



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L7-9DW-DIM-UNV-LM-OF-WH\_3000K.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.09

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 16 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L7-9DW-DIM-UNV-LM-OF-WH 3000k

[LUMINAIRE] Black formed aluminum housing, white reflector, frosted pl

[MORE] astic optic, clear glass 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	733
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	52
Total Luminaire Watts	14
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.60
Spacing Criterion (90-270)	0.60
Spacing Criterion (Diagonal)	0.56
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	3275	3275	3275
55	2398	2398	2398
65	1954	1954	1954
75	1590	1590	1590
85	1046	1046	1046

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CANDELA TABULATION

	<u>0</u>
0.0	1730.949
0.5	1730.151
1.0	1727.757
1.5	1724.166
2.0	1719.378
2.5	1712.594
3.0	1705.013
3.5	1696.234
4.0	1685.860
4.5	1675.086
5.0	1663.116
5.5	1649.549
6.0	1634.785
6.5	1618.426
7.0	1600.869
7.5	1581.716
8.0	1560.568
8.5	1537.823
9.0	1513.882
9.5	1488.345
10.0	1460.813
10.5	1431.684
11.0	1400.561
11.5	1367.043
12.0	1332.328
12.5	1295.618
13.0	1257.312
13.5	1217.011
14.0	1175.513
14.5	1132.419
15.0	1088.527
15.5	1043.837
16.0	999.146
16.5	954.057
17.0	910.165
17.5	866.273
18.0	821.981
18.5	778.488
19.0	735.394
19.5	693.896
20.0	653.595
20.5	614.890
21.0	578.579
21.5	543.864
22.0	509.150
22.5	476.430
23.0	445.306
23.5	415.779
24.0	388.286
24.5	362.270
25.0	337.970
25.5	315.066
26.0	293.838
26.5	273.967

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27.0	255.493
27.5	238.375
28.0	222.414
28.5	207.650
29.0	193.964
29.5	181.195
30.0	169.384
30.5	158.371
31.0	148.156
31.5	138.659
32.0	129.801
32.5	121.581
33.0	113.920
33.5	106.778
34.0	100.194
34.5	94.089
35.0	88.383
35.5	83.156
36.0	78.288
36.5	73.859
37.0	69.749
37.5	65.998
38.0	62.606
38.5	59.454
39.0	56.581
39.5	53.948
40.0	51.553
40.5	49.319
41.0	47.284
41.5	45.408
42.0	43.653
42.5	42.057
43.0	40.540
43.5	39.144
44.0	37.867
44.5	36.630
45.0	35.473
45.5	34.396
46.0	33.398
46.5	32.440
47.0	31.523
47.5	30.645
48.0	29.847
48.5	29.049
49.0	28.291
49.5	27.572
50.0	26.894
50.5	26.216
51.0	25.577
51.5	24.939
52.0	24.340
52.5	23.782
53.0	23.183
53.5	22.624
54.0	22.106
54.5	21.587

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55.0	21.068
55.5	20.550
56.0	20.071
56.5	19.592
57.0	19.113
57.5	18.634
58.0	18.195
58.5	17.756
59.0	17.317
59.5	16.918
60.0	16.519
60.5	16.081
61.0	15.681
61.5	15.282
62.0	14.883
62.5	14.524
63.0	14.125
63.5	13.766
64.0	13.407
64.5	13.048
65.0	12.649
65.5	12.290
66.0	11.931
66.5	11.611
67.0	11.252
67.5	10.893
68.0	10.574
68.5	10.255
69.0	9.896
69.5	9.576
70.0	9.257
70.5	8.938
71.0	8.659
71.5	8.340
72.0	8.020
72.5	7.741
73.0	7.422
73.5	7.142
74.0	6.863
74.5	6.584
75.0	6.305
75.5	6.025
76.0	5.746
76.5	5.467
77.0	5.187
77.5	4.948
78.0	4.669
78.5	4.429
79.0	4.190
79.5	3.910
80.0	3.671
80.5	3.432
81.0	3.192
81.5	2.953
82.0	2.713
82.5	2.474

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CANDELA TABULATION - (Cont.)

