

IES INDOOR REPORT

PHOTOMETRIC FILENAME : W6CR-XX-L60-930-XXX-DIM-UNV-N-XXX_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] W6CR_Angela-M_(V22)_measured
[TESTLAB] LEDIL Inc
[TESTDATE] 21 Aug 2024
[ISSUEDATE] 2025-07-15
[MANUFAC] H.E. WILLIAMS, INC.
[LUMCAT] W6CR-xx-L60-930-xxx-DIM-UNV-N-xxx
[LUMINAIRE] 6 INCH ROUND WET LOCATION LED
[MORE] CYLINDER WITH NARROW DIST.
[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	5315
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	53.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.44
Spacing Criterion (90-270)	0.46
Spacing Criterion (Diagonal)	0.52
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	20702	20701	20278
55	12377	12171	11815
65	7338	7225	7036
75	4836	4783	4705
85	1186	1186	1174

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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	13163.807	13163.807	13163.807	13163.807	13163.807
1	13104.782	13109.753	13118.745	13130.021	13132.225
2	12938.190	12956.465	12993.559	13034.385	13046.511
3	12666.775	12703.714	12784.226	12872.221	12897.344
4	12295.936	12354.361	12487.283	12615.351	12653.296
5	11831.105	11906.801	12079.795	12242.094	12284.719
6	11281.586	11369.272	11561.529	11747.345	11791.633
7	10665.712	10756.184	10957.587	11140.213	11187.789
8	9991.432	10082.812	10274.276	10455.741	10492.970
9	9291.759	9381.128	9557.971	9727.580	9766.781
10	8602.510	8679.559	8844.063	8995.764	9038.234
11	7927.417	7990.504	8139.632	8275.301	8313.922
12	7283.714	7338.020	7471.599	7593.536	7621.753
13	6693.581	6737.076	6853.153	6964.453	6980.776
14	6146.266	6191.076	6288.336	6393.022	6390.837
15	5664.010	5692.150	5785.077	5861.778	5866.691
16	5208.173	5238.710	5329.510	5398.998	5414.450
17	4817.085	4847.487	4920.842	4976.541	4993.076
18	4480.882	4505.560	4571.296	4615.178	4633.376
19	4189.742	4212.660	4268.377	4304.098	4321.639
20	3943.489	3963.699	4008.103	4042.798	4047.479
21	3731.390	3746.997	3782.273	3815.383	3814.822
22	3550.390	3559.518	3586.884	3616.744	3623.571
23	3395.884	3397.509	3420.330	3440.443	3451.853
24	3253.467	3252.538	3272.013	3283.521	3297.580
25	3125.882	3122.904	3133.502	3139.246	3148.336
26	3003.288	2997.099	2998.685	3001.276	3003.752
27	2879.552	2867.407	2860.986	2858.123	2859.980
28	2743.168	2727.948	2710.136	2711.490	2709.768
29	2584.659	2571.218	2541.184	2530.663	2531.533
30	2416.462	2391.224	2354.787	2333.591	2341.153
31	2207.728	2184.888	2149.438	2129.015	2121.666
32	1974.742	1956.331	1924.730	1909.180	1901.329
33	1723.016	1710.136	1691.260	1685.091	1684.433
34	1466.030	1460.034	1456.979	1465.701	1475.351
35	1218.249	1219.777	1230.085	1254.724	1271.027
36	994.952	999.865	1024.233	1056.066	1072.891
37	799.311	809.387	839.809	876.032	888.100
38	640.377	661.825	684.453	719.806	726.459
39	531.533	546.290	565.881	594.426	595.606
40	436.904	447.657	472.392	492.796	501.131
41	379.040	386.466	400.120	412.362	416.075
42	339.103	342.913	350.668	356.934	358.404
43	309.165	311.041	314.522	316.727	315.625
44	285.706	286.151	287.601	286.538	285.455
45	265.747	266.076	265.728	263.717	260.294
46	248.090	247.761	246.408	243.584	241.051
47	231.439	231.033	229.099	226.236	223.819
48	215.870	215.425	213.317	210.300	207.999
49	201.133	200.611	198.522	195.544	193.301
50	187.073	186.493	184.540	181.620	179.550
51	173.942	173.303	171.389	168.681	166.689
52	161.467	160.887	159.011	156.536	154.583
53	149.902	149.322	147.620	145.280	143.365

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CANDELA TABULATION - (Cont.)

