



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L12-9DW-DIM-UNV-RM-OF-WH\_3000K.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.14

[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-RM-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	1250
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	53
Total Luminaire Watts	23.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.58
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.56
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	4493	4493	4493
55	3021	3021	3021
65	2248	2248	2248
75	1553	1553	1553
85	1297	1297	1297

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CANDELA TABULATION

	<u>0</u>
0.0	3025.393
0.5	3023.990
1.0	3019.781
1.5	3012.766
2.0	3002.946
2.5	2991.021
3.0	2976.290
3.5	2959.455
4.0	2941.218
4.5	2920.174
5.0	2897.727
5.5	2873.176
6.0	2845.819
6.5	2815.656
7.0	2783.389
7.5	2748.316
8.0	2710.438
8.5	2669.753
9.0	2626.262
9.5	2579.265
10.0	2530.163
10.5	2477.553
11.0	2421.436
11.5	2362.514
12.0	2300.785
12.5	2234.848
13.0	2167.508
13.5	2096.661
14.0	2023.709
14.5	1949.355
15.0	1872.194
15.5	1795.034
16.0	1716.470
16.5	1637.907
17.0	1560.746
17.5	1487.093
18.0	1411.335
18.5	1336.279
19.0	1262.626
19.5	1192.480
20.0	1125.842
20.5	1061.307
21.0	998.176
21.5	937.851
22.0	879.630
22.5	824.916
23.0	773.008
23.5	723.906
24.0	677.750
24.5	634.470
25.0	593.715
25.5	555.485
26.0	519.781
26.5	486.251

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CANDELA TABULATION - (Cont.)

27.0	455.036
27.5	425.856
28.0	398.499
28.5	373.106
29.0	349.256
29.5	326.950
30.0	305.976
30.5	286.406
31.0	268.098
31.5	250.912
32.0	234.848
32.5	219.767
33.0	205.598
33.5	192.340
34.0	179.854
34.5	168.280
35.0	157.478
35.5	147.377
36.0	137.977
36.5	129.279
37.0	121.212
37.5	113.777
38.0	106.902
38.5	100.589
39.0	94.767
39.5	89.436
40.0	84.596
40.5	80.177
41.0	76.108
41.5	72.391
42.0	68.953
42.5	65.797
43.0	62.851
43.5	60.185
44.0	57.660
44.5	55.415
45.0	53.241
45.5	51.277
46.0	49.383
46.5	47.629
47.0	46.016
47.5	44.543
48.0	43.140
48.5	41.807
49.0	40.544
49.5	39.282
50.0	38.159
50.5	37.107
51.0	36.055
51.5	35.073
52.0	34.161
52.5	33.179
53.0	32.337
53.5	31.496
54.0	30.654
54.5	29.812

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V6DR-L12-9DW-DIM-UNV-RM-OF-WH\_3000K.IES****CANDELA TABULATION - (Cont.)**

55.0	29.040
55.5	28.269
56.0	27.567
56.5	26.796
57.0	26.094
57.5	25.393
58.0	24.691
58.5	23.990
59.0	23.359
59.5	22.657
60.0	22.026
60.5	21.394
61.0	20.763
61.5	20.132
62.0	19.501
62.5	18.869
63.0	18.308
63.5	17.677
64.0	17.116
64.5	16.484
65.0	15.923
65.5	15.362
66.0	14.801
66.5	14.240
67.0	13.678
67.5	13.187
68.0	12.626
68.5	12.135
69.0	11.644
69.5	11.083
70.0	10.662
70.5	10.171
71.0	9.750
71.5	9.259
72.0	8.838
72.5	8.418
73.0	8.067
73.5	7.716
74.0	7.365
74.5	7.015
75.0	6.734
75.5	6.383
76.0	6.103
76.5	5.892
77.0	5.612
77.5	5.331
78.0	5.121
78.5	4.840
79.0	4.630
79.5	4.419
80.0	4.139
80.5	3.928
81.0	3.648
81.5	3.437
82.0	3.227
82.5	3.016

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CANDELA TABULATION - (Cont.)

