

PHONAK communication systems Development	Technical Note Test Setup Photos Smart Control	Doc.: TN140907.doc Vers.: V1 Page: 1 of 1 Date: 14.09.07
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Test Setup Photos
Smart Control Transmitter

Pages extracted from Test Report No. 15014

Emission Tests

8.1 Radiated electromagnetic field

Test site: anechoic chamber (foam) open test site
 anechoic chamber (ferrites)

Distance: 30 m 10 m 3 m

Position of EUT: 0.8 m (height of the equipment under test above floor)

Meas. uncertainty: ± 6 dB (30 - 300 MHz) / ± 5.4 dB (300 - 1000 MHz)

Test method: The electromagnetic disturbance radiated by the equipment is measured using a spectrum analyser and a wide band antenna. The antenna is moved from 1 to 4 m in height successively with horizontal and vertical polarisations. The turning table is operated through 360° during the measurements. The recordings are carried out taking into account the maximum value of all the disturbances appearing while the apparatus is under test. The peak values are recorded continuously on the graph. The values exceeding a limit are remeasured manually using a receiver.

Test set-up:



Remarks: --

Test equipment:

Spectrum analyser	<input type="checkbox"/> 88-14	<input type="checkbox"/> 90-26	<input type="checkbox"/> 94-24	<input type="checkbox"/> 02-06	<input checked="" type="checkbox"/> 03-45	<input type="checkbox"/> 03-57
Receiver	<input type="checkbox"/> 85-04	<input type="checkbox"/> 90-43	<input checked="" type="checkbox"/> 94-35			
Preamplifier	<input type="checkbox"/> 88-05	<input type="checkbox"/> 90-01	<input type="checkbox"/> 90-42	<input checked="" type="checkbox"/> 05-59		
Antenna (biconical)	<input type="checkbox"/> 82-02	<input type="checkbox"/> 87-05	<input type="checkbox"/> 87-16	<input type="checkbox"/> 91-05	<input type="checkbox"/> 94-37	
Antenna (log-per)	<input type="checkbox"/> 88-20	<input type="checkbox"/> 90-30	<input type="checkbox"/> 91-35	<input type="checkbox"/> 94-64		
Antenna (bilog)	<input checked="" type="checkbox"/> 94-03	<input type="checkbox"/> 05-38	<input type="checkbox"/>			
Antenna (horn)	<input type="checkbox"/> 90-24	<input type="checkbox"/> 90-29	<input type="checkbox"/> 98-12	<input type="checkbox"/> 98-13	<input type="checkbox"/>	
Cables	<input checked="" type="checkbox"/> 06-01+A	<input checked="" type="checkbox"/> 117	<input checked="" type="checkbox"/> 130	<input type="checkbox"/>		

Result: pass fail not applicable not tested

Radiated magnetic Field FCC

- anechoic chamber (ferrites) open test site

Test site:

- anechoic chamber (foam)

Meas. distance: 3 m 10 m 30 m m

Test precision: ± 2.8 dB (10 m)

Position of EUT: 1.5 m (height above floor of equipment under test)

Measuring method: The magnetic disturbance radiated by the equipment under test is measured using a spectrum analyser and a wide band magnetic antenna. The bottom of the antenna is placed at 1 m of height, first in the direction of the apparatus under test and then at 90° to the apparatus. If possible the turning table is operated through 360° during the measurement. The recording is carried out taking into account the maximum value of the disturbance appearing during the functioning of the apparatus under test. The peak values are recorded continuously on a graph. The values exceeding the limits are remeasured using a measuring receiver.

Test set-up:



Remarks: ---

Test equipment:

Spectrum analyser	<input type="checkbox"/> 88-14	<input type="checkbox"/> 90-26	<input type="checkbox"/> 94-24	<input checked="" type="checkbox"/> 02-06	<input type="checkbox"/> 03-45	<input type="checkbox"/> 03-57
Receiver	<input type="checkbox"/> 85-12	<input type="checkbox"/> 90-11	<input type="checkbox"/> 94-34	<input type="checkbox"/> 04-28	<input type="checkbox"/>	
Preamplifier	<input type="checkbox"/> 88-05	<input type="checkbox"/> 90-01	<input type="checkbox"/> 90-42	<input checked="" type="checkbox"/> 05-62		
Antenna (typ: magnetic)	<input type="checkbox"/> 90-25	<input checked="" type="checkbox"/> 90-28	<input type="checkbox"/> 99-32	<input type="checkbox"/>		
Cables	<input checked="" type="checkbox"/> 06-00	<input checked="" type="checkbox"/> 147	<input checked="" type="checkbox"/> 148			

Result: pass fail not applicable not tested