

HOFTRONIC 496484

HOFTRONIC LED Batten 150cm 50W 4000K Instruction Manual

Model: 496484

1. INTRODUCTION

Thank you for choosing the HOFTRONIC LED Batten 150cm 50W 4000K. This ultra-slim LED batten is designed for efficient and bright illumination in various indoor environments such as garages, workshops, and commercial spaces. It features integrated LED light sources, consuming only 50 Watts while providing 6000 lumens of neutral white light (4000K). This manual provides essential information for safe installation, operation, and maintenance of your LED batten.



Figure 1: Front view of the HOFTRONIC LED Batten.

2. SAFETY INSTRUCTIONS

- Read all instructions carefully before installation and use.
- Installation must be performed by a qualified electrician in accordance with local wiring regulations.
- Ensure the power supply is disconnected before any installation, maintenance, or cleaning.
- This product is designed for indoor use only (IP20 rating). Do not expose to moisture or outdoor elements.
- Do not attempt to disassemble or modify the LED batten. There are no user-serviceable parts inside.
- Avoid direct eye exposure to the light source when illuminated.
- Keep packaging materials out of reach of children.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged:

- 1x HOFTRONIC LED Batten (Model 496484)
- Mounting brackets
- Quick connectors

4. SETUP AND INSTALLATION

The HOFTRONIC LED Batten is designed for easy ceiling installation. Follow these steps:

1. **Preparation:** Ensure the power supply to the installation area is turned off at the main circuit breaker.
2. **Marking:** Position the LED batten on the desired ceiling location and mark the drilling points for the mounting brackets. The batten measures 150cm in length, 7.4cm in width, and 2.5cm in height.



Figure 2: Product dimensions (1500mm length, 74mm width, 25mm height).

3. **Mounting Brackets:** Drill holes at the marked points and securely attach the mounting brackets to the ceiling using appropriate screws and wall plugs (not included).
4. **Wiring:** Connect the electrical wires to the quick connectors provided. Ensure correct polarity (Live, Neutral, Earth). Refer to the wiring diagram on the product label if necessary.



Figure 3: Rear view illustrating mounting points and electrical connection area.

5. **Attach Batten:** Clip the LED batten onto the installed mounting brackets. Ensure it is firmly secured.
6. **Power On:** Restore power to the circuit. The LED batten should illuminate.

The lightweight and ultra-thin housing (25mm height) allows for easy installation in dry indoor environments.

LIGHTWEIGHT & ULTRA THIN HOUSING

►►► the lightweight and ultra thin housing, allows for easy installation in dry indoor environments.



Figure 4: The ultra-thin design of the LED batten, highlighting its 25mm profile.

5. OPERATING INSTRUCTIONS

Once installed and powered, the HOFTRONIC LED Batten operates instantly. It provides a super bright, flicker-free illumination of 6000 lumens with a neutral white color temperature of 4000K.

- **Switching On/Off:** Use the wall switch connected to the batten to turn the light on or off.
- **Light Distribution:** The transparent, milk-colored diffuser ensures a uniform 110-degree beam angle, minimizing shadows and providing consistent lighting across the area.
- **Color Rendering:** With a Color Rendering Index (CRI) of >80, the batten accurately displays colors, making it suitable for environments where color perception is important.

HIGH PERFORMANCE & SMD LED CHIPS

►►► the high performance energy efficient LED chips, give the LED Battens light excellent light output at a super low energy consumption level.

AVAILABLE IN
20/40/50
WATTS

►►► AVAILABLE IN
3000/4000/6400
KELVIN

►►► **110° BEAM**
ANGLE

Figure 5: Illustration of the LED batten's high performance and 110-degree beam angle.

6. MAINTENANCE

The HOFTRONIC LED Batten requires minimal maintenance.

- **Cleaning:** Ensure the power is off before cleaning. Wipe the surface of the batten with a soft, dry, or slightly damp cloth. Do not use abrasive cleaners or solvents.
- **Inspection:** Periodically check the mounting and wiring for any signs of wear or damage. If any damage is observed, disconnect power and consult a qualified electrician.
- **LED Lifespan:** The integrated LEDs have an average lifespan of 30,000 hours and do not require replacement.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Light does not turn on	No power supply; Loose wiring; Faulty switch	Check circuit breaker; Verify wiring connections; Test switch functionality.

Problem	Possible Cause	Solution
Light flickers	Unstable power supply; Loose connection	Ensure stable power; Check wiring connections.
Reduced brightness	Dust accumulation; End of product lifespan	Clean the batten surface; Consider replacement if beyond average lifespan.

8. SPECIFICATIONS

Feature	Detail
Brand	HOFTRONIC
Model Number	496484
Product Dimensions (L x W x H)	150 x 7.4 x 2.5 cm
Weight	5 Kilograms
IP Rating	IP20 (Indoor use only)
Light Color Temperature	4000K (Neutral White)
Material	Plastic
Power Consumption	50 Watts
Voltage	230 Volts
Luminous Flux	6000 lm
Incandescent Equivalent	400 Watts
Average Lifespan	30,000 Hours
Beam Angle	110 Degrees
Certification	CE, RoHS
Energy Efficiency Rating	E

For detailed product information, refer to the official EU EPREL database:

<https://eprel.ec.europa.eu/qr/1565762>

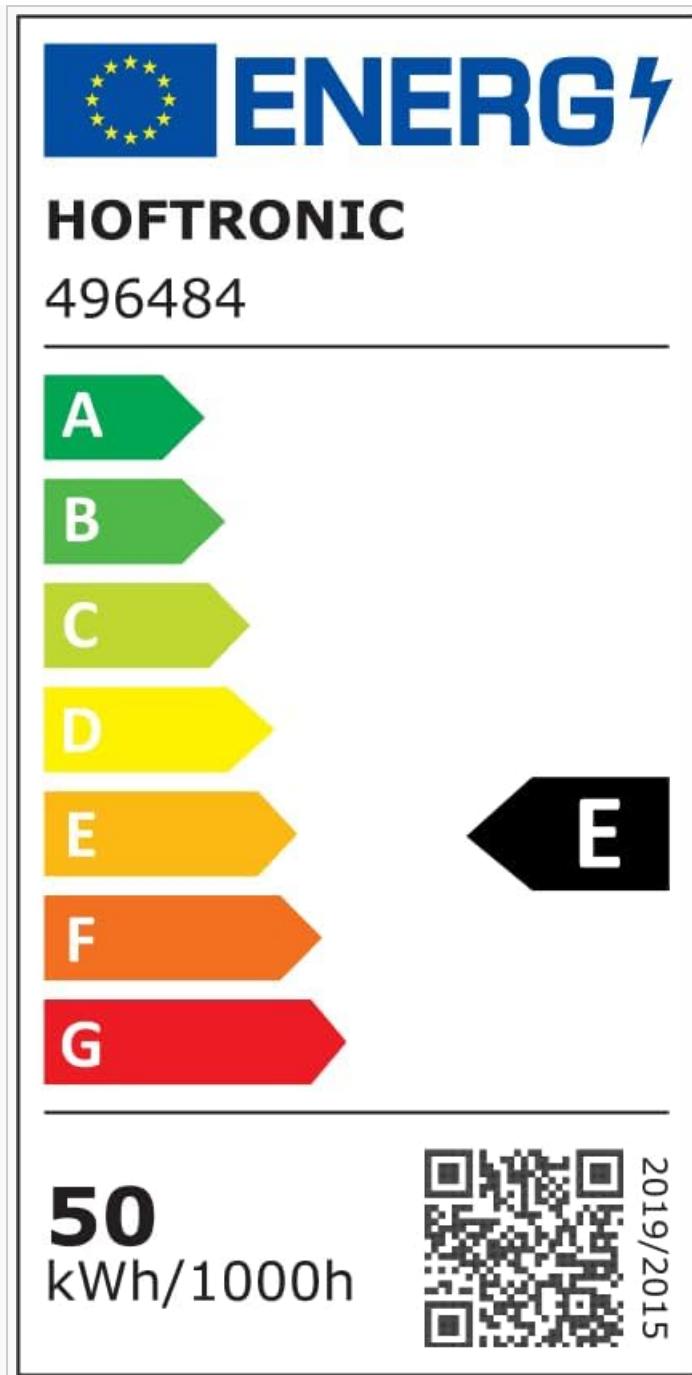


Figure 6: EU Energy Label for Model 496484, indicating an 'E' efficiency rating.

9. WARRANTY AND SUPPORT

HOFTRONIC products are designed for quality and durability. This LED Batten comes with a 5-year warranty, covering manufacturing defects and performance issues under normal use.



EXTENDED WARRANTY & 30.000 HOURS

►►► due to a long lifespan of 30.000 burning hours
the LED Batten comes with a 5 year all-in warranty.

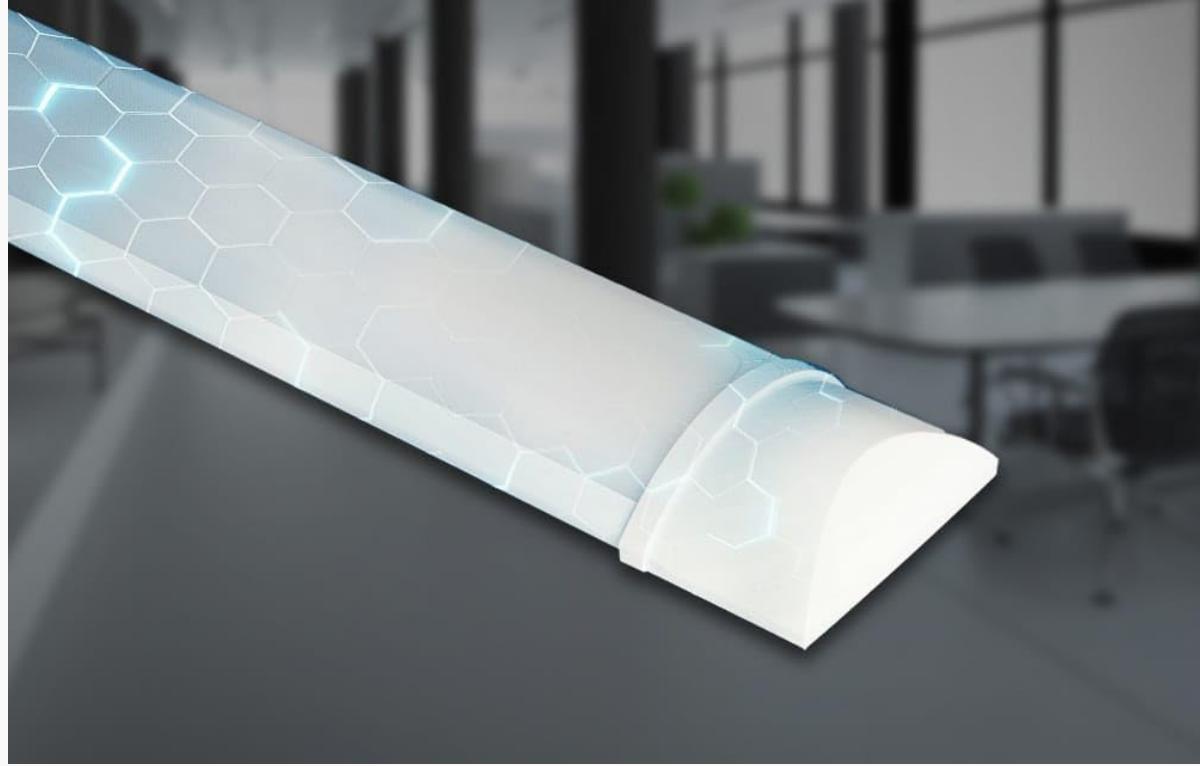


Figure 7: Visual representation of the 5-year warranty and 30,000-hour lifespan.

For warranty claims, technical support, or any product-related inquiries, please contact HOFTRONIC customer service. Ensure you have your purchase receipt and product model number (496484) available.

10. DISPOSAL INFORMATION

This product contains electronic components and should not be disposed of with household waste. Please dispose of it at an authorized recycling facility in accordance with local environmental regulations. Proper disposal helps prevent potential negative consequences for the environment and human health.

© 2025 HOFTRONIC. All rights reserved.

