TEST REPORT

of the accredited test laboratory

TÜV Nr.:M/FG-09/119

Applicant:	ADCON TELEMETRY GmbH Inkustraße 24 A-3400 Klosterneuburg
Tested Product:	UHF – GSM/GPRS Gateway transceiver
FCC-ID:	SHXRA440-46
Manufacturer:	ADCON TELEMETRY GmbH Inkustraße 24 A-3400 Klosterneuburg

Output power / field strength:	2 W @ 850 and 1 W @ 1900	**power supply:**	6,2 VDC
Frequency range:	824 – 849 and 1850 - 1910 MHz	**Channel separation:**	200 kHz
Standard:	FCC: 47 CFR 22 (RSS-132) and 47 CFR 24 (RSS-133)		

TUV Austria SERVICES GMBH
Test laboratory for EMC

Supervisor of EMC-laboratory: checked by:

Ing. Wilhelm Seier — Rundsiegel — Ing. Michael Emminger

10.08.2009

Copy Nbr.: 01

The results of this test report only refer to the provided equipment.

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BA CA 52949 001 066
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UID ATU63240488
DVR 3002476

LIST OF MEASUREMENTS

The complete list of measurements called for in the standards is given below.

SUBCLAUSE	PARAMETER TO BE MEASURED	PAGE
	Intentional Radiators	
	Test object data	3
22.913 – 4.4 (RSS-132) 24.232 – 6.4 (RSS-133)	Power Output	4-7
22.355 – 4.3 (RSS-132) 24.235 – 6.3 (RSS-133)	Frequency stability	8-9
22.917 – 4.5 (RSS-132) 24.238 – 6.5 (RSS-133) 15.209 – 4.6 (RSS-132) 15.209 – 6.6 (RSS-133)	Emissions Limits	10-13
2.989 – 4.5 (RSS-132) – 6.5 (RSS-133)	Occupied Bandwidth	14-25

To make the documentation of the measurements easier, on the measurement related pages only the FCC requirements are referenced and are equal to the canadian requirements as referenced in the matrix above.

TEST OBJECT DATA

General EUT Description

This telemetry gateway equipment will be used to collect data packets received on UHF and transmit it through a GSM/GPRS network and vice versa. This telemetry equipment will be situated in environment where normally no persons are situated and will work without user interaction. The UHF function of this device is reported in a separate test report nbr. M/FG-09/120.

The GSM Modem used, is capable of operation in the bands 850 MHz and 1900 MHz.

Power Output **§ 22.913**
850 MHz

Conducted Measurement

Frequency (MHz)	Power Step	Peak Output Power (dBm)	Average Output Power (dBm)
824,2	5	32,8	32,7
836,6	5	32,7	32,5
848,8	5	32,2	32,1
Measurement uncertainty	± 0,75 dB		

LIMIT

Power Step	Nominal Peak Output Power (dBm)	Tolerance (dB)
5	+ 33	± 2

Test Equipment used: NT-208

Power Output **§ 24.232**
1900 MHz

Conducted Measurement

Frequency (MHz)	Power Step	Peak Output Power (dBm)	Average Output Power (dBm)
1850,2	0	28,5	28,4
1880,0	0	29,5	29,4
1909,8	0	29,4	29,3
Measurement uncertainty	± 0,75 dB		

LIMIT

Power Step	Nominal Peak Output Power (dBm)	Tolerance (dB)
0	+ 30	± 2

Test Equipment used: NT-208

Power Output **§ 22.913**
850 MHz

ERP Measurement

Frequency (MHz)	Power Step	Burst Average (dBm)	Modulation Average (dBm)
824,2	5	35,9	24,5
836,6	5	35,7	24,2
848,8	5	35,1	23,6
Measurement uncertainty	± 4 dB		

LIMIT

Power Step	Burst Average ERP (dBm)
5	≤ 38,5

Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-207; NT-208

Power Output **§ 24.232**
1900 MHz

EIRP Measurement

Frequency (MHz)	Power Step	Burst Average (dBm)	Modulation Average (dBm)
1850,2	0	28,5	19,0
1880,0	0	28,0	18,9
1909,8	0	28,6	19,1
Measurement uncertainty	± 4 dB		

LIMIT

Power Step	Burst Average EIRP (dBm)
0	≤ 33

Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-207; NT-208

Frequency stability **§ 22.355**
850 MHz

Frequency error vs. Supply voltage

The power supply voltage is nominal 6,2 VDC. The shut off voltage is 5,5 VDC. The GSM module power supply is regulated to 3,75 VDC. This voltage stays constant over the full supply voltage range from 5,5 VDC to 10 VDC. Because of this there were no change in frequency stability measureable over the full power supply range. This also applies to the external power supply input, which has an input voltage range of 10,5 to 20 VDC.

Frequency error vs. Temperature

Temperature °C	Frequency Error Hz	Frequency Error ppm
-30	-5	-0,006
-20	-5	-0,006
-10	-5	-0,006
±0	-5	-0,006
+10	-5	-0,006
+20	0	0
+30	0	0
+40	-5	-0,006
+50	-10	-0,012

LIMIT

According to GSM standards the frequency stability of the carrier shall be accurate to within 0,1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 22.355, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Frequency stability **§ 24.235**
1900 MHz

Frequency error vs. Supply voltage

The power supply voltage is nominal 6,2 VDC. The shut off voltage is 5,5 VDC. The GSM module power supply is regulated to 3,75 VDC. This voltage stays constant over the full supply voltage range from 5,5 VDC to 10 VDC. Because of this there were no change in frequency stability measureable over the full power supply range. This also applies to the external power supply input, which has an input voltage range of 10,5 to 20 VDC.

Frequency error vs. Temperature

Temperature °C	Frequency Error Hz	Frequency Error ppm
-30	+20	+0,010
-20	+20	+0,010
-10	+20	+0,010
±0	+20	+0,010
+10	+15	+0,008
+20	+15	+0,008
+30	+10	+0,005
+40	-10	-0,005
+50	-20	-0,010

LIMIT

According to GSM standards the frequency stability of the carrier shall be accurate to within 0,1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Emissions Limits **§ 22.917**
850 MHz **§ 15.209**

LIMIT
22.917:
The power of any emission outside the authorized operating frequency ranges must be attenuated below the transmitter power (P, in watts) by at least 43+10log(P) dB. In the used power range this means a constant absolute limit of –13 dBm. Although the Limits of 15.209 are in field strength levels, the limits are far below that one of 22.917. So for all radiated measurements the 15.209 limit was taken to show compliance as digital device also.

Conducted Emissions

CHANNEL					
128 (824,2 MHz)		190 (836,6 MHz)		251 (848,8 MHz)	
Frequency (MHz)	Level (dBm)	Frequency (MHz)	Level (dBm)	Frequency (MHz)	Level (dBm)
2472,6	-47,5	2509,8	-43,5	2546,4	-42,0
3296,8	-44,0	3346,4	-49,5	All others	< -55
4121,0	-53,0	4183,0	-54,7		
All others	< -55	All others	< -55		

Test Equipment used: NT-207; NT-208

Emissions Limits **§ 24.238**
1900 MHz **§ 15.209**

LIMIT
24.238:
On any frequency outside a licensee's frequency block within the USPCS spectrum, the power of any emission shall be attenuated below the transmitter power (P, in watts) by at least 43+10log(P) dB. In the used power range this means a constant absolute limit of –13 dBm. Although the Limits of 15.209 are in field strength levels, the limits are far below that one of 24.238. So for all radiated measurements the 15.209 limit was taken to show compliance as digital device also.

Conducted Emissions

CHANNEL					
512 (1850,2 MHz)		661 (1880 MHz)		810 (1909,8 MHz)	
Frequency (MHz)	Level (dBm)	Frequency (MHz)	Level (dBm)	Frequency (MHz)	Level (dBm)
3700,4	-48,5	3760	-49,2	3819,6	-44,7
5550,6	-42,7	5640	-41,6	5729,4	-38,7
9251,0	-51,7	9400	-52,1	7639,2	-49,5
11101,2	-38,2	11280	-36,1	9549,0	-47,1
All others	< -55	All others	< -55	11458,8	-38,8
				All others	< -55

Test Equipment used: NT-207; NT-208

Emissions Limits **§ 22.917**
850 MHz **§ 15.209**

Radiated Emissions

CHANNEL					
128 (824,2 MHz)		190 (836,6 MHz)		251 (848,8 MHz)	
Frequency (MHz)	Level (dBµV/m)	Frequency (MHz)	Level (dBµV/m)	Frequency (MHz)	Level (dBµV/m)
≤ 500	< 35 QP	≤ 500	< 35 QP	≤ 500	< 35 QP
≤ 1000	< 45 QP	≤ 1000	< 45 QP	≤ 1000	< 45 QP
> 1000	< 45 AV	> 1000	< 45 AV	> 1000	< 45 AV

LIMIT 15.209

Frequency (MHz)	Limit (dBµV/m)	Measurement distance (m)
30 - 88	40	3
88 - 216	43,5	3
216 - 960	46	3
Above 960	54	3

Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-207; NT-208

Measurement diagrams in Annex 2.

Emissions Limits **§ 24.238**
1900 MHz **§ 15.209**

Radiated Emissions

CHANNEL					
512 (1850,2 MHz)		661 (1880 MHz)		810 (1909,8 MHz)	
Frequency (MHz)	Level (dBµV/m)	Frequency (MHz)	Level (dBµV/m)	Frequency (MHz)	Level (dBµV/m)
≤ 500	< 35 QP	≤ 500	< 35 QP	≤ 500	< 35 QP
≤ 1000	< 40 QP	≤ 1000	< 40 QP	≤ 1000	< 40 QP
> 1000	< 45 AV	> 1000	< 45 AV	> 1000	< 45 AV

LIMIT 15.209

Frequency (MHz)	Limit (dBµV/m)	Measurement distance (m)
30 - 88	40	3
88 - 216	43,5	3
216 - 960	46	3
Above 960	54	3

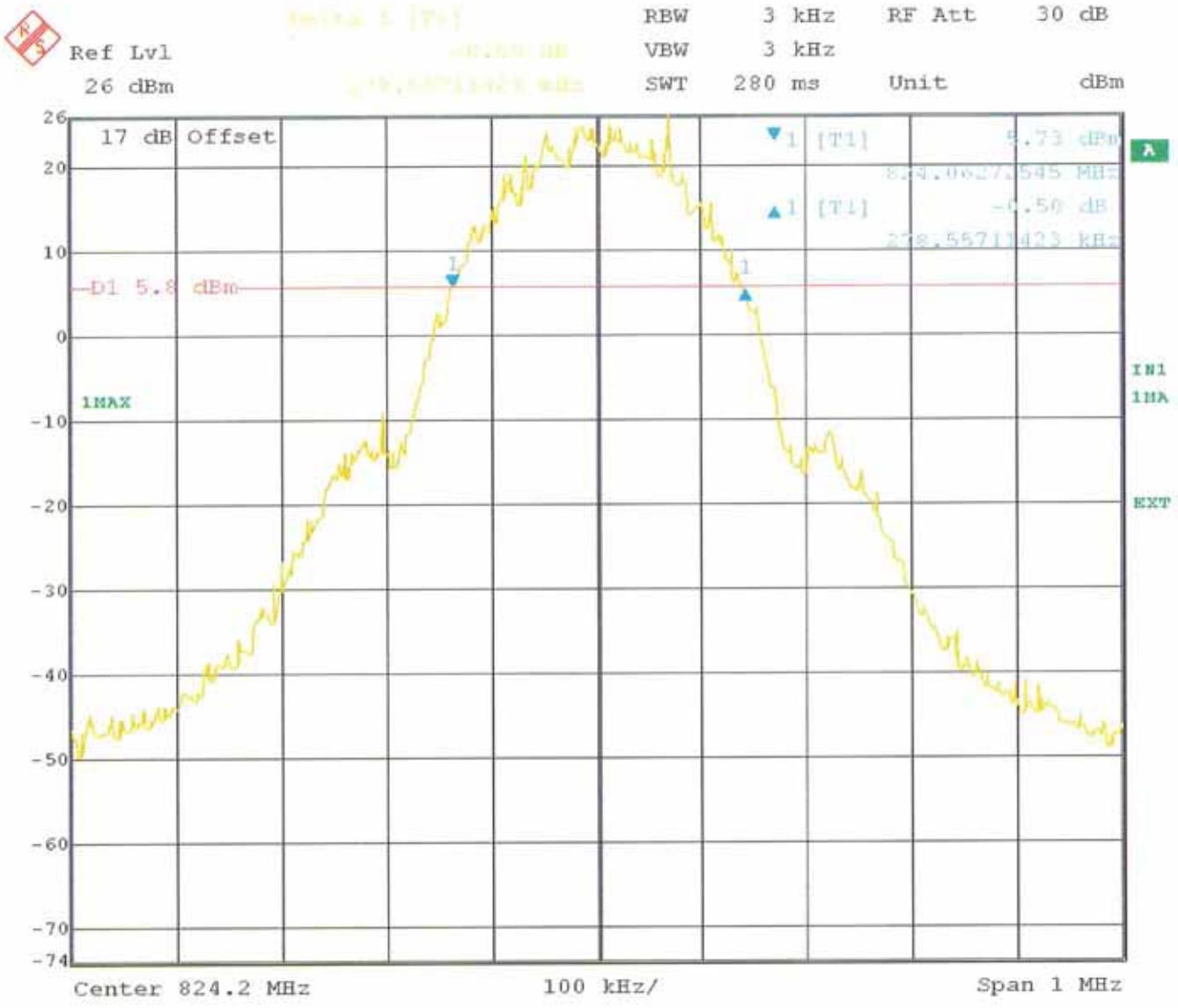
Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-207; NT-208

Measurement diagrams in Annex 2. Although the measurements were made up to the 10th harmonic, the diagrams only show the frequency range up to 18 GHz. This is because the measurements above 18 GHz are not yet automatized and we were not able to plot the Spectrum analyzer display.

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 20 dB BANDWIDTH § 2.989

850 MHz



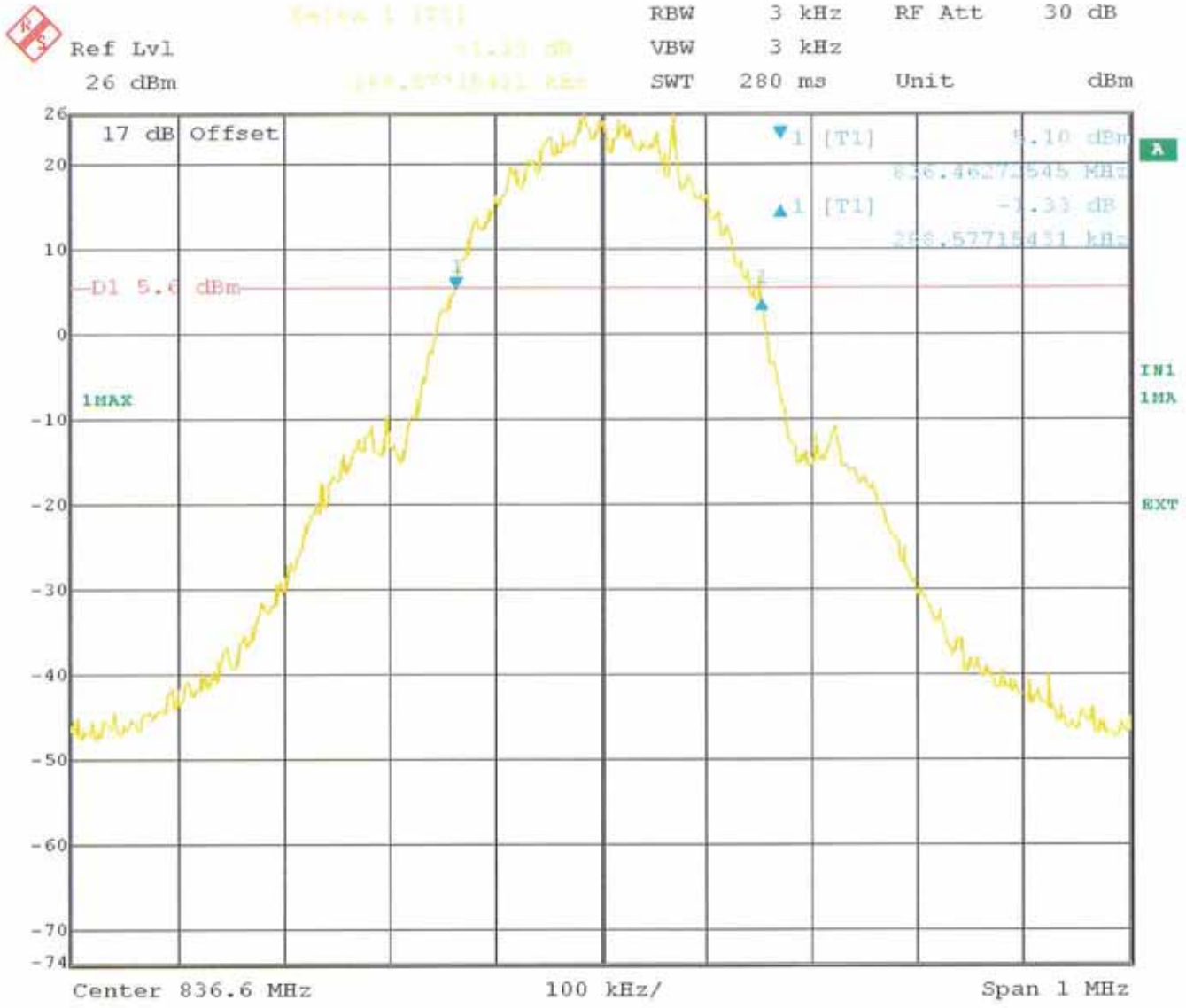
channel 128 Bandwidth: 278,56 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 20 dB BANDWIDTH § 2.989

850 MHz



channel 190 Bandwidth: 288,58 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

