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FCC Part 15, Subpart C, Section 15.247
Industry Canada, RSS-247 and RSS-GEN

Test Report

On

DCX900 Video Gateway
FCC ID: ACQ-DCX900
IC: 109AS-DCX900

Customer Name:	Arris Group, Inc.
Customer P.O:	AR1094889
Date of Report Revision:	April 18, 2017
Test Report No:	R-2601P-2, Rev. A
Test Start Date:	January 25, 2017
Test Finish Date:	January 26, 2017
Test Technician:	M. Seamans
Report Revision Approved By:	T. Hannemann
Report Revision Prepared By:	J. Ramsey

Technical Information

Report Number:	R-2601P-2, Rev. A
Customer:	Arris Group, Inc.
Address:	101 Tournament Dr. Horsham, PA 19044
Manufacturer:	Arris Group, Inc.
Manufacturer Address:	101 Tournament Dr. Horsham, PA 19044
Test Sample:	DCX900 Video Gateway
Model Number:	DCX900
Serial Numbers:	XX00L9DB012318101628143415, XX00L9DB012318101628143409
FCC ID:	ACQ-DCX900
IC Number:	109AS-DCX900
Type:	Digital Transmission – Direct Sequence Spread Spectrum Transmitter
Power Requirements:	120 VAC, 60 Hz
Power Supply:	Liteon AC Adapter, Model: PB-1300-3AR3
Frequency of Operation:	2402.0 to 2480.0 MHz
Equipment Class:	DTS
Antenna Type:	PCB Trace Inverted “F” Antenna
Equipment Use:	Cable Television Set-top Box

Test Specification:
FCC Rules and Regulations, Telecommunications, Part 15 Radio Frequency Devices, Subpart C, Intentional Radiators

Radio Standards Specification, RSS-247, Issue 1 May 2015

Radio Standards Specification, RSS-GEN, Issue 4, November 2014

Test Procedure:
ANSI C63.10:2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

ANSI C63.4:2014, Methods of Measurement of Radio Noise Emissions from Low Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

558074 D01, FCC Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under 15.247, v03 r04, January 7, 2016

Test Facility:
Retlif Testing Laboratories
101 New Boston Road
Goffstown, NH 03045

FCC Registered Test Site Number: 90899
IC Registered Test Site Number: 2047C-1

Table 1 – Tests Performed

FCC Part 15, Subpart C	Industry Canada RSS-GEN	Industry Canada RSS-247	Test Method
15.207(a)	8.8	N/A	Conducted Emissions, Power Leads, 150 kHz to 30 MHz
15.247(b)(3)	N/A	5.4(4)	Power Output
15.247(a)(2)	N/A	5.2(1)	Occupied Bandwidth
15.247(d)	N/A	5.5	Antenna Terminal Out of Band/Band Edge Conducted Emissions (30 MHz – 25 GHz)
15.247(d)	N/A	5.5	Spurious Emissions, 30 MHz to 10 GHz
15.247(e)	N/A	5.2(2)	Power Density
15.209(a)	7.1	N/A	Receiver Spurious Emissions

EUT Description
The EUT is a UHD 4kp60 Cable Television Set-top box with an embedded multi-channel full-band capture QAM front-end receiver and video back-end processor supporting video presentation and transcoding as well as other embedded functions. It is capable of presenting encrypted SD and HD video content through HDMI™ 2.0 and Analog Composite (SD content only). Digital audio is presented though HDMI™ and Optical SPDIF, and analog audio is presented through baseband 3.5mm connector. It has a removable hard drive for DVR capability and dual USB3.0 ports for external peripherals. Wireless interfaces include Bluetooth 4.1+ HS-compliant 2.4 GHz transceiver with embedded antenna (NO 6LoWPAN functionality) and RF4CE with embedded antennas. It has front panel buttons and 38 kHz IR receiver for user interface. System memory consists of DDR4, eMMC and SPI Flash. The DCX900 is home networking capable through MoCA® and Gigabit Ethernet. This model has removable Cablecard for content security.

Table 2 – Support Equipment

Description	Manufacturer	Part Number	Model Number	Serial Number
Laptop PC	HP	FY706UC#ABA	EliteBook 6930p	2CE9395YL3
Display	Samsung	N/A	UN19F4000AF	Z6U03CLF504436B

EUT Operation:
During Occupied Bandwidth, Peak Power Output, Antenna Terminal Out of Band/Band Edge Conducted Emissions, Spurious Radiated and Power Spectral Density, the EUT was continuously transmitting a modulated signal.

During Conducted Emissions, the EUT was continuously transmitting a modulated signal and video playback.

During Receiver Spurious, the EUT was continuously in video playback, not transmitting.

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.

Scott Wentworth
Branch Manager
NVLAP Approved Signatory

Todd Hannemann
EMC Test Engineer
iNARTE Certified Technician ATL-0255-T

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.

Revision History

Revisions to this document are listed below; the latest revised document supersedes all previous issues of this document:

Revision	Date	Pages Affected
-	February 8, 2017	Original Release
A	April 18, 2017	Global Changes: • Document changed from R-2601P-2 to R-2601P-2, Rev. A 3: • Revised EUT Description per customer request

Requirements and Test Results

Requirement:

Bandwidth
For systems using digital modulation techniques operating in the 902-928 MHz, 2400-2483.5 MHz, and 5725 – 5850 MHz bands the minimum 6 dB bandwidth shall be at least 500 kHz.

- **Results**: The minimum 6dB bandwidth measured while transmitting a Bluetooth (Low Energy) signal was 519.3 kHz. The device was found to meet the requirement of 15.247 (a)(2).

Requirement:

Power Output
For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g.: alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

- **Results**: The maximum measured peak conducted output power when transmitting a Bluetooth (Low Energy) signal was 3.105 mW. The maximum antenna gain of the antenna is 2.0 dB. The device was found to meet the power output requirements of 15.247 (b)(3) including de facto EIRP.

Requirements and Test Results (con't)

Requirement:

Antenna Terminal Out of Band/Band Edge Conducted Emissions
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under Paragraph (b)(3) of Section 15.247, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

- **Results**: All measured out of band/band edge conducted emissions were below the specified limits and the device was found to meet the requirements of 15.247 (d).

Requirement:

Radiated Spurious Emissions/Restricted Bands/Band Edge
Emissions which fall into restricted bands, as defined in 15.205(a) must comply with the radiated emissions limits specified in 15.209(a) and shown below in Table 1. Emissions emanating from the EUT cabinet and cables must also comply with the radiated emissions limits. Radiated emissions measurements were also performed at the band edges to ensure band edge compliance.

Table 3 - Radiated Emission Limits

Frequency of Emission (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 to 88	100	3
88 to 216	150	3
216 to 960	200	3
Above 960	500	3

- **Results**:
  All spurious emissions were measured and found to be in compliance with the limits specified in 15.209(a). Band edge emissions were also found to be in compliance with the limits specified in 15.209(a).

Requirements and Test Results (con't)

Requirement:

Receiver Radiated Spurious Emissions
Spurious emissions from receivers must comply with the radiated emissions limits specified in RSS-Gen, Para. 7.1 and as shown above in Table 3.

- **Results:** No EUT receiver spurious emissions were observed within 10dB of the specified limit.

Requirement:

Power Spectral Density
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

- **Results**: The measured power spectral density complied with the power spectral density limit. The device was found to meet the requirements of 15.247 (e).

Requirement:

Conducted Limits
For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits shown in Table 4, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of the paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Requirements and Test Results (con't)

Table 4 - Conducted Emission Limits

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-Peak	Average
0.15 to 0.5	66 to 56*	56 to 46*
0.5 to 5	56	46
5 to 30	60	50
*Decreases due to logarithm of the frequency		

- **Results:**
  The conducted emissions observed did not exceed the limits specified in Table 4.

Field Strength Calculation/Conversion:

The maximized field strength of the emission was obtained as follows:

$C_R = M_R + C_F$

Where:
C_R = Corrected Reading in dBµV/m
M_R = Uncorrected Meter Reading in dBµV
C_F = Correction Factor in dB (Antenna Factor, Pre-amp + Cable Loss)

Example:

M_R = 15.35 dBµV
C_F = 16.85 dB
C_R = 15.35 dBuV + 16.85 = 32.2 dBµV/m

dBµV/M is converted to uV/M for comparison to the specified limit using the formula:

invLog dBµV/M/20

32.2 dBuV/m = 40.74 uV/m

RF Power Conversion:

Power readings in dBm may be converted to mW using the formula:

InvLog dBm/10

Example: 20dBm = 100mW

Requirements and Test Results (con't)

RF Exposure Limits

Spread Spectrum Transmitters operating under 15.247 must be operated in a manner that ensures the public is not exposed to RF energy levels in access of the commission's guidelines. Based on the transmitter power and maximum antenna gain (see calculation below) the minimum separation distance was calculated to determine the distance for acceptable MPE power density levels to meet both the Occupational/Controlled Exposure and the General Population/Uncontrolled Exposure requirements of FCC Part 1.1310. The calculation below uses the more stringent General Population MPE Limits.

$$S = \frac{PG}{4 \prod Dsq}$$

D = Minimum Separation Distance in cm

S = Max allowed Power Density in mW/cmsq

Per 1.1310 For the Frequency of 2400 MHz S = 1 mW/cmsq

Power = Max Power Input to Antenna = 3.105 mW

Gain = Max Power Gain of Antenna = 2.0 dBi = 1.6 numeric

$$1.0 \text{ mW/cmsq} = \frac{3.105 x 1.6}{4x(3.14)xD\text{^}2} = \frac{4.705}{12.56xD\text{^}2}$$

$$D\text{^}2 = \frac{4.705}{12.56x1.0}$$

$$D = \sqrt{0.3746} = 0.612 \text{ cm}$$

The calculation above uses the highest power level for the device in this band.

Equipment List

Occupied Bandwidth

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz	757C-10	11/23/2016	11/30/2017
R474	AGILENT / HP	ANALYZER, SIGNAL	10 Hz - 26 GHz	N9020B	10/10/2016	10/10/2017

Band Edge Conducted Emissions, 30 MHz to 25 GHz

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz	757C-10	11/23/2016	11/30/2017
R469	AGILENT / HP	ANALYZER, SPECTRUM	100 Hz - 26.5 GHz	E7405A;A	12/1/2016	12/31/2017

Power Output

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz	757C-10	11/23/2016	11/30/2017
R474	AGILENT / HP	ANALYZER, SIGNAL	10 Hz - 26 GHz	N9020B	10/10/2016	10/10/2017

Spurious Radiated Emissions, 30 MHz to 25 GHz

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
1232	AGILENT / HP	PRE-AMPLIFIER	1 - 26.5 GHz	8449B	6/16/2016	6/30/2017
3258	ETS / EMCO	ANTENNA, DOUBLE RIDGED GUIDE	1 - 18 GHz	3115	10/13/2016	4/30/2018
3427B	ETS / EMCO	ANTENNA, BICONICAL	20 - 200 MHz	3104	2/5/2016	8/31/2017
3430	MCS	ANTENNA, HORN	18 - 26.5 GHz	K-5039	No Calibration Required	
4029B	RETLIF	OPEN AREA TEST SITE, ATTENUATION	3 / 10 Meters	RNH	4/13/2016	4/30/2018
443	ELECTRO-METRICS	ANTENNA, LOG PERIODIC	200 MHz - 1000 MHz	LPA-25	10/6/2016	4/30/2018
4984G	MICROLAB / FXR	ANTENNA, HIGH GAIN HORN	12.4 - 18 GHz	Y638A	No Calibration Required	
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	10/21/2016	10/31/2017
5188	Cybertron	COMPUTER, CONTROL	N/A	TSVQJA2221	No Calibration Required	
R469	AGILENT / HP	ANALYZER, SPECTRUM	100 Hz - 26.5 GHz	E7405A;A	12/1/2016	12/31/2017

Power Density

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5135	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz	757C-10	11/23/2016	11/30/2017
R474	AGILENT / HP	ANALYZER, SIGNAL	10 Hz - 26 GHz	N9020B	10/10/2016	10/10/2017

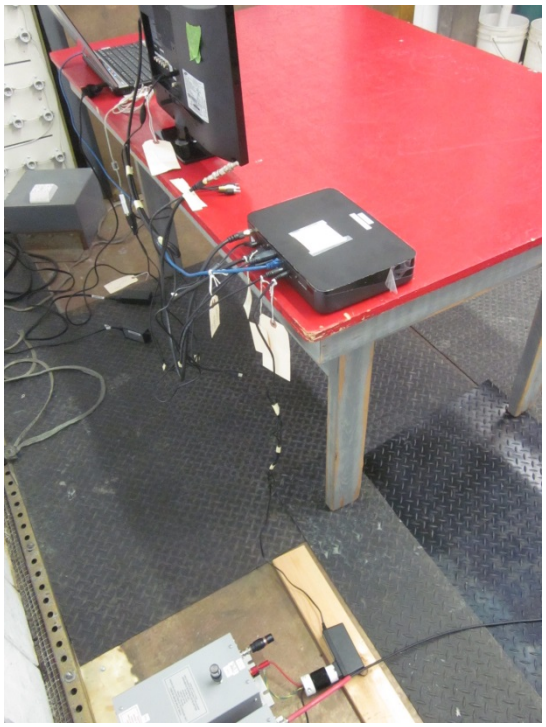
AC Line Conducted Emissions, 150 kHz to 30 MHz

