



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L12-835-DIM-UNV-LN-OF-WH\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12326812.10

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L12-835-DIM-UNV-LN-OF-WH

[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	1384
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	93
Total Luminaire Watts	14.9
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	5205	5205	5205
55	3809	3809	3809
65	3097	3097	3097
75	2529	2529	2529
85	1637	1637	1637

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CANDELA TABULATION

	<u>0</u>
0.0	5176.431
0.5	5171.908
1.0	5156.832
1.5	5130.449
2.0	5094.266
2.5	5048.283
3.0	4993.255
3.5	4928.427
4.0	4854.553
4.5	4773.141
5.0	4684.945
5.5	4588.457
6.0	4484.431
6.5	4373.621
7.0	4256.026
7.5	4132.401
8.0	4001.991
8.5	3867.813
9.0	3730.619
9.5	3588.902
10.0	3445.677
10.5	3300.192
11.0	3152.444
11.5	3003.943
12.0	2855.442
12.5	2708.449
13.0	2562.963
13.5	2419.738
14.0	2279.529
14.5	2143.089
15.0	2011.926
15.5	1886.039
16.0	1766.183
16.5	1652.357
17.0	1543.808
17.5	1440.536
18.0	1343.294
18.5	1252.837
19.0	1167.656
19.5	1088.505
20.0	1013.124
20.5	941.512
21.0	875.176
21.5	813.364
22.0	754.566
22.5	700.066
23.0	648.957
23.5	601.618
24.0	557.294
24.5	516.211
25.0	478.219
25.5	443.016
26.0	410.451
26.5	380.449

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V6DR-L12-835-DIM-UNV-LN-OF-WH\_.IES****CANDELA TABULATION - (Cont.)**

27.0	352.935
27.5	327.607
28.0	304.390
28.5	283.207
29.0	263.684
29.5	245.743
30.0	229.310
30.5	214.309
31.0	200.514
31.5	187.925
32.0	176.317
32.5	165.688
33.0	155.888
33.5	146.918
34.0	138.626
34.5	131.088
35.0	124.078
35.5	117.670
36.0	111.790
36.5	106.288
37.0	101.312
37.5	96.714
38.0	92.493
38.5	88.498
39.0	84.879
39.5	81.487
40.0	78.397
40.5	75.457
41.0	72.818
41.5	70.255
42.0	67.919
42.5	65.732
43.0	63.622
43.5	61.662
44.0	59.777
44.5	58.044
45.0	56.385
45.5	54.802
46.0	53.295
46.5	51.787
47.0	50.430
47.5	49.073
48.0	47.716
48.5	46.435
49.0	45.229
49.5	44.098
50.0	42.967
50.5	41.837
51.0	40.781
51.5	39.801
52.0	38.821
52.5	37.841
53.0	36.861
53.5	36.032
54.0	35.128
54.5	34.298

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55.0	33.469
55.5	32.640
56.0	31.811
56.5	31.057
57.0	30.303
57.5	29.625
58.0	28.871
58.5	28.193
59.0	27.514
59.5	26.760
60.0	26.157
60.5	25.479
61.0	24.800
61.5	24.197
62.0	23.594
62.5	22.991
63.0	22.388
63.5	21.785
64.0	21.182
64.5	20.579
65.0	20.051
65.5	19.448
66.0	18.921
66.5	18.318
67.0	17.790
67.5	17.262
68.0	16.735
68.5	16.207
69.0	15.679
69.5	15.152
70.0	14.624
70.5	14.172
71.0	13.644
71.5	13.192
72.0	12.739
72.5	12.212
73.0	11.759
73.5	11.307
74.0	10.855
74.5	10.403
75.0	10.026
75.5	9.573
76.0	9.121
76.5	8.669
77.0	8.292
77.5	7.840
78.0	7.463
78.5	7.086
79.0	6.634
79.5	6.257
80.0	5.880
80.5	5.503
81.0	5.126
81.5	4.749
82.0	4.372
82.5	3.995

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V6DR-L12-835-DIM-UNV-LN-OF-WH\_.IES****CANDELA TABULATION - (Cont.)**

