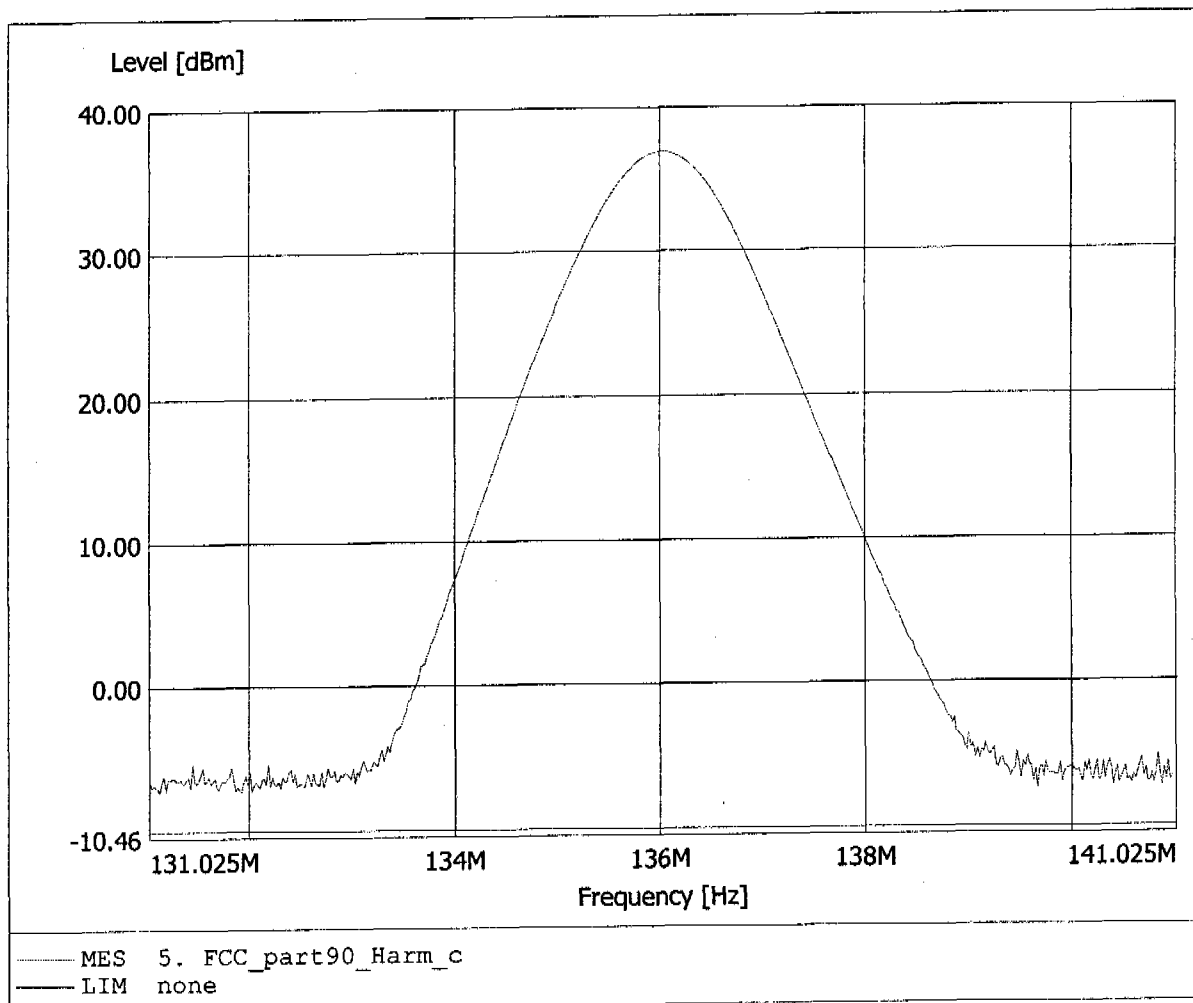


Appendix B

Output Power conducted

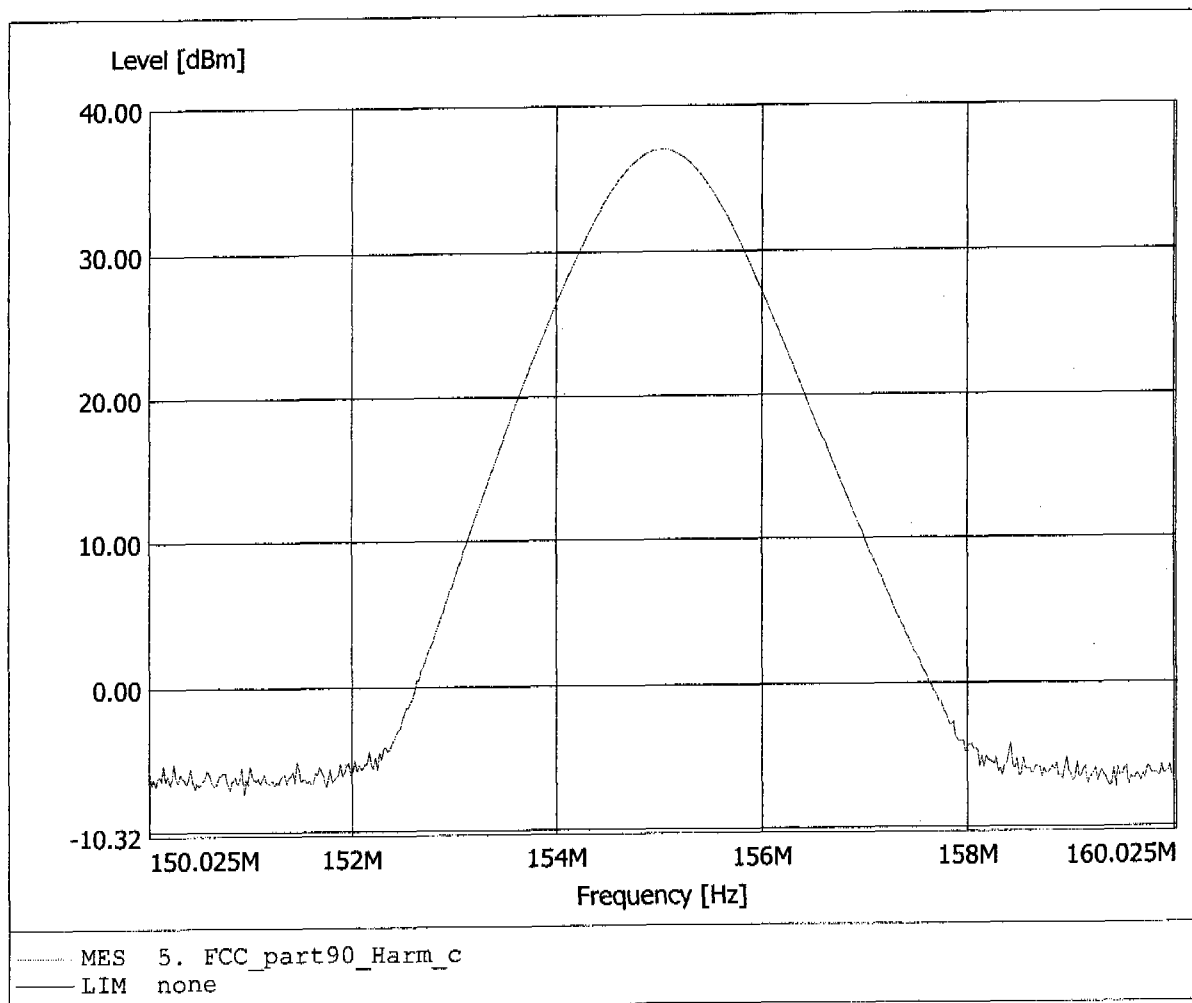
Output power conducted
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:136.015MHz Pmax:36.92dBm RBW: 1MHz



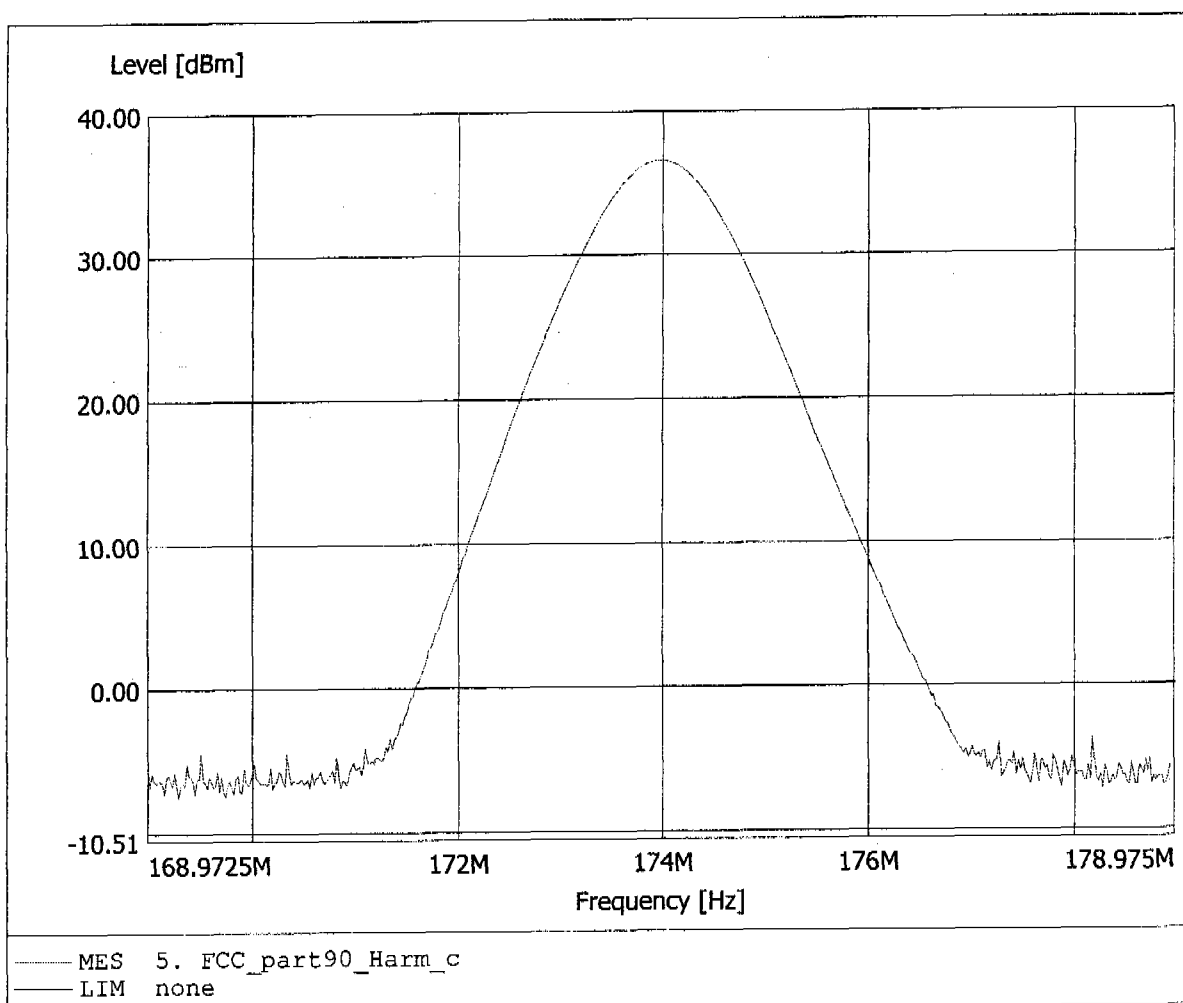
Output power conducted
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:155.015MHz Pmax:36.95dBm RBW: 1MHz



Output power conducted
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:173.984MHz Pmax:36.58dBm RBW: 1MHz

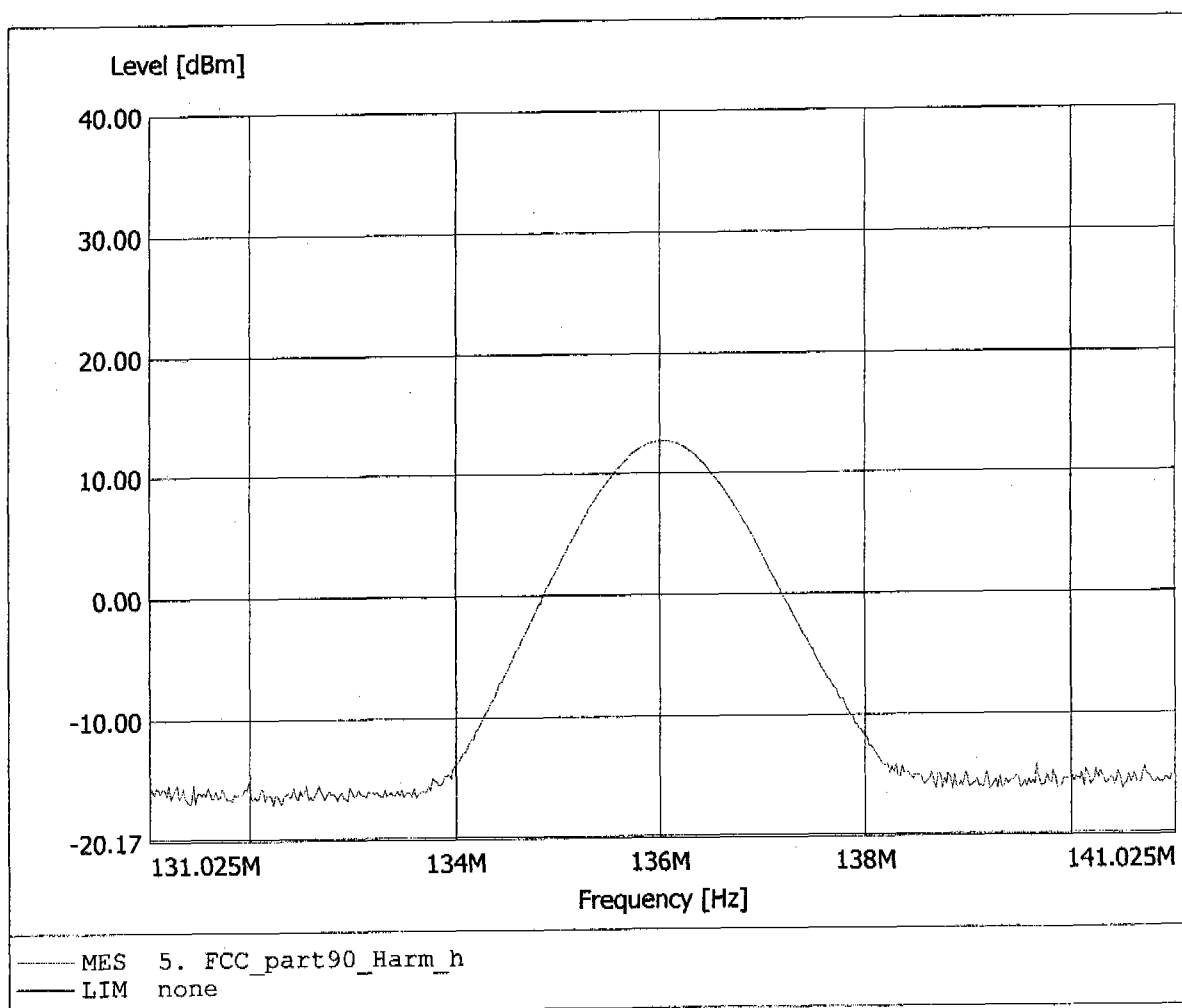


Appendix C

Output Power radiated

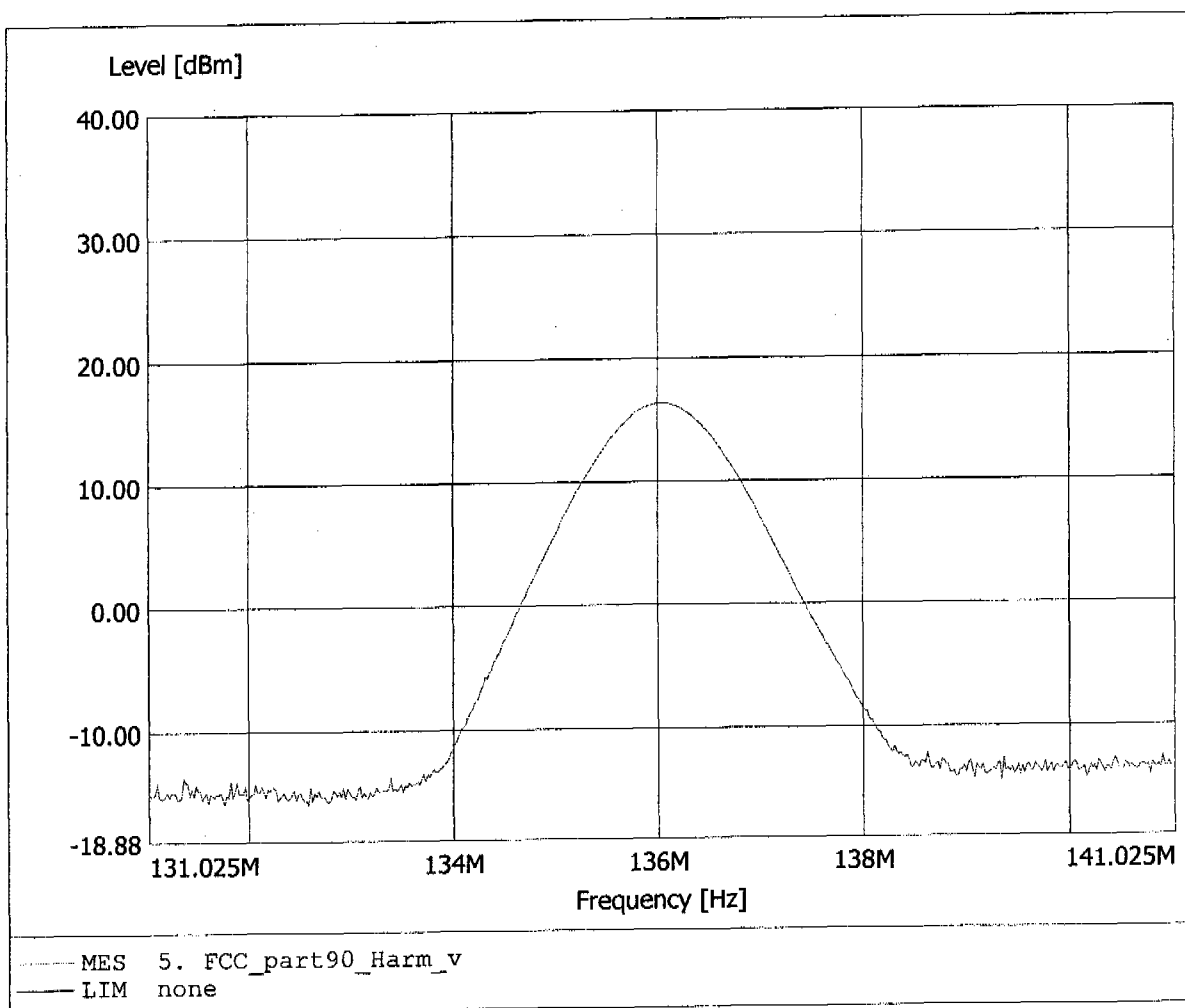
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:136.015MHz Pmax:12.71dBm RBW: 1 MHz



