

IES INDOOR REPORT

PHOTOMETRIC FILENAME : W6CR-XX-L50-935-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
[ISSUE DATE] 2025-07-15
[MANUFAC] H.E. WILLIAMS, INC.
[LUMCAT] W6CR-xx-L50-935-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	4962
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
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	5355	5504	5575
55	6078	5908	5790
65	4487	4409	4283
75	3172	3176	3117
85	870	891	870

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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	26817.080	26817.080	26817.080	26817.080	26817.080
1	27227.108	27240.328	27187.316	27162.577	27117.001
2	28161.447	28194.578	28020.981	27925.133	27747.967
3	28998.093	29057.893	28764.677	28578.781	28257.716
4	29046.843	29136.340	28762.475	28535.135	28075.531
5	27862.399	27949.046	27601.929	27366.295	26861.194
6	25437.326	25534.114	25286.880	25104.304	24625.033
7	22161.351	22236.462	22133.744	22040.666	21656.918
8	18500.168	18589.310	18593.765	18650.761	18352.345
9	14997.583	15089.363	15208.039	15347.761	15156.519
10	11978.951	12073.892	12252.141	12437.502	12325.194
11	9512.419	9611.313	9814.593	10005.966	9941.500
12	7595.555	7691.759	7872.049	8056.309	8001.403
13	6150.851	6237.545	6395.996	6554.592	6495.230
14	5065.156	5191.754	5298.733	5423.209	5342.671
15	4294.823	4292.296	4440.864	4540.940	4521.612
16	3611.833	3662.122	3759.461	3838.249	3793.678
17	3145.359	3185.620	3265.866	3324.953	3286.507
18	2794.872	2827.405	2889.699	2938.434	2909.125
19	2537.868	2562.154	2610.629	2649.982	2625.696
20	2347.354	2368.222	2403.995	2441.728	2411.658
21	2222.797	2225.487	2260.595	2289.418	2254.876
22	2119.124	2127.451	2140.153	2169.543	2147.606
23	2046.849	2053.362	2061.495	2081.990	2059.988
24	1988.799	1991.456	1996.381	2006.766	1988.426
25	1939.692	1941.361	1940.389	1944.018	1922.065
26	1892.902	1891.298	1880.881	1883.084	1856.951
27	1839.729	1832.584	1815.961	1813.353	1788.143
28	1772.250	1762.788	1735.602	1727.242	1707.897
29	1684.583	1672.610	1636.757	1621.462	1605.455
30	1570.217	1556.170	1516.104	1497.634	1477.674
31	1426.445	1412.657	1373.855	1356.989	1332.865
32	1260.736	1249.330	1216.328	1206.704	1185.107
33	1075.391	1069.477	1048.707	1047.524	1036.102
34	883.808	883.468	878.105	889.462	886.530
35	697.782	703.534	712.137	735.807	738.238
36	531.393	542.831	562.986	593.801	597.576
37	393.081	401.959	426.569	460.673	468.094
38	271.877	286.037	318.246	351.897	358.993
39	196.978	207.800	230.709	260.536	268.977
40	137.243	148.438	172.514	191.243	195.471
41	105.537	113.232	127.668	145.441	146.073
42	87.602	92.219	100.628	109.830	112.698
43	77.427	80.052	84.701	90.178	90.923
44	71.902	73.215	75.677	78.674	78.221
45	68.743	69.585	70.655	72.307	71.562
46	66.896	67.560	67.917	69.002	68.192
47	65.794	66.345	66.280	67.123	66.345
48	65.146	65.519	65.243	65.875	65.162
49	64.725	64.968	64.547	64.984	64.271
50	64.433	64.531	63.964	64.288	63.510
51	64.255	64.271	63.510	63.688	62.846
52	64.190	64.093	63.121	63.170	62.295
53	64.174	63.931	62.797	62.732	61.793

