

Technical Information

APPLICANT	MANUFACTURER
Name: <u>Flair Agency</u>	Name: <u>Electronic Display Applications, Inc.</u>
Address: <u>2900 E. Broadway, Suite 128</u>	Address: <u>324 South 2nd Street Pike, Unit 2</u>
City, State, Zip: <u>Tuscon, AZ 85716</u>	City, State, Zip: <u>Southampton, PA 18966</u>

TEST SPECIFICATION: FCC Rules and Regulations Part 90

TEST SAMPLE DESCRIPTION

BRANDNAME(s): Next Link

MODEL(s): SL-1550-T90

FCC ID: WPSSL-1550-T90

TYPE: Audio / Video Transmitter

POWER REQUIREMENTS: 10 to 40 VDC, Derived from 120 VAC, 60 Hz Adaptor

FREQUENCY OF OPERATION: 2450 to 2483.5 MHz

APPLICABLE RULE SECTION: Part 90

TESTS PERFORMED

- 2.1046 RF Power Output
- 2.1049 Occupied Bandwidth
- 2.1051 Spurious Emissions at Antenna Terminals
- 2.1053 Field Strength of Spurious Radiation
- 2.1055 Frequency Stability

TEST RESULTS

2.1046 RF Power Output

The RF Power Output of the EUT was measured with the transmitter adjusted for maximum power output. The highest observed power output was measured to be 28.72 dBm (744 mw). The measured power output is in compliance with the requirements specified in section 90.205(o) of the FCC Rules.

2.1049 Occupied Bandwidth

The Occupied Bandwidth of the transmitter was measured and found to be 16 MHz. Utilizing this Bandwidth, the transmitter complied with the requirements for Emissions Mask B contained in section 90.210(b) and the Bandwidth Limitations of section 90.209(b)(5).

2.1050 Spurious Emissions at Antenna Terminals

The Spurious Emissions present at the antenna terminals were measured over the frequency range of 30 MHz to 25 GHz (ten times the operating frequency) in accordance with section 2.1057. Spurious emissions were attenuated at least $43 + 10 \log P$ (Watts) from the carrier as required by sections 90.209 and 90.210.

2.1053 Field Strength of Spurious Radiation

The Field Strength of Spurious Radiation was measured over the frequency range of 30 MHz to 25 GHz. All spurious emissions complied with the requirements of sections 90.209 and 90.210. In addition, spurious digital emissions in the frequency range of 30 to 1000 MHz were found to be in compliance with the requirements for a Class B Digital Device as contained in section 15.109(a).

2.1054 Frequency Stability

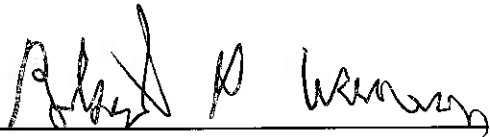
The frequency stability of the transmitter was measured over temperature extremes of -30° to $+50^{\circ}$ C and with both AC and DC input voltages varied from 85 to 115%. The EUT carrier frequency was found to remain within the $\pm 0.05\%$ tolerance as specified in section 90.213(a).

GENERAL NOTES

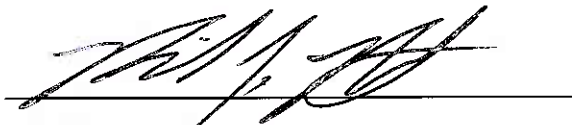
1. The AC input was varied from 85% to 115% of the rated input. Field strength measurements were taken with the AC input adjusted to produce maximum emissions.
2. All user accessible controls were adjusted to produce maximum emissions.
3. The device was tested with the following external accessories:
Video Camera providing audio and video input to EUT.
4. The unit operates at the following frequencies: 2456 to 2476 MHz in 1 MHz increments
The unit was tested at the following frequencies: 2456, 2466 and 2476 MHz
5. The frequency range was scanned from 30 MHz to 25 GHz. All emissions not reported were more than 20 dB below the specified limit.

Certification and Signatures

We certify that this report is a true representation of the results obtained from the tests of the equipment stated. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.



