



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L12-9DW-DIM-UNV-LW-OF-WH_3000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.07

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 15 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L12-9DW-DIM-UNV-LW-OF-WH 3000k

[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	1192
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	51
Total Luminaire Watts	23.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.08
Spacing Criterion (90-270)	1.08
Spacing Criterion (Diagonal)	0.98
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.46 ft (Diameter)
Luminous Width (90-270)	0.46 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	19809	19809	19809
55	16492	16492	16492
65	12529	12529	12529
75	9086	9086	9086
85	5921	5921	5921

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CANDELA TABULATION

	<u>0</u>
0.0	758.011
0.5	757.859
1.0	757.248
1.5	756.332
2.0	755.188
2.5	753.661
3.0	752.135
3.5	750.380
4.0	748.777
4.5	747.175
5.0	746.030
5.5	744.962
6.0	743.970
6.5	742.978
7.0	741.909
7.5	740.917
8.0	739.925
8.5	739.009
9.0	738.094
9.5	737.331
10.0	736.567
10.5	735.957
11.0	735.423
11.5	735.117
12.0	734.583
12.5	734.049
13.0	733.286
13.5	732.294
14.0	731.073
14.5	729.699
15.0	728.249
15.5	726.418
16.0	724.434
16.5	722.450
17.0	720.465
17.5	718.405
18.0	716.192
18.5	713.674
19.0	710.850
19.5	707.721
20.0	704.135
20.5	700.243
21.0	695.435
21.5	689.712
22.0	683.225
22.5	675.899
23.0	667.886
23.5	659.187
24.0	649.571
24.5	639.193
25.0	627.975
25.5	616.299
26.0	603.860
26.5	590.887

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CANDELA TABULATION - (Cont.)

27.0	577.074
27.5	562.880
28.0	547.923
28.5	532.126
29.0	515.719
29.5	498.473
30.0	480.768
30.5	462.530
31.0	444.291
31.5	425.900
32.0	408.042
32.5	390.948
33.0	374.541
33.5	359.203
34.0	345.085
34.5	332.264
35.0	320.817
35.5	310.286
36.0	301.052
36.5	292.582
37.0	285.027
37.5	278.235
38.0	272.054
38.5	266.407
39.0	261.065
39.5	256.257
40.0	251.602
40.5	247.252
41.0	243.208
41.5	239.239
42.0	235.424
42.5	231.913
43.0	228.327
43.5	224.816
44.0	221.382
44.5	218.025
45.0	214.590
45.5	211.309
46.0	207.951
46.5	204.594
47.0	201.160
47.5	197.802
48.0	194.368
48.5	190.934
49.0	187.500
49.5	183.913
50.0	180.479
50.5	176.968
51.0	173.458
51.5	169.871
52.0	166.285
52.5	162.698
53.0	159.111
53.5	155.525
54.0	152.091
54.5	148.580

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CANDELA TABULATION - (Cont.)

55.0	144.917
55.5	141.331
56.0	137.744
56.5	134.386
57.0	131.028
57.5	127.518
58.0	124.008
58.5	120.574
59.0	117.216
59.5	113.858
60.0	110.653
60.5	107.448
61.0	104.319
61.5	101.190
62.0	98.214
62.5	95.238
63.0	92.338
63.5	89.438
64.0	86.615
64.5	83.867
65.0	81.120
65.5	78.449
66.0	75.786
66.5	73.168
67.0	70.581
67.5	68.048
68.0	65.560
68.5	63.065
69.0	60.645
69.5	58.249
70.0	55.922
70.5	53.671
71.0	51.465
71.5	49.328
72.0	47.268
72.5	45.269
73.0	43.323
73.5	41.415
74.0	39.583
74.5	37.790
75.0	36.027
75.5	34.325
76.0	32.654
76.5	31.013
77.0	29.418
77.5	27.854
78.0	26.335
78.5	24.847
79.0	23.390
79.5	21.986
80.0	20.589
80.5	19.238
81.0	17.903
81.5	16.575
82.0	15.278
82.5	13.988

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CANDELA TABULATION - (Cont.)

