



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L30-840-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-L30-840-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	2810
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	26.9
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	12549	12549	12549
55	9188	9188	9188
65	7487	7487	7487
75	6093	6093	6093
85	4008	4008	4008

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CANDELA TABULATION

	<u>0</u>
0.0	6633.340
0.5	6630.282
1.0	6621.107
1.5	6607.345
2.0	6588.995
2.5	6563.000
3.0	6533.947
3.5	6500.306
4.0	6460.549
4.5	6419.263
5.0	6373.389
5.5	6321.399
6.0	6264.821
6.5	6202.127
7.0	6134.846
7.5	6061.448
8.0	5980.404
8.5	5893.244
9.0	5801.497
9.5	5703.633
10.0	5598.123
10.5	5486.497
11.0	5367.225
11.5	5238.779
12.0	5105.745
12.5	4965.066
13.0	4818.270
13.5	4663.828
14.0	4504.799
14.5	4339.654
15.0	4171.450
15.5	4000.188
16.0	3828.927
16.5	3656.136
17.0	3487.932
17.5	3319.728
18.0	3149.995
18.5	2983.321
19.0	2818.176
19.5	2659.147
20.0	2504.705
20.5	2356.380
21.0	2217.230
21.5	2084.196
22.0	1951.162
22.5	1825.774
23.0	1706.502
23.5	1593.347
24.0	1487.991
24.5	1388.292
25.0	1295.168
25.5	1207.396
26.0	1126.047
26.5	1049.897

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CANDELA TABULATION - (Cont.)

27.0	979.098
27.5	913.499
28.0	852.334
28.5	795.756
29.0	743.307
29.5	694.375
30.0	649.113
30.5	606.909
31.0	567.764
31.5	531.371
32.0	497.424
32.5	465.924
33.0	436.565
33.5	409.194
34.0	383.963
34.5	360.567
35.0	338.701
35.5	318.669
36.0	300.014
36.5	283.041
37.0	267.291
37.5	252.917
38.0	239.920
38.5	227.839
39.0	216.830
39.5	206.738
40.0	197.563
40.5	189.000
41.0	181.201
41.5	174.014
42.0	167.286
42.5	161.170
43.0	155.359
43.5	150.007
44.0	145.114
44.5	140.374
45.0	135.939
45.5	131.810
46.0	127.988
46.5	124.318
47.0	120.801
47.5	117.437
48.0	114.378
48.5	111.320
49.0	108.415
49.5	105.662
50.0	103.063
50.5	100.463
51.0	98.017
51.5	95.570
52.0	93.277
52.5	91.136
53.0	88.842
53.5	86.701
54.0	84.713
54.5	82.726

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CANDELA TABULATION - (Cont.)

55.0	80.738
55.5	78.750
56.0	76.915
56.5	75.080
57.0	73.245
57.5	71.410
58.0	69.728
58.5	68.046
59.0	66.364
59.5	64.835
60.0	63.306
60.5	61.624
61.0	60.095
61.5	58.565
62.0	57.036
62.5	55.660
63.0	54.131
63.5	52.755
64.0	51.379
64.5	50.002
65.0	48.473
65.5	47.097
66.0	45.721
66.5	44.498
67.0	43.121
67.5	41.745
68.0	40.522
68.5	39.298
69.0	37.922
69.5	36.699
70.0	35.476
70.5	34.252
71.0	33.182
71.5	31.959
72.0	30.735
72.5	29.665
73.0	28.442
73.5	27.371
74.0	26.301
74.5	25.231
75.0	24.160
75.5	23.090
76.0	22.019
76.5	20.949
77.0	19.879
77.5	18.961
78.0	17.891
78.5	16.973
79.0	16.056
79.5	14.985
80.0	14.068
80.5	13.150
81.0	12.233
81.5	11.316
82.0	10.398
82.5	9.481

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CANDELA TABULATION - (Cont.)

83.0	8.716
83.5	7.799
84.0	7.034
84.5	6.116
85.0	5.352
85.5	4.587
86.0	3.823
86.5	3.211
87.0	2.600
87.5	2.141
88.0	1.682
88.5	1.376
89.0	1.070
89.5	0.765
90.0	0.459
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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117.5	0.000
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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
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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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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	1706.00	N.A.	60.70
0-30	2323.86	N.A.	82.70
0-40	2548.54	N.A.	90.70
0-60	2729.14	N.A.	97.10
0-80	2803.05	N.A.	99.80
0-90	2809.58	N.A.	100.00
10-90	2225.44	N.A.	79.20
20-40	842.53	N.A.	30.00
20-50	950.39	N.A.	33.80
40-70	228.85	N.A.	8.10
60-80	73.91	N.A.	2.60
70-80	25.67	N.A.	0.90
80-90	6.53	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	2809.59	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	584.14
10-20	1121.86
20-30	617.86
30-40	224.67
40-50	107.86
50-60	72.75
60-70	48.24
70-80	25.67
80-90	6.53
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