54	139.149	138.550	136.906	134.682	132.845
55	128.880	128.281	126.733	124.587	123.020
56	118.804	118.243	116.812	114.897	113.447
57	109.270	108.786	107.413	105.692	104.415
58	100.567	100.102	98.903	97.260	96.196
59	92.444	91.999	90.974	89.466	88.499
60	85.017	84.631	83.644	82.368	81.459
61	78.229	77.842	76.972	75.773	74.883
62	72.041	71.615	70.841	69.836	68.966
63	66.297	65.987	65.252	64.382	63.550
64	61.036	60.727	60.108	59.296	58.580
65	56.298	55.931	55.428	54.673	53.977
66	51.772	51.482	50.999	50.361	49.722
67	47.634	47.363	46.957	46.396	45.835
68	43.882	43.592	43.244	42.721	42.219
69	40.246	40.072	39.704	39.279	38.776
70	36.939	36.726	36.436	36.049	35.604
71	33.806	33.593	33.361	33.013	32.626
72	30.886	30.653	30.460	30.131	29.822
73	28.043	27.849	27.675	27.404	27.134
74	25.335	25.180	25.006	24.794	24.542
75	22.724	22.608	22.473	22.318	22.105
76	20.171	20.094	19.997	19.862	19.707
77	17.696	17.657	17.599	17.541	17.406
78	15.259	15.220	15.240	15.201	15.143
79	12.842	12.842	12.900	12.958	12.880
80	10.443	10.463	10.521	10.676	10.598
81	7.891	7.968	8.007	8.142	8.065
82	4.564	4.680	4.835	4.854	4.912
83	2.243	2.263	2.456	2.572	2.766
84	2.050	2.031	2.031	2.050	2.031
85	1.876	1.895	1.876	1.876	1.857
86	1.683	1.683	1.683	1.683	1.663
87	1.431	1.431	1.431	1.431	1.412
88	1.122	1.122	1.102	1.102	1.102
89	0.735	0.735	0.735	0.735	0.735
90	0.387	0.425	0.445	0.464	0.483
91	0.387	0.387	0.387	0.387	0.367
92	0.387	0.406	0.406	0.387	0.387
93	0.406	0.406	0.406	0.406	0.387
94	0.406	0.406	0.406	0.406	0.406
95	0.425	0.425	0.425	0.406	0.406
96	0.445	0.445	0.445	0.425	0.425
97	0.445	0.464	0.464	0.445	0.445
98	0.483	0.483	0.483	0.464	0.464
99	0.522	0.503	0.503	0.503	0.503
100	0.522	0.503	0.503	0.503	0.522
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	2670.87	N.A.	50.30
0-30	4107.47	N.A.	77.30
0-40	4900.16	N.A.	92.20
0-60	5230.69	N.A.	98.40
0-80	5310.8	N.A.	99.90
0-90	5314.02	N.A.	100.00
10-90	4269.56	N.A.	80.30
20-40	2229.28	N.A.	41.90
20-50	2445.3	N.A.	46.00
40-70	386.64	N.A.	7.30
60-80	80.11	N.A.	1.50
70-80	24.00	N.A.	0.50
80-90	3.22	N.A.	0.10
90-110	0.50	N.A.	0.00
90-120	0.50	N.A.	0.00
90-130	0.50	N.A.	0.00
90-150	0.50	N.A.	0.00
90-180	0.50	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5314.52	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1044.46
10-20	1626.41
20-30	1436.59
30-40	792.69
40-50	216.02
50-60	114.51
60-70	56.11
70-80	24.00
80-90	3.22
90-100	0.48
100-110	0.03
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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	104	98	93	89	102	96	92	88	94	90	87	91	88	86	89	87	84	83
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	79	78
5	95	87	81	77	93	86	81	77	84	80	76	82	79	76	81	78	75	74
6	90	82	77	73	89	81	76	73	80	75	72	79	75	72	77	74	71	70
7	87	78	73	69	85	77	72	69	76	72	68	75	71	68	74	70	67	66
8	83	74	69	65	82	74	69	65	73	68	65	72	68	64	71	67	64	63
9	80	71	66	62	79	70	65	62	70	65	62	69	64	61	68	64	61	60
10	77	68	63	59	76	67	62	59	67	62	59	66	62	59	65	61	58	57

