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BUSINESS OVERVIEW

Driven by the increasing demand for energy efficient lighting, Venture has, since the early 1980s been a pioneer of light source technology, firstly transforming the HID lighting market and more recently taking advantage of the rapid developments in LED technology to bring you a world class range of LED Lighting products.

As a Venture Lighting customer, you're assured the very best technology combined with the very highest level of service. In short, everything you'd expect from a global leader in the lighting industry. We believe that the best LED products should be complemented by the very best service and support. That's why we strive to offer our customers, large and small, a level of service unequalled in the industry.

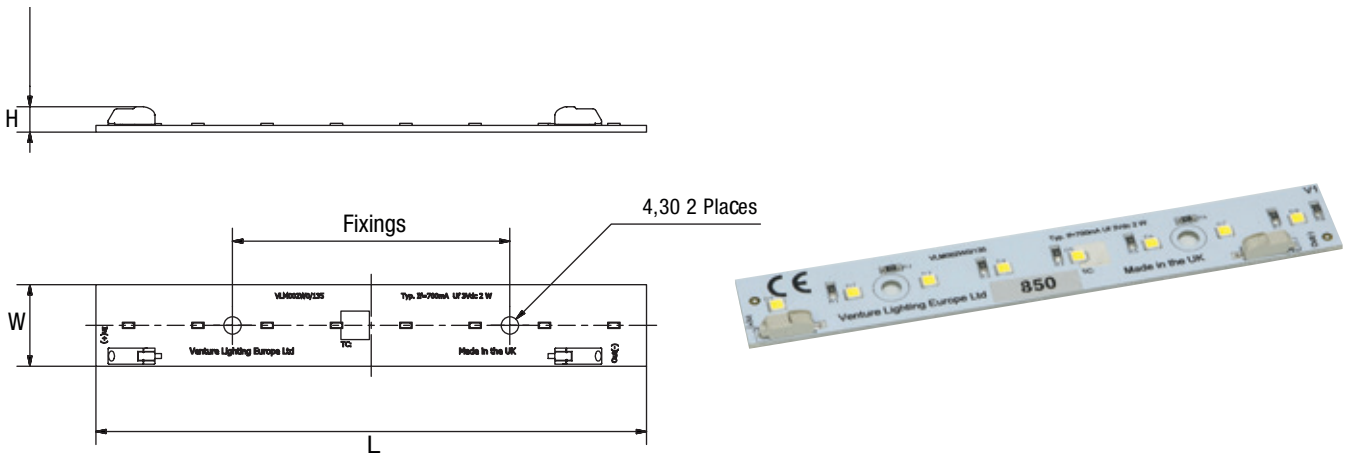
Our UK customer service team supported by our experienced technical department is always there to provide expert product advice and to help you with all your lighting systems requirements.

VLED Linear and square LED modules together with the VLED driver range are designed to replace traditional lighting such as Fluorescent and HiD within luminaires. By utilising the VLED system you will improve light levels for many lighting applications whilst increasing efficiency and reducing maintenance costs.

The VLED system range of components are suited for all types fixtures in all industries covering indoor applications such as recessed, suspension or high Bay, and outdoor such as non-corrosives, bollards, and bulkheads.

LED MODULES

Standard Linear Module - 135mm



A uniquely designed LED array board of only 135mm providing very high lm/W, this board is versatile and ideally used to fit into any small area or bespoke luminaire design. With easy push fit terminals for quick wiring and fixings in the centre of the board, you can be sure a secure fit with a guaranteed heat transfer.

APPLICATIONS

- Emergency Lighting
- Post tops
- Low power floods
- Bespoke product

FEATURES:

- Module efficacy up to 162 lm/W
- Secure mounting of modules with 2 fixings in the centre
- Push-in connectors
- 3 step SDCM

BENEFITS:

- High Efficiency
- Improved heat transfer from LED to heat sink
- Usage of bulk wiring and automated wiring
- No colour shift
- 5 year warranty

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL018	135x20mm LED 840	2.1	310	148	80	350-1050	2.4-3.3	135 x 20	68
MDL019	135x20mm LED 850	2.1	340	162	80	350-1050	2.4-3.3	135 x 20	68
MDL020	135x20mm Duplex LED 840	4.2	610	145	80	350-1050	5.7-7.1	135 x 20	68
MDL021	135x20mm Duplex LED 850	4.2	630	150	80	350-1050	5.7-7.1	135 x 20	68

Pages 20-23 for further module performance data

Lifetime
Under nominal conditions
of $T_s < 80^\circ\text{C}$ and $I_f = 700\text{mA}$

L70 B50 > 60,400Hrs

L70 B10 > 60,400Hrs

L80 B50 > 60,400Hrs

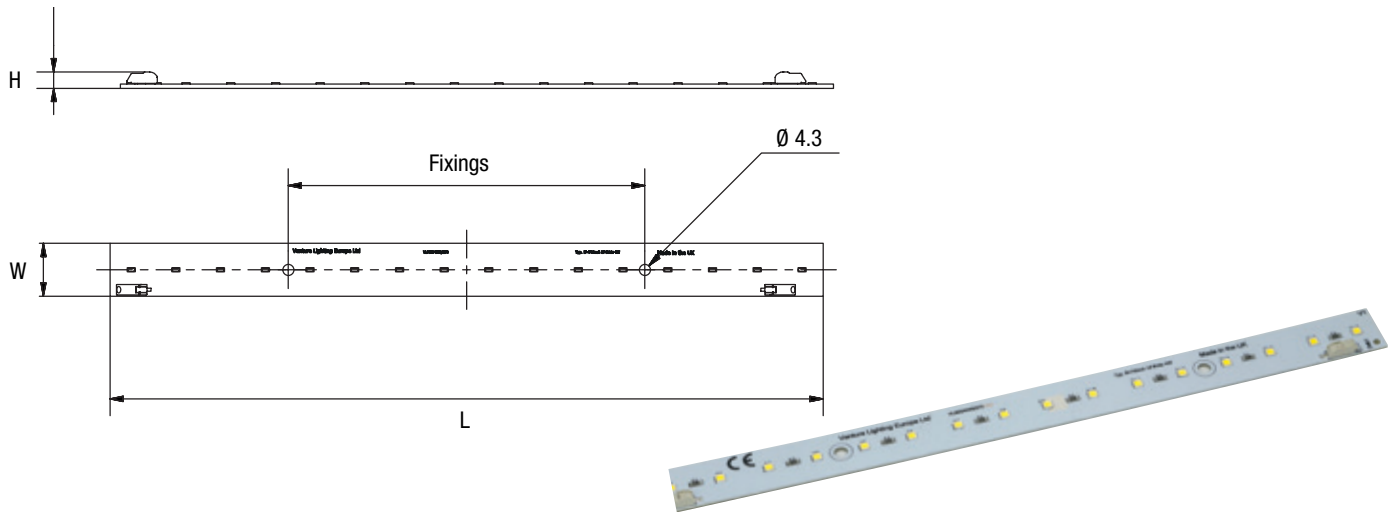
L80 B10 > 60,400Hrs

L90 B50 > 47,000Hrs

L90 B10 > 25,000Hrs

LED MODULES

Standard Linear Module - 270mm



VLED Linear LED modules have been designed to replace fluorescent tubes in luminaires such as recessed, batten and non-corrosive. Providing a very high lm/W, easy fitment and the ability to configure high lumen packages by using any number of modules from the VLED Standard linear module range (Pg 3,4 and 5), gives the versatility to manufacture any length product required.

