



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L18-8TW-DIM-UNV-LM-OF-WH_4000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.09

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 21 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L18-8TW-DIM-UNV-LM-OF-WH 4000k

[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	1948
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	81
Total Luminaire Watts	24
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	8702	8702	8702
55	6372	6372	6372
65	5192	5192	5192
75	4226	4226	4226
85	2779	2779	2779

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CANDELA TABULATION

	<u>0</u>
0.0	4600.124
0.5	4598.003
1.0	4591.640
1.5	4582.097
2.0	4569.372
2.5	4551.344
3.0	4531.196
3.5	4507.867
4.0	4480.296
4.5	4451.664
5.0	4419.852
5.5	4383.797
6.0	4344.561
6.5	4301.084
7.0	4254.425
7.5	4203.525
8.0	4147.322
8.5	4086.878
9.0	4023.253
9.5	3955.385
10.0	3882.216
10.5	3804.805
11.0	3722.092
11.5	3633.016
12.0	3540.759
12.5	3443.200
13.0	3341.399
13.5	3234.296
14.0	3124.012
14.5	3009.486
15.0	2892.840
15.5	2774.072
16.0	2655.304
16.5	2535.476
17.0	2418.830
17.5	2302.183
18.0	2184.476
18.5	2068.889
19.0	1954.363
19.5	1844.079
20.0	1736.976
20.5	1634.115
21.0	1537.616
21.5	1445.359
22.0	1353.102
22.5	1266.148
23.0	1183.434
23.5	1104.963
24.0	1031.900
24.5	962.760
25.0	898.180
25.5	837.312
26.0	780.897
26.5	728.088

IES INDOOR REPORT**PHOTOMETRIC FILENAME : V6DR-L18-8TW-DIM-UNV-LM-OF-WH_4000K.IES****CANDELA TABULATION - (Cont.)**

27.0	678.990
27.5	633.498
28.0	591.081
28.5	551.845
29.0	515.473
29.5	481.539
30.0	450.150
30.5	420.883
31.0	393.736
31.5	368.498
32.0	344.956
32.5	323.112
33.0	302.751
33.5	283.770
34.0	266.273
34.5	250.048
35.0	234.884
35.5	220.993
36.0	208.055
36.5	196.285
37.0	185.362
37.5	175.394
38.0	166.381
38.5	158.003
39.0	150.368
39.5	143.369
40.0	137.007
40.5	131.069
41.0	125.660
41.5	120.676
42.0	116.010
42.5	111.769
43.0	107.739
43.5	104.028
44.0	100.634
44.5	97.347
45.0	94.272
45.5	91.409
46.0	88.758
46.5	86.213
47.0	83.774
47.5	81.441
48.0	79.320
48.5	77.199
49.0	75.184
49.5	73.275
50.0	71.473
50.5	69.670
51.0	67.973
51.5	66.277
52.0	64.686
52.5	63.201
53.0	61.611
53.5	60.126
54.0	58.748
54.5	57.369

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55.0	55.990
55.5	54.612
56.0	53.339
56.5	52.067
57.0	50.794
57.5	49.522
58.0	48.355
58.5	47.189
59.0	46.022
59.5	44.962
60.0	43.902
60.5	42.735
61.0	41.675
61.5	40.614
62.0	39.554
62.5	38.599
63.0	37.539
63.5	36.585
64.0	35.630
64.5	34.676
65.0	33.615
65.5	32.661
66.0	31.707
66.5	30.858
67.0	29.904
67.5	28.950
68.0	28.101
68.5	27.253
69.0	26.299
69.5	25.450
70.0	24.602
70.5	23.754
71.0	23.011
71.5	22.163
72.0	21.315
72.5	20.572
73.0	19.724
73.5	18.982
74.0	18.239
74.5	17.497
75.0	16.755
75.5	16.012
76.0	15.270
76.5	14.528
77.0	13.786
77.5	13.149
78.0	12.407
78.5	11.771
79.0	11.134
79.5	10.392
80.0	9.756
80.5	9.120
81.0	8.483
81.5	7.847
82.0	7.211
82.5	6.575

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CANDELA TABULATION - (Cont.)