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54	64.077	63.688	62.408	62.181	61.193
55	63.283	62.862	61.517	61.193	60.286
56	61.793	61.355	59.946	59.524	58.844
57	59.719	59.427	57.888	57.467	56.867
58	57.337	57.094	55.523	55.053	54.712
59	54.469	54.307	52.736	52.315	52.055
60	51.245	51.132	49.690	49.301	49.042
61	47.859	47.713	46.466	46.126	45.737
62	44.360	44.181	43.177	42.885	42.318
63	40.925	40.650	39.920	39.661	38.965
64	37.587	37.280	36.794	36.551	35.757
65	34.428	34.169	33.829	33.618	32.857
66	31.447	31.285	31.058	30.896	30.151
67	28.806	28.693	28.563	28.401	27.786
68	26.473	26.376	26.327	26.165	25.631
69	24.335	24.318	24.270	24.173	23.687
70	22.407	22.455	22.439	22.358	21.921
71	20.706	20.738	20.738	20.689	20.300
72	19.150	19.183	19.166	19.134	18.745
73	17.676	17.708	17.692	17.660	17.336
74	16.266	16.299	16.283	16.283	15.991
75	14.905	14.922	14.922	14.938	14.646
76	13.544	13.593	13.593	13.609	13.350
77	12.216	12.248	12.281	12.297	12.103
78	10.855	10.855	10.920	10.952	10.839
79	9.429	9.429	9.543	9.591	9.478
80	7.906	7.923	8.020	8.133	8.036
81	6.108	6.238	6.254	6.383	6.286
82	3.500	3.645	3.775	3.807	3.807
83	1.653	1.685	1.831	1.928	1.993
84	1.507	1.507	1.523	1.523	1.474
85	1.377	1.393	1.410	1.410	1.377
86	1.248	1.248	1.248	1.248	1.231
87	1.053	1.069	1.069	1.053	1.037
88	0.826	0.826	0.842	0.826	0.810
89	0.551	0.535	0.551	0.551	0.535
90	0.275	0.308	0.324	0.356	0.324
91	0.275	0.275	0.292	0.292	0.275
92	0.292	0.275	0.292	0.292	0.275
93	0.292	0.275	0.292	0.292	0.292
94	0.308	0.292	0.308	0.308	0.292
95	0.308	0.308	0.308	0.308	0.308
96	0.308	0.308	0.308	0.308	0.308
97	0.324	0.324	0.308	0.324	0.308
98	0.324	0.340	0.324	0.324	0.324
99	0.324	0.340	0.340	0.340	0.324
100	0.356	0.340	0.340	0.356	0.324
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	3439.71	N.A.	69.30
0-30	4328.82	N.A.	87.20
0-40	4790.99	N.A.	96.60
0-60	4908.95	N.A.	98.90
0-80	4959.01	N.A.	99.90
0-90	4961.46	N.A.	100.00
10-90	2902.14	N.A.	58.50
20-40	1351.28	N.A.	27.20
20-50	1415.57	N.A.	28.50
40-70	152.22	N.A.	3.10
60-80	50.06	N.A.	1.00
70-80	15.81	N.A.	0.30
80-90	2.45	N.A.	0.00
90-110	0.36	N.A.	0.00
90-120	0.36	N.A.	0.00
90-130	0.36	N.A.	0.00
90-150	0.36	N.A.	0.00
90-180	0.36	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4961.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2059.32
10-20	1380.39
20-30	889.11
30-40	462.17
40-50	64.29
50-60	53.68
60-70	34.25
70-80	15.81
80-90	2.45
90-100	0.34
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	110	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	96	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	85	82	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	75	73	86	79	75	73	79	75	72	78	75	72	77	74	72	71