83.0	2.806
83.5	2.525
84.0	2.315
84.5	2.104
85.0	1.894
85.5	1.684
86.0	1.543
86.5	1.333
87.0	1.122
87.5	0.912
88.0	0.701
88.5	0.561
89.0	0.491
89.5	0.351
90.0	0.281
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
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

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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
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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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	769.12	N.A.	61.50
0-30	1051.61	N.A.	84.10
0-40	1155.58	N.A.	92.40
0-60	1224.59	N.A.	98.00
0-80	1247.79	N.A.	99.80
0-90	1249.95	N.A.	100.00
10-90	984.83	N.A.	78.80
20-40	386.47	N.A.	30.90
20-50	429.25	N.A.	34.30
40-70	84.87	N.A.	6.80
60-80	23.20	N.A.	1.90
70-80	7.33	N.A.	0.60
80-90	2.17	N.A.	0.20
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	1249.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	265.12
10-20	504.00
20-30	282.49
30-40	103.97
40-50	42.78
50-60	26.22
60-70	15.87
70-80	7.33
80-90	2.17
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	105	102	100	98	103	101	99	97	97	95	94	93	92	91	90	89	89	87
2	100	96	93	90	98	95	92	89	92	89	87	89	87	85	87	85	84	82
3	96	91	87	83	94	90	86	83	87	84	82	85	82	80	83	81	79	78
4	92	86	82	78	91	85	81	78	83	80	77	81	78	76	80	77	75	74
5	88	82	77	74	87	81	77	73	79	76	73	78	75	72	77	74	71	70
6	85	78	73	70	84	77	73	69	76	72	69	75	71	69	74	71	68	67
7	82	74	70	66	81	74	69	66	73	69	66	72	68	65	71	68	65	64
8	79	71	67	63	78	71	66	63	70	66	63	69	65	63	68	65	62	61
9	76	68	64	61	75	68	64	61	67	63	60	66	63	60	66	62	60	59
10	73	66	61	58	72	65	61	58	65	61	58	64	60	58	63	60	58	57

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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	8.7	9.7	9.1	10.0	10.3	8.7	9.7	9.1	10.0	10.3
	3H	9.8	10.7	10.2	11.0	11.4	9.8	10.7	10.2	11.0	11.4
	4H	10.1	10.9	10.5	11.3	11.7	10.1	10.9	10.5	11.3	11.7
	6H	10.4	11.1	10.8	11.5	11.9	10.4	11.1	10.8	11.5	11.9
	8H	10.4	11.1	10.9	11.5	11.9	10.4	11.1	10.9	11.5	11.9
	12H	10.5	11.1	10.9	11.5	11.9	10.5	11.1	10.9	11.5	11.9