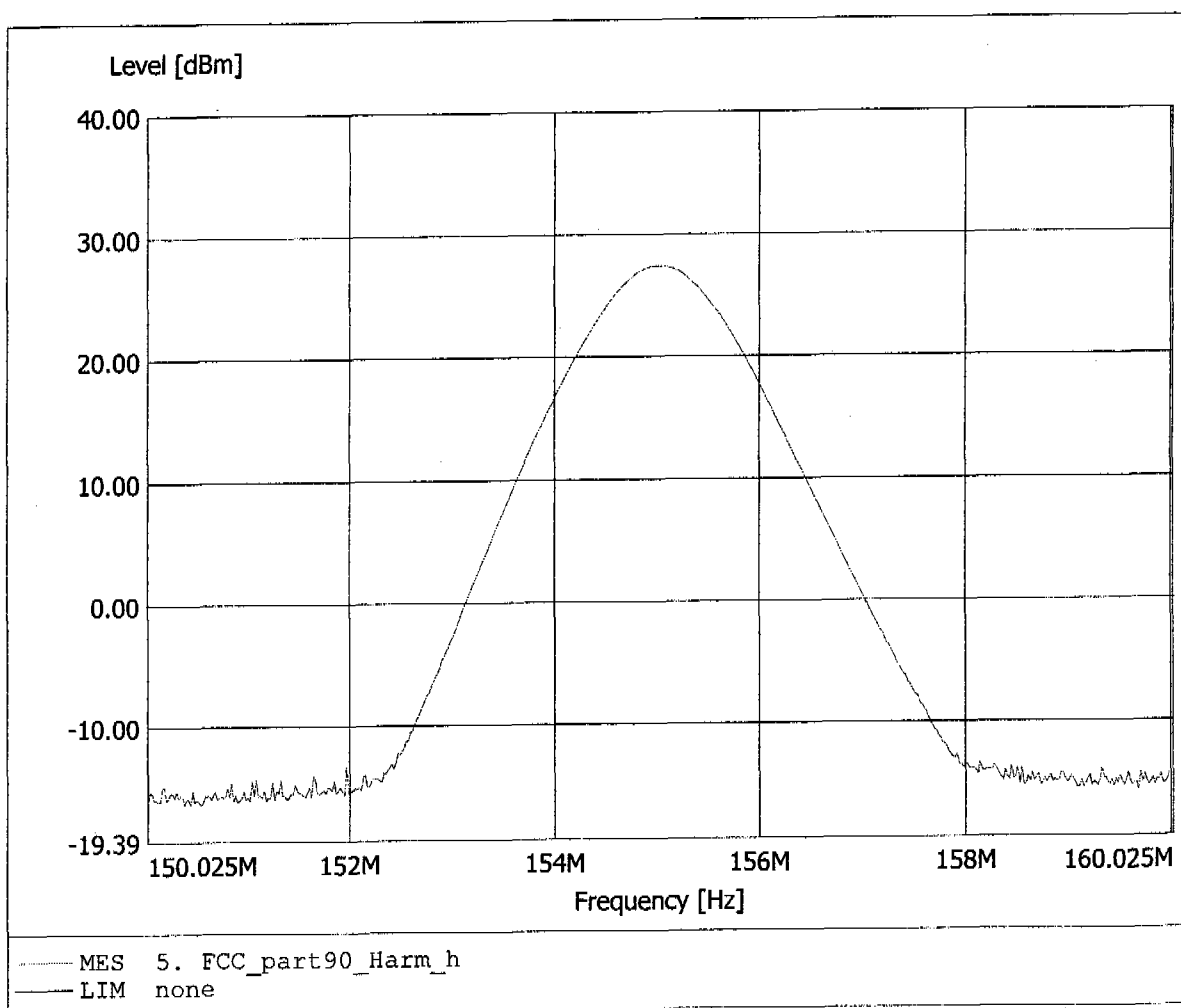
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:136.055MHz Pmax:16.36dBm RBW: 1 MHz



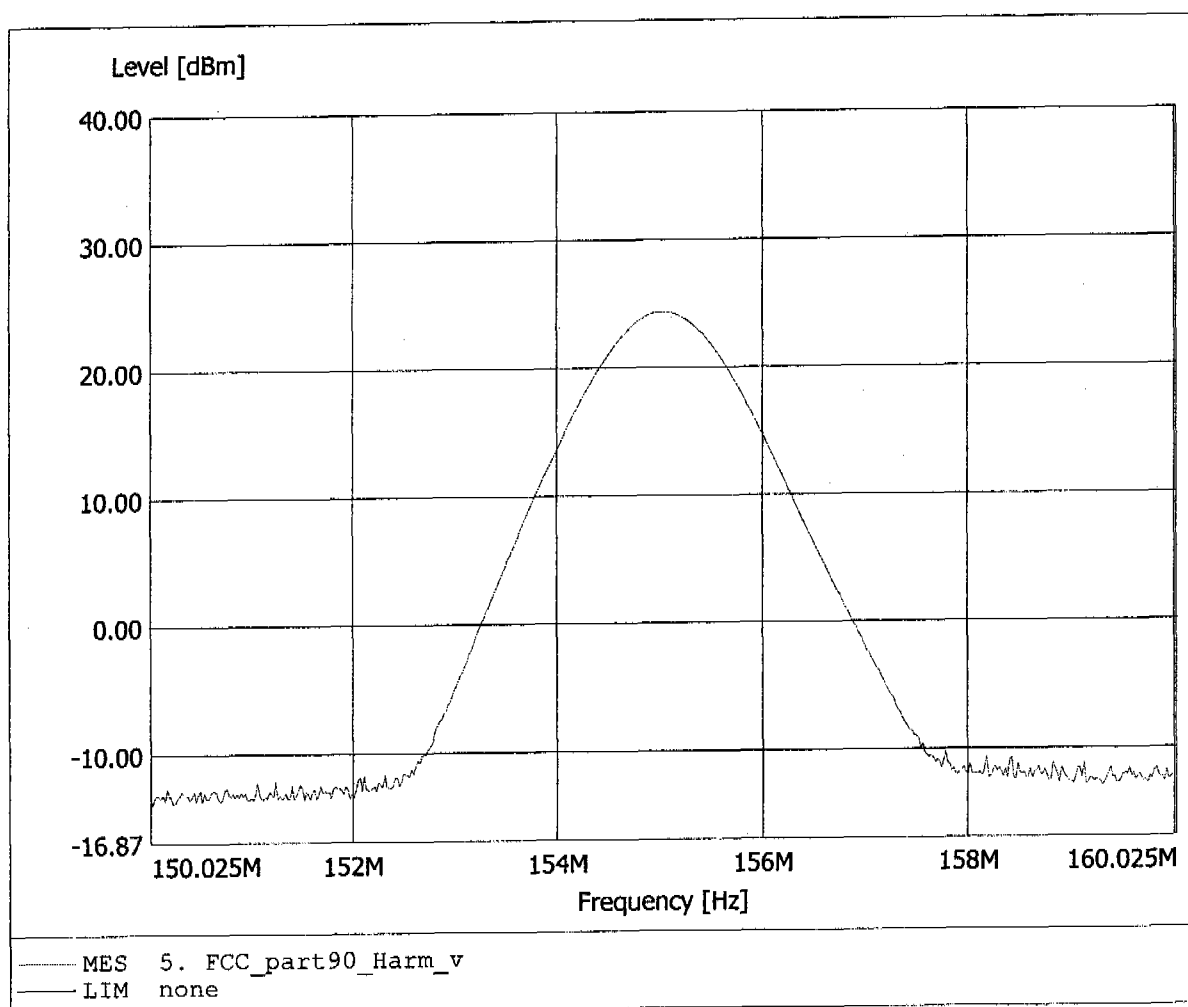
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:155.075MHz Pmax:27.43dBm RBW: 1 MHz



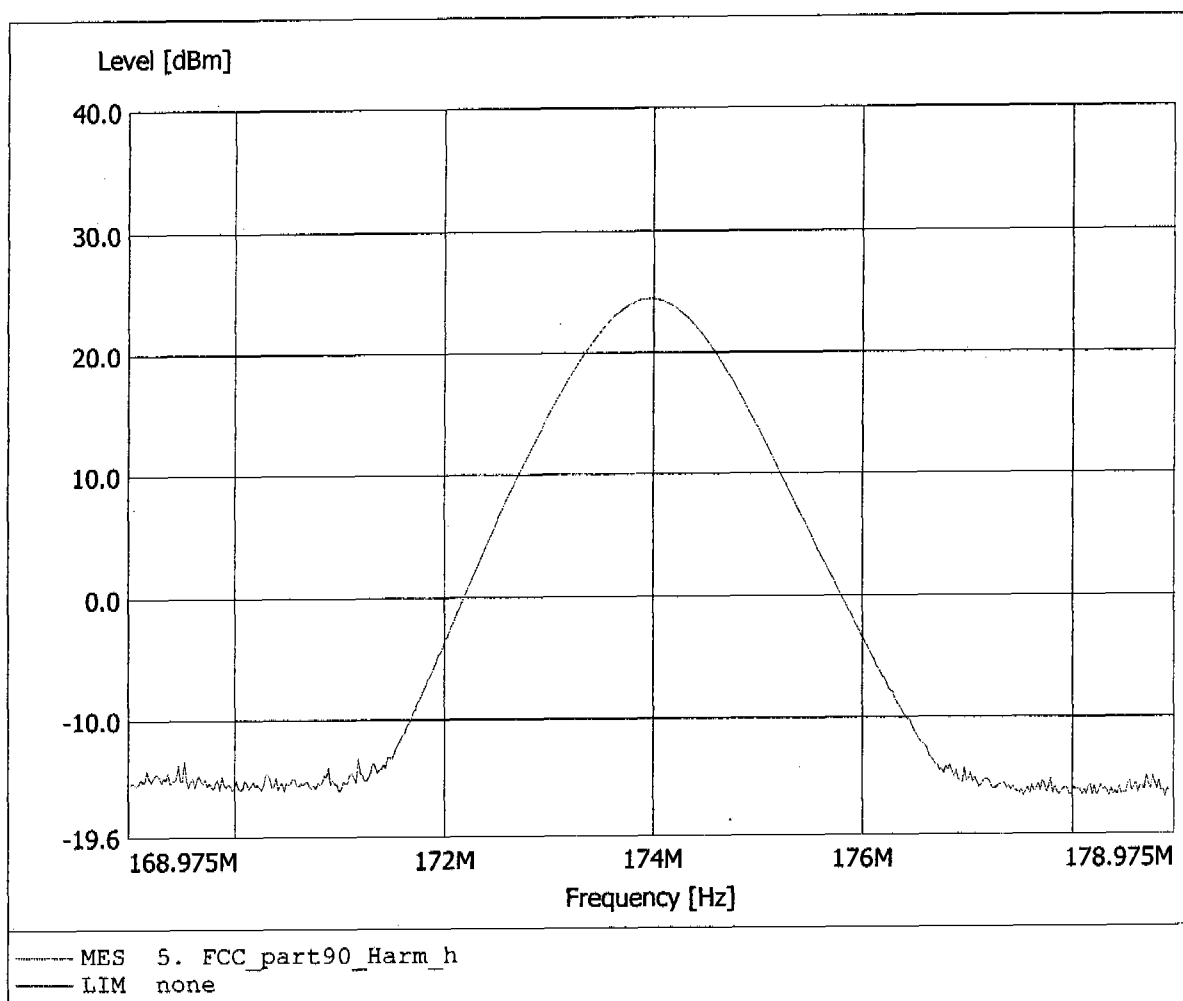
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:155.035MHz Pmax:24.34dBm RBW: 1 MHz



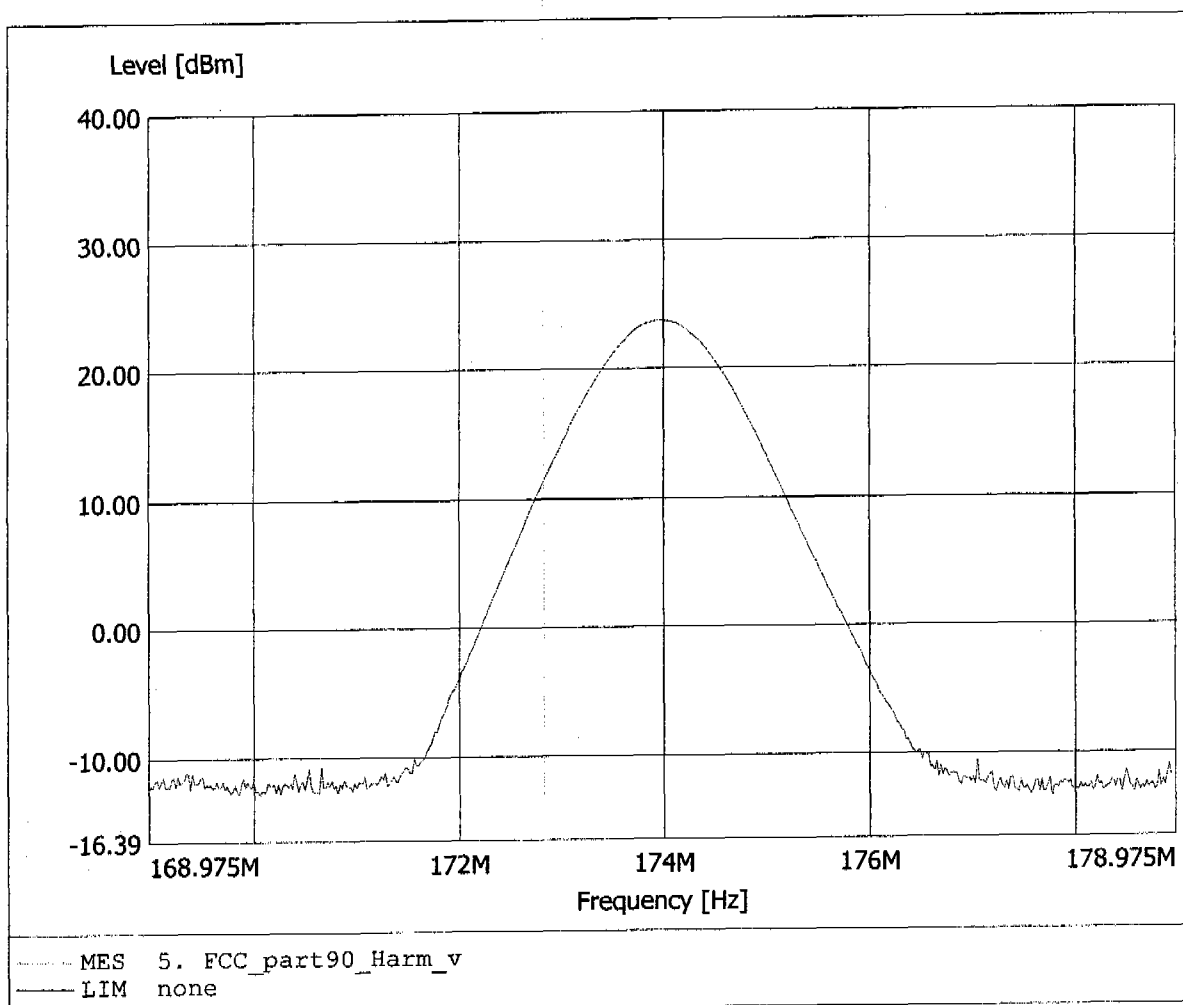
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:173.965MHz Pmax:24.46dBm RBW: 1 MHz



Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:173.965MHz Pmax:23.70dBm RBW: 1 MHz