Robert P. Warren
EMC Test Engineer
NARTE Certified Technician EMC-000498-NT



Richard J. Reitz
Corporate Laboratory Manager
NARTE Certified Engineer ATL-0036-E

Non-Warranty Provision

The testing services have been performed, findings obtained and reports prepared in accordance with generally accepted laboratory principles and practices. This warranty is in lieu of all others, either expressed or implied.

Non-Endorsement

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement or certification of the product or material tested. This test report must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

Equipment List

Paragraph 2.1046, RF Power Output

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
713	EMI Test Receiver	Rohde & Schwarz	20 Hz - 26.5 GHz	ESIB26	8/23/2008	8/23/2009
8100	20 DB Atten. (50 ohm)	Narda	10 kHz-11 GHz	768-20	6/5/2008	6/5/2009

Paragraph 2.1049, Occupied Bandwidth

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
713	EMI Test Receiver	Rohde & Schwarz	20 Hz - 26.5 GHz	ESIB26	8/23/2008	8/23/2009
8100	20 DB Atten. (50 ohm)	Narda	10 kHz-11 GHz	768-20	6/5/2008	6/5/2009

Paragraph 2.1051, Spurious Emissions at Antenna Terminals

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
713	EMI Test Receiver	Rohde & Schwarz	20 Hz - 26.5 GHz	ESIB26	8/23/2008	8/23/2009
8100	20 DB Atten. (50 ohm)	Narda	10 kHz-11 GHz	768-20	6/5/2008	6/5/2009

Paragraph 2.1053, Field Strength of Spurious Radiation

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
713	EMI Test Receiver	Rohde & Schwarz	20 Hz - 26.5 GHz	ESIB26	8/23/2008	8/23/2009
8017	Double Ridge Guide	EMCO	1 - 18 GHz	3115	8/6/2007	10/6/2008
8018	Double Ridge Guide	EMCO	1 - 18 GHz	3115	6/4/2008	6/4/2009
8060A	Cable	Retlif	10 kHz - 18 GHz	25' Type N	8/14/2008	8/14/2009
8061A	Cable	Retlif	10 kHz - 18 GHz	25' Type N	7/31/2007	7/31/2008
8317	Preamplifier	Agilent	1-26.5 GHz, 30 dB	8449B	4/6/2007	4/6/2009

Paragraph 2.1055, Frequency Stability - Voltage Variation

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
676	Frequency Counter	Hewlett Packard	10 Hz - 18 GHz	5342A	5/9/2007	5/9/2008
8327	Digital Multimeter	Fluke	N/A	111	8/2/2007	8/2/2008
8359	10.0 dB Attenuator	Narda	DC - 11 GHz, 20 W	768-10	8/15/2007	8/15/2008
8379	DC Power Supply	Lambda	0-120 vdc, 1.2A	LP-534-FM	11/13/2007	11/13/2008

Paragraph 2.1055, Frequency Stability - Temperature Variation

EN	Type	Manufacturer	Description	Model No.	Cal Date	Due Date
676	Frequency Counter	Hewlett Packard	10 Hz - 18 GHz	5342A	5/9/2007	5/9/2008
8359	10.0 dB Attenuator	Narda	DC - 11 GHz, 20 W	768-10	8/15/2007	8/15/2008

