



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6PR-TL-L14-9DW-DIM-UNV-LW-OF-WH_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from 12326812.29
 [TESTLAB] UL Verification Services Inc.
 [ISSUE DATE] 12/17/2019
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6PR-TL-L14-9DW-DIM-UNV-LW-OF-WH
 [LUMINAIRE] Black formed aluminum housing, white reflector, clear glass
 [MORE] s patterned lens enclosure
 [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	1413
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	60
Total Luminaire Watts	23.4
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	32834	32834	32834
55	16211	16211	16211
65	10981	10981	10981
75	8167	8167	8167
85	5655	5655	5655

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CANDELA TABULATION

	<u>0</u>
0.0	748.096
0.5	747.456
1.0	746.817
1.5	746.177
2.0	744.897
2.5	743.617
3.0	741.697
3.5	740.417
4.0	738.497
4.5	736.577
5.0	734.658
5.5	732.738
6.0	730.818
6.5	728.898
7.0	726.978
7.5	724.418
8.0	722.499
8.5	720.579
9.0	718.019
9.5	715.459
10.0	713.539
10.5	710.980
11.0	708.420
11.5	706.500
12.0	703.940
12.5	701.380
13.0	698.821
13.5	696.261
14.0	693.701
14.5	691.141
15.0	687.942
15.5	685.382
16.0	682.822
16.5	680.262
17.0	677.062
17.5	674.503
18.0	672.583
18.5	670.023
19.0	667.463
19.5	664.904
20.0	662.344
20.5	660.424
21.0	657.864
21.5	655.304
22.0	652.105
22.5	648.905
23.0	646.345
23.5	642.505
24.0	639.498
24.5	636.106
25.0	632.650
25.5	629.195
26.0	625.739
26.5	622.155

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CANDELA TABULATION - (Cont.)

27.0	618.635
27.5	615.116
28.0	611.596
28.5	608.140
29.0	604.813
29.5	601.421
30.0	597.773
30.5	594.126
31.0	590.286
31.5	586.318
32.0	581.967
32.5	577.359
33.0	572.623
33.5	567.504
34.0	562.000
34.5	556.113
35.0	549.969
35.5	543.314
36.0	536.402
36.5	529.107
37.0	521.364
37.5	513.428
38.0	505.109
38.5	496.278
39.0	487.127
39.5	477.527
40.0	467.736
40.5	457.497
41.0	447.450
41.5	436.955
42.0	426.268
42.5	415.133
43.0	403.806
43.5	392.095
44.0	380.256
44.5	368.097
45.0	355.682
45.5	342.883
46.0	329.700
46.5	316.389
47.0	302.950
47.5	289.639
48.0	276.393
48.5	263.274
49.0	250.667
49.5	238.188
50.0	226.541
50.5	215.214
51.0	204.719
51.5	194.863
52.0	185.648
52.5	177.073
53.0	169.010
53.5	161.522
54.0	154.739
54.5	148.339

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CANDELA TABULATION - (Cont.)

55.0	142.452
55.5	137.012
56.0	131.957
56.5	127.221
57.0	122.614
57.5	118.326
58.0	114.294
58.5	110.391
59.0	106.807
59.5	103.351
60.0	99.896
60.5	96.632
61.0	93.432
61.5	90.360
62.0	87.353
62.5	84.473
63.0	81.657
63.5	78.905
64.0	76.218
64.5	73.658
65.0	71.098
65.5	68.666
66.0	66.234
66.5	63.867
67.0	61.563
67.5	59.387
68.0	57.147
68.5	55.099
69.0	52.987
69.5	51.004
70.0	49.020
70.5	47.164
71.0	45.372
71.5	43.580
72.0	41.852
72.5	40.253
73.0	38.589
73.5	36.989
74.0	35.453
74.5	33.917
75.0	32.381
75.5	30.973
76.0	29.501
76.5	28.158
77.0	26.750
77.5	25.406
78.0	24.062
78.5	22.782
79.0	21.502
79.5	20.222
80.0	19.006
80.5	17.790
81.0	16.575
81.5	15.359
82.0	14.207
82.5	13.055

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CANDELA TABULATION - (Cont.)

