Test Report

Product Name	Push2TV
Model No	PTV2000
FCC ID.	PY310400146

Applicant	NETGEAR, Inc.
Address	350 East Plumeria Drive, San Jose, CA 95134, USA

Date of Receipt	Oct. 20, 2010
Issue Date	Nov. 25, 2010
Report No.	10A309R-RFUSP42V01
Report Version	V1.0

Test Report Certification

Issue Date: Nov. 25, 2010
Report No.: 10A309R-RFUSP42V01

Accredited by NIST (NVLAP)
NVLAP Lab Code: 200533-0

Product Name	Push2TV
Applicant	NETGEAR, Inc.
Address	350 East Plumeria Drive, San Jose, CA 95134, USA
Manufacturer	Maintek Computer (Suzhou) Co., Ltd.
Model No.	PTV2000
EUT Rated Voltage	AC 100-240V, 50-60Hz
EUT Test Voltage	AC 120V/60Hz
Trade Name	NETGEAR
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2009 ANSI C63.4: 2003
Test Result	Complied

NVLAP Lab Code: 200533-0

The test results relate only to the samples tested.
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This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

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(Engineer / Joe Guo)

Approved By :
(Manager / Vincent Lin)

Testing Laboratory
0914

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Push2TV
Trade Name	NETGEAR
Model No.	PTV2000
FCC ID.	PY310400146
Frequency Range	802.11b/g/n-20MHz:2412-2462MHz,802.11n-40MHz:2422-2452MHz 802.11a/n-20MHz:5745-5825MHz ,802.11n-40MHz:5755-5795MHz
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7 802.11a/n-20MHz: 5, n-40MHz: 2
Data Speed	802.11b: 1-11Mbps, 802.11a/g: 6-54Mbps, 802.11n: up to 300Mbps
Channel separation	802.11b/g/n-20MHz: 5 MHz, 802.11a/n-20MHz: 20MHz 802.11n-40MHz: 40MHz
Type of Modulation	802.11b:DSSS DBPSK, DQPSK, CCK 802.11a/g/n: OFDM BPSK, QPSK, 16QAM, 64QAM
Antenna Type	Dipole
Antenna Gain	Refer to the table “Antenna List”
Channel Control	Auto
Power Adapter (1)	MFR：LEADER, M/N：MT12-Y120100-A1 Input：AC 100-120V, 60Hz, 0.3A Output：DC 12V, 1A Cable out：Non-Shielded, 1.8m
Power Adapter (2)	MFR：PIE, M/N：T012LF1209 Input：AC 100-120V, 50/60Hz, 0.5A Output：DC 12V, 1A Cable out: Non-Shielded, 1.8m
Contain Module	Ralink / RT3572

Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	WHA YU	C1336S510041-A (Main) C1336S510042-A (Aux)	5.72dBi in 2.4GHz 6.41dBi in 5.725~5.850GHz

Note: The antenna of EUT is conform to FCC 15.203

802.11b/g/n-20MHz Center Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 01:	2412 MHz	Channel 02:	2417 MHz	Channel 03:	2422 MHz	Channel 04:	2427 MHz
Channel 05:	2432 MHz	Channel 06:	2437 MHz	Channel 07:	2442 MHz	Channel 08:	2447 MHz
Channel 09:	2452 MHz	Channel 10:	2457 MHz	Channel 11:	2462 MHz		

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 149:	5745 MHz	Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz
Channel 165:	5825 MHz						

802.11n-40MHz (2.4G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	2422 MHz	Channel 2:	2427 MHz	Channel 3:	2432 MHz	Channel 4:	2437 MHz
Channel 5:	2442 MHz	Channel 6:	2447 MHz	Channel 7:	2452 MHz		

802.11n-40MHz (5G Band) Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency
Channel 151:	5755 MHz	Channel 159:	5795 MHz

Note:

1. This device is a Push2TV with a built-in 2.4GHz and 5GHz WLAN transceiver.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps、802.11g is 6Mbps、802.11n(20M-BW) is 13Mbps and 、802.11n(40M-BW) is 27Mbps).
4. These tests are conducted on a sample for the purpose of demonstrating compliance of 802.11a/b/g/n transmitter with Part 15 Subpart C Paragraph 15.247 of spread spectrum devices.

1.2. Operational Description

The EUT is a Push2TV with a built-in 2.4GHz and 5GHz WLAN transceiver. This device provided four kinds of transmitting speed 1, 2, 5.5 and 11Mbps and the device of RF carrier is DBPSK, DQPSK and CCK (IEEE 802.11b). The device provided of eight kinds of transmitting speed 6, 9, 12, 18, 24, 36, 48 and 54Mbps the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11a/g).

The device provided of eight kinds of transmitting speed 13,26,39,52,78,104,117 and 130Mbps in 802.11n(20BW) mode and 27,54,81,108,162,216,243 and 270Mbps(40BW) the device of RF carrier is BPSK, QPSK, 16QAM and 64QAM (IEEE 802.11n), the IEEE 802.11n is Multiple In, Multiple Out" (MIMO) technology.

The device adapts direct sequence spread spectrum modulation. The antenna provides diversity function to improve the receiving function and the antennas to support 2(Transmit) × 2(Receive) MIMO technology.

Intel Wireless Display allows consumers to use their HDTV as a huge, remote screen for their laptop. With Intel Wireless Display, consumers can connect their laptop to their TV and enjoy and share their personal media collections, latest YouTube videos, downloaded or streamed movies, music, or a variety of other Internet content from the comfort of their couch.

Intel Wireless Display requires the following key elements:

- Push 2 TV adapter. The adapter receives Wi-Fi signals from the laptop, translates the signals into an image, and sends the image to the TV.
- A laptop computer with Intel Wireless Display installed. This will be used to manage the connection to the TV through the adapter.

Test Mode:	Mode 1: Transmit (802.11b 1Mbps)
	Mode 2: Transmit (802.11g 6Mbps)
	Mode 3: Transmit - 802.11a 6Mbps
	Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band)
	Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band)
	Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band)
	Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band)

NOTE: In n-20 and n-40 mode the power combiner is used, the factor of combiner is 10dB and offset it in test instrument.

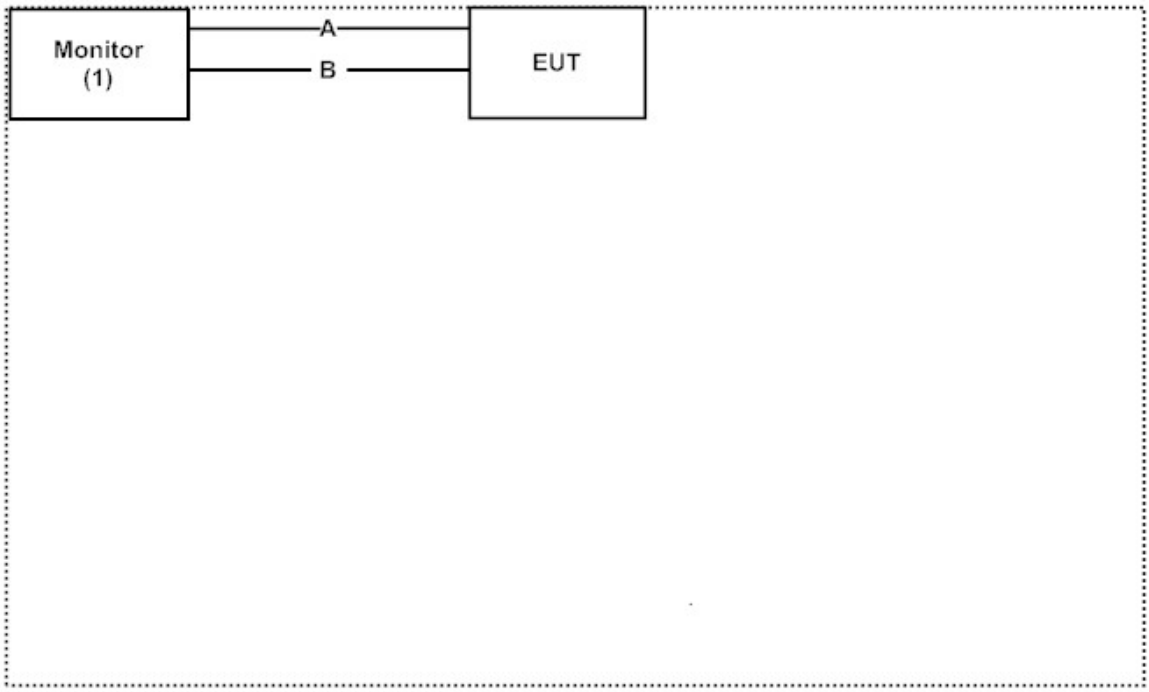
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
(1)	Monitor	SONY	PVM-14M2U	2105742	Non-Shielded, 1.8m

Signal Cable Type		Signal cable Description
A	RCA Cable	Non-Shielded, 1.5m
B	HDMI Cable	Shielded, 1.0m

1.4. Configuration of Tested System



1.5. EUT Exercise Software

(1) Connect EUT and Notebook via RS-232 Cable
(2) Execute Telnet program on the Notebook
(3) Configure the test mode, the test channel, and the data rate.
(4) Press “OK” to start the continuous transmission.
(5) Remove notebook and RS232 cable, Setup the EUT as shown in Section 1.4.
(6) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/

Site Description: File on
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 92195

Accreditation on NVLAP
NVLAP Lab Code: 200533-0

Site Name: Quietek Corporation
Site Address: No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,
Lin-Kou Shiang, Taipei,
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TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

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2. Conducted Emission

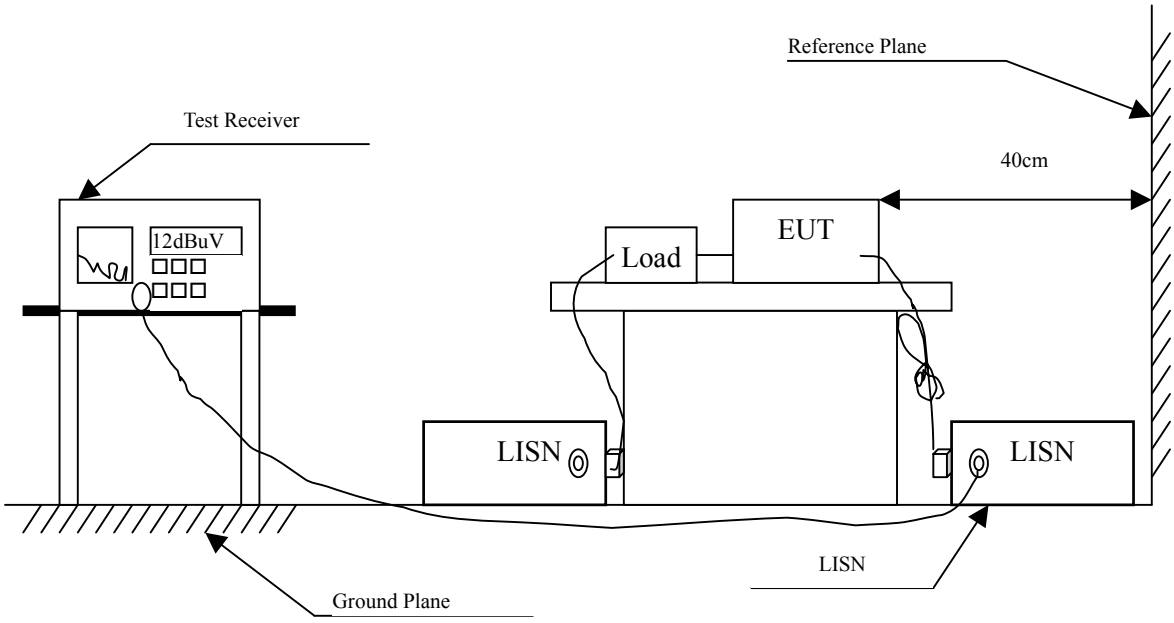
2.1. Test Equipment

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/17	May, 2010	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2010	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2010	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2010	
5	No.1 Shielded Room			N/A	

Note: All instruments are calibrated every one year.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AVG
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Push2TV
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2437MHz)
-(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.173	9.734	44.430	54.165	-11.178	65.343
0.279	9.657	39.180	48.837	-13.477	62.314
0.392	9.650	38.040	47.690	-11.396	59.086
0.502	9.640	36.430	46.070	-9.930	56.000
0.627	9.630	38.430	48.060	-7.940	56.000
0.736	9.636	37.400	47.036	-8.964	56.000
Average					
0.173	9.734	32.150	41.885	-13.458	55.343
0.279	9.657	29.370	39.027	-13.287	52.314
0.392	9.650	27.830	37.480	-11.606	49.086
0.502	9.640	25.970	35.610	-10.390	46.000
0.627	9.630	26.780	36.410	-9.590	46.000
0.736	9.636	23.560	33.196	-12.804	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Push2TV
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2437MHz)
-(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.170	9.743	43.830	53.573	-11.856	65.429
0.248	9.687	40.120	49.807	-13.393	63.200
0.279	9.667	38.780	48.447	-13.867	62.314
0.509	9.640	39.520	49.160	-6.840	56.000
0.740	9.658	38.080	47.738	-8.262	56.000
0.966	9.670	36.930	46.600	-9.400	56.000
Average					
0.170	9.743	31.070	40.813	-14.616	55.429
0.248	9.687	23.660	33.347	-19.853	53.200
0.279	9.667	28.550	38.217	-14.097	52.314
0.509	9.640	25.890	35.530	-10.470	46.000
0.740	9.658	23.560	33.218	-12.782	46.000
0.966	9.670	23.010	32.680	-13.320	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Push2TV
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band) (5755MHz)
-(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.166	9.746	46.800	56.545	-8.998	65.543
0.279	9.657	42.270	51.927	-10.387	62.314
0.404	9.648	38.860	48.508	-10.235	58.743
0.630	9.630	39.520	49.150	-6.850	56.000
0.865	9.664	36.740	46.405	-9.595	56.000
4.373	9.700	26.930	36.630	-19.370	56.000
Average					
0.166	9.746	34.760	44.505	-11.038	55.543
0.279	9.657	32.840	42.497	-9.817	52.314
0.404	9.648	27.170	36.818	-11.925	48.743
0.630	9.630	24.490	34.120	-11.880	46.000
0.865	9.664	20.350	30.015	-15.985	46.000
4.373	9.700	18.460	28.160	-17.840	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Push2TV
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band) (5755MHz)
-(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.170	9.743	46.400	56.143	-9.286	65.429
0.298	9.660	35.830	45.490	-16.281	61.771
0.509	9.640	38.730	48.370	-7.630	56.000
0.744	9.659	39.700	49.359	-6.641	56.000
1.322	9.670	33.370	43.040	-12.960	56.000
3.724	9.700	32.640	42.340	-13.660	56.000
Average					
0.170	9.743	34.630	44.373	-11.056	55.429
0.298	9.660	22.480	32.140	-19.631	51.771
0.509	9.640	26.710	36.350	-9.650	46.000
0.744	9.659	24.240	33.899	-12.101	46.000
1.322	9.670	16.040	25.710	-20.290	46.000
3.724	9.700	17.530	27.230	-18.770	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Push2TV
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2437MHz)
-(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.185	9.719	47.270	56.989	-8.011	65.000
0.201	9.706	32.860	42.566	-21.977	64.543
0.283	9.656	31.490	41.146	-21.054	62.200
0.455	9.640	23.420	33.060	-24.226	57.286
0.619	9.630	18.520	28.150	-27.850	56.000
0.744	9.639	21.720	31.359	-24.641	56.000
Average					
0.185	9.719	30.380	40.099	-14.901	55.000
0.201	9.706	16.760	26.466	-28.077	54.543
0.283	9.656	15.720	25.376	-26.824	52.200
0.455	9.640	9.830	19.470	-27.816	47.286
0.619	9.630	4.220	13.850	-32.150	46.000
0.744	9.639	9.620	19.259	-26.741	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Push2TV
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2437MHz)
-(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.189	9.724	45.860	55.584	-9.302	64.886
0.236	9.692	34.080	43.772	-19.771	63.543
0.287	9.664	28.760	38.424	-23.662	62.086
0.326	9.660	31.760	41.420	-19.551	60.971
0.377	9.650	30.250	39.900	-19.614	59.514
0.416	9.650	25.420	35.070	-23.330	58.400
Average					
0.189	9.724	27.840	37.564	-17.322	54.886
0.236	9.692	13.950	23.642	-29.901	53.543
0.287	9.664	12.490	22.154	-29.932	52.086
0.326	9.660	10.200	19.860	-31.111	50.971
0.377	9.650	8.530	18.180	-31.334	49.514
0.416	9.650	6.170	15.820	-32.580	48.400