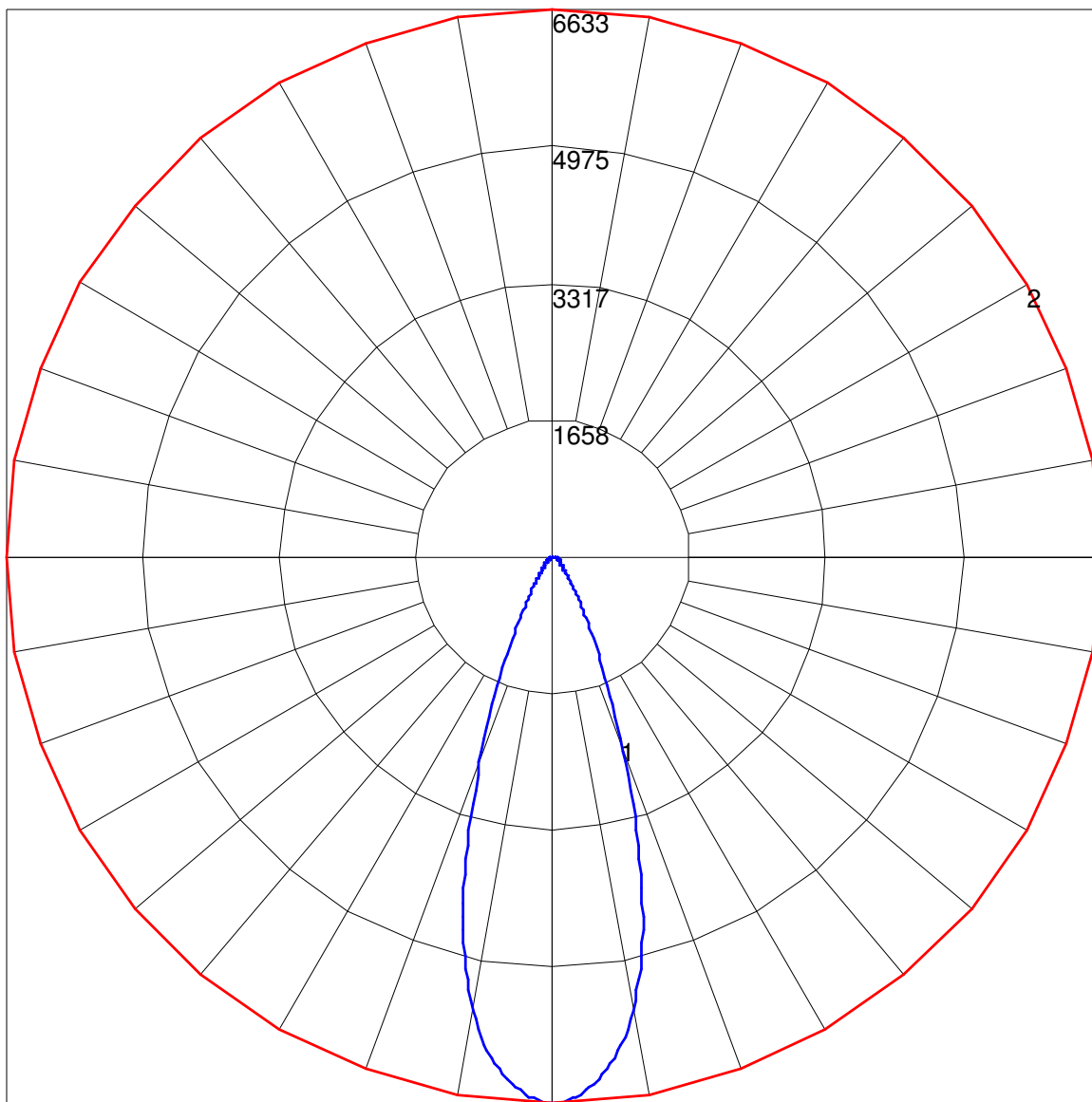
Reflectances

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	13.1	14.1	13.4	14.4	14.7	13.1	14.1	13.4	14.4	14.7
	3H	14.5	15.4	14.9	15.7	16.1	14.5	15.4	14.9	15.7	16.1
	4H	15.0	15.8	15.4	16.2	16.6	15.0	15.8	15.4	16.2	16.6
	6H	15.3	16.1	15.8	16.5	16.9	15.3	16.1	15.8	16.5	16.9
	8H	15.4	16.1	15.8	16.5	16.9	15.4	16.1	15.8	16.5	16.9
	12H	15.5	16.1	15.9	16.5	17.0	15.5	16.1	15.9	16.5	17.0
4H	2H	13.5	14.3	13.9	14.7	15.1	13.5	14.3	13.9	14.7	15.1
	3H	15.1	15.8	15.5	16.2	16.6	15.1	15.8	15.5	16.2	16.6
	4H	15.7	16.3	16.1	16.7	17.2	15.7	16.3	16.1	16.7	17.2
	6H	16.2	16.7	16.6	17.1	17.6	16.2	16.7	16.6	17.1	17.6
	8H	16.3	16.8	16.8	17.2	17.7	16.3	16.8	16.8	17.2	17.7
	12H	16.4	16.8	16.8	17.3	17.7	16.4	16.8	16.8	17.3	17.7
8H	4H	15.9	16.4	16.4	16.8	17.3	15.9	16.4	16.4	16.8	17.3
	6H	16.4	16.8	17.0	17.3	17.8	16.4	16.8	17.0	17.3	17.8
	8H	16.6	17.0	17.2	17.5	18.0	16.6	17.0	17.2	17.5	18.0
	12H	16.8	17.1	17.3	17.6	18.1	16.8	17.1	17.3	17.6	18.1
12H	4H	15.9	16.3	16.4	16.8	17.2	15.9	16.3	16.4	16.8	17.2
	6H	16.5	16.8	17.0	17.3	17.8	16.5	16.8	17.0	17.3	17.8
	8H	16.7	17.0	17.2	17.5	18.1	16.7	17.0	17.2	17.5	18.1

Maximum UGR = 18.1

POLAR GRAPH



Maximum Candela = 6633.34 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.)