83.0	12.729
83.5	11.493
84.0	10.272
84.5	9.074
85.0	7.906
85.5	6.777
86.0	5.685
86.5	4.632
87.0	3.610
87.5	2.755
88.0	2.106
88.5	1.542
89.0	1.068
89.5	0.672
90.0	0.427
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

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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
116.0	0.000
116.5	0.000
117.0	0.000
117.5	0.000
118.0	0.000
118.5	0.000
119.0	0.000
119.5	0.000
120.0	0.000
120.5	0.000
121.0	0.000
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122.0	0.000
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135.5	0.000
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
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159.5	0.000
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160.5	0.000
161.0	0.000
161.5	0.000
162.0	0.000
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

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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Zone	Lumens	%Lamp	%Fixt
0-20	276.12	N.A.	23.20
0-30	558.15	N.A.	46.80
0-40	767.28	N.A.	64.40
0-60	1062.56	N.A.	89.20
0-80	1182.16	N.A.	99.20
0-90	1191.62	N.A.	100.00
10-90	1120.68	N.A.	94.00
20-40	491.16	N.A.	41.20
20-50	656.87	N.A.	55.10
40-70	376.14	N.A.	31.60
60-80	119.60	N.A.	10.00
70-80	38.74	N.A.	3.30
80-90	9.45	N.A.	0.80
90-110	0.01	N.A.	0.00
90-120	0.01	N.A.	0.00
90-130	0.01	N.A.	0.00
90-150	0.01	N.A.	0.00
90-180	0.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1191.63	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	70.93
10-20	205.18
20-30	282.03
30-40	209.13
40-50	165.71
50-60	129.57
60-70	80.86
70-80	38.74
80-90	9.45
90-100	0.01
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	109	109	109	109	107	107	107	107	102	102	102	98	98	98	94	94	94	92
1	102	99	95	93	100	96	94	91	93	90	88	89	87	86	86	84	83	81
2	95	88	83	79	92	87	82	78	84	80	76	81	78	75	78	75	73	71
3	88	80	74	69	86	79	73	68	76	71	67	73	69	66	71	68	65	63
4	82	73	66	61	80	71	65	60	69	64	59	67	62	59	65	61	58	56
5	76	66	59	54	75	65	59	54	63	58	53	62	57	53	60	56	52	50
6	71	61	54	49	70	60	53	48	58	53	48	57	52	48	56	51	47	46
7	67	56	49	44	65	55	49	44	54	48	44	53	48	44	52	47	43	42
8	63	52	45	40	62	51	45	40	50	44	40	49	44	40	48	43	40	38
9	59	48	42	37	58	48	42	37	47	41	37	46	41	37	45	40	37	35
10	56	45	39	34	55	45	39	34	44	38	34	43	38	34	42	38	34	33

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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	19.9	21.3	20.3	21.6	21.9	19.9	21.3	20.3	21.6	21.9
	3H	21.1	22.4	21.5	22.7	23.0	21.1	22.4	21.5	22.7	23.0
	4H	21.5	22.7	21.9	23.0	23.4	21.5	22.7	21.9	23.0	23.4
	6H	21.8	22.8	22.2	23.2	23.6	21.8	22.8	22.2	23.2	23.6
	8H	21.8	22.9	22.3	23.2	23.7	21.8	22.9	22.3	23.2	23.7
	12H	21.9	22.8	22.3	23.2	23.7	21.9	22.8	22.3	23.2	23.7