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
5030B	NARDA MICROWAVE	ATTENUATOR, COAXIAL	10 dB, DC - 12.4 GHz	757C-10	3/16/2016	3/31/2017
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	10/21/2016	10/31/2017
5188	Cybertron	COMPUTER, CONTROL	N/A	TSVQJA2221	No Calibration Required	
5209	SOLAR ELECTRONICS	LISN	50 uH, 150 kHz - 30 MHz	21106-50-BP-25-BNC	3/23/2016	3/31/2017
5210	SOLAR ELECTRONICS	LISN	50 uH, 150 kHz - 30 MHz	21106-50-BP-25-BNC	3/23/2016	3/31/2017

Receiver Spurious

EN	Manufacturer	Description	Range	Model No.	Cal Date	Due Date
1232	AGILENT / HP	PRE-AMPLIFIER	1 - 26.5 GHz	8449B	6/16/2016	6/30/2017
3258	ETS / EMCO	ANTENNA, DOUBLE RIDGED GUIDE	1 - 18 GHz	3115	10/13/2016	4/30/2018
3427B	ETS / EMCO	ANTENNA, BICONICAL	20 - 200 MHz	3104	2/5/2016	8/31/2017
3430	MCS	ANTENNA, HORN	18 - 26.5 GHz	K-5039	No Calibration Required	
4029B	RETLIF	OPEN AREA TEST SITE, ATTENUATION	3 / 10 Meters	RNH	4/13/2016	4/30/2018
443	ELECTRO-METRICS	ANTENNA, LOG PERIODIC	200 MHz - 1000 MHz	LPA-25	10/6/2016	4/30/2018
4984G	MICROLAB / FXR	ANTENNA, HIGH GAIN HORN	12.4 - 18 GHz	Y638A	No Calibration Required	
5070	ROHDE & SCHWARZ	RECEIVER, EMI	20 Hz - 40 GHz	ESIB40	10/21/2016	10/31/2017
5188	Cybertron	COMPUTER, CONTROL	N/A	TSVQJA2221	No Calibration Required	
R469	AGILENT / HP	ANALYZER, SPECTRUM	100 Hz - 26.5 GHz	E7405A;A	12/1/2016	12/31/2017

Test Photographs
AC Line Conducted Emissions



EUT Configuration

Test Setup

Conducted Emissions, Class B, 150 kHz to 30 MHz

FCC Part 15 Subpart B Class B, Paragraph: 15.207 (a)
RSS GEN, Paragraph: 8.8
Test Data

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET		
Test Method	**Conducted Emissions, Class B 150 kHz to 30 MHz**	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318143415	
Test Specification	FCC Part 15 Subpart B Class B	Paragraph: 15.207 (a)
Operating Mode	Transmitting modulated signal(Classic Bluetooth), video playback	
Technician	M. Seamans	
Date	January 26th, 2017	
Port Tested	120 VAC 60 Hz	

Notes: Lead Tested: 120 VAC 60 Hz Hot Detector: Quasi-Peak and Average

TEST PARAMETERS

Test Frequency	Lead Tested	Quasi-Peak Reading	Quasi-Peak Limit	Quasi-Peak Margin		Average Reading	Average Limit	Average Margin
MHz		dBuV	dBuV	dB		dBuV	dBuV	dB
0.150	-	-	66.0	-		-	56.0	-
|	-	-	|	-		-	|	-
0.155	Hot	58.50	65.7	7.23		49.5	55.7	6.2
0.184	Hot	52.80	64.3	11.50		46.0	54.3	8.3
0.419	Hot	42.50	57.5	14.97		36.5	47.5	11.0
0.464	Hot	44.70	56.6	11.92		41.6	46.6	5.0
0.495	Hot	46.40	56.1	9.68		39.3	46.1	6.8
|	-	-	|	-		-	|	-
0.500	-	-	56.0	-		-	46.0	-
|	-	-	|	-		-	|	-
3.565	Hot	40.80	56.0	15.20		32.2	46.0	13.8
|	-	-	|	-		-	|	-
5.000	-	-	56.0	-		-	46.0	-
5.000	-	-	60.0	-		-	50.0	-
|	-	-	|	-		-	|	-
17.537	Hot	40.00	60.0	20.00		33.5	50.0	16.5
|	-	-	|	-		-	|	-
30.000	-	-	60.0	-		-	50.0	-

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet.

Data Sheet 1 of 2

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET		
Test Method	**Conducted Emissions, Class B 150 kHz to 30 MHz**	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318143415	
Test Specification	FCC Part 15 Subpart B Class B	Paragraph: 15.207 (a)
Operating Mode	Transmitting modulated signal(Classic Bluetooth), video playback	
Technician	M. Seamans	
Date	January 26th, 2017	
Port Tested	120 VAC 60 Hz	

Notes: Lead Tested: 120 VAC 60 Hz Neutral Detector: Quasi-Peak and Average

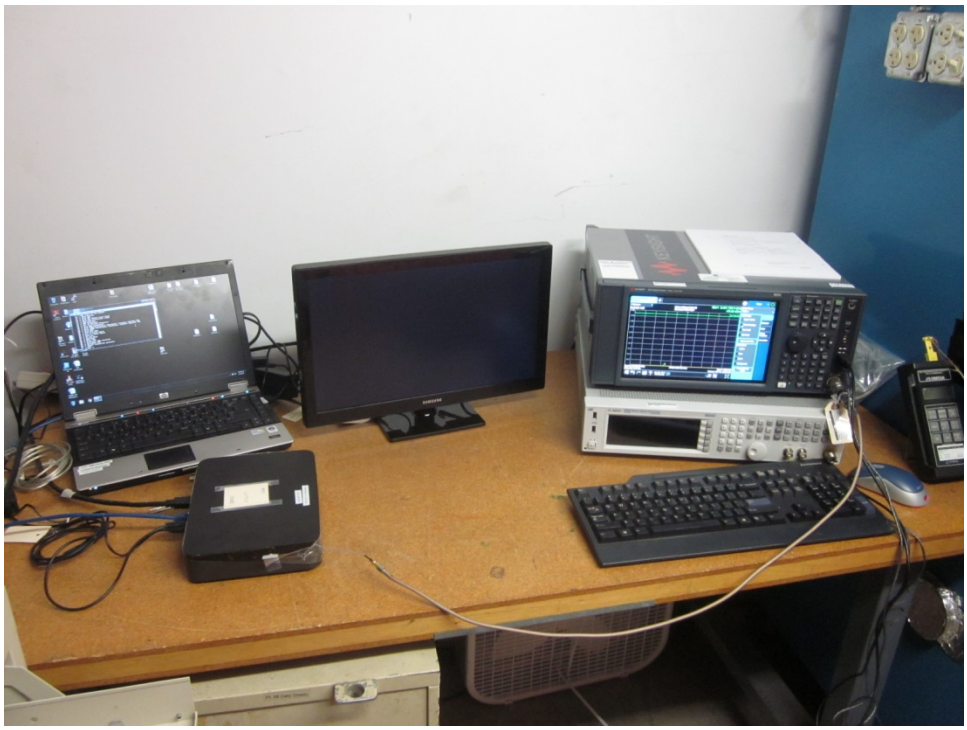
TEST PARAMETERS

Test Frequency	Lead Tested	Quasi-Peak Reading	Quasi-Peak Limit	Quasi-Peak Margin		Average Reading	Average Limit	Average Margin
MHz		dBuV	dBuV	dB		dBuV	dBuV	dB
0.150	-	-	66.0	-		-	56.0	-
|	-	-	|	-		-	|	-
0.166	Neutral	57.80	65.2	7.36		50.6	55.2	4.6
0.256	Neutral	45.30	61.6	16.26		35.2	51.6	16.4
0.493	Neutral	42.20	56.1	13.92		34.7	46.1	11.4
|	-	-	|	-		-	|	-
0.500	-	-	56.0	-		-	46.0	-
|	-	-	|	-		-	|	-
3.583	Neutral	38.80	56.0	17.20		30.1	46.0	15.9
|	-	-	|	-		-	|	-
5.000	-	-	56.0	-		-	46.0	-
5.000	-	-	60.0	-		-	50.0	-
|	-	-	|	-		-	|	-
17.569	Neutral	37.30	60.0	22.70		30.9	50.0	19.1
28.171	Neutral	16.90	60.0	43.10		11.4	50.0	38.6
|	-	-	|	-		-	|	-
30.000	-	-	60.0	-		-	50.0	-

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet.

Data Sheet 2 of 2

Test Photographs
Occupied Bandwidth



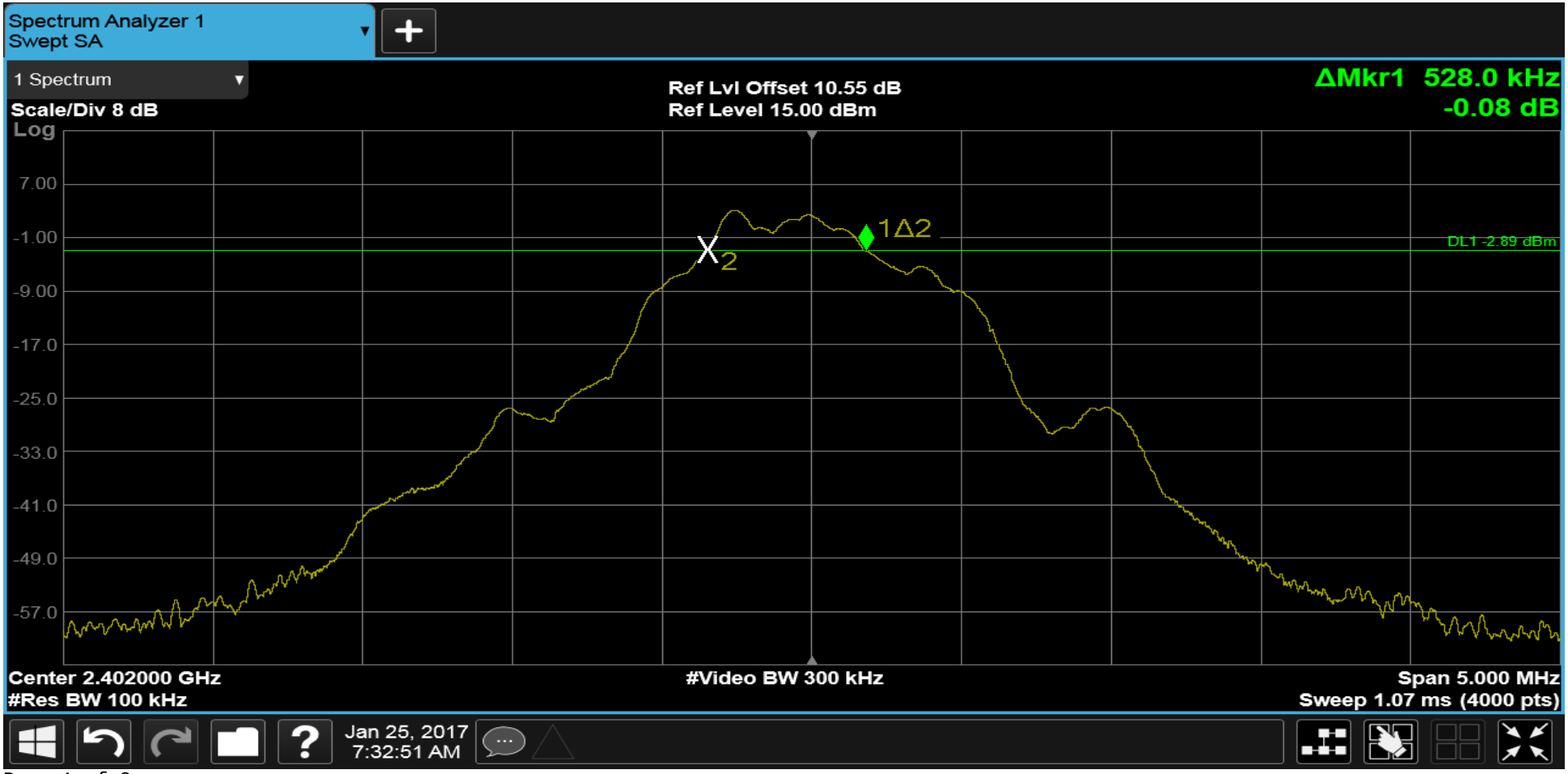
Test Setup

6dB Channel Bandwidth

FCC Part 15, Subpart C, Paragraph: 15.247 (a)(2)
RSS-247, Paragraph: 5.2(1)
Test Data

