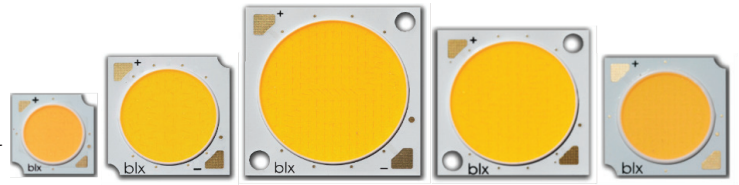


COB Portfolio

Bridgelux Differentiation

- Bridgelux chip-on-board (COB) arrays deliver compact solid-state lighting solutions for every lighting market, from specialized food illumination to roadway streetlights.
- Bridgelux develops the newest, highly innovative products at our vertically integrated Bridgelux facilities, some of which integrate with components such as optics, driver technology, environmental protection and holders. Their integrated construction eliminates significant R&D costs, improves manufacturing lead times, and reduces time to market.



Features

- 25+ years of driving LED industry transformation
- Industry's broadest portfolio of CCT and CRI options
- IP protected LED innovation
- Vertically integrated global supply chain



Benefits

- Cost-effective light engine that extends the technology and performance
- Highly-efficient lumen output in small source-size packages
- For commercial and residential lighting applications where cost and quality are essential
- Highly efficient F90 products using KSF technology
- Tuneable white technology for Human Centric applications
- Many products available in full spectrum Thrive technology - enabling the most advanced Human Centric Lighting products in the market

Applications

- Retail & Hospitality
- Architectural & Museums
- Industrial & Warehouse
- Residential
- Landscapes & Monuments
- Human Centric Lighting
- Healthcare & Hospitals
- Spot & Track Lighting
- Restaurant Lighting
- Roadway & Street Lighting



Page	Family	Description	Web Link
2	V Series™	Premium Chip on Board (COB) Arrays	V Series™
3-4	F90™	KSF Enabled 90CRI products with 80CRI efficacy	F90™
5	V Series™ HD	Ultra High Lumen Density COBs	V Series™ HD
6	Vero® Series	Flagship COB Platform with integrated holder and harness connectivity	Vero™ Series
7	Vero® SE Series	COB Platform with integrated holder and poke-in connectivity	Vero™ SE Series
8	Vesta® Tunable White	Tunable White COB arrays	Vesta® Series
9	Vesta® Dim to Warm	Dim-to-Warm COB arrays	Vesta® Series

V Series™ Portfolio

Product	CCT Range	CRI	SDCM	Typ. Flux Range (lumen)	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 80 CRI	True LES (mm)	Data-sheets
V6 - A	2200K - 6500K	80, 90, 95	2, 3, 4	505	300	16.8	5.0	186	6.3	DS1307 - Gen9
V6 - B		80, 90, 97			150	33.5	5.0			DS410 - Gen8
V6 - C					150	33.5	5.0			
V8 - D		80, 90, 97 + Thrive		878-895	300	16.8	5.0	191	8.5	DS1306 - Gen9
V8 - E					150	33.5	5.0			DS411 - Gen8
V10 - B		80, 90, 97 + Thrive		1140-1320	200	34.2	6.8	196	10	DS1305-x - Gen9
V10 - C					300	30.7	9.2			DS412 - Gen8
V13 - B		80, 90, 97 + Thrive		3216-3350	350	33.4	11.7	198	14.8	DS1304-x - Gen9
V13 - C					500	33.4	16.7			DS413 - Gen8
V15 - D		80, 90, 97		4050	500	33.7	16.9	199	15.3	DS1308 - Gen9 DS414 - Gen8
V18 - B		80, 90, 97		4280-6350	700	33.9	23.7	198	19.6	DS1309-x - Gen9
V18 - C					1050	33.9	35.6			DS415 - Gen8
V22 - B		80, 90, 97		6407-11080	950	50.2	47.7	199	23.3*	DS1310 - Gen9
V22 - C		80, 90, 97			1200	50.7	60.8			
V22 - D		80, 90, 97			1050	33.5	35.2			DS416 - Gen8