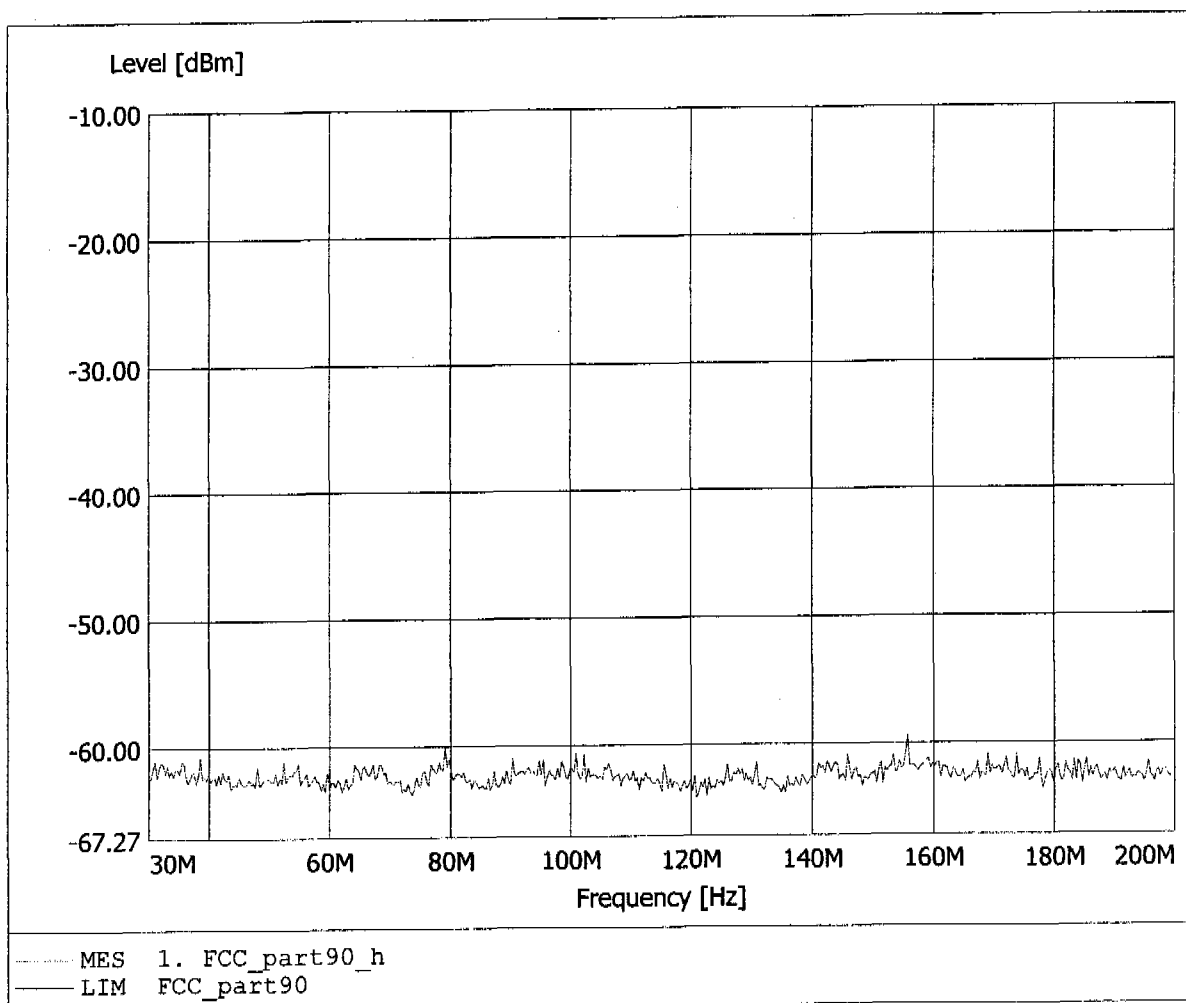


Appendix D

Spurious Emissions radiated - Transmitter operating

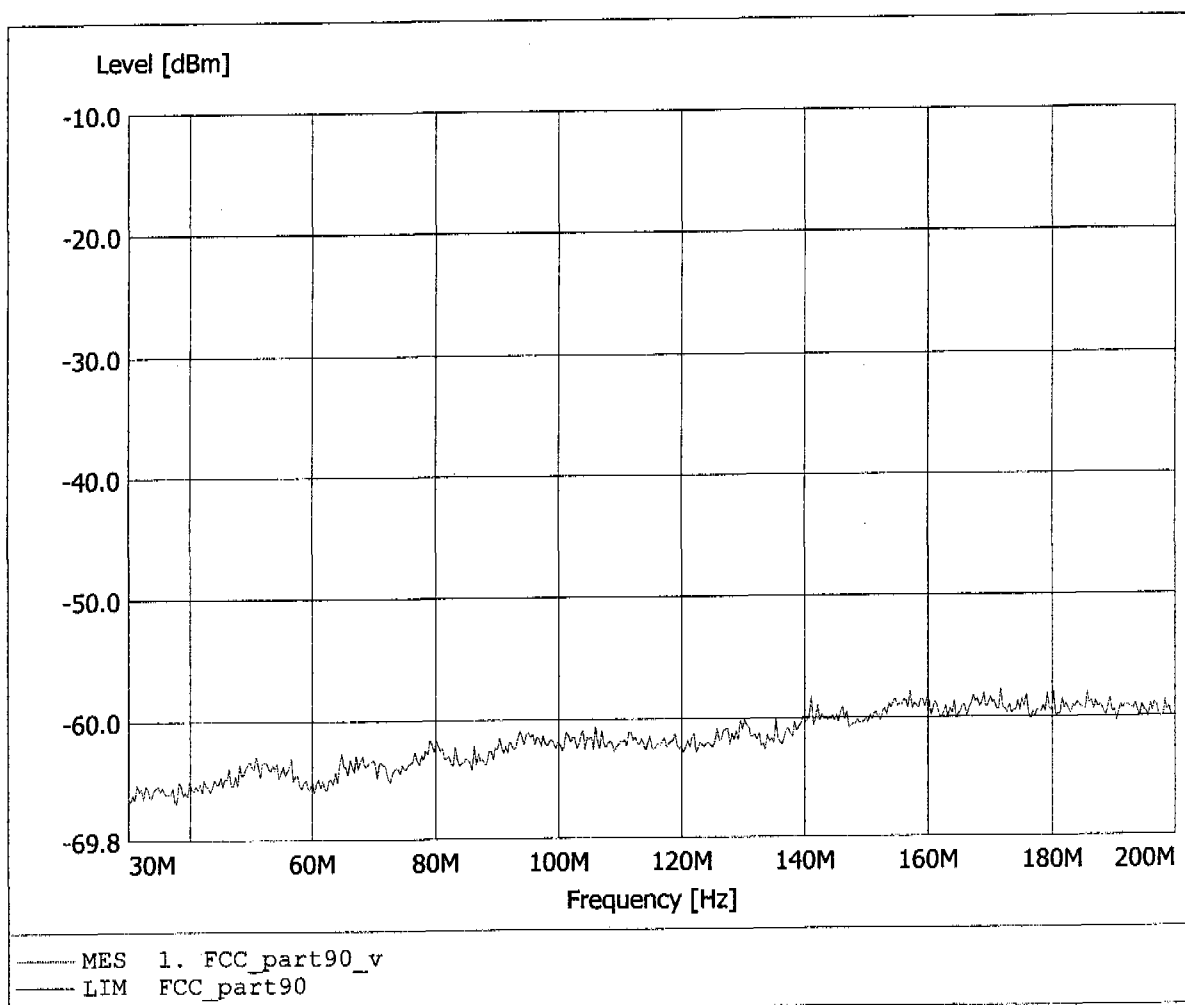
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:155.711MHz Pmax:-59.44dBm RBW: 100 kHz



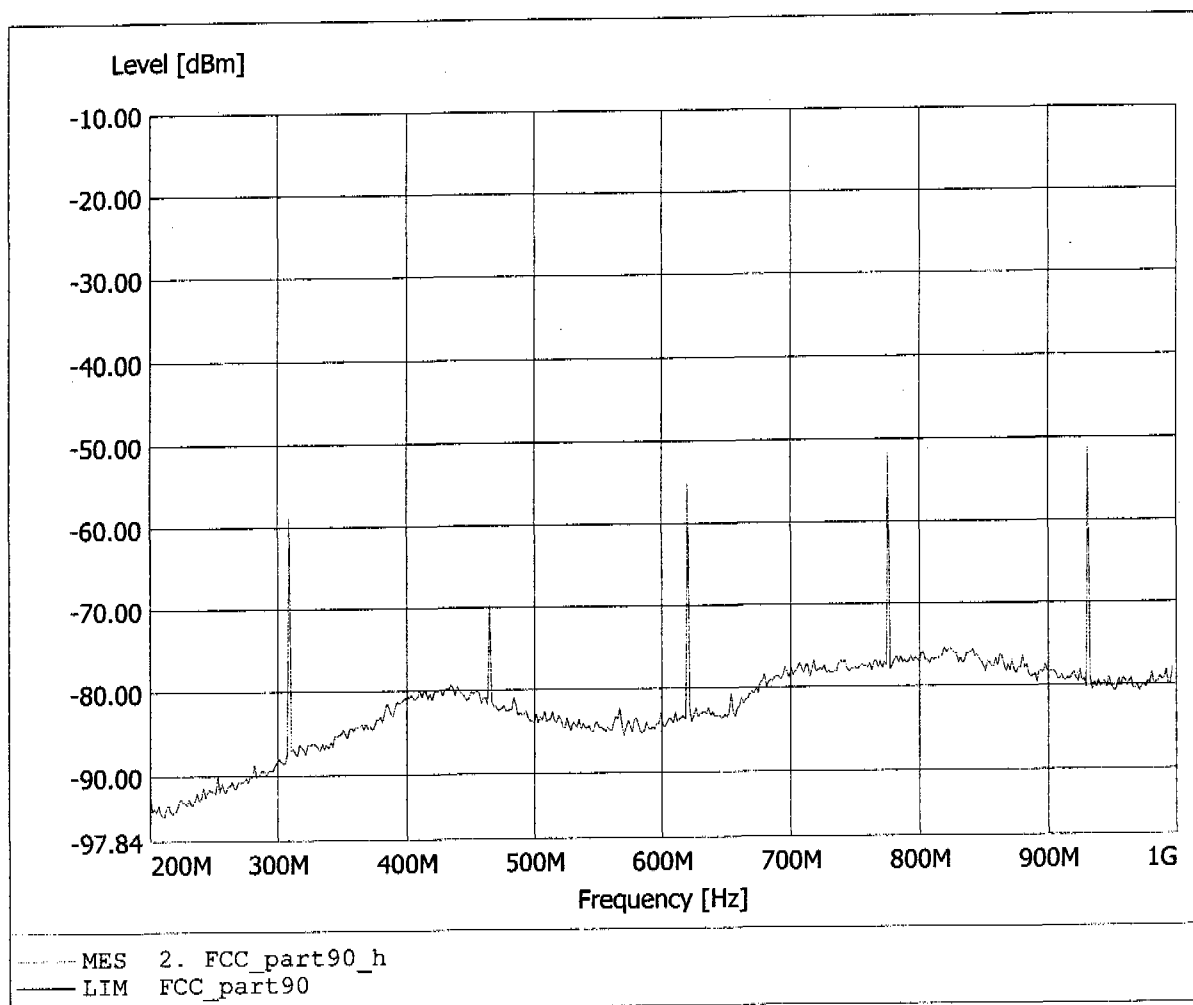
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HK 116,
Comment 2: Freq:171.723MHz Pmax:-57.77dBm RBW: 100 kHz



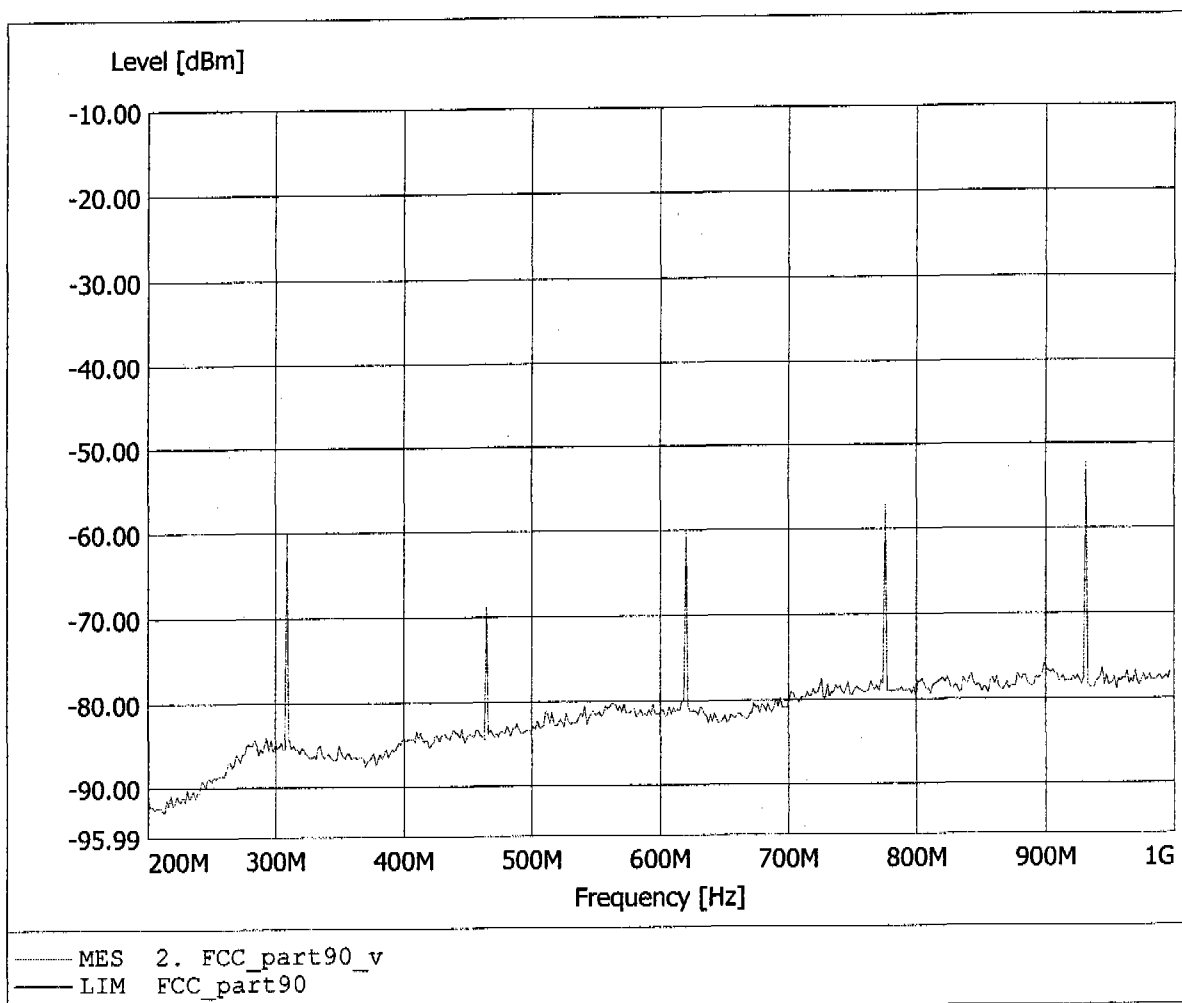
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HL 223,
Comment 2: Freq: 931.062MHz Pmax: -51.22dBm RBW: 100 kHz



