



IES INDOOR REPORT

PHOTOMETRIC FILENAME : DIG-S22-L48-927-AD-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN FROM BALLABS TEST NO. 19231.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 003/13/20

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4-72LED 22"ARRAYS 2x4'RECESSED WHITE LUMINAIRE w/A-SHAPED

[MORE] CENTER REFL, FROST ACRYLIC LINEAR RIBBED DIFFUSER

[LUMCAT] DIG-S22-L48-927-AD-DIM-UNV

[LAMPCAT] M700C835D72N2A

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3889
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	96
Total Luminaire Watts	40.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.10
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.92 ft
Luminous Width (90-270)	1.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3505	3880	4114
55	3046	3565	3887
65	2744	3561	4263
75	2247	3051	2746
85	1882	2082	2282

IES INDOOR REPORT
PHOTOMETRIC FILENAME : DIG-S22-L48-927-AD-DIM-UNV_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	1413.748	1413.748	1413.748	1413.748	1413.748
5	1397.003	1396.604	1396.604	1397.401	1397.401
10	1383.846	1384.643	1386.637	1390.225	1391.820
15	1329.226	1331.219	1338.794	1344.775	1346.768
20	1303.710	1304.906	1318.062	1329.226	1332.814
25	1172.541	1180.914	1199.253	1214.005	1220.783
30	995.923	1067.686	1151.012	1125.098	1097.189
35	997.517	1017.053	1052.138	1081.641	1092.006
40	910.205	934.525	981.570	1017.053	1029.014
45	849.604	881.898	940.505	983.563	997.119
50	722.821	756.710	819.304	862.362	875.519
55	598.829	635.907	700.893	748.337	764.285
60	482.412	520.687	585.274	643.084	663.018
65	397.492	439.753	515.902	589.261	617.568
70	297.421	341.277	424.204	452.112	417.825
75	199.344	240.409	270.709	245.592	243.598
80	123.593	156.286	154.691	145.122	143.528
85	56.215	64.587	62.195	64.587	68.176
90	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : DIG-S22-L48-927-AD-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	513.76	N.A.	13.20
0-30	1068.04	N.A.	27.50
0-40	1721.91	N.A.	44.30
0-60	3047.56	N.A.	78.40
0-80	3814.78	N.A.	98.10
0-90	3889.41	N.A.	100.00
10-90	3756.21	N.A.	96.60
20-40	1208.15	N.A.	31.10
20-50	1913.38	N.A.	49.20
40-70	1821.13	N.A.	46.80
60-80	767.21	N.A.	19.70
70-80	271.73	N.A.	7.00
80-90	74.64	N.A.	1.90
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	3889.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	133.20
10-20	380.55
20-30	554.28
30-40	653.87
40-50	705.23
50-60	620.43
60-70	495.48
70-80	271.73
80-90	74.64
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : DIG-S22-L48-927-AD-DIM-UNV_.IES

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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