F90™ Portfolio

F90 Gen1 Product	CCT Range	F90 Target	SDCM	Typ Flux (lm)* 3000K 90 CRI	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 90 CRI	True LES (mm)	Datasheets	
V6 - C	2700K - 4000K	To/So Fo/FB FD/FH	2.3	430	80	34.7	2.8	155	6.3	DS1317 - To	
				419				151		DS1317-1 - So	
				471				170		DS439 - Fo	
				459				165		DS439-1 - FB	
				448				161		DS439-2 - FD	
				455				164		DS439-3 - FH	
V8 - D	2700K - 4000K	To/So FD/FH	2.3	856	300	17.2	5.2	166	8.5	DS1318 - To	
835				161				DS1318-1 - So			
895				150	34.4	5.1	173	DS445-2 - FD			
748							164	DS445-3 - FH			
V10 - A	2700K-4000K	To/So FB FD/FH	2.3	1564	300	33.7	10.1	155	10	DS1319 - To	
1658				34.5		160		DS1319-1 - So			
1834				34.5	177	DS446-1 - FB					
1789				34.5	173	DS446-2 - FD					
1806				34.5	176	DS446-3 - FH					
V10 - B	2700K-5000K	To/So Fo FD/FH	2.3	1040	200	33.4	6.7	156	10	DS1319 - To	
				1102		34.1		161		DS1319-1 - So	
	1243			34.1	182	DS446 - Fo					
	1182			34.1	172	DS446-2 - FD					
2700K-4000K	2700K-4000K	Fo FD/FH	2.3	1080	300	34.1	6.8	175	10	DS446-3 - FH	
1716				31.6		9.5		181		DS446 - Fo	
1631				31.6		9.5		182		DS446 - Fo	
V10 - C	2700K-5000K	Fo FD/FH	2.3	1490	300	31.6	9.5	173	10	DS446-2 - FD	
2700K-4000K	1716			31.6				9.5		181	DS446 - Fo
2700K-4000K	1631			31.6				9.5		182	DS446 - Fo
V13 - B	2700K-4000K	To/So Fo/FB FD/FH	2.3	1781	350	34.3	12.0	165	14.8	DS1320 - To	
	2030			169				DS1320-1 - So			
	2256			185				DS447 - Fo			
	2210			184				DS447-1 - FB			
	2155			180				DS447-6 - FD			
	2180			179				DS447-7 - FH			
V13 - C	2700K-4000K	To/So Fo/FB FD/FH	2.3	2527	500	34.3	17.0	164	14.8	DS1320 - To	
	2880			168				DS1320-1 - So			
	3210			185				DS447 - Fo			
	3155			34.5		17.1	184	DS447-1 - FB			
	3076						179	DS447-6 - FD			
	3111						177	DS447-7 - FH			
V15 - D	2700K-5000K	Fo	2.3	3830	600	34.5	20.7	185	15.3	DS438	

F90 Gen1 Product	CCT Range	F90 Target	SDCM	Typ Flux (lm)* 3000K 90 CRI	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 90 CRI	True LES (mm)	Datasheets
V18 - B	2700K-4000K	To/So Fo/FB FD/FH	2.3	4070	700	34.6	24.2	168	19.6	DS1321 - To
				4968				164		DS1321-1 - So
	2700K-5000K			4478				185		DS448 - Fo
	2700K-4000K			4388				181		DS448-2 - FB
				3821				177		DS448-3 - FD
	4321			179				DS448-4 - FH		
V18 - C	2700K-4000K	To/So Fo/FB FD/FH	2.3	5980	1050	34.9	36.7	163	19.6	DS1321 - To
				5831				159		DS1321-1 - So
	2700K-5000K			6714				183		DS448 - Fo
	2700K-4000K			6579				179		DS448-2 - FB
				5773				175		DS448-3 - FD
	6479			177				DS448-4 - FH		
V22 - B	2700K-4000K	To/So Fo/FB FD/FH	2.3	8350	950	51.6	49.0	170	23.3	DS1322 - To
				8140				166		DS1322-1 - So
	2700K-5000K			9166				187		DS449 - Fo
	2700K-4000K			8265				173		DS449-1 - FB
				8846				180		DS449-3 - FH
	8759			169				DS449 - FD		
V22 - C	2700K-4000K	To/So Fo/FB FD/FH	2.3	10500	1200	23.3	1200.0	168	23.3	DS1322 - To
				10240				164		DS1322-1 - So
	2700K-5000K			11542				185		DS449 - Fo
	2700K-4000K			10475				171		DS449-1 - FB
				11139				179		DS449-3 - FH
	11029			167				DS449 - FD		
V22 - D	2700K-4000K	To/So Fo FD/FH	2.3	6200	1050	34.5	36.2	171	23.3	DS1322 - To
				6045				167		DS1322-1 - So
	2700K-5000K			6769				487		DS449 - Fo
	2700K-4000K			6468				169		DS449-2 - FD
				6532				180		DS449-3 - FH

