



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L7-9DW-DIM-UNV-RW-OF-WH_3000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.12

[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-RW-OF-WH

[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	659
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	47
Total Luminaire Watts	14
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	0.94
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	8899	8899	8899
55	7421	7421	7421
65	5236	5236	5236
75	3207	3207	3207
85	2529	2529	2529

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CANDELA TABULATION

	<u>0</u>
0.0	487.523
0.5	487.067
1.0	486.611
1.5	486.155
2.0	485.243
2.5	483.875
3.0	482.507
3.5	480.682
4.0	478.858
4.5	477.490
5.0	475.666
5.5	473.841
6.0	472.017
6.5	470.193
7.0	468.369
7.5	466.545
8.0	464.264
8.5	462.440
9.0	460.616
9.5	458.336
10.0	456.511
10.5	454.277
11.0	452.088
11.5	449.899
12.0	447.710
12.5	445.566
13.0	443.377
13.5	441.097
14.0	438.862
14.5	436.673
15.0	434.621
15.5	432.523
16.0	430.471
16.5	428.464
17.0	426.594
17.5	424.724
18.0	422.900
18.5	421.167
19.0	419.434
19.5	417.655
20.0	415.831
20.5	413.870
21.0	411.636
21.5	409.082
22.0	406.208
22.5	403.016
23.0	399.550
23.5	395.628
24.0	391.341
24.5	386.644
25.0	381.445
25.5	375.835
26.0	369.587
26.5	362.746

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

27.0	355.450
27.5	347.514
28.0	339.077
28.5	329.910
29.0	320.242
29.5	309.753
30.0	298.625
30.5	286.859
31.0	274.637
31.5	262.141
32.0	249.417
32.5	236.784
33.0	224.288
33.5	212.203
34.0	200.619
34.5	189.719
35.0	179.777
35.5	170.656
36.0	162.629
36.5	155.515
37.0	149.267
37.5	143.931
38.0	139.234
38.5	135.084
39.0	131.481
39.5	128.288
40.0	125.370
40.5	122.724
41.0	120.262
41.5	118.027
42.0	115.975
42.5	114.014
43.0	112.144
43.5	110.365
44.0	108.678
44.5	107.082
45.0	105.440
45.5	103.889
46.0	102.293
46.5	100.743
47.0	99.146
47.5	97.550
48.0	95.908
48.5	94.267
49.0	92.716
49.5	91.120
50.0	89.432
50.5	87.699
51.0	85.921
51.5	84.142
52.0	82.364
52.5	80.539
53.0	78.761
53.5	77.028
54.0	75.112
54.5	73.197

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CANDELA TABULATION - (Cont.)

55.0	71.327
55.5	69.412
56.0	67.542
56.5	65.672
57.0	63.802
57.5	61.932
58.0	60.154
58.5	58.329
59.0	56.551
59.5	54.818
60.0	53.085
60.5	51.352
61.0	49.664
61.5	48.023
62.0	46.381
62.5	44.785
63.0	43.188
63.5	41.592
64.0	40.087
64.5	38.537
65.0	37.077
65.5	35.572
66.0	34.159
66.5	32.745
67.0	31.377
67.5	30.008
68.0	28.686
68.5	27.363
69.0	26.132
69.5	24.855
70.0	23.669
70.5	22.484
71.0	21.343
71.5	20.249
72.0	19.154
72.5	18.151
73.0	17.193
73.5	16.327
74.0	15.460
74.5	14.685
75.0	13.910
75.5	13.226
76.0	12.542
76.5	11.949
77.0	11.401
77.5	10.854
78.0	10.307
78.5	9.760
79.0	9.258
79.5	8.756
80.0	8.255
80.5	7.753
81.0	7.251
81.5	6.795
82.0	6.294
82.5	5.838

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CANDELA TABULATION - (Cont.)

