



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L12-835-DIM-UNV-LM-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12326812.09

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

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

[LUMINAIRE] Black formed aluminum housing, white reflector, frosted pl

[MORE] astic 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	1385
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)	0.60
Spacing Criterion (90-270)	0.60
Spacing Criterion (Diagonal)	0.56
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	6187	6187	6187
55	4530	4530	4530
65	3691	3691	3691
75	3004	3004	3004
85	1976	1976	1976

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CANDELA TABULATION

	<u>0</u>
0.0	3270.621
0.5	3269.113
1.0	3264.589
1.5	3257.804
2.0	3248.756
2.5	3235.939
3.0	3221.614
3.5	3205.028
4.0	3185.425
4.5	3165.068
5.0	3142.450
5.5	3116.816
6.0	3088.920
6.5	3058.008
7.0	3024.834
7.5	2988.645
8.0	2948.686
8.5	2905.711
9.0	2860.474
9.5	2812.221
10.0	2760.199
10.5	2705.161
11.0	2646.353
11.5	2583.021
12.0	2517.428
12.5	2448.065
13.0	2375.686
13.5	2299.538
14.0	2221.127
14.5	2139.701
15.0	2056.767
15.5	1972.325
16.0	1887.883
16.5	1802.687
17.0	1719.752
17.5	1636.818
18.0	1553.130
18.5	1470.950
19.0	1389.524
19.5	1311.113
20.0	1234.965
20.5	1161.832
21.0	1093.223
21.5	1027.629
22.0	962.036
22.5	900.212
23.0	841.405
23.5	785.612
24.0	733.666
24.5	684.508
25.0	638.593
25.5	595.316
26.0	555.206
26.5	517.660

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CANDELA TABULATION - (Cont.)

27.0	482.752
27.5	450.408
28.0	420.250
28.5	392.354
29.0	366.494
29.5	342.367
30.0	320.050
30.5	299.241
31.0	279.940
31.5	261.996
32.0	245.259
32.5	229.728
33.0	215.252
33.5	201.756
34.0	189.316
34.5	177.781
35.0	166.999
35.5	157.122
36.0	147.924
36.5	139.556
37.0	131.790
37.5	124.703
38.0	118.294
38.5	112.338
39.0	106.910
39.5	101.934
40.0	97.410
40.5	93.188
41.0	89.343
41.5	85.799
42.0	82.482
42.5	79.466
43.0	76.601
43.5	73.962
44.0	71.550
44.5	69.212
45.0	67.026
45.5	64.990
46.0	63.105
46.5	61.296
47.0	59.562
47.5	57.903
48.0	56.395
48.5	54.887
49.0	53.455
49.5	52.098
50.0	50.816
50.5	49.534
51.0	48.328
51.5	47.122
52.0	45.991
52.5	44.935
53.0	43.804
53.5	42.749
54.0	41.769
54.5	40.789

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CANDELA TABULATION - (Cont.)

55.0	39.808
55.5	38.828
56.0	37.924
56.5	37.019
57.0	36.114
57.5	35.209
58.0	34.380
58.5	33.551
59.0	32.721
59.5	31.967
60.0	31.213
60.5	30.384
61.0	29.630
61.5	28.876
62.0	28.122
62.5	27.444
63.0	26.690
63.5	26.011
64.0	25.333
64.5	24.654
65.0	23.900
65.5	23.222
66.0	22.543
66.5	21.940
67.0	21.261
67.5	20.583
68.0	19.980
68.5	19.376
69.0	18.698
69.5	18.095
70.0	17.492
70.5	16.888
71.0	16.361
71.5	15.757
72.0	15.154
72.5	14.627
73.0	14.023
73.5	13.496
74.0	12.968
74.5	12.440
75.0	11.912
75.5	11.385
76.0	10.857
76.5	10.329
77.0	9.801
77.5	9.349
78.0	8.821
78.5	8.369
79.0	7.916
79.5	7.389
80.0	6.936
80.5	6.484
81.0	6.032
81.5	5.579
82.0	5.127
82.5	4.674

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CANDELA TABULATION - (Cont.)

