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Report On

Limited FCC Testing of the
Sharp 205SH AXGP & Quad-band WCDMA (FDD I/FDD V/FDD
VIII/FDD XI) Dual-mode Cellular Phone with Bluetooth, WLAN, Felica
and GPS in accordance with FCC CFR 47 Part 15C (WLAN and
Bluetooth Low Energy)

COMMERCIAL-IN-CONFIDENCE

FCC ID: APYHRO00193

Document 75921996 Report 10 Issue 2

July 2013



Product Service

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COMMERCIAL-IN-CONFIDENCE

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Limited FCC Testing of the Sharp 205SH AXGP & Quad-band WCDMA (FDD I/FDD V/FDD VIII/FDD XI) Dual-mode Cellular Phone with Bluetooth, WLAN, Felica and GPS in accordance with FCC CFR 47 Part 15C (WLAN and Bluetooth Low Energy)

Document 75921996 Report 10 Issue 2

July 2013

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DATED

11 July 2013

This report has been up-issued to Issue 2 to include additional test results.

ENGINEERING STATEMENT

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported testing was carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 15C. The sample tested was found to comply with the requirements defined in the applied rules.

Test Engineer(s);

S Hartley

M Russell



G Lawler



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SECTION 1

REPORT SUMMARY

Limited FCC Testing of the
Sharp 205SH AXGP & Quad-band WCDMA (FDD I/FDD V/FDD VIII/FDD XI) Dual-mode
Cellular Phone with Bluetooth, WLAN, Felica and GPS
In accordance with FCC CFR 47 Part 15C (WLAN and Bluetooth Low Energy)



1.1 INTRODUCTION

The information contained in this report is intended to show verification of the Limited FCC Testing of the Sharp 205SH AXGP & Quad-band WCDMA (FDD I/FDD V/FDD VIII/FDD XI) Dual-mode Cellular Phone with Bluetooth, WLAN, Felica and GPS to the requirements of FCC CFR 47 Part 15C.

Objective	To perform Limited FCC Testing to determine the Equipment Under Test's (EUT's) compliance with the Test Specification, for the series of tests carried out.
Manufacturer	Sharp Corporation
Model Number(s)	205SH
Serial Number(s)	IMEI 004401114778885 IMEI 004401114778950 IMEI 004401114778877 IMEI 004401114779164
Number of Samples Tested	4
Test Specification/Issue/Date	FCC CFR 47 Part 15C (2012)
Incoming Release Date	Application Form 07 May 2013
Disposal Reference Number Date	Held Pending Disposal Not Applicable Not Applicable
Order Number Date	9669 22 April 2013
Start of Test	13 April 2013
Finish of Test	10 July 2013
Name of Engineer(s)	S Hartley M Russell G Lawler
Related Document(s)	ANSI C63.10: 2009



1.2 BRIEF SUMMARY OF RESULTS

A brief summary of the tests carried out in accordance with FCC CFR 47 Part 15C is shown below.

Section	Spec Clause	Test Description	Result	Comments/Base Standard
802.11(b)				
2.2	15.247 (b)(3)	Maximum Peak Conducted Output Power	Pass	
2.3	15.247 (b)(4)	EIRP Peak Power	Pass	
2.4	15.247 (d)	Spurious and Band Edge Emissions	Pass	
2.5	15.247 (e)	Power Spectral Density	Pass	
2.6	15.247 (2)	6dB Bandwidth	Pass	
802.11(g)				
2.1	15.207	AC Line Conducted Emissions	Pass	
2.2	15.247 (b)(3)	Maximum Peak Conducted Output Power	Pass	
2.3	15.247 (b)(4)	EIRP Peak Power	Pass	
2.4	15.247 (d)	Spurious and Band Edge Emissions	Pass	
2.5	15.247 (e)	Power Spectral Density	Pass	
2.6	15.247 (2)	6dB Bandwidth	Pass	
802.11(n)				
2.2	15.247 (b)(3)	Maximum Peak Conducted Output Power	Pass	
2.3	15.247 (b)(4)	EIRP Peak Power	Pass	
2.4	15.247 (d)	Spurious and Band Edge Emissions	Pass	
2.5	15.247 (e)	Power Spectral Density	Pass	
2.6	15.247 (2)	6dB Bandwidth	Pass	



Product Service

Section	Spec Clause	Test Description	Result	Comments/Base Standard
Bluetooth Low Energy				
2.2	15.247 (b)(3)	Maximum Peak Conducted Output Power	Pass	
2.3	15.247 (b)(4)	EIRP Peak Power	Pass	
2.4	15.247 (d)	Spurious and Band Edge Emissions	Pass	
2.5	15.247 (e)	Power Spectral Density	Pass	
2.6	15.247 (2)	6dB Bandwidth	Pass	



Product Service

1.3 APPLICATION FORM

EQUIPMENT DESCRIPTION	
Model Name/Number	205SH
Part Number	
FCC ID (if applicable)	APYHRO00193
Industry Canada ID (if applicable)	
Technical Description (Please provide a brief description of the intended use of the equipment)	AXGP & Quad-band WCDMA (FDD I / FDD V / FDD VIII / FDD XI) Dual-mode Cellular Phone with Bluetooth, WLAN, FeliCa and GPS

EXTREME TEMPERATURE RANGE over which the equipment is to be type tested	
<input type="checkbox"/> -20°C to +55°C	
<input checked="" type="checkbox"/> Other (2)	
<input type="checkbox"/> Not applicable (no extreme temperature testing required)	
Extreme temperature range for the host(s):	10C to 55C

- (2) The equipment shall be tested over the following temperature ranges :
- a) 0°C to +35°C for equipment for indoor use only, or intended for used in areas where the temperature is controlled within this range.
 - b) Over the extremes of the temperature range(s) of the declared host equipment(s) in case of plug-in radio devices.

TYPE OF ANTENNA	
<input checked="" type="checkbox"/> Integral	
Temporary RF connector provided:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Antenna connector	
<input type="checkbox"/> Number of antenna assembly(ies) submitted	
Gain of the antenna intended for normal use:	
0 dBi for assembly identified as Bluetooth/WLAN	
dBi for assembly identified as	

TRANSMITTER TECHNICAL CHARACTERISTICS		
TRANSMITTER OPERATING FREQUENCY RANGE(S)		
	FCC and/or Industry Canada	EU
Bluetooth	2402 to 2480 MHz	2402 to 2480 MHz
WLAN	2412 to 2462 MHz	2412 to 2472 MHz
FCC and/or Industry Canada (only)		
	Highest Internally Generated Frequency	MHz



SPREAD SPECTRUM PARAMETERS		
<input checked="" type="checkbox"/> Bluetooth	Version: 4.0	
FHSS: Channel <input checked="" type="checkbox"/> 79 Other	EDR <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Medium Access Protocol (Customer Declaration)		
"We have implemented Bluetooth protocol which satisfies the medium access protocol requirement of EN 300 328".		
<input checked="" type="checkbox"/> WLAN		
IEEE 802.11(b) – DSSS	<input checked="" type="checkbox"/>	
IEEE 802.11(g) – OFDM	<input checked="" type="checkbox"/>	
IEEE 802.11(n) – OFDM	<input checked="" type="checkbox"/>	
Supported Spatial Streams	2.4 GHz	5GHz
Transmitter (Tx)	1	1
Receiver (Rx)	1	1
GI (Guard Interval)	<input checked="" type="checkbox"/> 800 ns	<input type="checkbox"/> 400 ns
Band Width	<input checked="" type="checkbox"/> 20 MHz	<input type="checkbox"/> 40 MHz
Medium Access Protocol (Customer Declaration)		
"We have implemented IEEE 802.11 (b/g/n) protocol which satisfies the medium access protocol requirement of EN 300 328".		
<input type="checkbox"/> Other Technology		
<input type="checkbox"/> Direct Sequence	<input type="checkbox"/> Frequency Hopping	<input type="checkbox"/> Combined <input type="checkbox"/> Other
DSSS	Chip Sequence Length	bit
	Spectrum Width	MHz
FHSS	Total Number of Hops	
	Dwell Time	ms
	Bandwidth Per Hop	MHz
	Maximum Separation of Hops	MHz for ETSI EN 300 328
Other		
Medium Access Protocol (Customer Declaration)		
"We have implemented a protocol which satisfies the medium access protocol requirement of EN 300 328".		



TRANSMITTER POWER CHARACTERISTICS				
Bluetooth				
Maximum Rated Transmitter Output				
Effective radiated power (for equipment with antenna connector)				W
Effective radiated power (for equipment with integral antenna)	2.5m			W
Minimum Rated Transmitter Output				
Effective radiated power (for equipment with antenna connector)				W
Effective radiated power (for equipment with integral antenna)	0.25m			W
Is transmitter intended for :				
Continuous duty		<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
Intermittent duty		<input type="checkbox"/>	Yes	<input type="checkbox"/> No
If intermittent state DUTY CYCLE				
Transmitter ON	seconds	Transmitter OFF		minutes
Is continuous operation possible for testing purposes?				
		<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
Is transmitter output power variable:				
		<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
State during the test:				
Transmitter duty cycle	Tx on	Seconds	Tx Off	Seconds
Duty cycle (Tx on / (Tx on + Tx off))				
		%		
<input type="checkbox"/> Continuously variable		<input type="checkbox"/> Stepped		
	dB per step			
WLAN				
Maximum Rated Transmitter Output				
Effective radiated power (for equipment with antenna connector)				W
Effective radiated power (for equipment with integral antenna)	0.1			W
Minimum Rated Transmitter Output				
Effective radiated power (for equipment with antenna connector)				W
Effective radiated power (for equipment with integral antenna)				W
Is transmitter intended for :				
Continuous duty		<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
Intermittent duty		<input type="checkbox"/>	Yes	<input type="checkbox"/> No
If intermittent state DUTY CYCLE				
Transmitter ON	seconds	Transmitter OFF		minutes
Is continuous operation possible for testing purposes?				
		<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
Is transmitter output power variable:				
		<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/> No
State during the test:				
Transmitter duty cycle	Tx on	Seconds	Tx Off	Seconds
Duty cycle (Tx on / (Tx on + Tx off))				
		%		
<input type="checkbox"/> Continuously variable		<input type="checkbox"/> Stepped		
	dB per step			



Product Service

RECEIVER POWER SOURCE (4)				
<input type="checkbox"/> AC mains		State voltage		
AC supply frequency	(Hz)	VAC	Max Current	Hz
<input type="checkbox"/> Single phase		<input type="checkbox"/> Three phase		
And / Or				
<input type="checkbox"/> External DC supply				
Nominal voltage		Max Current		A
Extreme upper voltage		Extreme lower voltage		
Battery				
<input type="checkbox"/> Nickel Cadmium				
<input type="checkbox"/> Lead acid (Vehicle regulated)				
<input type="checkbox"/> Alkaline				
<input type="checkbox"/> Lithium				
<input type="checkbox"/> Other Details :				
	Volts nominal.			
End point voltage as quoted by equipment manufacturer				V

(4) If a transmitter and receiver use the same power source, this should be declared. In such cases only the box for the transmitter power source should be filled in.

AUTOMATIC EQUIPMENT SWITCH OFF	
If the equipment is designed to automatically switch off at a predetermined voltage level which is higher or lower in value than the battery minimum and minimum calculated values this shall be clearly stated.	
<input type="checkbox"/> Applies	V cut-off voltage
<input type="checkbox"/> Does not apply	

I hereby declare that I am entitled to sign on behalf of the applicant and that the information supplied is correct and complete.

Signature:		Name:	Hiroyuki Uwatoko
Position held:	Supervisor	Date:	07 th May, 2013



Product Service

1.4 PRODUCT INFORMATION

1.4.1 Technical Description

The Equipment Under Test (EUT) was a Sharp 205SH AXGP & Quad-band WCDMA (FDD I/FDD V/FDD VIII/FDD XI) Dual-mode Cellular Phone with Bluetooth, WLAN, Felica and GPS. A full technical description can be found in the manufacturer's documentation.

1.5 TEST CONDITIONS

For all tests the EUT was set up in accordance with the relevant test standard and to represent typical operating conditions. Tests were applied with the EUT situated in a shielded enclosure.

The EUT was powered from a 4.0 V DC supply.

FCC Accreditation
90987 Octagon House, Fareham Test Laboratory

1.6 DEVIATIONS FROM THE STANDARD

No deviations from the applicable test standard or test plan were made during testing.

1.7 MODIFICATION RECORD

Modification 0 - No modifications were made to the test sample during testing.



Product Service

SECTION 2

TEST DETAILS

Limited FCC Testing of the
Sharp 205SH AXGP & Quad-band WCDMA (FDD I/FDD V/FDD VIII/FDD XI) Dual-mode
Cellular Phone with Bluetooth, WLAN, Felica and GPS
In accordance with FCC CFR 47 Part 15C (WLAN and Bluetooth Low Energy)



2.1 AC LINE CONDUCTED EMISSIONS

2.1.1 Specification Reference

FCC CFR 47 Part 15C, Clause 15.207

2.1.2 Equipment Under Test and Modification State

205SH S/N: IMEI 004401114778885 - Modification State 0

2.1.3 Date of Test

24 April 2013

2.1.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.1.5 Test Procedure

The EUT is set up on a test table 800mm above a horizontal ground plane. A vertical ground plane is also required and is placed 400mm from the EUT. Where a EUT is floor standing it will be stood on but insulated from the ground plane by up to 12mm.

The EUT is powered through a Line Impedance Stabilisation Network (LISN) which is bonded to the ground plane. The EUT is located so that the distance between the EUT and the LISN is no less than 800mm. Where possible the cable between the mains input of the EUT and the LISN is 1m. Where this is not possible the cable is non inductively bundled with the bundle not exceeding 400mm in length.

A preliminary profile of the Conducted Emissions is obtained over the frequency range 150kHz to 30MHz. Any points of interest are noted for formal measurements.

During formal measurements, the measuring receiver is tuned to the emission of interest where Quasi – Peak and Average measurements are performed in a 9kHz Video and Resolution Bandwidth.

2.1.6 Environmental Conditions

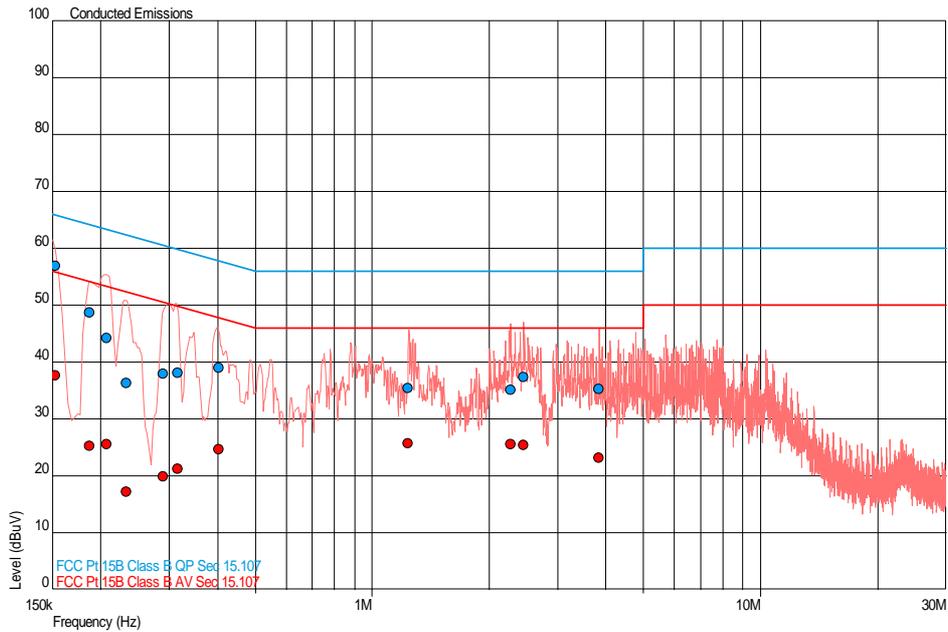
Ambient Temperature	21.0°C
Relative Humidity	36.0%



2.1.7 Test Results

802.11(g)

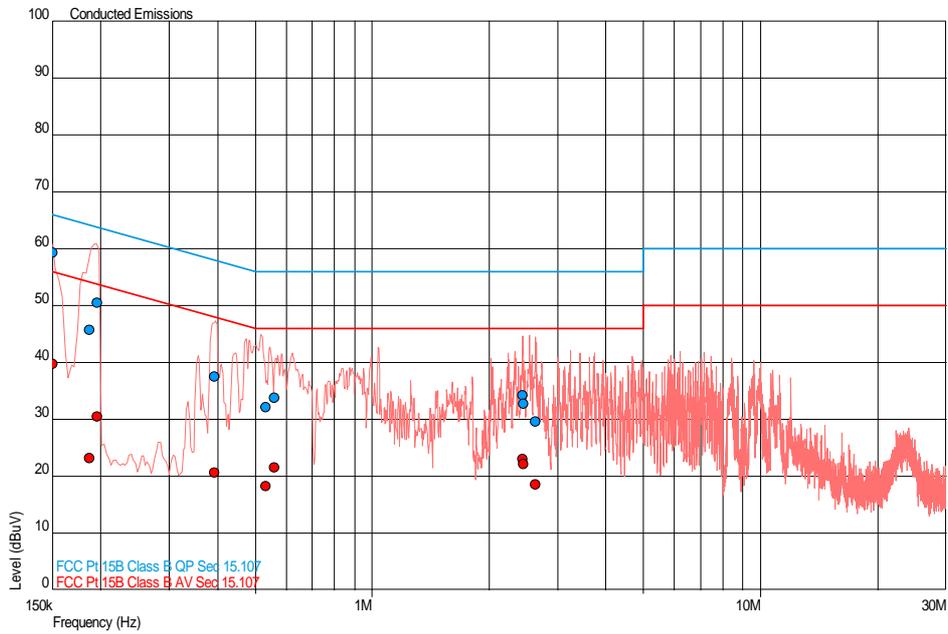
Live Line



Frequency (MHz)	QP Level (dBμV)	QP Limit (dBμV)	QP Margin (dBμV)	AV Level (dBμV)	AV Limit (dBμV)	AV Margin (dBμV)
0.152	56.9	65.9	-9.0	37.8	55.9	-18.1
0.187	48.7	64.2	-15.5	25.2	54.2	-28.9
0.207	44.3	63.3	-19.1	25.5	53.3	-27.8
0.233	36.3	62.3	-26.0	17.2	52.3	-35.1
0.290	38.0	60.5	-22.5	19.9	50.5	-30.6
0.315	38.1	59.8	-21.7	21.2	49.8	-28.6
0.403	39.0	57.8	-18.8	24.6	47.8	-23.2
1.238	35.5	56.0	-20.5	25.7	46.0	-20.3
2.275	35.2	56.0	-20.8	25.6	46.0	-20.4
2.456	37.4	56.0	-18.6	25.5	46.0	-20.5
3.832	35.3	56.0	-20.7	23.3	46.0	-22.7



Neutral Line



Frequency (MHz)	QP Level (dBµV)	QP Limit (dBµV)	QP Margin (dBµV)	AV Level (dBµV)	AV Limit (dBµV)	AV Margin (dBµV)
0.151	59.4	66.0	-6.6	39.8	56.0	-16.1
0.187	45.8	64.2	-18.4	23.3	54.2	-30.9
0.196	50.6	63.8	-13.2	30.6	53.8	-23.2
0.393	37.6	58.0	-20.4	20.7	48.0	-27.3
0.533	32.2	56.0	-23.8	18.3	46.0	-27.7
0.560	33.9	56.0	-22.1	21.5	46.0	-24.5
2.439	34.2	56.0	-21.8	23.0	46.0	-23.0
2.446	32.7	56.0	-23.3	22.1	46.0	-23.9
2.632	29.7	56.0	-26.3	18.6	46.0	-27.4



2.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER

2.2.1 Specification Reference

FCC CFR 47 Part 15C, Clause 15.247 (b)(3)

2.2.2 Equipment Under Test and Modification State

205SH S/N: IMEI 004401114778950 - Modification State 0

2.2.3 Date of Test

16 April 2013, 19 April 2013 & 10 July 2013

2.2.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.2.5 Test Procedure

The EUT was transmitted at maximum power via a cable to the Peak Power Analyser. The Analyser settings were adjusted to display the resultant trace on screen and a reference level offset was entered to account for the measurement path loss. The measurement bandwidth was set according to the signal being measured and the peak and average levels were recorded.

2.2.6 Environmental Conditions

Ambient Temperature	21.3 - 23.2°C
Relative Humidity	29.0 - 54.4%



Product Service

2.2.7 Test Results

802.11(b)

4.0 V DC Supply

Modulation Data Rate (Mbps)	Maximum Peak Conducted Output Power					
	dBm			mW		
	2412 MHz	2437 MHz	2462 MHz	2412 MHz	2437 MHz	2462 MHz
1	17.56	16.67	17.27	57.02	46.45	53.33
2	17.12	16.60	17.20	51.55	45.73	52.46
5.5	17.07	16.54	17.19	50.96	45.13	52.34
11	17.16	16.75	17.34	52.01	47.34	54.17

Limit Clause

The maximum peak conducted output power of the intentional radiator shall not exceed the following:

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non overlapping hopping channels, and all frequency hopping systems in the 5725-5850MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt.



Product Service

802.11(g)

4.0 V DC Supply

Modulation Data Rate (Mbps)	Maximum Peak Conducted Output Power					
	dBm			mW		
	2412 MHz	2437 MHz	2462 MHz	2412 MHz	2437 MHz	2462 MHz
6	21.67	21.23	21.79	146.81	132.70	150.86
9	21.45	21.25	21.63	139.52	133.41	145.48
12	21.65	21.14	21.88	146.39	146.39	130.09
18	21.45	21.17	22.14	139.61	131.05	163.72
24	21.60	21.33	21.86	144.60	135.89	153.53
36	21.67	21.31	21.83	146.86	135.21	152.48
48	21.52	21.30	21.84	141.79	134.87	152.72
54	21.56	21.30	21.79	143.22	134.80	151.06

Limit Clause

The maximum peak conducted output power of the intentional radiator shall not exceed the following:

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non overlapping hopping channels, and all frequency hopping systems in the 5725-5850MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt.



Product Service

802.11(n)

4.0 V DC Supply

Modulation Data Rate (Mbps)	Maximum Peak Conducted Output Power					
	dBm			mW		
	2412 MHz	2437 MHz	2462 MHz	2412 MHz	2437 MHz	2462 MHz
6.5	21.12	20.76	20.77	129.29	119.06	119.29
13	21.38	20.69	21.45	137.39	117.17	139.66
19.5	21.35	20.64	21.41	136.41	115.89	138.51
26	20.99	21.06	21.24	125.47	127.73	132.93
39	21.04	20.77	21.28	127.11	119.43	134.41
52	21.25	21.07	21.57	133.33	128.01	143.71
58.5	21.25	20.46	21.22	133.35	111.21	132.42
65	21.54	20.41	21.49	142.43	109.97	140.87

Limit Clause

The maximum peak conducted output power of the intentional radiator shall not exceed the following:

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non overlapping hopping channels, and all frequency hopping systems in the 5725-5850MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt.



Product Service

Bluetooth Low Energy

4.0 V DC Supply

Packet Type	Maximum Peak Conducted Output Power					
	dBm			mW		
	2402 MHz	2441 MHz	2480 MHz	2402 MHz	2441 MHz	2480 MHz
37oct/prbs9	2.52	1.25	1.31	1.785	1.333	1.351

Limit Clause

The maximum peak conducted output power of the intentional radiator shall not exceed the following:

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non overlapping hopping channels, and all frequency hopping systems in the 5725-5850MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt.



2.3 EIRP PEAK POWER

2.3.1 Specification Reference

FCC CFR 47 Part 15C, Clause 15.247 (b)(4)

2.3.2 Equipment Under Test and Modification State

205SH S/N: IMEI 004401114778877 - Modification State 0

205SH S/N: IMEI 004401114778885 - Modification State 0

2.3.3 Date of Test

13 April 2013, 30 April 2013 & 10 July 2013

2.3.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.3.5 Test Procedure

The EUT was transmitted at maximum power via a cable to the Spectrum Analyser. The Analyser settings were adjusted to display the resultant trace on screen and a resolution bandwidth and video bandwidth of 1 MHz were used to perform the measurement. The level on the spectrum analyser was maximised by rotating the EUT 360° and a height search of the measuring antenna. A substitution was then performed using a substitution antenna and signal generator.

This level was maximised by adjusting the height of the measuring antenna once more. The level from the signal generator was then adjusted to achieve the same raw result as with the EUT. This level was then corrected to account for cable loss and antenna factor. If applicable, a peak power analyser was also used to obtain a correction factor for wideband signals such as WLAN.

A calculation was then performed to obtain the final figure.

2.3.6 Environmental Conditions

Ambient Temperature	19.1 - 20.7°C
Relative Humidity	25.5 - 38.2%



Product Service

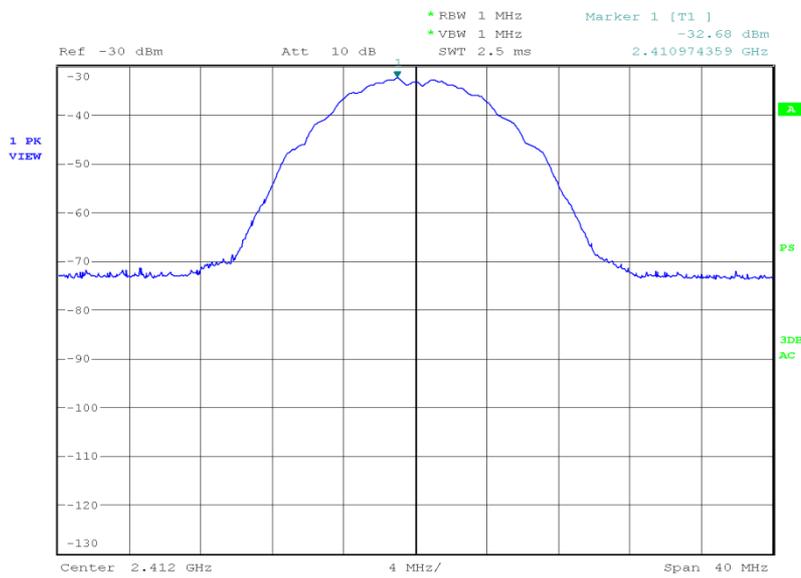
2.3.7 Test Results

802.11(b)

4.0 V DC Supply

2412 MHz

EIRP (dBm)	EIRP (mW)
16.11	40.83



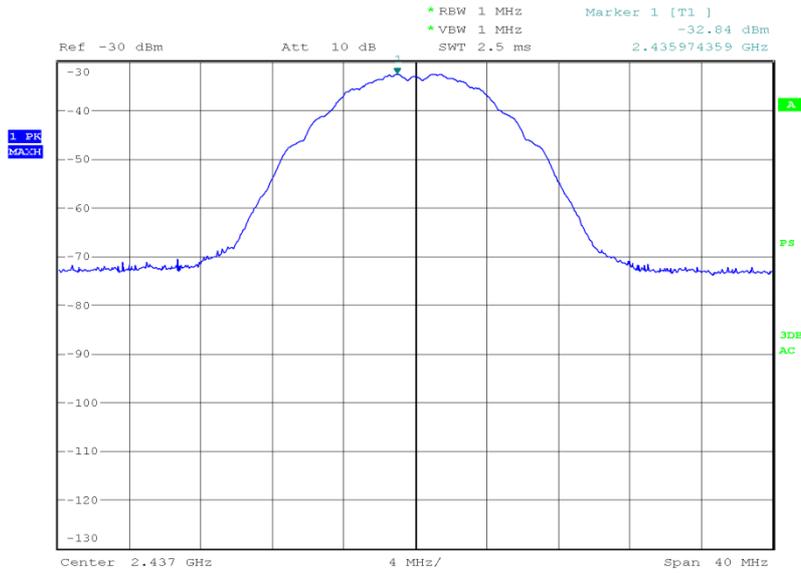
Date: 13.APR.2013 11:45:48



Product Service

2437 MHz

EIRP (dBm)	EIRP (mW)
16.03	40.09



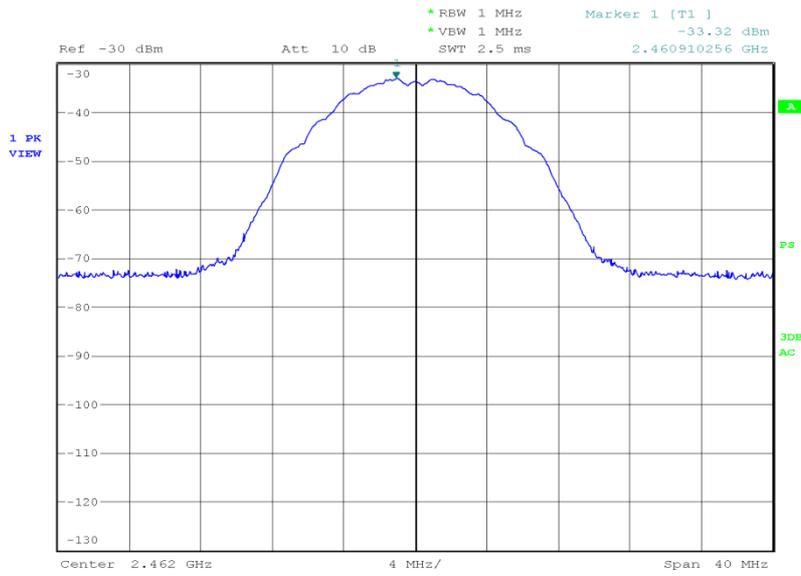
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Product Service

2462 MHz

EIRP (dBm)	EIRP (mW)
14.46	27.93



Date: 13.APR.2013 11:51:45

Limit

EIRP (dBm)	EIRP (mW)
36.0	4000



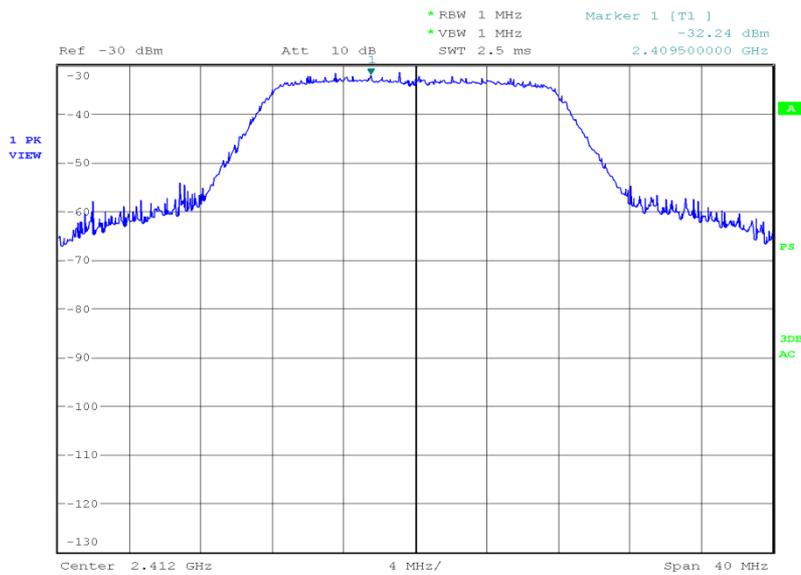
Product Service

802.11(g)

4.0 V DC Supply

2412 MHz

EIRP (dBm)	EIRP (mW)
17.72	59.16



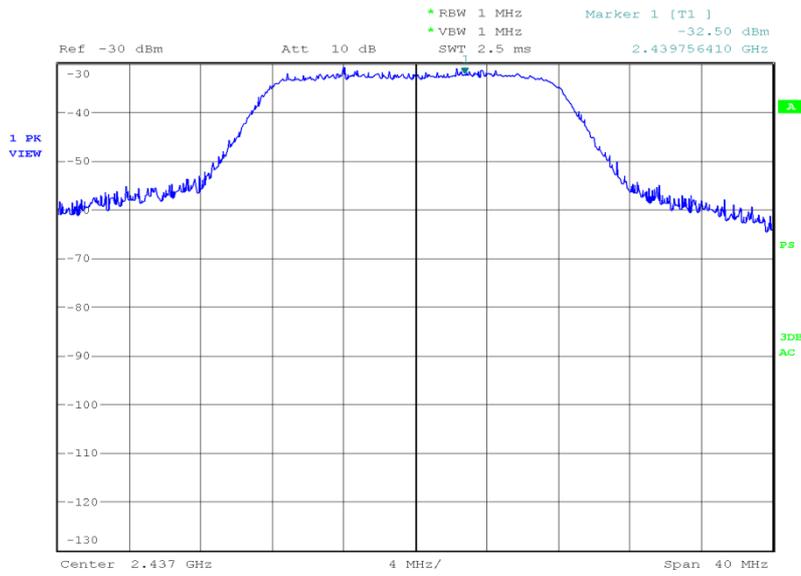
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Product Service

2437 MHz

EIRP (dBm)	EIRP (mW)
17.59	57.41



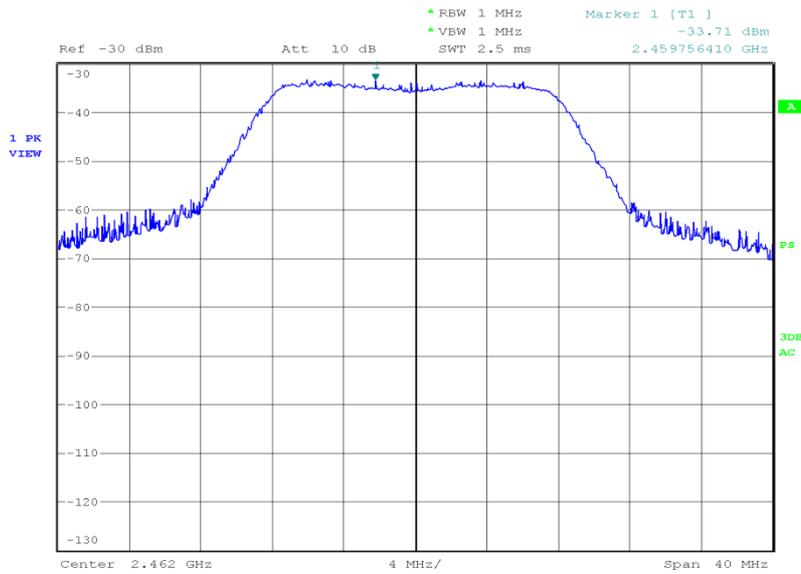
Date: 13.APR.2013 12:40:28



Product Service

2462 MHz

EIRP (dBm)	EIRP (mW)
15.57	36.06



Date: 13.APR.2013 12:54:02

Limit

EIRP (dBm)	EIRP (mW)
36.0	4000



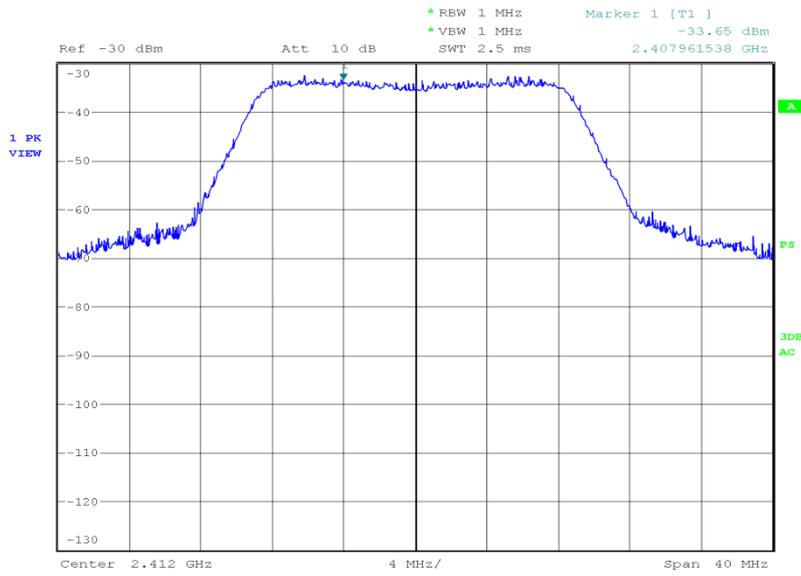
Product Service

802.11(n)

4.0 V DC Supply

2412 MHz

EIRP (dBm)	EIRP (mW)
16.80	47.86



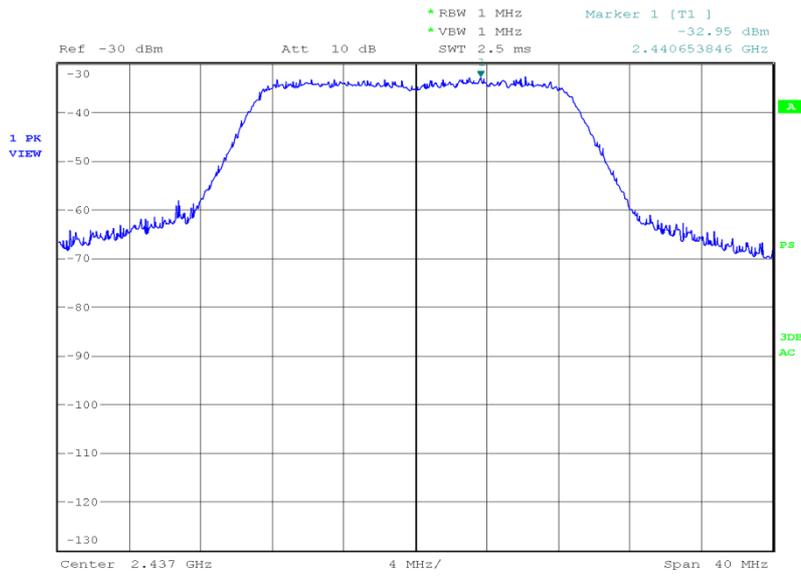
Date: 13.APR.2013 13:30:12



Product Service

2437 MHz

EIRP (dBm)	EIRP (mW)
16.53	44.98



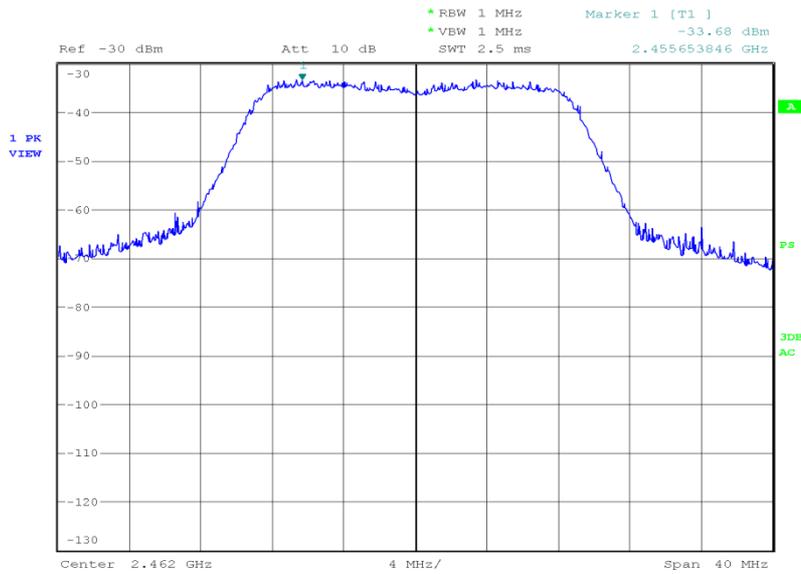
Date: 13.APR.2013 13:20:57



Product Service

2462 MHz

EIRP (dBm)	EIRP (mW)
16.29	42.56



Date: 13.APR.2013 13:36:14

Limit

EIRP (dBm)	EIRP (mW)
36.0	4000



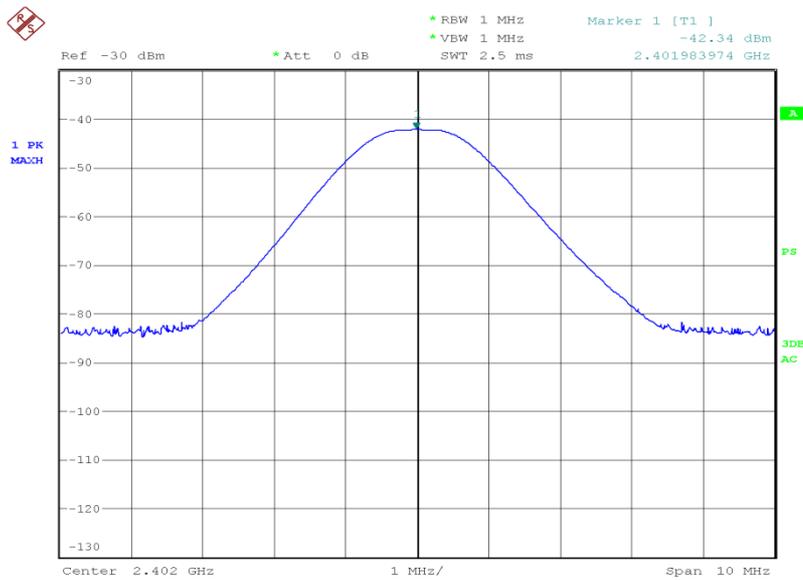
Product Service

Bluetooth Low Energy

4.0 V DC Supply

2402 MHz

EIRP (dBm)	EIRP (mW)
-0.29	0.935



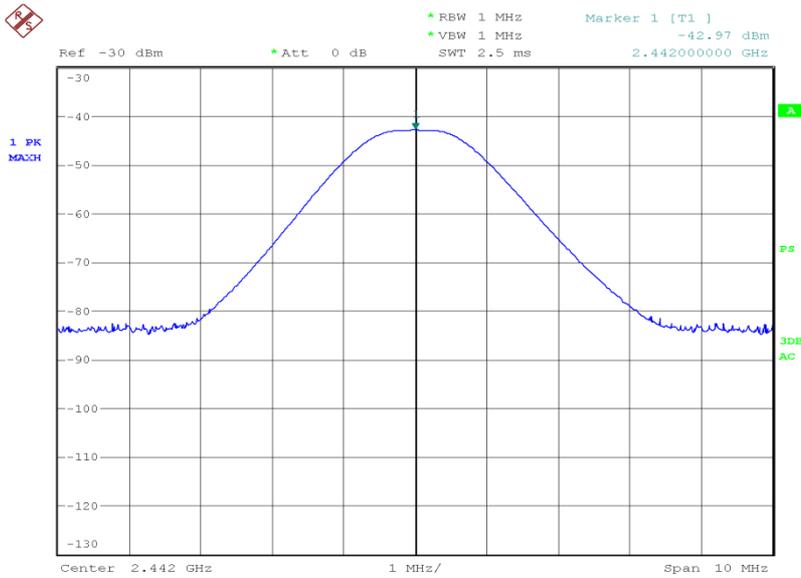
Date: 10.JUL.2013 17:11:04



Product Service

2441 MHz

EIRP (dBm)	EIRP (mW)
-1.12	0.773



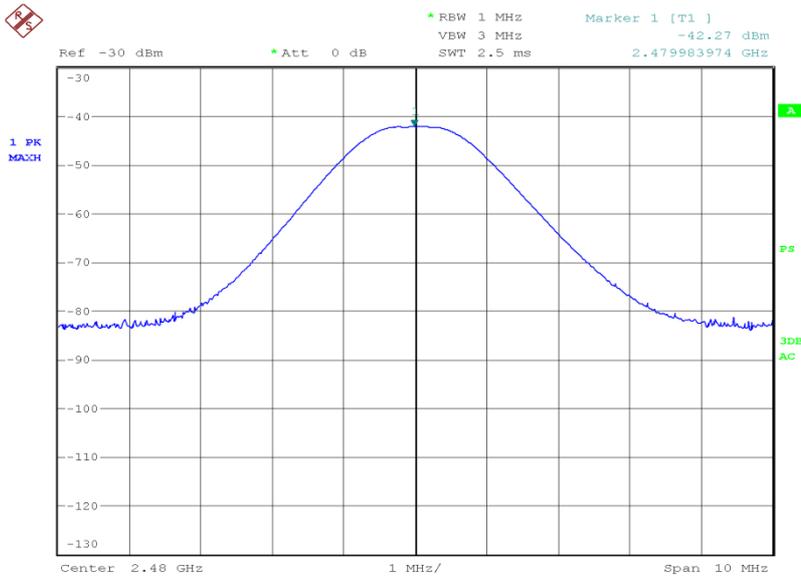
Date: 10.JUL.2013 17:31:48



Product Service

2480 MHz

EIRP (dBm)	EIRP (mW)
-0.25	0.945



Date: 10.JUL.2013 17:48:53

Limit

EIRP (dBm)	EIRP (mW)
36.0	4000



Product Service

2.4 SPURIOUS AND BAND EDGE EMISSIONS

2.4.1 Specification Reference

FCC CFR 47 Part 15C, Clause 15.247 (d)

2.4.2 Equipment Under Test and Modification State

205SH S/N: IMEI 004401114779164 - Modification State 0

205SH S/N: IMEI 004401114778885 - Modification State 0

2.4.3 Date of Test

13 April 2013, 17 April 2013, 18 April 2013, 19 April 2013, 20 April 2013, 24 April 2013 & 10 July 2013

2.4.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.4.5 Test Procedure

For conducted emissions, the EUT was set to operate at maximum power on the worst case data rate. The test was performed on the bottom, middle and top channels. The test was performed from 9 kHz to 25 GHz. Firstly, the power of each fundamental frequency was measured in 100 kHz bandwidth and this was used to show a -20 dBc limit line on the trace. The measurement path loss in each relevant frequency band was measured and entered as a reference level offset.

For radiated emissions, the test method described above was also used. However, the measurement was performed from 30 MHz to 25 GHz and the path loss is incorporated as a transducer factor and entered into the spectrum analyser.

The band edge measurements were performed in accordance with ANSI C63.10, Clause 6.9.3. The results were analysed to ensure compliance with restricted bands. The EUT was set to the lowest and highest operating frequencies.

2.4.6 Environmental Conditions

Ambient Temperature	19.3 - 23.7°C
Relative Humidity	37.8 - 54.4%



Product Service

2.4.7 Test Results

802.11(b)

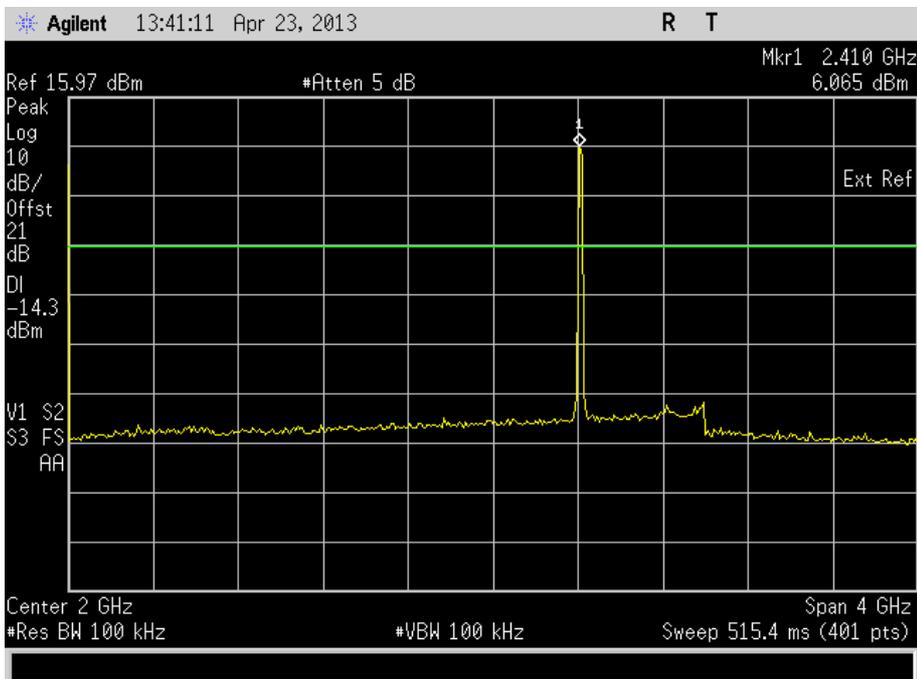
4.0 V DC Supply

Spurious Conducted Emissions

1 Mbps

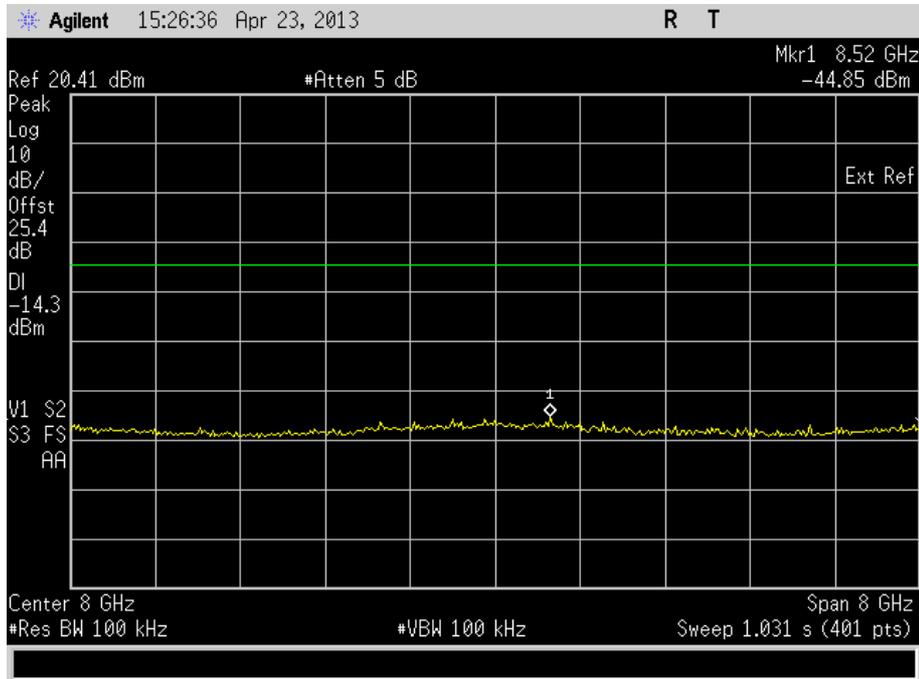
2412 MHz

9 kHz to 4 GHz

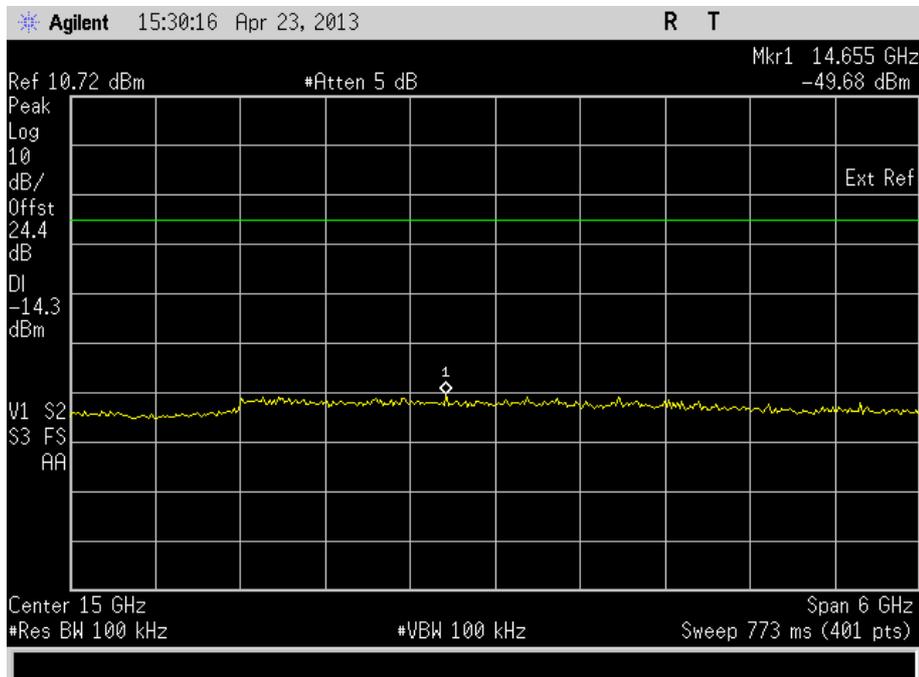




4 GHz to 12 GHz

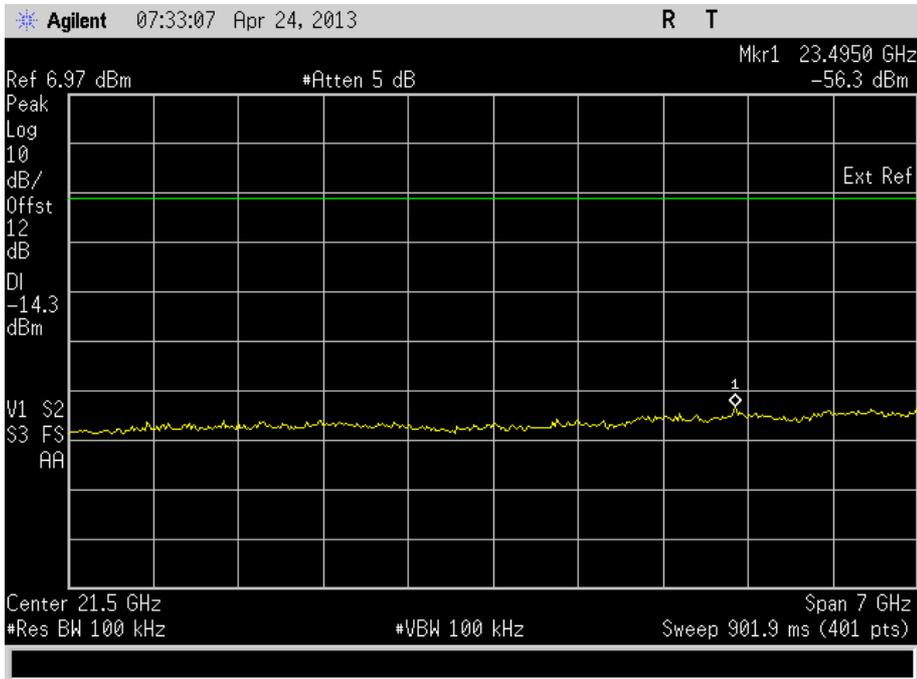


12 GHz to 18 GHz



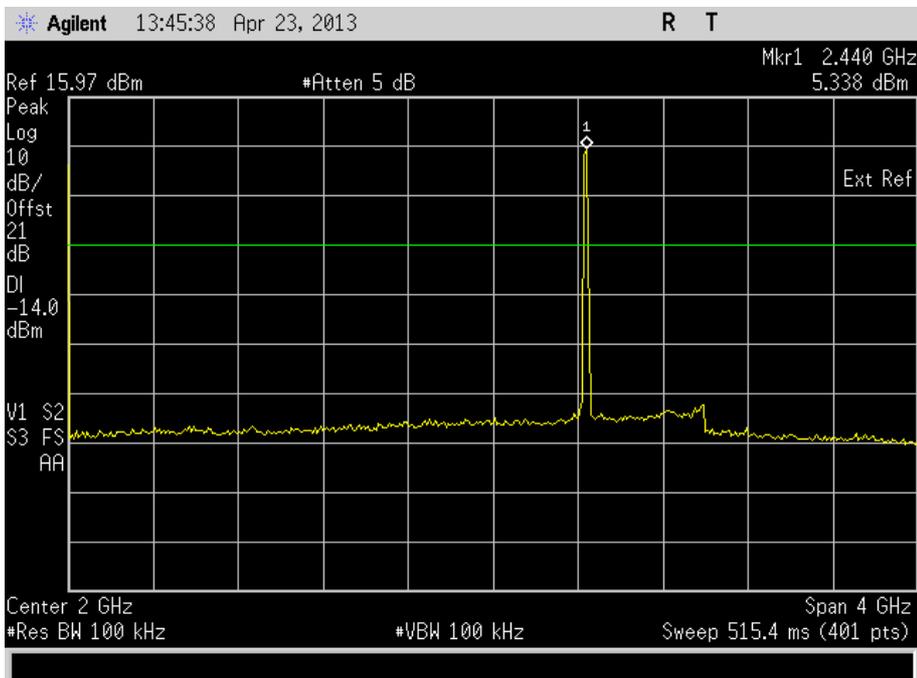


18 GHz to 25 GHz



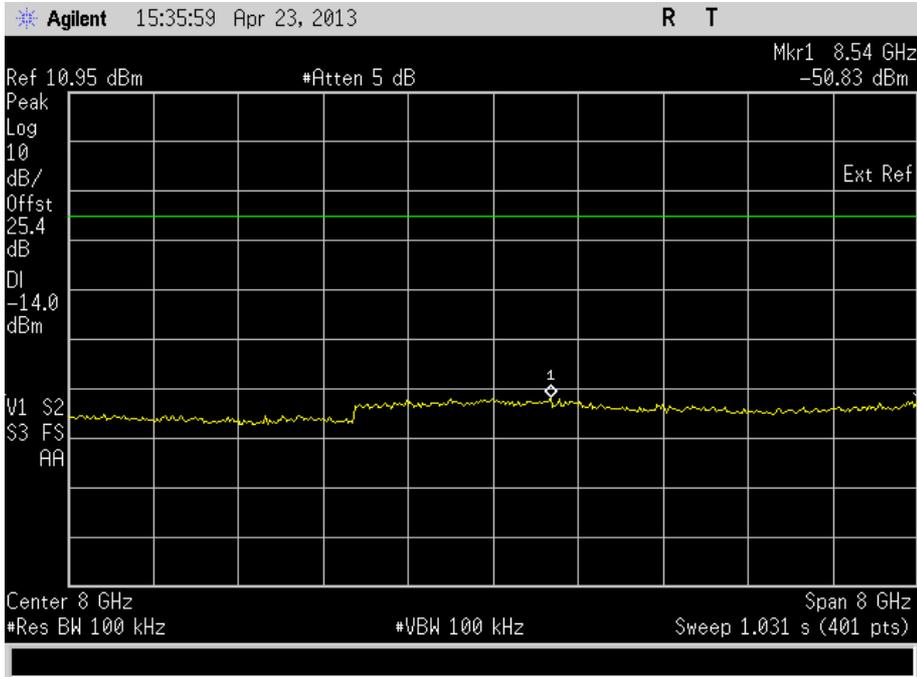
2437 MHz

9 kHz to 4 GHz

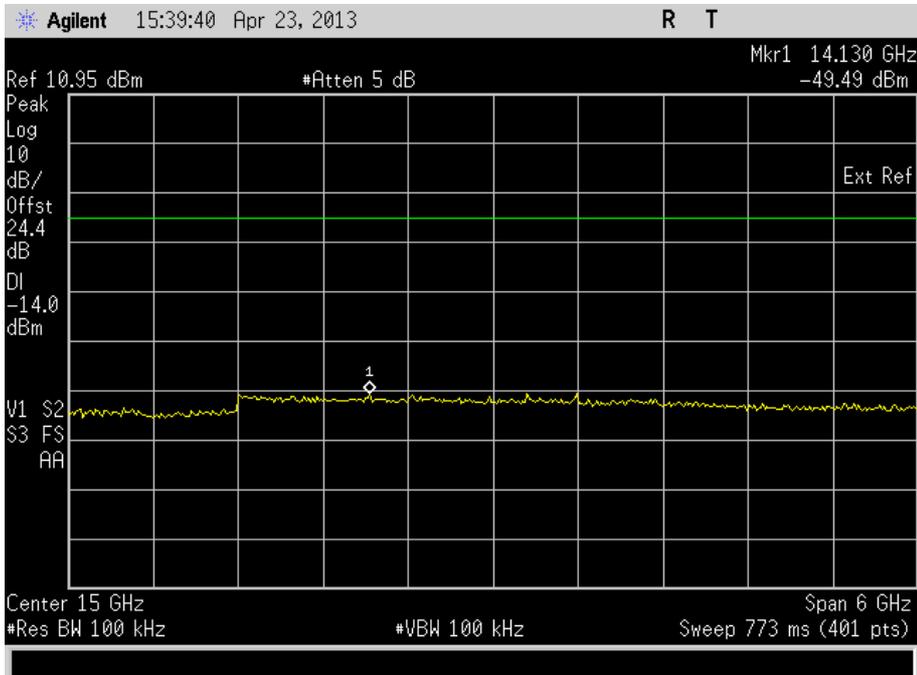




4 GHz to 12 GHz



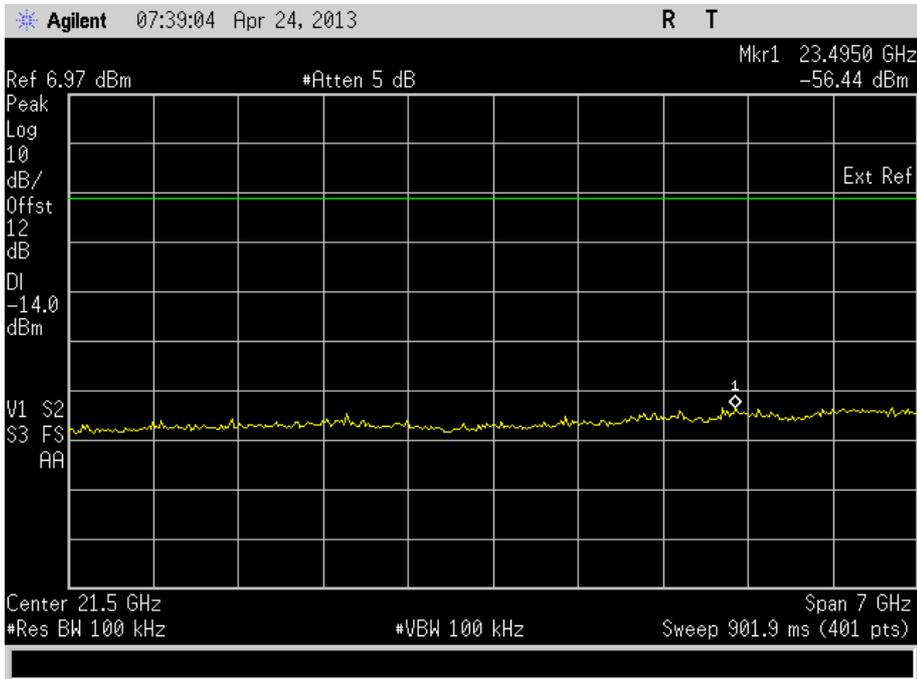
12 GHz to 18 GHz





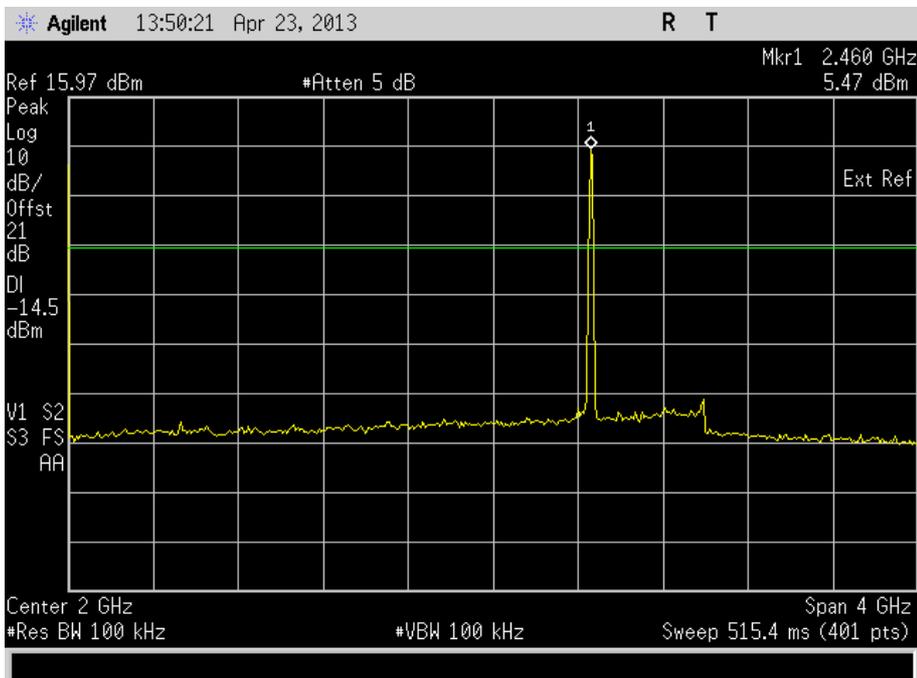
Product Service

18 GHz to 25 GHz



2462 MHz

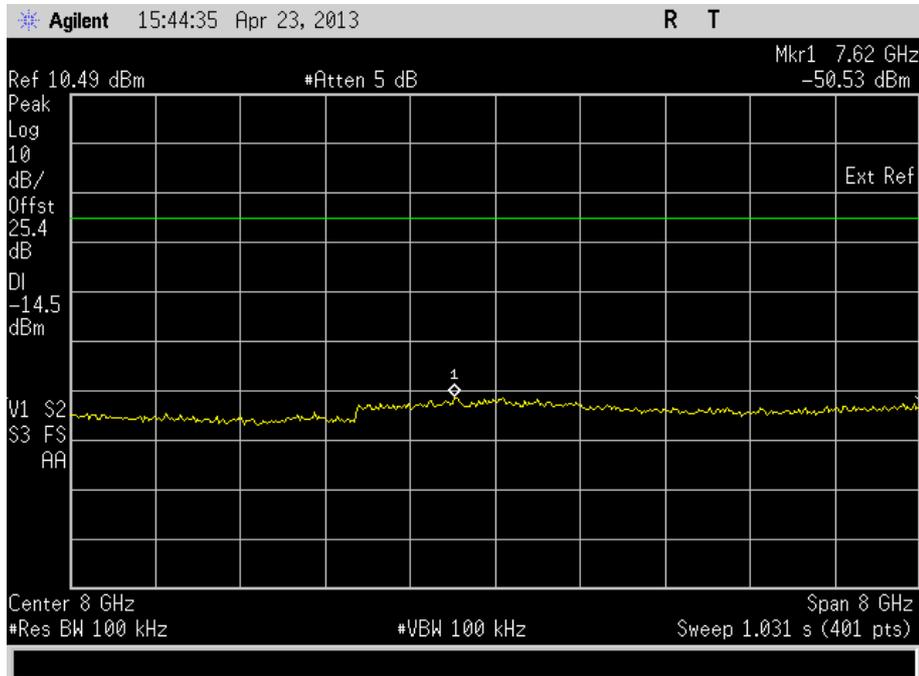
9 kHz to 4 GHz



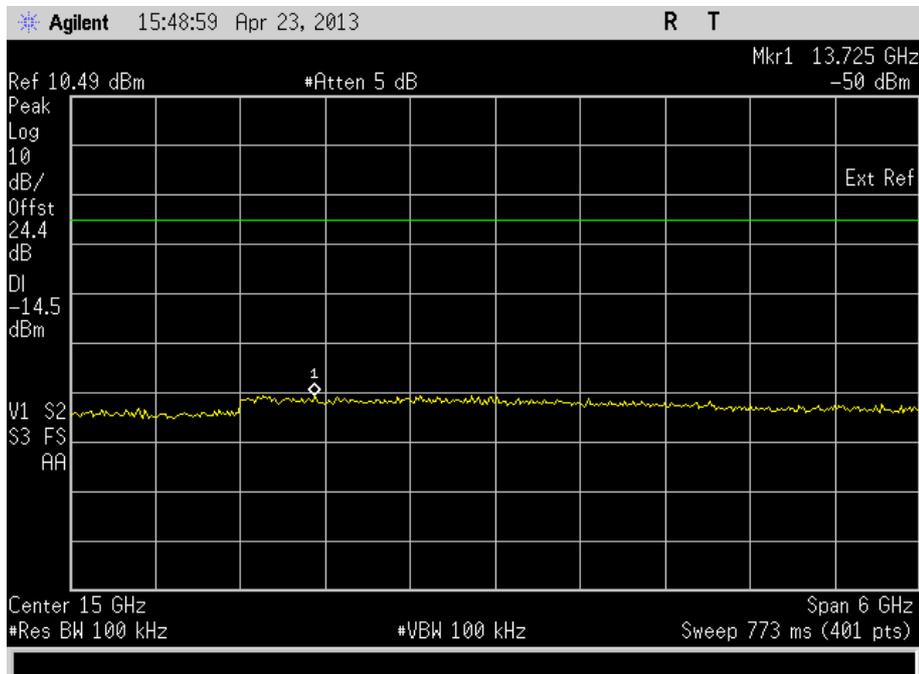


Product Service

4 GHz to 12 GHz



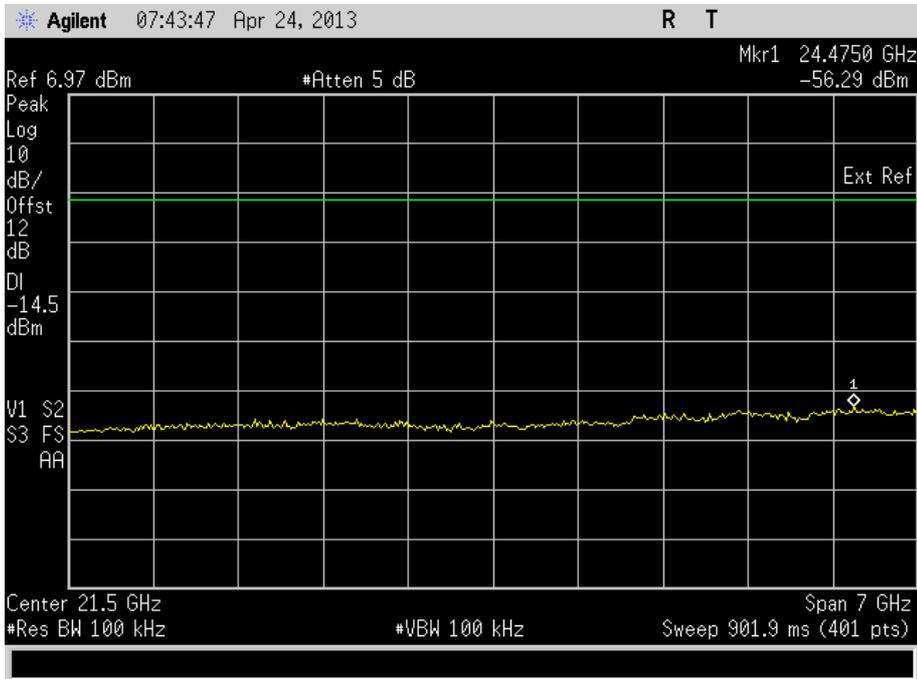
12 GHz to 18 GHz





Product Service

18 GHz to 25 GHz



Limit Clause

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.

