

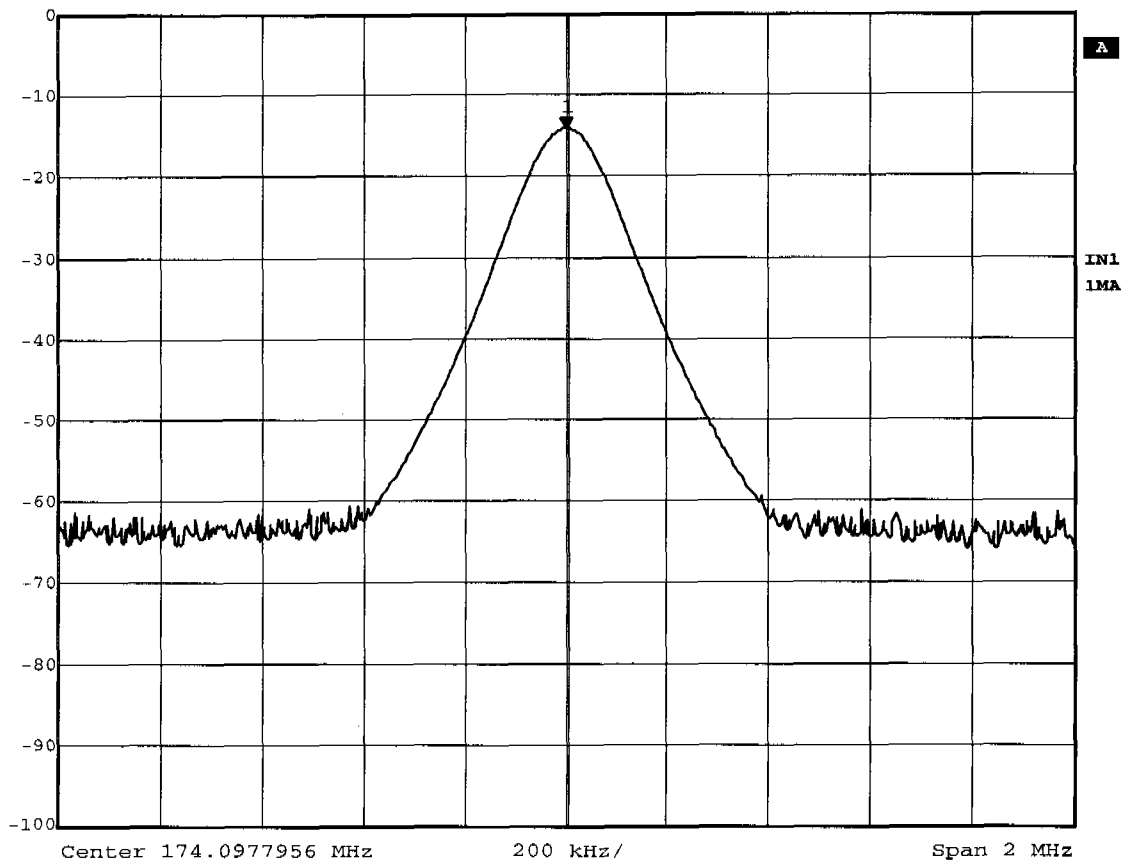


## Appendix B

RF Power Output



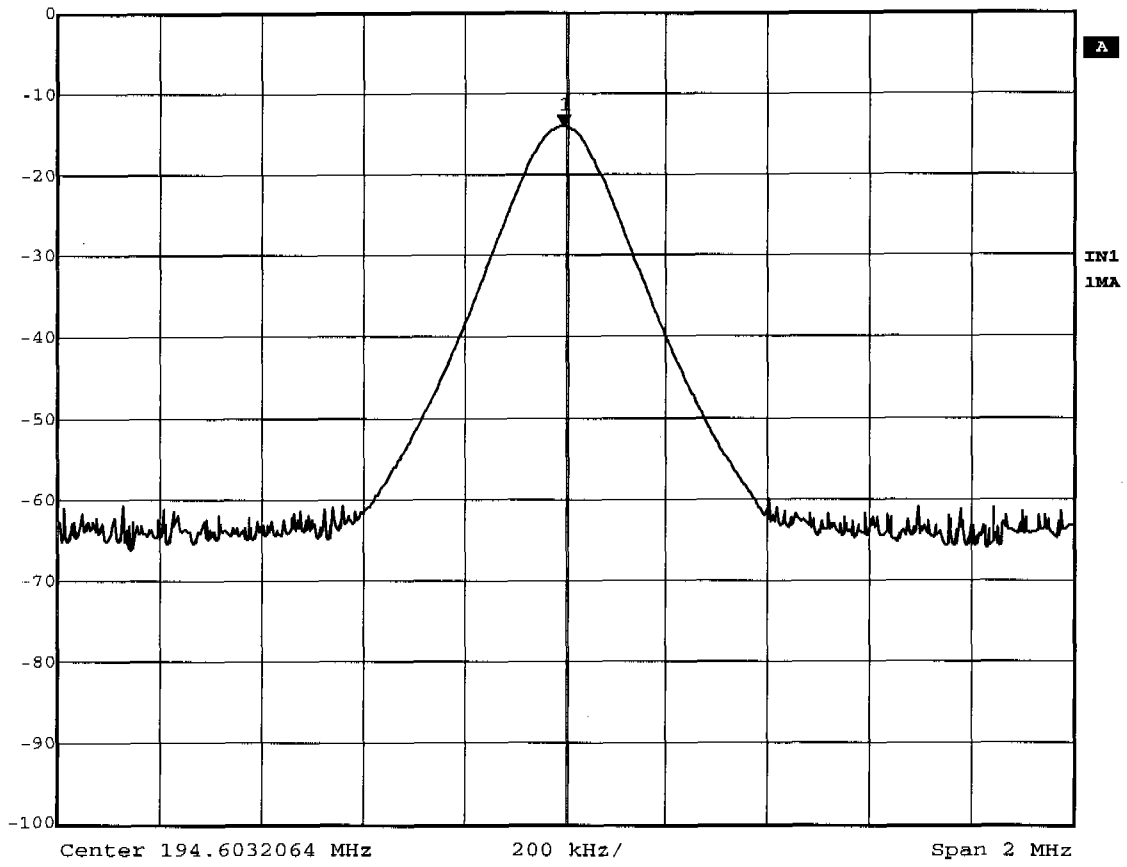
Ref Lvl	0 dBm	Marker 1 [T1]	-14.37 dBm	RBW	100 kHz	RF Att	30 dB
			174.09779559 MHz	VBW	100 kHz	Unit	dBm
				SWT	200 ms		



Date: 12.MAY.2004 22:54:15



Marker 1 [T1]	RBW	100 kHz	RF Att	30 dB
Ref Lvl	-14.15 dBm	VBW	100 kHz	
0 dBm	194.60120240 MHz	SWT	200 ms	Unit dBm



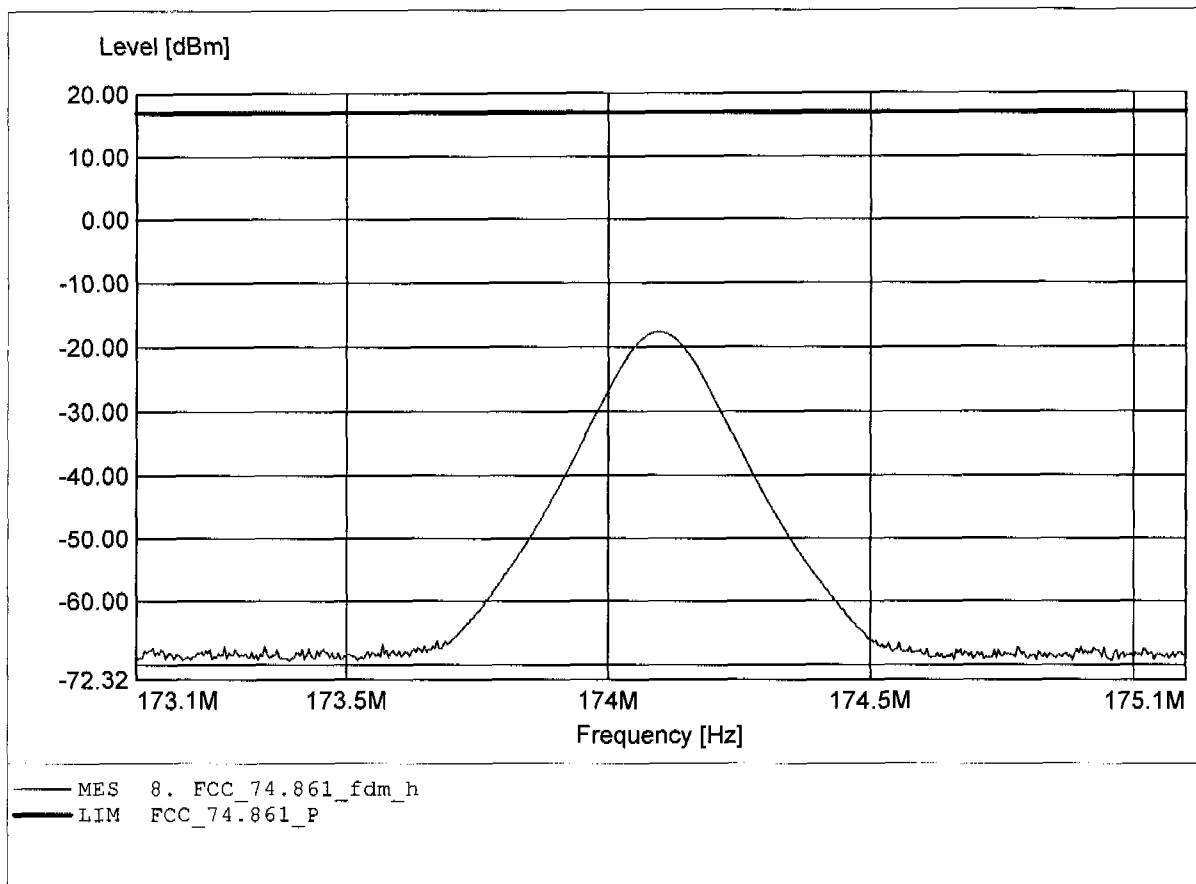
Date: 12.MAY.2004 22:50:13



**Transmitter carrier power under normal conditions**

**in according to FCC Part 74.861**

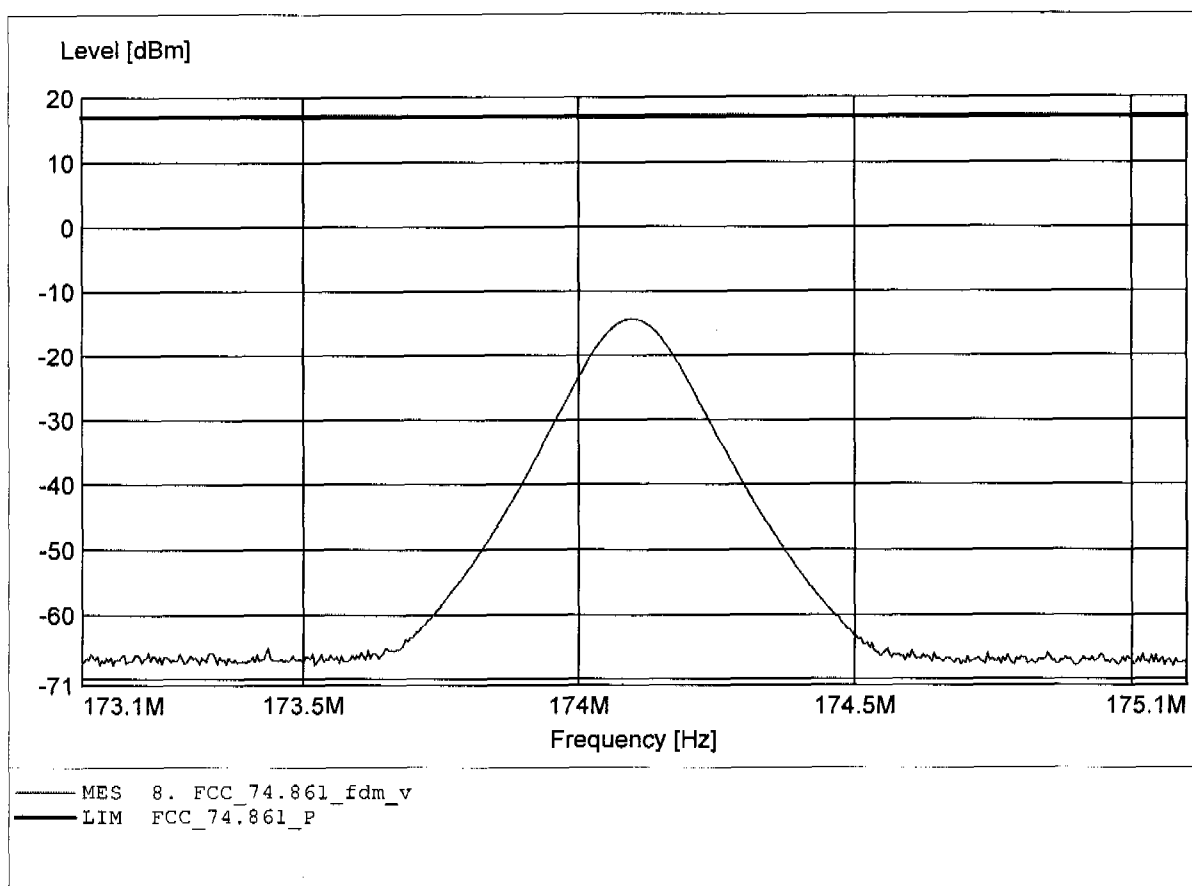
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 174.1 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223  
Freq:174.098MHz Pmax:-17.71dBm RBW: 100 kHz



**Transmitter carrier power under normal conditions**

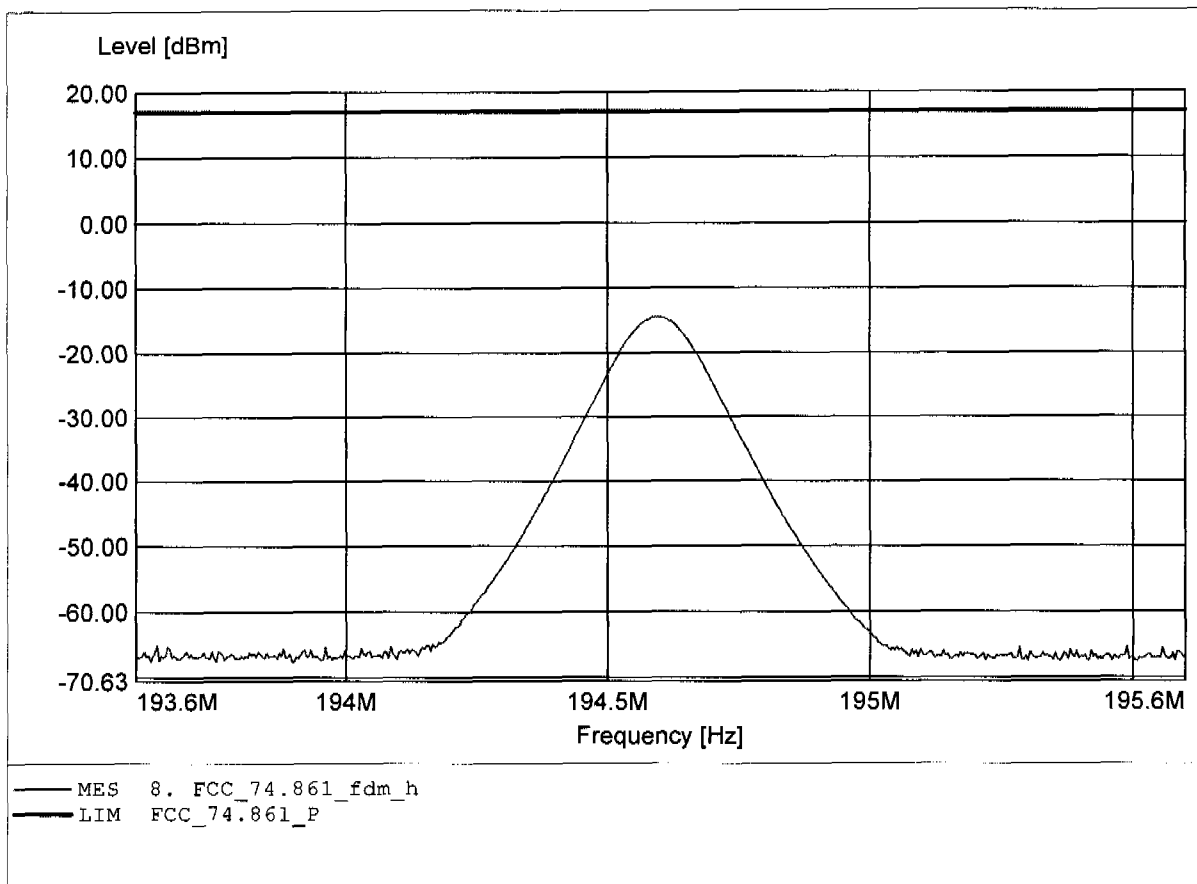
**in according to FCC Part 74.861**

EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 174.1 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223  
Freq:174.094MHz Pmax:-14.34dBm RBW: 100 kHz



