



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DR-TL-L10-835-DIM-UNV-RW-OF-WH-IP_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN FROM 12326812.12
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 08/07/2020
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6DR-TL-L10-835-DIM-UNV-RW-OF-WH-IP
 [LUMINAIRE] Black formed aluminum housing, white 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	609
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	70
Total Luminaire Watts	8.7
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	8218	8218	8218
55	6853	6853	6853
65	4835	4835	4835
75	2962	2962	2962
85	2336	2336	2336

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CANDELA TABULATION

	<u>0</u>
0.0	450.238
0.5	449.816
1.0	449.395
1.5	448.974
2.0	448.132
2.5	446.868
3.0	445.605
3.5	443.920
4.0	442.235
4.5	440.972
5.0	439.287
5.5	437.602
6.0	435.918
6.5	434.233
7.0	432.548
7.5	430.864
8.0	428.758
8.5	427.073
9.0	425.388
9.5	423.282
10.0	421.598
10.5	419.534
11.0	417.512
11.5	415.491
12.0	413.469
12.5	411.489
13.0	409.468
13.5	407.362
14.0	405.298
14.5	403.276
15.0	401.381
15.5	399.444
16.0	397.548
16.5	395.695
17.0	393.968
17.5	392.242
18.0	390.557
18.5	388.956
19.0	387.356
19.5	385.713
20.0	384.029
20.5	382.218
21.0	380.154
21.5	377.795
22.0	375.142
22.5	372.194
23.0	368.993
23.5	365.371
24.0	361.412
24.5	357.073
25.0	352.272
25.5	347.092
26.0	341.321
26.5	335.004

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CANDELA TABULATION - (Cont.)

27.0	328.265
27.5	320.936
28.0	313.145
28.5	304.679
29.0	295.750
29.5	286.063
30.0	275.786
30.5	264.920
31.0	253.632
31.5	242.092
32.0	230.341
32.5	218.675
33.0	207.135
33.5	195.973
34.0	185.276
34.5	175.209
35.0	166.028
35.5	157.604
36.0	150.192
36.5	143.621
37.0	137.851
37.5	132.923
38.0	128.585
38.5	124.752
39.0	121.425
39.5	118.477
40.0	115.781
40.5	113.339
41.0	111.064
41.5	109.000
42.0	107.105
42.5	105.294
43.0	103.567
43.5	101.925
44.0	100.366
44.5	98.892
45.0	97.376
45.5	95.944
46.0	94.470
46.5	93.038
47.0	91.564
47.5	90.090
48.0	88.573
48.5	87.057
49.0	85.625
49.5	84.151
50.0	82.593
50.5	80.992
51.0	79.350
51.5	77.707
52.0	76.064
52.5	74.380
53.0	72.737
53.5	71.137
54.0	69.368
54.5	67.599

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CANDELA TABULATION - (Cont.)

55.0	65.872
55.5	64.103
56.0	62.376
56.5	60.649
57.0	58.923
57.5	57.196
58.0	55.553
58.5	53.868
59.0	52.226
59.5	50.625
60.0	49.025
60.5	47.424
61.0	45.866
61.5	44.350
62.0	42.834
62.5	41.360
63.0	39.885
63.5	38.411
64.0	37.021
64.5	35.589
65.0	34.242
65.5	32.852
66.0	31.546
66.5	30.240
67.0	28.977
67.5	27.713
68.0	26.492
68.5	25.271
69.0	24.133
69.5	22.954
70.0	21.859
70.5	20.764
71.0	19.711
71.5	18.700
72.0	17.689
72.5	16.763
73.0	15.878
73.5	15.078
74.0	14.278
74.5	13.562
75.0	12.846
75.5	12.214
76.0	11.582
76.5	11.035
77.0	10.529
77.5	10.024
78.0	9.519
78.5	9.013
79.0	8.550
79.5	8.087
80.0	7.623
80.5	7.160
81.0	6.697
81.5	6.276
82.0	5.812
82.5	5.391

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CANDELA TABULATION - (Cont.)

83.0	4.970
83.5	4.591
84.0	4.170
84.5	3.791
85.0	3.412
85.5	3.032
86.0	2.653
86.5	2.274
87.0	1.937
87.5	1.558
88.0	1.264
88.5	1.011
89.0	0.800
89.5	0.590
90.0	0.421
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
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125.0	0.000
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127.0	0.000
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134.5	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
144.5	0.000
145.0	0.000
145.5	0.000
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147.5	0.000
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150.5	0.000
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
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156.0	0.000
156.5	0.000
157.0	0.000
157.5	0.000
158.0	0.000
158.5	0.000
159.0	0.000
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	154.71	N.A.	25.40
0-30	312.77	N.A.	51.40
0-40	422.12	N.A.	69.40
0-60	556.31	N.A.	91.40
0-80	604.76	N.A.	99.40
0-90	608.64	N.A.	100.00
10-90	567.28	N.A.	93.20
20-40	267.41	N.A.	43.90
20-50	342.85	N.A.	56.30
40-70	168.39	N.A.	27.70
60-80	48.44	N.A.	8.00
70-80	14.25	N.A.	2.30
80-90	3.89	N.A.	0.60
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	608.65	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	41.36
10-20	113.35
20-30	158.05
30-40	109.35
40-50	75.45
50-60	58.75
60-70	34.19
70-80	14.25
80-90	3.89
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38

