



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L31-835-DIM-UNV-RN-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12326812.15

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L31-835-DIM-UNV-RN-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	3587
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	87
Total Luminaire Watts	41
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.44
Spacing Criterion (90-270)	0.44
Spacing Criterion (Diagonal)	0.46
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.48 ft (Diameter)
Luminous Width (90-270)	0.48 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	11745	11745	11745
55	7682	7682	7682
65	5227	5227	5227
75	3378	3378	3378
85	2711	2711	2711

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CANDELA TABULATION

	<u>0</u>
0.0	13320.601
0.5	13308.723
1.0	13271.111
1.5	13205.785
2.0	13114.724
2.5	12995.949
3.0	12853.419
3.5	12689.114
4.0	12505.013
4.5	12299.137
5.0	12075.444
5.5	11829.976
6.0	11564.712
6.5	11283.612
7.0	10986.675
7.5	10673.901
8.0	10347.270
8.5	10008.762
9.0	9656.396
9.5	9296.112
10.0	8925.931
10.5	8553.769
11.0	8177.649
11.5	7799.549
12.0	7423.429
12.5	7047.308
13.0	6679.106
13.5	6310.904
14.0	5954.580
14.5	5608.153
15.0	5269.645
15.5	4946.973
16.0	4640.138
16.5	4349.139
17.0	4068.039
17.5	3800.796
18.0	3547.409
18.5	3311.839
19.0	3088.146
19.5	2886.229
20.0	2688.271
20.5	2502.190
21.0	2329.967
21.5	2169.621
22.0	2017.193
22.5	1873.871
23.0	1740.844
23.5	1617.120
24.0	1501.710
24.5	1394.219
25.0	1294.250
25.5	1201.606
26.0	1116.088
26.5	1036.707

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CANDELA TABULATION - (Cont.)

27.0	963.462
27.5	896.156
28.0	834.195
28.5	777.183
29.0	724.725
29.5	676.621
30.0	632.080
30.5	591.301
31.0	553.887
31.5	519.244
32.0	487.373
32.5	457.877
33.0	430.757
33.5	405.616
34.0	382.455
34.5	360.878
35.0	340.884
35.5	322.474
36.0	305.449
36.5	289.415
37.0	274.766
37.5	260.909
38.0	248.239
38.5	236.560
39.0	225.672
39.5	215.378
40.0	206.074
40.5	197.166
41.0	189.050
41.5	181.330
42.0	174.203
42.5	167.473
43.0	161.138
43.5	155.199
44.0	149.458
44.5	144.113
45.0	139.165
45.5	134.414
46.0	129.861
46.5	125.505
47.0	121.348
47.5	117.191
48.0	113.430
48.5	109.669
49.0	106.303
49.5	102.938
50.0	99.771
50.5	96.604
51.0	93.634
51.5	90.863
52.0	88.091
52.5	85.518
53.0	82.944
53.5	80.569
54.0	78.193
54.5	76.016

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CANDELA TABULATION - (Cont.)

55.0	73.838
55.5	71.661
56.0	69.681
56.5	67.702
57.0	65.524
57.5	63.545
58.0	61.763
58.5	59.783
59.0	58.002
59.5	56.022
60.0	54.241
60.5	52.261
61.0	50.479
61.5	48.698
62.0	46.916
62.5	45.332
63.0	43.551
63.5	41.967
64.0	40.185
64.5	38.602
65.0	37.018
65.5	35.434
66.0	34.049
66.5	32.663
67.0	31.277
67.5	29.892
68.0	28.506
68.5	27.318
69.0	26.130
69.5	24.943
70.0	23.755
70.5	22.765
71.0	21.577
71.5	20.588
72.0	19.598
72.5	18.608
73.0	17.816
73.5	17.024
74.0	16.233
74.5	15.441
75.0	14.649
75.5	13.857
76.0	13.263
76.5	12.669
77.0	12.075
77.5	11.482
78.0	10.888
78.5	10.492
79.0	9.898
79.5	9.304
80.0	8.908
80.5	8.314
81.0	7.720
81.5	7.324
82.0	6.731
82.5	6.335

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CANDELA TABULATION - (Cont.)

