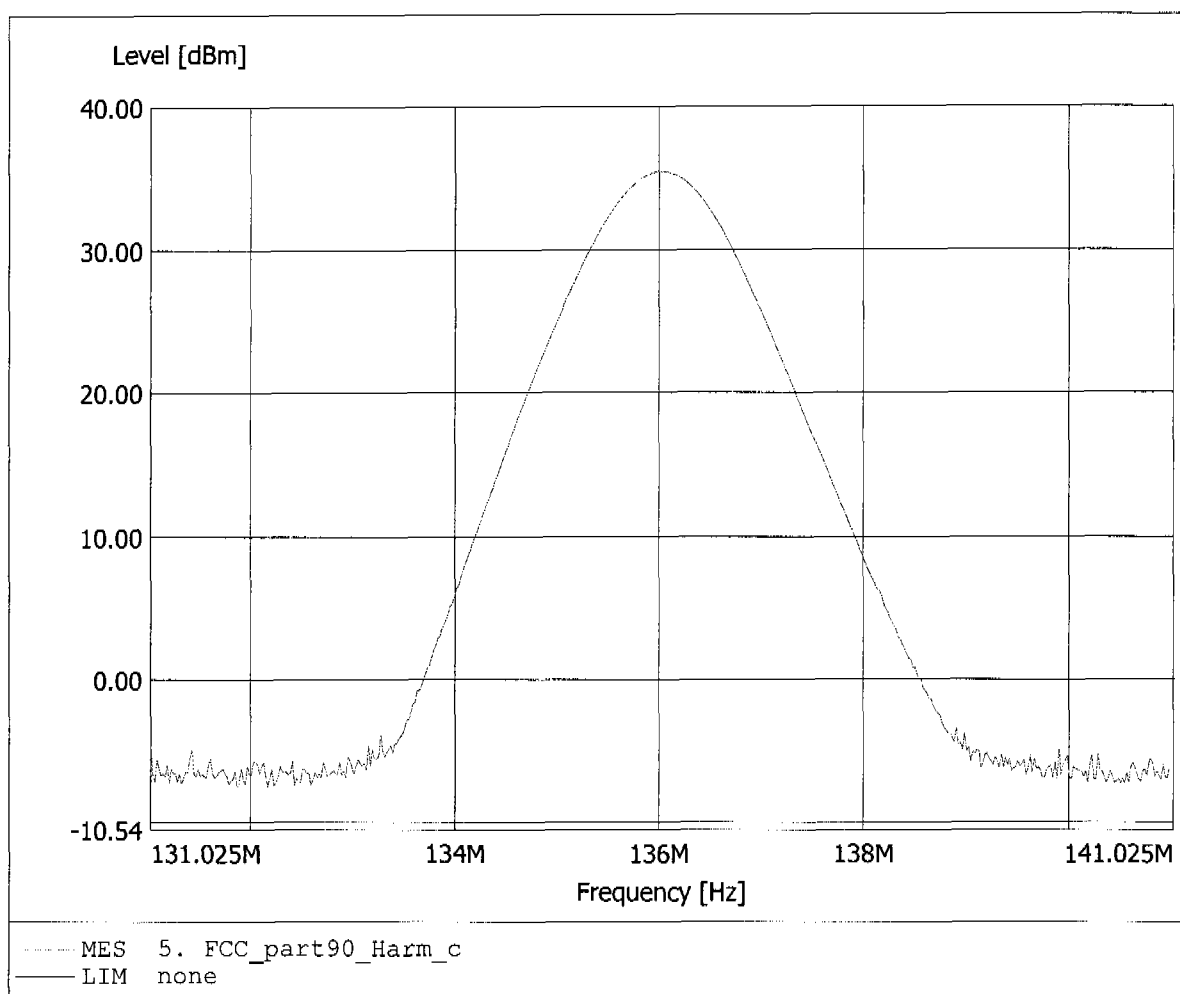


Appendix B

Output Power conducted

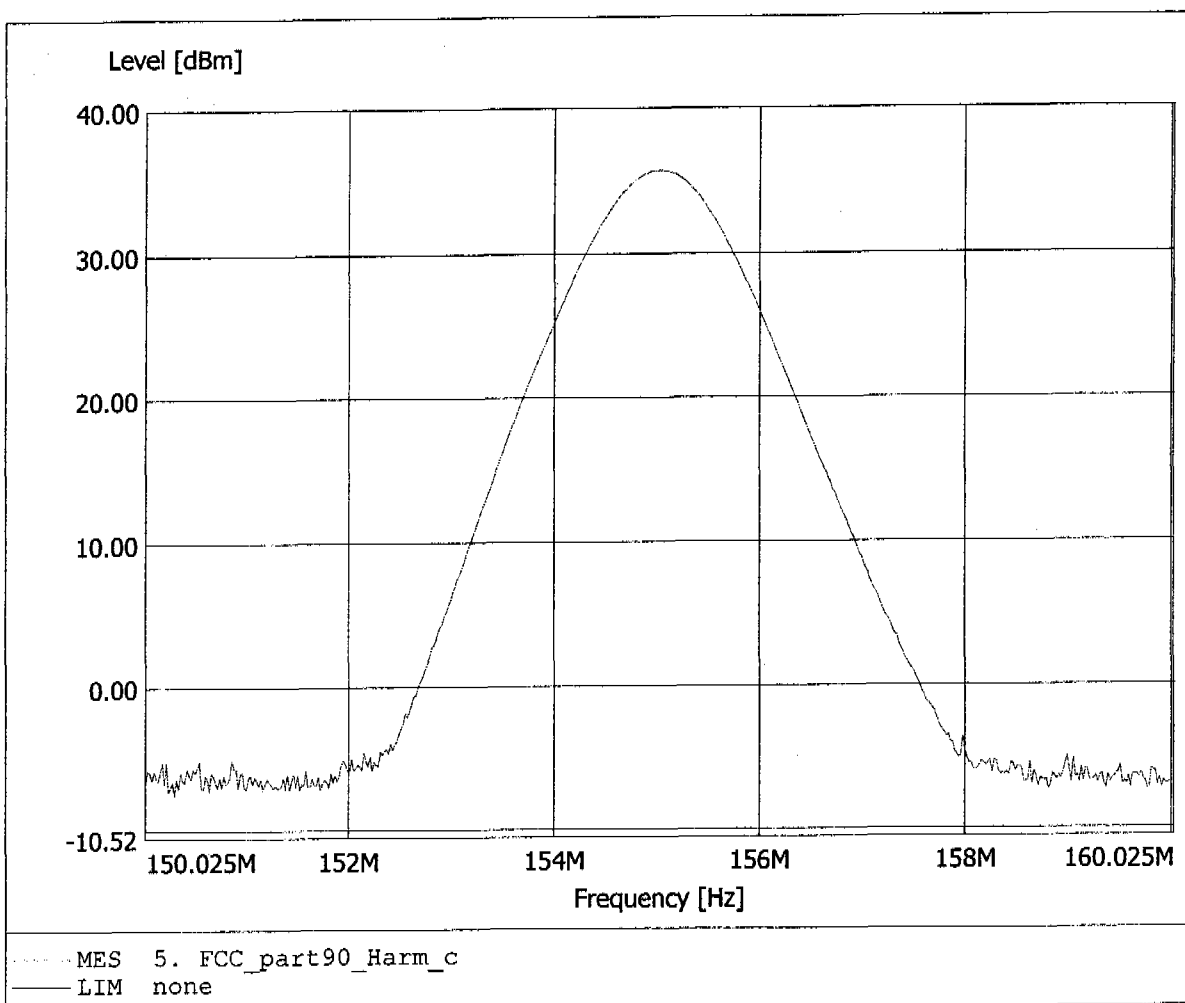
Output power conducted
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:135.995MHz Pmax:35.46dBm RBW: 1MHz



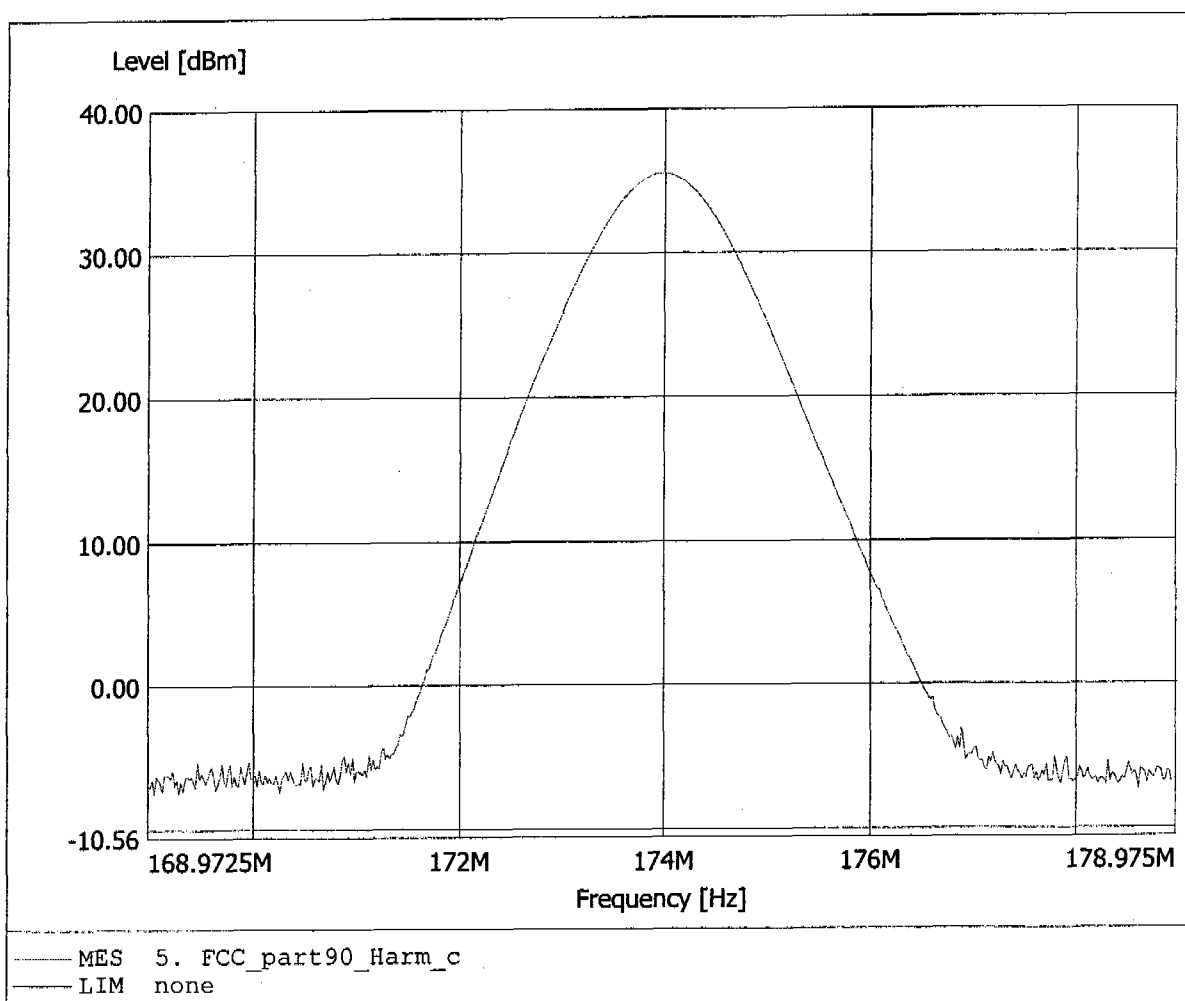
Output power conducted
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:35.72dBm RBW: 1MHz



Output power conducted
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATS-100
Approval Holder: Airtech 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:35.51dBm RBW: 1MHz

