



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L7-9DW-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] 16 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L7-9DW-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	719
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	51
Total Luminaire Watts	14
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	2354	2354	2354
55	1540	1540	1540
65	1048	1048	1048
75	677	677	677
85	544	544	544

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CANDELA TABULATION

	<u>0</u>
0.0	2670.061
0.5	2667.680
1.0	2660.141
1.5	2647.047
2.0	2628.794
2.5	2604.986
3.0	2576.416
3.5	2543.482
4.0	2506.580
4.5	2465.313
5.0	2420.474
5.5	2371.271
6.0	2318.100
6.5	2261.755
7.0	2202.235
7.5	2139.541
8.0	2074.069
8.5	2006.216
9.0	1935.586
9.5	1863.369
10.0	1789.167
10.5	1714.569
11.0	1639.177
11.5	1563.388
12.0	1487.997
12.5	1412.605
13.0	1338.800
13.5	1264.995
14.0	1193.572
14.5	1124.132
15.0	1056.279
15.5	991.601
16.0	930.097
16.5	871.768
17.0	815.422
17.5	761.854
18.0	711.064
18.5	663.845
19.0	619.007
19.5	578.533
20.0	538.853
20.5	501.554
21.0	467.033
21.5	434.892
22.0	404.338
22.5	375.610
23.0	348.945
23.5	324.145
24.0	301.012
24.5	279.466
25.0	259.427
25.5	240.857
26.0	223.715
26.5	207.804

IES INDOOR REPORT**PHOTOMETRIC FILENAME : V6DR-L7-9DW-DIM-UNV-RN-OF-WH_3000K.IES****CANDELA TABULATION - (Cont.)**

27.0	193.122
27.5	179.631
28.0	167.211
28.5	155.783
29.0	145.268
29.5	135.626
30.0	126.698
30.5	118.524
31.0	111.024
31.5	104.080
32.0	97.692
32.5	91.780
33.0	86.343
33.5	81.304
34.0	76.662
34.5	72.336
35.0	68.329
35.5	64.639
36.0	61.226
36.5	58.012
37.0	55.076
37.5	52.298
38.0	49.759
38.5	47.417
39.0	45.235
39.5	43.172
40.0	41.307
40.5	39.521
41.0	37.894
41.5	36.347
42.0	34.918
42.5	33.569
43.0	32.299
43.5	31.109
44.0	29.958
44.5	28.887
45.0	27.895
45.5	26.943
46.0	26.030
46.5	25.157
47.0	24.324
47.5	23.491
48.0	22.737
48.5	21.983
49.0	21.308
49.5	20.634
50.0	19.999
50.5	19.364
51.0	18.769
51.5	18.213
52.0	17.658
52.5	17.142
53.0	16.626
53.5	16.150
54.0	15.674
54.5	15.237

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55.0	14.801
55.5	14.364
56.0	13.967
56.5	13.571
57.0	13.134
57.5	12.737
58.0	12.380
58.5	11.983
59.0	11.626
59.5	11.229
60.0	10.872
60.5	10.475
61.0	10.118
61.5	9.761
62.0	9.404
62.5	9.087
63.0	8.730
63.5	8.412
64.0	8.055
64.5	7.738
65.0	7.420
65.5	7.103
66.0	6.825
66.5	6.547
67.0	6.269
67.5	5.992
68.0	5.714
68.5	5.476
69.0	5.238
69.5	5.000
70.0	4.762
70.5	4.563
71.0	4.325
71.5	4.127
72.0	3.928
72.5	3.730
73.0	3.571
73.5	3.412
74.0	3.254
74.5	3.095
75.0	2.936
75.5	2.778
76.0	2.659
76.5	2.540
77.0	2.420
77.5	2.301
78.0	2.182
78.5	2.103
79.0	1.984
79.5	1.865
80.0	1.786
80.5	1.667
81.0	1.548
81.5	1.468
82.0	1.349
82.5	1.270

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CANDELA TABULATION - (Cont.)

