GENERAL INFORMATION REQUIREMENTS

*Paragraph 2.983(a)*

| | |
|---|---|
| Name of Applicant: | Nucomm, Inc. |
| Address of Applicant: | 101 Bilby Road<br>Hackettstown, NJ 07840 |
| Name of Manufacturer: | Nucomm, Inc. |

*Paragraph 2.983(b)*

| | |
|---|---|
| Equipment Identification: | **FCC ID: I4U27VT2-L5-E1P5** |

Para. 2.1051

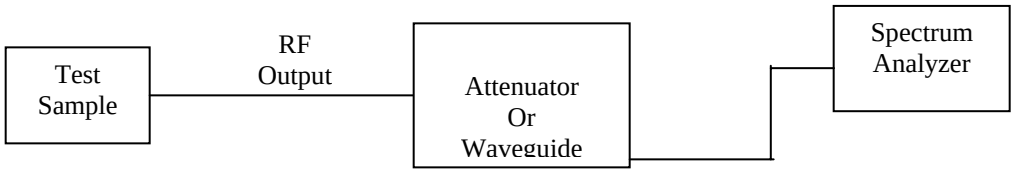
Spurious Emissions at Antenna Terminals

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.

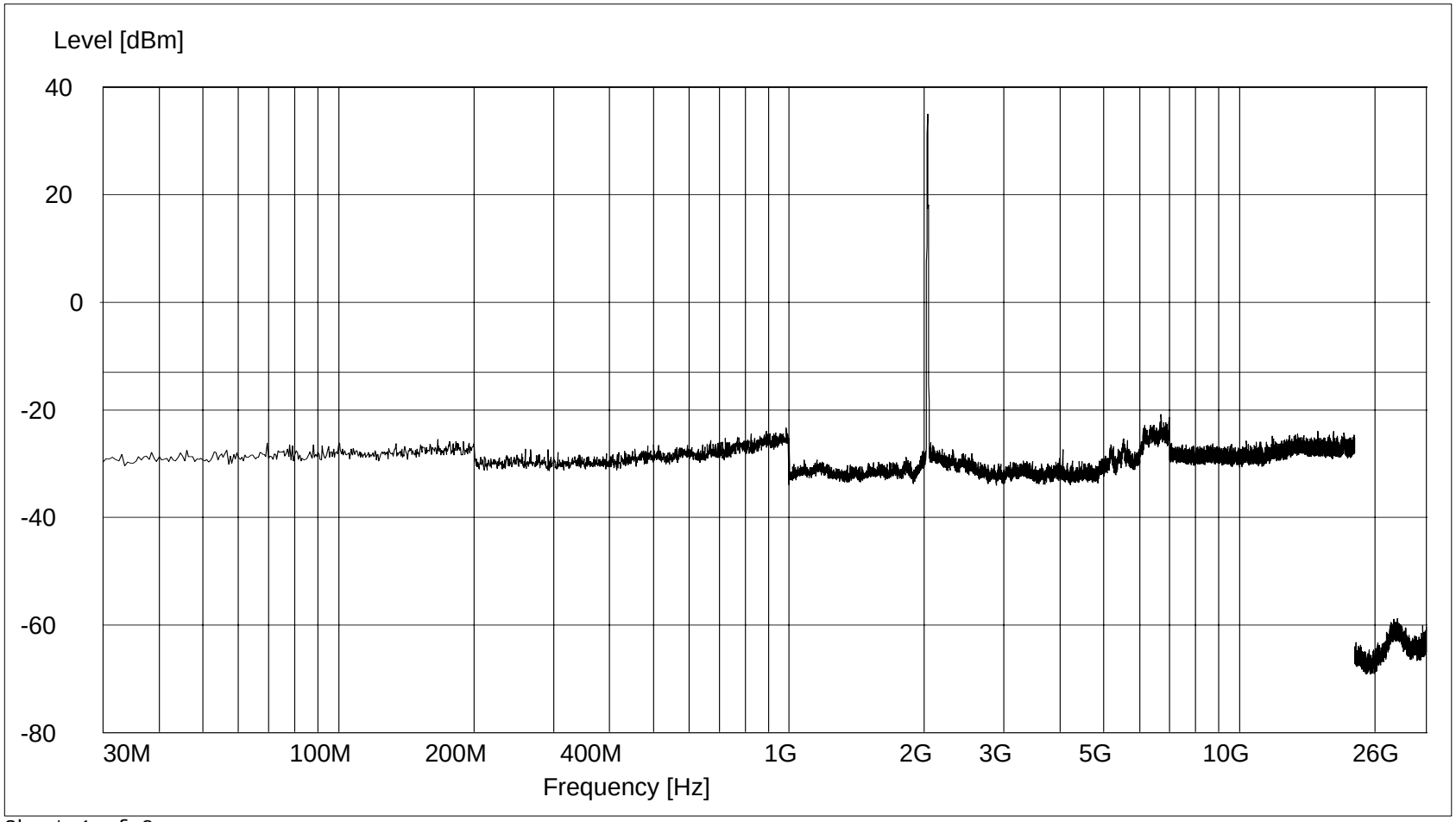
| EN | Type | Manufacturer | Description | Model No. | Cal Date | Due Date |
|---|---|---|---|---|---|---|
| 032G | H.P. Filter | Microlab/FXR | 3 GHz | HA-30N | 5/25/2006 | 5/25/2007 |
| 1008 | 20.0 dB Attenuator | Narda | DC - 18 GHz | 776C-20 | 11/29/2005 | 11/29/2006 |
| 1009 | 30.0 dB Attenuator | 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 |

2 GHz Antenna Port Conducted Emissions,
12 MHz channel spacing plan

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 12 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

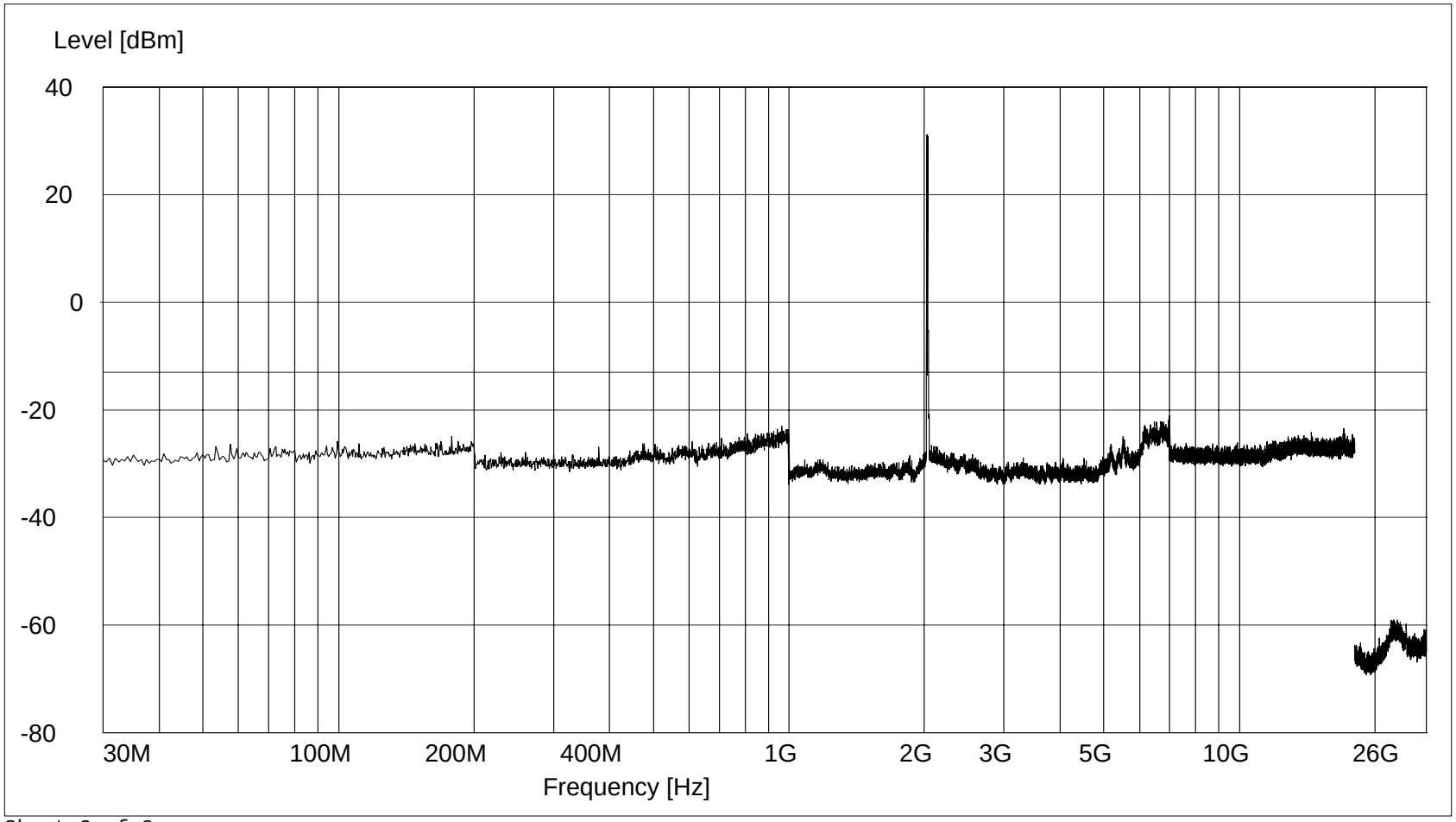



Sheet 1 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 12 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

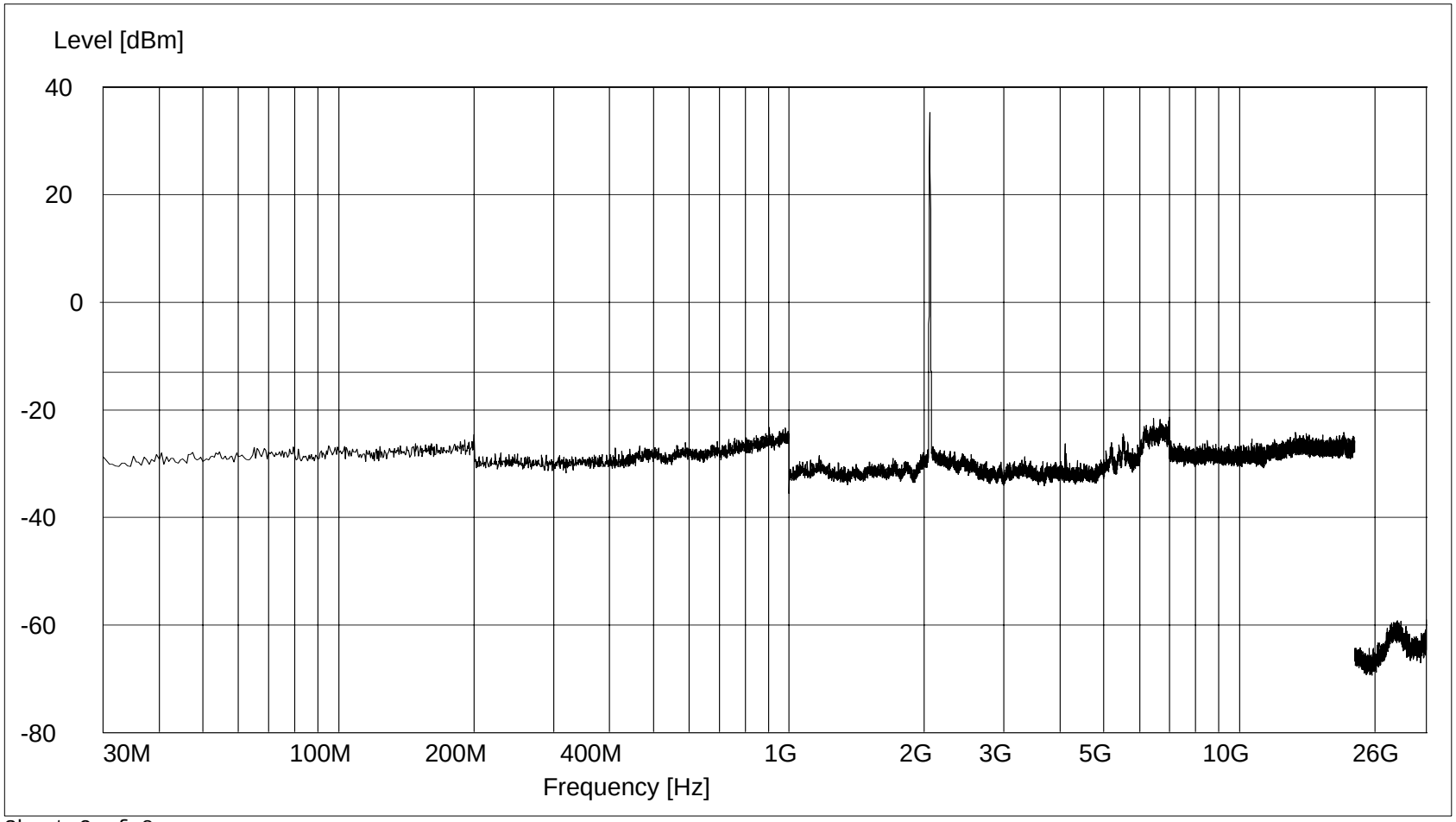



Sheet 2 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 12 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

