

BRIGHTTEK

electronica 2014 (11-14 Nov 2014)

Stand Build-up



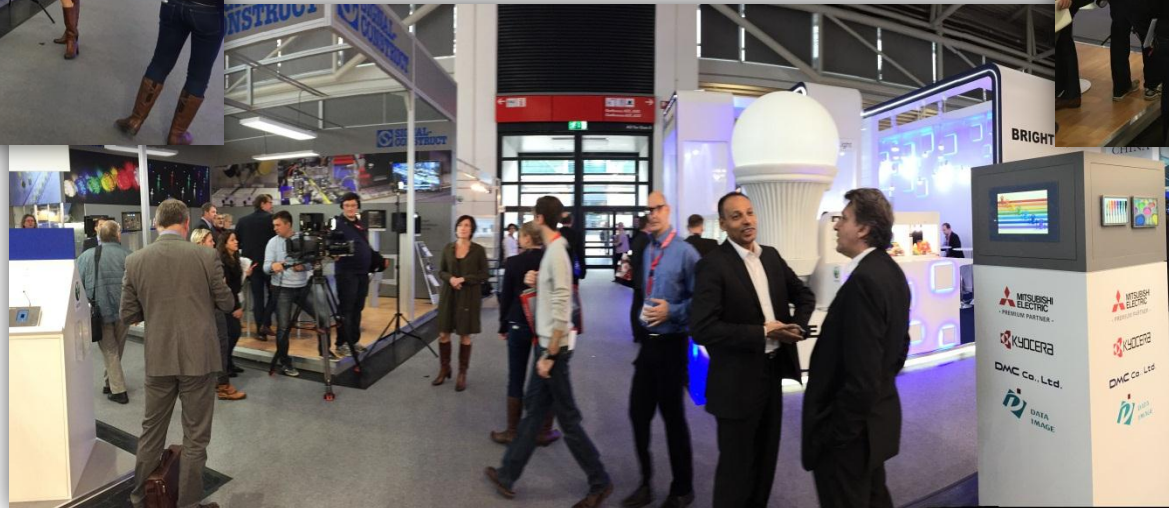
Stand Overall



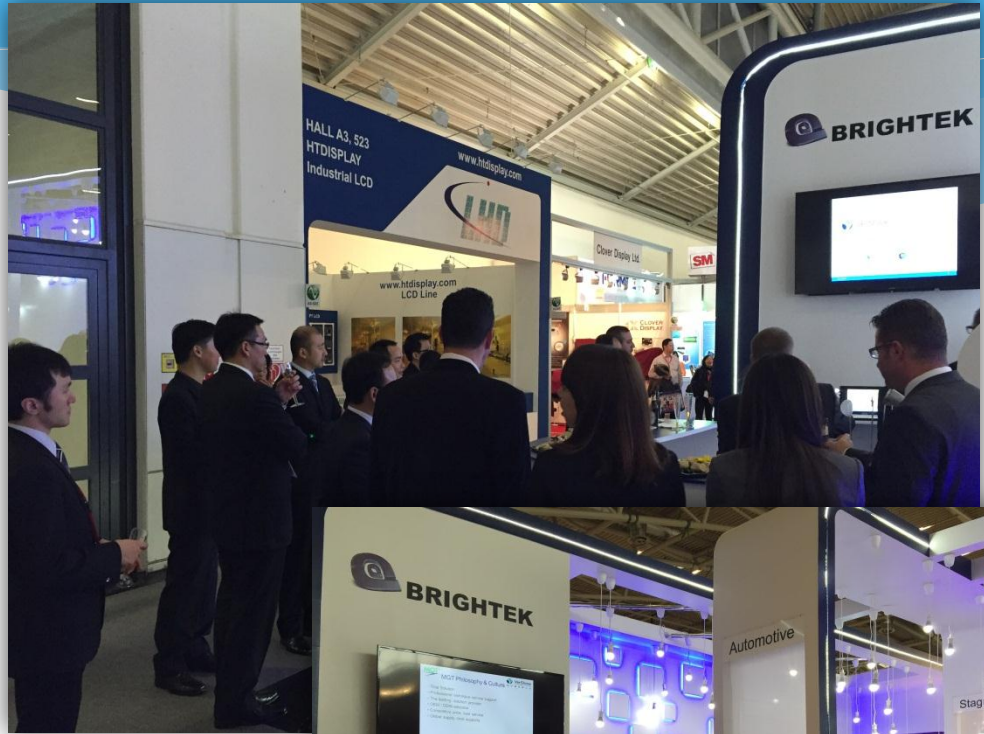
We are on WebTV

for 6 seconds (from 4'04')

