



LUXEON CS CoB Gen 2

High efficacy, superior quality of light and ease for design footprints



LUXEON CS extends Lumileds CoB leadership for performance and reliability to an entirely new board footprint that enables easy design-in for new luminaire programs and as a cost-effective replacement for existing solutions where an upgrade is desired. State-of-the-art LUXEON CoB technology delivers unmatched performance, quality of light, and uncompromising product quality.

FEATURES AND BENEFITS

- Widely used square footprints for easy design-in
- High performance with superior color stability
- Low thermal resistance enables smaller heatsinks and extends the operating life span
- Supported by a comprehensive optical, mechanical, and electrical ecosystem

PRIMARY APPLICATIONS

- Track Lights
- Downlights
- Spotlights
- High Bay
- Low Bay
- More...

LUXEON CS CoB G2 Product performance at specified test current, Tj=85°C

LES ^[4] (mm)	NOMINAL CCT	MINIMUM CRI ^[1, 2, 3]	LUMINOUS FLUX ^[1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	ENERGY EFFICIENCY CLASS ^[5]	PART NUMBER
			MINIMUM	TYPICAL				
6.3	2700K	90	827	919	151	180	D	L2C6-2790xL02C0600
6.3	3000K	90	859	954	156	180	D	L2C6-3090xL02C0600
6.3	3500K	90	889	988	162	180	D	L2C6-3590xL02C0600
6.3	4000K	90	890	989	162	180	D	L2C6-4090xL02C0600
6.3	5000K	90	893	992	163	180	D	L2C6-5090xL02C0600
9.8	2700K	90	875	972	159	180	D	L2C6-2790xL02C0900
9.8	3000K	90	879	977	160	180	D	L2C6-3090xL02C0900
9.8	3500K	90	907	1008	165	180	D	L2C6-3590xL02C0900
9.8	4000K	90	908	1008	165	180	D	L2C6-4090xL02C0900
9.8	5000K	90	910	1011	166	180	D	L2C6-5090xL02C0900
9.8	2700K	90	1332	1480	162	270	D	L2C6-2790xL03C0900
9.8	3000K	90	1350	1500	164	270	D	L2C6-3090xL03C0900
9.8	3500K	90	1400	1555	170	270	D	L2C6-3590xL03C0900
9.8	4000K	90	1393	1548	169	270	D	L2C6-4090xL03C0900
9.8	5000K	90	1398	1554	170	270	D	L2C6-5090xL03C0900
9.8	2700K	90	1801	2001	164	360	D	L2C6-2790xL04C0900
9.8	3000K	90	1782	1980	162	360	D	L2C6-3090xL04C0900
9.8	3500K	90	1877	2086	171	360	D	L2C6-3590xL04C0900
9.8	4000K	90	1865	2072	170	360	D	L2C6-4090xL04C0900
9.8	5000K	90	1871	2079	170	360	D	L2C6-5090xL04C0900
13	2700K	90	2209	2454	161	450	D	L2C6-2790xL05C1300
13	3000K	90	2263	2515	165	450	D	L2C6-3090xL05C1300
13	3500K	90	2306	2563	168	450	D	L2C6-3590xL05C1300
13	4000K	90	2313	2570	168	450	D	L2C6-4090xL05C1300
13	5000K	90	2321	2578	169	450	D	L2C6-5090xL05C1300
13	2700K	90	2646	2940	161	540	D	L2C6-2790xL06C1300
13	3000K	90	2705	3006	164	540	D	L2C6-3090xL06C1300
13	3500K	90	2792	3103	169	540	D	L2C6-3590xL06C1300
13	4000K	90	2799	3110	170	540	D	L2C6-4090xL06C1300
13	5000K	90	2810	3122	171	540	D	L2C6-5090xL06C1300
14.5	2700K	90	3510	3900	160	720	D	L2C6-2790xL08C1500
14.5	3000K	90	3569	3965	162	720	D	L2C6-3090xL08C1500
14.5	3500K	90	3683	4093	168	720	D	L2C6-3590xL08C1500
14.5	4000K	90	3710	4122	169	720	D	L2C6-4090xL08C1500
14.5	5000K	90	3721	4134	169	720	D	L2C6-5090xL08C1500
14.5	2700K	90	4404	4893	160	900	D	L2C6-2790xL10C1500
14.5	3000K	90	4459	4954	162	900	D	L2C6-3090xL10C1500
14.5	3500K	90	4538	5042	165	900	D	L2C6-3590xL10C1500
14.5	4000K	90	4583	5092	167	900	D	L2C6-4090xL10C1500
14.5	5000K	90	4597	5108	167	900	D	L2C6-5090xL10C1500

Notes:

1. Lumileds maintains a tolerance of ±2 on CRI and ±6.5% on luminous flux measurements.
2. Typical CRI is approximately 2 points higher than the minimum CRI specified, but this is not guaranteed.
3. R9 value of 90CRI products is >50.
4. Light Emitting Surface (LES) is the inner diameter (phosphor area) inside the dam.
5. Energy efficiency class as specified in Commission Delegated Regulation (EU) 2019/2015. The available range of energy efficiency classes is A-G.

