

NIGHT HAWK

Variable series

LED LIGHT BARS





Congratulations! on your purchase of the Night Hawk® Variable Series LED Light Bar by Bushranger 4X4. To take full advantage of this product, please read this manual carefully before using. Retain this manual for future reference for installation and warranty.



Register Your Product



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Overview

The Night Hawk VLI Single Row LED Light Bars by Bushranger 4X4 have been developed from the ground up by our team of engineers to offer a compact and low-profile design which takes performance, looks and usability to a whole new level.

These lights incorporate a brightness control function which allows complete control of the light intensity in adverse conditions, where too much light can be detrimental to clear vision. The brightness is controlled by our pioneering, relay-free VLI series wiring system, which is the first of its kind and leads the way with simpler wiring, easier installation, more user control and greater reliability over traditional systems.

The clean, modern aesthetic incorporates quality materials and construction and provides a unique and versatile mounting system that makes installation a breeze. The Advanced Temperature Control System takes advantage of the quality aircraft grade aluminium heatsink to run the LED's at their maximum potential by monitoring and adjusting the output according to the environment.

The 5.5" model comes supplied with two protective covers, a Flood Beam and a Diffused Beam, which allow quick and easy customisation of the beam pattern to suit any requirement. Clip-on the Diffused protective cover to experience a dedicated work light beam pattern, which provides a smooth, indirect wall of light over the immediate work area for excellent, short distance illumination. Change over to the flood protective cover to achieve a wide, flood beam pattern that lights up all the surroundings for excellent medium distance vision. Remove the covers completely to achieve a clean, focused Spot Beam pattern that reaches incredible distance for a small, compact light.

The models 13" and above are supplied with a full set of protective spot beam covers plus a full set of protective flood beam covers, which allow quick and easy customisation of the beam pattern to suit any requirement. With the spot protective covers fitted, the light projects a clean, focused spot beam pattern that reaches extreme distance; great for highway driving. Clip-on the flood protective covers and the light changes significantly to a wide, flood beam pattern which illuminates all the surroundings for excellent short to medium distance vision. Run any combination of each cover to tailor the perfect combo beam pattern for the environment.

Night Hawk lights are engineered tough to withstand the rugged outdoor terrain and harsh climate experienced down under. They are backed by a 5-year warranty and our 40+ year history of supplying quality engineered 4X4 products to the Australian market.

Variable Light Intensity Light Bar Features

Versatile Installation

- Lightweight and low-profile design with highly adjustable sliding mounting feet allows for diverse fitment.

Active Temperature Control System

- Intelligent onboard monitoring of the LED temperatures, combined with the superior cooling design allows for maximum output in all conditions.

High Performance Genuine LED's

- Genuine high output OSRAM LED's for unmatched performance, producing huge effective lumens for each size in the range
- Unrivalled 1Lux distance and width performance for slimline single row lightbars
- Tested by an Australian NATA accredited photometry lab to produce real light performance data

Modern Electronics Design

- Built in Transistor switching simplifies wiring installation by removing the need for traditional 12V relay switching.
- PWM dimming capability for brightness control at the turn of a dial.
- Over voltage and Reverse Polarity Protection.

Durable Exterior

- UV stable polyester powder coat, polycarbonate lens and covers ensure long term durability to handle even the toughest Australian conditions.

Built Tough

- Extruded, 6061 aircraft grade aluminium housing and cast alloy mounting feet offers long term strength and durability.
- Designed, engineered and extensively tested in Australia.

Sealed Tight

- Waterproof and submersible, IP67 & IP69K rated.
- Genuine GORE breather manages the internal air pressure of the light, preventing water ingress in all conditions.

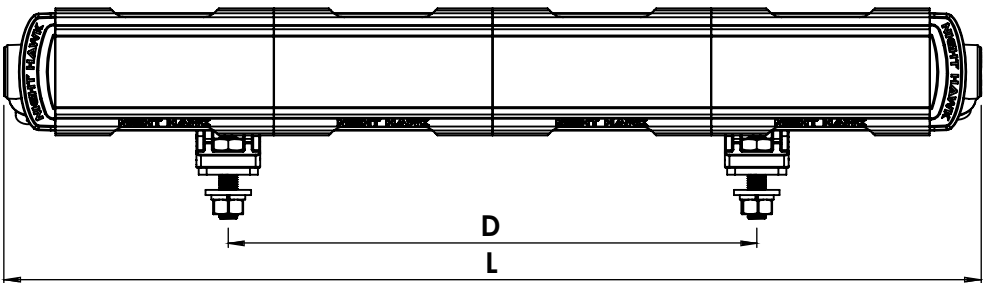
General Specifications



GENERAL LIGHT BAR SPECIFICATIONS

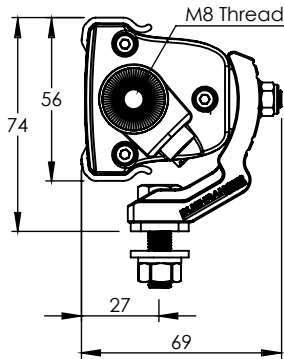
Voltage Range	10-30V DC
LED Type	Genuine OSRAM LED's
LED Colour Temperature	5700k (72 CRI)
Control Plug	4 pin round (use with VLI Wiring System, sold seperately)
Compliance	CE, UNECE R10, IP67 & IP69K, RoHS

Dimensions



LIGHT BAR DIMENSIONS

Nominal Size	Part Number	(L) Overall Length	(D) Mounting Hole Adjustment Max. Distance*
5.5"	NHT055VLI	141mm	-
13"	NHT130VLI	333mm	258mm
17"	NHT170VLI	429mm	354mm
20.5"	NHT205VLI	525mm	450mm
24.5"	NHT245VLI	621mm	546mm
28"	NHT280VLI	717mm	642mm
32"	NHT320VLI	813mm	738mm
39.5"	NHT395VLI	1005mm	930mm**
43.5"	NHT435VLI	1101mm	1026mm**
51"	NHT510VLI	1292mm	1218mm**



*When using mounting feet, all mounting feet supplied must be used. Please refer to mounting guide for more information.