<https://www.youtube.com/watch?v=P76fd54KSSY&feature=youtu.be>



Reception Area



Main Demonstration Area - part 1

2016 & 3535 Series

Brightek's 1W 2016 and 1.3W 3535, using Flip-Chip and eutectic die bonding on ceramic substrate, providing excellent thermal path.

Flip-Chip
Eutectic Die Bonding
Thermal Pad
Substrate

2016
3535

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Secondary Lens

Brightek provides secondary lens solution for high-power 1W 2016 (warm/cool white plus blue light), 3535 1.3W ceramic LED, and 5252 4-12W ceramic LED.

Secondary Lens Design for Ceramic LED

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5252 4-12W Series

Brightek's 5252 multi-chip LED is available in single white (cool white/natural white/warm white), duo-white (cool & warm white), and in full colour WRGB and true colour RGB.

5252 WRGB
5252 Duo White

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9090 12-24W Series

Brightek's 5252 and 9090 are available in duo-white package as well as single white colour.

Two parts of cool white and warm white arranged diagonally, allow no dark areas when only one colour is lighted up. By adjusting the current, users can achieve mixing full range of white colours for the indoor and decorative application.

9090 Duo White

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PCB / CHIP LED

Brightek's new 9008F Series provides a focus light source with flat surface without side emitting package. Ideal for IC applications which require narrow viewing angle and precise point of light source, such as barcodes, switch, indicator, or backlighting for LCD.

PCB / Chip LED

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PLCC SMD

Wavelength (nm) vs. Power (mW)

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3030 1W Series

Brightek's 3030 now is available with Macdonell Filter having 1 Macdonell Filter "Sheet" represents 1.000 (Standard Deviation of Color Matching).

Macdonell Filter - Color
Macdonell Filter - White

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Ultraviolet (UV) LED

UV LED Spectral Graph

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AC LED & JC-Embedded COB

Brightek offers advanced AC LED and JC-Embedded COB (CCOB) LED light engine. Simplify the circuit design and save on components and assembling cost.

AC LED Structure
JC-Embedded COB Structure

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Chip-on-Board (COB)

Chip-on-board (COB) is a multi-chip light source, can reduce uncomfortable glare compared to LED modules with several individual light points.

COB LED Module

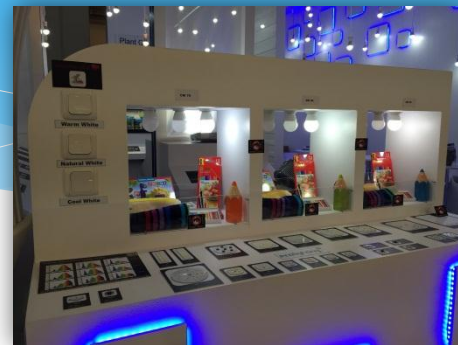
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Main Demonstration Area - part 2

The display area features ten panels, each dedicated to a specific LED technology:

- Side View & Reverse Mount:** Shows LED packages with side and reverse views, highlighting their design flexibility.
- LED IC Driver:** Promotes cooperation with StarChip from Taiwan, offering comprehensive LED IC driver solutions for various applications like lighting, backlighting, and displays.
- K1 1-3W Series:** Features the K1 series available in various colors and sizes, including K1 Color and UV, K1 30°, K1 60°, and K1 120°.
- RGB Full Colour LED:** Focuses on RGB Full Colour LEDs, including SMD LEDs and RGB for Display applications, with a graph showing beam spread and distance.
- Narrow Viewing Angle & SMD with Lens:** Displays narrow viewing angle LEDs and SMD LEDs with lenses, showing their beam spread characteristics.
- PTH Through Hole:** Offers a wide range of PTH Through Hole LED lamp solutions in various shapes, colors, and viewing angles.
- High Voltage LED:** Promotes high voltage LEDs with low driving current, reducing AC-DC conversion losses.
- Dot Matrix & LED Display:** Features dot matrix and PTH SMD numeral displays, including alpha-numeric, side view, graphic, and custom displays.
- Superflux:** Shows Superflux (pinhole) LEDs available in various colors, bi-colors, full colors, IR, and UV, with a color spectrum graph.
- Infrared (IR) LED:** Displays infrared LEDs, including SMD and PTH types, with technical specifications.