LUXEON CS CoB G2 HE Product performance at specified test current, Tj=50°C

LES ^[4] (mm)	NOMINAL CCT	MINIMUM CRI ^[1, 2, 3]	LUMINOUS FLUX ^[1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	ENERGY EFFICIENCY CLASS ^[5]	PART NUMBER
			MINIMUM	TYPICAL				
10.2	2700K	90	844	938	192	150	C	L2C6-2790xL04D090K
10.2	3000K	90	876	973	200	150	B	L2C6-3090xL04D090K
10.2	3500K	90	885	983	202	150	B	L2C6-3590xL04D090K
10.2	4000K	90	891	990	203	150	B	L2C6-4090xL04D090K
10.2	5000K	90	891	990	203	150	B	L2C6-5090xL04D090K
14.5	2700K	90	1292	1436	196	225	C	L2C6-2790xL06D130K
14.5	3000K	90	1328	1475	202	225	B	L2C6-3090xL06D130K
14.5	3500K	90	1355	1505	206	225	B	L2C6-3590xL06D130K
14.5	4000K	90	1364	1516	207	225	B	L2C6-4090xL06D130K
14.5	5000K	90	1364	1516	207	225	B	L2C6-5090xL06D130K
16.2	2700K	90	1710	1900	195	300	C	L2C6-2790xL08D150K
16.2	3000K	90	1762	1958	201	300	B	L2C6-3090xL08D150K
16.2	3500K	90	1787	1985	204	300	B	L2C6-3590xL08D150K
16.2	4000K	90	1800	2000	205	300	B	L2C6-4090xL08D150K
16.2	5000K	90	1800	2000	205	300	B	L2C6-5090xL08D150K
16.2	2700K	90	2102	2335	192	375	C	L2C6-2790xL10D150K
16.2	3000K	90	2192	2435	200	375	B	L2C6-3090xL10D150K
16.2	3500K	90	2219	2465	202	375	B	L2C6-3590xL10D150K
16.2	4000K	90	2232	2480	203	375	B	L2C6-4090xL10D150K
16.2	5000K	90	2232	2480	203	375	B	L2C6-5090xL10D150K
23.5	2700K	90	3456	3840	197	600	C	L2C6-2790xL16D220K
23.5	3000K	90	3553	3948	202	600	B	L2C6-3090xL16D220K
23.5	3500K	90	3609	4010	206	600	B	L2C6-3590xL16D220K
23.5	4000K	90	3627	4030	207	600	B	L2C6-4090xL16D220K
23.5	5000K	90	3627	4030	207	600	B	L2C6-5090xL16D220K

Notes:

1. Lumileds maintains a tolerance of ±2 on CRI and ±6.5% on luminous flux measurements.
2. Typical CRI is approximately 2 points higher than the minimum CRI specified, but this is not guaranteed.
3. R9 value of 90CRI products is >50.
4. Light Emitting Surface (LES) is the inner diameter (phosphor area) inside the dam.
5. Energy efficiency class as specified in Commission Delegated Regulation (EU) 2019/2015. The available range of energy efficiency classes is A-G.

LUXEON CS CoB G2 HE PW Product performance at specified test current, Tj=50°C

LES ^[4] (mm)	NOMINAL CCT	MINIMUM CRI ^[1, 2, 3]	LUMINOUS FLUX ^[1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	ENERGY EFFICIENCY CLASS ^[5]	PART NUMBER
			MINIMUM	TYPICAL				
10.2	3000K	90	859	954	196	150	C	L2C6-3090xL04D09PK
10.2	3500K	90	868	964	198	150	C	L2C6-3590xL04D09PK
10.2	4000K	90	878	975	200	150	B	L2C6-4090xL04D09PK
14.5	3000K	90	1314	1460	200	225	B	L2C6-3090xL06D13PK
14.5	3500K	90	1328	1475	202	225	B	L2C6-3590xL06D13PK
14.5	4000K	90	1337	1485	203	225	B	L2C6-4090xL06D13PK
16.2	3000K	90	1751	1946	200	300	B	L2C6-3090xL08D15PK
16.2	3500K	90	1761	1957	201	300	B	L2C6-3590xL08D15PK
16.2	4000K	90	1778	1975	203	300	B	L2C6-4090xL08D15PK
16.2	3000K	90	2145	2383	196	375	C	L2C6-3090xL10D15PK
16.2	3500K	90	2169	2410	198	375	C	L2C6-3590xL10D15PK
16.2	4000K	90	2192	2435	200	375	B	L2C6-4090xL10D15PK
23.5	3000K	90	3510	3900	200	600	B	L2C6-3090xL16D22PK
23.5	3500K	90	3541	3934	202	600	B	L2C6-3590xL16D22PK
23.5	4000K	90	3564	3960	203	600	B	L2C6-4090xL16D22PK

Notes:

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5. Energy efficiency class as specified in Commission Delegated Regulation (EU) 2019/2015. The available range of energy efficiency classes is A-G.