

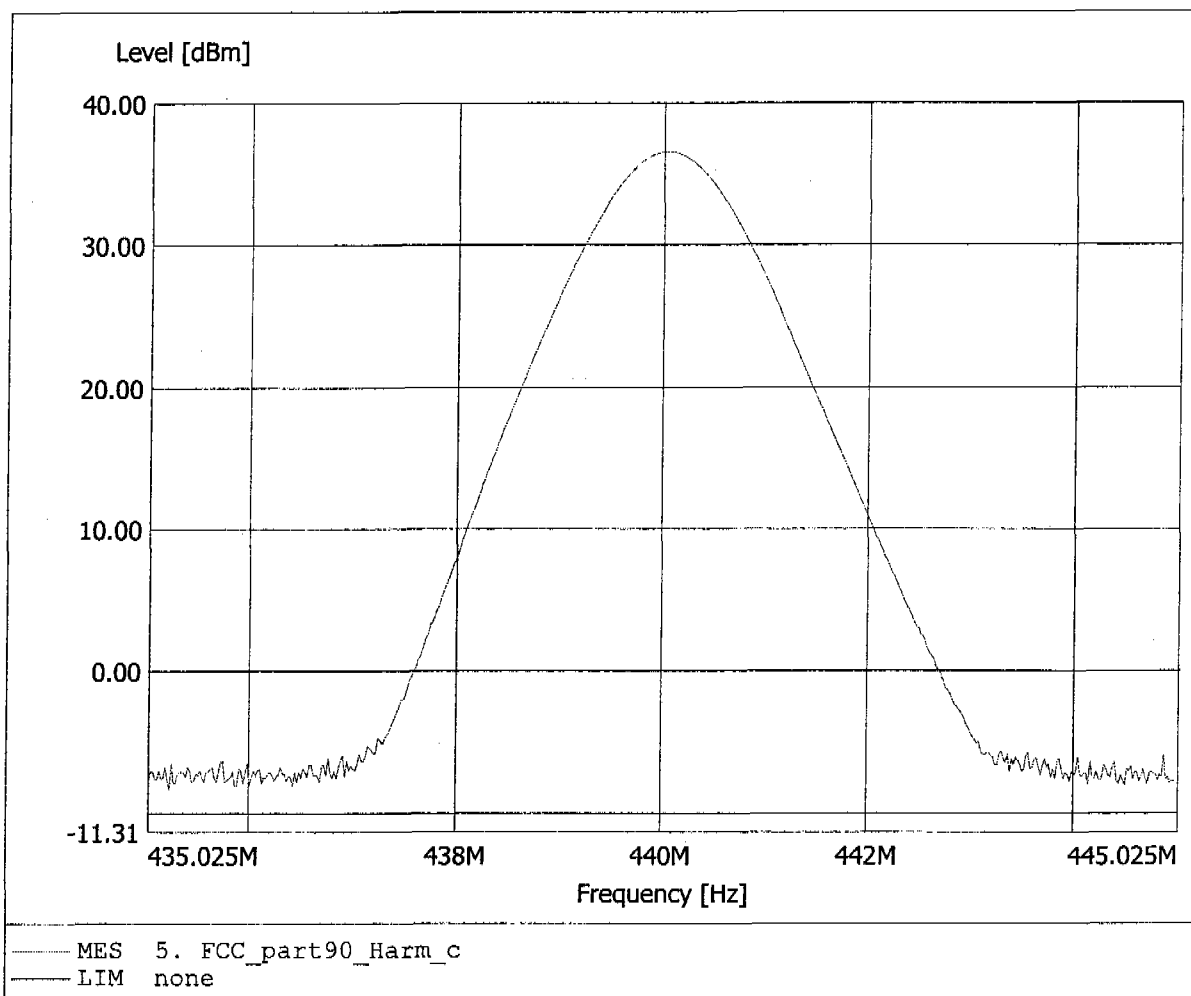


Appendix B

Output Power conducted

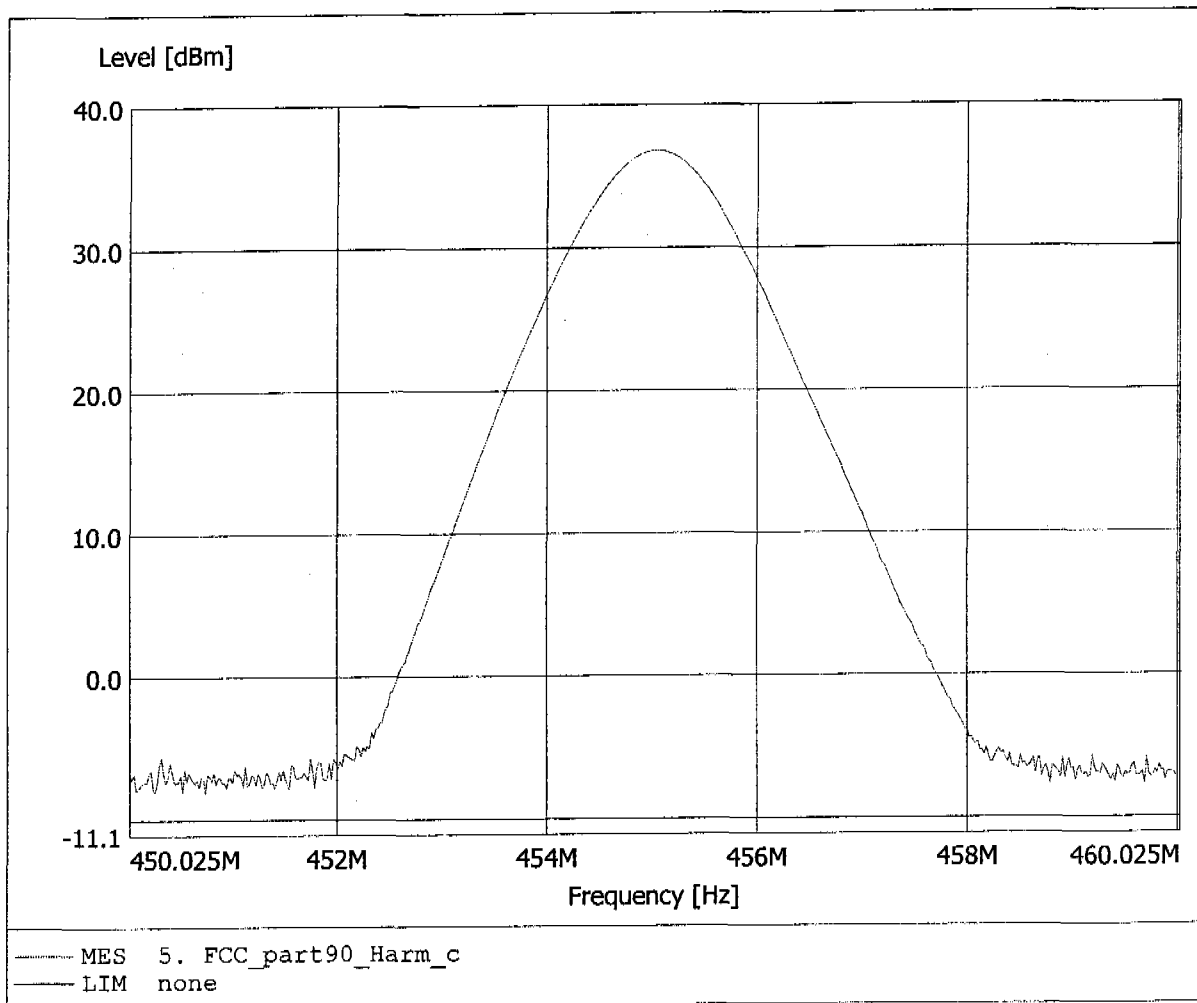
Output power conducted
FCC RULES PART 90

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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:440.015MHz Pmax:36.56dBm RBW: 1MHz



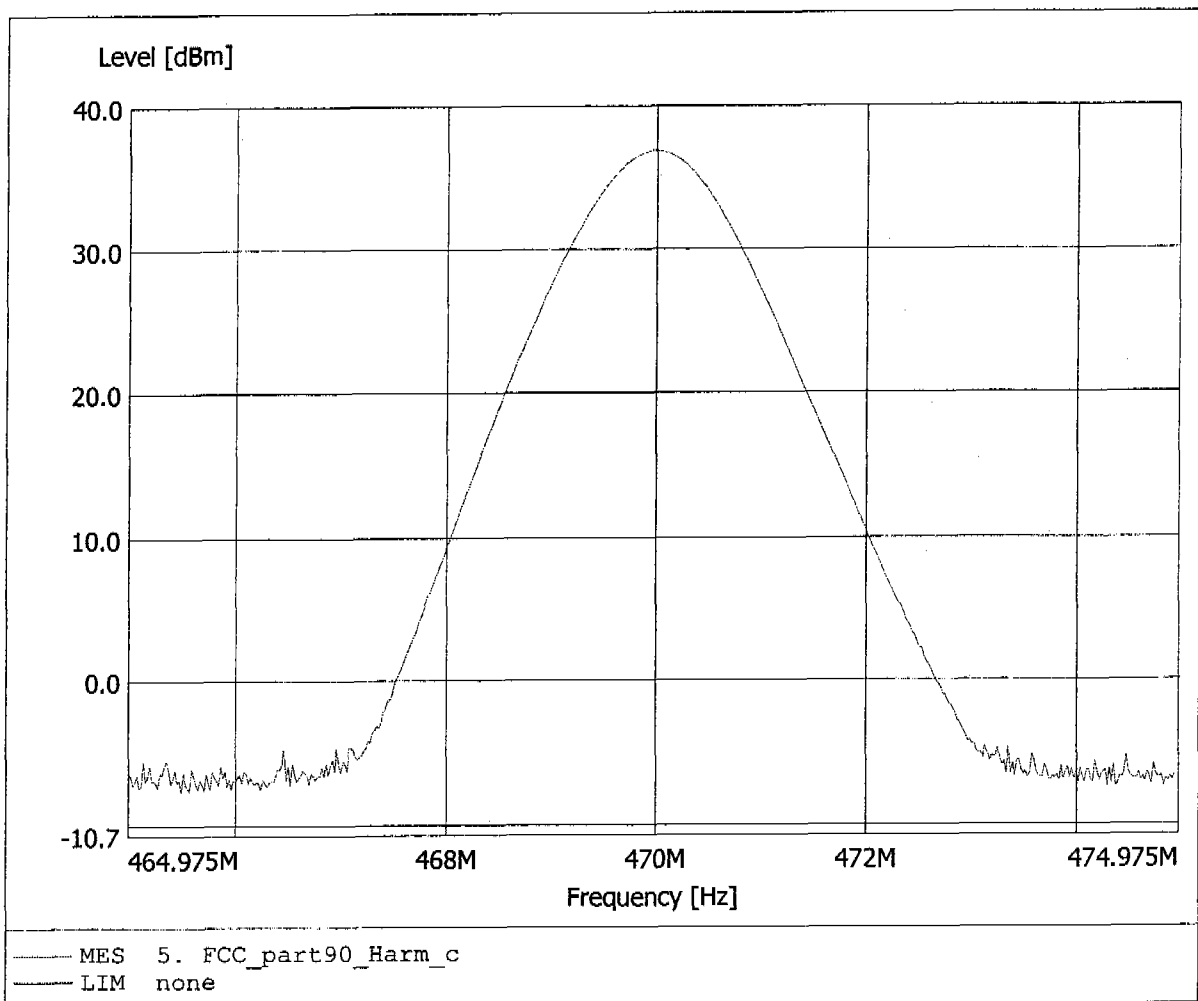
Output power conducted
FCC RULES PART 90

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:455.035MHz Pmax:36.81dBm RBW: 1MHz



Output power conducted
FCC RULES PART 90

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:470.005MHz Pmax:36.89dBm RBW: 1MHz



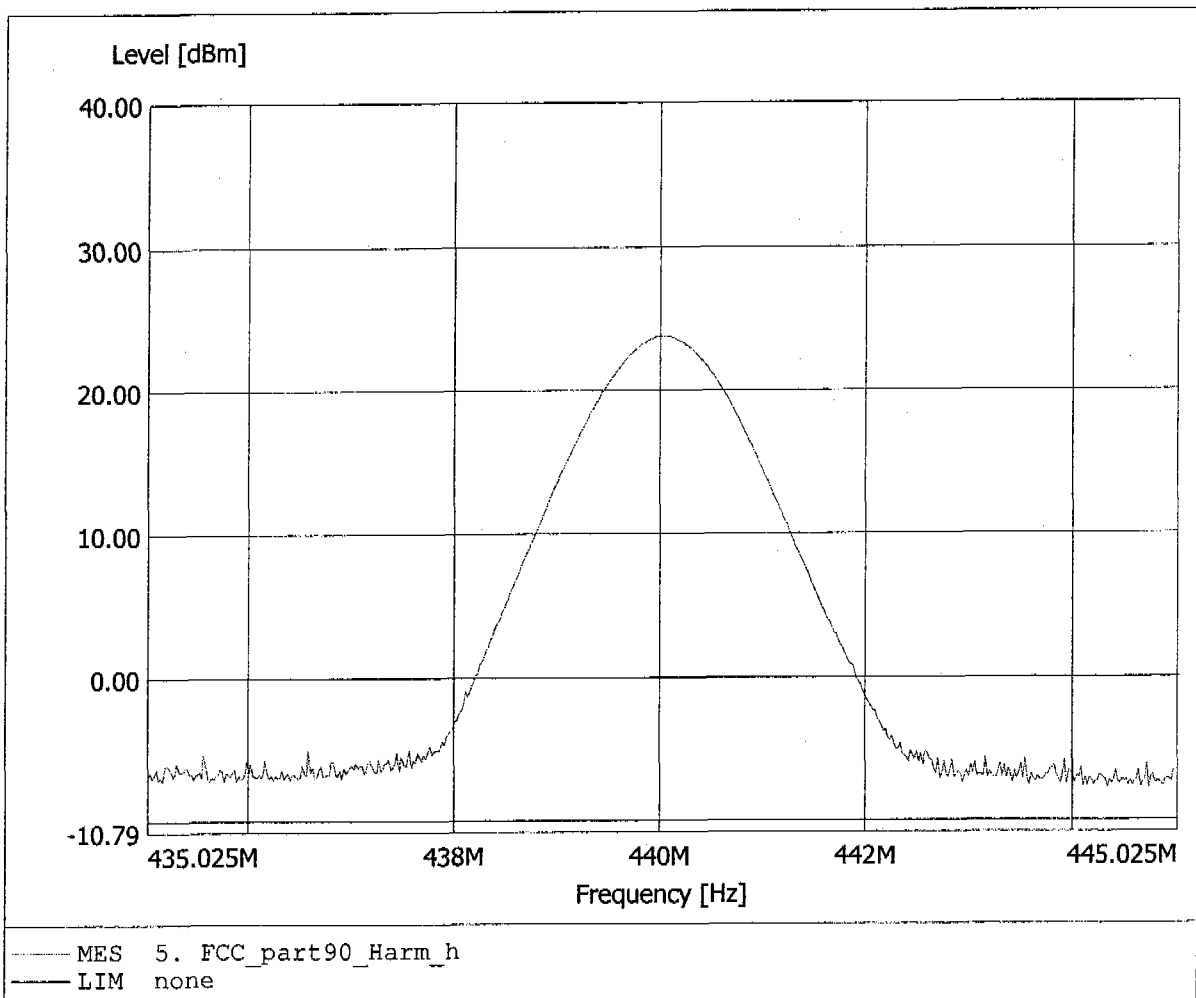


Appendix C

Output Power radiated

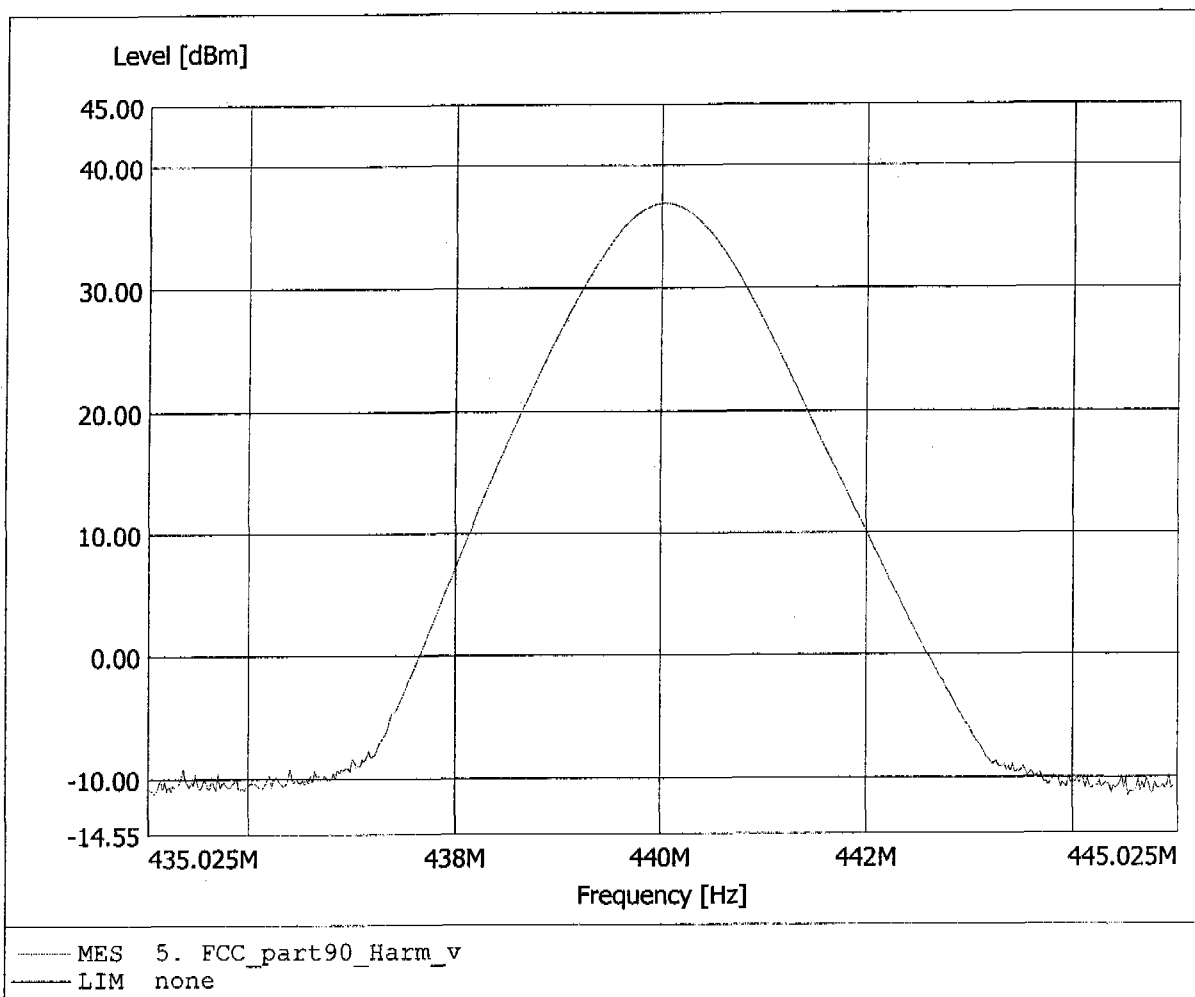
**Radiated power under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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:440.055MHz Pmax:23.82dBm RBW: 1 MHz



