

Light is OSRAM

LINEARlight FLEX IP00 RGB and RGBW

RGB and RGBW IP00 LED strips for vivid colors and perfect white
LF600RGB / LF1300RGBW



Features & Benefits

- Luminous flux up to 1243 lm/m
- Lifetime up to 60.000 h L90B10 at Tp (white chip)
- Perceived color uniformity ≤ 3 SDCM*
- Internal constant current regulator
- Full single bin on each color and white
- Vivid saturated colors and powerful pastel colors
- Enhanced special white: add a few drops of colors to white for a gentle change of CCT and ad-hoc color rendering
- Extraordinary design and high-quality materials
- Great design freedom thanks to flexibility and cuttability of the strip
- Easy mounting on many smooth surfaces thanks to self-adhesive tape at the back
- Quick and safe installation thanks to factory-assembled wires on both ends, with Reel-to-Reel manufacturing process
- Dimmable by PWM technology & DALI
- Made in Italy

Application areas

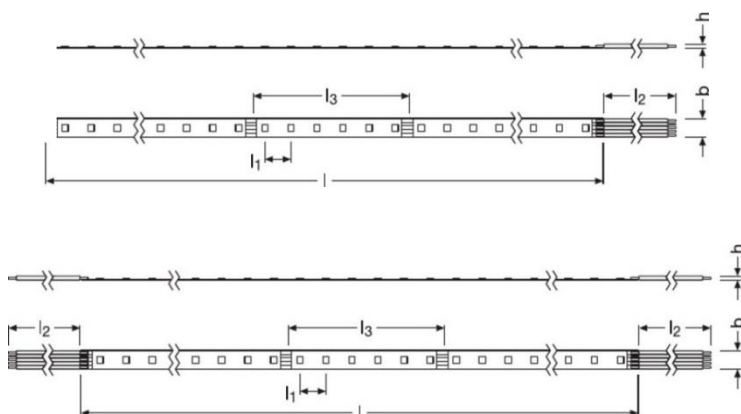
Effect lighting in architecture, Dynamic effects in public zones

Standards

CE, UKCA

Photometric data acc. to: LM-80 and TM-21, LM-79, EN13032-4, CIE S 025, IES TM-30-15

Technical data



	l mm	l ₁ mm	l ₂ mm	l ₃ mm	h mm	b mm
LF600RGB	6000	20	--	100	2.2	8

	l mm	l ₁ mm	l ₂ mm	l ₃ mm	h mm	b mm
LF1300RGBW	5100	16.7	500	100	1.7	10

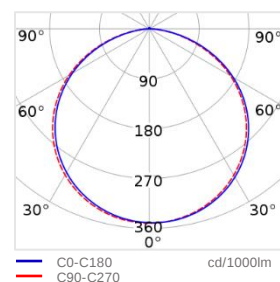
Lowest Bending Radius = 20 mm

Number LED/m = LF600RGB 50

LF1300RGBW 120

Max. operable length = product length "l"

Nominal Voltage	24.0 V
Reverse voltage protection up to	25.0 V
Temperature range in operation @ Tc point	RGB: -30 ... +75°C RGBW: -20... +85°C
Storage Temperature	-40...+85 °C
Ambient Temperature with profile **	-20...+50 °C



Technical data

	Luminous Flux lm/m	Power W/m	Current A/m	Luminous Efficacy lm/W	Performance Temp. Tp °C	Length m
LF600RGB-G5-06	574	16.4	0.685	35	45	6