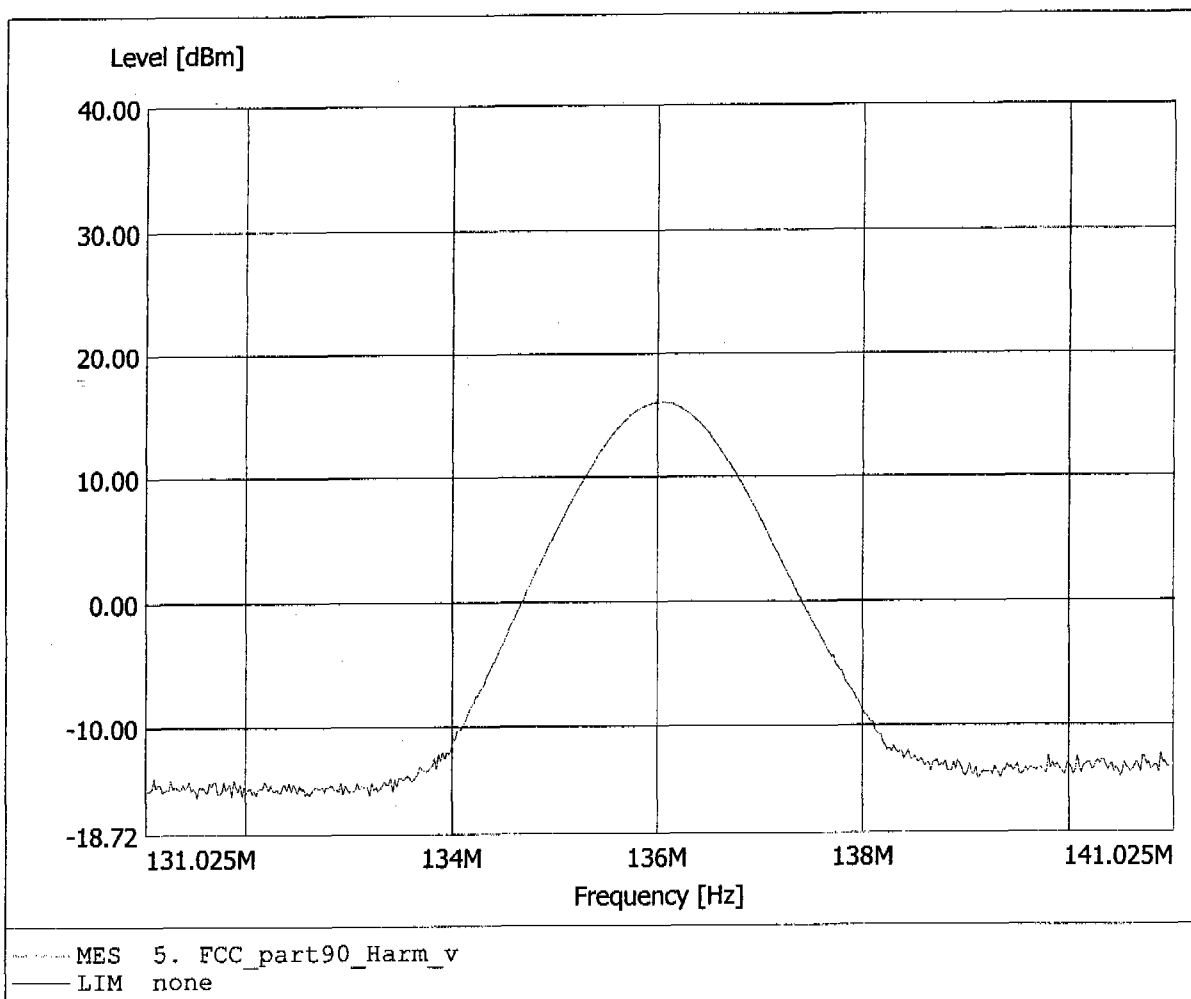


Appendix C

Output Power radiated

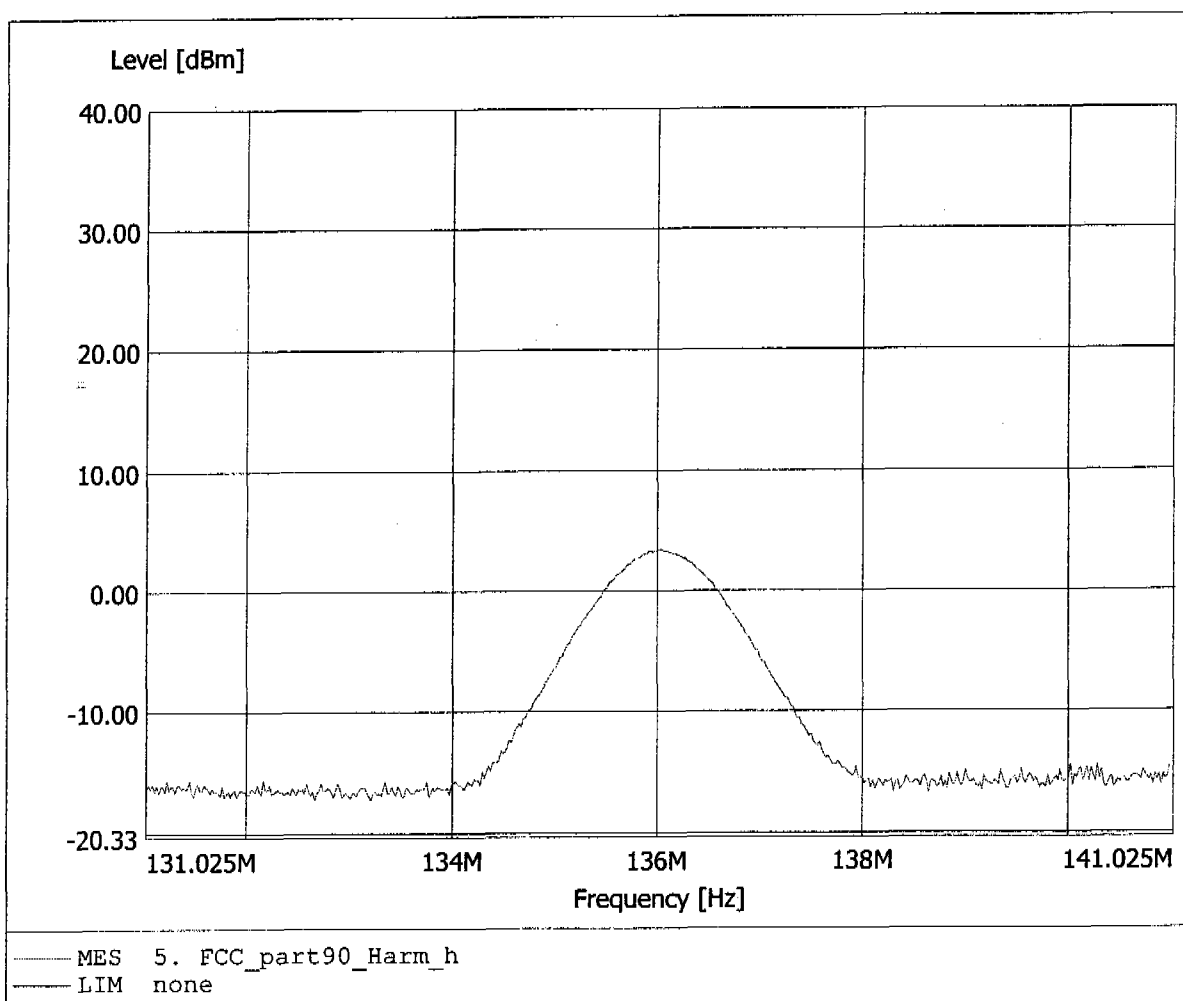
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:16.04dBm RBW: 1 MHz



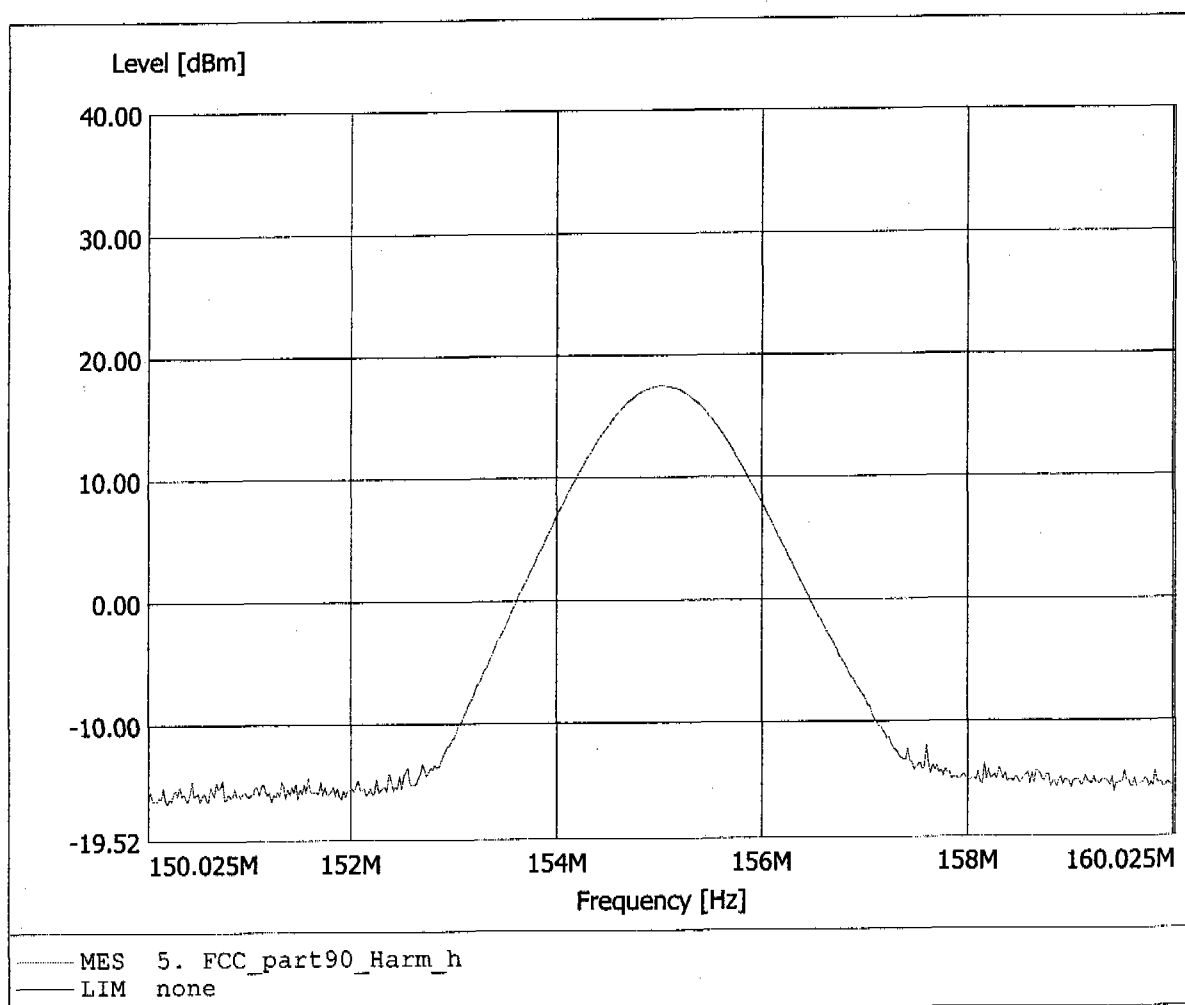
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:136.035MHz Pmax:3.44dBm RBW: 1 MHz



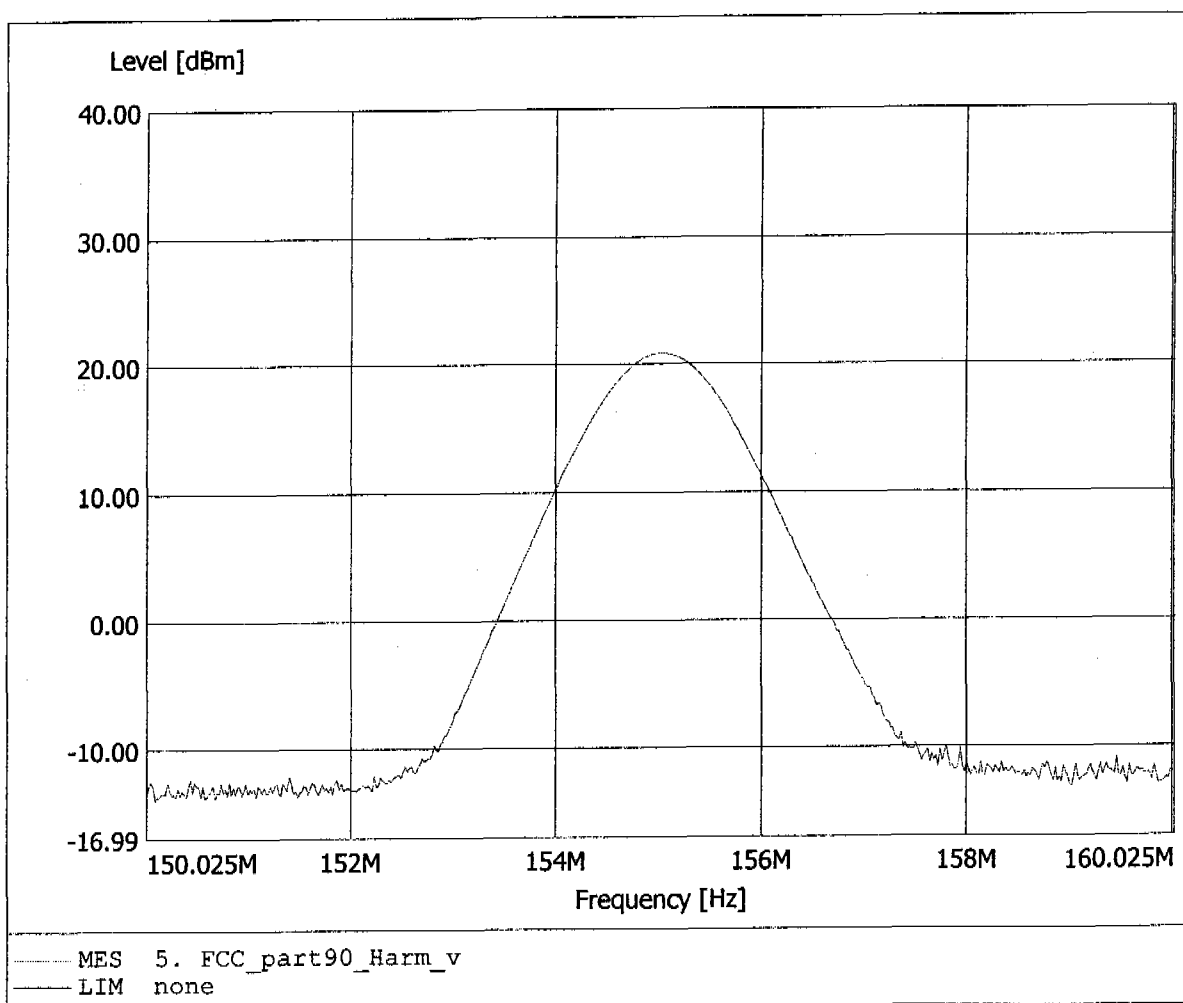
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:155.015MHz Pmax:17.48dBm RBW: 1 MHz



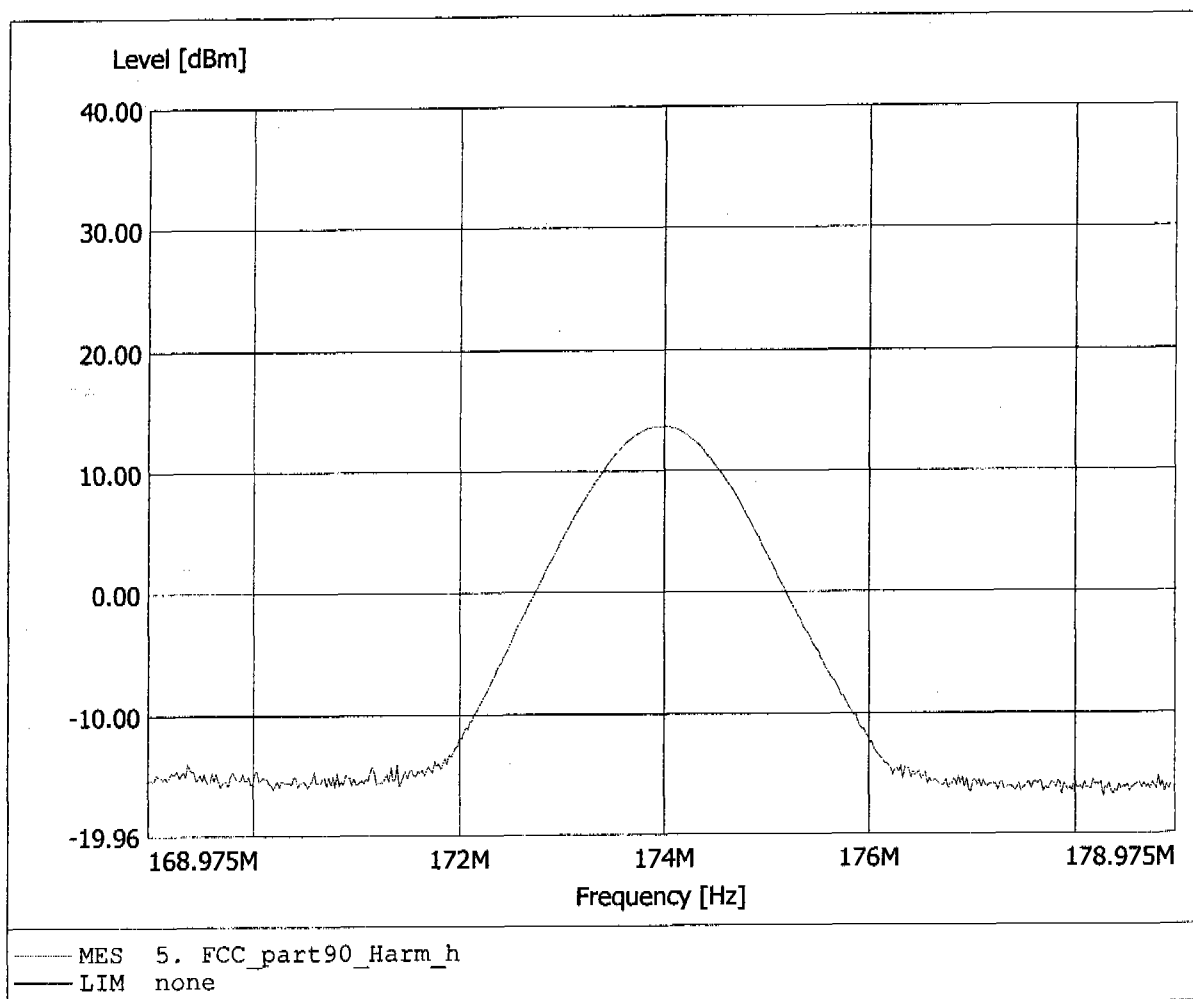
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:20.84dBm RBW: 1 MHz



