



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : LL6G-4-L76-835-SWF-AF125-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 17249.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 10-AUG-2020

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS INC. - CARTHAGE, MO. 64836

[LUMINAIRE] 4' LED TROFFER

[MORE] WITH FROSTED ACRYLIC LENS

[LUMCAT] LL6G-4-L76-835-SWF-AF125-DIM-UNV

[LAMPCAT] HLM 80 CRI, 3500K CCT

[\_SEARCH\_SOURCE TYPE] LED

[\_SEARCH\_APPLICATION] INDOOR, OFFICE, CLASSROOM, ARCHITECTURAL, DIRECT, LINEAR

[\_SEARCH\_MOUNTING] RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7661
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	67.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.12
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	1.18
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.84 ft
Luminous Width (90-270)	0.34 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	21962	19763	17914
55	18481	16325	14631
65	15593	13754	12332
75	12628	10990	9966
85	10541	9122	8514

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : LL6G-4-L76-835-SWF-AF125-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>	3732.240	3732.240	3732.240	3732.240	3732.240
<b>5</b>	3710.515	3708.343	3701.826	3697.481	3697.481
<b>10</b>	3612.756	3601.894	3582.342	3569.307	3558.445
<b>15</b>	3456.341	3441.134	3404.202	3378.133	3360.754
<b>20</b>	3302.098	3276.029	3213.028	3150.028	3121.786
<b>25</b>	2995.785	2963.198	2887.163	2804.611	2774.197
<b>30</b>	2752.472	2706.851	2598.230	2493.953	2452.677
<b>35</b>	2476.574	2420.090	2304.951	2194.157	2142.019
<b>40</b>	2161.571	2105.087	1985.604	1863.947	1822.671
<b>45</b>	1909.569	1846.568	1718.394	1601.083	1557.634
<b>50</b>	1590.221	1535.910	1416.426	1314.322	1273.046
<b>55</b>	1303.460	1255.666	1151.389	1066.665	1031.906
<b>60</b>	1036.250	994.974	914.594	842.904	819.007
<b>65</b>	810.317	784.248	714.730	658.247	640.868
<b>70</b>	595.247	571.350	519.211	484.453	469.246
<b>75</b>	401.900	384.521	349.762	330.210	317.175
<b>80</b>	241.140	232.450	212.898	197.691	193.347
<b>85</b>	112.967	106.449	97.759	95.587	91.242
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : LL6G-4-L76-835-SWF-AF125-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1310.04	N.A.	17.10
0-30	2643.76	N.A.	34.50
0-40	4082.82	N.A.	53.30
0-60	6449.37	N.A.	84.20
0-80	7547.68	N.A.	98.50
0-90	7660.93	N.A.	100.00
10-90	7311.34	N.A.	95.40
20-40	2772.78	N.A.	36.20
20-50	4096.41	N.A.	53.50
40-70	3081.3	N.A.	40.20
60-80	1098.3	N.A.	14.30
70-80	383.56	N.A.	5.00
80-90	113.25	N.A.	1.50
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	7660.93	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	349.59
10-20	960.45
20-30	1333.72
30-40	1439.06
40-50	1323.63
50-60	1042.92
60-70	714.74
70-80	383.56
80-90	113.25
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 : LL6G-4-L76-835-SWF-AF125-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	267	267	267	267	261	261	261	261	250	250	250	239	239	239	229	229	229	225
1	246	237	228	220	240	232	224	216	222	216	210	213	208	203	205	201	197	193
2	226	209	195	183	220	205	192	181	197	186	177	190	181	173	183	176	169	165
3	208	186	169	156	203	183	167	154	176	163	151	170	159	149	164	155	146	142
4	192	167	148	134	187	164	147	133	158	143	132	153	140	130	148	137	128	123
5	177	150	131	117	173	148	130	117	143	128	116	139	125	114	135	123	113	109
6	165	136	118	104	160	134	117	104	130	115	103	127	113	102	123	111	101	97
7	153	125	106	93	150	123	105	93	119	104	92	116	102	91	113	101	91	87
8	143	114	96	84	140	113	96	84	110	94	83	107	93	83	105	92	82	78
9	134	106	88	76	131	104	88	76	102	86	76	99	85	75	97	84	75	71
10	126	98	81	70	124	97	81	70	95	80	69	93	79	69	91	78	69	65