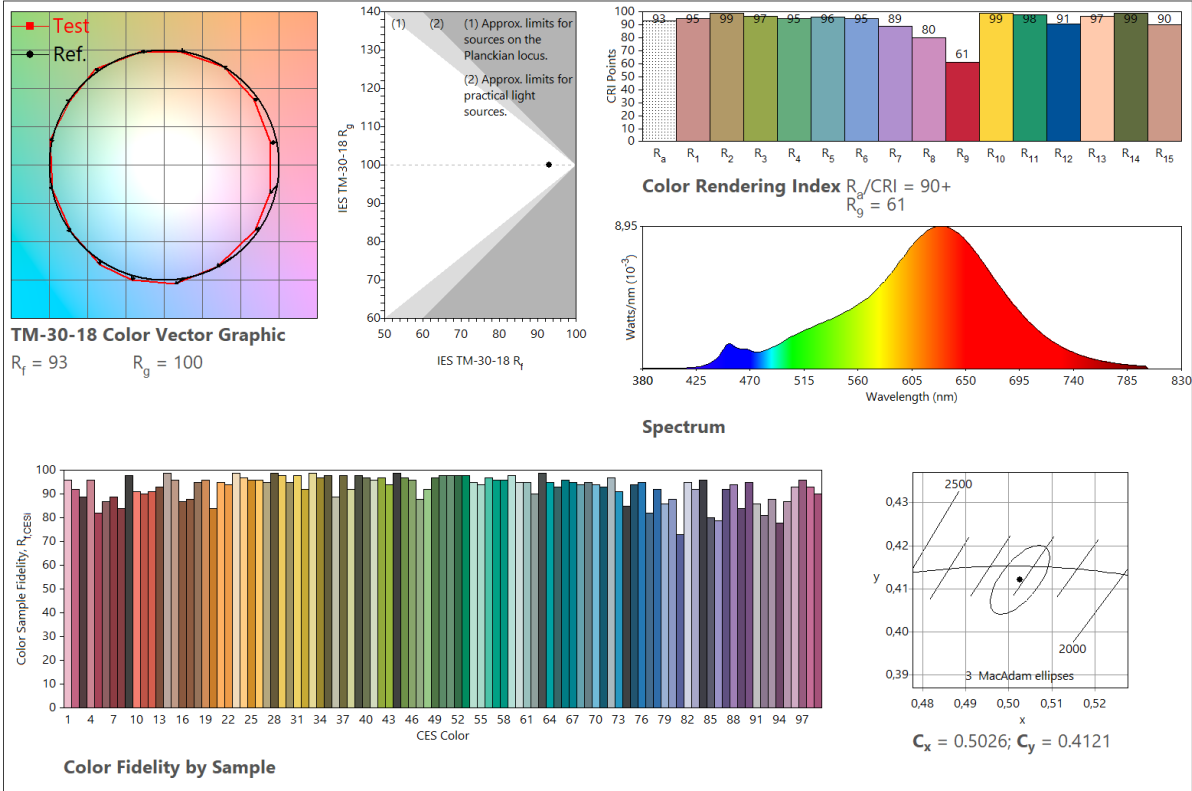
LF600RGB-G5-06	Dom. λ (nm)	Luminous Flux per meter lm/m	Power W/m	Current A/m	Luminous Efficacy lm/W	Performance Temp. Tp °C	Length m
● R	620	190	6.6	0.275	29	30	6
● G	530	320	5	0.208	64	30	6
● B	470	64	4.8	0.200	13	30	6

LF1300RGBW	Nominal CCT (White only)	CRI	Luminous Flux lm/m	Power W/m	Current A/m	Efficacy lm/W	Performance Temp. Tp °C	Length m
LF1300RGBW-G1-922-05	● 2200 K	>90	1163	19.8	0.817	78	45	5.1
LF1300RGBW-G1-927-05	● 2700 K	>90	1208	18.8	0.775	94	45	5.1
LF1300RGBW-G1-930-05	● 3000 K	>90	1218	18.8	0.775	95	45	5.1
LF1300RGBW-G1-940-05	● 4000 K	>90	1278	18.8	0.775	103	45	5.1
LF1300RGBW-G1-965-05	● 6500 K	>90	1243	18.8	0.775	99	45	5.1