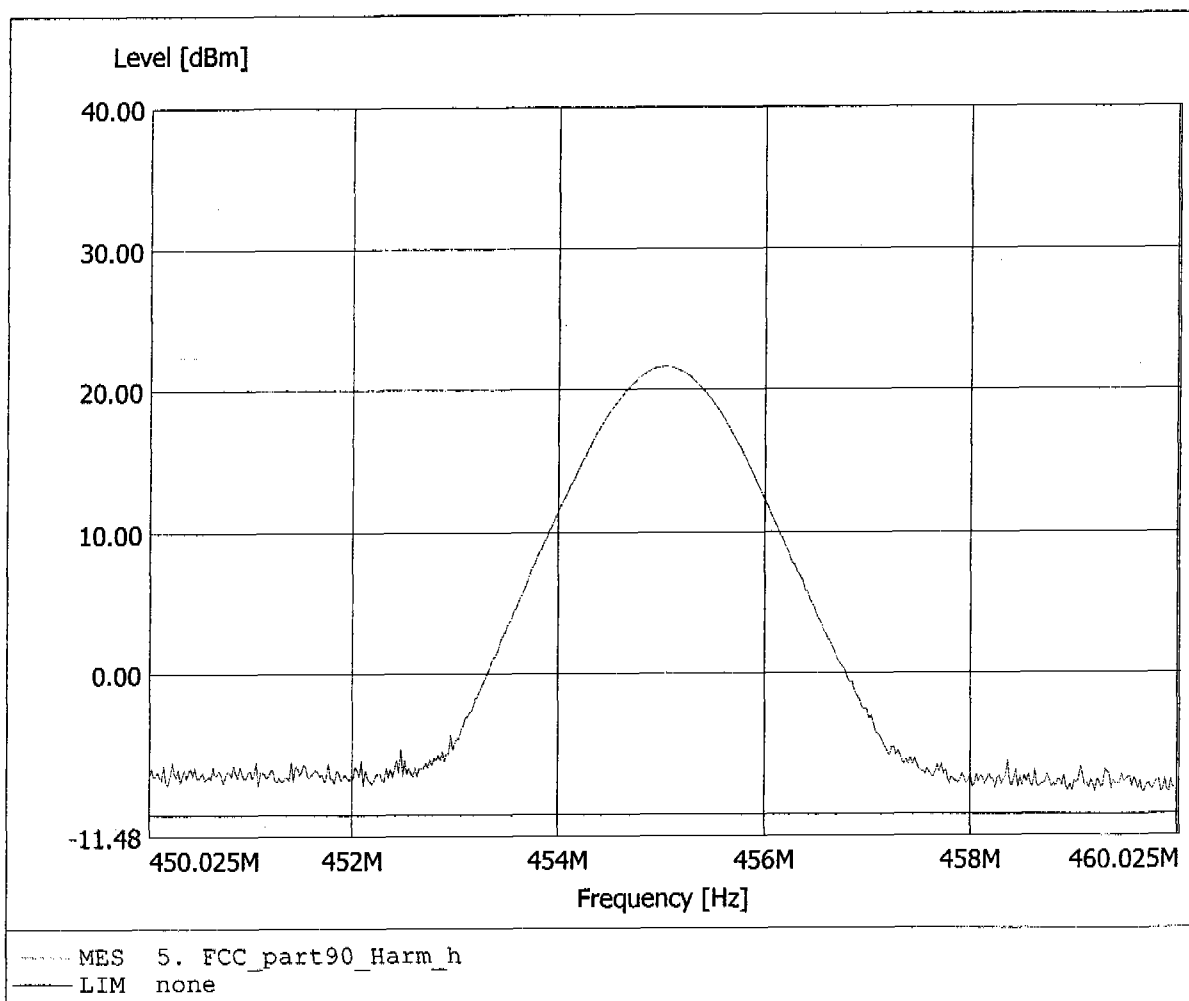
**Radiated power under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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:440.015MHz Pmax:36.89dBm RBW: 1 MHz



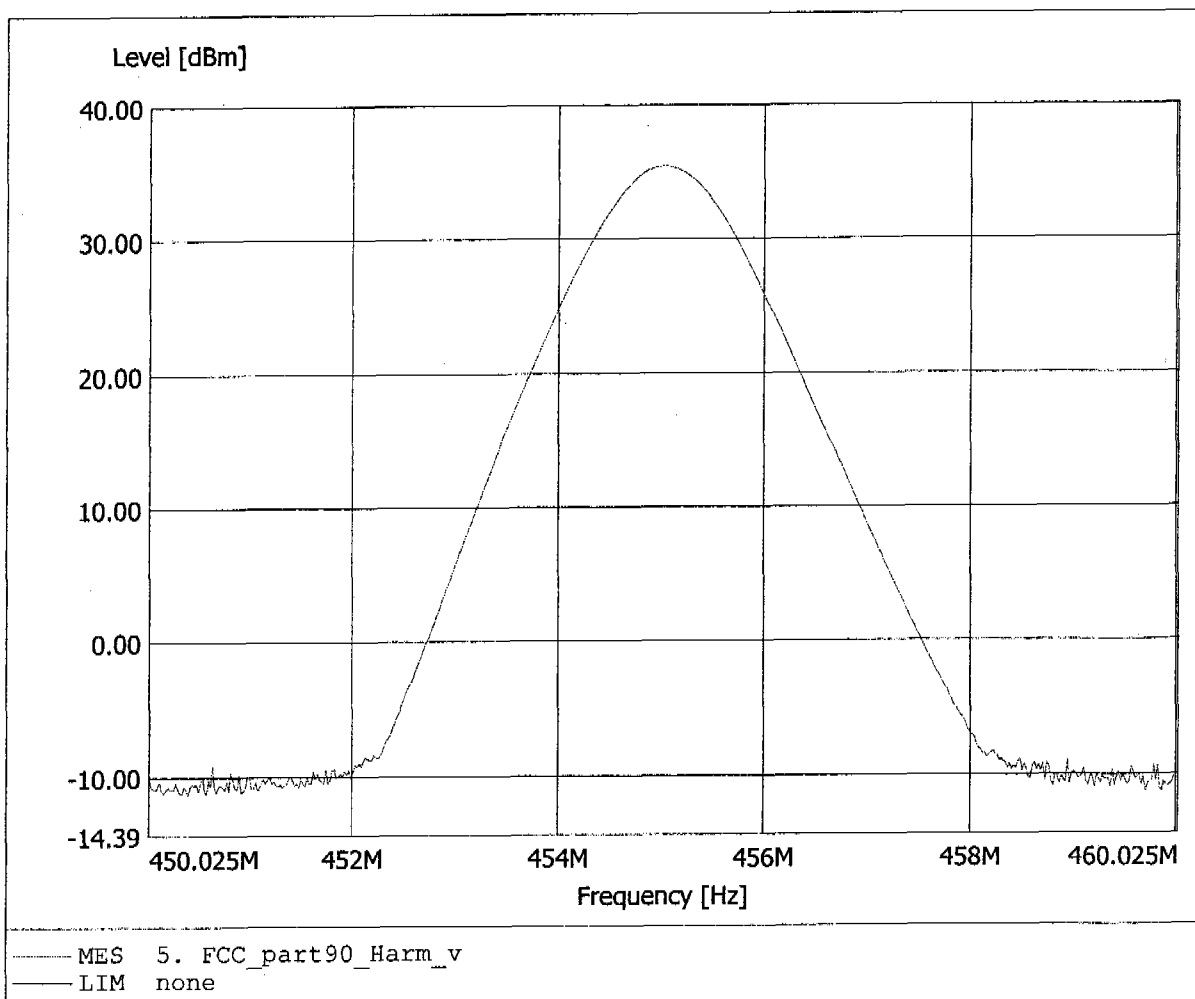
**Radiated power under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:455.035MHz Pmax:21.64dBm RBW: 1 MHz



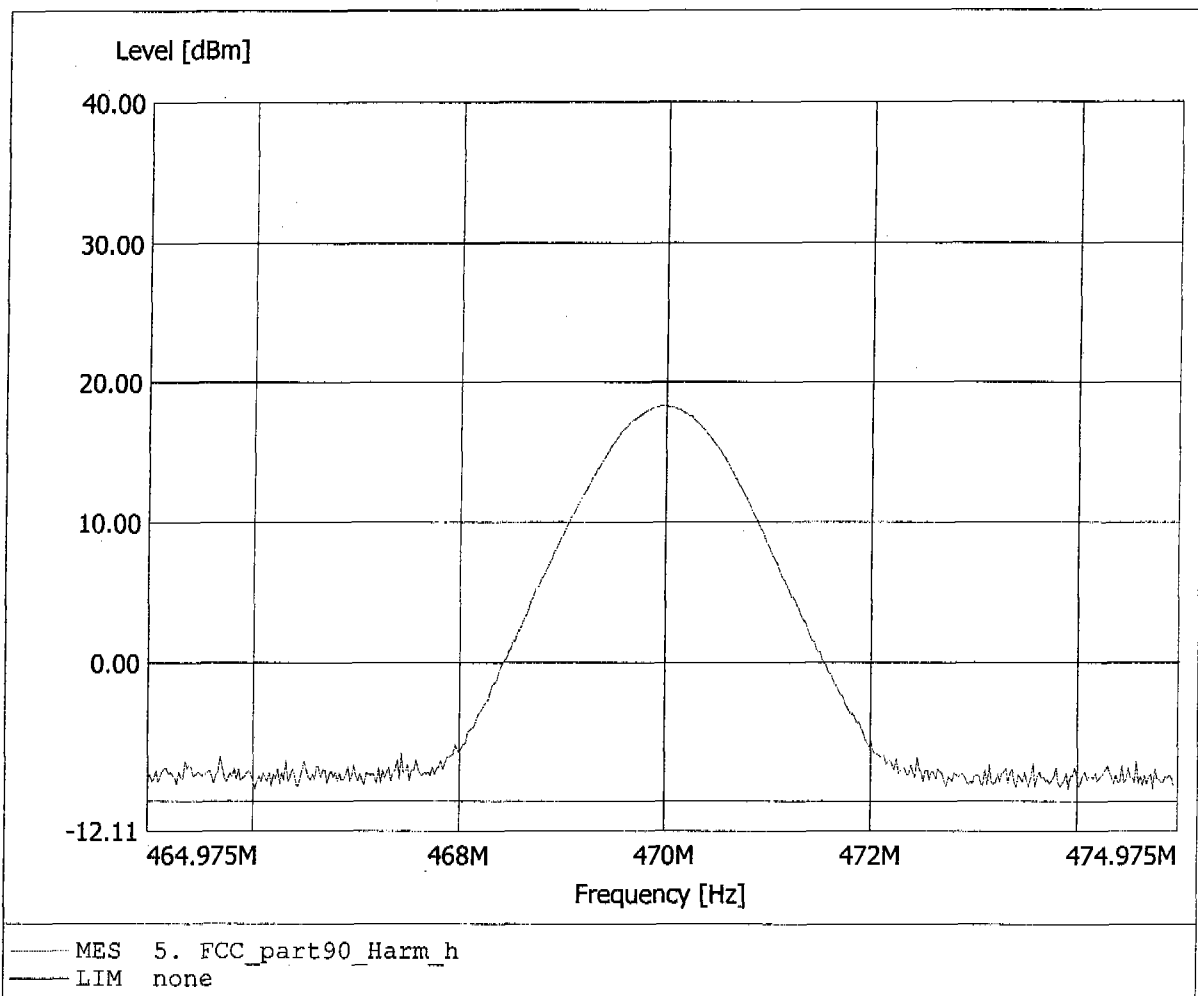
**Radiated power under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:455.035MHz Pmax:35.41dBm RBW: 1 MHz



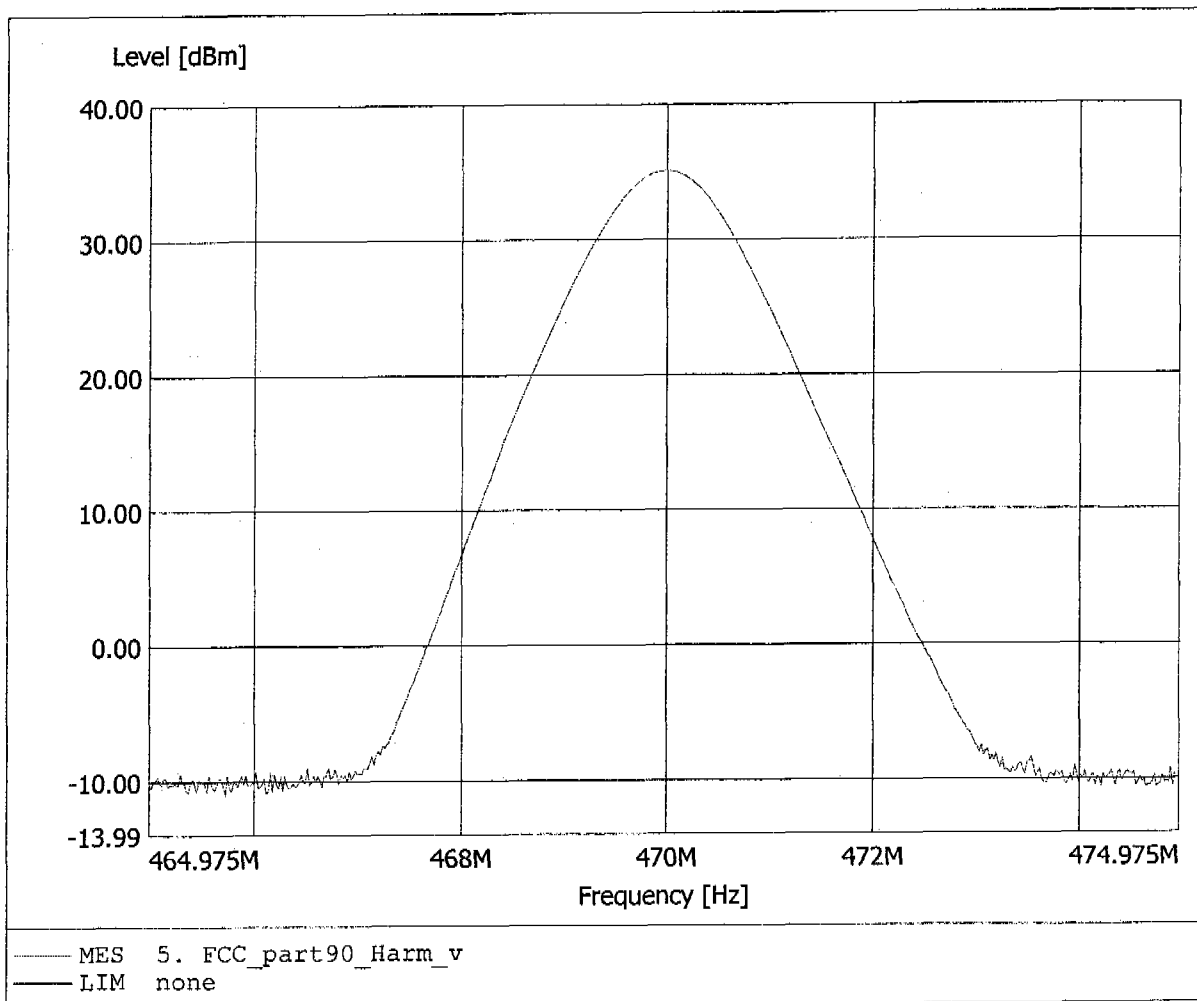
**Radiated power under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:469.945MHz Pmax:18.33dBm RBW: 1 MHz