F90 Gen2 Product	CCT Range	F90 Target	SDCM	Typ Flux (lm)* 3000K 90 CRI	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 90 CRI	True LES (mm)	Datasheets	
V10A	2700K - 4000K	FH/FD	2.3	1892	300	33.9	10.2	186	10.2	DS1305-10 - FH	
											DS1305-11 - FD
V13C				3176	500	33.8	16.9	188	13.6	DS1304-12 - FH	
											DS1304-13 - FD
V13H				4026	630	33.8	21.3	189	14.8	DS1304-10 - FH	
											DS1304-11 - FD
V15H				4775	750	33.9	25.4	188	15.6	DS1308-10 - FH	
								DS1308-11 - FD			
V18H	6069	950	33.9	32.2	189	19.6	DS1309-10 - FH				
								DS1309-11 - FD			
V22H	7677	1050	33.9	35.6	189	23.3	DS1310-10 - FH				
								DS1310-11 - FD			

V Series™ HD Portfolio

Product	CCT Range	CRI	SDCM	Typ Flux (lm)* 3000K 80 CRI	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 80 CRI	True LES (mm)	Datasheets
V3 HD (FC)	2700K - 6500K	80, 90, 95	3	422	350	11.9	4.2	101	2.9	DS435
V3 HD - A	2200K - 5000K	80, 90, 97	2, 3, 4	396	80	35.2	2.8	141	3.8	DS403
V3 HD - B					160	17.6	2.8			
V4 HD - A	2200K - 5000K	80, 90, 97+ Thrive	2, 3, 4	868	175	36.6	6.4	136	4.8	DS404
V4 HD - B					350	18.3	6.4			
V6 HD - B	2200K - 5700K	80, 90, 97+ Thrive	2, 3, 4	1797	350	36.6	12.8	140	6.6	DS407
V6 HD - G					700	18.3	12.8			
V9 HD	2700K - 5000K	80, 90, 97+ Thrive	2, 3, 4	3630	700	36.6	25.6	142	8.8	DS408
V11 HD	2700-5000K	80, 90, 97	2, 3, 4	5410	1050	36.6	38.4	141	11.3	DS 409

V Series™ HD with Fgo™ Portfolio

Product	CCT Range	Fgo Target	SDCM	Typ Flux (lm)* 3000K 90 CRI	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 90 CRI	True LES (mm)	Datasheets
V4 HD	2700K - 4000K	To/TB	2, 3	799	175	33.9	5.9	135	4.8	DS1361
V6 HD - C	2700K - 4000K	To/TB	2, 3	1458	350	33.9	11.9	123	6.6	DS1360
V6 HD - G				1508	700	18.2	12.7	118		
V9 HD	2700K - 4000K	To/TB	2, 3	3240	700	33.9	23.7	137	8.8	DS1362
V11 HD	2700K - 4000K	To/TB	2, 3	4374	1050	33.9	35.6	123	11.3	DS1363



