

IES INDOOR REPORT

PHOTOMETRIC FILENAME : W6CR-XX-L60-927-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-L60-927-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	5801
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	53.6
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	6261	6435	6518
55	7105	6907	6769
65	5246	5155	5007
75	3709	3713	3644
85	1018	1042	1018

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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	31351.8433	1351.8433	1351.8433	1351.8433	1351.8433
1	31831.2063	1846.6623	1784.6853	1755.7633	1702.480
2	32923.5423	2962.2753	2759.3233	2647.2673	2440.142
3	33901.6643	3971.5773	3628.7783	3411.4473	3036.090
4	33958.6583	4063.2903	3626.2043	3360.4203	2823.098
5	32573.9253	2675.2243	2269.4093	1993.9303	1403.417
6	29738.7732	9851.9282	9562.8862	9349.4372	8789.121
7	25908.8312	5996.6432	5876.5552	5767.7382	5319.098
8	21628.5432	1732.7582	1737.9672	1804.6012	1455.723
9	17533.6711	17640.9711	17779.7161	17943.0651	17719.483
10	14004.5901	14115.5851	14323.9761	14540.6811	14409.381
11	11120.9671	11236.5841	11474.2391	11697.9721	11622.605
12	8879.962	8992.434	9203.211	9418.629	9354.438
13	7190.958	7292.313	7477.557	7662.972	7593.572
14	5921.673	6069.679	6194.748	6340.273	6246.116
15	5021.077	5018.122	5191.813	5308.812	5286.216
16	4222.593	4281.387	4395.185	4487.296	4435.189
17	3677.239	3724.308	3818.123	3887.202	3842.254
18	3267.484	3305.518	3378.347	3435.322	3401.057
19	2967.021	2995.414	3052.085	3098.094	3069.701
20	2744.291	2768.688	2810.510	2854.624	2819.469
21	2598.672	2601.816	2642.862	2676.558	2636.175
22	2477.467	2487.203	2502.053	2536.412	2510.766
23	2392.971	2400.585	2410.093	2434.054	2408.332
24	2325.104	2328.211	2333.969	2346.110	2324.669
25	2267.694	2269.645	2268.508	2272.751	2247.086
26	2212.992	2211.116	2198.937	2201.513	2170.961
27	2150.827	2142.474	2123.040	2119.990	2090.518
28	2071.937	2060.875	2029.092	2019.318	1996.702
29	1969.446	1955.449	1913.532	1895.651	1876.937
30	1835.740	1819.318	1772.477	1750.884	1727.548
31	1667.656	1651.537	1606.173	1586.456	1558.252
32	1473.926	1460.591	1422.008	1410.757	1385.509
33	1257.239	1250.326	1226.043	1224.660	1211.307
34	1033.260	1032.862	1026.592	1039.870	1036.442
35	815.777	822.501	832.559	860.232	863.073
36	621.251	634.624	658.187	694.213	698.626
37	459.551	469.930	498.702	538.573	547.248
38	317.852	334.406	372.061	411.402	419.698
39	230.287	242.939	269.722	304.593	314.461
40	160.451	173.539	201.686	223.582	228.525
41	123.383	132.380	149.256	170.035	170.774
42	102.415	107.813	117.644	128.402	131.755
43	90.520	93.588	99.024	105.427	106.298
44	84.061	85.595	88.474	91.978	91.448
45	80.367	81.352	82.602	84.534	83.663
46	78.208	78.985	79.401	80.670	79.723
47	76.920	77.564	77.488	78.473	77.564
48	76.162	76.598	76.276	77.015	76.181
49	75.670	75.954	75.462	75.973	75.140
50	75.329	75.443	74.780	75.159	74.249
51	75.121	75.140	74.249	74.458	73.473
52	75.045	74.931	73.795	73.852	72.829
53	75.026	74.742	73.416	73.340	72.242

