

PHILIPS

Fortimo

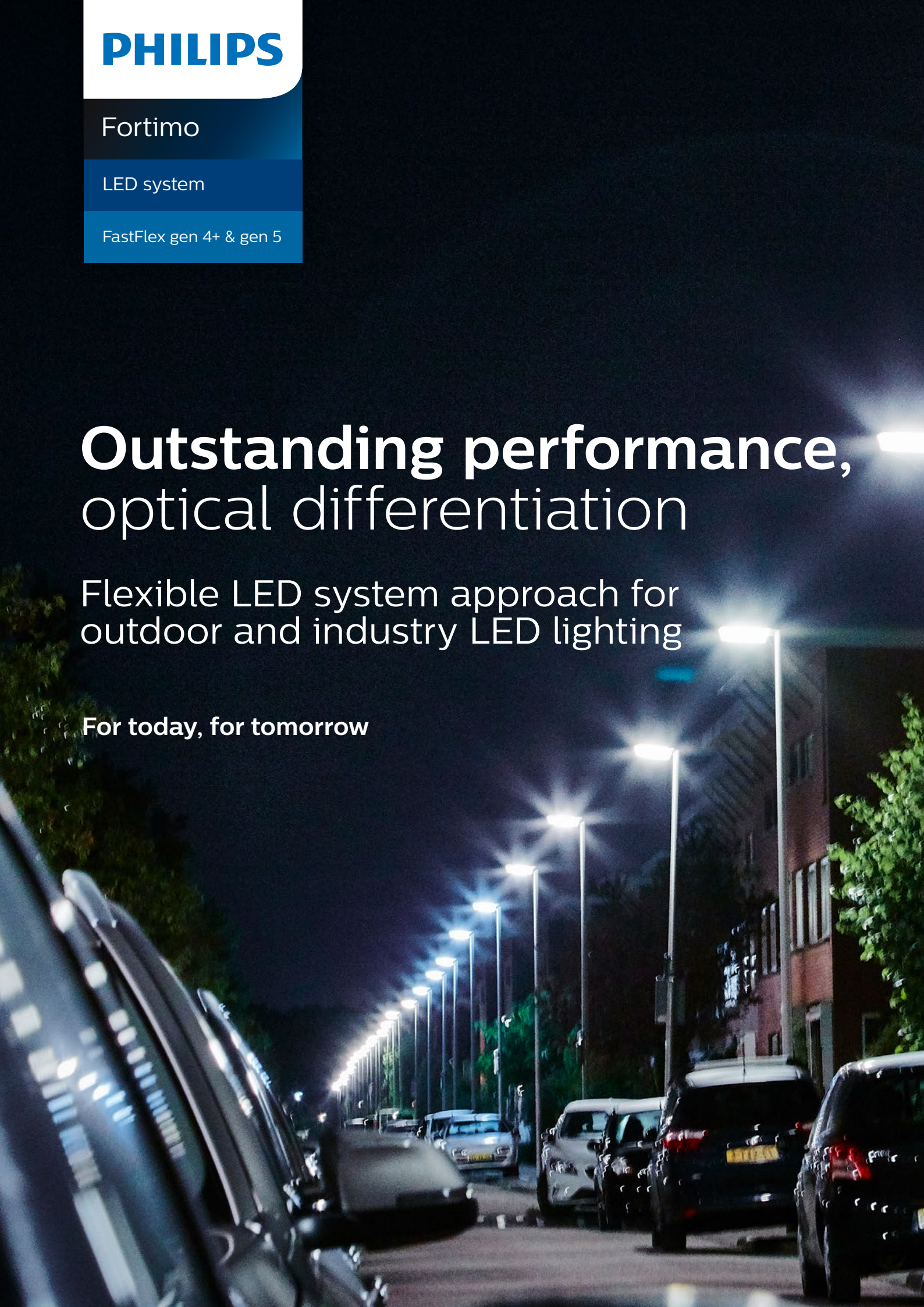
LED system

FastFlex gen 4+ & gen 5

Outstanding performance, optical differentiation

Flexible LED system approach for
outdoor and industry LED lighting

For today, for tomorrow





“The best-in class efficiency and reliability with maximum optical flexibility for road, urban and industrial lighting applications.”

What's new?

- Tc measurement point with easy access and patented module surge protection.
- The 4+ generation of the Fortimo FastFlex portfolio has been developed to be backwards compatible with generation 4 and offer a suitable competitive solution for every project requirement. Merging the previous generation 4 DA and DAX versions into generation 4+ DA, enables the use of third-party lenses.
- While FastFlex gen 4+ remains backwards compatible with Fortimo FastFlex gen 4, the New Fortimo FastFlex generation 5 premium, with its new LED technology, enables improved optical quality and efficiency leadership. The future of outdoor lighting!