APPLICATIONS

- Recessed
- Modular
- Non Corrosive
- Batten

FEATURES:

- Module efficacy up to 160 lm/W
- Secure mounting of modules with 2 fixings in the centre
- Push-in connectors
- 3 step SDCM

BENEFITS:

- High Efficiency
- Improved heat transfer from LED to heat sink
- Usage of bulk wiring and automated wiring
- No colour shift
- 5 year warranty

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL022	270x20mm LED 840	4.2	620	148	80	350-1050	4.8-6.6	270 x 20	135
MDL023	270x20mm LED 850	4.2	670	160	80	350-1050	4.8-6.6	270 x 20	135
MDL024	270x20mm Duplex LED 840	8.4	1210	144	80	350-1050	11.4-14.2	270 x 20	135
MDL025	270x20mm Duplex LED 850	8.4	1250	149	80	350-1050	11.4-14.2	270 x 20	135

Pages 20-23 for further module performance data

Lifetime
Under nominal conditions
of $T_s < 80°C$ and $I_f = 700mA$

L70 B50 > 60,400Hrs

L70 B10 > 60,400Hrs

L80 B50 > 60,400Hrs

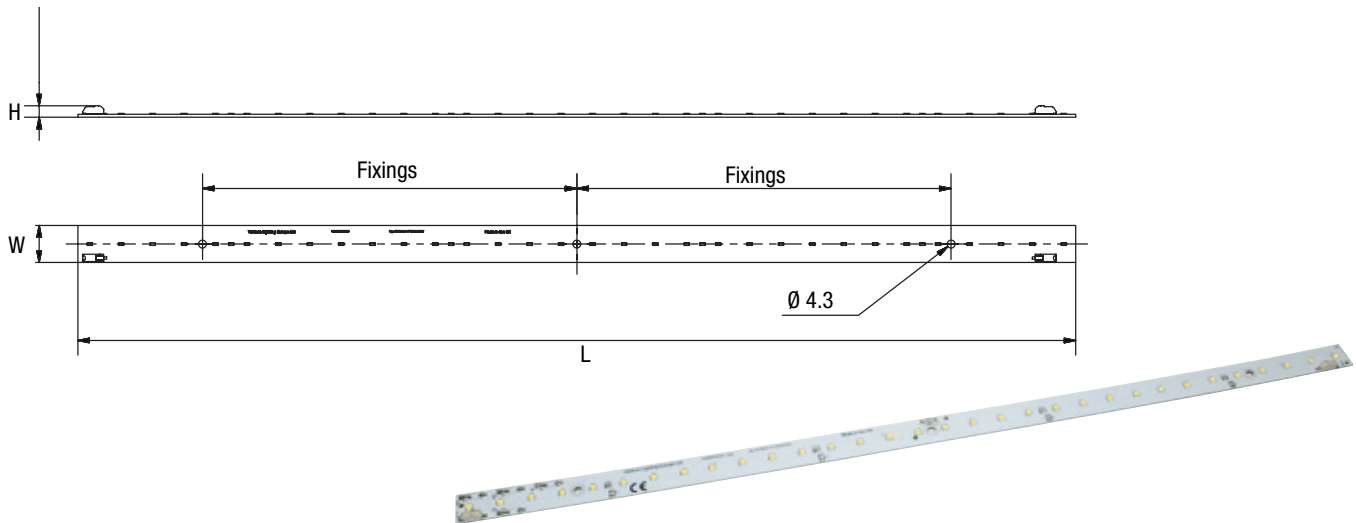
L80 B10 > 60,400Hrs

L90 B50 > 47,000Hrs

L90 B10 > 25,000Hrs

LED MODULES

Standard Linear Module - 540mm



VLED Linear LED modules have been designed to replace fluorescent tubes in luminaires such as recessed, batten and non-corrosive. Providing a very high lm/W, easy fitment and the ability to configure high lumen packages by using any number of modules from the VLED Standard linear module range (Pg 3,4 and 5), gives the versatility to manufacture any length product required.

APPLICATIONS

- Recessed
- Modular
- Non Corrosive
- Batten

FEATURES:

- Module efficacy up to 158 lm/W
- Secure mounting of modules with 3 fixings in the centre
- Push-in connectors
- 3 step SDCM

BENEFITS:

- High Efficiency
- Improved heat transfer from LED to heat sink
- Usage of bulk wiring and automated wiring
- No colour shift
- 5 year warranty

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL026	540x20mm LED 840	8.4	1230	149	80	350-1050	11-13	540 x 20	202.5, 405
MDL027	540x20mm LED 840 Emergency	9.5	1230	129	80	350-1050	13-15	540 x 20	202.5, 405
MDL028	540x20mm LED 850	8.4	1330	158	80	350-1050	11-13	540 x 20	202.5, 405
MDL029	540x20mm LED 850 Emergency	9.5	1330	140	80	350-1050	13-15	540 x 20	202.5, 405
MDL016	540x20mm Duplex LED 840	17	2420	144	80	350-1050	24-26	540 x 20	202.5, 405
MDL017	540x20mm Duplex LED 850	17	2490	146	80	350-1050	24-26	540 x 20	202.5, 405

Pages 20-23 for further module performance data

Lifetime
Under nominal conditions
of Ts < 80°C and If = 700mA

L70 B50 > 60,400Hrs

L70 B10 > 60,400Hrs

L80 B50 > 60,400Hrs

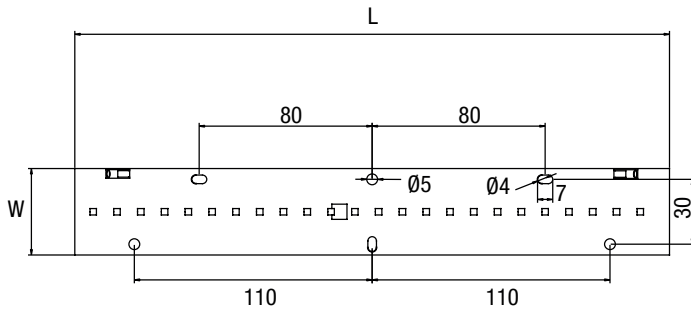
L80 B10 > 60,400Hrs

L90 B50 > 47,000Hrs

L90 B10 > 25,000Hrs

LED MODULES

Linear High Output Module - 275mm



VLED Linear High Output LED modules have been designed to replace fluorescent tubes or Metal Halide lamps in luminaires such as High Bays and Low Bays. The High Output modules provide high lm/W. The LED's are mounted on an Aluminium substrate improving thermal management thus reducing costs to the luminaire design. They offer the ability to be linked together with the rest of the VLED High Output linear module range giving the versatility to manufacture any length/ width product requiring a high lumen package

APPLICATIONS

- High Bay
- Low Bay
- Non Corrosive

FEATURES:

- Aluminium substrate for improved thermal management reducing fixture costs
- Module efficacy up to 142 lm/W
- Push-in connectors
- 3 step SDCM

BENEFITS:

- High Output
- High efficiency
- Increased manufacturing speeds
- Long life
- Versatile
- 5 year warranty
- No Colour shift

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL009	275x40mm Duplex LED 840	17	2360	139	80	350-1050	24-26	275 x 40	See Diagram
MDL010	275x40mm Duplex LED 850	17	2420	142	80	350-1050	24-26	275 x 40	See Diagram

