



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.09

[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-LM-OF-WH 3000k

[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	1285
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)	0.60
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	5741	5741	5741
55	4203	4203	4203
65	3425	3425	3425
75	2787	2787	2787
85	1833	1833	1833

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CANDELA TABULATION

	<u>0</u>
0.0	3034.474
0.5	3033.075
1.0	3028.878
1.5	3022.583
2.0	3014.188
2.5	3002.297
3.0	2989.006
3.5	2973.617
4.0	2955.430
4.5	2936.543
5.0	2915.558
5.5	2891.774
6.0	2865.892
6.5	2837.212
7.0	2806.434
7.5	2772.858
8.0	2735.784
8.5	2695.911
9.0	2653.941
9.5	2609.172
10.0	2560.906
10.5	2509.842
11.0	2455.280
11.5	2396.521
12.0	2335.664
12.5	2271.309
13.0	2204.156
13.5	2133.505
14.0	2060.756
14.5	1985.209
15.0	1908.263
15.5	1829.918
16.0	1751.573
16.5	1672.528
17.0	1595.582
17.5	1518.636
18.0	1440.991
18.5	1364.744
19.0	1289.197
19.5	1216.448
20.0	1145.797
20.5	1077.945
21.0	1014.289
21.5	953.432
22.0	892.575
22.5	835.215
23.0	780.653
23.5	728.889
24.0	680.693
24.5	635.085
25.0	592.485
25.5	552.333
26.0	515.119
26.5	480.284

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CANDELA TABULATION - (Cont.)

27.0	447.896
27.5	417.887
28.0	389.907
28.5	364.025
29.0	340.032
29.5	317.647
30.0	296.942
30.5	277.636
31.0	259.728
31.5	243.080
32.0	227.551
32.5	213.141
33.0	199.710
33.5	187.189
34.0	175.647
34.5	164.944
35.0	154.941
35.5	145.778
36.0	137.244
36.5	129.479
37.0	122.274
37.5	115.699
38.0	109.753
38.5	104.227
39.0	99.191
39.5	94.574
40.0	90.377
40.5	86.459
41.0	82.892
41.5	79.604
42.0	76.526
42.5	73.728
43.0	71.070
43.5	68.622
44.0	66.383
44.5	64.215
45.0	62.186
45.5	60.298
46.0	58.549
46.5	56.870
47.0	55.261
47.5	53.722
48.0	52.323
48.5	50.924
49.0	49.595
49.5	48.336
50.0	47.147
50.5	45.958
51.0	44.839
51.5	43.719
52.0	42.670
52.5	41.691
53.0	40.642
53.5	39.662
54.0	38.753
54.5	37.843

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CANDELA TABULATION - (Cont.)

55.0	36.934
55.5	36.025
56.0	35.185
56.5	34.346
57.0	33.507
57.5	32.667
58.0	31.898
58.5	31.128
59.0	30.359
59.5	29.659
60.0	28.960
60.5	28.190
61.0	27.491
61.5	26.791
62.0	26.092
62.5	25.462
63.0	24.763
63.5	24.133
64.0	23.504
64.5	22.874
65.0	22.174
65.5	21.545
66.0	20.915
66.5	20.356
67.0	19.726
67.5	19.097
68.0	18.537
68.5	17.977
69.0	17.348
69.5	16.788
70.0	16.229
70.5	15.669
71.0	15.179
71.5	14.620
72.0	14.060
72.5	13.570
73.0	13.011
73.5	12.521
74.0	12.032
74.5	11.542
75.0	11.052
75.5	10.563
76.0	10.073
76.5	9.583
77.0	9.094
77.5	8.674
78.0	8.184
78.5	7.765
79.0	7.345
79.5	6.855
80.0	6.435
80.5	6.016
81.0	5.596
81.5	5.176
82.0	4.757
82.5	4.337

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CANDELA TABULATION - (Cont.)

83.0	3.987
83.5	3.568
84.0	3.218
84.5	2.798
85.0	2.448
85.5	2.099
86.0	1.749
86.5	1.469
87.0	1.189
87.5	0.979
88.0	0.769
88.5	0.630
89.0	0.490
89.5	0.350
90.0	0.210
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
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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
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148.5	0.000
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150.5	0.000
151.0	0.000
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152.0	0.000
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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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Zone	Lumens	%Lamp	%Fixt
0-20	780.42	N.A.	60.70
0-30	1063.07	N.A.	82.70
0-40	1165.85	N.A.	90.70
0-60	1248.47	N.A.	97.10
0-80	1282.28	N.A.	99.80
0-90	1285.27	N.A.	100.00
10-90	1018.04	N.A.	79.20
20-40	385.42	N.A.	30.00
20-50	434.77	N.A.	33.80
40-70	104.69	N.A.	8.10
60-80	33.81	N.A.	2.60
70-80	11.74	N.A.	0.90
80-90	2.99	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	1285.27	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	267.22
10-20	513.20
20-30	282.64
30-40	102.78
40-50	49.34
50-60	33.28
60-70	22.07
70-80	11.74
80-90	2.99
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	89	98	94	91	88	91	89	87	89	87	85	86	84	83	81
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	86	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	64	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

