



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V4DR-L34-835-DIM-UNV-LW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12316380.07

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V4DR-L34-835-DIM-UNV-LW-OF-WH

[LUMINAIRE] Black formed aluminum housing, white reflector, clear patterned glass lens

[LAMP] One white LED

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Corridor, Hotel, Industrial, Office, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3363
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	65
Total Luminaire Watts	51.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.00
Spacing Criterion (90-270)	1.00
Spacing Criterion (Diagonal)	0.90
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.35 ft (Diameter)
Luminous Width (90-270)	0.35 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	92811	92811	92811
55	76263	76263	76263
65	55791	55791	55791
75	38623	38623	38623
85	21055	21055	21055

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CANDELA TABULATION

	<u>0</u>
0.0	2362.514
0.5	2361.767
1.0	2360.274
1.5	2358.284
2.0	2356.293
2.5	2354.054
3.0	2351.068
3.5	2349.326
4.0	2348.082
4.5	2347.336
5.0	2346.341
5.5	2345.345
6.0	2344.599
6.5	2343.604
7.0	2342.857
7.5	2342.360
8.0	2342.111
8.5	2341.364
9.0	2340.618
9.5	2339.125
10.0	2338.130
10.5	2336.388
11.0	2334.646
11.5	2332.407
12.0	2329.919
12.5	2326.933
13.0	2323.449
13.5	2319.468
14.0	2314.492
14.5	2308.521
15.0	2301.305
15.5	2292.596
16.0	2282.892
16.5	2271.447
17.0	2259.006
17.5	2245.072
18.0	2228.650
18.5	2211.731
19.0	2193.318
19.5	2172.667
20.0	2150.024
20.5	2125.391
21.0	2098.768
21.5	2070.154
22.0	2038.554
22.5	2004.964
23.0	1968.886
23.5	1930.070
24.0	1888.269
24.5	1843.731
25.0	1795.461
25.5	1744.951
26.0	1690.958
26.5	1633.730

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CANDELA TABULATION - (Cont.)

27.0	1574.512
27.5	1512.805
28.0	1450.103
28.5	1387.153
29.0	1325.446
29.5	1264.984
30.0	1206.761
30.5	1152.021
31.0	1100.765
31.5	1053.987
32.0	1011.440
32.5	973.122
33.0	939.034
33.5	908.678
34.0	881.557
34.5	857.671
35.0	836.024
35.5	816.367
36.0	798.950
36.5	782.528
37.0	767.599
37.5	753.666
38.0	740.727
38.5	728.286
39.0	716.841
39.5	705.644
40.0	695.194
40.5	684.743
41.0	674.791
41.5	665.087
42.0	655.881
42.5	646.674
43.0	637.468
43.5	628.262
44.0	619.056
44.5	609.850
45.0	600.643
45.5	591.437
46.0	582.231
46.5	573.025
47.0	563.321
47.5	553.617
48.0	543.913
48.5	533.960
49.0	523.759
49.5	513.557
50.0	503.605
50.5	493.403
51.0	483.202
51.5	473.000
52.0	463.048
52.5	453.095
53.0	442.894
53.5	432.443
54.0	421.744
54.5	411.045

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CANDELA TABULATION - (Cont.)

55.0	400.346
55.5	389.647
56.0	379.197
56.5	368.995
57.0	358.794
57.5	348.592
58.0	338.639
58.5	328.936
59.0	319.232
59.5	309.777
60.0	300.570
60.5	291.364
61.0	282.407
61.5	273.698
62.0	264.990
62.5	256.281
63.0	247.971
63.5	239.710
64.0	231.599
64.5	223.611
65.0	215.799
65.5	208.185
66.0	200.671
66.5	193.355
67.0	186.214
67.5	179.198
68.0	172.405
68.5	165.762
69.0	159.118
69.5	152.699
70.0	146.453
70.5	140.308
71.0	134.311
71.5	128.464
72.0	122.816
72.5	117.242
73.0	111.818
73.5	106.543
74.0	101.368
74.5	96.367
75.0	91.490
75.5	86.762
76.0	82.134
76.5	77.631
77.0	73.326
77.5	69.047
78.0	64.916
78.5	60.910
79.0	56.979
79.5	53.197
80.0	49.490
80.5	45.882
81.0	42.324
81.5	38.865
82.0	35.481
82.5	32.197

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CANDELA TABULATION - (Cont.)

