



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : DIG-S24-L98-830-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] 04-NOV-2019

[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-S24-L98-830-AD-DIM-UNV

[LAMPCAT] M700C835D72N2A

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	9727
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	130
Total Luminaire Watts	74.8
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)	3.91 ft
Luminous Width (90-270)	1.88 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4412	4884	5178
55	3834	4487	4893
65	3454	4483	5366
75	2828	3841	3456
85	2368	2620	2872

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : DIG-S24-L98-830-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>
<b>0</b>	3535.460	3535.460	3535.460	3535.460	3535.460
<b>5</b>	3493.584	3492.587	3492.587	3494.581	3494.581
<b>10</b>	3460.683	3462.677	3467.662	3476.635	3480.623
<b>15</b>	3324.090	3329.075	3348.018	3362.974	3367.959
<b>20</b>	3260.280	3263.271	3296.173	3324.090	3333.063
<b>25</b>	2932.258	2953.196	2999.059	3035.949	3052.898
<b>30</b>	2490.575	2670.040	2878.418	2813.612	2743.820
<b>35</b>	2494.563	2543.417	2631.156	2704.936	2730.858
<b>40</b>	2276.214	2337.032	2454.682	2543.417	2573.328
<b>45</b>	2124.666	2205.425	2351.988	2459.667	2493.566
<b>50</b>	1807.611	1892.358	2048.892	2156.571	2189.472
<b>55</b>	1497.535	1590.259	1752.774	1871.421	1911.302
<b>60</b>	1206.403	1302.118	1463.636	1608.205	1658.057
<b>65</b>	994.036	1099.721	1290.154	1473.607	1544.396
<b>70</b>	743.783	853.456	1060.837	1130.629	1044.885
<b>75</b>	498.514	601.208	676.982	614.169	609.184
<b>80</b>	309.079	390.835	386.847	362.918	358.930
<b>85</b>	140.581	161.518	155.536	161.518	170.492
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : DIG-S24-L98-830-AD-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1284.79	N.A.	13.20
0-30	2670.92	N.A.	27.50
0-40	4306.11	N.A.	44.30
0-60	7621.26	N.A.	78.40
0-80	9539.88	N.A.	98.10
0-90	9726.54	N.A.	100.00
10-90	9393.42	N.A.	96.60
20-40	3021.32	N.A.	31.10
20-50	4784.93	N.A.	49.20
40-70	4554.24	N.A.	46.80
60-80	1918.62	N.A.	19.70
70-80	679.54	N.A.	7.00
80-90	186.65	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	9726.54	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	333.11
10-20	951.68
20-30	1386.13
30-40	1635.19
40-50	1763.61
50-60	1551.54
60-70	1239.09
70-80	679.54
80-90	186.65
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-S24-L98-830-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	83	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	35	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-S24-L98-830-AD-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

