

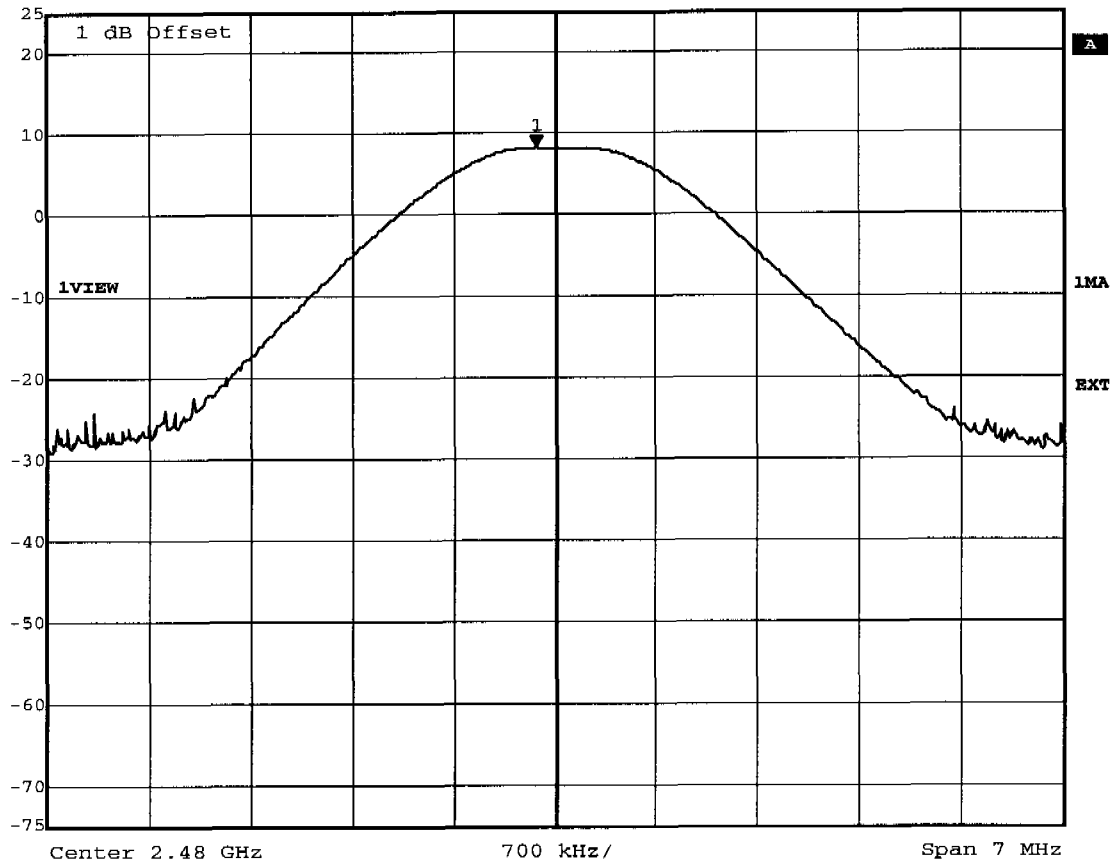


Appendix B

Peak Output Power



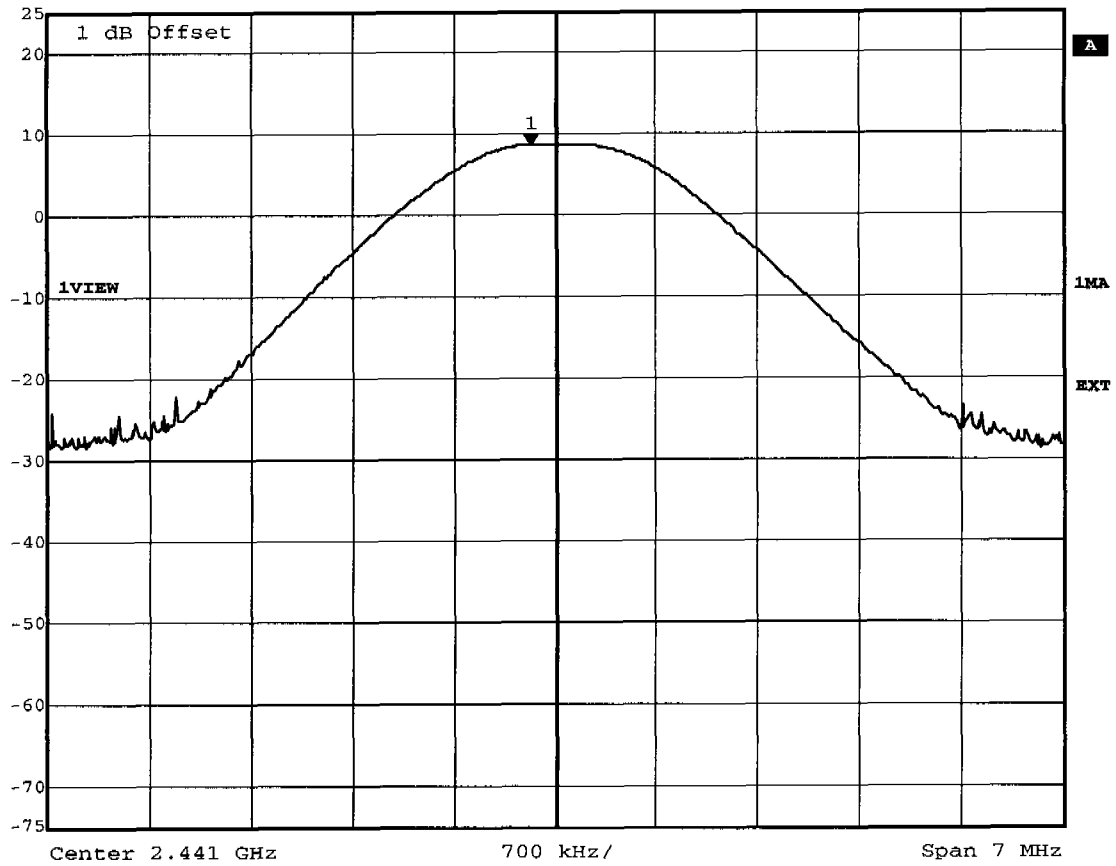
Marker 1 [T1] RBW 1 MHz RF Att 50 dB
Ref Lvl 8.01 dBm VBW 1 MHz
25 dBm 2.47988076 GHz SWT 5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 78 Unom
Comment A: HPS-110
Date: 31.MAR.2005 14:54:21



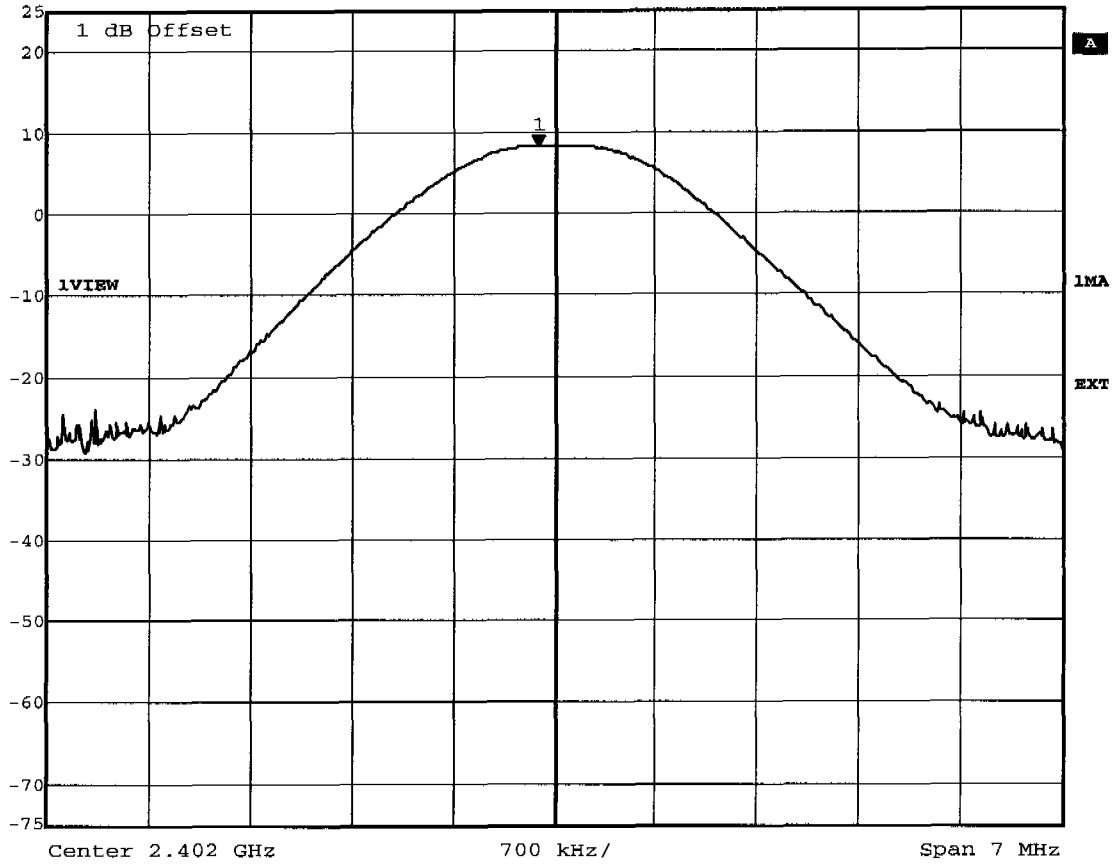
Marker 1 [T1] RBW 1 MHz RF Att 50 dB
Ref Lvl 8.48 dBm VBW 1 MHz
25 dBm 2.44083868 GHz SWT 5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 39 Unom
Comment A: HPS-110
Date: 31.MAR.2005 15:00:17



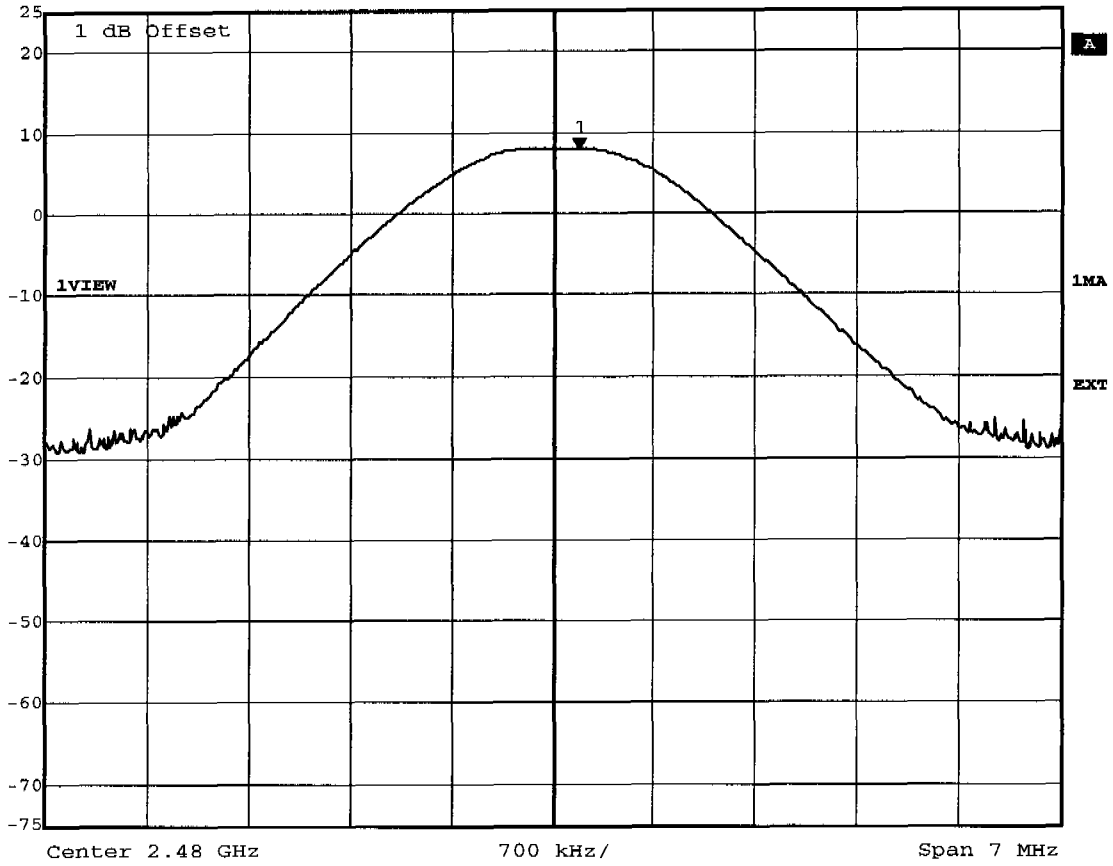
Marker 1 [T1] RBW 1 MHz RF Att 50 dB
Ref Lvl 8.16 dBm VBW 1 MHz
25 dBm 2.40189479 GHz SWF .5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 0 Unom
Comment A: HPS-110
Date: 31.MAR.2005 14:55:16



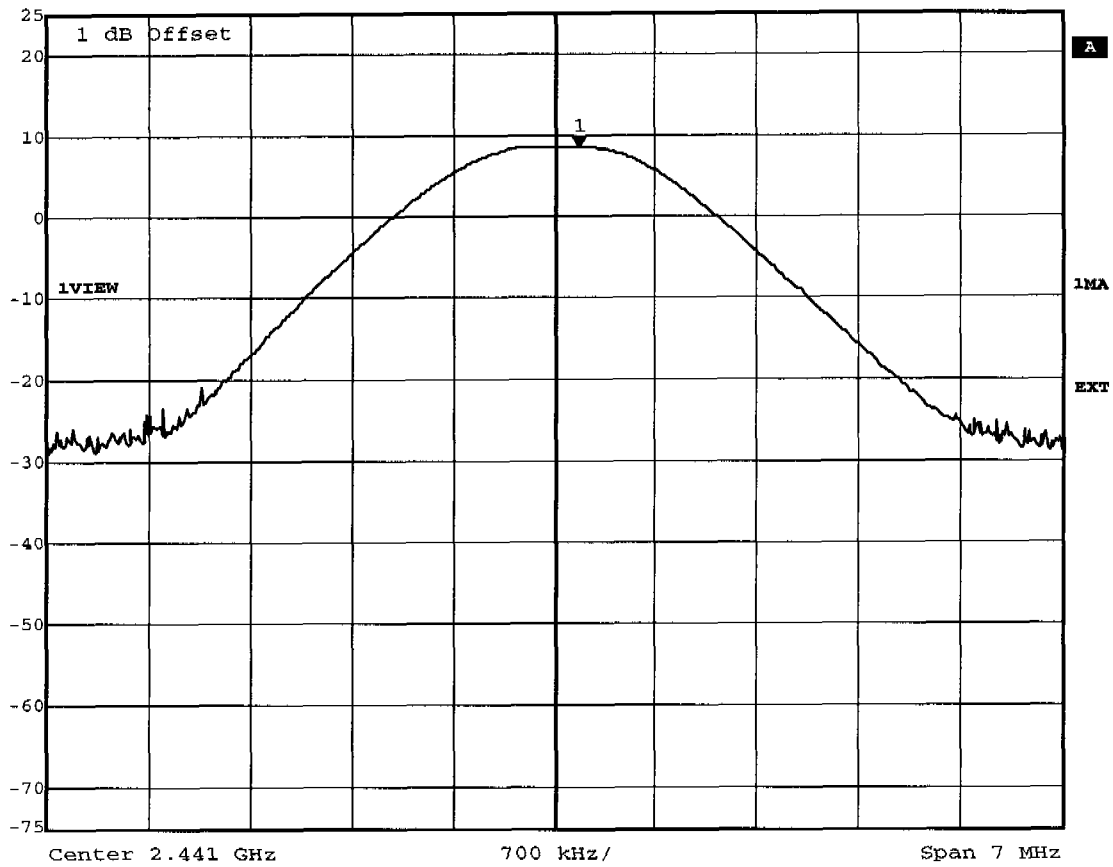
Marker 1 [T1] REW 1 MHz RF Att 50 dB
Ref Lvl 7.94 dBm VBW 1 MHz
25 dBm 2.48018938 GHz SWT 5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 78 Umin
Comment A: HPS-110
Date: 31.MAR.2005 15:34:26



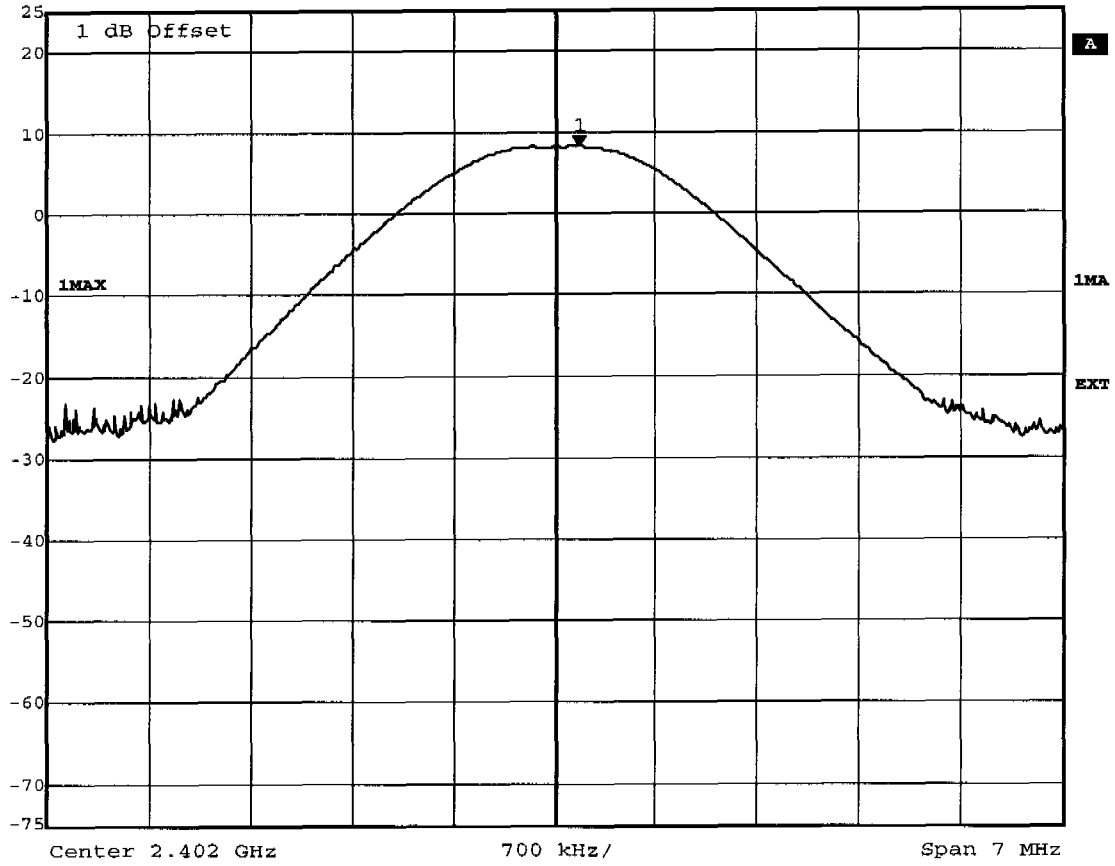
Marker 1 [T1] REW 1 MHz RF Att 50 dB
Ref Lvl 8.46 dBm VEW 1 MHz
25 dBm 2.44117535 GHz SWT 5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 39 Umin
Comment A: HPS-110
Date: 31.MAR.2005 15:33:22



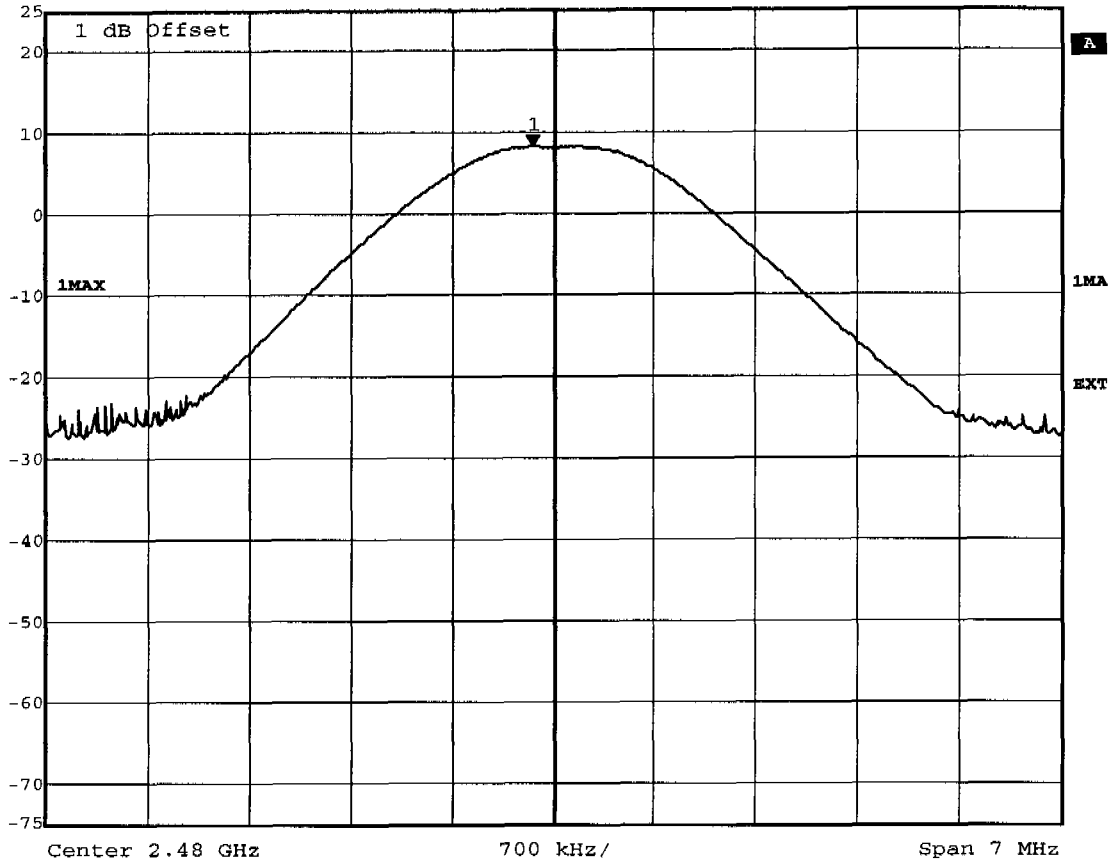
Marker 1 [T1] REW 1 MHz RF Att 50 dB
Ref Lvl 8.04 dBm VBW 1 MHz
25 dBm 2.40217535 GHz SWT 5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 0 Umin
Comment A: HPS-110
Date: 31.MAR.2005 15:38:23



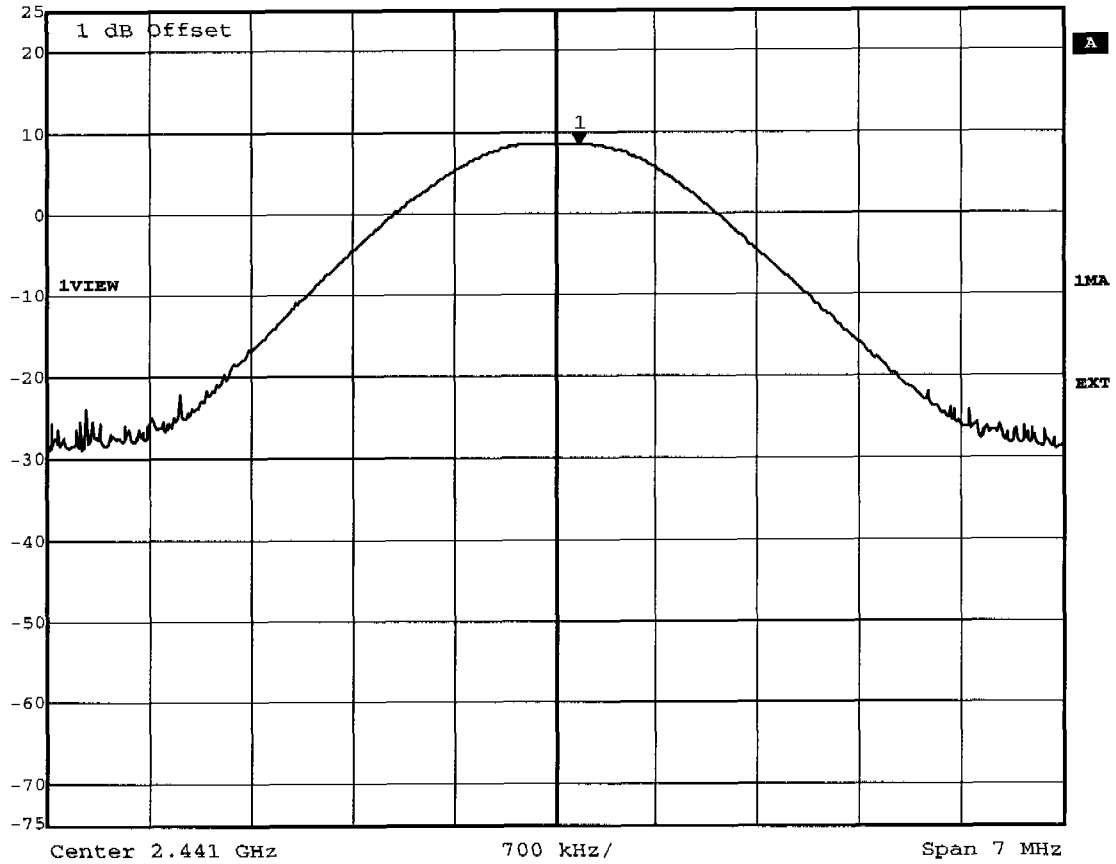
Marker 1 [T1] RBW 1 MHz RF Att 50 dB
Ref Lvl 8.05 dBm VBW 1 MHz
25 dBm 2.47986673 GHz SWT 5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 78 Umax
Comment A: HPS-110
Date: 31.MAR.2005 15:13:56



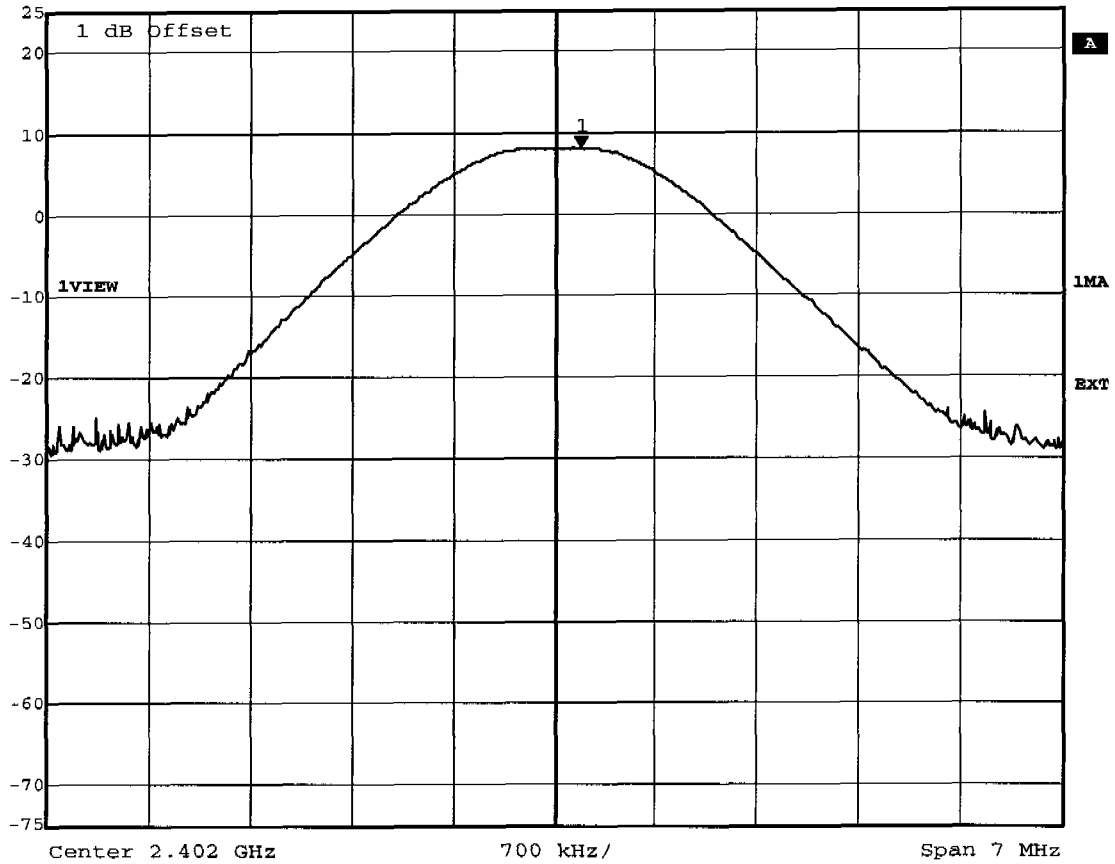
Marker 1 [T1] REW 1 MHz RF Att 50 dB
Ref Lvl 8.41 dBm VBW 1 MHz
25 dBm 2.44117535 GHz SWF 5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 39 Umax
Comment A: HPS-110
Date: 31.MAR.2005 15:31:16



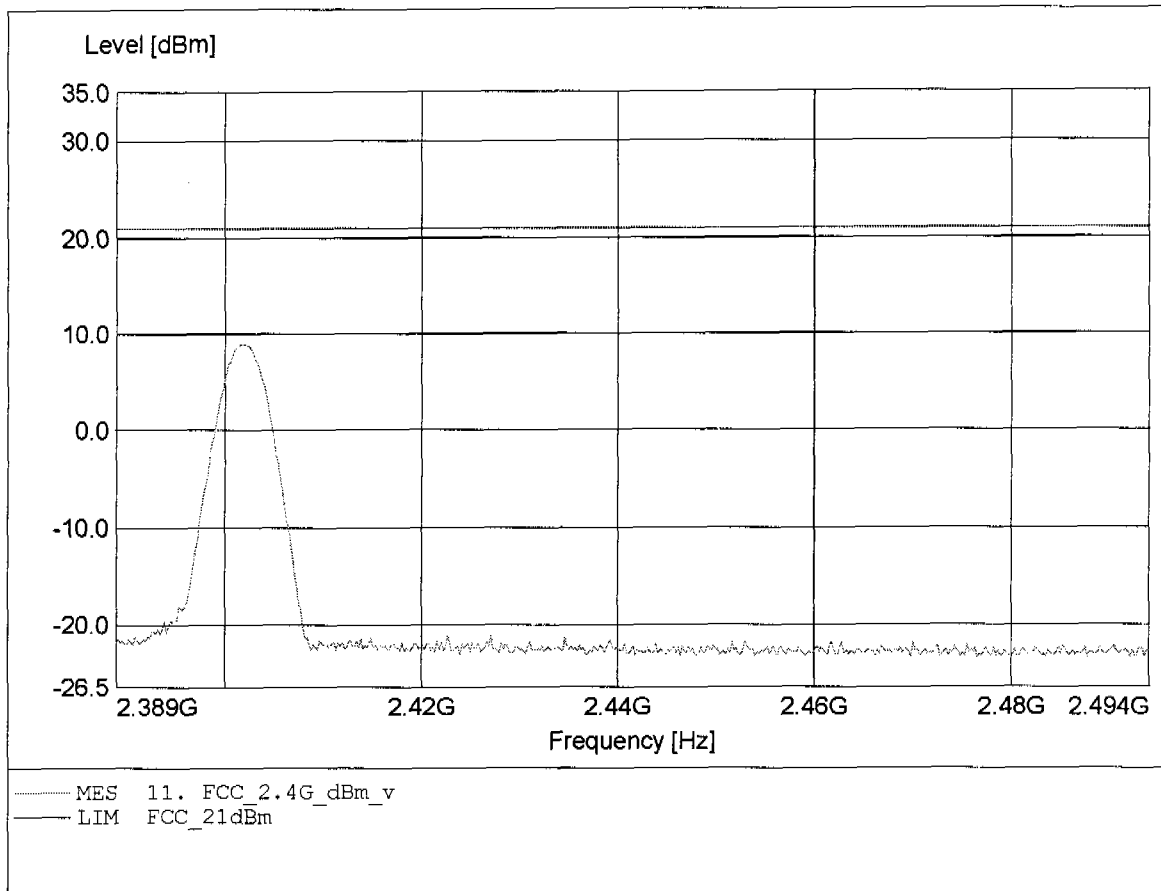
Marker 1 [T1] RBW 1 MHz RF Att 50 dB
Ref Lvl 8.01 dBm VBW 1 MHz
25 dBm 2.40218938 GHz SWT 5 ms Unit dBm



Title: Peak Output Power conducted Ch.: 0 Umax
Comment A: HPS-110
Date: 31.MAR.2005 15:28:57

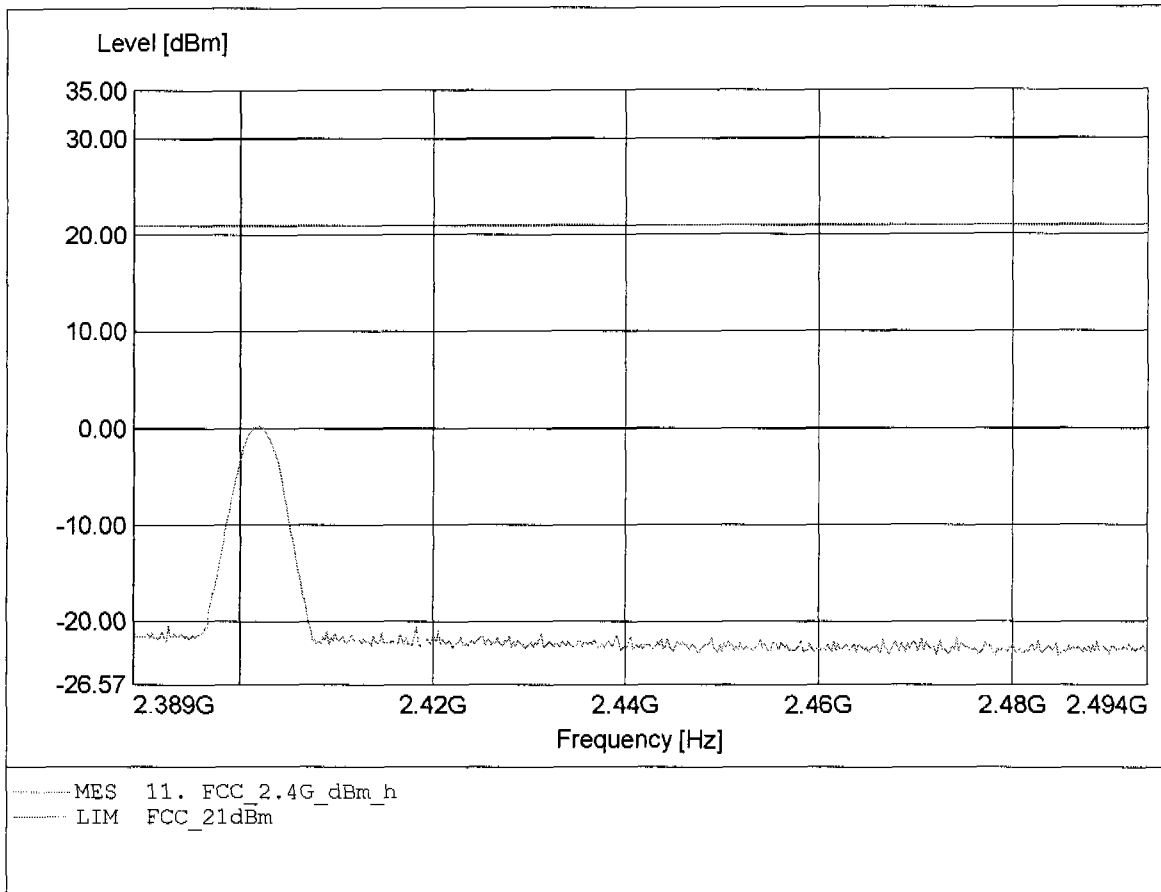
Carrier power (dBm)
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL025
Freq: 2.402GHz, Pmax: 8.90dBm, RBW: 5MHz