83.0	6.044
83.5	5.408
84.0	4.878
84.5	4.242
85.0	3.711
85.5	3.181
86.0	2.651
86.5	2.227
87.0	1.803
87.5	1.485
88.0	1.166
88.5	0.954
89.0	0.742
89.5	0.530
90.0	0.318
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-L18-8TW-DIM-UNV-LM-OF-WH_4000K.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
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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	1183.09	N.A.	60.70
0-30	1611.56	N.A.	82.70
0-40	1767.37	N.A.	90.70
0-60	1892.62	N.A.	97.10
0-80	1943.87	N.A.	99.80
0-90	1948.4	N.A.	100.00
10-90	1543.31	N.A.	79.20
20-40	584.28	N.A.	30.00
20-50	659.08	N.A.	33.80
40-70	158.70	N.A.	8.10
60-80	51.25	N.A.	2.60
70-80	17.80	N.A.	0.90
80-90	4.53	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	1948.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	405.10
10-20	777.99
20-30	428.48
30-40	155.81
40-50	74.80
50-60	50.45
60-70	33.45
70-80	17.80
80-90	4.53
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	110	110	110	110	107	107	107	107	102	102	102	98	98	98	94	94	94	92
1	105	102	100	98	102	100	98	97	97	95	94	93	92	91	90	89	88	87
2	100	96	92	90	98	94	91	89	91	89	87	89	87	85	86	84	83	82
3	96	90	86	83	94	89	85	82	87	83	81	84	82	80	82	80	78	77
4	92	85	81	77	90	84	80	77	82	79	76	81	78	75	79	76	74	73
5	88	81	76	73	87	80	76	72	79	75	72	77	74	71	76	73	71	69
6	84	77	72	69	83	76	72	69	75	71	68	74	70	68	73	70	67	66
7	81	74	69	65	80	73	69	65	72	68	65	71	67	65	70	67	64	63
8	78	71	66	62	77	70	65	62	69	65	62	68	65	62	67	64	62	60
9	75	68	63	60	74	67	63	60	66	62	59	66	62	59	65	62	59	58
10	73	65	60	57	72	65	60	57	64	60	57	63	60	57	63	59	57	56

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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	12.2	13.2	12.5	13.5	13.8	UGR Viewed Endwise	12.2	13.2	12.5	13.5	13.8
	3H	13.6	14.5	14.0	14.8	15.2		13.6	14.5	14.0	14.8	15.2
	4H	14.1	14.9	14.5	15.3	15.7		14.1	14.9	14.5	15.3	15.7
	6H	14.4	15.2	14.9	15.6	16.0		14.4	15.2	14.9	15.6	16.0
	8H	14.5	15.2	14.9	15.6	16.0		14.5	15.2	14.9	15.6	16.0
	12H	14.6	15.2	15.0	15.6	16.1		14.6	15.2	15.0	15.6	16.1