IES INDOOR REPORT**PHOTOMETRIC FILENAME : W6CR-XX-L60-927-XXX-DIM-UNV-S-XXX_.IES****CANDELA TABULATION - (Cont.)**

54	74.912	74.458	72.961	72.696	71.541
55	73.984	73.492	71.920	71.541	70.480
56	72.242	71.730	70.082	69.590	68.794
57	69.817	69.476	67.677	67.184	66.484
58	67.033	66.749	64.911	64.362	63.964
59	63.680	63.491	61.654	61.161	60.858
60	59.911	59.778	58.093	57.638	57.335
61	55.952	55.782	54.323	53.926	53.471
62	51.861	51.653	50.478	50.137	49.474
63	47.845	47.523	46.671	46.368	45.554
64	43.944	43.584	43.015	42.731	41.803
65	40.250	39.947	39.549	39.303	38.413
66	36.765	36.575	36.310	36.121	35.250
67	33.677	33.545	33.393	33.204	32.484
68	30.950	30.836	30.779	30.590	29.965
69	28.450	28.431	28.374	28.260	27.692
70	26.196	26.252	26.234	26.139	25.627
71	24.207	24.245	24.245	24.188	23.733
72	22.388	22.426	22.407	22.370	21.915
73	20.665	20.703	20.684	20.646	20.267
74	19.017	19.055	19.036	19.036	18.695
75	17.426	17.445	17.445	17.464	17.123
76	15.835	15.892	15.892	15.911	15.608
77	14.282	14.320	14.357	14.376	14.149
78	12.691	12.691	12.766	12.804	12.672
79	11.024	11.024	11.156	11.213	11.081
80	9.243	9.262	9.376	9.508	9.395
81	7.141	7.292	7.311	7.463	7.349
82	4.091	4.262	4.413	4.451	4.451
83	1.932	1.970	2.140	2.254	2.330
84	1.762	1.762	1.780	1.780	1.724
85	1.610	1.629	1.648	1.648	1.610
86	1.458	1.458	1.458	1.458	1.440
87	1.231	1.250	1.250	1.231	1.212
88	0.966	0.966	0.985	0.966	0.947
89	0.644	0.625	0.644	0.644	0.625
90	0.322	0.360	0.379	0.417	0.379
91	0.322	0.322	0.341	0.341	0.322
92	0.341	0.322	0.341	0.341	0.322
93	0.341	0.322	0.341	0.341	0.341
94	0.360	0.341	0.360	0.360	0.341
95	0.360	0.360	0.360	0.360	0.360
96	0.360	0.360	0.360	0.360	0.360
97	0.379	0.379	0.360	0.379	0.360
98	0.379	0.398	0.379	0.379	0.379
99	0.379	0.398	0.398	0.398	0.379
100	0.417	0.398	0.398	0.417	0.379
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	4021.36	N.A.	69.30
0-30	5060.82	N.A.	87.20
0-40	5601.14	N.A.	96.60
0-60	5739.05	N.A.	98.90
0-80	5797.58	N.A.	99.90
0-90	5800.44	N.A.	100.00
10-90	3392.89	N.A.	58.50
20-40	1579.78	N.A.	27.20
20-50	1654.94	N.A.	28.50
40-70	177.96	N.A.	3.10
60-80	58.52	N.A.	1.00
70-80	18.48	N.A.	0.30
80-90	2.87	N.A.	0.00
90-110	0.42	N.A.	0.00
90-120	0.42	N.A.	0.00
90-130	0.42	N.A.	0.00
90-150	0.42	N.A.	0.00
90-180	0.42	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	5800.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2407.55
10-20	1613.81
20-30	1039.46
30-40	540.32
40-50	75.16
50-60	62.75
60-70	40.05
70-80	18.48
80-90	2.87
90-100	0.39
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	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

