



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12326812.12

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 11 OCT 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-P20-835-PoE-RW-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	1862
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	80
Total Luminaire Watts	23.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.04
Spacing Criterion (90-270)	1.04
Spacing Criterion (Diagonal)	0.94
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	25143	25143	25143
55	20968	20968	20968
65	14793	14793	14793
75	9062	9062	9062
85	7147	7147	7147

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CANDELA TABULATION

	<u>0</u>
0.0	1377.493
0.5	1376.205
1.0	1374.916
1.5	1373.627
2.0	1371.050
2.5	1367.184
3.0	1363.319
3.5	1358.164
4.0	1353.010
4.5	1349.144
5.0	1343.990
5.5	1338.836
6.0	1333.681
6.5	1328.527
7.0	1323.373
7.5	1318.218
8.0	1311.775
8.5	1306.621
9.0	1301.467
9.5	1295.024
10.0	1289.870
10.5	1283.556
11.0	1277.370
11.5	1271.185
12.0	1265.000
12.5	1258.944
13.0	1252.758
13.5	1246.316
14.0	1240.002
14.5	1233.816
15.0	1228.018
15.5	1222.090
16.0	1216.292
16.5	1210.622
17.0	1205.339
17.5	1200.055
18.0	1194.901
18.5	1190.005
19.0	1185.108
19.5	1180.082
20.0	1174.928
20.5	1169.387
21.0	1163.073
21.5	1155.857
22.0	1147.739
22.5	1138.719
23.0	1128.926
23.5	1117.844
24.0	1105.731
24.5	1092.459
25.0	1077.769
25.5	1061.920
26.0	1044.266
26.5	1024.937

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CANDELA TABULATION - (Cont.)

27.0	1004.320
27.5	981.899
28.0	958.060
28.5	932.160
29.0	904.842
29.5	875.204
30.0	843.763
30.5	810.517
31.0	775.983
31.5	740.676
32.0	704.725
32.5	669.031
33.0	633.724
33.5	599.577
34.0	566.847
34.5	536.050
35.0	507.959
35.5	482.187
36.0	459.508
36.5	439.406
37.0	421.753
37.5	406.676
38.0	393.404
38.5	381.678
39.0	371.498
39.5	362.478
40.0	354.231
40.5	346.757
41.0	339.799
41.5	333.485
42.0	327.686
42.5	322.145
43.0	316.862
43.5	311.837
44.0	307.069
44.5	302.559
45.0	297.920
45.5	293.539
46.0	289.029
46.5	284.648
47.0	280.138
47.5	275.627
48.0	270.989
48.5	266.350
49.0	261.969
49.5	257.458
50.0	252.691
50.5	247.794
51.0	242.769
51.5	237.743
52.0	232.718
52.5	227.563
53.0	222.538
53.5	217.641
54.0	212.229
54.5	206.817

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CANDELA TABULATION - (Cont.)

55.0	201.534
55.5	196.122
56.0	190.839
56.5	185.556
57.0	180.272
57.5	174.989
58.0	169.964
58.5	164.810
59.0	159.784
59.5	154.887
60.0	149.991
60.5	145.094
61.0	140.326
61.5	135.688
62.0	131.049
62.5	126.539
63.0	122.029
63.5	117.519
64.0	113.266
64.5	108.885
65.0	104.762
65.5	100.509
66.0	96.515
66.5	92.520
67.0	88.654
67.5	84.789
68.0	81.052
68.5	77.315
69.0	73.836
69.5	70.228
70.0	66.877
70.5	63.527
71.0	60.306
71.5	57.213
72.0	54.120
72.5	51.286
73.0	48.580
73.5	46.131
74.0	43.683
74.5	41.492
75.0	39.302
75.5	37.369
76.0	35.436
76.5	33.761
77.0	32.215
77.5	30.668
78.0	29.122
78.5	27.576
79.0	26.158
79.5	24.741
80.0	23.323
80.5	21.906
81.0	20.488
81.5	19.200
82.0	17.782
82.5	16.494

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CANDELA TABULATION - (Cont.)