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Push2TV
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band) (5755MHz)
-(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.185	9.719	46.520	56.239	-8.761	65.000
0.193	9.711	41.490	51.201	-13.570	64.771
0.232	9.685	34.620	44.305	-19.352	63.657
0.271	9.662	31.260	40.922	-21.621	62.543
0.505	9.640	23.220	32.860	-23.140	56.000
0.748	9.640	20.160	29.800	-26.200	56.000
Average					
0.185	9.719	29.910	39.629	-15.371	55.000
0.193	9.711	21.590	31.301	-23.470	54.771
0.232	9.685	15.060	24.745	-28.912	53.657
0.271	9.662	15.160	24.822	-27.721	52.543
0.505	9.640	8.360	18.000	-28.000	46.000
0.748	9.640	7.770	17.410	-28.590	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Push2TV
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band) (5755MHz)
-(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.185	9.727	46.540	56.268	-8.732	65.000
0.228	9.698	32.590	42.288	-21.483	63.771
0.334	9.660	28.900	38.560	-22.183	60.743
0.560	9.640	22.780	32.420	-23.580	56.000
0.892	9.670	23.610	33.280	-22.720	56.000
23.021	9.970	14.140	24.110	-35.890	60.000
Average					
0.185	9.727	28.960	38.688	-16.312	55.000
0.228	9.698	14.700	24.398	-29.373	53.771
0.334	9.660	8.040	17.700	-33.043	50.743
0.560	9.640	5.150	14.790	-31.210	46.000
0.892	9.670	14.970	24.640	-21.360	46.000
23.021	9.970	5.780	15.750	-34.250	50.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Peak Power Output

3.1. Test Equipment

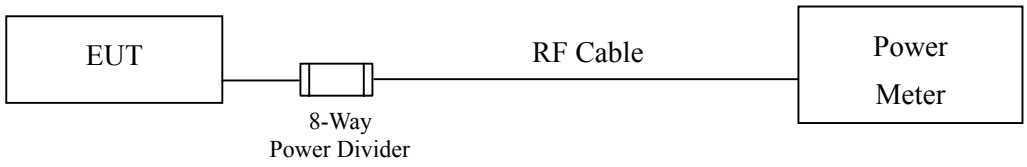
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Power Meter	Anritsu	ML2495A/6K00003357	May, 2010
X	Power Sensor	Anritsu	MA2411B/0738448	Jun, 2010
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2010

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.
3. The power combiner is used for measure 11n mode.

3.2. Test Setup

Conducted Measurement



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Test Procedure

The EUT was tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Peak Power Output

Product : Push2TV
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

CHAIN A (Antenna Gain=5.72dBi)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)				Peak Power	Required Limit	Result
		1	2	5.5	11	1		
		Measurement Level (dBm)						
01	2412	17.36	--	--	--	19.84	<30dBm	Pass
06	2437	16.58	16.45	16.4	16.37	19.09	<30dBm	Pass
11	2462	15.90	--	--	--	18.35	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

Product : Push2TV
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

CHAIN A (Antenna Gain=5.72dBi)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
01	2412	13.86	--	--	--	--	--	--	--	22.52	<30dBm	Pass
06	2437	13.20	13.17	13.13	13.1	13.07	12.98	12.95	12.91	22.20	<30dBm	Pass
11	2462	12.36	--	--	--	--	--	--	--	21.45	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

Product : Push2TV
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps

CHAIN A (Antenna Gain=6.41dBi)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		6	9	12	18	24	36	48	54	6		
		Measurement Level (dBm)										
149	5745	12.45	--	--	--	--	--	--	--	20.30	<29.59dBm	Pass
157	5785	11.52	11.5	11.47	11.45	11.44	11.42	11.4	11.4	19.68	<29.59dBm	Pass
165	5825	12.25	--	--	--	--	--	--	--	19.85	<29.59dBm	Pass

Note:
1. Peak Power Output Value =Reading value on peak power meter + cable loss
2. The maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Product : Push2TV
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band)

CHAIN A+B (Antenna Gain=5.72dBi)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		13	26	39	52	78	104	117	130	13		
		Measurement Level (dBm)										
01	2412	14.41	--	--	--	--	--	--	--	24.08	<30dBm	Pass
06	2437	14.58	14.50	14.46	14.42	14.40	14.37	14.32	14.30	24.30	<30dBm	Pass
11	2462	14.30	--	--	--	--	--	--	--	23.95	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

Product : Push2TV
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band)

CHAIN A+B (Antenna Gain=5.72dBi)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		27	54	81	108	162	216	243	270	27		
		Measurement Level (dBm)										
01	2422	14.79	--	--	--	--	--	--	--	24.34	<30dBm	Pass
04	2437	14.7	14.63	14.6	14.56	14.5	14.42	14.39	14.35	24.32	<30dBm	Pass
07	2452	14.16	--	--	--	--	--	--	--	23.03	<30dBm	Pass

Note: Peak Power Output Value =Reading value on peak power meter + cable loss

Product : Push2TV
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band)

CHAIN A+B (Antenna Gain=6.41dBi)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		13	26	39	52	78	104	117	130	13		
		Measurement Level (dBm)										
149	5745	12.10	--	--	--	--	--	--	--	21.33	<29.59dBm	Pass
157	5785	12.15	12.12	12.1	12.09	12.07	12.06	12.05	12.03	21.50	<29.59dBm	Pass
165	5825	12.91	--	--	--	--	--	--	--	22.00	<29.59dBm	Pass

Note:
1. Peak Power Output Value =Reading value on peak power meter + cable loss
2. The maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Product : Push2TV
Test Item : Peak Power Output Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band)

CHAIN A+B (Antenna Gain=6.41dBi)

Channel No	Frequency (MHz)	Average Power For different Data Rate (Mbps)								Peak Power	Required Limit	Result
		27	54	81	108	162	216	243	270	27		
		Measurement Level (dBm)										
151	5755	12.86	--	--	--	--	--	--	--	21.90	<29.59dBm	Pass
159	5795	12.83	12.81	12.78	12.77	12.75	12.74	12.72	12.70	21.25	<29.59dBm	Pass

Note:
1. Peak Power Output Value =Reading value on peak power meter + cable loss
2. The maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4. Radiated Emission

4.1. Test Equipment

The following test equipment are used during the radiated emission test:

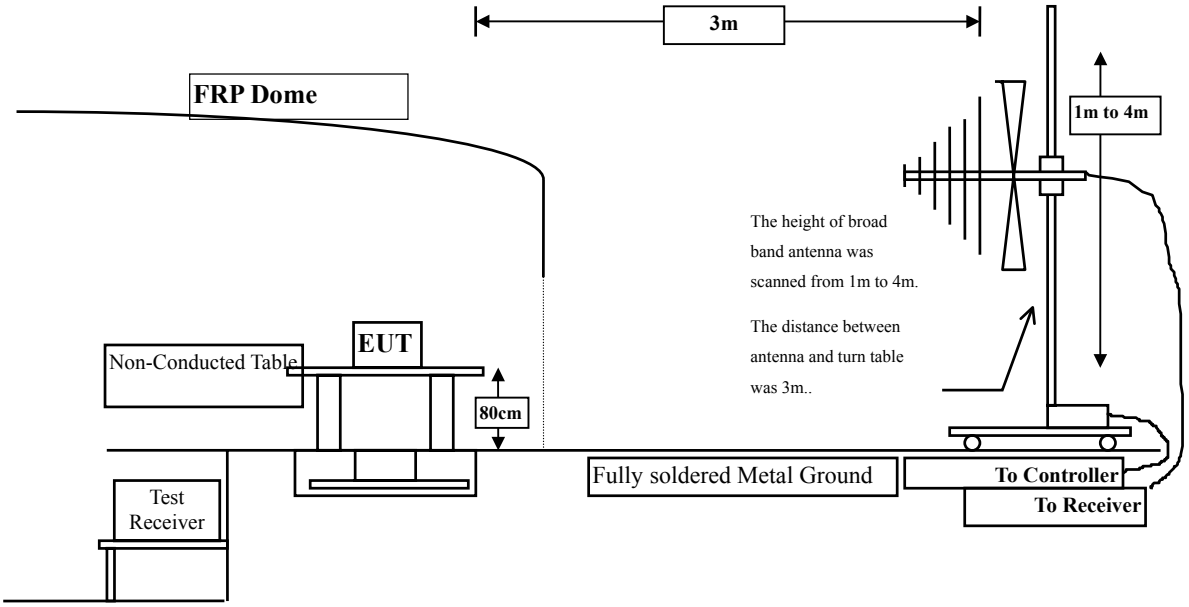
Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2010
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2010
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2010
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2010
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2010
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2010
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2010
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

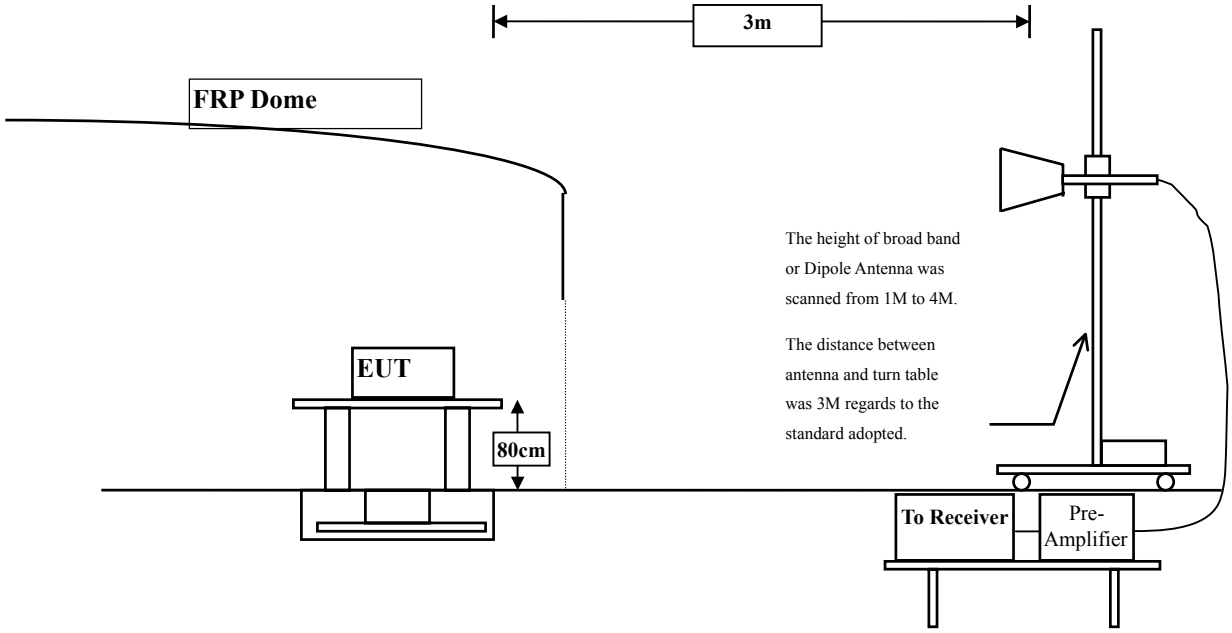
2. The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned between 1 meter and 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.
The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.
Radiated emission measurements below 1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.
The measurement is divided into the Preliminary Measurement and the Final Measurement.
The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna.
The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.
The measurement frequency range form 30MHz - 10th Harmonic of fundamental was investigated.