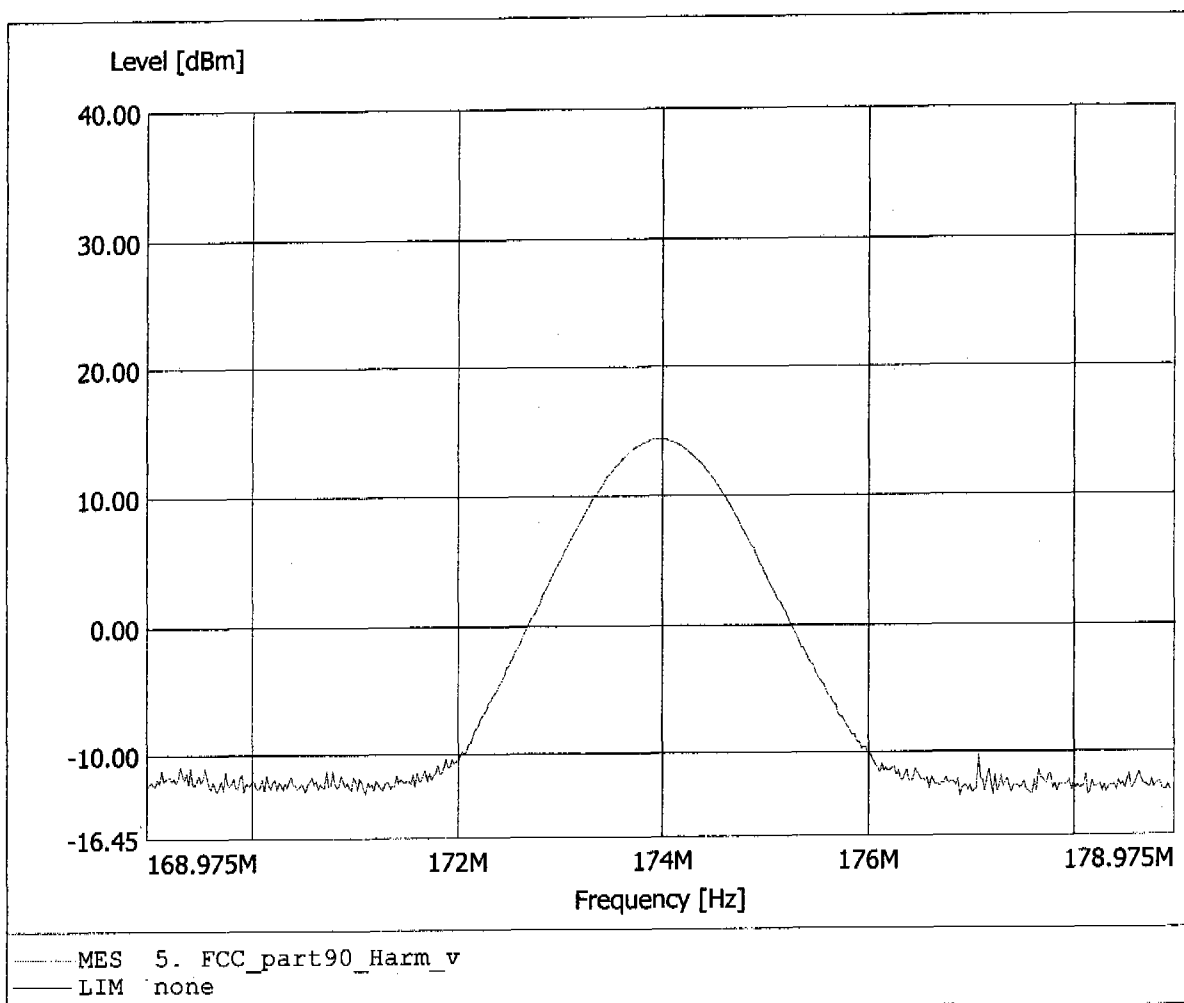
Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATS-100
Approval Holder: Airtech 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:173.925MHz Pmax:13.70dBm RBW: 1 MHz



Radiated power under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATS-100
Approval Holder: Airtech 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:174.025MHz Pmax:14.41dBm RBW: 1 MHz

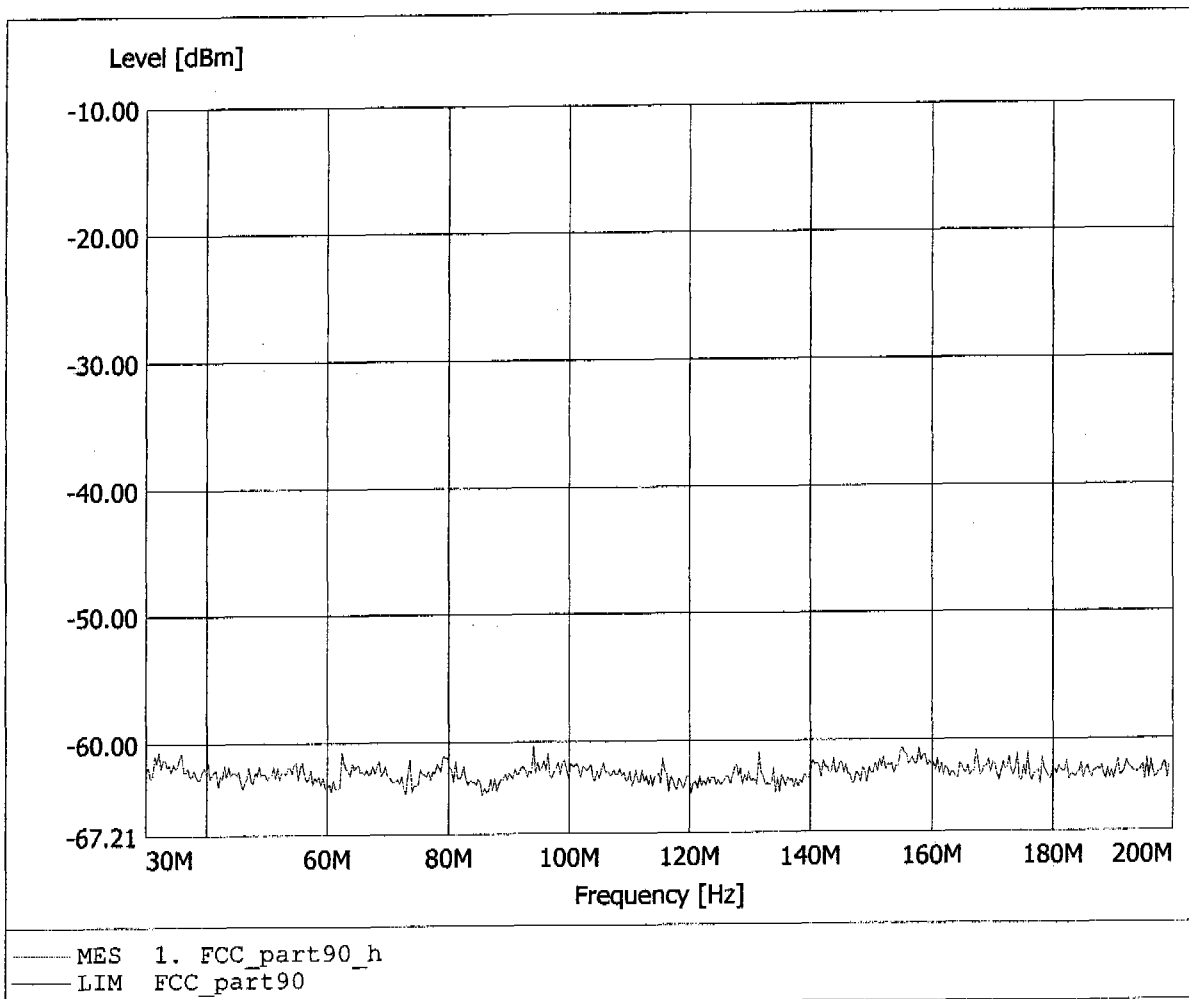


Appendix D

Spurious Emissions radiated - Transmitter operating

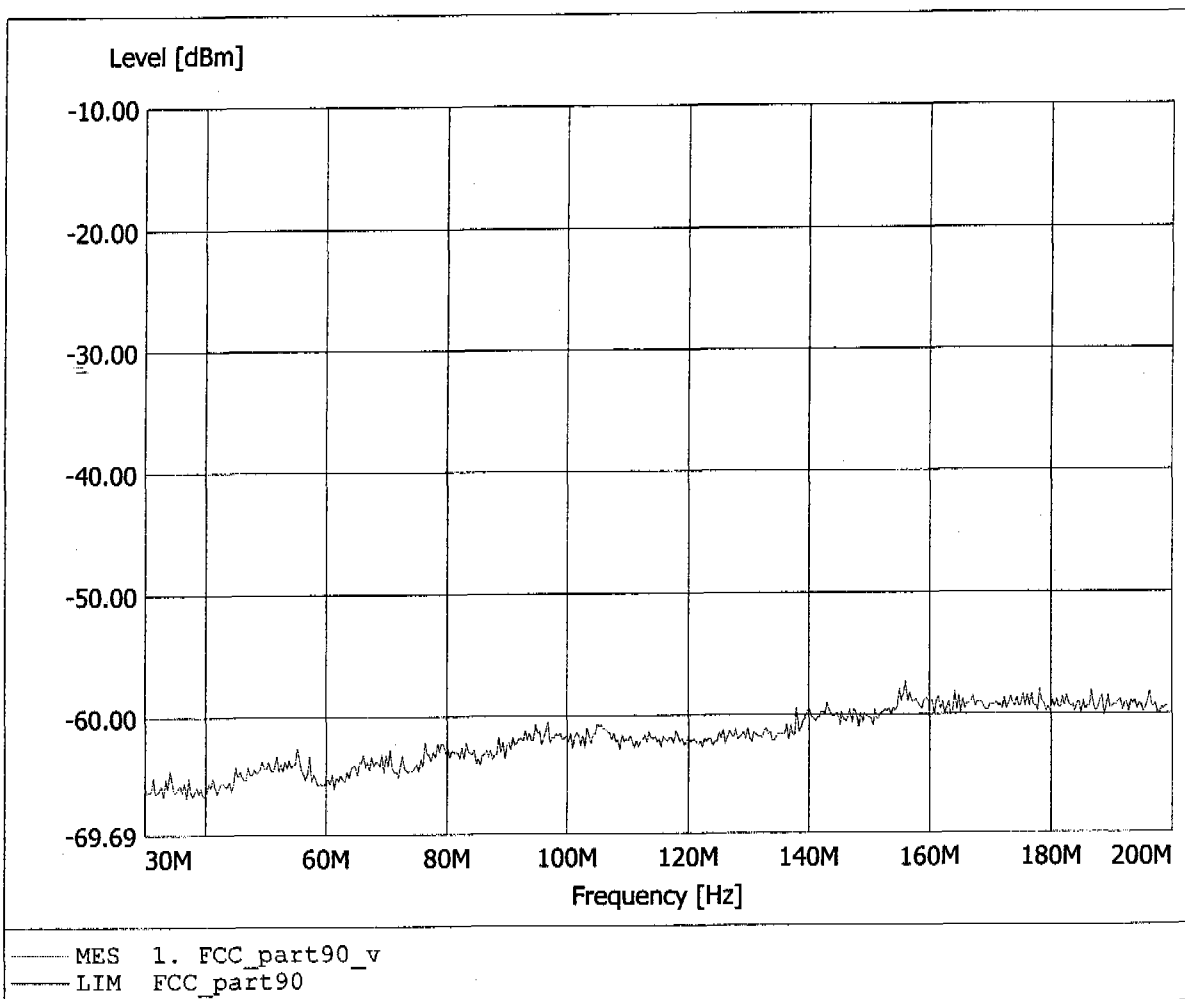
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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: 94.048MHz Pmax: -60.40dBm RBW: 100 kHz



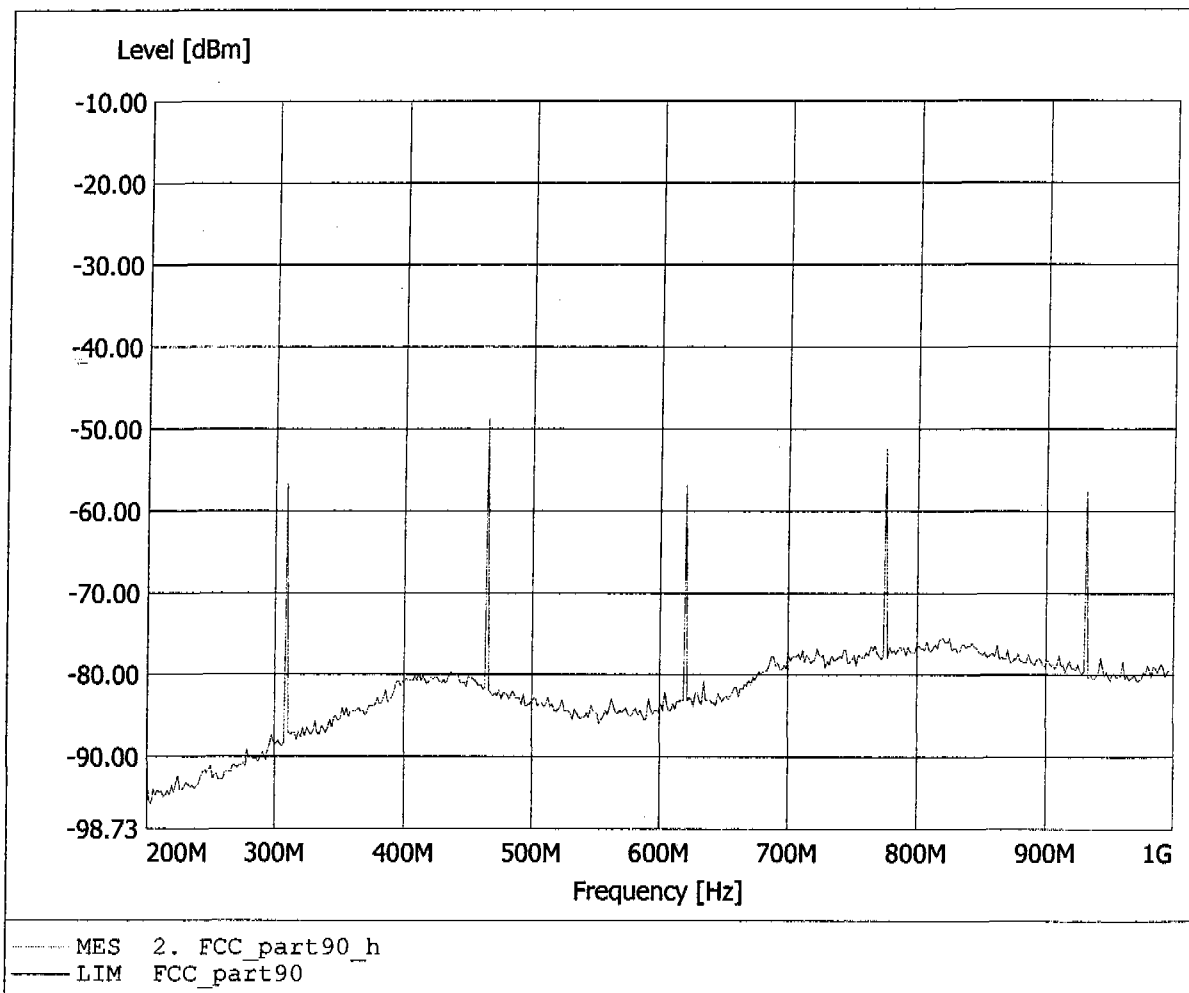
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:156.052MHz Pmax:-57.24dBm RBW: 100 kHz



