



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V4DR-L7-835-DIM-UNV-LN-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12316380.10

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 10 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V4DR-L7-835-DIM-UNV-LN-OF-WH

[LUMINAIRE] Black formed aluminum housing, white reflector, clear plas

[MORE] tic optic, clear glass patterned enclosure

[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	914
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	85
Total Luminaire Watts	10.7
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)	0.35 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	6000	6000	6000
55	4501	4501	4501
65	3725	3725	3725
75	3030	3030	3030
85	1687	1687	1687

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-L7-835-DIM-UNV-LN-OF-WH_.IES

CANDELA TABULATION

	<u>0</u>
0.0	3432.172
0.5	3428.184
1.0	3416.719
1.5	3398.773
2.0	3373.349
2.5	3341.944
3.0	3304.058
3.5	3260.190
4.0	3210.340
4.5	3155.505
5.0	3096.183
5.5	3031.877
6.0	2963.084
6.5	2888.807
7.0	2810.543
7.5	2728.789
8.0	2642.050
8.5	2552.818
9.0	2460.596
9.5	2366.379
10.0	2270.667
10.5	2173.460
11.0	2074.258
11.5	1975.057
12.0	1876.852
12.5	1779.146
13.0	1682.936
13.5	1588.221
14.0	1495.998
14.5	1406.767
15.0	1321.025
15.5	1238.274
16.0	1159.012
16.5	1083.240
17.0	1011.955
17.5	943.660
18.0	879.354
18.5	819.035
19.0	762.705
19.5	710.362
20.0	661.011
20.5	614.152
21.0	570.284
21.5	530.404
22.0	491.970
22.5	456.227
23.0	422.828
23.5	391.921
24.0	363.157
24.5	336.238
25.0	311.463
25.5	288.631
26.0	267.445
26.5	248.004

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-L7-835-DIM-UNV-LN-OF-WH_.IES

CANDELA TABULATION - (Cont.)

27.0	230.058
27.5	213.607
28.0	198.553
28.5	184.744
29.0	172.082
29.5	160.417
30.0	149.799
30.5	140.029
31.0	131.056
31.5	122.880
32.0	115.453
32.5	108.523
33.0	102.192
33.5	96.360
34.0	91.076
34.5	86.191
35.0	81.754
35.5	77.716
36.0	73.928
36.5	70.488
37.0	67.347
37.5	64.406
38.0	61.764
38.5	59.321
39.0	57.028
39.5	54.885
40.0	52.891
40.5	51.046
41.0	49.351
41.5	47.756
42.0	46.261
42.5	44.865
43.0	43.519
43.5	42.273
44.0	41.076
44.5	39.930
45.0	38.833
45.5	37.836
46.0	36.839
46.5	35.892
47.0	34.995
47.5	34.097
48.0	33.250
48.5	32.402
49.0	31.605
49.5	30.807
50.0	30.060
50.5	29.362
51.0	28.614
51.5	27.966
52.0	27.268
52.5	26.620
53.0	26.022
53.5	25.374
54.0	24.775
54.5	24.227

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-L7-835-DIM-UNV-LN-OF-WH_.IES

CANDELA TABULATION - (Cont.)

55.0	23.629
55.5	23.081
56.0	22.532
56.5	21.984
57.0	21.485
57.5	20.987
58.0	20.488
58.5	19.990
59.0	19.541
59.5	19.093
60.0	18.644
60.5	18.195
61.0	17.747
61.5	17.298
62.0	16.849
62.5	16.450
63.0	16.002
63.5	15.603
64.0	15.204
64.5	14.805
65.0	14.407
65.5	14.008
66.0	13.609
66.5	13.210
67.0	12.861
67.5	12.462
68.0	12.114
68.5	11.715
69.0	11.366
69.5	10.967
70.0	10.618
70.5	10.269
71.0	9.920
71.5	9.571
72.0	9.222
72.5	8.873
73.0	8.524
73.5	8.175
74.0	7.826
74.5	7.527
75.0	7.178
75.5	6.829
76.0	6.530
76.5	6.181
77.0	5.882
77.5	5.533
78.0	5.234
78.5	4.935
79.0	4.636
79.5	4.337
80.0	4.038
80.5	3.739
81.0	3.440
81.5	3.190
82.0	2.891
82.5	2.642

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-L7-835-DIM-UNV-LN-OF-WH_.IES

CANDELA TABULATION - (Cont.)

