



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6PR-TL-L50-835-DIM-UNV-LW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN from UL 12326812.29

[TESTLAB] UL Verification Services Inc.

[ISSUE DATE] 18 DEC 2019

[MANUFAC] WILLIAMS INDOOR

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

[LUMCAT] 6PR-TL-L50-835-DIM-UNV-LW-OF-WH

[LUMINAIRE] Black formed aluminum housing, white reflector, clear glas

[MORE] s patterned lens enclosure

[LAMP] One white LED

[OTHER] This test was performed using the calibrated photodetector met

[MORE] hod of absolute photometry.

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5504
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	54.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.26
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	127872	127872	127872
55	63136	63136	63136
65	42767	42767	42767
75	31805	31805	31805
85	22026	22026	22026

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CANDELA TABULATION

	<u>0</u>
0.0	2913.500
0.5	2911.008
1.0	2908.515
1.5	2906.023
2.0	2901.038
2.5	2896.054
3.0	2888.577
3.5	2883.592
4.0	2876.115
4.5	2868.638
5.0	2861.162
5.5	2853.685
6.0	2846.208
6.5	2838.731
7.0	2831.254
7.5	2821.285
8.0	2813.808
8.5	2806.331
9.0	2796.362
9.5	2786.393
10.0	2778.916
10.5	2768.946
11.0	2758.977
11.5	2751.500
12.0	2741.531
12.5	2731.562
13.0	2721.593
13.5	2711.623
14.0	2701.654
14.5	2691.685
15.0	2679.224
15.5	2669.254
16.0	2659.285
16.5	2649.316
17.0	2636.854
17.5	2626.885
18.0	2619.408
18.5	2609.439
19.0	2599.470
19.5	2589.501
20.0	2579.532
20.5	2572.055
21.0	2562.085
21.5	2552.116
22.0	2539.655
22.5	2527.193
23.0	2517.224
23.5	2502.270
24.0	2490.556
24.5	2477.347
25.0	2463.889
25.5	2450.430
26.0	2436.972
26.5	2423.015

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CANDELA TABULATION - (Cont.)

27.0	2409.307
27.5	2395.600
28.0	2381.892
28.5	2368.434
29.0	2355.474
29.5	2342.264
30.0	2328.058
30.5	2313.852
31.0	2298.898
31.5	2283.446
32.0	2266.499
32.5	2248.554
33.0	2230.111
33.5	2210.173
34.0	2188.739
34.5	2165.810
35.0	2141.883
35.5	2115.964
36.0	2089.047
36.5	2060.634
37.0	2030.478
37.5	1999.573
38.0	1967.173
38.5	1932.779
39.0	1897.140
39.5	1859.755
40.0	1821.623
40.5	1781.746
41.0	1742.617
41.5	1701.743
42.0	1660.122
42.5	1616.756
43.0	1572.642
43.5	1527.033
44.0	1480.925
44.5	1433.572
45.0	1385.221
45.5	1335.375
46.0	1284.033
46.5	1232.194
47.0	1179.855
47.5	1128.015
48.0	1076.425
48.5	1025.333
49.0	976.234
49.5	927.634
50.0	882.275
50.5	838.161
51.0	797.287
51.5	758.906
52.0	723.017
52.5	689.620
53.0	658.217
53.5	629.057
54.0	602.638
54.5	577.715

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CANDELA TABULATION - (Cont.)

55.0	554.786
55.5	533.602
56.0	513.912
56.5	495.469
57.0	477.525
57.5	460.826
58.0	445.125
58.5	429.922
59.0	415.965
59.5	402.507
60.0	389.048
60.5	376.337
61.0	363.876
61.5	351.913
62.0	340.199
62.5	328.984
63.0	318.018
63.5	307.301
64.0	296.833
64.5	286.864
65.0	276.895
65.5	267.424
66.0	257.953
66.5	248.732
67.0	239.759
67.5	231.286
68.0	222.562
68.5	214.587
69.0	206.363
69.5	198.636
70.0	190.910
70.5	183.683
71.0	176.704
71.5	169.726
72.0	162.996
72.5	156.766
73.0	150.286
73.5	144.055
74.0	138.073
74.5	132.092
75.0	126.110
75.5	120.627
76.0	114.895
76.5	109.661
77.0	104.178
77.5	98.944
78.0	93.711
78.5	88.726
79.0	83.741
79.5	78.757
80.0	74.021
80.5	69.286
81.0	64.551
81.5	59.815
82.0	55.329
82.5	50.843

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CANDELA TABULATION - (Cont.)