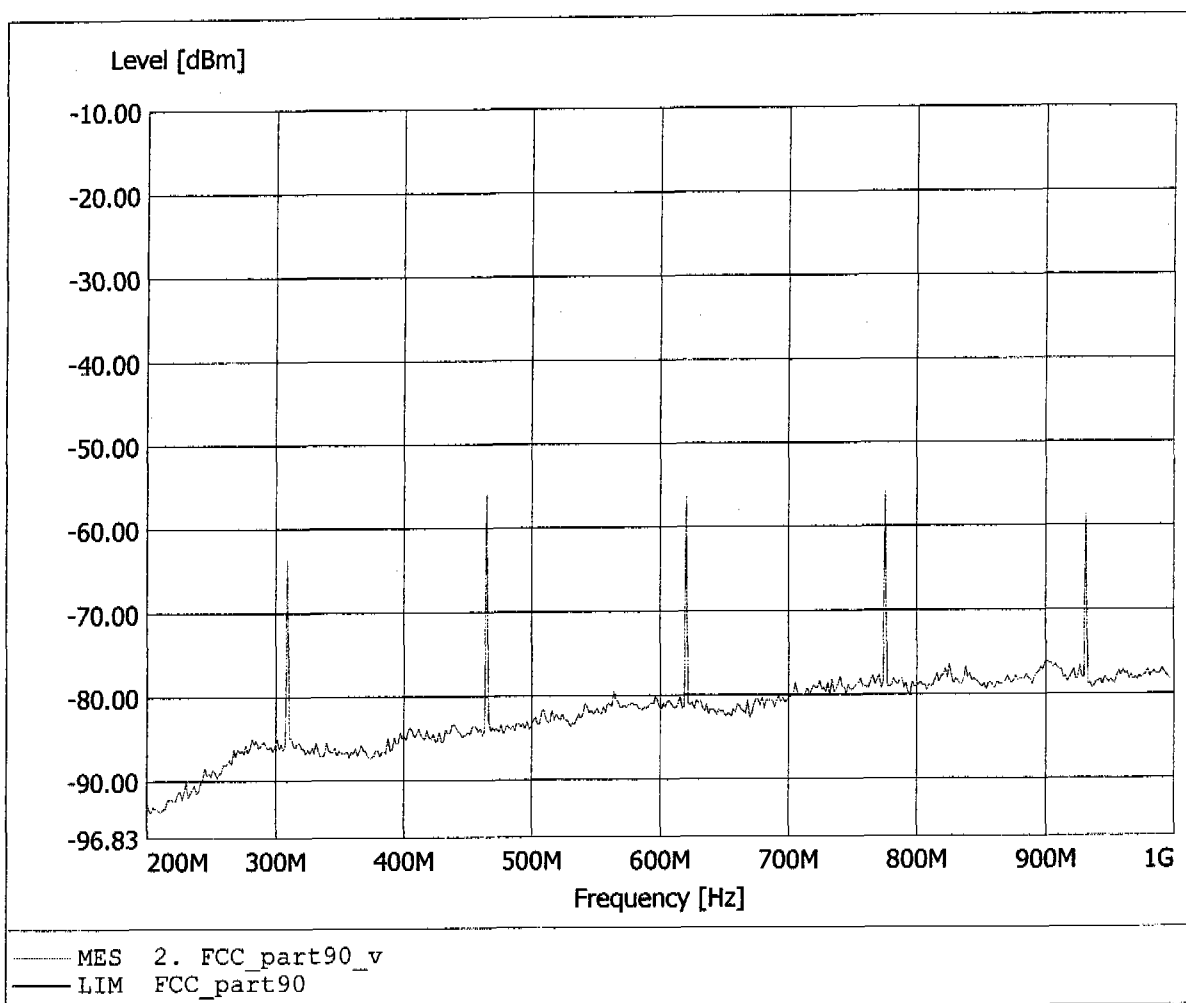
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:464.529MHz Pmax:-48.69dBm RBW: 100 kHz



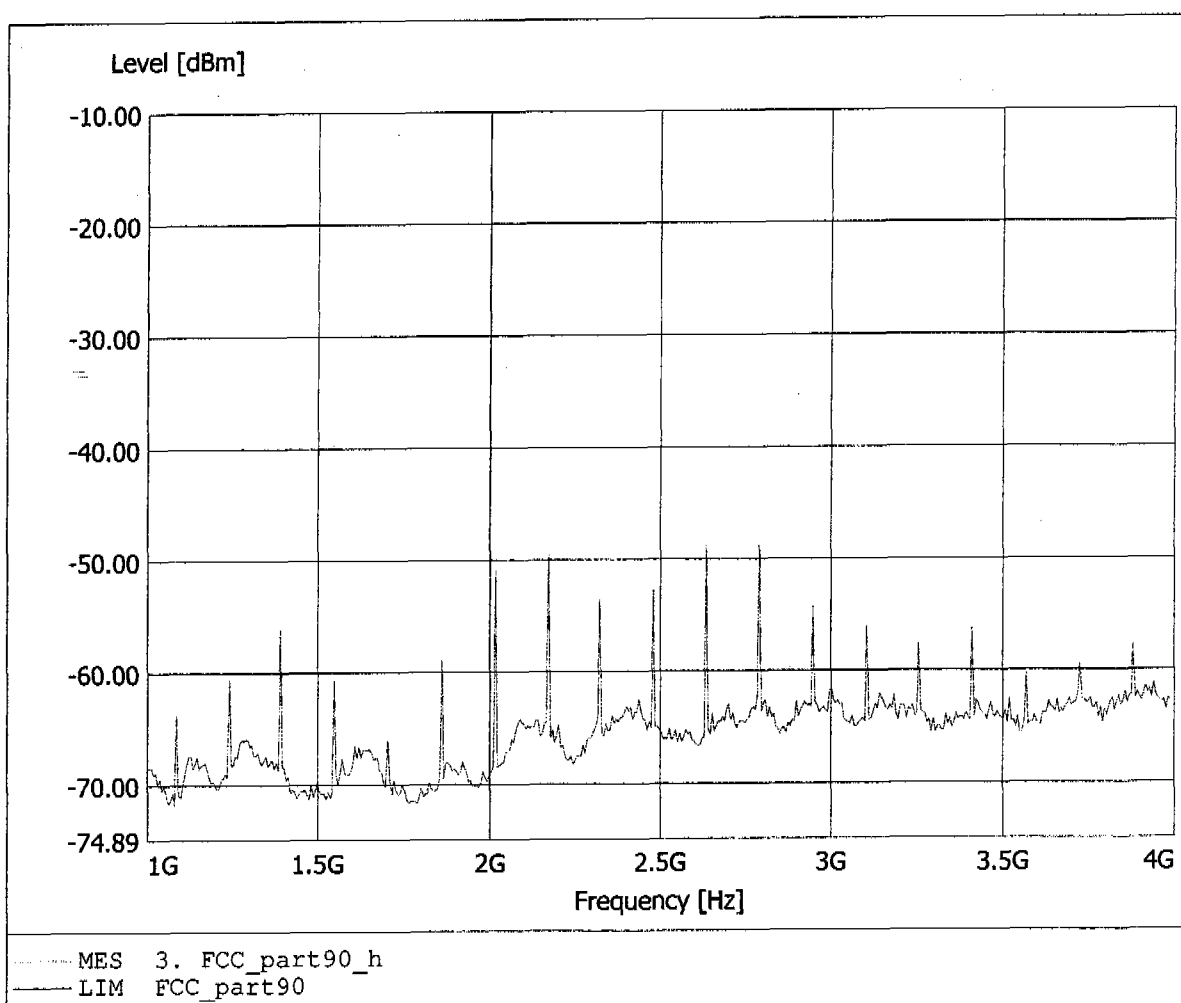
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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: 775.551MHz Pmax: -55.83dBm RBW: 100 kHz



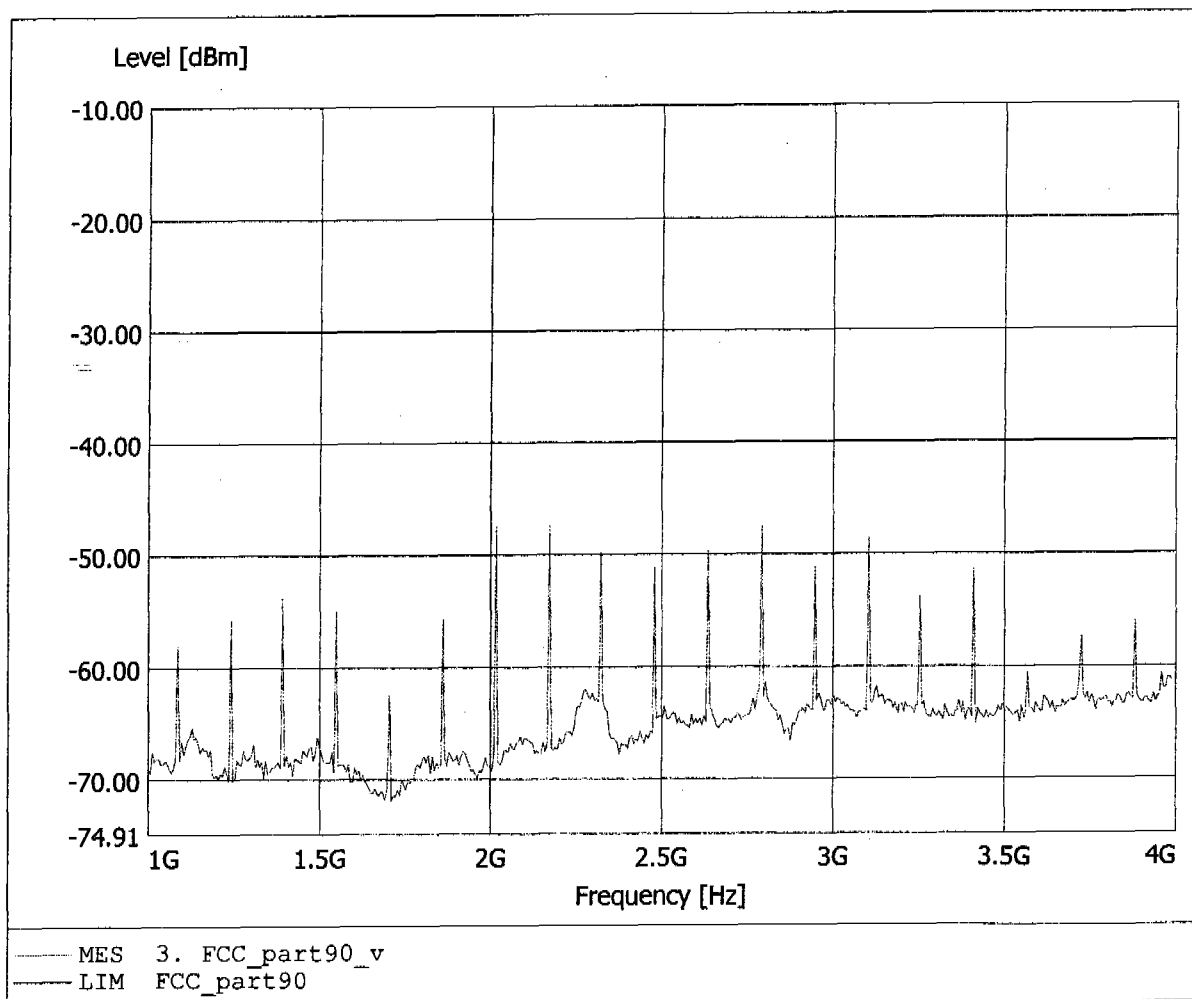
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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: 2.792GHz Pmax: -48.76dBm RBW: 1 MHz



Spurious emissions under normal conditions
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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: 2.016GHz Pmax: -47.28dBm RBW: 1 MHz