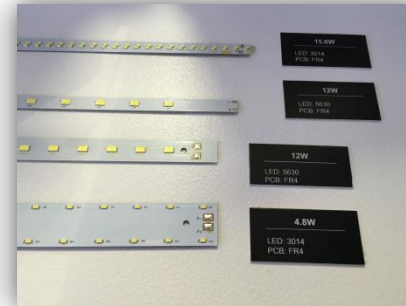
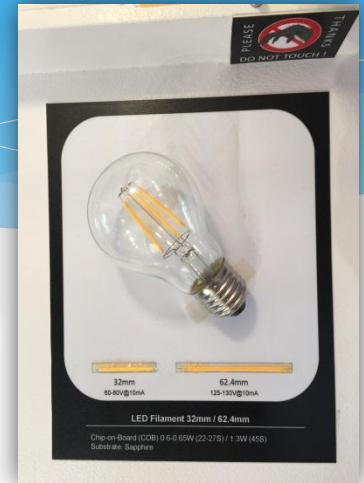
CRI Area



Lighting Area



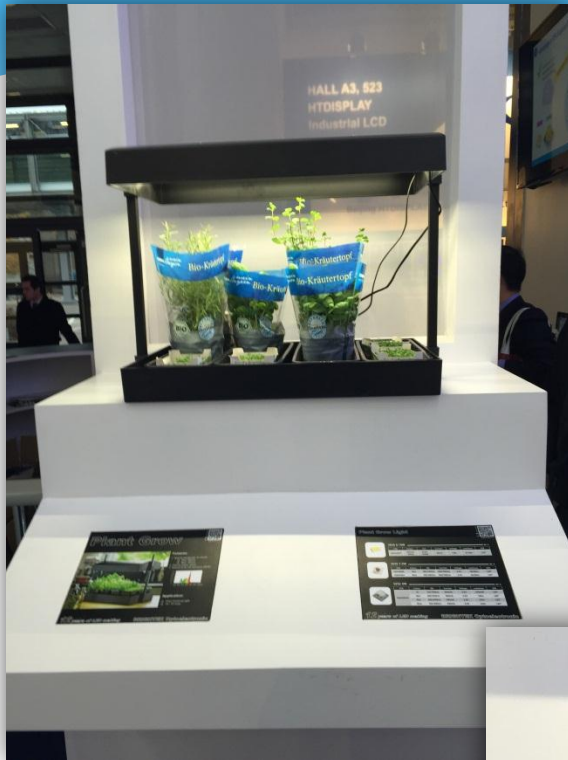
Modules Area





Commercial Lightings



HOT Topics - plants

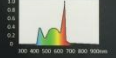


Plant Grow

Features:

- Special wavelength for plants:
 - Red: 660nm
 - Blue: 455nm
- Various power option
- Natural white full spectrum (2835):
 - 1.3
 - 0.8
 - 0.4
 - 0.2
 - 0



Application:

- Plant Growing Light
- T2 / T3 Tube

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Plant Grow Light



2835 0.15W

P/N	Colour	CCF	Current	Voltage	Luminous	V/A
NM12037	Natural	3715-4763K	20mA	2.8V	27.5lm	120°

3535 1-3W

P/N	Colour	WL	Current	Voltage	Luminous	V/A
NM19583	Red	650-670nm	350/700mA	2.2V	38.70lm	120°
NM19584	Blue	450-460nm	350/700mA	3.4V	14.70lm	120°

