Phantom LED

Next generation advanced LED lighting for EMC, Military and Antenna test chambers

GLOBAL EMC
ELECTROMAGNETIC SHIELDING & ANECHOICS EST. 1994

Applications

No maintenance and long lifespan LED lighting for anechoic test chambers, where low emission LED lighting is critical for performing EMC and military test measurements. The lighting is compatible with chambers testing to the following standards

CISPR 12, CISPR25, ISO 11452-2

RTCA DO-160

Antenna

Military Testing - MIL-STD-461, DEF STAN59-411

Fully Compliant - CISPR 16-1-4, common mommercial CISPR test standards

Designed for anechoic test chambers, military test chambers and antenna measurement rooms.

Phantom High-Performance LED

Global EMC's Phantom LED is the latest development in LED lighting technology.

Highly efficient and aesthetically designed, this LED light produces 7000 lumens per unit fitting and can be grouped together producing perfect, low shadow lighting throughout an anechoic chamber or shielded enclosure.

Using a revolutionary non-conventional driver system, the Phantom LED is lightweight, has zero maintenance and is low-emission.

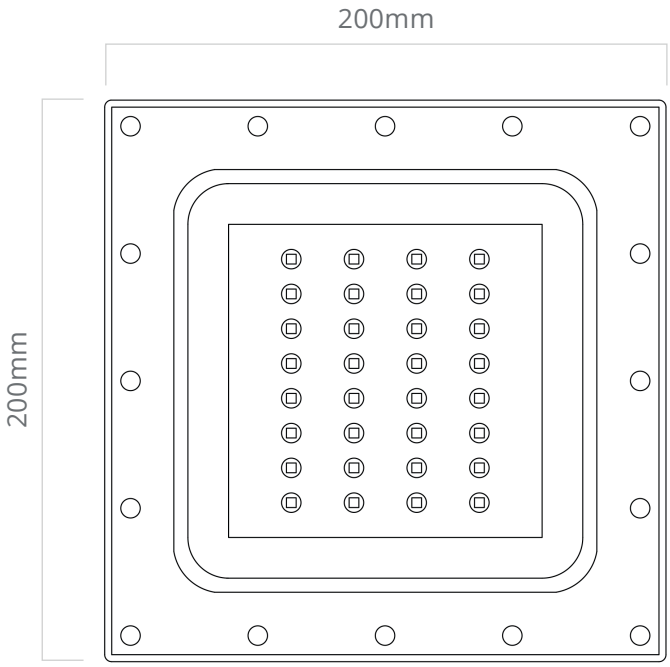
Emissions Mastered

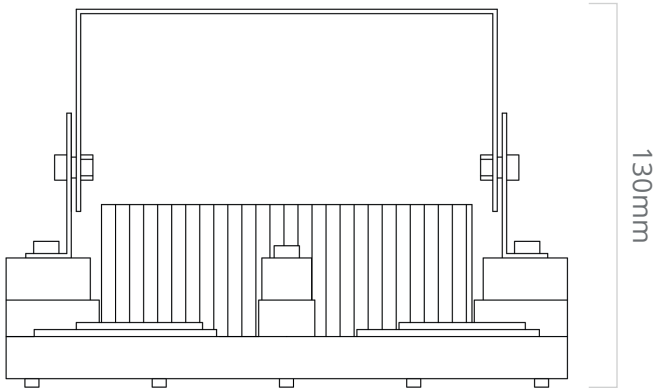
The Phantom LED is the next generation in ultra-low emission LED lighting and is the perfect solution for EMC, vehicle and military chambers.

As a perfect upgrade from conventional lighting, the Phantom high-performance LED can be seamlessly installed in to any anechoic / shielded room and can also be fully utilised as a high-bay lighting system; fully serviceable from ground level.

