

TEST REPORT
of the accredited test laboratory

TÜV Nr.:M/FG-05/123

Geschäftsbereich
Medizintechnik,
Nachrichtentechnik
und EMV

Prüfstelle für
Nachrichtentechnik
und EMV

Prüfzentrum Wien
A - 1230 Wien
Deutschstraße 10

Tel: +43-1-61091-0
Fax: DW 6505
Mail: office@tuev.or.at

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

Akkreditierte Prüf-,
Überwachungs-,
Zertifizierungs- und
Kalibrierstelle

Notified Body 0408

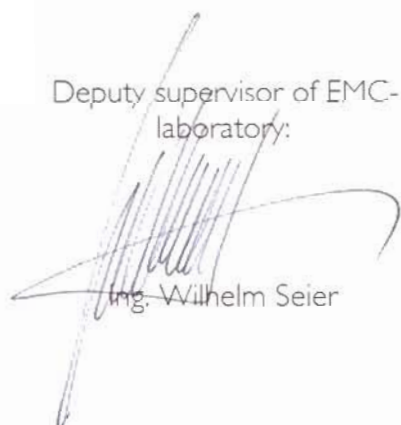
Output power / 10mW erp **power supply:** 1,5 VDC
field strength:

Frequency range: 734,6 – 750,9 **Channel separation:** n.a.
MHz

Standard: FCC: 47 CFR 74

TUV Austria
Test laboratory for EMC

Deputy supervisor of EMC-
laboratory:


Ing. Wilhelm Seier



06.12.2005

Copy Nbr.: 11

checked by:


Ing. Michael Emminger

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

LIST OF MEASUREMENTS

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

SUBCLAUSE	PARAMETER TO BE MEASURED	PAGE
	Intentional Radiators	
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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		$\pm 0,75$ 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

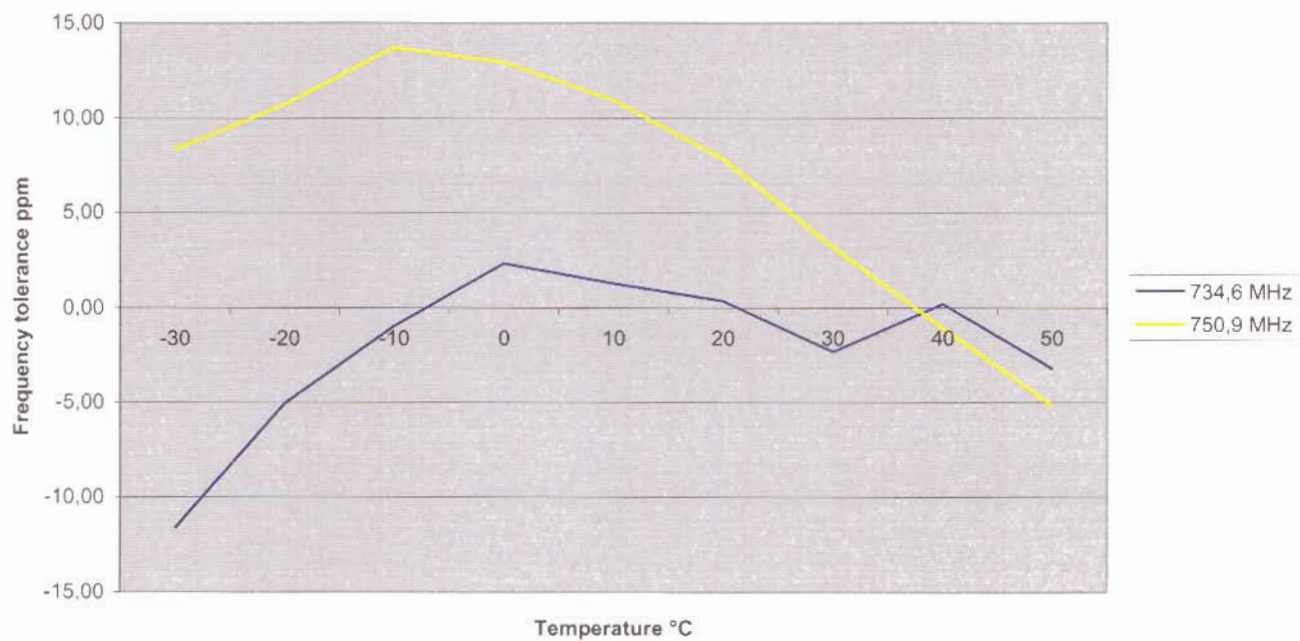
SUBCLAUSE 74.261 (e)(4)

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

Frequency tolerance

§ 74.261 (e)(4)