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UGR TABLE - CORRECTED

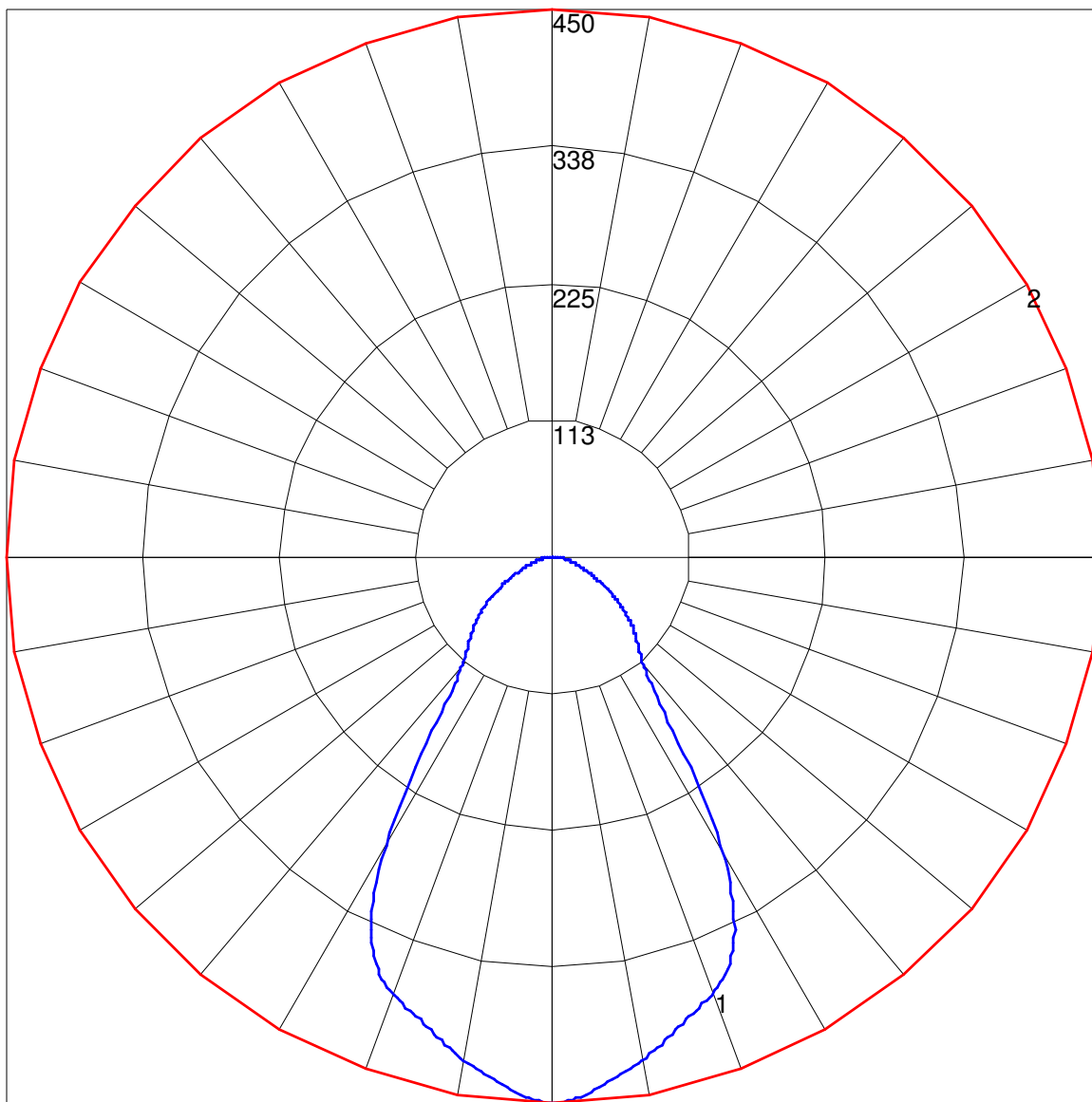
Reflectances

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	16.2	17.5	16.6	17.8	18.1	16.2	17.5	16.6	17.8	18.1
	3H	17.2	18.3	17.6	18.7	19.0	17.2	18.3	17.6	18.7	19.0
	4H	17.4	18.5	17.8	18.9	19.2	17.4	18.5	17.8	18.9	19.2
	6H	17.6	18.6	18.0	19.0	19.4	17.6	18.6	18.0	19.0	19.4
	8H	17.6	18.6	18.1	19.0	19.4	17.6	18.6	18.1	19.0	19.4
	12H	17.7	18.6	18.1	19.0	19.4	17.7	18.6	18.1	19.0	19.4
4H	2H	16.5	17.6	16.9	18.0	18.4	16.5	17.6	16.9	18.0	18.4
	3H	17.7	18.6	18.1	19.0	19.4	17.7	18.6	18.1	19.0	19.4
	4H	18.0	18.8	18.4	19.2	19.7	18.0	18.8	18.4	19.2	19.7
	6H	18.3	18.9	18.7	19.4	19.9	18.3	18.9	18.7	19.4	19.9
	8H	18.3	19.0	18.8	19.4	19.9	18.3	19.0	18.8	19.4	19.9
	12H	18.4	19.0	18.9	19.4	19.9	18.4	19.0	18.9	19.4	19.9
8H	4H	18.1	18.7	18.5	19.2	19.6	18.1	18.7	18.5	19.2	19.6
	6H	18.4	18.9	18.9	19.4	19.9	18.4	18.9	18.9	19.4	19.9
	8H	18.6	19.0	19.1	19.5	20.0	18.6	19.0	19.1	19.5	20.0
	12H	18.7	19.1	19.2	19.6	20.1	18.7	19.1	19.2	19.6	20.1
12H	4H	18.1	18.6	18.6	19.1	19.6	18.1	18.6	18.6	19.1	19.6
	6H	18.4	18.9	19.0	19.4	19.9	18.4	18.9	19.0	19.4	19.9
	8H	18.6	19.0	19.1	19.5	20.1	18.6	19.0	19.1	19.5	20.1

Maximum UGR = 20.1

POLAR GRAPH



Maximum Candela = 450.238 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.)