



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L40-940-DIM-UNV-RW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.12

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 22 Nov, 2022

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6DR-TL-L30-940-DIM-UNV-RW-OF-WH

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

[MORE] 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	1815
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	67
Total Luminaire Watts	26.9
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	24500	24500	24500
55	20432	20432	20432
65	14415	14415	14415
75	8830	8830	8830
85	6964	6964	6964

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CANDELA TABULATION

	<u>0</u>
0.0	1342.279
0.5	1341.024
1.0	1339.768
1.5	1338.512
2.0	1336.001
2.5	1332.234
3.0	1328.467
3.5	1323.445
4.0	1318.422
4.5	1314.655
5.0	1309.633
5.5	1304.610
6.0	1299.587
6.5	1294.565
7.0	1289.542
7.5	1284.520
8.0	1278.242
8.5	1273.219
9.0	1268.196
9.5	1261.918
10.0	1256.896
10.5	1250.743
11.0	1244.716
11.5	1238.689
12.0	1232.662
12.5	1226.760
13.0	1220.733
13.5	1214.455
14.0	1208.302
14.5	1202.275
15.0	1196.625
15.5	1190.849
16.0	1185.199
16.5	1179.674
17.0	1174.526
17.5	1169.378
18.0	1164.355
18.5	1159.584
19.0	1154.812
19.5	1149.915
20.0	1144.893
20.5	1139.493
21.0	1133.341
21.5	1126.309
22.0	1118.399
22.5	1109.609
23.0	1100.066
23.5	1089.268
24.0	1077.465
24.5	1064.532
25.0	1050.217
25.5	1034.773
26.0	1017.571
26.5	998.736

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CANDELA TABULATION - (Cont.)

27.0	978.646
27.5	956.798
28.0	933.568
28.5	908.330
29.0	881.710
29.5	852.831
30.0	822.193
30.5	789.798
31.0	756.146
31.5	721.742
32.0	686.710
32.5	651.928
33.0	617.524
33.5	584.249
34.0	552.356
34.5	522.346
35.0	494.973
35.5	469.860
36.0	447.761
36.5	428.173
37.0	410.971
37.5	396.280
38.0	383.347
38.5	371.921
39.0	362.001
39.5	353.212
40.0	345.175
40.5	337.893
41.0	331.112
41.5	324.960
42.0	319.309
42.5	313.910
43.0	308.762
43.5	303.865
44.0	299.219
44.5	294.824
45.0	290.304
45.5	286.035
46.0	281.640
46.5	277.371
47.0	272.976
47.5	268.581
48.0	264.061
48.5	259.541
49.0	255.272
49.5	250.877
50.0	246.231
50.5	241.460
51.0	236.563
51.5	231.666
52.0	226.769
52.5	221.746
53.0	216.849
53.5	212.078
54.0	206.804
54.5	201.530

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CANDELA TABULATION - (Cont.)

55.0	196.382
55.5	191.108
56.0	185.960
56.5	180.812
57.0	175.664
57.5	170.516
58.0	165.619
58.5	160.596
59.0	155.699
59.5	150.928
60.0	146.156
60.5	141.385
61.0	136.739
61.5	132.219
62.0	127.699
62.5	123.304
63.0	118.909
63.5	114.514
64.0	110.371
64.5	106.102
65.0	102.084
65.5	97.940
66.0	94.047
66.5	90.155
67.0	86.388
67.5	82.621
68.0	78.980
68.5	75.338
69.0	71.948
69.5	68.432
70.0	65.168
70.5	61.903
71.0	58.764
71.5	55.750
72.0	52.737
72.5	49.974
73.0	47.338
73.5	44.952
74.0	42.566
74.5	40.432
75.0	38.297
75.5	36.414
76.0	34.530
76.5	32.898
77.0	31.391
77.5	29.884
78.0	28.377
78.5	26.871
79.0	25.489
79.5	24.108
80.0	22.727
80.5	21.346
81.0	19.965
81.5	18.709
82.0	17.328
82.5	16.072

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CANDELA TABULATION - (Cont.)

