

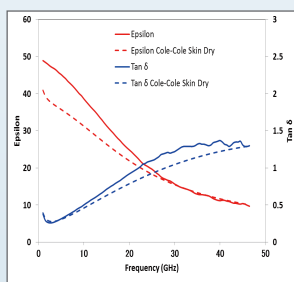
Human body equivalent phantom in low-frequency, microwave, and millimeter-waves



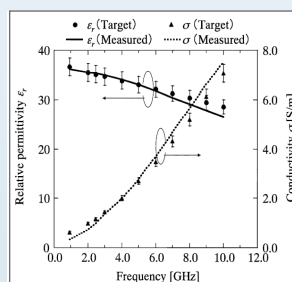
Phantom model examples
 Pictures provided by Professor Emeritus Ito Koichi of Chiba University

Features

- Evaluation of interactions between the human body and mobile devices, RFID tags, medical devices, and wireless EV charging systems, etc.
- Evaluation of SAR by thermography as well as by thin probes
- Mimicking dielectric constants of human tissues over the wide frequency range from Low-frequency to millimeter wave
- Elastic semisolid materials and filling gel phantoms
- Evaluation of wearable and implantable wireless devices



Semisolid phantom prototype for millimeter waves
 Comparative evaluation of the semisolid phantom prototype by AET and the broadband frequency characteristics



Characteristics of Biological Tissue Equivalent Phantoms Applied to UWB Communications [in Japanese] Takimoto Takuya, Ito Koichi et al. IEICE Transactions on Communications B Vol.J88-B No.9 Frequency characteristics of a 2/3 muscle equivalent phantom electric constant

References

Development and the Characteristics of a Biological Tissue-equivalent Phantom for Microwaves

[in Japanese] Ito Koichi et al.
 IEICE Transactions on Communications Vol. J81 - B2 No.12 pp. 1126-1135

Characteristics of Biological Tissue Equivalent Phantoms Applied to UWB Communications

[in Japanese] Ito Koichi et al.
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Development of Biological Tissue-Equivalent Phantom in HF Band Ito Koichi et al.

IEICE Transactions on Communications Vol. J96-B No.9 pp. 964-970