



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL#12326812.15

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 15 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-1L2-9DW-DIM-UNV-RN-OF-WH 3000k

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

[MORE] tic 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	1260
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	54
Total Luminaire Watts	23.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.44
Spacing Criterion (90-270)	0.44
Spacing Criterion (Diagonal)	0.46
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	4126	4126	4126
55	2699	2699	2699
65	1836	1836	1836
75	1187	1187	1187
85	952	952	952

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CANDELA TABULATION

	<u>0</u>
0.0	4679.104
0.5	4674.932
1.0	4661.720
1.5	4638.773
2.0	4606.786
2.5	4565.065
3.0	4514.998
3.5	4457.283
4.0	4392.614
4.5	4320.297
5.0	4241.720
5.5	4155.495
6.0	4062.316
6.5	3963.575
7.0	3859.270
7.5	3749.403
8.0	3634.668
8.5	3515.760
9.0	3391.986
9.5	3265.429
10.0	3135.396
10.5	3004.668
11.0	2872.549
11.5	2739.734
12.0	2607.615
12.5	2475.496
13.0	2346.158
13.5	2216.820
14.0	2091.655
14.5	1969.966
15.0	1851.059
15.5	1737.715
16.0	1629.933
16.5	1527.715
17.0	1428.973
17.5	1335.099
18.0	1246.092
18.5	1163.344
19.0	1084.768
19.5	1013.841
20.0	944.304
20.5	878.940
21.0	818.443
21.5	762.119
22.0	708.576
22.5	658.232
23.0	611.503
23.5	568.043
24.0	527.503
24.5	489.745
25.0	454.629
25.5	422.086
26.0	392.046
26.5	364.162

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CANDELA TABULATION - (Cont.)

27.0	338.434
27.5	314.791
28.0	293.026
28.5	273.000
29.0	254.573
29.5	237.675
30.0	222.030
30.5	207.705
31.0	194.563
31.5	182.394
32.0	171.199
32.5	160.838
33.0	151.311
33.5	142.480
34.0	134.344
34.5	126.765
35.0	119.742
35.5	113.275
36.0	107.295
36.5	101.662
37.0	96.517
37.5	91.649
38.0	87.199
38.5	83.096
39.0	79.271
39.5	75.656
40.0	72.387
40.5	69.258
41.0	66.407
41.5	63.695
42.0	61.192
42.5	58.828
43.0	56.603
43.5	54.517
44.0	52.500
44.5	50.622
45.0	48.884
45.5	47.215
46.0	45.616
46.5	44.086
47.0	42.626
47.5	41.166
48.0	39.844
48.5	38.523
49.0	37.341
49.5	36.159
50.0	35.046
50.5	33.934
51.0	32.891
51.5	31.917
52.0	30.944
52.5	30.040
53.0	29.136
53.5	28.301
54.0	27.467
54.5	26.702

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CANDELA TABULATION - (Cont.)

55.0	25.937
55.5	25.172
56.0	24.477
56.5	23.781
57.0	23.017
57.5	22.321
58.0	21.695
58.5	21.000
59.0	20.374
59.5	19.679
60.0	19.053
60.5	18.358
61.0	17.732
61.5	17.106
62.0	16.480
62.5	15.924
63.0	15.298
63.5	14.742
64.0	14.116
64.5	13.560
65.0	13.003
65.5	12.447
66.0	11.960
66.5	11.474
67.0	10.987
67.5	10.500
68.0	10.013
68.5	9.596
69.0	9.179
69.5	8.762
70.0	8.344
70.5	7.997
71.0	7.579
71.5	7.232
72.0	6.884
72.5	6.536
73.0	6.258
73.5	5.980
74.0	5.702
74.5	5.424
75.0	5.146
75.5	4.868
76.0	4.659
76.5	4.450
77.0	4.242
77.5	4.033
78.0	3.825
78.5	3.685
79.0	3.477
79.5	3.268
80.0	3.129
80.5	2.921
81.0	2.712
81.5	2.573
82.0	2.364
82.5	2.225

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CANDELA TABULATION - (Cont.)