**Mounting hole adjustment range listed is the maximum distance that the two outer sliding feet can be adjusted apart. Where a third mounting foot is supplied it should be mounted in the centre.

Individual Specifications

INDIVIDUAL LIGHT BAR SPECIFICATIONS

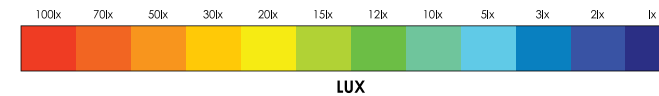
Nominal Size Part Number	LED Quantity	Current Draw (@14.4V)	Power Draw	Luminous Flux (Effective) Without Covers	Power Plug	Overall Weight
5.5" NHT055VLI	3	0.9A	13W	1020	Deutsch DT	0.50kg
13" NHT130VLI	9	2.7A	39W	3100	Deutsch DT	1.10kg
17" NHT170VLI	12	3.6A	52W	4150	Deutsch DT	1.35kg
20.5" NHT205VLI	15	4.4A	63W	5210	Deutsch DT	1.60kg
24.5" NHT245VLI	18	5.4A	78W	6280	Deutsch DT	1.85kg
28" NHT280VLI	21	6.3A	90W	7360	Deutsch DT	2.10kg
32" NHT320VLI	24	7.1A	102W	8410	Deutsch DT	2.35kg
39.5" NHT395VLI	30	9.0A	129W	10,520	Deutsch DT	3.00kg
43.5" NHT435VLI	33	9.8A	141W	11,580	Deutsch DTP	3.25kg
51" NHT510VLI	39	11.8A	170W	13,680	Deutsch DTP	3.75kg

LIGHT BAR PERFORMANCE

Nominal Size Part Number	Covers Removed		Full Spot Covers		Full Flood Covers	
	Max Distance @ 1LUX	Max Width @ 1LUX	Max Distance @ 1LUX	Max Width @ 1LUX	Max Distance @ 1LUX	Max Width @ 1LUX
5.5" NHT055VLI	282m	19m	267m	15m	126m (Flood Cover) 43m (Diffused Cover)	39m (Flood Cover) 20m (Diffused Cover)
13" NHT130VLI	490m	33m	462m	26m	218m	69m
17" NHT170VLI	567m	38m	534m	30m	252m	79m
20.5" NHT205VLI	635m	43m	597m	34m	282m	89m
24.5" NHT245VLI	697m	47m	654m	38m	309m	96m
28" NHT280VLI	755m	51m	706m	40m	334m	105m
32" NHT320VLI	807m	55m	755m	43m	357m	112m
39.5" NHT395VLI	902m	61m	844m	48m	399m	125m
43.5" NHT435VLI	946m	64m	886m	51m	418m	132m
51" NHT510VLI	1028m	70m	963m	55m	454m	143m

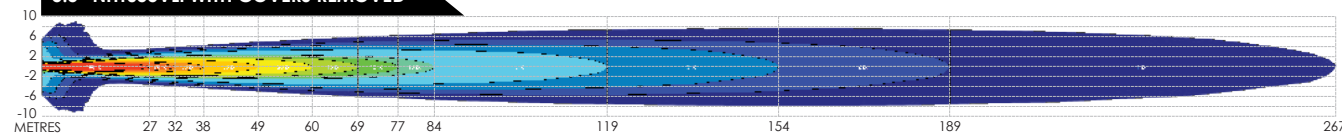
Isolux Data NHT055VLI / NHT130VLI

All results shown below are obtained from real scientific testing carried out by a NATA Accredited Photometric Laboratory in Australia. **Measurements displayed with optional clear protective covers fitted.**

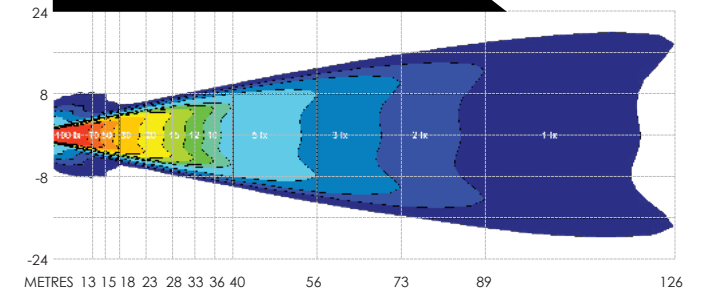


NATA ACTUAL PHOTOMETRIC TEST DATA
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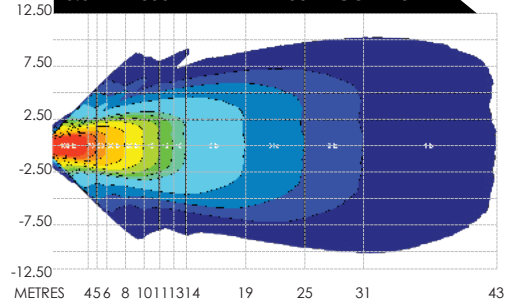
5.5" NHT055VLI WITH COVERS REMOVED



