TÜV ÖSTERREICH

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Kalibrierstelle

Notified Body 0408

TEST REPORT

of the accredited test laboratory

TÜV Nr.:M/FG-05/123

Applicant:	AKG Acoustics GmbH Lemböckgasse 21-25 A – 1230 Wien		
Tested Product:	Radio microphone for harmonicas		
FCC-ID:	E9MWX1		
Manufacturer:	Vtech Communications Ltd Vtech Science Park, Xia Ling Bei Management Zone, Liabpu, Dongguan Guangdong 523411		
Output power / field strength:	10mW erp	**power supply:**	1,5 VDC
Frequency range:	734,6 – 750,9 MHz	**Channel separation:**	n.a.
Standard:	FCC: 47 CFR 74		

TUV Austria
Test laboratory for EMC

Deputy supervisor of EMC-laboratory:

Ing. Wilhelm Seier

Technischer Überwachungs-Verein TÜV ÖSTERREICH Österreich
Rundsiegel

06.12.2005

checked by:

Ing. Michael Emminger

Copy Nbr.: #1

DVR 0047 333
UID ATU 37086005

LIST OF MEASUREMENTS

The complete list of measurements called for in 47 CFR 74 is given below.

TEST OBJECT DATA

General EUT Description

This audio transmitter will be used as wireless microphone for harmonicas. It has no antenna connector, so all technical data were measured radiated.

2.1033 (c) Technical description

2.1033 (4) Type of emission: 200KF3E – no channel spacing, there are actually only two frequencies available.

2.1033 (5) Frequency range: 734,6 – 750,9 MHz MHz

2.1033 (6) Power range and Controls: There are NO user power controls.

2.1033 (7) Maximum output power rating: 10mW erp.

2.1033 (8) DC Voltage and Current: 1,5 V nominal 1,15V minimum (1 AA Cell)
maximum current consumption: 80 mA

Power Output § 74.261(e)(1)

Radiated Measurement

Test conditions		Transmitter power (mW) (erp)	
		734,6 MHz	750,9 MHz
T_{nom} (21)°C	V_{nom} (1.5)V	9,20	9,68
Maximum deviation from output power under normal test conditions (dB)		-0,36	-0,14
Measurement uncertainty		± 0,75 dB	

LIMIT SUBCLAUSE 74.261 (e)(1)(ii)

Under normal test conditons	250 mW

Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-126; NT-150; NT-207; NT-500; NT-520; NT-550

MAXIMUM FREQUENCY DEVIATION § 74.261 (e)(3)

Radiated Measurement

Maximum Frequency deviation (kHz) @ 734,6 MHz						
acoustic input level	modulation frequency 50 Hz		modulation frequency 1 kHz		modulation frequency 20 kHz	
	pos.	neg.	pos.	neg.	pos.	neg.
max.	38,9	34,0	**42,5**	40,7	13,2	13,0
-10 dB	37,5	34,2	42,1	39,9	12,8	12,5
-20 dB	19,2	16,2	22,7	26,6	8,9	8,9
-30 dB	7,3	7,0	12,2	13,2	5,5	5,4
-40 dB	4,0	3,8	6,2	6,5	3,7	3,7
-50 dB	2,3	2,3	3,5	3,6	1,6	1,6
-60 dB	1,4	1,4	2,2	2,2	1,3	1,3
-70 dB	1,1	1,1	1,5	1,5	1,1	1,1
-80 dB	1,0	1,0	1,3	1,3	1,0	1,0
-90 dB	1,0	1,0	1,0	1,0	1,0	1,0

Maximum Frequency deviation (kHz) @ 750,9 MHz						
acoustic input level	modulation frequency 50 Hz		modulation frequency 1 kHz		modulation frequency 20 kHz	
	pos.	neg.	pos.	neg.	pos.	neg.
max.	39,6	41,0	**46,0**	43,0	40,8	38,7
-10 dB	36,4	40,2	34,8	36,3	30,3	29,5
-20 dB	25,6	29,0	21,4	20,0	16,1	15,8
-30 dB	11,1	11,1	9,4	9,3	9,3	9,2
-40 dB	6,2	6,0	5,2	5,3	5,1	5,1
-50 dB	3,6	3,5	3,0	3,0	2,6	2,6
-60 dB	2,1	2,1	2,0	1,9	1,5	1,5
-70 dB	1,4	1,4	1,5	1,5	1,3	1,3
-80 dB	1,1	1,1	1,3	1,3	1,0	1,0
-90 dB	1,0	1,0	1,0	1,0	1,0	1,0

LIMIT SUBCLAUSE 74.261 (e)(1)(ii)

Under normal test conditons	250 mW

Frequency tolerance § 74.261 (e)(4)

Frequency error vs. Supply voltage

DC-Voltage	Frequency Error Hz		Frequency Error ppm	
	734,600 MHz	750,900 MHz	734,600 MHz	750,900 MHz
1,5 V	250	5890	0,34	7,84
1,15 V	-320	5430	-0,44	7,23

Frequency error vs. Temperature

Temperature °C	Frequency Error Hz		Frequency Error ppm	
	734,600 MHz	750,900 MHz	734,600 MHz	750,900 MHz
-30	-8540	6250	-11,63	8,32
-20	-3710	8040	-5,05	10,71
-10	-710	10290	-0,97	13,70
±0	1710	9710	2,33	12,93
+10	930	8210	1,27	10,93
+20	250	5890	0,34	7,84
+30	-1710	2430	-2,33	3,24
+40	140	-790	0,19	-1,05
+50	-2360	-3860	-3,21	-5,14

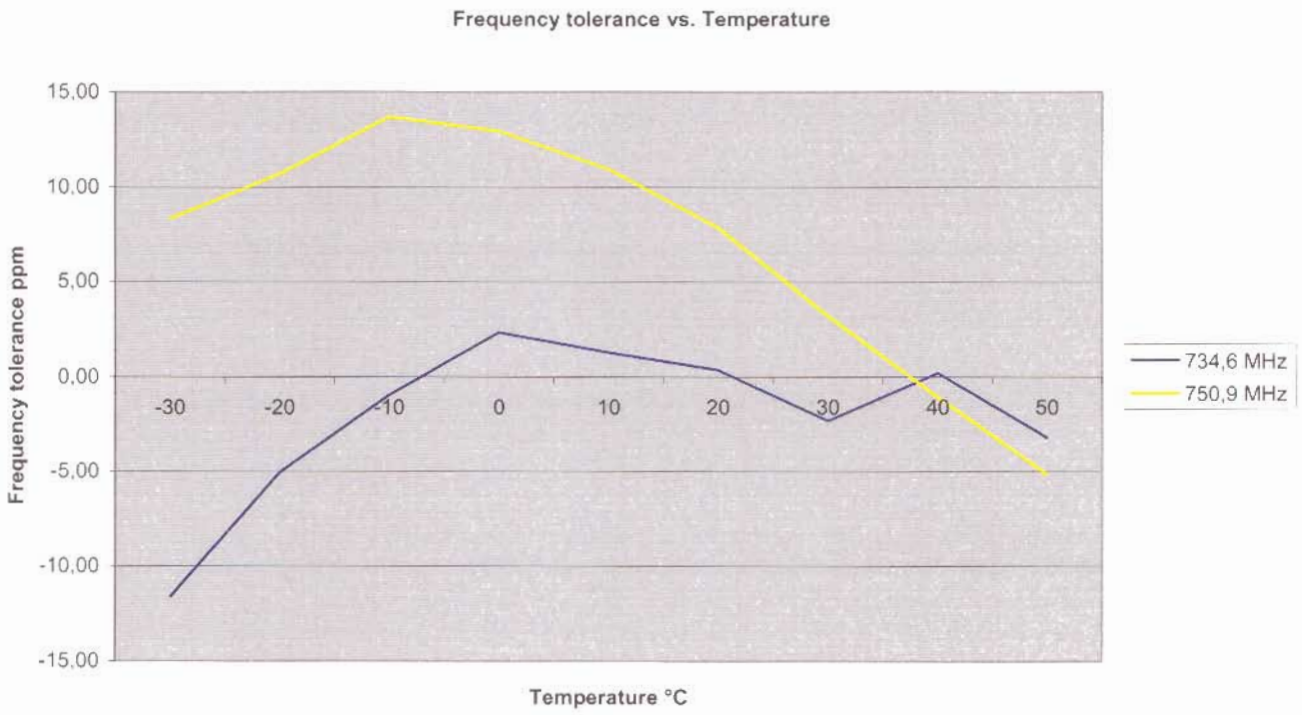
LIMIT SUBCLAUSE 74.261 (e)(4)

The frequency tolerance of the transmitter shall be 0.005 percent. = 50 ppm

Ambient temperature: 21°C Relative humidity: 57%

Frequency tolerance

§ 74.261 (e)(4)

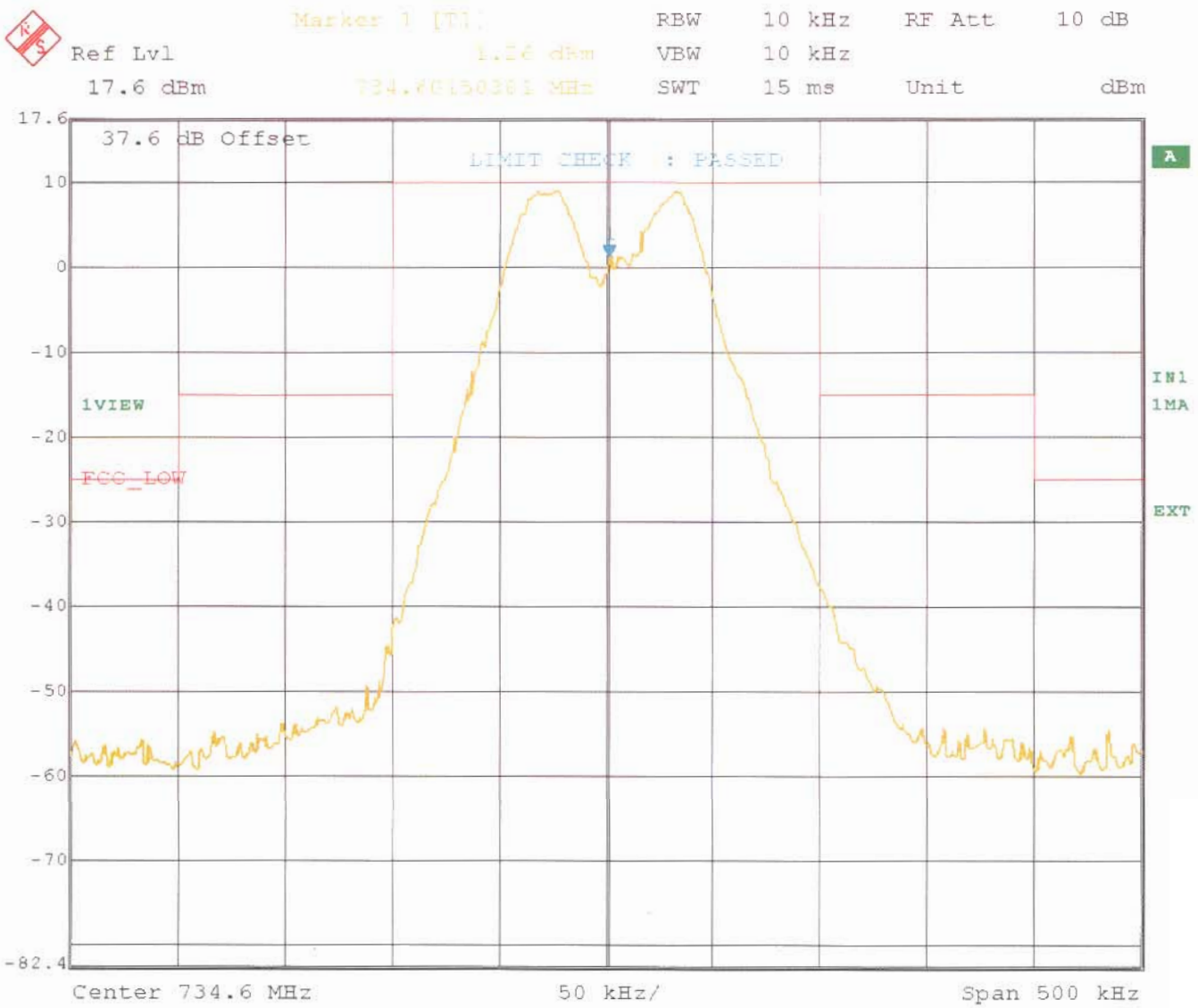


Test Equipment used: NT-207, M-512

OPERATING BANDWIDTH § 74.261 (e)(5)

The operating Bandwidth was measured at an acoustic input level 16 dB higher than that required for half of the maximum deviation.

Measurement with audio frequency 1 kHz @ 734.6 MHz



LIMIT SUBCLAUSE 74.261 (e)(5)

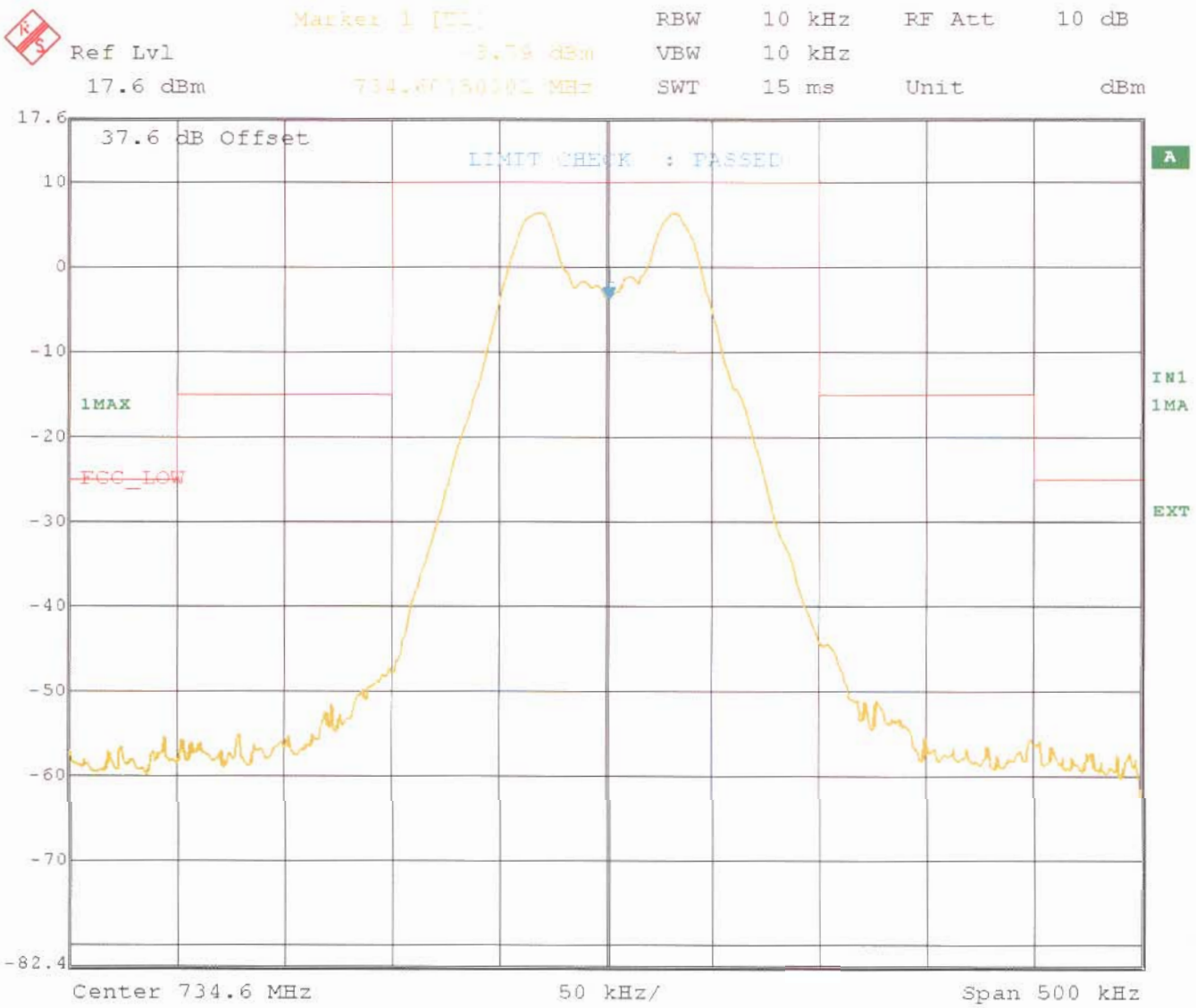
The operating bandwidth shall not exceed 200 kHz.

TEST EQUIPMENT USED: NT-207

OPERATING BANDWIDTH § 74.261 (e)(5)

The operating Bandwidth was measured at an acoustic input level 16 dB higher than that required for half of the maximum deviation.

Measurement with audio frequency 7,5 kHz @ 734,6 MHz



LIMIT SUBCLAUSE 74.261 (e)(5)

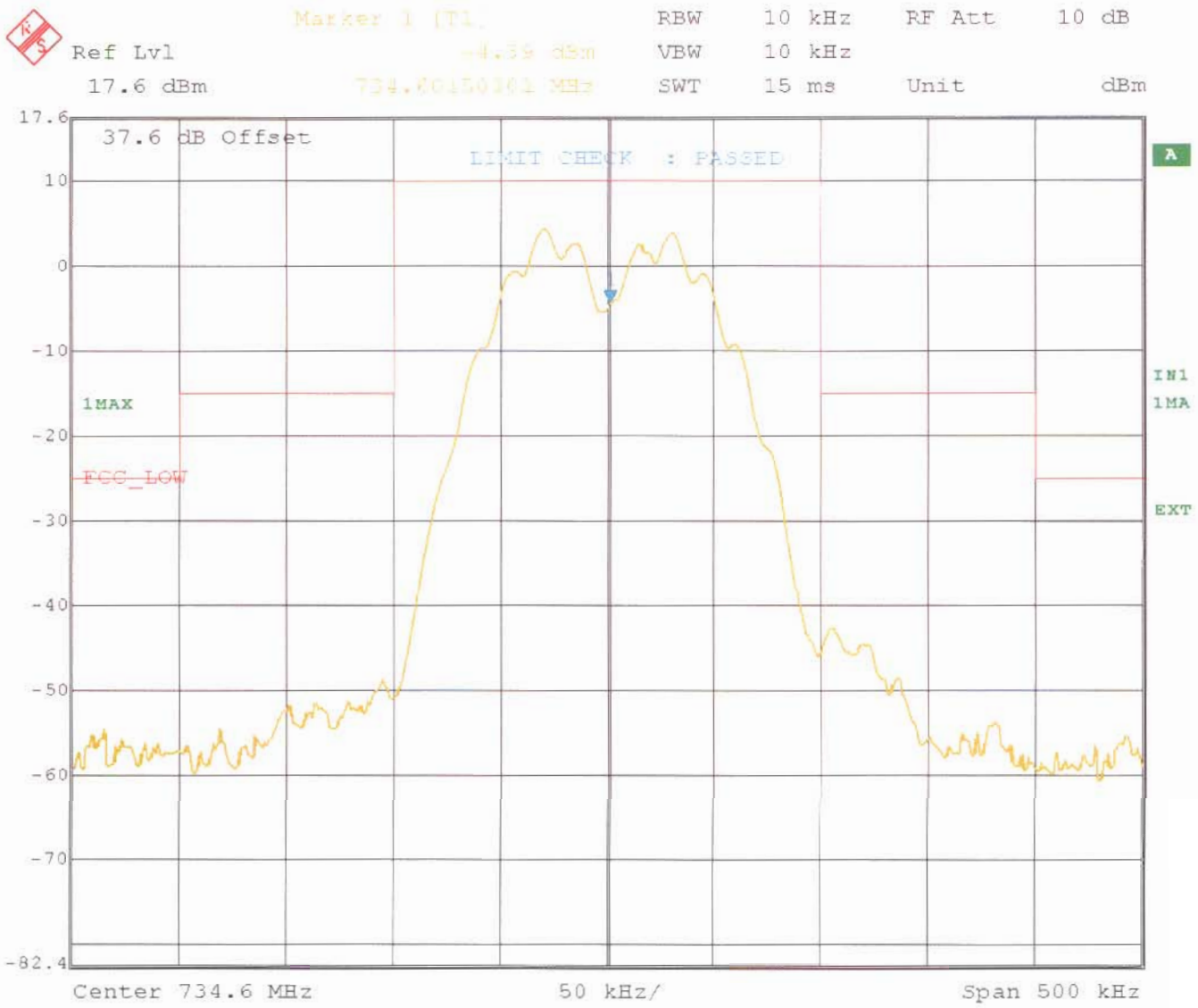
The operating bandwidth shall not exceed 200 kHz.

