LUXEON CoB Core Range

Uniform, high efficacy and easy to design array

LUXEON CoB represents a new breakthrough for arrays. The efficacies will be >160 lm/W for 70CRI and 80CRI products. Due to its small Light Emitting Surface (LES) and industry-leading thermal resistance, LUXEON CoB is easy to work with, enabling simplified and less expensive luminaire designs. LUXEON CoBs are hot-tested at 85°C—real world operating conditions—which means additional testing can be minimized. LUXEON CoB LEDs are available in 3-step MacAdam ellipse, ensuring uniform optical performance in a wide range of applications.

FEATURES AND BENEFITS

- Highest flux densities with industry's smallest LES
- 3-step MacAdam ellipse color definition: *Freedom from Binning* for color consistency from luminaire to luminaire
- Up to 4x lower thermal resistance than competition, enabling smaller heatsinks and higher lumens
- Supported by a comprehensive optical, mechanical and electrical ecosystem

PRIMARY APPLICATIONS

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

DS162 LUXEON CoB Core Range Product Datasheet ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table of Contents

General Product Information 2
- Product Test Conditions 2
- Part Number Nomenclature 2
- Lumen Maintenance 2
- Environmental Compliance 3

Performance Characteristics 3
- Product Selection Guide 3
- Optical Characteristics 11
- Electrical and Thermal Characteristics 12

Absolute Maximum Ratings 12

Characteristic Curves 13
- Spectral Power Distribution Characteristics 13
- Light Output Characteristics 15
- Forward Current Characteristics 18
- Radiation Pattern Characteristics 21

Color Bin Definitions 22

Mechanical Dimensions 23

Packaging and Labeling Information 25
- Tube 25
- Inner Box 27
- Outer Box 28

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

General Product Information

Product Test Conditions

LUXEON CoB Core Range LEDs are tested and binned with a DC drive current specified below at a junction temperature, T_j, of 85°C:

200mA	–	LUXEON CoB 1202s
200mA	–	LUXEON CoB 1202
300mA	–	LUXEON CoB 1203
450mA	–	LUXEON CoB 1204
600mA	–	LUXEON CoB 1205
900mA	–	LUXEON CoB 1208
900mA	–	LUXEON CoB 1210
1200mA	–	LUXEON CoB 1211
1300mA	–	LUXEON CoB 1213
1600mA	–	LUXEON CoB 1216
1200mA	–	LUXEON CoB 1812
2100mA	–	LUXEON CoB 1321
2250mA	–	LUXEON CoB 1825

Part Number Nomenclature

Part numbers for LUXEON CoB Core Range follow the convention below:

L 2 C 5 – **A A B B C C C C D E E F F**

Where:

A A	–	designates nominal CCT (22=2200K, 27=2700K, 30=3000K, 35=3500K, 40=4000K, 50=5000K, 56=5600K, 57=5700K, 65=6500K)
B B	–	designates minimum CRI (60=60CRI, 70=70CRI, 80=80CRI, 90=90CRI, 95=95CRI)
C C C C	–	designates product configuration (example: 1202, 1203, 1204, 1205, 1208, 1210, 1211, 1213, 1216, 1812, 1321, 1825)
D	–	designates options for product specification
E E	–	designates light emitting surface (LES) size (06=6mm, 09=9mm, 13=13mm, 15=15mm, 19=19mm, 23=23mm, 29=29mm, 32=32mm)
F F	–	designates options for product specification

Therefore, the following part number is used for a LUXEON CoB 1203, Gen 4, 3000K 80CRI, with a 9mm LES:

L 2 C 5 – **3 0 8 0 1 2 0 3 F 0 9** 0 0

Lumen Maintenance

Please contact your local Sales Representative or Lumileds Technical Solutions Manager for more information about the long-term performance of this product.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Environmental Compliance

Lumileds LLC is committed to providing environmentally friendly products to the solid-state lighting market. LUXEON CoB Core Range is compliant to the European Union directives on the restriction of hazardous substances in electronic equipment, namely the RoHS Directive 2011/65/EU and REACH Regulation (EC) 1907/2006. Lumileds LLC will not intentionally add the following restricted materials to its products: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE).

Performance Characteristics

Product Selection Guide

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85°C.

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1202s	2200K	80	675	750	109	200	6	F	L2C5-22801202E0600
	2700K	80	797	886	128	200	6	E	L2C5-27801202E0600
	3000K	80	837	930	135	200	6	E	L2C5-30801202E0600
	3500K	80	854	949	138	200	6	E	L2C5-35801202E0600
	4000K	80	863	959	139	200	6	E	L2C5-40801202E0600
	5000K	80	863	959	139	200	6	E	L2C5-50801202E0600
	5700K	80	869	966	140	200	6	E	L2C5-57801202E0600
	2200K	90	589	654	95	200	6	F	L2C5-22901202E0600
	2700K	90	662	736	107	200	6	F	L2C5-27901202E0600
	3000K	90	689	766	111	200	6	F	L2C5-30901202E0600
	3500K	90	725	805	117	200	6	F	L2C5-35901202E0600
	4000K	90	742	824	119	200	6	E	L2C5-40901202E0600
LUXEON CoB 1202	3000K	70	923	1026	149	200	9	D	L2C5-30701202E0900
	3500K	70	923	1026	149	200	9	D	L2C5-35701202E0900
	4000K	70	968	1075	156	200	9	D	L2C5-40701202E0900
	5000K	70	968	1075	156	200	9	D	L2C5-50701202E0900
	5700K	70	942	1047	152	200	9	D	L2C5-57701202E0900
	2200K	80	703	781	113	200	9	F	L2C5-22801202E0900
	2700K	80	830	922	134	200	9	E	L2C5-27801202E0900
	3000K	80	876	973	141	200	9	E	L2C5-30801202E0900
	3500K	80	893	992	144	200	9	E	L2C5-35801202E0900
	4000K	80	899	999	145	200	9	E	L2C5-40801202E0900
	5000K	80	899	999	145	200	9	E	L2C5-50801202E0900
	2200K	90	625	694	101	200	9	F	L2C5-22901202E0900
	2700K	90	689	766	111	200	9	F	L2C5-27901202E0900
	3000K	90	729	810	117	200	9	F	L2C5-30901202E0900
	3500K	90	752	836	121	200	9	E	L2C5-35901202E0900
	4000K	90	772	858	124	200	9	E	L2C5-40901202E0900

Table 1 continued on next page. 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.
6. Exception: Not available in EU or UK.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85ºC (continued).

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1203	3000K	70	1475	1639	160	300	9	D	L2C5-30701203F0900
		70	1379	1532	148	300	9	D	L2C5-30701203E0900
	3500K	70	1379	1532	148	300	9	D	L2C5-35701203E0900
	4000K	70	1569	1743	170	300	9	D	L2C5-40701203F0900
		70	1466	1629	157	300	9	D	L2C5-40701203E0900
	5000K	70	1466	1629	157	300	9	D	L2C5-50701203E0900
	5700K	70	1428	1587	153	300	9	D	L2C5-57701203E0900
	6500K	70	1391	1546	149	300	9	D	L2C5-65701203E0900
	2200K	80	1066	1184	114	300	9	F	L2C5-22801203E0900
	2700K	80	1359	1510	147	300	9	D	L2C5-27801203F0900
		80	1258	1398	135	300	9	E	L2C5-27801203E0900
	3000K	80	1392	1547	151	300	9	D	L2C5-30801203F0900
		80	1289	1432	138	300	9	E	L2C5-30801203E0900
	3500K	80	1420	1578	154	300	9	D	L2C5-35801203F0900
		80	1315	1461	141	300	9	E	L2C5-35801203E0900
	4000K	80	1472	1635	159	300	9	D	L2C5-40801203F0900
		80	1363	1514	146	300	9	D	L2C5-40801203E0900
	5000K	80	1472	1635	159	300	9	D	L2C5-50801203F0900
		80	1363	1514	146	300	9	D	L2C5-50801203E0900
	5700K	80	1359	1510	146	300	9	D	L2C5-57801203E0900
	2200K	90	929	1032	100	300	9	F	L2C5-22901203E0900
	2700K	90	1170	1300	127	300	9	E	L2C5-27901203F0900
		90	1045	1161	112	300	9	F	L2C5-27901203E0900
	3000K	90	1210	1344	131	300	9	E	L2C5-30901203F0900
		90	1080	1200	116	300	9	F	L2C5-30901203E0900
	3500K	90	1258	1398	136	300	9	E	L2C5-35901203F0900
		90	1140	1267	122	300	9	E	L2C5-35901203E0900
	4000K	90	1251	1390	135	300	9	E	L2C5-40901203F0900
		90	1171	1301	126	300	9	E	L2C5-40901203E0900
	2700K	95	999	1110	108	300	9	F	L2C5-27951203F0900
	3000K	95	1053	1170	114	300	9	F	L2C5-30951203F0900
	4000K	95	1194	1327	129	300	9	E	L2C5-40951203F0900

Table 1 continued on next page. 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.
6. Exception: Not available in EU or UK.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85ºC (continued).

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1204	3000K	70	2124	2360	151	450	13	D	L2C5-30701204E1300
	3500K	70	2124	2360	151	450	13	D	L2C5-35701204E1300
	4000K	70	2258	2509	161	450	13	D	L2C5-40701204E1300
	5000K	70	2258	2509	161	450	13	D	L2C5-50701204E1300
	5700K	70	2199	2443	156	450	13	D	L2C5-57701204E1300
	6500K	70	2142	2380	152	450	13	D	L2C5-65701204E1300
	2200K	80	1641	1823	117	450	13	F	L2C5-22801204E1300
	2700K	80	2092	2324	149	450	13	D	L2C5-27801204F1300
		80	1937	2152	138	450	13	E	L2C5-27801204E1300
	3000K	80	2138	2376	152	450	13	D	L2C5-30801204F1300
		80	1980	2200	141	450	13	E	L2C5-30801204E1300
	3500K	80	2020	2244	144	450	13	E	L2C5-35801204E1300
	4000K	80	2260	2511	161	450	13	D	L2C5-40801204F1300
		80	2099	2332	149	450	13	D	L2C5-40801204E1300
	5000K	80	2099	2332	149	450	13	D	L2C5-50801204E1300
	5700K	80	2093	2325	149	450	13	D	L2C5-57801204E1300
	2200K [5]	90	1430	1589	102	450	13	F	L2C5-22901204E1300
	2700K	90	1803	2003	128	450	13	E	L2C5-27901204F1300
		90	1609	1788	115	450	13	F	L2C5-27901204E1300
	3000K	90	1855	2061	132	450	13	E	L2C5-30901204F1300
		90	1656	1840	118	450	13	F	L2C5-30901204E1300
	3500K	90	1929	2143	137	450	13	E	L2C5-35901204F1300
		90	1755	1950	125	450	13	E	L2C5-35901204E1300
	4000K	90	1803	2003	128	450	13	E	L2C5-40901204E1300

Table 1 continued on next page. 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.
6. Exception: Not available in EU or UK.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85ºC (continued).