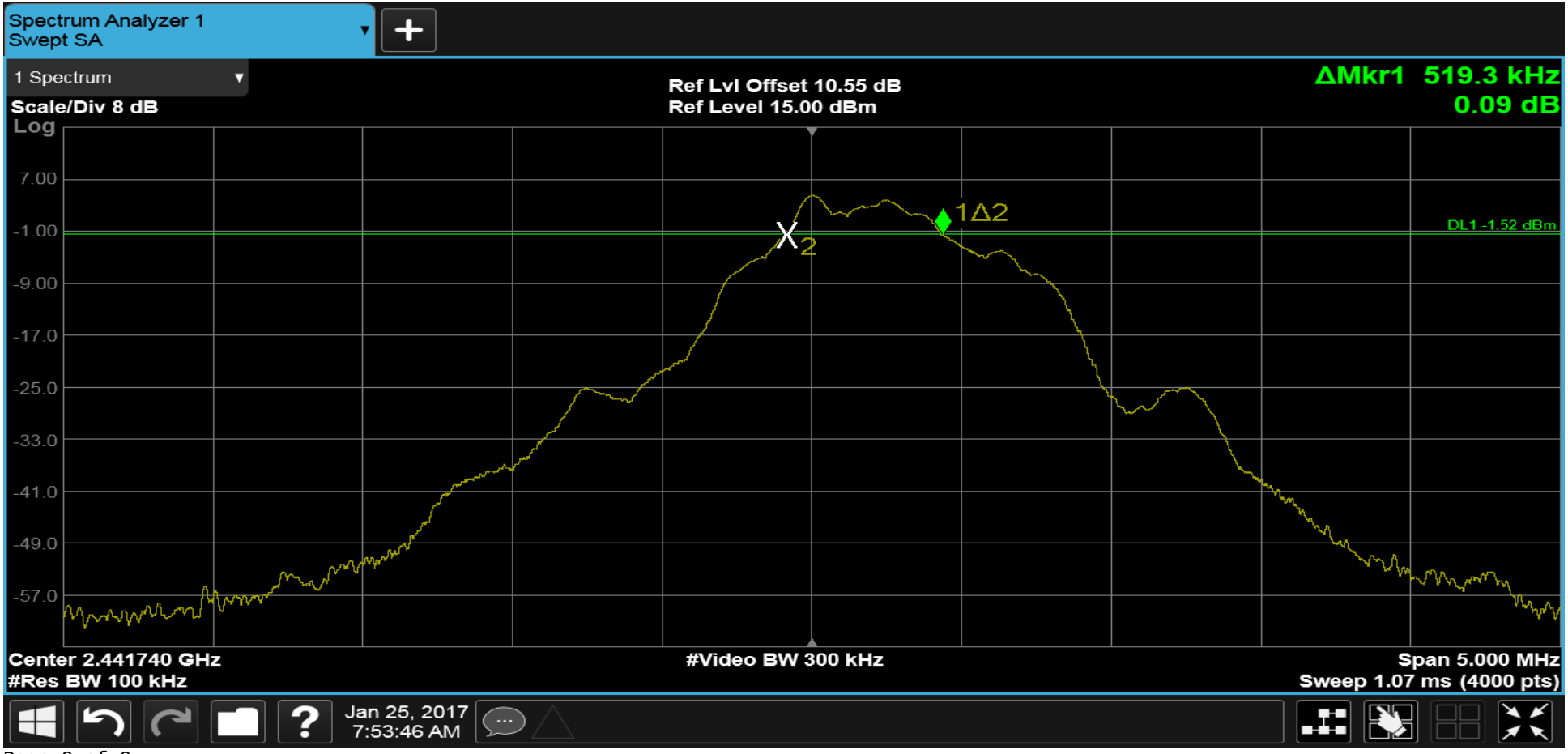
RETLIF TESTING LABORATORIES

Test Method	6dB Channel Bandwidth		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.9 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2402 MHz 6dB Bandwidth: 528 kHz		



RETLIF TESTING LABORATORIES

Test Method	6dB Channel Bandwidth		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.9 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2441 MHz 6dB Bandwidth: 519.3 kHz		



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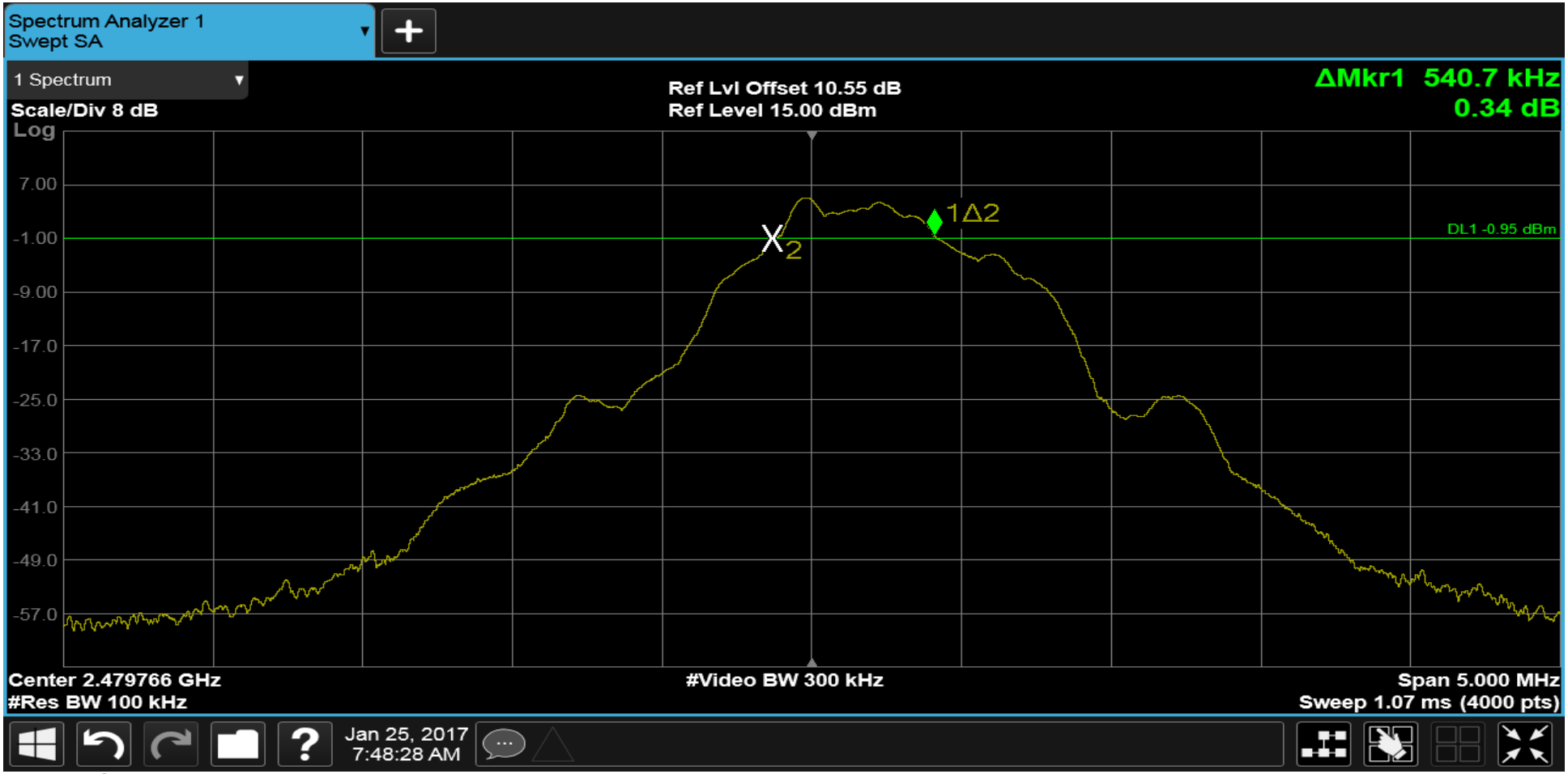
RETLIF TESTING LABORATORIES

Test Method	6dB Channel Bandwidth		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (a)(2)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.9 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2480 MHz 6dB Bandwidth: 540.7 kHz		



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Test Photographs
Power Output

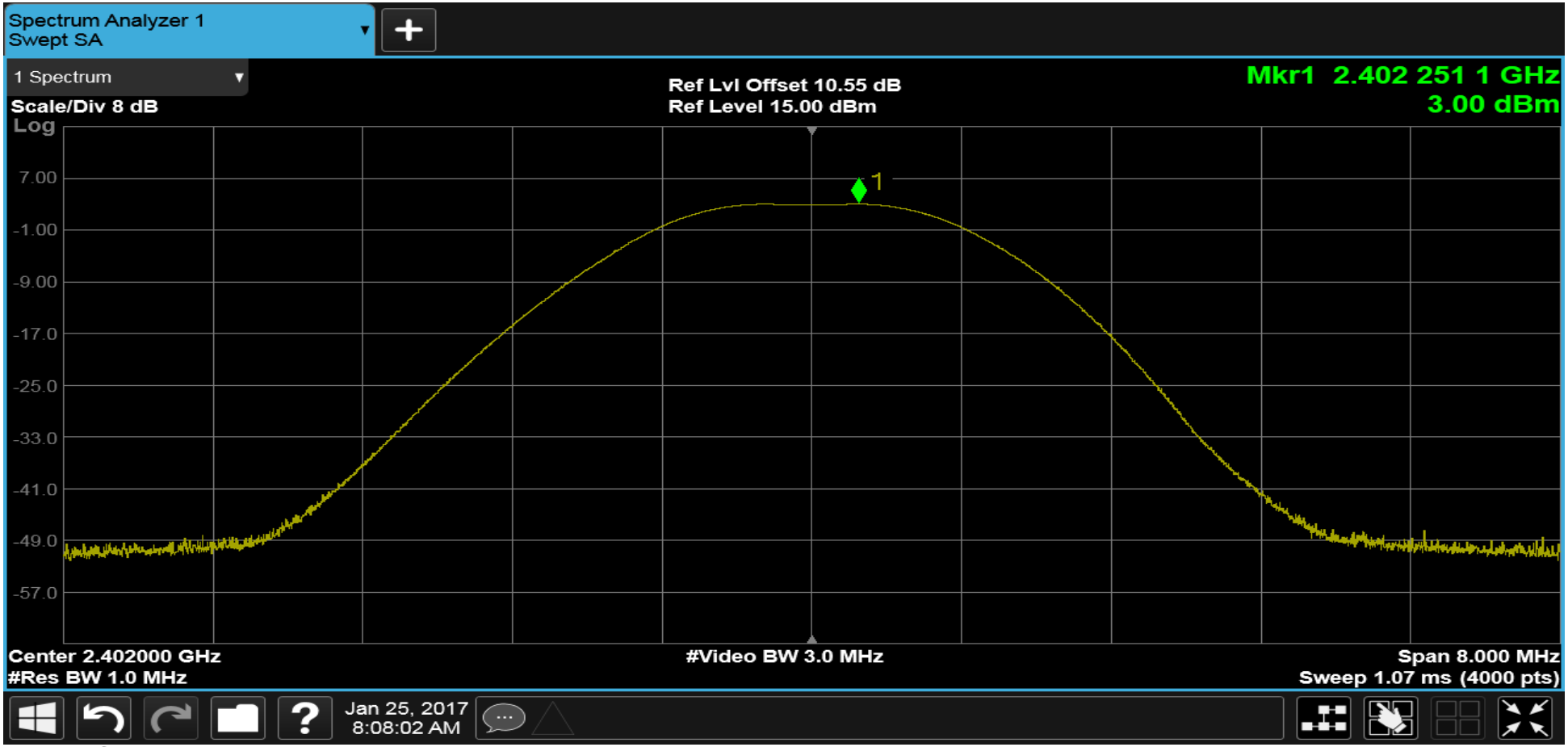
Test Setup

Peak Power Output

FCC Part 15, Subpart C, Paragraph: 15.247 (b)(3)
RSS-247, Paragraph: 5.4(4)
Test Data

RETLIF TESTING LABORATORIES

Test Method	Peak Power Output		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (b)(3)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.9 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2402 MHz Peak Power Output: 3dBm (1.995mW)		