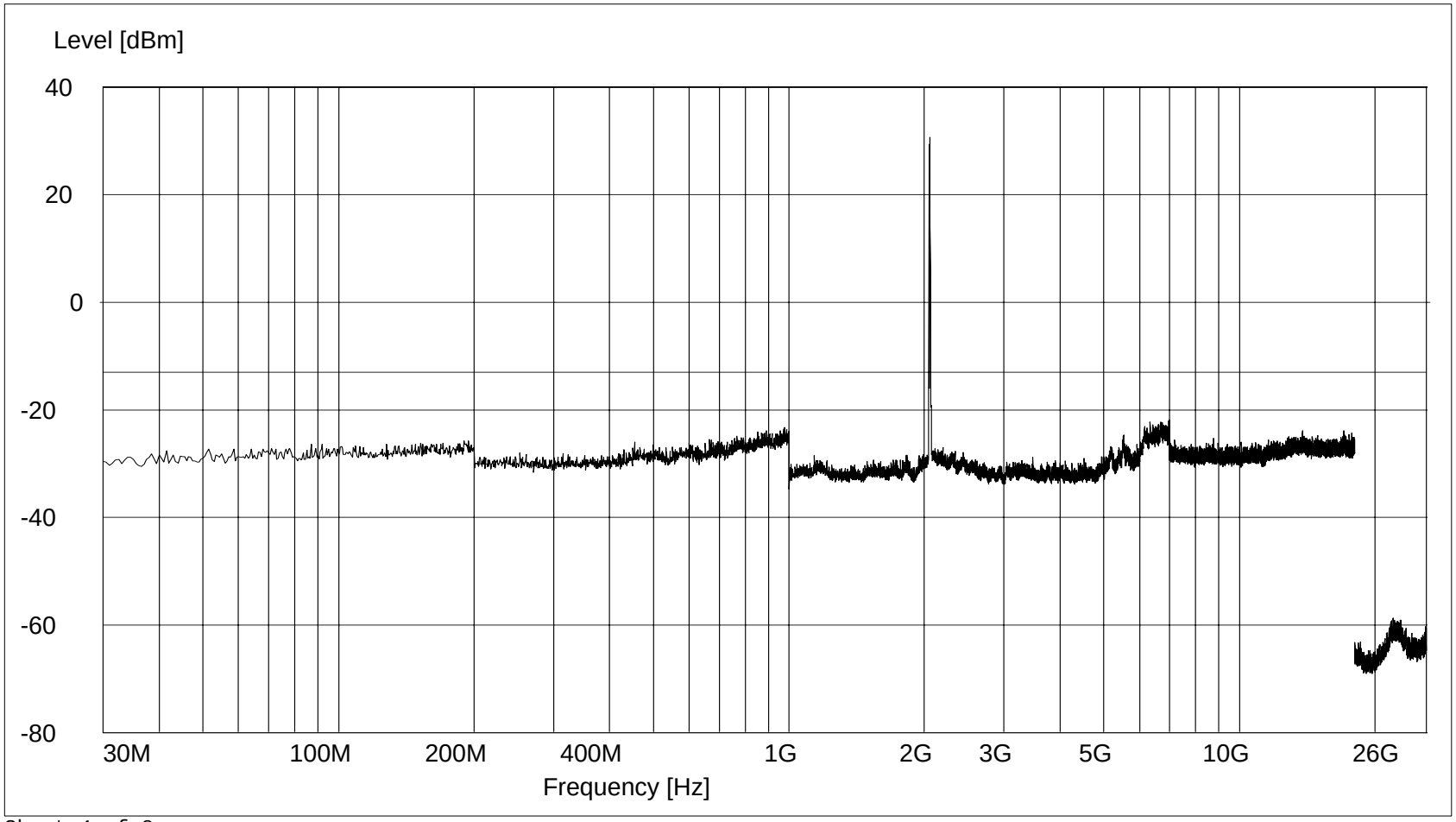



Sheet 3 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 12 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

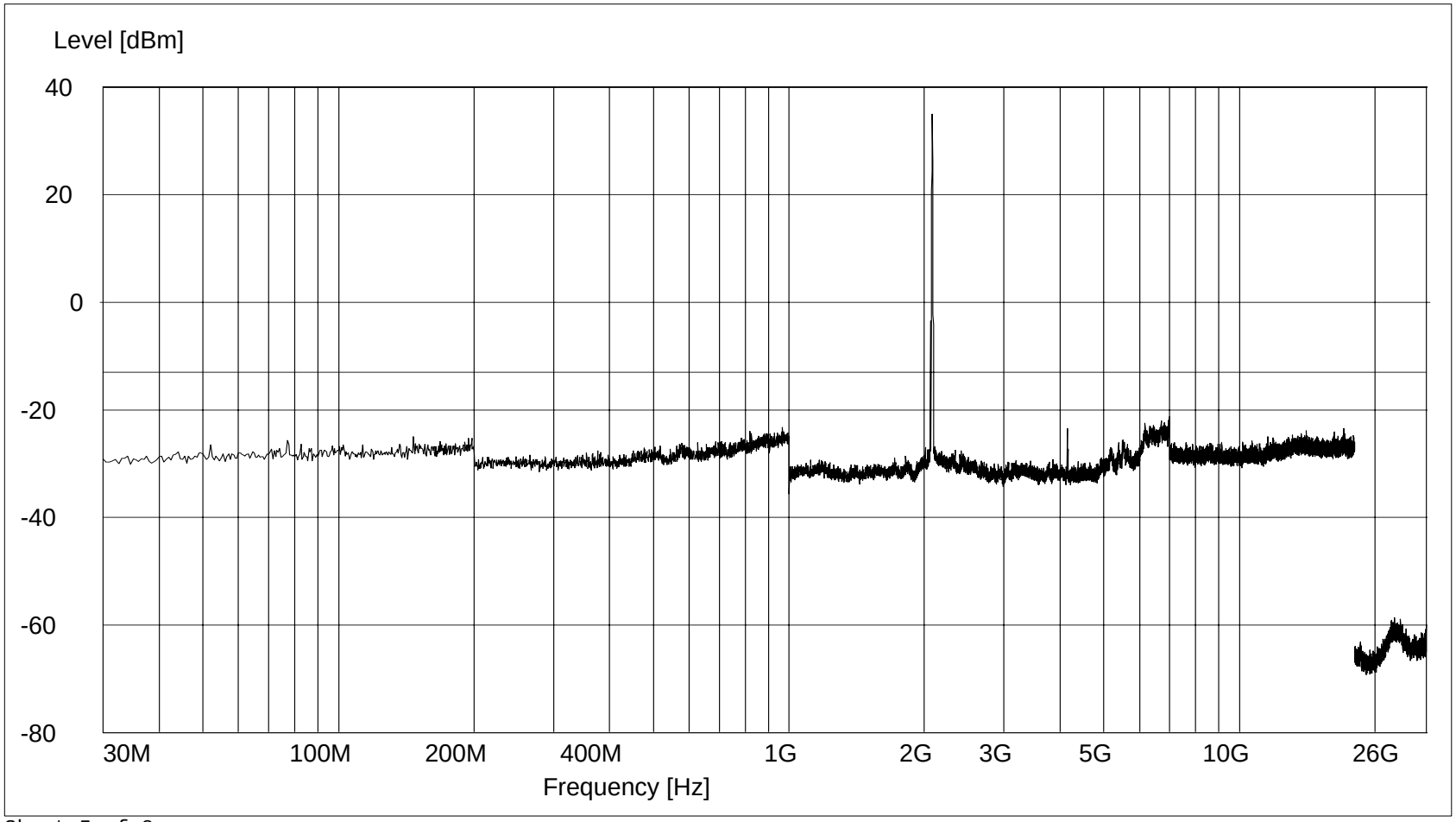



Sheet 4 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 12 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

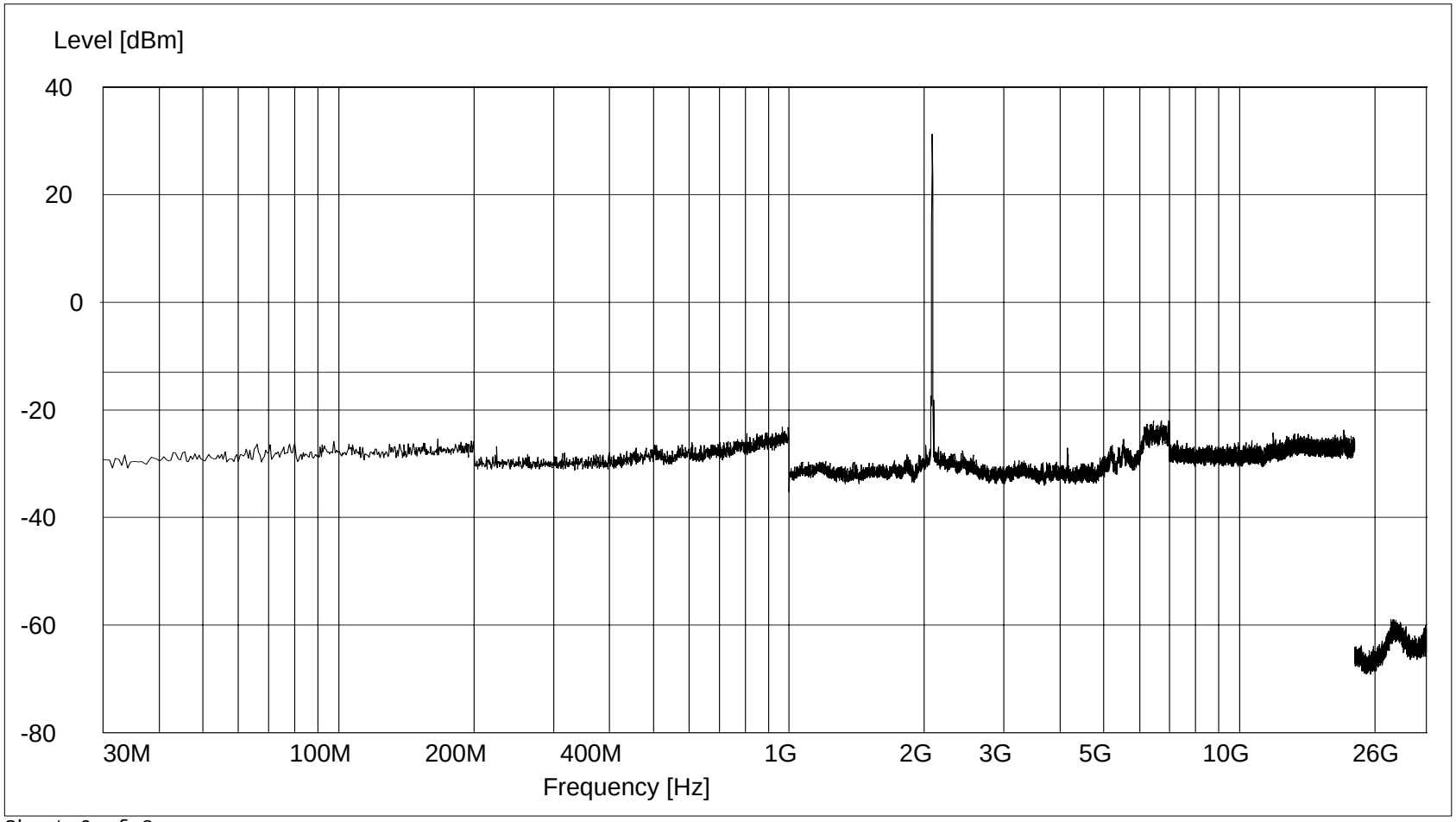



Sheet 5 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 12 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