**Transmitter carrier power under normal conditions  
in according to FCC Part 74.861**

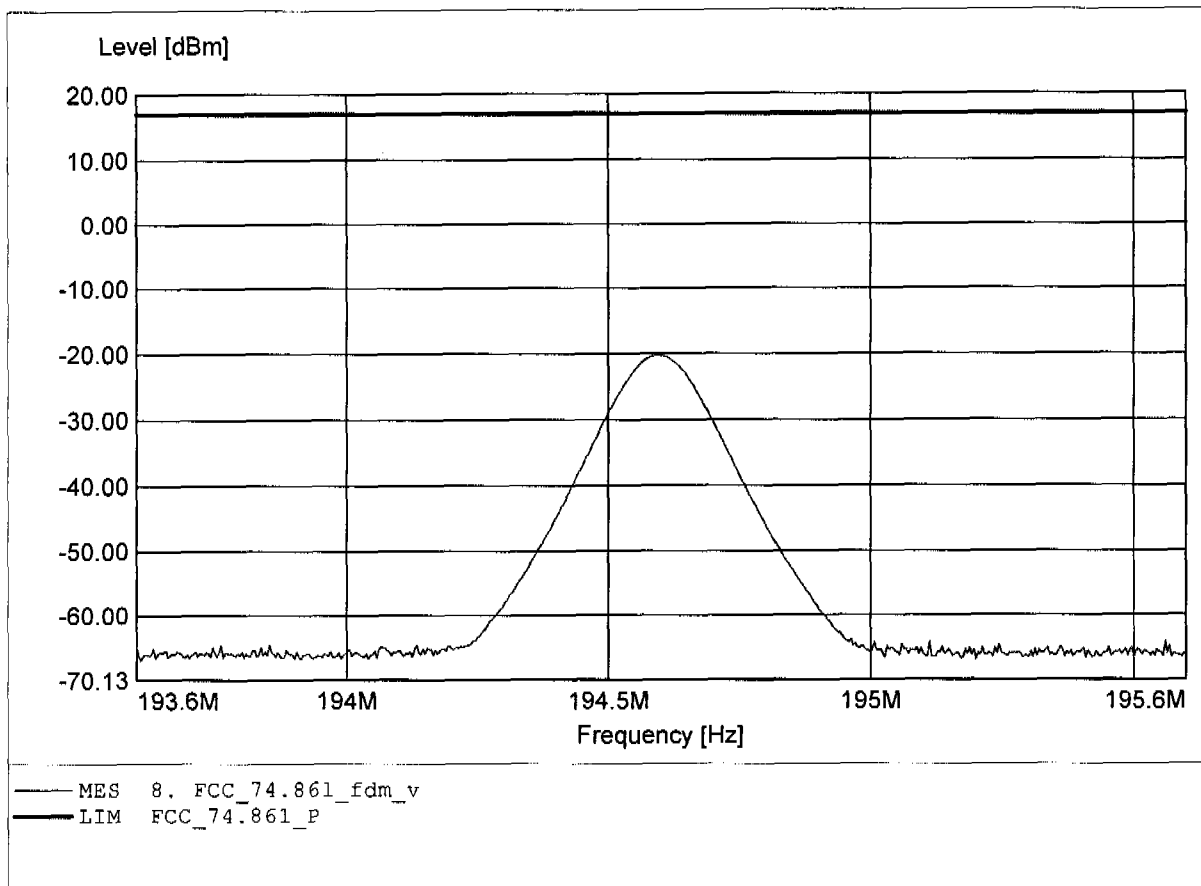
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 194.6 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223  
Freq:194.598MHz Pmax:-14.47dBm RBW: 100 kHz



**Transmitter carrier power under normal conditions**

**in according to FCC Part 74.861**

EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 194.6 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223  
Freq:194.594MHz Pmax:-20.28dBm RBW: 100 kHz

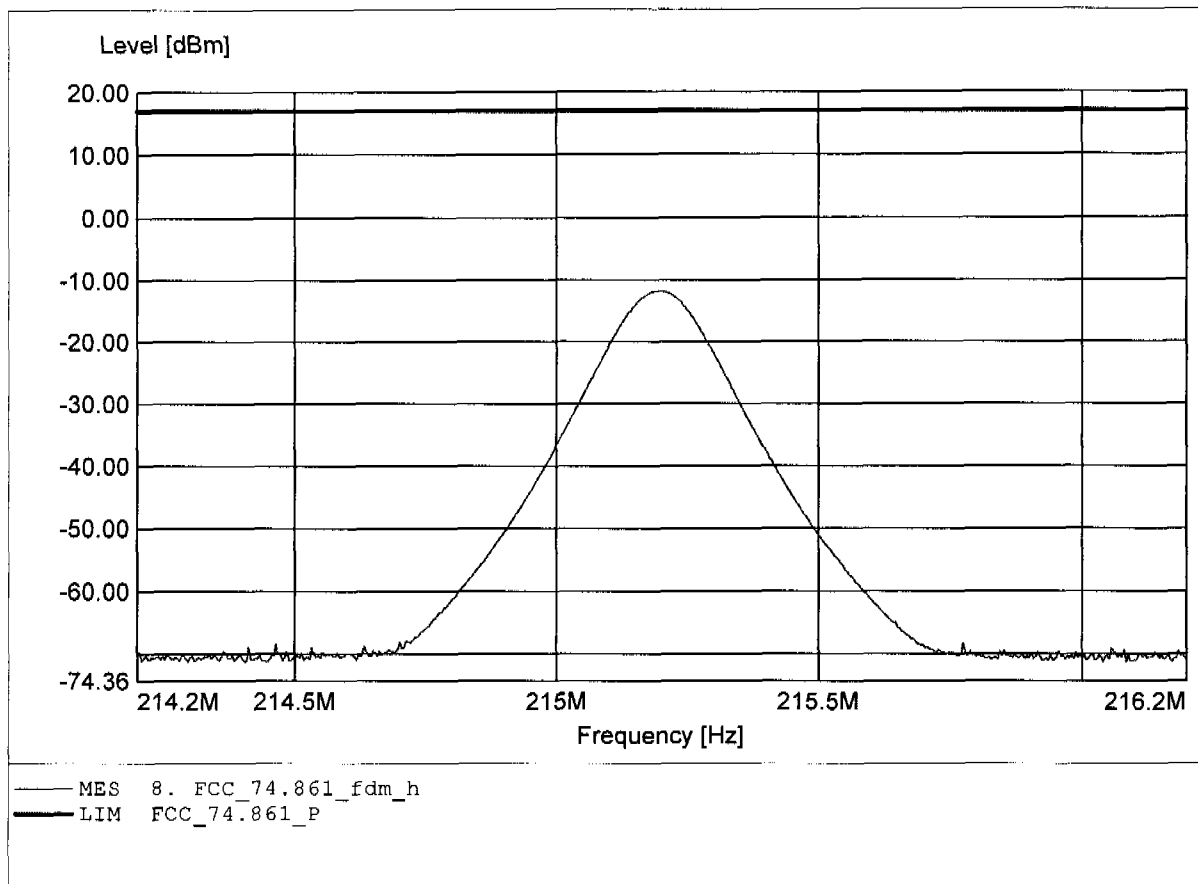




**Transmitter carrier power under normal conditions**

**in according to FCC Part 74.861**

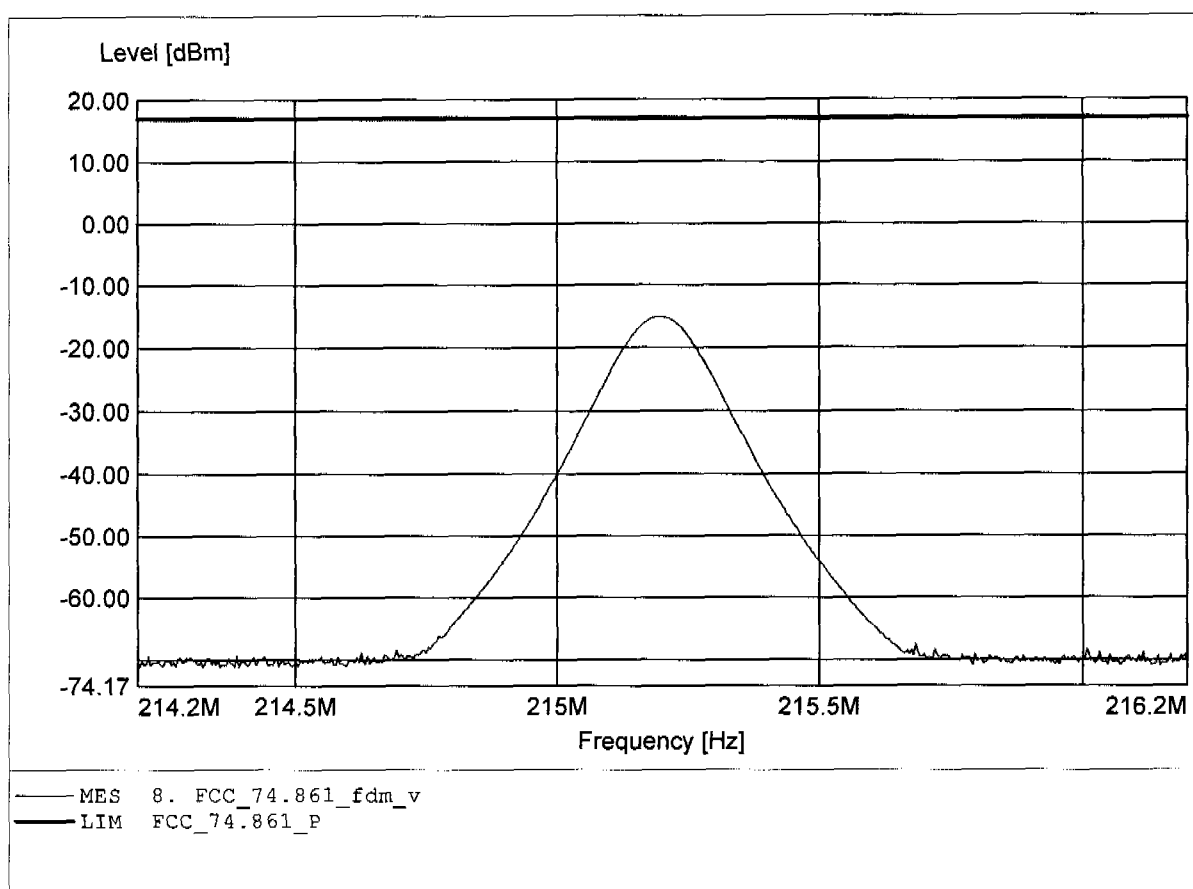
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 215.2 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223  
Freq:215.194MHz Pmax:-11.82dBm RBW: 100 kHz



**Transmitter carrier power under normal conditions**

**in according to FCC Part 74.861**

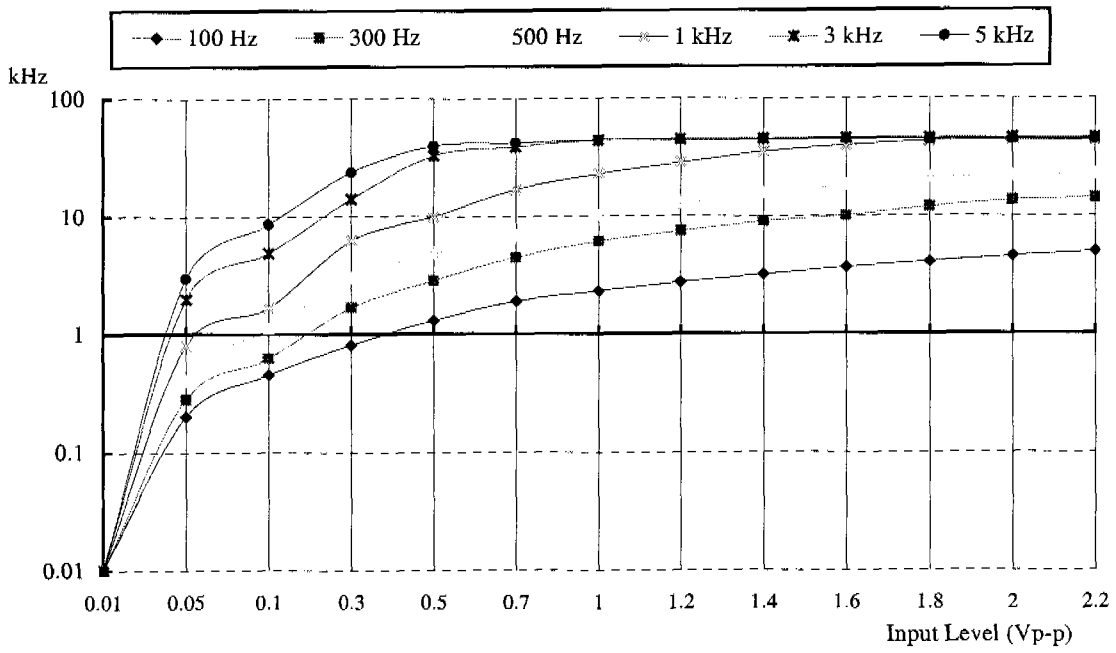
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 215.2 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223  
Freq:215.194MHz Pmax:-15.12dBm RBW: 100 kHz