Pages 20-23 for further module performance data

Lifetime
Under nominal conditions
of Ts < 80°C and If = 700mA

L70 B50 > 60,400Hrs

L70 B10 > 60,400Hrs

L80 B50 > 60,400Hrs

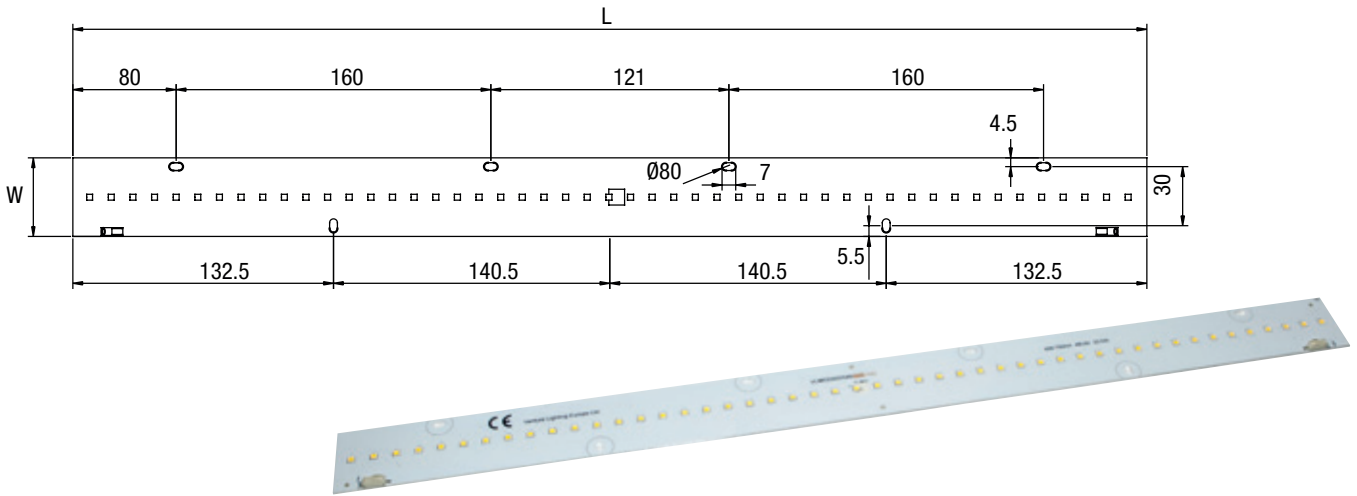
L80 B10 > 60,400Hrs

L90 B50 > 47,000Hrs

L90 B10 > 25,000Hrs

LED MODULES

Linear High Output Module - 546mm



VLED Linear High Output LED modules have been designed to replace fluorescent tubes or Metal Halide lamps in luminaires such as High Bays and Low Bays. The High Output modules provide High lm/W. The LED's are mounted on an Aluminium substrate improving thermal management and reducing costs to the luminaire design. They offer the ability to be linked together with the rest of the VLED High Output linear module range giving the versatility to manufacture any length/ width product requiring a high lumen package.

APPLICATIONS

- High Bay
- Low Bay
- Non Corrosive

FEATURES:

- Aluminium substrate for improved thermal management reducing fixture costs
- Module efficacy up to 144 lm/W
- Push-in connectors
- 3 step SDCM

BENEFITS:

- High Output
- High efficiency
- Increased manufacturing speeds
- Long life
- Versatile
- 5 year warranty
- No Colour shift

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL011	546x40mm Duplex LED 840	33.5	4720	141	80	350-1050	48-55	546 x 40	See Diagram
MDL005	546x40mm Duplex LED 850	33.5	4840	144	80	350-1050	48-55	546 x 40	See Diagram

Pages 20-23 for further module performance data

Lifetime
Under nominal conditions
of $T_s < 80^\circ\text{C}$ and $I_f = 700\text{mA}$

L70 B50 > 60,400Hrs

L70 B10 > 60,400Hrs

L80 B50 > 60,400Hrs

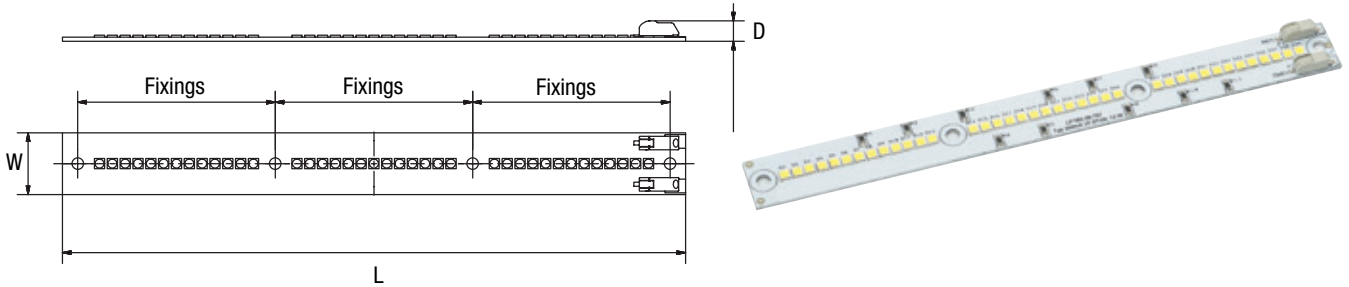
L80 B10 > 60,400Hrs

L90 B50 > 47,000Hrs

L90 B10 > 25,000Hrs

LED MODULES

Standard Linear Module - 182mm



VLED Linear LED 182 module has been designed to replace double ended halogen lamps in luminaires such as floodlights. The Highly efficient module provides High lm/W. The LED's are mounted on an Aluminium substrate improving thermal management and reducing costs to the luminaire design.

APPLICATIONS

- Domestic Floodlight

FEATURES:

- Aluminium substrate for improved thermal management reducing fixture costs
- Module efficacy up to 137 lm/W
- Push-in connectors
- 3 step SDCM

BENEFITS:

- High Output
- High efficiency
- Increased manufacturing speeds
- Long life
- Versatile
- 5 year warranty
- No Colour shift

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL030	182x20mm Duplex LED 850	14.2	1940	137	80	700	40	182 x 18	3 @ 57.67

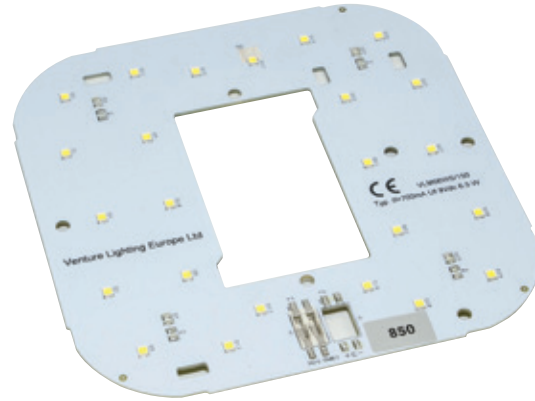
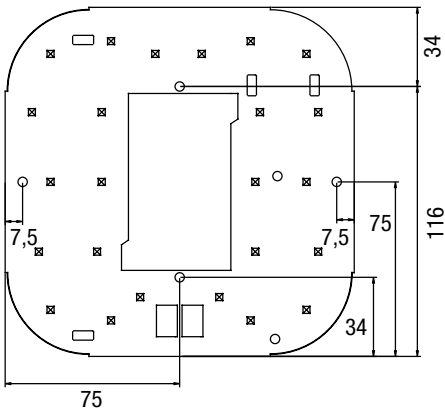
Pages 20-23 for further module performance data

Lifetime
Under nominal conditions
of $T_s < 80^\circ\text{C}$ and $I_f = 700\text{mA}$

L70 B50	> 60,400Hrs
L70 B10	> 60,400Hrs
L80 B50	> 60,400Hrs
L80 B10	> 60,400Hrs
L90 B50	> 47,000Hrs
L90 B10	> 25,000Hrs

LED MODULES

Square Module - 150mm x 150mm



VLED Square 150 X 150 LED modules have been designed to replace traditional 16W 2D fluorescent lamps. Featuring reverse mounted terminals on the back of the board so no visible wiring and a knock out in the centre for a microwave sensor, the module provides a highly efficient, versatile and easy to manufacture option.