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1205	3000K	70	2958	3287	158	600	13	D	L2C5-30701205F1300
		70	2765	3072	146	600	13	D	L2C5-30701205E1300
	3500K	70	2765	3072	146	600	13	D	L2C5-35701205E1300
	4000K	70	3137	3486	167	600	13	D	L2C5-40701205F1300
		70	2932	3258	155	600	13	D	L2C5-40701205E1300
	5000K	70	2932	3258	155	600	13	D	L2C5-50701205E1300
	5700K	70	2856	3173	151	600	13	D	L2C5-57701205E1300
	6500K	70	2782	3091	147	600	13	D	L2C5-65701205E1300
	2200K	80	2131	2368	113	600	13	F	L2C5-22801205E1300
	2700K	80	2717	3019	145	600	13	E	L2C5-27801205F1300
		80	2516	2795	133	600	13	E	L2C5-27801205E1300
	3000K	80	2823	3137	151	600	13	D	L2C5-30801205F1300
		80	2615	2905	138	600	13	E	L2C5-30801205E1300
	3500K	80	2880	3200	154	600	13	D	L2C5-35801205F1300
		80	2667	2963	141	600	13	E	L2C5-35801205E1300
	4000K	80	2943	3270	157	600	13	D	L2C5-40801205F1300
		80	2725	3028	144	600	13	E	L2C5-40801205E1300
	5000K	80	2943	3270	157	600	13	D	L2C5-50801205F1300
		80	2725	3028	144	600	13	E	L2C5-50801205E1300
	5700K	80	2935	3261	157	600	13	D	L2C5-57801205F1300
		80	2717	3019	144	600	13	E	L2C5-57801205E1300
	6500K	80	2861	3179	153	600	13	D	L2C5-65801205F1300
	2200K	90	1857	2063	98	600	13	Note 6	L2C5-22901205E1300
	2700K	90	2340	2600	125	600	13	E	L2C5-27901205F1300
		90	2090	2322	111	600	13	F	L2C5-27901205E1300
	3000K	90	2437	2708	130	600	13	E	L2C5-30901205F1300
		90	2176	2418	115	600	13	F	L2C5-30901205E1300
	3500K	90	2534	2816	135	600	13	E	L2C5-35901205F1300
		90	2280	2533	121	600	13	E	L2C5-35901205E1300
	4000K	90	2622	2913	140	600	13	E	L2C5-40901205F1300
		90	2341	2601	124	600	13	E	L2C5-40901205E1300
	5000K	90	2623	2914	140	600	13	E	L2C5-50901205F1300
	2700K	95	2007	2230	107	600	13	F	L2C5-27951205F1300
	3000K	95	2160	2400	115	600	13	F	L2C5-30951205F1300
	4000K	95	2434	2704	130	600	13	E	L2C5-40951205F1300

Table 1 continued on next page. 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.
6. Exception: Not available in EU or UK.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85ºC (continued).

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1208	3000K	70	4440	4933	158	900	15	D	L2C5-30701208F1500
		70	4149	4610	147	900	15	D	L2C5-30701208E1500
	3500K	70	4149	4610	147	900	15	D	L2C5-35701208E1500
	4000K	70	4719	5243	168	900	15	D	L2C5-40701208F1500
		70	4410	4900	156	900	15	D	L2C5-40701208E1500
	5000K	70	4719	5243	168	900	15	D	L2C5-50701208F1500
		70	4410	4900	156	900	15	D	L2C5-50701208E1500
	5700K	70	4584	5093	163	900	15	D	L2C5-57701208F1500
		70	4284	4760	152	900	15	D	L2C5-57701208E1500
	6500K	70	4466	4962	159	900	15	D	L2C5-65701208F1500
		70	4173	4637	148	900	15	D	L2C5-65701208E1500
	2200K	80	3197	3552	113	900	15	Note 6	L2C5-22801208E1500
	2700K	80	4075	4528	145	900	15	E	L2C5-27801208F1500
		80	3774	4193	134	900	15	E	L2C5-27801208E1500
	3000K	80	4245	4717	151	900	15	D	L2C5-30801208F1500
		80	3931	4368	139	900	15	E	L2C5-30801208E1500
	3500K	80	4330	4811	154	900	15	D	L2C5-35801208F1500
		80	4010	4455	142	900	15	E	L2C5-35801208E1500
	4000K	80	4415	4905	157	900	15	D	L2C5-40801208F1500
		80	4088	4542	145	900	15	E	L2C5-40801208E1500
	5000K	80	4415	4905	157	900	15	D	L2C5-50801208F1500
		80	4088	4542	145	900	15	E	L2C5-50801208E1500
	5700K	80	4402	4891	157	900	15	D	L2C5-57801208F1500
		80	4076	4529	145	900	15	E	L2C5-57801208E1500
	6500K	80	4292	4769	153	900	15	D	L2C5-65801208F1500
	2200K	90	2786	3095	99	900	15	Note 6	L2C5-22901208E1500
	2700K	90	3514	3904	125	900	15	E	L2C5-27901208F1500
		90	3137	3486	111	900	15	F	L2C5-27901208E1500
	3000K	90	3639	4043	129	900	15	E	L2C5-30901208F1500
		90	3249	3610	115	900	15	F	L2C5-30901208E1500
	3500K	90	3785	4205	135	900	15	E	L2C5-35901208F1500
		90	3420	3800	121	900	15	E	L2C5-35901208E1500
	4000K	90	3933	4370	140	900	15	E	L2C5-40901208F1500
		90	3512	3902	125	900	15	E	L2C5-40901208E1500
	2700K	95	3015	3350	107	900	15	F	L2C5-27951208F1500
	3000K	95	3240	3600	115	900	15	F	L2C5-30951208F1500
	4000K	95	3572	3969	127	900	15	E	L2C5-40951208F1500
LUXEON CoB 1210	2700K	80	4116	4573	149	900	15	D	L2C5-27801210F1500
	3000K	80	4288	4764	156	900	15	D	L2C5-30801210F1500
	3500K	80	4373	4859	159	900	15	D	L2C5-35801210F1500
	4000K	80	4533	5037	165	900	15	D	L2C5-40801210F1500
	3000K	90	3721	4134	135	900	15	E	L2C5-30901210F1500
	3500K	90	3822	4247	139	900	15	E	L2C5-35901210F1500
	4000K	90	3972	4414	144	900	15	E	L2C5-40901210F1500
	2700K	95	3045	3384	111	900	15	F	L2C5-27951210F1500

Table 1 continued on next page. 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.
6. Exception: Not available in EU or UK.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85ºC (continued).

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1211	3000K	70	6065	6739	164	1200	19	D	L2C5-30701211F1900
		70	5695	6328	152	1200	19	D	L2C5-30701211E1900
	3500K	70	5695	6328	152	1200	19	D	L2C5-35701211E1900
	4000K	70	6447	7163	174	1200	19	C	L2C5-40701211F1900
		70	6053	6726	161	1200	19	D	L2C5-40701211E1900
	5000K	70	6447	7163	174	1200	19	C	L2C5-50701211F1900
		70	6053	6726	161	1200	19	D	L2C5-50701211E1900
	5700K	70	6265	6961	169	1200	19	D	L2C5-57701211F1900
		70	5882	6536	157	1200	19	D	L2C5-57701211E1900
	6500K	70	6104	6782	165	1200	19	D	L2C5-65701211F1900
		70	5731	6368	152	1200	19	D	L2C5-65701211E1900
	2200K	80	4390	4878	117	1200	19	F	L2C5-22801211E1900
	2700K	80	5519	6132	149	1200	19	D	L2C5-27801211F1900
		80	5182	5758	138	1200	19	E	L2C5-27801211E1900
	3000K	80	5675	6305	153	1200	19	D	L2C5-30801211F1900
		80	5328	5920	142	1200	19	E	L2C5-30801211E1900
	3500K	80	5787	6430	156	1200	19	D	L2C5-35801211F1900
		80	5434	6038	145	1200	19	E	L2C5-35801211E1900
	4000K	80	5979	6643	161	1200	19	D	L2C5-40801211F1900
		80	5614	6238	149	1200	19	D	L2C5-40801211E1900
	5000K	80	5979	6643	161	1200	19	D	L2C5-50801211F1900
		80	5614	6238	149	1200	19	D	L2C5-50801211E1900
	5700K	80	5962	6624	161	1200	19	D	L2C5-57801211F1900
		80	5598	6220	149	1200	19	D	L2C5-57801211E1900
	6500K	80	5661	6290	153	1200	19	D	L2C5-65801211F1900
	2200K	90	3749	4165	100	1200	19	Note 6	L2C5-22901211E1900
	2700K	90	4692	5213	127	1200	19	E	L2C5-27901211F1900
		90	4305	4783	115	1200	19	F	L2C5-27901211E1900
	3000K	90	4910	5455	133	1200	19	E	L2C5-30901211F1900
		90	4505	5005	120	1200	19	E	L2C5-30901211E1900
	3500K	90	5119	5688	138	1200	19	E	L2C5-35901211F1900
		90	4696	5218	125	1200	19	E	L2C5-35901211E1900
	4000K	90	5256	5840	142	1200	19	E	L2C5-40901211F1900
		90	4822	5358	128	1200	19	E	L2C5-40901211E1900
	5000K	90	5256	5840	142	1200	19	E	L2C5-50901211F1900
	2700K	95	4032	4480	109	1200	19	F	L2C5-27951211F1910
	3000K	95	4221	4690	114	1200	19	F	L2C5-30951211F1910
LUXEON CoB 1213	5000K	70	7072	7858	177	1300	23	C	L2C5-50701213F2300
	3000K	80	6188	6875	155	1300	23	D	L2C5-30801213F2300
	4000K	80	6623	7359	166	1300	23	D	L2C5-40801213F2300

Table 1 continued on next page. 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.
6. Exception: Not available in EU or UK.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85ºC (continued).

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1216	3000K	70	7988	8875	163	1600	23	D	L2C5-30701216F2300
		70	7465	8294	150	1600	23	D	L2C5-30701216E2300
	3500K	70	7465	8294	150	1600	23	D	L2C5-35701216E2300
	4000K	70	8428	9364	172	1600	23	D	L2C5-40701216F2300
		70	7876	8751	159	1600	23	D	L2C5-40701216E2300
	5000K	70	8428	9364	172	1600	23	D	L2C5-50701216F2300
		70	7876	8751	159	1600	23	D	L2C5-50701216E2300
	5700K	70	8250	9167	169	1600	23	D	L2C5-57701216F2300
		70	7710	8567	155	1600	23	D	L2C5-57701216E2300
	6500K	70	8038	8931	164	1600	23	D	L2C5-65701216F2300
		70	7512	8347	151	1600	23	D	L2C5-65701216E2300
	2200K	80	5755	6394	116	1600	23	Note 6	L2C5-22801216E2300
	2700K	80	7335	8150	150	1600	23	D	L2C5-27801216F2300
		80	6791	7546	137	1600	23	E	L2C5-27801216E2300
	3000K	80	7508	8342	153	1600	23	D	L2C5-30801216F2300
		80	6952	7724	140	1600	23	E	L2C5-30801216E2300
	3500K	80	7657	8508	156	1600	23	D	L2C5-35801216F2300
		80	7090	7878	143	1600	23	E	L2C5-35801216E2300
	4000K	80	7947	8830	162	1600	23	D	L2C5-40801216F2300
		80	7358	8176	148	1600	23	D	L2C5-40801216E2300
	5000K	80	7947	8830	162	1600	23	D	L2C5-50801216F2300
		80	7358	8176	148	1600	23	D	L2C5-50801216E2300
	5700K	80	7923	8803	162	1600	23	D	L2C5-57801216F2300
		80	7336	8151	148	1600	23	D	L2C5-57801216E2300
	2200K	90	5013	5570	101	1600	23	Note 6	L2C5-22901216E2300
	2700K	90	6319	7021	129	1600	23	E	L2C5-27901216F2300
		90	5642	6269	114	1600	23	F	L2C5-27901216E2300
	3000K	90	6570	7300	134	1600	23	E	L2C5-30901216F2300
		90	5866	6518	118	1600	23	F	L2C5-30901216E2300
	3500K	90	6893	7659	141	1600	23	E	L2C5-35901216F2300
		90	6155	6839	124	1600	23	E	L2C5-35901216E2300
	4000K	90	6893	7659	141	1600	23	E	L2C5-40901216F2300
		90	6321	7023	127	1600	23	E	L2C5-40901216E2300
	5000K	90	6954	7727	142	1600	23	E	L2C5-50901216F2300

Table 1 continued on next page. 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.
6. Exception: Not available in EU or UK.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85ºC (continued).

