

## GENERAL INFORMATION REQUIREMENTS

### *Paragraph 2.983(a)*

Name of Applicant: Nucomm, Inc.  
Address of Applicant: 101 Bilby Road  
Hackettstown, NJ 07840  
Name of Manufacturer: Nucomm, Inc.

### *Paragraph 2.983(b)*

Equipment  
Identification: **FCC ID: I4U27CMT1-L5-E1P5**

Applicant: Nucomm, Inc.  
FCC ID: I4U27CMT1-L5-E1P5  
Retlif Testing Laboratories Report No.: R-11549

Para. 2.1051  
Spurious Emissions at Antenna Terminals

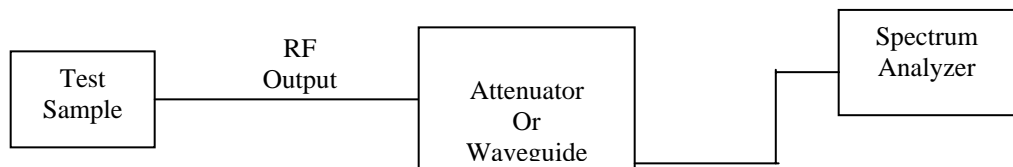
Applicant: Nucomm, Inc.  
FCC ID: I4U27CMT1-L5-E1P5  
Retlif Testing Laboratories Report No.: R-11549

## Spurious Emissions at Antenna Terminals (Para. 2.1051)

### A. Measurement Procedure:

The RF output of the transmitter was directly coupled through either attenuators or a waveguide transmission line to the input of a spectrum analyzer. With the transmitter on, the spectrum analyzer was swept from 30 MHz to 26 or 40 GHz. (Dependant of fundamental operating frequency). It was verified that all emissions not associated with the fundamental transmission were at least  $43 + 10 \log (P)$  down from the fundamental transmit power level (P).

Setup of the test is shown below:



### B. Test Results:

The EUT was found to comply with the requirements specified for this test method.

## EQUIPMENT LIST

### FCC Part 2, Antenna Conducted Emissions

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
032G	H.P. Filter	Microlab/FXR	3 GHz	HA-30N	5/25/2006	5/25/2007
1008	20.0 dB Attenuator	Narda	DC - 18 GHz	776C-20	11/29/2005	11/29/2006
1009	30.0 dB Attenuator	Narda	DC - 18 GHz	776C-30	11/29/2005	11/29/2006
896	EMI Test Receiver	Rohde & Schwarz	20 Hz - 40 GHz	ESIB40	9/5/2006	9/5/2007
R126	Signal Generator	Hewlett Packard	10 MHz - 40 GHz	83640B	8/2/2005	8/2/2007

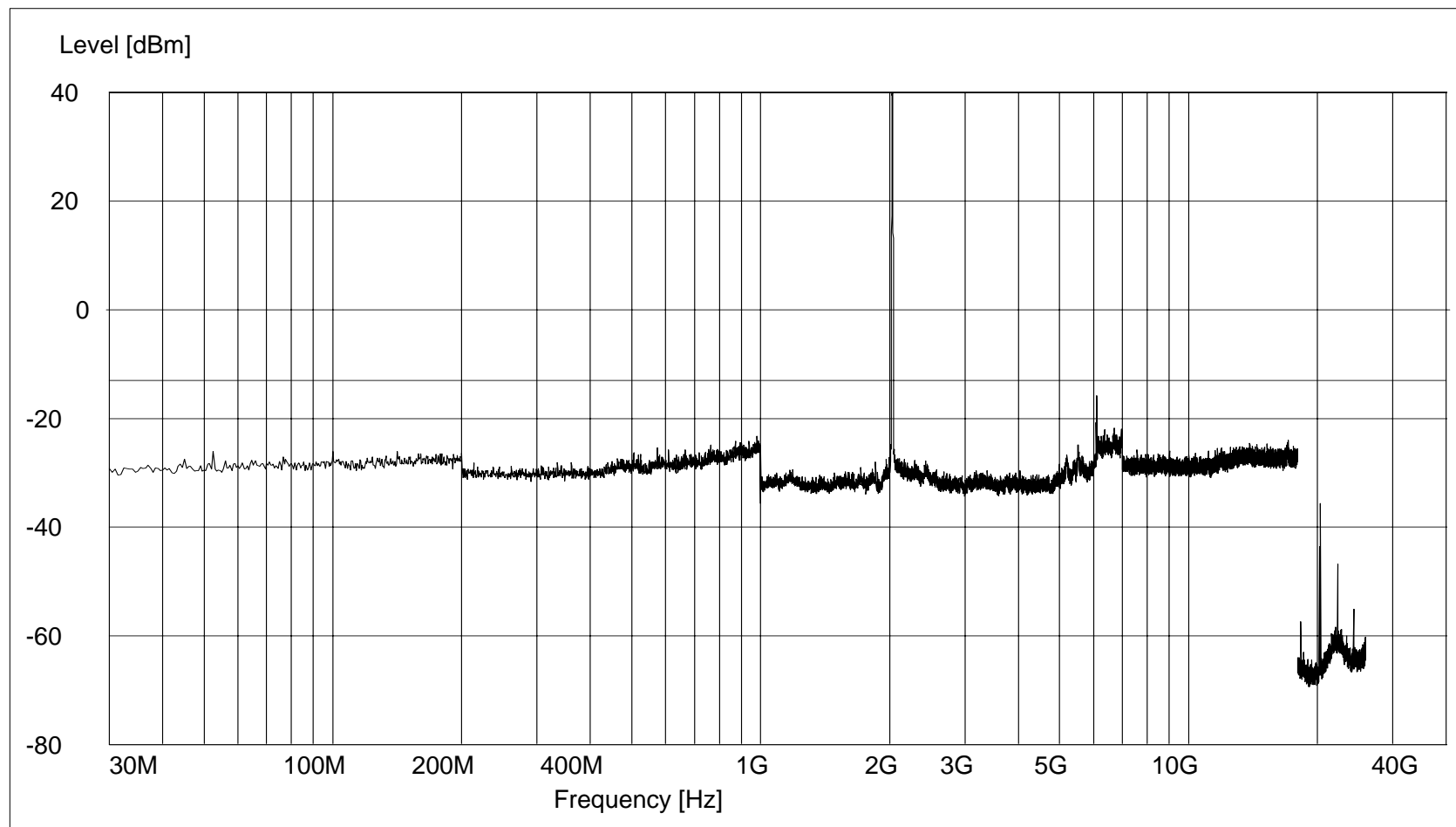
Applicant: Nucomm, Inc.  
FCC ID: I4U27CMT1-L5-E1P5  
Retlif Testing Laboratories Report No.: R-11549

2 GHz Conducted Emissions  
12 MHz channel spacing plan

Applicant: Nucomm, Inc.  
FCC ID: I4U27CMT1-L5-E1P5  
Retlif Testing Laboratories Report No.: R-11549

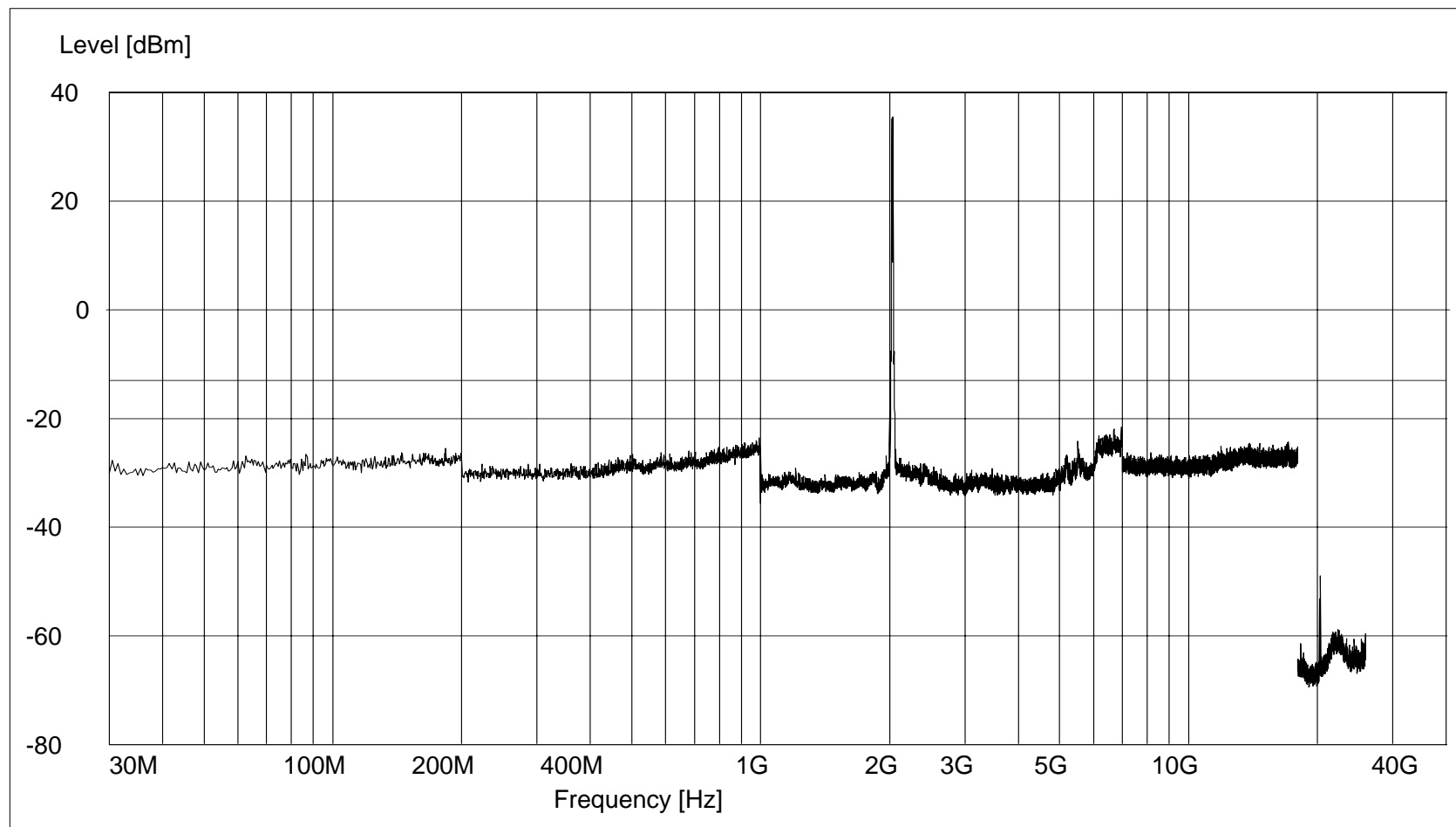
**FCC Antenna Conducted Emissions, 30 MHz to 26 GHz**

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 1, Analog FM Modulation, 12 MHz channel  
Transmitting at 2031.5 MHz.  
Antenna Port Tested: RF Output Port 12 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



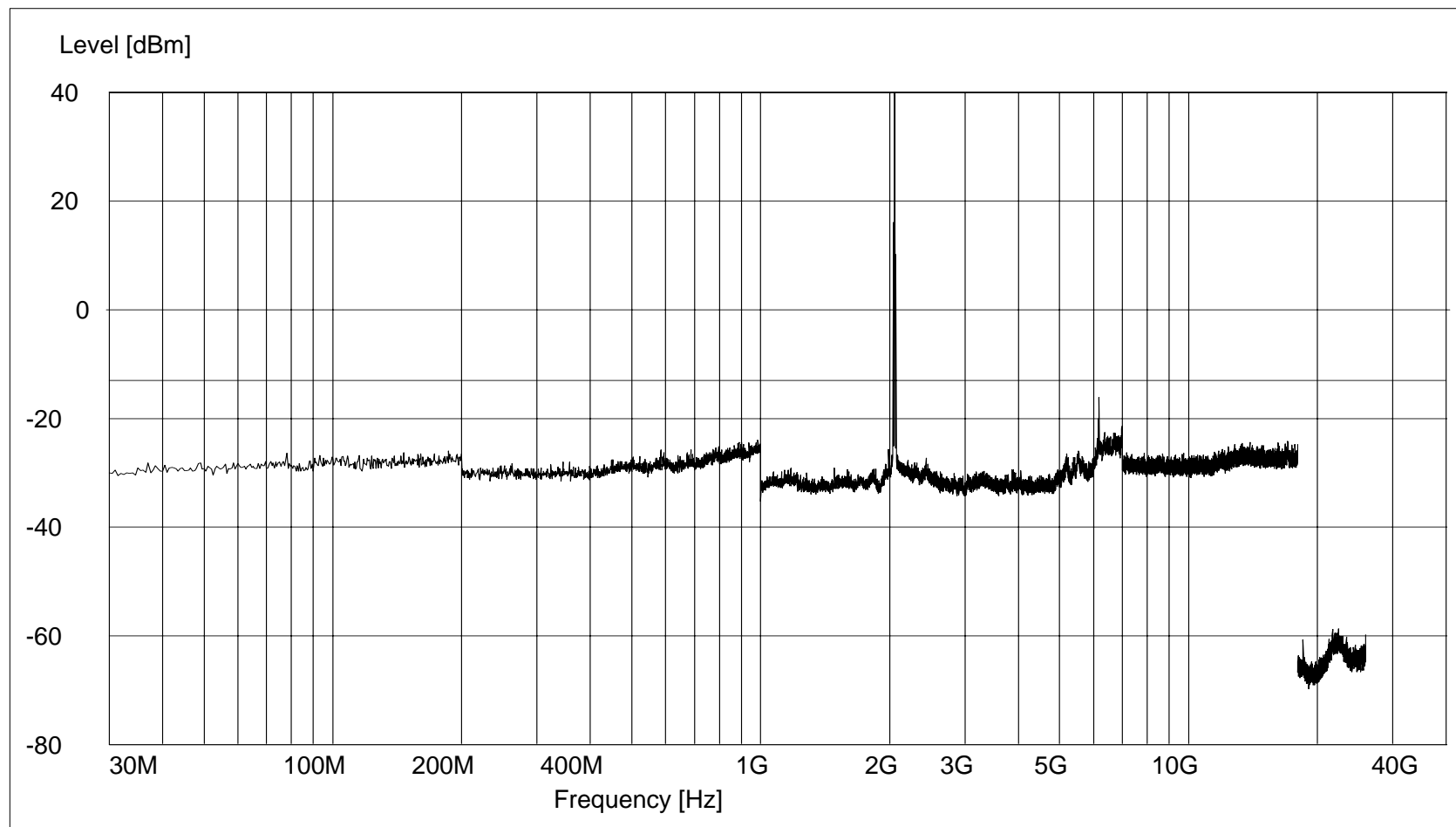
**FCC Antenna Conducted Emissions, 30 MHz to 26 GHz**

