



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L33-8TW-DIM-UNV-LW-OF-WH_4000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL#12326812.07

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 21 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L33-8TW-DIM-UNV-LW-OF-WH 4000k

[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	3307
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	74
Total Luminaire Watts	44.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.08
Spacing Criterion (90-270)	1.08
Spacing Criterion (Diagonal)	0.98
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	54974	54974	54974
55	45768	45768	45768
65	34771	34771	34771
75	25215	25215	25215
85	16432	16432	16432

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CANDELA TABULATION

	<u>0</u>
0.0	2103.609
0.5	2103.185
1.0	2101.491
1.5	2098.950
2.0	2095.773
2.5	2091.537
3.0	2087.302
3.5	2082.431
4.0	2077.983
4.5	2073.536
5.0	2070.359
5.5	2067.394
6.0	2064.641
6.5	2061.888
7.0	2058.923
7.5	2056.170
8.0	2053.417
8.5	2050.876
9.0	2048.334
9.5	2046.217
10.0	2044.099
10.5	2042.404
11.0	2040.922
11.5	2040.075
12.0	2038.592
12.5	2037.110
13.0	2034.992
13.5	2032.239
14.0	2028.851
14.5	2025.039
15.0	2021.015
15.5	2015.932
16.0	2010.426
16.5	2004.919
17.0	1999.413
17.5	1993.695
18.0	1987.554
18.5	1980.565
19.0	1972.729
19.5	1964.046
20.0	1954.092
20.5	1943.292
21.0	1929.949
21.5	1914.066
22.0	1896.065
22.5	1875.734
23.0	1853.497
23.5	1829.354
24.0	1802.670
24.5	1773.868
25.0	1742.736
25.5	1710.334
26.0	1675.814
26.5	1639.811

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CANDELA TABULATION - (Cont.)

27.0	1601.479
27.5	1562.088
28.0	1520.579
28.5	1476.741
29.0	1431.208
29.5	1383.346
30.0	1334.213
30.5	1283.597
31.0	1232.982
31.5	1181.943
32.0	1132.387
32.5	1084.948
33.0	1039.415
33.5	996.848
34.0	957.668
34.5	922.089
35.0	890.322
35.5	861.097
36.0	835.471
36.5	811.964
37.0	790.998
37.5	772.149
38.0	754.995
38.5	739.323
39.0	724.499
39.5	711.157
40.0	698.238
40.5	686.167
41.0	674.942
41.5	663.930
42.0	653.341
42.5	643.599
43.0	633.645
43.5	623.903
44.0	614.373
44.5	605.055
45.0	595.525
45.5	586.418
46.0	577.100
46.5	567.782
47.0	558.252
47.5	548.933
48.0	539.403
48.5	529.873
49.0	520.343
49.5	510.389
50.0	500.859
50.5	491.117
51.0	481.376
51.5	471.422
52.0	461.468
52.5	451.515
53.0	441.561
53.5	431.607
54.0	422.077
54.5	412.335

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CANDELA TABULATION - (Cont.)

55.0	402.170
55.5	392.216
56.0	382.263
56.5	372.944
57.0	363.626
57.5	353.884
58.0	344.142
58.5	334.612
59.0	325.294
59.5	315.975
60.0	307.081
60.5	298.186
61.0	289.503
61.5	280.820
62.0	272.561
62.5	264.301
63.0	256.254
63.5	248.206
64.0	240.370
64.5	232.746
65.0	225.122
65.5	217.710
66.0	210.319
66.5	203.054
67.0	195.875
67.5	188.844
68.0	181.940
68.5	175.015
69.0	168.301
69.5	161.652
70.0	155.192
70.5	148.945
71.0	142.824
71.5	136.894
72.0	131.176
72.5	125.628
73.0	120.227
73.5	114.933
74.0	109.850
74.5	104.873
75.0	99.981
75.5	95.259
76.0	90.621
76.5	86.067
77.0	81.641
77.5	77.300
78.0	73.085
78.5	68.956
79.0	64.911
79.5	61.014
80.0	57.138
80.5	53.390
81.0	49.684
81.5	45.999
82.0	42.398
82.5	38.819

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CANDELA TABULATION - (Cont.)