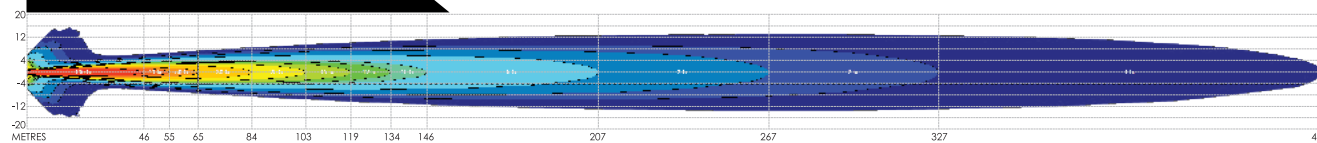
5.5" NHT055VLI WITH FLOOD COVERS



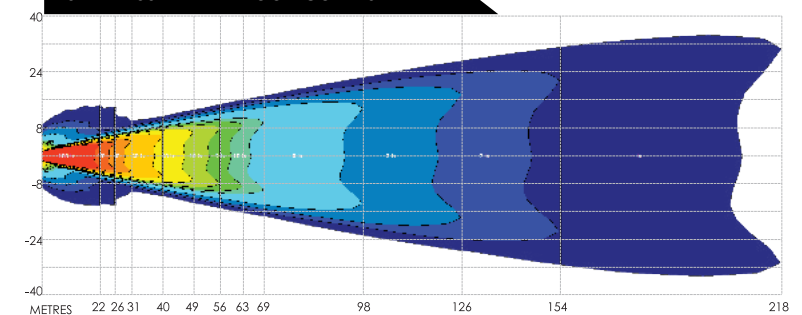
5.5" NHT055VLI WITH DIFFUSED COVERS



13" NHT130VLI WITH SPOT COVERS

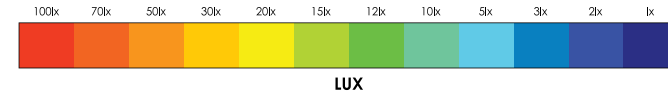


13" NHT130VLI WITH FLOOD COVERS

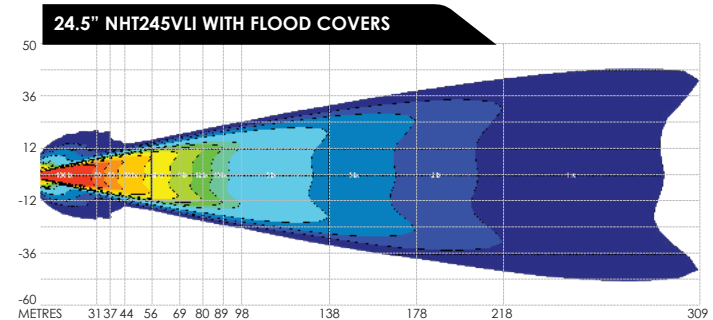
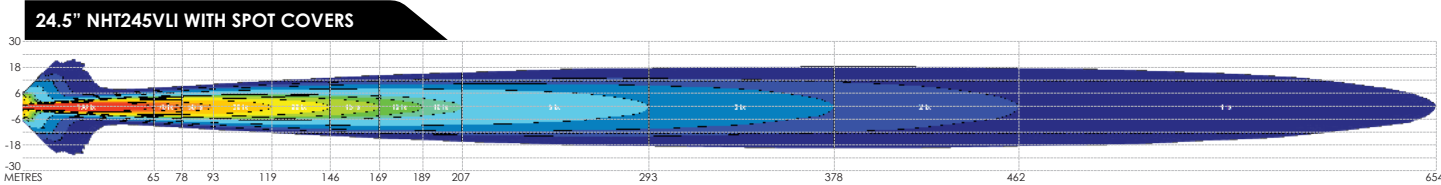
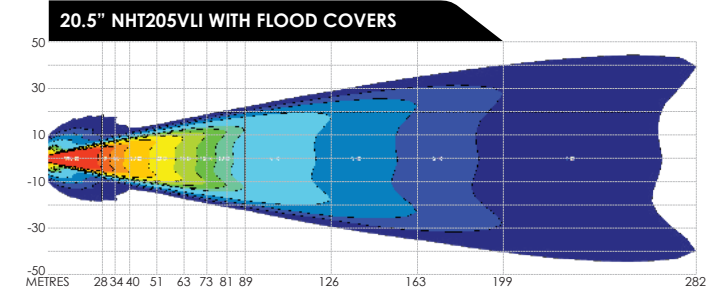
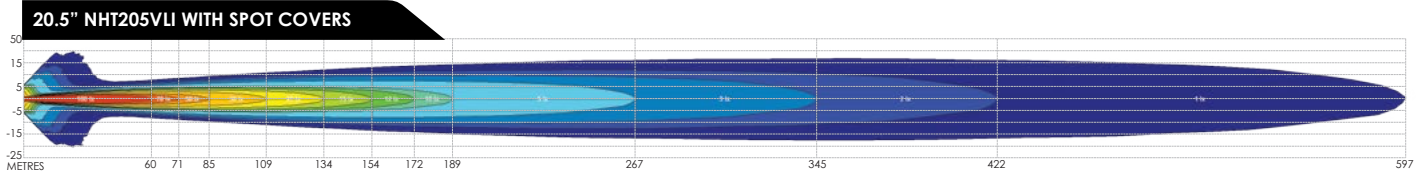
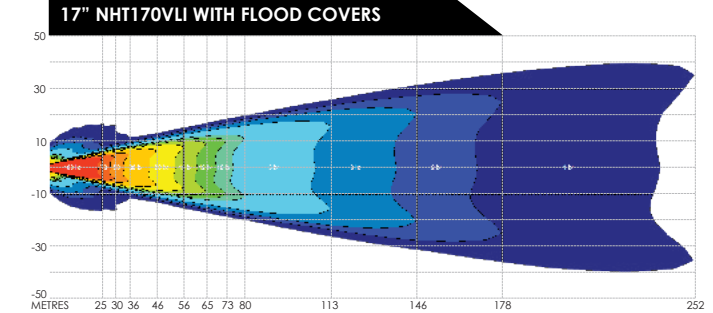
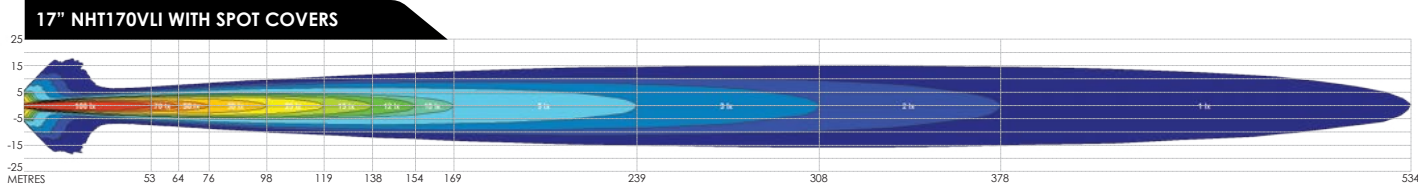