83.0	28.937
83.5	25.777
84.0	22.692
84.5	19.681
85.0	16.795
85.5	14.008
86.0	11.346
86.5	8.833
87.0	6.619
87.5	4.777
88.0	3.334
88.5	2.115
89.0	1.319
89.5	0.896
90.0	0.622
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
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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
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147.0	0.000
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151.0	0.000
151.5	0.000
152.0	0.000
152.5	0.000
153.0	0.000
153.5	0.000
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154.5	0.000
155.0	0.000
155.5	0.000
156.0	0.000
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157.5	0.000
158.0	0.000
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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	867.80	N.A.	25.80
0-30	1664.53	N.A.	49.50
0-40	2207.24	N.A.	65.60
0-60	3027.62	N.A.	90.00
0-80	3342.1	N.A.	99.40
0-90	3363.13	N.A.	100.00
10-90	3139.36	N.A.	93.30
20-40	1339.44	N.A.	39.80
20-50	1802.02	N.A.	53.60
40-70	1036.15	N.A.	30.80
60-80	314.48	N.A.	9.40
70-80	98.71	N.A.	2.90
80-90	21.03	N.A.	0.60
90-110	0.02	N.A.	0.00
90-120	0.02	N.A.	0.00
90-130	0.02	N.A.	0.00
90-150	0.02	N.A.	0.00
90-180	0.02	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3363.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	223.77
10-20	644.02
20-30	796.74
30-40	542.71
40-50	462.57
50-60	357.80
60-70	215.78
70-80	98.71
80-90	21.03
90-100	0.02
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	198	198	198	198	193	193	193	193	185	185	185	177	177	177	170	170	170	166
1	185	179	173	168	181	175	170	166	168	164	160	162	159	156	156	153	151	148
2	172	161	152	145	168	158	150	143	153	146	140	147	142	137	143	138	134	130
3	160	146	135	126	156	143	133	125	139	130	123	134	127	121	130	124	119	116
4	149	133	121	112	146	131	120	111	127	117	110	123	115	108	120	113	107	104
5	139	122	109	100	136	120	108	100	117	106	99	114	105	98	111	103	97	94
6	131	112	99	90	128	111	99	90	108	97	89	105	96	89	103	95	88	85
7	123	104	91	83	120	102	91	82	100	89	82	98	88	81	96	87	81	78
8	116	96	84	76	113	95	84	76	93	83	75	91	82	75	89	81	74	72
9	109	90	78	70	107	89	78	70	87	77	70	86	76	69	84	75	69	66
10	103	84	73	65	101	83	72	65	82	72	65	80	71	64	79	70	64	62