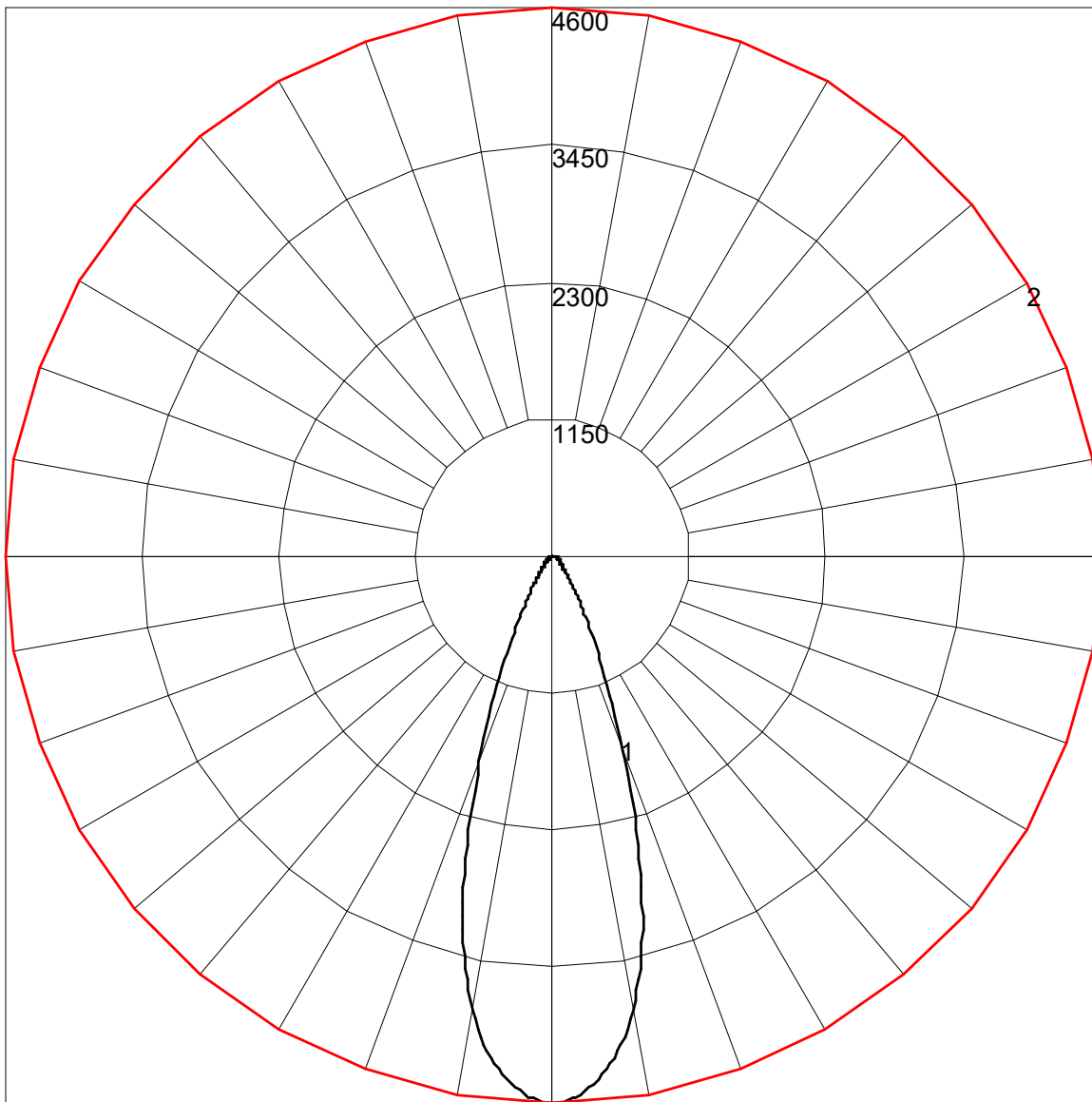
4H	2H	12.6	13.4	13.0	13.8	14.2	12.6	13.4	13.0	13.8	14.2
	3H	14.2	14.9	14.6	15.3	15.7	14.2	14.9	14.6	15.3	15.7
	4H	14.8	15.4	15.2	15.8	16.3	14.8	15.4	15.2	15.8	16.3
	6H	15.3	15.8	15.7	16.2	16.7	15.3	15.8	15.7	16.2	16.7
	8H	15.4	15.9	15.9	16.3	16.8	15.4	15.9	15.9	16.3	16.8
	12H	15.5	15.9	15.9	16.4	16.8	15.5	15.9	15.9	16.4	16.8

8H	4H	15.0	15.5	15.5	15.9	16.4	15.0	15.5	15.5	15.9	16.4
	6H	15.5	15.9	16.1	16.4	16.9	15.5	15.9	16.1	16.4	16.9
	8H	15.7	16.1	16.3	16.6	17.1	15.7	16.1	16.3	16.6	17.1
	12H	15.9	16.2	16.4	16.7	17.2	15.9	16.2	16.4	16.7	17.2

12H	4H	15.0	15.4	15.5	15.9	16.3	15.0	15.4	15.5	15.9	16.3
	6H	15.6	15.9	16.1	16.4	16.9	15.6	15.9	16.1	16.4	16.9
	8H	15.8	16.1	16.3	16.6	17.2	15.8	16.1	16.3	16.6	17.2

Maximum UGR = 17.2

POLAR GRAPH



Maximum Candela = 4600.124 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.)