



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S14-L45-835-SAF12125-(L30)-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

[ISSUE DATE] 06-18-2020

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 1x4' LED TROFFER

[MORE] WITH FROSTED ACRYLIC LENS

[LUMCAT] 50G-S14-L45-835-SAF12125-(L30)-DIM-UNV

[LAMPCAT] HLM 80 CRI, 3500K CCT

[_SEARCH_SOURCETYPE]LED

[_SEARCH_APPLICATION]INDOOR,CLASSROOM, COMMERCIAL, EDUCATIONAL,OFFICE, DIRECT

[_SEARCH_MOUNTING]RECESSED

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3097
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	27
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	4031	3826	3588
55	3233	2937	2648
65	2593	2283	2109
75	2066	1911	1911
85	2105	1905	2105

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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	1424.951	1424.951	1424.951	1424.951	1424.951
5	1421.171	1420.699	1421.171	1420.699	1422.116
10	1397.548	1397.548	1396.603	1396.603	1396.603
15	1343.215	1343.215	1340.852	1340.852	1340.380
20	1301.165	1300.220	1297.386	1295.496	1295.023
25	1186.829	1183.994	1180.687	1175.962	1175.962
30	1094.226	1090.446	1081.470	1071.075	1067.768
35	999.261	994.536	979.890	960.991	953.904
40	873.586	865.554	845.238	820.670	809.330
45	770.588	757.832	731.374	697.829	686.017
50	628.377	613.258	583.965	548.530	538.136
55	501.284	487.110	455.455	422.855	410.571
60	385.058	370.884	344.426	319.386	309.464
65	296.235	284.423	260.800	245.209	240.957
70	212.136	204.104	186.623	181.899	182.371
75	144.574	140.322	133.707	130.400	133.707
80	96.383	93.548	89.296	91.658	93.075
85	49.609	47.246	44.884	49.136	49.609
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 50G-S14-L45-835-SAF12125-(L30)-DIM-UNV_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	514.82	N.A.	16.60
0-30	1060.94	N.A.	34.30
0-40	1668.00	N.A.	53.90
0-60	2634.72	N.A.	85.10
0-80	3045.73	N.A.	98.30
0-90	3096.85	N.A.	100.00
10-90	2962.02	N.A.	95.60
20-40	1153.18	N.A.	37.20
20-50	1709.19	N.A.	55.20
40-70	1230.84	N.A.	39.70
60-80	411.01	N.A.	13.30
70-80	146.89	N.A.	4.70
80-90	51.11	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	3096.85	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	134.83
10-20	379.98
20-30	546.12
30-40	607.06
40-50	556.00
50-60	410.72
60-70	264.12
70-80	146.89
80-90	51.11
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	15.5	17.0	15.8	17.3	17.6	14.4	15.9	14.7	16.2	16.5
	3H	16.9	18.2	17.3	18.6	18.9	15.8	17.2	16.2	17.5	17.9
	4H	17.4	18.7	17.8	19.0	19.4	16.4	17.7	16.8	18.0	18.4
	6H	17.9	19.0	18.3	19.4	19.8	17.0	18.1	17.4	18.5	18.9
	8H	18.0	19.2	18.5	19.5	19.9	17.2	18.3	17.6	18.7	19.1
	12H	18.2	19.3	18.6	19.6	20.1	17.4	18.5	17.8	18.8	19.3