FCC Part 90, Section 2.1046
RF Power Output
Test Data

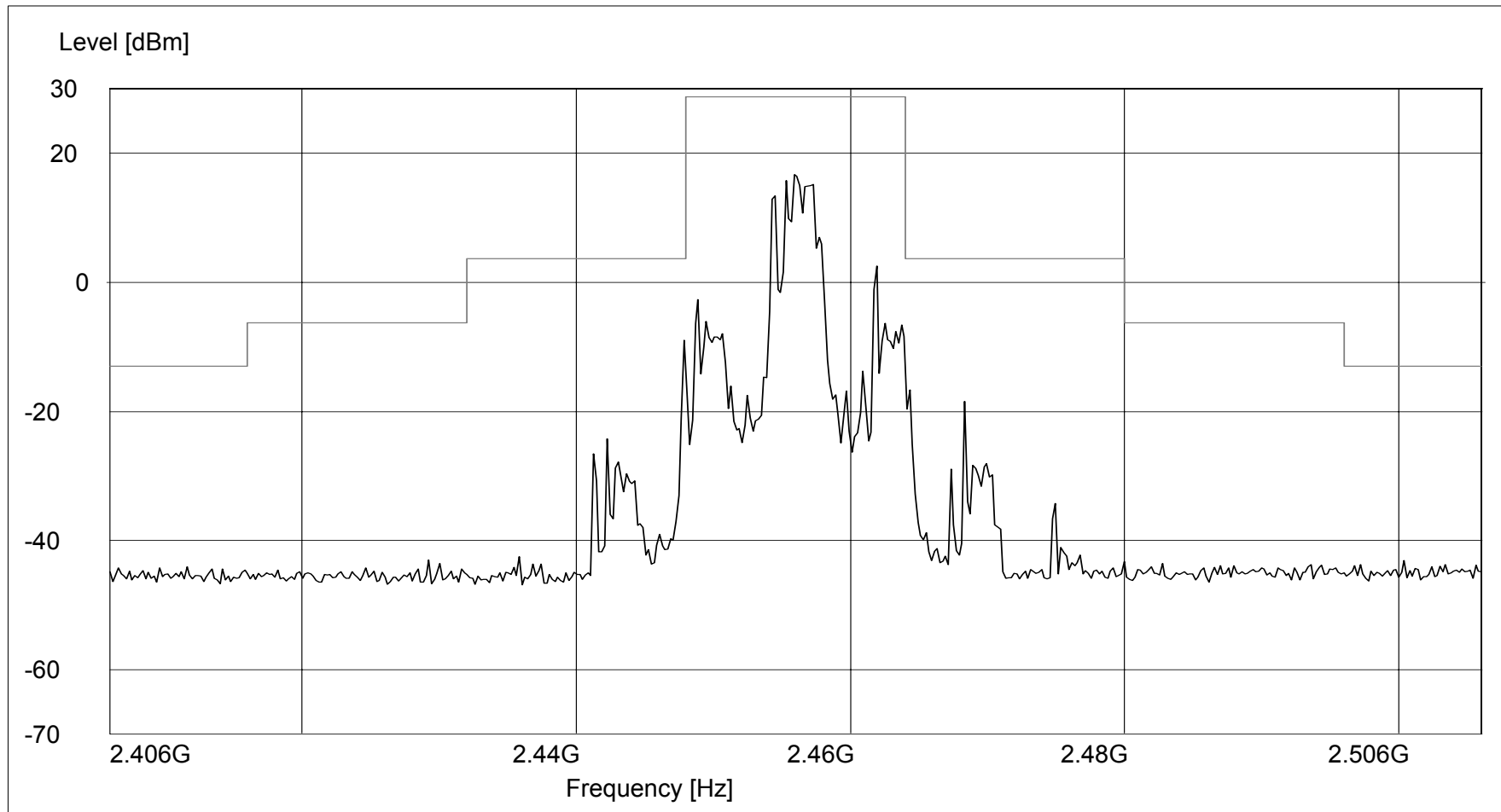
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FCC Part 90, Section 2.1049
Occupied Bandwidth
Test Data