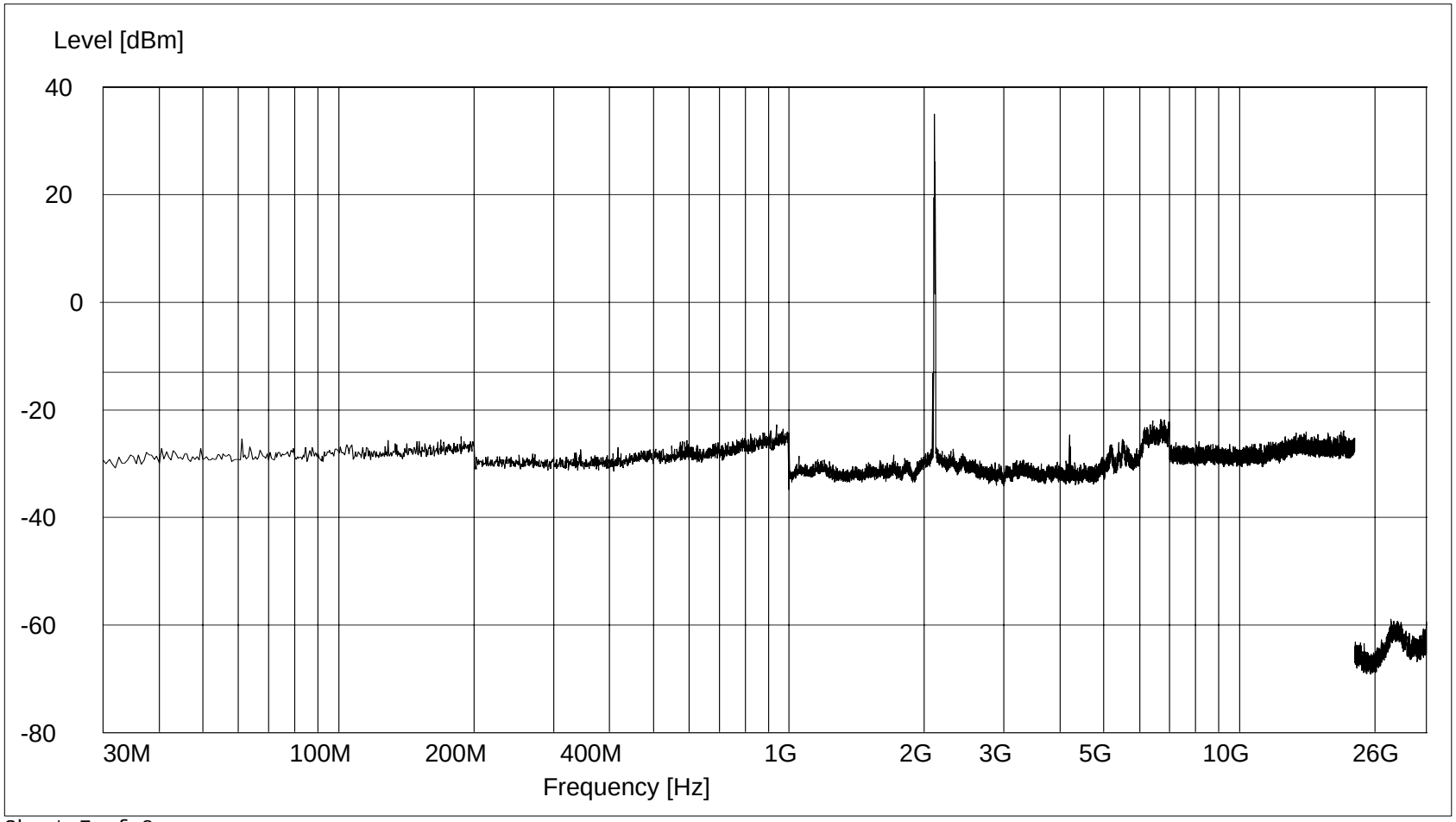



Sheet 6 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 12 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

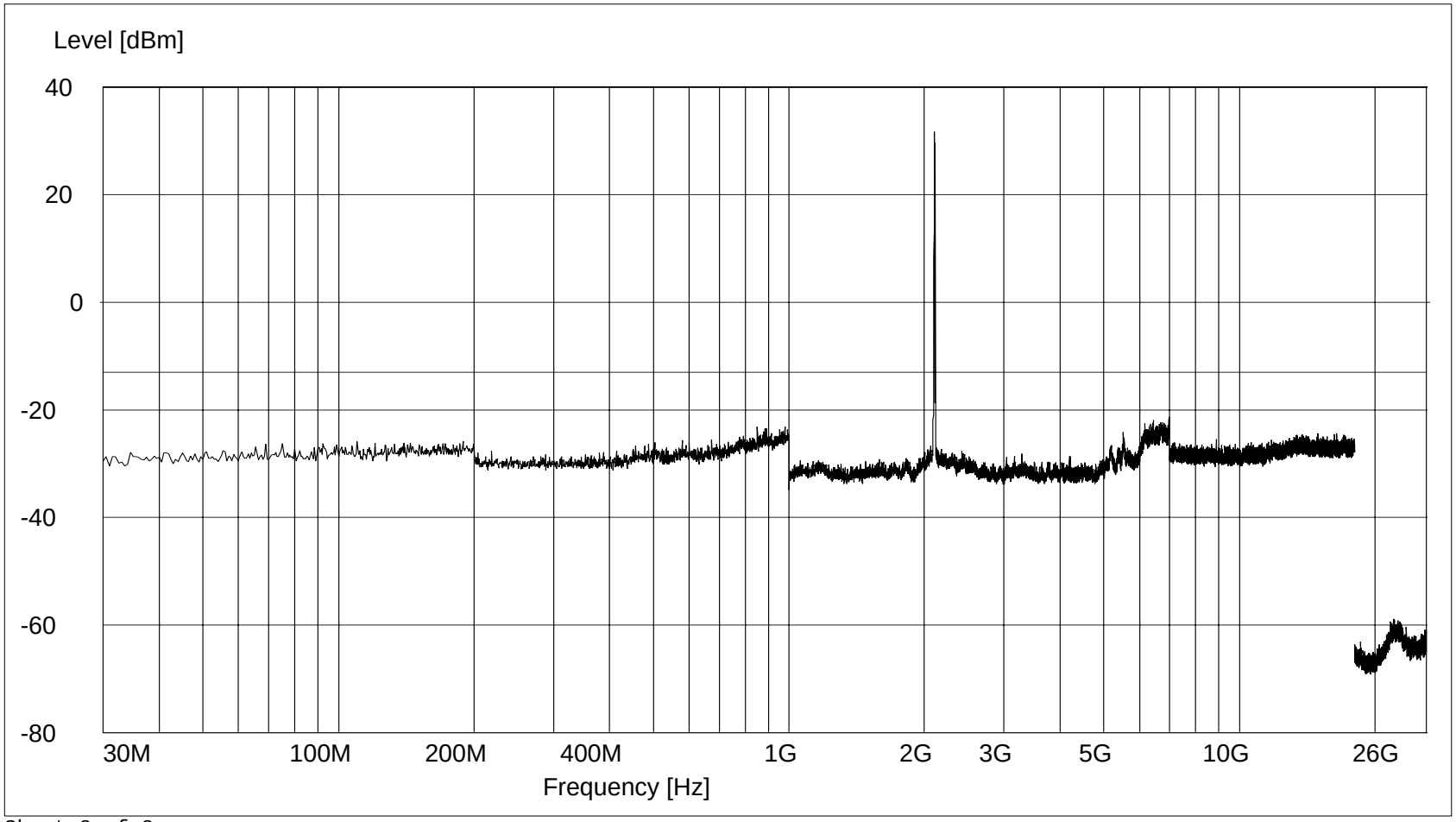



Sheet 7 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 12 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

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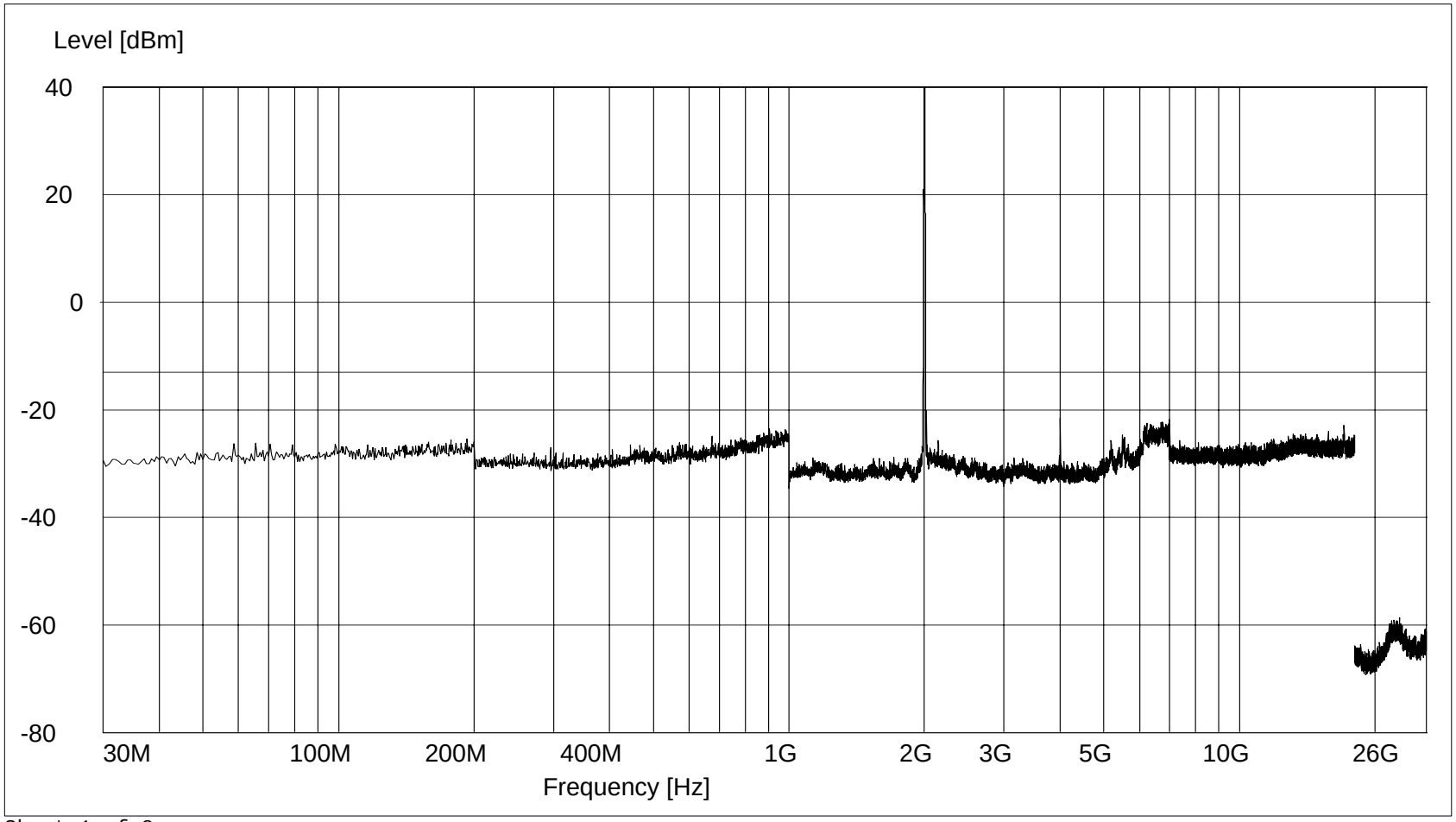
2 GHz Antenna Port Conducted Emissions,
17 MHz channel spacing plan

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 17 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

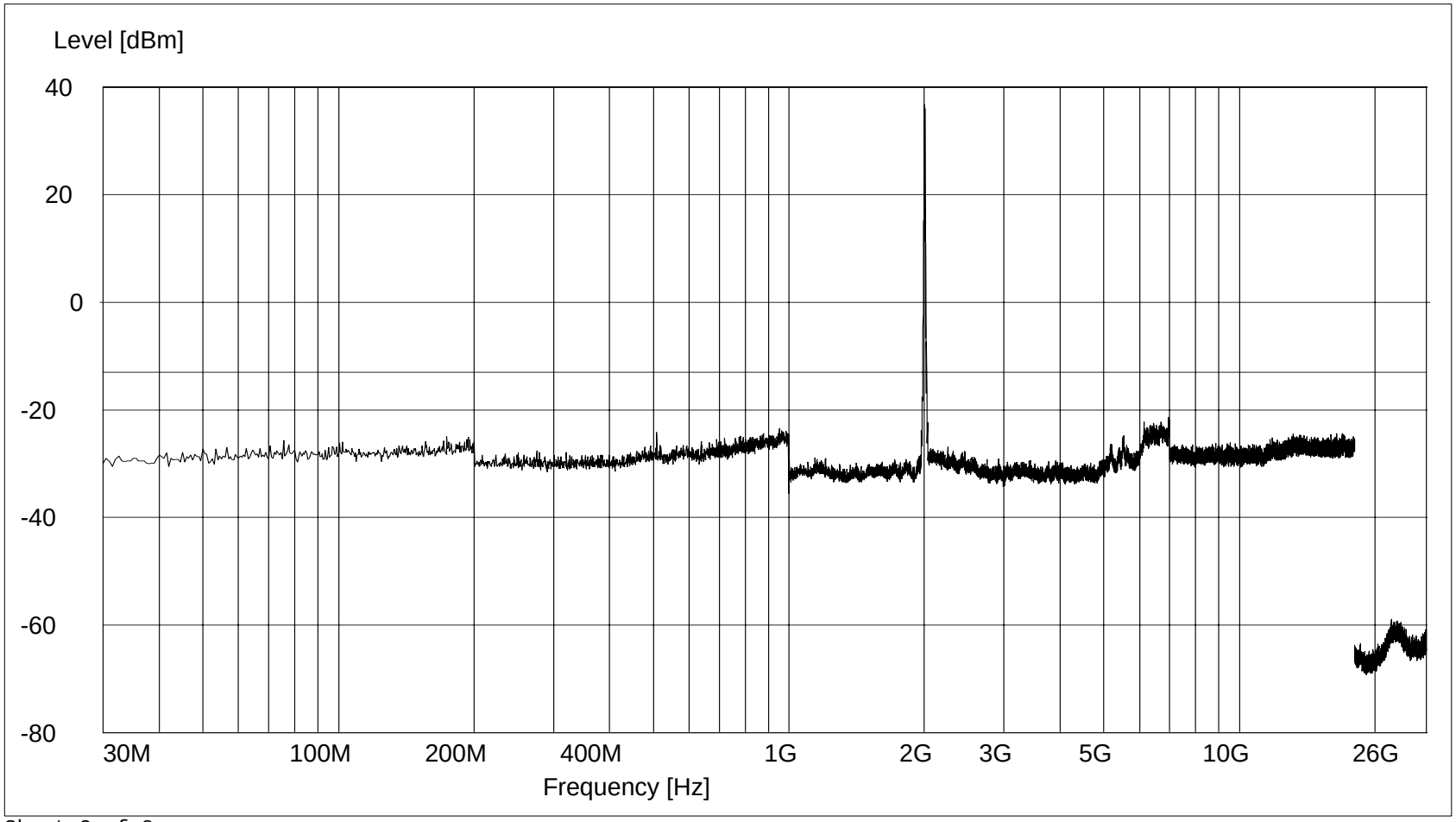



Sheet 1 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 17 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

