



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L18-8TW-DIM-UNV-RW-OF-WH_4000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.12

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 21 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L18-8TW-DIM-UNV-RW-OF-WH 4000k

[LUMINAIRE] Black formed aluminum housing, white reflector, clear glas

[MORE] s patterned lens enclosure

[LAMP] One white LED

[SEARCH_SOURCETYPE] LED

[SEARCH_APPLICATION] Indoor, Architectural, Classroom, Commercial, Healthcare, Office, Downlight

[SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1748
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	73
Total Luminaire Watts	24
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	0.94
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.48 ft (Diameter)
Luminous Width (90-270)	0.48 ft (Diameter)
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	23604	23604	23604
55	19684	19684	19684
65	13887	13887	13887
75	8507	8507	8507
85	6709	6709	6709

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CANDELA TABULATION

	<u>0</u>
0.0	1293.158
0.5	1291.948
1.0	1290.738
1.5	1289.528
2.0	1287.109
2.5	1283.480
3.0	1279.851
3.5	1275.012
4.0	1270.173
4.5	1266.544
5.0	1261.706
5.5	1256.867
6.0	1252.028
6.5	1247.189
7.0	1242.351
7.5	1237.512
8.0	1231.463
8.5	1226.625
9.0	1221.786
9.5	1215.737
10.0	1210.899
10.5	1204.971
11.0	1199.165
11.5	1193.358
12.0	1187.552
12.5	1181.866
13.0	1176.060
13.5	1170.011
14.0	1164.084
14.5	1158.277
15.0	1152.834
15.5	1147.269
16.0	1141.825
16.5	1136.503
17.0	1131.543
17.5	1126.583
18.0	1121.745
18.5	1117.148
19.0	1112.551
19.5	1107.833
20.0	1102.994
20.5	1097.793
21.0	1091.865
21.5	1085.091
22.0	1077.470
22.5	1069.002
23.0	1059.809
23.5	1049.405
24.0	1038.034
24.5	1025.574
25.0	1011.784
25.5	996.905
26.0	980.332
26.5	962.187

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CANDELA TABULATION - (Cont.)

27.0	942.832
27.5	921.783
28.0	899.404
28.5	875.089
29.0	849.444
29.5	821.621
30.0	792.104
30.5	760.894
31.0	728.475
31.5	695.329
32.0	661.579
32.5	628.071
33.0	594.925
33.5	562.868
34.0	532.142
34.5	503.231
35.0	476.859
35.5	452.666
36.0	431.375
36.5	412.504
37.0	395.931
37.5	381.778
38.0	369.318
38.5	358.310
39.0	348.753
39.5	340.286
40.0	332.544
40.5	325.527
41.0	318.995
41.5	313.068
42.0	307.624
42.5	302.422
43.0	297.463
43.5	292.745
44.0	288.269
44.5	284.035
45.0	279.680
45.5	275.567
46.0	271.333
46.5	267.220
47.0	262.986
47.5	258.752
48.0	254.398
48.5	250.043
49.0	245.930
49.5	241.696
50.0	237.220
50.5	232.623
51.0	227.905
51.5	223.188
52.0	218.470
52.5	213.631
53.0	208.913
53.5	204.316
54.0	199.236
54.5	194.155

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CANDELA TABULATION - (Cont.)

55.0	189.195
55.5	184.115
56.0	179.155
56.5	174.195
57.0	169.235
57.5	164.276
58.0	159.558
58.5	154.719
59.0	150.001
59.5	145.405
60.0	140.808
60.5	136.211
61.0	131.735
61.5	127.380
62.0	123.025
62.5	118.791
63.0	114.558
63.5	110.324
64.0	106.332
64.5	102.219
65.0	98.348
65.5	94.356
66.0	90.606
66.5	86.856
67.0	83.227
67.5	79.598
68.0	76.089
68.5	72.581
69.0	69.315
69.5	65.928
70.0	62.783
70.5	59.638
71.0	56.613
71.5	53.710
72.0	50.807
72.5	48.146
73.0	45.605
73.5	43.307
74.0	41.008
74.5	38.952
75.0	36.896
75.5	35.081
76.0	33.266
76.5	31.694
77.0	30.242
77.5	28.791
78.0	27.339
78.5	25.887
79.0	24.557
79.5	23.226
80.0	21.895
80.5	20.565
81.0	19.234
81.5	18.024
82.0	16.694
82.5	15.484

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CANDELA TABULATION - (Cont.)

83.0	14.274
83.5	13.186
84.0	11.976
84.5	10.887
85.0	9.798
85.5	8.710
86.0	7.621
86.5	6.532
87.0	5.565
87.5	4.476
88.0	3.629
88.5	2.903
89.0	2.298
89.5	1.694
90.0	1.210
90.5	0.000
91.0	0.000
91.5	0.000
92.0	0.000
92.5	0.000
93.0	0.000
93.5	0.000
94.0	0.000
94.5	0.000
95.0	0.000
95.5	0.000
96.0	0.000
96.5	0.000
97.0	0.000
97.5	0.000
98.0	0.000
98.5	0.000
99.0	0.000
99.5	0.000
100.0	0.000
100.5	0.000
101.0	0.000
101.5	0.000
102.0	0.000
102.5	0.000
103.0	0.000
103.5	0.000
104.0	0.000
104.5	0.000
105.0	0.000
105.5	0.000
106.0	0.000
106.5	0.000
107.0	0.000
107.5	0.000
108.0	0.000
108.5	0.000
109.0	0.000
109.5	0.000
110.0	0.000
110.5	0.000

CANDELA TABULATION - (Cont.)

