



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6PR-TL-L43-8TW-DIM-UNV-LW-OF-WH 4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] GEN from 12326812.29
 [TESTLAB] UL Verification Services Inc.
 [ISSUEDATE] 6/JAN/2020
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMCAT] 6PR-TL-L43-8TW-DIM-UNV-LW-OF-WH 4000k
 [LUMINAIRE] Black formed aluminum housing, white reflector, clear glass
 [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	4353
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	93
Total Luminaire Watts	46.7
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	101127	101127	101127
55	49931	49931	49931
65	33822	33822	33822
75	25153	25153	25153
85	17419	17419	17419

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CANDELA TABULATION

	<u>0</u>
0.0	2304.115
0.5	2302.144
1.0	2300.173
1.5	2298.202
2.0	2294.260
2.5	2290.318
3.0	2284.405
3.5	2280.463
4.0	2274.550
4.5	2268.637
5.0	2262.724
5.5	2256.811
6.0	2250.898
6.5	2244.985
7.0	2239.072
7.5	2231.188
8.0	2225.275
8.5	2219.362
9.0	2211.478
9.5	2203.594
10.0	2197.681
10.5	2189.797
11.0	2181.913
11.5	2175.999
12.0	2168.115
12.5	2160.231
13.0	2152.347
13.5	2144.463
14.0	2136.579
14.5	2128.695
15.0	2118.840
15.5	2110.956
16.0	2103.072
16.5	2095.188
17.0	2085.333
17.5	2077.449
18.0	2071.536
18.5	2063.652
19.0	2055.768
19.5	2047.884
20.0	2040.000
20.5	2034.086
21.0	2026.202
21.5	2018.318
22.0	2008.463
22.5	1998.608
23.0	1990.724
23.5	1978.898
24.0	1969.634
24.5	1959.188
25.0	1948.544
25.5	1937.901
26.0	1927.258
26.5	1916.220

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27.0	1905.379
27.5	1894.539
28.0	1883.698
28.5	1873.055
29.0	1862.805
29.5	1852.359
30.0	1841.124
30.5	1829.889
31.0	1818.063
31.5	1805.843
32.0	1792.440
32.5	1778.249
33.0	1763.663
33.5	1747.895
34.0	1730.945
34.5	1712.811
35.0	1693.889
35.5	1673.391
36.0	1652.104
36.5	1629.634
37.0	1605.785
37.5	1581.345
38.0	1555.721
38.5	1528.521
39.0	1500.336
39.5	1470.771
40.0	1440.614
40.5	1409.078
41.0	1378.133
41.5	1345.808
42.0	1312.892
42.5	1278.597
43.0	1243.710
43.5	1207.640
44.0	1171.177
44.5	1133.727
45.0	1095.490
45.5	1056.069
46.0	1015.466
46.5	974.469
47.0	933.078
47.5	892.081
48.0	851.281
48.5	810.875
49.0	772.046
49.5	733.611
50.0	697.739
50.5	662.852
51.0	630.527
51.5	600.174
52.0	571.791
52.5	545.380
53.0	520.545
53.5	497.484
54.0	476.591
54.5	456.881

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55.0	438.748
55.5	421.994
56.0	406.423
56.5	391.838
57.0	377.646
57.5	364.440
58.0	352.023
58.5	340.000
59.0	328.962
59.5	318.319
60.0	307.675
60.5	297.623
61.0	287.768
61.5	278.307
62.0	269.043
62.5	260.174
63.0	251.501
63.5	243.026
64.0	234.748
64.5	226.864
65.0	218.980
65.5	211.490
66.0	204.000
66.5	196.707
67.0	189.612
67.5	182.910
68.0	176.012
68.5	169.704
69.0	163.200
69.5	157.090
70.0	150.980
70.5	145.264
71.0	139.745
71.5	134.226
72.0	128.904
72.5	123.977
73.0	118.852
73.5	113.925
74.0	109.194
74.5	104.464
75.0	99.733
75.5	95.397
76.0	90.864
76.5	86.725
77.0	82.388
77.5	78.249
78.0	74.110
78.5	70.168
79.0	66.226
79.5	62.284
80.0	58.539
80.5	54.794
81.0	51.049
81.5	47.304
82.0	43.757
82.5	40.209

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CANDELA TABULATION - (Cont.)

