



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S14-L59-835-FVLF-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 18123.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 23-APR-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 1x4' RECESSED LED TROFFER LUMINAIRE

[MORE] WHITE REFLECTOR w/CLEAR POLYCARB LENS & PAT12 PRISMATIC OVERLAY

[LUMCAT] 50G-S14-L59-835-FVLF-DIM-UNV

[\_SEARCH\_SOURCETYPE]LED

[\_SEARCH\_APPLICATION]INDOOR,DIRECT

[\_SEARCH\_MOUNTING]RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5871
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	55.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.77 ft
Luminous Width (90-270)	0.77 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7641	7252	6803
55	6128	5568	5019
65	4915	4327	3998
75	3917	3622	3622
85	3991	3611	3991

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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>	2701.287	2701.287	2701.287	2701.287	2701.287
<b>5</b>	2694.122	2693.226	2694.122	2693.226	2695.913
<b>10</b>	2649.339	2649.339	2647.548	2647.548	2647.548
<b>15</b>	2546.339	2546.339	2541.861	2541.861	2540.965
<b>20</b>	2466.626	2464.835	2459.461	2455.878	2454.982
<b>25</b>	2249.878	2244.504	2238.235	2229.278	2229.278
<b>30</b>	2074.330	2067.165	2050.148	2030.443	2024.174
<b>35</b>	1894.304	1885.348	1857.582	1821.756	1808.322
<b>40</b>	1656.061	1640.835	1602.322	1555.748	1534.252
<b>45</b>	1460.809	1436.626	1386.469	1322.878	1300.487
<b>50</b>	1191.217	1162.556	1107.026	1039.852	1020.148
<b>55</b>	950.287	923.417	863.409	801.609	778.322
<b>60</b>	729.956	703.087	652.930	605.461	586.652
<b>65</b>	561.574	539.183	494.400	464.843	456.783
<b>70</b>	402.148	386.922	353.783	344.826	345.722
<b>75</b>	274.070	266.009	253.470	247.200	253.470
<b>80</b>	182.713	177.339	169.278	173.757	176.443
<b>85</b>	94.043	89.565	85.087	93.148	94.043
<b>90</b>	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	975.94	N.A.	16.60
0-30	2011.23	N.A.	34.30
0-40	3162.04	N.A.	53.90
0-60	4994.65	N.A.	85.10
0-80	5773.82	N.A.	98.30
0-90	5870.71	N.A.	100.00
10-90	5615.11	N.A.	95.60
20-40	2186.1	N.A.	37.20
20-50	3240.12	N.A.	55.20
40-70	2333.32	N.A.	39.70
60-80	779.16	N.A.	13.30
70-80	278.46	N.A.	4.70
80-90	96.90	N.A.	1.70
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	5870.71	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	255.60
10-20	720.34
20-30	1035.29
30-40	1150.81
40-50	1054.02
50-60	778.60
60-70	500.70
70-80	278.46
80-90	96.90
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

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**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	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

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**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	17.7	19.2	18.0	19.5	19.8	16.6	18.1	16.9	18.4	18.7
	3H	19.1	20.4	19.5	20.8	21.1	18.0	19.4	18.4	19.7	20.1
	4H	19.6	20.9	20.0	21.2	21.6	18.6	19.9	19.0	20.2	20.6
	6H	20.1	21.2	20.5	21.6	22.0	19.2	20.3	19.6	20.7	21.1
	8H	20.2	21.4	20.7	21.7	22.1	19.4	20.5	19.8	20.9	21.3
	12H	20.4	21.5	20.8	21.8	22.3	19.6	20.7	20.0	21.0	21.5

