



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S14-L24-835-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-L24-835-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	2359
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	20.1
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	3070	2914	2733
55	2462	2237	2017
65	1975	1739	1606
75	1574	1455	1455
85	1604	1451	1604

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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	1085.392	1085.392	1085.392	1085.392	1085.392
5	1082.513	1082.153	1082.513	1082.153	1083.233
10	1064.519	1064.519	1063.799	1063.799	1063.799
15	1023.133	1023.133	1021.334	1021.334	1020.974
20	991.104	990.384	988.225	986.785	986.425
25	904.013	901.854	899.335	895.736	895.736
30	833.477	830.598	823.761	815.843	813.324
35	761.142	757.543	746.387	731.992	726.594
40	665.414	659.296	643.822	625.108	616.471
45	586.961	577.244	557.091	531.540	522.543
50	478.638	467.122	444.809	417.818	409.901
55	381.830	371.034	346.922	322.091	312.734
60	293.301	282.504	262.351	243.277	235.720
65	225.643	216.647	198.653	186.777	183.538
70	161.585	155.467	142.152	138.553	138.913
75	110.123	106.884	101.845	99.326	101.845
80	73.415	71.256	68.017	69.816	70.896
85	37.787	35.988	34.188	37.427	37.787
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	392.14	N.A.	16.60
0-30	808.12	N.A.	34.30
0-40	1270.52	N.A.	53.90
0-60	2006.88	N.A.	85.10
0-80	2319.95	N.A.	98.30
0-90	2358.88	N.A.	100.00
10-90	2256.18	N.A.	95.60
20-40	878.39	N.A.	37.20
20-50	1301.9	N.A.	55.20
40-70	937.54	N.A.	39.70
60-80	313.07	N.A.	13.30
70-80	111.89	N.A.	4.70
80-90	38.93	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	2358.88	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	102.70
10-20	289.44
20-30	415.99
30-40	462.40
40-50	423.51
50-60	312.84
60-70	201.19
70-80	111.89
80-90	38.93
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