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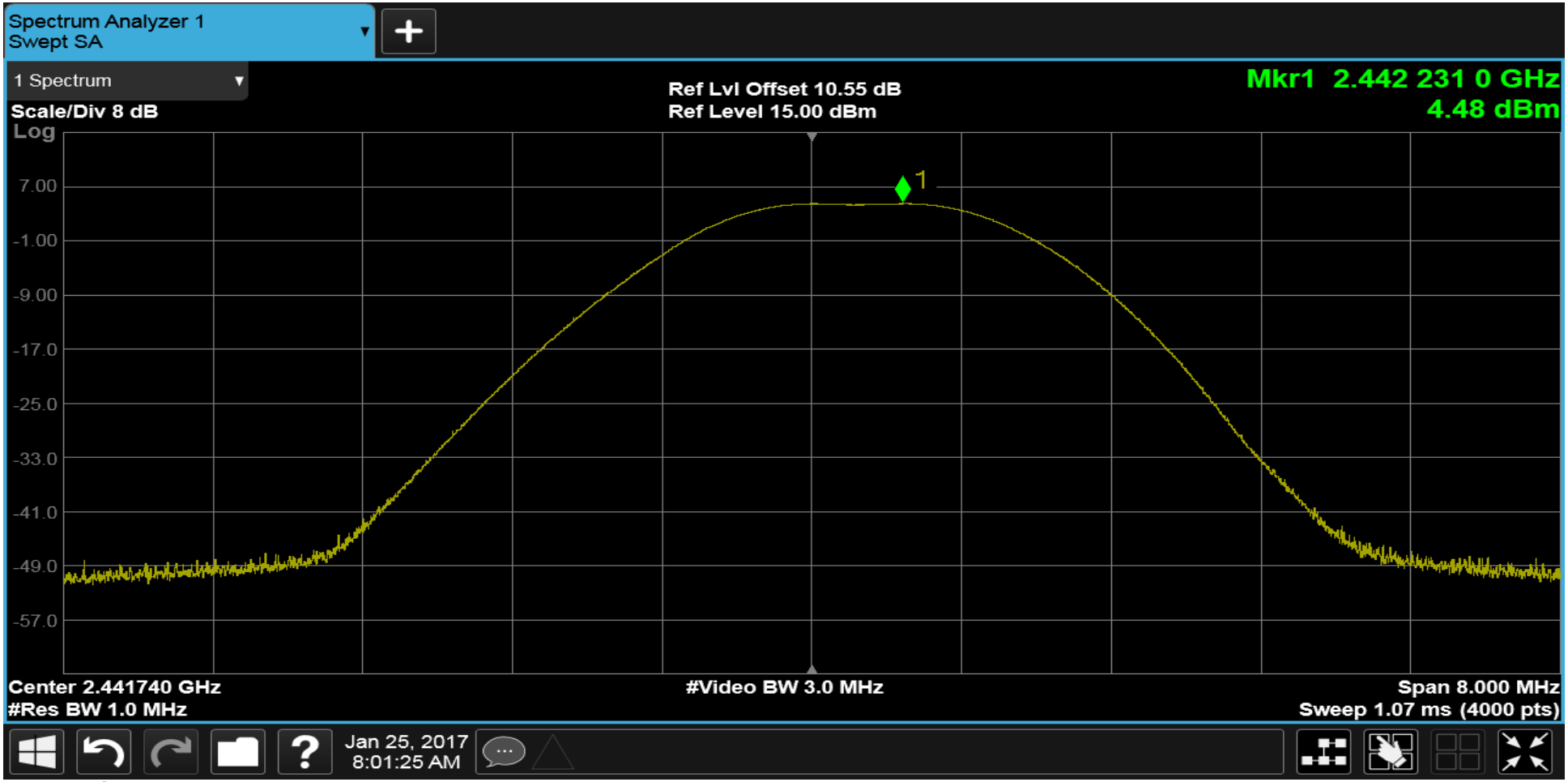
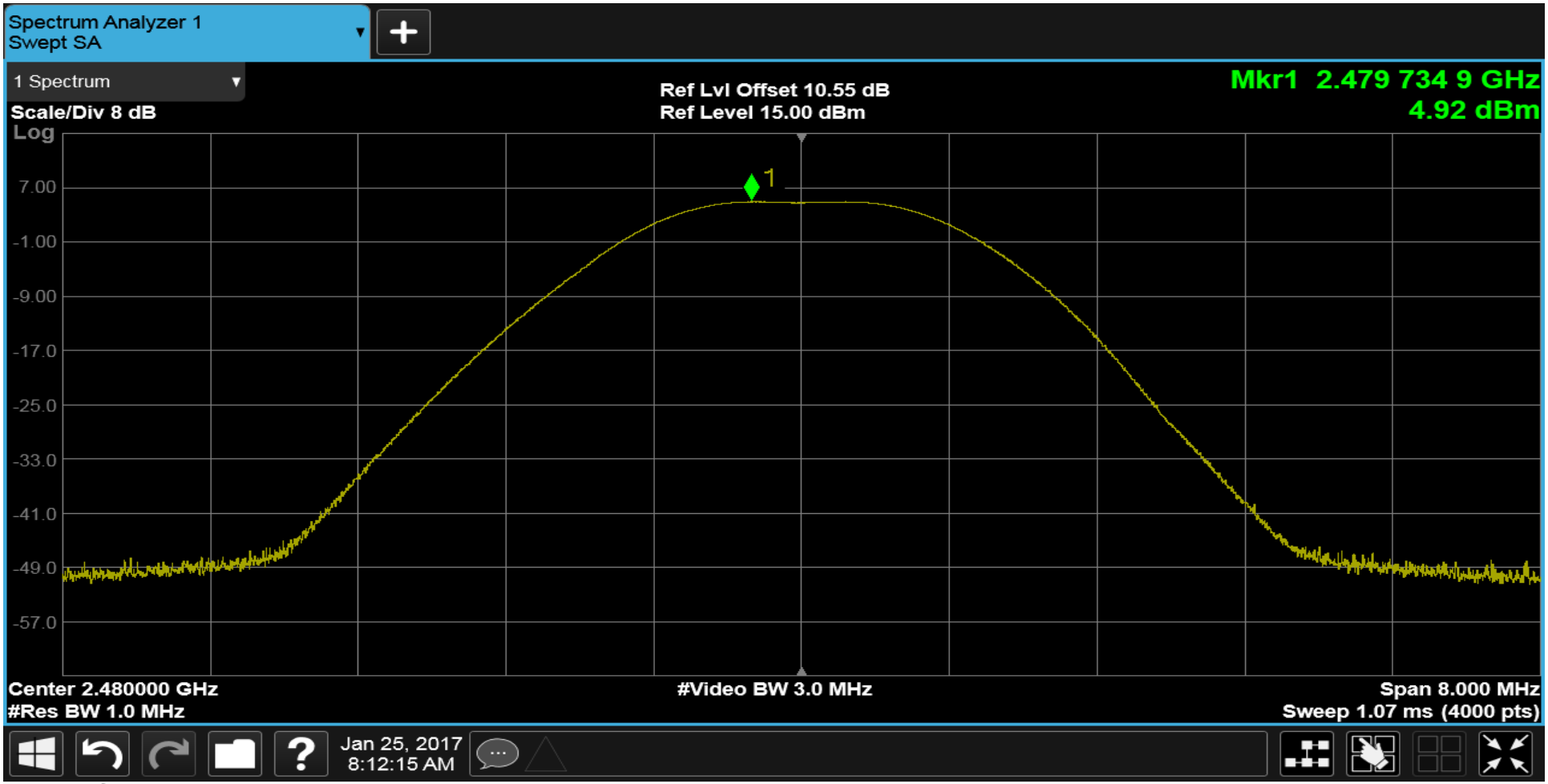
RETLIF TESTING LABORATORIES

Test Method	Peak Power Output		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (b)(3)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.9 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2441 MHz Peak Power Output: 4.48dBm (2.805mW)		

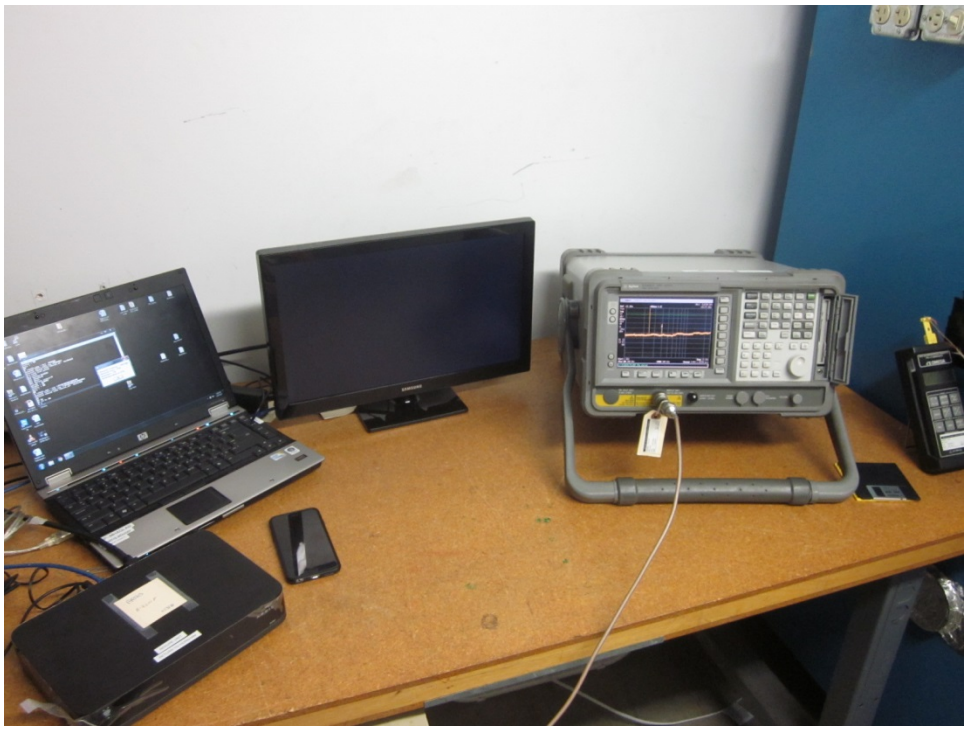


RETLIF TESTING LABORATORIES

Test Method	Peak Power Output		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (b)(3)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.9 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2480 MHz Peak Power Output: 4.92dBm (3.105mW)		



Test Photographs
Antenna Terminal Out of Band/Band Edge Conducted Emissions (30 MHz to 25 GHz)