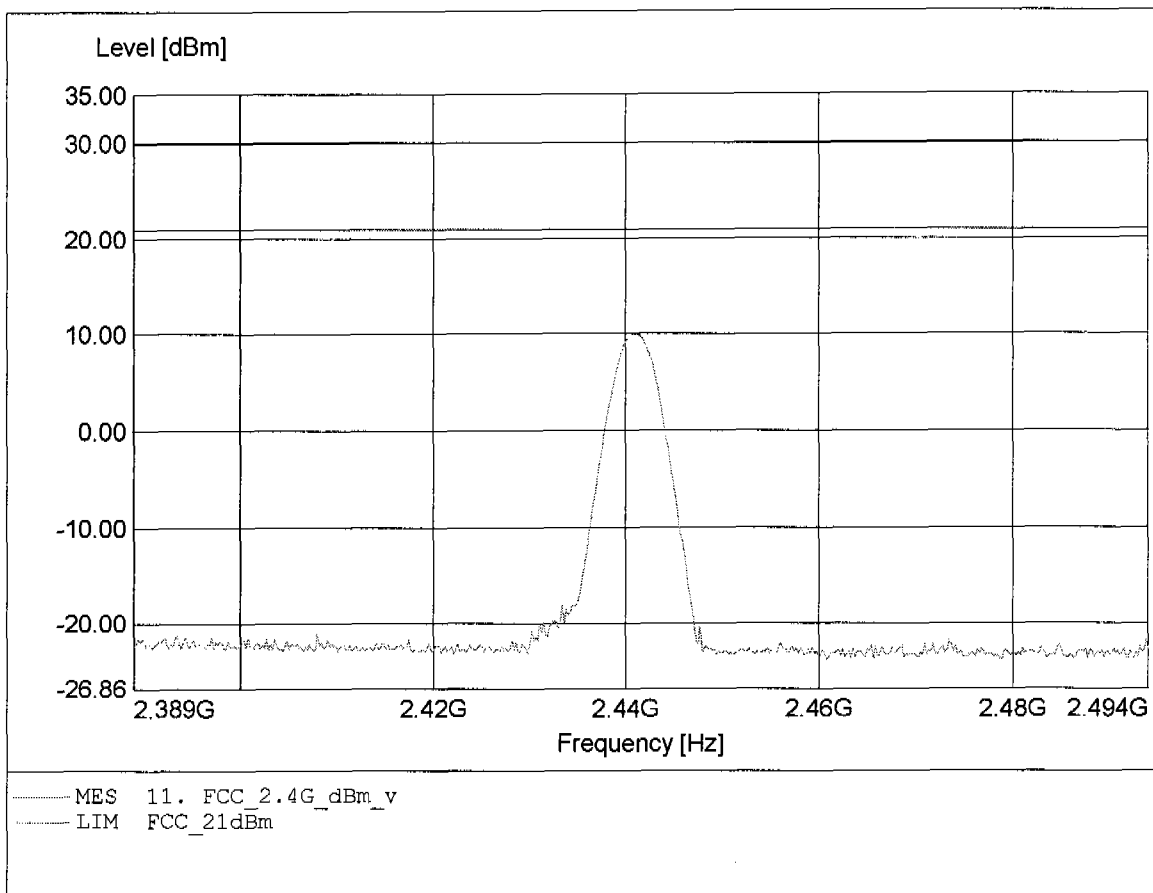
Carrier power (dBm)
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL025
Freq: 2.402GHz, Pmax: 0.26dBm, RBW: 5MHz



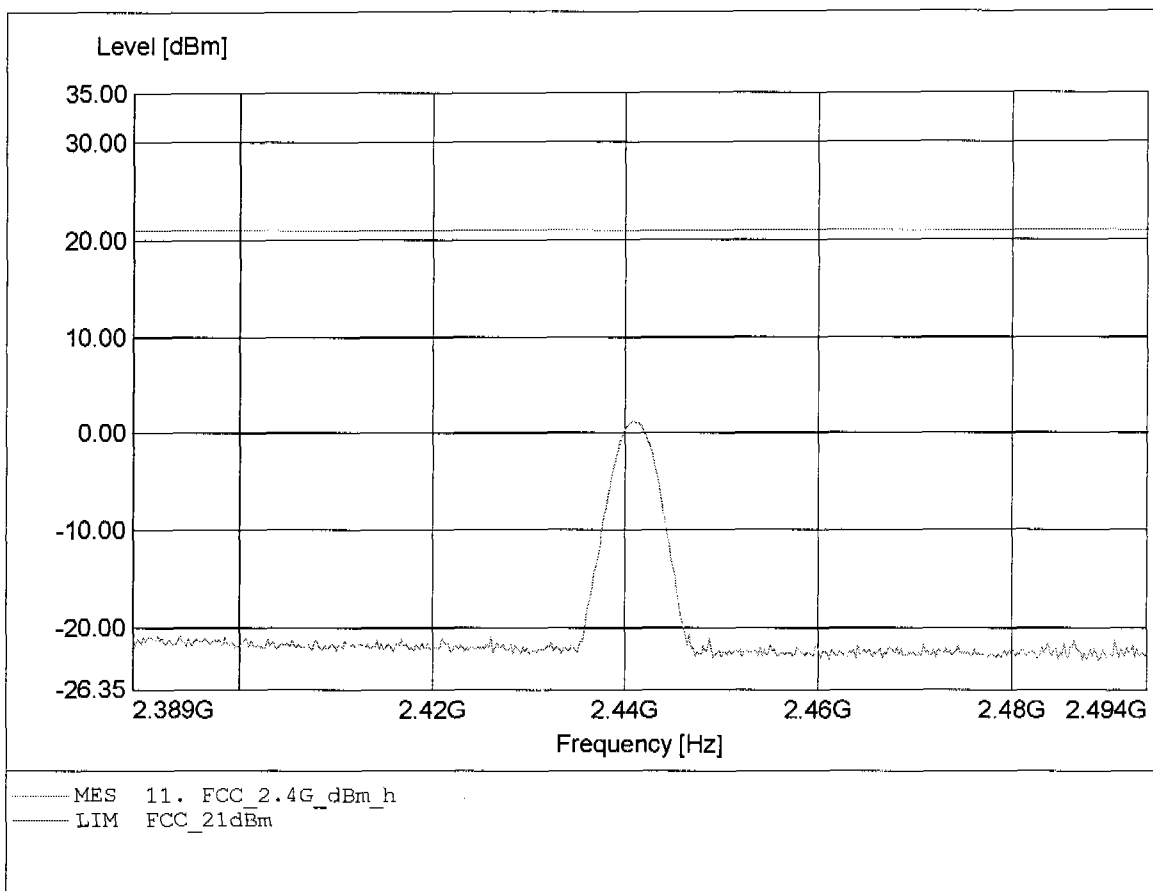
Carrier power (dBm)
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL025
Freq: 2.441GHz, Pmax: 9.97dBm, RBW: 5MHz



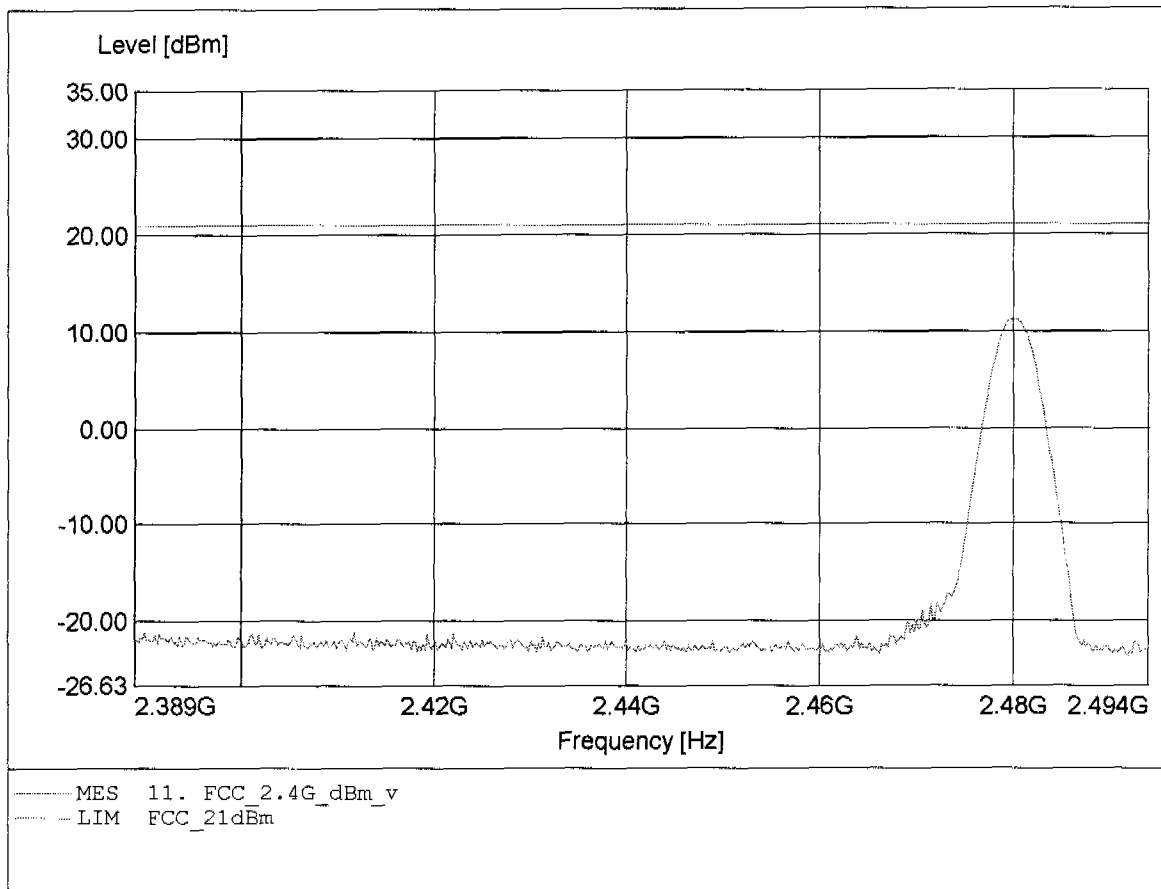
Carrier power (dBm)
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL025
Freq: 2.441GHz, Pmax: 1.16dBm, RBW: 5MHz



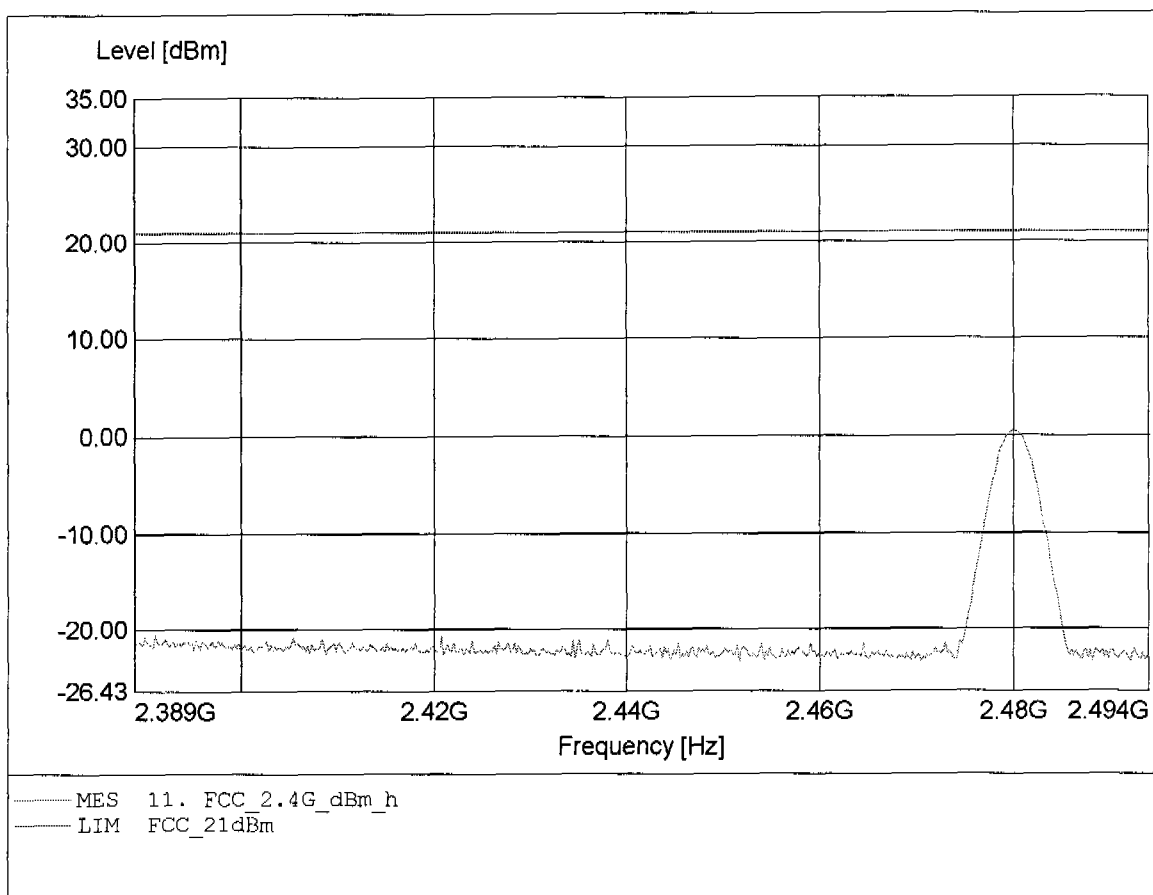
Carrier power (dBm)
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL025
Freq: 2.480GHz, Pmax: 11.21dBm, RBW: 5MHz



Carrier power (dBm)
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL025
Freq: 2.480GHz, Pmax: 0.46dBm, RBW: 5MHz



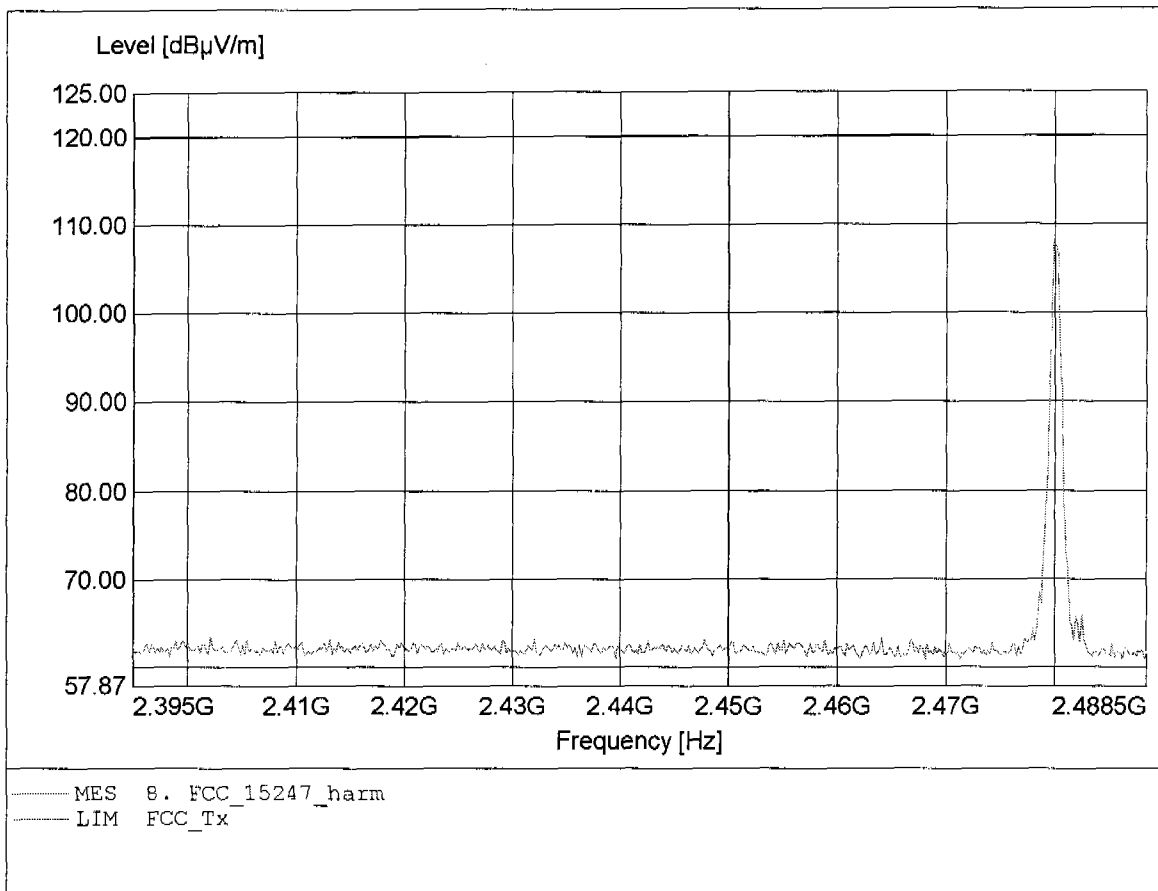


Appendix C

Spurious Emissions radiated - Transmitter operating

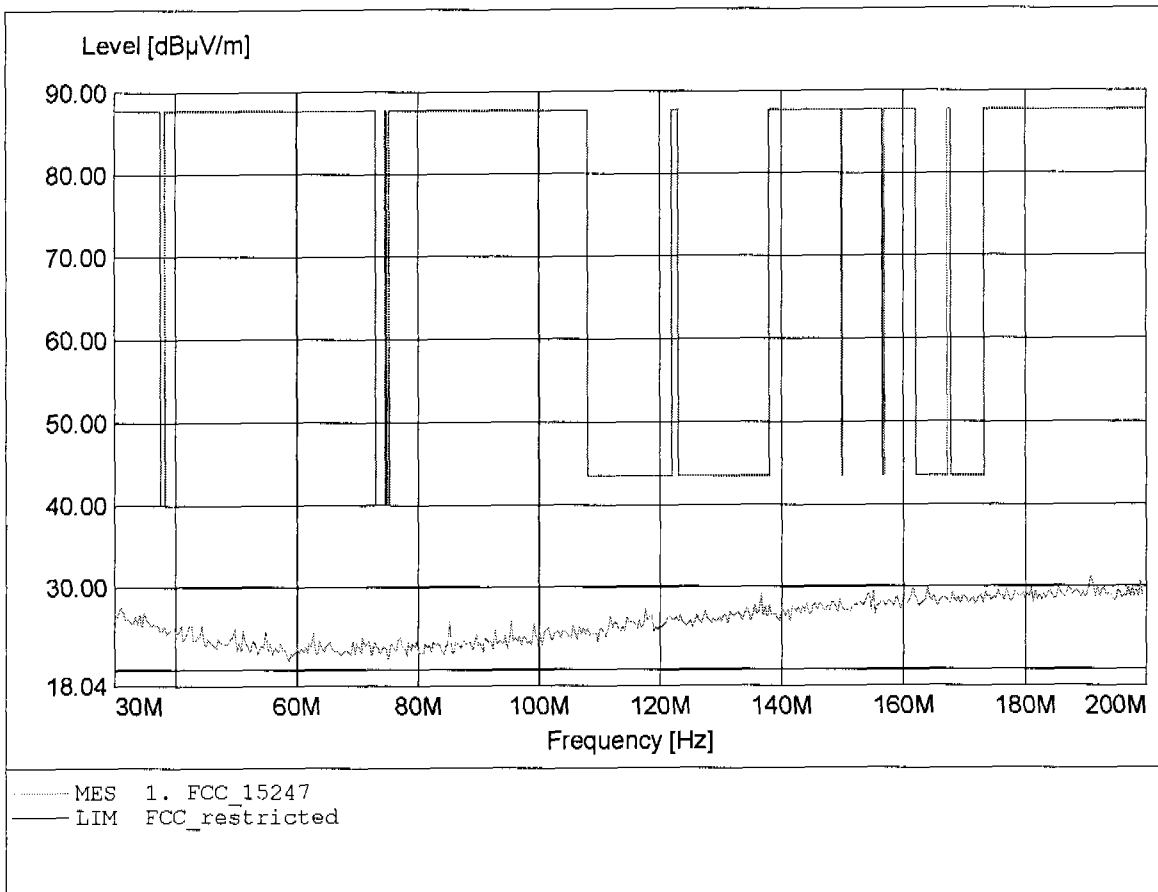
Carrier power (Field Strength)
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cerovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL025
Freq: 2.480GHz, Emax: 107.73dB μ V/m, RBW: 100kHz



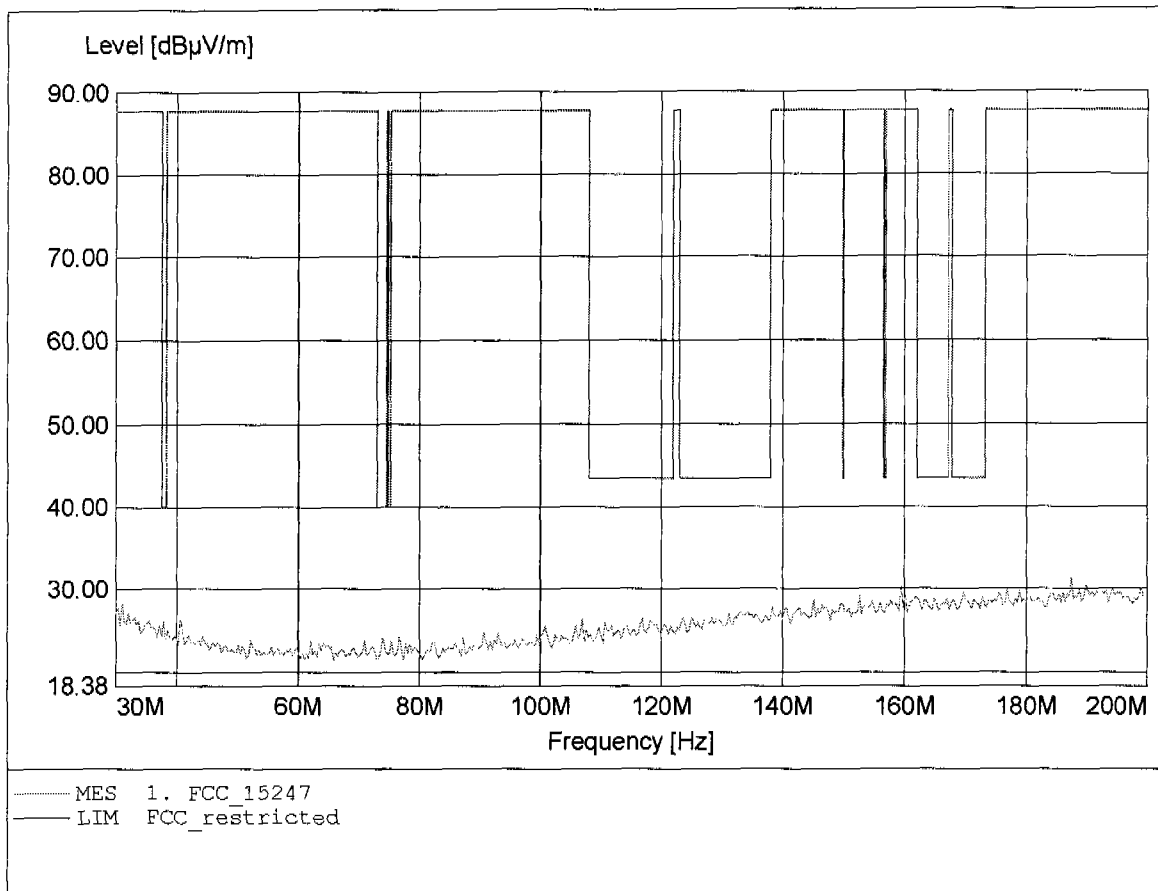
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HK 116
Freq: 190.802MHz, Emax: 31.14dBµV/m, RBW: 100kHz



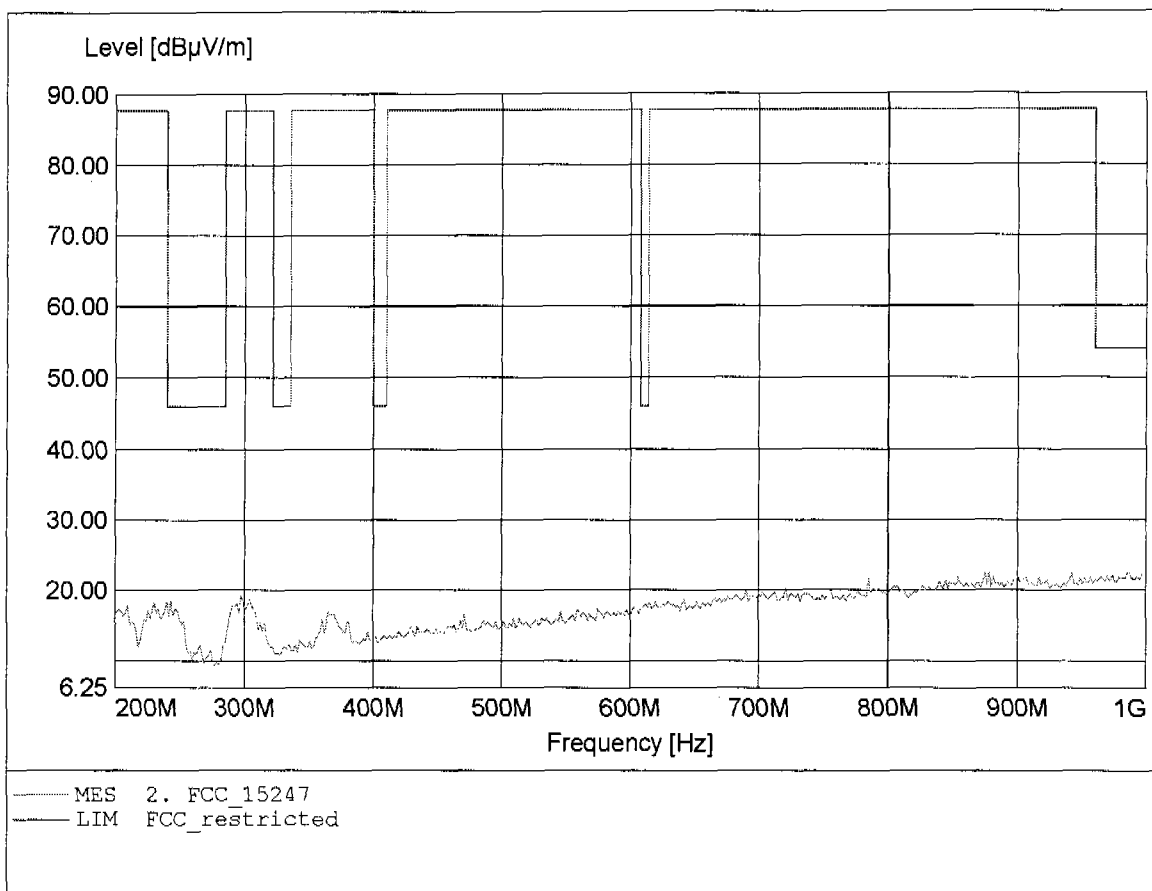
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HK 116
Freq: 187.395MHz, Emax: 31.28dBµV/m, RBW: 100kHz



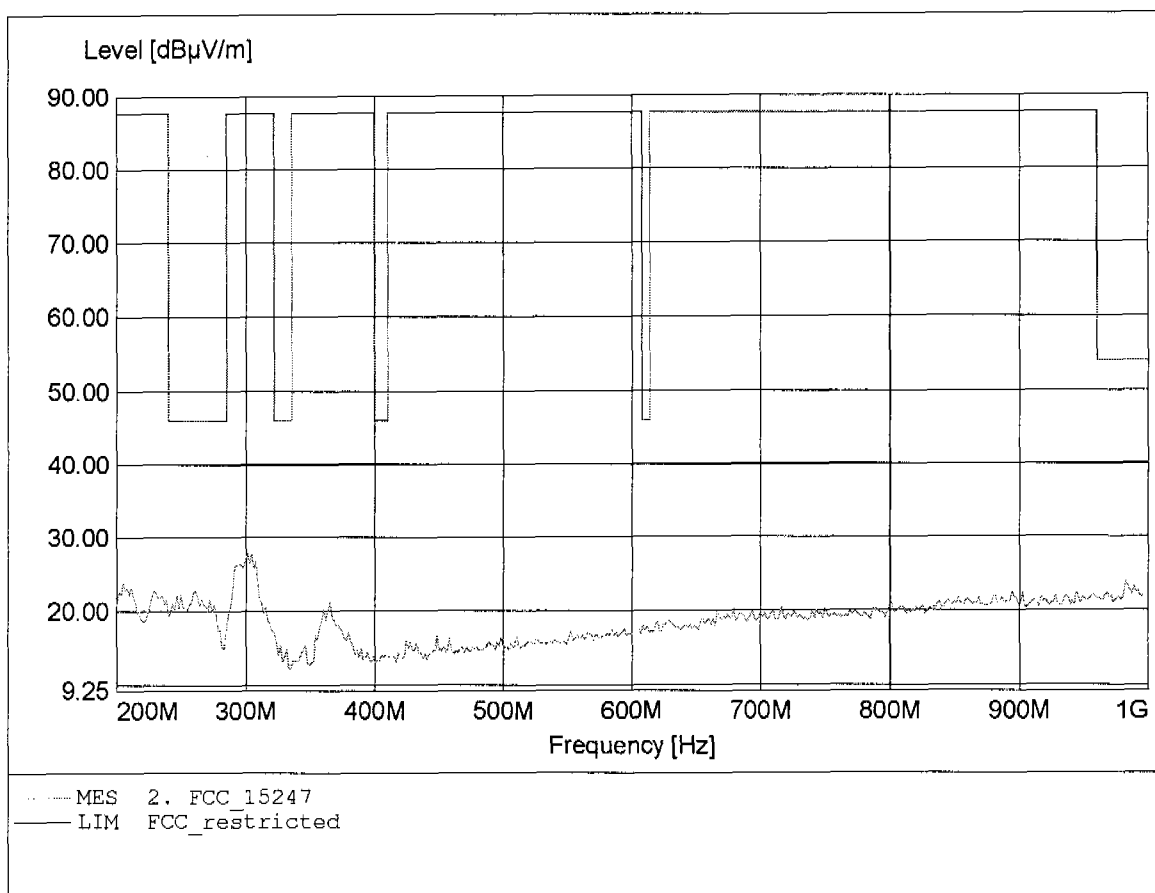
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL 223, amplif.
Freq: 878.156MHz, Emax: 22.49dBµV/m, RBW: 100kHz



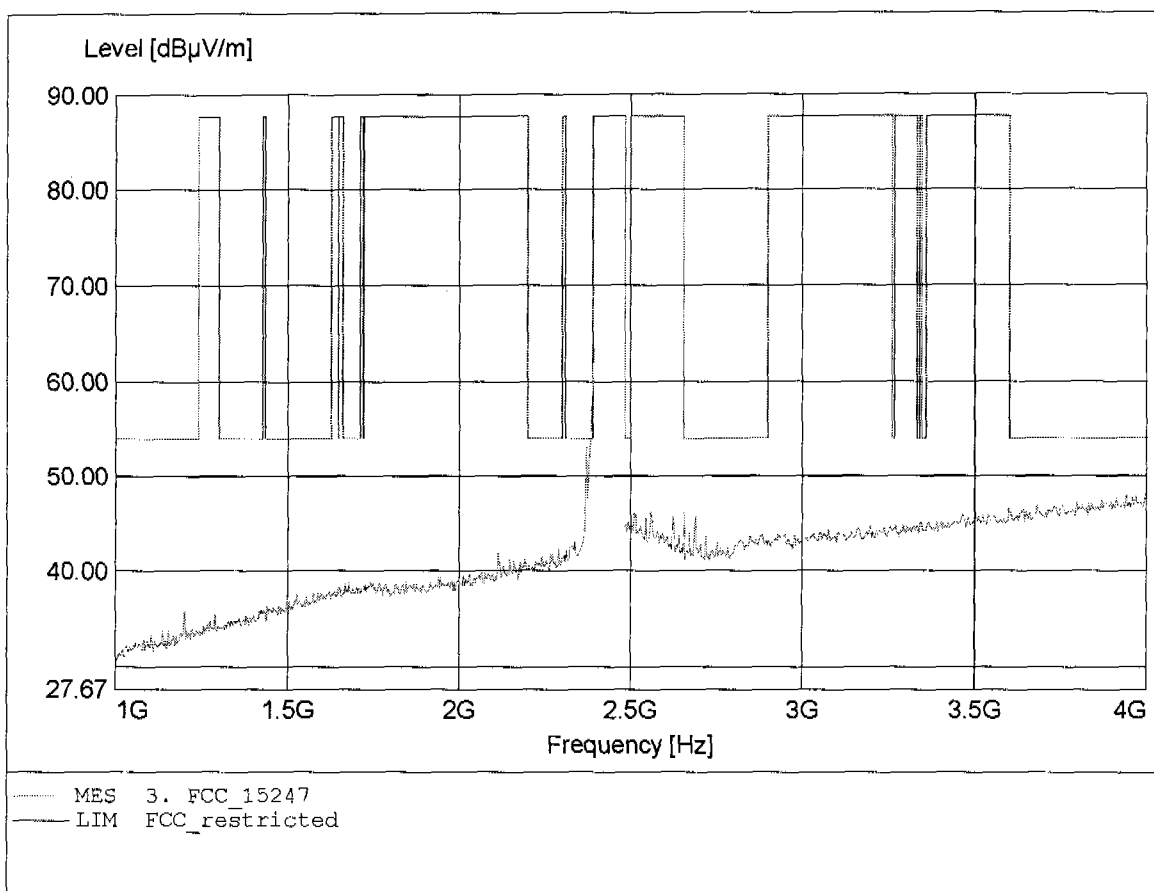
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL 223, amplif.
Freq: 304.208MHz, Emax: 27.88dBµV/m, RBW: 100kHz



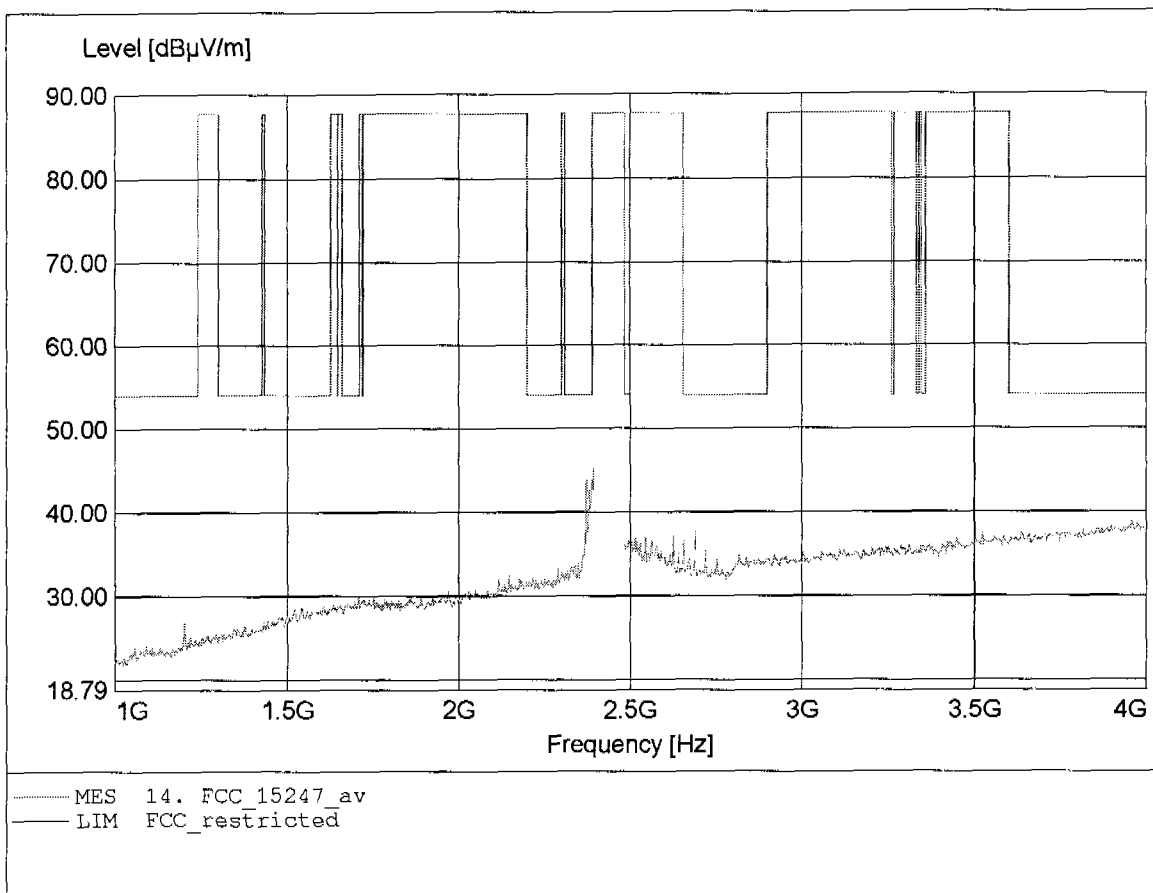
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 2.394GHz, Emax: 63.55dBµV/m, RBW: 1MHz