83.0	5.381
83.5	4.971
84.0	4.515
84.5	4.104
85.0	3.694
85.5	3.284
86.0	2.873
86.5	2.463
87.0	2.098
87.5	1.687
88.0	1.368
88.5	1.095
89.0	0.867
89.5	0.638
90.0	0.456
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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122.5	0.000
123.0	0.000
123.5	0.000
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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
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132.0	0.000
132.5	0.000
133.0	0.000
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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
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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
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155.0	0.000
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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	167.52	N.A.	25.40
0-30	338.67	N.A.	51.40
0-40	457.08	N.A.	69.40
0-60	602.38	N.A.	91.40
0-80	654.84	N.A.	99.40
0-90	659.05	N.A.	100.00
10-90	614.26	N.A.	93.20
20-40	289.55	N.A.	43.90
20-50	371.25	N.A.	56.30
40-70	182.33	N.A.	27.70
60-80	52.46	N.A.	8.00
70-80	15.43	N.A.	2.30
80-90	4.21	N.A.	0.60
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	659.06	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	44.78
10-20	122.74
20-30	171.14
30-40	118.41
40-50	81.69
50-60	63.61
60-70	37.02
70-80	15.43
80-90	4.21
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 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	64	62	60	58	62	60	59	57	58	57	55	56	55	54	54	53	52	51
2	59	56	53	50	58	55	52	50	53	50	48	51	49	47	49	48	46	45
3	55	51	47	44	54	50	46	44	48	45	43	47	44	42	45	43	42	40
4	52	46	42	39	51	45	42	39	44	41	38	43	40	38	42	39	37	36
5	48	42	38	35	47	42	38	35	41	37	35	40	37	34	39	36	34	33
6	45	39	35	32	44	39	35	32	38	34	31	37	34	31	36	33	31	30
7	43	36	32	29	42	36	32	29	35	31	29	34	31	29	33	31	28	27
8	40	34	30	27	39	33	29	27	33	29	27	32	29	26	31	28	26	25
9	38	31	27	25	37	31	27	25	30	27	25	30	27	24	29	26	24	23
10	36	29	26	23	35	29	25	23	29	25	23	28	25	23	28	25	23	22

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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	18.4	19.7	18.8	20.0	20.3	18.4	19.7	18.8	20.0	20.3
	3H	19.4	20.5	19.8	20.9	21.2	19.4	20.5	19.8	20.9	21.2
	4H	19.6	20.7	20.0	21.1	21.4	19.6	20.7	20.0	21.1	21.4
	6H	19.8	20.8	20.2	21.2	21.6	19.8	20.8	20.2	21.2	21.6
	8H	19.8	20.8	20.3	21.2	21.6	19.8	20.8	20.3	21.2	21.6
	12H	19.9	20.8	20.3	21.2	21.6	19.9	20.8	20.3	21.2	21.6