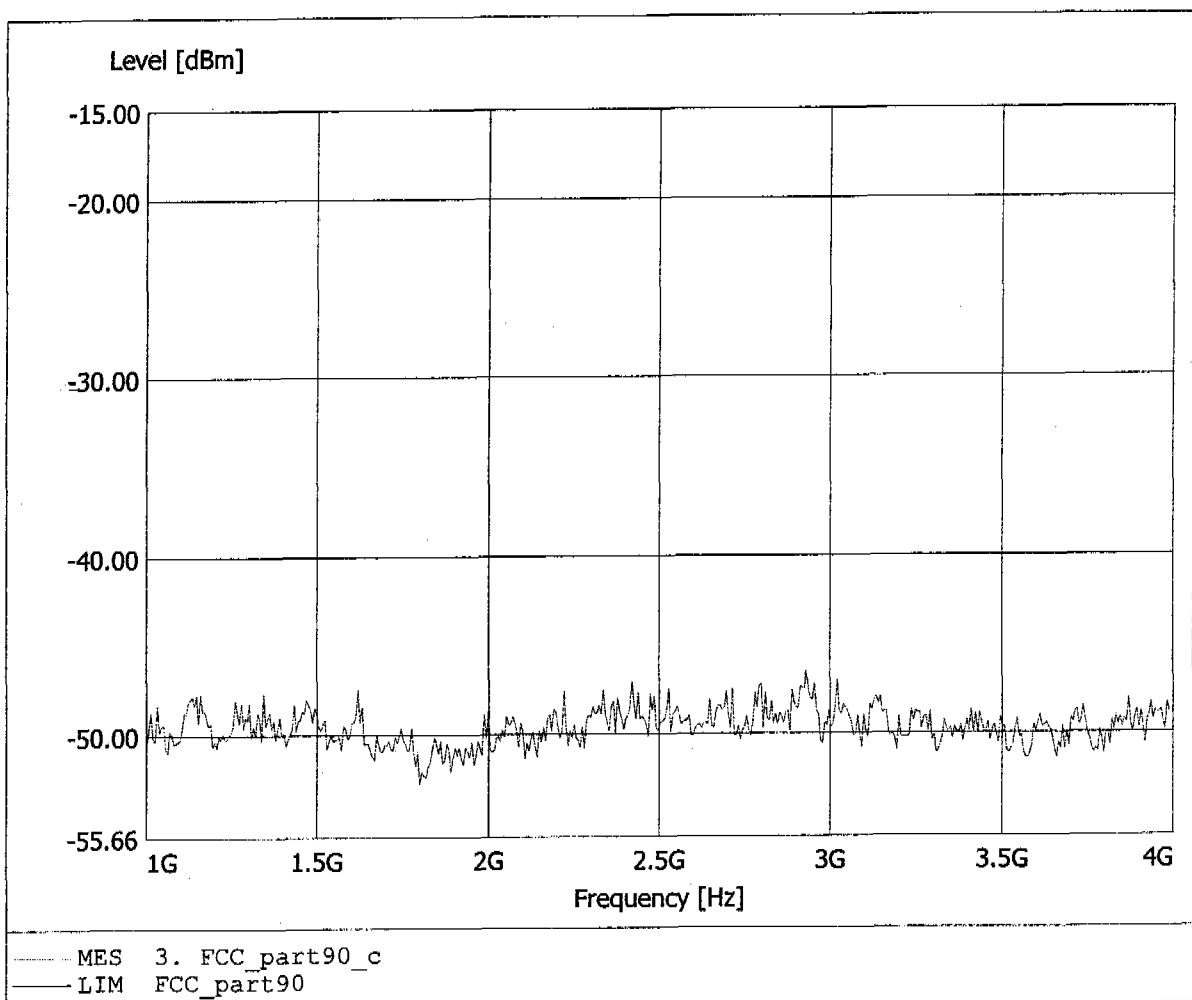


Appendix E

Spurious Emissions at antenna terminal

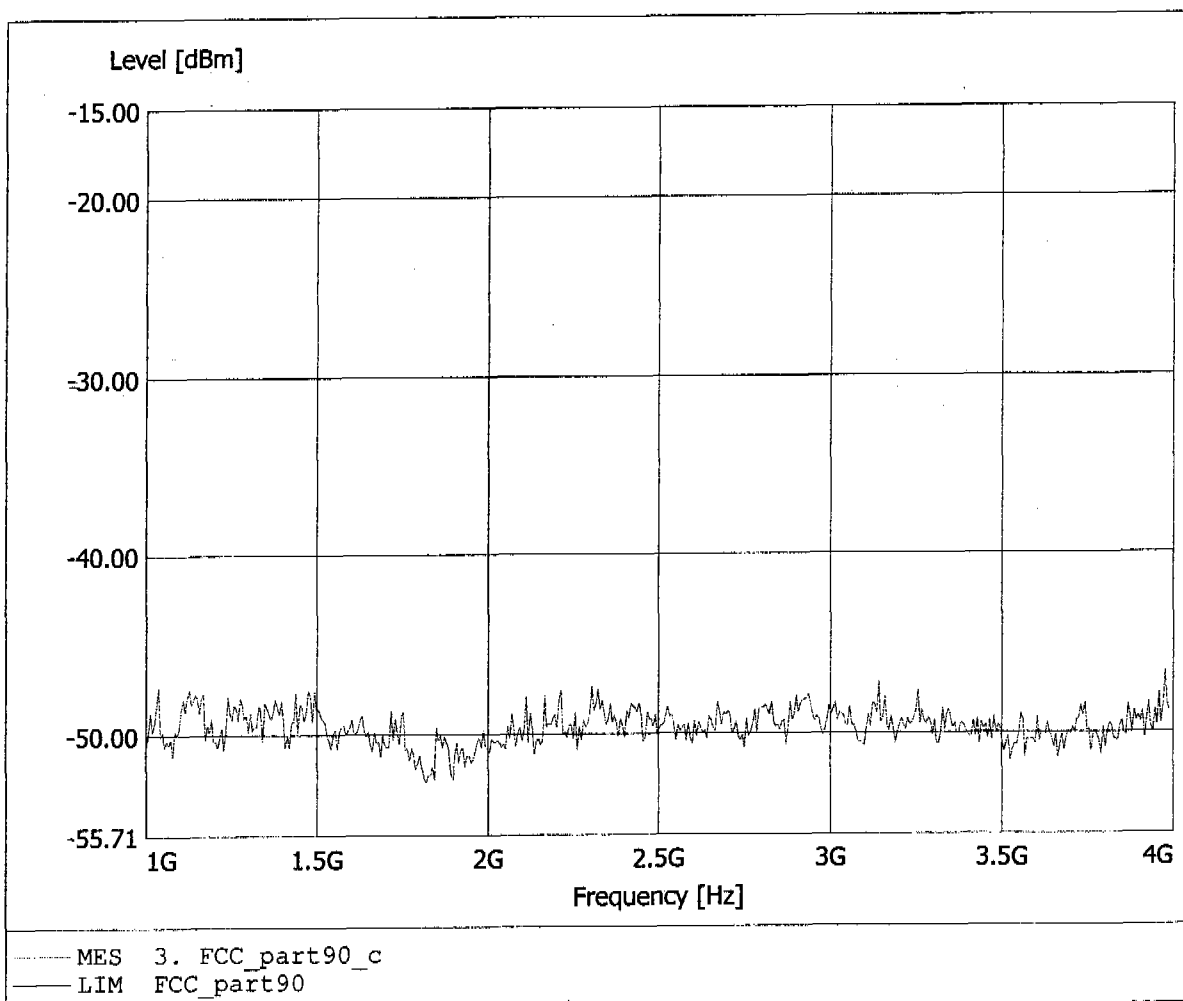
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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: 2.930GHz Pmax: -46.58dBm RBW: 1MHz



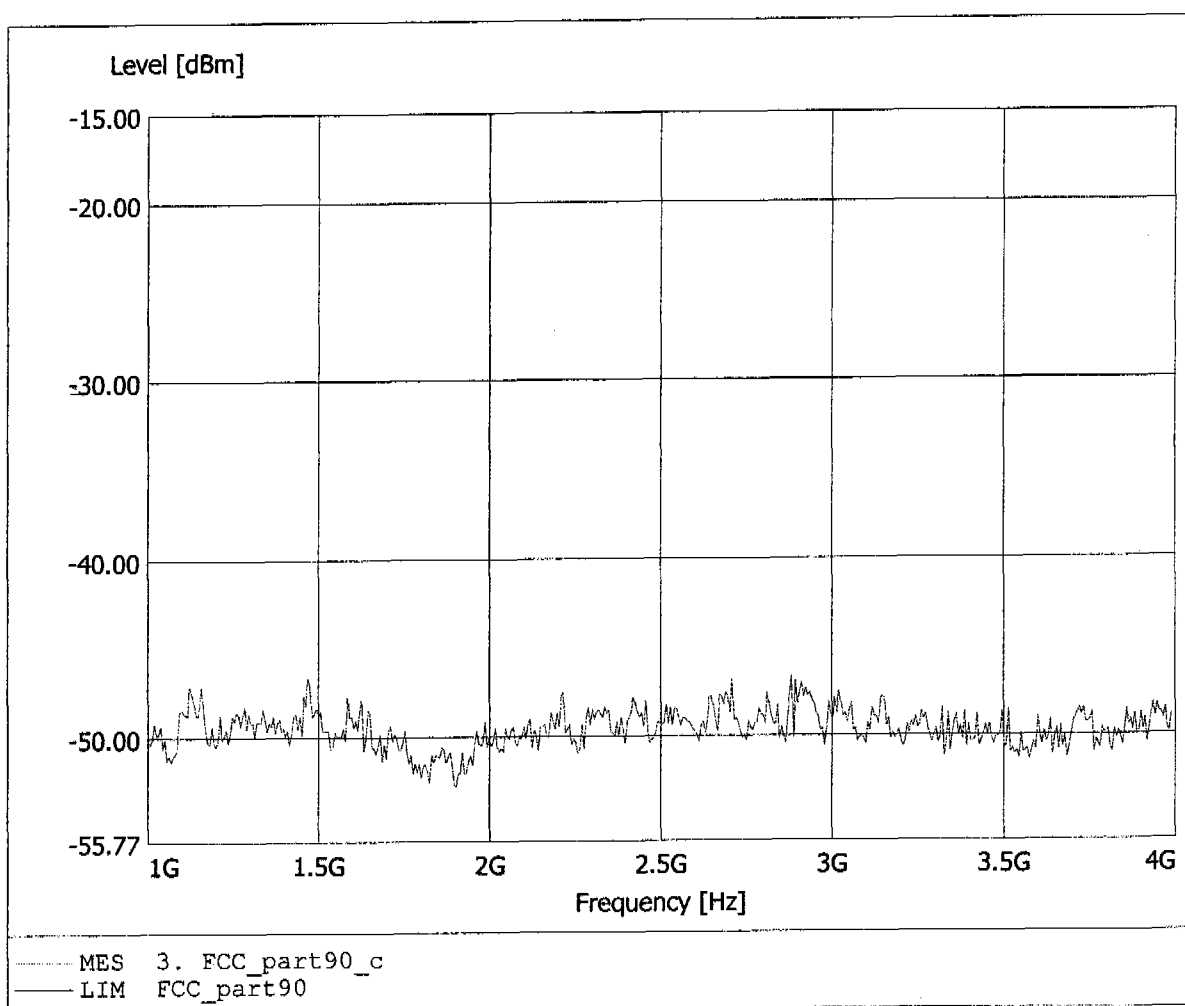
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATS-100
Approval Holder: Airtech 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: 3.976GHz Pmax: -46.64dBm RBW: 1MHz



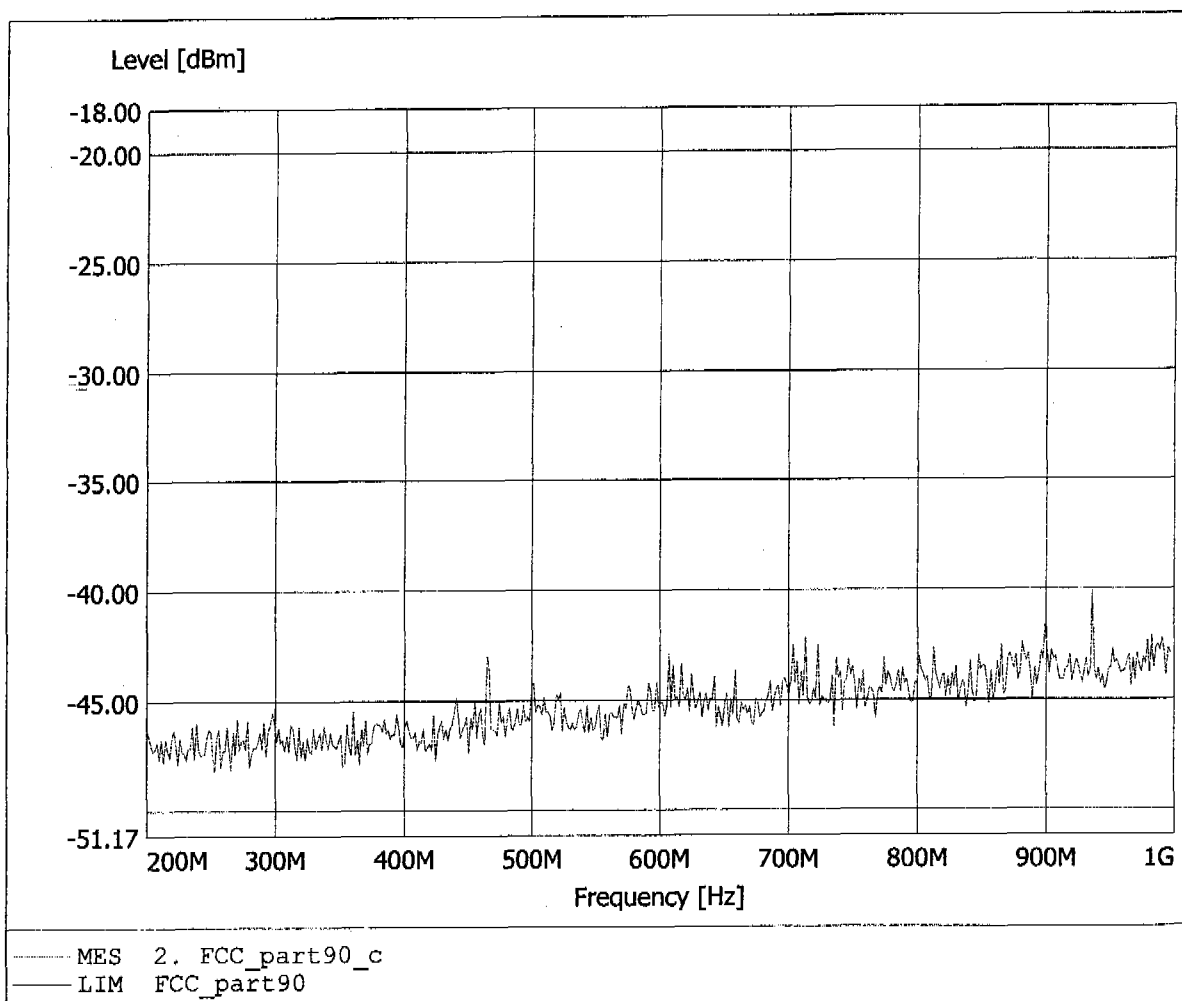
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATS-100
Approval Holder: Airtech 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:1.469GHz Pmax:-46.67dBm RBW: 1MHz



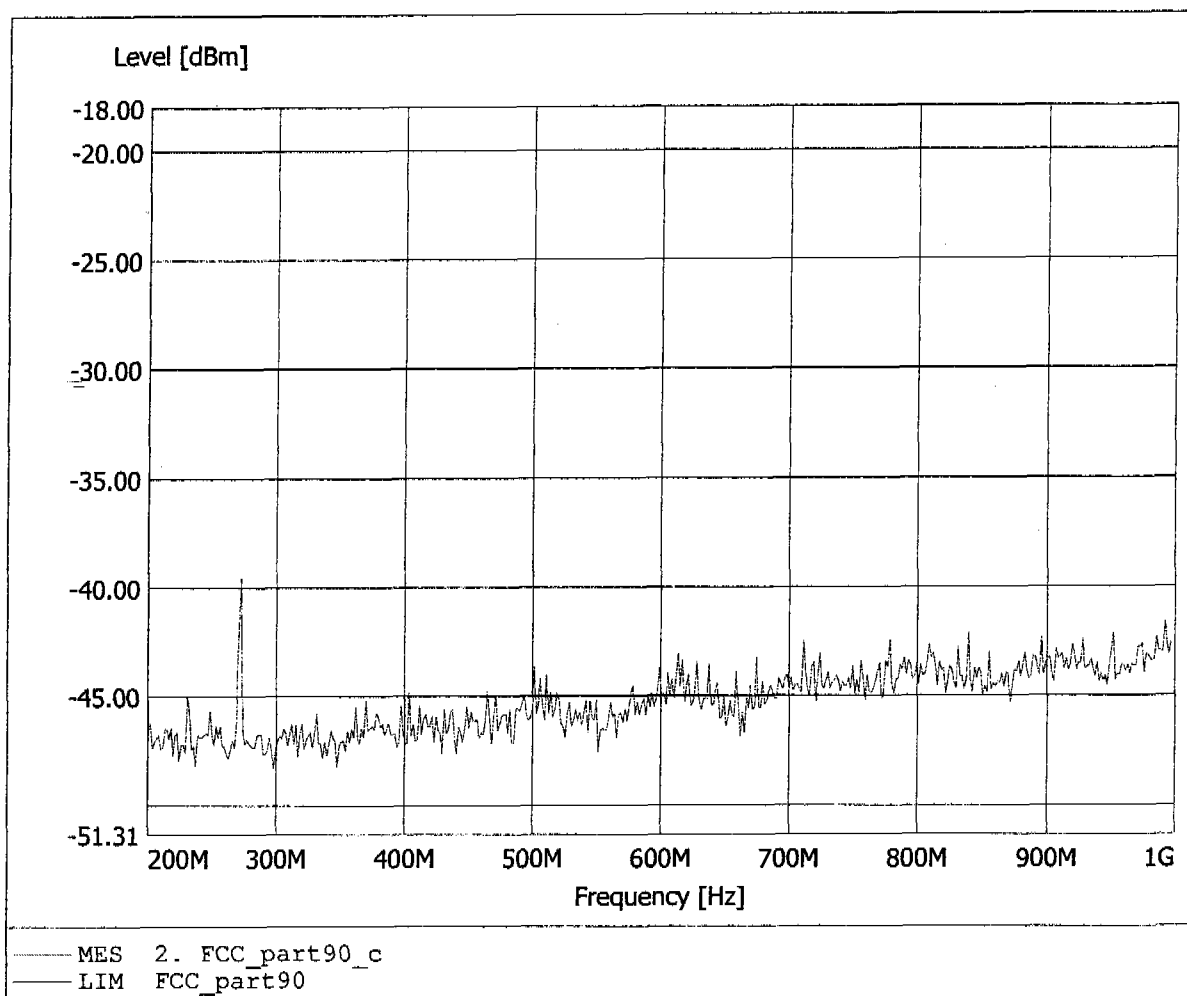
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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: 935.872MHz Pmax: -40.09dBm RBW: 100kHz