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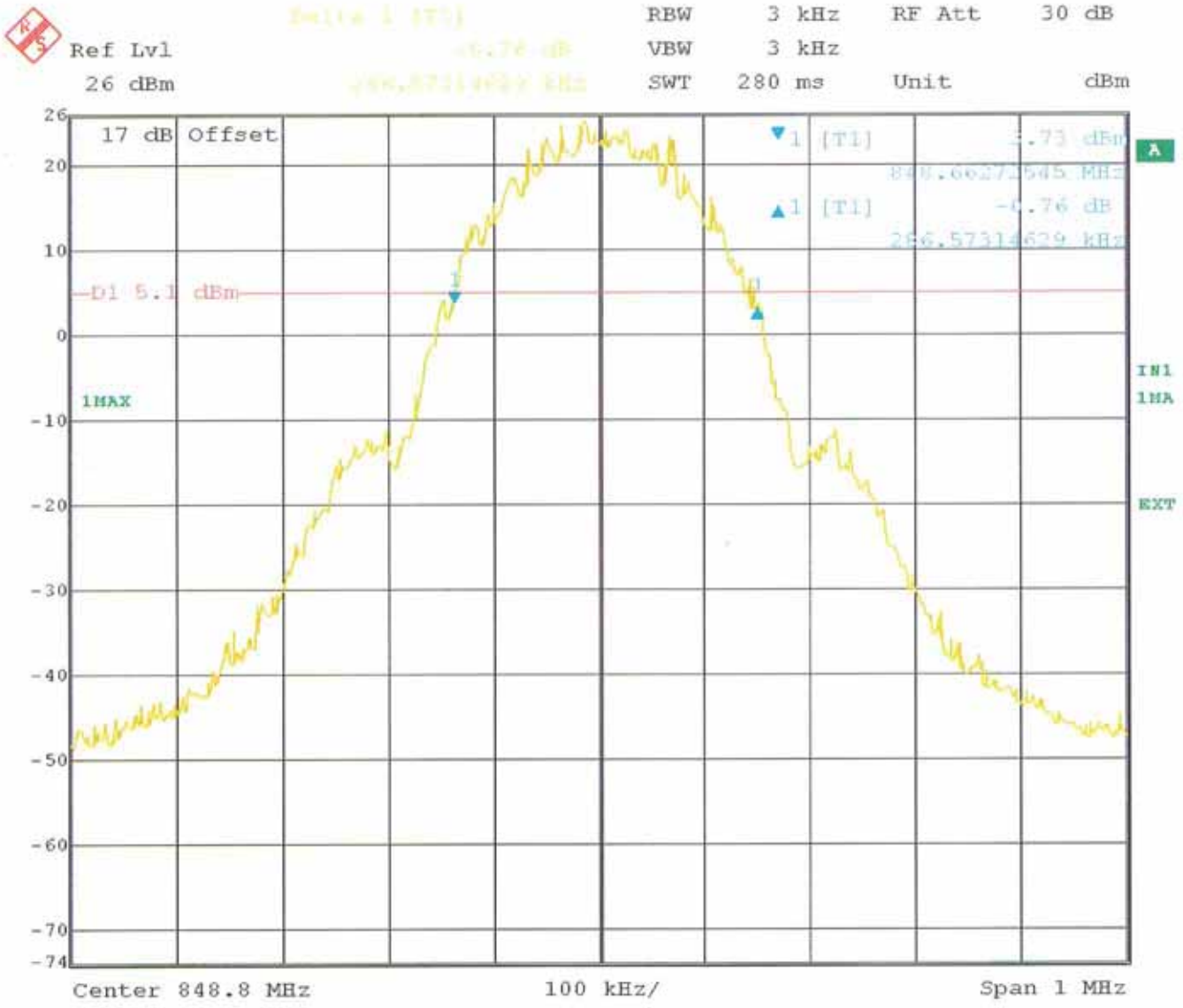
OCCUPIED BANDWIDTH – 20 dB BANDWIDTH § 2.989

850 MHz



Date: 17.FEB.2009 11:11:43

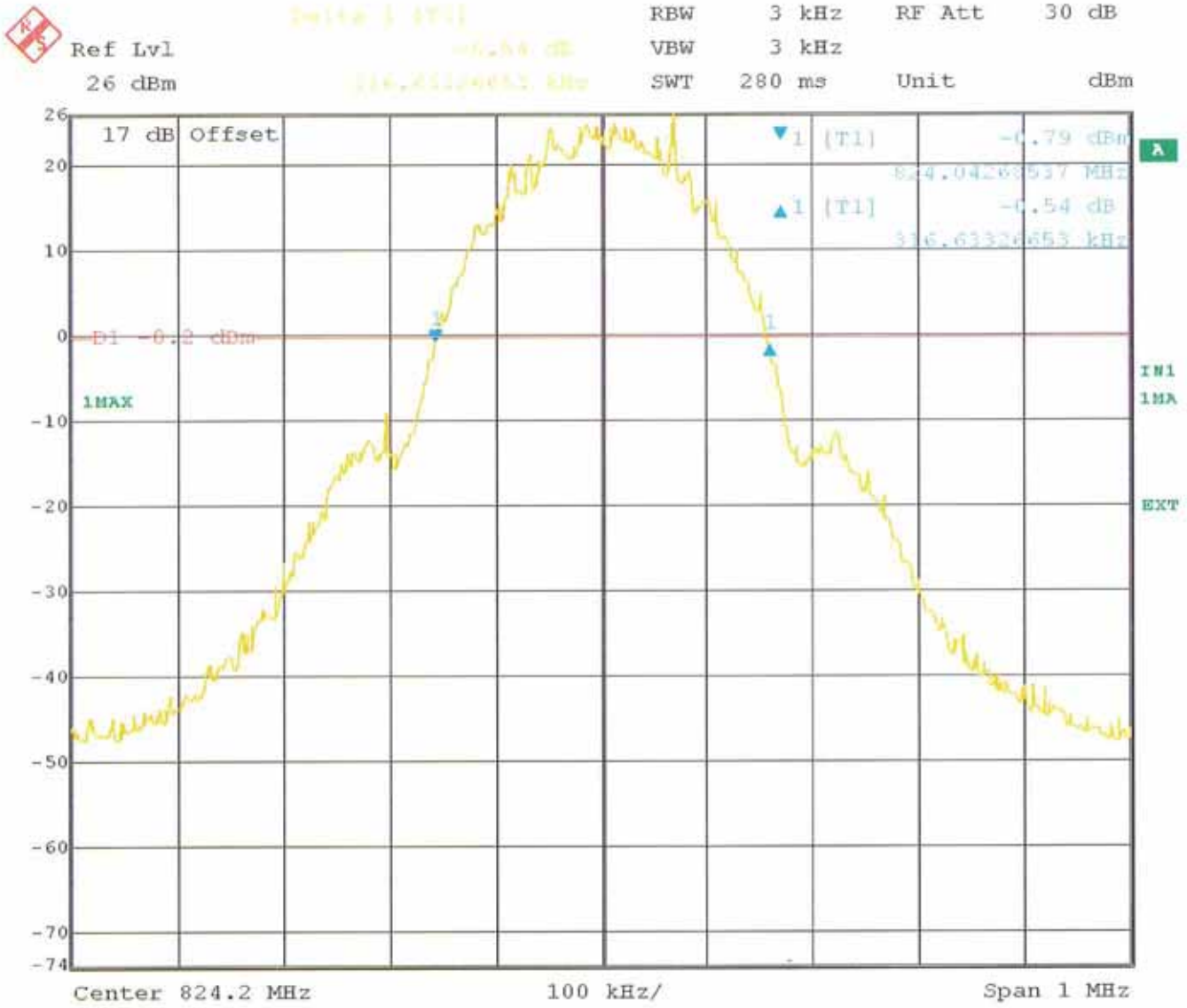
channel 251 Bandwidth: 286,57 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 26 dB BANDWIDTH § 2.989

850 MHz



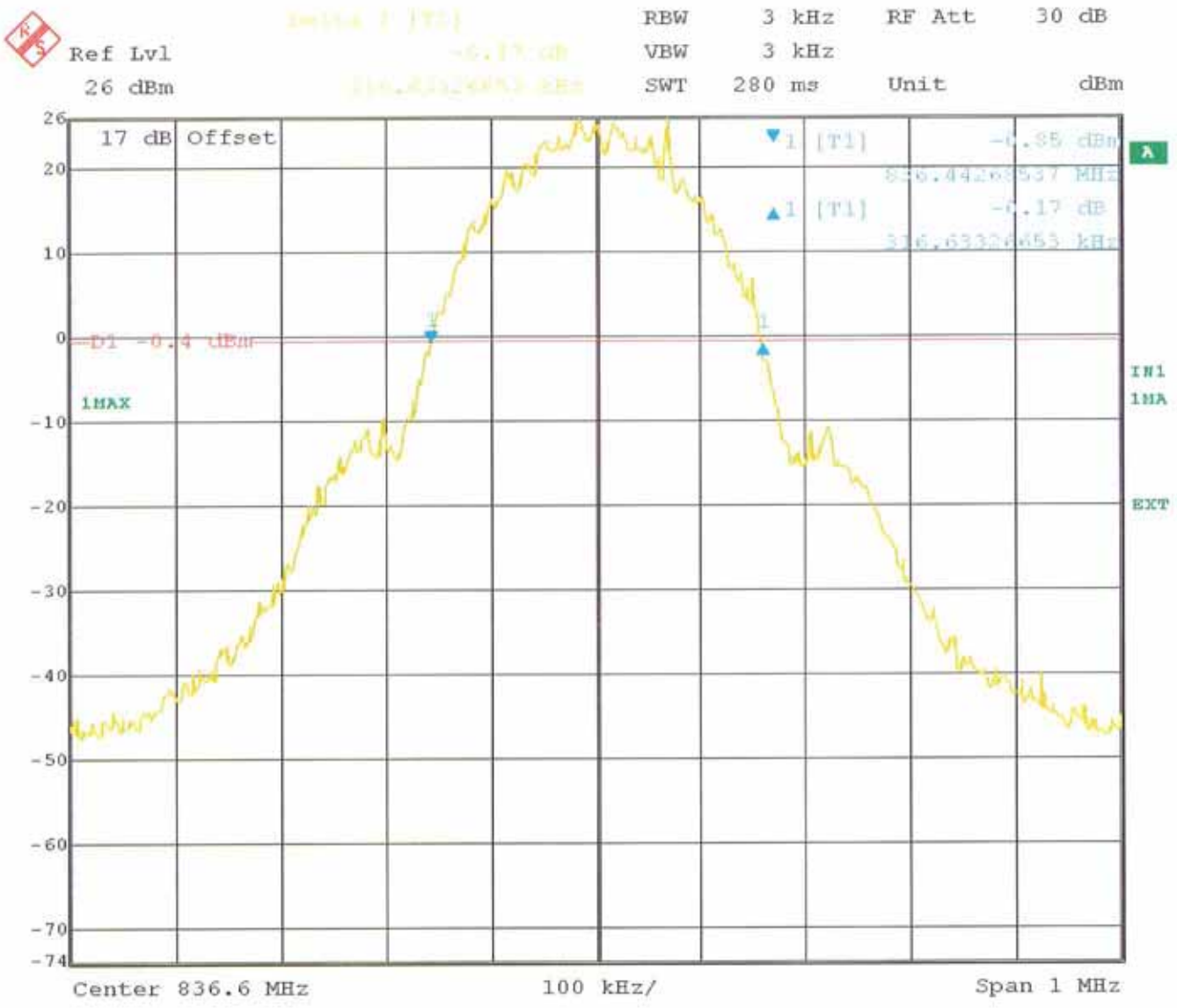
channel 128 Bandwidth: 316,63 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 26 dB BANDWIDTH § 2.989

850 MHz



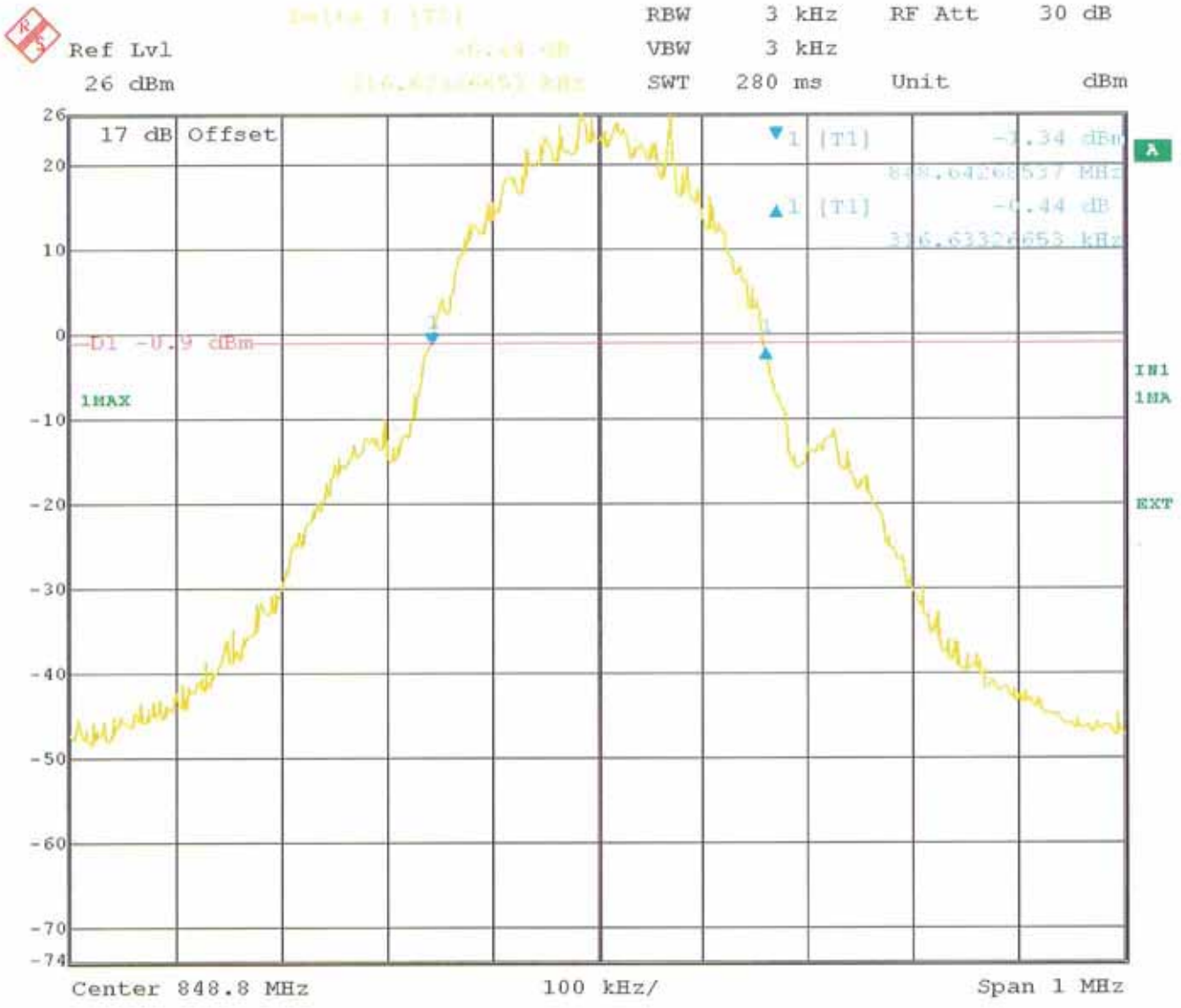
channel 190 Bandwidth: 316,63 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 26 dB BANDWIDTH § 2.989

850 MHz



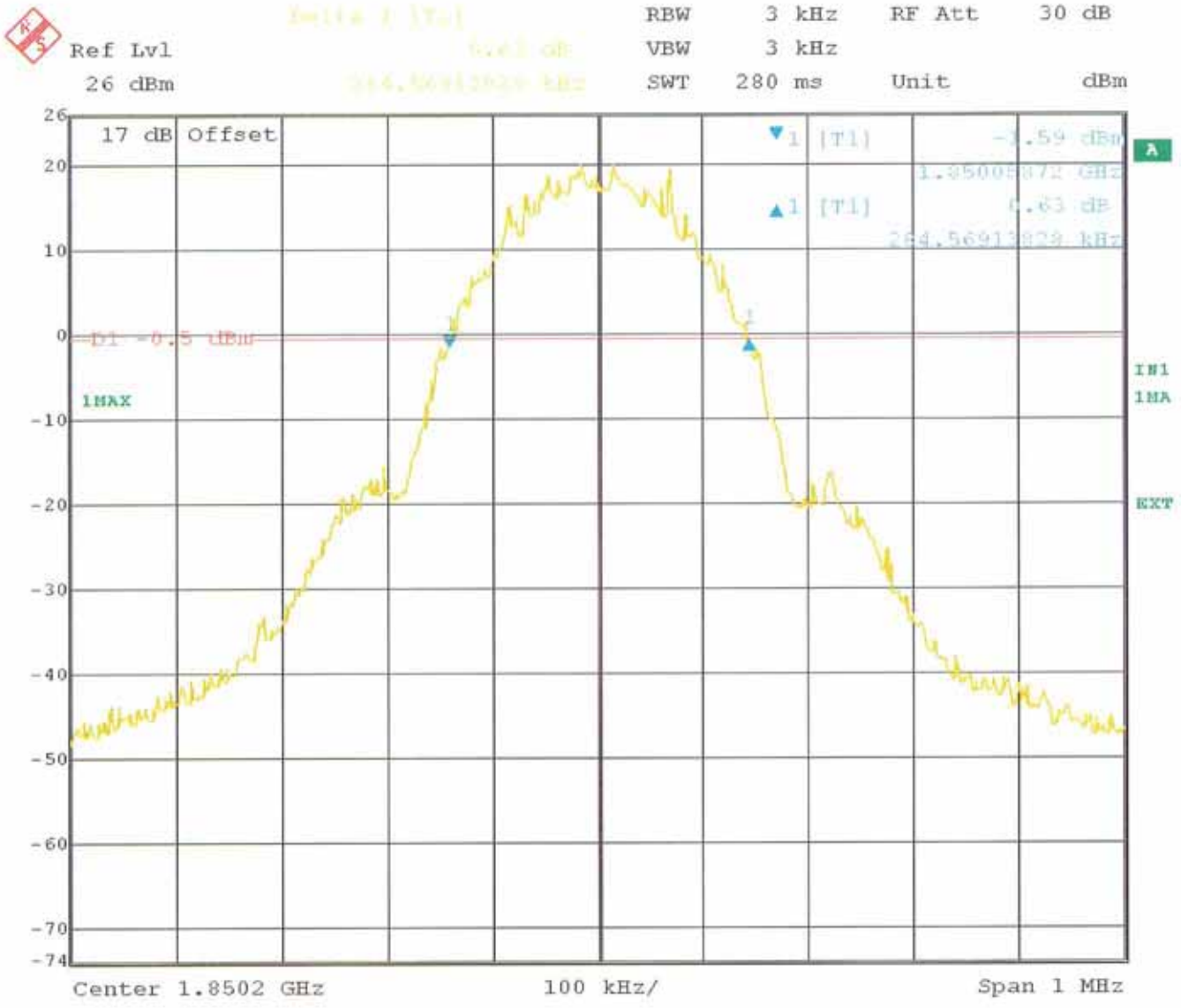
channel 251 Bandwidth: 316,63 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 20 dB BANDWIDTH § 2.989