83.0	11.903
83.5	10.815
84.0	9.663
84.5	8.639
85.0	7.551
85.5	6.527
86.0	5.504
86.5	4.544
87.0	3.648
87.5	2.880
88.0	2.240
88.5	1.664
89.0	1.216
89.5	0.832
90.0	0.512
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
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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
147.0	0.000
147.5	0.000
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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	263.71	N.A.	18.70
0-30	555.25	N.A.	39.30
0-40	895.34	N.A.	63.40
0-60	1298.14	N.A.	91.90
0-80	1404.21	N.A.	99.40
0-90	1413.15	N.A.	100.00
10-90	1343.7	N.A.	95.10
20-40	631.63	N.A.	44.70
20-50	901.48	N.A.	63.80
40-70	474.14	N.A.	33.60
60-80	106.07	N.A.	7.50
70-80	34.73	N.A.	2.50
80-90	8.94	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	1413.16	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	69.45
10-20	194.26
20-30	291.54
30-40	340.09
40-50	269.86
50-60	132.95
60-70	71.34
70-80	34.73
80-90	8.94
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 RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	73	73	73	73	71	71	71	71	68	68	68	65	65	65	62	62	62	61
1	68	66	63	62	66	64	62	61	62	60	59	59	58	57	57	56	55	54
2	63	59	56	53	61	58	55	52	56	53	51	54	52	50	52	50	49	48
3	58	53	49	46	57	52	48	45	50	47	44	49	46	44	47	45	43	42
4	54	48	43	40	53	47	43	40	46	42	39	44	41	39	43	40	38	37
5	50	44	39	35	49	43	39	35	42	38	35	41	37	35	40	37	34	33
6	47	40	35	32	46	39	35	31	38	34	31	37	34	31	36	33	31	30
7	44	36	32	28	43	36	32	28	35	31	28	34	31	28	34	30	28	27
8	41	34	29	26	40	33	29	26	32	28	26	32	28	25	31	28	25	24
9	38	31	27	23	38	31	26	23	30	26	23	29	26	23	29	26	23	22
10	36	29	24	21	35	29	24	21	28	24	21	27	24	21	27	24	21	20

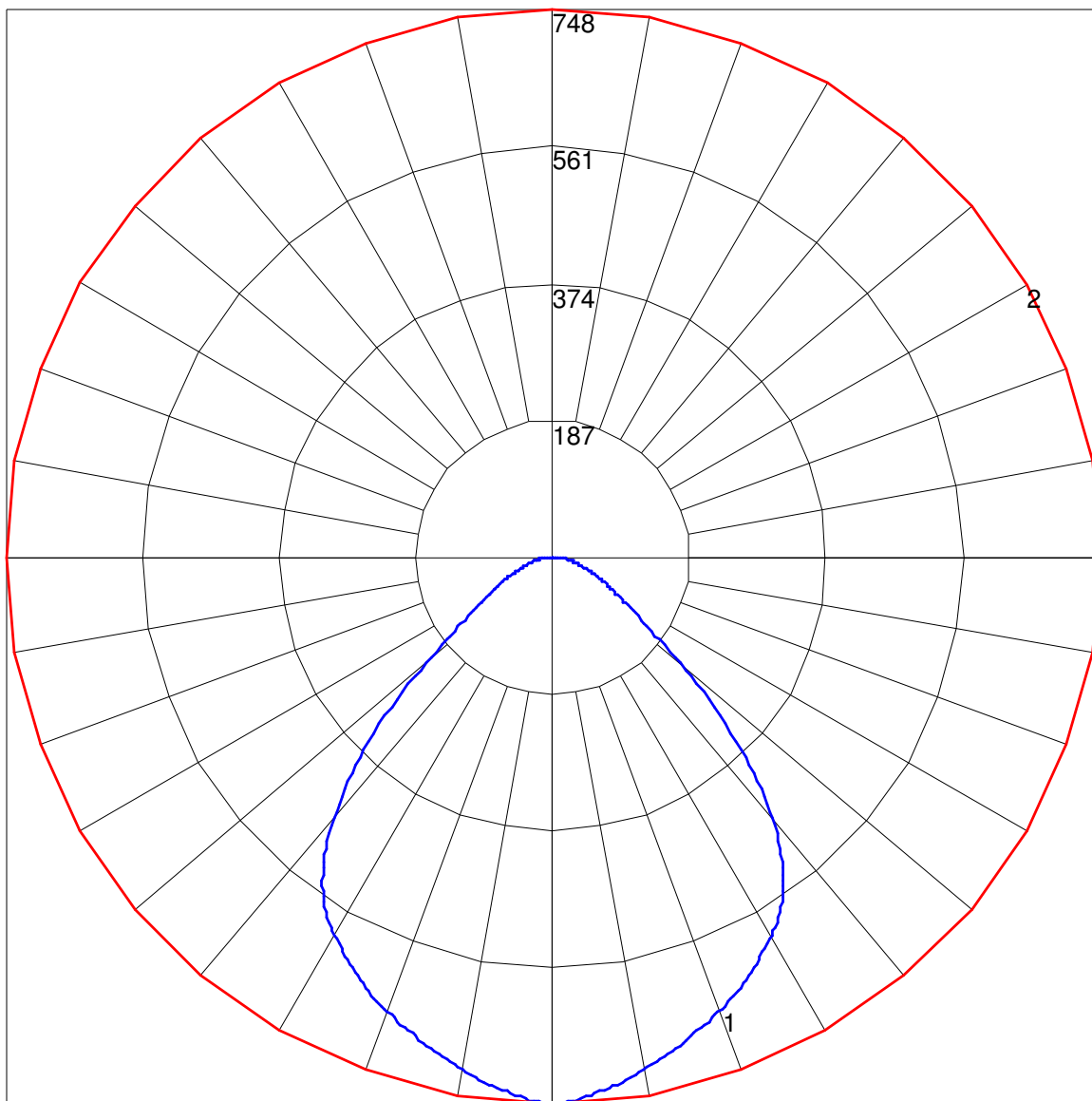
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UGR TABLE - CORRECTED

