



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from 12326812.14

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 9 SEP 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V6DR-P20-835-POE-RM-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	2295
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	23.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.58
Spacing Criterion (90-270)	0.58
Spacing Criterion (Diagonal)	0.56
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	8250	8250	8250
55	5548	5548	5548
65	4129	4129	4129
75	2851	2851	2851
85	2381	2381	2381

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CANDELA TABULATION

	<u>0</u>
0.0	5555.144
0.5	5552.568
1.0	5544.840
1.5	5531.960
2.0	5513.928
2.5	5492.032
3.0	5464.984
3.5	5434.072
4.0	5400.584
4.5	5361.944
5.0	5320.728
5.5	5275.648
6.0	5225.416
6.5	5170.032
7.0	5110.784
7.5	5046.384
8.0	4976.832
8.5	4902.128
9.0	4822.272
9.5	4735.976
10.0	4645.816
10.5	4549.216
11.0	4446.176
11.5	4337.984
12.0	4224.640
12.5	4103.568
13.0	3979.920
13.5	3849.832
14.0	3715.880
14.5	3579.352
15.0	3437.672
15.5	3295.992
16.0	3151.736
16.5	3007.480
17.0	2865.800
17.5	2730.560
18.0	2591.456
18.5	2453.640
19.0	2318.400
19.5	2189.600
20.0	2067.240
20.5	1948.744
21.0	1832.824
21.5	1722.056
22.0	1615.152
22.5	1514.688
23.0	1419.376
23.5	1329.216
24.0	1244.466
24.5	1164.996
25.0	1090.163
25.5	1019.967
26.0	954.408
26.5	892.842

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CANDELA TABULATION - (Cont.)

27.0	835.526
27.5	781.945
28.0	731.713
28.5	685.087
29.0	641.295
29.5	600.337
30.0	561.826
30.5	525.890
31.0	492.274
31.5	460.718
32.0	431.222
32.5	403.530
33.0	377.513
33.5	353.170
34.0	330.243
34.5	308.991
35.0	289.156
35.5	270.609
36.0	253.350
36.5	237.378
37.0	222.566
37.5	208.914
38.0	196.291
38.5	184.699
39.0	174.009
39.5	164.220
40.0	155.333
40.5	147.218
41.0	139.748
41.5	132.922
42.0	126.610
42.5	120.814
43.0	115.405
43.5	110.510
44.0	105.874
44.5	101.752
45.0	97.759
45.5	94.153
46.0	90.675
46.5	87.455
47.0	84.493
47.5	81.788
48.0	79.212
48.5	76.765
49.0	74.446
49.5	72.128
50.0	70.067
50.5	68.135
51.0	66.203
51.5	64.400
52.0	62.726
52.5	60.922
53.0	59.377
53.5	57.831
54.0	56.286
54.5	54.740

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CANDELA TABULATION - (Cont.)

55.0	53.323
55.5	51.906
56.0	50.618
56.5	49.202
57.0	47.914
57.5	46.626
58.0	45.338
58.5	44.050
59.0	42.890
59.5	41.602
60.0	40.443
60.5	39.284
61.0	38.125
61.5	36.966
62.0	35.806
62.5	34.647
63.0	33.617
63.5	32.458
64.0	31.427
64.5	30.268
65.0	29.238
65.5	28.207
66.0	27.177
66.5	26.146
67.0	25.116
67.5	24.214
68.0	23.184
68.5	22.282
69.0	21.381
69.5	20.350
70.0	19.578
70.5	18.676
71.0	17.903
71.5	17.002
72.0	16.229
72.5	15.456
73.0	14.812
73.5	14.168
74.0	13.524
74.5	12.880
75.0	12.365
75.5	11.721
76.0	11.206
76.5	10.819
77.0	10.304
77.5	9.789
78.0	9.402
78.5	8.887
79.0	8.501
79.5	8.114
80.0	7.599
80.5	7.213
81.0	6.698
81.5	6.311
82.0	5.925
82.5	5.538

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CANDELA TABULATION - (Cont.)