83.0	2.343
83.5	2.094
84.0	1.844
84.5	1.595
85.0	1.346
85.5	1.147
86.0	0.997
86.5	0.798
87.0	0.648
87.5	0.548
88.0	0.399
88.5	0.299
89.0	0.199
89.5	0.150
90.0	0.100
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 : V4DR-L7-835-DIM-UNV-LN-OF-WH_.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 : V4DR-L7-835-DIM-UNV-LN-OF-WH_.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 : V4DR-L7-835-DIM-UNV-LN-OF-WH_.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 : V4DR-L7-835-DIM-UNV-LN-OF-WH_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	632.55	N.A.	69.20
0-30	784.07	N.A.	85.80
0-40	838.27	N.A.	91.70
0-60	890.08	N.A.	97.40
0-80	912.01	N.A.	99.80
0-90	913.77	N.A.	100.00
10-90	645.01	N.A.	70.60
20-40	205.72	N.A.	22.50
20-50	236.22	N.A.	25.90
40-70	66.13	N.A.	7.20
60-80	21.93	N.A.	2.40
70-80	7.62	N.A.	0.80
80-90	1.76	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	913.77	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	268.76
10-20	363.79
20-30	151.53
30-40	54.19
40-50	30.50
50-60	21.31
60-70	14.31
70-80	7.62
80-90	1.76
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 : V4DR-L7-835-DIM-UNV-LN-OF-WH_.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	59	59	59	59	58	58	58	58	55	55	55	53	53	53	51	51	51	50
1	57	56	55	54	56	55	54	53	53	52	51	51	50	50	49	49	48	47
2	55	52	51	49	54	52	50	49	50	49	48	49	48	47	47	46	46	45
3	52	50	48	46	52	49	47	46	48	46	45	47	45	44	46	44	44	43
4	51	47	45	43	50	47	45	43	46	44	43	45	43	42	44	43	42	41
5	49	45	43	41	48	45	43	41	44	42	41	43	42	40	42	41	40	39
6	47	43	41	39	46	43	41	39	42	40	39	42	40	39	41	40	38	38
7	45	42	39	38	45	41	39	37	41	39	37	40	38	37	40	38	37	36
8	44	40	38	36	43	40	38	36	39	37	36	39	37	36	39	37	36	35
9	43	39	36	35	42	39	36	35	38	36	35	38	36	35	37	36	35	34
10	41	38	35	34	41	37	35	34	37	35	34	37	35	34	36	35	33	33