4.5. Uncertainty

± 3.9 dB above 1GHz
± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	40.071	43.332	-30.668	74.000
7236.000	10.650	35.187	45.837	-28.163	74.000
9648.000	13.337	34.572	47.908	-26.092	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	39.806	46.227	-27.773	74.000
7236.000	11.495	34.479	45.974	-28.026	74.000
9648.000	13.807	35.170	48.976	-25.024	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	36.510	39.547	-34.453	74.000
7311.000	11.795	34.338	46.132	-27.868	74.000
9748.000	12.635	34.026	46.661	-27.339	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	44.561	50.372	-23.628	74.000
7311.000	12.630	33.920	46.549	-27.451	74.000
9748.000	13.126	33.622	46.748	-27.252	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	36.742	39.599	-34.401	74.000
7386.000	12.127	34.777	46.905	-27.095	74.000
9848.000	12.852	34.090	46.943	-27.057	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	41.026	46.546	-27.454	74.000
7386.000	13.254	34.737	47.991	-26.009	74.000
9848.000	13.367	34.105	47.472	-26.528	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	39.466	42.727	-31.273	74.000
7236.000	10.650	35.144	45.794	-28.206	74.000
9648.000	13.337	34.214	47.550	-26.450	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	46.715	53.136	-20.864	74.000
7236.000	11.495	34.766	46.261	-27.739	74.000
9648.000	13.807	35.040	48.846	-25.154	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	38.264	41.301	-32.699	74.000
7311.000	11.795	35.595	47.389	-26.611	74.000
9748.000	12.635	34.303	46.938	-27.062	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	40.707	46.518	-27.482	74.000
7311.000	12.630	34.036	46.665	-27.335	74.000
9748.000	13.126	34.303	47.429	-26.571	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	36.815	39.672	-34.328	74.000
7386.000	12.127	35.120	47.248	-26.752	74.000
9848.000	12.852	36.280	49.133	-24.867	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	37.150	42.670	-31.330	74.000
7386.000	13.254	35.520	48.774	-25.226	74.000
9848.000	13.367	36.150	49.517	-24.483	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5745 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11490.000	17.106	35.280	52.387	-21.613	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11490.000	18.034	34.780	52.815	-21.185	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11570.000	16.809	35.470	52.279	-21.721	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11570.000	17.698	35.500	53.198	-20.802	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5825 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11650.000	16.158	35.190	51.348	-22.652	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11650.000	17.274	34.430	51.705	-22.295	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band) (2412MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4824.000	3.261	39.160	42.421	-31.579	74.000
7236.000	10.650	36.340	46.990	-27.010	74.000
9648.000	13.337	35.680	49.016	-24.984	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4824.000	6.421	36.970	43.391	-30.609	74.000
7236.000	11.495	35.990	47.485	-26.515	74.000
9648.000	13.807	36.120	49.926	-24.074	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	37.140	40.177	-33.823	74.000
7311.000	11.795	35.580	47.374	-26.626	74.000
9748.000	12.635	36.160	48.795	-25.205	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	37.370	43.181	-30.819	74.000
7311.000	12.630	35.730	48.359	-25.641	74.000
9748.000	13.126	36.380	49.506	-24.494	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band) (2462 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4924.000	2.858	37.240	40.097	-33.903	74.000
7386.000	12.127	34.890	47.018	-26.982	74.000
9848.000	12.852	35.830	48.683	-25.317	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4924.000	5.521	37.610	43.130	-30.870	74.000
7386.000	13.254	34.500	47.754	-26.246	74.000
9848.000	13.367	35.880	49.247	-24.753	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2422MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4844.000	3.171	37.160	40.331	-33.669	74.000
7266.000	11.162	35.300	46.462	-27.538	74.000
9688.000	12.964	35.440	48.405	-25.595	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4844.000	6.178	37.200	43.378	-30.622	74.000
7266.000	11.982	35.270	47.252	-26.748	74.000
9688.000	13.507	36.310	49.818	-24.182	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2437 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4874.000	3.038	36.990	40.027	-33.973	74.000
7311.000	11.795	35.530	47.324	-26.676	74.000
9748.000	12.635	35.560	48.195	-25.805	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4874.000	5.812	37.760	43.571	-30.429	74.000
7311.000	12.630	34.960	47.589	-26.411	74.000
9748.000	13.126	35.630	48.756	-25.244	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2452 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4904.000	2.914	37.340	40.255	-33.745	74.000
7356.000	11.995	35.240	47.234	-26.766	74.000
9808.000	12.475	35.440	47.915	-26.085	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4904.000	5.530	37.440	42.971	-31.029	74.000
7356.000	13.005	34.850	47.854	-26.146	74.000
9808.000	12.901	35.940	48.841	-25.159	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band) (5745MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11490.000	17.106	34.500	51.607	-22.393	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
11490.000	18.034	34.440	52.475	-21.525	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band) (5785 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11570.000	16.809	34.670	51.479	-22.521	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
11570.000	17.698	34.700	52.398	-21.602	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band) (5825 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11650.000	16.158	34.260	50.418	-23.582	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11650.000	17.274	34.210	51.485	-22.515	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band) (5755MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11510.000	17.124	34.390	51.514	-22.486	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
11510.000	18.081	34.920	53.001	-20.999	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : Harmonic Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band) (5795 MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
11590.000	16.701	34.520	51.220	-22.780	74.000
Average Detector:					
--					
Vertical Peak Detector:					
11590.000	45.821	34.210	51.776	-22.224	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz) -(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
41.640	-3.949	24.830	20.881	-19.119	40.000
165.800	-11.079	36.081	25.002	-18.498	43.500
332.640	-4.184	41.353	37.169	-8.831	46.000
437.400	-1.960	36.636	34.676	-11.324	46.000
674.080	2.799	32.076	34.875	-11.125	46.000
961.200	6.450	29.922	36.372	-17.628	54.000
Vertical					
101.780	-0.021	31.322	31.300	-12.200	43.500
165.800	-7.719	36.128	28.409	-15.091	43.500
330.700	-4.912	40.336	35.424	-10.576	46.000
542.160	-0.269	25.629	25.360	-20.640	46.000
672.140	-1.149	28.852	27.703	-18.297	46.000
961.200	7.260	30.924	38.184	-15.816	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz) -(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
249.220	-6.014	32.120	26.106	-19.894	46.000
336.520	-3.860	40.127	36.267	-9.733	46.000
544.100	3.512	25.450	28.962	-17.038	46.000
699.300	2.875	30.372	33.247	-12.753	46.000
813.760	5.098	32.046	37.144	-8.856	46.000
961.200	6.450	32.817	39.267	-14.733	54.000
Vertical					
101.780	-0.021	27.140	27.118	-16.382	43.500
165.800	-7.719	35.993	28.274	-15.226	43.500
204.600	-7.666	32.010	24.343	-19.157	43.500
332.640	-4.914	39.268	34.354	-11.646	46.000
613.940	-1.687	27.002	25.315	-20.685	46.000
961.200	7.260	26.513	33.773	-20.227	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz) -(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
165.800	-11.079	37.011	25.932	-17.568	43.500
332.640	-4.184	41.705	37.521	-8.479	46.000
466.500	0.794	28.463	29.256	-16.744	46.000
615.880	3.215	28.426	31.641	-14.359	46.000
674.080	2.799	31.961	34.760	-11.240	46.000
961.200	6.450	32.937	39.387	-14.613	54.000
Vertical					
101.780	-0.021	25.718	25.696	-17.804	43.500
334.580	-4.891	38.517	33.626	-12.374	46.000
526.640	-0.423	24.194	23.771	-22.229	46.000
782.720	3.035	23.605	26.640	-19.360	46.000
881.660	2.557	25.344	27.901	-18.099	46.000
961.200	7.260	29.790	37.050	-16.950	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band) (2437 MHz)
-(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
165.800	-11.079	33.760	22.681	-20.819	43.500
260.860	-5.032	27.051	22.019	-23.981	46.000
330.700	-4.492	40.695	36.203	-9.797	46.000
544.100	3.512	24.790	28.302	-17.698	46.000
674.080	2.799	31.200	33.999	-12.001	46.000
994.180	7.128	29.600	36.728	-17.272	54.000
Vertical					
101.780	-0.021	29.308	29.286	-14.214	43.500
165.800	-7.719	35.693	27.974	-15.526	43.500
330.700	-4.912	40.169	35.257	-10.743	46.000
540.220	0.121	24.646	24.767	-21.233	46.000
683.780	1.968	24.917	26.885	-19.115	46.000
961.200	7.260	29.940	37.200	-16.800	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2437 MHz)
-(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
136.700	-10.363	38.299	27.936	-15.564	43.500
231.760	-8.338	36.839	28.501	-17.499	46.000
313.240	-4.111	43.777	39.666	-6.334	46.000
396.660	-2.296	43.267	40.971	-5.029	46.000
480.080	-0.329	35.295	34.966	-11.034	46.000
961.200	6.450	35.162	41.612	-12.388	54.000
Vertical					
136.700	-5.143	40.232	35.089	-8.411	43.500
229.820	-8.512	37.530	29.018	-16.982	46.000
307.420	-6.821	47.797	40.976	-5.024	46.000
398.600	-4.678	34.588	29.910	-16.090	46.000
485.900	-3.204	34.760	31.556	-14.444	46.000
961.200	7.260	33.949	41.209	-12.791	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band) (5785 MHz)
-(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
332.640	-4.184	41.373	37.189	-8.811	46.000
460.680	1.589	24.045	25.634	-20.366	46.000
606.180	4.666	24.470	29.136	-16.864	46.000
674.080	2.799	29.057	31.856	-14.144	46.000
875.840	5.271	24.688	29.959	-16.041	46.000
932.100	6.922	24.435	31.357	-14.643	46.000
Vertical					
101.780	-0.021	27.814	27.792	-15.708	43.500
332.640	-4.914	40.117	35.203	-10.797	46.000
528.580	-0.462	25.044	24.582	-21.418	46.000
691.540	2.421	24.114	26.535	-19.465	46.000
922.400	5.534	24.829	30.363	-15.637	46.000
961.200	7.260	26.849	34.109	-19.891	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band) (5755MHz)
-(Adapter: MT12-Y120100-A1)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
136.700	-10.363	38.514	28.151	-15.349	43.500
229.820	-8.162	36.804	28.642	-17.358	46.000
305.480	-2.929	44.337	41.408	-4.592	46.000
398.600	-2.268	42.921	40.653	-5.347	46.000
480.080	-0.329	34.267	33.938	-12.062	46.000
961.200	6.450	32.800	39.250	-14.750	54.000
Vertical					
136.700	-5.143	40.913	35.770	-7.730	43.500
229.820	-8.512	37.292	28.780	-17.220	46.000
301.600	-6.785	47.282	40.498	-5.502	46.000
480.080	-4.359	35.089	30.730	-15.270	46.000
546.040	-1.300	27.309	26.008	-19.992	46.000
961.200	7.260	30.027	37.287	-16.713	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437 MHz) -(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
35.820	-4.149	33.185	29.036	-10.964	40.000
130.880	-10.159	34.063	23.904	-19.596	43.500
307.420	-3.301	46.470	43.169	-2.831	46.000
398.600	-2.268	42.237	39.969	-6.031	46.000
699.300	2.875	39.865	42.740	-3.260	46.000
961.200	6.450	38.848	45.298	-8.702	54.000
Vertical					
55.220	-4.699	41.201	36.502	-3.498	40.000
128.940	-4.128	42.281	38.153	-5.347	43.500
301.600	-6.785	49.517	42.733	-3.267	46.000
480.080	-4.359	35.809	31.450	-14.550	46.000
699.300	0.695	35.427	36.122	-9.878	46.000
961.200	7.260	36.921	44.181	-9.819	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437 MHz) -(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
57.160	-13.583	48.400	34.817	-5.183	40.000
222.060	-10.439	39.161	28.722	-17.278	46.000
303.540	-3.074	46.904	43.830	-2.170	46.000
398.600	-2.268	42.168	39.900	-6.100	46.000
699.300	2.875	29.645	32.520	-13.480	46.000
961.200	6.450	36.825	43.275	-10.725	54.000
Vertical					
59.100	-4.097	32.169	28.072	-11.928	40.000
130.880	-4.239	42.332	38.093	-5.407	43.500
305.480	-6.809	50.417	43.608	-2.392	46.000
480.080	-4.359	37.695	33.336	-12.664	46.000
835.100	1.995	32.088	34.083	-11.917	46.000
961.200	7.260	36.182	43.442	-10.558	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz) -(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
41.640	-3.949	35.186	31.237	-8.763	40.000
130.880	-10.159	33.736	23.577	-19.923	43.500
303.540	-3.074	46.732	43.658	-2.342	46.000
398.600	-2.268	42.618	40.350	-5.650	46.000
480.080	-0.329	36.191	35.862	-10.138	46.000
961.200	6.450	36.326	42.776	-11.224	54.000
Vertical					
59.100	-4.097	37.229	33.132	-6.868	40.000
128.940	-4.128	41.983	37.855	-5.645	43.500
222.060	-8.789	38.840	30.051	-15.949	46.000
309.360	-6.830	49.645	42.815	-3.185	46.000
480.080	-4.359	35.477	31.118	-14.882	46.000
961.200	7.260	36.931	44.191	-9.809	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band) (2437 MHz)
-(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
130.880	-10.159	34.504	24.345	-19.155	43.500
301.600	-3.375	47.076	43.702	-2.298	46.000
400.540	-2.276	41.894	39.618	-6.382	46.000
462.620	1.172	31.880	33.052	-12.948	46.000
697.360	3.171	28.078	31.249	-14.751	46.000
961.200	6.450	38.273	44.723	-9.277	54.000
Vertical					
57.160	-4.403	32.212	27.809	-12.191	40.000
128.940	-4.128	41.963	37.835	-5.665	43.500
305.480	-6.809	50.333	43.524	-2.476	46.000
493.660	-2.396	40.653	38.257	-7.743	46.000
699.300	0.695	24.391	25.086	-20.914	46.000
961.200	7.260	35.465	42.725	-11.275	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band) (2437 MHz)
-(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
128.940	-10.088	32.959	22.871	-20.629	43.500
305.480	-2.929	46.655	43.726	-2.274	46.000
398.600	-2.268	42.229	39.961	-6.039	46.000
480.080	-0.329	34.034	33.705	-12.295	46.000
745.860	3.308	24.871	28.179	-17.821	46.000
961.200	6.450	36.698	43.148	-10.852	54.000
Vertical					
59.100	-4.097	31.398	27.301	-12.699	40.000
128.940	-4.128	41.953	37.825	-5.675	43.500
222.060	-8.789	37.064	28.275	-17.725	46.000
307.420	-6.821	50.553	43.732	-2.268	46.000
462.620	-3.838	34.943	31.105	-14.895	46.000
961.200	7.260	35.711	42.971	-11.029	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band) (5785 MHz)
-(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
128.940	-10.088	35.598	25.510	-17.990	43.500
307.420	-3.301	46.714	43.413	-2.587	46.000
404.420	-2.269	41.875	39.606	-6.394	46.000
480.080	-0.329	31.754	31.425	-14.575	46.000
625.580	1.770	31.843	33.613	-12.387	46.000
961.200	6.450	33.984	40.434	-13.566	54.000
Vertical					
55.220	-4.699	32.976	28.277	-11.723	40.000
130.880	-4.239	41.875	37.636	-5.864	43.500
229.820	-8.512	36.119	27.607	-18.393	46.000
305.480	-6.809	50.543	43.734	-2.266	46.000
480.080	-4.359	35.396	31.037	-14.963	46.000
961.200	7.260	32.544	39.804	-14.196	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product : Push2TV
Test Item : General Radiated Emission Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band) (5755MHz)
-(Adapter: T012LF1209)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
55.220	-13.109	36.467	23.358	-16.642	40.000
130.880	-10.159	38.235	28.076	-15.424	43.500
307.420	-3.301	46.641	43.340	-2.660	46.000
402.480	-2.263	41.772	39.509	-6.491	46.000
462.620	1.172	30.798	31.970	-14.030	46.000
961.200	6.450	32.670	39.120	-14.880	54.000
Vertical					
55.220	-4.699	33.101	28.402	-11.598	40.000
130.880	-4.239	41.787	37.548	-5.952	43.500
305.480	-6.809	49.500	42.691	-3.309	46.000
412.180	-7.225	44.614	37.389	-8.611	46.000
480.080	-4.359	34.956	30.597	-15.403	46.000
961.200	7.260	36.166	43.426	-10.574	54.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. Measurement Level = Reading Level + Correct Factor.
5. Correct Factor = Antenna factor + Cable loss –Amplifier gain.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The emission levels of other frequencies are very lower than the limit and not show in test report.