5252 4W

P/N	Colour	WL	Current	Voltage	Luminous	V/A
in		710-740nm	350mA	2.0V	270lmW	120°
NM20644	Red	650-670nm	350mA	2.2V	13lm	120°
	Red	650-670nm	350mA	2.2V	13lm	120°
	Blue	450-460nm	350mA	3.3V	12lm	120°

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HOT Topics - automotive



Automotive




Features:

1. AEC-Q101 Automotive standard *
2. High reliability and performance
3. NiP/Au or Tin-Plated
4. Eutectic die-bonding (3535)
5. Flip-chip (3535FP)
6. Secondary optics option

Application:

- Daytime Running Light
- Reading Light
- Stop Light
- Car Door Light
- Turning Light
- Head Lamp
- Shopping Light
- Mirror Light

* Available from Q1 2018

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Automotive



3528 0.1W

P/N	Colour	WL	Current	Voltage	Luminous	V/A
NOR10580P	Red	615-630nm	50mA	2.2V	2500mcd	120°
NDY10581P	Yellow	585-597nm	50mA	3.2V	2100mcd	120°

3030 0.25-0.5W

P/N	Colour	WL/CCT	Current	Voltage	Luminous	V/A
NOR10584P	Red	615-630nm	120mA	2.2V	15lm	120°
NOR10583P	Yellow	585-597nm	120mA	2.1V	15lm	120°
NOW10583P	Warm White	1700-2700K	150mA	3.2V	36lm	120°

3535 / 3535FP 1-3W

P/N	Colour	WL/CCT	Current	Voltage	Luminous	V/A
NOR10511	Red	620-630nm	350/700mA	2.4V	60/120lm	120°
NOR10512	Red	620-630nm	350/700mA	2.4V	60/120lm	60°
NDY10512	Yellow	5710-6330K	350/700mA	2.4V	55/93lm	120°
NDY10506	Cool White	5710-6330K	350/700mA	3.0V	130/227lm	120°
NOW10507	Warm White	1600-1800K	350/700mA	3.0V	65/119lm	120°


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HOT Topics - street



Street Light



Features:


1. Eutectic die-bonding process
2. Flip-chip die wire bonding
3. Excellent UV and weather resistant
4. High lumen output
5. Compatible board and 2" lens with leading manufacturers
6. CRI>82
7. LM-80 Standard

Application:

- Street Light
- Park Light
- Outdoor Light
- Architectural Light
- Wall washer

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Street Light



3535FP 1-3W

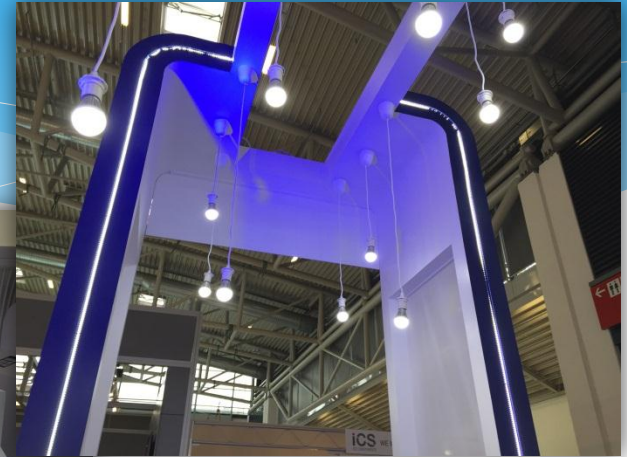
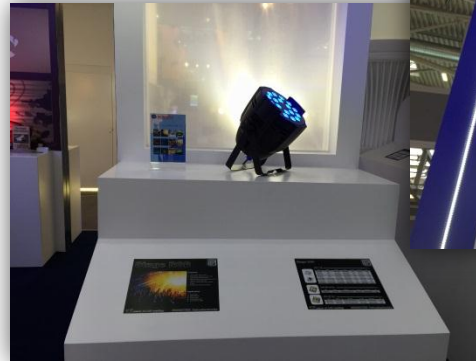
P/N	Colour	CCT	Current	Voltage	Lumens	V/A
NOW10500	Cool White	5710-6930K	350/700mA	3.0V	130/227lm	120°
NOW10501	Cool White	4746-6310K	350/700mA	3.0V	130/227lm	120°
NOW10502	Natural White	3730-4260K	350/700mA	3.0V	125/218lm	120°
NOW10505	Warm White	1980-2240K	350/700mA	3.0V	65/113lm	120°

