



## IES INDOOR REPORT

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

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.10

[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-LN-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	1293
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	55
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)	0.44
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	4863	4863	4863
55	3558	3558	3558
65	2893	2893	2893
75	2362	2362	2362
85	1529	1529	1529

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

CANDELA TABULATION

	<u>0</u>
0.0	4836.073
0.5	4831.848
1.0	4817.763
1.5	4793.114
2.0	4759.310
2.5	4716.351
3.0	4664.941
3.5	4604.375
4.0	4535.359
4.5	4459.300
5.0	4376.903
5.5	4286.759
6.0	4189.573
6.5	4086.049
7.0	3976.186
7.5	3860.689
8.0	3738.854
8.5	3613.498
9.0	3485.325
9.5	3352.926
10.0	3219.119
10.5	3083.199
11.0	2945.166
11.5	2806.430
12.0	2667.693
12.5	2530.364
13.0	2394.444
13.5	2260.637
14.0	2129.647
14.5	2002.178
15.0	1879.639
15.5	1762.029
16.0	1650.054
16.5	1543.712
17.0	1442.301
17.5	1345.819
18.0	1254.970
18.5	1170.461
19.0	1090.881
19.5	1016.935
20.0	946.510
20.5	879.606
21.0	817.632
21.5	759.884
22.0	704.953
22.5	654.035
23.0	606.287
23.5	562.061
24.0	520.651
24.5	482.269
25.0	446.775
25.5	413.887
26.0	383.463
26.5	355.434

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

27.0	329.729
27.5	306.066
28.0	284.375
28.5	264.586
29.0	246.346
29.5	229.585
30.0	214.232
30.5	200.218
31.0	187.330
31.5	175.569
32.0	164.724
32.5	154.794
33.0	145.639
33.5	137.258
34.0	129.511
34.5	122.469
35.0	115.919
35.5	109.933
36.0	104.440
36.5	99.299
37.0	94.651
37.5	90.355
38.0	86.411
38.5	82.679
39.0	79.298
39.5	76.129
40.0	73.242
40.5	70.495
41.0	68.030
41.5	65.636
42.0	63.453
42.5	61.410
43.0	59.439
43.5	57.608
44.0	55.847
44.5	54.227
45.0	52.678
45.5	51.199
46.0	49.790
46.5	48.382
47.0	47.114
47.5	45.847
48.0	44.579
48.5	43.382
49.0	42.255
49.5	41.199
50.0	40.142
50.5	39.086
51.0	38.100
51.5	37.184
52.0	36.269
52.5	35.353
53.0	34.438
53.5	33.663
54.0	32.818
54.5	32.043

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

55.0	31.269
55.5	30.494
56.0	29.719
56.5	29.015
57.0	28.311
57.5	27.677
58.0	26.973
58.5	26.339
59.0	25.705
59.5	25.001
60.0	24.437
60.5	23.804
61.0	23.170
61.5	22.606
62.0	22.043
62.5	21.480
63.0	20.916
63.5	20.353
64.0	19.789
64.5	19.226
65.0	18.733
65.5	18.170
66.0	17.677
66.5	17.113
67.0	16.620
67.5	16.127
68.0	15.634
68.5	15.141
69.0	14.648
69.5	14.155
70.0	13.662
70.5	13.240
71.0	12.747
71.5	12.324
72.0	11.902
72.5	11.409
73.0	10.986
73.5	10.564
74.0	10.141
74.5	9.719
75.0	9.367
75.5	8.944
76.0	8.521
76.5	8.099
77.0	7.747
77.5	7.324
78.0	6.972
78.5	6.620
79.0	6.197
79.5	5.845
80.0	5.493
80.5	5.141
81.0	4.789
81.5	4.437
82.0	4.085
82.5	3.733

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

CANDELA TABULATION - (Cont.)