IES INDOOR REPORT
PHOTOMETRIC FILENAME : V4DR-L7-835-DIM-UNV-LN-OF-WH_.IES

UGR TABLE - CORRECTED

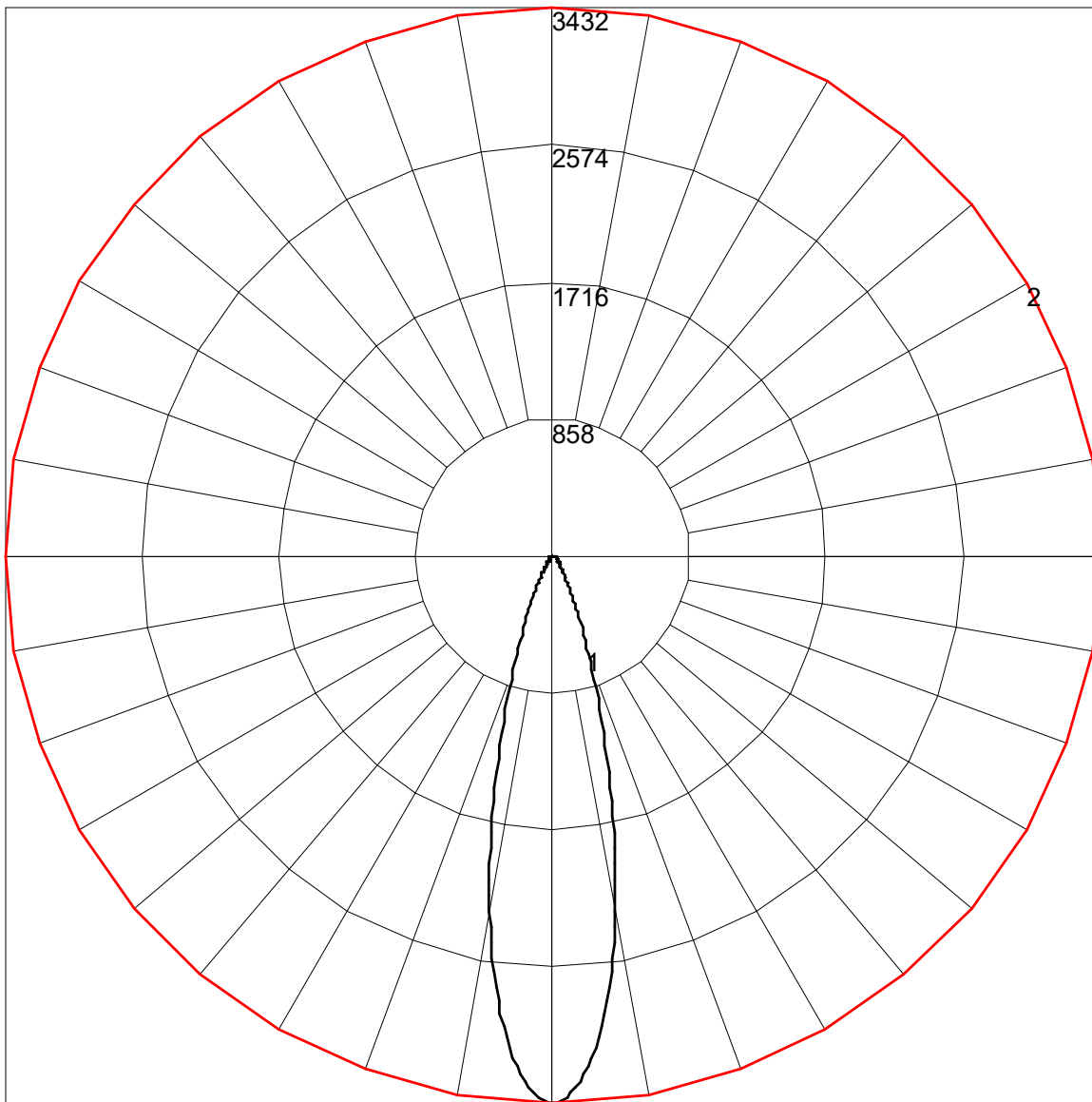
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	12.7	13.7	13.1	14.0	14.4	12.7	13.7	13.1	14.0	14.4
	3H	14.2	15.1	14.6	15.4	15.8	14.2	15.1	14.6	15.4	15.8
	4H	14.7	15.5	15.1	15.9	16.3	14.7	15.5	15.1	15.9	16.3
	6H	15.0	15.8	15.4	16.1	16.5	15.0	15.8	15.4	16.1	16.5
	8H	15.1	15.8	15.5	16.2	16.6	15.1	15.8	15.5	16.2	16.6
	12H	15.1	15.8	15.6	16.2	16.6	15.1	15.8	15.6	16.2	16.6
4H	2H	13.2	14.0	13.6	14.3	14.7	13.2	14.0	13.6	14.3	14.7
	3H	14.8	15.5	15.2	15.9	16.3	14.8	15.5	15.2	15.9	16.3
	4H	15.4	16.0	15.9	16.4	16.9	15.4	16.0	15.9	16.4	16.9
	6H	15.9	16.4	16.3	16.8	17.3	15.9	16.4	16.3	16.8	17.3
	8H	16.0	16.4	16.5	16.9	17.4	16.0	16.4	16.5	16.9	17.4
	12H	16.0	16.4	16.5	16.9	17.4	16.0	16.4	16.5	16.9	17.4
8H	4H	15.6	16.1	16.1	16.5	17.0	15.6	16.1	16.1	16.5	17.0
	6H	16.1	16.5	16.7	17.0	17.5	16.1	16.5	16.7	17.0	17.5
	8H	16.3	16.6	16.8	17.1	17.6	16.3	16.6	16.8	17.1	17.6
	12H	16.4	16.7	16.9	17.2	17.7	16.4	16.7	16.9	17.2	17.7
12H	4H	15.6	16.0	16.1	16.5	16.9	15.6	16.0	16.1	16.5	16.9
	6H	16.2	16.5	16.7	16.9	17.5	16.2	16.5	16.7	16.9	17.5
	8H	16.3	16.6	16.9	17.1	17.7	16.3	16.6	16.9	17.1	17.7

Maximum UGR = 17.7

POLAR GRAPH



Maximum Candela = 3432.172 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.)