Fortimo FastFlex family is comprised of five groups: Gen 5 Premium (PR), Gen 4+ standard, Differentiation Array (DA), Differentiation Protected (DP), and Differentiation High Efficiency (DHE)

Standard Fortimo FastFlex gen 4+, the 'one-stop-shop' solution

The standard Fortimo FastFlex gen 4+ is a LED lighting system containing two key building blocks: a LED board and a FastFlex lens. There are two board form factors (2x8 and 2x4) and eight standard lenses to comply with the most common road and industrial applications. It is suitable for operation with Xitanium LED outdoor drivers.

Fortimo FastFlex DA gen 4+ for exceptional optical differentiation

The Fortimo FastFlex gen 4+ Differentiation Array (DA) versions are system propositions (LED module driver) that enable exceptional optical differentiation through the use of third party 2x2 array lenses, including high temperature 2x2 lenses. There are four board form factors (2x8, 2x6, 2x4 and 2x2). They are suitable for operation with Xitanium LED outdoor drivers and are compatible with Zhaga book 15.

New Fortimo FastFlex DP gen 4+ for IP rating at module level

The Fortimo FastFlex gen 4+ Differentiation Protected (DP) is system propositions

(LED module and driver) that enable excellent optical differentiation and IP rating at module level when installed with third party IP ready lenses.

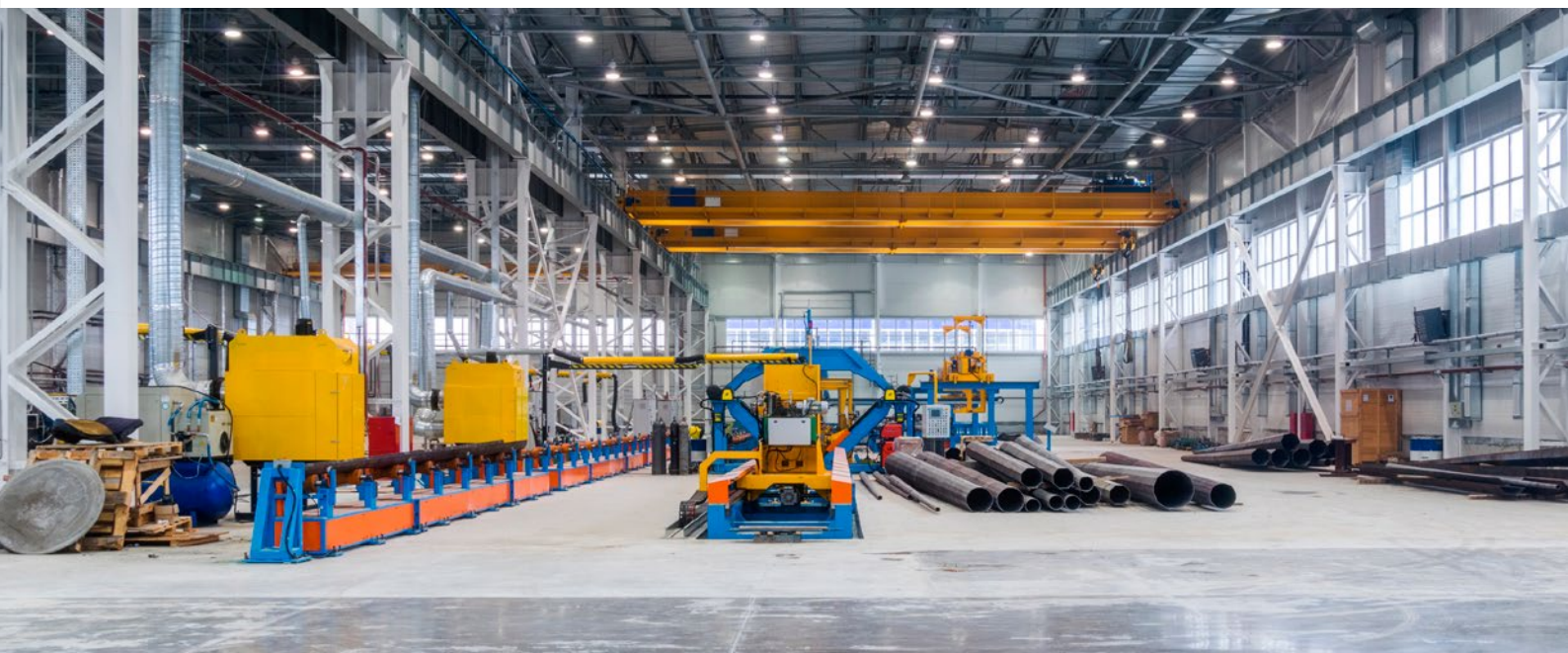
Fortimo FastFlex DHE for outstanding luminaire efficiency

FastFlex DHE gen 4 is a module specially designed to offer unparalleled efficiency and optical flexibility in a compact form factor. Ultimately the FastFlex DHE allows the creation of top notch industry high bay as well as outdoor luminaires with superior efficiency.

