



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 80-4-L115-935-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-L115-935-DIM-UNV  
[LAMPCAT] HLM 90 CRI 3500K 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	9210
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	73.1
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	9992	9749	9724
55	9628	9415	9376
65	9170	8967	4793
75	7374	4096	784
85	3313	1449	1087

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : 80-4-L115-935-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>
<b>0</b>	3460.941	3460.941	3460.941	3460.941	3460.941
<b>5</b>	3419.827	3408.080	3397.801	3411.016	3425.700
<b>10</b>	3350.813	3339.067	3391.928	3400.738	3366.965
<b>15</b>	3272.990	3306.762	3270.053	3243.623	3243.623
<b>20</b>	3174.609	3248.028	3143.774	3127.622	3127.622
<b>25</b>	3046.861	3063.014	3011.621	3002.810	3002.810
<b>30</b>	2883.873	2858.911	2839.822	2829.543	2826.606
<b>35</b>	2710.605	2685.643	2663.618	2660.681	2654.808
<b>40</b>	2519.718	2478.603	2466.857	2462.451	2459.515
<b>45</b>	2299.463	2252.475	2243.665	2240.728	2237.791
<b>50</b>	2042.498	2008.726	1998.447	1995.511	1995.511
<b>55</b>	1797.281	1760.572	1757.635	1750.293	1750.293
<b>60</b>	1518.291	1490.392	1487.456	1481.582	1477.177
<b>65</b>	1261.327	1236.365	1233.428	950.033	659.297
<b>70</b>	963.249	941.223	753.272	510.992	521.270
<b>75</b>	621.119	621.119	345.066	298.078	66.077
<b>80</b>	328.914	212.913	60.203	49.924	49.924
<b>85</b>	93.975	49.924	41.114	30.836	30.836
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 80-4-L115-935-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1249.32	N.A.	13.60
0-30	2641.91	N.A.	28.70
0-40	4313.45	N.A.	46.80
0-60	7618.66	N.A.	82.70
0-80	9150.31	N.A.	99.30
0-90	9210.25	N.A.	100.00
10-90	8885.48	N.A.	96.50
20-40	3064.14	N.A.	33.30
20-50	4799.3	N.A.	52.10
40-70	4397.33	N.A.	47.70
60-80	1531.65	N.A.	16.60
70-80	439.53	N.A.	4.80
80-90	59.94	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	9210.25	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	324.77
10-20	924.54
20-30	1392.59
30-40	1671.55
40-50	1735.16
50-60	1570.05
60-70	1092.12
70-80	439.53
80-90	59.94
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-L115-935-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	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-L115-935-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