UGR Viewed Endwise

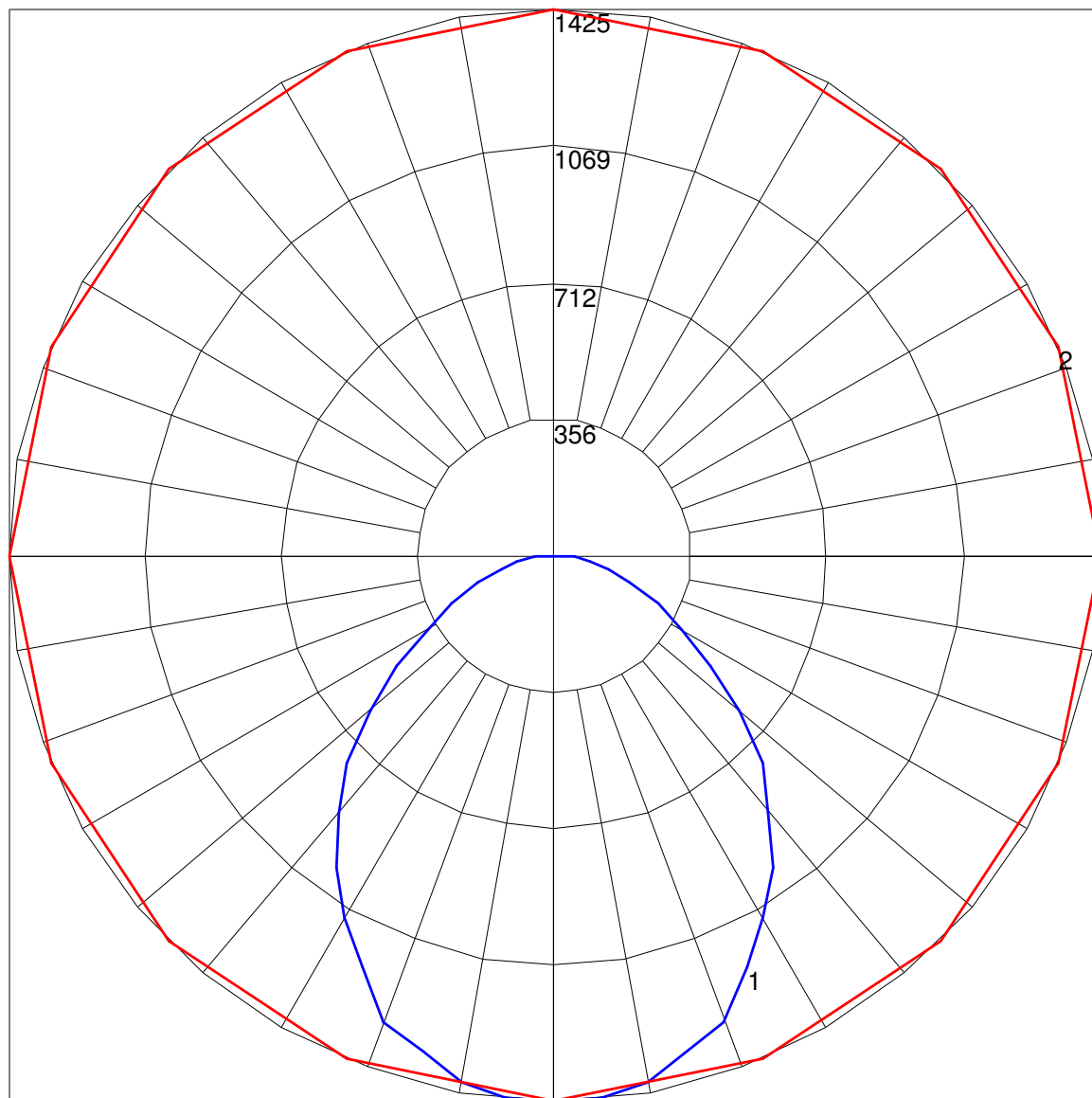
4H	2H	15.8	17.1	16.2	17.5	17.8	14.9	16.2	15.3	16.6	16.9
	3H	17.5	18.5	17.9	18.9	19.3	16.6	17.7	17.0	18.1	18.5
	4H	18.1	19.1	18.6	19.5	19.9	17.3	18.3	17.7	18.7	19.1
	6H	18.7	19.6	19.2	20.0	20.5	18.0	18.8	18.5	19.3	19.7
	8H	19.0	19.8	19.4	20.2	20.7	18.3	19.1	18.8	19.5	20.0
	12H	19.2	19.9	19.7	20.4	20.8	18.6	19.3	19.0	19.7	20.2

8H	4H	18.3	19.1	18.8	19.6	20.0	17.6	18.4	18.1	18.8	19.3
	6H	19.1	19.7	19.6	20.2	20.7	18.5	19.1	18.9	19.6	20.1
	8H	19.4	20.0	19.9	20.5	21.0	18.9	19.4	19.4	19.9	20.4
	12H	19.7	20.2	20.2	20.7	21.3	19.2	19.7	19.7	20.2	20.8

12H	4H	18.4	19.1	18.8	19.5	20.0	17.6	18.4	18.1	18.8	19.3
	6H	19.2	19.7	19.7	20.2	20.7	18.6	19.1	19.1	19.6	20.1
	8H	19.5	20.1	20.0	20.5	21.1	19.0	19.5	19.5	20.0	20.6

Maximum UGR = 21.3

POLAR GRAPH



Maximum Candela = 1424.951 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.)