Isolux Data NHT170VLI / NHT205VLI / NHT245VLI

All results shown below are obtained from real scientific testing carried out by a NATA Accredited Photometric Laboratory in Australia. **Measurements displayed with optional clear protective covers fitted.**

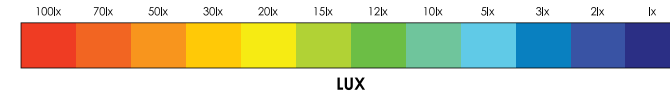


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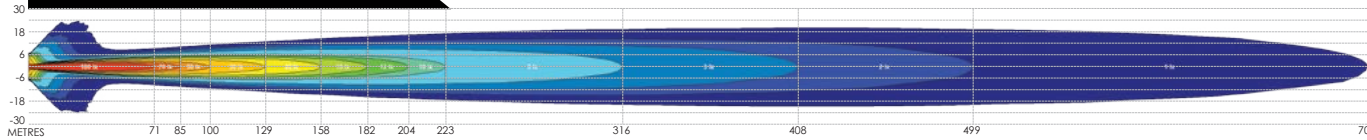
Isolux Data NHT280VLI / NHT320VLI / NHT395VLI

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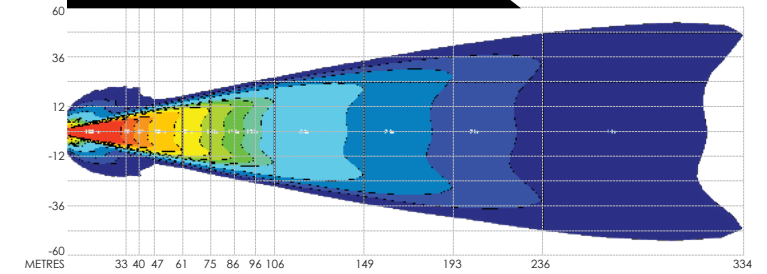


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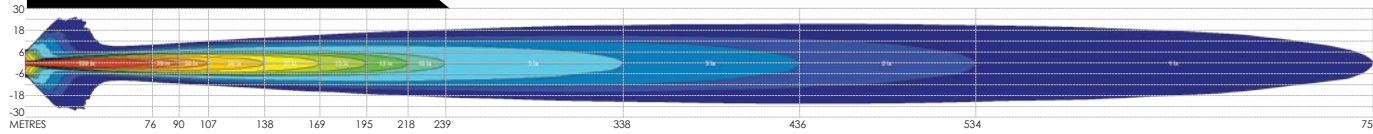
28" NHT280VLI WITH SPOT COVERS