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1812	4000K	70	9356	10395	170	1200	23	D	L2C5-40701812F2300
		70	9000	10000	161	1200	23	D	L2C5-40701812G2300
	5000K	70	9450	10500	171	1200	23	D	L2C5-50701812F2300
		70	9000	10000	161	1200	23	D	L2C5-50701812G2300
	3000K	80	8221	9134	149	1200	23	D	L2C5-30801812F2300
		80	7682	8536	138	1200	23	E	L2C5-30801812G2300
	4000K	80	8691	9657	157	1200	23	D	L2C5-40801812F2300
		80	8123	9025	145	1200	23	E	L2C5-40801812G2300
	5000K	80	8814	9793	160	1200	23	D	L2C5-50801812F2300
		80	8123	9025	145	1200	23	E	L2C5-50801812G2300
LUXEON CoB 1321	2200K	60	10961	12179	155	2100	29	D	L2C5-22601321F2900
	3000K	70	10736	11929	151	2100	29	D	L2C5-30701321E2900
	4000K	70	11867	13185	167	2100	29	D	L2C5-40701321F2900
		70	11416	12684	161	2100	29	D	L2C5-40701321E2900
	5000K	70	11986	13318	169	2100	29	D	L2C5-50701321F2900
		70	11416	12684	161	2100	29	D	L2C5-50701321E2900
	5700K	70	11121	12357	157	2100	29	D	L2C5-57701321E2900
	6500K	70	10834	12038	153	2100	29	D	L2C5-65701321E2900
	2700K	80	10286	11429	145	2100	29	E	L2C5-27801321F2900
		80	9797	10885	138	2100	29	E	L2C5-27801321E2900
	3000K	80	10737	11930	151	2100	29	D	L2C5-30801321F2900
		80	10035	11150	142	2100	29	E	L2C5-30801321E2900
	3500K	80	10238	11376	144	2100	29	E	L2C5-35801321E2900
	4000K	80	11352	12613	160	2100	29	D	L2C5-40801321F2900
		80	10609	11788	150	2100	29	D	L2C5-40801321E2900
	5000K	80	10609	11788	150	2100	29	D	L2C5-50801321E2900
	2700K	90	8136	9040	115	2100	29	F	L2C5-27901321E2900
	3000K	90	8410	9344	119	2100	29	F	L2C5-30901321E2900
	5600K	90	9117	10130	129	2100	29	E	L2C5-56901321E2900
LUXEON CoB 1825	2200K	60	15876	17640	156	2250	32	D	L2C5-22601825F3200
		60	15120	16800	144	2250	32	E	L2C5-22601825G3200
	3000K	70	15550	17278	149	2250	32	D	L2C5-30701825G3200
	4000K	70	17362	19291	170	2250	32	D	L2C5-40701825F3200
		70	16535	18372	158	2250	32	D	L2C5-40701825G3200
	5000K	70	18315	20350	179	2250	32	C	L2C5-50701825F3200
		70	16535	18372	158	2250	32	D	L2C5-50701825G3200
	5700K	70	16108	17898	154	2250	32	D	L2C5-57701825G3200
	6500K	70	15692	17436	150	2250	32	D	L2C5-65701825G3200
	2700K	80	14190	15767	136	2250	32	E	L2C5-27801825G3200
	3000K	80	15553	17281	152	2250	32	D	L2C5-30801825F3200
		80	14535	16150	139	2250	32	E	L2C5-30801825G3200

Table 1 continued on next page. 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.
6. Exception: Not available in EU or UK.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Table 1. Product performance of LUXEON CoB Core Range at specified test current, T_j=85ºC (continued).

PRODUCT	NOMINAL CCT	MINIMUM CRI [1, 2, 3]	LUMINOUS FLUX [1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES [4] (mm)	ENERGY EFFICIENCY CLASS [5]	PART NUMBER
			MINIMUM	TYPICAL					
LUXEON CoB 1825	3500K	80	15930	17700	156	2250	32	D	L2C5-35801825F3200
		80	14829	16477	142	2250	32	E	L2C5-35801825G3200
	4000K	80	16443	18270	161	2250	32	D	L2C5-40801825F3200
		80	15368	17075	147	2250	32	D	L2C5-40801825G3200
	5000K	80	16799	18666	165	2250	32	D	L2C5-50801825F3200
		80	15368	17075	147	2250	32	D	L2C5-50801825G3200
	5600K	80	16556	18395	162	2250	32	D	L2C5-56801825F3200
	2700K	90	11785	13094	113	2250	32	F	L2C5-27901825G3200
	3000K	90	13725	15250	134	2250	32	E	L2C5-30901825F3200
		90	12181	13534	116	2250	32	F	L2C5-30901825G3200
	3500K	90	14598	16220	143	2250	32	E	L2C5-35901825F3200
	4000K	90	14841	16490	145	2250	32	E	L2C5-40901825F3200
	5600K	90	13770	15300	135	2250	32	E	L2C5-56901825F3200
		90	13206	14673	126	2250	32	E	L2C5-56901825G3200

Notes for Table 1:
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.
6. Exception: Not available in EU or UK.

Optical Characteristics

Table 2. Optical characteristics for LUXEON CoB Core Range at specified test current, T_j=85°C.

PART NUMBER	TYPICAL TOTAL INCLUDED ANGLE [1]	TYPICAL VIEWING ANGLE [2]
L2C5-xxxx12xxxxx00	135°	115°

Notes for Table 2:
1. Total angle at which 90% of total luminous flux is captured.
2. Viewing angle is the off axis angle from the LED centerline where the luminous intensity is ½ of the peak value.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Electrical and Thermal Characteristics

Table 3. Electrical and thermal characteristics for LUXEON CoB Core Range at specified test current, T_j=85°C.

PART NUMBER	FORWARD VOLTAGE [1] (V_f)			TYPICAL TEMPERATURE COEFFICIENT OF FORWARD VOLTAGE [2] (mV/°C)	TYPICAL THERMAL RESISTANCE—JUNCTION TO CASE [3] (°C/W)
	MINIMUM	TYPICAL	MAXIMUM		
L2C5-xxxx1202E0600	32.5	34.5	37.5	-16	0.98
L2C5-xxxx1202E0900	32.5	34.5	37.5	-16	0.98
L2C5-xxxx1203F0900	32.5	34.2	37.5	-16	0.62
L2C5-xxxx1203E0900	32.5	34.5	37.5	-16	0.70
L2C5-xxxx1204F1300	32.5	34.7	37.5	-16	0.46
L2C5-xxxx1204E1300	32.5	34.8	37.5	-16	0.55
L2C5-xxxx1205F1300	32.5	34.7	37.5	-16	0.37
L2C5-xxxx1205E1300	32.5	35.0	37.5	-16	0.51
L2C5-xxxx1208F1500	32.5	34.7	37.5	-16	0.25
L2C5-xxxx1208E1500	32.5	34.8	37.5	-16	0.29
L2C5-xxxx1210F1500	32.5	34.0	37.5	-16	0.20
L2C5-xxxx1211F1900	32.5	34.3	37.5	-16	0.18
L2C5-xxxx1211E1900	32.5	34.8	37.5	-16	0.23
L2C5-xxxx1213F2300	32.5	34.2	37.5	-16	0.16
L2C5-xxxx1216F2300	32.5	34.0	37.5	-16	0.13
L2C5-xxxx1216E2300	32.5	34.5	37.5	-16	0.14
L2C5-xxxx1812F2300	48.8	51.1	56.3	-16	0.12
L2C5-xxxx1812G2300	48.8	51.7	56.3	-16	0.12
L2C5-xxxx1321F2900	35.2	37.5	40.6	-16	0.08
L2C5-xxxx1321E2900	35.2	37.5	40.6	-16	0.08
L2C5-xxxx1825F3200	48.8	50.4	56.3	-16	0.05
L2C5-xxxx1825G3200	48.8	51.7	56.3	-16	0.05

Notes for Table 3:
1. Lumileds maintains a tolerance of ±2% on forward voltage measurements.
2. Measured between 25°C and 85°C.
3. Thermal resistance is measured between junction and the bottom of the LUXEON CoB substrate.

Absolute Maximum Ratings

Table 4. Absolute maximum ratings for LUXEON CoB Core Range.

PARAMETER	MAXIMUM PERFORMANCE
DC Forward Current [1,2]	2x test current [3]
LED Junction Temperature [1] (DC & Pulse)	125°C
ESD Sensitivity (ANSI/ESDA/JEDEC JS-001-2012)	Class 3B
Operating Case Temperature [1]	-40°C to 105°C
LED Storage Temperature	-40°C to 120°C
Allowable Reflow Cycles	3
Reverse Voltage ($V_{reverse}$)	LUXEON LEDs are not designed to be driven in reverse bias

Notes for Table 4:
1. Proper current derating must be observed to maintain the junction temperature below the maximum allowable junction temperature.
2. Residual periodic variations due to power conversion from alternating current (AC) to direct current (DC), also called "ripple," are acceptable if the following conditions are met:
   – The frequency of the ripple current is 100Hz or higher
   – The average current for each cycle does not exceed the maximum allowable DC forward current
   – The maximum amplitude of the ripple does not exceed 20% of the maximum allowable DC forward current
3. Exception: LUXEON CoB 1812 has a maximum DC forward current of 2.1A (1.75x test current).

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Characteristic Curves

Spectral Power Distribution Characteristics

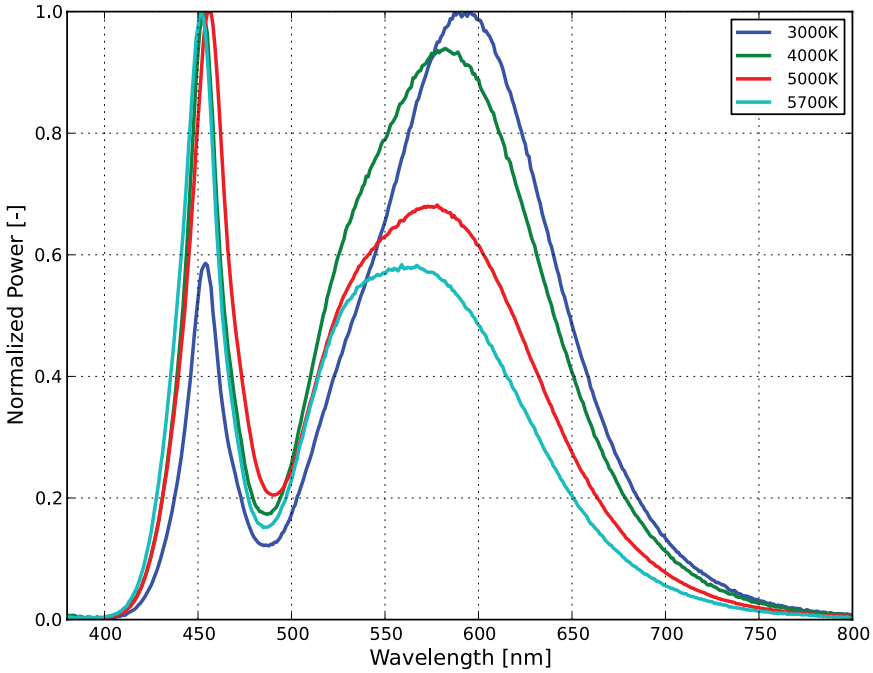


Figure 1a. Typical normalized power vs. wavelength for L2C5-xx7012xxxxx00 at specified test current, T_j=85°C.

