



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V6DR-P20-835-POE-LM-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12326812.09

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 11 OCT 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-P20-835-PoE-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	2335
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	23.2
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	10431	10430	10430
55	7637	7637	7637
65	6223	6223	6223
75	5065	5065	5065
85	3332	3332	3332

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CANDELA TABULATION

	<u>0</u>
0.0	5513.598
0.5	5511.056
1.0	5503.430
1.5	5491.991
2.0	5476.739
2.5	5455.132
3.0	5430.983
3.5	5403.021
4.0	5369.975
4.5	5335.658
5.0	5297.528
5.5	5254.314
6.0	5207.287
6.5	5155.176
7.0	5099.252
7.5	5038.244
8.0	4970.881
8.5	4898.434
9.0	4822.174
9.5	4740.830
10.0	4653.131
10.5	4560.348
11.0	4461.210
11.5	4354.446
12.0	4243.869
12.5	4126.937
13.0	4004.921
13.5	3876.550
14.0	3744.366
14.5	3607.098
15.0	3467.288
15.5	3324.936
16.0	3182.584
16.5	3038.961
17.0	2899.151
17.5	2759.341
18.0	2618.260
18.5	2479.721
19.0	2342.453
19.5	2210.269
20.0	2081.898
20.5	1958.611
21.0	1842.950
21.5	1732.373
22.0	1621.796
22.5	1517.574
23.0	1418.436
23.5	1324.382
24.0	1236.810
24.5	1153.941
25.0	1076.537
25.5	1003.582
26.0	935.964
26.5	872.669

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CANDELA TABULATION - (Cont.)

27.0	813.821
27.5	759.295
28.0	708.455
28.5	661.428
29.0	617.833
29.5	577.161
30.0	539.540
30.5	504.460
31.0	471.922
31.5	441.673
32.0	413.456
32.5	387.274
33.0	362.871
33.5	340.120
34.0	319.148
34.5	299.702
35.0	281.527
35.5	264.876
36.0	249.370
36.5	235.262
37.0	222.171
37.5	210.223
38.0	199.420
38.5	189.379
39.0	180.228
39.5	171.839
40.0	164.213
40.5	157.096
41.0	150.614
41.5	144.640
42.0	139.047
42.5	133.963
43.0	129.134
43.5	124.685
44.0	120.618
44.5	116.678
45.0	112.992
45.5	109.560
46.0	106.383
46.5	103.332
47.0	100.409
47.5	97.613
48.0	95.071
48.5	92.529
49.0	90.114
49.5	87.826
50.0	85.665
50.5	83.505
51.0	81.471
51.5	79.438
52.0	77.531
52.5	75.752
53.0	73.845
53.5	72.066
54.0	70.413
54.5	68.761

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CANDELA TABULATION - (Cont.)

55.0	67.109
55.5	65.457
56.0	63.931
56.5	62.406
57.0	60.881
57.5	59.356
58.0	57.958
58.5	56.560
59.0	55.161
59.5	53.890
60.0	52.619
60.5	51.221
61.0	49.950
61.5	48.679
62.0	47.408
62.5	46.264
63.0	44.993
63.5	43.850
64.0	42.706
64.5	41.562
65.0	40.291
65.5	39.147
66.0	38.003
66.5	36.986
67.0	35.842
67.5	34.698
68.0	33.682
68.5	32.665
69.0	31.521
69.5	30.504
70.0	29.487
70.5	28.470
71.0	27.581
71.5	26.564
72.0	25.547
72.5	24.657
73.0	23.641
73.5	22.751
74.0	21.861
74.5	20.972
75.0	20.082
75.5	19.192
76.0	18.302
76.5	17.413
77.0	16.523
77.5	15.760
78.0	14.871
78.5	14.108
79.0	13.346
79.5	12.456
80.0	11.693
80.5	10.931
81.0	10.168
81.5	9.405
82.0	8.643
82.5	7.880

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CANDELA TABULATION - (Cont.)