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UGR TABLE - CORRECTED

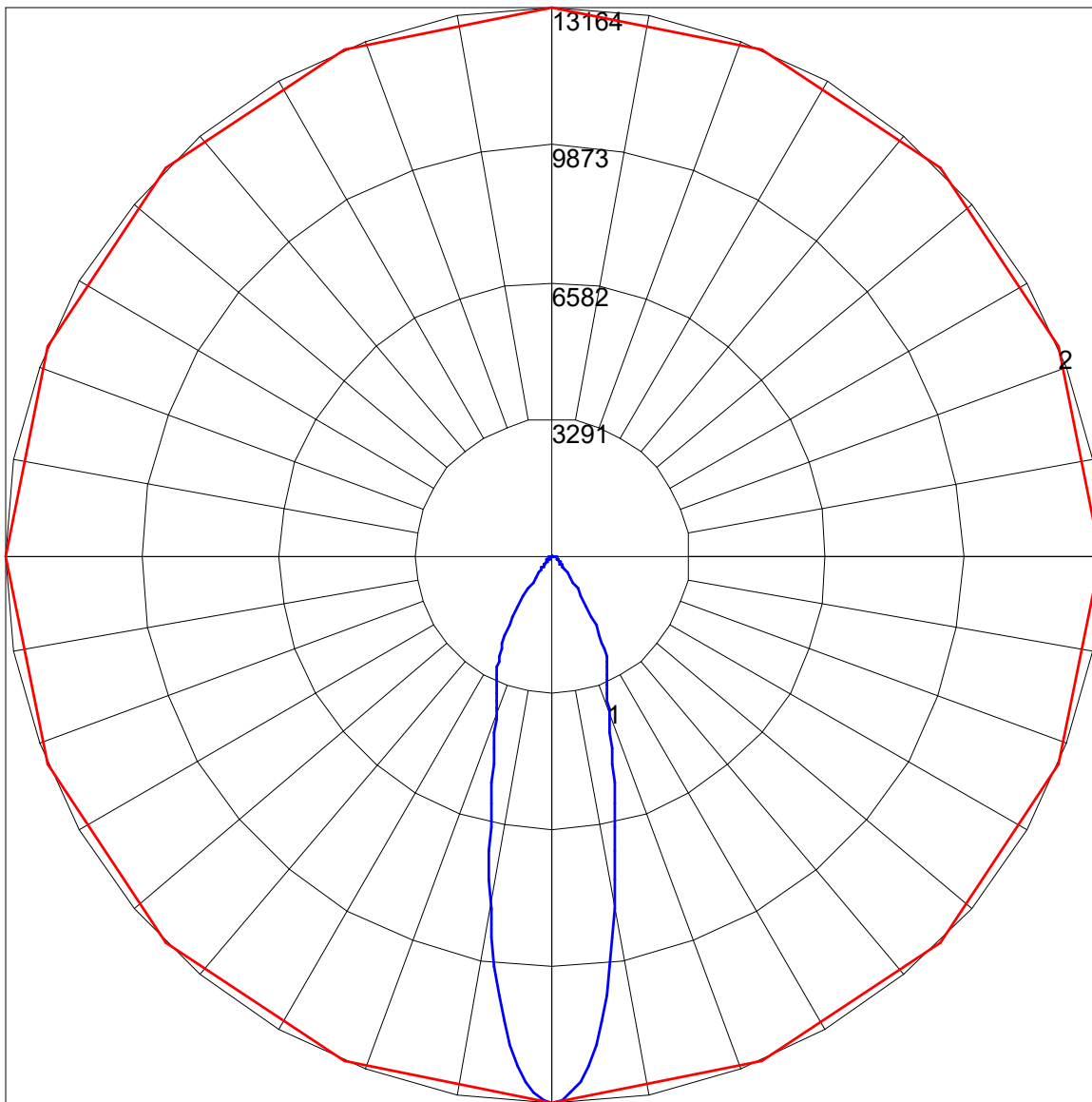
Reflectances

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	13.0	14.0	13.3	14.3	14.6	12.8	13.7	13.1	14.1	14.4
	3H	13.7	14.6	14.1	14.9	15.3	13.5	14.4	13.9	14.7	15.1
	4H	14.0	14.8	14.4	15.1	15.5	13.7	14.5	14.1	14.9	15.3
	6H	14.1	14.8	14.5	15.2	15.6	13.9	14.6	14.3	15.0	15.3
	8H	14.0	14.7	14.4	15.1	15.5	13.8	14.5	14.2	14.9	15.3
	12H	14.0	14.6	14.4	15.0	15.4	13.8	14.4	14.2	14.8	15.2
4H	2H	13.1	13.9	13.5	14.3	14.7	12.9	13.7	13.3	14.1	14.5
	3H	14.1	14.7	14.5	15.1	15.5	13.9	14.5	14.3	14.9	15.3
	4H	14.4	14.9	14.8	15.4	15.8	14.2	14.8	14.6	15.2	15.6
	6H	14.5	15.0	15.0	15.5	15.9	14.4	14.9	14.8	15.3	15.8
	8H	14.5	14.9	15.0	15.4	15.9	14.3	14.8	14.8	15.2	15.7
	12H	14.4	14.8	14.9	15.3	15.8	14.3	14.7	14.8	15.2	15.6
8H	4H	14.4	14.8	14.9	15.3	15.8	14.2	14.7	14.7	15.1	15.6
	6H	14.6	14.9	15.1	15.5	15.9	14.4	14.8	14.9	15.3	15.8
	8H	14.6	14.9	15.1	15.4	15.9	14.4	14.7	15.0	15.3	15.8
	12H	14.5	14.8	15.0	15.3	15.9	14.4	14.6	14.9	15.1	15.7
12H	4H	14.3	14.7	14.8	15.2	15.7	14.2	14.6	14.7	15.1	15.5
	6H	14.5	14.9	15.1	15.3	15.9	14.4	14.7	14.9	15.2	15.7
	8H	14.5	14.8	15.1	15.3	15.9	14.4	14.7	14.9	15.2	15.7

Maximum UGR = 15.9

POLAR GRAPH



Maximum Candela = 13163.807 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.)