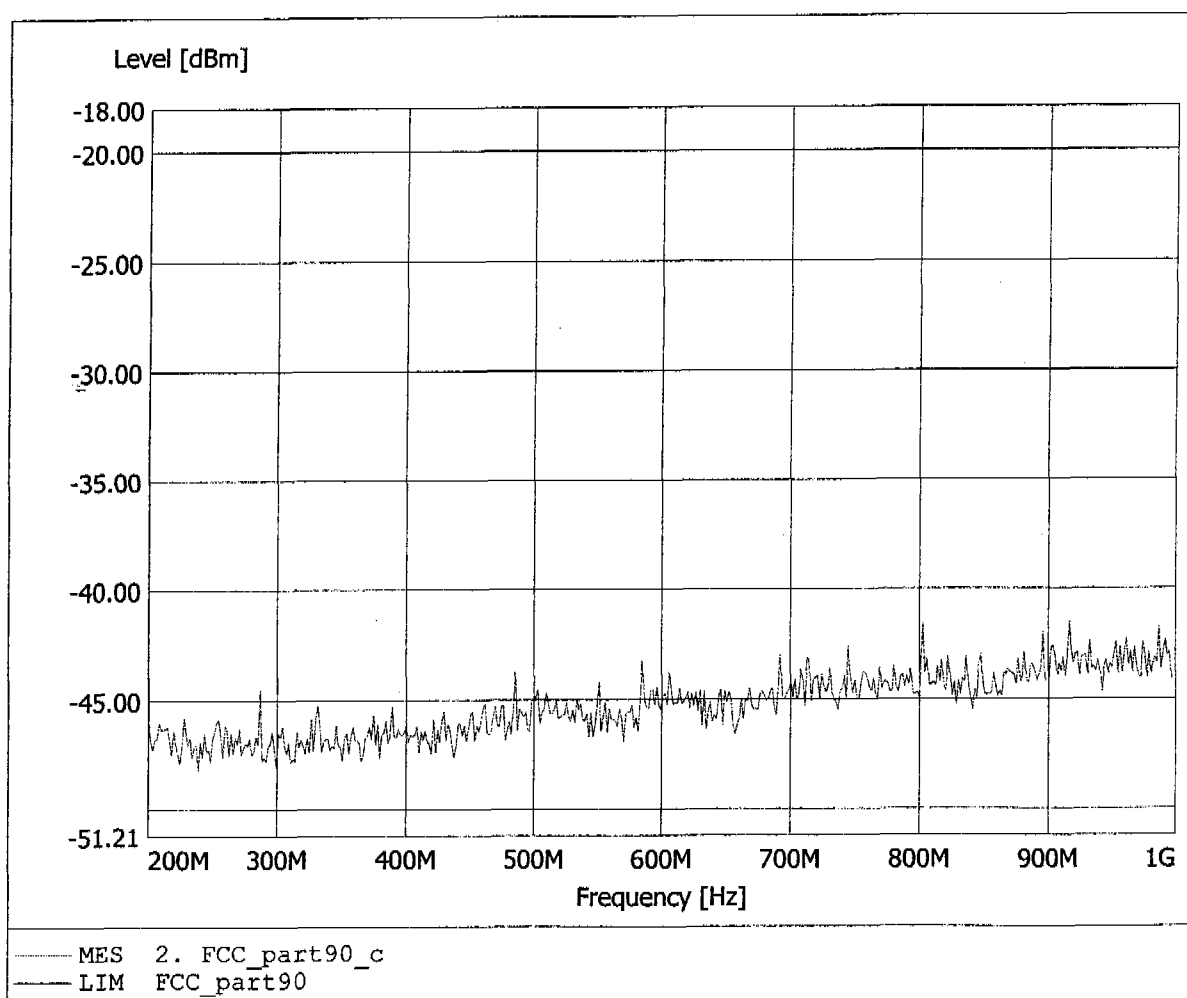
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:-39.56dBm RBW: 100kHz



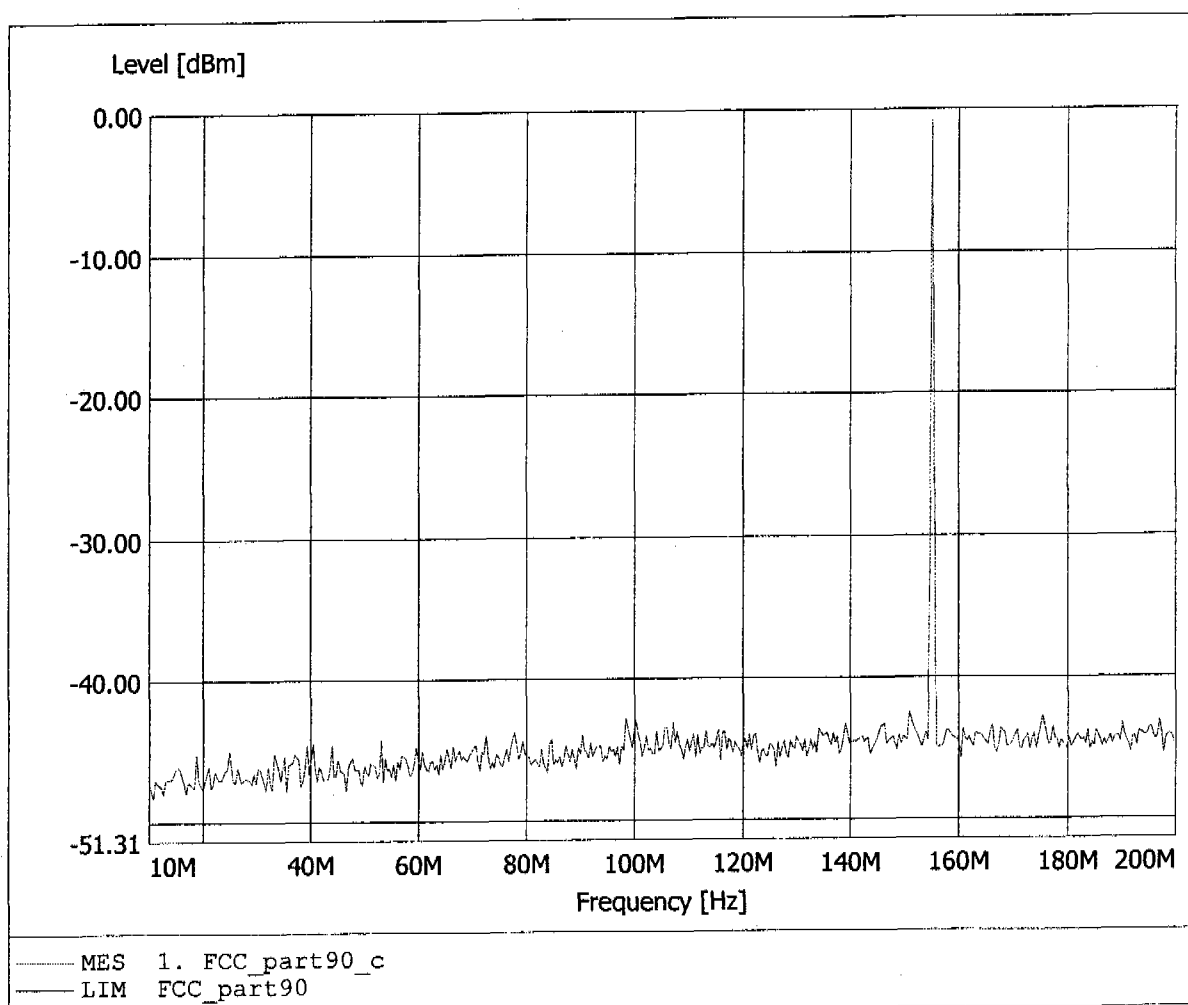
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATS-100
Approval Holder: Airtech 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: 916.633MHz Pmax:-41.50dBm RBW: 100kHz



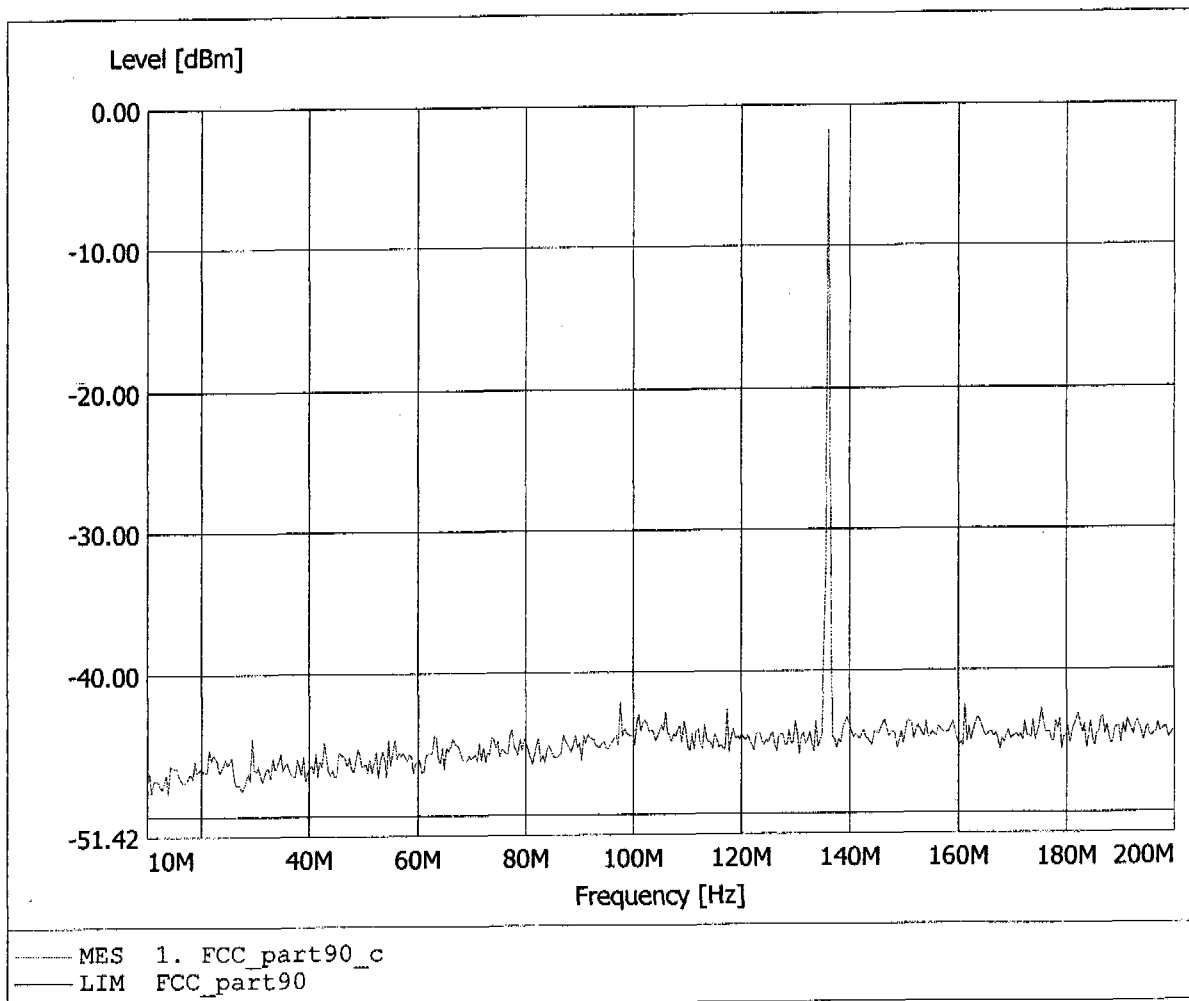
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:-0.80dBm RBW: 100kHz



