



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-L16-835-DIM-UNV-LW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.07

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-L16-835-DIM-UNV-LW-OF-WH

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

[MORE] s 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	1561
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	20.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.08
Spacing Criterion (90-270)	1.08
Spacing Criterion (Diagonal)	0.98
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	25941	25941	25941
55	21597	21597	21597
65	16408	16408	16408
75	11899	11899	11899
85	7754	7754	7754

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CANDELA TABULATION

	<u>0</u>
0.0	992.664
0.5	992.464
1.0	991.665
1.5	990.465
2.0	988.966
2.5	986.968
3.0	984.969
3.5	982.670
4.0	980.572
4.5	978.473
5.0	976.974
5.5	975.575
6.0	974.276
6.5	972.977
7.0	971.578
7.5	970.278
8.0	968.979
8.5	967.780
9.0	966.581
9.5	965.581
10.0	964.582
10.5	963.783
11.0	963.083
11.5	962.683
12.0	961.984
12.5	961.284
13.0	960.285
13.5	958.986
14.0	957.387
14.5	955.588
15.0	953.689
15.5	951.291
16.0	948.692
16.5	946.094
17.0	943.496
17.5	940.797
18.0	937.899
18.5	934.601
19.0	930.904
19.5	926.806
20.0	922.109
20.5	917.013
21.0	910.717
21.5	903.221
22.0	894.727
22.5	885.133
23.0	874.640
23.5	863.247
24.0	850.655
24.5	837.064
25.0	822.373
25.5	807.083
26.0	790.793
26.5	773.804

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CANDELA TABULATION - (Cont.)

27.0	755.716
27.5	737.128
28.0	717.540
28.5	696.854
29.0	675.367
29.5	652.782
30.0	629.597
30.5	605.712
31.0	581.827
31.5	557.743
32.0	534.358
32.5	511.972
33.0	490.486
33.5	470.399
34.0	451.910
34.5	435.121
35.0	420.131
35.5	406.340
36.0	394.247
36.5	383.155
37.0	373.261
37.5	364.367
38.0	356.272
38.5	348.877
39.0	341.881
39.5	335.585
40.0	329.489
40.5	323.793
41.0	318.496
41.5	313.299
42.0	308.302
42.5	303.705
43.0	299.008
43.5	294.411
44.0	289.914
44.5	285.517
45.0	281.020
45.5	276.723
46.0	272.326
46.5	267.928
47.0	263.431
47.5	259.034
48.0	254.537
48.5	250.040
49.0	245.543
49.5	240.846
50.0	236.349
50.5	231.752
51.0	227.154
51.5	222.457
52.0	217.760
52.5	213.064
53.0	208.367
53.5	203.670
54.0	199.172
54.5	194.575

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CANDELA TABULATION - (Cont.)

55.0	189.778
55.5	185.081
56.0	180.384
56.5	175.987
57.0	171.590
57.5	166.993
58.0	162.396
58.5	157.899
59.0	153.502
59.5	149.104
60.0	144.907
60.5	140.710
61.0	136.612
61.5	132.515
62.0	128.618
62.5	124.720
63.0	120.923
63.5	117.125
64.0	113.427
64.5	109.830
65.0	106.232
65.5	102.734
66.0	99.246
66.5	95.819
67.0	92.431
67.5	89.113
68.0	85.855
68.5	82.587
69.0	79.419
69.5	76.281
70.0	73.233
70.5	70.285
71.0	67.397
71.5	64.599
72.0	61.900
72.5	59.282
73.0	56.734
73.5	54.235
74.0	51.837
74.5	49.488
75.0	47.180
75.5	44.951
76.0	42.763
76.5	40.614
77.0	38.525
77.5	36.477
78.0	34.488
78.5	32.539
79.0	30.630
79.5	28.792
80.0	26.963
80.5	25.194
81.0	23.445
81.5	21.706
82.0	20.007
82.5	18.318

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CANDELA TABULATION - (Cont.)

83.0	16.669
83.5	15.050
84.0	13.451
84.5	11.882
85.0	10.353
85.5	8.874
86.0	7.445
86.5	6.066
87.0	4.727
87.5	3.608
88.0	2.758
88.5	2.019
89.0	1.399
89.5	0.879
90.0	0.560
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
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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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118.5	0.000
119.0	0.000
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120.0	0.000
120.5	0.000
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122.0	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
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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	361.60	N.A.	23.20
0-30	730.93	N.A.	46.80
0-40	1004.8	N.A.	64.40
0-60	1391.49	N.A.	89.20
0-80	1548.12	N.A.	99.20
0-90	1560.5	N.A.	100.00
10-90	1467.6	N.A.	94.00
20-40	643.20	N.A.	41.20
20-50	860.21	N.A.	55.10
40-70	492.58	N.A.	31.60
60-80	156.63	N.A.	10.00
70-80	50.74	N.A.	3.30
80-90	12.38	N.A.	0.80
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	1560.51	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	92.89
10-20	268.70
20-30	369.34
30-40	273.87
40-50	217.01
50-60	169.68
60-70	105.89
70-80	50.74
80-90	12.38
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	78
3	96	87	80	75	93	85	79	74	83	77	73	80	75	72	77	74	70	69
4	89	79	71	66	87	78	71	65	75	69	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38
10	61	49	42	37	60	49	42	37	48	42	37	47	41	37	46	41	37	35