Frequency tolerance vs. Temperature



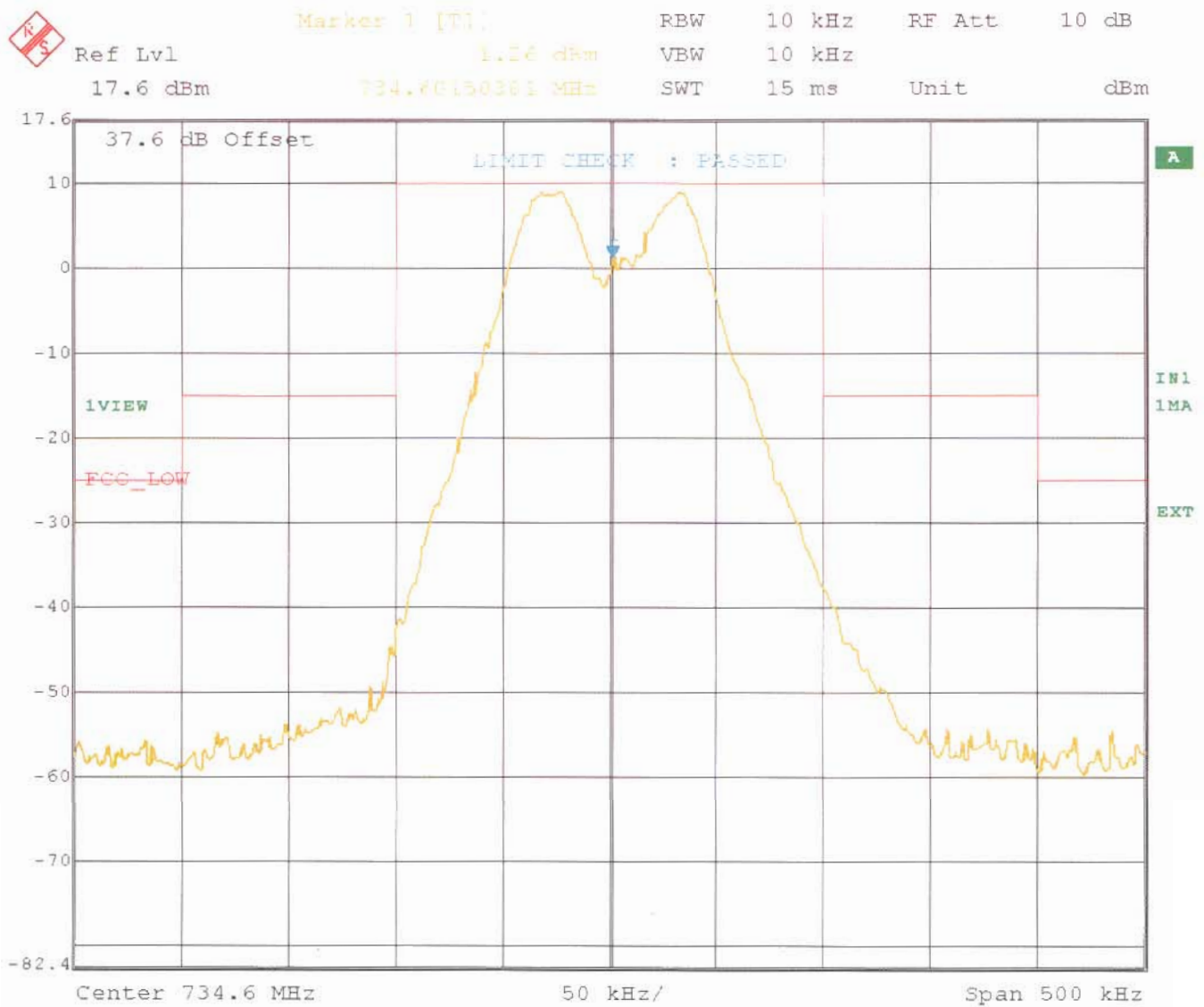
Test Equipment used: NT-207, M-512

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



Date: 2.NOV.2005 14:26:00

LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

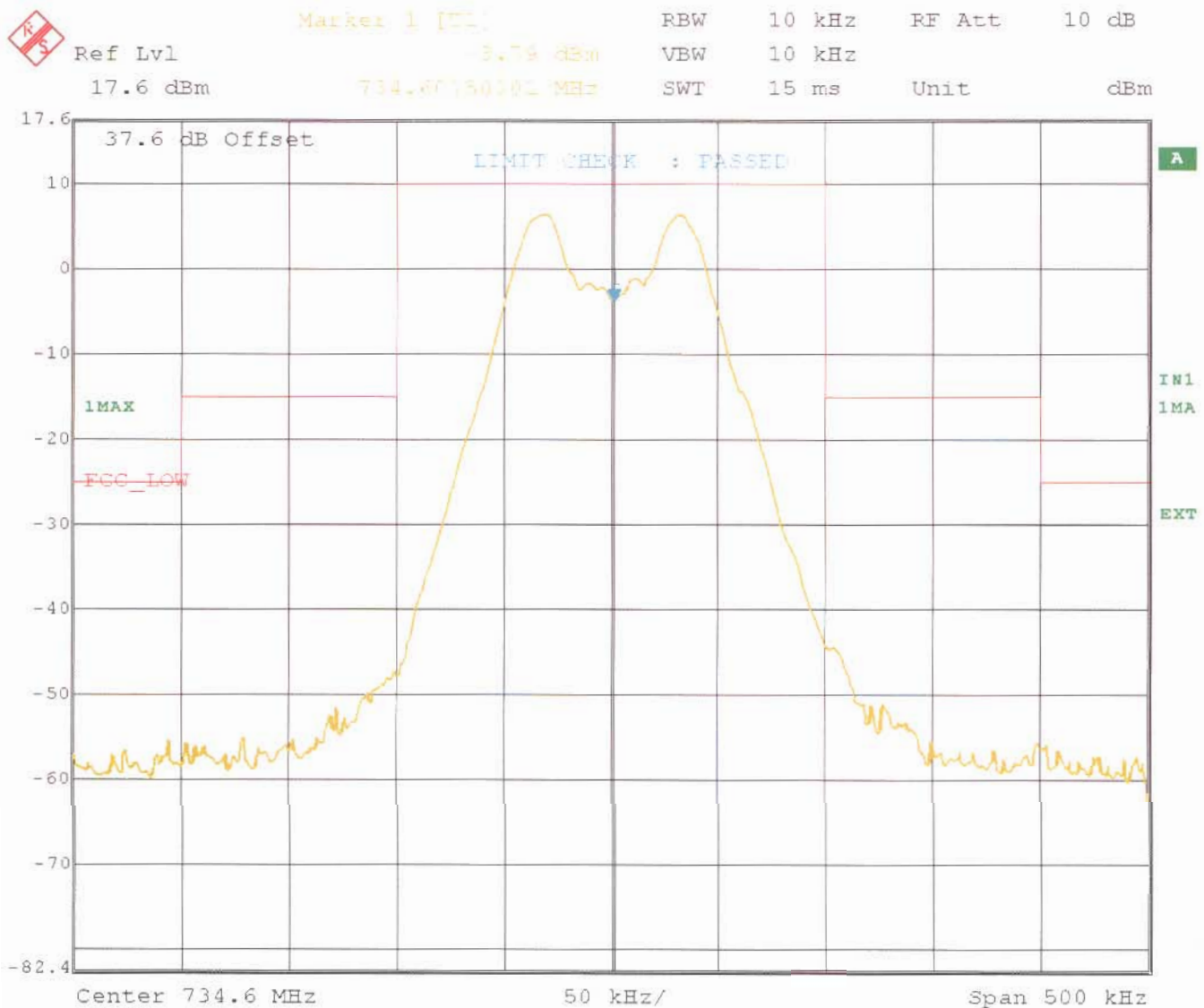
TEST EQUIPMENT USED: NT-207

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



Date: 2.NOV.2005 14:30:31

LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

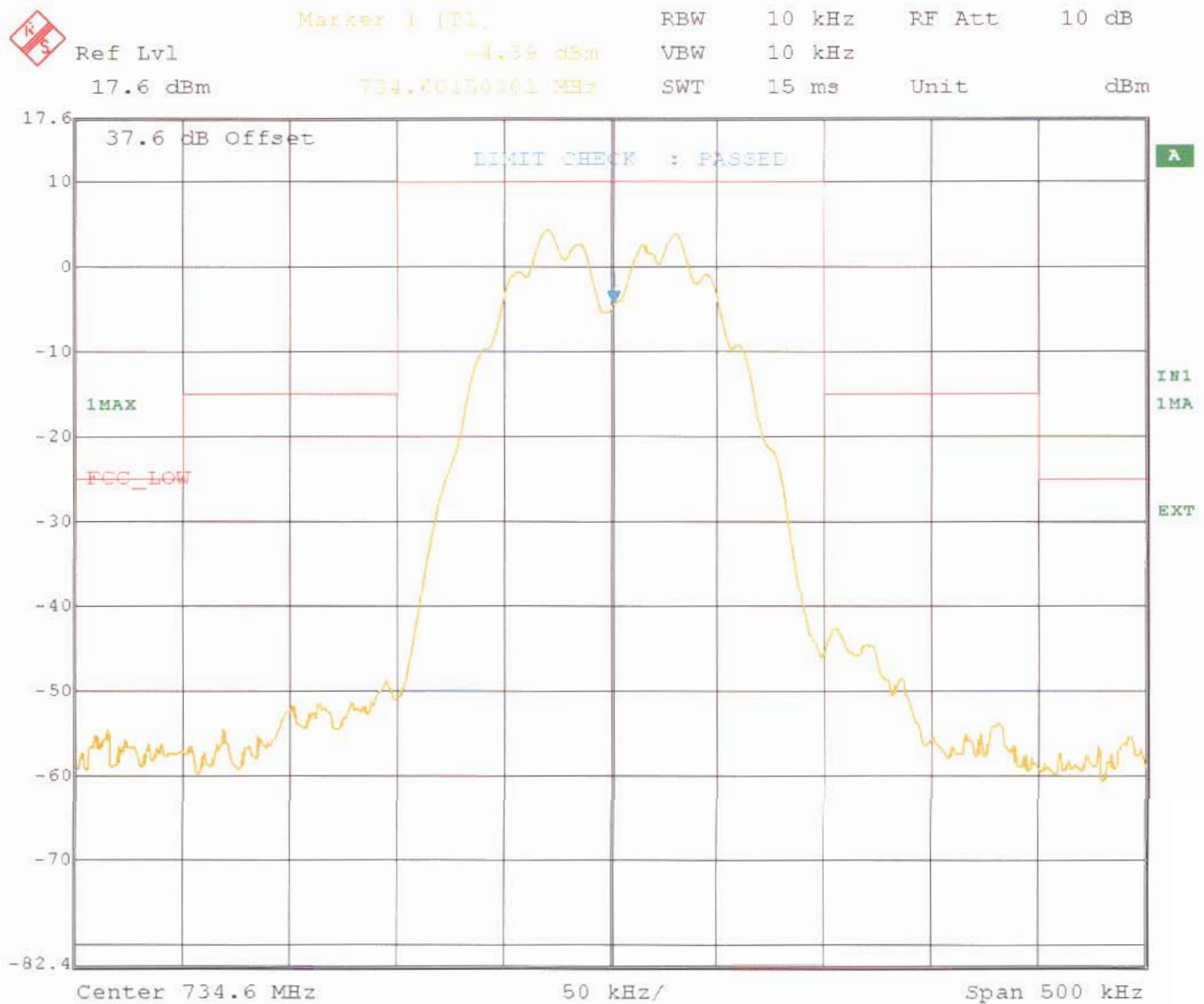
TEST EQUIPMENT USED: NT-207

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



Date: 2.NOV.2005 14:38:34

LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

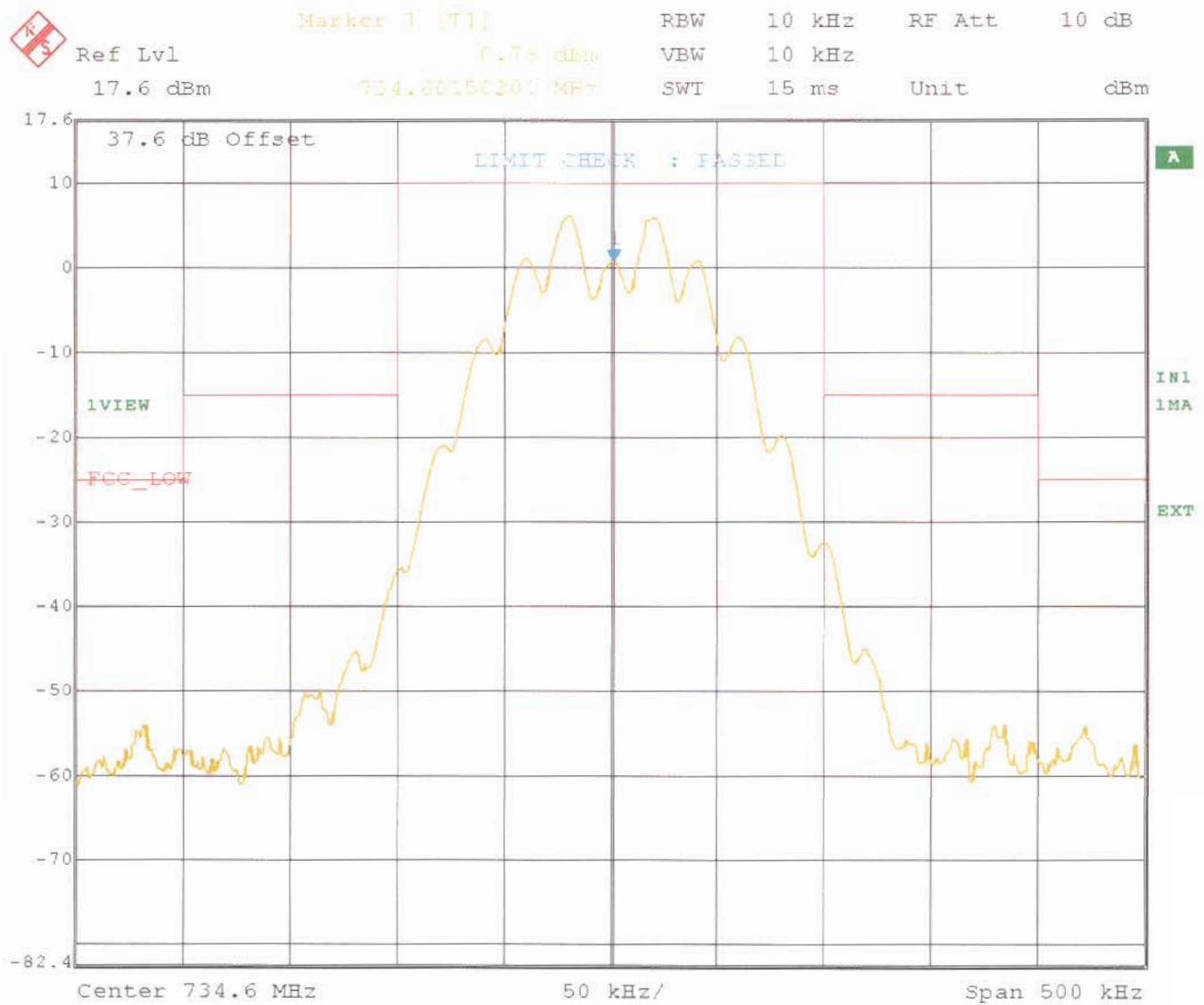
TEST EQUIPMENT USED: NT-207

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



Date: 2.NOV.2005 14:36:51

LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

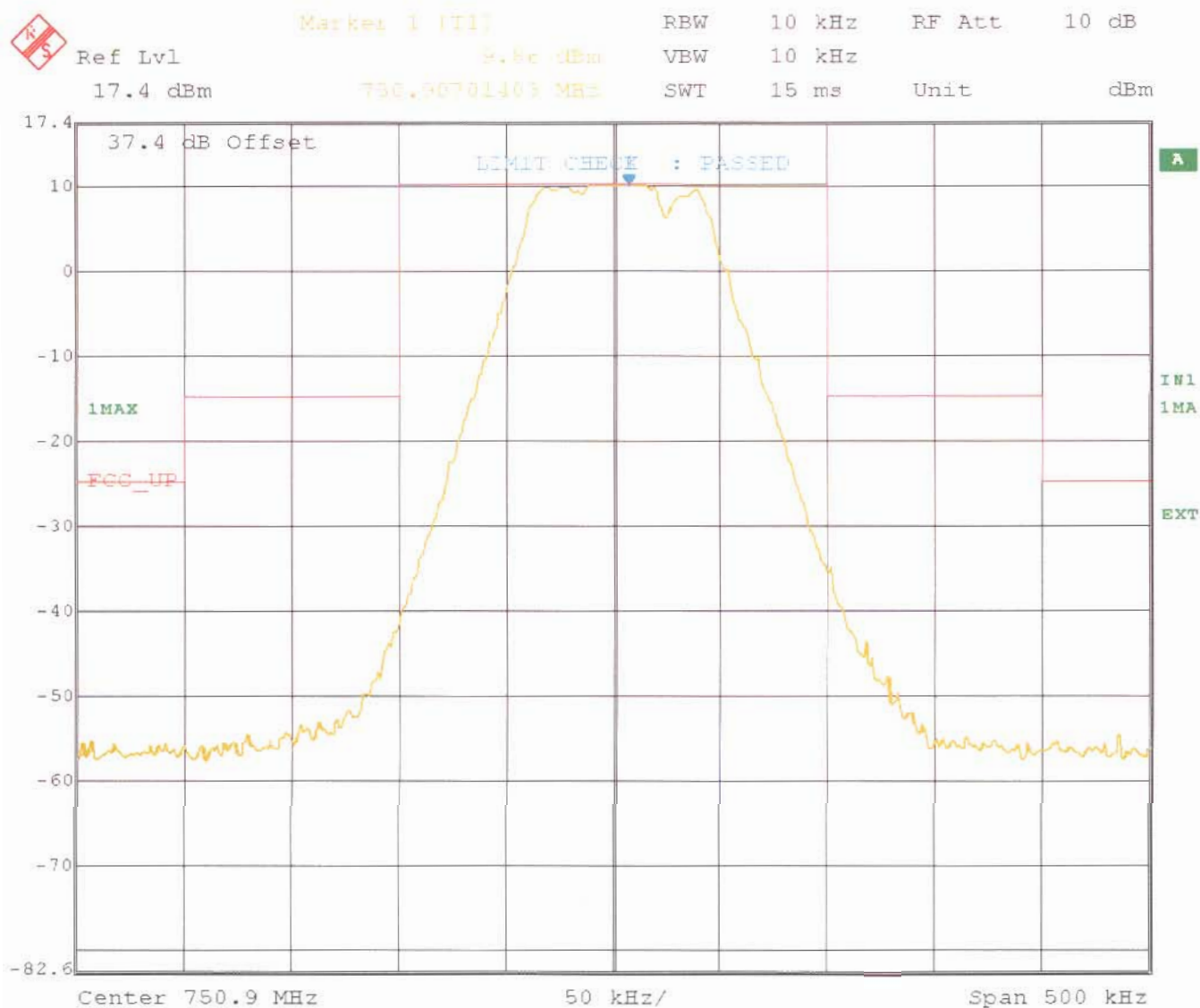
TEST EQUIPMENT USED: NT-207

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



Date: 2.NOV.2005 13:54:52

LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

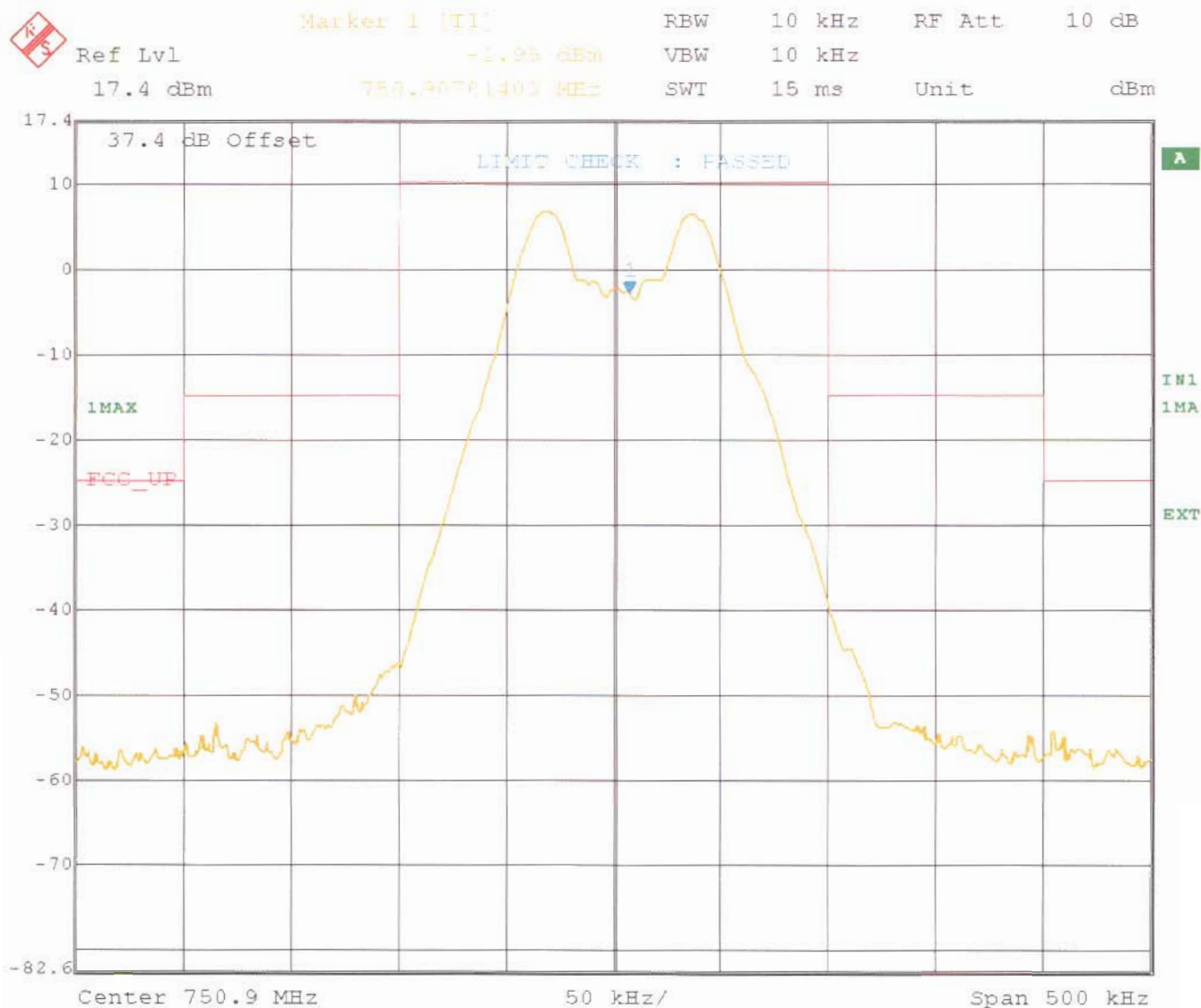
TEST EQUIPMENT USED: NT-207

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



Date: 2.NOV.2005 13:57:13

LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

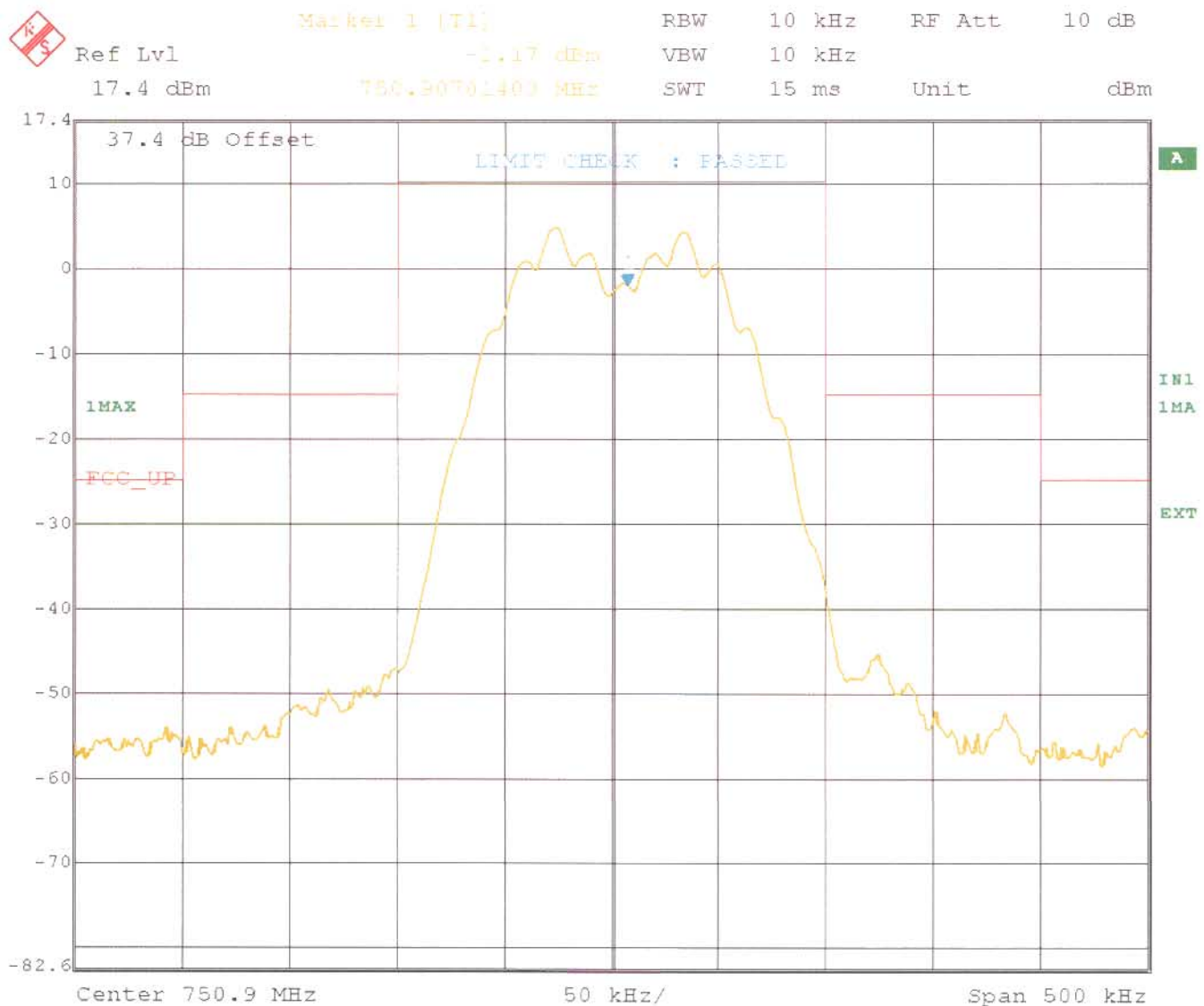
TEST EQUIPMENT USED: NT-207

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 @ 750,9 MHz



Date: 2.NOV.2005 13:58:39

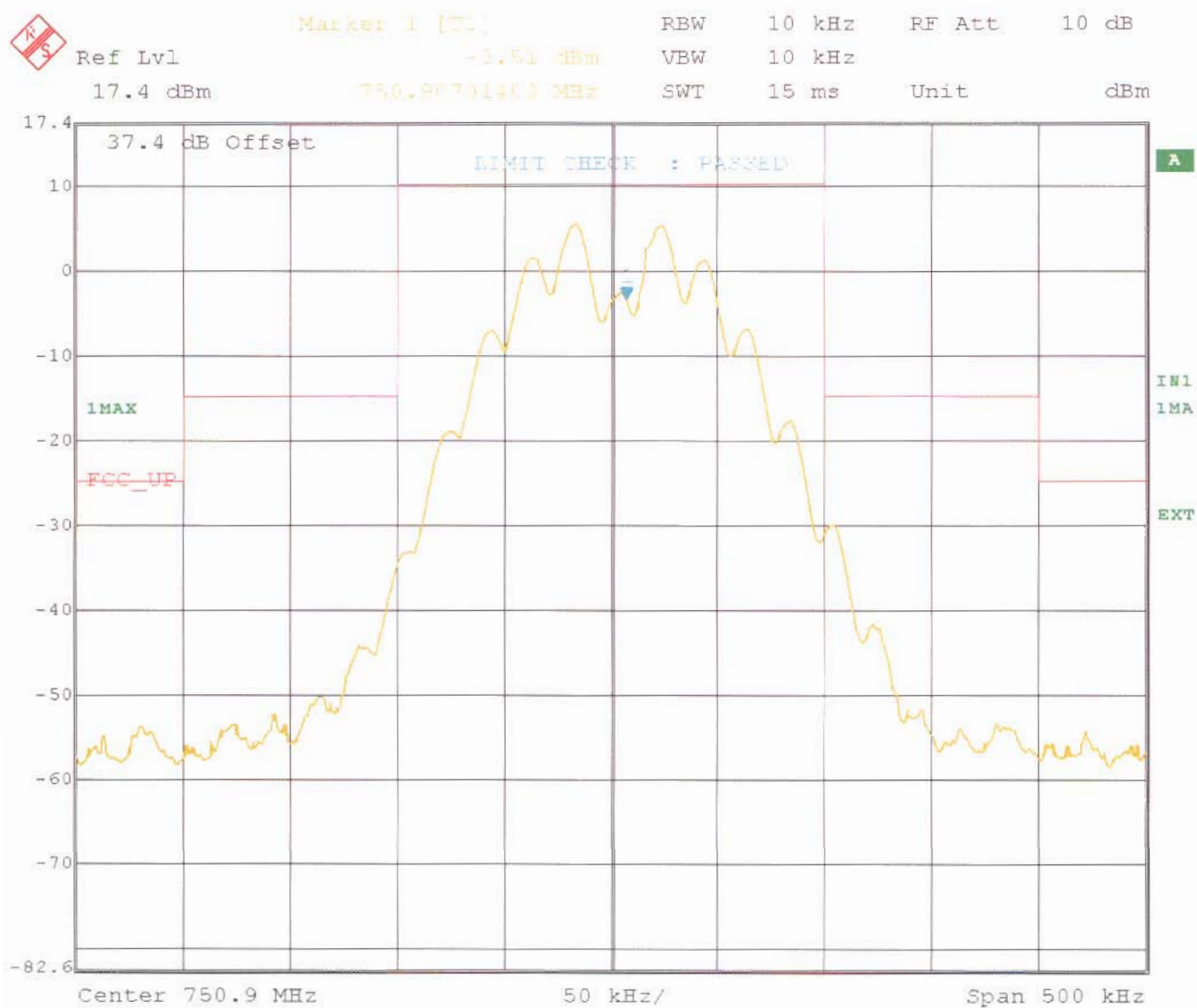
LIMIT SUBCLAUSE 74.261 (e)(5)

The operating bandwidth shall not exceed 200 kHz.