83.0	2.274
83.5	2.035
84.0	1.835
84.5	1.596
85.0	1.397
85.5	1.197
86.0	0.998
86.5	0.838
87.0	0.678
87.5	0.559
88.0	0.439
88.5	0.359
89.0	0.279
89.5	0.200
90.0	0.120
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

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V6DR-L7-9DW-DIM-UNV-LM-OF-WH\_3000K.IES****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
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
123.5	0.000
124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
132.0	0.000
132.5	0.000
133.0	0.000
133.5	0.000
134.0	0.000
134.5	0.000
135.0	0.000
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

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V6DR-L7-9DW-DIM-UNV-LM-OF-WH\_3000K.IES****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
145.0	0.000
145.5	0.000
146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
148.0	0.000
148.5	0.000
149.0	0.000
149.5	0.000
150.0	0.000
150.5	0.000
151.0	0.000
151.5	0.000
152.0	0.000
152.5	0.000
153.0	0.000
153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
155.5	0.000
156.0	0.000
156.5	0.000
157.0	0.000
157.5	0.000
158.0	0.000
158.5	0.000
159.0	0.000
159.5	0.000
160.0	0.000
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

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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	445.18	N.A.	60.70
0-30	606.40	N.A.	82.70
0-40	665.03	N.A.	90.70
0-60	712.16	N.A.	97.10
0-80	731.45	N.A.	99.80
0-90	733.15	N.A.	100.00
10-90	580.72	N.A.	79.20
20-40	219.86	N.A.	30.00
20-50	248.00	N.A.	33.80
40-70	59.72	N.A.	8.10
60-80	19.29	N.A.	2.60
70-80	6.70	N.A.	0.90
80-90	1.70	N.A.	0.20
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	733.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	152.43
10-20	292.75
20-30	161.23
30-40	58.63
40-50	28.15
50-60	18.98
60-70	12.59
70-80	6.70
80-90	1.70
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	68	68	68	68	66	66	66	66	63	63	63	61	61	61	58	58	58	57
1	65	63	62	61	64	62	61	60	60	59	58	58	57	56	56	55	55	54
2	62	59	57	55	61	58	57	55	57	55	54	55	54	53	53	52	51	51
3	59	56	53	51	58	55	53	51	54	52	50	52	51	49	51	50	49	48
4	57	53	50	48	56	52	50	48	51	49	47	50	48	47	49	47	46	45
5	55	50	47	45	54	50	47	45	49	46	45	48	46	44	47	45	44	43
6	52	48	45	43	52	47	45	43	47	44	42	46	44	42	45	43	42	41
7	50	46	43	41	50	45	42	40	45	42	40	44	42	40	43	41	40	39
8	48	44	41	39	48	43	41	39	43	40	38	42	40	38	42	40	38	37
9	47	42	39	37	46	42	39	37	41	39	37	41	38	37	40	38	37	36
10	45	40	37	36	45	40	37	35	40	37	35	39	37	35	39	37	35	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	10.4	11.4	10.7	11.7	12.0
	3H	11.8	12.7	12.2	13.0	13.4
	4H	12.3	13.1	12.7	13.5	13.9
	6H	12.6	13.4	13.1	13.8	14.2
	8H	12.7	13.4	13.2	13.8	14.2
	12H	12.8	13.4	13.2	13.8	14.3

### UGR Viewed Endwise

10.4	11.4	10.7	11.7	12.0
11.8	12.7	12.2	13.0	13.4
12.3	13.1	12.7	13.5	13.9
12.6	13.4	13.1	13.8	14.2
12.7	13.4	13.2	13.8	14.2
12.8	13.4	13.2	13.8	14.3