APPLICATIONS

- Bulkheads
- Bollards
- Post tops

FEATURES:

- Terminals on the back for easy wiring
- Module efficacy up to 152 lm/W
- Knock out in the centre for sensor
- Multiple fixing centres to fit all bulkheads
- 3 step SDCM

BENEFITS:

- High Output
- High efficiency
- Increased manufacturing speeds
- Long life
- Versatile
- 5 year warranty
- No Colour shift

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL031	150X150mm LED 840	6.6	930	141	80	350-1050	7-10	150 x 150	See Diagram
MDL032	150X150mm LED 840 Emergency	7.6	930	122	80	350-1050	9-12	150 x 150	See Diagram
MDL033	150X150mm LED 850	6.6	1000	152	80	350-1050	7-10	150 x 150	See Diagram
MDL034	150X150mm LED 850 Emergency	7.6	1000	132	80	350-1050	9-12	150 x 150	See Diagram

Pages 20-23 for further module performance data

universal fixing centres for most existing luminaires



Reverse mounted connector for ease of wiring

Lifetime
Under nominal conditions
of $T_s < 80°C$ and $I_f = 700mA$

L70 B50 > 60,400Hrs

L70 B10 > 60,400Hrs

L80 B50 > 60,400Hrs

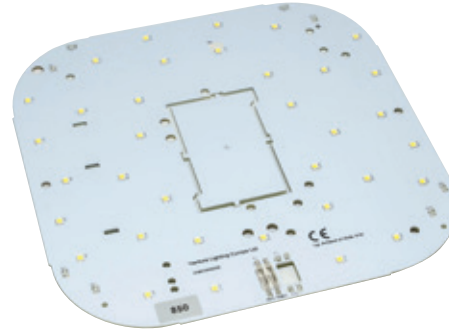
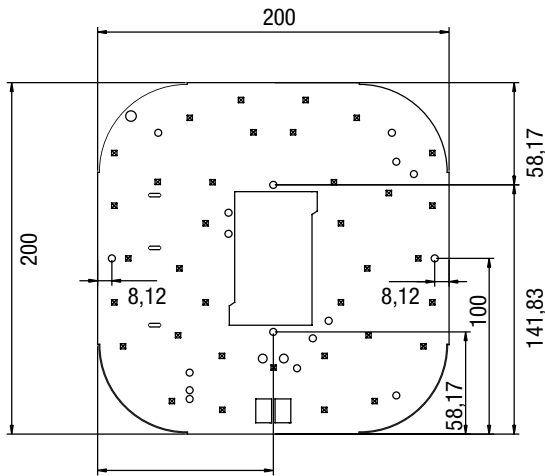
L80 B10 > 60,400Hrs

L90 B50 > 47,000Hrs

L90 B10 > 25,000Hrs

LED MODULES

Square Module - 200mm x 200mm



VLED Square 200 X 200 LED modules have been designed to replace traditional 28W 2D fluorescent lamps. Featuring reverse mounted terminals on the back of the board so no visible wiring and a knock out in the centre for a microwave sensor, the module provides a highly efficient, versatile and easy to manufacture option.

APPLICATIONS

- Bulkheads
- Bollards
- Post tops

FEATURES:

- Terminals on the back for easy wiring
- Module efficacy up to 159 lm/W
- Knock out in the centre for sensor
- Multiple fixing centres to fit all bulkheads
- 3 step SDCM

BENEFITS:

- High Output
- High efficiency
- Increased manufacturing speeds
- Long life
- Versatile
- 5 year warranty
- No Colour shift

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL035	200x200mm LED 840	10.5	1540	147	80	350-1050	12-16.5	200 x 200	See Diagram
MDL036	200X200mm LED 840 Emergency	11.6	1540	133	80	350-1050	14-18	200 x 200	See Diagram
MDL037	200X200mm LED 850	10.5	1670	159	80	350-1050	12-16.5	200 x 200	See Diagram
MDL038	200X200mm LED 850 Emergency	11.6	1670	144	80	350-1050	14-18	200 x 200	See Diagram

Pages 20-23 for further module performance data

universal fixing centres for most existing luminaires



Reverse mounted connector for ease of wiring

Lifetime Under nominal conditions of Ts < 80C and If = 700mA

L70 B50 > 60,400Hrs

L70 B10 > 60,400Hrs

L80 B50 > 60,400Hrs

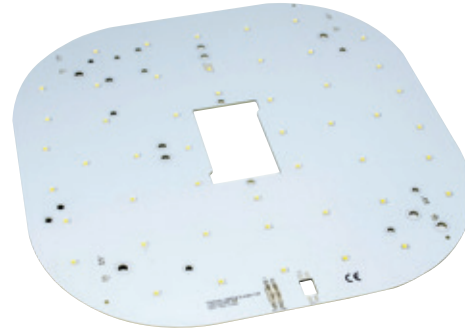
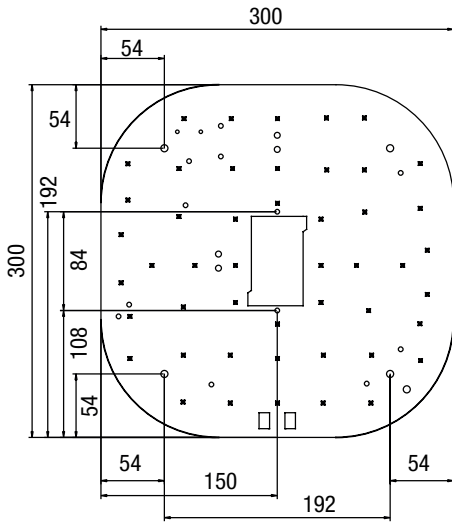
L80 B10 > 60,400Hrs

L90 B50 > 47,000Hrs

L90 B10 > 25,000Hrs

LED MODULES

Square Module - 300mm x 300mm



VLED Square 300 X 300 LED modules have been designed to replace traditional 36W 2D fluorescent lamps. Featuring reverse mounted terminals on the back of the board so no visible wiring and a knock out in the centre for a microwave sensor, the module provides a highly efficient, versatile and easy to manufacture option.

APPLICATIONS

- Bulkheads
- Bollards
- Post tops

FEATURES:

- Terminals on the back for easy wiring
- Module efficacy up to 153 lm/W
- Knock out in the centre for sensor
- Multiple fixing centres to fit all bulkheads
- 3 step SDCM

BENEFITS:

- High Output
- High efficiency
- Increased manufacturing speeds
- Long life
- Versatile
- 5 year warranty
- No Colour shift

Product Code	Description	Module Rated Power @ 700mA (W)	Luminous Flux @ 700mA	Module Efficacy @ 700mA (lm/W)	Max TC Point (°C)	Forward Current Range (mA)	Forward Voltage Range (Vdc)	Dimensions (LxW mm)	Fixings (mm)
MDL039	300x300mm LED 840	13.1	1850	141	80	350-1050	15-20	300 x 300	See Diagram
MDL040	300X300mm LED 840 Emergency	14.2	1850	130	80	350-1050	17-22	300 x 300	See Diagram
MDL041	300X300mm LED 850	13.1	2000	153W	80	350-1050	15-20	300 x 300	See Diagram
MDL042	300X300mm LED 850 Emergency	14.2	2000	141	80	350-1050	17-22	300 x 300	See Diagram

Pages 20-23 for further module performance data

universal fixing centres for most existing luminaires



Reverse mounted connector for ease of wiring

Lifetime
Under nominal conditions
of Ts < 80C and If = 700mA

L70 B50 > 60,400Hrs

L70 B10 > 60,400Hrs

L80 B50 > 60,400Hrs

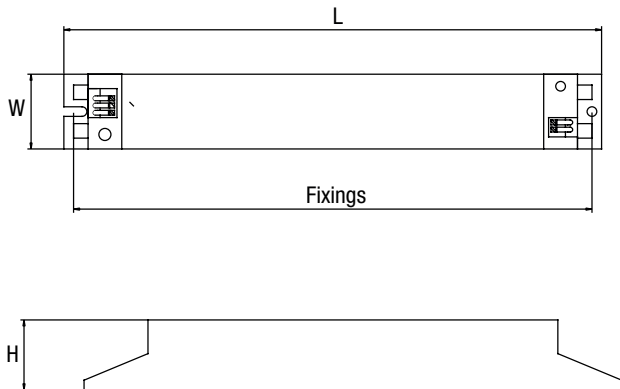
L80 B10 > 60,400Hrs

L90 B50 > 47,000Hrs

L90 B10 > 25,000Hrs

F SERIES

Single Channel 700mA Constant Current Driver



The VLED F series driver range offers robustness in its most economical way. These products provide reliability and the key functionality required to manufacture many luminaires.