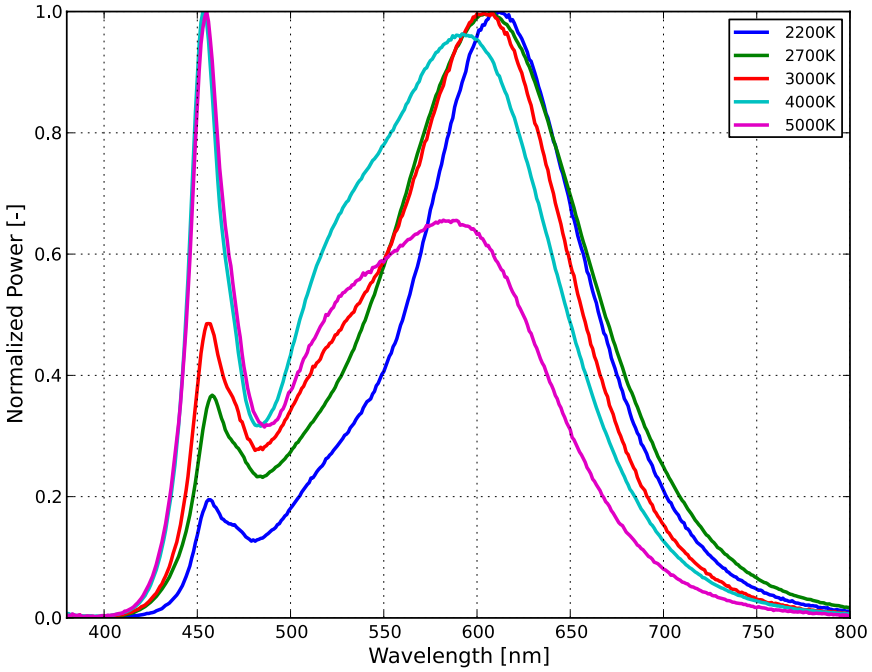


Figure 1b. Typical normalized power vs. wavelength for L2C5-xx8012xxxxx00 at specified test current, T_j=85°C.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

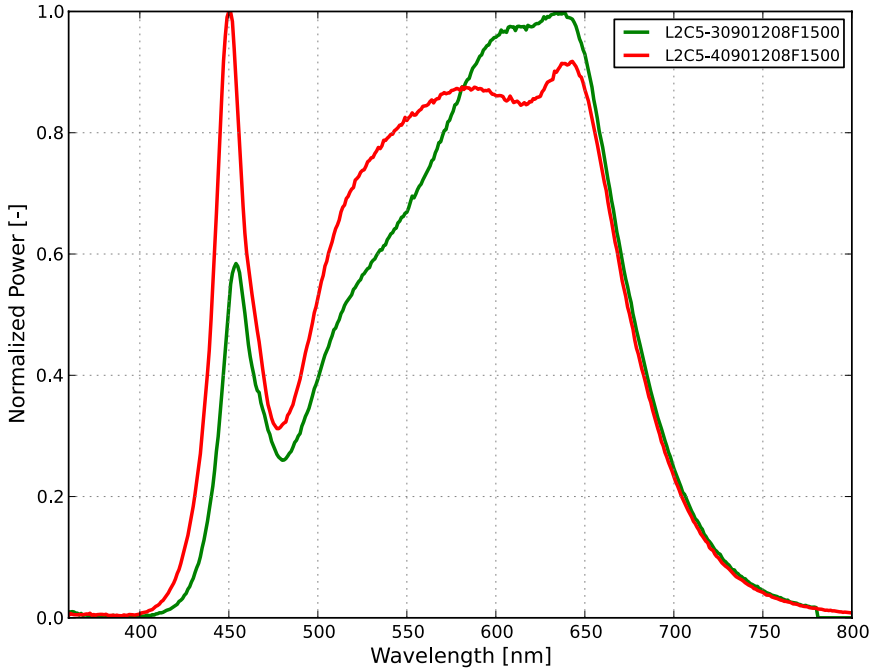


Figure 1c. Typical normalized power vs. wavelength for L2C5-xx9012xxFxx00 at specified test current, T_j=85°C.

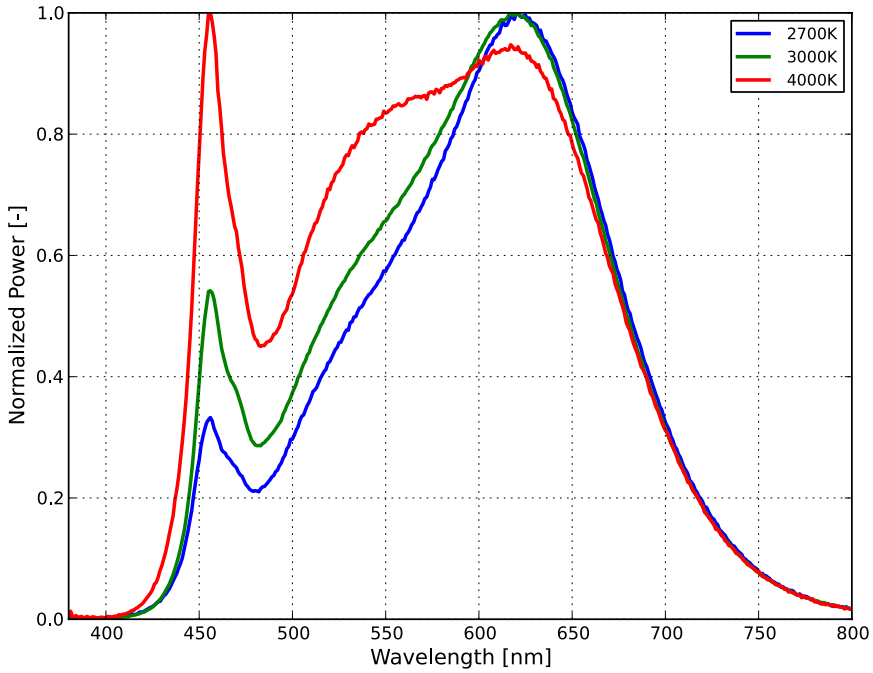


Figure 1d. Typical normalized power vs. wavelength for L2C5-xx9012xxExx00 at specified test current, T_j=85°C.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Light Output Characteristics

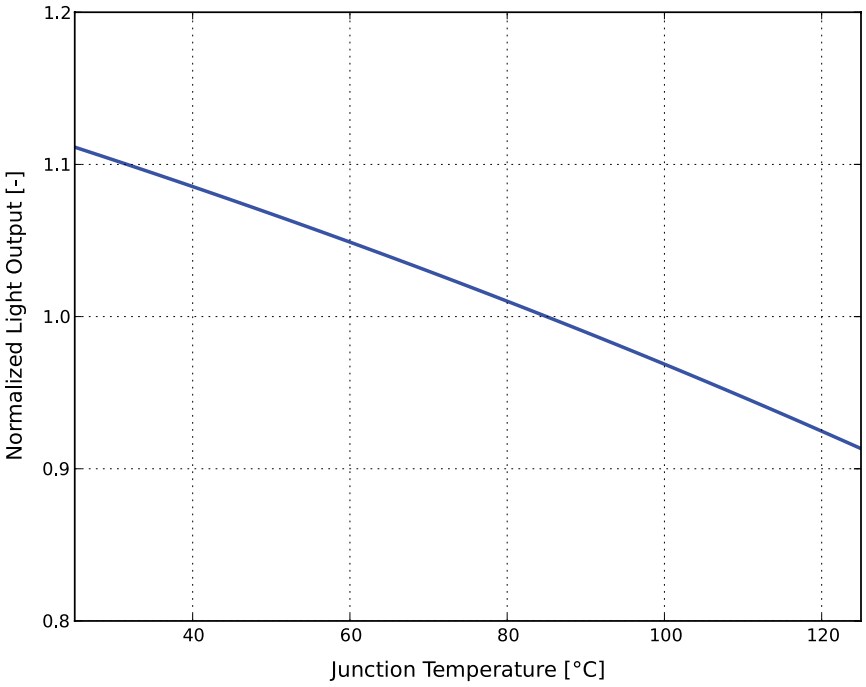


Figure 2. Typical normalized light output vs. junction temperature for L2C5-xxxx12xxxxx00 at specified test current.

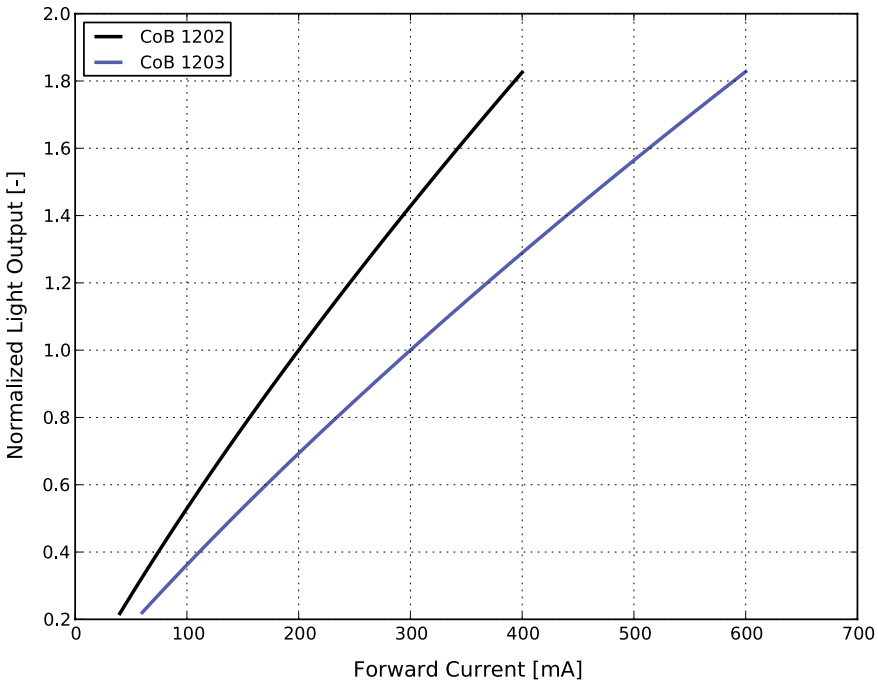


Figure 3a. Typical normalized light output vs. forward current for L2C5-xxxx1202xxx00 and L2C5-xxxx1203xxx00 at T_j=85°C.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

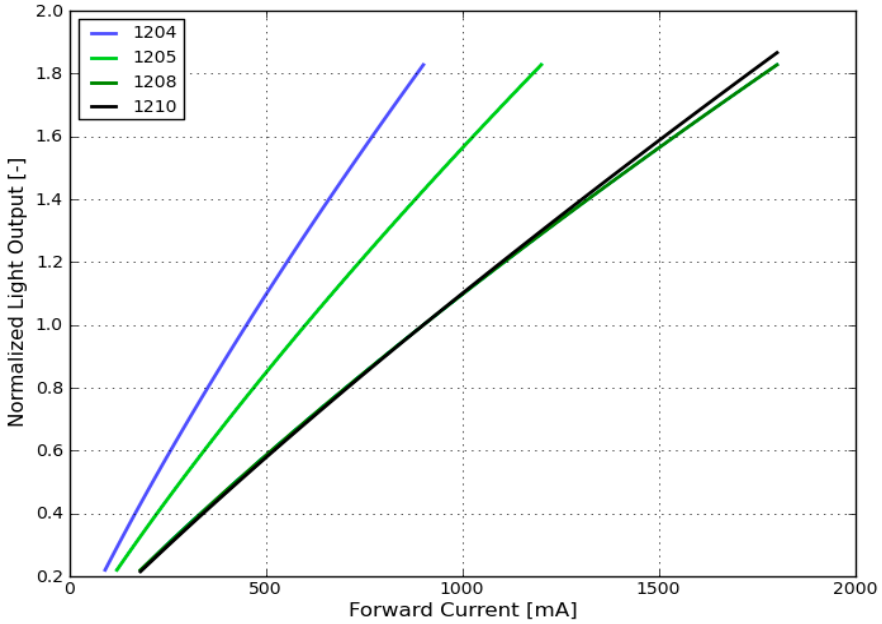


Figure 3b. Typical normalized light output vs. forward current for L2C5-xxxx1204xxx00, L2C5-xxxx1205xxx00, L2C5-xxxx1208xxx00 and L2C5-xxxx1210xxx00 at T_j=85°C.