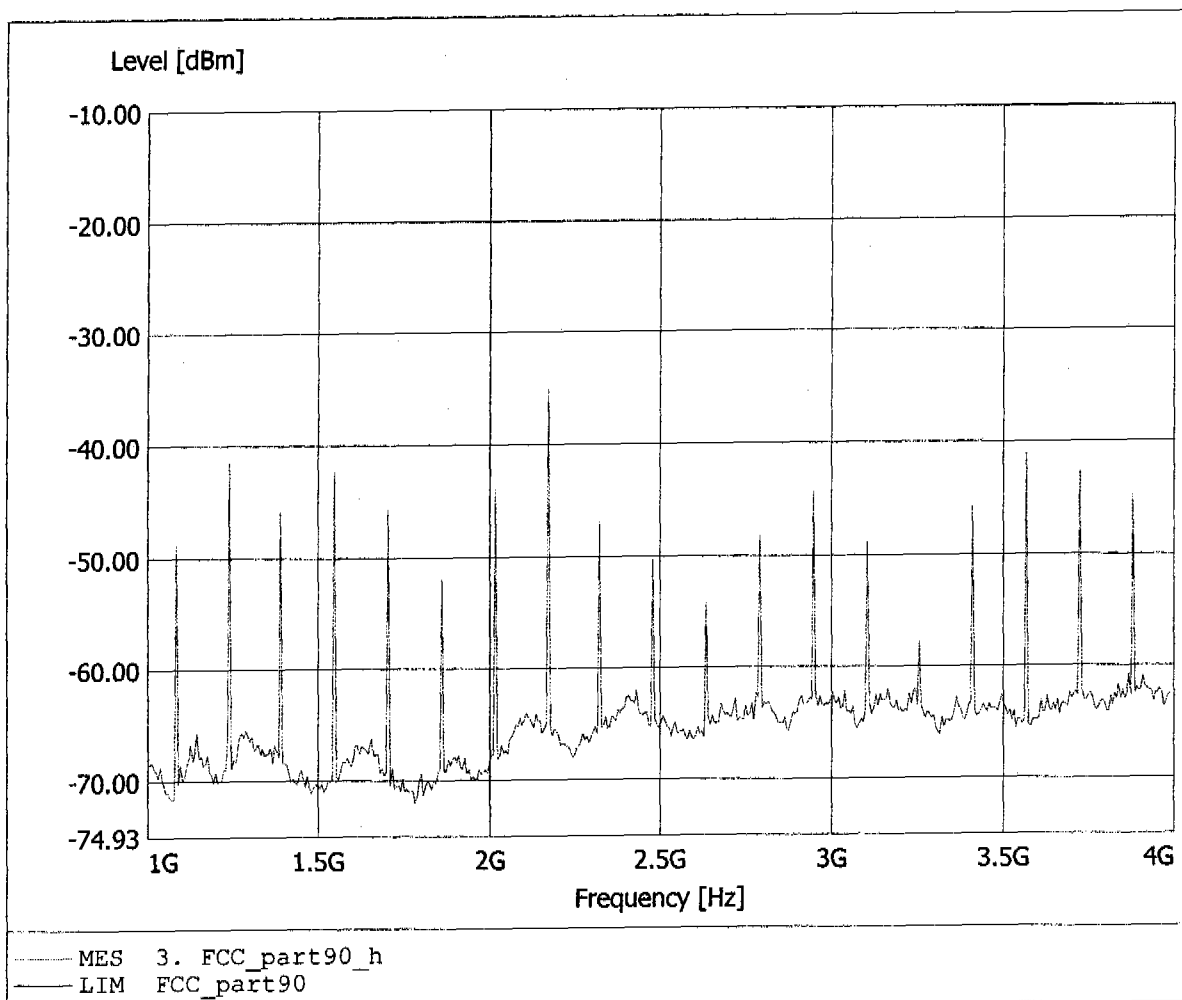
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: HL 223,
Comment 2: Freq:931.062MHz Pmax:-52.32dBm RBW: 100 kHz



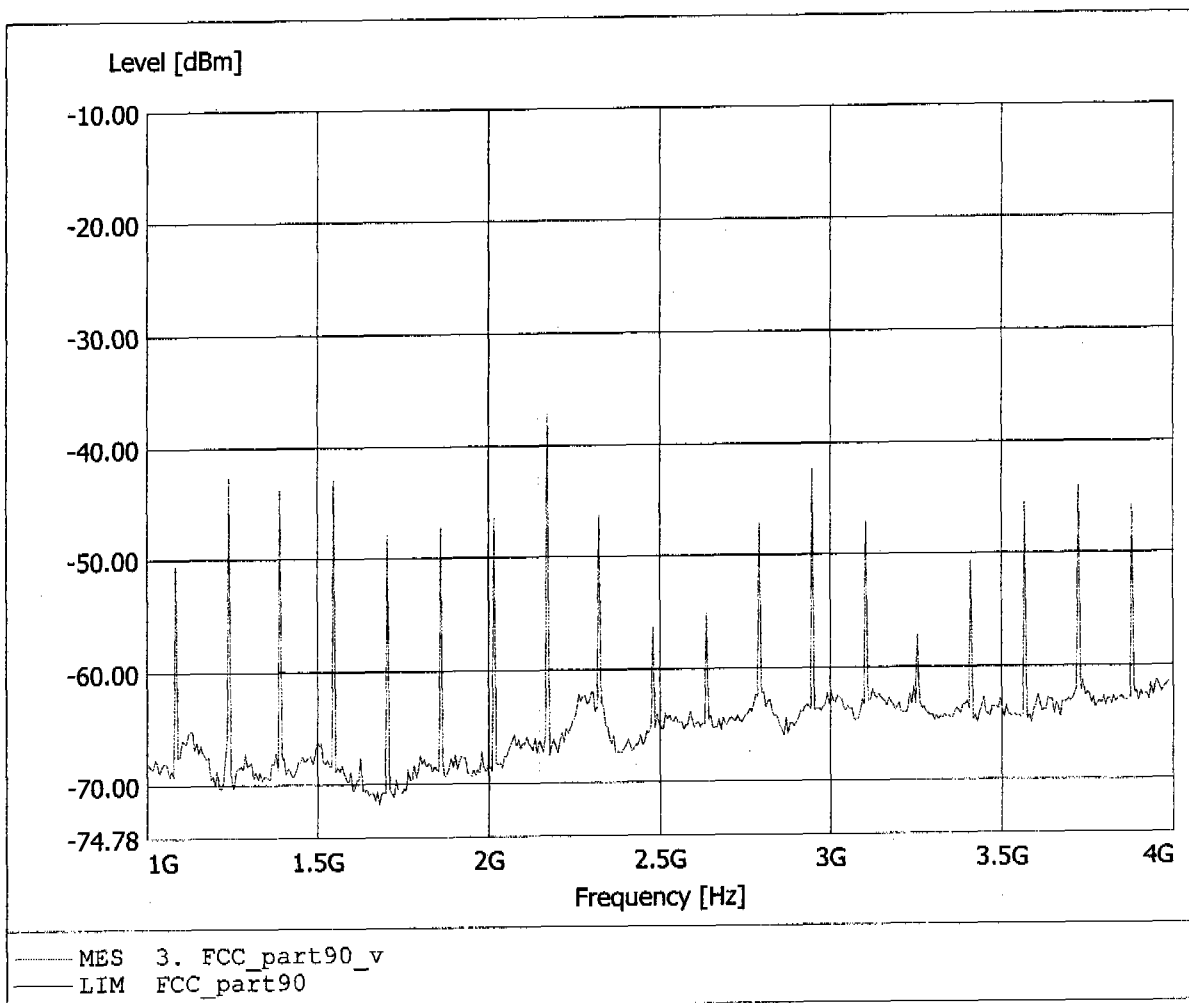
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: BBHA 9120D, + HP, ampl.: 1-4 GHz
Comment 2: Freq: 2.172 GHz Pmax: -35.06 dBm RBW: 1 MHz



Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC (rechargeable battery)
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: Fully anechoic chamber / mode: Tx
Comment 1: Dist.: 3m, Ant.: BBHA 9120D, + HP, ampl.: 1-4 GHz
Comment 2: Freq: 2.172 GHz Pmax: -37.19 dBm RBW: 1 MHz

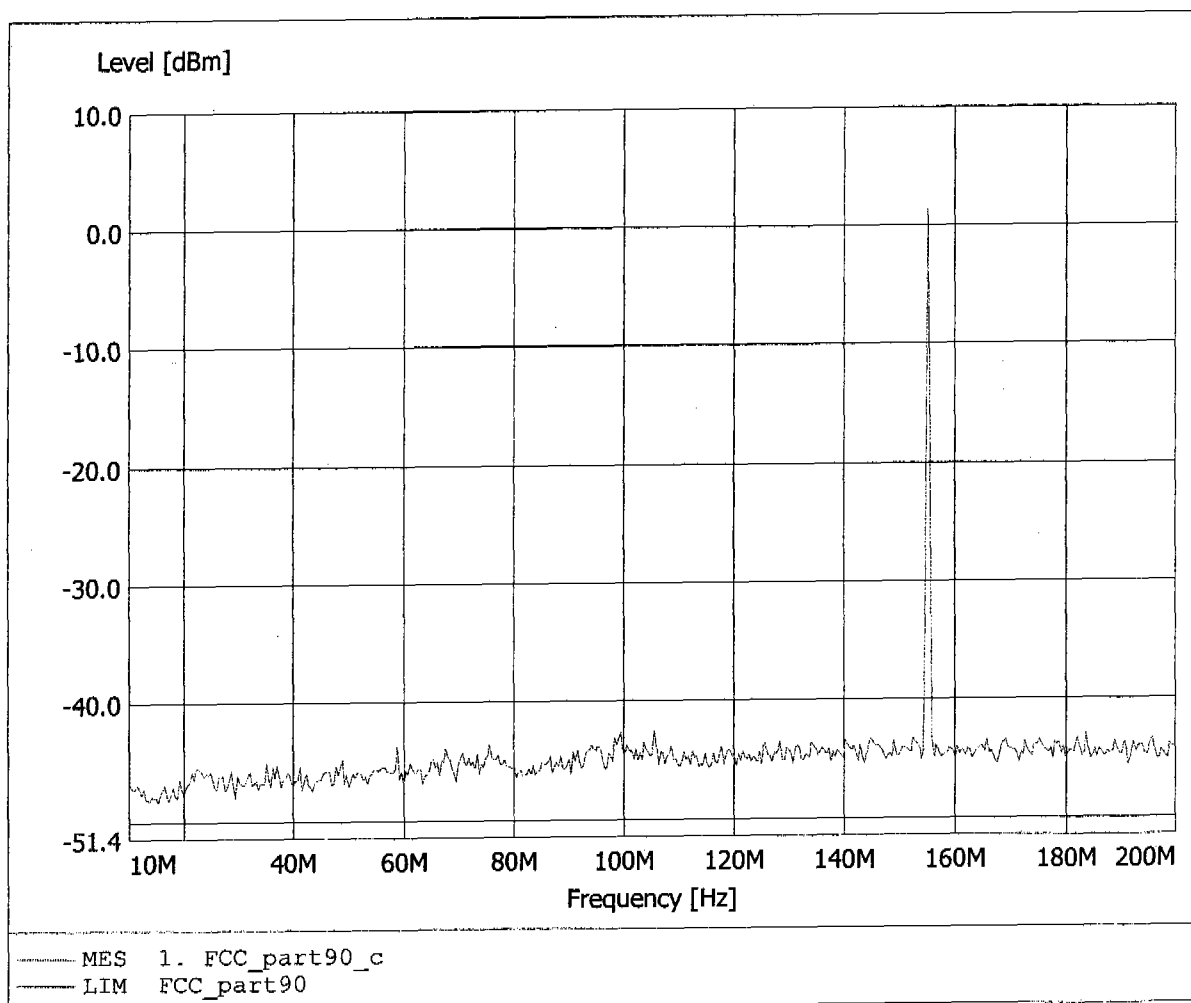


Appendix E

Spurious Emissions at antenna terminal

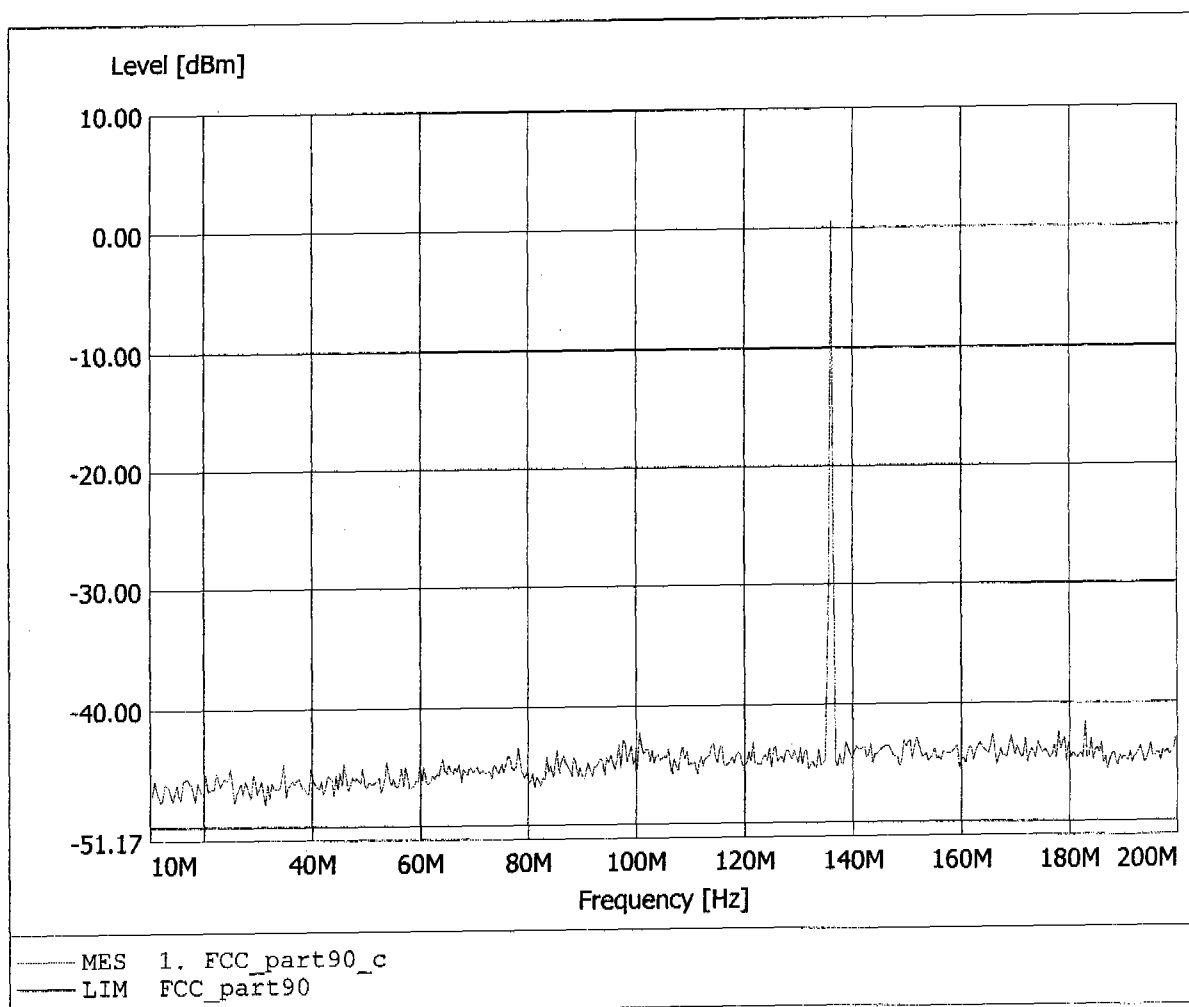
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:155.070MHz Pmax:1.35dBm RBW: 100kHz



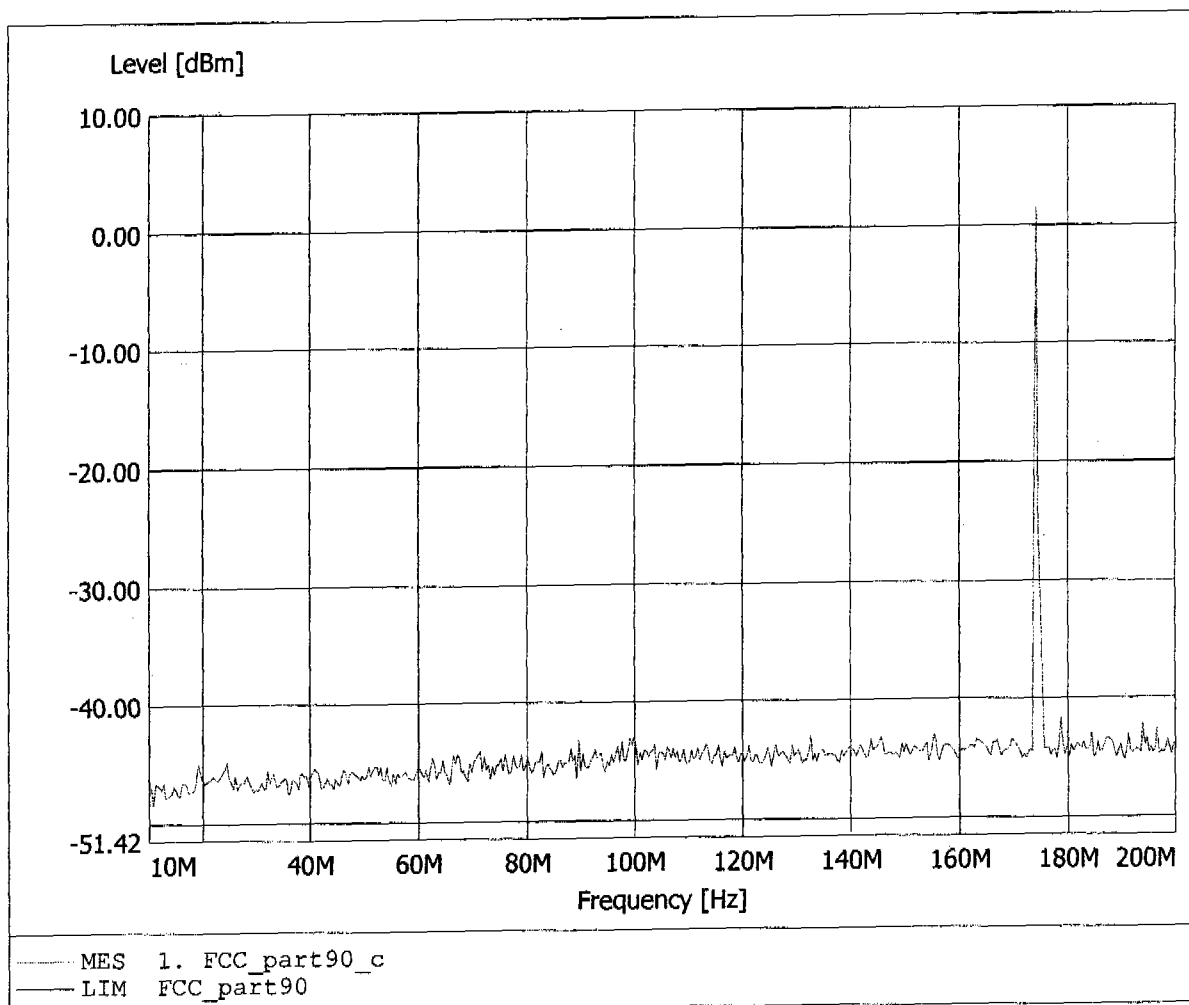
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:136.032MHz Pmax:0.50dBm RBW: 100kHz