83.0	14.817
83.5	13.686
84.0	12.431
84.5	11.301
85.0	10.171
85.5	9.041
86.0	7.911
86.5	6.780
87.0	5.776
87.5	4.646
88.0	3.767
88.5	3.014
89.0	2.386
89.5	1.758
90.0	1.256
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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118.5	0.000
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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
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145.5	0.000
146.0	0.000
146.5	0.000
147.0	0.000
147.5	0.000
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150.0	0.000
150.5	0.000
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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	461.23	N.A.	25.40
0-30	932.44	N.A.	51.40
0-40	1258.45	N.A.	69.40
0-60	1658.52	N.A.	91.40
0-80	1802.95	N.A.	99.40
0-90	1814.53	N.A.	100.00
10-90	1691.23	N.A.	93.20
20-40	797.21	N.A.	43.90
20-50	1022.14	N.A.	56.30
40-70	502.00	N.A.	27.70
60-80	144.43	N.A.	8.00
70-80	42.49	N.A.	2.30
80-90	11.58	N.A.	0.60
90-110	0.03	N.A.	0.00
90-120	0.03	N.A.	0.00
90-130	0.03	N.A.	0.00
90-150	0.03	N.A.	0.00
90-180	0.03	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1814.56	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	123.30
10-20	337.93
20-30	471.20
30-40	326.01
40-50	224.93
50-60	175.14
60-70	101.93
70-80	42.49
80-90	11.58
90-100	0.03
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 RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	66	66	66	66	64	64	64	64	61	61	61	59	59	59	56	56	56	55
1	62	60	58	56	60	58	57	55	56	55	54	54	53	52	52	51	50	49
2	57	54	51	49	56	53	50	48	51	49	47	49	47	46	48	46	45	44
3	54	49	45	43	52	48	45	42	47	44	42	45	43	41	44	42	40	39
4	50	45	41	38	49	44	40	38	43	40	37	42	39	37	40	38	36	35
5	47	41	37	34	46	40	37	34	39	36	33	38	35	33	37	35	33	32
6	44	38	34	31	43	37	33	31	36	33	30	36	33	30	35	32	30	29
7	41	35	31	28	40	35	31	28	34	30	28	33	30	28	32	30	28	27
8	39	33	29	26	38	32	28	26	32	28	26	31	28	26	30	27	25	24
9	37	30	26	24	36	30	26	24	29	26	24	29	26	24	28	26	24	23
10	35	28	25	22	34	28	25	22	28	24	22	27	24	22	27	24	22	21

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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