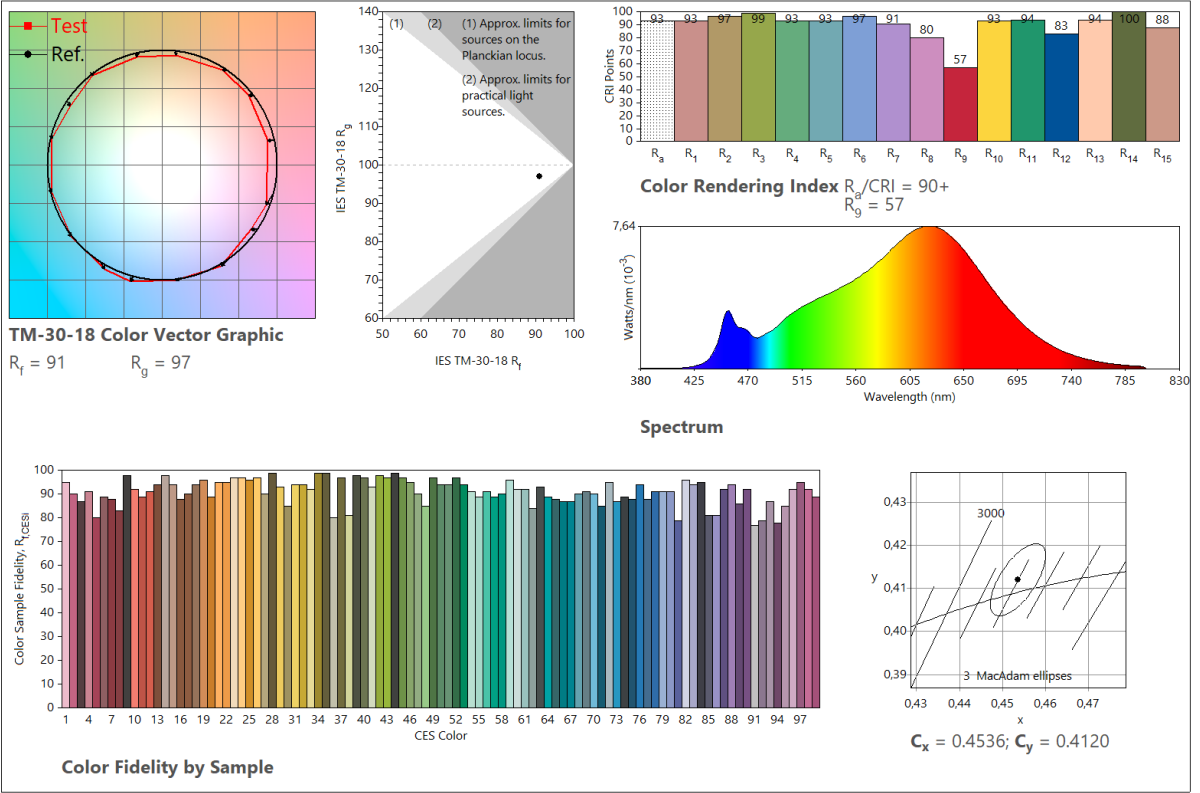
LF1300RGBW	Dom. λ (nm)	Luminous Flux per meter lm/m	Power W/m	Current A/m	Luminous Efficacy lm/W	Performance Temp. Tp °C	Length m
● R	622	131.5	4.7	0.195	28	45	5.1
● G	534	328	4.6	0.192	71	45	5.1
● B	468	33	1.7	0.070	19	45	5.1
○ White (922 version)	-	670	8.8	0.367	76	45	5.1