**Radiated power under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:470.005MHz Pmax:35.05dBm RBW: 1 MHz



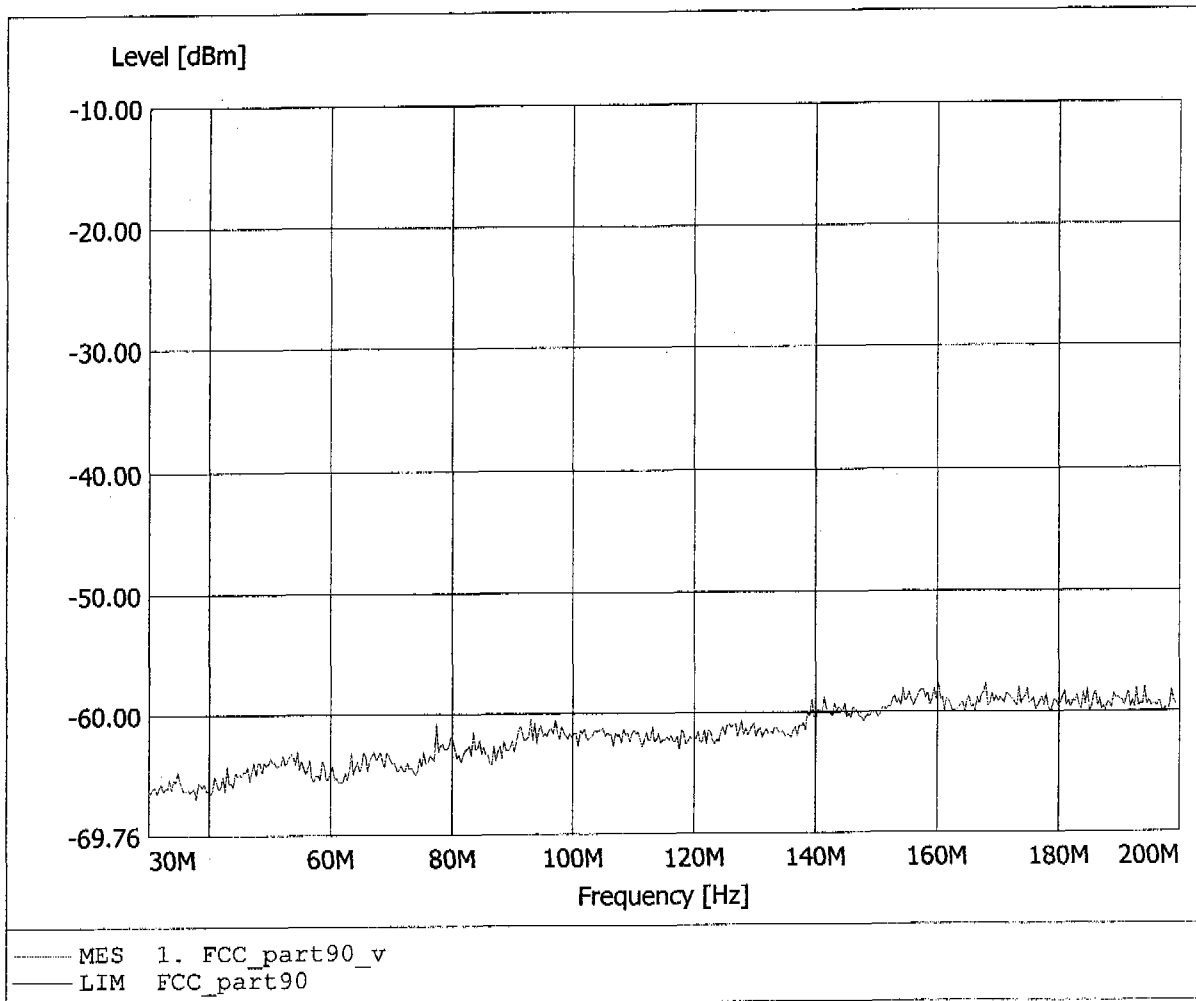


Appendix D

Spurious Emissions radiated - Transmitter operating

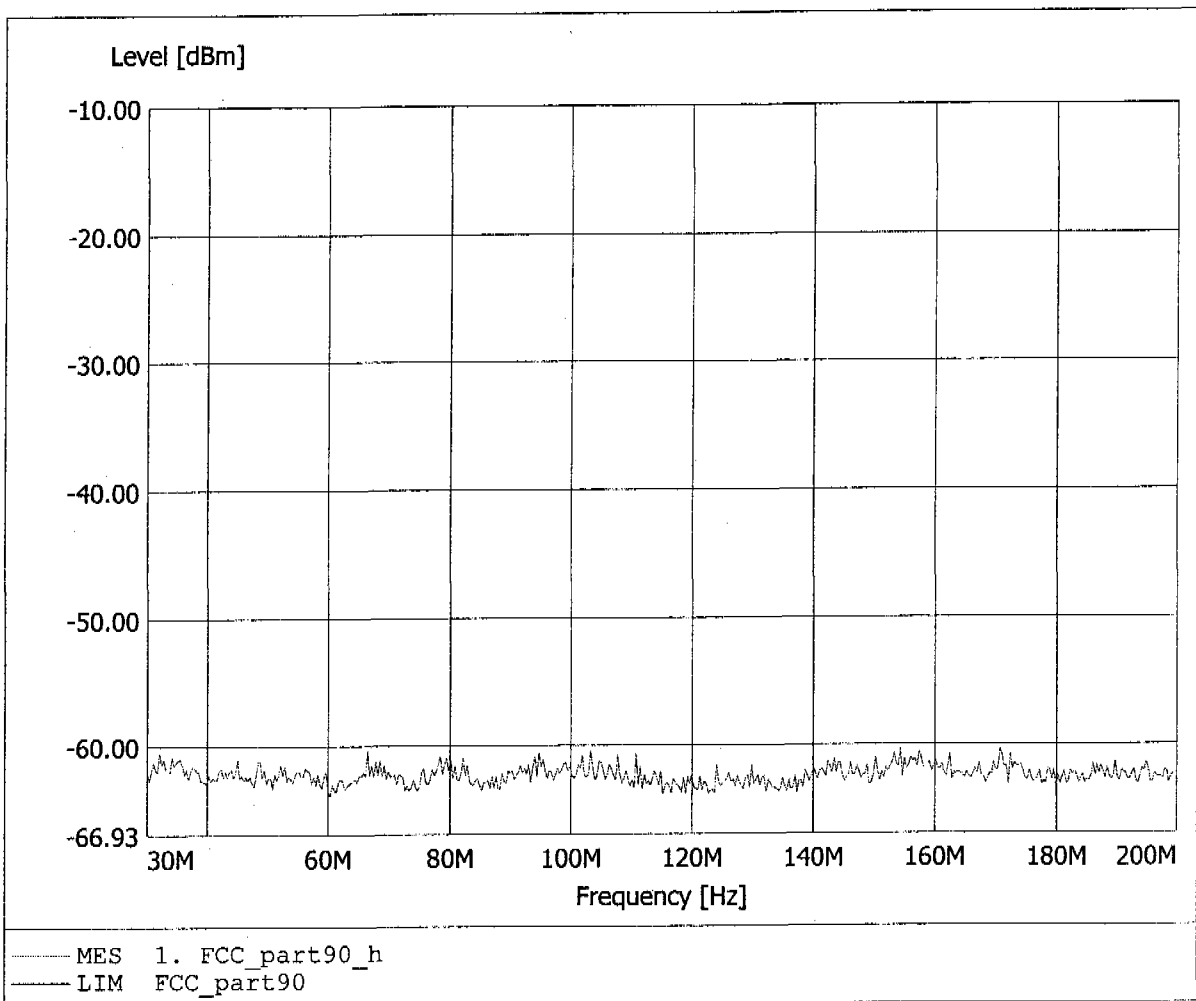
**Spurious emissions under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:167.976MHz Pmax:-57.66dBm RBW: 100 kHz



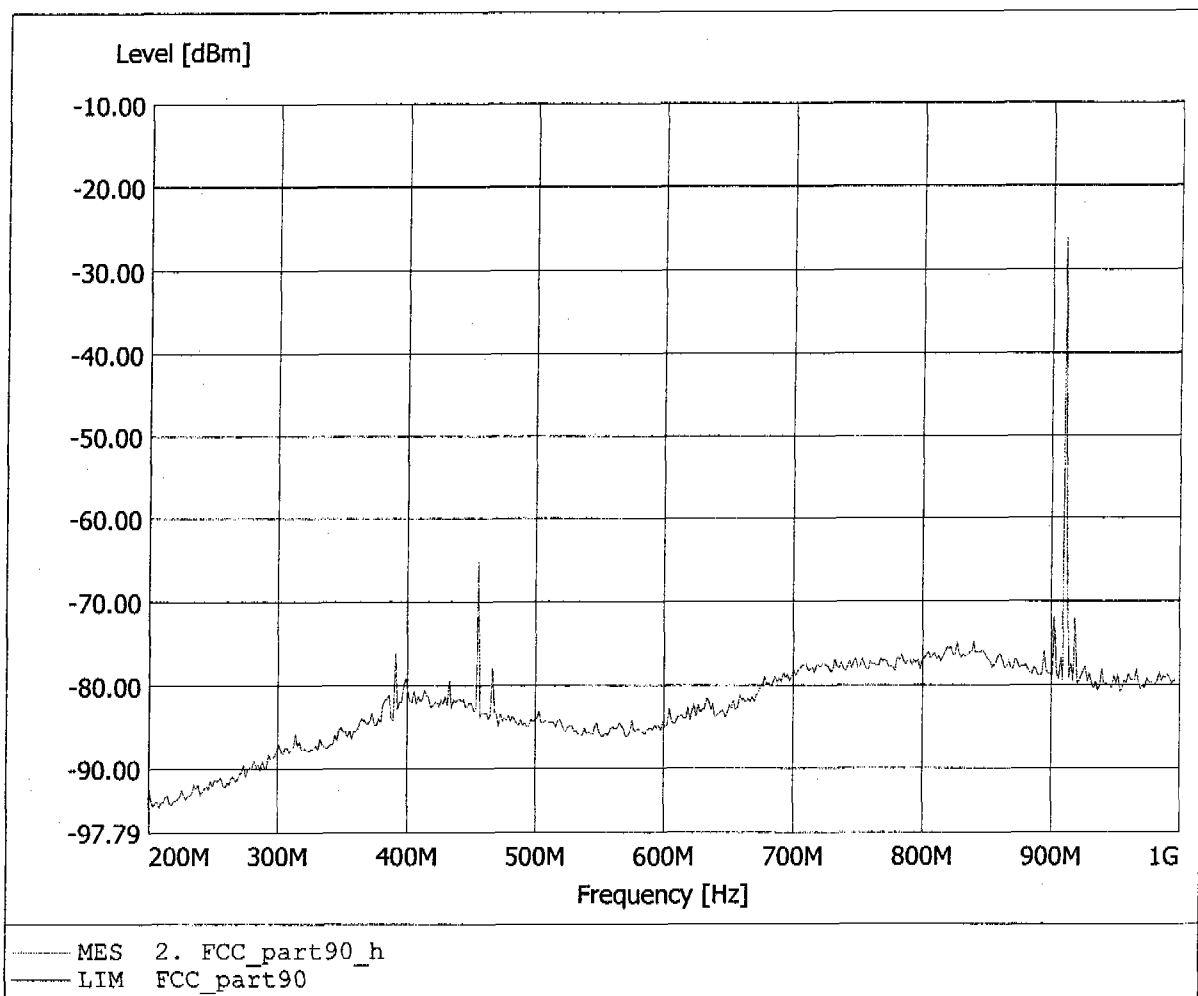
Spurious emissions under normal conditions
FCC RULES PART 90

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:154.349MHz Pmax:-60.29dBm RBW: 100 kHz



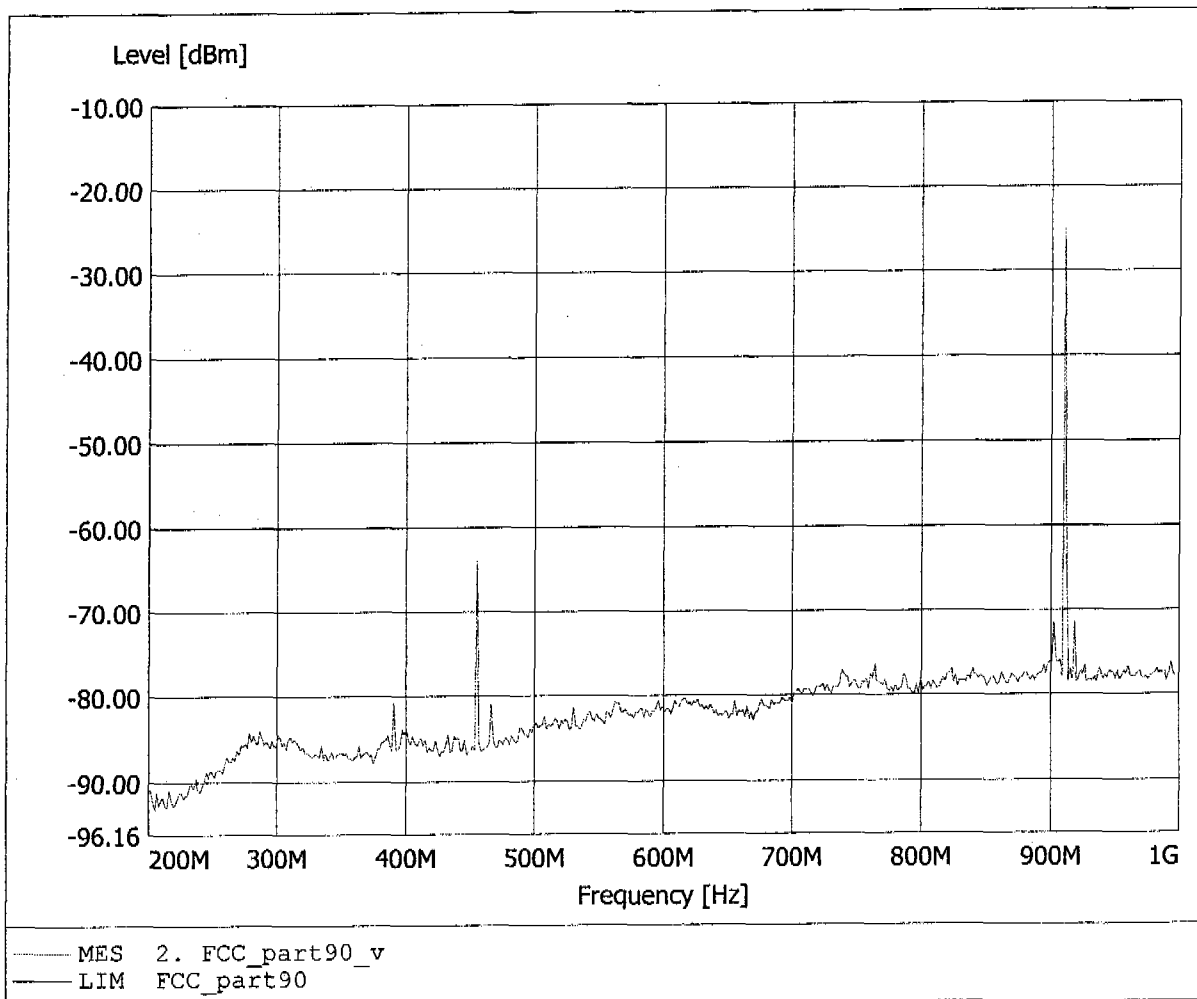
**Spurious emissions under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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: 910.220MHz Pmax: -26.17dBm RBW: 100 kHz



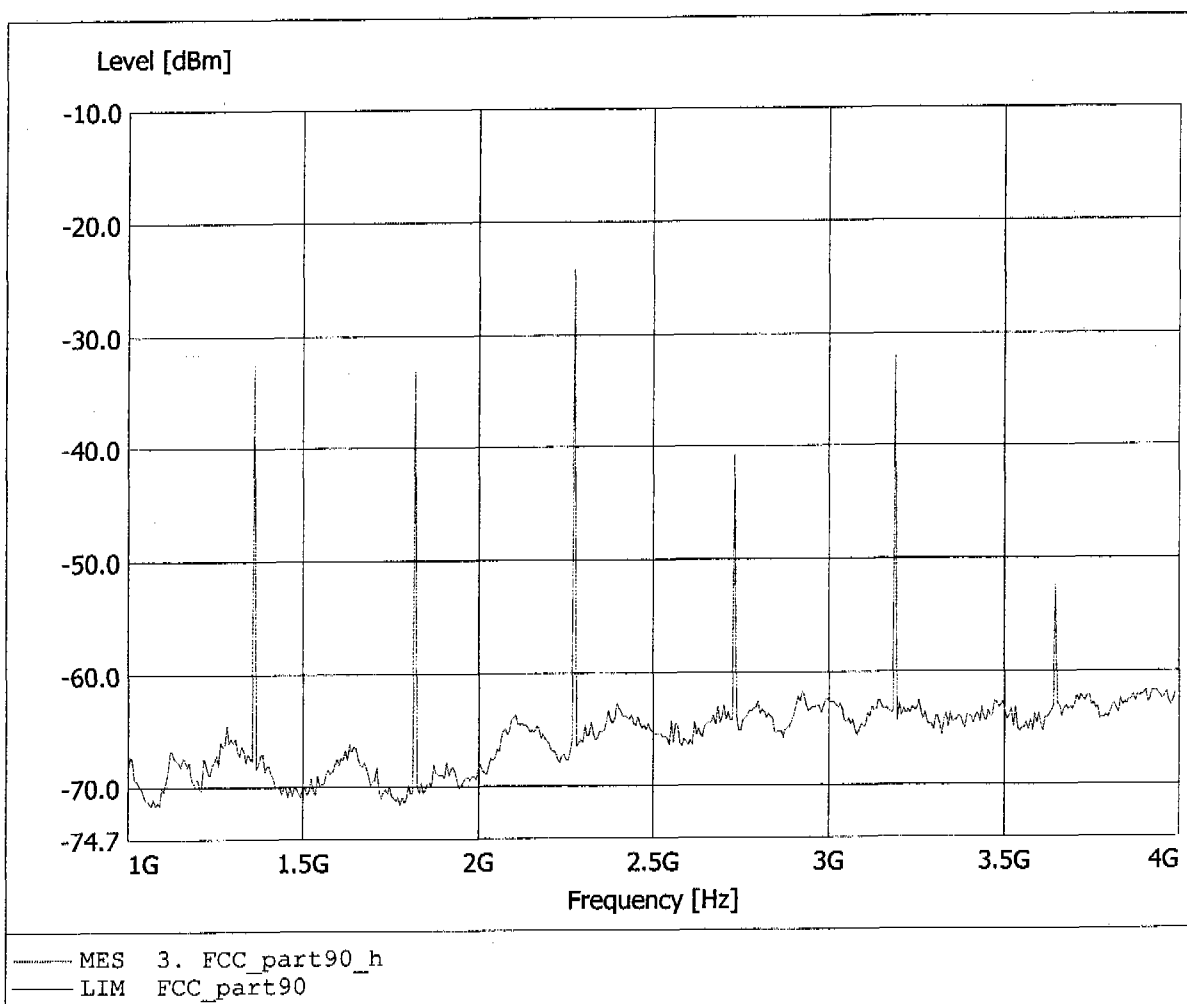
**Spurious emissions under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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: 910.220MHz Pmax: -25.03dBm RBW: 100 kHz



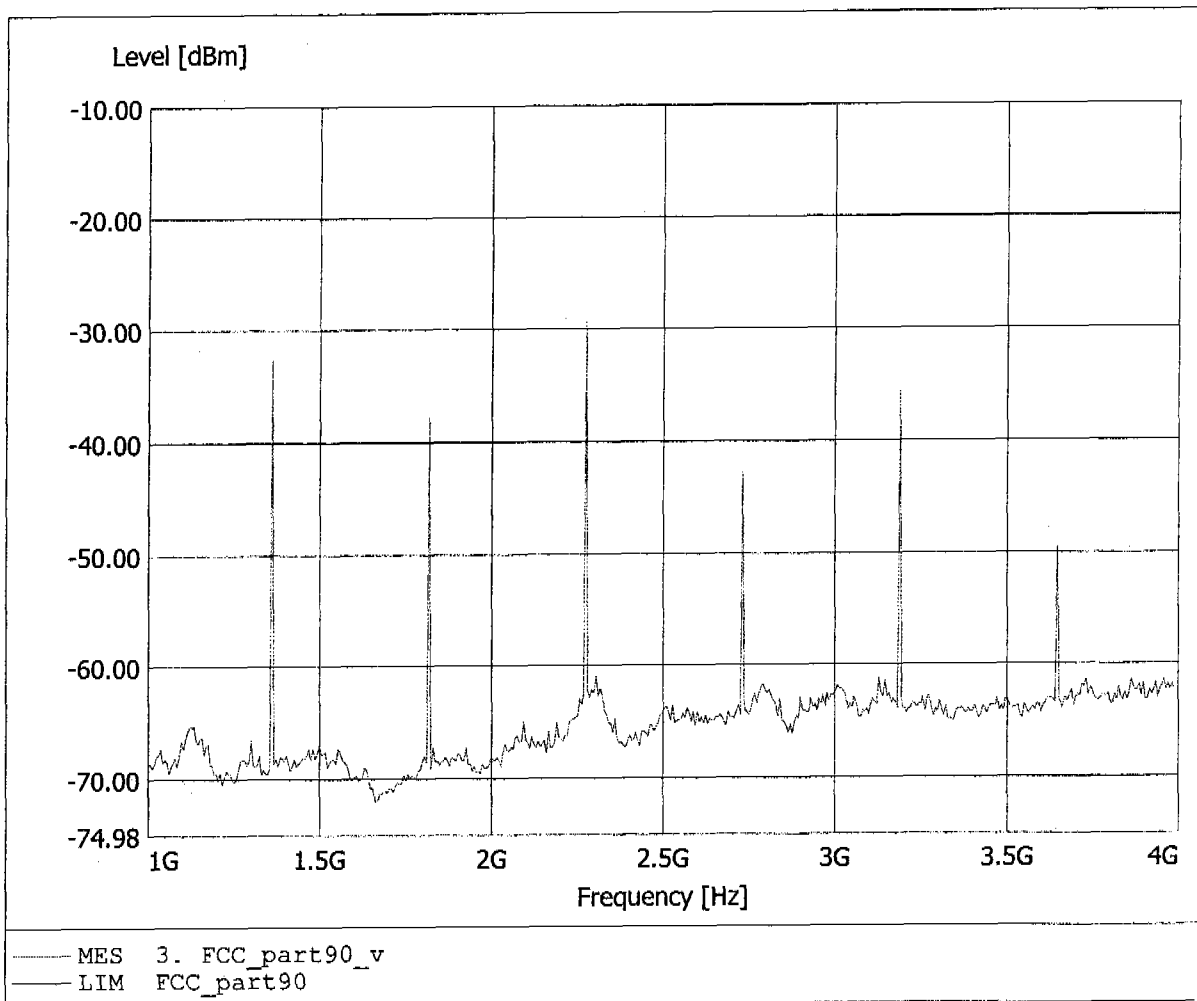
**Spurious emissions under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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: 2.275GHz Pmax: -24.15dBm RBW: 1 MHz