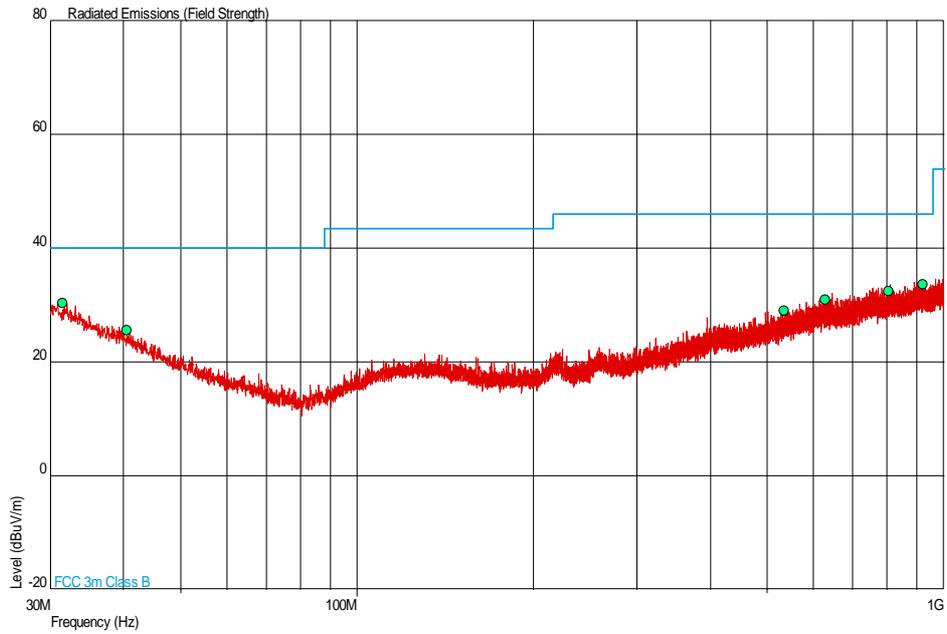
If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval the attenuation required shall be 30 dB instead of 20 dB.



Spurious Radiated Emissions

2412 MHz

30 MHz to 1 GHz



Frequency (MHz)	QP Level (dBuV/m)	QP Level (uV/m)	QP Limit (dBuV/m)	QP Limit (uV/m)	QP Margin (dBuV/m)	QP Margin (uV/m)	Angle (Deg)	Height (m)	Polarity
31.504	30.4	33.1	40.0	100	-9.6	66.9	0	1.00	Horizontal
40.525	25.7	19.3	40.0	100	-14.3	80.7	0	1.00	Vertical
535.079	29.0	28.2	46.0	200	-17.0	171.8	0	1.00	Vertical
628.830	30.9	35.1	46.0	200	-15.1	164.9	0	1.00	Vertical
805.116	32.5	42.2	46.0	200	-13.5	157.8	0	1.00	Vertical
920.459	33.6	47.9	46.0	200	-12.4	152.1	0	1.00	Vertical

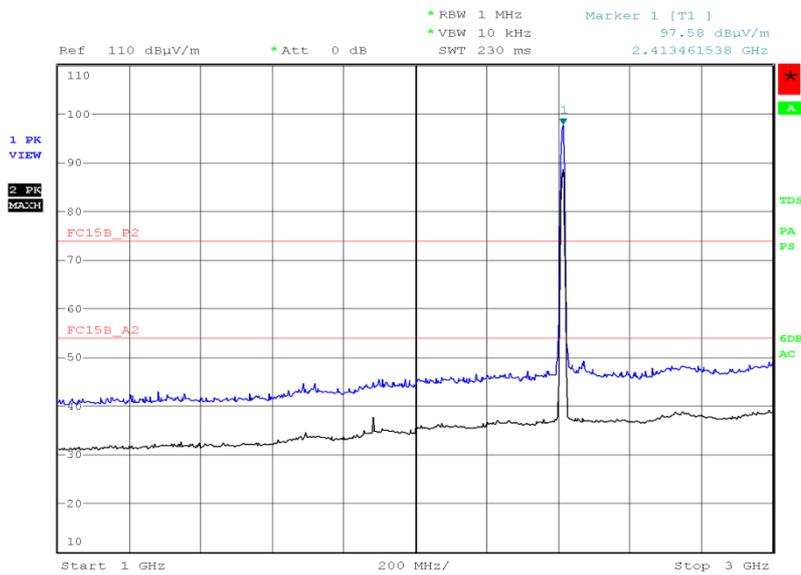


1GHz to 25GHz

Frequency (GHz)	Antenna Polarisation	Antenna Height (cm)	EUT Arc (degrees)	Final Peak (dBµV/m)	Final Average (dBµV/m)
4.824	Horizontal	100	247	43.75	39.30
9.648	Horizontal	110	52	43.57	N/A*

*This emission is not in a restricted band therefore the limit of 20 dBc in 100 kHz bandwidth is applied.

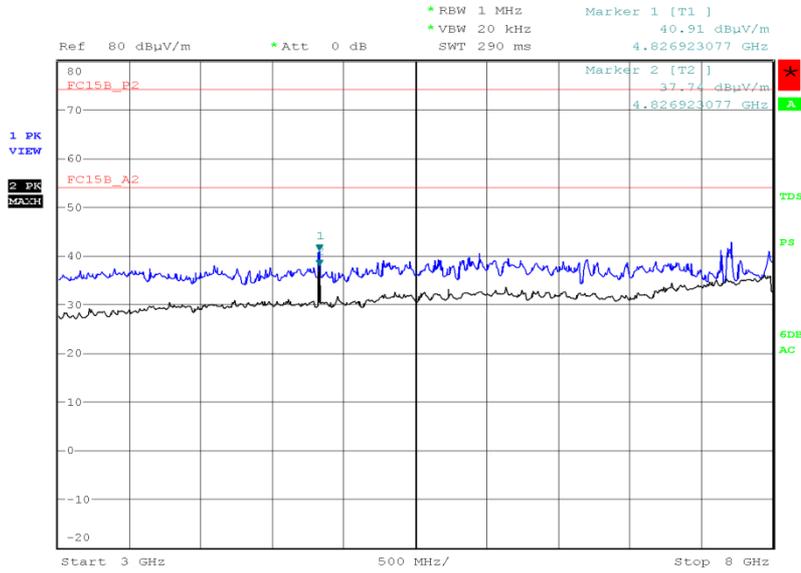
1 GHz to 3 GHz



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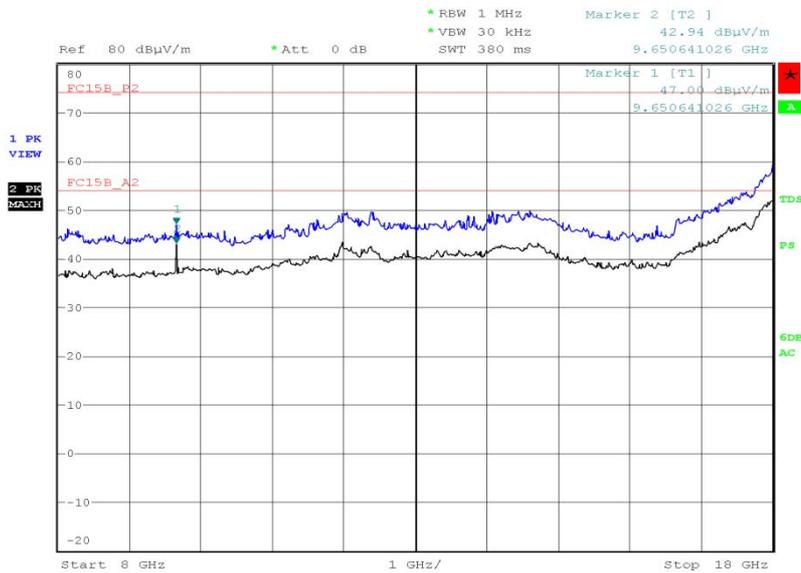


3 GHz to 8 GHz



Date: 17.APR.2013 21:51:14

8 GHz to 18 GHz

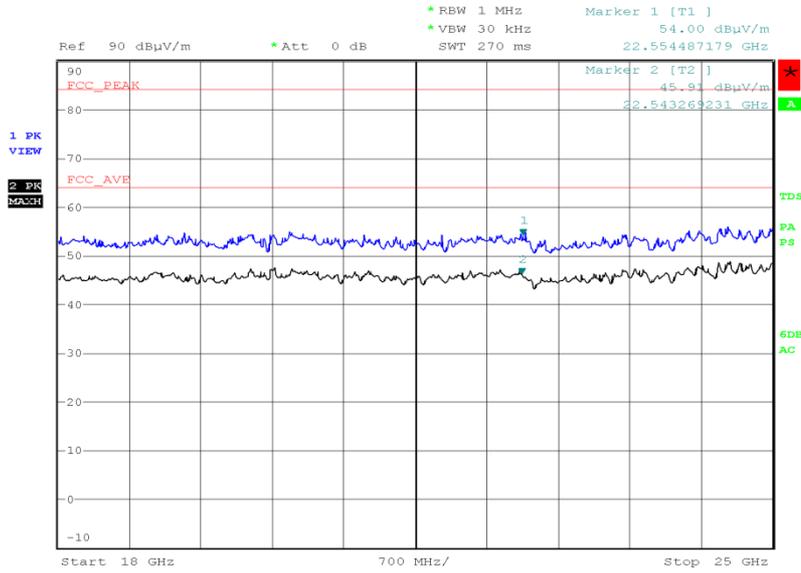


Date: 18.APR.2013 02:10:42



Product Service

18 GHz to 25 GHz



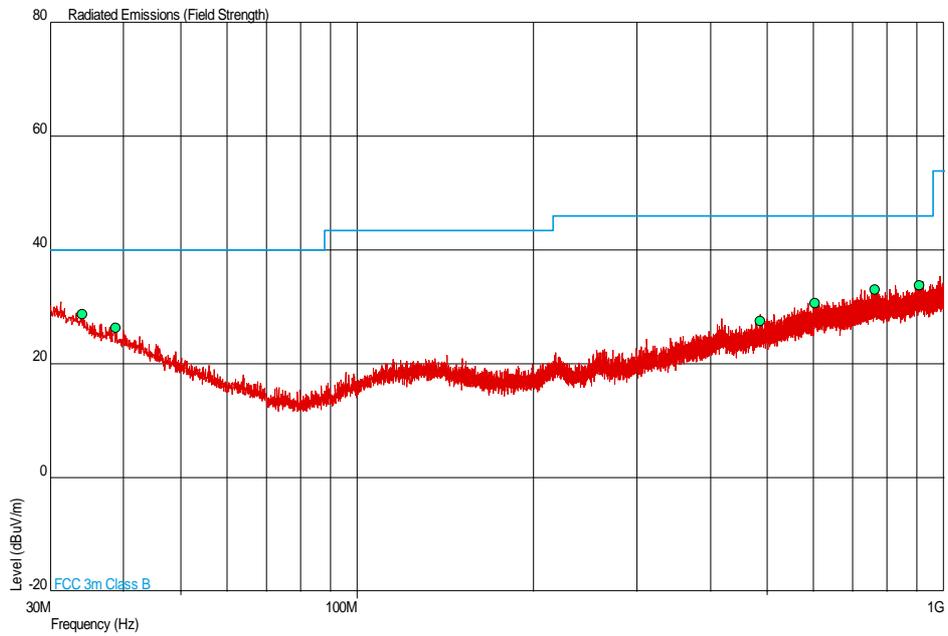
Date: 18.APR.2013 22:04:20



Product Service

2437 MHz

30 MHz to 1 GHz



Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
33.977	28.8	27.5	40.0	100	-11.2	72.5	0	1.00	Horizontal
38.730	26.4	20.9	40.0	100	-13.6	79.1	0	1.00	Vertical
485.803	27.5	23.7	46.0	200	-18.5	176.3	0	1.00	Vertical
602.640	30.7	34.3	46.0	200	-15.3	165.7	0	1.00	Vertical
763.805	33.1	45.2	46.0	200	-12.9	154.8	0	1.00	Vertical
909.742	33.8	49.0	46.0	200	-12.2	151.0	0	1.00	Vertical

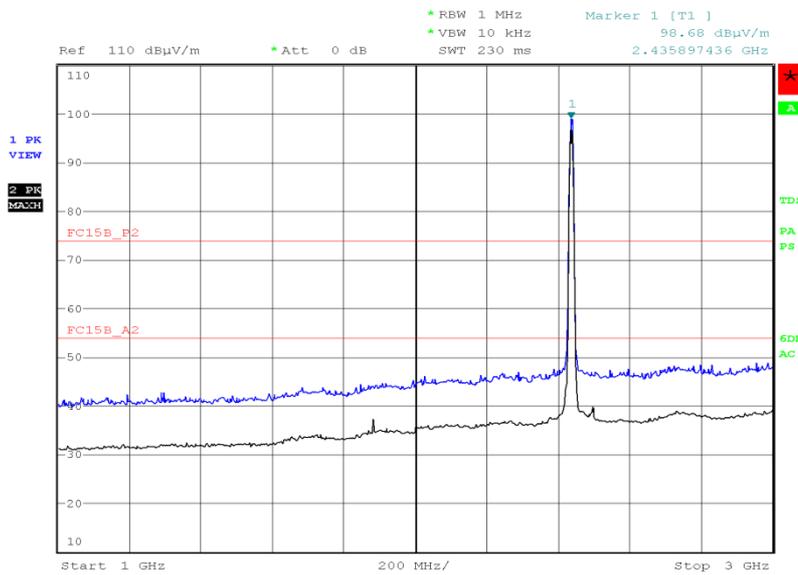


1GHz to 25GHz

Frequency (GHz)	Antenna Polarisation	Antenna Height (cm)	EUT Arc (degrees)	Final Peak (dBµV/m)	Final Average (dBµV/m)
4.873	Horizontal	100	256	47.66	43.78
9.748	Horizontal	128	68	44.76	N/A*

*This emission is not in a restricted band therefore the limit of 20 dBc in 100 kHz bandwidth is applied.

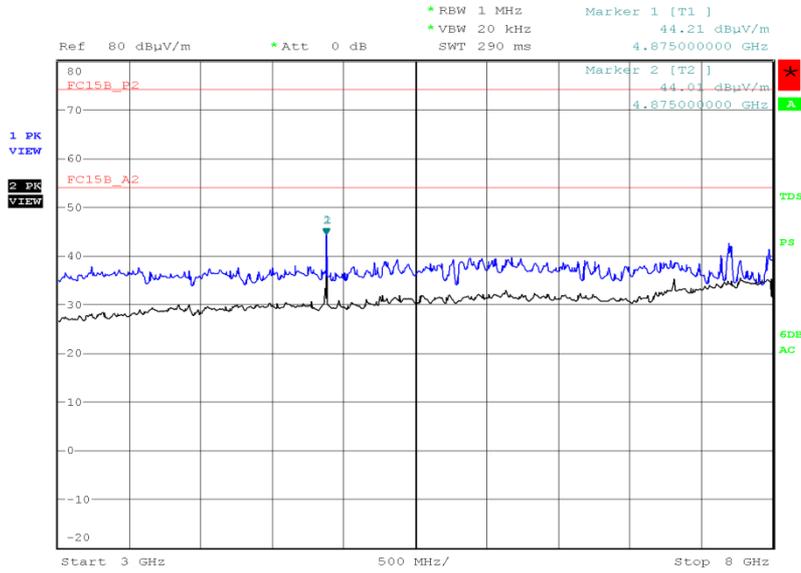
1 GHz to 3 GHz



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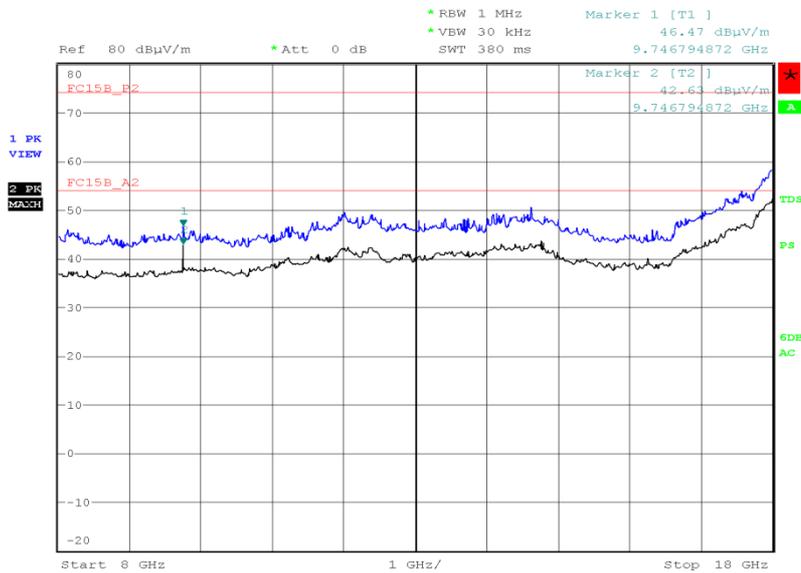


3 GHz to 8 GHz



Date: 17.APR.2013 21:58:01

8 GHz to 18 GHz

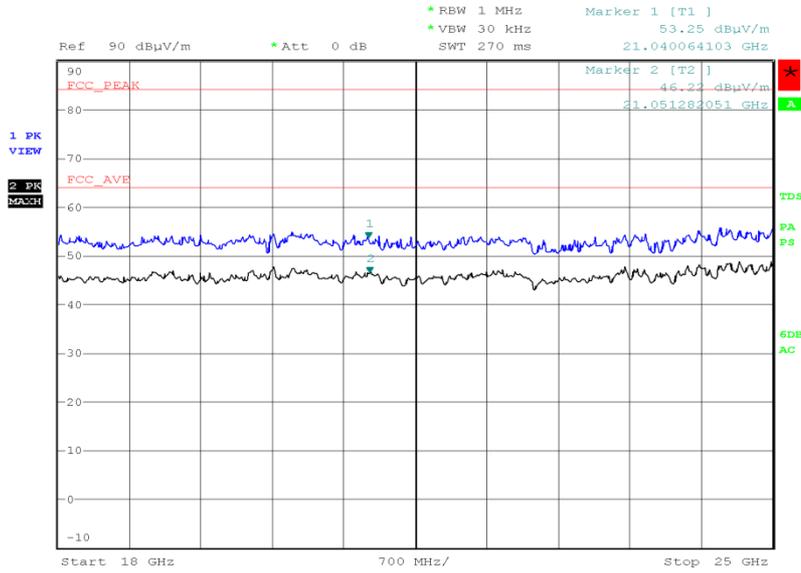


Date: 18.APR.2013 02:17:18



Product Service

18 GHz to 25 GHz

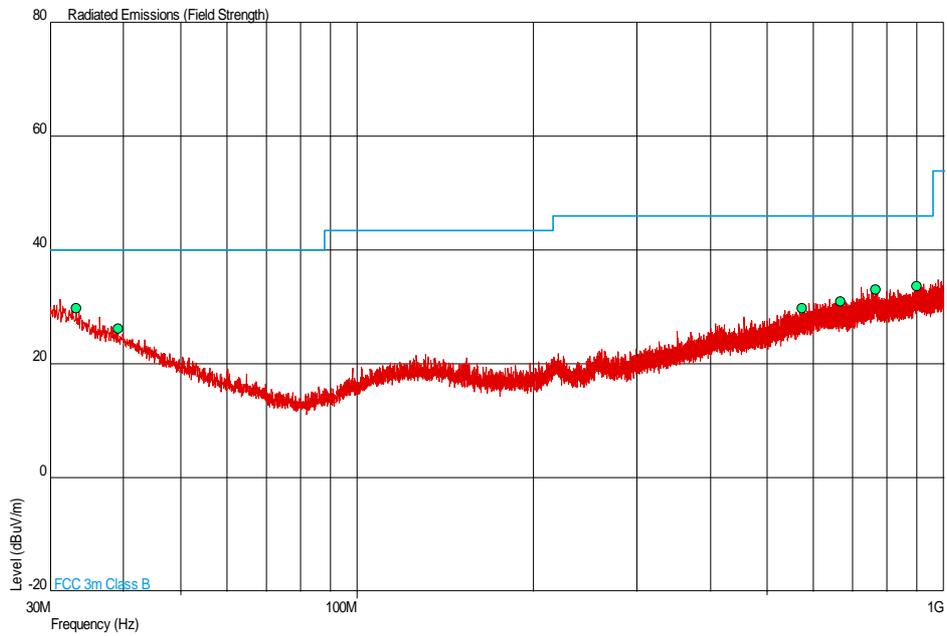


Date: 18.APR.2013 22:11:16



2462 MHz

30 MHz to 1 GHz



Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
33.201	29.8	27.5	40.0	100	-10.2	72.5	0	1.00	Vertical
39.118	26.2	20.9	40.0	100	-13.8	79.1	0	1.00	Horizontal
572.812	29.8	23.7	46.0	200	-16.2	176.3	0	1.00	Vertical
666.417	30.9	34.3	46.0	200	-15.1	165.7	0	1.00	Vertical
765.115	33.1	45.2	46.0	200	-12.9	154.8	0	1.00	Vertical
899.654	33.6	49.0	46.0	200	-12.4	151.0	0	1.00	Horizontal



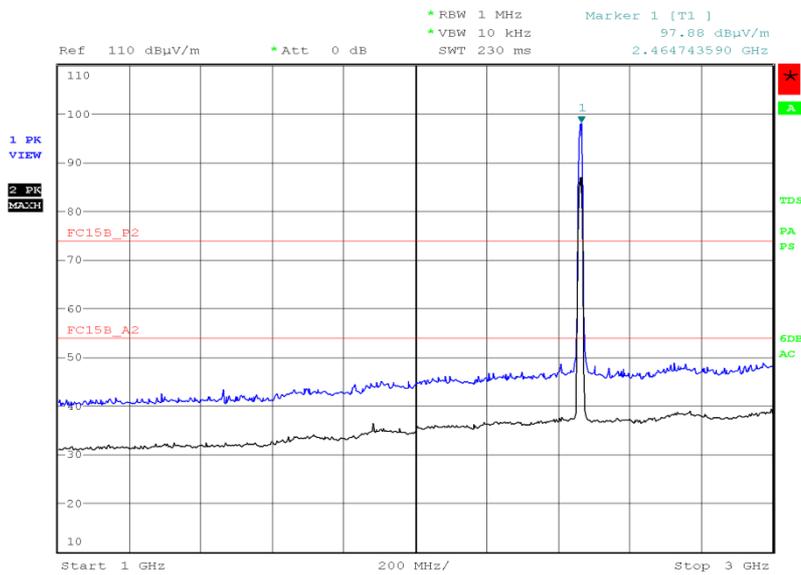
Product Service

1GHz to 25GHz

Frequency (GHz)	Antenna Polarisation	Antenna Height (cm)	EUT Arc (degrees)	Final Peak (dBµV/m)	Final Average (dBµV/m)
4.924	Horizontal	100	235	45.69	41.93
9.848	Horizontal	165	69	42.94	N/A*

*This emission is not in a restricted band therefore the limit of 20 dBc in 100 kHz bandwidth is applied.

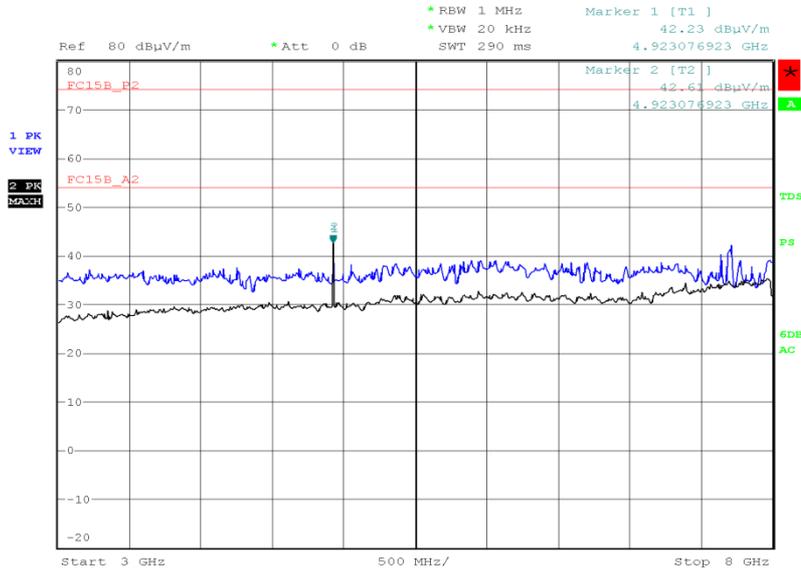
1 GHz to 3 GHz



Date: 13.APR.2013 16:50:24

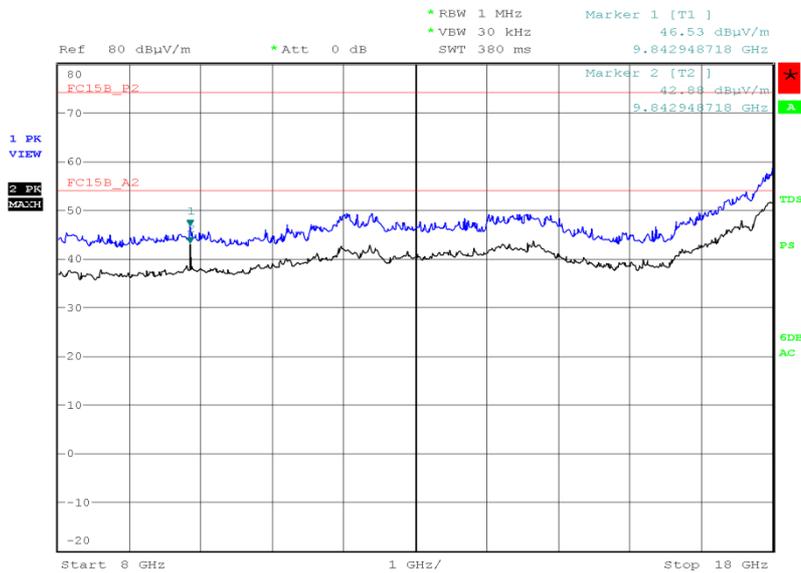


3 GHz to 8 GHz



Date: 17.APR.2013 22:05:48

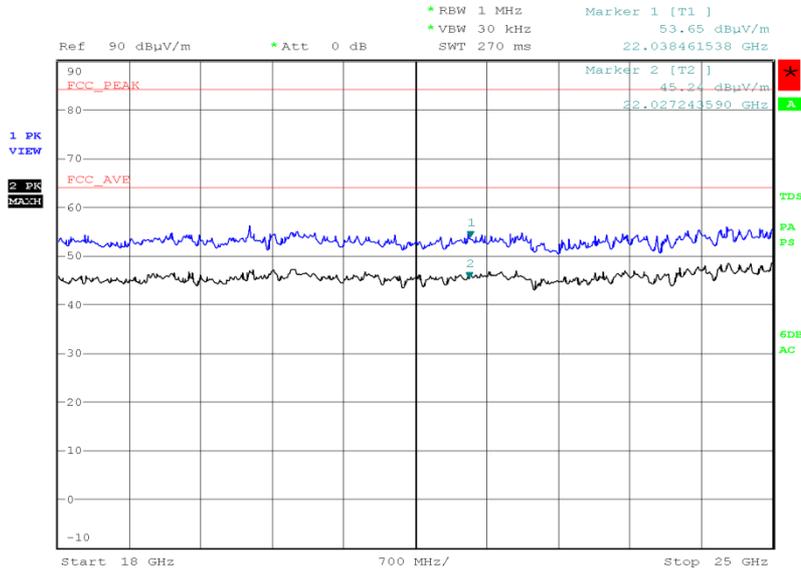
8 GHz to 18 GHz



Date: 18.APR.2013 02:24:06



18 GHz to 25 GHz



Date: 18.APR.2013 22:23:03

Limit

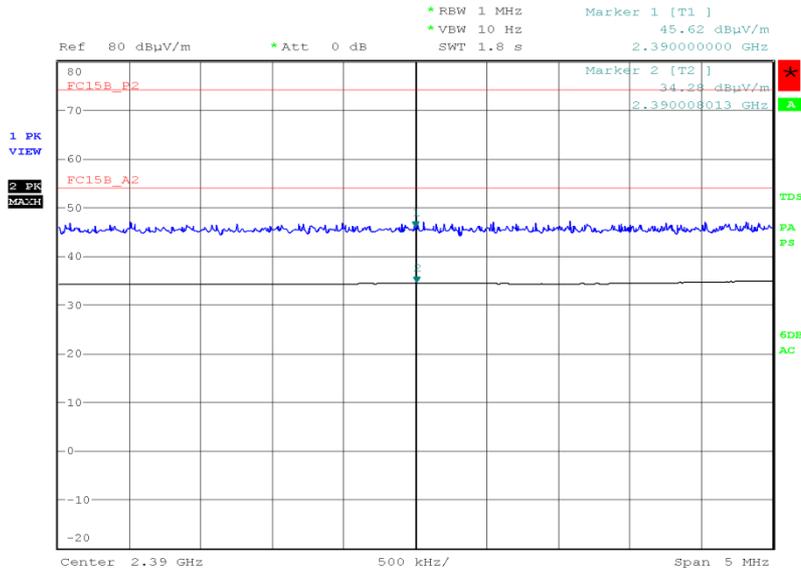
Peak (dBµV/m)	Average (dBµV/m)
74.0	54.0



Band Edge Emissions

2412 MHz

Polarisation	Final Peak (dBµV/m)	Final Average (dBµV/m)
Horizontal	45.62	34.28

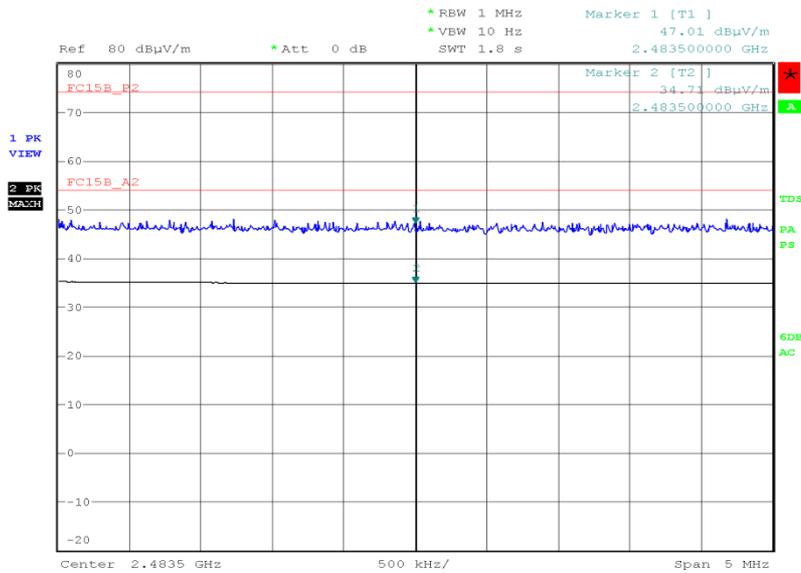


Date: 13.APR.2013 15:04:46



2462 MHz

Polarisation	Final Peak (dBµV/m)	Final Average (dBµV/m)
Horizontal	47.01	34.71



Date: 13.APR.2013 15:09:57

Limit

Peak (dBµV/m)	Average (dBµV/m)
74.0	54.0



Product Service

802.11(g)

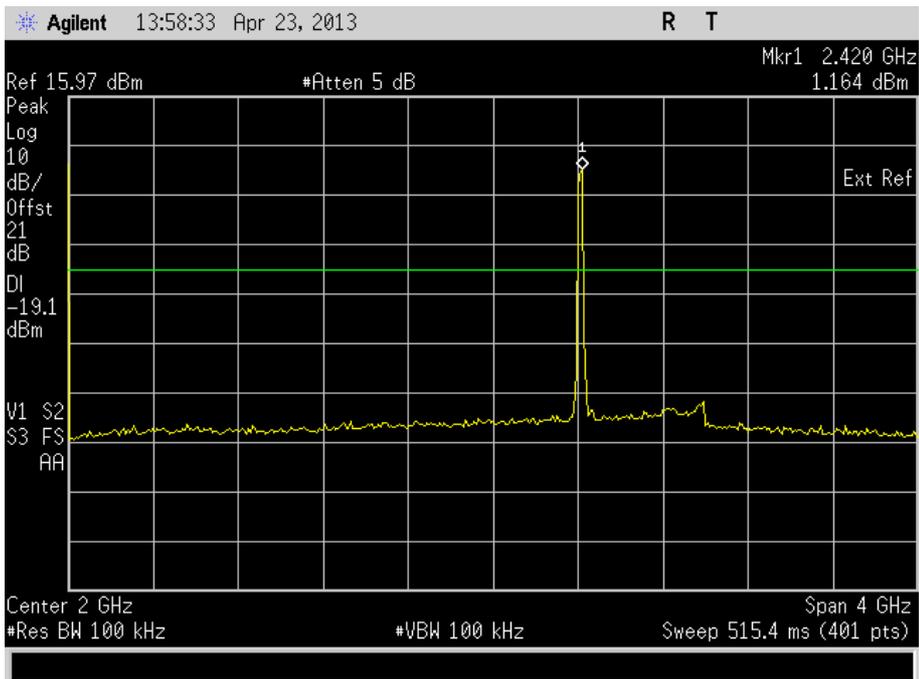
4.0 V DC Supply

Spurious Conducted Emissions

6 Mbps

2412 MHz

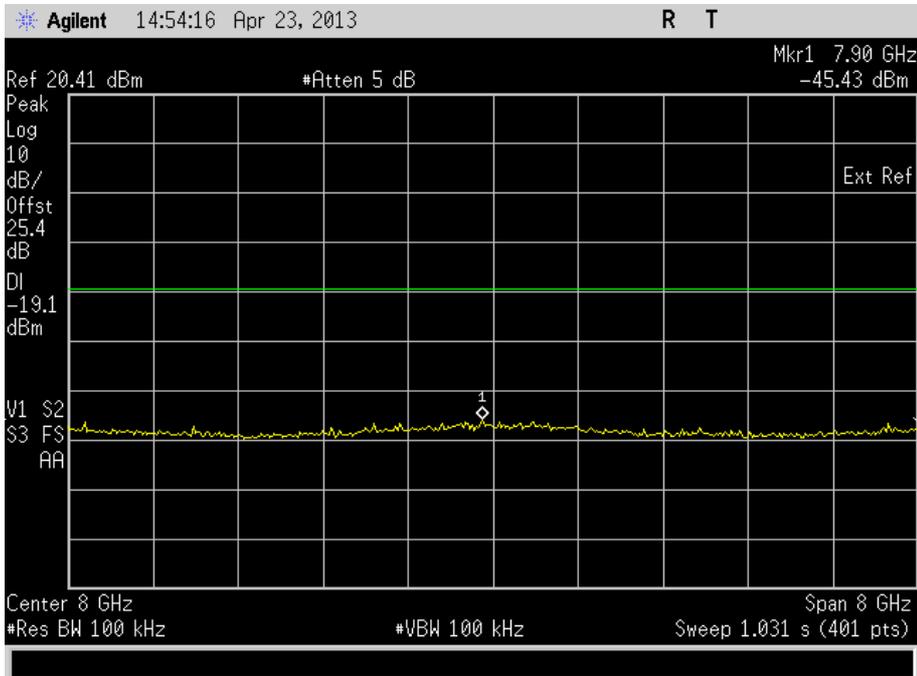
9 kHz to 4 GHz



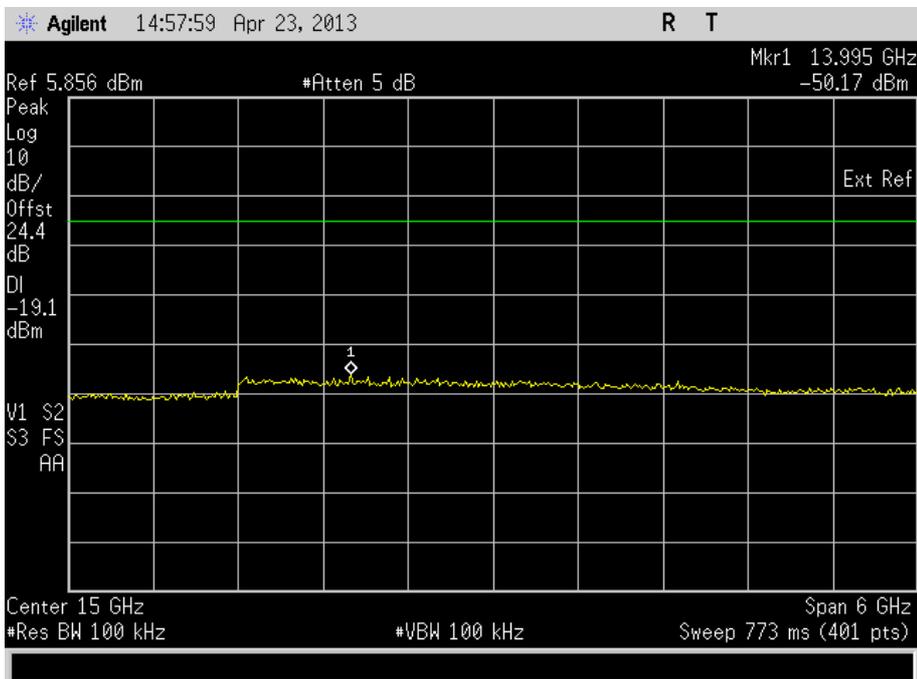


Product Service

4 GHz to 12 GHz



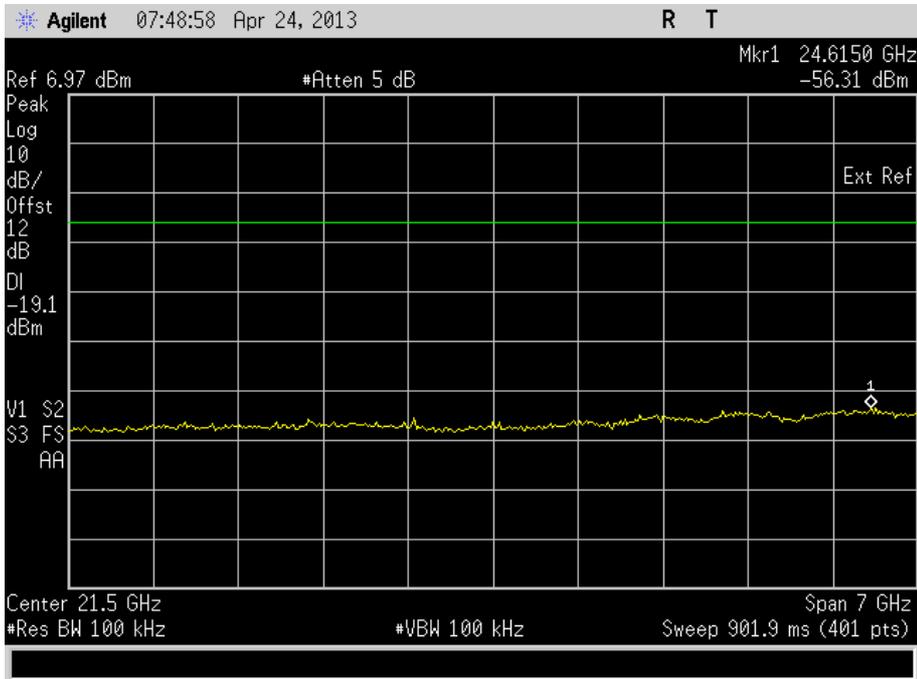
12 GHz to 18 GHz





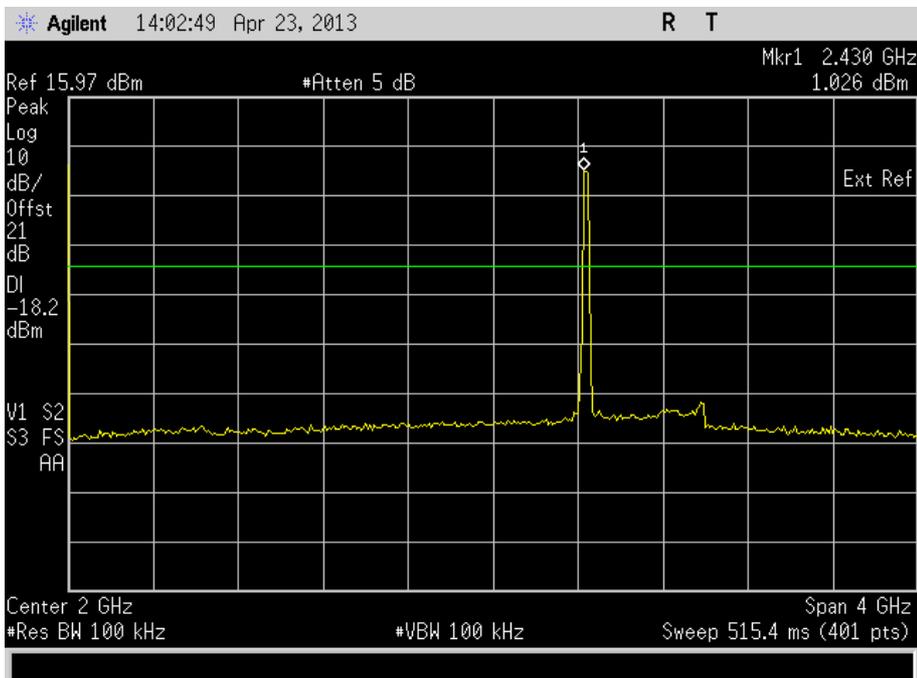
Product Service

18 GHz to 25 GHz



2437 MHz

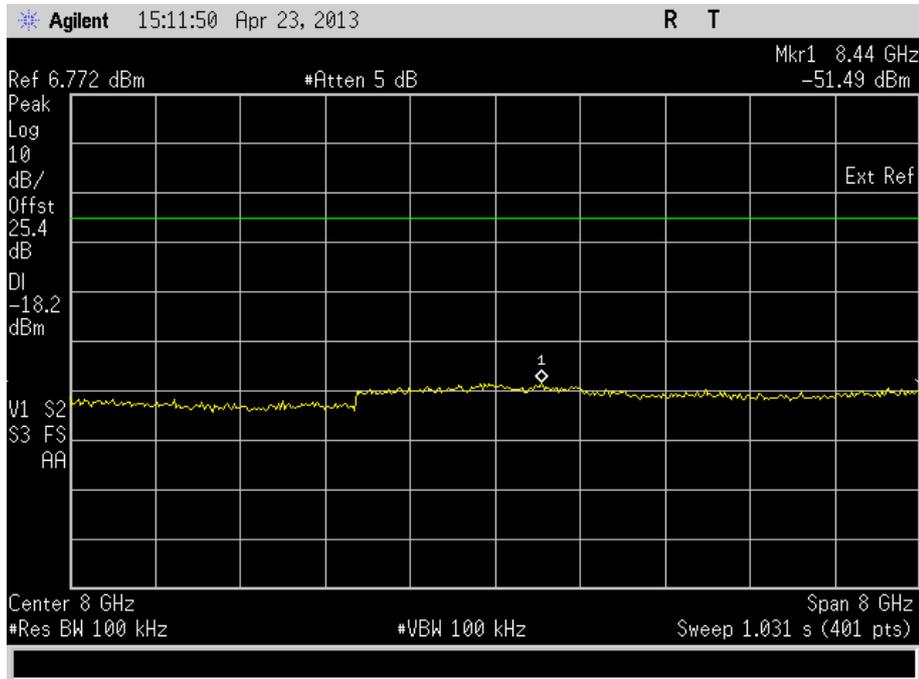
9 kHz to 4 GHz



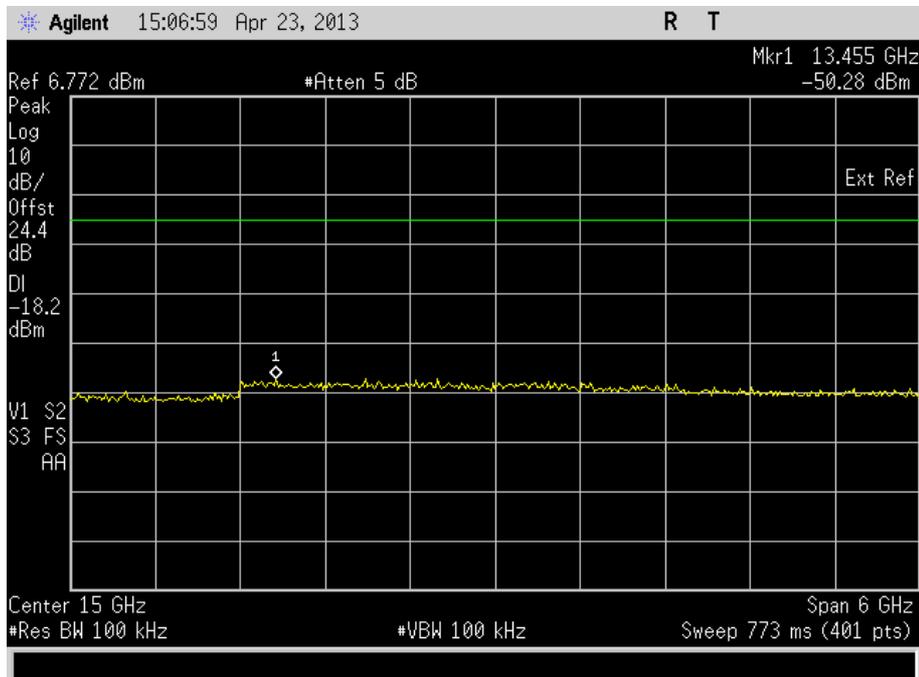


Product Service

4 GHz to 12 GHz



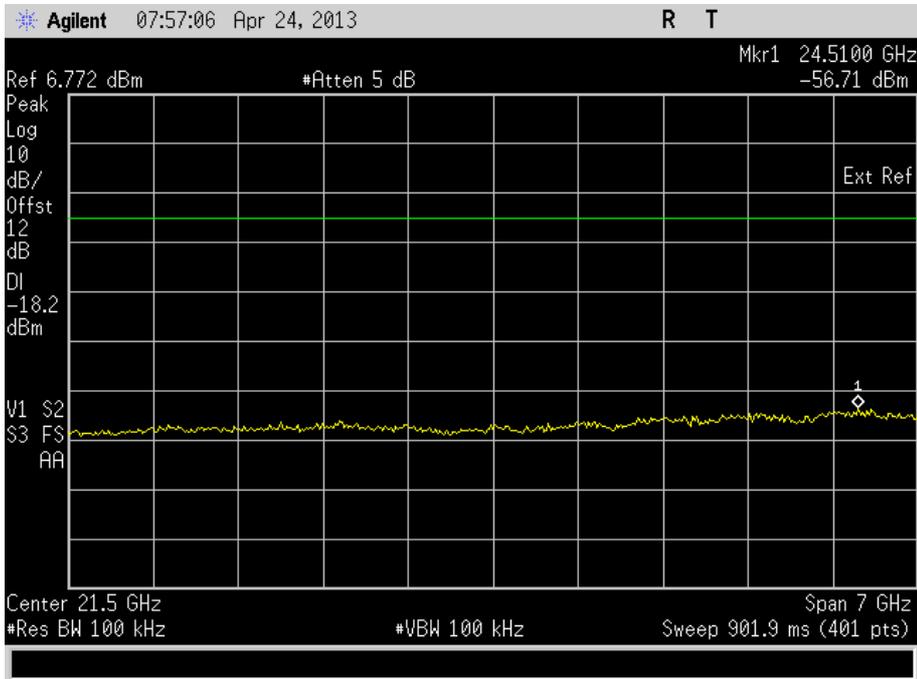
12 GHz to 18 GHz





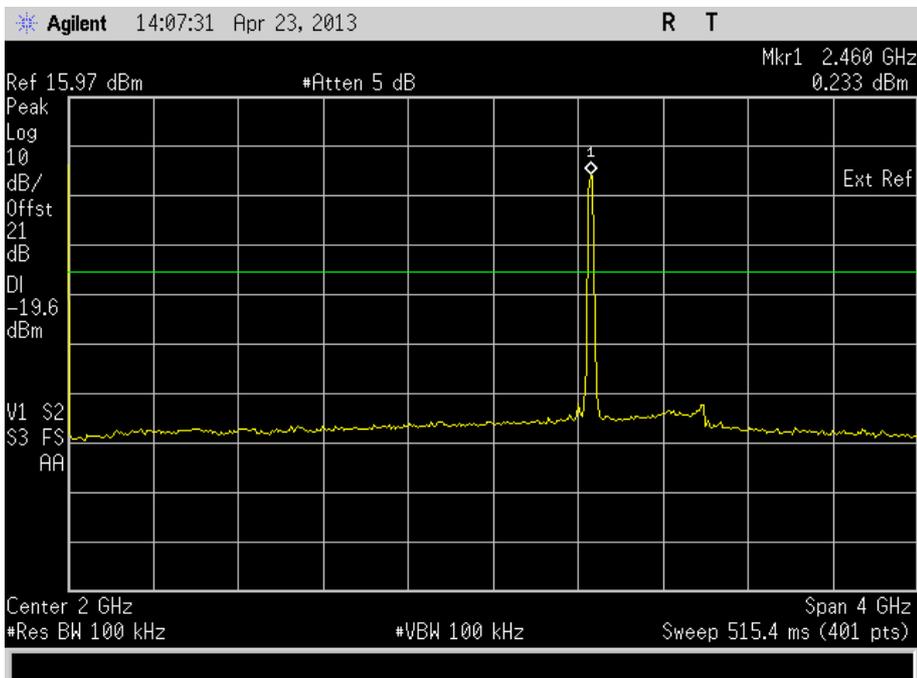
Product Service

18 GHz to 25 GHz



2462 MHz

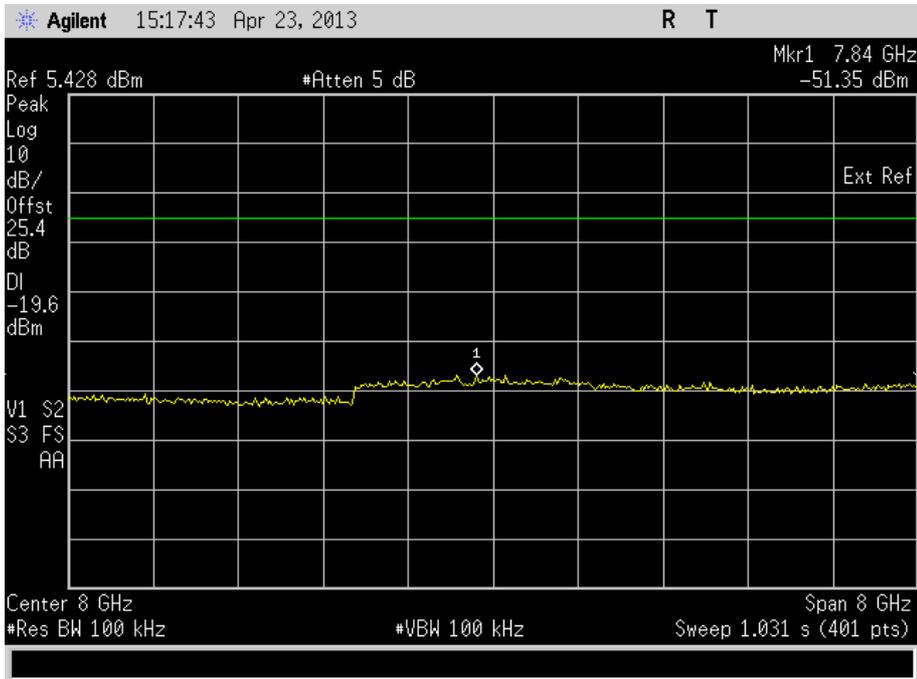
9 kHz to 4 GHz



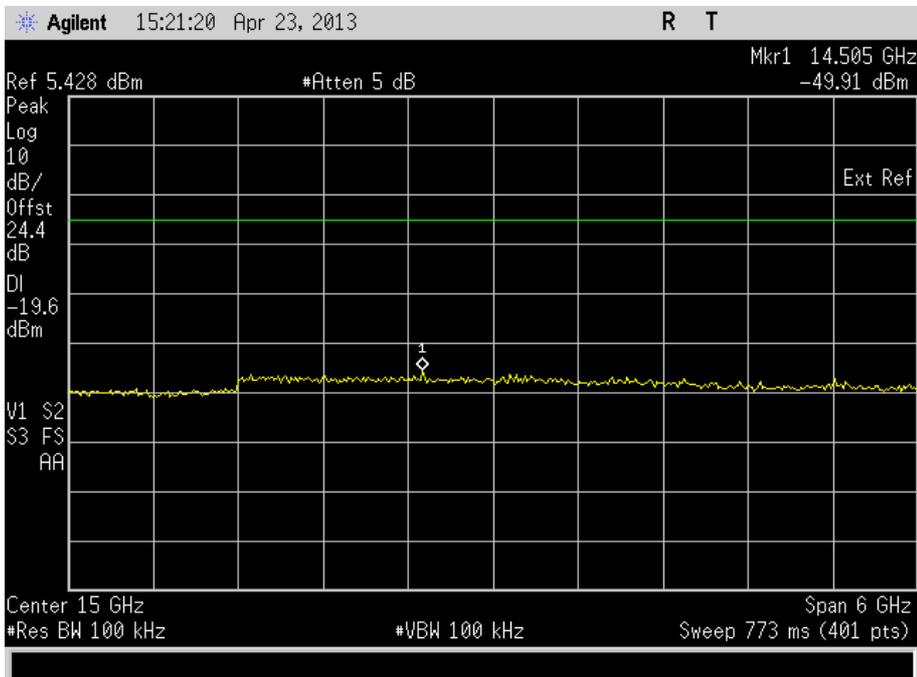


Product Service

4 GHz to 12 GHz



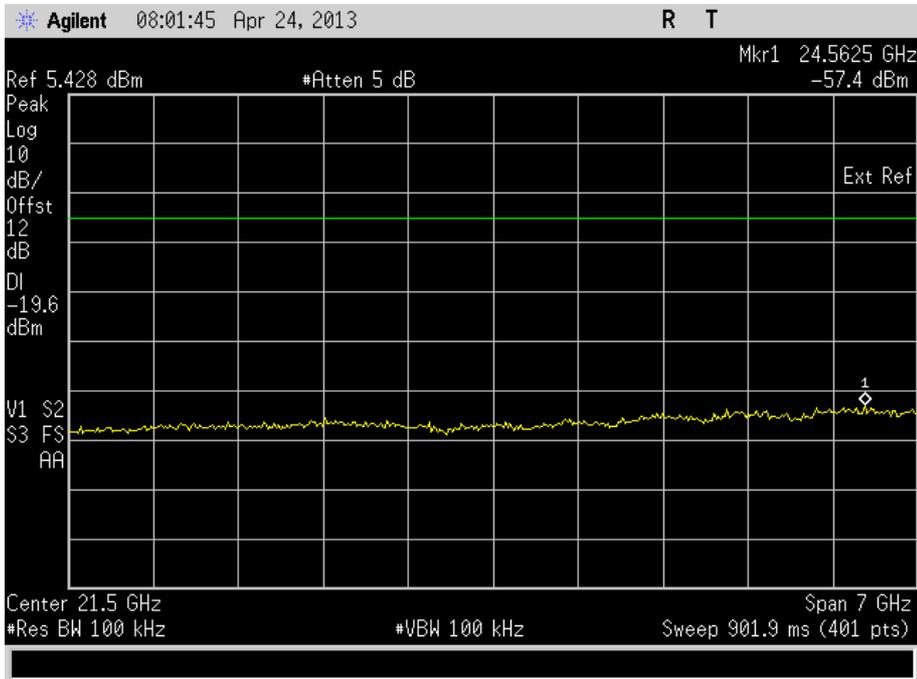
12 GHz to 18 GHz





Product Service

18 GHz to 25 GHz



Limit Clause

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 the attenuation required shall be 30 dB instead of 20 dB.