83.0	3.618
83.5	3.241
84.0	2.940
84.5	2.563
85.0	2.186
85.5	1.885
86.0	1.583
86.5	1.281
87.0	1.055
87.5	0.829
88.0	0.603
88.5	0.452
89.0	0.377
89.5	0.226
90.0	0.151
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-L12-835-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
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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-L12-835-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

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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



**IES INDOOR REPORT****PHOTOMETRIC FILENAME : V6DR-L12-835-DIM-UNV-LN-OF-WH\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	961.23	N.A.	69.50
0-30	1193.67	N.A.	86.30
0-40	1275.86	N.A.	92.20
0-60	1350.38	N.A.	97.60
0-80	1380.93	N.A.	99.80
0-90	1383.62	N.A.	100.00
10-90	976.76	N.A.	70.60
20-40	314.63	N.A.	22.70
20-50	358.97	N.A.	25.90
40-70	94.45	N.A.	6.80
60-80	30.54	N.A.	2.20
70-80	10.62	N.A.	0.80
80-90	2.70	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	1383.63	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	406.87
10-20	554.36
20-30	232.45
30-40	82.18
40-50	44.35
50-60	30.18
60-70	19.92
70-80	10.62
80-90	2.70
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

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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	98	98	97	95
2	110	105	102	99	107	104	101	98	101	98	96	98	96	94	95	93	92	90
3	105	100	96	92	103	99	95	92	96	93	90	94	91	89	92	89	87	86
4	101	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82
5	98	91	86	83	96	90	86	82	88	85	82	87	84	81	85	83	80	79
6	94	87	82	79	93	86	82	79	85	81	78	84	80	78	83	80	77	76
7	91	84	79	76	90	83	79	75	82	78	75	81	77	75	80	77	74	73
8	88	81	76	73	87	80	76	73	79	75	72	78	75	72	77	74	72	71
9	86	78	73	70	85	78	73	70	77	73	70	76	72	70	75	72	69	68
10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	66

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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	9.5	10.5	9.8	10.8	11.1
	3H	10.9	11.7	11.3	12.1	12.4
	4H	11.4	12.2	11.8	12.5	12.9
	6H	11.7	12.4	12.1	12.8	13.2
	8H	11.8	12.5	12.2	12.9	13.3
	12H	11.8	12.5	12.3	12.9	13.3

### UGR Viewed Endwise

9.5	10.5	9.8	10.8	11.1
10.9	11.7	11.3	12.1	12.4
11.4	12.2	11.8	12.5	12.9
11.7	12.4	12.1	12.8	13.2
11.8	12.5	12.2	12.9	13.3
11.8	12.5	12.3	12.9	13.3