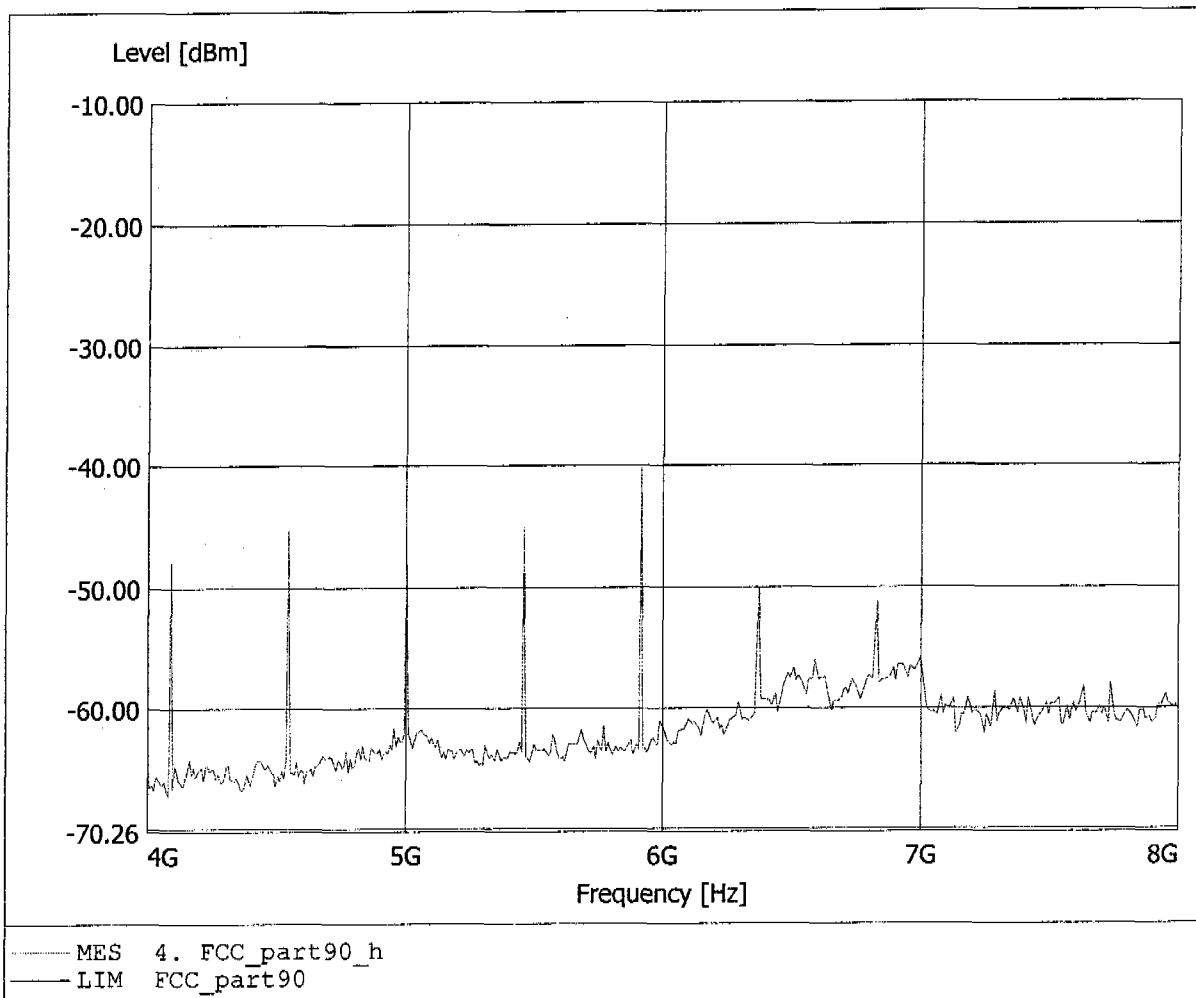
**Spurious emissions under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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: 2.275GHz Pmax: -29.26dBm RBW: 1 MHz



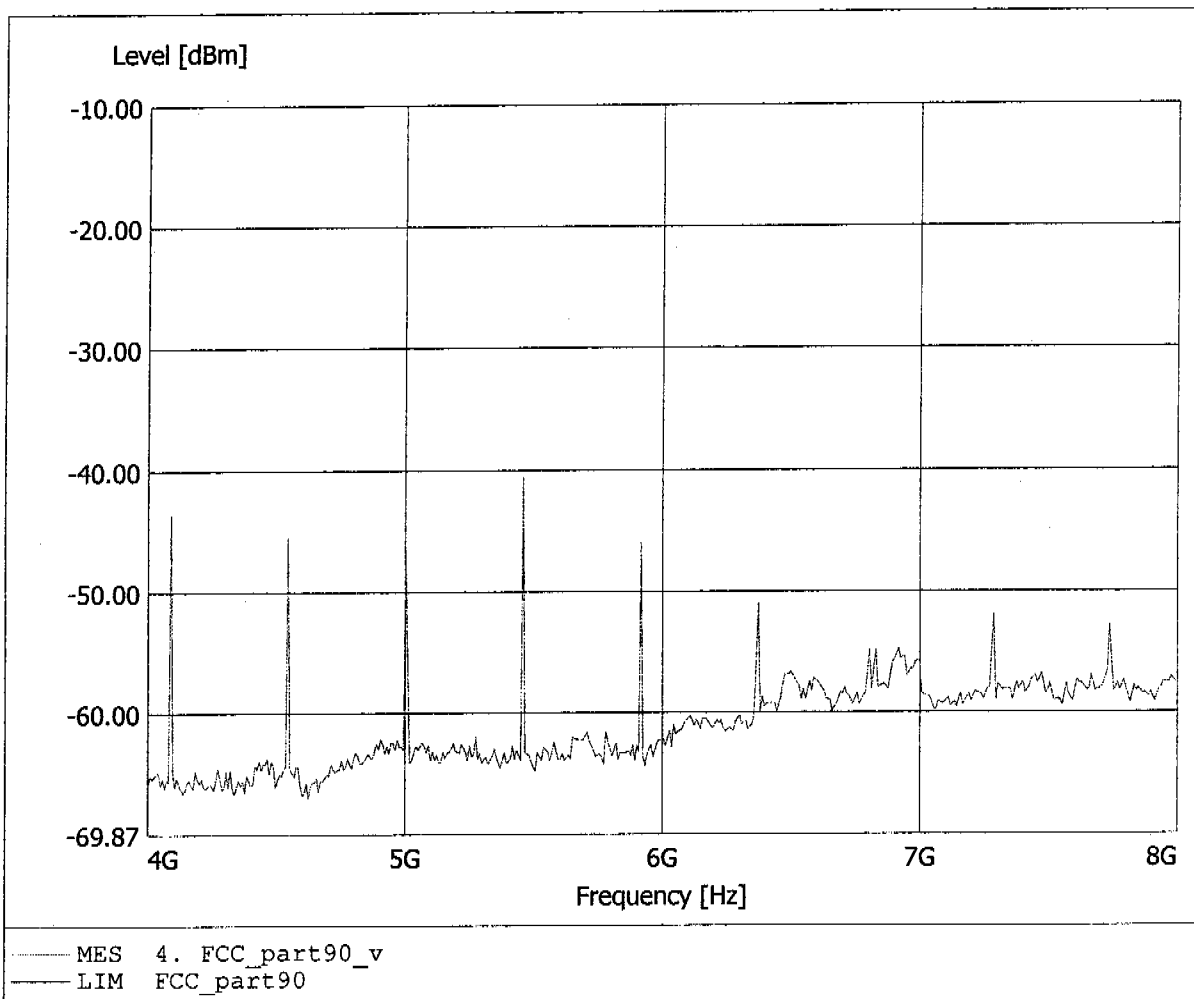
**Spurious emissions under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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.: 4-8 GHz
Comment 2: Freq:5.916GHz Pmax:-40.28dBm RBW: 1 MHz



**Spurious emissions under normal conditions
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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.: 4-8 GHz
Comment 2: Freq:5.459GHz Pmax:-40.49dBm RBW: 1 MHz



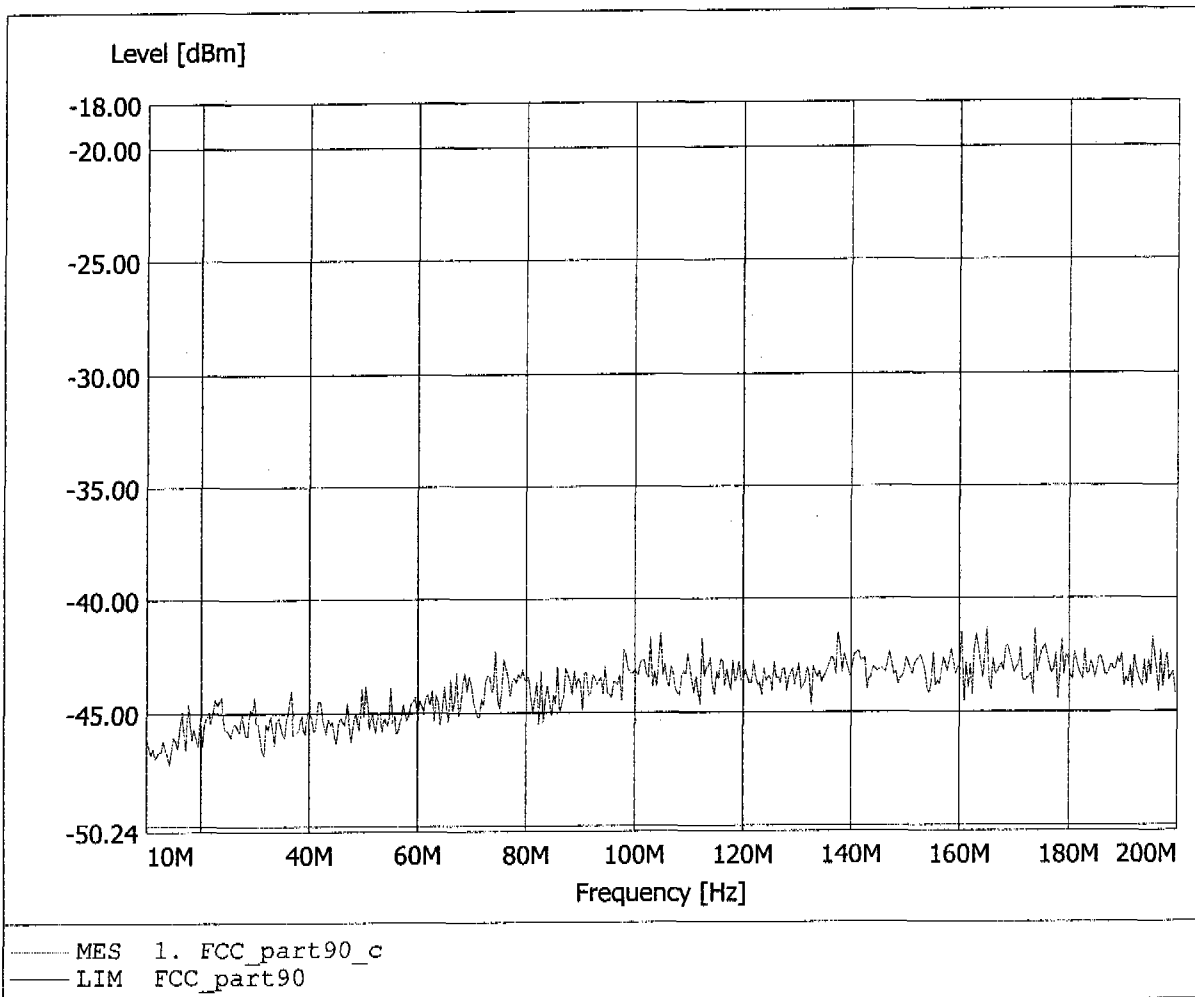


Appendix E

Spurious Emissions at antenna terminal

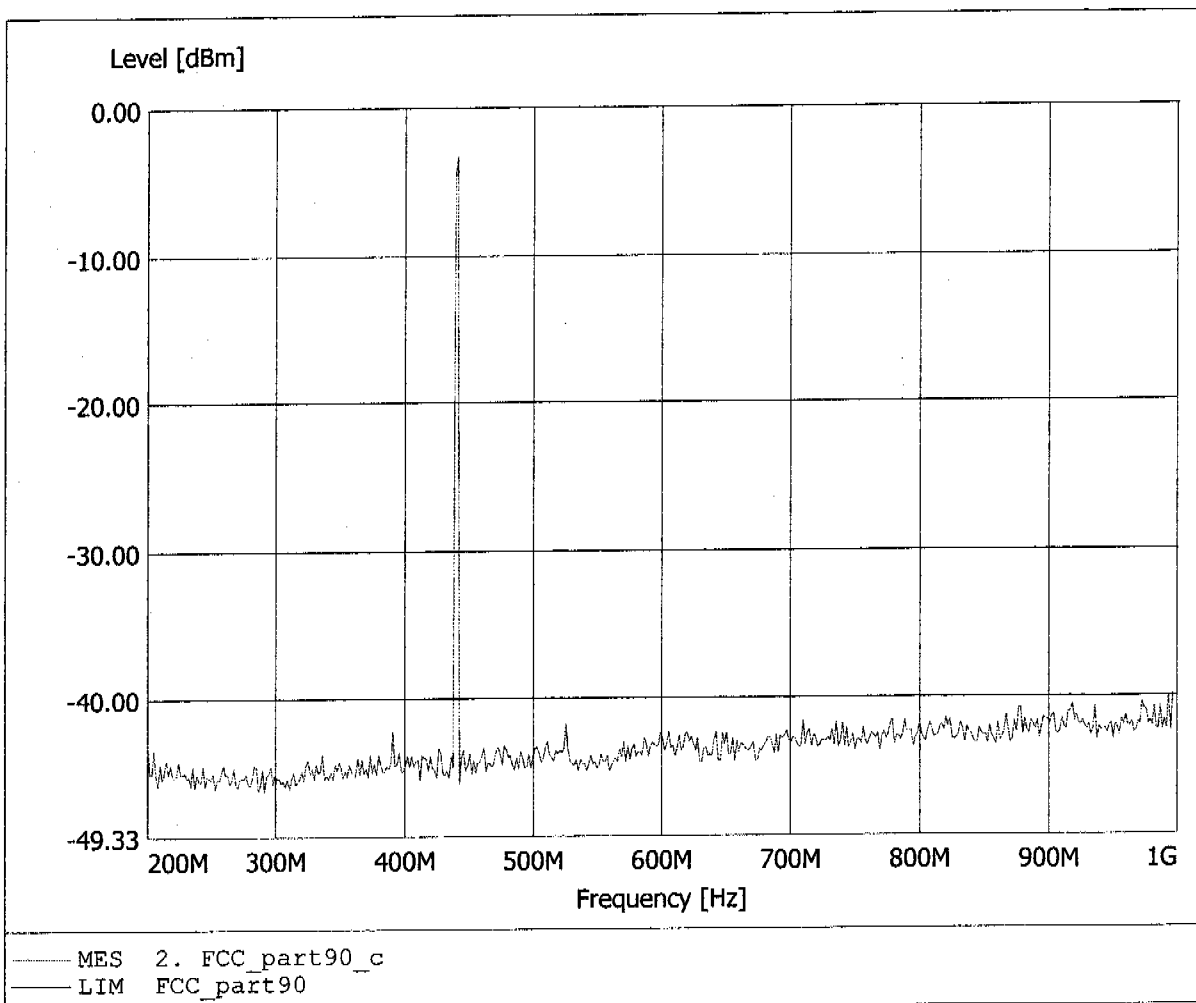
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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:164.970MHz Pmax:-41.31dBm RBW: 100kHz



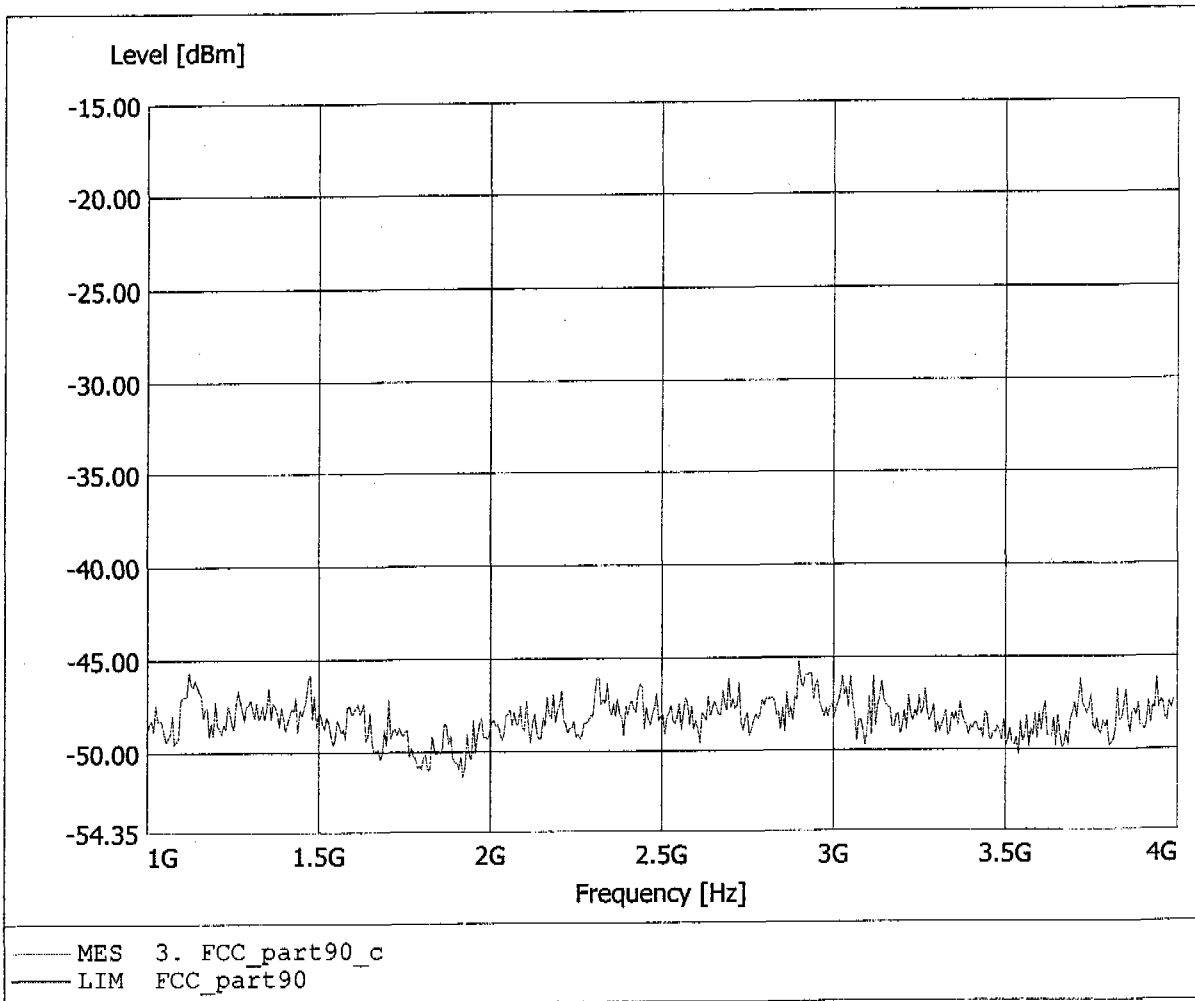
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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:440.481MHz Pmax:-3.28dBm RBW: 100kHz