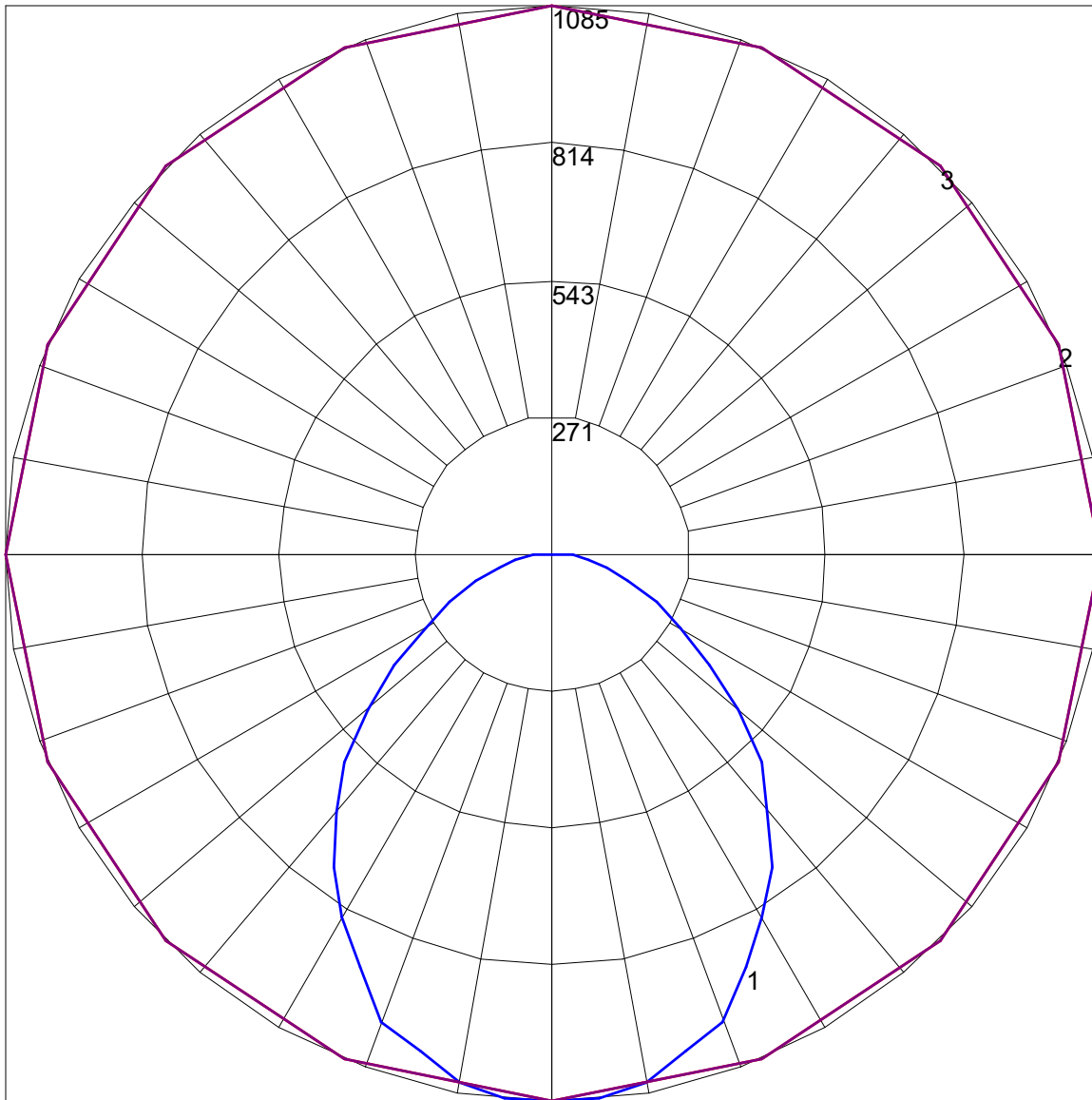
Reflectances

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	14.6	16.1	14.9	16.4	16.7	13.5	15.0	13.8	15.3	15.6
	3H	16.0	17.3	16.4	17.7	18.0	14.9	16.3	15.3	16.6	17.0
	4H	16.5	17.8	16.9	18.1	18.5	15.5	16.8	15.9	17.1	17.5
	6H	17.0	18.1	17.4	18.5	18.9	16.1	17.2	16.5	17.6	18.0
	8H	17.1	18.3	17.6	18.6	19.0	16.3	17.4	16.7	17.8	18.2
	12H	17.3	18.4	17.7	18.7	19.2	16.5	17.6	16.9	17.9	18.4
4H	2H	14.9	16.2	15.3	16.6	16.9	14.0	15.3	14.4	15.7	16.0
	3H	16.6	17.6	17.0	18.0	18.4	15.7	16.8	16.1	17.2	17.6
	4H	17.2	18.2	17.7	18.6	19.0	16.4	17.4	16.8	17.8	18.2
	6H	17.8	18.7	18.3	19.1	19.6	17.1	17.9	17.6	18.4	18.8
	8H	18.1	18.9	18.5	19.3	19.8	17.4	18.2	17.9	18.6	19.1
	12H	18.3	19.0	18.8	19.5	19.9	17.7	18.4	18.1	18.8	19.3
8H	4H	17.4	18.2	17.9	18.7	19.1	16.7	17.5	17.2	17.9	18.4
	6H	18.2	18.8	18.7	19.3	19.8	17.6	18.2	18.0	18.7	19.2
	8H	18.5	19.1	19.0	19.6	20.1	18.0	18.5	18.5	19.0	19.5
	12H	18.8	19.3	19.3	19.8	20.4	18.3	18.8	18.8	19.3	19.9
12H	4H	17.5	18.2	17.9	18.6	19.1	16.7	17.5	17.2	17.9	18.4
	6H	18.3	18.8	18.8	19.3	19.8	17.7	18.2	18.2	18.7	19.2
	8H	18.6	19.2	19.1	19.6	20.2	18.1	18.6	18.6	19.1	19.7

Maximum UGR = 20.4

POLAR GRAPH



Maximum Candela = 1085.392 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)