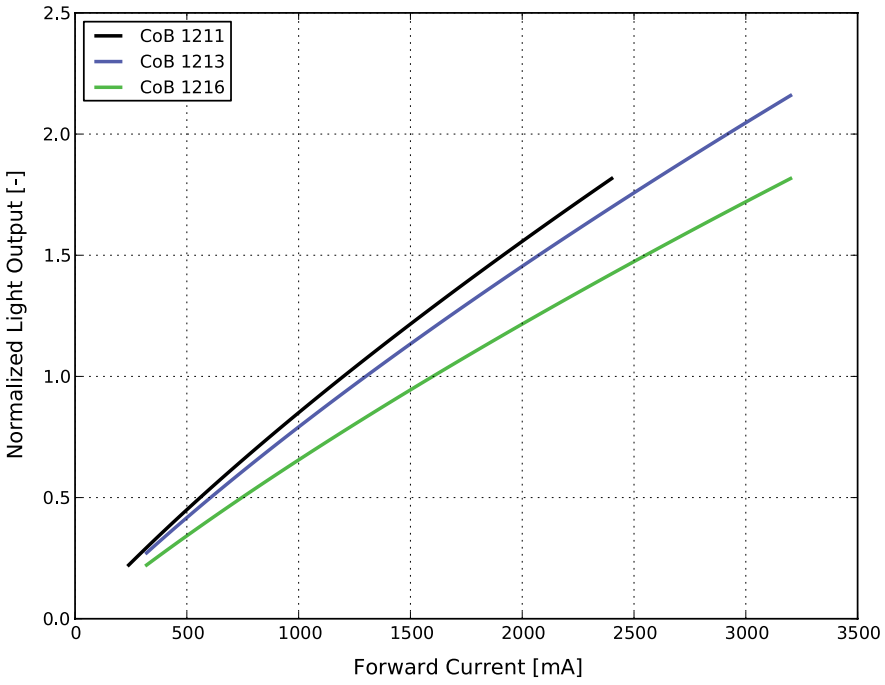


Figure 3c. Typical normalized light output vs. forward current for L2C5-xxxx1211xxx00, L2C5-xxxx1213xxx00 and L2C5-xxxx1216xxx00 at T_j=85°C.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

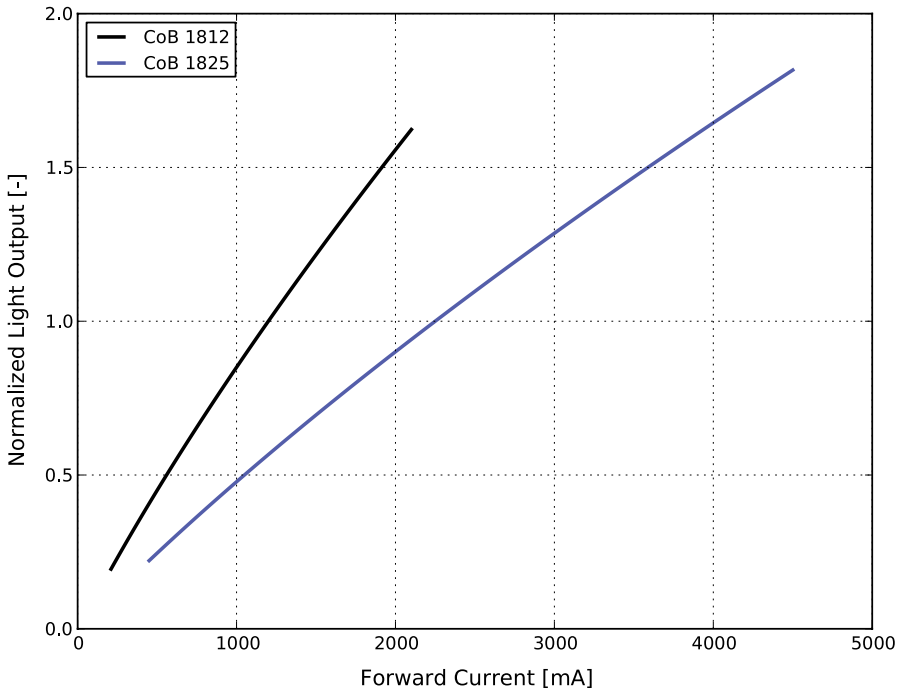


Figure 3d. Typical normalized light output vs. forward current for L2C5-xxxx1812xxx00 and L2C5-xxxx1825xxx00 at T_j=85°C.

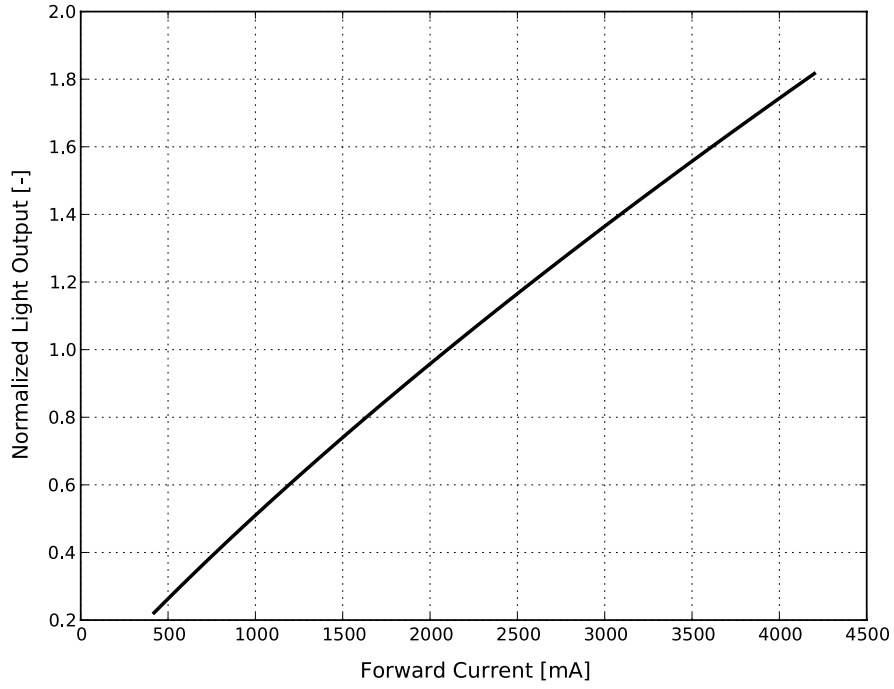


Figure 3e. Typical normalized light output vs. forward current for L2C5-xxxx1321xxx00 at T_j=85°C.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Forward Current Characteristics

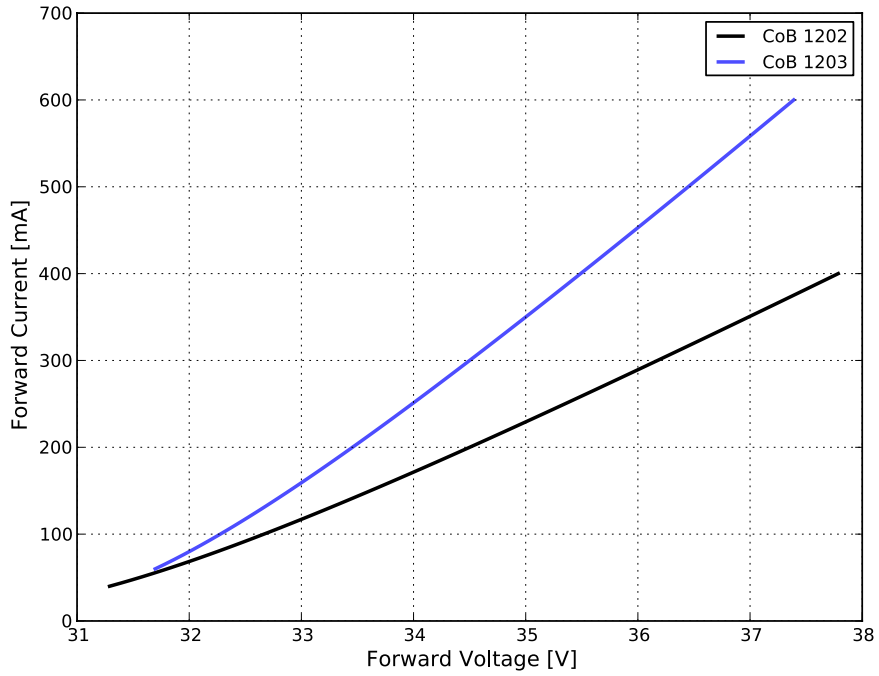


Figure 4a. Typical forward current vs. forward voltage for L2C5-xxxx1202xxx00 and L2C5-xxxx1203xxx00 at T_j=85°C.

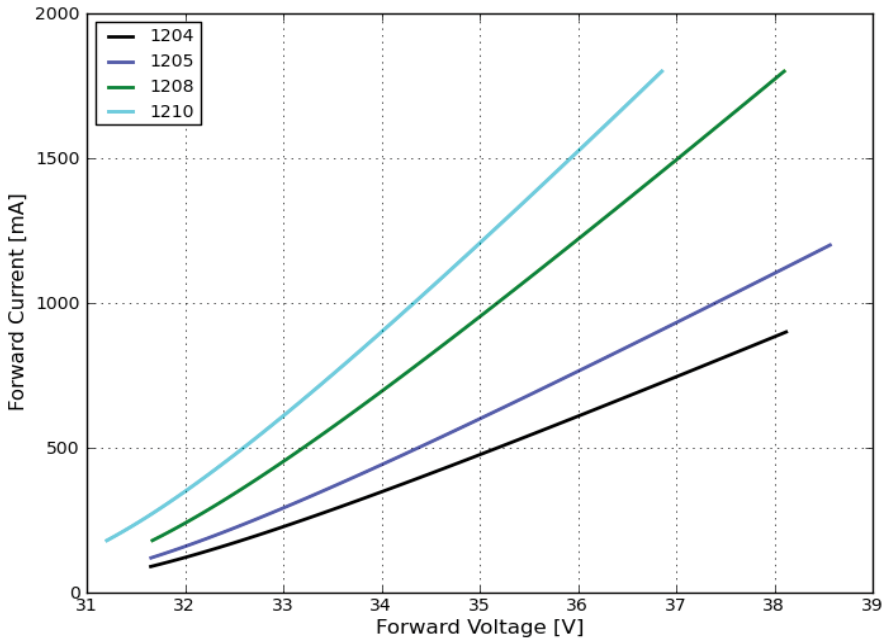


Figure 4b. Typical forward current vs. forward voltage for L2C5-xxxx1204xxx00, L2C5-xxxx1205xxx00, L2C5-xxxx1208xxx00 and L2C5-xxxx1210xxx00 at T_j=85°C.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

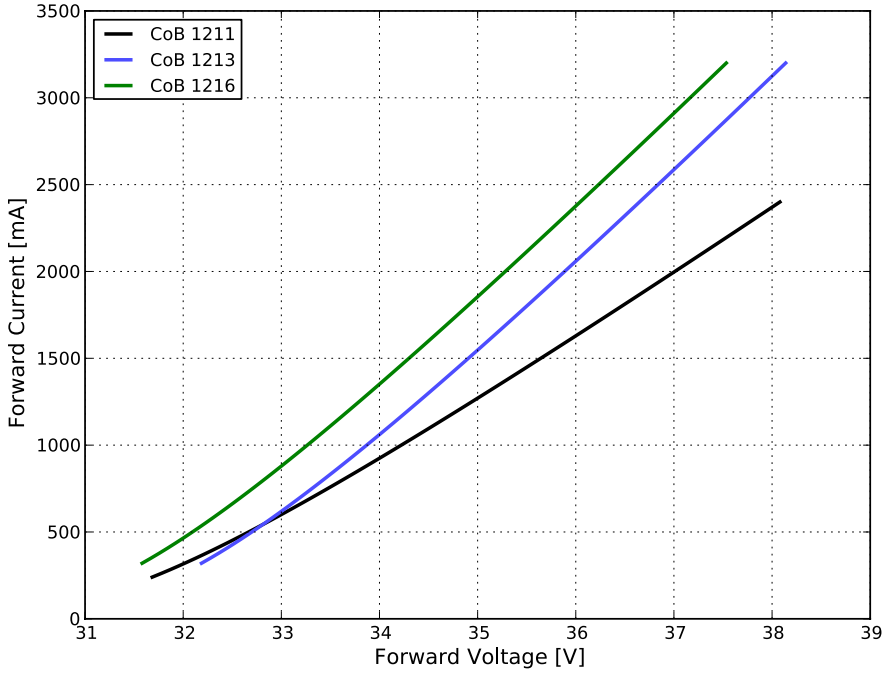


Figure 4c. Typical forward current vs. forward voltage for L2C5-xxxx1211xxx00, L2C5-xxxx1213xxx00 and L2C5-xxxx1216xxx00 at T_j=85°C.