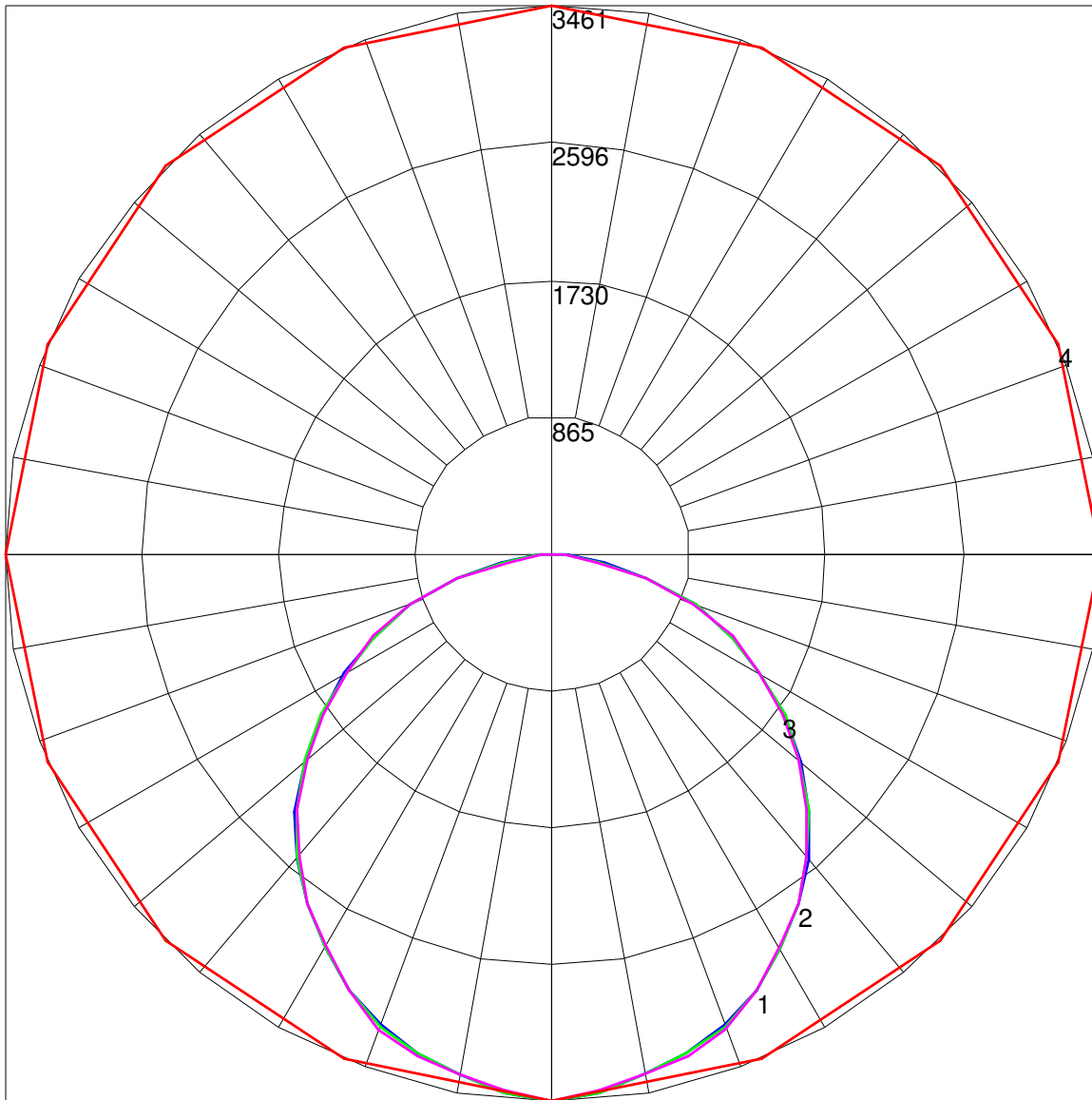
Reflectances

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	20.2	21.8	20.6	22.1	22.4	20.1	21.7	20.5	22.1	22.4
	3H	22.1	23.5	22.5	23.9	24.2	20.8	22.3	21.2	22.6	23.0
	4H	22.7	24.1	23.1	24.4	24.8	20.9	22.2	21.3	22.6	23.0
	6H	23.1	24.3	23.5	24.7	25.1	20.8	22.1	21.2	22.5	22.8
	8H	23.1	24.3	23.6	24.7	25.1	20.8	22.0	21.2	22.4	22.8
	12H	23.2	24.3	23.6	24.7	25.1	20.8	21.9	21.2	22.3	22.7
4H	2H	20.9	22.2	21.3	22.6	23.0	20.8	22.2	21.2	22.5	22.9
	3H	22.9	24.0	23.3	24.4	24.8	21.6	22.8	22.1	23.2	23.6
	4H	23.6	24.6	24.0	25.0	25.5	21.8	22.8	22.2	23.2	23.6
	6H	24.0	24.9	24.5	25.3	25.8	21.7	22.6	22.2	23.1	23.5
	8H	24.1	24.9	24.6	25.4	25.8	21.7	22.6	22.2	23.0	23.5
	12H	24.2	24.9	24.6	25.4	25.8	21.7	22.4	22.2	22.9	23.4
8H	4H	23.7	24.5	24.1	24.9	25.4	21.9	22.8	22.4	23.2	23.7
	6H	24.1	24.7	24.6	25.2	25.7	21.9	22.6	22.4	23.1	23.6
	8H	24.2	24.8	24.7	25.3	25.8	21.9	22.5	22.4	23.0	23.5
	12H	24.2	24.8	24.7	25.3	25.8	21.9	22.4	22.4	22.9	23.5
12H	4H	23.6	24.4	24.1	24.8	25.3	21.9	22.7	22.4	23.1	23.6
	6H	24.1	24.7	24.6	25.1	25.7	21.9	22.5	22.5	23.0	23.5
	8H	24.2	24.7	24.7	25.2	25.8	21.9	22.4	22.4	22.9	23.5

Maximum UGR = 25.8

POLAR GRAPH



Maximum Candela = 3460.941 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.)