Color output data

LF1300RGBW-G1-922



LF1300RGBW-G1-927



LF1300RGBW-G1-930

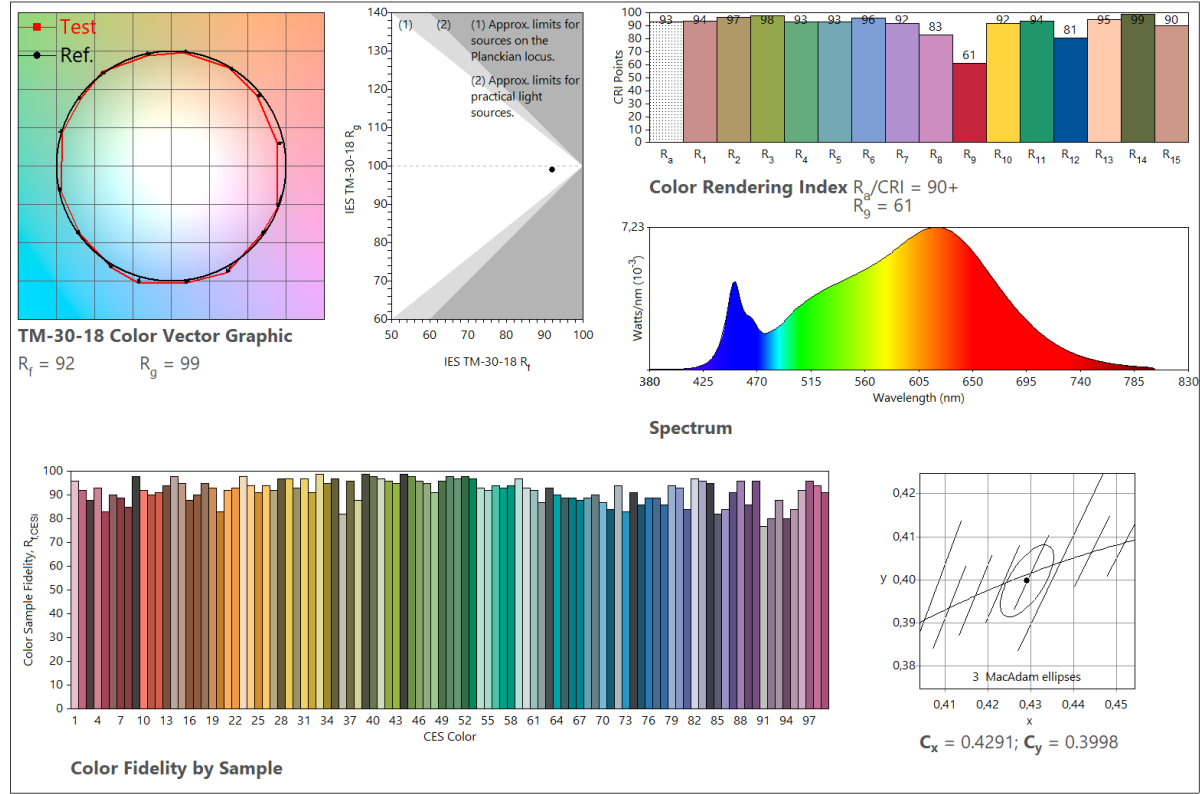


Figure 1: Color rendering properties of the LED light source.

(a) **TM-30-18 Color Vector Graphic**: The color vector locus (red line) is plotted against the reference locus (black line) on a color vector diagram. The color vector locus is a red line that follows the reference locus (black line) closely, indicating high color rendering performance.