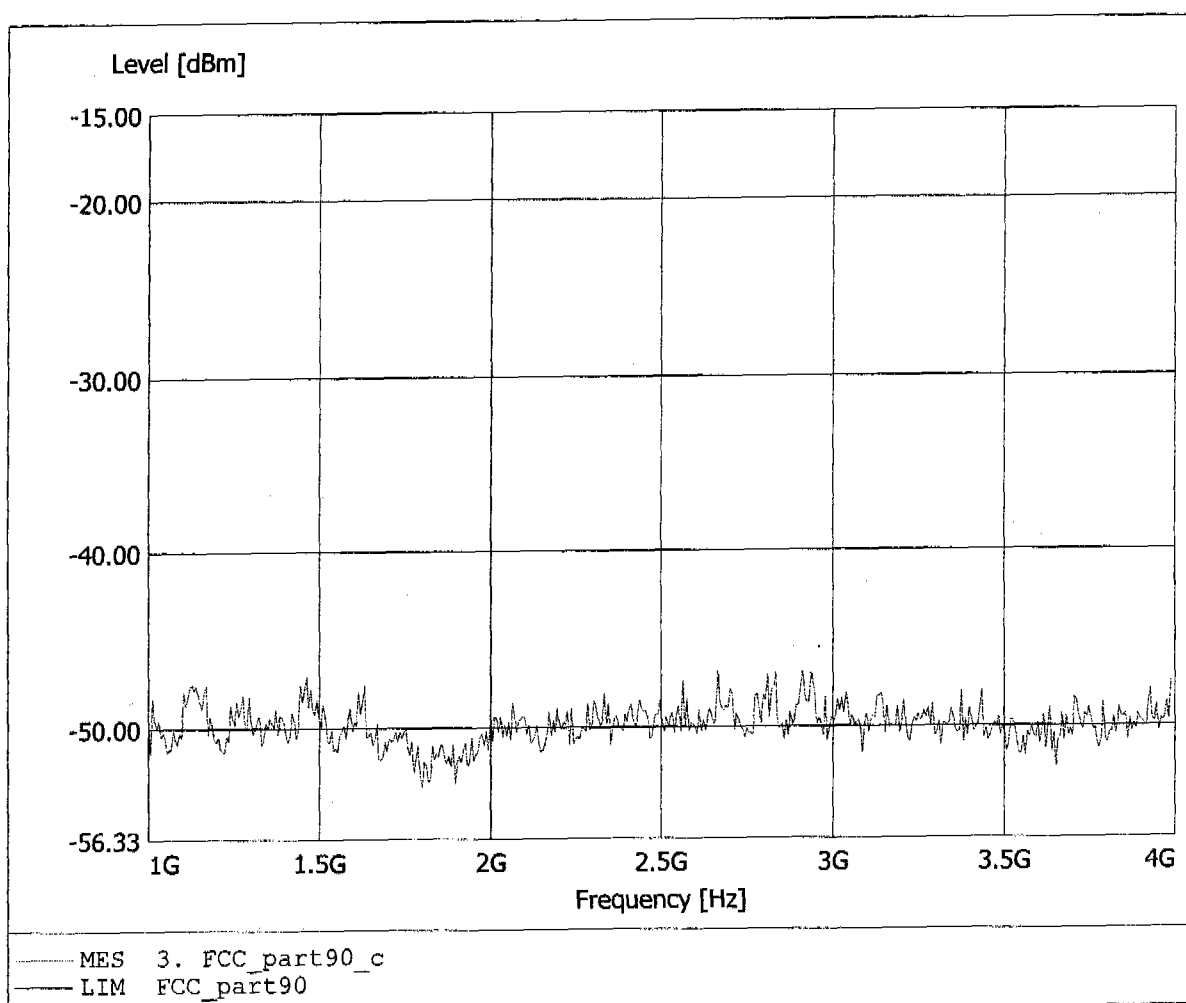
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:174.108MHz Pmax:1.43dBm RBW: 100kHz



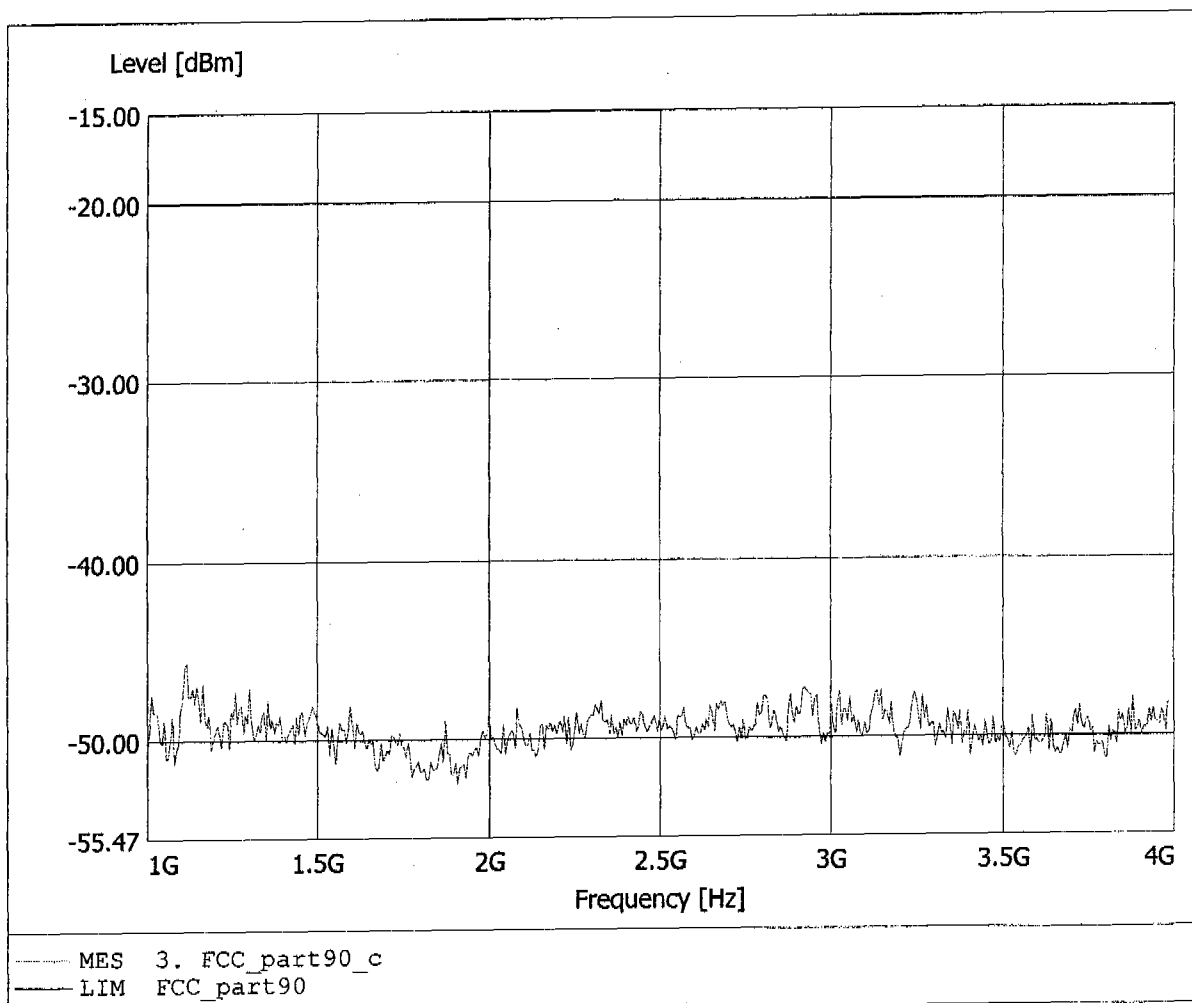
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:2.665GHz Pmax:-46.74dBm RBW: 1MHz



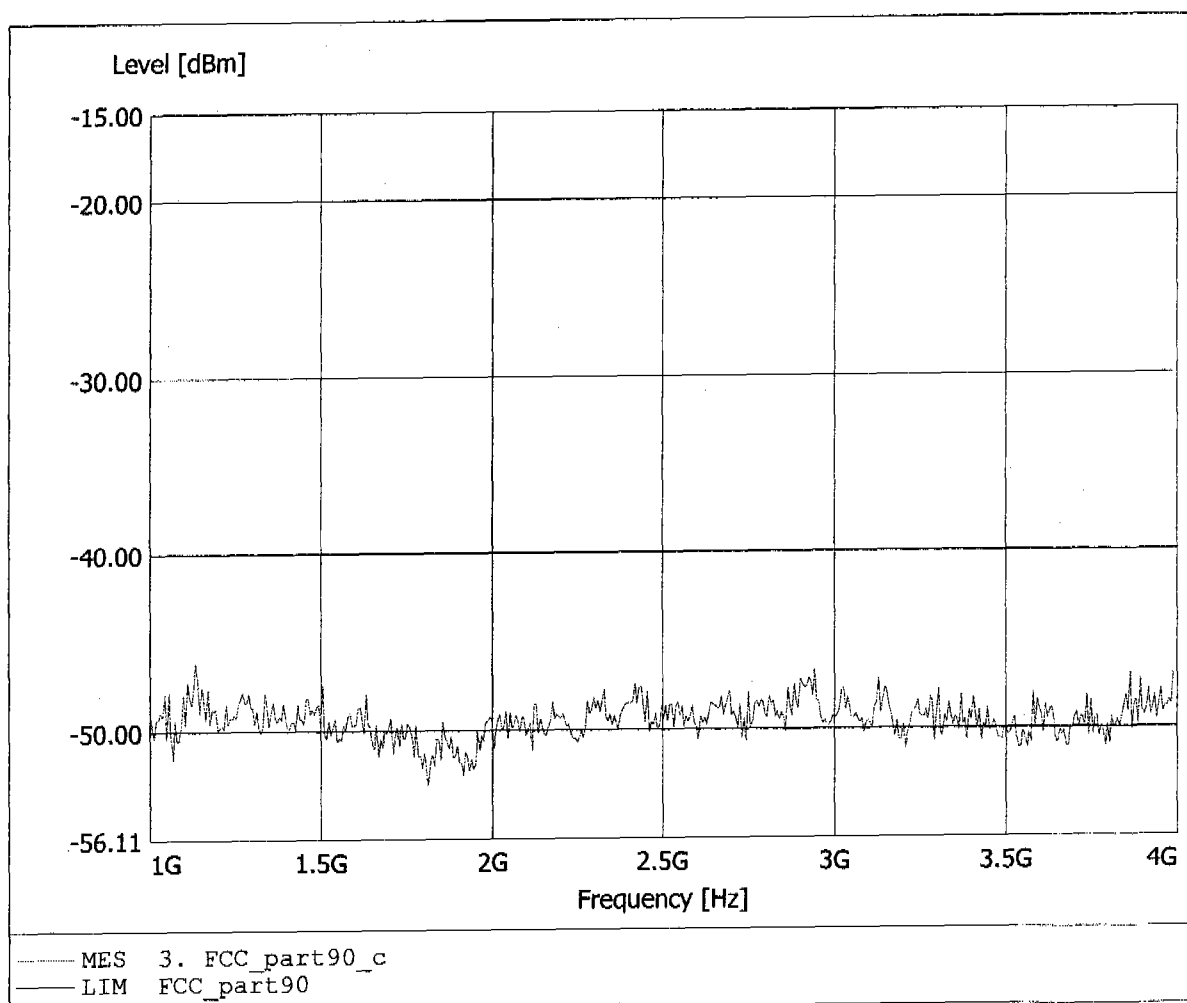
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:1.114GHz Pmax:-45.64dBm RBW: 1MHz



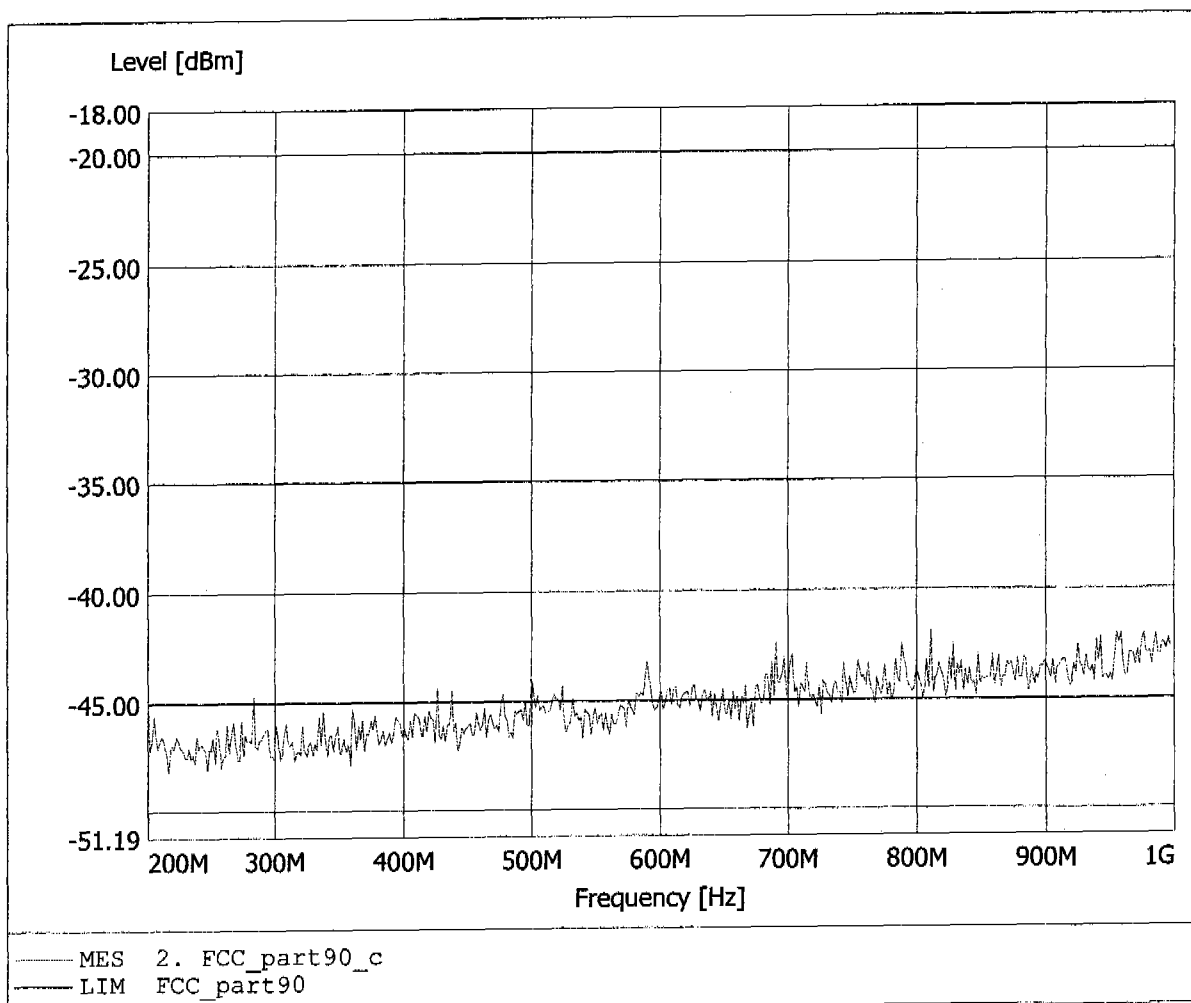
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:1.132GHz Pmax:-46.14dBm RBW: 1MHz