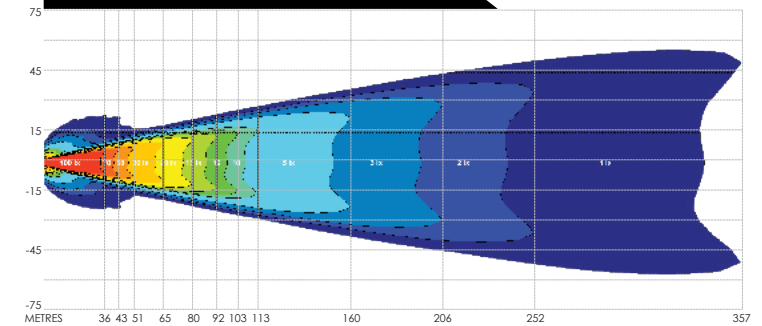
28" NHT280VLI WITH FLOOD COVERS



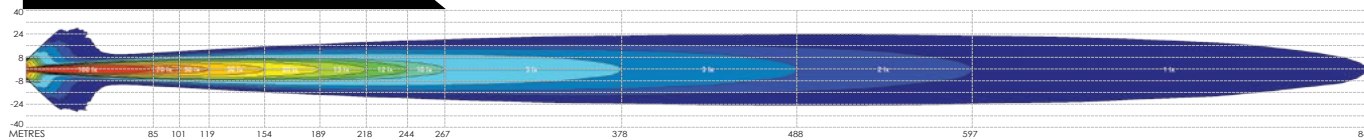
32" NHT320VLI WITH SPOT COVERS



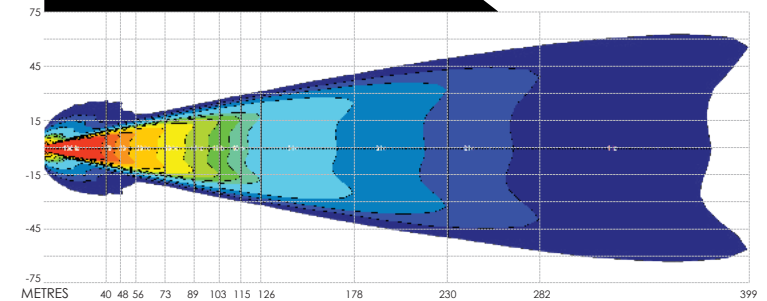
32" NHT320VLI WITH FLOOD COVERS



39.5" NHT395VLI WITH SPOT COVERS

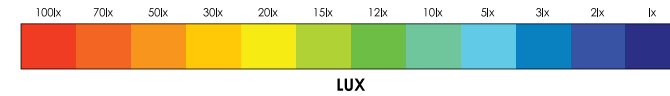


39.5" NHT395VLI WITH FLOOD COVERS

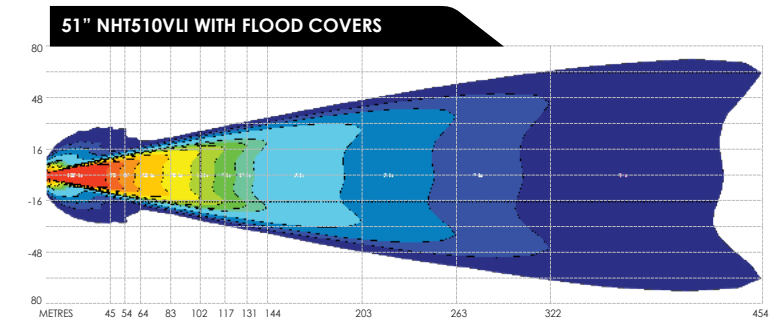
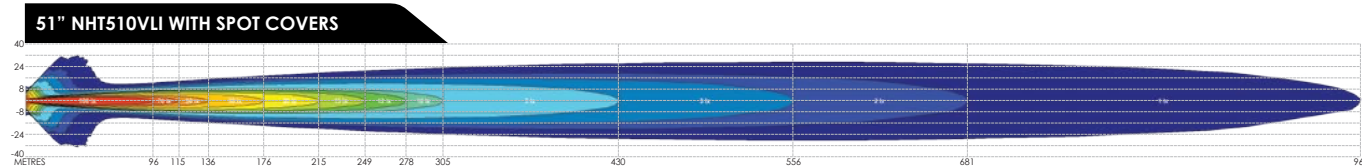
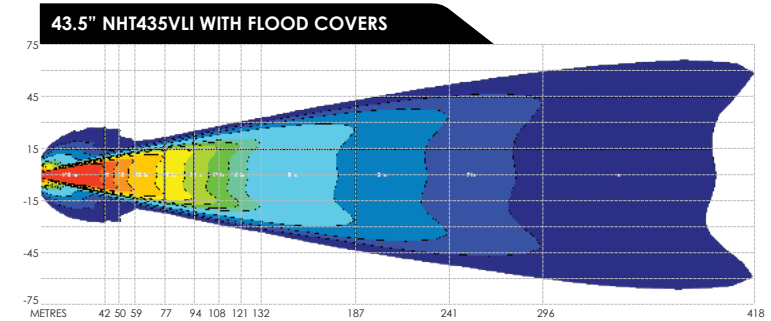
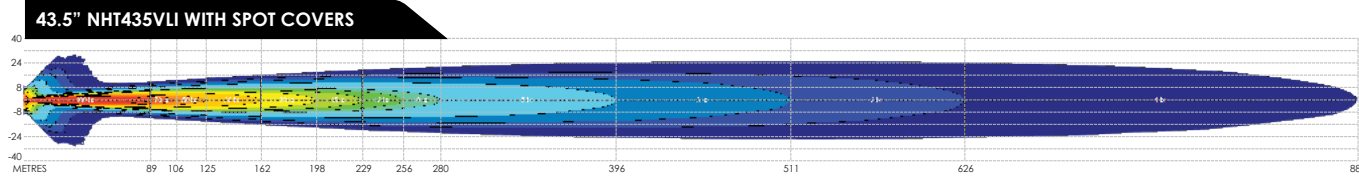