APPLICATIONS

- High Bays
- Low bays
- Non Corrosive
- Bulkheads
- Batten

FEATURES:

- Easy push terminals
- Slim metal case
- Light Weight
- Over load protection
- Short circuit protection

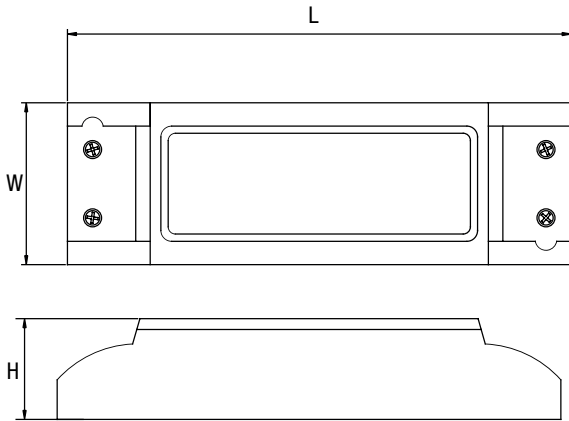
BENEFITS:

- 5 year warranty
- High efficiency

Product Code	Description	Input Frequency (Hz)	Input Voltage Range (Vac)	Efficiency (%)	Output Channels	Output Voltage Range (V)	Short Circuit Protection	Over load Protection	Dimensions (LxWxH mm)	Fixings (mm)
DRV001	10W F Driver, 700mA Fixed Output	50/60	220-240 ± 10%	85	1	10-15	Yes	Yes	223 x 30 x 29	215
DRV002	15W F Driver, 700mA Fixed Output	50/60	220-240 ± 10%	86	1	11-22	Yes	Yes	223 x 30 x 29	215
DRV003	20W F Driver, 700mA Fixed Output	50/60	220-240 ± 10%	88	1	20-29	Yes	Yes	223 x 30 x 29	215
DRV004	30W F Driver, 700mA Fixed Output	50/60	220-240 ± 10%	89	1	27-43	Yes	Yes	223 x 30 x 29	215
DRV005	40W F Driver, 700mA Fixed Output	50/60	220-240 ± 10%	90	1	41-58	Yes	Yes	223 x 30 x 29	215
DRV006	50W F Driver, 700mA Fixed Output	50/60	220-240 ± 10%	90	1	56-72	Yes	Yes	280 x 30 x 30	272
DRV007	70W F Driver, 700mA Fixed Output	50/60	220-240 ± 10%	90	1	88-105	Yes	Yes	280 x 30 x 30	272

P SERIES

Single Channel 700mA Constant Current Driver



The VLED P series driver range offers versatility with a large input voltage range allowing it to be used on construction sites (110V supply) together with an increased output voltage range. These products provide reliability and the key functionality required to manufacture many low wattage luminaires.

APPLICATIONS

- Non Corrosive
- Bulkheads
- Batten
- Site lighting

FEATURES:

- Easy push terminals
- Plastic case
- Light Weight
- Over load protection
- Short circuit protection

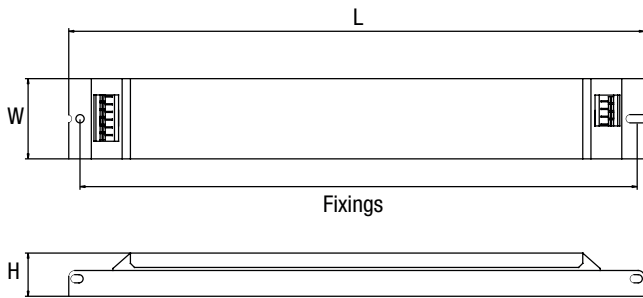
BENEFITS:

- 5 year warranty
- 100V – 240V input range
- Highly Efficient

Product Code	Description	Input Frequency (Hz)	Input Voltage Range (Vac)	Efficiency (%)	Output Channels	Output Voltage Range (V)	Short Circuit Protection	Over load Protection	Dimensions (LxWxH mm)	Fixing (mm)
DRV009	15W P Driver, 700mA Fixed Output	50/60	100-240 ± 10%	88	1	18-24	Yes	Yes	140 x 45 x 28	126 x 31
DRV010	20W P Driver, 700mA Fixed Output	50/60	100-240 ± 10%	85	1	14-29	Yes	Yes	140 x 45 x 25	132 x 36
DRV011	35W P Driver, 700mA Fixed Output	50/60	100-240 ± 10%	85	1	25-50	Yes	Yes	140 x 45 x 31	132 x 36

D SERIES

SELV - Multi Channel 700mA Constant Current Driver



The VLED D series driver range offers versatility with multiple output channels providing a SELV product offering for high power/ high lumen output luminaires. 70W and 140W options with 35W/channel, this highly efficient linear product is ideal for High bay and Low bay applications.

APPLICATIONS

- High Bay
- Low Bay

FEATURES:

- Multi Channels
- SELV
- Easy push terminals
- Metal Case
- Light Weight
- Over load protection
- Short circuit protection

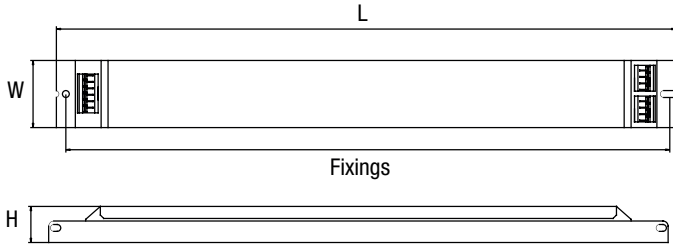
BENEFITS:

- 5 year warranty
- Very high efficiency of up to 91 % (100 % load)
- Selection of additional output currents by means of parallel connection of the output channels
- For use in luminaires of protection class 1
- Identical dimensions to the dimmable product

Product Code	Description	Input Frequency (Hz)	Input Voltage Range (Vac)	Efficiency (%)	Output Channels	Output Voltage Range (V)	Short Circuit Protection	Over load Protection	Dimensions (LxWxH mm)	Fixings (mm)
DRV015	70W D Driver, 700mA, 2 Channel	50/60	220-240 ± 10%	91	2	10-50	Yes	Yes	280 x 39 x 21	271
DRV017	140W D Driver, 700mA, 4 Channel	50/60	220-240 ± 10%	91	4	10-50	Yes	Yes	360 x 39 x 21	351

D SERIES - DALI

SELV - Multi Channel 700mA Constant Current Driver



The VLED D series driver range offers versatility with multiple output channels providing a SELV product offering for high power/ high lumen output luminaires. 70W and 140W options with 35W/channel with DALI and Push Dim also available, this highly efficient linear product is ideal for High bay and Low bay applications.

