



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L30-935-DIM-UNV-LW-OF-CS_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 12326812.07
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 06-09-2023
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6DR-TL-L30-935-DIM-UNV-LW-OF-CS
 [LUMINAIRE] Black formed aluminum housing, semi spec reflector, clear glas
 [MORE] s 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	1914
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	71
Total Luminaire Watts	26.9
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	31819	31819	31819
55	26491	26491	26491
65	20126	20126	20126
75	14595	14595	14595
85	9511	9511	9511

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CANDELA TABULATION

	<u>0</u>
0.0	1217.587
0.5	1217.342
1.0	1216.361
1.5	1214.890
2.0	1213.052
2.5	1210.600
3.0	1208.149
3.5	1205.329
4.0	1202.755
4.5	1200.181
5.0	1198.342
5.5	1196.626
6.0	1195.032
6.5	1193.439
7.0	1191.723
7.5	1190.129
8.0	1188.536
8.5	1187.065
9.0	1185.594
9.5	1184.368
10.0	1183.142
10.5	1182.162
11.0	1181.303
11.5	1180.813
12.0	1179.955
12.5	1179.097
13.0	1177.871
13.5	1176.278
14.0	1174.316
14.5	1172.110
15.0	1169.781
15.5	1166.839
16.0	1163.652
16.5	1160.465
17.0	1157.278
17.5	1153.968
18.0	1150.413
18.5	1146.368
19.0	1141.833
19.5	1136.807
20.0	1131.046
20.5	1124.794
21.0	1117.072
21.5	1107.878
22.0	1097.459
22.5	1085.691
23.0	1072.820
23.5	1058.846
24.0	1043.401
24.5	1026.730
25.0	1008.711
25.5	989.956
26.0	969.976
26.5	949.137

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CANDELA TABULATION - (Cont.)

27.0	926.950
27.5	904.150
28.0	880.124
28.5	854.750
29.0	828.396
29.5	800.693
30.0	772.254
30.5	742.957
31.0	713.661
31.5	684.119
32.0	655.435
32.5	627.977
33.0	601.623
33.5	576.984
34.0	554.307
34.5	533.713
35.0	515.326
35.5	498.410
36.0	483.578
36.5	469.972
37.0	457.836
37.5	446.927
38.0	436.998
38.5	427.927
39.0	419.346
39.5	411.624
40.0	404.146
40.5	397.159
41.0	390.662
41.5	384.288
42.0	378.159
42.5	372.521
43.0	366.759
43.5	361.121
44.0	355.605
44.5	350.211
45.0	344.695
45.5	339.424
46.0	334.031
46.5	328.637
47.0	323.121
47.5	317.727
48.0	312.211
48.5	306.695
49.0	301.179
49.5	295.418
50.0	289.902
50.5	284.263
51.0	278.624
51.5	272.863
52.0	267.102
52.5	261.341
53.0	255.579
53.5	249.818
54.0	244.302
54.5	238.663

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CANDELA TABULATION - (Cont.)

55.0	232.779
55.5	227.018
56.0	221.257
56.5	215.863
57.0	210.470
57.5	204.831
58.0	199.193
58.5	193.676
59.0	188.283
59.5	182.889
60.0	177.741
60.5	172.593
61.0	167.567
61.5	162.541
62.0	157.760
62.5	152.980
63.0	148.322
63.5	143.664
64.0	139.128
64.5	134.715
65.0	130.303
65.5	126.012
66.0	121.734
66.5	117.530
67.0	113.374
67.5	109.305
68.0	105.308
68.5	101.300
69.0	97.414
69.5	93.565
70.0	89.827
70.5	86.211
71.0	82.668
71.5	79.236
72.0	75.926
72.5	72.714
73.0	69.589
73.5	66.524
74.0	63.582
74.5	60.702
75.0	57.870
75.5	55.136
76.0	52.452
76.5	49.817
77.0	47.255
77.5	44.742
78.0	42.302
78.5	39.912
79.0	37.571
79.5	35.315
80.0	33.072
80.5	30.902
81.0	28.757
81.5	26.624
82.0	24.541
82.5	22.469

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CANDELA TABULATION - (Cont.)

