



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM 12326812.09

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 11/16/2022

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6DR-TL-L40-940-DIM-UNV-LM-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	3125
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	36.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.60
Spacing Criterion (90-270)	0.60
Spacing Criterion (Diagonal)	0.56
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	13956	13956	13956
55	10218	10218	10218
65	8326	8326	8326
75	6776	6776	6776
85	4458	4458	4458

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CANDELA TABULATION

	<u>0</u>
0.0	7377.159
0.5	7373.758
1.0	7363.555
1.5	7348.249
2.0	7327.842
2.5	7298.932
3.0	7266.621
3.5	7229.208
4.0	7184.993
4.5	7139.077
5.0	7088.059
5.5	7030.239
6.0	6967.317
6.5	6897.593
7.0	6822.767
7.5	6741.139
8.0	6651.008
8.5	6554.074
9.0	6452.039
9.5	6343.201
10.0	6225.860
10.5	6101.717
11.0	5969.071
11.5	5826.221
12.0	5678.270
12.5	5521.816
13.0	5358.559
13.5	5186.800
14.0	5009.938
14.5	4826.274
15.0	4639.210
15.5	4448.743
16.0	4258.277
16.5	4066.111
17.0	3879.046
17.5	3691.981
18.0	3503.215
18.5	3317.851
19.0	3134.187
19.5	2957.326
20.0	2785.566
20.5	2620.609
21.0	2465.856
21.5	2317.904
22.0	2169.953
22.5	2030.504
23.0	1897.858
23.5	1772.015
24.0	1654.844
24.5	1543.966
25.0	1440.400
25.5	1342.786
26.0	1252.314
26.5	1167.625

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CANDELA TABULATION - (Cont.)

27.0	1088.888
27.5	1015.932
28.0	947.909
28.5	884.987
29.0	826.657
29.5	772.238
30.0	721.900
30.5	674.964
31.0	631.429
31.5	590.955
32.0	553.202
32.5	518.170
33.0	485.518
33.5	455.078
34.0	427.018
34.5	400.999
35.0	376.681
35.5	354.403
36.0	333.656
36.5	314.779
37.0	297.263
37.5	281.278
38.0	266.823
38.5	253.388
39.0	241.144
39.5	229.920
40.0	219.716
40.5	210.193
41.0	201.520
41.5	193.527
42.0	186.045
42.5	179.242
43.0	172.780
43.5	166.828
44.0	161.386
44.5	156.114
45.0	151.182
45.5	146.591
46.0	142.339
46.5	138.258
47.0	134.347
47.5	130.605
48.0	127.204
48.5	123.803
49.0	120.572
49.5	117.511
50.0	114.620
50.5	111.729
51.0	109.008
51.5	106.287
52.0	103.736
52.5	101.355
53.0	98.804
53.5	96.423
54.0	94.213
54.5	92.002

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CANDELA TABULATION - (Cont.)

55.0	89.791
55.5	87.580
56.0	85.540
56.5	83.499
57.0	81.458
57.5	79.418
58.0	77.547
58.5	75.676
59.0	73.806
59.5	72.105
60.0	70.404
60.5	68.534
61.0	66.833
61.5	65.133
62.0	63.432
62.5	61.901
63.0	60.201
63.5	58.670
64.0	57.140
64.5	55.609
65.0	53.909
65.5	52.378
66.0	50.848
66.5	49.487
67.0	47.957
67.5	46.426
68.0	45.066
68.5	43.705
69.0	42.175
69.5	40.814
70.0	39.454
70.5	38.093
71.0	36.903
71.5	35.542
72.0	34.182
72.5	32.991
73.0	31.631
73.5	30.441
74.0	29.250
74.5	28.060
75.0	26.869
75.5	25.679
76.0	24.488
76.5	23.298
77.0	22.108
77.5	21.087
78.0	19.897
78.5	18.877
79.0	17.856
79.5	16.666
80.0	15.645
80.5	14.625
81.0	13.605
81.5	12.584
82.0	11.564
82.5	10.544

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CANDELA TABULATION - (Cont.)