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 1, Digital COFDM Modulation, 12 MHz channel  
Transmitting at 2031.5 MHz.  
Antenna Port Tested: RF Output Port 12 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

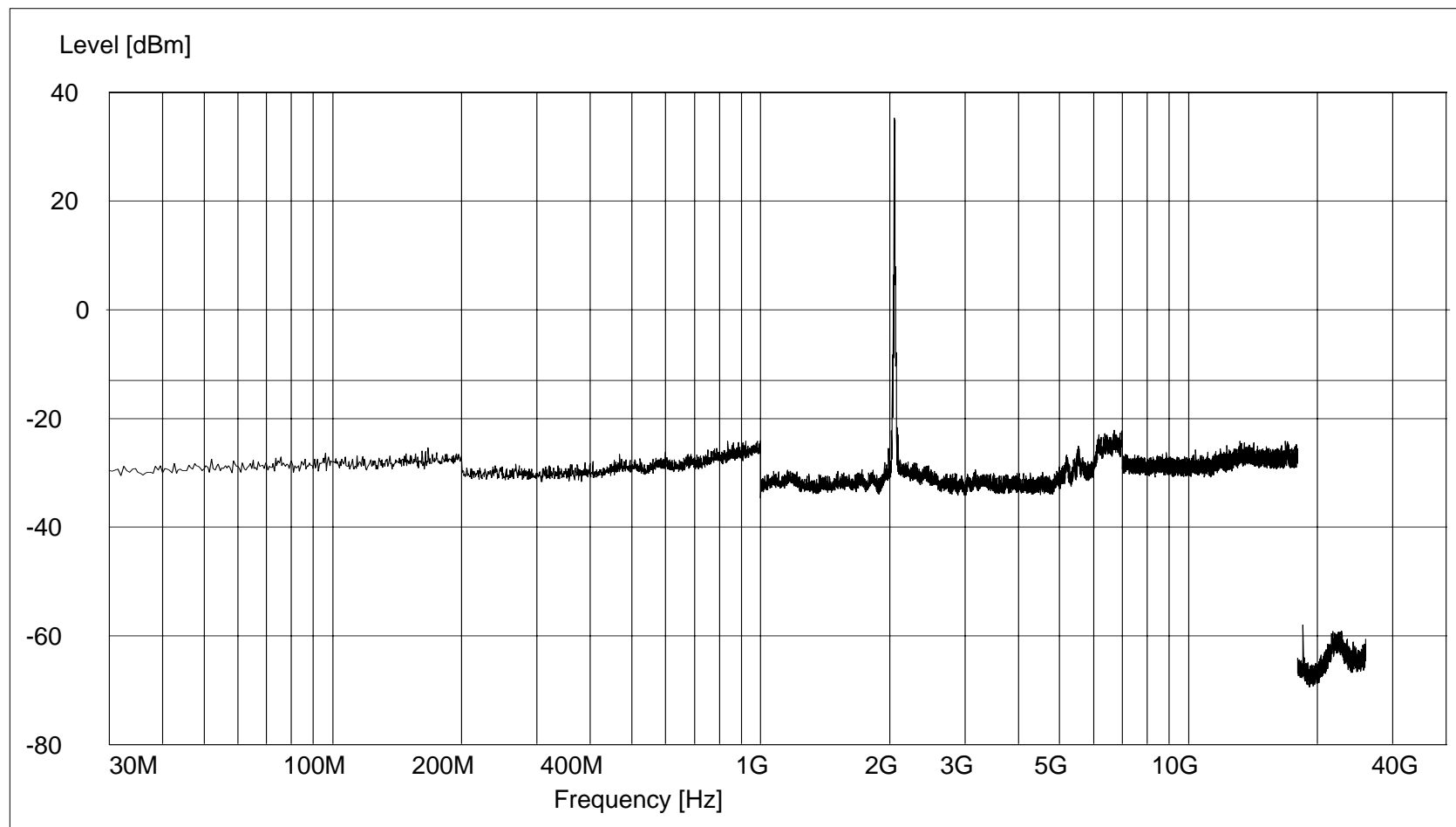
Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 3, Analog FM Modulation, 12 MHz channel  
Transmitting at 2055.5 MHz.  
Antenna Port Tested: RF Output Port 12 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm





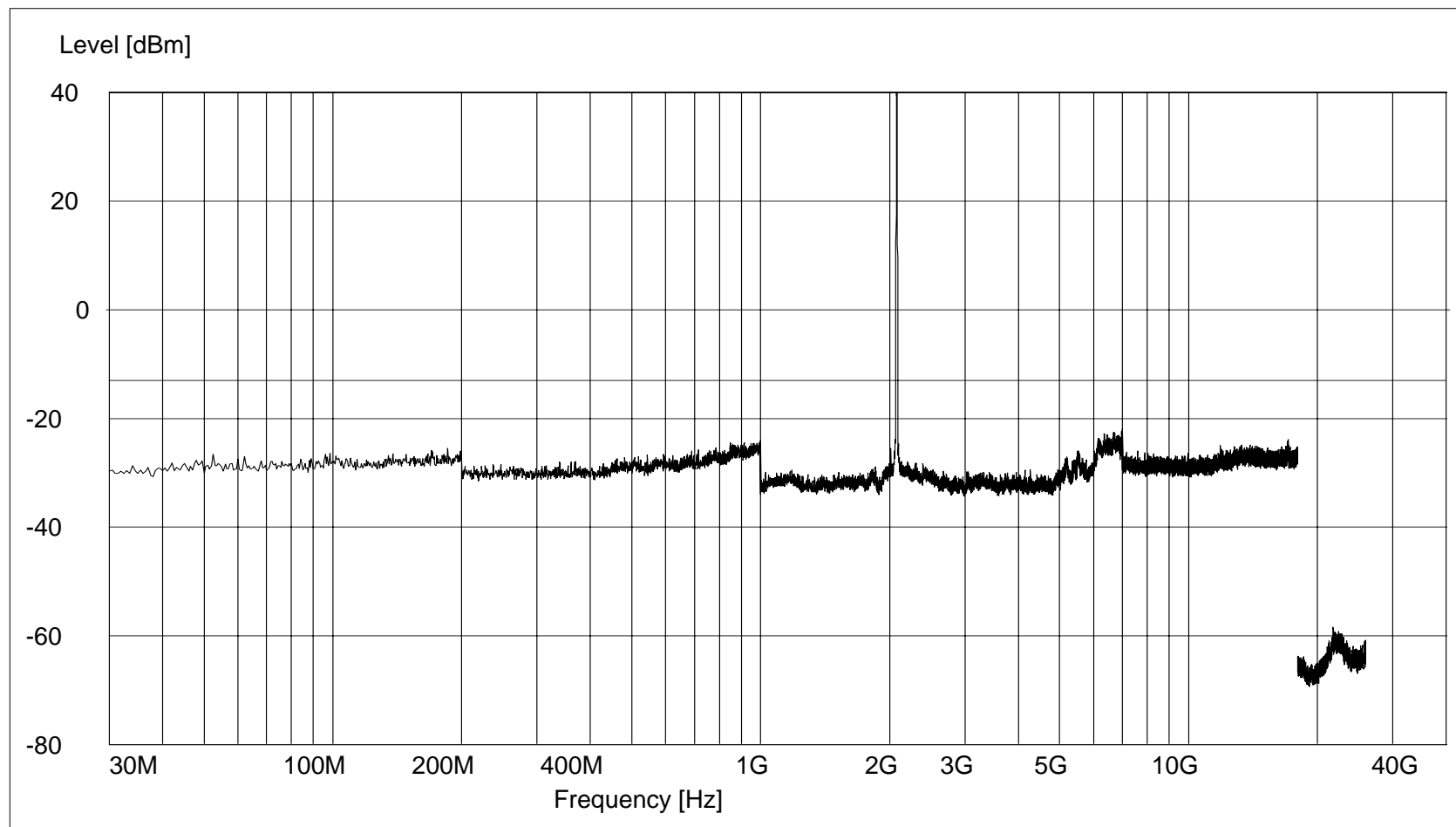
FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 3, Digital COFDM Modulation, 12 MHz channel  
Transmitting at 2055.5 MHz.  
Antenna Port Tested: RF Output Port 12 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



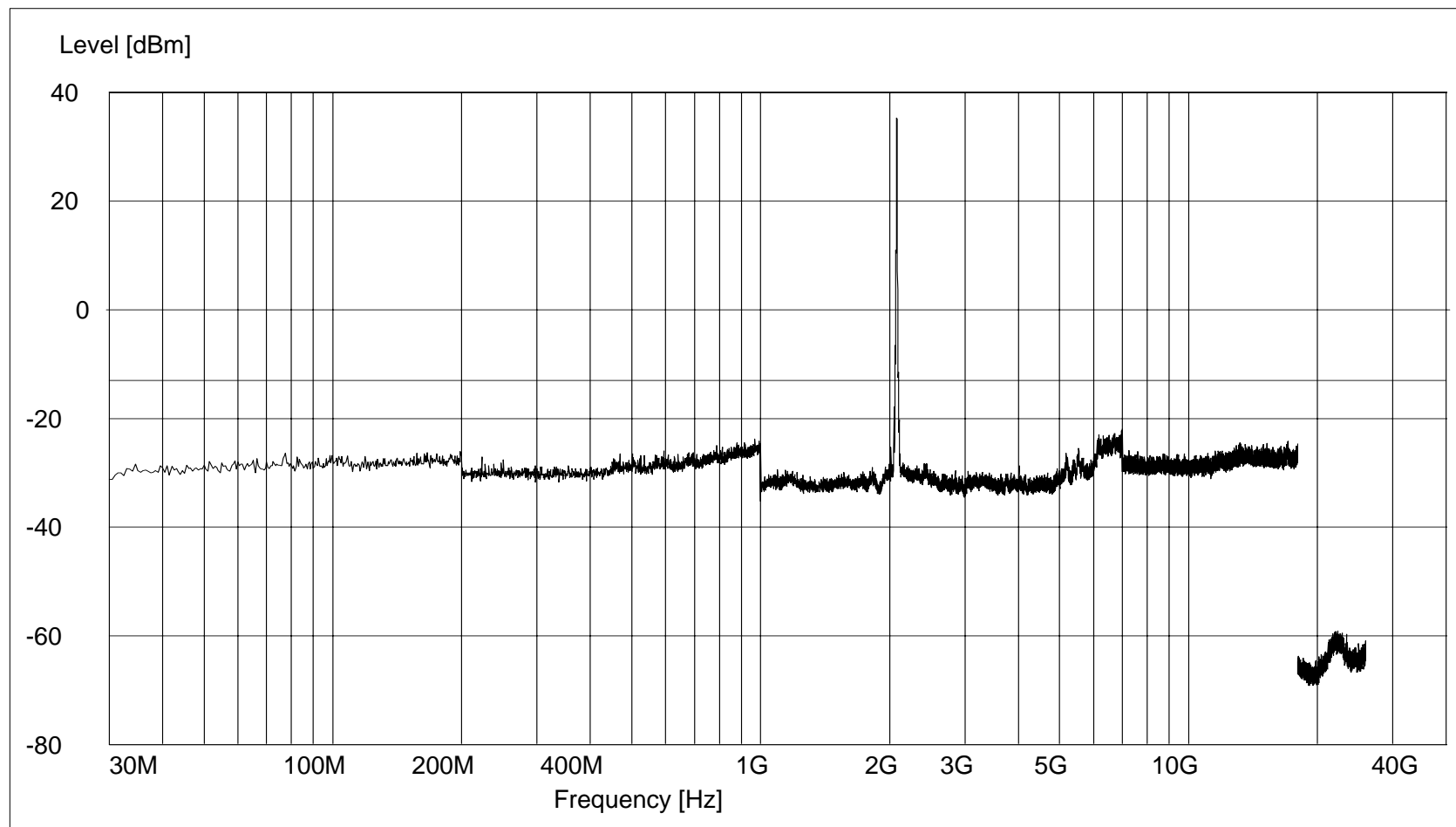
FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 5, Analog FM Modulation, 12 MHz channel  
Transmitting at 2079.5 MHz.  
Antenna Port Tested: RF Output Port 12 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