83.0	1.190
83.5	1.071
84.0	0.992
84.5	0.873
85.0	0.794
85.5	0.714
86.0	0.635
86.5	0.556
87.0	0.476
87.5	0.397
88.0	0.317
88.5	0.238
89.0	0.198
89.5	0.159
90.0	0.119
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-RN-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

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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	501.35	N.A.	69.70
0-30	626.97	N.A.	87.20
0-40	672.04	N.A.	93.50
0-60	707.47	N.A.	98.40
0-80	718.15	N.A.	99.90
0-90	719.07	N.A.	100.00
10-90	508.53	N.A.	70.70
20-40	170.69	N.A.	23.70
20-50	192.74	N.A.	26.80
40-70	42.90	N.A.	6.00
60-80	10.68	N.A.	1.50
70-80	3.22	N.A.	0.40
80-90	0.92	N.A.	0.10
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	719.07	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	210.54
10-20	290.81
20-30	125.62
30-40	45.07
40-50	22.06
50-60	13.38
60-70	7.46
70-80	3.22
80-90	0.92
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 RW	80				70				50			30			10			0
	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	64	63	62	64	63	62	61	60	60	59	58	58	57	56	56	55	54
2	63	60	58	57	62	59	58	56	58	56	55	56	55	54	54	53	53	52
3	60	57	55	53	59	57	54	53	55	53	52	54	52	51	53	51	50	49
4	58	55	52	50	57	54	52	50	53	51	49	52	50	49	51	49	48	47
5	56	52	50	48	55	52	49	47	51	49	47	50	48	47	49	47	46	45
6	54	50	47	45	53	50	47	45	49	47	45	48	46	45	47	46	44	44
7	52	48	45	44	52	48	45	43	47	45	43	47	44	43	46	44	43	42
8	51	46	44	42	50	46	44	42	46	43	42	45	43	41	45	43	41	41
9	49	45	42	40	49	45	42	40	44	42	40	44	42	40	43	41	40	39
10	48	43	41	39	47	43	41	39	43	40	39	42	40	39	42	40	39	38

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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