Retlif Testing Laboratories R-1176P

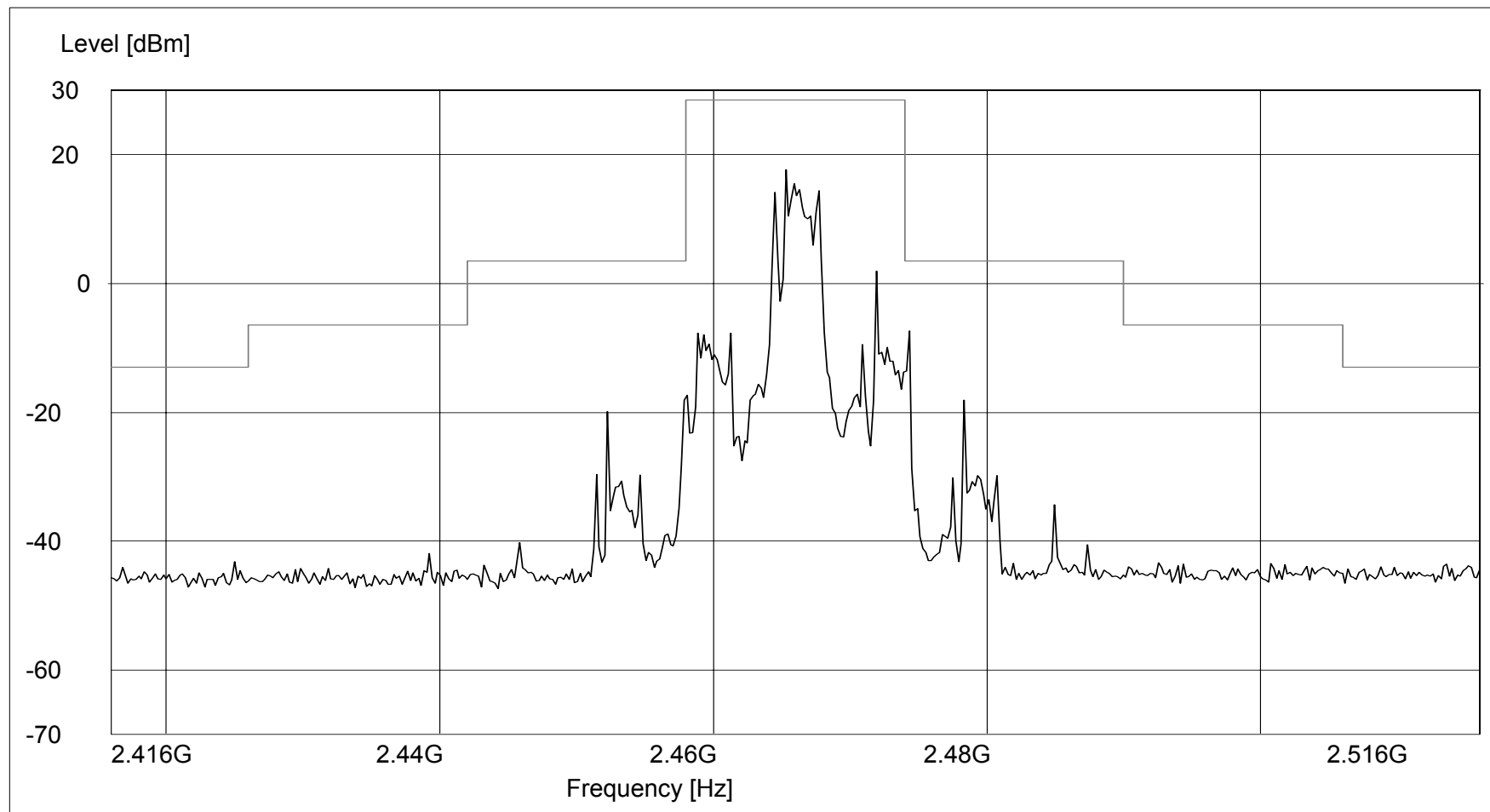
Occupied Bandwidth

Customer: Electronic Display Applications, Inc.
Test Sample: 2.4GHz Transmitter
Model/Serial Number: SL-1550-P74/P90 S/N: 001
Test Specification: FCC Part 90, Section 90.209/90.210
Mode Of Operation: Transmitting a FM signal on channel 1 at Max Power Output
Technician/Date: RW/9-11-08