New Fortimo FastFlex gen 5 PR for new future LED technology

FastFlex gen 5 PR with new LED technology improves on both optical quality and flux efficacy in comparison to gen 4. Premium lm/watt. There are three board form factors (2x8up, 3x8up, 4x8up). LEDil launched specific lens for this modules.

All five groups feature a new Tc point for easy access, patented surge protection, a wide range of color temperatures (CCT) and color rendition index (CRI) options.





Ultimate performance and design flexibility

- Current range from 100 to 1050 mA for flux flexibility.
- State-of-the-art LED efficacy up to 187 lumen per watt.
- Excellent quality of light with CRI 70 and 80 in a range of color temperatures.
- Patented module surge protection up to 6 kilovolts.
- New case temperature (Tc) measurement point on front of the board for easy access.
- Wide lumen output range to match every application need.
- Complete system proposition with a wide range of driver choices.

Benefits for every OEM and product range

- Short time to market and minimum assembly time via 7 FastFlex modules and 8 standard lenses same used for gen 4.
- Optical differentiation and short assembly time (FastFlex DA plus third party 2x2 50 mm lenses).
- Outstanding energy efficiency and optical flexibility (FastFlex DHE plus third party 16up -50mm lenses).
- Optical differentiation and IP rating (FastFlex DP, plus third party 2x6 and 2x2 70mm IP ready lenses).
- Leading efficacy & optical performance with 18 Fastflex gen 5.

Applications

- Residential – paths, pedestrianized tourism, and commercial areas.
- Mixed traffic – commercial and tourist areas, and city centers.
- Motorized traffic – airport express ways, tourist routes.
- Highways – national roads, rural roads, freeways, motorways and tunnels.
- High bay/low bay – flood and industrial lighting.
- High lumen applications – areas and arenas.

Full portfolio offer

- Range includes 2200, 2700, 3000, 4000, 5000, 5700 K color temperatures.
- Choice of color rendition index (CRI) of 70 and 80.
- Different module form factors.
- System warranty of five years.

Performance and versatility

Introducing Fortimo FastFlex gen 4+ & 5

Outdoor and industrial lighting are highly diverse fields, and as an OEM, you can differentiate your products through fixture design, speed-to-market, optical (photometric) performance, efficacy, cost, or product life time. To help you in all these areas, we developed the 4+ generation of the Fortimo FastFlex portfolio so you can meet every project requirement. FastFlex gen 4+ brings you more than state-of-the-art LED modules; it's supported by practical reliability and performance data that makes it easier for you to design and specify fixtures that stand from the crowd. While FastFlex gen 4+ remains backwards compatible with Fortimo FastFlex gen 4, the New Fortimo FastFlex generation 5 premium, with its new LED technology, enables improved optical quality and efficiency leadership. The future of outdoor lighting!

From a one-stop-shop to unique optical performance

Standard Fortimo FastFlex gen 4+ is an ideal 'one-stop-shop' solution with boards and lenses from Philips. It shortens your development cycle, and still provides optical flexibility thanks to eight standard light distributions. When you want unique photometric performance, the FastFlex gen 4+ Differentiation Array (DA) the FastFlex Differentiation Protected (DP), enables you to use third-party lenses for an unlimited range of optical configurations. FastFlex gen 4+ DP maximize cost effectiveness and fixture efficacy via IP protection at LED module level. Gen 4+ reduce SKUs by merging X and non-X versions, while it has higher performance than FastFlex G4 non-X versions and the same operating windows as FastFlex gen 4.

Performance leadership

The new generation FastFlex gen 5 PR with improved optical quality, improves up to 20% of flux and efficacy in comparison to gen 4. It exhibits an outstanding lifetime with a flexible current range and patented surge protection. There are three board form factors (2x8up, 3x8up, 4x8up). NTC is enabled at system level (DTL – Driver Temperature Limit Function). New LEDIL Lenses Optimized for FF gen 5 Technology being launched simultaneously.

