

IES INDOOR REPORT

PHOTOMETRIC FILENAME : W6CR-XX-L50-830-XXX-DIM-UNV-S-XXX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] W6CR_Angela-S_(V22)_measured
[TESTLAB] LEDIL Inc
[TESTDATE] 21 Aug 2024
[ISSUEDATE] 2025-07-15
[MANUFAC] H.E. WILLIAMS, INC.
[LUMCAT] W6CR-xx-L50-830-xxx-DIM-UNV-S-xxx
[LUMINAIRE] 6 INCH ROUND WET LOCATION LED
[MORE] CYLINDER WITH SPOT DISTRIBUTION
[LAMPCAT] BL VERO 22 COB
[LAMP] LED
[OTHER] Absolute Photometry

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5115
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	45
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.34
Spacing Criterion (90-270)	0.34
Spacing Criterion (Diagonal)	0.32
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.15 m (Diameter)
Luminous Width (90-270)	0.15 m (Diameter)
Luminous Height	0.00 m

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5521	5674	5747
55	6266	6091	5969
65	4626	4546	4415
75	3270	3274	3214
85	897	918	897

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	27646.480	27646.480	27646.480	27646.480	27646.480
1	28069.189	28082.818	28028.166	28002.662	27955.677
2	29032.425	29066.581	28887.615	28788.803	28606.157
3	29894.947	29956.597	29654.313	29462.667	29131.672
4	29945.205	30037.470	29652.042	29417.671	28943.853
5	28724.129	28813.455	28455.602	28212.681	27691.958
6	26224.053	26323.834	26068.954	25880.732	25386.637
7	22846.758	22924.192	22818.297	22722.341	22326.724
8	19072.342	19164.241	19168.834	19227.593	18919.948
9	15461.429	15556.048	15678.394	15822.438	15625.280
10	12349.437	12447.314	12631.076	12822.170	12706.388
11	9806.619	9908.572	10118.139	10315.431	10248.971
12	7830.471	7929.650	8115.516	8305.475	8248.870
13	6341.085	6430.460	6593.811	6757.313	6696.115
14	5221.811	5352.325	5462.612	5590.938	5507.910
15	4427.653	4425.048	4578.211	4681.383	4661.457
16	3723.540	3775.385	3875.733	3956.958	3911.010
17	3242.639	3284.145	3366.873	3427.787	3388.152
18	2881.312	2914.851	2979.072	3029.314	2999.099
19	2616.359	2641.396	2691.370	2731.941	2706.904
20	2419.953	2441.466	2478.346	2517.246	2486.246
21	2291.544	2294.317	2330.511	2360.225	2324.615
22	2184.664	2193.249	2206.344	2236.643	2214.027
23	2110.154	2116.868	2125.253	2146.382	2123.700
24	2050.309	2053.048	2058.125	2068.832	2049.924
25	1999.683	2001.403	2000.401	2004.143	1981.511
26	1951.446	1949.792	1939.053	1941.324	1914.383
27	1896.628	1889.262	1872.125	1869.436	1843.447
28	1827.062	1817.308	1789.281	1780.662	1760.719
29	1736.684	1724.341	1687.378	1671.611	1655.109
30	1618.781	1604.300	1562.994	1543.953	1523.376
31	1470.562	1456.348	1416.345	1398.958	1374.088
32	1299.728	1287.969	1253.946	1244.025	1221.760
33	1108.650	1102.554	1081.141	1079.922	1068.147
34	911.142	910.792	905.263	916.972	913.949
35	719.363	725.293	734.162	758.564	761.070
36	547.828	559.620	580.398	612.166	616.058
37	405.238	414.391	439.762	474.921	482.571
38	280.286	294.884	328.089	362.780	370.096
39	203.070	214.227	237.845	268.594	277.296
40	141.488	153.029	177.849	197.157	201.517
41	108.801	116.734	131.616	149.939	150.590
42	90.311	95.071	103.740	113.227	116.183
43	79.822	82.527	87.321	92.967	93.735
44	74.126	75.479	78.018	81.108	80.640
45	70.869	71.738	72.840	74.544	73.775
46	68.965	69.650	70.017	71.136	70.301
47	67.829	68.397	68.330	69.199	68.397
48	67.161	67.545	67.261	67.913	67.178
49	66.727	66.977	66.543	66.994	66.259
50	66.426	66.526	65.942	66.276	65.474
51	66.242	66.259	65.474	65.658	64.789
52	66.176	66.075	65.073	65.123	64.221
53	66.159	65.908	64.739	64.672	63.704

