



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S14-L24-835-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-L24-835-FPC12187/CA040-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	1963
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
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	2555	2425	2274
55	2049	1862	1678
65	1643	1447	1337
75	1310	1211	1211
85	1334	1207	1334

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	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	903.189	903.189	903.189	903.189	903.189
5	900.794	900.494	900.794	900.494	901.393
10	885.820	885.820	885.222	885.222	885.222
15	851.382	851.382	849.885	849.885	849.585
20	824.729	824.130	822.334	821.136	820.836
25	752.259	750.462	748.366	745.371	745.371
30	693.563	691.168	685.478	678.889	676.793
35	633.371	630.376	621.093	609.114	604.622
40	553.713	548.622	535.745	520.172	512.985
45	488.429	480.343	463.573	442.311	434.825
50	398.290	388.707	370.140	347.680	341.092
55	317.733	308.749	288.685	268.022	260.236
60	244.065	235.081	218.311	202.439	196.150
65	187.765	180.279	165.305	155.423	152.728
70	134.460	129.369	118.289	115.294	115.594
75	91.637	88.941	84.749	82.653	84.749
80	61.091	59.294	56.599	58.096	58.995
85	31.444	29.947	28.449	31.144	31.444
90	0.000	0.000	0.000	0.000	0.000

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Zone	Lumens	%Lamp	%Fixt
0-20	326.31	N.A.	16.60
0-30	672.47	N.A.	34.30
0-40	1057.24	N.A.	53.90
0-60	1669.99	N.A.	85.10
0-80	1930.51	N.A.	98.30
0-90	1962.9	N.A.	100.00
10-90	1877.44	N.A.	95.60
20-40	730.93	N.A.	37.20
20-50	1083.35	N.A.	55.20
40-70	780.16	N.A.	39.70
60-80	260.52	N.A.	13.30
70-80	93.10	N.A.	4.70
80-90	32.40	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	1962.9	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	85.46
10-20	240.85
20-30	346.16
30-40	384.78
40-50	352.42
50-60	260.33
60-70	167.41
70-80	93.10
80-90	32.40
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

