



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V50G-S24-L31-835-FPC12187-CA040-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] 4-56 LED 22" ARRAYS 2X4' RECESSED LUMINAIRE

[MORE] WHITE REFL w/.187" PRISMATIC PAT12 POLYCARB LENS & CA040 OVERLAY

[LUMCAT] V50G-S24-L31/835-FPC12187/CA040-DIM-UNV

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2582
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	24.9
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)	3.76 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	1399	1365	1352
55	1167	1138	1117
65	955	900	914
75	799	774	849
85	635	687	770

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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	1108.834	1108.834	1108.834	1108.834	1108.834
5	1113.493	1106.971	1099.330	1096.162	1096.907
10	1094.112	1088.521	1079.949	1077.899	1078.271
15	1063.363	1057.772	1049.945	1046.218	1046.963
20	1018.637	1013.791	1005.964	1001.305	1002.237
25	961.425	955.275	947.634	943.161	944.280
30	888.931	883.527	875.327	873.091	871.972
35	805.442	802.274	793.515	789.975	789.229
40	712.263	709.281	699.963	692.323	695.118
45	612.747	602.498	597.466	588.521	591.875
50	512.114	506.709	497.950	491.242	489.564
55	414.462	411.853	404.026	394.149	396.758
60	327.060	321.841	312.896	312.524	309.355
65	249.907	242.266	235.557	239.285	239.098
70	183.191	180.395	175.364	181.513	183.191
75	128.028	126.165	124.115	133.246	136.042
80	80.693	79.948	80.507	88.334	91.129
85	34.290	33.545	37.085	44.353	41.558
90	0.000	0.000	0.000	0.000	0.000

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Zone	Lumens	%Lamp	%Fixt
0-20	401.05	N.A.	15.50
0-30	837.68	N.A.	32.40
0-40	1333.95	N.A.	51.70
0-60	2158.97	N.A.	83.60
0-80	2538.44	N.A.	98.30
0-90	2582.03	N.A.	100.00
10-90	2477.44	N.A.	95.90
20-40	932.90	N.A.	36.10
20-50	1395.06	N.A.	54.00
40-70	1066.85	N.A.	41.30
60-80	379.48	N.A.	14.70
70-80	137.65	N.A.	5.30
80-90	43.59	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	2582.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	104.60
10-20	296.46
20-30	436.63
30-40	496.27
40-50	462.16
50-60	362.85
60-70	241.83
70-80	137.65
80-90	43.59
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

