	2967.974	2980.750
10	2915.590	2905.369	2951.365	2959.030	2929.645
15	2847.875	2877.261	2845.320	2822.322	2822.322
20	2762.273	2826.155	2735.442	2721.388	2721.388
25	2651.118	2665.172	2620.454	2612.788	2612.788
30	2509.299	2487.579	2470.969	2462.026	2459.471
35	2358.536	2336.816	2317.652	2315.096	2309.986
40	2192.442	2156.668	2146.447	2142.614	2140.059
45	2000.795	1959.911	1952.245	1949.689	1947.134
50	1777.207	1747.821	1738.878	1736.322	1736.322
55	1563.840	1531.899	1529.343	1522.955	1522.955
60	1321.087	1296.812	1294.256	1289.146	1285.313
65	1097.499	1075.779	1073.223	826.638	573.664
70	838.136	818.972	655.433	444.621	453.565
75	540.445	540.445	300.247	259.362	57.494
80	286.193	185.259	52.384	43.440	43.440
85	81.769	43.440	35.774	26.831	26.831
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : 80-4-L77-850-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1087.05	N.A.	13.60
0-30	2298.76	N.A.	28.70
0-40	3753.2	N.A.	46.80
0-60	6629.11	N.A.	82.70
0-80	7961.82	N.A.	99.30
0-90	8013.97	N.A.	100.00
10-90	7731.38	N.A.	96.50
20-40	2666.15	N.A.	33.30
20-50	4175.94	N.A.	52.10
40-70	3826.18	N.A.	47.70
60-80	1332.71	N.A.	16.60
70-80	382.44	N.A.	4.80
80-90	52.16	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	8013.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	282.59
10-20	804.46
20-30	1211.71
30-40	1454.44
40-50	1509.79
50-60	1366.12
60-70	950.27
70-80	382.44
80-90	52.16
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-L77-850-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-L77-850-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	19.7	21.3	20.1	21.6	21.9	19.6	21.2	20.0	21.6	21.9
	3H	21.6	23.0	22.0	23.4	23.7	20.3	21.8	20.7	22.1	22.5
	4H	22.2	23.6	22.6	23.9	24.3	20.4	21.7	20.8	22.1	22.5
	6H	22.6	23.8	23.0	24.2	24.6	20.3	21.6	20.7	22.0	22.3
	8H	22.6	23.8	23.1	24.2	24.6	20.3	21.5	20.7	21.9	22.3
	12H	22.7	23.8	23.1	24.2	24.6	20.3	21.4	20.7	21.8	22.2