5. RF antenna conducted test

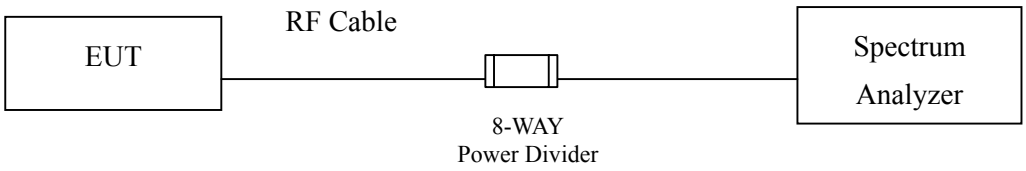
5.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2010
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2010
	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2010
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2010

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.
3. The power combiner is used for measure 11n mode.

5.2. Test Setup

RF antenna Conducted Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

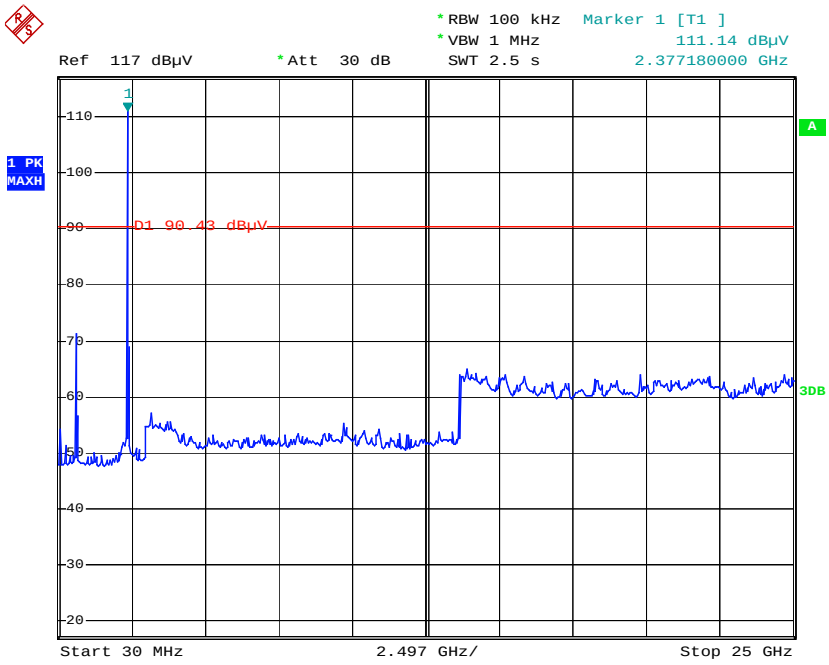
5.5. Uncertainty

The measurement uncertainty
Conducted is defined as ± 1.27dB

5.6. Test Result of RF antenna conducted test

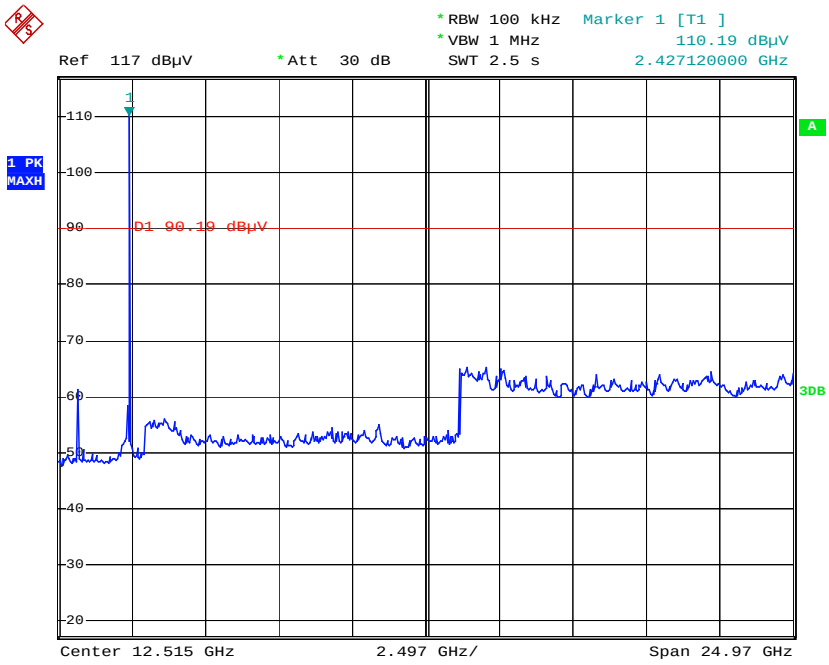
Product : Push2TV
Test Item : RF antenna conducted test
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Channel 01 (2412MHz) 30MHz-25GHz



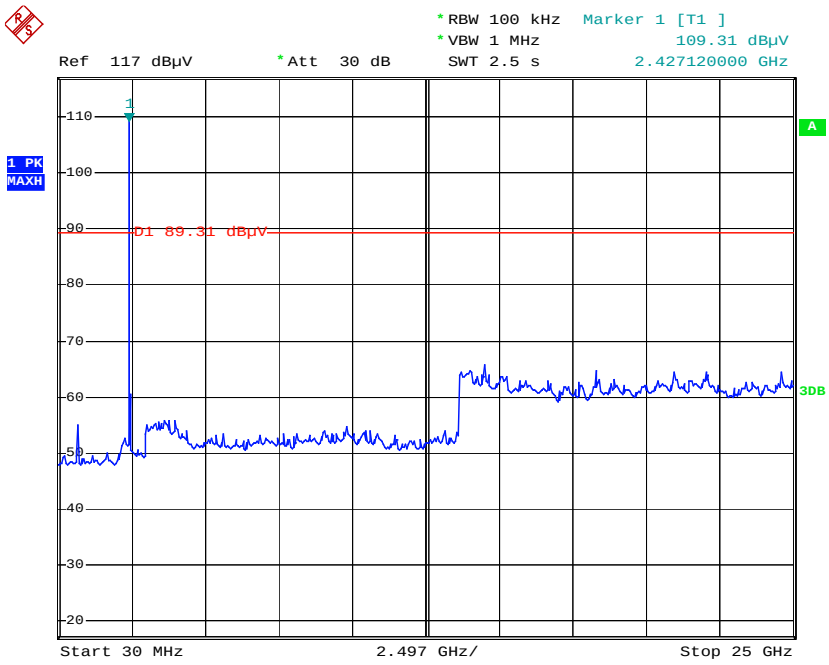
Date: 6.NOV.2010 05:17:00

Channel 06 (2437MHz) 30MHz -25GHz



Date: 6.NOV.2010 05:17:59

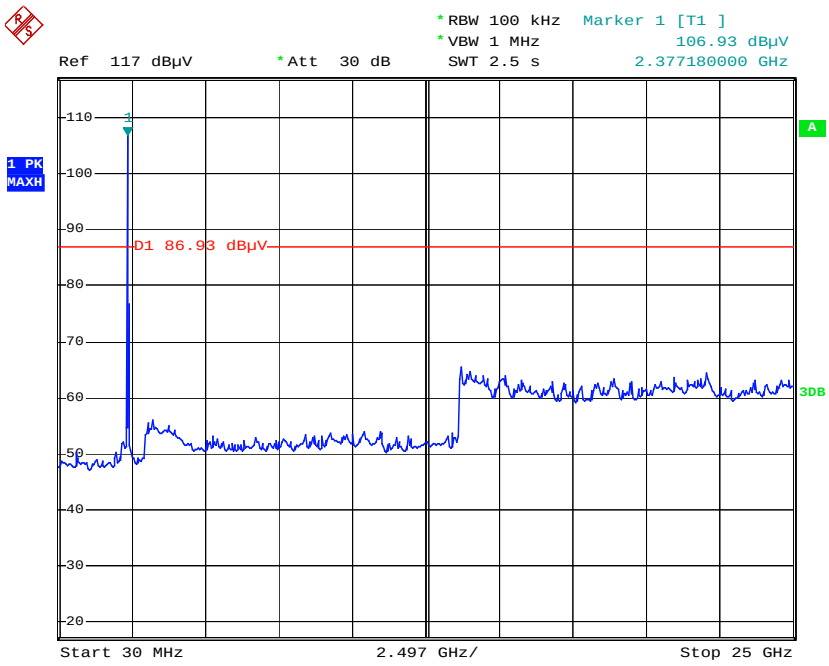
Channel 11 (2462MHz) 30MHz -25GHz



Date: 6.NOV.2010 05:18:43

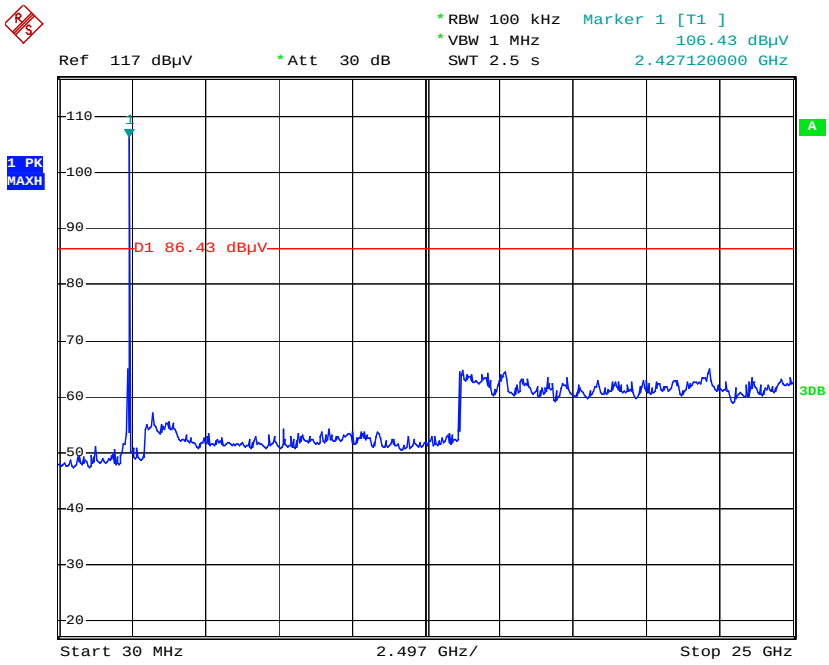
Product : Push2TV
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Channel 01 (2412MHz) 30MHz -25GHz