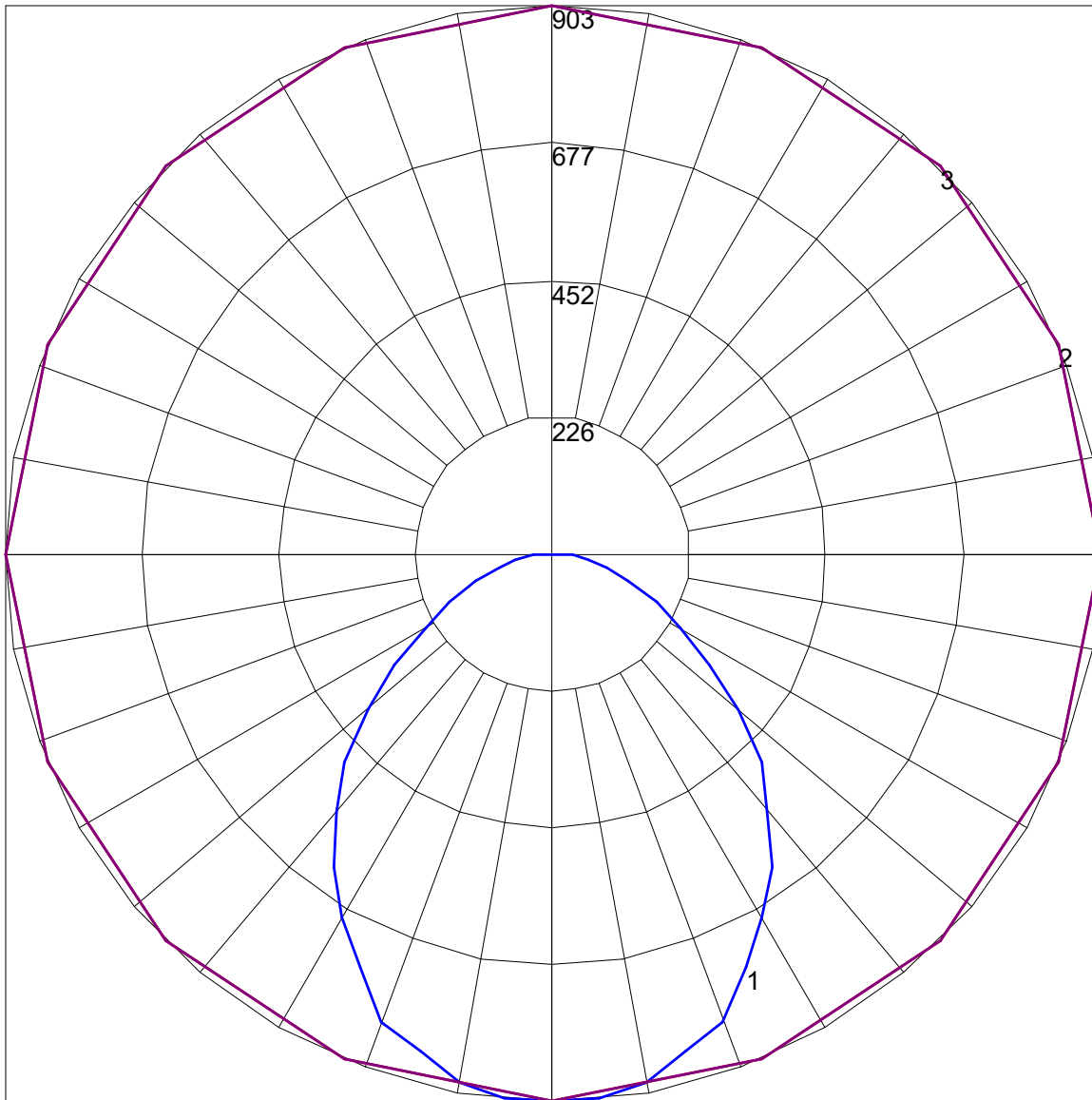
X=2H	Y=2H	13.9	15.4	14.2	15.7	16.0	12.8	14.3	13.1	14.6	14.9
	3H	15.3	16.6	15.7	17.0	17.3	14.2	15.6	14.6	15.9	16.3
	4H	15.8	17.1	16.2	17.4	17.8	14.8	16.1	15.2	16.4	16.8
	6H	16.3	17.4	16.7	17.8	18.2	15.4	16.5	15.8	16.9	17.3
	8H	16.4	17.6	16.9	17.9	18.3	15.6	16.7	16.0	17.1	17.5
	12H	16.6	17.7	17.0	18.0	18.5	15.8	16.9	16.2	17.2	17.7

UGR Viewed Endwise

4H	2H	14.2	15.5	14.6	15.9	16.2	13.3	14.6	13.7	15.0	15.3
	3H	15.9	16.9	16.3	17.3	17.7	15.0	16.1	15.4	16.5	16.9
	4H	16.5	17.5	17.0	17.9	18.3	15.7	16.7	16.1	17.1	17.5
	6H	17.1	18.0	17.6	18.4	18.9	16.4	17.2	16.9	17.7	18.1
	8H	17.4	18.2	17.8	18.6	19.1	16.7	17.5	17.2	17.9	18.4
	12H	17.6	18.3	18.1	18.8	19.2	17.0	17.7	17.4	18.1	18.6
8H	4H	16.7	17.5	17.2	18.0	18.4	16.0	16.8	16.5	17.2	17.7
	6H	17.5	18.1	18.0	18.6	19.1	16.9	17.5	17.3	18.0	18.5
	8H	17.8	18.4	18.3	18.9	19.4	17.3	17.8	17.8	18.3	18.8
	12H	18.1	18.6	18.6	19.1	19.7	17.6	18.1	18.1	18.6	19.2
12H	4H	16.8	17.5	17.2	17.9	18.4	16.0	16.8	16.5	17.2	17.7
	6H	17.6	18.1	18.1	18.6	19.1	17.0	17.5	17.5	18.0	18.5
	8H	17.9	18.5	18.4	18.9	19.5	17.4	17.9	17.9	18.4	19.0

Maximum UGR = 19.7

POLAR GRAPH



Maximum Candela = 903.189 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)