

FC

Test Report

Product Name	Portable Navigation Device
Model No.	PD-17
FCC ID.	OW3PD-17

Applicant	Nokia Gmbh
Address	Rensingstrasse 15 Bochum D-44807 Germany

Date of Receipt	2007/09/26
Issued Date	2007/10/02
Report No.	079194R-RFUSP02V01

The Test Results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuietTek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Test Report Certification

Test Date : 2007/10/02

Report No. : 079194R-RFUSP02V01



Product Name	Portable Navigation Device
Applicant	Nokia Gmbh
Address	Rensingstrasse 15 Bochum D-44807 Germany
Manufacturer	Nokia Gmbh
Model No.	PD-17
FCC ID.	OW3PD-17
EUT Voltage	DC 5V
Rated Voltage	Input: DC 12V-24V Output: DC 5V
Trade Name	Nokia
Measurement Standard	FCC CFR Title 47 Part 15 Subpart C: 2006
Measurement Procedure	ANSI C63.4: 2003
Test Result	Complied



The Test Results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of Quietek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented By : Rita Huang
(Engineering Adm. Specialist / Rita Huang)



Tested By : Dino Chen
(Engineer / Dino Chen)

Approved By : Vincent Lin
(Deputy Manager / Vincent Lin)



TABLE OF CONTENTS

Description	Page
1. GENERAL INFORMATION	4
1.1. EUT Description.....	4
1.2. Operation Description	6
1.3. Test System Details	7
1.4. Configuration of Tested System	7
1.5. EUT Exercise Software	7
1.6. Test Facility	8
2. Conducted Emission	9
2.1. Test Equipments	9
2.2. Test Setup	9
2.3. Limits	9
2.4. Test Procedure	10
2.5. Uncertainty	10
2.6. Test Result of Conducted Emission.....	11
3. Radiated Emission	15
3.1. Test Equipment.....	15
3.2. Test Setup	15
3.3. Limits	16
3.4. Test Procedure	17
3.5. Uncertainty	17
3.6. Test Result of Radiated Emission.....	18
4. Occupied Bandwidth	33
4.1. Test Equipment.....	33
4.2. Test Setup	33
4.3. Limits	33
4.4. Uncertainty	33
4.5. Test Result of Occupied Bandwidth	34
5. Band Edge	36
5.1. Test Equipment.....	36
5.2. Test Setup	36
5.3. Limits	37
5.4. Test Procedure	37
5.5. Uncertainty	37
5.6. Test Result of Band Edge	38
6. EMI Reduction Method During Compliance Testing.....	50
7. SECOND SOURCE LIST.....	51
Attachment 1: EUT Test Setup Photographs	52
Attachment 2 : EUT Detailed Photographs.....	60

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Portable Navigation Device
Trade Name	Nokia
Model No.	PD-17
FCC ID.	OW3PD-17
Frequency Range	88.1 - 107.9MHz
Channel Number	102
Channel Control	Manual
Type of Modulation	FM
Antenna Type	Planar Monopole Antenna
Antenna Gain	N/A

Component	
HW version	DVT2.2
SW version	1.0.32

Frequency of Each Channel

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	88.1 MHz	Channel 2:	88.3 MHz	Channel 3:	88.5 MHz	Channel 4:	88.7 MHz
Channel 5:	88.9 MHz	Channel 6:	89.1 MHz	Channel 7:	89.3 MHz	Channel 8:	89.5 MHz
Channel 9:	89.7 MHz	Channel 10:	89.9 MHz	Channel 11:	90.1 MHz	Channel 12:	90.3 MHz
Channel 13:	90.5 MHz	Channel 14:	90.7 MHz	Channel 15:	90.9 MHz	Channel 16:	91.1 MHz
Channel 17:	91.3 MHz	Channel 18:	91.5 MHz	Channel 19:	91.7 MHz	Channel 20:	91.9 MHz
Channel 21:	92.1 MHz	Channel 22:	92.3 MHz	Channel 23:	92.5 MHz	Channel 24:	92.7 MHz
Channel 25:	92.9 MHz	Channel 26:	93.1 MHz	Channel 27:	93.3 MHz	Channel 28:	93.5 MHz
Channel 29:	93.7 MHz	Channel 30:	93.9 MHz	Channel 31:	94.1 MHz	Channel 32:	94.3 MHz
Channel 33:	94.5 MHz	Channel 34:	94.7 MHz	Channel 35:	94.9 MHz	Channel 36:	95.1 MHz
Channel 37:	95.3 MHz	Channel 38:	95.5 MHz	Channel 39:	95.7 MHz	Channel 40:	95.9 MHz
Channel 41:	96.1 MHz	Channel 42:	96.3 MHz	Channel 43:	96.5 MHz	Channel 44:	96.7 MHz
Channel 45:	96.9 MHz	Channel 46:	97.1 MHz	Channel 47:	97.3 MHz	Channel 48:	97.5 MHz
Channel 49:	97.7 MHz	Channel 50:	97.9 MHz	Channel 51:	98.1 MHz	Channel 52:	98.3 MHz
Channel 53:	98.5 MHz	Channel 54:	98.7 MHz	Channel 55:	98.9 MHz	Channel 56:	99.1 MHz
Channel 57:	99.3 MHz	Channel 58:	99.5 MHz	Channel 59:	99.7 MHz	Channel 60:	99.9 MHz
Channel 61:	100.1 MHz	Channel 62:	100.3 MHz	Channel 63:	100.5 MHz	Channel 64:	100.7 MHz
Channel 65:	100.9 MHz	Channel 66:	101.1 MHz	Channel 67:	101.3 MHz	Channel 68:	101.5 MHz
Channel 69:	101.7 MHz	Channel 70:	101.9 MHz	Channel 71:	102.1 MHz	Channel 72:	102.3 MHz
Channel 73:	102.5 MHz	Channel 74:	102.7 MHz	Channel 75:	102.9 MHz	Channel 76:	103.1 MHz
Channel 77:	103.3 MHz	Channel 78:	103.5 MHz	Channel 79:	103.7 MHz	Channel 80:	103.9 MHz
Channel 81:	104.1 MHz	Channel 82:	104.3 MHz	Channel 83:	104.5 MHz	Channel 84:	104.7 MHz
Channel 85:	104.9 MHz	Channel 86:	105.1 MHz	Channel 87:	105.3 MHz	Channel 88:	105.5 MHz
Channel 89:	105.7 MHz	Channel 90:	105.9 MHz	Channel 91:	106.1 MHz	Channel 92:	106.3 MHz
Channel 93:	106.5 MHz	Channel 94:	106.7 MHz	Channel 95:	106.9 MHz	Channel 96:	107.1 MHz
Channel 97:	107.3 MHz	Channel 98:	107.5 MHz	Channel 99:	107.6 MHz	Channel 100:	107.7 MHz
Channel 101:	107.8 MHz	Channel 102:	107.9 MHz				

Note:

1. This device is an Portable Navigation Device with a built-in FM transmitter.
2. Regarding to the operation frequency, the lowest, middle, and highest channels are selected to perform the test.
3. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.239.
4. Quietek verified the construction and function in typical operation, and then shown in this test report.

Mode 1: PDA Only-Battery

Mode 2: Atech DC Charger

Mode 3: JPC DC Charger

1.2. Operation Description

The EUT is an Portable Navigation Device. The operation frequency is from 88.1 to 107.9MHz with FM modulation. 102 manually selectable channels were built in the EUT. The channels are separated by 200kHz. The signals are modulated by FM. RF signals are transmitted from the Planar monopole antenna. DC 12V-DC24V shall be provided for EUT operation.

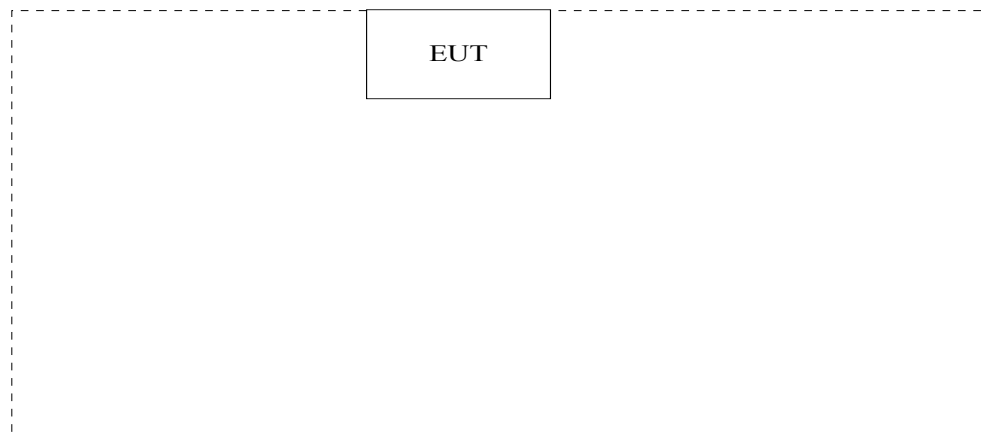
1.3. Test System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	Power Cord
(1)	N/A	N/A	N/A	N/A	N/A

	Signal Cable Type	Signal cable Description
A.	N/A	N/A

1.4. Configuration of Tested System



1.5. EUT Exercise Description

1	EUT shall be placed on the center of the testing table.
2	Starting FM Transmitter function after the power on.
3	With the FM Transmitter set-up to the test channel as follow: CH01, CH51, CH102
4	Entering MP3 Player mode after set-up and then playing 1KHz tone.
5	The volume shall be adjusted to give the maximum.
6	After the set-up, starting the test and data shall be recorded in the test report.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Reference 31040/SIT1300F2



Accreditation on NVLAP
NVLAP Lab Code: 200533-0



Site Name: Quietek Corporation
Site Address: No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,
Lin-Kou Shiang, Taipei,
Taiwan, R.O.C.
TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com



FCC Accreditation Number: TW1014

2. Conducted Emission

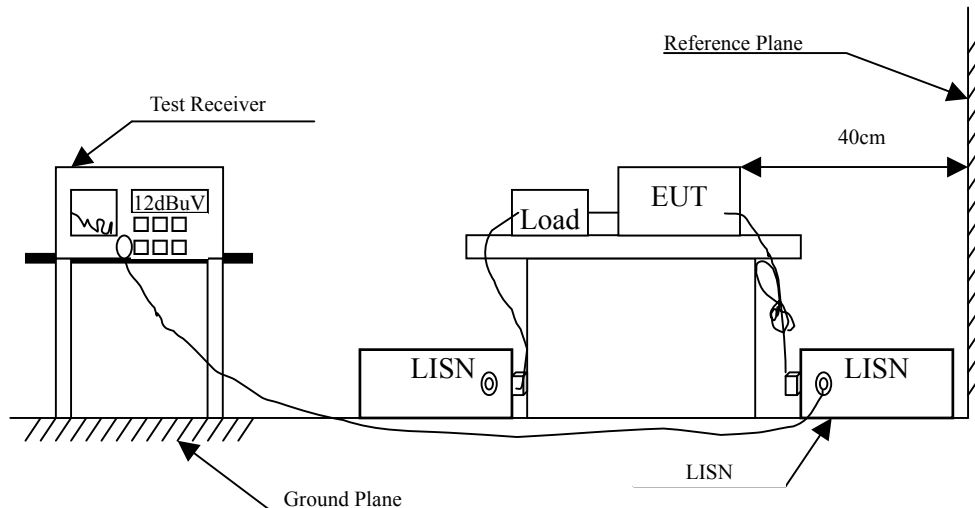
2.1. Test Equipments

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2007	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2007	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2007	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2007	
5	No.1 Shielded Room			N/A	