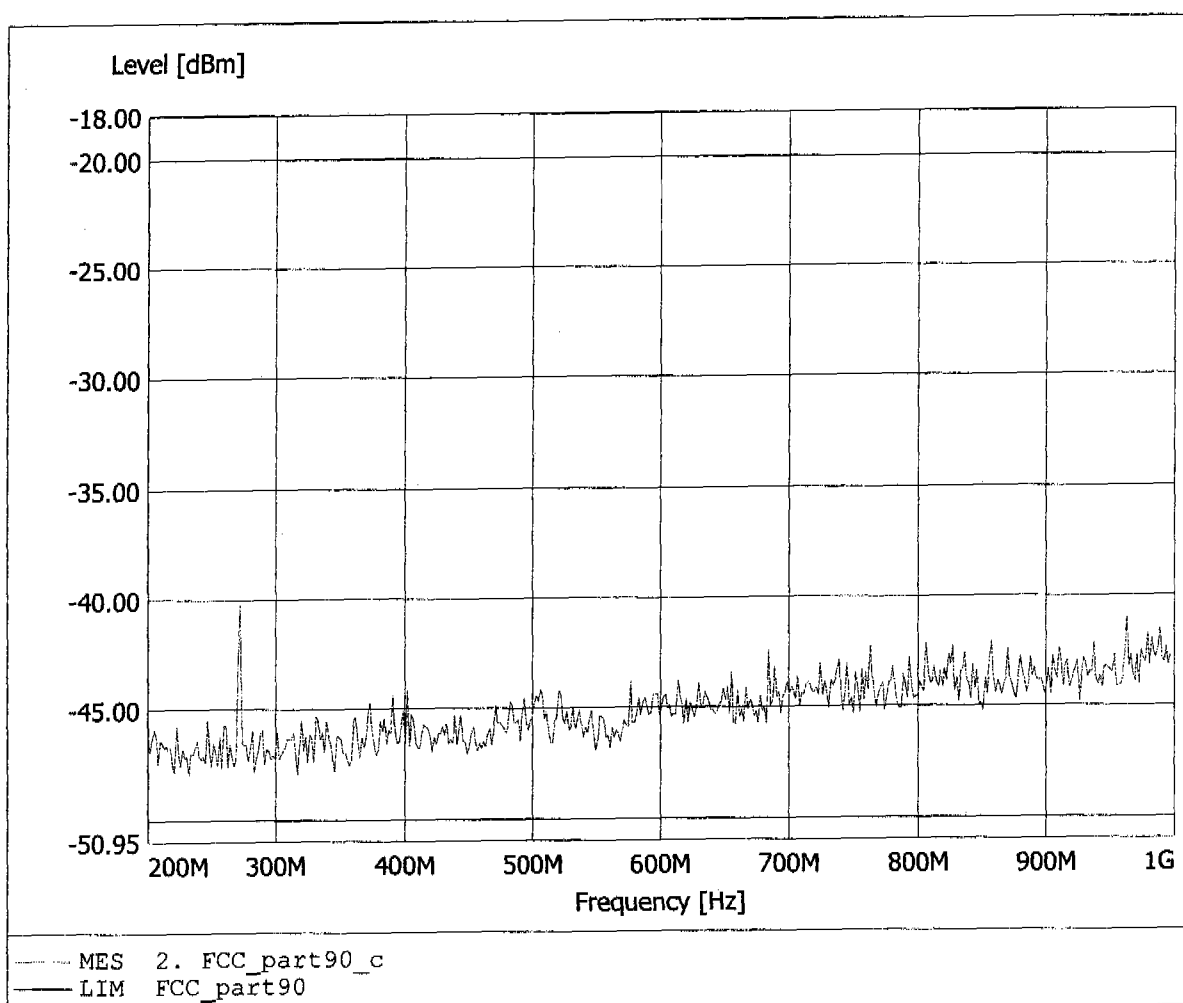
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:810.822MHz Pmax:-41.83dBm RBW: 100kHz



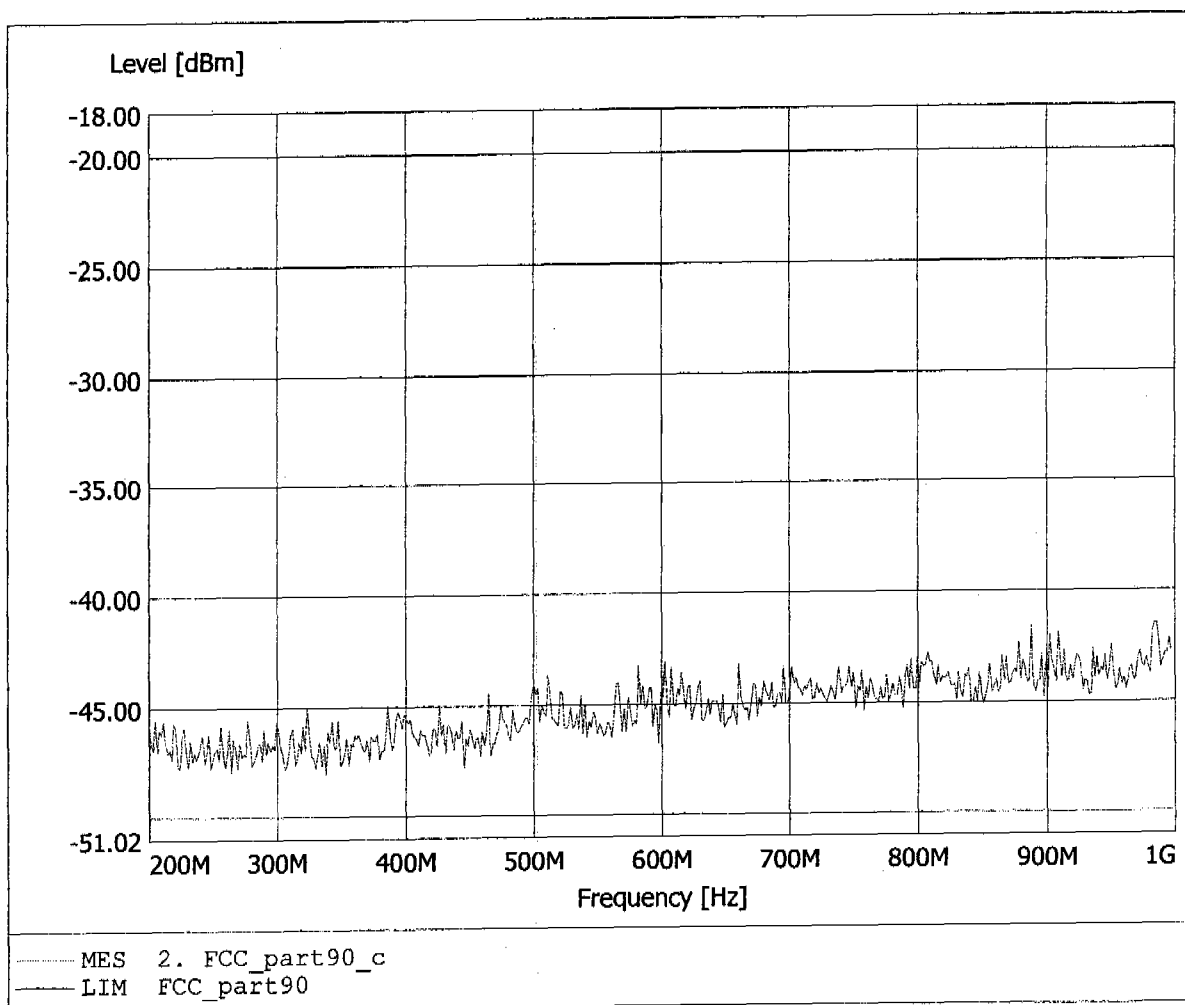
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq: 272.144MHz Pmax: -40.23dBm RBW: 100kHz



Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load
Comment 2: Freq:983.968MHz Pmax:-41.46dBm RBW: 100kHz



Appendix F

Audio frequency response

No diagrams

Refer to point 3.5

Appendix G

Audio low pass filter frequency response

No diagrams
Refer to point 3.6

Appendix H

Modulation limiting

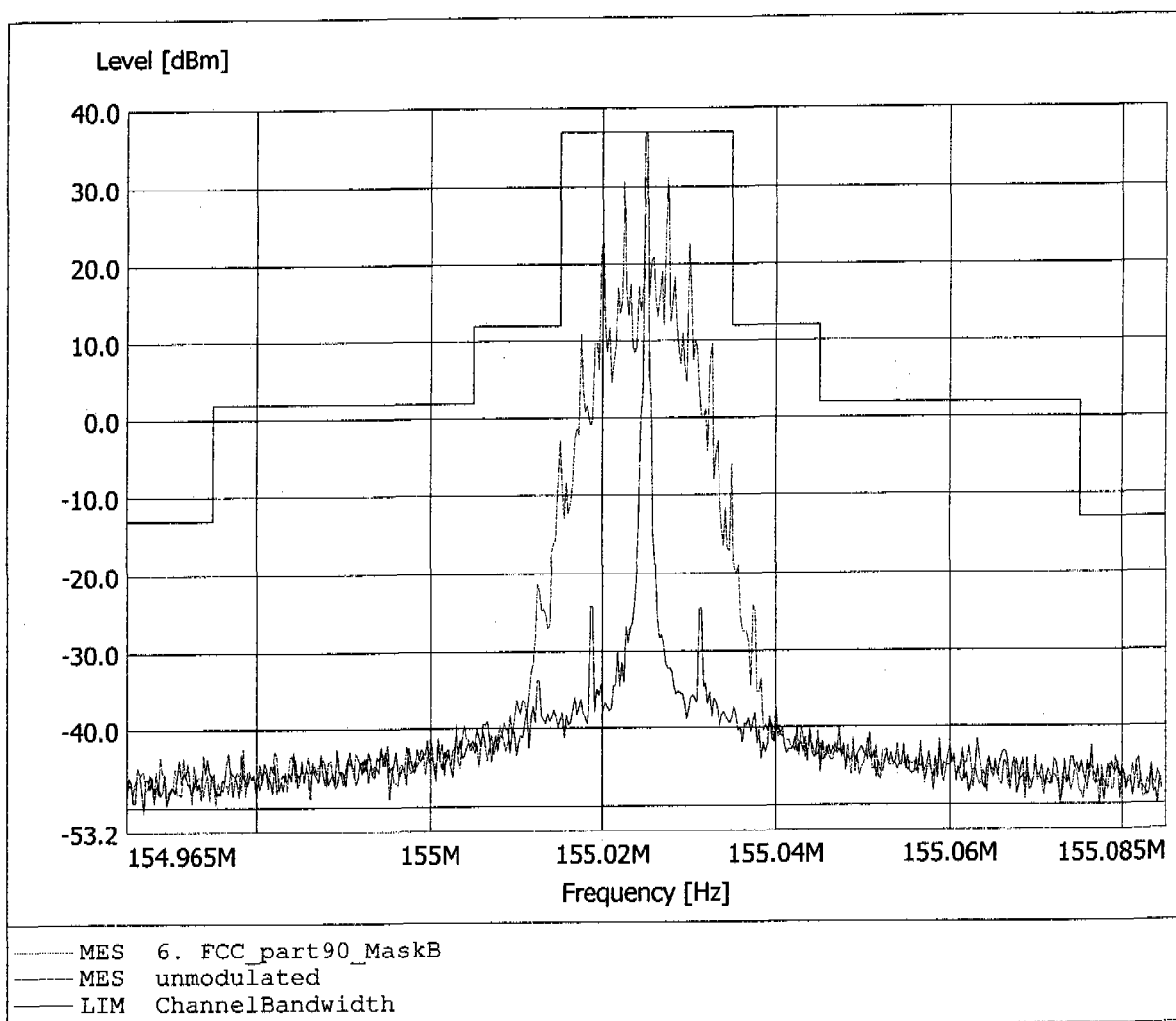
No diagrams
Refer to point 3.7

Appendix I

Occupied Bandwidth

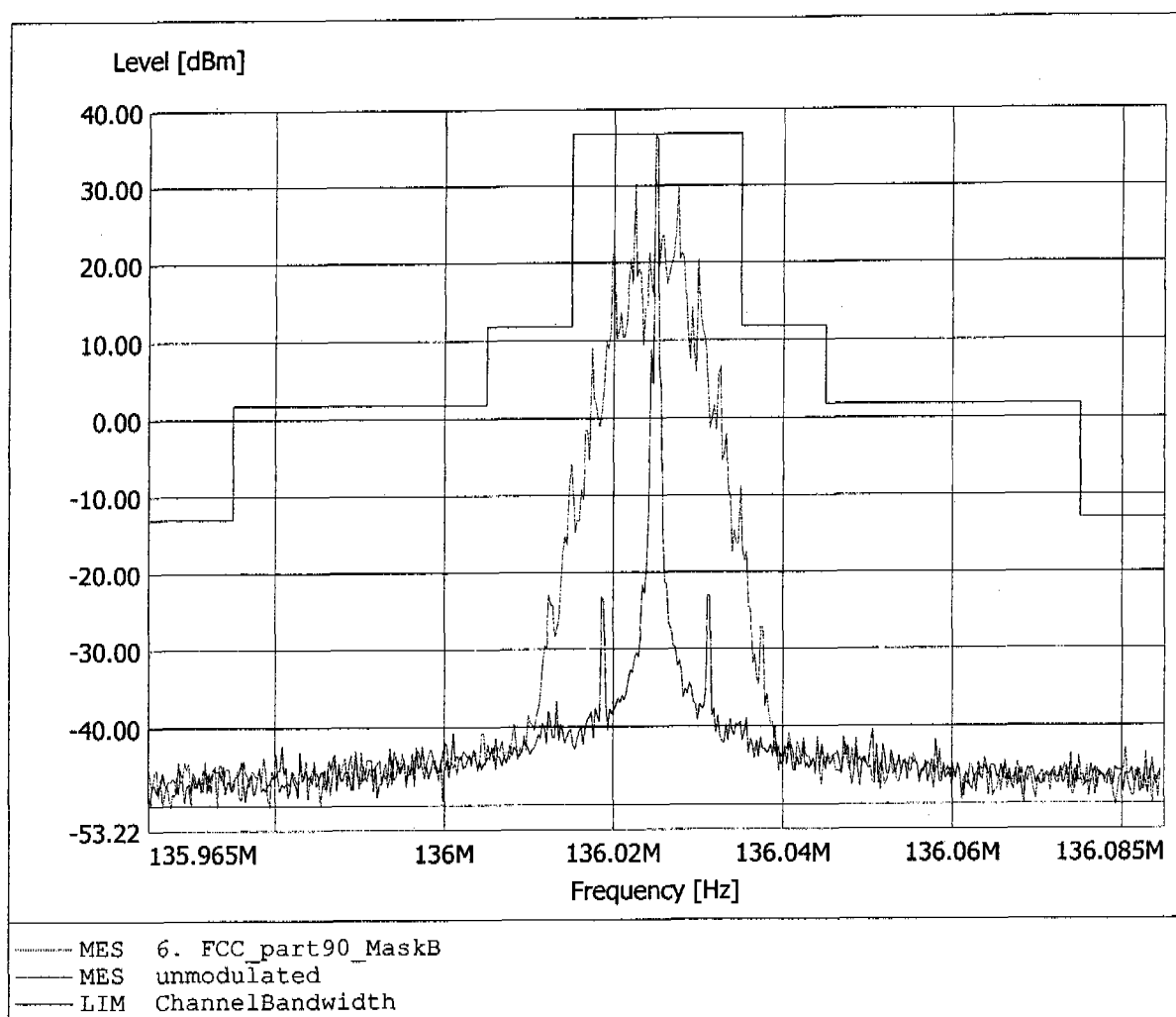
Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load, Channel spacing 25 kHz
Comment 2: Freq:155.025MHz Pmax:31.23dBm RBW: 100Hz



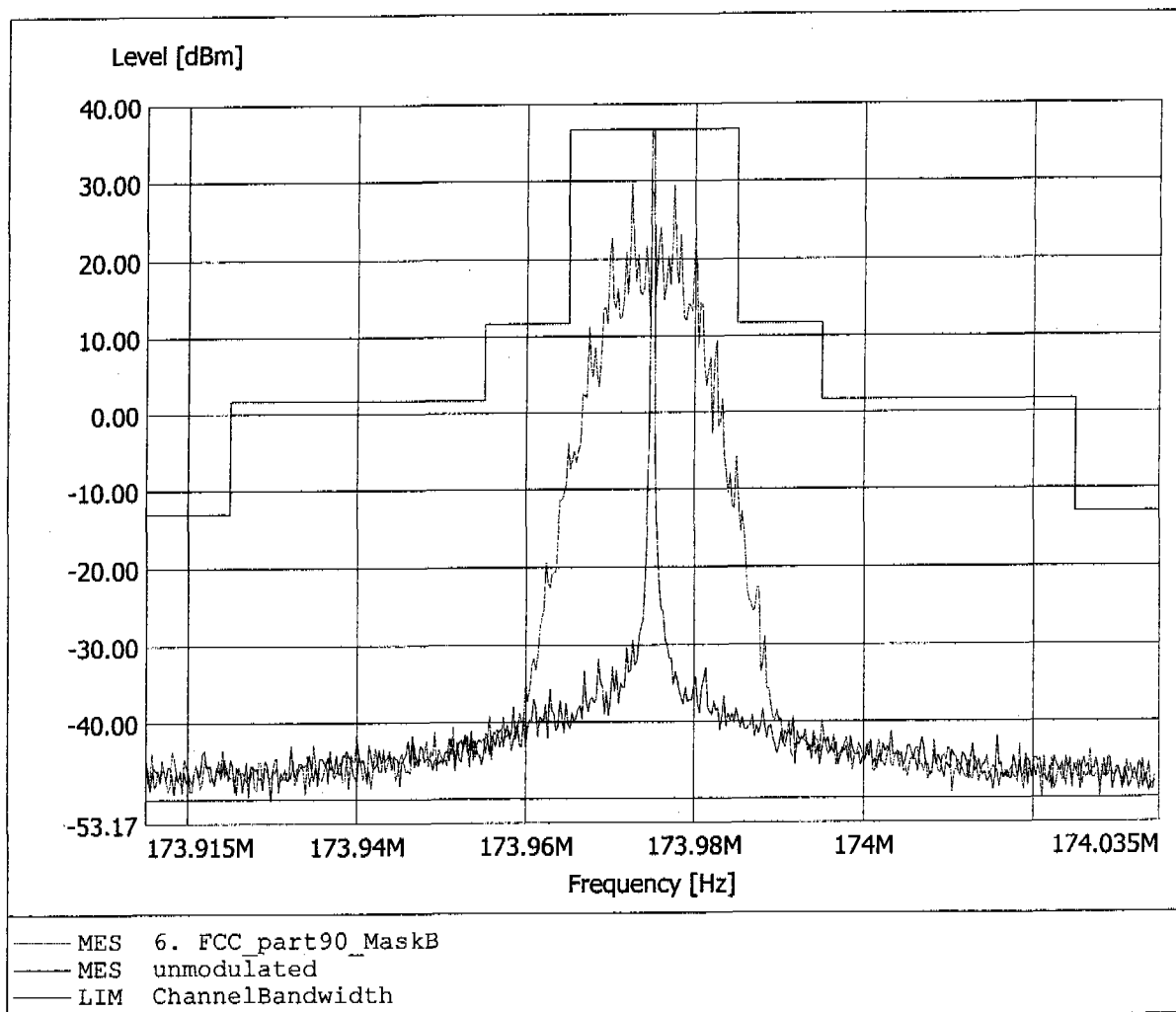
Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load, Channel spacing 25 kHz
Comment 2: Freq:136.025MHz Pmax:30.76dBm RBW: 100Hz