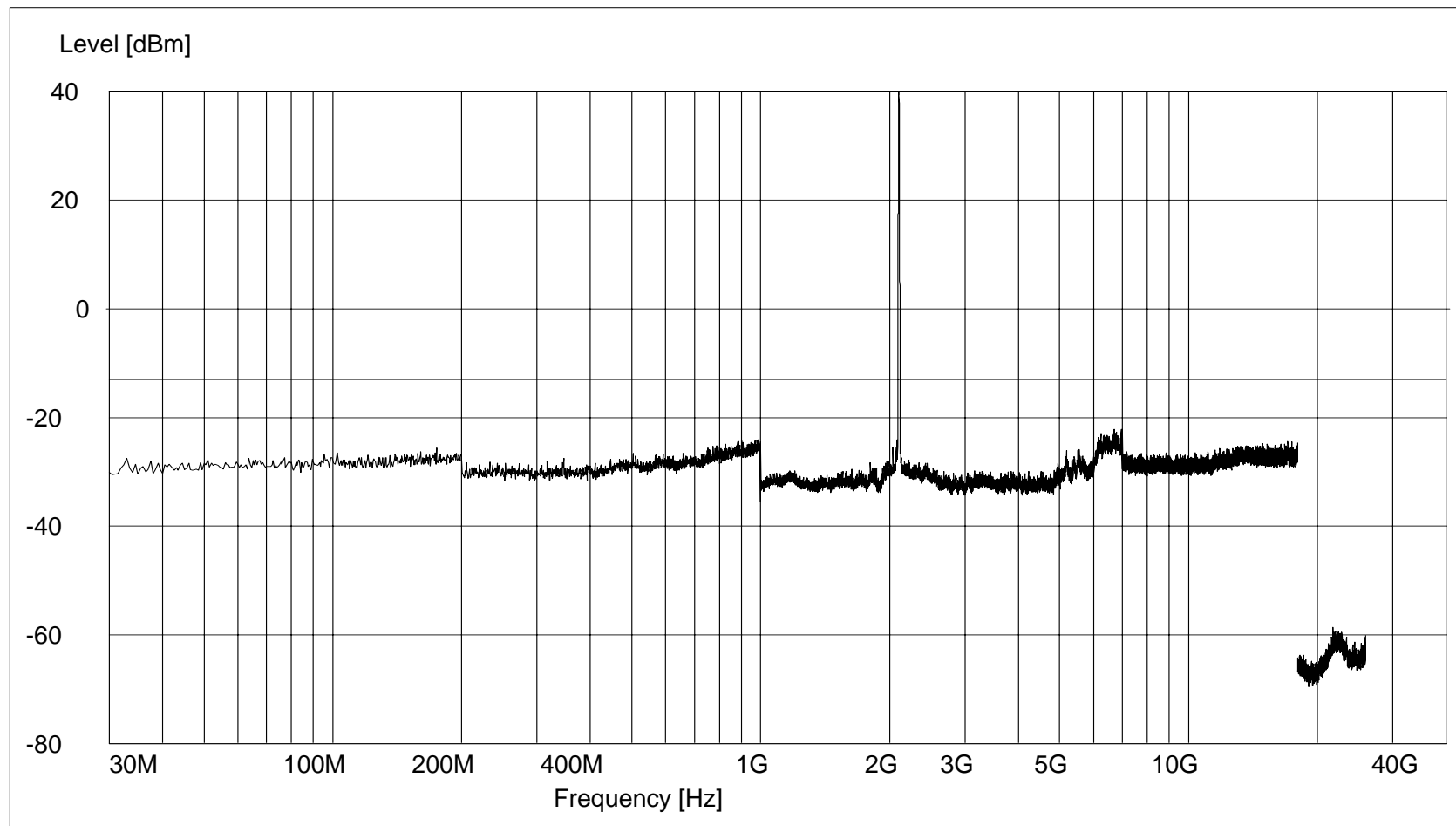
**FCC Antenna Conducted Emissions, 30 MHz to 26 GHz**

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 5, Digital COFDM Modulation, 12 MHz channel  
Transmitting at 2079.5 MHz.  
Antenna Port Tested: RF Output Port 12 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



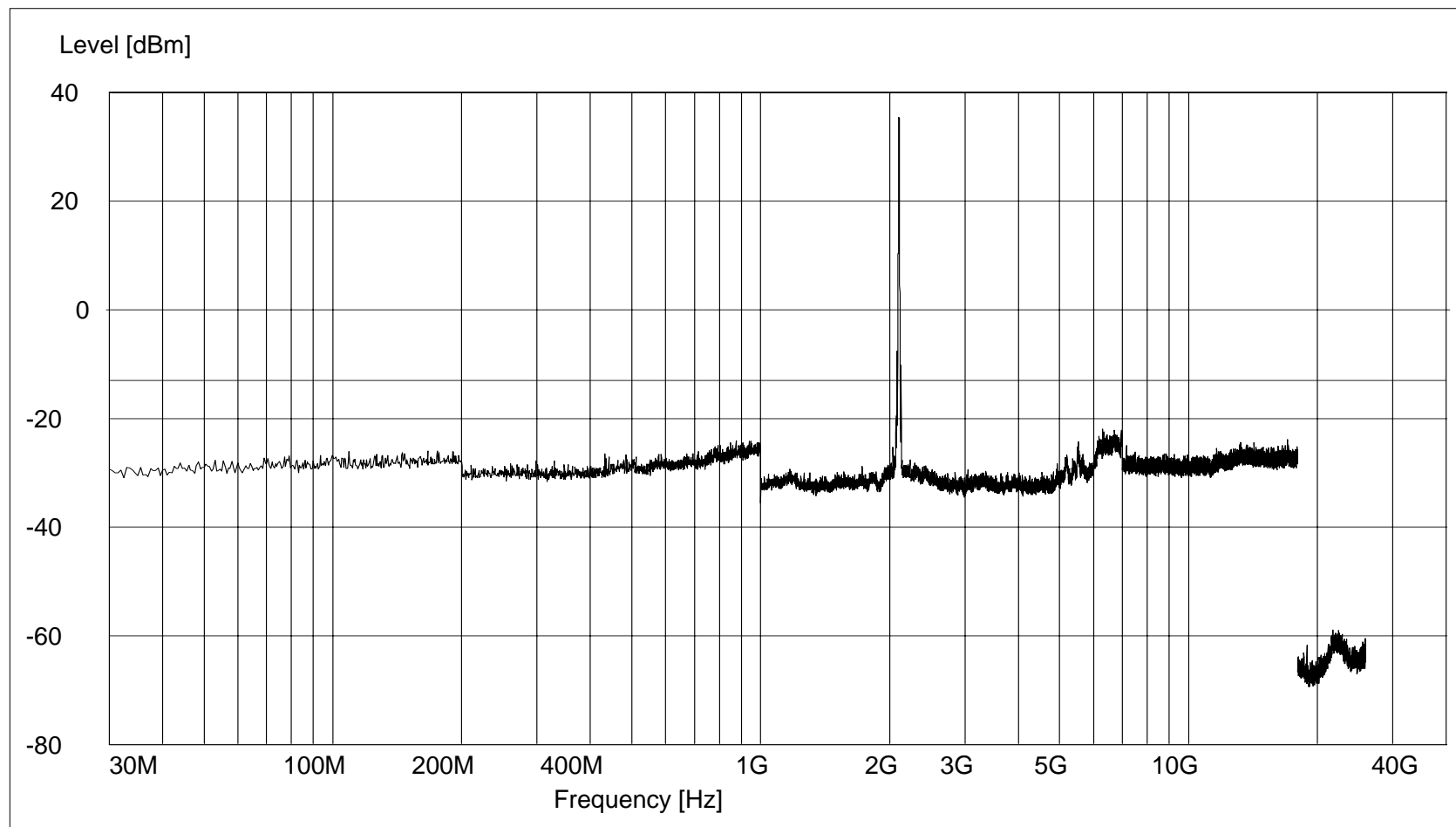
FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 7, Analog FM Modulation, 12 MHz channel  
Transmitting at 2103.5 MHz.  
Antenna Port Tested: RF Output Port 12 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 7, Digital COFDM Modulation, 12 MHz channel  
Transmitting at 2103.5 MHz.  
Antenna Port Tested: RF Output Port 12 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