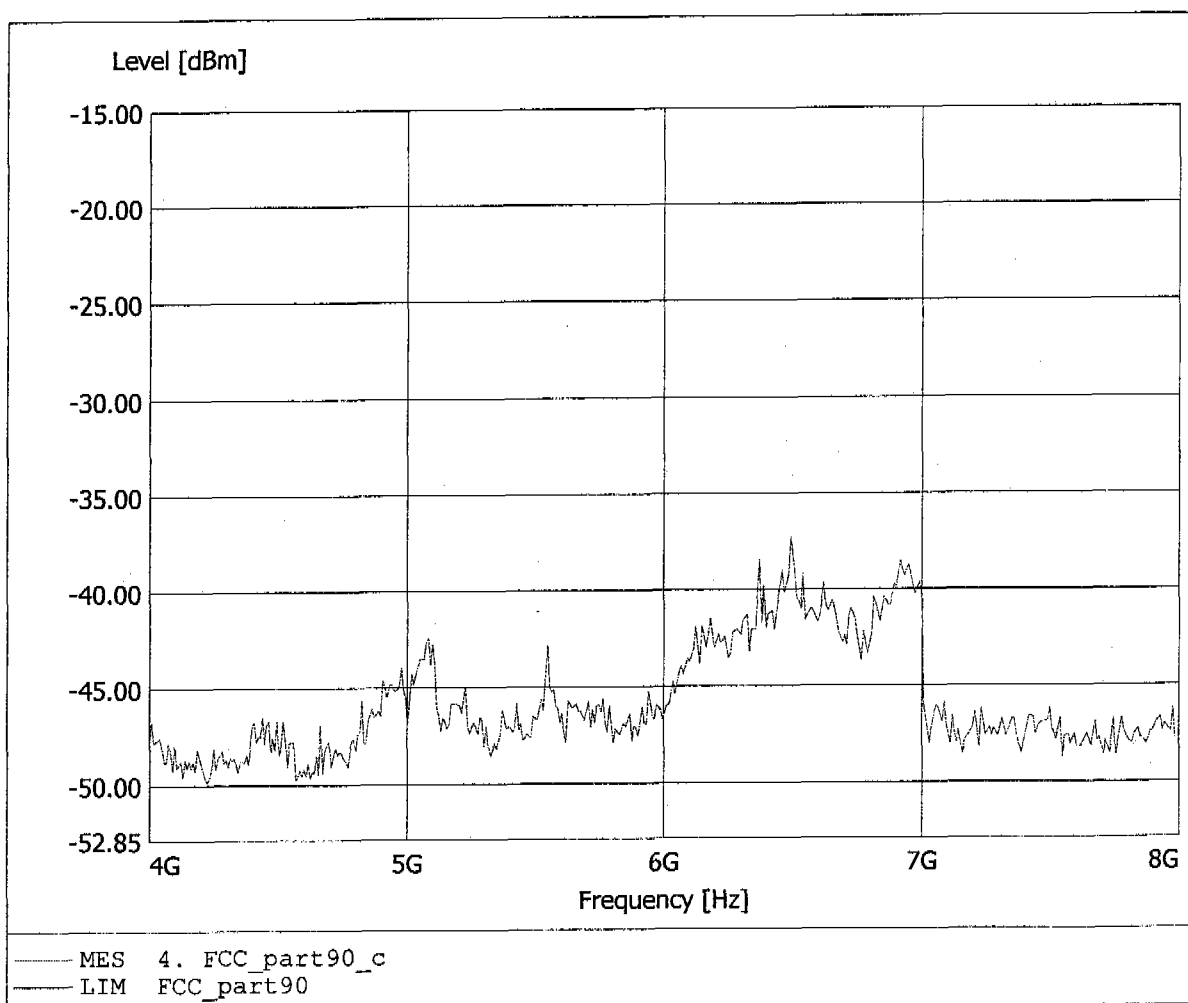
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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:2.900GHz Pmax:-45.20dBm RBW: 1MHz



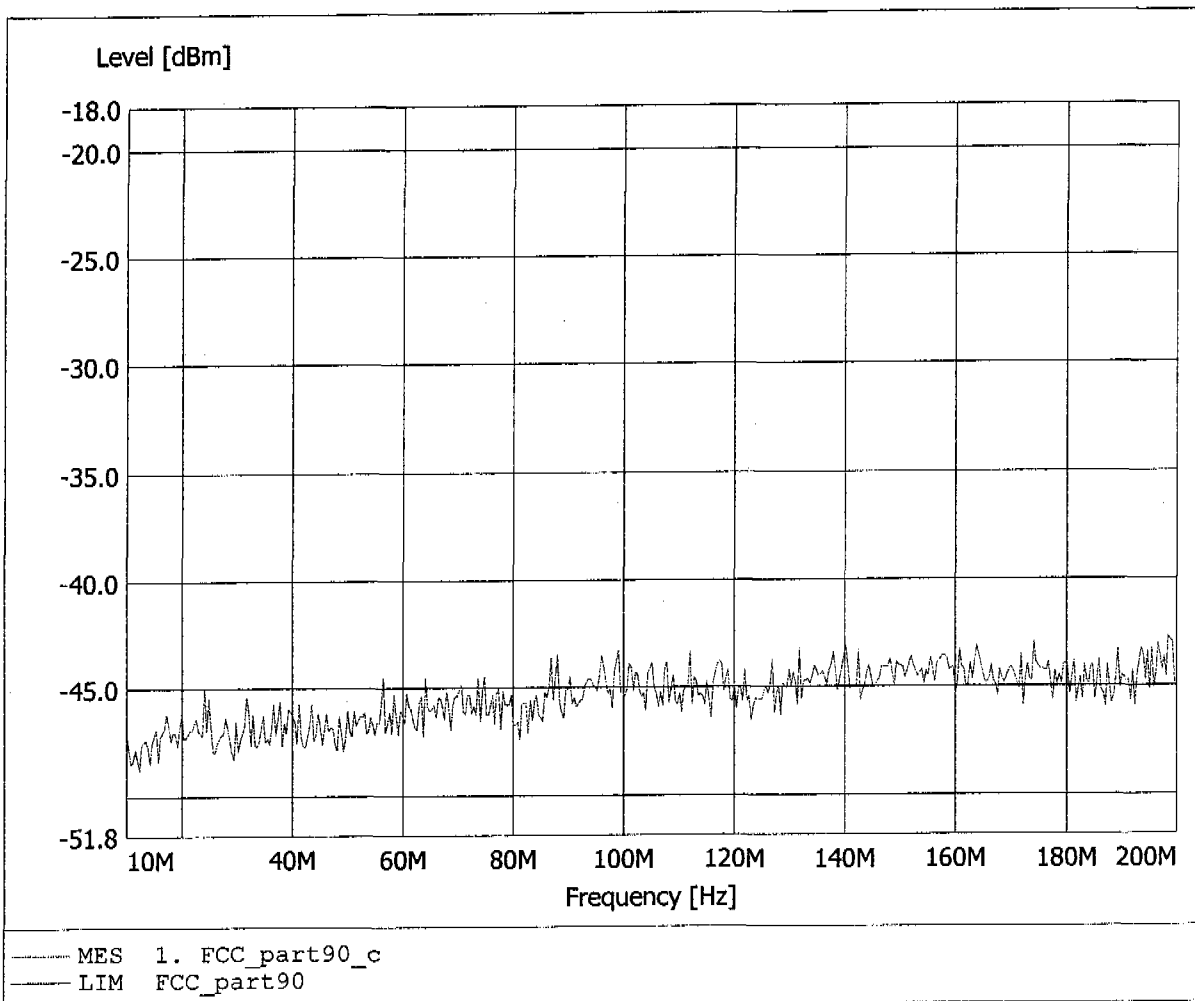
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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: 6.493GHz Pmax: -37.23dBm RBW: 1MHz



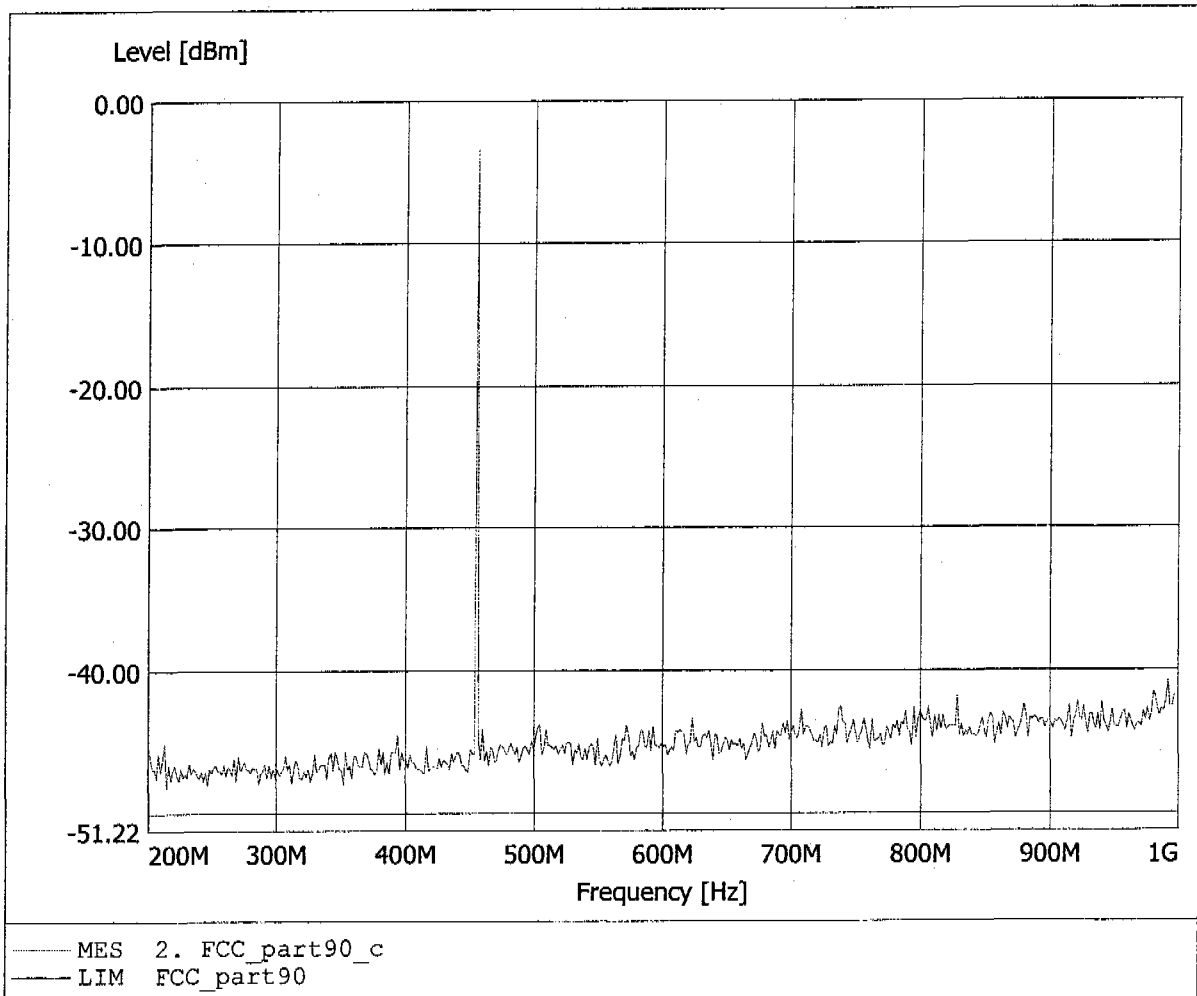
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:198.477MHz Pmax:-42.72dBm RBW: 100kHz



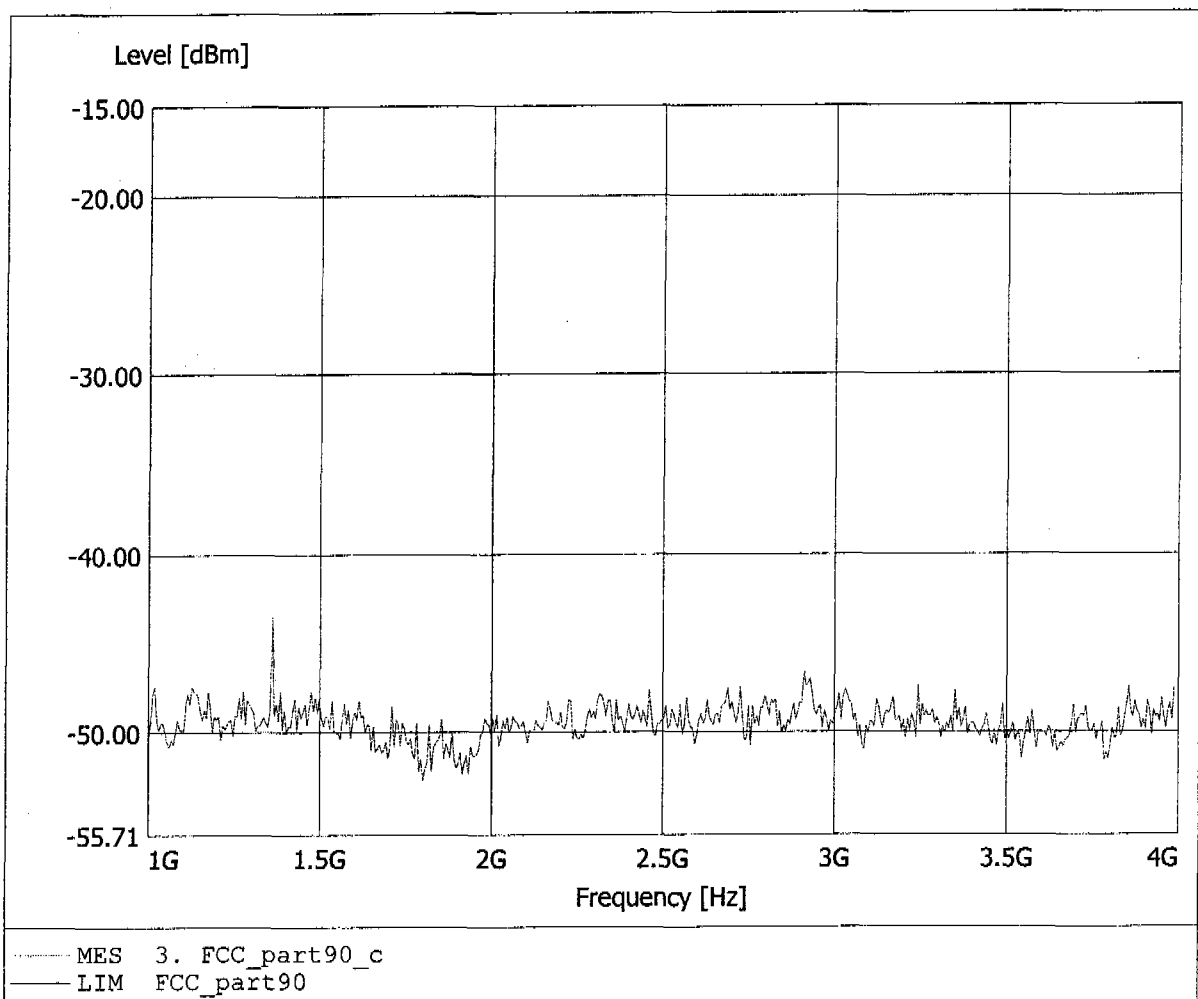
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:454.910MHz Pmax:-3.36dBm RBW: 100kHz



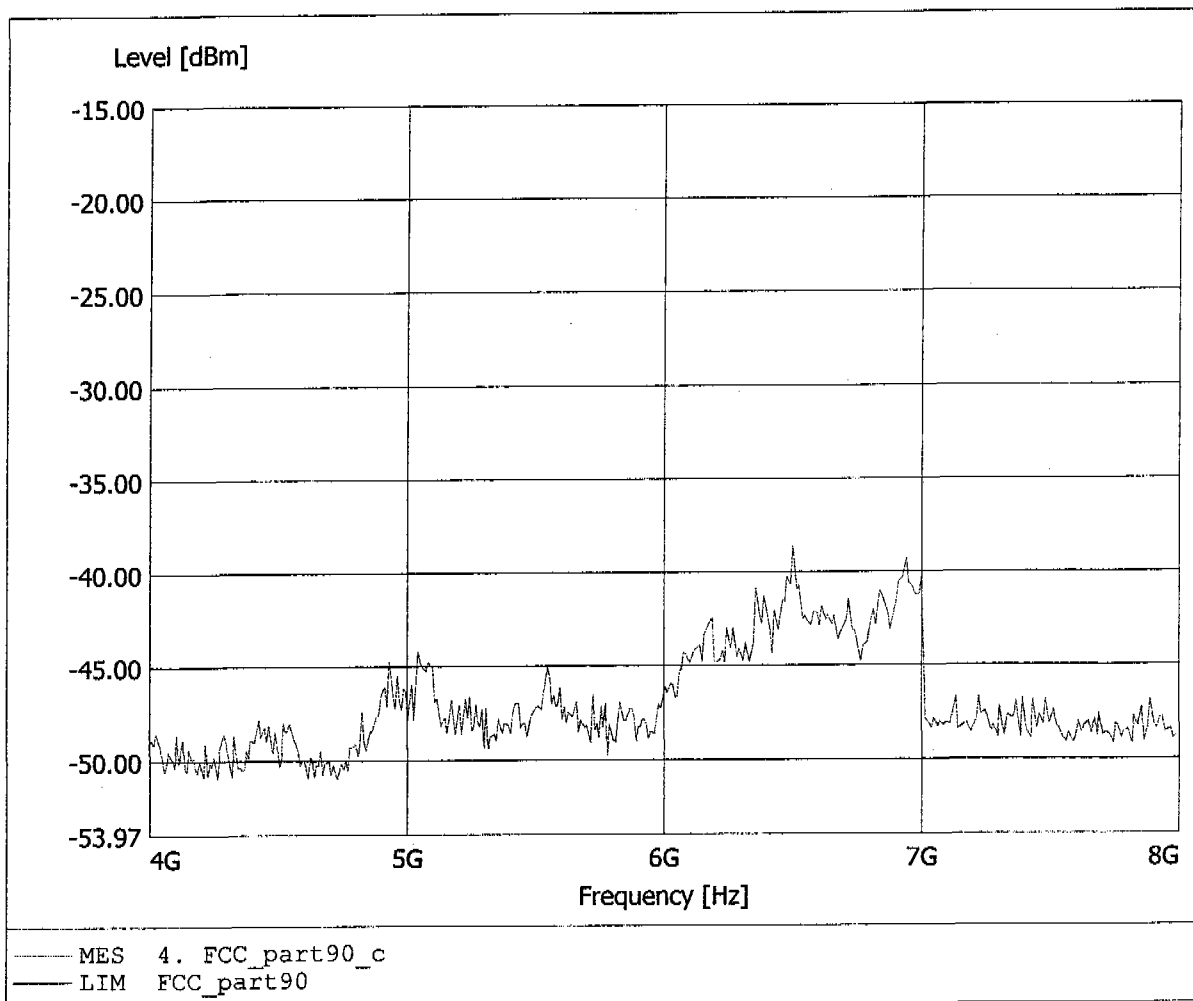
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:1.361GHz Pmax:-43.54dBm RBW: 1MHz