TEST EQUIPMENT USED: NT-207

OPERATING BANDWIDTH § 74.261 (e)(5)

The operating Bandwidth was measured at an acoustic input level 16 dB higher than that required for half of the maximum deviation.

Measurement with audio frequency 15 kHz @ 734,6 MHz



LIMIT SUBCLAUSE 74.261 (e)(5)

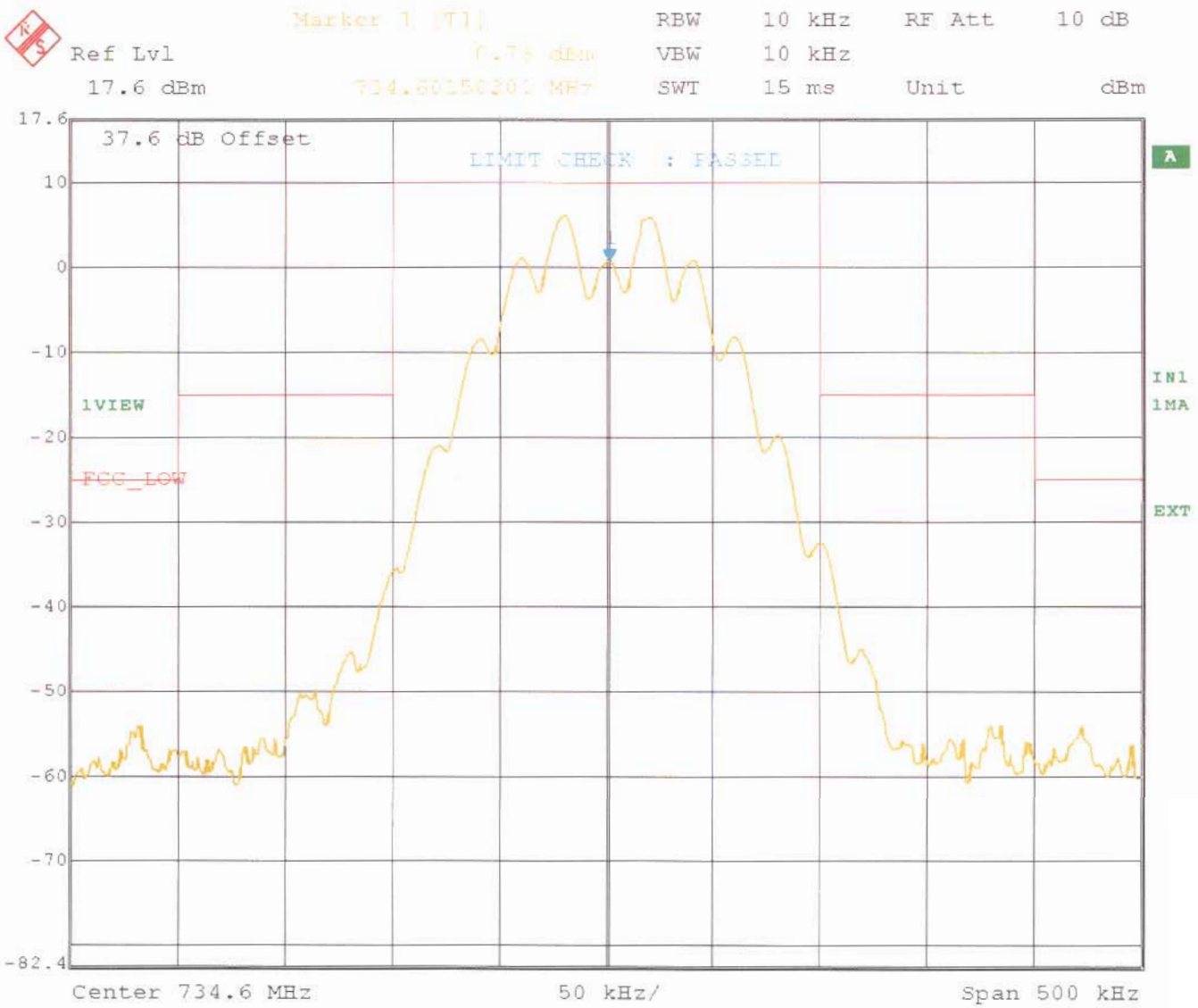
The operating bandwidth shall not exceed 200 kHz.

TEST EQUIPMENT USED: NT-207

OPERATING BANDWIDTH § 74.261 (e)(5)

The operating Bandwidth was measured at an acoustic input level 16 dB higher than that required for half of the maximum deviation.

Measurement with audio frequency 20 kHz @ 734,6 MHz



LIMIT SUBCLAUSE 74.261 (e)(5)

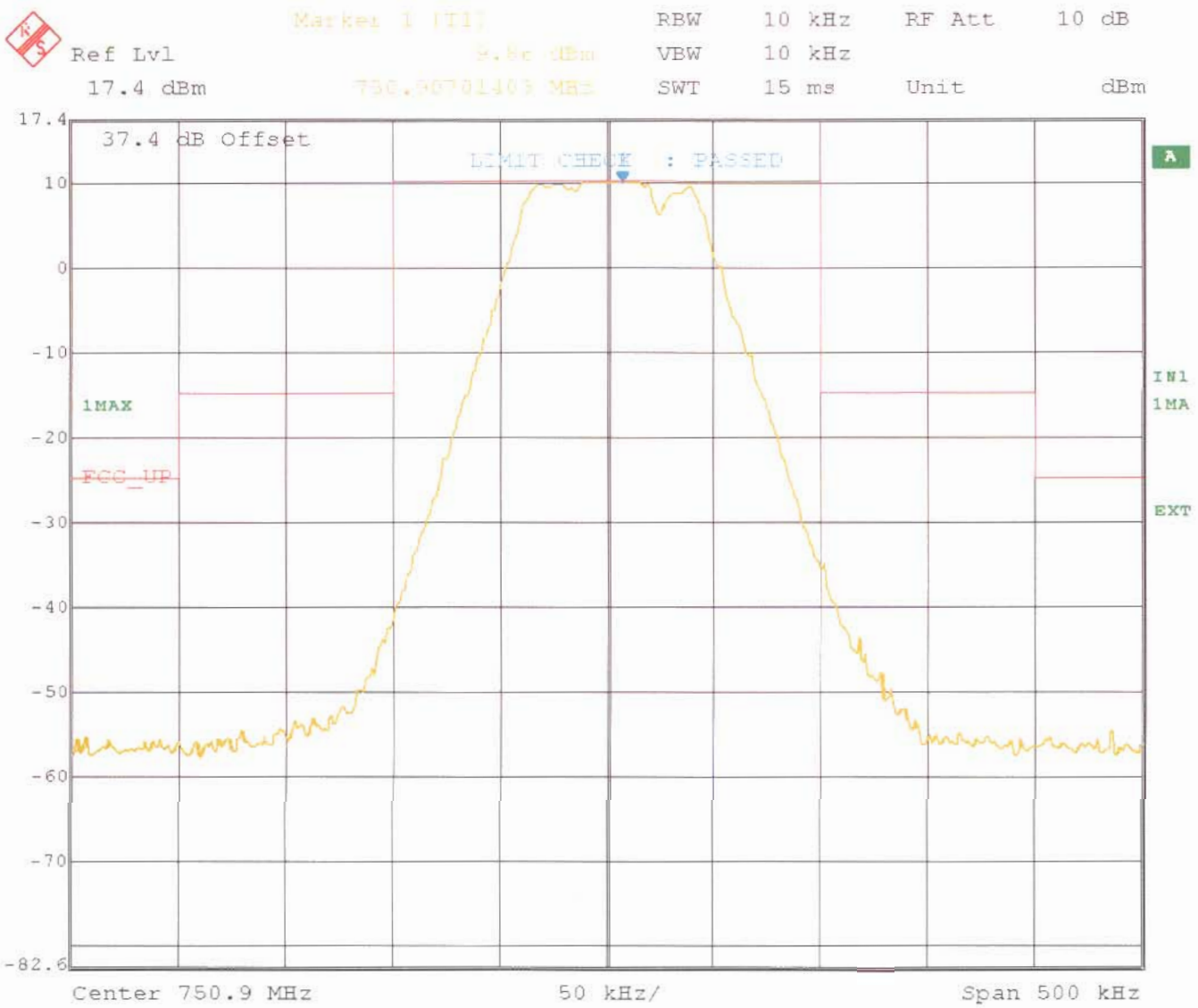
The operating bandwidth shall not exceed 200 kHz.

TEST EQUIPMENT USED: NT-207

OPERATING BANDWIDTH § 74.261 (e)(5)

The operating Bandwidth was measured at an acoustic input level 16 dB higher than that required for half of the maximum deviation.

Measurement with audio frequency 1 kHz @ 750,9 MHz



LIMIT SUBCLAUSE 74.261 (e)(5)

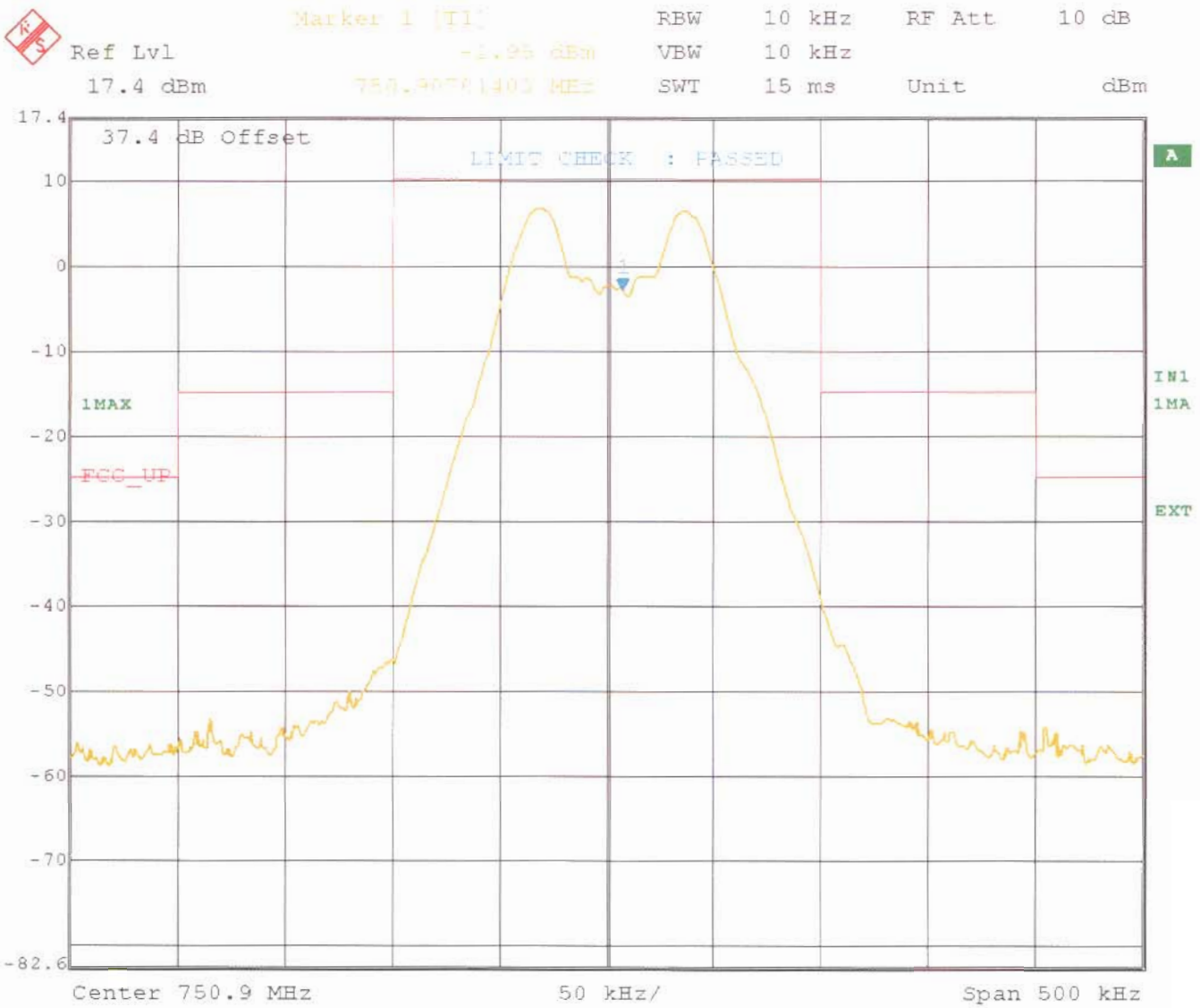
The operating bandwidth shall not exceed 200 kHz.

TEST EQUIPMENT USED: NT-207

OPERATING BANDWIDTH § 74.261 (e)(5)

The operating Bandwidth was measured at an acoustic input level 16 dB higher than that required for half of the maximum deviation.

Measurement with audio frequency 7,5 kHz @ 750,9 MHz



LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

TEST EQUIPMENT USED: NT-207

Ambient temperature: 21°C Relative humidity: 57%

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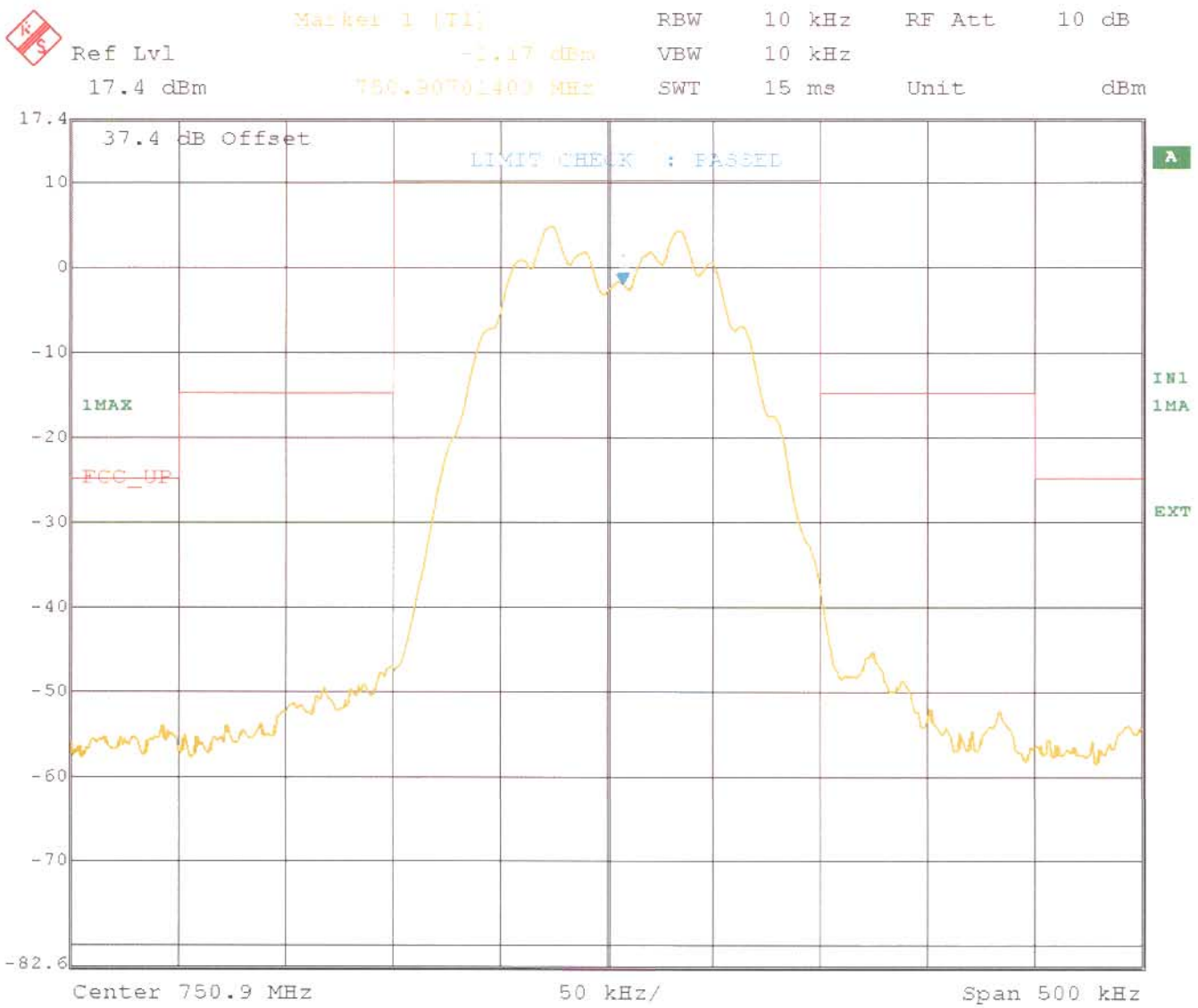
OPERATING BANDWIDTH § 74.261 (e)(5)

The operating Bandwidth was measured at an acoustic input level 16 dB higher than that required for half of the maximum deviation.