83.0	15.205
83.5	14.046
84.0	12.757
84.5	11.597
85.0	10.438
85.5	9.278
86.0	8.118
86.5	6.958
87.0	5.927
87.5	4.768
88.0	3.866
88.5	3.093
89.0	2.448
89.5	1.804
90.0	1.289
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
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99.5	0.000
100.0	0.000
100.5	0.000
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103.0	0.000
103.5	0.000
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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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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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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	473.33	N.A.	25.40
0-30	956.90	N.A.	51.40
0-40	1291.46	N.A.	69.40
0-60	1702.03	N.A.	91.40
0-80	1850.25	N.A.	99.40
0-90	1862.13	N.A.	100.00
10-90	1735.59	N.A.	93.20
20-40	818.13	N.A.	43.90
20-50	1048.96	N.A.	56.30
40-70	515.17	N.A.	27.70
60-80	148.22	N.A.	8.00
70-80	43.61	N.A.	2.30
80-90	11.89	N.A.	0.60
90-110	0.04	N.A.	0.00
90-120	0.04	N.A.	0.00
90-130	0.04	N.A.	0.00
90-150	0.04	N.A.	0.00
90-180	0.04	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1862.17	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	126.54
10-20	346.80
20-30	483.57
30-40	334.56
40-50	230.83
50-60	179.74
60-70	104.61
70-80	43.61
80-90	11.89
90-100	0.04
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	224	217	210	205	219	212	207	201	204	199	195	197	193	189	189	186	184	180
2	209	196	186	177	204	193	183	175	186	178	171	180	173	167	174	168	163	160
3	195	178	165	155	190	175	163	154	170	159	151	164	156	149	160	152	146	142
4	182	163	148	138	178	160	147	137	156	144	135	151	141	133	147	139	132	128
5	170	149	135	124	167	147	133	123	143	131	122	140	129	121	136	127	120	116
6	160	138	123	112	156	136	122	112	133	120	111	129	118	110	127	117	109	106
7	150	127	113	102	147	126	112	102	123	111	101	120	109	101	118	108	100	97
8	141	118	104	94	139	117	103	94	115	102	93	112	101	93	110	100	92	89
9	134	111	96	87	131	109	96	87	107	95	86	105	94	86	103	93	86	82
10	126	104	90	81	124	103	89	81	101	89	80	99	88	80	97	87	80	77

