

APPLICATIONS

- High Speed Linescan
- Web Inspection
- Print Inspection
- Surface Inspection
- Plastic Film Inspection
- Metal Inspection

INDUSTRIES

- Automotive
- Food & Beverage
- Medical
- Packaging
- Pharmaceutical
- Printing
- Semi-conductor
- Solar
- Waste Management
- Wood

High intensity
controllable LED light
lines



VECTOR

KEY FEATURES

- 1 million Lux (Active cooled)
- Excellent uniformity +/-1.5%
- High brightness LED
Light sources
- Available in lengths
up to 5m
- IP54
- Visible and IR as standard
- Custom wavelengths
- Intensity control (RS 485 or 0-10v)
- Thermal cutout protection
- Multiple diffuser options
- Collimated light for long working distances
- Mounting fixtures (Optional)
- Power supplies (Optional)



VECTOR

CONTROL OPTIONS

Vector HB

High Brightness LEDs 10mm Pitch.
Factory set up uniformity of $< \pm 1.5\%$
Stored offset to enable stable dimming over the whole range
Dimming via 0-10v analogue signal

Vector HBC

High Brightness LEDs controlled over RS 485 in 50mm sections
In field adjustment of profile/ uniformity
Pre set dimming and profile storage
Temperature monitoring every 100mm along the profile
Average temperature monitoring
Time run monitoring
Dimming either over the RS 485 or 0-10v

OPTICAL CONFIGURATIONS

FT (Focused Front Light) - Fresnel Lens + Clear Window

LD (Focused Front Light for Specular Reflection) - Fresnel Lens + 1D Diffuser + Clear Window

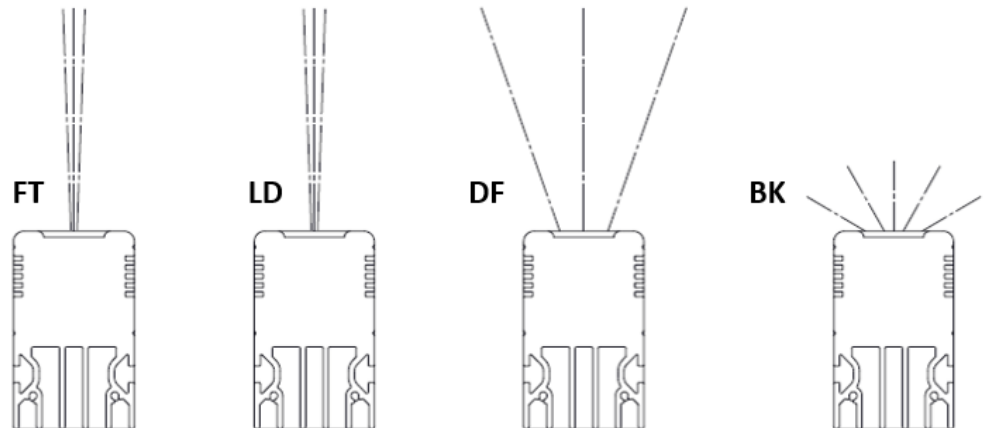
DF (Divergent Front Light) - 1D Diffuser + Diffuse Reflector + Clear Window

BK (Back Light) - 2D Diffuser + Diffuse Reflector + Clear Window

Other optical configurations available upon request

Example: FC (Collimated) FT variant with collimating lens

WF (Front Light)- No Diffuser, No Lens, Reflector and Clear Window



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KEY DATA (Peak Intensity Values FT Configuration)

Color	NWH	WWH	CWH	Red	Blue	IR
Peak Illuminance (kLux)	462	452	515	232	102	n/a
Peak Irradiance (W m ⁻²)	1353	1330	1435	1133	1664	1118
CCT (K)	4700	3300	5650	n/a	n/a	n/a
Peak Wavelength (nm)	n/a	n/a	n/a	627	470	860
Spectral FWHM (nm)	n/a	n/a	n/a	20	20	30

COLOUR RANGE

Standard

Neutral White (NWH), Cool White (CWH), Warm White (WWH)
Red (625nm), Blue (470nm), Green (530nm), IR (850nm)

