



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 50G-S22-L26-840-SAF19156-(L20)-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM BALLABS TEST NO. 18124.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUEDATE] 02-11-2022
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMINAIRE] 2x2' RECESSED LED TROFFER LUMINAIRE
 [MORE] WHITE REFLECTOR w/PAT 12 LENS PRISMS DOWN
 [LUMCAT] 50G-S22-L26-840-SAF19156-(L20)-DIM-UNV
 [LAMPCAT] HLM 80 CRI 4000K CCT
 [_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	2050
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	17.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.77 ft
Luminous Width (90-270)	1.77 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2274	2321	2417
55	1874	1889	1945
65	1491	1459	1522
75	1305	1258	1254
85	1288	1186	1211

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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	894.545	894.545	894.545	894.545	894.545
5	893.249	892.601	890.656	888.712	888.063
10	875.099	875.747	875.747	874.127	877.044
15	859.217	860.514	865.051	864.403	868.941
20	792.775	800.553	803.470	807.036	814.490
25	755.178	764.901	769.439	774.949	785.320
30	696.190	702.672	712.719	717.905	732.490
35	623.265	627.478	640.119	651.787	665.399
40	547.099	549.368	560.711	572.379	586.964
45	468.988	468.664	478.711	484.221	498.482
50	389.905	390.229	397.684	396.063	410.972
55	313.415	314.063	316.008	314.711	325.407
60	242.111	241.462	241.462	238.221	248.269
65	183.771	180.854	179.881	178.909	187.660
70	137.099	134.182	132.237	132.561	135.154
75	98.530	96.585	94.964	93.992	94.640
80	64.498	64.174	63.202	60.933	61.257
85	32.735	34.032	30.142	30.142	30.791
90	0.000	0.000	0.000	0.000	0.000

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Zone	Lumens	%Lamp	%Fixt
0-20	325.07	N.A.	15.90
0-30	677.63	N.A.	33.10
0-40	1077.61	N.A.	52.60
0-60	1730.93	N.A.	84.40
0-80	2015.83	N.A.	98.30
0-90	2050.09	N.A.	100.00
10-90	1965.57	N.A.	95.90
20-40	752.54	N.A.	36.70
20-50	1122.12	N.A.	54.70
40-70	835.92	N.A.	40.80
60-80	284.90	N.A.	13.90
70-80	102.30	N.A.	5.00
80-90	34.26	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	2050.09	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	84.52
10-20	240.55
20-30	352.56
30-40	399.98
40-50	369.58
50-60	283.74
60-70	182.60
70-80	102.30
80-90	34.26
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	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	81	98	91	85	80	88	83	79	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55
5	79	67	58	52	77	65	57	51	63	56	51	61	55	50	60	54	50	48
6	73	60	52	46	71	59	51	46	58	50	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	39	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	41	34	30	40	34	30	28

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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