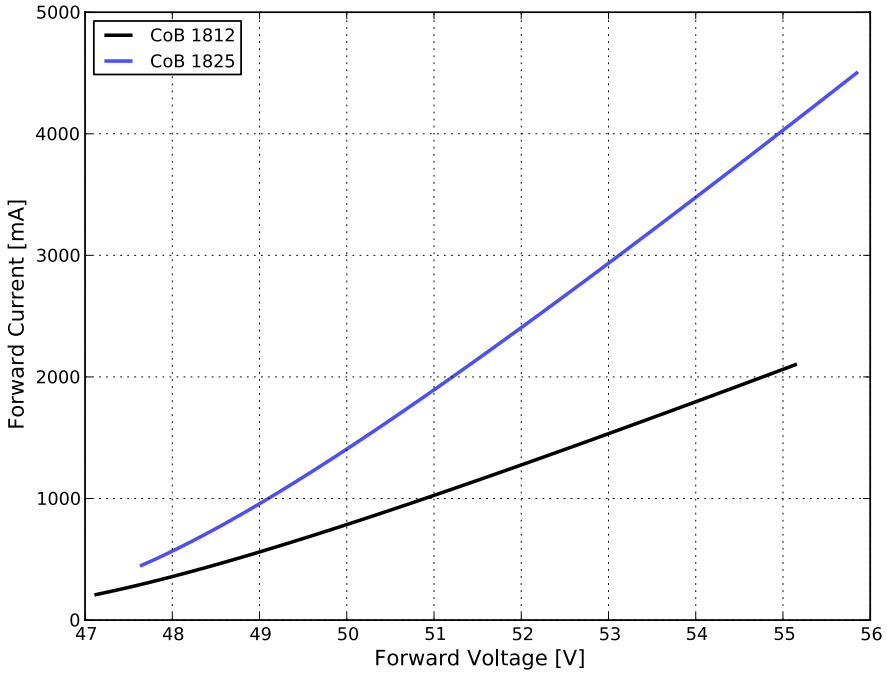


Figure 4d. Typical forward current vs. forward voltage for L2C5-xxxx1812xxx00 and L2C5-xxxx1825xxx00 at T_j=85°C.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

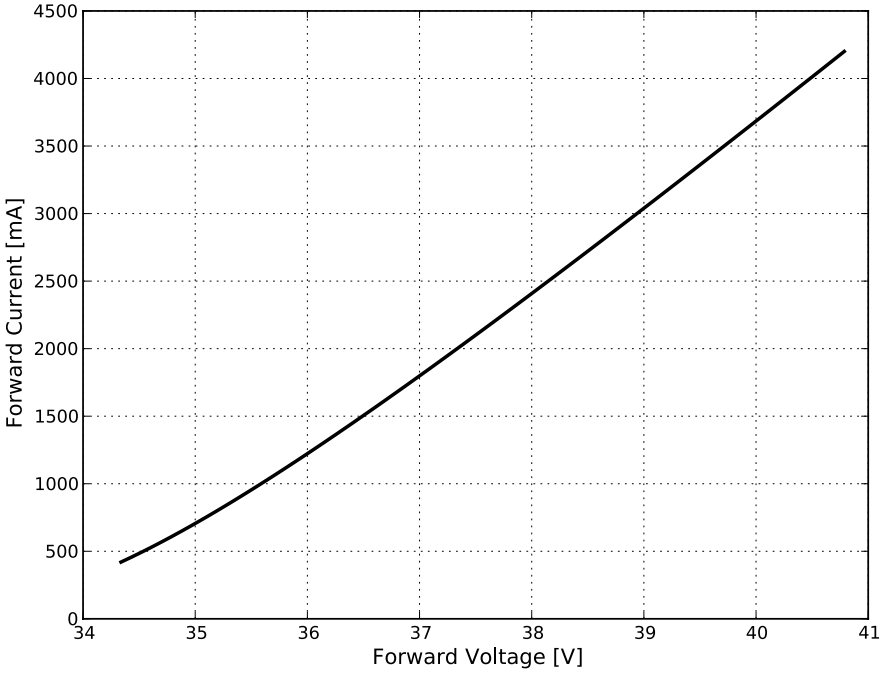


Figure 4e. Typical forward current vs. forward voltage for L2C5-xxxx1321xxx00 at T_j=85°C.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Radiation Pattern Characteristics

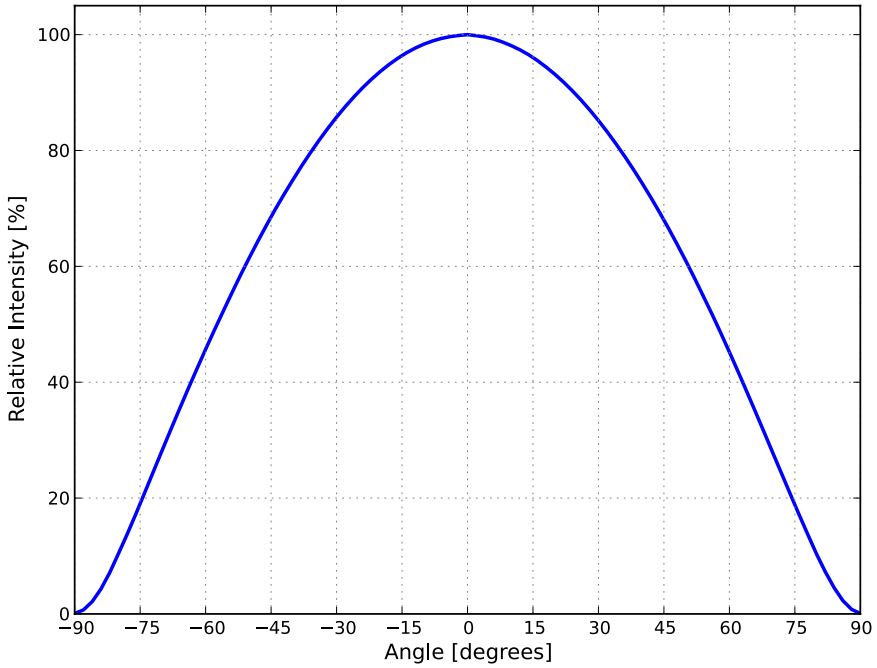


Figure 5. Typical radiation pattern for LUXEON CoB Core Range at specified test current, T_j=85ºC.

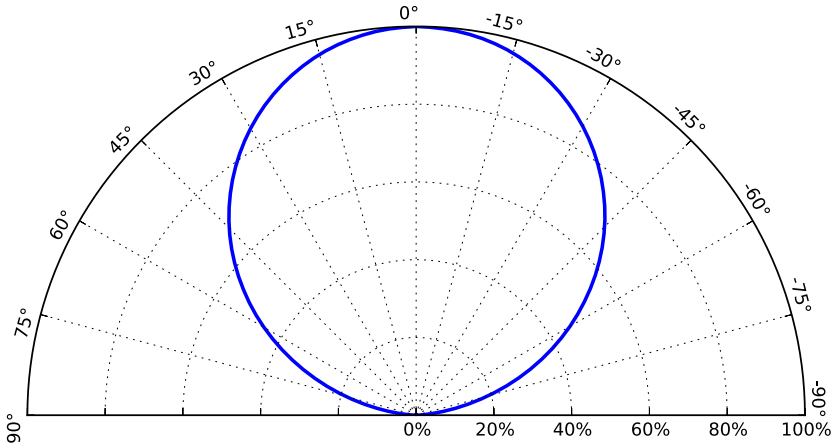


Figure 6. Typical polar radiation pattern for LUXEON CoB Core Range at specified test current, T_j=85ºC.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Color Bin Definitions

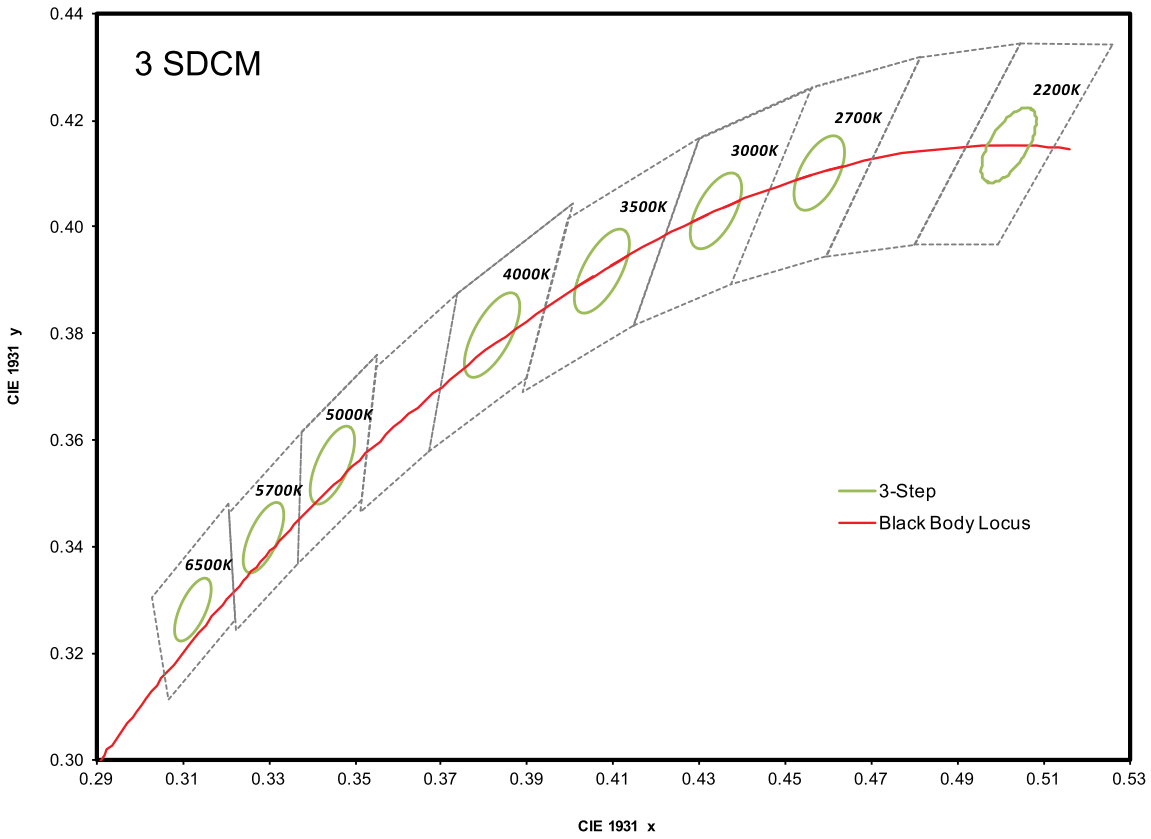


Figure 7. 3-step MacAdam ellipse illustration for Table 5.

Table 5. 3-step MacAdam ellipse color bin definitions for LUXEON CoB Core Range.

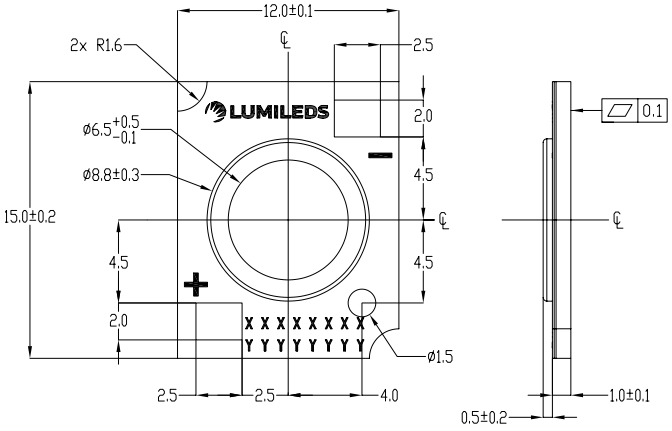
NOMINAL CCT	COLOR SPACE	CENTER POINT [1] (cx, cy)	MAJOR AXIS, a	MINOR AXIS, b	ELLIPSE ROTATION ANGLE, θ
2200K	Single 3-step MacAdam ellipse	(0.5020, 0.4155)	0.00862	0.00397	49.30°
2700K	Single 3-step MacAdam ellipse	(0.4578, 0.4101)	0.00810	0.00420	53.70°
3000K	Single 3-step MacAdam ellipse	(0.4338, 0.4030)	0.00834	0.00408	53.20°
3500K	Single 3-step MacAdam ellipse	(0.4073, 0.3917)	0.00927	0.00414	54.00°
4000K	Single 3-step MacAdam ellipse	(0.3818, 0.3797)	0.00939	0.00402	53.70°
5000K	Single 3-step MacAdam ellipse	(0.3447, 0.3553)	0.00822	0.00354	59.60°
5600K	Single 3-step MacAdam ellipse	(0.3293, 0.3423)	0.00745	0.00320	59.10°
5700K	Single 3-step MacAdam ellipse	(0.3287, 0.3417)	0.00745	0.00320	59.09°
6500K	Single 3-step MacAdam ellipse	(0.3123, 0.3282)	0.00669	0.00285	58.57°

Notes for Table 5:
1. Lumileds maintains a tolerance of ±0.005 on x and y coordinates in the CIE 1931 color space.