Note: All instruments are calibrated every one year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56 _(註)	56-46 _(註)
0.50-5.0	56	46
5.0 - 30	60	50

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Portable Navigation Device
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Atech DC Charger

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.170	0.400	41.520	41.920	-23.509	65.429
0.405	0.400	32.180	32.580	-26.134	58.714
0.670	0.356	36.330	36.686	-19.314	56.000
1.150	0.300	30.830	31.130	-24.870	56.000
1.470	0.300	38.150	38.450	-17.550	56.000
1.685	0.300	41.620	41.920	-14.080	56.000
Average					
0.170	0.400	36.750	37.150	-18.279	55.429
0.405	0.400	25.780	26.180	-22.534	48.714
0.670	0.356	27.830	28.186	-17.814	46.000
1.150	0.300	21.660	21.960	-24.040	46.000
1.470	0.300	25.880	26.180	-19.820	46.000
1.685	0.300	37.400	37.700	-8.300	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Portable Navigation Device
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Atech DC Charger

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.166	0.400	42.610	43.010	-22.533	65.543
0.406	0.400	33.240	33.640	-25.046	58.686
0.611	0.366	32.550	32.916	-23.084	56.000
1.111	0.300	31.620	31.920	-24.080	56.000
1.511	0.300	37.700	38.000	-18.000	56.000
1.751	0.300	42.570	42.870	-13.130	56.000
Average					
0.166	0.400	36.900	37.300	-18.243	55.543
0.406	0.400	25.930	26.330	-22.356	48.686
0.611	0.366	26.960	27.326	-18.674	46.000
1.111	0.300	20.520	20.820	-25.180	46.000
1.511	0.300	28.600	28.900	-17.100	46.000
1.751	0.300	36.380	36.680	-9.320	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Portable Navigation Device
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: JPC DC Charger

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.176	0.400	37.520	37.920	-27.337	65.257
0.529	0.380	41.570	41.950	-14.050	56.000
0.769	0.340	34.900	35.240	-20.760	56.000
1.380	0.300	31.980	32.280	-23.720	56.000
1.590	0.300	26.850	27.150	-28.850	56.000
3.755	0.300	15.060	15.360	-40.640	56.000
Average					
0.176	0.400	32.850	33.250	-22.007	55.257
0.529	0.380	34.390	34.770	-11.230	46.000
0.769	0.340	28.670	29.010	-16.990	46.000
1.380	0.300	16.230	16.530	-29.470	46.000
1.590	0.300	18.170	18.470	-27.530	46.000
3.755	0.300	9.610	9.910	-36.090	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Portable Navigation Device
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: JPC DC Charger

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.160	0.400	34.030	34.430	-31.284	65.714
0.525	0.380	37.730	38.110	-17.890	56.000
0.685	0.351	33.000	33.351	-22.649	56.000
1.080	0.300	28.750	29.050	-26.950	56.000
1.877	0.300	33.120	33.420	-22.580	56.000
23.130	0.600	29.720	30.320	-29.680	60.000
Average					
0.160	0.400	29.190	29.590	-26.124	55.714
0.525	0.380	30.180	30.560	-15.440	46.000
0.685	0.351	25.970	26.321	-19.679	46.000
1.080	0.300	19.800	20.100	-25.900	46.000
1.877	0.300	24.580	24.880	-21.120	46.000
23.130	0.600	27.860	28.460	-21.540	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Radiated Emission

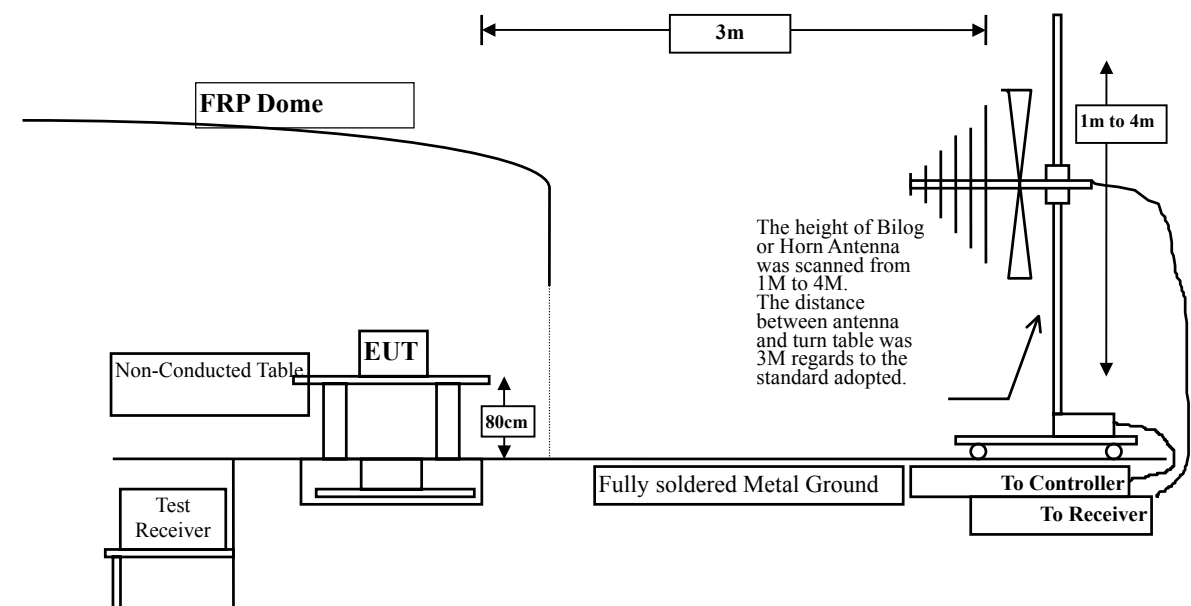
3.1. Test Equipment

The following test equipment are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☐ Site # 1		Test Receiver	R & S	ESVS 10 / 834468/003	May, 2007
		Spectrum Analyzer	Advantest	R3162/ 00803480	May, 2007
		Pre-Amplifier	Advantest	BB525C/ 3307A01812	May, 2007
		Bilog Antenna	SCHAFFNER	CBL6112B / 2697	Sep., 2007
☐ Site # 2		Test Receiver	R & S	ESCS 30 / 836858 / 022	May, 2007
		Spectrum Analyzer	Advantest	R3162 / 100803466	May, 2007
		Pre-Amplifier	Advantest	BB525C/3307A01814	May, 2007
		Bilog Antenna	SCHAFFNER	CBL6112B / 2705	May, 2007
		Horn Antenna	ETS	3115 / 0005-6160	Sep., 2007
		Pre-Amplifier	QTK	QTK-AMP-01/ 0001	May, 2007
☒ Site # 3	X	Test Receiver	R & S	ESI 26 / 838786/004	May, 2007
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007
	X	Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2007
	X	Horn Antenna	Schwarzbeck	BBHA9120D / 305, 306	July, 2007
	X	Horn Antenna	Schwarzbeck	BBHA9170 / 208, 209	July, 2007
	X	Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2007
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2007
	X	Pre-Amplifier	HP	8449B / 3008A01123	July, 2007

- Note: 1. All equipments are calibrated every one year.
2. Test equipments marked by "X" are used to measure the final test results.

3.2. Test Setup



3.3. Limits

➤ Fundamental and Harmonics Emission Limits

FCC Part 15 Subpart C Paragraph 15.239 Limits	
Frequency MHz	Field Strength of Fundamental (uV/m @3m)
88-108	250

Remarks :

1. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)
2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart B Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks :

1. RF Voltage (dBuV/m) = 20 log RF Voltage (uV/m)
2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

3.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

Radiated emissions were investigated over the frequency range from 30MHz to 1GHz using a receiver bandwidth of 120kHz. Radiated was performed at an antenna to EUT distance of 3 meters.

The frequency range from 30MHz to 10th harmonics is checked.

3.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

3.6. Test Result of Radiated Emission

Product : Portable Navigation Device
Test Item : Fundamental Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: PDA Only-Bateery

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
88.100	10.480	35.850	46.330	-21.620	67.950
98.100	12.079	31.020	43.099	-24.851	67.950
107.900	13.101	31.080	44.181	-23.769	67.950
Average					
Detector:					
88.100	10.480	29.050	39.530	-8.420	47.950
98.100	12.079	25.850	37.929	-10.021	47.950
107.900	13.101	27.230	40.331	-7.619	47.950
Vertical					
Peak Detector:					
88.100	8.977	43.900	52.878	-15.072	67.950
98.100	10.517	38.990	49.507	-18.443	67.950
107.900	11.601	31.460	43.061	-24.889	67.950
Average					
Detector:					
88.100	8.977	37.600	46.578	-1.372	47.950
98.100	10.517	35.810	46.327	-1.623	47.950
107.900	11.601	26.480	38.081	-9.869	47.950

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:120KHz °
3. Receiver setting (AVG Detector) : RBW:120KHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Portable Navigation Device
 Test Item : Fundamental Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
88.100	10.480	35.850	46.330	-21.620	67.950
98.100	12.079	31.020	43.099	-24.851	67.950
107.900	13.101	31.080	44.181	-23.769	67.950
Average					
Detector:					
88.100	10.480	29.050	39.530	-8.420	47.950
98.100	12.079	25.850	37.929	-10.021	47.950
107.900	13.101	27.230	40.331	-7.619	47.950
Vertical					
Peak Detector:					
88.100	8.977	43.900	52.878	-15.072	67.950
98.100	10.517	38.990	49.507	-18.443	67.950
107.900	11.601	31.460	43.061	-24.889	67.950
Average					
Detector:					
88.100	8.977	37.600	46.578	-1.372	47.950
98.100	10.517	35.810	46.327	-1.623	47.950
107.900	11.601	26.480	38.081	-9.869	47.950

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:120KHz °
3. Receiver setting (AVG Detector) : RBW:120KHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Portable Navigation Device
Test Item : Fundamental Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: JPC DC Charger

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
88.100	10.480	32.800	43.280	-24.670	67.950
98.100	12.079	33.060	45.139	-22.811	67.950
107.900	13.101	28.010	41.111	-26.839	67.950
Average					
Detector:					
88.100	10.480	25.400	35.880	-12.070	47.950
98.100	12.079	28.920	40.999	-6.951	47.950
107.900	13.101	20.620	33.721	-14.229	47.950
Vertical					
Peak Detector:					
88.100	8.977	33.060	42.038	-25.912	67.950
98.100	10.517	38.720	49.237	-18.713	67.950
107.900	11.601	28.310	39.911	-28.039	67.950
Average					
Detector:					
88.100	8.977	25.580	34.558	-13.392	47.950
98.100	10.517	35.660	46.177	-1.773	47.950
107.900	11.601	21.330	32.931	-15.019	47.950