UGR Viewed Endwise

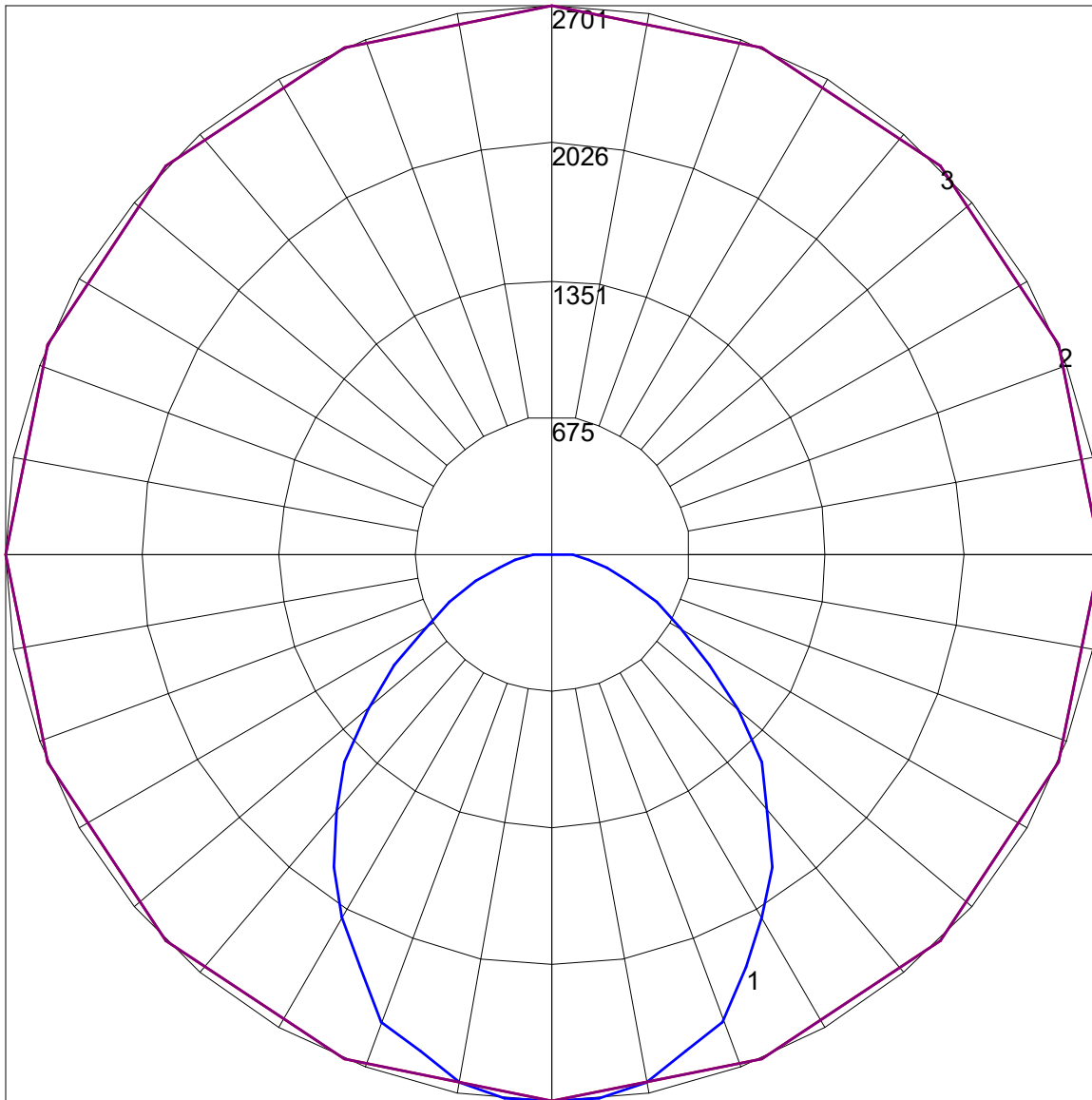
4H	2H	18.0	19.3	18.4	19.7	20.0	17.1	18.4	17.5	18.8	19.1
	3H	19.7	20.7	20.1	21.1	21.5	18.8	19.9	19.2	20.3	20.7
	4H	20.3	21.3	20.8	21.7	22.1	19.5	20.5	19.9	20.9	21.3
	6H	20.9	21.8	21.4	22.2	22.7	20.2	21.0	20.7	21.5	21.9
	8H	21.2	22.0	21.6	22.4	22.9	20.5	21.3	21.0	21.7	22.2
	12H	21.4	22.1	21.9	22.6	23.0	20.8	21.5	21.2	21.9	22.4

8H	4H	20.5	21.3	21.0	21.8	22.2	19.8	20.6	20.3	21.0	21.5
	6H	21.3	21.9	21.8	22.4	22.9	20.7	21.3	21.1	21.8	22.3
	8H	21.6	22.2	22.1	22.7	23.2	21.1	21.6	21.6	22.1	22.6
	12H	21.9	22.4	22.4	22.9	23.5	21.4	21.9	21.9	22.4	23.0

12H	4H	20.6	21.3	21.0	21.7	22.2	19.8	20.6	20.3	21.0	21.5
	6H	21.4	21.9	21.9	22.4	22.9	20.8	21.3	21.3	21.8	22.3
	8H	21.7	22.3	22.2	22.7	23.3	21.2	21.7	21.7	22.2	22.8

Maximum UGR = 23.5

POLAR GRAPH



Maximum Candela = 2701.287 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)  
# 3 - Horizontal Cone Through Vertical Angle (0)