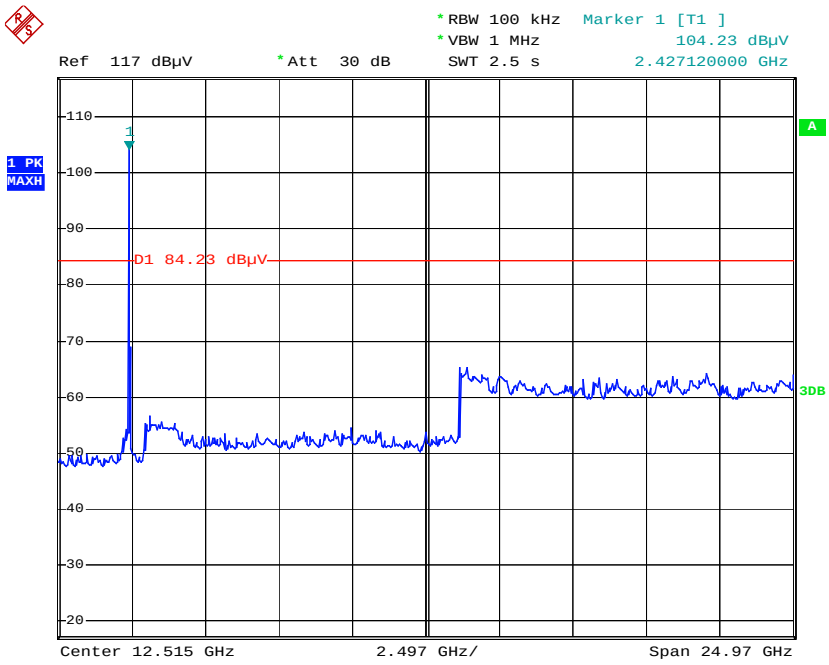
Date: 6.NOV.2010 05:19:13

Channel 06 (2437MHz) 30MHz -25GHz



Date: 6.NOV.2010 05:19:53

Channel 11 (2462MHz) 30MHz -25GHz



Date: 6.NOV.2010 05:20:30

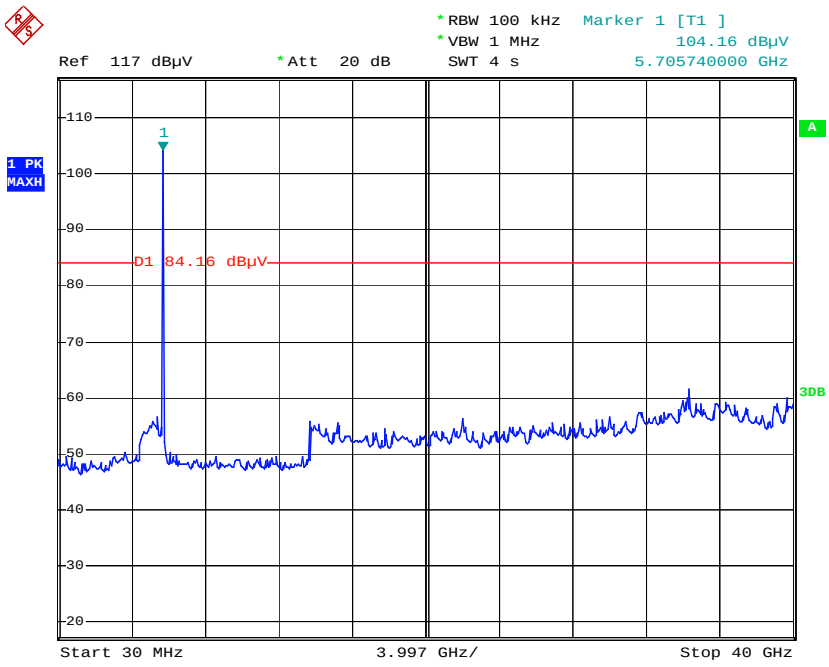
Product : Push2TV

Test Item : RF Antenna Conducted Spurious

Test Site : No.3 OATS

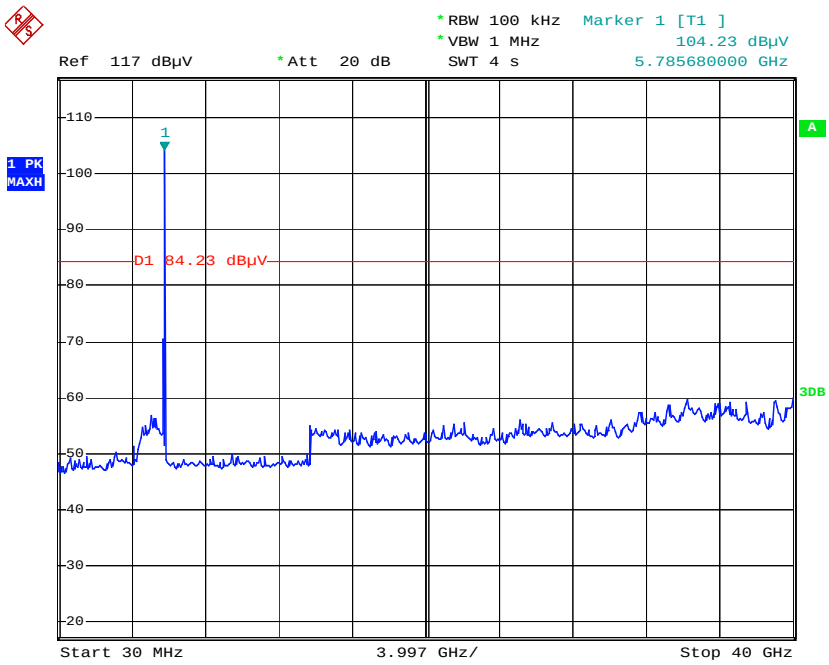
Test Mode : Mode 3: Transmit - 802.11a 6Mbps

Channel 149 (5745MHz) 30MHz -40GHz



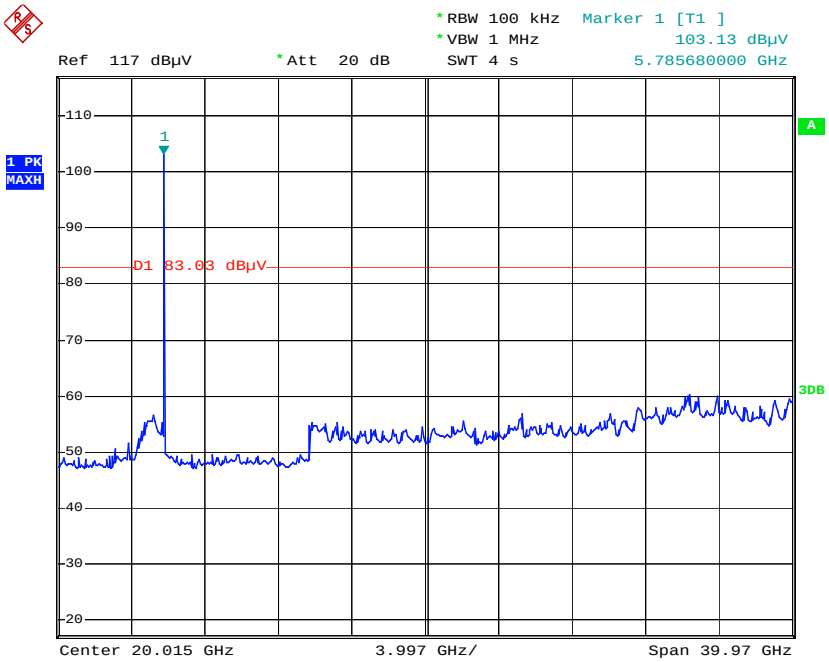
Date: 6.NOV.2010 05:14:17

Channel 157 (5785MHz) 30MHz -40GHz



Date: 6.NOV.2010 05:15:04

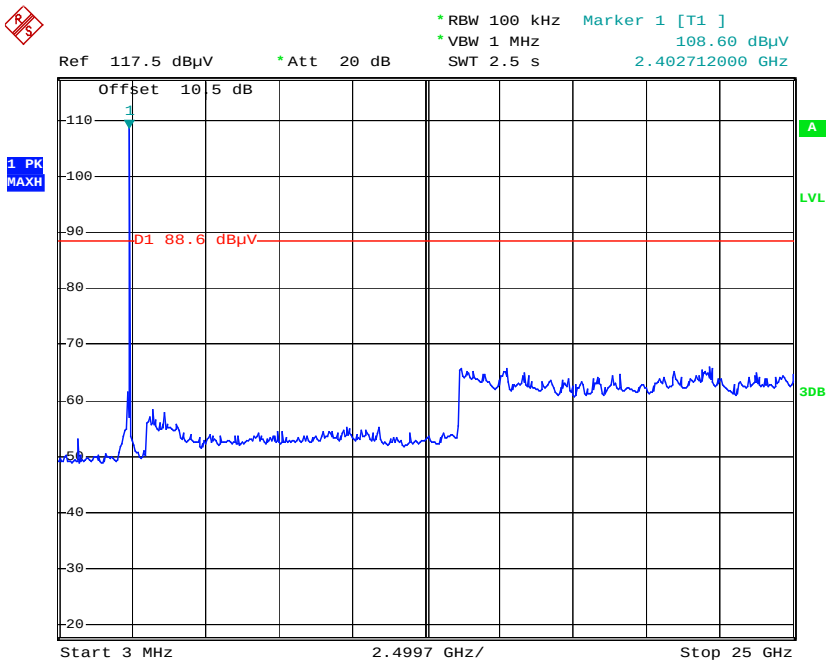
Channel 165 (5825MHz) 30MHz -40GHz



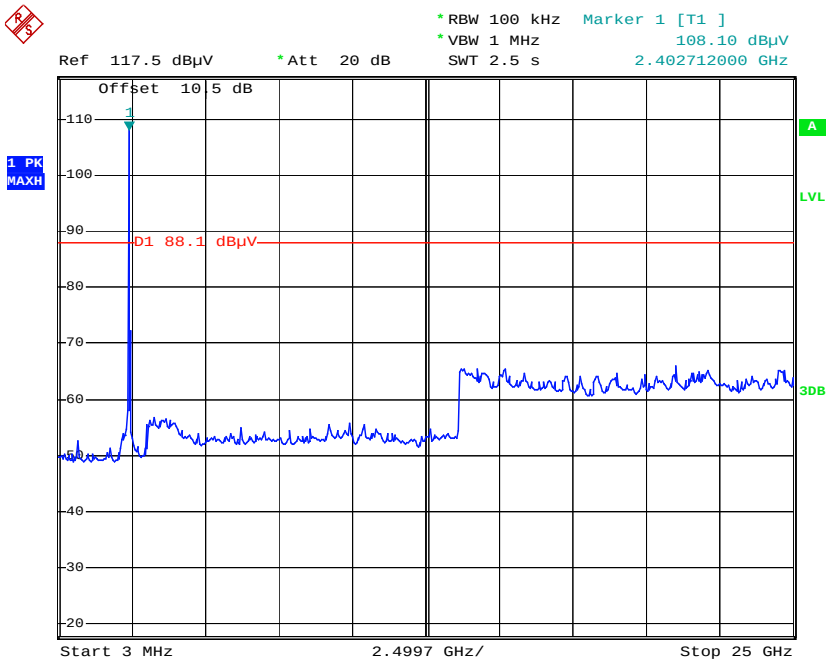
Date: 6.NOV.2010 05:15:49

Product : Push2TV
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band)

Channel 01 (2412MHz) 30MHz -25GHz

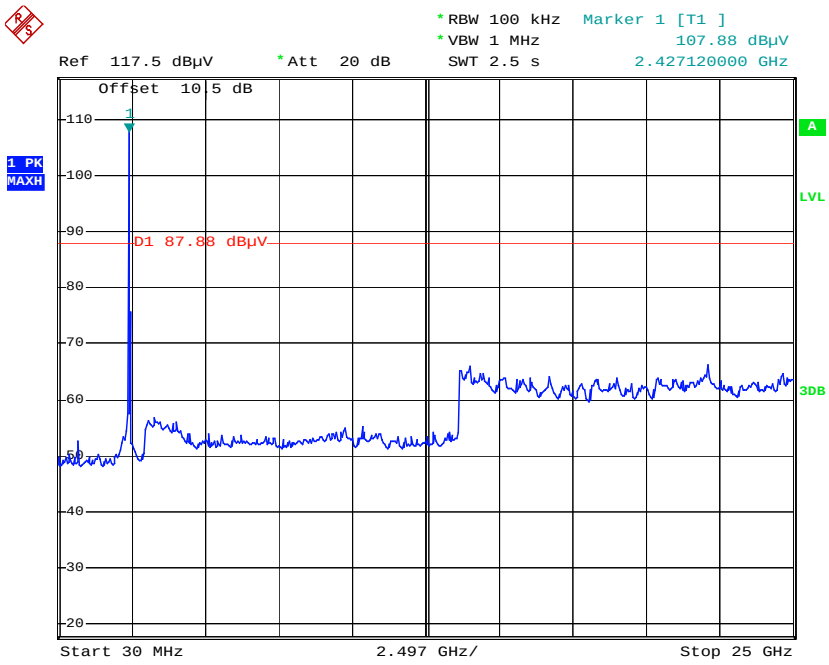


Channel 06 (2437MHz) 30MHz -25GHz



Date: 6.NOV.2010 05:05:07

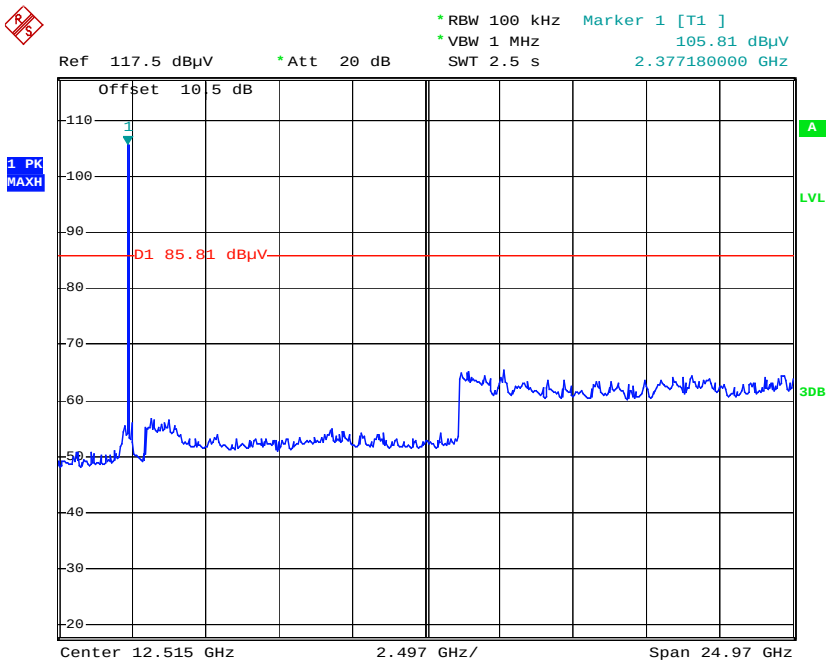
Channel 11 (2462MHz) 30MHz -25GHz



Date: 6.NOV.2010 05:05:57

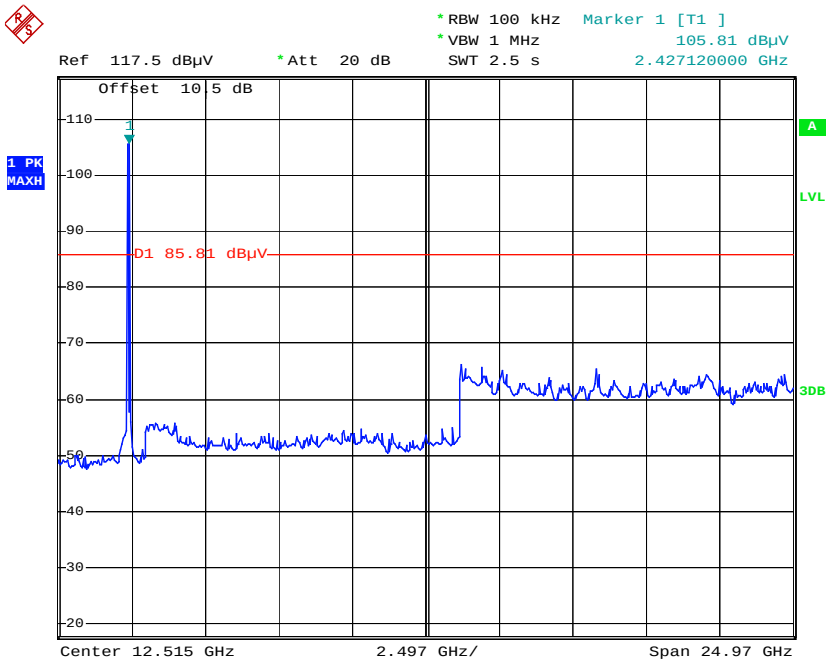
Product : Push2TV
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band)