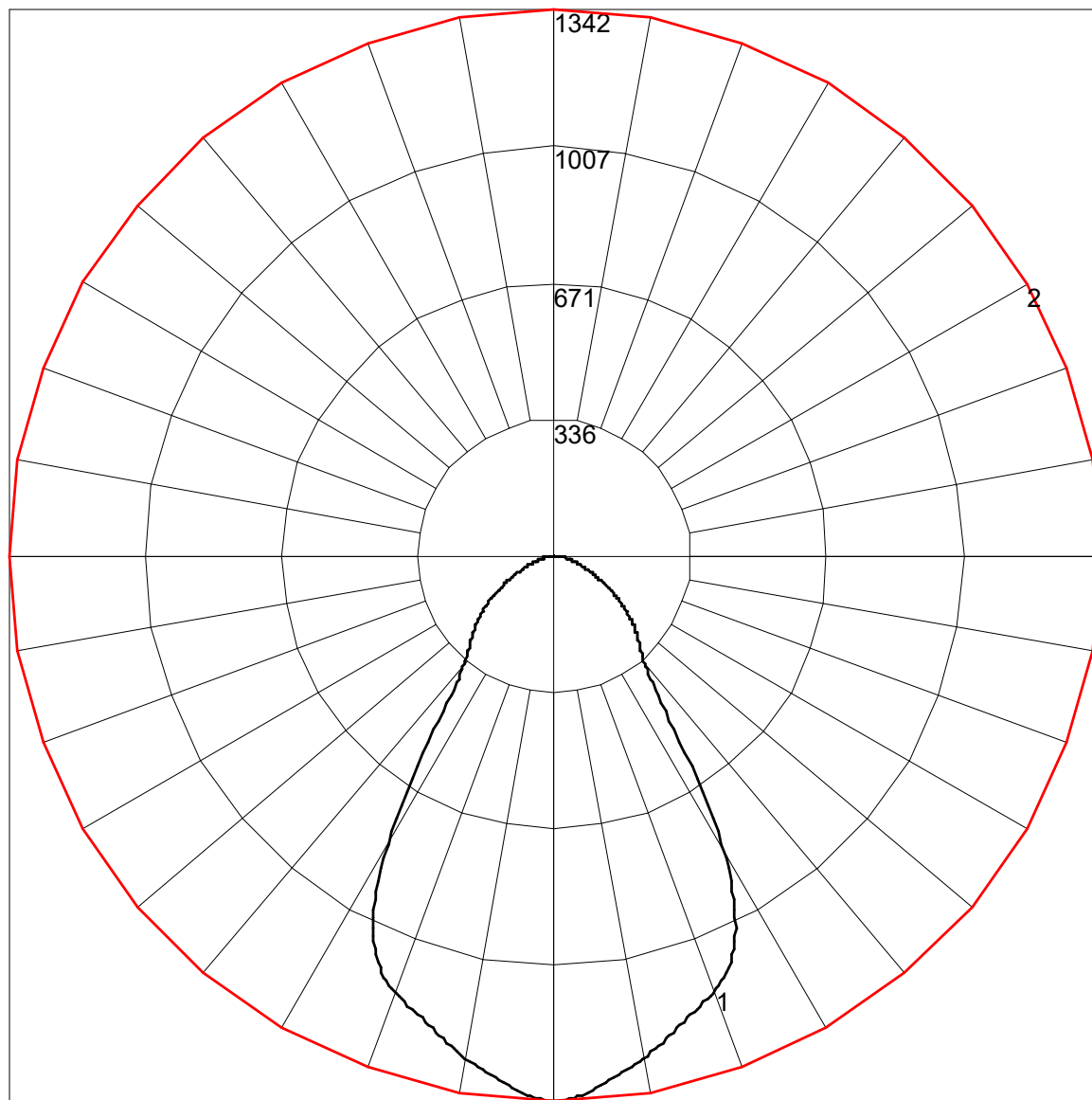
X=2H	Y=2H	21.9	23.3	22.3	23.6	23.9	21.9	23.3	22.3	23.6	23.9
	3H	22.9	24.1	23.3	24.4	24.8	22.9	24.1	23.3	24.4	24.8
	4H	23.2	24.3	23.6	24.6	25.0	23.2	24.3	23.6	24.6	25.0
	6H	23.3	24.4	23.8	24.7	25.1	23.3	24.4	23.8	24.7	25.1
	8H	23.4	24.4	23.8	24.8	25.2	23.4	24.4	23.8	24.8	25.2
	12H	23.4	24.3	23.9	24.7	25.2	23.4	24.3	23.9	24.7	25.2

UGR Viewed Endwise

4H	2H	22.3	23.4	22.7	23.7	24.1	22.3	23.4	22.7	23.7	24.1
	3H	23.4	24.3	23.8	24.7	25.1	23.4	24.3	23.8	24.7	25.1
	4H	23.8	24.6	24.2	25.0	25.4	23.8	24.6	24.2	25.0	25.4
	6H	24.0	24.7	24.5	25.2	25.6	24.0	24.7	24.5	25.2	25.6
	8H	24.1	24.7	24.6	25.2	25.7	24.1	24.7	24.6	25.2	25.7
	12H	24.2	24.7	24.6	25.2	25.7	24.2	24.7	24.6	25.2	25.7
8H	4H	23.8	24.5	24.3	24.9	25.4	23.8	24.5	24.3	24.9	25.4
	6H	24.2	24.7	24.7	25.2	25.7	24.2	24.7	24.7	25.2	25.7
	8H	24.3	24.8	24.8	25.3	25.8	24.3	24.8	24.8	25.3	25.8
	12H	24.4	24.8	24.9	25.3	25.9	24.4	24.8	24.9	25.3	25.9
12H	4H	23.8	24.4	24.3	24.9	25.4	23.8	24.4	24.3	24.9	25.4
	6H	24.2	24.7	24.7	25.1	25.7	24.2	24.7	24.7	25.1	25.7
	8H	24.3	24.8	24.9	25.3	25.8	24.3	24.8	24.9	25.3	25.8

Maximum UGR = 25.9

POLAR GRAPH



Maximum Candela = 1342.279 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.)