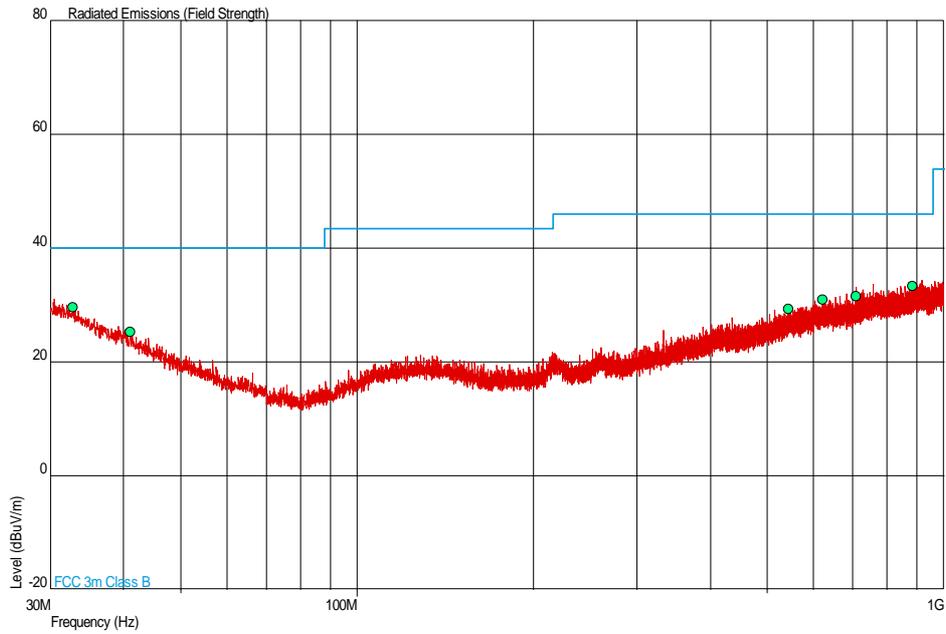


Product Service

Spurious Radiated Emissions

2412 MHz

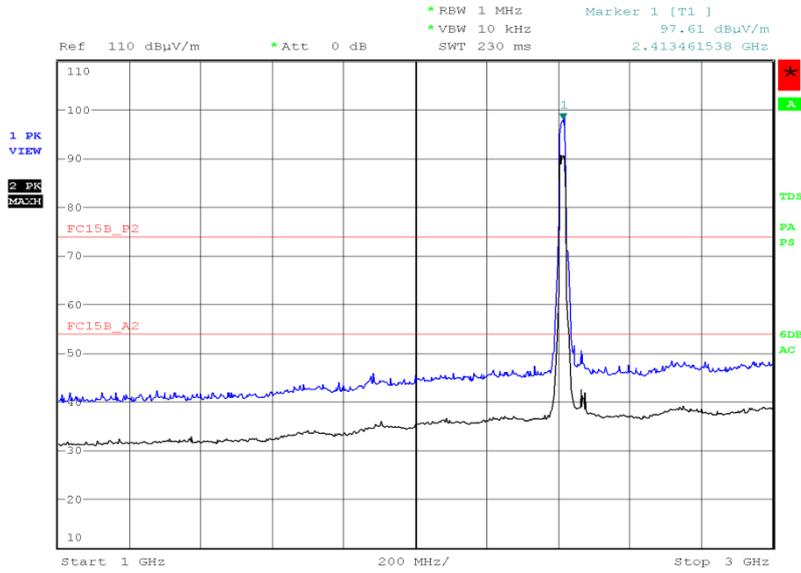
30 MHz to 1 GHz



Frequency (MHz)	QP Level (dBuV/m)	QP Level (uV/m)	QP Limit (dBuV/m)	QP Limit (uV/m)	QP Margin (dBuV/m)	QP Margin (uV/m)	Angle (Deg)	Height (m)	Polarity
32.813	29.7	30.5	40.0	100	-10.3	69.5	0	1.00	Vertical
41.010	25.4	18.6	40.0	100	-14.6	81.4	0	1.00	Horizontal
543.033	29.4	29.5	46.0	200	-16.6	170.5	0	1.00	Horizontal
621.118	30.9	35.1	46.0	200	-15.1	164.9	0	1.00	Vertical
708.515	31.6	38.0	46.0	200	-14.4	162.0	0	1.00	Vertical
885.831	33.3	46.2	46.0	200	-12.7	153.8	0	1.00	Vertical

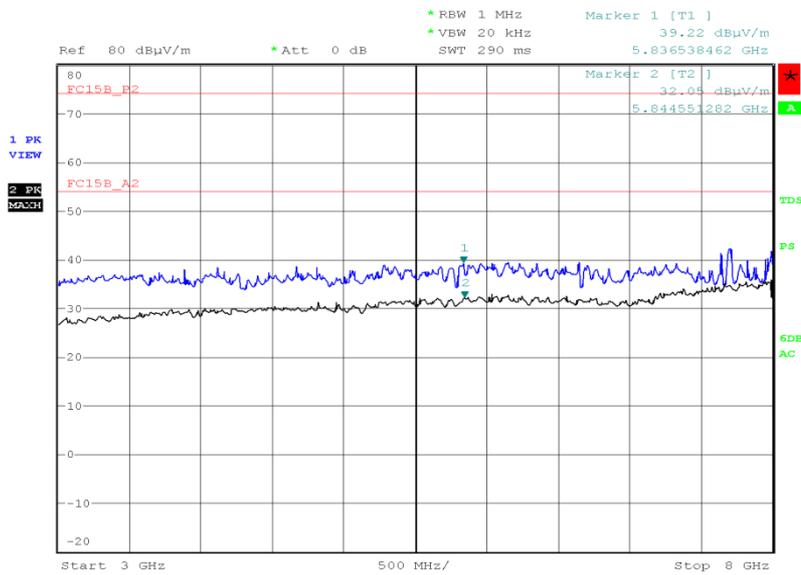


1 GHz to 3 GHz



Date: 13.APR.2013 16:16:27

3 GHz to 8 GHz

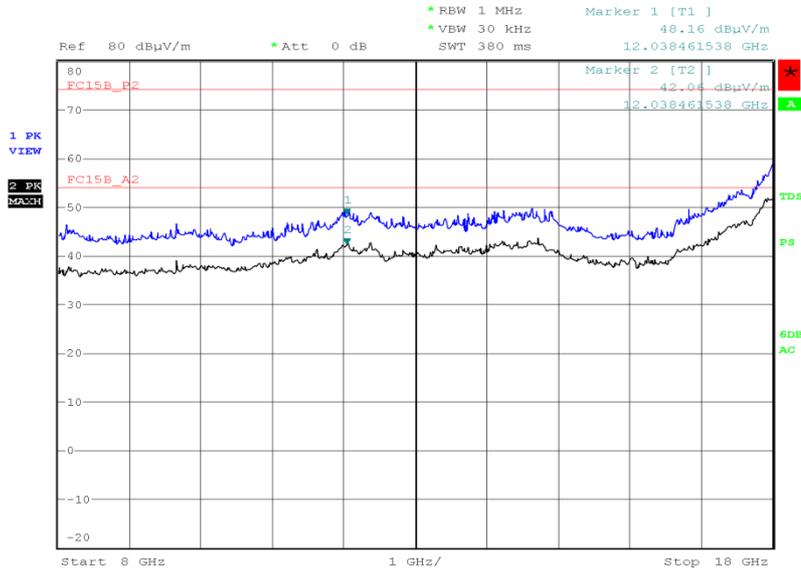


Date: 17.APR.2013 22:38:01



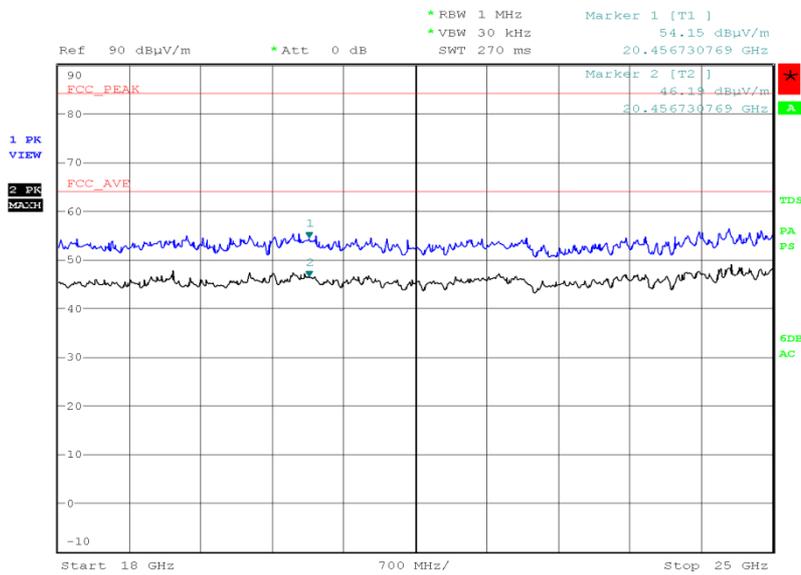
Product Service

8 GHz to 18 GHz



Date: 18.APR.2013 01:47:25

18 GHz to 25 GHz

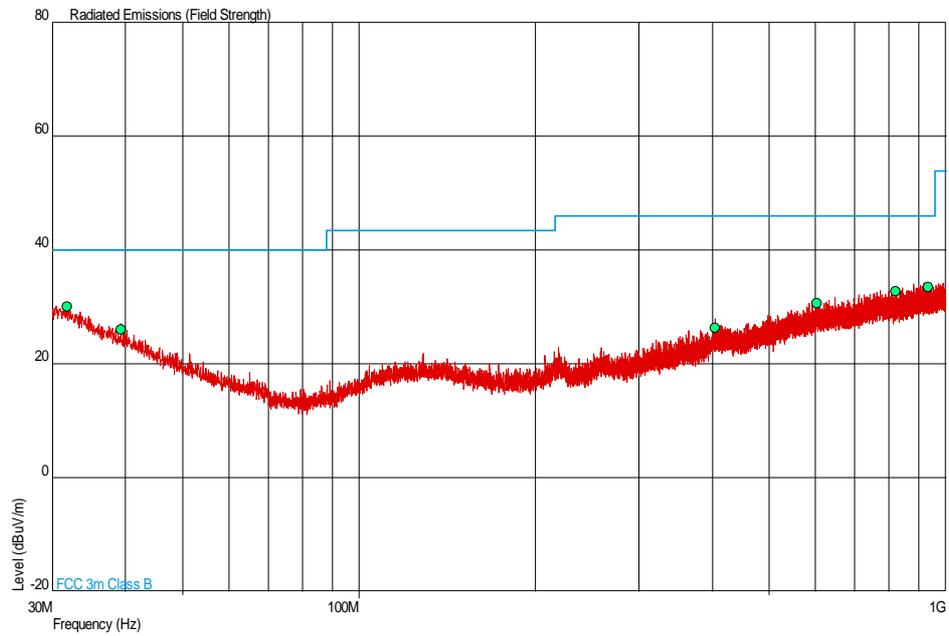


Date: 18.APR.2013 22:40:04



2437 MHz

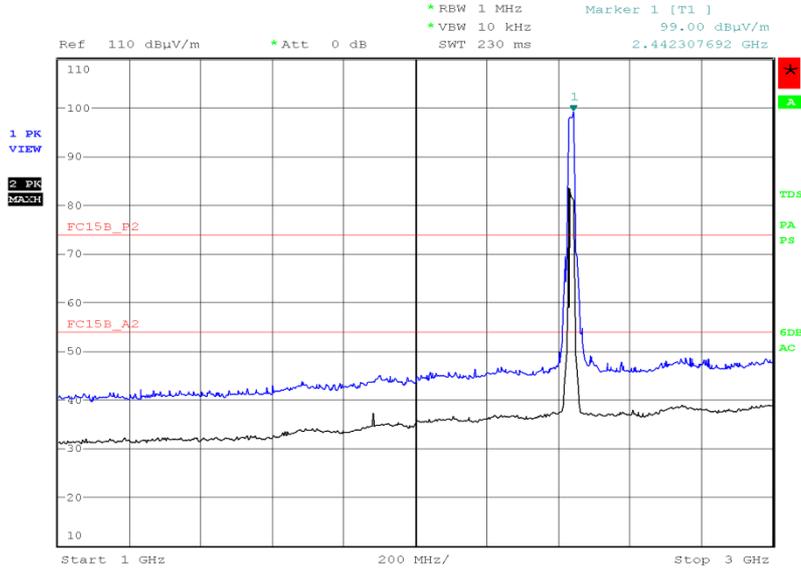
30 MHz to 1 GHz



Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
31.843	30.1	32.0	40.0	100	-9.9	68.0	0	1.00	Vertical
39.312	26.1	20.2	40.0	100	-13.9	79.8	0	1.00	Vertical
404.857	26.4	20.9	46.0	200	-19.6	179.1	0	1.00	Horizontal
602.737	30.7	34.3	46.0	200	-15.3	165.7	0	1.00	Horizontal
820.663	32.8	43.7	46.0	200	-13.2	156.3	0	1.00	Horizontal
932.272	33.4	46.8	46.0	200	-12.6	153.2	0	1.00	Horizontal

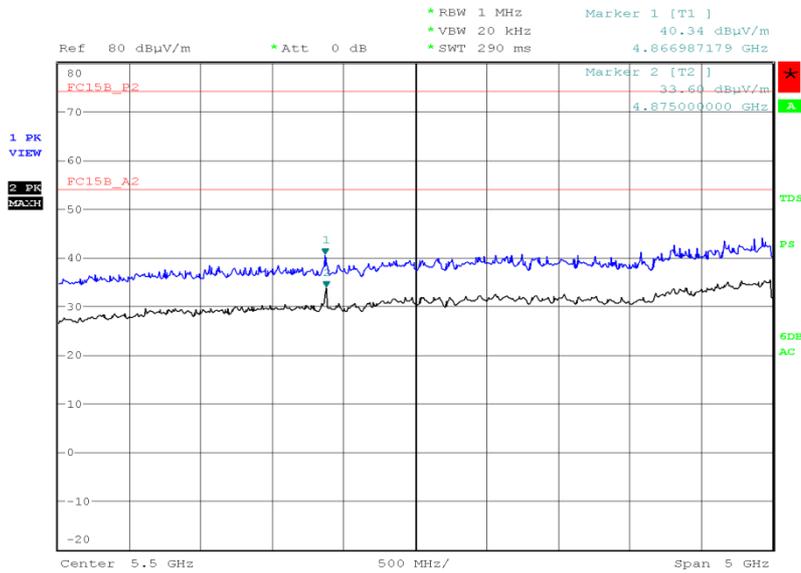


1 GHz to 3 GHz



Date: 13.APR.2013 16:22:17

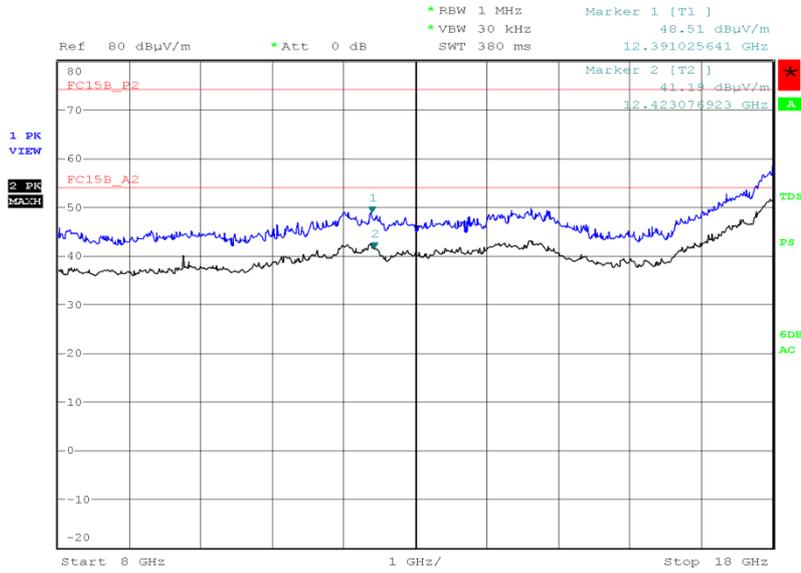
3 GHz to 8 GHz



Date: 17.APR.2013 22:49:41

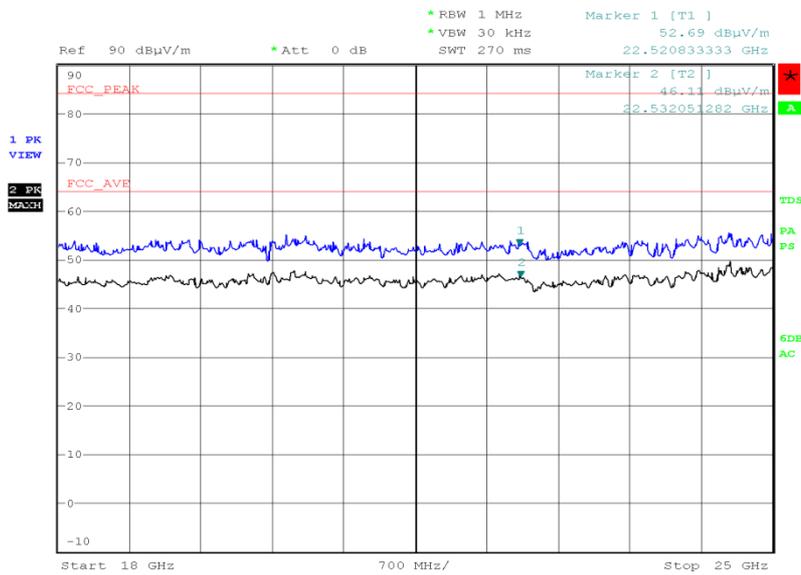


8 GHz to 18 GHz



Date: 18.APR.2013 01:53:02

18 GHz to 25 GHz

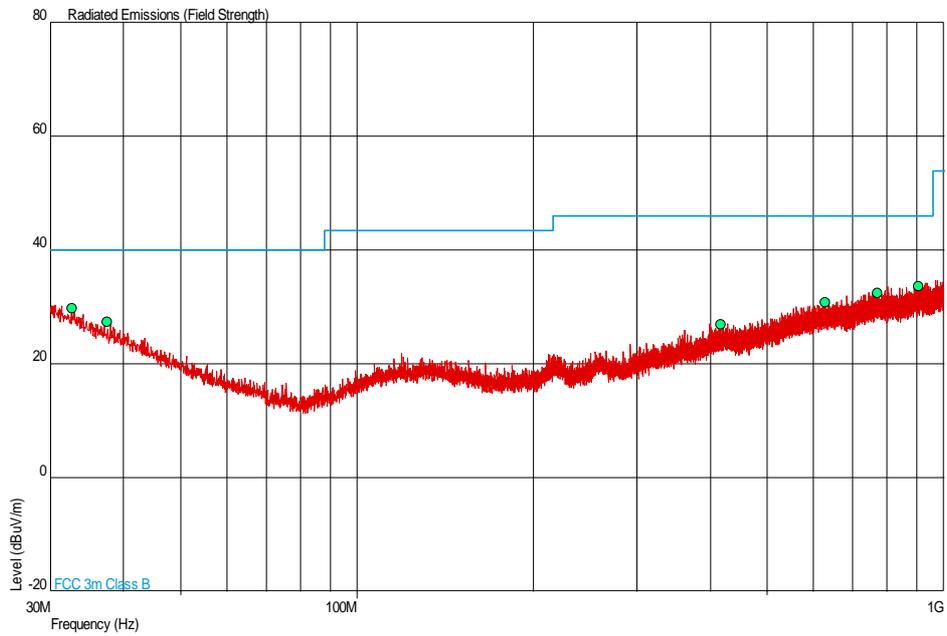


Date: 18.APR.2013 22:44:38



2462 MHz

30 MHz to 1 GHz

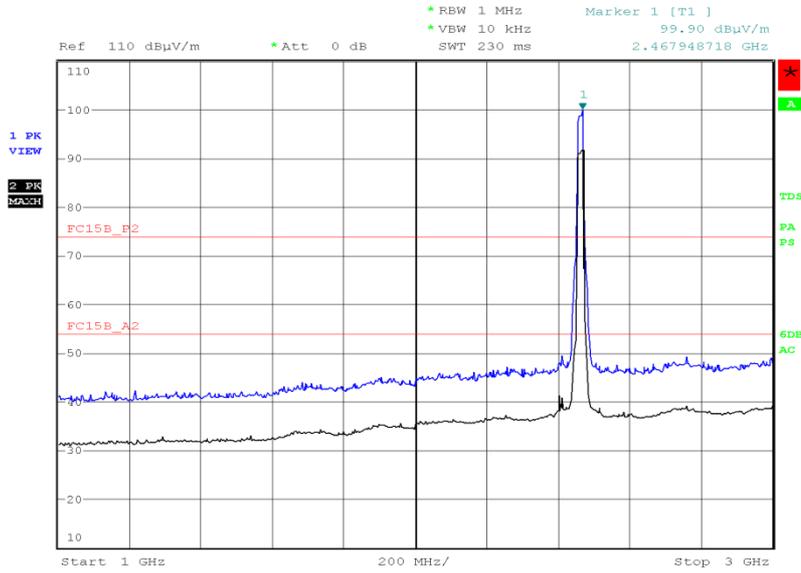


Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
32.668	29.7	30.5	40.0	100	-10.3	69.5	0	1.00	Vertical
37.518	27.3	23.2	40.0	100	-12.7	76.8	0	1.00	Horizontal
417.030	27.0	22.4	46.0	200	-19.0	177.6	0	1.00	Vertical
627.617	30.9	35.1	46.0	200	-15.1	164.9	0	1.00	Vertical
769.868	32.4	41.7	46.0	200	-13.6	158.3	0	1.00	Vertical
906.832	33.7	48.4	46.0	200	-12.3	151.6	0	1.00	Vertical



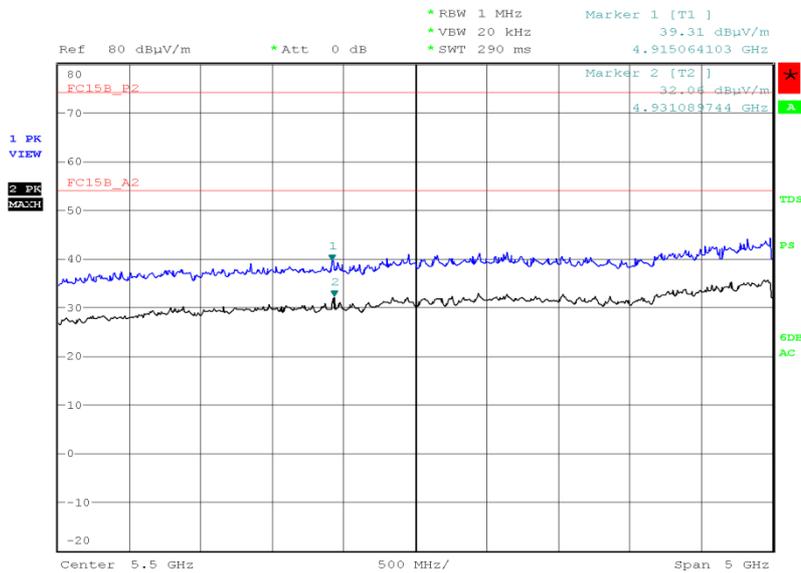
Product Service

1 GHz to 3 GHz



Date: 13.APR.2013 16:31:06

3 GHz to 8 GHz

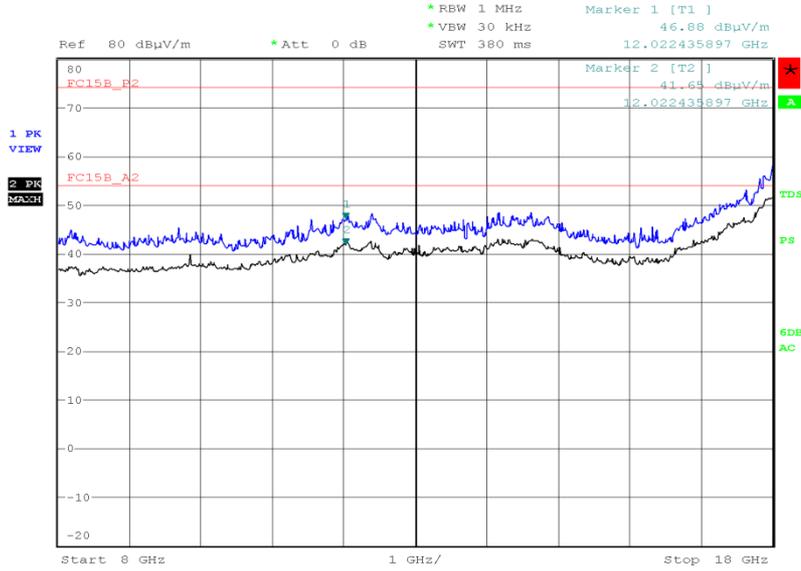


Date: 17.APR.2013 22:56:20



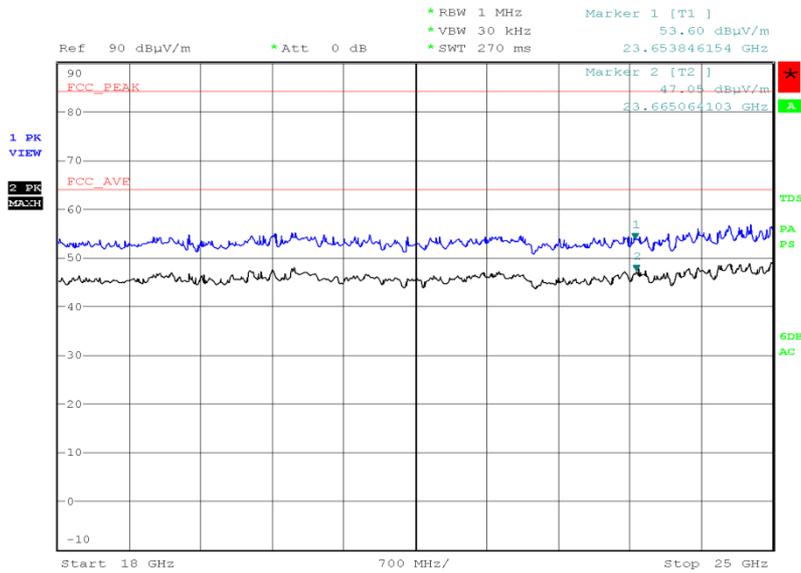
Product Service

8 GHz to 18 GHz



Date: 18.APR.2013 01:59:56

18 GHz to 25 GHz



Date: 18.APR.2013 22:51:29

Limit

Peak (dBμV/m)	Average (dBμV/m)
74.0	54.0

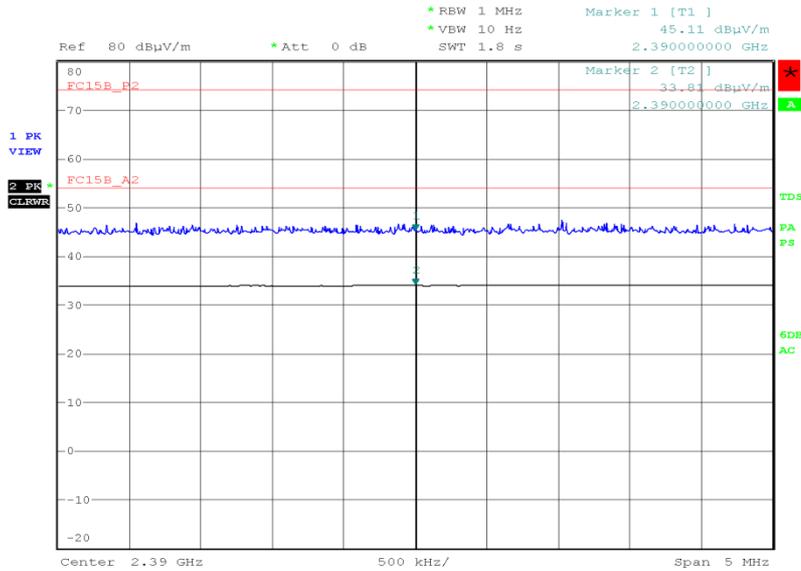


Product Service

Band Edge Emissions

2412 MHz

Polarisation	Final Peak (dBµV/m)	Final Average (dBµV/m)
Horizontal	45.11	33.81

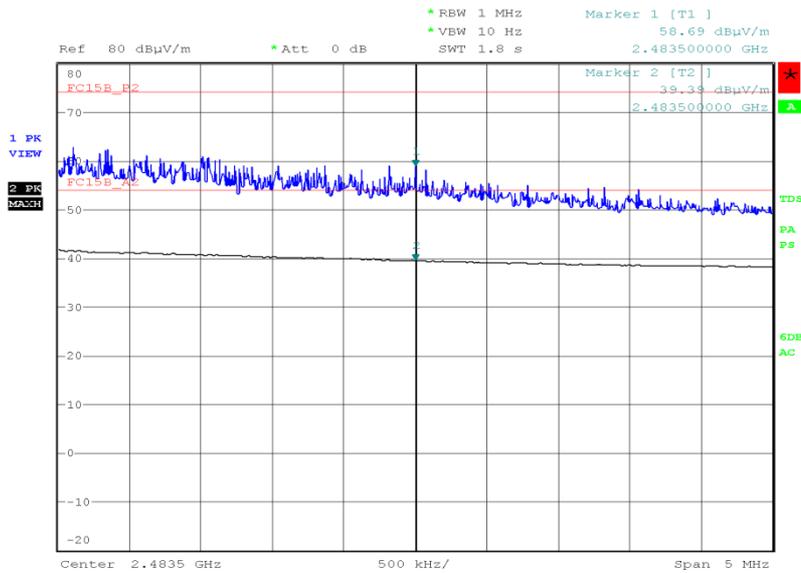


Date: 13.APR.2013 15:36:34



2462 MHz

Polarisation	Final Peak (dBµV/m)	Final Average (dBµV/m)
Horizontal	58.69	39.39



Date: 17.APR.2013 20:49:04

Limit

Peak (dBµV/m)	Average (dBµV/m)
74.0	54.0



Product Service

802.11(n)

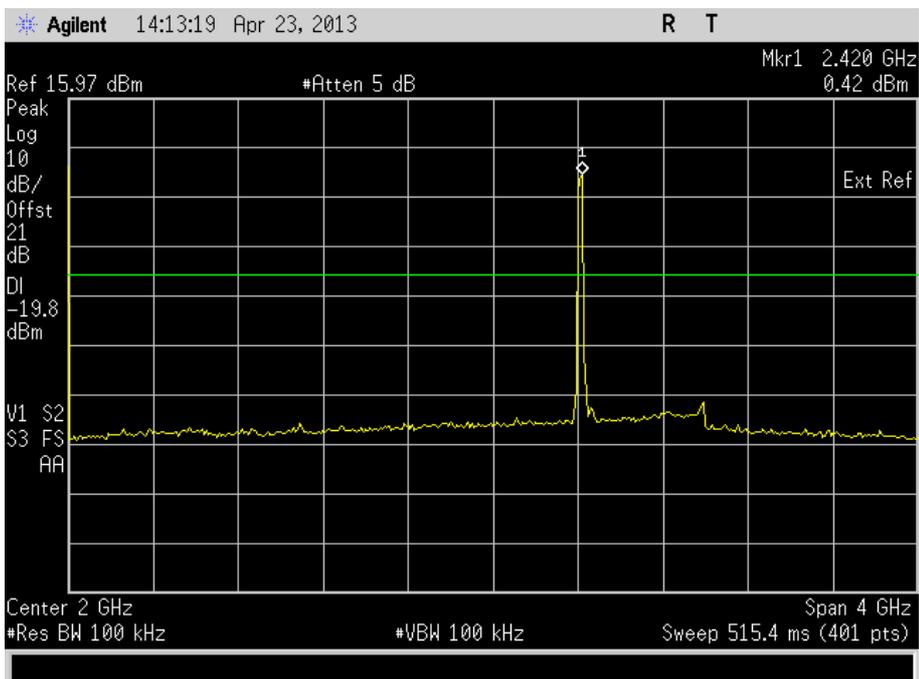
4.0 V DC Supply

Spurious Conducted Emissions

19.5 Mbps

2412 MHz

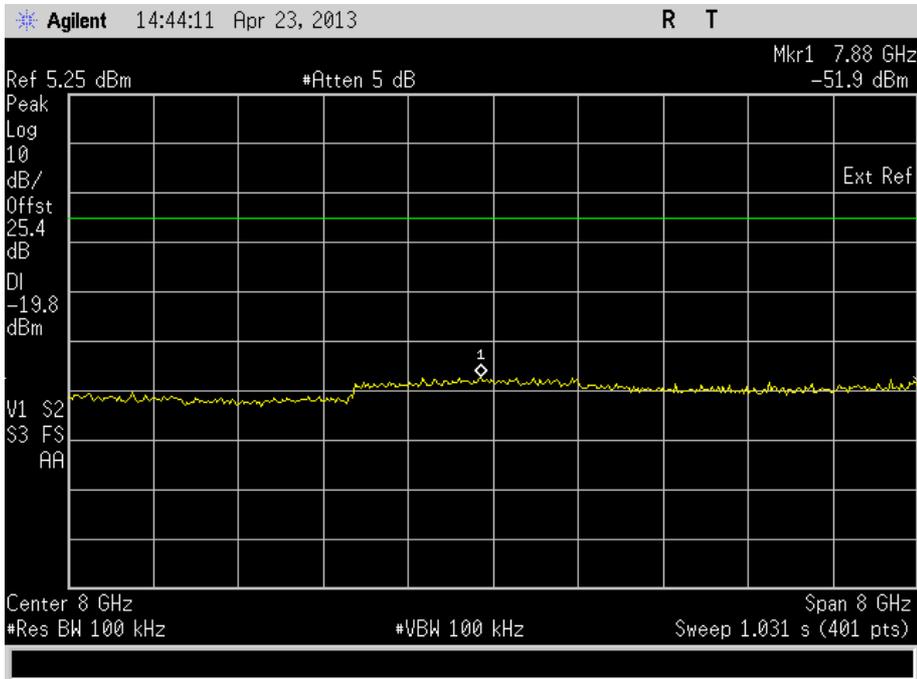
9 kHz to 4 GHz



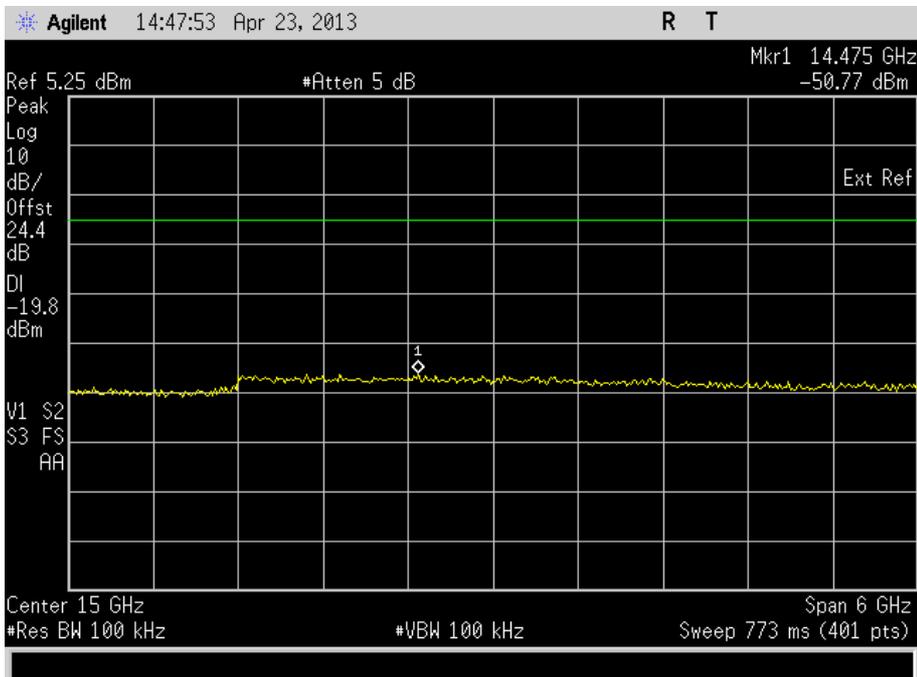


Product Service

4 GHz to 12 GHz



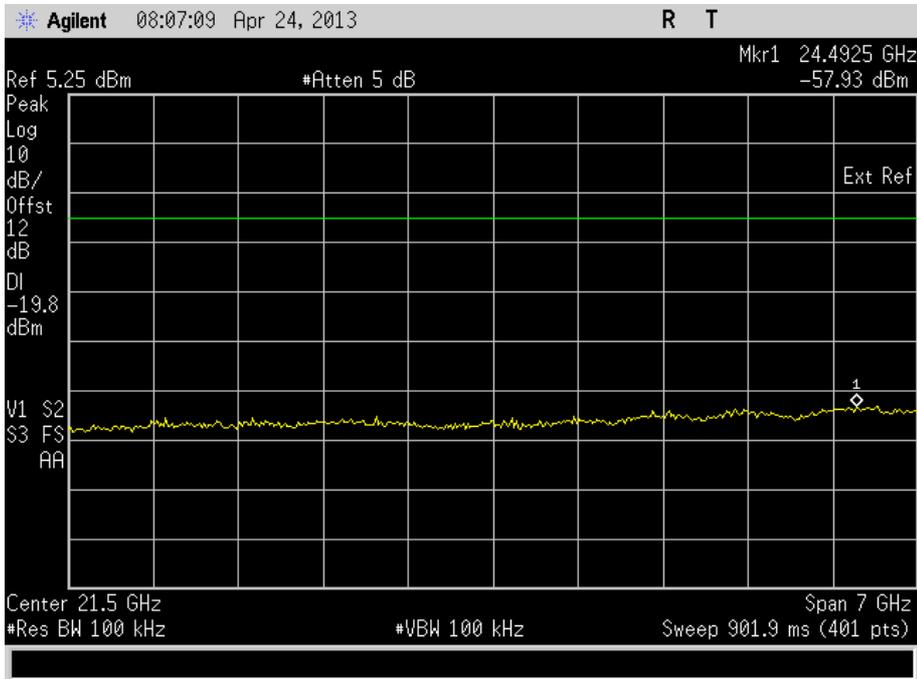
12 GHz to 18 GHz





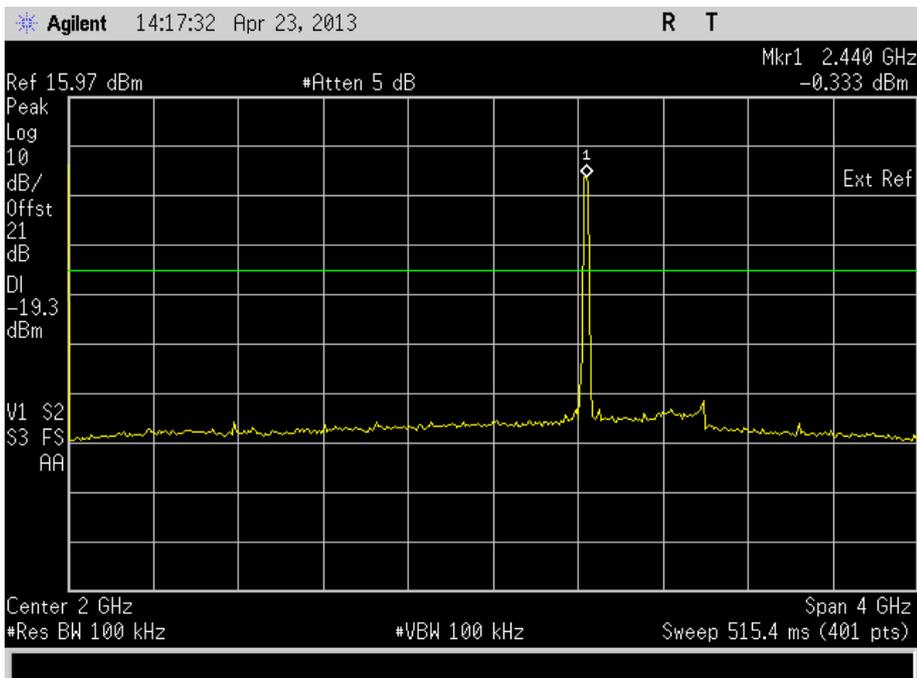
Product Service

18 GHz to 25 GHz



2437 MHz

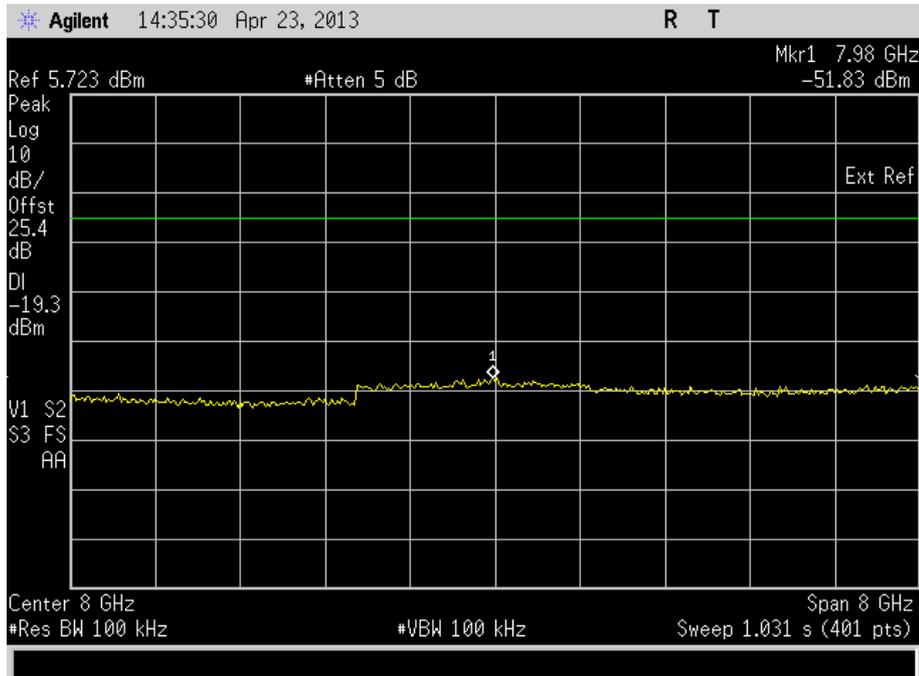
9 kHz to 4 GHz



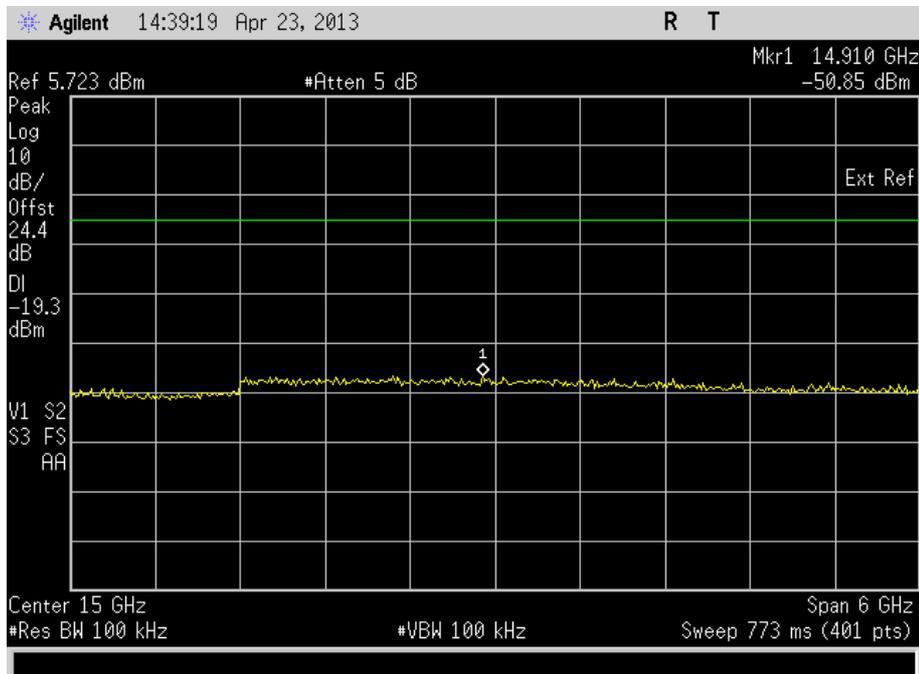


Product Service

4 GHz to 12 GHz



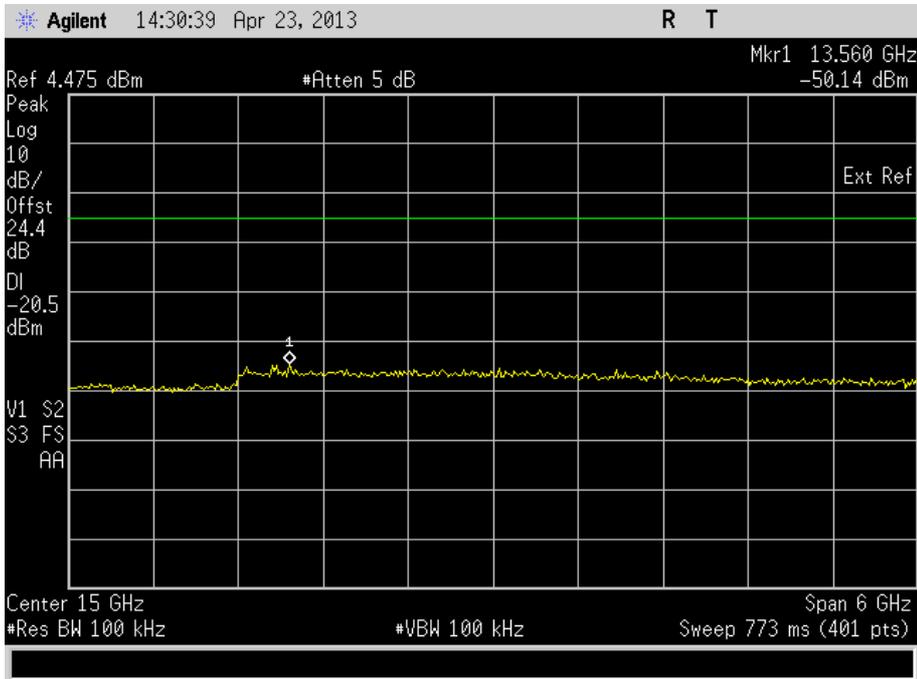
12 GHz to 18 GHz





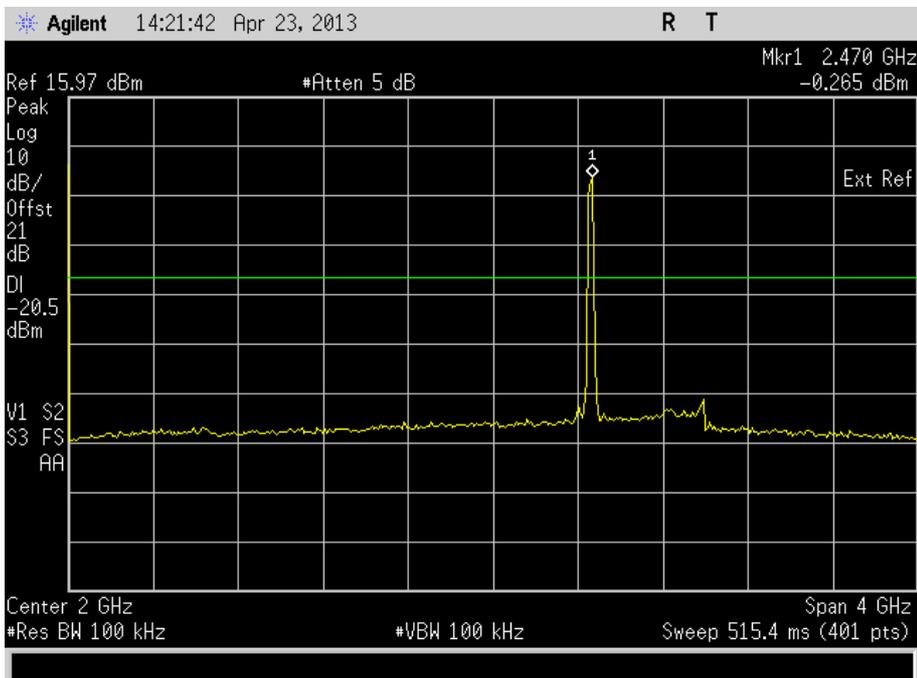
Product Service

18 GHz to 25 GHz



2462 MHz

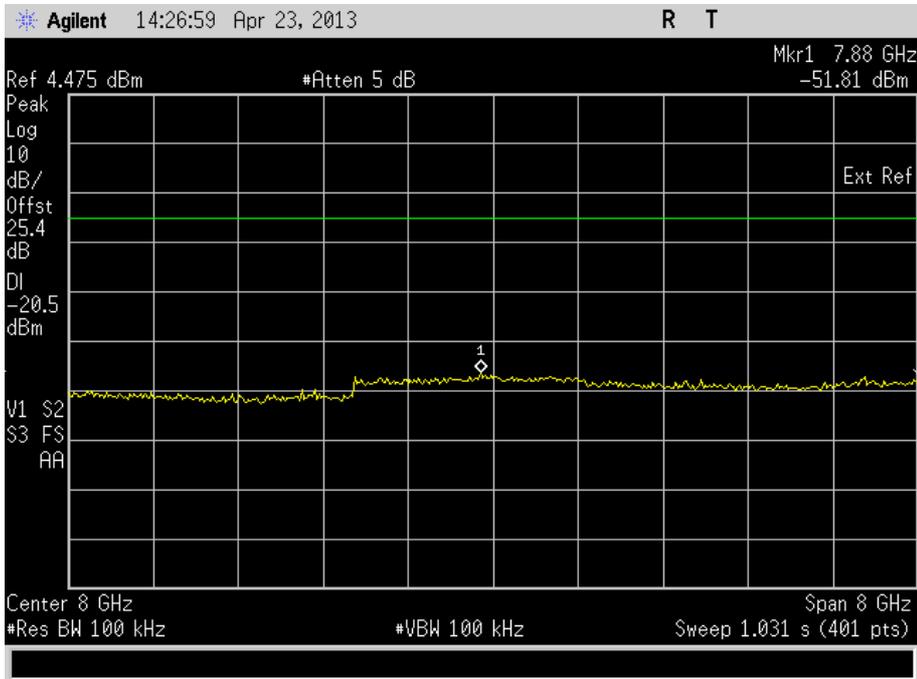
9 kHz to 4 GHz



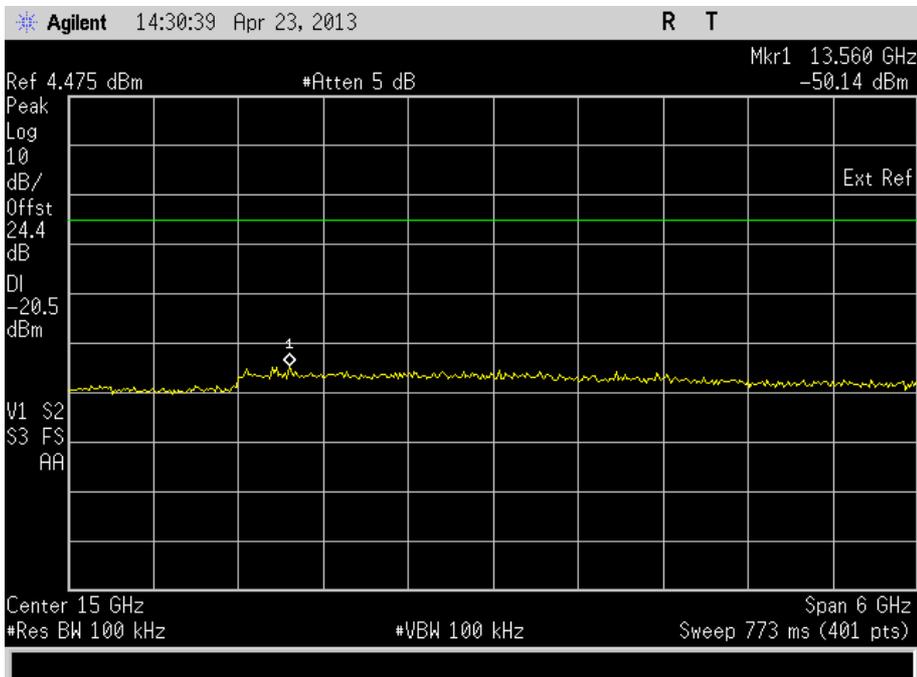


Product Service

4 GHz to 12 GHz



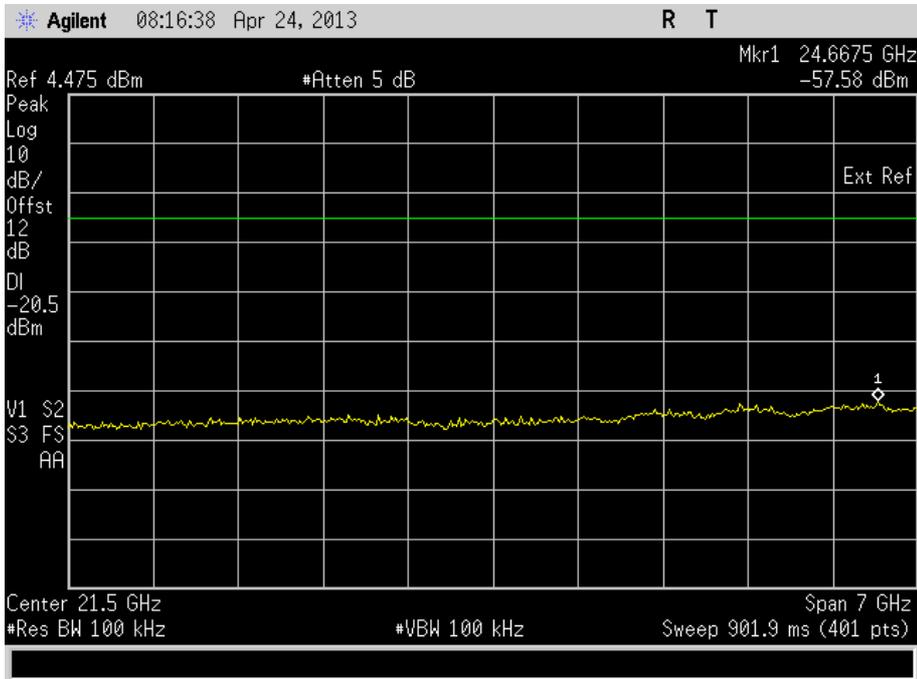
12 GHz to 18 GHz





Product Service

18 GHz to 25 GHz



Limit Clause

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.

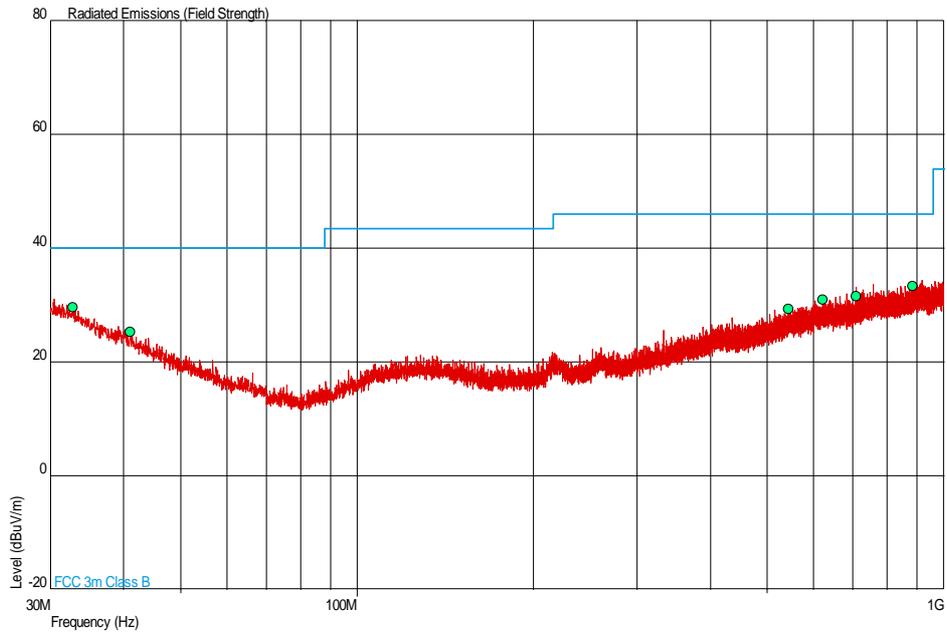
If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval the attenuation required shall be 30 dB instead of 20 dB.



Spurious Radiated Emissions

2412 MHz

30 MHz to 1 GHz

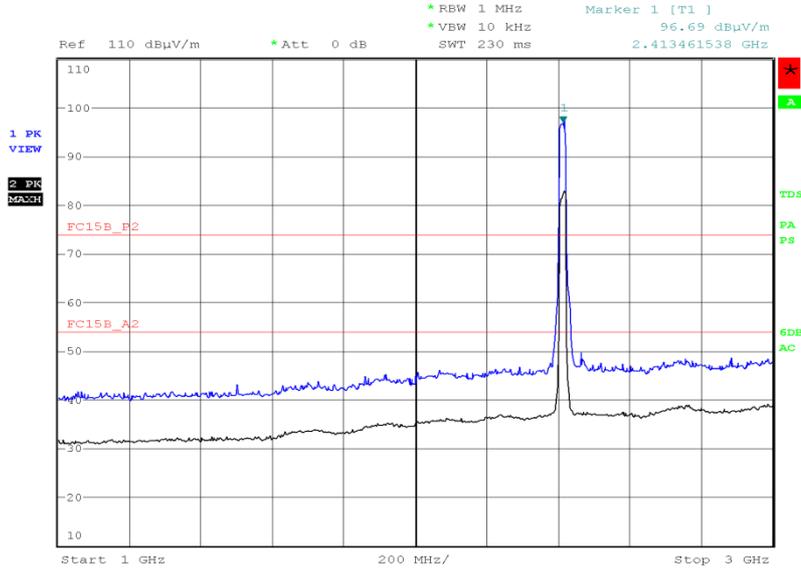


Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
32.813	29.7	30.5	40.0	100	-10.3	69.5	0	1.00	Vertical
41.010	25.4	18.6	40.0	100	-14.6	81.4	0	1.00	Horizontal
543.033	29.4	29.5	46.0	200	-16.6	170.5	0	1.00	Horizontal
621.118	30.9	35.1	46.0	200	-15.1	164.9	0	1.00	Vertical
708.515	31.6	38.0	46.0	200	-14.4	162.0	0	1.00	Vertical
885.831	33.3	46.2	46.0	200	-12.7	153.8	0	1.00	Vertical



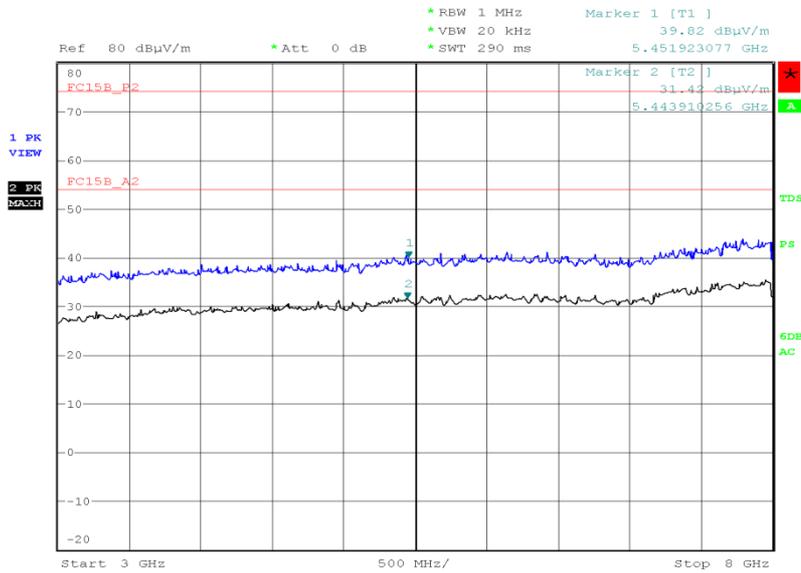
Product Service

1 GHz to 3 GHz



Date: 13.APR.2013 16:10:32

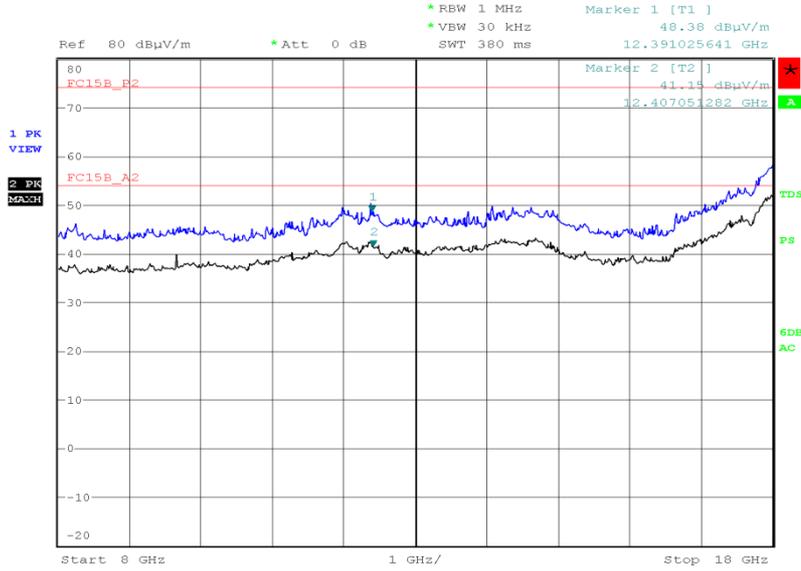
3 GHz to 8 GHz



Date: 17.APR.2013 23:04:24

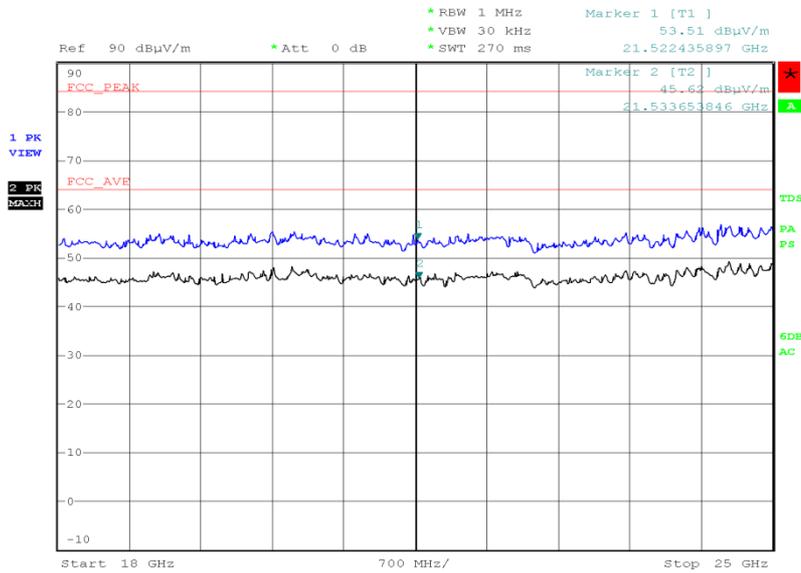


8 GHz to 18 GHz



Date: 17.APR.2013 23:57:56

18 GHz to 25 GHz

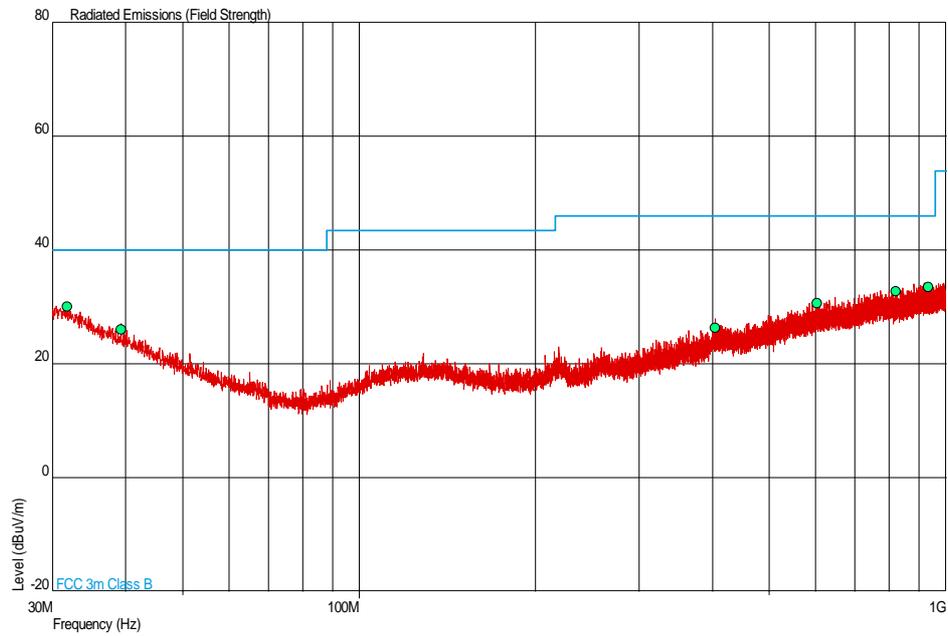


Date: 18.APR.2013 23:04:34



2437 MHz

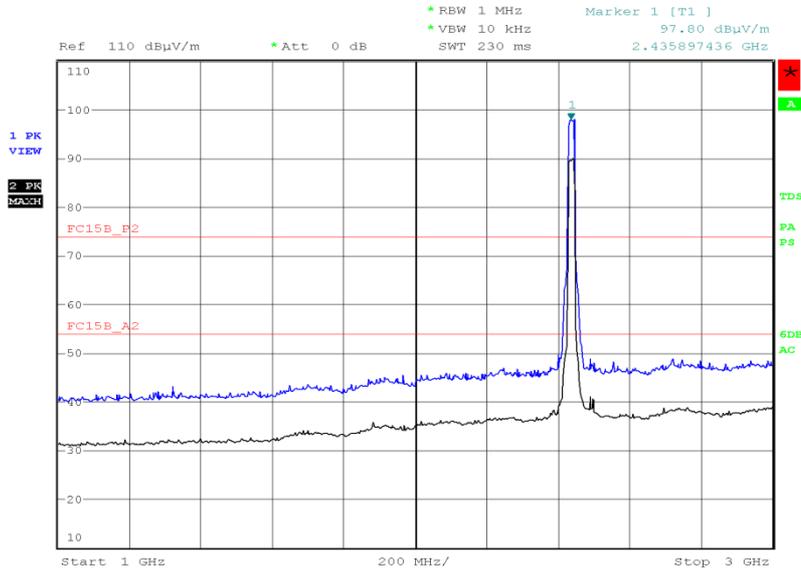
30 MHz to 1 GHz



Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
31.843	30.1	32.0	40.0	100	-9.9	68.0	0	1.00	Vertical
39.312	26.1	20.2	40.0	100	-13.9	79.8	0	1.00	Vertical
404.857	26.4	20.9	46.0	200	-19.6	179.1	0	1.00	Horizontal
602.737	30.7	34.3	46.0	200	-15.3	165.7	0	1.00	Horizontal
820.663	32.8	43.7	46.0	200	-13.2	156.3	0	1.00	Horizontal
932.272	33.4	46.8	46.0	200	-12.6	153.2	0	1.00	Horizontal

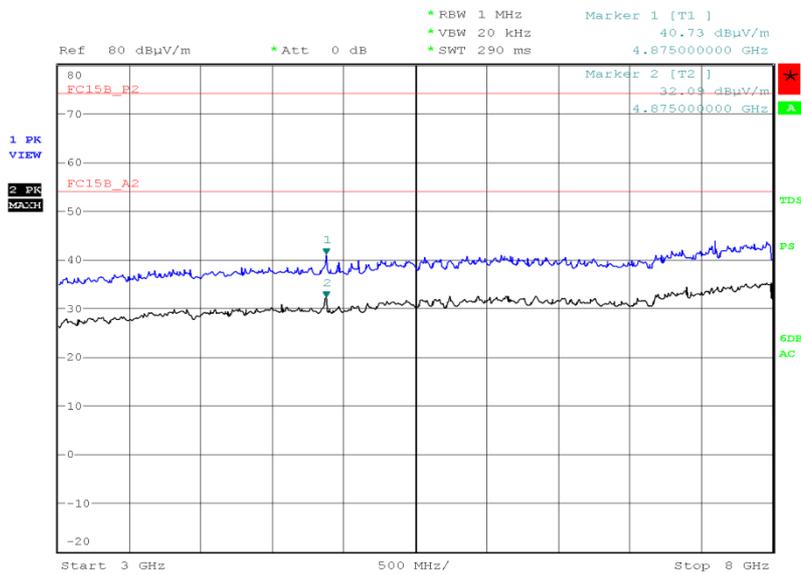


1 GHz to 3 GHz



Date: 13.APR.2013 16:00:19

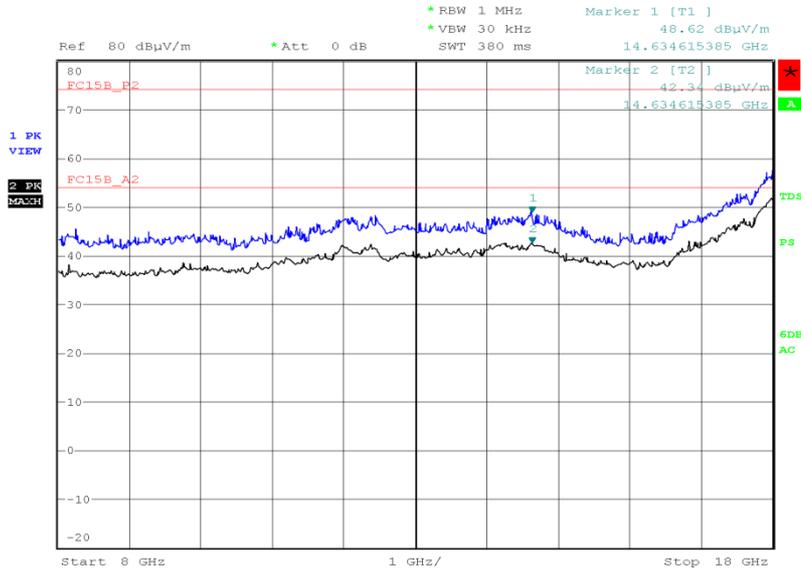
3 GHz to 8 GHz



Date: 17.APR.2013 23:11:14

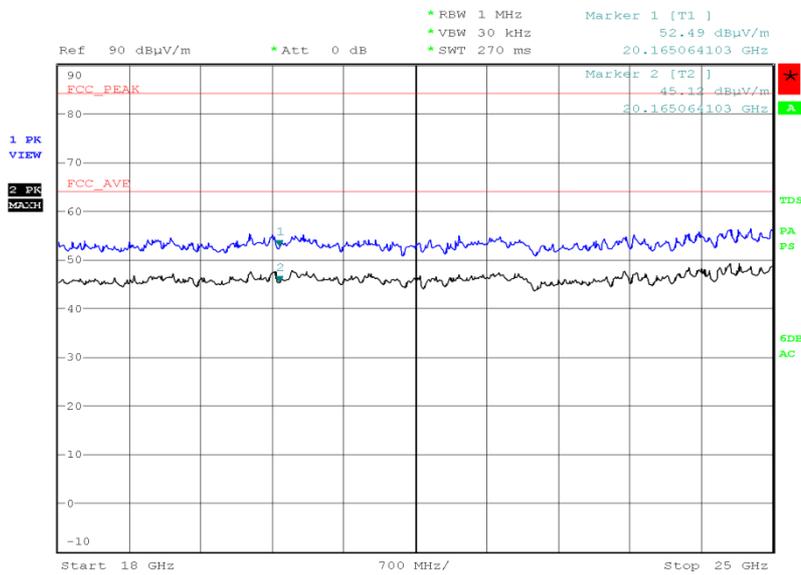


8 GHz to 18 GHz



Date: 18.APR.2013 00:10:28

18 GHz to 25 GHz

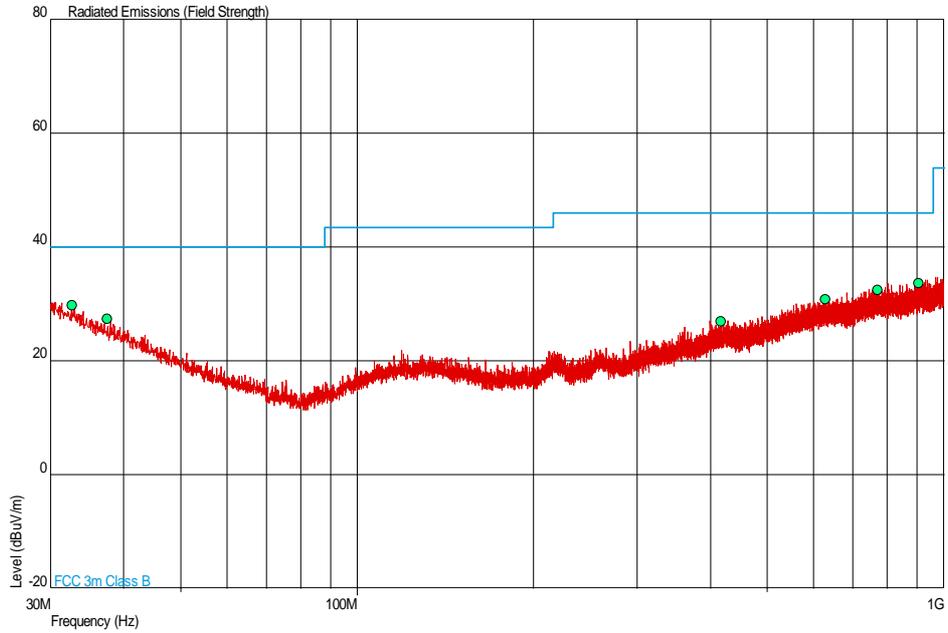


Date: 18.APR.2013 23:13:48



2462 MHz

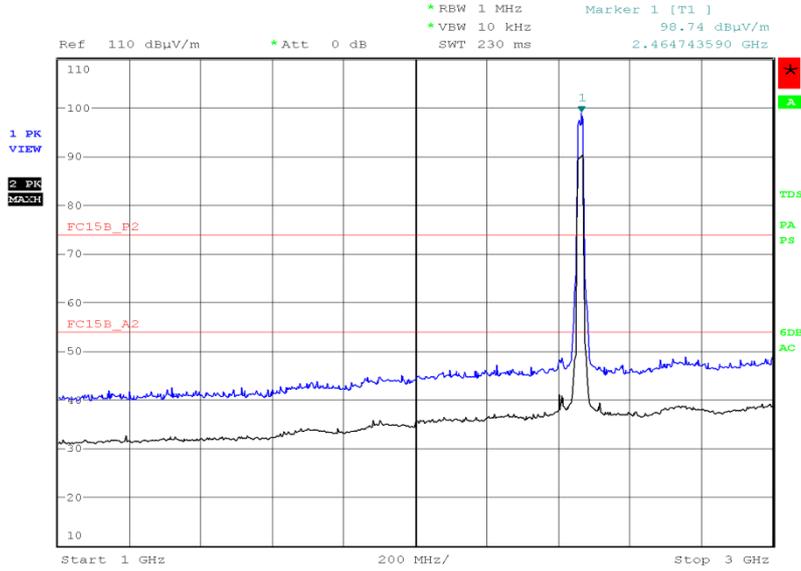
30 MHz to 1 GHz



Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
32.668	29.7	30.5	40.0	100	-10.3	69.5	0	1.00	Vertical
37.518	27.3	23.2	40.0	100	-12.7	76.8	0	1.00	Horizontal
417.030	27.0	22.4	46.0	200	-19.0	177.6	0	1.00	Vertical
627.617	30.9	35.1	46.0	200	-15.1	164.9	0	1.00	Vertical
769.868	32.4	41.7	46.0	200	-13.6	158.3	0	1.00	Vertical
906.832	33.7	48.4	46.0	200	-12.3	151.6	0	1.00	Vertical