83.0	5.152
83.5	4.637
84.0	4.250
84.5	3.864
85.0	3.478
85.5	3.091
86.0	2.834
86.5	2.447
87.0	2.061
87.5	1.674
88.0	1.288
88.5	1.030
89.0	0.902
89.5	0.644
90.0	0.515
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
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118.5	0.000
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134.0	0.000
134.5	0.000
135.0	0.000
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
144.0	0.000
144.5	0.000
145.0	0.000
145.5	0.000
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146.5	0.000
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160.0	0.000
160.5	0.000
161.0	0.000
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	1412.24	N.A.	61.50
0-30	1930.94	N.A.	84.10
0-40	2121.85	N.A.	92.40
0-60	2248.56	N.A.	98.00
0-80	2291.15	N.A.	99.80
0-90	2295.13	N.A.	100.00
10-90	1808.33	N.A.	78.80
20-40	709.62	N.A.	30.90
20-50	788.17	N.A.	34.30
40-70	155.84	N.A.	6.80
60-80	42.59	N.A.	1.90
70-80	13.46	N.A.	0.60
80-90	3.98	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	2295.14	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	486.80
10-20	925.43
20-30	518.70
30-40	190.92
40-50	78.56
50-60	48.15
60-70	29.14
70-80	13.46
80-90	3.98
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	220	215	212	212	208	205	204	202	199	197	195	193	190
2	219	210	203	197	215	207	200	195	201	195	190	195	190	186	189	186	183	179
3	210	198	190	182	206	196	188	181	191	184	178	186	180	175	181	177	173	170
4	201	188	178	171	198	186	177	170	182	174	168	178	171	166	174	169	164	161
5	193	179	168	161	190	177	167	160	173	165	159	170	163	157	167	161	156	153
6	186	170	160	152	183	169	159	152	166	157	151	163	156	150	161	154	149	146
7	179	163	152	145	176	161	152	145	159	150	144	157	149	143	155	148	142	140
8	172	156	145	138	170	155	145	138	153	144	138	151	143	137	149	142	136	134
9	166	149	139	132	164	148	139	132	147	138	132	145	137	131	144	136	131	129
10	160	144	134	127	158	143	133	127	141	133	127	140	132	126	138	131	126	124

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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

X=2H	Y=2H	8.1	9.1	8.5	9.4	9.7	8.1	9.1	8.5	9.4	9.7
	3H	9.2	10.1	9.6	10.4	10.8	9.2	10.1	9.6	10.4	10.8
	4H	9.5	10.3	9.9	10.7	11.1	9.5	10.3	9.9	10.7	11.1
	6H	9.8	10.5	10.2	10.9	11.3	9.8	10.5	10.2	10.9	11.3
	8H	9.8	10.5	10.3	10.9	11.3	9.8	10.5	10.3	10.9	11.3
	12H	9.9	10.5	10.3	10.9	11.3	9.9	10.5	10.3	10.9	11.3