83.0	5.939
83.5	5.345
84.0	4.949
84.5	4.355
85.0	3.959
85.5	3.563
86.0	3.167
86.5	2.771
87.0	2.375
87.5	1.980
88.0	1.584
88.5	1.188
89.0	0.990
89.5	0.792
90.0	0.594
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
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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
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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
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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	2501.17	N.A.	69.70
0-30	3127.86	N.A.	87.20
0-40	3352.7	N.A.	93.50
0-60	3529.49	N.A.	98.40
0-80	3582.76	N.A.	99.90
0-90	3587.34	N.A.	100.00
10-90	2536.98	N.A.	70.70
20-40	851.53	N.A.	23.70
20-50	961.57	N.A.	26.80
40-70	214.01	N.A.	6.00
60-80	53.28	N.A.	1.50
70-80	16.05	N.A.	0.40
80-90	4.58	N.A.	0.10
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	3587.36	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1050.36
10-20	1450.82
20-30	626.69
30-40	224.84
40-50	110.04
50-60	66.74
60-70	37.23
70-80	16.05
80-90	4.58
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	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	99	98	97	95
2	110	106	102	100	108	104	101	98	101	98	96	98	96	94	95	94	92	91
3	106	100	96	93	104	99	95	92	97	93	91	94	92	89	92	90	88	87
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83
5	98	91	87	83	97	91	86	83	89	85	82	87	84	82	86	83	81	80
6	95	88	83	80	94	87	83	79	86	82	79	84	81	78	83	80	78	77
7	92	84	80	76	91	84	79	76	83	79	76	81	78	75	80	77	75	74
8	89	81	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71
9	86	78	74	71	85	78	74	71	77	73	70	76	73	70	76	72	70	69
10	83	76	71	68	83	76	71	68	75	71	68	74	70	68	73	70	68	67