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:120KHz °
3. Receiver setting (AVG Detector) : RBW:120KHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Portable Navigation Device
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Battery (88.1 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
176.200	9.846	18.007	27.854	-15.666	43.520
264.300	14.463	14.538	29.001	-17.019	46.020
352.400	15.057	15.584	30.641	-15.379	46.020
440.500	17.710	15.841	33.551	-12.469	46.020
528.600	18.890	16.884	35.774	-10.246	46.020
Vertical					
176.200	9.777	18.255	28.032	-15.488	43.520
264.300	14.715	14.833	29.548	-16.472	46.020
352.400	15.511	15.079	30.589	-15.431	46.020
440.500	19.054	15.955	35.009	-11.011	46.020
528.600	19.245	16.782	36.027	-9.993	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Bateery (98.1 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
196.200	9.613	18.880	28.493	-15.027	43.520
294.300	14.118	14.567	28.685	-17.335	46.020
392.400	16.215	15.418	31.633	-14.387	46.020
490.500	18.420	16.272	34.691	-11.329	46.020
588.600	20.382	16.876	37.258	-8.762	46.020
Vertical					
196.200	9.601	18.284	27.884	-15.636	43.520
294.300	14.011	14.326	28.337	-17.683	46.020
392.400	17.548	14.445	31.993	-14.027	46.020
490.500	18.420	15.849	34.268	-11.752	46.020
588.600	22.158	17.091	39.249	-6.771	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : General Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Bateery (107.9 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
215.800	9.683	20.435	30.118	-13.402	43.520
323.700	14.088	14.654	28.741	-17.279	46.020
431.600	17.870	15.157	33.028	-12.992	46.020
539.500	19.822	16.465	36.287	-9.733	46.020
647.400	21.384	16.685	38.069	-7.951	46.020
Vertical					
215.800	10.897	20.522	31.419	-12.101	43.520
323.700	14.457	14.597	29.054	-16.966	46.020
431.600	19.397	15.322	34.719	-11.301	46.020
539.500	20.353	16.118	36.471	-9.549	46.020
674.400	20.444	16.538	36.981	-9.039	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger
 (88.1 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
176.200	9.846	17.835	27.682	-15.838	43.520
264.300	14.463	14.016	28.479	-17.541	46.020
352.400	15.057	15.274	30.331	-15.689	46.020
440.500	17.710	15.901	33.611	-12.409	46.020
528.600	18.890	16.359	35.249	-10.771	46.020
Vertical					
176.200	9.777	18.155	27.932	-15.588	43.520
264.300	14.715	13.984	28.699	-17.321	46.020
352.400	15.511	14.648	30.158	-15.862	46.020
440.500	19.054	16.060	35.114	-10.906	46.020
528.600	19.245	17.469	36.714	-9.306	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger (98.1 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
196.200	9.613	18.901	28.514	-15.006	43.520
294.300	14.118	14.139	28.257	-17.763	46.020
392.400	16.215	15.074	31.289	-14.731	46.020
490.500	18.420	15.903	34.322	-11.698	46.020
588.600	20.382	16.912	37.294	-8.726	46.020
Vertical					
196.200	9.601	17.848	27.448	-16.072	43.520
294.300	14.011	14.328	28.339	-17.681	46.020
392.400	17.548	14.399	31.947	-14.073	46.020
490.500	18.420	15.839	34.258	-11.762	46.020
588.600	22.158	16.533	38.691	-7.329	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger (107.9MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
215.800	9.683	19.998	29.681	-13.839	43.520
323.700	14.088	18.564	32.651	-13.369	46.020
431.600	17.870	14.818	32.689	-13.331	46.020
539.500	19.822	15.455	35.277	-10.743	46.020
647.400	21.384	16.822	38.206	-7.814	46.020
Vertical					
215.800	10.897	19.745	30.642	-12.878	43.520
323.700	14.457	14.176	28.633	-17.387	46.020
431.600	19.397	15.315	34.712	-11.308	46.020
539.500	20.353	15.932	36.285	-9.735	46.020
674.400	20.444	16.243	36.686	-9.334	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: JPC DC Charger
 (88.1 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
176.200	9.846	17.462	27.309	-16.211	43.520
264.300	14.463	13.848	28.311	-17.709	46.020
352.400	15.057	14.627	29.684	-16.336	46.020
440.500	17.710	15.499	33.209	-12.811	46.020
528.600	18.890	19.254	38.144	-7.876	46.020
Vertical					
176.200	9.777	17.706	27.483	-16.037	43.520
264.300	14.715	13.976	28.691	-17.329	46.020
352.400	15.511	15.101	30.611	-15.409	46.020
440.500	19.054	15.302	34.356	-11.664	46.020
528.600	19.245	16.696	35.941	-10.079	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: JPC DC Charger
 (98.1 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
196.200	9.613	18.056	27.669	-15.851	43.520
294.300	14.118	14.183	28.301	-17.719	46.020
392.400	16.215	15.453	31.668	-14.352	46.020
490.500	18.420	15.858	34.277	-11.743	46.020
588.600	20.382	16.562	36.944	-9.076	46.020
Vertical					
196.200	9.601	18.039	27.639	-15.881	43.520
294.300	14.011	13.687	27.698	-18.322	46.020
392.400	17.548	14.963	32.511	-13.509	46.020
490.500	18.420	15.193	33.612	-12.408	46.020
588.600	22.158	16.463	38.621	-7.399	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: JPC DC Charger (107.9MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
196.200	9.613	17.945	27.558	-15.962	43.520
294.300	14.118	14.244	28.362	-17.658	46.020
392.400	16.215	15.440	31.655	-14.365	46.020
490.500	18.420	16.262	34.681	-11.339	46.020
588.600	20.382	17.030	37.412	-8.608	46.020
Vertical					
196.200	9.601	17.914	27.514	-16.006	43.520
294.300	14.011	13.943	27.954	-18.066	46.020
392.400	17.548	15.096	32.644	-13.376	46.020
490.500	18.420	16.091	34.510	-11.510	46.020
588.600	22.158	16.209	38.367	-7.653	46.020

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Product : Portable Navigation Device
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Bateery (107.9 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector:

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
1079.000	26.012	4.213	30.225	-43.745	73.970

Average

Detector:

--

Vertical

Peak Detector:

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
1079.000	26.012	4.345	30.357	-43.613	73.970

Average

Detector:

--

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Portable Navigation Device
 Test Item : Harmonic Radiated Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger (107.9 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
1079.000	26.012	3.993	30.005	-43.965	73.970
Average					
Detector:					
--					
Vertical					
Peak Detector:					
1079.000	26.012	4.105	30.117	-43.853	73.970
Average					
Detector:					
--					

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Portable Navigation Device
Test Item : Harmonic Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 3: JPC DC Charger (107.9 MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
1079.000	26.012	4.040	30.052	-43.918	73.970
Average					
Detector:					
--					
Vertical					
Peak Detector:					
1079.000	26.012	4.229	30.241	-43.729	73.970
Average					
Detector:					
--					

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

4. Occupied Bandwidth

4.1. Test Equipment

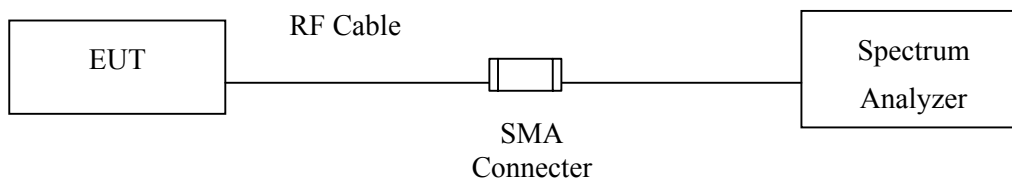
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B/US39440758	May, 2007

Note: 1. All instruments are calibrated every one year.

2. The test instruments marked by “X” are used to measure the final test results.

4.2. Test Setup



4.3. Limits

FCC Part 15 Subpart C Paragraph 15.239 Limits	
Frequency MHz	Occupied Bandwidth
	kHz
88-108	200

4.4. Uncertainty

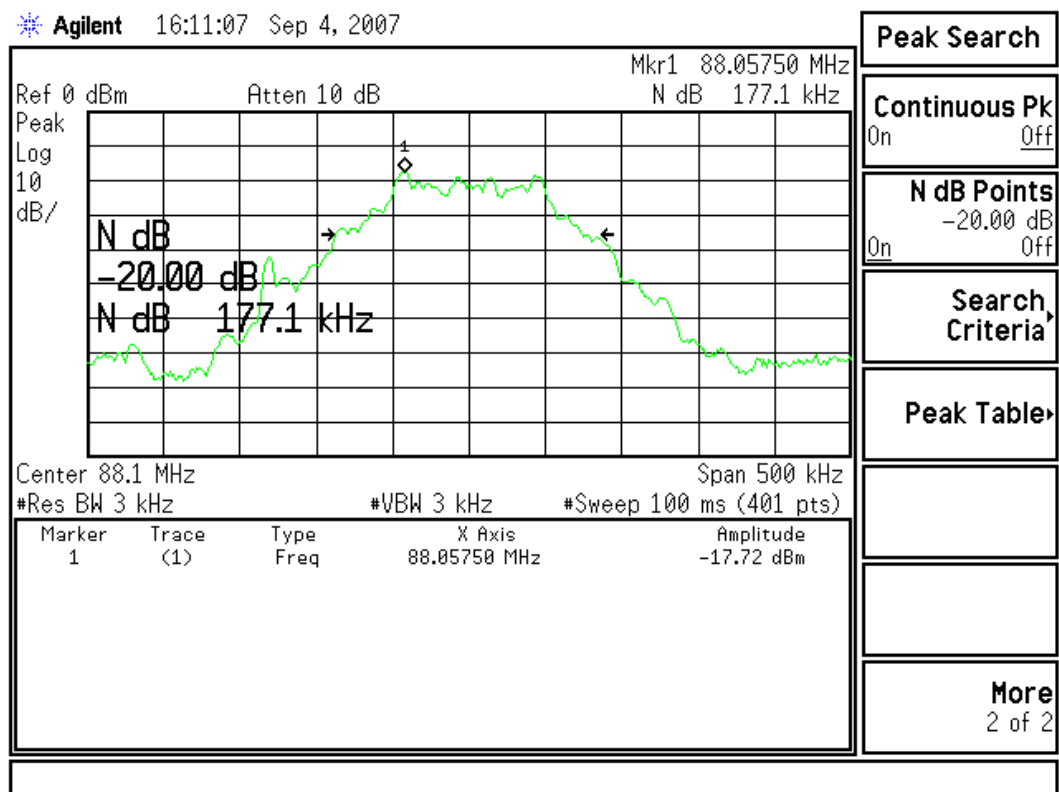
$\pm 150\text{Hz}$

4.5. Test Result of Occupied Bandwidth

Product : Portable Navigation Device
 Test Item : Occupied Bandwidth (modulation)
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Bateery