1900 MHz



Date: 17.FEB.2009 10:50:48

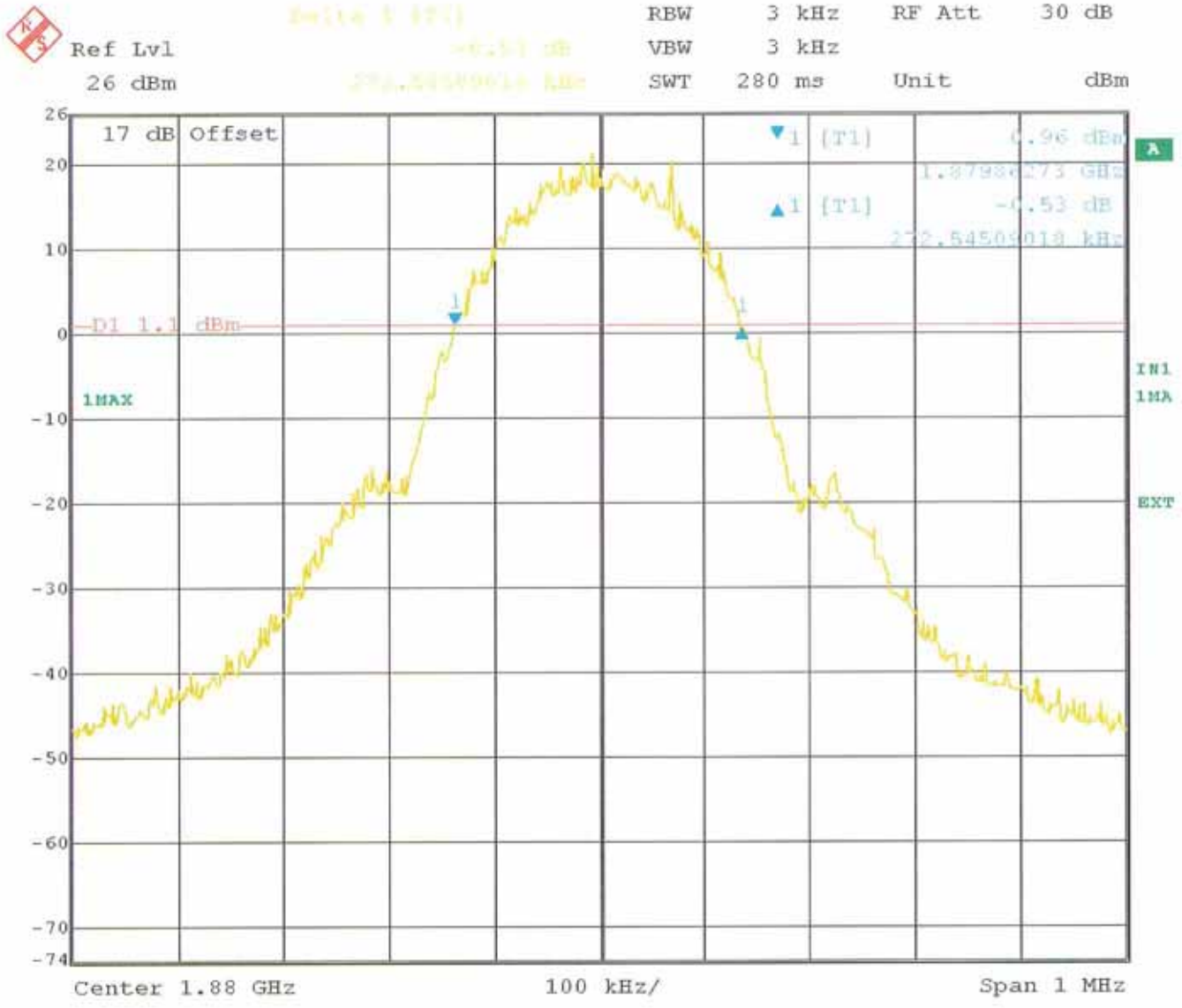
channel 512 Bandwidth: 284,57 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 20 dB BANDWIDTH § 2.989

1900 MHz



Date: 17.FEB.2009 10:47:59

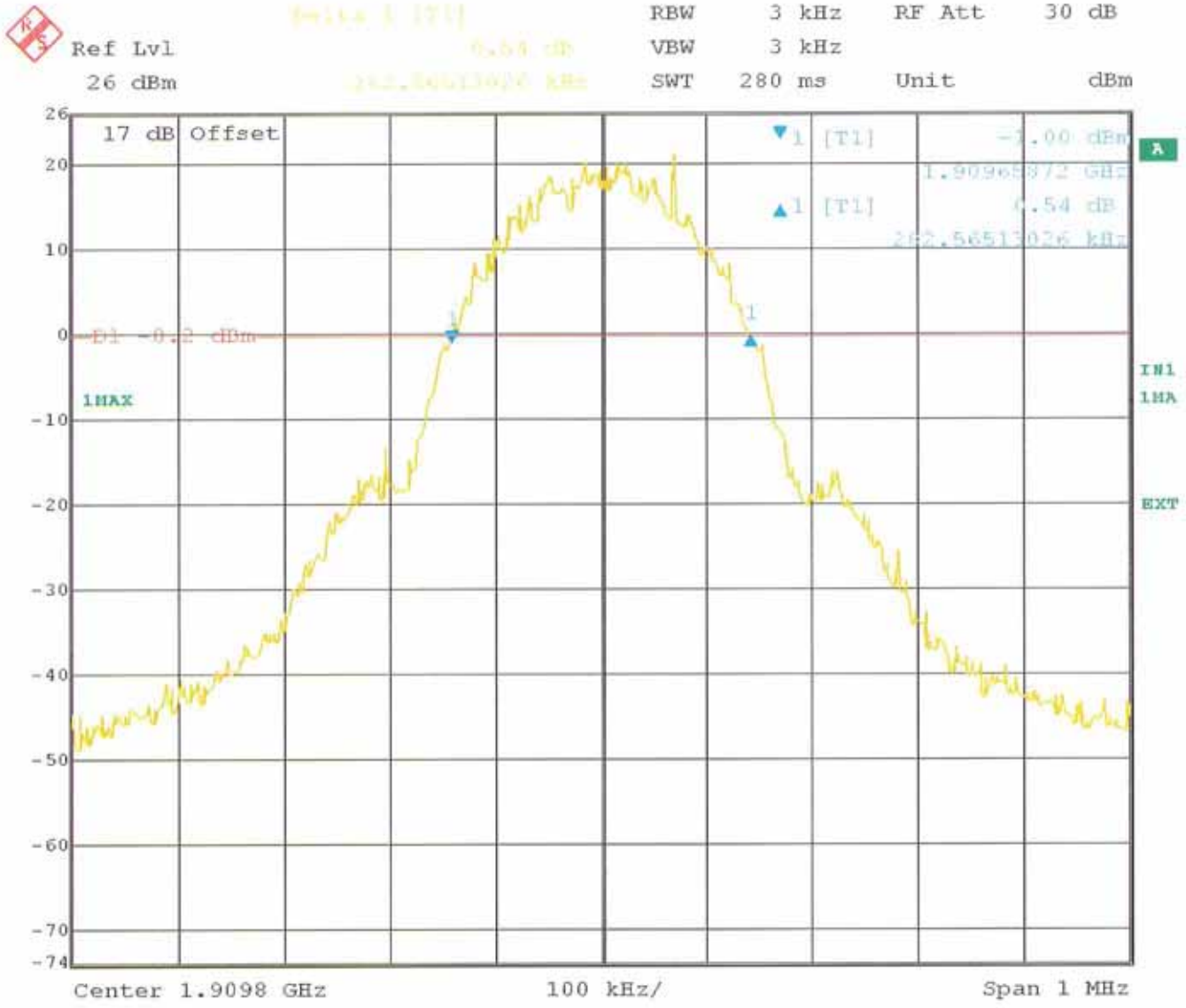
channel 661 Bandwidth: 272,55 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 20 dB BANDWIDTH § 2.989

1900 MHz



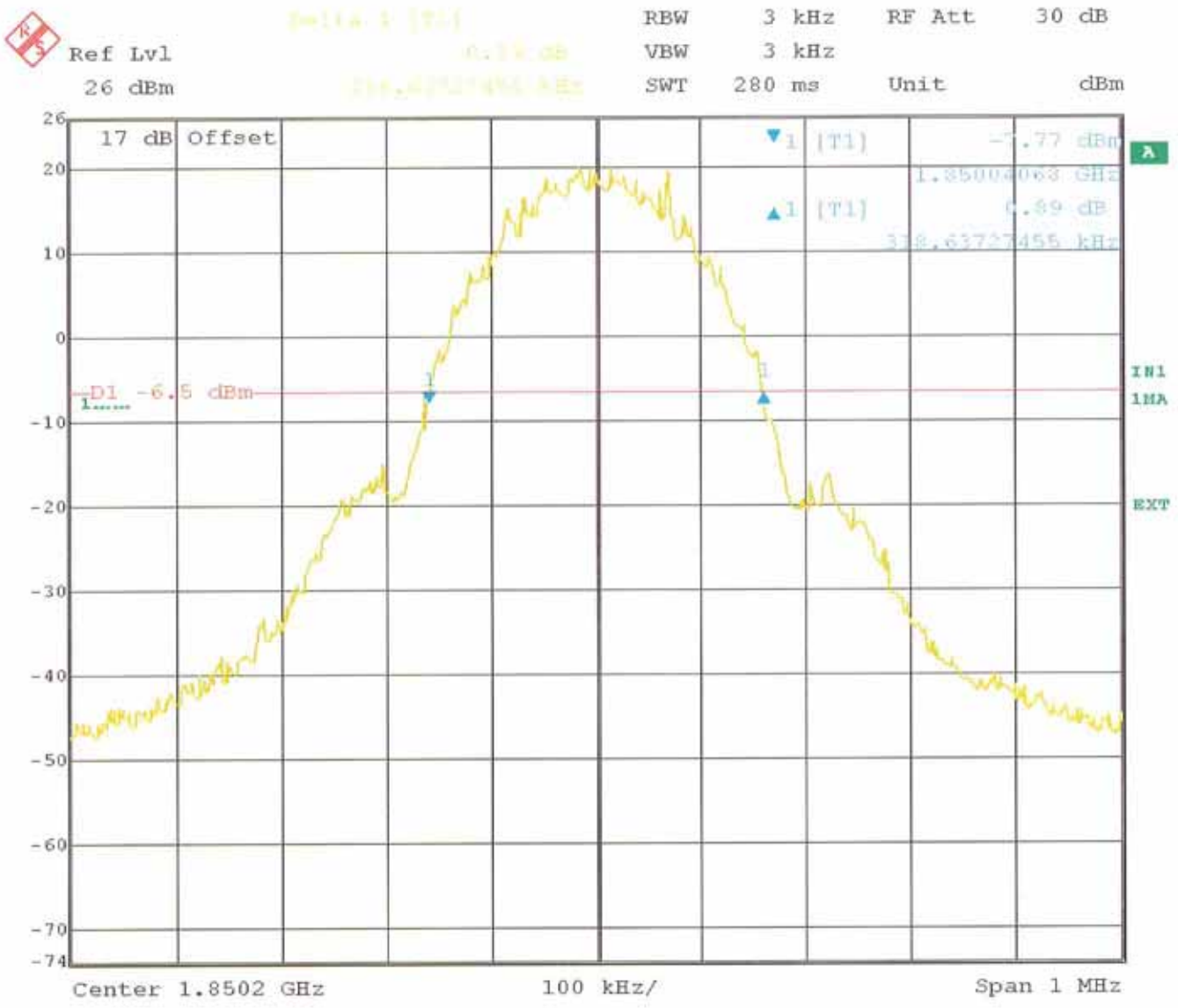
channel 810 Bandwidth: 282,57 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 26 dB BANDWIDTH § 2.989

1900 MHz



Date: 17.FEB.2009 10:51:46

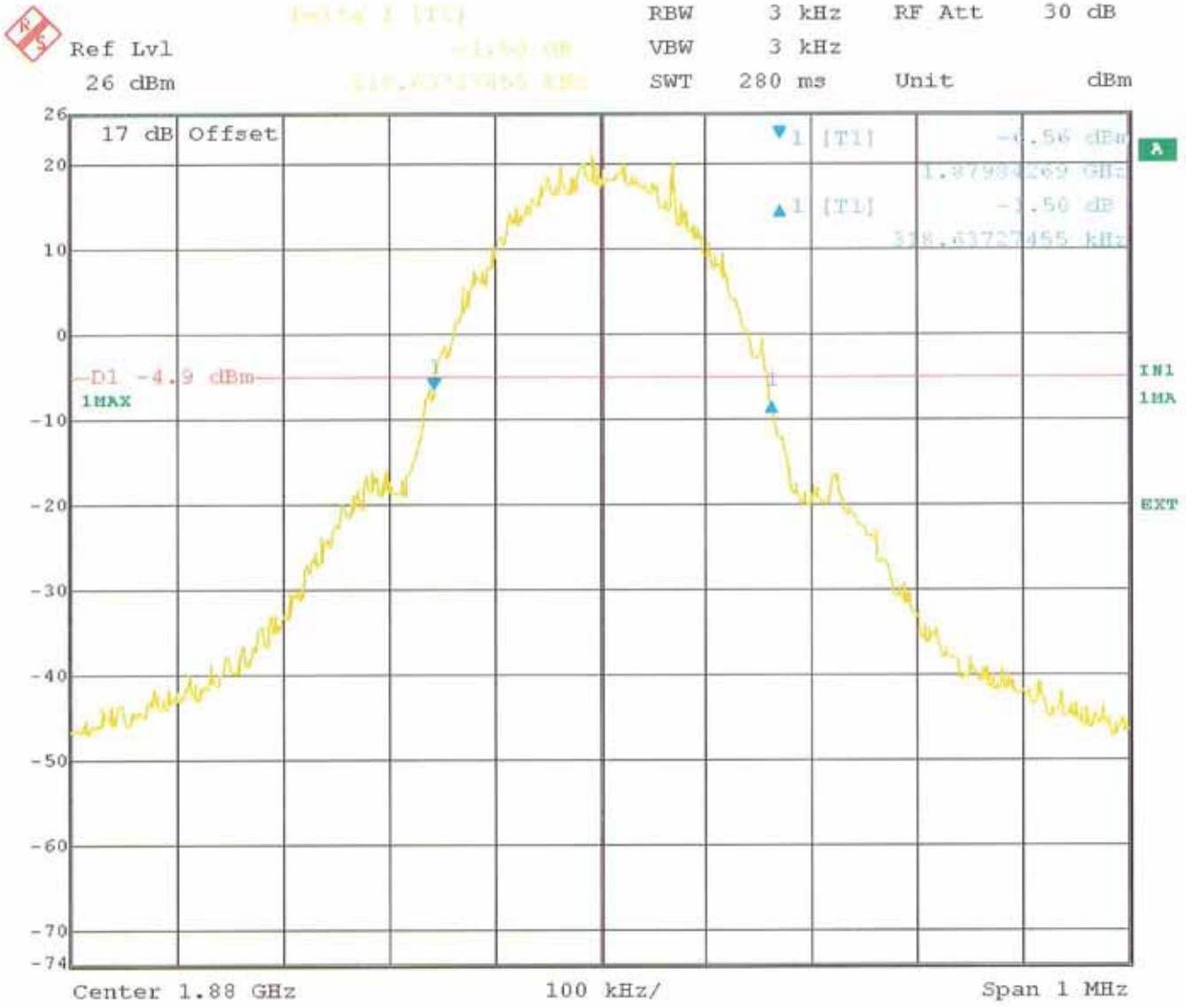
channel 512 Bandwidth: 318,64 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 26 dB BANDWIDTH § 2.989

1900 MHz



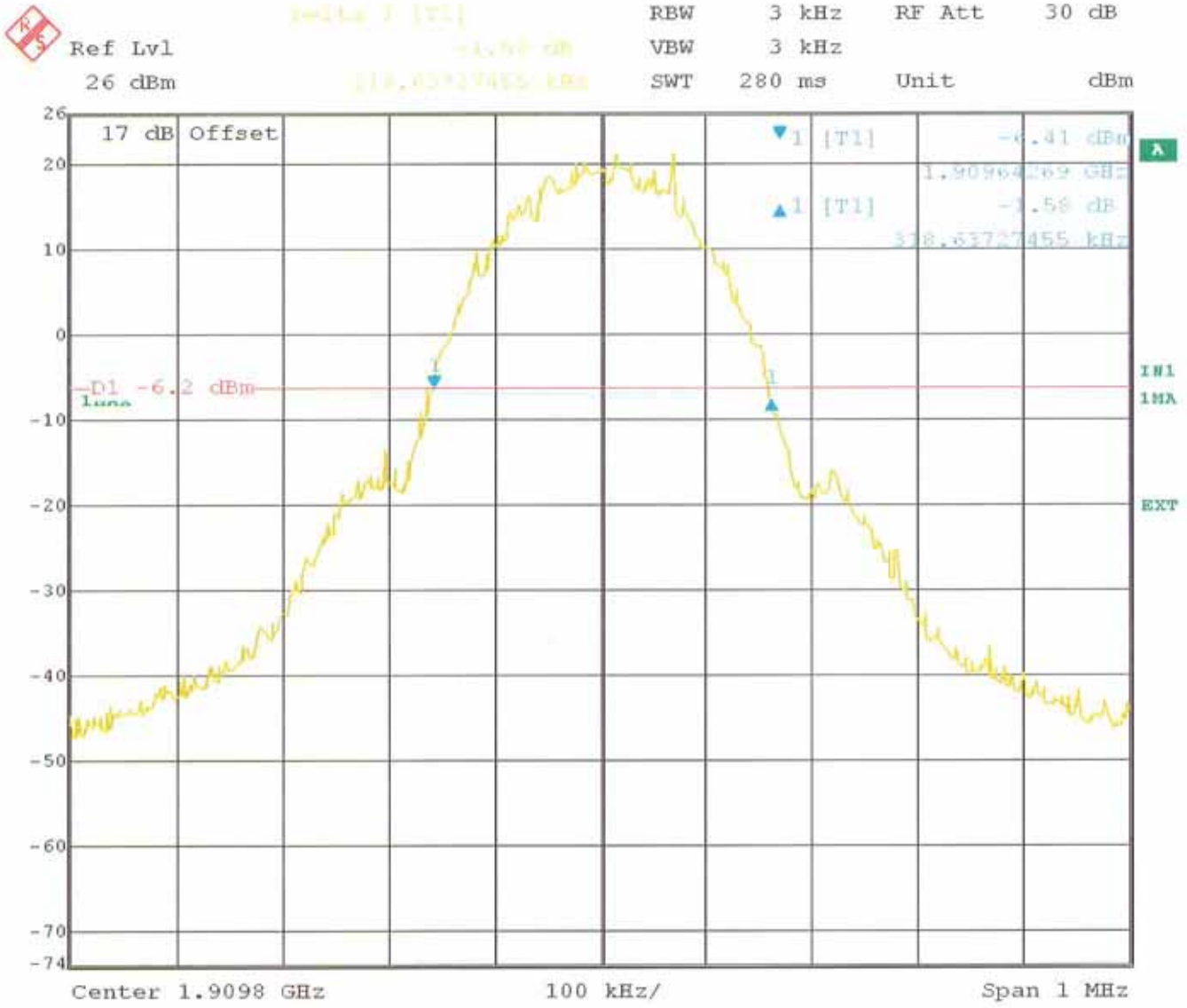
channel 661 Bandwidth: 318,64 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Ambient temperature: 22°C Relative humidity: 37%