APPLICATIONS

- High Bay
- Low Bay

FEATURES:

- DALI
- Multi Channels
- SELV
- Metal Case
- Light Weight
- Over load protection
- Short circuit protection

BENEFITS:

- 5 year warranty
- Very high efficiency of up to 91 % (100 % load)
- Selection of additional output currents by means of parallel connection of the output channels
- For use in luminaires of protection class 1
- Identical dimensions to the non-dimmable product

Product Code	Description	Input Frequency (Hz)	Input Voltage Range (Vac)	Efficiency (%)	Output Channels	Output Voltage Range (V)	Short Circuit Protection	Over load Protection	Dimensions (LxWxH mm)	Fixings (mm)
DRV016	70W D Driver, 700mA, 2 Channel, DALI	50/60	220-240 ± 10%	91	2	10-50	Yes	Yes	280 x 39 x 21	271
DRV018	140W D Driver, 700mA, 4 Channel, DALI	50/60	220-240 ± 10%	91	4	10-50	Yes	Yes	360 x 39 x 21	351

SCHEMATICS

2FT SINGLE UNIT

OPTION 1	• DRV001 (Pg12)	• MDL028 (Pg5)	W	Lm
			8.4	1376

OPTION 2	• DRV003 (Pg12)	• MDL017 (Pg5)	W	Lm
			17	2400

OPTION 3	• DRV005 (Pg12)	• MDL005 (Pg7)	W	Lm
			33.5	4400


4FT SINGLE UNIT

OPTION 1	• DRV003 (Pg12)	• MDL028 (Pg5)	• MDL028 (Pg5)	W	Lm
				16.8	2752

OPTION 2	• DRV005 (Pg12)	• MDL017 (Pg5)	• MDL017 (Pg5)	W	Lm
				34	4800

OPTION 3	• DRV007 (Pg12)	• MDL005 (Pg7)	• MDL005 (Pg7)	W	Lm
				67	8800

5FT SINGLE UNIT

OPTION 1	• DRV004 (Pg12) • MDL028 (Pg5) • MDL023 (Pg4) • MDL028 (Pg5)	W	Lm
		21	3440

OPTION 2	• DRV006 (Pg12) • MDL017 (Pg5) • MDL025 (Pg4) • MDL017 (Pg5)	W	Lm
		42.4	6000

OPTION 3	• DRV007 (Pg12) • MDL005 (Pg7) • MDL005 (Pg7) • MDL010 (Pg6) • DRV003 (Pg12)	W	Lm
		84	11000

6FT SINGLE UNIT

OPTION 1	• DRV004 (Pg12) • MDL028 (Pg5) • MDL028 (Pg5) • MDL028 (Pg5)	W	Lm
		25.2	4128

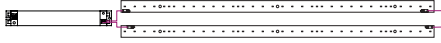
OPTION 2	• DRV006 (Pg12) • MDL017 (Pg5) • MDL017 (Pg5) • MDL017 (Pg5)	W	Lm
		51	7200

OPTION 3	• DRV007 (Pg12) • MDL005 (Pg7) • MDL005 (Pg7) • MDL005 (Pg7) • DRV005 (Pg12)	W	Lm
		100.5	13200

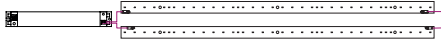
SCHEMATICS

2FT TWIN UNIT

OPTION 1	• DRV003 (Pg12)	• MDL028 x2 (Pg5)	W	Lm
			16.8	2752

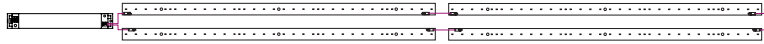


OPTION 2	• DRV005 (Pg12)	• MDL017 x2 (Pg5)	W	Lm
			34	4800

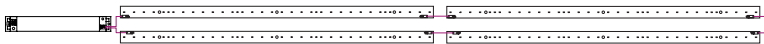


4FT TWIN UNIT

OPTION 1	• DRV003 (Pg12)	• MDL028 x2 (Pg5)	• MDL028 x2 (Pg5)	W	Lm
				33.6	5504



OPTION 2	• DRV007 (Pg12)	• MDL017 x2 (Pg5)	• MDL017 x2 (Pg5)	W	Lm
				68	9600



5FT TWIN UNIT

OPTION 1	• DRV006 (Pg12)	• MDL028 x2 (Pg5)	• MDL028 x2 (Pg5)	• MDL023 x2 (Pg4)	W	Lm
					42	6880



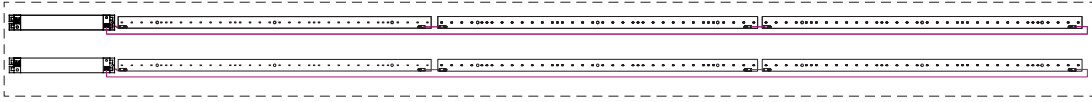
OPTION 2	• DRV006 x2 (Pg12)	• MDL017 x2 (Pg5)	• MDL017 x2 (Pg5)	• MDL025 x2 (Pg4)	W	Lm
					84.8	12000



6FT TWIN UNIT

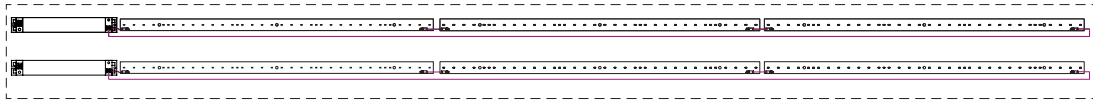
OPTION 1 • DRV004 x2 (Pg12) • MDL028 x2 (Pg5) • MDL028 x2 (Pg5) • MDL028 x2 (Pg5)

W	Lm
50.4	8256



OPTION 2 • DRV006 x2 (Pg12) • MDL017 x2 (Pg5) • MDL017 x2 (Pg5) • MDL017 x2 (Pg5)

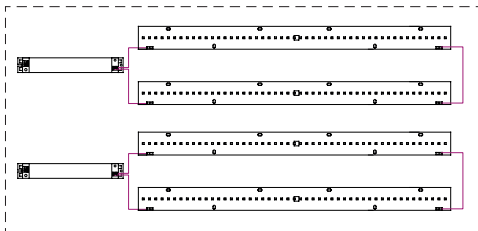
W	Lm
102	14400



NON SELV HIGH BAY / LOW BAY

• DRV007 x2 (Pg12) • MDL005 x4 (Pg7)

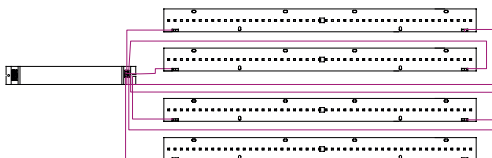
W	Lm
134	17600



SELV HIGH BAY / LOW BAY

• DRV017 (Pg12) • MDL005 x4 (Pg7)