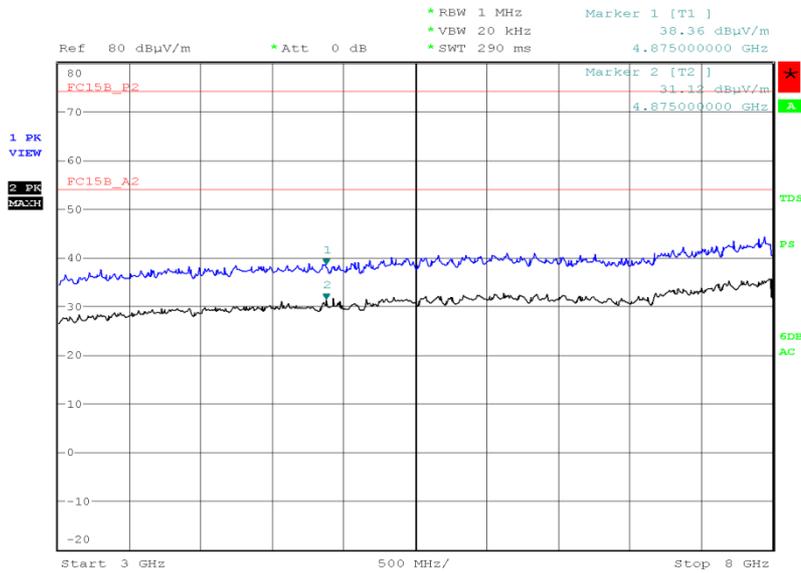


1 GHz to 3 GHz



Date: 13.APR.2013 16:05:45

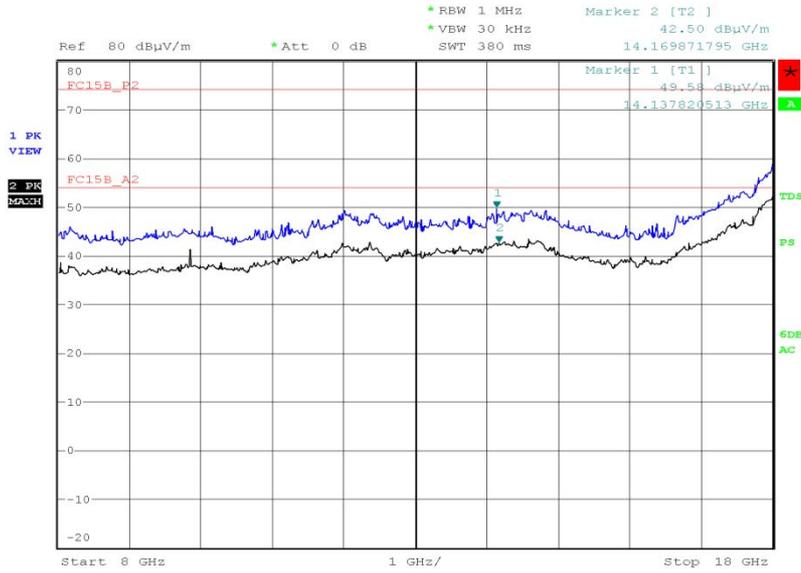
3 GHz to 8 GHz



Date: 17.APR.2013 23:18:50

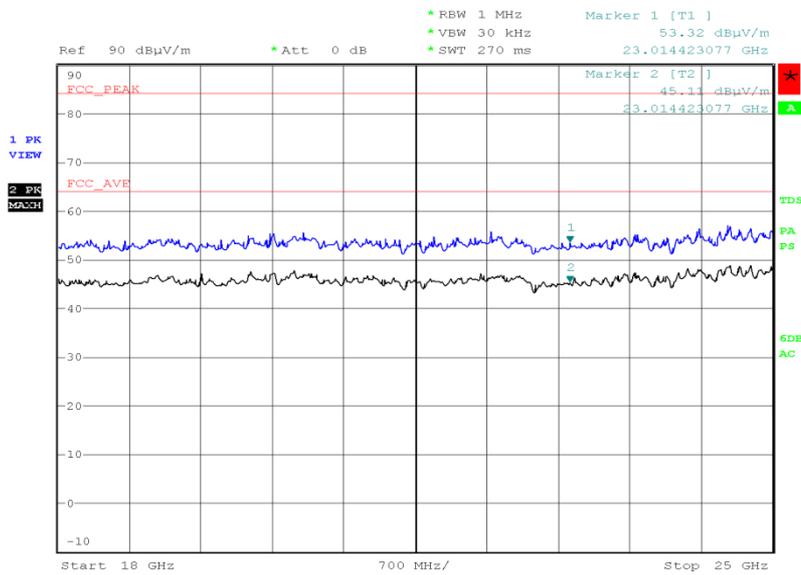


8 GHz to 18 GHz



Date: 18.APR.2013 00:18:38

18 GHz to 25 GHz



Date: 18.APR.2013 23:21:47

Limit

Peak (dBμV/m)	Average (dBμV/m)
74.0	54.0

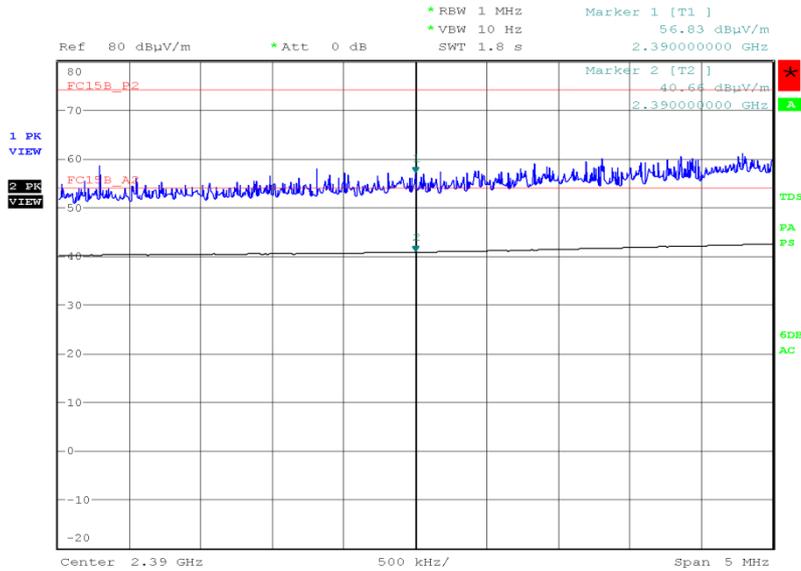


Product Service

Band Edge Emissions

2412 MHz

Polarisation	Final Peak (dBµV/m)	Final Average (dBµV/m)
Horizontal	56.83	40.66

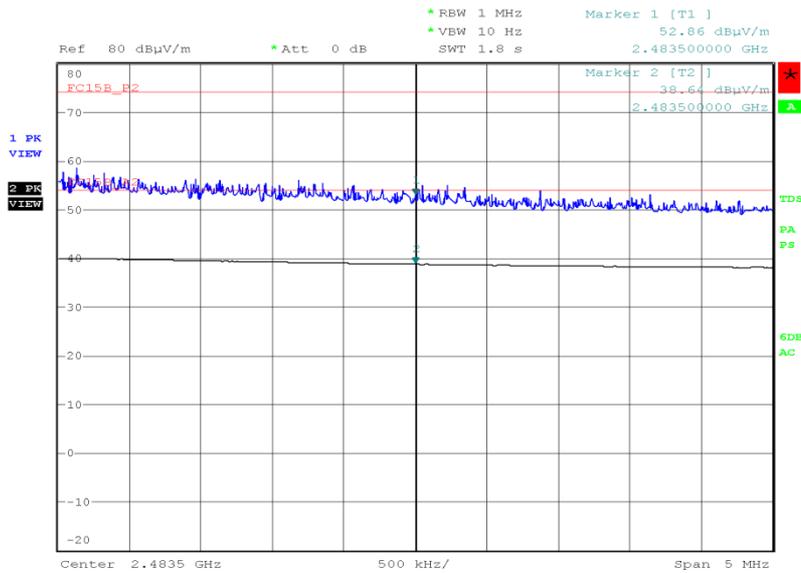


Date: 17.APR.2013 21:02:56



2462 MHz

Polarisation	Final Peak (dBµV/m)	Final Average (dBµV/m)
Horizontal	52.86	38.64



Date: 17.APR.2013 20:53:01

Limit

Peak (dBµV/m)	Average (dBµV/m)
74.0	54.0



Product Service

Bluetooth Low Energy

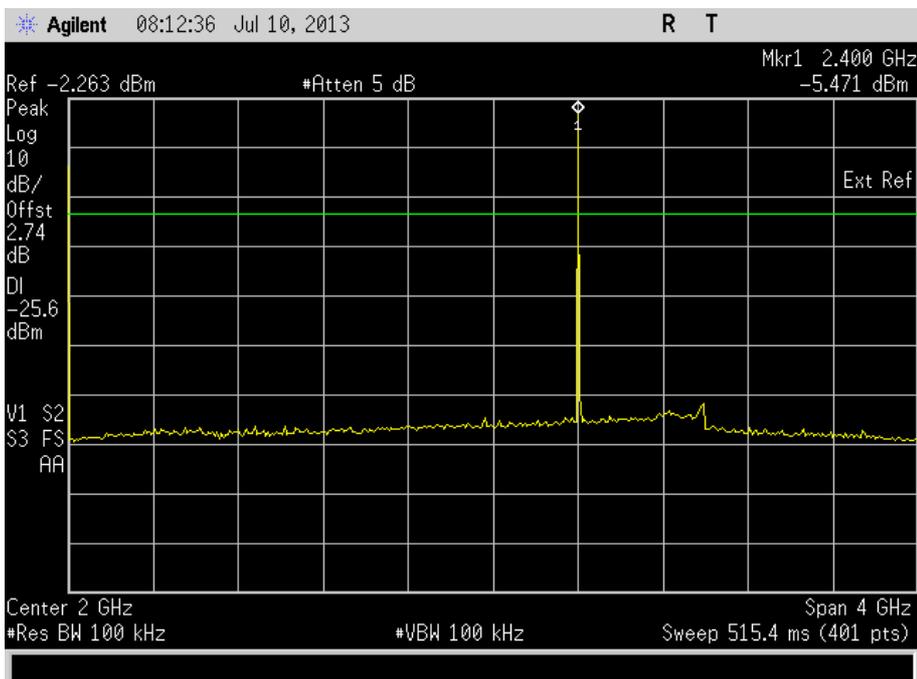
4.0 V DC Supply

Spurious Conducted Emissions

37oct/prbs9

2402 MHz

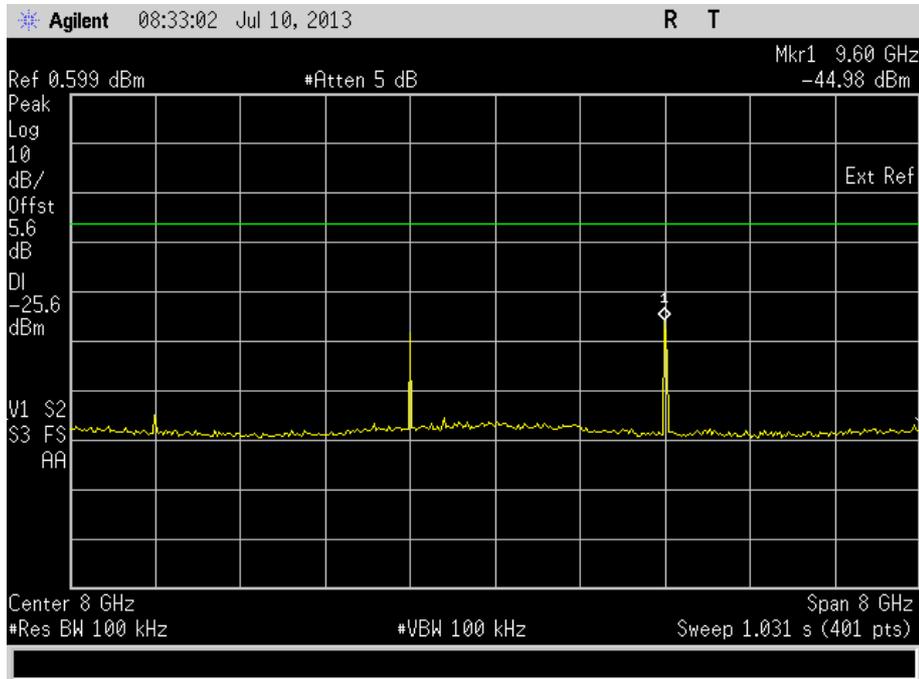
9 kHz to 4 GHz



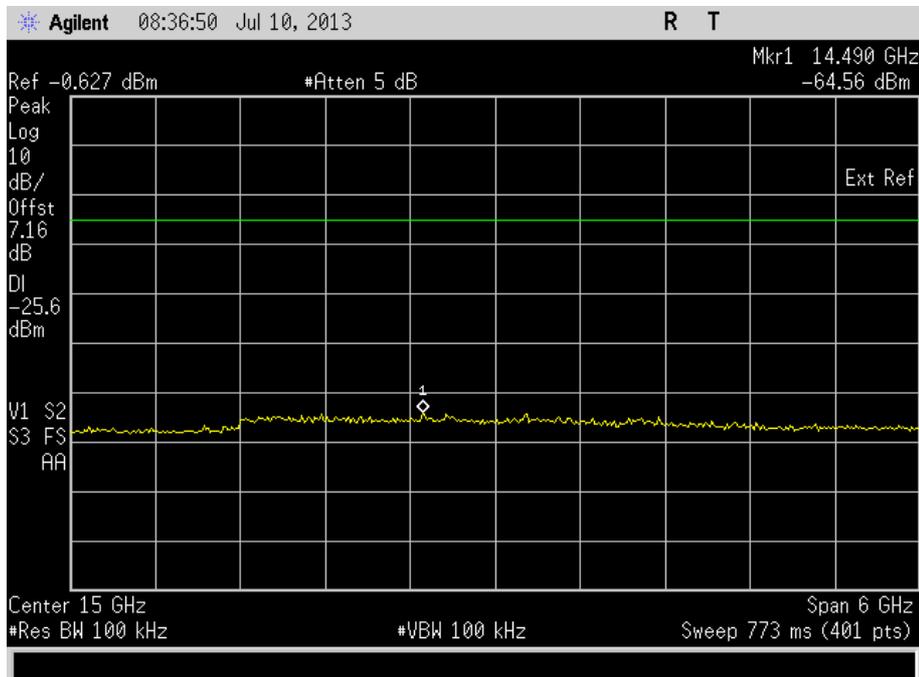


Product Service

4 GHz to 12 GHz



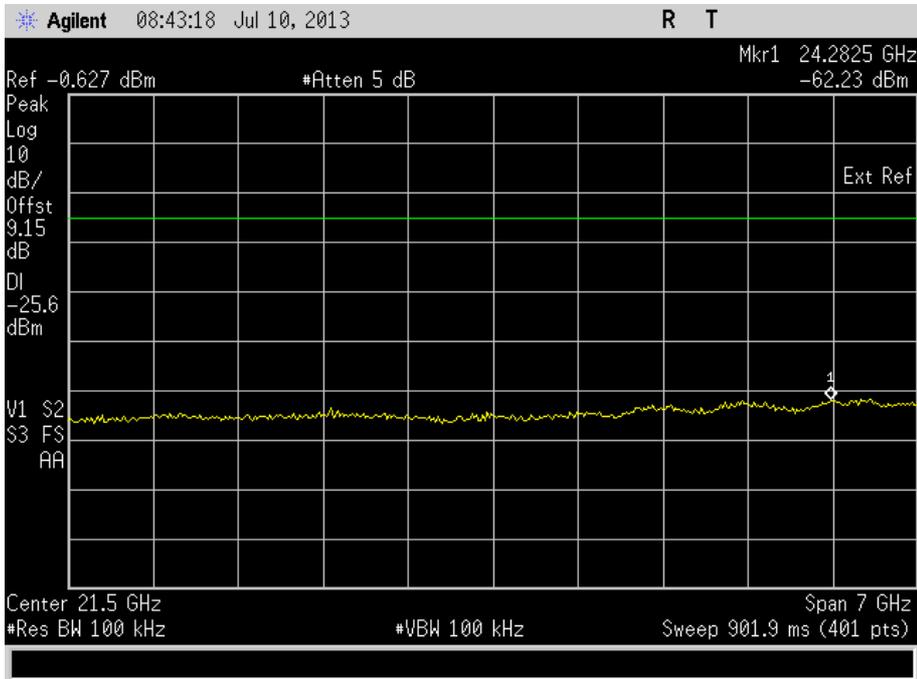
12 GHz to 18 GHz





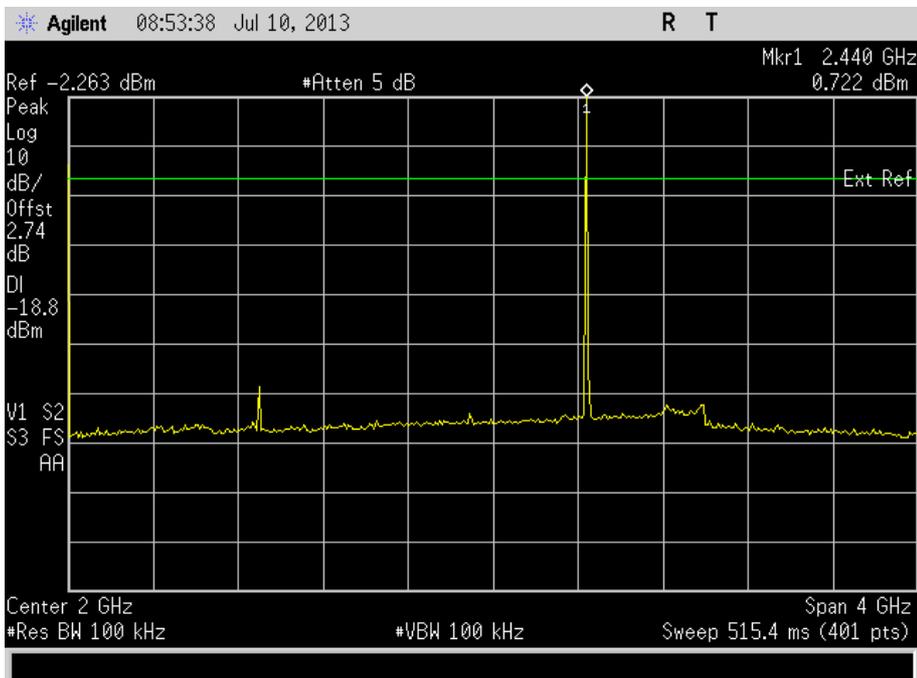
Product Service

18 GHz to 25 GHz



2441 MHz

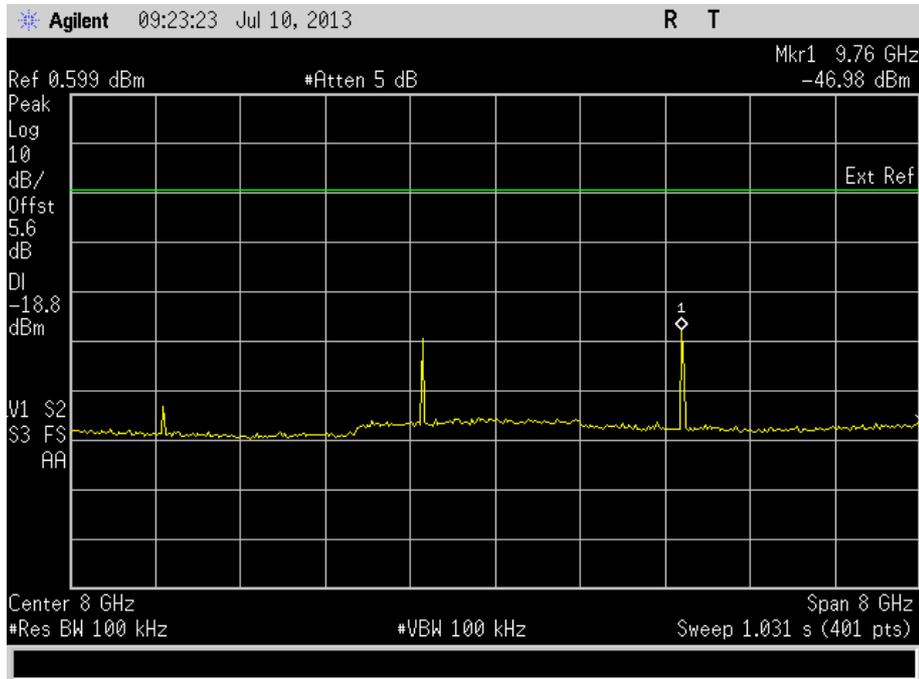
9 kHz to 4 GHz



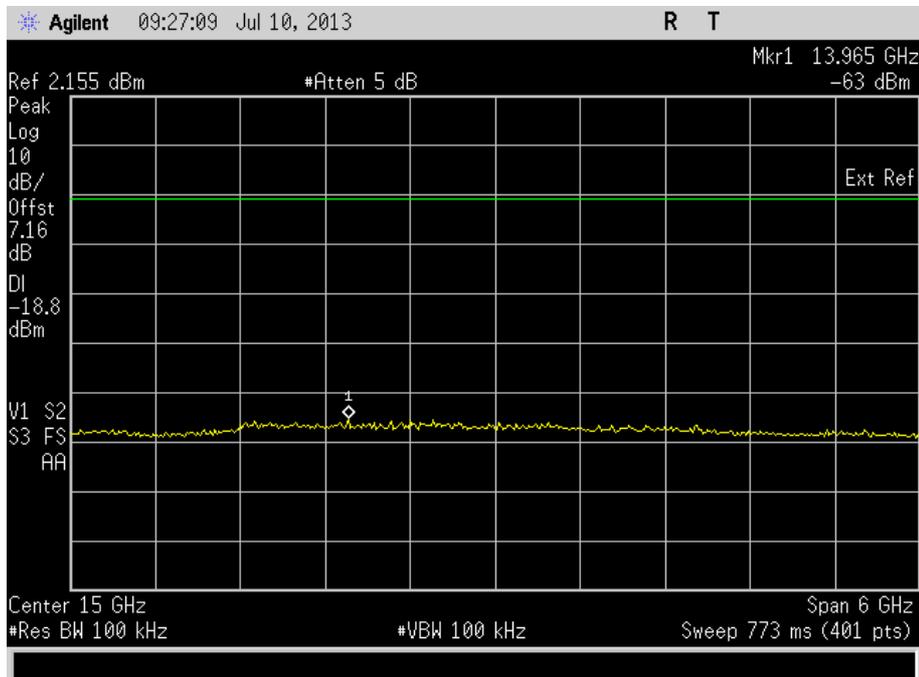


Product Service

4 GHz to 12 GHz

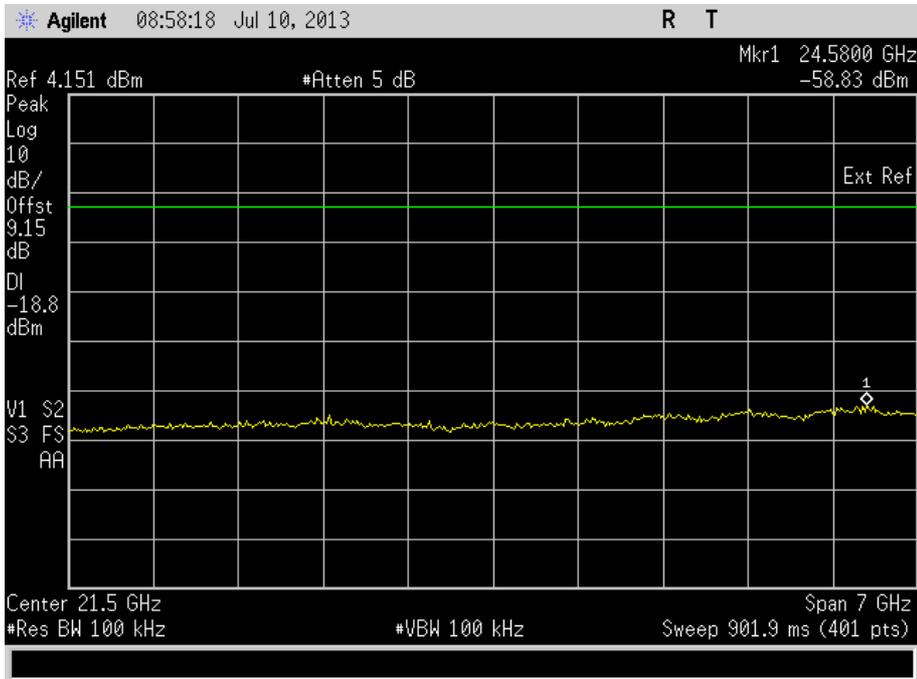


12 GHz to 18 GHz



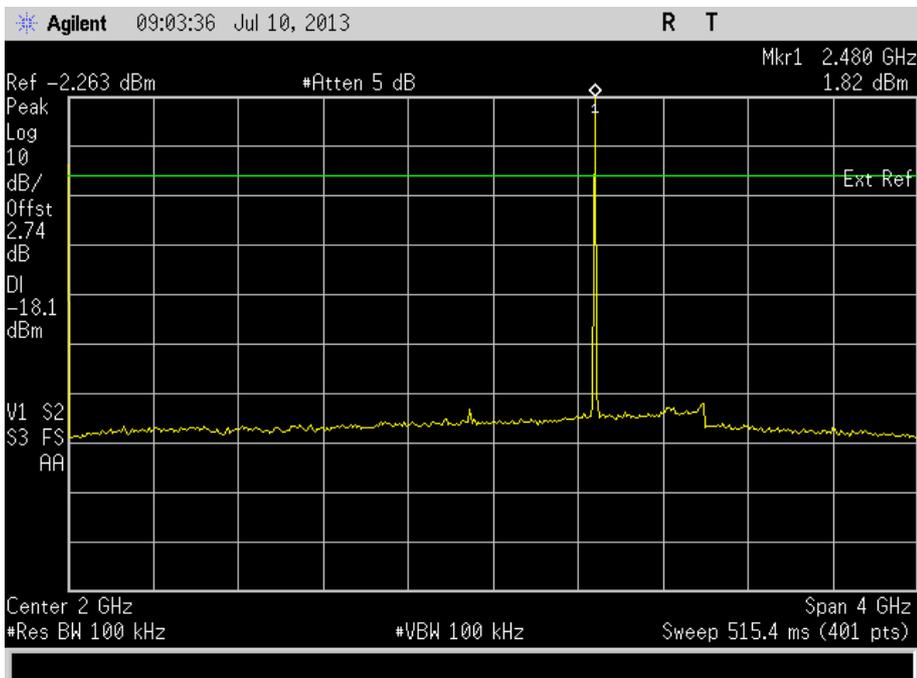


18 GHz to 25 GHz



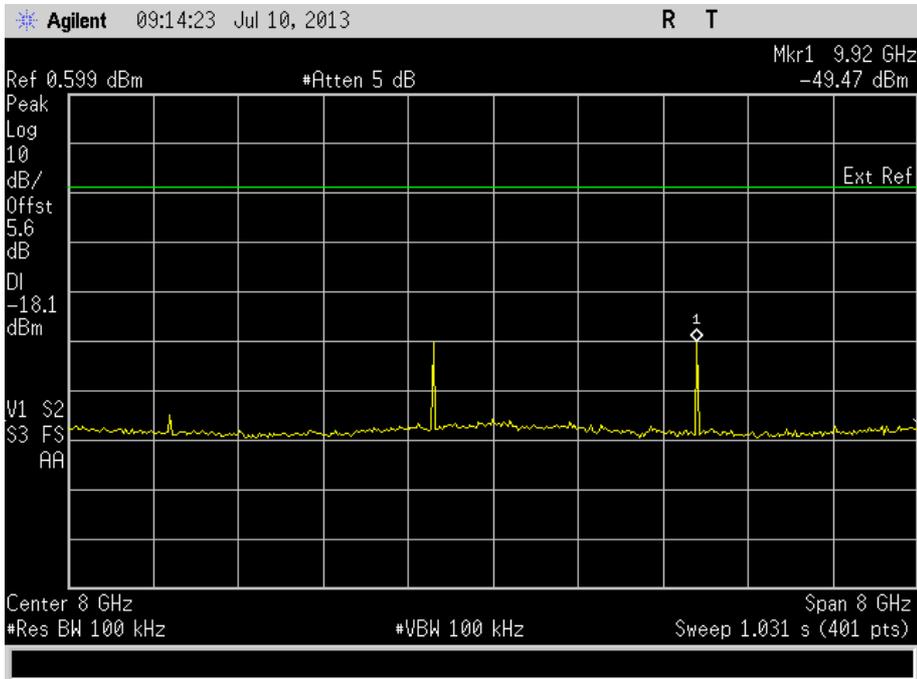
2480 MHz

9 kHz to 4 GHz

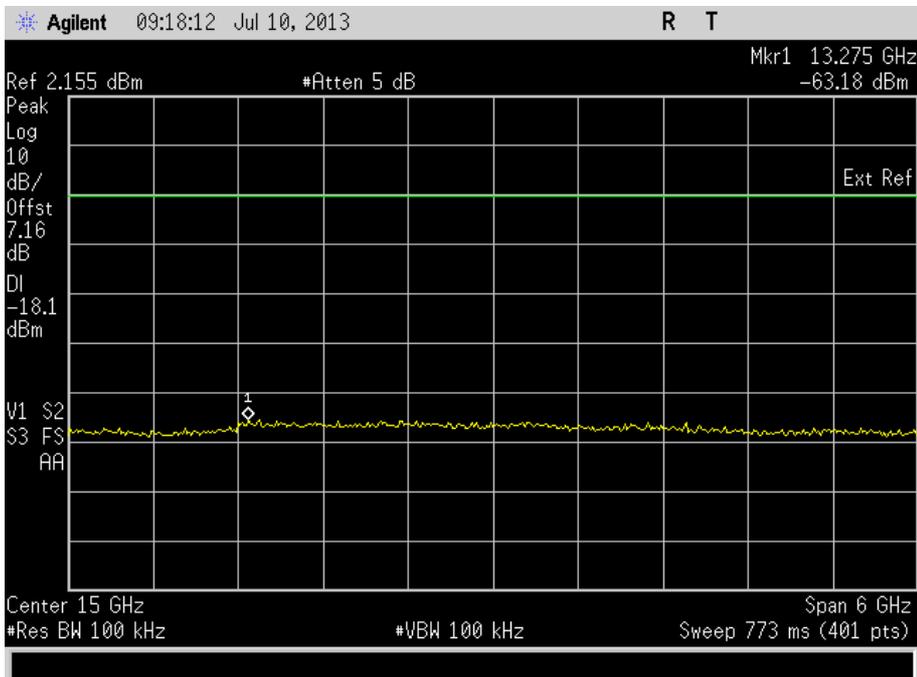




4 GHz to 12 GHz



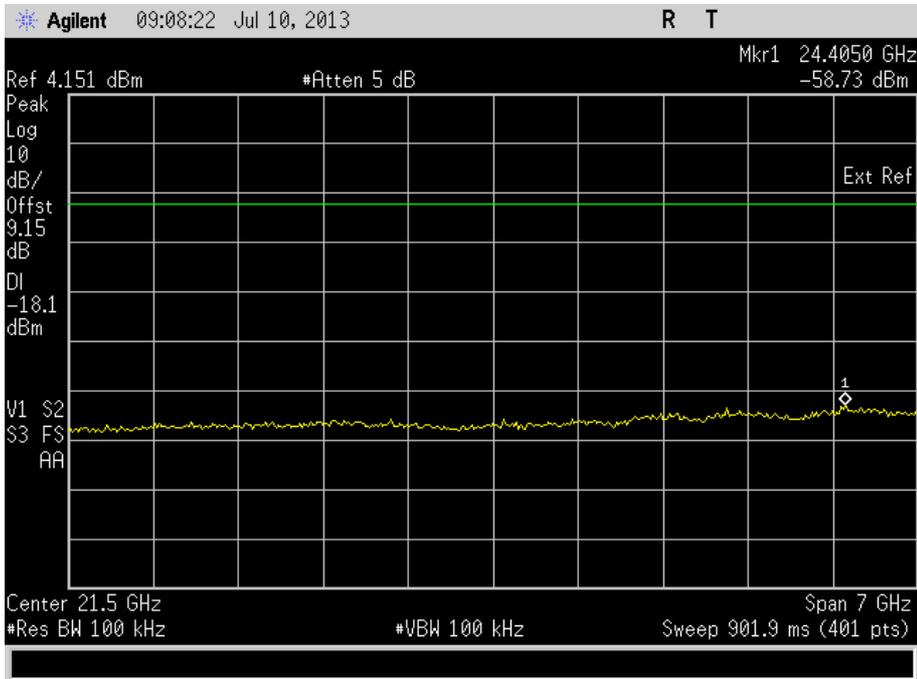
12 GHz to 18 GHz





Product Service

18 GHz to 25 GHz



Limit Clause

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.

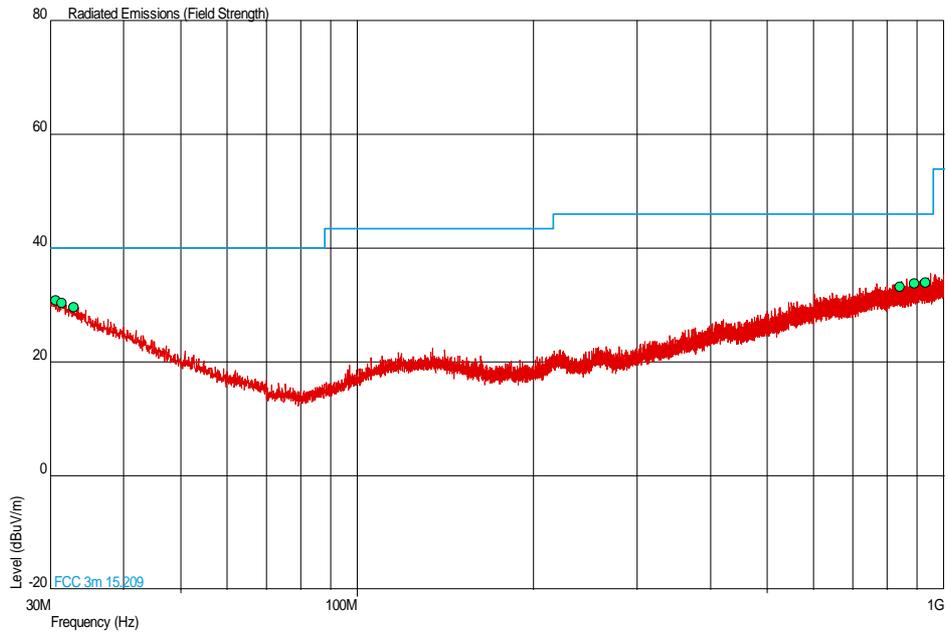
If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval the attenuation required shall be 30 dB instead of 20 dB.



Spurious Radiated Emissions

2402 MHz

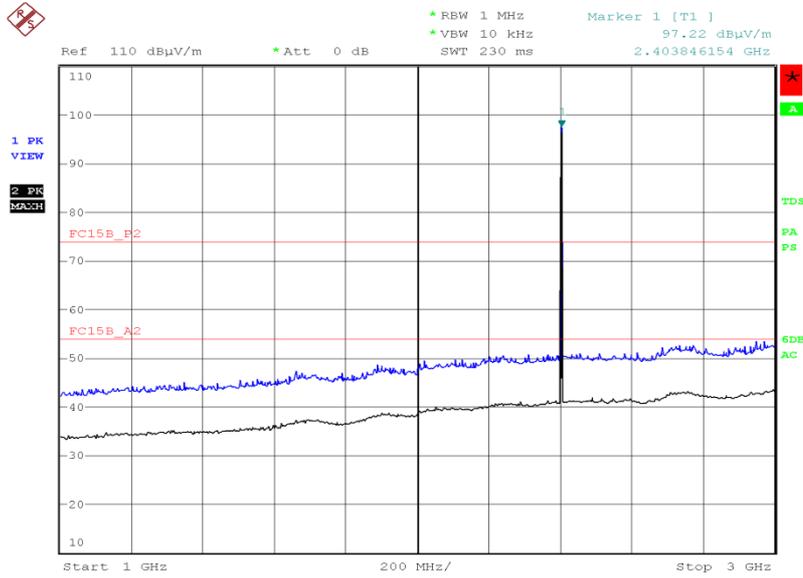
30 MHz to 1 GHz



Frequency (MHz)	QP Level (dB μ V/m)	QP Level (μ V/m)	QP Limit (dB μ V/m)	QP Limit (μ V/m)	QP Margin (dB μ V/m)	QP Margin (μ V/m)	Angle (Deg)	Height (m)	Polarity
30.631	30.8	34.7	40.0	100	-9.2	65.3	90	1.00	Horizontal
31.407	30.4	33.1	40.0	100	-9.6	66.9	0	1.00	Horizontal
32.862	29.6	30.2	40.0	100	-10.4	69.8	90	1.00	Horizontal
841.939	33.2	45.7	46.0	200	-12.8	154.3	180	1.00	Vertical
890.099	33.8	49.0	46.0	200	-12.2	151.0	270	1.00	Vertical
929.433	33.9	49.5	46.0	200	-12.1	150.5	270	1.00	Horizontal

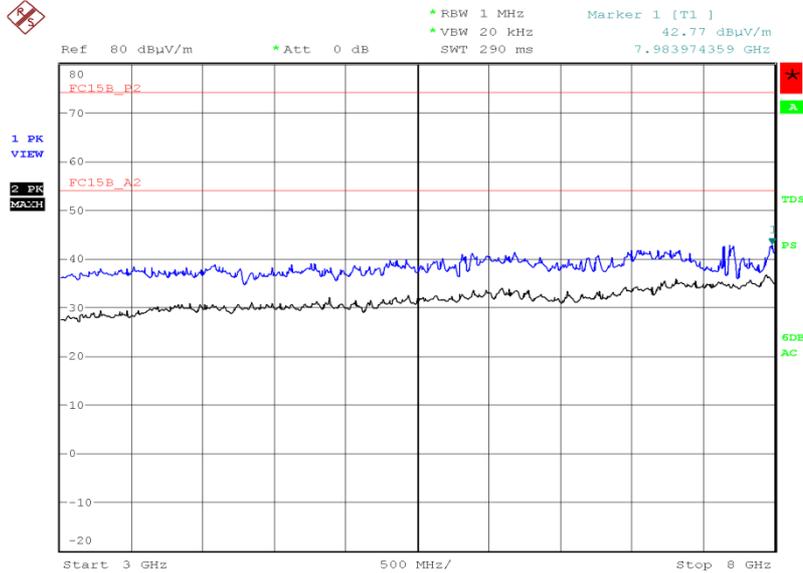


1 GHz to 3 GHz



Date: 10.JUL.2013 17:27:15

3 GHz to 8 GHz

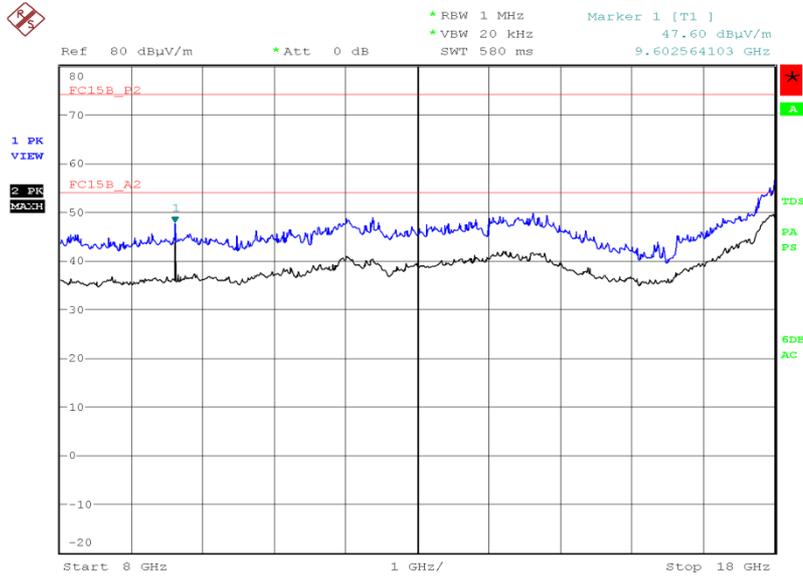


Date: 10.JUL.2013 18:51:43



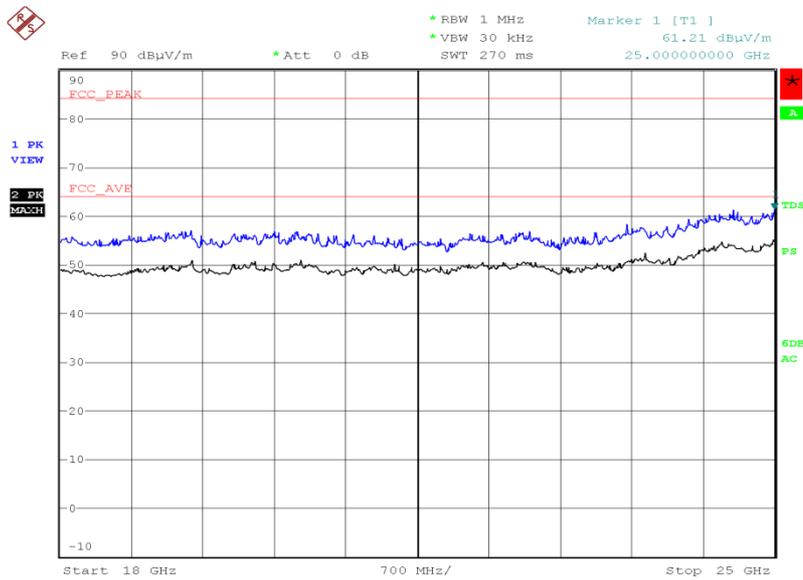
Product Service

8 GHz to 18 GHz



Date: 10.JUL.2013 19:38:06

18 GHz to 25 GHz

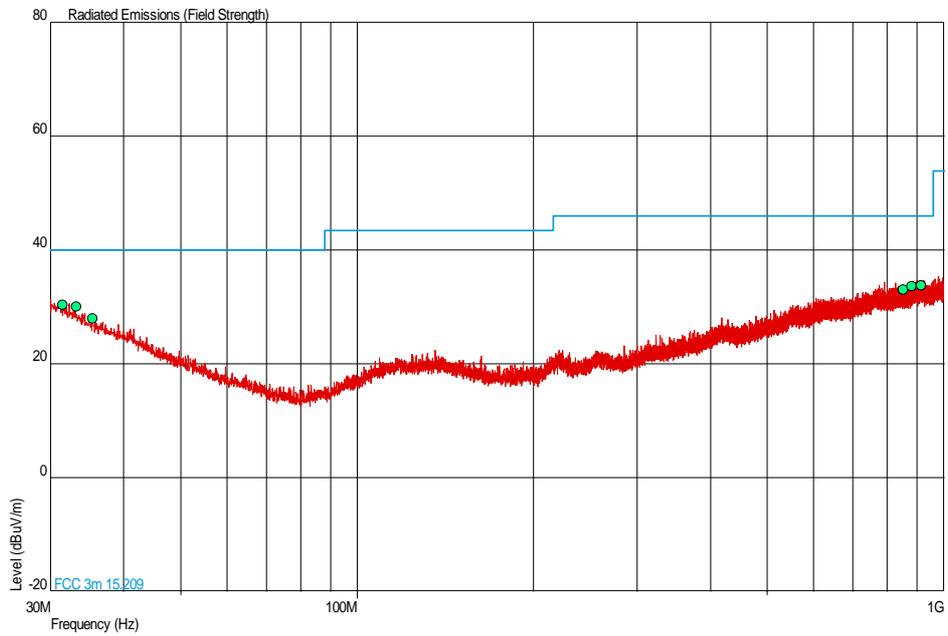


Date: 10.JUL.2013 21:13:27



2441 MHz

30 MHz to 1 GHz

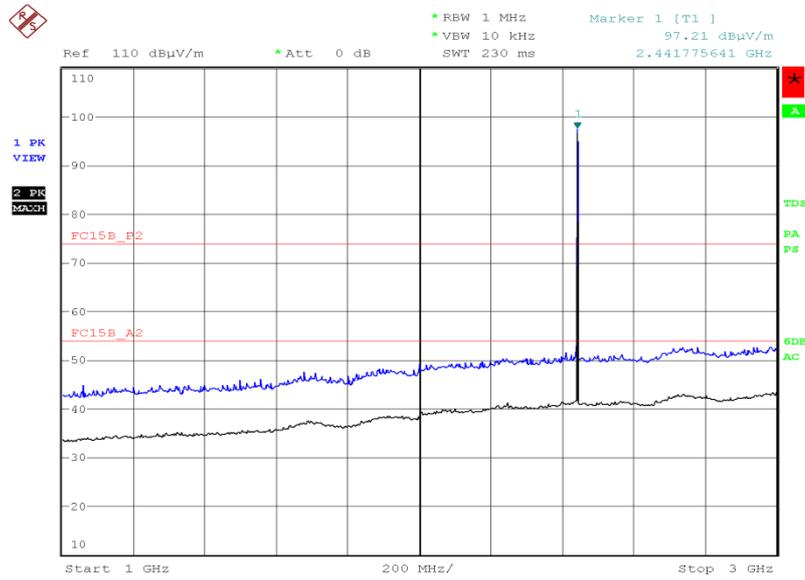


Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
31.455	30.4	34.7	40.0	100	-9.6	65.3	270	1.00	Vertical
33.250	30.1	33.1	40.0	100	-9.9	66.9	180	1.00	Vertical
35.432	28.0	30.2	40.0	100	-12.0	69.8	90	1.00	Horizontal
853.821	33.1	45.7	46.0	200	-12.9	154.3	180	1.00	Horizontal
882.194	33.6	49.0	46.0	200	-12.4	151.0	270	1.00	Horizontal
915.950	33.9	49.5	46.0	200	-12.1	150.5	0	1.00	Horizontal



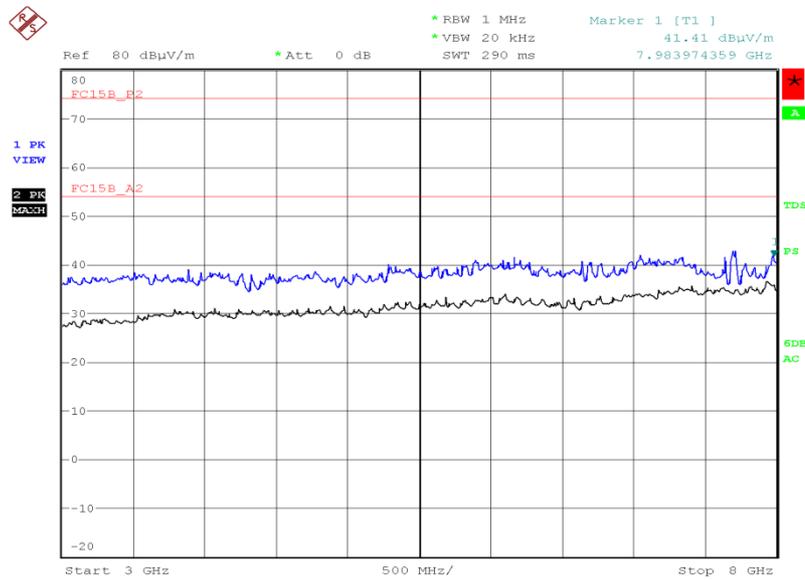
Product Service

1 GHz to 3 GHz



Date: 10.JUL.2013 17:41:40

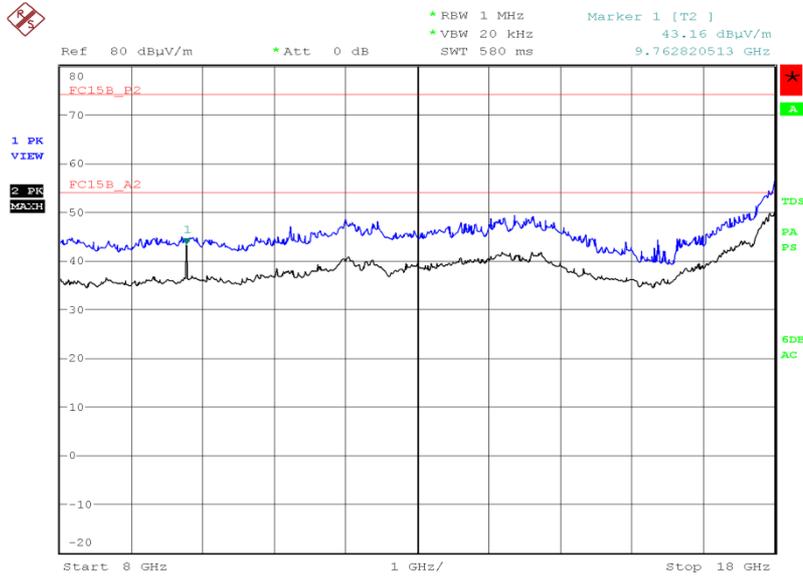
3 GHz to 8 GHz



Date: 10.JUL.2013 18:59:16

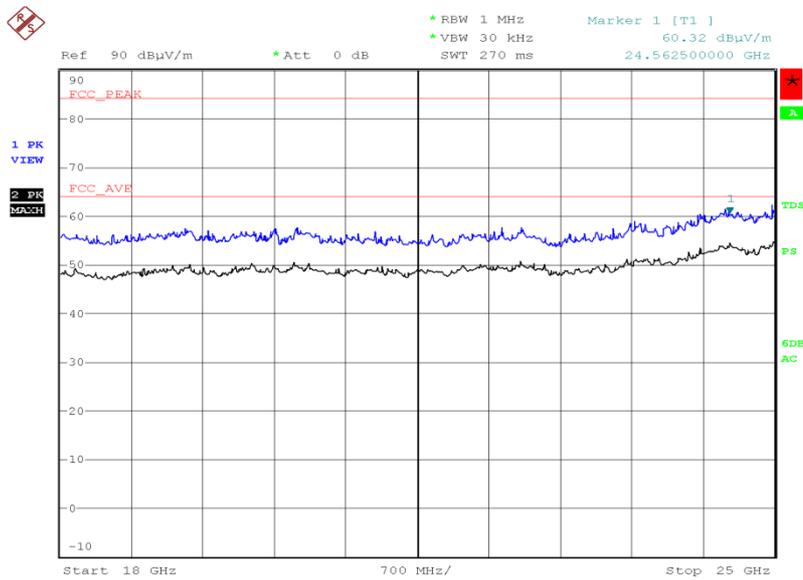


8 GHz to 18 GHz



Date: 10.JUL.2013 19:54:12

18 GHz to 25 GHz

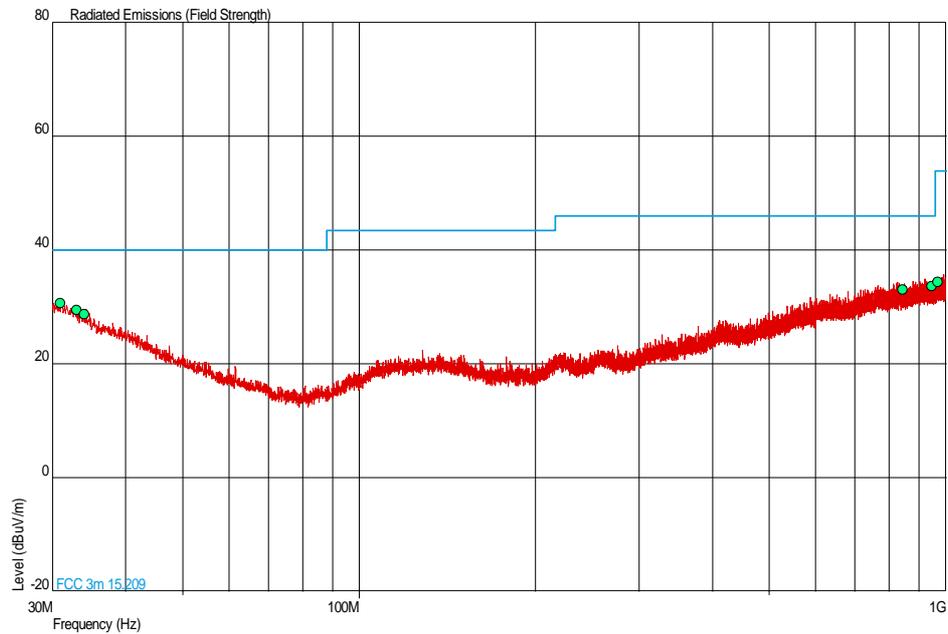


Date: 10.JUL.2013 21:08:03



2480 MHz

30 MHz to 1 GHz

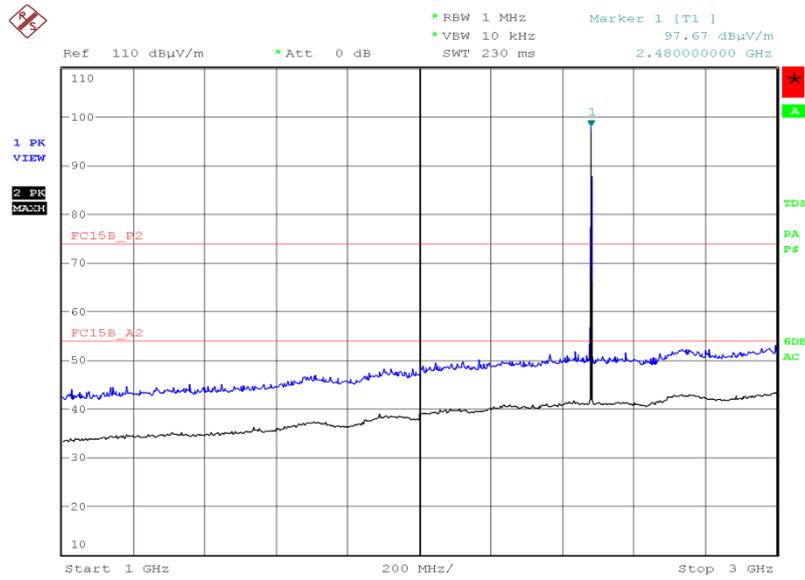


Frequency (MHz)	QP Level (dBµV/m)	QP Level (µV/m)	QP Limit (dBµV/m)	QP Limit (µV/m)	QP Margin (dBµV/m)	QP Margin (µV/m)	Angle (Deg)	Height (m)	Polarity
31.019	30.7	34.3	40.0	100	-9.3	65.7	180	1.00	Vertical
32.959	29.5	29.9	40.0	100	-10.5	70.1	180	1.00	Horizontal
33.977	28.7	27.2	40.0	100	-11.3	72.8	90	1.00	Vertical
842.812	33.1	45.2	46.0	200	-12.9	154.8	270	1.00	Horizontal
945.147	33.7	48.4	46.0	200	-12.3	151.6	0	1.00	Horizontal
967.214	34.4	52.5	54.0	501	-19.6	447.5	0	1.00	Horizontal



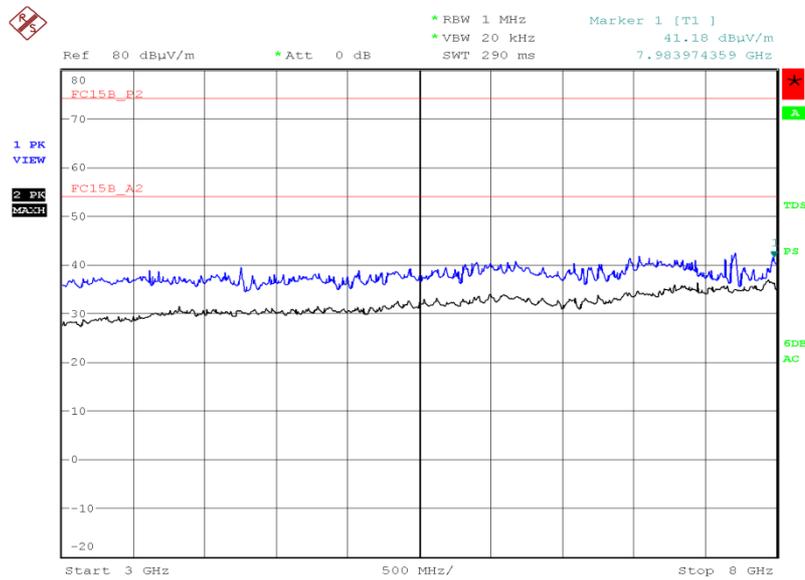
Product Service

1 GHz to 3 GHz



Date: 10.JUL.2013 17:59:43

3 GHz to 8 GHz

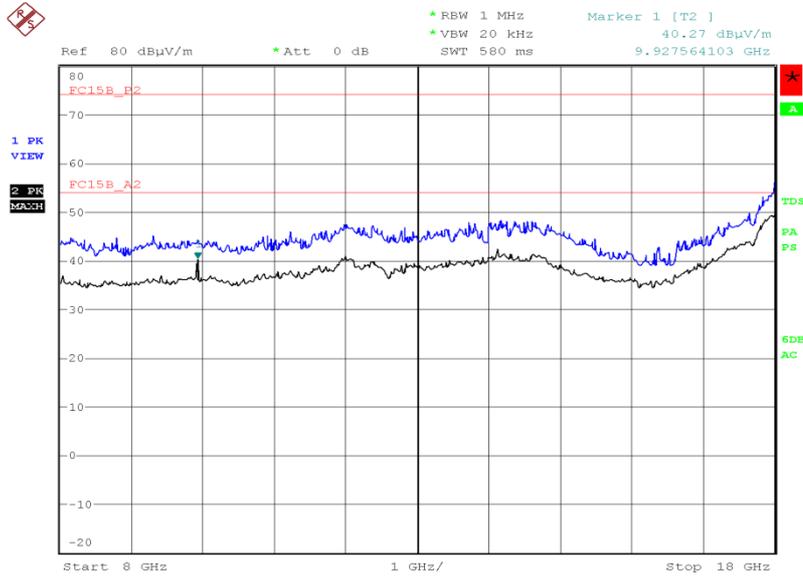


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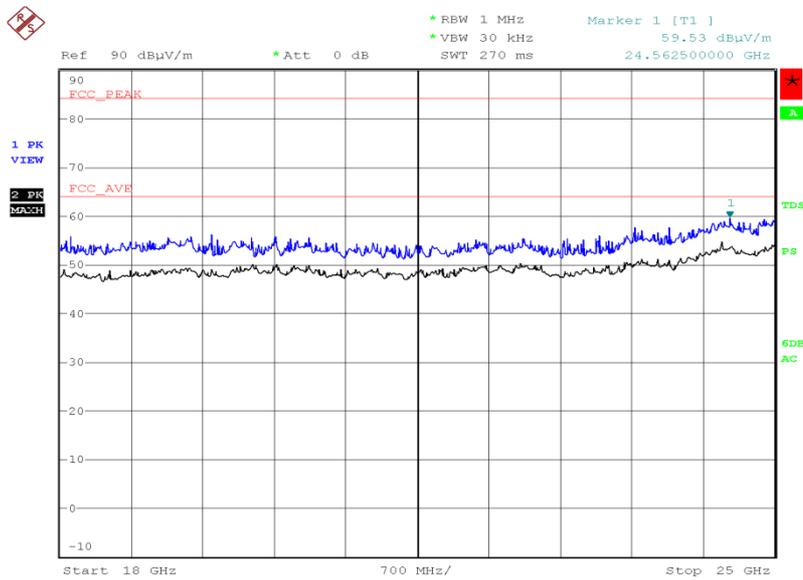
Product Service

8 GHz to 18 GHz



Date: 10.JUL.2013 20:08:49

18 GHz to 25 GHz



Date: 10.JUL.2013 21:04:39

Limit

Peak (dBμV/m)	Average (dBμV/m)
74.0	54.0

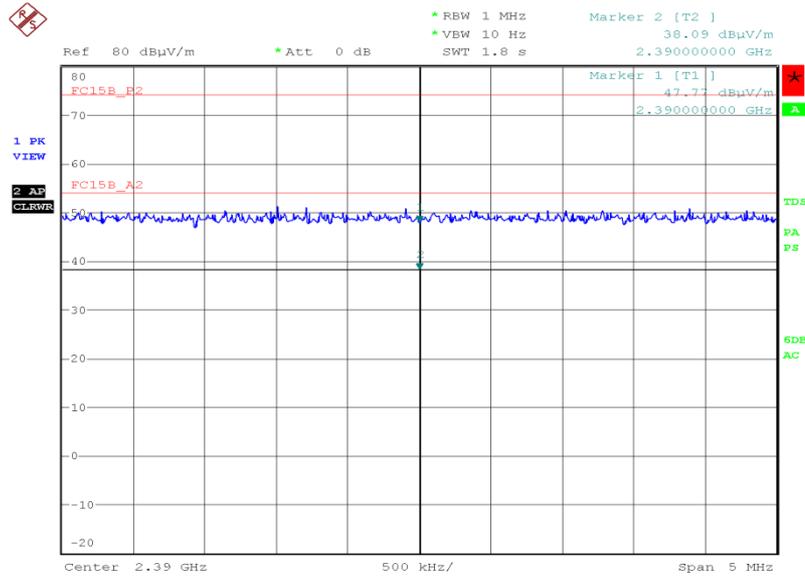


Product Service

Band Edge Emissions

2402 MHz

Polarisation	Final Peak (dBµV/m)	Final Average (dBµV/m)
Horizontal	47.77	38.09

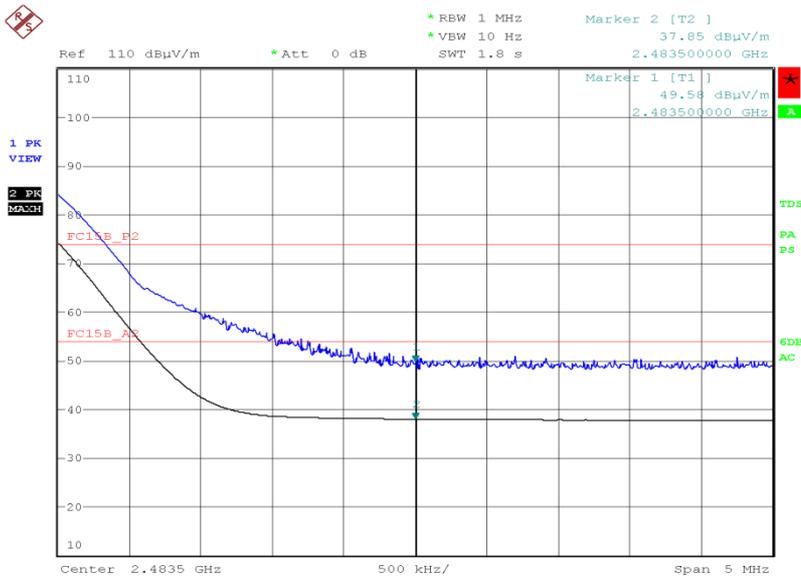


Date: 10.JUL.2013 17:17:49



2480 MHz

Polarisation	Final Peak (dBµV/m)	Final Average (dBµV/m)
Horizontal	49.58	37.85



Date: 10.JUL.2013 17:52:55

Limit

Peak (dBµV/m)	Average (dBµV/m)
74.0	54.0



2.5 POWER SPECTRAL DENSITY

2.5.1 Specification Reference

FCC CFR 47 Part 15C, Clause 15.247 (e)

2.5.2 Equipment Under Test and Modification State

205SH S/N: IMEI 004401114779164 - Modification State 0

2.5.3 Date of Test

18 April 2013, 19 April 2013 & 10 July 2013

2.5.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.5.5 Test Procedure

The EUT was connected to a spectrum analyser via a 10 dB attenuator. The path loss was measured between the EUT and the spectrum analyser and entered as a reference level offset. The trace was set to max hold and using a peak detector the maximum response was established. With the spectrum analyser RBW at 3 kHz and VBW at 10 kHz, the power spectral density in a 3 kHz bandwidth was measured.