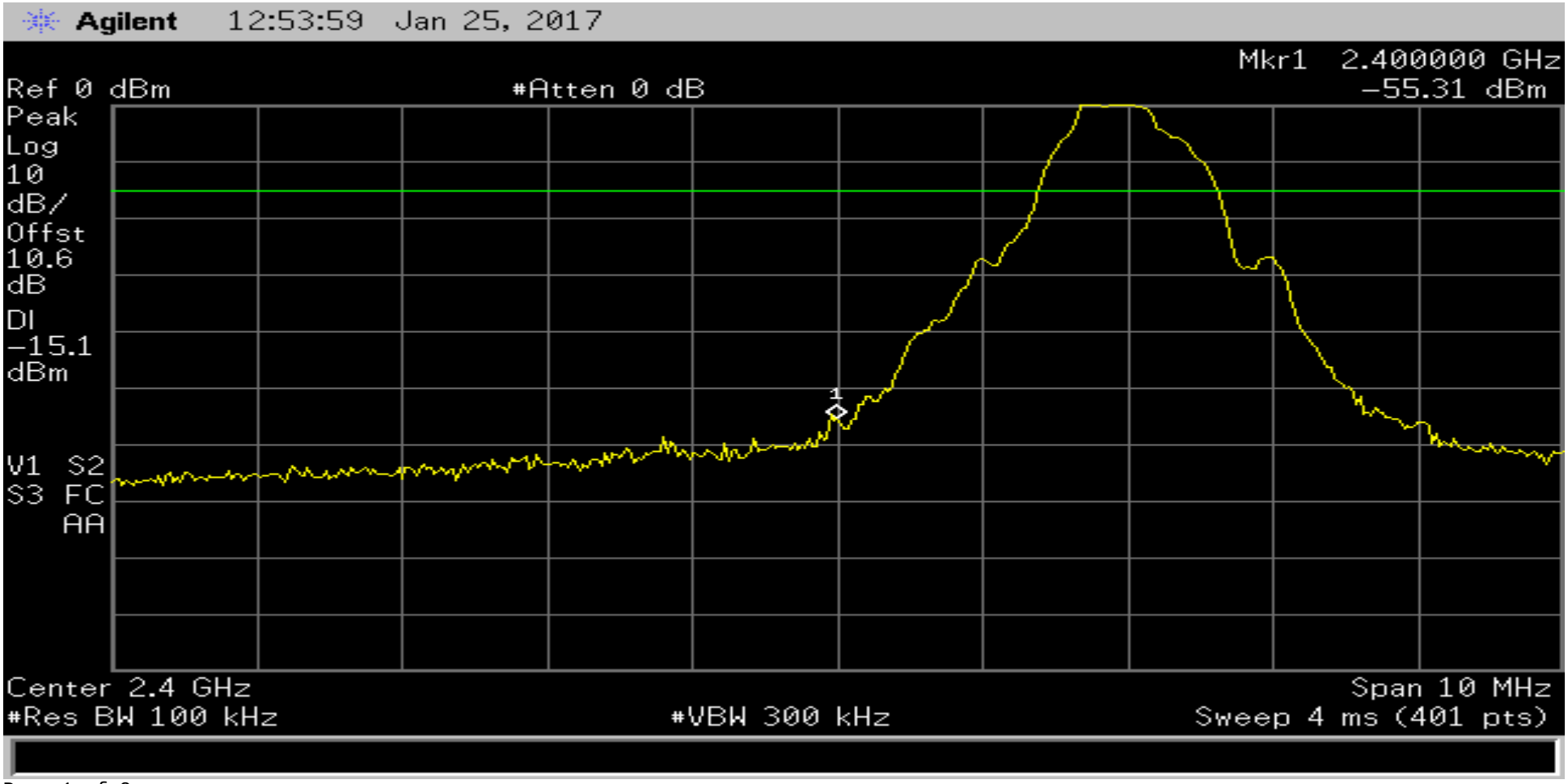
Test Setup

Band Edge Emissions Conducted

FCC Part 15, Subpart C, Paragraph: 15.247 (d)
RSS-247, Paragraph: 5.5
Test Data

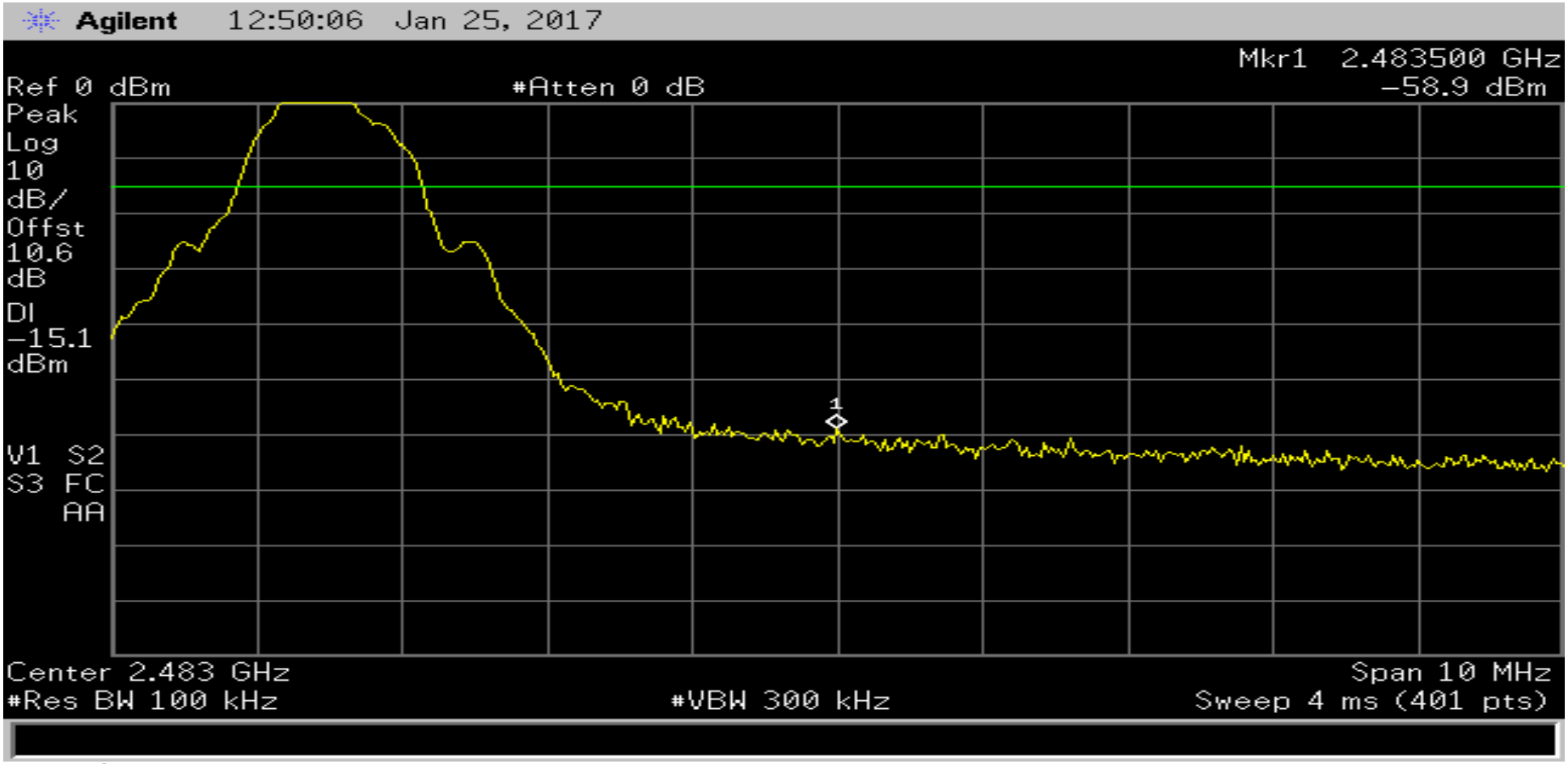
RETLIF TESTING LABORATORIES

Test Method	Band Edge Emissions Conducted		
Customer	Arris	**Job No.**	R-2601P-1
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.1 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2402 MHz **Limit based on 100kHz PSD Level of 4.87dBm**		



RETLIF TESTING LABORATORIES

Test Method	Band Edge Emissions Conducted		
Customer	Arris	**Job No.**	R-2601P-1
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.1 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2480 MHz **Limit based on 100kHz PSD Level of 4.87dBm**		



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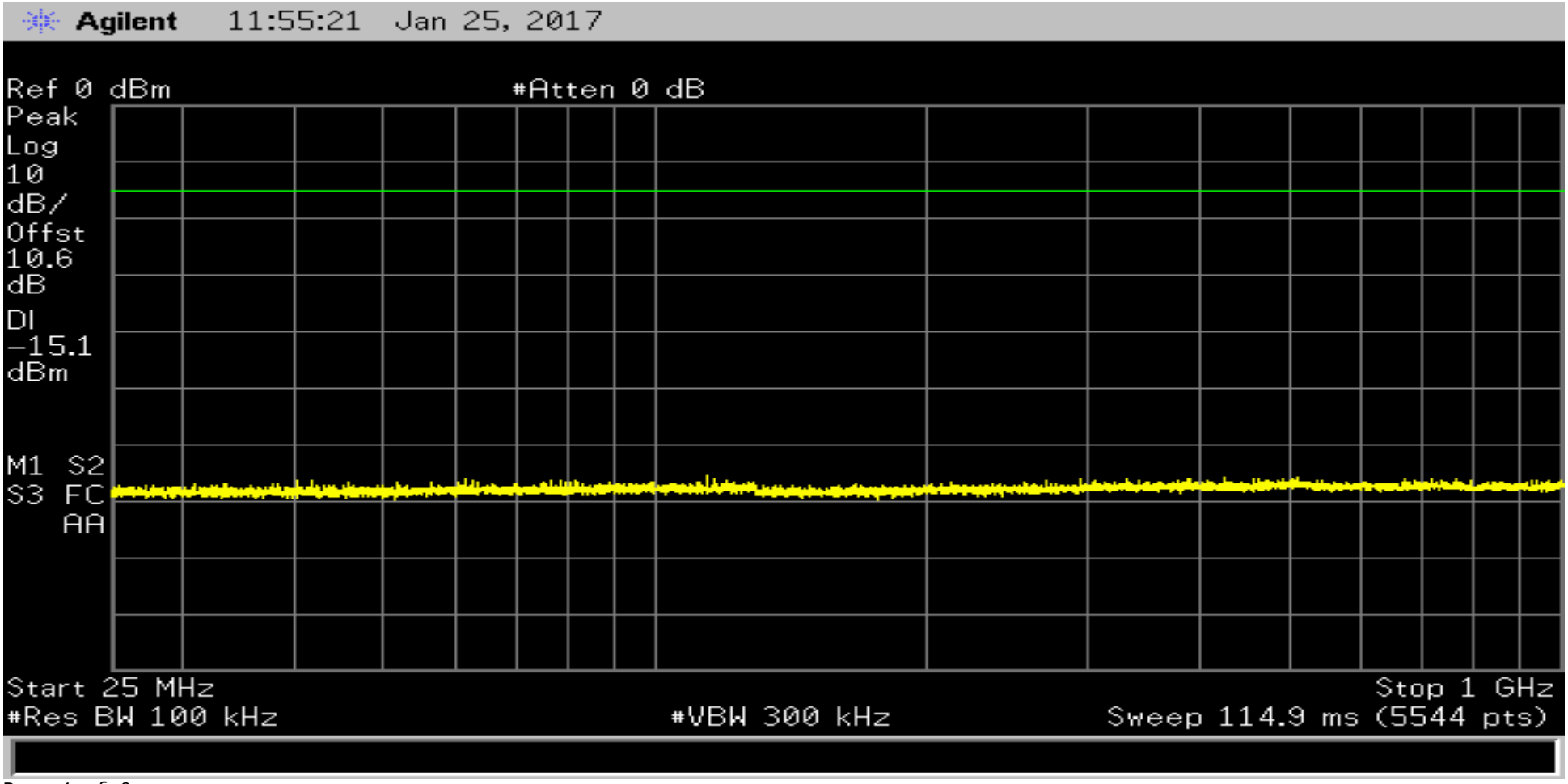
Unwanted Emissions into Non-Restricted Frequency Bands
25 MHz to 25 GHz

FCC Part 15, Subpart C, Paragraph: 15.247 (d)
RSS-247, Paragraph: 5.5
Test Data

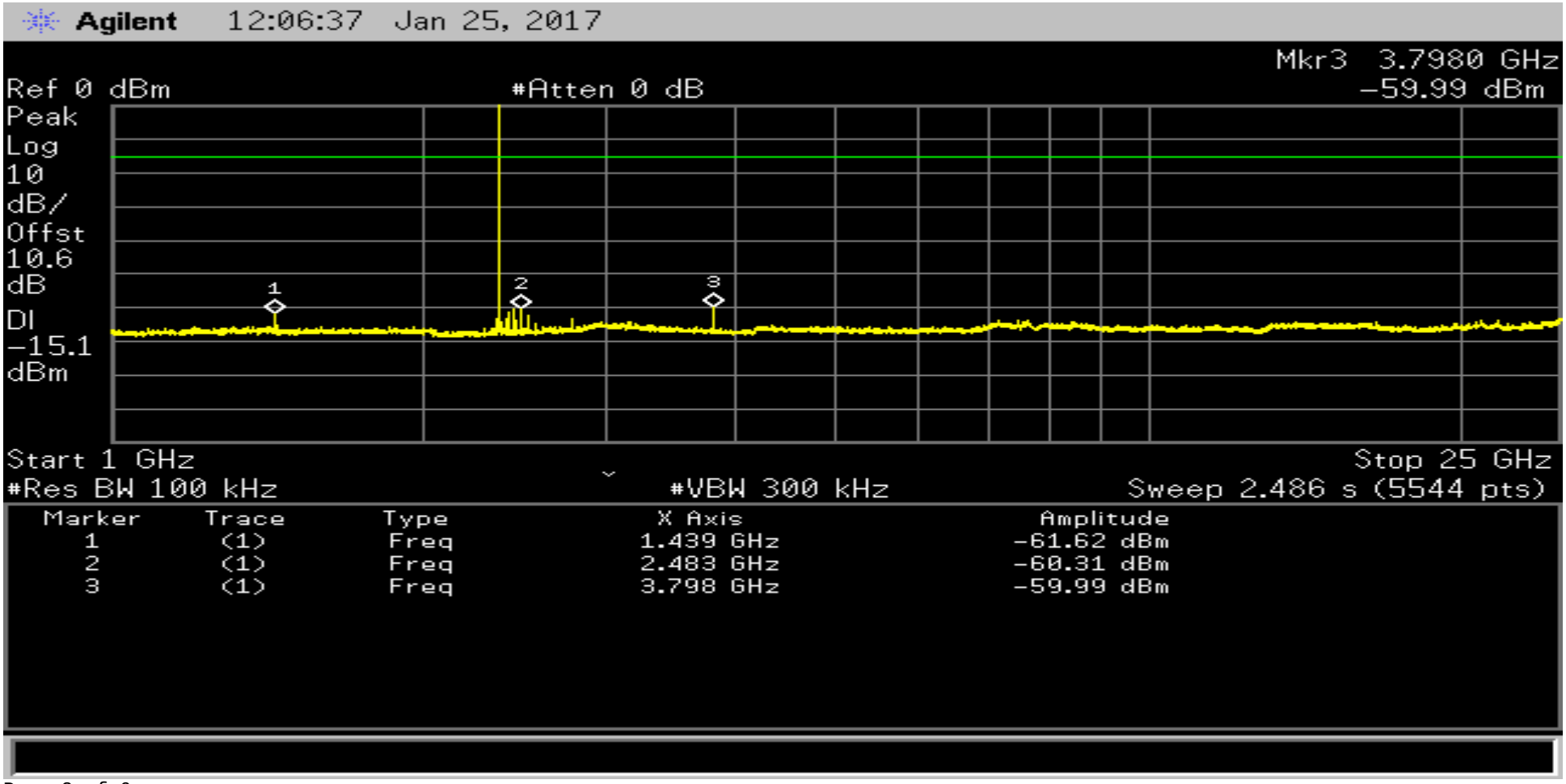
RETLIF TESTING LABORATORIES

Test Method	Unwanted Emissions into Non-Restricted Frequency Bands		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.1 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2402 MHz **Limit based on 100kHz PSD Level of 4.87dBm**		



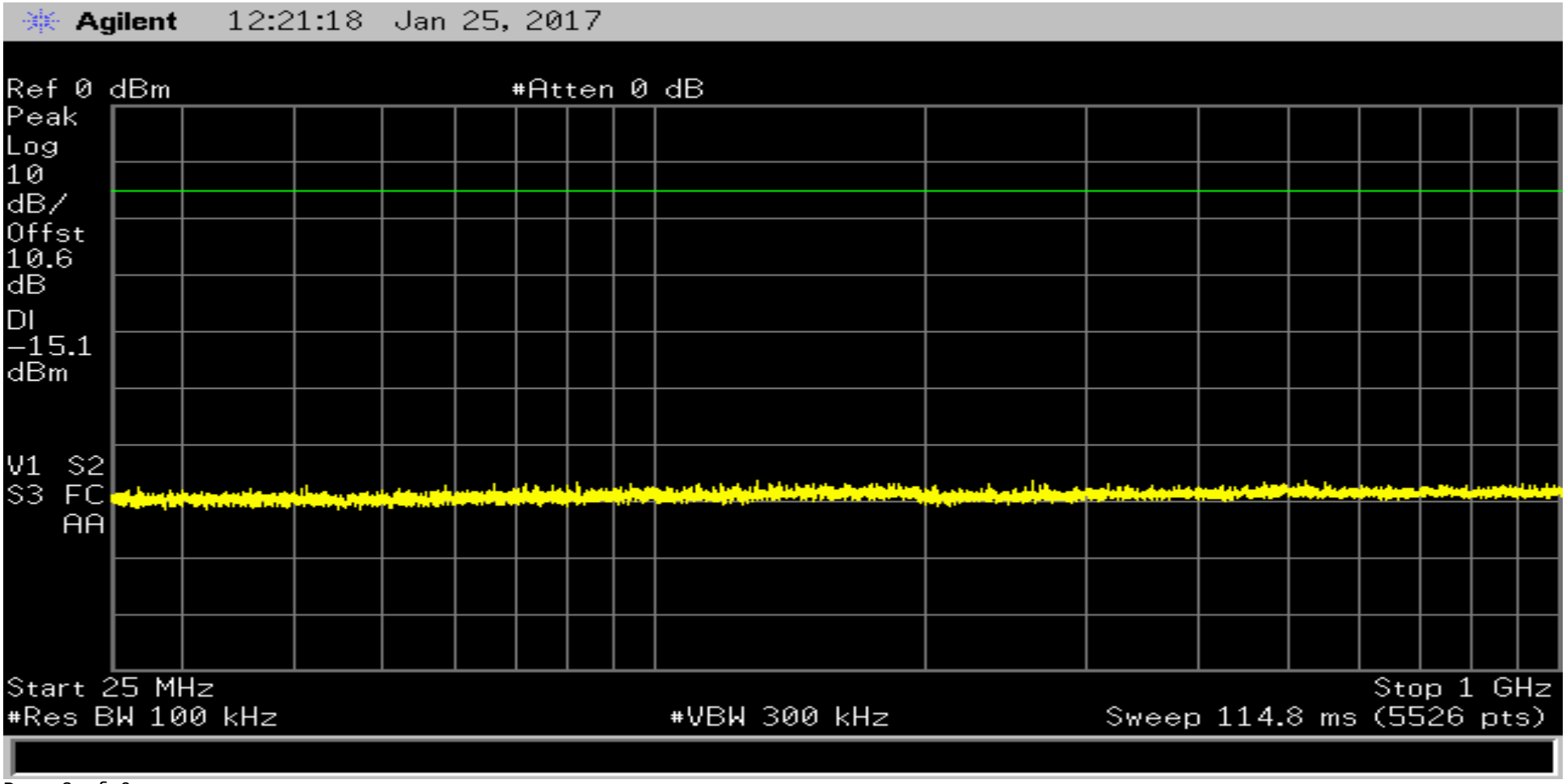
RETLIF TESTING LABORATORIES

Test Method	Unwanted Emissions into Non-Restricted Frequency Bands		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.1 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2402 MHz **Limit based on 100kHz PSD Level of 4.87dBm**		



