



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S14-L59-835-FPC12187-CA040-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/.187" PRISMATIC PAT12 POLYCARB LENS & CA040 OVERLAY

[LUMCAT] 50G-S14-L59-835-FPC12187/CA040-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	4885
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
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	6358	6034	5660
55	5099	4633	4176
65	4089	3600	3326
75	3259	3014	3014
85	3321	3004	3321

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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>
0	2247.621	2247.621	2247.621	2247.621	2247.621
5	2241.660	2240.914	2241.660	2240.914	2243.150
10	2204.398	2204.398	2202.908	2202.908	2202.908
15	2118.696	2118.696	2114.970	2114.970	2114.225
20	2052.371	2050.880	2046.409	2043.428	2042.683
25	1872.024	1867.553	1862.336	1854.884	1854.884
30	1725.959	1719.997	1705.837	1689.442	1684.226
35	1576.167	1568.715	1545.612	1515.803	1504.625
40	1377.935	1365.266	1333.221	1294.469	1276.583
45	1215.474	1195.353	1153.620	1100.709	1082.078
50	991.159	967.312	921.107	865.215	848.820
55	790.692	768.335	718.404	666.983	647.607
60	607.365	585.008	543.275	503.777	488.127
65	467.261	448.630	411.368	386.776	380.069
70	334.609	321.940	294.367	286.915	287.660
75	228.041	221.334	210.901	205.684	210.901
80	152.027	147.556	140.849	144.575	146.811
85	78.249	74.523	70.797	77.504	78.249
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : V50G-S14-L59-835-FPC12187-CA040-DIM-UNV_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	812.04	N.A.	16.60
0-30	1673.46	N.A.	34.30
0-40	2630.99	N.A.	53.90
0-60	4155.83	N.A.	85.10
0-80	4804.14	N.A.	98.30
0-90	4884.76	N.A.	100.00
10-90	4672.09	N.A.	95.60
20-40	1818.96	N.A.	37.20
20-50	2695.96	N.A.	55.20
40-70	1941.45	N.A.	39.70
60-80	648.30	N.A.	13.30
70-80	231.69	N.A.	4.70
80-90	80.62	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	4884.76	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	212.68
10-20	599.36
20-30	861.42
30-40	957.54
40-50	877.00
50-60	647.83
60-70	416.61
70-80	231.69
80-90	80.62
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	17.1	18.6	17.4	18.9	19.2	16.0	17.5	16.3	17.8	18.1
	3H	18.5	19.8	18.9	20.2	20.5	17.4	18.8	17.8	19.1	19.5
	4H	19.0	20.3	19.4	20.6	21.0	18.0	19.3	18.4	19.6	20.0
	6H	19.5	20.6	19.9	21.0	21.4	18.6	19.7	19.0	20.1	20.5
	8H	19.6	20.8	20.1	21.1	21.5	18.8	19.9	19.2	20.3	20.7
	12H	19.8	20.9	20.2	21.2	21.7	19.0	20.1	19.4	20.4	20.9