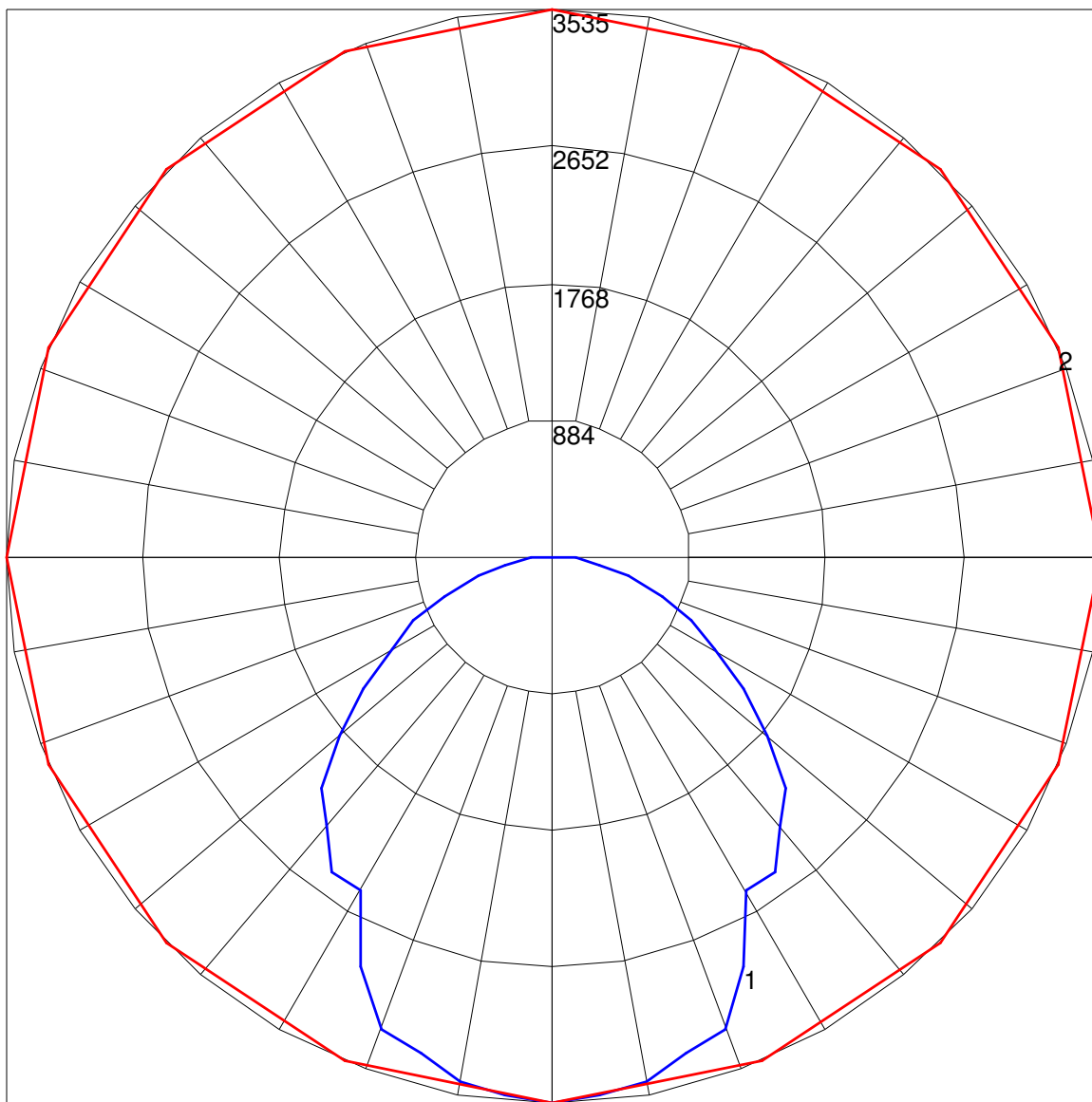
Reflectances

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	16.5	18.1	16.8	18.4	18.8	17.9	19.5	18.2	19.8	20.2
	3H	18.2	19.7	18.6	20.1	20.4	20.0	21.5	20.4	21.9	22.2
	4H	18.8	20.3	19.2	20.6	21.0	20.6	22.0	21.0	22.3	22.7
	6H	19.3	20.6	19.7	21.0	21.4	20.9	22.2	21.3	22.6	23.0
	8H	19.5	20.7	19.9	21.1	21.5	21.0	22.3	21.4	22.7	23.1
	12H	19.6	20.8	20.0	21.1	21.6	21.1	22.3	21.5	22.7	23.1
4H	2H	17.4	18.8	17.8	19.2	19.6	18.5	19.9	18.9	20.3	20.6
	3H	19.4	20.6	19.8	21.0	21.4	20.9	22.1	21.3	22.5	22.9
	4H	20.2	21.2	20.6	21.6	22.1	21.5	22.5	21.9	23.0	23.4
	6H	20.8	21.7	21.2	22.1	22.6	21.9	22.9	22.4	23.3	23.8
	8H	20.9	21.8	21.4	22.3	22.7	22.1	23.0	22.6	23.4	23.9
	12H	21.1	21.9	21.6	22.3	22.8	22.2	23.0	22.7	23.5	24.0
8H	4H	20.6	21.5	21.1	21.9	22.4	21.7	22.6	22.2	23.1	23.5
	6H	21.3	22.1	21.8	22.5	23.0	22.3	23.0	22.8	23.5	24.0
	8H	21.6	22.3	22.1	22.8	23.3	22.5	23.2	23.0	23.7	24.2
	12H	21.8	22.4	22.3	22.9	23.5	22.7	23.3	23.2	23.8	24.3
12H	4H	20.6	21.4	21.1	21.9	22.4	21.8	22.6	22.2	23.0	23.5
	6H	21.4	22.1	21.9	22.5	23.1	22.4	23.0	22.9	23.5	24.0
	8H	21.7	22.3	22.2	22.8	23.4	22.6	23.2	23.1	23.7	24.3

Maximum UGR = 24.3

POLAR GRAPH



Maximum Candela = 3535.46 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.)