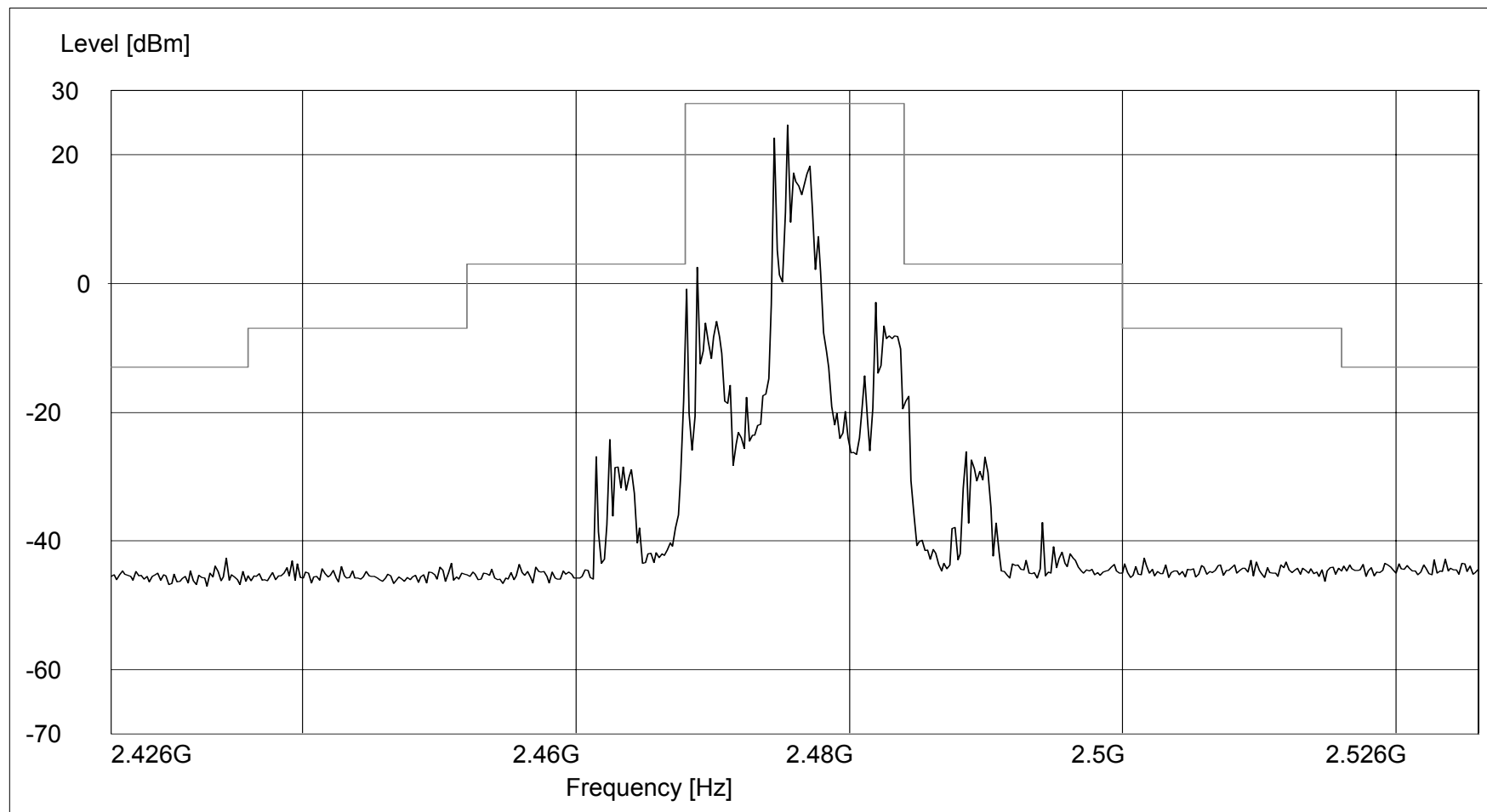
Occupied Bandwidth

Customer: Electronic Display Applications, Inc.
Test Sample: 2.4GHz Transmitter
Model/Serial Number: SL-1550-P74/P90 S/N: 001
Test Specification: FCC Part 90, Section 90.209/90.210
Mode Of Operation: Transmitting a FM signal on channel 2 at Max Power Output
Technician/Date: RW/9-11-08