83.0	20.446
83.5	18.461
84.0	16.499
84.5	14.575
85.0	12.699
85.5	10.885
86.0	9.132
86.5	7.441
87.0	5.798
87.5	4.425
88.0	3.383
88.5	2.476
89.0	1.716
89.5	1.079
90.0	0.686
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
123.0	0.000
123.5	0.000
124.0	0.000
124.5	0.000
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125.5	0.000
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128.0	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
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147.5	0.000
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150.0	0.000
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151.0	0.000
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152.5	0.000
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154.0	0.000
154.5	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	443.53	N.A.	23.20
0-30	896.55	N.A.	46.80
0-40	1232.47	N.A.	64.40
0-60	1706.78	N.A.	89.20
0-80	1898.9	N.A.	99.20
0-90	1914.08	N.A.	100.00
10-90	1800.14	N.A.	94.00
20-40	788.94	N.A.	41.20
20-50	1055.13	N.A.	55.10
40-70	604.20	N.A.	31.60
60-80	192.12	N.A.	10.00
70-80	62.24	N.A.	3.30
80-90	15.18	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	1914.1	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	113.94
10-20	329.59
20-30	453.02
30-40	335.92
40-50	266.19
50-60	208.13
60-70	129.88
70-80	62.24
80-90	15.18
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	57	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	21.3	22.7	21.7	23.0	23.3	21.3	22.7	21.7	23.0	23.3
	3H	22.5	23.8	22.9	24.1	24.4	22.5	23.8	22.9	24.1	24.4
	4H	22.9	24.1	23.3	24.4	24.8	22.9	24.1	23.3	24.4	24.8
	6H	23.2	24.2	23.6	24.6	25.0	23.2	24.2	23.6	24.6	25.0
	8H	23.3	24.3	23.7	24.7	25.1	23.3	24.3	23.7	24.7	25.1
	12H	23.3	24.3	23.7	24.6	25.1	23.3	24.3	23.7	24.6	25.1