UGR Viewed Endwise

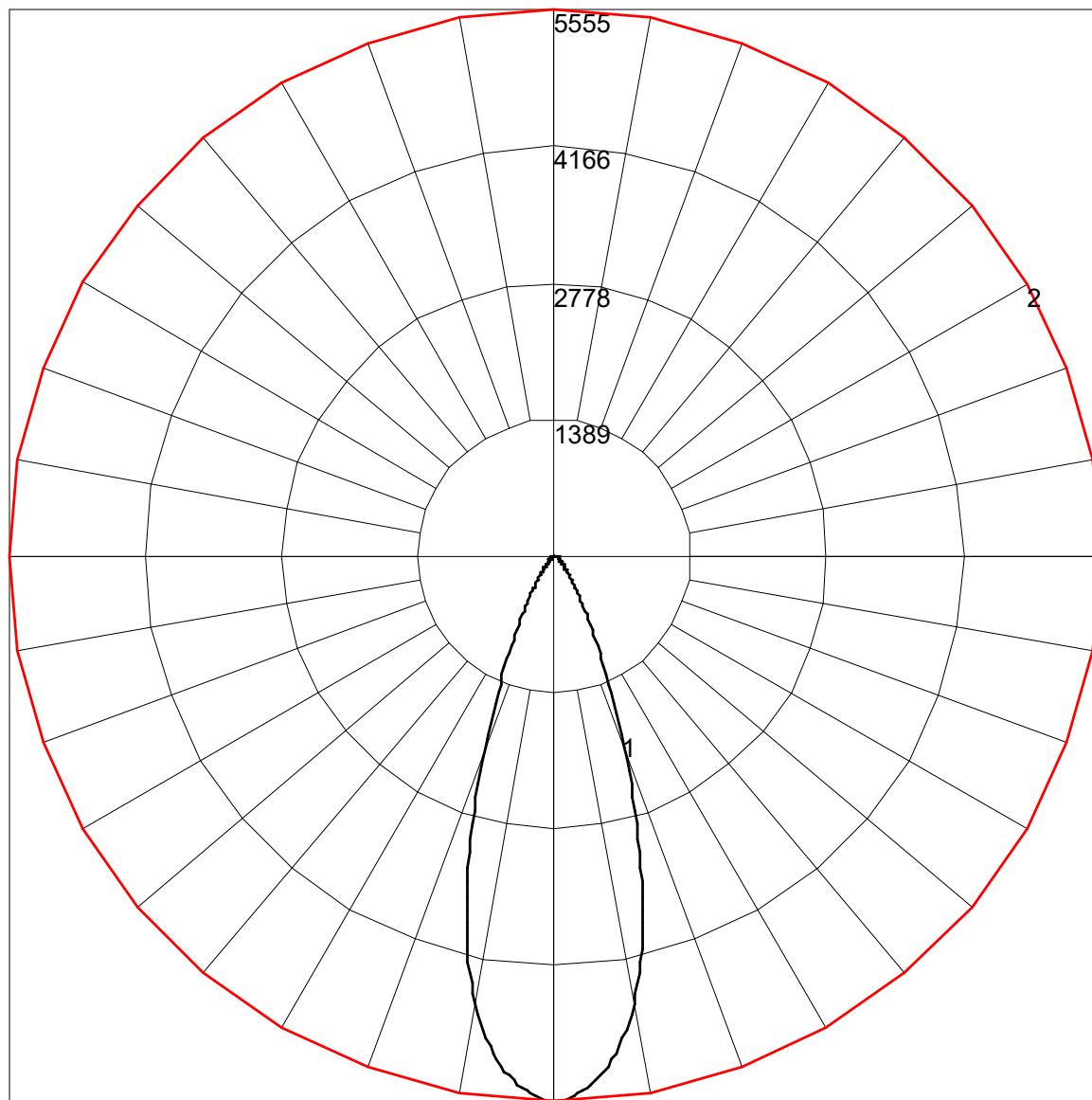
4H	2H	8.4	9.2	8.8	9.6	10.0	8.4	9.2	8.8	9.6	10.0
	3H	9.7	10.3	10.1	10.8	11.2	9.7	10.3	10.1	10.8	11.2
	4H	10.1	10.7	10.5	11.1	11.6	10.1	10.7	10.5	11.1	11.6
	6H	10.4	10.9	10.9	11.4	11.9	10.4	10.9	10.9	11.4	11.9
	8H	10.6	11.0	11.0	11.5	11.9	10.6	11.0	11.0	11.5	11.9
	12H	10.6	11.0	11.1	11.5	12.0	10.6	11.0	11.1	11.5	12.0

8H	4H	10.2	10.6	10.7	11.1	11.6	10.2	10.6	10.7	11.1	11.6
	6H	10.6	11.0	11.2	11.5	12.0	10.6	11.0	11.2	11.5	12.0
	8H	10.8	11.1	11.4	11.7	12.2	10.8	11.1	11.4	11.7	12.2
	12H	11.0	11.2	11.5	11.7	12.3	11.0	11.2	11.5	11.7	12.3

12H	4H	10.2	10.6	10.7	11.0	11.5	10.2	10.6	10.7	11.0	11.5
	6H	10.6	11.0	11.2	11.4	12.0	10.6	11.0	11.2	11.4	12.0
	8H	10.9	11.1	11.4	11.6	12.2	10.9	11.1	11.4	11.6	12.2

Maximum UGR = 12.3

POLAR GRAPH



Maximum Candela = 5555.144 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.)