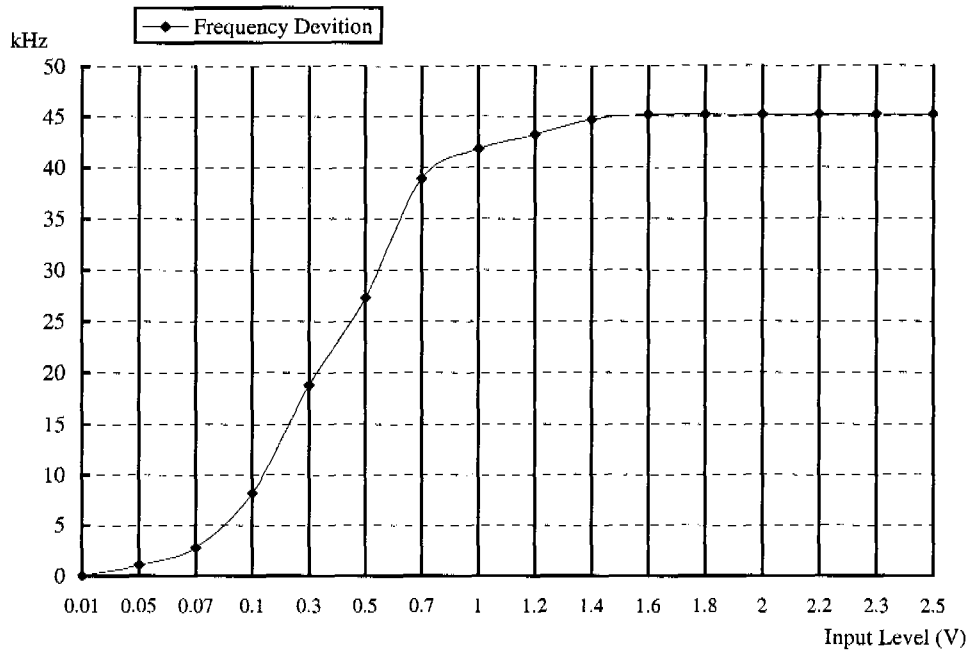


## Appendix C

Modulation Limiting



Input Audio Frequency : 1kHz, Sine Wave

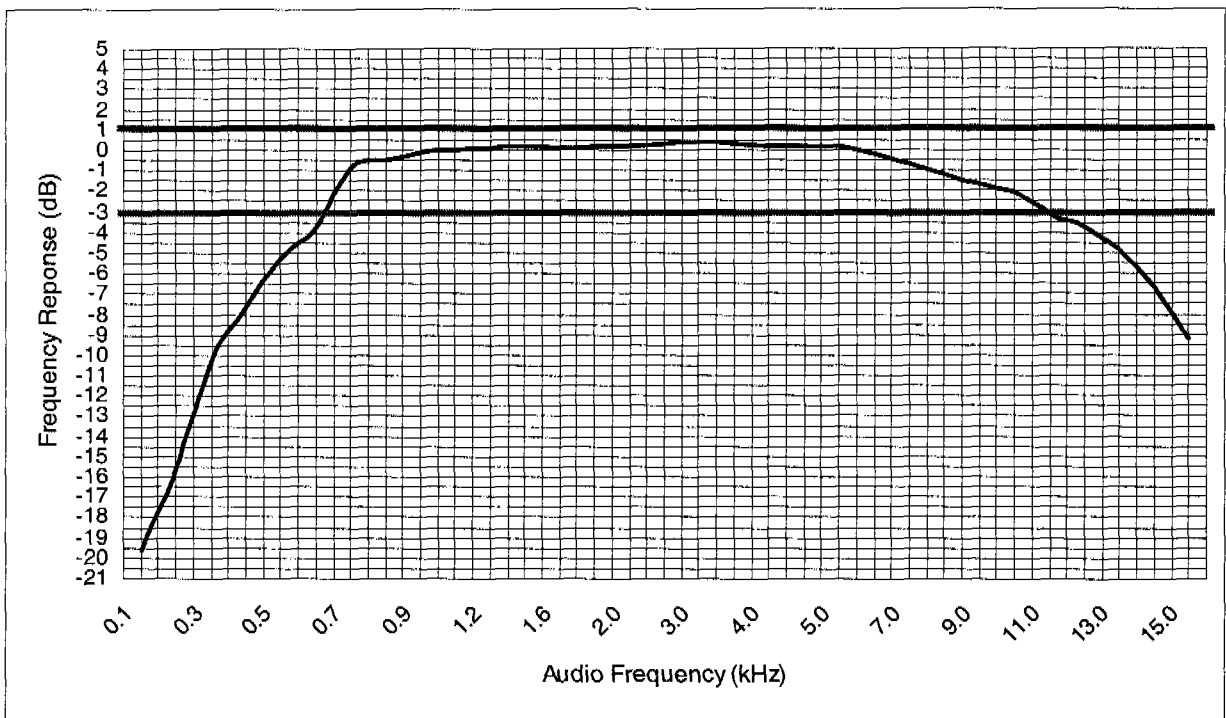
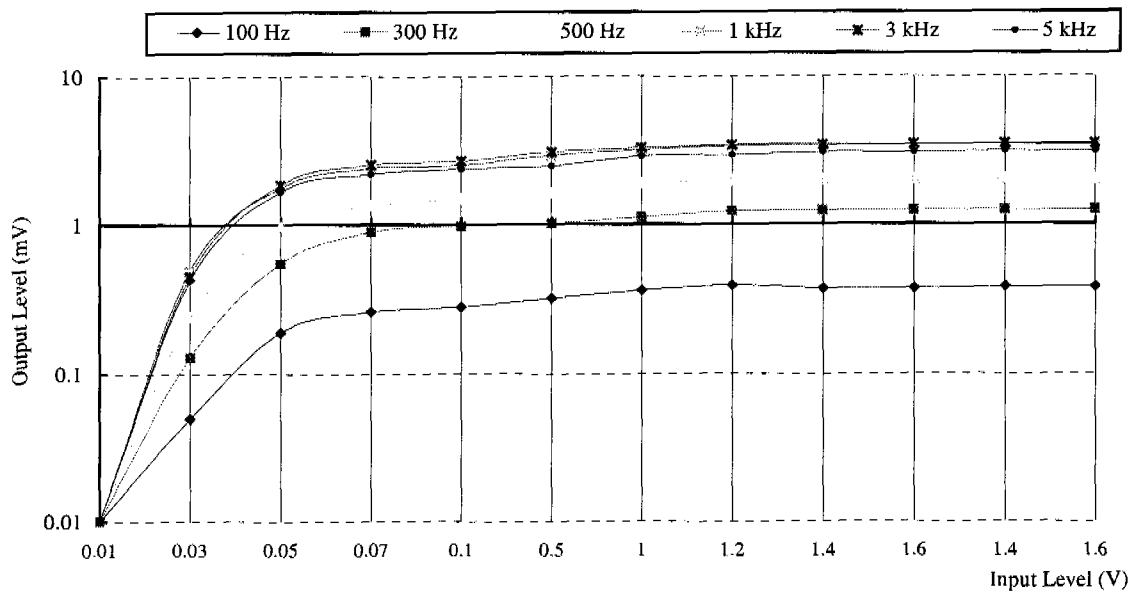


The Level input to produce 50% modulation is 350 mV, therefore the magnitude 16 dB greater than it is 2187.7mV.



## Appendix D

Audio Frequency Response



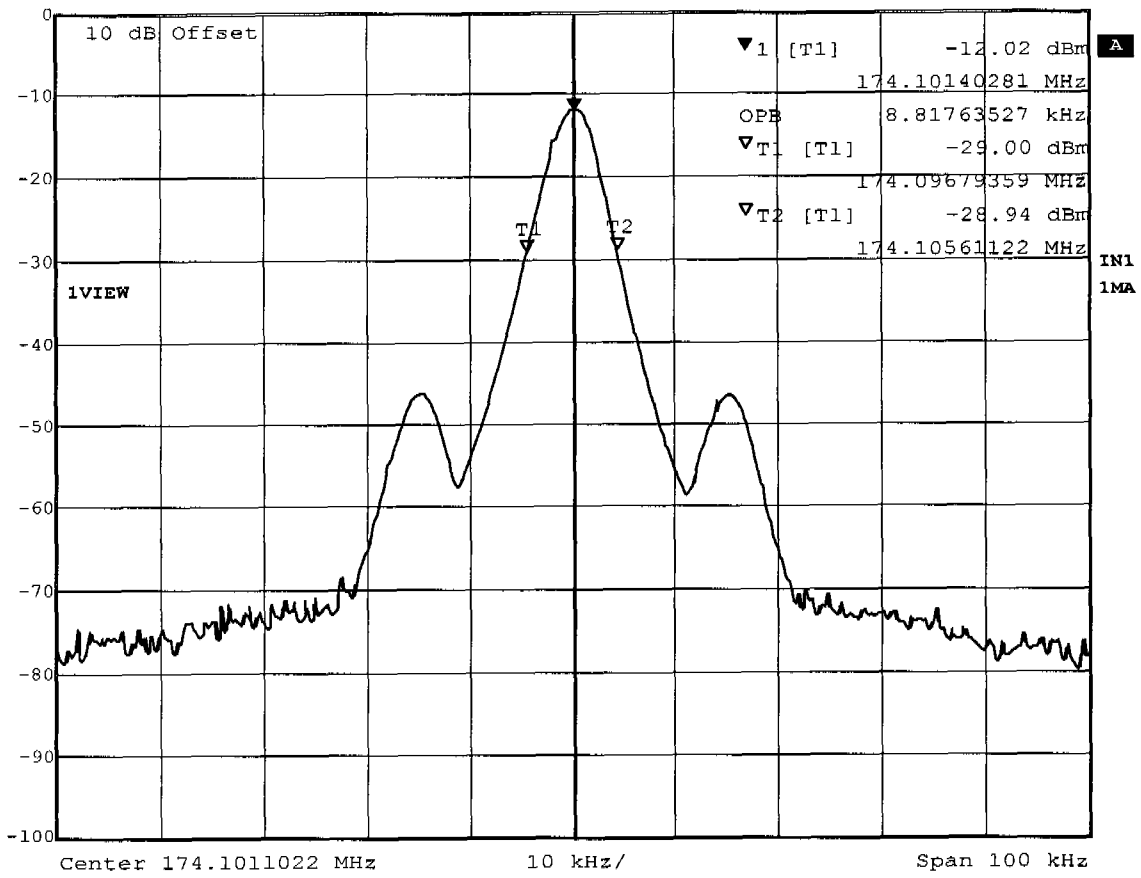


## Appendix E

Occupied Bandwidth / Emission Mask



Marker 1 [T1] RBW 3 kHz RF Att 20 dB  
Ref Lvl -12.02 dBm VBW 3 kHz  
0 dBm 174.10140281 MHz SWT 50 ms Unit dBm

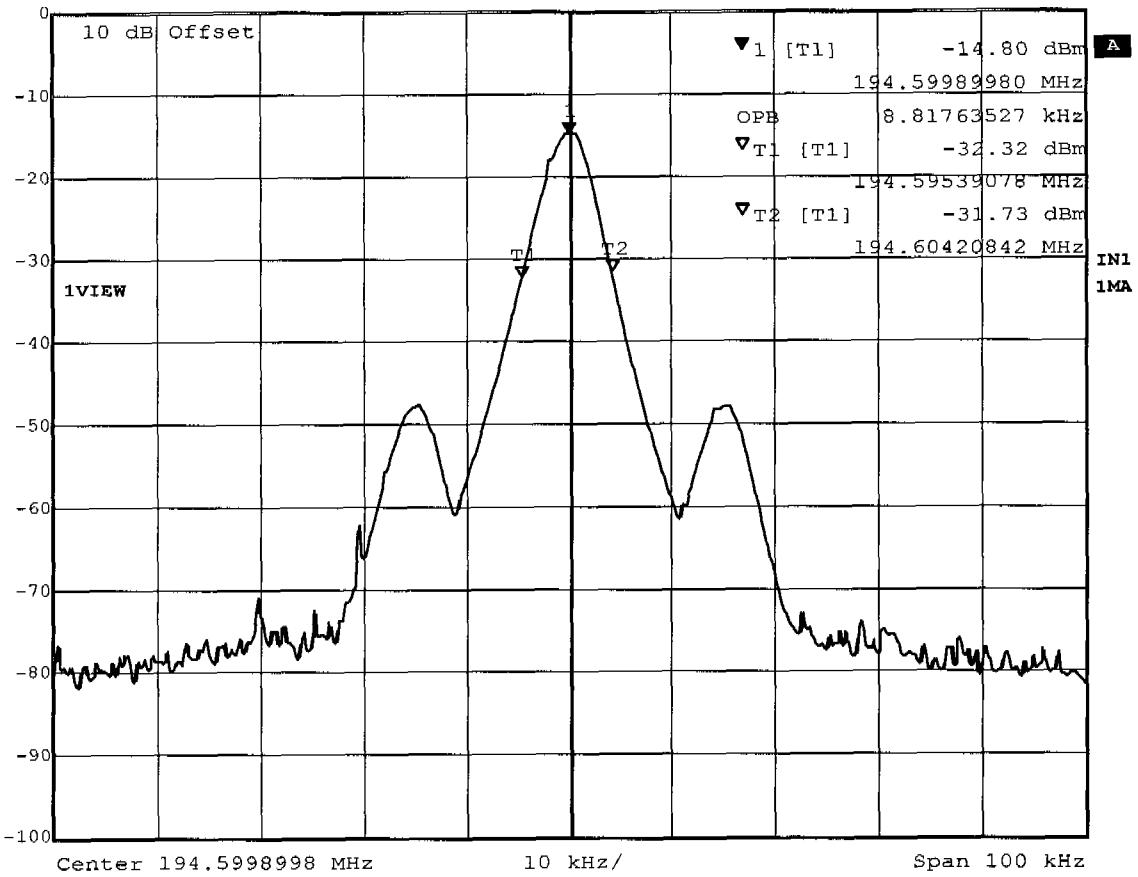


Title: Occupied bandwidth with 15000Hz Modulation  
Comment A: Transmitter Q-1002 174.1 MHz  
Date: 5.APR.2004 22:08:25





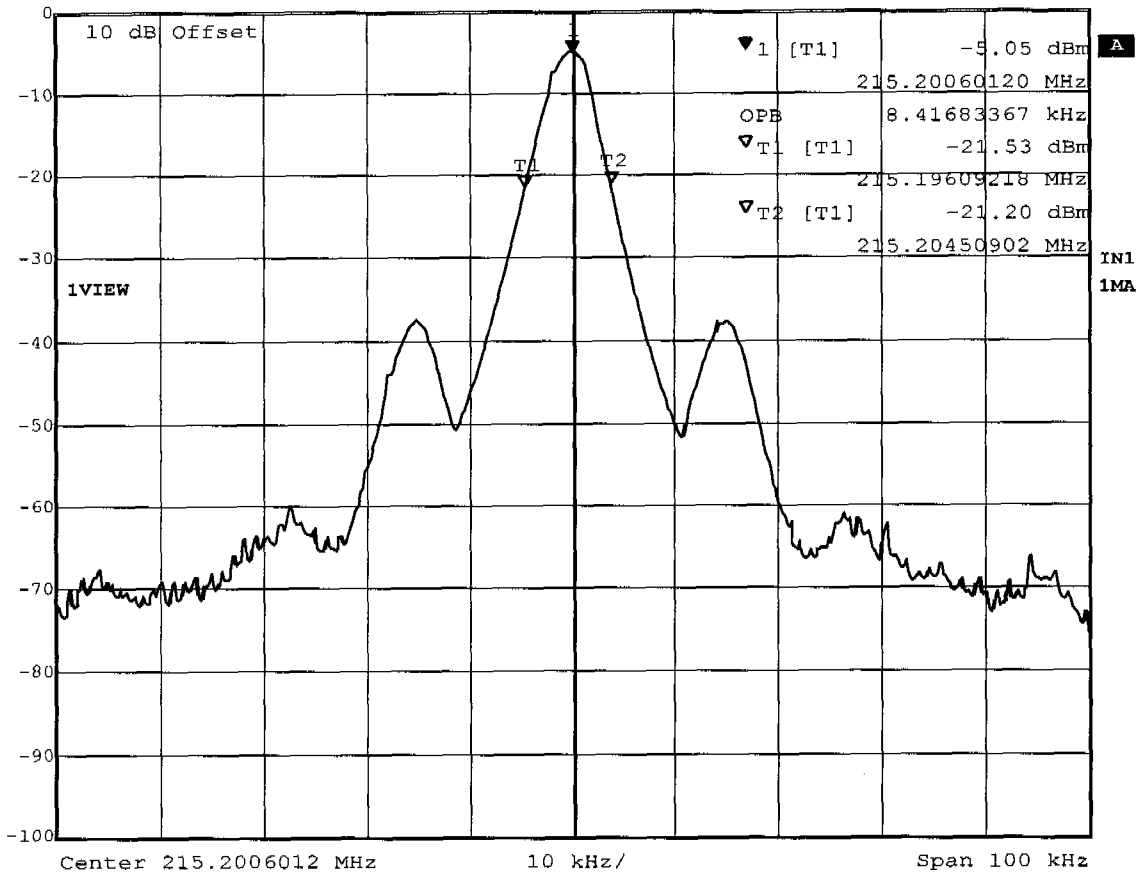
Marker 1 [T1] RBW 3 kHz RF Att 20 dB  
Ref Lvl -14.80 dBm VBW 3 kHz  
0 dBm 194.59989980 MHz SWT 50 ms Unit dBm



Title: Occupied bandwidth with 15000Hz Modulation  
Comment A: Transmitter Q-1002 194.6 MHz  
Date: 5.APR.2004 22:19:36