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UGR TABLE - CORRECTED

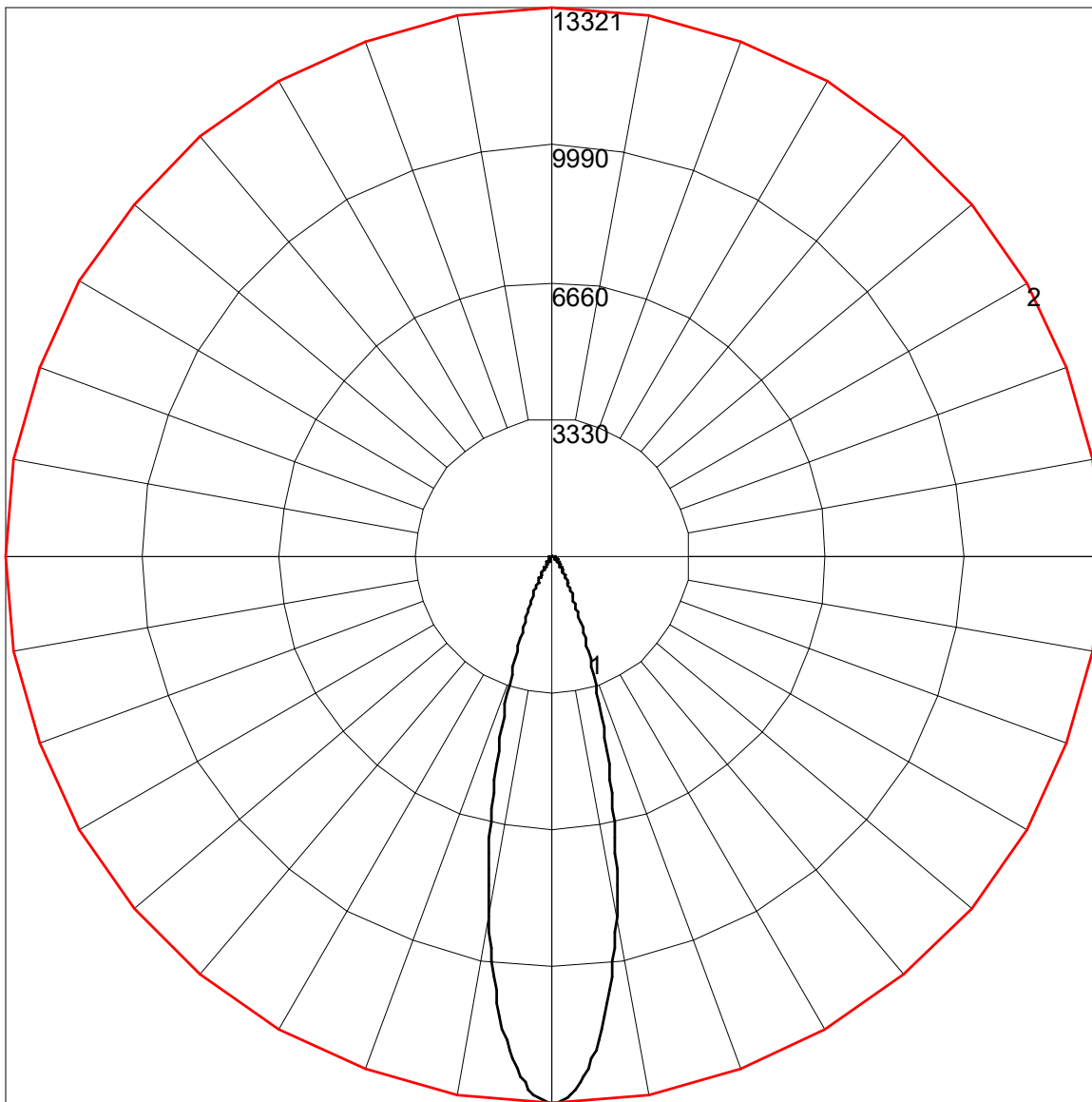
Reflectances

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	11.2	12.1	11.5	12.4	12.8	11.2	12.1	11.5	12.4	12.8
	3H	12.0	12.9	12.4	13.2	13.6	12.0	12.9	12.4	13.2	13.6
	4H	12.3	13.1	12.7	13.4	13.8	12.3	13.1	12.7	13.4	13.8
	6H	12.4	13.2	12.9	13.5	13.9	12.4	13.2	12.9	13.5	13.9
	8H	12.5	13.2	12.9	13.6	14.0	12.5	13.2	12.9	13.6	14.0
	12H	12.5	13.1	12.9	13.5	14.0	12.5	13.1	12.9	13.5	14.0
4H	2H	11.4	12.2	11.8	12.5	12.9	11.4	12.2	11.8	12.5	12.9
	3H	12.4	13.1	12.8	13.5	13.9	12.4	13.1	12.8	13.5	13.9
	4H	12.8	13.3	13.2	13.7	14.2	12.8	13.3	13.2	13.7	14.2
	6H	13.0	13.5	13.5	13.9	14.4	13.0	13.5	13.5	13.9	14.4
	8H	13.1	13.5	13.6	14.0	14.5	13.1	13.5	13.6	14.0	14.5
	12H	13.1	13.5	13.6	14.0	14.5	13.1	13.5	13.6	14.0	14.5
8H	4H	12.8	13.2	13.3	13.7	14.2	12.8	13.2	13.3	13.7	14.2
	6H	13.1	13.5	13.7	14.0	14.5	13.1	13.5	13.7	14.0	14.5
	8H	13.3	13.6	13.8	14.1	14.6	13.3	13.6	13.8	14.1	14.6
	12H	13.4	13.7	13.9	14.2	14.7	13.4	13.7	13.9	14.2	14.7
12H	4H	12.8	13.1	13.2	13.6	14.1	12.8	13.1	13.2	13.6	14.1
	6H	13.1	13.5	13.7	13.9	14.5	13.1	13.5	13.7	13.9	14.5
	8H	13.3	13.6	13.8	14.1	14.7	13.3	13.6	13.8	14.1	14.7

Maximum UGR = 14.7

POLAR GRAPH



Maximum Candela = 13320.601 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.)