Occupied Bandwidth

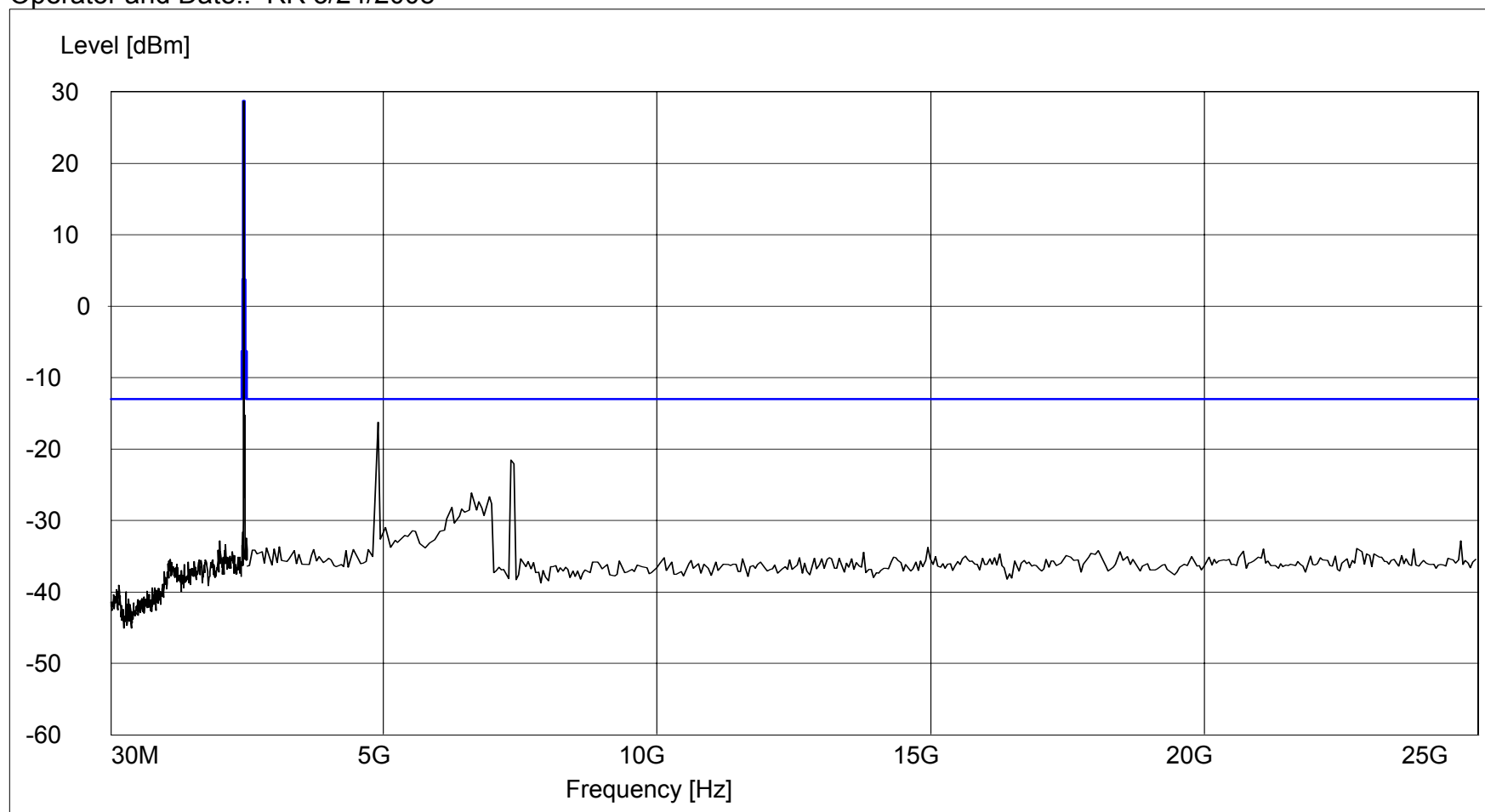
Customer: Electronic Display Applications, Inc.
Test Sample: 2.4GHz Transmitter
Model/Serial Number: SL-1550-P74/P90 S/N: 001
Test Specification: FCC Part 90, Section 90.209/90.210
Mode Of Operation: Transmitting a FM signal on channel 3 at Max Power Output
Technician/Date: RW/9-11-08