2.5.6 Environmental Conditions

Ambient Temperature	21.3 - 24.3°C
Relative Humidity	29.0 - 54.4%



Product Service

2.5.7 Test Results

802.11(b)

4.0 V DC Supply

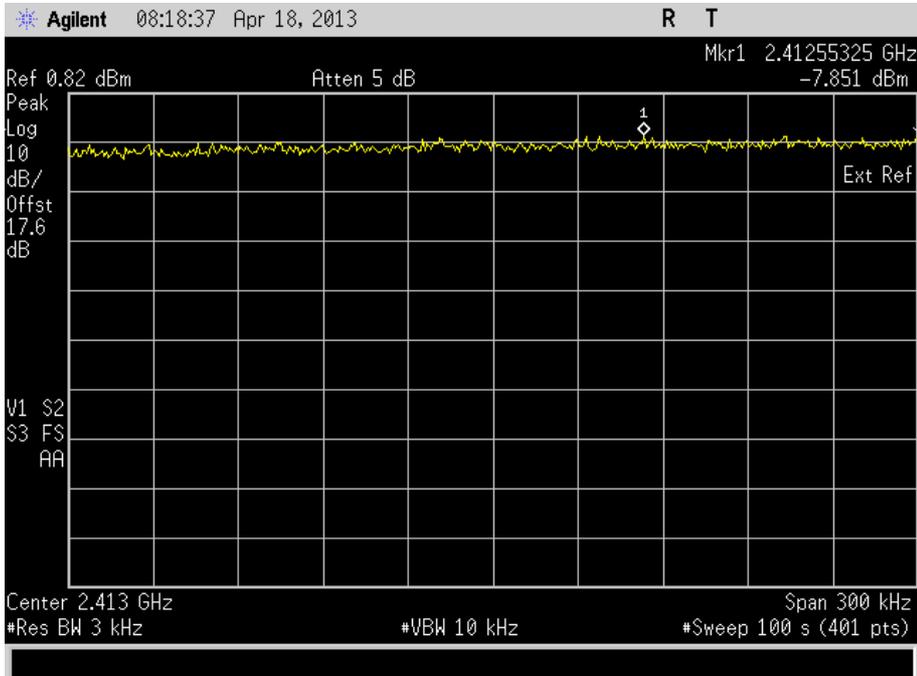
Frequency	Data Rate (Mbps)	Power Spectral Density in 3 kHz Bands (dBm)
2412 MHz	1	-7.85
	2	-7.01
	5	-7.87
	11	-7.46
2437 MHz	1	-8.02
	2	-7.03
	5	-7.87
	11	-8.35
2462 MHz	1	-7.51
	2	-7.27
	5	-8.04
	11	-7.67



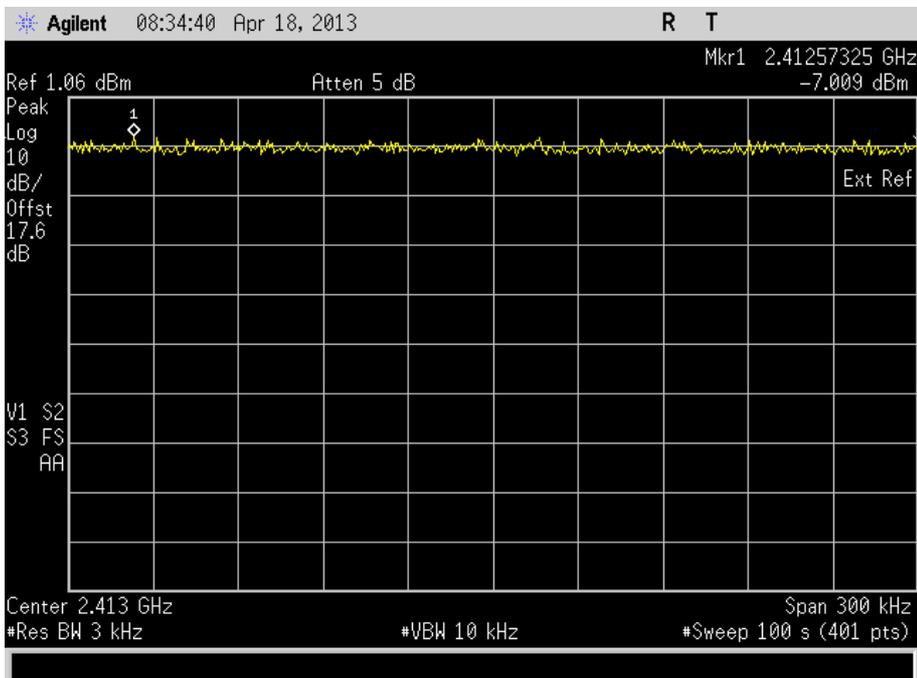
Product Service

2412 MHz

1 Mbps



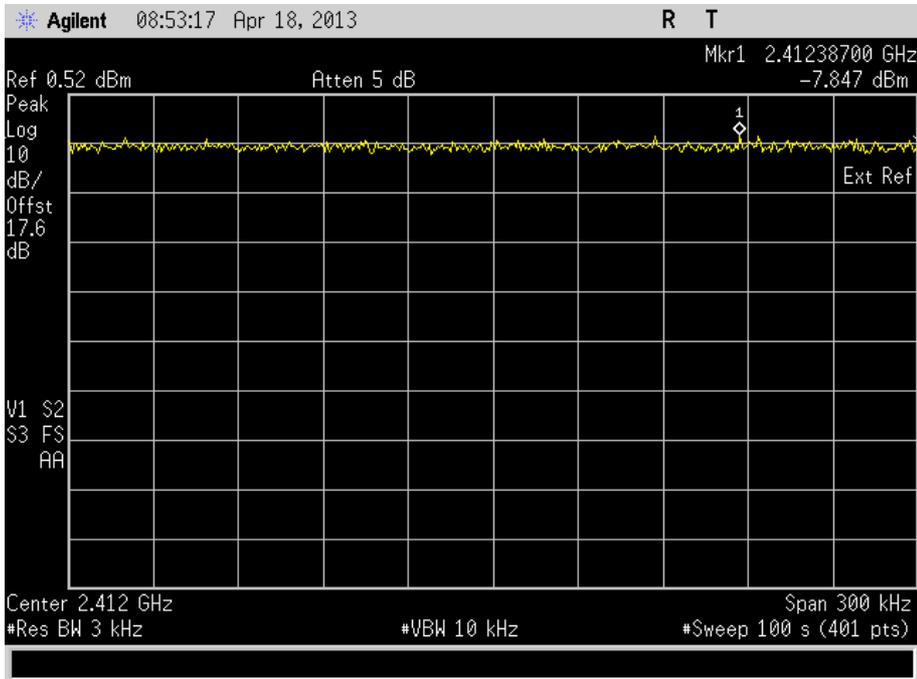
2 Mbps



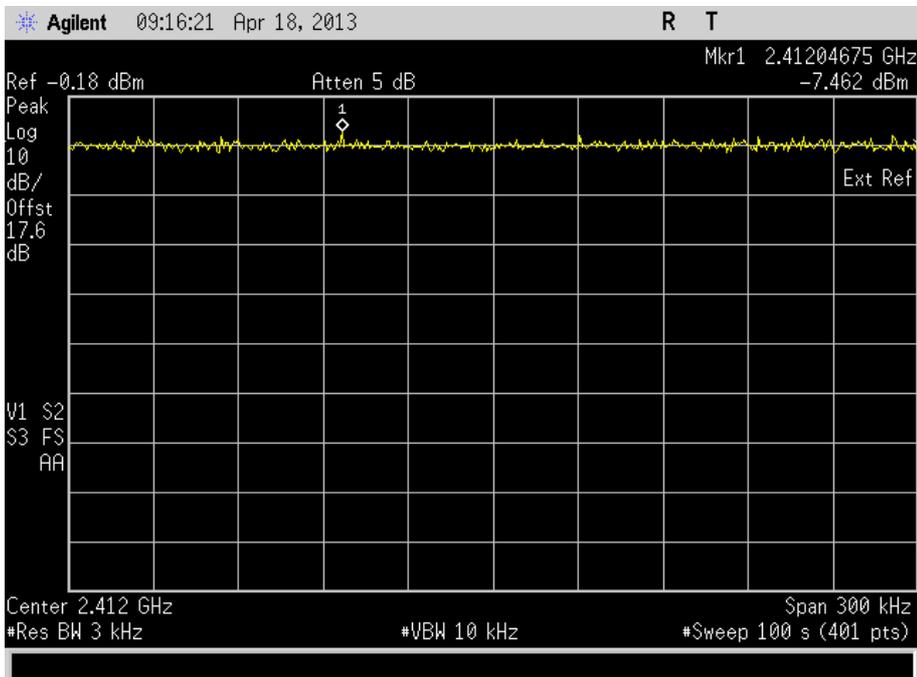


Product Service

5.5 Mbps



11 Mbps

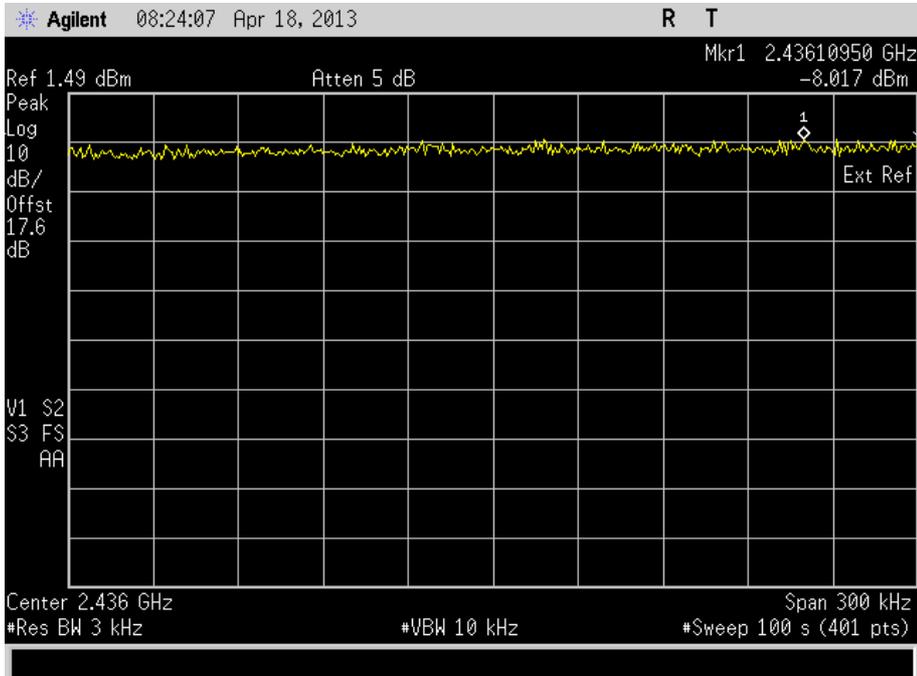




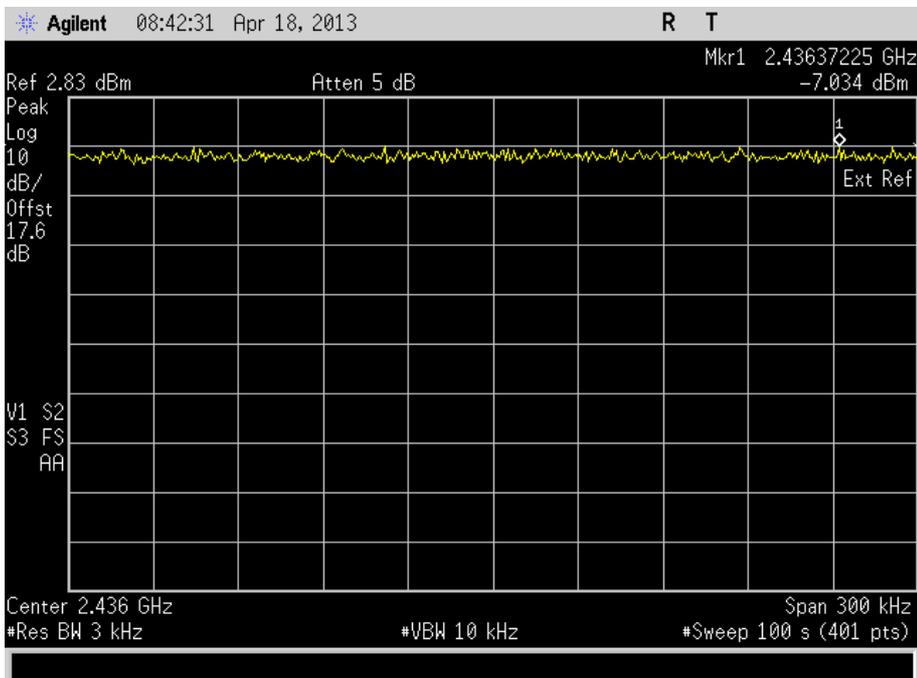
Product Service

2437 MHz

1 Mbps



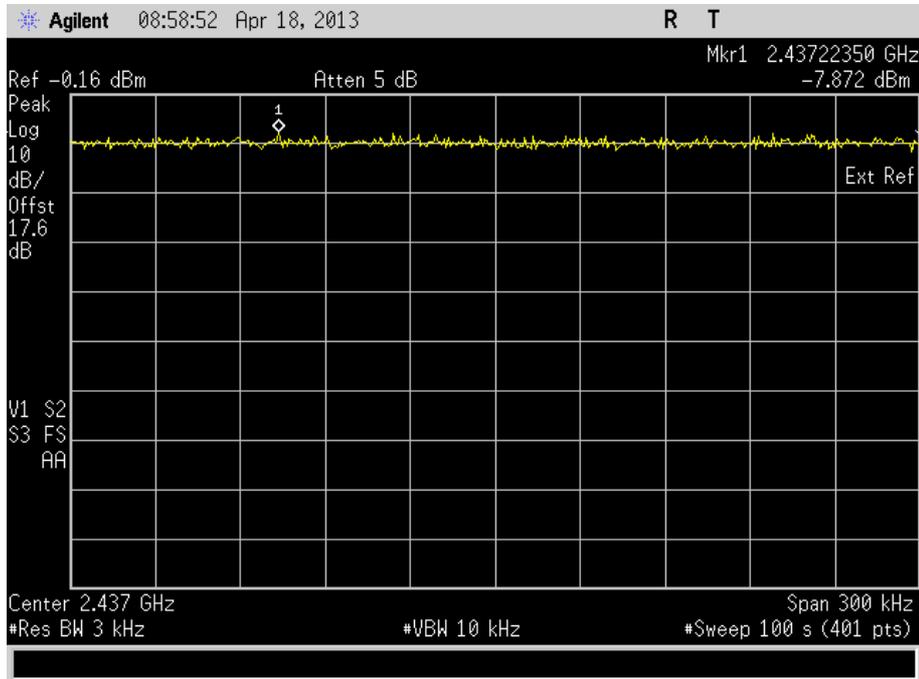
2 Mbps



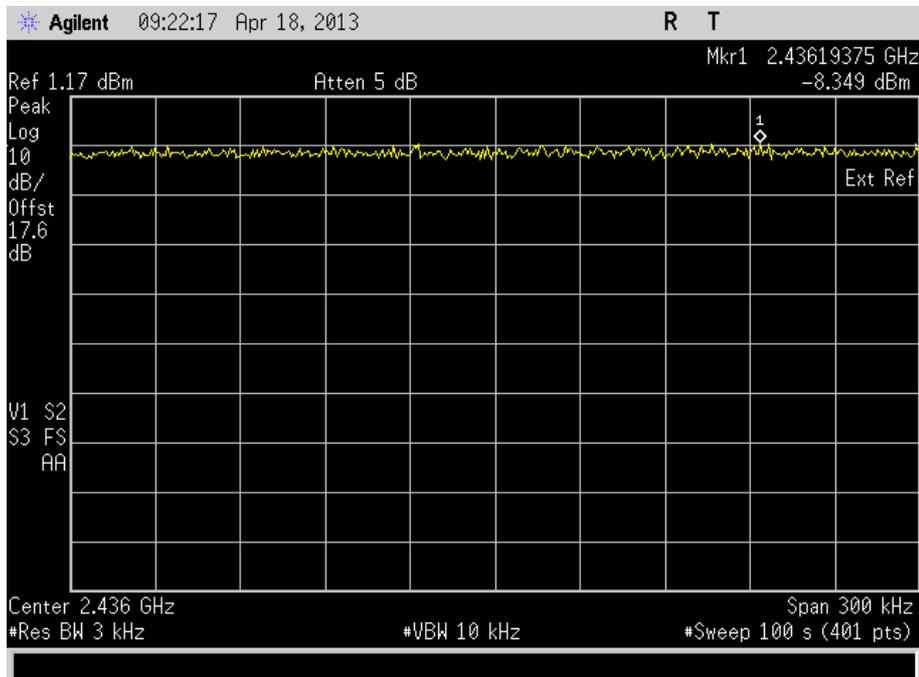


Product Service

5.5 Mbps



11 Mbps

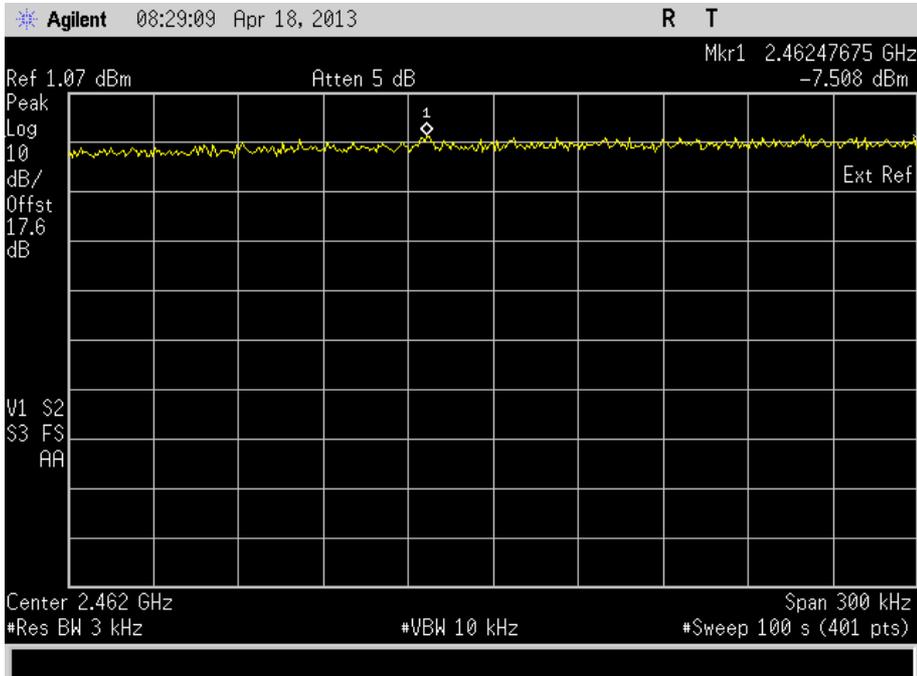




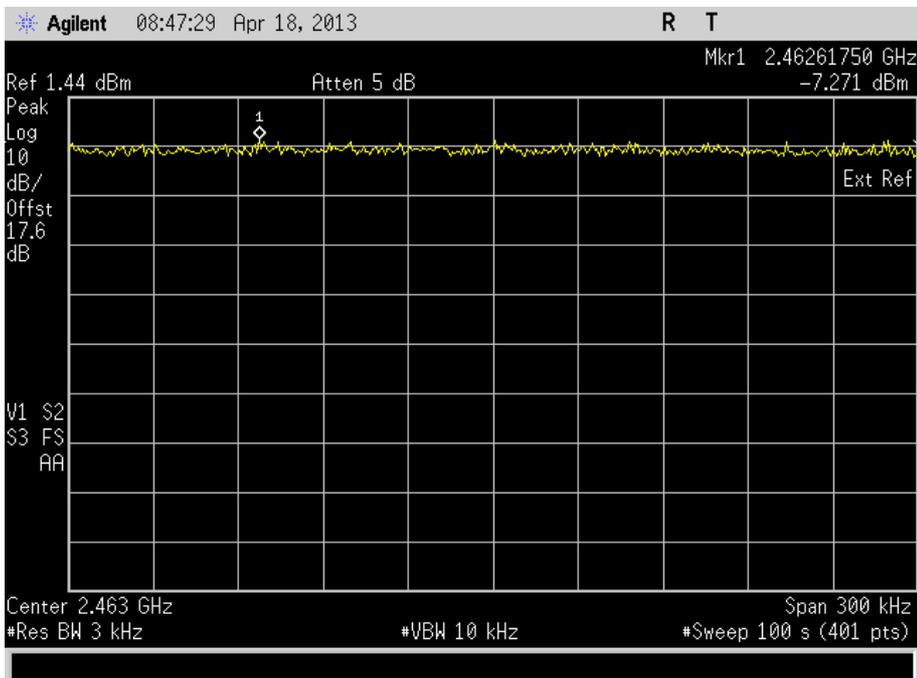
Product Service

2462 MHz

1 Mbps



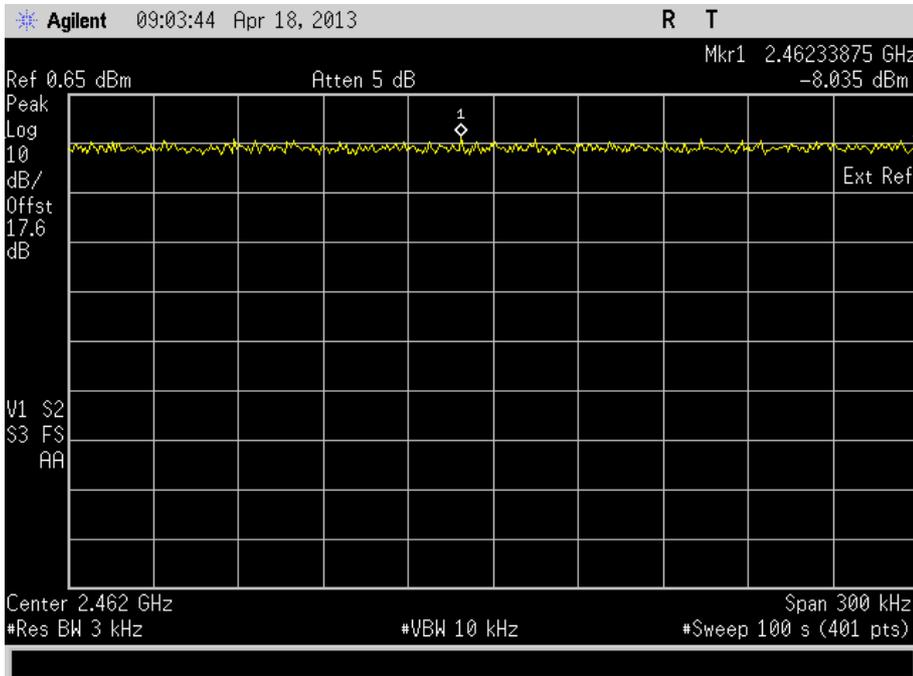
2 Mbps



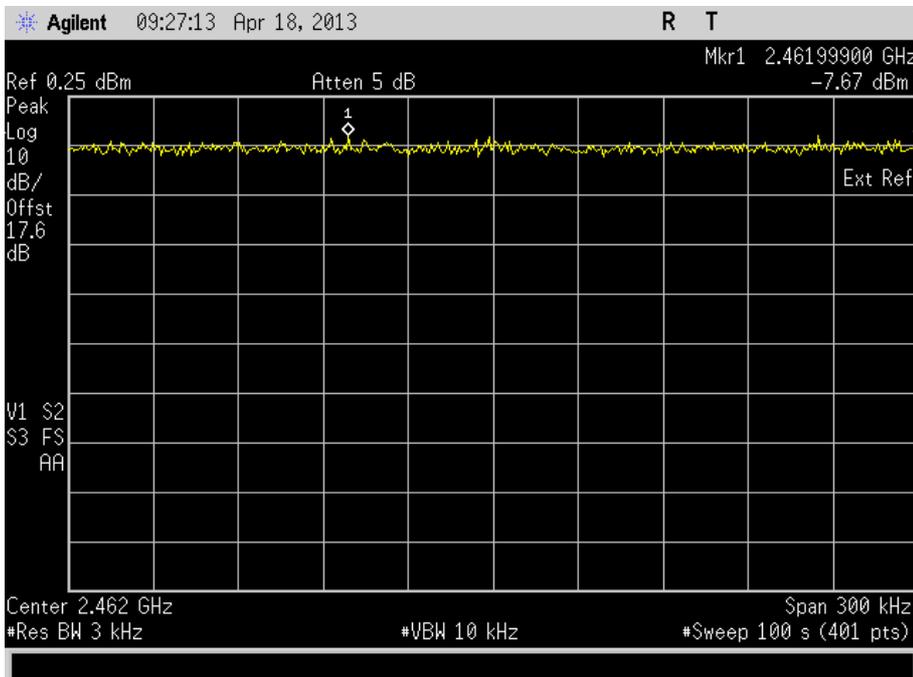


Product Service

5.5 Mbps



11 Mbps



Limit Clause

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.



Product Service

802.11(g)

4.0 V DC Supply

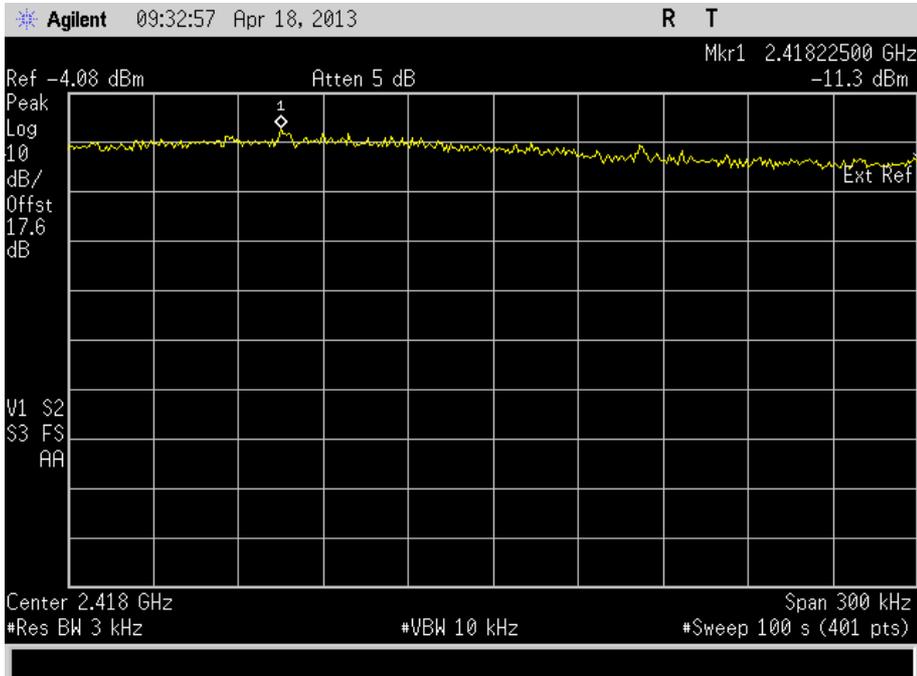
Frequency	Data Rate (Mbps)	Power Spectral Density in 3 kHz Bands (dBm)
2412 MHz	6	-11.30
	9	-11.52
	12	-11.64
	18	-12.68
	24	-12.18
	36	-12.50
	48	-12.74
	54	-12.08
2437 MHz	6	-11.83
	9	-11.80
	12	-14.33
	18	-11.11
	24	-12.07
	36	-13.04
	48	-12.25
	54	-11.91
2462 MHz	6	-13.40
	9	-12.71
	12	-13.15
	18	-12.52
	24	-12/53
	36	-13.20
	48	-12.74
	54	-13.05



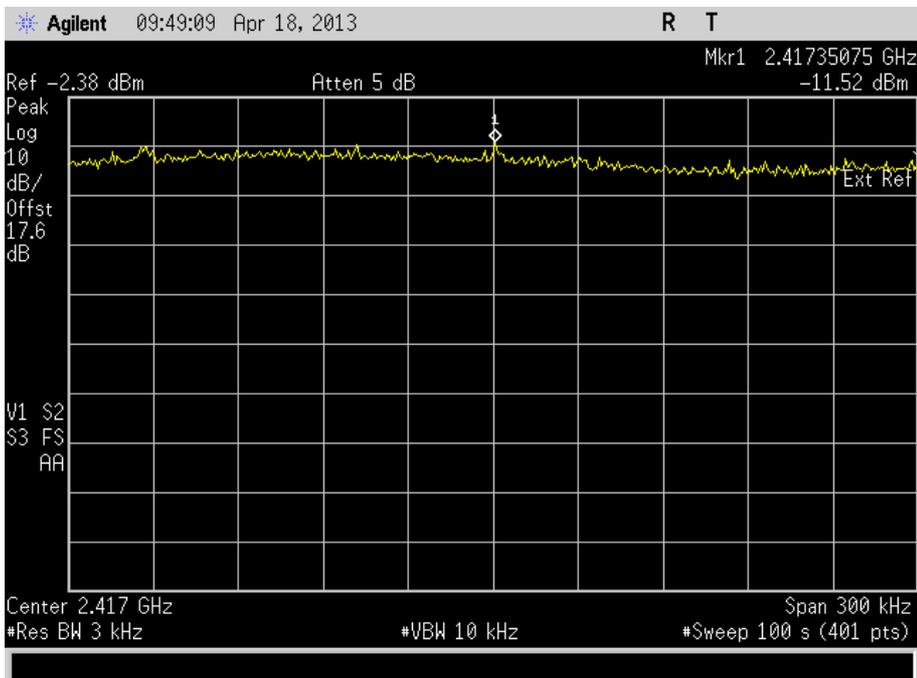
Product Service

2412 MHz

6 Mbps



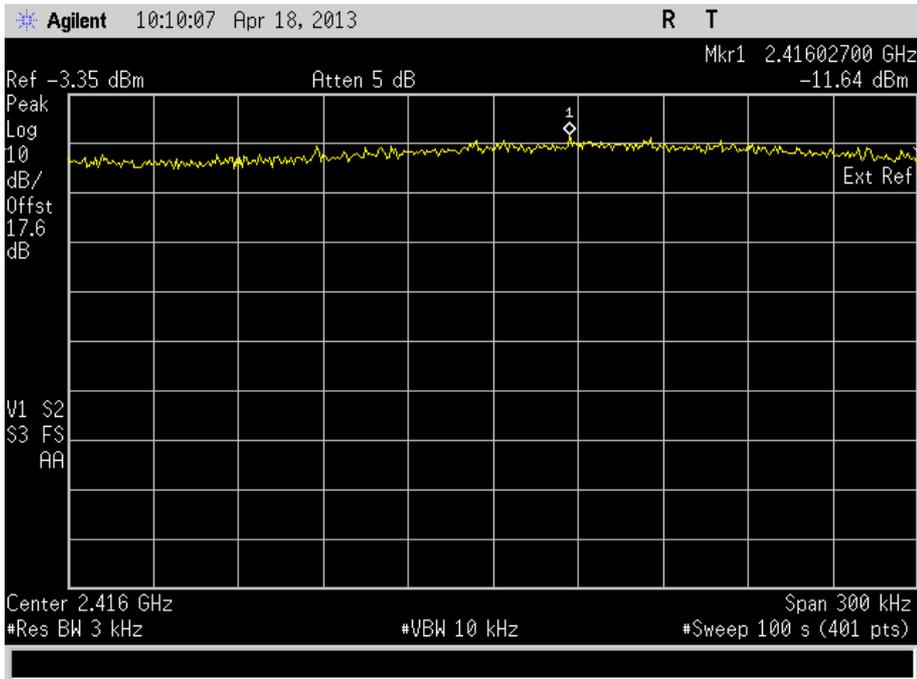
9 Mbps



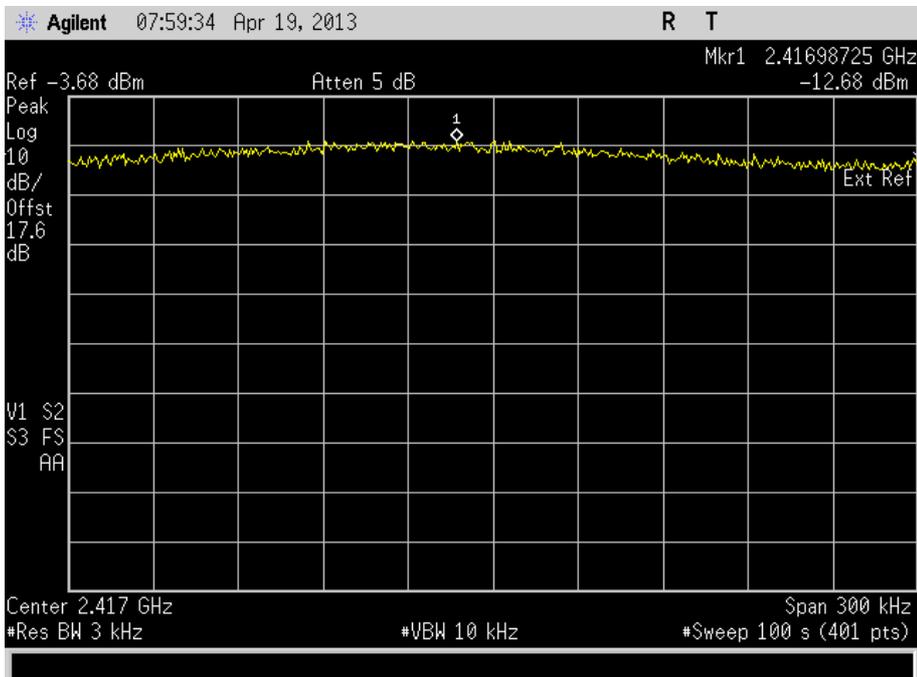


Product Service

12 Mbps



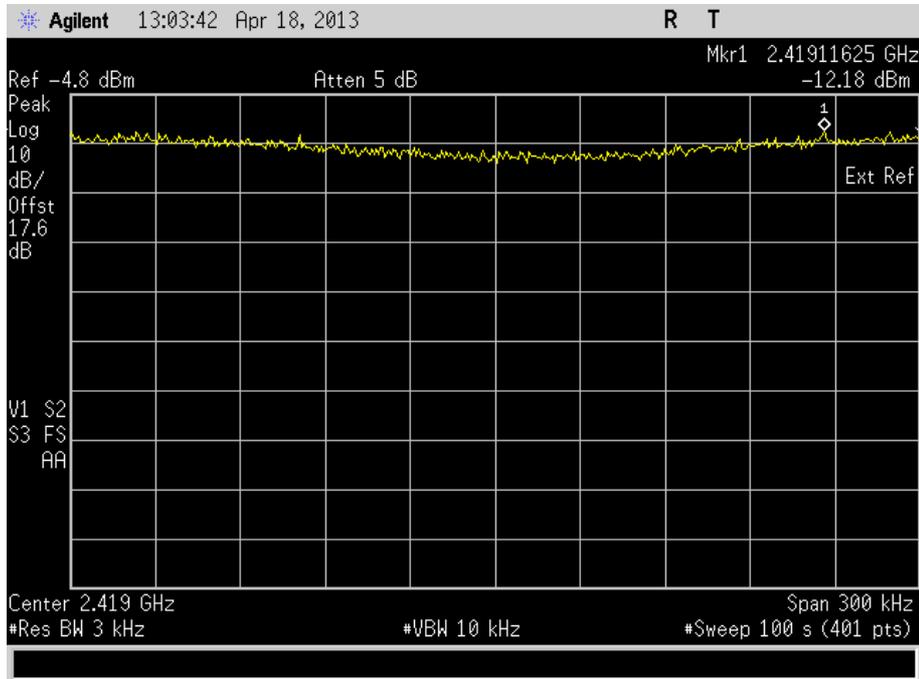
18 Mbps



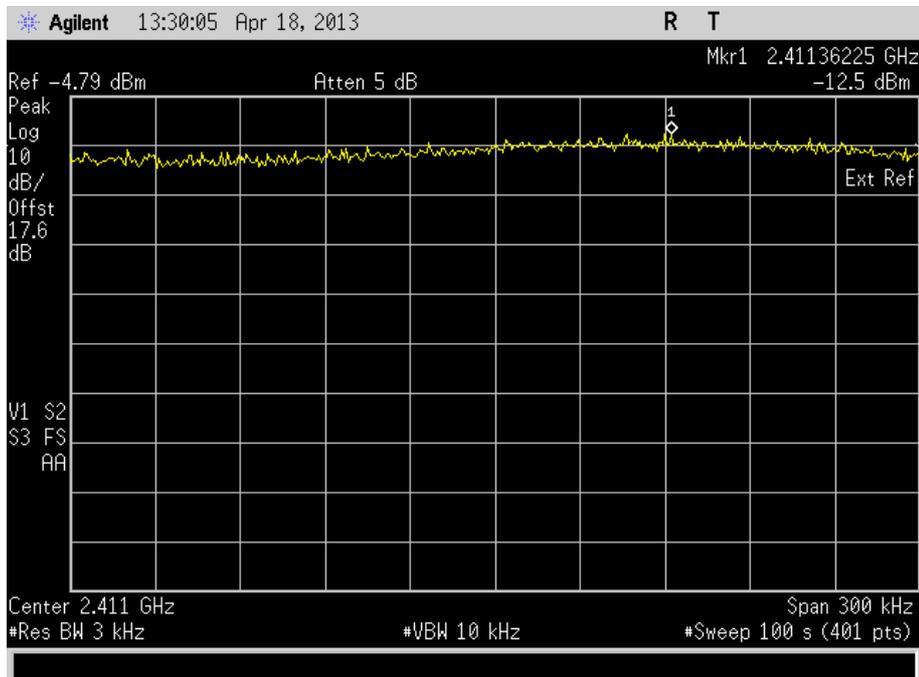


Product Service

24 Mbps



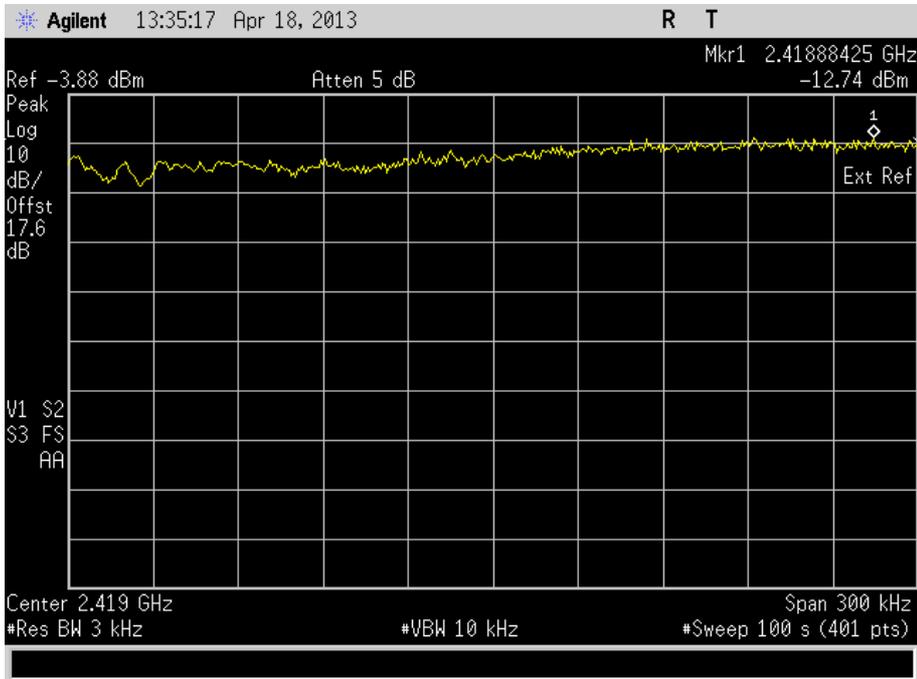
36 Mbps



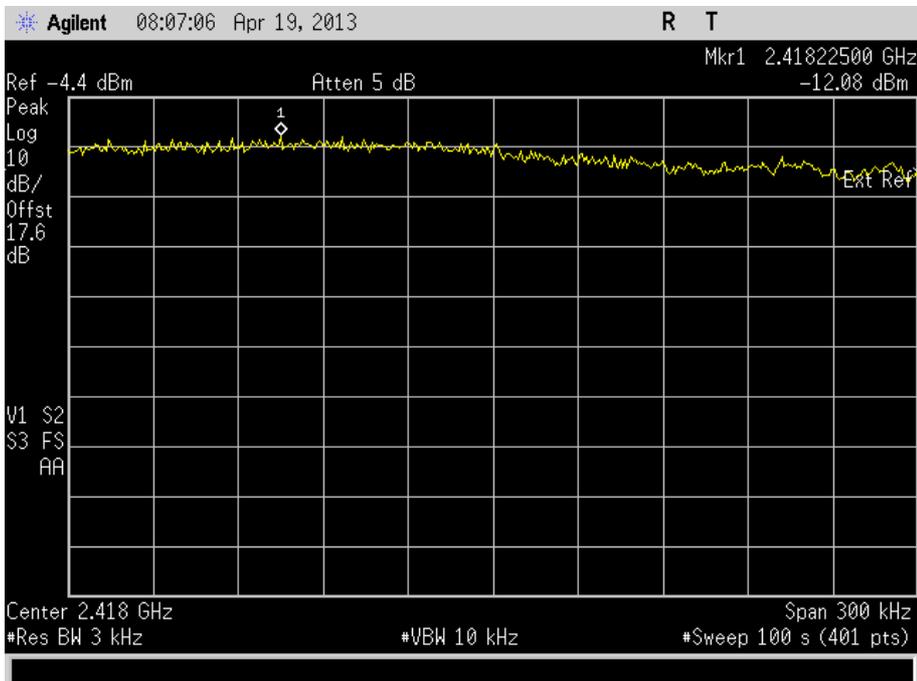


Product Service

48 Mbps



54 Mbps

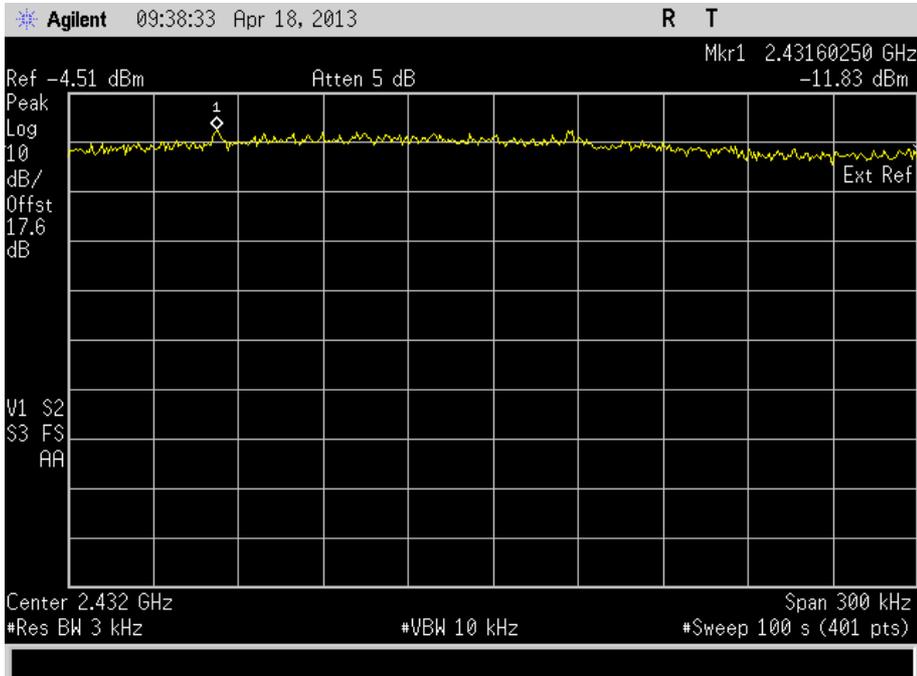




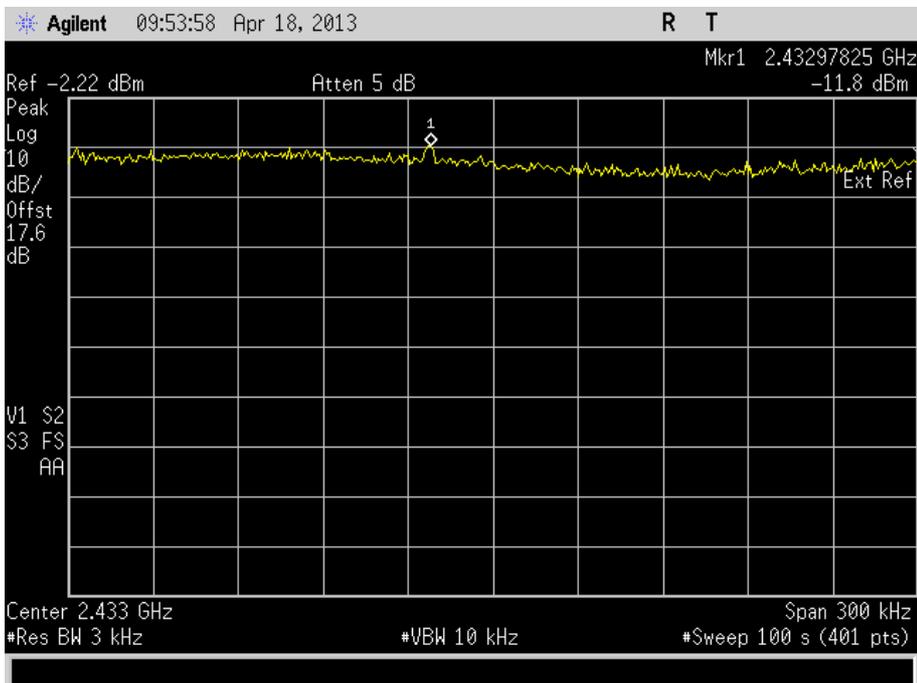
Product Service

2437 MHz

6 Mbps



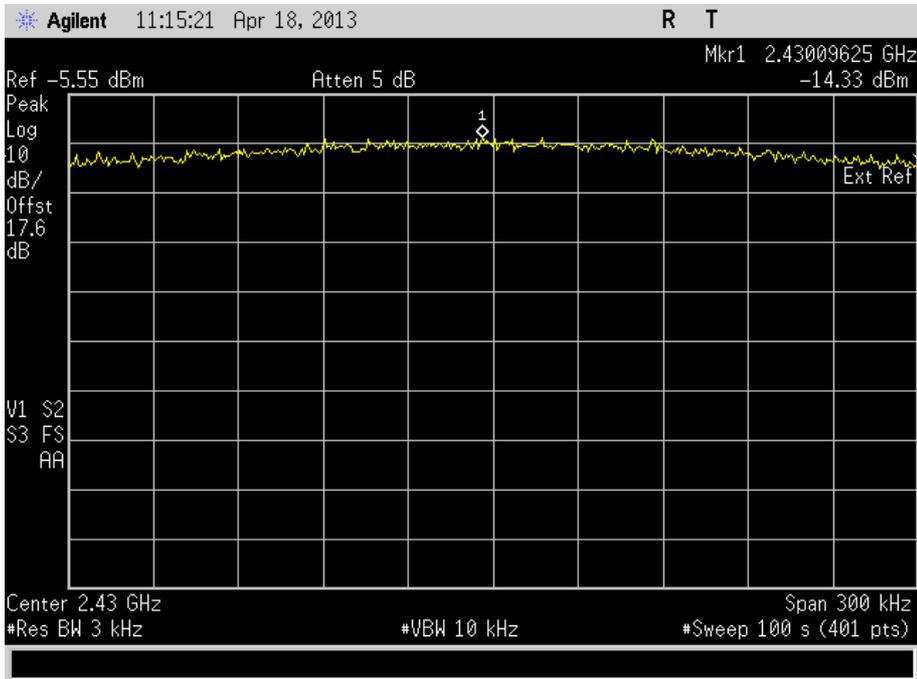
9 Mbps



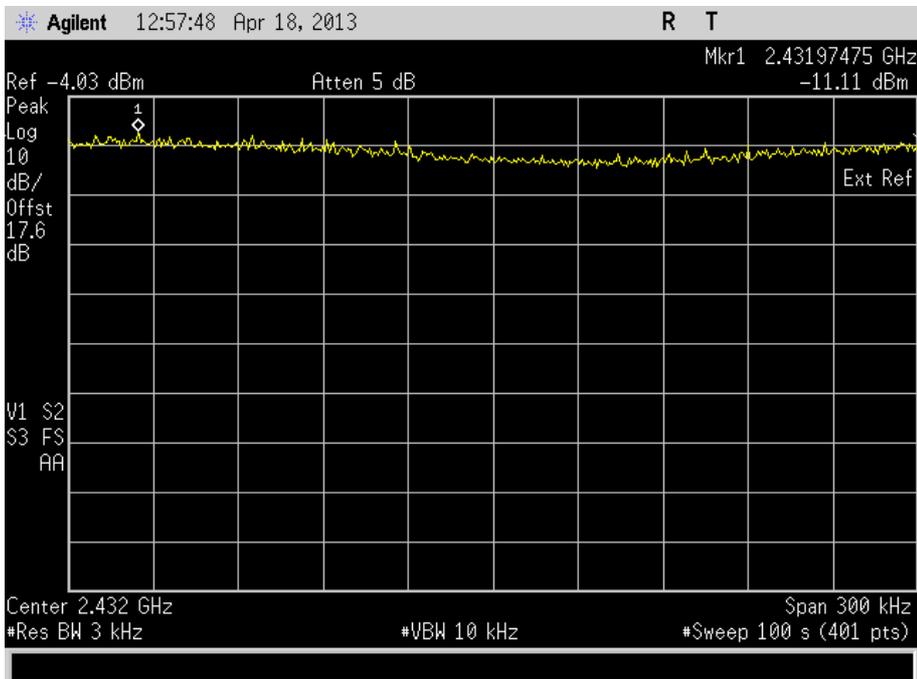


Product Service

12 Mbps



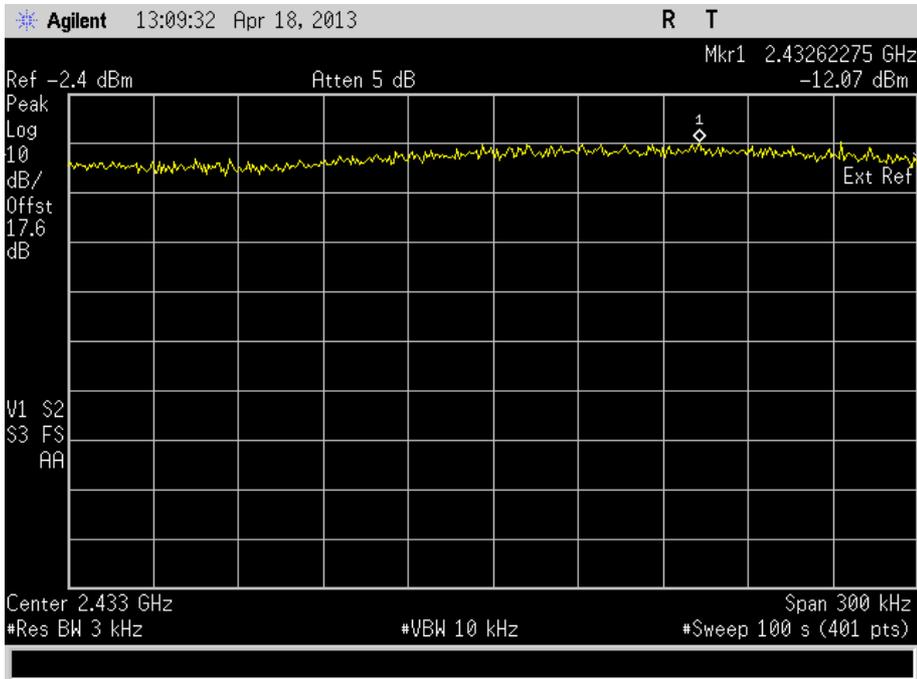
18 Mbps



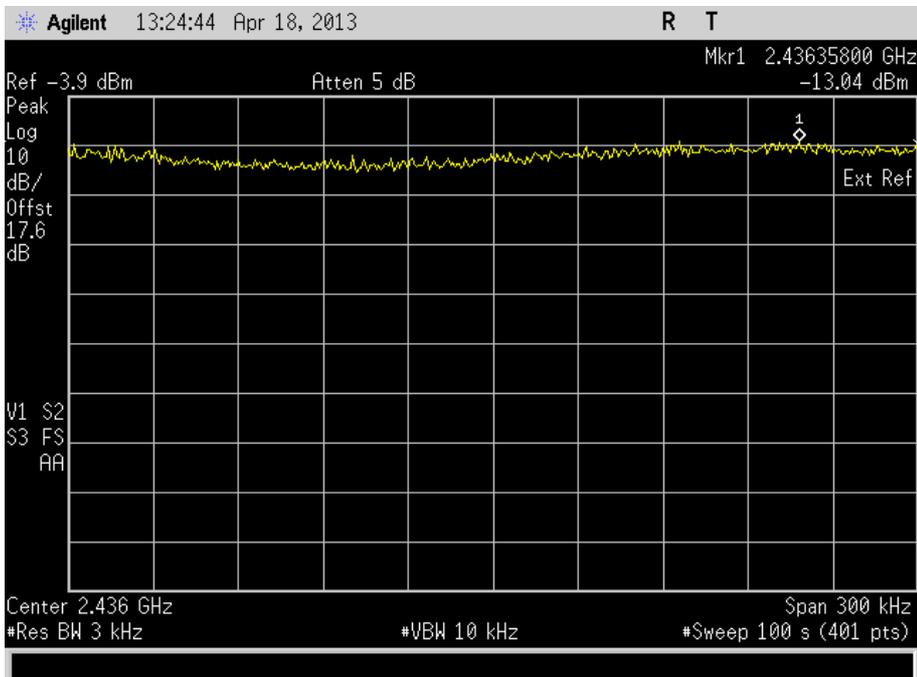


Product Service

24 Mbps



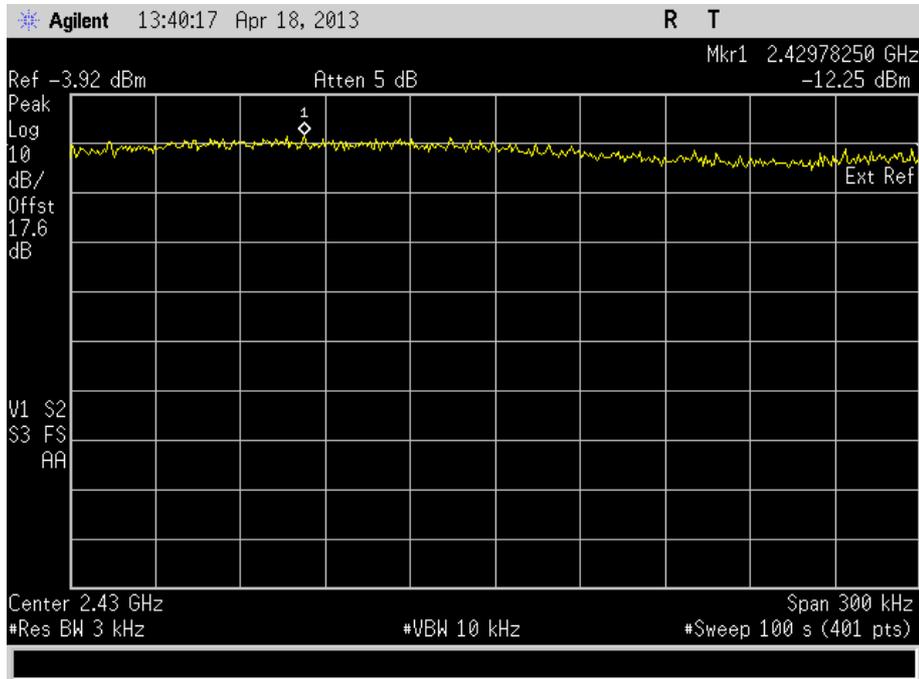
36 Mbps



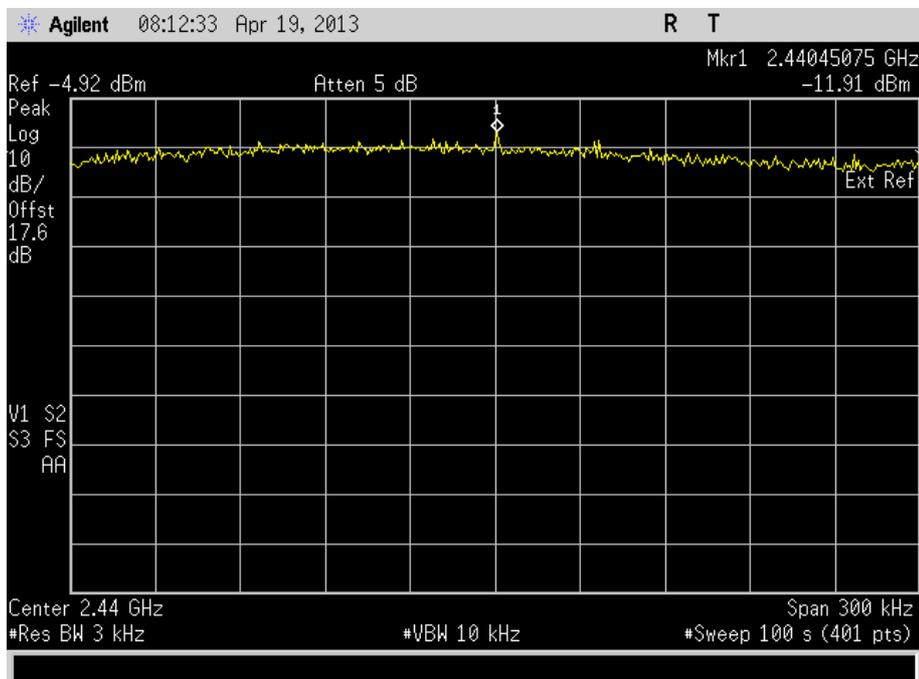


Product Service

48 Mbps



54 Mbps

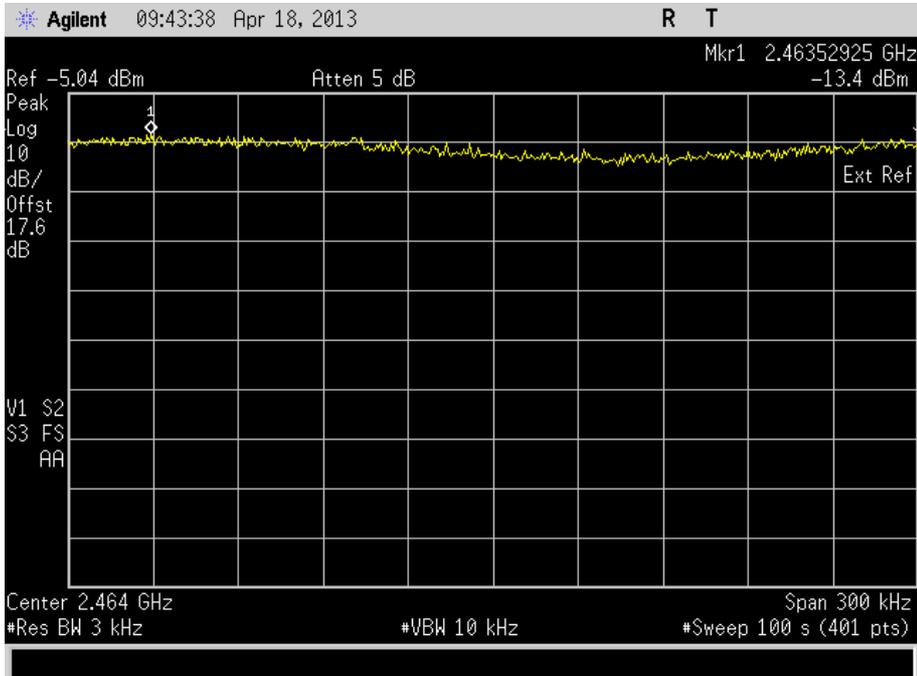




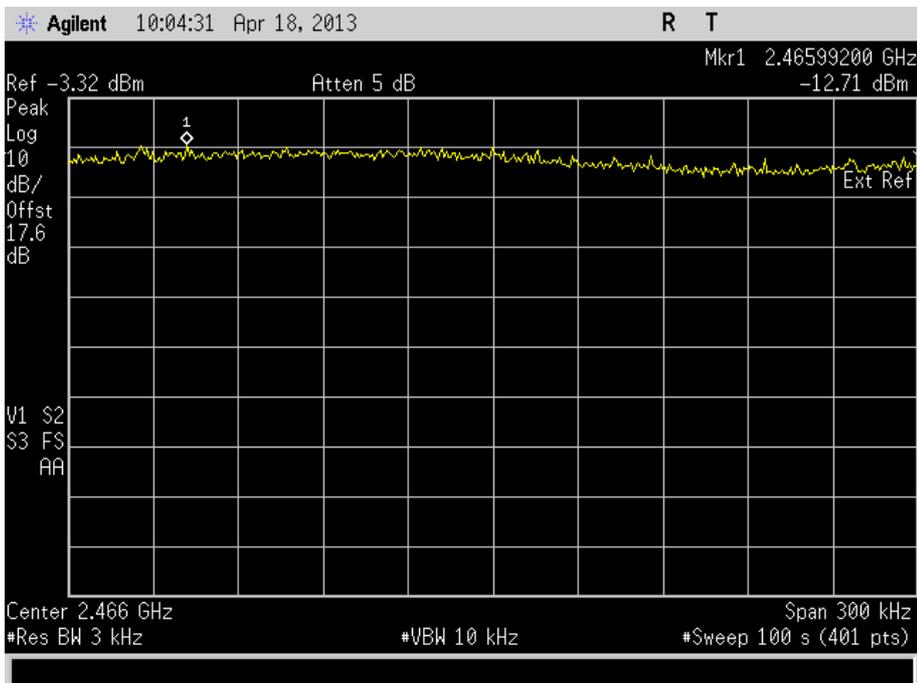
Product Service

2462 MHz

6 Mbps



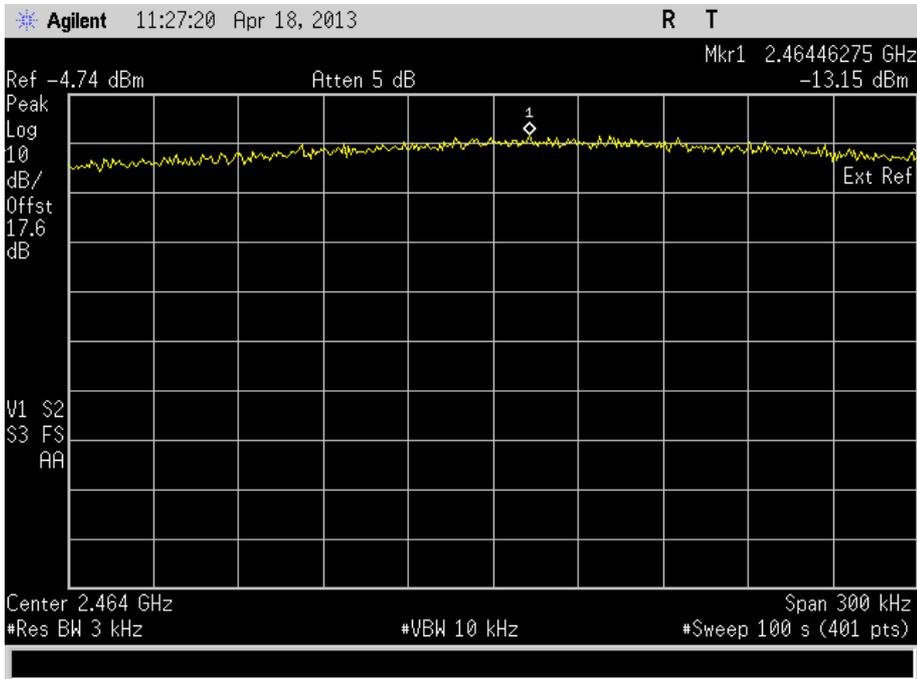
9 Mbps



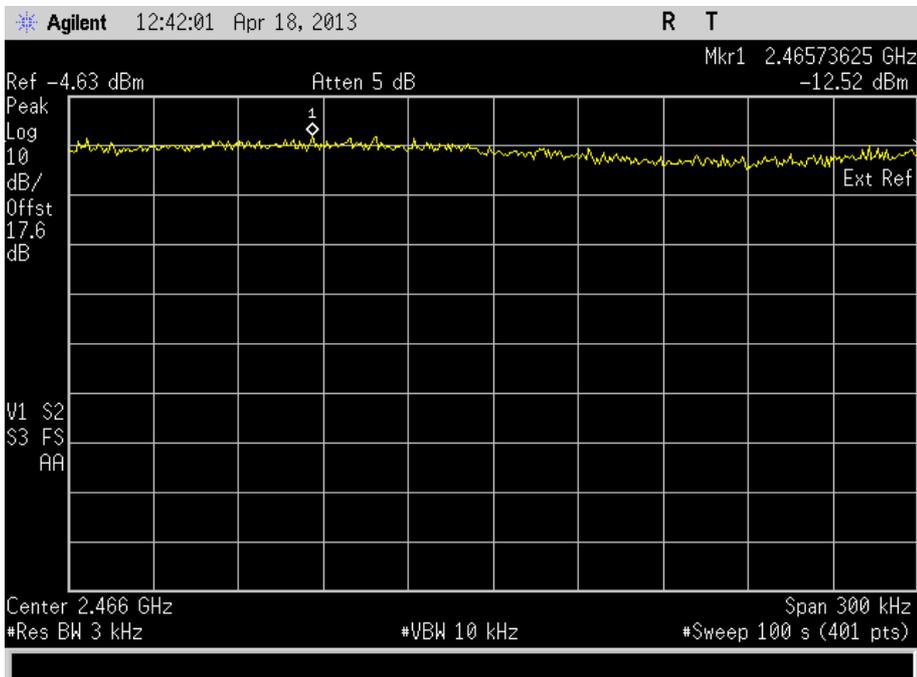


Product Service

12 Mbps



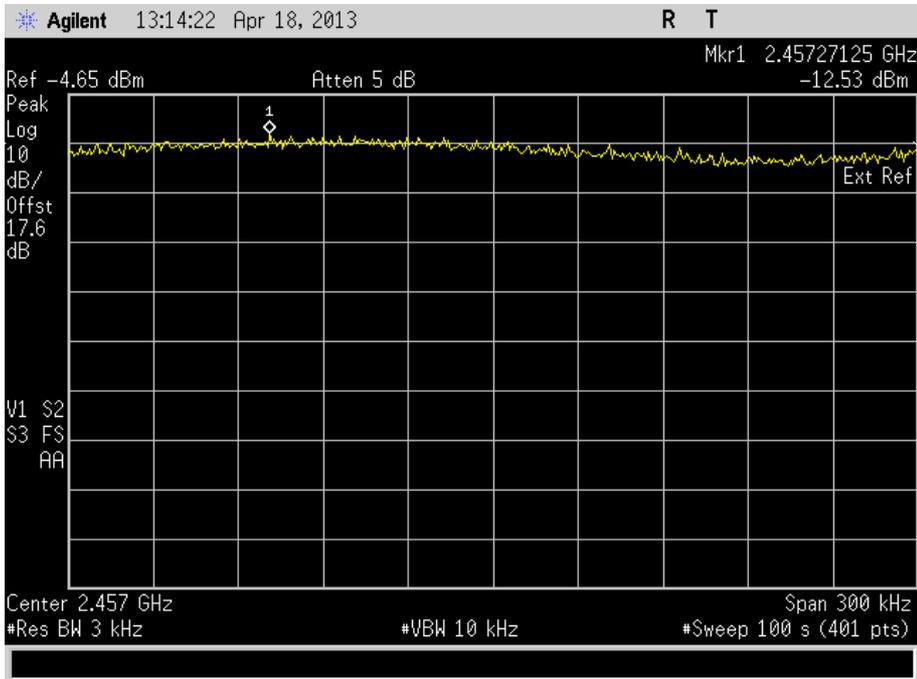
18 Mbps



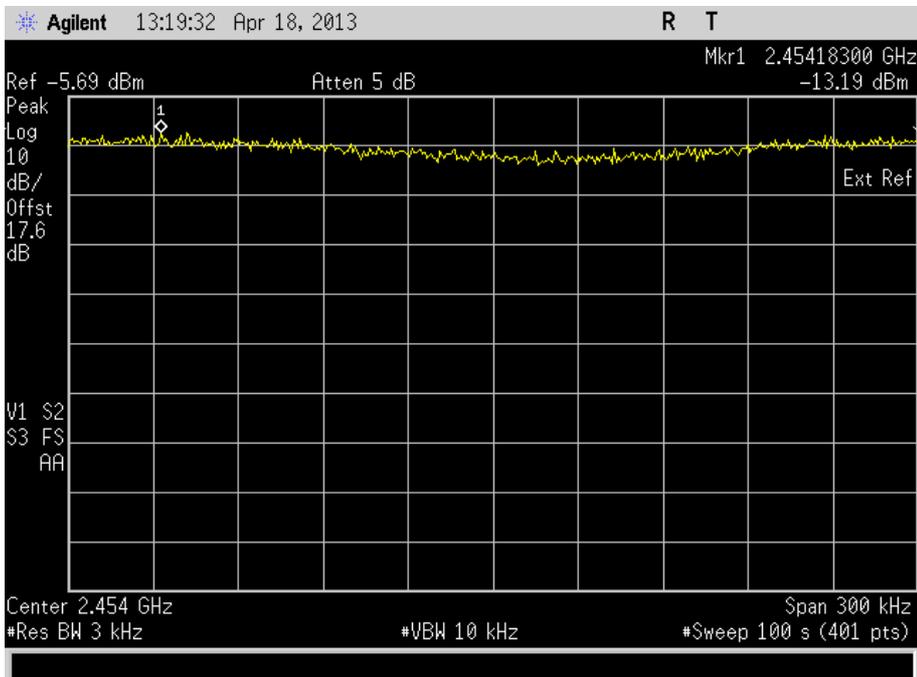


Product Service

24 Mbps



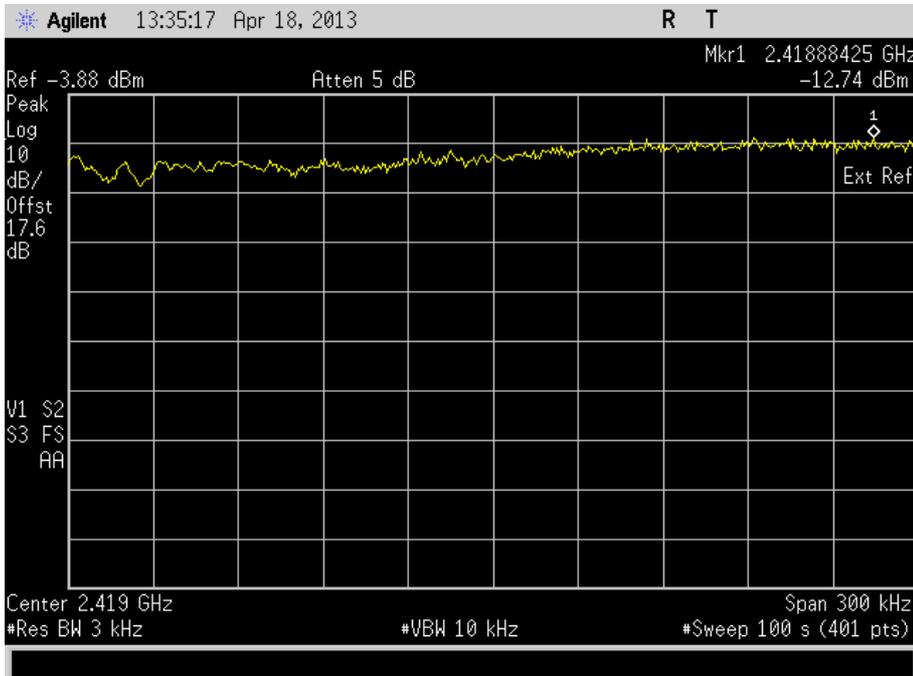
36 Mbps



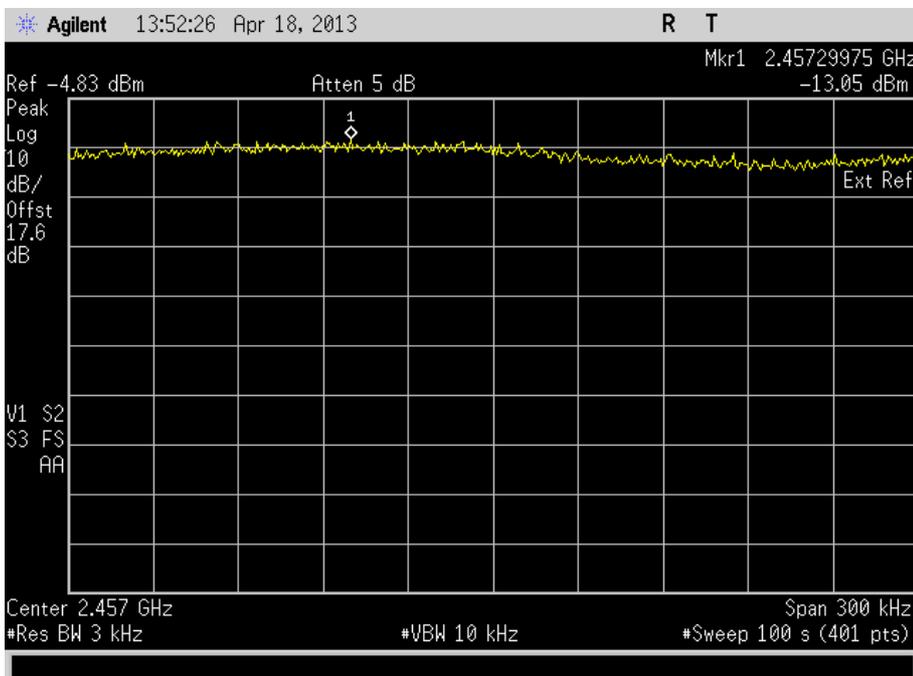


Product Service

48 Mbps



54 Mbps



Limit Clause

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.