Vero® Series Portfolio

Product	CCT Range	CRI	SDCM	Typ. Flux Range (lumen)	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 80 CRI	True LES (mm)	Data-sheets
Vero 10B	2200K - 6500K	80, 90, 97 + Thrive	2, 3, 4	1320	200	33.6	6.7	200	10	DS1311 - Gen9
Vero 10C				1790	300	33.6	10.1			DS420 - Gen8
Vero 10D				1110	250	24.9	6.2			DS90 - Gen7
Vero 13B		80, 90, 97		2350	350	33.8	11.8	199	13.3	DS1312 - Gen9
Vero 13C		80, 90, 97 + Thrive		3350	500	33.8	16.9			DS421 - Gen8
Vero 13D		80, 90, 97		220	400	30.9	12.4			DS91 - Gen7
Vero 18B		80, 90, 97		4720	700	34	23.8	198	18.5	DS1313 - Gen9
Vero 18C		80, 90, 97 + Thrive		6088	900	33.9	30.5			DS422 - Gen8
Vero 18D		80, 90, 97		4310	850	28.2	24.0			DS92 - Gen7
Vero 29B		80, 90, 97		11445	1400	50.2	70.3	185	29.1	DS423 - Gen8
Vero 29C				16040	1300	66.7	86.7			DS93 - Gen7
Vero 29D				12050	1700	36.4	61.9			

Vero® Series F90™ Portfolio

Product	CCT Range	F90 Target	SDCM	Typ Flux (lm)* 3000K 90 CRI	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 90 CRI	True LES (mm)	Datasheets
Vero 10B	2700K - 4000K	F0	2, 3	1243	200	34.1	6.8	182	10	DS419
Vero 10C	2700K - 4000K	F0	2, 3	1716	300	31.6	9.5	181	10	
Vero 13B	2700K - 4000K	F0/FD	2, 3	2256	350	34	11.9	190	13.3	DS436 - F0
Vero 13C	2700K - 4000K	F0/FD	2, 3	3210	500	33.8	16.9	190	13.3	DS436-2 - FD
Vero 18B	2700K - 4000K	F0/FD	2, 3	4478	700	34	23.8	188	18.5	DS437 - F0
Vero 18C	2700K - 4000K	F0/FD	2, 3	6714	1050	34	35.7	188	18.5	DS437-2 - FD

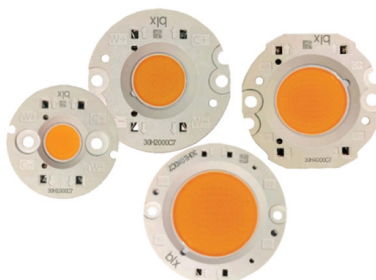


Vero[®] SE Series Portfolio

Product	CCT Range	CRI	SDCM	Typ. Flux Range (lu-men)	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 80 CRI	True LES (mm)	Data-sheets
Vero SE 10B	2200K - 6500K	80, 90, 97 + Thrive	2, 3, 4	1180	200	33.6	6.7	173	10	DS430 - Gen8
Vero SE 10C			2, 3, 4	1594	300	33.6	10.1			
Vero SE 10D			2, 3, 4	1080	250	24.9	6.2			
Vero SE 13B		80, 90, 97	2, 3, 4	2048	350	33.8	11.8			
Vero SE 13C		80, 90, 97 + Thrive	2, 3, 4	2930	500	33.8	16.9	175	13.3	DS431 - Gen8
Vero SE 13D		80, 90, 97	2, 3, 4	2156	400	30.9	12.4			
Vero SE 18B		80, 90, 97	2, 3, 4	4224	700	34	23.8	178	18.5	DS432 - Gen8
Vero SE 18C		80, 90, 97 + Thrive	2, 3, 4	6317	900	33.9	30.5			
Vero SE 18D		80, 90, 97	2, 3, 4	4254	850	28.2	24.0			
Vero SE 29B		80, 90, 97	2, 3, 4	12977	1400	50.2	70.3	185	29	DS433 - Gen8
Vero SE 29C		80, 90, 97	2, 3, 4	16002	1300	66.7	86.7			
Vero SE 29D		80, 90, 97	2, 3, 4	11415	1700	36.4	61.9			

