

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : W6CR-XX-L50-935-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-L50-935-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	4450
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	45
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	17336	17335	16980
55	10365	10192	9894
65	6145	6050	5892
75	4050	4005	3940
85	993	993	983

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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	11023.243	11023.243	11023.243	11023.243	11023.243
1	10973.816	10977.979	10985.509	10994.951	10996.797
2	10834.314	10849.618	10880.680	10914.867	10925.021
3	10607.034	10637.967	10705.386	10779.073	10800.110
4	10296.497	10345.421	10456.729	10563.972	10595.747
5	9907.252	9970.639	10115.503	10251.410	10287.104
6	9447.090	9520.518	9681.512	9837.112	9874.199
7	8931.363	9007.123	9175.777	9328.705	9368.545
8	8366.728	8443.249	8603.578	8755.535	8786.710
9	7780.829	7855.665	8003.751	8145.780	8178.607
10	7203.658	7268.178	7405.932	7532.965	7568.529
11	6638.342	6691.170	6816.048	6929.656	6961.997
12	6099.311	6144.786	6256.644	6358.753	6382.382
13	5605.139	5641.562	5738.764	5831.965	5845.634
14	5146.823	5184.347	5265.791	5353.454	5351.624
15	4742.987	4766.551	4844.367	4908.596	4912.710
16	4361.273	4386.845	4462.880	4521.068	4534.008
17	4033.780	4059.238	4120.665	4167.307	4181.153
18	3752.247	3772.912	3827.958	3864.705	3879.944
19	3508.449	3527.640	3574.298	3604.210	3618.898
20	3302.239	3319.163	3356.346	3385.400	3389.319
21	3124.630	3137.699	3167.238	3194.964	3194.495
22	2973.062	2980.706	3003.621	3028.626	3034.343
23	2843.680	2845.041	2864.151	2880.993	2890.548
24	2724.421	2723.644	2739.952	2749.588	2761.362
25	2617.583	2615.089	2623.964	2628.774	2636.386
26	2514.924	2509.741	2511.069	2513.239	2515.312
27	2411.309	2401.138	2395.762	2393.365	2394.920
28	2297.102	2284.357	2269.441	2270.575	2269.134
29	2164.369	2153.113	2127.963	2119.153	2119.881
30	2023.522	2002.387	1971.876	1954.126	1960.459
31	1848.730	1829.604	1799.919	1782.817	1776.663
32	1653.630	1638.212	1611.750	1598.729	1592.154
33	1442.837	1432.051	1416.245	1411.079	1410.528
34	1227.639	1222.619	1220.060	1227.364	1235.445
35	1020.150	1021.429	1030.061	1050.693	1064.346
36	833.163	837.277	857.682	884.339	898.429
37	669.336	677.773	703.248	733.581	743.686
38	536.246	554.206	573.154	602.758	608.329
39	445.101	457.458	473.863	497.767	498.755
40	365.859	374.864	395.577	412.662	419.642
41	317.404	323.623	335.056	345.308	348.417
42	283.962	287.152	293.646	298.893	300.124
43	258.892	260.463	263.378	265.224	264.301
44	239.247	239.620	240.835	239.944	239.037
45	222.534	222.810	222.518	220.834	217.967
46	207.748	207.473	206.339	203.975	201.853
47	193.804	193.464	191.845	189.448	187.424
48	180.768	180.395	178.630	176.103	174.176
49	168.427	167.990	166.241	163.747	161.868
50	156.653	156.168	154.532	152.086	150.354
51	145.657	145.123	143.519	141.252	139.584
52	135.211	134.725	133.155	131.082	129.446
53	125.527	125.041	123.616	121.656	120.053

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**CANDELA TABULATION - (Cont.)**