UGR Viewed Endwise

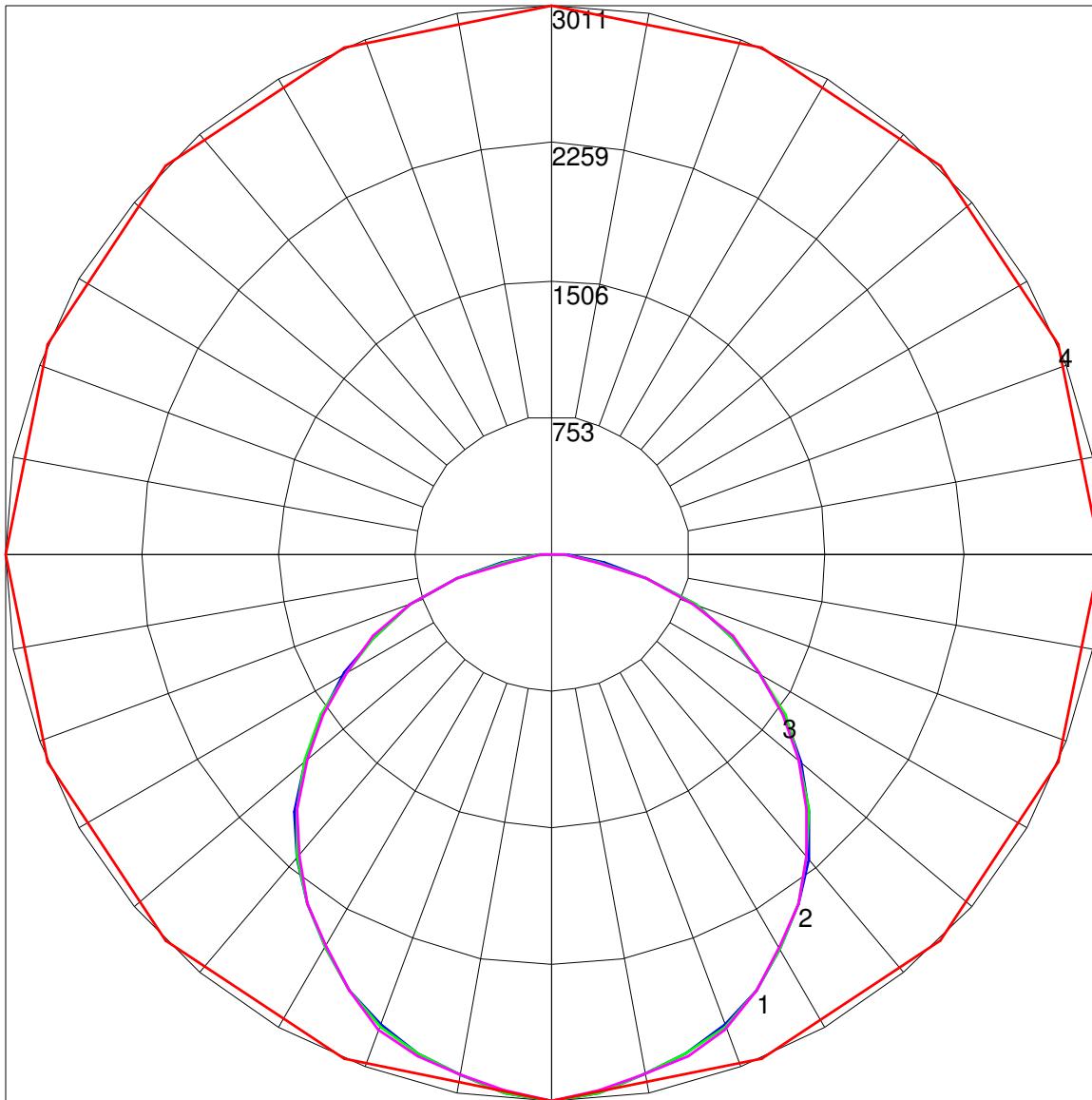
4H	2H	20.4	21.7	20.8	22.1	22.5	20.3	21.7	20.7	22.0	22.4
	3H	22.4	23.5	22.8	23.9	24.3	21.1	22.3	21.6	22.7	23.1
	4H	23.1	24.1	23.5	24.5	25.0	21.3	22.3	21.7	22.7	23.1
	6H	23.5	24.4	24.0	24.8	25.3	21.2	22.1	21.7	22.6	23.0
	8H	23.6	24.4	24.1	24.9	25.3	21.2	22.1	21.7	22.5	23.0
	12H	23.7	24.4	24.1	24.9	25.3	21.2	21.9	21.7	22.4	22.9

8H	4H	23.2	24.0	23.6	24.4	24.9	21.4	22.3	21.9	22.7	23.2
	6H	23.6	24.2	24.1	24.7	25.2	21.4	22.1	21.9	22.6	23.1
	8H	23.7	24.3	24.2	24.8	25.3	21.4	22.0	21.9	22.5	23.0
	12H	23.7	24.3	24.2	24.8	25.3	21.4	21.9	21.9	22.4	23.0

12H	4H	23.1	23.9	23.6	24.3	24.8	21.4	22.2	21.9	22.6	23.1
	6H	23.6	24.2	24.1	24.6	25.2	21.4	22.0	22.0	22.5	23.0
	8H	23.7	24.2	24.2	24.7	25.3	21.4	21.9	21.9	22.4	23.0

Maximum UGR = 25.3

POLAR GRAPH



Maximum Candela = 3011.414 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.)