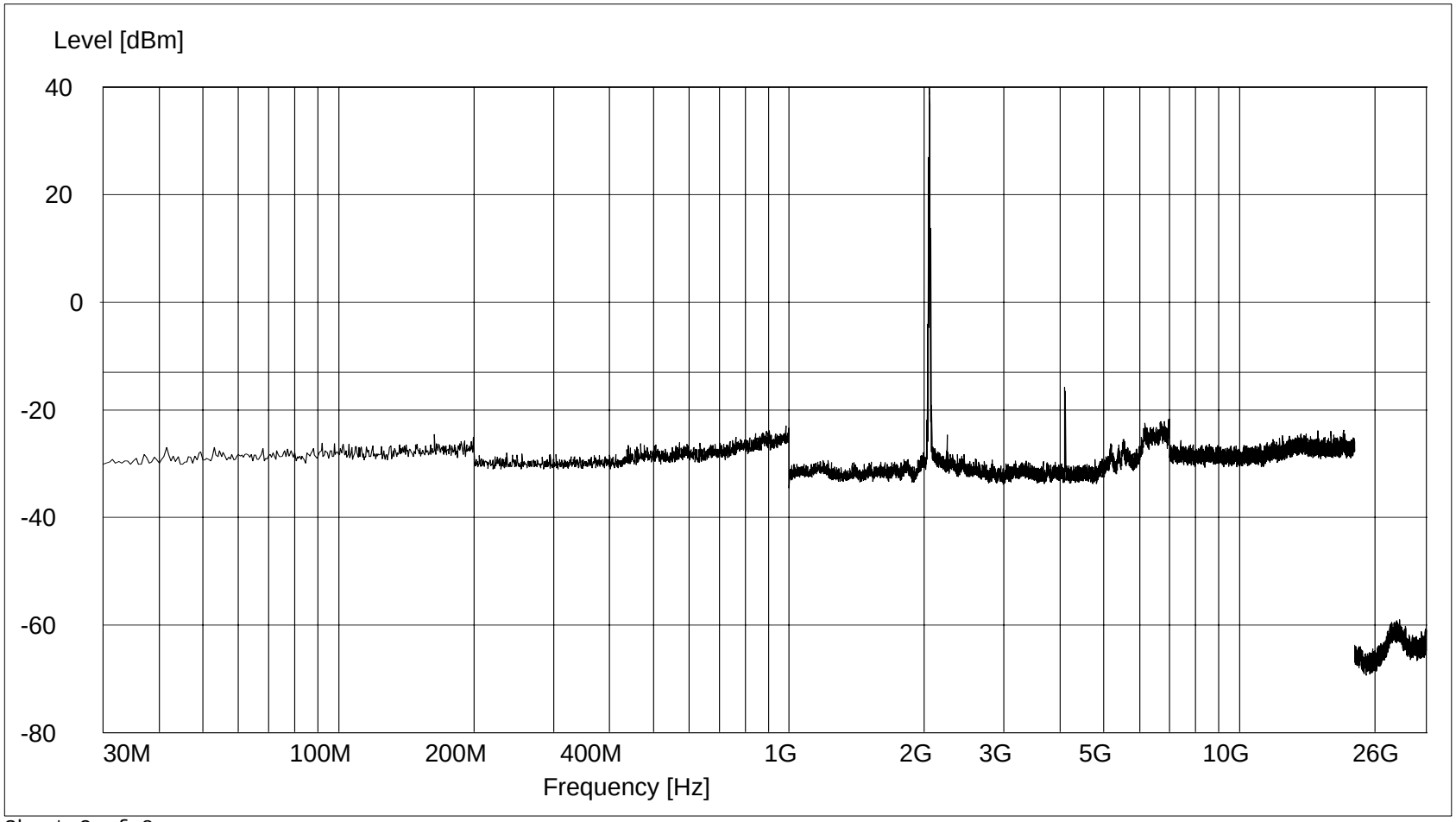



Sheet 2 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 17 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

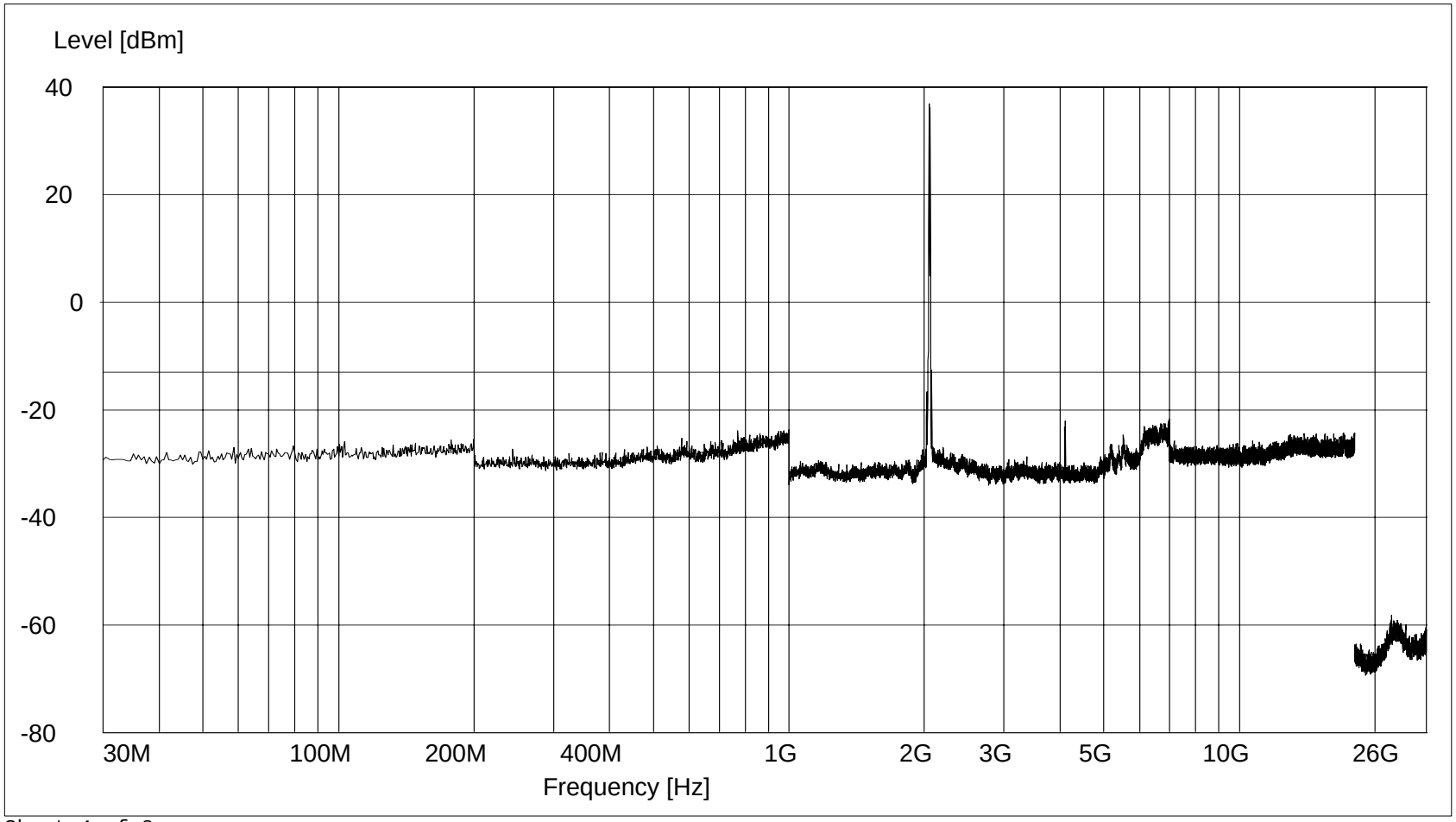



Sheet 3 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 17 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

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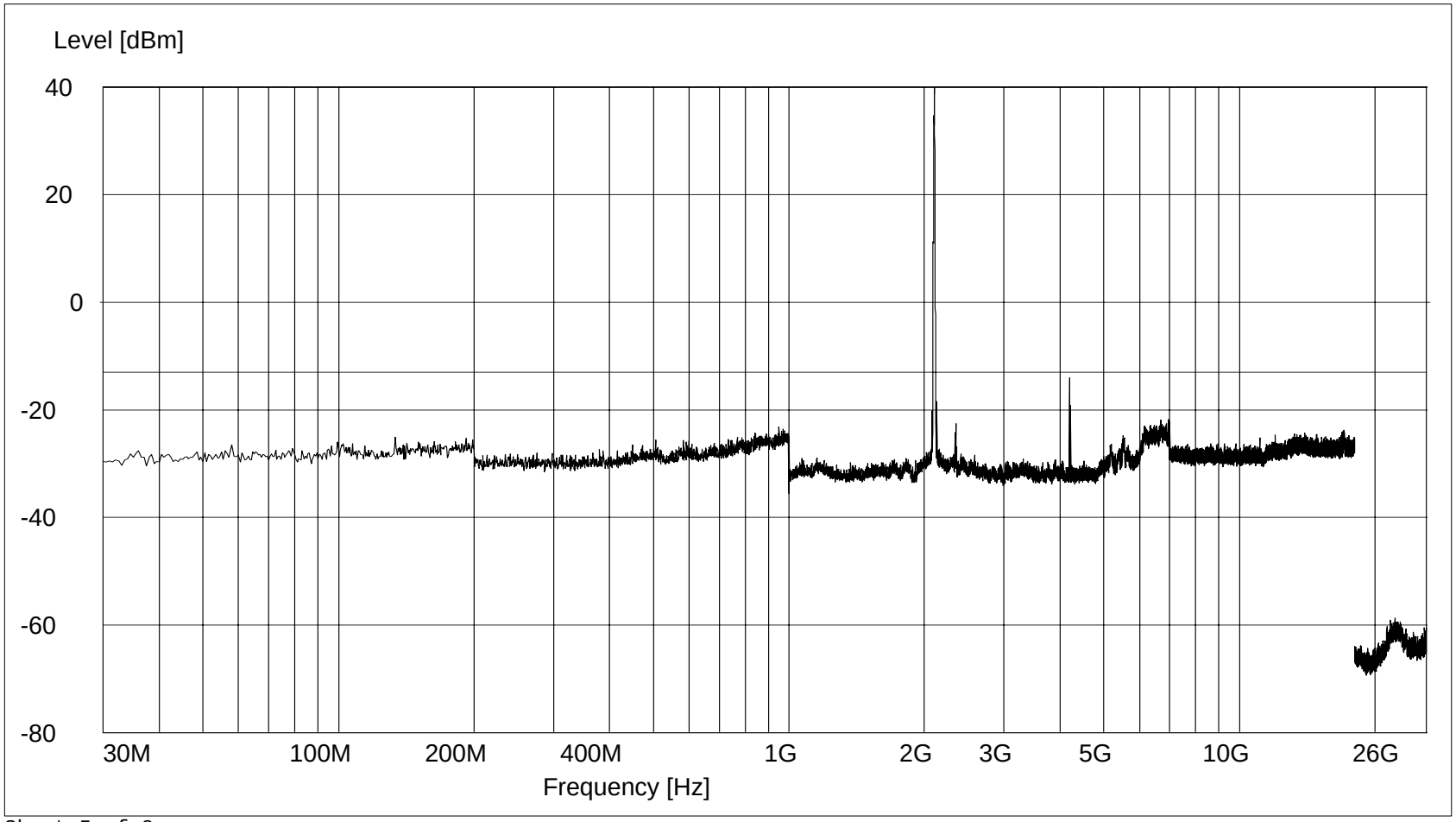
***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 17 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