54	116.522	116.020	114.644	112.781	111.243
55	107.923	107.421	106.125	104.328	103.016
56	99.485	99.016	97.817	96.214	94.999
57	91.501	91.096	89.947	88.505	87.436
58	84.214	83.825	82.821	81.444	80.553
59	77.412	77.039	76.181	74.918	74.108
60	71.193	70.869	70.043	68.974	68.213
61	65.508	65.185	64.456	63.452	62.707
62	60.326	59.970	59.322	58.480	57.751
63	55.516	55.257	54.642	53.913	53.216
64	51.111	50.852	50.334	49.654	49.054
65	47.143	46.836	46.415	45.783	45.200
66	43.354	43.111	42.706	42.172	41.637
67	39.888	39.661	39.321	38.852	38.382
68	36.746	36.503	36.212	35.775	35.353
69	33.702	33.556	33.248	32.892	32.471
70	30.932	30.754	30.511	30.187	29.815
71	28.309	28.131	27.936	27.645	27.321
72	25.863	25.669	25.507	25.232	24.973
73	23.483	23.321	23.175	22.948	22.721
74	21.215	21.086	20.940	20.762	20.551
75	19.029	18.932	18.818	18.689	18.511
76	16.891	16.827	16.746	16.632	16.503
77	14.818	14.786	14.737	14.689	14.575
78	12.778	12.745	12.762	12.729	12.681
79	10.753	10.753	10.802	10.851	10.786
80	8.745	8.761	8.810	8.940	8.875
81	6.608	6.672	6.705	6.818	6.753
82	3.822	3.919	4.049	4.065	4.114
83	1.879	1.895	2.057	2.154	2.316
84	1.717	1.700	1.700	1.717	1.700
85	1.571	1.587	1.571	1.571	1.555
86	1.409	1.409	1.409	1.409	1.393
87	1.198	1.198	1.198	1.198	1.182
88	0.939	0.939	0.923	0.923	0.923
89	0.615	0.615	0.615	0.615	0.615
90	0.324	0.356	0.372	0.389	0.405
91	0.324	0.324	0.324	0.324	0.308
92	0.324	0.340	0.340	0.324	0.324
93	0.340	0.340	0.340	0.340	0.324
94	0.340	0.340	0.340	0.340	0.340
95	0.356	0.356	0.356	0.340	0.340
96	0.372	0.372	0.372	0.356	0.356
97	0.372	0.389	0.389	0.372	0.372
98	0.405	0.405	0.405	0.389	0.389
99	0.437	0.421	0.421	0.421	0.421
100	0.437	0.421	0.421	0.421	0.437
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	2236.56	N.A.	50.30
0-30	3439.55	N.A.	77.30
0-40	4103.34	N.A.	92.20
0-60	4380.13	N.A.	98.40
0-80	4447.21	N.A.	99.90
0-90	4449.91	N.A.	100.00
10-90	3575.28	N.A.	80.30
20-40	1866.78	N.A.	41.90
20-50	2047.67	N.A.	46.00
40-70	323.77	N.A.	7.30
60-80	67.08	N.A.	1.50
70-80	20.10	N.A.	0.50
80-90	2.70	N.A.	0.10
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	4450.33	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	874.62
10-20	1361.94
20-30	1202.99
30-40	663.79
40-50	180.89
50-60	95.89
60-70	46.98
70-80	20.10
80-90	2.70
90-100	0.40
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	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	80	78
5	95	87	81	77	93	86	81	77	84	80	76	83	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