Measurement with audio frequency 15 kHz @ 750,9 MHz



LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

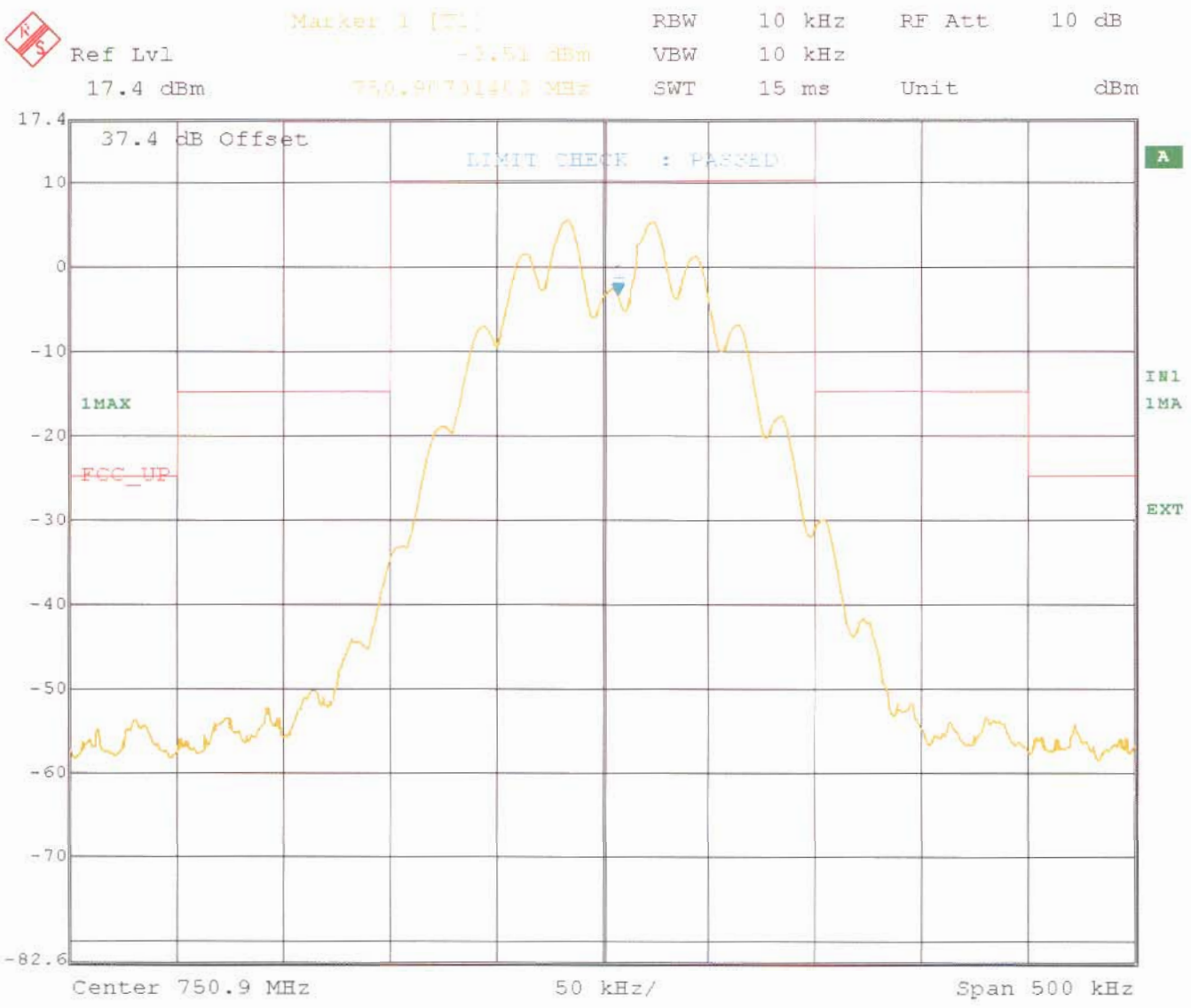
TEST EQUIPMENT USED: NT-207

Ambient temperature: 21°C Relative humidity: 57%

OPERATING BANDWIDTH § 74.261 (e)(5)

The operating Bandwidth was measured at an acoustic input level 16 dB higher than that required for half of the maximum deviation.

Measurement with audio frequency 20 kHz @ 750,9 MHz



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LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

TEST EQUIPMENT USED: NT-207

Emissions Mask § 74.261 (e)(6)

LIMIT

74.261(e)(6)
The mean power of emissions shall be attenuated below the mean output power of the transmitter in accordance with the following schedule:
(i) On any frequency removed from the operating frequency by more than 50 percent up to and including 100 percent of the authorized bandwidth: at least 25dB;
(ii) On any frequency removed from the operating frequency by more than 100 percent up to and including 250 percent of the authorized bandwidth: at least 35dB;
(iii) On any frequency removed from the operating frequency by more than 250 percent of the authorized bandwidth: at least $43+10\log_{10}$ (mean output power in watts) dB.

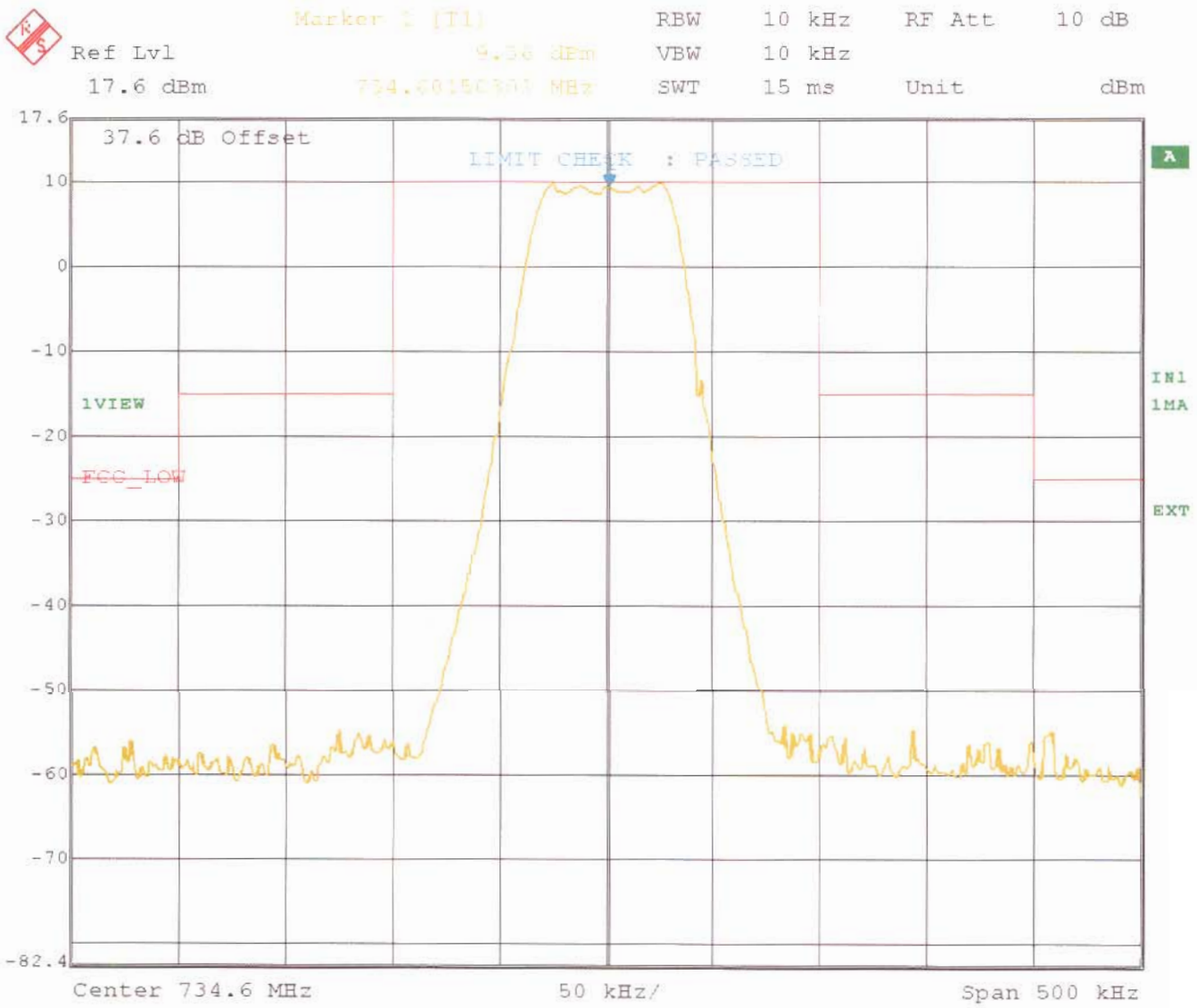
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 1 kHz

DC Voltage: 1,5 V



Test Equipment used: NT-207

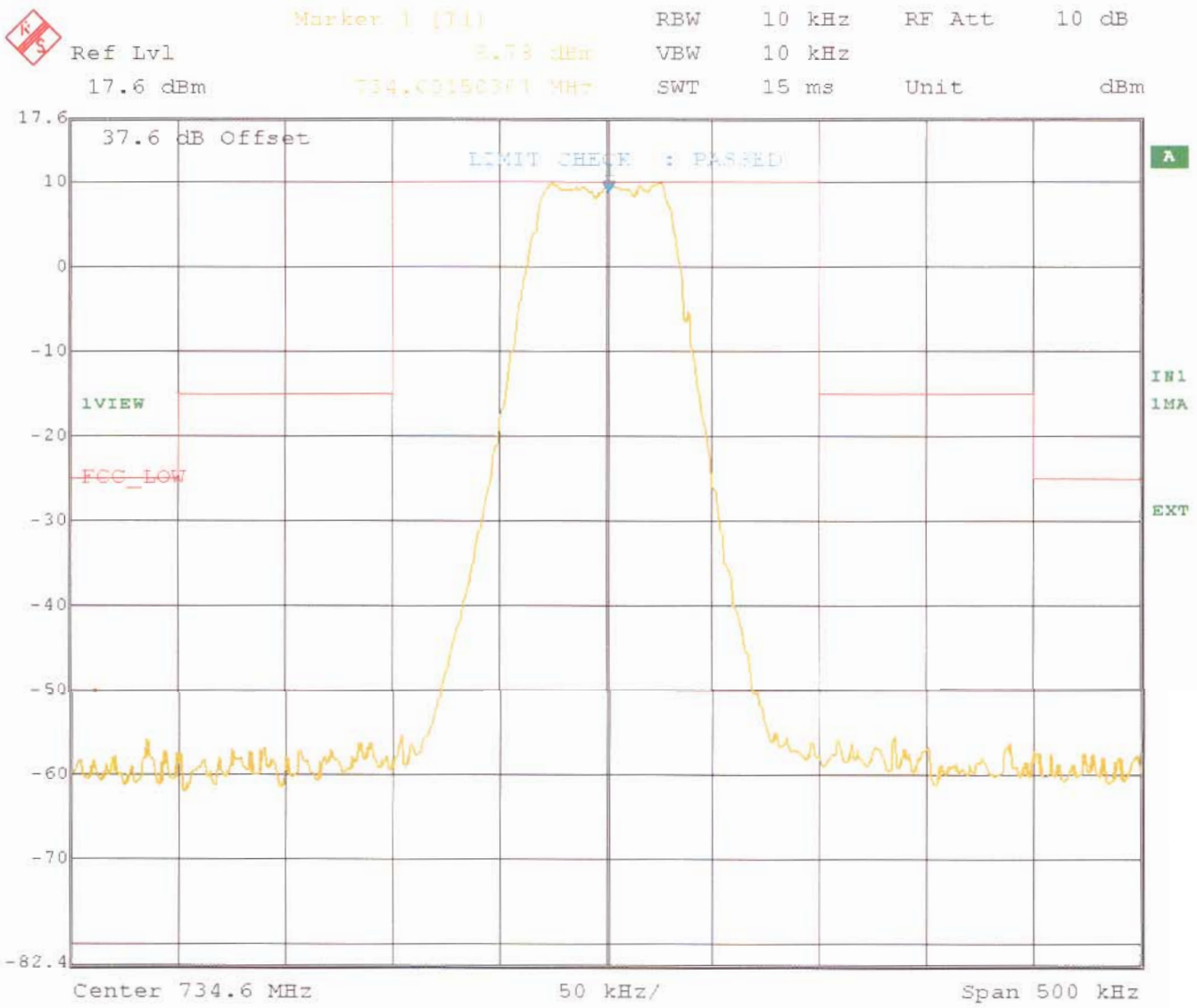
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 1 kHz

DC Voltage: 1,15 V



Test Equipment used: NT-207

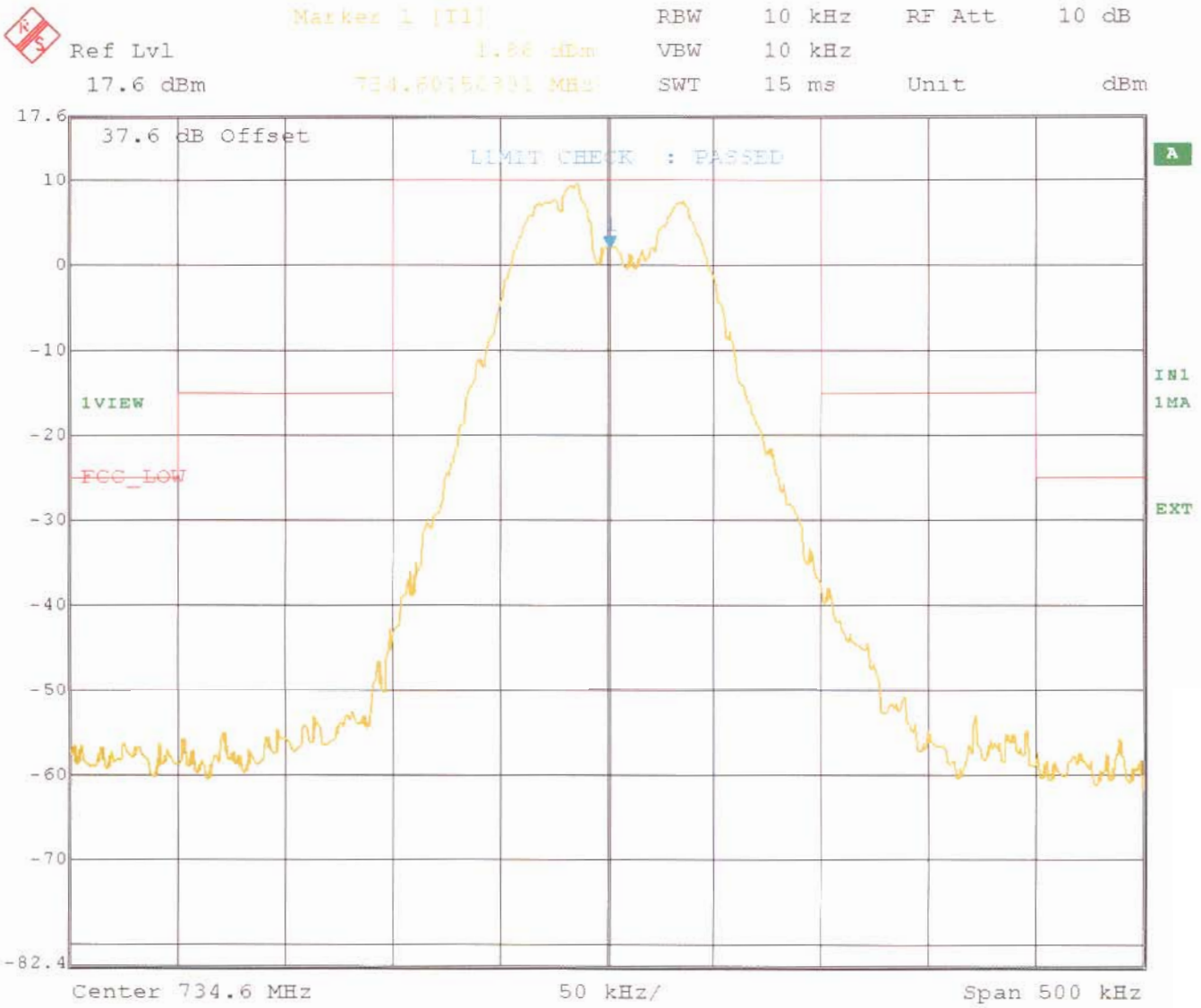
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level full quieting, audio frequency 1 kHz

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:28:35

Test Equipment used: NT-207

Ambient temperature: 21°C Relative humidity: 57%

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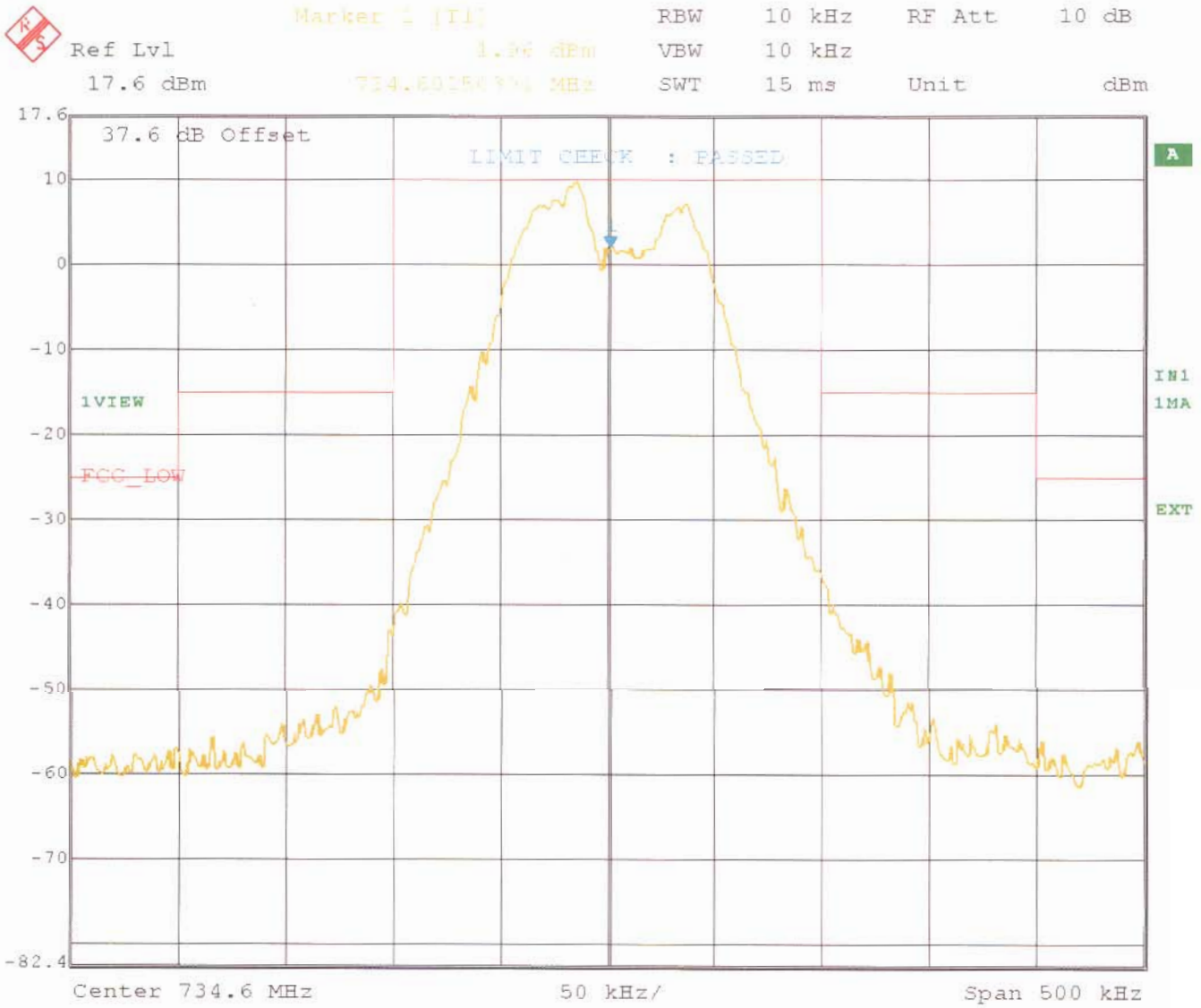
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level full quieting, audio frequency 1 kHz