83.0	36.661
83.5	33.310
84.0	29.762
84.5	26.609
85.0	23.258
85.5	20.104
86.0	16.951
86.5	13.994
87.0	11.235
87.5	8.870
88.0	6.899
88.5	5.125
89.0	3.745
89.5	2.562
90.0	1.577
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

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 6PR-TL-L43-8TW-DIM-UNV-LW-OF-WH 4000K_.IES****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
128.0	0.000
128.5	0.000
129.0	0.000
129.5	0.000
130.0	0.000
130.5	0.000
131.0	0.000
131.5	0.000
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
148.0	0.000
148.5	0.000
149.0	0.000
149.5	0.000
150.0	0.000
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
154.5	0.000
155.0	0.000
155.5	0.000
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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Zone	Lumens	%Lamp	%Fixt
0-20	812.22	N.A.	18.70
0-30	1710.15	N.A.	39.30
0-40	2757.61	N.A.	63.40
0-60	3998.24	N.A.	91.90
0-80	4324.93	N.A.	99.40
0-90	4352.46	N.A.	100.00
10-90	4138.55	N.A.	95.10
20-40	1945.39	N.A.	44.70
20-50	2776.53	N.A.	63.80
40-70	1460.35	N.A.	33.60
60-80	326.68	N.A.	7.50
70-80	106.97	N.A.	2.50
80-90	27.53	N.A.	0.60
90-110	0.04	N.A.	0.00
90-120	0.04	N.A.	0.00
90-130	0.04	N.A.	0.00
90-150	0.04	N.A.	0.00
90-180	0.04	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4352.5	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	213.91
10-20	598.31
20-30	897.93
30-40	1047.45
40-50	831.15
50-60	409.49
60-70	219.71
70-80	106.97
80-90	27.53
90-100	0.04
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	240	240	240	240	234	234	234	234	224	224	224	214	214	214	205	205	205	201
1	224	216	209	203	219	212	206	200	203	198	194	196	192	188	189	185	182	178
2	208	194	183	174	203	191	180	172	184	175	168	177	170	164	171	166	161	157
3	192	175	161	150	188	172	159	149	166	155	147	161	152	144	156	148	142	138
4	179	158	143	132	174	156	142	131	151	139	129	147	136	128	142	133	126	122
5	166	144	128	117	162	142	127	116	138	125	115	134	123	114	130	121	113	109
6	155	131	116	104	151	129	115	104	126	113	103	123	111	102	120	109	101	98
7	144	120	105	94	141	119	104	93	116	103	93	113	101	92	111	100	92	88
8	135	111	95	85	132	109	95	85	107	94	84	105	93	84	102	91	83	80
9	127	102	87	77	124	101	87	77	99	86	77	97	85	76	95	84	76	73
10	119	95	80	71	117	94	80	71	92	79	70	90	78	70	89	78	70	67

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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

