

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : W6CR-XX-L70-940-RDB-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-L70-940-RDB-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	6735
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
Total Luminaire Watts	63.7
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	7269	7471	7567
55	8249	8019	7859
65	6091	5985	5813
75	4306	4311	4231
85	1181	1209	1181

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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	36399.113	36399.113	36399.113	36399.113	36399.113
1	36955.648	36973.592	36901.638	36868.060	36806.198
2	38223.836	38268.805	38033.181	37903.085	37662.616
3	39359.425	39440.592	39042.608	38790.289	38354.504
4	39425.594	39547.070	39039.619	38731.048	38107.223
5	37817.936	37935.542	37464.396	37144.568	36458.990
6	34526.358	34657.729	34322.156	34074.344	33423.824
7	30079.842	30181.790	30042.370	29916.034	29395.169
8	25110.478	25231.471	25237.519	25314.880	24909.837
9	20356.381	20480.956	20642.036	20831.683	20572.107
10	16259.160	16388.025	16629.964	16881.556	16729.119
11	12911.309	13045.539	13321.454	13581.205	13493.705
12	10309.529	10440.108	10684.818	10934.915	10860.390
13	8348.616	8466.287	8681.354	8896.619	8816.046
14	6874.991	7046.824	7192.028	7360.980	7251.665
15	5829.410	5825.980	6027.632	6163.467	6137.233
16	4902.380	4970.638	5102.757	5209.697	5149.201
17	4269.230	4323.876	4432.795	4512.994	4460.811
18	3793.510	3837.667	3922.220	3988.368	3948.587
19	3444.675	3477.639	3543.434	3596.849	3563.886
20	3186.089	3214.413	3262.968	3314.184	3273.370
21	3017.027	3020.677	3068.331	3107.451	3060.568
22	2876.310	2887.613	2904.853	2944.744	2914.969
23	2778.210	2787.050	2798.090	2825.908	2796.044
24	2699.418	2703.025	2709.710	2723.806	2698.913
25	2632.765	2635.030	2633.711	2638.637	2608.839
26	2569.257	2567.080	2552.940	2555.931	2520.460
27	2497.084	2487.386	2464.824	2461.283	2427.066
28	2405.494	2392.651	2355.751	2344.404	2318.148
29	2286.503	2270.252	2221.587	2200.828	2179.102
30	2131.272	2112.207	2057.824	2032.755	2005.663
31	1936.129	1917.415	1864.748	1841.856	1809.112
32	1711.210	1695.729	1650.935	1637.872	1608.559
33	1459.640	1451.613	1423.421	1421.816	1406.313
34	1199.602	1199.140	1191.862	1207.277	1203.297
35	947.108	954.914	966.591	998.719	1002.018
36	721.265	736.791	764.147	805.973	811.097
37	533.533	545.584	578.987	625.277	635.349
38	369.022	388.242	431.959	477.633	487.265
39	267.360	282.050	313.144	353.629	365.086
40	186.281	201.477	234.155	259.576	265.315
41	143.246	153.691	173.285	197.408	198.266
42	118.902	125.170	136.583	149.073	152.966
43	105.092	108.655	114.966	122.399	123.411
44	97.594	99.375	102.717	106.786	106.170
45	93.306	94.449	95.900	98.143	97.132
46	90.799	91.700	92.184	93.657	92.558
47	89.303	90.051	89.963	91.107	90.051
48	88.424	88.929	88.556	89.413	88.446
49	87.852	88.182	87.610	88.204	87.236
50	87.456	87.588	86.818	87.258	86.203
51	87.214	87.236	86.203	86.445	85.301
52	87.126	86.994	85.675	85.741	84.553
53	87.104	86.774	85.235	85.147	83.872

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**CANDELA TABULATION - (Cont.)**