W	Lm
134	17600



MODULE PERFORMANCE TABLES

Duplex LED 840

		Ts = 20C			Ts = 40C			Ts = 60C			Ts = 80C		
		350mA	700mA	1050mA	350mA	700mA	1050mA	350mA	700mA	1050mA	350mA	700mA	1050mA
MDL009	Lumens	1240	2360	3390	1200	2280	3260	1160	2200	3140	1110	2090	Over Tj
	Forward Volts	23.1	24.8	26.2	22.7	24.3	25.7	22.4	24.0	25.4	22.2	23.6	Over Tj
	Power	8.1	17.3	27.5	7.9	17.0	27.0	7.9	16.8	26.6	7.8	16.6	Over Tj
	Efficacy (LPW)	154	136	123	151	134	121	148	131	118	143	126	Over Tj
	Tj	24	28	33	44	48	52	64	68	72	84	88	Over Tj
MDL011	Lumens	2480	4720	6770	2390	4550	6510	2310	4390	6280	2210	4180	Over Tj
	Forward Volts	46.1	49.5	52.4	45.4	48.6	51.4	44.9	48.0	50.7	44.4	47.3	Over Tj
	Power	16.1	34.7	55.0	15.9	34.0	54.0	15.7	33.6	53.3	15.5	33.1	Over Tj
	Efficacy (LPW)	154	136	123	150	134	121	147	131	118	142	126	Over Tj
	Tj	24	28	33	44	48	52	64	68	72	84	88	Over Tj
MDL016	Lumens	1260	2420	3500	1220	2330	3380	1170	2250	3260	1130	2150	3090
	Forward Volts	22.6	23.9	25.1	22.3	23.5	24.7	22.0	23.2	24.4	21.8	22.9	24.0
	Power	7.9	16.8	26.4	7.8	16.5	25.9	7.7	16.3	25.6	7.6	16.1	25.2
	Efficacy (LPW)	159	144	133	157	141	130	152	138	127	148	134	123
	Tj	23	26	29	43	46	49	63	66	69	83	86	89
MDL020	Lumens	320	610	880	310	590	850	300	570	820	290	540	780
	Forward Volts	5.7	6.0	6.3	5.6	5.9	6.2	5.5	5.8	6.1	5.4	5.7	6.0
	Power	2.0	4.2	6.6	1.9	4.1	6.5	1.9	4.1	6.4	1.9	4.0	6.3
	Efficacy (LPW)	162	146	133	159	143	131	156	140	128	152	135	124
	Tj	23	26	29	43	46	49	63	66	69	83	86	89
MDL024	Lumens	630	1210	1750	610	1170	1690	590	1130	1630	570	1080	1550
	Forward Volts	11.3	12.0	12.6	11.1	11.8	12.3	11.0	11.6	12.2	10.9	11.5	12.0
	Power	4.0	8.4	13.2	3.9	8.2	13.0	3.9	8.1	12.8	3.8	8.0	12.6
	Efficacy (LPW)	159	144	133	157	142	130	153	139	127	150	135	123
	Tj	23	26	29	43	46	49	63	66	69	83	86	89

MODULE PERFORMANCE TABLES

Duplex LED 850

		Ts = 20C			Ts = 40C			Ts = 60C			Ts = 80C		
		350mA	700mA	1050mA	350mA	700mA	1050mA	350mA	700mA	1050mA	350mA	700mA	1050mA
MDL005	Lumens	2560	4840	6870	2500	4750	6760	2430	4580	6510	2350	4390	Over Tj
	Forward Volts	46.1	49.2	51.9	45.5	48.5	51.1	45.1	47.9	50.5	44.7	47.5	Over Tj
	Power	16.1	34.4	54.5	15.9	34.0	53.7	15.8	33.6	53.0	15.6	33.3	Over Tj
	Efficacy (LPW)	159	141	126	157	140	126	154	137	123	150	132	Over Tj
	Tj	24	28	32	44	48	52	64	68	72	84	88	Over Tj
MDL010	Lumens	1280	2420	3440	1250	2380	3380	1220	2290	3260	1180	2200	Over Tj
	Forward Volts	23.1	24.6	25.9	22.8	24.3	25.6	22.5	24.0	25.2	22.3	23.8	Over Tj
	Power	8.1	17.2	27.2	8.0	17.0	26.8	7.9	16.8	26.5	7.8	16.6	Over Tj
	Efficacy (LPW)	159	141	126	157	140	126	155	137	123	151	132	Over Tj
	Tj	24	28	32	44	48	52	64	68	72	84	88	Over Tj
MDL017	Lumens	1300	2490	3580	1270	2440	3520	1240	2360	3390	1200	2270	3250
	Forward Volts	22.6	23.8	24.9	22.4	23.5	24.6	22.1	23.3	24.3	21.9	23.1	24.1
	Power	7.9	16.7	26.2	7.8	16.5	25.8	7.8	16.3	25.5	7.7	16.1	25.3
	Efficacy (LPW)	164	149	137	162	148	136	160	145	133	156	141	128
	Tj	23	26	29	43	46	49	63	66	69	83	86	89
MDL021	Lumens	330	630	900	320	610	880	310	590	850	300	570	820
	Forward Volts	5.7	6.0	6.2	5.6	5.9	6.1	5.5	5.8	6.1	5.5	5.8	6.0
	Power	2.0	4.2	6.5	2.0	4.1	6.5	1.9	4.1	6.4	1.9	4.0	6.3
	Efficacy (LPW)	167	151	137	163	148	136	160	145	133	156	141	130
	Tj	23	26	29	43	46	49	63	66	69	83	86	89
MDL025	Lumens	650	1250	1790	640	1220	1760	620	1180	1700	600	1140	1630
	Forward Volts	11.3	11.9	12.5	11.2	11.8	12.3	11.1	11.6	12.1	11.0	11.5	12.0
	Power	4.0	8.3	13.1	3.9	8.2	12.9	3.9	8.1	12.8	3.8	8.1	12.6
	Efficacy (LPW)	164	150	137	163	148	136	160	145	133	156	141	129
	Tj	23	26	29	43	46	49	63	66	69	83	86	89
MDL030	Lumens	1030	1940	2720	1000	1870	2620	970	1810	2530	940	1740	2420
	Forward Volts	17.6	19.0	20.2	17.4	18.8	20.1	17.3	18.7	19.9	17.1	18.5	19.7
	Power	6.2	13.3	21.2	6.1	13.2	21.1	6.0	13.1	20.9	6.0	13.0	20.7
	Efficacy (LPW)	167	146	128	164	142	124	161	139	121	157	134	117
	Tj	22	24	26	42	44	46	62	64	66	82	84	86