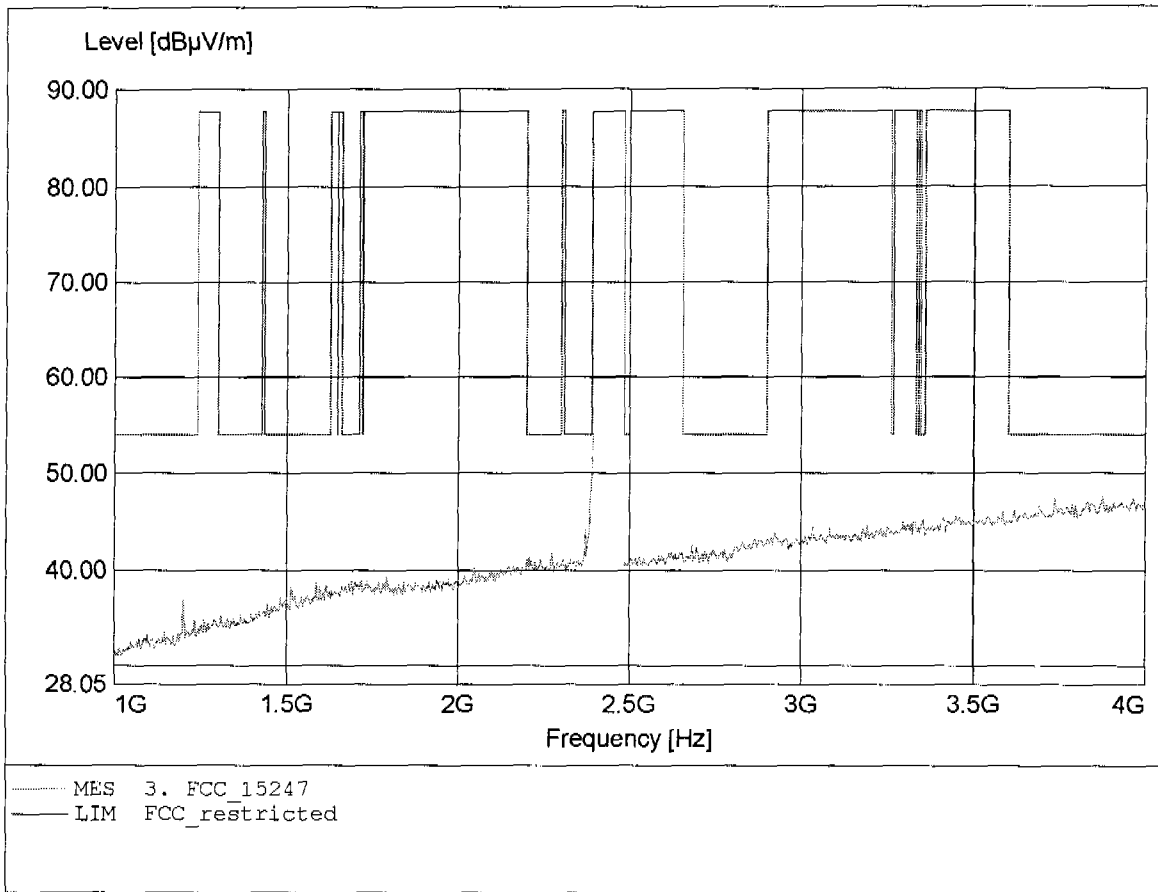
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, average detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 2.394GHz, Emax: 46.12dB μ V/m, RBW: 1MHz



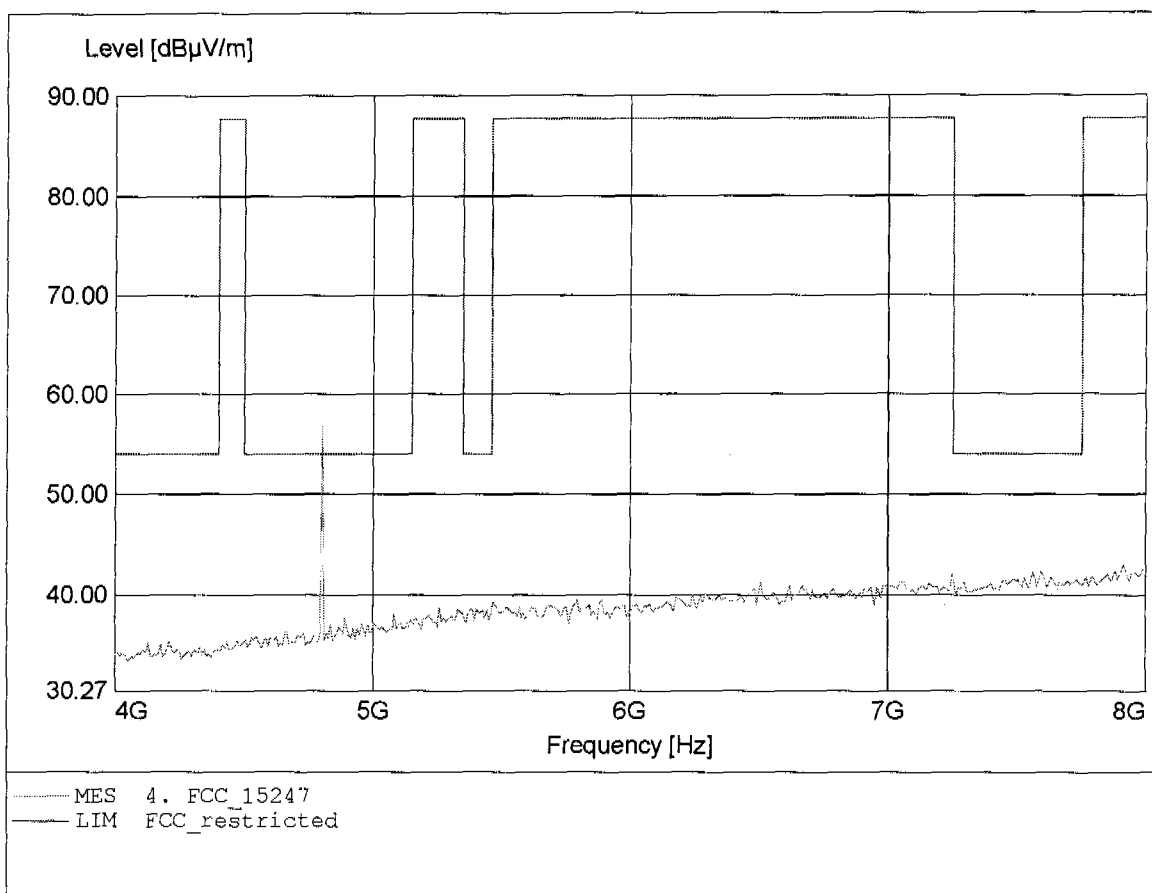
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 2.394GHz, Emax: 54.06dBµV/m, RBW: 1MHz



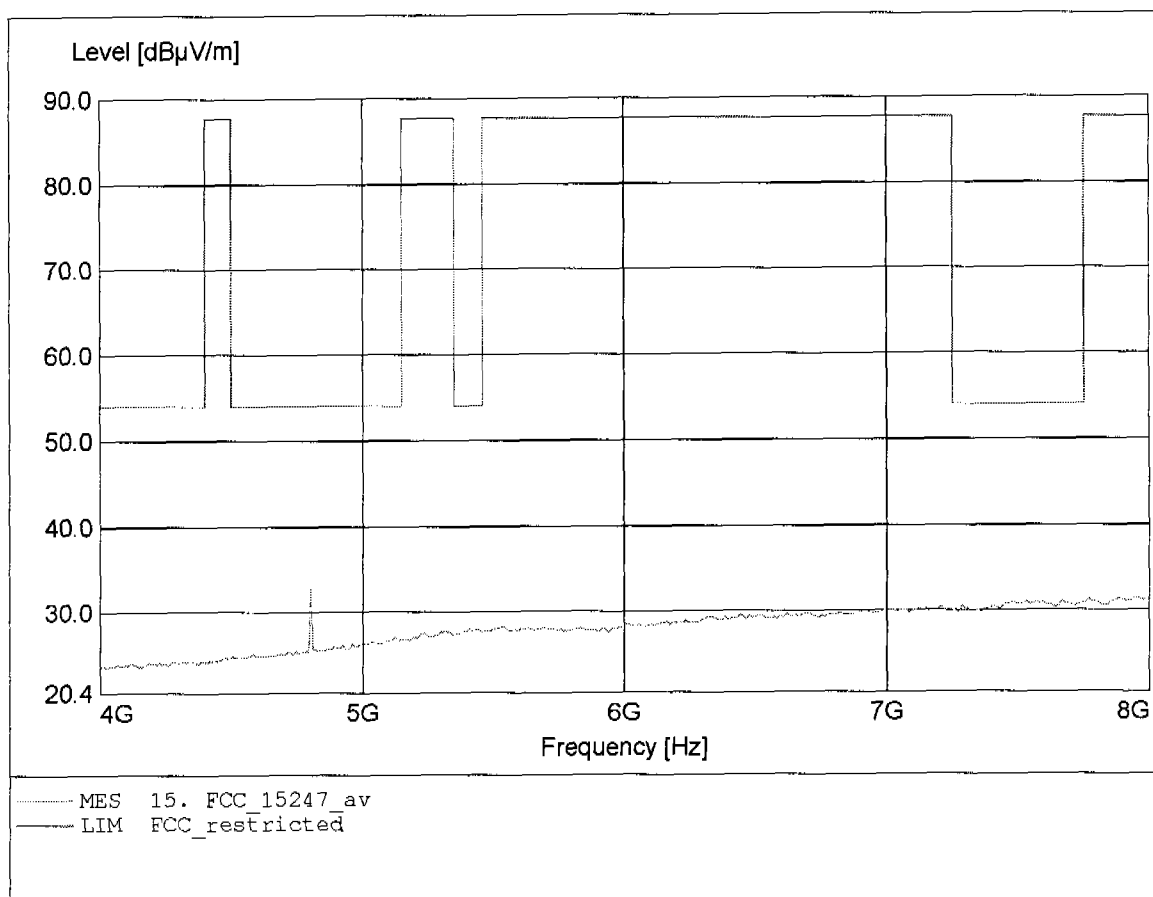
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 4.802GHz, Emax: 56.80dBμV/m, RBW: 1MHz



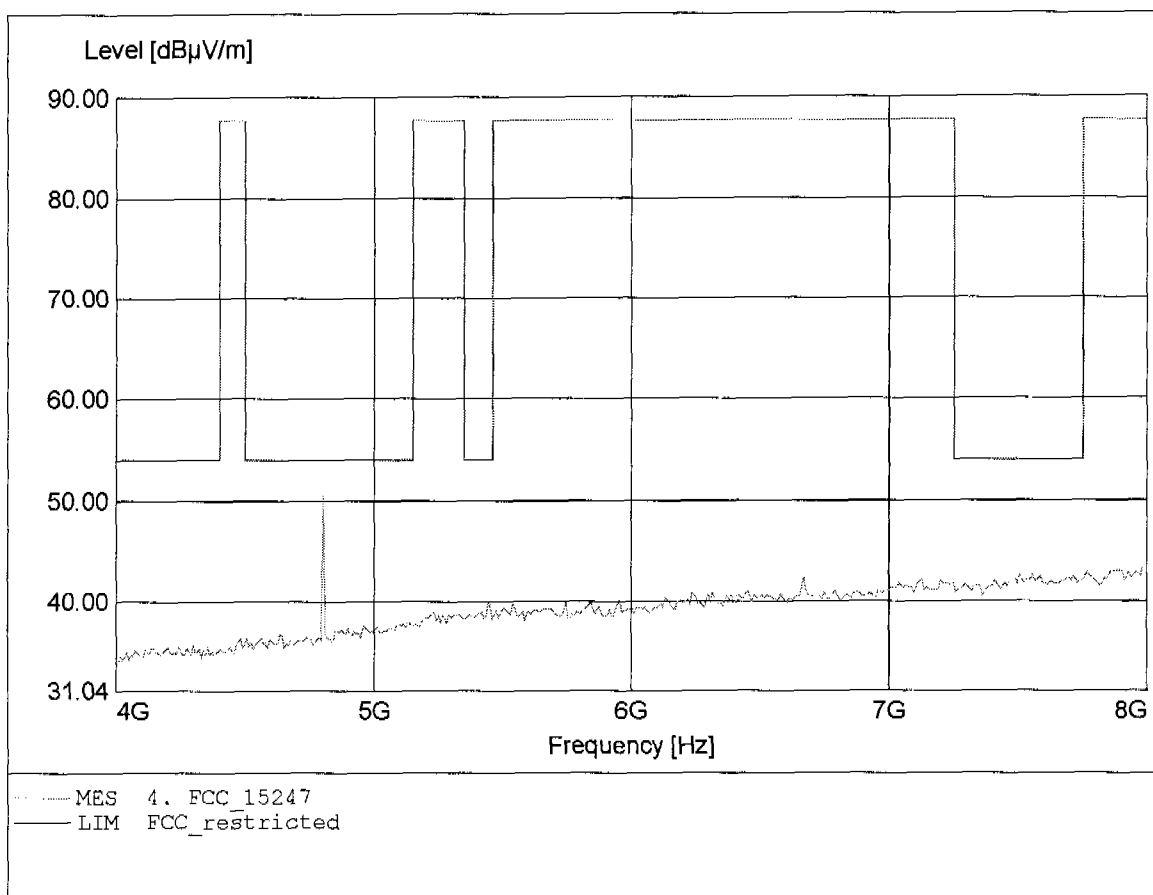
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to S15.247, average detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 4.802GHz, Emax: 32.71dB μ V/m, RBW: 1MHz



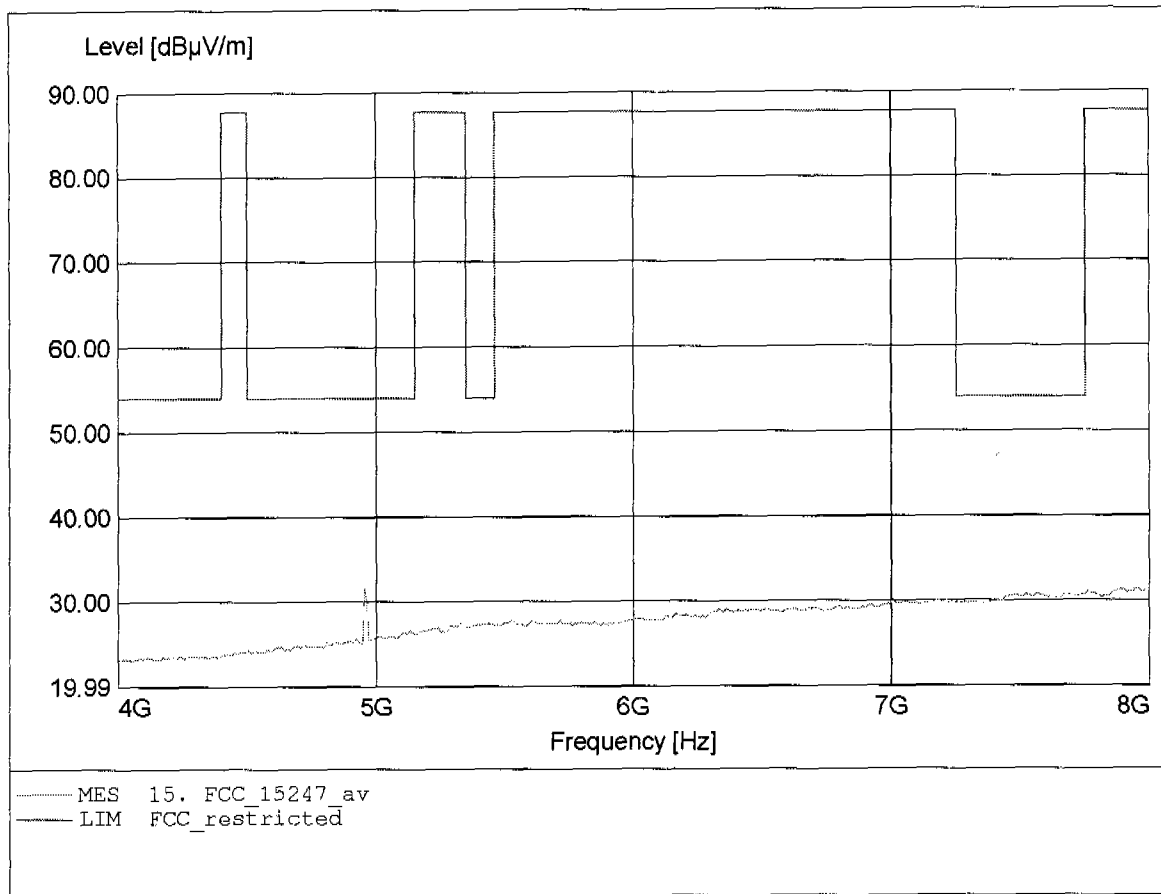
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 4.802GHz, Emax: 50.48dBμV/m, RBW: 1MHz



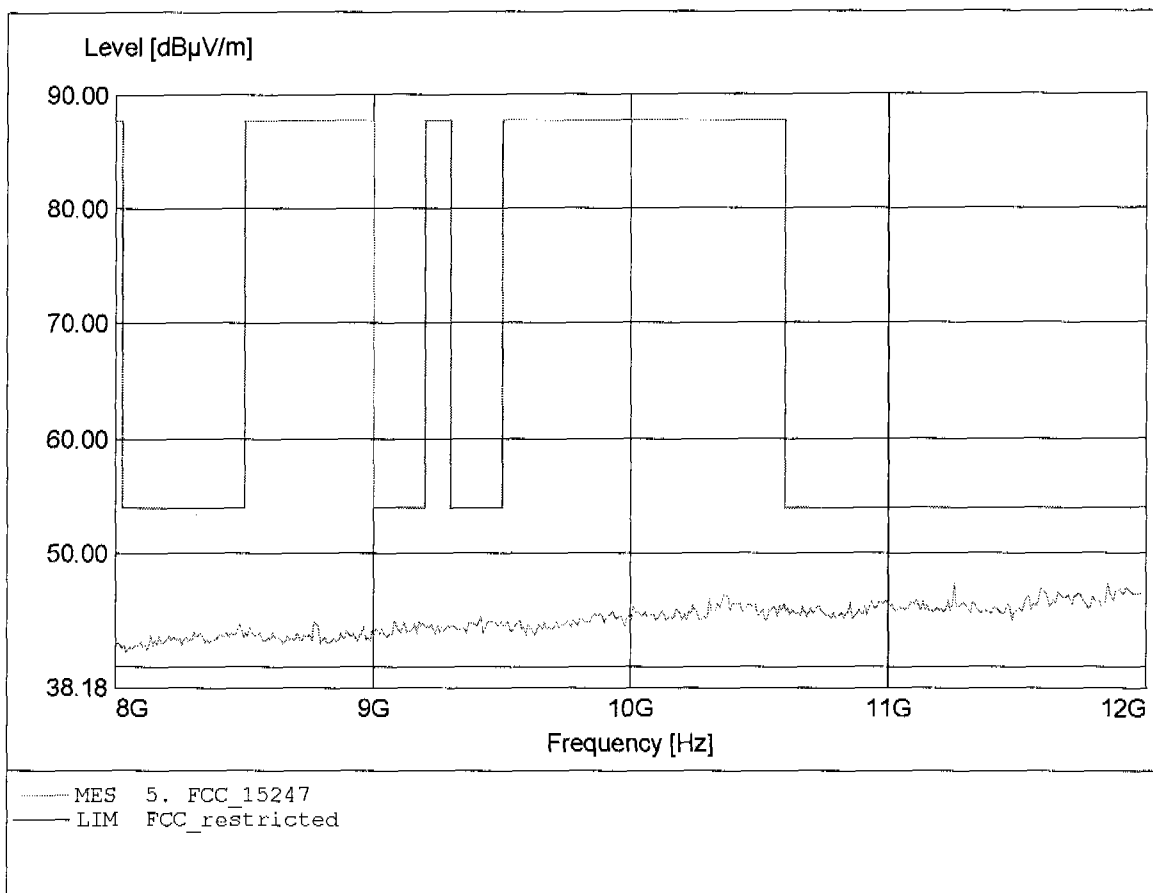
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, average detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 4.954GHz, Emax: 31.50dBμV/m, RBW: 1MHz



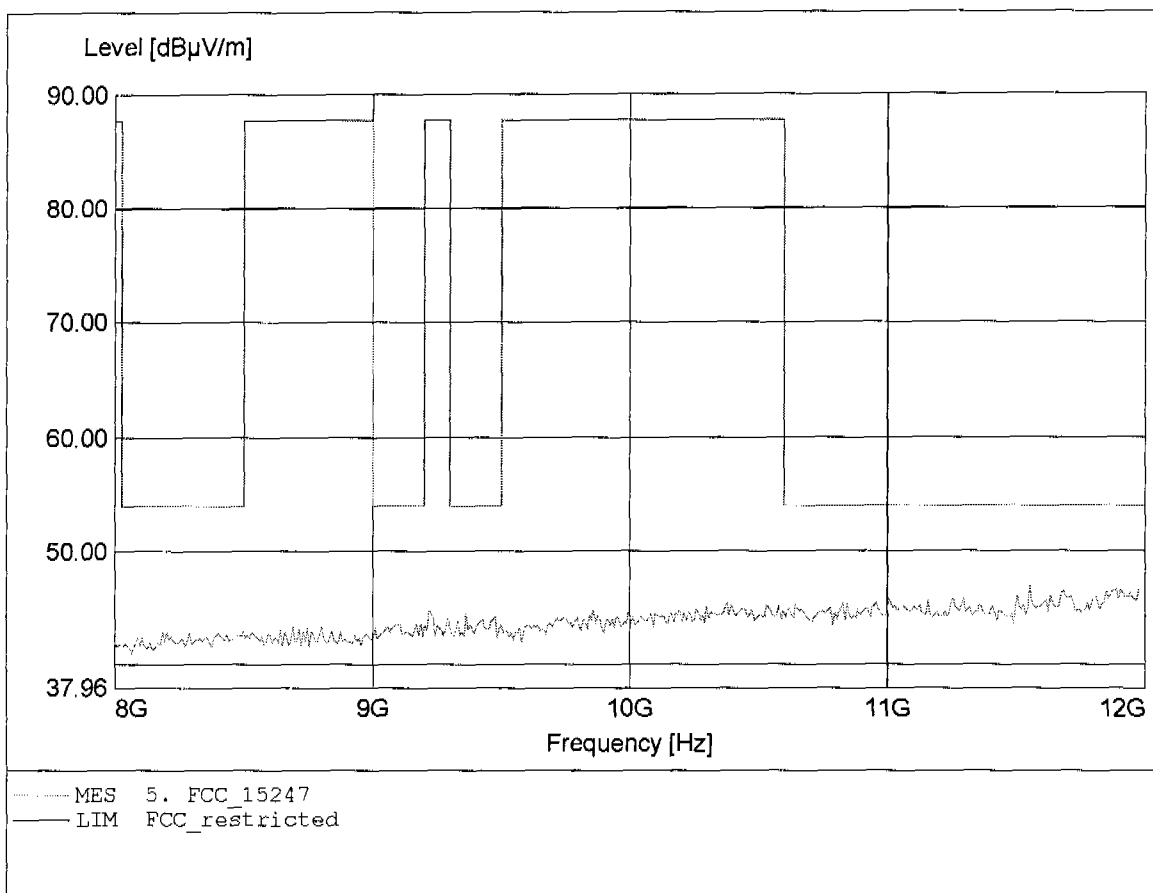
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 11.255GHz, Emax: 47.28dBμV/m, RBW: 1MHz



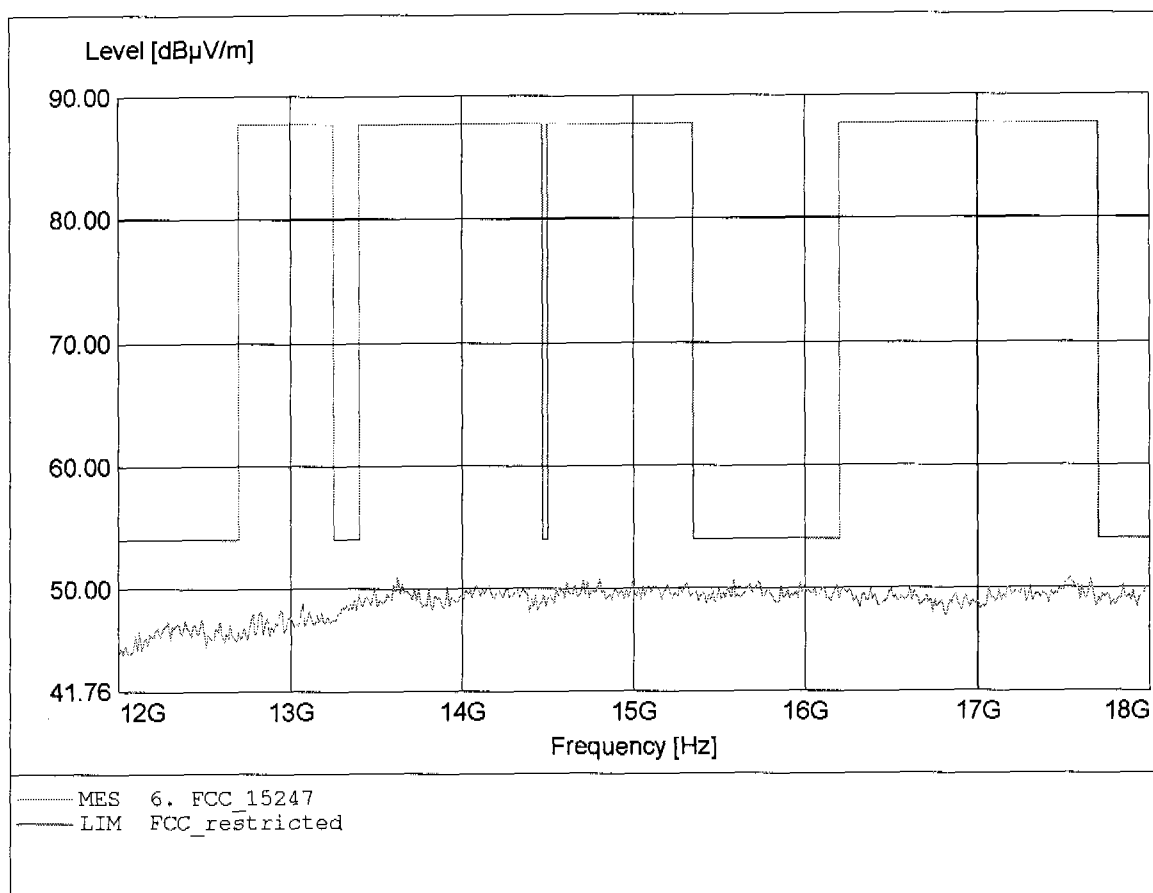
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 11.551GHz, Emax: 46.88dB μ V/m, RBW: 1MHz



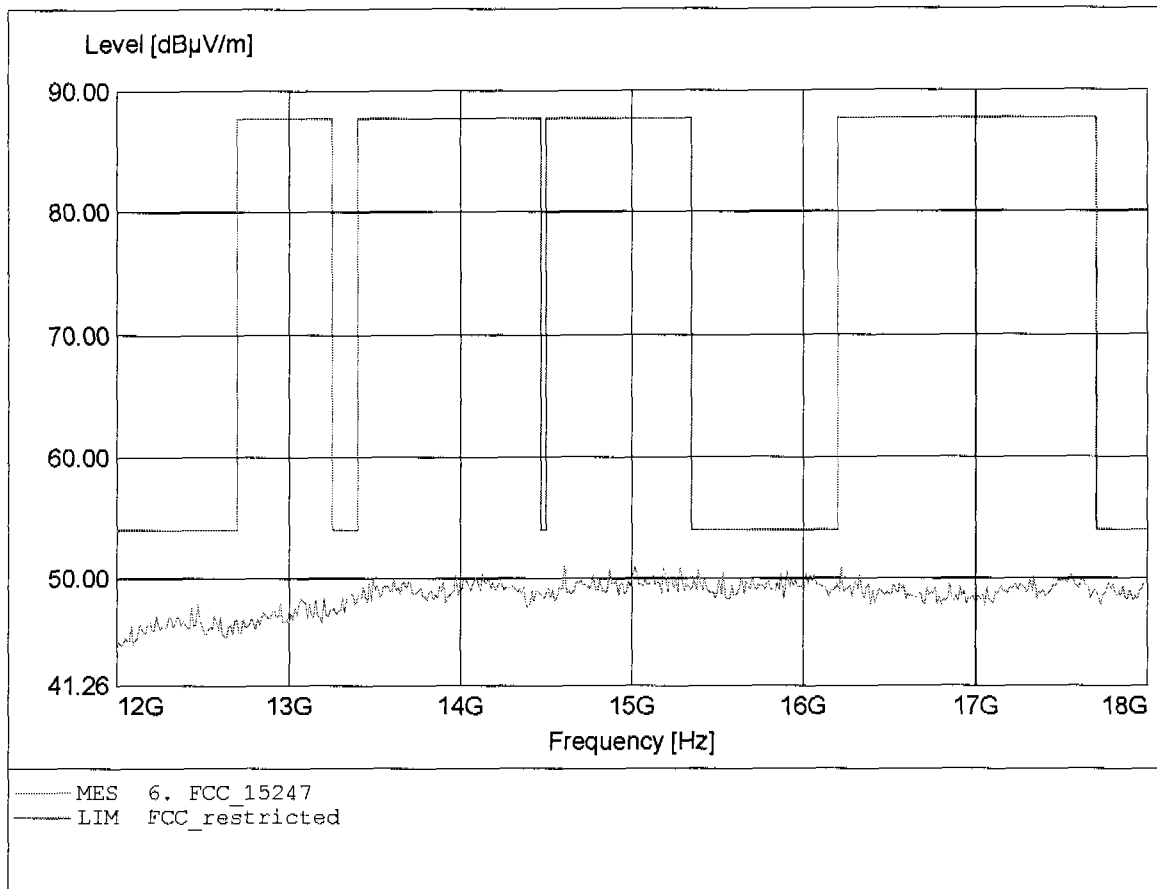
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 13.623GHz, Emax: 50.92dBµV/m, RBW: 1MHz



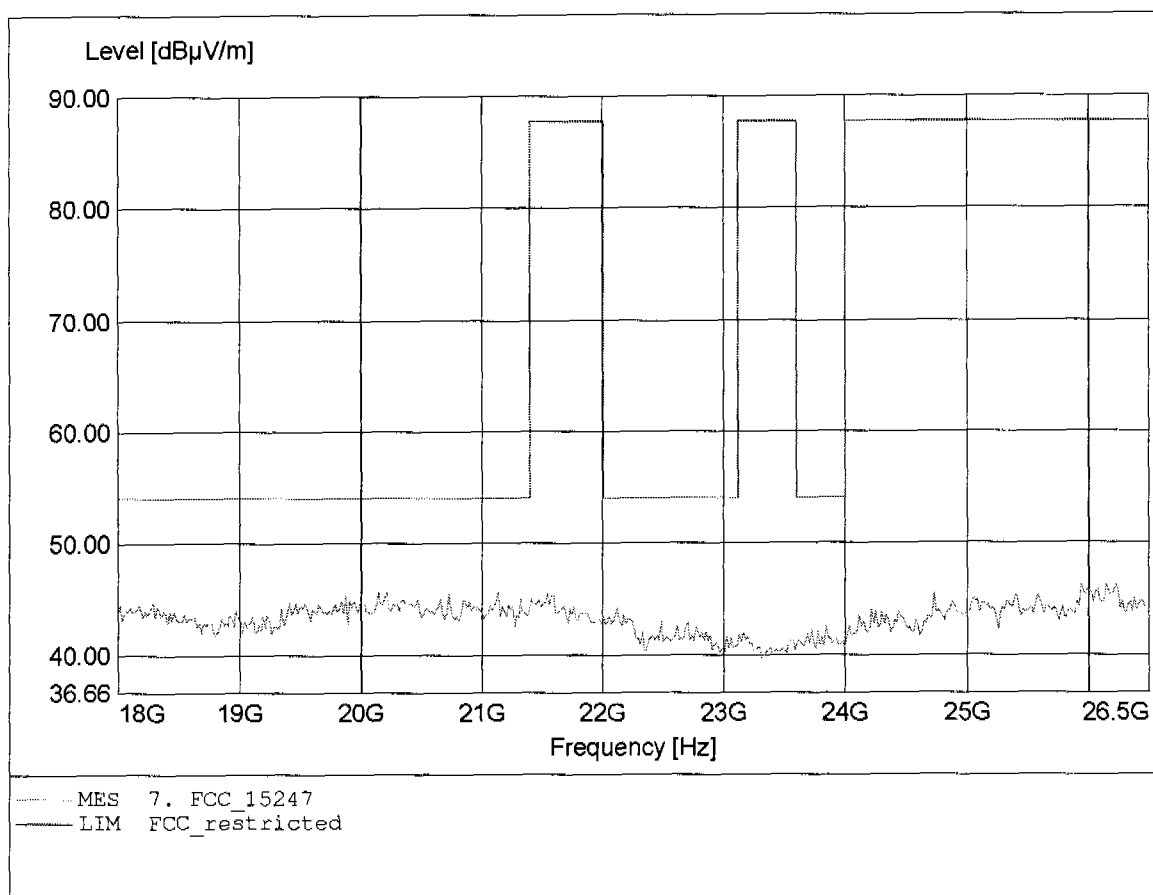
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 14.609GHz, Emax: 51.09dBµV/m, RBW: 1MHz