Unparalleled lumen per watt

The Fortimo FastFlex LED board offers best-in-class energy efficiency, with performance efficacy of up to 181 lumens per watt. The remarkable energy savings and CO₂ reductions achieved with a Fortimo FastFlex LED system can be further extended by lowering the light levels during off peak hours (FastFlex support multiple dimming protocols). Energy usage is reduced and light pollution is minimized, improving quality of life for local residents.

Information to optimize temperature and drive current settings

The Fortimo FastFlex LED module features a comprehensive set of LED module performance information, allowing you optimize your fixture design to meet target specifications. This performance information includes charts displaying the relationship between case temperature (T_c) and module driving current, expected lifetime (up to 100,000 hours) and lumen depreciation values (L70 and above). These data enable you to align the fixture performance-to-cost ratio according to application needs.

The Easy Design-in Tool

Create your ideal configuration in minutes. Design the optimal LED system in the fastest, most simple way.

The Easy Design-in Tool is a powerful, time-saving way to speed up the work of those who design or define LED systems. It's a true solution composer and is ideal for all those involved in delivering added-value LED solutions right through the supply chain.

Check out our tool online!

Visit philips.com/easydesignintool



Fortimo and Xitanium – **partners in performance**

Luminaire performance is determined by the sum of its component parts, each carefully designed or selected to meet specific application requirements. In addition to the Fortimo FastFlex family modules featured here, we also offer an extensive range of Xitanium LED drivers. Pair components from these complementary families and you'll benefit from design-in simplicity, flexibility, compatibility and exceptionally long life. You'll also enjoy the convenience of dealing with just one knowledgeable supplier of these vital luminaire components.

Product and ordering information

Fortimo FastFlex DHE gen 4, gen 4+ & gen 5 PR



Product name	MG3 code	GPC	EOC	Units per box
Fortimo FastFlex LED 4x16/830 DHE G4	X68	929001616506	871869680334900	100
Fortimo FastFlex LED 4x16/840 DHE G4	X68	929001616606	871869680336300	100
Fortimo FastFlex LED 4x16/850 DHE G4	X68	929001616706	871869680338700	100
Fortimo FastFlex LED 2x4/730 G4+	X1X	929002118906	871869970847400	25
Fortimo FastFlex LED 2x4/740 G4+	X1X	929002119006	871869970849800	25
Fortimo FastFlex LED 2x8/730 G4+	X1U	929002116206	871869970834400	25
Fortimo FastFlex LED 2x8/740 G4+	X1U	929002116306	871869970836800	25
Fortimo FastFlex LED 2x8/757 G4+	X1U	929002116406	871869970838200	25
Fortimo FastFlex LED 2x8/830 G4+	X1U	929002116506	871869970841200	25
Fortimo FastFlex LED 2x8/840 G4+	X1U	929002116606	871869970843600	25
Fortimo FastFlex LED 2x6/730 DP G4+	X1Y	929002118606	871869970881800	25
Fortimo FastFlex LED 2x6/740 DP G4+	X1Y	929002118706	871869970883200	25
Fortimo FastFlex LED 2x6/840 DP G4+	X1Y	929002118806	871869970885600	25
Fortimo FastFlex LED 2x2/730 DA G4+	X23	929002116706	871869970851100	25
Fortimo FastFlex LED 2x2/740 DA G4+	X23	929002116806	871869970853500	25
Fortimo FastFlex LED 2x2/840 DA G4+	X23	929002116906	871869970855900	25
Fortimo FastFlex LED 2x4/730 DA G4+	X22	929002117006	871869970857300	25
Fortimo FastFlex LED 2x4/740 DA G4+	X22	929002117106	871869970859700	25
Fortimo FastFlex LED 2x4/840 DA G4+	X22	929002117206	871869970861000	25
Fortimo FastFlex LED 2x6/730 DA G4+	X20	929002117306	871869970863400	25
Fortimo FastFlex LED 2x6/740 DA G4+	X20	929002117406	871869970865800	25
Fortimo FastFlex LED 2x6/827 DA G4+	X20	929002117506	871869970887000	25
Fortimo FastFlex LED 2x6/830 DA G4+	X20	929002117606	871869970889400	25
Fortimo FastFlex LED 2x6/840 DA G4+	X20	929002117706	871869970867200	25
Fortimo FastFlex LED 2x8/730 DA G4+	X1Y	929002117806	871869970845000	25
Fortimo FastFlex LED 2x8/740 DA G4+	X1Y	929002117906	871869970869600	25
Fortimo FastFlex LED 2x8/757 DA G4+	X1Y	929002118006	871869970871900	25
Fortimo FastFlex LED 2x8/827 DA G4+	X1Y	929002118306	871869970874000	25
Fortimo FastFlex LED 2x8/830 DA G4+	X1Y	929002118406	871869970877100	25
Fortimo FastFlex LED 2x8/840 DA G4+	X1Y	929002118506	871869970879500	25
Fortimo FastFlex LED 2x8up/730 PR G5	XFE	929001691006	871869970755200	24
Fortimo FastFlex LED 2x8up/740 PR G5	XFE	929001691106	871869970759000	24
Fortimo FastFlex LED 2x8up/757 PR G5	XFE	929001691206	871869970761300	24
Fortimo FastFlex LED 2x8up/827 PR G5	XFE	929001691306	871869970763700	24
Fortimo FastFlex LED 2x8up/830 PR G5	XFE	929001691406	871869970765100	24
Fortimo FastFlex LED 2x8up/840 PR G5	XFE	929001691506	871869970769900	24
Fortimo FastFlex LED 3x8up/730 PR G5	XFF	929001691606	871869970771200	24
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Fortimo FastFlex LED 3x8up/830 PR G5	XFF	929001692006	871869970779800	24
Fortimo FastFlex LED 3x8up/840 PR G5	XFF	929001692106	871869970781100	24
Fortimo FastFlex LED 4x8up/730 PR G5	XFG	929001692206	871869970791000	96
Fortimo FastFlex LED 4x8up/740 PR G5	XFG	929001692306	871869970793400	96
Fortimo FastFlex LED 4x8up/757 PR G5	XFG	929001692406	871869970783500	24
Fortimo FastFlex LED 4x8up/827 PR G5	XFG	929001692506	871869970785900	24
Fortimo FastFlex LED 4x8up/830 PR G5	XFG	929001692606	871869970787300	24
Fortimo FastFlex LED 4x8up/840 PR G5	XFG	929001692706	871869970789700	24