83.0	3.380
83.5	3.028
84.0	2.747
84.5	2.394
85.0	2.042
85.5	1.761
86.0	1.479
86.5	1.197
87.0	0.986
87.5	0.775
88.0	0.563
88.5	0.423
89.0	0.352
89.5	0.211
90.0	0.141
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-L12-9DW-DIM-UNV-LN-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

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V6DR-L12-9DW-DIM-UNV-LN-OF-WH\_3000K.IES****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

**IES INDOOR REPORT**

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

**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



**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V6DR-L12-9DW-DIM-UNV-LN-OF-WH\_3000K.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	898.03	N.A.	69.50
0-30	1115.19	N.A.	86.30
0-40	1191.97	N.A.	92.20
0-60	1261.59	N.A.	97.60
0-80	1290.13	N.A.	99.80
0-90	1292.65	N.A.	100.00
10-90	912.53	N.A.	70.60
20-40	293.94	N.A.	22.70
20-50	335.37	N.A.	25.90
40-70	88.24	N.A.	6.80
60-80	28.54	N.A.	2.20
70-80	9.92	N.A.	0.80
80-90	2.52	N.A.	0.20
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	1292.65	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	380.11
10-20	517.91
20-30	217.16
30-40	76.78
40-50	41.43
50-60	28.20
60-70	18.61
70-80	9.92
80-90	2.52
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

# IES INDOOR REPORT

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

## 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	103	101	99	103	101	99	97	97	96	94	94	93	92	91	90	89	87
2	101	97	94	91	99	95	93	90	93	90	88	90	88	86	87	86	84	83
3	97	92	88	85	95	91	87	84	88	85	83	86	84	82	84	82	81	79
4	93	88	83	80	92	87	83	80	85	81	79	83	80	78	81	79	77	76
5	90	84	79	76	89	83	79	76	81	78	75	80	77	74	79	76	74	73
6	87	80	76	73	86	80	75	72	78	75	72	77	74	71	76	73	71	70
7	84	77	73	70	83	77	72	69	76	72	69	75	71	69	74	71	68	67
8	81	74	70	67	80	74	70	67	73	69	67	72	69	66	71	68	66	65
9	79	72	67	65	78	71	67	64	71	67	64	70	67	64	69	66	64	63
10	76	69	65	62	76	69	65	62	68	65	62	68	64	62	67	64	62	61

# IES INDOOR REPORT

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

## 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	9.6	10.6	9.9	10.9	11.2
	3H	11.0	11.8	11.4	12.2	12.5
	4H	11.5	12.3	11.9	12.6	13.0
	6H	11.8	12.5	12.2	12.9	13.3
	8H	11.9	12.6	12.3	13.0	13.4
	12H	11.9	12.6	12.4	13.0	13.4

### UGR Viewed Endwise

9.6	10.6	9.9	10.9	11.2
11.0	11.8	11.4	12.2	12.5
11.5	12.3	11.9	12.6	13.0
11.8	12.5	12.2	12.9	13.3
11.9	12.6	12.3	13.0	13.4
11.9	12.6	12.4	13.0	13.4