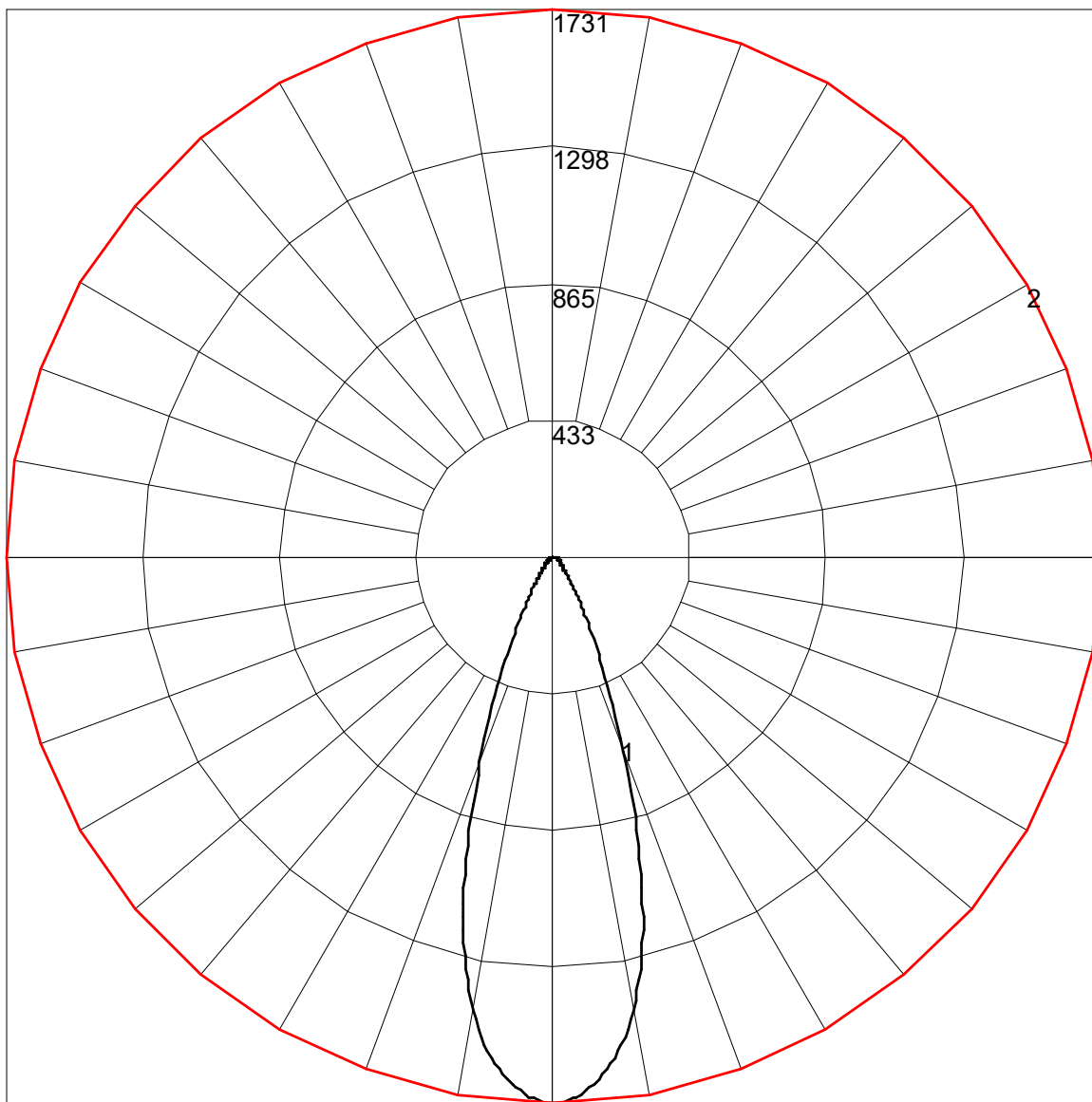
4H	2H	10.8	11.6	11.2	12.0	12.4	10.8	11.6	11.2	12.0	12.4
	3H	12.4	13.1	12.8	13.5	13.9	12.4	13.1	12.8	13.5	13.9
	4H	13.0	13.6	13.4	14.0	14.5	13.0	13.6	13.4	14.0	14.5
	6H	13.5	14.0	13.9	14.4	14.9	13.5	14.0	13.9	14.4	14.9
	8H	13.6	14.1	14.1	14.5	15.0	13.6	14.1	14.1	14.5	15.0
	12H	13.7	14.1	14.2	14.6	15.0	13.7	14.1	14.2	14.6	15.0

8H	4H	13.2	13.7	13.7	14.1	14.6	13.2	13.7	13.7	14.1	14.6
	6H	13.7	14.1	14.3	14.6	15.1	13.7	14.1	14.3	14.6	15.1
	8H	13.9	14.3	14.5	14.8	15.3	13.9	14.3	14.5	14.8	15.3
	12H	14.1	14.4	14.6	14.9	15.4	14.1	14.4	14.6	14.9	15.4

12H	4H	13.2	13.6	13.7	14.1	14.6	13.2	13.6	13.7	14.1	14.6
	6H	13.8	14.1	14.3	14.6	15.1	13.8	14.1	14.3	14.6	15.1
	8H	14.0	14.3	14.5	14.8	15.4	14.0	14.3	14.5	14.8	15.4

Maximum UGR = 15.4

POLAR GRAPH



Maximum Candela = 1730.949 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.)