83.0	9.693
83.5	8.673
84.0	7.823
84.5	6.802
85.0	5.952
85.5	5.102
86.0	4.251
86.5	3.571
87.0	2.891
87.5	2.381
88.0	1.871
88.5	1.531
89.0	1.190
89.5	0.850
90.0	0.510
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
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
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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
145.0	0.000
145.5	0.000
146.0	0.000
146.5	0.000
147.0	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	1897.3	N.A.	60.70
0-30	2584.45	N.A.	82.70
0-40	2834.31	N.A.	90.70
0-60	3035.17	N.A.	97.10
0-80	3117.36	N.A.	99.80
0-90	3124.63	N.A.	100.00
10-90	2474.98	N.A.	79.20
20-40	937.01	N.A.	30.00
20-50	1056.96	N.A.	33.80
40-70	254.51	N.A.	8.10
60-80	82.19	N.A.	2.60
70-80	28.54	N.A.	0.90
80-90	7.26	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	3124.64	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	649.65
10-20	1247.66
20-30	687.14
30-40	249.87
40-50	119.96
50-60	80.90
60-70	53.65
70-80	28.54
80-90	7.26
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	89
3	104	98	94	90	102	97	93	89	94	91	88	92	89	86	90	87	85	84
4	100	93	88	84	98	92	87	83	90	86	83	88	84	82	86	83	81	79
5	96	88	83	79	94	87	82	79	85	81	78	84	80	77	82	79	77	75
6	92	84	79	75	90	83	78	75	82	77	74	80	76	74	79	76	73	72
7	88	80	75	71	87	79	74	71	78	74	71	77	73	70	76	73	70	69
8	85	77	71	68	84	76	71	68	75	71	67	74	70	67	73	70	67	66
9	82	73	68	65	81	73	68	65	72	68	65	71	67	64	71	67	64	63
10	79	71	66	62	78	70	65	62	69	65	62	69	65	62	68	64	62	61

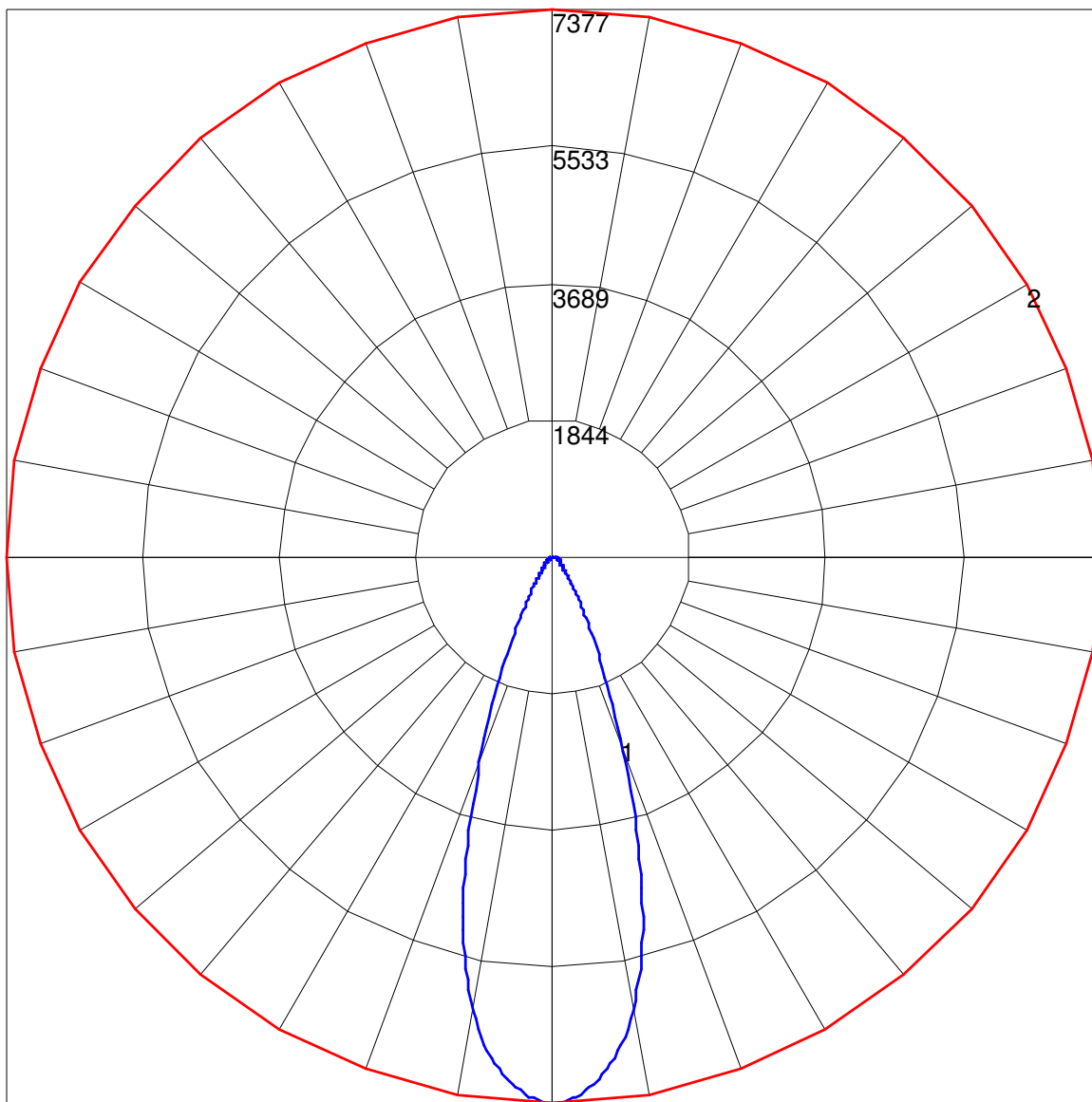
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UGR TABLE - CORRECTED