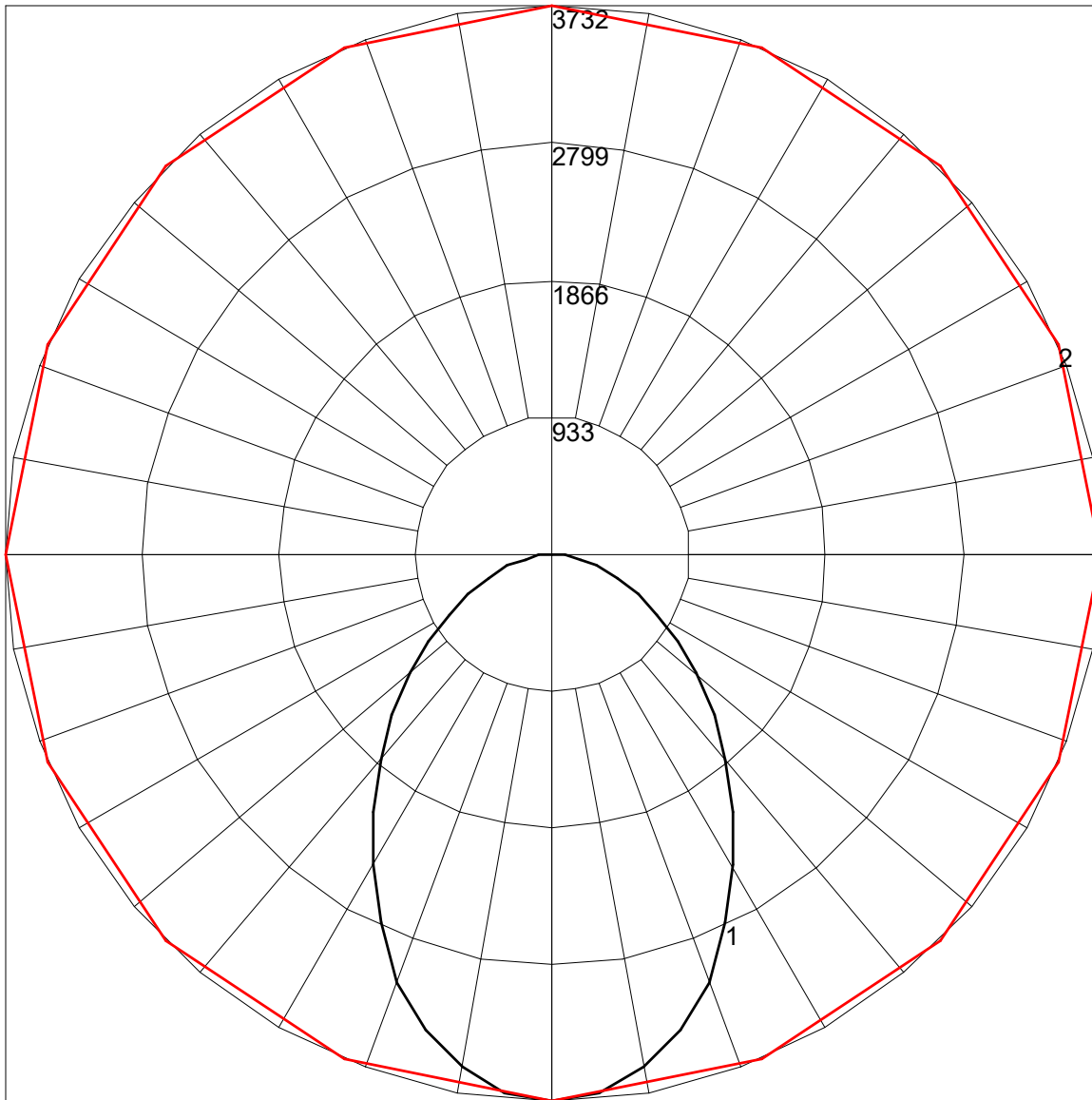
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : LL6G-4-L76-835-SWF-AF125-DIM-UNV\_.IES**

**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	19.0	20.5	19.4	20.9	21.2	17.8	19.3	18.1	19.6	19.9
	3H	20.6	22.0	20.9	22.3	22.6	19.3	20.7	19.7	21.0	21.3
	4H	21.1	22.4	21.5	22.8	23.2	19.8	21.1	20.2	21.5	21.8
	6H	21.6	22.7	22.0	23.1	23.5	20.2	21.4	20.6	21.8	22.2
	8H	21.7	22.8	22.1	23.2	23.6	20.4	21.5	20.8	21.9	22.3
	12H	21.8	22.9	22.2	23.3	23.7	20.4	21.5	20.9	21.9	22.4
4H	2H	19.4	20.7	19.8	21.1	21.4	18.4	19.7	18.8	20.1	20.5
	3H	21.2	22.3	21.6	22.7	23.1	20.1	21.2	20.5	21.6	22.0
	4H	21.9	22.9	22.3	23.3	23.7	20.8	21.7	21.2	22.2	22.6
	6H	22.4	23.3	22.9	23.7	24.2	21.3	22.1	21.7	22.6	23.0
	8H	22.6	23.4	23.1	23.9	24.3	21.5	22.3	21.9	22.7	23.2
	12H	22.8	23.5	23.3	24.0	24.5	21.6	22.3	22.1	22.8	23.3
8H	4H	22.1	22.9	22.6	23.3	23.8	21.1	21.9	21.5	22.3	22.8
	6H	22.7	23.4	23.2	23.9	24.4	21.7	22.4	22.2	22.9	23.3
	8H	23.0	23.6	23.5	24.1	24.6	22.0	22.6	22.5	23.1	23.6
	12H	23.3	23.8	23.8	24.3	24.8	22.2	22.7	22.7	23.2	23.8
12H	4H	22.1	22.8	22.6	23.3	23.8	21.1	21.8	21.6	22.3	22.8
	6H	22.8	23.4	23.3	23.8	24.4	21.8	22.4	22.3	22.8	23.4
	8H	23.1	23.6	23.6	24.1	24.7	22.1	22.6	22.6	23.1	23.7

Maximum UGR = 24.8

POLAR GRAPH



Maximum Candela = 3732.24 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)