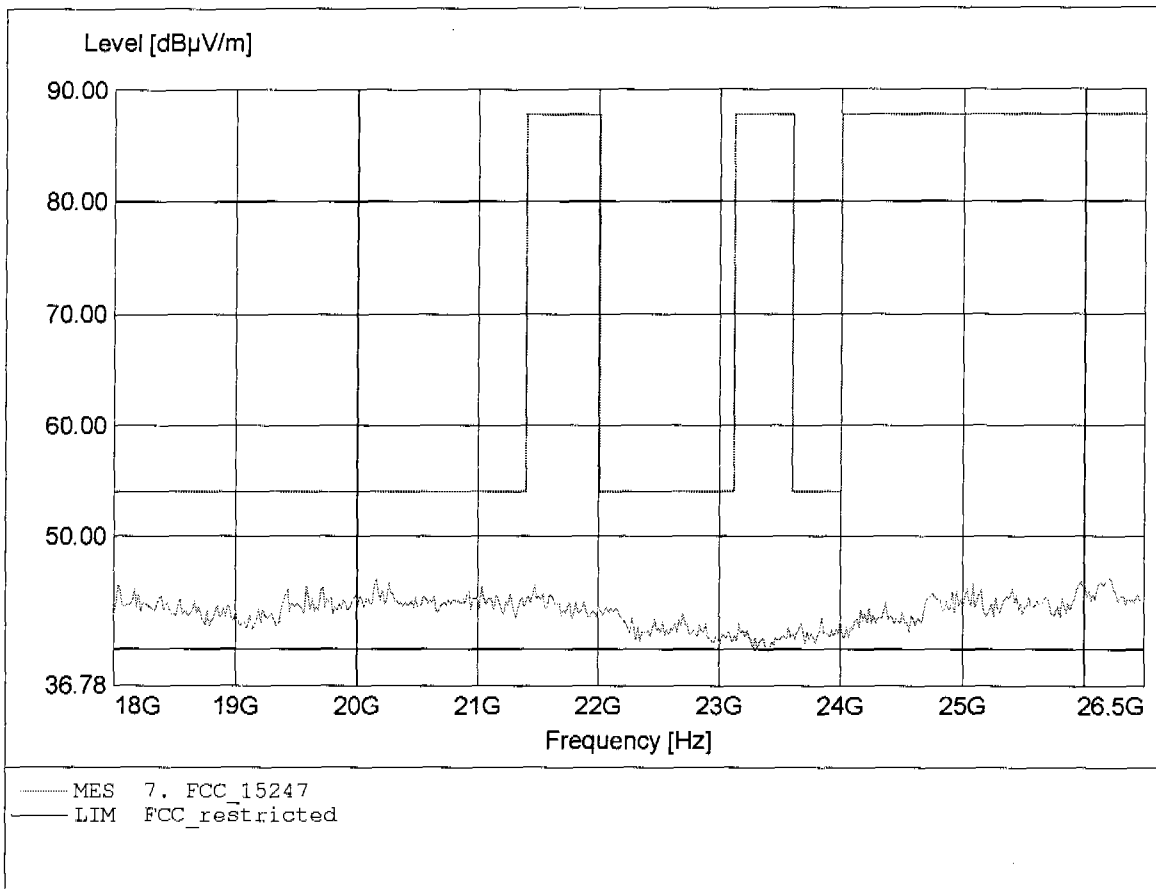
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 25.938GHz, Emax: 46.25dBμV/m, RBW: 1MHz



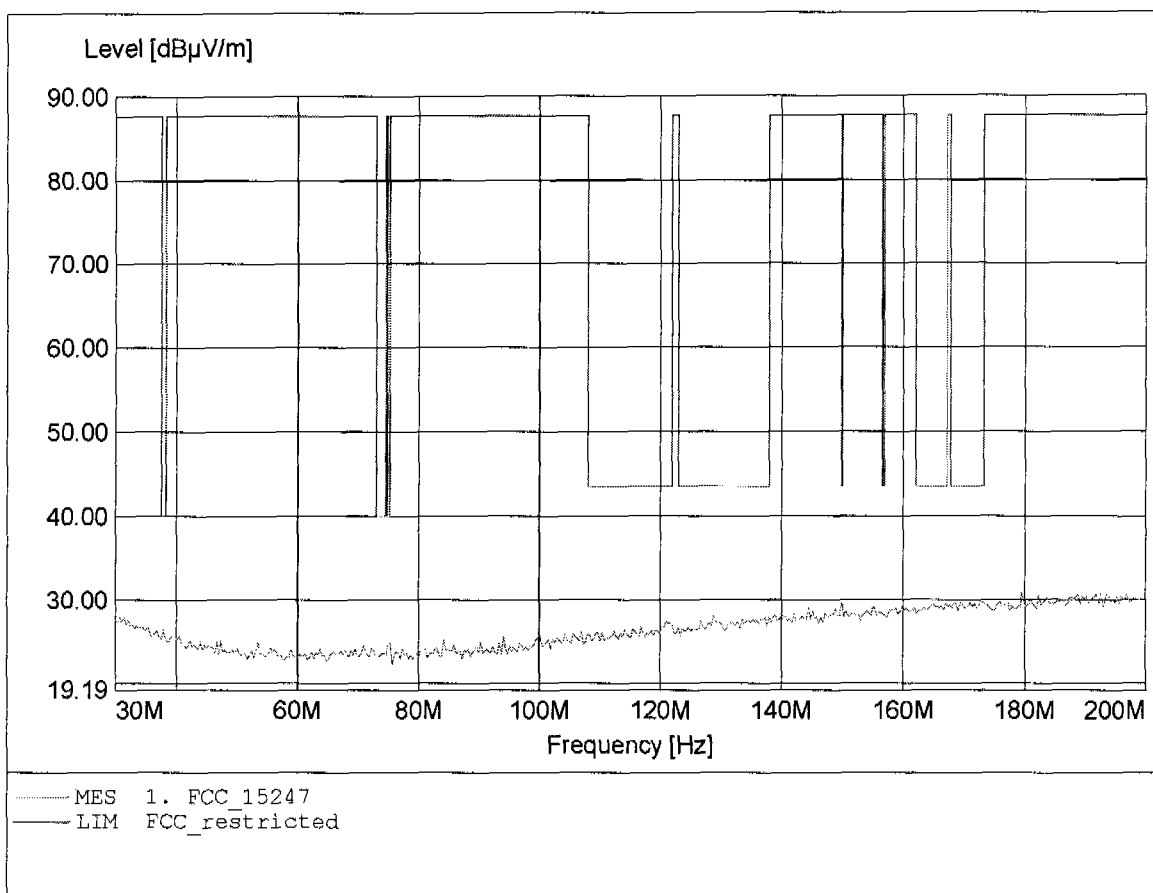
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2402MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 26.210GHz, Emax: 46.22dB μ V/m, RBW: 1MHz



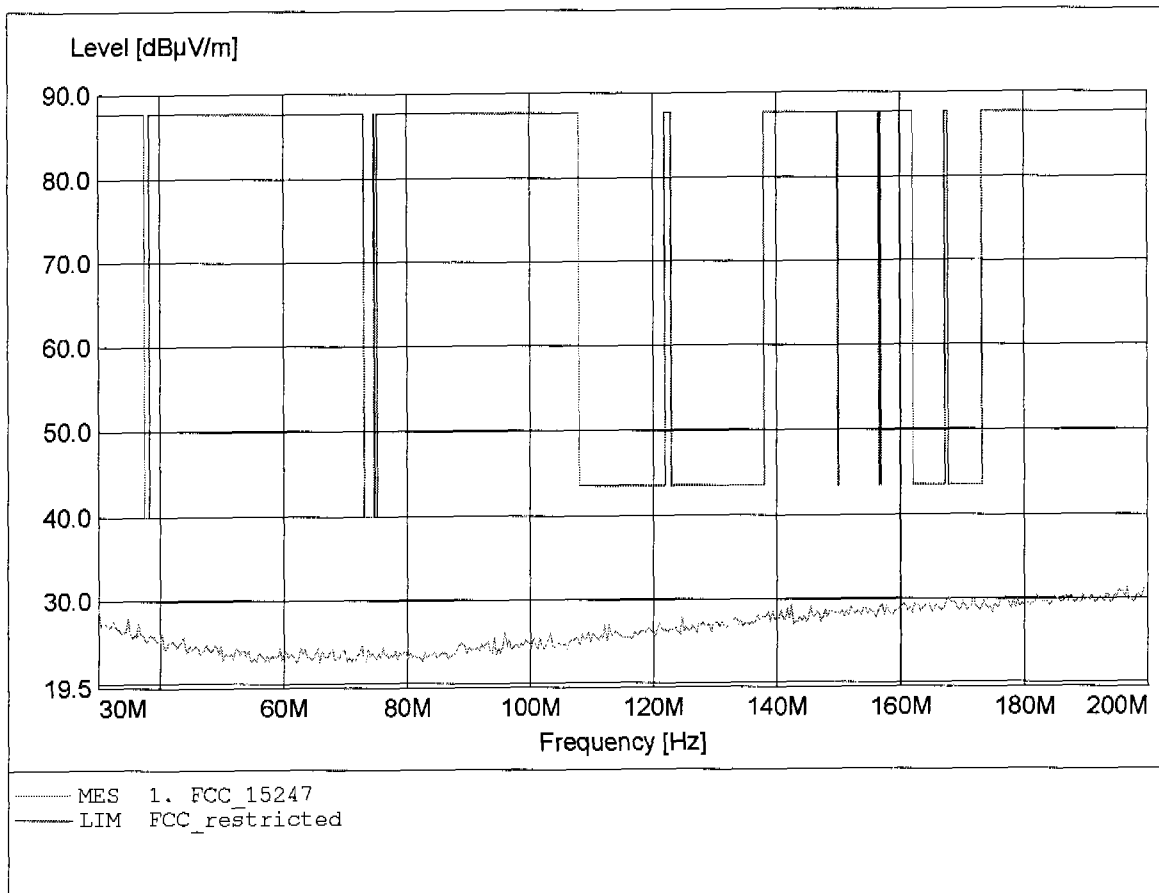
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to S15.247
Comment: Dist.: 3m, Ant.: HK 116
Freq: 179.559MHz, Emax: 30.84dB μ V/m, RBW: 100kHz



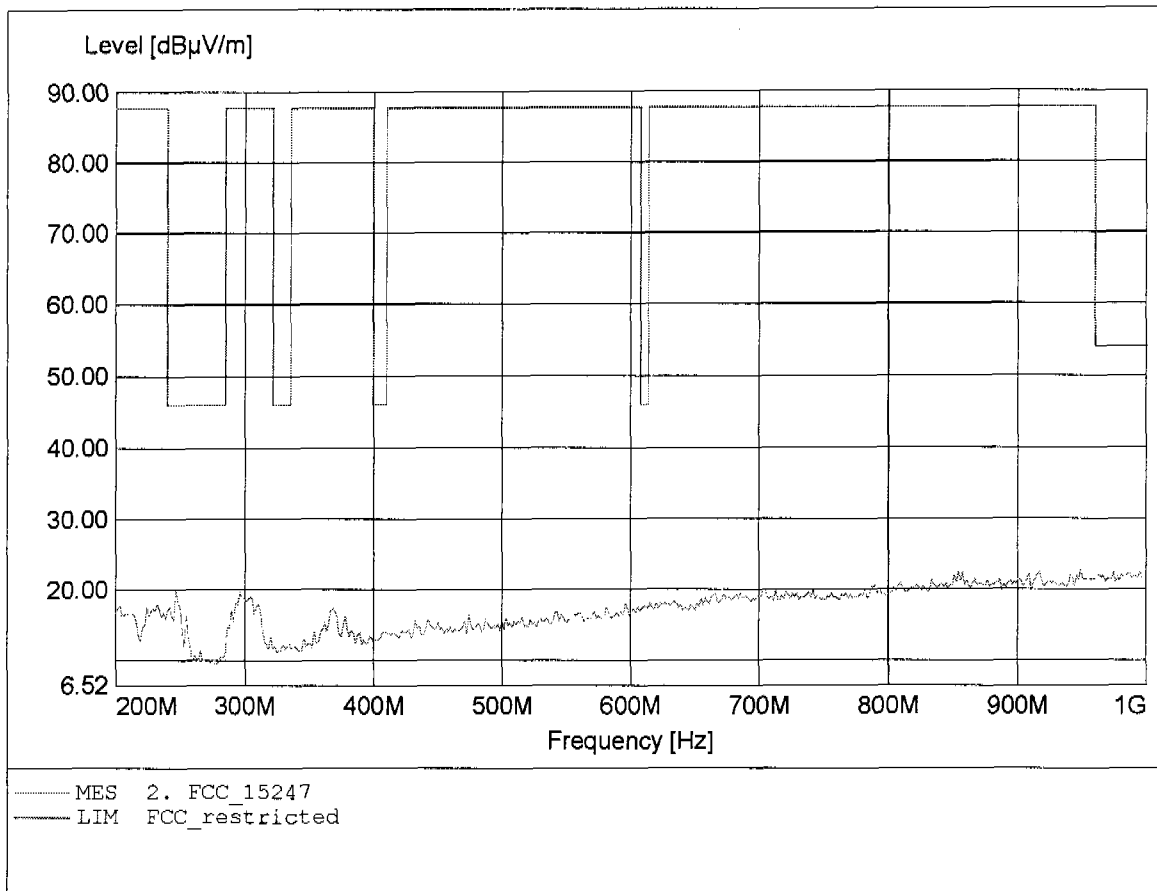
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HK 116
Freq: 196.593MHz, Emax: 31.22dB μ V/m, RBW: 100kHz



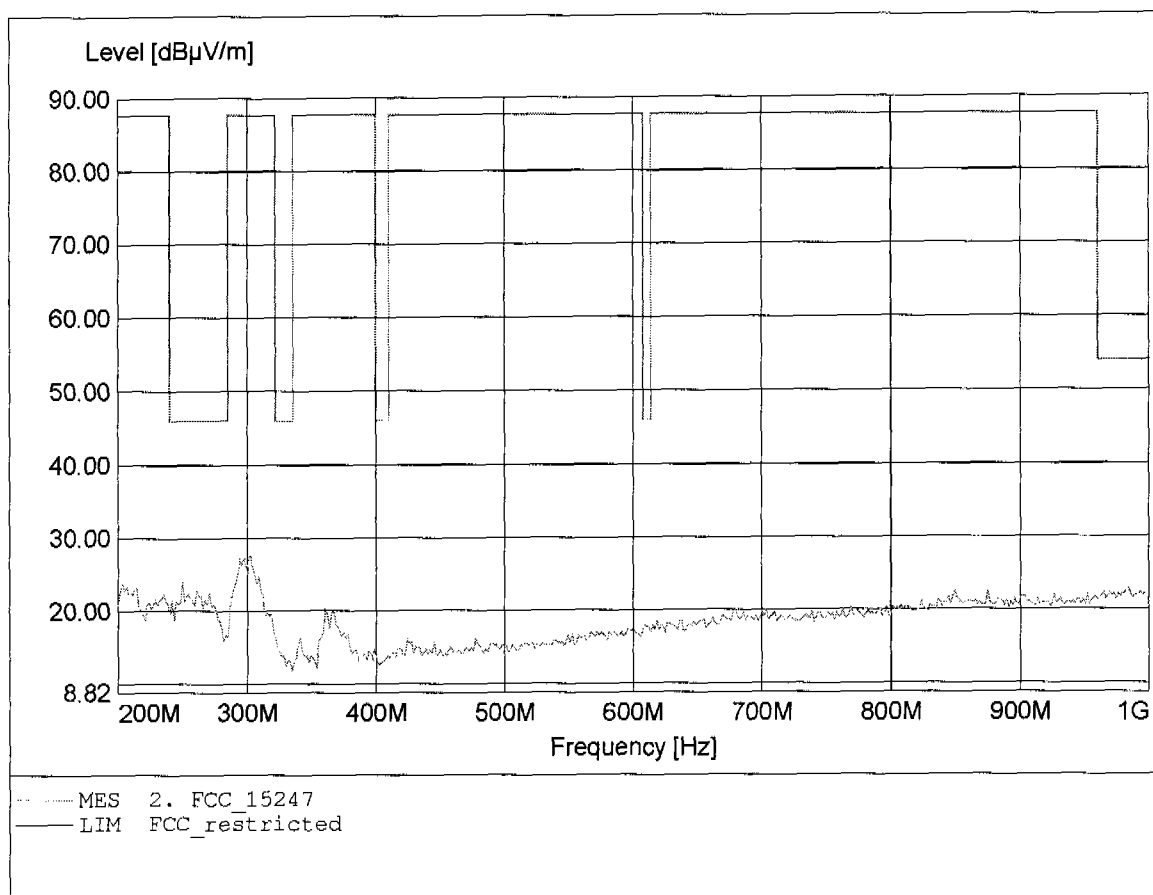
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL 223, amplif.
Freq: 948.697MHz, Emax: 22.86dBµV/m, RBW: 100kHz



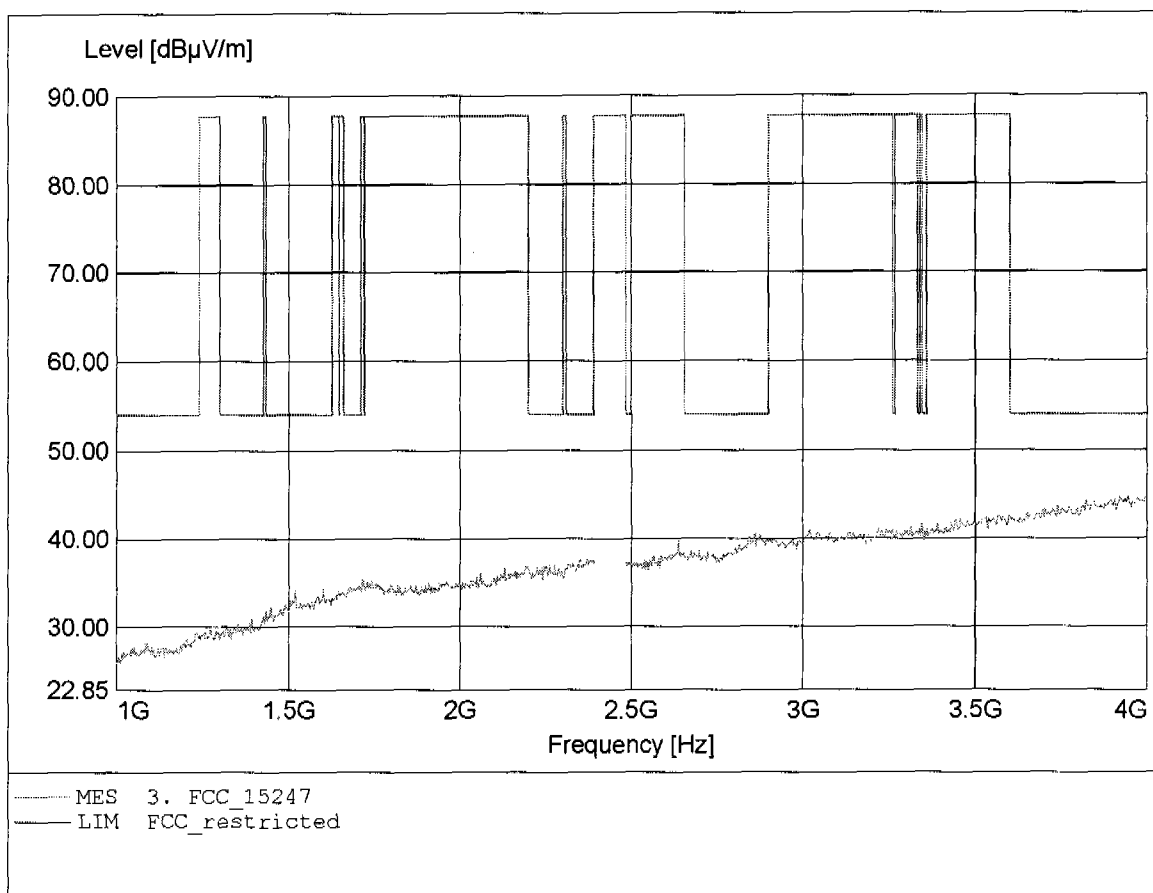
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL 223, amplif.
Freq: 302.605MHz, Emax: 27.77dBµV/m, RBW: 100kHz



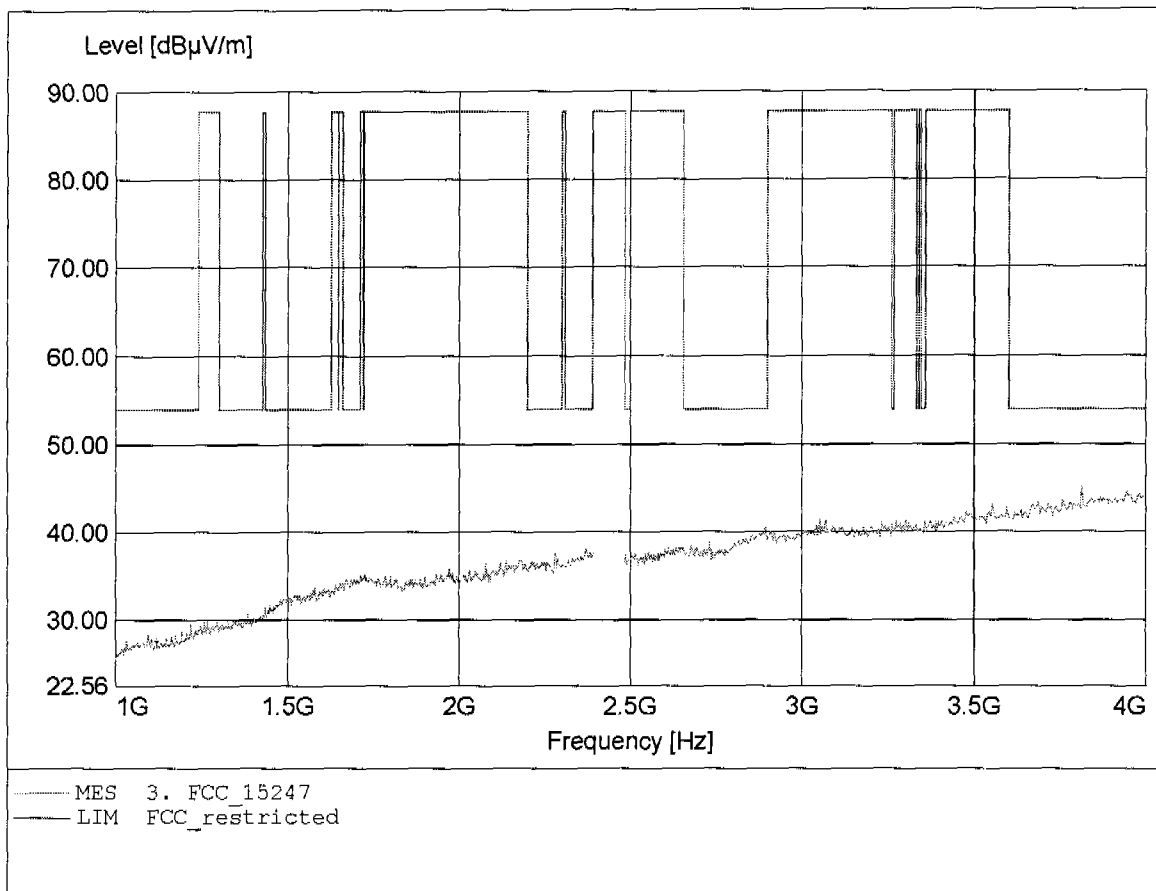
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 3.945GHz, Emax: 44.76dB μ V/m, RBW: 1MHz



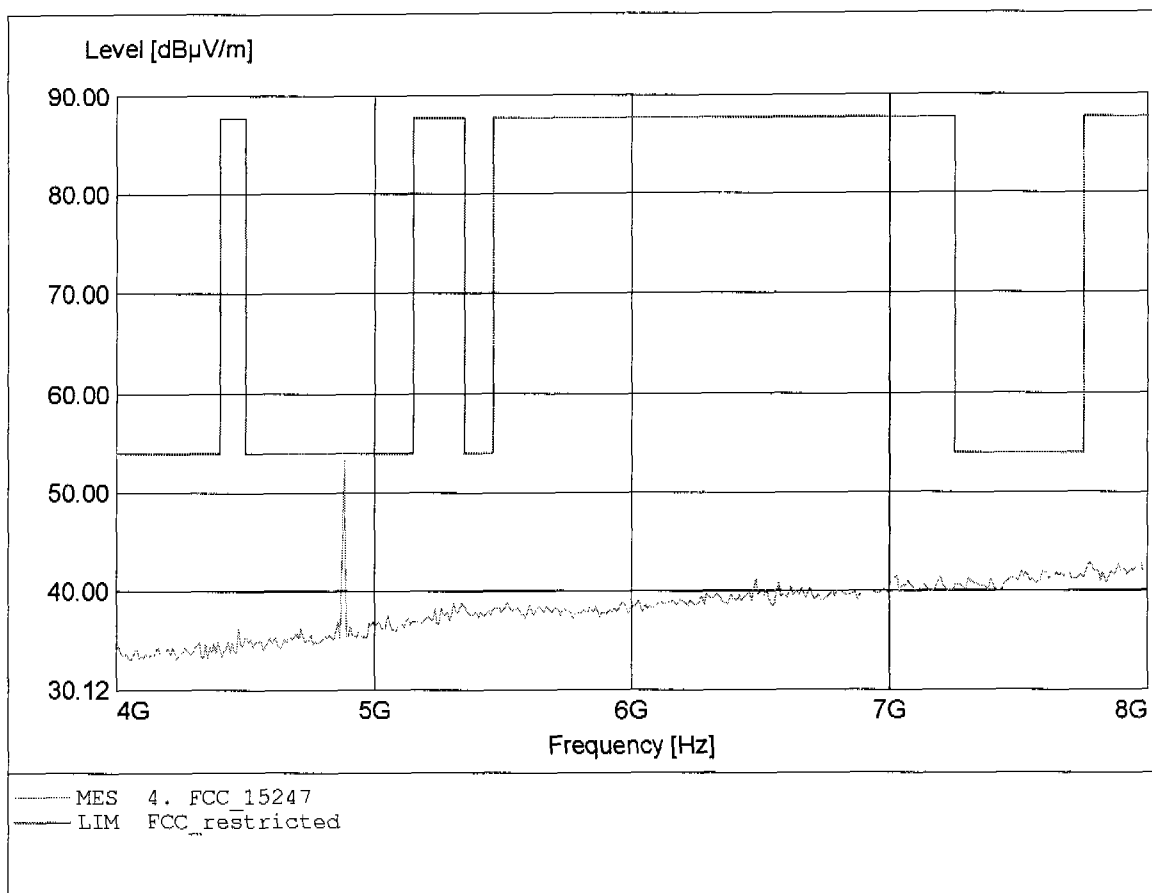
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 3.812GHz, Emax: 45.15dB μ V/m, RBW: 1MHz



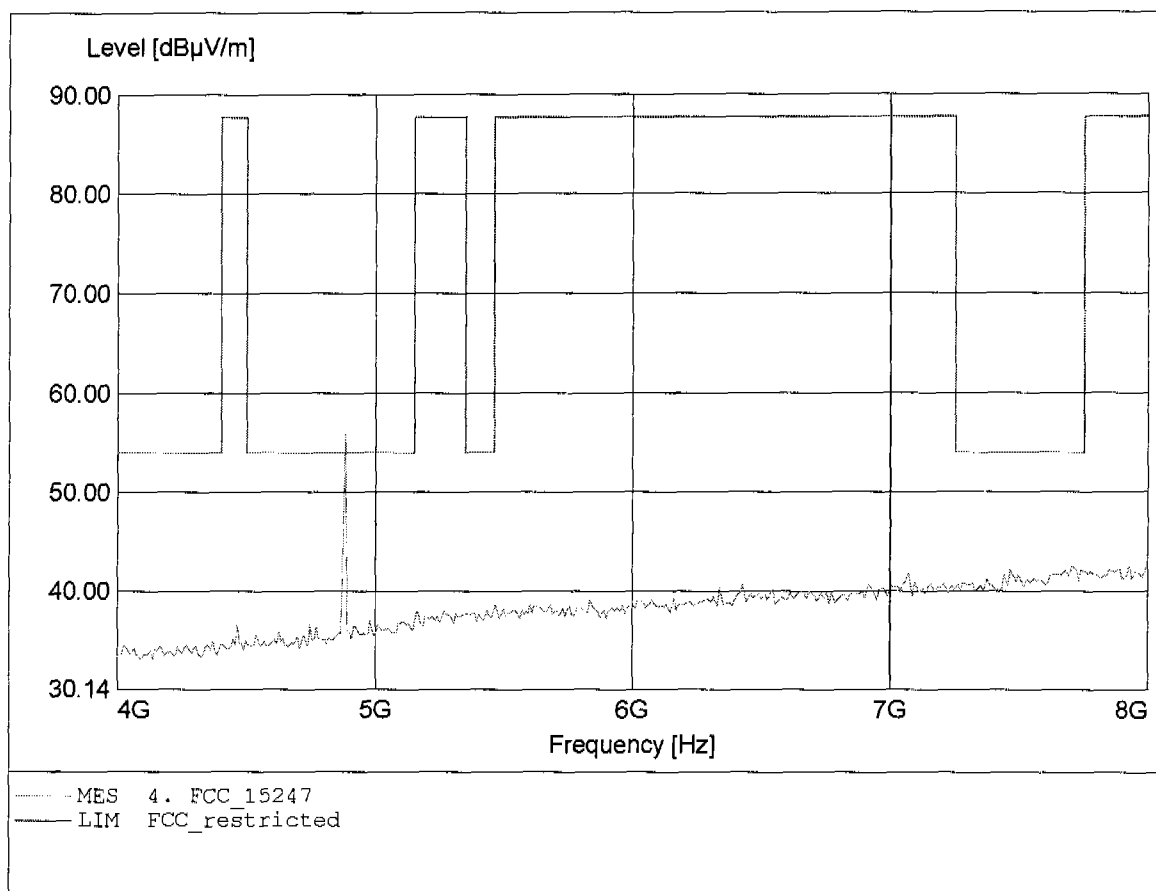
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 4.882GHz, Emax: 53.26dB μ V/m, RBW: 1MHz



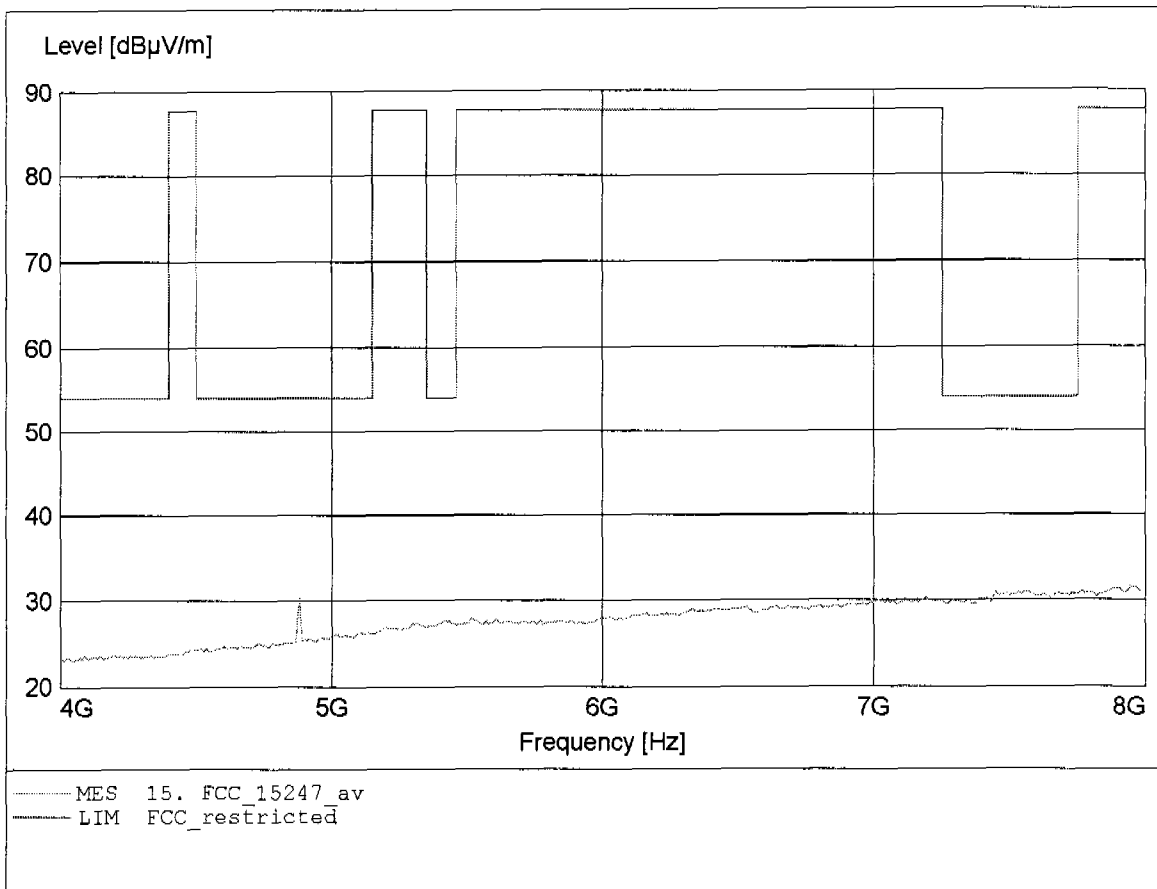
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 4.882GHz, Emax: 55.86dBµV/m, RBW: 1MHz



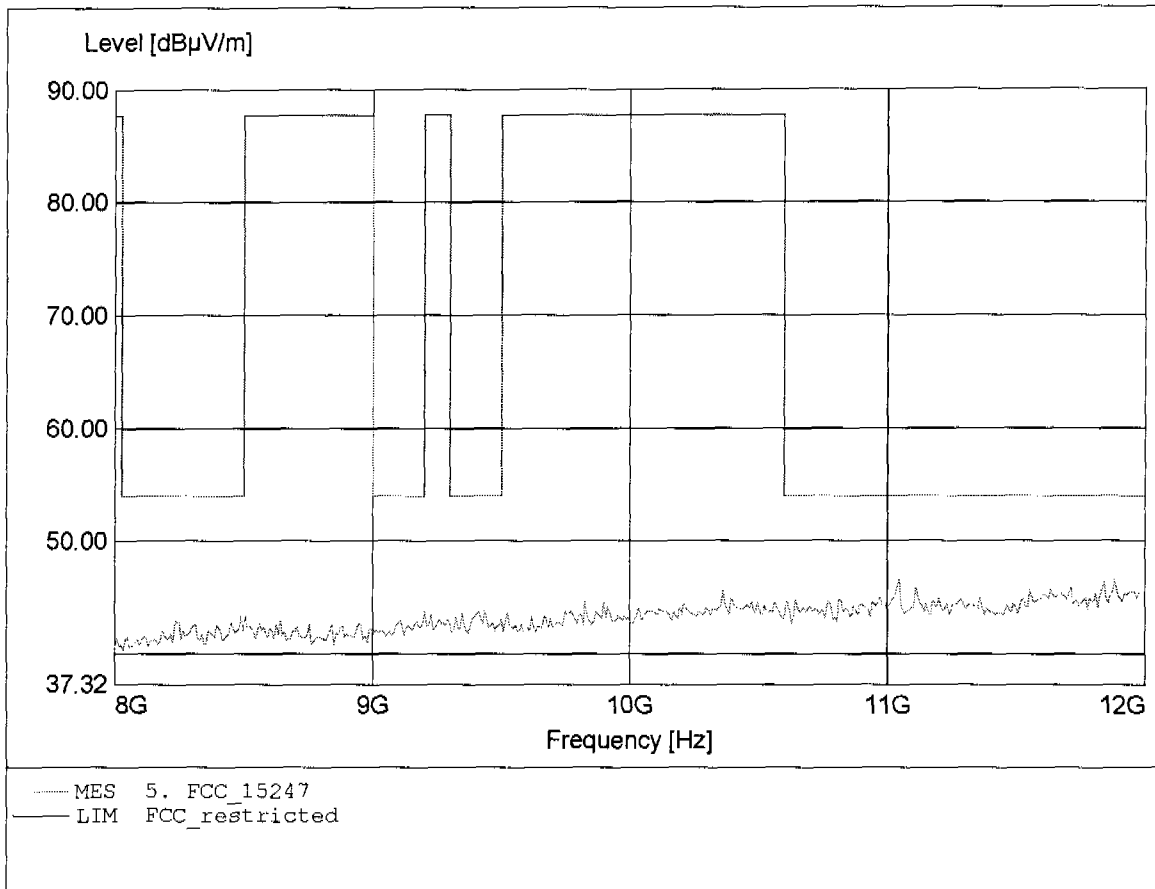
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, average detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 7.944GHz, Emax: 31.55dB μ V/m, RBW: 1MHz



