

AFJ VDH 30 Test System for Human Exposure Measurements to Luminaries

The Van Der Hoofden test head allows to determine the human exposure to radiation caused by luminaries into the frequency range from 20kHz to 10MHz. The measurement is based on IEC 62493. Through different ways of coupling between luminaries and humans, a level of exposure of a person to electromagnetic fields can be derived. One part of the exposure is based on capacitive coupling between lighting equipment and person. This induces current densities that must be measured and evaluated using an EMI receiver and a Van Der Hoofden test head.

VDH 30 consists of electrically conductive sphere with 210mm diameter, connection line of 300mm length, protection network for the EMI receiver and wooden tripod.



The EMI receiver measures a voltage across 50Ω . It must be connected to the N connector of the protection network. To determine the compliance of a luminary to the standard the measured voltages must be converted into induced current densities. The measured densities must be expressed in relation to the allowed densities and they must be summed up. The result is a factor called F. A DUT is compliant if F does not exceed 0.85.

These calculations can be done with the software provided with the equipment.



VDH 30

| OFTWARE | | |
|-------------------------|----------------------|--|
| Van Der Hoofden Test | Van Der Hoofden Test | |
| Cenerate Output File GO | F = 0.043201 : PASS | |

| TECHNICAL SPECIFICATIONS | |
|--------------------------|---------------------------------------|
| Design: | Fully compliant to IEC 62493 standard |
| Frequency range: | 20kHz÷10MHz |
| Output impedance: | 50Ω |
| Connector: | N female |
| Operating temperature: | 0° to 45°C |
| Storage temperature: | -20° to 70°C |
| Diameter of the sphere: | 210mm |
| Weight: | 8kg |
| Tripod: | Wooden support with height adjustment |

Subject to change without notice.

RELATED PRODUCTS

| REALDTRODUCIS | |
|---|--|
| AFJ EMI RECEIVERS FFT 3010 f=9kHz÷30MHz | |
| R3030 f=9kHz÷300MHz | |
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AFJ INSTRUMENTS SRL Via F.Ili Lorenzetti 6 - 20146 Milan – Italy Phone +39 02 91434850 sales@afj-instruments.com www.afj.it www.afj-emv.com www.afj-russia.com www.afj-china.com www.afj-instruments.com