Channel 01 (2422MHz) 30MHz -25GHz



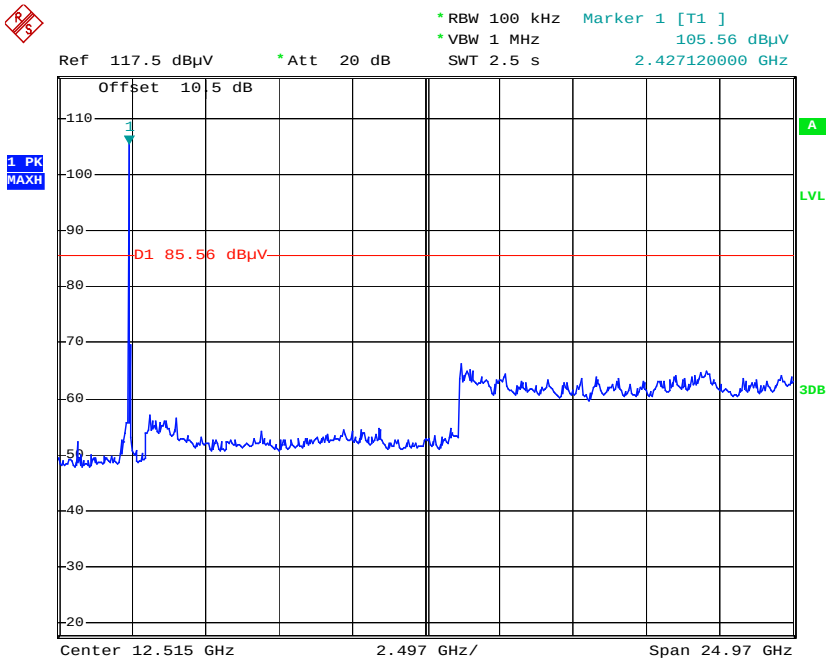
Date: 6.NOV.2010 05:06:46

Channel 04 (2437MHz) 30MHz -25GHz



Date: 6.NOV.2010 05:07:26

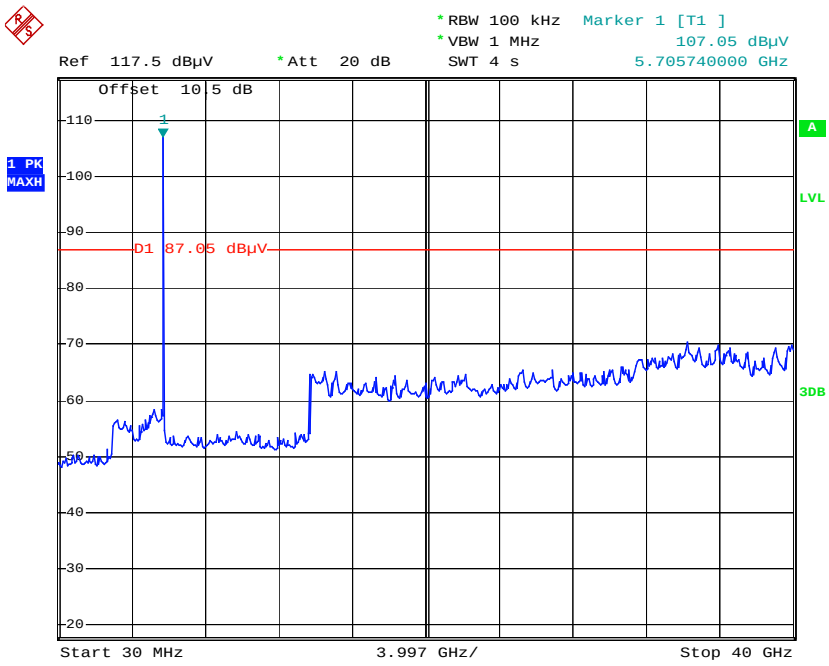
Channel 07 (2452MHz) 30MHz -25GHz



Date: 6.NOV.2010 05:07:59

Product : Push2TV
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band)

Channel 49 (5745MHz) 30MHz -40GHz



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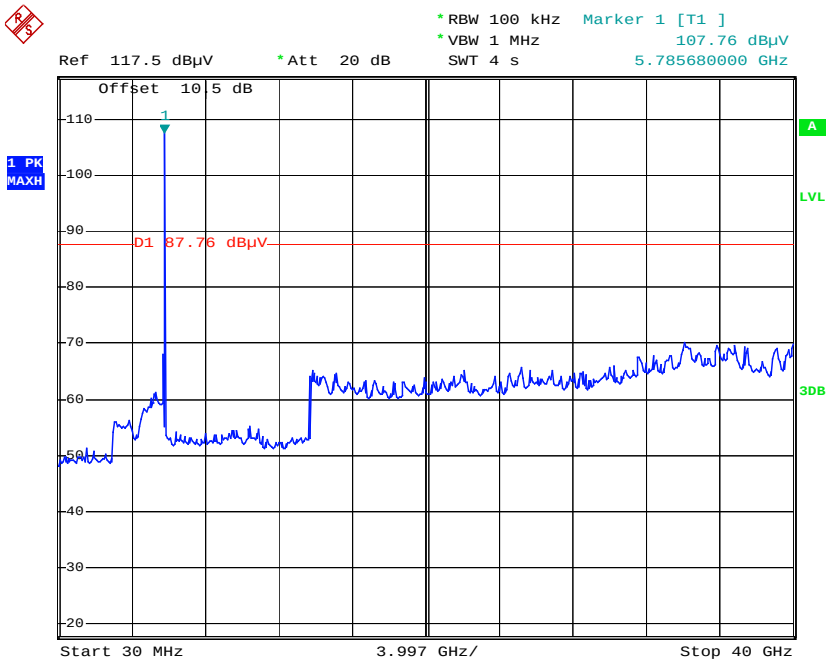
Channel 157 (5785MHz) 30MHz -40GHz



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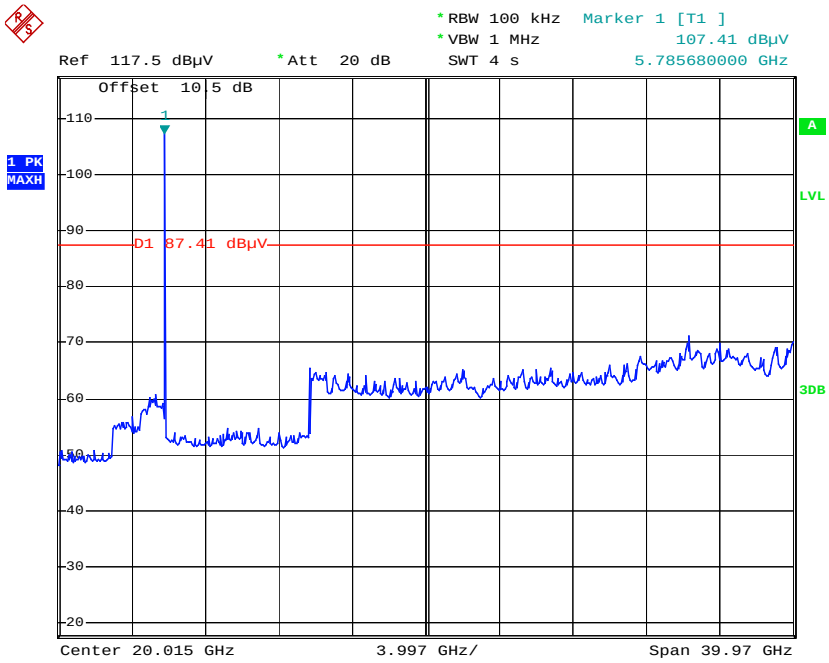
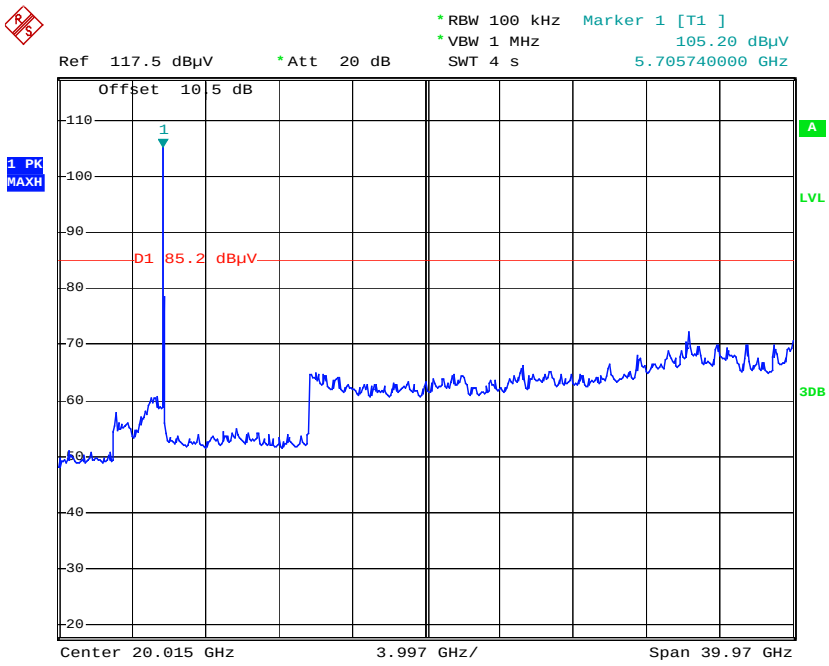
Channel 165 (5825MHz) 30MHz -40GHz



Date: 6.NOV.2010 05:10:10

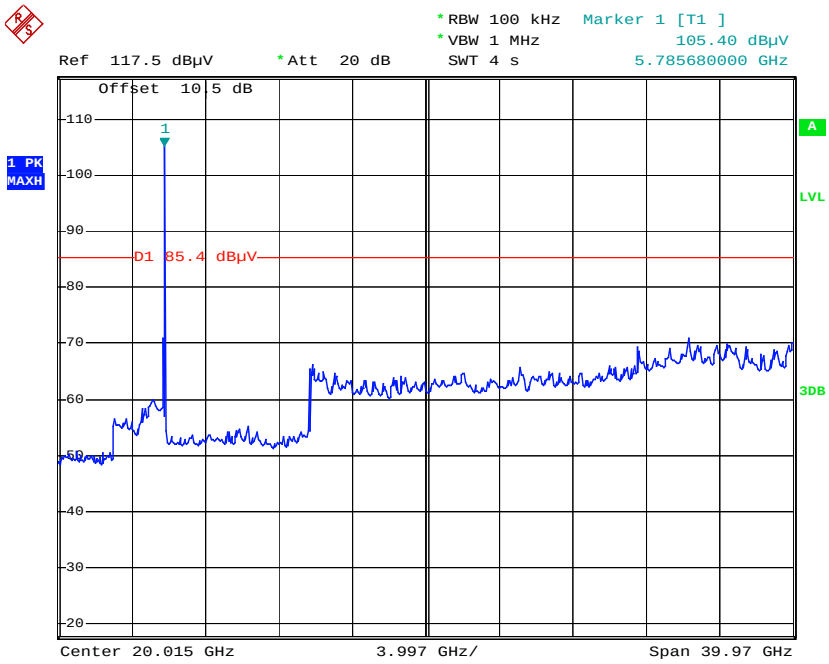
Product : Push2TV
Test Item : RF Antenna Conducted Spurious
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band)

Channel 151 (5755MHz) 30MHz -40GHz



Date: 6.NOV.2010 05:11:02

Channel 159 (5795MHz) 30MHz -40GHz



Date: 6.NOV.2010 05:11:46

6. Band Edge

6.1. Test Equipment

RF Conducted Measurement

The following test equipments are used during the band edge tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2010
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2010
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2010
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2010

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.
3. The power combiner is used for measure 11n mode.

RF Radiated Measurement:

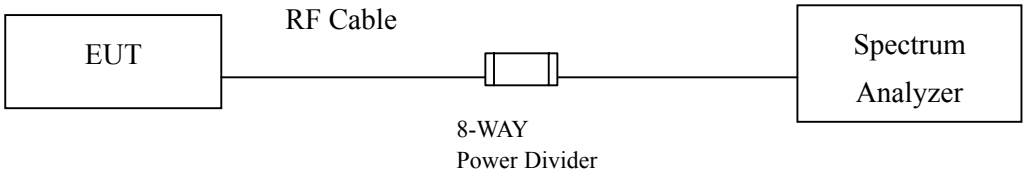
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3		Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2010
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2010
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2010
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2010
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2010
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2010
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2010
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

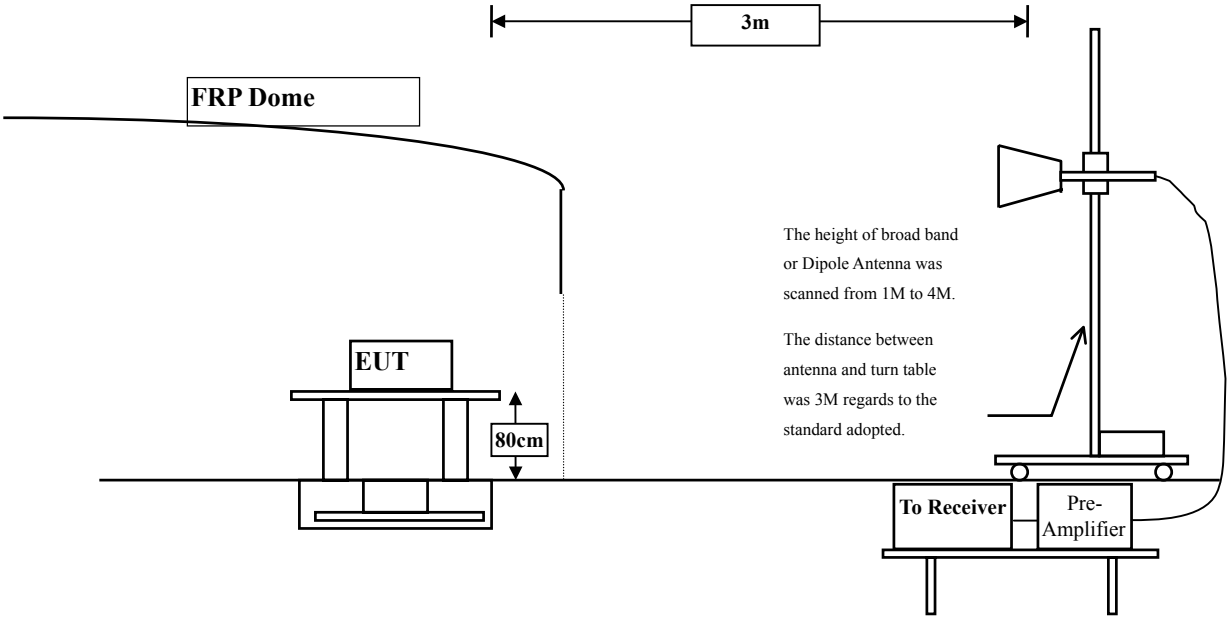
Note: 1. All instruments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup

RF Conducted Measurement



RF Radiated Measurement:



6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

6.5. Uncertainty

± 3.9 dB above 1GHz
± 3.8 dB below 1GHz

6.6. Test Result of Band Edge

Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2412	31.771	70.18	101.952	Peak
Horizontal	2412	31.771	65.65	97.422	Average
Vertical	2412	30.248	69.8	100.049	Peak
Vertical	2412	30.248	66.06	96.309	Average

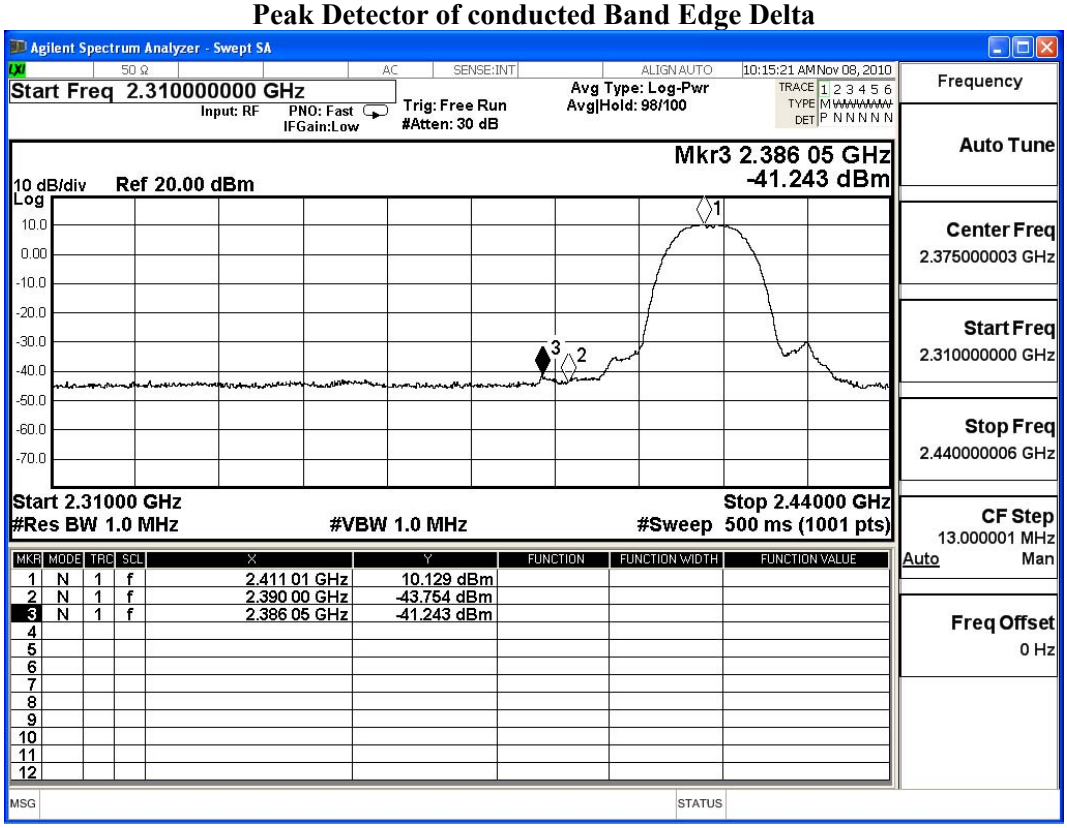
Note: 1:Spectrum Analyzer setting:
Peak detector: RBW=1MHz, VBW=1MHz
Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

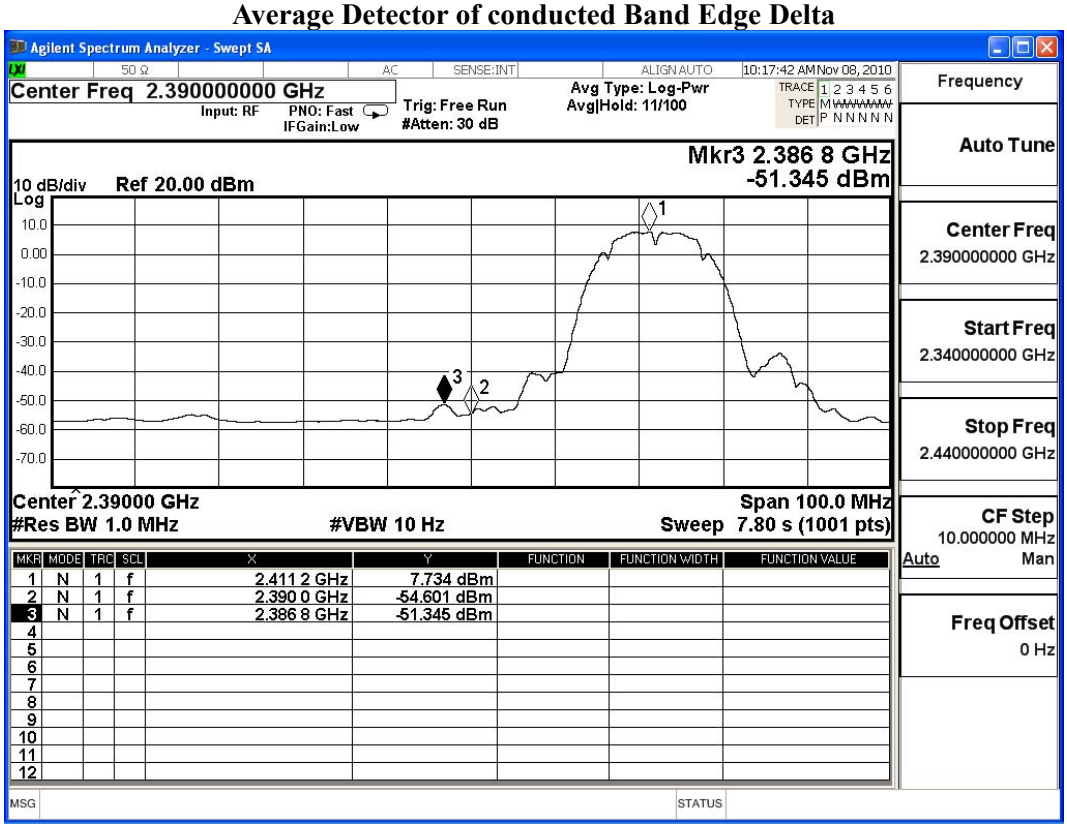
Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2386.05	101.952	51.372	50.58	Peak
Horizontal	2386.8	97.422	59.07	38.352	Average
Vertical	2386.05	100.049	51.372	48.677	Peak
Vertical	2386.8	96.309	59.07	37.239	Average

Note:
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:
Band Edge field Strength = F - Δ
F = Fundamental field Strength (Peak or Average)
Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2462	31.892	69.79	101.682	Peak
Horizontal	2462	31.892	65.43	97.322	Average
Vertical	2462	30.48	69.15	99.63	Peak
Vertical	2462	30.48	64.85	95.33	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2486.3	101.682	53.56	48.122	Peak
Horizontal	2486.8	97.322	62.82	34.502	Average
Vertical	2486.3	99.63	53.56	46.07	Peak
Vertical	2486.8	95.33	62.82	32.51	Average

Note:

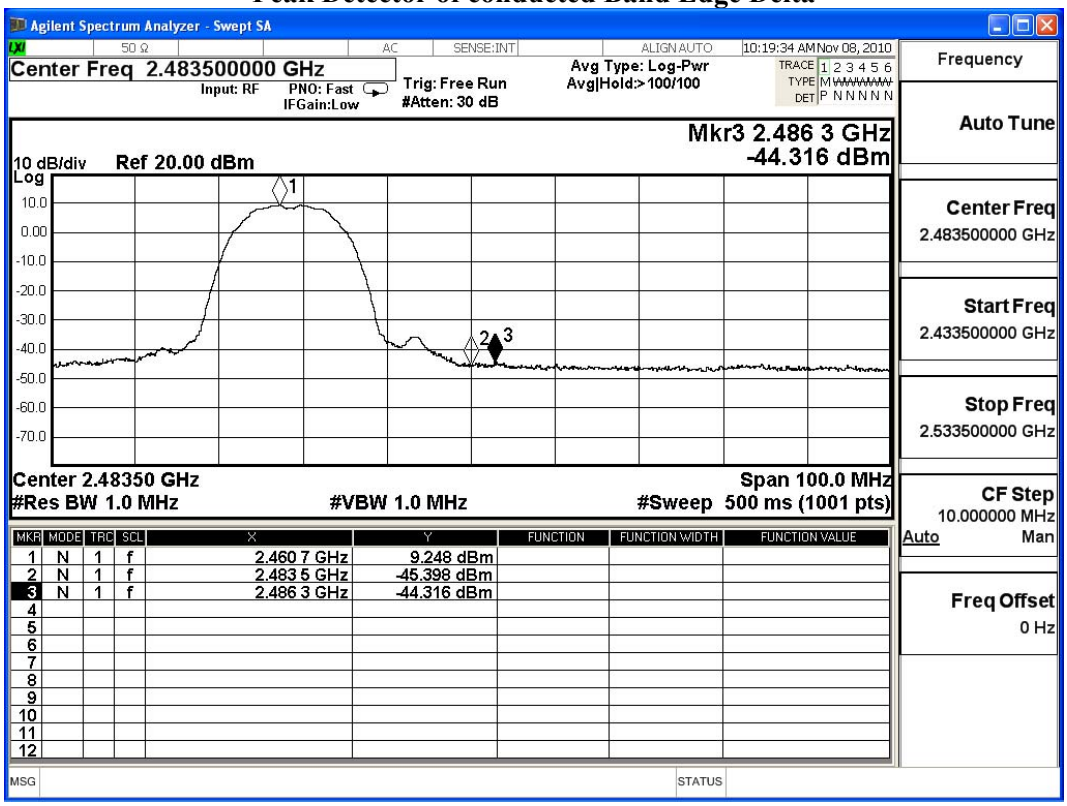
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

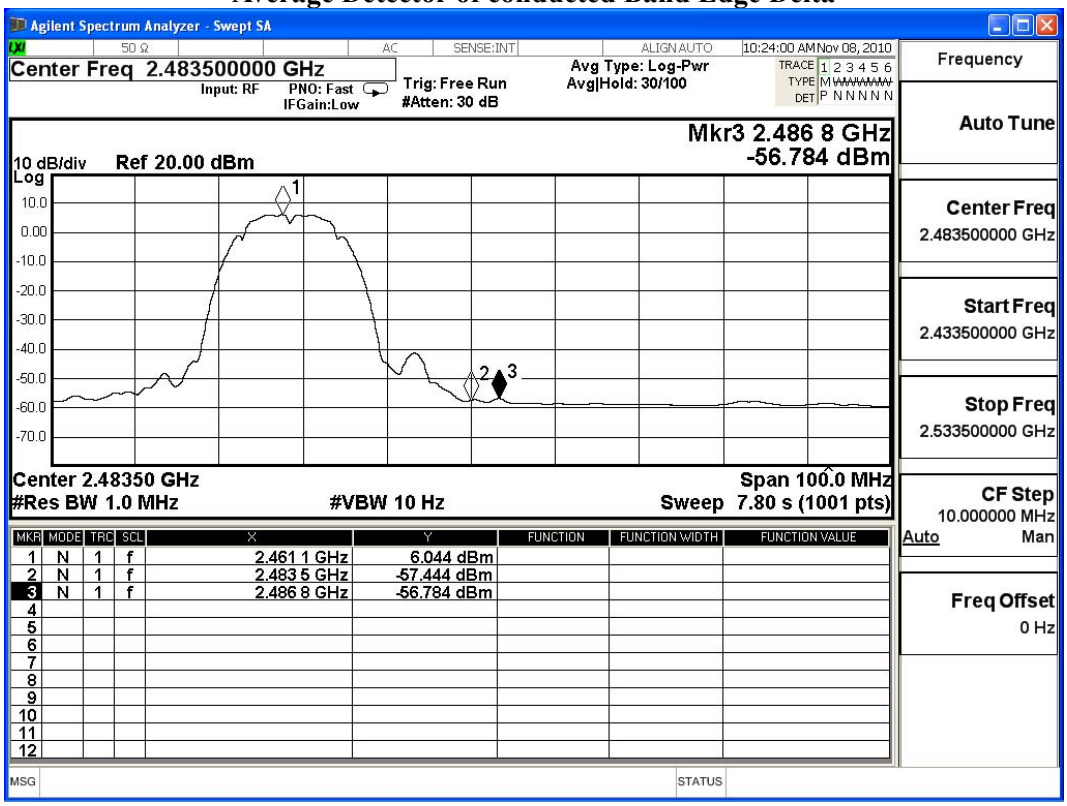
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2412	31.755	71.67	103.424	Peak
Horizontal	2412	31.755	61.55	93.304	Average
Vertical	2412	30.248	70.89	101.139	Peak
Vertical	2412	30.248	60.61	90.859	Average