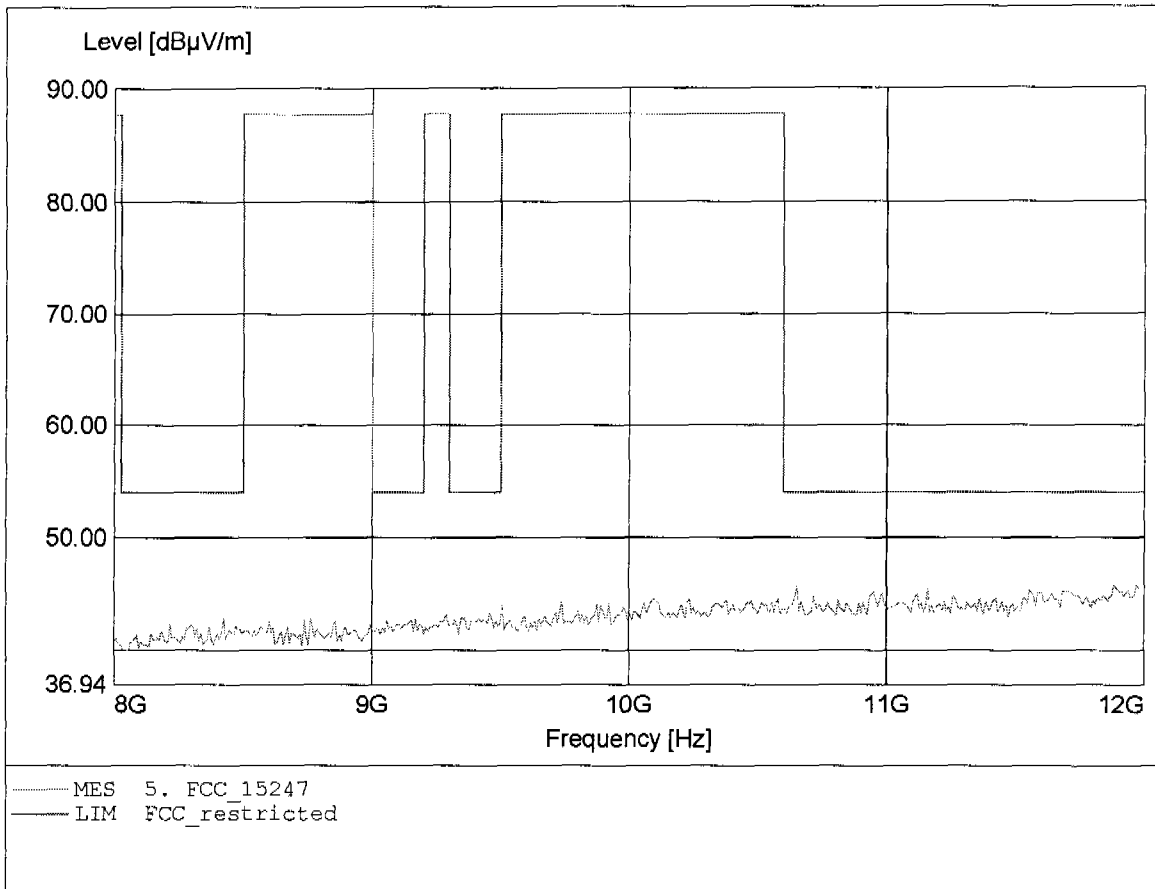
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 11.046GHz, Emax: 46.58dBµV/m, RBW: 1MHz



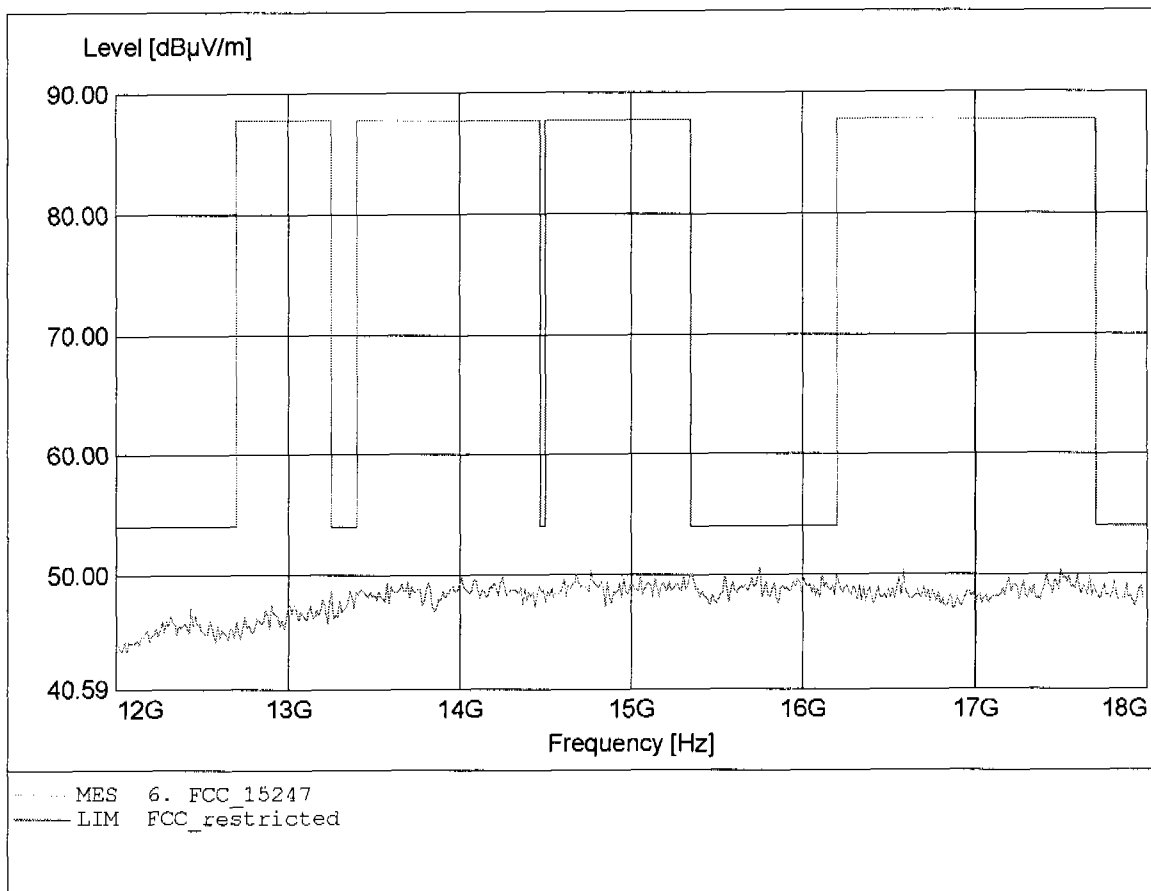
Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to S15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 11.880GHz, Emax: 45.88dB μ V/m, RBW: 1MHz



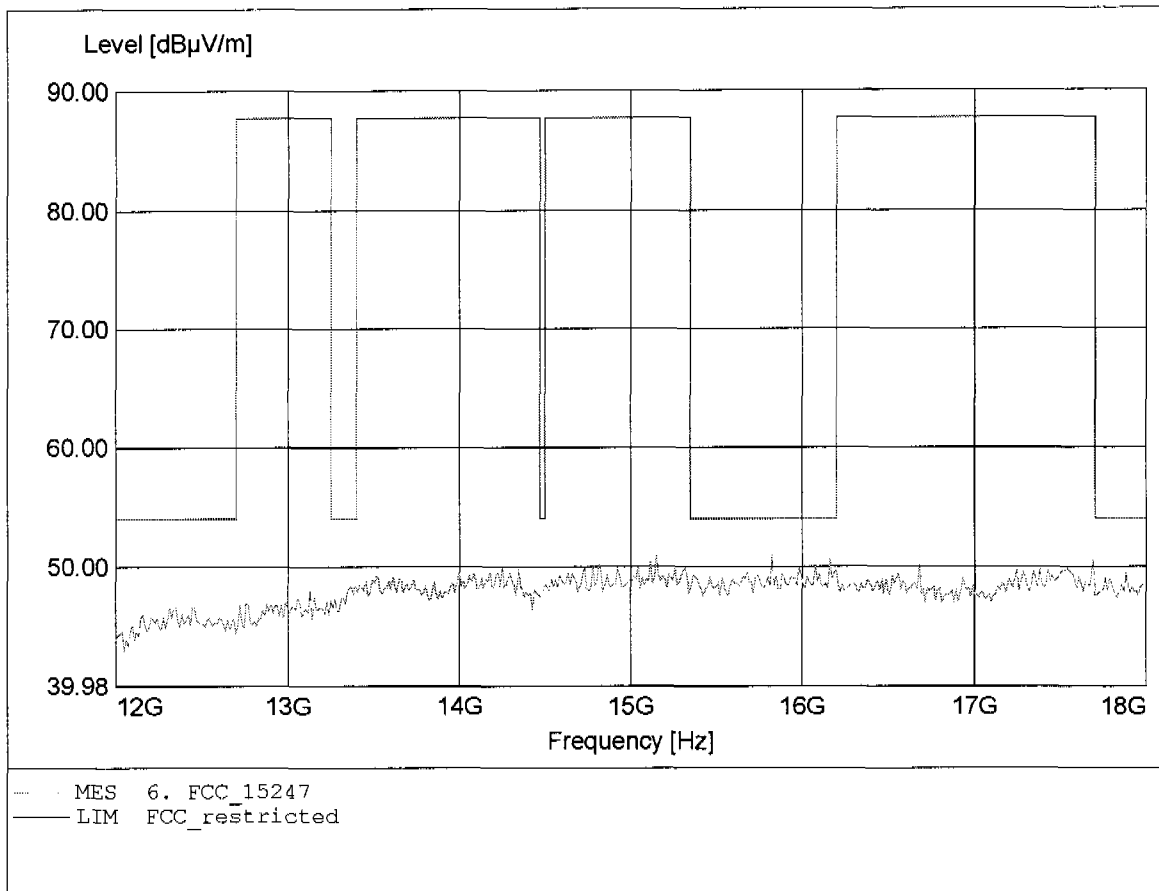
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 15.752GHz, Emax: 50.58dB μ V/m, RBW: 1MHz



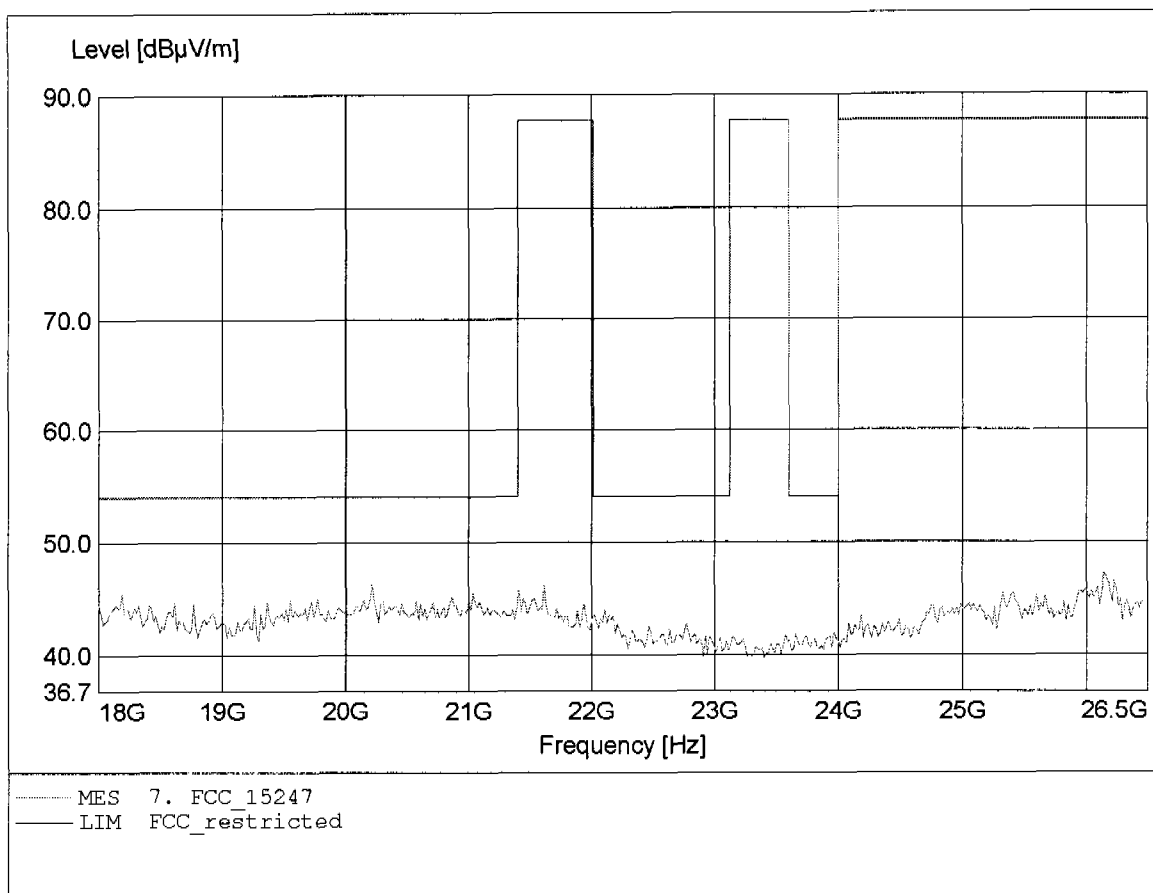
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 15.824GHz, Emax: 50.93dBμV/m, RBW: 1MHz



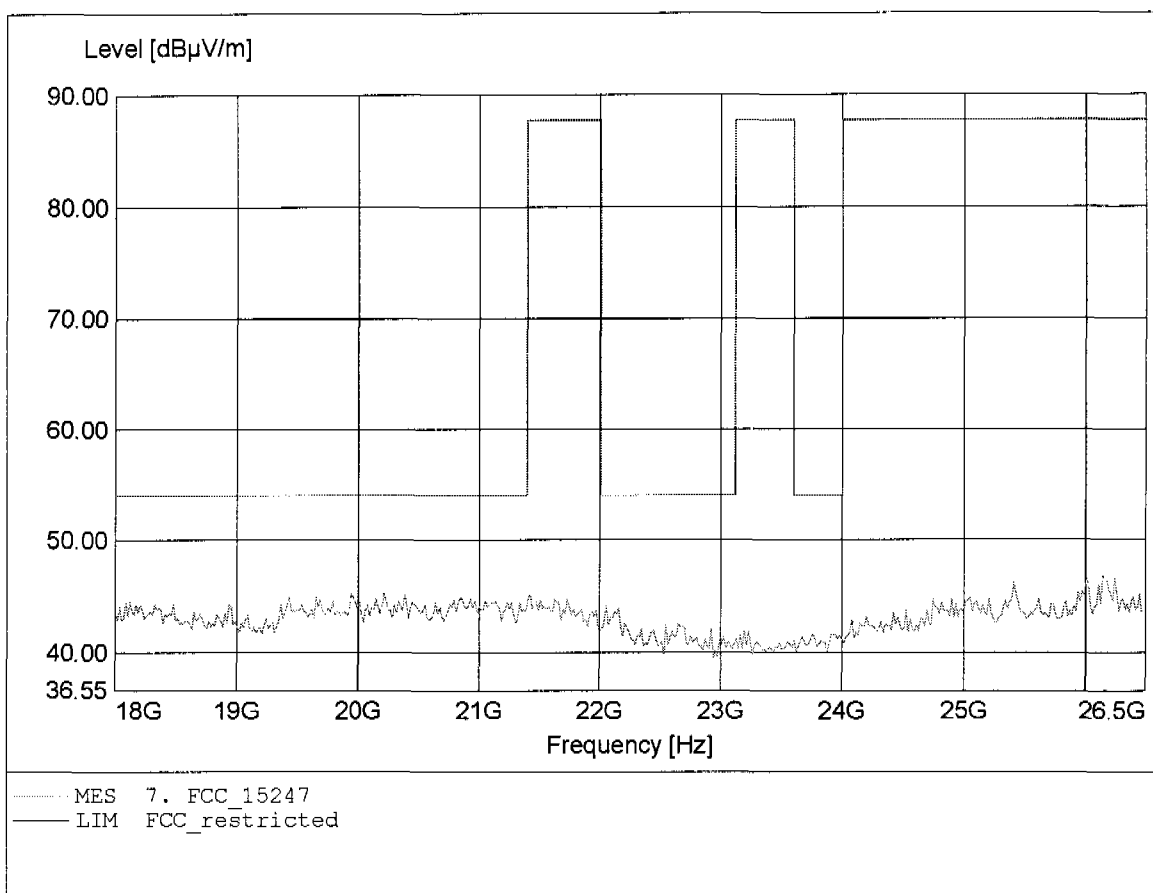
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 26.142GHz, Emax: 47.27dBµV/m, RBW: 1MHz



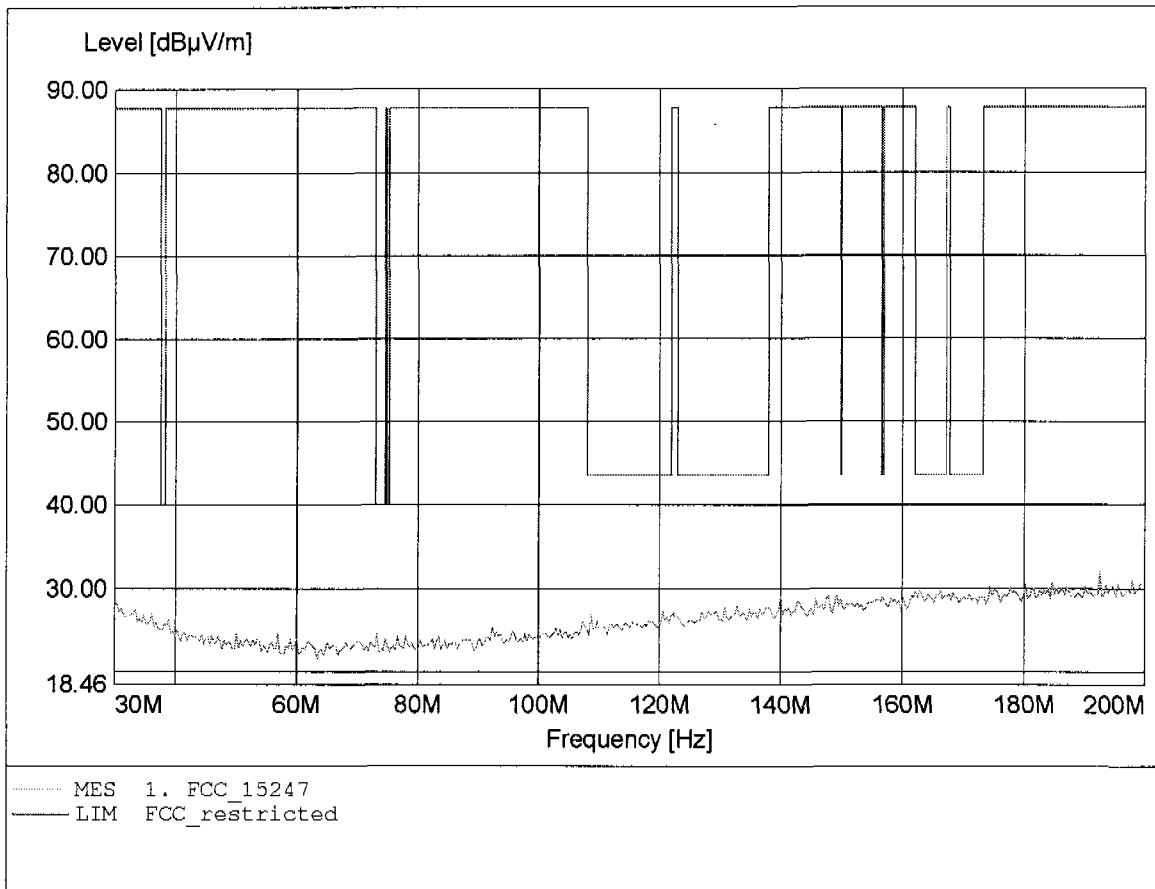
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2441MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 26.142GHz, Emax: 46.84dB μ V/m, RBW: 1MHz



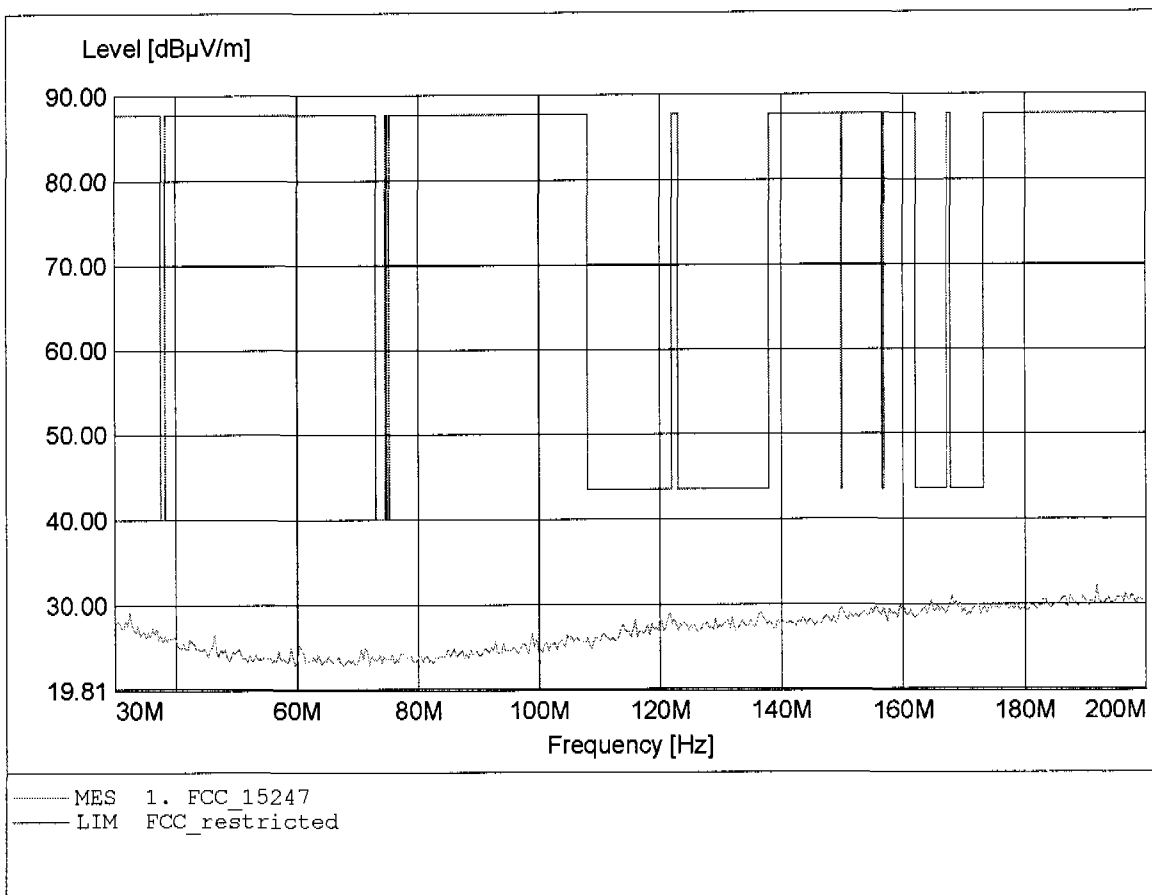
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HK 116
Freq: 192.505MHz, Emax: 31.99dB μ V/m, RBW: 100kHz



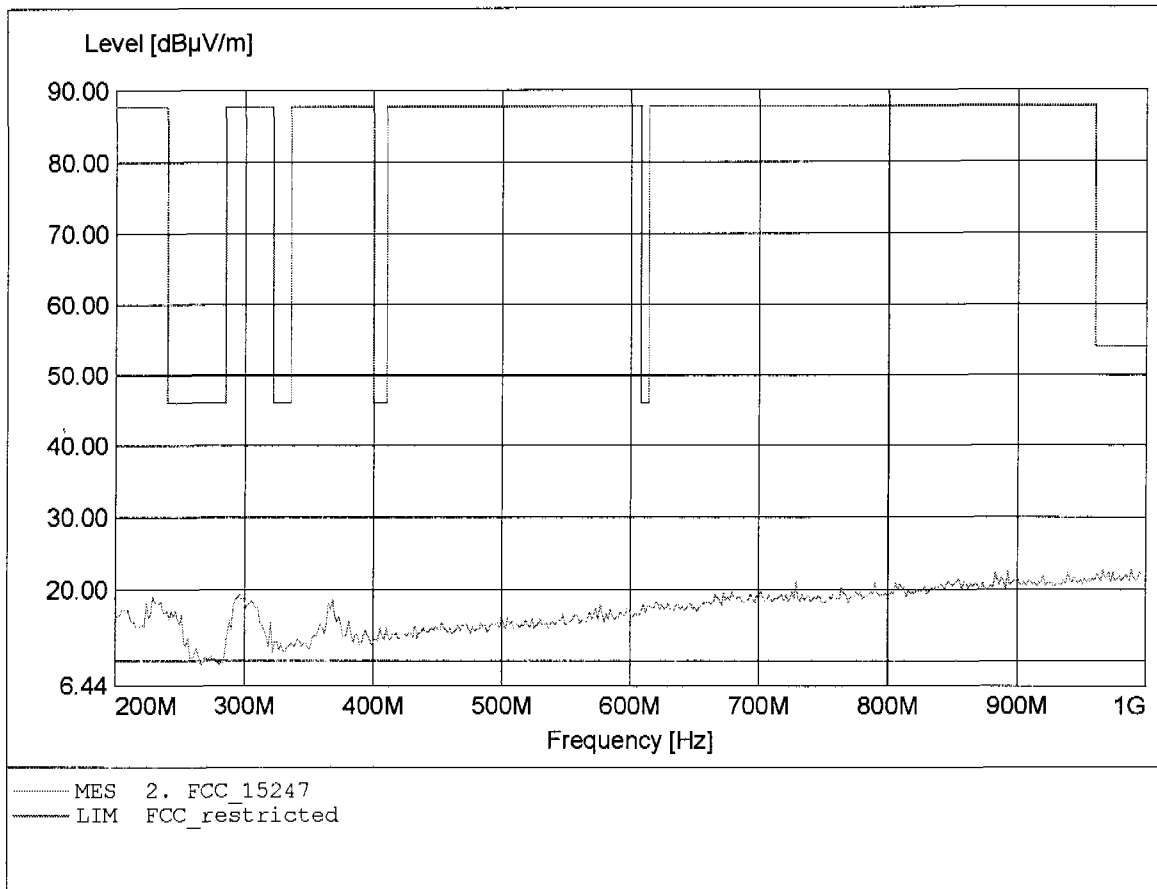
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HK 116
Freq: 191.824MHz, Emax: 32.08dB μ V/m, RBW: 100kHz



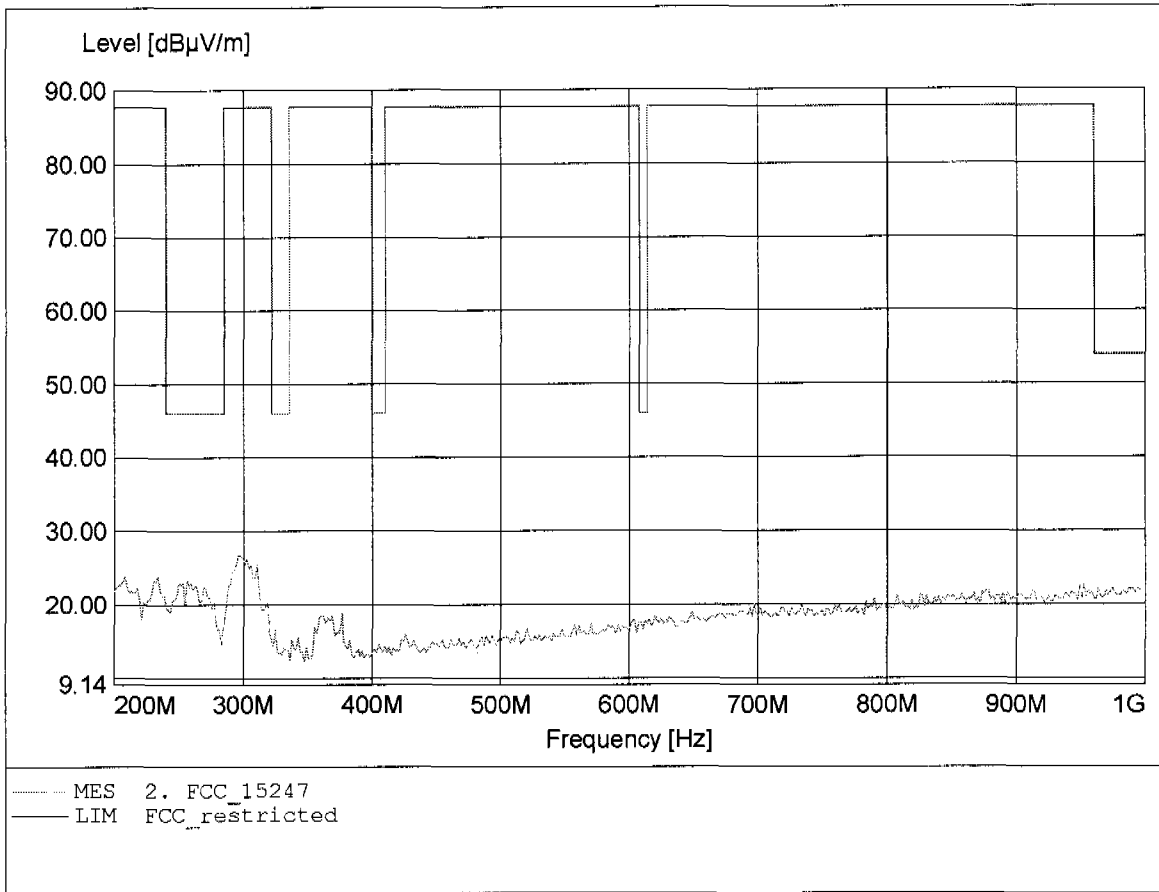
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL 223, amplif.
Freq: 966.333MHz, Emax: 22.74dB μ V/m, RBW: 100kHz



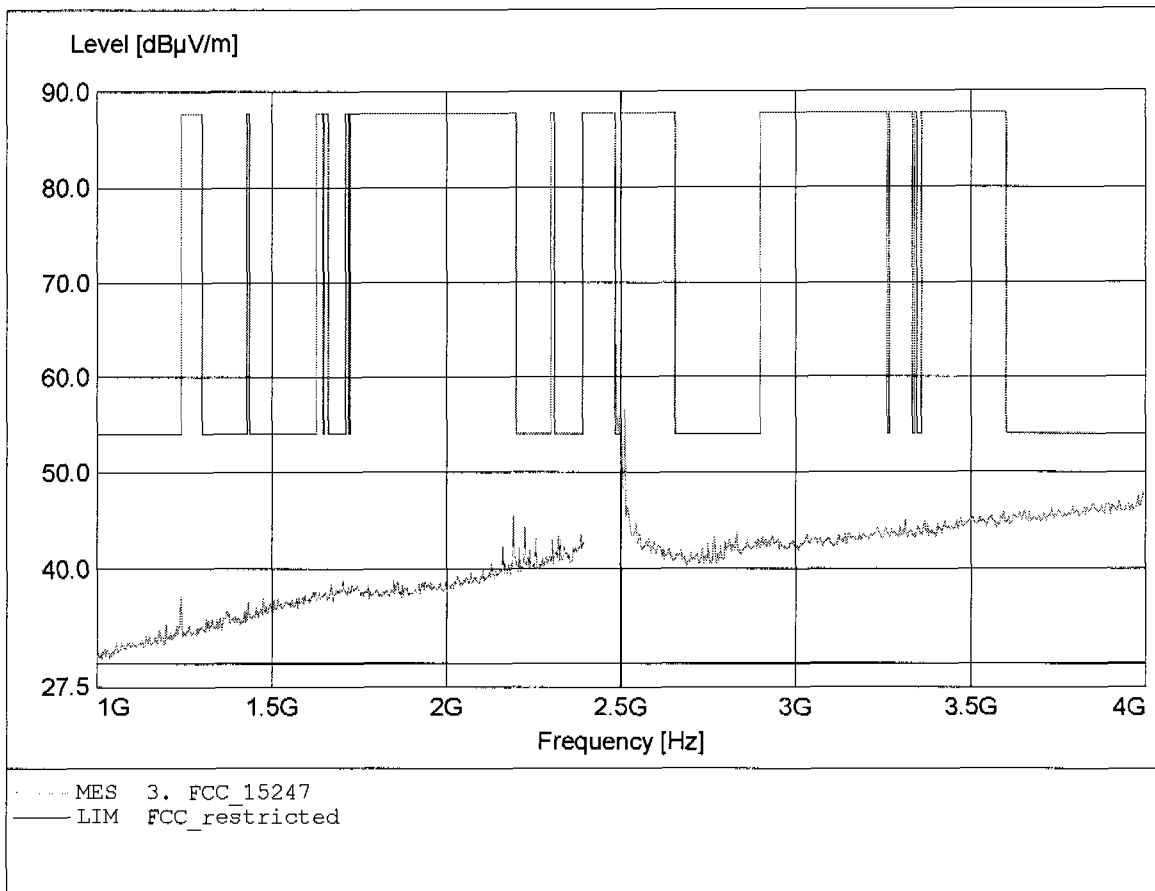
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247
Comment: Dist.: 3m, Ant.: HL 223, amplif.
Freq: 296.192MHz, Emax: 26.74dB μ V/m, RBW: 100kHz



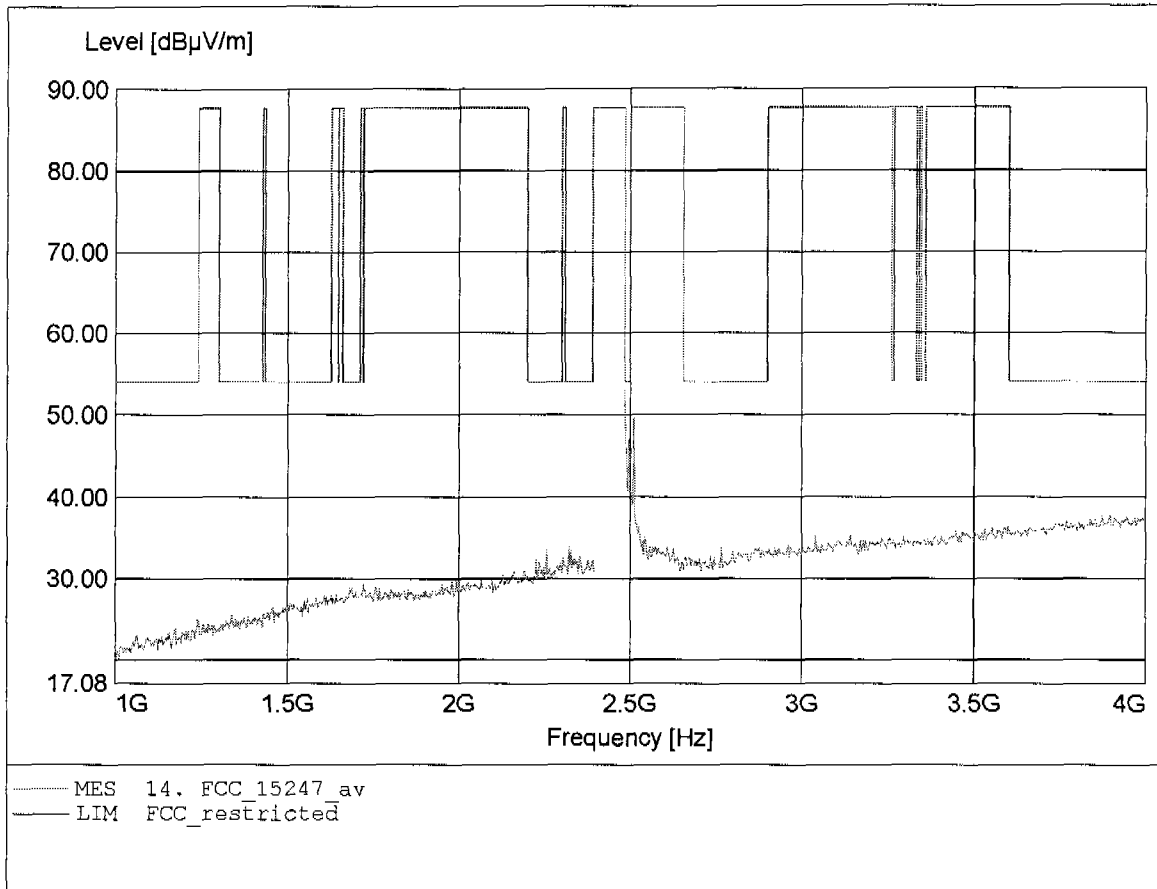
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 2.484GHz, Emax: 67.63dB μ V/m, RBW: 1MHz



