



IES INDOOR REPORT

PHOTOMETRIC FILENAME : V4DR-P8-8TW-POE-LW-OF-WH_4000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL #12316380.07

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 6 OCT 2021

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] V4DR-P8-8TW-POE x-LW-OF-WH 4000k

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

[MORE] erved glass lens enclosure

[LAMP] One white LED

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Classroom, Commercial, Corridor, Hotel, Industrial, Office, Downlight

[_SEARCH_MOUNTING] Recessed

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	750
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	65
Total Luminaire Watts	11.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.00
Spacing Criterion (90-270)	1.00
Spacing Criterion (Diagonal)	0.90
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.35 ft (Diameter)
Luminous Width (90-270)	0.35 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	20692	20692	20692
55	17003	17003	17003
65	12439	12439	12439
75	8611	8611	8611
85	4694	4694	4694

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CANDELA TABULATION

	<u>0</u>
0.0	526.720
0.5	526.553
1.0	526.220
1.5	525.777
2.0	525.333
2.5	524.834
3.0	524.168
3.5	523.780
4.0	523.502
4.5	523.336
5.0	523.114
5.5	522.892
6.0	522.726
6.5	522.504
7.0	522.337
7.5	522.226
8.0	522.171
8.5	522.004
9.0	521.838
9.5	521.505
10.0	521.283
10.5	520.895
11.0	520.507
11.5	520.007
12.0	519.453
12.5	518.787
13.0	518.010
13.5	517.123
14.0	516.013
14.5	514.682
15.0	513.073
15.5	511.132
16.0	508.968
16.5	506.416
17.0	503.643
17.5	500.536
18.0	496.875
18.5	493.103
19.0	488.998
19.5	484.393
20.0	479.345
20.5	473.854
21.0	467.918
21.5	461.538
22.0	454.493
22.5	447.004
23.0	438.961
23.5	430.307
24.0	420.987
24.5	411.058
25.0	400.296
25.5	389.035
26.0	376.997
26.5	364.238

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CANDELA TABULATION - (Cont.)

27.0	351.035
27.5	337.278
28.0	323.299
28.5	309.264
29.0	295.507
29.5	282.027
30.0	269.046
30.5	256.842
31.0	245.414
31.5	234.985
32.0	225.499
32.5	216.956
33.0	209.356
33.5	202.589
34.0	196.542
34.5	191.217
35.0	186.391
35.5	182.008
36.0	178.125
36.5	174.464
37.0	171.135
37.5	168.029
38.0	165.144
38.5	162.371
39.0	159.819
39.5	157.322
40.0	154.993
40.5	152.663
41.0	150.444
41.5	148.280
42.0	146.228
42.5	144.175
43.0	142.123
43.5	140.070
44.0	138.018
44.5	135.965
45.0	133.913
45.5	131.860
46.0	129.808
46.5	127.755
47.0	125.592
47.5	123.428
48.0	121.265
48.5	119.046
49.0	116.771
49.5	114.497
50.0	112.278
50.5	110.004
51.0	107.729
51.5	105.455
52.0	103.236
52.5	101.017
53.0	98.743
53.5	96.413
54.0	94.027
54.5	91.642

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CANDELA TABULATION - (Cont.)

55.0	89.257
55.5	86.871
56.0	84.541
56.5	82.267
57.0	79.993
57.5	77.718
58.0	75.499
58.5	73.336
59.0	71.172
59.5	69.064
60.0	67.012
60.5	64.959
61.0	62.962
61.5	61.021
62.0	59.079
62.5	57.138
63.0	55.285
63.5	53.443
64.0	51.635
64.5	49.854
65.0	48.112
65.5	46.415
66.0	44.739
66.5	43.108
67.0	41.516
67.5	39.952
68.0	38.437
68.5	36.956
69.0	35.475
69.5	34.044
70.0	32.652
70.5	31.281
71.0	29.945
71.5	28.641
72.0	27.382
72.5	26.139
73.0	24.930
73.5	23.754
74.0	22.600
74.5	21.485
75.0	20.398
75.5	19.344
76.0	18.312
76.5	17.308
77.0	16.348
77.5	15.394
78.0	14.473
78.5	13.580
79.0	12.703
79.5	11.860
80.0	11.034
80.5	10.229
81.0	9.436
81.5	8.665
82.0	7.911
82.5	7.178

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CANDELA TABULATION - (Cont.)

