



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L10-835-DIM-UNV-SW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 12326812.11
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 01-18-2021
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6DR-TL-L10-835-DIM-UNV-SW-OF-WH
 [LUMINAIRE] Black formed aluminum housing, white reflector, frosted pl
 [MORE] astic 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	658
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	76
Total Luminaire Watts	8.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.94
Spacing Criterion (90-270)	0.94
Spacing Criterion (Diagonal)	1.02
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	11763	11763	11763
55	10721	10721	10721
65	10623	10623	10623
75	11093	11093	11093
85	9060	9060	9060

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CANDELA TABULATION

	<u>0</u>
0.0	370.367
0.5	370.268
1.0	370.019
1.5	369.573
2.0	368.927
2.5	368.132
3.0	367.189
3.5	366.146
4.0	364.954
4.5	363.713
5.0	362.471
5.5	361.081
6.0	359.591
6.5	358.051
7.0	356.363
7.5	354.625
8.0	352.787
8.5	350.851
9.0	348.864
9.5	346.778
10.0	344.643
10.5	342.408
11.0	340.074
11.5	337.591
12.0	335.059
12.5	332.377
13.0	329.646
13.5	326.765
14.0	323.786
14.5	320.756
15.0	317.578
15.5	314.350
16.0	311.073
16.5	307.745
17.0	304.418
17.5	301.041
18.0	297.664
18.5	294.238
19.0	290.861
19.5	287.434
20.0	283.958
20.5	280.531
21.0	277.006
21.5	273.430
22.0	269.805
22.5	266.080
23.0	262.306
23.5	258.482
24.0	254.609
24.5	250.686
25.0	246.762
25.5	242.839
26.0	238.916
26.5	235.043

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CANDELA TABULATION - (Cont.)

27.0	231.219
27.5	227.395
28.0	223.670
28.5	219.946
29.0	216.370
29.5	212.795
30.0	209.318
30.5	205.892
31.0	202.465
31.5	199.138
32.0	195.811
32.5	192.533
33.0	189.256
33.5	186.077
34.0	182.850
34.5	179.771
35.0	176.741
35.5	173.712
36.0	170.732
36.5	167.802
37.0	164.972
37.5	162.191
38.0	159.459
38.5	156.778
39.0	154.195
39.5	151.663
40.0	149.180
40.5	146.746
41.0	144.412
41.5	142.128
42.0	139.893
42.5	137.708
43.0	135.573
43.5	133.487
44.0	131.401
44.5	129.415
45.0	127.429
45.5	125.492
46.0	123.605
46.5	121.718
47.0	119.830
47.5	118.043
48.0	116.205
48.5	114.418
49.0	112.679
49.5	110.991
50.0	109.302
50.5	107.664
51.0	106.025
51.5	104.436
52.0	102.847
52.5	101.307
53.0	99.768
53.5	98.377
54.0	97.036
54.5	95.646

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CANDELA TABULATION - (Cont.)

55.0	94.206
55.5	92.766
56.0	91.375
56.5	90.034
57.0	88.892
57.5	87.601
58.0	86.260
58.5	84.969
59.0	83.678
59.5	82.387
60.0	81.095
60.5	79.854
61.0	78.612
61.5	77.371
62.0	76.129
62.5	74.888
63.0	73.646
63.5	72.454
64.0	71.213
64.5	69.971
65.0	68.780
65.5	67.538
66.0	66.297
66.5	65.055
67.0	63.814
67.5	62.622
68.0	61.380
68.5	60.188
69.0	58.947
69.5	57.755
70.0	56.514
70.5	55.322
71.0	54.130
71.5	52.888
72.0	51.696
72.5	50.455
73.0	49.208
73.5	47.937
74.0	46.641
74.5	45.320
75.0	43.984
75.5	42.628
76.0	41.243
76.5	39.833
77.0	38.392
77.5	36.927
78.0	35.428
78.5	33.903
79.0	32.364
79.5	30.789
80.0	29.195
80.5	27.581
81.0	25.943
81.5	24.279
82.0	22.591
82.5	20.877

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CANDELA TABULATION - (Cont.)