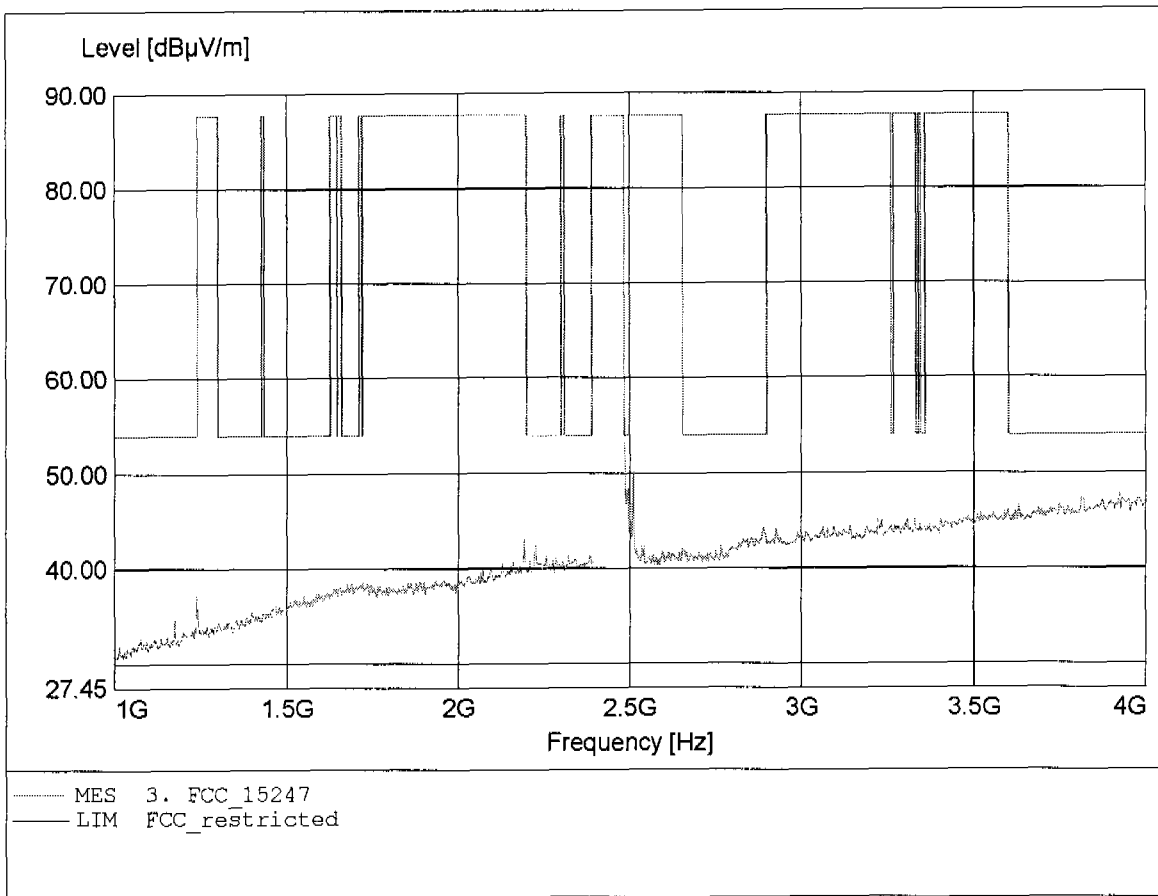
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, average detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 2.484GHz, Emax: 53.15dB μ V/m, RBW: 1MHz



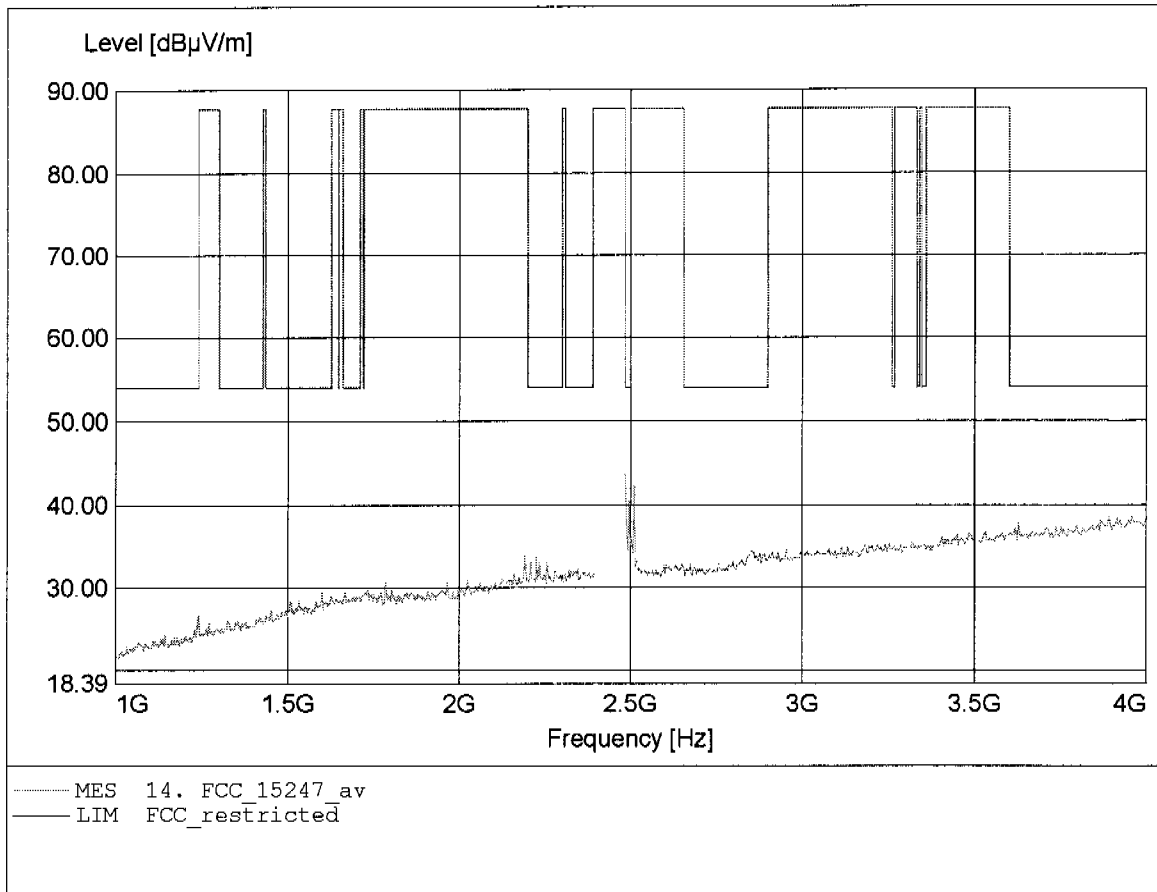
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 2.484GHz, Emax: 58.34dBuV/m, RBW: 1MHz



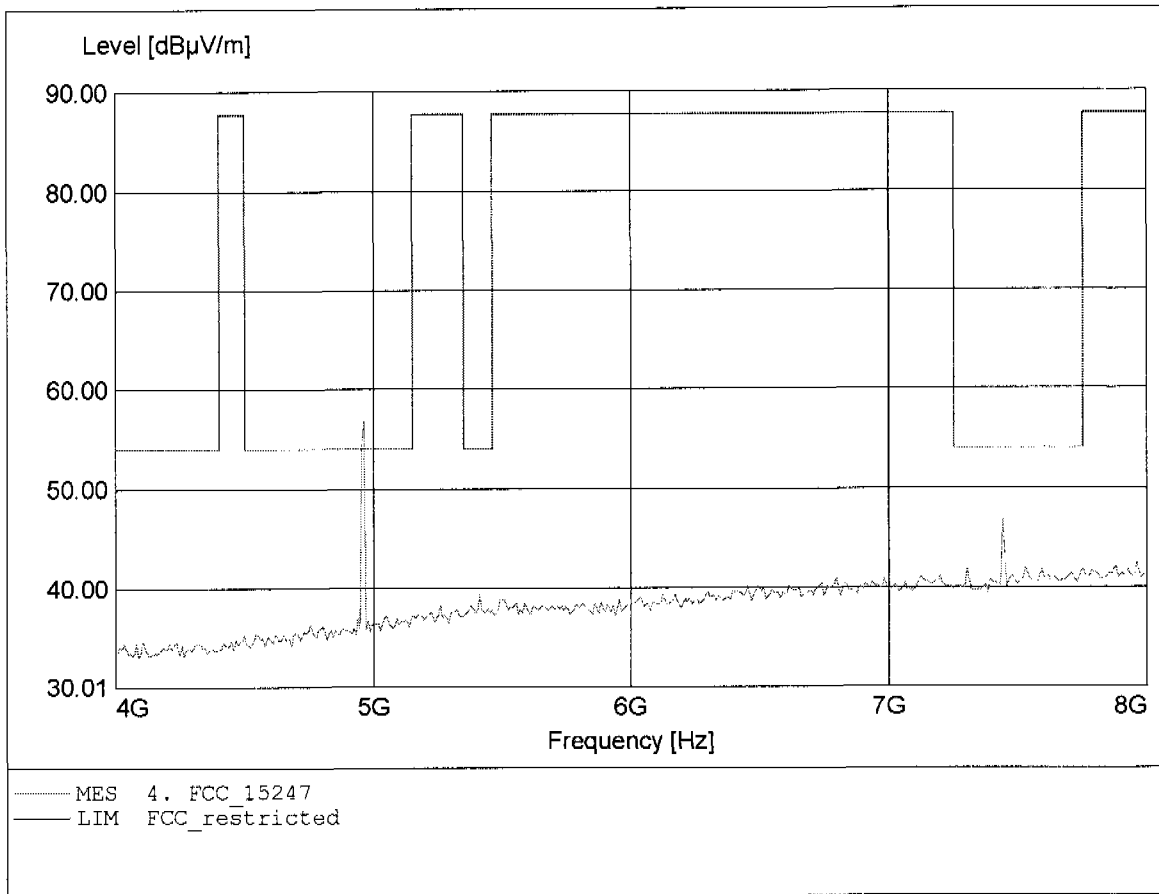
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to S15.247, average detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 2.484GHz, Emax: 44.89dB μ V/m, RBW: 1MHz



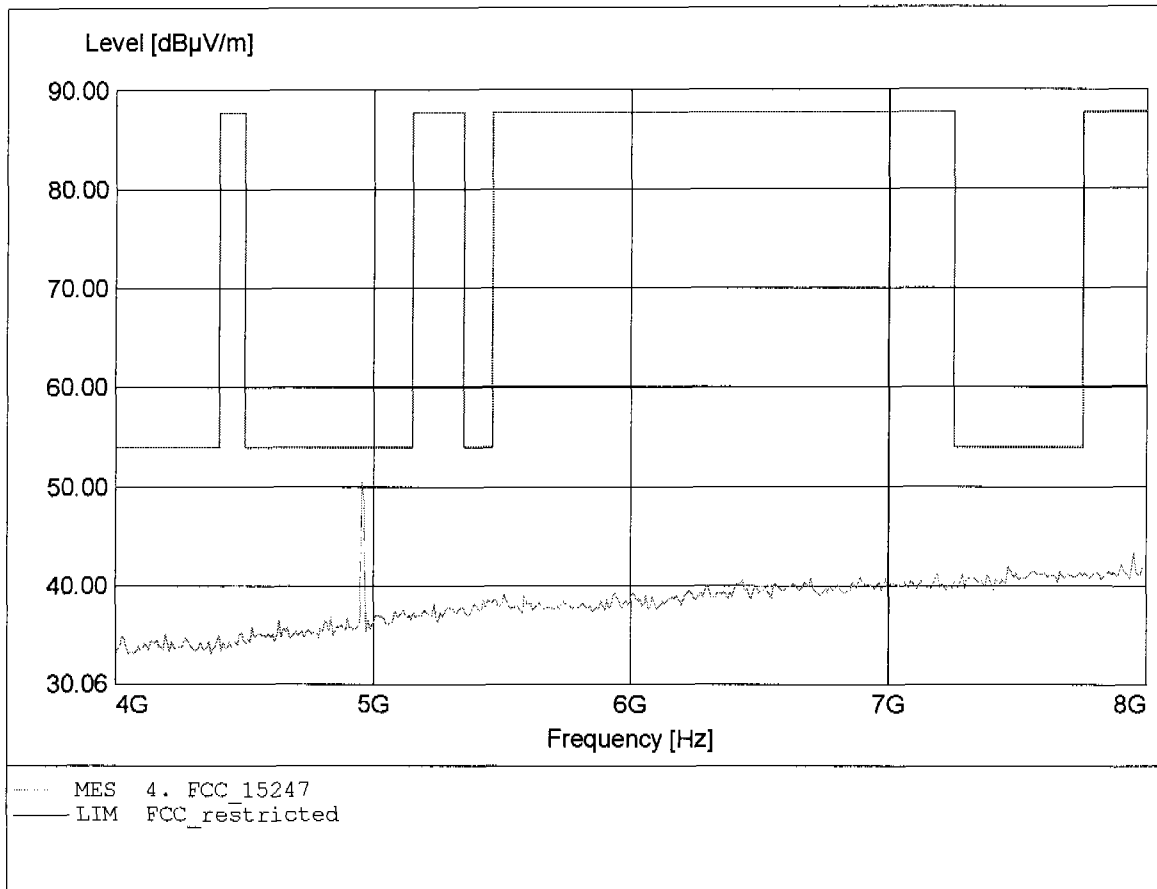
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 4.962GHz, Emax: 56.81dBµV/m, RBW: 1MHz



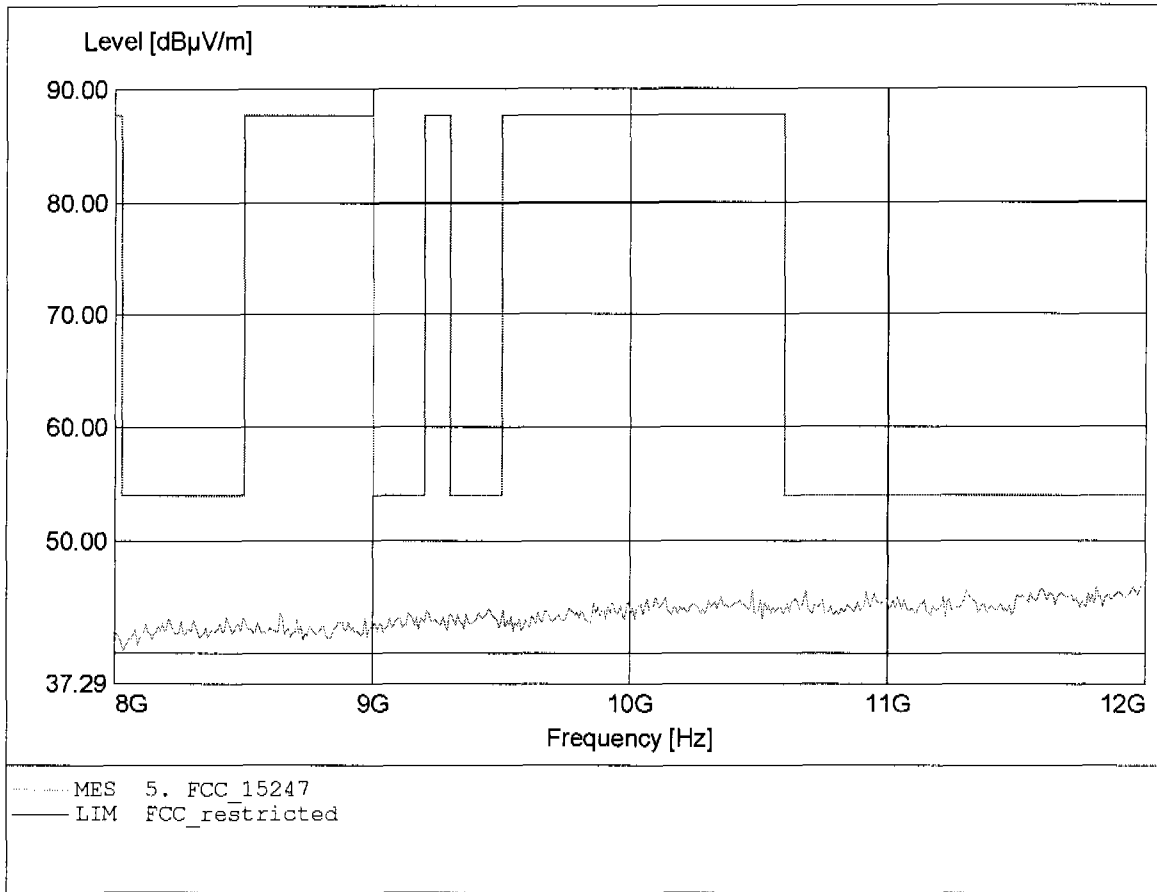
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 4.954GHz, Emax: 50.49dBuV/m, RBW: 1MHz



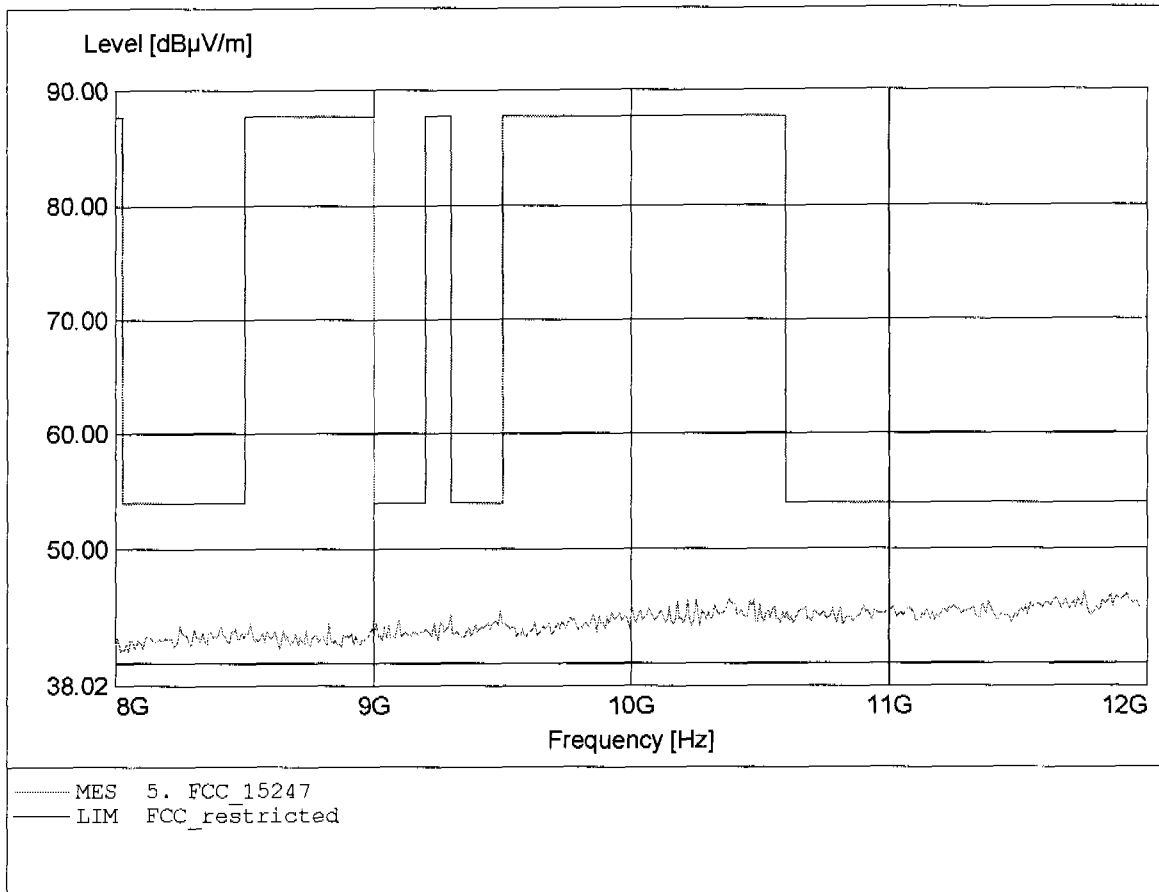
Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 11.984GHz, Emax: 46.00dBμV/m, RBW: 1MHz



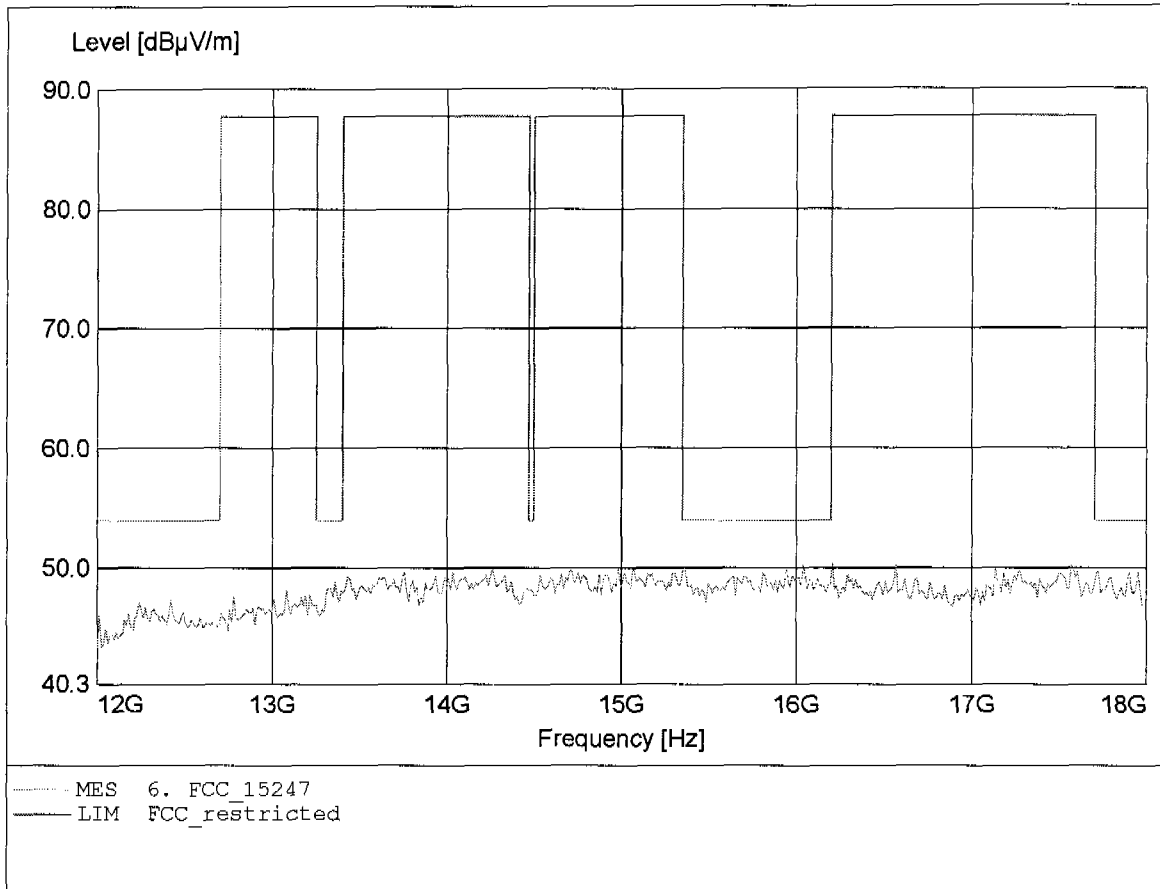
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 11.752GHz, Emax: 46.28dBμV/m, RBW: 1MHz



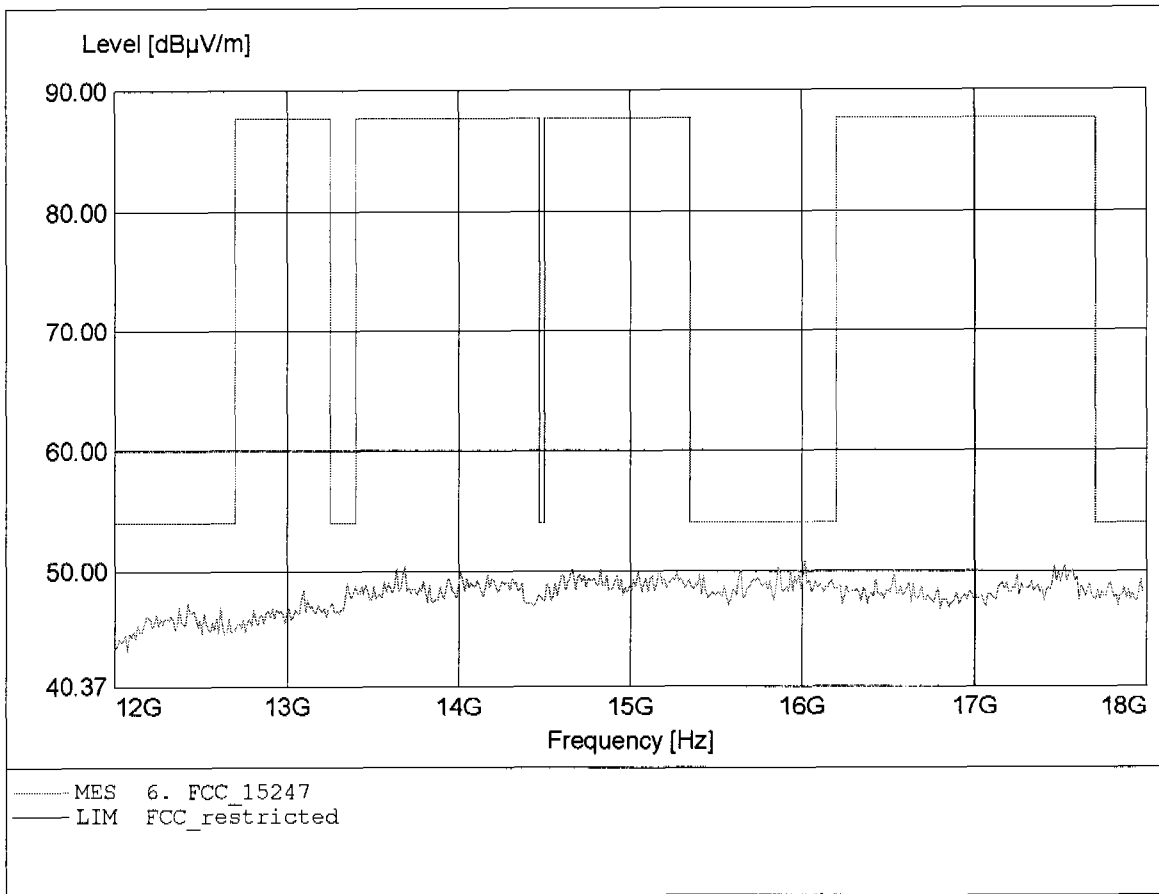
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 16.208GHz, Emax: 50.39dB μ V/m, RBW: 1MHz



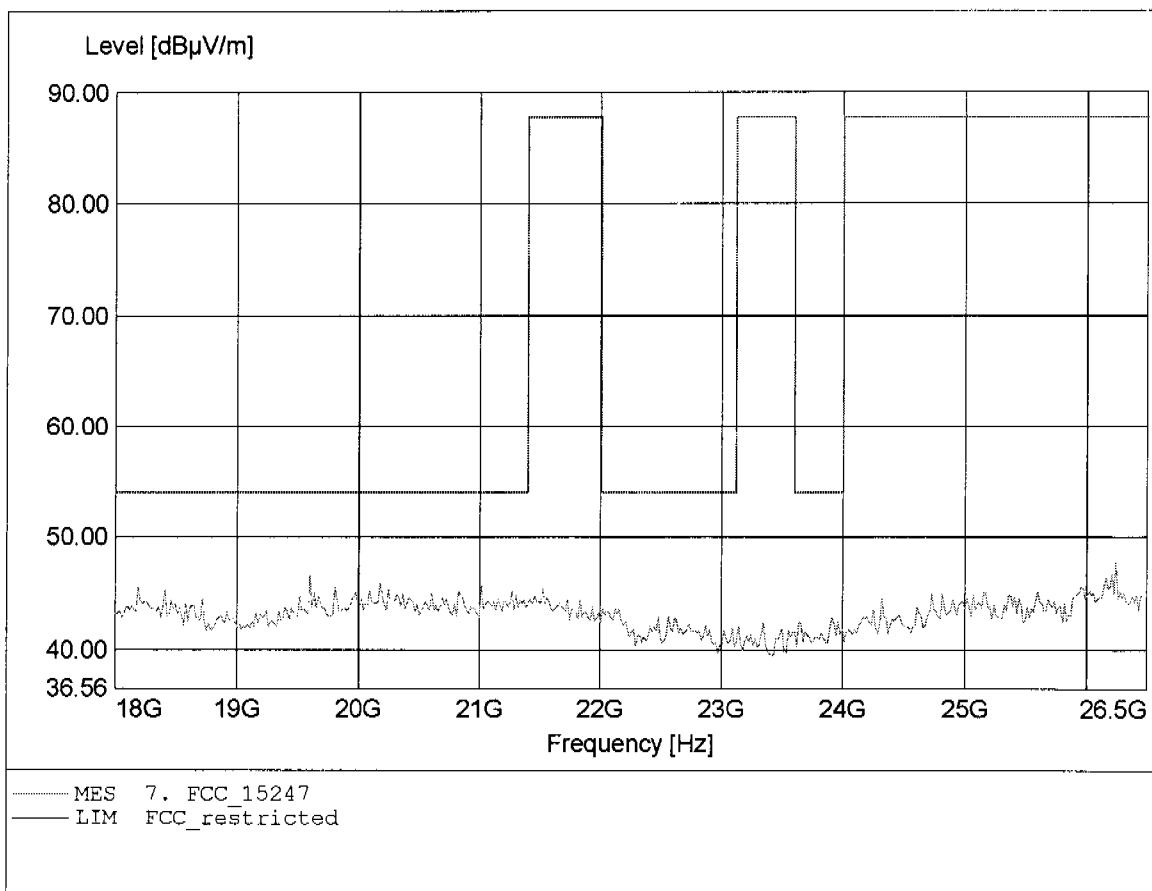
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, ampl.+HP.
Freq: 16.016GHz, Emax: 50.83dB μ V/m, RBW: 1MHz



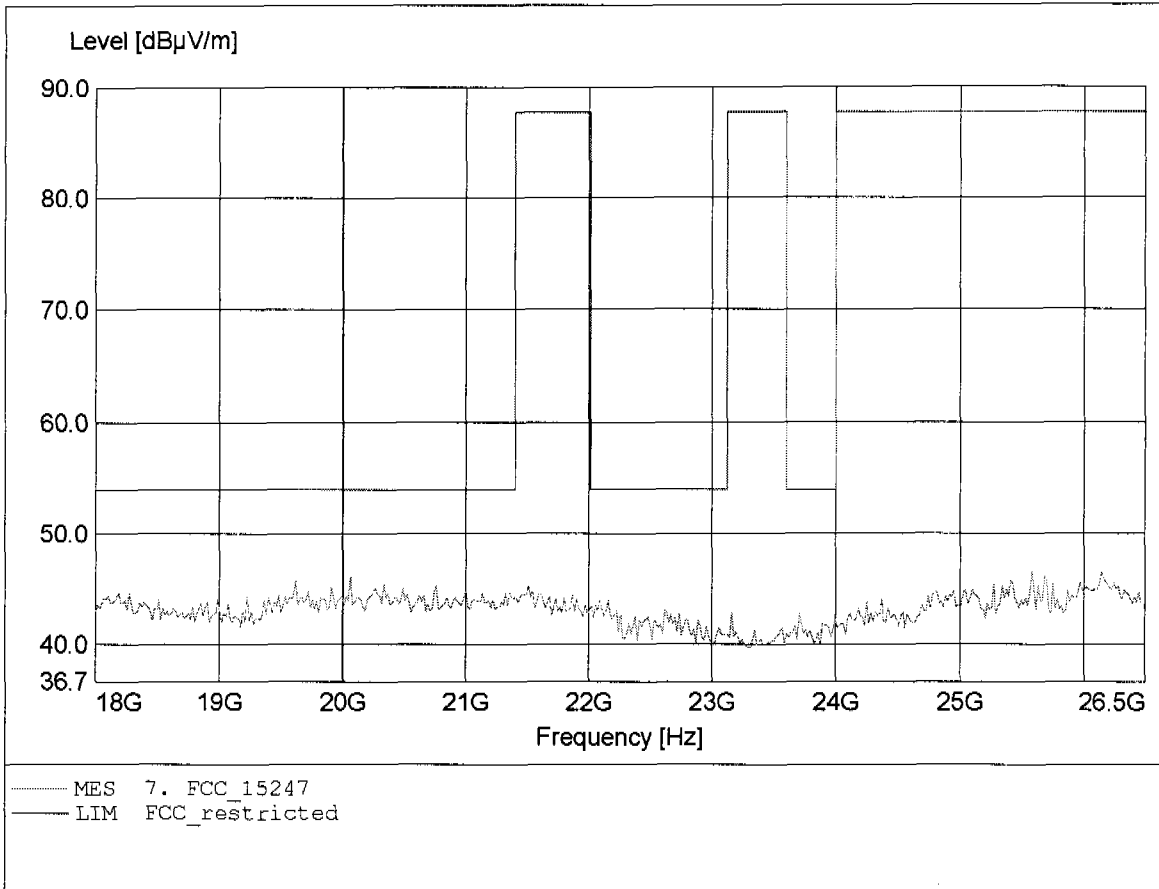
**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 26.244GHz, Emax: 47.74dB μ V/m, RBW: 1MHz



**Spurious emissions Field Strength
FCC RULES PART 15, SUBPART C**

EUT: 2,4GHz Transceiver Module / HPS 110
Manufacturer: Handy Wave Co., Ltd.
Operating Condition: Unom: 5 V DC (powered by USB port)
settings: frequency 2480MHz; power (Ext, int) 255, 20
Operator: Mr. Cersovsky
Test Specification: according to §15.247, peak detector
Comment: Dist.: 3m, Ant.: HL025, amplif.
Freq: 25.580GHz, Emax: 46.56dBμV/m, RBW: 1MHz