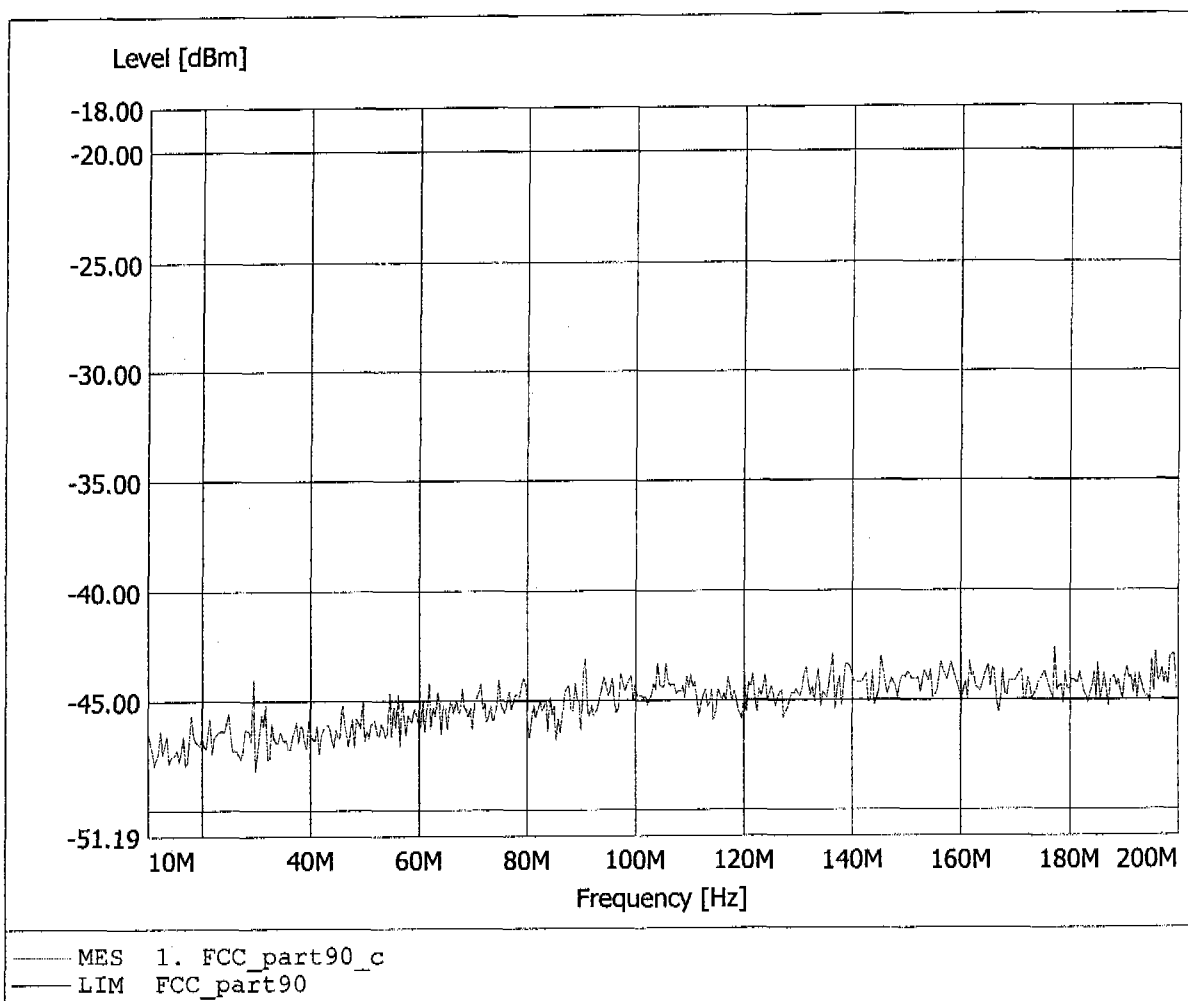
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:6.501GHz Pmax:-38.60dBm RBW: 1MHz



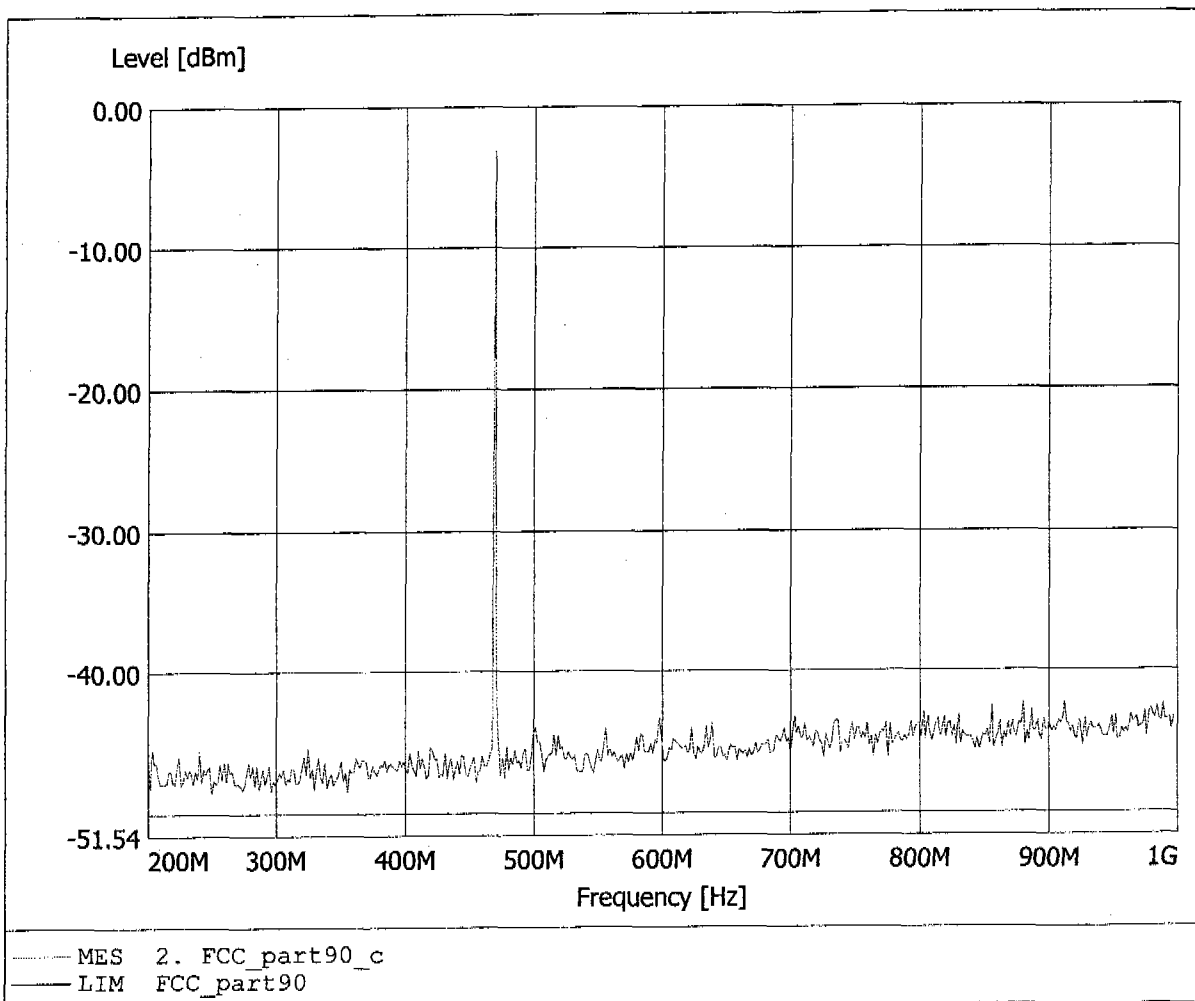
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:177.154MHz Pmax:-42.56dBm RBW: 100kHz



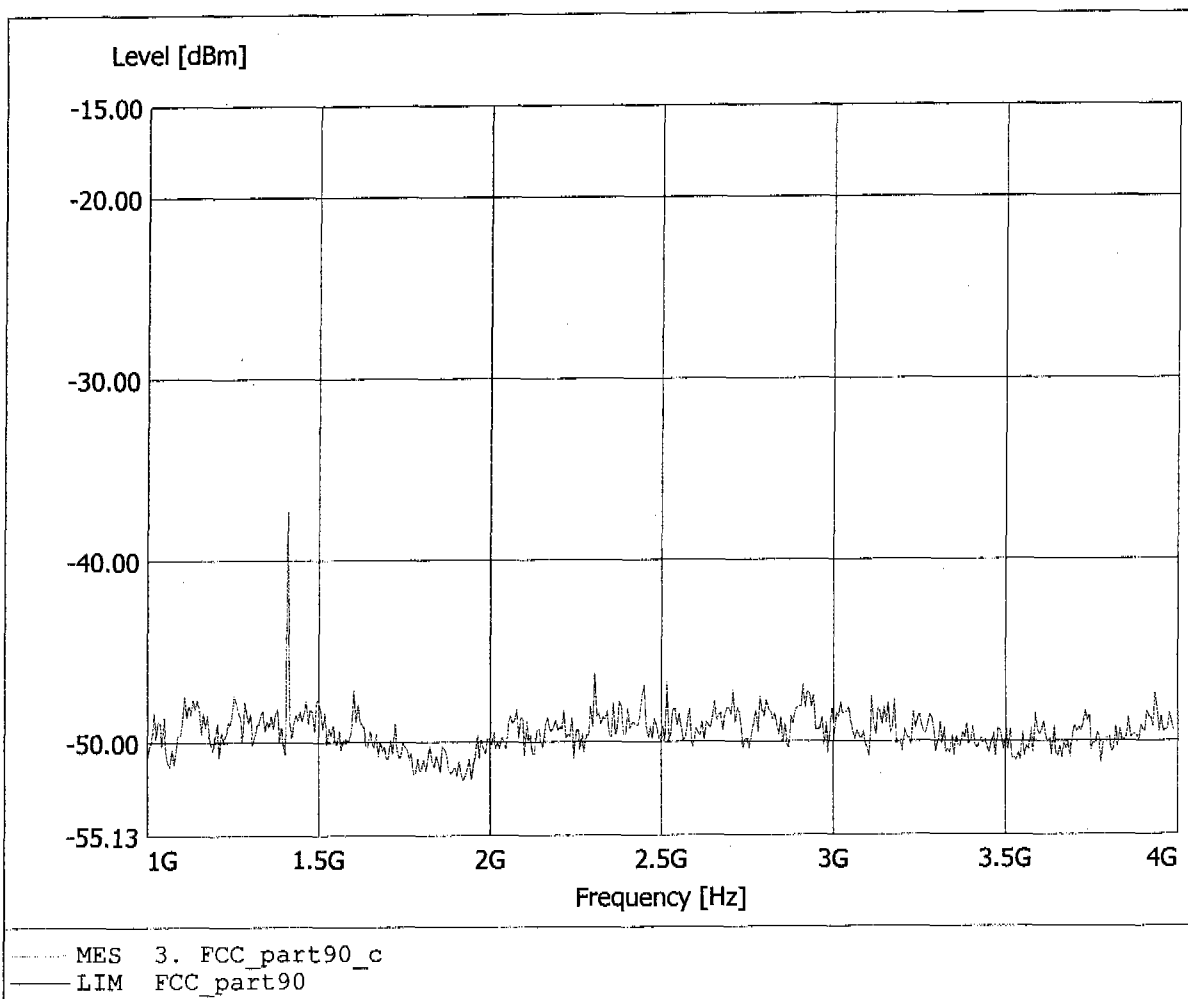
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:469.339MHz Pmax:-3.08dBm RBW: 100kHz



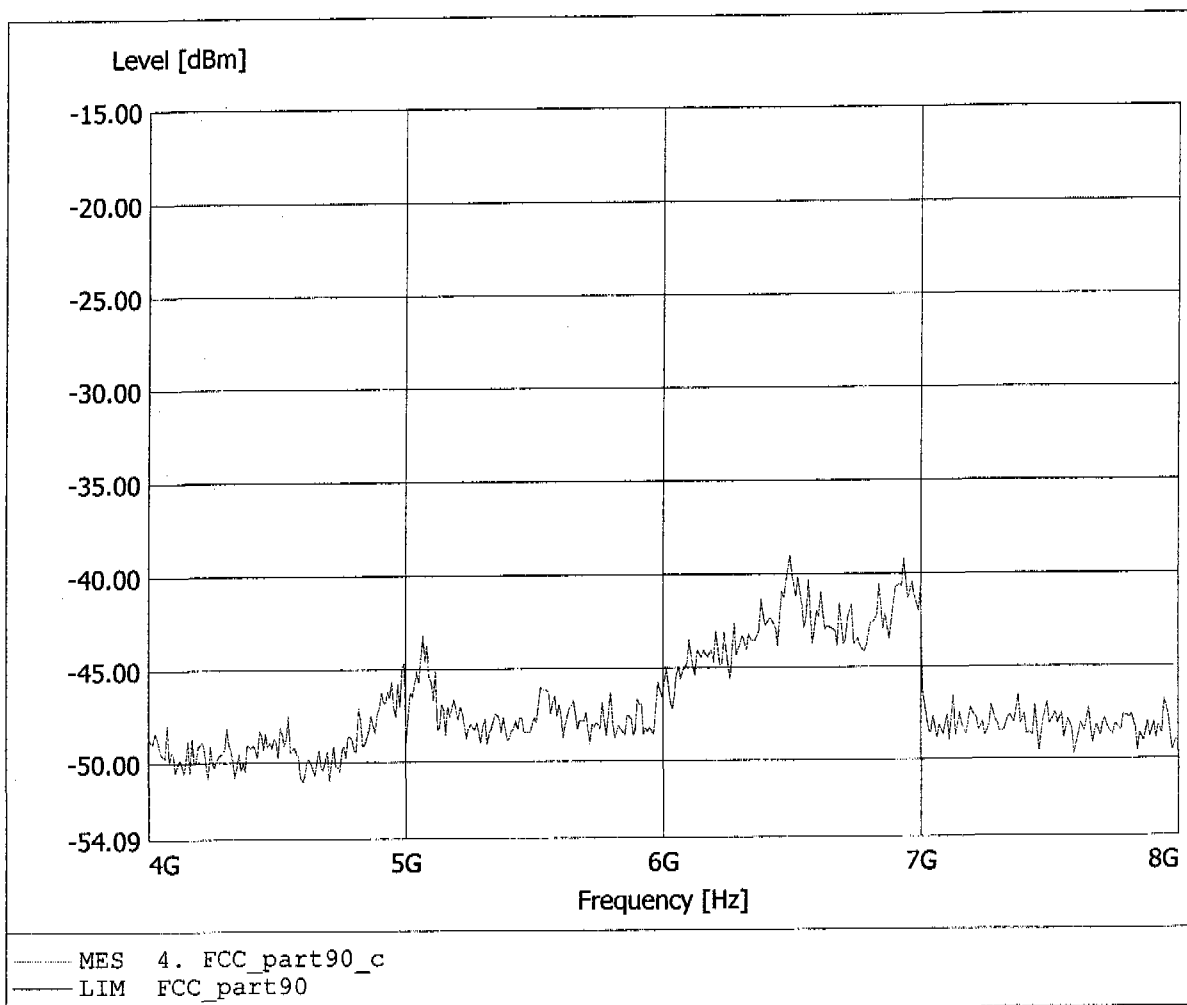
**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:1.409GHZ Pmax:-37.31dBm RBW: 1MHz



**Spurious emissions at antenna terminal
FCC RULES PART 90**

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:6.493GHz Pmax:-38.99dBm RBW: 1MHz