MODULE PERFORMANCE TABLES

LED 840

		Ts = 20C			Ts = 40C			Ts = 60C			Ts = 80C		
		350mA	700mA	1050mA	350mA	700mA	1050mA	350mA	700mA	1050mA	350mA	700mA	1050mA
MDL018	Lumens	170	310	440	160	300	430	160	300	420	150	280	390
	Forward Volts	2.9	3.0	3.2	2.8	3.0	3.2	2.8	3.0	3.1	2.8	3.0	3.1
	Power	1.0	2.1	3.4	1.0	2.1	3.3	1.0	2.1	3.3	1.0	2.1	3.3
	Efficacy (LPW)	170	146	131	162	142	129	164	144	127	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL022	Lumens	330	620	870	320	600	850	320	590	830	300	560	780
	Forward Volts	5.7	6.1	6.4	5.7	6.0	6.4	5.6	6.0	6.3	5.5	5.9	6.2
	Power	2.0	4.3	6.7	2.0	4.2	6.7	2.0	4.2	6.6	1.9	4.1	6.5
	Efficacy (LPW)	165	146	129	162	142	127	164	142	126	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL026	Lumens	660	1230	1730	640	1200	1690	630	1180	1650	600	1120	1560
	Forward Volts	11.4	12.2	12.8	11.3	12.0	12.7	11.2	11.9	12.6	11.1	11.8	12.5
	Power	4.0	8.5	13.5	4.0	8.4	13.3	3.9	8.3	13.2	3.9	8.3	13.1
	Efficacy (LPW)	165	144	129	162	142	127	161	142	125	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL027	Lumens	660	1230	1730	640	1200	1690	630	1180	1650	600	1120	1560
	Forward Volts	11.4	12.2	12.8	11.3	12.0	12.7	11.2	11.9	12.6	11.1	11.8	12.5
	Power	4.0	8.5	13.5	4.0	8.4	13.3	3.9	8.3	13.2	3.9	8.3	13.1
	Efficacy (LPW)	165	144	129	162	142	127	161	142	125	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL031	Lumens	490	930	1300	480	900	1270	470	880	1240	450	840	1170
	Forward Volts	8.6	9.1	9.6	8.5	9.0	9.5	8.4	8.9	9.4	8.3	8.9	9.3
	Power	3.0	6.4	10.1	3.0	6.3	10.0	2.9	6.3	9.9	2.9	6.2	9.8
	Efficacy (LPW)	163	146	129	162	142	127	160	141	125	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL032	Lumens	490	930	1300	480	900	1270	470	880	1240	450	840	1170
	Forward Volts	8.6	9.1	9.6	8.5	9.0	9.5	8.4	8.9	9.4	8.3	8.9	9.3
	Power	3.0	6.4	10.1	3.0	6.3	10.0	2.9	6.3	9.9	2.9	6.2	9.8
	Efficacy (LPW)	163	146	129	162	142	127	160	141	125	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL035	Lumens	820	1540	2170	800	1500	2110	790	1470	2060	750	1400	1950
	Forward Volts	14.3	15.2	16.0	14.1	15.0	15.9	14.0	14.9	15.7	13.8	14.8	15.6
	Power	5.0	10.6	16.8	4.9	10.5	16.7	4.9	10.4	16.5	4.8	10.3	16.3
	Efficacy (LPW)	164	145	129	162	142	127	162	141	125	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL036	Lumens	820	1540	2170	800	1500	2110	790	1470	2060	750	1400	1950
	Forward Volts	14.3	15.2	16.0	14.1	15.0	15.9	14.0	14.9	15.7	13.8	14.8	15.6
	Power	5.0	10.6	16.8	4.9	10.5	16.7	4.9	10.4	16.5	4.8	10.3	16.3
	Efficacy (LPW)	164	145	129	162	142	127	162	141	125	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL039	Lumens	980	1850	2600	960	1800	2530	940	1760	2470	900	1680	2340
	Forward Volts	17.2	18.3	19.2	17.0	18.0	19.1	16.8	17.9	18.9	16.6	17.7	18.7
	Power	6.0	12.8	20.2	5.9	12.6	20.0	5.9	12.5	19.8	5.8	12.4	19.6
	Efficacy (LPW)	163	145	129	162	142	126	160	141	125	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84
MDL040	Lumens	980	1850	2600	960	1800	2530	940	1760	2470	900	1680	2340
	Forward Volts	17.2	18.3	19.2	17.0	18.0	19.1	16.8	17.9	18.9	16.6	17.7	18.7
	Power	6.0	12.8	20.2	5.9	12.6	20.0	5.9	12.5	19.8	5.8	12.4	19.6
	Efficacy (LPW)	163	145	129	162	142	126	160	141	125	155	135	119
	Tj	21	23	25	41	43	45	61	63	65	81	83	84

MODULE PERFORMANCE TABLES

LED 850

		Ts = 20C			Ts = 40C			Ts = 60C			Ts = 80C		
		350mA	700mA	1050mA	350mA	700mA	1050mA	350mA	700mA	1050mA	350mA	700mA	1050mA
MDL019	Lumens	180	340	480	170	330	460	170	320	450	160	300	430
	Forward Volts	2.9	3.1	3.2	2.8	3.0	3.2	2.8	3.0	3.2	2.8	3.0	3.1
	Power	1.0	2.1	3.4	1.0	2.1	3.4	1.0	2.1	3.3	1.0	2.1	3.3
	Efficacy (LPW)	179	159	142	171	156	137	173	153	135	164	144	131
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL023	Lumens	350	670	960	340	650	920	330	630	890	320	600	860
	Forward Volts	5.7	6.1	6.4	5.7	6.0	6.4	5.6	6.0	6.3	5.6	5.9	6.3
	Power	2.0	4.3	6.8	2.0	4.2	6.7	2.0	4.2	6.6	1.9	4.2	6.6
	Efficacy (LPW)	174	157	142	171	154	137	168	150	134	164	144	131
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL028	Lumens	700	1330	1910	680	1290	1840	660	1250	1780	640	1200	1710
	Forward Volts	11.5	12.2	12.9	11.3	12.1	12.8	11.2	12.0	12.7	11.1	11.9	12.5
	Power	4.0	8.6	13.5	4.0	8.5	13.4	3.9	8.4	13.3	3.9	8.3	13.2
	Efficacy (LPW)	174	155	141	171	152	137	168	149	134	164	144	130
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL029	Lumens	700	1330	1910	680	1290	1840	660	1250	1780	640	1200	1710
	Forward Volts	11.5	12.2	12.9	11.3	12.1	12.8	11.2	12.0	12.7	11.1	11.9	12.5
	Power	4.0	8.6	13.5	4.0	8.5	13.4	3.9	8.4	13.3	3.9	8.3	13.2
	Efficacy (LPW)	174	155	141	171	152	137	168	149	134	164	144	130
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL033	Lumens	530	1000	1430	510	970	1380	500	940	1340	480	900	1280
	Forward Volts	8.6	9.2	9.7	8.5	9.1	9.6	8.4	9.0	9.5	8.4	8.9	9.4
	Power	3.0	6.4	10.1	3.0	6.4	10.1	3.0	6.3	10.0	2.9	6.2	9.9
	Efficacy (LPW)	176	156	141	171	153	137	169	149	134	164	144	130
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL034	Lumens	530	1000	1430	510	970	1380	500	940	1340	480	900	1280
	Forward Volts	8.6	9.2	9.7	8.5	9.1	9.6	8.4	9.0	9.5	8.4	8.9	9.4
	Power	3.0	6.4	10.1	3.0	6.4	10.1	3.0	6.3	10.0	2.9	6.2	9.9
	Efficacy (LPW)	176	156	141	171	153	137	169	149	134	164	144	130
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL037	Lumens	870	1670	2380	850	1620	2300	830	1560	2220	800	1500	2130
	Forward Volts	14.3	15.3	16.1	14.2	15.1	16.0	14.1	15.0	15.8	13.9	14.9	15.7
	Power	5.0	10.7	16.9	5.0	10.6	16.8	4.9	10.5	16.6	4.9	10.4	16.5
	Efficacy (LPW)	173	156	141	171	153	137	169	149	134	164	144	129
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL038	Lumens	870	1670	2380	850	1620	2300	830	1560	2220	800	1500	2130
	Forward Volts	14.3	15.3	16.1	14.2	15.1	16.0	14.1	15.0	15.8	13.9	14.9	15.7
	Power	5.0	10.7	16.9	5.0	10.6	16.8	4.9	10.5	16.6	4.9	10.4	16.5
	Efficacy (LPW)	173	156	141	171	153	137	169	149	134	164	144	129
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL041	Lumens	1050	2000	2860	1020	1940	2760	990	1870	2670	960	1800	2560
	Forward Volts	17.2	18.3	19.3	17.0	18.1	19.2	16.9	18.0	19.0	16.7	17.8	18.8
	Power	6.0	12.8	20.3	6.0	12.7	20.1	5.9	12.6	19.9	5.8	12.5	19.8
	Efficacy (LPW)	174	156	141	171	153	137	168	149	134	164	144	130
	Tj	21	23	25	41	43	45	61	63	65	81	83	85
MDL042	Lumens	1050	2000	2860	1020	1940	2760	990	1870	2670	960	1800	2560
	Forward Volts	17.2	18.3	19.3	17.0	18.1	19.2	16.9	18.0	19.0	16.7	17.8	18.8
	Power	6.0	12.8	20.3	6.0	12.7	20.1	5.9	12.6	19.9	5.8	12.5	19.8
	Efficacy (LPW)	174	156	141	171	153	137	168	149	134	164	144	130
	Tj	21	23	25	41	43	45	61	63	65	81	83	85