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UGR TABLE - CORRECTED

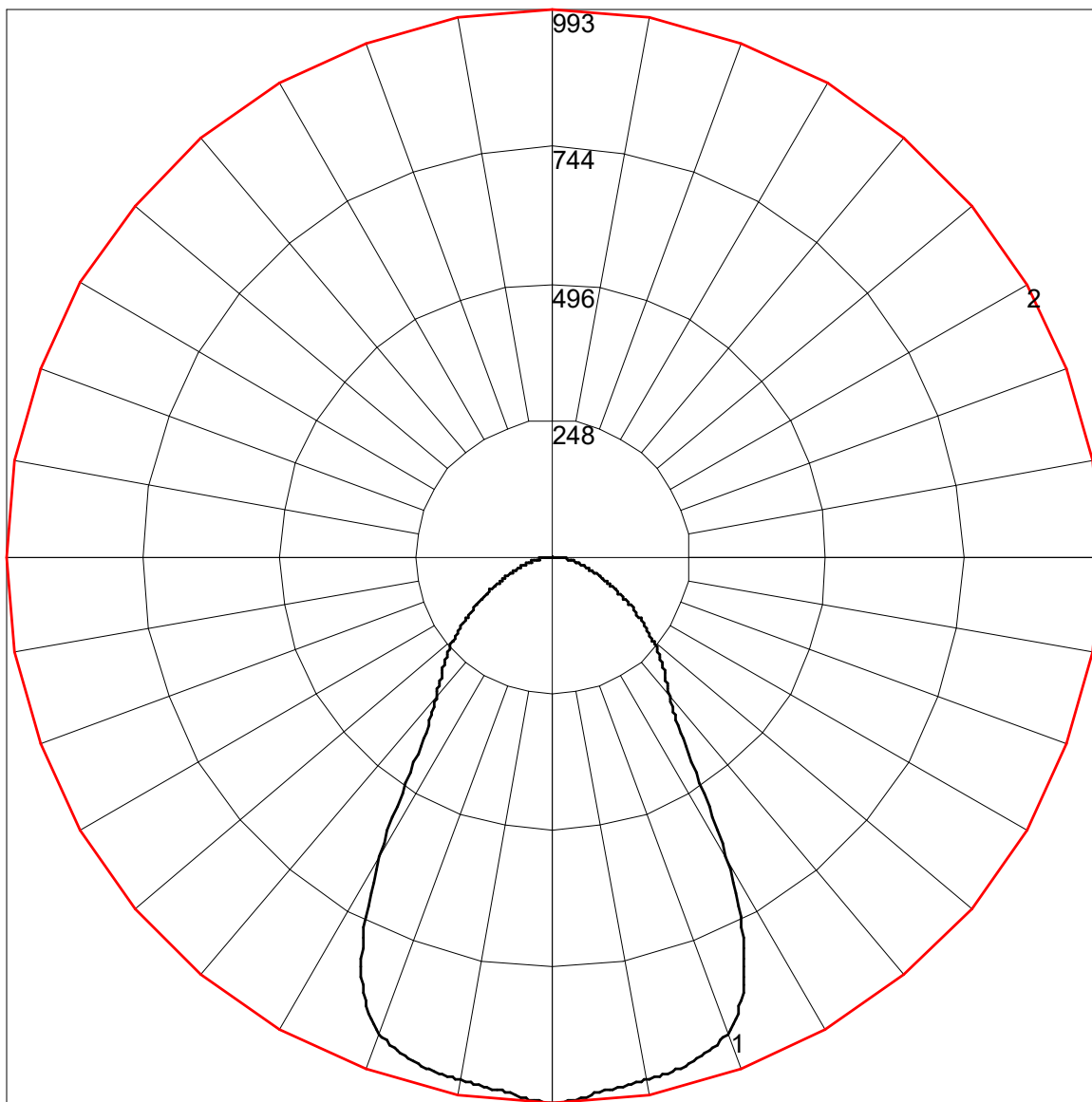
Reflectances

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	20.6	22.0	21.0	22.3	22.6	20.6	22.0	21.0	22.3	22.6
	3H	21.8	23.1	22.2	23.4	23.7	21.8	23.1	22.2	23.4	23.7
	4H	22.2	23.4	22.6	23.7	24.1	22.2	23.4	22.6	23.7	24.1
	6H	22.5	23.5	22.9	23.9	24.3	22.5	23.5	22.9	23.9	24.3
	8H	22.6	23.6	23.0	24.0	24.4	22.6	23.6	23.0	24.0	24.4
	12H	22.6	23.6	23.0	23.9	24.4	22.6	23.6	23.0	23.9	24.4
4H	2H	21.0	22.2	21.4	22.5	22.9	21.0	22.2	21.4	22.5	22.9
	3H	22.4	23.4	22.8	23.8	24.2	22.4	23.4	22.8	23.8	24.2
	4H	22.9	23.8	23.4	24.2	24.6	22.9	23.8	23.4	24.2	24.6
	6H	23.3	24.0	23.8	24.5	24.9	23.3	24.0	23.8	24.5	24.9
	8H	23.4	24.1	23.8	24.5	25.0	23.4	24.1	23.8	24.5	25.0
	12H	23.5	24.1	23.9	24.6	25.0	23.5	24.1	23.9	24.6	25.0
8H	4H	23.1	23.8	23.5	24.2	24.7	23.1	23.8	23.5	24.2	24.7
	6H	23.5	24.1	24.0	24.6	25.1	23.5	24.1	24.0	24.6	25.1
	8H	23.7	24.2	24.2	24.7	25.2	23.7	24.2	24.2	24.7	25.2
	12H	23.8	24.3	24.3	24.8	25.3	23.8	24.3	24.3	24.8	25.3
12H	4H	23.1	23.7	23.6	24.2	24.6	23.1	23.7	23.6	24.2	24.6
	6H	23.6	24.1	24.1	24.5	25.1	23.6	24.1	24.1	24.5	25.1
	8H	23.8	24.2	24.3	24.7	25.3	23.8	24.2	24.3	24.7	25.3

Maximum UGR = 25.3

POLAR GRAPH



Maximum Candela = 992.664 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.)