Product Service

802.11(n)

4.0 V DC Supply

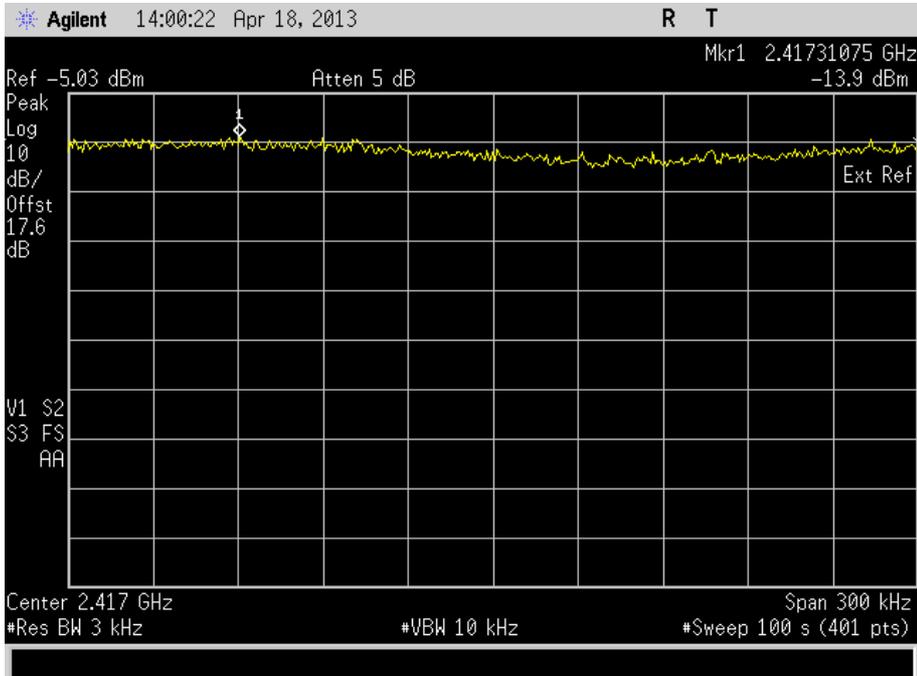
Frequency	Data Rate (Mbps)	Power Spectral Density in 3 kHz Bands (dBm)
2412 MHz	6.5	-13.90
	13	-14.09
	19.5	-13.88
	26	-13.70
	39	-16.69
	52	-15.87
	58.5	-17.11
	65	-13.76
2437 MHz	6.5	-14.40
	13	-15.43
	19.5	-14.43
	26	-13.86
	39	-16.10
	52	-16.02
	58.5	-13.55
	65	-13.01
2462 MHz	6.5	-13.53
	13	-14.27
	19.5	-13.65
	26	-14.21
	39	-14.29
	52	-15.14
	58.5	-14.23
	65	-14.02



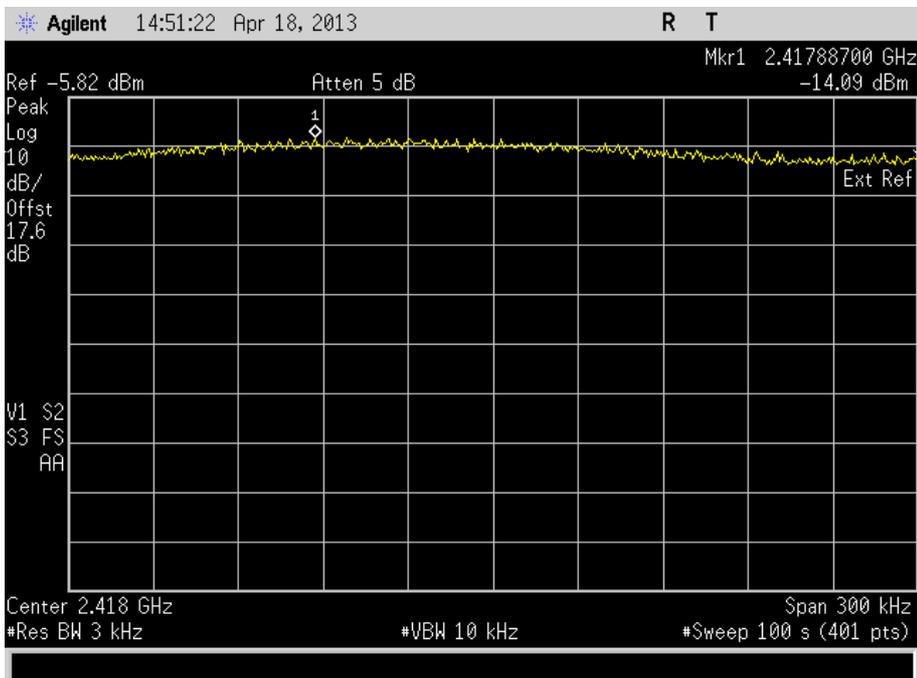
Product Service

2412 MHz

6.5 Mbps



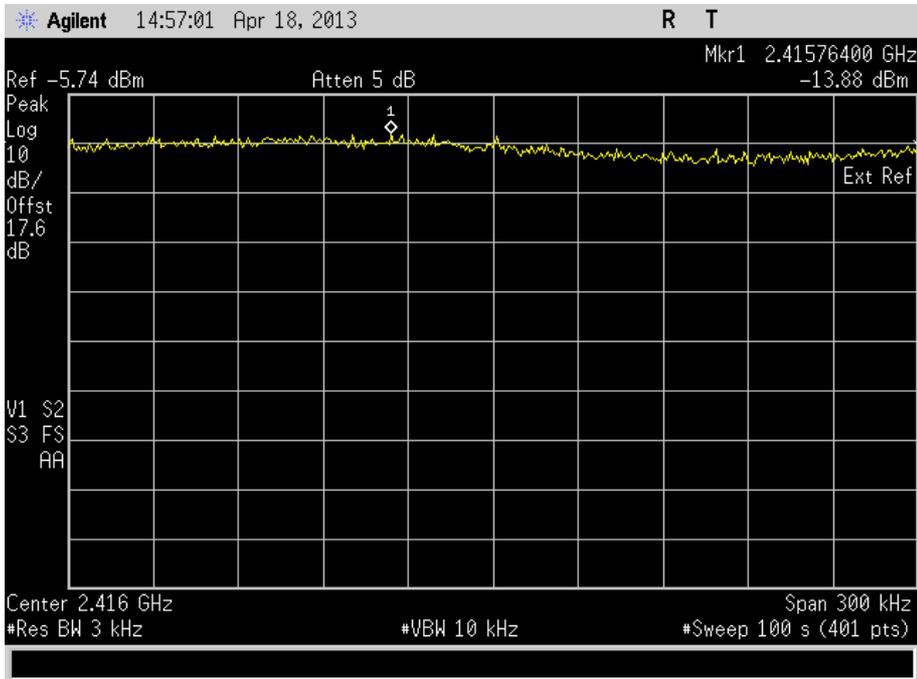
13 Mbps



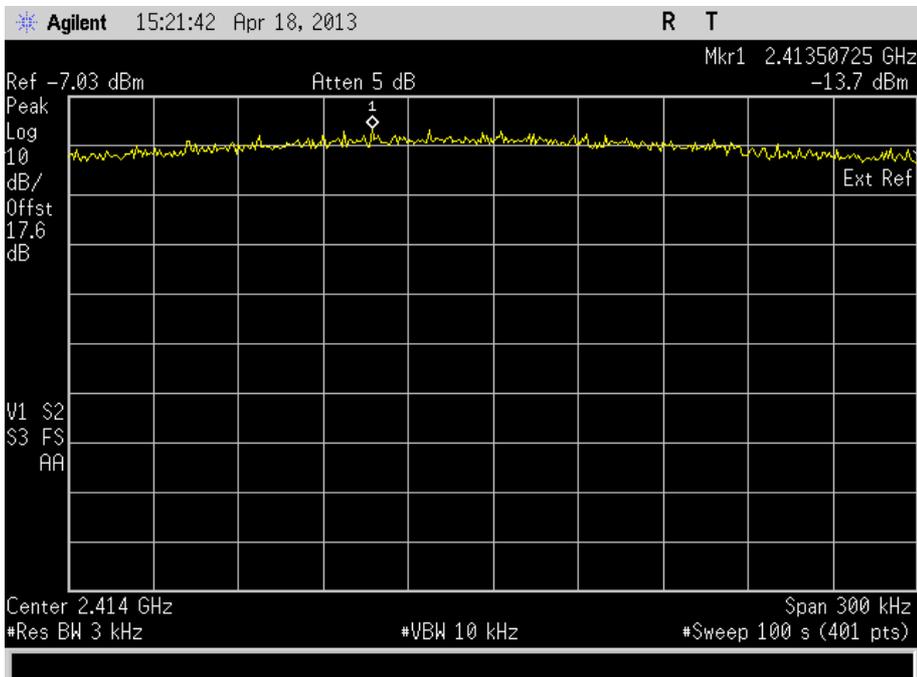


Product Service

19.5 Mbps



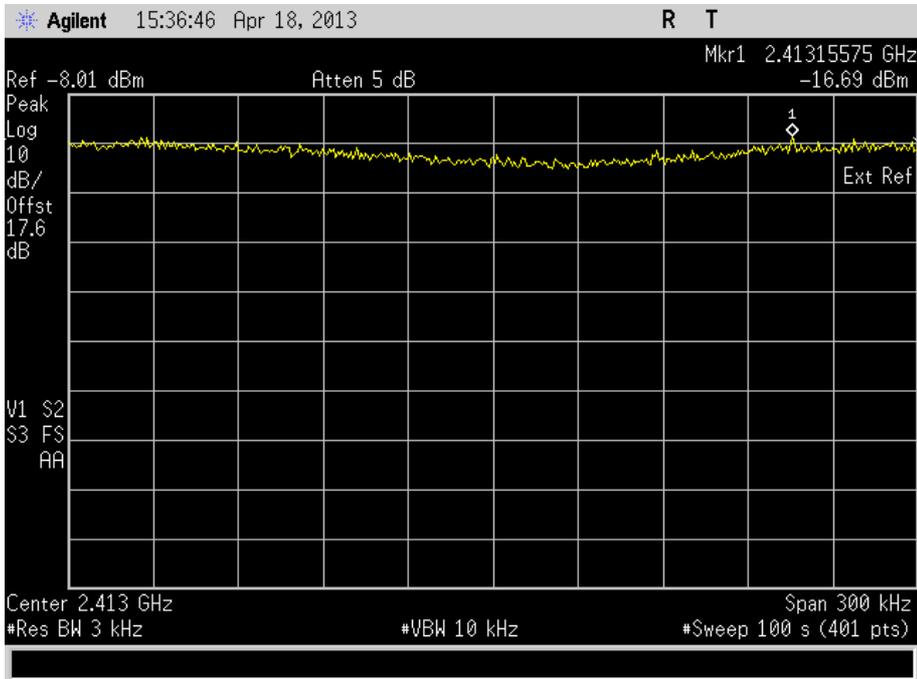
26 Mbps



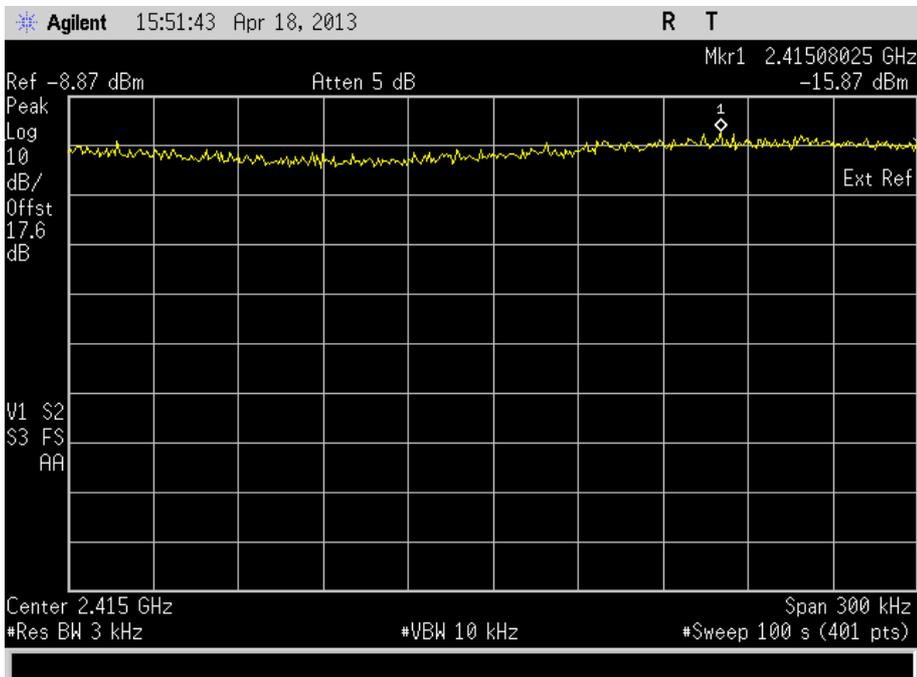


Product Service

39 Mbps



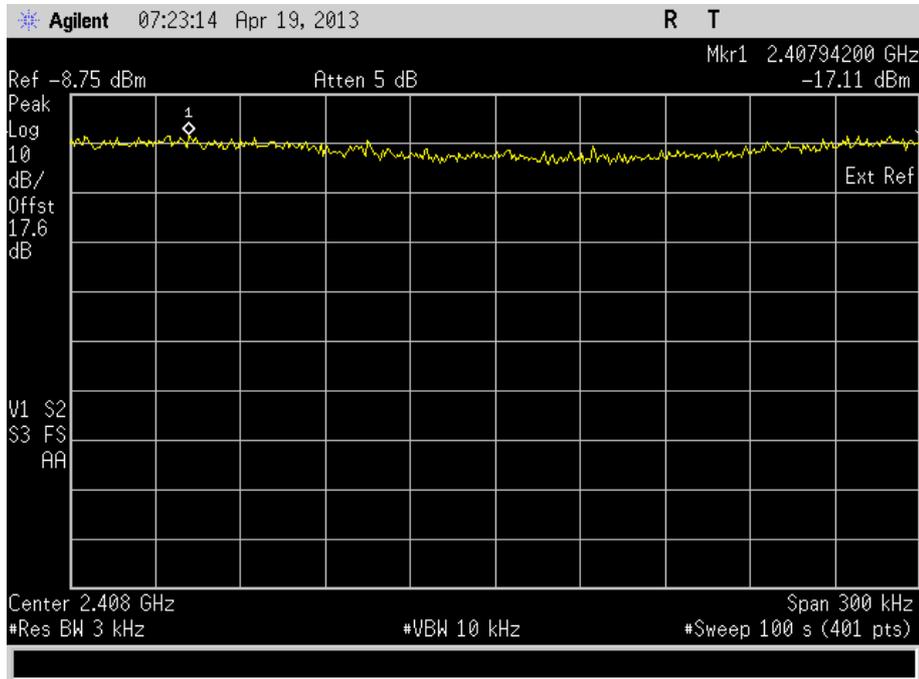
52 Mbps



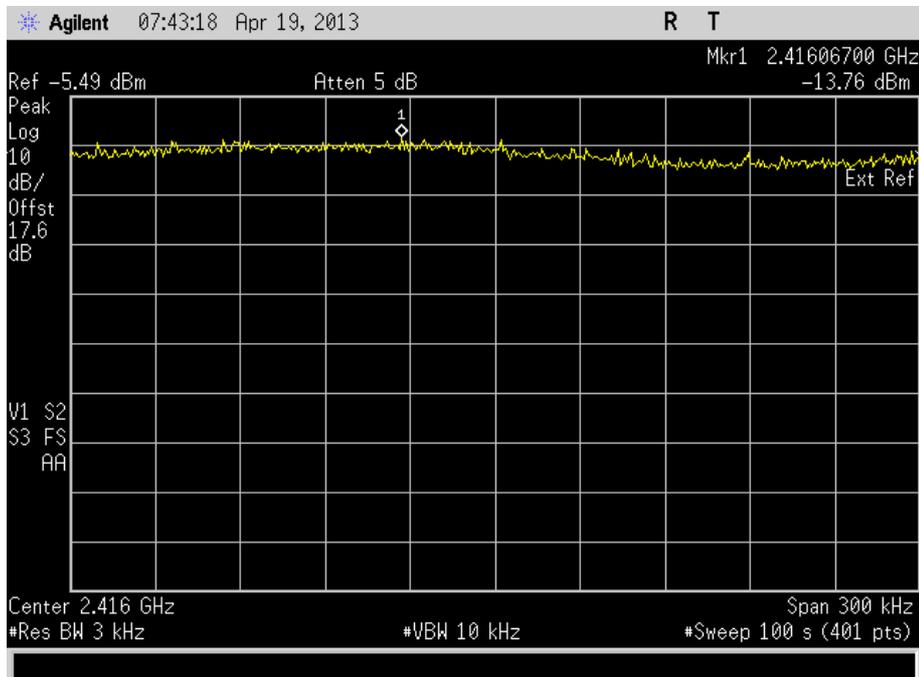


Product Service

58.5 Mbps



65 Mbps

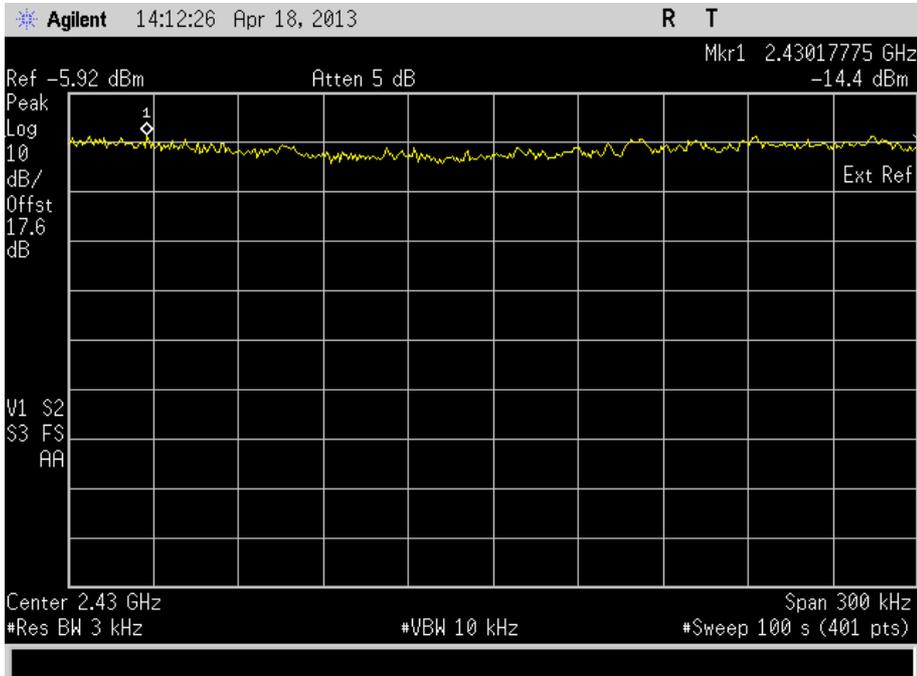




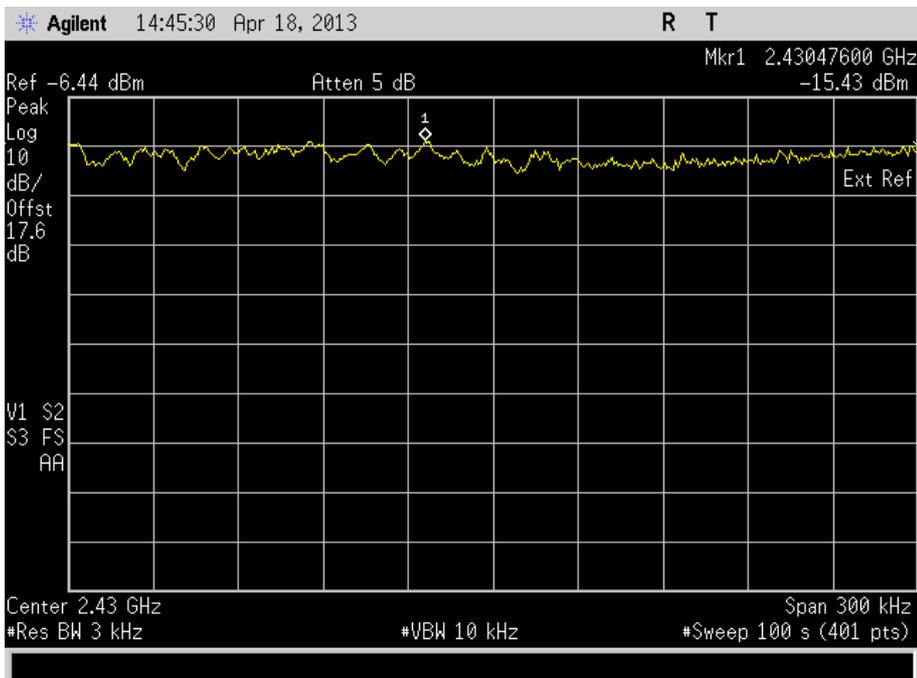
Product Service

2437 MHz

6.5 Mbps



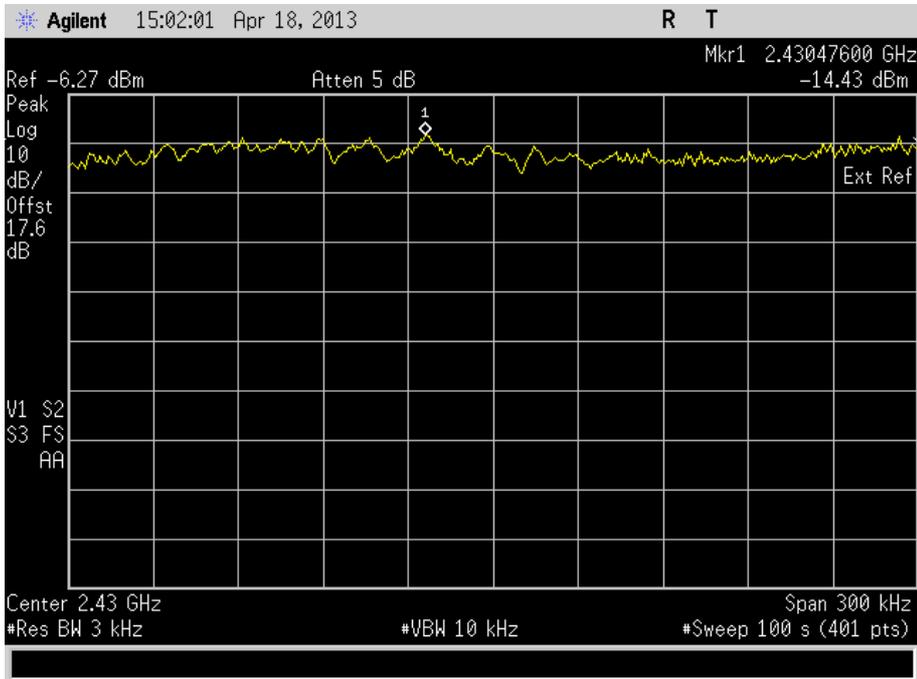
13 Mbps



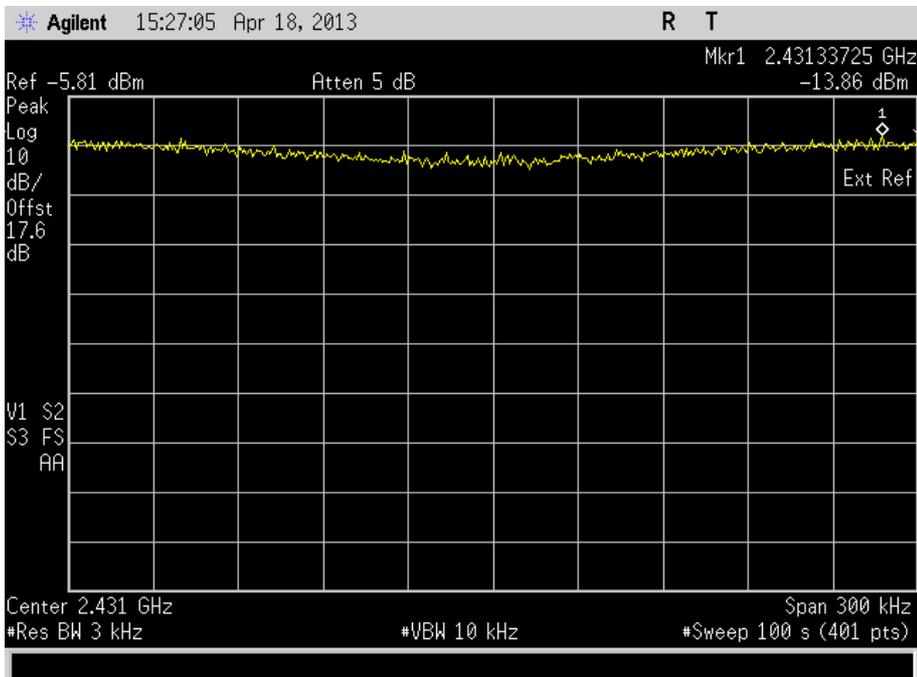


Product Service

19.5 Mbps



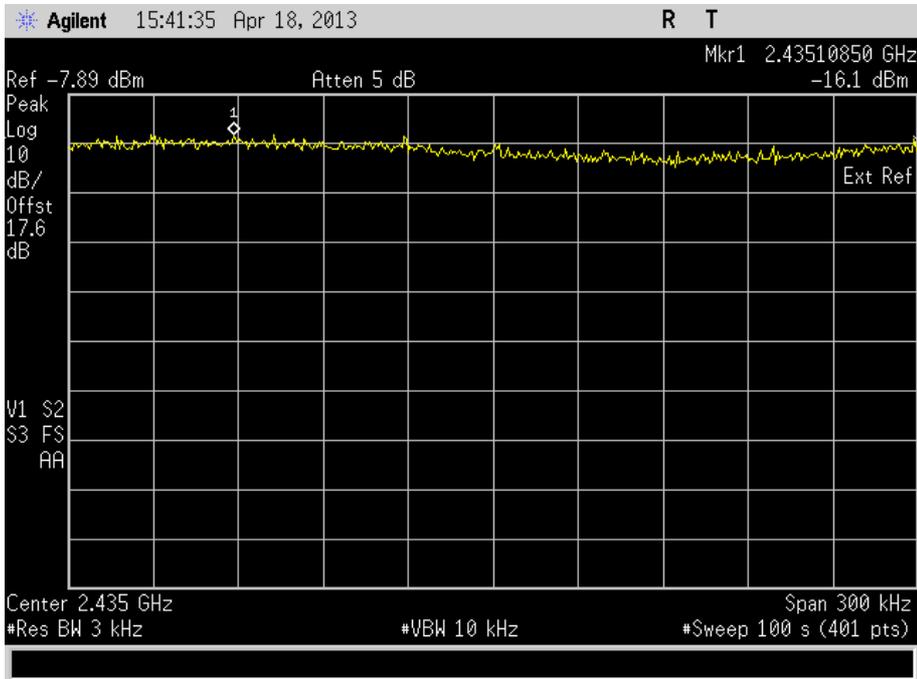
26 Mbps



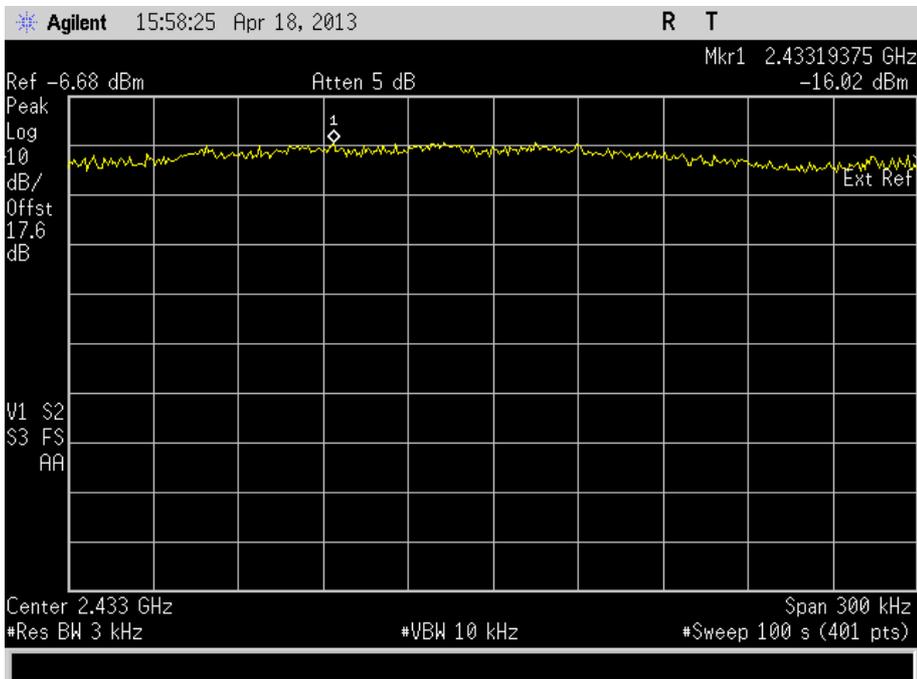


Product Service

39 Mbps



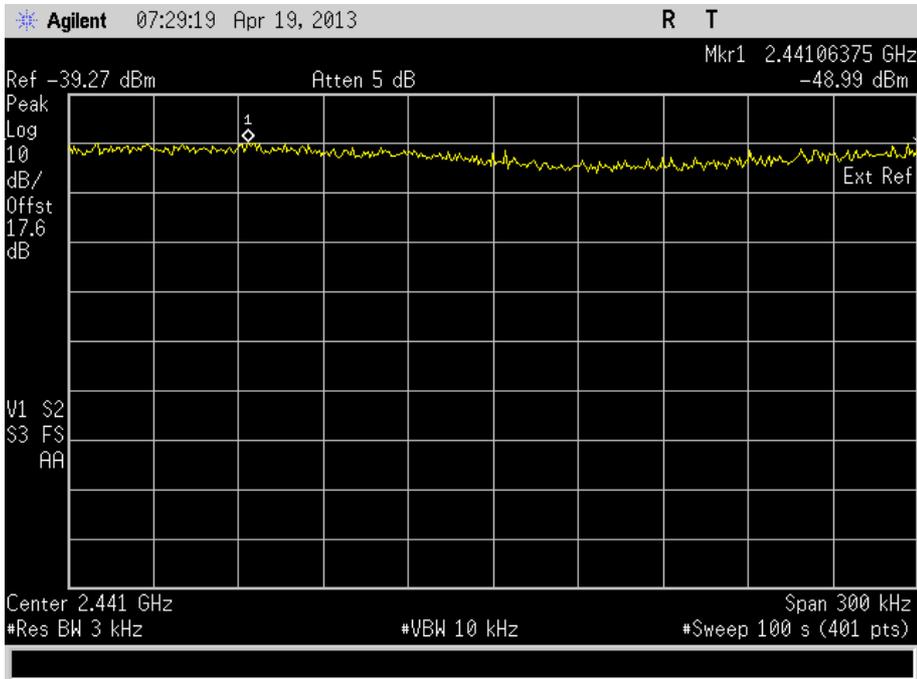
52 Mbps



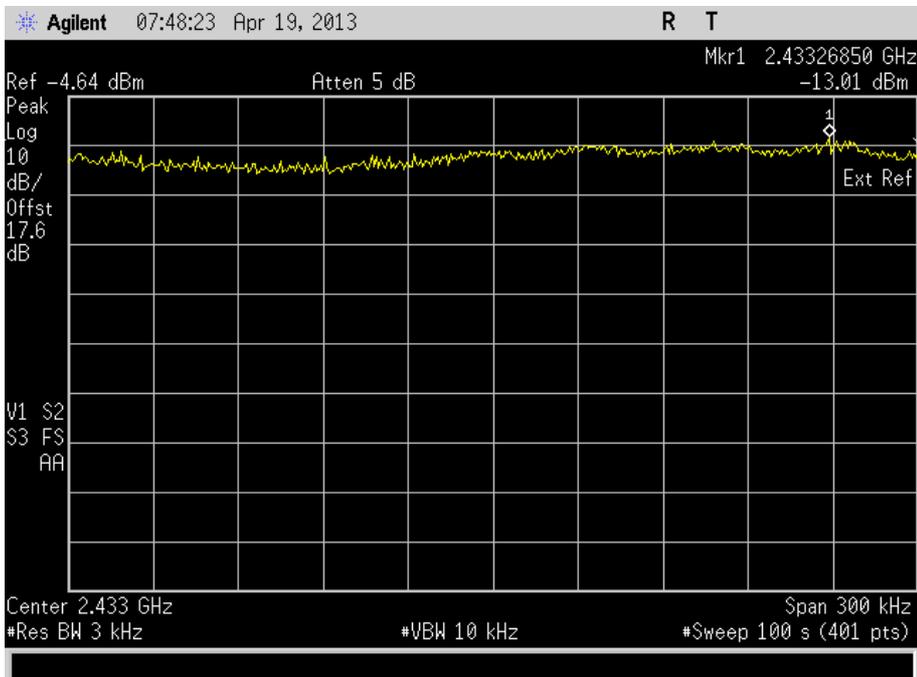


Product Service

58.5 Mbps



65 Mbps

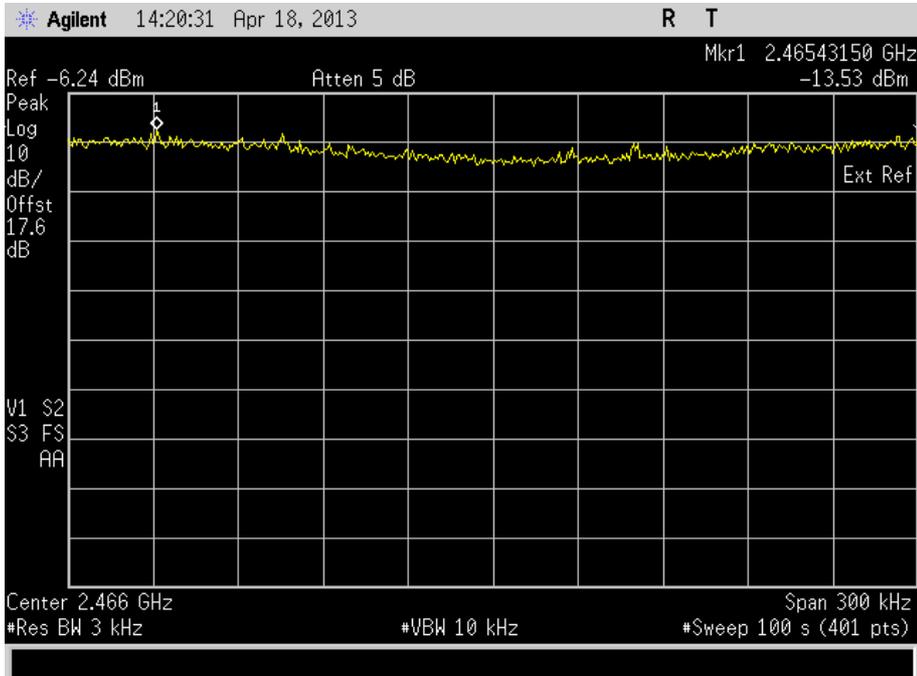




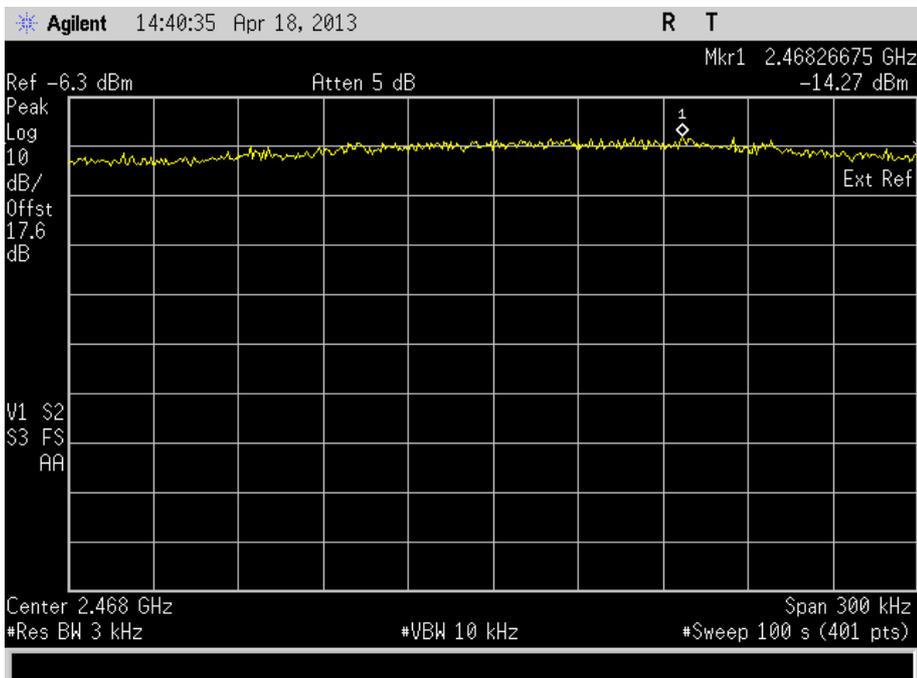
Product Service

2462 MHz

6.5 Mbps



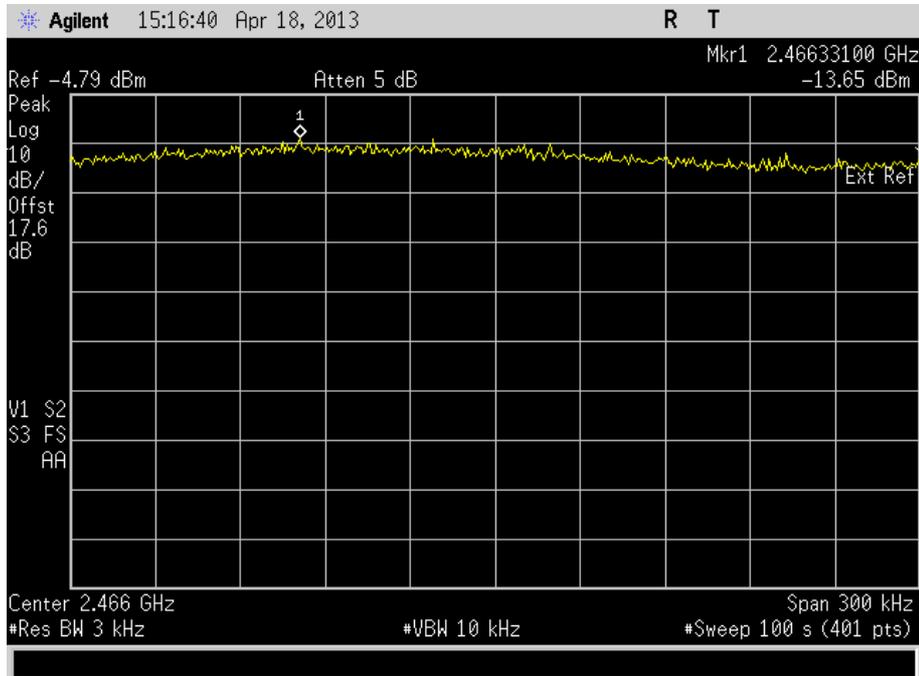
13 Mbps



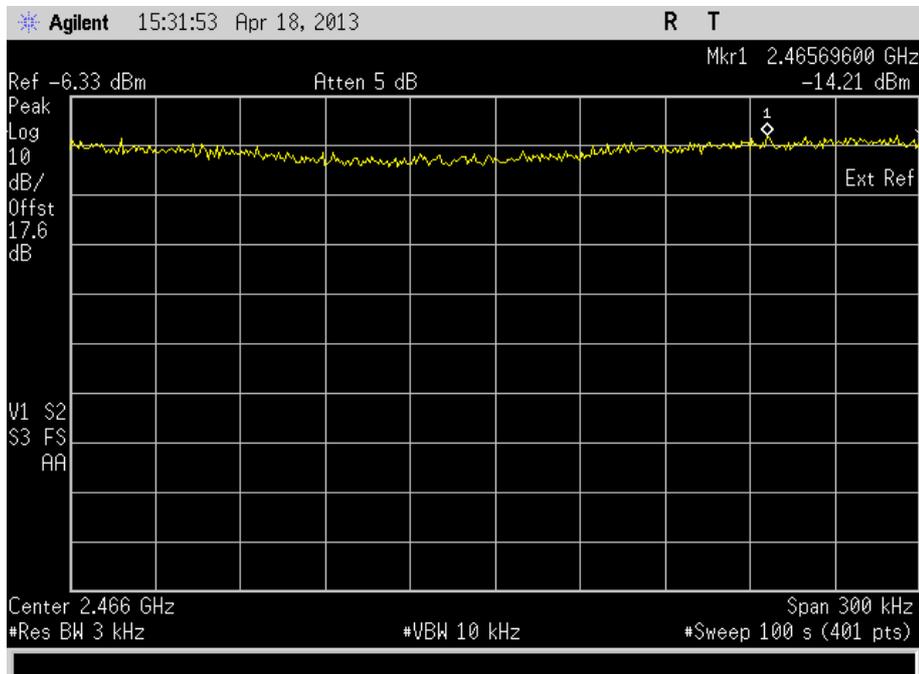


Product Service

19.5 Mbps



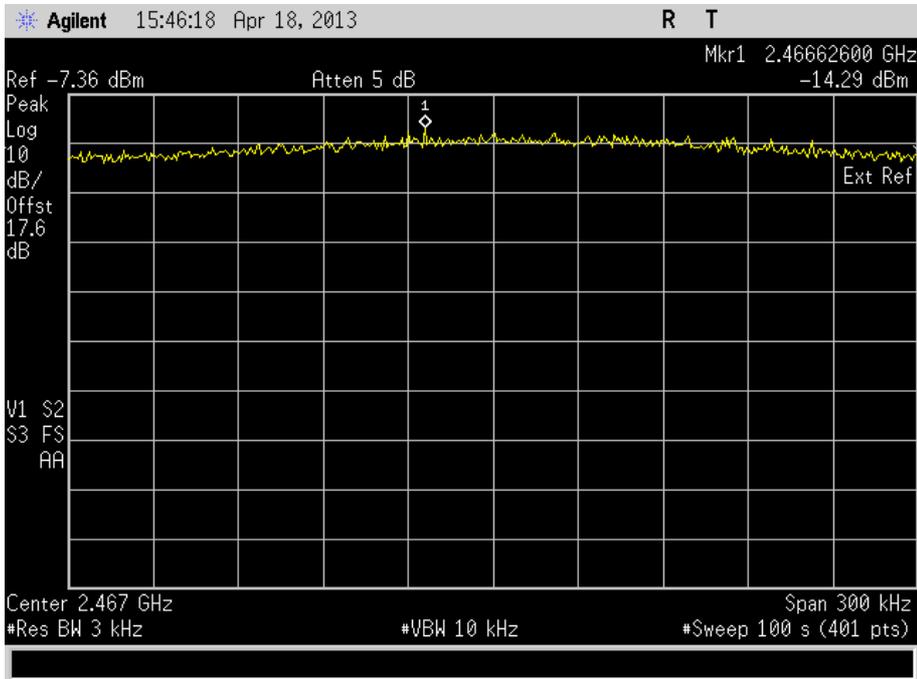
26 Mbps



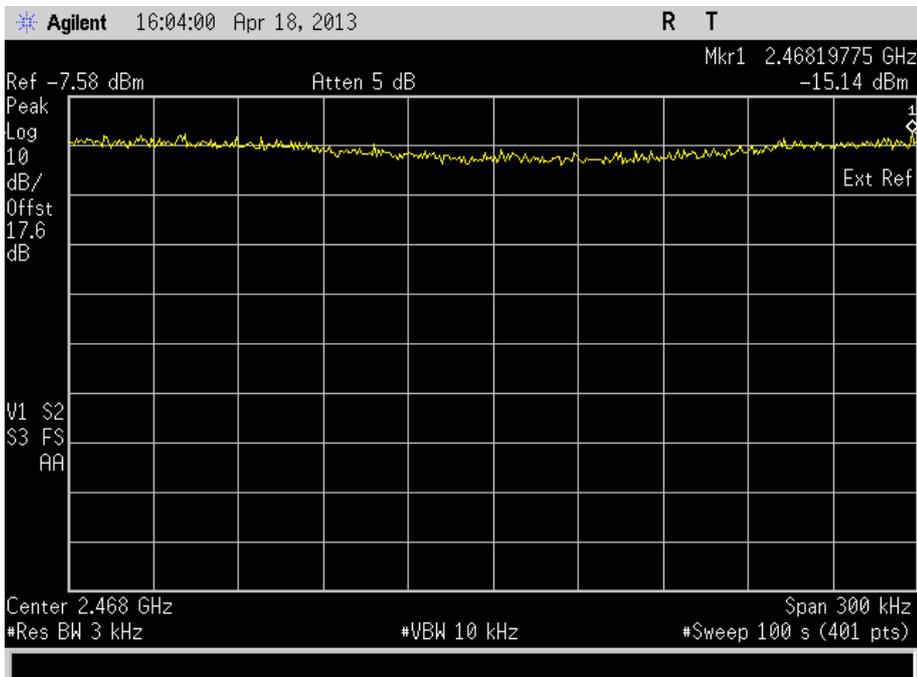


Product Service

39 Mbps



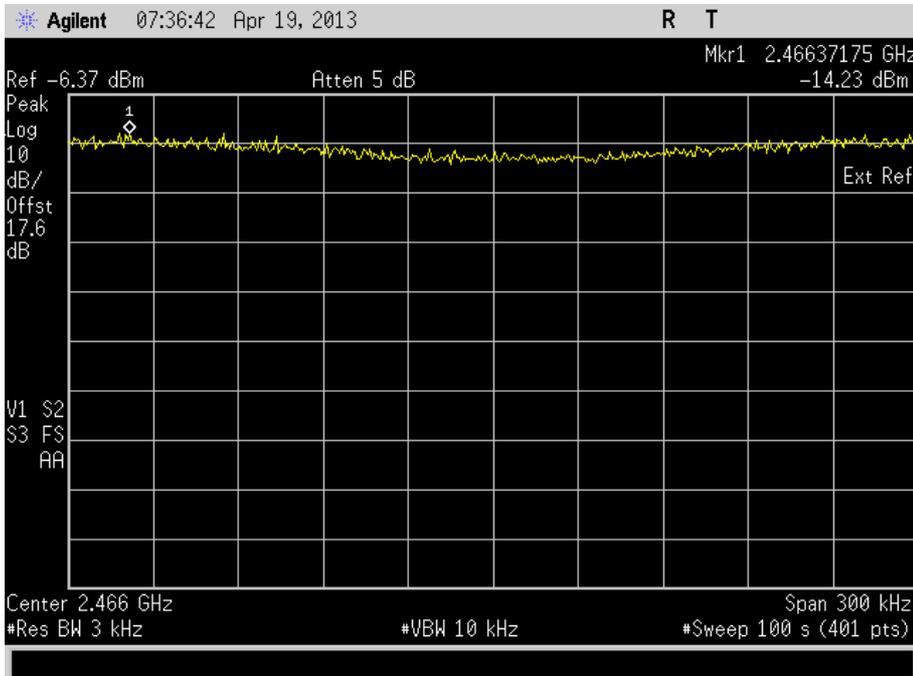
52 Mbps



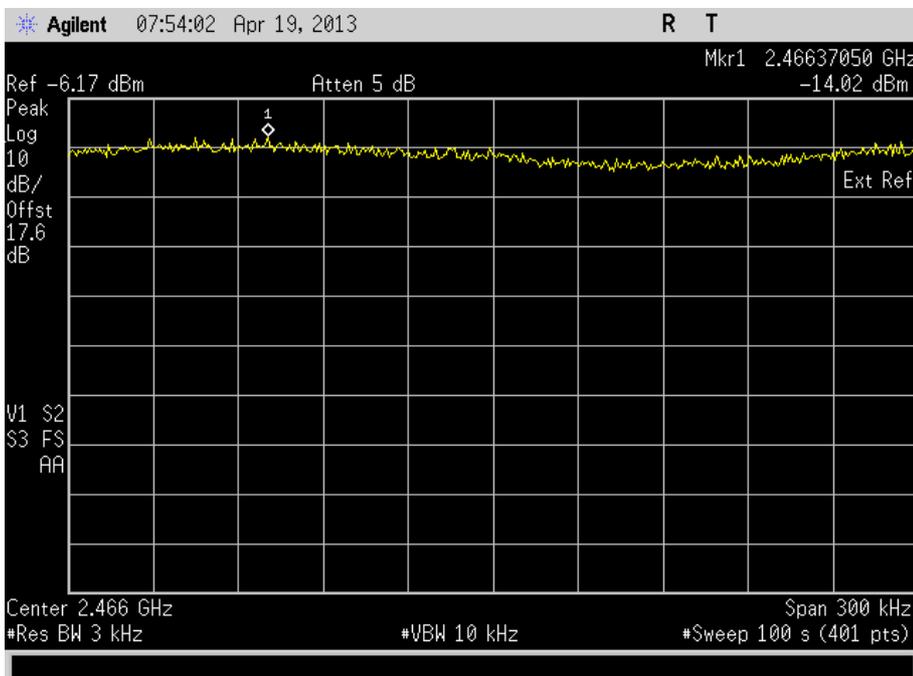


Product Service

58.5 Mbps



65 Mbps



Limit Clause

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.



Product Service

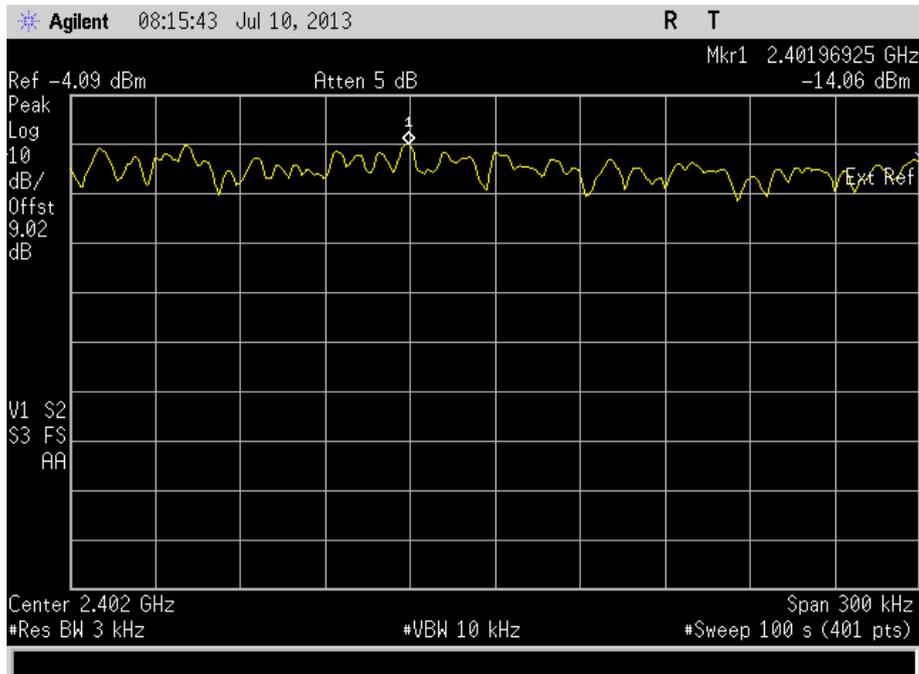
Bluetooth Low Energy

4.0 V DC Supply

Frequency	Packet Type	Power Spectral Density in 3 kHz Bands (dBm)
2402 MHz	37oct/prbs9	-14.06
2441 MHz	37oct/prbs9	-14.19
2480 MHz	37oct/prbs9	-13.67

2402 MHz

37oct/prbs9

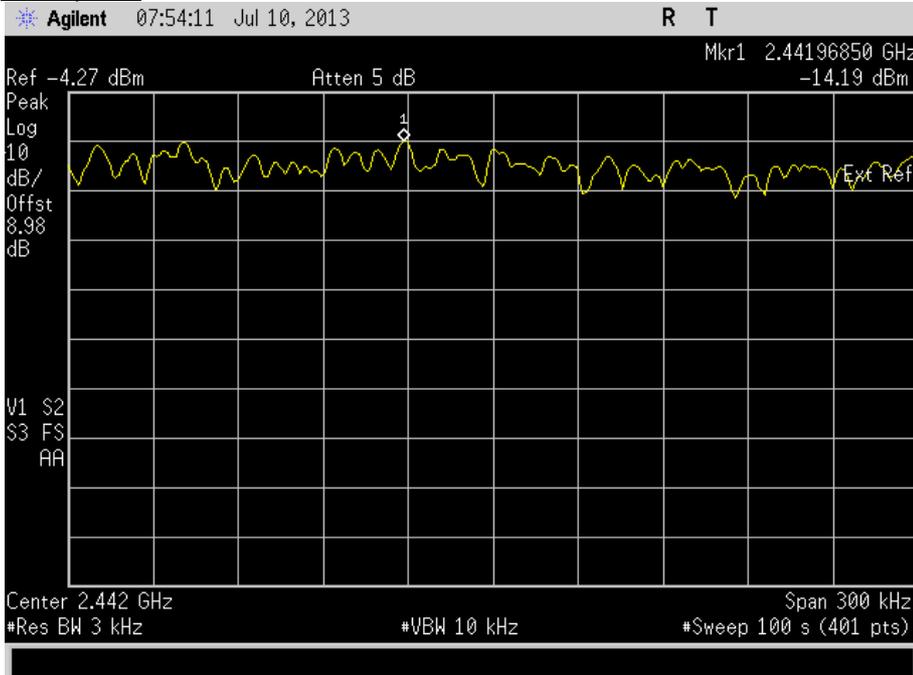




Product Service

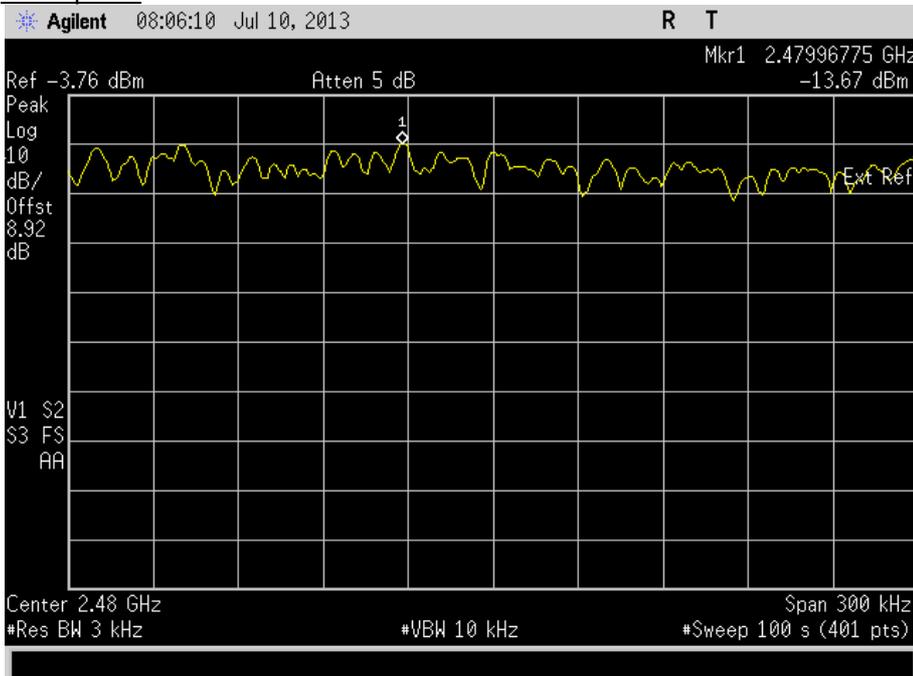
2441 MHz

37oct/prbs9



2480 MHz

37oct/prbs9



Limit Clause

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.



2.6 6dB BANDWIDTH

2.6.1 Specification Reference

FCC CFR 47 Part 15C, Clause 15.247 (2)

2.6.2 Equipment Under Test and Modification State

205SH S/N: IMEI 004401114779164 - Modification State 0

2.6.3 Date of Test

18 April 2013, 19 April 2013 & 10 July 2013

2.6.4 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.6.5 Test Procedure

The EUT was transmitted at maximum power via a cable to the Spectrum Analyser. The Analyser settings were adjusted to display the resultant trace on screen. The peak point of the trace was measured and the markers positioned to give the -6dBc points of the displayed spectrum.