TEST EQUIPMENT USED: NT-207

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



Date: 2.NOV.2005 14:00:32

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

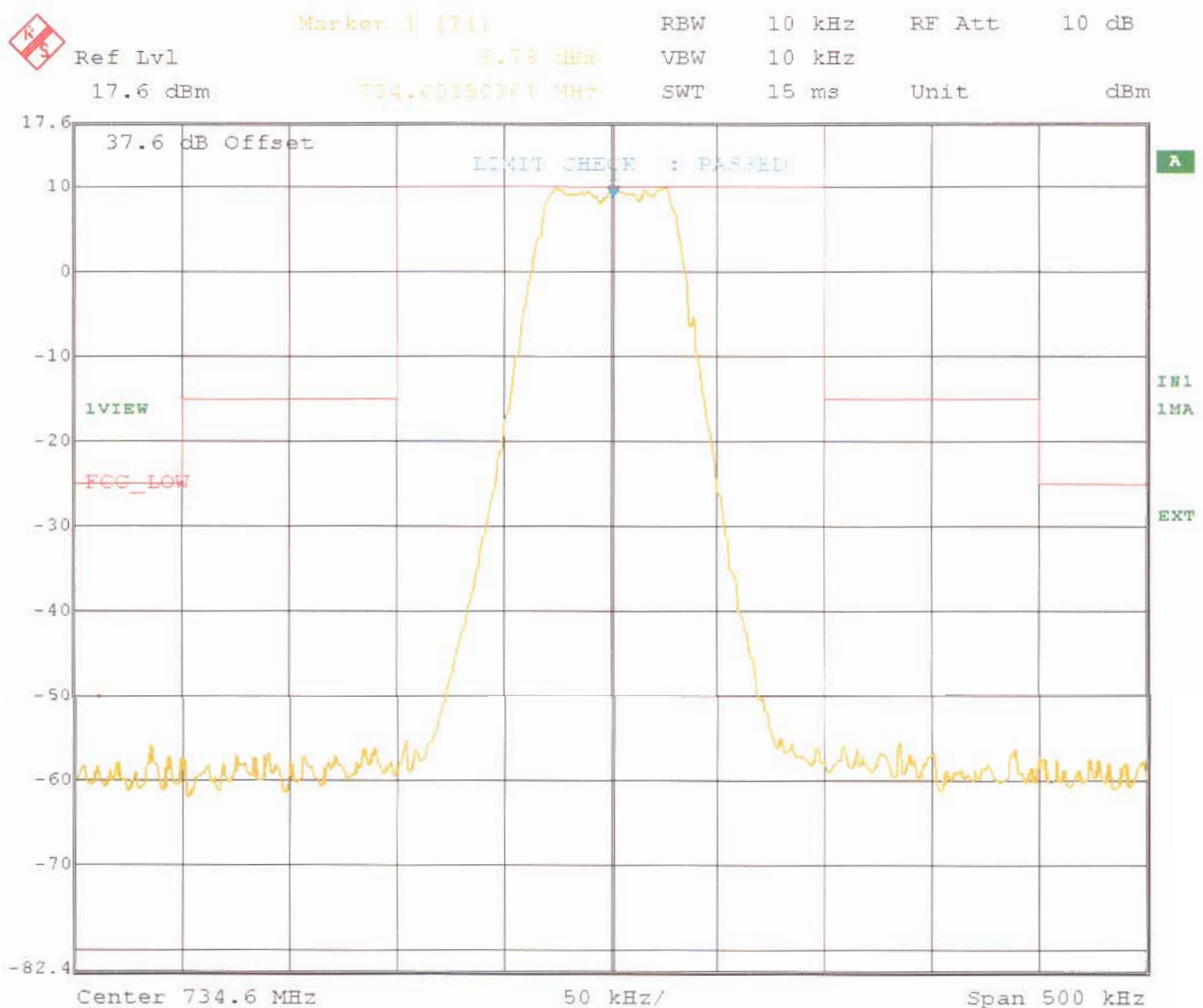
§ 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

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

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:27:24

Test Equipment used: NT-207

Emissions Mask

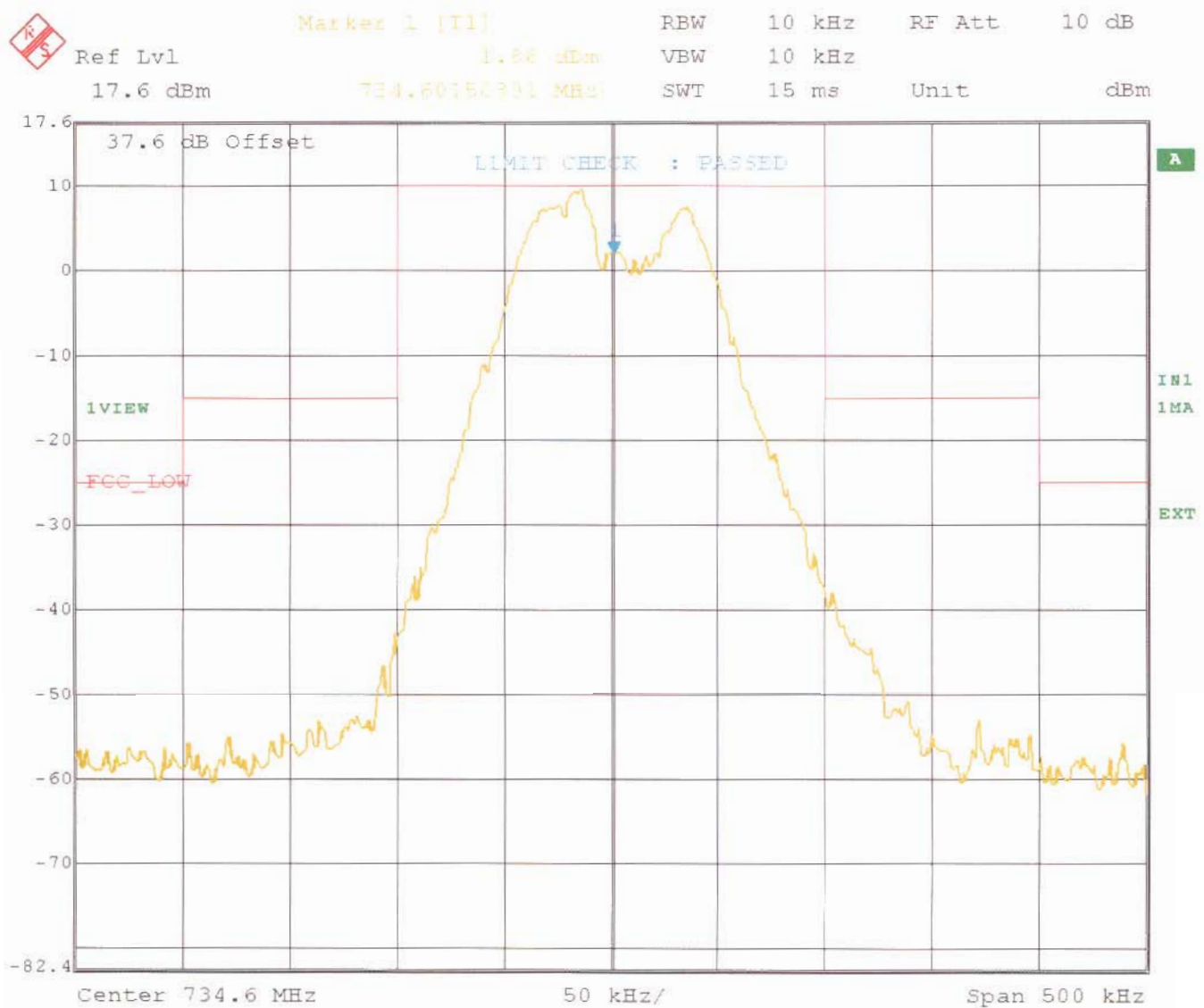
§ 74.261 (e)(6)

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

Emissions Mask

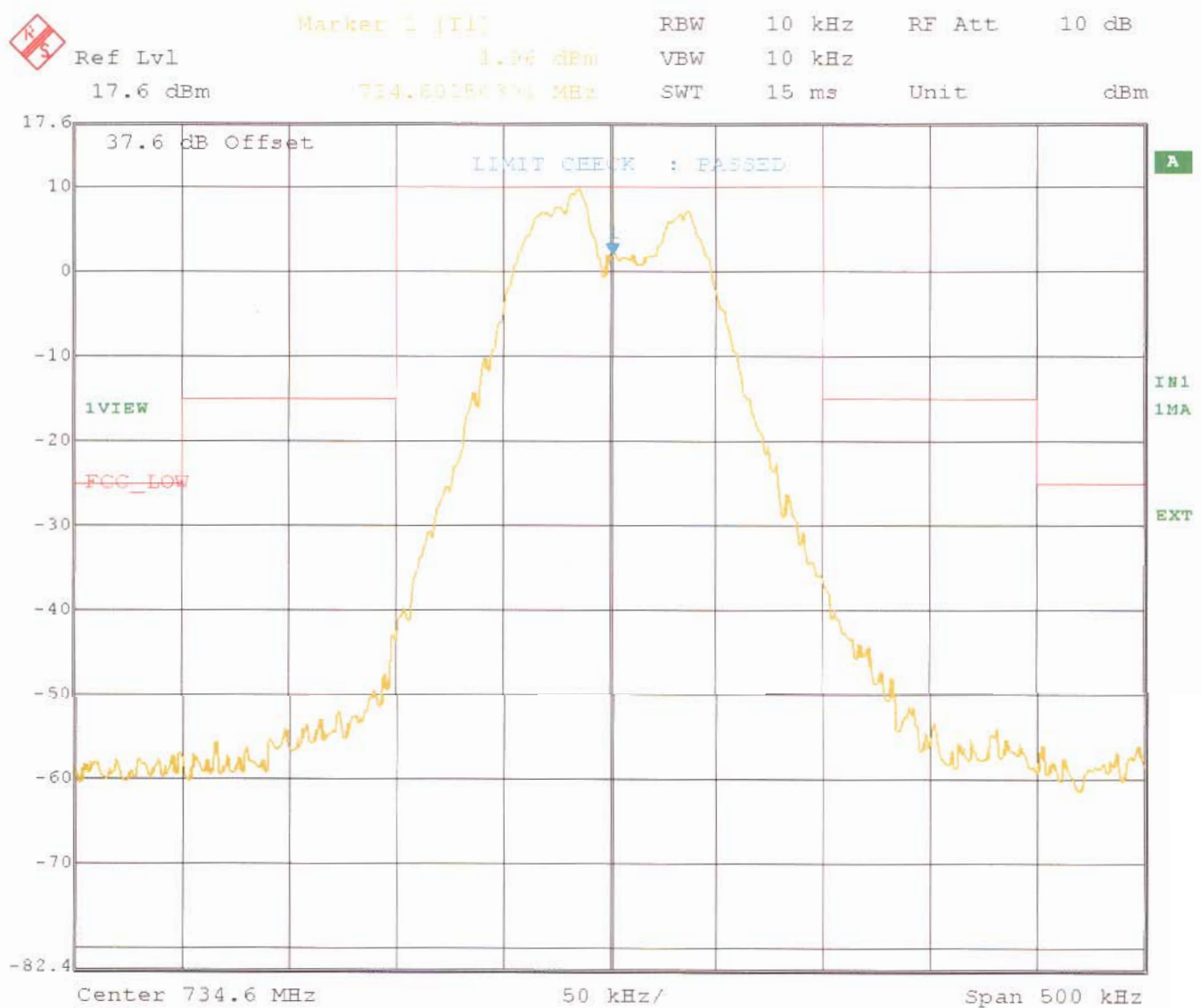
§ 74.261 (e)(6)

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

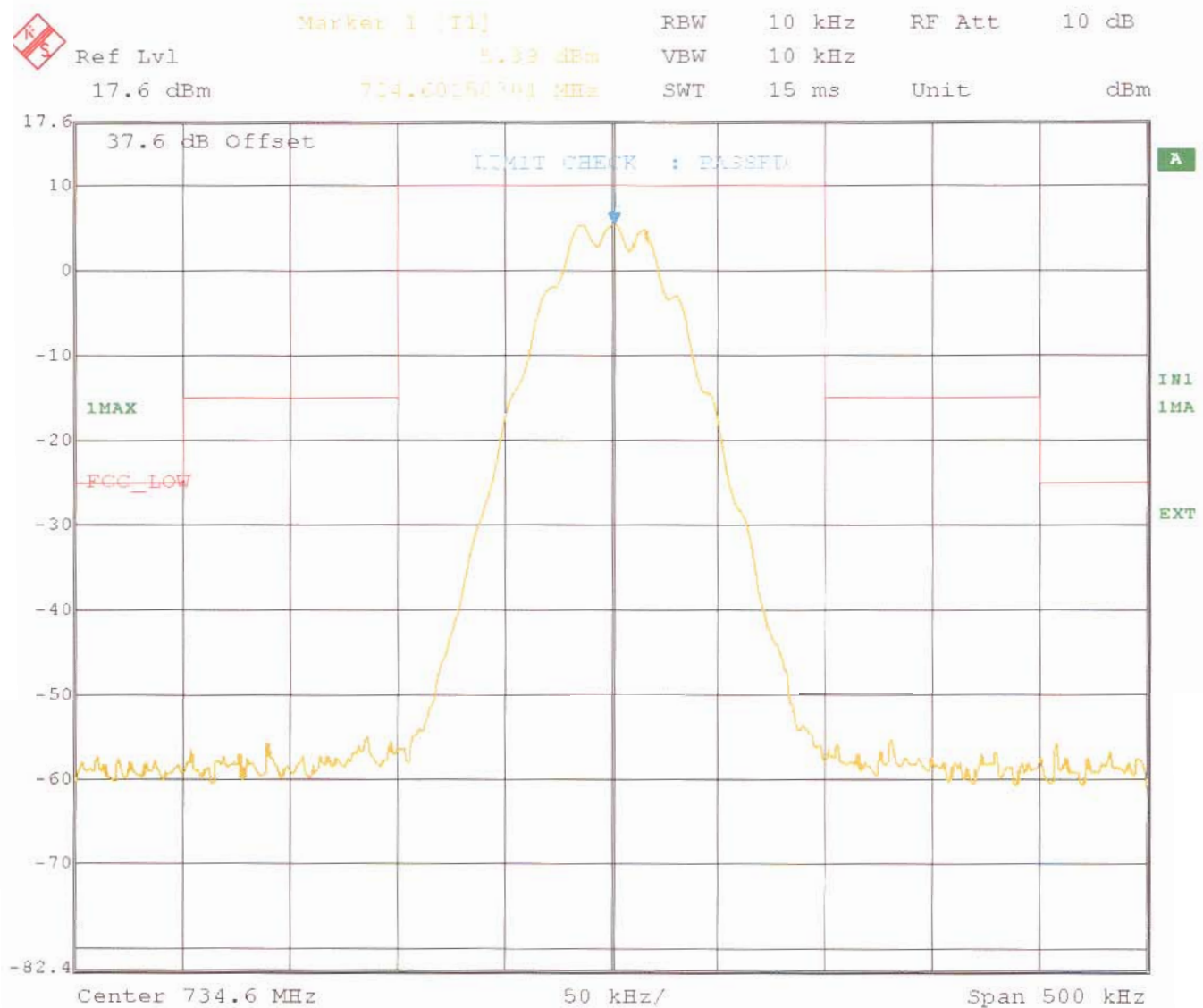
§ 74.261 (e)(6)

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



Date: 2.NOV.2005 14:32:42

Test Equipment used: NT-207

Emissions Mask

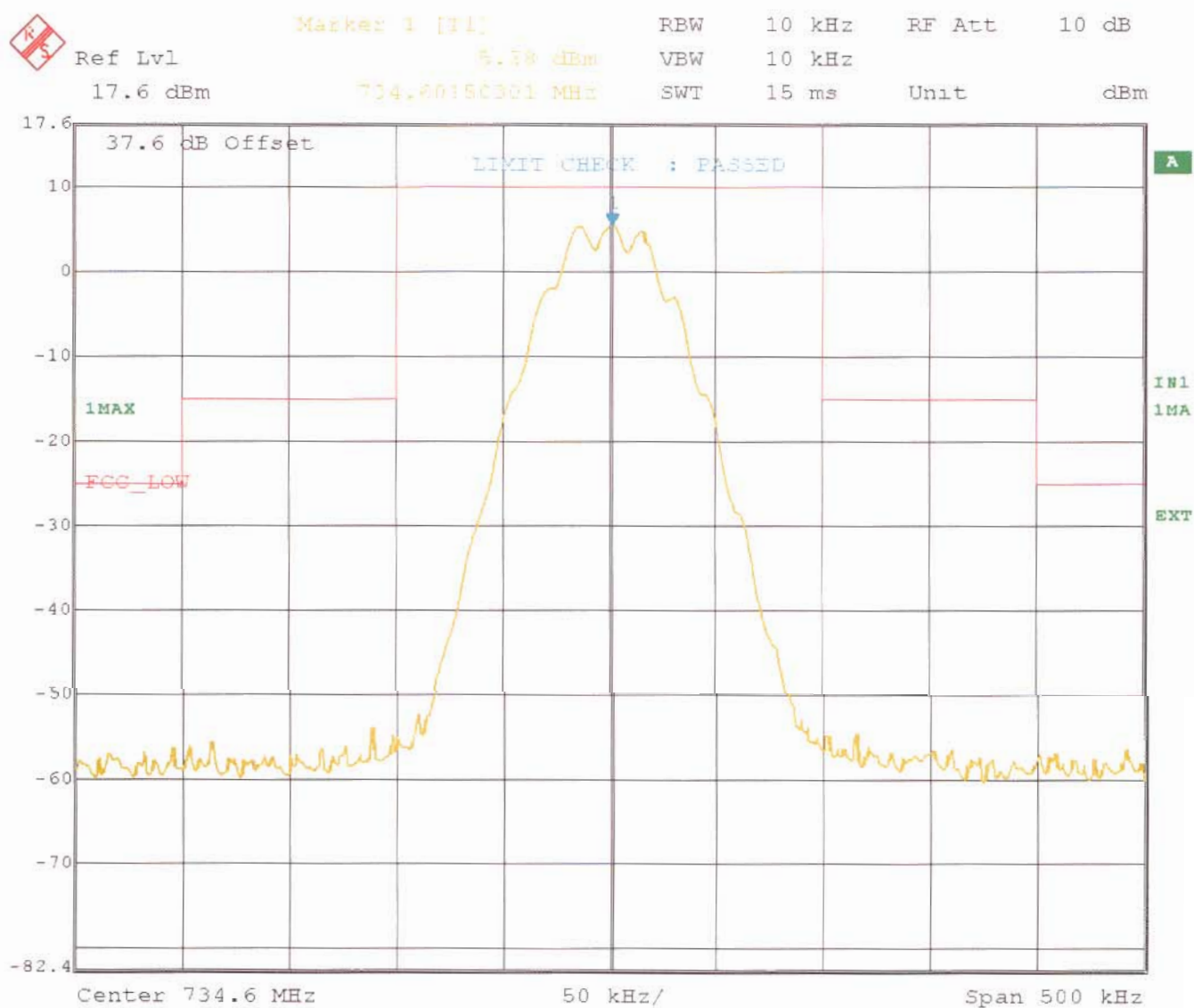
§ 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