Specifications

Input Voltage	230V AC
Wattage	64W
Frequency	50Hz
Length	200mm
Width	200mm
Height	130mm





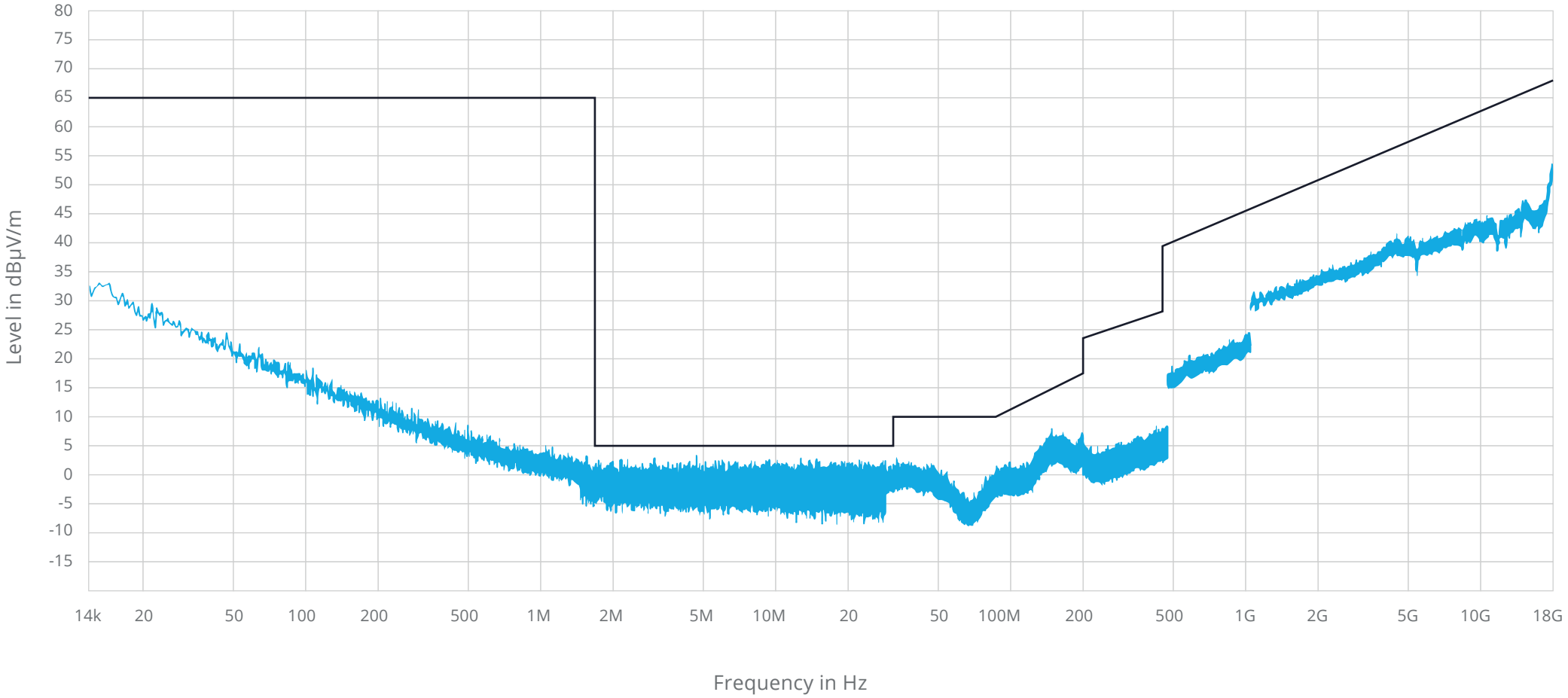


Figure	1.0
Test Type	Radiated Emission
Frequency Range	14kHz to 1GHz
Step Size (A)	1/2BW
Sensor	3301B (10kHz to 30MHz)
	94455-1 (30 to 200MHz)
	BBHA9120F (200 to 1000MHz)
	3115 (1 to 18GHz)

Test Item	Phantom LED
Test limit	DRE01.B Land A
Detector Function	Peak
Dwell Time	20mS
Polarisation	Vertical
	Vertical
	Vertical
	Vertical

Date	28 Sep 2019
Function/Lead	Ambient
Position	1
Number of Bands	3
Res Bandwidth	1kHz
Function/Lead	10kHz
Position	10kHz/100kHz
Number of Bands	1MHz