Isolux Data NHT435VLI / NHT510VLI

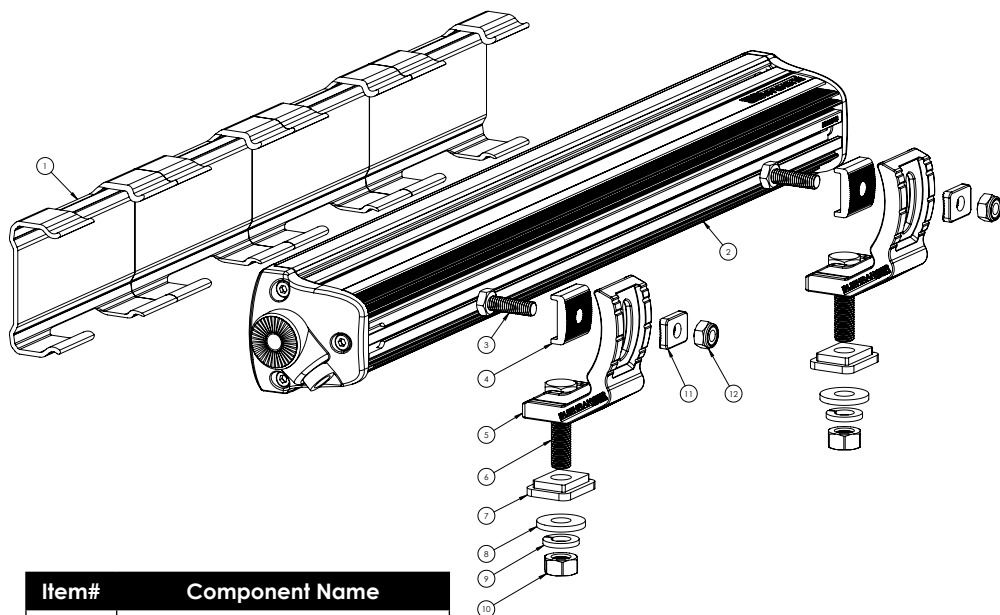
All results shown below are obtained from real scientific testing carried out by a NATA Accredited Photometric Laboratory in Australia. **Measurements displayed with optional clear protective covers fitted.**



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Components Diagram



Item#	Component Name
1	Optional Protective Covers
2	NHT Light Bar
3	M6x20mm Hex Bolt
4	Mount Adaptor
5	Mounting Foot
6	M8x30mm Hex Bolt
7	Rubber Isolator
8	M8 Flat Washer
9	M8 Spring Washer
10	M8 Hex Nut
11	Radius Washer
12	M6 Nyloc Nut
13	Power Lead 2.5m with fuse (Not Shown)
14	Anti-Seize Lubricant Sachet (not shown)

*Quantity of covers equal the amount fitted to the light. All Light Bars come with two sets of covers (Spot & Flood).

** 5.5" (NHT055VLI) only supplied with Flood and Diffused Covers.

COVERS & FEET PER LIGHT

Nominal Size Part Number		Quantity of Covers*	Mounting Feet Supplied
5.5"	NHT055VLI	1**	1
13"	NHT130VLI	3	2
17"	NHT170VLI	4	2
20.5"	NHT205VLI	5	2
24.5"	NHT245VLI	6	2
28"	NHT280VLI	7	2
32"	NHT320VLI	8	2
39.5"	NHT395VLI	10	3
43.5"	NHT435VLI	11	3
51"	NHT510VLI	13	3

Installation Guide

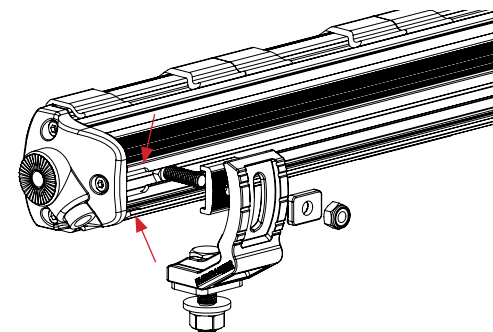
IMPORTANT!

- We recommend the lights / wiring to be fitted by a qualified automotive electrician.
- A forward facing light system may be used only as an auxiliary to high beam. Check compliance and regulations with local authorities.
- Vehicle accessories mounted on the outside of the vehicle may need to comply with regulations governed by your local state authority. Please check before installation.
- When mounting lights, position them appropriately so they do not obstruct existing automotive function. If fitting to front of vehicle, check for Bonnet clearances.
- Consideration should be given for airflow requirements of the vehicle and its mechanical components when mounting lights.
- All stainless steel hardware must have anti-seize applied to the threads before tightening to avoid binding or galling of components.
- Ensure all recyclable Parts/Packaging are discarded in accordance to local regulations.