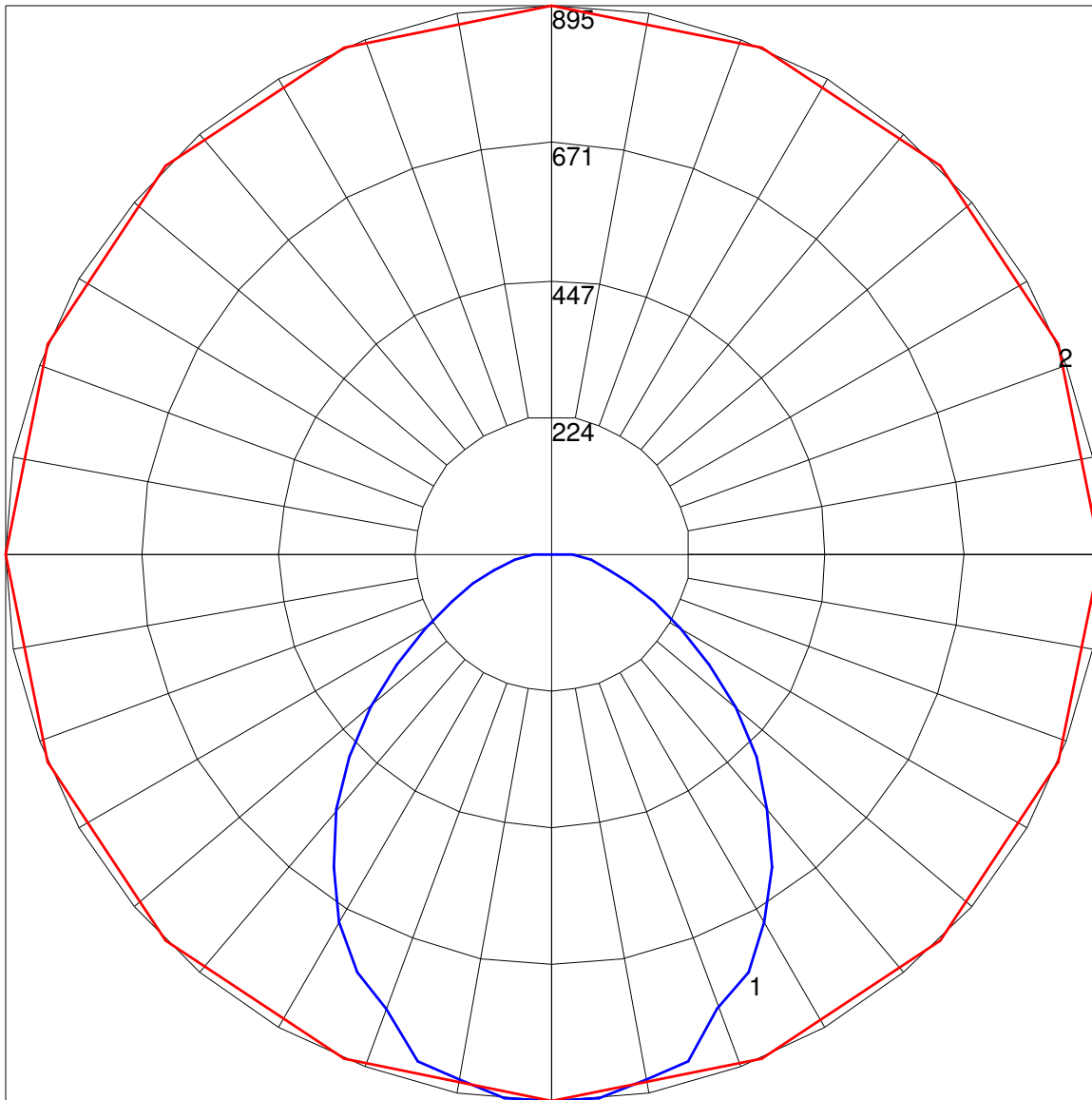
X=2H	Y=2H	13.6	15.1	14.0	15.4	15.7	13.6	15.1	14.0	15.4	15.8
	3H	15.0	16.4	15.4	16.7	17.1	15.0	16.4	15.4	16.7	17.1
	4H	15.6	16.9	16.0	17.2	17.6	15.5	16.8	15.9	17.2	17.6
	6H	16.1	17.3	16.5	17.6	18.0	16.0	17.2	16.4	17.6	17.9
	8H	16.3	17.4	16.7	17.8	18.2	16.2	17.3	16.6	17.7	18.1
	12H	16.4	17.5	16.8	17.9	18.3	16.3	17.4	16.7	17.8	18.2

UGR Viewed Endwise

4H	2H	14.0	15.3	14.4	15.7	16.1	14.0	15.3	14.4	15.7	16.1
	3H	15.7	16.8	16.1	17.2	17.6	15.7	16.8	16.1	17.2	17.6
	4H	16.4	17.4	16.8	17.8	18.2	16.4	17.3	16.8	17.7	18.2
	6H	17.1	17.9	17.5	18.3	18.8	17.0	17.8	17.4	18.2	18.7
	8H	17.3	18.1	17.8	18.5	19.0	17.2	18.0	17.7	18.4	18.9
	12H	17.5	18.2	18.0	18.7	19.2	17.4	18.1	17.9	18.6	19.0
8H	4H	16.7	17.5	17.1	17.9	18.4	16.6	17.4	17.1	17.9	18.3
	6H	17.5	18.1	18.0	18.6	19.1	17.4	18.0	17.9	18.5	19.0
	8H	17.8	18.4	18.3	18.9	19.4	17.7	18.3	18.2	18.8	19.3
	12H	18.1	18.7	18.6	19.1	19.7	17.9	18.5	18.5	19.0	19.5
12H	4H	16.7	17.4	17.2	17.9	18.4	16.7	17.4	17.1	17.8	18.3
	6H	17.5	18.1	18.1	18.6	19.1	17.4	18.0	18.0	18.5	19.0
	8H	17.9	18.5	18.4	19.0	19.5	17.8	18.3	18.3	18.8	19.4

Maximum UGR = 19.7

POLAR GRAPH



Maximum Candela = 894.545 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.)