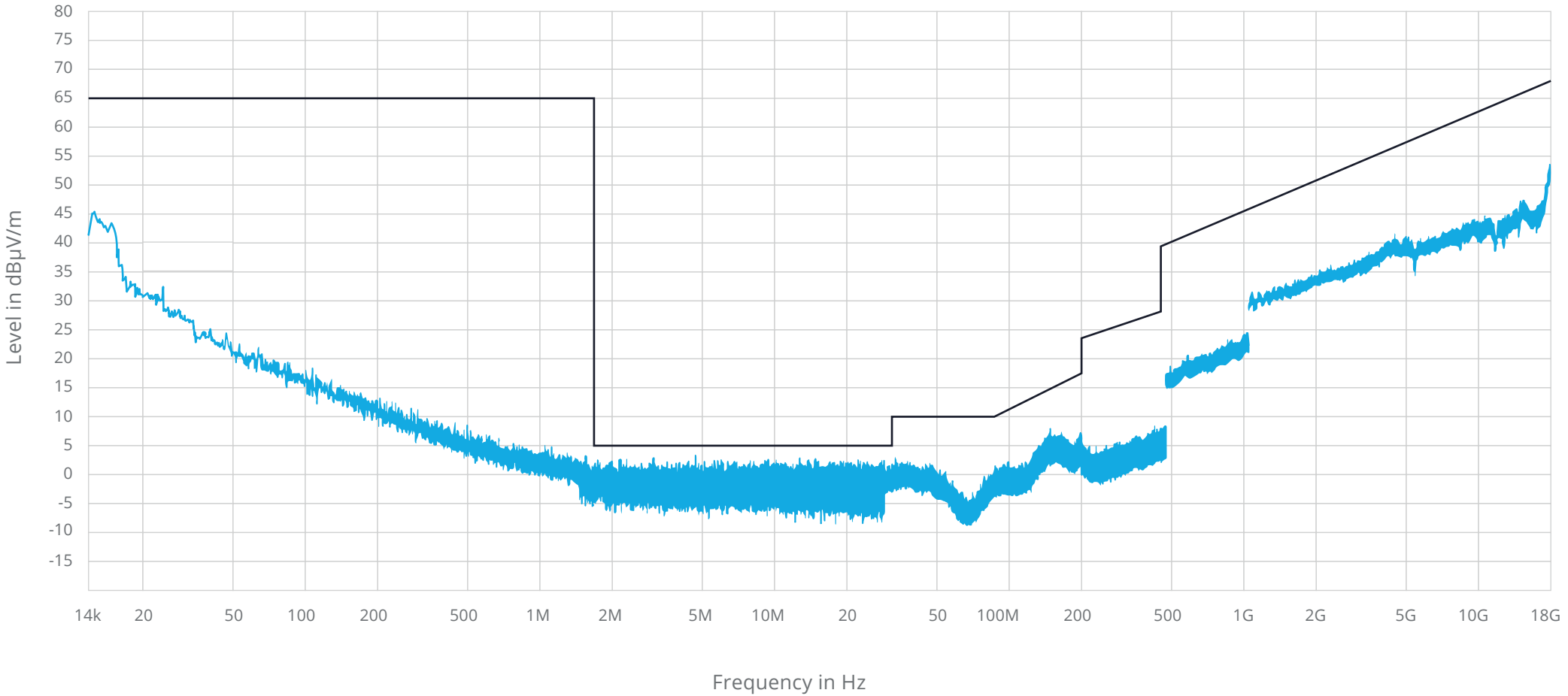


Figure	1.1
Test Type	Radiated Emission
Frequency Range	14kHz to 1GHz
Step Size (A)	1/2BW
Sensor	3301B (10kHz to 30MHz)
	94455-1 (30 to 200MHz)
	BBHA9120F (200 to 1000MHz)
	3115 (1 to 18GHz)

Test Item	Phantom LED
Test limit	DRE01.B Land A
Detector Function	Peak
Dwell Time	20mS
Polarisation	Vertical
	Vertical
	Vertical
	Vertical

Date	28 Sep 2019
Function/Lead	Vertical
Position	1
Number of Bands	3
Res Bandwidth	1kHz
Function/Lead	10kHz
Position	10kHz/100kHz
Number of Bands	1MHz

