



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : DIG-S24-L50-940-WPR-(L30)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 19230.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 01-30-2022

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 2x4' RECESSED LED LUMINAIRE w/A-SHAPED

[MORE] CENTER REFL, FROST ACRYLIC INTERNAL LENS & PERF BASKET

[MORE] w/ACRYLIC OVERLAY MATERIAL

[LUMCAT] DIG-S24-L50-940-WPR(L30)-DIM-UNV

[LAMPCAT] HLM 90 CRI 4000K CCT

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2650
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	21.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.40
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	1102	1291	1456
55	943	1280	1548
65	807	1409	1926
75	633	1210	1015
85	514	572	619

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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>
<b>0</b>	897.665	897.665	897.665	897.665	897.665
<b>5</b>	890.037	889.690	890.037	890.037	890.730
<b>10</b>	874.434	875.128	877.555	879.635	881.022
<b>15</b>	850.857	852.244	857.445	862.299	865.419
<b>20</b>	807.863	811.677	821.732	832.481	838.028
<b>25</b>	745.107	750.654	765.563	780.472	788.100
<b>30</b>	685.470	681.656	738.172	783.246	781.166
<b>35</b>	630.688	642.824	675.069	707.661	722.223
<b>40</b>	572.092	591.509	634.849	678.883	697.259
<b>45</b>	530.485	558.223	621.673	678.189	701.073
<b>50</b>	450.046	485.758	559.957	623.060	648.024
<b>55</b>	368.219	412.947	499.974	573.479	604.684
<b>60</b>	291.594	345.682	438.951	525.285	562.384
<b>65</b>	232.304	296.794	405.665	511.416	554.409
<b>70</b>	168.854	235.425	345.336	401.158	382.435
<b>75</b>	111.645	170.587	213.234	175.095	178.909
<b>80</b>	67.958	105.057	93.268	100.896	103.323
<b>85</b>	30.512	30.165	33.979	36.059	36.753
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : DIG-S24-L50-940-WPR-(L30)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	325.96	N.A.	12.30
0-30	682.33	N.A.	25.70
0-40	1108.55	N.A.	41.80
0-60	2019.81	N.A.	76.20
0-80	2605.44	N.A.	98.30
0-90	2649.84	N.A.	100.00
10-90	2565.24	N.A.	96.80
20-40	782.59	N.A.	29.50
20-50	1251.68	N.A.	47.20
40-70	1295.85	N.A.	48.90
60-80	585.63	N.A.	22.10
70-80	201.04	N.A.	7.60
80-90	44.40	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	2649.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	84.60
10-20	241.36
20-30	356.37
30-40	426.22
40-50	469.09
50-60	442.17
60-70	384.59
70-80	201.04
80-90	44.40
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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	50	48
5	75	61	52	45	73	60	52	45	58	51	45	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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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