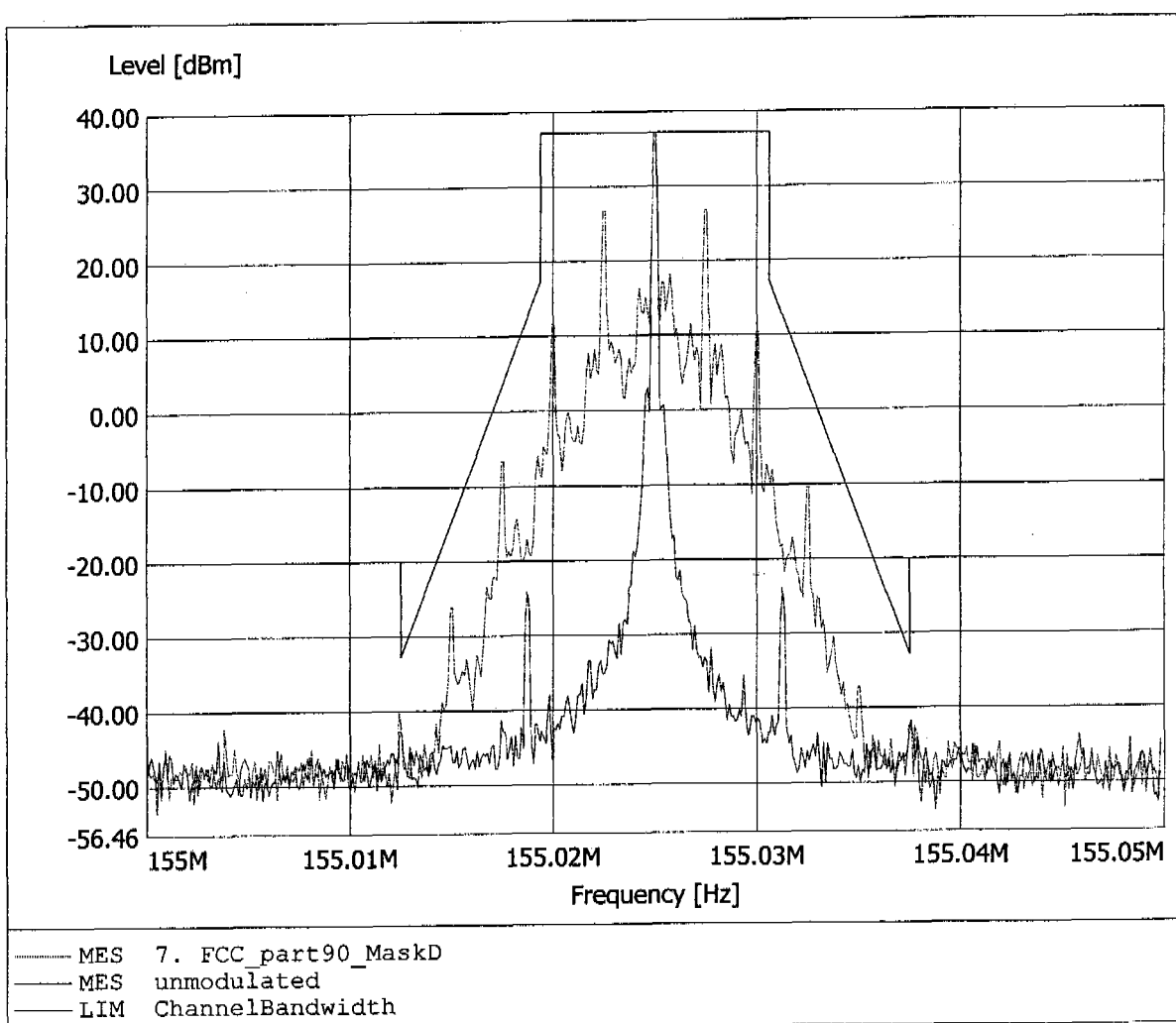
Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load, Channel spacing 25 kHz
Comment 2: Freq:173.972MHz Pmax:30.04dBm RBW: 100Hz



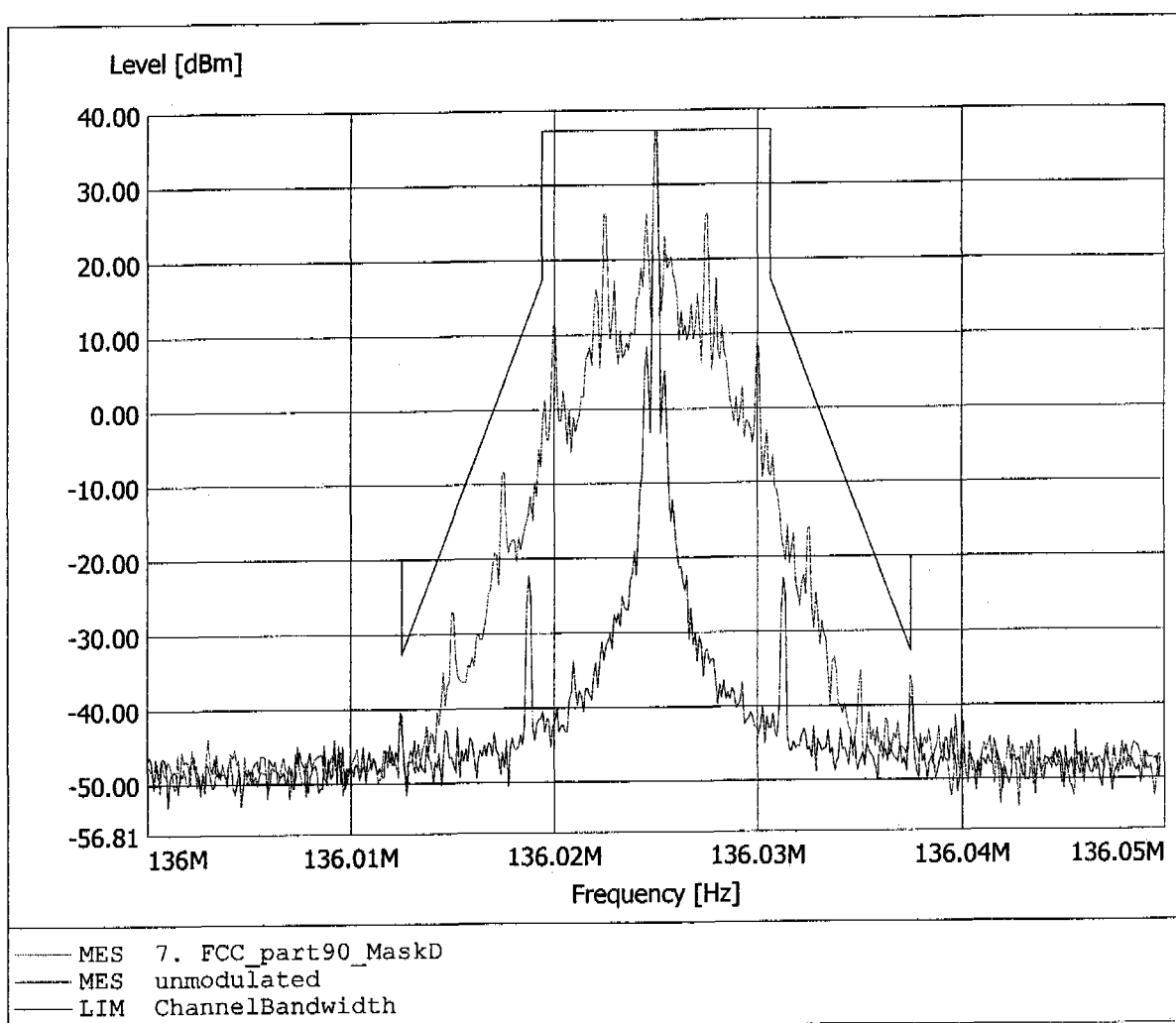
Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load, Channel spacing 12.5 kHz
Comment 2: Freq:155.025MHz Pmax:35.93dBm RBW: 100Hz



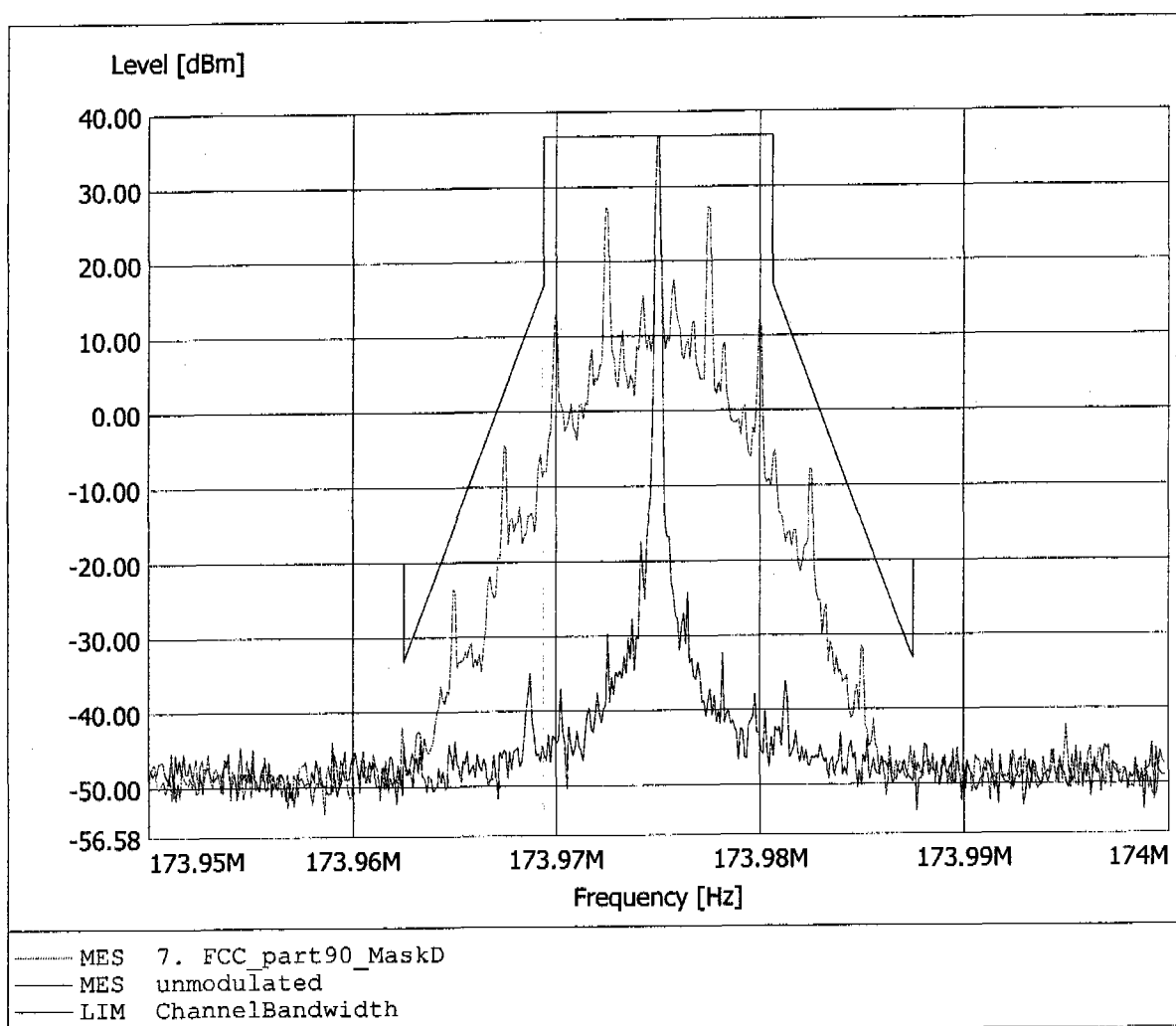
Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load, Channel spacing 12.5 kHz
Comment 2: Freq:136.025MHz Pmax:36.02dBm RBW: 100Hz



Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATP-100
Approval Holder: Aitech I & C Co., Ltd.
Operating Condition: Tnom: 23°C / Unom: 7.5 V DC
Test Site / Operator: ETS / Mr. Hoppe
Test Specification: mode: Tx
Comment 1: Conducted, 50 Ohm Load, Channel spacing 12.5 kHz
Comment 2: Freq:173.975MHz Pmax:35.37dBm RBW: 100Hz



Appendix J

Frequency stability

No diagrams

Refer to point 3.9

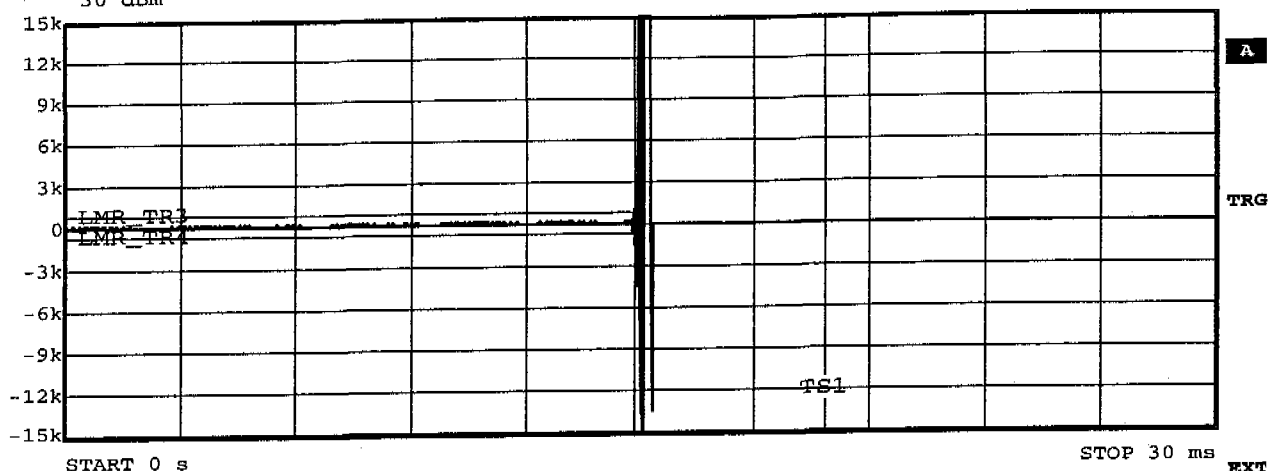
Appendix K

Transient frequency behaviour of the transmitter



Ref Lvl
30 dBm

CF 155.025 MHz Real Time OFF
DEMODO BW: 30 kHz AF-Signal
FM [Hz]



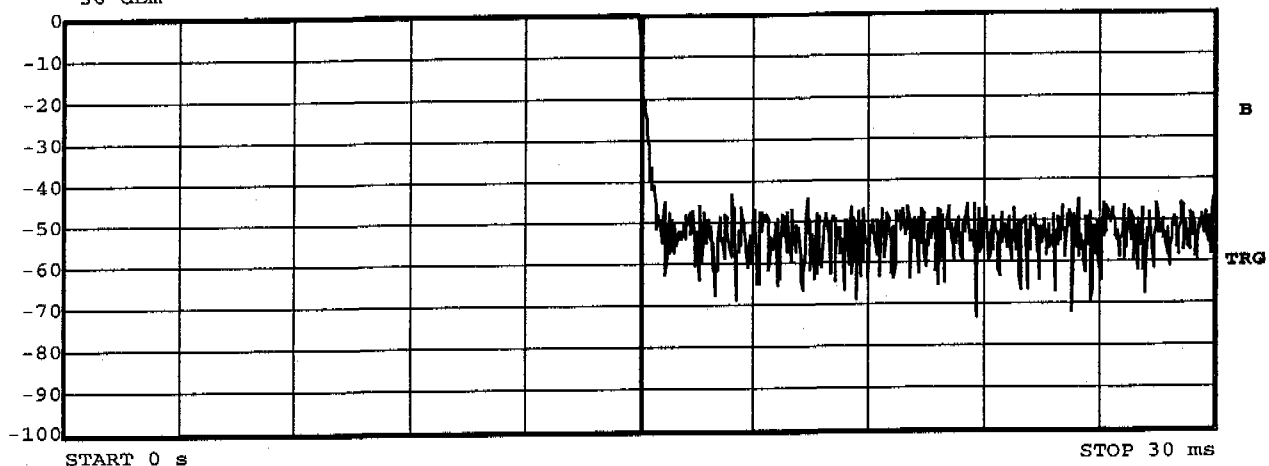
START 0 s

STOP 30 ms

EXT

Ref Lvl
30 dBm

CF 155.025 MHz Real Time OFF
DEMODO BW: 30 kHz AF-Signal
AM [dBm]