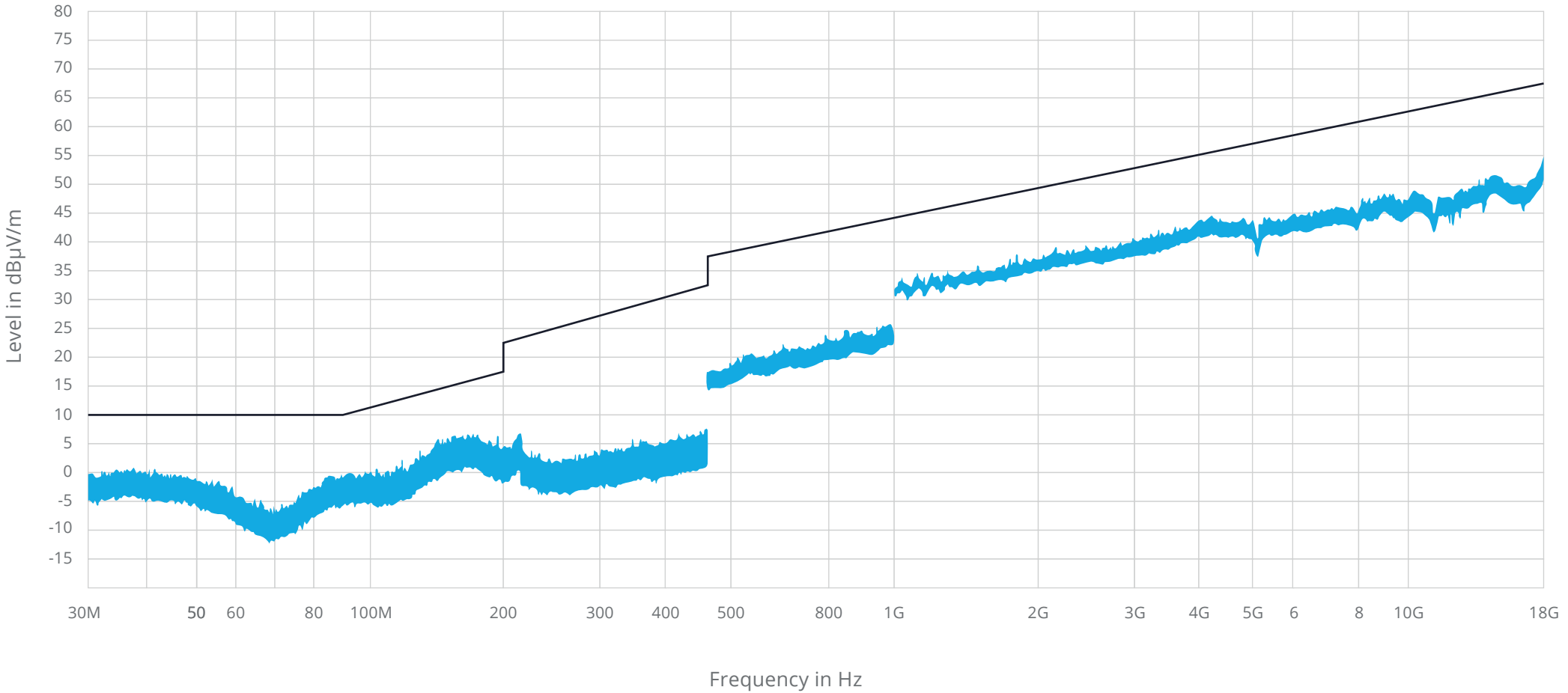


Figure	1.1
Test Type	Radiated Emission
Frequency Range	30MHz to 18GHz
Step Size (A)	1/2BW
Sensor	3301B (10kHz to 30MHz)
	94455-1 (30 to 200MHz)
	BBHA9120F (200 to 1000MHz)
	3115 (1 to 18GHz)

Test Item	Phantom LED
Test limit	DRE01.B Land A
Detector Function	Peak
Dwell Time	20mS
Polarisation	N/A
	Horizontal
	Horizontal
	Horizontal

Date	28 Sep 2019
Function/Lead	Horizontal
Position	1
Number of Bands	3
Res Bandwidth	N/A
Function/Lead	10kHz
Position	10kHz/100kHz
Number of Bands	1MHz

Measurement Uncertainty

Uncertainty statements highlighted with an asterisk are used to establish compliance with the specification where a tolerance in the test parameter exists.

This is achieved by adjusting the upper and lower allowed tolerance by the uncertainty figure to give a 95% confidence that the parameter measured falls within tolerance limits.

If no tolerance exists then the uncertainty given is the uncertainty in establishing that particular parameter exactly or within required limits or test levels

All statements of uncertainty are expanded standard uncertainty using a coverage factor of 2.00 to give a 95% confidence where no required test level exists. Where a test level exists (for example, conducted immunity) the standard uncertainty is expanded by a coverage factor of 1.64 to give a 95% confidence.

Disclaimer

All pictures are for illustration purposes only and Global EMC reserve the right to change the products aesthetics.

The information presented is subject to change and is true and complete to the best of Global EMC's knowledge. Global EMC disclaim any liability in connection with the use of this information.

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