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:28:01

Test Equipment used: NT-207

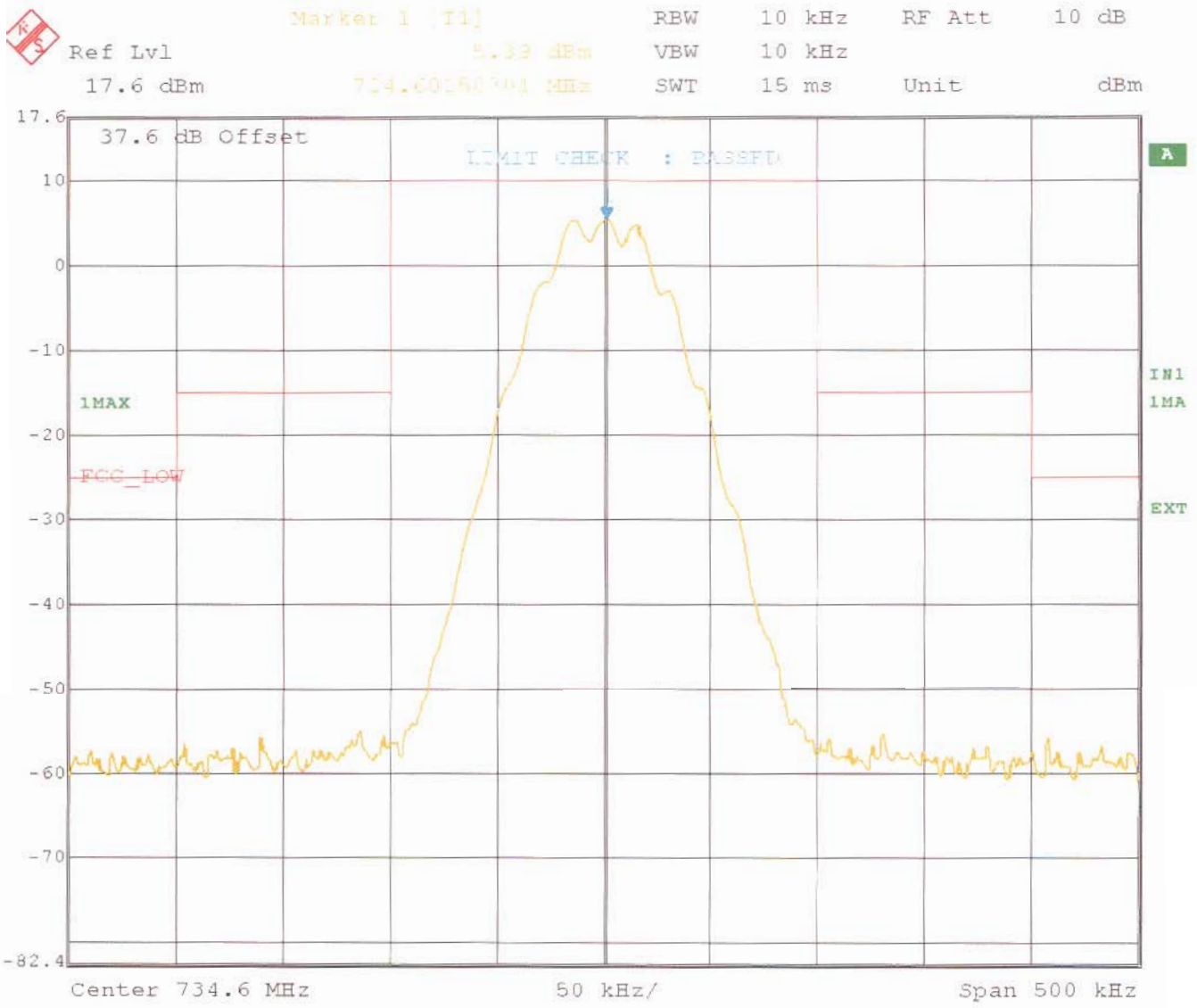
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 15 kHz

DC Voltage: 1,5 V



Test Equipment used: NT-207

Ambient temperature: 21°C Relative humidity: 57%

TÜV ÖSTERREICH

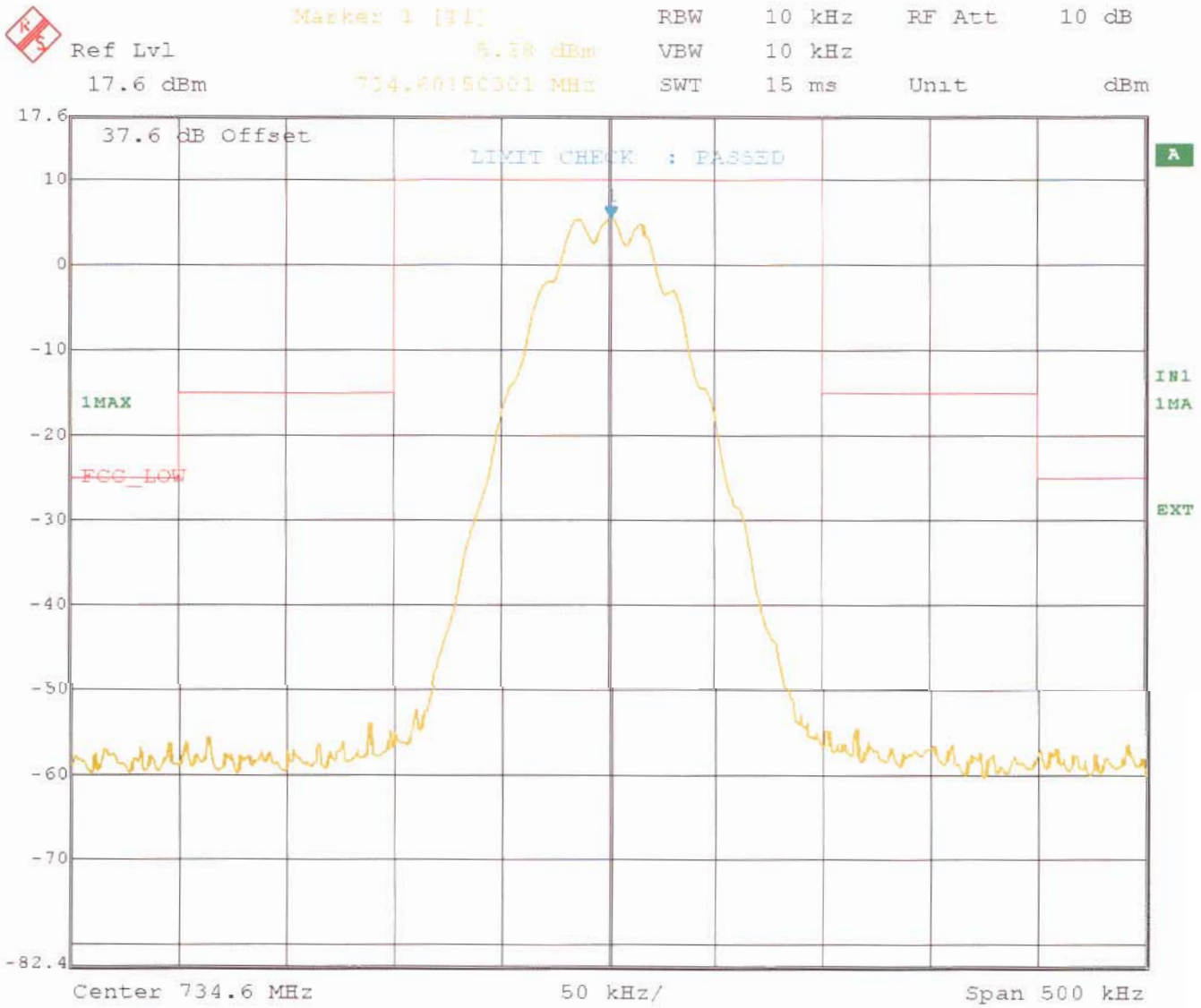
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 15 kHz

DC Voltage: 1,15 V



Test Equipment used: NT-207

Ambient temperature: 21°C Relative humidity: 57%

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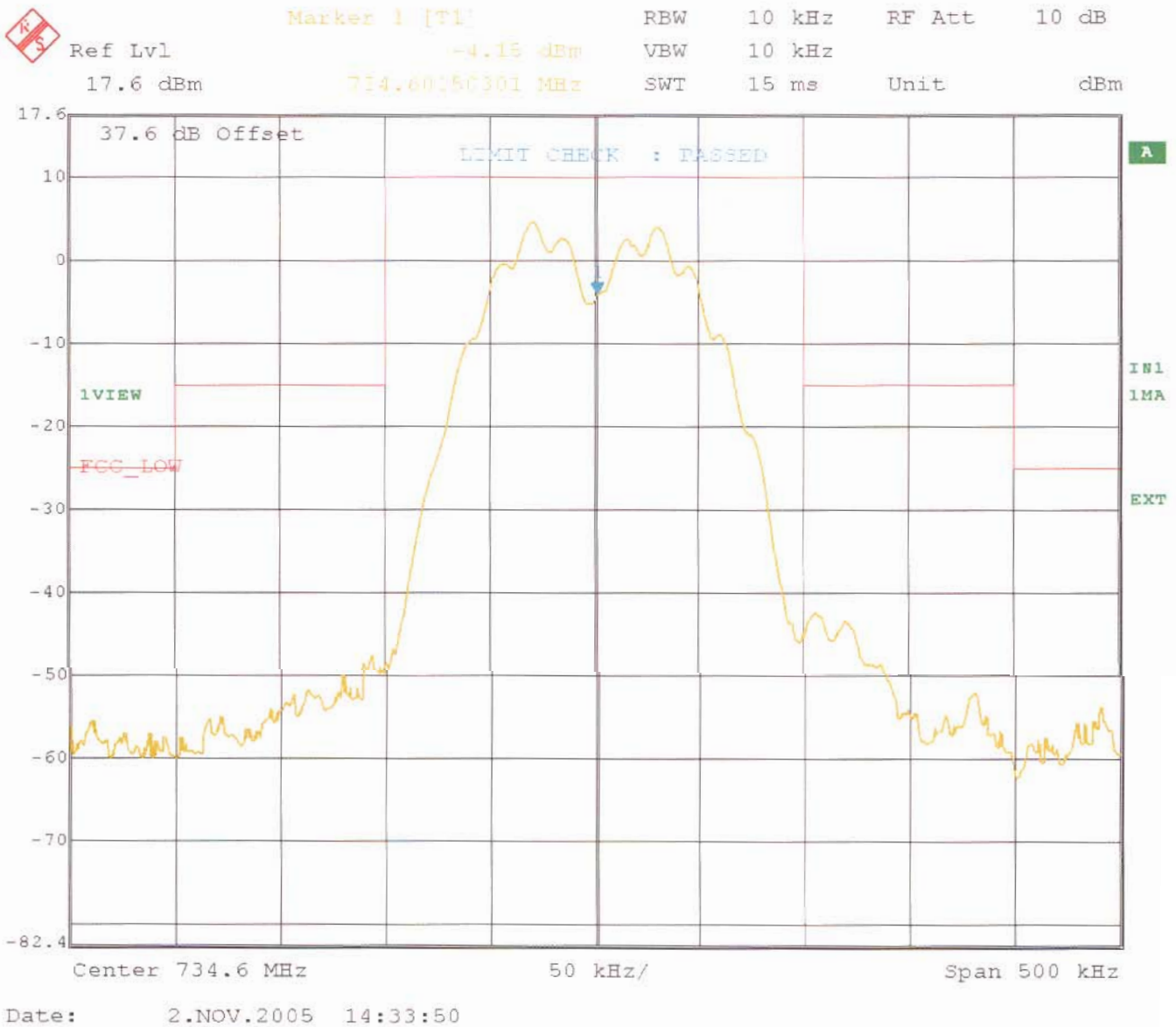
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level full quieting, audio frequency 15 kHz

DC Voltage: 1,5 V



Test Equipment used: NT-207

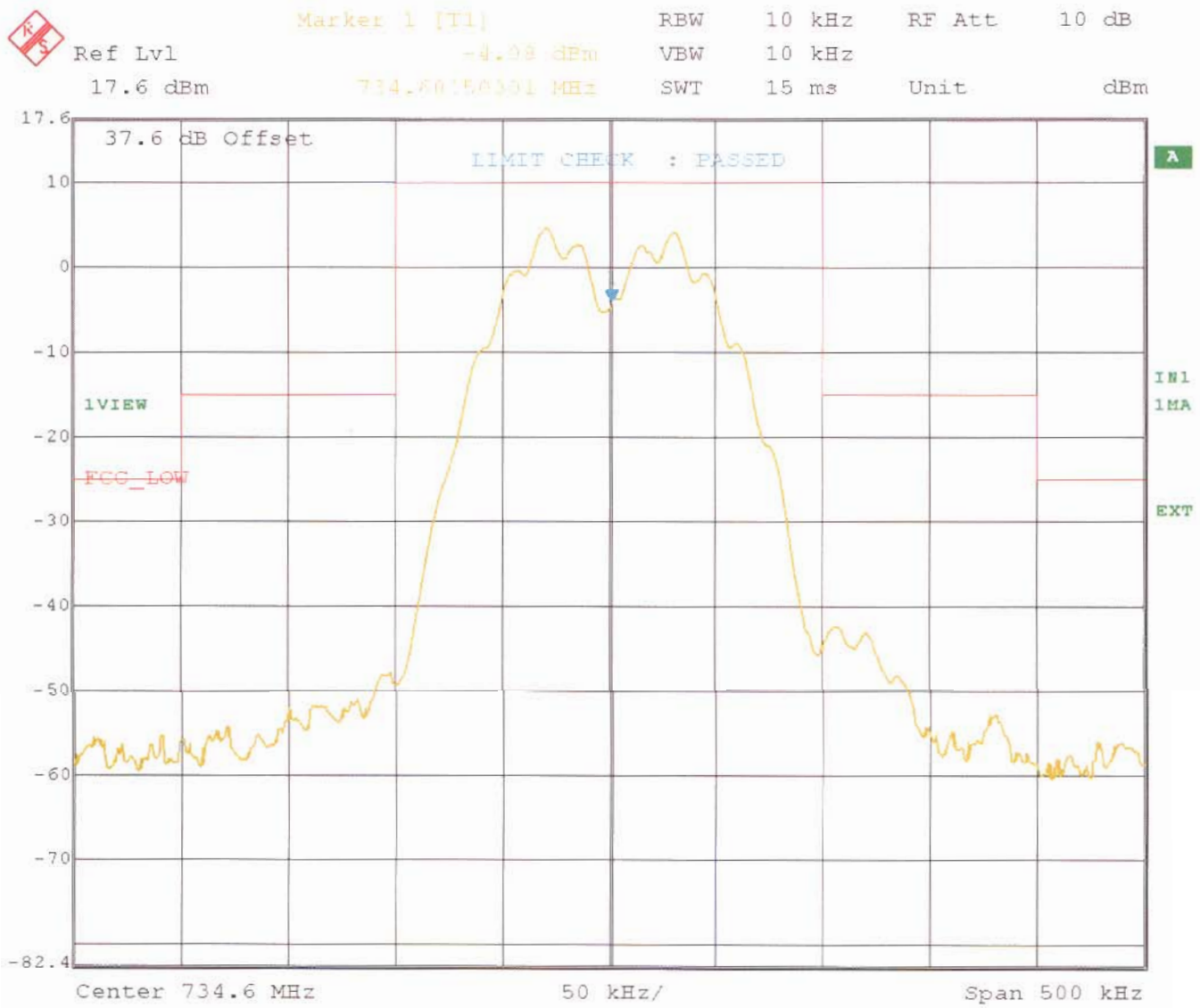
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level full quieting, audio frequency 15 kHz

DC Voltage: 1,15 V



Test Equipment used: NT-207

Ambient temperature: 21°C Relative humidity: 57%

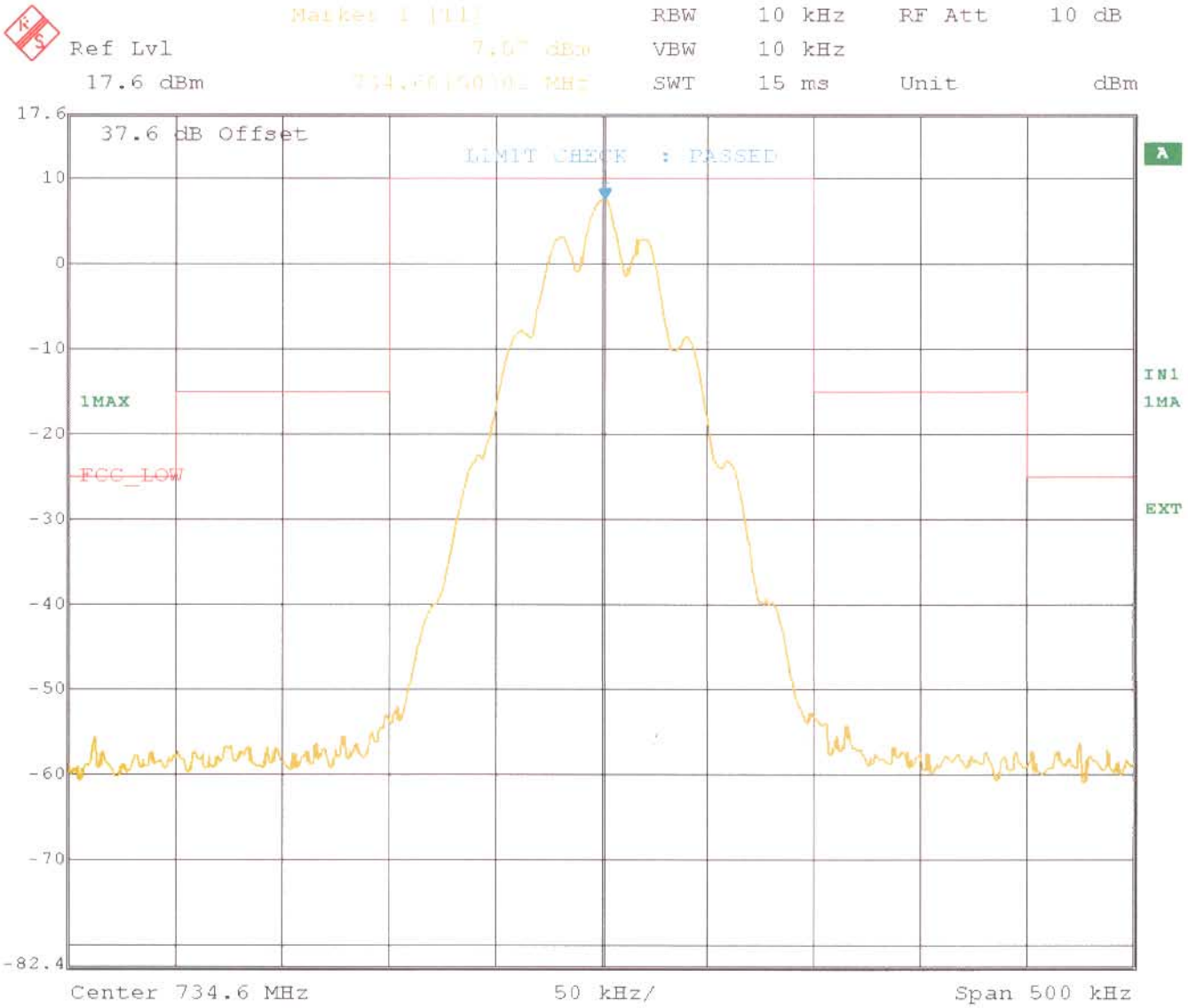
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 20 kHz