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	13.5	14.5	13.8	14.8	15.1	13.5	14.5	13.8	14.8	15.1
	3H	14.9	15.8	15.3	16.1	16.5	14.9	15.8	15.3	16.1	16.5
	4H	15.4	16.2	15.8	16.6	17.0	15.4	16.2	15.8	16.6	17.0
	6H	15.7	16.5	16.2	16.9	17.3	15.7	16.5	16.2	16.9	17.3
	8H	15.8	16.5	16.3	16.9	17.3	15.8	16.5	16.3	16.9	17.3
	12H	15.9	16.5	16.3	16.9	17.4	15.9	16.5	16.3	16.9	17.4
4H	2H	13.9	14.7	14.3	15.1	15.5	13.9	14.7	14.3	15.1	15.5
	3H	15.5	16.2	15.9	16.6	17.0	15.5	16.2	15.9	16.6	17.0
	4H	16.1	16.7	16.5	17.1	17.6	16.1	16.7	16.5	17.1	17.6
	6H	16.6	17.1	17.0	17.5	18.0	16.6	17.1	17.0	17.5	18.0
	8H	16.7	17.2	17.2	17.6	18.1	16.7	17.2	17.2	17.6	18.1
	12H	16.8	17.2	17.2	17.7	18.1	16.8	17.2	17.2	17.7	18.1
8H	4H	16.3	16.8	16.8	17.2	17.7	16.3	16.8	16.8	17.2	17.7
	6H	16.8	17.2	17.4	17.7	18.2	16.8	17.2	17.4	17.7	18.2
	8H	17.0	17.4	17.6	17.9	18.4	17.0	17.4	17.6	17.9	18.4
	12H	17.2	17.5	17.7	18.0	18.5	17.2	17.5	17.7	18.0	18.5
12H	4H	16.3	16.7	16.8	17.2	17.6	16.3	16.7	16.8	17.2	17.6
	6H	16.9	17.2	17.4	17.7	18.2	16.9	17.2	17.4	17.7	18.2
	8H	17.1	17.4	17.6	17.9	18.5	17.1	17.4	17.6	17.9	18.5

Maximum UGR = 18.5

POLAR GRAPH



Maximum Candela = 7377.159 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)