

AFJ VDH 30 Test System for Human Exposure Measurements to Electromagnetic Fields

The Van Der Hoofden test head allows to determine the human exposure to electromagnetic fields caused by luminaries into the frequency range from 20kHz to 10MHz. The measurement is based on IEC 62493 Ed. 2.0: 2015-03. 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 creates induced internal electric field that must be 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 voltage must be converted into induced internal electric field.

The measured, weighted and summarized induced internal electric field compliance factor F due to the external electric field into the frequency range from 20kHz to 10MHz shall not exceed the value of 1.

A DUT is compliant if F does not exceed 1. These calculations can be done with the software provided with the equipment.



VDH 30

SOFTWARE		
Van Der Hoofden Test	Van Der Hoofden Test	
Input File	Input File C:\Users\AFJ\Desktop\VDH30.txt	
	F = 0.043201 : PASS	
Generate Output File GO	Generate Output File GO	

TECHNICAL SPECIFICATIONS	
Design:	Fully compliant to IEC 62493 Ed. 2.0: 2015-03 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

AFJ EMI RECEIVERS		6
FFT 3010 T=9KHZ÷30/MHZ	1 1	AND A REAL
R3030 f=9kHz÷300MHz	11	
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