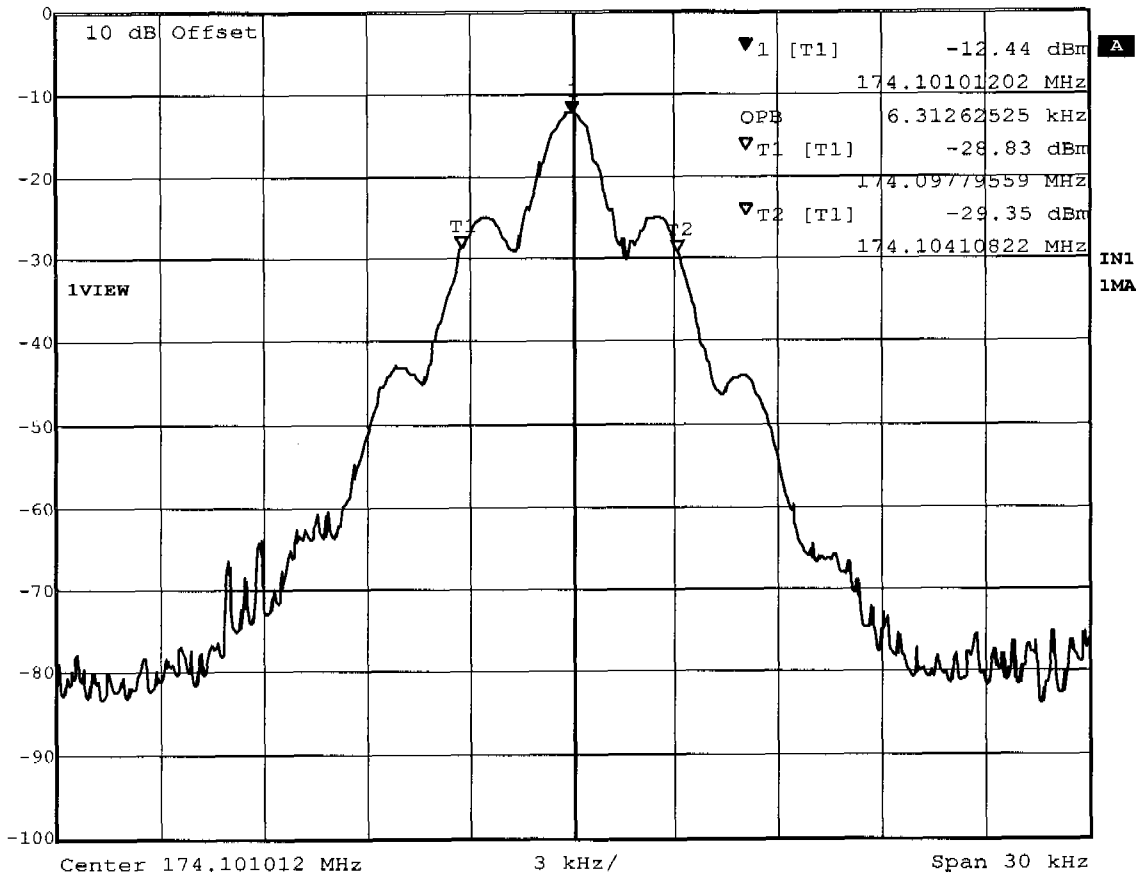
Marker 1 [T1] REW 3 kHz RF Att 20 dB  
Ref Lvl -5.05 dBm VBW 3 kHz  
0 dBm 215.20060120 MHz SWT 50 ms Unit dBm



Title: Occupied bandwidth with 15000Hz Modulation  
Comment A: Transmitter Q-1002 215.2 MHz  
Date: 5.APR.2004 22:17:45



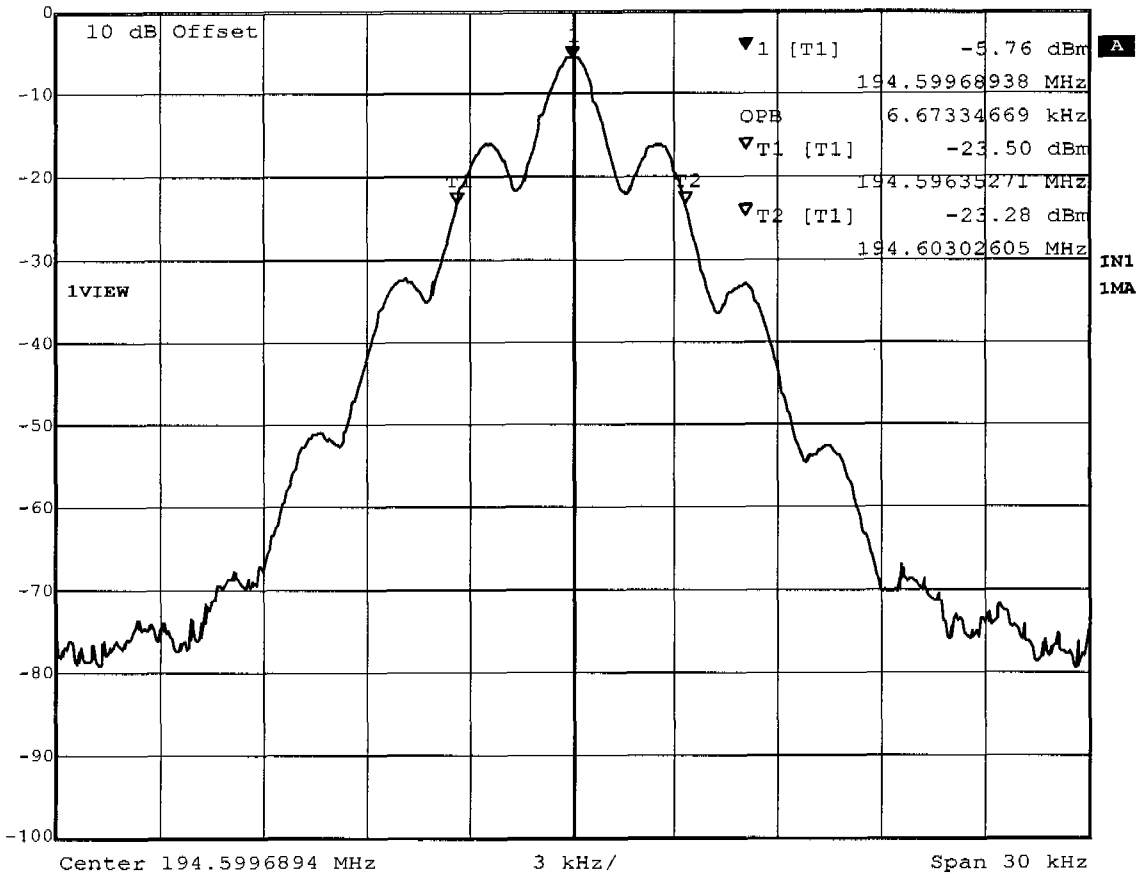
Marker 1 [T1] REW 1 kHz RF Att 20 dB  
Ref Lvl -12.44 dBm VEW 1 kHz  
0 dBm 174.10101202 MHz SWT 150 ms Unit dBm



Title: Occupied bandwidth with 2500Hz Modulation  
Comment A: Transmitter Q-1002 174.1 MHz  
Date: 5.APR.2004 22:13:33



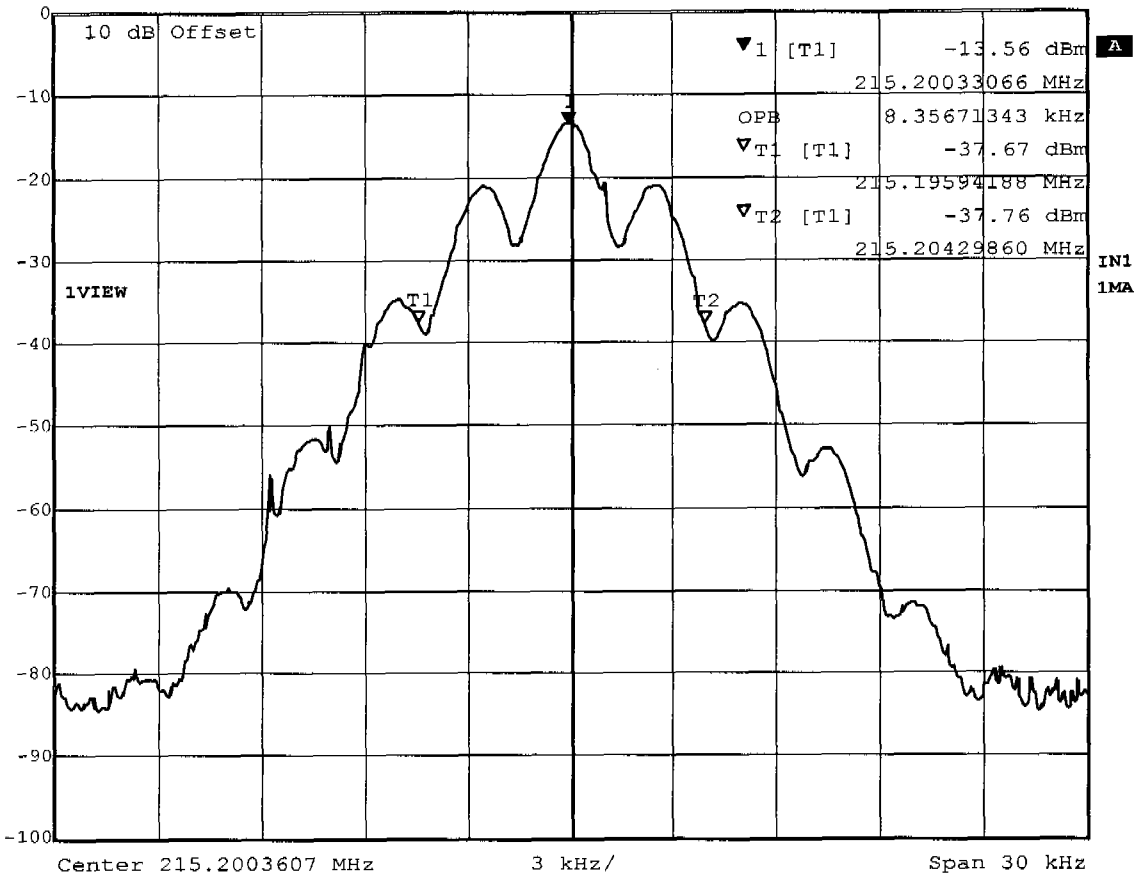
Marker 1 [T1] RBW 1 kHz RF Att 20 dB  
 Ref Lvl -5.76 dBm VBW 1 kHz  
 0 dBm 194.59968938 MHz SWT 150 ms Unit dBm



Title: Occupied bandwidth with 2500Hz Modulation  
 Comment A: Transmitter Q-1002 194.6 MHz  
 Date: 5.APR.2004 22:22:34



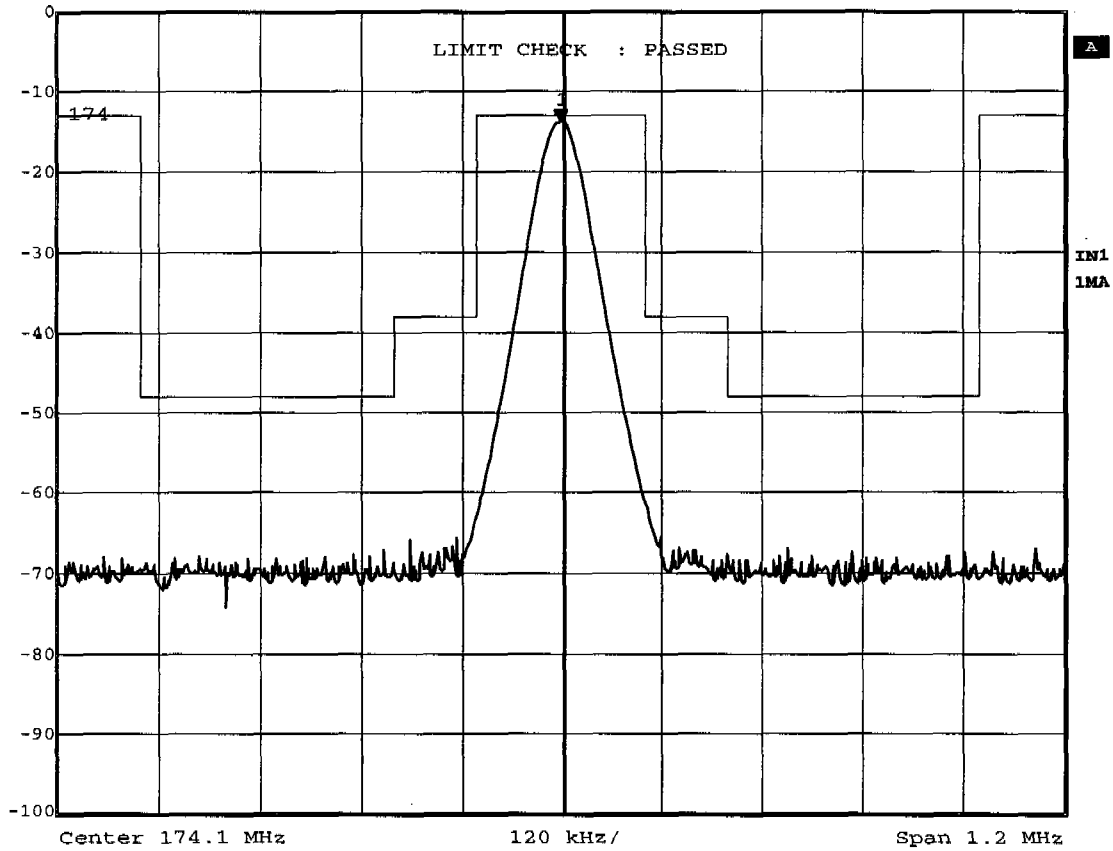
Marker 1 [T1] RBW 1 kHz RF Att 20 dB  
Ref Lvl -13.56 dBm VBW 1 kHz  
0 dBm 215.20033066 MHz SWT 150 ms Unit dBm



Title: Occupied bandwidth with 2500Hz Modulation  
Comment A: Transmitter Q-1002 215.2 MHz  
Date: 5.APR.2004 22:30:13



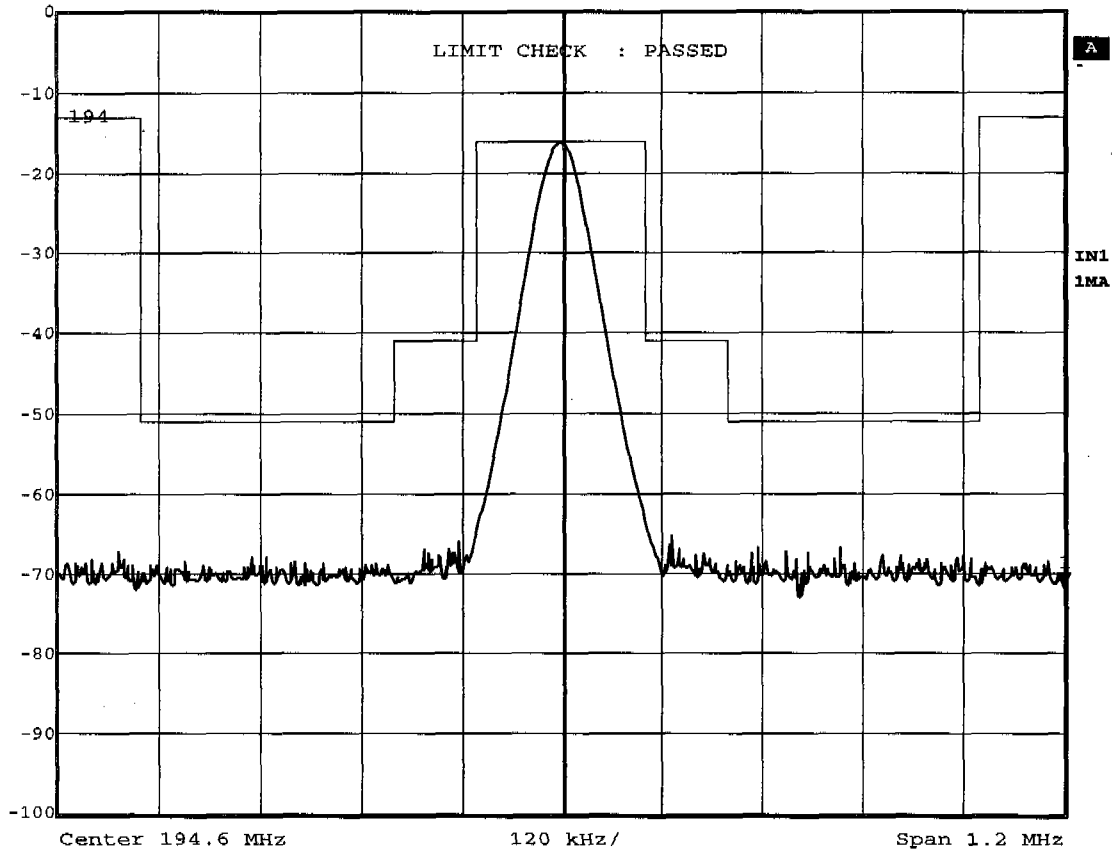
Marker 1 [T1] RBW 30 kHz RF Att 30 dB  
Ref Lvl -13.99 dBm VBW 100 kHz  
0 dBm 174.09879760 MHz SWT 1 s Unit dBm