Appendix F

Audio frequency response



Appendix G

Audio low pass filter frequency response



Appendix H

Modulation limiting

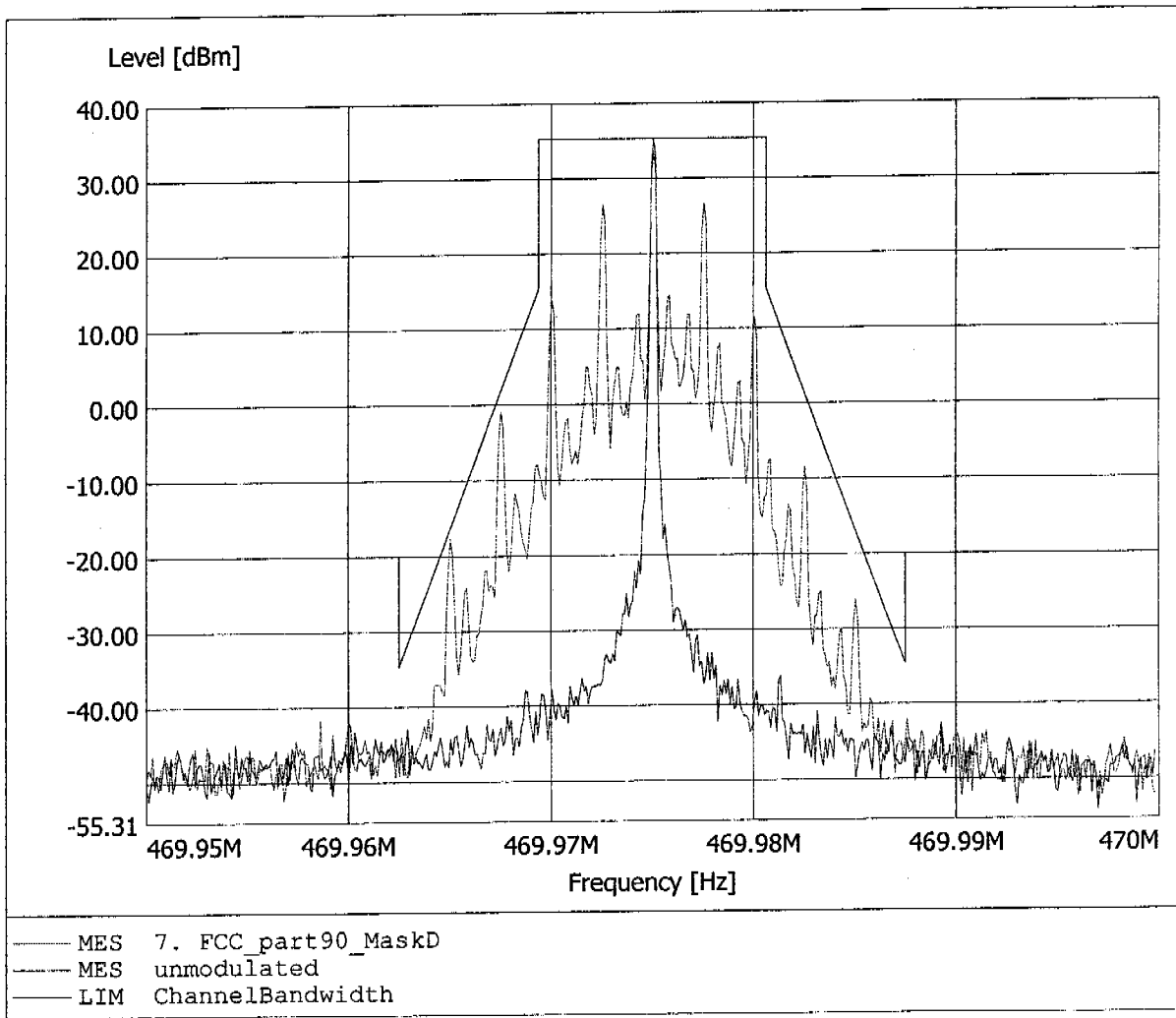


Appendix I

Occupied Bandwidth

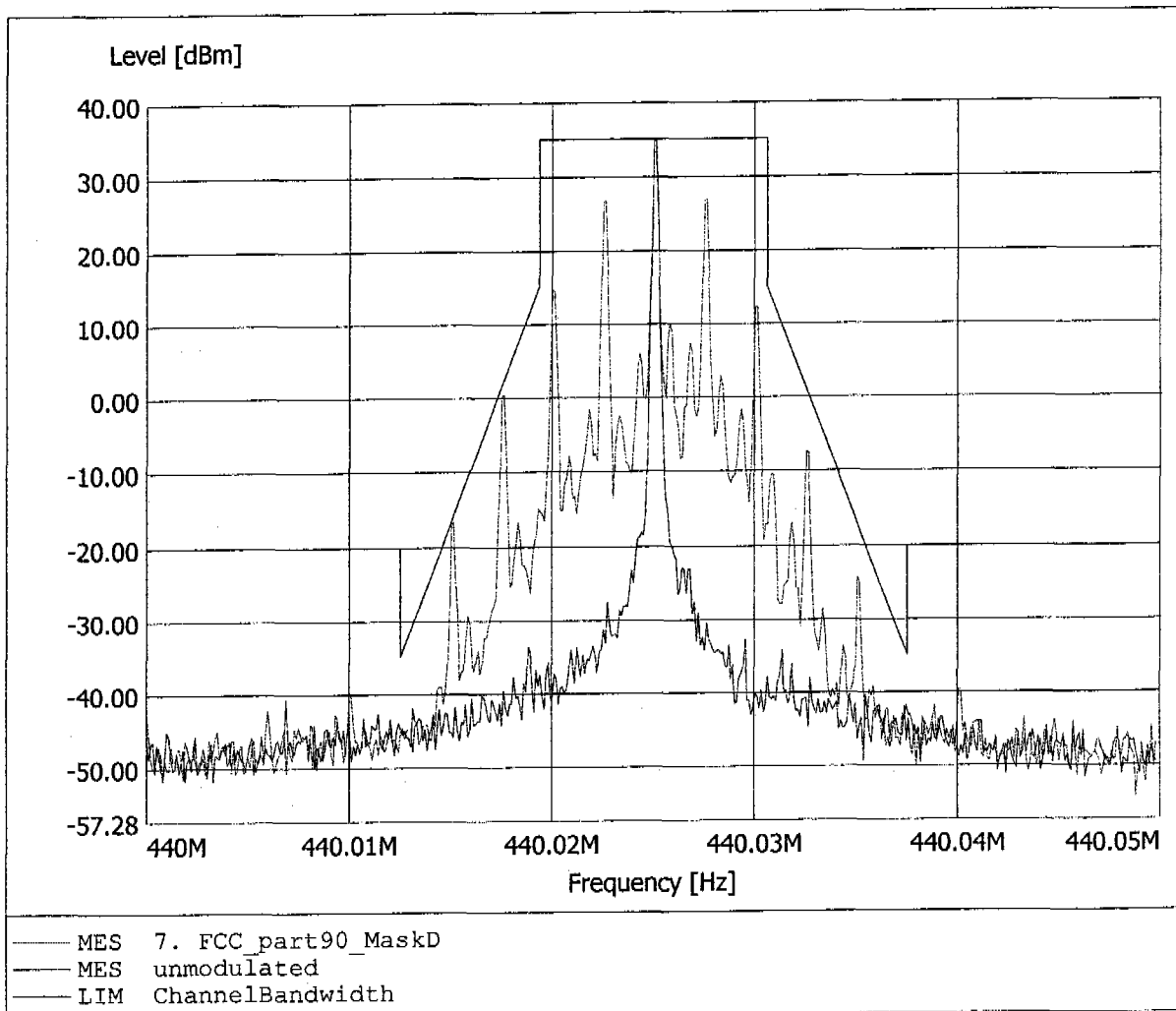
**Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210**

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:469.975MHz Pmax:33.67dBm RBW: 100Hz



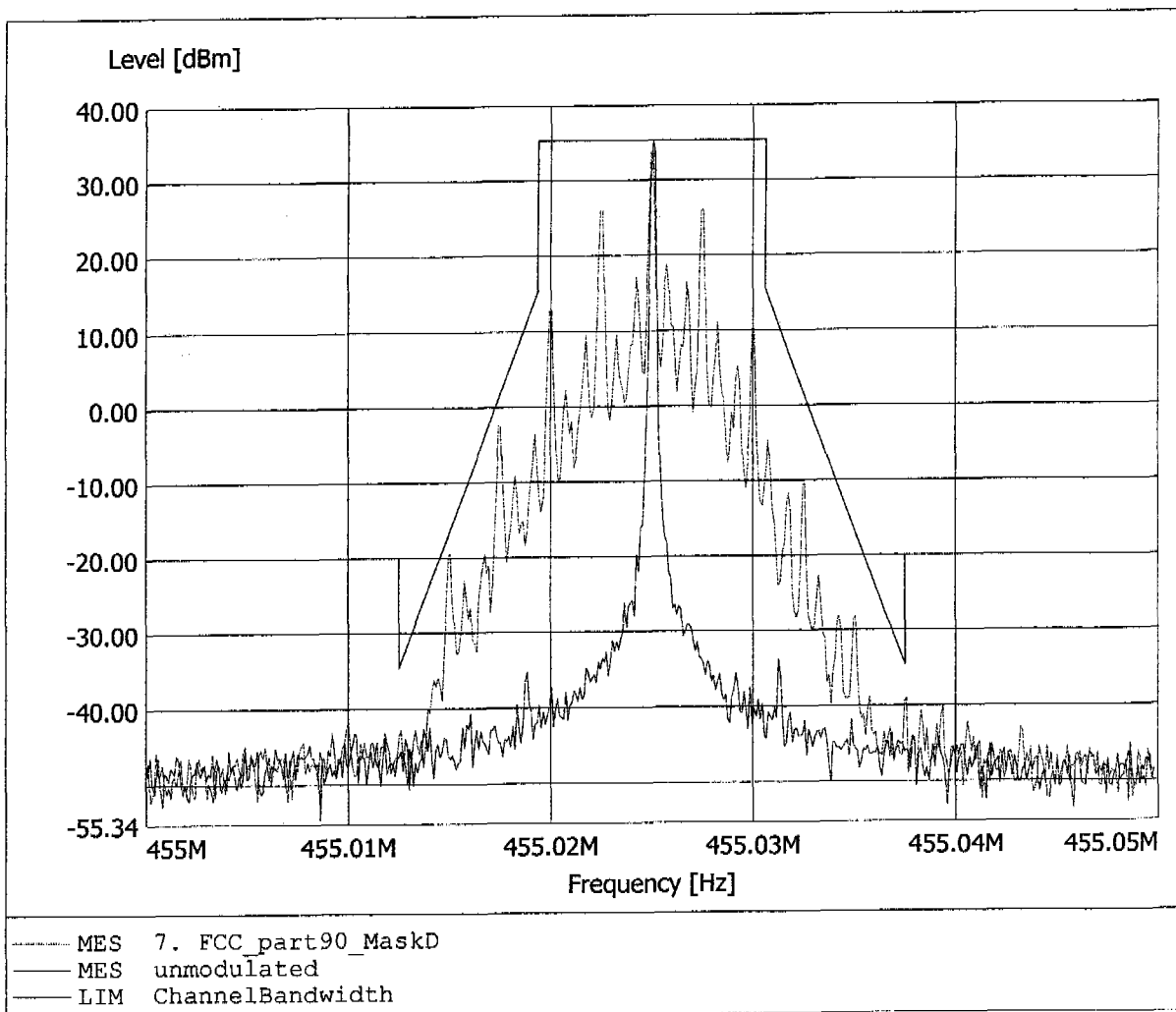
**Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210**

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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: 440.025MHz Pmax: 33.33dBm RBW: 100Hz



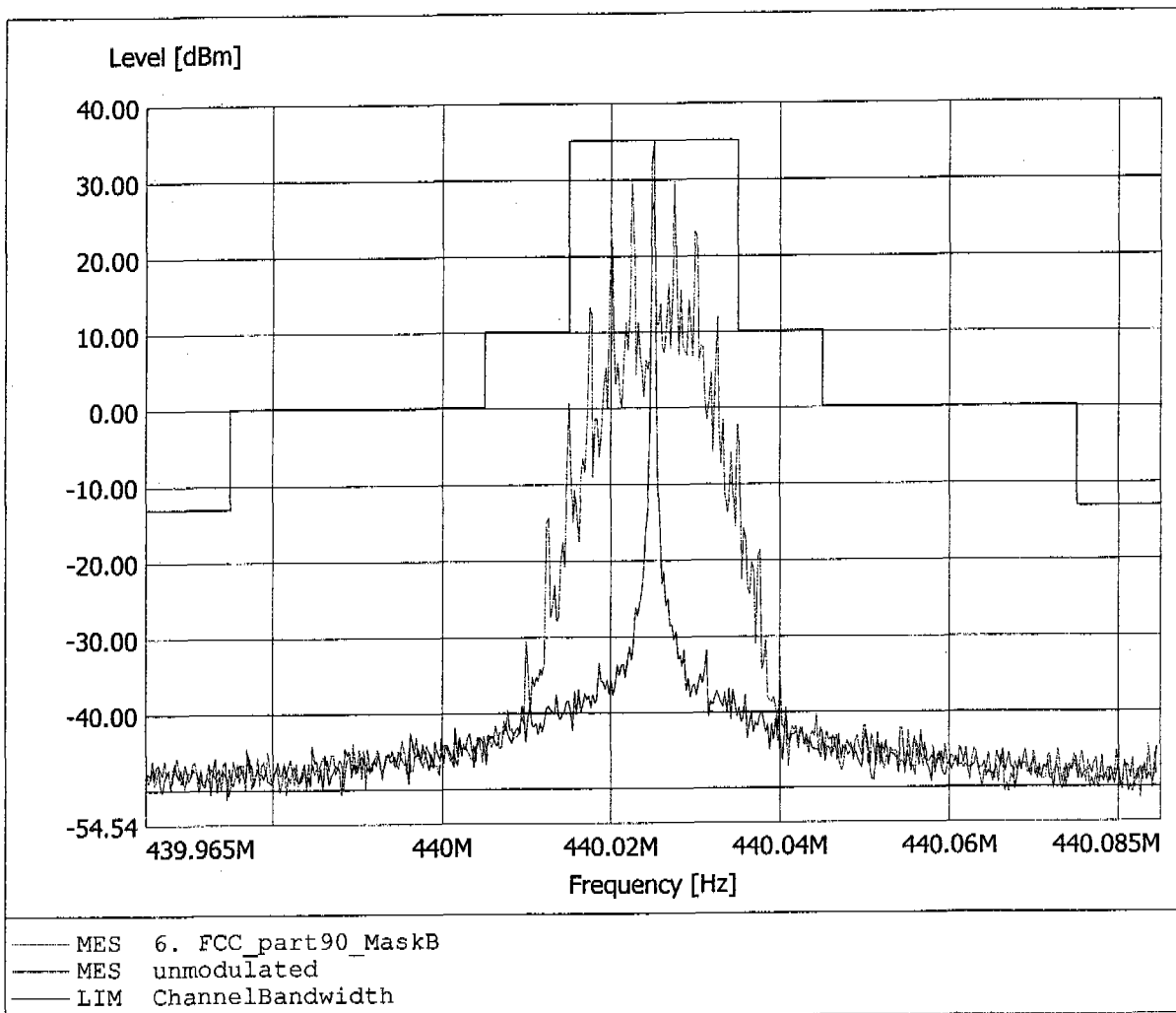
**Occupied Bandwidth Emission Mask D
FCC RULES PART 90 §90.210**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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:455.025MHz Pmax:33.65dBm RBW: 100Hz



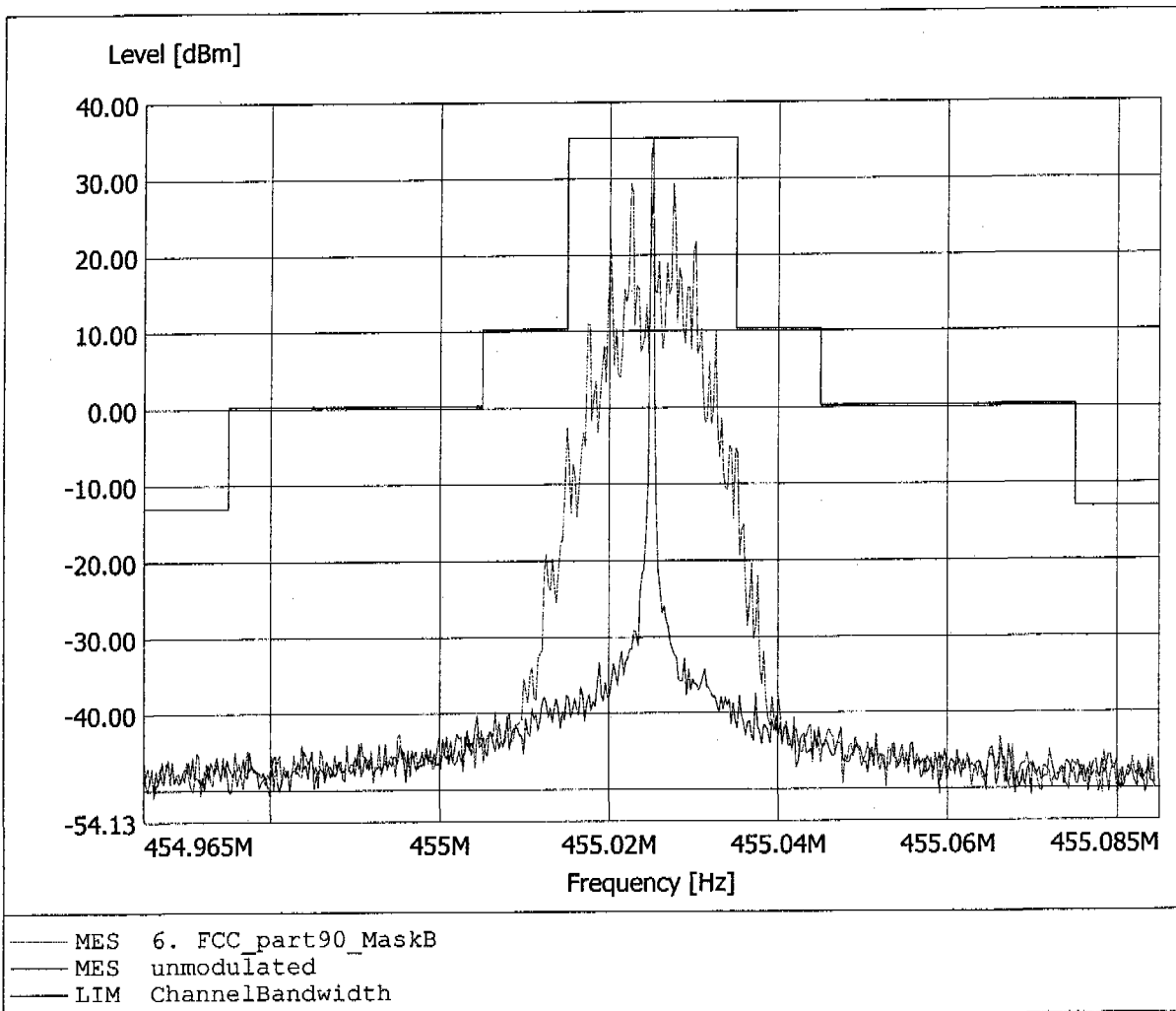
**Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210**

EUT: UHF TRANSCEIVER / 440.025 MHz
Model: ATP-400B
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:440.028MHz Pmax:29.88dBm RBW: 100Hz



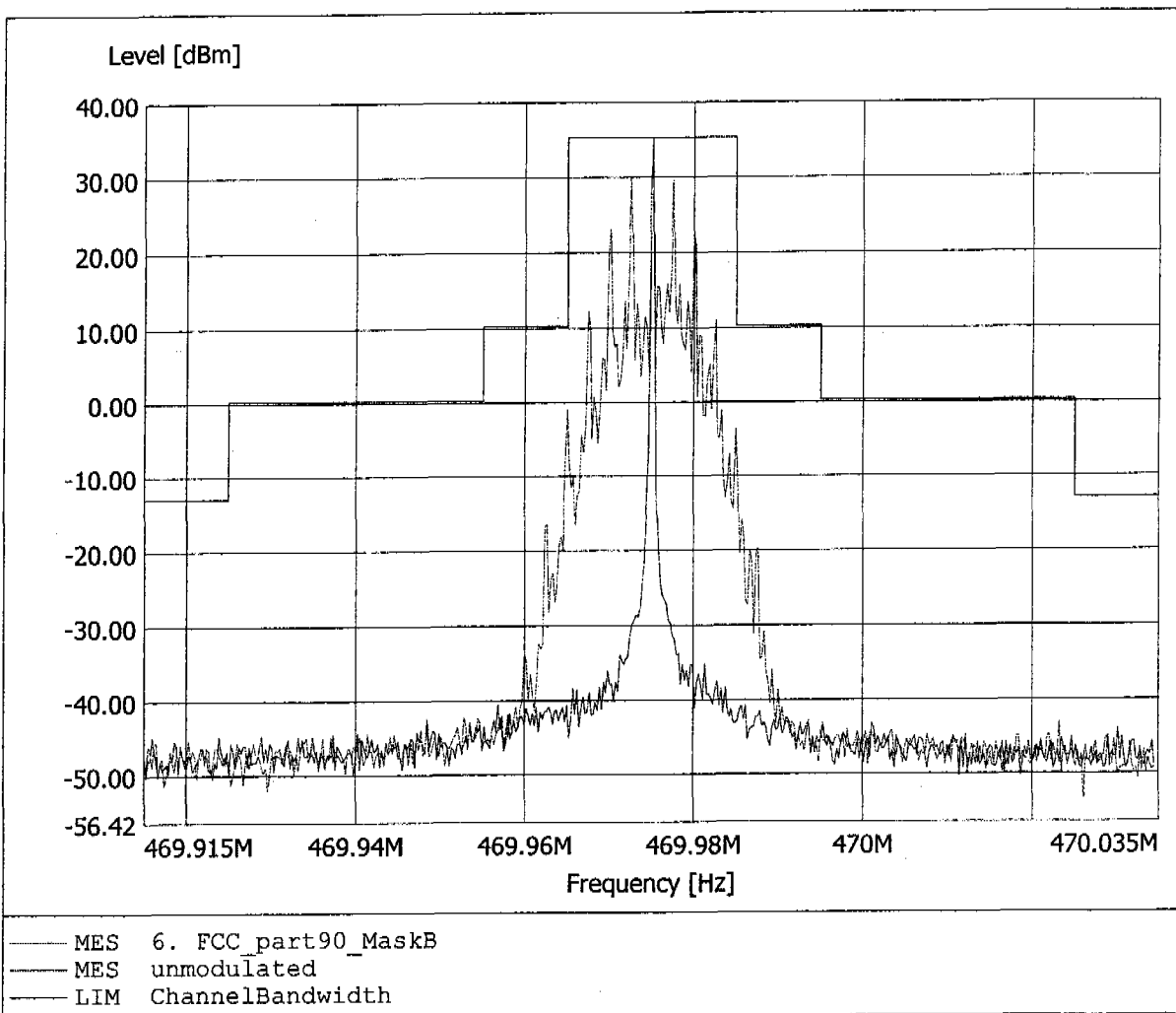
**Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210**