DC Voltage: 1,5 V



Test Equipment used: NT-207

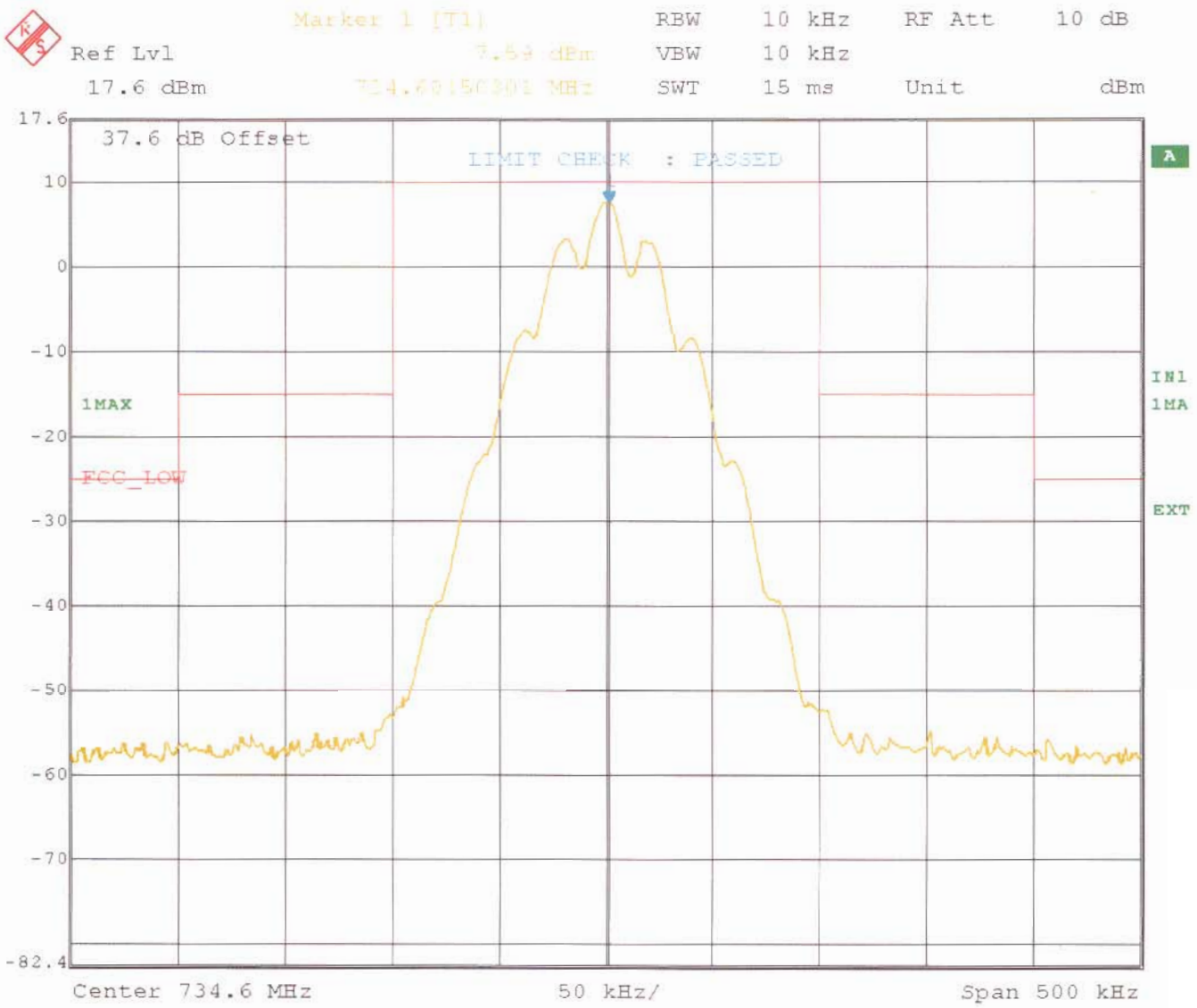
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 20 kHz

DC Voltage: 1,15 V



Test Equipment used: NT-207

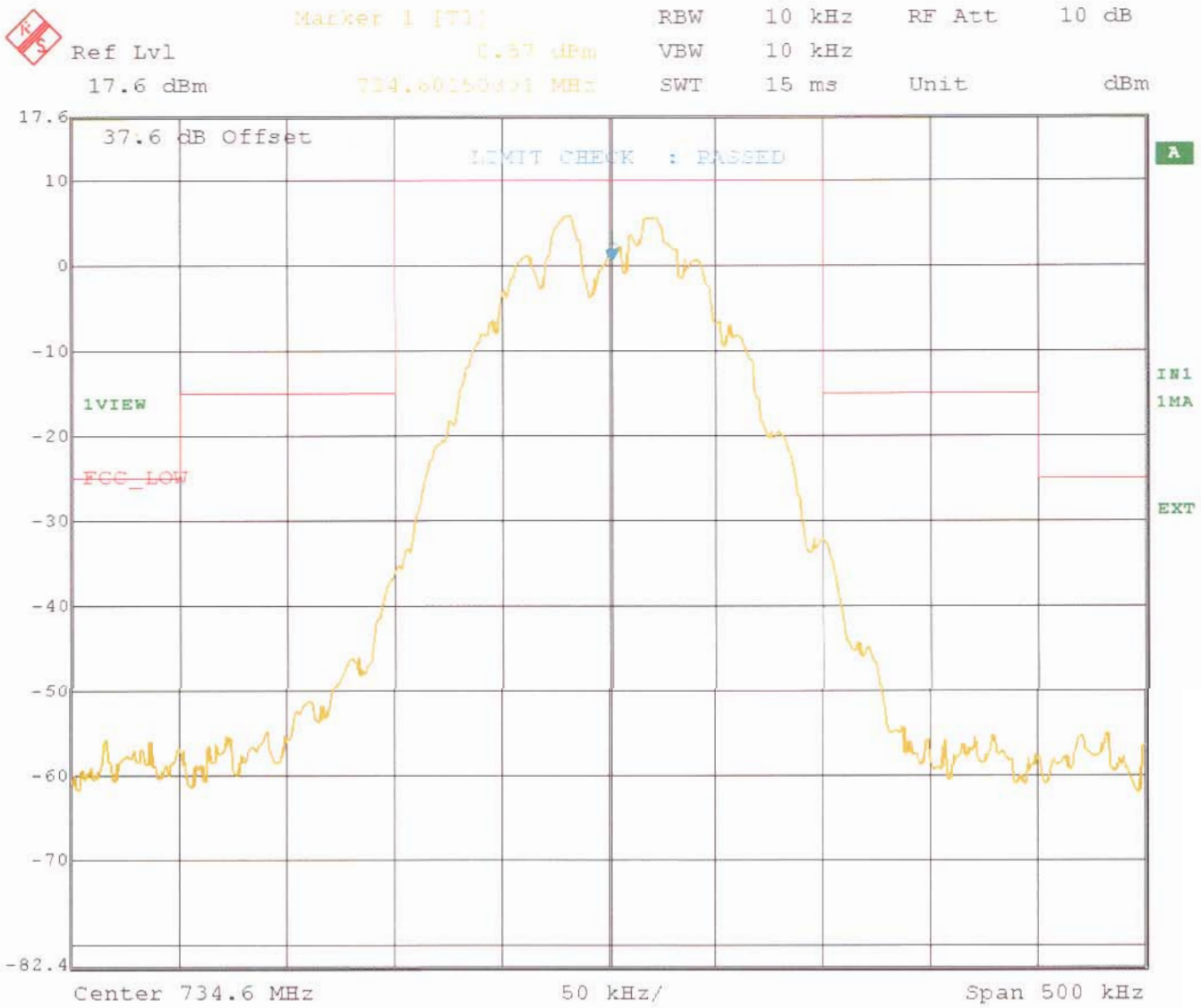
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level full quieting, audio frequency 20 kHz

DC Voltage: 1,5 V



Test Equipment used: NT-207

Ambient temperature: 21°C Relative humidity: 57%

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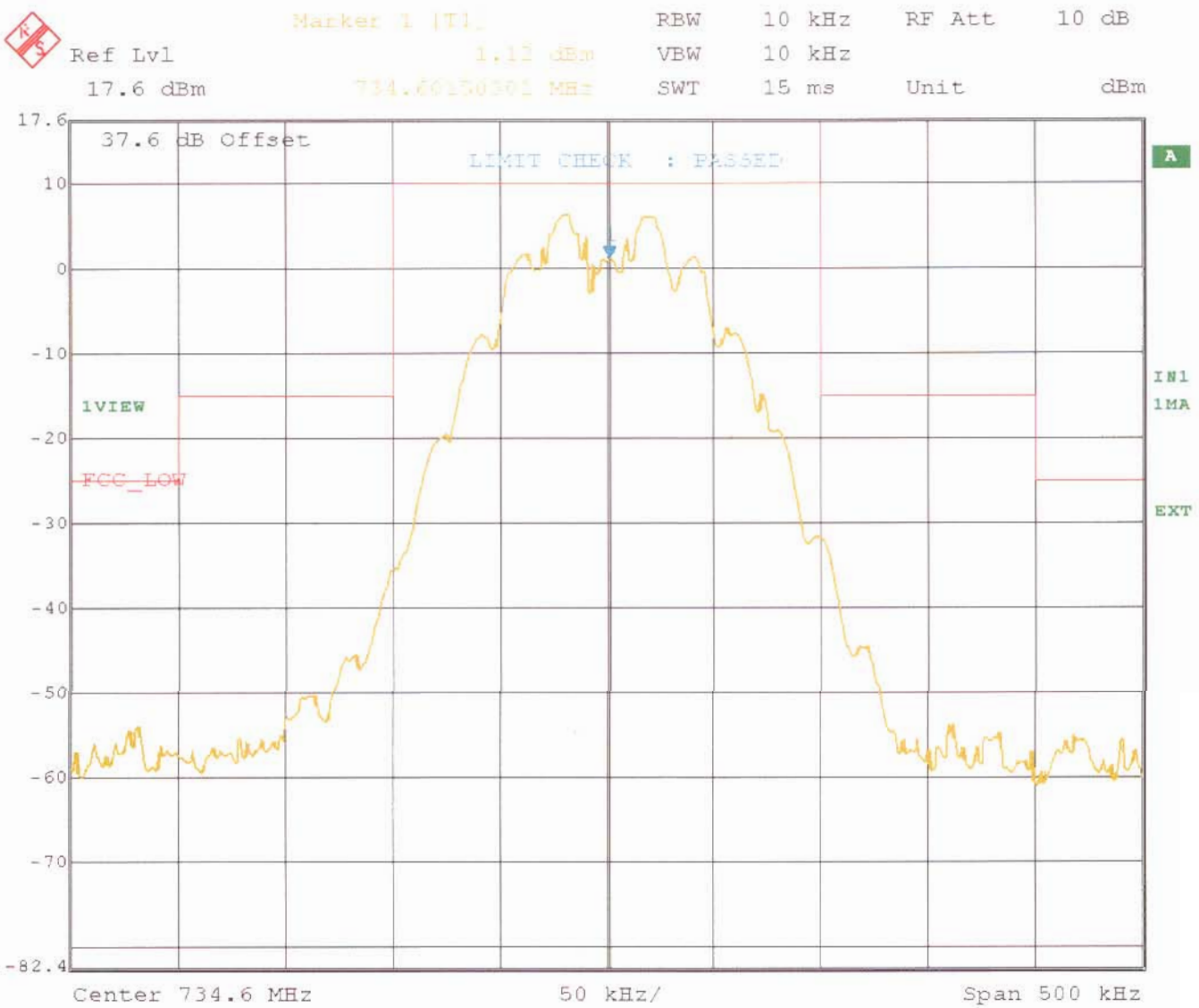
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

Modulation: acoustic input level full quieting, audio frequency 20 kHz

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:37:18

Test Equipment used: NT-207

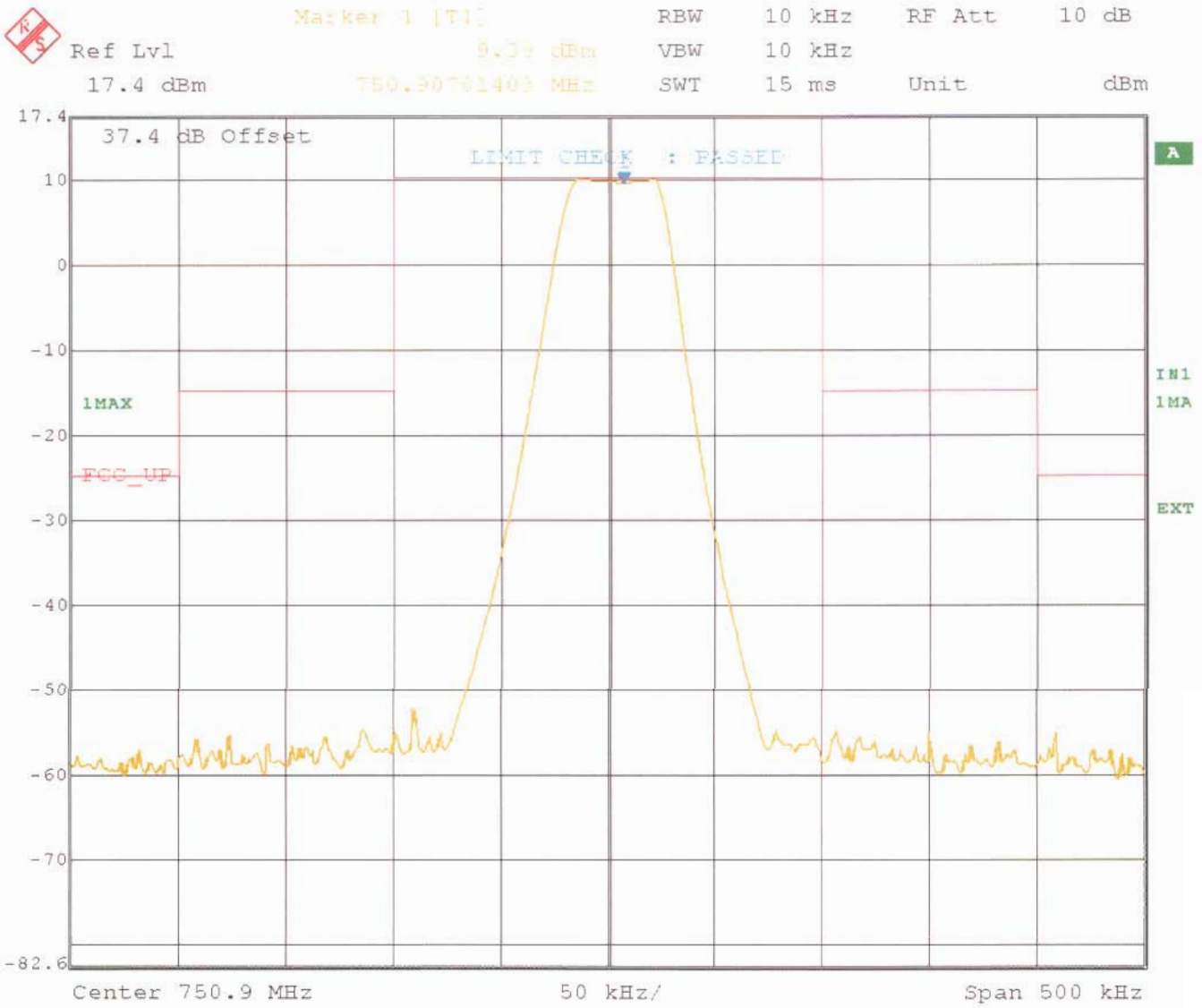
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 1 kHz

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:13:25

Test Equipment used: NT-207

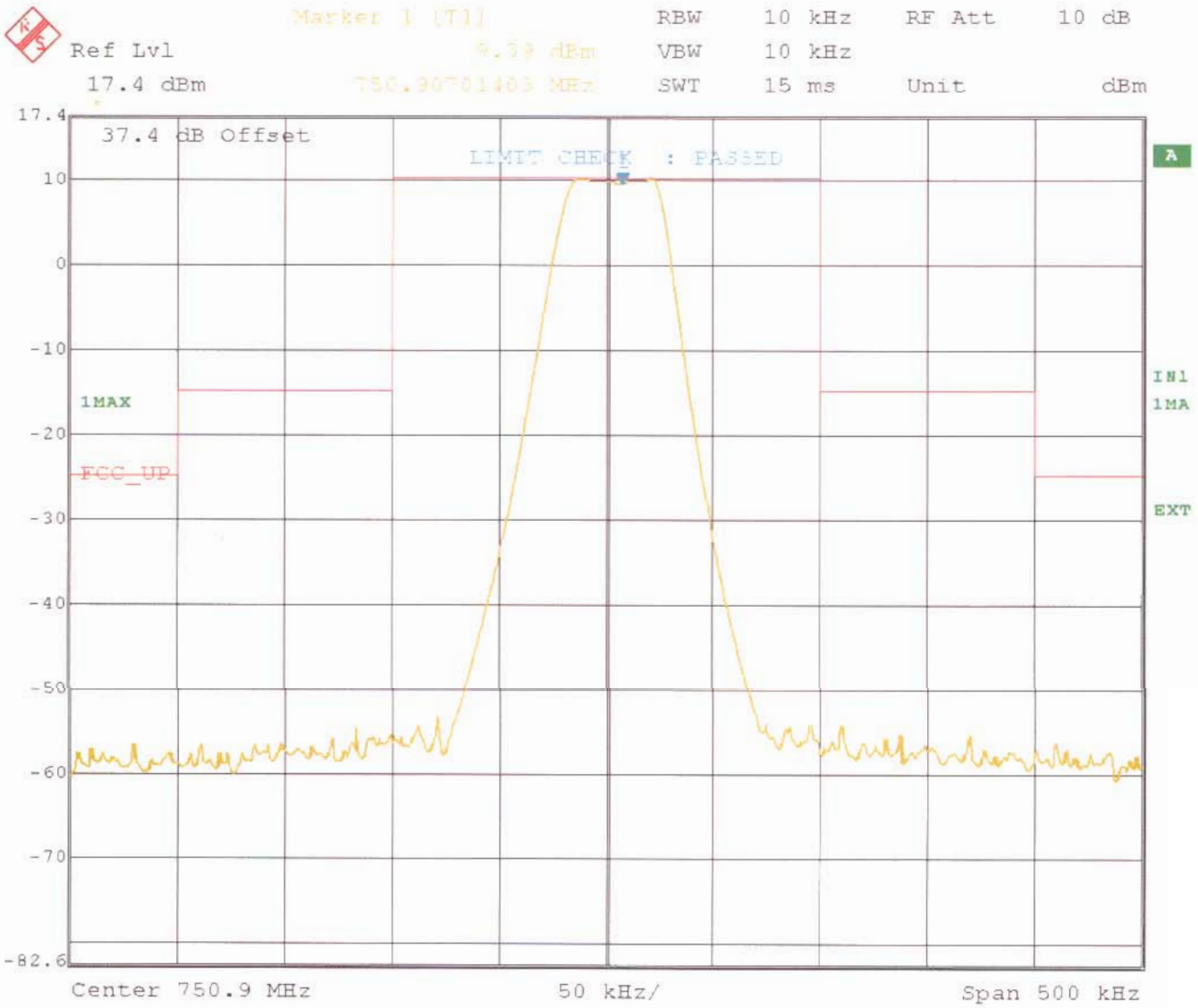
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 1 kHz