83.0	35.325
83.5	31.894
84.0	28.506
84.5	25.181
85.0	21.940
85.5	18.806
86.0	15.778
86.5	12.855
87.0	10.017
87.5	7.645
88.0	5.845
88.5	4.278
89.0	2.965
89.5	1.864
90.0	1.186
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-L33-8TW-DIM-UNV-LW-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
120.5	0.000
121.0	0.000
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122.0	0.000
122.5	0.000
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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
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149.0	0.000
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150.0	0.000
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151.0	0.000
151.5	0.000
152.0	0.000
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153.0	0.000
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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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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	766.28	N.A.	23.20
0-30	1548.96	N.A.	46.80
0-40	2129.32	N.A.	64.40
0-60	2948.78	N.A.	89.20
0-80	3280.71	N.A.	99.20
0-90	3306.94	N.A.	100.00
10-90	3110.08	N.A.	94.00
20-40	1363.04	N.A.	41.20
20-50	1822.93	N.A.	55.10
40-70	1043.86	N.A.	31.60
60-80	331.92	N.A.	10.00
70-80	107.52	N.A.	3.30
80-90	26.23	N.A.	0.80
90-110	0.03	N.A.	0.00
90-120	0.03	N.A.	0.00
90-130	0.03	N.A.	0.00
90-150	0.03	N.A.	0.00
90-180	0.03	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3306.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	196.85
10-20	569.42
20-30	782.68
30-40	580.36
40-50	459.88
50-60	359.58
60-70	224.40
70-80	107.52
80-90	26.23
90-100	0.03
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	218	218	218	218	213	213	213	213	204	204	204	195	195	195	187	187	187	183
1	203	196	190	184	199	192	187	181	185	180	176	178	174	170	171	168	165	162
2	189	176	166	158	184	173	164	156	167	159	152	161	155	149	156	150	146	142
3	175	159	147	137	171	156	145	136	151	141	133	146	138	131	142	135	129	126
4	163	145	131	121	159	142	130	120	138	127	118	134	124	117	130	122	115	112
5	152	132	118	108	149	130	117	107	126	115	106	123	113	105	120	111	104	101
6	142	121	107	97	139	120	106	97	116	105	96	114	103	95	111	102	94	91
7	133	112	98	88	130	110	97	88	108	96	87	105	95	87	103	93	86	83
8	125	104	90	81	123	102	89	80	100	88	80	98	87	80	96	86	79	76
9	118	96	83	74	116	95	83	74	93	82	74	92	81	73	90	80	73	70
10	112	90	77	69	109	89	77	68	88	76	68	86	75	68	84	75	68	65

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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	21.1	22.5	21.5	22.8	23.1	21.1	22.5	21.5	22.8	23.1
	3H	22.3	23.6	22.7	23.9	24.2	22.3	23.6	22.7	23.9	24.2
	4H	22.7	23.9	23.1	24.2	24.6	22.7	23.9	23.1	24.2	24.6
	6H	23.0	24.0	23.4	24.4	24.8	23.0	24.0	23.4	24.4	24.8
	8H	23.1	24.1	23.5	24.5	24.9	23.1	24.1	23.5	24.5	24.9
	12H	23.1	24.1	23.5	24.4	24.9	23.1	24.1	23.5	24.4	24.9