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

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:32:18

Test Equipment used: NT-207

Emissions Mask

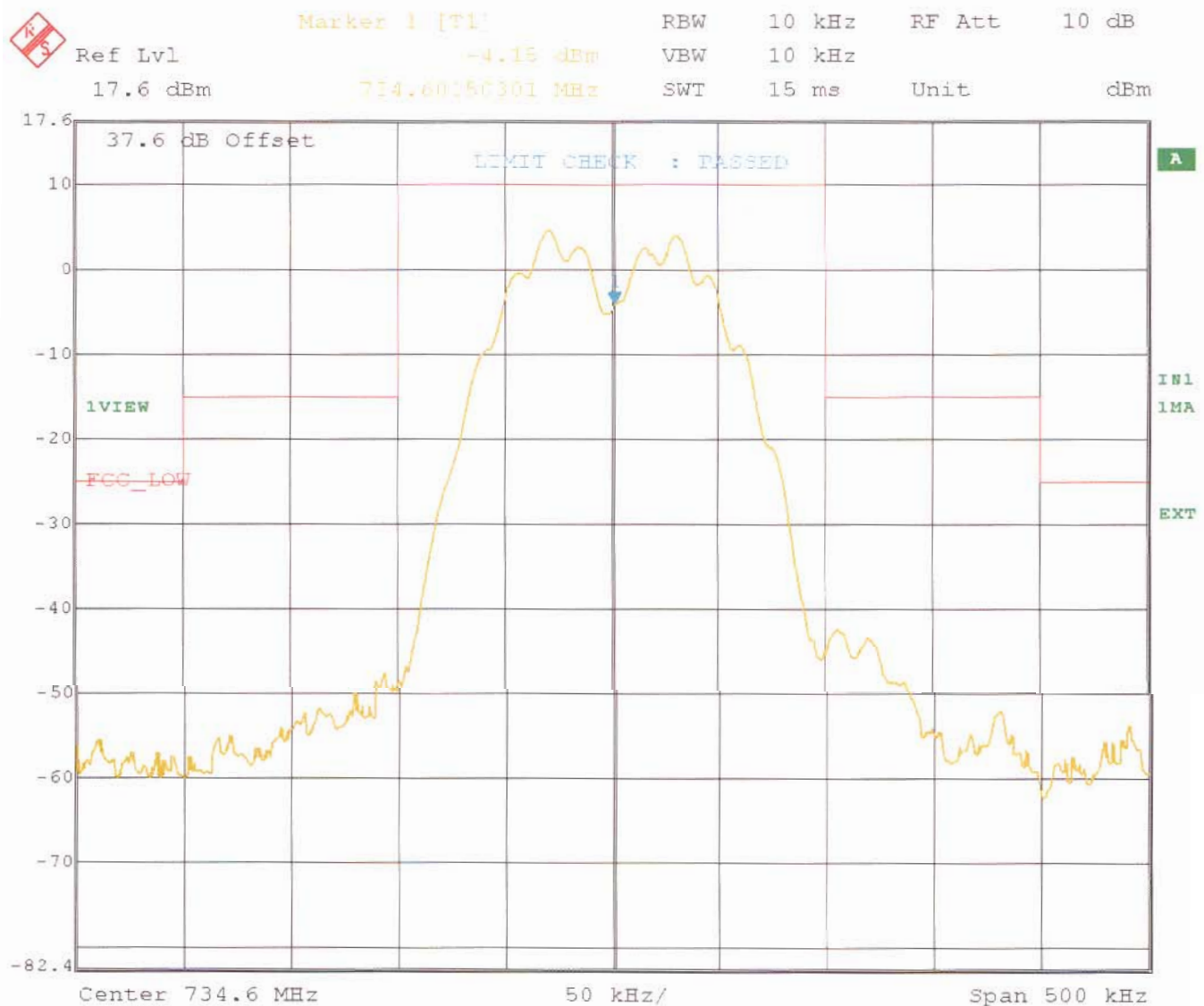
§ 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

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

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:33:50

Test Equipment used: NT-207

Emissions Mask

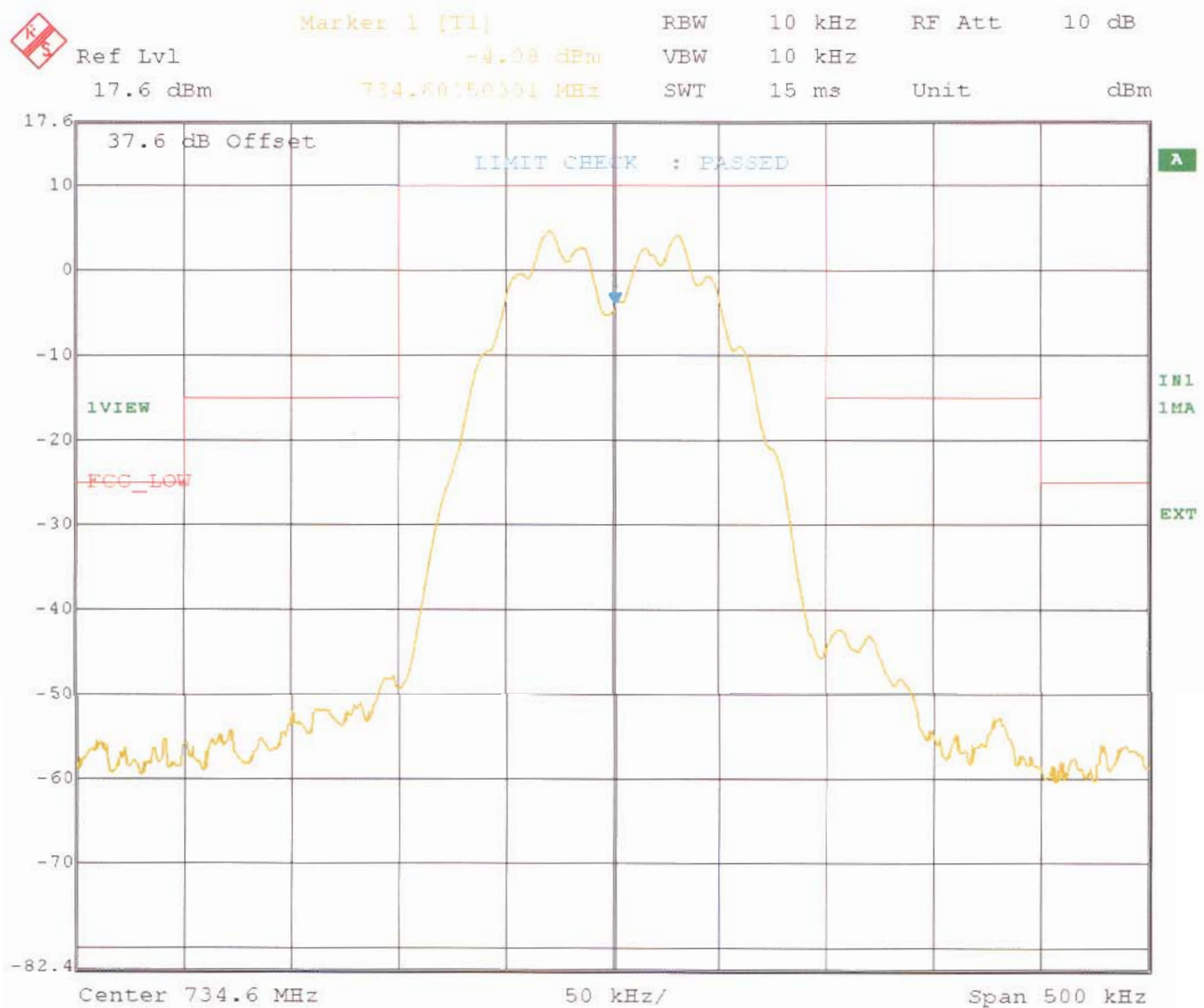
§ 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

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

DC Voltage: 1,15 V



Date: 2.NOV.2005 14:33:11

Test Equipment used: NT-207

Emissions Mask

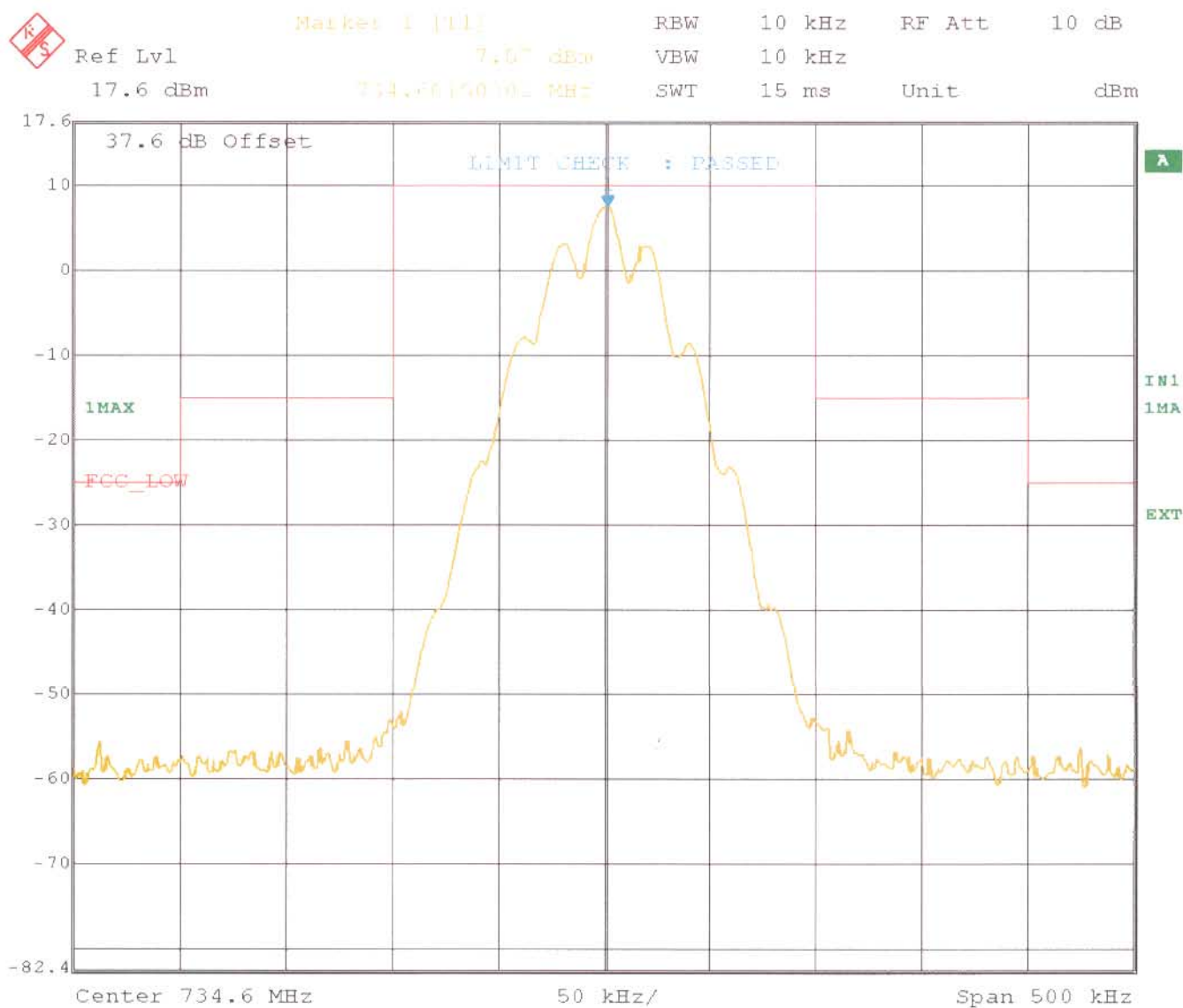
§ 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

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

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:35:53

Test Equipment used: NT-207

Emissions Mask

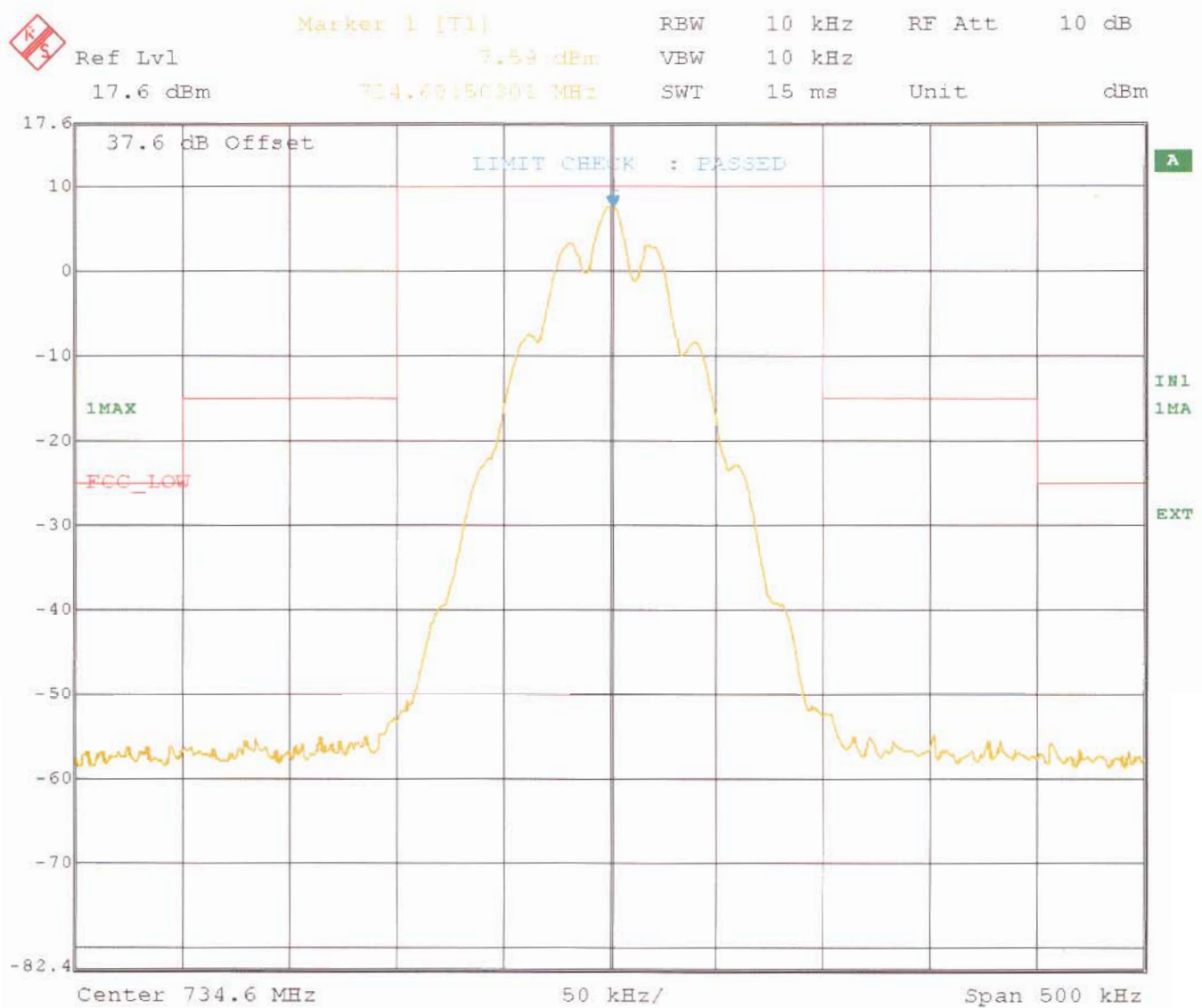
§ 74.261 (e)(6)

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



Date: 2.NOV.2005 14:35:20

Test Equipment used: NT-207

Emissions Mask

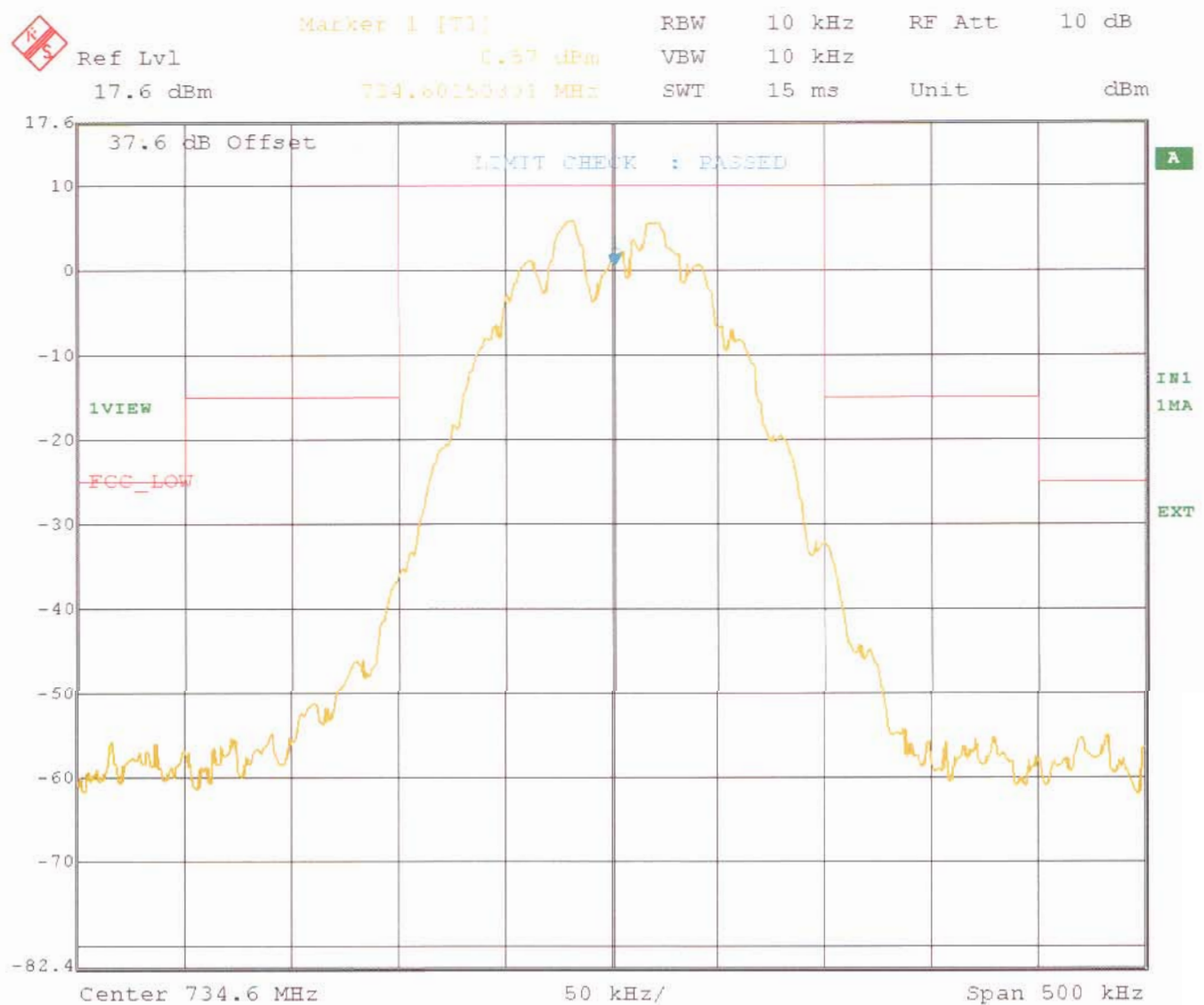
§ 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

