



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S22-L39-835-FVL-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from BALLABS TEST NO. 21039.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 23-APR-2020

[MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] 2-56 LED 22"ARRAYS 2X2' RECESSED LUMINAIRE

[MORE] WHITE REFL w/ CLEAR POLYCARB LENS W/ PRISMATIC PAT12 OVERLAY

[LUMCAT] V50G-S22-L39/835-FVL-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3790
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	33.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.76 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	4388	4279	4239
55	3659	3567	3503
65	2995	2823	2865
75	2505	2429	2662
85	1992	2155	2415

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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	1627.607	1627.607	1627.607	1627.607	1627.607
5	1634.446	1624.872	1613.656	1609.006	1610.100
10	1605.997	1597.790	1585.207	1582.198	1582.745
15	1560.862	1552.655	1541.166	1535.695	1536.789
20	1495.210	1488.098	1476.609	1469.770	1471.138
25	1411.231	1402.204	1390.989	1384.423	1386.065
30	1304.821	1296.888	1284.852	1281.570	1279.928
35	1182.272	1177.622	1164.765	1159.567	1158.473
40	1045.498	1041.121	1027.444	1016.229	1020.332
45	899.424	884.379	876.993	863.863	868.787
50	751.708	743.775	730.919	721.071	718.609
55	608.369	604.540	593.051	578.553	582.382
60	480.076	472.416	459.286	458.739	454.089
65	366.827	355.612	345.764	351.235	350.961
70	268.897	264.794	257.408	266.435	268.897
75	187.927	185.192	182.183	195.586	199.690
80	118.446	117.352	118.172	129.661	133.765
85	50.333	49.239	54.436	65.104	61.001
90	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	588.69	N.A.	15.50
0-30	1229.59	N.A.	32.40
0-40	1958.04	N.A.	51.70
0-60	3169.05	N.A.	83.60
0-80	3726.06	N.A.	98.30
0-90	3790.05	N.A.	100.00
10-90	3636.52	N.A.	95.90
20-40	1369.36	N.A.	36.10
20-50	2047.75	N.A.	54.00
40-70	1565.98	N.A.	41.30
60-80	557.01	N.A.	14.70
70-80	202.04	N.A.	5.30
80-90	63.98	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	3790.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	153.53
10-20	435.16
20-30	640.91
30-40	728.45
40-50	678.39
50-60	532.61
60-70	354.97
70-80	202.04
80-90	63.98
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	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42
7	67	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29	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	16.0	17.6	16.4	17.9	18.2	15.8	17.3	16.1	17.6	17.9
	3H	17.5	18.9	17.9	19.2	19.6	17.3	18.7	17.7	19.0	19.4
	4H	18.0	19.4	18.4	19.7	20.1	17.9	19.3	18.3	19.6	20.0
	6H	18.5	19.7	18.9	20.1	20.5	18.5	19.7	18.9	20.1	20.5
	8H	18.7	19.8	19.1	20.2	20.6	18.7	19.9	19.2	20.3	20.7
	12H	18.8	19.9	19.2	20.2	20.7	18.9	20.0	19.3	20.4	20.8