83.0	7.245
83.5	6.482
84.0	5.847
84.5	5.084
85.0	4.449
85.5	3.813
86.0	3.178
86.5	2.669
87.0	2.161
87.5	1.779
88.0	1.398
88.5	1.144
89.0	0.890
89.5	0.636
90.0	0.381
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
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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

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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	1418.02	N.A.	60.70
0-30	1931.58	N.A.	82.70
0-40	2118.33	N.A.	90.70
0-60	2268.45	N.A.	97.10
0-80	2329.88	N.A.	99.80
0-90	2335.31	N.A.	100.00
10-90	1849.77	N.A.	79.20
20-40	700.31	N.A.	30.00
20-50	789.96	N.A.	33.80
40-70	190.22	N.A.	8.10
60-80	61.43	N.A.	2.60
70-80	21.33	N.A.	0.90
80-90	5.43	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	2335.32	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	485.54
10-20	932.48
20-30	513.56
30-40	186.75
40-50	89.65
50-60	60.47
60-70	40.10
70-80	21.33
80-90	5.43
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	239	239	239	239	234	234	234	234	223	223	223	214	214	214	205	205	205	201
1	229	224	219	215	224	219	215	211	211	208	205	204	201	199	197	195	193	189
2	219	210	202	196	214	206	199	193	200	194	189	194	189	185	188	185	181	178
3	209	197	188	181	205	195	186	179	189	182	177	185	179	174	180	175	171	168
4	200	187	177	169	197	184	175	168	180	172	166	176	170	164	173	167	162	159
5	192	177	167	159	189	175	166	158	172	163	157	169	161	156	166	159	154	152
6	185	169	158	150	182	167	157	150	164	156	149	162	154	148	159	152	147	144
7	177	161	150	143	175	160	150	143	157	148	142	155	147	141	153	146	140	138
8	171	154	144	136	169	153	143	136	151	142	136	149	141	135	147	140	135	132
9	165	148	138	131	163	147	137	130	145	136	130	143	135	130	142	135	129	127
10	159	142	132	125	157	141	132	125	140	131	125	138	130	124	137	129	124	122