2.6.6 Environmental Conditions

Ambient Temperature	21.3 - 25.3°C
Relative Humidity	29.0 - 54.4%



Product Service

2.6.7 Test Results

802.11(b)

4.0 V DC Supply

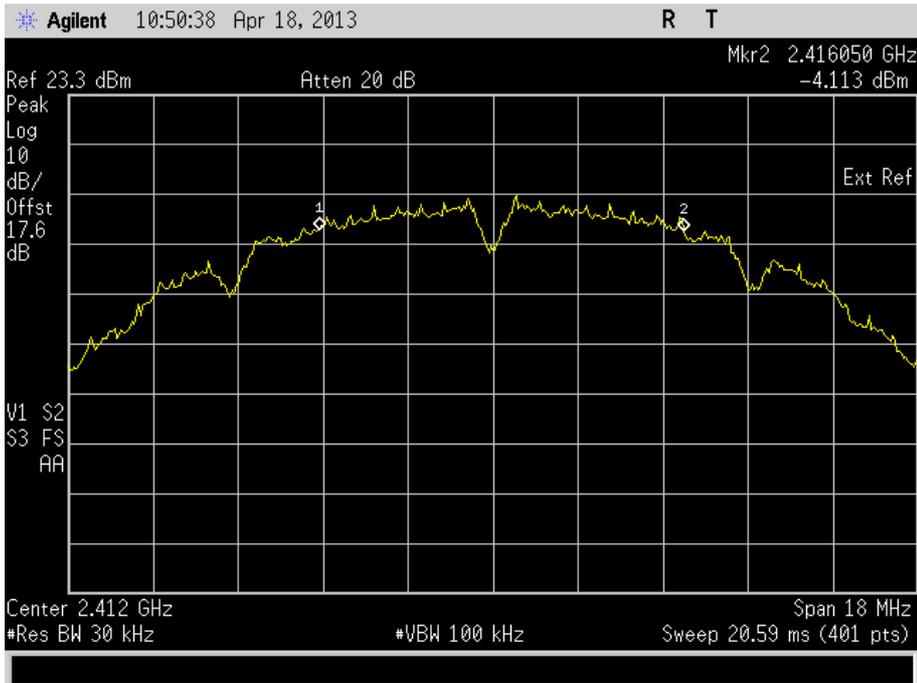
Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (kHz)
2412 MHz	1	7740
	2	8010
	5	8280
	11	8235
2437 MHz	1	7785
	2	8955
	5	8415
	11	7830
2462 MHz	1	8595
	2	8055
	5	8955
	11	8820



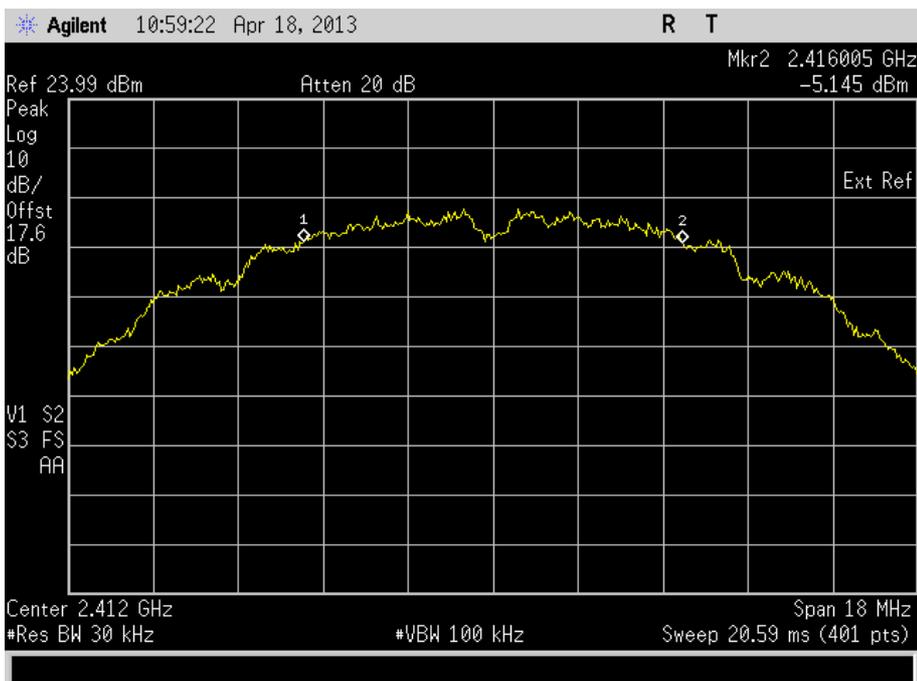
Product Service

2412 MHz

1 Mbps

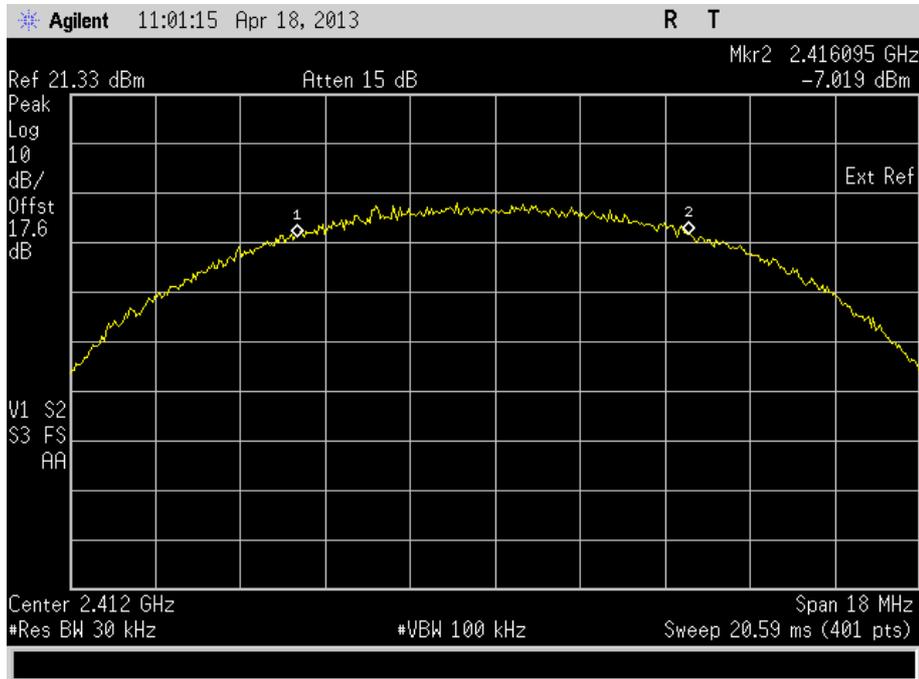


2 Mbps

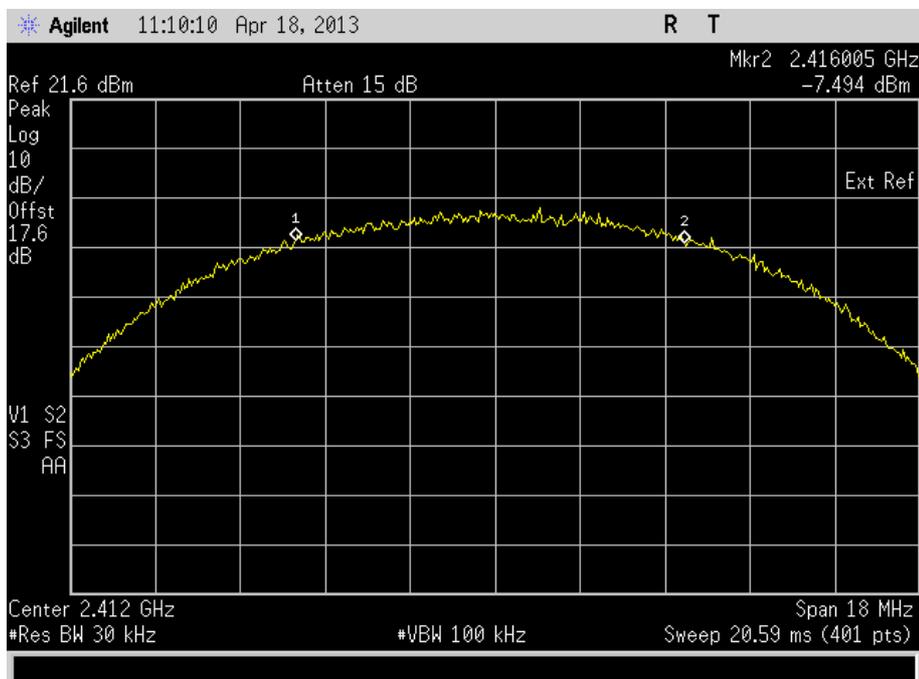




5.5 Mbps



11 Mbps

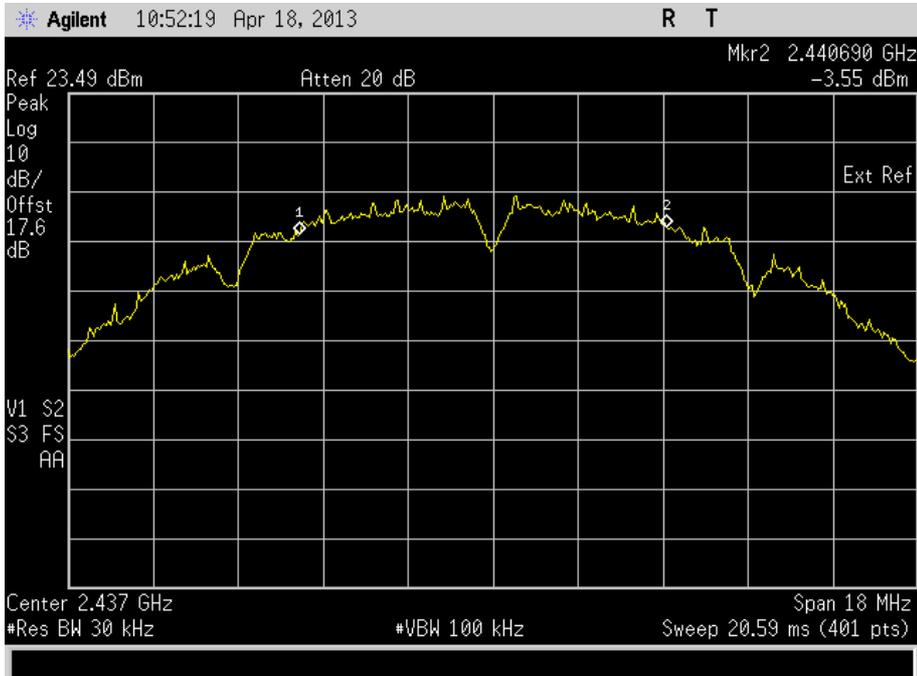




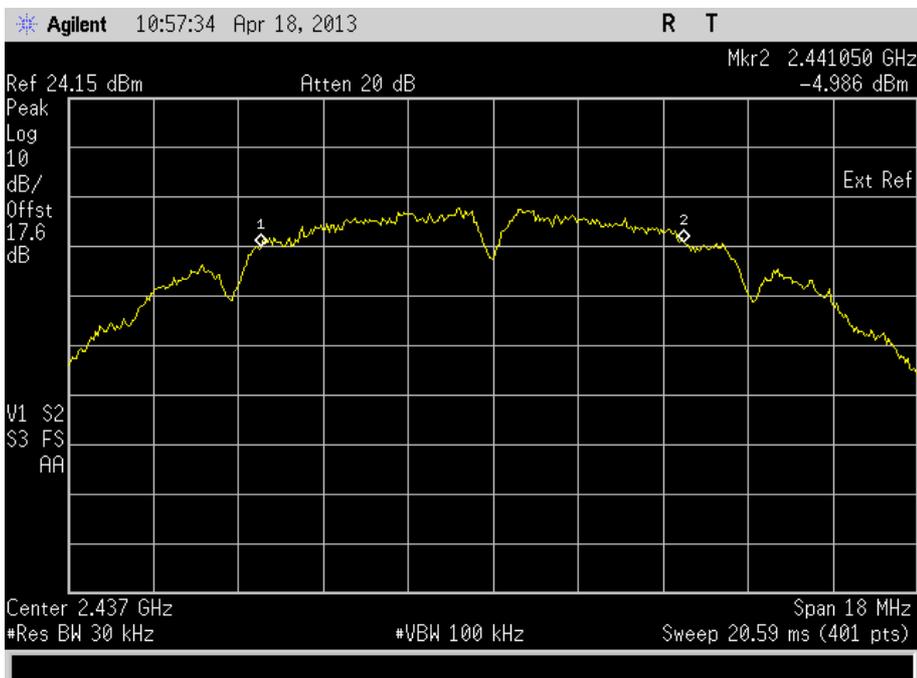
Product Service

2437 MHz

1 Mbps



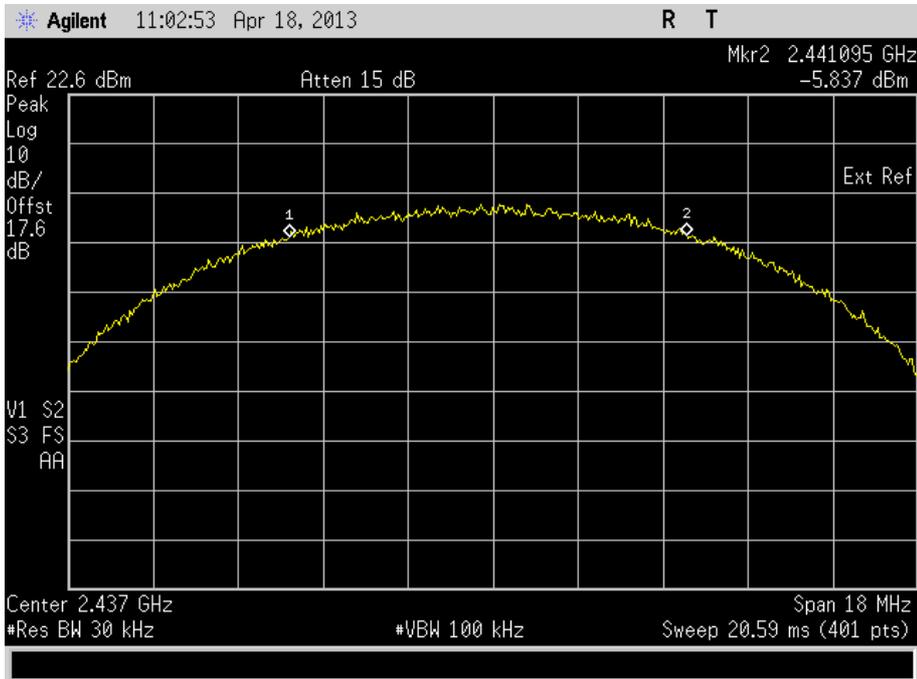
2 Mbps



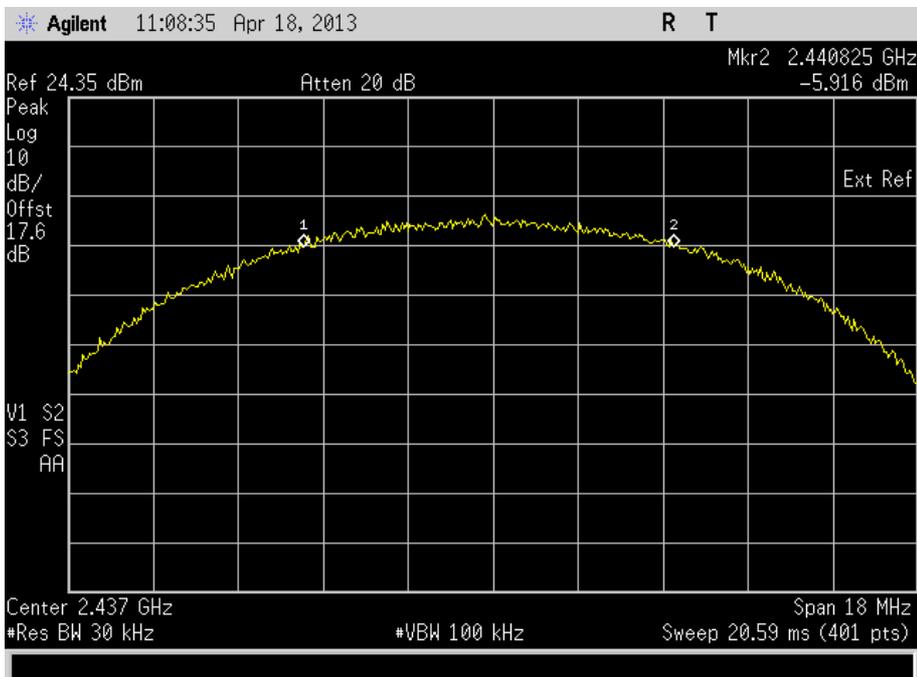


Product Service

5.5 Mbps



11 Mbps

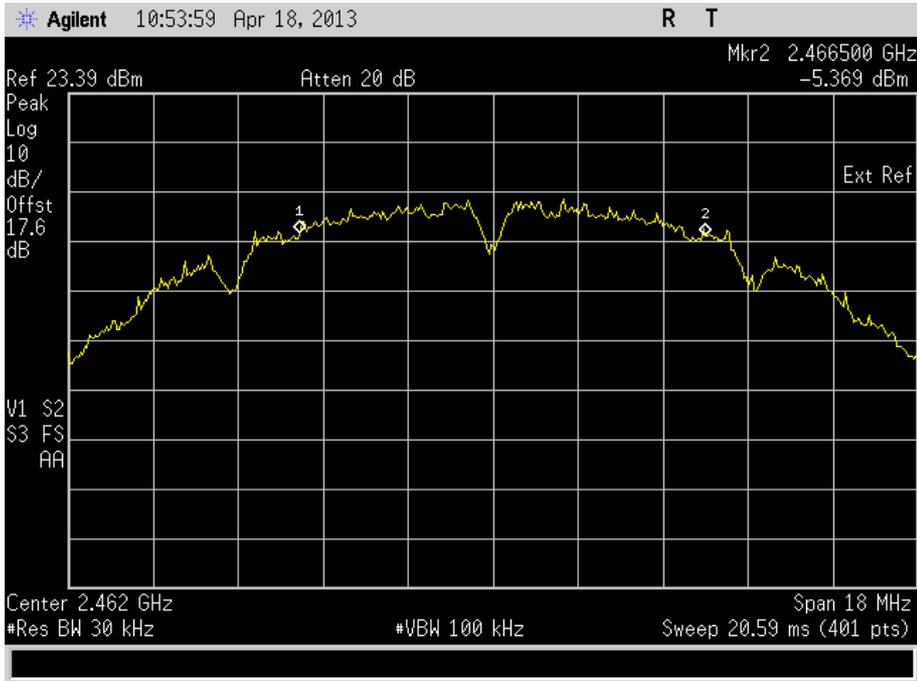




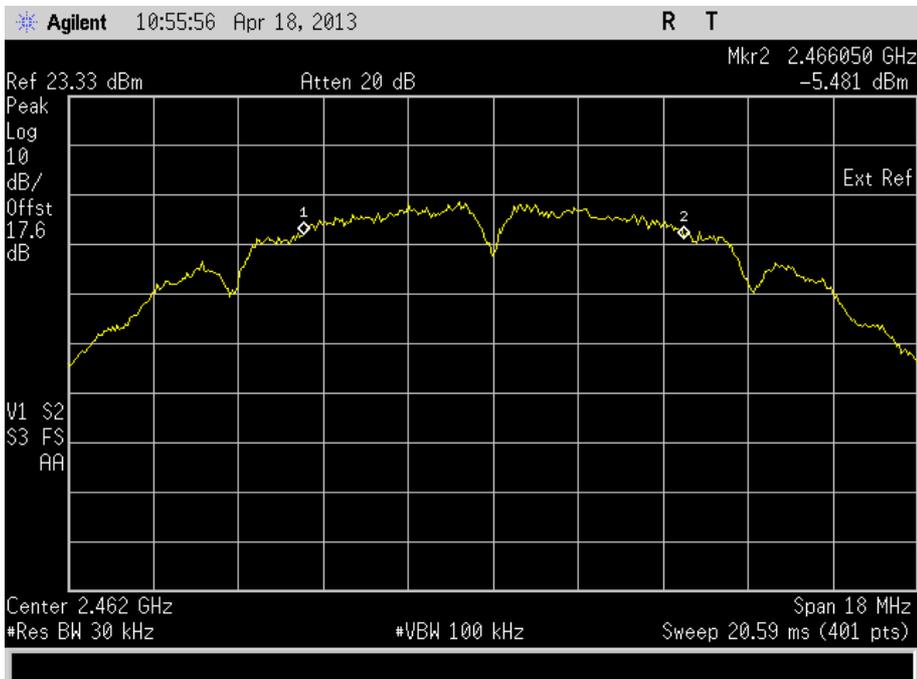
Product Service

2462 MHz

1 Mbps



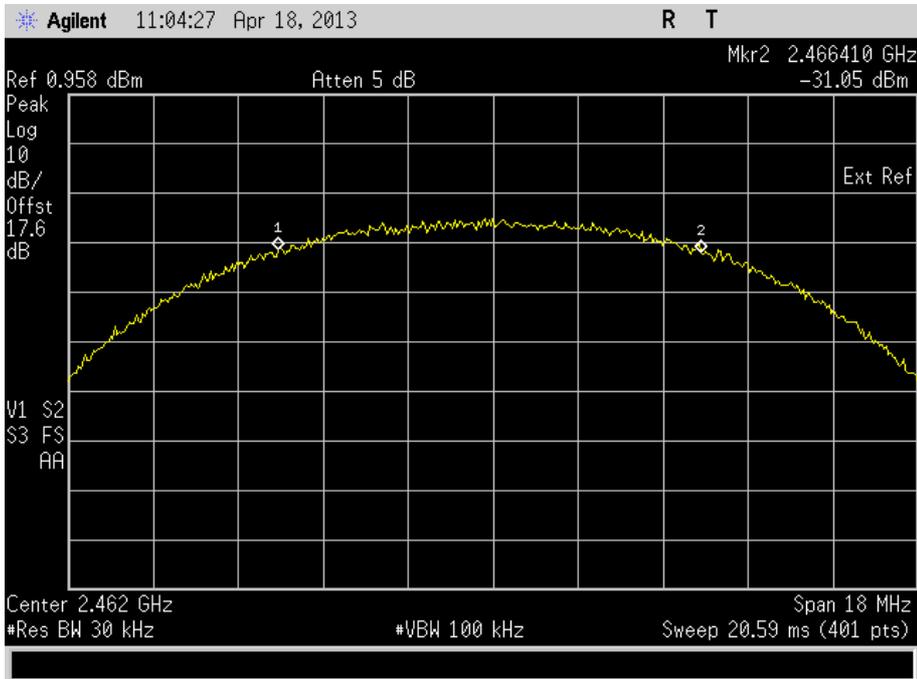
2 Mbps



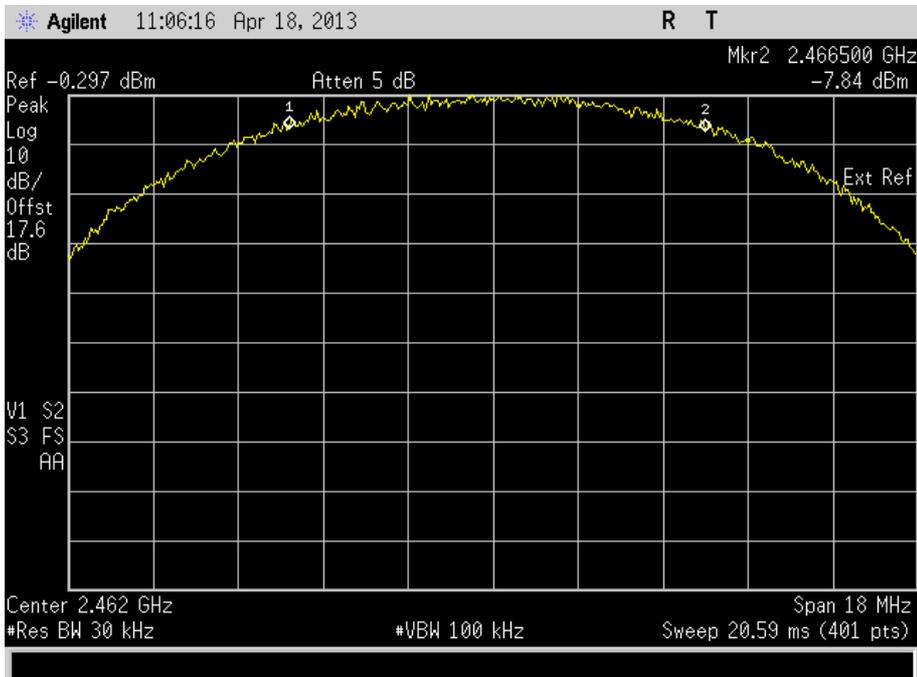


Product Service

5.5 Mbps



11 Mbps



Limit Clause

The minimum 6 dB Bandwidth shall be at least 500 kHz.



Product Service

802.11(g)

4.0 V DC Supply

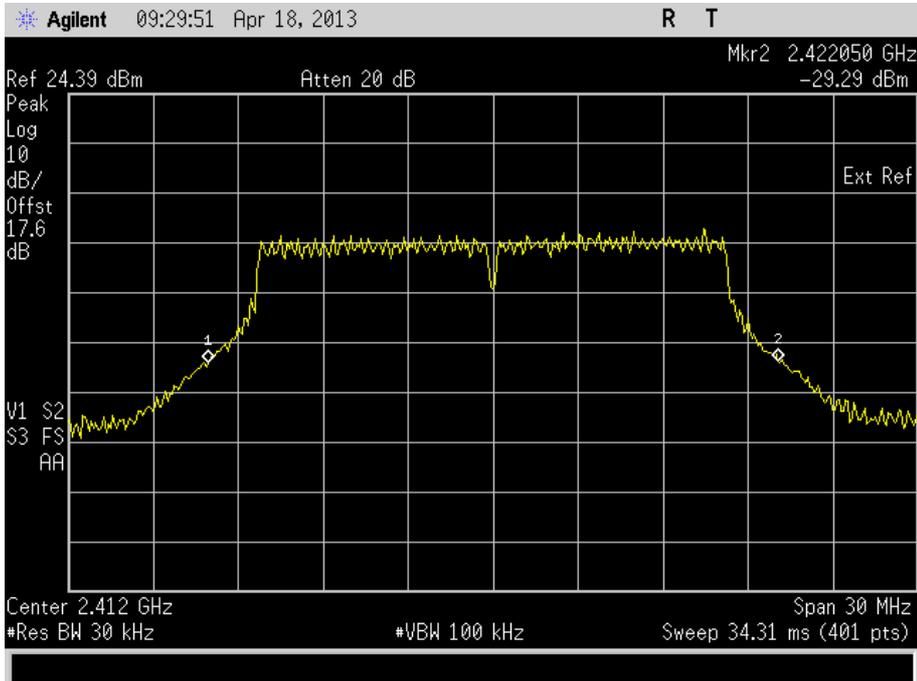
Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (kHz)
2412 MHz	6	16650
	9	16650
	12	16650
	18	16550
	24	16550
	36	16550
	48	16550
	54	16600
2437 MHz	6	16650
	9	16600
	12	16550
	18	16600
	24	16550
	36	16550
	48	16550
	54	16600
2462 MHz	6	16650
	9	16650
	12	16600
	18	16550
	24	16650
	36	16550
	48	16550
	54	16550



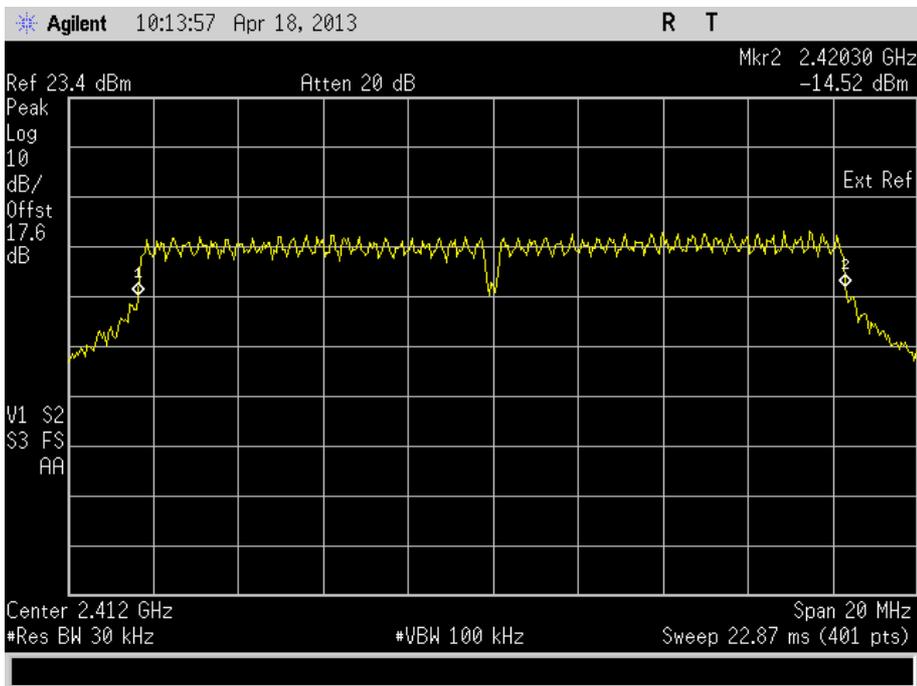
Product Service

2412 MHz

6 Mbps



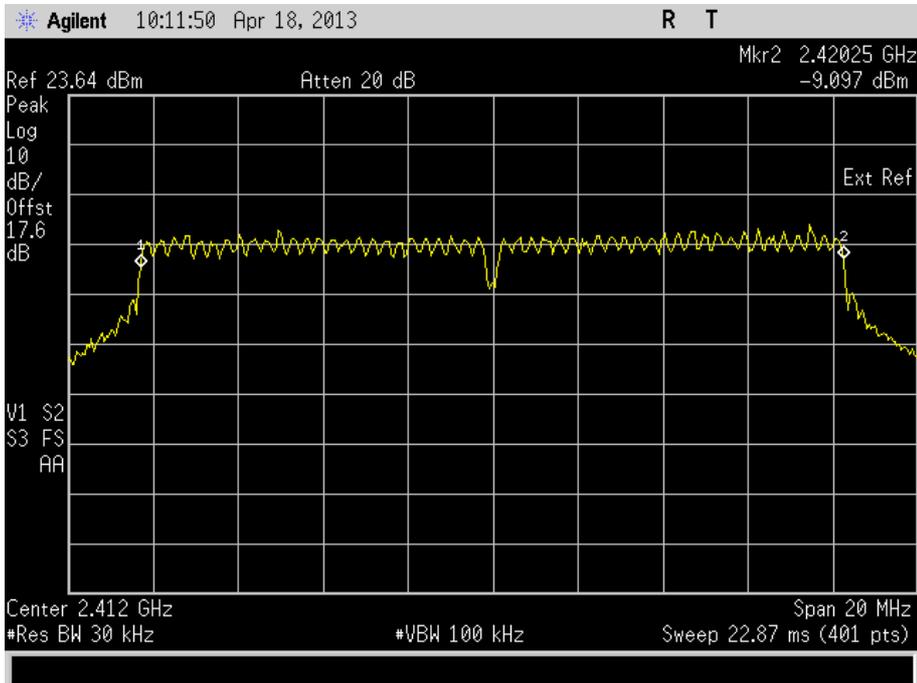
9 Mbps



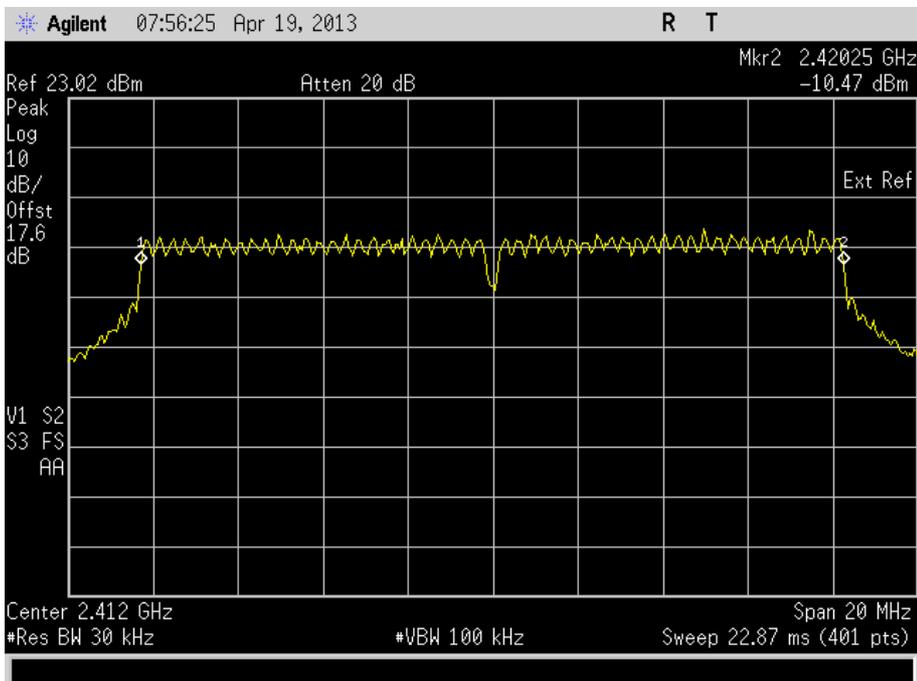


Product Service

12 Mbps



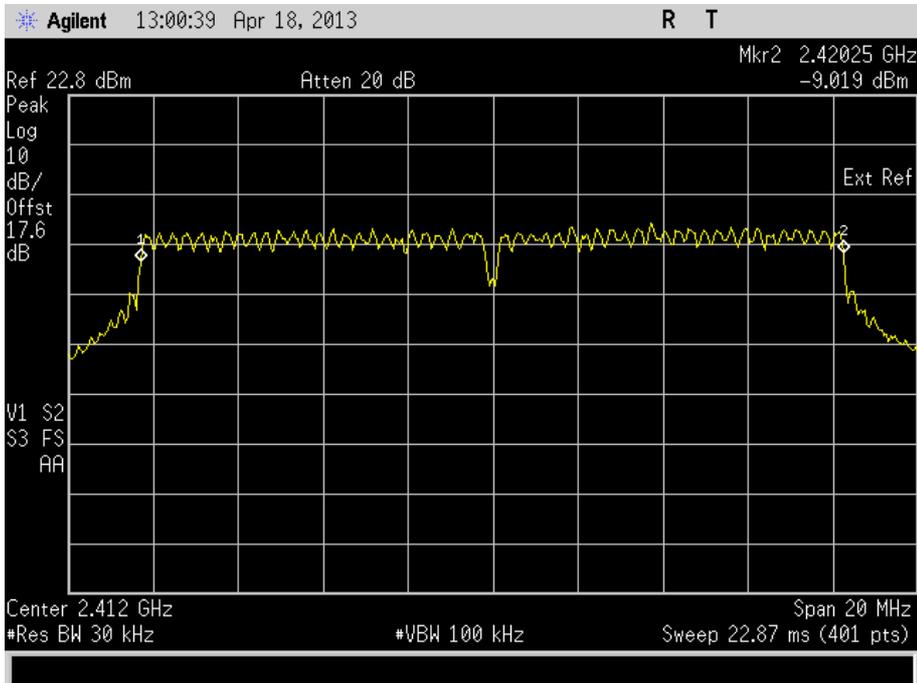
18 Mbps



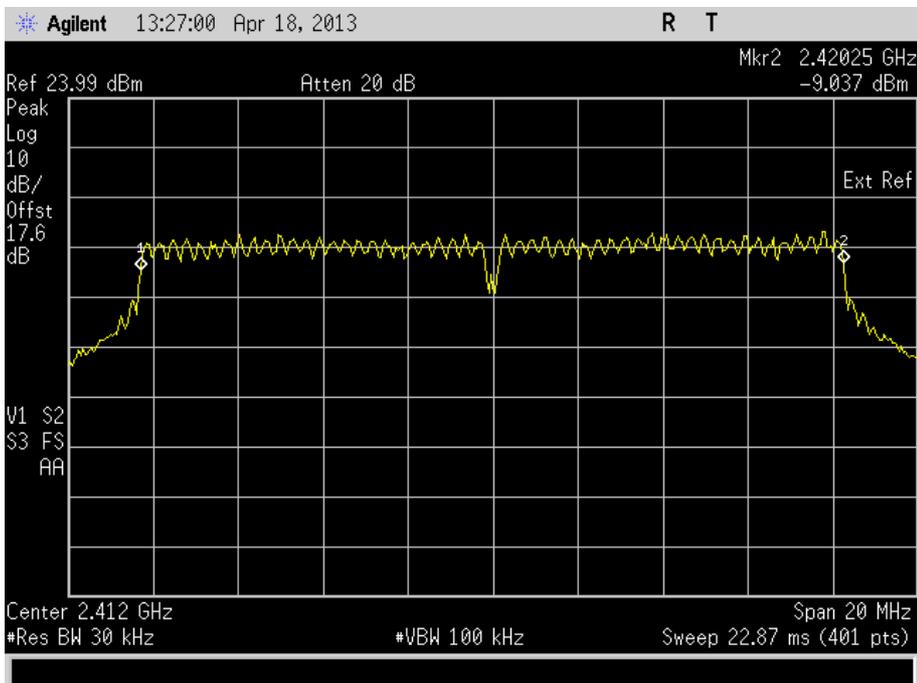


Product Service

24 Mbps



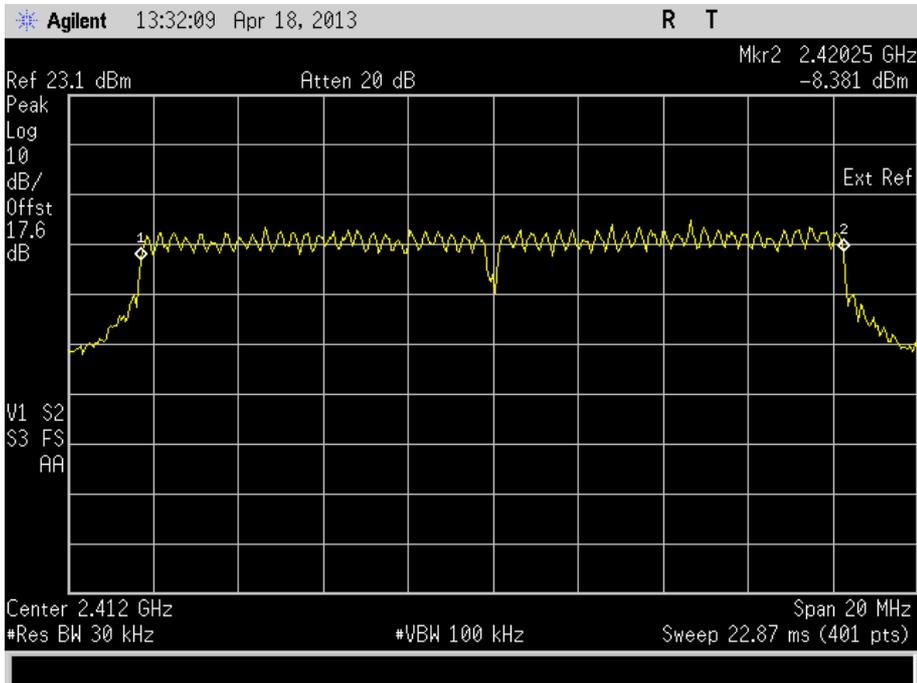
36 Mbps



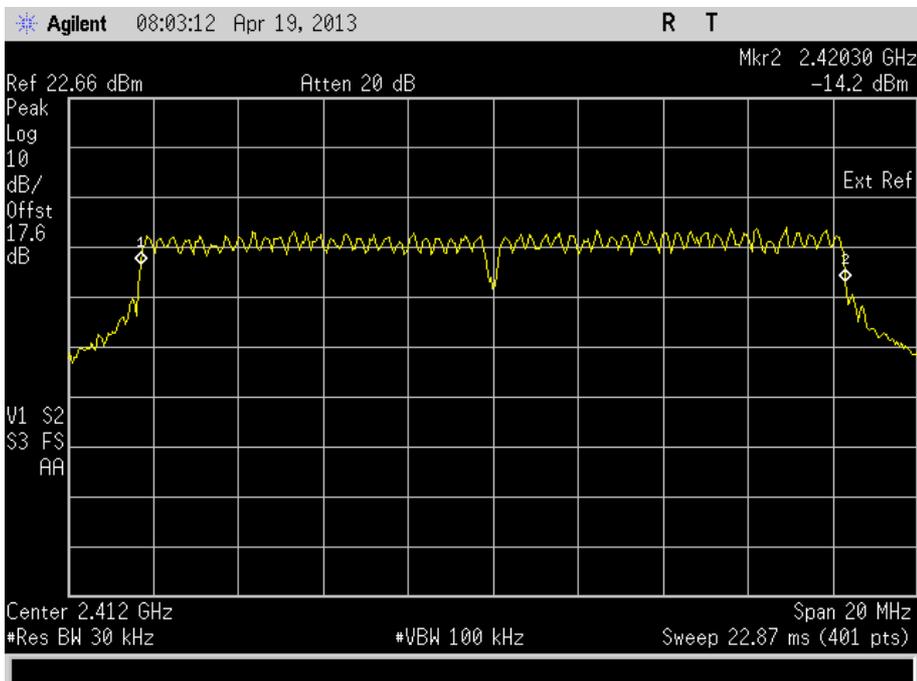


Product Service

48 Mbps



54 Mbps

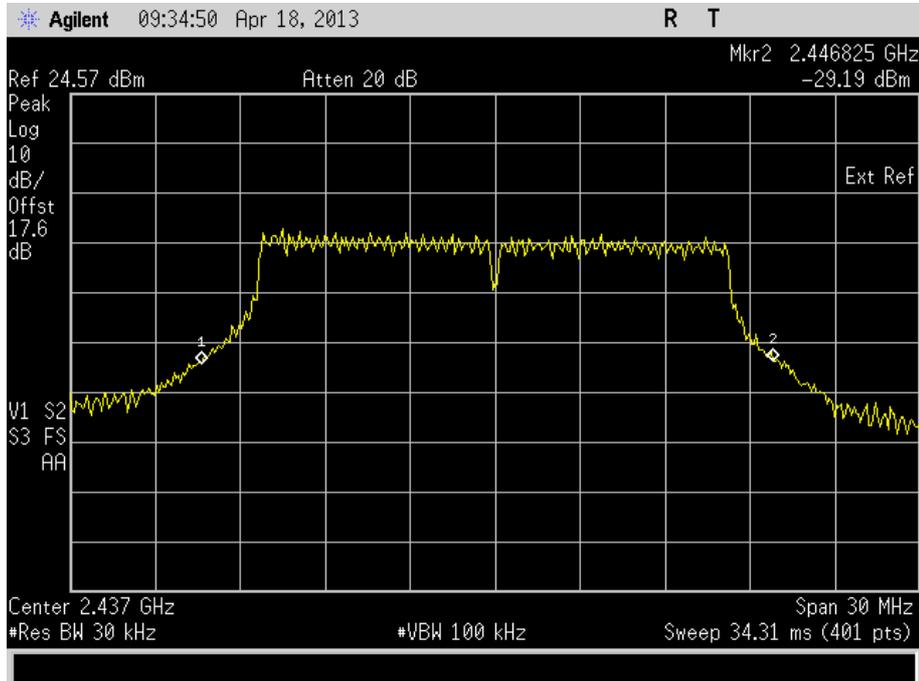




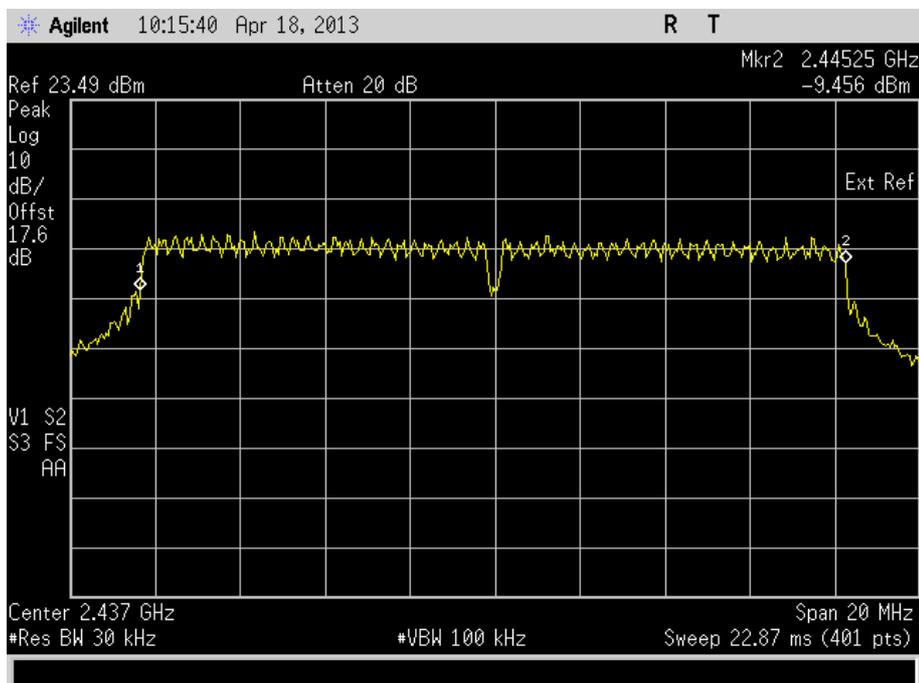
Product Service

2437 MHz

6 Mbps



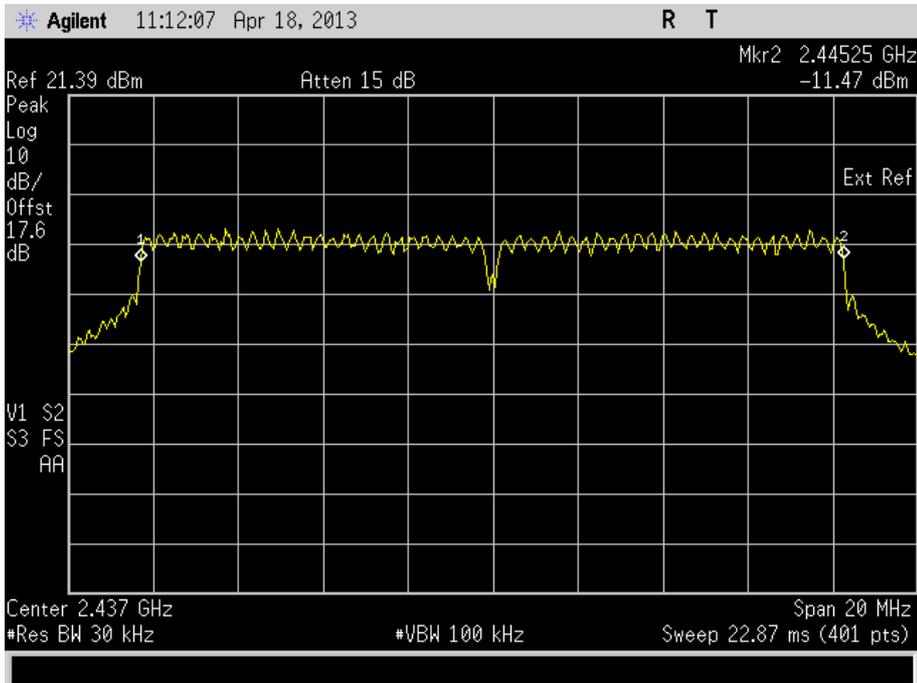
9 Mbps



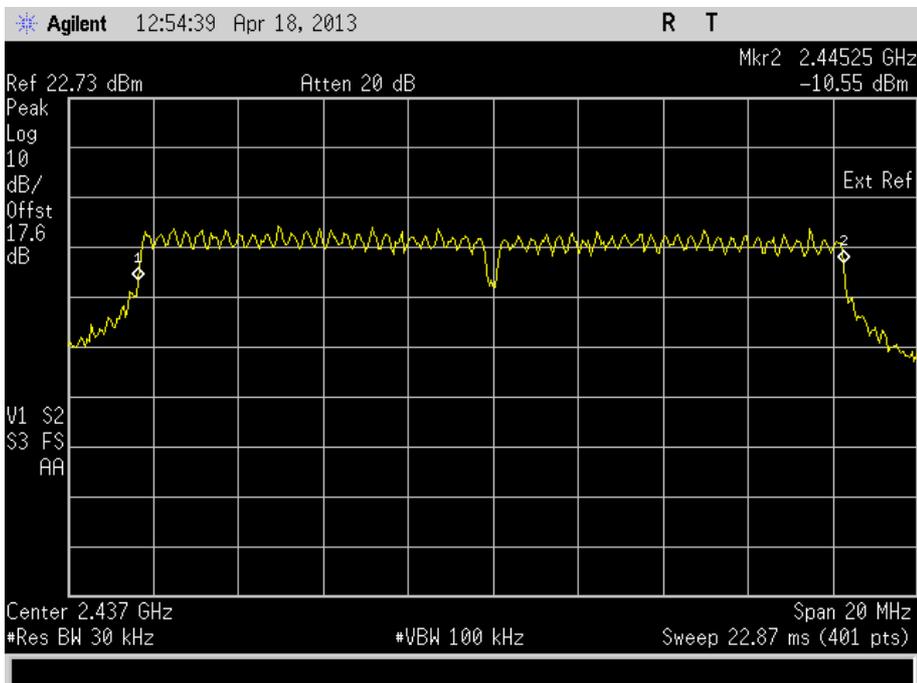


Product Service

12 Mbps



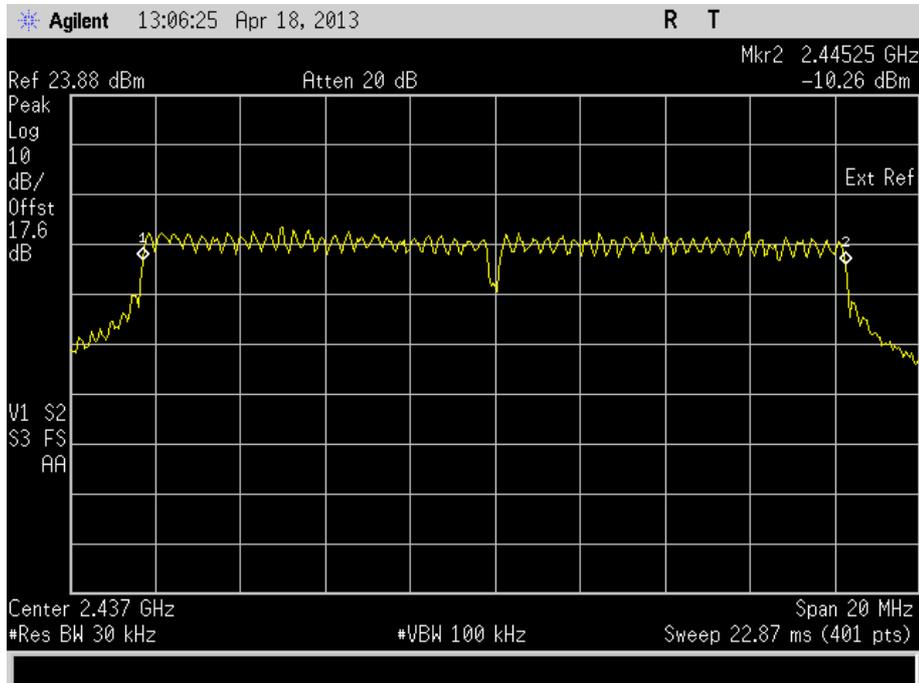
18 Mbps



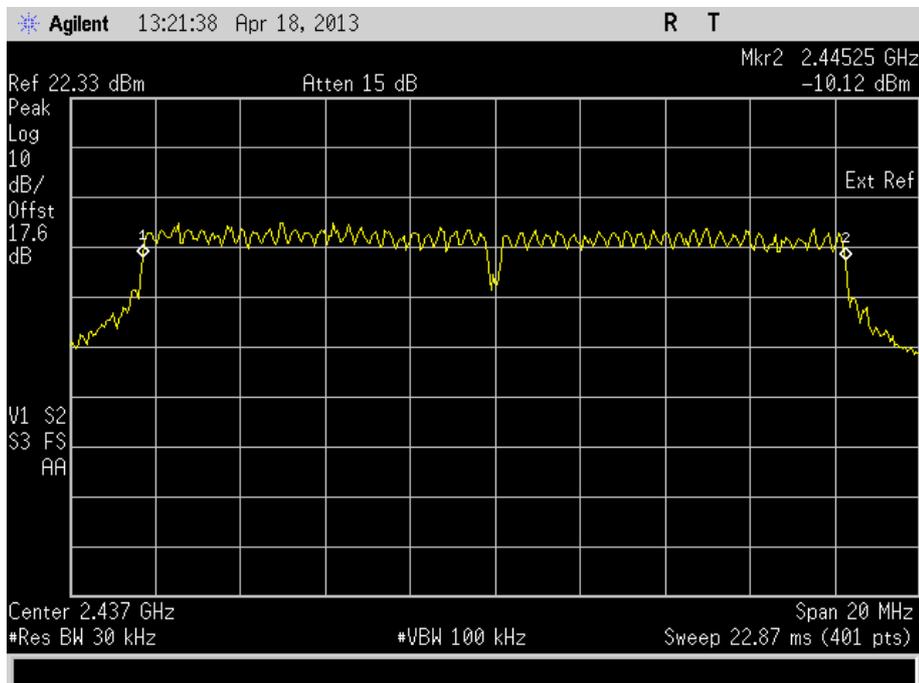


Product Service

24 Mbps



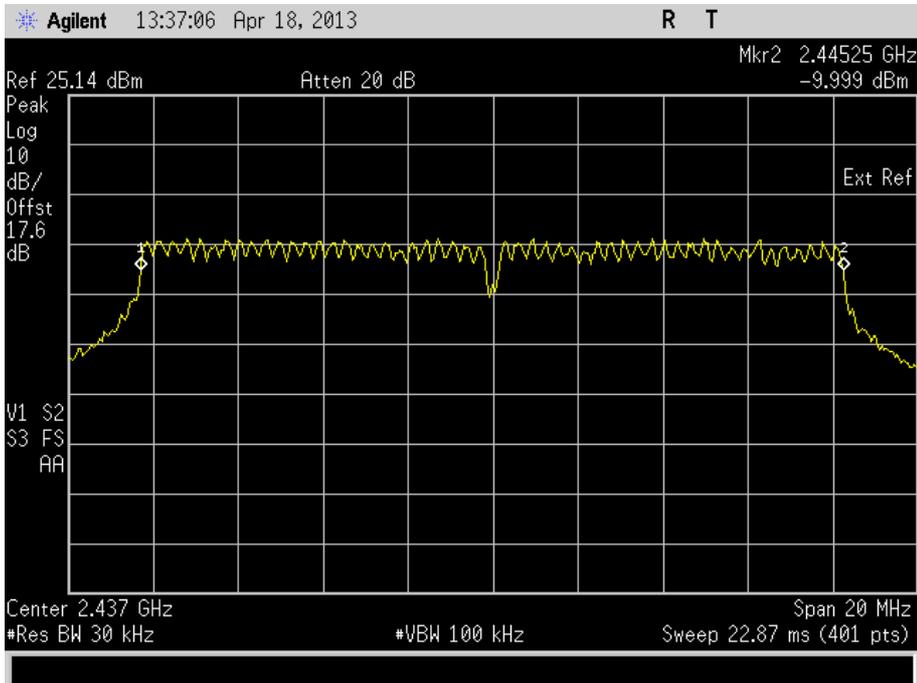
36 Mbps



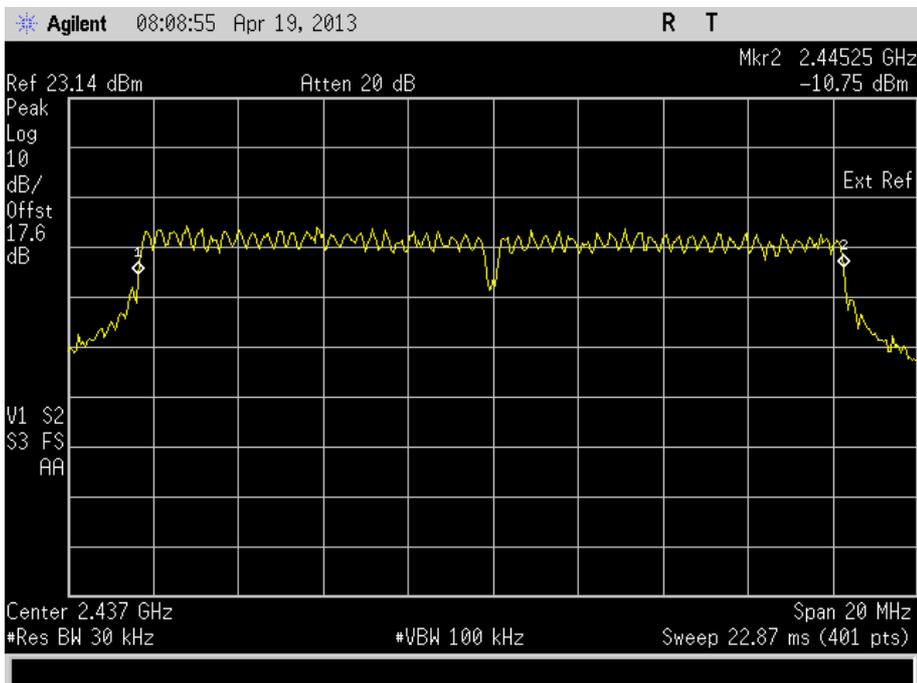


Product Service

48 Mbps



54 Mbps

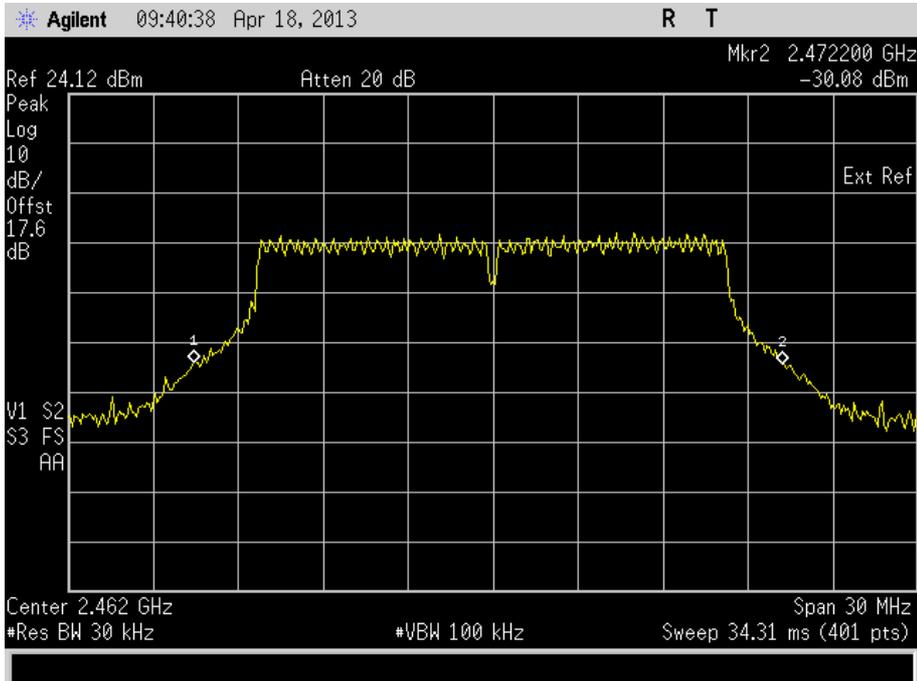




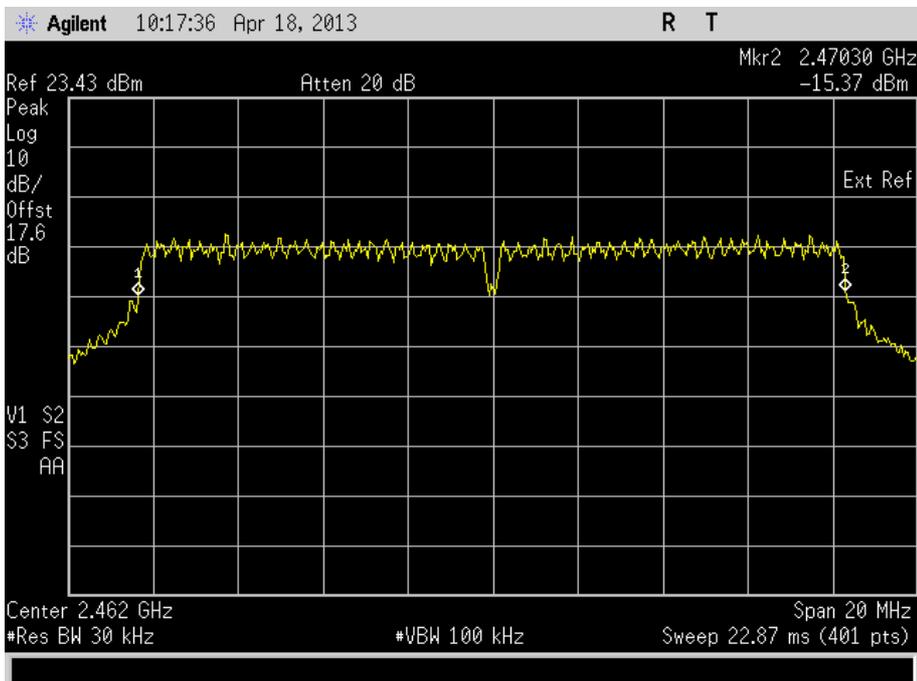
Product Service

2462 MHz

6 Mbps



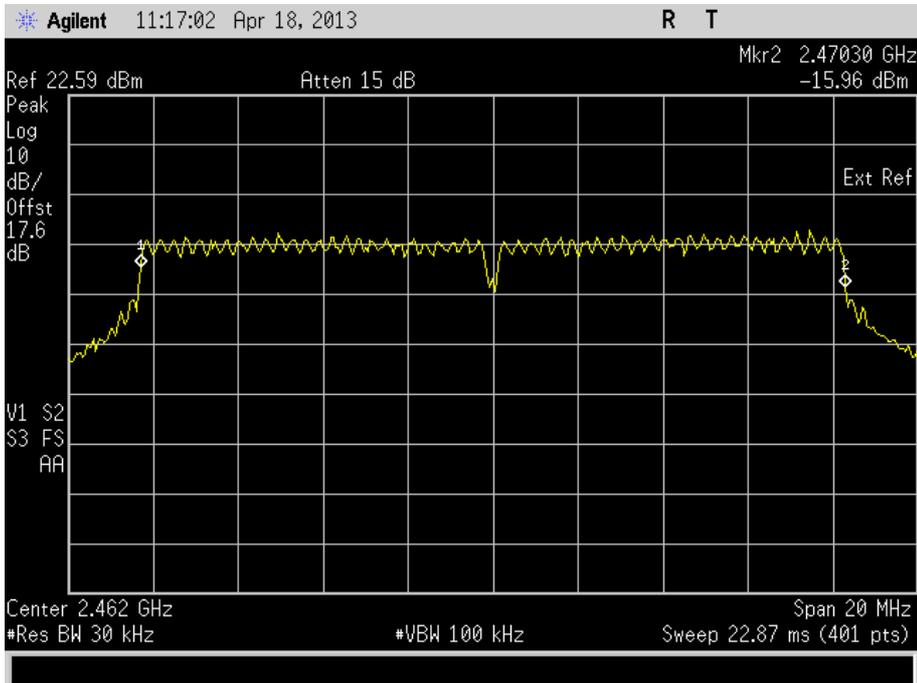
9 Mbps



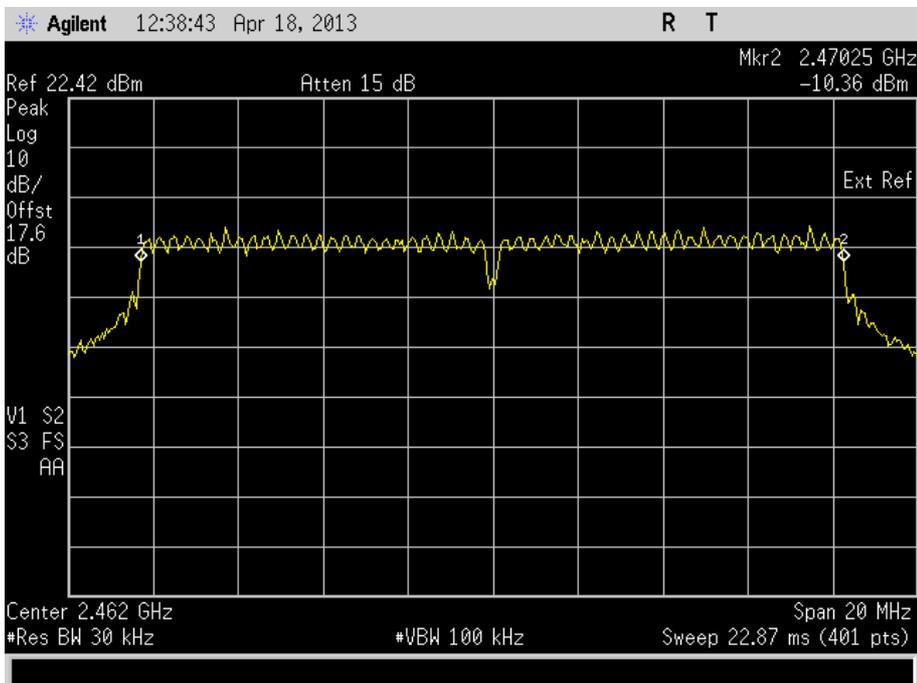


Product Service

12 Mbps



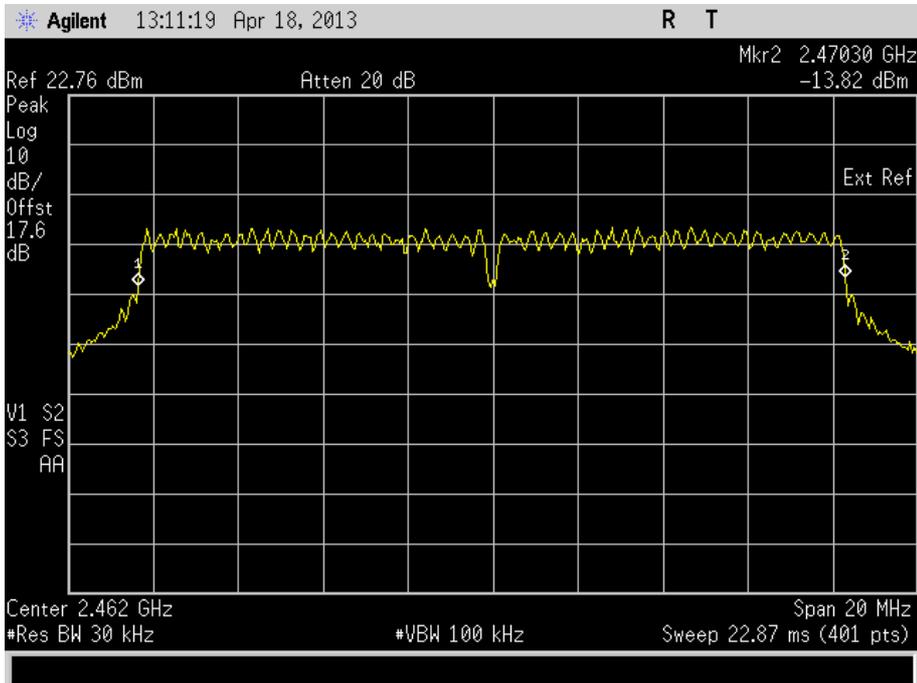
18 Mbps



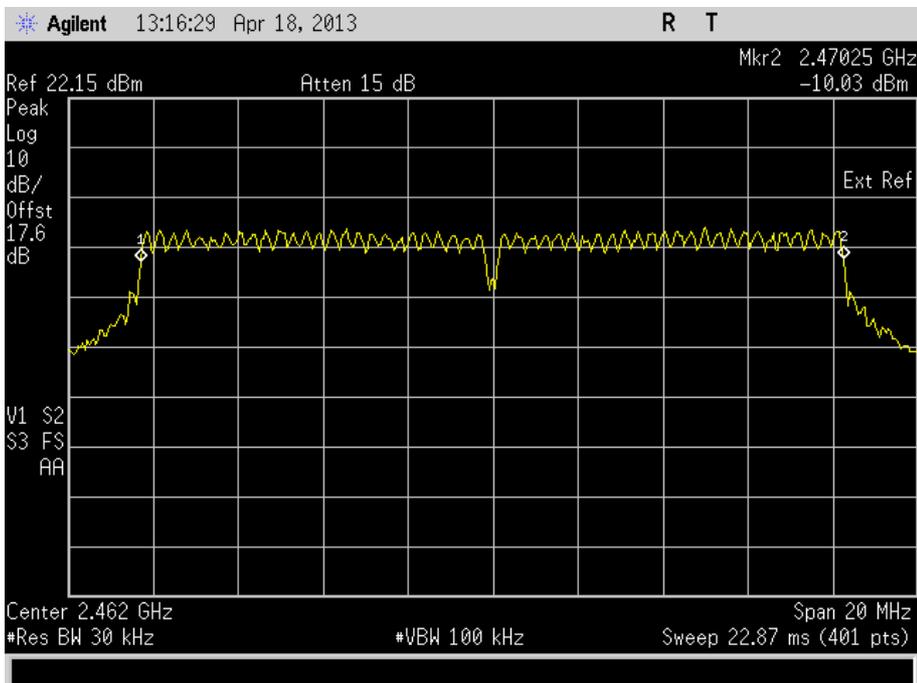


Product Service

24 Mbps



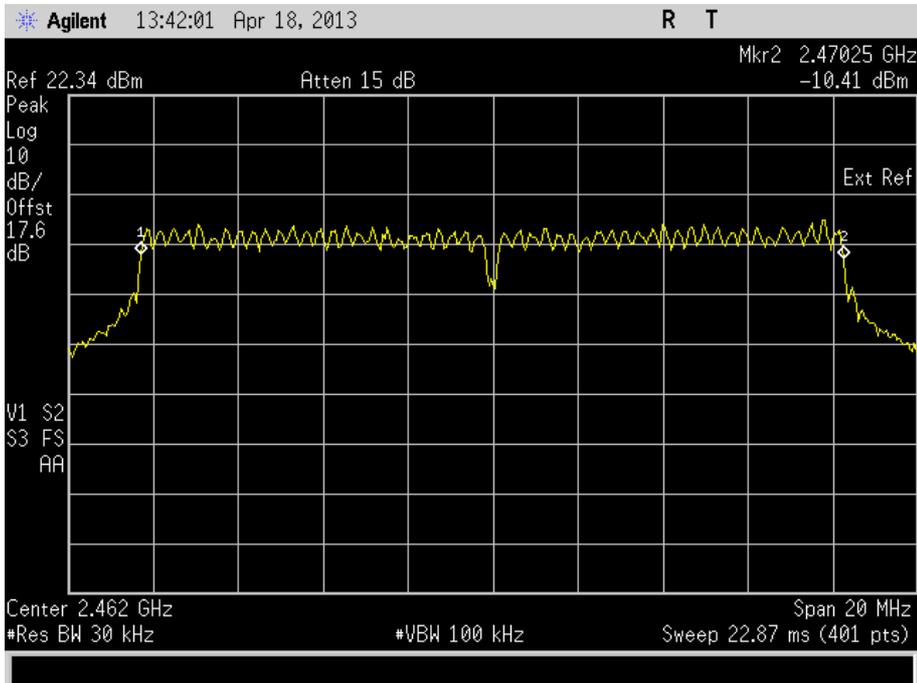
36 Mbps



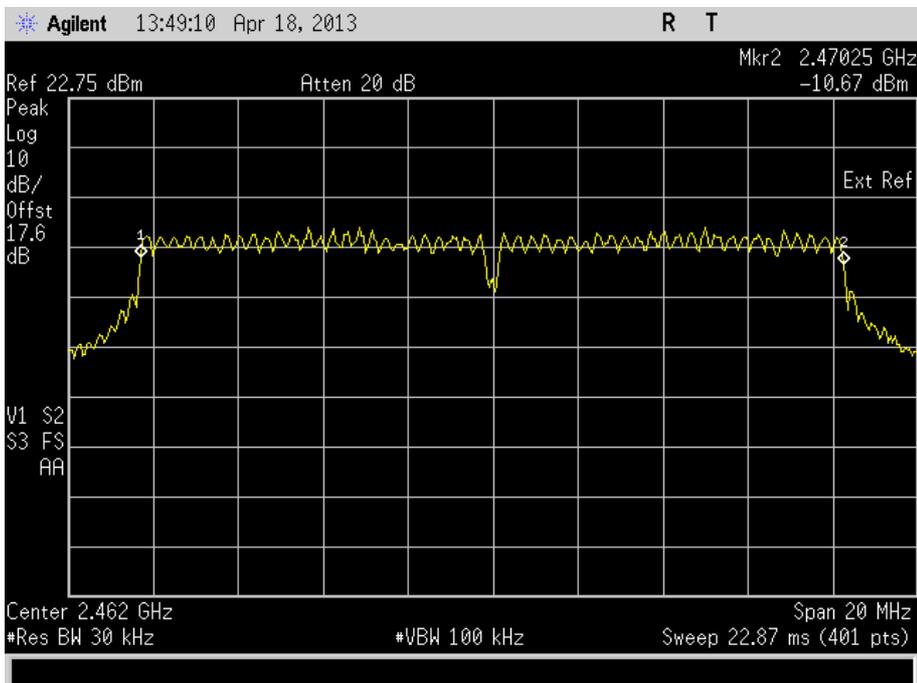


Product Service

48 Mbps



54 Mbps



Limit Clause

The minimum 6 dB Bandwidth shall be at least 500 kHz.