54	86.972	86.445	84.707	84.399	83.058
55	85.895	85.323	83.498	83.058	81.827
56	83.872	83.278	81.365	80.793	79.869
57	81.057	80.661	78.572	78.000	77.187
58	77.824	77.494	75.361	74.724	74.262
59	73.932	73.712	71.579	71.007	70.655
60	69.556	69.402	67.445	66.917	66.565
61	64.960	64.762	63.069	62.607	62.079
62	60.210	59.968	58.605	58.209	57.439
63	55.548	55.174	54.185	53.833	52.887
64	51.018	50.600	49.940	49.611	48.533
65	46.730	46.378	45.916	45.630	44.597
66	42.684	42.464	42.156	41.936	40.924
67	39.099	38.945	38.769	38.549	37.714
68	35.932	35.800	35.735	35.515	34.789
69	33.030	33.008	32.942	32.810	32.150
70	30.413	30.479	30.457	30.347	29.753
71	28.104	28.148	28.148	28.082	27.554
72	25.993	26.037	26.015	25.971	25.443
73	23.992	24.036	24.014	23.970	23.530
74	22.078	22.122	22.100	22.100	21.705
75	20.231	20.253	20.253	20.275	19.879
76	18.384	18.450	18.450	18.472	18.120
77	16.581	16.625	16.669	16.691	16.427
78	14.734	14.734	14.822	14.866	14.712
79	12.798	12.798	12.952	13.018	12.864
80	10.731	10.753	10.885	11.039	10.907
81	8.290	8.466	8.488	8.664	8.532
82	4.750	4.948	5.124	5.168	5.168
83	2.243	2.287	2.485	2.617	2.705
84	2.045	2.045	2.067	2.067	2.001
85	1.869	1.891	1.913	1.913	1.869
86	1.693	1.693	1.693	1.693	1.671
87	1.429	1.451	1.451	1.429	1.407
88	1.122	1.122	1.144	1.122	1.100
89	0.748	0.726	0.748	0.748	0.726
90	0.374	0.418	0.440	0.484	0.440
91	0.374	0.374	0.396	0.396	0.374
92	0.396	0.374	0.396	0.396	0.374
93	0.396	0.374	0.396	0.396	0.396
94	0.418	0.396	0.418	0.418	0.396
95	0.418	0.418	0.418	0.418	0.418
96	0.418	0.418	0.418	0.418	0.418
97	0.440	0.440	0.418	0.440	0.418
98	0.440	0.462	0.440	0.440	0.440
99	0.440	0.462	0.462	0.462	0.440
100	0.484	0.462	0.462	0.484	0.440
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

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : W6CR-XX-L70-940-RDB-XXX-DIM-UNV-S-XXX\_.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	4668.75	N.A.	69.30
0-30	5875.55	N.A.	87.20
0-40	6502.86	N.A.	96.60
0-60	6662.97	N.A.	98.90
0-80	6730.92	N.A.	99.90
0-90	6734.24	N.A.	100.00
10-90	3939.11	N.A.	58.50
20-40	1834.11	N.A.	27.20
20-50	1921.36	N.A.	28.50
40-70	206.60	N.A.	3.10
60-80	67.95	N.A.	1.00
70-80	21.45	N.A.	0.30
80-90	3.33	N.A.	0.00
90-110	0.48	N.A.	0.00
90-120	0.48	N.A.	0.00
90-130	0.48	N.A.	0.00
90-150	0.48	N.A.	0.00
90-180	0.48	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	6734.73	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	2795.14
10-20	1873.61
20-30	1206.8
30-40	627.31
40-50	87.26
50-60	72.85
60-70	46.49
70-80	21.45
80-90	3.33
90-100	0.46
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	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	74	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