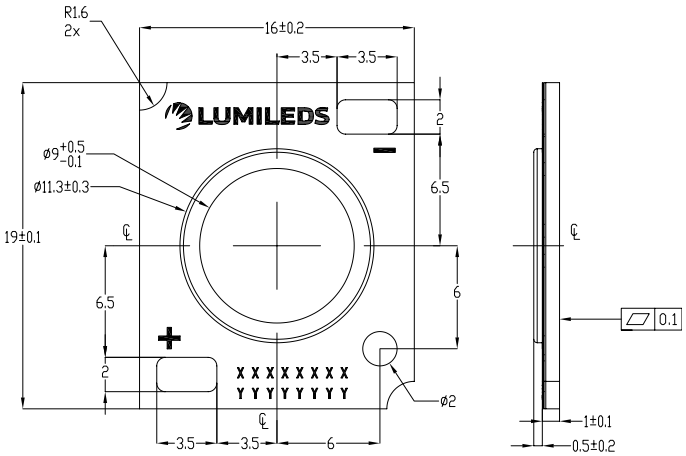
 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

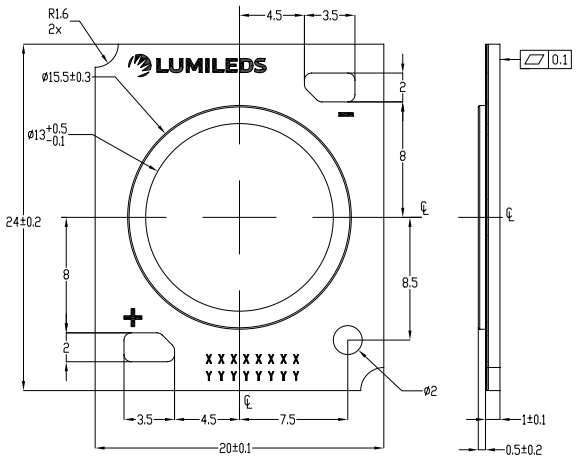
Mechanical Dimensions



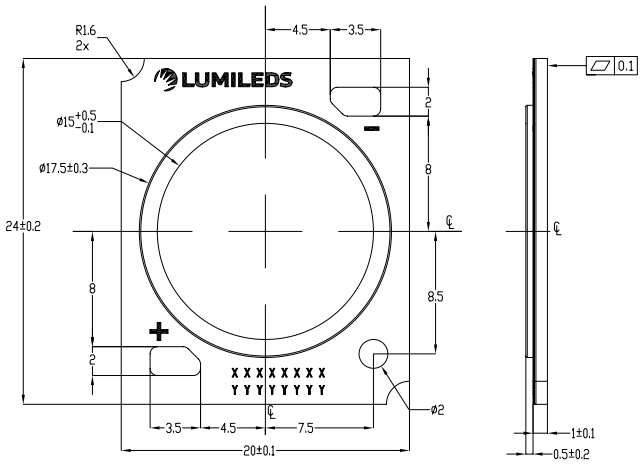
L2C5-xxxx1202x0600



L2C5-xxxx1202x0900, L2C5-xxxx1203x0900



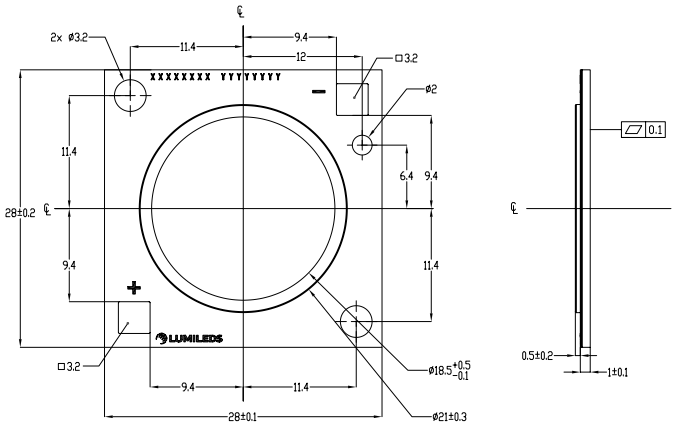
L2C5-xxxx1204x1300, L2C5-xxxx1205x1300



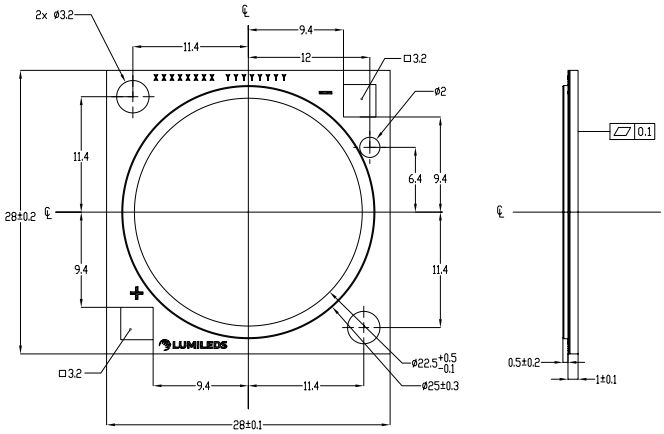
L2C5-xxxx1208x1500, L2C5-xxxx1210x1500

 ©2022 Lumileds Holding B.V. All rights reserved.

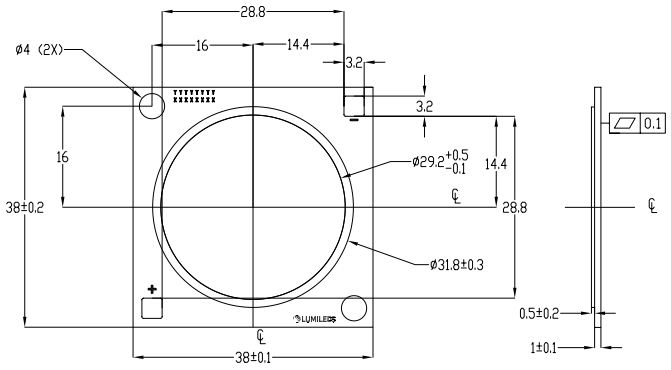
Downloaded from Arrow.com.



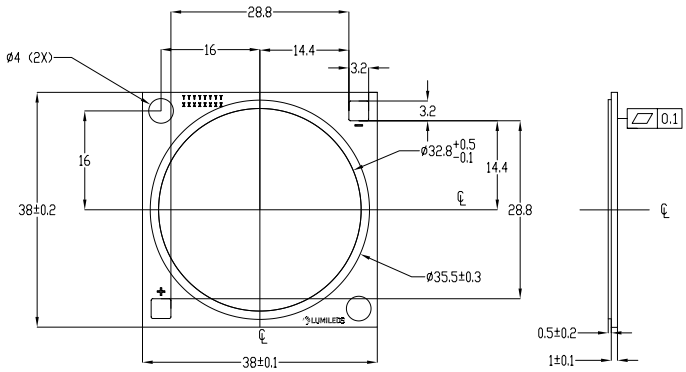
L2C5-xxxx1211x1900



L2C5-xxxx1213x2300, L2C5-xxxx1216x2300 and L2C5-xxxx1812x2300



L2C5-xxxx1321x2900



L2C5-xxxx1825x3200

Figure 8. Mechanical dimensions for LUXEON CoB Core Range.

Notes for Figure 8:
1. Drawings not to scale.
2. All dimensions are in millimeters.

Downloaded from Arrow.com.

Packaging and Labeling Information

LUXEON CoB Core Range LEDs are packaged in tubes then in a carton box. Each tube contains a specified number of LEDs. The LEDs in each tube come from a single category code, ensuring they are all well-matched for light output, color, and forward voltage. Each tube contains a rubber stopper at one end. The tube label has both alphanumeric and bar code information. The carton boxes have printed information providing part numbers with CAT codes that indicate luminous flux, color and forward voltage bins.

Table 6. Number of LEDs per tube for LUXEON CoB Core Range.

PART NUMBER	TOTAL UNITS PER TUBE	TOTAL TUBES PER INNER BOX	TOTAL UNITS PER INNER BOX
L2C5-xxxx1202E0600	20	5	100
L2C5-xxxx1202E0900	20	5	100
L2C5-xxxx1203x0900	20	5	100
L2C5-xxxx1204x1300	20	5	100
L2C5-xxxx1205x1300	20	5	100
L2C5-xxxx1208x1500	20	5	100
L2C5-xxxx1210x1500	20	5	100
L2C5-xxxx1211x1900	10	5	50
L2C5-xxxx1213x2300	10	5	50
L2C5-xxxx1216x2300	10	5	50
L2C5-xxxx1812x2300	10	5	50
L2C5-xxxx1321x2900	10	5	50
L2C5-xxxx1825x3200	10	5	50

Tube

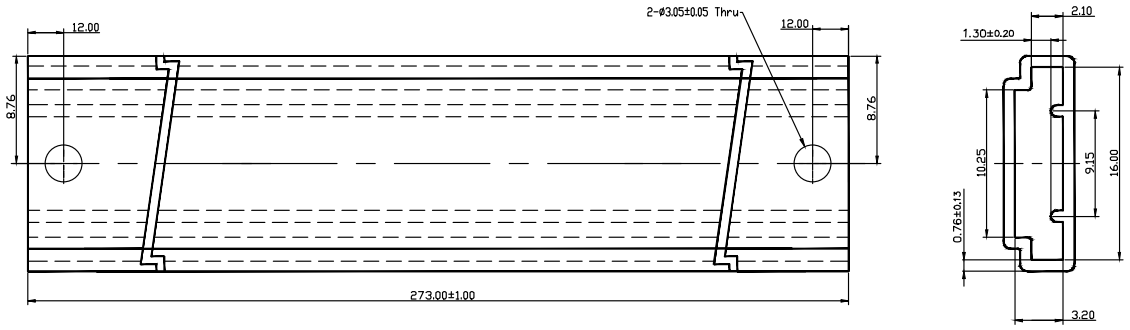


Figure 9a. Tube dimensions for L2C5-xxxx1202E0600.

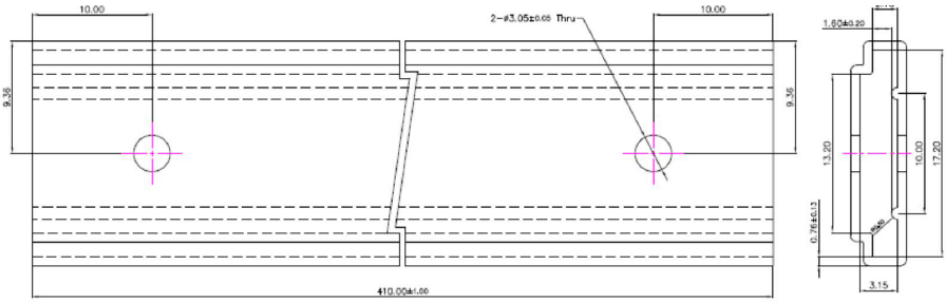


Figure 9b. Tube dimensions for L2C5-xxxx1202E0900.

Notes for Figures 9a and 9b:
1. Drawings not to scale.
2. All dimensions are in millimeters.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

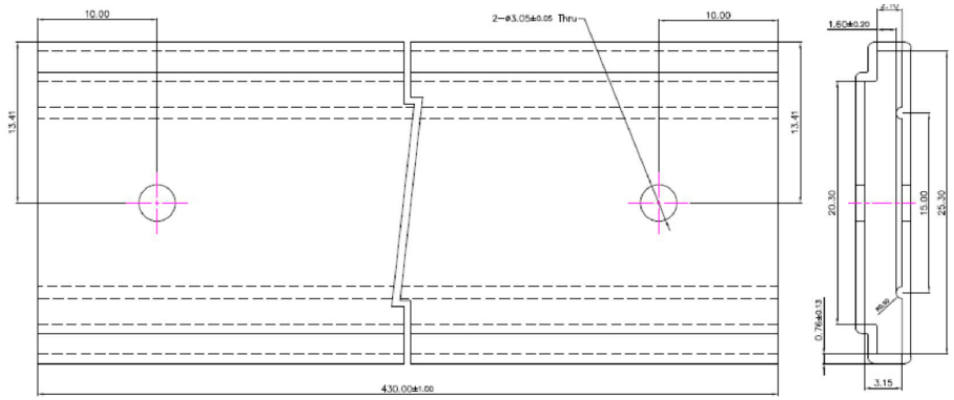


Figure 9c. Tube dimensions for L2C5-xxxx120xx1300 and L2C5-xxxx1208x1500.