Title: 174.1 MASK  
Date: 13.MAY.2004 01:17:13



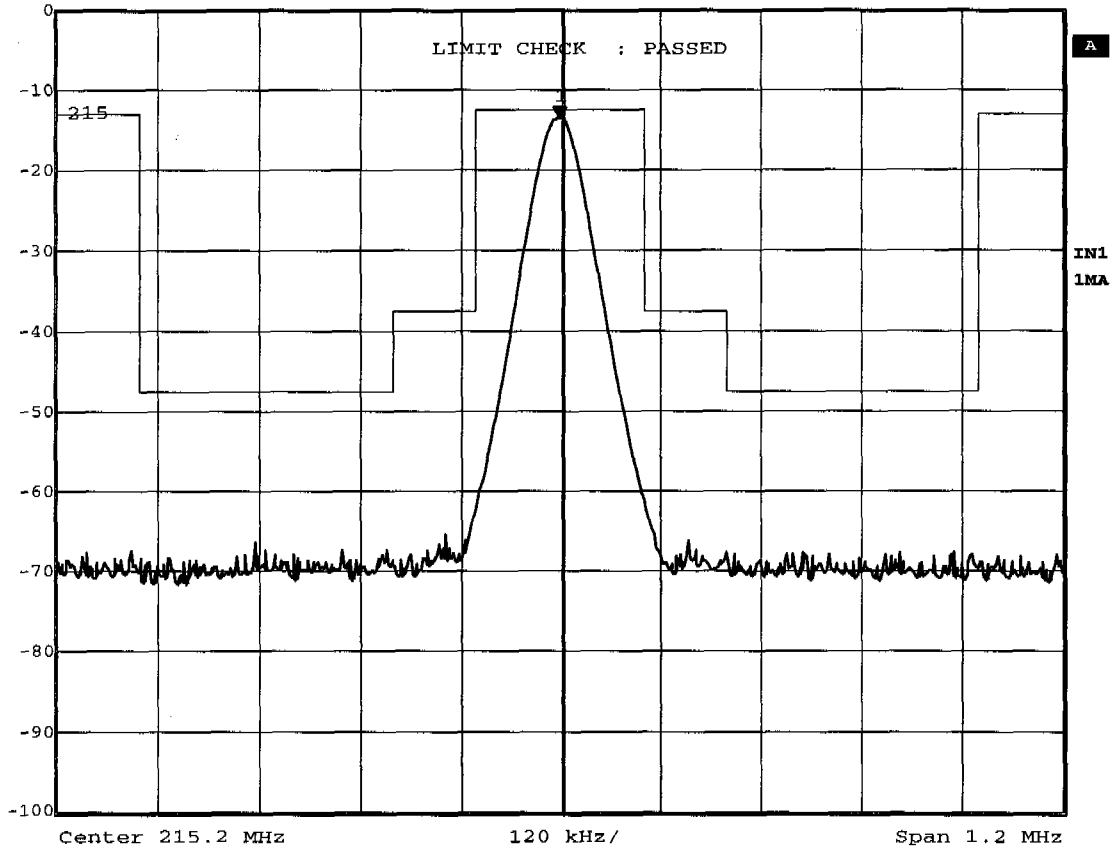
Marker 1 [T1] RBW 30 kHz RF Att 30 dB  
Ref Lvl -71.28 dBm VBW 100 kHz  
0 dBm 195.2000000 MHz SWT 1 s Unit dBm



Title: 194.6 MASK  
Date: 13.MAY.2004 01:04:52



Marker 1 [T1] RBW 30 kHz RF Att 30 dB  
Ref Lvl -13.63 dBm VBW 100 kHz  
0 dBm 215.19879760 MHz SWT 1 s Unit dBm



Center 215.2 MHz 120 kHz/ Span 1.2 MHz  
Title: 215.2 MASK  
Date: 13.MAY.2004 01:24:56





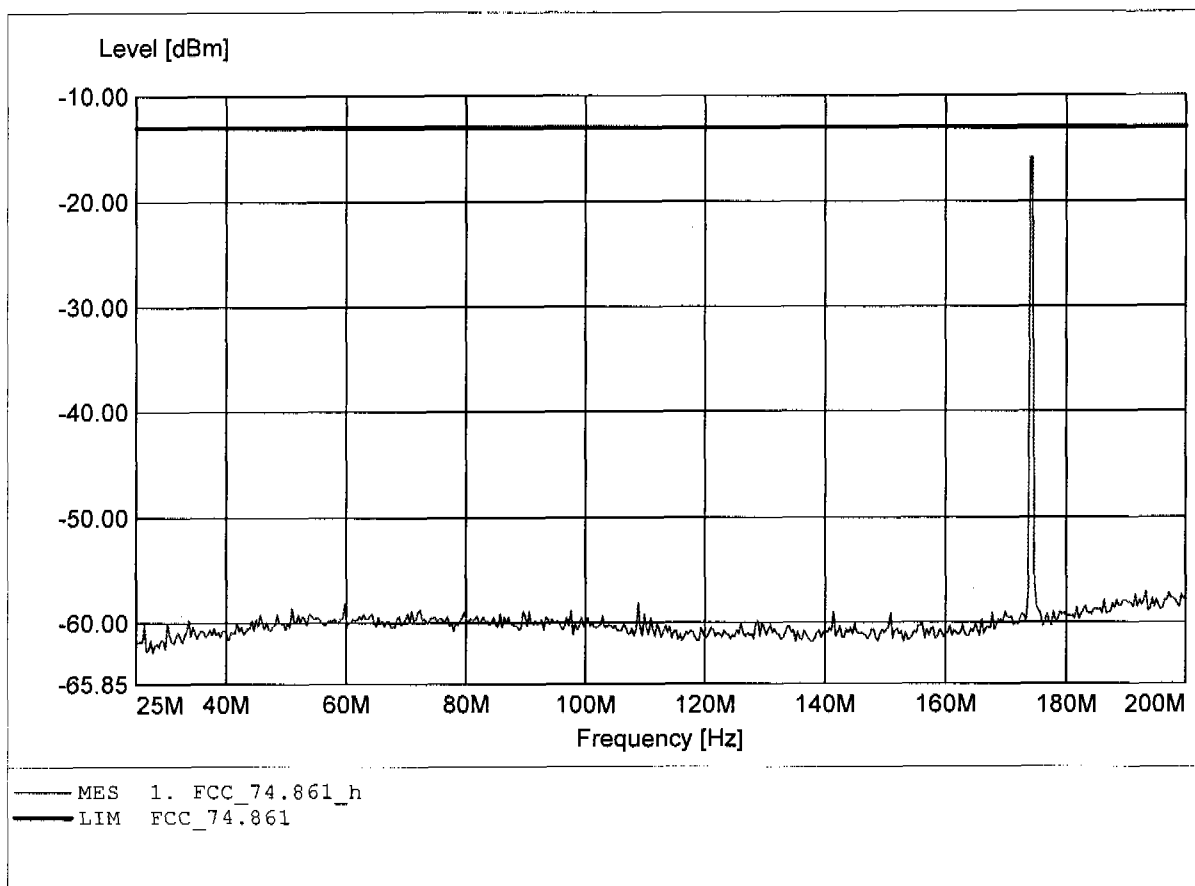
## Appendix F

### Field Strength of Spurious Radiation

**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

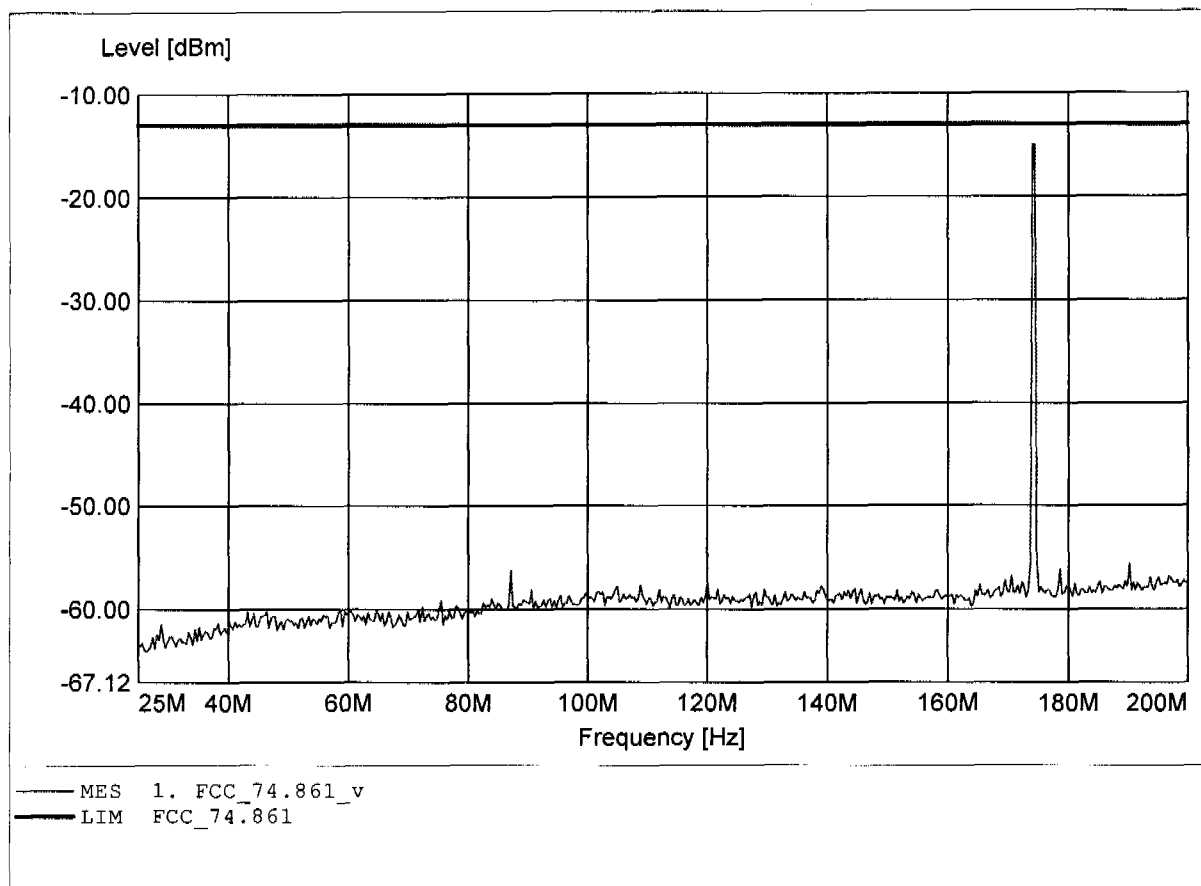
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 174.1 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:174.399MHz Pmax:-15.90dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

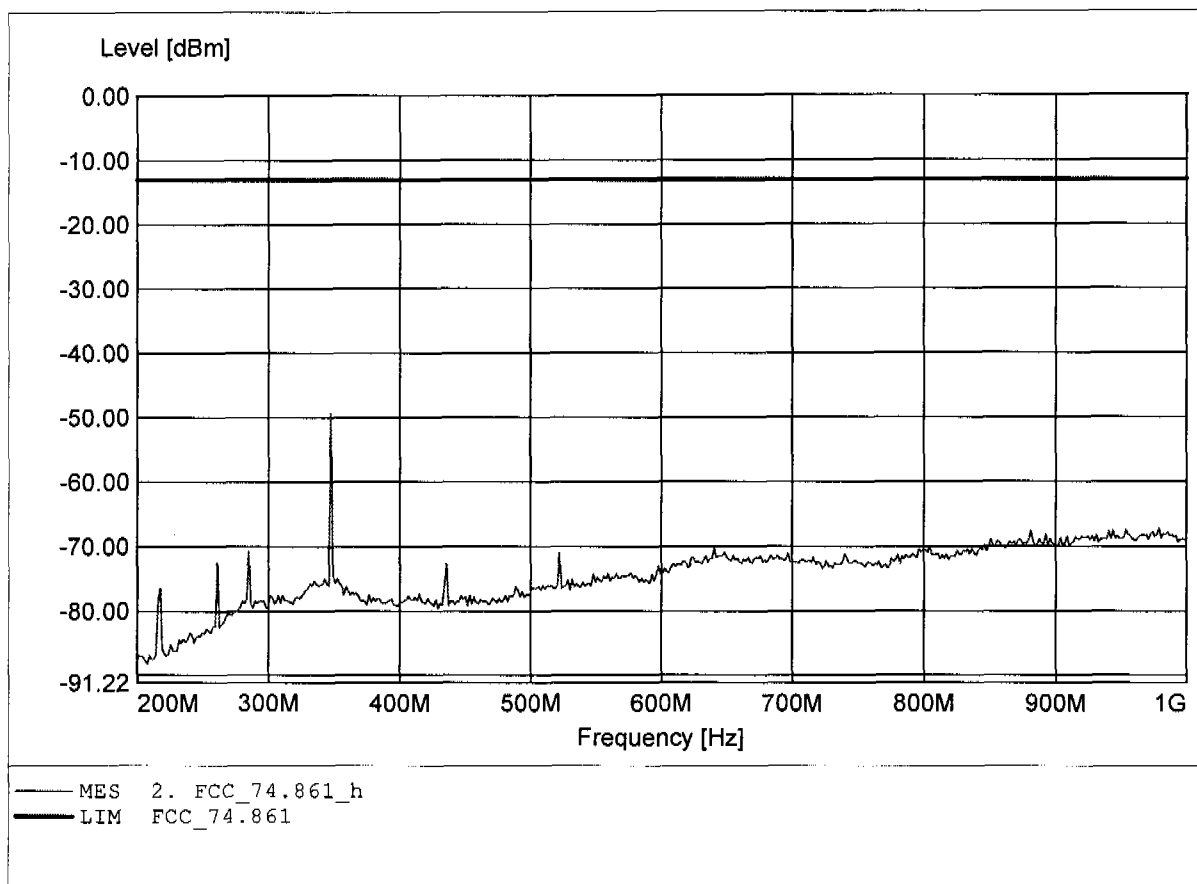
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 174.1 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:174.048MHz Pmax:-14.97dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

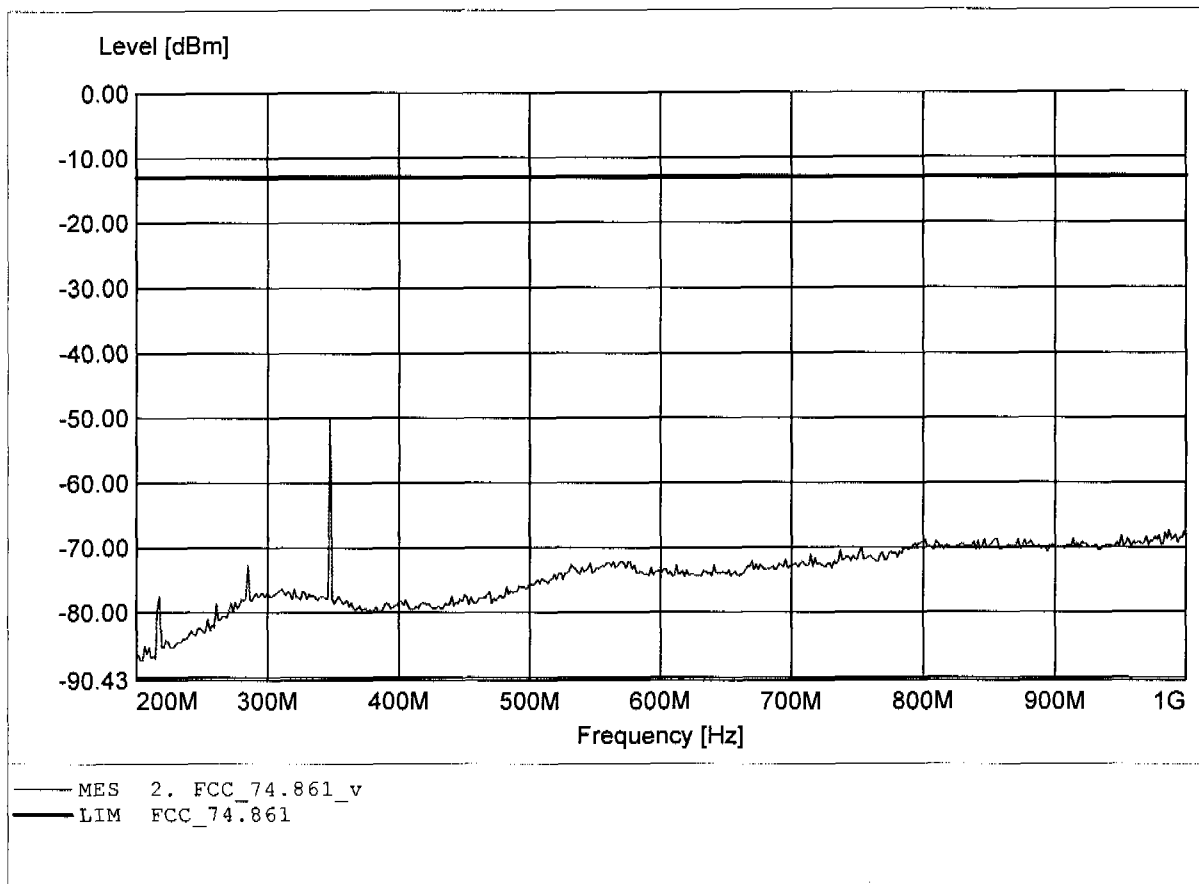
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 174.1 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.: 0.1-1GHz  
Freq:347.495MHz Pmax:-49.36dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