2 GHz Conducted Emissions  
17 MHz channel spacing plan

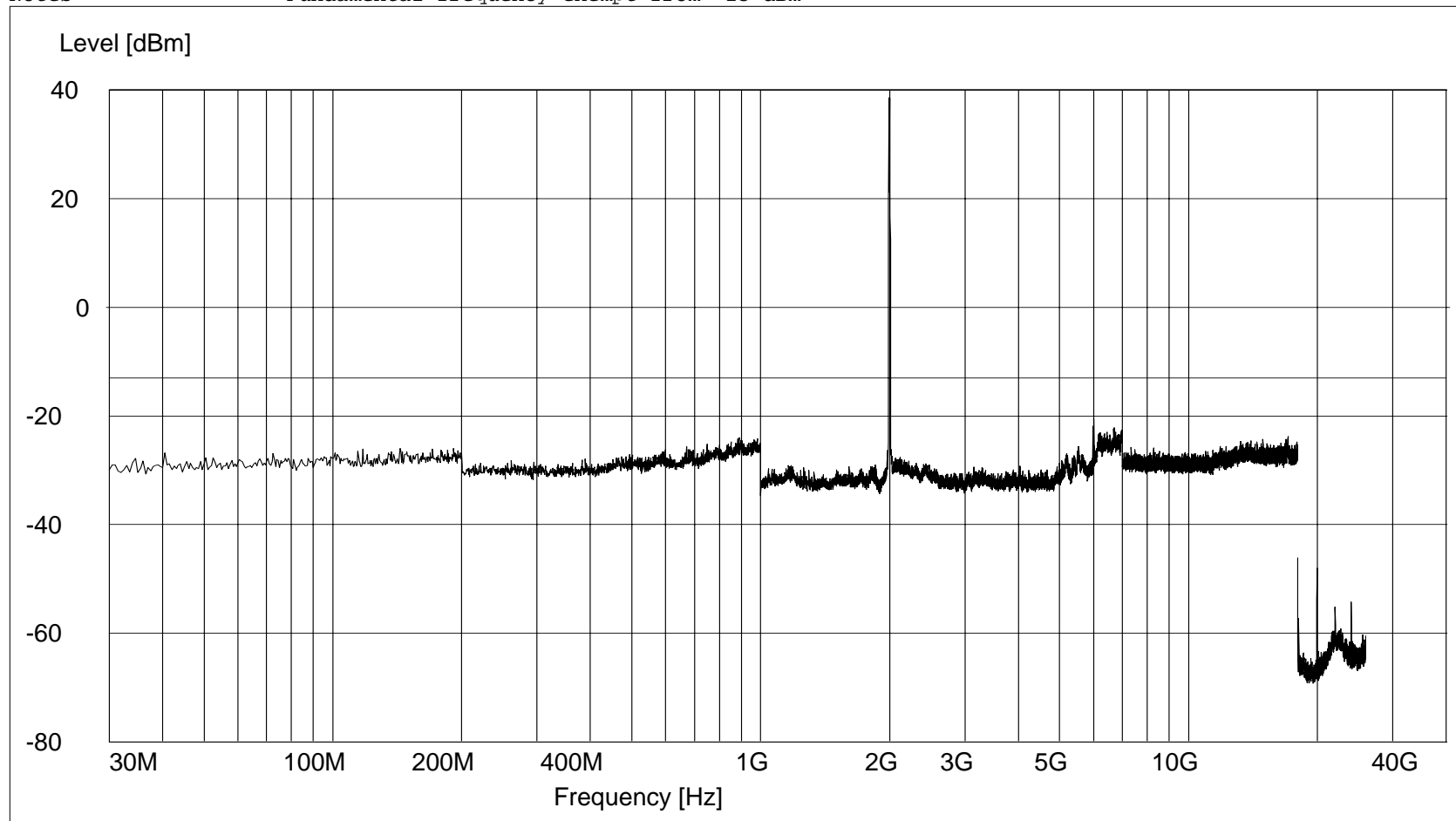


**Retlif Testing Laboratories**

Test Report No. R-11549

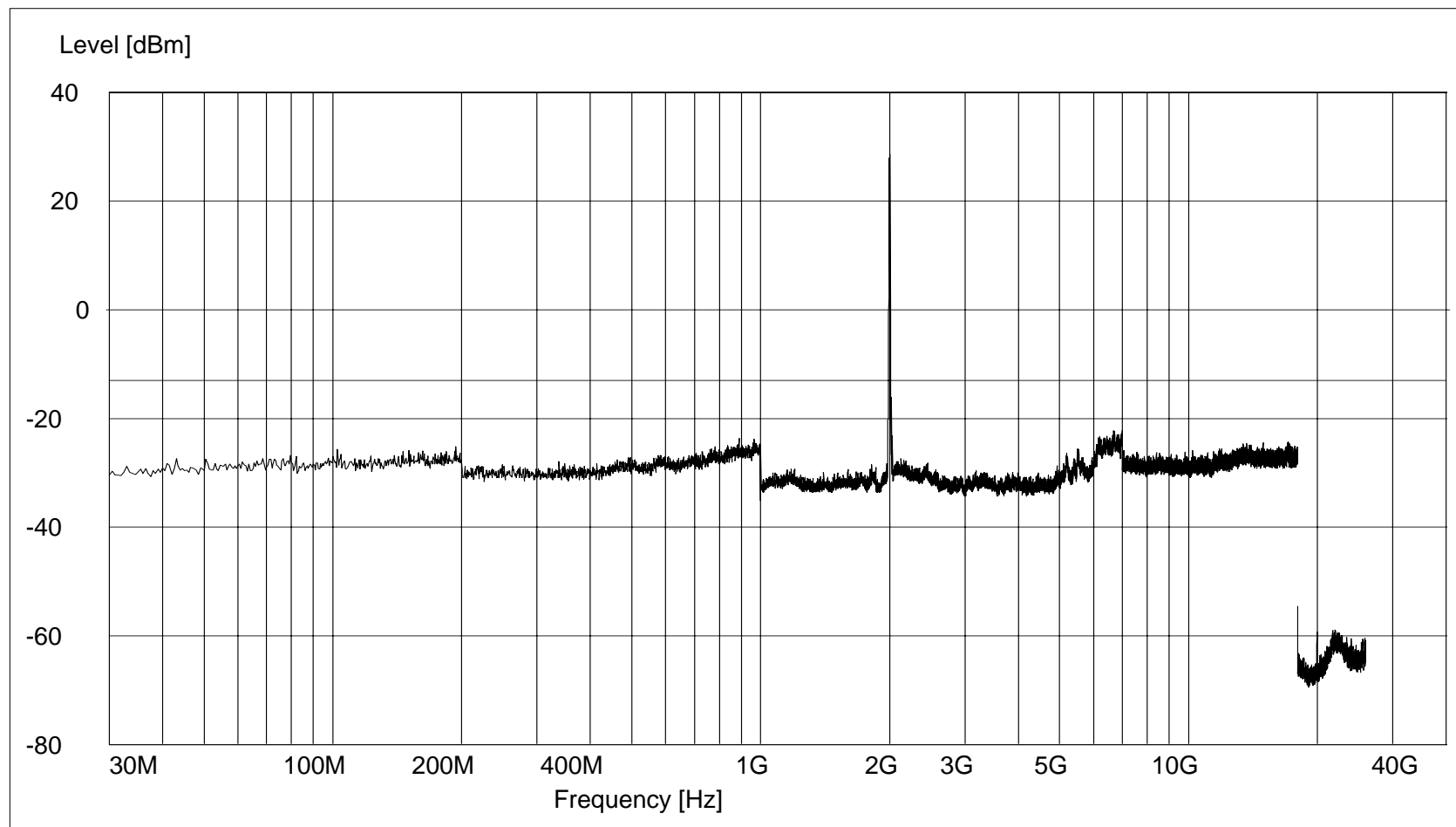
**FCC Antenna Conducted Emissions, 30 MHz to 26 GHz**

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 1, Analog FM Modulation, 17 MHz channel  
Transmitting at 1999.5 MHz.  
Antenna Port Tested: RF Output Port 17 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



**FCC Antenna Conducted Emissions, 30 MHz to 26 GHz**

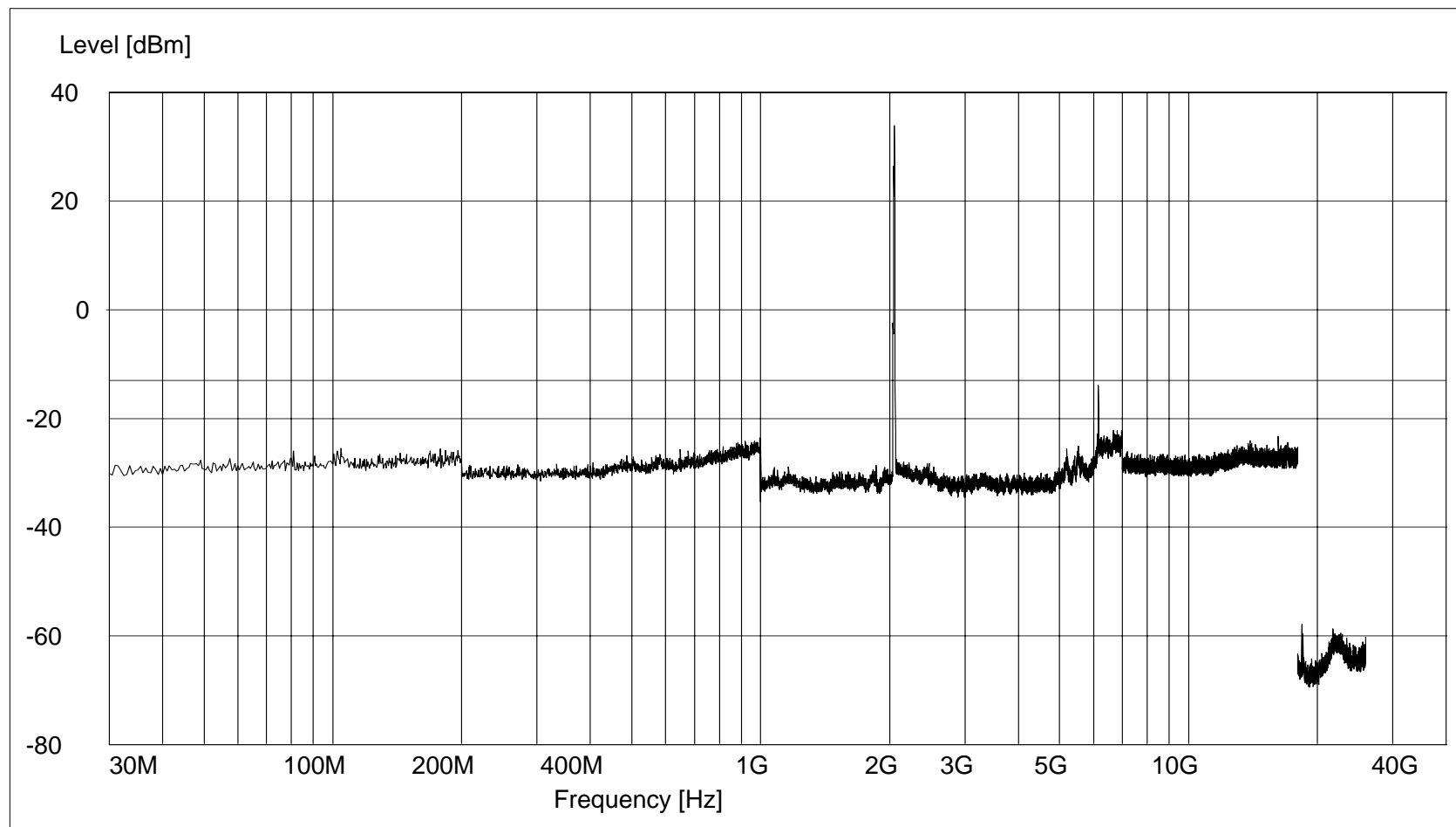
Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 1, Digital COFDM Modulation, 17 MHz channel  
Transmitting at 1999.0 MHz.  
Antenna Port Tested: RF Output Port 17 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm





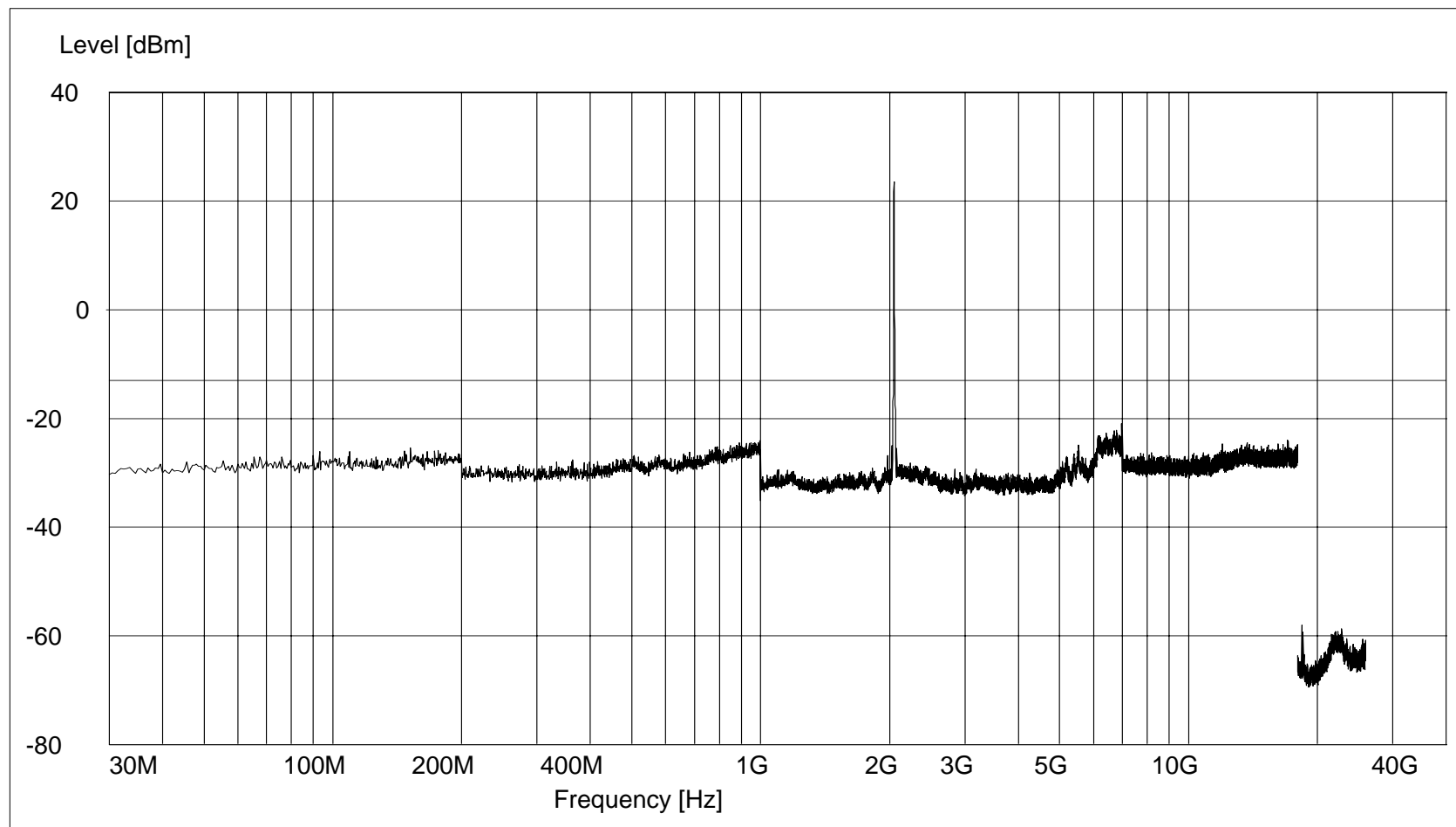
FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 4, Analog FM Modulation, 17 MHz channel  
Transmitting at 2050.5 MHz.  
Antenna Port Tested: RF Output Port 17 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