83.0	2.086
83.5	1.877
84.0	1.738
84.5	1.530
85.0	1.391
85.5	1.252
86.0	1.113
86.5	0.974
87.0	0.834
87.5	0.695
88.0	0.556
88.5	0.417
89.0	0.348
89.5	0.278
90.0	0.209
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
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121.0	0.000
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122.5	0.000
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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
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156.5	0.000
157.0	0.000
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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	878.58	N.A.	69.70
0-30	1098.72	N.A.	87.20
0-40	1177.7	N.A.	93.50
0-60	1239.8	N.A.	98.40
0-80	1258.51	N.A.	99.90
0-90	1260.12	N.A.	100.00
10-90	891.16	N.A.	70.70
20-40	299.11	N.A.	23.70
20-50	337.77	N.A.	26.80
40-70	75.18	N.A.	6.00
60-80	18.71	N.A.	1.50
70-80	5.64	N.A.	0.40
80-90	1.61	N.A.	0.10
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	1260.12	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	368.96
10-20	509.63
20-30	220.14
30-40	78.98
40-50	38.65
50-60	23.44
60-70	13.08
70-80	5.64
80-90	1.61
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	103	101	99	103	101	99	98	97	96	95	94	93	92	91	90	89	88
2	101	97	94	92	99	96	93	91	93	91	89	90	88	87	88	86	85	83
3	97	92	89	86	96	91	88	85	89	86	84	87	84	82	85	83	81	80
4	94	88	84	81	92	87	83	80	85	82	79	83	81	78	82	79	78	76
5	90	84	80	77	89	83	79	76	82	78	76	80	77	75	79	76	74	73
6	87	81	76	73	86	80	76	73	79	75	72	78	74	72	76	74	72	70
7	84	78	73	70	83	77	73	70	76	72	70	75	72	69	74	71	69	68
8	82	75	70	67	81	74	70	67	73	70	67	73	69	67	72	69	67	66
9	79	72	68	65	78	72	68	65	71	67	65	70	67	65	70	67	64	63
10	77	70	66	63	76	69	65	63	69	65	63	68	65	62	68	65	62	61

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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	7.9	8.8	8.2	9.1	9.5	7.9	8.8	8.2	9.1	9.5
	3H	8.7	9.6	9.1	9.9	10.3	8.7	9.6	9.1	9.9	10.3
	4H	9.0	9.8	9.4	10.1	10.5	9.0	9.8	9.4	10.1	10.5
	6H	9.1	9.9	9.6	10.2	10.6	9.1	9.9	9.6	10.2	10.6
	8H	9.2	9.9	9.6	10.3	10.7	9.2	9.9	9.6	10.3	10.7
	12H	9.2	9.8	9.6	10.2	10.7	9.2	9.8	9.6	10.2	10.7