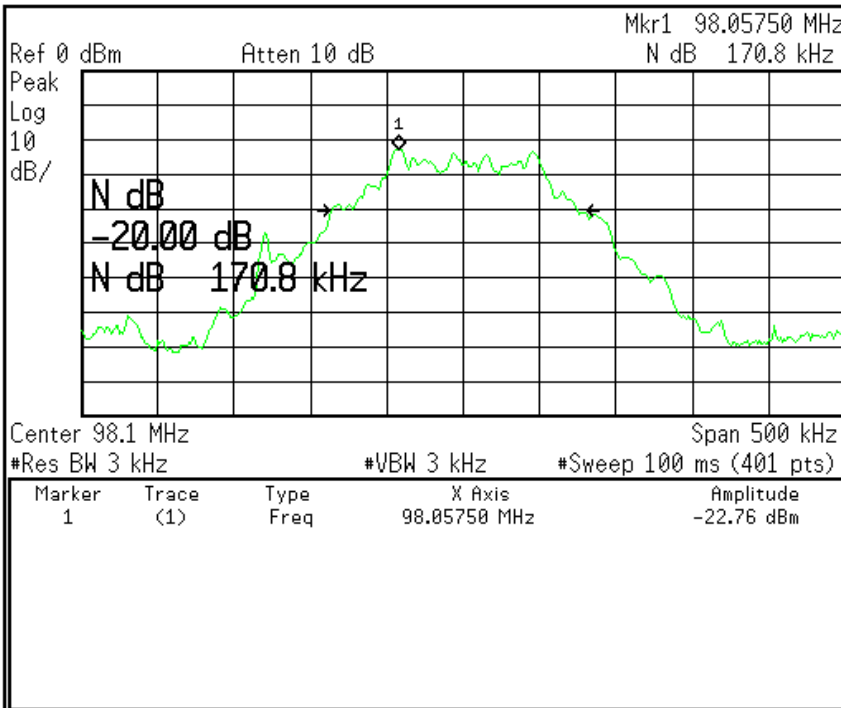
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	88.1	177.1	200	Pass
51	98.1	107.8	200	Pass
102	107.9	179.6	200	Pass

Channel 1:



Channel 51

Agilent 16:12:38 Sep 4, 2007



Peak Search

Continuous Pk
On Off

N dB Points
-20.00 dB
On Off

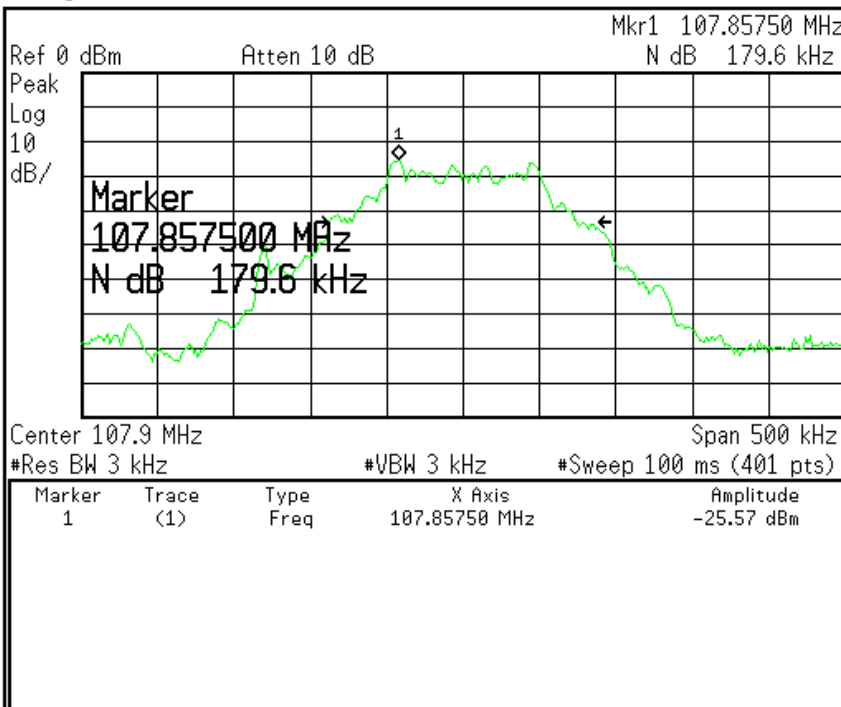
Search Criteria

Peak Table

More
2 of 2

Channel 98:

Agilent 16:13:53 Sep 4, 2007



Peak Search

Meas Tools

Next Peak

Next Pk Right

Next Pk Left

Min Search

Pk-Pk Search

More
1 of 2

5. Band Edge

5.1. Test Equipment

The following test equipments are used during the band edge tests:

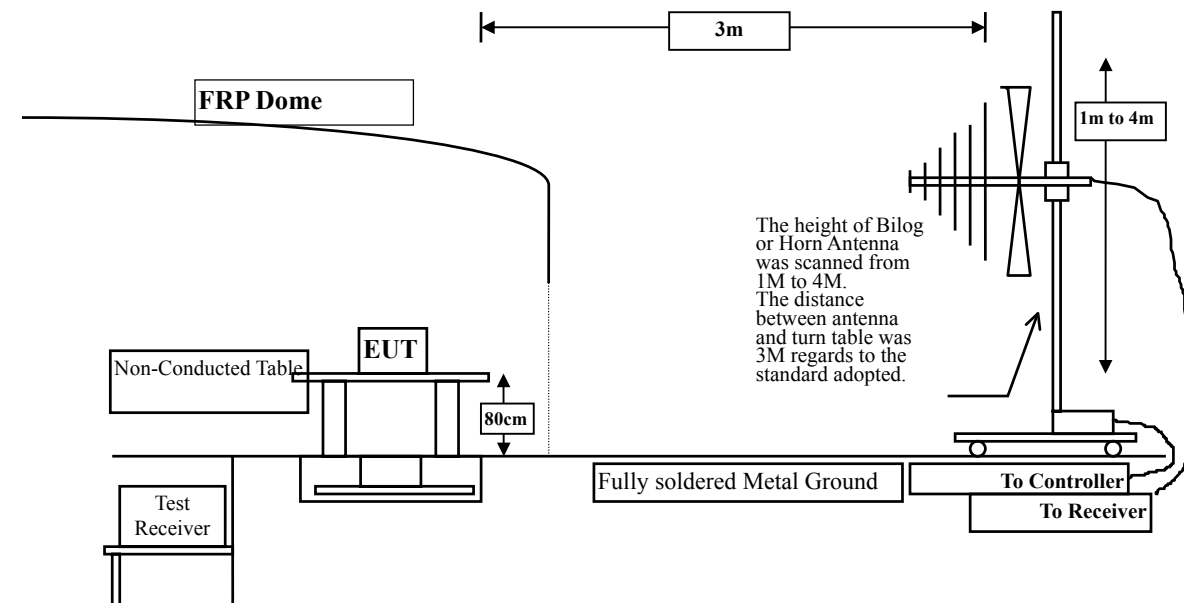
Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X Test Receiver	R & S	ESI 26 / 838786/004	May, 2007
X Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007
X Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2007
X Horn Antenna	Schwarzbeck	BBHA9120D / 305, 306	July, 2007
X Horn Antenna	Schwarzbeck	BBHA9170 / 208, 209	July, 2007
X Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2007
X Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2007
X Pre-Amplifier	HP	8449B / 3008A01123	July, 2007

OATS No.3

- Note:
1. All equipments are calibrated every one year.
 2. The test equipments marked by "X" are used to measure the final test results.

5.2. Test Setup

RF Radiated Measurement:



5.3. Limits

The 200 kHz band shall lie wholly within the frequency range of 88–108 MHz. The field strength of any emissions appearing outside of this band shall not exceed the general radiated emission limits shown in Section 15.209. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

The bandwidth below 30MHz setting on the field strength meter (R&S Test Receiver ESI 26) is 9 kHz, 30MHz to 1GHz is 120 kHz and above 1GHz are 1 MHz.

5.5. Uncertainty

± 3.8 dB below 1GHz

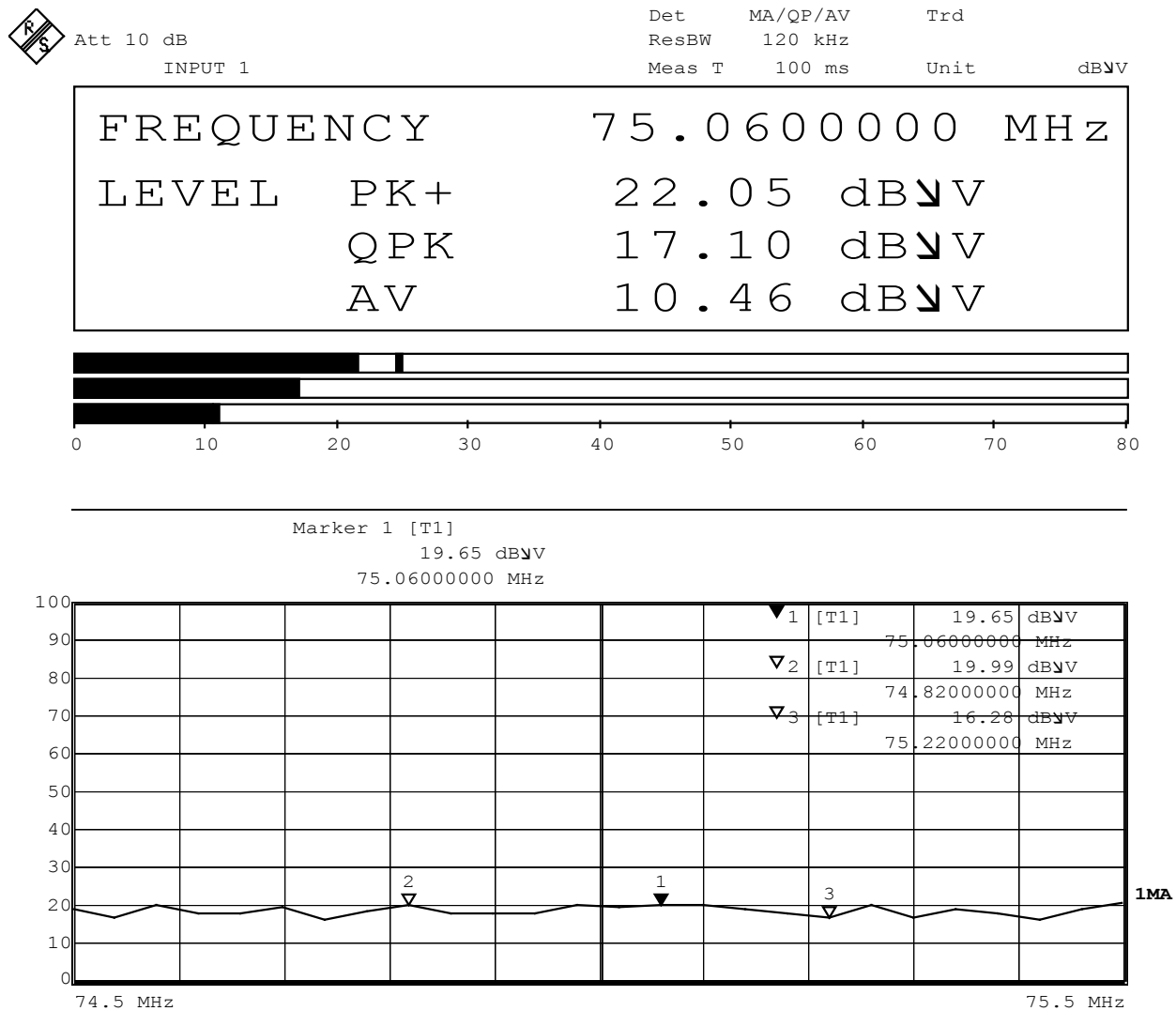
5.6. Test Result of Band Edge

Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Battery (88.1 MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
1	75.060	12.691	17.100	29.792	40.000	Pass

Figure Channel 1: Horizontal (Quasi-Peak)