Vero[®] SE Series F90[™] Portfolio

Product	CCT Range	F90 Target	SDCM	Typ Flux (lm)* 3000K 90 CRI	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 90 CRI	True LES (mm)	Datasheets
Vero SE 10B	2700K - 4000K	Fo	2, 3	1208	200	34.1	6.8	177	10	DS418
Vero SE 10C				1668	300	31.6	9.5	176	10	
Vero SE 13B		Fo/FB FH/FD		2211	350	34.3	12.0	184	13.3	DS358 - Fo
Vero SE 13C				3146	500	34.3	17.2	183	13.3	DS358-1 - FB
Vero SE 18B				4411	700	34.6	24.2	182	18.5	DS358-2 - FD
Vero SE 18C		Fo/FB		6613	1050	34.9	36.6	180	18.5	DS358-3 - FH
										DS359 - Fo
										DS359-1 - FB

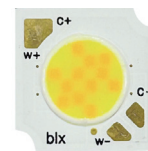
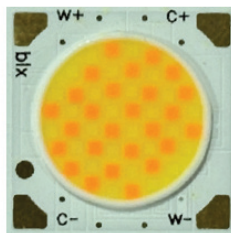
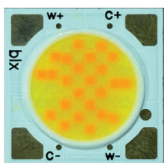


Vesta® Series Tunable White Portfolio

Product	CCT Ranges*	CRI	SDCM	Typ Flux (lm)*	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)*	True LES (mm)	Datasheets
Vesta TW 6B	Warm: 18/2700K Cool: 40/50/57/6500K	90	3	670	150	36.3	5.4	123	7.0	DS491 - Gen3 DS349 - Gen2
Vesta TW 9A				1100	500	18.2	9.0	123	10.4	DS492 - Gen3
Vesta TW 9B				1200	250	36.1	9.0	133		DS350 - Gen2
Vesta TW 13A				2277	500	37.4	18.7	135	14.3	DS495 - Gen3 DS351 - Gen2
Vesta TW 15A				2925	650	36.4	23.7	137	16.3	DS496 - Gen3 DS352 - Gen2
Vesta TW 18A				4077	900	36.4	32.8	138	19.6	DS497 - Gen3 DS353 - Gen2
Vesta TW 22A				5966	900	53.6	48.2	127	21.7	DS354
Vesta TW 29A				6600	1050	52.7	55.3	136	28.5	DS355

Vesta® Tunable White HD Portfolio

Product	CCT Ranges	CRI	SDCM	Typ Flux (lm)*	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)*	True LES (mm)	Datasheets
V6TW HD	1800-4000K 2700K-6500K	90/Thrive	3	1021 1091	250	34.2	8.6	118 128	7.0	DS1751
V6 TW HD (D3)				1021 1091	250	34.2	8.6	118 129	7.0	DS1756
V9 TW HD	2700K-6500K	90		2140	500	34.2	17.1	125	10.5	DS1752
V13 TW HD	1800-4000K 2700K-6500K	90		3557	700	37.1	26.0	137	15.6	DS1753



Vesta® Series Dim to Warm Portfolio

Product	CCT Ranges*	CRI	SDCM	Typ Flux (lm)*	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)*	True LES (mm)	Datasheets
Vesta DW 6A	Warm: 1800K Cool: 27/30/4000K	90	3	660	350	17	6.0	111	7.2	DS1370 - Gen3
Vesta DW 6B				1080	280	34.6	9.7			DS190 - Gen2
Vesta DW 9B				1430	350	34.6	12.1	118	9.3	DS1371 - Gen3 DS191 - Gen2
Vesta DW 13A				2560	600	34.7	20.8	123	13.5	DS1372 - Gen3
Vesta DW 15A				2432	600	33.5	20.1	117	13.5	DS192 - Gen2
Vesta DW 18A				3920	950	34.1	32.4	121	16.3	DS159
Vesta DW 18A				5144	1290	33.8	43.6	118	18.3	DS165
Vesta DW 29A				13098	2350	45.6	107.2	122	28.5	DS167