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

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:37:42

Test Equipment used: NT-207

Emissions Mask

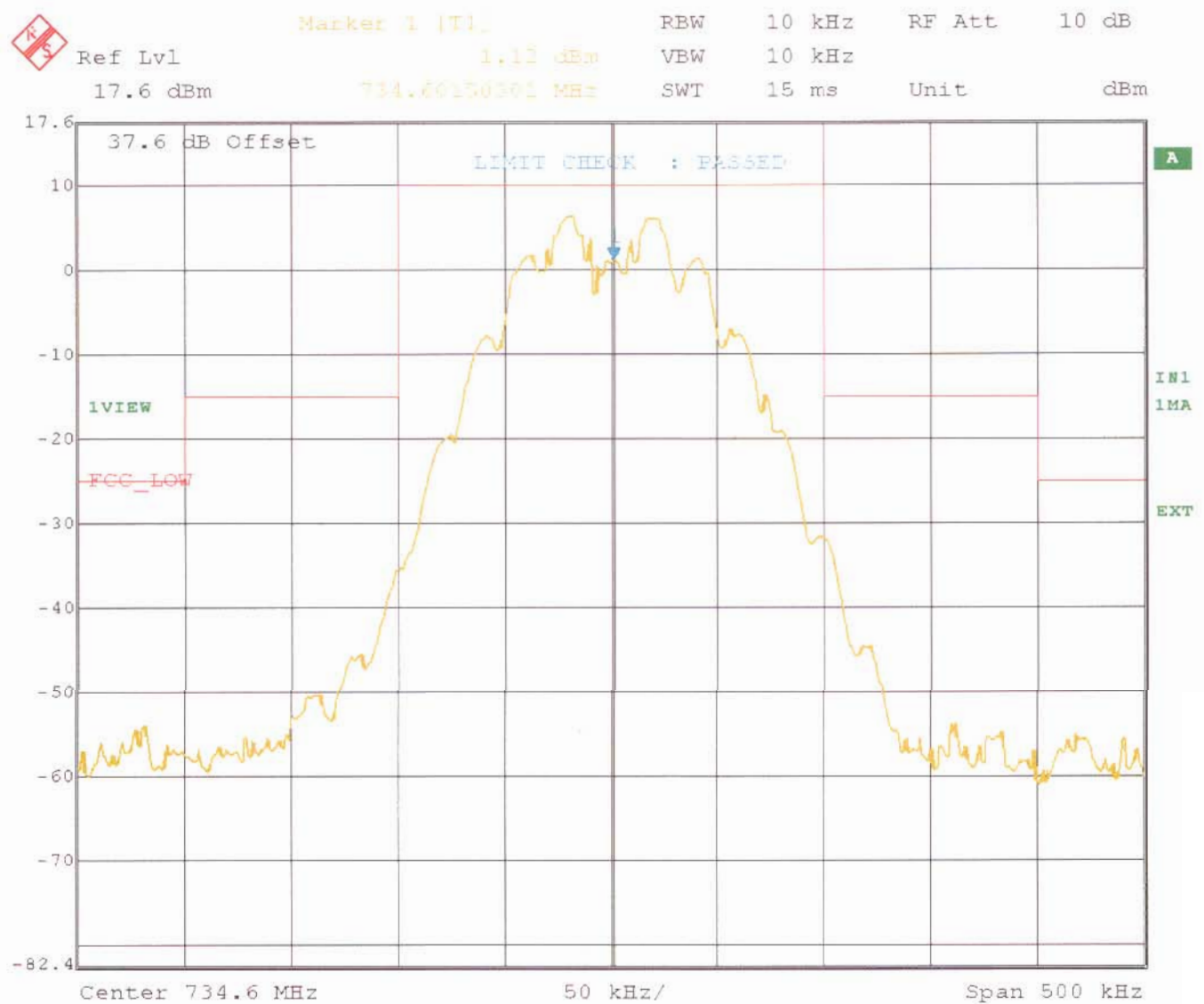
§ 74.261 (e)(6)

Operating mode:

Frequency: 734,6 MHz

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

DC Voltage: 1,15 V



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

Test Equipment used: NT-207

Emissions Mask

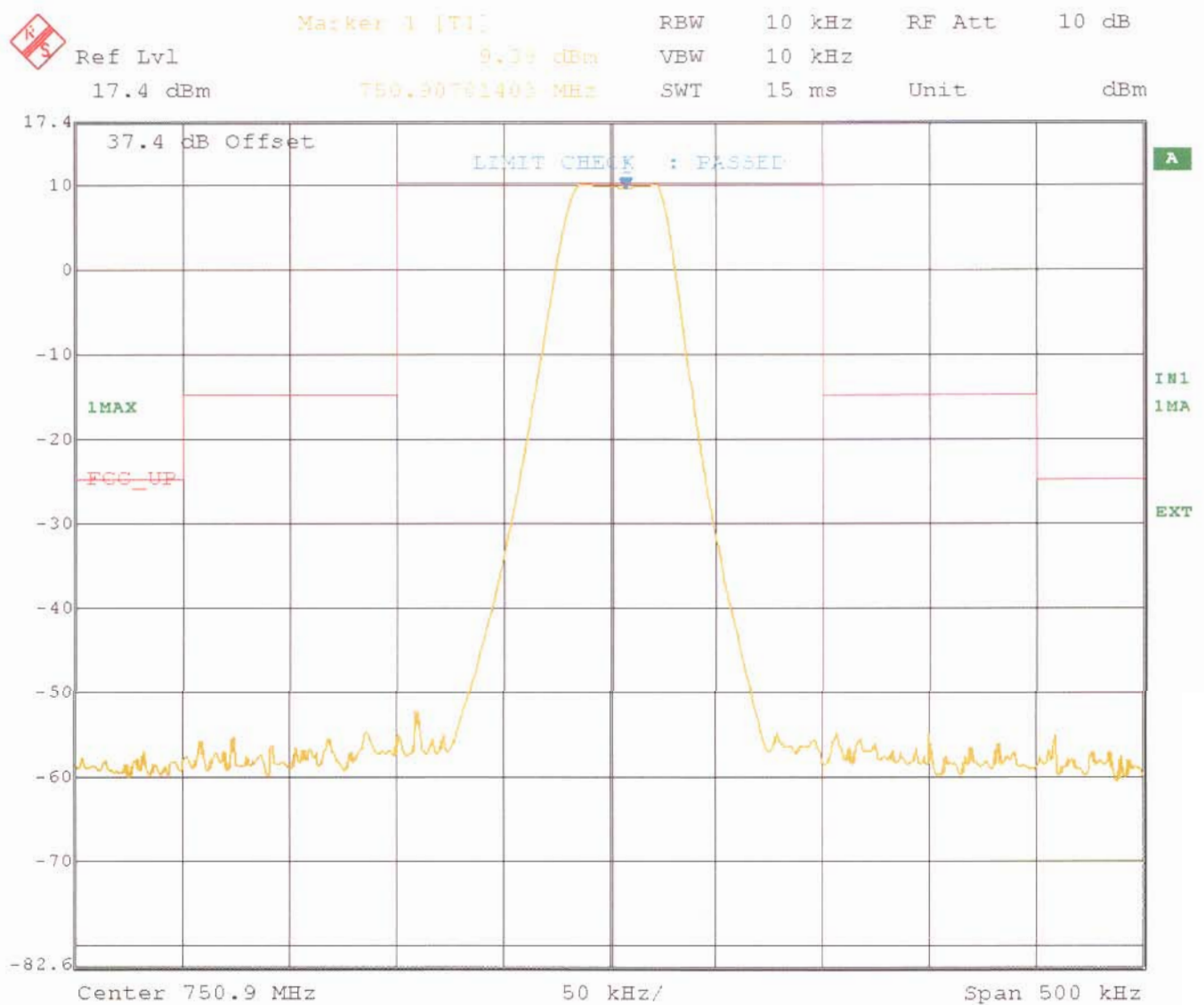
§ 74.261 (e)(6)

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

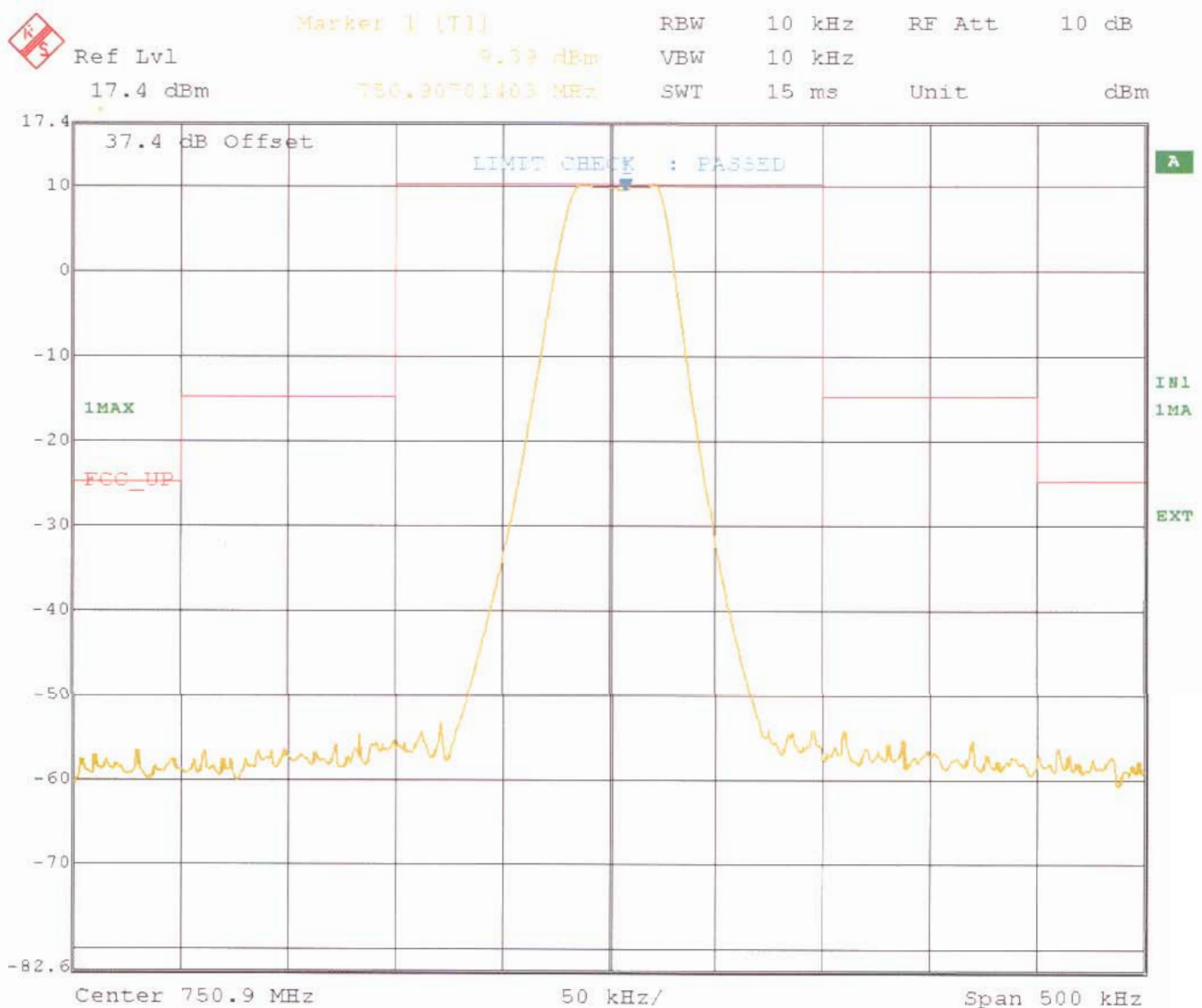
§ 74.261 (e)(6)

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



Date: 2.NOV.2005 14:12:58

Test Equipment used: NT-207

Emissions Mask

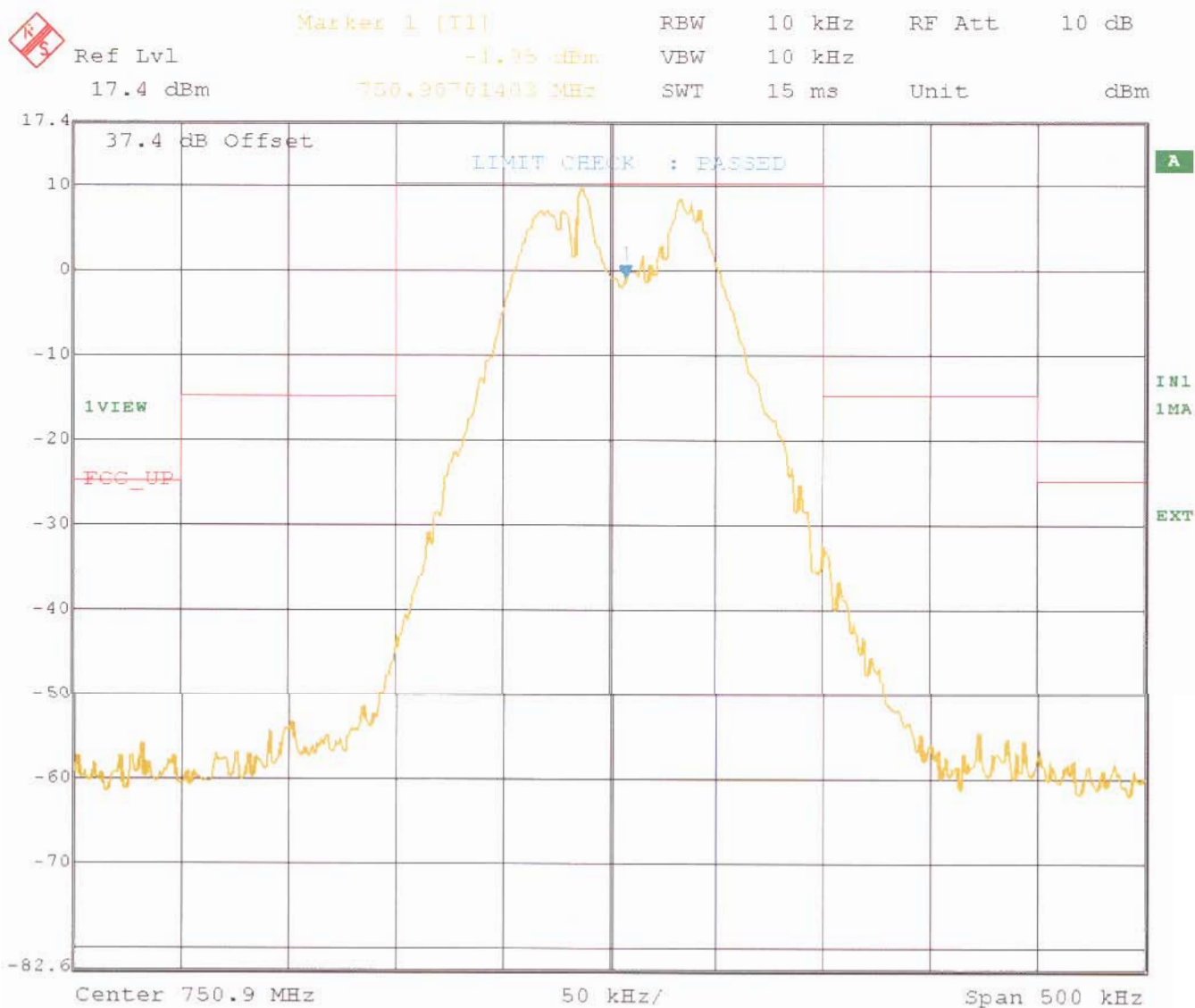
§ 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

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

DC Voltage: 1,5 V



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

Test Equipment used: NT-207

Emissions Mask

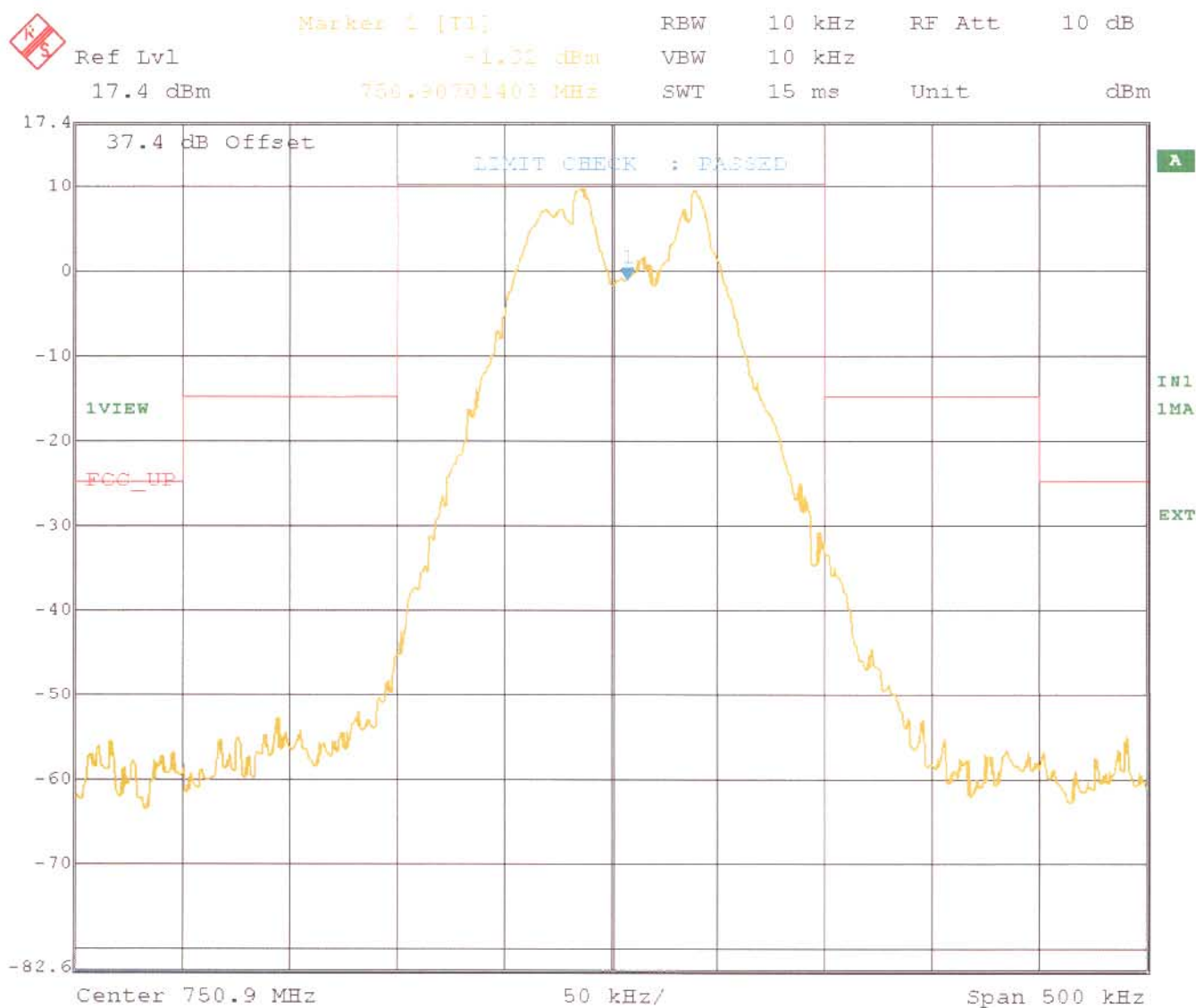
§ 74.261 (e)(6)