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UGR TABLE - CORRECTED

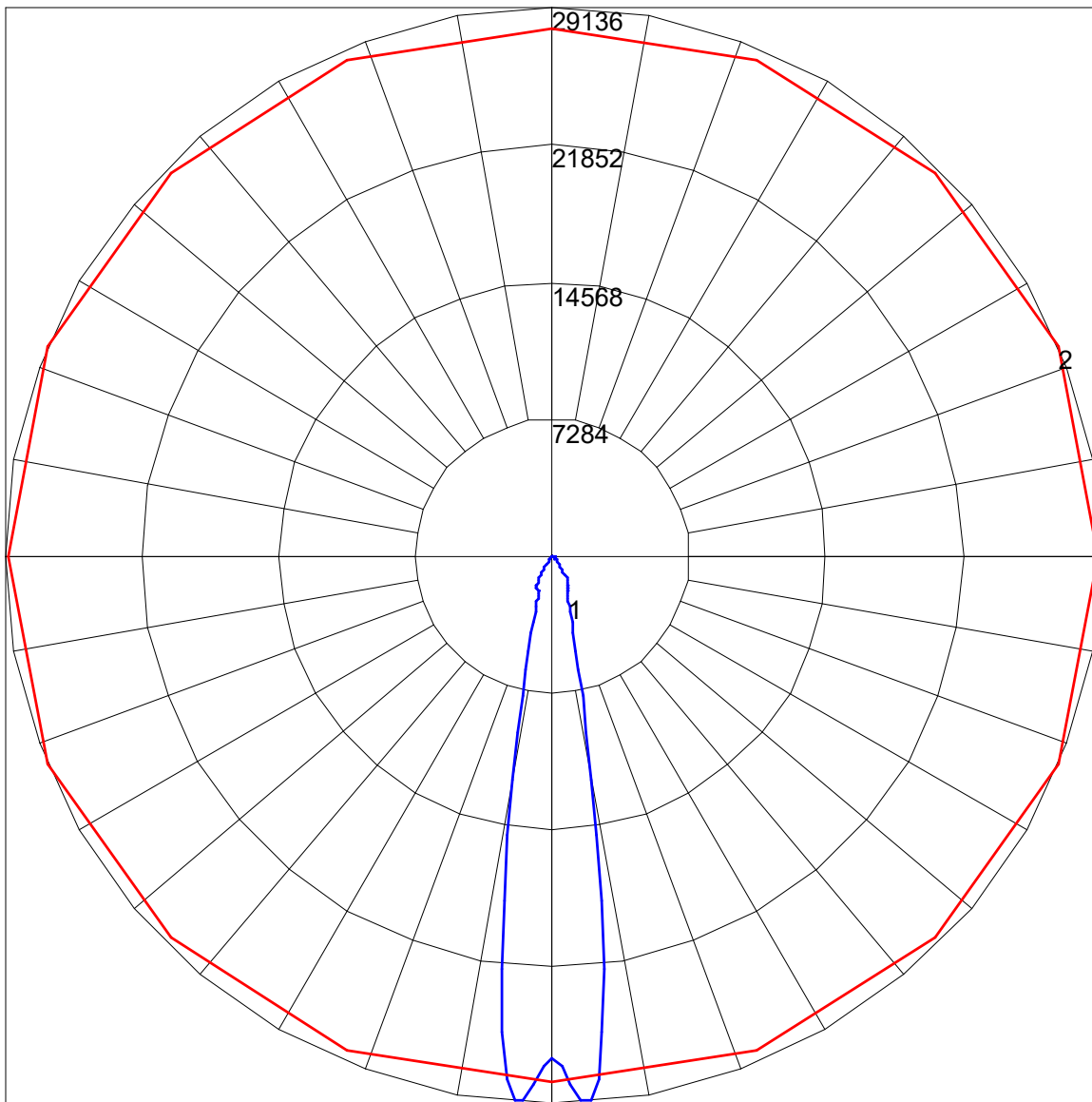
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	9.2	10.2	9.6	10.5	10.8	9.0	9.9	9.3	10.2	10.5
	3H	10.1	10.9	10.5	11.3	11.6	9.9	10.7	10.3	11.0	11.4
	4H	10.4	11.2	10.8	11.5	11.9	10.2	11.0	10.6	11.3	11.7
	6H	10.6	11.3	11.0	11.7	12.1	10.4	11.1	10.8	11.5	11.9
	8H	10.6	11.2	11.0	11.6	12.0	10.4	11.0	10.8	11.4	11.8
	12H	10.5	11.1	11.0	11.5	12.0	10.3	11.0	10.8	11.3	11.8
4H	2H	9.4	10.2	9.9	10.6	11.0	9.2	10.0	9.6	10.3	10.7
	3H	10.5	11.1	10.9	11.5	11.9	10.3	10.9	10.7	11.3	11.8
	4H	10.9	11.5	11.4	11.9	12.3	10.8	11.3	11.2	11.7	12.2
	6H	11.2	11.7	11.7	12.1	12.6	11.0	11.5	11.5	12.0	12.4
	8H	11.2	11.6	11.6	12.1	12.5	11.0	11.5	11.5	11.9	12.4
	12H	11.1	11.5	11.6	12.0	12.5	11.0	11.4	11.5	11.9	12.3
8H	4H	11.0	11.4	11.5	11.9	12.3	10.8	11.3	11.3	11.7	12.2
	6H	11.3	11.7	11.8	12.2	12.7	11.2	11.5	11.7	12.1	12.5
	8H	11.3	11.6	11.9	12.2	12.7	11.2	11.5	11.8	12.0	12.5
	12H	11.3	11.6	11.8	12.1	12.6	11.2	11.4	11.7	11.9	12.5
12H	4H	10.9	11.3	11.4	11.8	12.3	10.8	11.2	11.3	11.7	12.1
	6H	11.3	11.6	11.8	12.1	12.6	11.2	11.5	11.7	12.0	12.5
	8H	11.3	11.6	11.8	12.1	12.7	11.2	11.5	11.7	12.0	12.5

Maximum UGR = 12.7

POLAR GRAPH



Maximum Candela = 29136.34 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.)