UGR Viewed Endwise

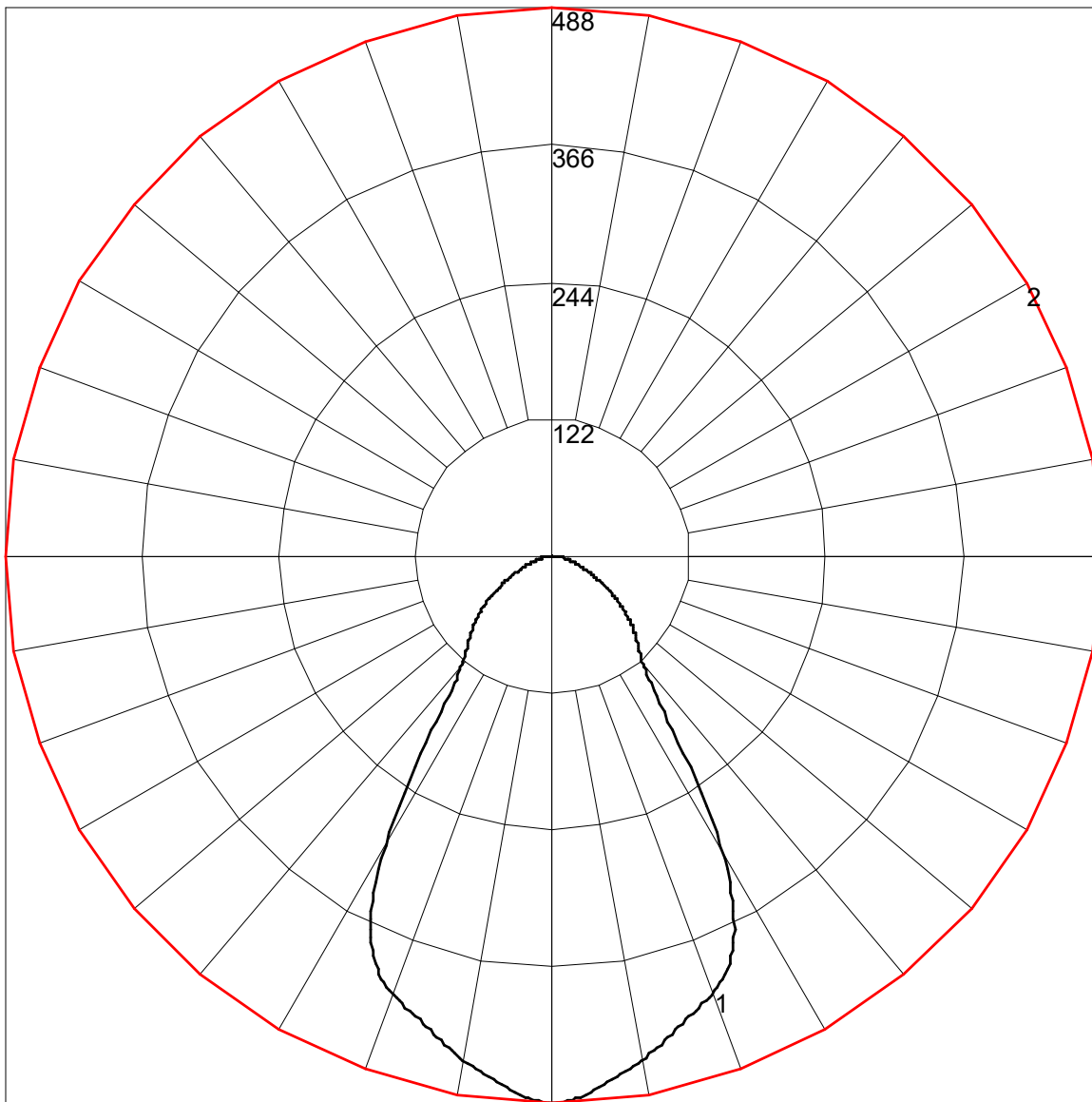
4H	2H	18.7	19.8	19.1	20.2	20.6	18.7	19.8	19.1	20.2	20.6
	3H	19.9	20.8	20.3	21.2	21.6	19.9	20.8	20.3	21.2	21.6
	4H	20.2	21.0	20.6	21.4	21.9	20.2	21.0	20.6	21.4	21.9
	6H	20.5	21.2	20.9	21.6	22.1	20.5	21.2	20.9	21.6	22.1
	8H	20.5	21.2	21.0	21.6	22.1	20.5	21.2	21.0	21.6	22.1
	12H	20.6	21.2	21.1	21.7	22.1	20.6	21.2	21.1	21.7	22.1

8H	4H	20.3	20.9	20.7	21.4	21.8	20.3	20.9	20.7	21.4	21.8
	6H	20.6	21.1	21.1	21.6	22.1	20.6	21.1	21.1	21.6	22.1
	8H	20.8	21.2	21.3	21.7	22.2	20.8	21.2	21.3	21.7	22.2
	12H	20.9	21.3	21.4	21.8	22.3	20.9	21.3	21.4	21.8	22.3

12H	4H	20.3	20.8	20.8	21.3	21.8	20.3	20.8	20.8	21.3	21.8
	6H	20.6	21.1	21.2	21.6	22.1	20.6	21.1	21.2	21.6	22.1
	8H	20.8	21.2	21.3	21.7	22.3	20.8	21.2	21.3	21.7	22.3

Maximum UGR = 22.3

POLAR GRAPH



Maximum Candela = 487.523 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.)