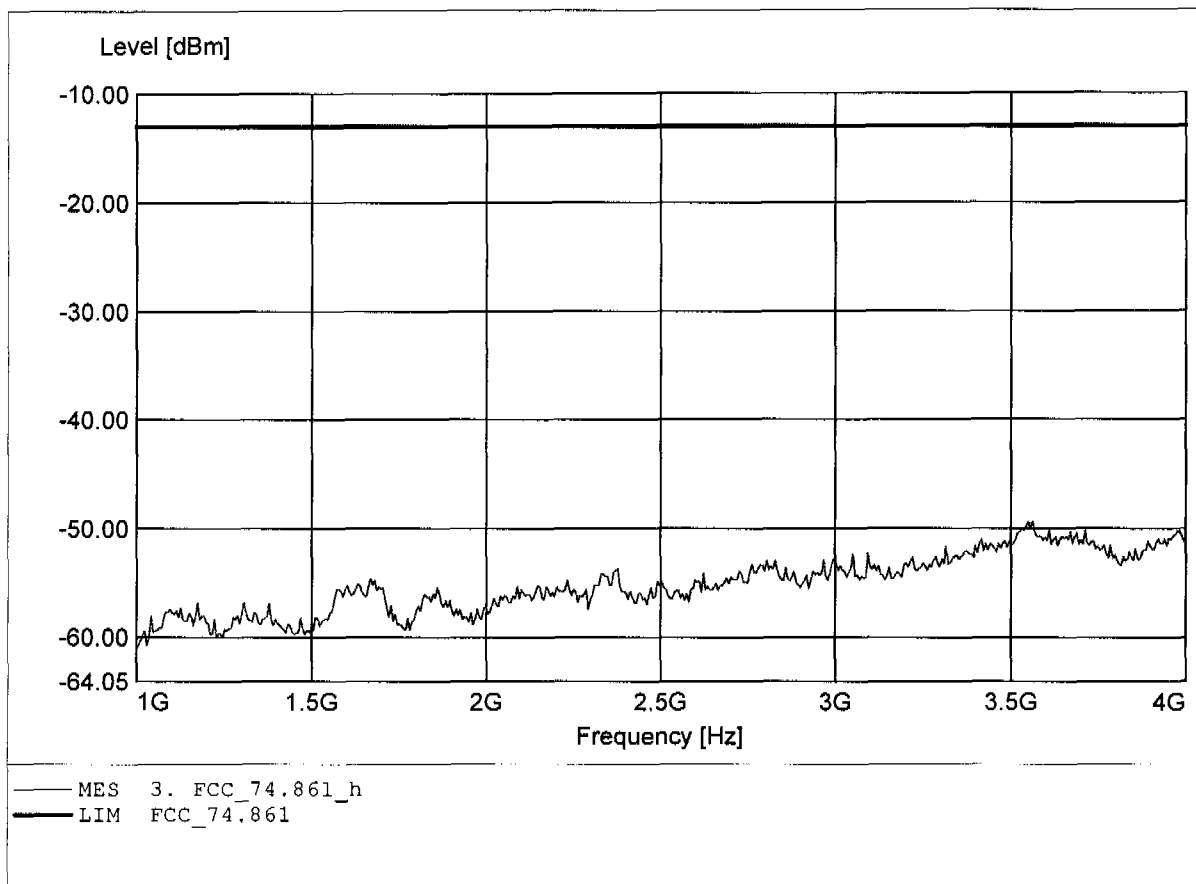
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 174.1 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.: 0.1-1GHz  
Freq:347.495MHz Pmax:-50.03dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

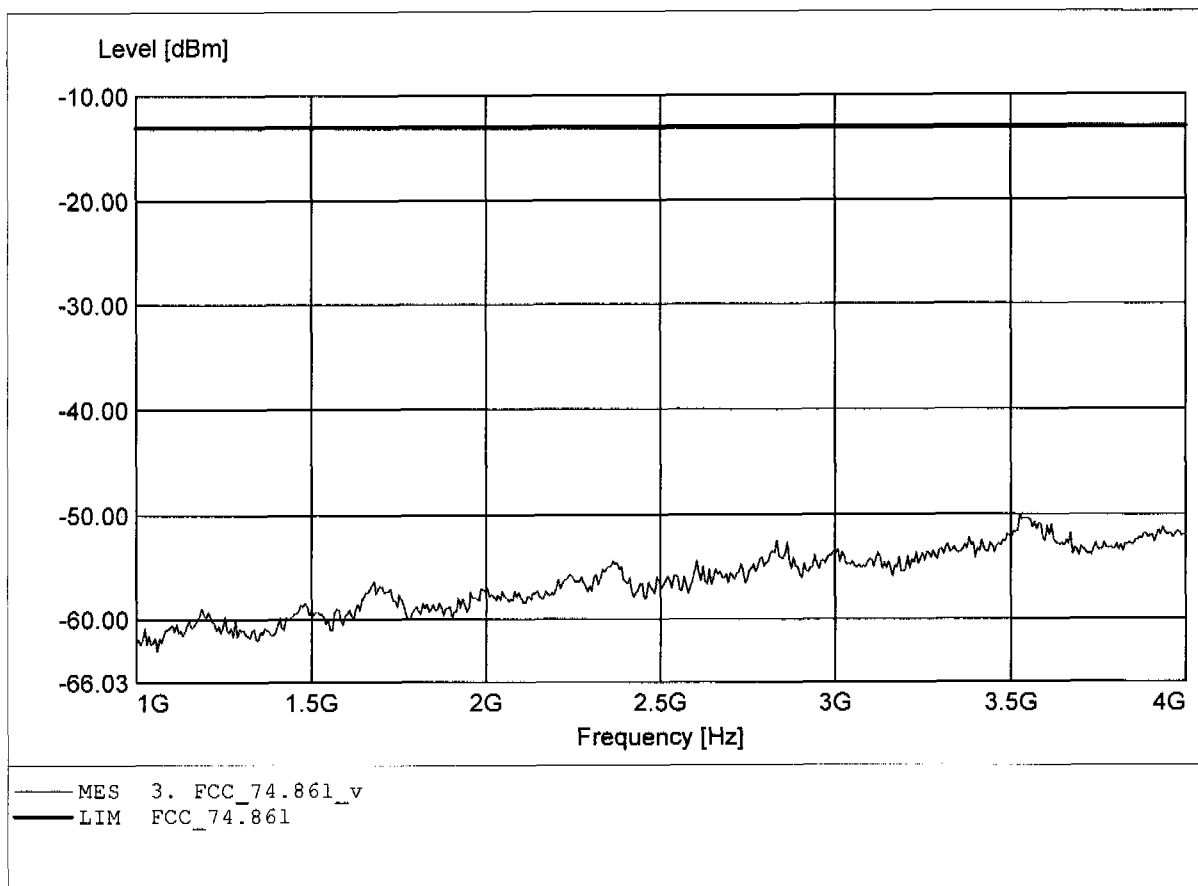
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 174.1 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.: 1-4GHz  
Freq:3.561GHz Pmax:-49.32dBm RBW: 1 MHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

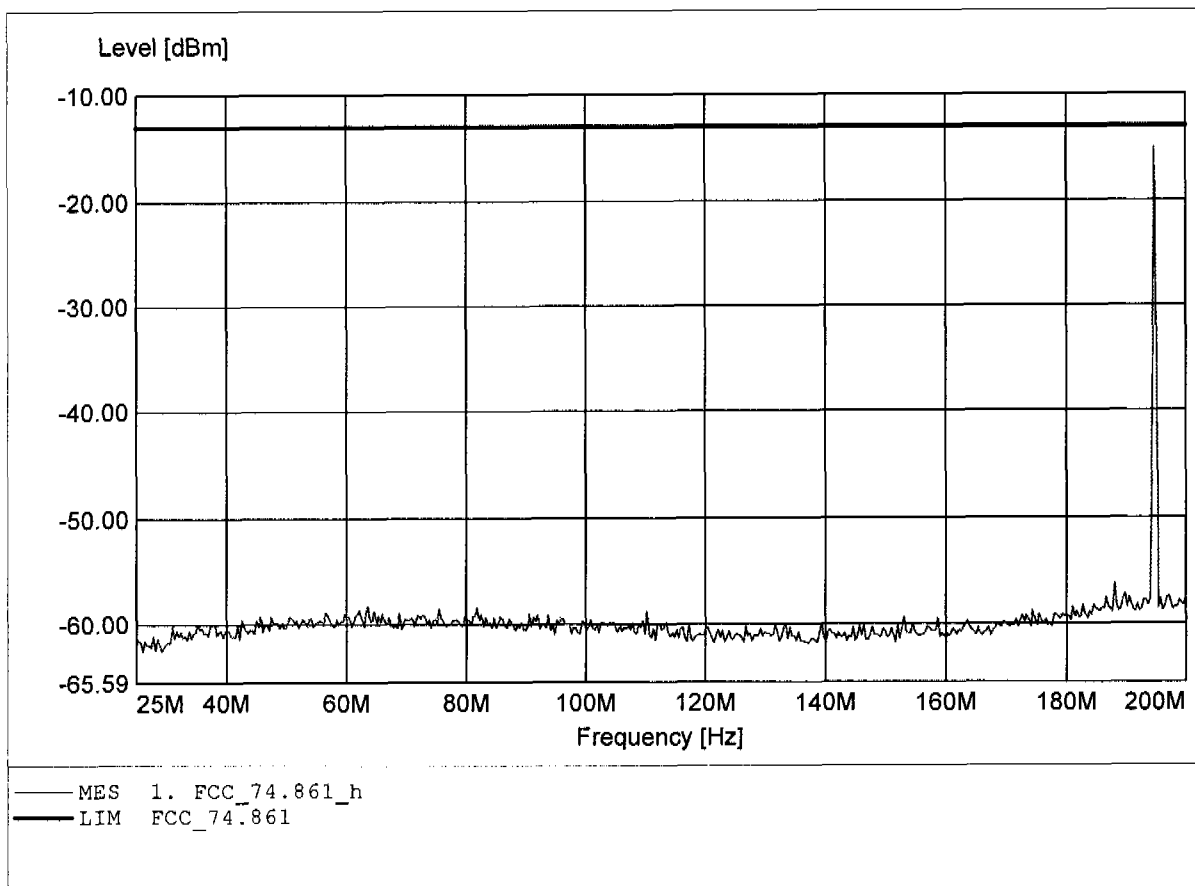
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 174.1 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.: 1-4GHz  
Freq:3.525GHz Pmax:-50.02dBm RBW: 1 MHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 194.6 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:194.739MHz Pmax:-15.02dBm RBW: 100 kHz

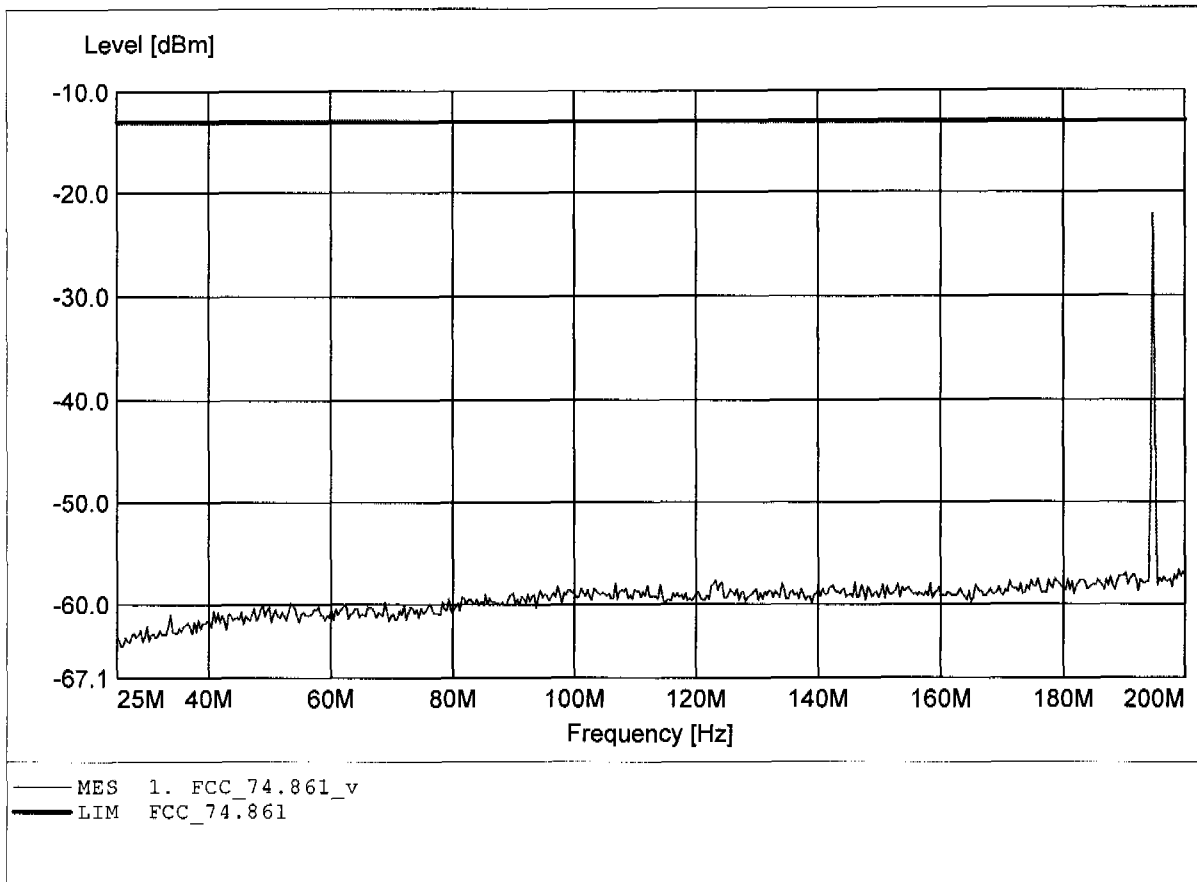




**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

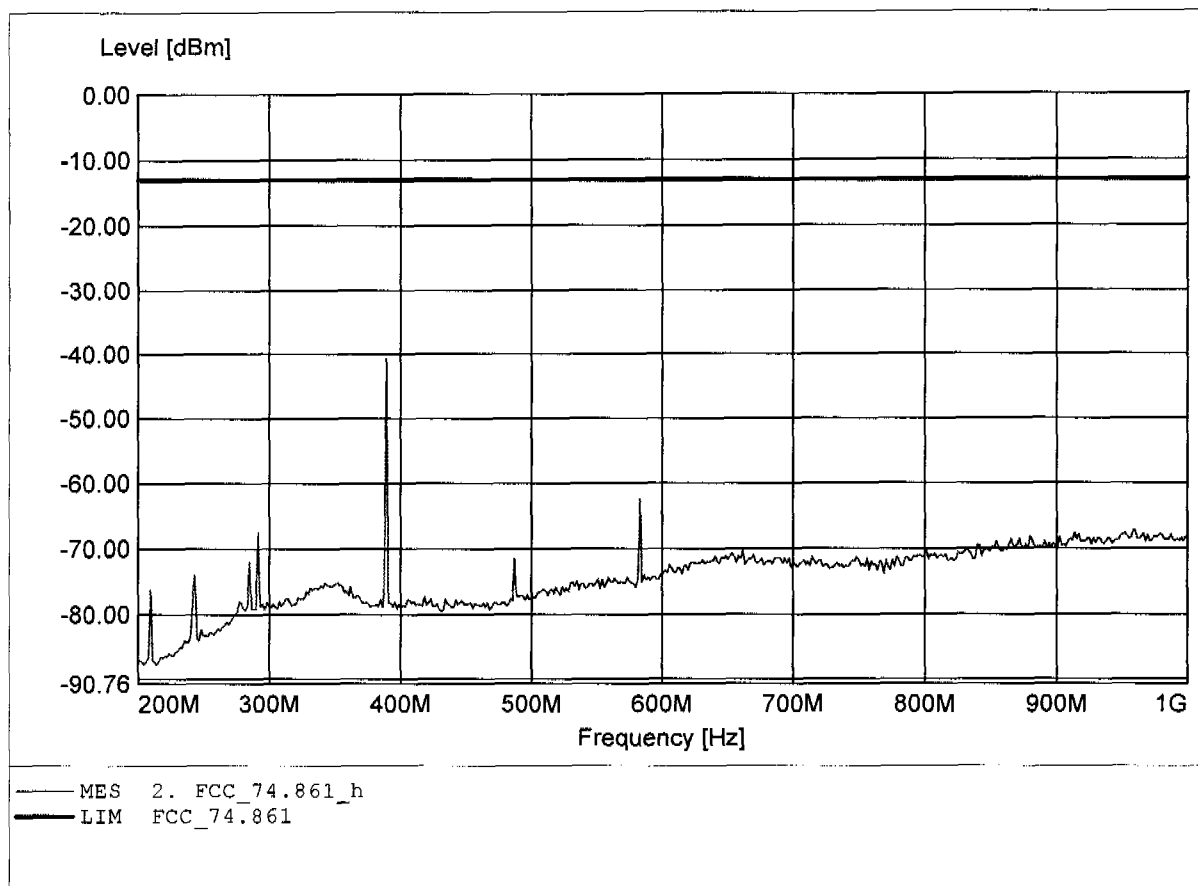
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 194.6 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:194.739MHz Pmax:-22.16dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