FCC Part 90, Section 2.1051
Spurious Emissions at Antenna Terminals
Test Data

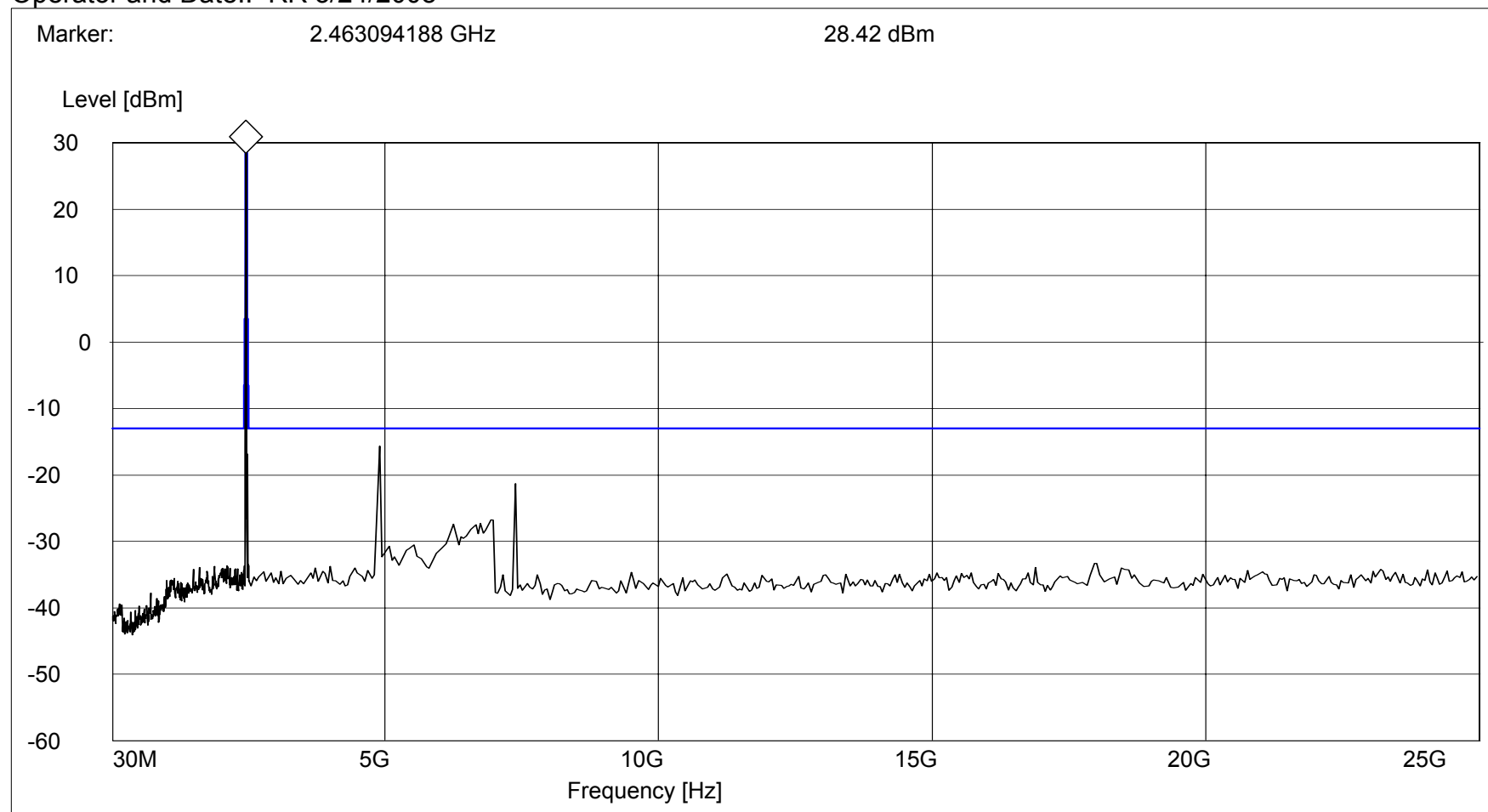
Antenna Conducted Emissions

Customer:: Electronic Display Applications
Test Sample:: 2.4 GHz Transmitter
Model:: SL-1550-P74/P90
Test Specification:: FCC Part 90, Section 90.209/90.210
Operating Mode:: Transmitting on Channel 1 at Max Power Output
Operator and Date:: RR 3/24/2008