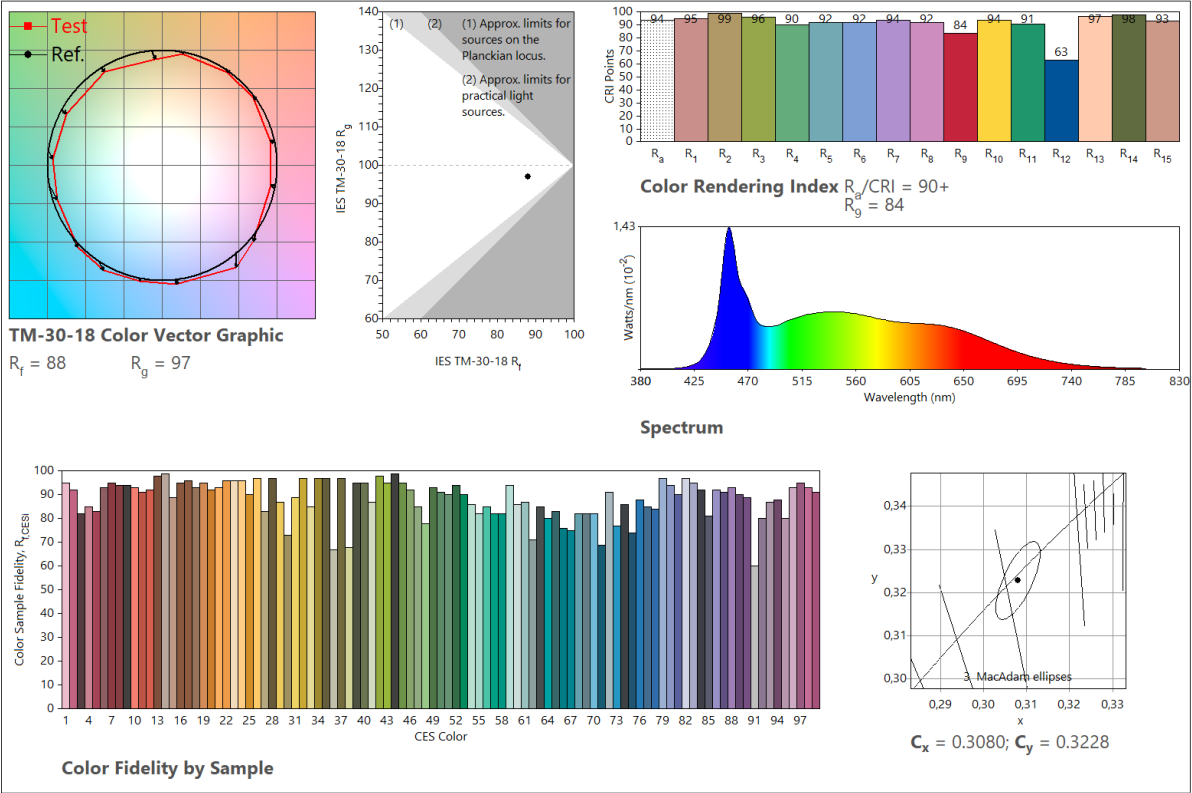
(b) **TM-30-18 R_f and R_g values**: R_f = 90, R_g = 97.

(c) **Color Rendering Index (CRI) bar chart**: The CRI values for various color samples (R₁ to R₁₅) are shown. The CRI values are generally high, ranging from approximately 85 to 95.

(d) **Spectrum graph**: The power spectrum (Watts/nm) is plotted against wavelength (nm). The spectrum shows a broad peak around 450 nm and a sharp peak around 650 nm.