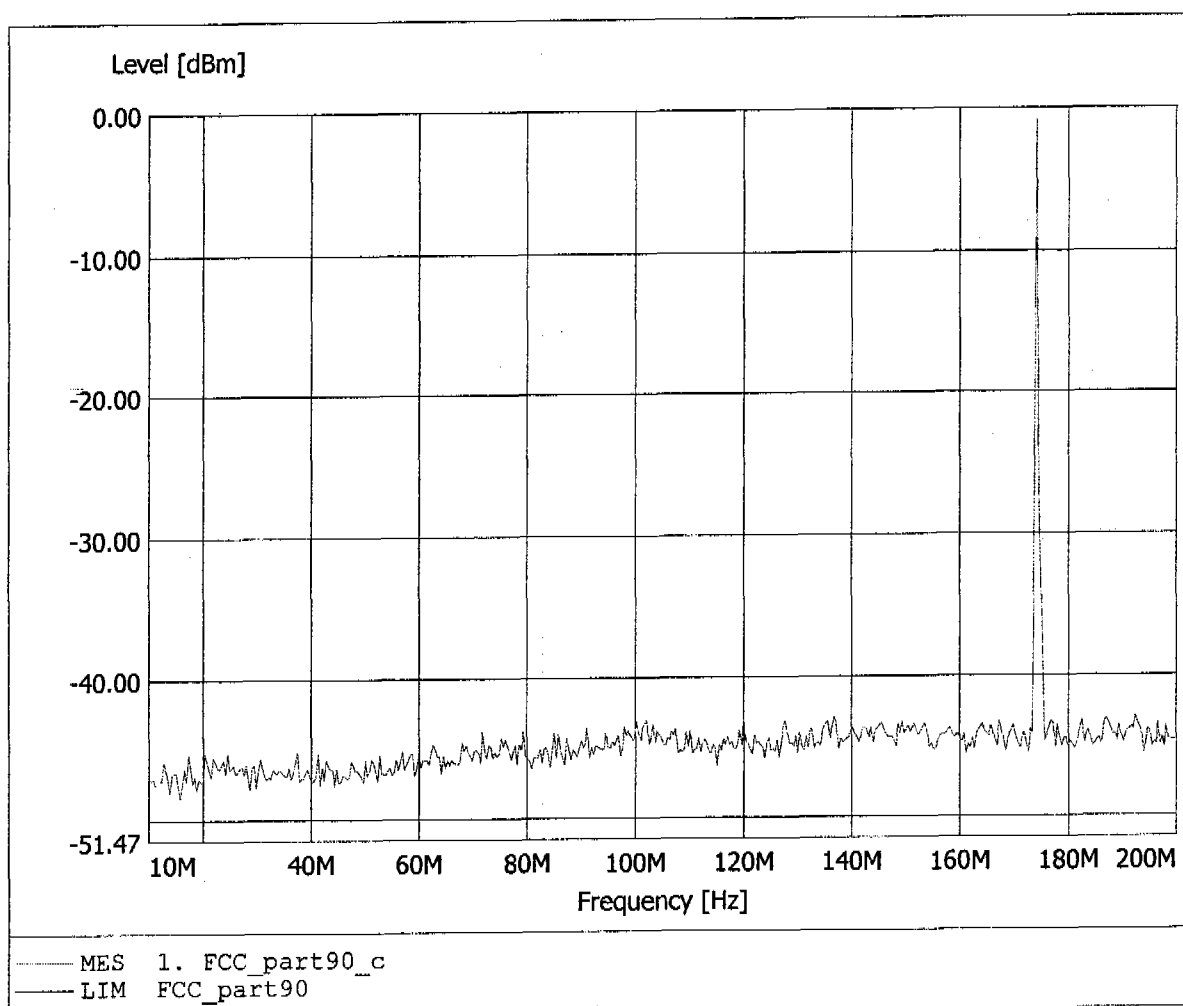
Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:-1.82dBm RBW: 100kHz



Spurious emissions at antenna terminal
FCC RULES PART 90

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATS-100
Approval Holder: Airtech 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:-0.77dBm 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

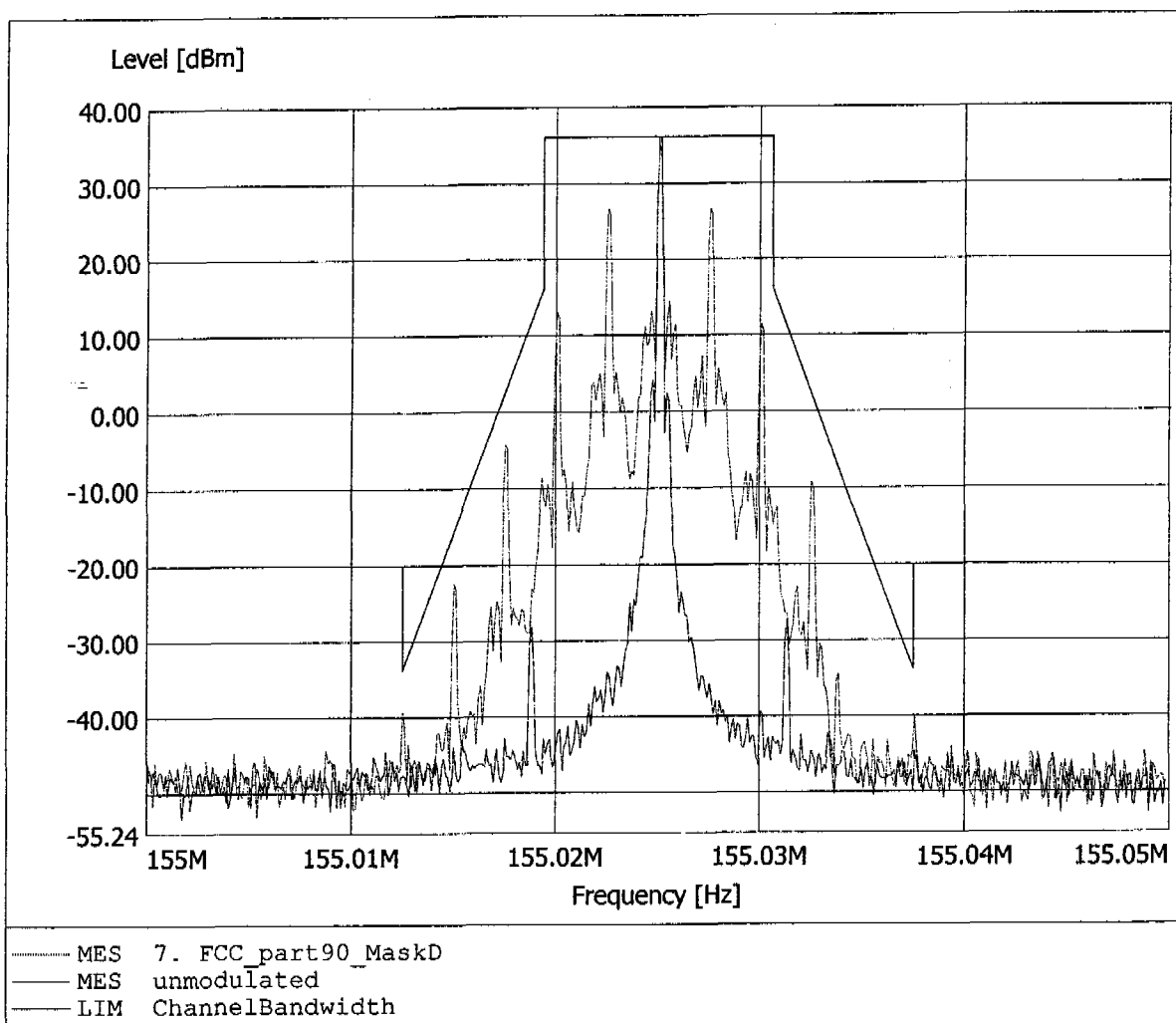
Refer to point 3.7

Appendix I

Occupied Bandwidth

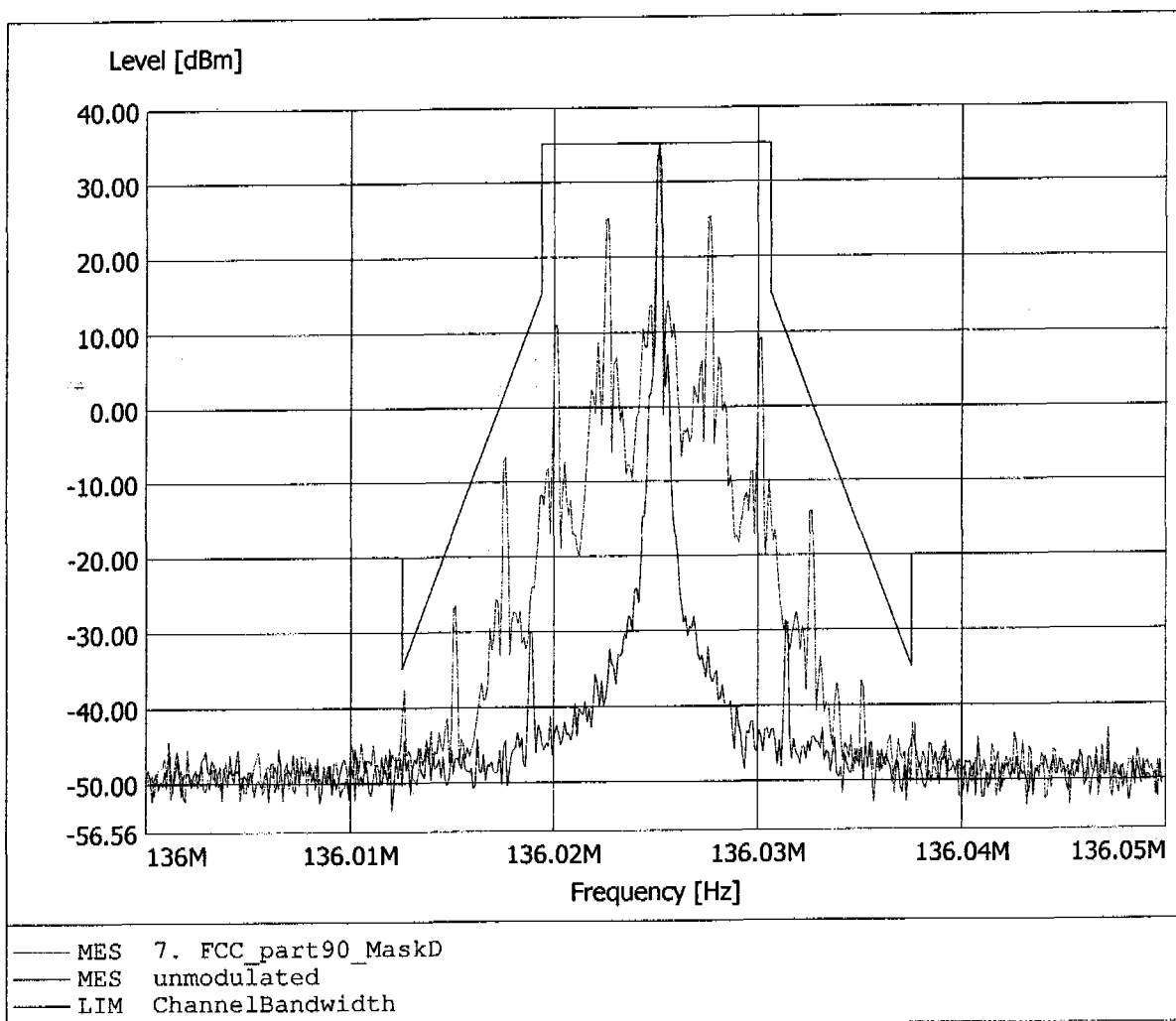
Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:34.89dBm RBW: 100Hz



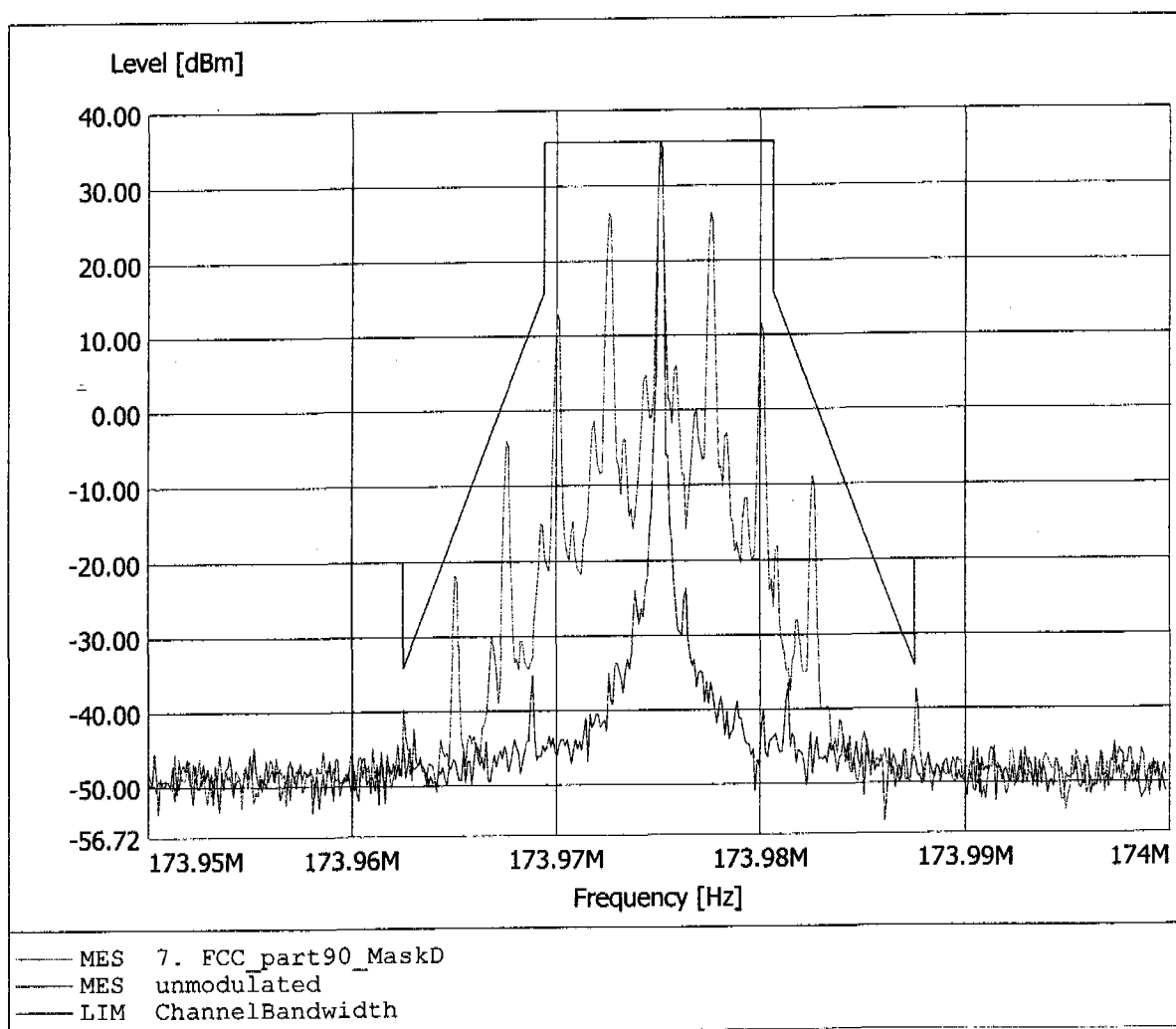
Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:34.02dBm RBW: 100Hz