OCCUPIED BANDWIDTH – 26 dB BANDWIDTH § 2.989

1900 MHz



channel 810 Bandwidth: 318,64 kHz

TEST EQUIPMENT USED: NT-207; NT-208

Appendix 1
Test equipment used

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☐	Anechoic Chamber with 3m measurement distance	NT-100
☐	Stripline according to ISO 11452-5	NT-108
☐	MA 240 - Antenna mast 1 - 4 m height	NT-110
☐	DS 412 - Turntable 0 - 400 ° Azimuth	NT-111
☐	HD 100 Controller Mast+Turntable	NT-112
☐	HUF-Z2 - Bicon. Antennna 20 - 300 MHz	NT-120
☐	HUF-Z3 - Log. Per. Antenna 200 - 1000 MHz	NT-121
☐	HFH-Z2 - Loop Antenna 9 kHz - 30 MHz	NT-122
☐	HFH-Z6 - Rod Antenna 9 kHz - 30 MHz	NT-123
☐	3121C - Dipole Antenna 28 - 1000 MHz	NT-124
☐	3115 - Horn Antenna 1 - 18 GHz (immunity)	NT-125
☐	3116 - Horn Antenna 18 - 40 GHz	NT-126
☐	SAS-200/543 - Bicon. Antenna 20 MHz - 300 MHz	NT-127
☐	AT-1080 - Log. Per. Antenna 80 - 1000 MHz	NT-128
☐	HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-129
☐	HK-116 - bicon. Antenna 20 MHz - 300 MHz	NT-130
☐	3146 - Log. Per. Antenna 200 – 1000 MHz	NT-131
☐	Loop Antenna H-Field	NT-132
☐	Horn Antenna 500 MHz - 2900 MHz	NT-133
☐	Horn Antenna 500 MHz - 6000 MHz	NT-133/1
☐	Log. per. Antenna 800 MHz - 2500 MHz	NT-134
☐	Log. per. Antenna 800 MHz - 2500 MHz	NT-135
☐	BiConiLog Antenna 26 MHz – 2000 MHz	NT-137
☐	Conical Dipol Antenna PCD8250	NT-138
☐	HF 906 - Horn Antenna 1 - 18 GHz (emission)	NT-139
☐	HZ-1 Antenna tripod	NT-150
☐	BN 1500 Antenna tripod	NT-151
☐	Ant. tripod for EN61000-4-3 Model TP1000A	NT-156
☐	Power quality analyzer Fluke 1760 (complete set)	NT-160 - NT-172
☐	Spectrumanalyzer – FSP7 9 kHz – 7 GHz	NT-200
☐	ESVP - Test receiver 20 - 1000 MHz	NT-201
☐	ESPC - Test receiver 9 kHz - 2,5 GHz	NT-203
☐	ESI26 – Test receiver 20 Hz – 26,5 GHz	NT-207
☐	Digital Radio Tester CMU200	NT-208
☐	Noise-gen., ITU-R 559-2 20 Hz – 20 kHz	NT-209
☐	CMTA - Radiocommunication analyzer ; 0,1 - 1000 MHz	NT-210
☐	3271 - Spectrum analyzer 100 Hz - 26,5 GHz	NT-211
☐	Radiocommunicationanalyzer Marconi 2945A	NT-212
☐	2855S - Communication analyzer	NT-213
☐	Mixer M28HW 26,5 GHz - 40 GHz	NT-214
☐	Diode Detector 0,01 GHz - 26,5 GHz	NT-215
☐	RubiSource T&M Timing reference	NT-216
☐	Radiocommunicationanalyzer SWR 1180 MD	NT-217
☐	Mixer M19HWD 40 GHz – 60 GHz	NT-218
☐	Mixer M12HWD 60 GHz – 90 GHz	NT-219
☐	TDS - 540 DSO Digital scope	NT-220
☐	TPS 2014 Digital scope	NT-222
☐	Artificial Ear according to IEC 60318	NT-224
☐	1 kHz Sound calibrator	NT-225
☐	B10 - Harmonics and flicker analyzer	NT-232
☐	SRM-3000 Spectrumanalyzer	NT-233
☐	E-field probe SRM 75 MHz – 3 GHz	NT-234
☐	Hall-Teslameter ETM-1	NT-241
☐	EFA-3 H-field- / E-field probe	NT-243
☐	E-field measuring instrument EMR-200; 100 kHz – 3 GHz	NT-244
☐	E-field probe 100 kHz – 3 GHz	NT-245
☐	Magneticfield-Sensor 300 kHz – 30 MHz	NT-246
☐	E-field probe 3 MHz – 18 GHz	NT-247

Appendix 1 (continued)
Test equipment used

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☐	ELT-400 1 Hz – 400 kHz	NT-249
☐	MDS 21 - Absorbing clamp 30 - 1000 MHz	NT-250
☐	FCC-203I EM Injection clamp	NT-251
☐	FCC-203I-DCN Ferrite decoupling network	NT-252
☐	PR50 Current Probe	NT-253
☐	PR630 Current Probe	NT-254
☐	Fluke 87 V True RMS Multimeter	NT-260
☐	Model 2000 Digital Multimeter	NT-261
☐	Fluke 87 V Digital Multimeter	NT-262/1
☐	ESH2-Z5-U1 Artificial mains network 4x25A	NT-300
☐	ESH3-Z5-U1 Artificial mains network 2x10A	NT-301
☐	ESH3-Z6-U1 Artificial mains network 1x100A	NT-302
☐	ESH3-Z4 T-Artificial network	NT-303
☐	PHE 4500/B Power amplifier	NT-304
☐	EZ10 T-Artificial Network	NT-305
☐	ENY22 Artificial Network	NT-308
☐	ENY41 Artificial Network	NT-309
☐	SMG - Signal generator 0,1 - 1000 MHz	NT-310
☐	PM 5518 TXVPS Video generator	NT-311
☐	RefRad Reference generator	NT-312
☐	SMP 02 Signal generator 10 MHz - 20 GHz	NT-313
☐	40 MHz Arbitrary Generator TGA1241	NT-315
☐	Artificial mains network NSLK 8127-PLC	NT-316
☐	PEFT - Burst generator up to 4 kV	NT-320
☐	ESD 30 System up to 25 kV	NT-321
☐	PSURGE 4.1 Surge generator	NT-324
☐	TRANSIENT 1000 Immunity test system	NT-325
☐	VCS 500-M6 Surge-Generator	NT-326
☐	BTA-250 - RF-Amplifier 9 kHz - 220 MHz / 250 W	NT-330
☐	T82-50 RF-Amplifier 2 GHz – 8 GHz	NT-331
☐	500W1000M7 - RF-Amplifier 80 - 1000 MHz / 500 W	NT-332
☐	AS0102-65R - RF-Amplifier 1 GHz - 2 GHz	NT-333
☐	APA01 – RF-Amplifier 0,5 GHz – 2,5 GHz	NT-334
☐	Preamplifier 1 GHz - 4 GHz	NT-335
☐	Preamplifier for GPS MKU 152 A	NT-336
☐	Preamplifier 100 MHz – 23 GHz	NT-337
☐	DC Block 10 MHz – 18 GHz Model 8048	NT-338
☐	2-97201 Electronic load	NT-341
☐	TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-344
☐	TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-345
☐	VDS 200 Mobil-impuls-generator	NT-350
☐	LD 200 Mobil-impuls-generator	NT-351
☐	MPG 200 Mobil-Impuls-Generators	NT-352
☐	EFT 200 Mobil-impuls-generator	NT-353
☐	AN 200 S1 Artificial Network	NT-354
☐	FP-EFT 32M 3 ph. Coupling filter (Burst)	NT-400/1
☐	PHE 4500 - Mains impedance network	NT-401
☐	IP 6.2 Coupling filter for data lines (Surge)	NT-403
☐	TK 9421 High Power Volt. Probe 150 kHz - 30 MHz	NT-409
☐	ESH2-Z3 - Probe 9 kHz - 30 MHz	NT-410
☐	IP 4 - Capacitive clamp (Burst)	NT-411
☐	Highpass-Filter 100 MHz – 3 GHz	NT-412
☐	Highpass-Filter 600 MHz – 4 GHz	NT-413
☐	Highpass-Filter 1250 MHz – 4 GHz	NT-414
☐	Highpass-Filter 1800 MHz – 16 GHz	NT-415
☐	Highpass-Filter 3500 MHz – 18 GHz	NT-416
☐	RF-Attenuator 10 dB DC – 18 GHz / 50 W	NT-417
☐	RF-Attenuator 6 dB DC – 18 GHz / 50 W	NT-418

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Appendix 1 (continued)
Test equipment used

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Division Medical Technology/ Communication Technology/ EMC

Department: FG

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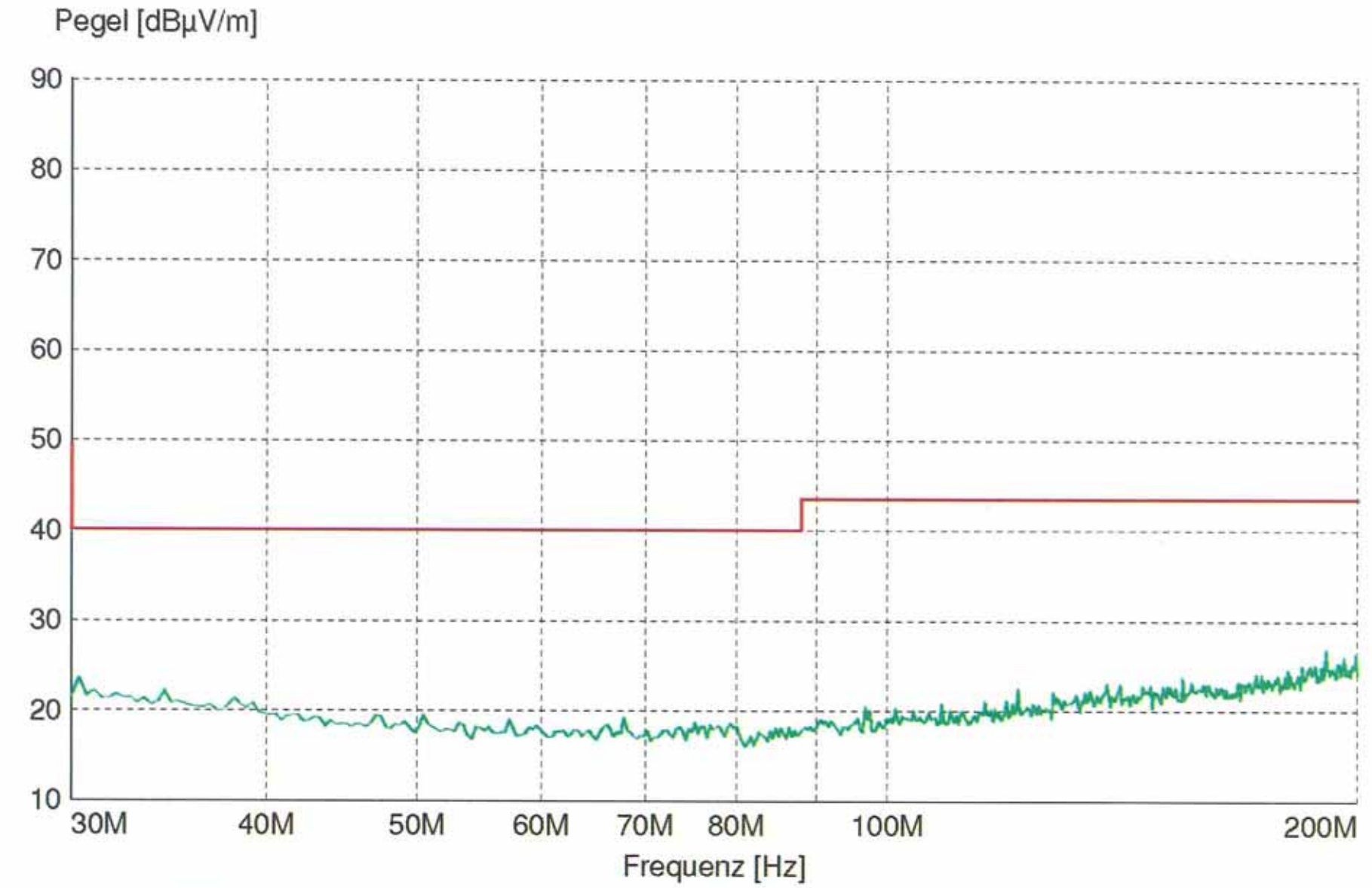
☐	RF-Attenuator 3 dB DC – 18 GHz / 50 W	NT-419
☐	RF-Attenuator 20 dB DC - 1000 MHz / 25 W	NT-421
☐	RF-Attenuator 30 dB DC - 1000 MHz / 1 W	NT-423
☐	RF-Attenuator 30 dB	NT-424
☐	RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-425
☐	RF-Attenuator 6 dB DC - 1000 MHz / 1 W	NT-426
☐	RF-Attenuator 6 dB	NT-428
☐	RF-Attenuator 0 dB - 81 dB	NT-429
☐	WRU 27 - Band blocking 27 MHz	NT-430
☐	WHJ450C9 AA - High pass 450 MHz	NT-431
☐	WHJ250C9 AA - High pass 250 MHz	NT-432
☐	RF-Load 150 W	NT-433
☐	Impedance transducer 1:4 ; 1:9 ; 1:16	NT-435
☐	RF-Attenuator DC – 18 GHz 6 dB	NT-436
☐	RF-Attenuator DC – 18 GHz 6 dB	NT-437
☐	RF-Attenuator DC – 18 GHz 10 dB	NT-438
☐	RF-Attenuator DC – 18 GHz 20 dB	NT-439
☐	I+P 7780 Directional coupler 100 - 2000 MHz	NT-440
☐	ESH3-Z2 - Pulse limiter 9 kHz - 30 MHz	NT-441
☐	Power Divider 6 dB/1 W/50 Ohm	NT-443
☐	Directional coupler 0,1 MHz – 70 MHz	NT-444
☐	Directional coupler 0,1 MHz – 70 MHz	NT-445
☐	Tube imitations according to EN 55015	NT-450
☐	FCC-801-M2-50A Coupling decoupling network	NT-459
☐	FCC-801-M5-25 Coupling decoupling network	NT-460
☐	FCC-801-AF10 Coupling decoupling network	NT-461
☐	FCC-801-S25 Coupling decoupling network	NT-462
☐	FCC-801-T4 Coupling decoupling network	NT-463
☐	FCC-801-C1 Coupling decoupling network	NT-464
☐	F-16A - Current probe 1kHz - 70MHz	NT-465
☐	95242-1 – Current probe 10 MHz – 400 MHz	NT-468
☐	94106-1L-1 – Current probe 20 Hz – 450 MHz	NT-471
☐	GA 1240 Power amplifier according to EN 61000-4-16	NT-480
☐	Coupling networks according to EN 61000-4-16	NT-481 - NT-483
☐	PC P4 3 GHz Test computer	NT-500
☐	PC P4 1700 MHz Notebook	NT-505
☐	PC Intel Centrino 1600 MHz Notebook	NT-506
☐	Monitoring camera with Monitor	NT-511
☐	ES-K1 Version 1.71 SP2 Test software	NT-520
☐	SRM-TS Version 1.3 software for SRM-3000	NT-522
☐	SPS-PHE Test software V2.4c voltage fluctuations/harmonics	NT-525
☐	SPS-EM Test software V2.4c EN61000-4-11	NT-527
☐	Noise power test apparatus according to EN 55014	NT-530
☐	Vertical coupling plane (ESD)	NT-531
☐	Test cable #4 for EN 61000-4-6	NT-553
☐	Test cable #3 for conducted emission	NT-554
☐	Test cable #5 ESD-cable (2x470k)	NT-555
☐	Test cable #6 ESD-cable (2x470k)	NT-556
☐	Test cable #8 Sucoflex 104EA	NT-559
☐	Test cable #9 (for outdoor measurements)	NT-580
☐	Test cable #10 (for outdoor measurements)	NT-581
☐	Test cable #13 Sucoflex 104PE	NT-584
☐	Test cable #21 for SRM-3000	NT-592
☐	Shield chamber	NT-600
☐	Climatic chamber	M-1200
☐	Control and simulation equipment for EUT	---



MES RA440_128_F1
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

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checked by:

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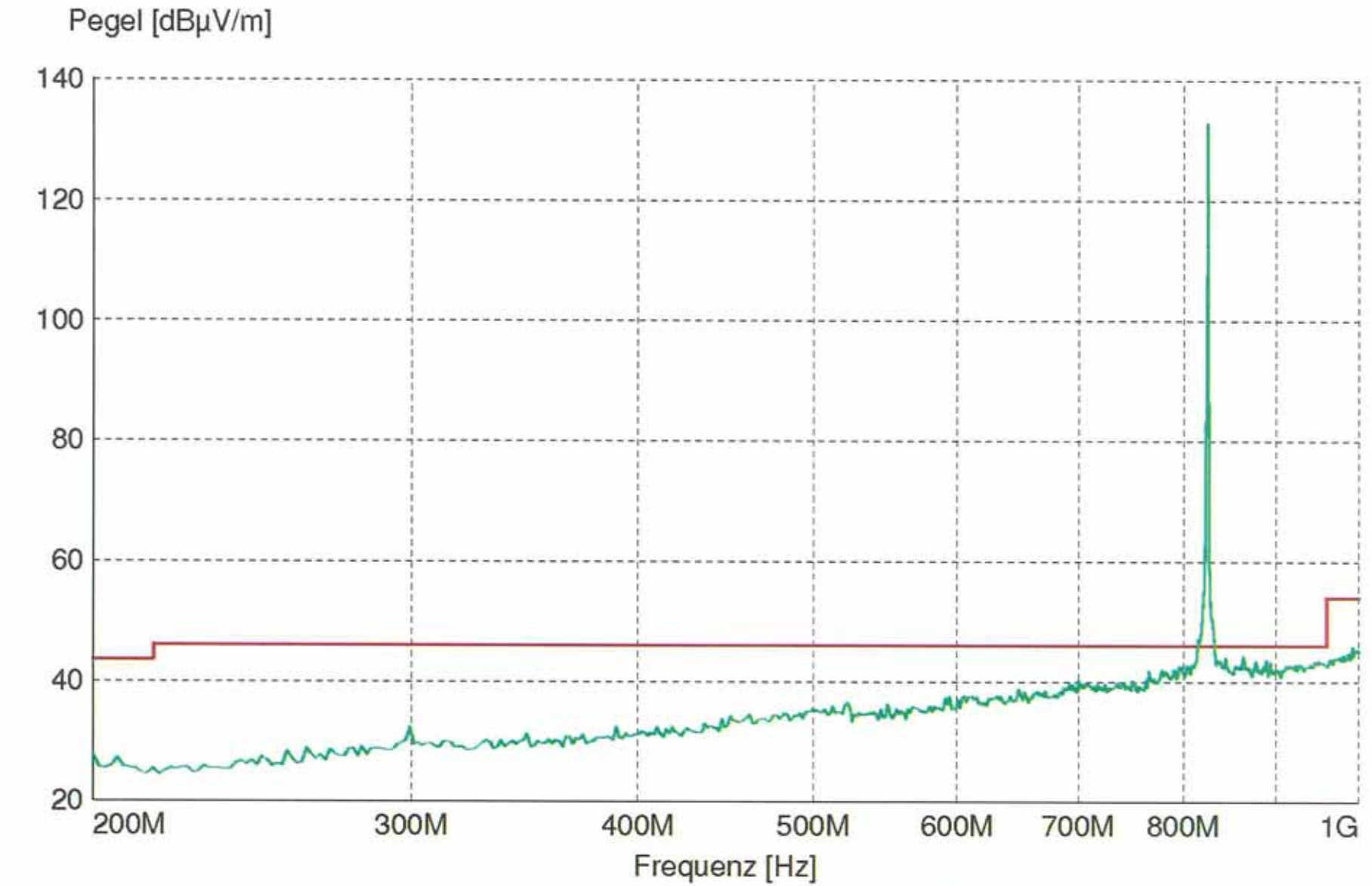
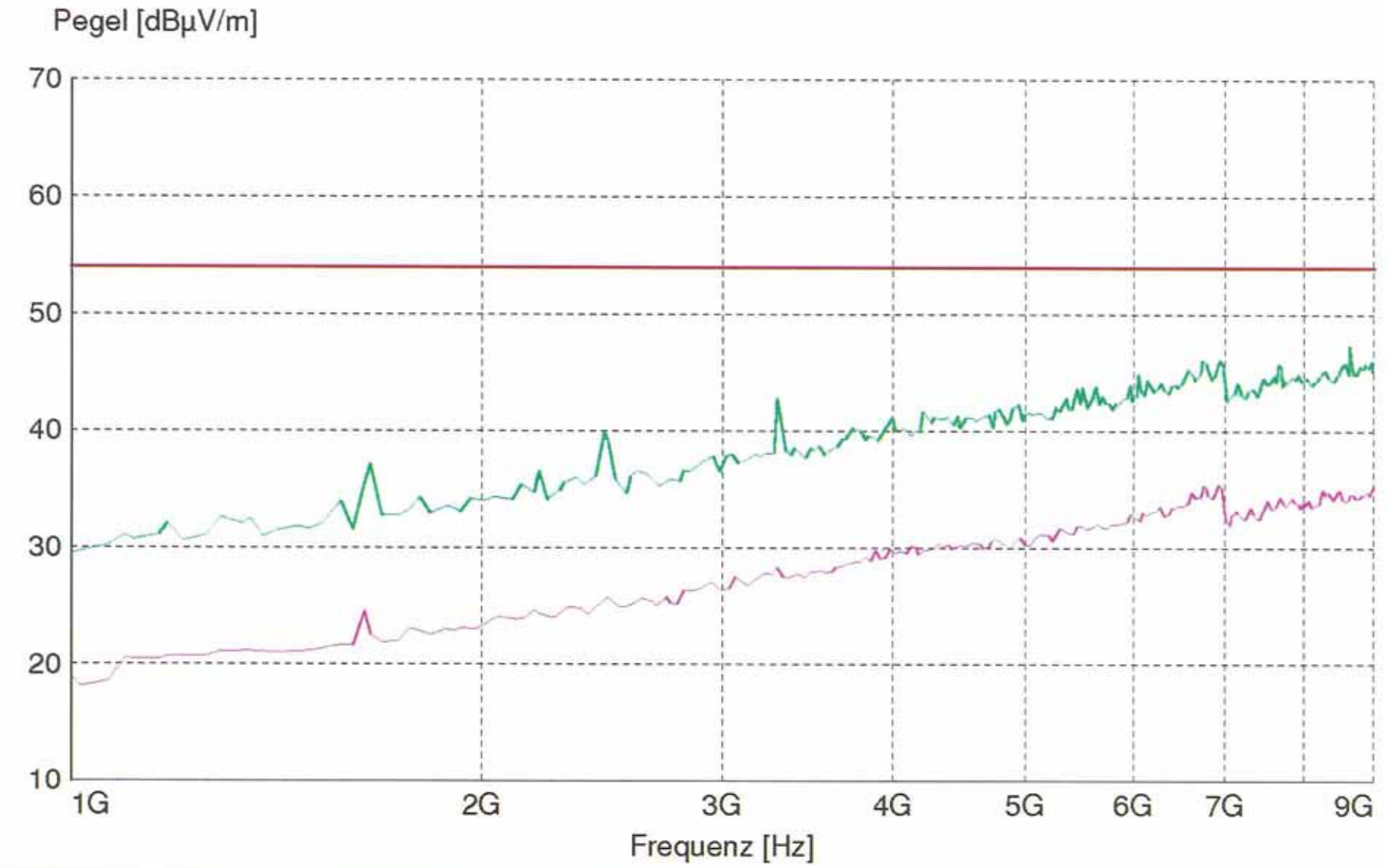


MES RA440_128_F2
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
Measurement diagram: 2 of 21
Date: 10.08.2009
checked by:

TÜV AUSTRIA



MES RA440_128_TX_F3_PK
MES RA440_128_TX_F3_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
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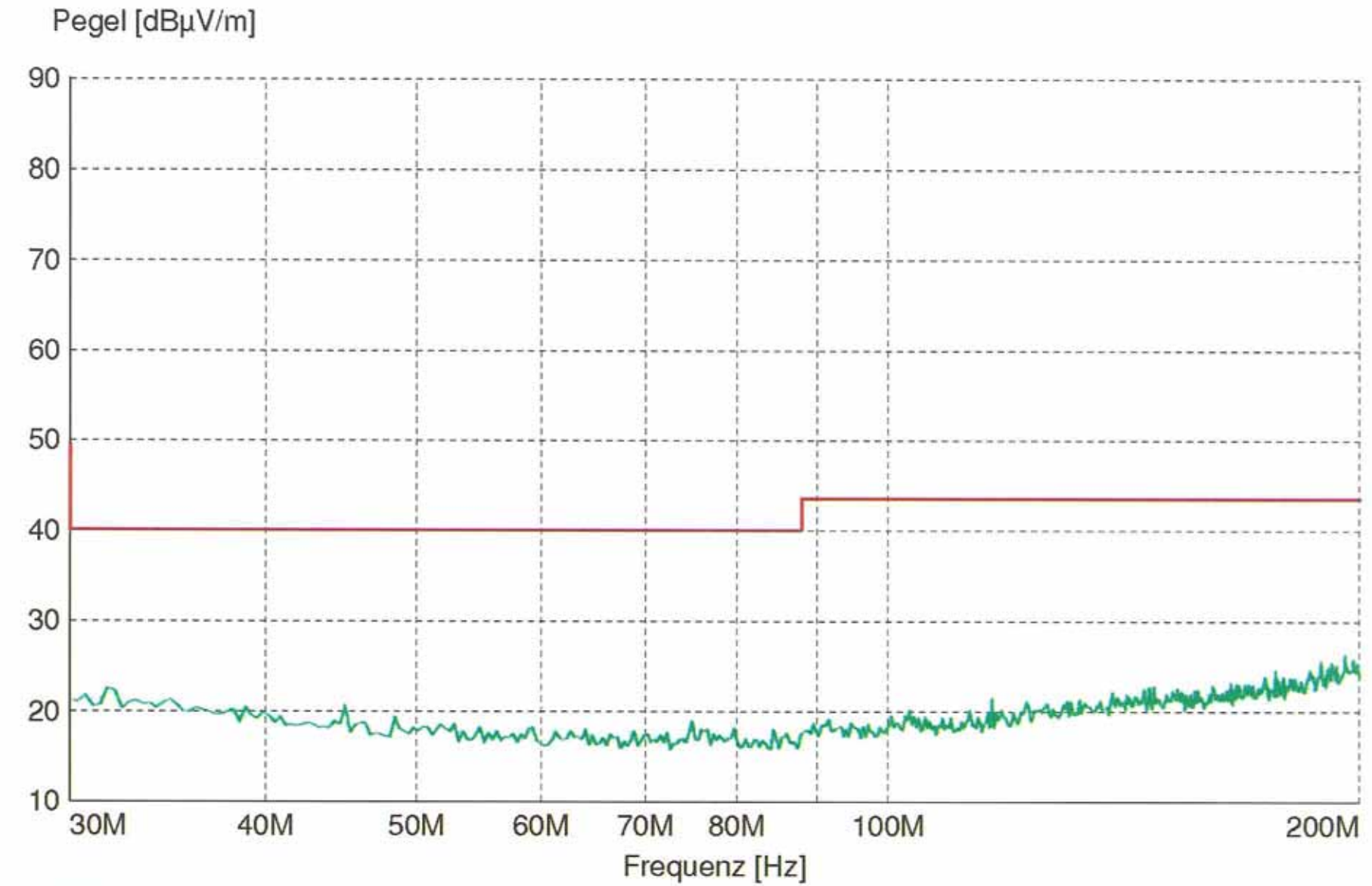
Date: 10.08.2009
checked by:

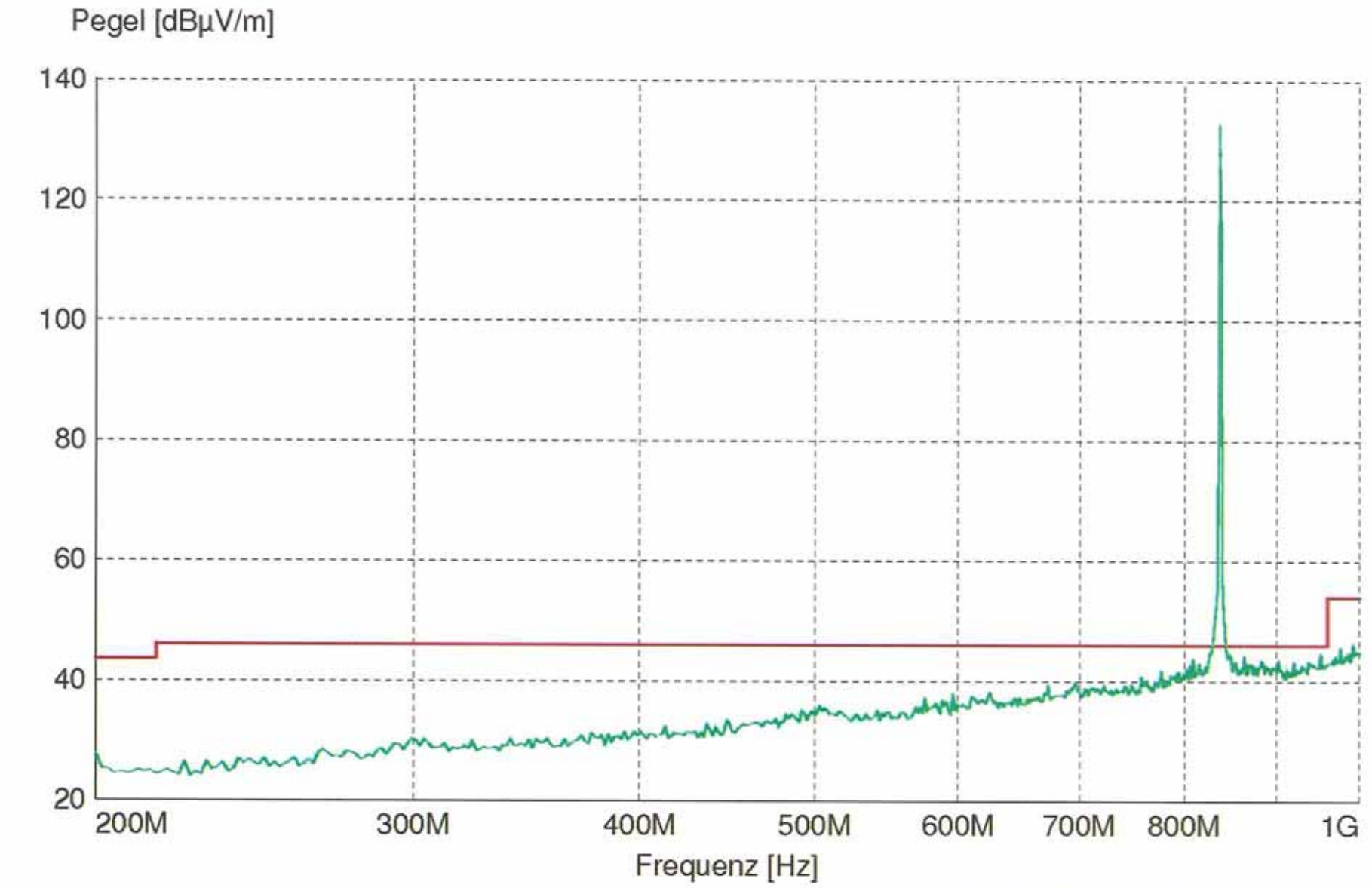
TÜV AUSTRIA



MES RA440_190_F1
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
Measurement diagram: 4 of 21
Date: 10.08.2009
checked by:

TÜV AUSTRIA



MES RA440_190_F2
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical
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Technology/ EMC
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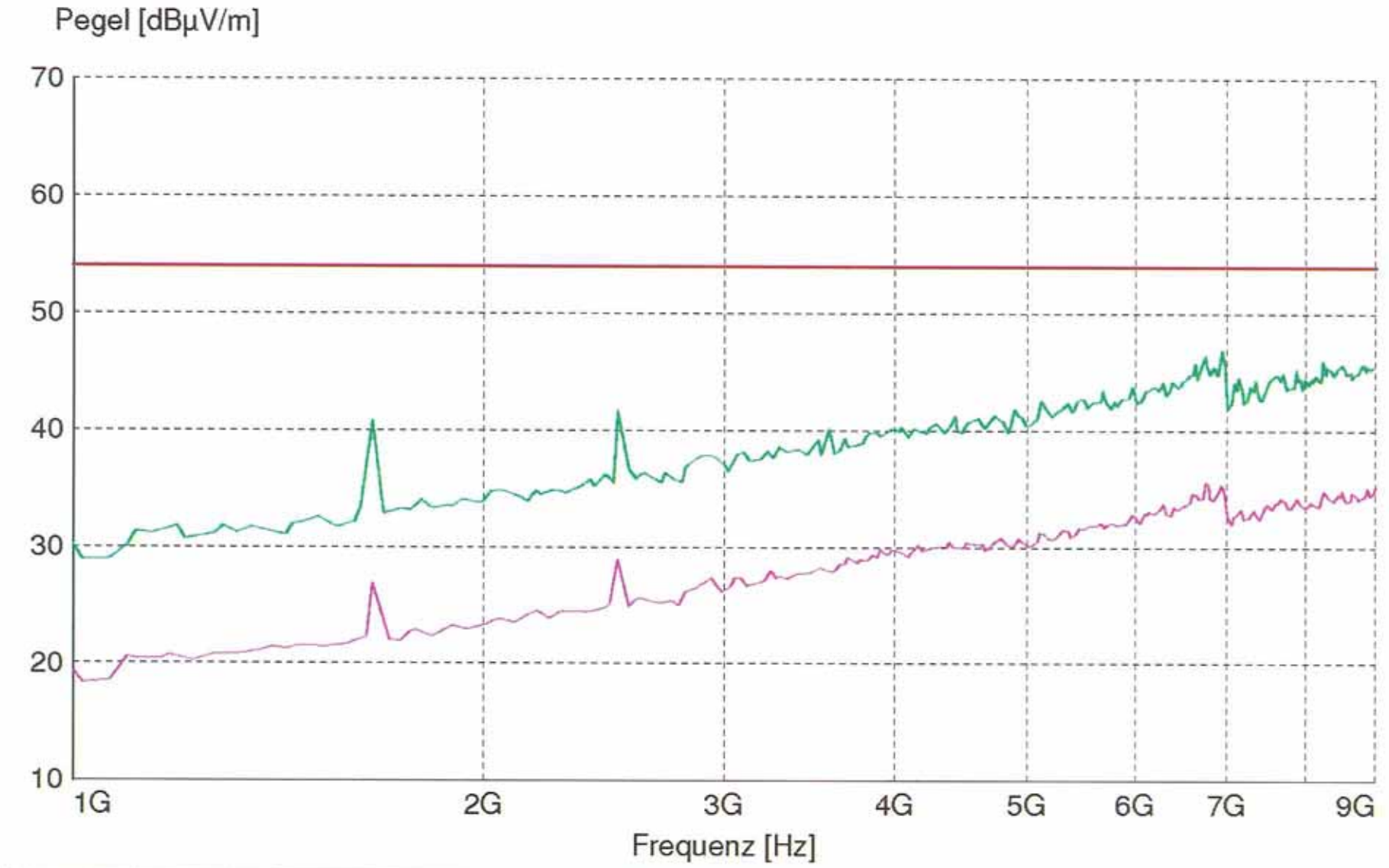
checked by:

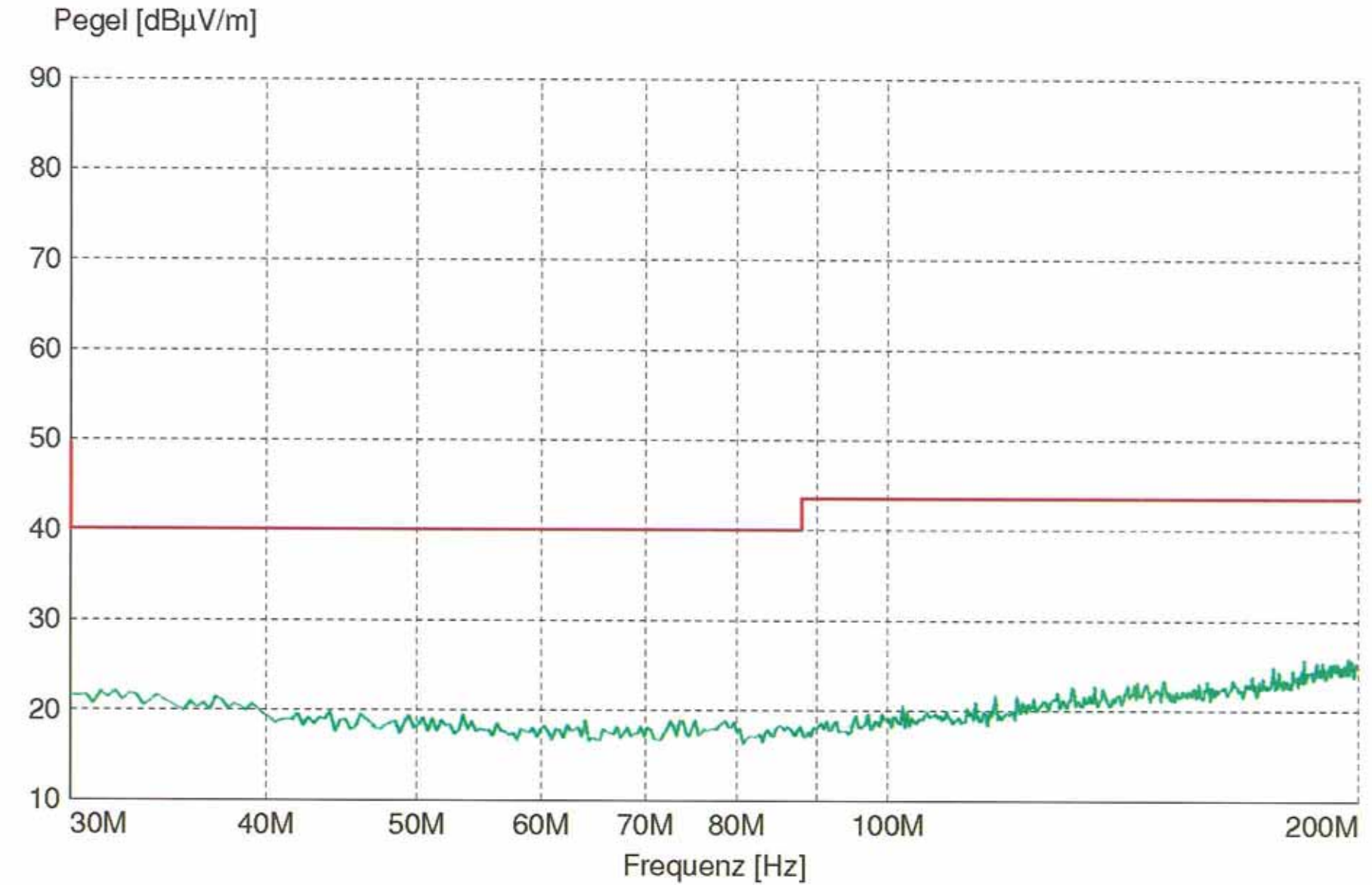
TÜV AUSTRIA



MES RA440_190_TX_F3_PK
MES RA440_190_TX_F3_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
Measurement diagram: 12 of 21
Date: 10.08.2009
checked by:

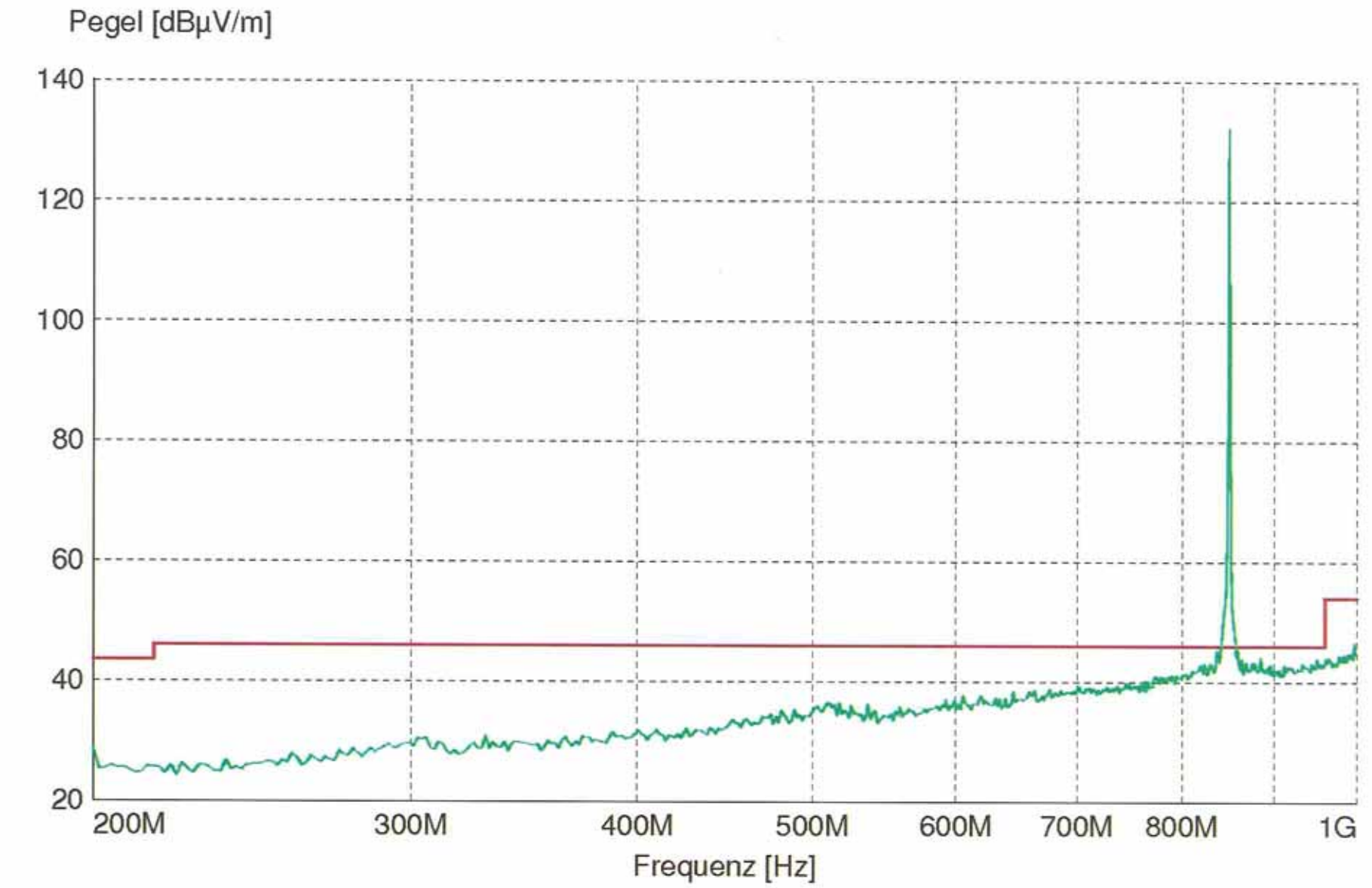
TÜV AUSTRIA



MES RA440_251_F1
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
Measurement diagram: 2 of 21
Date: 10.08.2009
checked by:

TÜV AUSTRIA



MES RA440_251_F2
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
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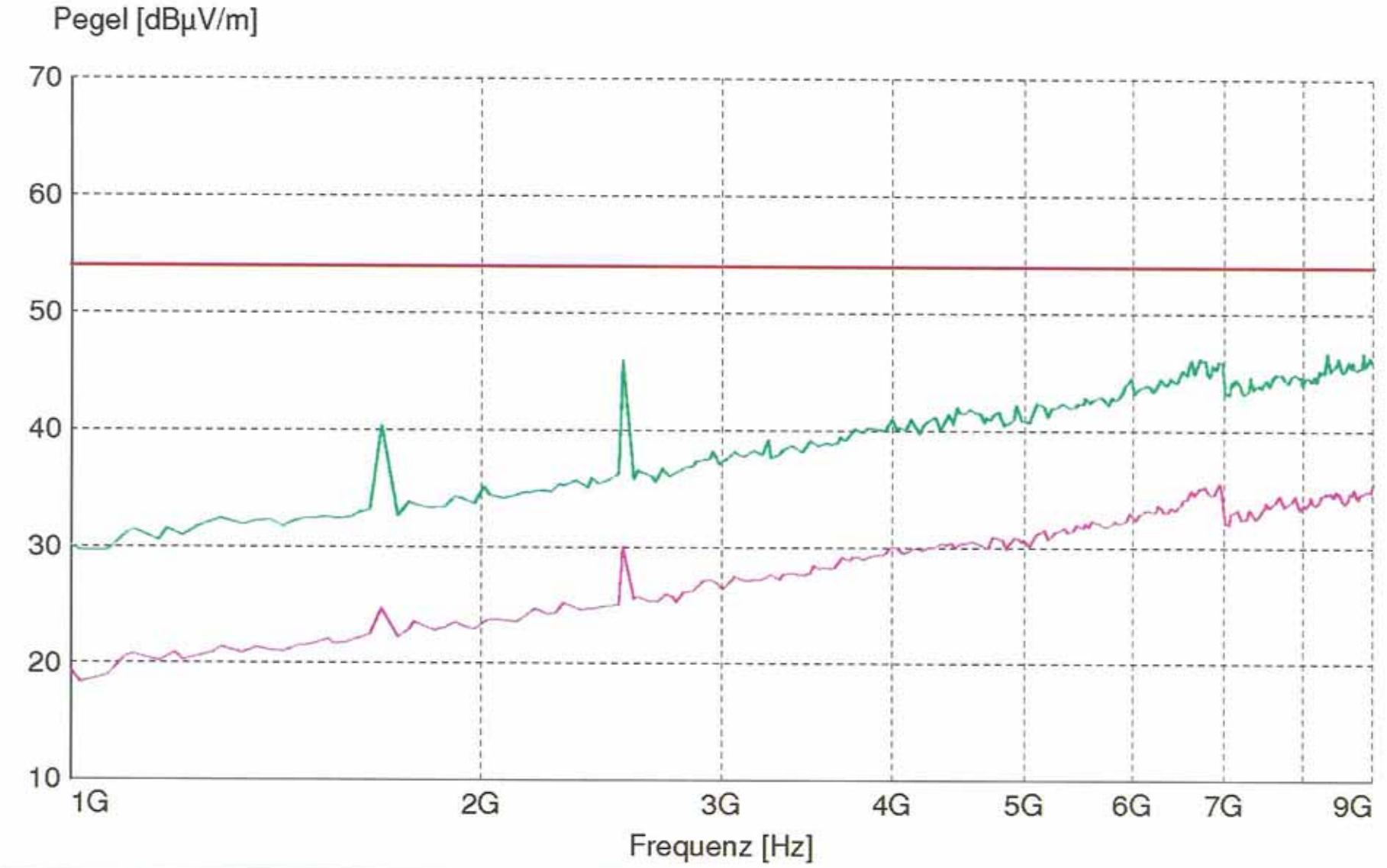
checked by:

TÜV AUSTRIA



MES RA440_251_TX_F3_PK
MES RA440_251_TX_F3_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
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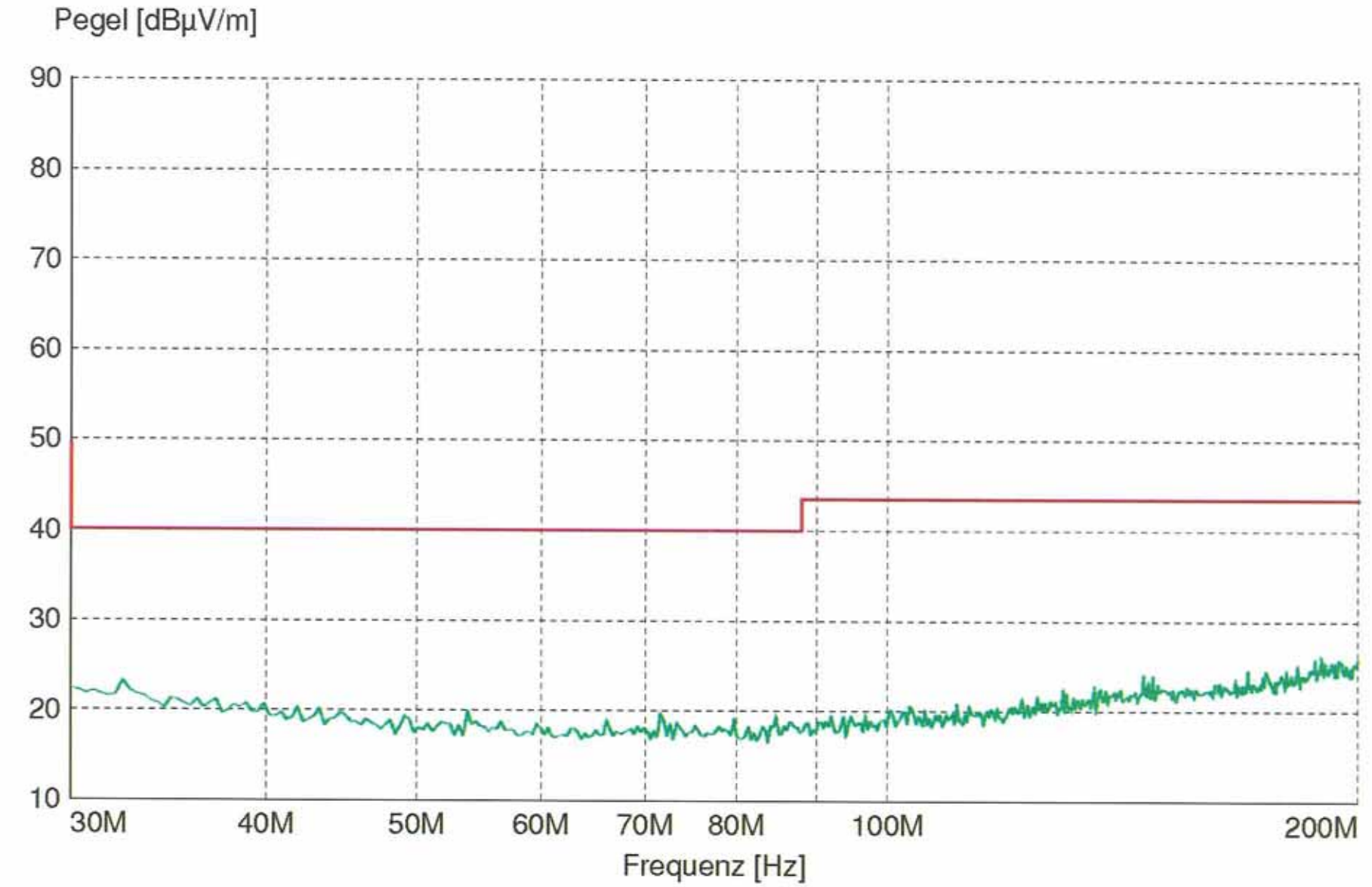
Date: 10.08.2009
checked by:

TÜV AUSTRIA



MES RA440_512_F1
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

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Department: FG
Test report reference:
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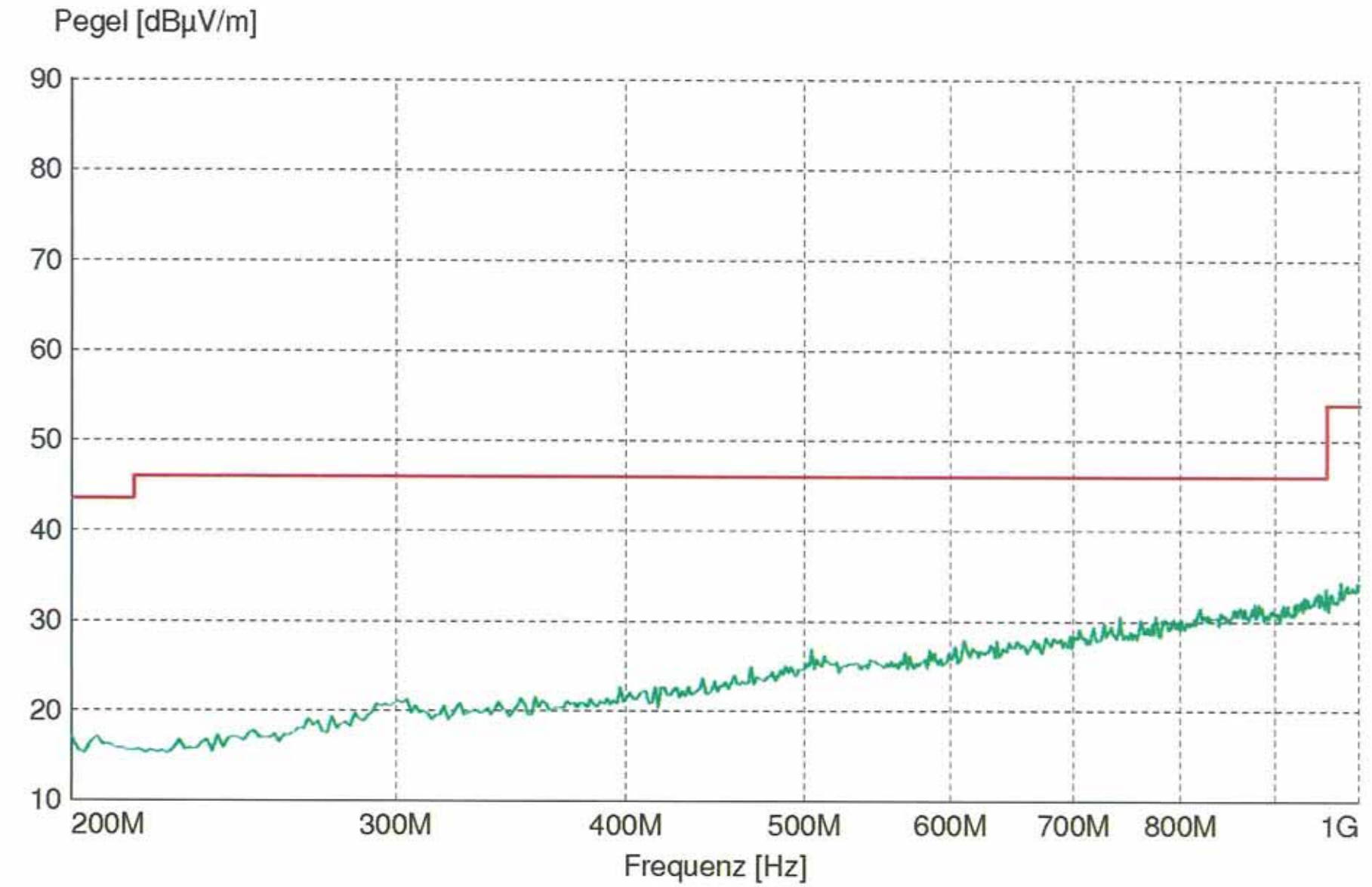
of 21
Date: 10.08.2009
checked by:

TÜV AUSTRIA



MES RA440_512_F2
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
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checked by:

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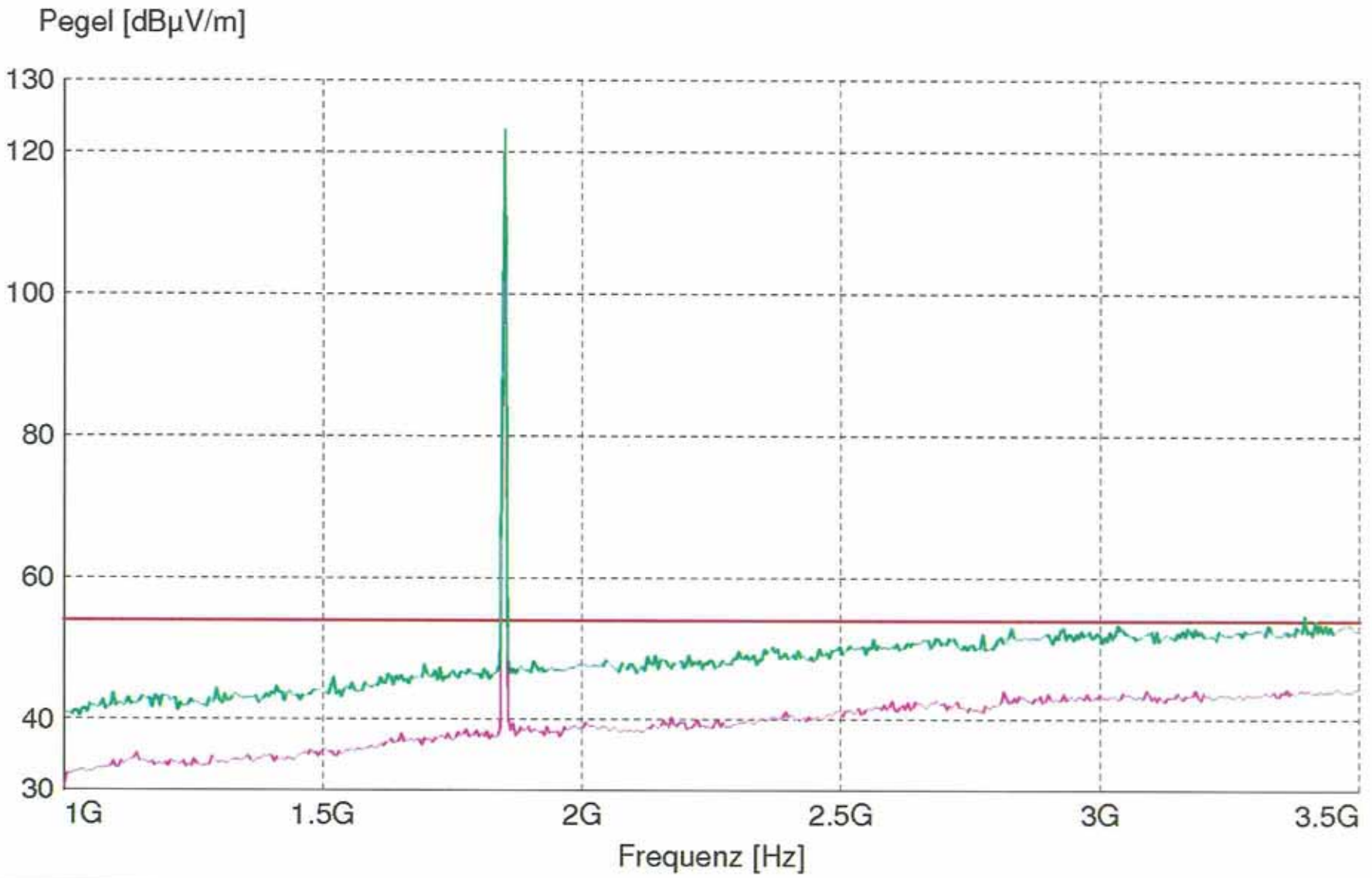

MES RA440_512_TX_F3_PK
MES RA440_512_TX_F3_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

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Department: FG
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checked by:

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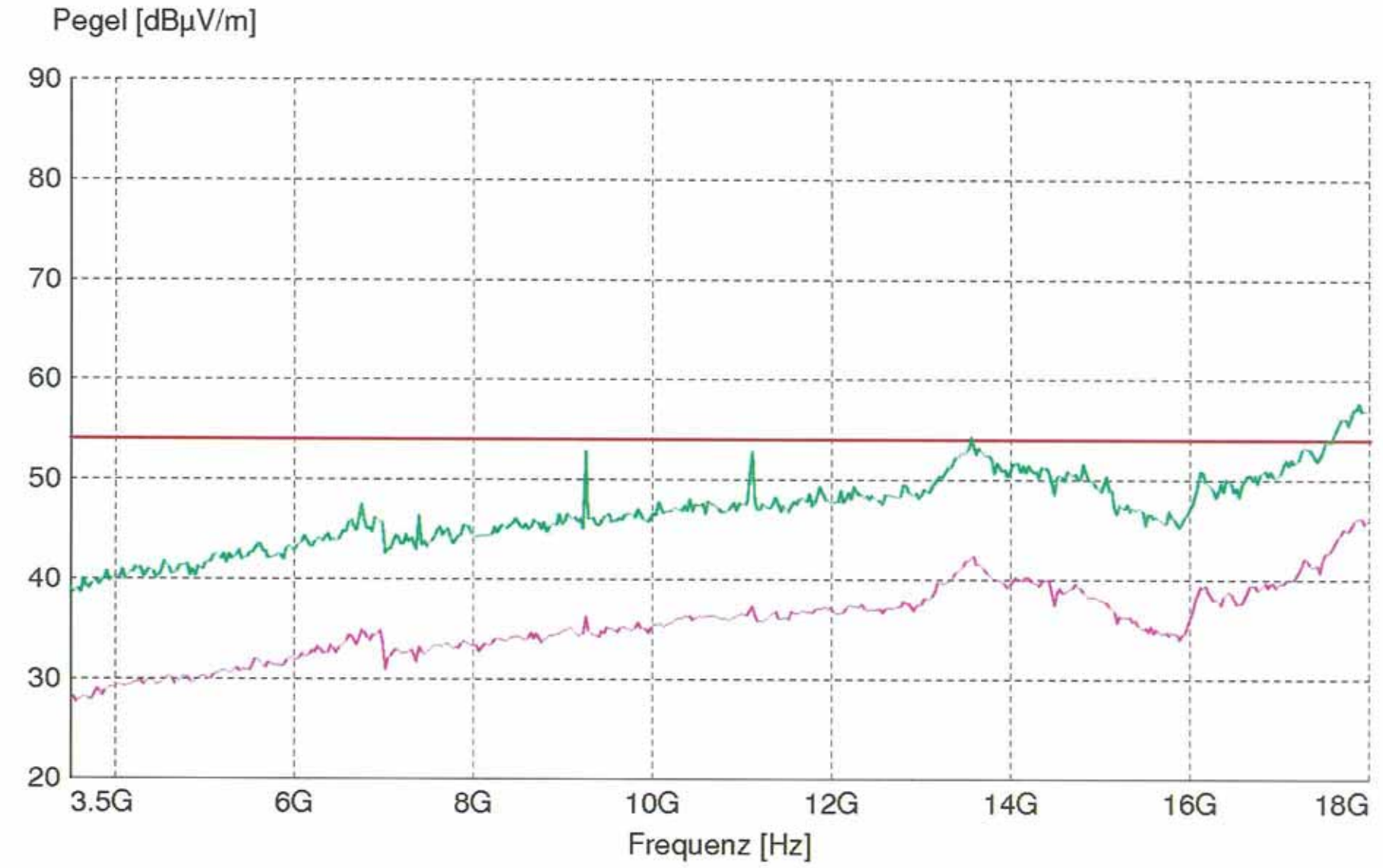

MES RA440_512_TX_F4_PK
MES RA440_512_TX_F4_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
Test report reference: M/FG-09/119
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checked by:

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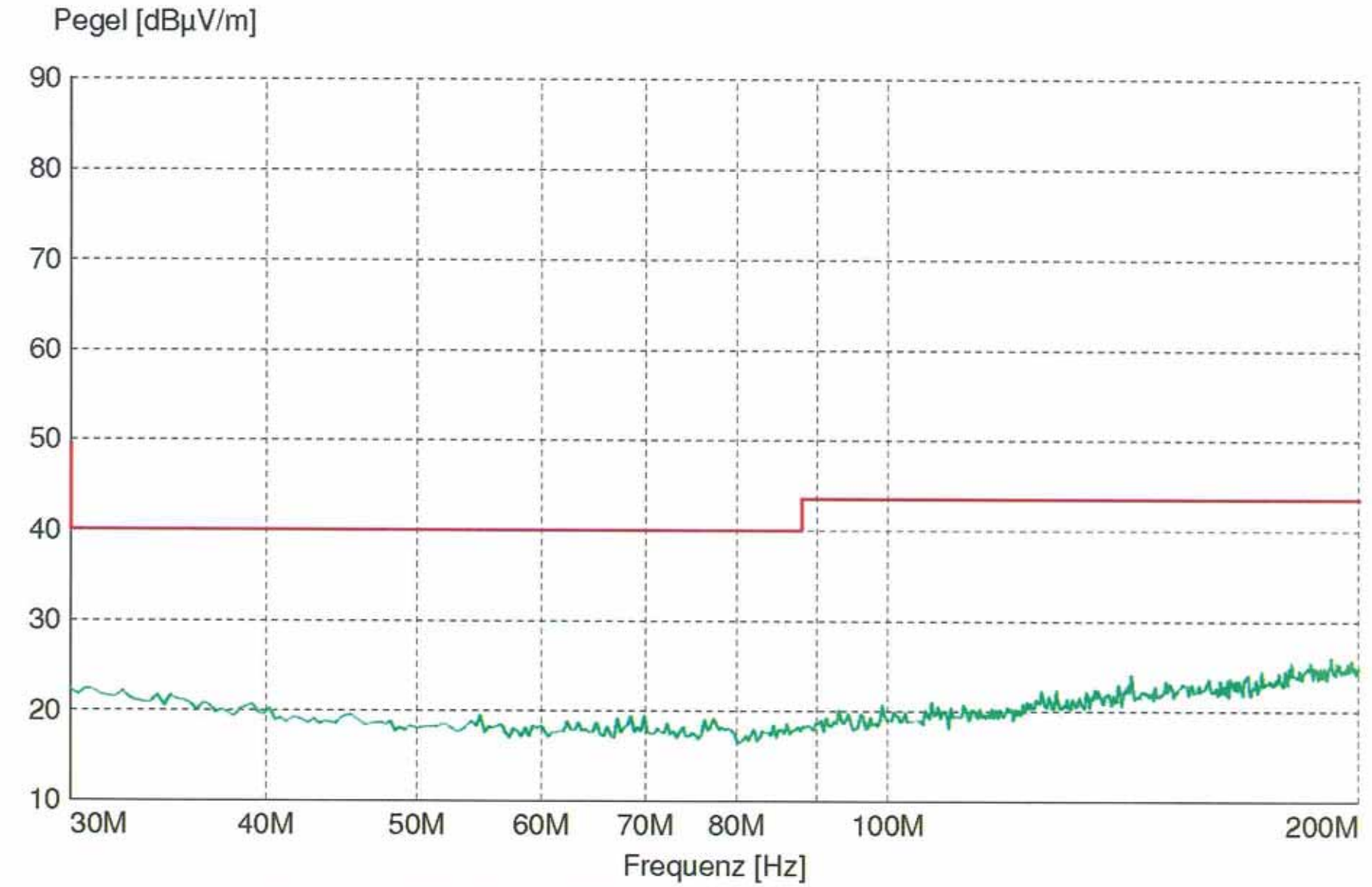

MES RA440_661_F1
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

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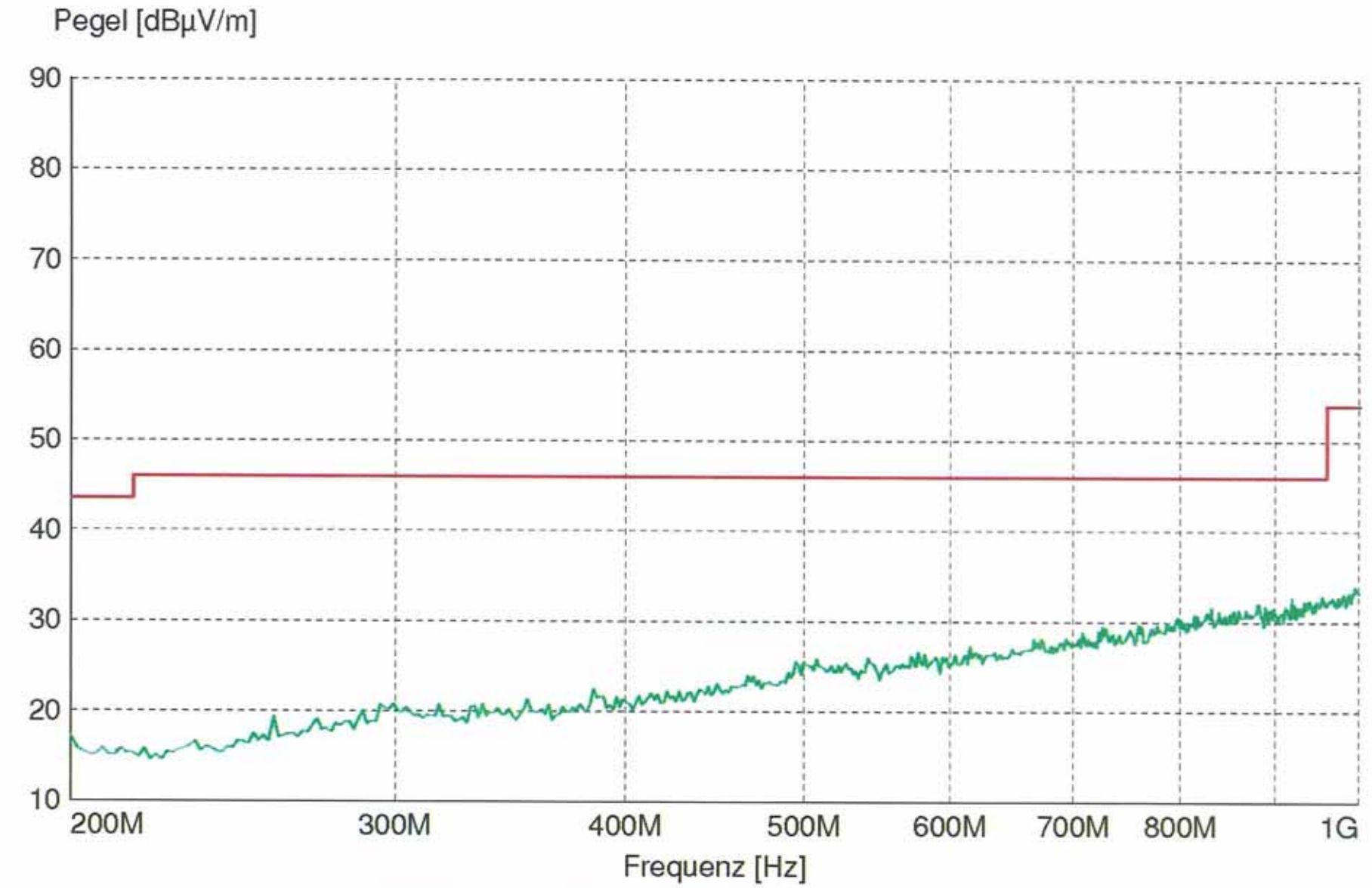

MES RA440_661_F2
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
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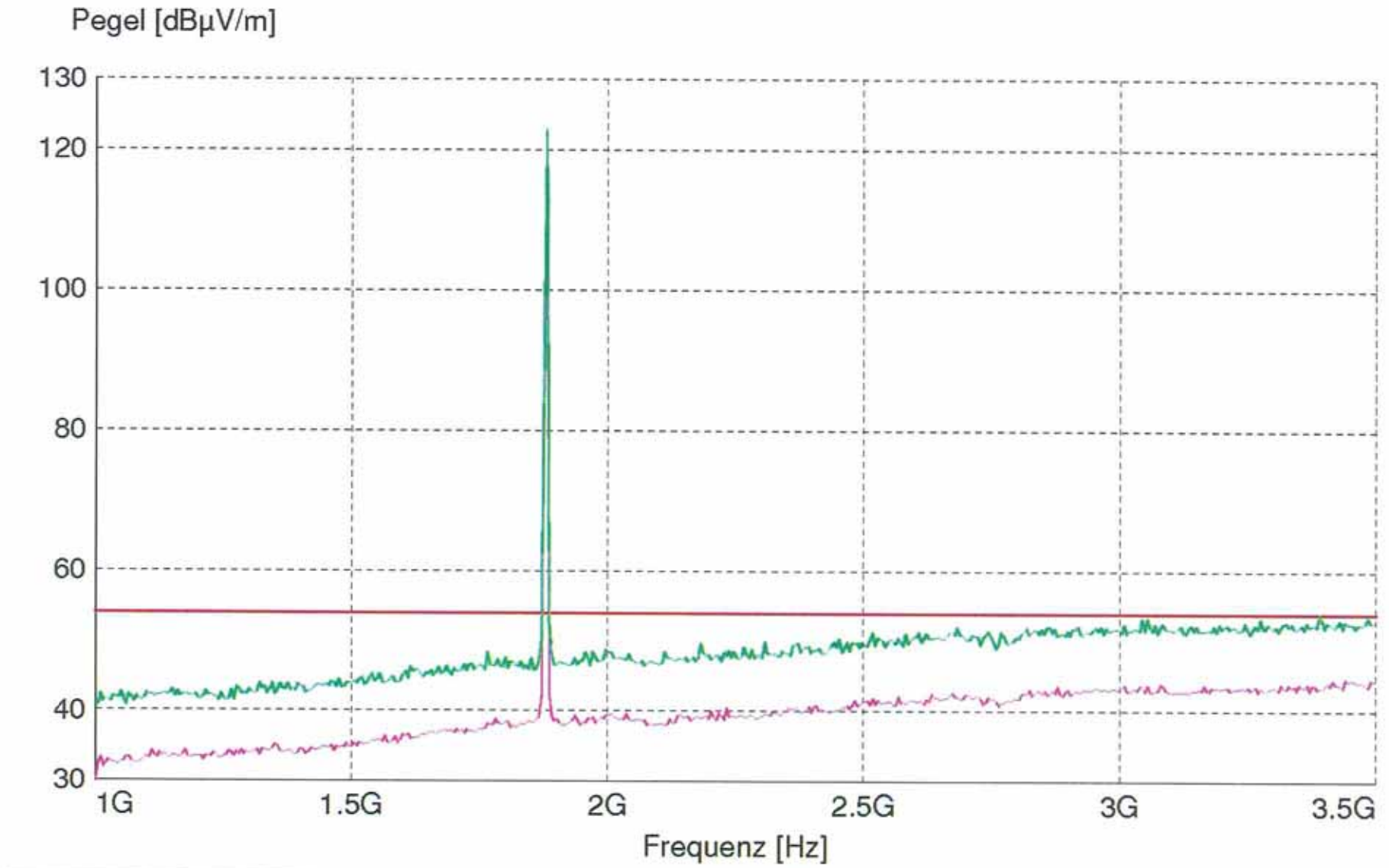

MES RA440_661_TX_F3_PK
MES RA440_661_TX_F3_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
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checked by:

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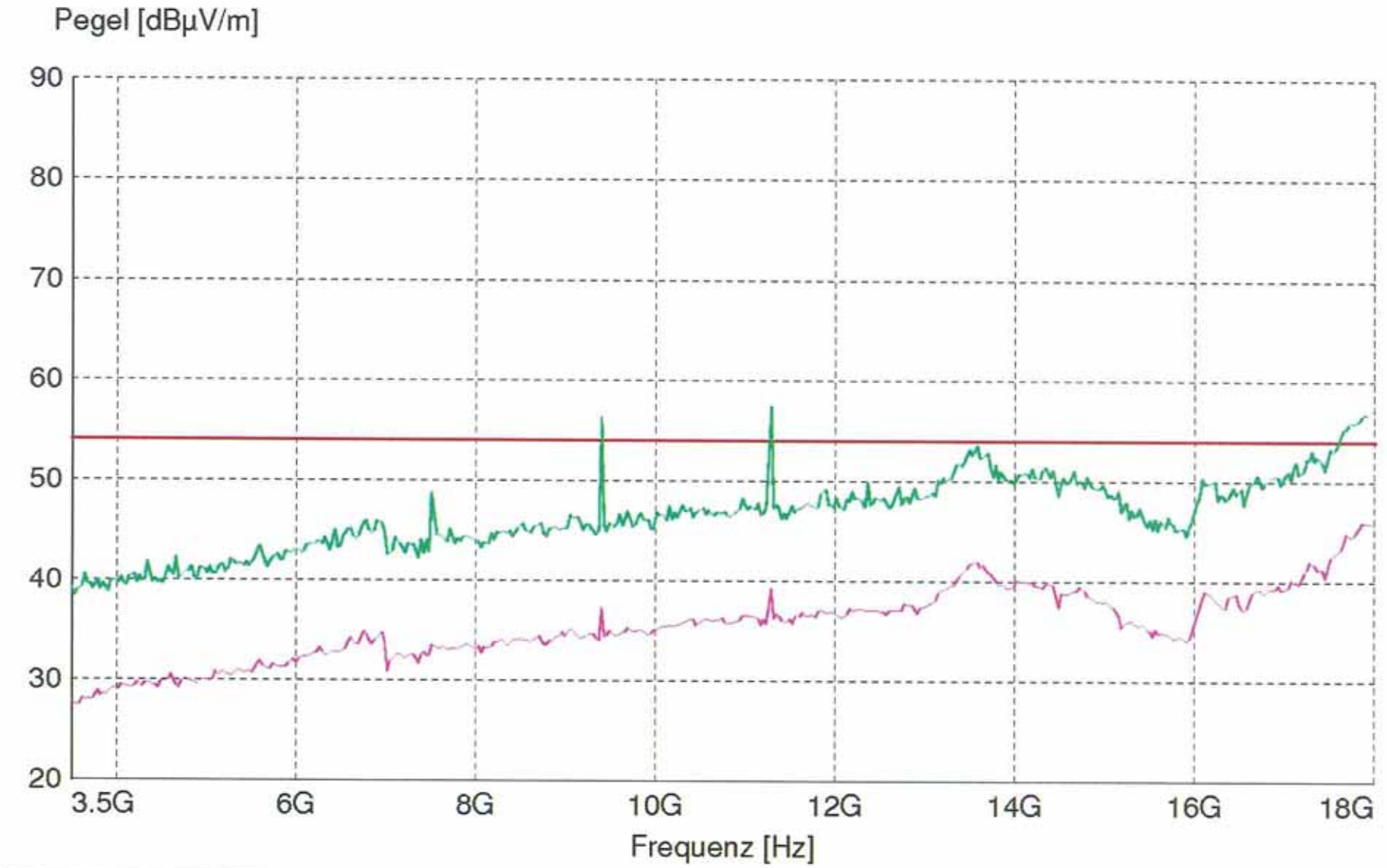

MES RA440_661_TX_F4_PK
MES RA440_661_TX_F4_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

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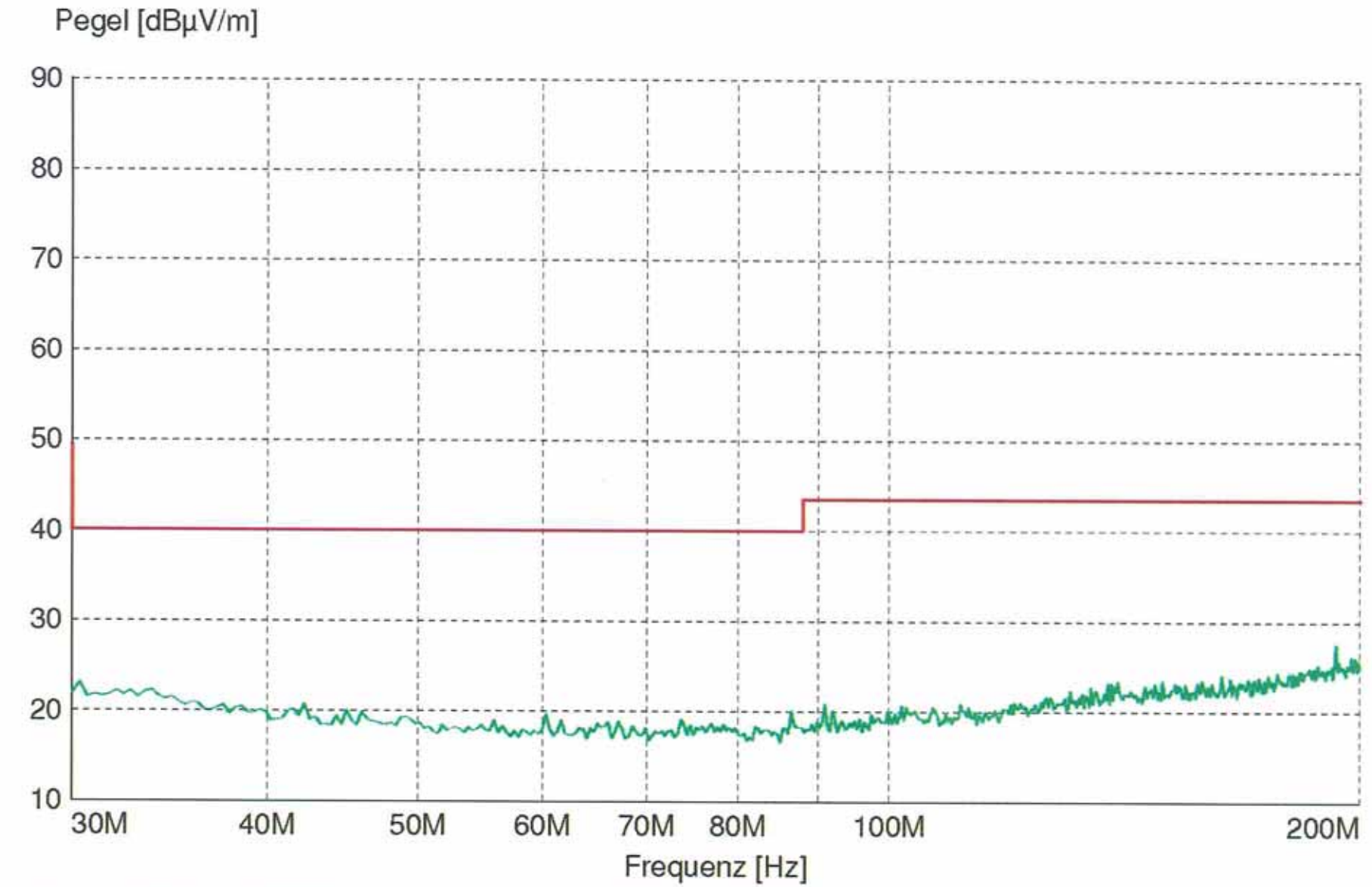

MES RA440_810_F1
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

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checked by:

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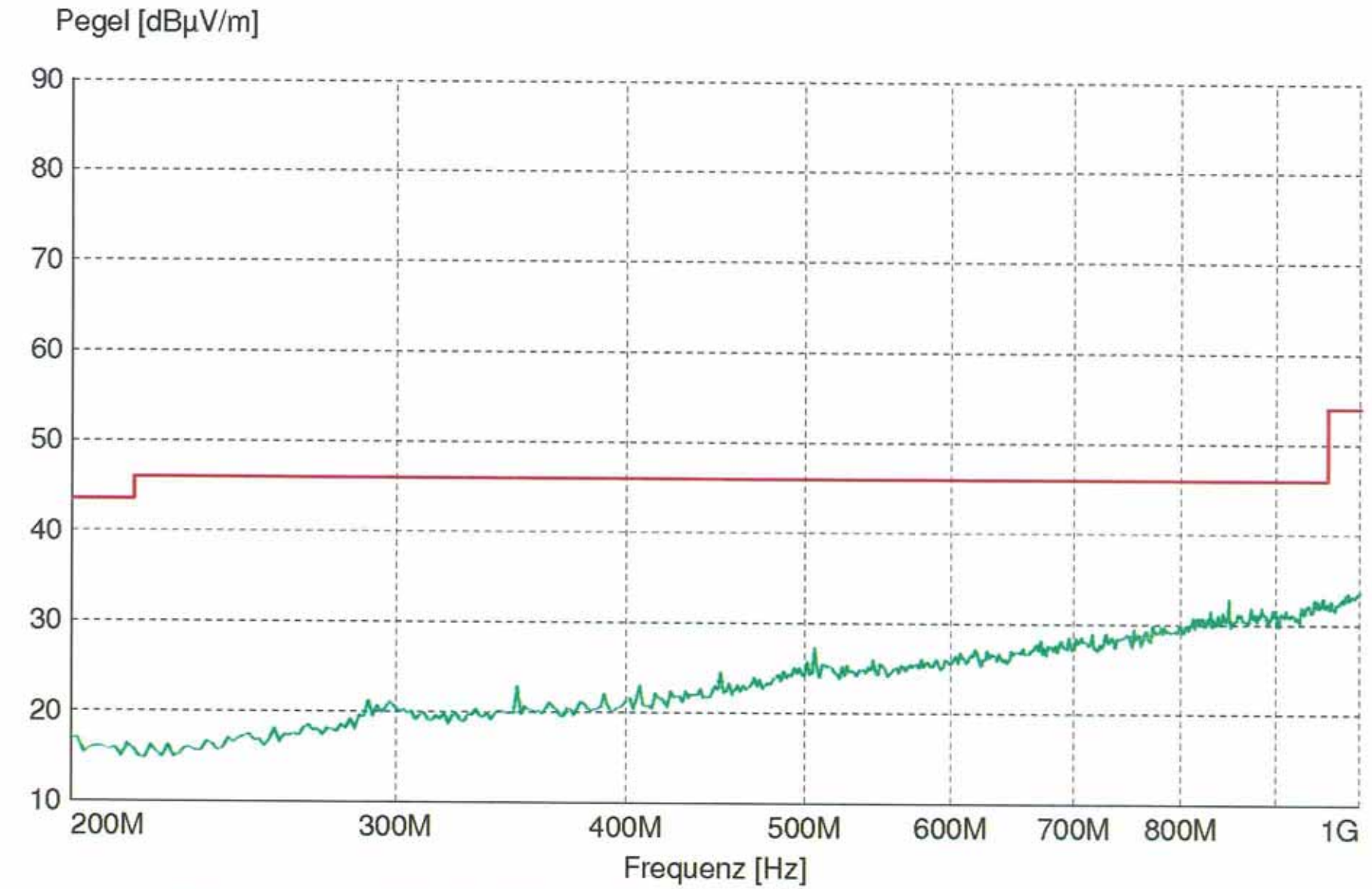

MES RA440_810_F2
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

Division Medical Technology/ Communication Technology/ EMC
Department: FG
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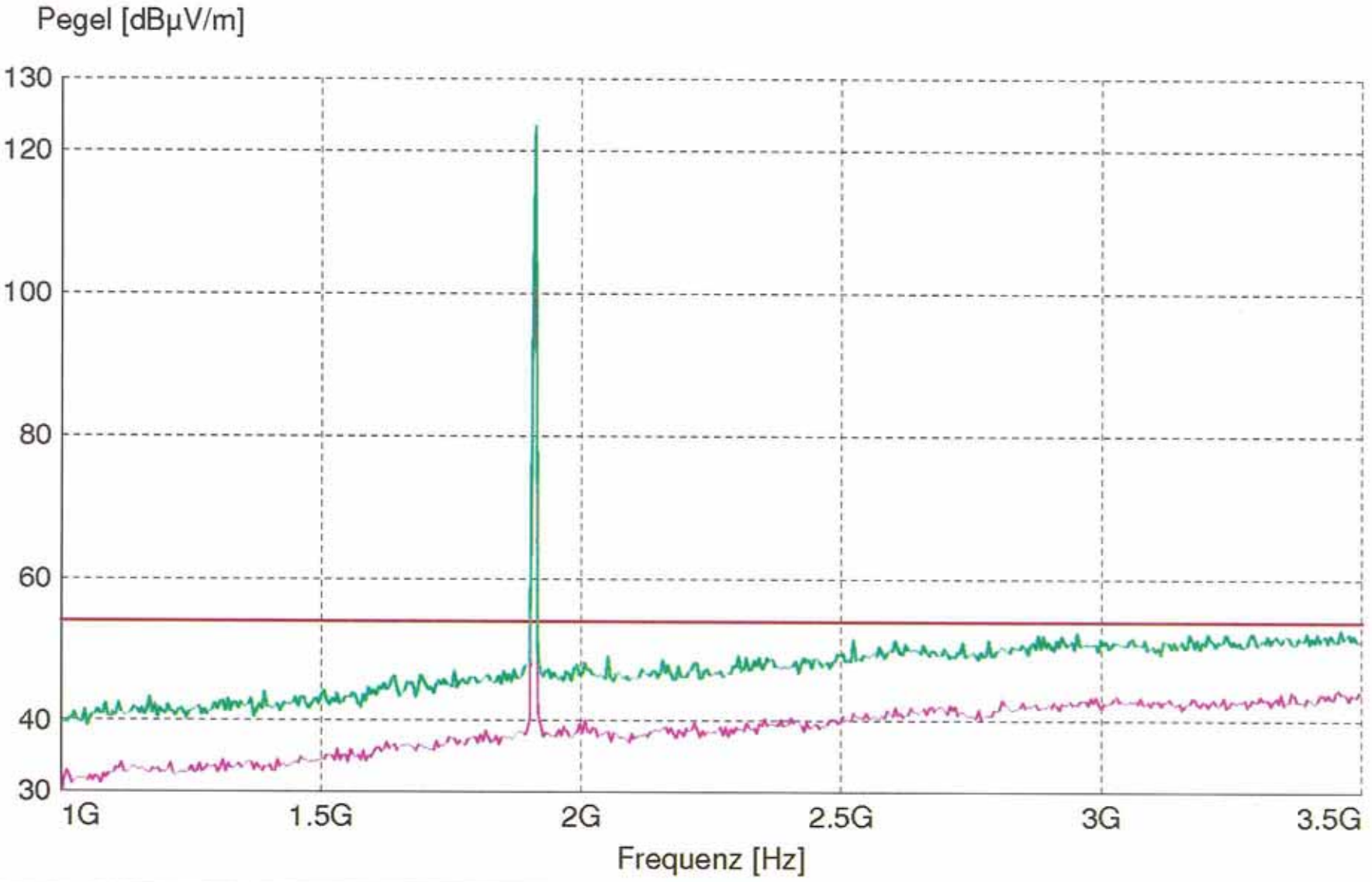
checked by:

TÜV AUSTRIA



MES RA440_810_TX_F3_PK
MES RA440_810_TX_F3_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

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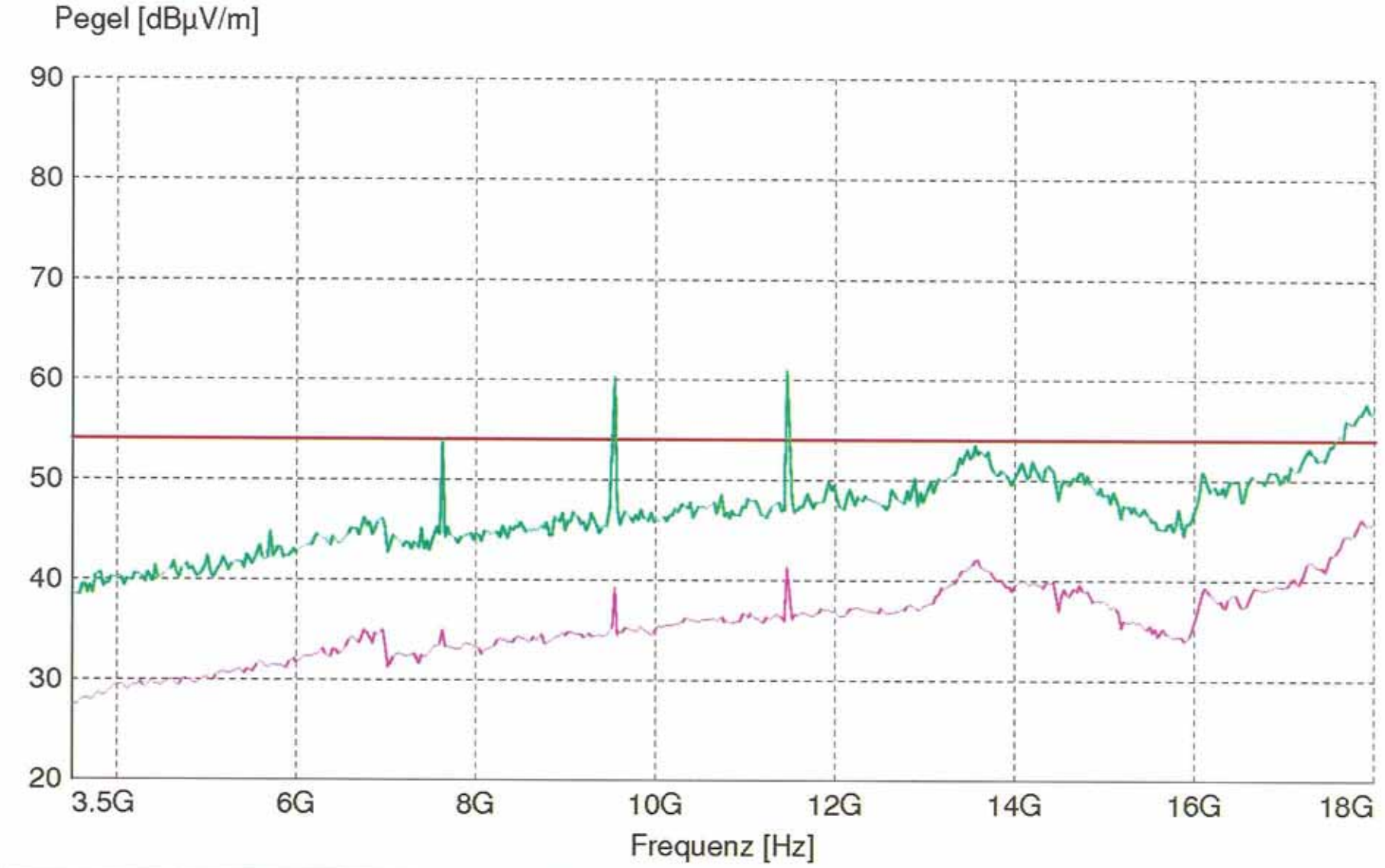

MES RA440_810_TX_F4_PK
MES RA440_810_TX_F4_AV
LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

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