Date: 24.OCT.2007 21:34:00

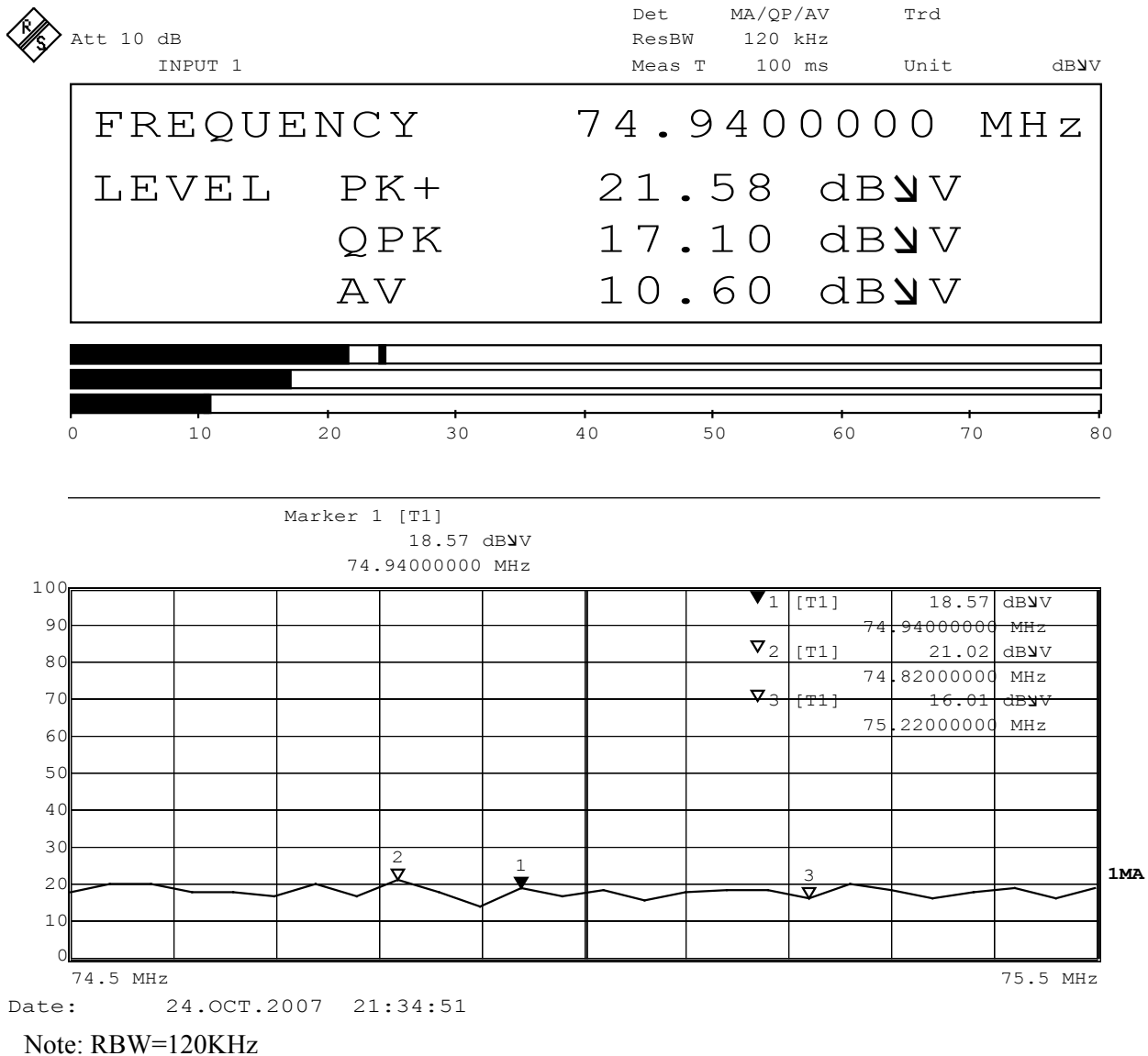
Note: RBW=120KHz

Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Battery (88.1 MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
1	74.940	10.662	17.100	27.762	40.000	Pass

Figure Channel 1: Vertical (Quasi-Peak)



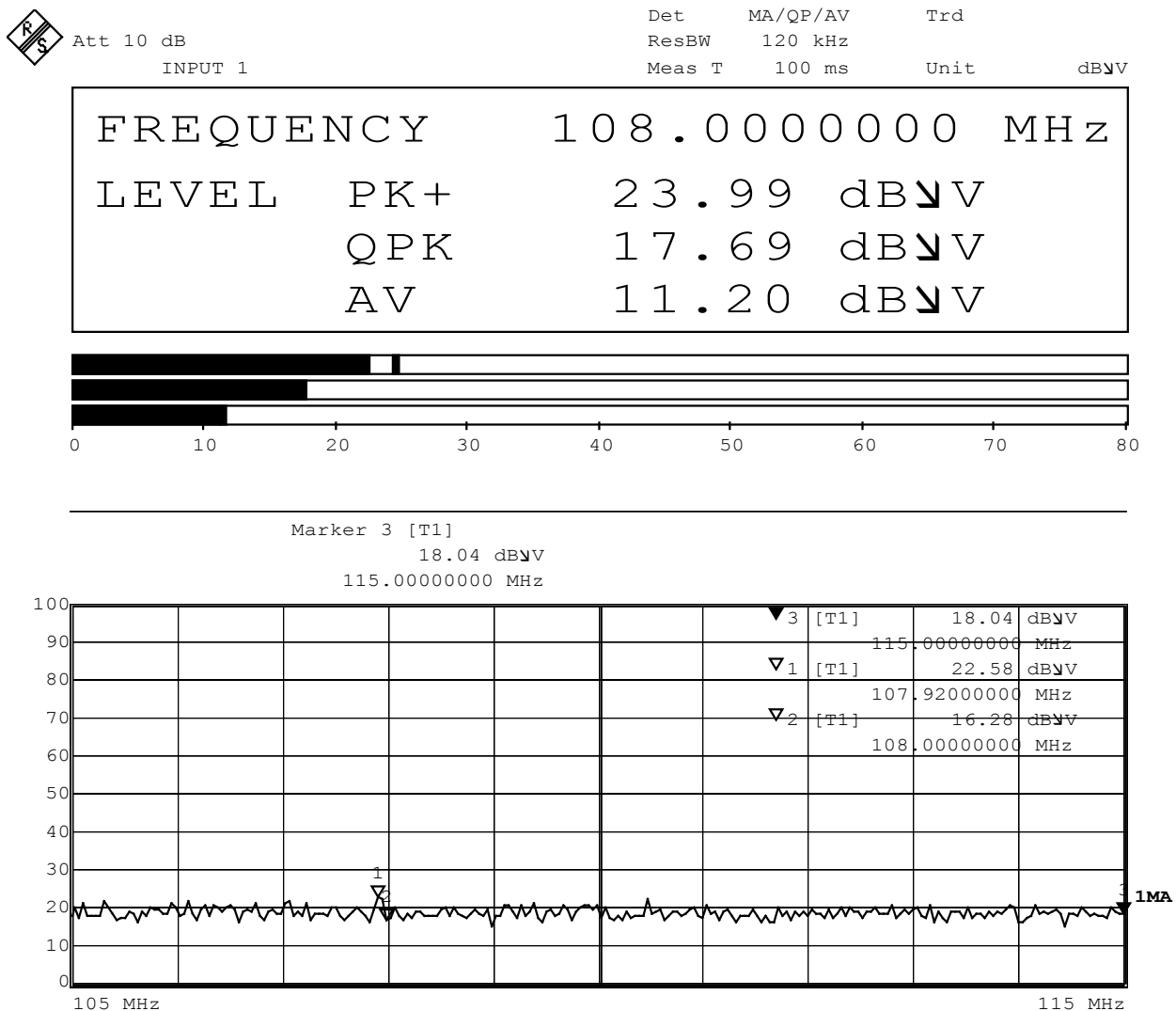
Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Battery (107.9 MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
102	108.000	15.378	17.690	33.068	43.520	Pass

Figure Channel 102:

Horizontal (Quasi-Peak)



Date: 24.OCT.2007 21:40:47

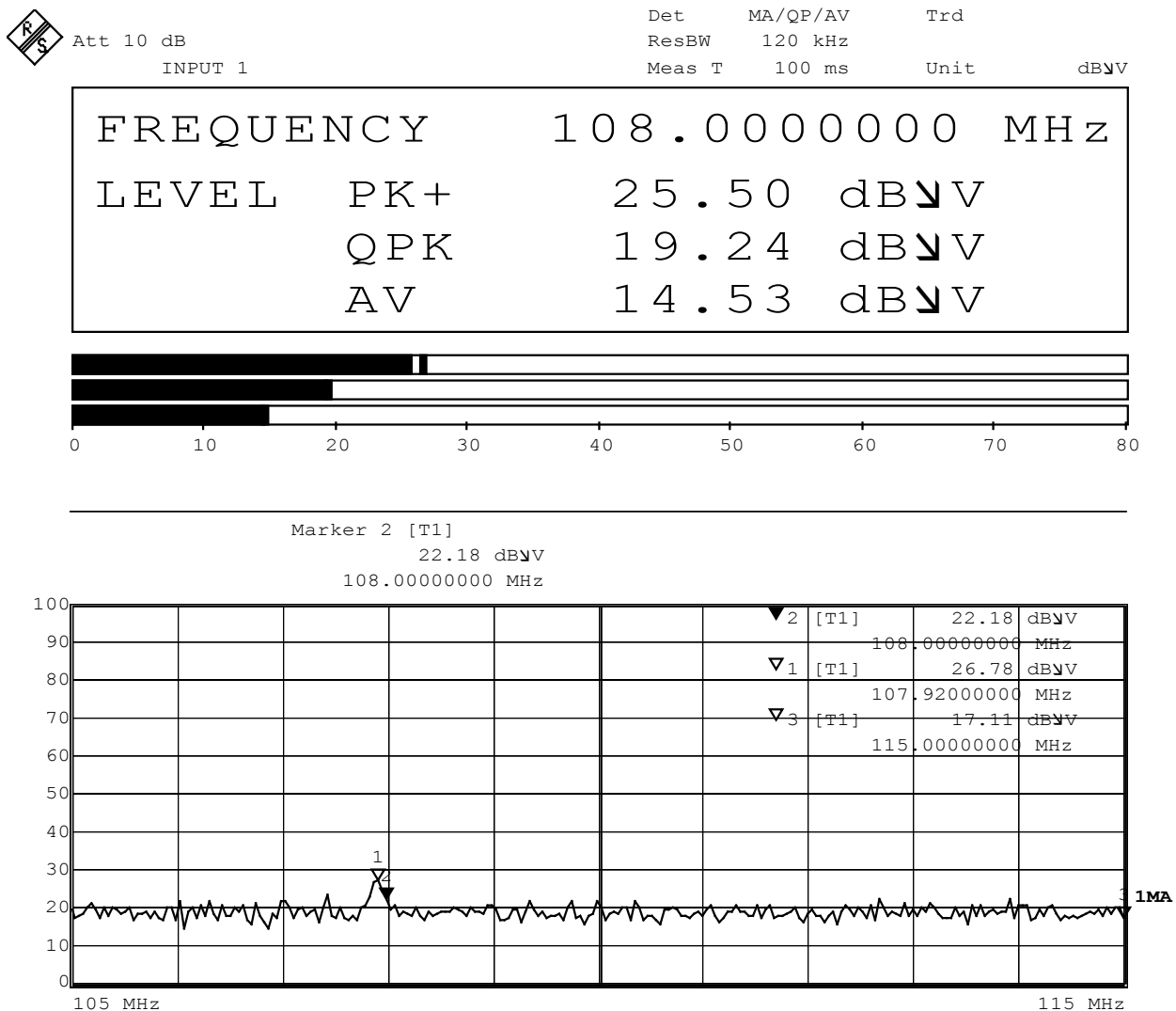
Note: RBW=120KHz

Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: PDA Only-Battery (107.9 MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
102	108.000	16.089	19.240	35.329	43.520	Pass