UGR Viewed Endwise

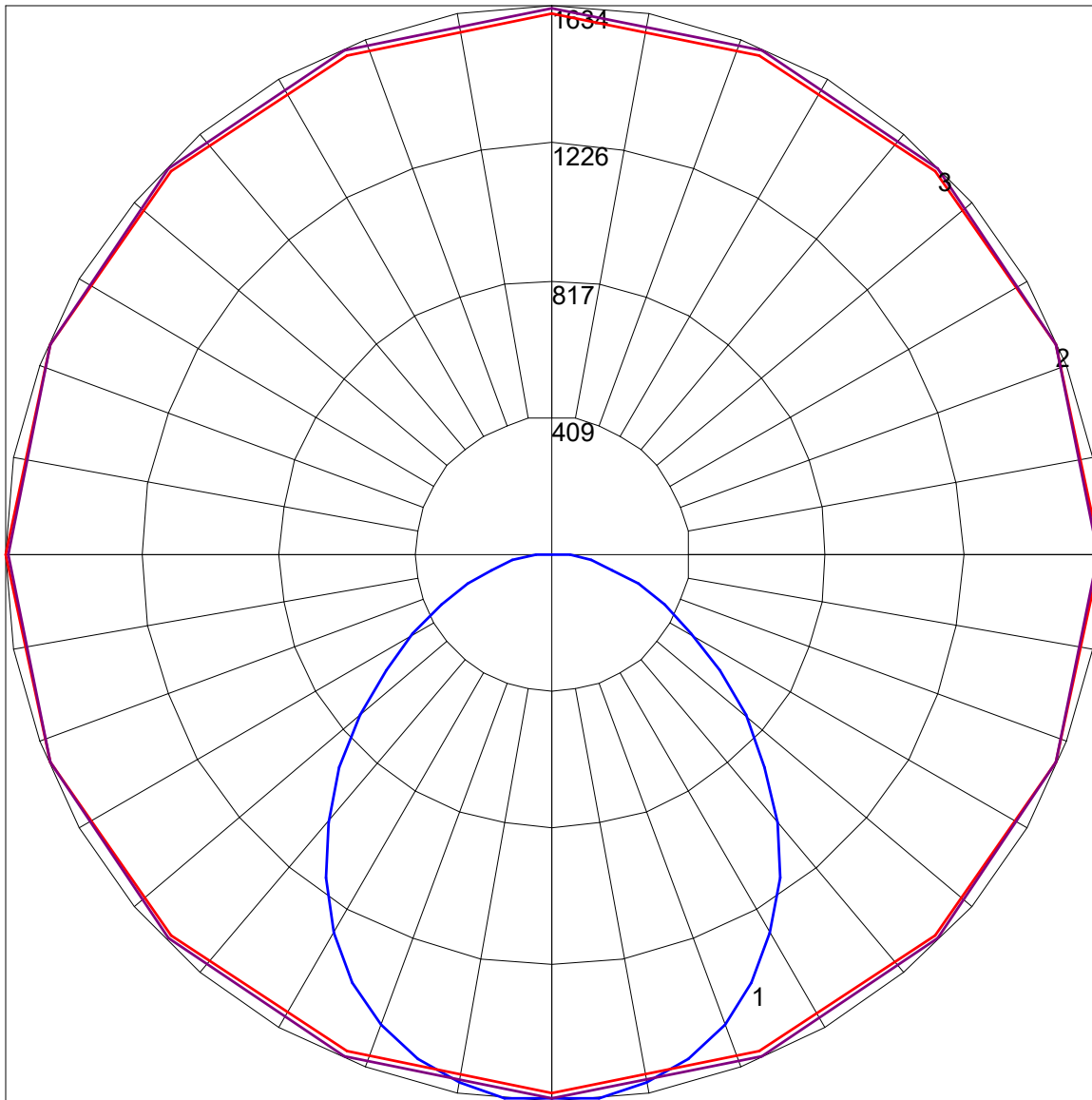
4H	2H	16.5	17.8	16.9	18.1	18.5	16.2	17.6	16.6	17.9	18.3
	3H	18.2	19.3	18.6	19.7	20.1	18.0	19.1	18.4	19.5	19.9
	4H	18.9	19.9	19.3	20.3	20.7	18.8	19.8	19.3	20.2	20.7
	6H	19.5	20.3	19.9	20.8	21.2	19.5	20.4	20.0	20.9	21.3
	8H	19.7	20.5	20.1	20.9	21.4	19.8	20.6	20.3	21.1	21.5
	12H	19.8	20.5	20.3	21.0	21.5	20.0	20.8	20.5	21.2	21.7

8H	4H	19.1	19.9	19.6	20.4	20.8	19.1	19.9	19.6	20.3	20.8
	6H	19.9	20.5	20.4	21.0	21.5	20.0	20.6	20.5	21.1	21.6
	8H	20.1	20.7	20.7	21.2	21.7	20.3	20.9	20.8	21.4	21.9
	12H	20.3	20.9	20.9	21.4	21.9	20.6	21.2	21.1	21.7	22.2

12H	4H	19.2	19.9	19.6	20.4	20.8	19.1	19.8	19.6	20.3	20.8
	6H	19.9	20.5	20.5	21.0	21.5	20.0	20.6	20.6	21.1	21.6
	8H	20.2	20.8	20.8	21.3	21.8	20.4	21.0	20.9	21.5	22.0

Maximum UGR = 22.2

POLAR GRAPH



Maximum Candela = 1634.446 Located At Horizontal Angle = 0, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)
3 - Horizontal Cone Through Vertical Angle (0)