Related Documents - 496484

 <p>HOFTRONIC™ CEILING LIGHT + CCT & REMOTE USER MANUAL CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE</p>	<p>HOFTRONIC Ceiling Light with CCT & Remote User Manual</p> <p>User manual for the HOFTRONIC Ceiling Light with CCT and Remote control. Includes important safety details, installation instructions, functional characteristics, usage guidelines, maintenance, and environmental protection information.</p>
 <p>HOFTRONIC™ WIFI + BLUETOOTH SMART WALL LIGHT KANSAS USER INSTRUCTIONS</p>	<p>HOFTRONIC WiFi + Bluetooth Smart Wall Light Kansas: User Manual & Installation Guide</p> <p>Get detailed instructions for installing and using the HOFTRONIC WiFi + Bluetooth Smart Wall Light Kansas. Learn how to connect via Wi-Fi and Bluetooth, use the HOFTRONIC Smart App, and ensure proper setup for this smart home-compatible lighting solution.</p>
 <p>HOFTRONIC™ LED PANELS USER MANUAL LED PANELS CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE</p>	<p>HOFTRONIC LED Panels User Manual and Installation Guide</p> <p>Comprehensive user manual and installation guide for HOFTRONIC LED Panels. Covers safety precautions, recessed T-bar ceiling installation, suspension installation, and surface mounting frame installation for various panel sizes. Includes usage guidelines, maintenance, environmental protection information, and declarations of conformity.</p>
 <p>HOFTRONIC™ T8 & T5 LED TUBES USER MANUAL T8 & T5 LED TUBES CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE</p>	<p>HOFTRONIC T8 & T5 LED Tubes User Manual and Installation Guide</p> <p>Comprehensive user manual and installation guide for HOFTRONIC T8 and T5 LED tubes, covering safety, specifications, applications, and installation procedures. Features include high lumen efficiency, energy saving, and long lifespan.</p>
 <p>HOFTRONIC™ REMOTE CONTROL 2.4 GHz USER MANUAL REMOTE CONTROL 2.4 GHz CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE</p>	<p>Hoftronic Remote Control 2.4 GHz User Manual</p> <p>User manual for the Hoftronic 2.4 GHz remote control, detailing installation, grouping, timer functions, brightness settings, and disconnecting the remote.</p>
 <p>HOFTRONIC™ VENEZIA LED DIMMABLE DOWNLIGHT USER MANUAL VENEZIA LED DIMMABLE DOWNLIGHT CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE CEILING LIGHT + CCT & REMOTE</p>	<p>HOFTRONIC Venezia LED Dimmable Downlight User Manual</p> <p>User manual for the HOFTRONIC Venezia LED Dimmable Downlight, providing safety, installation, dimming, and maintenance instructions. Features IP65 rating and fire resistance.</p>