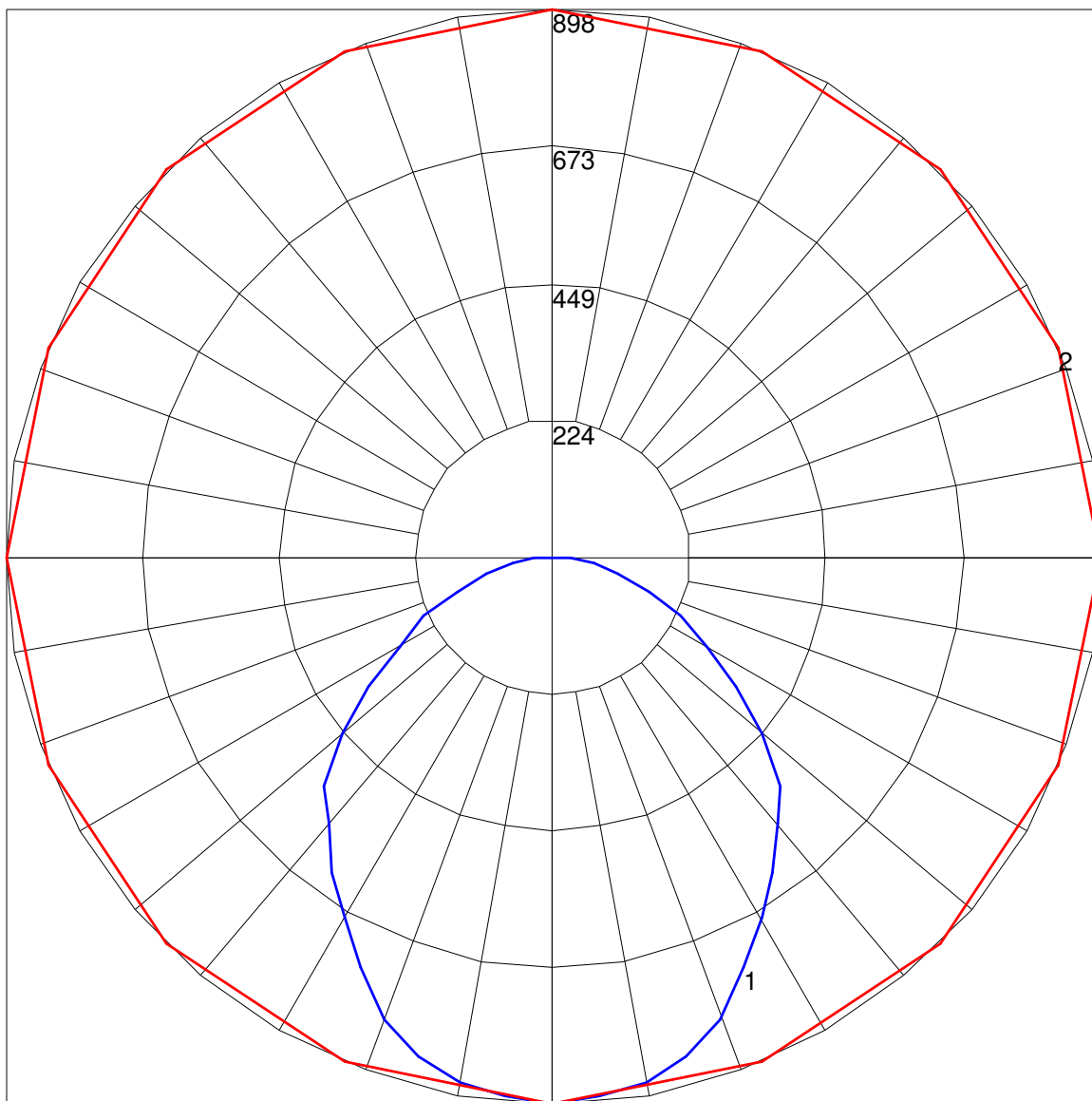
X=2H	Y=2H	11.6	13.3	12.0	13.6	13.9	14.4	16.1	14.8	16.4	16.7
	3H	13.3	14.8	13.7	15.1	15.5	17.0	18.5	17.4	18.8	19.2
	4H	13.8	15.3	14.2	15.6	16.0	17.4	18.9	17.8	19.2	19.6
	6H	14.3	15.6	14.7	16.0	16.3	17.7	19.0	18.1	19.4	19.8
	8H	14.4	15.6	14.8	16.0	16.4	17.7	19.0	18.2	19.4	19.8
	12H	14.4	15.7	14.9	16.1	16.5	17.8	19.0	18.2	19.4	19.8

### UGR Viewed Endwise

4H	2H	13.0	14.4	13.4	14.8	15.1	15.0	16.5	15.4	16.8	17.2
	3H	14.9	16.1	15.3	16.5	16.9	17.8	19.0	18.2	19.4	19.8
	4H	15.6	16.7	16.0	17.1	17.5	18.3	19.4	18.7	19.8	20.2
	6H	16.1	17.1	16.6	17.5	18.0	18.6	19.6	19.1	20.0	20.5
	8H	16.3	17.2	16.7	17.6	18.1	18.7	19.6	19.2	20.1	20.5
	12H	16.3	17.2	16.8	17.6	18.1	18.8	19.6	19.3	20.1	20.5
8H	4H	16.2	17.1	16.6	17.5	18.0	18.5	19.4	18.9	19.8	20.3
	6H	16.8	17.6	17.3	18.0	18.5	18.9	19.6	19.4	20.1	20.6
	8H	17.0	17.7	17.5	18.2	18.7	19.0	19.7	19.6	20.2	20.7
	12H	17.2	17.7	17.7	18.2	18.8	19.2	19.7	19.7	20.2	20.8
12H	4H	16.2	17.0	16.7	17.5	18.0	18.5	19.3	19.0	19.8	20.2
	6H	16.9	17.5	17.4	18.0	18.5	18.9	19.6	19.4	20.0	20.6
	8H	17.1	17.7	17.6	18.2	18.8	19.1	19.7	19.6	20.2	20.7

Maximum UGR = 20.8

POLAR GRAPH



Maximum Candela = 897.665 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.)