EUT: UHF TRANSCEIVER / 455.025 MHz
Model: ATP-400B
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: 455.028MHz Pmax: 29.45dBm RBW: 100Hz



**Occupied Bandwidth Emission Mask B
FCC RULES PART 90 §90.210**

EUT: UHF TRANSCEIVER / 469.975 MHz
Model: ATP-400B
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:469.972MHz Pmax:29.96dBm RBW: 100Hz





Appendix J

Frequency stability



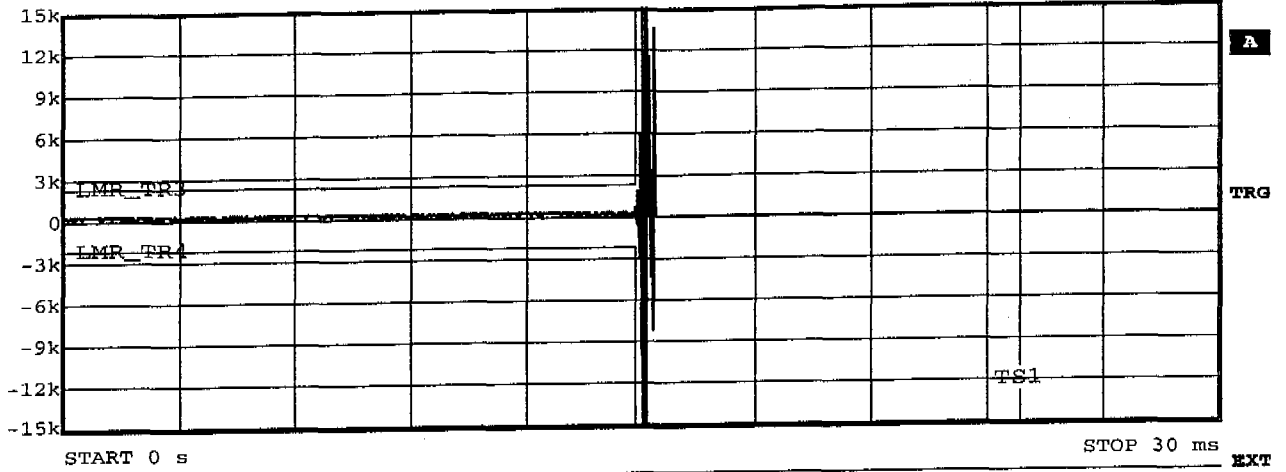
Appendix K

Transient frequency behaviour of the transmitter



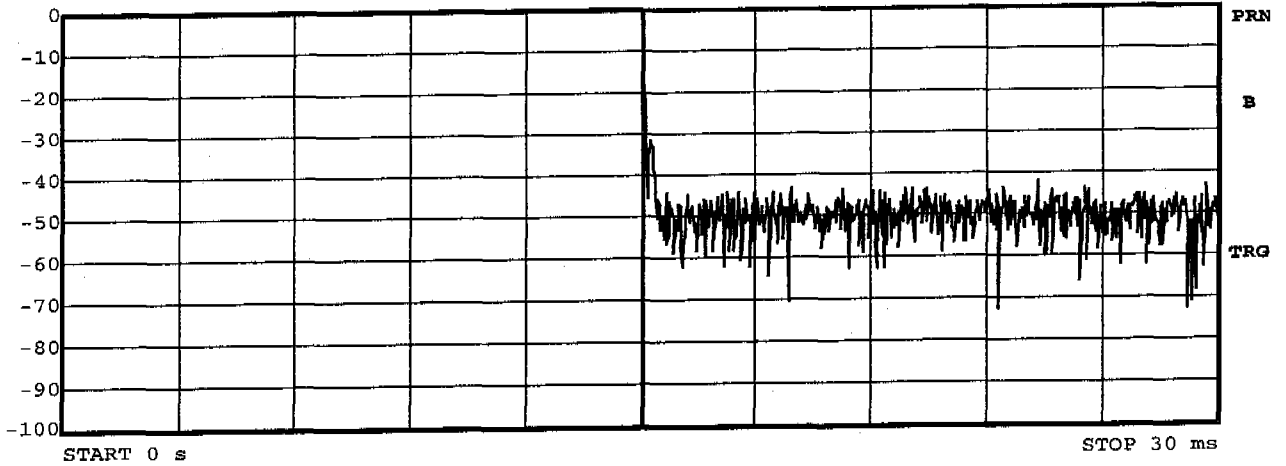
Ref Lvl
30 dBm

CF 455.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
FM [Hz]



Ref Lvl
30 dBm

CF 455.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
AM [dBm]

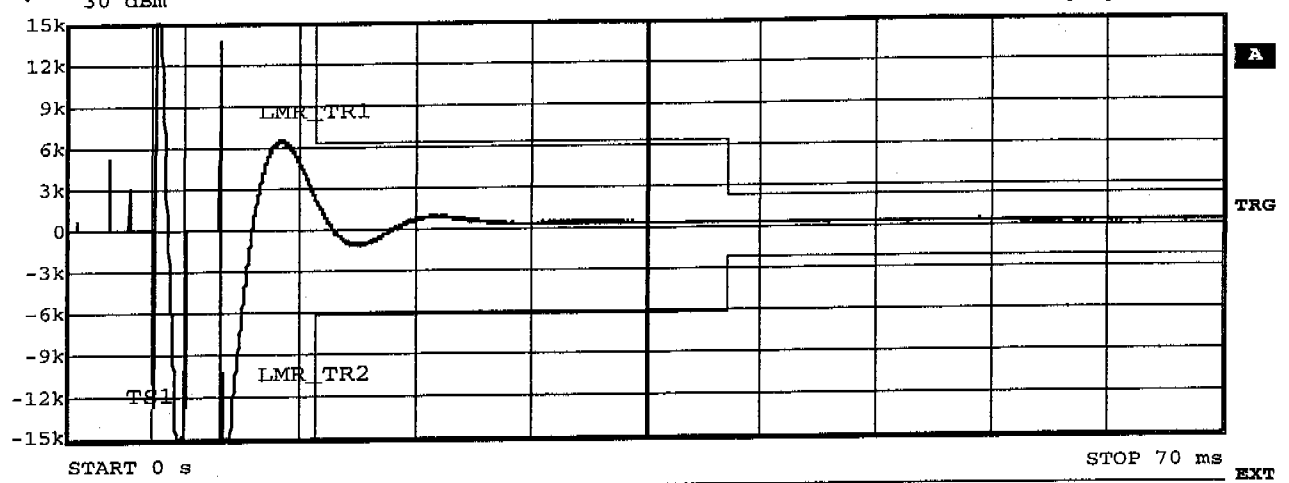


Title: Transient frequency behaviour of the transmitter (switch off)
Comment A: UHF TRANSCEIVER ATP-400B (12.5 kHz channel spacing)
Date: 15.AUG.2003 11:28:38



Ref Lvl
30 dBm

CF 455.025 MHz Real Time OFF
DEMODO BW: 30 kHz AF-Signal
FM [Hz]



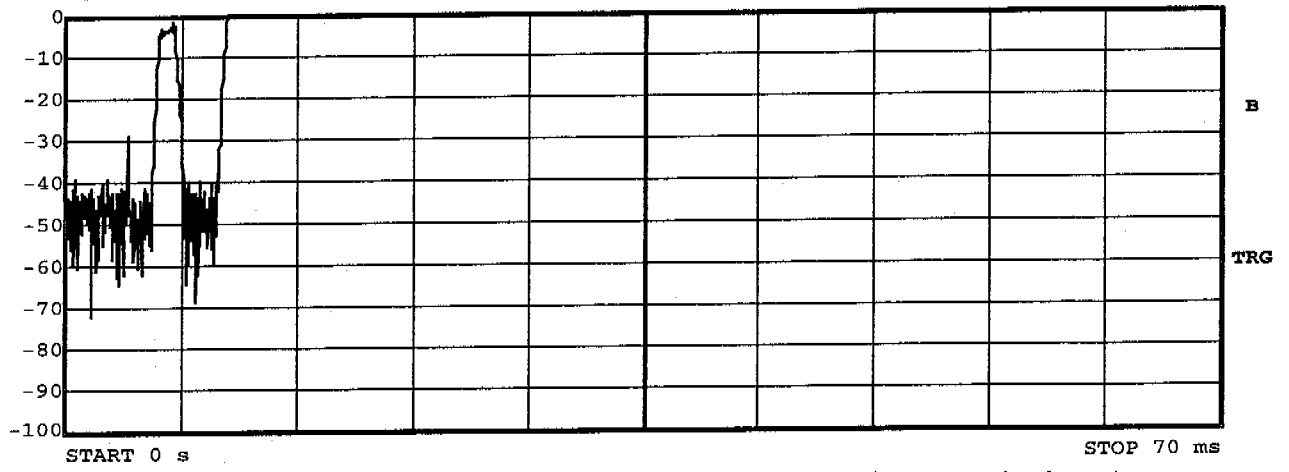
A

TRG

EXT

Ref Lvl
30 dBm

CF 455.025 MHz Real Time OFF
DEMODO BW: 30 kHz AF-Signal
AM [dBm]



B

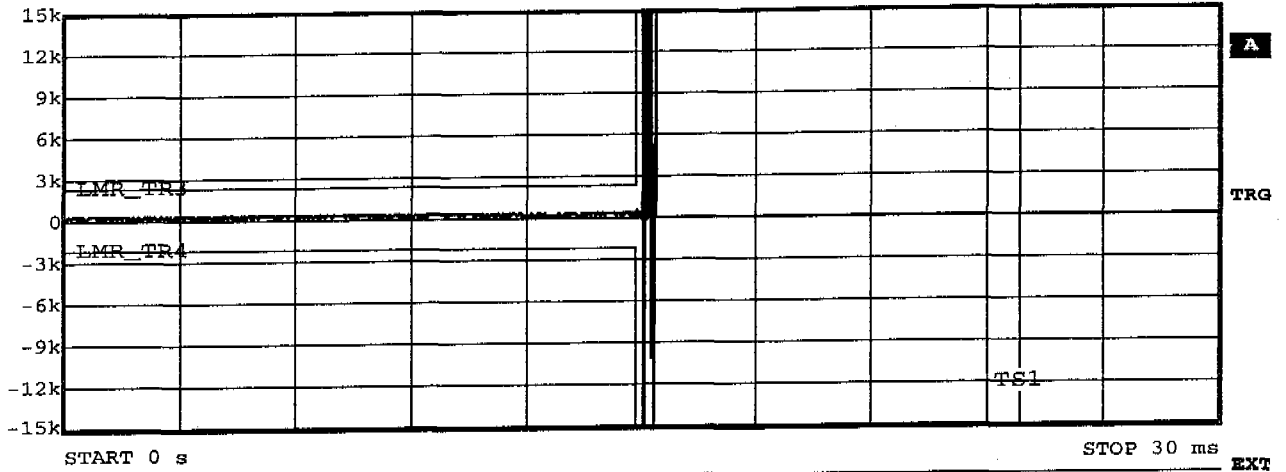
TRG

Title: Transient frequency behaviour of the transmitter (switch on)
 Comment A: UHF TRANSCEIVER ATP-400B (12.5 kHz channel spacing)
 Date: 15.AUG.2003 10:56:13



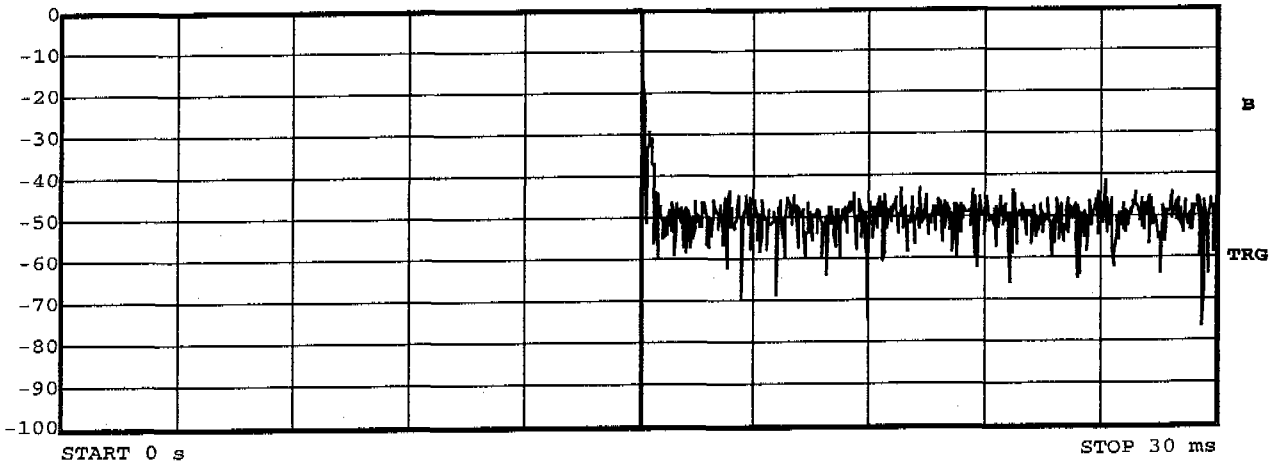
Ref Lvl
30 dBm

CF 455.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
FM [Hz]



Ref Lvl
30 dBm

CF 455.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
AM [dBm]

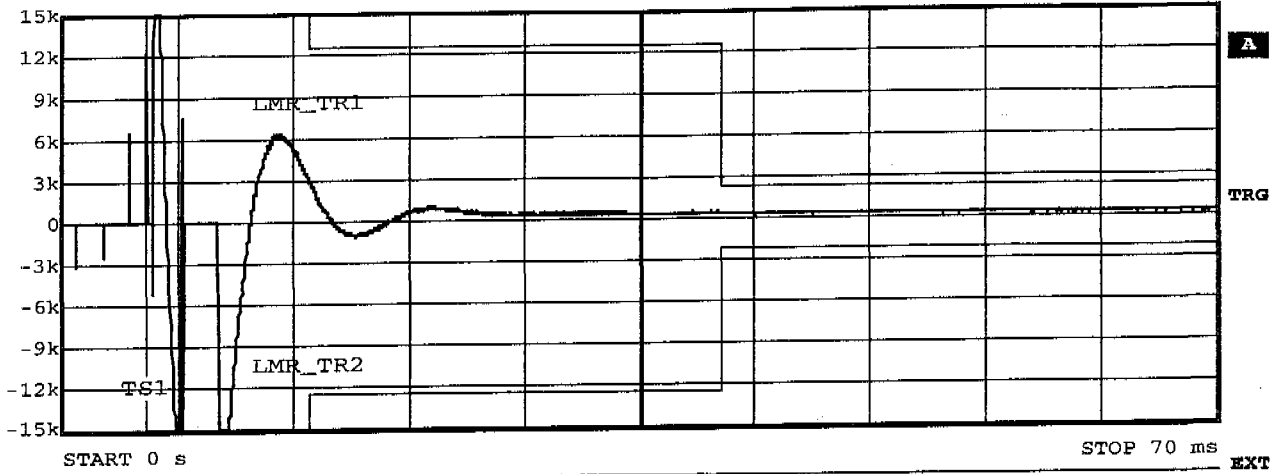


Title: Transient frequency behaviour of the transmitter (switch off)
Comment A: UHF TRANSCEIVER ATP-400B (25 kHz channel spacing)
Date: 15.AUG.2003 11:30:48



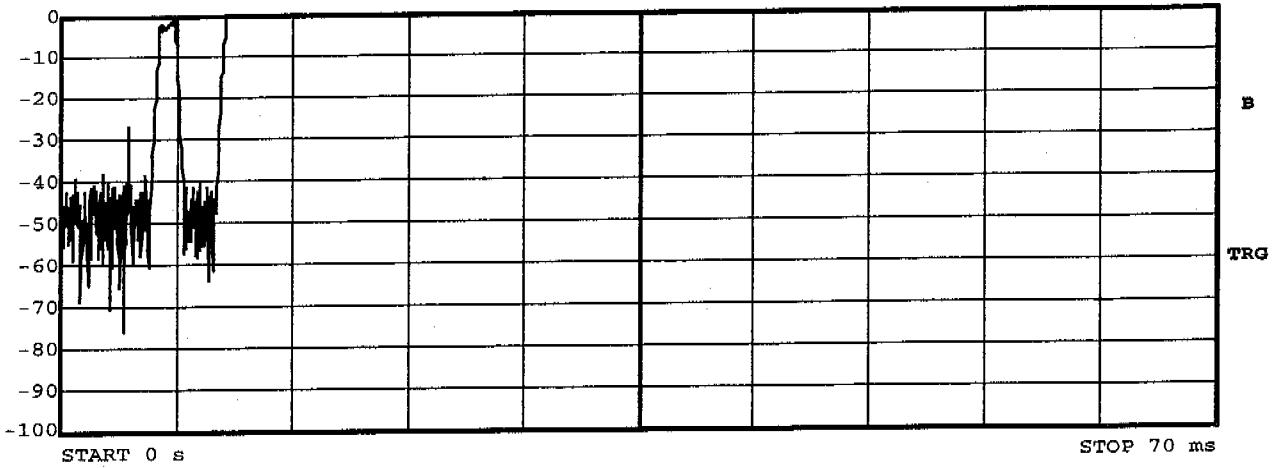
Ref Lvl
30 dBm

CF 455.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
FM [Hz]



Ref Lvl
30 dBm

CF 455.025 MHz Real Time OFF
DEMOD BW: 30 kHz AF-Signal
AM [dBm]



Title: Transient frequency behaviour of the transmitter (switch on)
Comment A: UHF TRANSCEIVER ATP-400B (25 kHz channel spacing)
Date: 15.AUG.2003 11:04:26



Appendix L

Spurious emissions related to AC power line

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 Tnom: 23°C
Test Site: ETS
Operator: Mr. Marquardt
Test Specification: V-Network: ESH2-Z5
Comment: model: ATP-400B mode: charging