Product Information Sheet			
COMMISSION DELEGATED REGULATION (EU) 2013/2015 with regard to energy labelling of light sources			
Supplier's name or trade mark: HOFTRONIC			
Supplier's address: HOF Trading Support, Fahrenheitstraat 11, 6003 DC Weert Limburg, NL			
Model identifier: 496484			
Type of light source			
Lighting technology used:	LED	Non-directional or directional	NDS
Light source (or other electric interface)	Integrated (LED)		
Mano or non-man	MILS	Connected source (LS)	No
Colour rendering index	No	Envelope	-
High luminance light source	No		
Anti-plee shield	No	Dimmable	No
Product parameters			
Parameter	Value	Parameter	Value
General product parameters:			
Energy consumption in de-rated luminous flux (W), rounded up to the nearest integer	50	Energy efficiency class	E
Useful luminous flux (phi_u) (expressed in lumens), rounded up to the nearest integer	6000	Correlated colour temperature, rounded to the nearest integer in the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set	4000
On-mode power (P _{on}), expressed in W	50,0	Spectral power distribution (P _s), expressed in W, rounded to the second decimal	0,00
Reduced standby power (P _{st}) for L50, expressed in mW and rounded to the second decimal	-	Colour rendering index, rounded to the nearest integer, or the range of CIE values, rounded to the second decimal	80
Outer dimensions with control gear, lighting control	Height: 25 mm Width: 74 mm Depth: 1500 mm	Spectral power distribution (P _s), expressed in nm, mm ⁻¹ , nm ⁻¹ , nm ⁻² , nm ⁻³ , nm ⁻⁴ , nm ⁻⁵ , nm ⁻⁶ , nm ⁻⁷ , nm ⁻⁸ , nm ⁻⁹ , nm ⁻¹⁰ , nm ⁻¹¹ , nm ⁻¹² , nm ⁻¹³ , nm ⁻¹⁴ , nm ⁻¹⁵ , nm ⁻¹⁶ , nm ⁻¹⁷ , nm ⁻¹⁸ , nm ⁻¹⁹ , nm ⁻²⁰ , nm ⁻²¹ , nm ⁻²² , nm ⁻²³ , nm ⁻²⁴ , nm ⁻²⁵ , nm ⁻²⁶ , nm ⁻²⁷ , nm ⁻²⁸ , nm ⁻²⁹ , nm ⁻³⁰ , nm ⁻³¹ , nm ⁻³² , nm ⁻³³ , nm ⁻³⁴ , nm ⁻³⁵ , nm ⁻³⁶ , nm ⁻³⁷ , nm ⁻³⁸ , nm ⁻³⁹ , nm ⁻⁴⁰ , nm ⁻⁴¹ , nm ⁻⁴² , nm ⁻⁴³ , nm ⁻⁴⁴ , nm ⁻⁴⁵ , nm ⁻⁴⁶ , nm ⁻⁴⁷ , nm ⁻⁴⁸ , nm ⁻⁴⁹ , nm ⁻⁵⁰ , nm ⁻⁵¹ , nm ⁻⁵² , nm ⁻⁵³ , nm ⁻⁵⁴ , nm ⁻⁵⁵ , nm ⁻⁵⁶ , nm ⁻⁵⁷ , nm ⁻⁵⁸ , nm ⁻⁵⁹ , nm ⁻⁶⁰ , nm ⁻⁶¹ , nm ⁻⁶² , nm ⁻⁶³ , nm ⁻⁶⁴ , nm ⁻⁶⁵ , nm ⁻⁶⁶ , nm ⁻⁶⁷ , nm ⁻⁶⁸ , nm ⁻⁶⁹ , nm ⁻⁷⁰ , nm ⁻⁷¹ , nm ⁻⁷² , nm ⁻⁷³ , nm ⁻⁷⁴ , nm ⁻⁷⁵ , nm ⁻⁷⁶ , nm ⁻⁷⁷ , nm ⁻⁷⁸ , nm ⁻⁷⁹ , nm ⁻⁸⁰ , nm ⁻⁸¹ , nm ⁻⁸² , nm ⁻⁸³ , nm ⁻⁸⁴ , nm ⁻⁸⁵ , nm ⁻⁸⁶ , nm ⁻⁸⁷ , nm ⁻⁸⁸ , nm ⁻⁸⁹ , nm ⁻⁹⁰ , nm ⁻⁹¹ , nm ⁻⁹² , nm ⁻⁹³ , nm ⁻⁹⁴ , nm ⁻⁹⁵ , nm ⁻⁹⁶ , nm ⁻⁹⁷ , nm ⁻⁹⁸ , nm ⁻⁹⁹ , nm ⁻¹⁰⁰ , nm ⁻¹⁰¹ , nm ⁻¹⁰² , nm ⁻¹⁰³ , nm ⁻¹⁰⁴ , nm ⁻¹⁰⁵ , nm ⁻¹⁰⁶ , nm ⁻¹⁰⁷ , nm ⁻¹⁰⁸ , nm ⁻¹⁰⁹ , nm ⁻¹¹⁰ , nm ⁻¹¹¹ , nm ⁻¹¹² , nm ⁻¹¹³ , nm ⁻¹¹⁴ , nm ⁻¹¹⁵ , nm ⁻¹¹⁶ , nm ⁻¹¹⁷ , nm ⁻¹¹⁸ , nm ⁻¹¹⁹ , nm ⁻¹²⁰ , nm ⁻¹²¹ , nm ⁻¹²² , nm ⁻¹²³ , nm ⁻¹²⁴ , nm ⁻¹²⁵ , nm ⁻¹²⁶ , nm ⁻¹²⁷ , nm ⁻¹²⁸ , nm ⁻¹²⁹ , nm ⁻¹³⁰ , nm ⁻¹³¹ , nm ⁻¹³² , nm ⁻¹³³ , nm ⁻¹³⁴ , nm ⁻¹³⁵ , nm ⁻¹³⁶ , nm ⁻¹³⁷ , nm ⁻¹³⁸ , nm ⁻¹³⁹ , nm ⁻¹⁴⁰ , nm ⁻¹⁴¹ , nm ⁻¹⁴² , nm ⁻¹⁴³ , nm ⁻¹⁴⁴ , nm ⁻¹⁴⁵ , nm ⁻¹⁴⁶ , nm ⁻¹⁴⁷ , nm ⁻¹⁴⁸ , nm ⁻¹⁴⁹ , nm ⁻¹⁵⁰ , nm ⁻¹⁵¹ , nm ⁻¹⁵² , nm ⁻¹⁵³ , nm ⁻¹⁵⁴ , nm ⁻¹⁵⁵ , nm ⁻¹⁵⁶ , nm ⁻¹⁵⁷ , nm ⁻¹⁵⁸ , nm ⁻¹⁵⁹ , nm ⁻¹⁶⁰ , nm ⁻¹⁶¹ , nm ⁻¹⁶² , nm ⁻¹⁶³ , nm ⁻¹⁶⁴ , nm ⁻¹⁶⁵ , nm ⁻¹⁶⁶ , nm ⁻¹⁶⁷ , nm ⁻¹⁶⁸ , nm ⁻¹⁶⁹ , nm ⁻¹⁷⁰ , nm ⁻¹⁷¹ , nm ⁻¹⁷² , nm ⁻¹⁷³ , nm ⁻¹⁷⁴ , nm ⁻¹⁷⁵ , nm ⁻¹⁷⁶ , nm ⁻¹⁷⁷ , nm ⁻¹⁷⁸ , nm ⁻¹⁷⁹ , nm ⁻¹⁸⁰ , nm ⁻¹⁸¹ , nm ⁻¹⁸² , nm ⁻¹⁸³ , nm ⁻¹⁸⁴ , nm ⁻¹⁸⁵ , nm ⁻¹⁸⁶ , nm ⁻¹⁸⁷ , nm ⁻¹⁸⁸ , nm ⁻¹⁸⁹ , nm ⁻¹⁹⁰ , nm ⁻¹⁹¹ , nm ⁻¹⁹² , nm ⁻¹⁹³ , nm ⁻¹⁹⁴ , nm ⁻¹⁹⁵ , nm ⁻¹⁹⁶ , nm ⁻¹⁹⁷ , nm ⁻¹⁹⁸ , nm ⁻¹⁹⁹ , nm ⁻²⁰⁰ , nm ⁻²⁰¹ , nm ⁻²⁰² , nm ⁻²⁰³ , nm ⁻²⁰⁴ , nm ⁻²⁰⁵ , nm ⁻²⁰⁶ , nm ⁻²⁰⁷ , nm ⁻²⁰⁸ , nm ⁻²⁰⁹ , nm ⁻²¹⁰ , nm ⁻²¹¹ , nm ⁻²¹² , nm ⁻²¹³ , nm ⁻²¹⁴ , nm ⁻²¹⁵ , nm ⁻²¹⁶ , nm ⁻²¹⁷ , nm ⁻²¹⁸ , nm ⁻²¹⁹ , nm ⁻²²⁰ , nm ⁻²²¹ , nm ⁻²²² , nm ⁻²²³ , nm ⁻²²⁴ , nm ⁻²²⁵ , nm ⁻²²⁶ , nm ⁻²²⁷ , nm ⁻²²⁸ , nm ⁻²²⁹ , nm ⁻²³⁰ , nm ⁻²³¹ , nm ⁻²³² , nm ⁻²³³ , nm ⁻²³⁴ , nm ⁻²³⁵ , nm ⁻²³⁶ , nm ⁻²³⁷ , nm ⁻²³⁸ , nm ⁻²³⁹ , nm ⁻²⁴⁰ , nm ⁻²⁴¹ , nm ⁻²⁴² , nm ⁻²⁴³ , nm ⁻²⁴⁴ , nm ⁻²⁴⁵ , nm ⁻²⁴⁶ , nm ⁻²⁴⁷ , nm ⁻²⁴⁸ , nm ⁻²⁴⁹ , nm ⁻²⁵⁰ , nm ⁻²⁵¹ , nm ⁻²⁵² , nm ⁻²⁵³ , nm ⁻²⁵⁴ , nm ⁻²⁵⁵ , nm ⁻²⁵⁶ , nm ⁻²⁵⁷ , nm ⁻²⁵⁸ , nm ⁻²⁵⁹ , nm ⁻²⁶⁰ , nm ⁻²⁶¹ , nm ⁻²⁶² , nm ⁻²⁶³ , nm ⁻²⁶⁴ , nm ⁻²⁶⁵ , nm ⁻²⁶⁶ , nm ⁻²⁶⁷ , nm ⁻²⁶⁸ , nm ⁻²⁶⁹ , nm ⁻²⁷⁰ , nm ⁻²⁷¹ , nm ⁻²⁷² , nm ⁻²⁷³ , nm ⁻²⁷⁴ , nm ⁻²⁷⁵ , nm ⁻²⁷⁶ , nm ⁻²⁷⁷ , nm ⁻²⁷⁸ , nm ⁻²⁷⁹ , nm ⁻²⁸⁰ , nm ⁻²⁸¹ , nm ⁻²⁸² , nm ⁻²⁸³ , nm ⁻²⁸⁴ , nm ⁻²⁸⁵ , nm ⁻²⁸⁶ , nm ⁻²⁸⁷ , nm ⁻²⁸⁸ , nm ⁻²⁸⁹ , nm ⁻²⁹⁰ , nm ⁻²⁹¹ , nm ⁻²⁹² , nm ⁻²⁹³ , nm ⁻²⁹⁴ , nm ⁻²⁹⁵ , nm ⁻²⁹⁶ , nm ⁻²⁹⁷ , nm ⁻²⁹⁸ , nm ⁻²⁹⁹ , nm ⁻³⁰⁰ , nm ⁻³⁰¹ , nm ⁻³⁰² , nm ⁻³⁰³ , nm ⁻³⁰⁴ , nm ⁻³⁰⁵ , nm ⁻³⁰⁶ , nm ⁻³⁰⁷ , nm ⁻³⁰⁸ , nm ⁻³⁰⁹ , nm ⁻³¹⁰ , nm ⁻³¹¹ , nm ⁻³¹² , nm ⁻³¹³ , nm ⁻³¹⁴ , nm ⁻³¹⁵ , nm ⁻³¹⁶ , nm ⁻³¹⁷ , nm ⁻³¹⁸ , nm ⁻³¹⁹ , nm ⁻³²⁰ , nm ⁻³²¹ , nm ⁻³²² , nm ⁻³²³ , nm ⁻³²⁴ , nm ⁻³²⁵ , nm ⁻³²⁶ , nm ⁻³²⁷ , nm ⁻³²⁸ , nm ⁻³²⁹ , nm ⁻³³⁰ , nm ⁻³³¹ , nm ⁻³³² , nm ⁻³³³ , nm ⁻³³⁴ , nm ⁻³³⁵ , nm ⁻³³⁶ , nm ⁻³³⁷ , nm ⁻³³⁸ , nm ⁻³³⁹ , nm ⁻³⁴⁰ , nm ⁻³⁴¹ , nm ⁻³⁴² , nm ⁻³⁴³ , nm ⁻³⁴⁴ , nm ⁻³⁴⁵ , nm ⁻³⁴⁶ , nm ⁻³⁴⁷ , nm ⁻³⁴⁸ , nm ⁻³⁴⁹ , nm ⁻³⁵⁰ , nm ⁻³⁵¹ , nm ⁻³⁵² , nm ⁻³⁵³ , nm ⁻³⁵⁴ , nm ⁻³⁵⁵ , nm ⁻³⁵⁶ , nm ⁻³⁵⁷ , nm ⁻³⁵⁸ , nm ⁻³⁵⁹ , nm ⁻³⁶⁰ , nm ⁻³⁶¹ , nm ⁻³⁶² , nm ⁻³⁶³ , nm ⁻³⁶⁴ , nm ⁻³⁶⁵ , nm ⁻³⁶⁶ , nm ⁻³⁶⁷ , nm ⁻³⁶⁸ , nm ⁻³⁶⁹ , nm ⁻³⁷⁰ , nm ⁻³⁷¹ , nm ⁻³⁷² , nm ⁻³⁷³ , nm ⁻³⁷⁴ , nm ⁻³⁷⁵ , nm ⁻³⁷⁶ , nm ⁻³⁷⁷ , nm ⁻³⁷⁸ , nm ⁻³⁷⁹ , nm ⁻³⁸⁰ , nm ⁻³⁸¹ , nm ⁻³⁸² , nm ⁻³⁸³ , nm ⁻³⁸⁴ , nm ⁻³⁸⁵ , nm ⁻³⁸⁶ , nm ⁻³⁸⁷ , nm ⁻³⁸⁸ , nm ⁻³⁸⁹ , nm ⁻³⁹⁰ , nm ⁻³⁹¹ , nm ⁻³⁹² , nm ⁻³⁹³ , nm ⁻³⁹⁴ , nm ⁻³⁹⁵ , nm ⁻³⁹⁶ , nm ⁻³⁹⁷ , nm ⁻³⁹⁸ , nm ⁻³⁹⁹ , nm ⁻⁴⁰⁰ , nm ⁻⁴⁰¹ , nm ⁻⁴⁰² , nm ⁻⁴⁰³ , nm ⁻⁴⁰⁴ , nm ⁻⁴⁰⁵ , nm ⁻⁴⁰⁶ , nm ⁻⁴⁰⁷ , nm ⁻⁴⁰⁸ , nm ⁻⁴⁰⁹ , nm ⁻⁴¹⁰ , nm ⁻⁴¹¹ , nm ⁻⁴¹² , nm ⁻⁴¹³ , nm ⁻⁴¹⁴ , nm ⁻⁴¹⁵ , nm ⁻⁴¹⁶ , nm ⁻⁴¹⁷ , nm ⁻⁴¹⁸ , nm ⁻⁴¹⁹ , nm ⁻⁴²⁰ , nm ⁻⁴²¹ , nm ⁻⁴²² , nm ⁻⁴²³ , nm ⁻⁴²⁴ , nm ⁻⁴²⁵ , nm ⁻⁴²⁶ , nm ⁻⁴²⁷ , nm ⁻⁴²⁸ , nm ⁻⁴²⁹ , nm ⁻⁴³⁰ , nm ⁻⁴³¹ , nm ⁻⁴³² , nm ⁻⁴³³ , nm ⁻⁴³⁴ , nm ⁻⁴³⁵ , nm ⁻⁴³⁶ , nm ⁻⁴³⁷ , nm ⁻⁴³⁸ , nm ⁻⁴³⁹ , nm ⁻⁴⁴⁰ , nm ⁻⁴⁴¹ , nm ⁻⁴⁴² , nm ⁻⁴⁴³ , nm ⁻⁴⁴⁴ , nm ⁻⁴⁴⁵ , nm ⁻⁴⁴⁶ , nm ⁻⁴⁴⁷ , nm ⁻⁴⁴⁸ , nm ⁻⁴⁴⁹ , nm ⁻⁴⁵⁰ , nm ⁻⁴⁵¹ , nm ⁻⁴⁵² , nm ⁻⁴⁵³ , nm ⁻⁴⁵⁴ , nm ⁻⁴⁵⁵ , nm ⁻⁴⁵⁶ , nm ⁻⁴⁵⁷ , nm ⁻⁴⁵⁸ , nm ⁻⁴⁵⁹ , nm ⁻⁴⁶⁰ , nm ⁻⁴⁶¹ , nm ⁻⁴⁶² , nm ⁻⁴⁶³ , nm ⁻⁴⁶⁴ , nm ⁻⁴⁶⁵ , nm ⁻⁴⁶⁶ , nm ⁻⁴⁶⁷ , nm ⁻⁴⁶⁸ , nm ⁻⁴⁶⁹ , nm ⁻⁴⁷⁰ , nm ⁻⁴⁷¹ , nm ⁻⁴⁷² , nm ⁻⁴⁷³ , nm ⁻⁴⁷⁴ , nm ⁻⁴⁷⁵ , nm ⁻⁴⁷⁶ , nm ⁻⁴⁷⁷ , nm ⁻⁴⁷⁸ , nm ⁻⁴⁷⁹ , nm ⁻⁴⁸⁰ , nm ⁻⁴⁸¹ , nm ⁻⁴⁸² , nm ⁻⁴⁸³ , nm ⁻⁴⁸⁴ , nm ⁻⁴⁸⁵ , nm ⁻⁴⁸⁶ , nm ⁻⁴⁸⁷ , nm ⁻⁴⁸⁸ , nm ⁻⁴⁸⁹ , nm ⁻⁴⁹⁰ , nm ⁻⁴⁹¹ , nm ⁻⁴⁹² , nm ⁻⁴⁹³ , nm ⁻⁴⁹⁴ , nm ⁻⁴⁹⁵ , nm ⁻⁴⁹⁶ , nm ⁻⁴⁹⁷ , nm ⁻⁴⁹⁸ , nm ⁻⁴⁹⁹ , nm ⁻⁵⁰⁰ , nm ⁻⁵⁰¹ , nm ⁻⁵⁰² , nm ⁻⁵⁰³ , nm ⁻⁵⁰⁴ , nm ⁻⁵⁰⁵ , nm ⁻⁵⁰⁶ , nm ⁻⁵⁰⁷ , nm ⁻⁵⁰⁸ , nm ⁻⁵⁰⁹ , nm ⁻⁵¹⁰ , nm ⁻⁵¹¹ , nm ⁻⁵¹² , nm ⁻⁵¹³ , nm ⁻⁵¹⁴ , nm ⁻⁵¹⁵ , nm ⁻⁵¹⁶ , nm ⁻⁵¹⁷ , nm ⁻⁵¹⁸ , nm ⁻⁵¹⁹ , nm ⁻⁵²⁰ , nm ⁻⁵²¹ , nm ⁻⁵²² , nm ⁻⁵²³ , nm ⁻⁵²⁴ , nm ⁻⁵²⁵ , nm ⁻⁵²⁶ , nm ⁻⁵²⁷ , nm ⁻⁵²⁸ , nm ⁻⁵²⁹ , nm ⁻⁵³⁰ , nm ⁻⁵³¹ , nm ⁻⁵³² , nm ⁻⁵³³ , nm ⁻⁵³⁴ , nm ⁻⁵³⁵ , nm ⁻⁵³⁶ , nm ⁻⁵³⁷ , nm ⁻⁵³⁸ , nm ⁻⁵³⁹ , nm ⁻⁵⁴⁰ , nm ⁻⁵⁴¹ , nm ⁻⁵⁴² , nm ⁻⁵⁴³ , nm ⁻⁵⁴⁴ , nm ⁻⁵⁴⁵ , nm ⁻⁵⁴⁶ , nm ⁻⁵⁴⁷ , nm ⁻⁵⁴⁸ , nm ⁻⁵⁴⁹ , nm ⁻⁵⁵⁰ , nm ⁻⁵⁵¹ , nm ⁻⁵⁵² , nm ⁻⁵⁵³ , nm ⁻⁵⁵⁴ , nm ⁻⁵⁵⁵ , nm ⁻⁵⁵⁶ , nm ⁻⁵⁵⁷ , nm ⁻⁵⁵⁸ , nm ⁻⁵⁵⁹ , nm ⁻⁵⁶⁰ , nm ⁻⁵⁶¹ , nm ⁻⁵⁶² , nm ⁻⁵⁶³ , nm ⁻⁵⁶⁴ , nm ⁻⁵⁶⁵ , nm ⁻⁵⁶⁶ , nm ⁻⁵⁶⁷ , nm ⁻⁵⁶⁸ , nm ⁻⁵⁶⁹ , nm ⁻⁵⁷⁰ , nm ⁻⁵⁷¹ , nm ⁻⁵⁷² , nm ⁻⁵⁷³ , nm ⁻⁵⁷⁴ , nm ⁻⁵⁷⁵ , nm ⁻⁵⁷⁶ , nm ⁻⁵⁷⁷ , nm ⁻⁵⁷⁸ , nm ⁻⁵⁷⁹ , nm ⁻⁵⁸⁰ , nm ⁻⁵⁸¹ , nm ⁻⁵⁸² , nm ⁻⁵⁸³ , nm ⁻⁵⁸⁴ , nm ⁻⁵⁸⁵ , nm ⁻⁵⁸⁶ , nm ⁻⁵⁸⁷ , nm ⁻⁵⁸⁸ , nm ⁻⁵⁸⁹ , nm ⁻⁵⁹⁰ , nm ⁻⁵⁹¹ , nm ⁻⁵⁹² , nm ⁻⁵⁹³ , nm ⁻⁵⁹⁴ , nm ⁻⁵⁹⁵ , nm ⁻⁵⁹⁶ , nm ⁻⁵⁹⁷ , nm ⁻⁵⁹⁸ , nm ⁻⁵⁹⁹ , nm ⁻⁶⁰⁰ , nm ⁻⁶⁰¹ , nm ⁻⁶⁰² , nm ⁻⁶⁰³ , nm ⁻⁶⁰⁴ , nm ⁻⁶⁰⁵ , nm ⁻⁶⁰⁶ , nm ⁻⁶⁰⁷ , nm ⁻⁶⁰⁸ , nm ⁻⁶⁰⁹ , nm ⁻⁶¹⁰ , nm ⁻⁶¹¹ , nm ⁻⁶¹² , nm ⁻⁶¹³ , nm ⁻⁶¹⁴ , nm ⁻⁶¹⁵ , nm ⁻⁶¹⁶ , nm ⁻⁶¹⁷ , nm ⁻⁶¹⁸ , nm ⁻⁶¹⁹ , nm ⁻⁶²⁰ , nm ⁻⁶²¹ , nm ⁻⁶²² , nm ⁻⁶²³ , nm ⁻⁶²⁴ , nm ⁻⁶²⁵ , nm ⁻⁶²⁶ , nm ⁻⁶²⁷ , nm ⁻⁶²⁸ , nm ⁻⁶²⁹ , nm ⁻⁶³⁰ , nm ⁻⁶³¹ , nm ⁻⁶³² , nm ⁻⁶³³ , nm ⁻⁶³⁴ , nm ⁻⁶³⁵ , nm ⁻⁶³⁶ , nm ⁻⁶³⁷ , nm ⁻⁶³⁸ , nm ⁻⁶³⁹ , nm ⁻⁶⁴⁰ , nm ⁻⁶⁴¹ , nm ⁻⁶⁴² , nm ⁻⁶⁴³ , nm ⁻⁶⁴⁴ , nm ⁻⁶⁴⁵ , nm ⁻⁶⁴⁶ , nm ⁻⁶⁴⁷ , nm ⁻⁶⁴⁸ , nm ⁻⁶⁴⁹ , nm ⁻⁶⁵⁰ , nm ⁻⁶⁵¹ , nm ⁻⁶⁵² , nm ⁻⁶⁵³ , nm ⁻⁶⁵⁴ , nm ⁻⁶⁵⁵ , nm ⁻⁶⁵⁶ , nm ⁻⁶⁵⁷ , nm ⁻⁶⁵⁸ , nm ⁻⁶⁵⁹ , nm ⁻⁶⁶⁰ , nm ⁻⁶⁶¹ , nm ⁻⁶⁶² , nm ⁻⁶⁶³ , nm ⁻⁶⁶⁴ , nm ⁻⁶⁶⁵ , nm ⁻⁶⁶⁶ , nm ⁻⁶⁶⁷ , nm ⁻⁶⁶⁸ , nm ⁻⁶⁶⁹ , nm ⁻⁶⁷⁰ , nm ⁻⁶⁷¹ , nm ⁻⁶⁷² , nm ⁻⁶⁷³ , nm ⁻⁶⁷⁴ , nm ⁻⁶⁷⁵ , nm ⁻⁶⁷⁶ , nm ⁻⁶⁷⁷ , nm ⁻⁶⁷⁸ , nm ⁻⁶⁷⁹ , nm ⁻⁶⁸⁰ , nm ⁻⁶⁸¹ , nm ⁻⁶⁸² , nm ⁻⁶⁸³ , nm ⁻⁶⁸⁴ , nm ⁻⁶⁸⁵ , nm ⁻⁶⁸⁶ , nm ⁻⁶⁸⁷ , nm ⁻⁶⁸⁸ , nm ⁻⁶⁸⁹ , nm ⁻⁶⁹⁰ , nm ⁻⁶⁹¹ , nm ⁻⁶⁹² , nm ⁻⁶⁹³ , nm ⁻⁶⁹⁴ , nm ⁻⁶⁹⁵ , nm ⁻⁶⁹⁶ , nm ⁻⁶⁹⁷ , nm ⁻⁶⁹⁸ , nm ⁻⁶⁹⁹ , nm ⁻⁷⁰⁰ , nm ⁻⁷⁰¹ , nm ⁻⁷⁰² , nm ⁻⁷⁰³ , nm ⁻⁷⁰⁴ , nm ⁻⁷⁰⁵ , nm ⁻⁷⁰⁶ , nm ⁻⁷⁰⁷ , nm ⁻⁷⁰⁸ , nm ⁻⁷⁰⁹ , nm ⁻⁷¹⁰ , nm ⁻⁷¹¹ , nm ⁻⁷¹² , nm ⁻⁷¹³ , nm ⁻⁷¹⁴ , nm ⁻⁷¹⁵ , nm ⁻⁷¹⁶ , nm ⁻⁷¹⁷ , nm ⁻⁷¹⁸ , nm ⁻⁷¹⁹ , nm ⁻⁷²⁰ , nm ⁻⁷²¹ , nm ⁻⁷²² , nm ⁻⁷²³ , nm ⁻⁷²⁴ , nm ⁻⁷²⁵ , nm ⁻⁷²⁶ , nm ⁻⁷²⁷ , nm ⁻⁷²⁸ , nm ⁻⁷²⁹ , nm ⁻⁷³⁰ , nm ⁻⁷³¹ , nm ⁻⁷³² , nm ⁻⁷³³ , nm ⁻⁷³⁴ , nm ⁻⁷³⁵ , nm ⁻⁷³⁶ , nm ⁻⁷³⁷ , nm ⁻⁷³⁸ , nm ⁻⁷³⁹ , nm ⁻⁷⁴⁰ , nm ⁻⁷⁴¹ , nm ⁻⁷⁴² , nm ⁻⁷⁴³ , nm ⁻⁷⁴⁴ , nm ⁻⁷⁴⁵ , nm ⁻⁷⁴⁶ , nm ⁻⁷⁴⁷ , nm ⁻⁷⁴⁸ , nm ⁻⁷⁴⁹ , nm ⁻⁷⁵⁰ , nm ⁻⁷⁵¹ , nm ⁻⁷⁵² , nm ⁻⁷⁵³ , nm ⁻⁷⁵⁴ , nm ⁻⁷⁵⁵ , nm ⁻⁷⁵⁶ , nm ⁻⁷⁵⁷ , nm ⁻⁷⁵⁸ , nm ⁻⁷⁵⁹ , nm ⁻⁷⁶⁰ , nm ⁻⁷⁶¹ , nm ⁻⁷⁶² , nm ⁻⁷⁶³ , nm ⁻⁷⁶⁴ , nm ⁻⁷⁶⁵ , nm ⁻⁷⁶⁶ , nm ⁻⁷⁶⁷ , nm ⁻⁷⁶⁸ , nm ⁻⁷⁶⁹ , nm ⁻⁷⁷⁰ , nm ⁻⁷⁷¹ , nm ⁻⁷⁷² , nm ⁻⁷⁷³ , nm ⁻⁷⁷⁴ , nm ⁻⁷⁷⁵ , nm ⁻⁷⁷⁶ , nm ⁻⁷⁷⁷ , nm ⁻⁷⁷⁸ , nm ⁻⁷⁷⁹ , nm ⁻⁷⁸⁰ , nm ⁻⁷⁸¹ , nm ⁻⁷⁸² , nm ⁻⁷⁸³ , nm ⁻⁷⁸⁴ , nm ⁻⁷⁸⁵ , nm ⁻⁷⁸⁶ , nm ⁻⁷⁸⁷ , nm ⁻⁷⁸⁸ , nm ⁻⁷⁸⁹ , nm ⁻⁷⁹⁰ , nm ⁻⁷⁹¹ , nm ⁻⁷⁹² , nm ⁻⁷⁹³ , nm ⁻⁷⁹⁴ , nm ⁻⁷⁹⁵ , nm ⁻⁷⁹⁶ , nm ⁻⁷⁹⁷ , nm ⁻⁷⁹⁸ , nm ⁻⁷⁹⁹ , nm ⁻⁸⁰⁰ , nm ⁻⁸⁰¹ , nm ⁻⁸⁰² , nm ⁻⁸⁰³ , nm ⁻⁸⁰⁴ , nm ⁻⁸⁰⁵ , nm ⁻⁸⁰⁶ , nm ⁻⁸⁰⁷ , nm ⁻⁸⁰⁸ , nm ⁻⁸⁰⁹ , nm ⁻⁸¹⁰ , nm ⁻⁸¹¹ , nm ⁻⁸¹² , nm ⁻⁸¹³ , nm ⁻⁸¹⁴ , nm ⁻⁸¹⁵ , nm ⁻⁸¹⁶ , nm ⁻⁸¹⁷ , nm ⁻⁸¹⁸ , nm ⁻⁸¹⁹ , nm ⁻⁸²⁰ , nm ⁻⁸²¹ , nm ⁻⁸²² , nm ⁻⁸²³ , nm ⁻⁸²⁴ , nm ⁻⁸²⁵ , nm ⁻⁸²⁶ , nm ⁻⁸²⁷ , nm ⁻⁸²⁸ , nm ⁻⁸²⁹ , nm ⁻⁸³⁰ , nm ⁻⁸³¹ , nm ⁻⁸³² , nm ⁻⁸³³ , nm ⁻⁸³⁴ , nm ⁻⁸³⁵ , nm ⁻⁸³⁶ , nm ⁻⁸³⁷ , nm ⁻⁸³⁸ , nm ⁻⁸³⁹ , nm ⁻⁸⁴⁰ , nm ⁻⁸⁴¹ , nm ⁻⁸⁴² , nm ⁻⁸⁴³ , nm ⁻⁸⁴⁴ , nm ⁻⁸⁴⁵ , nm ⁻⁸⁴⁶ , nm ⁻⁸⁴⁷ , nm ⁻⁸⁴⁸ , nm ⁻⁸⁴⁹ , nm ⁻⁸⁵⁰ , nm ⁻⁸⁵¹ , nm ⁻⁸⁵² , nm ⁻⁸⁵³ , nm ⁻⁸⁵⁴ , nm ⁻⁸⁵⁵ , nm ⁻⁸⁵⁶ , nm ⁻⁸⁵⁷ , nm ⁻⁸⁵⁸ , nm ⁻⁸⁵⁹ , nm ⁻⁸⁶⁰ , nm ⁻⁸⁶¹ , nm ⁻⁸⁶² , nm ⁻⁸⁶³ , nm ⁻⁸⁶⁴ , nm ⁻⁸⁶⁵ , nm ⁻⁸⁶⁶ , nm ⁻⁸⁶⁷ , nm ⁻⁸⁶⁸ , nm ⁻⁸⁶⁹ , nm ⁻⁸⁷⁰ , nm ⁻⁸⁷¹ , nm ⁻⁸⁷² , nm ⁻⁸⁷³ , nm ⁻⁸⁷⁴ , nm ⁻⁸⁷⁵ , nm ⁻⁸⁷⁶ , nm ⁻⁸⁷⁷ , nm ⁻⁸⁷⁸ , nm ⁻⁸⁷⁹ , nm ⁻⁸⁸⁰ , nm ⁻⁸⁸¹ , nm ⁻⁸⁸² , nm ⁻⁸⁸³ , nm ⁻⁸⁸⁴ , nm ⁻⁸⁸⁵ , nm ⁻⁸⁸⁶ , nm ⁻⁸⁸⁷ , nm ⁻⁸⁸⁸ , nm ⁻⁸⁸⁹ , nm ⁻⁸⁹⁰ , nm ⁻⁸⁹¹ , nm ⁻⁸⁹² , nm ⁻⁸⁹³ , nm ⁻⁸⁹⁴ , nm ⁻⁸⁹⁵ , nm ⁻⁸⁹⁶ , nm ⁻⁸⁹⁷ , nm ⁻⁸⁹⁸ , nm ⁻⁸⁹⁹ , nm ⁻⁹⁰⁰ , nm ⁻⁹⁰¹ , nm ⁻⁹⁰² , nm ⁻⁹⁰³ , nm ⁻⁹⁰⁴ , nm ⁻⁹⁰⁵ , nm ⁻⁹⁰⁶ , nm ⁻⁹⁰⁷ , nm ⁻⁹⁰⁸ , nm ⁻⁹⁰⁹ , nm ⁻⁹¹⁰ , nm ⁻⁹¹¹ , nm ⁻⁹¹² , nm ⁻⁹¹³ , nm ⁻⁹¹⁴ , nm ⁻⁹¹⁵ , nm ⁻⁹¹⁶ , nm ⁻⁹¹⁷ , nm ⁻⁹¹⁸ , nm ⁻⁹¹⁹ , nm ⁻⁹²⁰ , nm ⁻⁹²¹ , nm ⁻⁹²² , nm ⁻⁹²³ , nm ⁻⁹²⁴ , nm ⁻⁹²⁵ , nm ⁻⁹²⁶ , nm ⁻⁹²⁷ , nm ⁻⁹²⁸ , nm ⁻⁹²⁹ , nm ⁻⁹³⁰ , nm ⁻⁹³¹ , nm ⁻⁹³² , nm ⁻⁹³³ , nm ⁻⁹³⁴ , nm ⁻⁹³⁵ , nm ⁻⁹³⁶ , nm ⁻⁹³⁷ , nm ⁻⁹³⁸ , nm ⁻⁹³⁹ , nm ⁻⁹⁴⁰ , nm ⁻⁹⁴¹ , nm ⁻⁹⁴² , nm ⁻⁹⁴³ , nm ⁻⁹⁴⁴ , nm ⁻⁹⁴⁵ , nm ⁻⁹⁴⁶ , nm ⁻⁹⁴⁷ , nm ⁻⁹⁴⁸ , nm ⁻⁹⁴⁹ , nm ⁻⁹⁵⁰ , nm ⁻⁹⁵¹ , nm ⁻⁹⁵² , nm ⁻⁹⁵³ , nm ⁻⁹⁵⁴ , nm ⁻⁹⁵⁵ , nm ⁻⁹⁵⁶ , nm ⁻⁹⁵⁷ , nm ⁻⁹⁵⁸ , nm ⁻⁹⁵⁹ , nm ⁻⁹⁶⁰ , nm ⁻⁹⁶¹ , nm ⁻⁹⁶² , nm ⁻⁹⁶³ , nm ⁻⁹⁶⁴ , nm ⁻⁹⁶⁵ , nm ⁻⁹⁶⁶ , nm ⁻⁹⁶⁷ , nm ⁻⁹⁶⁸ , nm ⁻⁹⁶⁹ , nm ⁻⁹⁷⁰ , nm ⁻⁹⁷¹ , nm ⁻⁹⁷² , nm ⁻⁹⁷³ , nm ⁻⁹⁷⁴ , nm ⁻⁹⁷⁵ , nm ⁻⁹⁷⁶ , nm ⁻⁹⁷⁷ , nm ⁻⁹⁷⁸ , nm ⁻⁹⁷⁹ , nm ⁻⁹⁸⁰ , nm ⁻⁹⁸¹ , nm ⁻⁹⁸² , nm ⁻⁹⁸³ , nm ⁻⁹⁸⁴ , nm ⁻⁹⁸⁵ , nm ⁻⁹⁸⁶ , nm ⁻⁹⁸⁷ , nm ⁻⁹⁸⁸ , nm ⁻⁹⁸⁹ , nm ⁻⁹⁹⁰ , nm ⁻⁹⁹¹ , nm ⁻⁹⁹² , nm ⁻⁹⁹³ , nm ⁻⁹⁹⁴ , nm ⁻⁹⁹⁵ , nm ⁻⁹⁹⁶ , nm ⁻⁹⁹⁷ , nm ⁻⁹⁹⁸ , nm ⁻⁹⁹⁹ , nm ⁻¹⁰⁰⁰ , nm ⁻¹⁰⁰¹ , nm ⁻¹⁰⁰² , nm ⁻¹⁰⁰³ , nm ⁻¹⁰⁰⁴ , nm ⁻¹⁰⁰⁵ , nm ⁻¹⁰⁰⁶ , nm ⁻¹⁰⁰⁷ , nm	