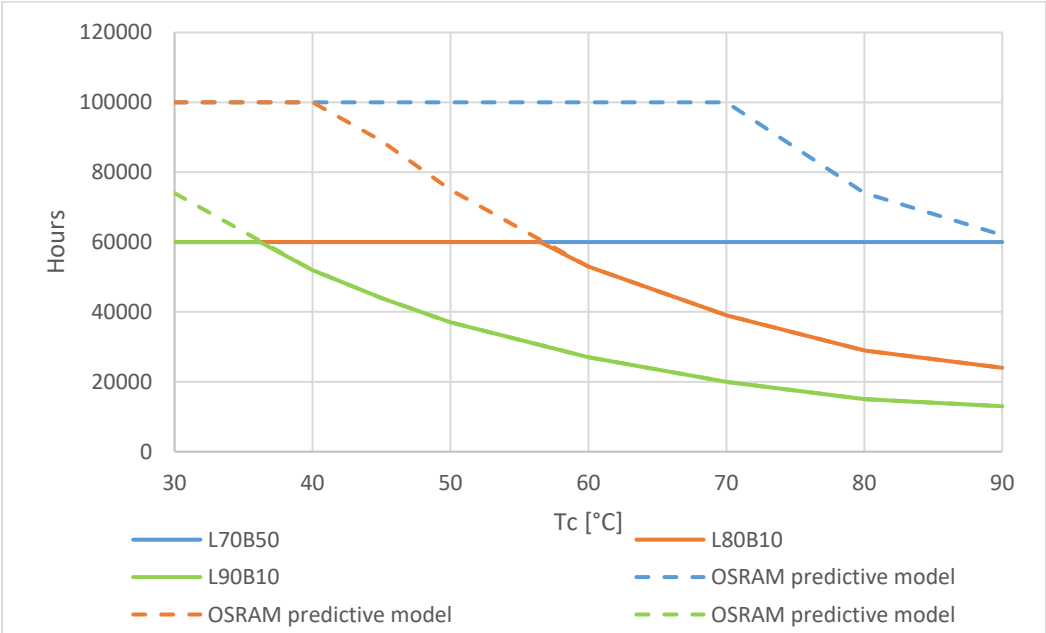
(e) **MacAdam ellipses graph**: The color rendering properties (C_x, C_y) of the LED light source are plotted against the MacAdam ellipses. The C_x and C_y values are approximately 0.3782 and 0.3813, respectively.

LF1300RGBW-G1-965



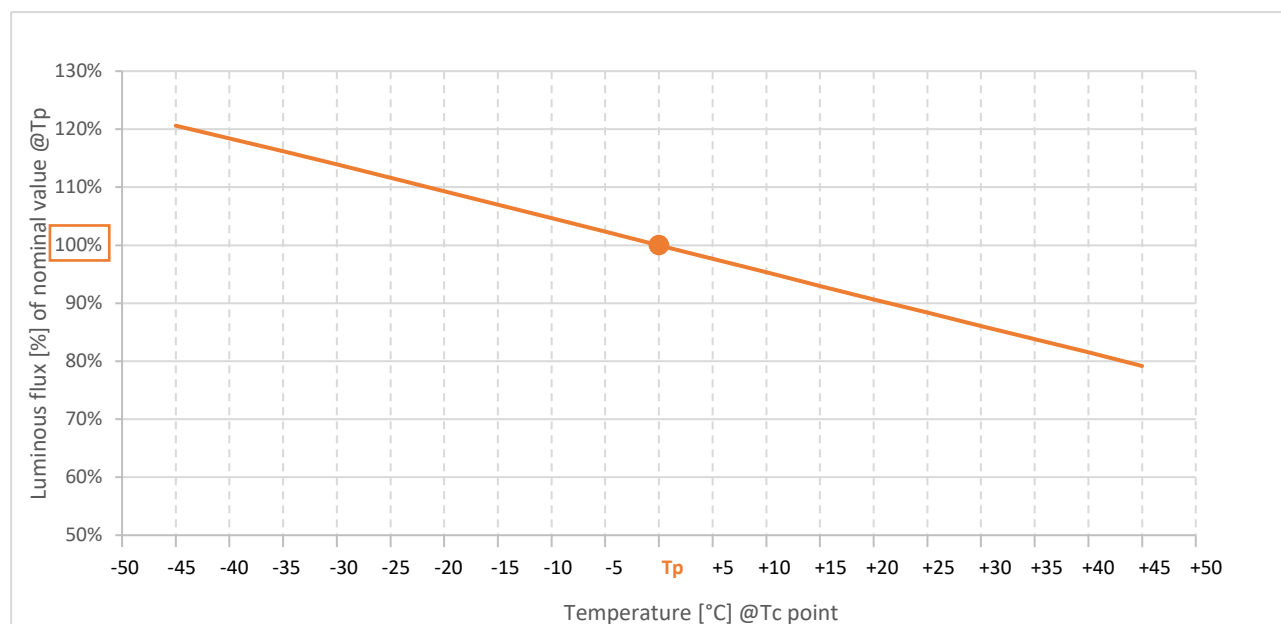
Lifetime

LF1300RGBW – White LED



Luminous Flux vs Tc temperature

LF1300RGBW



Note: Values applicable only for White CCTs.