DC Voltage: 1,15 V



Test Equipment used: NT-207

Ambient temperature: 21°C Relative humidity: 57%

TÜV ÖSTERREICH

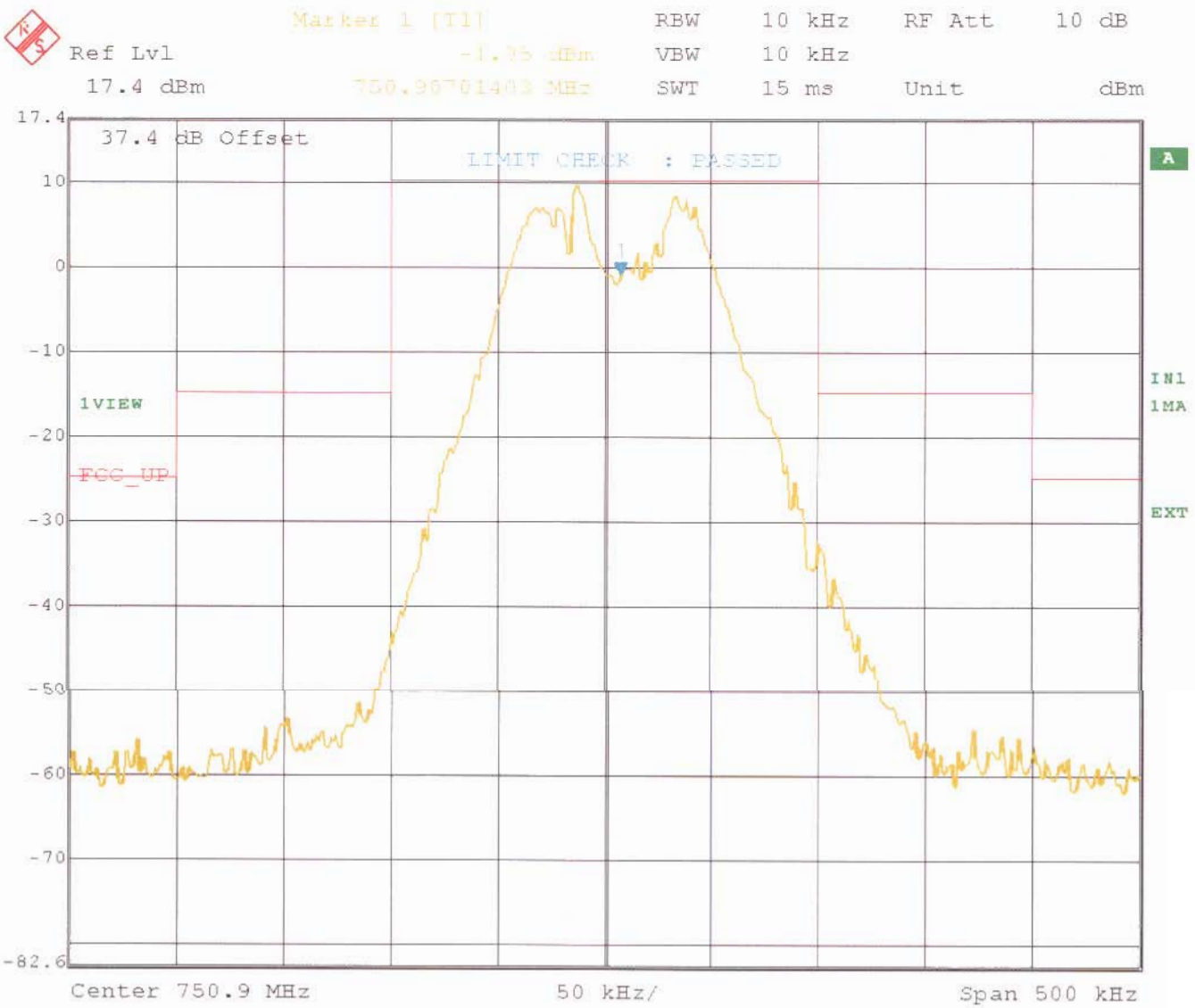
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level full quieting, audio frequency 1 kHz

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:16:22

Test Equipment used: NT-207

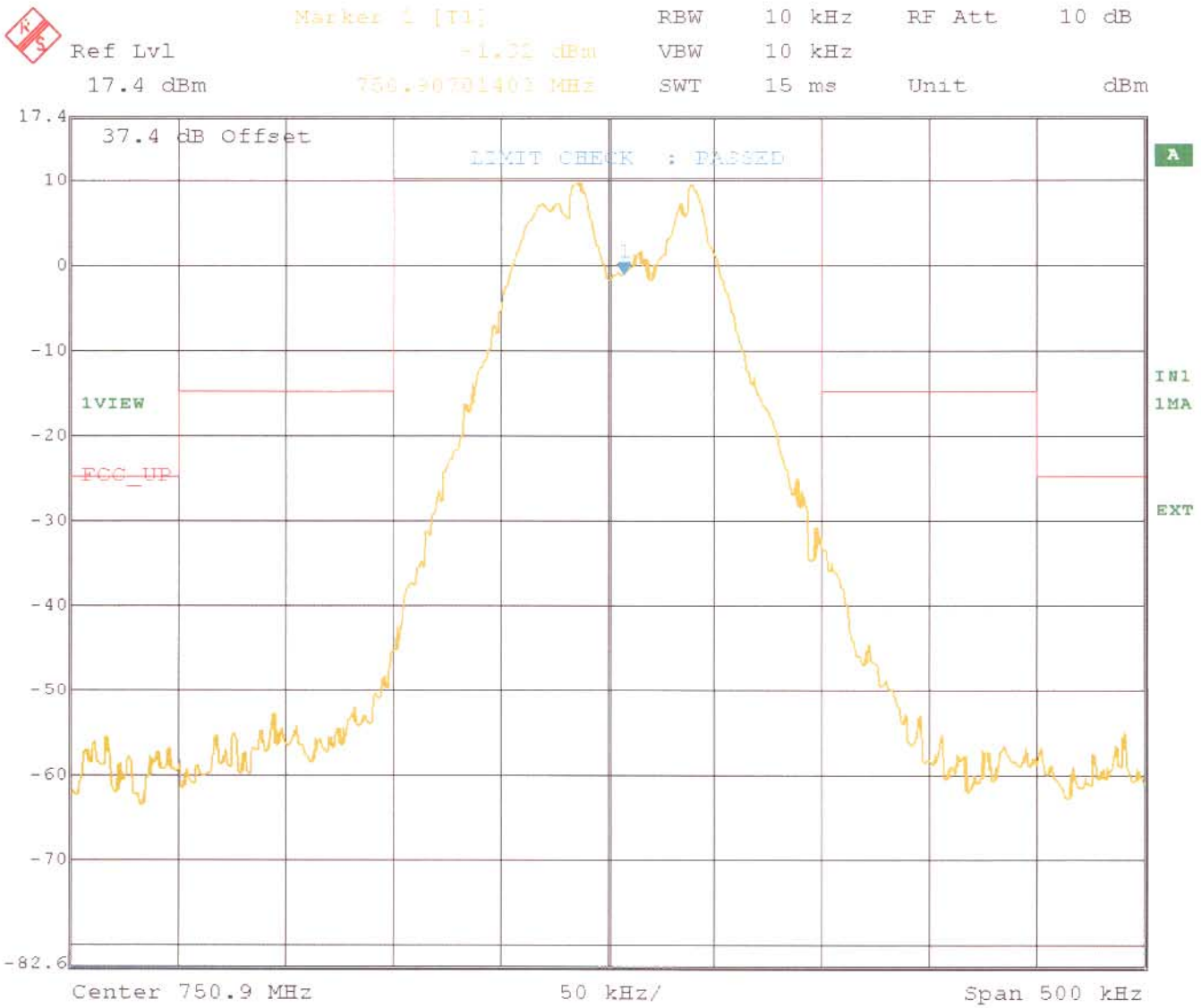
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level full quieting, audio frequency 1 kHz

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:14:02

Test Equipment used: NT-207

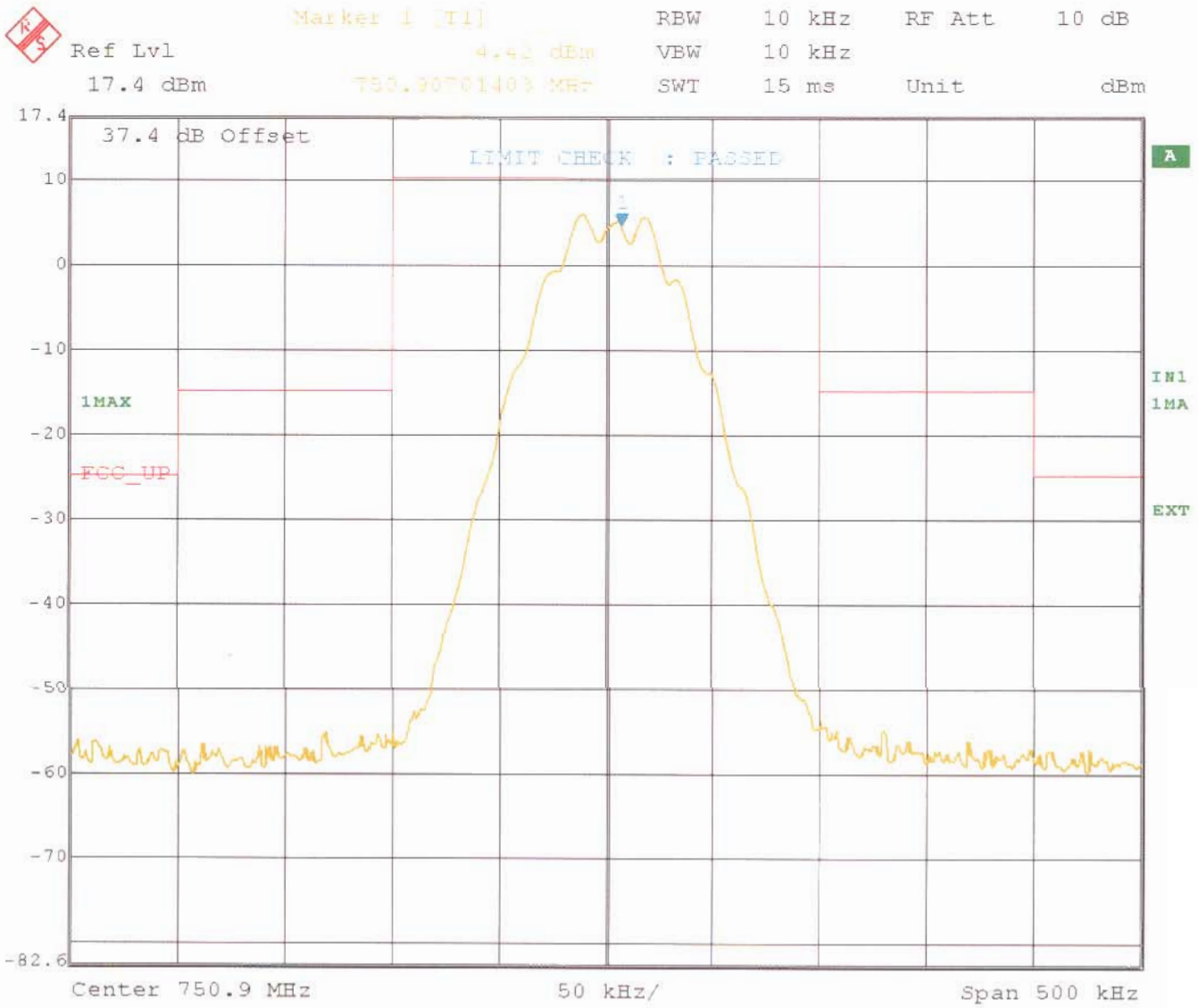
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 15 kHz

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:09:24

Test Equipment used: NT-207

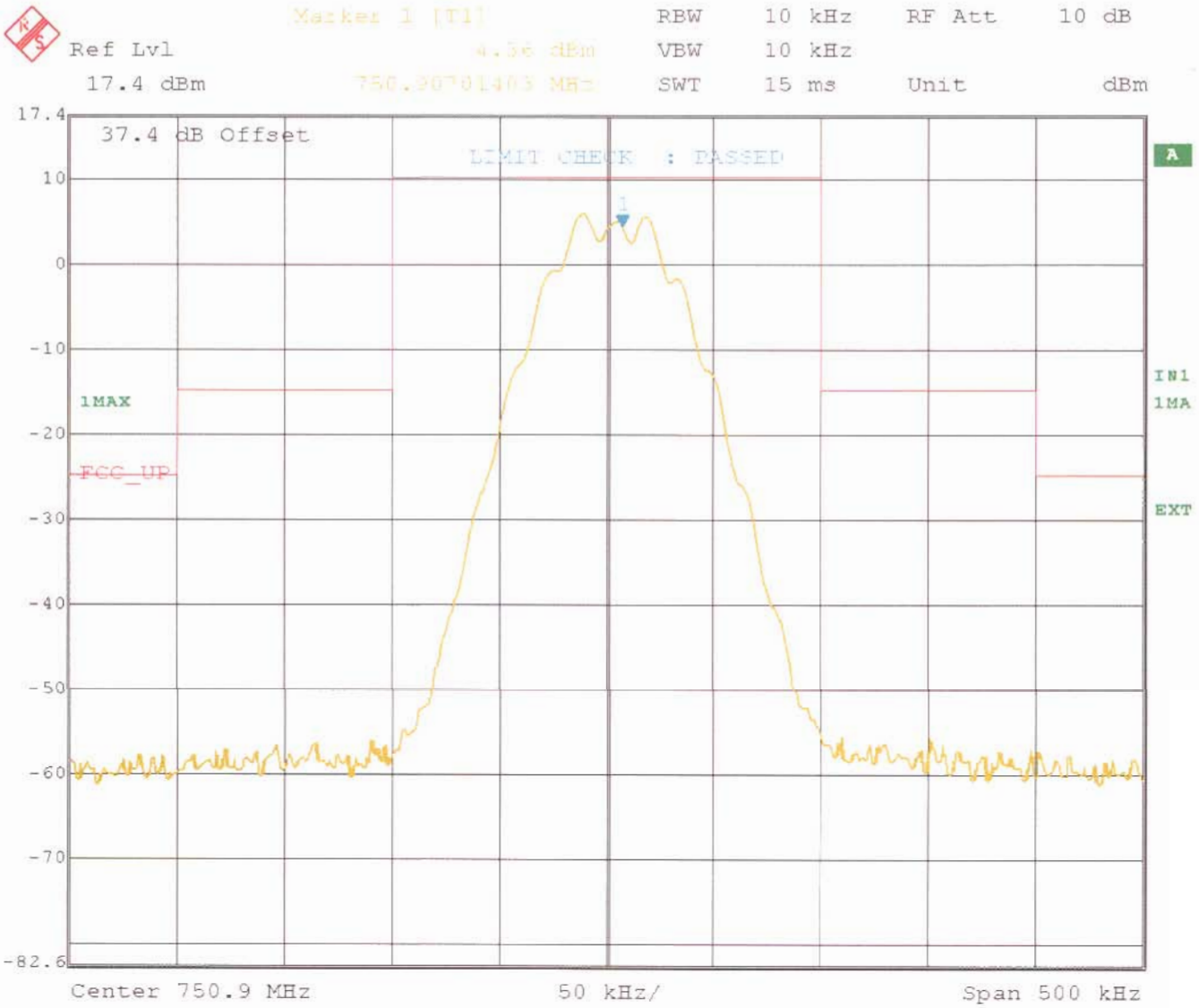
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 15 kHz

DC Voltage: 1,15 V



Test Equipment used: NT-207

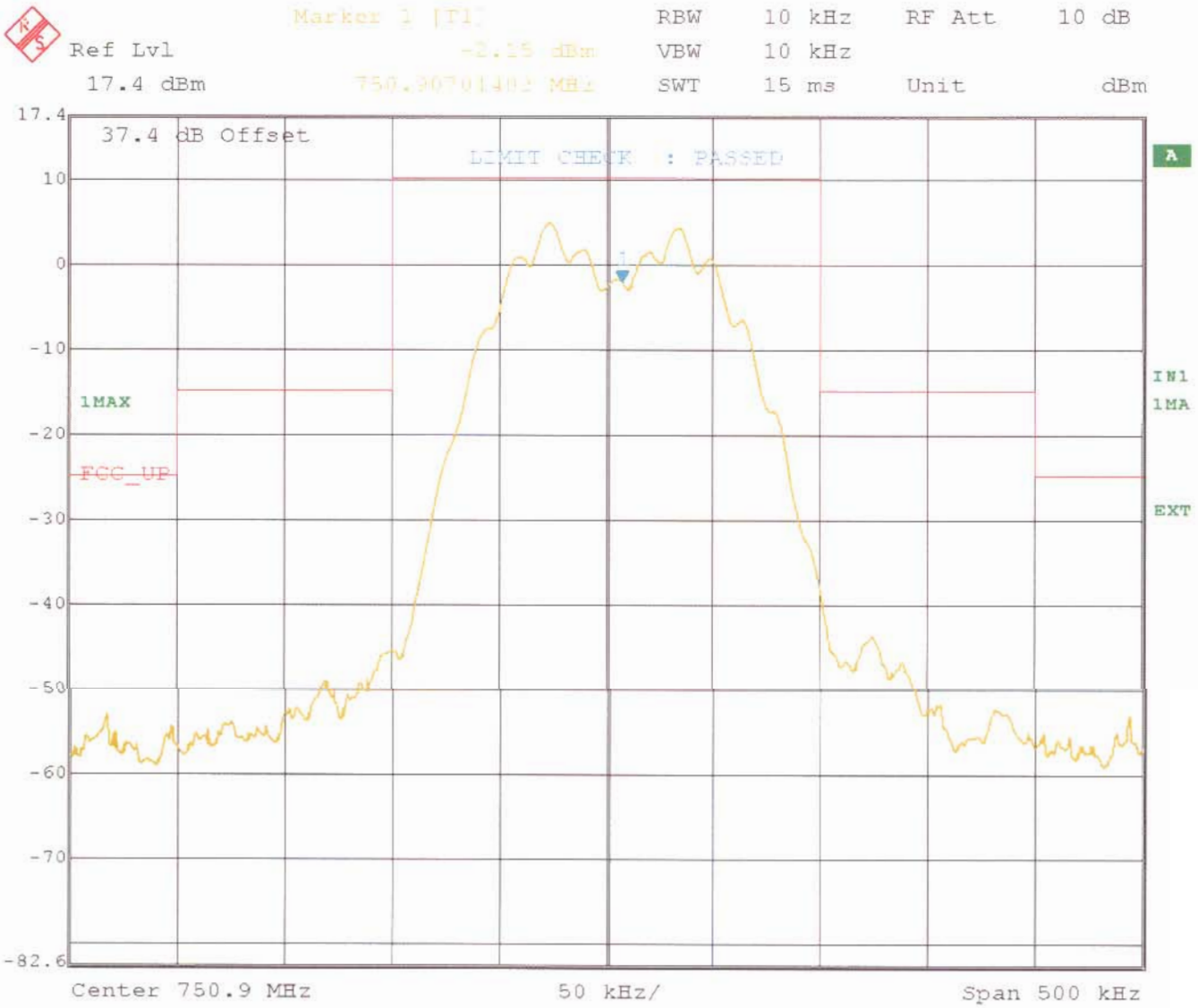
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level full quieting, audio frequency 15 kHz

DC Voltage: 1,5 V



Test Equipment used: NT-207

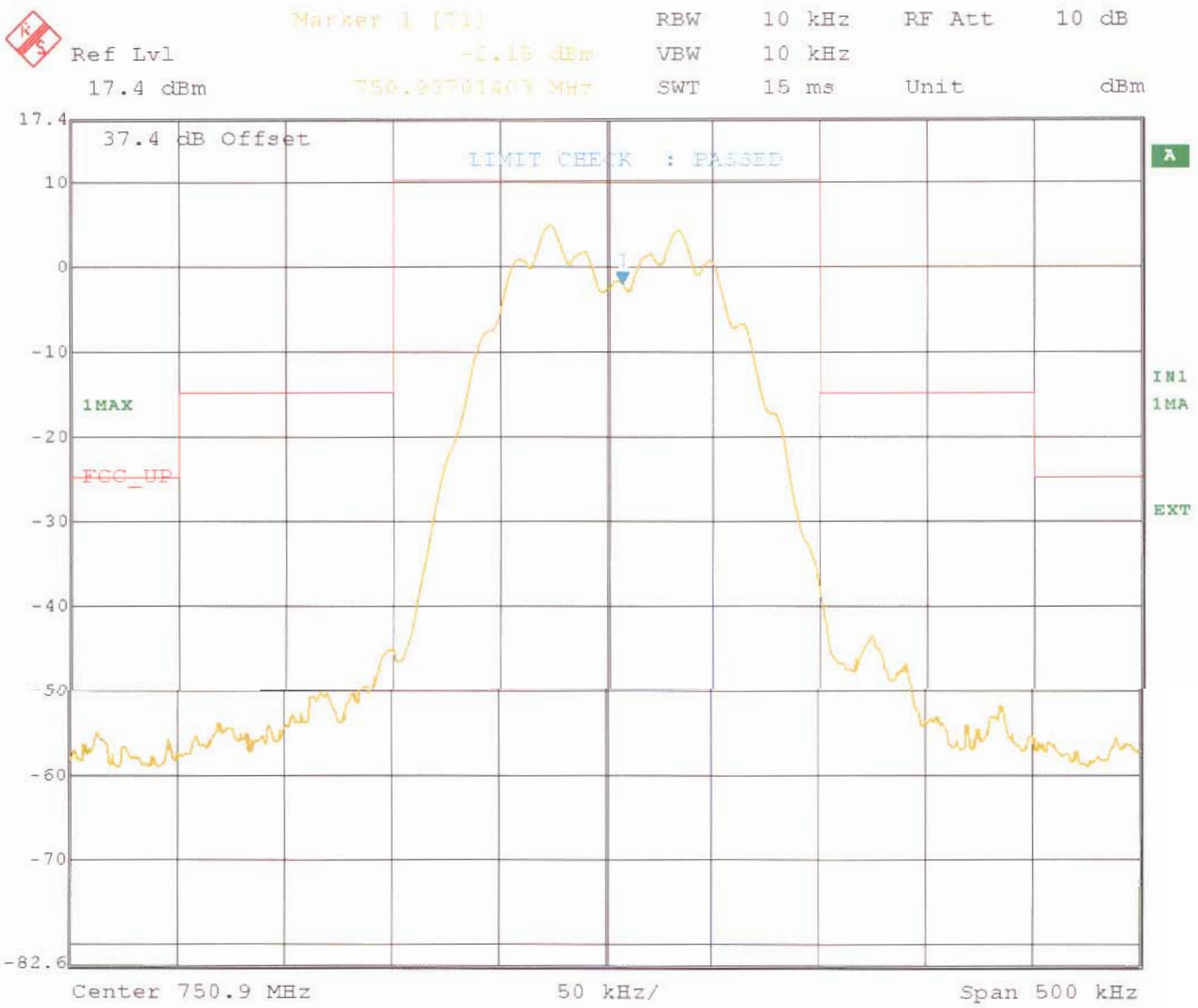
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level full quieting, audio frequency 15 kHz