83.0	6.452
83.5	5.747
84.0	5.059
84.5	4.388
85.0	3.744
85.5	3.123
86.0	2.530
86.5	1.969
87.0	1.476
87.5	1.065
88.0	0.743
88.5	0.472
89.0	0.294
89.5	0.200
90.0	0.139
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
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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
146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
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148.5	0.000
149.0	0.000
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150.0	0.000
150.5	0.000
151.0	0.000
151.5	0.000
152.0	0.000
152.5	0.000
153.0	0.000
153.5	0.000
154.0	0.000
154.5	0.000
155.0	0.000
155.5	0.000
156.0	0.000
156.5	0.000
157.0	0.000
157.5	0.000
158.0	0.000
158.5	0.000
159.0	0.000
159.5	0.000
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	193.47	N.A.	25.80
0-30	371.11	N.A.	49.50
0-40	492.10	N.A.	65.60
0-60	675.00	N.A.	90.00
0-80	745.12	N.A.	99.40
0-90	749.81	N.A.	100.00
10-90	699.92	N.A.	93.30
20-40	298.63	N.A.	39.80
20-50	401.76	N.A.	53.60
40-70	231.01	N.A.	30.80
60-80	70.11	N.A.	9.40
70-80	22.01	N.A.	2.90
80-90	4.69	N.A.	0.60
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	749.81	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	49.89
10-20	143.58
20-30	177.63
30-40	121.00
40-50	103.13
50-60	79.77
60-70	48.11
70-80	22.01
80-90	4.69
90-100	0.00
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	75	75	75	75	73	73	73	73	70	70	70	67	67	67	64	64	64	63
1	70	67	65	63	68	66	64	62	63	62	60	61	60	59	59	58	57	56
2	65	61	57	55	63	60	57	54	58	55	53	56	53	52	54	52	50	49
3	60	55	51	48	59	54	50	47	52	49	46	51	48	46	49	47	45	44
4	56	50	46	42	55	49	45	42	48	44	41	46	43	41	45	43	40	39
5	53	46	41	38	51	45	41	38	44	40	37	43	39	37	42	39	36	35
6	49	42	38	34	48	42	37	34	41	37	34	40	36	33	39	36	33	32
7	46	39	34	31	45	39	34	31	38	34	31	37	33	31	36	33	30	29
8	44	36	32	29	43	36	32	28	35	31	28	34	31	28	34	30	28	27
9	41	34	29	26	40	34	29	26	33	29	26	32	29	26	32	28	26	25
10	39	32	27	24	38	31	27	24	31	27	24	30	27	24	30	27	24	23

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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	21.2	22.6	21.6	22.9	23.2	21.2	22.6	21.6	22.9	23.2
	3H	22.3	23.5	22.7	23.9	24.2	22.3	23.5	22.7	23.9	24.2
	4H	22.7	23.8	23.1	24.1	24.5	22.7	23.8	23.1	24.1	24.5
	6H	22.9	23.9	23.3	24.3	24.7	22.9	23.9	23.3	24.3	24.7
	8H	22.9	23.9	23.4	24.3	24.7	22.9	23.9	23.4	24.3	24.7
	12H	22.9	23.9	23.4	24.3	24.7	22.9	23.9	23.4	24.3	24.7

UGR Viewed Endwise

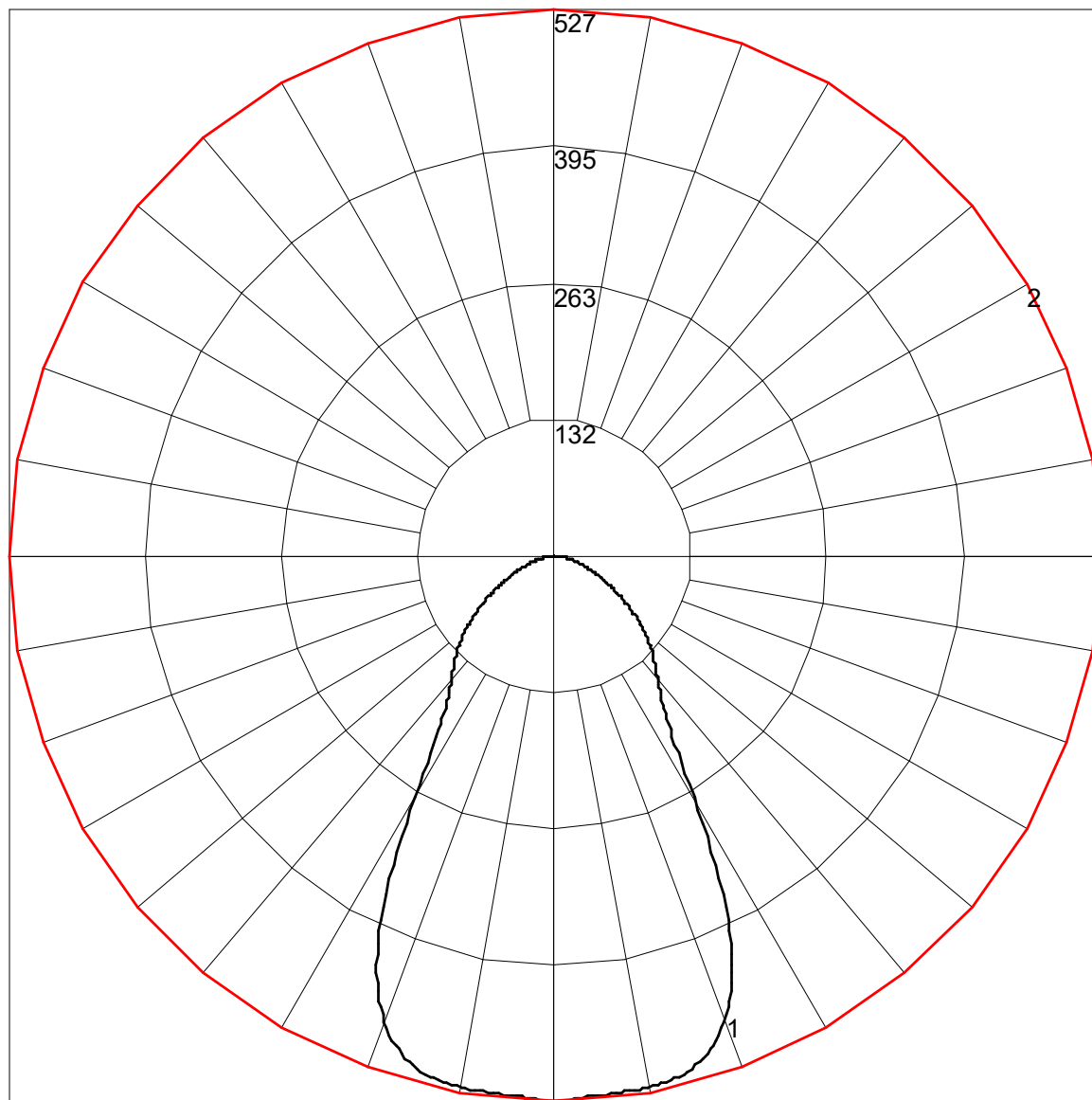
4H	2H	21.6	22.7	22.0	23.1	23.4	21.6	22.7	22.0	23.1	23.4
	3H	22.9	23.8	23.3	24.2	24.6	22.9	23.8	23.3	24.2	24.6
	4H	23.3	24.2	23.7	24.6	25.0	23.3	24.2	23.7	24.6	25.0
	6H	23.6	24.4	24.1	24.8	25.3	23.6	24.4	24.1	24.8	25.3
	8H	23.7	24.4	24.2	24.8	25.3	23.7	24.4	24.2	24.8	25.3
	12H	23.7	24.3	24.2	24.8	25.3	23.7	24.3	24.2	24.8	25.3

8H	4H	23.4	24.1	23.9	24.6	25.0	23.4	24.1	23.9	24.6	25.0
	6H	23.8	24.4	24.3	24.9	25.4	23.8	24.4	24.3	24.9	25.4
	8H	23.9	24.4	24.5	25.0	25.4	23.9	24.4	24.5	25.0	25.4
	12H	24.0	24.4	24.5	24.9	25.5	24.0	24.4	24.5	24.9	25.5

12H	4H	23.4	24.0	23.9	24.5	25.0	23.4	24.0	23.9	24.5	25.0
	6H	23.8	24.3	24.4	24.8	25.3	23.8	24.3	24.4	24.8	25.3
	8H	24.0	24.4	24.5	24.9	25.5	24.0	24.4	24.5	24.9	25.5

Maximum UGR = 25.5

POLAR GRAPH



Maximum Candela = 526.72 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.)