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54	66.059	65.658	64.338	64.105	63.086
55	65.240	64.806	63.420	63.086	62.150
56	63.704	63.253	61.800	61.365	60.664
57	61.566	61.265	59.678	59.244	58.626
58	59.110	58.860	57.240	56.755	56.405
59	56.154	55.987	54.367	53.933	53.665
60	52.830	52.713	51.227	50.826	50.559
61	49.339	49.189	47.903	47.552	47.151
62	45.732	45.548	44.512	44.212	43.627
63	42.191	41.907	41.155	40.888	40.170
64	38.750	38.433	37.932	37.681	36.863
65	35.493	35.226	34.875	34.658	33.873
66	32.420	32.253	32.019	31.852	31.084
67	29.697	29.580	29.447	29.280	28.645
68	27.292	27.192	27.142	26.975	26.423
69	25.087	25.071	25.020	24.920	24.419
70	23.100	23.150	23.133	23.050	22.599
71	21.346	21.379	21.379	21.329	20.928
72	19.742	19.776	19.759	19.726	19.325
73	18.223	18.256	18.239	18.206	17.872
74	16.769	16.803	16.786	16.786	16.485
75	15.366	15.383	15.383	15.400	15.099
76	13.963	14.013	14.013	14.030	13.763
77	12.594	12.627	12.661	12.677	12.477
78	11.191	11.191	11.258	11.291	11.174
79	9.721	9.721	9.838	9.888	9.771
80	8.151	8.168	8.268	8.385	8.284
81	6.297	6.430	6.447	6.581	6.481
82	3.608	3.758	3.892	3.925	3.925
83	1.704	1.737	1.887	1.988	2.054
84	1.553	1.553	1.570	1.570	1.520
85	1.420	1.436	1.453	1.453	1.420
86	1.286	1.286	1.286	1.286	1.269
87	1.086	1.102	1.102	1.086	1.069
88	0.852	0.852	0.869	0.852	0.835
89	0.568	0.551	0.568	0.568	0.551
90	0.284	0.317	0.334	0.367	0.334
91	0.284	0.284	0.301	0.301	0.284
92	0.301	0.284	0.301	0.301	0.284
93	0.301	0.284	0.301	0.301	0.301
94	0.317	0.301	0.317	0.317	0.301
95	0.317	0.317	0.317	0.317	0.317
96	0.317	0.317	0.317	0.317	0.317
97	0.334	0.334	0.317	0.334	0.317
98	0.334	0.351	0.334	0.334	0.334
99	0.334	0.351	0.351	0.351	0.334
100	0.367	0.351	0.351	0.367	0.334
101	0.000	0.000	0.000	0.000	0.000
102	0.000	0.000	0.000	0.000	0.000
103	0.000	0.000	0.000	0.000	0.000
104	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000
106	0.000	0.000	0.000	0.000	0.000
107	0.000	0.000	0.000	0.000	0.000
108	0.000	0.000	0.000	0.000	0.000
109	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

110	0.000	0.000	0.000	0.000	0.000
111	0.000	0.000	0.000	0.000	0.000
112	0.000	0.000	0.000	0.000	0.000
113	0.000	0.000	0.000	0.000	0.000
114	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000
116	0.000	0.000	0.000	0.000	0.000
117	0.000	0.000	0.000	0.000	0.000
118	0.000	0.000	0.000	0.000	0.000
119	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000
121	0.000	0.000	0.000	0.000	0.000
122	0.000	0.000	0.000	0.000	0.000
123	0.000	0.000	0.000	0.000	0.000
124	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000
126	0.000	0.000	0.000	0.000	0.000
127	0.000	0.000	0.000	0.000	0.000
128	0.000	0.000	0.000	0.000	0.000
129	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000
131	0.000	0.000	0.000	0.000	0.000
132	0.000	0.000	0.000	0.000	0.000
133	0.000	0.000	0.000	0.000	0.000
134	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000
136	0.000	0.000	0.000	0.000	0.000
137	0.000	0.000	0.000	0.000	0.000
138	0.000	0.000	0.000	0.000	0.000
139	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000
141	0.000	0.000	0.000	0.000	0.000
142	0.000	0.000	0.000	0.000	0.000
143	0.000	0.000	0.000	0.000	0.000
144	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000
146	0.000	0.000	0.000	0.000	0.000
147	0.000	0.000	0.000	0.000	0.000
148	0.000	0.000	0.000	0.000	0.000
149	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000
151	0.000	0.000	0.000	0.000	0.000
152	0.000	0.000	0.000	0.000	0.000
153	0.000	0.000	0.000	0.000	0.000
154	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000
156	0.000	0.000	0.000	0.000	0.000
157	0.000	0.000	0.000	0.000	0.000
158	0.000	0.000	0.000	0.000	0.000
159	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000
161	0.000	0.000	0.000	0.000	0.000
162	0.000	0.000	0.000	0.000	0.000
163	0.000	0.000	0.000	0.000	0.000
164	0.000	0.000	0.000	0.000	0.000
165	0.000	0.000	0.000	0.000	0.000

