



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 8CR-TL-L25-9DW-XXX-DIM-UNV-LW-WH-XX_3000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 12326812.07
 [TESTLAB] UL Verification Services Inc.
 [ISSUE DATE] 29-JAN-2021
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 8CR-TL-L25-9DW-xxx-DIM-UNV-LW-WH-xx
 [LUMINAIRE] 8" DIA. SURFACE CYLINDER
 [LAMP] One white LED
 [OTHER] This test was performed using the calibrated photodetector met
 [MORE] hod of absolute photometry.

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2122
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	56
Total Luminaire Watts	37.7
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	35281	35281	35281
55	29373	29373	29373
65	22315	22315	22315
75	16183	16183	16183
85	10546	10546	10546

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CANDELA TABULATION

	<u>0</u>
0.0	1350.049
0.5	1349.777
1.0	1348.690
1.5	1347.059
2.0	1345.020
2.5	1342.302
3.0	1339.583
3.5	1336.457
4.0	1333.603
4.5	1330.749
5.0	1328.710
5.5	1326.807
6.0	1325.040
6.5	1323.273
7.0	1321.371
7.5	1319.604
8.0	1317.837
8.5	1316.206
9.0	1314.575
9.5	1313.216
10.0	1311.856
10.5	1310.769
11.0	1309.818
11.5	1309.274
12.0	1308.323
12.5	1307.371
13.0	1306.012
13.5	1304.245
14.0	1302.071
14.5	1299.624
15.0	1297.042
15.5	1293.780
16.0	1290.246
16.5	1286.712
17.0	1283.178
17.5	1279.509
18.0	1275.567
18.5	1271.082
19.0	1266.053
19.5	1260.480
20.0	1254.092
20.5	1247.161
21.0	1238.598
21.5	1228.404
22.0	1216.852
22.5	1203.804
23.0	1189.533
23.5	1174.038
24.0	1156.913
24.5	1138.428
25.0	1118.449
25.5	1097.654
26.0	1075.499
26.5	1052.394

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-L25-9DW-XXX-DIM-UNV-LW-WH-XX_3000K.IES****CANDELA TABULATION - (Cont.)**

27.0	1027.793
27.5	1002.513
28.0	975.873
28.5	947.739
29.0	918.517
29.5	887.800
30.0	856.268
30.5	823.784
31.0	791.300
31.5	758.544
32.0	726.740
32.5	696.295
33.0	667.073
33.5	639.754
34.0	614.610
34.5	591.776
35.0	571.389
35.5	552.632
36.0	536.187
36.5	521.100
37.0	507.644
37.5	495.548
38.0	484.539
38.5	474.481
39.0	464.967
39.5	456.404
40.0	448.113
40.5	440.366
41.0	433.163
41.5	426.095
42.0	419.299
42.5	413.047
43.0	406.659
43.5	400.407
44.0	394.291
44.5	388.311
45.0	382.194
45.5	376.350
46.0	370.370
46.5	364.389
47.0	358.273
47.5	352.293
48.0	346.177
48.5	340.061
49.0	333.944
49.5	327.556
50.0	321.440
50.5	315.188
51.0	308.936
51.5	302.548
52.0	296.160
52.5	289.772
53.0	283.384
53.5	276.996
54.0	270.880
54.5	264.627

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55.0	258.104
55.5	251.716
56.0	245.327
56.5	239.347
57.0	233.367
57.5	227.115
58.0	220.863
58.5	214.746
59.0	208.766
59.5	202.786
60.0	197.077
60.5	191.369
61.0	185.796
61.5	180.224
62.0	174.923
62.5	169.623
63.0	164.458
63.5	159.293
64.0	154.264
64.5	149.371
65.0	144.478
65.5	139.721
66.0	134.978
66.5	130.316
67.0	125.708
67.5	121.196
68.0	116.765
68.5	112.321
69.0	108.012
69.5	103.744
70.0	99.599
70.5	95.589
71.0	91.661
71.5	87.856
72.0	84.186
72.5	80.625
73.0	77.159
73.5	73.761
74.0	70.499
74.5	67.305
75.0	64.166
75.5	61.135
76.0	58.158
76.5	55.236
77.0	52.395
77.5	49.609
78.0	46.904
78.5	44.254
79.0	41.658
79.5	39.157
80.0	36.670
80.5	34.264
81.0	31.886
81.5	29.521
82.0	27.210
82.5	24.913