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

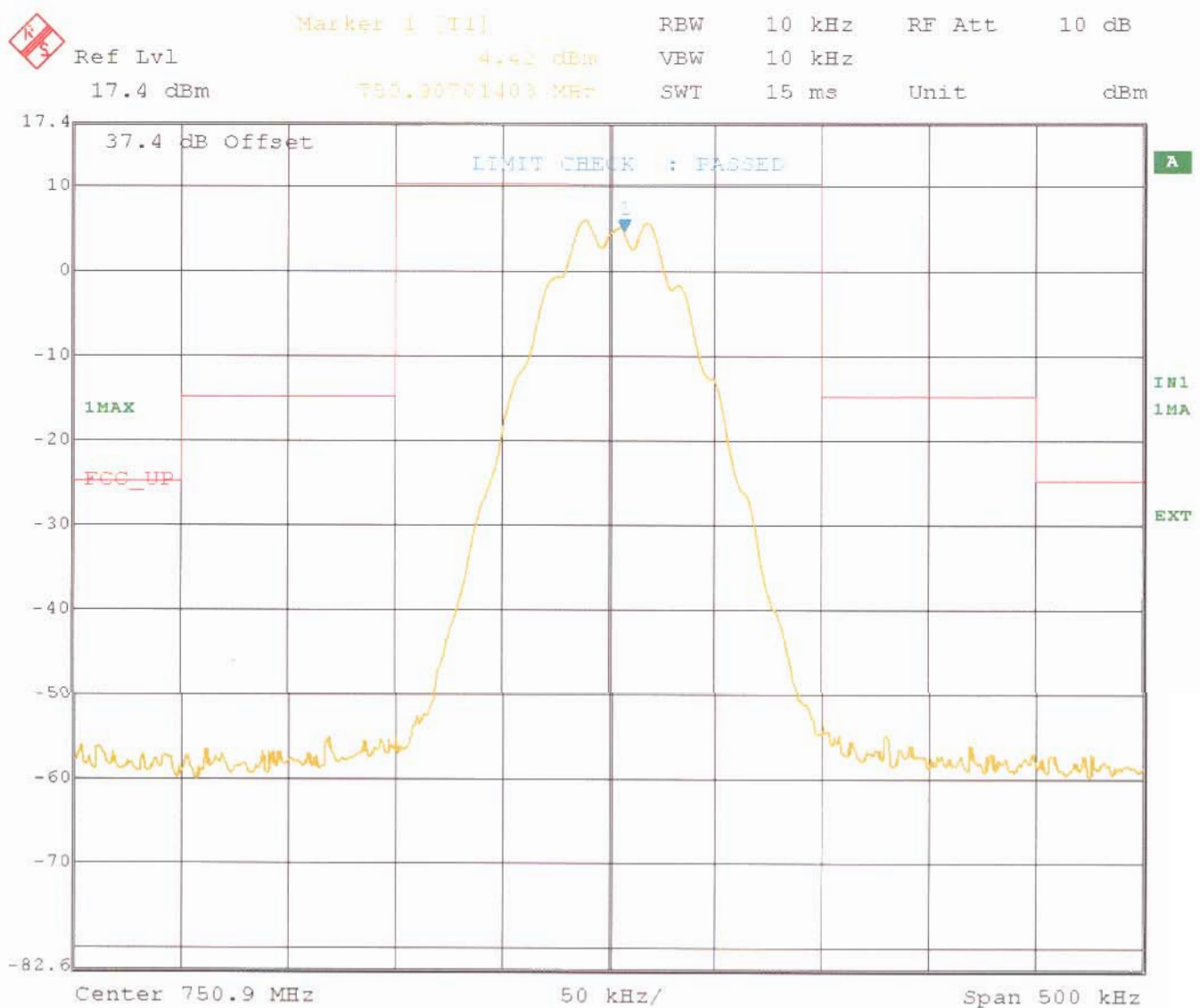
§ 74.261 (e)(6)

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

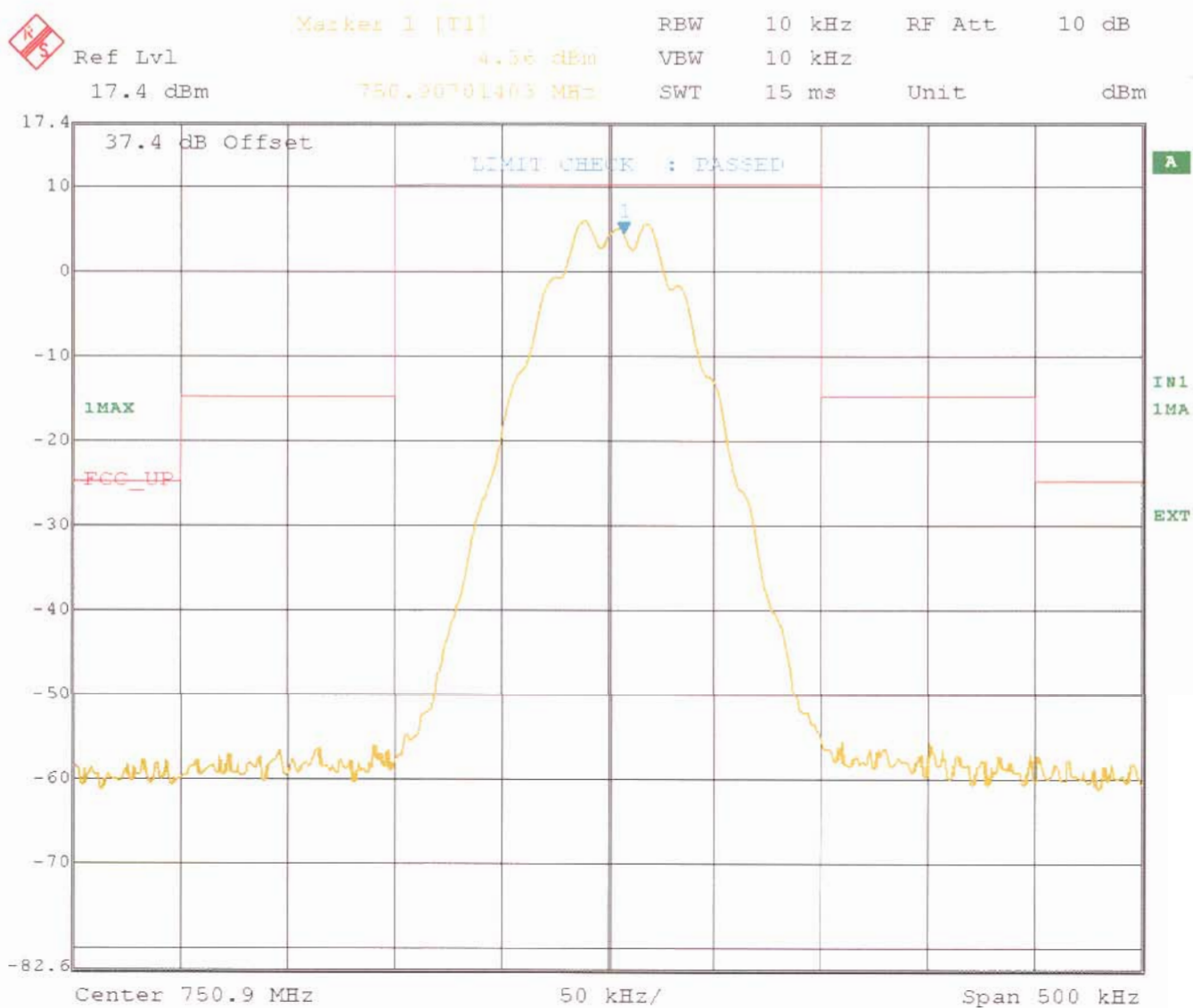
§ 74.261 (e)(6)

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



Date: 2.NOV.2005 14:10:00

Test Equipment used: NT-207

Ambient temperature: 21°C

Relative humidity: 57%

Emissions Mask

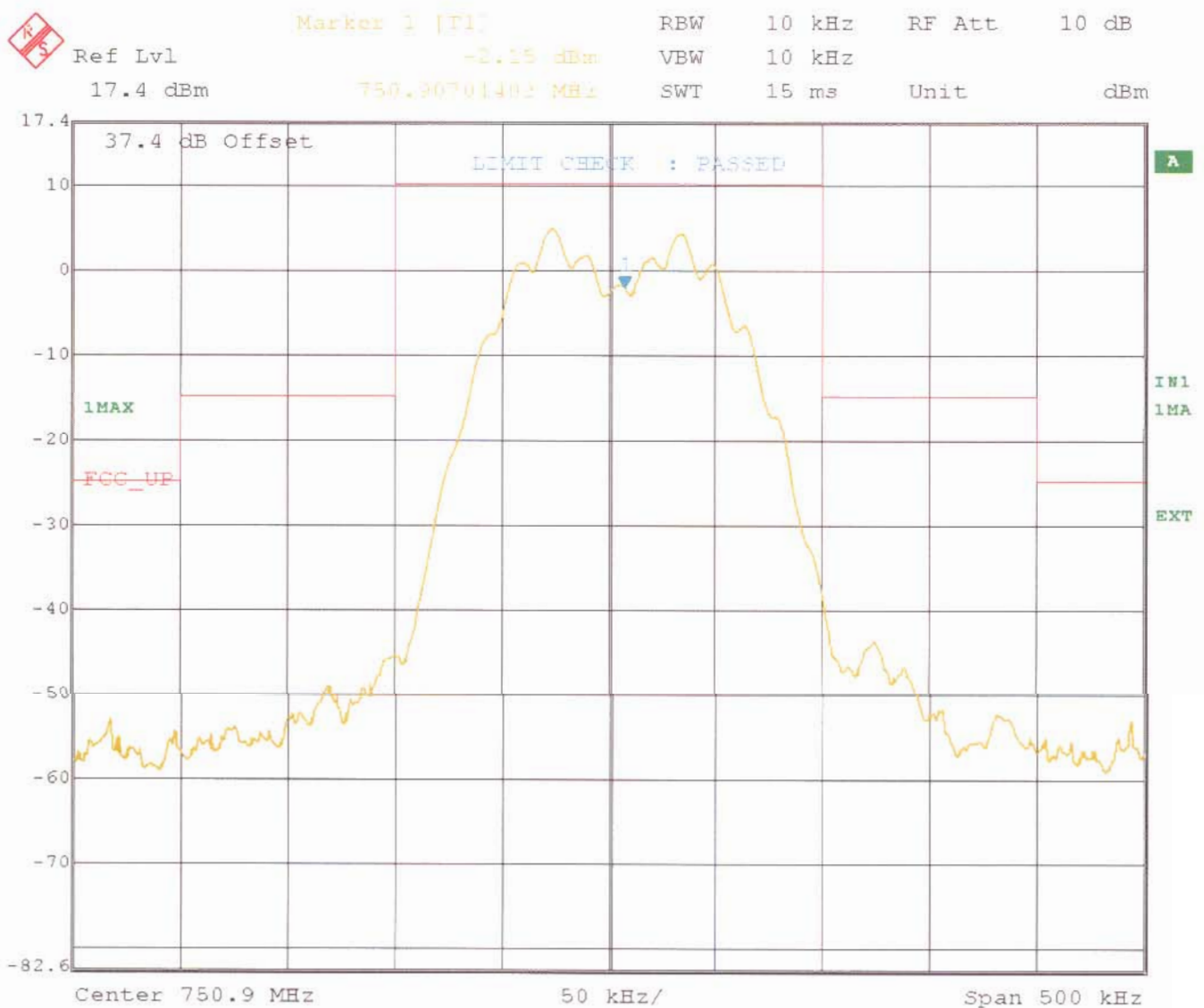
§ 74.261 (e)(6)

Operating mode:

Frequency: 750,9 MHz

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

DC Voltage: 1,5 V



Date: 2.NOV.2005 14:10:38

Test Equipment used: NT-207

Emissions Mask

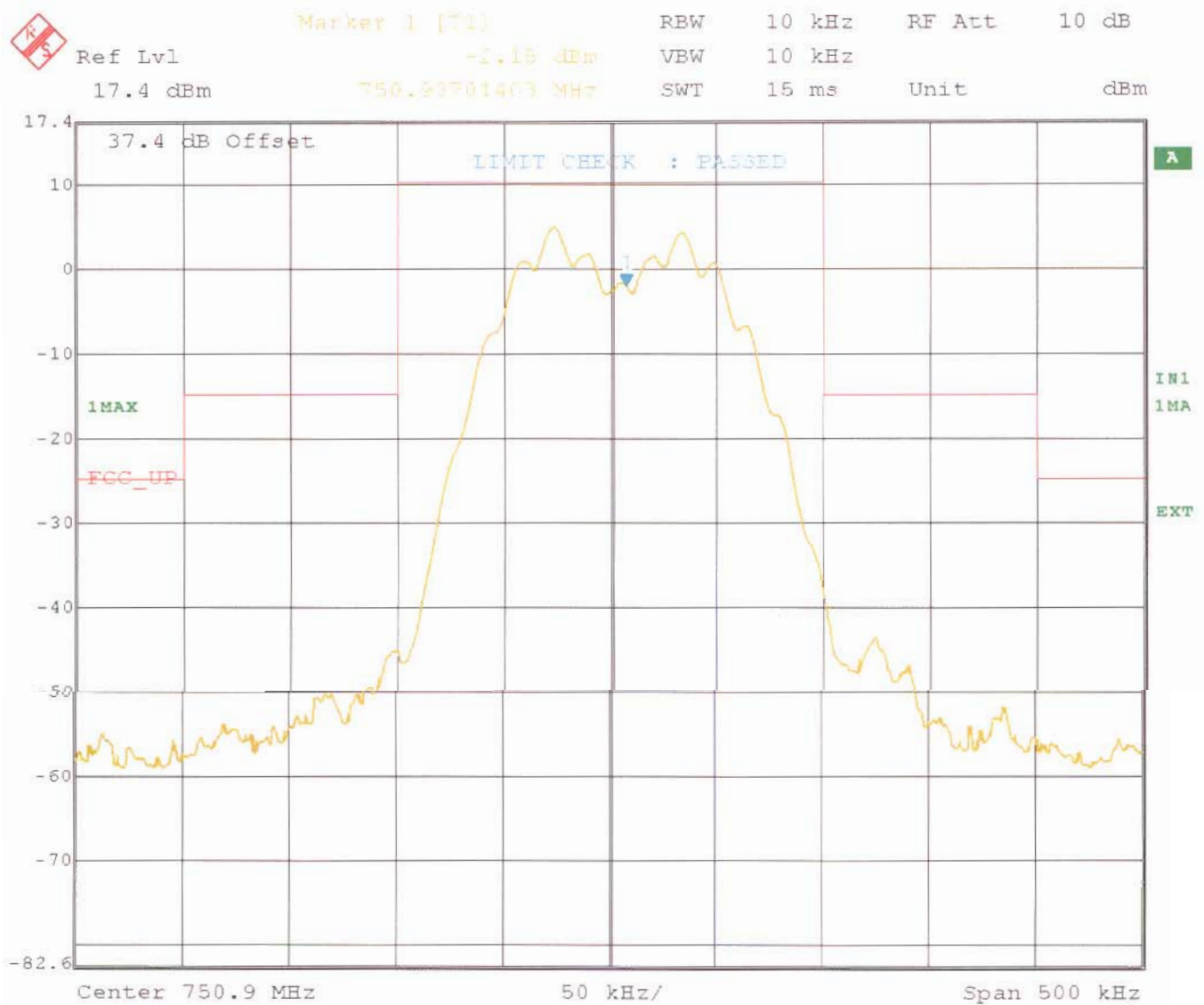
§ 74.261 (e)(6)

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

Emissions Mask

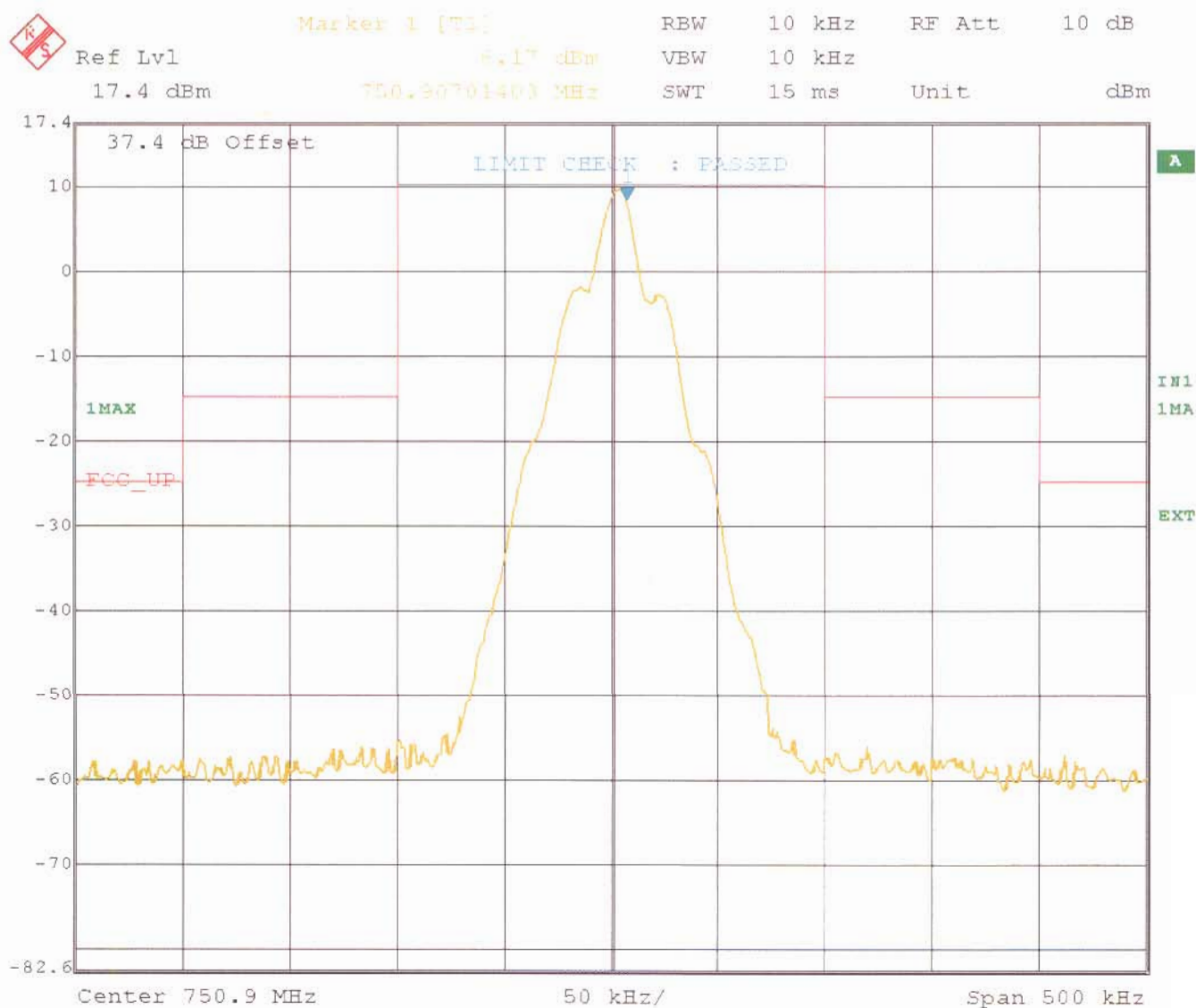
§ 74.261 (e)(6)