Product Service

802.11(n)

4.0 V DC Supply

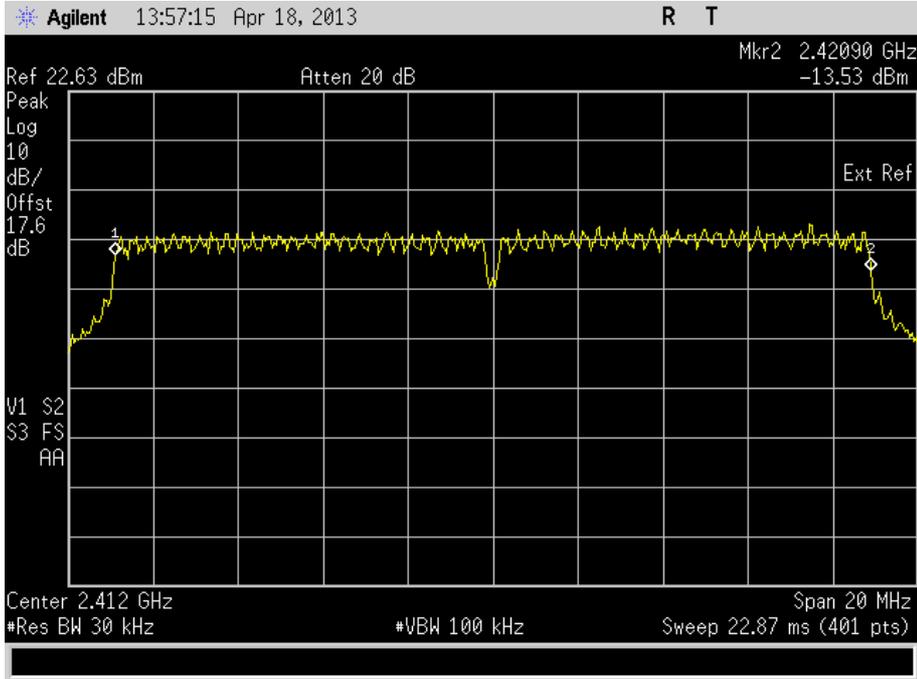
Frequency (MHz)	Data Rate (Mbps)	6dB Bandwidth (kHz)
2412 MHz	6.5	17800
	13	17800
	19.5	17800
	26	17800
	39	17850
	52	17800
	58.5	17800
	65	17850
2437 MHz	6.5	17800
	13	17800
	19.5	17800
	26	17800
	39	17850
	52	17850
	58.5	17750
	65	17800
2462 MHz	6.5	17850
	13	17800
	19.5	17850
	26	17800
	39	17850
	52	17800
	58.5	17850
	65	17800



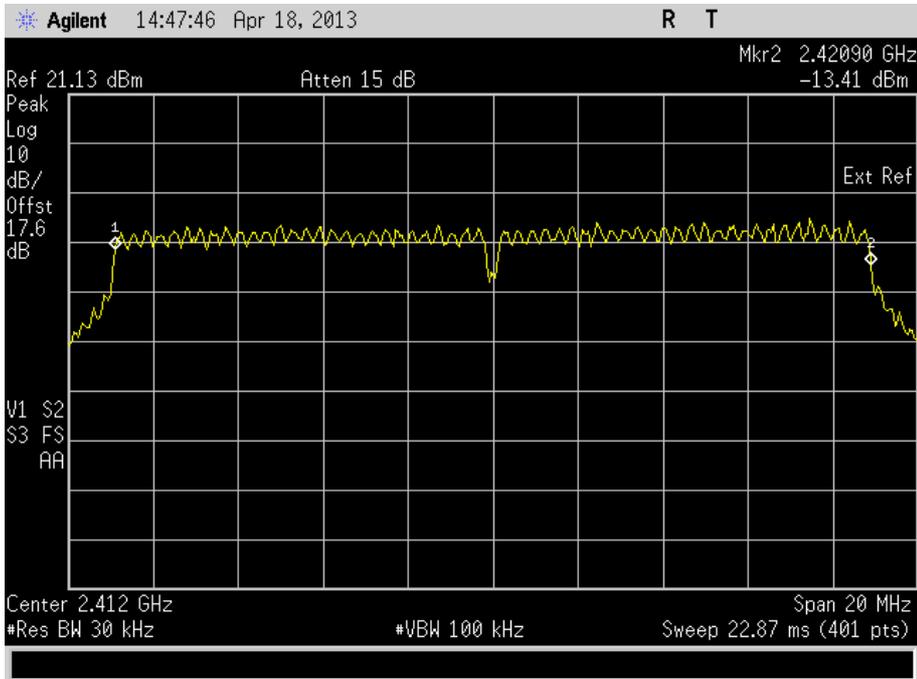
Product Service

2412 MHz

6.5 Mbps



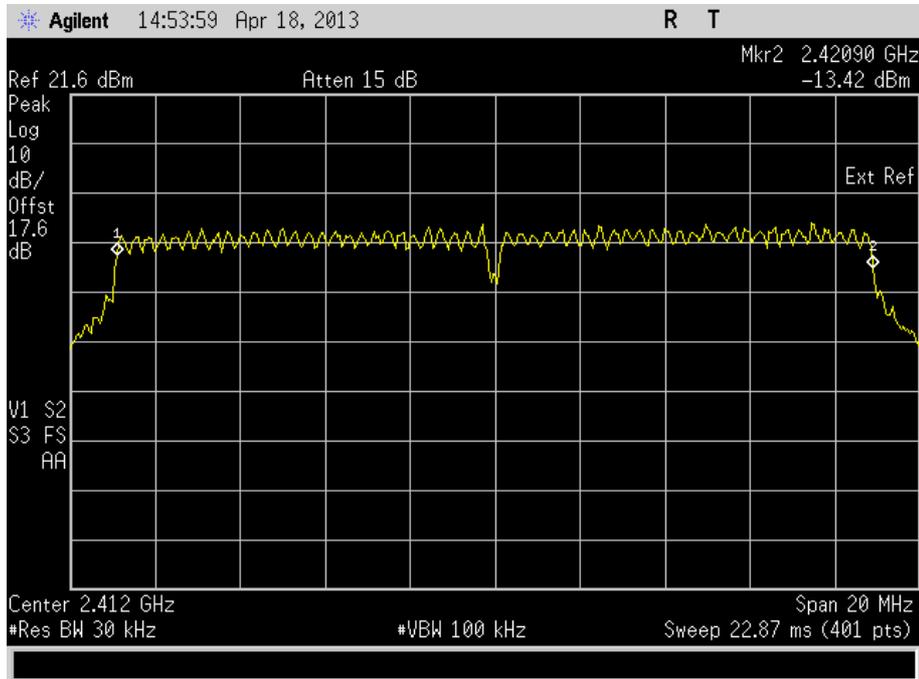
13 Mbps



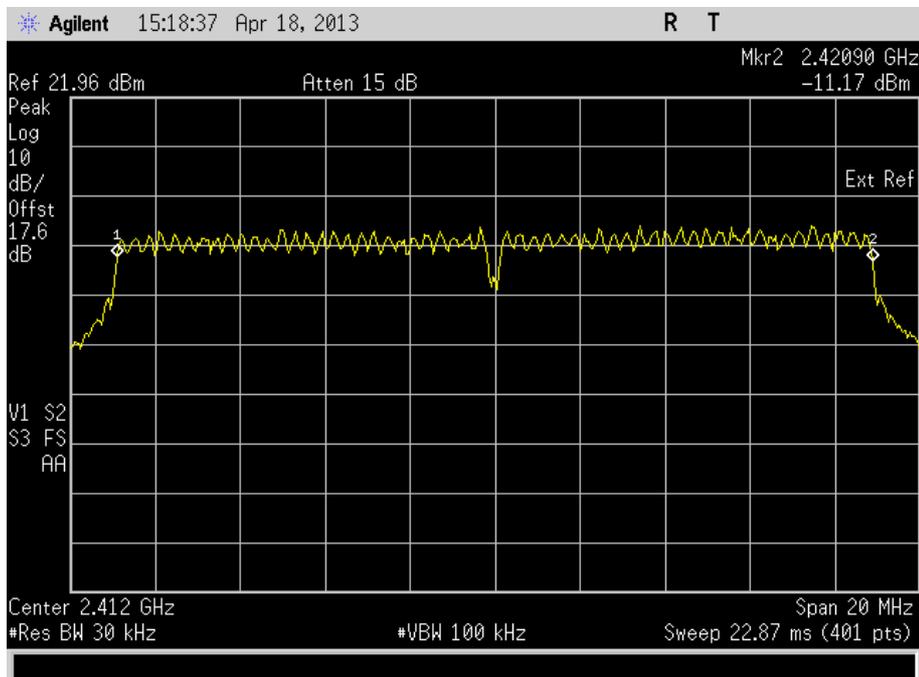


Product Service

19.5 Mbps



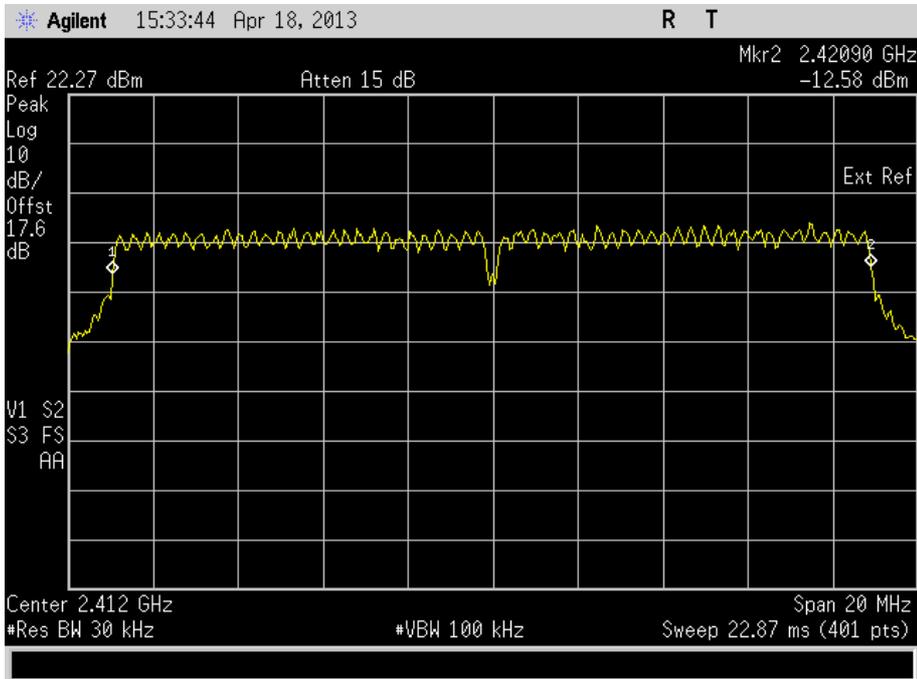
26 Mbps



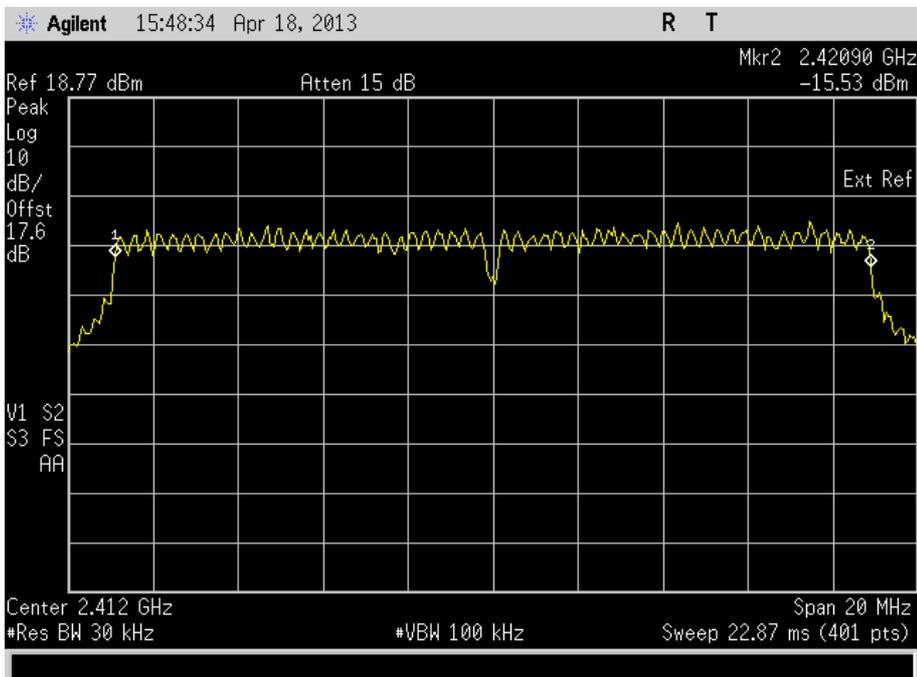


Product Service

39 Mbps



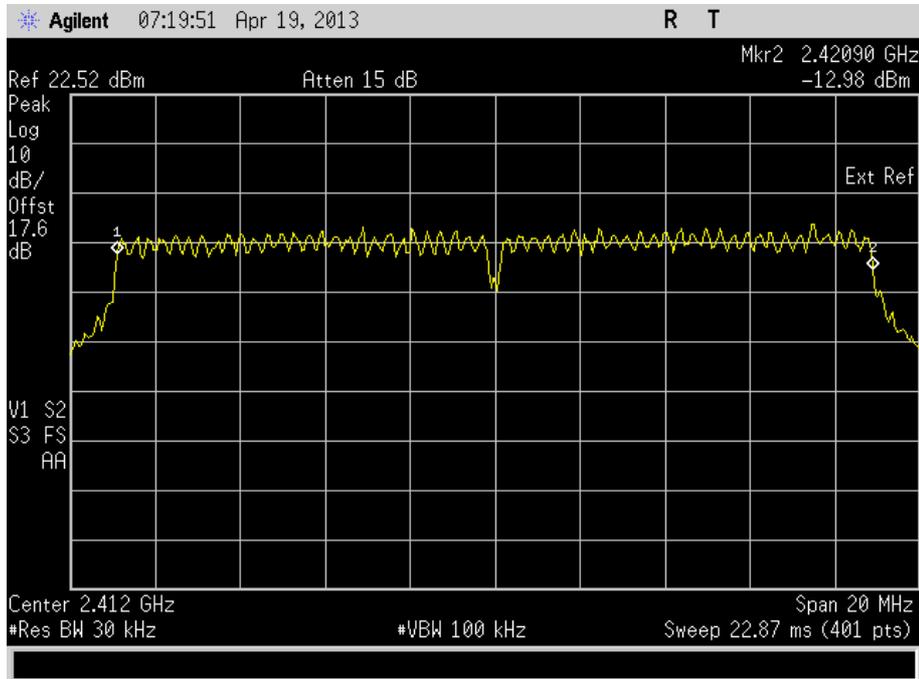
52 Mbps



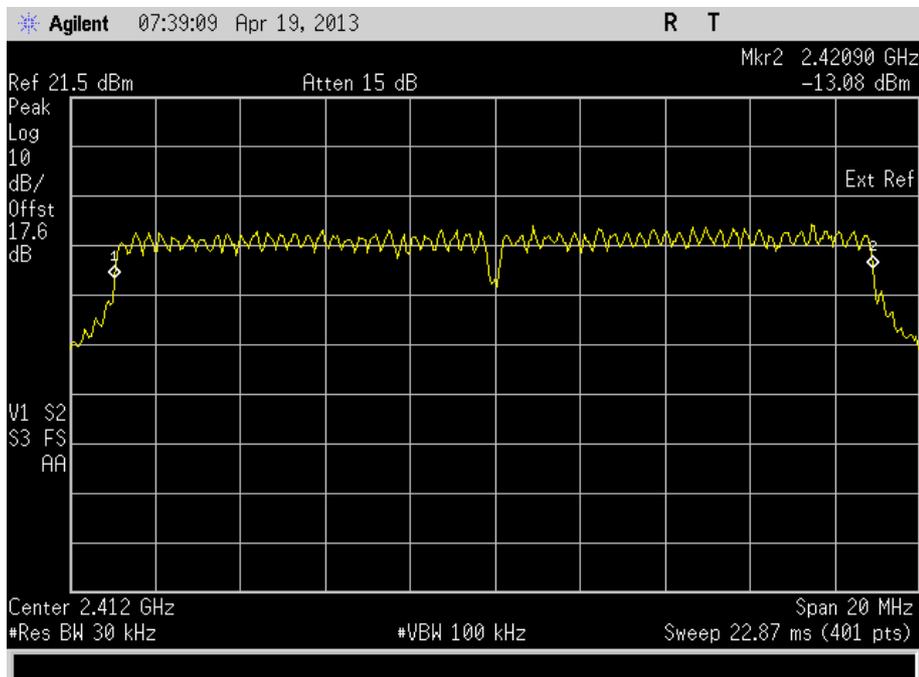


Product Service

58.5 Mbps



65 Mbps

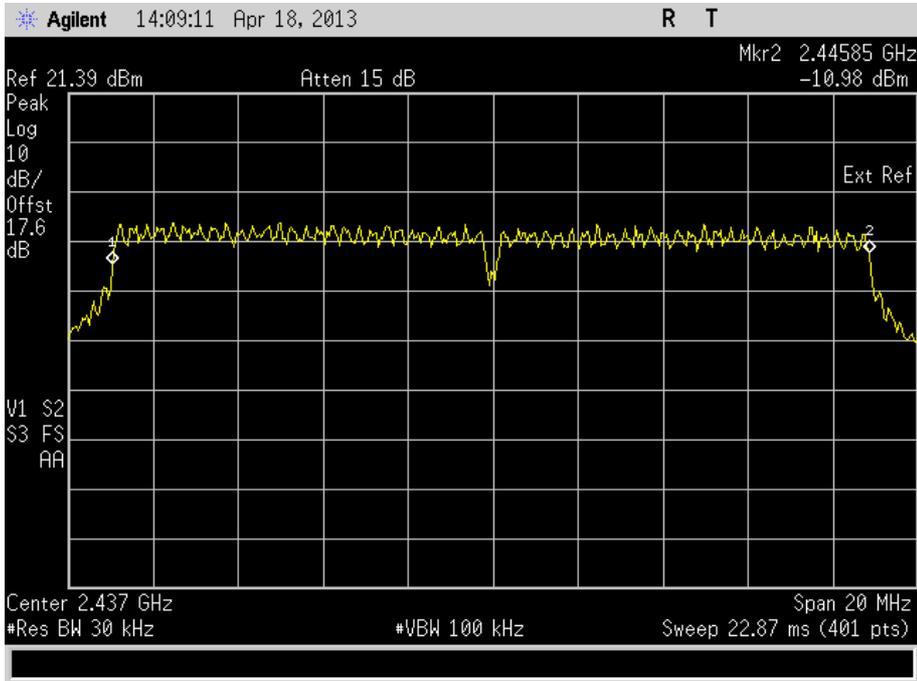




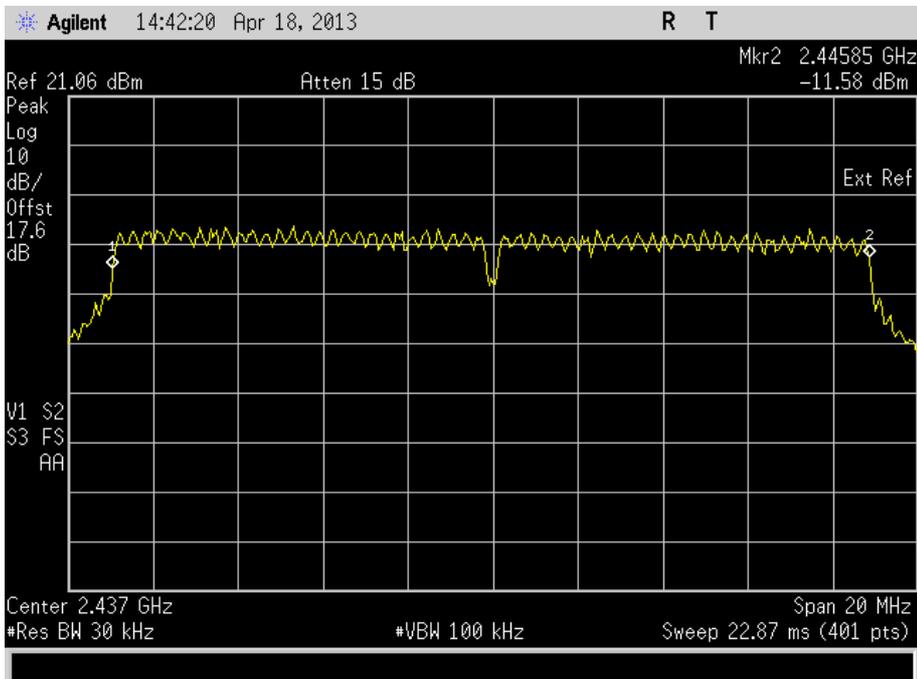
Product Service

2437 MHz

6.5 Mbps



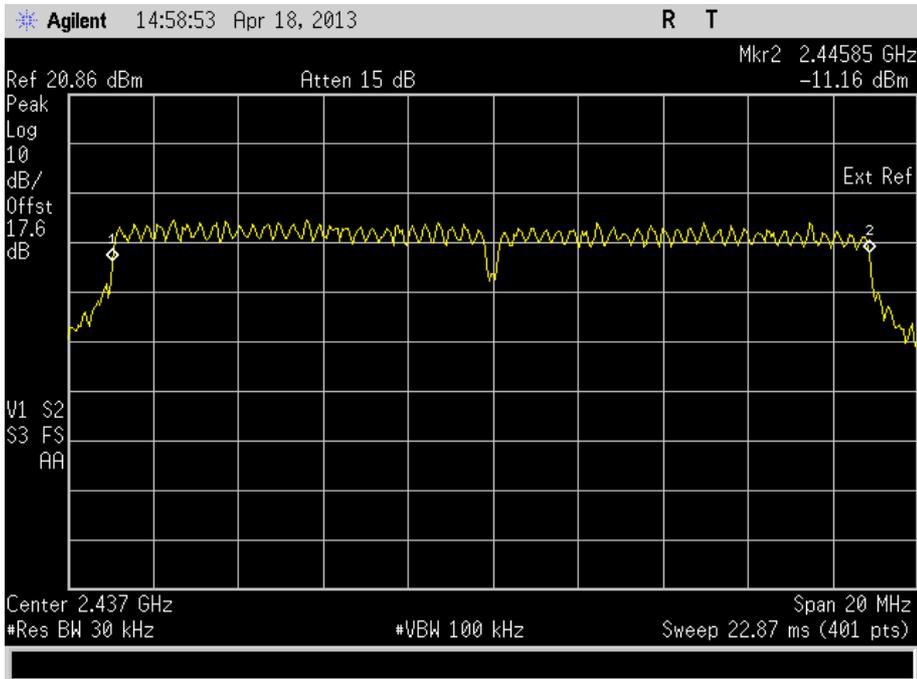
13 Mbps



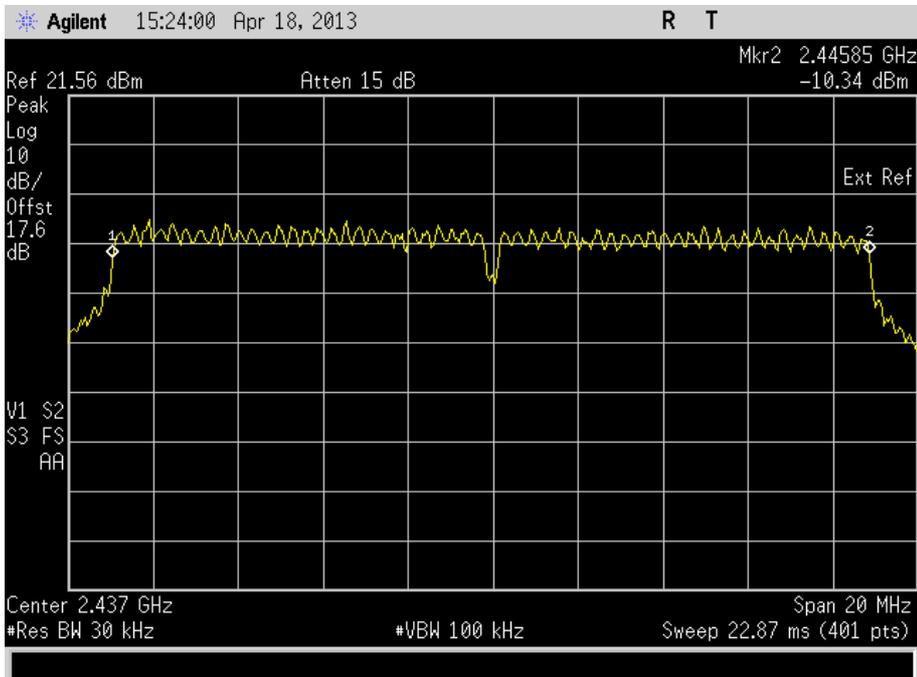


Product Service

19.5 Mbps



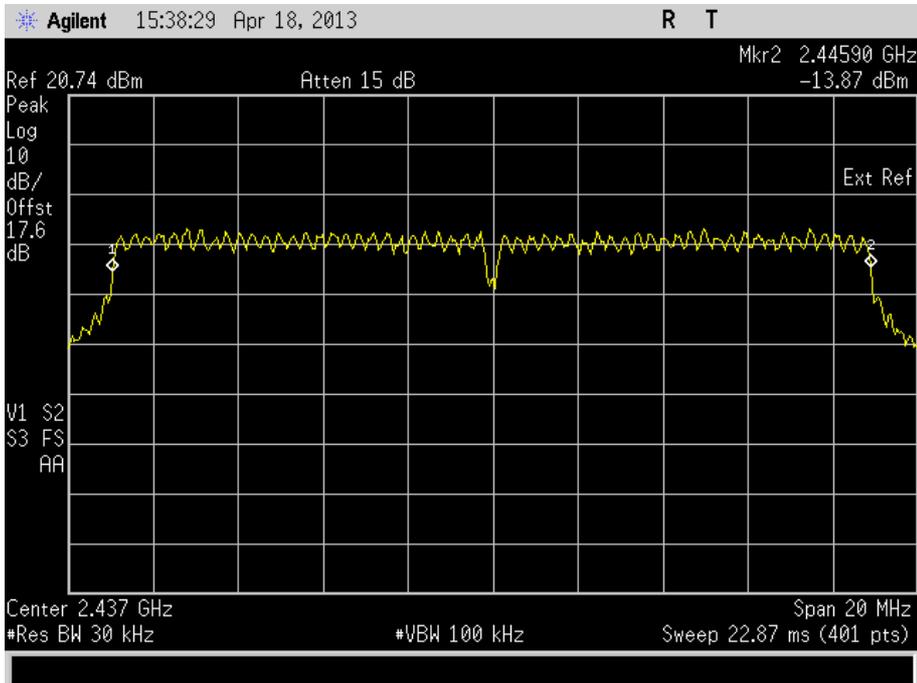
26 Mbps



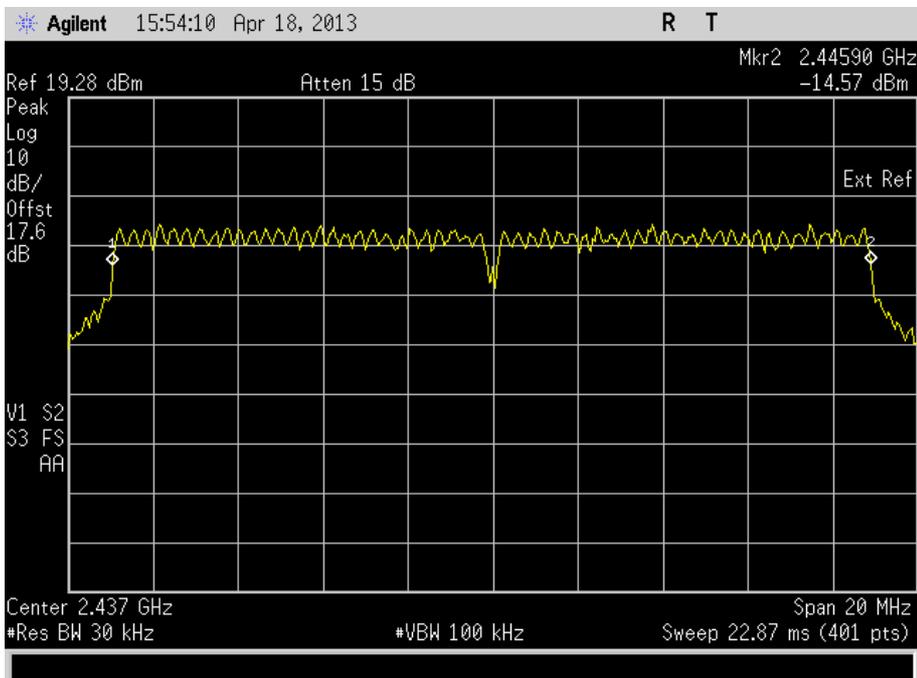


Product Service

39 Mbps



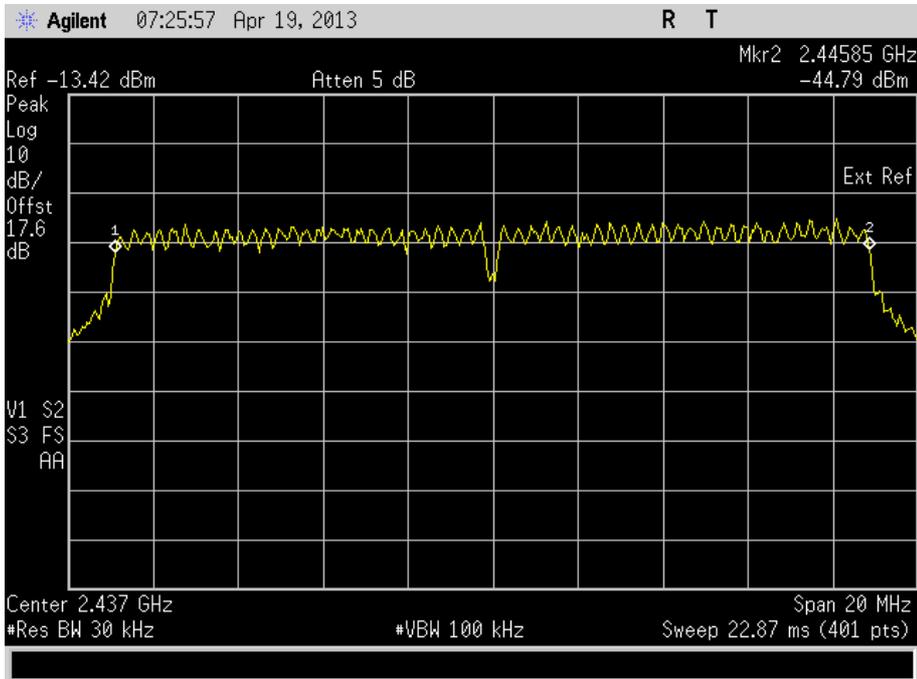
52 Mbps



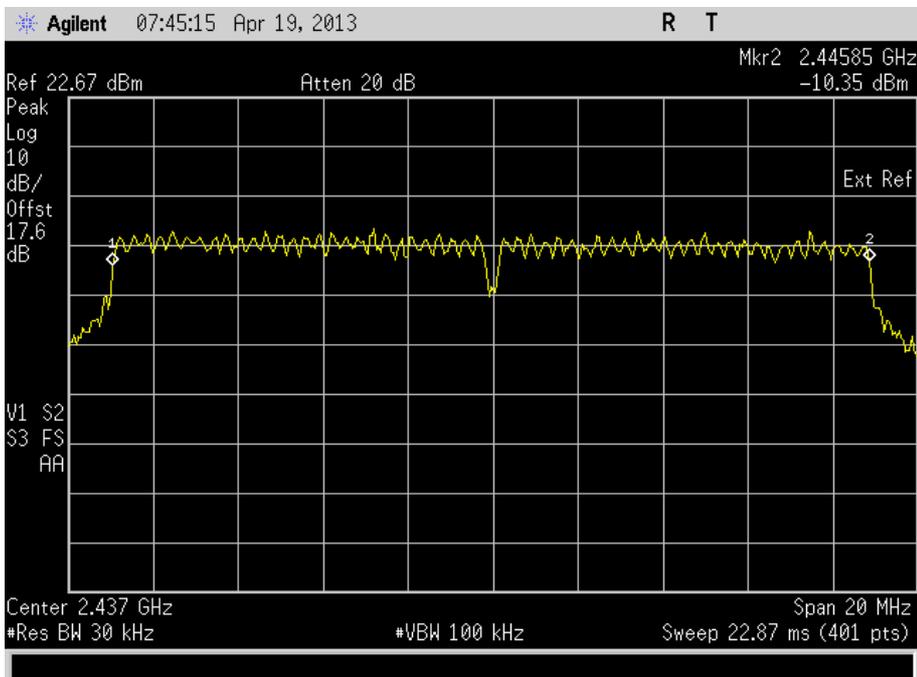


Product Service

58.5 Mbps



65 Mbps

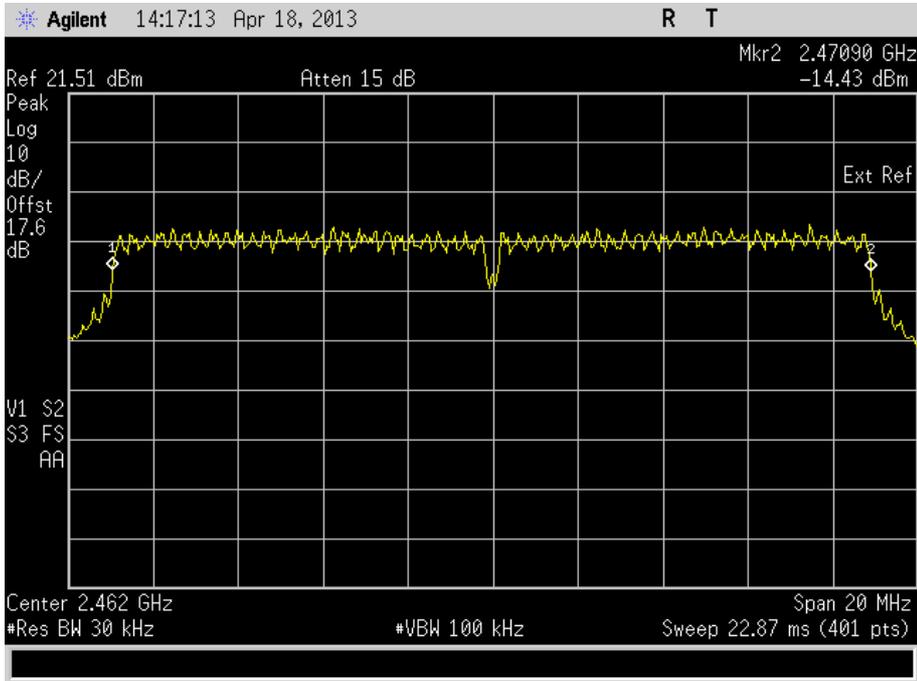




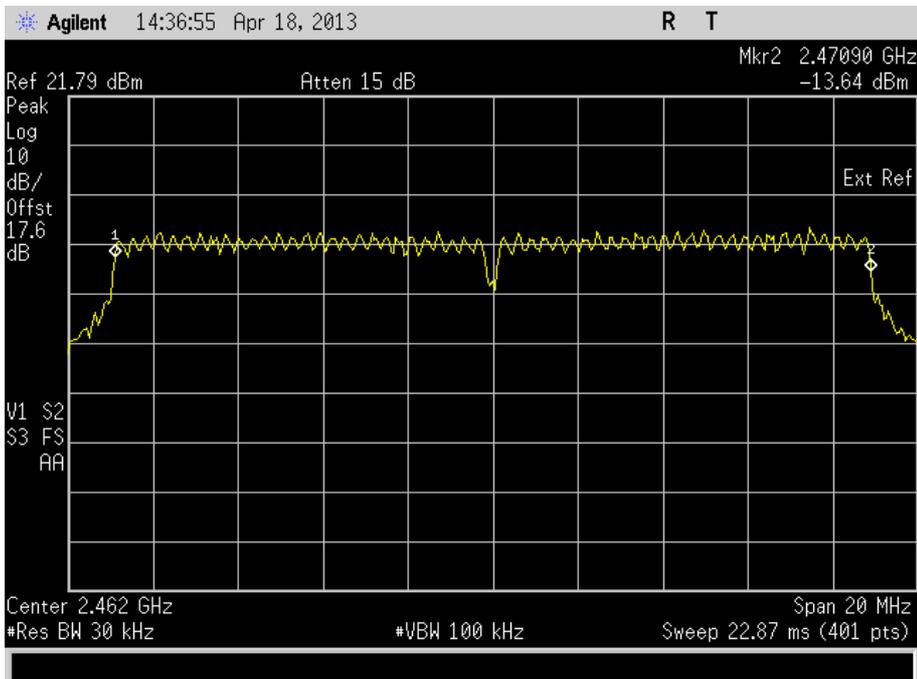
Product Service

2462 MHz

6.5 Mbps



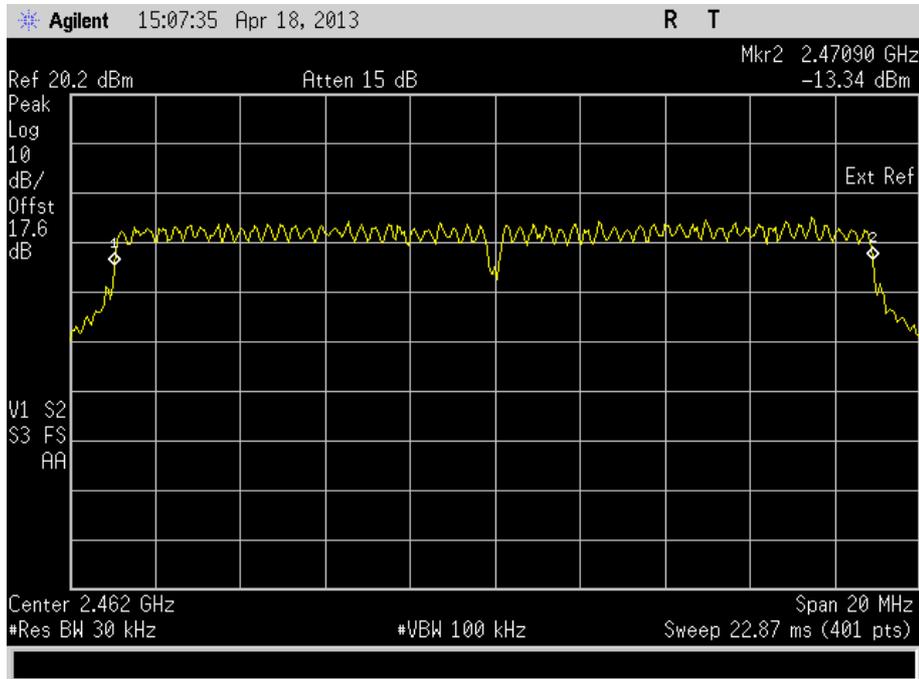
13 Mbps



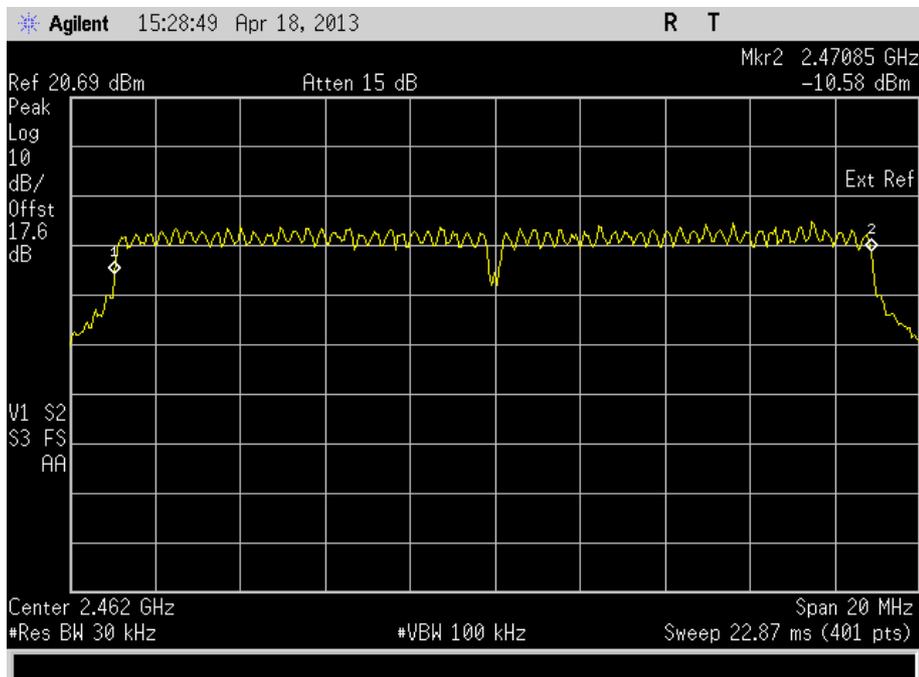


Product Service

19.5 Mbps



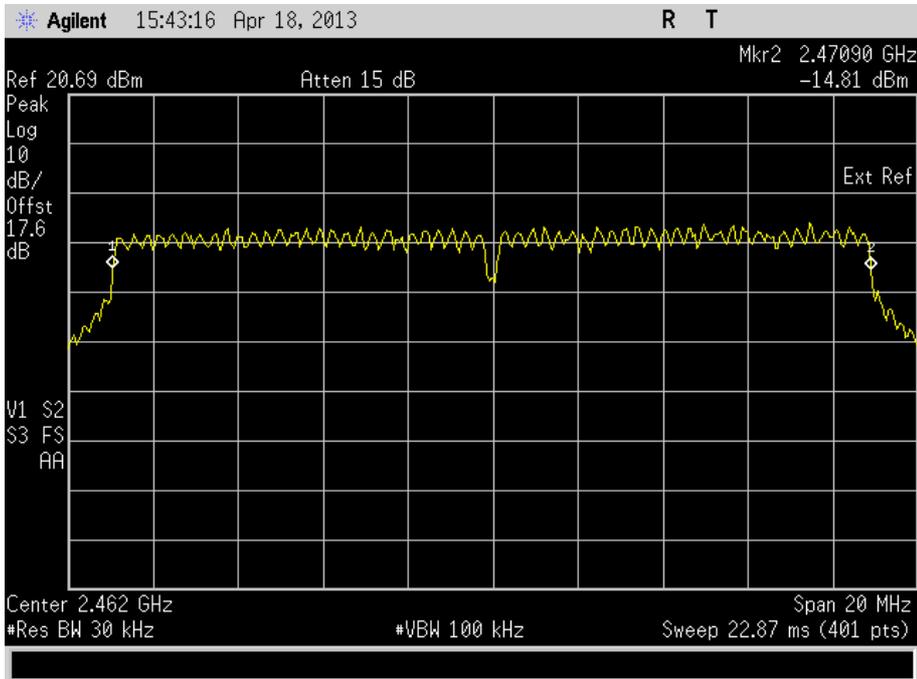
26 Mbps



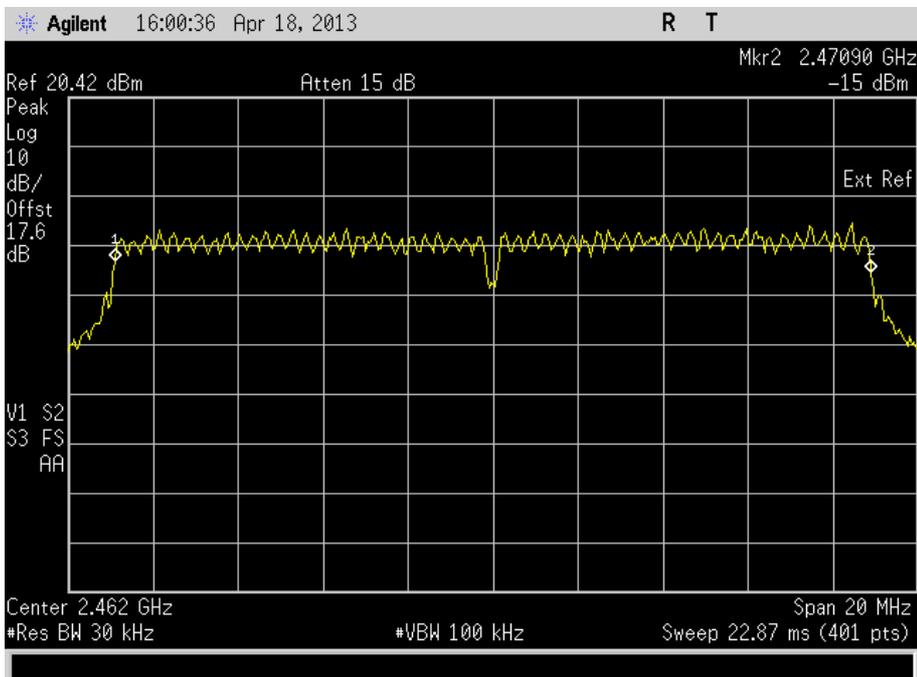


Product Service

39 Mbps



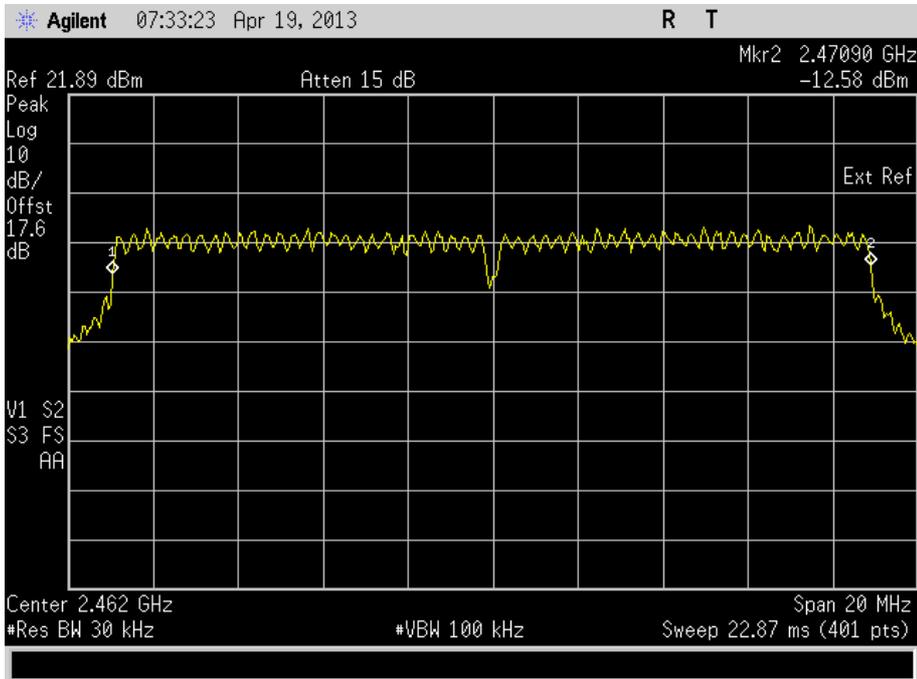
52 Mbps



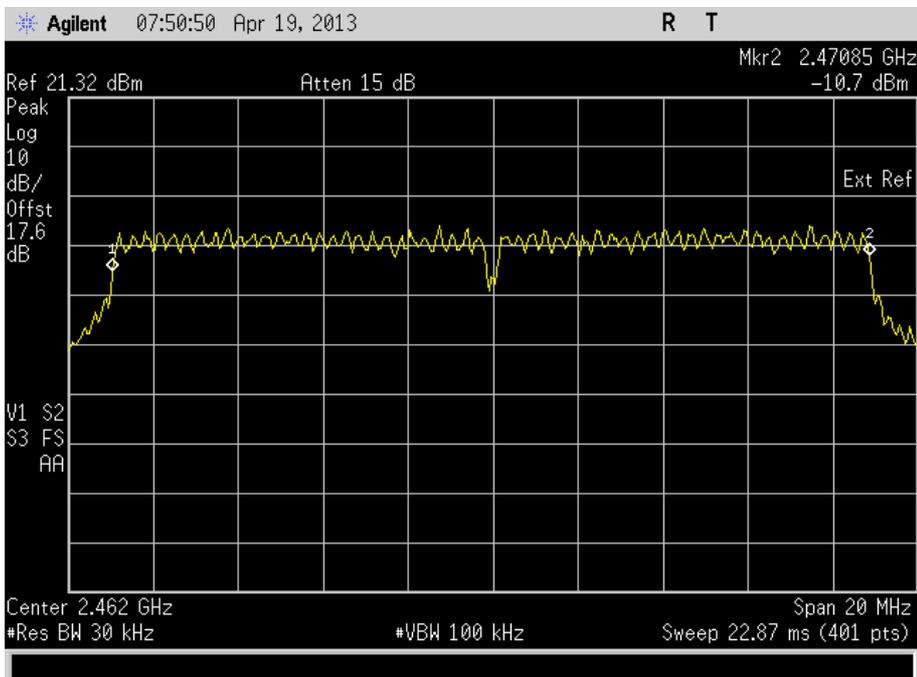


Product Service

58.5 Mbps



65 Mbps



Limit Clause

The minimum 6 dB Bandwidth shall be at least 500 kHz.



Product Service

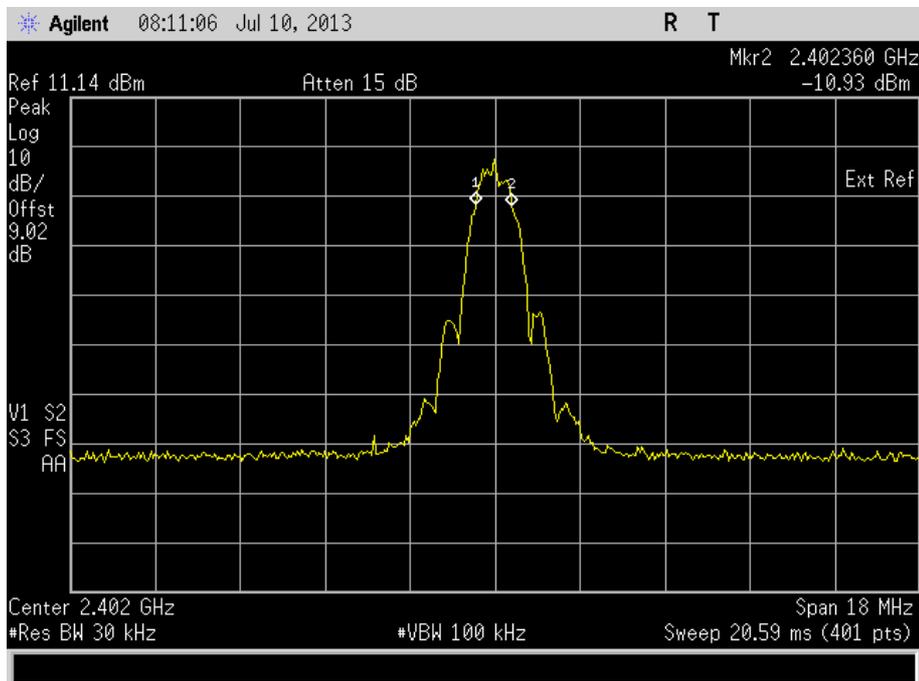
Bluetooth Low Energy

4.0 V DC Supply

Frequency (MHz)	Packet Type	6dB Bandwidth (kHz)
2402 MHz	37oct/prbs9	765
2441 MHz	37oct/prbs9	765
2480 MHz	37oct/prbs9	765

2402 MHz

37oct/prbs9

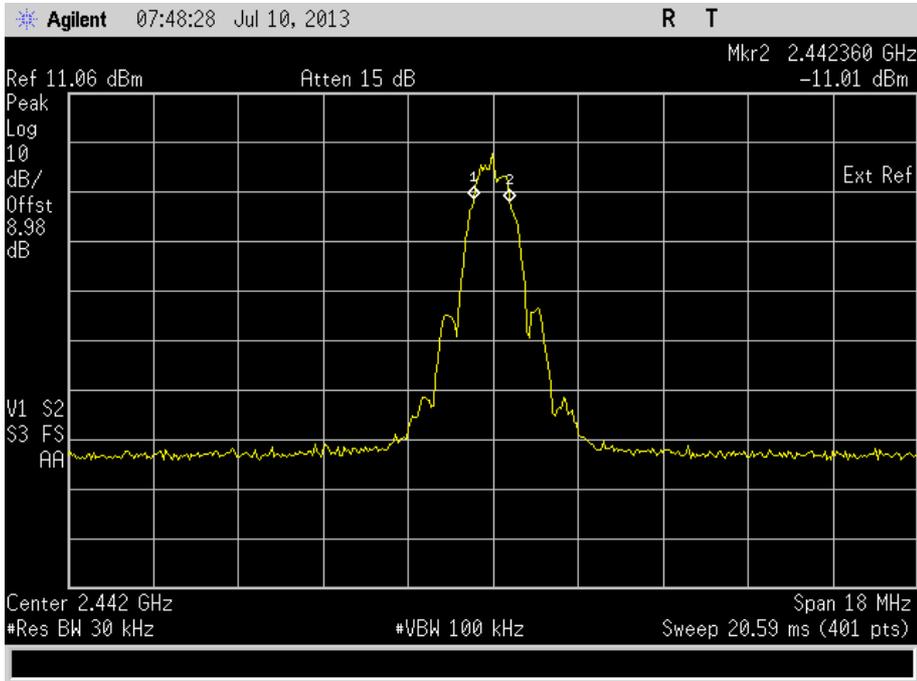




Product Service

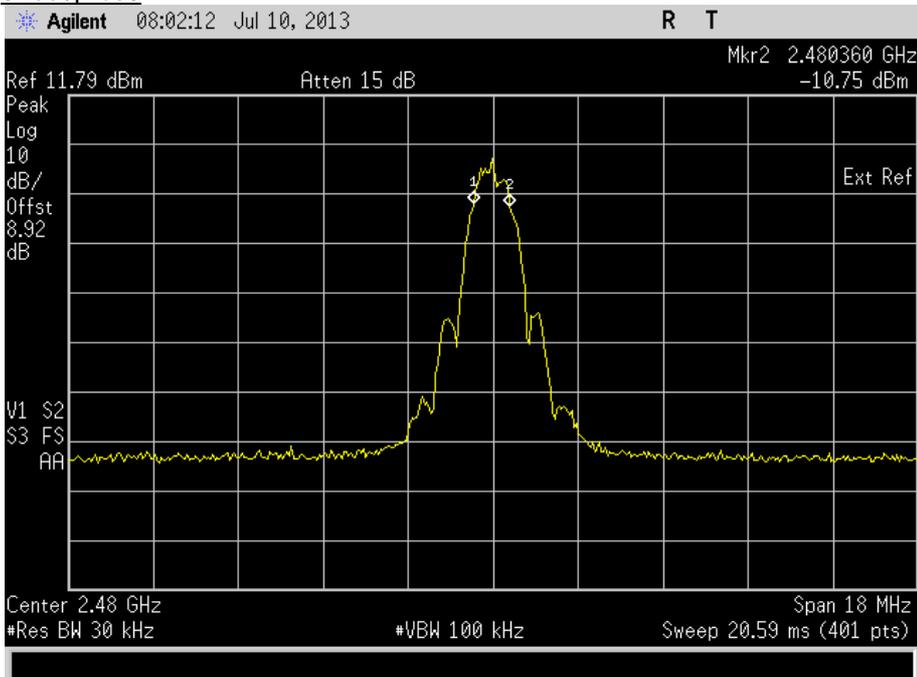
2441 MHz

37oct/prbs9



2480 MHz

37oct/prbs9



Limit Clause

The minimum 6 dB Bandwidth shall be at least 500 kHz.



Product Service

SECTION 3

TEST EQUIPMENT USED



3.1 TEST EQUIPMENT USED

List of absolute measuring and other principal items of test equipment.

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Due
Section 2.1 - AC Line Conducted Emissions					
LISN	Rohde & Schwarz	ESH2-Z5	17	12	31-Jul-2013
Transient Limiter	Hewlett Packard	11947A	1032	12	28-Jun-2013
Screened Room (5)	Rainford	Rainford	1545	36	25-Dec-2013
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	11-Oct-2013
Section 2.2- Maximum Peak Conducted Output Power					
Climatic Chamber	Votsch	VT4002	161	-	O/P Mon
Power Supply Unit	Farnell	H60-25	1092	-	O/P Mon
Spectrum Analyser	Hewlett Packard	E4407B	1154	12	17-Jul-2013
GPS Frequency Standard	Rapco	GPS-804/3	1312	6	23-Jul-2013
Multimeter	Iso-tech	IDM101	2424	12	10-Sep-2013
Thermocouple Thermometer	Fluke	51	3172	12	30-Jul-2013
Hygrometer	Rotronic	I-1000	3220	12	13-Jun-2013
Combiner/Splitter	Weinschel	1506A	3878	12	19-Mar-2014
DC - 12.4 GHz 10 dB Attenuator	Suhner	6810.17.A	3965	12	27-Jun-2013
P-Series Power Meter	Agilent	N1911A	3981	12	17-Sep-2013
50 MHz-18 GHz Wideband Power Sensor	Agilent	N1921A	3983	12	17-Sep-2013
1 Metre SMA Cable	Rhophase	3PS-1801A-1000-3PS	4099	12	26-Oct-2013
2 Metre SMA Type Cable	Rhophase	3PS-1801A-2000-3PS	4111	12	25-Oct-2013
Section 2.3- EIRP Peak Power					
Antenna (Double Ridge Guide, 1GHz-18GHz)	EMCO	3115	235	12	9-Nov-2013
Attenuator 20dB 5W	Marconi	56534-904H	377	12	8-May-2013
Signal Generator	Marconi	2031	762	12	4-Apr-2014
Screened Room (5)	Rainford	Rainford	1545	36	25-Dec-2013
Turntable Controller	Inn-Co GmbH	CO 1000	1606	-	TU
Antenna (Bilog)	Chase	CBL6143	2904	24	12-May-2013
EMI Test Receiver	Rohde & Schwarz	ESU40	3506	12	11-Oct-2013
Tilt Antenna Mast	maturio GmbH	TAM 4.0-P	3916	-	TU
Mast Controller	maturio GmbH	NCD	3917	-	TU
Section 2.4 - Power Spectral Density					
Power Supply Unit	Farnell	H60-25	1092	-	O/P Mon
Spectrum Analyser	Hewlett Packard	E4407B	1154	12	17-Jul-2013
GPS Frequency Standard	Rapco	GPS-804/3	1312	6	23-Jul-2013
Multimeter	Iso-tech	IDM101	2424	12	10-Sep-2013
Hygrometer	Rotronic	I-1000	3220	12	13-Jun-2013
Network Analyser	Rohde & Schwarz	ZVA 40	3548	12	31-Aug-2013
Combiner/Splitter	Weinschel	1506A	3878	12	19-Mar-2014
DC - 12.4 GHz 10 dB Attenuator	Suhner	6810.17.A	3965	12	27-Jun-2013
P-Series Power Meter	Agilent	N1911A	3981	12	17-Sep-2013



Product Service

Instrument	Manufacturer	Type No.	TE No.	Calibration Period (months)	Calibration Due
Section 2.5 - Spurious and Band Edge Emissions					
Attenuator (20dB/ 2W)	Pasternack	PE7004-20	489	12	18-Oct-2013
Filter (High Pass)	Lorch	SHP7-7000-SR	566	12	20-Feb-2014
Spectrum Analyser	Hewlett Packard	E4407B	1154	12	17-Jul-2013
GPS Frequency Standard	Rapco	GPS-804/3	1312	6	23-Jul-2013
4GHz HPF	Sematron	F-100-4000-5-R	2245	-	TU
Spectrum Analyser	Rohde & Schwarz	FSU26	2747	12	30-Nov-2013
Filter	Daden Anthony Ass	MH-1500-7SS	2778	12	31-Jan-2014
Test Receiver	Rohde & Schwarz	ESIB40	2941	12	23-Oct-2013
Hygrometer	Rotronic	I-1000	3220	12	13-Jun-2013
Network Analyser	Rohde & Schwarz	ZVA 40	3548	12	31-Aug-2013
'2.92mm' - '2.92mm' RF Cable (2m)	Rhophase	KPS-1503-2000-KPS	3694	12	25-Oct-2013
'2.92mm' - '2.92mm' RF Cable (2m)	Rhophase	KPS-1503-2000-KPS	3695	12	15-Oct-2013
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	4144	12	10-May-2013
Section 2.6 – 6dB Bandwidth					
Power Supply Unit	Farnell	H60-25	1092	-	O/P Mon
Spectrum Analyser	Hewlett Packard	E4407B	1154	12	17-Jul-2013
GPS Frequency Standard	Rapco	GPS-804/3	1312	6	23-Jul-2013
Multimeter	Iso-tech	IDM101	2424	12	10-Sep-2013
Hygrometer	Rotronic	I-1000	3220	12	13-Jun-2013
Signal Analyser	Rohde & Schwarz	FSQ 26	3545	12	9-May-2013
Combiner/Splitter	Weinschel	1506A	3878	12	19-Mar-2014
DC - 12.4 GHz 10 dB Attenuator	Suhner	6810.17.A	3965	12	27-Jun-2013
P-Series Power Meter	Agilent	N1911A	3981	12	17-Sep-2013
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	4144	12	10-May-2013

TU – Traceability Unscheduled

O/P MON – Output Monitored with Calibrated Equipment



3.2 MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement uncertainties for defined systems are:-

Test Discipline	MU
6dB Bandwidth	± 212.114 kHz
EIRP Peak Power	30MHz to 1GHz: ± 5.1 dB 1GHz to 40GHz: ± 6.3 dB
Maximum Peak Conducted Output Power	± 0.70 dB
Spurious and Band Edge Emissions	30MHz to 1GHz: ± 5.1 dB 1GHz to 40GHz: ± 6.3 dB
Power Spectral Density	± 3.0 dB
AC Line Conducted Emissions	± 3.2 dB



Product Service

SECTION 4

ACCREDITATION, DISCLAIMERS AND COPYRIGHT



Product Service

4.1 ACCREDITATION, DISCLAIMERS AND COPYRIGHT



This report relates only to the actual item/items tested.

Our UKAS Accreditation does not cover opinions and interpretations and any expressed are outside the scope of our UKAS Accreditation.

Results of tests not covered by our UKAS Accreditation Schedule are marked NUA
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