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83.0	22.671
83.5	20.469
84.0	18.294
84.5	16.160
85.0	14.081
85.5	12.069
86.0	10.126
86.5	8.250
87.0	6.429
87.5	4.907
88.0	3.751
88.5	2.745
89.0	1.903
89.5	1.196
90.0	0.761
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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 8CR-TL-L25-9DW-XXX-DIM-UNV-LW-WH-XX_3000K.IES****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
119.5	0.000
120.0	0.000
120.5	0.000
121.0	0.000
121.5	0.000
122.0	0.000
122.5	0.000
123.0	0.000
123.5	0.000
124.0	0.000
124.5	0.000
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
132.0	0.000
132.5	0.000
133.0	0.000
133.5	0.000
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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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
148.0	0.000
148.5	0.000
149.0	0.000
149.5	0.000
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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Zone	Lumens	%Lamp	%Fixt
0-20	491.78	N.A.	23.20
0-30	994.08	N.A.	46.80
0-40	1366.55	N.A.	64.40
0-60	1892.46	N.A.	89.20
0-80	2105.48	N.A.	99.20
0-90	2122.32	N.A.	100.00
10-90	1995.98	N.A.	94.00
20-40	874.77	N.A.	41.20
20-50	1169.91	N.A.	55.10
40-70	669.93	N.A.	31.60
60-80	213.02	N.A.	10.00
70-80	69.01	N.A.	3.30
80-90	16.83	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	2122.34	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	126.34
10-20	365.44
20-30	502.31
30-40	372.46
40-50	295.14
50-60	230.77
60-70	144.01
70-80	69.01
80-90	16.83
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	101	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	78	74	70	69
4	89	79	72	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	52	50
7	73	61	53	48	71	60	53	48	59	52	48	58	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

X=2H	Y=2H	21.6	23.0	22.0	23.3	23.6	21.6	23.0	22.0	23.3	23.6
	3H	22.8	24.1	23.2	24.4	24.7	22.8	24.1	23.2	24.4	24.7
	4H	23.2	24.4	23.6	24.7	25.1	23.2	24.4	23.6	24.7	25.1
	6H	23.5	24.5	23.9	24.9	25.3	23.5	24.5	23.9	24.9	25.3
	8H	23.6	24.6	24.0	25.0	25.4	23.6	24.6	24.0	25.0	25.4
	12H	23.6	24.6	24.0	24.9	25.4	23.6	24.6	24.0	24.9	25.4

UGR Viewed Endwise

4H	2H	22.0	23.2	22.4	23.5	23.9	22.0	23.2	22.4	23.5	23.9
	3H	23.4	24.4	23.8	24.8	25.2	23.4	24.4	23.8	24.8	25.2
	4H	23.9	24.8	24.4	25.2	25.6	23.9	24.8	24.4	25.2	25.6
	6H	24.3	25.0	24.8	25.5	25.9	24.3	25.0	24.8	25.5	25.9
	8H	24.4	25.1	24.8	25.5	26.0	24.4	25.1	24.8	25.5	26.0
	12H	24.5	25.1	24.9	25.6	26.0	24.5	25.1	24.9	25.6	26.0

8H	4H	24.1	24.8	24.5	25.2	25.7	24.1	24.8	24.5	25.2	25.7
	6H	24.5	25.1	25.0	25.6	26.1	24.5	25.1	25.0	25.6	26.1
	8H	24.7	25.2	25.2	25.7	26.2	24.7	25.2	25.2	25.7	26.2
	12H	24.8	25.3	25.3	25.8	26.3	24.8	25.3	25.3	25.8	26.3