83.0	46.357
83.5	42.120
84.0	37.634
84.5	33.646
85.0	29.409
85.5	25.421
86.0	21.434
86.5	17.695
87.0	14.206
87.5	11.215
88.0	8.723
88.5	6.480
89.0	4.735
89.5	3.240
90.0	1.994
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
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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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151.0	0.000
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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	1027.03	N.A.	18.70
0-30	2162.45	N.A.	39.30
0-40	3486.93	N.A.	63.40
0-60	5055.69	N.A.	91.90
0-80	5468.77	N.A.	99.40
0-90	5503.58	N.A.	100.00
10-90	5233.1	N.A.	95.10
20-40	2459.9	N.A.	44.70
20-50	3510.86	N.A.	63.80
40-70	1846.58	N.A.	33.60
60-80	413.08	N.A.	7.50
70-80	135.26	N.A.	2.50
80-90	34.81	N.A.	0.60
90-110	0.05	N.A.	0.00
90-120	0.05	N.A.	0.00
90-130	0.05	N.A.	0.00
90-150	0.05	N.A.	0.00
90-180	0.05	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5503.64	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	270.49
10-20	756.54
20-30	1135.42
30-40	1324.48
40-50	1050.96
50-60	517.79
60-70	277.82
70-80	135.26
80-90	34.81
90-100	0.05
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	590	590	590	590	576	576	576	576	550	550	550	527	527	527	505	505	505	495
1	551	532	515	500	538	521	506	492	500	488	477	481	471	462	464	456	449	439
2	511	478	450	427	499	469	444	422	452	431	413	436	419	404	422	408	395	386
3	474	430	397	370	462	423	392	367	409	383	361	396	374	355	384	365	349	340
4	440	389	353	325	429	383	349	322	371	342	318	361	335	314	350	328	310	301
5	409	354	316	287	399	349	313	286	339	307	283	330	302	280	321	297	277	268
6	381	323	284	256	372	319	282	255	310	278	253	302	273	251	295	269	249	240
7	355	296	258	231	347	292	256	230	285	252	228	278	249	227	272	246	225	217
8	333	272	235	209	325	269	233	208	263	230	207	257	228	206	252	225	205	196
9	312	252	215	190	305	249	214	190	244	211	189	239	209	188	234	207	187	179
10	293	234	198	174	288	231	197	174	227	195	173	222	193	172	218	191	172	164

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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	17.7	19.1	18.1	19.4	19.7	17.7	19.1	18.1	19.4	19.7
	3H	18.8	20.0	19.2	20.3	20.7	18.8	20.0	19.2	20.3	20.7
	4H	19.2	20.3	19.6	20.7	21.1	19.2	20.3	19.6	20.7	21.1
	6H	19.4	20.5	19.9	20.9	21.3	19.4	20.5	19.9	20.9	21.3
	8H	19.5	20.5	19.9	20.9	21.3	19.5	20.5	19.9	20.9	21.3
	12H	19.6	20.5	20.0	20.9	21.3	19.6	20.5	20.0	20.9	21.3