Antenna Conducted Emissions

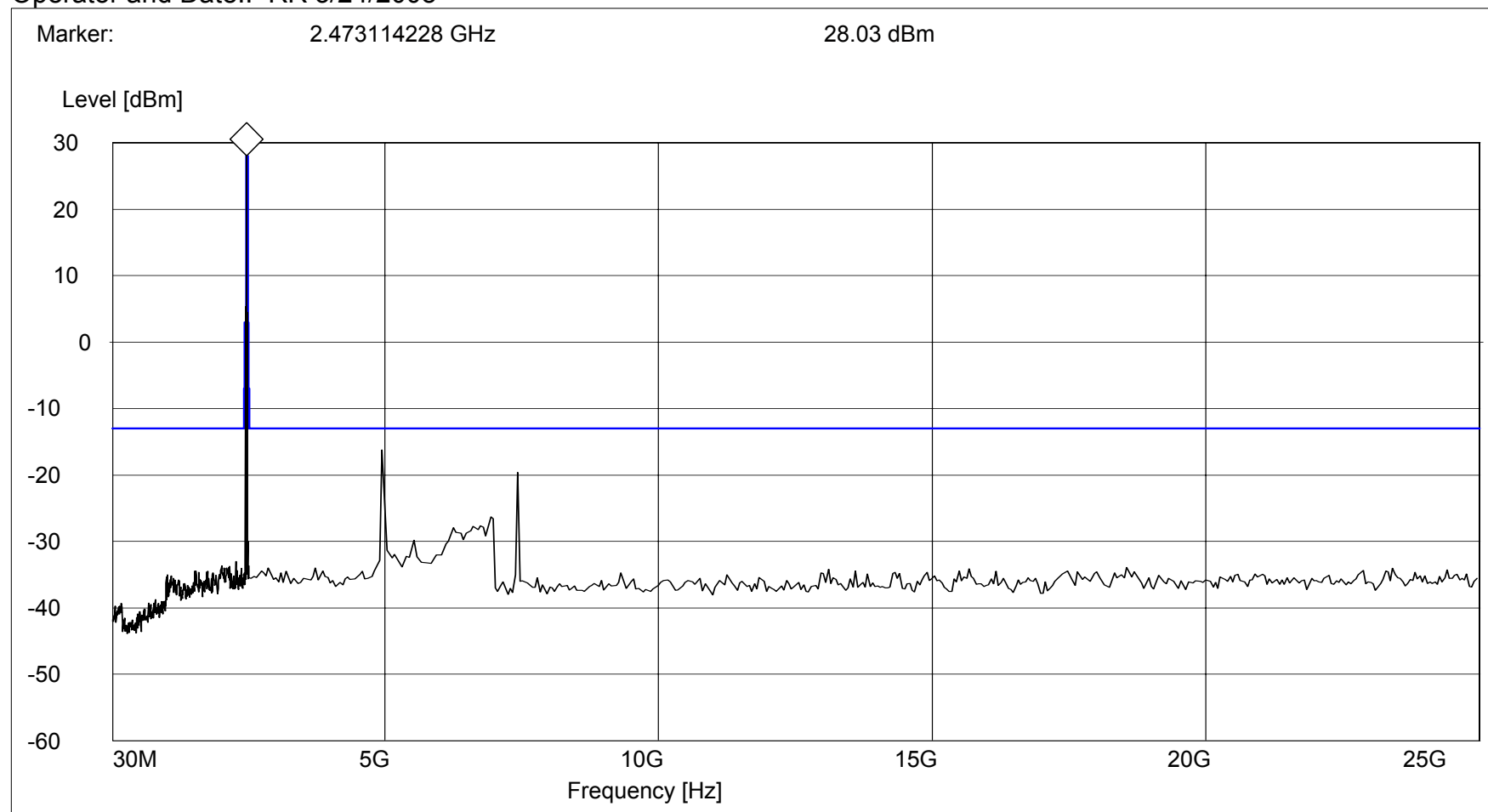
Customer:: Electronic Display Applications
Test Sample:: 2.4 GHz Transmitter
Model:: SL-1550-P74/P90
Test Specification:: FCC Part 90, Section 90.209/90.210
Operating Mode:: Transmitting on Channel 2 at Max Power Output
Operator and Date:: RR 3/24/2008



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Antenna Conducted Emissions

Customer:: Electronic Display Applications
Test Sample:: 2.4 GHz Transmitter
Model:: SL-1550-P74/P90
Test Specification:: FCC Part 90, Section 90.209/90.210
Operating Mode:: Transmitting on Channel 3 at Max Power Output
Operator and Date:: RR 3/24/2008



FCC Part 90, Section 2.1053
Field Strength of Spurious Radiation
Test Data

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FCC Part 90, Section 2.1055
Frequency Stability - Voltage Variation
Test Data

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FCC Part 90, Section 2.1055
Frequency Stability - Temperature Variation
Test Data

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