



Client	Sensors & Software	
Product	Noggin (NG1000)	
Standard(s)	RSS 220 Issue 1:2009 / FCC Part 15:2011 Subpart F	

Radiated Emissions (Below 30 MHz) – Test Setup




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Radiated Emissions – 30 MHz to 960 MHz



As per guidance in ANSI C63.10 section 7.10.2.2, Anechoic material was used as an alternative to a bed of sand. The bed of sand was investigated during engineering prescan measurements to have similar attenuation with respect to the directly-radiated UWB emissions. In accordance with guidance provided in RSS 220 the preferred alternative method for testing GPR devices was performed. This method is to place the DUT at a height of 80 cm on a non-conducting support with the emitter directed downwards. If the DUT emissions are expected to have components below 500 MHz, a layer of ferrite tile is be placed directly on the floor below the DUT. Pyramidal or wedge-shaped RF absorbers not less than 60 cm in height should be placed directly below the DUT. Some sections of absorber may be inverted and placed over other absorbers to form a solid block. The placement of the absorber shall not be disturbed when the device is rotated. This arrangement prevents energy directed directly downwards from consideration in the measurement.

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Radiated Emissions Above 960 MHz



As per guidance in ANSI C63.10 section 7.3.10, for frequencies above 960 MHz, the device was additionally tested with absorber placed above the reference ground plane, however this absorber is not shown in the photograph above.