83.0	4.297
83.5	3.845
84.0	3.468
84.5	3.016
85.0	2.639
85.5	2.262
86.0	1.885
86.5	1.583
87.0	1.282
87.5	1.056
88.0	0.829
88.5	0.679
89.0	0.528
89.5	0.377
90.0	0.226
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
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
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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
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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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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	841.16	N.A.	60.70
0-30	1145.8	N.A.	82.70
0-40	1256.58	N.A.	90.70
0-60	1345.63	N.A.	97.10
0-80	1382.07	N.A.	99.80
0-90	1385.29	N.A.	100.00
10-90	1097.27	N.A.	79.20
20-40	415.42	N.A.	30.00
20-50	468.60	N.A.	33.80
40-70	112.84	N.A.	8.10
60-80	36.44	N.A.	2.60
70-80	12.65	N.A.	0.90
80-90	3.22	N.A.	0.20
90-110	0.01	N.A.	0.00
90-120	0.01	N.A.	0.00
90-130	0.01	N.A.	0.00
90-150	0.01	N.A.	0.00
90-180	0.01	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1385.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	288.02
10-20	553.14
20-30	304.64
30-40	110.78
40-50	53.18
50-60	35.87
60-70	23.79
70-80	12.65
80-90	3.22
90-100	0.01
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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	107	103	99	96	99	97	94	96	94	92	94	92	90	89
3	104	98	94	90	102	97	93	89	94	91	88	92	89	86	90	87	85	84
4	100	93	88	84	98	92	87	84	90	86	83	88	84	82	86	83	81	79
5	96	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75
6	92	84	79	75	90	83	78	75	82	77	74	80	77	74	79	76	73	72
7	88	80	75	71	87	79	74	71	78	74	71	77	73	70	76	73	70	69
8	85	77	71	68	84	76	71	68	75	71	67	74	70	67	73	70	67	66
9	82	74	68	65	81	73	68	65	72	68	65	71	67	64	71	67	64	63
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61