Appendix D

Spurious Emissions conducted - Transmitter operating

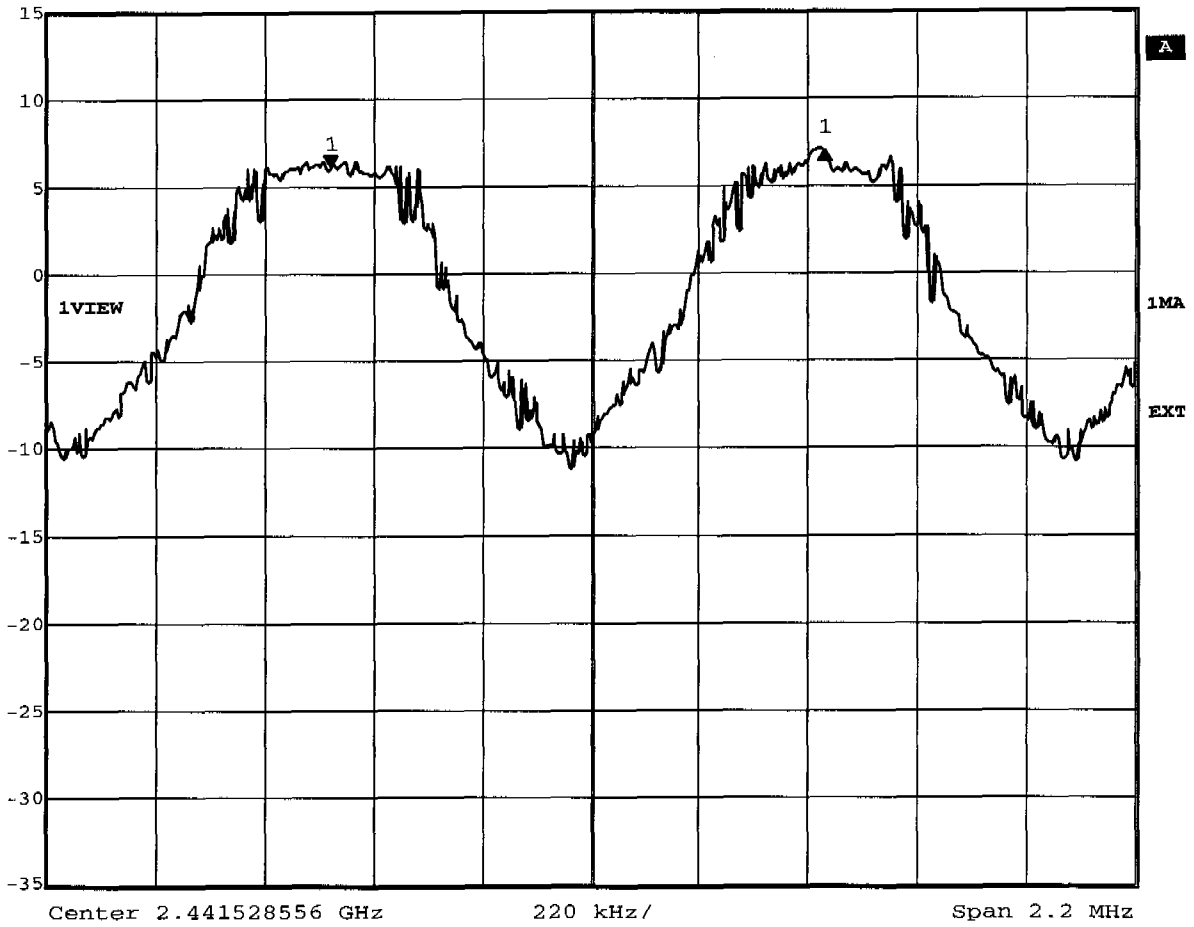


Appendix E

Carrier Frequency Separation



Delta 1 [T1] RBW 100 kHz RF Att 40 dB
Ref Lvl 0.83 dB VBW 100 kHz
15 dBm 1.00080160 MHz SWT 5 ms Unit dBm



Title: Carrier Frequency Separation
Date: 1.APR.2005 10:15:31
Comment A: HPS-110



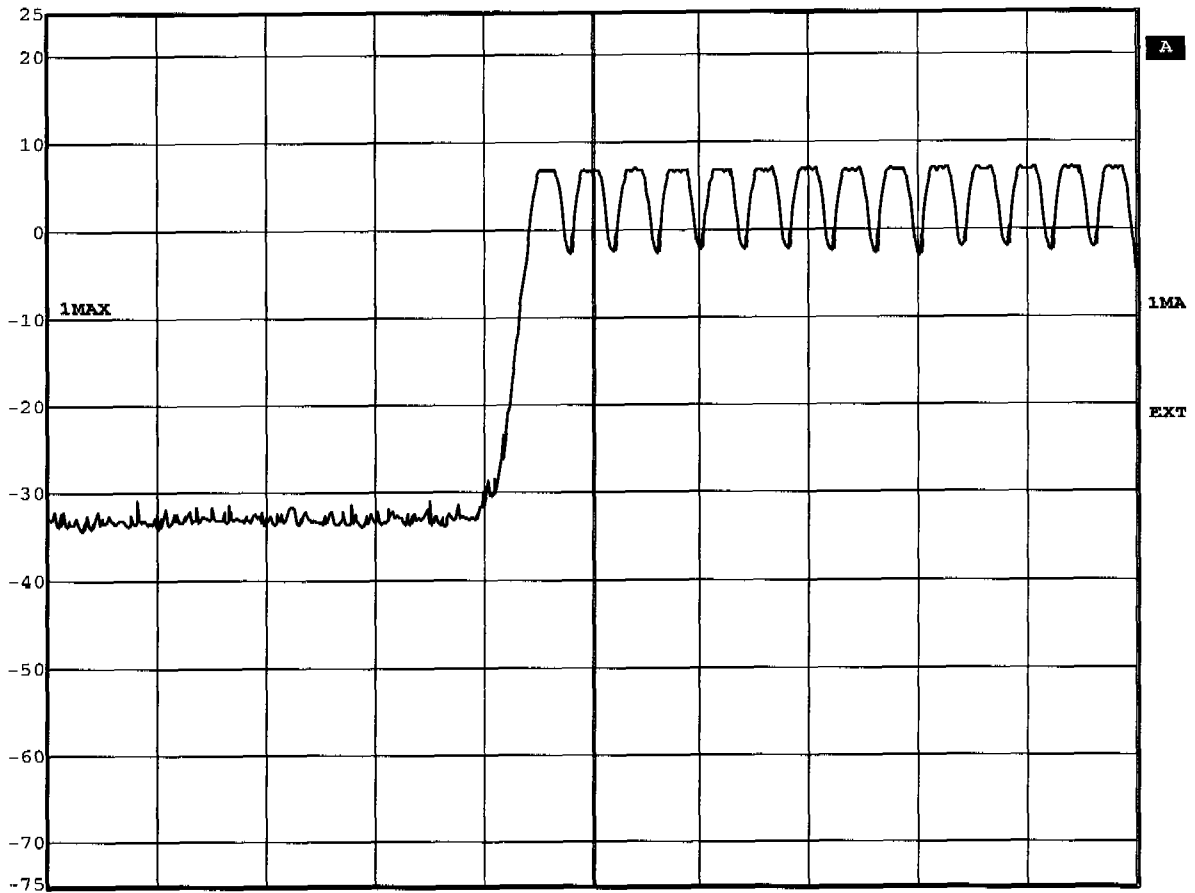
Appendix F

Number of Hopping Frequencies



Ref Lvl
25 dBm

RBW 300 kHz RF Att 50 dB
VBW 300 kHz
SWT 5 ms Unit dBm



Center 2.403 GHz

2.5 MHz/

Span 25 MHz

Title: Number of Hopping Frequencies Ch.: 0-13

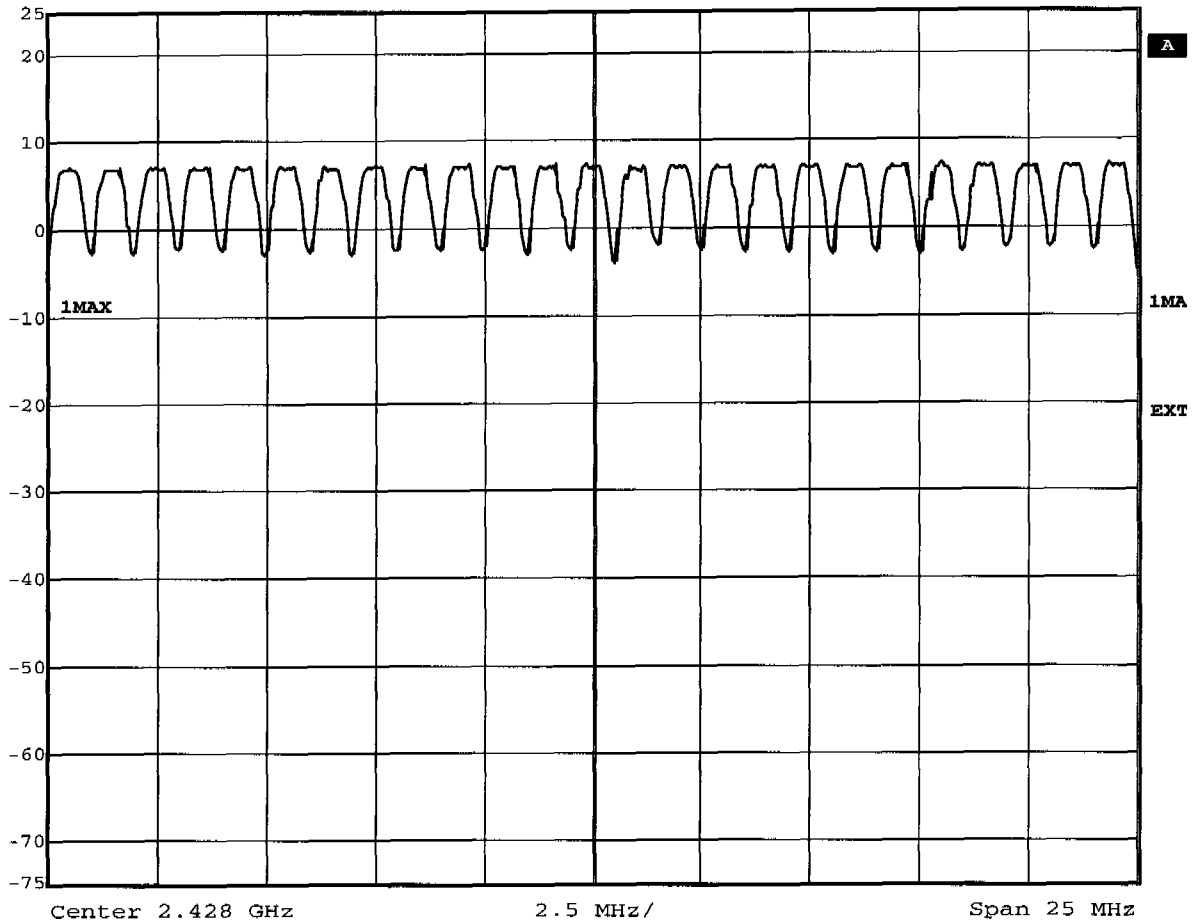
Date: 1.APR.2005 10:43:23

Comment A: HPS-110



Ref Lvl
25 dBm

RBW 300 kHz RF Att 50 dB
VBW 300 kHz
SWT 5 ms Unit dBm

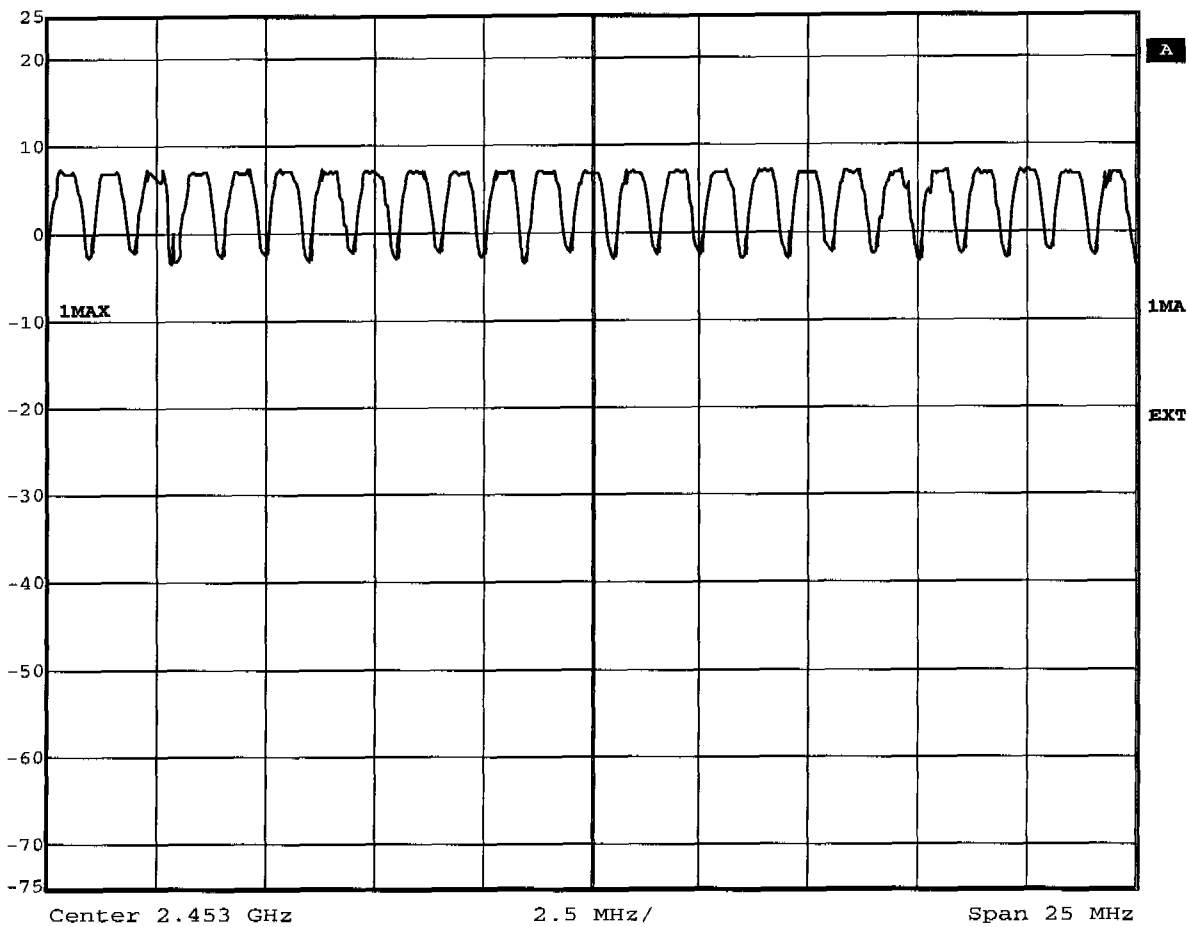


Title: Number of Hopping Frequencies Ch.: 14-38
Date: 1.APR.2005 10:47:23
Comment A: HPS-110



Ref Lvl
25 dBm

RBW 300 kHz RF Att 50 dB
VBW 300 kHz
SWT 5 ms Unit dBm

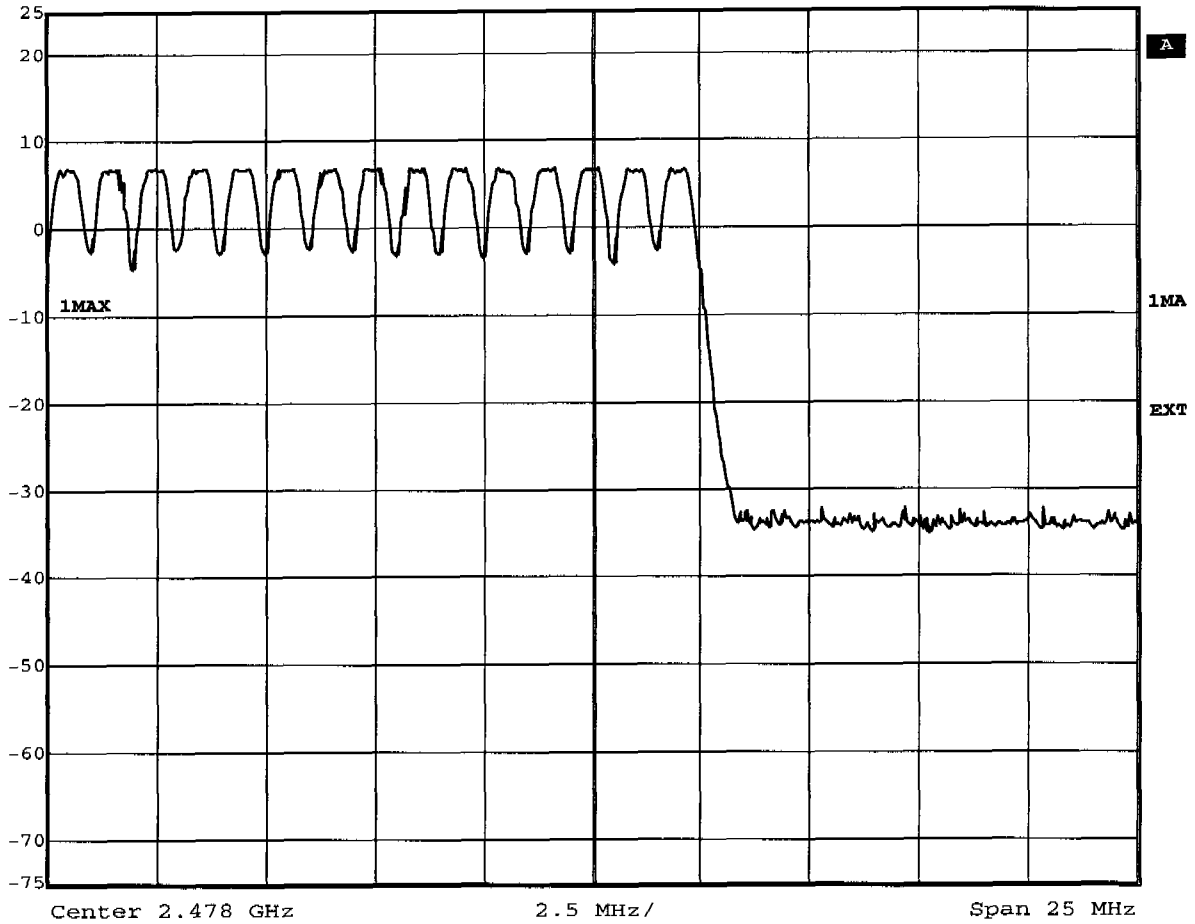


Title: Number of Hopping Frequencies Ch.: 39-63
Date: 1.APR.2005 10:49:02
Comment A: HPS-110



Ref Lvl
25 dBm

RBW 300 kHz RF Att 50 dB
VBW 300 kHz
SWT 5 ms Unit dBm

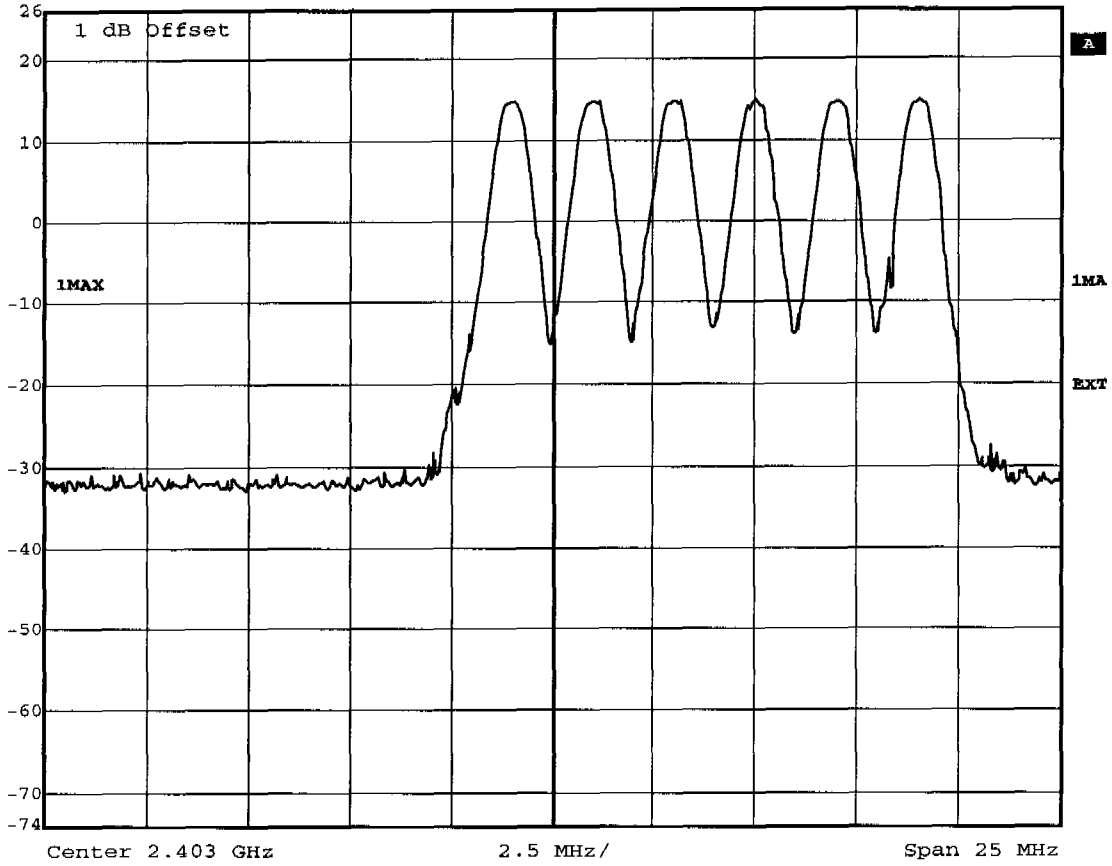


Title: Number of Hopping Frequencies Ch.: 64-78
Date: 1.APR.2005 10:50:36
Comment A: HPS-110



Ref Lvl
26 dBm

RBW 300 kHz RF Att 50 dB
VBW 300 kHz
SWT 5 ms Unit dBm

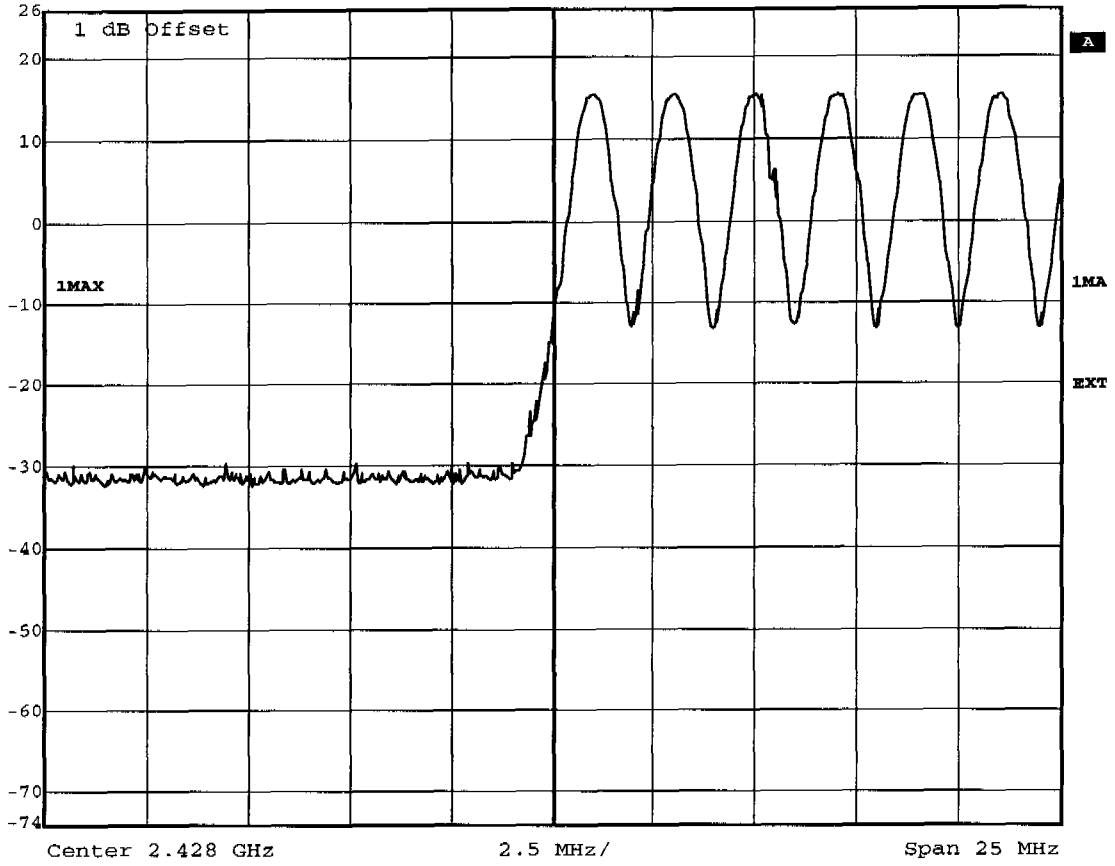


Title: Number of Hopping Frequencies (Master Inquiry Mode)
Comment A: HPS - 110
Date: 4.APR.2005 08:00:57



Ref Lvl
26 dBm

RBW 300 kHz RF Att 50 dB
VBW 300 kHz
SWT 5 ms Unit dBm

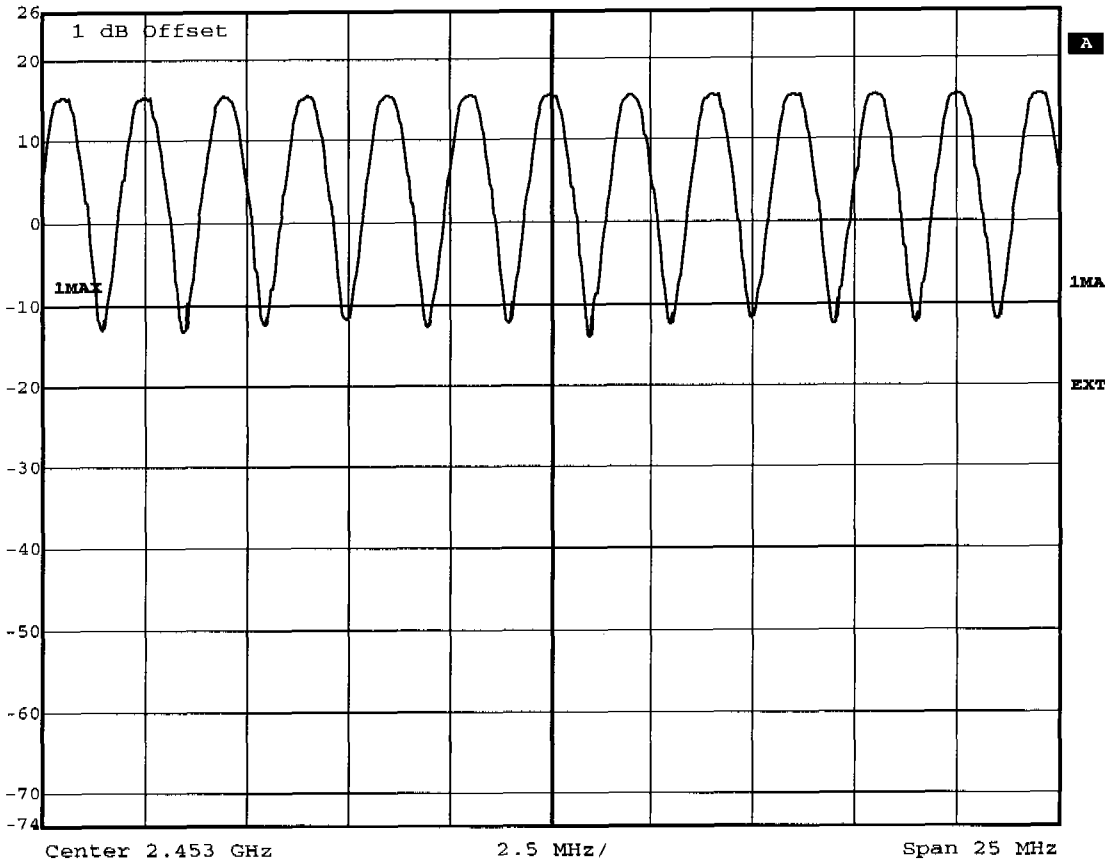


Title: Number of Hopping Frequencies (Master Inquiry Mode)
Comment A: HPS ~ 110
Date: 4.APR.2005 07:58:31



Ref Lvl
26 dBm

RBW 300 kHz RF Att 50 dB
VBW 300 kHz
SWT 5 ms Unit dBm

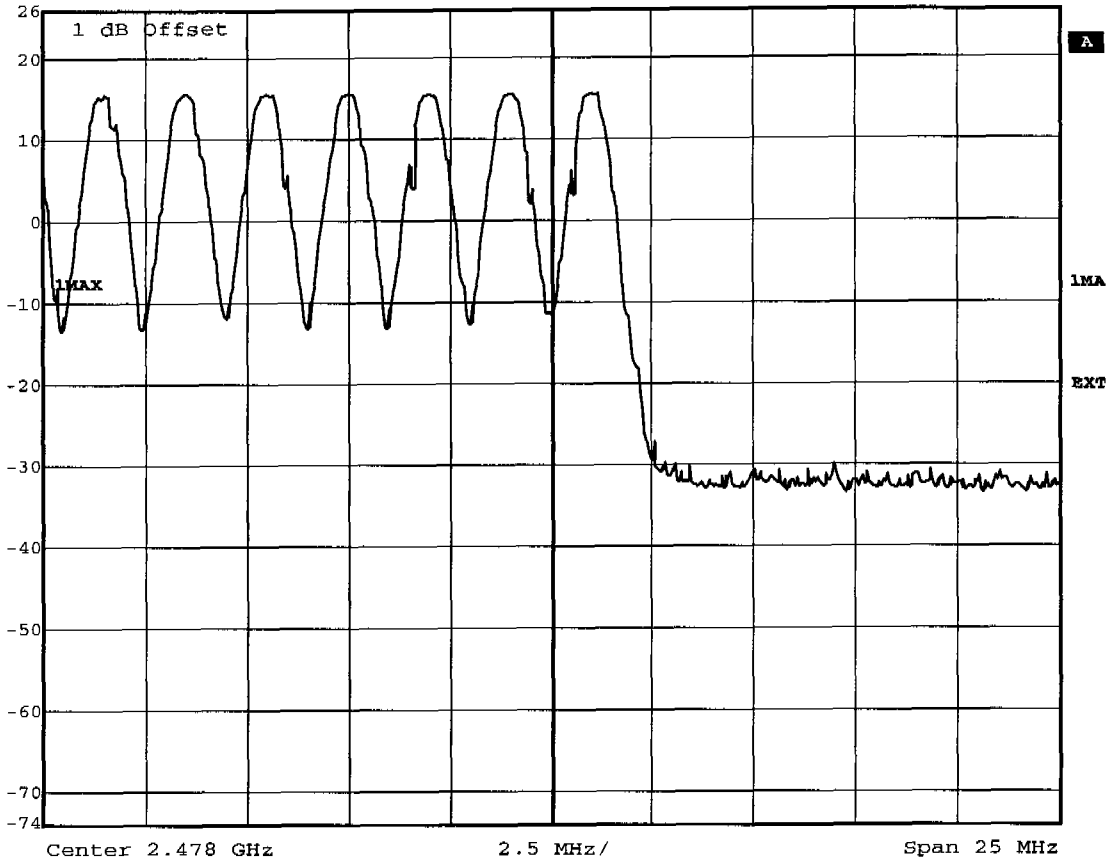


Title: Number of Hopping Frequencies (Master Inquiry Mode)
Comment A: HPS - 110
Date: 4.APR.2005 08:19:12



Ref Lvl
26 dBm

RBW 300 kHz RF Att 50 dB
VBW 300 kHz
SWT 5 ms Unit dBm



Title: Number of Hopping Frequencies (Master Inquiry Mode)
Comment A: HPS - 110
Date: 4.APR.2005 08:20:51

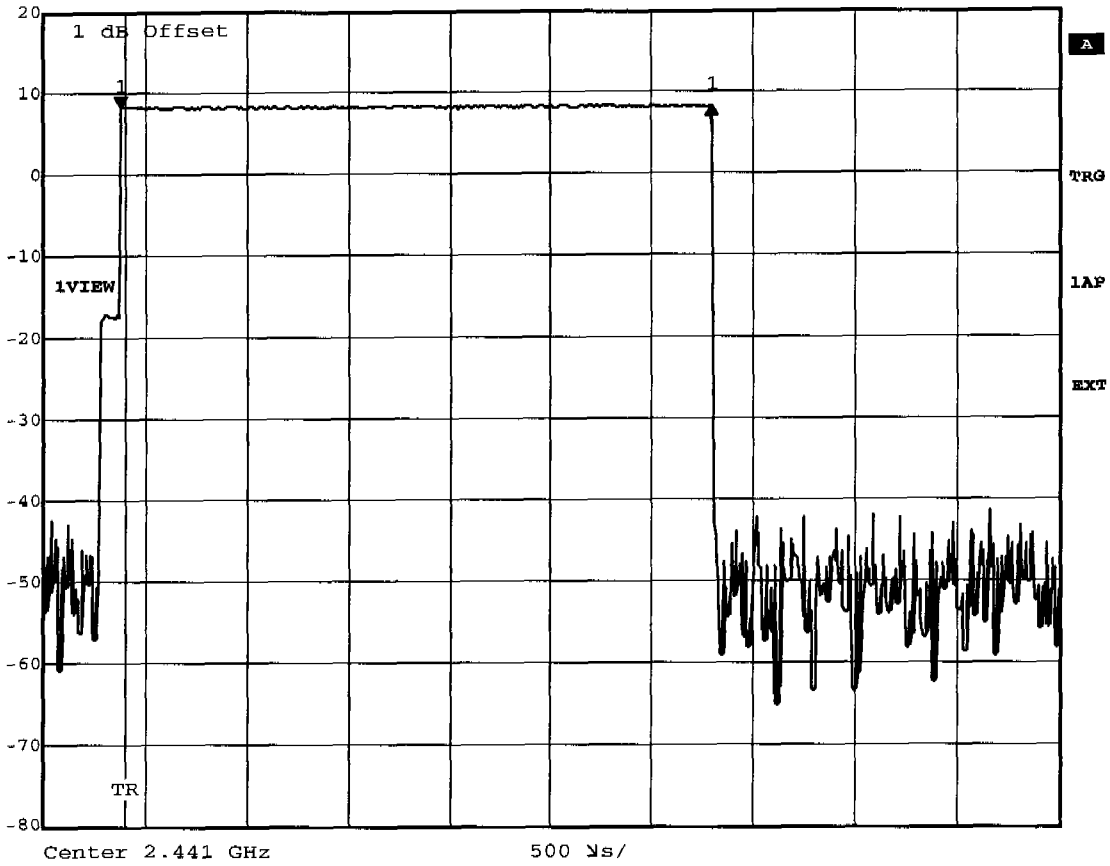


Appendix G

Time of Occupancy (Dwell Time)



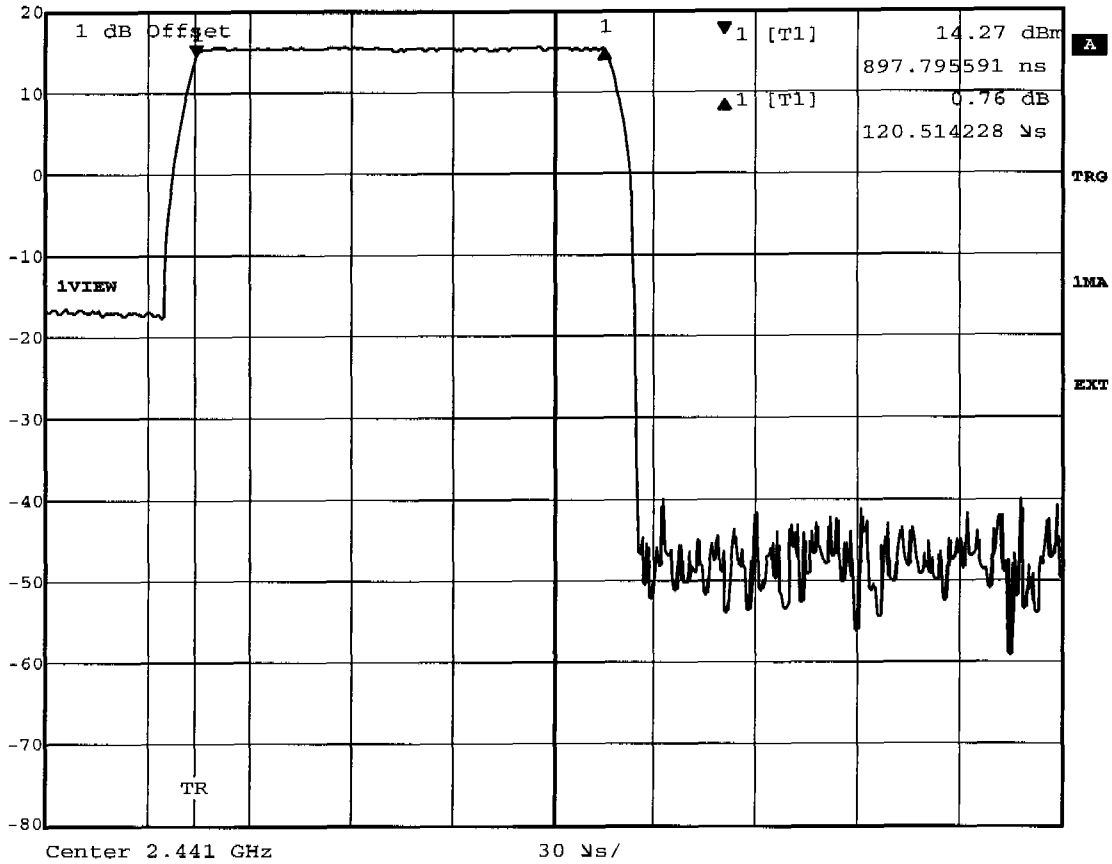
Delta 1 [T1] RBW 1 MHz RF Att 40 dB
Ref Lvl -0.08 dB VBW 1 MHz
20 dBm 2.912689 ms SWT 5 ms Unit dBm



