

Additional test of spurious emissions at 2.4835 GHz for Cordless Headset GN 9050
(headset part)

Dear Mr. Baschin,

Please find the requested test results for GN 9050 including explanation.

Related documents: Test report G0M20110-5642-T-48 and Public Notice DA 00-705
sub clause Spurious Radiated Emissions

In order to hold the requirements the addressed tests of spurious emissions on the upper edge of 2.4 GHz band were repeated in average mode using the average limits considering measurement value reduction by duty cycle correction factor.

Please find attached measurement diagrams for peak measurement and average measurement for the upper band edge.

Average measurements were done with RWB of 1 MHz and VBW of 10 Hz using a suitable sweep time.

Measurement average values at 2.4835 GHz:

vertical: 68,61 dB μ V/m
horizontal: 65,82 dB μ V/m

On time:

single channel mode: 0,41059 ms (see report, point 3.7 measurement diagram)
frequency hopping mode: 0,41059 / 79 = 0,0051973 ms

Off time: 11,19616 ms (see report, point 3.7 measurement diagram)

Dwell time during 100 ms for one channel : 0,04642 ms

Duty cycle correction factor:

$$20 \log (\text{dwell time} / 100 \text{ ms}) = 20 \log (0,04642 / 100) = - 66,66 \text{ dB}$$

Adjusted readings:

vertical: 68,61 – 66,66 = 1,95 dB μ V/m
horizontal 65,82 – 66,66 = - 0,84 dB μ V/m



Limit at 2.4835 GHz: 54 dB μ V/m

Verdict: PASS

Best regards,

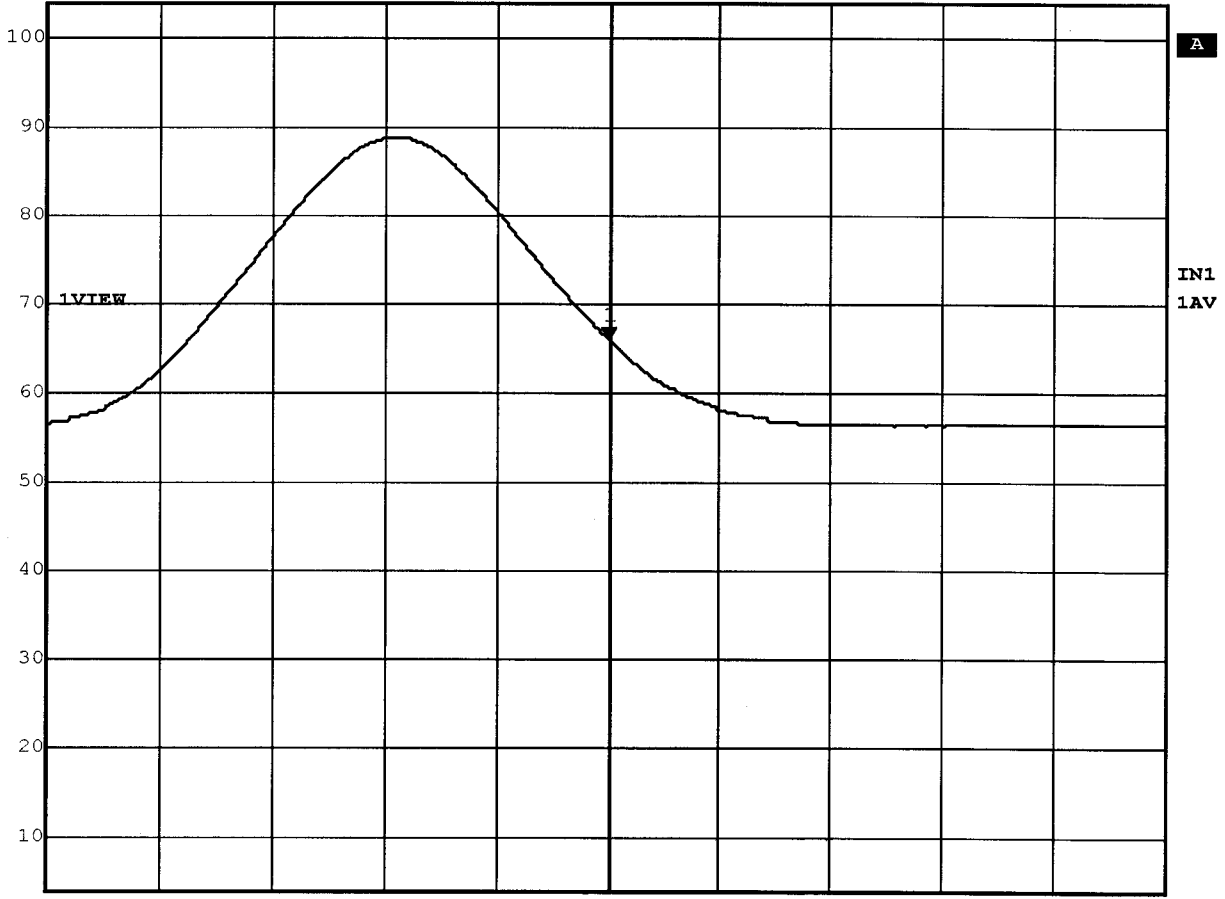
A handwritten signature in black ink, appearing to read 'Kurt Damm', with a long horizontal flourish extending to the right.

Kurt Damm
Head of Radio Communication Laboratory

Enclosures: 4 x measurement diagram Spurious emissions



Ref Lvl	Marker 1 [T1]	RBW	1 MHz	RF Att	20 dB
104 dB μ V	65.82 dB μ V	VBW	10 Hz		
	2.48350000 GHz	SWT	60 s	Unit	dB μ V



Center 2.4835 GHz 1 MHz/ Span 10 MHz

Title: Spurious Emissions (dB μ V/m) without duty cycle Ch.: 78 hor.
Comment A: GN Netcom Cordless Headset Gn 9050
Date: 5.JUL.2002 17:07:12