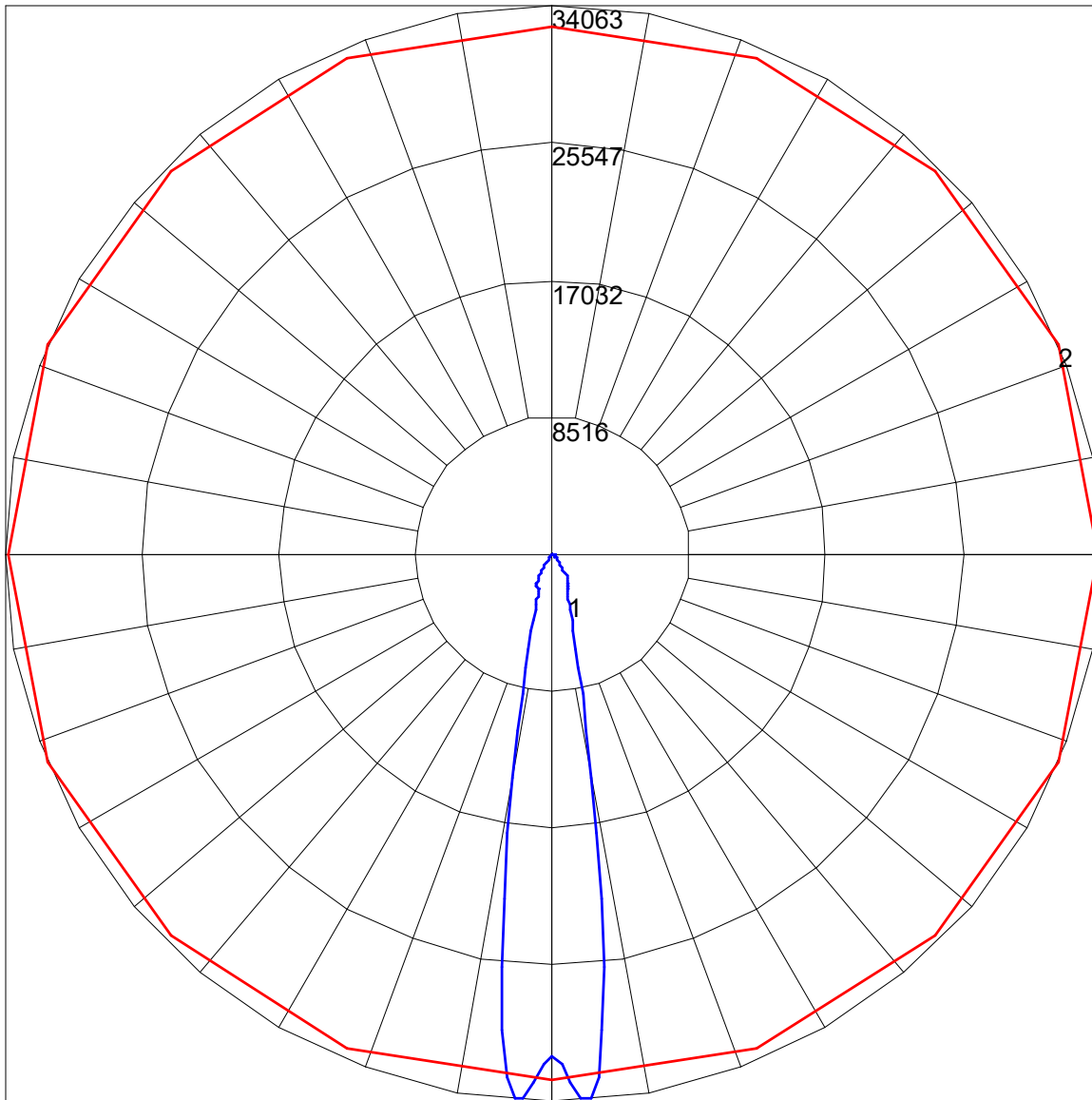
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

X=2H	Y=2H	9.8	10.8	10.2	11.1	11.4	UGR Viewed Endwise				
	3H	10.7	11.5	11.1	11.9	12.2	9.6	10.5	9.9	10.8	11.1
	4H	11.0	11.8	11.4	12.1	12.5	10.5	11.3	10.9	11.6	12.0
	6H	11.2	11.9	11.6	12.3	12.7	10.8	11.6	11.2	11.9	12.3
	8H	11.2	11.8	11.6	12.2	12.6	11.0	11.7	11.4	12.1	12.5
	12H	11.1	11.7	11.6	12.1	12.6	11.0	11.6	11.4	12.0	12.4
							10.9	11.6	11.4	11.9	12.4
4H	2H	10.0	10.8	10.5	11.2	11.6	9.8	10.6	10.2	10.9	11.3
	3H	11.1	11.7	11.5	12.1	12.5	10.9	11.5	11.3	11.9	12.4
	4H	11.5	12.1	12.0	12.5	12.9	11.4	11.9	11.8	12.3	12.8
	6H	11.8	12.3	12.3	12.7	13.2	11.6	12.1	12.1	12.6	13.0
	8H	11.8	12.2	12.2	12.7	13.1	11.6	12.1	12.1	12.5	13.0
	12H	11.7	12.1	12.2	12.6	13.1	11.6	12.0	12.1	12.5	12.9
8H	4H	11.6	12.0	12.1	12.5	12.9	11.4	11.9	11.9	12.3	12.8
	6H	11.9	12.3	12.4	12.8	13.3	11.8	12.1	12.3	12.7	13.1
	8H	11.9	12.2	12.5	12.8	13.3	11.8	12.1	12.4	12.6	13.1
	12H	11.9	12.2	12.4	12.7	13.2	11.8	12.0	12.3	12.5	13.1
12H	4H	11.5	11.9	12.0	12.4	12.9	11.4	11.8	11.9	12.3	12.7
	6H	11.9	12.2	12.4	12.7	13.2	11.8	12.1	12.3	12.6	13.1
	8H	11.9	12.2	12.4	12.7	13.3	11.8	12.1	12.3	12.6	13.1

Maximum UGR = 13.3

POLAR GRAPH



Maximum Candela = 34063.29 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.)