83.0	19.144
83.5	17.401
84.0	15.638
84.5	13.870
85.0	12.097
85.5	10.329
86.0	8.576
86.5	6.903
87.0	5.418
87.5	4.211
88.0	3.163
88.5	2.235
89.0	1.410
89.5	0.790
90.0	0.402
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
125.0	0.000
125.5	0.000
126.0	0.000
126.5	0.000
127.0	0.000
127.5	0.000
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130.0	0.000
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131.0	0.000
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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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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
147.5	0.000
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150.0	0.000
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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
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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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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	122.79	N.A.	18.70
0-30	235.89	N.A.	35.80
0-40	346.65	N.A.	52.70
0-60	529.90	N.A.	80.50
0-80	644.00	N.A.	97.90
0-90	657.99	N.A.	100.00
10-90	623.96	N.A.	94.80
20-40	223.86	N.A.	34.00
20-50	322.56	N.A.	49.00
40-70	251.34	N.A.	38.20
60-80	114.10	N.A.	17.30
70-80	46.01	N.A.	7.00
80-90	13.99	N.A.	2.10
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	658.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	34.03
10-20	88.76
20-30	113.11
30-40	110.76
40-50	98.70
50-60	84.55
60-70	68.09
70-80	46.01
80-90	13.99
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	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	48
6	73	60	52	46	71	59	51	46	58	50	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	45	40	38
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

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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	19.0	20.5	19.3	20.8	21.1	19.0	20.5	19.3	20.8	21.1
	3H	21.1	22.5	21.5	22.8	23.2	21.1	22.5	21.5	22.8	23.2
	4H	22.0	23.3	22.4	23.7	24.0	22.0	23.3	22.4	23.7	24.0
	6H	22.7	24.0	23.1	24.3	24.7	22.7	24.0	23.1	24.3	24.7
	8H	23.0	24.2	23.4	24.6	25.0	23.0	24.2	23.4	24.6	25.0
	12H	23.1	24.3	23.6	24.7	25.1	23.1	24.3	23.6	24.7	25.1