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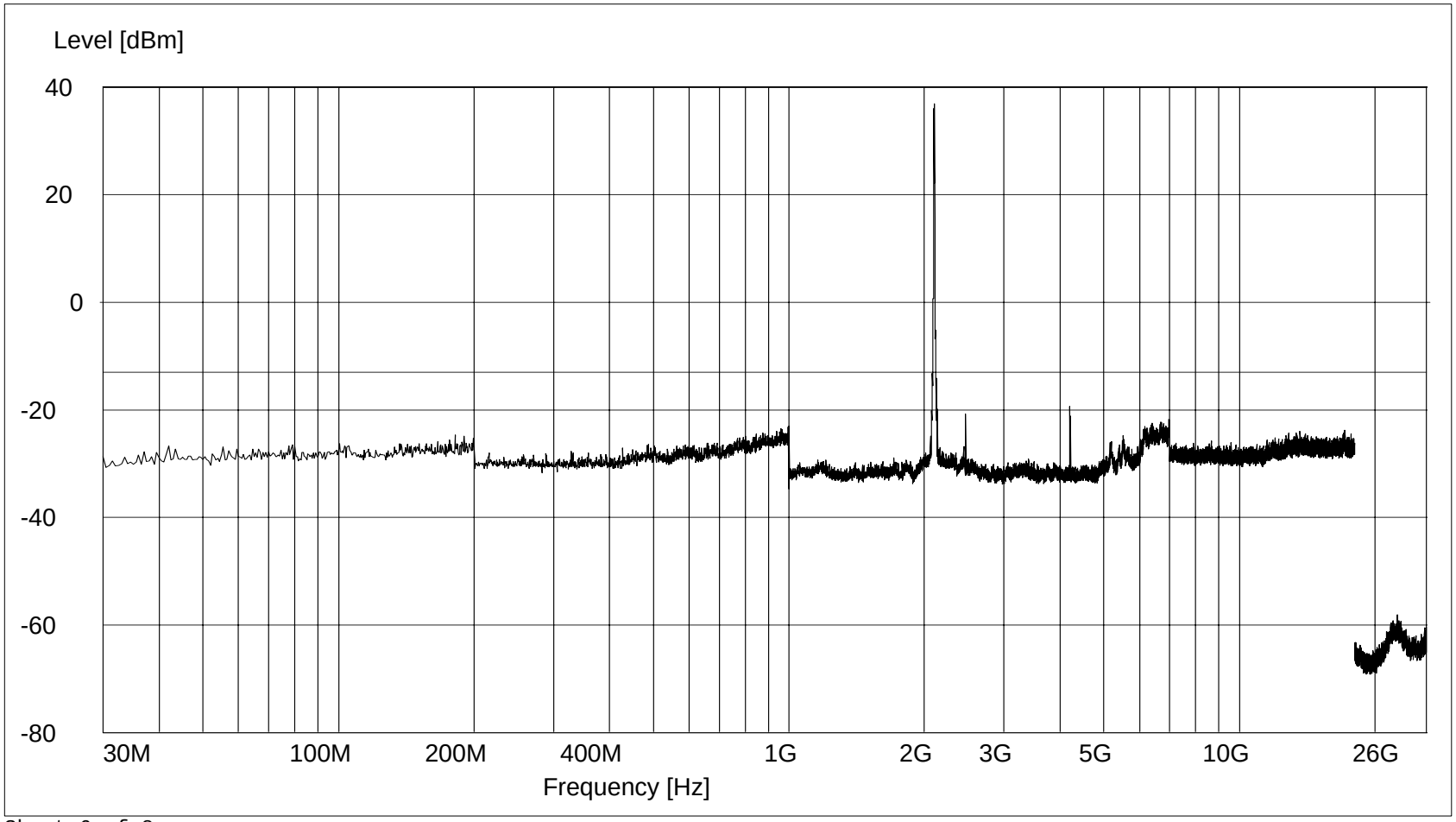
***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 17 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

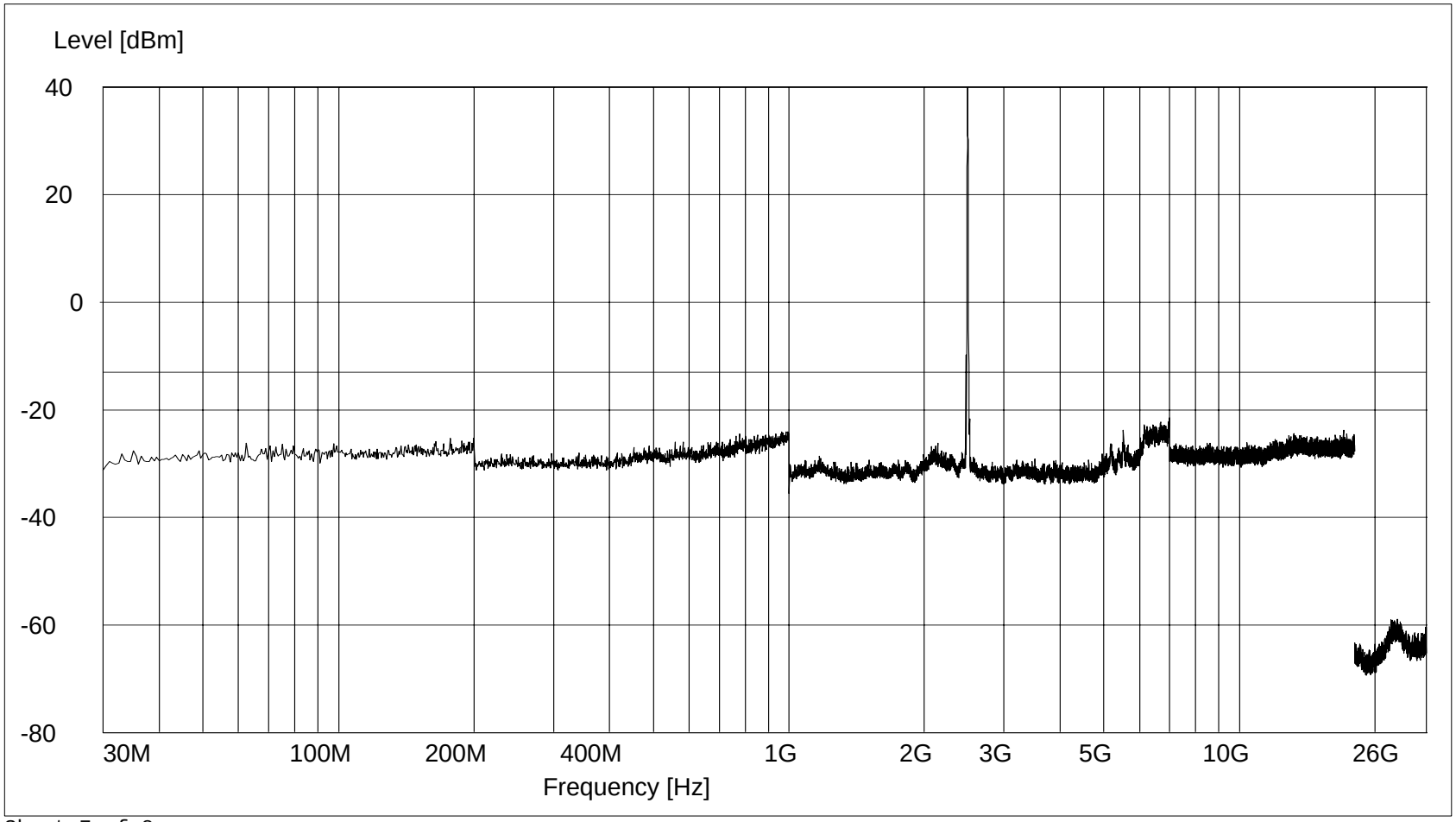



Sheet 6 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 17 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

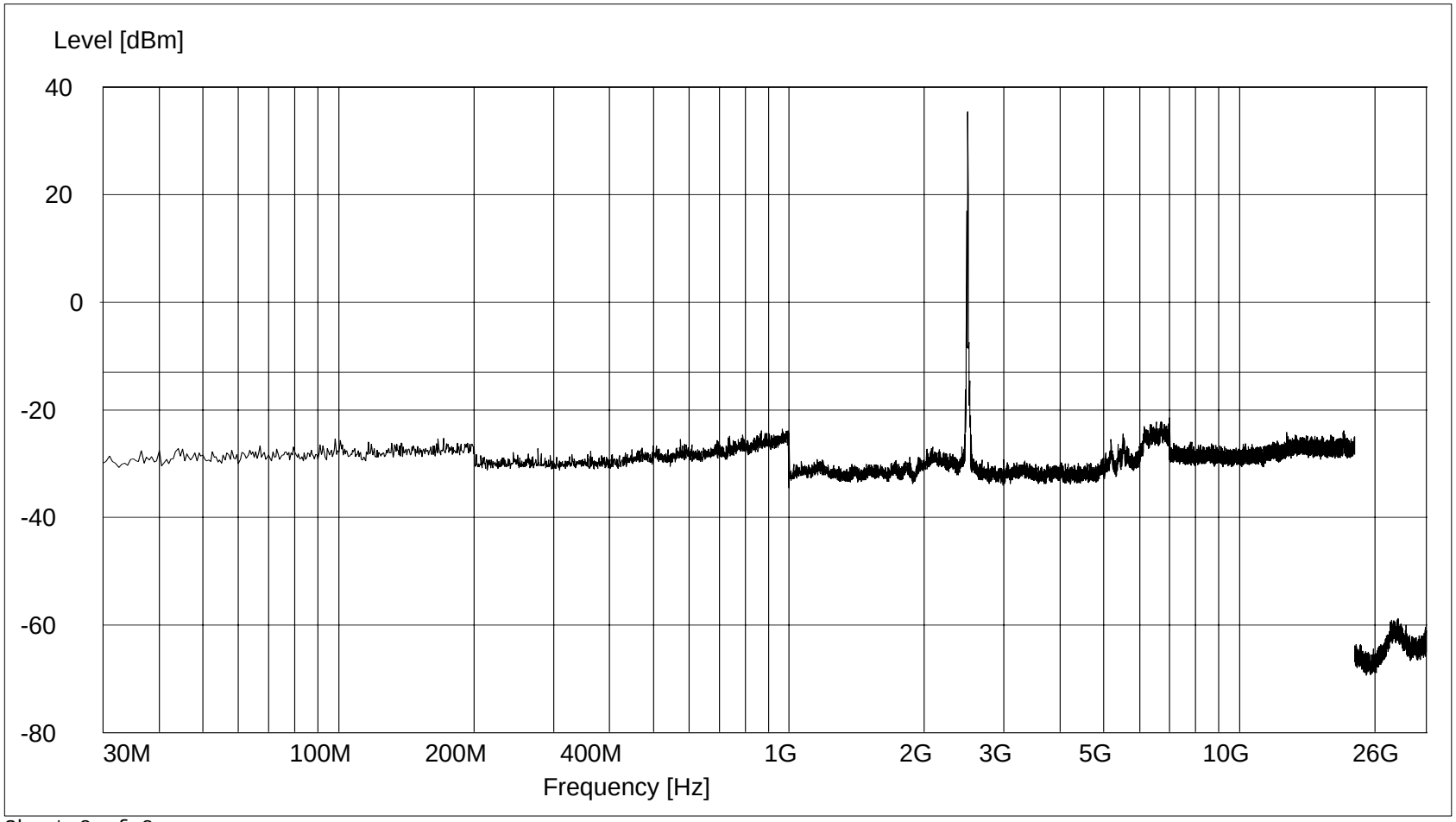



Sheet 7 of 8

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 2 GHz Directional / 17 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm



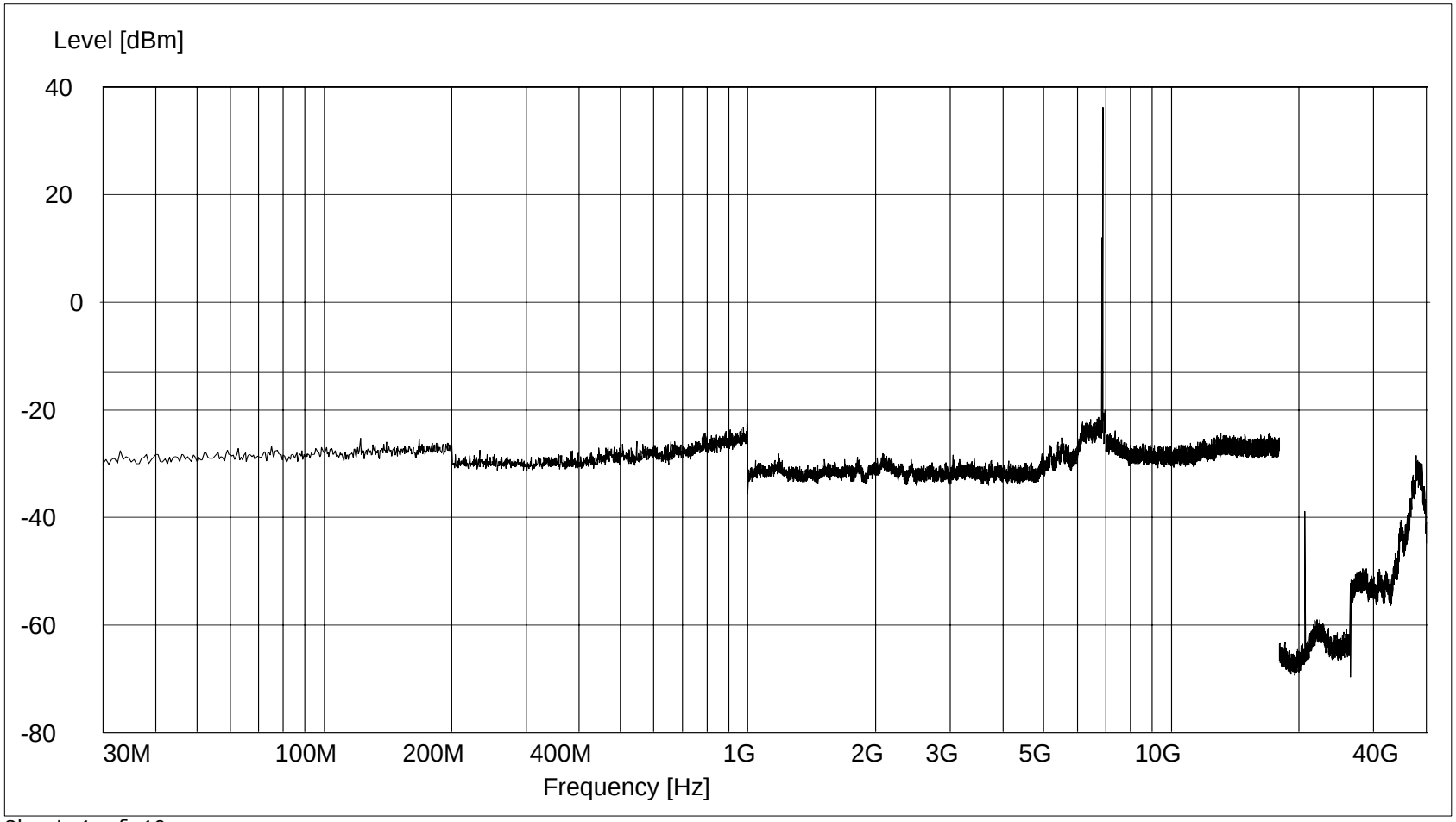

Sheet 8 of 8

7 GHz Antenna Port Conducted Emissions,
25 MHz channel spacing plan

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

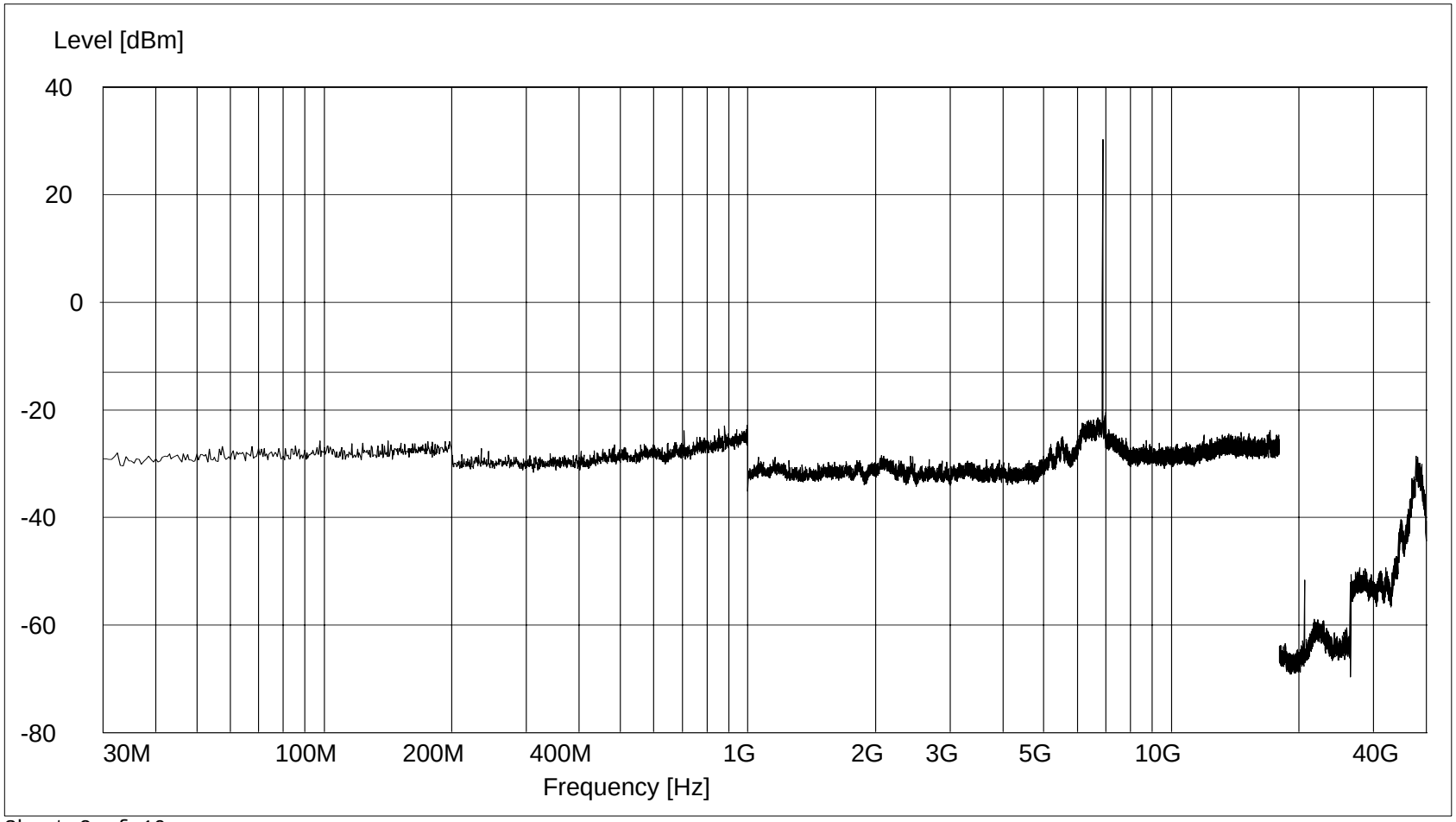



Sheet 1 of 10

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

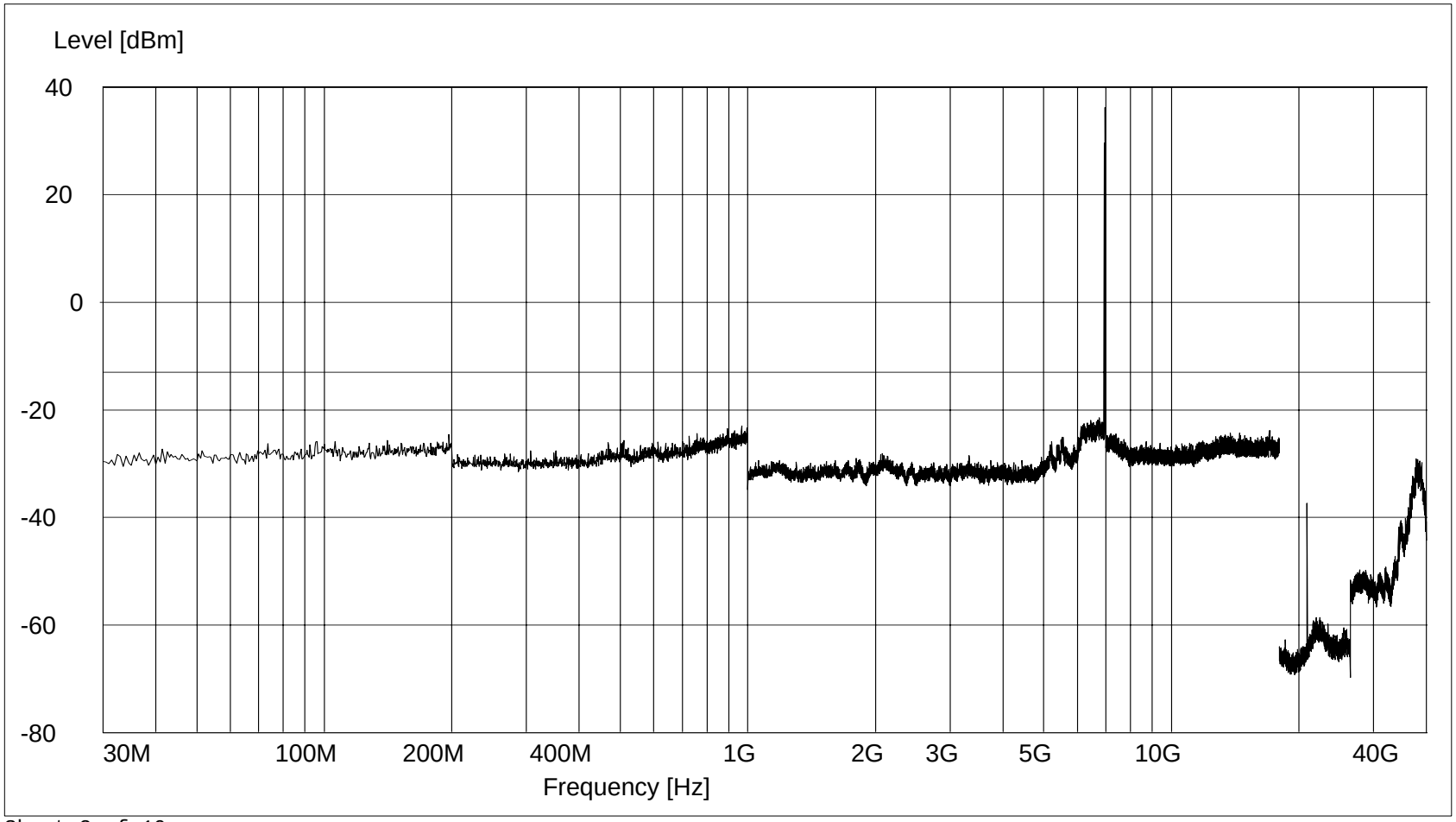



Sheet 2 of 10

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

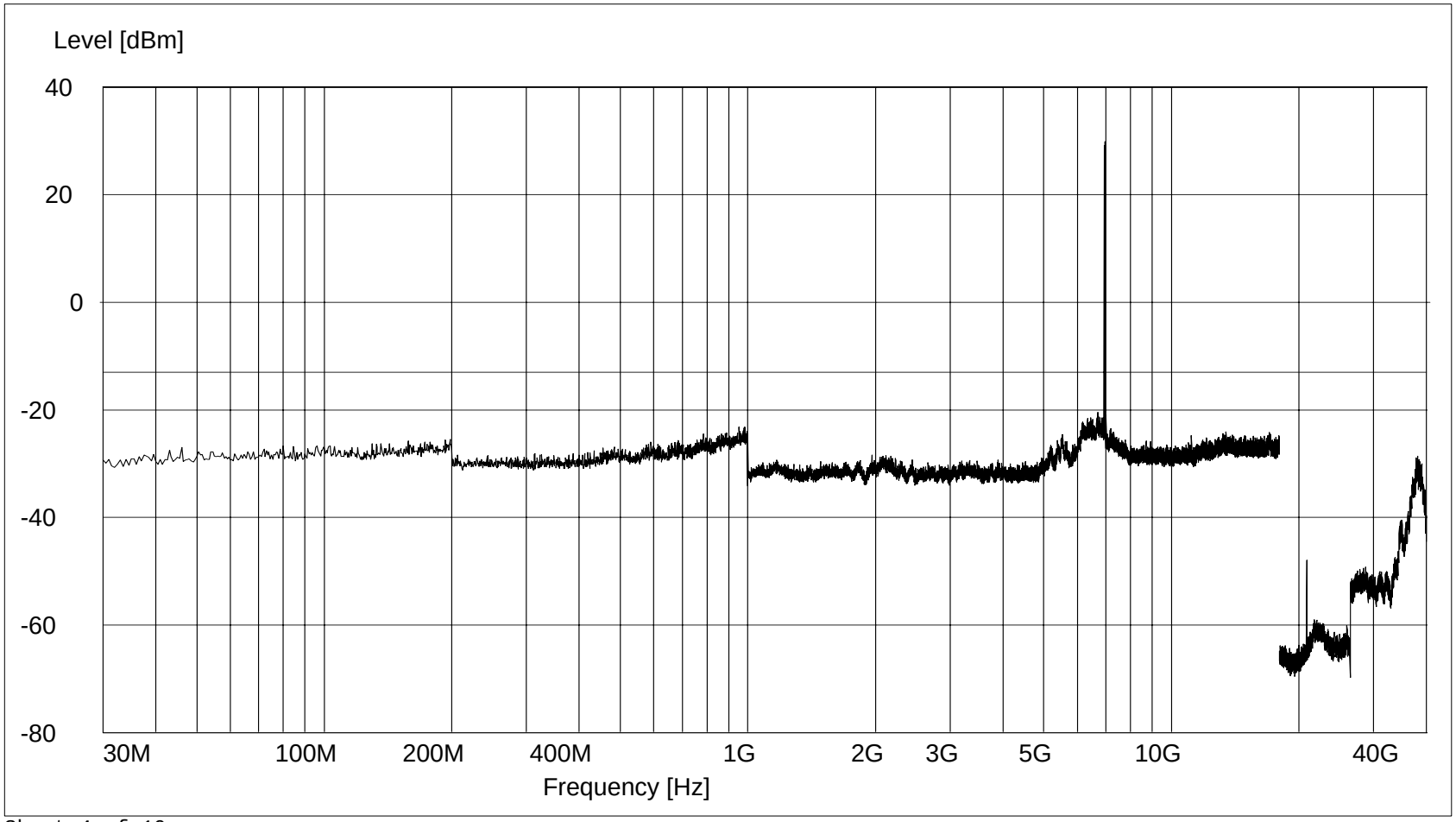



Sheet 3 of 10

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-L5-E1P5
Equipment Settings: Color bars plus audio, High power, Channel 4, Digital COFDM Modulation, 25 MHz channel Transmitting at 6962.5 MHz.
Antenna Port Tested: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