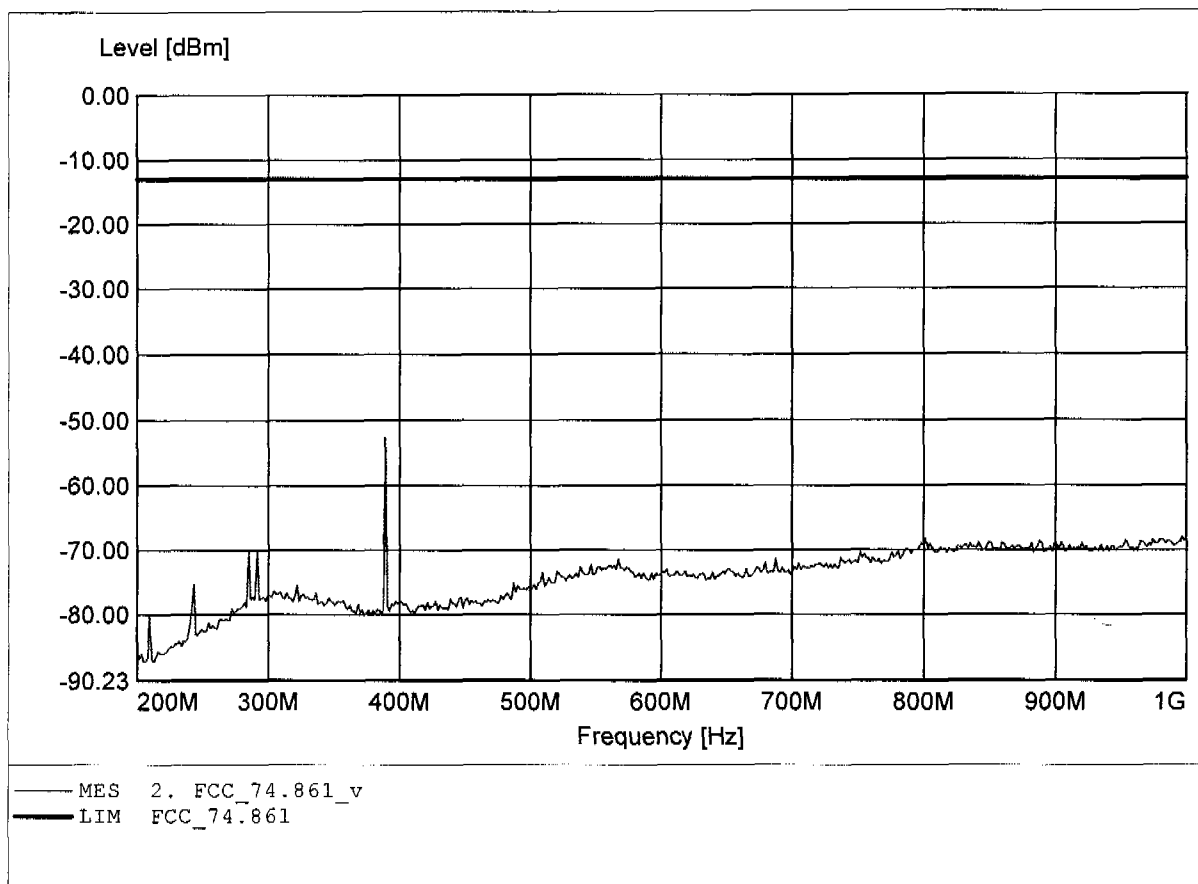
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 194.6 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.: 0.1-1GHz  
Freq:389.178MHz Pmax:-40.61dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

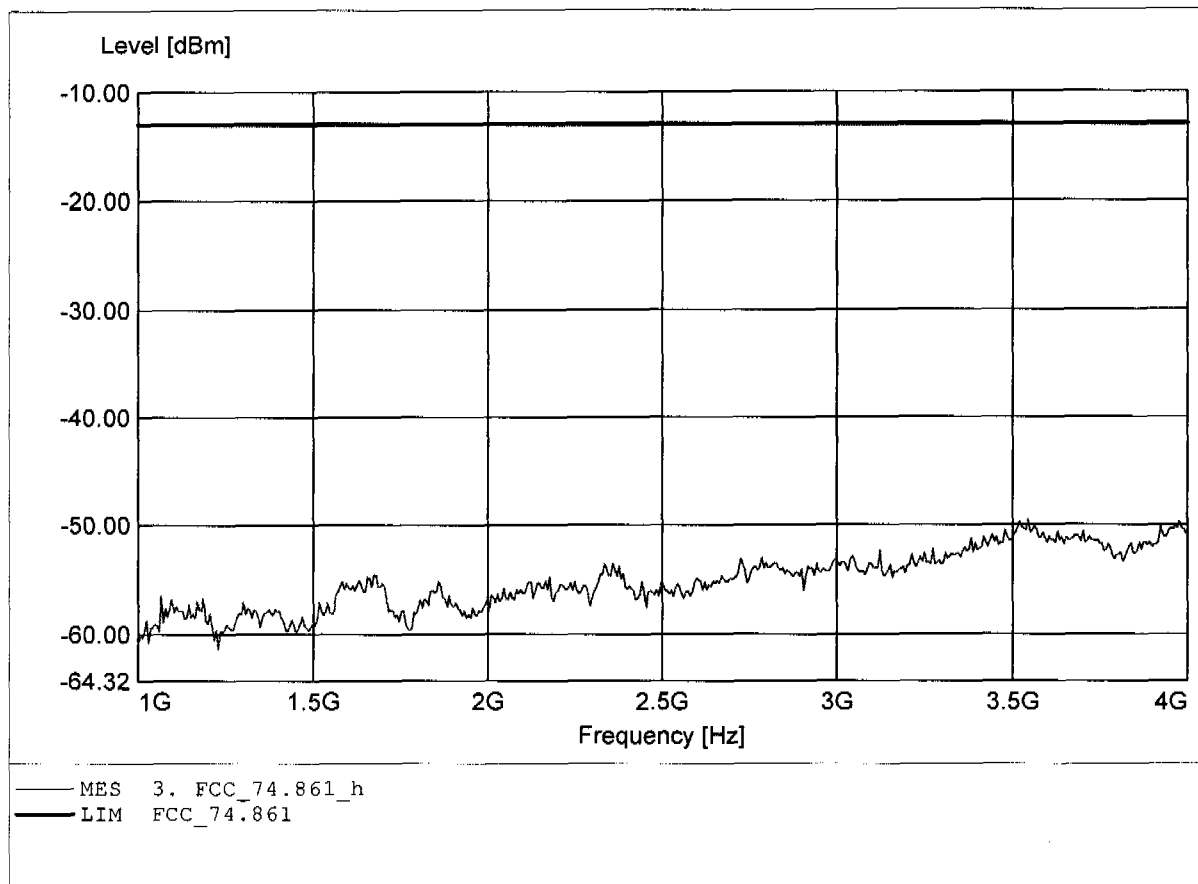
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 194.6 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.: 0.1-1GHz  
Freq:389.178MHz Pmax:-52.48dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

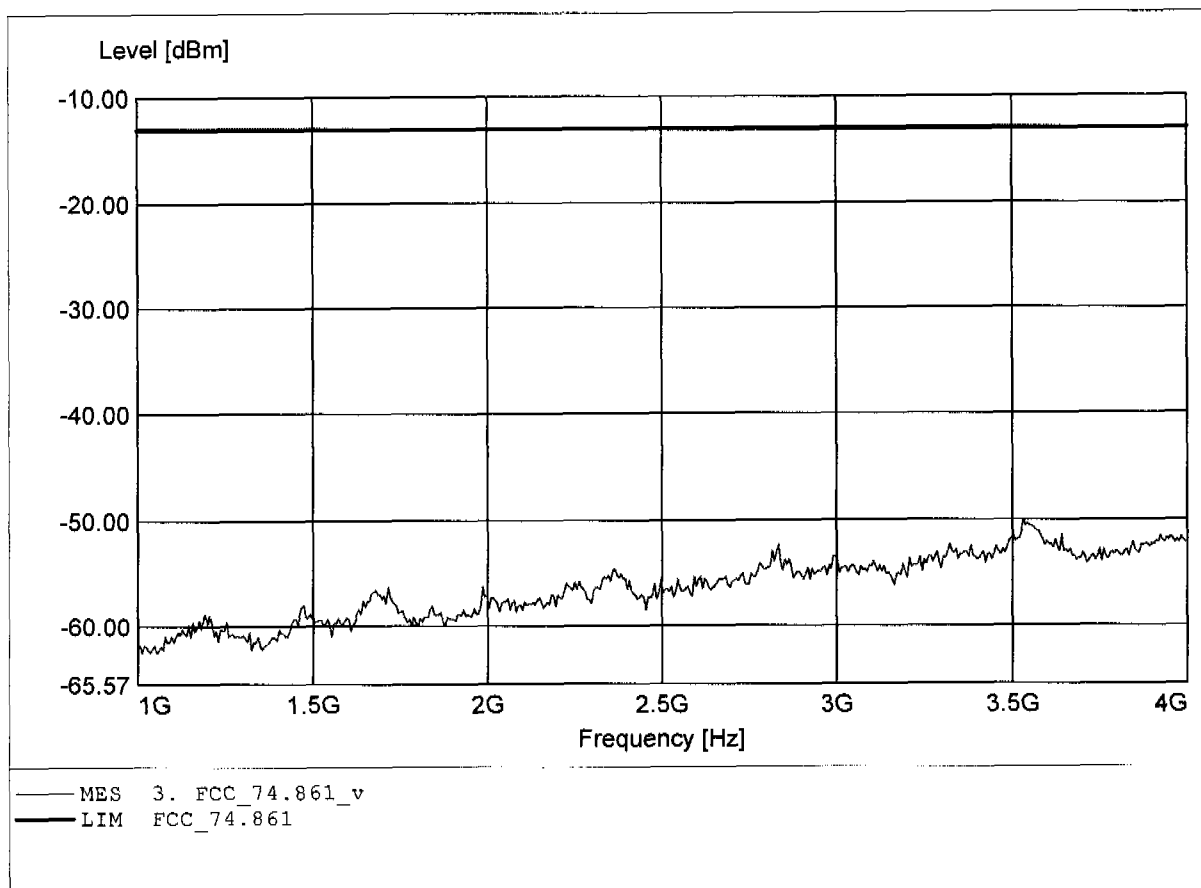
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 194.6 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.: 1-4GHz  
Freq:3.543GHz Pmax:-49.58dBm RBW: 1 MHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

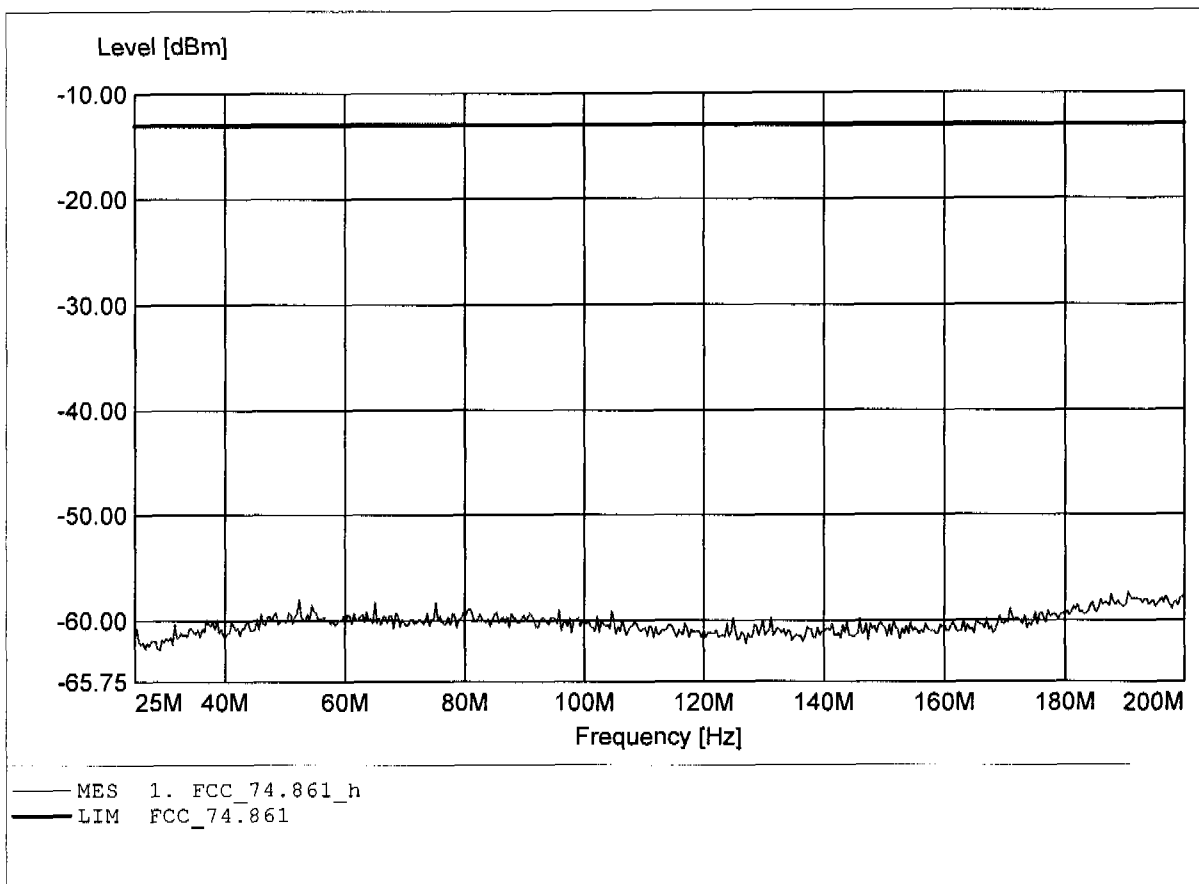
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 194.6 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.: 1-4GHz  
Freq:3.531GHz Pmax:-49.98dBm RBW: 1 MHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