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UGR TABLE - CORRECTED

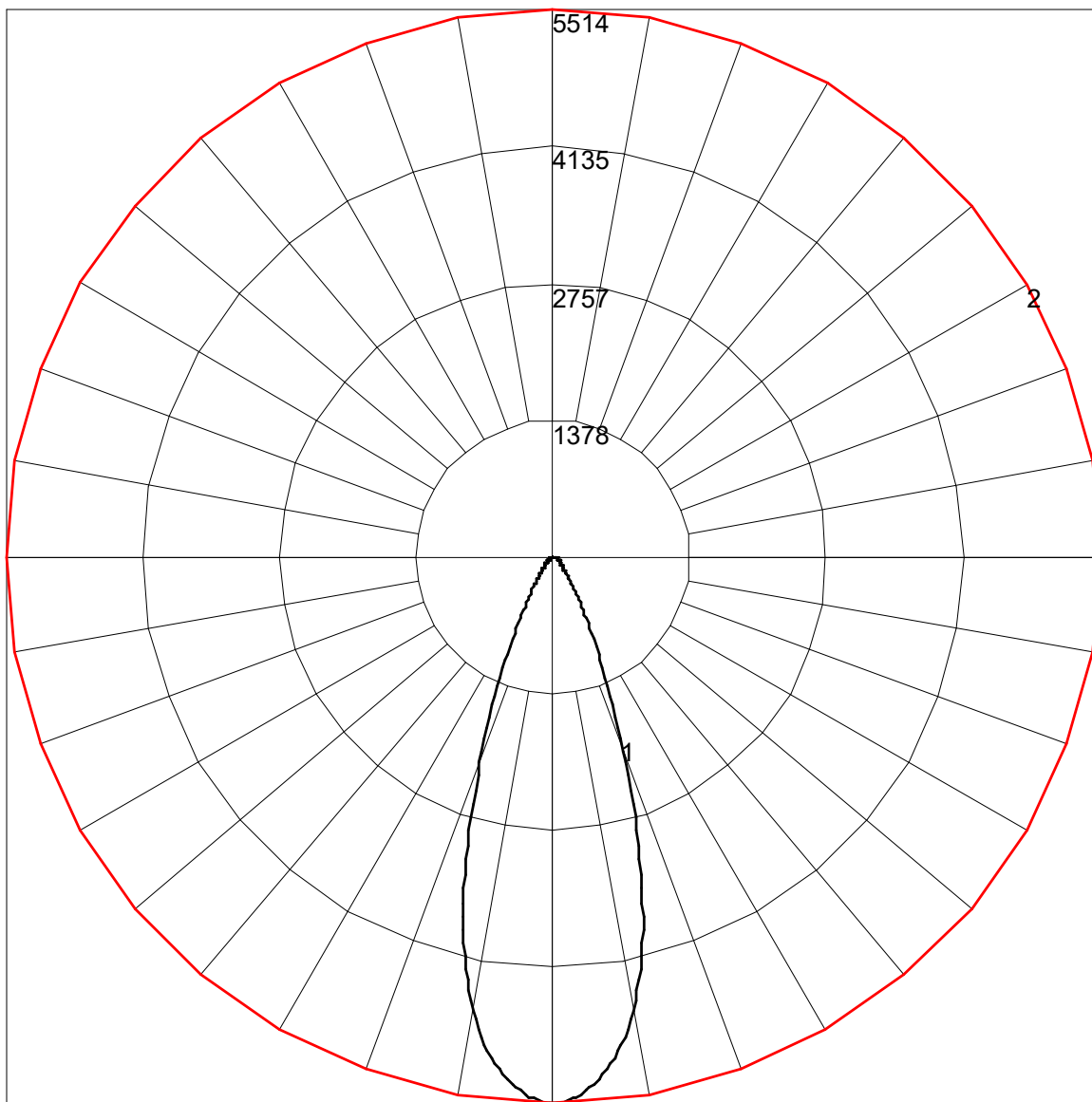
Reflectances

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	10.1	11.1	10.4	11.4	11.7	10.1	11.1	10.4	11.4	11.7
	3H	11.5	12.4	11.9	12.7	13.1	11.5	12.4	11.9	12.7	13.1
	4H	12.0	12.8	12.4	13.2	13.6	12.0	12.8	12.4	13.2	13.6
	6H	12.3	13.1	12.8	13.5	13.9	12.3	13.1	12.8	13.5	13.9
	8H	12.4	13.1	12.9	13.5	13.9	12.4	13.1	12.9	13.5	13.9
	12H	12.5	13.1	12.9	13.5	14.0	12.5	13.1	12.9	13.5	14.0
4H	2H	10.5	11.3	10.9	11.7	12.1	10.5	11.3	10.9	11.7	12.1
	3H	12.1	12.8	12.5	13.2	13.6	12.1	12.8	12.5	13.2	13.6
	4H	12.7	13.3	13.1	13.7	14.2	12.7	13.3	13.1	13.7	14.2
	6H	13.2	13.7	13.6	14.1	14.6	13.2	13.7	13.6	14.1	14.6
	8H	13.3	13.8	13.8	14.2	14.7	13.3	13.8	13.8	14.2	14.7
	12H	13.4	13.8	13.8	14.3	14.7	13.4	13.8	13.8	14.3	14.7
8H	4H	12.9	13.4	13.4	13.8	14.3	12.9	13.4	13.4	13.8	14.3
	6H	13.4	13.8	14.0	14.3	14.8	13.4	13.8	14.0	14.3	14.8
	8H	13.6	14.0	14.2	14.5	15.0	13.6	14.0	14.2	14.5	15.0
	12H	13.8	14.1	14.3	14.6	15.1	13.8	14.1	14.3	14.6	15.1
12H	4H	12.9	13.3	13.4	13.8	14.2	12.9	13.3	13.4	13.8	14.2
	6H	13.5	13.8	14.0	14.3	14.8	13.5	13.8	14.0	14.3	14.8
	8H	13.7	14.0	14.2	14.5	15.1	13.7	14.0	14.2	14.5	15.1

Maximum UGR = 15.1

POLAR GRAPH



Maximum Candela = 5513.598 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.)