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166	0.000	0.000	0.000	0.000	0.000
167	0.000	0.000	0.000	0.000	0.000
168	0.000	0.000	0.000	0.000	0.000
169	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000
171	0.000	0.000	0.000	0.000	0.000
172	0.000	0.000	0.000	0.000	0.000
173	0.000	0.000	0.000	0.000	0.000
174	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000
176	0.000	0.000	0.000	0.000	0.000
177	0.000	0.000	0.000	0.000	0.000
178	0.000	0.000	0.000	0.000	0.000
179	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3546.09	N.A.	69.30
0-30	4462.7	N.A.	87.20
0-40	4939.16	N.A.	96.60
0-60	5060.77	N.A.	98.90
0-80	5112.38	N.A.	99.90
0-90	5114.91	N.A.	100.00
10-90	2991.9	N.A.	58.50
20-40	1393.07	N.A.	27.20
20-50	1459.35	N.A.	28.50
40-70	156.92	N.A.	3.10
60-80	51.61	N.A.	1.00
70-80	16.29	N.A.	0.30
80-90	2.53	N.A.	0.00
90-110	0.37	N.A.	0.00
90-120	0.37	N.A.	0.00
90-130	0.37	N.A.	0.00
90-150	0.37	N.A.	0.00
90-180	0.37	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5115.27	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2123.01
10-20	1423.08
20-30	916.61
30-40	476.46
40-50	66.27
50-60	55.34
60-70	35.31
70-80	16.29
80-90	2.53
90-100	0.35
100-110	0.02
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	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	96	95	94	92
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89
4	103	98	93	90	102	97	93	90	94	91	89	93	90	88	91	89	87	85
5	100	94	89	86	99	93	89	86	91	88	85	90	87	84	88	86	84	83
6	97	90	86	83	96	90	86	83	88	85	82	87	84	81	86	83	81	80
7	94	87	83	80	93	87	83	80	86	82	79	85	81	79	84	81	78	77
8	91	84	80	77	90	84	80	77	83	79	77	82	79	76	81	78	76	75
9	89	82	78	75	88	82	77	75	81	77	75	80	77	74	79	76	74	73
10	87	80	76	73	86	79	75	73	79	75	72	78	75	72	77	74	72	71

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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	9.3	10.3	9.7	10.6	10.9	9.1	10.0	9.4	10.3	10.6
	3H	10.2	11.0	10.6	11.4	11.7	10.0	10.8	10.4	11.1	11.5
	4H	10.5	11.3	10.9	11.6	12.0	10.3	11.1	10.7	11.4	11.8
	6H	10.7	11.4	11.1	11.8	12.2	10.5	11.2	10.9	11.6	12.0
	8H	10.7	11.3	11.1	11.7	12.1	10.5	11.1	10.9	11.5	11.9
	12H	10.6	11.2	11.1	11.6	12.1	10.4	11.1	10.9	11.4	11.9