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

Ambient temperature: 21°C

Relative humidity: 57%

Emissions Mask

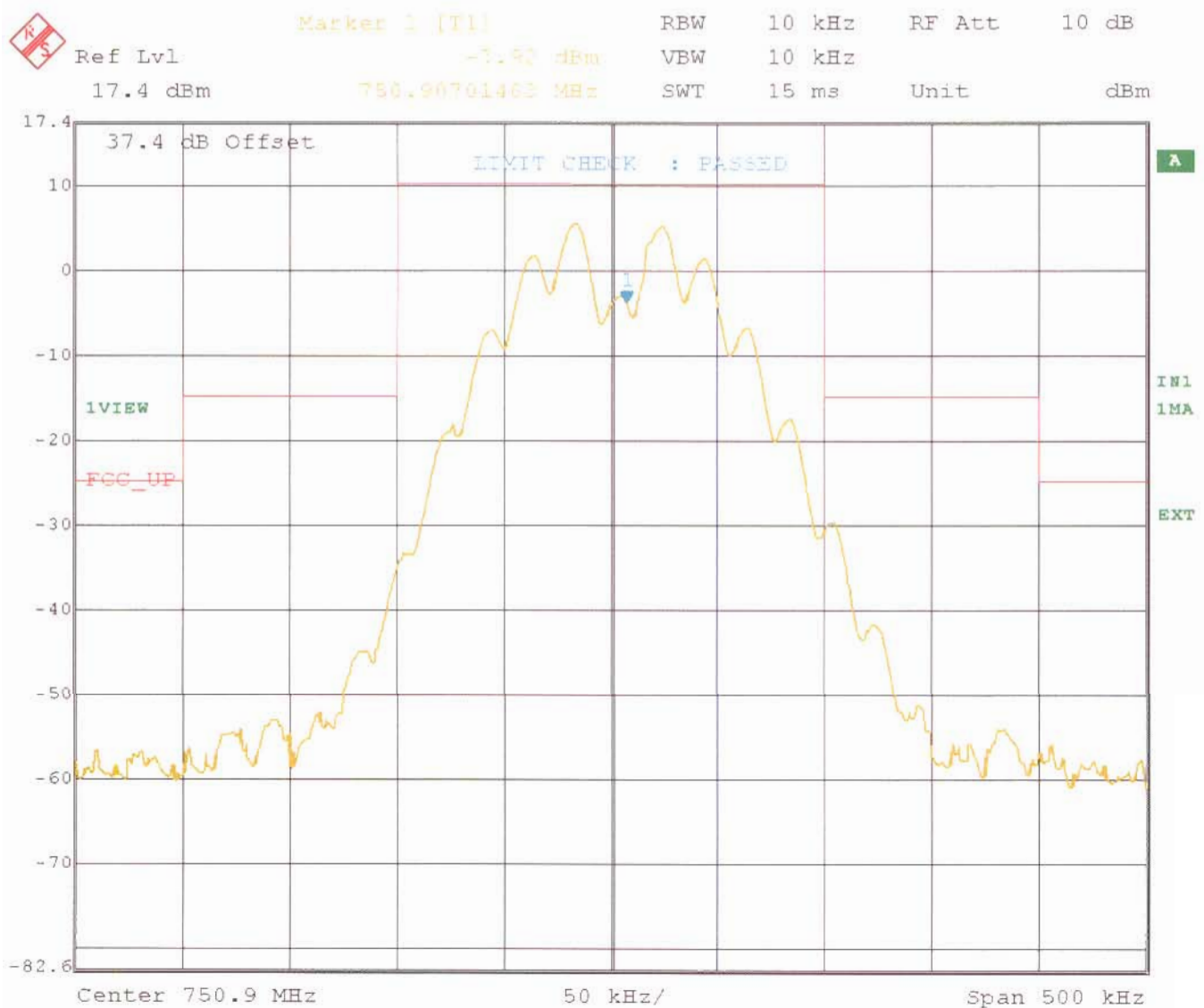
§ 74.261 (e)(6)

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

Emissions Mask

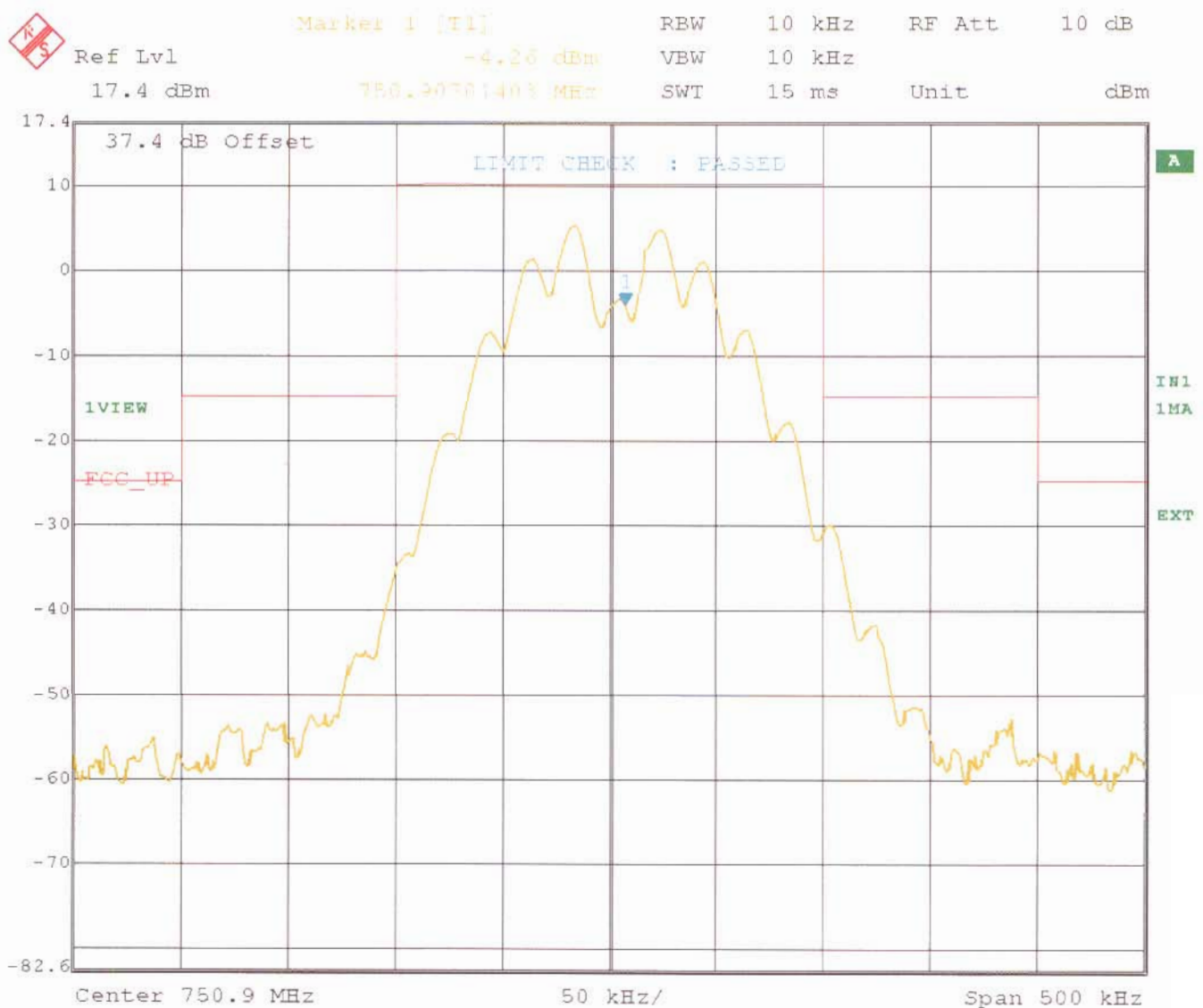
§ 74.261 (e)(6)

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

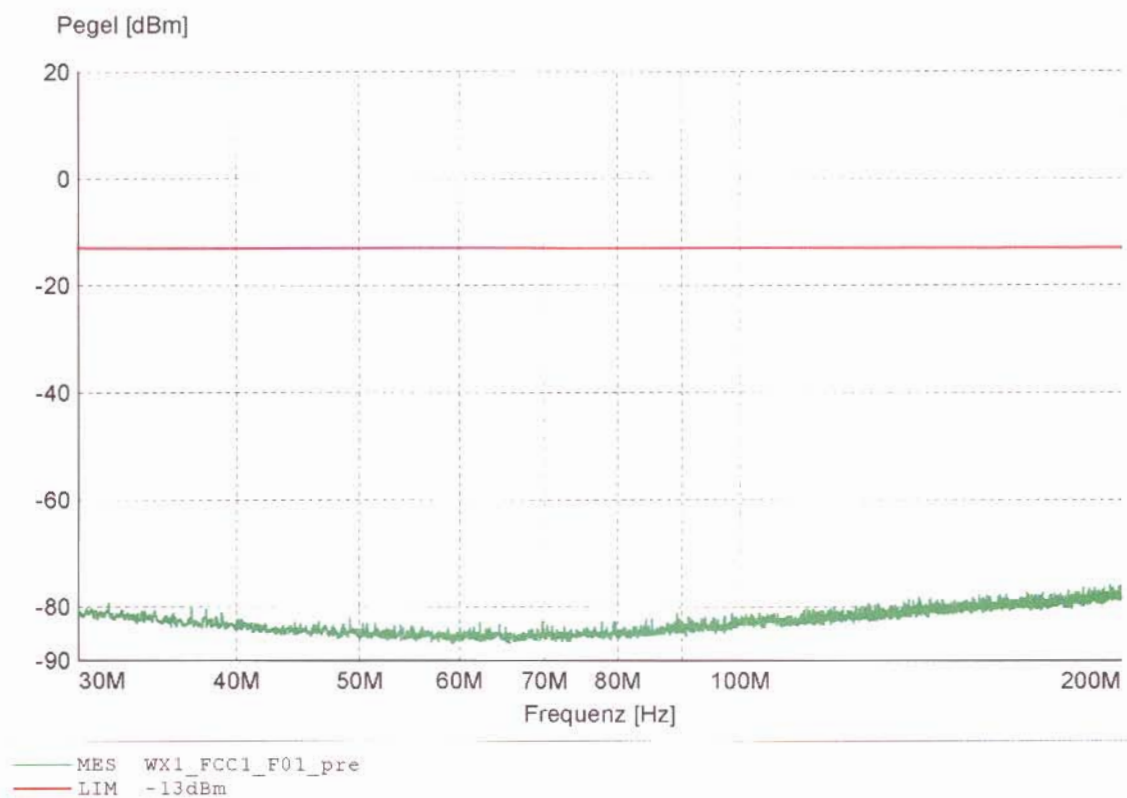
Field strength of spurious emissions of the transmitter

§ 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

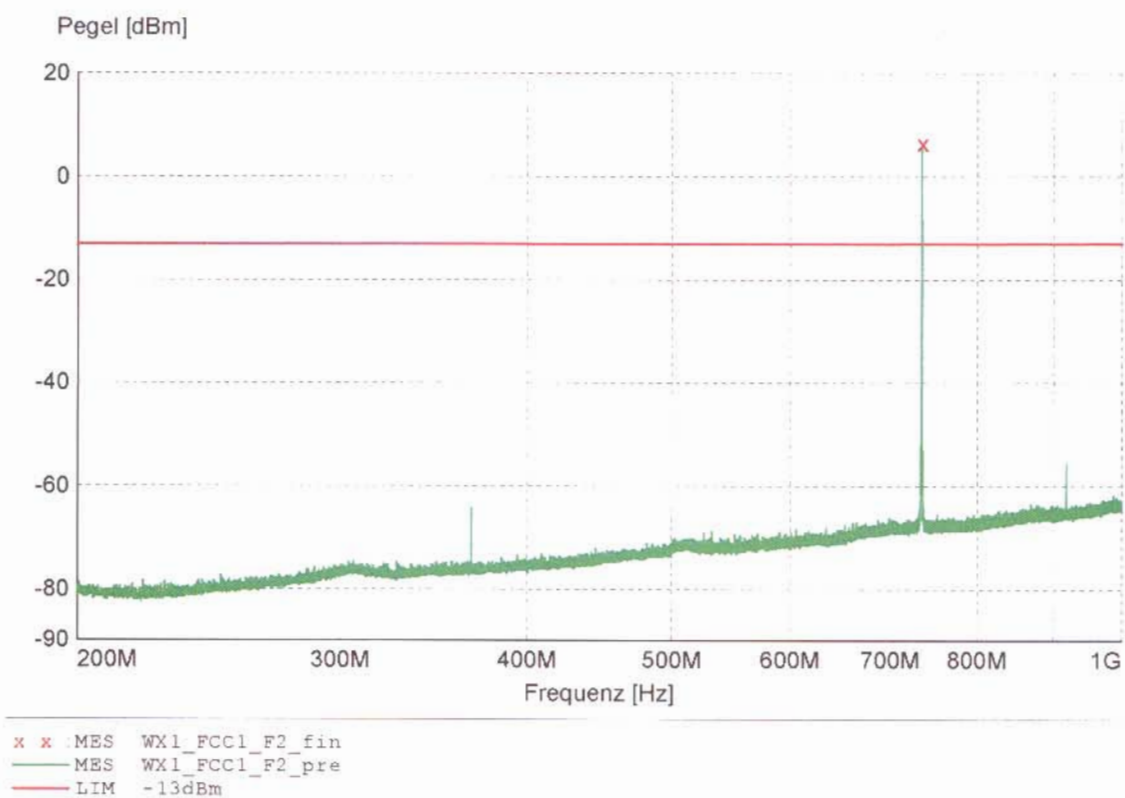
Field strength of spurious emissions of the transmitter

§ 74.261 (e)(6)(iii)

Operating mode:

Frequency: 734,6 MHz

Modulation: unmodulated carrier



Seite 1 06.12.2005 14:44

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

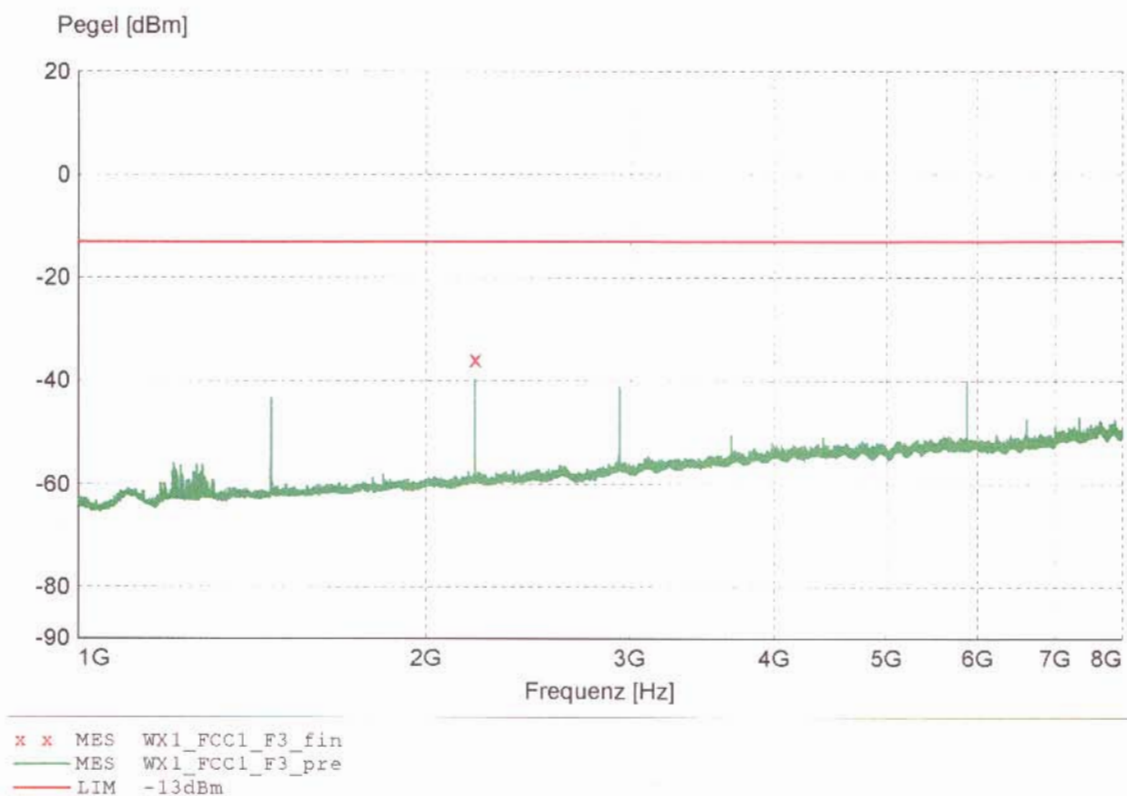
Field strength of spurious emissions of the transmitter

§ 74.261 (e)(6)(iii)

Operating mode:

Frequency: 734,6 MHz

Modulation: unmodulated carrier



Seite 1 06.12.2005 14:47

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

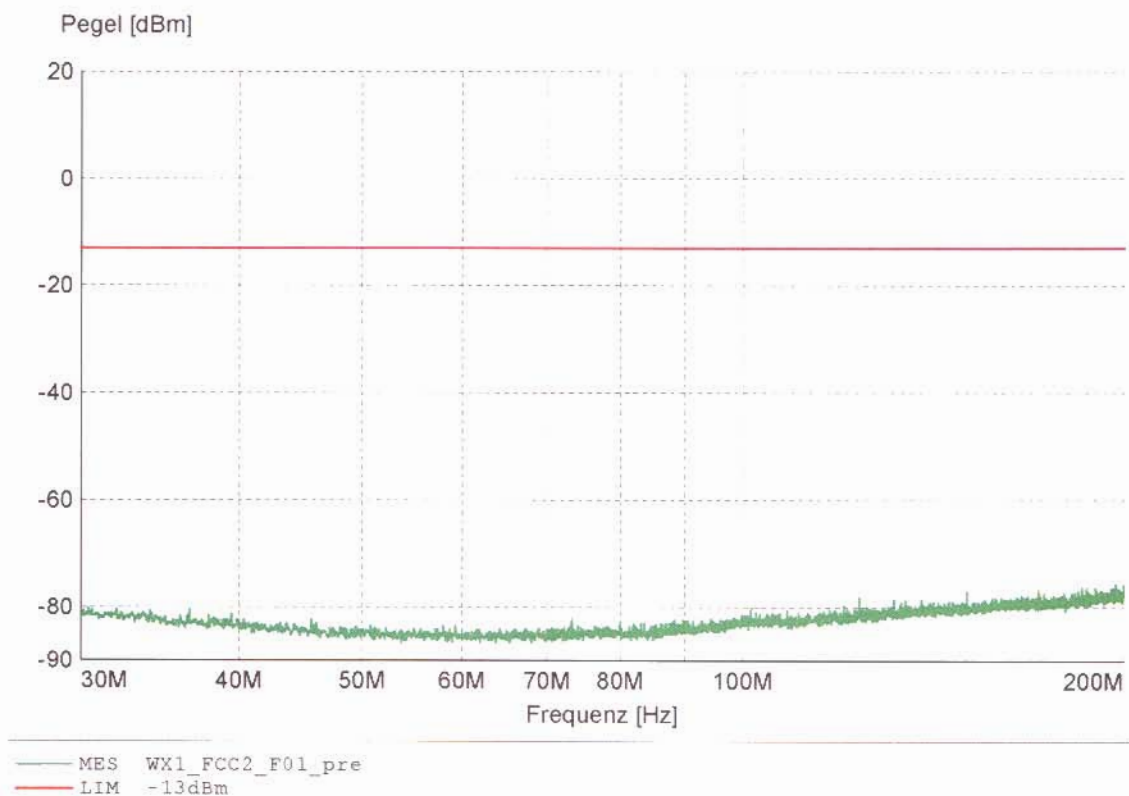
Field strength of spurious emissions of the transmitter