For more information see datasheet

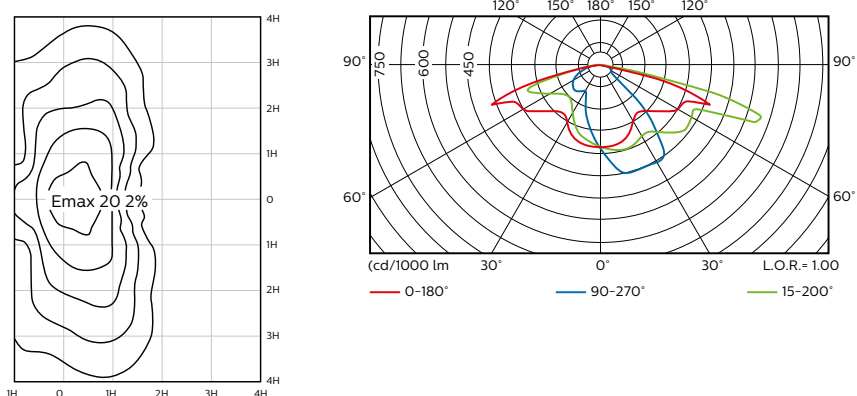
FastFlex Lenses gen 2 applicable for standard Fortimo FastFlex 2x8 and 2x4 gen 4

• Isolux diagram • Polar intensity diagram • Application rendering



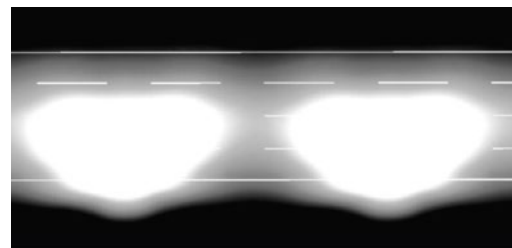
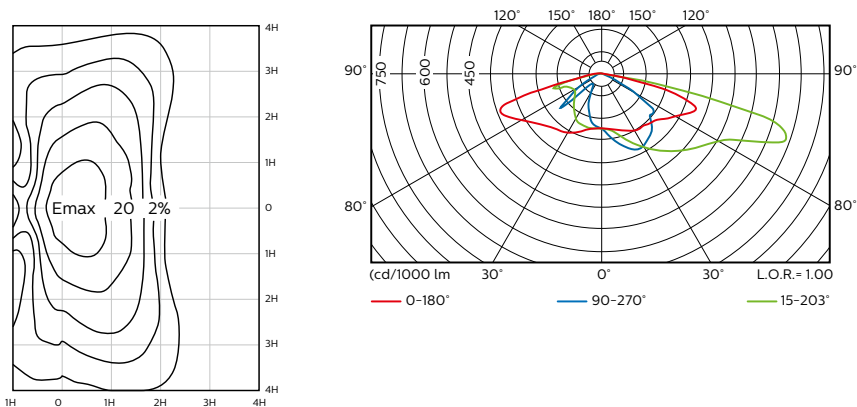
Fortimo FastFlex lens 2x8/II-X gen 2

Designed for narrow roads and urban street lighting.