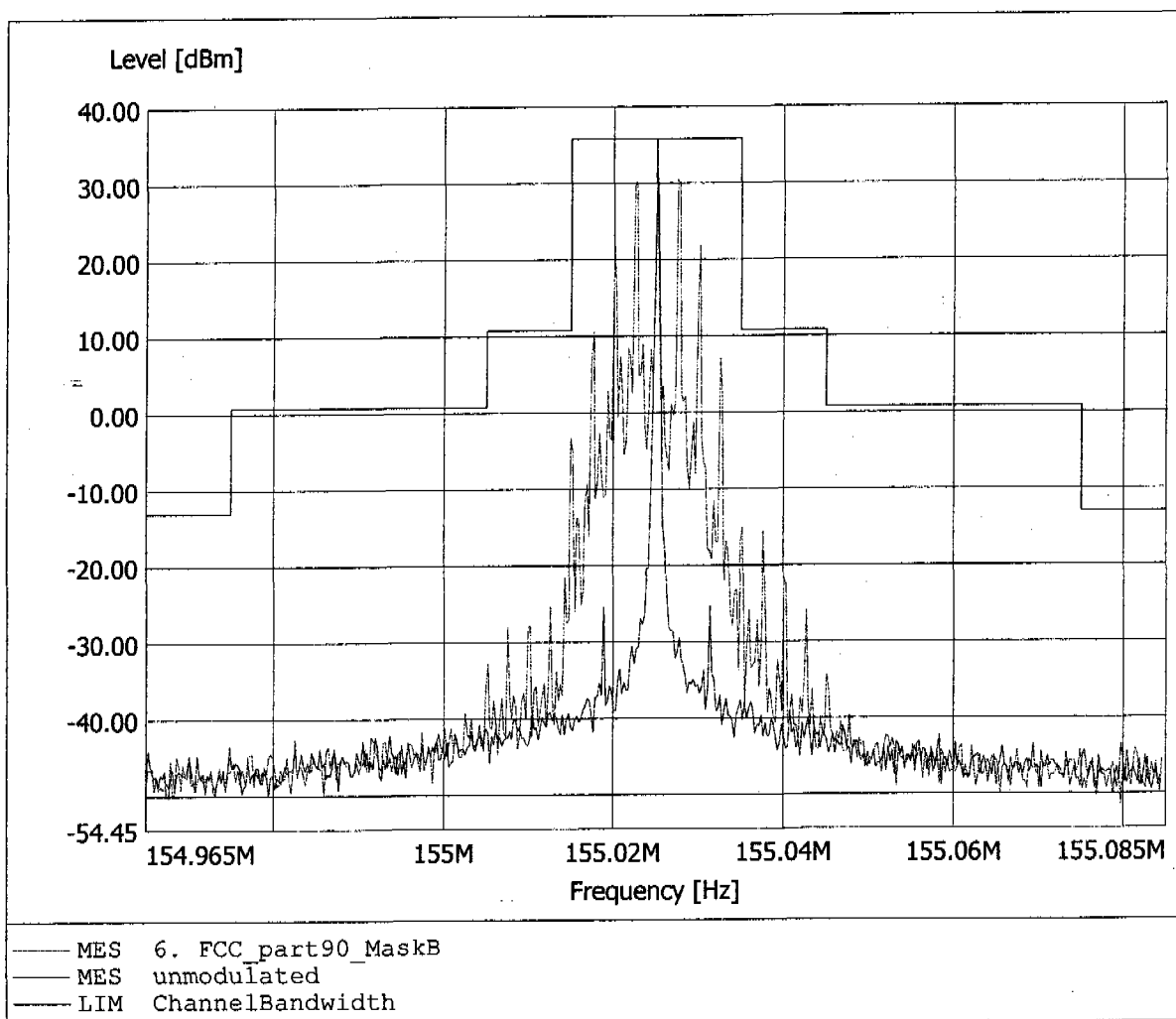
Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATS-100
Approval Holder: Airtech 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:34.37dBm RBW: 100Hz



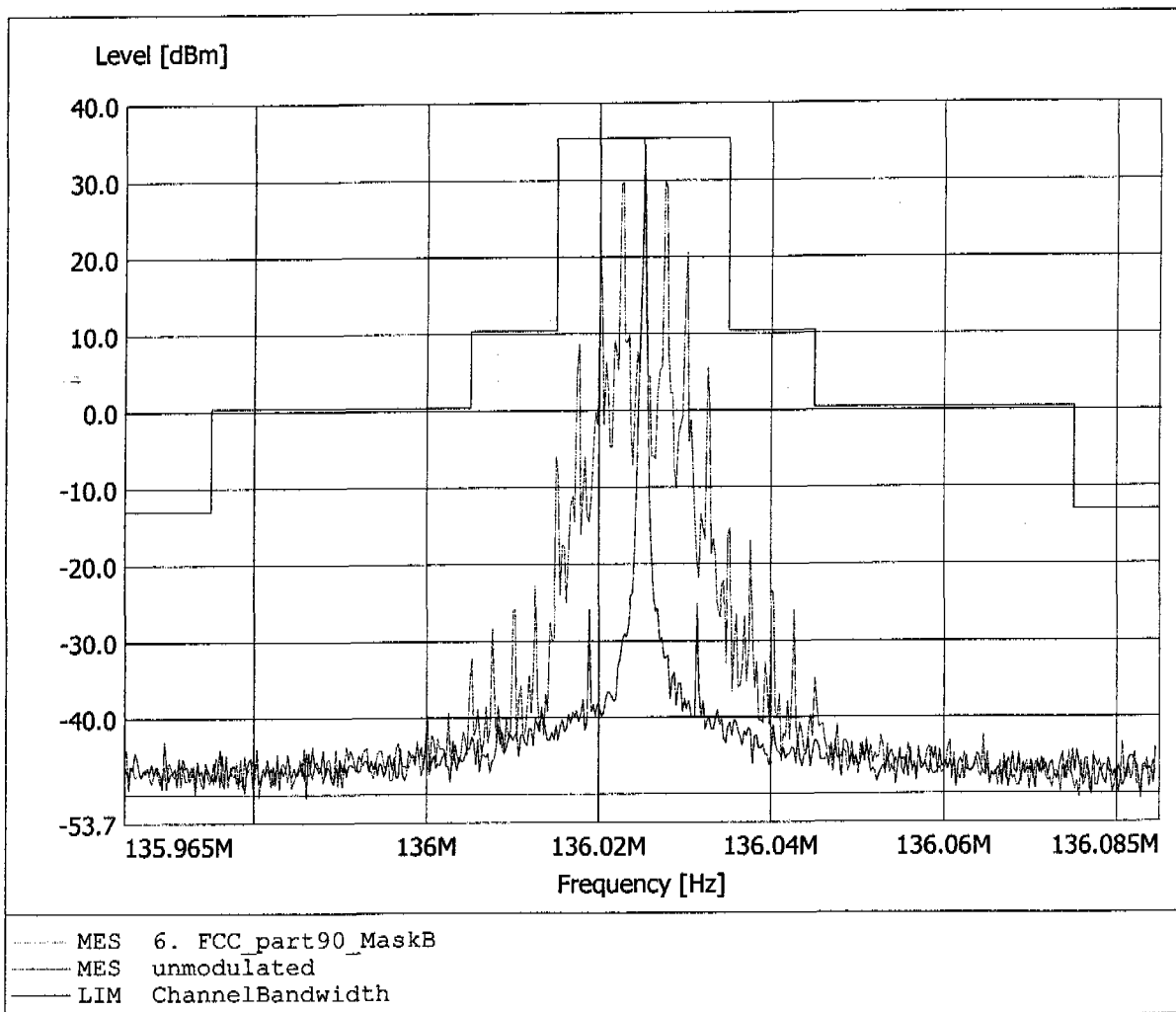
Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 155.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:30.76dBm RBW: 100Hz



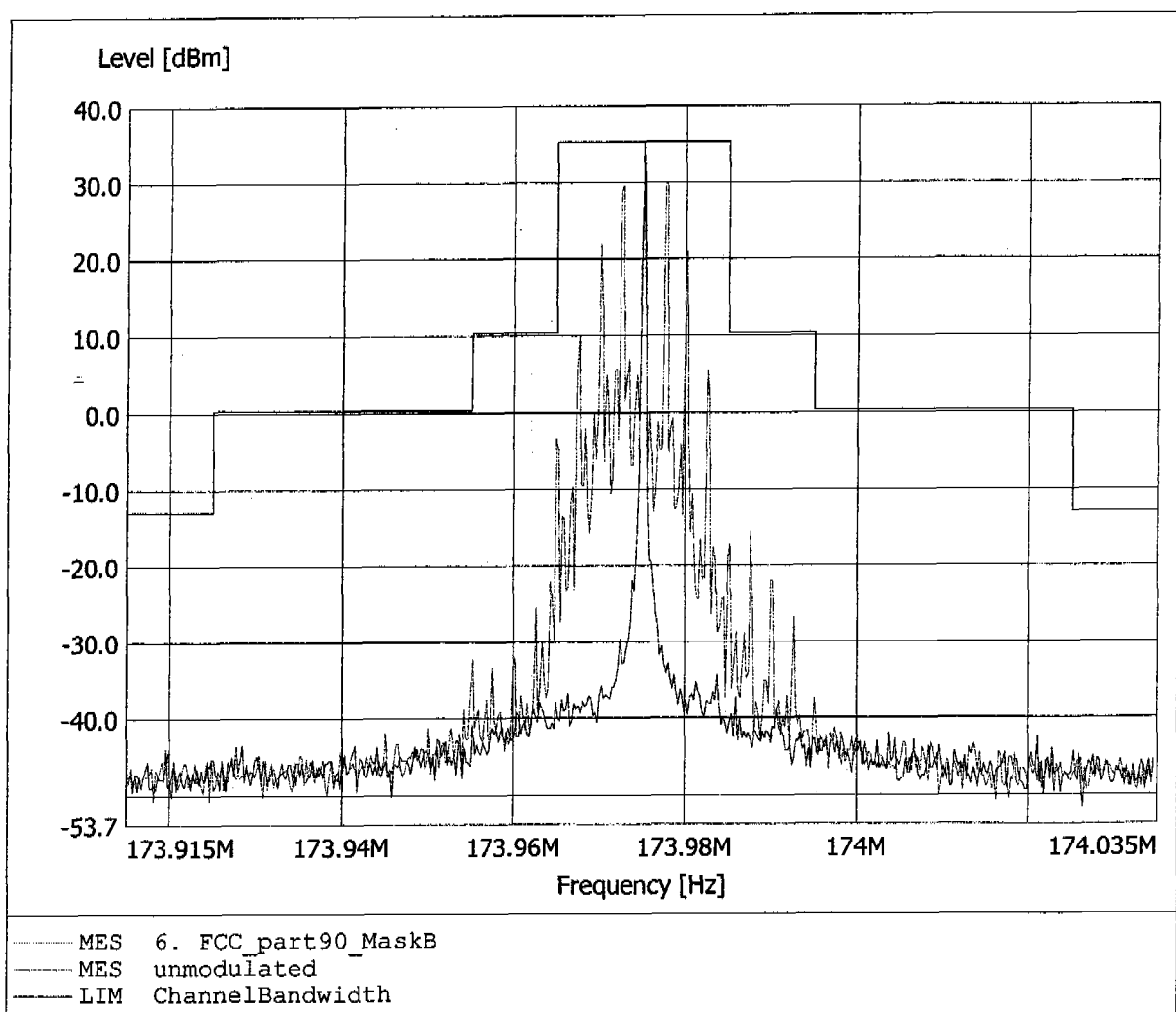
Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 136.025 MHz
Model: ATS-100
Approval Holder: Airtech 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:30.99dBm RBW: 100Hz



Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210

EUT: VHF TRANSCEIVER / 173.975 MHz
Model: ATS-100
Approval Holder: Airtech 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:173.975MHz Pmax:30.59dBm RBW: 100Hz



Appendix J

Frequency stability

No diagrams

Refer to point 3.9

Appendix K

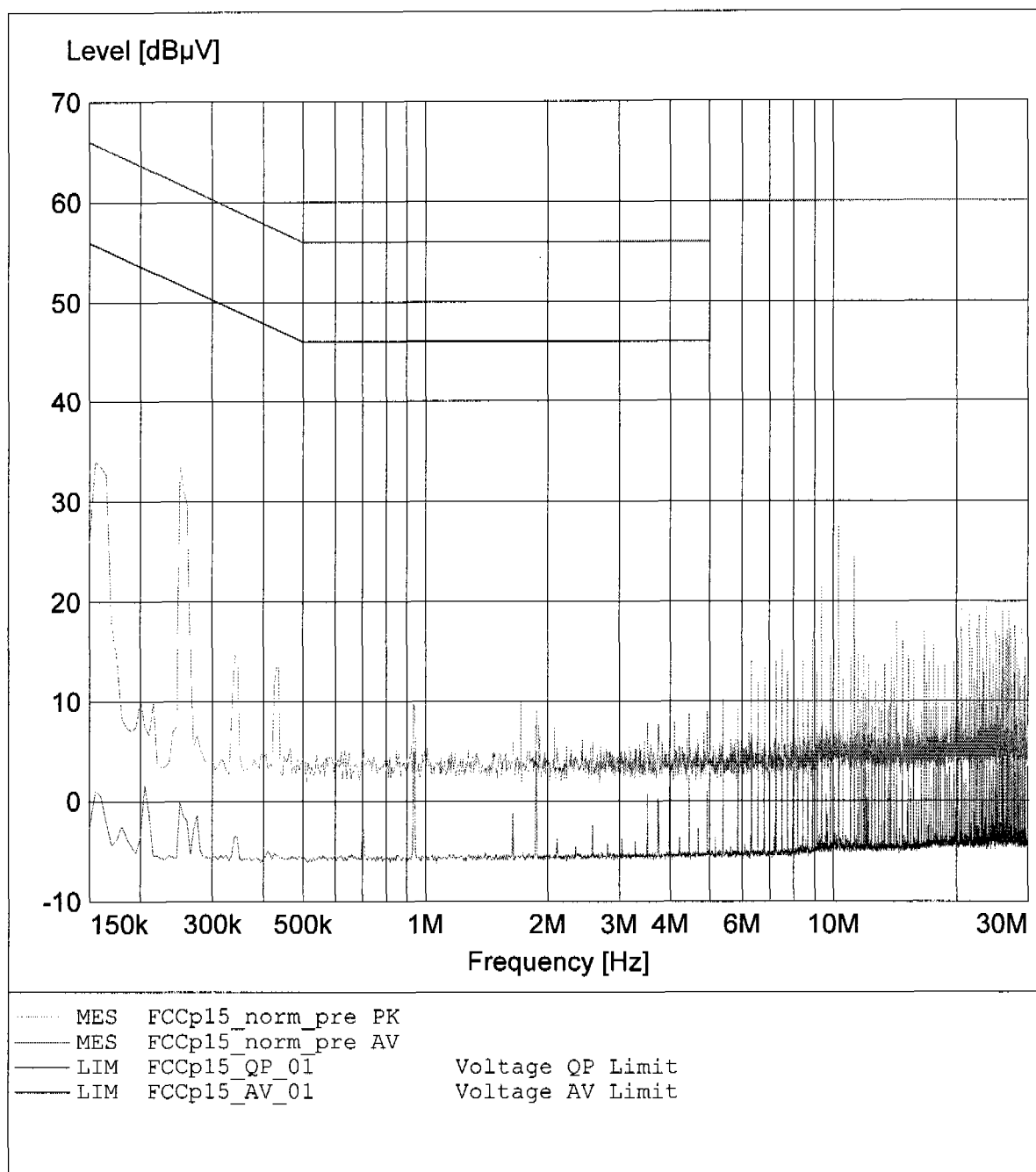
Transient frequency behaviour of the transmitter

Appendix L

Spurious emissions related to AC power line

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

EUT: VHF Transceiver
Manufacturer: Airtech I & C Co., Ltd.
Operating Condition: Unom: 12VDC (AC/DC adaptor), Tnom: 23°C
Test Site: ETS
Operator: Mr. Pflug
Test Specification: V-Network: ESH2-Z5 (N)
Comment: model: ATS-100 mode: charging
Start of Test:



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

EUT: VHF Transceiver
Manufacturer: Airtech I & C Co., Ltd.
Operating Condition: Unom: 12VDC (AC/DC adaptor), Tnom: 23°C
Test Site: ETS
Operator: Mr. Pflug
Test Specification: V-Network: ESH2-Z5 (L1)
Comment: model: ATS-100 mode: charging
Start of Test:

