



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S14-L39-835-FVL-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-L39-835-FVL-DIM-UNV

[_SEARCH_SOURCE]TYPE]LED

[_SEARCH_APPLICATION]INDOOR,DIRECT

[_SEARCH_MOUNTING]RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3744
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	33.7
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	4873	4625	4338
55	3908	3551	3201
65	3134	2759	2549
75	2498	2310	2310
85	2545	2303	2545

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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	1722.640	1722.640	1722.640	1722.640	1722.640
5	1718.070	1717.499	1718.070	1717.499	1719.213
10	1689.512	1689.512	1688.370	1688.370	1688.370
15	1623.828	1623.828	1620.972	1620.972	1620.401
20	1572.994	1571.852	1568.425	1566.140	1565.569
25	1434.771	1431.344	1427.346	1421.635	1421.635
30	1322.823	1318.253	1307.401	1294.836	1290.837
35	1208.018	1202.307	1184.600	1161.754	1153.186
40	1056.088	1046.378	1021.818	992.117	978.409
45	931.573	916.152	884.167	843.614	829.334
50	759.652	741.375	705.962	663.125	650.559
55	606.008	588.873	550.605	511.194	496.344
60	465.501	448.366	416.381	386.109	374.114
65	358.122	343.843	315.284	296.436	291.295
70	256.454	246.744	225.611	219.899	220.470
75	174.777	169.637	161.640	157.642	161.640
80	116.518	113.091	107.951	110.806	112.520
85	59.973	57.117	54.261	59.401	59.973
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	622.37	N.A.	16.60
0-30	1282.58	N.A.	34.30
0-40	2016.47	N.A.	53.90
0-60	3185.14	N.A.	85.10
0-80	3682.02	N.A.	98.30
0-90	3743.82	N.A.	100.00
10-90	3580.82	N.A.	95.60
20-40	1394.1	N.A.	37.20
20-50	2066.26	N.A.	55.20
40-70	1487.98	N.A.	39.70
60-80	496.88	N.A.	13.30
70-80	177.58	N.A.	4.70
80-90	61.79	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	3743.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	163.00
10-20	459.37
20-30	660.22
30-40	733.88
40-50	672.16
50-60	496.52
60-70	319.30
70-80	177.58
80-90	61.79
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