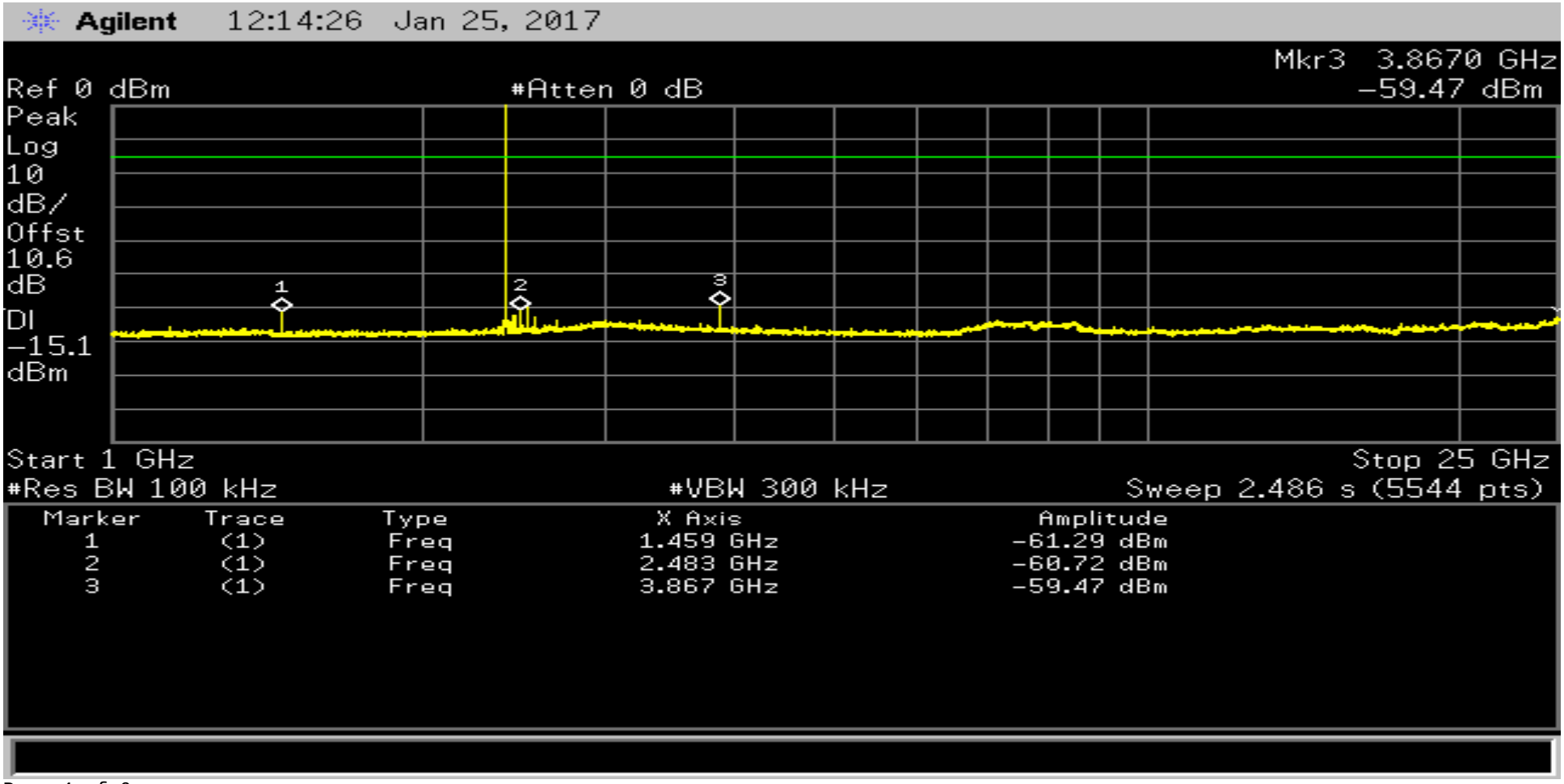
RETLIF TESTING LABORATORIES

Test Method	Unwanted Emissions into Non-Restricted Frequency Bands		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.1 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2441 MHz **Limit based on 100kHz PSD Level of 4.87dBm**		



RETLIF TESTING LABORATORIES

Test Method	Unwanted Emissions into Non-Restricted Frequency Bands		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.1 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2441 MHz **Limit based on 100kHz PSD Level of 4.87dBm**		



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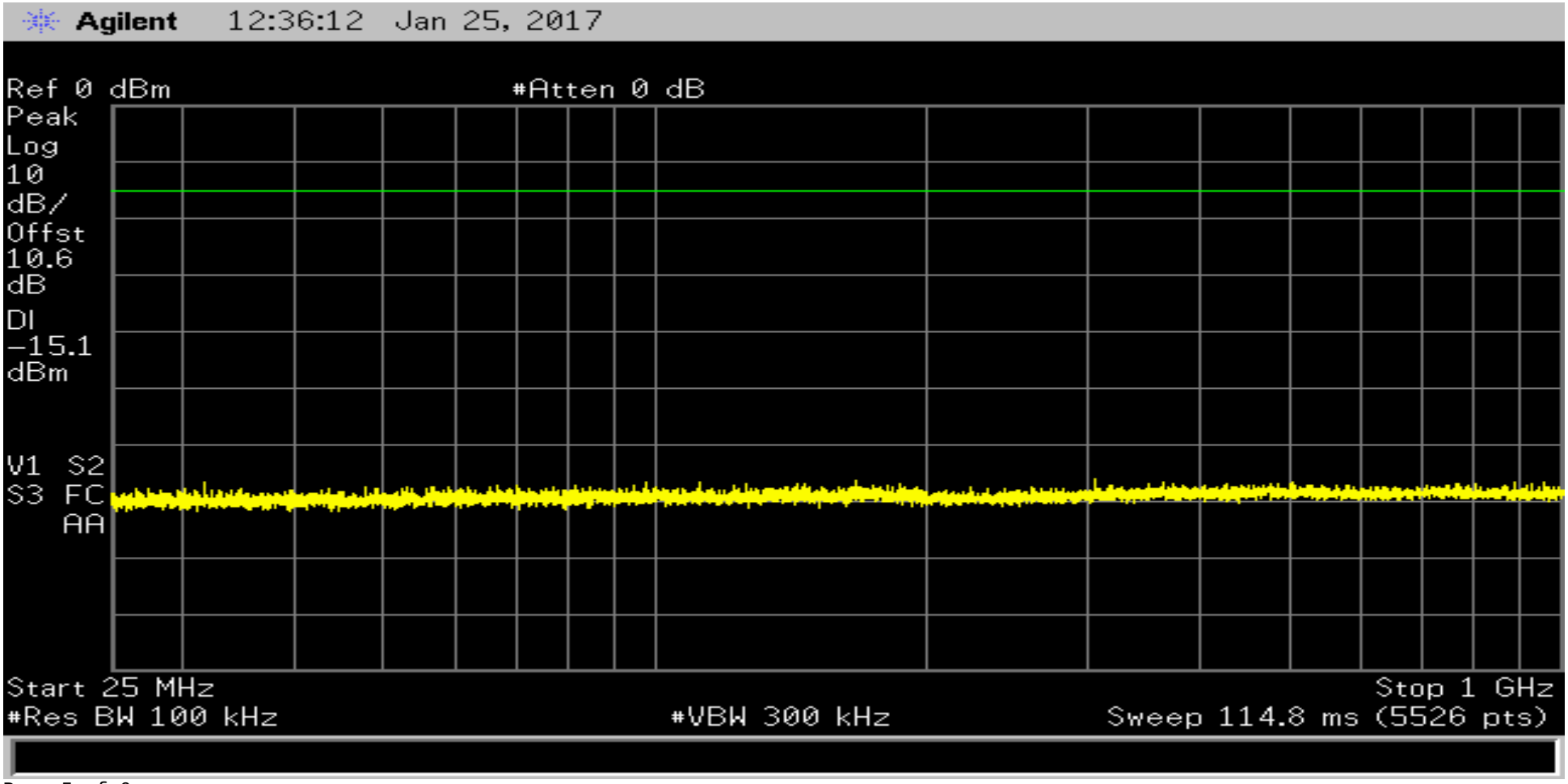
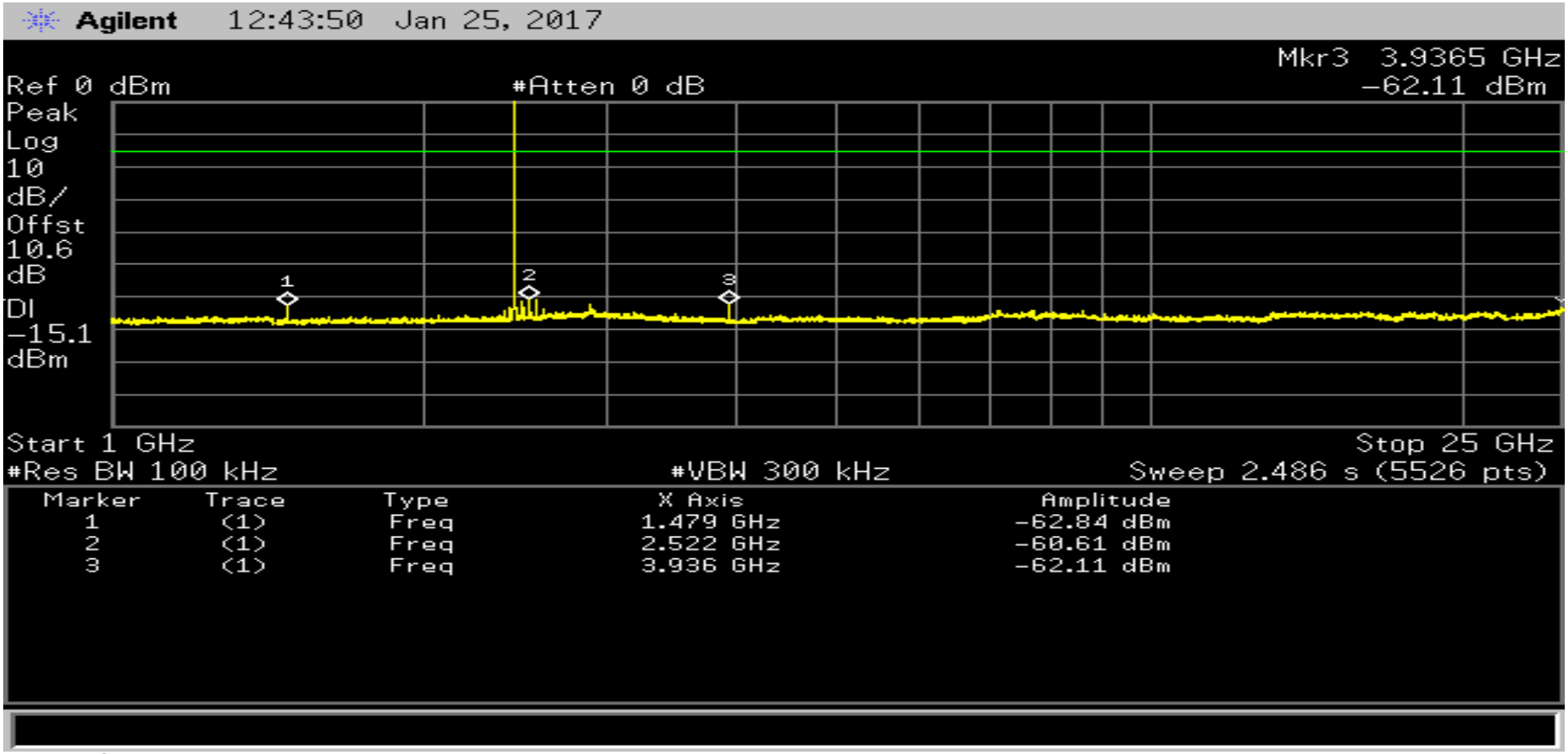
RETLIF TESTING LABORATORIES

Test Method	Unwanted Emissions into Non-Restricted Frequency Bands		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.1 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2480 MHz **Limit based on 100kHz PSD Level of 4.87dBm**		



RETLIF TESTING LABORATORIES

Test Method	Unwanted Emissions into Non-Restricted Frequency Bands		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (d)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.1 °C Relative Humidity: 23.0 %		
Notes	Transmit Frequency: 2480 MHz **Limit based on 100kHz PSD Level of 4.87dBm**		



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Test Photographs
Spurious Radiated Emissions (30 MHz to 25 GHz)

Configuration, Front

Configuration, Back

Test Photographs
Spurious Radiated Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 25 MHz to 200 MHz

Vertical Antenna Polarization, 25 MHz to 200 MHz

Test Photographs
Spurious Radiated Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 200 GHz to 1 GHz

Vertical Antenna Polarization, 200 GHz to 1 GHz

Test Photographs
Spurious Radiated Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 1 GHz to 12 GHz