UGR Viewed Endwise

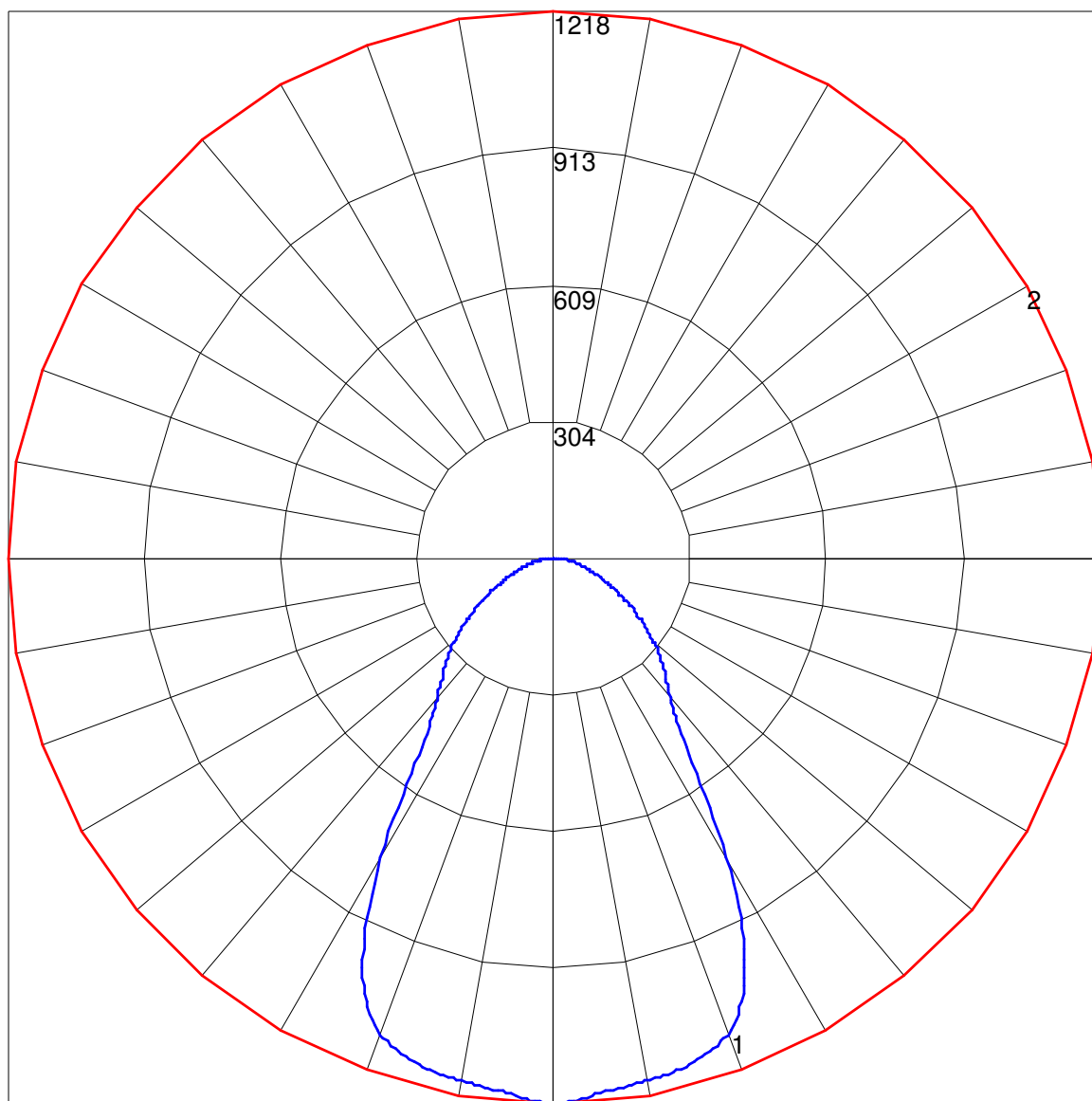
4H	2H	21.7	22.9	22.1	23.2	23.6	21.7	22.9	22.1	23.2	23.6
	3H	23.1	24.1	23.5	24.5	24.9	23.1	24.1	23.5	24.5	24.9
	4H	23.6	24.5	24.1	24.9	25.3	23.6	24.5	24.1	24.9	25.3
	6H	24.0	24.7	24.5	25.2	25.6	24.0	24.7	24.5	25.2	25.6
	8H	24.1	24.8	24.5	25.2	25.7	24.1	24.8	24.5	25.2	25.7
	12H	24.2	24.8	24.6	25.3	25.7	24.2	24.8	24.6	25.3	25.7

8H	4H	23.8	24.5	24.2	24.9	25.4	23.8	24.5	24.2	24.9	25.4
	6H	24.2	24.8	24.7	25.3	25.8	24.2	24.8	24.7	25.3	25.8
	8H	24.4	24.9	24.9	25.4	25.9	24.4	24.9	24.9	25.4	25.9
	12H	24.5	25.0	25.0	25.5	26.0	24.5	25.0	25.0	25.5	26.0

12H	4H	23.8	24.4	24.3	24.9	25.3	23.8	24.4	24.3	24.9	25.3
	6H	24.3	24.8	24.8	25.2	25.8	24.3	24.8	24.8	25.2	25.8
	8H	24.5	24.9	25.0	25.4	26.0	24.5	24.9	25.0	25.4	26.0

Maximum UGR = 26.0

POLAR GRAPH



Maximum Candela = 1217.587 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.)