### UGR Viewed Endwise

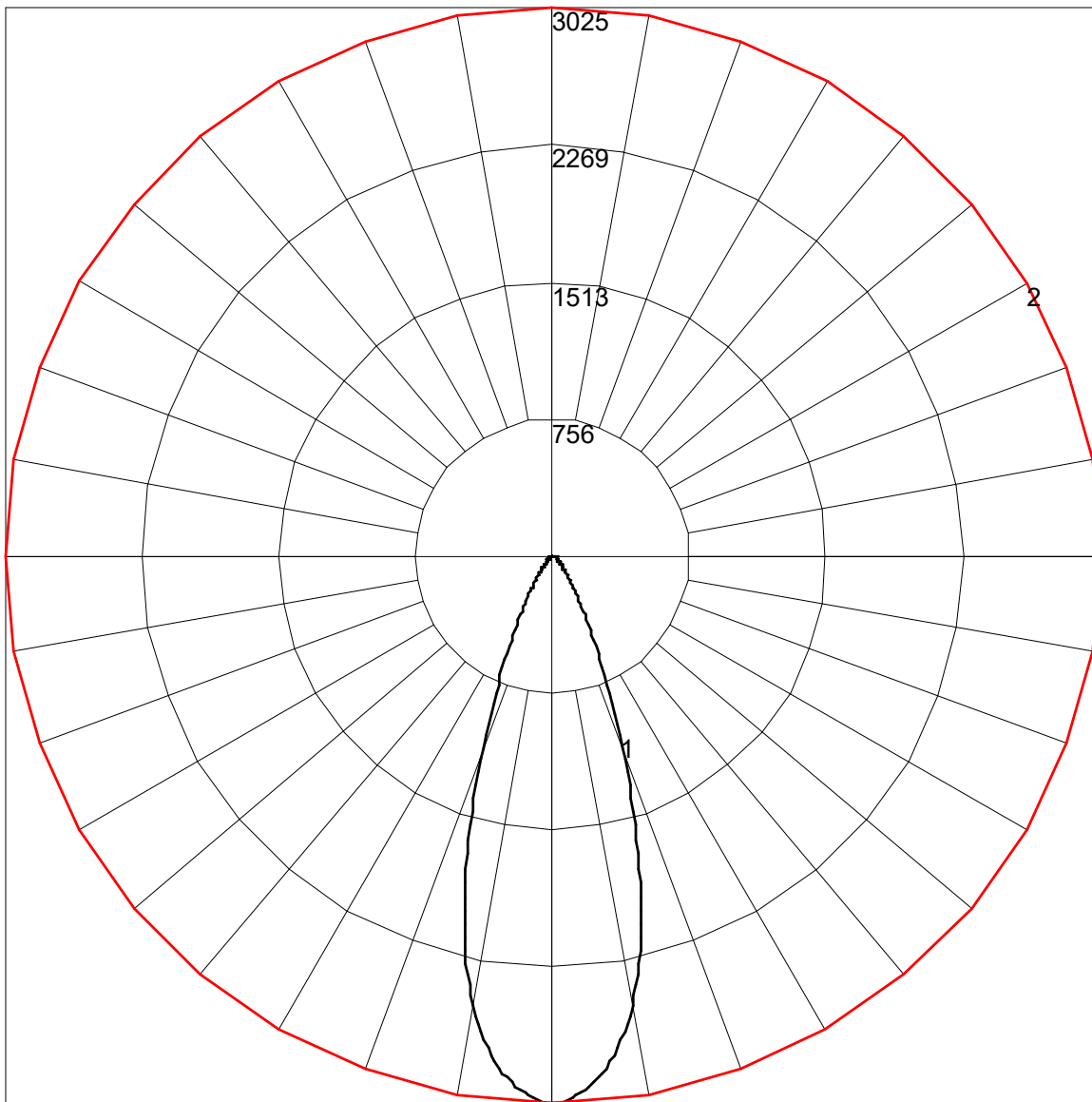
4H	2H	9.0	9.8	9.4	10.2	10.6	9.0	9.8	9.4	10.2	10.6
	3H	10.3	10.9	10.7	11.4	11.8	10.3	10.9	10.7	11.4	11.8
	4H	10.7	11.3	11.1	11.7	12.2	10.7	11.3	11.1	11.7	12.2
	6H	11.0	11.5	11.5	12.0	12.5	11.0	11.5	11.5	12.0	12.5
	8H	11.2	11.6	11.6	12.1	12.5	11.2	11.6	11.6	12.1	12.5
	12H	11.2	11.6	11.7	12.1	12.6	11.2	11.6	11.7	12.1	12.6

8H	4H	10.8	11.2	11.3	11.7	12.2	10.8	11.2	11.3	11.7	12.2
	6H	11.2	11.6	11.8	12.1	12.6	11.2	11.6	11.8	12.1	12.6
	8H	11.4	11.7	12.0	12.3	12.8	11.4	11.7	12.0	12.3	12.8
	12H	11.6	11.8	12.1	12.3	12.9	11.6	11.8	12.1	12.3	12.9

12H	4H	10.8	11.2	11.3	11.6	12.1	10.8	11.2	11.3	11.6	12.1
	6H	11.2	11.6	11.8	12.0	12.6	11.2	11.6	11.8	12.0	12.6
	8H	11.5	11.7	12.0	12.2	12.8	11.5	11.7	12.0	12.2	12.8

Maximum UGR = 12.9

POLAR GRAPH



Maximum Candela = 3025.393 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.)