UGR Viewed Endwise

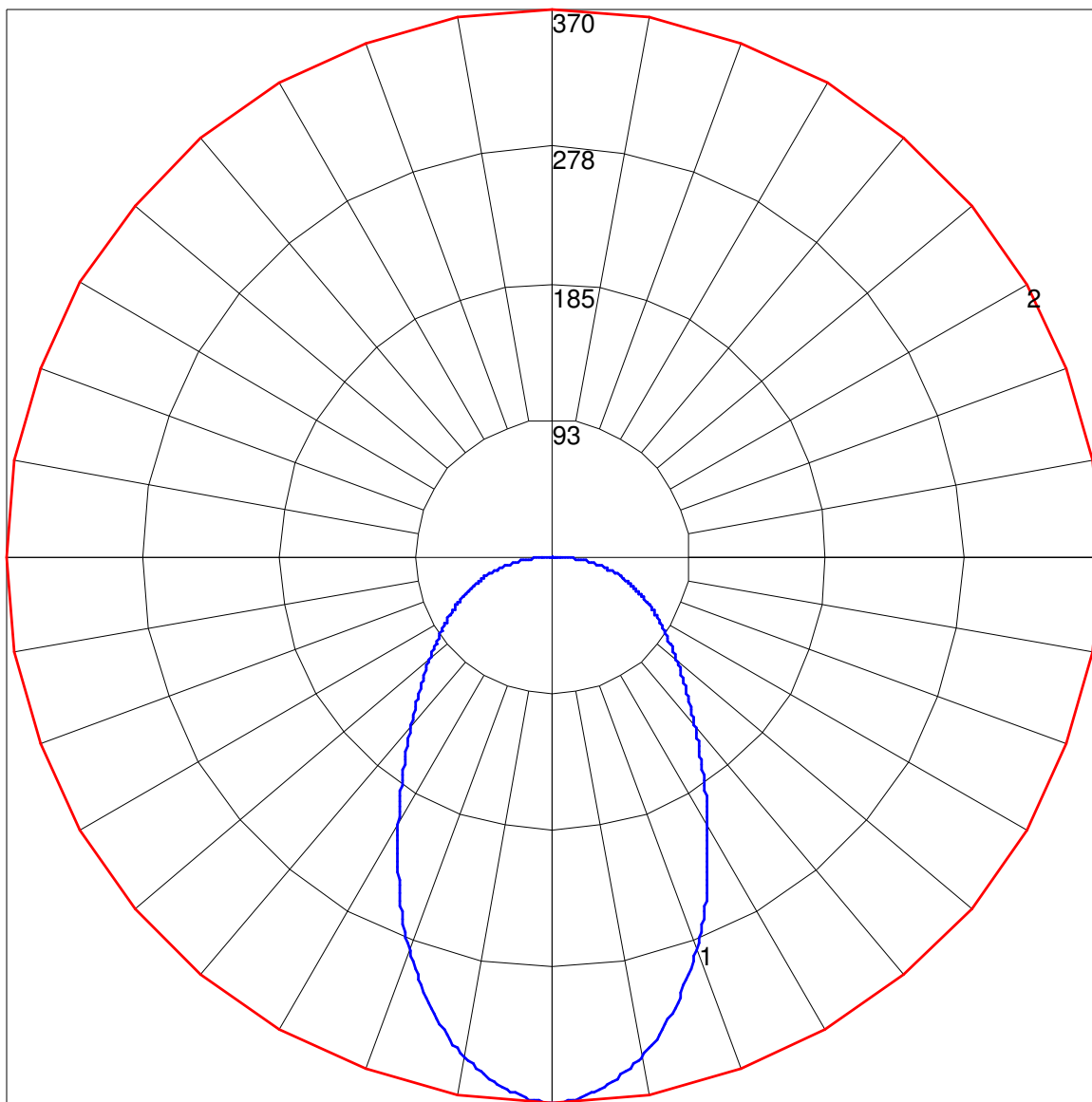
4H	2H	19.6	21.0	20.0	21.3	21.7	19.6	21.0	20.0	21.3	21.7
	3H	22.0	23.1	22.4	23.5	23.9	22.0	23.1	22.4	23.5	23.9
	4H	23.1	24.1	23.5	24.5	24.9	23.1	24.1	23.5	24.5	24.9
	6H	24.0	24.9	24.4	25.3	25.8	24.0	24.9	24.4	25.3	25.8
	8H	24.3	25.1	24.8	25.6	26.0	24.3	25.1	24.8	25.6	26.0
	12H	24.5	25.3	25.0	25.7	26.2	24.5	25.3	25.0	25.7	26.2

8H	4H	23.5	24.3	24.0	24.8	25.2	23.5	24.3	24.0	24.8	25.2
	6H	24.6	25.2	25.1	25.7	26.2	24.6	25.2	25.1	25.7	26.2
	8H	25.0	25.6	25.5	26.1	26.6	25.0	25.6	25.5	26.1	26.6
	12H	25.3	25.8	25.8	26.3	26.9	25.3	25.8	25.8	26.3	26.9

12H	4H	23.6	24.3	24.0	24.8	25.2	23.6	24.3	24.0	24.8	25.2
	6H	24.7	25.3	25.2	25.7	26.3	24.7	25.3	25.2	25.7	26.3
	8H	25.1	25.7	25.6	26.2	26.7	25.1	25.7	25.6	26.2	26.7

Maximum UGR = 26.9

POLAR GRAPH



Maximum Candela = 370.367 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.)