UGR Viewed Endwise

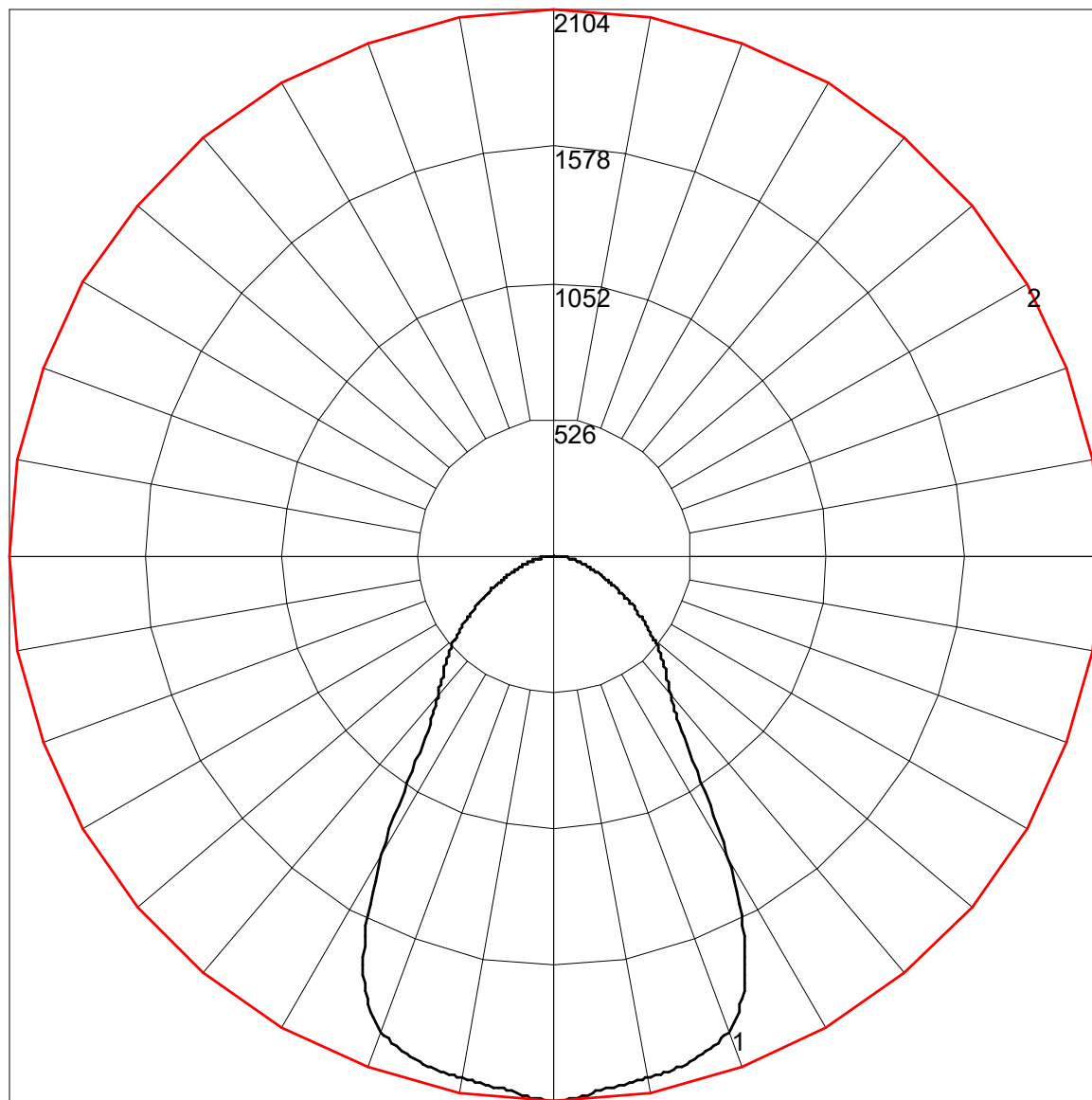
4H	2H	21.5	22.7	21.9	23.0	23.4	21.5	22.7	21.9	23.0	23.4
	3H	22.9	23.9	23.3	24.3	24.7	22.9	23.9	23.3	24.3	24.7
	4H	23.4	24.3	23.9	24.7	25.1	23.4	24.3	23.9	24.7	25.1
	6H	23.8	24.5	24.3	25.0	25.4	23.8	24.5	24.3	25.0	25.4
	8H	23.9	24.6	24.3	25.0	25.5	23.9	24.6	24.3	25.0	25.5
	12H	24.0	24.6	24.4	25.1	25.5	24.0	24.6	24.4	25.1	25.5

8H	4H	23.6	24.3	24.0	24.7	25.2	23.6	24.3	24.0	24.7	25.2
	6H	24.0	24.6	24.5	25.1	25.6	24.0	24.6	24.5	25.1	25.6
	8H	24.2	24.7	24.7	25.2	25.7	24.2	24.7	24.7	25.2	25.7
	12H	24.3	24.8	24.8	25.3	25.8	24.3	24.8	24.8	25.3	25.8

12H	4H	23.6	24.2	24.1	24.7	25.1	23.6	24.2	24.1	24.7	25.1
	6H	24.1	24.6	24.6	25.0	25.6	24.1	24.6	24.6	25.0	25.6
	8H	24.3	24.7	24.8	25.2	25.8	24.3	24.7	24.8	25.2	25.8

Maximum UGR = 25.8

POLAR GRAPH



Maximum Candela = 2103.609 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.)