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:11:03

Test Equipment used: NT-207

Ambient temperature: 21°C Relative humidity: 57%

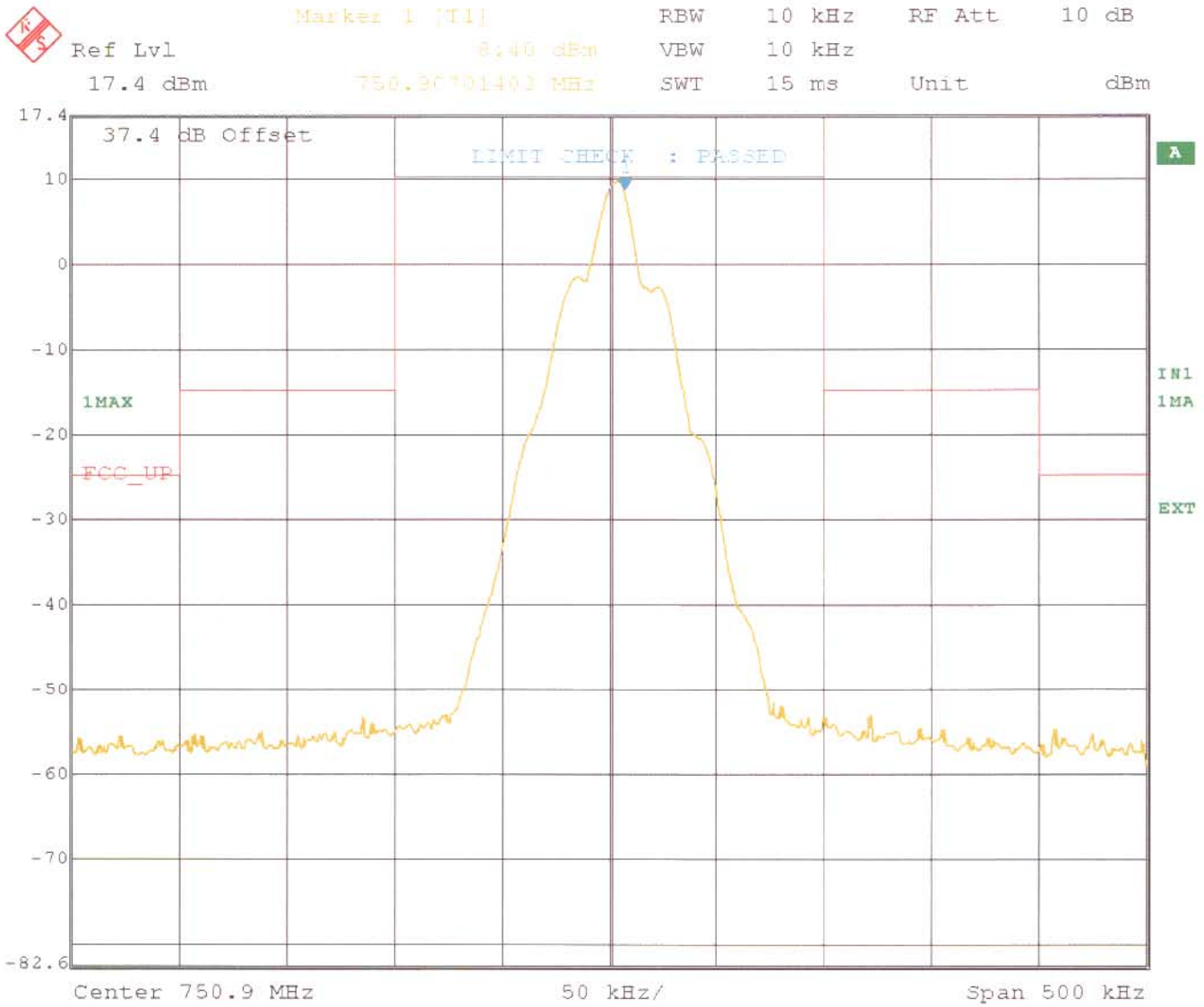
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 20 kHz

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:04:20

Test Equipment used: NT-207

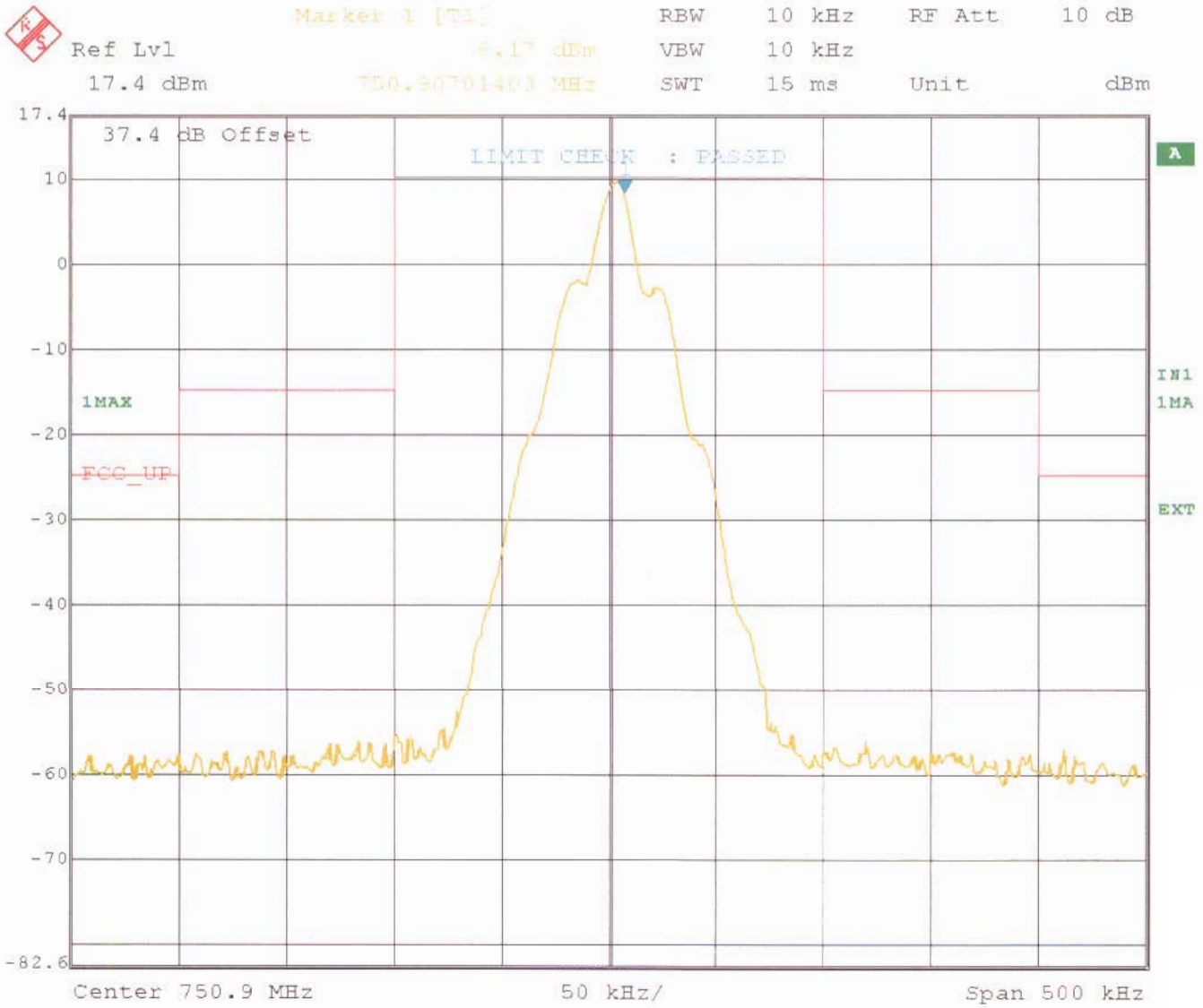
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level to achieve half of maximum deviation, audio frequency 20 kHz

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:04:51

Test Equipment used: NT-207

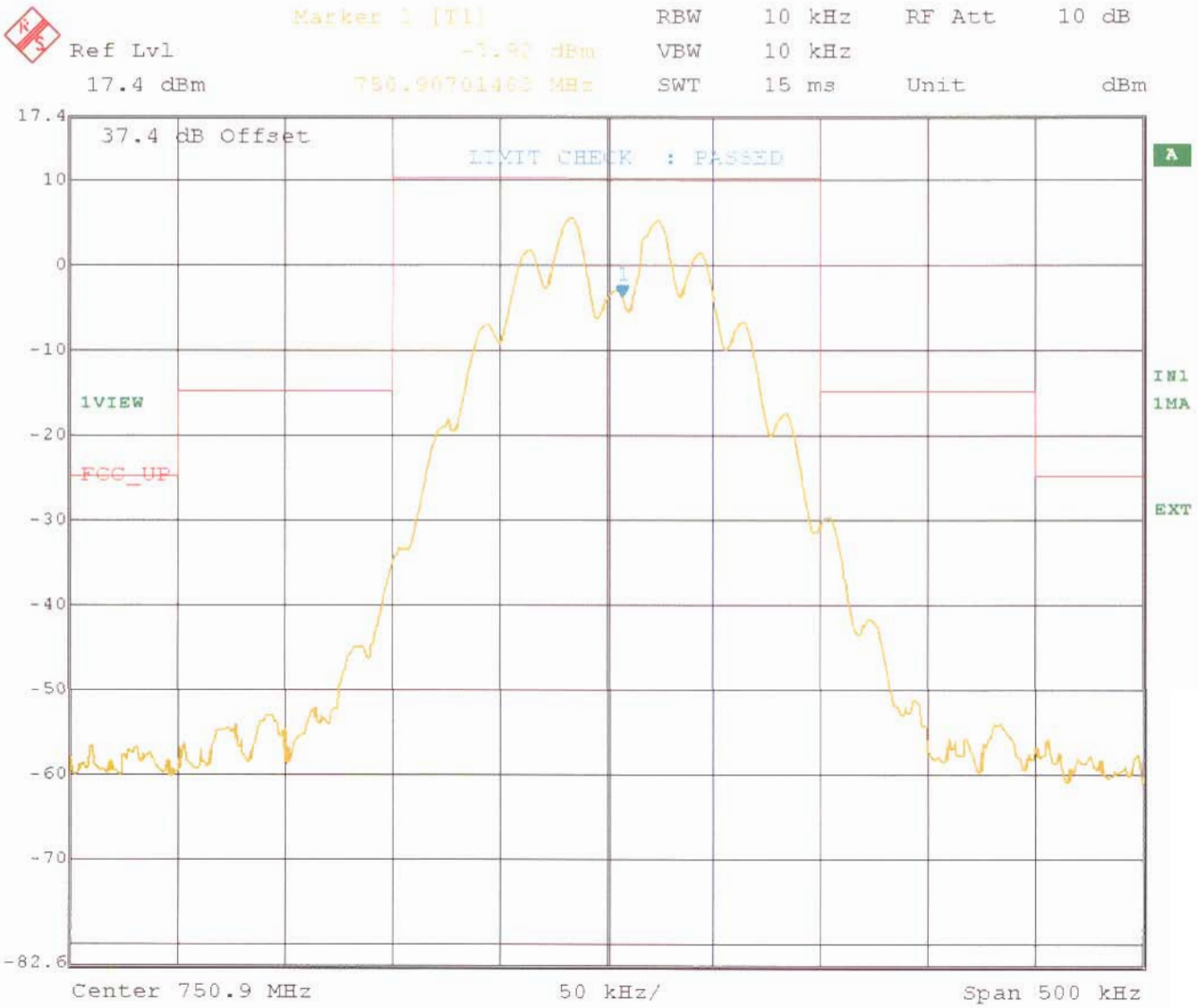
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level full quieting, audio frequency 20 kHz

DC Voltage: 1,5 V



Test Equipment used: NT-207

Ambient temperature: 21°C Relative humidity: 57%

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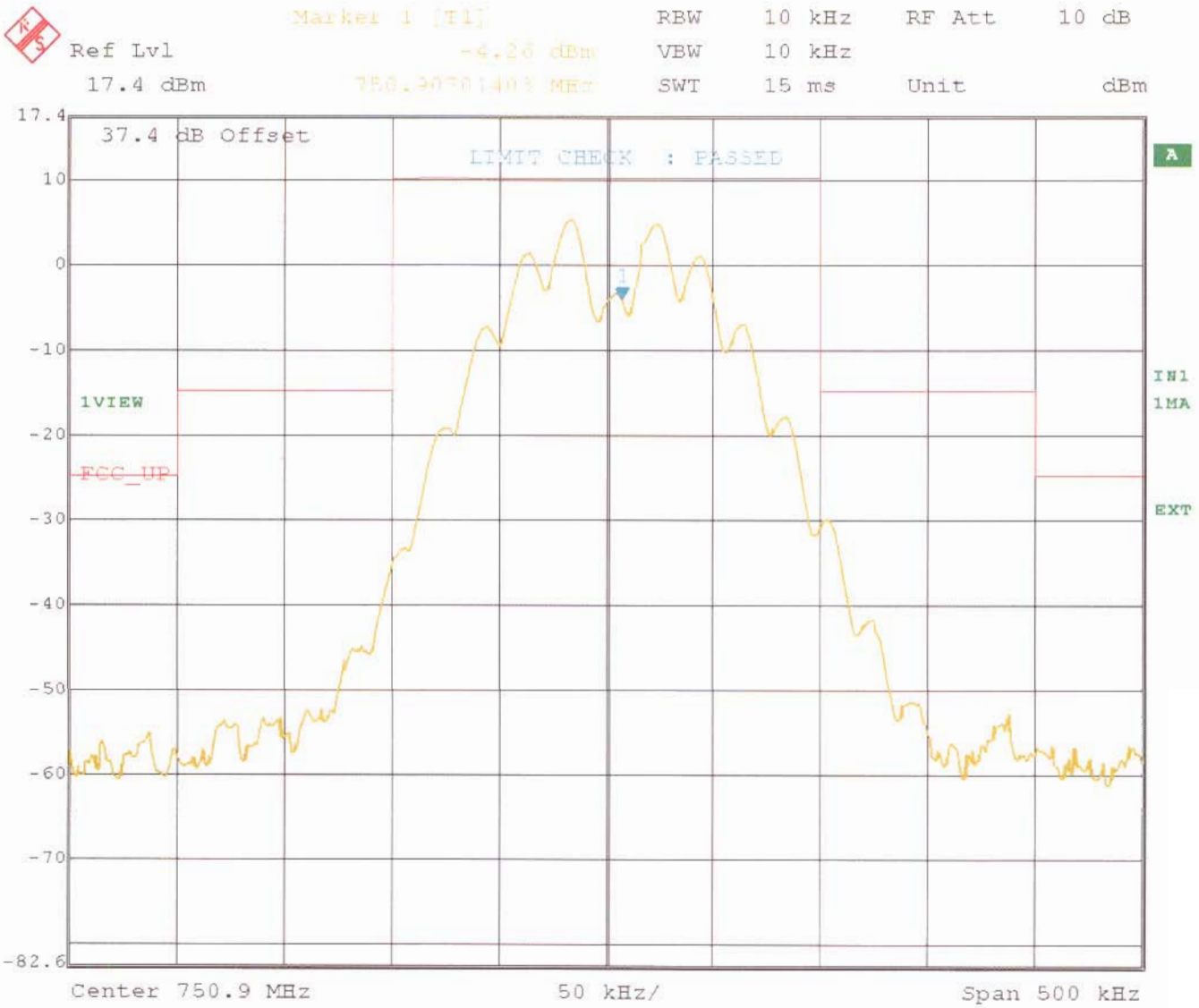
Emissions Mask § 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

Modulation: acoustic input level full quieting, audio frequency 20 kHz

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:06:49

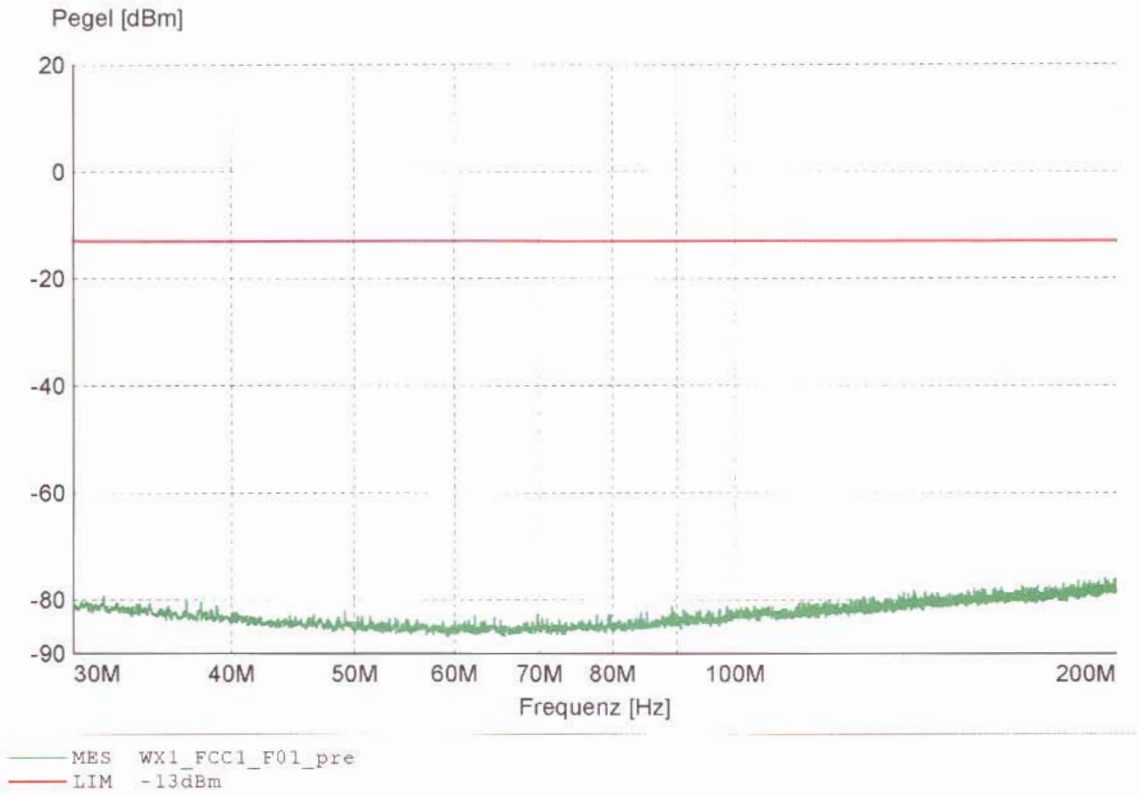
Test Equipment used: NT-207

Field strength of spurious emissions of the transmitter § 74.261 (e)(6)(iii)