UGR Viewed Endwise

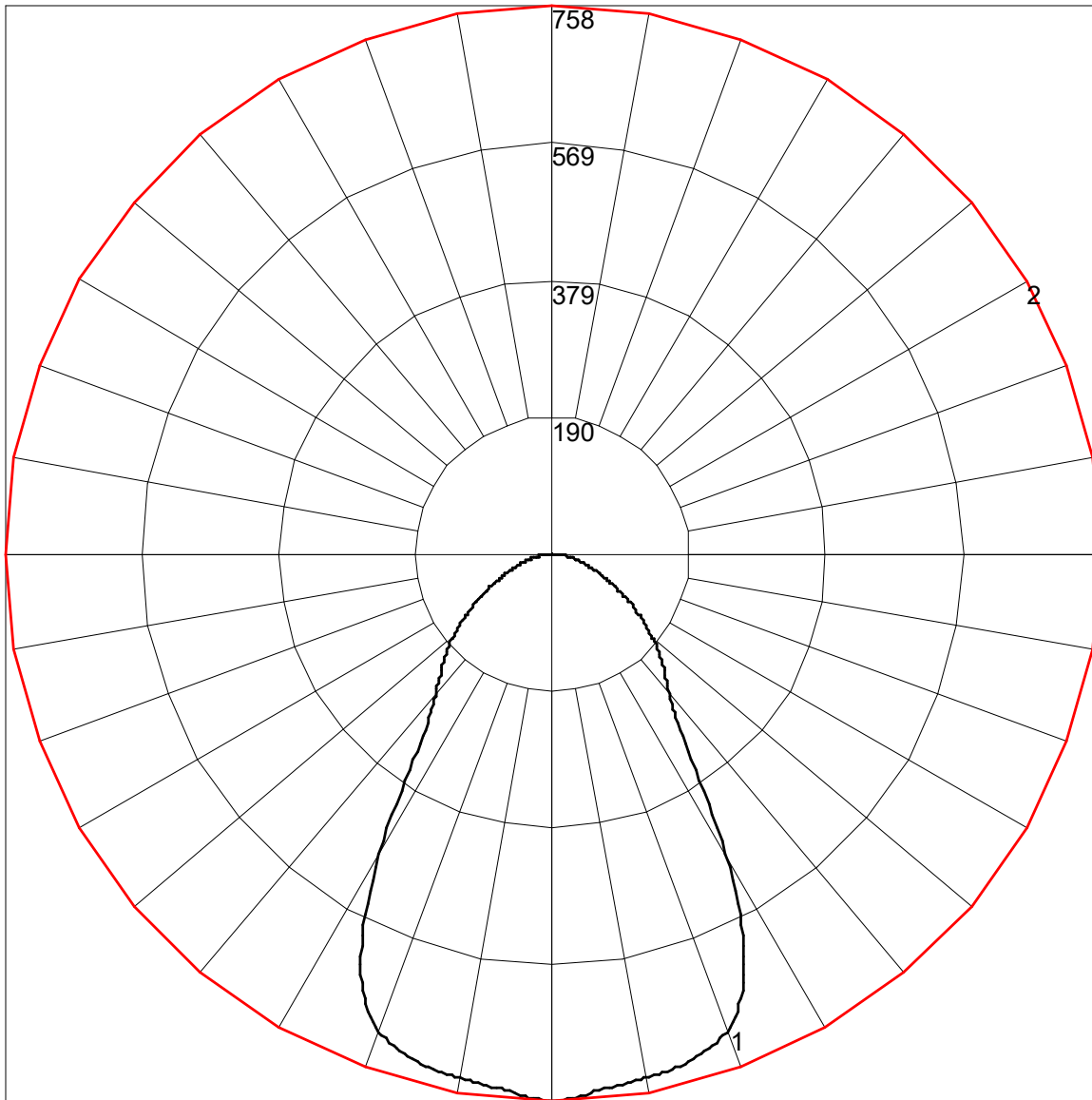
4H	2H	20.3	21.5	20.7	21.8	22.2	20.3	21.5	20.7	21.8	22.2
	3H	21.7	22.7	22.1	23.1	23.5	21.7	22.7	22.1	23.1	23.5
	4H	22.2	23.1	22.6	23.5	23.9	22.2	23.1	22.6	23.5	23.9
	6H	22.6	23.3	23.0	23.8	24.2	22.6	23.3	23.0	23.8	24.2
	8H	22.7	23.4	23.1	23.8	24.3	22.7	23.4	23.1	23.8	24.3
	12H	22.8	23.4	23.2	23.9	24.3	22.8	23.4	23.2	23.9	24.3

8H	4H	22.4	23.1	22.8	23.5	24.0	22.4	23.1	22.8	23.5	24.0
	6H	22.8	23.4	23.3	23.9	24.4	22.8	23.4	23.3	23.9	24.4
	8H	23.0	23.5	23.5	24.0	24.5	23.0	23.5	23.5	24.0	24.5
	12H	23.1	23.6	23.6	24.1	24.6	23.1	23.6	23.6	24.1	24.6

12H	4H	22.4	23.0	22.8	23.5	23.9	22.4	23.0	22.8	23.5	23.9
	6H	22.9	23.4	23.4	23.8	24.4	22.9	23.4	23.4	23.8	24.4
	8H	23.1	23.5	23.6	24.0	24.6	23.1	23.5	23.6	24.0	24.6

Maximum UGR = 24.6

POLAR GRAPH



Maximum Candela = 758.011 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.)