Light flux varies with the temperature measured @Tc point; nominal values is given @Tc = Tp. Flux increases when Tc decreases.

Order Code

Product description	Product code	Dimensions (length x width x height)	EAN10 Package content
LF600RGB-G5-06	4062172283281	241 x 195 x 205 mm	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-922-05	4062172283724	241 x 195 x 205 mm	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-927-05	4062172283748	241 x 195 x 205 mm	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-930-05	4062172283762	241 x 195 x 205 mm	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-940-05	4062172283786	241 x 195 x 205 mm	1x LED strip pre-soldered wires both ends
LF1300RGBW-G1-965-05	4062172283809	241 x 195 x 205 mm	1x LED strip pre-soldered wires both ends

Tracks System compatibility

The table reports the maximum recommended ambient temperature for each listed track in combination with LF600RGB/1300RGBW, in case of surface or recessed mounting. In these conditions the expected Tc of LED strip is the maximum allowed.

				SURFACE MOUNTING		RECESSED MOUNTING	
				LF600RGB	LF1300RGBW	LF600RGB	LF1300RGBW
Track Type	Product description	Product code (EAN)		T Amb. °C	T Amb. °C	T Amb. °C	T Amb. °C
 Slim Track	LF-LTS-2000	4062172207300		50	45	50	40
 Slim Track	FX-QMS-G1-TU15H6-300	4052899448865		50	40	50	35
 Slim Track	FX-QMS-G1-TU15H6W3-300	4052899448889		50	40	50	35
 Slim Track	FX-QMS-G1-TU16H12-300	4052899448964		50	45	50	40
 Slim Track	FX-QMS-G1-TU16H12W3-300	4052899448988		50	45	50	40
 Slim Track	FX-QMS-G1-TR19H16-300	4052899449008		50	45	50	40
 Slim Track	FX-QMS-G1-TU16H12LS-300	4052899449046		50	45	50	40
 Slim Track	FX-QMS-G1-T45D19H19-300	4052899448667		50	45	50	42
 Wide Track	FX-QMW-G1-TK30D46H27-300	4052899448827		50	50	50	50
 Wide Track	FX-QMW-G1-TU26H8-300	4052899448643		50	50	50	45
 Wide Track	FX-QMW-G1-TU26H25W10-300	4052899448773		50	50	50	50
 Wide Track	FX-QMW-G1-TU26H25W2-300	4052899448841		50	50	50	50
 Wide Track	FX-QMW-G1-TU26H25-300	4052899448803		50	50	50	50

Note: the table is for application evaluation only; always ensure that Tc do not exceed the maximum allowed value.

For further information please write to support-ds@osram.com or consult our Flex Configurator at www.osram.com/flex-configurator

Disclaimer

Subject to change without notice. Errors and omission excepted. Make sure to use the most recent release. All values are average typical and cannot be used as reference for compliance tests. Always refer to the official data on web site: www.osram.com

* The color uniformity shown is a result of internal theoretical and statistical evaluation under specific conditions; it is intended to provide our customers with an estimation of color uniformity in real applications. Despite LEDs used in OSRAM strips are single BIN 3 SDCM ellipse, their careful combination in a LED strip with proper manufacturing process, results in a mixed light through a diffusive material which is within a 2SDCM ellipse, with a probability greater than 90%.

Due to variability of each single chip and statistical meth, this indication cannot be considered as legally binding. The guaranteed color consistency claim can be found inside the official data sheets of every product.

** Always ensure that Tc will not exceed the maximum allowed value.

OSRAM GmbH

Head Office:

Marcel-Breuer-Strasse 6
80807 Munich, Germany
Phone +49 89 6213-0
Fax +49 89 6213-2020
www.osram.com

OSRAM