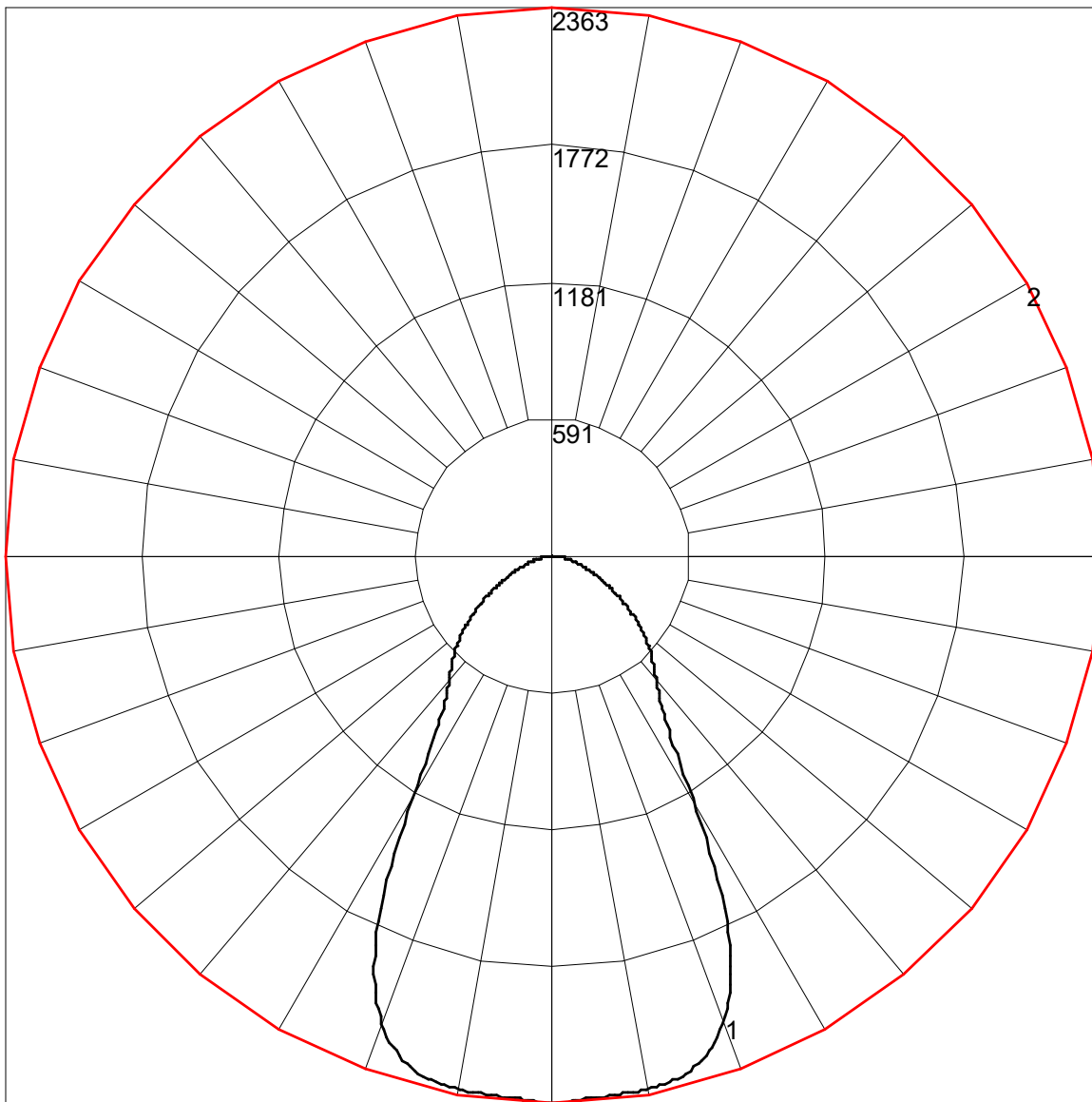
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UGR TABLE - CORRECTED

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	23.1	24.5	23.5	24.8	25.1	23.1	24.5	23.5	24.8	25.1
	3H	24.2	25.4	24.6	25.8	26.1	24.2	25.4	24.6	25.8	26.1
	4H	24.6	25.7	25.0	26.1	26.4	24.6	25.7	25.0	26.1	26.4
	6H	24.8	25.8	25.2	26.2	26.6	24.8	25.8	25.2	26.2	26.6
	8H	24.8	25.8	25.3	26.2	26.6	24.8	25.8	25.3	26.2	26.6
	12H	24.8	25.8	25.3	26.2	26.6	24.8	25.8	25.3	26.2	26.6
4H	2H	23.5	24.6	23.9	25.0	25.3	23.5	24.6	23.9	25.0	25.3
	3H	24.8	25.7	25.2	26.1	26.5	24.8	25.7	25.2	26.1	26.5
	4H	25.2	26.1	25.6	26.5	26.9	25.2	26.1	25.6	26.5	26.9
	6H	25.5	26.3	26.0	26.7	27.2	25.5	26.3	26.0	26.7	27.2
	8H	25.6	26.3	26.1	26.7	27.2	25.6	26.3	26.1	26.7	27.2
	12H	25.6	26.2	26.1	26.7	27.2	25.6	26.2	26.1	26.7	27.2
8H	4H	25.3	26.0	25.8	26.5	26.9	25.3	26.0	25.8	26.5	26.9
	6H	25.7	26.3	26.2	26.8	27.3	25.7	26.3	26.2	26.8	27.3
	8H	25.8	26.3	26.4	26.9	27.3	25.8	26.3	26.4	26.9	27.3
	12H	25.9	26.4	26.4	26.8	27.4	25.9	26.4	26.4	26.8	27.4
12H	4H	25.3	25.9	25.8	26.4	26.9	25.3	25.9	25.8	26.4	26.9
	6H	25.7	26.2	26.3	26.7	27.2	25.7	26.2	26.3	26.7	27.2
	8H	25.9	26.3	26.4	26.8	27.4	25.9	26.3	26.4	26.8	27.4

Maximum UGR = 27.4

POLAR GRAPH



Maximum Candela = 2362.514 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.)