Figure Channel 102: Vertical (Quasi-Peak)



Date: 24.OCT.2007 21:41:51

Note: RBW=120KHz

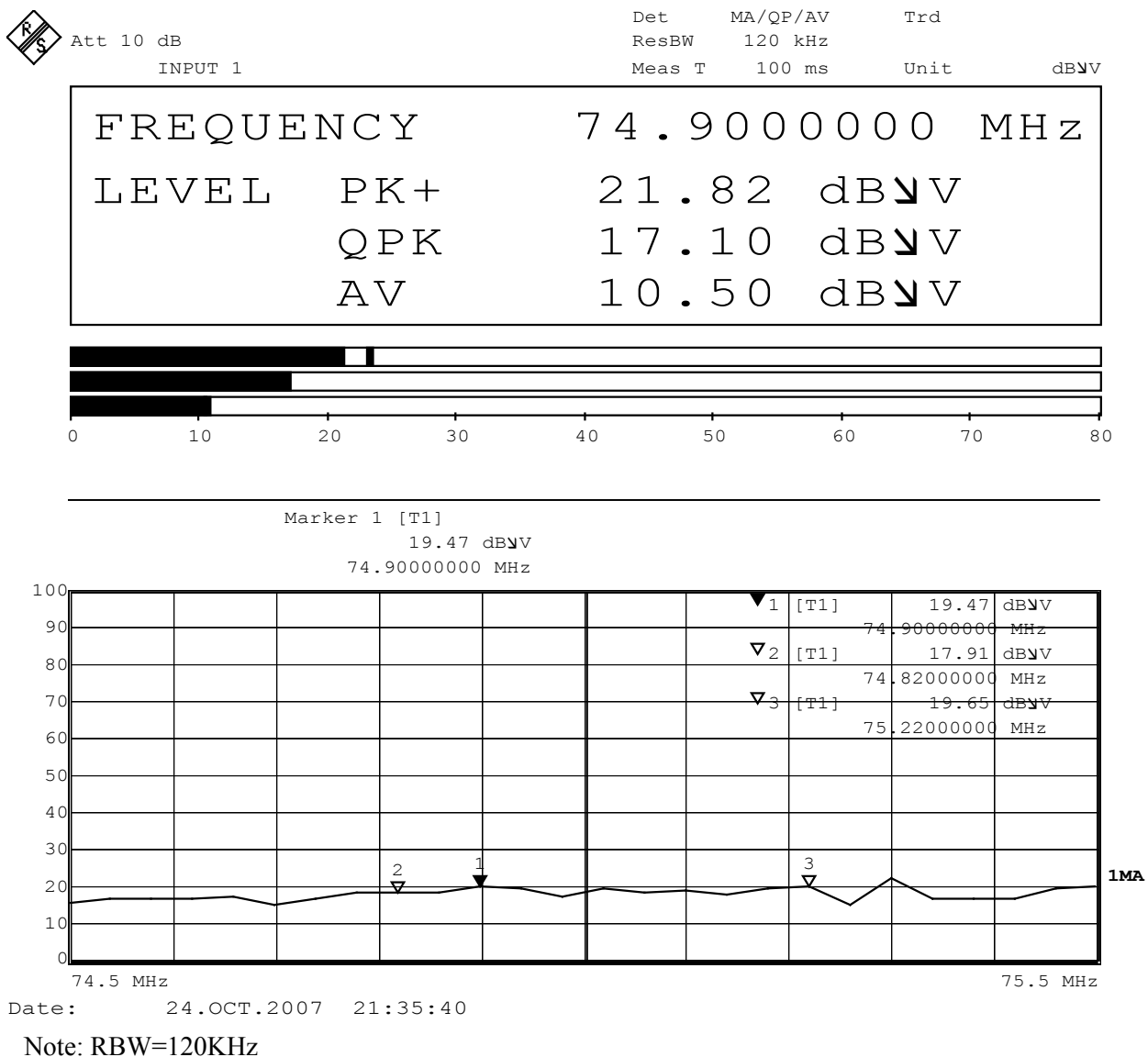
Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger (88.1 MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
1	74.900	12.692	17.100	29.792	40.000	Pass

Figure Channel 1:

Horizontal (Quasi-Peak)



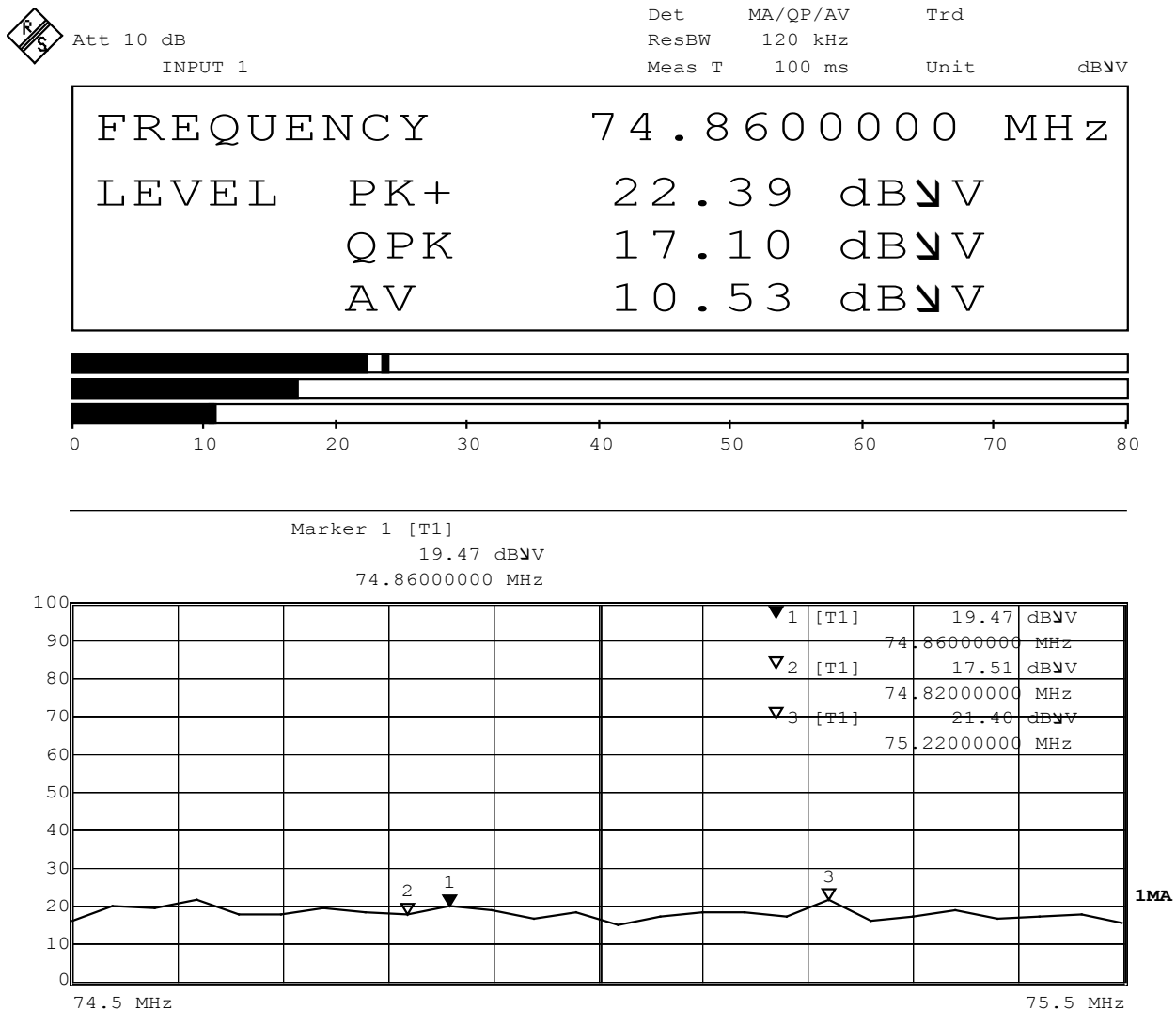
Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger (88.1 MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
1	74.860	10.654	17.100	27.754	40.000	Pass

Figure Channel 1:

Vertical (Quasi-Peak)



Date: 24.OCT.2007 21:36:17

Note: RBW=120KHz

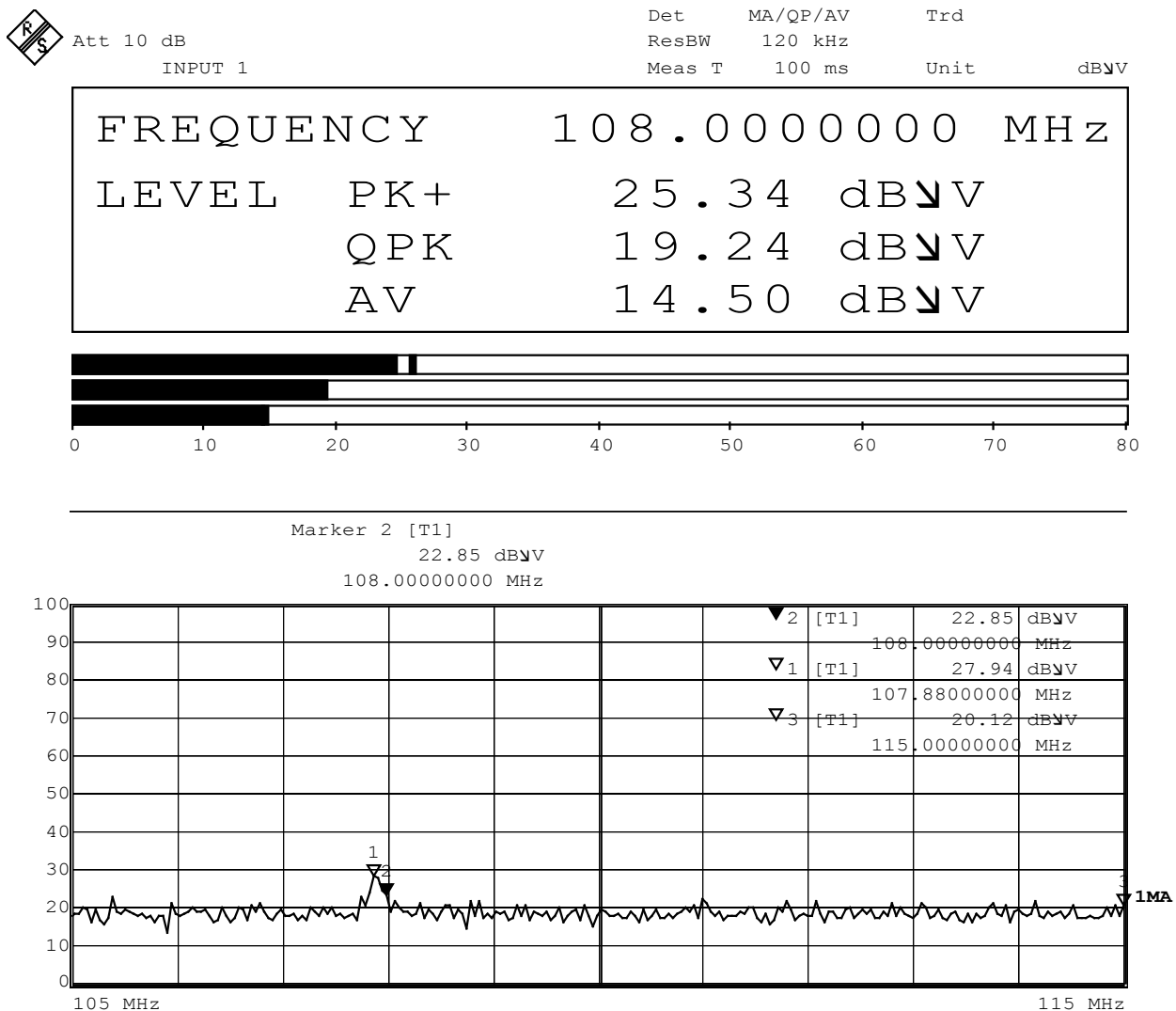
Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger (107.9 MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
102	108.000	15.378	19.240	34.618	43.520	Pass