IES INDOOR REPORT
PHOTOMETRIC FILENAME : DIG-S22-L48-927-AD-DIM-UNV_.IES

UGR TABLE - CORRECTED

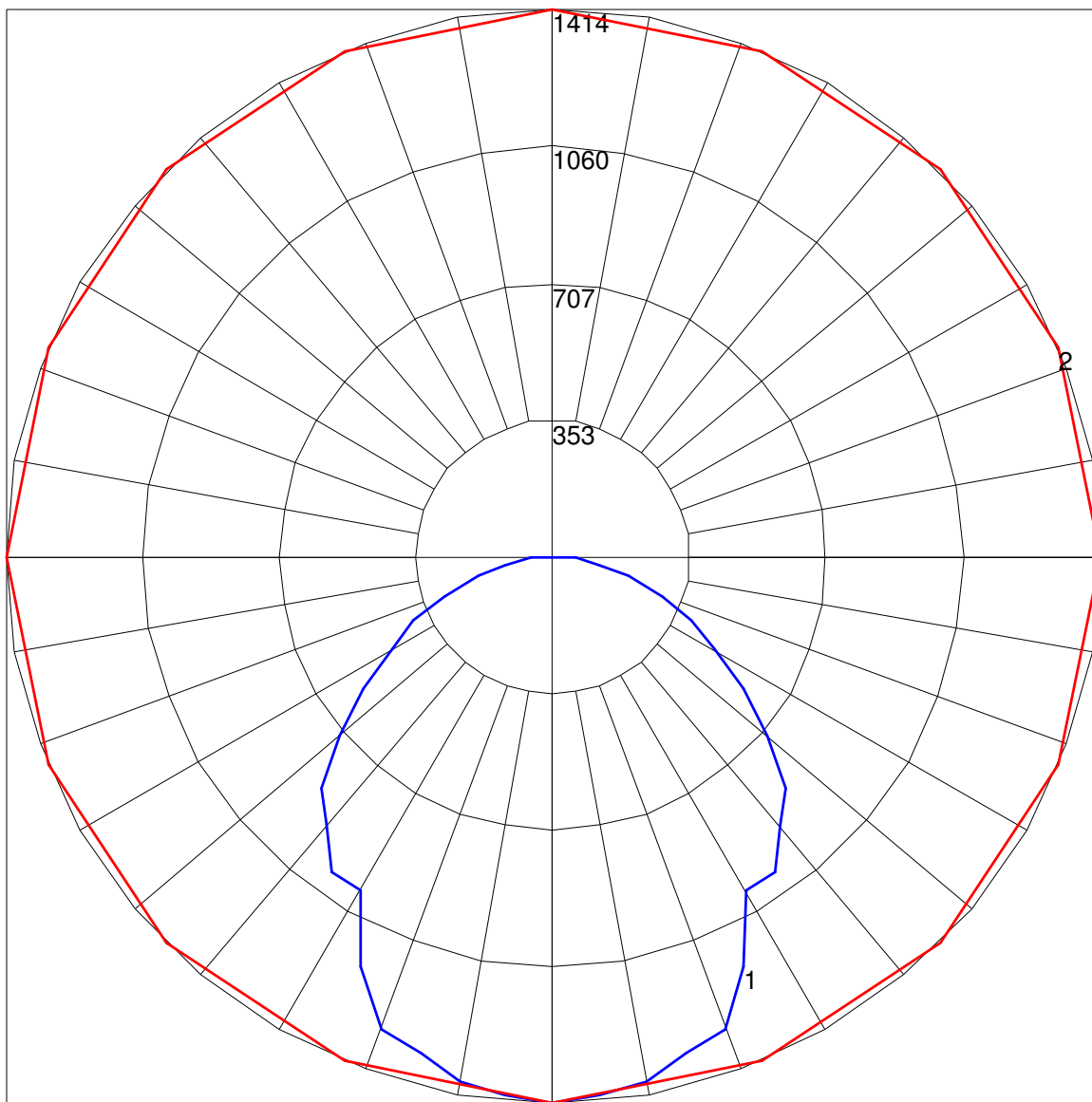
Reflectances

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	15.7	17.3	16.0	17.6	17.9	17.1	18.7	17.4	19.0	19.3
	3H	17.4	18.9	17.8	19.2	19.6	19.2	20.7	19.6	21.0	21.4
	4H	18.0	19.4	18.4	19.8	20.2	19.7	21.1	20.1	21.5	21.9
	6H	18.5	19.8	18.9	20.2	20.6	20.1	21.4	20.5	21.8	22.1
	8H	18.6	19.9	19.1	20.3	20.7	20.2	21.4	20.6	21.8	22.2
	12H	18.8	19.9	19.2	20.3	20.8	20.3	21.5	20.7	21.9	22.3
4H	2H	16.6	18.0	17.0	18.4	18.8	17.7	19.1	18.1	19.4	19.8
	3H	18.6	19.8	19.0	20.2	20.6	20.1	21.2	20.5	21.6	22.0
	4H	19.3	20.4	19.8	20.8	21.3	20.7	21.7	21.1	22.1	22.6
	6H	19.9	20.9	20.4	21.3	21.8	21.1	22.1	21.6	22.5	22.9
	8H	20.1	21.0	20.6	21.4	21.9	21.3	22.2	21.7	22.6	23.1
	12H	20.3	21.1	20.7	21.5	22.0	21.4	22.2	21.9	22.7	23.1
8H	4H	19.8	20.7	20.2	21.1	21.6	20.9	21.8	21.4	22.2	22.7
	6H	20.5	21.2	21.0	21.7	22.2	21.5	22.2	22.0	22.7	23.2
	8H	20.8	21.5	21.3	22.0	22.4	21.7	22.4	22.2	22.9	23.4
	12H	21.0	21.6	21.5	22.1	22.6	21.9	22.5	22.4	23.0	23.5
12H	4H	19.8	20.6	20.3	21.1	21.6	21.0	21.7	21.4	22.2	22.7
	6H	20.6	21.3	21.1	21.7	22.3	21.5	22.2	22.1	22.7	23.2
	8H	20.9	21.5	21.4	22.0	22.6	21.8	22.4	22.3	22.9	23.4

Maximum UGR = 23.5

POLAR GRAPH



Maximum Candela = 1413.748 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.)