Title: Time of occupancy (Hopping DH5) 64 events * 2.913ms=186.43ms
Comment A: HPS - 110
Date: 4.APR.2005 08:47:51



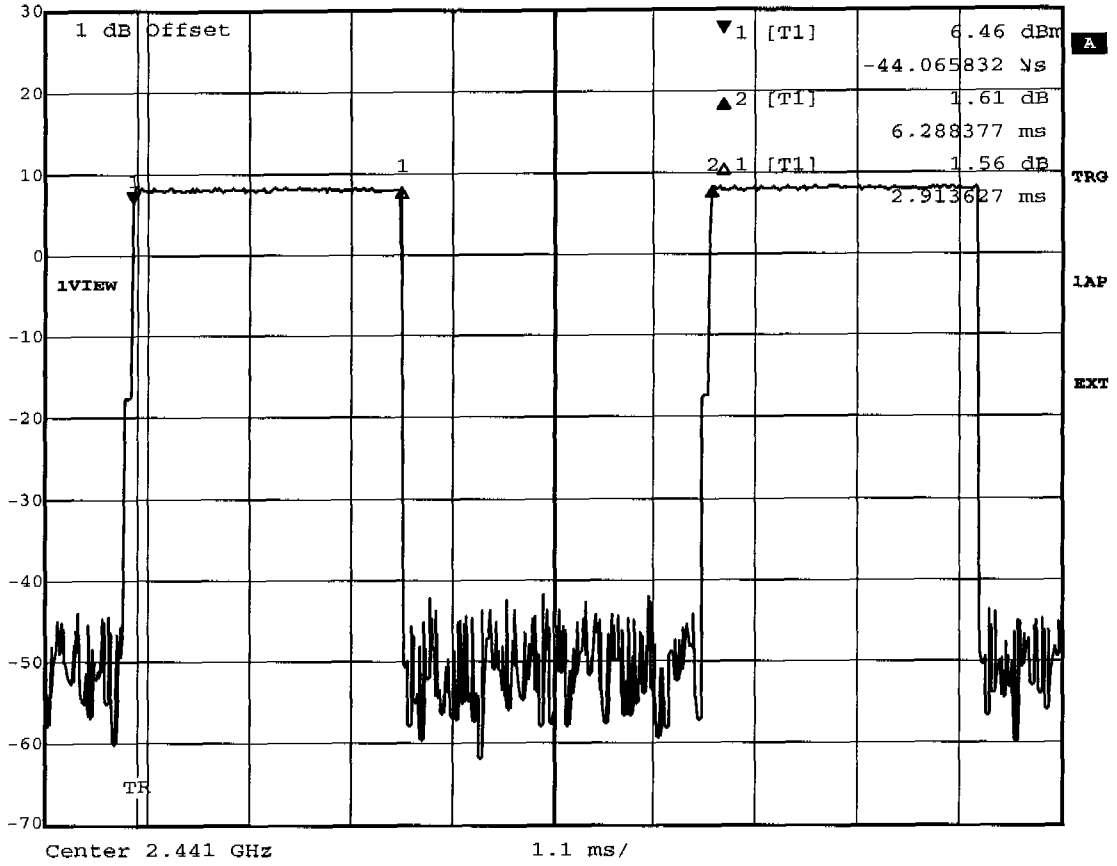
Delta 1 [T1] RBW 1 MHz RF Att 40 dB
Ref Lvl 0.76 dB VBW 1 MHz
20 dBm 120.514228 μ s SWT 300 μ s Unit dBm



Title: Time of occupancy (Inquiry mode) 606 events * 0.120ms=48.7ms
Comment A: HPS - 110
Date: 4.APR.2005 08:58:36



Delta 2 [T1] REW 1 MHz RF Att 40 dB
Ref Lvl 1.61 dB VBW 1 MHz
30 dBm 6.288377 ms SWT 11 ms Unit dBm



Title: Duty Cycle
Comment A: HPS - 110
Date: 4.APR.2005 08:32:02

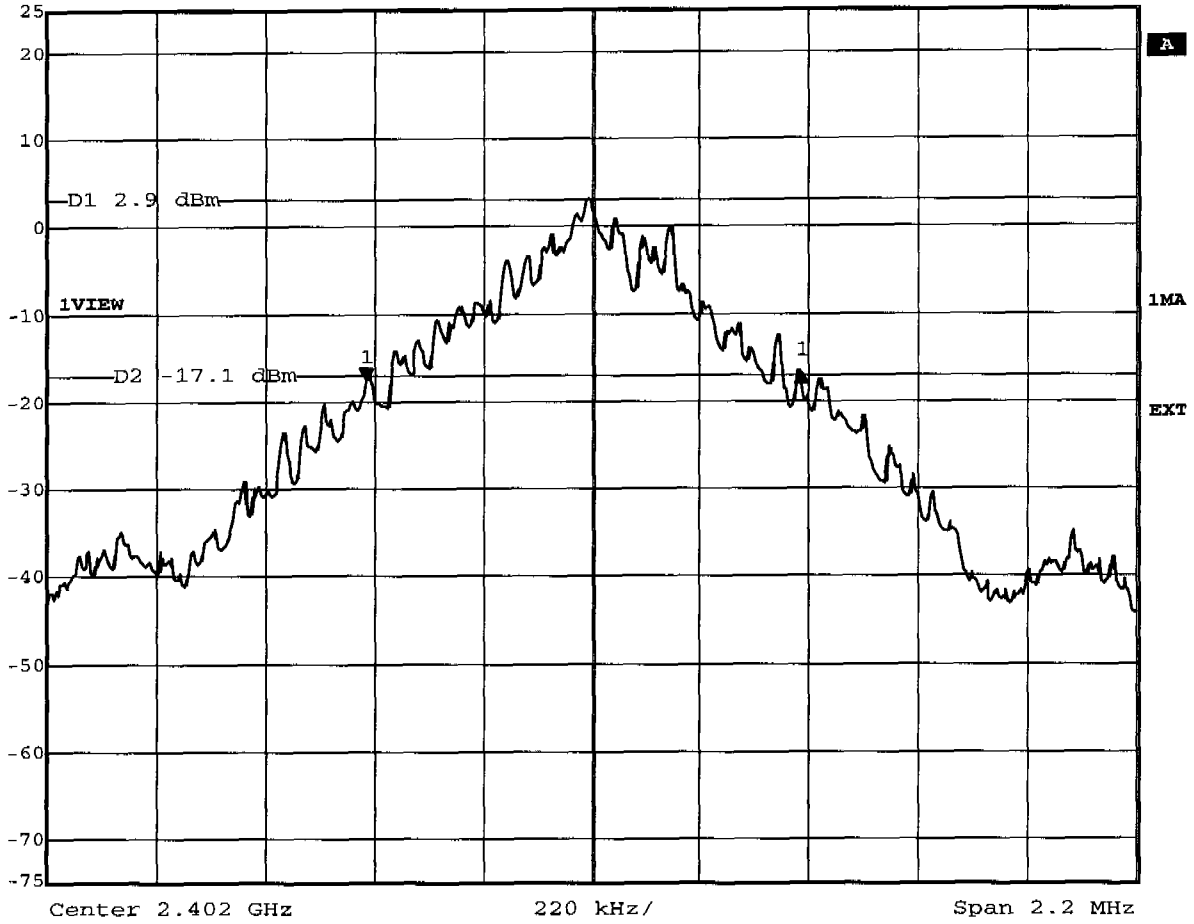


Appendix H

20dB Bandwidth



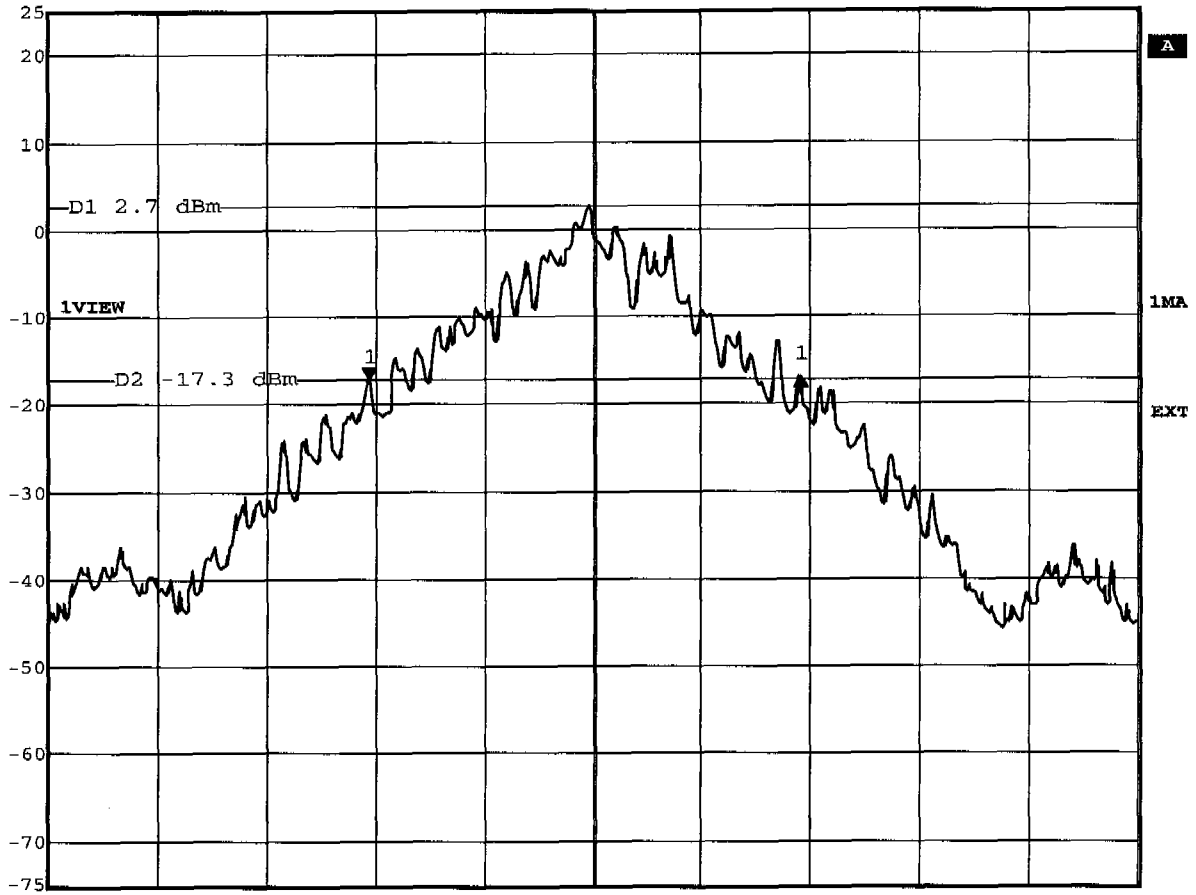
Delta 1 [T1] RBW 10 kHz RF Att 50 dB
Ref Lvl 0.64 dB VBW 10 kHz
25 dBm 881.76352705 kHz SWT 56 ms Unit dBm



Title: -20dB Bandwidth Ch.: 0
Date: 1.APR.2005 07:36:14
Comment A: HPS-110



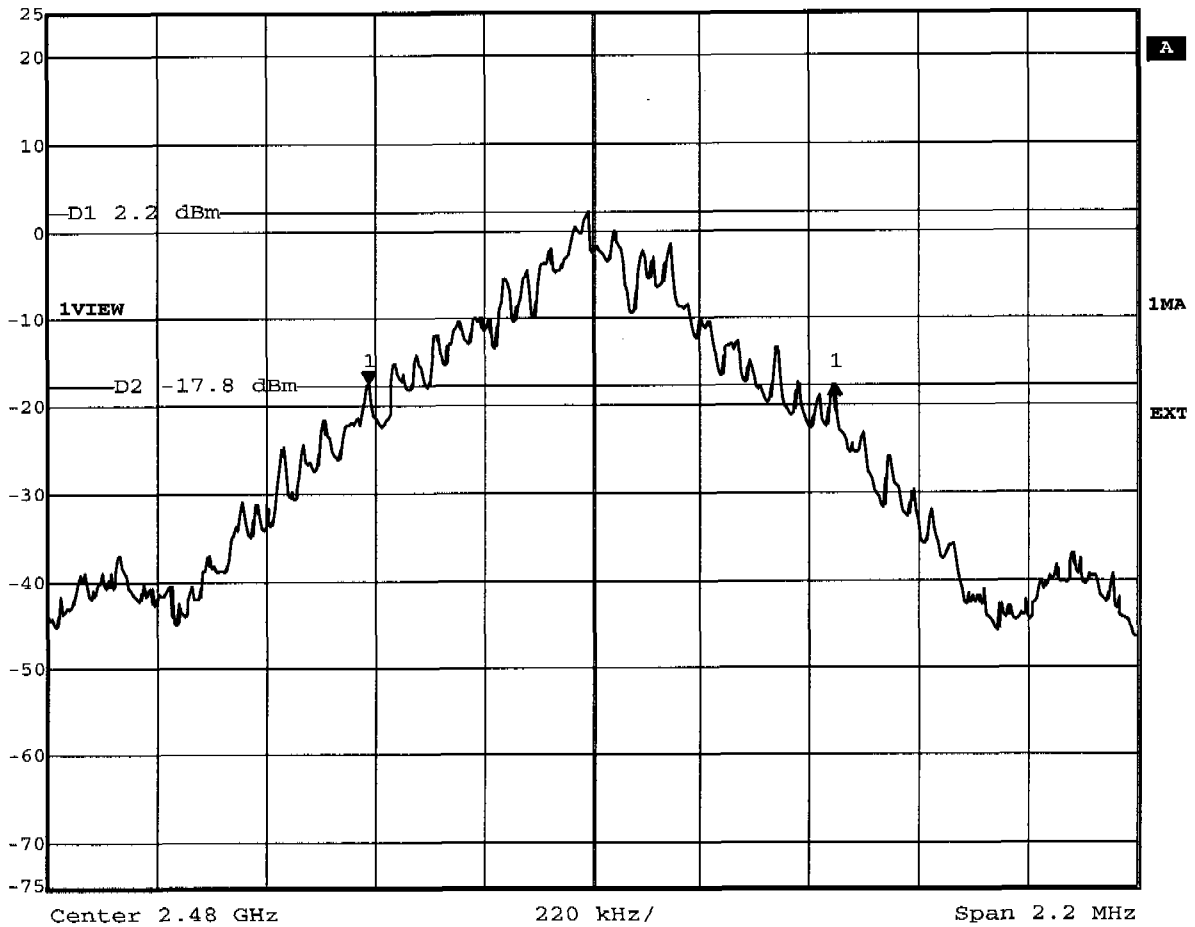
Delta 1 [T1]	RBW	10 kHz	RF Att	50 dB
Ref Lvl	0.25 dB	VBW	10 kHz	
25 dBm	872.94589179 kHz	SWT	56 ms	Unit dBm



Title: -20dB Bandwidth Ch.: 39
Date: 1.APR.2005 09:28:57
Comment A: HPS-110



Delta 1 [T1]	RBW	10 kHz	RF Att	50 dB
Ref Lvl	-0.01 dB	VBW	10 kHz	
25 dBm	943.48697395 kHz	SWT	56 ms	Unit dBm



Title: -20dB Bandwidth Ch.: 78
Date: 1.APR.2005 09:24:39
Comment A: HPS-110

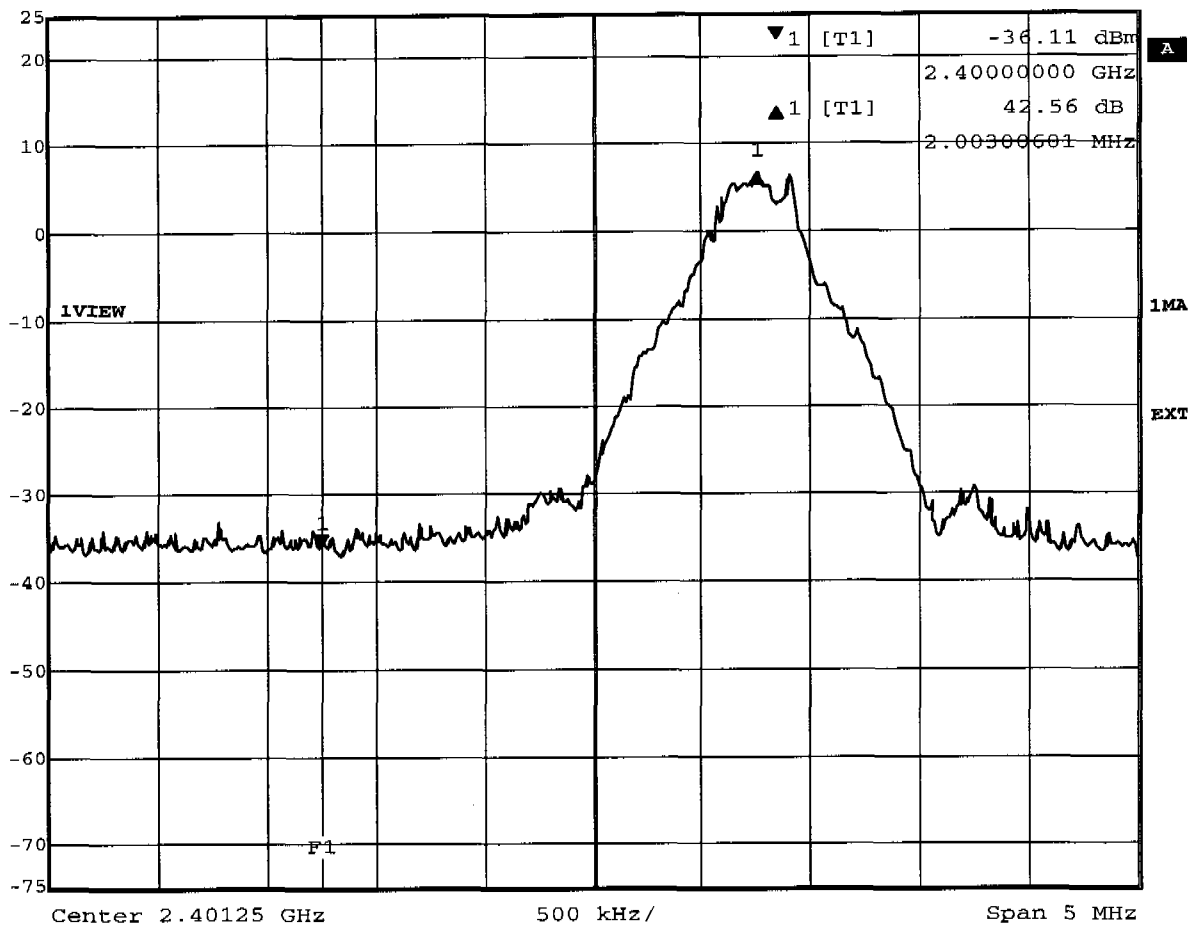


Appendix I

Band-edge Compliance of RF Emissions



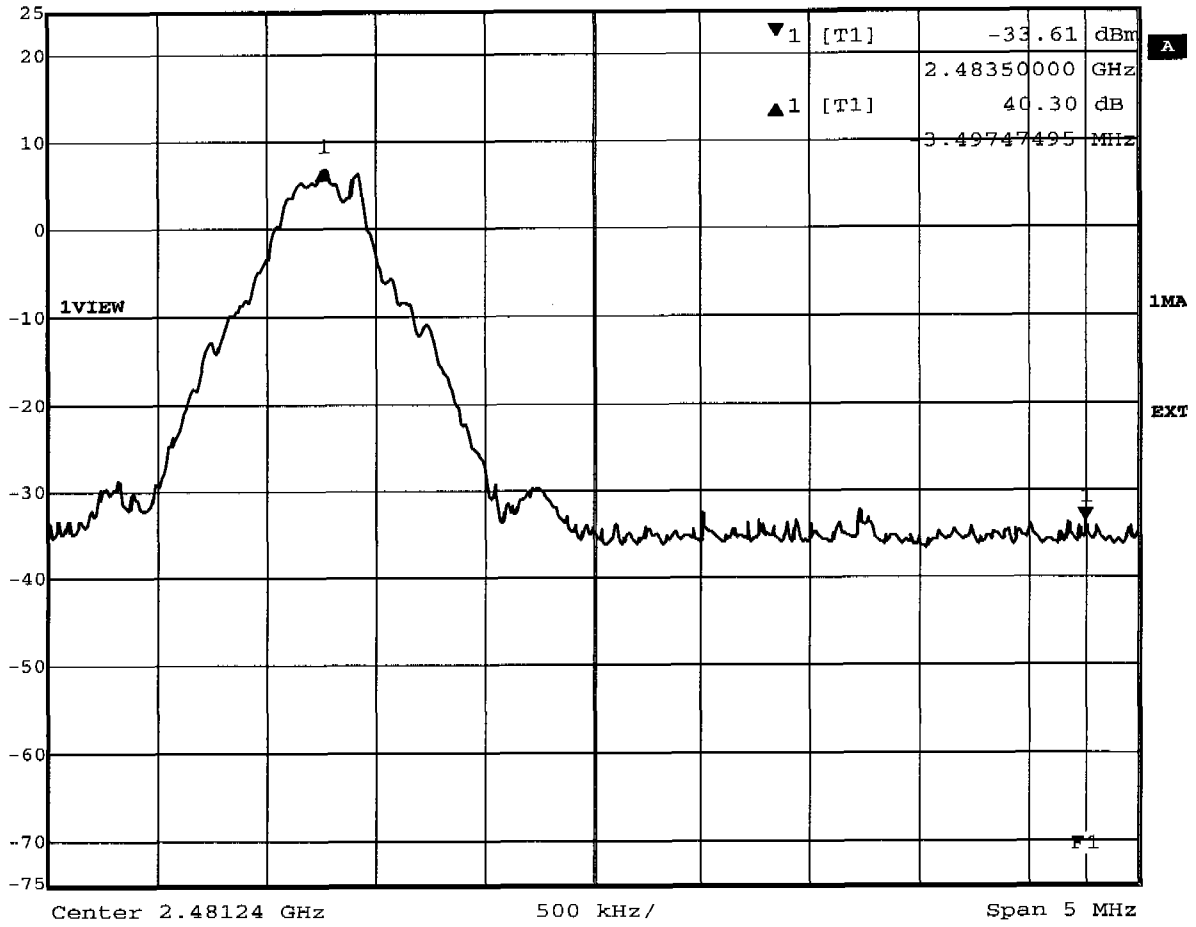
Delta 1 [T1] RBW 50 kHz RF Att 50 dB
Ref Lvl 42.56 dB VBW 50 kHz
25 dBm 2.00300601 MHz SWT 5 ms Unit dBm



Title: Band-edge Compliance (conducted, single frequency)
Date: 1.APR.2005 09:15:58
Comment A: HPS-110



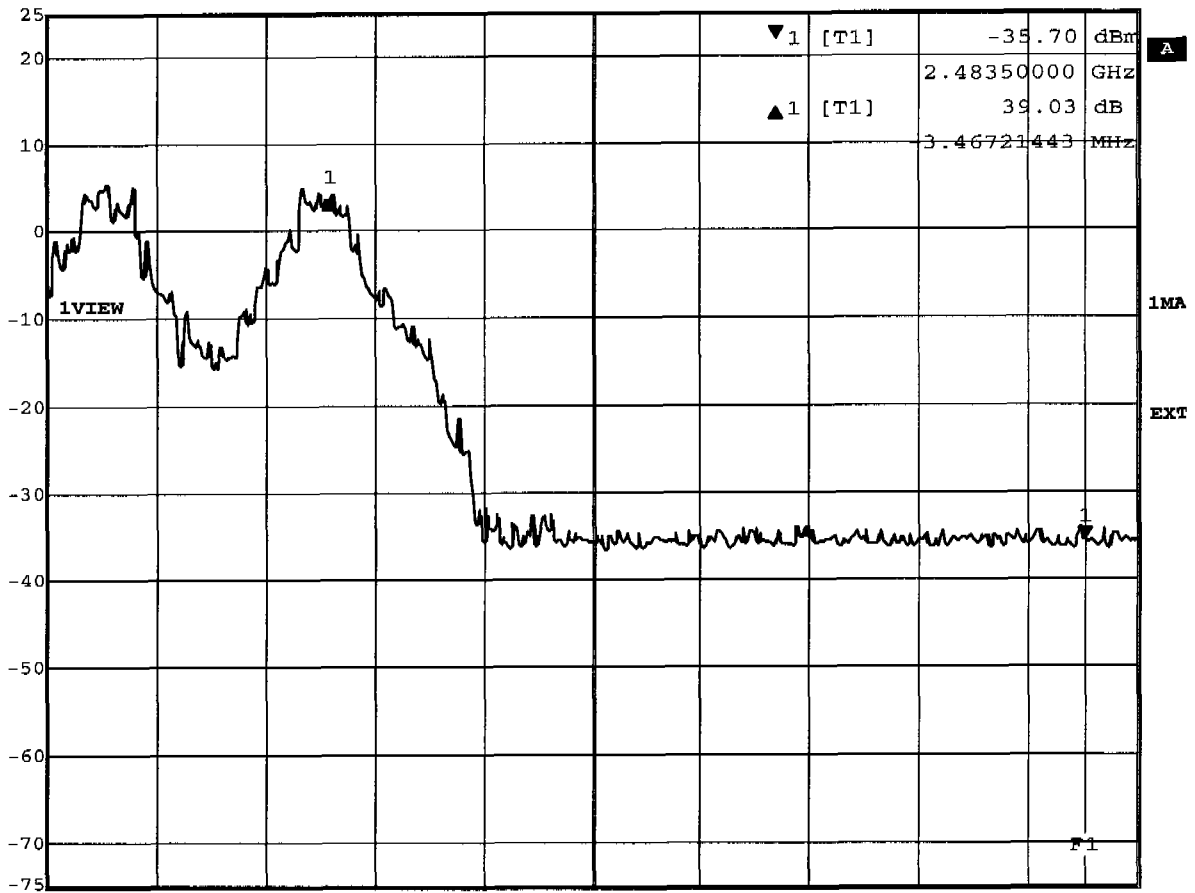
Delta 1 [T1] RBW 50 kHz RF Att 50 dB
Ref Lvl 40.30 dB VBW 50 kHz
25 dBm -3.49747495 MHz SWT 5 ms Unit dBm



Title: Band-edge Compliance (conducted, single frequency)
Date: 1.APR.2005 09:10:39
Comment A: HPS-110



Delta 1 [T1] RBW 50 kHz RF Att 50 dB
Ref Lvl 39.03 dB VBW 50 kHz
25 dBm -3.46721443 MHz SWT 5 ms Unit dBm

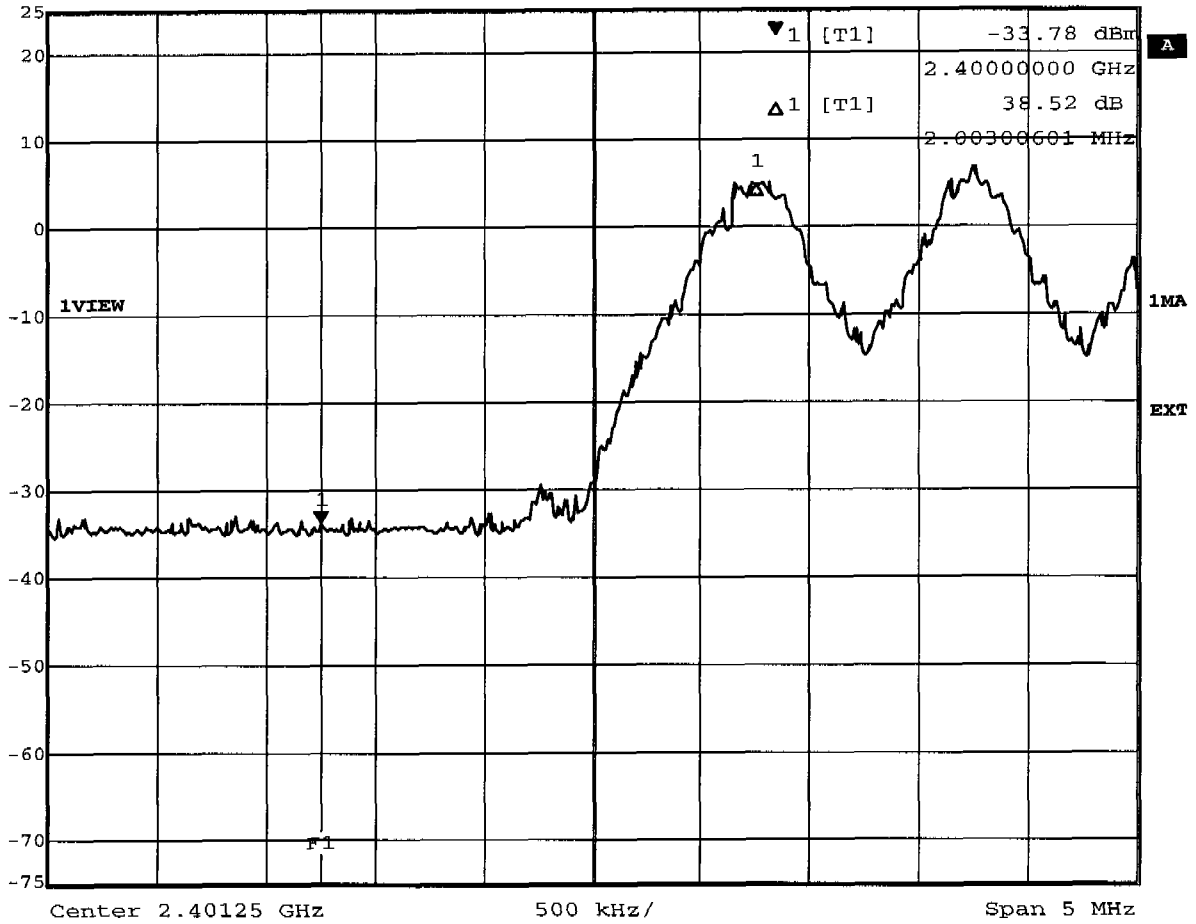


Center 2.48124 GHz 500 kHz/ Span 5 MHz

Title: Band-edge Compliance (conducted, hopping mode)
Date: 1.APR.2005 10:38:02
Comment A: HPS-110



Marker 1 [T1] RBW 50 kHz RF Att 50 dB
Ref Lvl -33.78 dBm VBW 50 kHz
25 dBm 2.40000000 GHz SWT 5 ms Unit dBm



Title: Band-edge Compliance (conducted, hopping mode)
Date: 1.APR.2005 10:34:03
Comment A: HPS-110

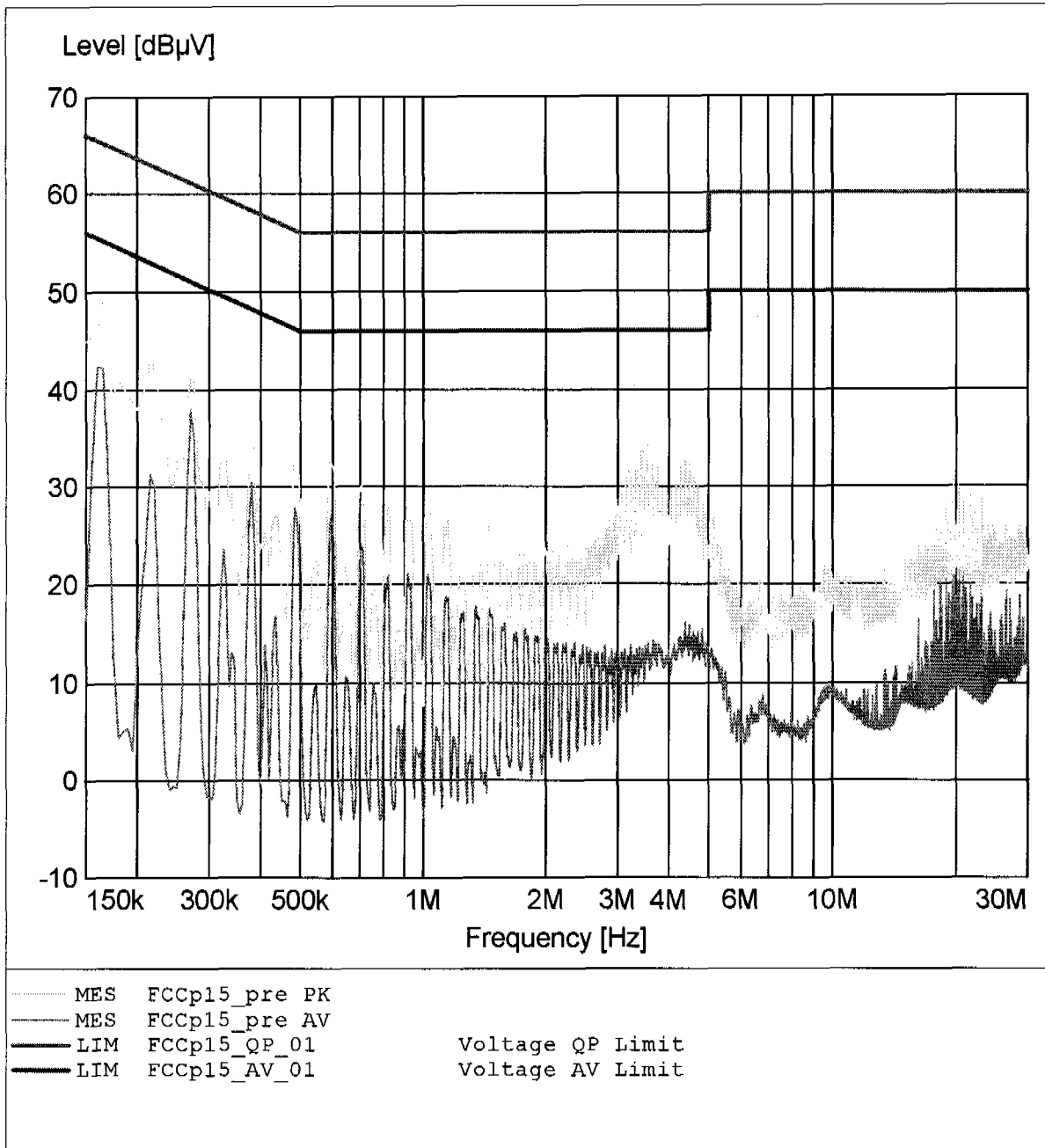


Appendix J

Conducted Measurement at (AC) Power Line

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

EUT: 2.4GHz Transceiver Module
Manufacturer: HandyWave Co., Ltd.
Operating Condition: Unom: 120 VAC (AC/DC-adapter), Tnom: 23°C
Test Site: ETS
Operator: Mr. Pflug
Test Specification: V-Network: ESH2-Z5 (L1)
Comment: model: HPS-110 mode: link



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

EUT: 2.4GHz Transceiver Module
Manufacturer: HandyWave Co., Ltd.
Operating Condition: Unom: 120 VAC (AC/DC-adapter), Tnom: 23°C
Test Site: ETS
Operator: Mr. Pflug
Test Specification: V-Network: ESH2-25 (N)
Comment: model: HPS-110 mode: link