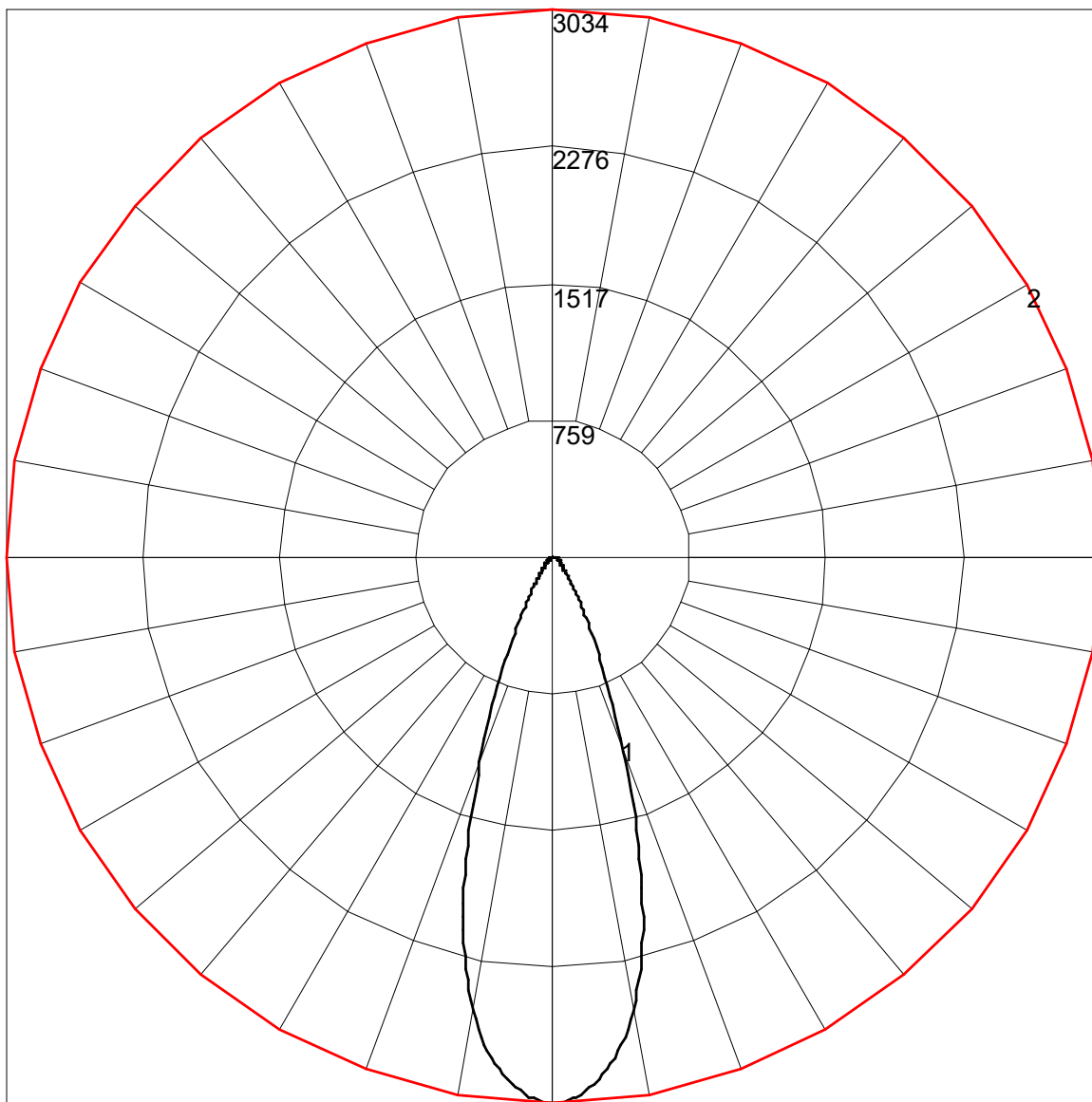
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UGR TABLE - CORRECTED

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					UGR Viewed Endwise				
X=2H	Y=2H	10.7	11.7	11.0	12.0	12.3	10.7	11.7	11.0	12.0	12.3
	3H	12.1	13.0	12.5	13.3	13.7	12.1	13.0	12.5	13.3	13.7
	4H	12.6	13.4	13.0	13.8	14.2	12.6	13.4	13.0	13.8	14.2
	6H	12.9	13.7	13.4	14.1	14.5	12.9	13.7	13.4	14.1	14.5
	8H	13.0	13.7	13.5	14.1	14.5	13.0	13.7	13.5	14.1	14.5
	12H	13.1	13.7	13.5	14.1	14.6	13.1	13.7	13.5	14.1	14.6
4H	2H	11.1	11.9	11.5	12.3	12.7	11.1	11.9	11.5	12.3	12.7
	3H	12.7	13.4	13.1	13.8	14.2	12.7	13.4	13.1	13.8	14.2
	4H	13.3	13.9	13.7	14.3	14.8	13.3	13.9	13.7	14.3	14.8
	6H	13.8	14.3	14.2	14.7	15.2	13.8	14.3	14.2	14.7	15.2
	8H	13.9	14.4	14.4	14.8	15.3	13.9	14.4	14.4	14.8	15.3
	12H	14.0	14.4	14.4	14.9	15.3	14.0	14.4	14.4	14.9	15.3
8H	4H	13.5	14.0	14.0	14.4	14.9	13.5	14.0	14.0	14.4	14.9
	6H	14.0	14.4	14.6	14.9	15.4	14.0	14.4	14.6	14.9	15.4
	8H	14.2	14.6	14.8	15.1	15.6	14.2	14.6	14.8	15.1	15.6
	12H	14.4	14.7	14.9	15.2	15.7	14.4	14.7	14.9	15.2	15.7
12H	4H	13.5	13.9	14.0	14.4	14.8	13.5	13.9	14.0	14.4	14.8
	6H	14.1	14.4	14.6	14.9	15.4	14.1	14.4	14.6	14.9	15.4
	8H	14.3	14.6	14.8	15.1	15.7	14.3	14.6	14.8	15.1	15.7

Maximum UGR = 15.7

POLAR GRAPH



Maximum Candela = 3034.474 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.)