Operating mode:

Frequency: 734,6 MHz

Modulation: unmodulated carrier



Seite 1 06.12.2005 15:05

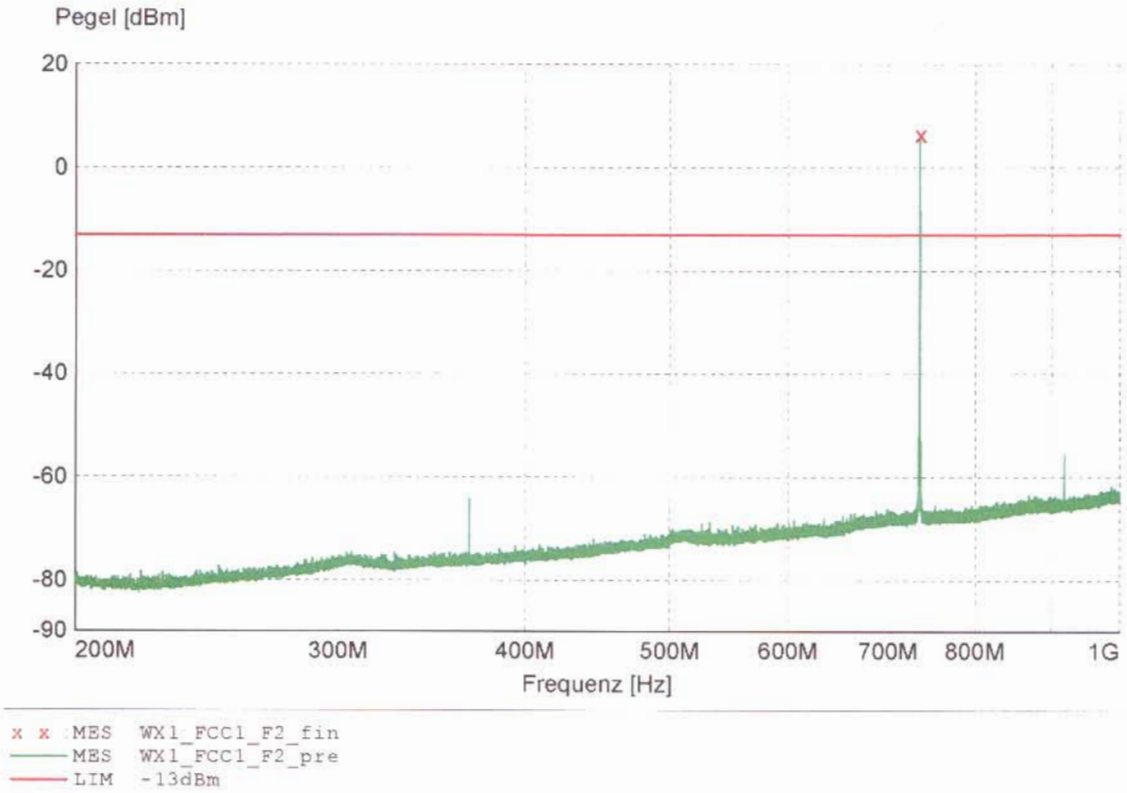
Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-207

Field strength of spurious emissions of the transmitter § 74.261 (e)(6)(iii)

Operating mode:

Frequency: 734,6 MHz

Modulation: unmodulated carrier



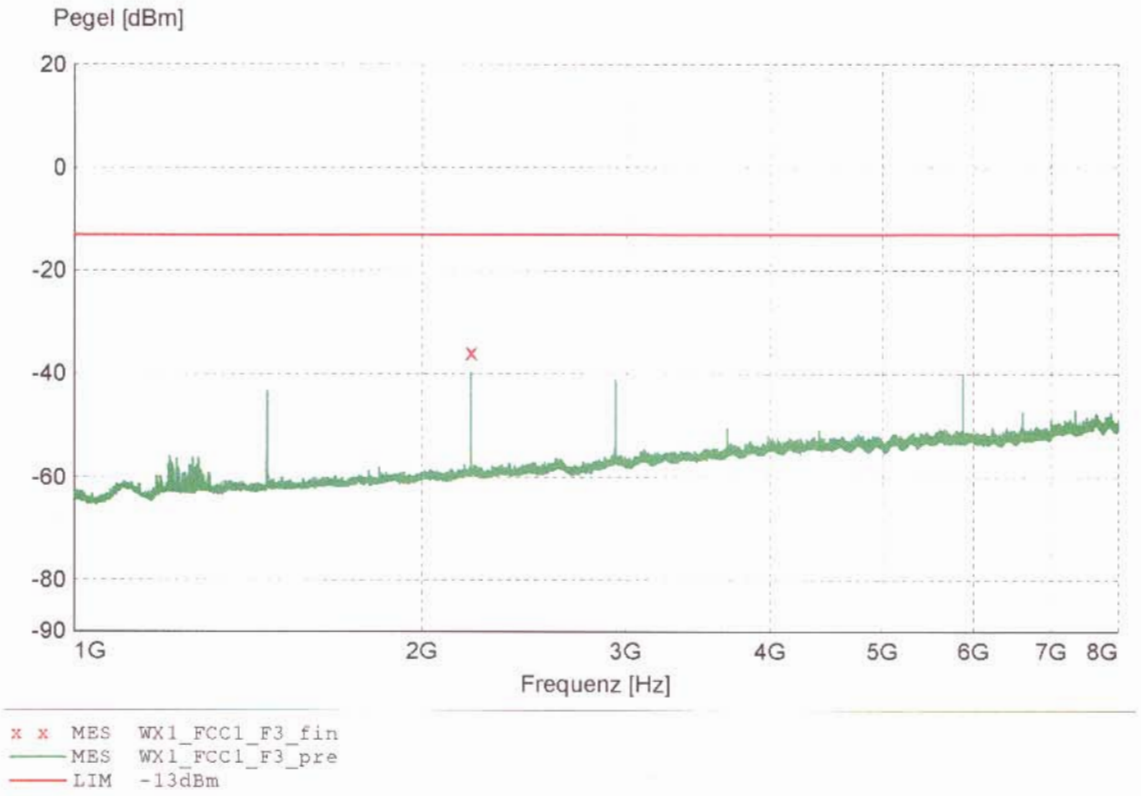
Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-207

Field strength of spurious emissions of the transmitter § 74.261 (e)(6)(iii)

Operating mode:

Frequency: 734,6 MHz

Modulation: unmodulated carrier



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

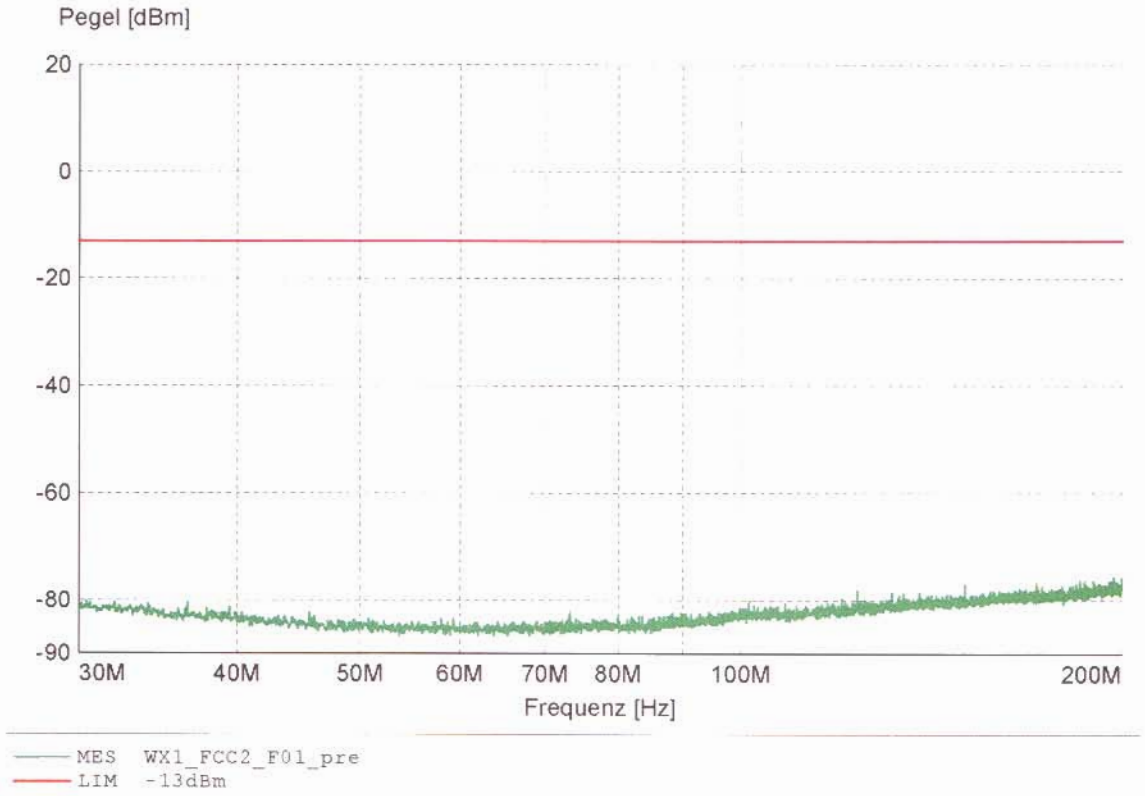
Ambient temperature: 21°C Relative humidity: 57%

Field strength of spurious emissions of the transmitter § 74.261 (e)(6)(iii)

Operating mode:

Frequency: 750,9 MHz

Modulation: unmodulated carrier



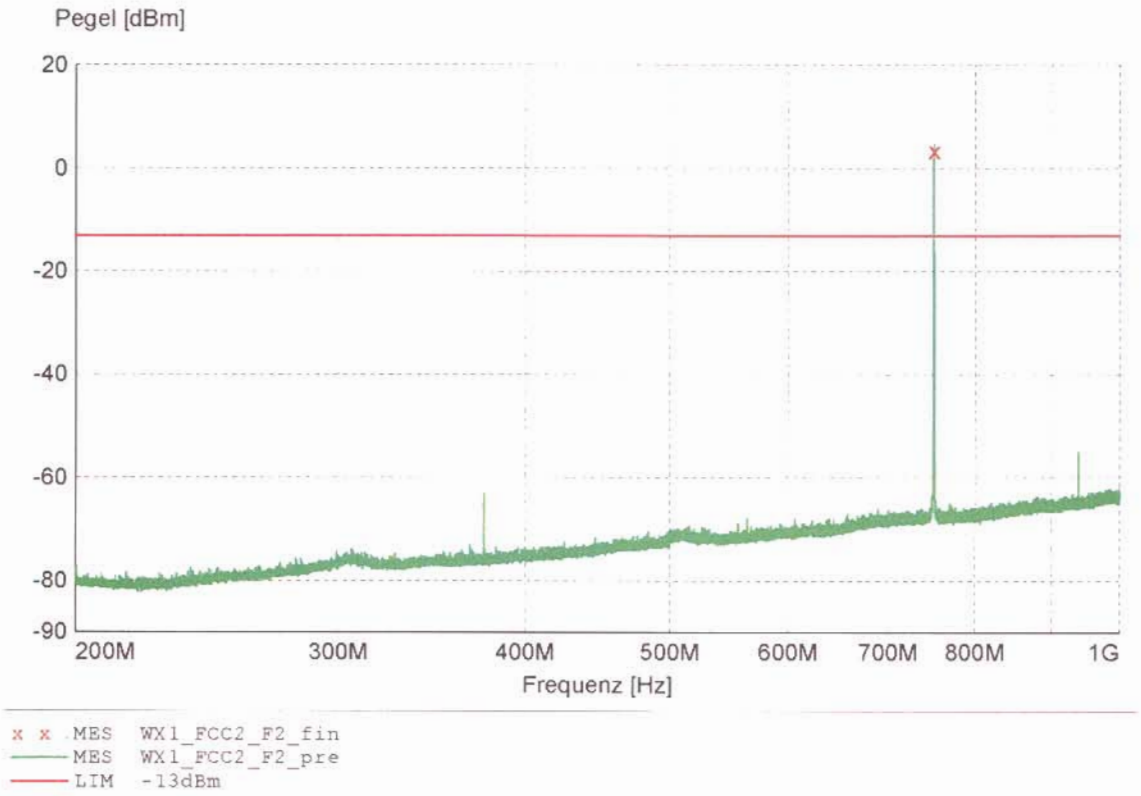
Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-207

Field strength of spurious emissions of the transmitter § 74.261 (e)(6)(iii)

Operating mode:

Frequency: 750,9 MHz

Modulation: unmodulated carrier



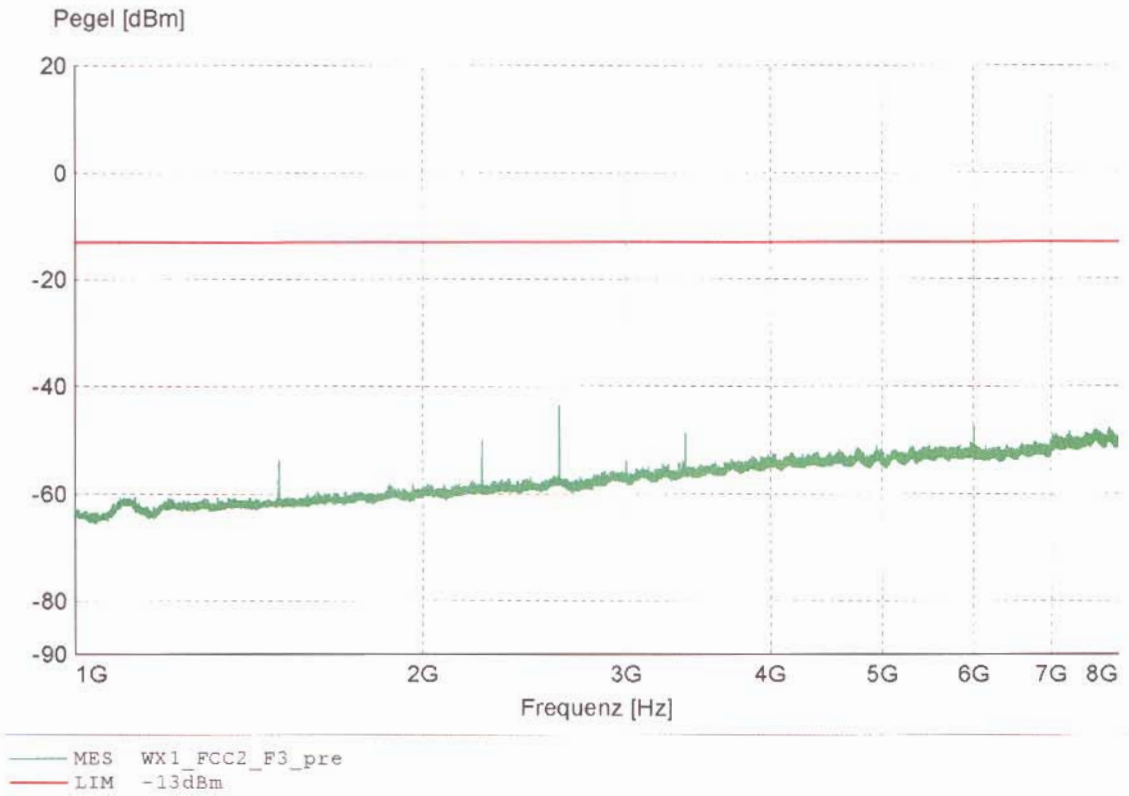
Test Equipment used: NT-100; NT-110; NT-111; NT-112; NT-125; NT-207

Field strength of spurious emissions of the transmitter § 74.261 (e)(6)(iii)

Operating mode:

Frequency: 750,9 MHz

Modulation: unmodulated carrier



Seite 1 06.12.2005 14:47

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

Appendix 1
Test equipment used

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☐	Anechoic Chamber with 3m measurement distance	NT-100
☐	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	NT-125
☐	3116 - Horn Antenna 18 - 40 GHz	NT-126
☐	SAS-200/543 - Bicon. Ant. 20 MHz - 300 MHz	NT-127
☐	AT-1080 - Log. Per. Ant. 80 - 1000 MHz	NT-128
☐	HK-116 - bicon. Ant. 20 MHz - 300 MHz	NT-129
☐	HK-116 - bicon. Ant. 20 MHz - 300 MHz	NT-130
☐	3146 - Log. Per. Ant. 200 - 1000MHz	NT-131
☐	Loop Antenna H-Field	NT-132
☐	Horn Antenna 500 MHz - 2900 MHz	NT-133
☐	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
☐	HZ-1 Antenna tripod	NT-150
☐	BN 1500 Antenna tripod	NT-151
☐	Ant. tripod for EN61000-4-3 Model TP1000A	NT-156
☐	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 CTS55	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
☐	PM97 Scopemeter	NT-221
☐	TPS 2014 Digital scope	NT-222
☐	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

Medizintechnik/
Nachrichtentechnik/EMV

Department: FG

Test report number:
M/FG-05/123

Date: 06.12.2005

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Appendix 1 (continued)
Test equipment used

TÜV ÖSTERREICH

☐	E-field probe 10 MHz – 18 GHz	NT-247
☐	H-field probe 10 MHz – 1 GHz	NT-248
☐	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 79 Digital Multimeter	NT-262
☐	Fluke 79 Digital Multimeter	NT-263
☐	ESH2-Z5 Artificial mains network 4x25A	NT-300
☐	ESH3-Z5 Artificial mains network 2x10A	NT-301
☐	ESH3-Z6 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
☐	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 T1241	NT-315
☐	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
☐	FP 16/3-1 3 ph. Coupling filter (Burst)	NT-400
☐	PHE 4500 - Mains impedance network	NT-401
☐	IP 6.2 Coupling filter for data lines (Surge)	NT-403
☐	ESH2-Z3 - Probe 9 kHz - 30 MHz	NT-410
☐	IP 4 - Capacitive clamp (Burst)	NT-411
☐	Highpass-Filter 100 MHz – 4 GHz	NT-412
☐	Highpass-Filter 600 MHz – 4 GHz	NT-413
☐	Highpass-Filter 1250 MHz – 4 GHz	NT-414

Appendix 1 (continued)
Test equipment used

TÜV ÖSTERREICH

Medizintechnik/
Nachrichtentechnik/EMV

Department: FG

Test report number:
M/FG-05/123

Date: 06.12.2005

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☐	Highpass-Filter 1800 MHz – 18 GHz	NT-415
☐	Highpass-Filter 3500 MHz – 18 GHz	NT-416
☐	RF-Attenuator 20 dB 0,1 - 1000 MHz / 25 W	NT-421
☐	RF-Attenuator 10 dB 0,1 - 1000 MHz / 20 W	NT-422
☐	RF-Attenuator 30 dB 0,1 - 1000 MHz / 1 W	NT-423
☐	RF-Attenuator 30 dB	NT-424
☐	RF-Attenuator 6 dB 0,1 - 1000 MHz / 1 W	NT-425
☐	RF-Attenuator 6 dB 0,1 - 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
☐	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 Test software	NT-520
☐	SRM-TS Version 1.3 software for SRM-3000	NT-522
☐	SPS-PHE Test software V2.32 voltage fluctuations/harmonics	NT-525
☐	SPS-EM Test software V2.32 for PHE 4500/B	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 -55°C to +180°C	M-512
☐	Control and simulation equipment for EUT	---