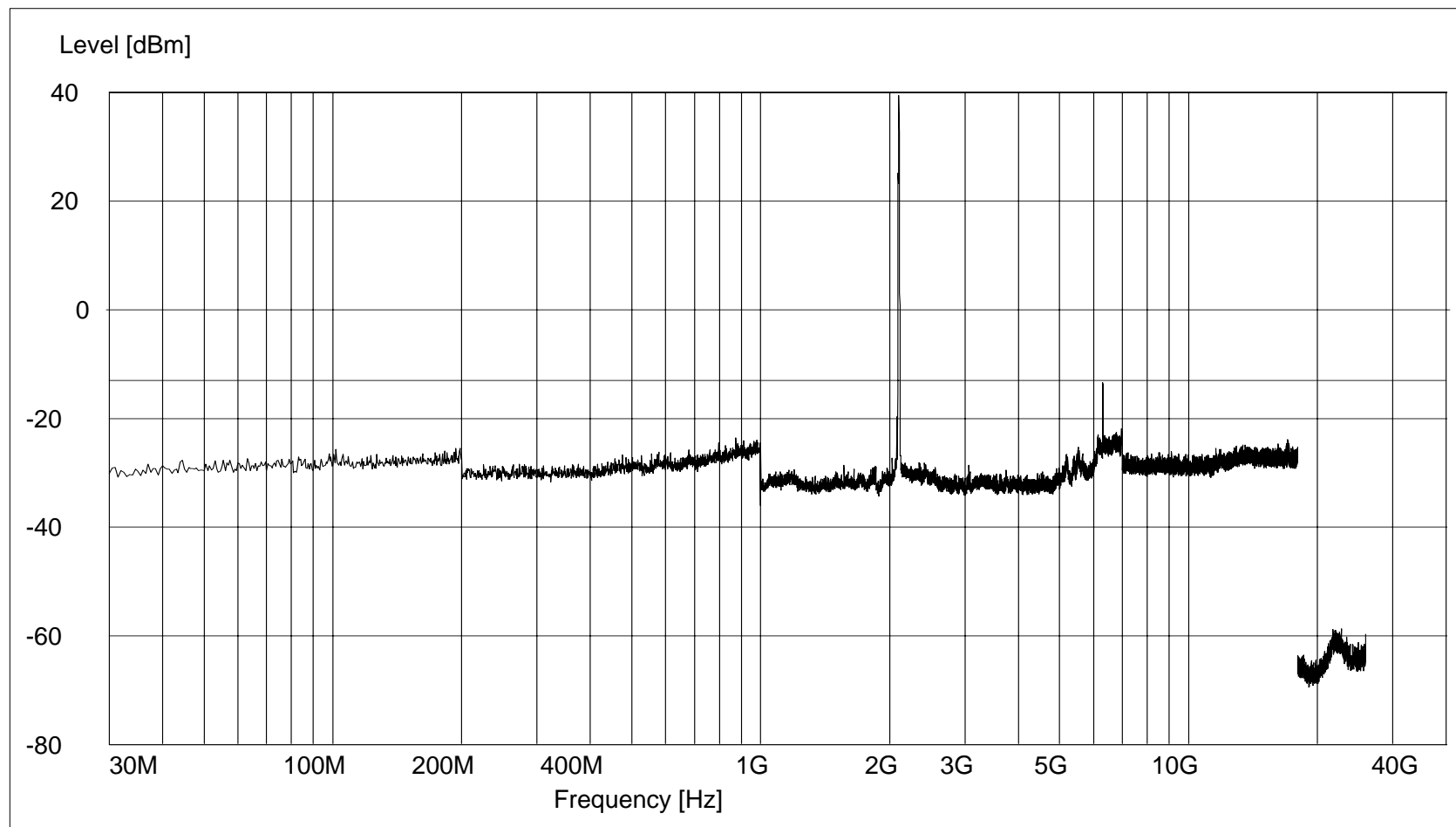
FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 4, Digital COFDM Modulation, 17 MHz channel  
Transmitting at 2050.5 MHz.  
Antenna Port Tested: RF Output Port 17 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



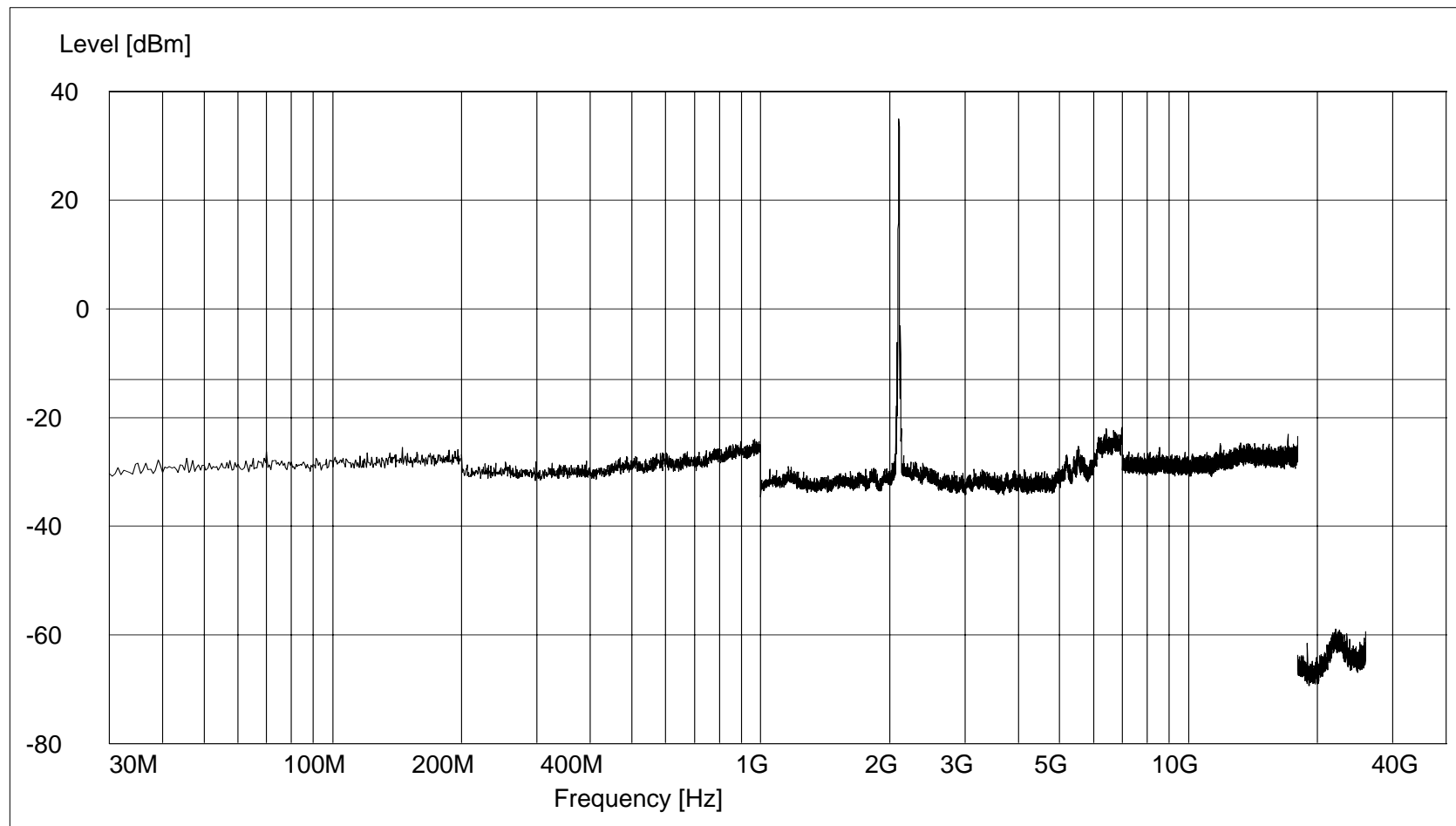
FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 7, Analog FM Modulation, 17 MHz channel  
Transmitting at 2101.5 MHz.  
Antenna Port Tested: RF Output Port 17 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



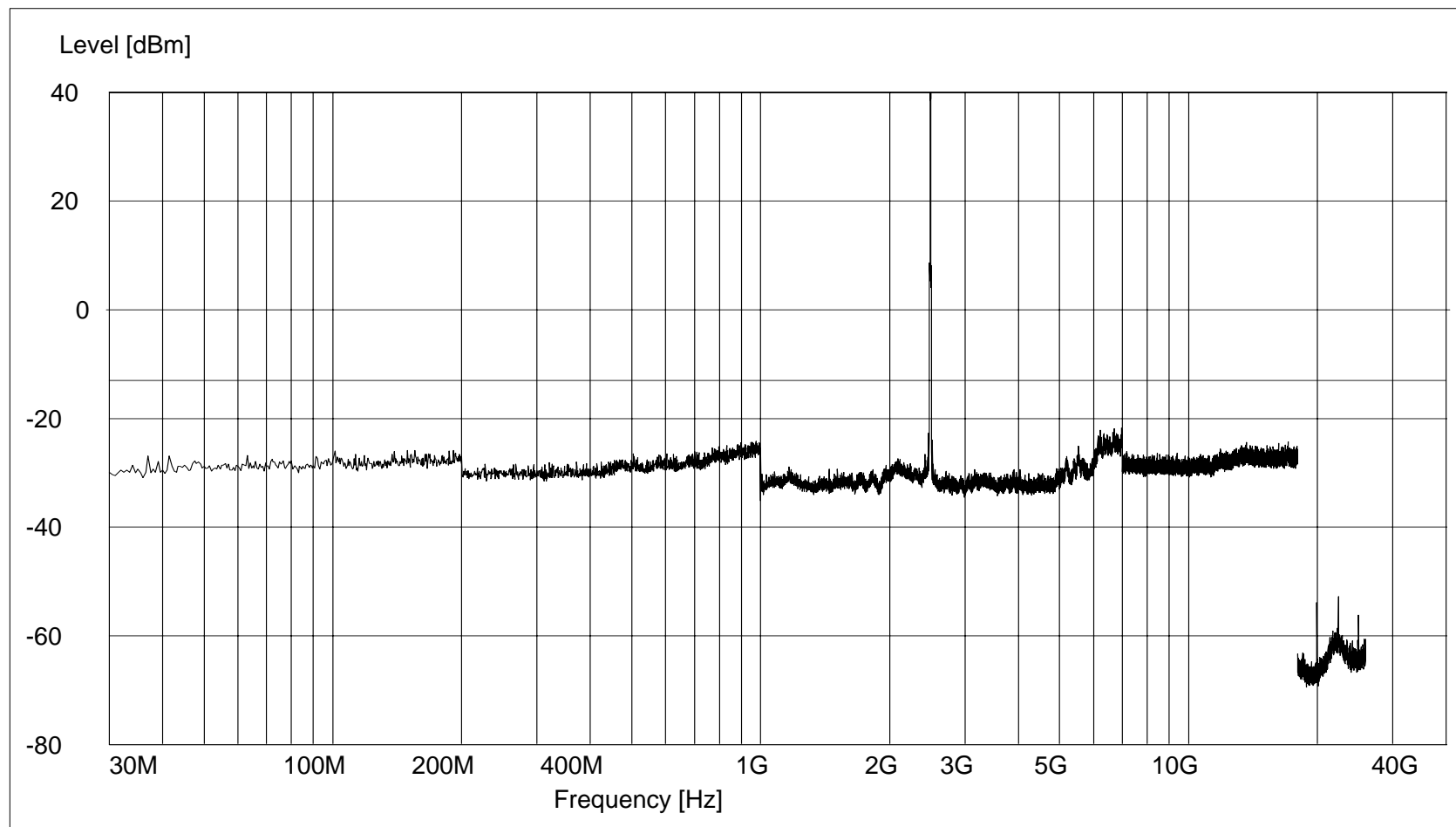
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Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 7, Digital COFDM Modulation, 17 MHz channel  
Transmitting at 2101.5 MHz.  
Antenna Port Tested: RF Output Port 17 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