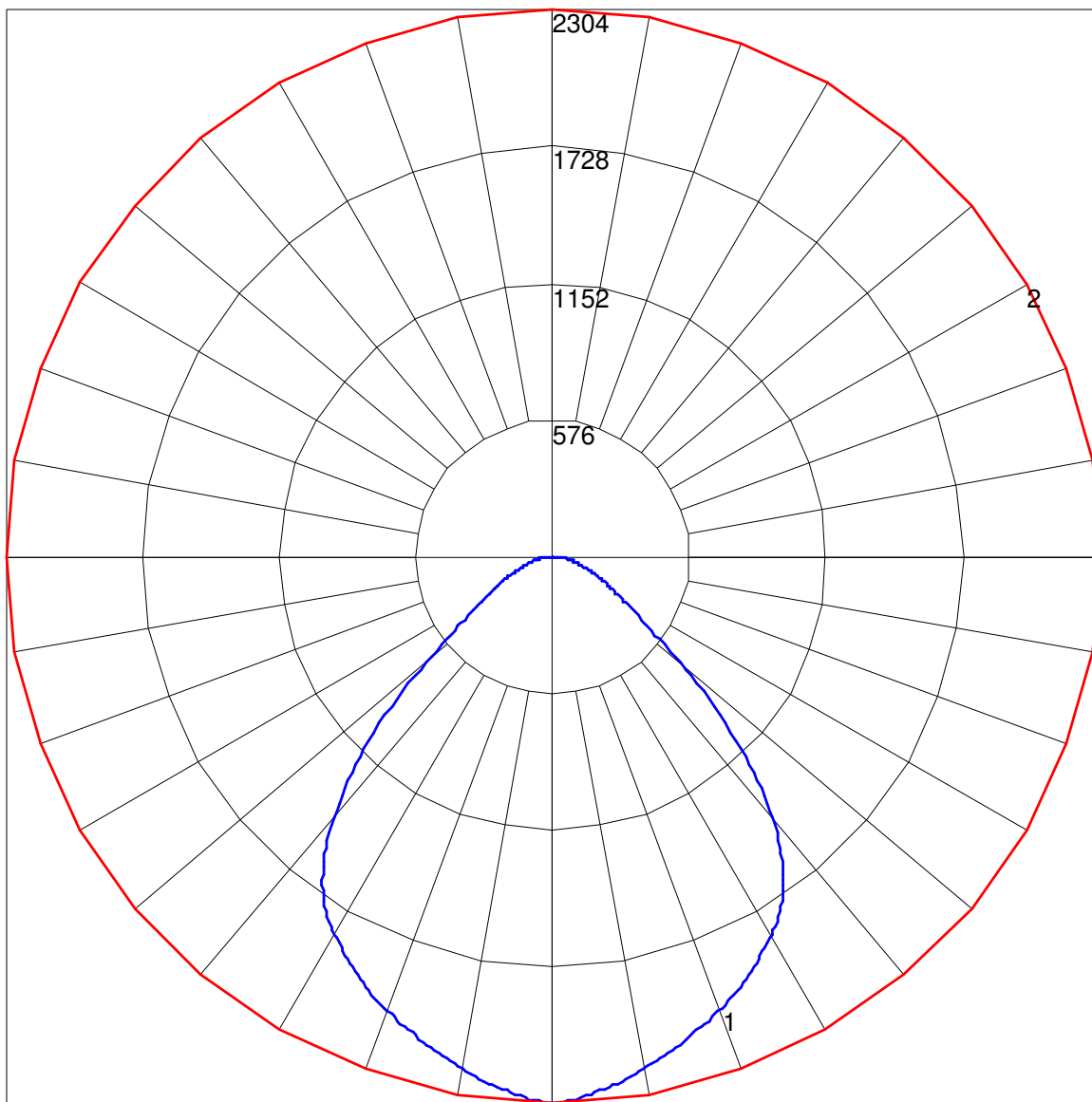
X=2H	Y=2H	20.0	21.4	20.4	21.7	22.0	20.0	21.4	20.4	21.7	22.0
	3H	21.1	22.3	21.5	22.6	23.0	21.1	22.3	21.5	22.6	23.0
	4H	21.5	22.6	21.9	23.0	23.4	21.5	22.6	21.9	23.0	23.4
	6H	21.7	22.8	22.2	23.2	23.6	21.7	22.8	22.2	23.2	23.6
	8H	21.8	22.8	22.2	23.2	23.6	21.8	22.8	22.2	23.2	23.6
	12H	21.9	22.8	22.3	23.2	23.6	21.9	22.8	22.3	23.2	23.6

UGR Viewed Endwise

4H	2H	20.4	21.5	20.8	21.9	22.2	20.4	21.5	20.8	21.9	22.2
	3H	21.6	22.6	22.1	23.0	23.4	21.6	22.6	22.1	23.0	23.4
	4H	22.1	23.0	22.6	23.4	23.8	22.1	23.0	22.6	23.4	23.8
	6H	22.5	23.3	23.0	23.7	24.2	22.5	23.3	23.0	23.7	24.2
	8H	22.6	23.3	23.1	23.8	24.2	22.6	23.3	23.1	23.8	24.2
	12H	22.7	23.3	23.2	23.8	24.3	22.7	23.3	23.2	23.8	24.3
8H	4H	22.3	23.0	22.8	23.4	23.9	22.3	23.0	22.8	23.4	23.9
	6H	22.8	23.3	23.3	23.8	24.3	22.8	23.3	23.3	23.8	24.3
	8H	22.9	23.4	23.5	24.0	24.4	22.9	23.4	23.5	24.0	24.4
	12H	23.1	23.5	23.6	24.0	24.6	23.1	23.5	23.6	24.0	24.6
12H	4H	22.3	22.9	22.8	23.4	23.8	22.3	22.9	22.8	23.4	23.8
	6H	22.8	23.3	23.3	23.8	24.3	22.8	23.3	23.3	23.8	24.3
	8H	23.0	23.4	23.5	23.9	24.5	23.0	23.4	23.5	23.9	24.5

Maximum UGR = 24.6

POLAR GRAPH



Maximum Candela = 2304.115 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.)