START 0 s

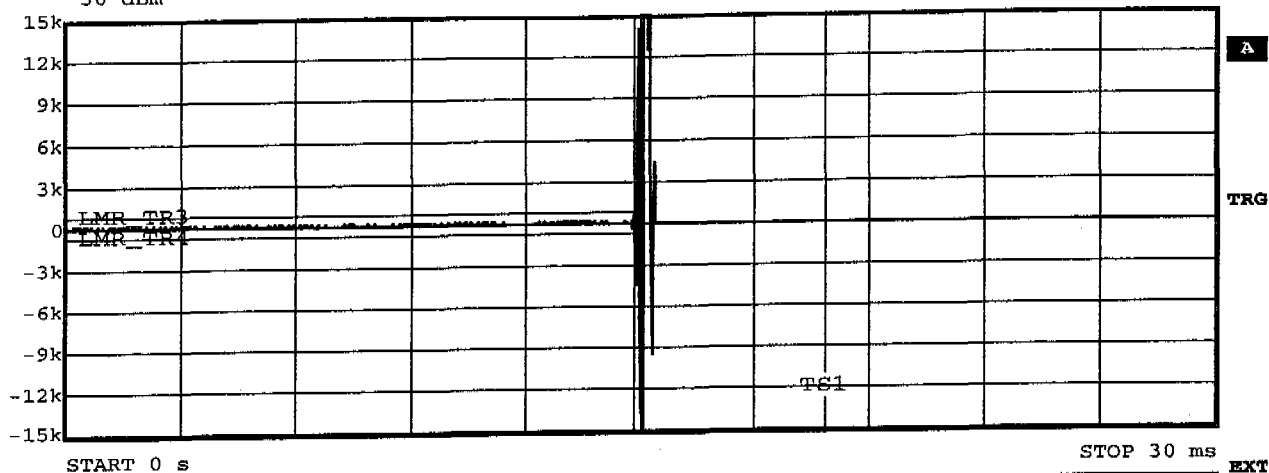
STOP 30 ms

Title: Transient frequency behaviour of the transmitter (switch off)
Comment A: VHF TRANSCEIVER ATP-100 (12.5 kHz channel spacing)
Date: 29.AUG.2003 15:29:05



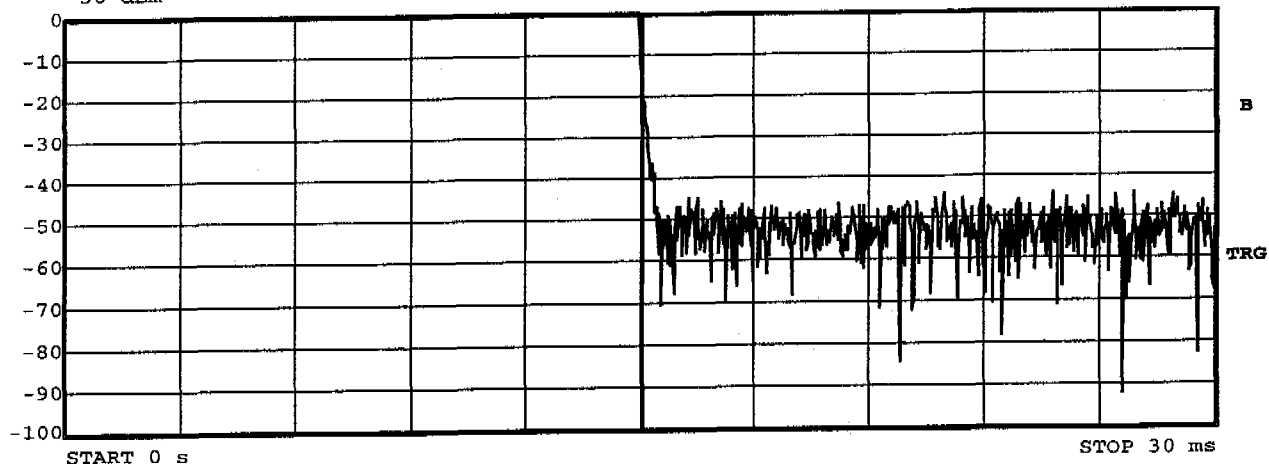
Ref Lvl
30 dBm

CF 155.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
FM [Hz]



Ref Lvl
30 dBm

CF 155.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
AM [dBm]

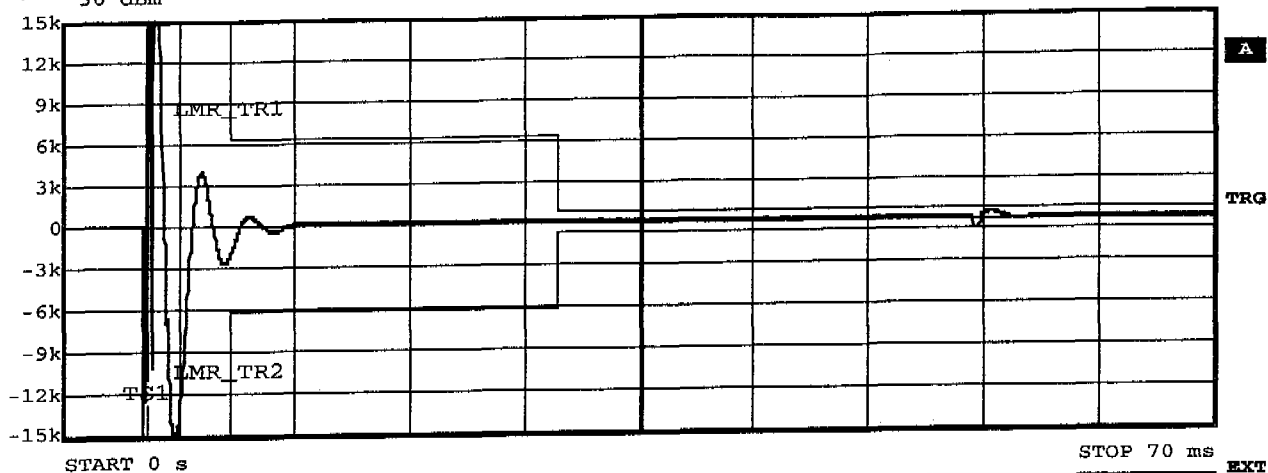


Title: Transient frequency behaviour of the transmitter (switch off)
Comment A: VHF TRANSCEIVER ATP-100 (25 kHz channel spacing)
Date: 29.AUG.2003 15:30:01



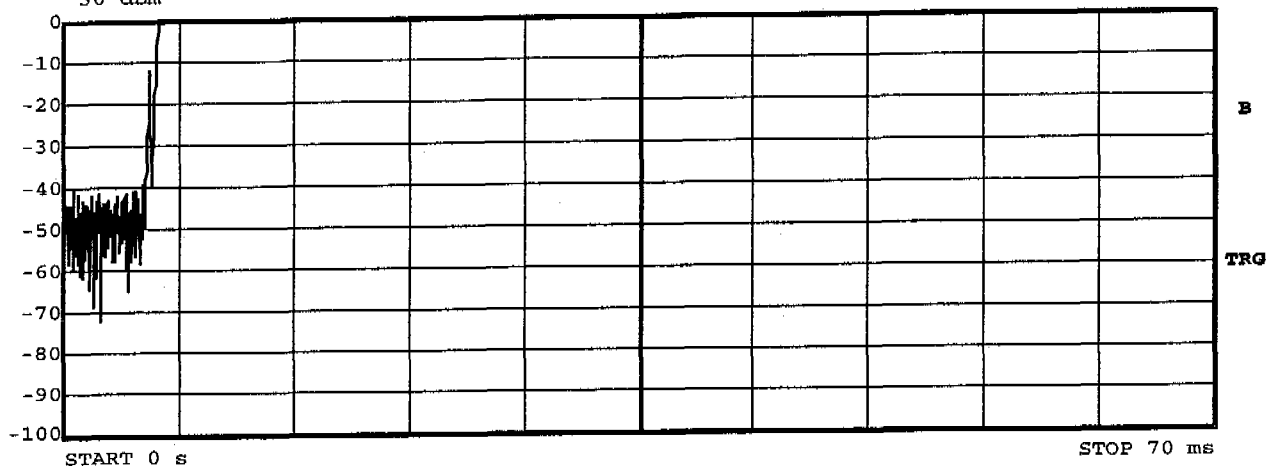
Ref Lvl
30 dBm

CF 155.025 MHz Real Time OFF
DEMODO BW: 30 kHz AF-Signal
FM [Hz]



Ref Lvl
30 dBm

CF 155.025 MHz Real Time OFF
DEMODO BW: 30 kHz AF-Signal
AM [dBm]

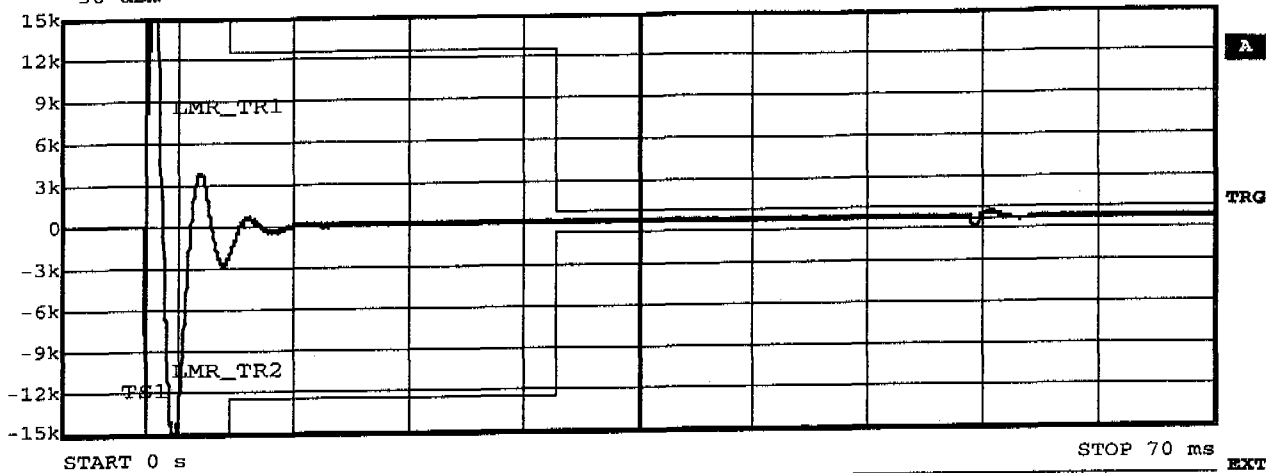


Title: Transient frequency behaviour of the transmitter (switch on)
Comment A: VHF TRANSCEIVER ATP-100 (12.5 kHz channel spacing)
Date: 29.AUG.2003 15:22:48



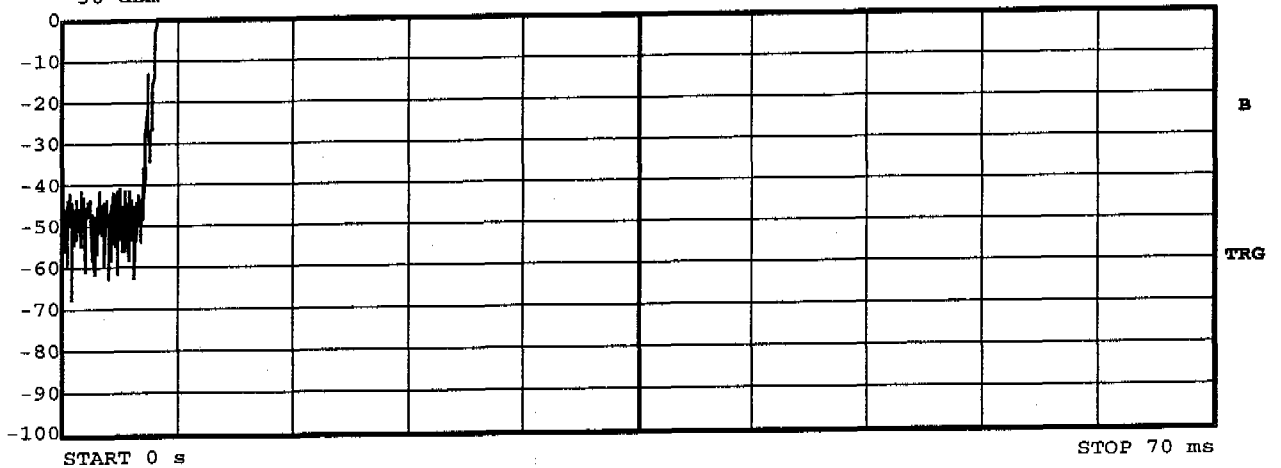
Ref Lvl
30 dBm

CF 155.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
FM [Hz]



Ref Lvl
30 dBm

CF 155.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
AM [dBm]



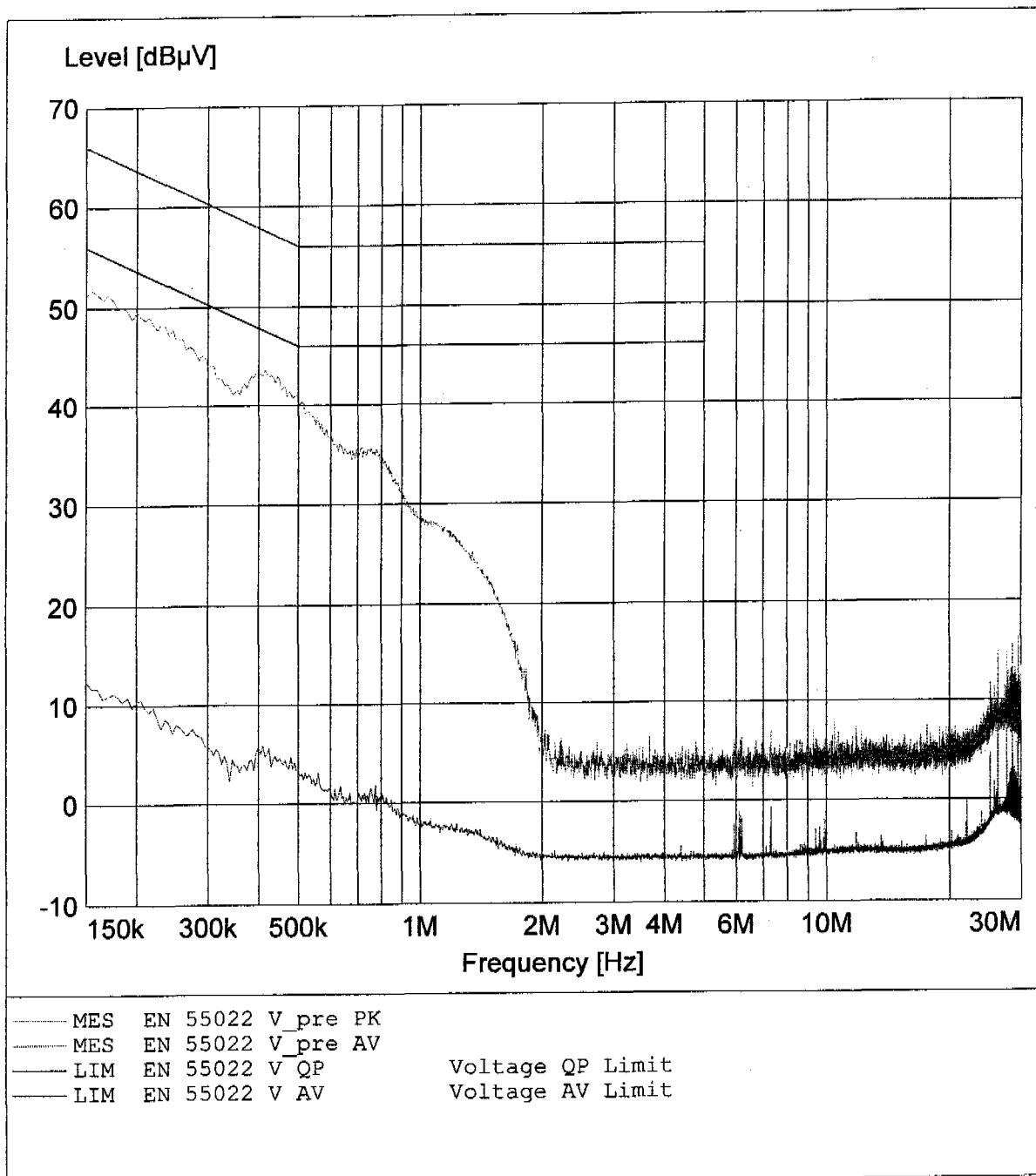
Title: Transient frequency behaviour of the transmitter (switch on)
Comment A: VHF TRANSCEIVER ATP-100 (25 kHz channel spacing)
Date: 29.AUG.2003 15:25:02

Appendix L

Spurious emissions related to AC power line

EMI voltage test in the ac-mains according to EN 55022

EUT: VHF TRANSCEIVER
Manufacturer: AIRTECH I & CO., LTD.
Operating Condition: Unom: 230VAC(AC/DC-adaptor) , Tnom: 23°C
Test Site: ETS
Operator: Mr. Marquardt
Test Specification: V-Network: ESH3-Z5
Comment: model: ATP-100 mode: charging



EMI voltage test in the dc-mains according to FCC part 15

EUT: VHF TRANSCEIVER
Manufacturer: AIRTECH I & C CO., LTD.
Operating Condition: Unom: 120 VAC(AC/DC-adaptor) , Tnom: 23°C
Test Site: ETS
Operator: Mr. Marquardt
Test Specification: V-Network: ESH2-25
Comment: model: ATP-100 mode: charging