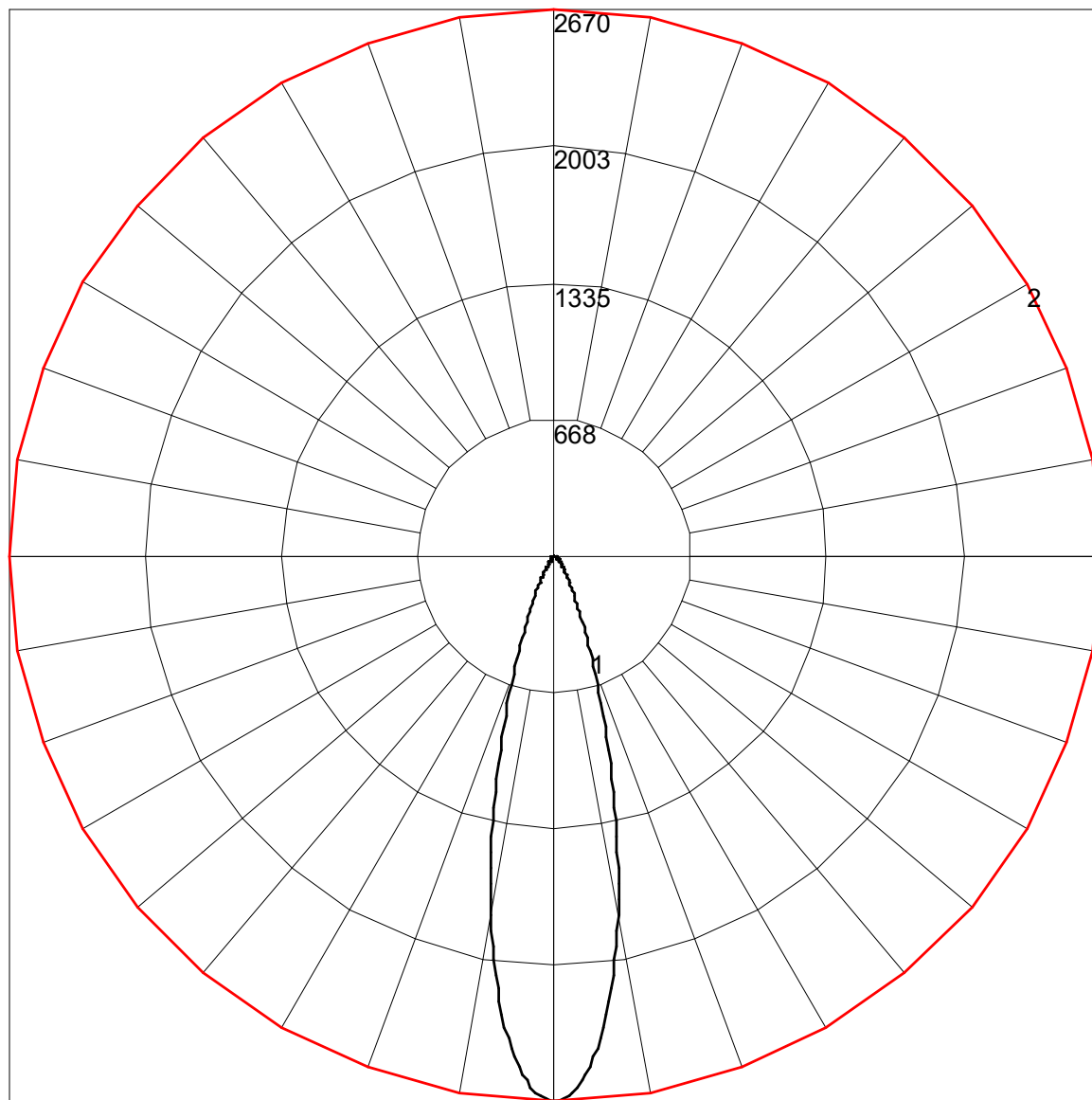
X=2H	Y=2H	7.6	8.5	7.9	8.8	9.2	7.6	8.5	7.9	8.8	9.2
	3H	8.4	9.3	8.8	9.6	10.0	8.4	9.3	8.8	9.6	10.0
	4H	8.7	9.5	9.1	9.8	10.2	8.7	9.5	9.1	9.8	10.2
	6H	8.8	9.6	9.3	9.9	10.3	8.8	9.6	9.3	9.9	10.3
	8H	8.9	9.6	9.3	10.0	10.4	8.9	9.6	9.3	10.0	10.4
	12H	8.9	9.5	9.3	9.9	10.4	8.9	9.5	9.3	9.9	10.4

UGR Viewed Endwise

4H	2H	7.8	8.6	8.2	8.9	9.3	7.8	8.6	8.2	8.9	9.3
	3H	8.8	9.5	9.2	9.9	10.3	8.8	9.5	9.2	9.9	10.3
	4H	9.2	9.7	9.6	10.1	10.6	9.2	9.7	9.6	10.1	10.6
	6H	9.4	9.9	9.9	10.3	10.8	9.4	9.9	9.9	10.3	10.8
	8H	9.5	9.9	10.0	10.4	10.9	9.5	9.9	10.0	10.4	10.9
	12H	9.5	9.9	10.0	10.4	10.9	9.5	9.9	10.0	10.4	10.9
8H	4H	9.2	9.6	9.7	10.1	10.6	9.2	9.6	9.7	10.1	10.6
	6H	9.5	9.9	10.1	10.4	10.9	9.5	9.9	10.1	10.4	10.9
	8H	9.7	10.0	10.2	10.5	11.0	9.7	10.0	10.2	10.5	11.0
	12H	9.8	10.1	10.3	10.6	11.1	9.8	10.1	10.3	10.6	11.1
12H	4H	9.2	9.5	9.6	10.0	10.5	9.2	9.5	9.6	10.0	10.5
	6H	9.5	9.9	10.1	10.3	10.9	9.5	9.9	10.1	10.3	10.9
	8H	9.7	10.0	10.2	10.5	11.1	9.7	10.0	10.2	10.5	11.1

Maximum UGR = 11.1

POLAR GRAPH



Maximum Candela = 2670.061 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.)