§ 74.261 (e)(6)(iii)

Operating mode:

Frequency: 750,9 MHz

Modulation: unmodulated carrier



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

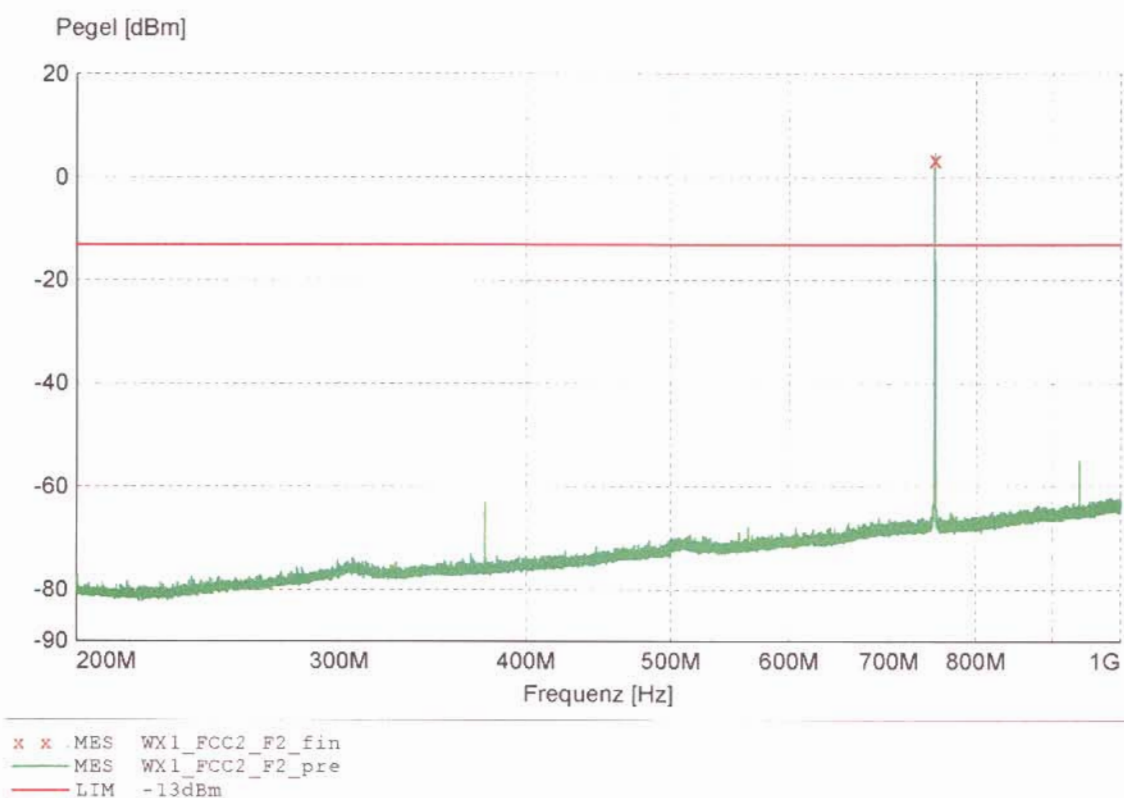
Field strength of spurious emissions of the transmitter

§ 74.261 (e)(6)(iii)

Operating mode:

Frequency: 750,9 MHz

Modulation: unmodulated carrier



Seite 1 06.12.2005 14:45

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

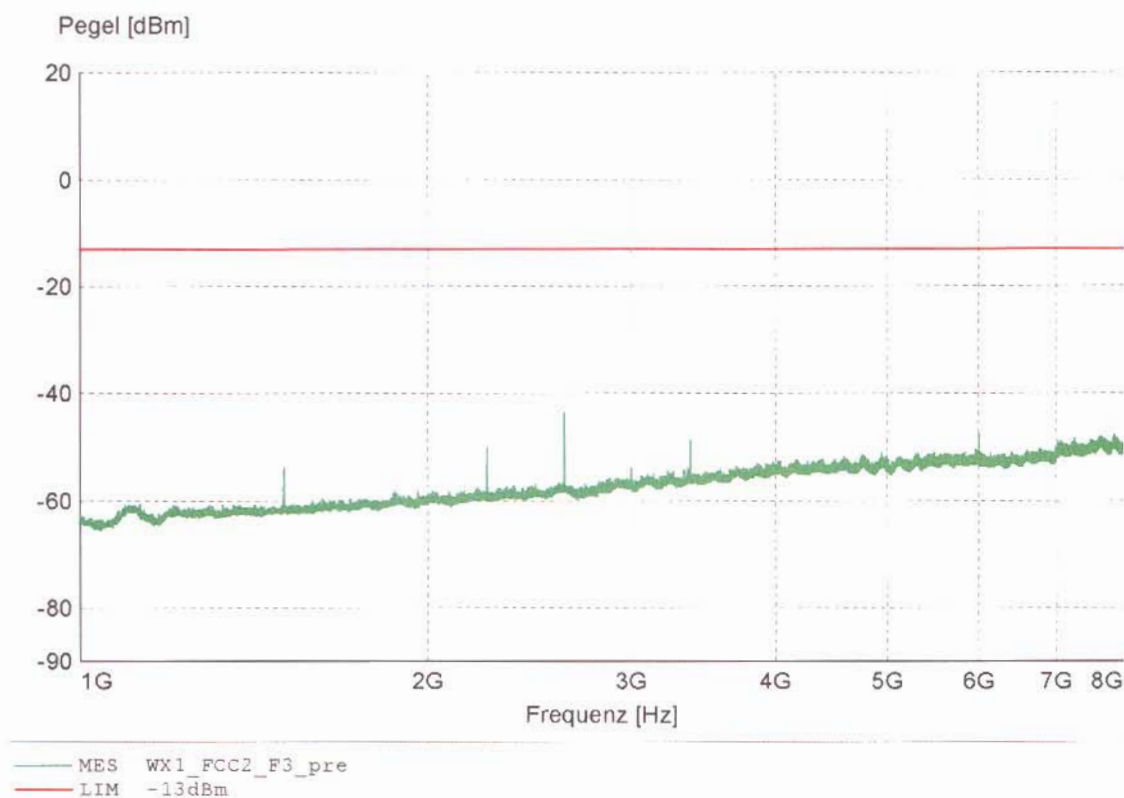
Field strength of spurious emissions of the transmitter

§ 74.261 (e)(6)(iii)

Operating mode:

Frequency: 750,9 MHz

Modulation: unmodulated carrier



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

Appendix 1

Test equipment used

☐ Anechoic Chamber with 3m measurement distance	NT-100	☐ ESVP - Test receiver 20 - 1000 MHz	NT-201
☐ MA 240 - Antenna mast 1 - 4 m height	NT-110	☐ ESPC - Test receiver 9 kHz - 2,5 GHz	NT-203
☐ DS 412 - Turntable 0 - 400 ° Azimuth	NT-111	☐ ESI26 - Test receiver 20 Hz - 26,5 GHz	NT-207
☐ HD 100 Controller Mast+Turntable	NT-112	☐ Digital Radio Tester CTS55	NT-208
☐ HUF-Z2 - Bicon. Antennna 20 - 300 MHz	NT-120	☐ Noise-gen., ITU-R 559-2 20 Hz - 20 kHz	NT-209
☐ HUF-Z3 - Log. Per. Antenna 200 - 1000 MHz	NT-121	☐ CMTA - Radiocommunication analyzer ; 0,1 - 1000 MHz	NT-210
☐ HFH-Z2 - Loop Antenna. 9 kHz - 30 MHz	NT-122	☐ 3271 - Spectrum analyzer 100 Hz - 26,5 GHz	NT-211
☐ HFH-Z6 - Rod Antenna 9 kHz - 30 MHz	NT-123	☐ Radiocommunicationanalyzer Marconi 2945A	NT-212
☐ 3121C - Dipole Antenna 28 - 1000 MHz	NT-124	☐ 2855S - Communication analyzer	NT-213
☐ 3115 - Horn Antenna 1 - 18 GHz	NT-125	☐ Mixer M28HW 26,5 GHz - 40 GHz	NT-214
☐ 3116 - Horn Antenna 18 - 40 GHz	NT-126	☐ Diode Detector 0,01 GHz - 26,5 GHz	NT-215
☐ SAS-200/543 - Bicon. Ant. 20 MHz - 300 MHz	NT-127	☐ RubiSource T&M Timing reference	NT-216
☐ AT-1080 - Log. Per. Ant. 80 - 1000 MHz	NT-128	☐ Radiocommunicationanalyzer SWR 1180 MD	NT-217
☐ HK-116 - bicon. Ant. 20 MHz - 300 MHz	NT-129	☐ Mixer M19HWD 40 GHz - 60 GHz	NT-218
☐ HK-116 - bicon. Ant. 20 MHz - 300 MHz	NT-130	☐ Mixer M12HWD 60 GHz - 90 GHz	NT-219
☐ 3146 - Log. Per. Ant. 200 - 1000MHz	NT-131	☐ TDS - 540 DSO Digital scope	NT-220
☐ Loop Antenna H-Field	NT-132	☐ PM97 Scopemeter	NT-221
☐ Horn Antenna 500 MHz - 2900 MHz	NT-133	☐ TPS 2014 Digital scope	NT-222
☐ Log. per. Antenna 800 MHz - 2500 MHz	NT-134	☐ B10 - Harmonics and flicker analyzer	NT-232
☐ Log. per. Antenna 800 MHz - 2500 MHz	NT-135	☐ SRM-3000 Spectrumanalyzer	NT-233
☐ BiConiLog Antenna 26 MHz - 2000 MHz	NT-137	☐ E-field probe SRM 75 MHz - 3 GHz	NT-234
☐ Conical Dipol Antenna PCD8250	NT-138	☐ Hall-Teslameter ETM-1	NT-241
☐ HZ-1 Antenna tripod	NT-150	☐ EFA-3 H-field- / E-field probe	NT-243
☐ BN 1500 Antenna tripod	NT-151	☐ E-field measuring instrument EMR-200; 100 kHz - 3 GHz	NT-244
☐ Ant. tripod for EN61000-4-3 Model TP1000A	NT-156	☐ E-field probe 100 kHz - 3 GHz	NT-245
☐ Spectrumanalyzer - FSP7 9 kHz - 7 GHz	NT-200	☐ Magneticfield-Sensor 300 kHz - 30 MHz	NT-246

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Test equipment used

☐ E-field probe 10 MHz – 18 GHz	NT-247	☐ TRANSIENT 1000 Immunity test system	NT-325
☐ H-field probe 10 MHz – 1 GHz	NT-248	☐ VCS 500-M6 Surge-Generator	NT-326
☐ ELT-400 1 Hz – 400 kHz	NT-249	☐ BTA-250 - RF-Amplifier 9 kHz - 220 MHz / 250 W	NT-330
☐ MDS 21 - Absorbing clamp 30 - 1000 MHz	NT-250	☐ T82-50 RF-Amplifier 2 GHz – 8 GHz	NT-331
☐ FCC-203I EM Injection clamp	NT-251	☐ 500W1000M7 - RF-Amplifier 80 - 1000 MHz / 500 W	NT-332
☐ FCC-203I-DCN Ferrite decoupling network	NT-252	☐ AS0102-65R - RF-Amplifier 1 GHz - 2 GHz	NT-333
☐ PR50 Current Probe	NT-253	☐ APA01 – RF-Amplifier 0,5 GHz – 2,5 GHz	NT-334
☐ PR630 Current Probe	NT-254	☐ Preamplifier 1 GHz - 4 GHz	NT-335
☐ Fluke 87 V True RMS Multimeter	NT-260	☐ Preamplifier for GPS MKU 152 A	NT-336
☐ Model 2000 Digital Multimeter	NT-261	☐ Preamplifier 100 MHz – 23 GHz	NT-337
☐ Fluke 79 Digital Multimeter	NT-262	☐ DC Block 10 MHz – 18 GHz Model 8048	NT-338
☐ Fluke 79 Digital Multimeter	NT-263	☐ 2-97201 Electronic load	NT-341
☐ ESH2-Z5 Artificial mains network 4x25A	NT-300	☐ TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-344
☐ ESH3-Z5 Artificial mains network 2x10A	NT-301	☐ TSX3510P - Power supply 0-30 V / 0 - 10 A	NT-345
☐ ESH3-Z6 Artificial mains network 1x100A	NT-302	☐ VDS 200 Mobil-impuls-generator	NT-350
☐ ESH3-Z4 T-Artificial network	NT-303	☐ LD 200 Mobil-impuls-generator	NT-351
☐ PHE 4500/B Power amplifier	NT-304	☐ MPG 200 Mobil-Impuls-Generators	NT-352
☐ EZ10 T-Artificial network	NT-305	☐ EFT 200 Mobil-impuls-generator	NT-353
☐ SMG - Signal generator 0,1 - 1000 MHz	NT-310	☐ FP 16/3-1 3 ph. Coupling filter (Burst)	NT-400
☐ PM 5518 TXVPS Video generator	NT-311	☐ PHE 4500 - Mains impedance network	NT-401
☐ RefRad Reference generator	NT-312	☐ IP 6.2 Coupling filter for data lines (Surge)	NT-403
☐ SMP 02 Signal generator 10 MHz - 20 GHz	NT-313	☐ ESH2-Z3 - Probe 9 kHz - 30 MHz	NT-410
☐ 40 MHz Arbitrary Generator T1241	NT-315	☐ IP 4 - Capacitive clamp (Burst)	NT-411
☐ PEFT - Burst generator up to 4 kV	NT-320	☐ Highpass-Filter 100 MHz – 4 GHz	NT-412
☐ ESD 30 System up to 25 kV	NT-321	☐ Highpass-Filter 600 MHz – 4 GHz	NT-413
☐ PSURGE 4.1 Surge generator	NT-324	☐ Highpass-Filter 1250 MHz – 4 GHz	NT-414

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Appendix 1 (continued)

Test equipment used

☐ Highpass-Filter 1800 MHz – 18 GHz	NT-415	☐ FCC-801-AF10 Coupling decoupling network	NT-461
☐ Highpass-Filter 3500 MHz – 18 GHz	NT-416	☐ FCC-801-S25 Coupling decoupling network	NT-462
☐ RF-Attenuator 20 dB 0,1 - 1000 MHz / 25 W	NT-421	☐ FCC-801-T4 Coupling decoupling network	NT-463
☐ RF-Attenuator 10 dB 0,1 - 1000 MHz / 20 W	NT-422	☐ FCC-801-C1 Coupling decoupling network	NT-464
☐ RF-Attenuator 30 dB 0,1 - 1000 MHz / 1 W	NT-423	☐ F-16A - Current probe 1kHz - 70MHz	NT-465
☐ RF-Attenuator 30 dB	NT-424	☐ PC P4 3 GHz Test computer	NT-500
☐ RF-Attenuator 6 dB 0,1 - 1000 MHz / 1 W	NT-425	☐ PC P4 1700 MHz Notebook	NT-505
☐ RF-Attenuator 6 dB 0,1 - 1000 MHz / 1 W	NT-426	☐ PC Intel Centrino 1600 MHz Notebook	NT-506
☐ RF-Attenuator 6 dB	NT-428	☐ Monitoring camera with Monitor	NT-511
☐ RF-Attenuator 0 dB - 81 dB	NT-429	☐ ES-K1 Version 1.71 Test software	NT-520
☐ WRU 27 - Band blocking 27 MHz	NT-430	☐ SRM-TS Version 1.3 software for SRM-3000	NT-522
☐ WHJ450C9 AA - High pass 450 MHz	NT-431	☐ SPS-PHE Test software V2.32 voltage fluctuations/harmonics	NT-525
☐ WHJ250C9 AA - High pass 250 MHz	NT-432	☐ SPS-EM Test software V2.32 for PHE 4500/B	NT-527
☐ RF-Load 150 W	NT-433	☐ Noise power test apparatus according to EN 55014	NT-530
☐ Impedance transducer 1:4 ; 1:9 ; 1:16	NT-435	☐ Vertical coupling plane (ESD)	NT-531
☐ RF-Attenuator DC – 18 GHz 6 dB	NT-436	☐ Test cable #4 for EN 61000-4-6	NT-553
☐ RF-Attenuator DC – 18 GHz 6 dB	NT-437	☐ Test cable #3 for conducted emission	NT-554
☐ RF-Attenuator DC – 18 GHz 10 dB	NT-438	☐ Test cable #5 ESD-cable (2x470k)	NT-555
☐ RF-Attenuator DC – 18 GHz 20 dB	NT-439	☐ Test cable #6 ESD-cable (2x470k)	NT-556
☐ I+P 7780 Directional coupler 100 - 2000 MHz	NT-440	☐ Test cable #8 Sucoflex 104EA	NT-559
☐ ESH3-Z2 - Pulse limiter 9 kHz - 30 MHz	NT-441	☐ Test cable #9 (for outdoor measurements)	NT-580
☐ Power Divider 6 dB/1 W/50 Ohm	NT-443	☐ Test cable #10 (for outdoor measurements)	NT-581
☐ Directional coupler 0,1 MHz – 70 MHz	NT-444	☐ Test cable #13 Sucoflex 104PE	NT-584
☐ Directional coupler 0,1 MHz – 70 MHz	NT-445	☐ Test cable #21 for SRM-3000	NT-592
☐ Tube imitations according to EN 55015	NT-450	☐ Shield chamber	NT-600
☐ FCC-801-M2-50A Coupling decoupling network	NT-459	☐ Climatic chamber -55°C to +180°C	M-512
☐ FCC-801-M5-25 Coupling decoupling network	NT-460	☐ Control and simulation equipment for EUT	---

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