UGR Viewed Endwise

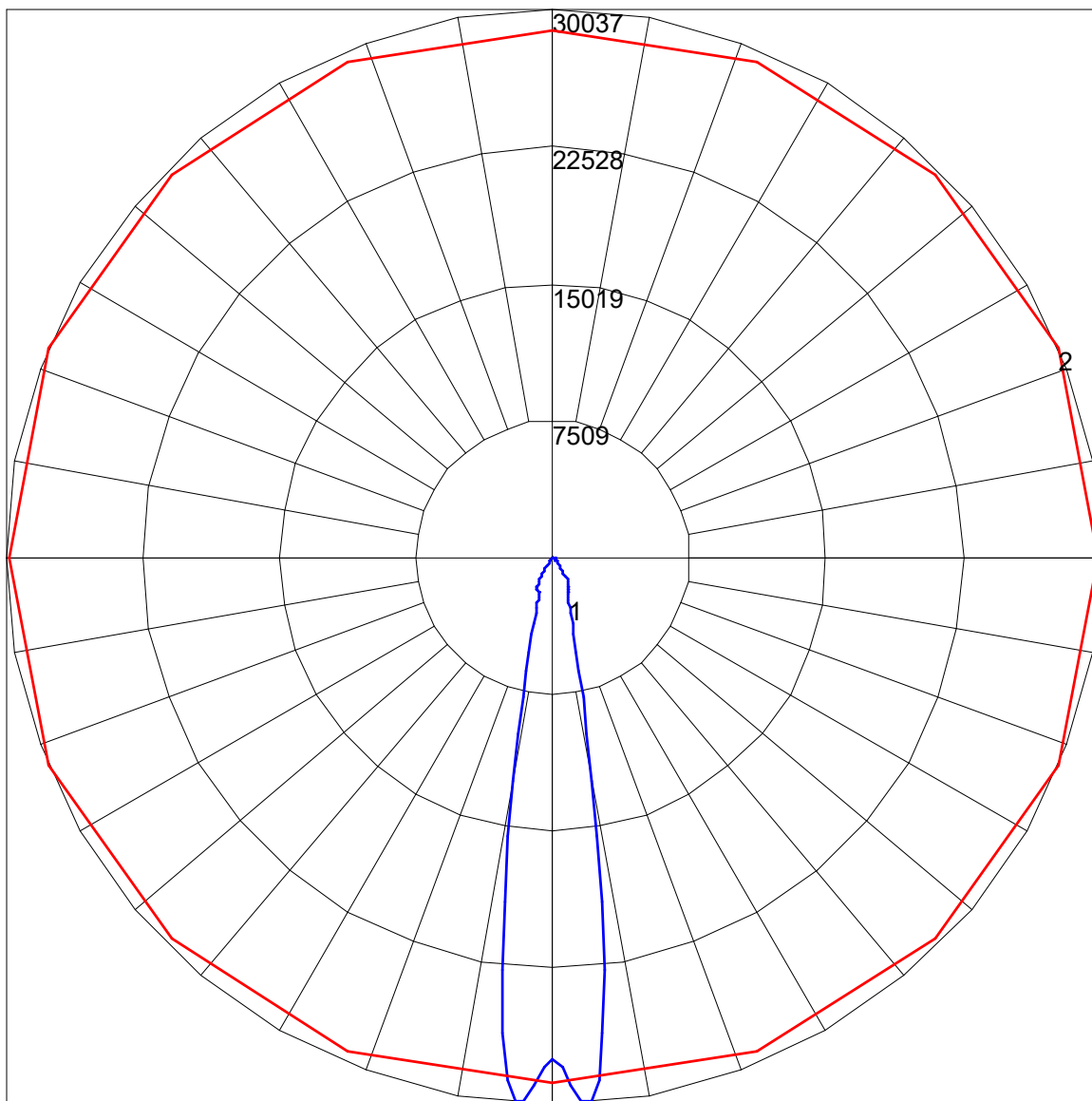
4H	2H	9.5	10.3	10.0	10.7	11.1	9.3	10.1	9.7	10.4	10.8
	3H	10.6	11.2	11.0	11.6	12.0	10.4	11.0	10.8	11.4	11.9
	4H	11.0	11.6	11.5	12.0	12.4	10.9	11.4	11.3	11.8	12.3
	6H	11.3	11.8	11.8	12.2	12.7	11.1	11.6	11.6	12.1	12.5
	8H	11.3	11.7	11.7	12.2	12.6	11.1	11.6	11.6	12.0	12.5
	12H	11.2	11.6	11.7	12.1	12.6	11.1	11.5	11.6	12.0	12.4

8H	4H	11.1	11.5	11.6	12.0	12.4	10.9	11.4	11.4	11.8	12.3
	6H	11.4	11.8	11.9	12.3	12.8	11.3	11.6	11.8	12.2	12.6
	8H	11.4	11.7	12.0	12.3	12.8	11.3	11.6	11.9	12.1	12.6
	12H	11.4	11.7	11.9	12.2	12.7	11.3	11.5	11.8	12.0	12.6

12H	4H	11.0	11.4	11.5	11.9	12.4	10.9	11.3	11.4	11.8	12.2
	6H	11.4	11.7	11.9	12.2	12.7	11.3	11.6	11.8	12.1	12.6
	8H	11.4	11.7	11.9	12.2	12.8	11.3	11.6	11.8	12.1	12.6

Maximum UGR = 12.8

POLAR GRAPH



Maximum Candela = 30037.47 Located At Horizontal Angle = 22.5, Vertical Angle = 4
1 - Vertical Plane Through Horizontal Angles (22.5 - 202.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (4) (Through Max. Cd.)