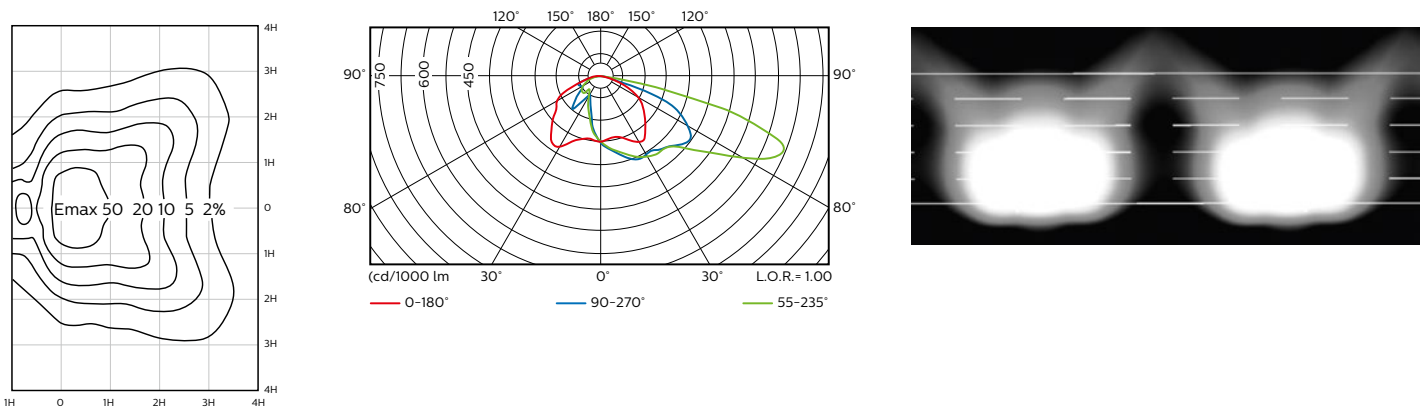
Fortimo FastFlex lens 2x8/III-X gen 2

Designed for roads of medium width and urban street lighting.



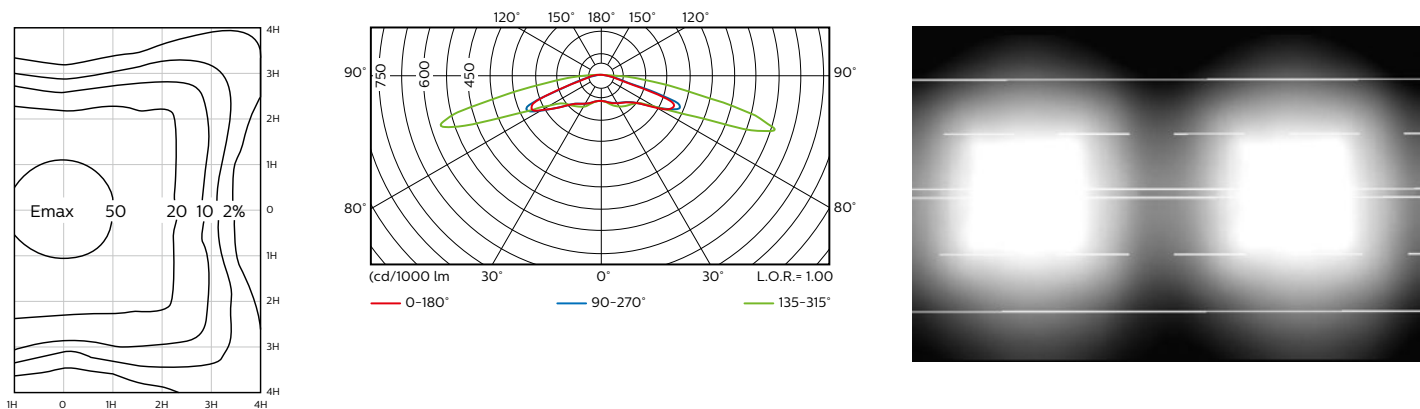
Fortimo FastFlex lens 2x8/IV-X gen 2

Designed for wide roads and asymmetrical floodlighting.