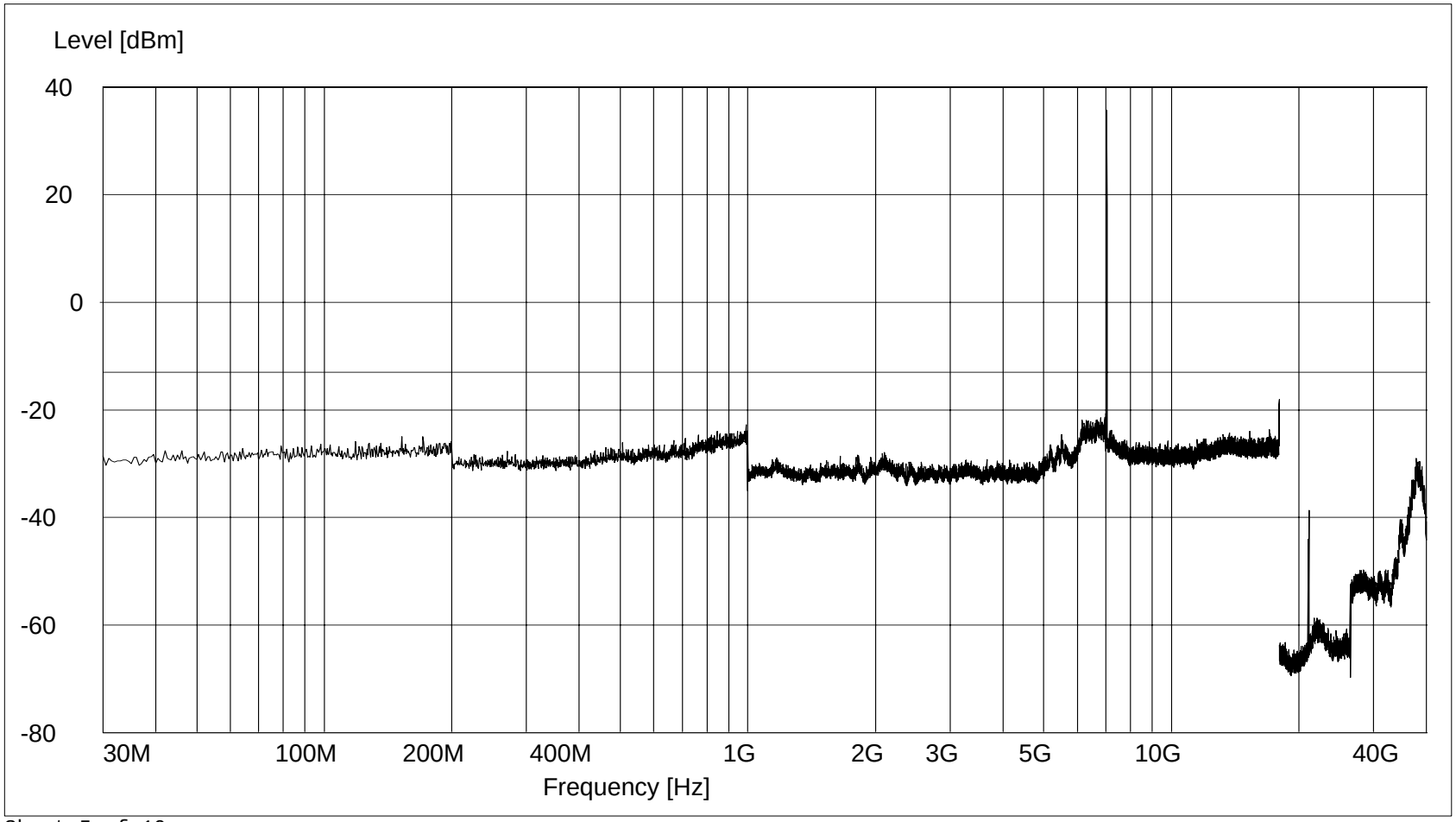



Sheet 4 of 10

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

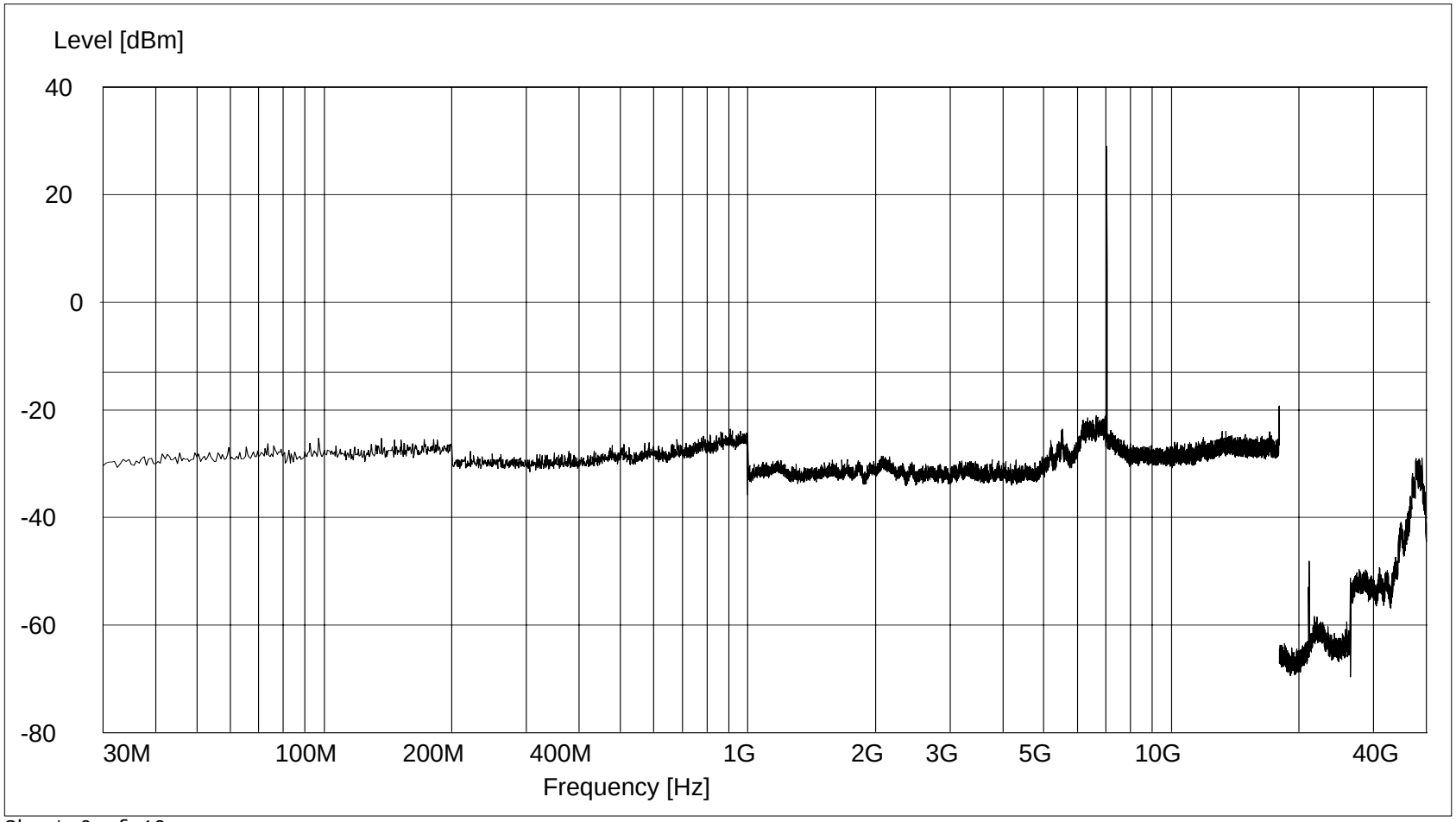



Sheet 5 of 10

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

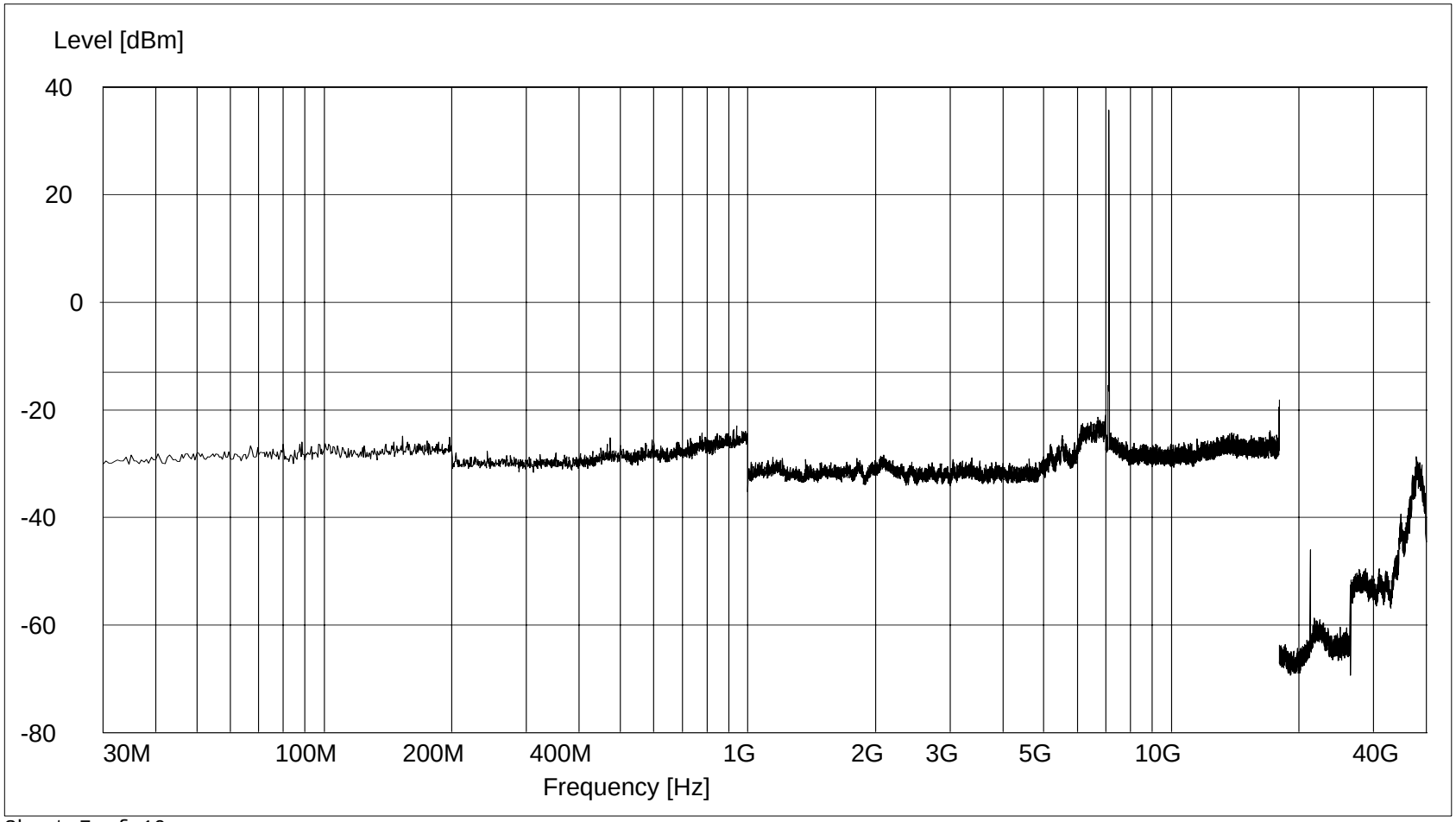



Sheet 6 of 10

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

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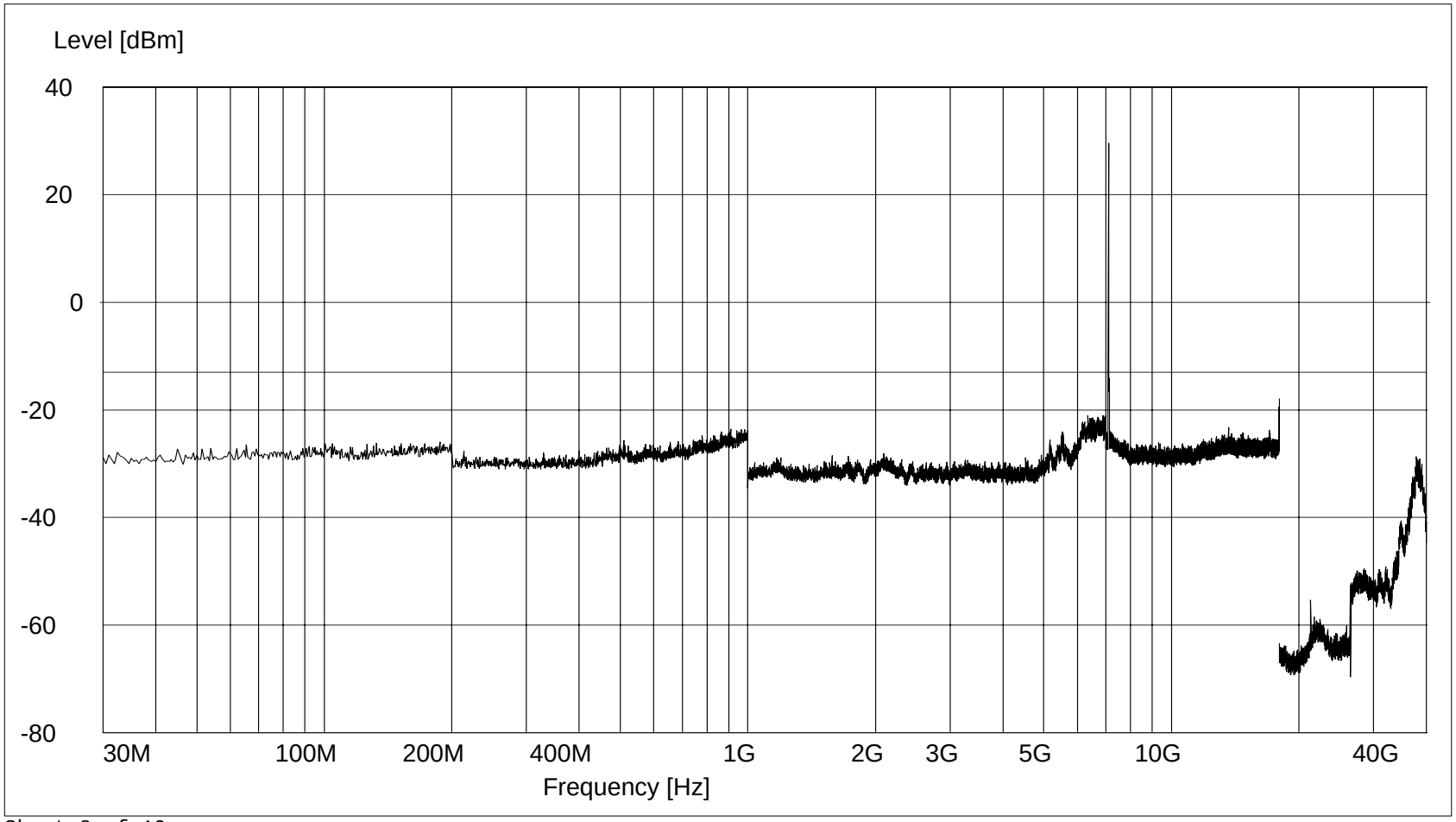
***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

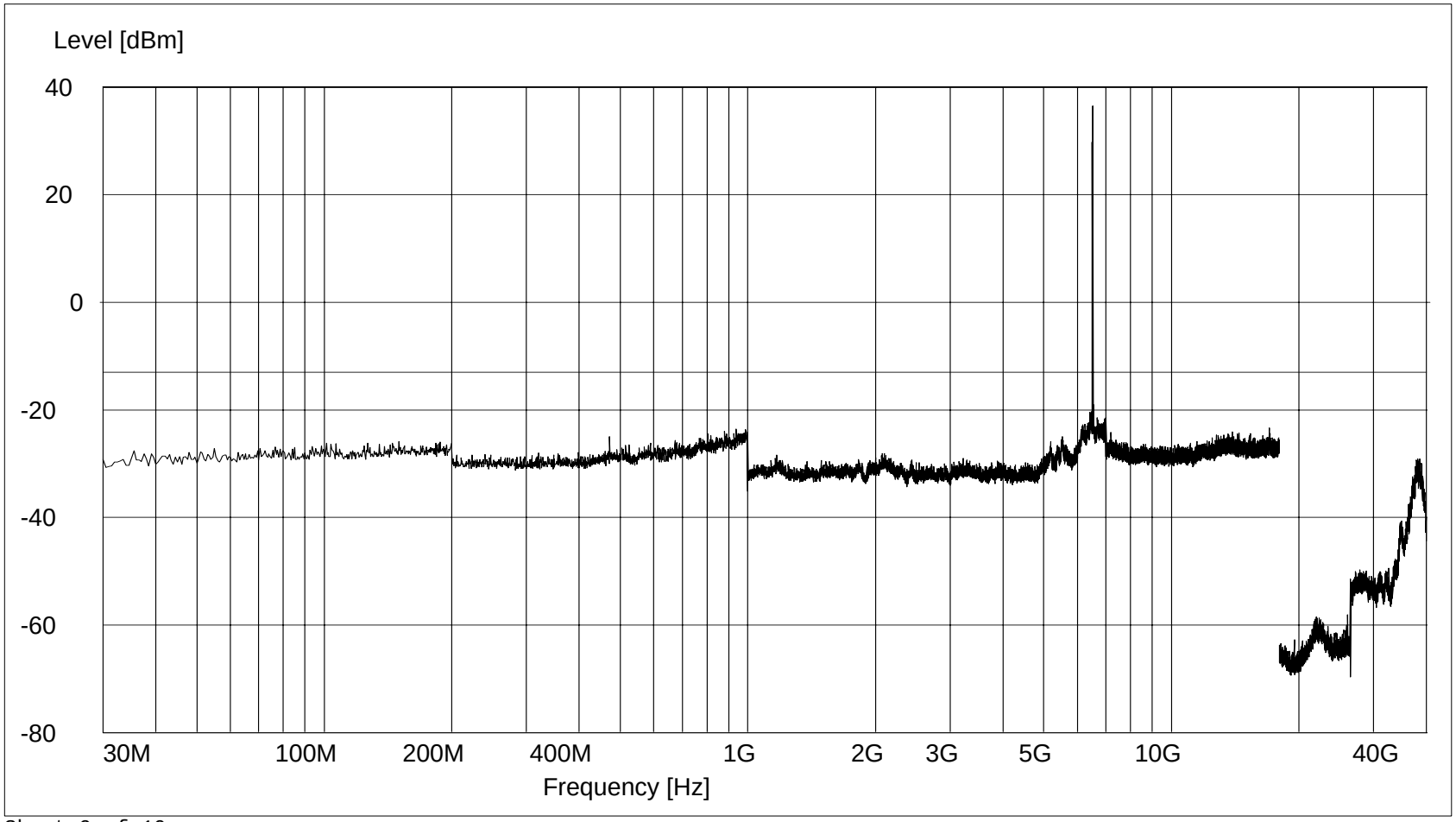



Sheet 8 of 10