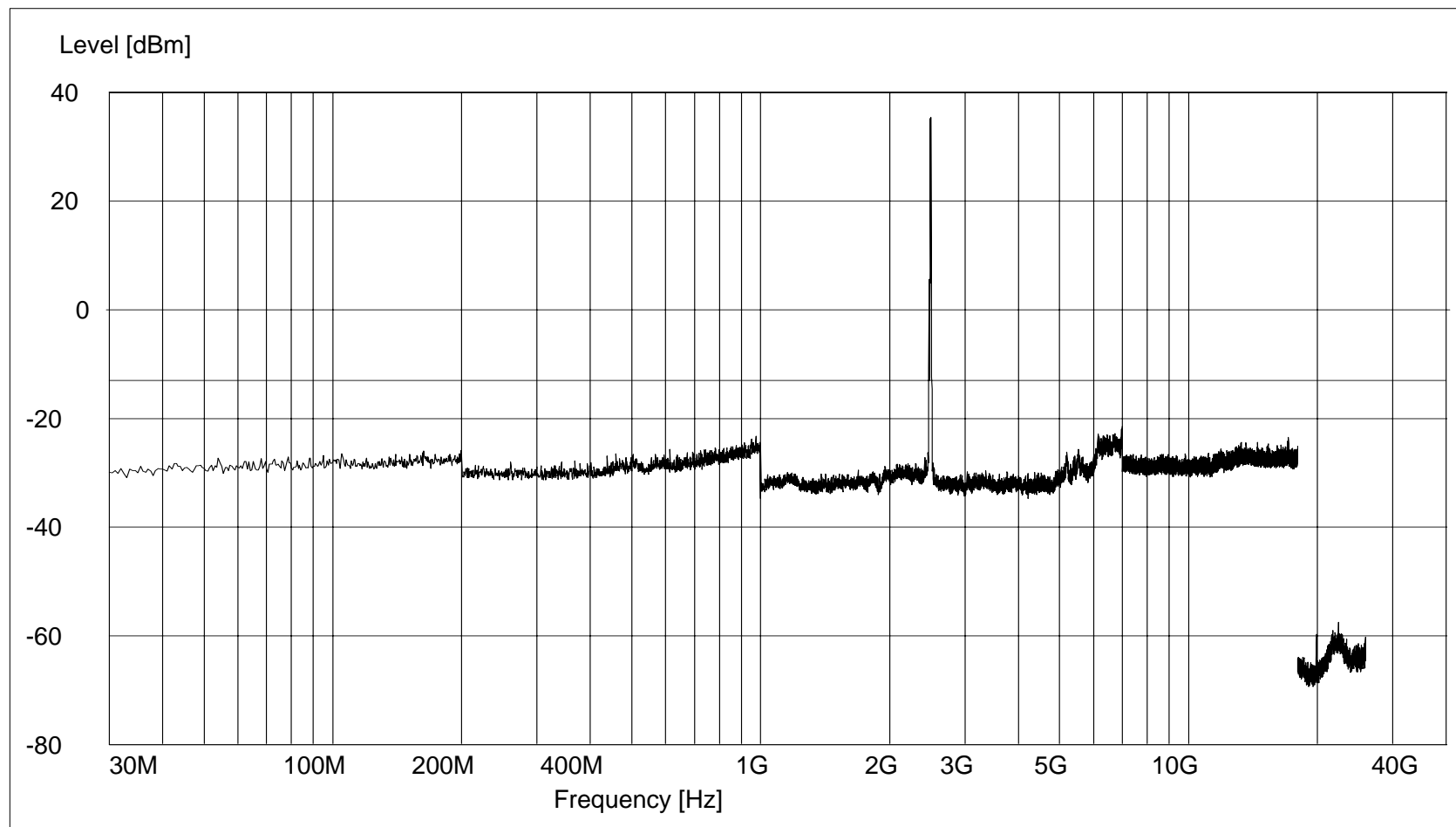
FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 10, Analog FM Modulation, 17 MHz channel  
Transmitting at 2492.5 MHz.  
Antenna Port Tested: RF Output Port 17 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



FCC Antenna Conducted Emissions, 30 MHz to 26 GHz

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Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 10, Digital COFDM Modulation, 17 MHz channel  
Transmitting at 2492.5 MHz.  
Antenna Port Tested: RF Output Port 17 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



7GHz Conducted Emissions  
25 MHz channel spacing plan

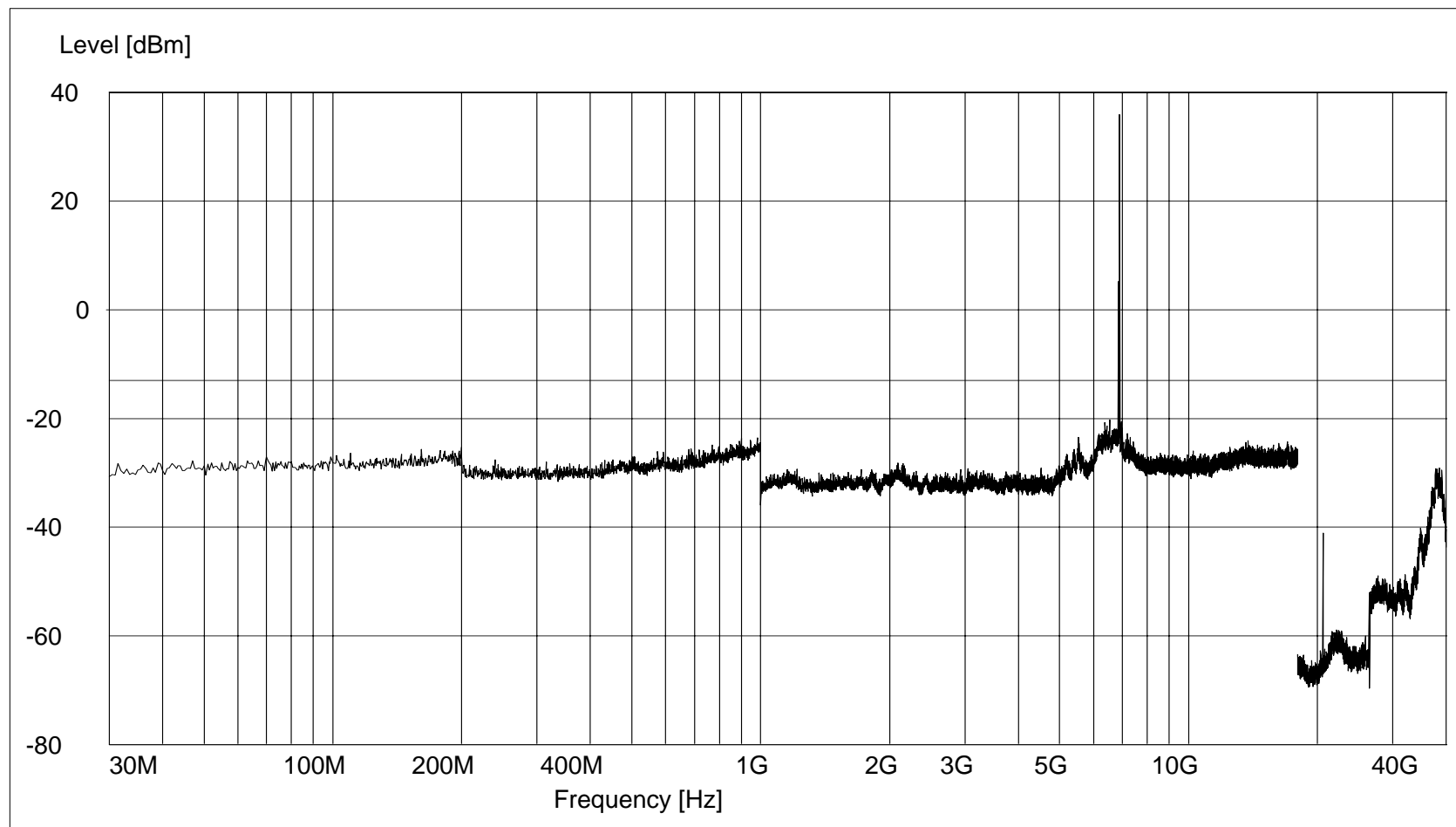


**Retlif Testing Laboratories**

Test Report No. R-11549

**FCC Antenna Conducted Emissions, 30 MHz to 40 GHz**

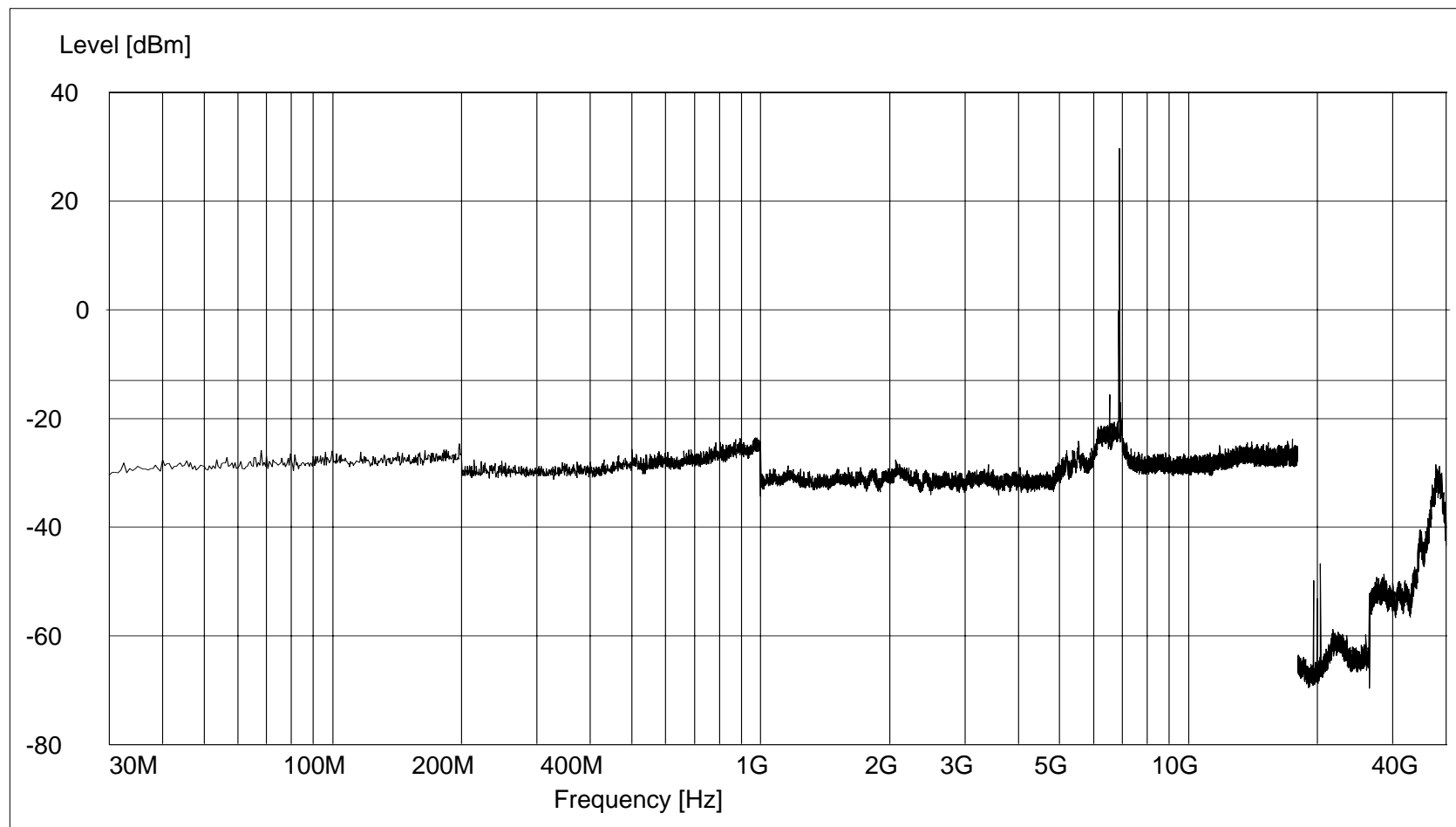
Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 1, Analog FM Modulation, 25 MHz channel  
Transmitting at 6887.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm





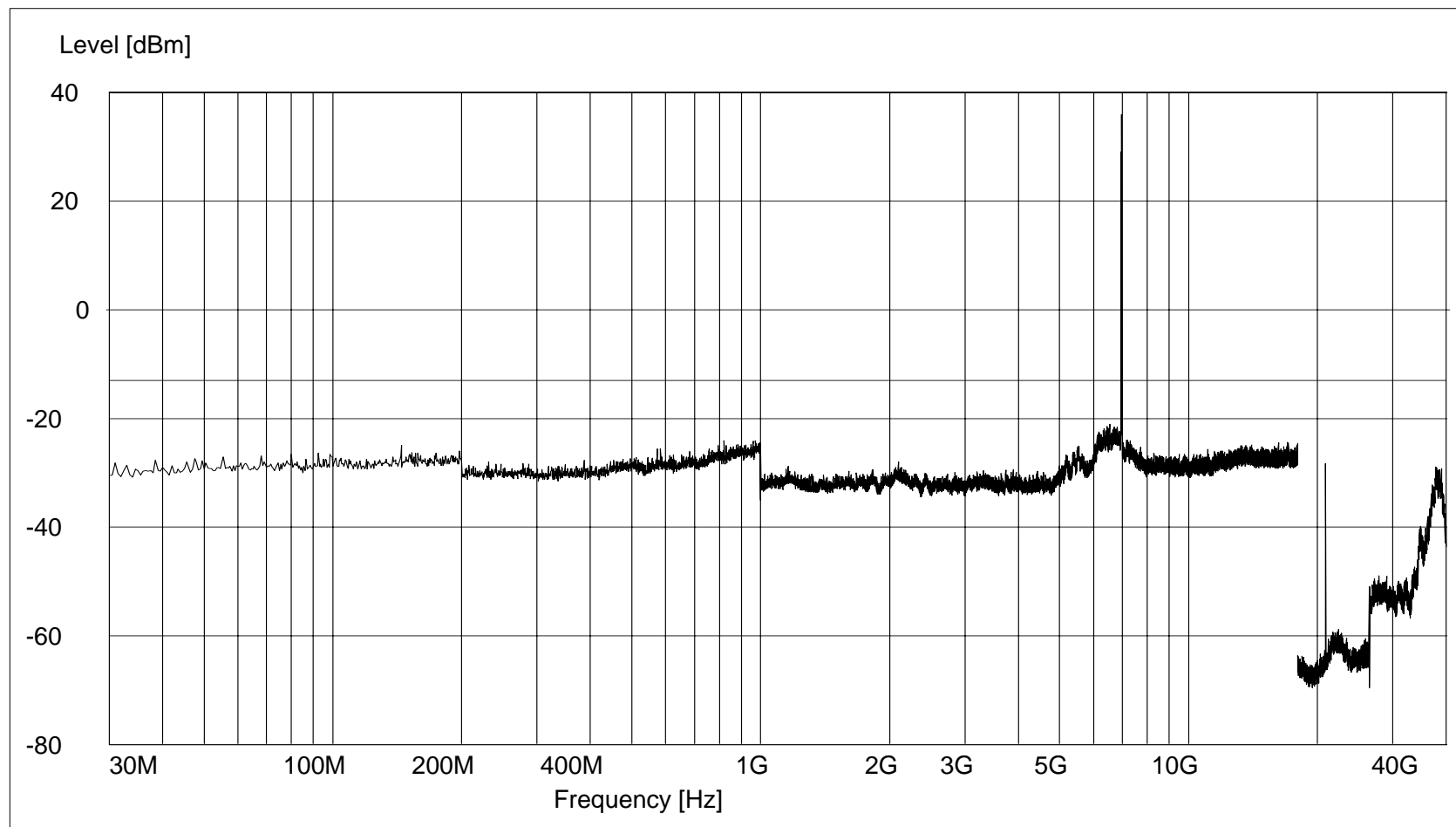
**FCC Antenna Conducted Emissions, 30 MHz to 40 GHz**