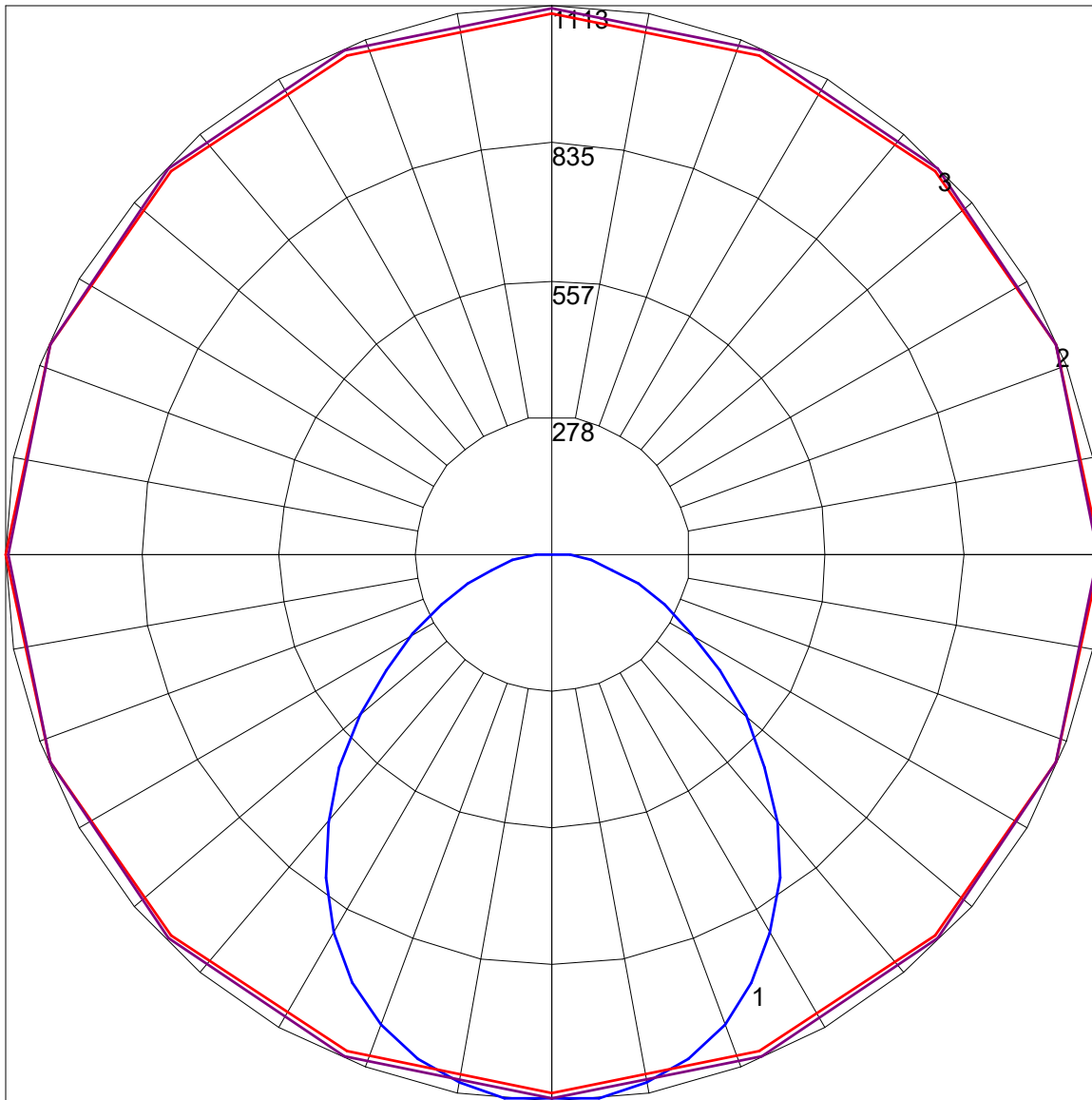
X=2H	Y=2H	12.1	13.6	12.5	14.0	14.3	11.8	13.4	12.2	13.7	14.0
	3H	13.5	14.9	13.9	15.3	15.6	13.4	14.8	13.7	15.1	15.4
	4H	14.1	15.4	14.5	15.8	16.2	14.0	15.3	14.4	15.7	16.1
	6H	14.6	15.8	15.0	16.1	16.5	14.6	15.8	15.0	16.2	16.6
	8H	14.7	15.9	15.2	16.3	16.7	14.8	15.9	15.2	16.3	16.7
	12H	14.8	15.9	15.2	16.3	16.7	14.9	16.0	15.4	16.4	16.9

UGR Viewed Endwise

4H	2H	12.5	13.9	12.9	14.2	14.6	12.3	13.6	12.7	14.0	14.4
	3H	14.2	15.3	14.6	15.7	16.1	14.1	15.2	14.5	15.6	16.0
	4H	14.9	15.9	15.4	16.3	16.8	14.9	15.9	15.3	16.3	16.7
	6H	15.5	16.4	16.0	16.8	17.3	15.6	16.5	16.1	16.9	17.4
	8H	15.7	16.5	16.2	17.0	17.4	15.9	16.7	16.3	17.1	17.6
	12H	15.9	16.6	16.4	17.1	17.5	16.1	16.8	16.6	17.3	17.8
8H	4H	15.2	16.0	15.6	16.4	16.9	15.2	16.0	15.6	16.4	16.9
	6H	15.9	16.6	16.4	17.1	17.6	16.0	16.7	16.5	17.2	17.7
	8H	16.2	16.8	16.7	17.3	17.8	16.4	17.0	16.9	17.5	18.0
	12H	16.4	16.9	16.9	17.4	18.0	16.7	17.2	17.2	17.7	18.3
12H	4H	15.2	16.0	15.7	16.4	16.9	15.2	15.9	15.7	16.4	16.9
	6H	16.0	16.6	16.5	17.1	17.6	16.1	16.7	16.6	17.2	17.7
	8H	16.3	16.8	16.8	17.3	17.9	16.5	17.0	17.0	17.5	18.1

Maximum UGR = 18.3

POLAR GRAPH



Maximum Candela = 1113.493 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)