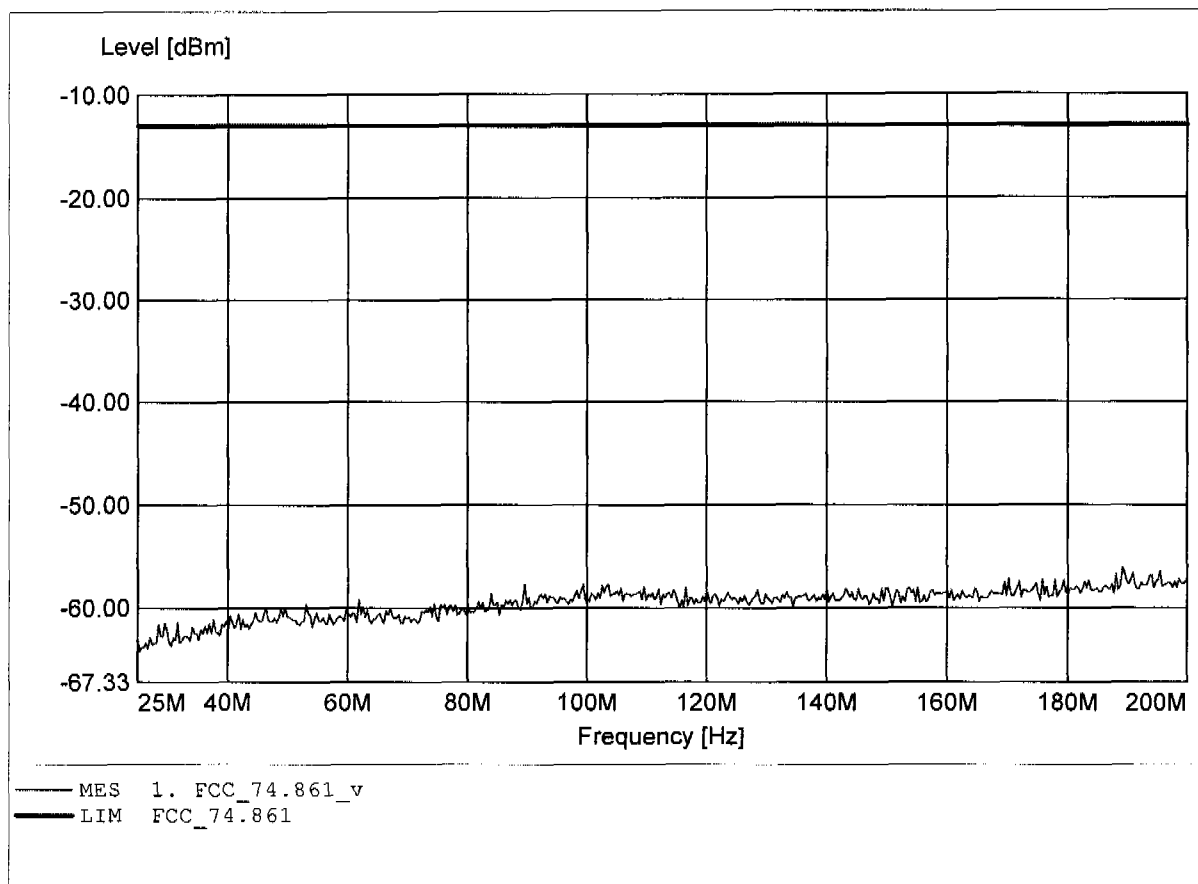
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 215.2MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:190.531MHz Pmax:-57.35dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

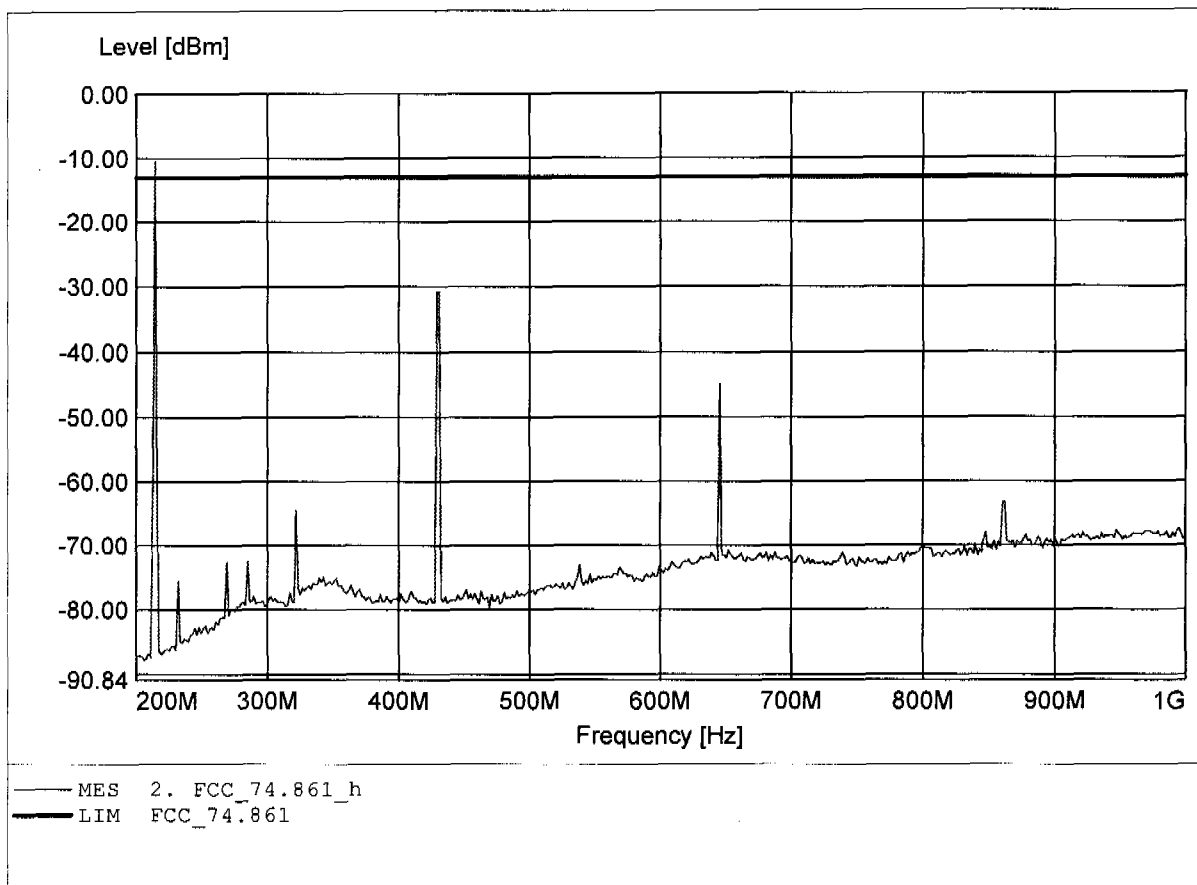
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 215.2MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq:189.128MHz Pmax:-56.10dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 215.2 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.: 0.1-1GHz  
Freq:214.429MHz Pmax:-10.43dBm RBW: 100 kHz

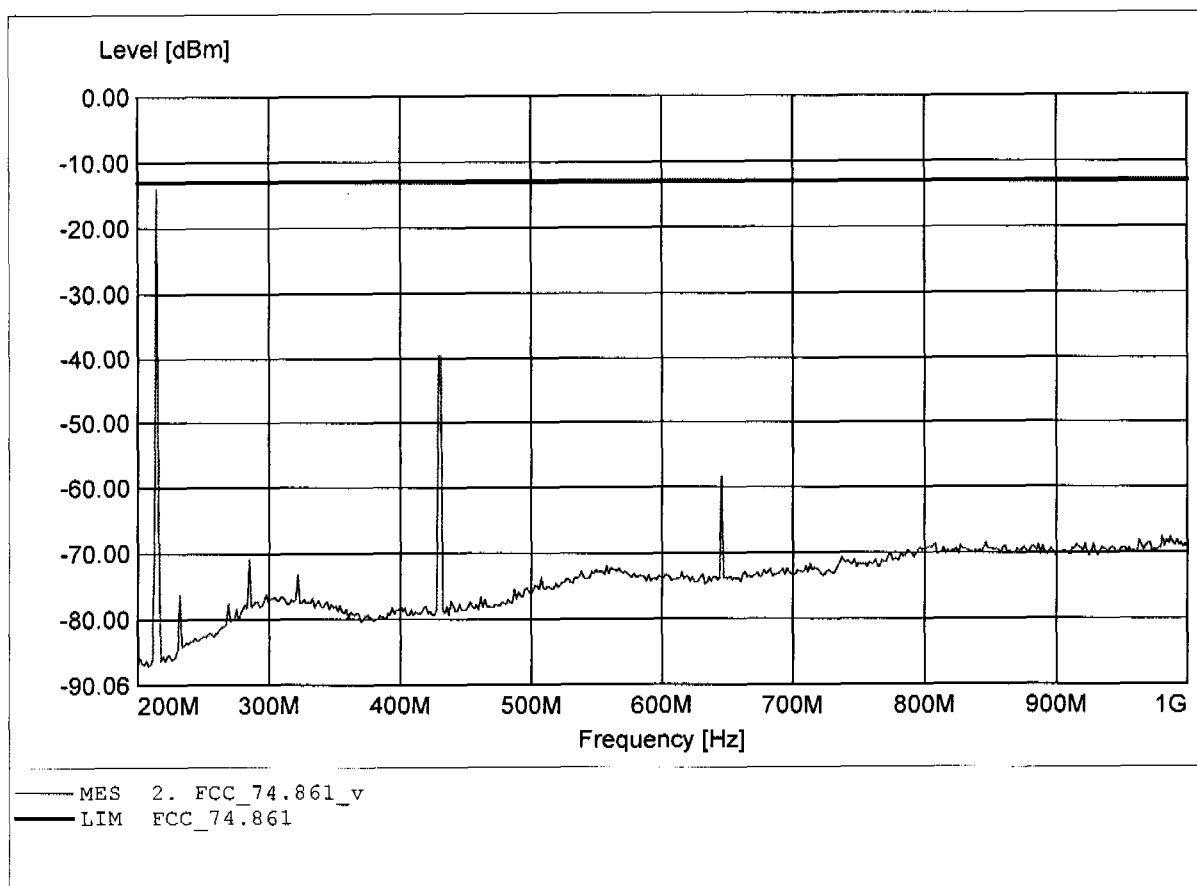




**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

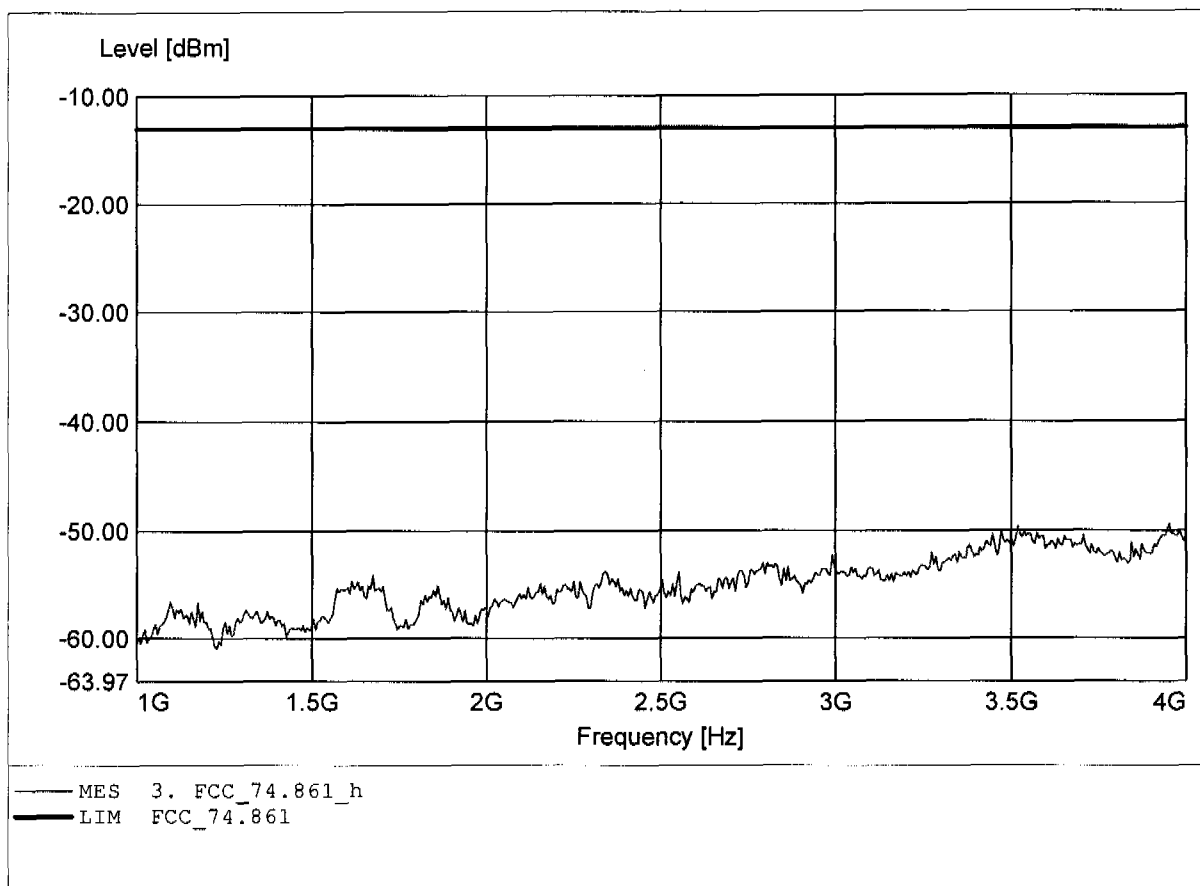
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 215.2 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.: 0.1-1GHz  
Freq:214.429MHz Pmax:-13.98dBm RBW: 100 kHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

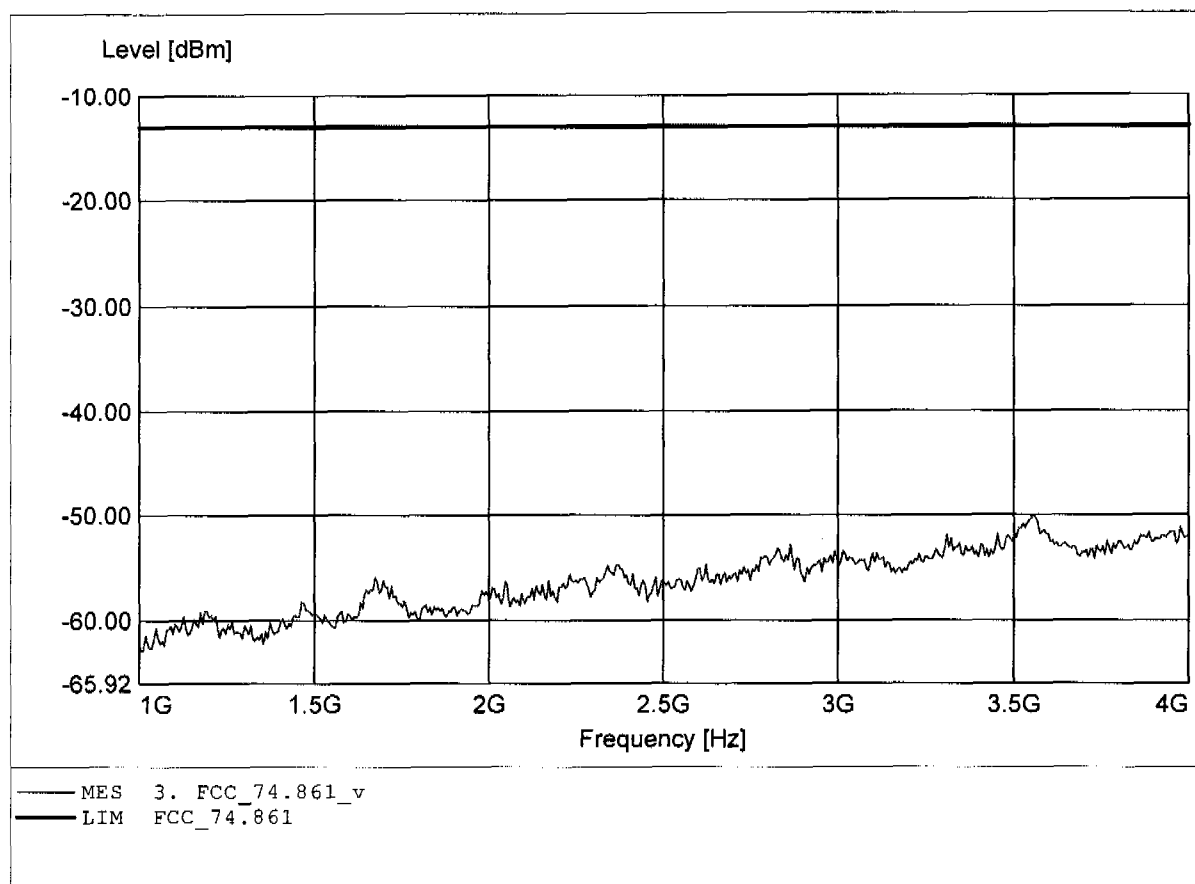
EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 215.2 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.: 1-4GHz  
Freq:3.952GHz Pmax:-49.41dBm RBW: 1 MHz



**Spurious emissions under normal conditions**

**in according to FCC Part 74.861**

EUT: WIRELESS MICROPHONE TRANSMITTER  
MODEL NO.: Q-1002 215.2 MHz  
Approval Holder: CHIAYO ELECTRONICS CO.,LTD  
Test Site / Operator: ETS / PIERCE PENG  
Temperature/Voltage: Temp.: 23°C/ Unom.:9 VDC(battery)  
Test Specification: 74.861  
Comment 1: Dist.: 3m, Ant.: HL 025, ampl.: 1-4GHz  
Freq:3.555GHz Pmax:-50.00dBm RBW: 1 MHz





## Appendix G

Line Conducted Emissions



## Appendix H

### Frequency Stability vs. Temperature

No diagrams  
Refer to point 11.2



## Appendix I

### Frequency Stability vs. Voltage

No diagrams  
Refer to point 12.2