Light Mounting Feet

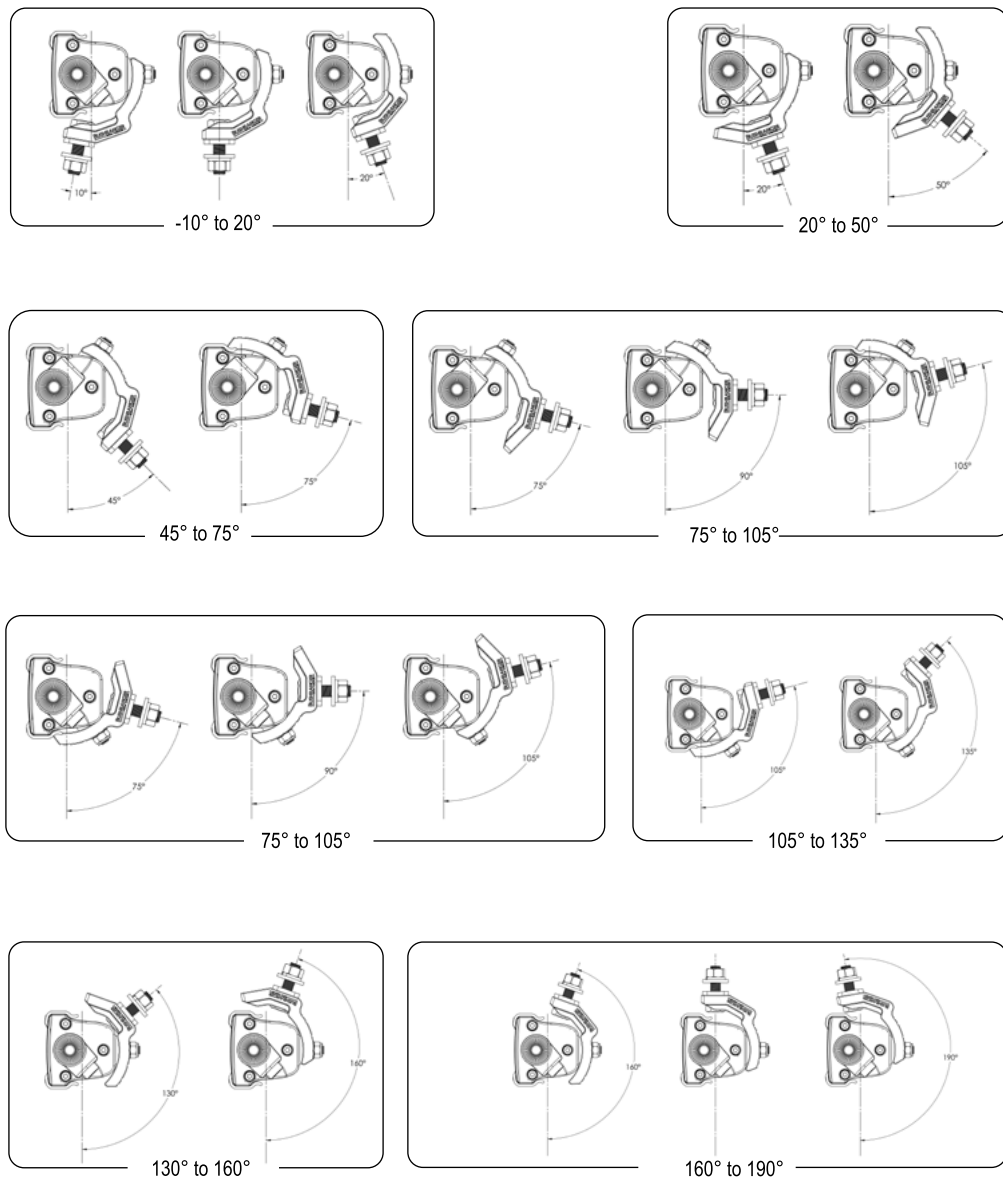
The NHT Light Bar series have been designed to offer a highly adaptable mounting arrangement. The light mounting feet can be slid along the body of the light bar and rotated a full 200° around to suit the majority of mounting applications.

The mounting feet supplied with each light bar can be fitted to the rear or underside sliding channels incorporated into the light bar body. Slide the head of the M6x20mm Hex Bolt (Item 3) into the selected channel by inserting it through the opening at one end of the body (marked with red arrows below). The remaining components can then be assembled onto the bolt to secure the mounting foot to the light bar.



Angle Adjustment

The mounting feet can be moved through 200° rotation by utilising the two individual channels in the body of the light bar and the two hole positions in the mounting feet. All configurations shown below:



Vehicle Mounting & Adjustment

Light bars can be mounted using the supplied mounting feet or tube clamps are available (sold separately) for bar mounting applications. When using mounting feet, all mounting feet supplied must be used, be fitted symmetrically about the centre of the light and positioned towards the ends of the light bar to reduce overhang.

Ensure the mounting location for fitment of the light/s to the vehicle is flat, stable, sufficiently strong and has enough clearance around the light to avoid damage to the vehicle from any movement during installation and use. If drilling is required for mounting, ensure raw edges are coated with corrosion resistant paint or inhibitor.

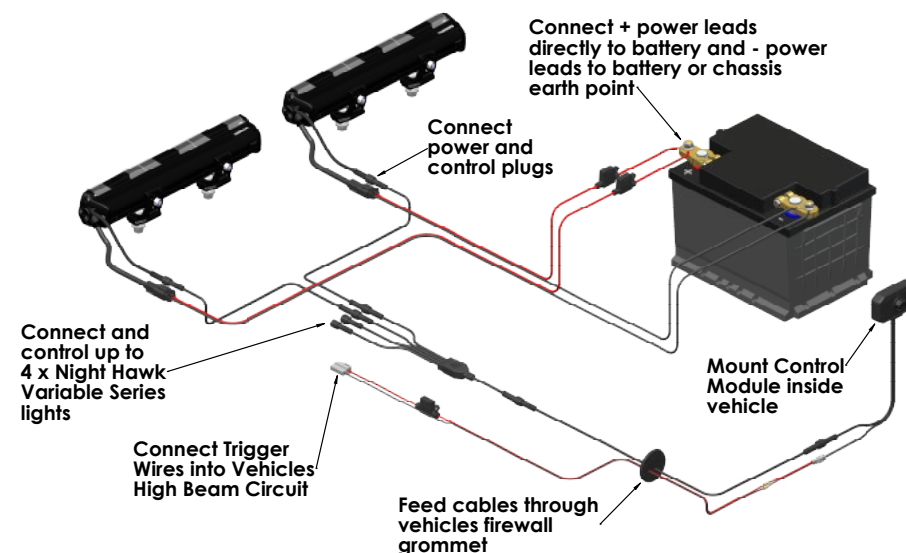
Apply anti-seize lubricant to the threads before final installation. The use of anti-seize greatly reduces the risk of thread galling or binding commonly seen between stainless steel nuts and bolts during tightening. Tighten fasteners to the following torque specifications:

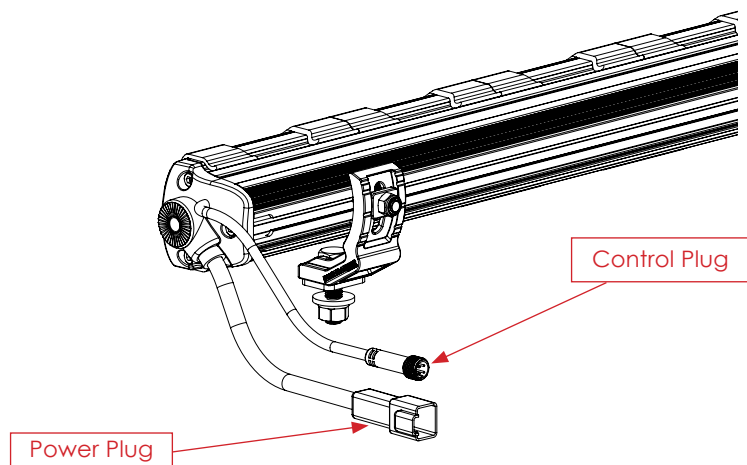
RECOMMENDED TORQUE SETTINGS

M6 Fasteners	8Nm
M8 Fasteners	22Nm

Please refer to the wiring system owners manual, for the full guide on light bar installation.

Wiring Installation





Care & Maintenance

- The light is not serviceable – DO NOT disassemble.
- Clean lights using pH neutral soapy water and a soft nonabrasive brush or sponge. Rinse thoroughly after cleaning.
- DO NOT use solvents, Alkaline based cleaners or abrasive materials to clean the light.
- If lights are exposed to a high salt environment or any other corrosive substance, remove the light and mounting bracket from the vehicle and thoroughly clean and rinse the components as outlined above.
- Remove the clear covers periodically to clean any dirt and grime build up.
- Regularly check all fasteners to ensure they are secured and properly torqued.

Warranty Policy

1. Our Warranty

We warrant to you that the Kingsley product is free from defects in workmanship and materials for the warranty period.

2. Fitting and use

Please ensure you:

- fit the Kingsley product in accordance with the product information and all relevant vehicle safety and compliance laws
- use the Kingsley product for the purpose for which it was originally designed and in accordance with the product information and all relevant vehicle safety and compliance laws

3. Exclusions

Our warranty doesn't cover:

- normal wear and tear
- fitting the Kingsley product other than in accordance with the product information and any relevant vehicle safety and compliance laws, including incorrect fitting
- using the Kingsley product other than for the purpose for which it was originally designed or other than in accordance with the product information and any relevant vehicle safety and compliance laws, including unusual, improper or negligent use or misuse or overloading
- misuse or neglect of the Kingsley product, including improper repair or maintenance or failing to repair or maintain
- alteration, abuse, acts of nature, terrorism, vandalism, collision, road hazards or adverse conditions

4. Making a claim

Please immediately contact us as soon as you become aware of a possible defect in the Kingsley product. We'll arrange for you to either attend a Kingsley outlet (at your cost) for a Kingsley representative to inspect the Kingsley product (as fitted to your vehicle) or for you to return the Kingsley product to us. We'll also request you to provide the purchase receipt and complete a warranty claim form. In order to ensure our warranty is not voided, please keep the purchase receipt as proof of purchase and don't remove the fitted Kingsley product from your vehicle before contacting us. Note: Non-transferable warranty. The original purchaser can only claim warranty. If your claim's in order, we'll notify you and (at our sole discretion) either repair or replace the defective workmanship or materials (at our cost) or refund to you the purchase price you paid for the defective Kingsley product. If further information or investigation is required or if the claim does not meet the requirements under our warranty, we'll let you know.

5. Australian Consumer Law

The Kingsley product comes with guarantees that can't be excluded under the Australian Customer Law. You're entitled to a replacement or refund if there's a major failure and compensation for any other reasonably foreseeable loss or damage. You're also entitled to have the Kingsley product repaired or replaced if it fails to be of acceptable quality and the failure doesn't amount to a major failure.

6. Other consumer rights

The benefits to you under our warranty are in addition to any other rights and remedies you are entitled to under relevant consumer laws. Our warranty replaces any other warranty given by Kingsley or it's supplier in respect of the Kingsley product.

7. Terms

The following terms have the following meanings:

Term	Meaning
Product information	information about the Kingsley product which may be contained in any of the documentation provided with the Kingsley product, including safety instructions, installation instructions, operating instructions, owner's manual, service manual, labels and packaging
Purchase date	the date you purchased the Kingsley product from a Kingsley outlet, as specified in the purchase receipt
Kingsley outlet	an outlet authorised by Kingsley to sell Kingsley products
Kingsley products	products or components which Kingsley manufactures or sells through Kingsley outlets
Warranty period	commences on and from the purchase date and ends as follows: Night Hawk LED Light Bars - 5 year warranty
We/Us	Kingsley Enterprises Pty Ltd (ABN 23 001 592 749) E: sales@bushranger.com.au A: 6A Brooks Road, Ingleburn NSW 2565 P: 1800 654 767 W: www.bushranger.com.au
You	the purchaser of the Kingsley product from a Kingsley outlet

www.bushranger.com.au/nighthawk



BUSHRANGER
4x4 GEAR

Kingsley Enterprises PTY. LTD.

Free Call | 1800 654 767 (Australia Only)

International | +61 2 8700 0400

Email | sales@bushranger.com.au

Address | 6A Brooks Road, Ingleburn NSW 2565