Figure Channel 102:

Horizontal (Quasi-Peak)



Date: 24.OCT.2007 21:43:37

Note: RBW=120KHz

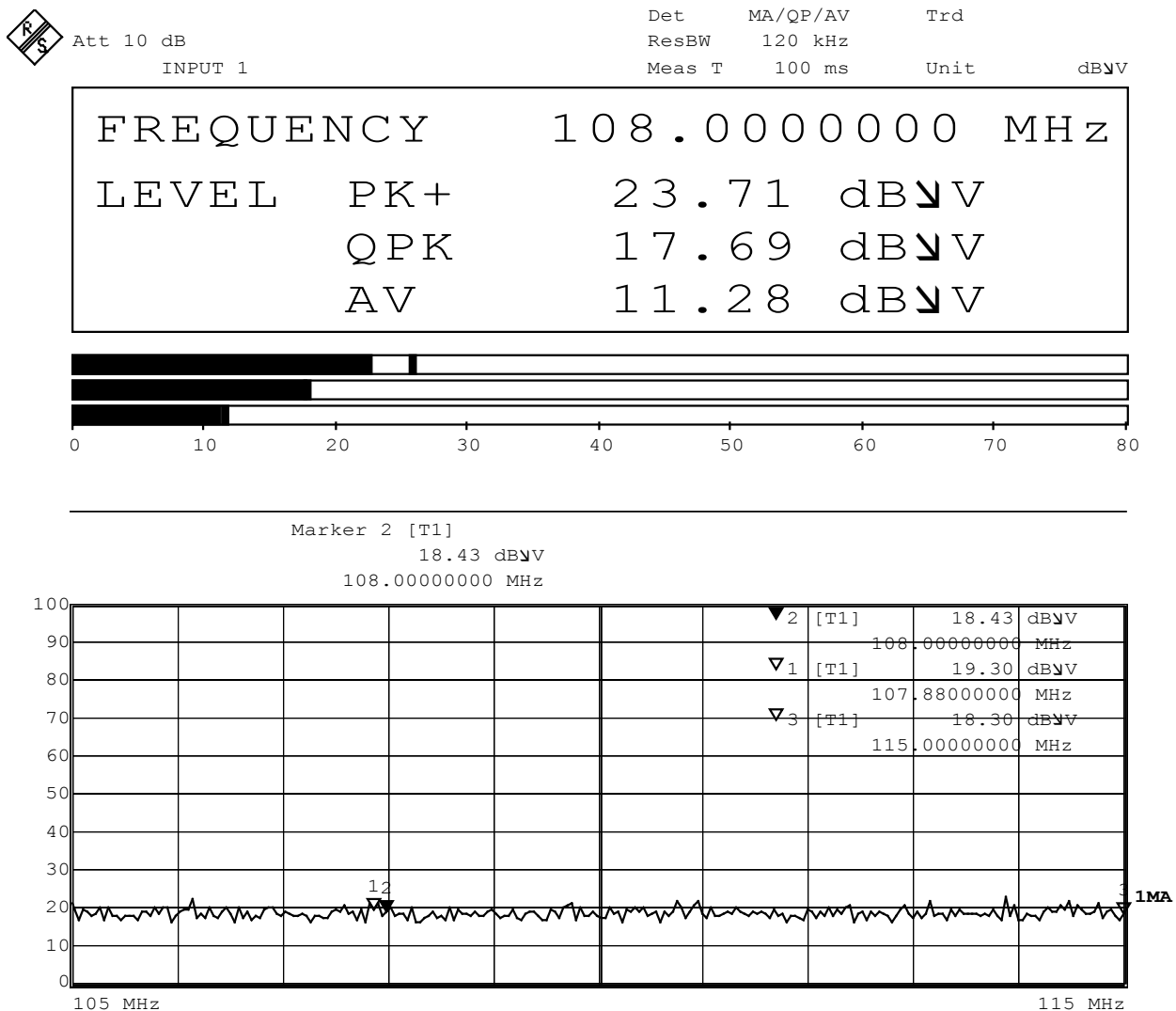
Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Atech DC Charger (107.9 MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
102	108.000	16.089	17.690	33.779	43.520	Pass

Figure Channel 102:

Vertical (Quasi-Peak)



Date: 24.OCT.2007 22:00:42

Note: RBW=120KHz

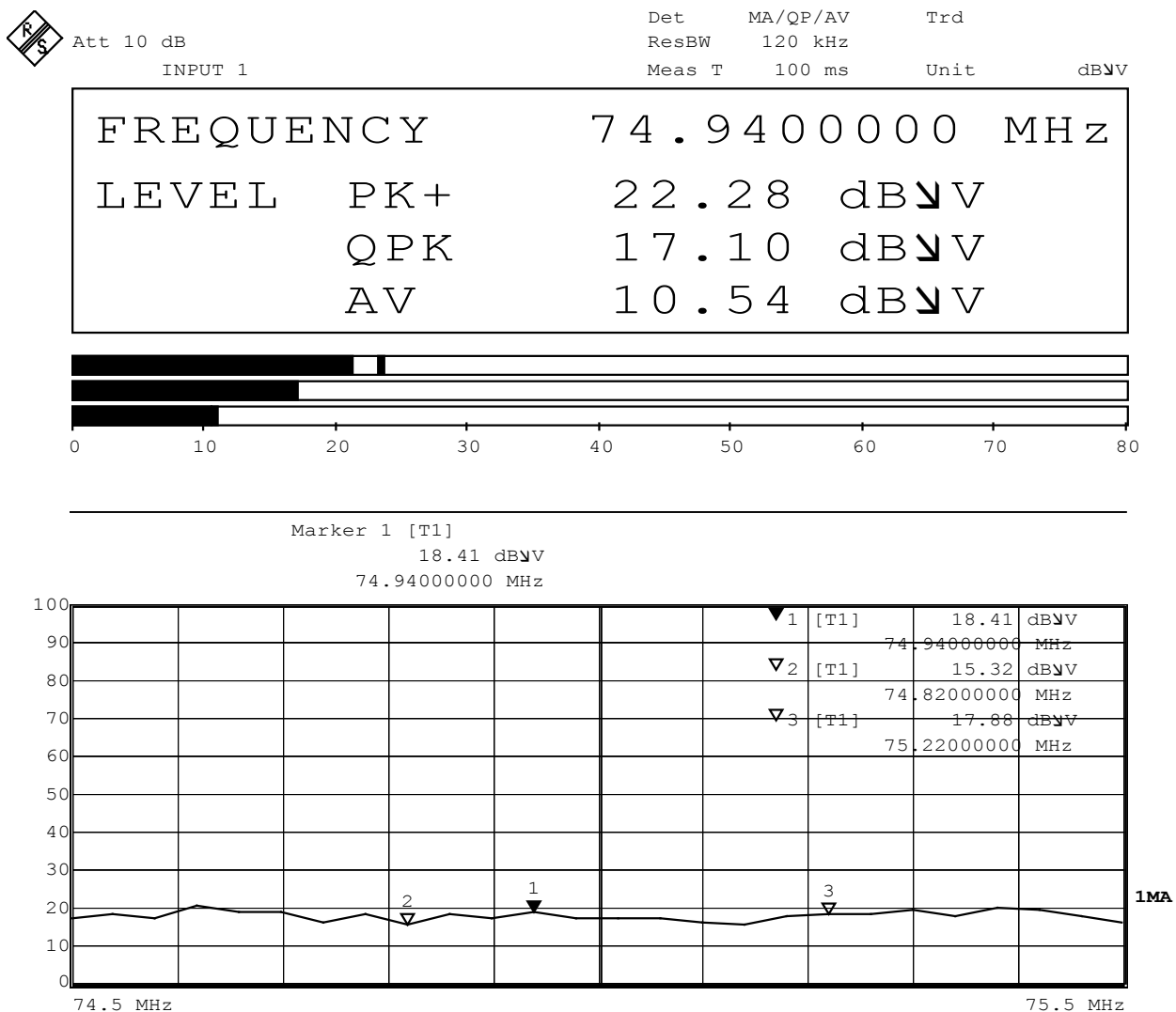
Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: JPC DC Charger (88.1 MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
1	74.940	12.692	17.100	29.792	40.000	Pass

Figure Channel 1:

Horizontal (Quasi-Peak)