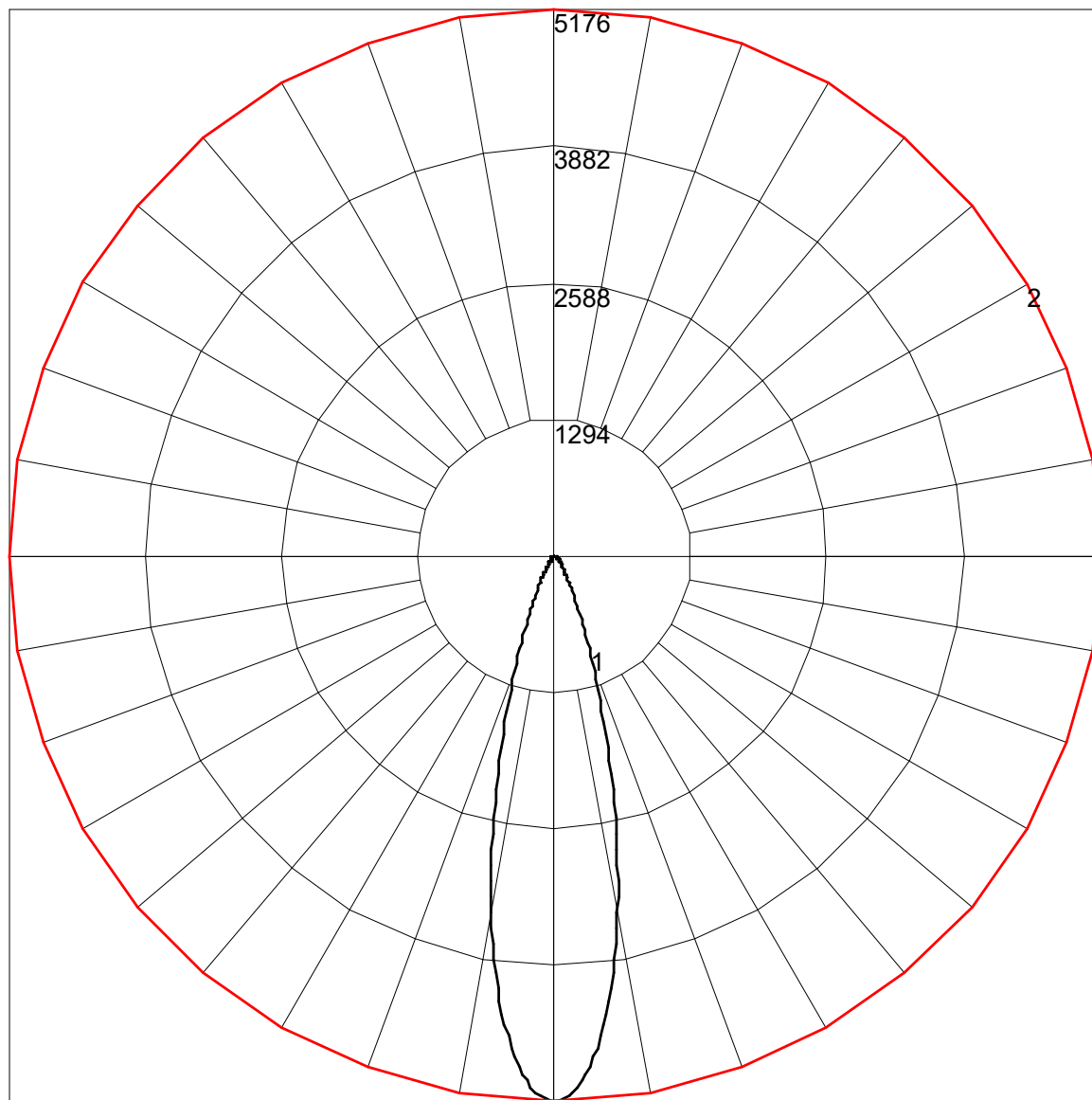
4H	2H	9.9	10.7	10.3	11.0	11.4	9.9	10.7	10.3	11.0	11.4
	3H	11.5	12.1	11.9	12.5	12.9	11.5	12.1	11.9	12.5	12.9
	4H	12.1	12.7	12.5	13.1	13.5	12.1	12.7	12.5	13.1	13.5
	6H	12.5	13.0	13.0	13.5	14.0	12.5	13.0	13.0	13.5	14.0
	8H	12.7	13.1	13.1	13.6	14.1	12.7	13.1	13.1	13.6	14.1
	12H	12.7	13.1	13.2	13.6	14.1	12.7	13.1	13.2	13.6	14.1

8H	4H	12.2	12.7	12.7	13.2	13.6	12.2	12.7	12.7	13.2	13.6
	6H	12.8	13.2	13.3	13.7	14.2	12.8	13.2	13.3	13.7	14.2
	8H	13.0	13.3	13.6	13.9	14.4	13.0	13.3	13.6	13.9	14.4
	12H	13.1	13.4	13.7	13.9	14.5	13.1	13.4	13.7	13.9	14.5

12H	4H	12.2	12.6	12.7	13.1	13.6	12.2	12.6	12.7	13.1	13.6
	6H	12.8	13.2	13.4	13.6	14.2	12.8	13.2	13.4	13.6	14.2
	8H	13.1	13.3	13.6	13.8	14.4	13.1	13.3	13.6	13.8	14.4

Maximum UGR = 14.5

POLAR GRAPH



Maximum Candela = 5176.431 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.)