UbiTag v0.1 UWB component parameters

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This information relates to the UWB component of the UbiTag v0.1 device.

The device is a pre-production prototype of an ultra-wideband unit which will be used indoors.

The device has the following UWB parameters:

-10dB bandwidth (measured):	**2.784GHz**
Frequency of highest radiated emission:	4.932GHz
-10dB band lower boundary f(H):	4.704GHz
-10dB band upper boundary f(L):	7.488GHz
Centre frequency f(C)=(f(H)+f(L)/2):	6.096GHz
Peak ERP (theoretical/calculated):	**2 milliwatts (+3dBm)**
Peak EIRP (measured):	**0.35 milliwatts (-4.5dBm)**
Average (RMS) EIRP across occupied bandwidth (measured):	**1.26 microwatts (-29dBm)**
Pulse Repetition Frequency (PRF):	**12MHz**

The raw data from which the measured values are derived was captured by the UK Radiocommunications Agency on 27/10/03, and is contained in attachments to this application (named ‘‘Measurements271003.txt” and “measurements.xls”).

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