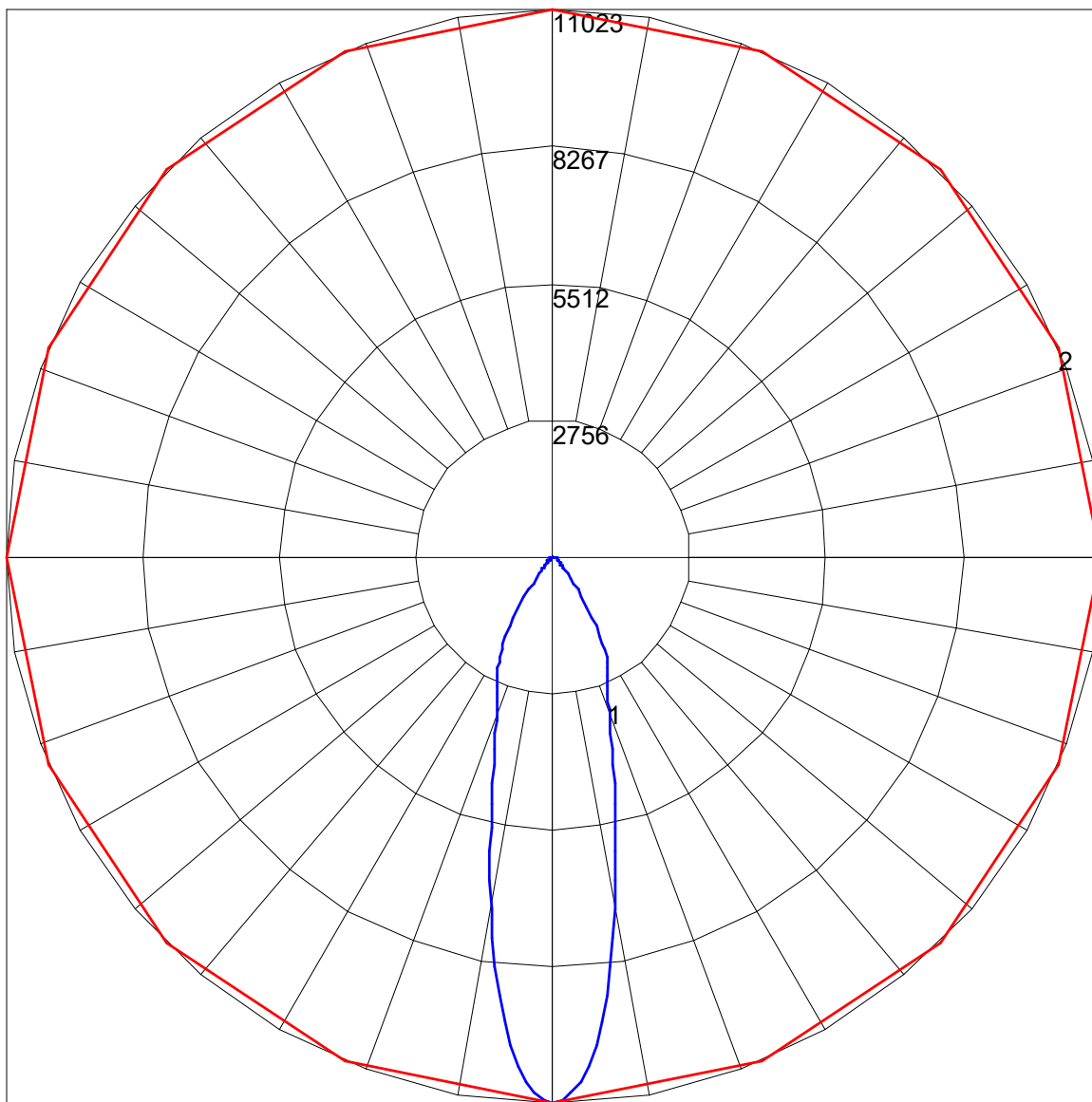
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	12.3	13.3	12.6	13.6	13.9	12.1	13.0	12.4	13.4	13.7
	3H	13.0	13.9	13.4	14.2	14.6	12.8	13.7	13.2	14.0	14.4
	4H	13.3	14.1	13.7	14.4	14.8	13.0	13.8	13.4	14.2	14.6
	6H	13.4	14.1	13.8	14.5	14.9	13.2	13.9	13.6	14.3	14.6
	8H	13.3	14.0	13.7	14.4	14.8	13.1	13.8	13.5	14.2	14.6
	12H	13.3	13.9	13.7	14.3	14.7	13.1	13.7	13.5	14.1	14.5
4H	2H	12.4	13.2	12.8	13.6	14.0	12.2	13.0	12.6	13.4	13.8
	3H	13.4	14.0	13.8	14.4	14.8	13.2	13.8	13.6	14.2	14.6
	4H	13.7	14.2	14.1	14.7	15.1	13.5	14.1	13.9	14.5	14.9
	6H	13.8	14.3	14.3	14.8	15.2	13.7	14.2	14.1	14.6	15.1
	8H	13.8	14.2	14.3	14.7	15.2	13.6	14.1	14.1	14.5	15.0
	12H	13.7	14.1	14.2	14.6	15.1	13.6	14.0	14.1	14.5	14.9
8H	4H	13.7	14.1	14.2	14.6	15.1	13.5	14.0	14.0	14.4	14.9
	6H	13.9	14.2	14.4	14.8	15.2	13.7	14.1	14.2	14.6	15.1
	8H	13.9	14.2	14.4	14.7	15.2	13.7	14.0	14.3	14.6	15.1
	12H	13.8	14.1	14.3	14.6	15.2	13.7	14.0	14.2	14.4	15.0
12H	4H	13.6	14.0	14.1	14.5	15.0	13.5	13.9	14.0	14.4	14.8
	6H	13.8	14.2	14.4	14.6	15.2	13.7	14.0	14.2	14.5	15.0
	8H	13.8	14.1	14.4	14.6	15.2	13.7	14.0	14.2	14.5	15.0

Maximum UGR = 15.2



POLAR GRAPH



Maximum Candela = 11023.243 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.)