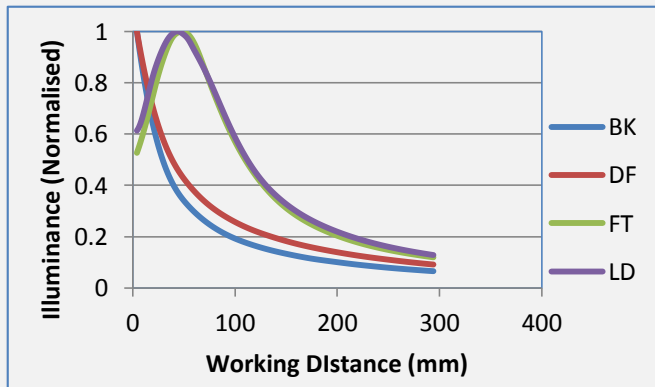
Custom

Custom wavelengths available on request including UV

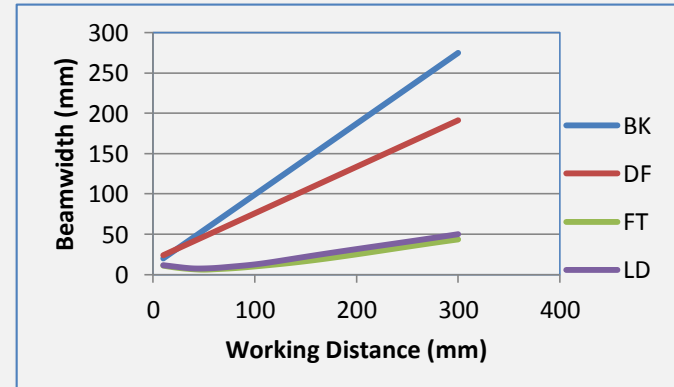


OPTICAL PERFORMANCE

Intensity versus Working distance, 5 metre length, White (normalised):



Line width versus working distance (White)



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ELECTRICAL CHARACTERISTICS

Unit Length (mm)	1000	2000	3000	4000	5000
Maximum Current Draw (A)	4.1	8.2	12.3	16.4	20.5

Power Supply 24V DC (compatible power supplies provided by CVR Lighting)

Dimming Levels 0 - 10 volt
 10 volt = 0%
 0 volt = 100%

ACCESSORIES (Connector version)

Power Cables

VECTOR-PCAB-020 (Standard 2m Power Cable)
 VECTOR-PCAB-050 (Standard 5m Power Cable)
 VECTOR-PCAB-100 (Standard 10m Power Cable)
 Power Supplies and Replacement Diffuser parts available on request.

Control Cables

VECTOR-CCAB-020 (Standard 2m Control Cable)
 VECTOR-CCAB-050 (Standard 5m Control Cable)
 VECTOR-CCAB-100 (Standard 10m Control Cable)

PRODUCT CODES

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Product Family	Version	Wavelength	Optical Configuration	Aperture Length	Connector
Vector	HB HBC	NWH CWH WWH 625 nm 470 nm 850 nm	FT LD DF BK	Defined in cm	Connector (C) or Flying leads (F)*

Example 1:

Vector –High Brightness LEDs- 470nm – Focussed Front light - 2600mm - Flying leads, correspond to Vector-HB-FT-470-260-F

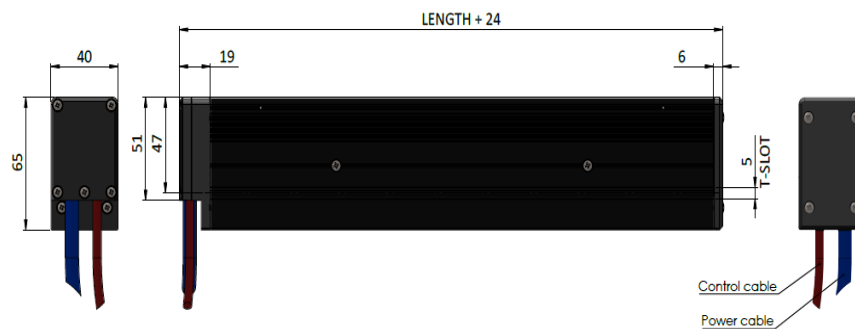
*Flying lead version comes as standard with a 2m power and control cable.

Example 2:

Vector - High Brightness Controlled LEDs – Neutral White - Back Light - 1500mm - Connector, correspond to Vector-HBC-NWH-BK-150-C

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MECHANICAL SPECIFICATIONS

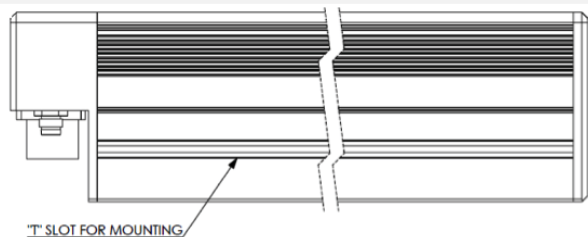


MOUNTING

Mounting is over two T-slots on the adjacent side to the light aperture face.

The nuts (M5) are freely movable over the whole length.

CVR Lighting suggest a minimum of 2 nuts up to 0.5m length plus one more for every additional 0.5m. Additional nuts can be added to the mounting sides if required.



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Specifications are subject to change without notice