Vertical Antenna Polarization, 1 GHz to 12 GHz

Test Photographs
Spurious Radiated Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 12 GHz to 18 GHz

Vertical Antenna Polarization, 12 GHz to 18 GHz

Test Photographs
Spurious Radiated Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 18 GHz to 25 GHz

Vertical Antenna Polarization, 18 GHz to 25 GHz

Unwanted Emissions into Restricted Frequency Bands
25 MHz to 25 GHz

FCC Part 15 Subpart C, Paragraph: 15.247(d)
RSS-247, Paragraph: 5.5
Test Data

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)	
Technician	M. Seamans	
Date	January 26th, 2017	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
37.50	-	-	-	-			-	100.00
|	38.00	22.10	14.20	36.30	*		65.31	I
38.25	-	-	-	-			-	100.00
73.00	-	-	-	-			-	100.00
|	74.00	22.84	8.36	31.20	*		36.31	I
74.60	-	-	-	-			-	100.00
74.80	-	-	-	-			-	100.00
|	75.00	19.54	8.36	27.90	*		24.83	|
75.20	-	-	-	-			-	100.00
108.00	-	-	-	-			-	150.00
|	115.00	12.78	10.02	22.80	*		13.80	|
|	-	-	-	-			-	|
121.94	-	-	-	-			-	150.00
123.00	-	-	-	-			-	150.00
|	130.00	7.74	15.96	23.70	*		15.31	|
|	-	-	-	-			-	|
138.00	-	-	-	-			-	150.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.
* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET		
Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)	
Technician	M. Seamans	
Date	January 26th, 2017	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
149.90	-	-	-	-			-	150.00
|	150.00	15.43	11.17	26.60	*		22.13	|
150.05	-	-	-	-			-	150.00
156.52	-	-	-	-			-	150.00
|	156.52	13.82	12.08	25.90	*		19.72	|
156.52	-	-	-	-			-	150.00
156.70	-	-	-	-			-	150.00
|	156.80	12.08	12.12	24.20	*		16.22	|
156.90	-	-	-	-			-	150.00
162.01	-	-	-	-			-	150.00
|	165.00	9.92	12.68	22.60	*		13.49	|
167.17	-	-	-	-			-	150.00
167.72	-	-	-	-			-	150.00
|	170.00	9.60	12.80	22.40	*		13.18	|
173.20	-	-	-	-			-	150.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.
* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)	
Technician	M. Seamans	
Date	January 26th, 2017	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
240.00	-	-	-	-			-	200.00
|	269.661	13.35	16.85	30.20			32.36	|
285.00	-	-	-	-			-	200.00
322.80	-	-	-	-			-	200.00
|	330.00	7.89	18.91	26.80	*		21.88	|
335.40	-	-	-	-			-	200.00
399.90	-	-	-	-			-	200.00
|	405.00	2.11	21.49	23.60	*		15.14	|
410.00	-	-	-	-			-	200.00
608.00	-	-	-	-			-	200.00
|	611.00	-1.84	27.34	25.50	*		18.84	|
614.00	-	-	-	-			-	200.00
960.00	-	-	-	-			-	500.00
|	975.00	0.80	32.10	32.90	*		44.16	|
1240.00	-	-	-	-			-	500.00
1300.00	-	-	-	-			-	500.00
|	1350.00	33.67	-5.55	28.12	*		25.47	|
1427.00	-	-	-	-			-	500.00

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET		
Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)	
Technician	M. Seamans	
Date	January 26th, 2017	
Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz		

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
1435.00	-	-	-	-			-	500.00
|	1500.00	32.21	-4.81	27.40	*		23.44	|
1646.50	-	-	-	-			-	500.00
1660.00	-	-	-	-			-	500.00
|	1680.00	31.41	-4.01	27.40	*		23.44	|
1710.00	-	-	-	-			-	500.00
1718.80	-	-	-	-			-	500.00
|	1720.00	32.08	-3.84	28.24	*		25.82	|
1722.20	-	-	-	-			-	500.00
2200.00	-	-	-	-			-	500.00
|	2250.00	32.14	-2.07	30.07	*		31.88	|
2300.00	-	-	-	-			-	500.00
2310.00	-	-	-	-			-	500.00
|	2360.00	31.69	-1.79	29.90	*		31.26	|
2390.00	-	-	-	-			-	500.00
2483.50	-	-	-	-			-	500.00
|	2490.00	31.91	-1.47	30.44	*		33.27	|
2500.00	-	-	-	-			-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.
* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)	
Technician	M. Seamans	
Date	January 26th, 2017	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
2690.00	-	-	-	-			-	500.00
|	2706.00	37.91	-0.97	36.94	*		70.31	|
|	2745.00	38.09	-0.89	37.20	*		72.44	|
|	2781.00	38.19	-0.81	37.38	*		73.96	|
2900.00	-	-	-	-			-	500.00
3260.00	-	-	-	-			-	500.00
|	3263.00	30.75	0.11	30.86	*		34.91	|
3267.00	-	-	-	-			-	500.00
3332.00	-	-	-	-			-	500.00
|	3336.00	30.80	0.23	31.03	*		35.60	|
3339.00	-	-	-	-			-	500.00
3345.00	-	-	-	-			-	500.00
|	3350.00	31.45	0.26	31.71	*		38.50	|
3358.00	-	-	-	-			-	500.00
3600.00	-	-	-	-			-	500.00
|	3608.00	38.15	0.67	38.82	*		87.30	|
|	3660.00	38.45	0.75	39.20	*		91.20	|
|	3708.00	38.32	0.83	39.15	*		90.68	|

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.
* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)	
Technician	M. Seamans	
Date	January 26th, 2017	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
|	-	-	-	-			-	|
4400.00	-	-	-	-			-	500.00
4500.00	-	-	-	-			-	500.00
|	4804.00	45.08	0.30	45.38			185.78	|
|	4882.00	50.17	0.35	50.52			335.74	|
|	4960.00	51.61	0.40	52.01			398.57	|
|	-	-	-	-			-	|
5150.00	-	-	-	-			-	500.00
5350.00	-	-	-	-			-	500.00
|	5400.00	29.72	2.43	32.15	*		40.50	|
5460.00	-	-	-	-			-	500.00
7250.00	-	-	-	-			-	500.00
|	7326.00	38.02	3.85	41.87	*		124.02	|
7750.00	-	-	-	-			-	500.00
8025.00	-	-	-	-			-	500.00
|	8118.00	34.08	4.19	38.27	*		81.94	|
|	8235.00	34.50	4.25	38.75	*		86.60	|
|	8343.00	34.79	4.26	39.05	*		89.64	|
|	-	-	-	-			-	|
8500.00	-	-	-	-			-	500.00

EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET		
Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)	
Technician	M. Seamans	
Date	January 26th, 2017	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
9000.00	-	-	-	-			-	500.00
|	9100.00	31.99	4.68	36.67	*		68.16	|
9200.00	-	-	-	-			-	500.00
9300.00	-	-	-	-			-	500.00
|	9400.00	31.72	4.82	36.54	*		67.14	|
9500.00	-	-	-	-			-	500.00
10600.00	-	-	-	-			-	500.00
|	12010.00	30.87	6.91	37.78	*		77.50	|
12700.00	-	-	-	-			-	500.00
13250.00	-	-	-	-			-	500.00
|	13300.00	30.04	9.86	39.90	*		98.87	|
13400.00	-	-	-	-			-	500.00
14470.00	-	-	-	-			-	500.00
|	14490.00	30.41	11.2	41.61	*		120.36	|
14500.00	-	-	-	-			-	500.00
15350.00	-	-	-	-			-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.
* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	Unwanted Emissions into Restricted Frequency Bands	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15 Subpart C	Paragraph: 15.247(d)
Operating Mode	Transmitting Modulated Data (Bluetooth Low Energy)	
Technician	M. Seamans	
Date	January 26th, 2017	

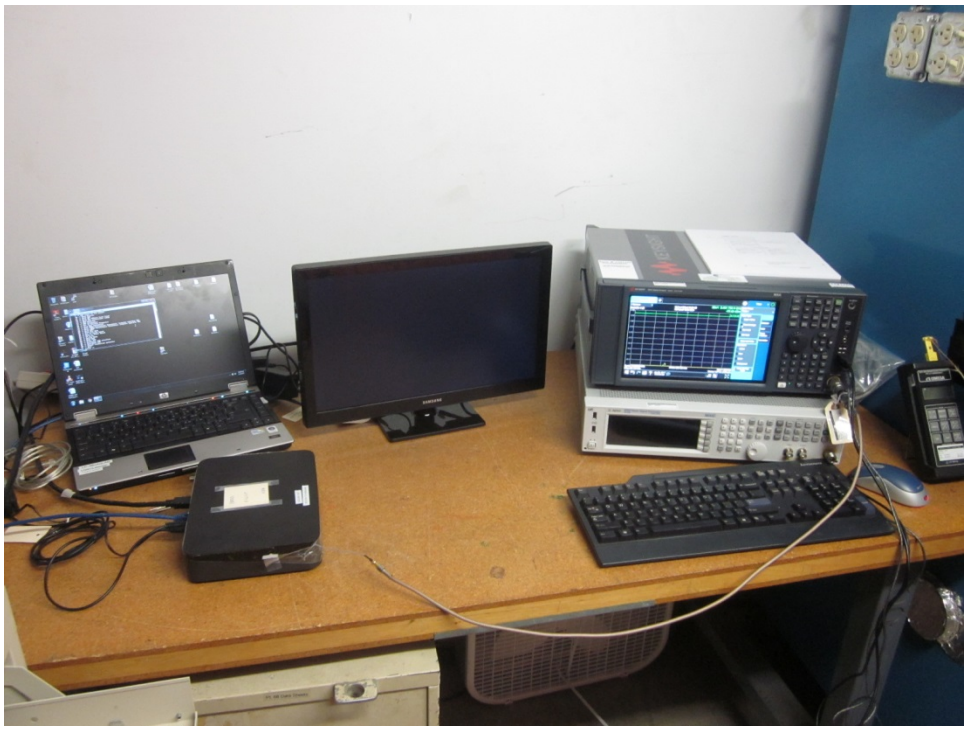
Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Restricted Band	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
|	15800.00	31.91	5.79	37.70	*		76.73	|
16200.00	-	-	-	-			-	500.00
17700.00	-	-	-	-			-	500.00
|	19000.00	31.41	-5.57	25.84	*		19.58	|
|	19216.00	31.19	-5.37	25.82	*		19.54	|
|	19528.00	32.05	-5.37	26.68	*		21.57	|
|	19840.00	32.45	-5.37	27.08	*		22.59	|
21400.00	-	-	-	-			-	500.00
22010.00	-	-	-	-			-	500.00
|	22500.00	32.60	-6.61	25.99	*		19.92	|
23120.00	-	-	-	-			-	500.00
23600.00	-	-	-	-			-	500.00
|	23800.00	35.03	-6.08	28.95	*		28.02	|
24000.00	-	-	-	-			-	500.00

No EUT emissions within 10 dB of the specified test limit were observed at the specified test distance throughout the given frequency spectrum.
* This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Test Photographs
Power Density



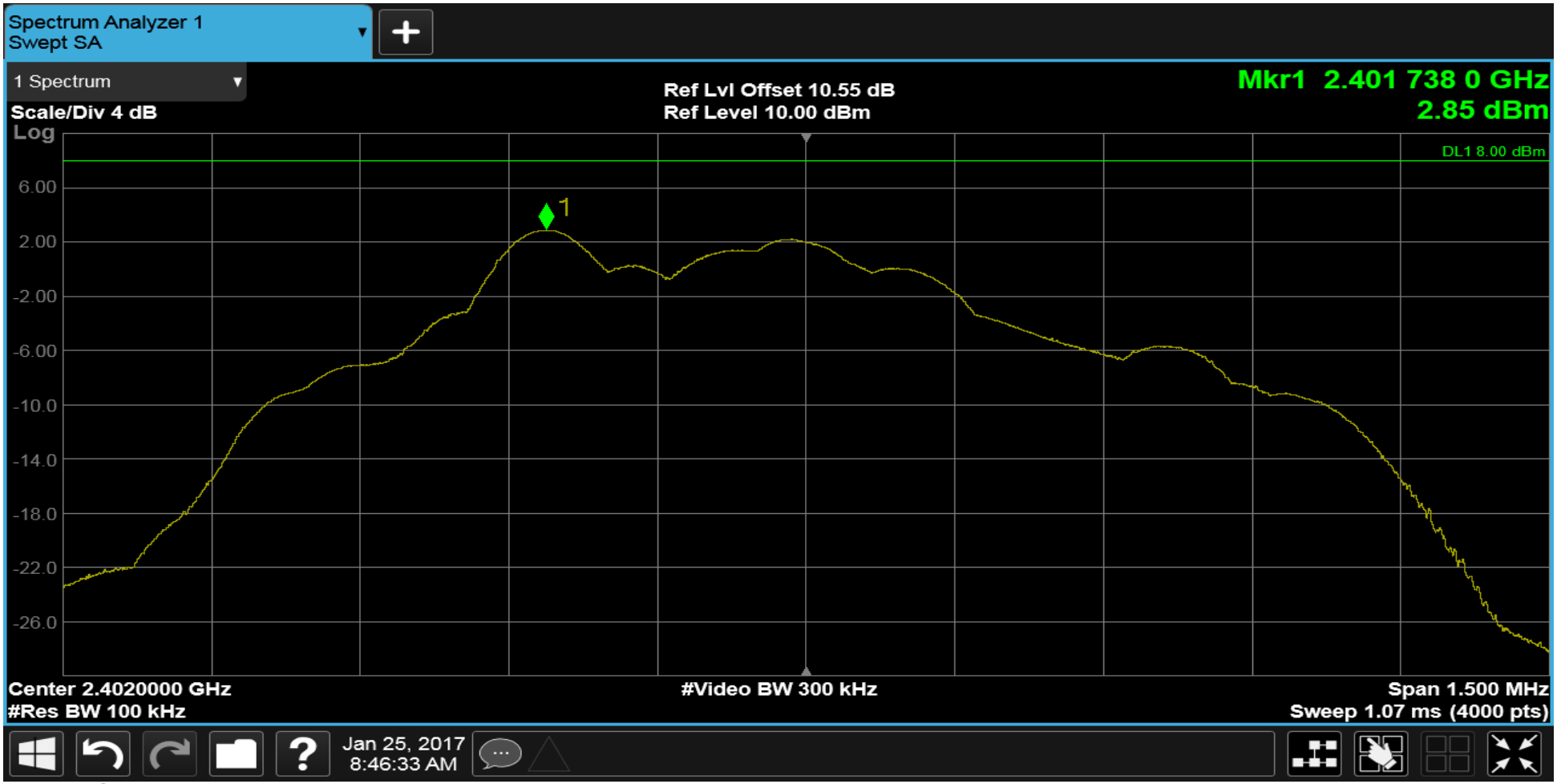
Test Configuration

Power Spectral Density

FCC Part 15, Subpart C, Paragraph: 15.247 (b)(3)
RSS-247, Paragraph: 5.2(2)
Test Data