***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

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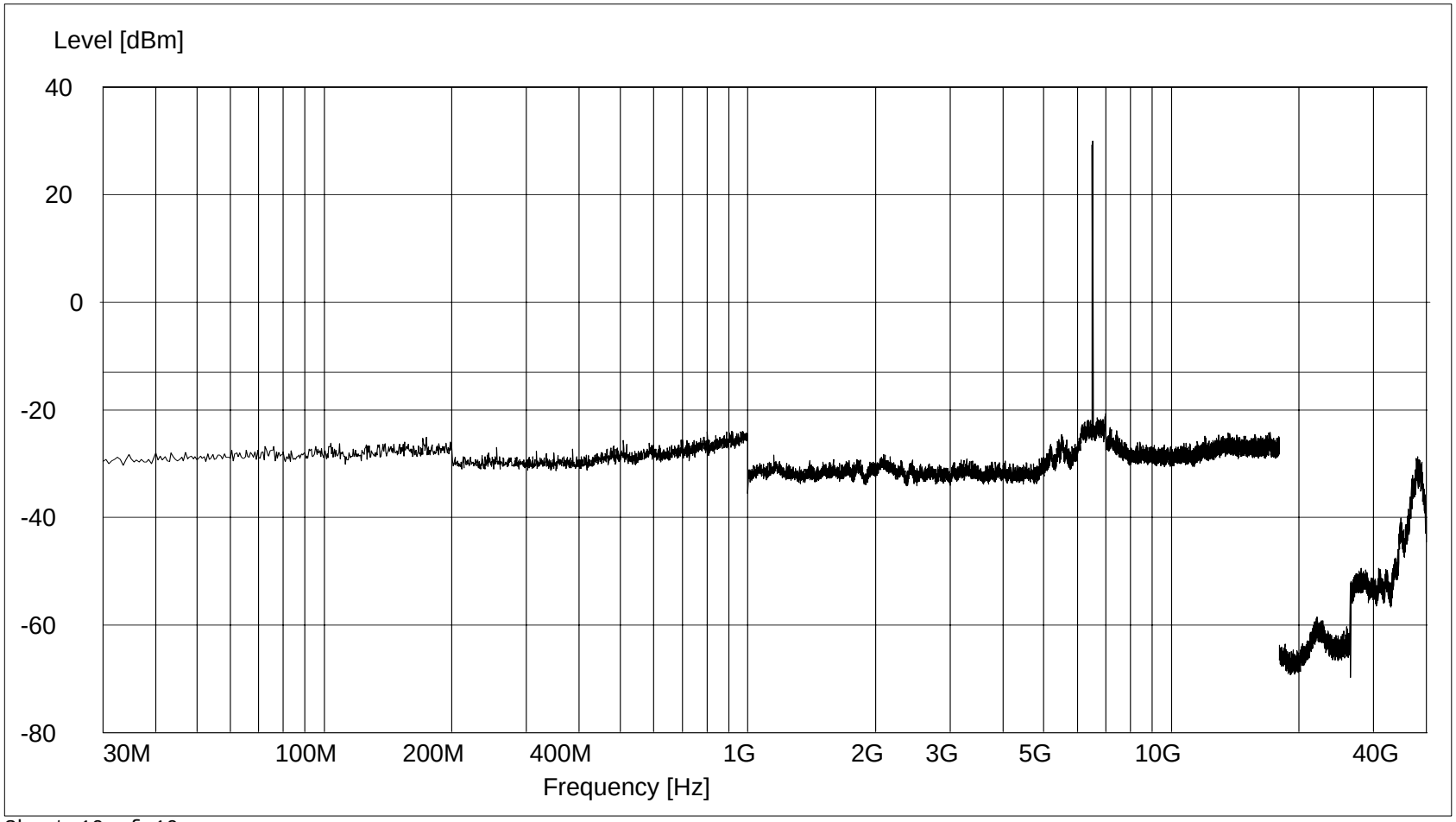
***Retlif Testing Laboratories, Job Number R-11489***

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

Customer: Nucomm, Inc.
Test Sample: 2 GHz / 7 GHz Digital/Analog ENG/OB Van Transmitter
Part Number: 2/7NCVT2-L5E1.5-326-A2C2K
FCC ID Number: I4U27VT2-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: 7 GHz Directional / 25 MHz Channel
Test Engineer / Date: D. Lerner / October 6, 2006
Notes: Fundamental frequency exempt from -13 dBm

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