Date: 24.OCT.2007 21:32:16

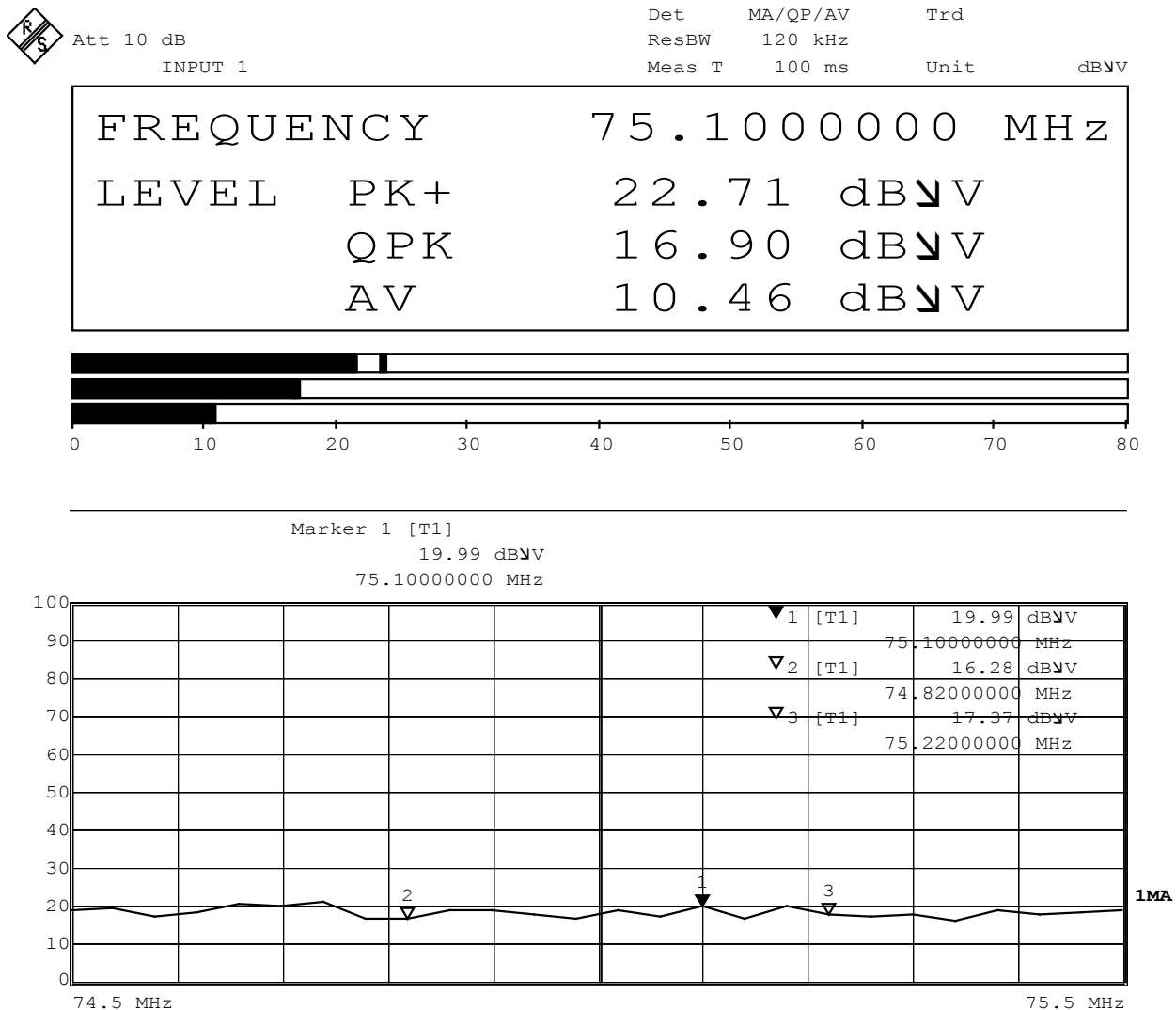
Note: RBW=120KHz

Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: JPC DC Charger (88.1 MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
1	75.100	10.677	16.900	27.576	40.000	Pass

Figure Channel 1: Vertical (Quasi-Peak)



Date: 24.OCT.2007 21:33:12

Note: RBW=120KHz

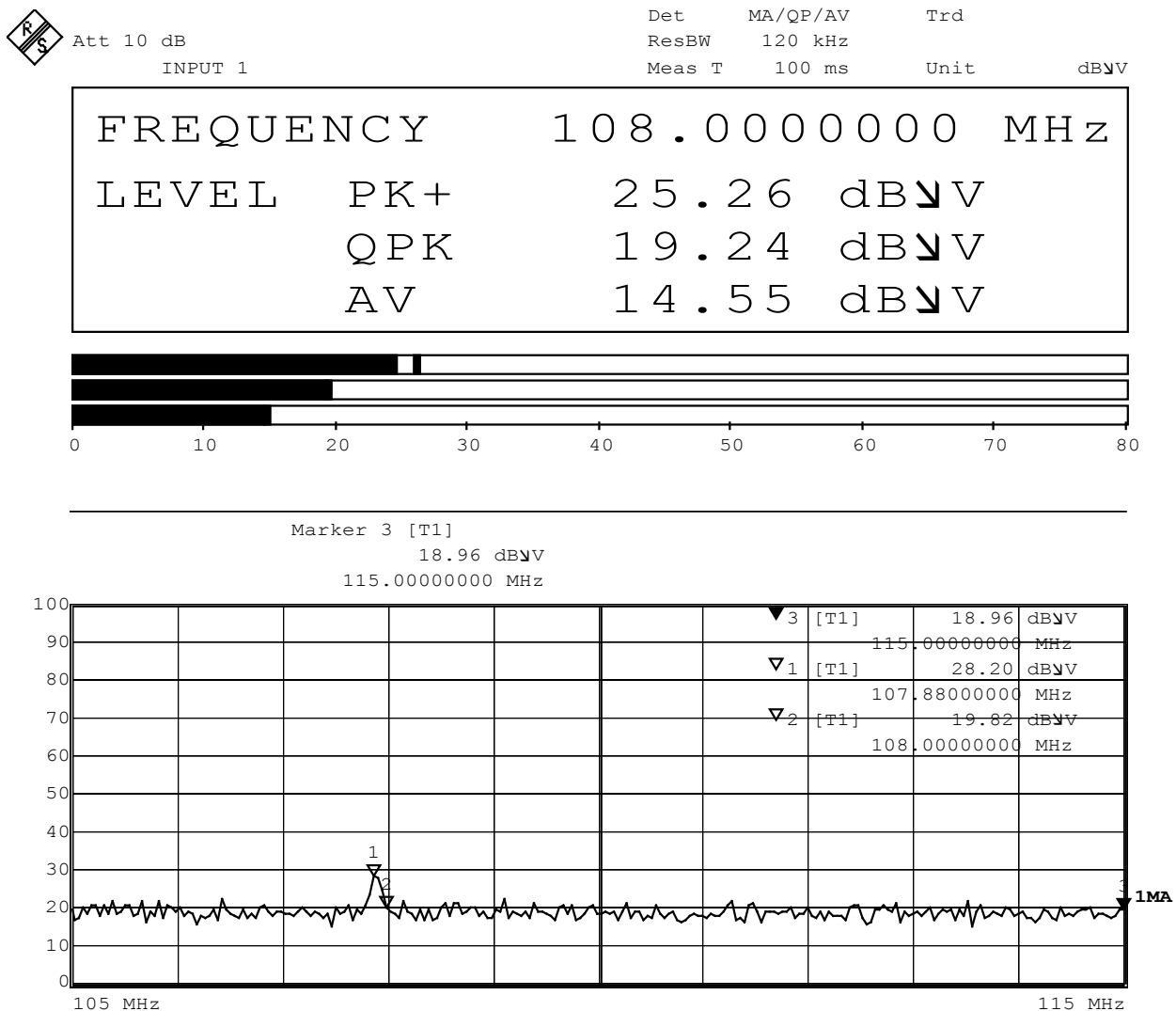
Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: JPC DC Charger (107.9 MHz)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
102	108.000	15.378	19.240	34.618	43.520	Pass

Figure Channel 102:

Horizontal (Quasi-Peak)



Date: 24.OCT.2007 21:39:35

Note: RBW=120KHz

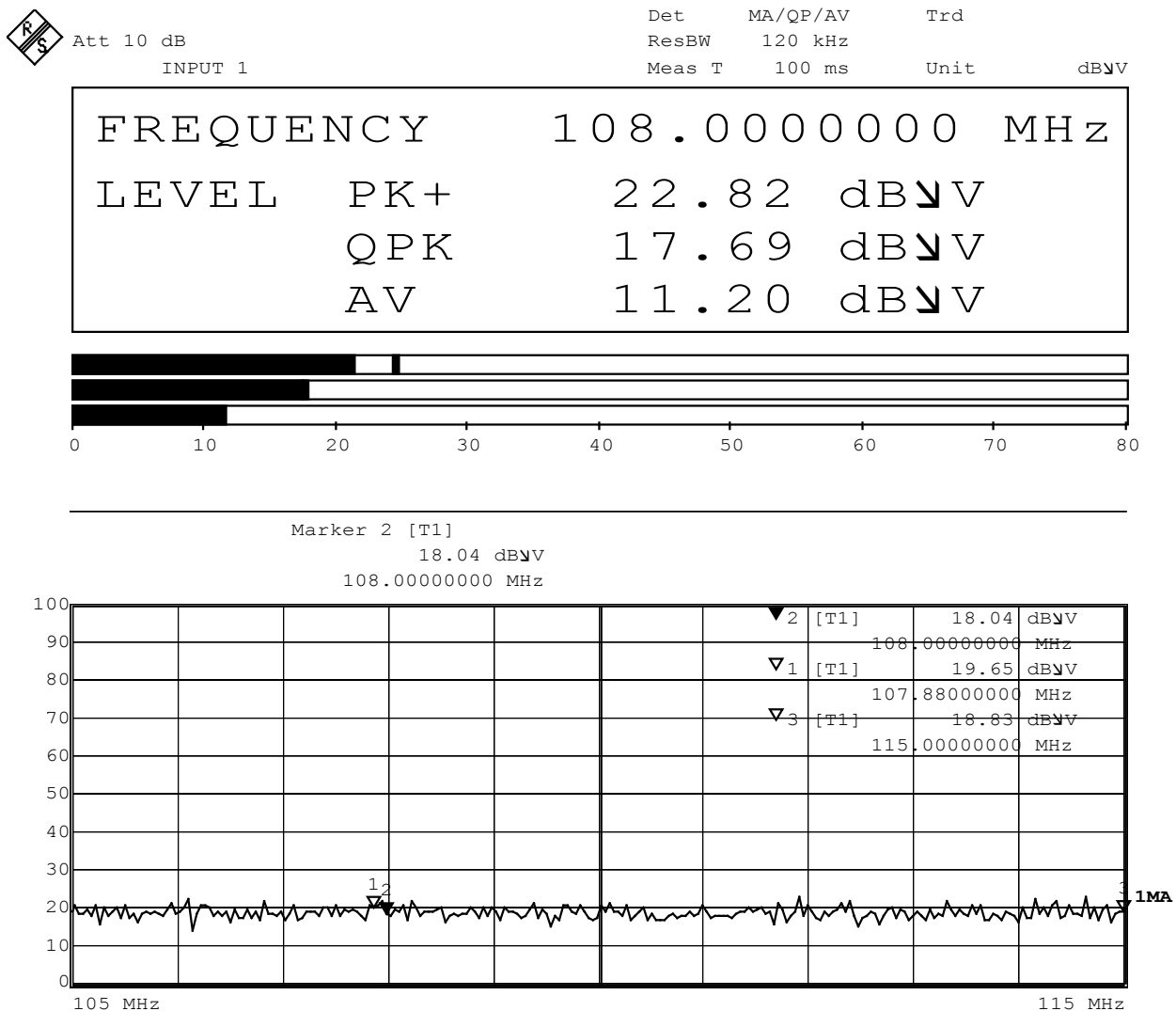
Product : Portable Navigation Device
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: JPC DC Charger (107.9 MHz)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
102	108.000	16.089	17.690	33.779	43.520	Pass

Figure Channel 102:

Vertical (Quasi-Peak)



Date: 24.OCT.2007 21:42:57

Note: RBW=120KHz

6. EMI Reduction Method During Compliance Testing

No modification was made during testing.

7. SECOND SOURCE LIST

PCBA BOM SECOND SOURCE		
Item	Specification	Brand
1	Flash ROM,K9F1208U0C-PCB0, 64M*8,42ns,48p,TSOP1,SAMSUNG,RoHS	Samsung
2	Flash ROM,K9F1208U0C-PCB0, 64M*8,42ns,48p,TSOP1,SAMSUNG,RoHS	Samsung
3	Flash ROM,SST39VF800A-70-4C-B3KE	SST
4	REG,S-1111B18MC-NYD-TFG, 1.8V,150mA,SOT23-5,Pb/F,RoHS	Seiko
5	SDRAM,HYB25L256160AF-7.5, 16M*16,7.5ns,54p,TFBGA,RoHS	Infineon (Qimonda)
6	Fuse,1.5A,50V, FCC32,152,1206, KAMAYA, RoHS	KAMAYA
ENGINE BOM SECOND SOURCE		
1	MIC+RUB,2.2K,1~10V,-42+-3dB, BLK,D6*2.7,TSOF6027L0423ZGF,NESSIE,RoHS	Nessie
2	Speaker,1W,8ohm,90+-3Db, 52.5*27.6*8.4, FYX2952A-01-C1-E1,BANG-TEC,RoHS	BANG-TEC