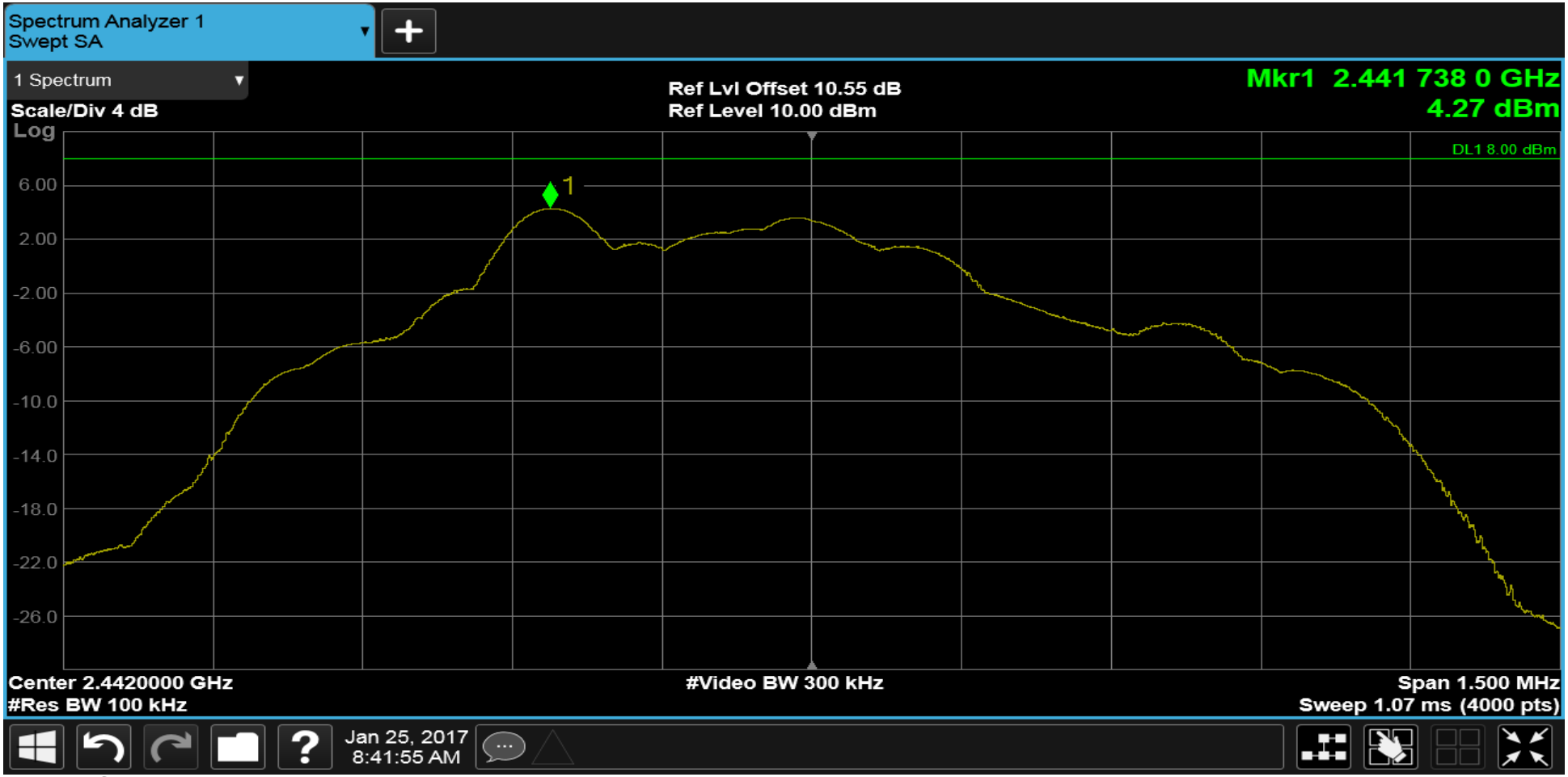
RETLIF TESTING LABORATORIES

Test Method	Power Spectral Density		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting modulated signal		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (b)(3)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.8 °C Relative Humidity: 23.1 %		
Notes	Transmit Frequency: 2402 MHz Limit: 8dBm **Power Spectral Density: 2.85dBm**		



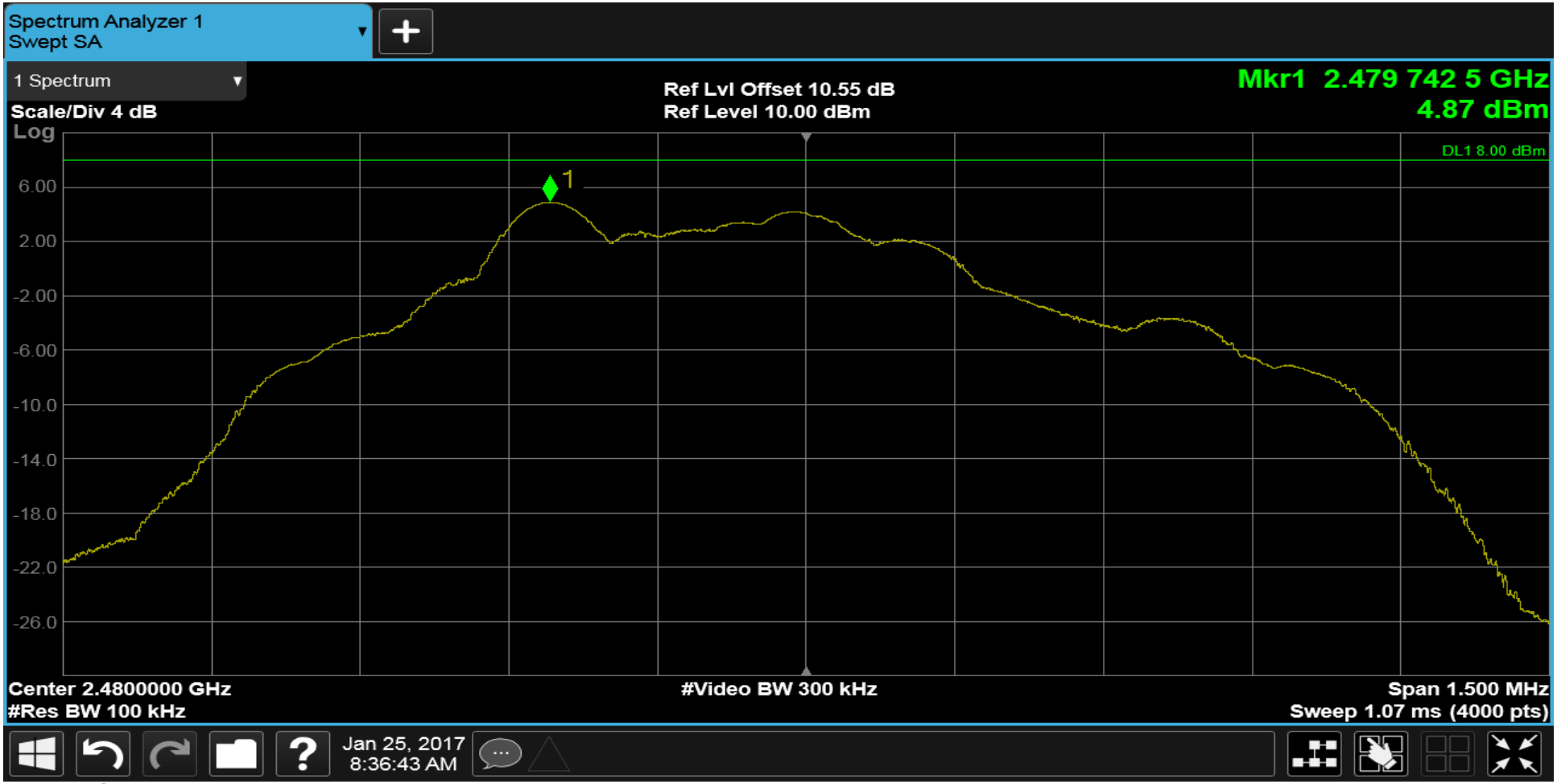
RETLIF TESTING LABORATORIES

Test Method	Power Spectral Density		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting modulated signal		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (b)(3)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.8 °C Relative Humidity: 23.1 %		
Notes	Transmit Frequency: 2441 MHz Limit: 8dBm **Power Spectral Density: 4.27dBm**		



RETLIF TESTING LABORATORIES

Test Method	Power Spectral Density		
Customer	Arris	**Job No.**	R-2601P-2
Test Sample	DCX900 Video Gateway		
Model Number	DCX900	**Serial No.**	XX00L9DB012318101628143409
Operating Mode	Transmitting modulated signal		
Test Specification	FCC Part 15, Subpart C Paragraph: 15.247 (b)(3)		
Technician	M. Seamans	**Date**	January 25th, 2017
Climatic Conditions	Temp: 22.8 °C Relative Humidity: 23.1 %		
Notes	Transmit Frequency: 2480 MHz Limit: 8dBm **Power Spectral Density: 4.87dBm**		



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Test Photographs
Receiver Spurious Emissions (30 MHz to 25 GHz)

Configuration, Back

Configuration, Front

Test Photographs
Receiver Spurious Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 25 MHz to 200 MHz

Vertical Antenna Polarization, 25 MHz to 200 MHz

Test Photographs
Receiver Spurious Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 200 GHz to 1 GHz

Vertical Antenna Polarization, 200 GHz to 1 GHz

Test Photographs
Receiver Spurious Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 1 GHz to 12 GHz

Vertical Antenna Polarization, 1 GHz to 12 GHz

Test Photographs
Receiver Spurious Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 12 GHz to 18 GHz

Vertical Antenna Polarization, 12 GHz to 18 GHz

Test Photographs
Receiver Spurious Emissions (30 MHz to 25 GHz)

Horizontal Antenna Polarization, 18 GHz to 25 GHz

Vertical Antenna Polarization, 18 GHz to 25 GHz

Receiver Spurious Emissions, 30 MHz to 25 GHz

FCC Part 15, Subpart C, Paragraph: 15.209(a)
RSS-Gen, Paragraph: 7.1
Test Data

RETLIF TESTING LABORATORIES

EMISSIONS TEST DATA SHEET

Test Method	**Receiver Spurious Emissions 30 MHz to 25 GHz**	
Customer	Arris	
Job Number	R-2601P-2	
Test Sample	DCX900 Video Gateway	
Model Number	DCX900	
Serial Number	XX00L9DB012318101628143415	
Test Specification	FCC Part 15, Subpart C	Paragraph: 15.209(a)
Operating Mode	Video Playback, not transmitting	
Technician	M. Seamans	
Date	January 26th, 2017	

Notes: Antenna Test Distance: 3 meters Detector: Quasi-Peak <1GHz, Average >1GHz

TEST PARAMETERS

Test Frequency	Measured Frequency	Meter Reading	Correction Factor	Corrected Reading			Converted Reading	Limit at 3M
MHz	MHz	dBuV	dB	dBuV/m			uV/m	uV/m
30.00	-	-	-	-				100.00
|	-	-	-	-				|
80.00	V-2m	29.33	8.57	37.90	*		78.52	|
|	-	-	-	-				|
88.00	-	-	-	-				100.00
88.00	-	-	-	-				150.00
|	-	-	-	-				|
150.00	V-2m	11.95	11.95	23.90	*		15.67	|
|	-	-	-	-				|
216.00	-	-	-	-				150.00
216.00	-	-	-	-				200.00
|	-	-	-	-				|
269.66	V-2m	13.23	16.97	30.20			32.36	|
374.65	H-1m	16.25	21.25	37.50			74.99	|
377.66	V-2m	8.83	21.27	30.10			31.99	|
431.35	V-1.5m	15.38	22.02	37.40			74.13	|
|	-	-	-	-				|
960.00	-	-	-	-				200.00
960.00	-	-	-	-				500.00
|	-	-	-	-				|
25000.00	-	-	-	-				500.00

EUT emissions observed throughout the given frequency spectrum were recorded and evaluated. Emission levels closest to the limit are listed on this data sheet. * This emission is not from the EUT. It is a measurement of minimum measurement system sensitivity (Noise Floor).

Data Sheet 1 of 1