UGR Viewed Endwise

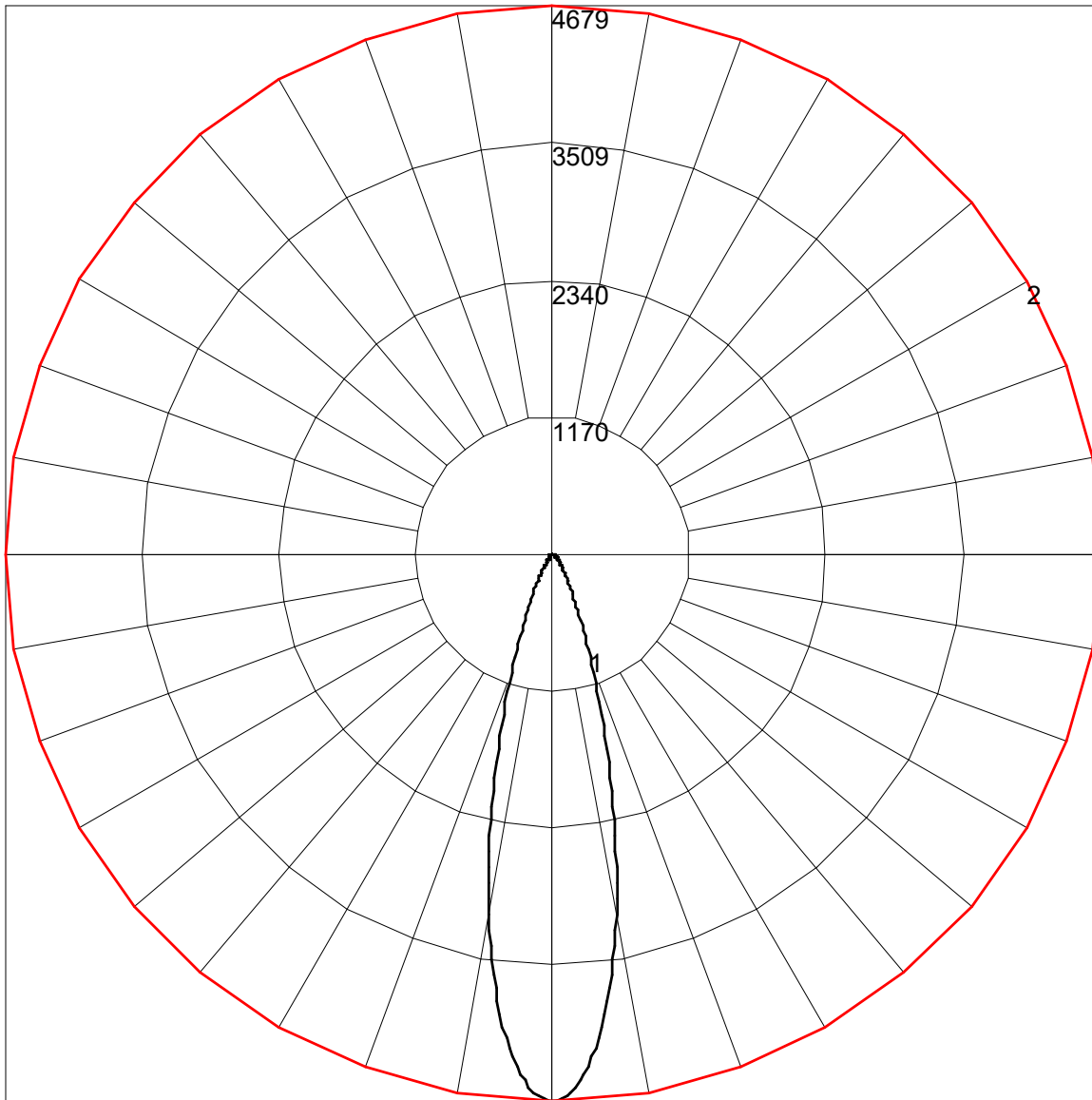
4H	2H	8.1	8.9	8.5	9.2	9.6	8.1	8.9	8.5	9.2	9.6
	3H	9.1	9.8	9.5	10.2	10.6	9.1	9.8	9.5	10.2	10.6
	4H	9.5	10.0	9.9	10.4	10.9	9.5	10.0	9.9	10.4	10.9
	6H	9.7	10.2	10.2	10.6	11.1	9.7	10.2	10.2	10.6	11.1
	8H	9.8	10.2	10.3	10.7	11.2	9.8	10.2	10.3	10.7	11.2
	12H	9.8	10.2	10.3	10.7	11.2	9.8	10.2	10.3	10.7	11.2

8H	4H	9.5	9.9	10.0	10.4	10.9	9.5	9.9	10.0	10.4	10.9
	6H	9.8	10.2	10.4	10.7	11.2	9.8	10.2	10.4	10.7	11.2
	8H	10.0	10.3	10.5	10.8	11.3	10.0	10.3	10.5	10.8	11.3
	12H	10.1	10.4	10.6	10.9	11.4	10.1	10.4	10.6	10.9	11.4

12H	4H	9.5	9.8	9.9	10.3	10.8	9.5	9.8	9.9	10.3	10.8
	6H	9.8	10.2	10.4	10.6	11.2	9.8	10.2	10.4	10.6	11.2
	8H	10.0	10.3	10.5	10.8	11.4	10.0	10.3	10.5	10.8	11.4

Maximum UGR = 11.4

POLAR GRAPH



Maximum Candela = 4679.104 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.)