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 1, Digital COFDM Modulation, 25 MHz channel  
Transmitting at 6887.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



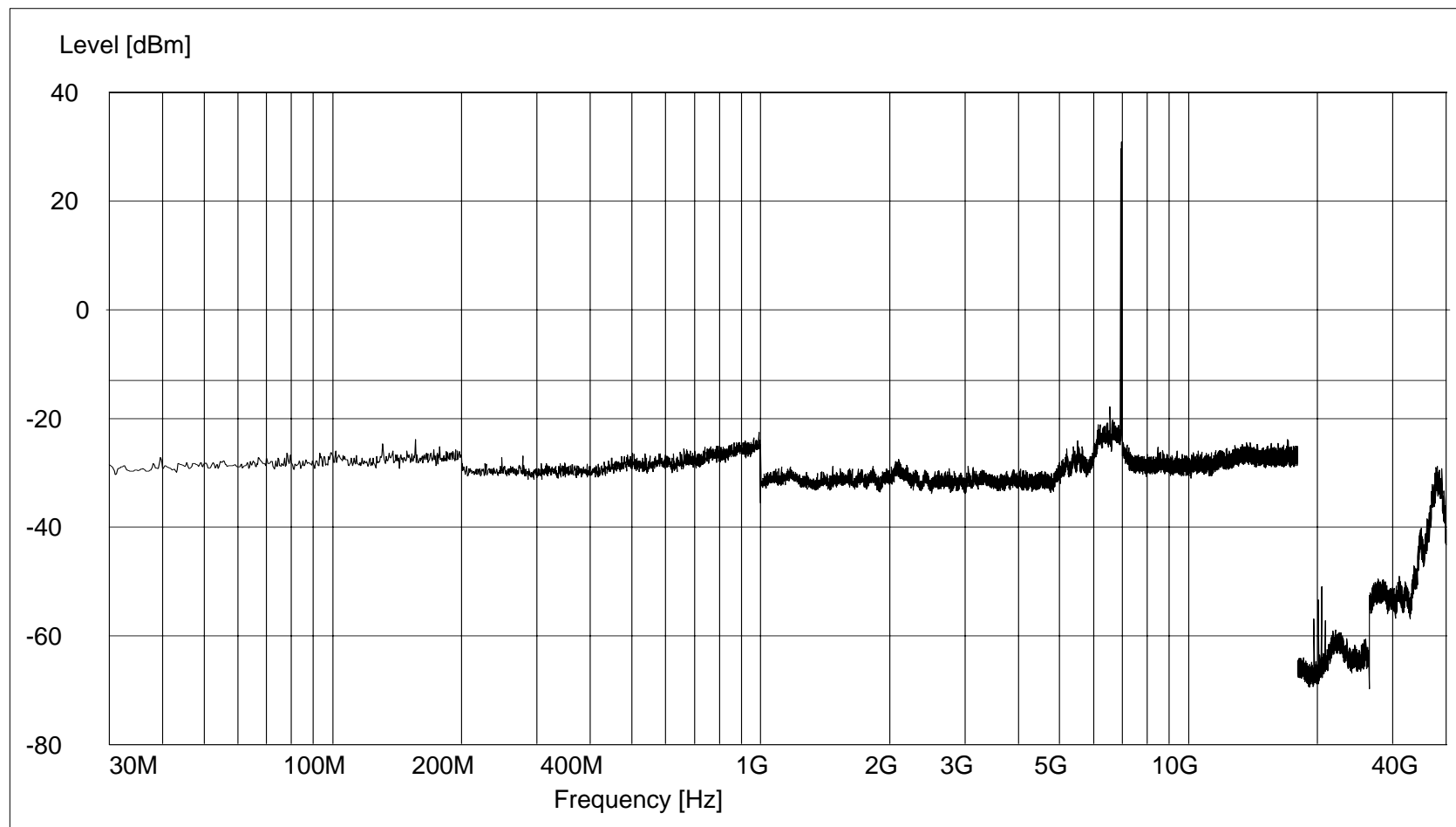
FCC Antenna Conducted Emissions, 30 MHz to 40 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 4, Analog FM Modulation, 25 MHz channel  
Transmitting at 6962.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



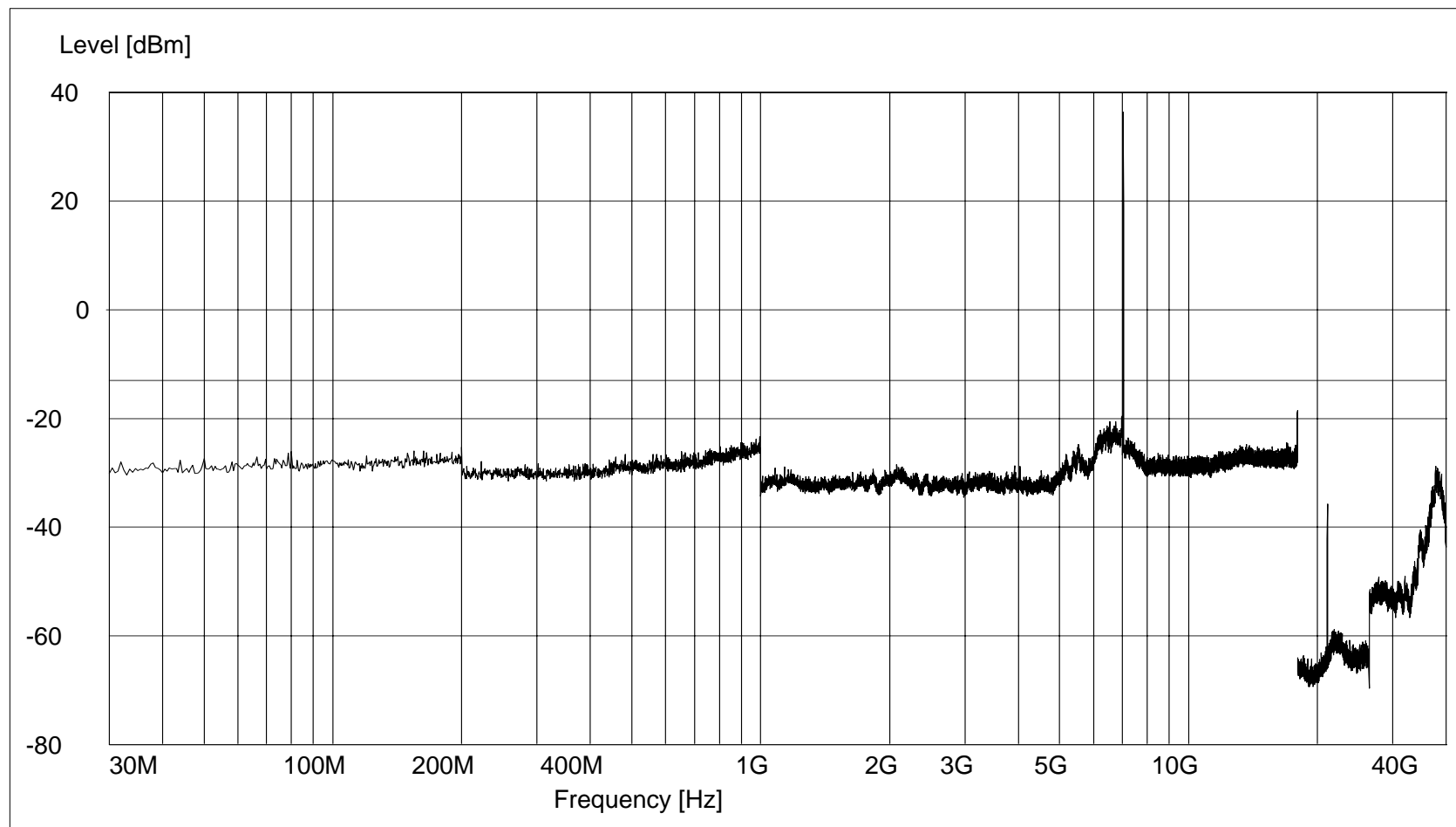
FCC Antenna Conducted Emissions, 30 MHz to 40 GHz

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Equipment Settings: Color bars plus audio, High power, Channel 4, Digital COFDM Modulation, 25 MHz channel  
Transmitting at 6962.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



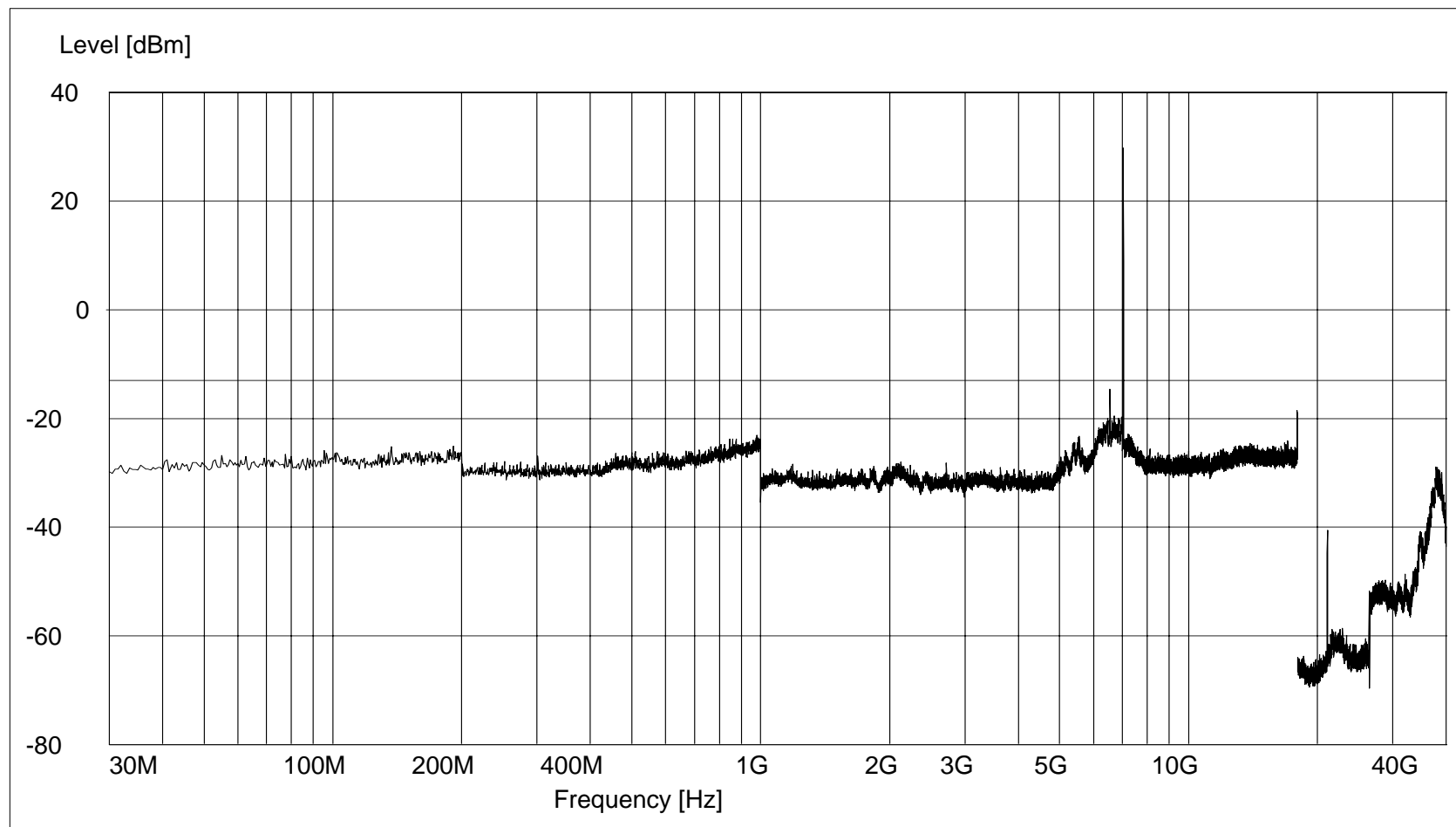
FCC Antenna Conducted Emissions, 30 MHz to 40 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 7, Analog FM Modulation, 25 MHz channel  
Transmitting at 7037.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