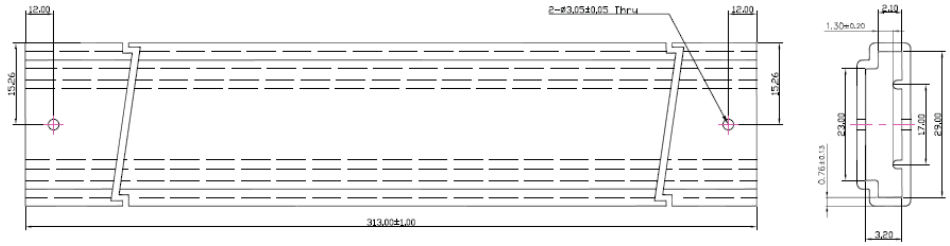


Figure 9d. Tube dimensions for L2C5-xxxx1211x1900, L2C5-xxxx1216x2300 and L2C5-xxxx1812x2300.

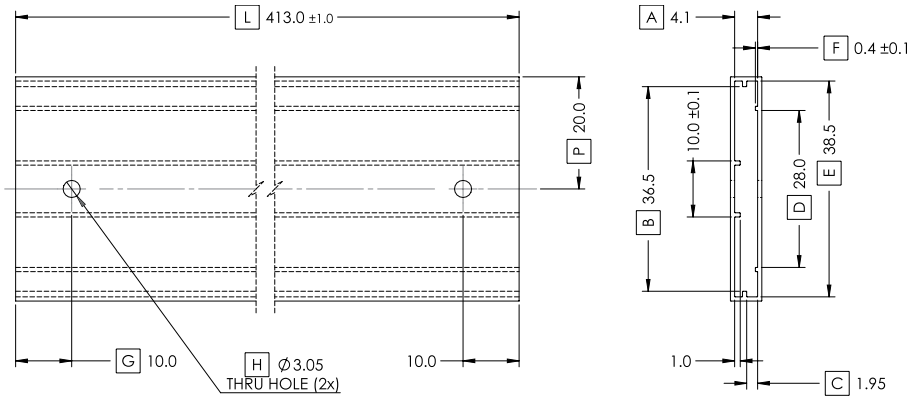


Figure 9e. Tube dimensions for L2C5-xxxx1321x2900 and L2C5-xxxx1825x3200.

Notes for Figures 9c, 9d and 9e:
1. Drawings not to scale.
2. All dimensions are in millimeters.

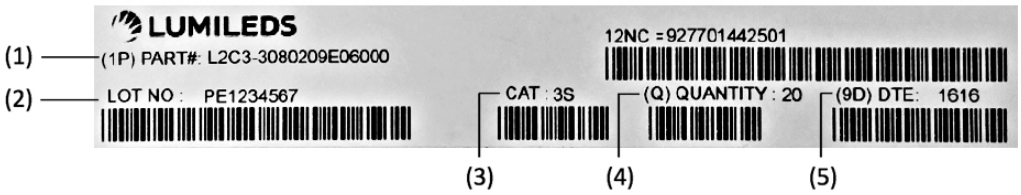


Figure 10. Example of a tube label for LUXEON CoB Core Range.

Notes for Figure 10 - Tube Label descriptions for customer use:
Field labels not described are for Lumileds internal use only.
1. Lumileds part number.
2. Unique production lot identification number. This number is required for traceability purpose.
3. Product category code.
4. Number of LED emitters in a tube.
5. LED test date in YYWW format.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

Inner Box

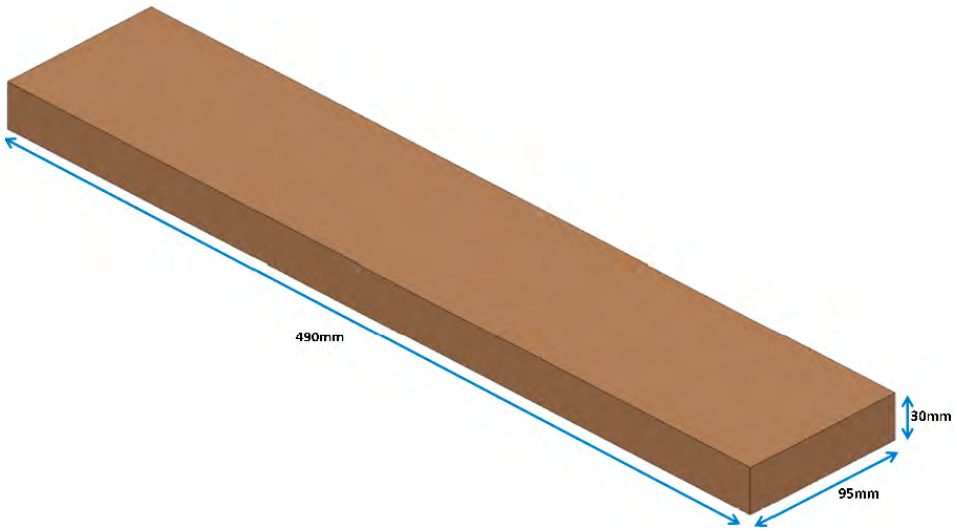


Figure 11. Dimensions for inner box packaging for LUXEON CoB Core Range.

Table 7. Inner box information for LUXEON CoB Core Range.

BOX TYPE	DIMENSIONS (mm)			AVERAGE WEIGHT (100pcs/box)	AVERAGE WEIGHT (50pcs/box)
	H	L	W		
Inner Box	30	490	95	0.340Kg	0.305Kg

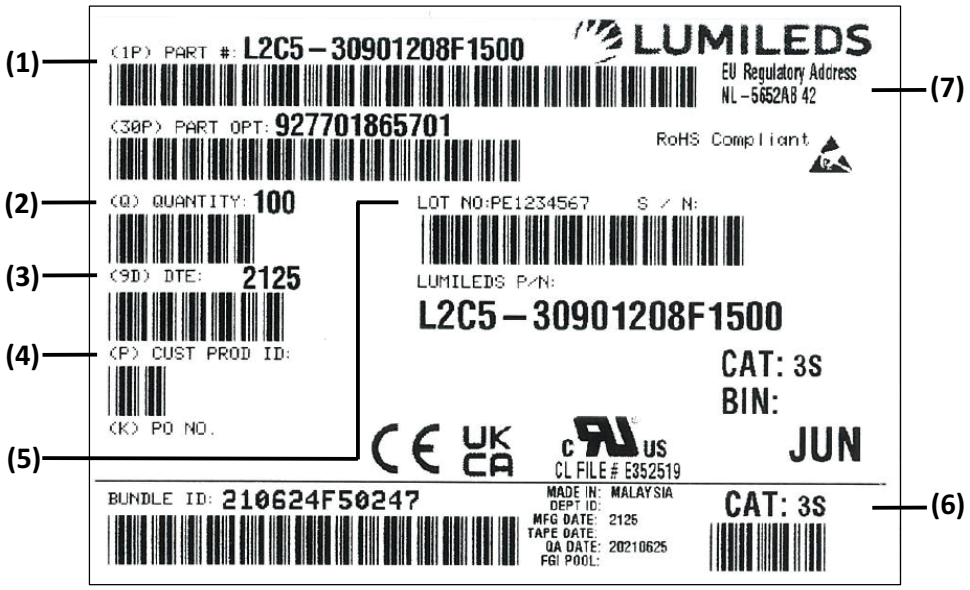


Figure 12. Example of inner box label for LUXEON CoB Core Range.

Notes for Figure 12 – Inner Box Label descriptions for customer use:
Field labels not described are for Lumileds internal use only.

1. Lumileds part number.
2. Number of LED emitters in a box.
3. LED test date in YYWW format.
4. Customer part number for custom requests only.
5. Unique production lot identification number. This number is required for traceability purpose.
6. Product category code.
7. EU regulatory address.

Downloaded from Arrow.com.

Outer Box

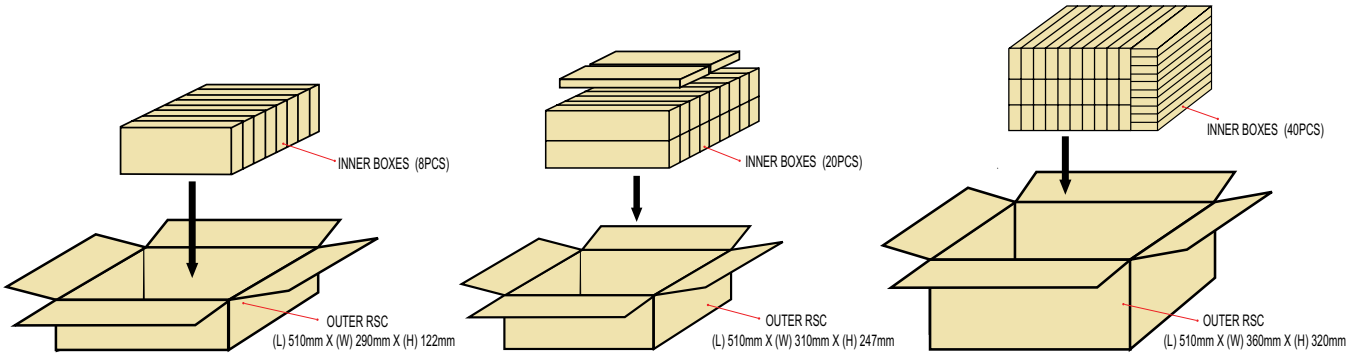


Figure 13. Dimensions for outer box packaging for LUXEON CoB Core Range.

Table 8. Outer box information for LUXEON CoB Core Range.

BOX TYPE	DIMENSIONS (mm)			MAXIMUM INNER BOXES PER OUTER BOX	MAXIMUM QUANTITY PER OUTER BOX	AVERAGE WEIGHT (100pcs/box)	AVERAGE WEIGHT (50pcs/box)
	H	L	W				
Outer Box 8	122	510	290	8	800	3.05kg	2.77kg
Outer Box 20	247	510	310	20	2000	7.55kg	6.85kg
Outer Box 40	320	510	360	40	4000	15.10kg	13.70kg

Figure 14. Example of outer box label for LUXEON CoB Core Range.

Notes for Figure 14 – Outer Box Label descriptions for customer use:
Field labels not described are for Lumileds internal use only.
1. Country code of origin of manufacturing of parts (e.g. MY for Malaysia, CN for China) according to ISO 3166-1 alpha-2 document.
2. Lumileds part number.
3. Customer part number for custom requests only.
4. Total number of LED emitters in a shipment box.

 ©2022 Lumileds Holding B.V. All rights reserved.

Downloaded from Arrow.com.

About Lumileds

Lumileds is a global leader in LED and microLED technology, innovation, and solutions for the automotive, display, illumination, mobile, and other markets where light sources are essential. Our approximately 3,500 employees operate in over 15 countries and partner with our customers to deliver never before possible solutions for lighting, safety, and well-being

To learn more about our lighting solutions, visit lumileds.com.

©2022 Lumileds Holding B.V. All rights reserved. LUXEON is a registered trademark of the Lumileds Holding B.V. in the United States and other countries.

lumileds.com

Neither Lumileds Holding B.V. nor its affiliates shall be liable for any kind of loss of data or any other damages, direct, indirect or consequential, resulting from the use of the provided information and data. Although Lumileds Holding B.V. and/or its affiliates have attempted to provide the most accurate information and data, the materials and services information and data are provided "as is," and neither Lumileds Holding B.V. nor its affiliates warrants or guarantees the contents and correctness of the provided information and data. Lumileds Holding B.V. and its affiliates reserve the right to make changes without notice. You as user agree to this disclaimer and user agreement with the download or use of the provided materials, information and data. A listing of Lumileds product/patent coverage may be accessed at lumileds.com/patents.

Downloaded from Arrow.com.