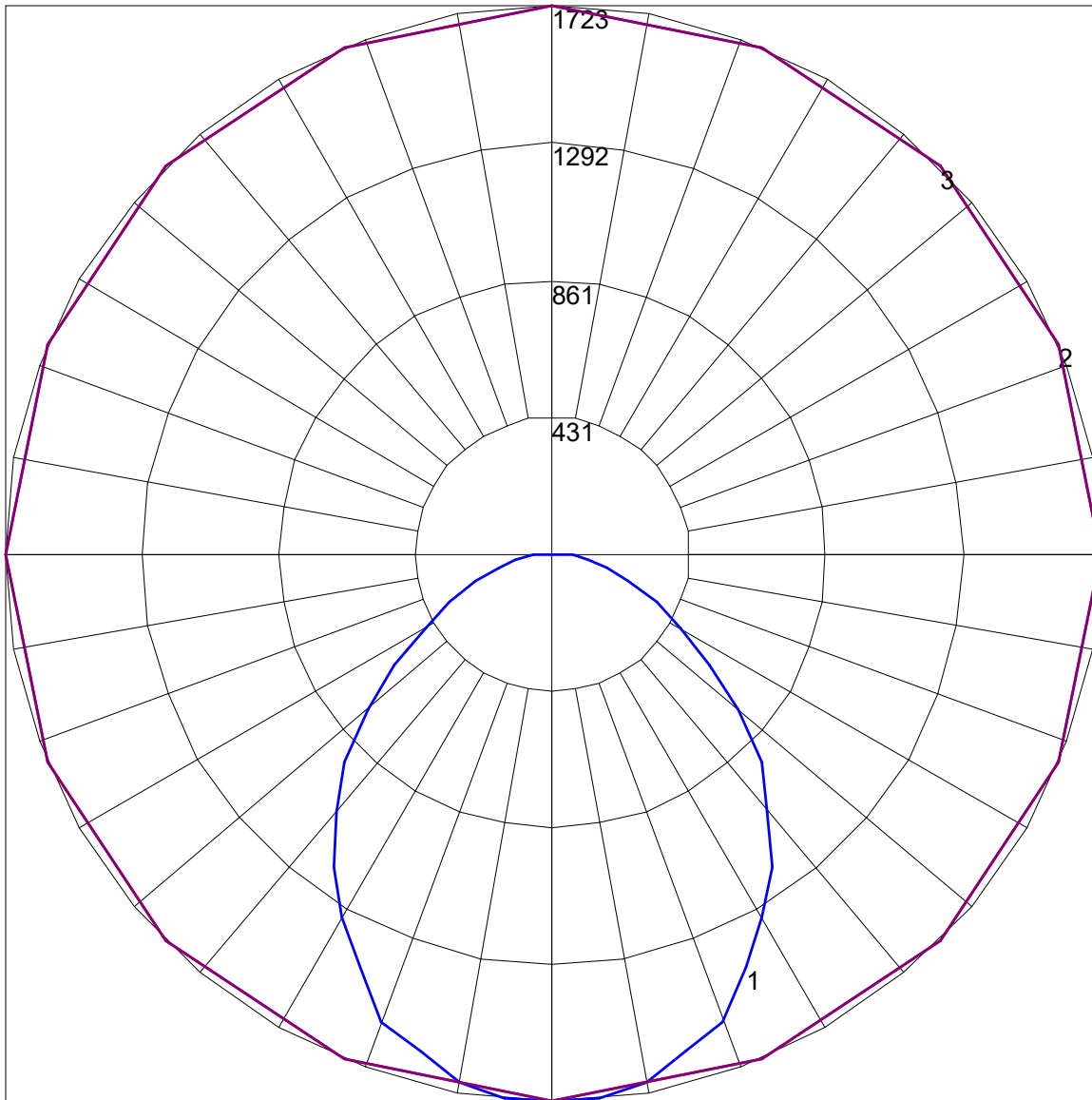
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	16.2	17.7	16.5	18.0	18.3	15.1	16.6	15.4	16.9	17.2
	3H	17.6	18.9	18.0	19.3	19.6	16.5	17.9	16.9	18.2	18.6
	4H	18.1	19.4	18.5	19.7	20.1	17.1	18.4	17.5	18.7	19.1
	6H	18.6	19.7	19.0	20.1	20.5	17.7	18.8	18.1	19.2	19.6
	8H	18.7	19.9	19.2	20.2	20.6	17.9	19.0	18.3	19.4	19.8
	12H	18.9	20.0	19.3	20.3	20.8	18.1	19.2	18.5	19.5	20.0
4H	2H	16.5	17.8	16.9	18.2	18.5	15.6	16.9	16.0	17.3	17.6
	3H	18.2	19.2	18.6	19.6	20.0	17.3	18.4	17.7	18.8	19.2
	4H	18.8	19.8	19.3	20.2	20.6	18.0	19.0	18.4	19.4	19.8
	6H	19.4	20.3	19.9	20.7	21.2	18.7	19.5	19.2	20.0	20.4
	8H	19.7	20.5	20.1	20.9	21.4	19.0	19.8	19.5	20.2	20.7
	12H	19.9	20.6	20.4	21.1	21.5	19.3	20.0	19.7	20.4	20.9
8H	4H	19.0	19.8	19.5	20.3	20.7	18.3	19.1	18.8	19.5	20.0
	6H	19.8	20.4	20.3	20.9	21.4	19.2	19.8	19.6	20.3	20.8
	8H	20.1	20.7	20.6	21.2	21.7	19.6	20.1	20.1	20.6	21.1
	12H	20.4	20.9	20.9	21.4	22.0	19.9	20.4	20.4	20.9	21.5
12H	4H	19.1	19.8	19.5	20.2	20.7	18.3	19.1	18.8	19.5	20.0
	6H	19.9	20.4	20.4	20.9	21.4	19.3	19.8	19.8	20.3	20.8
	8H	20.2	20.8	20.7	21.2	21.8	19.7	20.2	20.2	20.7	21.3

Maximum UGR = 22.0

POLAR GRAPH



Maximum Candela = 1722.64 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)