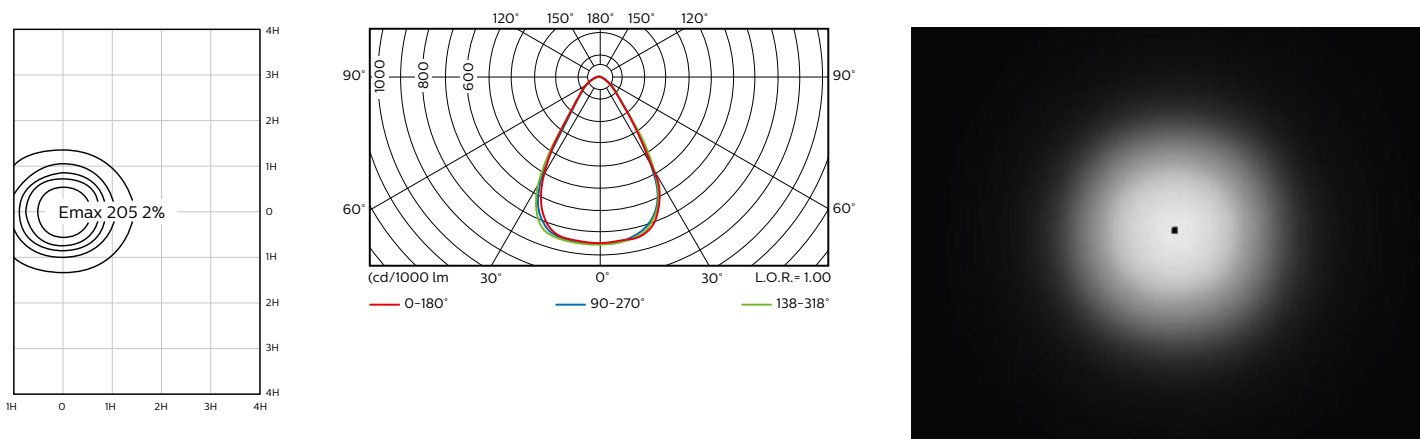
Fortimo FastFlex lens 2x8/V gen 2

Designed for symmetrical lighting, e.g. high bays, parking lots, petrol stations.



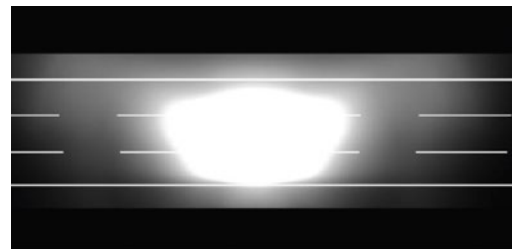
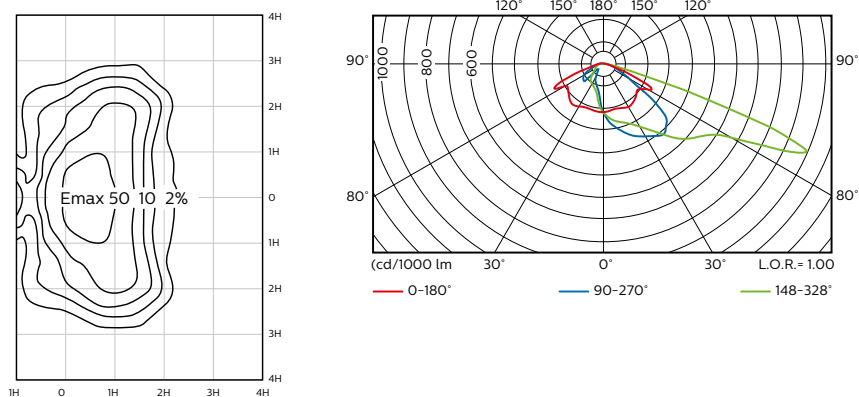
Fortimo FastFlex lens 2x8/HB65 gen 2

Designed for high bay lighting.