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UGR TABLE - CORRECTED

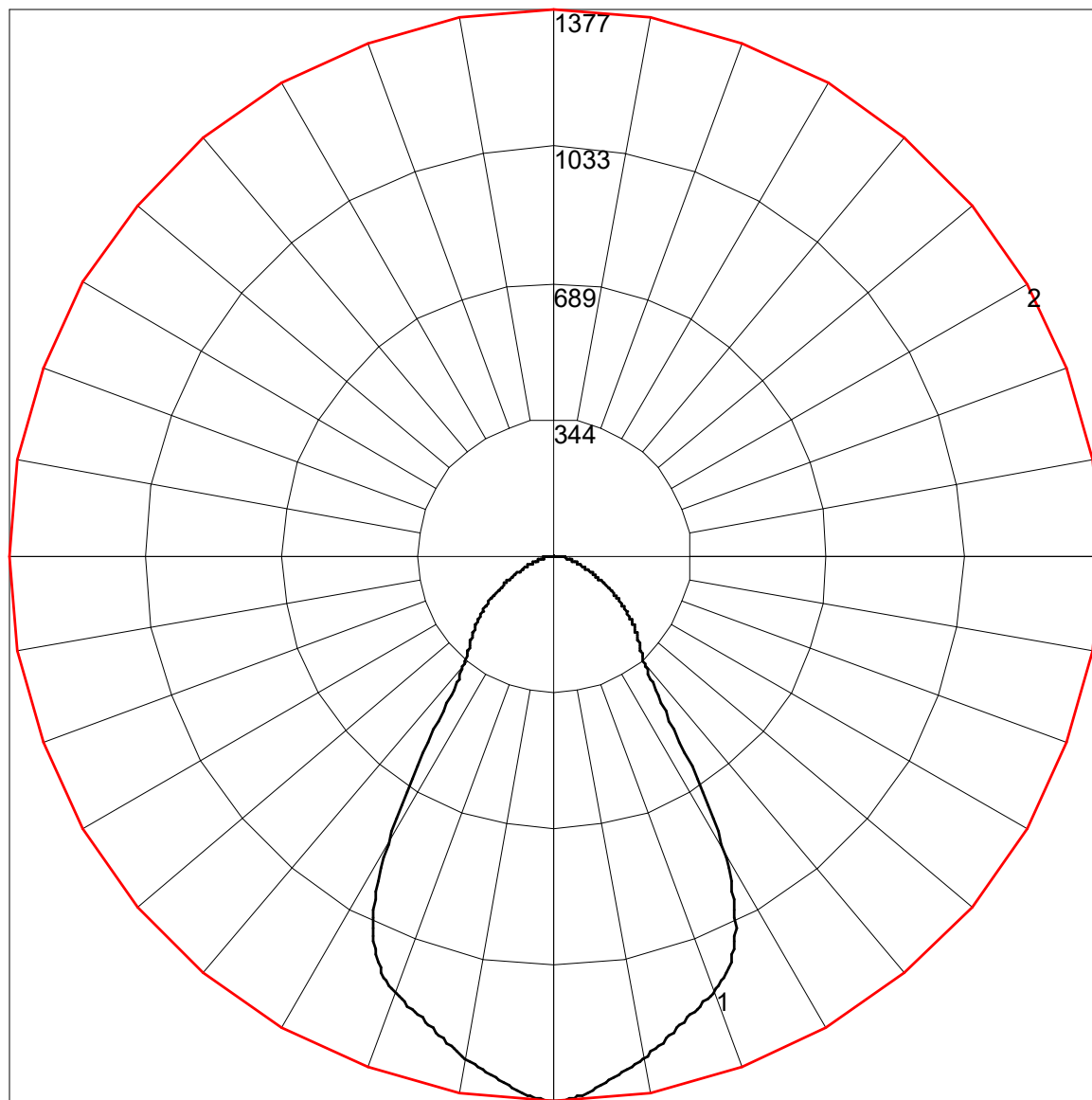
Reflectances

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	17.7	19.0	18.1	19.3	19.6	17.7	19.0	18.1	19.3	19.6
	3H	18.7	19.8	19.1	20.2	20.5	18.7	19.8	19.1	20.2	20.5
	4H	18.9	20.0	19.3	20.4	20.7	18.9	20.0	19.3	20.4	20.7
	6H	19.1	20.1	19.5	20.5	20.9	19.1	20.1	19.5	20.5	20.9
	8H	19.1	20.1	19.6	20.5	20.9	19.1	20.1	19.6	20.5	20.9
	12H	19.2	20.1	19.6	20.5	20.9	19.2	20.1	19.6	20.5	20.9
4H	2H	18.0	19.1	18.4	19.5	19.9	18.0	19.1	18.4	19.5	19.9
	3H	19.2	20.1	19.6	20.5	20.9	19.2	20.1	19.6	20.5	20.9
	4H	19.5	20.3	19.9	20.7	21.2	19.5	20.3	19.9	20.7	21.2
	6H	19.8	20.5	20.2	20.9	21.4	19.8	20.5	20.2	20.9	21.4
	8H	19.8	20.5	20.3	20.9	21.4	19.8	20.5	20.3	20.9	21.4
	12H	19.9	20.5	20.4	20.9	21.4	19.9	20.5	20.4	20.9	21.4
8H	4H	19.6	20.2	20.0	20.7	21.1	19.6	20.2	20.0	20.7	21.1
	6H	19.9	20.4	20.4	20.9	21.4	19.9	20.4	20.4	20.9	21.4
	8H	20.1	20.5	20.6	21.0	21.5	20.1	20.5	20.6	21.0	21.5
	12H	20.2	20.6	20.7	21.1	21.6	20.2	20.6	20.7	21.1	21.6
12H	4H	19.6	20.1	20.1	20.6	21.1	19.6	20.1	20.1	20.6	21.1
	6H	19.9	20.4	20.5	20.9	21.4	19.9	20.4	20.5	20.9	21.4
	8H	20.1	20.5	20.6	21.0	21.6	20.1	20.5	20.6	21.0	21.6

Maximum UGR = 21.6

POLAR GRAPH



Maximum Candela = 1377.493 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.)