111.0	0.000
111.5	0.000
112.0	0.000
112.5	0.000
113.0	0.000
113.5	0.000
114.0	0.000
114.5	0.000
115.0	0.000
115.5	0.000
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136.0	0.000
136.5	0.000
137.0	0.000
137.5	0.000
138.0	0.000
138.5	0.000

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CANDELA TABULATION - (Cont.)

139.0	0.000
139.5	0.000
140.0	0.000
140.5	0.000
141.0	0.000
141.5	0.000
142.0	0.000
142.5	0.000
143.0	0.000
143.5	0.000
144.0	0.000
144.5	0.000
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162.5	0.000
163.0	0.000
163.5	0.000
164.0	0.000
164.5	0.000
165.0	0.000
165.5	0.000
166.0	0.000
166.5	0.000

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CANDELA TABULATION - (Cont.)

167.0	0.000
167.5	0.000
168.0	0.000
168.5	0.000
169.0	0.000
169.5	0.000
170.0	0.000
170.5	0.000
171.0	0.000
171.5	0.000
172.0	0.000
172.5	0.000
173.0	0.000
173.5	0.000
174.0	0.000
174.5	0.000
175.0	0.000
175.5	0.000
176.0	0.000
176.5	0.000
177.0	0.000
177.5	0.000
178.0	0.000
178.5	0.000
179.0	0.000
179.5	0.000
180.0	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	444.35	N.A.	25.40
0-30	898.31	N.A.	51.40
0-40	1212.4	N.A.	69.40
0-60	1597.82	N.A.	91.40
0-80	1736.97	N.A.	99.40
0-90	1748.12	N.A.	100.00
10-90	1629.33	N.A.	93.20
20-40	768.04	N.A.	43.90
20-50	984.74	N.A.	56.30
40-70	483.63	N.A.	27.70
60-80	139.14	N.A.	8.00
70-80	40.94	N.A.	2.30
80-90	11.16	N.A.	0.60
90-110	0.03	N.A.	0.00
90-120	0.03	N.A.	0.00
90-130	0.03	N.A.	0.00
90-150	0.03	N.A.	0.00
90-180	0.03	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1748.16	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	118.79
10-20	325.56
20-30	453.96
30-40	314.08
40-50	216.70
50-60	168.73
60-70	98.20
70-80	40.94
80-90	11.16
90-100	0.03
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	110	110	110	110	107	107	107	107	102	102	102	98	98	98	94	94	94	92
1	103	99	96	94	100	97	95	92	93	91	89	90	88	87	87	85	84	82
2	96	90	85	81	93	88	84	80	85	81	78	82	79	76	79	77	75	73
3	89	82	76	71	87	80	75	70	78	73	69	75	71	68	73	70	67	65
4	83	74	68	63	81	73	67	63	71	66	62	69	65	61	67	63	60	59
5	78	68	62	57	76	67	61	56	66	60	56	64	59	55	62	58	55	53
6	73	63	56	51	72	62	56	51	61	55	51	59	54	50	58	53	50	48
7	69	58	52	47	67	58	51	47	56	51	46	55	50	46	54	49	46	44
8	65	54	48	43	63	54	47	43	52	47	43	51	46	42	50	46	42	41
9	61	51	44	40	60	50	44	40	49	43	40	48	43	39	47	43	39	38
10	58	47	41	37	57	47	41	37	46	41	37	45	40	37	45	40	36	35

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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	20.1	21.4	20.4	21.7	22.0	20.1	21.4	20.4	21.7	22.0
	3H	21.0	22.2	21.4	22.5	22.9	21.0	22.2	21.4	22.5	22.9
	4H	21.3	22.4	21.7	22.7	23.1	21.3	22.4	21.7	22.7	23.1
	6H	21.4	22.5	21.9	22.8	23.2	21.4	22.5	21.9	22.8	23.2
	8H	21.5	22.5	21.9	22.9	23.3	21.5	22.5	21.9	22.9	23.3
	12H	21.5	22.4	22.0	22.8	23.3	21.5	22.4	22.0	22.8	23.3