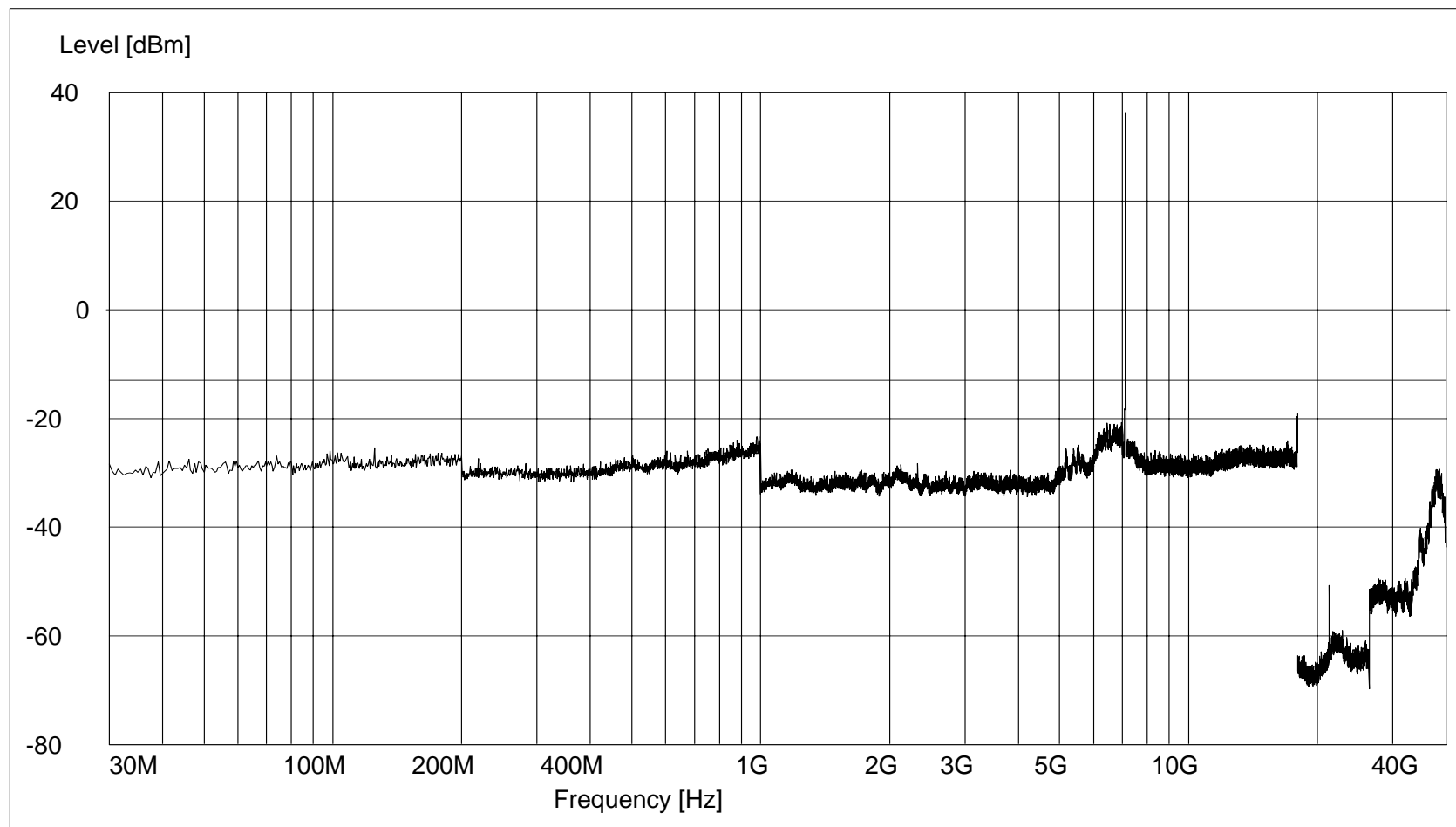
FCC Antenna Conducted Emissions, 30 MHz to 40 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 7, Digital COFDM Modulation, 25 MHz channel  
Transmitting at 7037.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



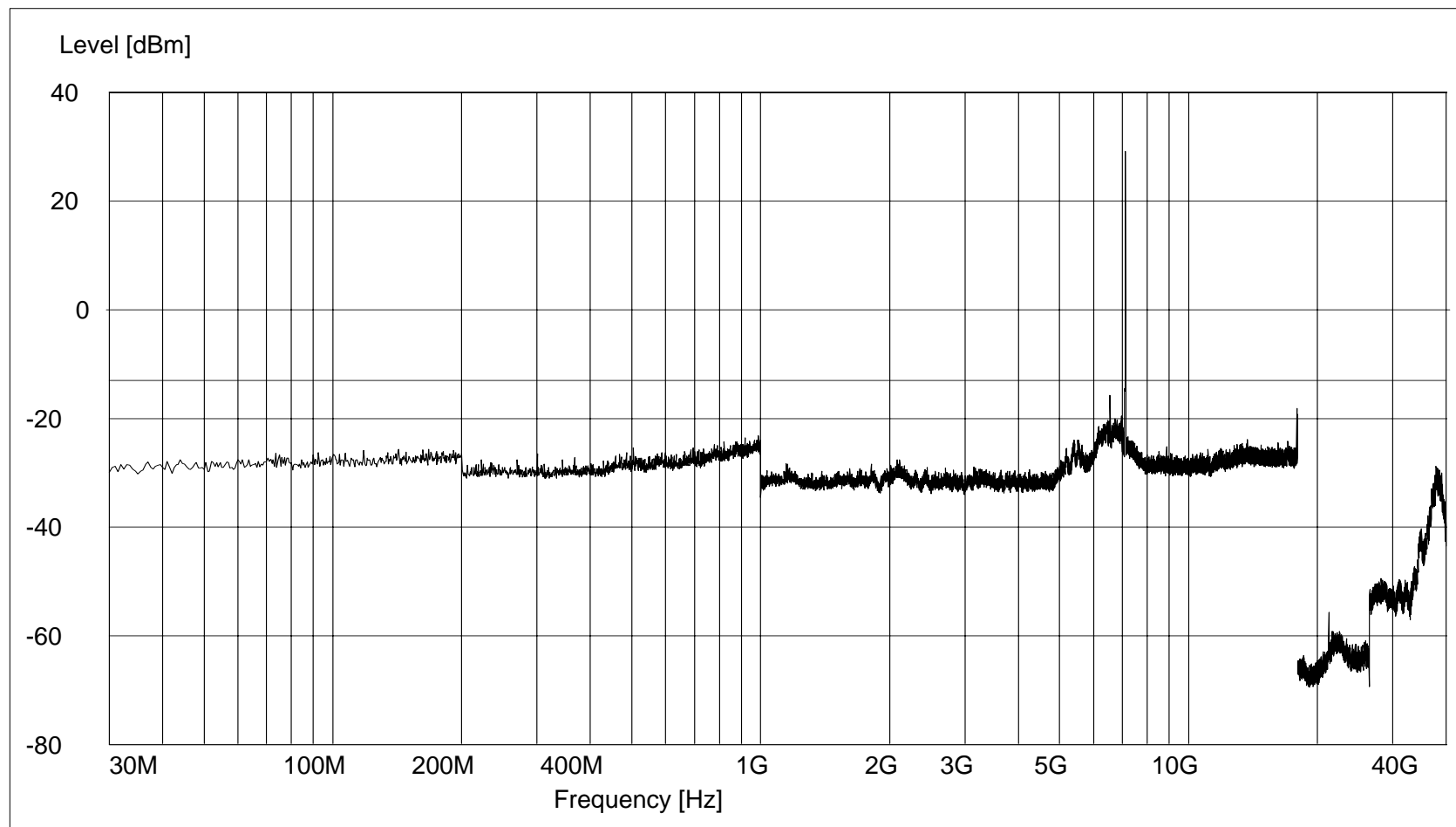
FCC Antenna Conducted Emissions, 30 MHz to 40 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 10, Analog FM Modulation, 25 MHz channel  
Transmitting at 7112.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



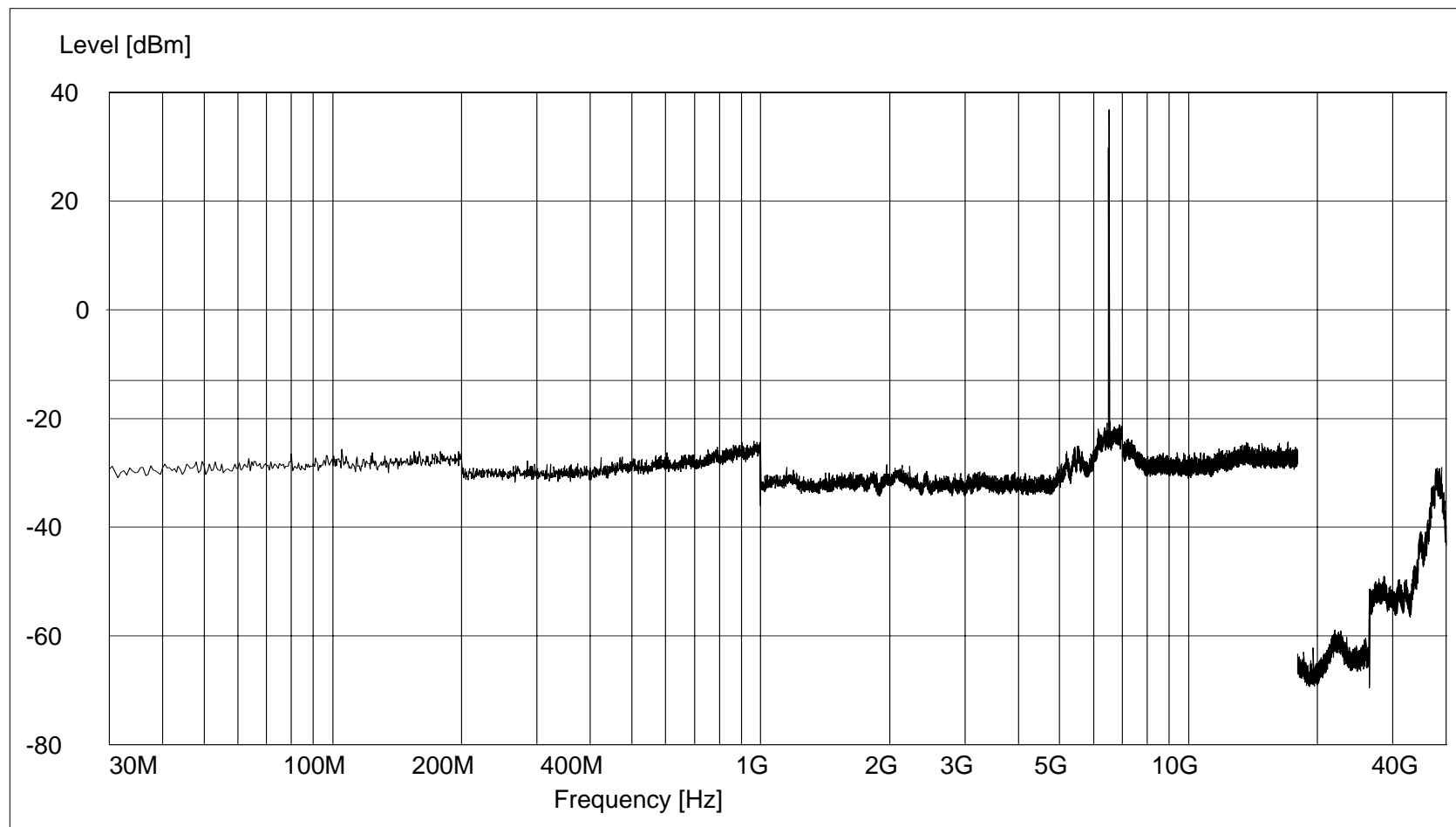
FCC Antenna Conducted Emissions, 30 MHz to 40 GHz

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Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 10, Digital COFDM Modulation, 25 MHz channel  
Transmitting at 7112.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm



FCC Antenna Conducted Emissions, 30 MHz to 40 GHz

Customer: Nucomm, Inc.  
Test Sample: 2 GHz / 7 GHz Digital/Analog Portable Microwave Transmitter  
Part Number: 2/7CMTX1-L5E1.5-326 Serial # 09962-013  
FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 14, Analog FM Modulation, 25 MHz channel  
Transmitting at 6512.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm





FCC Antenna Conducted Emissions, 30 MHz to 40 GHz

Customer: Nucomm, Inc.  
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FCC ID Number: I4U27CMT1-L5-E1P5  
Equipment Settings: Color bars plus audio, High power, Channel 14, Digital COFDM Modulation, 25 MHz channel  
Transmitting at 6512.5 MHz.  
Antenna Port Tested: RF Output Port 25 MHz  
Test Engineer / Date: D. Lerner / October 10, 2006  
Notes: Fundamental frequency exempt from -13 dBm