UGR Viewed Endwise

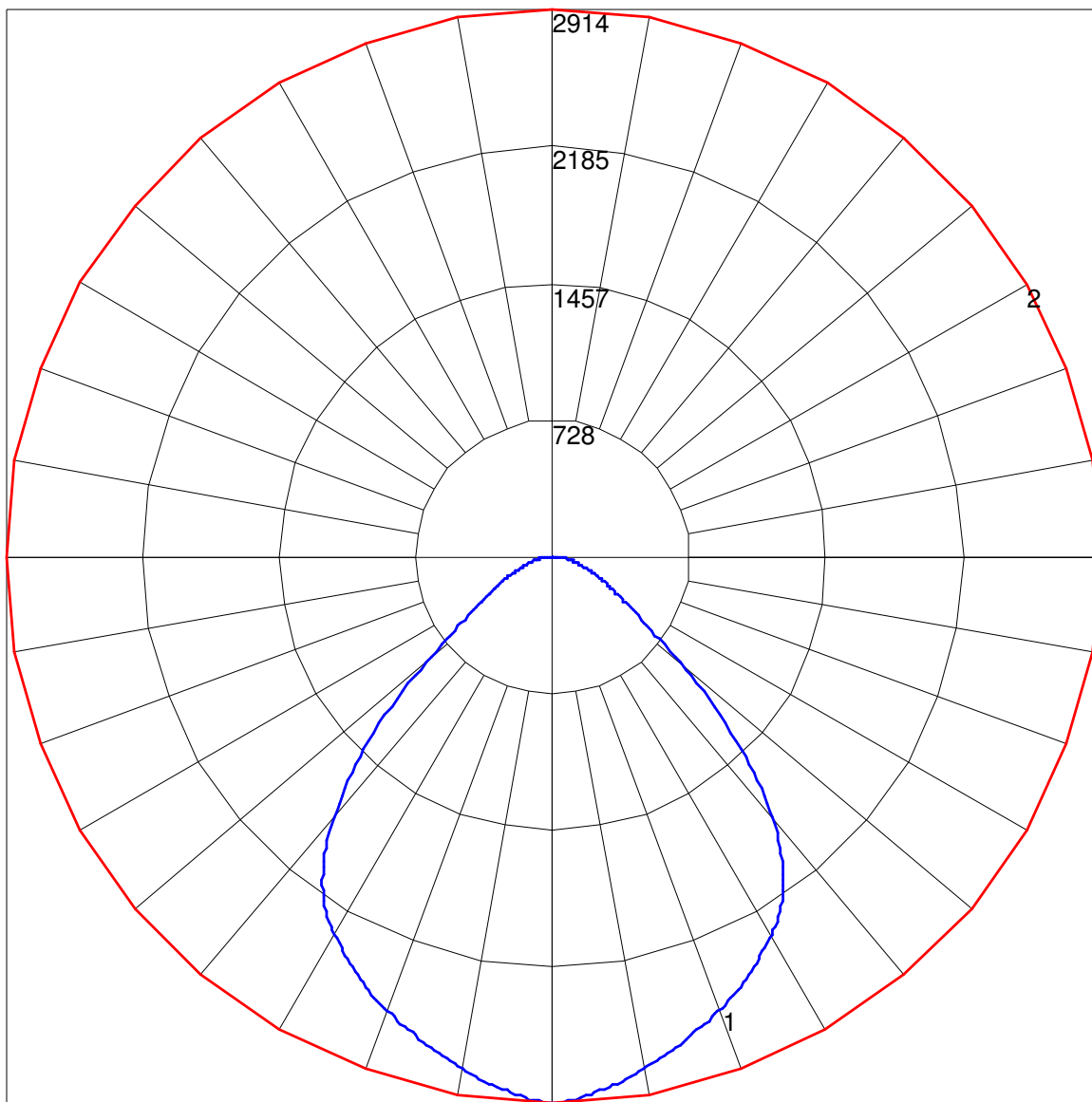
4H	2H	18.1	19.2	18.5	19.6	19.9	18.1	19.2	18.5	19.6	19.9
	3H	19.3	20.3	19.8	20.7	21.1	19.3	20.3	19.8	20.7	21.1
	4H	19.8	20.7	20.3	21.1	21.5	19.8	20.7	20.3	21.1	21.5
	6H	20.2	21.0	20.7	21.4	21.9	20.2	21.0	20.7	21.4	21.9
	8H	20.3	21.0	20.8	21.5	21.9	20.3	21.0	20.8	21.5	21.9
	12H	20.4	21.0	20.9	21.5	22.0	20.4	21.0	20.9	21.5	22.0

8H	4H	20.0	20.7	20.5	21.1	21.6	20.0	20.7	20.5	21.1	21.6
	6H	20.5	21.0	21.0	21.5	22.0	20.5	21.0	21.0	21.5	22.0
	8H	20.6	21.1	21.2	21.7	22.1	20.6	21.1	21.2	21.7	22.1
	12H	20.8	21.2	21.3	21.7	22.3	20.8	21.2	21.3	21.7	22.3

12H	4H	20.0	20.6	20.5	21.1	21.6	20.0	20.6	20.5	21.1	21.6
	6H	20.5	21.0	21.0	21.5	22.0	20.5	21.0	21.0	21.5	22.0
	8H	20.7	21.1	21.2	21.6	22.2	20.7	21.1	21.2	21.6	22.2

Maximum UGR = 22.3

POLAR GRAPH



Maximum Candela = 2913.5 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.)