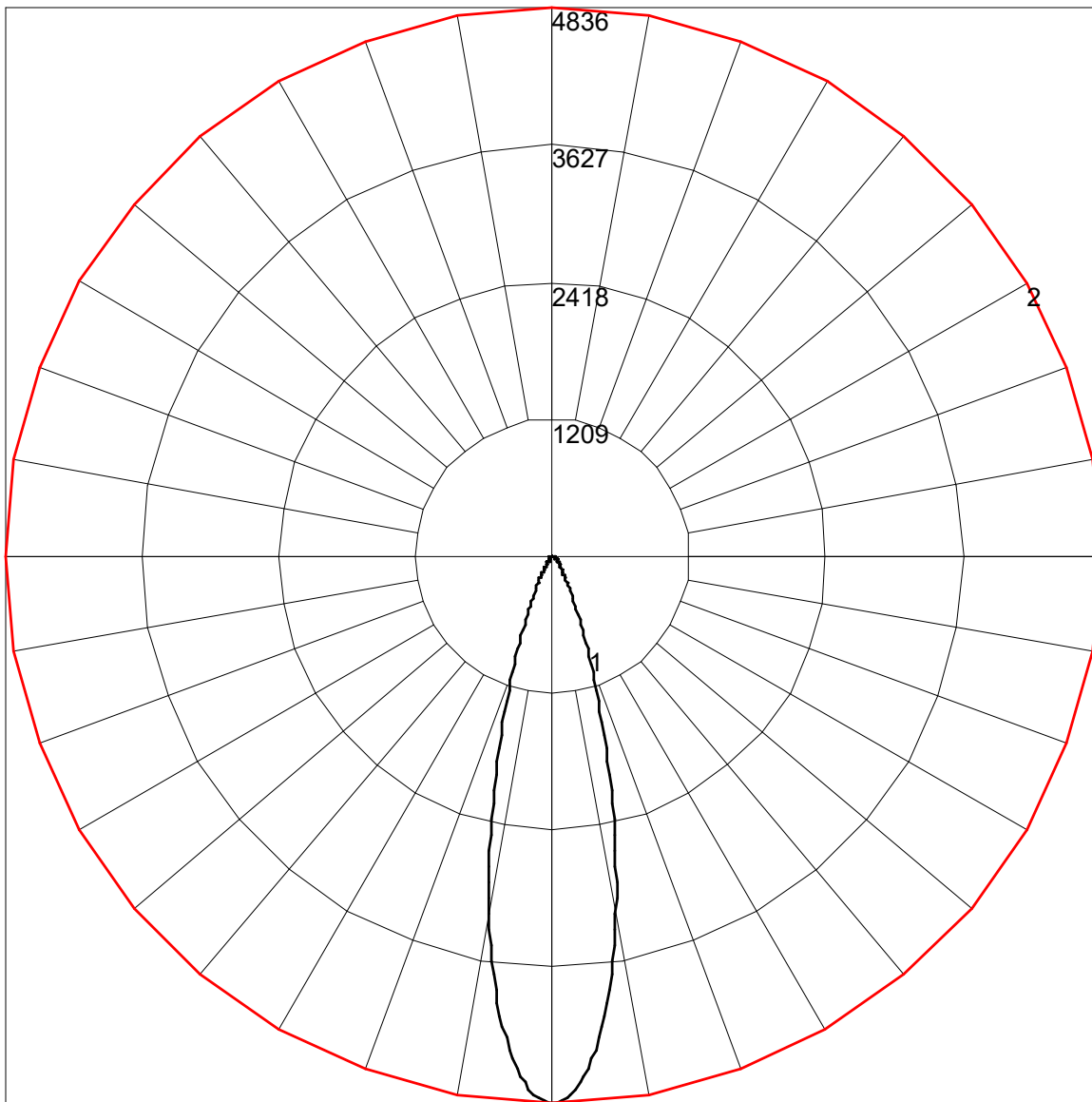
4H	2H	10.0	10.8	10.4	11.1	11.5
	3H	11.6	12.2	12.0	12.6	13.0
	4H	12.2	12.8	12.6	13.2	13.6
	6H	12.6	13.1	13.1	13.6	14.1
	8H	12.8	13.2	13.3	13.7	14.2
	12H	12.8	13.2	13.3	13.7	14.2

8H	4H	12.4	12.8	12.8	13.3	13.7
	6H	12.9	13.3	13.4	13.8	14.3
	8H	13.1	13.4	13.7	14.0	14.5
	12H	13.2	13.5	13.8	14.0	14.6

12H	4H	12.3	12.7	12.8	13.2	13.7
	6H	12.9	13.3	13.5	13.7	14.3
	8H	13.2	13.5	13.7	14.0	14.5

Maximum UGR = 14.6

POLAR GRAPH



Maximum Candela = 4836.073 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.)