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	20.2	21.6	20.6	21.9	22.2	20.2	21.6	20.6	21.9	22.2
	3H	21.3	22.5	21.7	22.8	23.2	21.3	22.5	21.7	22.8	23.2
	4H	21.7	22.8	22.1	23.2	23.5	21.7	22.8	22.1	23.2	23.5
	6H	21.9	23.0	22.3	23.4	23.8	21.9	23.0	22.3	23.4	23.8
	8H	22.0	23.0	22.4	23.4	23.8	22.0	23.0	22.4	23.4	23.8
	12H	22.1	23.0	22.5	23.4	23.8	22.1	23.0	22.5	23.4	23.8
4H	2H	20.6	21.7	21.0	22.1	22.4	20.6	21.7	21.0	22.1	22.4
	3H	21.8	22.8	22.2	23.2	23.6	21.8	22.8	22.2	23.2	23.6
	4H	22.3	23.2	22.8	23.6	24.0	22.3	23.2	22.8	23.6	24.0
	6H	22.7	23.5	23.2	23.9	24.4	22.7	23.5	23.2	23.9	24.4
	8H	22.8	23.5	23.3	24.0	24.4	22.8	23.5	23.3	24.0	24.4
	12H	22.9	23.5	23.4	24.0	24.5	22.9	23.5	23.4	24.0	24.5
8H	4H	22.5	23.2	23.0	23.6	24.1	22.5	23.2	23.0	23.6	24.1
	6H	23.0	23.5	23.5	24.0	24.5	23.0	23.5	23.5	24.0	24.5
	8H	23.1	23.6	23.7	24.2	24.6	23.1	23.6	23.7	24.2	24.6
	12H	23.3	23.7	23.8	24.2	24.8	23.3	23.7	23.8	24.2	24.8
12H	4H	22.5	23.1	23.0	23.6	24.0	22.5	23.1	23.0	23.6	24.0
	6H	23.0	23.5	23.5	24.0	24.5	23.0	23.5	23.5	24.0	24.5
	8H	23.2	23.6	23.7	24.1	24.7	23.2	23.6	23.7	24.1	24.7

Maximum UGR = 24.8

POLAR GRAPH



Maximum Candela = 748.096 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.)