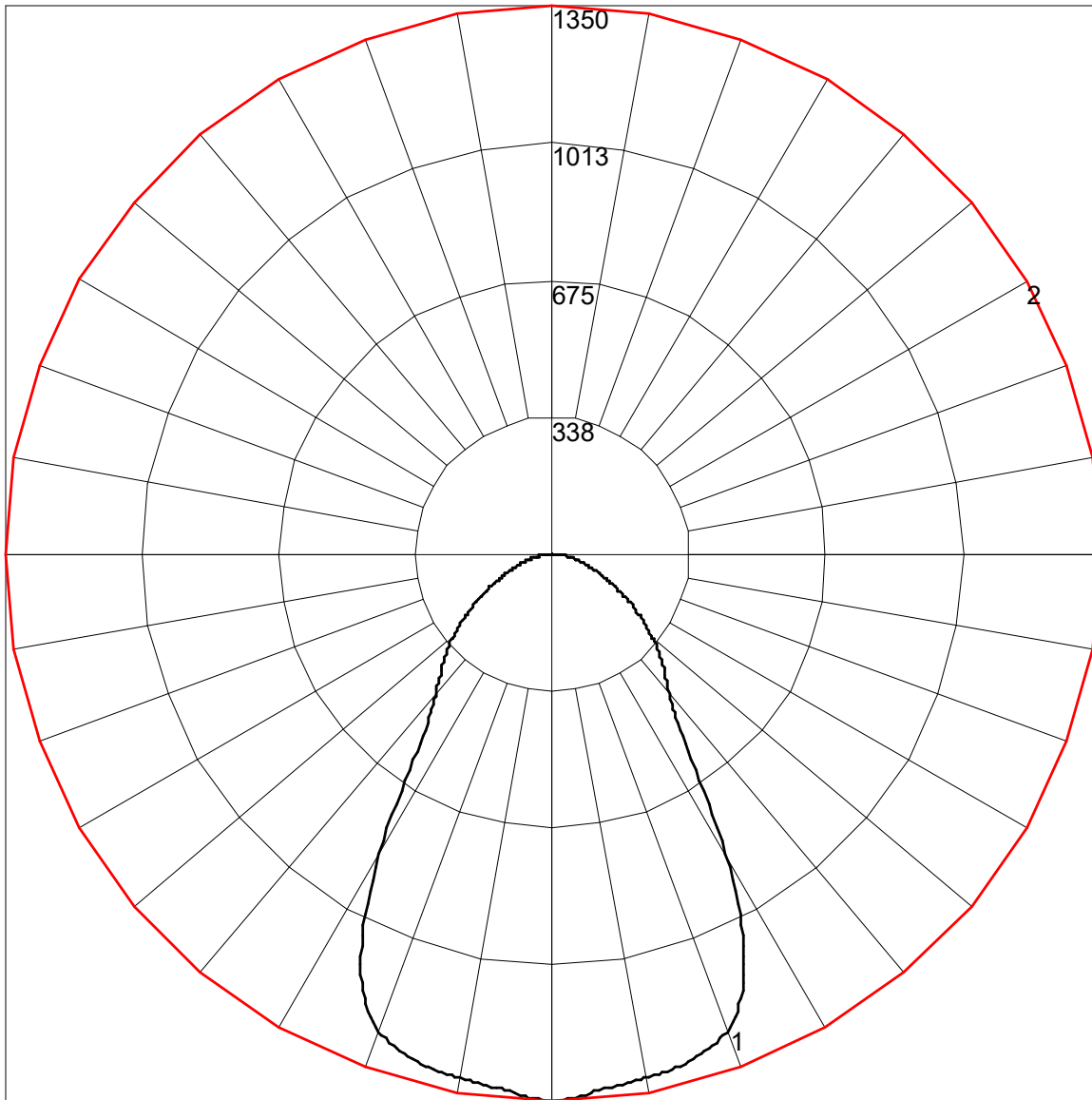
12H	4H	24.1	24.7	24.6	25.2	25.6	24.1	24.7	24.6	25.2	25.6
	6H	24.6	25.1	25.1	25.5	26.1	24.6	25.1	25.1	25.5	26.1
	8H	24.8	25.2	25.3	25.7	26.3	24.8	25.2	25.3	25.7	26.3

Maximum UGR = 26.3

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POLAR GRAPH



Maximum Candela = 1350.049 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.)