UGR Viewed Endwise

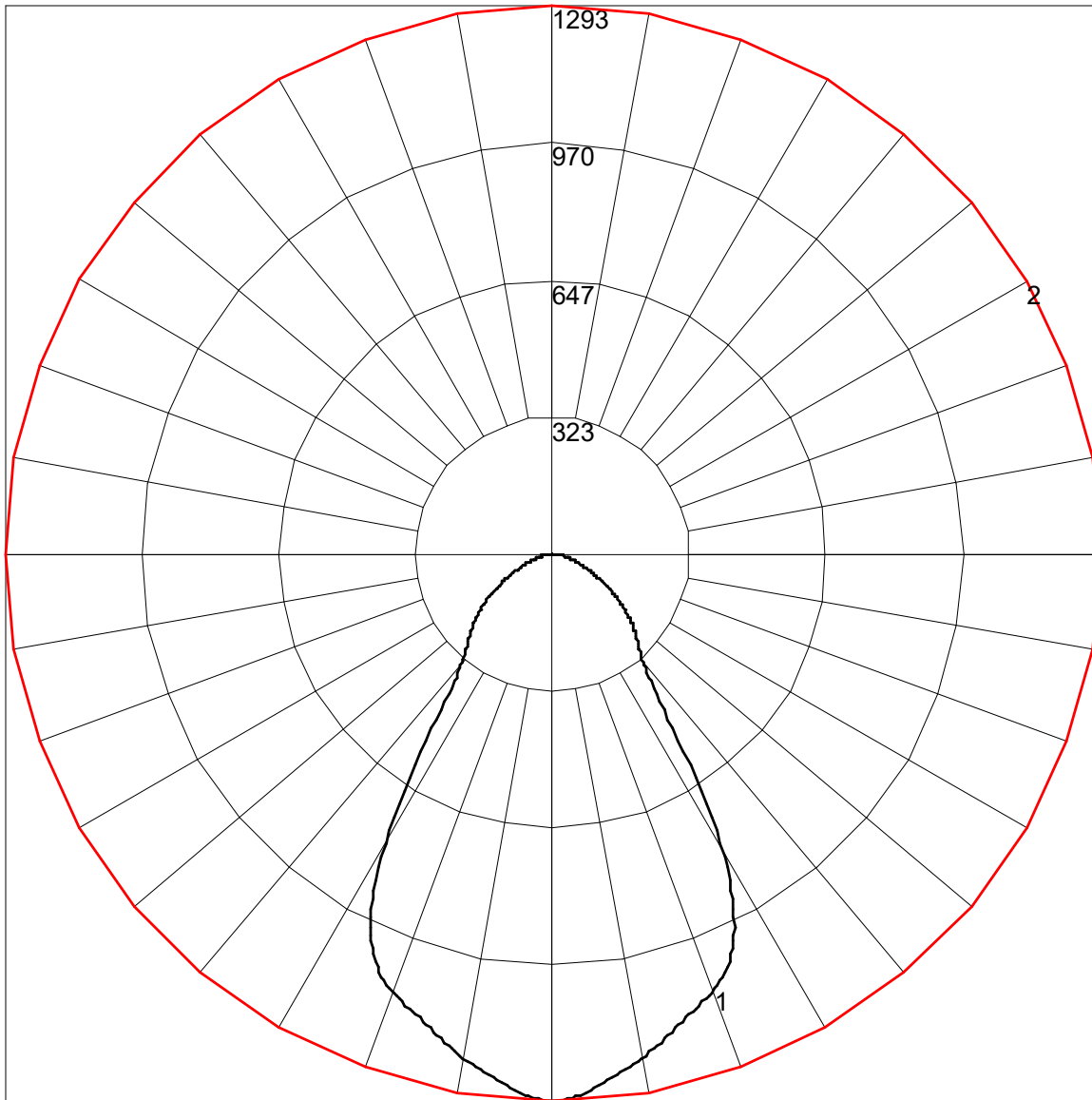
4H	2H	20.4	21.5	20.8	21.8	22.2	20.4	21.5	20.8	21.8	22.2
	3H	21.5	22.4	21.9	22.8	23.2	21.5	22.4	21.9	22.8	23.2
	4H	21.9	22.7	22.3	23.1	23.5	21.9	22.7	22.3	23.1	23.5
	6H	22.1	22.8	22.6	23.3	23.7	22.1	22.8	22.6	23.3	23.7
	8H	22.2	22.8	22.7	23.3	23.8	22.2	22.8	22.7	23.3	23.8
	12H	22.3	22.8	22.7	23.3	23.8	22.3	22.8	22.7	23.3	23.8

8H	4H	21.9	22.6	22.4	23.0	23.5	21.9	22.6	22.4	23.0	23.5
	6H	22.3	22.8	22.8	23.3	23.8	22.3	22.8	22.8	23.3	23.8
	8H	22.4	22.9	22.9	23.4	23.9	22.4	22.9	22.9	23.4	23.9
	12H	22.5	22.9	23.0	23.4	24.0	22.5	22.9	23.0	23.4	24.0

12H	4H	21.9	22.5	22.4	23.0	23.5	21.9	22.5	22.4	23.0	23.5
	6H	22.3	22.8	22.8	23.2	23.8	22.3	22.8	22.8	23.2	23.8
	8H	22.4	22.9	23.0	23.4	23.9	22.4	22.9	23.0	23.4	23.9

Maximum UGR = 24.0

POLAR GRAPH



Maximum Candela = 1293.158 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)