Modules with Driver

P/N	Colour	CCT	Wattage	Lumens	V/A
NOW9M90-S1.1	Cool White / Natural White	5000/6000K	32W	3450lm	152x62°
NOW9M90-S1.2			64W	6900lm	152x62°
NOW9M90-S1.3			96W	10350lm	152x62°
NOW9M90-S1.4			128W	13800lm	152x62°
NOW9M95-S1.5			160W	17250lm	152x62°
NOW9M95-S1.6			192W	20700lm	152x62°
NOW9M95-S1.7			224W	24150lm	152x62°

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HOT Topics - stage



Stage RGB



3535 1-3W

P/N	Colour	Wavelength	Current	Voltage	Luminous	V/A
NOW0580	Blue	460-470nm	350/700mA	3.4V	25/40lm	120°
NOW0579	Green	520-535nm	350/700mA	3.4V	80/130lm	120°
NOW0578	Red	620-630nm	350/700mA	3.4V	60/102lm	120°
NOW0581	Yellow	584-595nm	350/700mA	2.4V	65/110lm	120°
NOW0588	Cool White	5710-6530K	350/700mA	3.2V	130/227lm	120°
NOW0593	Natural White	3710-4620K	350/700mA	3.2V	110/192lm	120°
NOW0595	Warm White	2725-3045K	350/700mA	3.2V	100/178lm	120°

5252 4W Convex

P/N	Colour	Wavelength	Current	Luminous	V/A
NOM0454	CW/R/G/B	6500K/625/525/462nm	350mA/6e	75/45/75/22lm	130°

5252 4W Flat

P/N	Colour	Wavelength	Current	Luminous	V/A
NOM1250	CW/R/G/B	6500K/625/525/462nm	350mA/6e	75/45/75/22lm	120°
NOW1259	WW/R/G/B	3000K/625/525/462nm	350mA/6e	70/45/75/22lm	120°

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Stage RGB




Features:

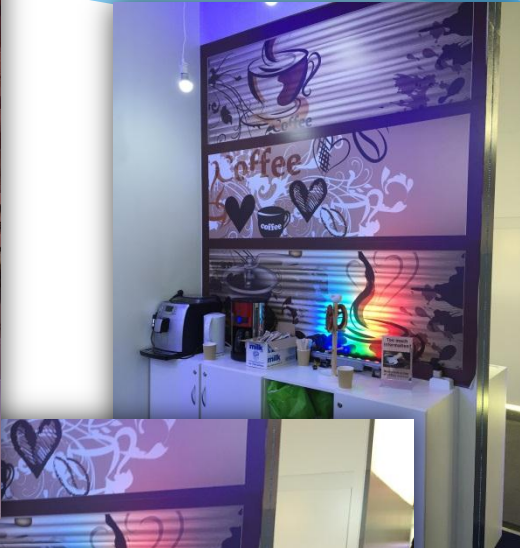
1. High power colour LED
2. Compatible SMD and 2in¹ lens with leading manufacturers
3. WRGB (5252) multi-chips without the hassle of white balance
4. Flat lens (5252) for easier optical design
5. Eutectic die-bonding process

Application:

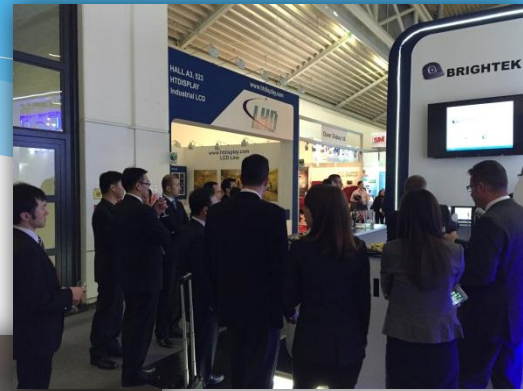
- Spot Light
- Wall Washer
- Stage Light
- Decorating Light
- Architectural Light

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Canteen Area



Friendship





**Thank you very much for your
support in the show**

**We are looking forward to having a
very successful outcome with you**