UGR Viewed Endwise

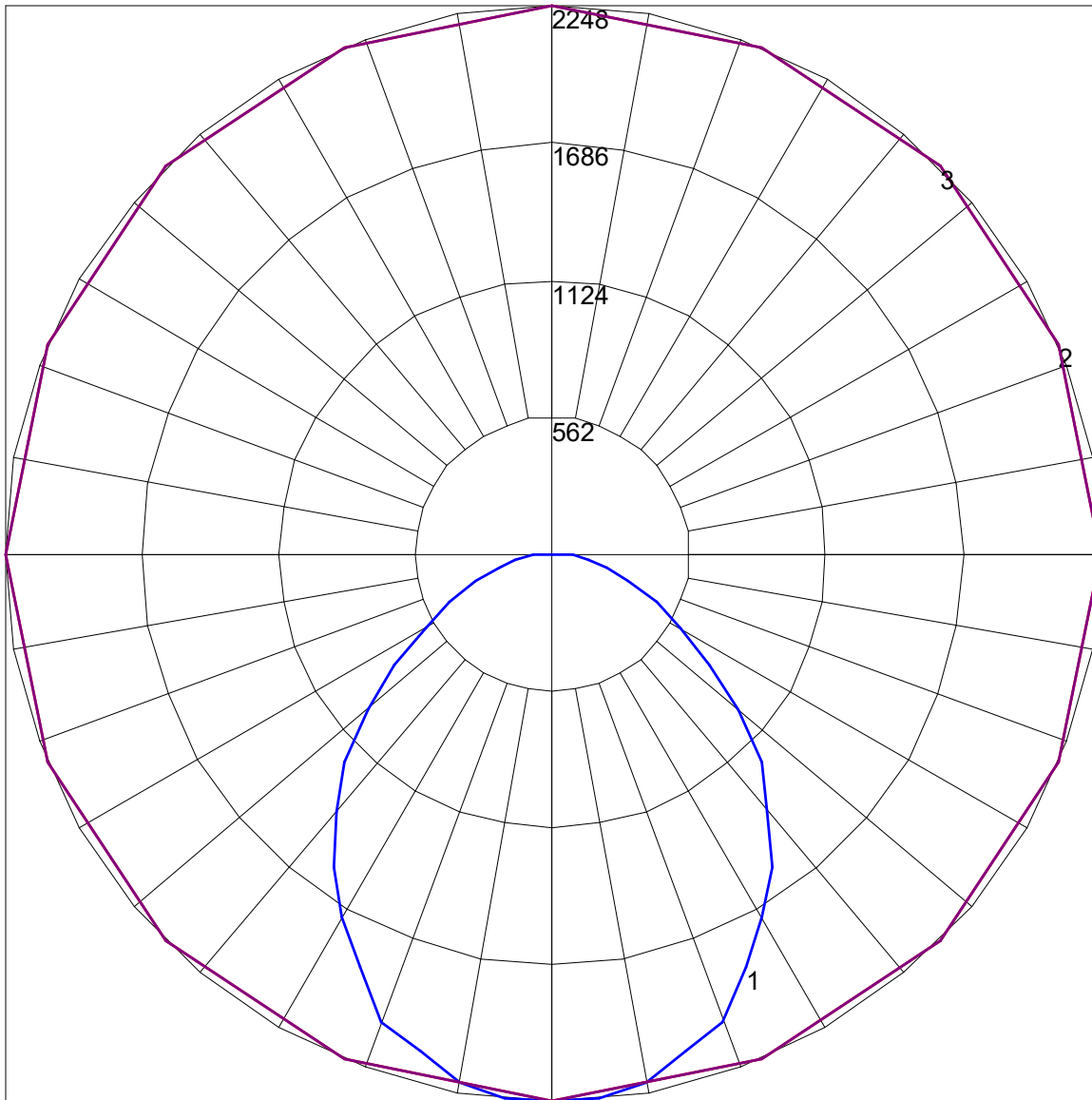
4H	2H	17.4	18.7	17.8	19.1	19.4	16.5	17.8	16.9	18.2	18.5
	3H	19.1	20.1	19.5	20.5	20.9	18.2	19.3	18.6	19.7	20.1
	4H	19.7	20.7	20.2	21.1	21.5	18.9	19.9	19.3	20.3	20.7
	6H	20.3	21.2	20.8	21.6	22.1	19.6	20.4	20.1	20.9	21.3
	8H	20.6	21.4	21.0	21.8	22.3	19.9	20.7	20.4	21.1	21.6
	12H	20.8	21.5	21.3	22.0	22.4	20.2	20.9	20.6	21.3	21.8

8H	4H	19.9	20.7	20.4	21.2	21.6	19.2	20.0	19.7	20.4	20.9
	6H	20.7	21.3	21.2	21.8	22.3	20.1	20.7	20.5	21.2	21.7
	8H	21.0	21.6	21.5	22.1	22.6	20.5	21.0	21.0	21.5	22.0
	12H	21.3	21.8	21.8	22.3	22.9	20.8	21.3	21.3	21.8	22.4

12H	4H	20.0	20.7	20.4	21.1	21.6	19.2	20.0	19.7	20.4	20.9
	6H	20.8	21.3	21.3	21.8	22.3	20.2	20.7	20.7	21.2	21.7
	8H	21.1	21.7	21.6	22.1	22.7	20.6	21.1	21.1	21.6	22.2

Maximum UGR = 22.9

POLAR GRAPH



Maximum Candela = 2247.621 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)