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UGR TABLE - CORRECTED

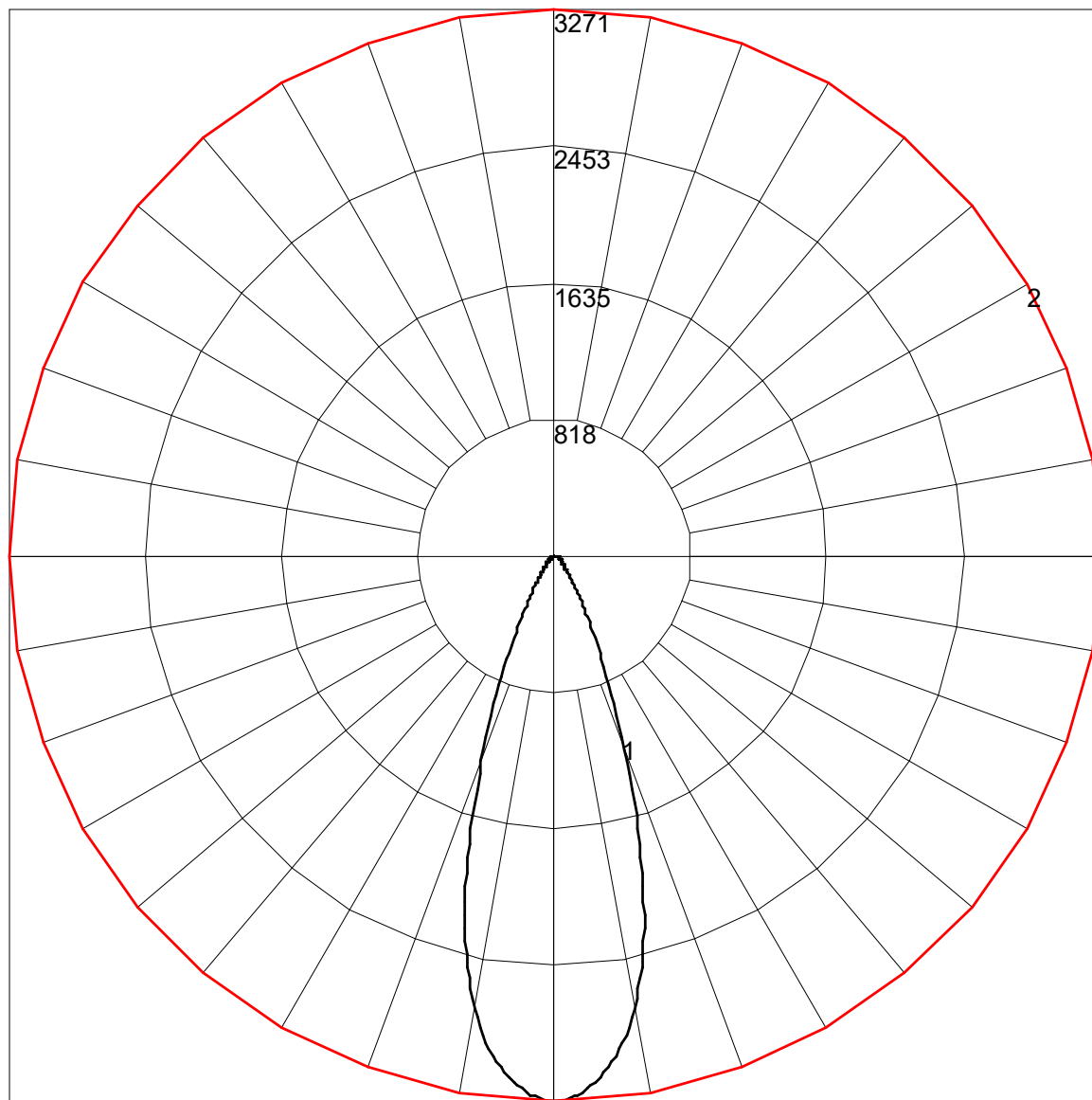
Reflectances

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	10.7	11.7	11.0	12.0	12.3	10.7	11.7	11.0	12.0	12.3
	3H	12.1	13.0	12.5	13.3	13.7	12.1	13.0	12.5	13.3	13.7
	4H	12.6	13.4	13.0	13.8	14.2	12.6	13.4	13.0	13.8	14.2
	6H	12.9	13.7	13.4	14.1	14.5	12.9	13.7	13.4	14.1	14.5
	8H	13.0	13.7	13.5	14.1	14.5	13.0	13.7	13.5	14.1	14.5
	12H	13.1	13.7	13.5	14.1	14.6	13.1	13.7	13.5	14.1	14.6
4H	2H	11.1	11.9	11.5	12.3	12.7	11.1	11.9	11.5	12.3	12.7
	3H	12.7	13.4	13.1	13.8	14.2	12.7	13.4	13.1	13.8	14.2
	4H	13.3	13.9	13.7	14.3	14.8	13.3	13.9	13.7	14.3	14.8
	6H	13.8	14.3	14.2	14.7	15.2	13.8	14.3	14.2	14.7	15.2
	8H	13.9	14.4	14.4	14.8	15.3	13.9	14.4	14.4	14.8	15.3
	12H	14.0	14.4	14.4	14.9	15.3	14.0	14.4	14.4	14.9	15.3
8H	4H	13.5	14.0	14.0	14.4	14.9	13.5	14.0	14.0	14.4	14.9
	6H	14.0	14.4	14.6	14.9	15.4	14.0	14.4	14.6	14.9	15.4
	8H	14.2	14.6	14.8	15.1	15.6	14.2	14.6	14.8	15.1	15.6
	12H	14.4	14.7	14.9	15.2	15.7	14.4	14.7	14.9	15.2	15.7
12H	4H	13.5	13.9	14.0	14.4	14.8	13.5	13.9	14.0	14.4	14.8
	6H	14.1	14.4	14.6	14.9	15.4	14.1	14.4	14.6	14.9	15.4
	8H	14.3	14.6	14.8	15.1	15.7	14.3	14.6	14.8	15.1	15.7

Maximum UGR = 15.7

POLAR GRAPH



Maximum Candela = 3270.621 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.)