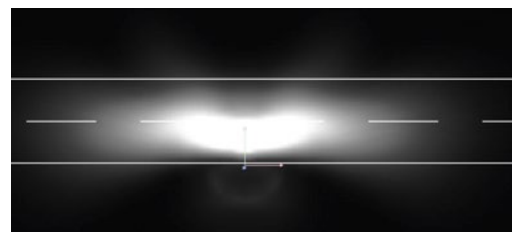
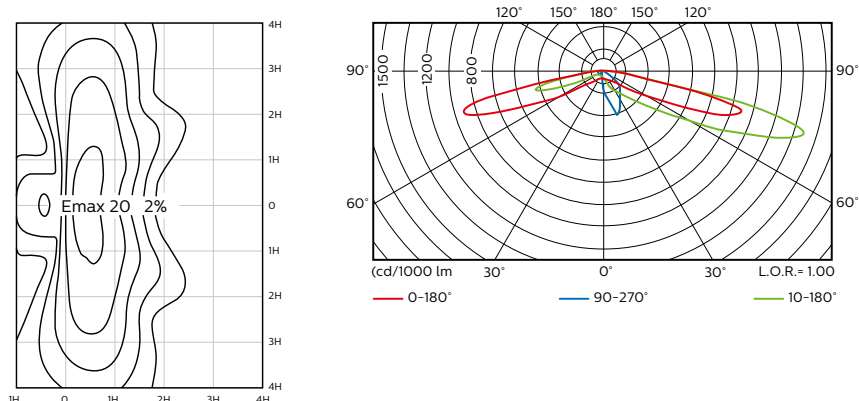
Fortimo FastFlex lens 2x8/II-x WTR gen 2

Designed for wet road lighting.



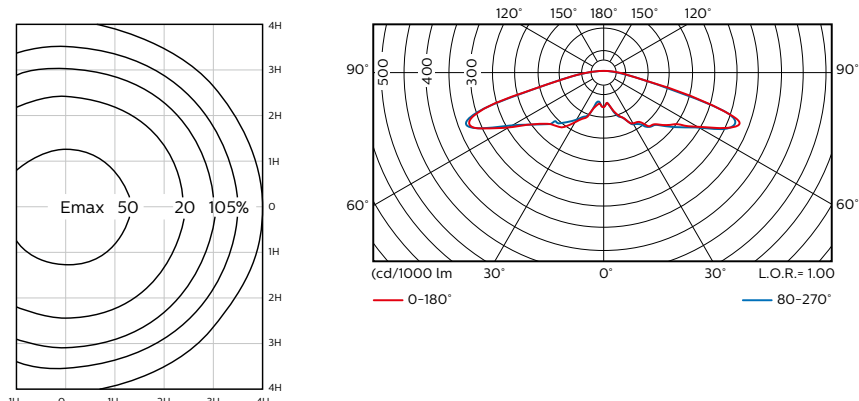
Fortimo FastFlex lens 2x4/SW-X gen 2

Designed for Pedestrian Road and Bicycle path lighting.



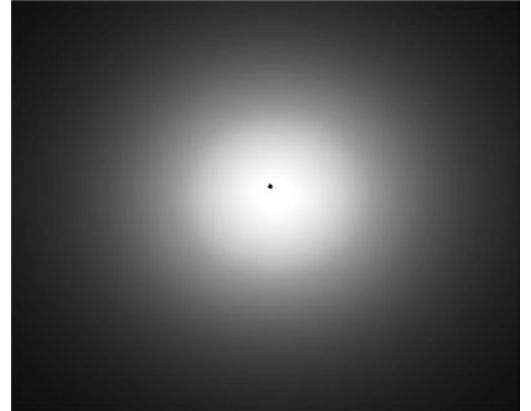
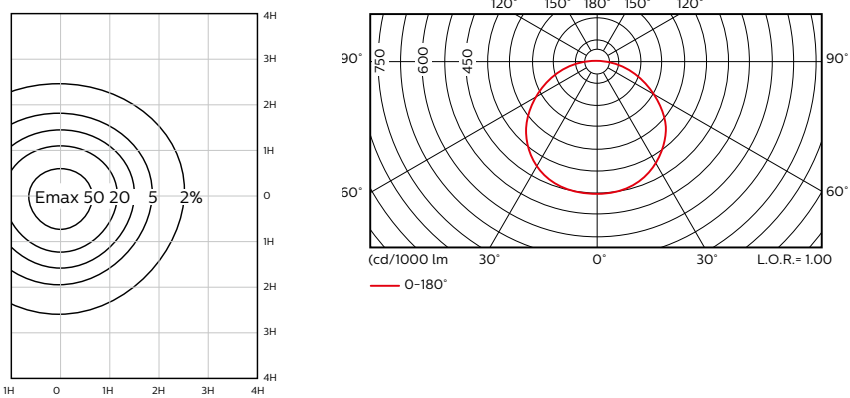
Fortimo FastFlex lens 2x4/V_C gen 2

Designed for Park lighting and Squares within towns and cities.



Fortimo FastFlex lensless mounting gen 2

Designed to enable the use of the Fortimo FastFlex gen 3 board without lenses.



Fortimo FastFlex DA and DS gen 3 version operate with third party lenses.
(OEM or complementary partner optics).

Please contact your Phillips sales representative for more information on compatible lenses.





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