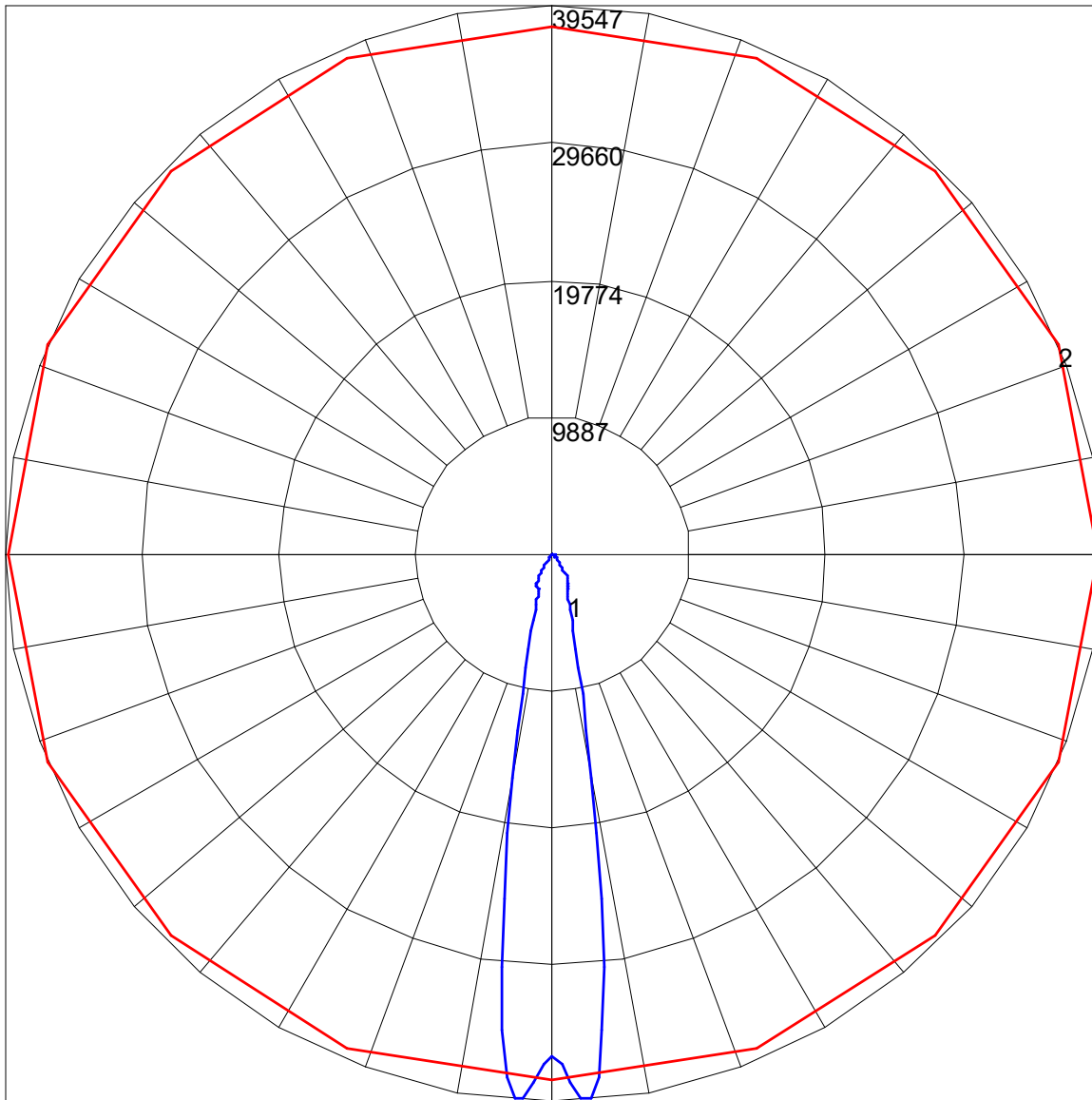
X=2H	Y=2H	10.3	11.3	10.7	11.6	11.9	10.1	11.0	10.4	11.3	11.6
	3H	11.2	12.0	11.6	12.4	12.7	11.0	11.8	11.4	12.1	12.5
	4H	11.5	12.3	11.9	12.6	13.0	11.3	12.1	11.7	12.4	12.8
	6H	11.7	12.4	12.1	12.8	13.2	11.5	12.2	11.9	12.6	13.0
	8H	11.7	12.3	12.1	12.7	13.1	11.5	12.1	11.9	12.5	12.9
	12H	11.6	12.2	12.1	12.6	13.1	11.4	12.1	11.9	12.4	12.9

### UGR Viewed Endwise

4H	2H	10.5	11.3	11.0	11.7	12.1	10.3	11.1	10.7	11.4	11.8
	3H	11.6	12.2	12.0	12.6	13.0	11.4	12.0	11.8	12.4	12.9
	4H	12.0	12.6	12.5	13.0	13.4	11.9	12.4	12.3	12.8	13.3
	6H	12.3	12.8	12.8	13.2	13.7	12.1	12.6	12.6	13.1	13.5
	8H	12.3	12.7	12.7	13.2	13.6	12.1	12.6	12.6	13.0	13.5
	12H	12.2	12.6	12.7	13.1	13.6	12.1	12.5	12.6	13.0	13.4
8H	4H	12.1	12.5	12.5	13.0	13.4	11.9	12.4	12.4	12.8	13.3
	6H	12.4	12.8	12.9	13.3	13.8	12.3	12.6	12.8	13.2	13.6
	8H	12.4	12.7	13.0	13.3	13.8	12.3	12.6	12.9	13.1	13.6
	12H	12.4	12.7	12.9	13.1	13.7	12.3	12.5	12.8	13.0	13.6
12H	4H	12.0	12.4	12.5	12.9	13.4	11.9	12.3	12.4	12.8	13.2
	6H	12.4	12.7	12.9	13.2	13.7	12.3	12.6	12.8	13.1	13.6
	8H	12.4	12.7	12.9	13.2	13.8	12.3	12.6	12.8	13.1	13.6

Maximum UGR = 13.8

POLAR GRAPH



Maximum Candela = 39547.07 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.)