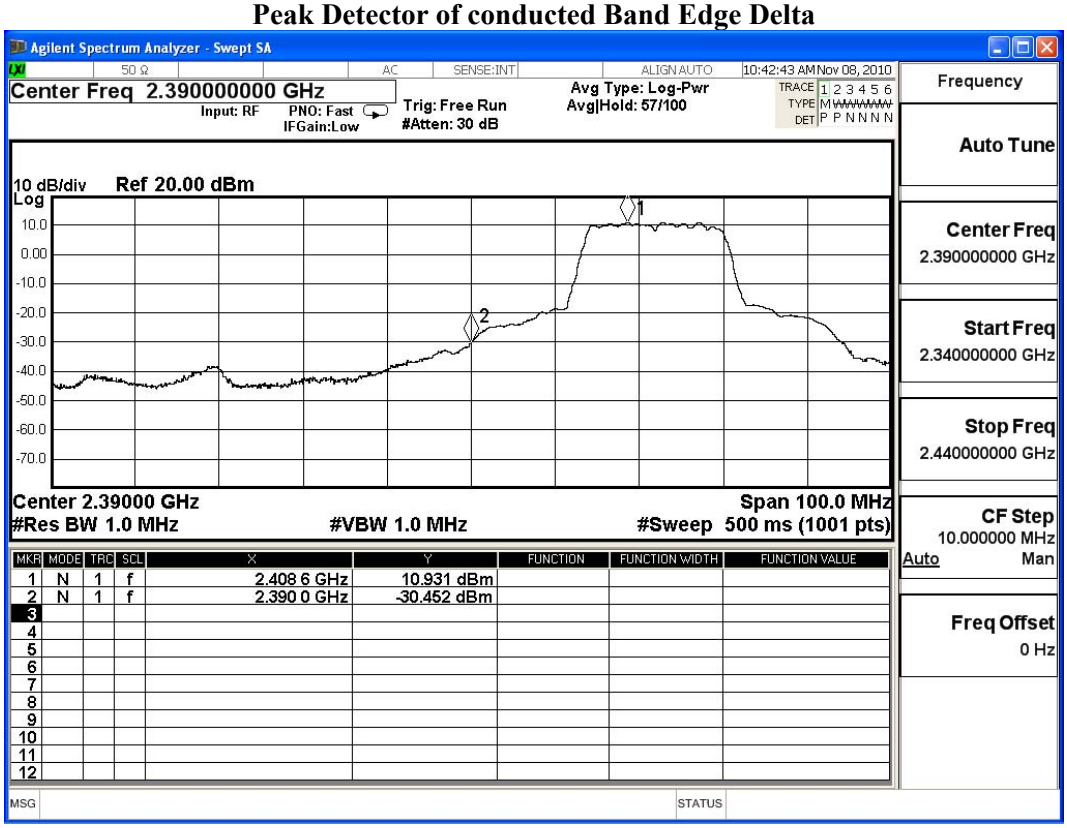
Note: 1:Spectrum Analyzer setting:
Peak detector: RBW=1MHz, VBW=1MHz
Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

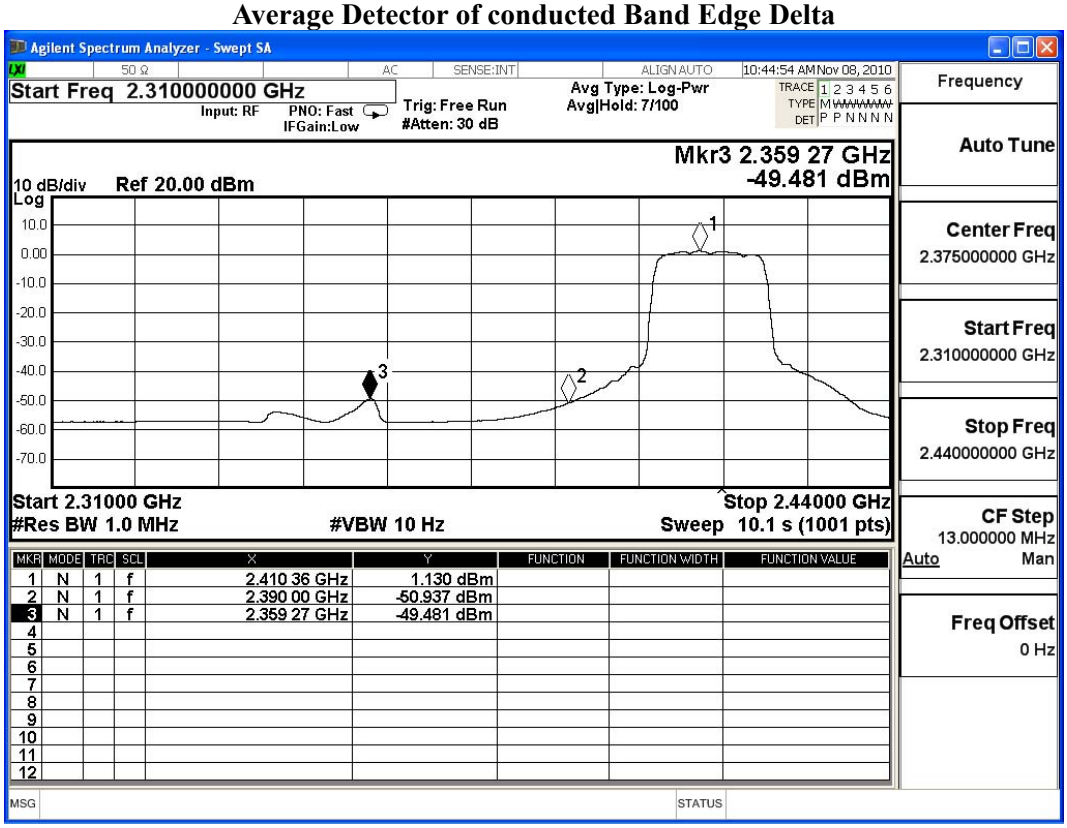
Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2390	103.424	41.38	62.044	Peak
Horizontal	2359.27	93.304	50.61	42.694	Average
Vertical	2390	101.139	41.38	59.759	Peak
Vertical	2359.27	90.859	50.61	40.249	Average

Note:
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:
Band Edge field Strength = F - Δ
F = Fundamental field Strength (Peak or Average)
Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2462	31.892	67.84	99.732	Peak
Horizontal	2462	31.892	58.3	90.192	Average
Vertical	2462	30.48	69.09	99.57	Peak
Vertical	2462	30.48	59.16	89.64	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2483.5	99.732	44.206	55.526	Peak
Horizontal	2483.5	90.192	54.683	35.509	Average
Vertical	2483.5	99.57	44.206	55.364	Peak
Vertical	2483.5	89.64	54.683	34.957	Average

Note:

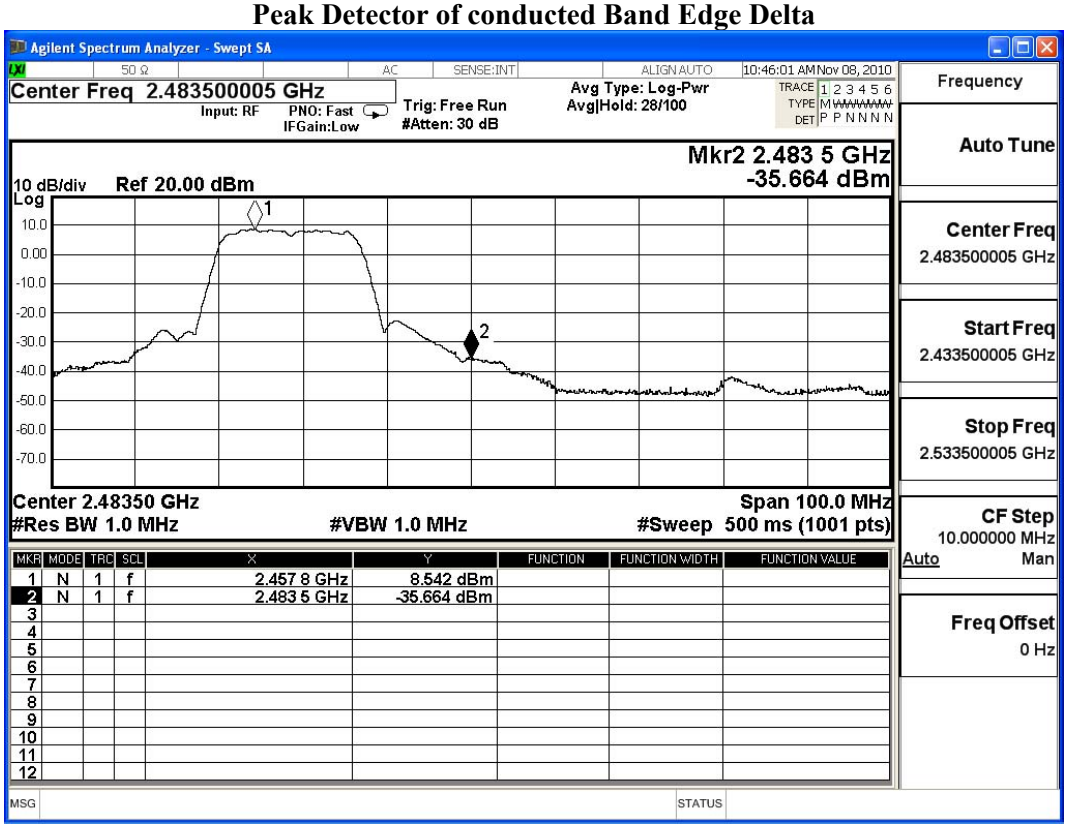
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

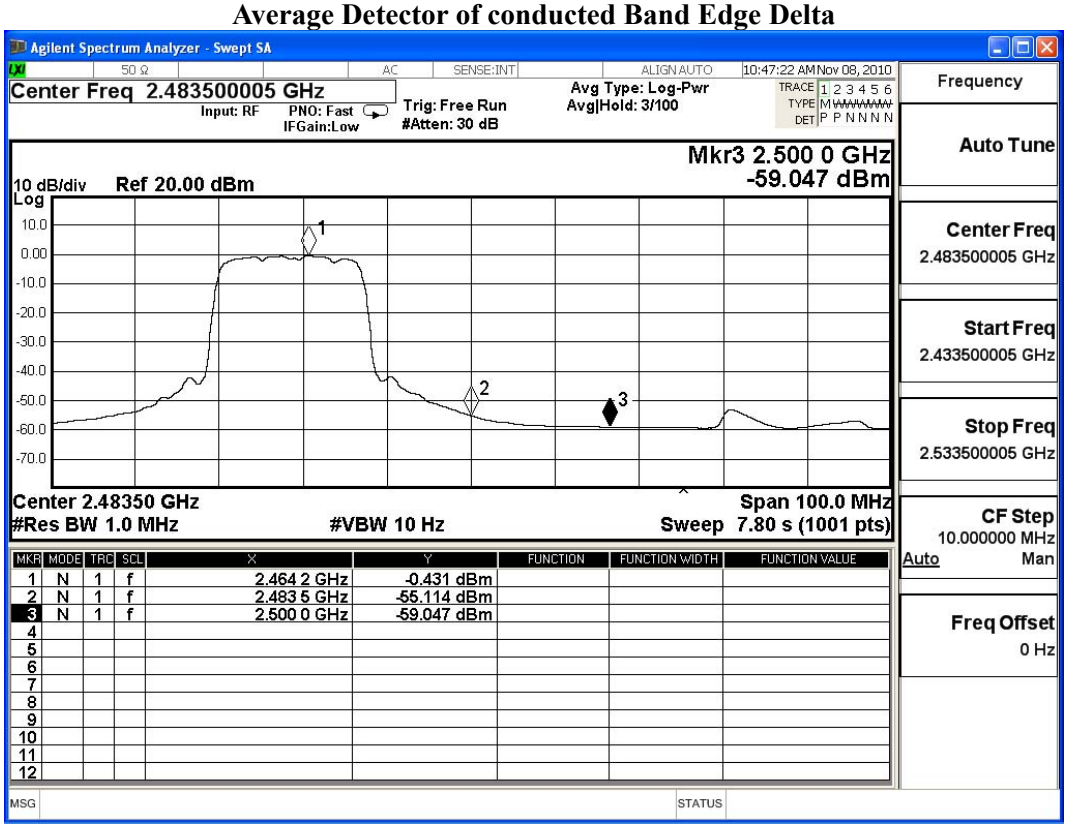
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2412	31.771	74.22	105.992	Peak
Horizontal	2412	31.771	62.8	94.572	Average
Vertical	2412	30.248	72.36	102.609	Peak
Vertical	2412	30.248	61.28	91.529	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2360.05	105.992	46.233	59.759	Peak
Horizontal	2360.05	94.572	48.6	45.972	Average
Vertical	2360.05	102.609	46.233	56.376	Peak
Vertical	2360.05	91.529	48.6	42.929	Average

Note:

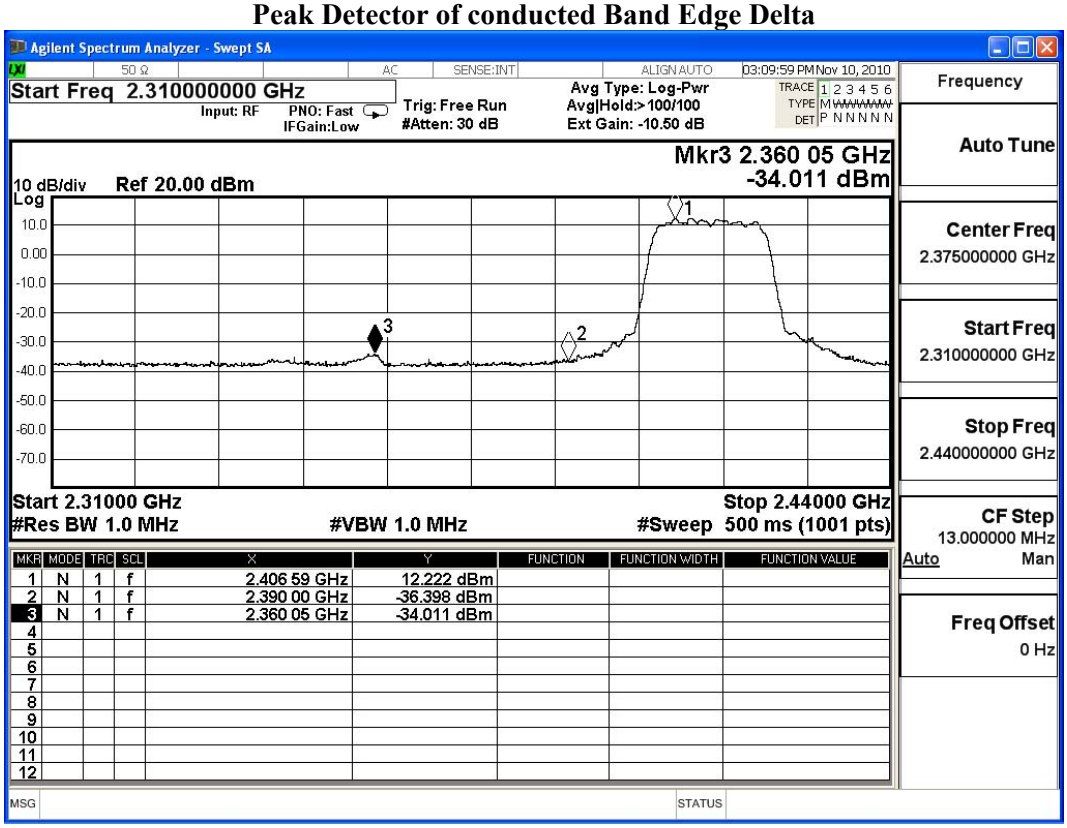
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

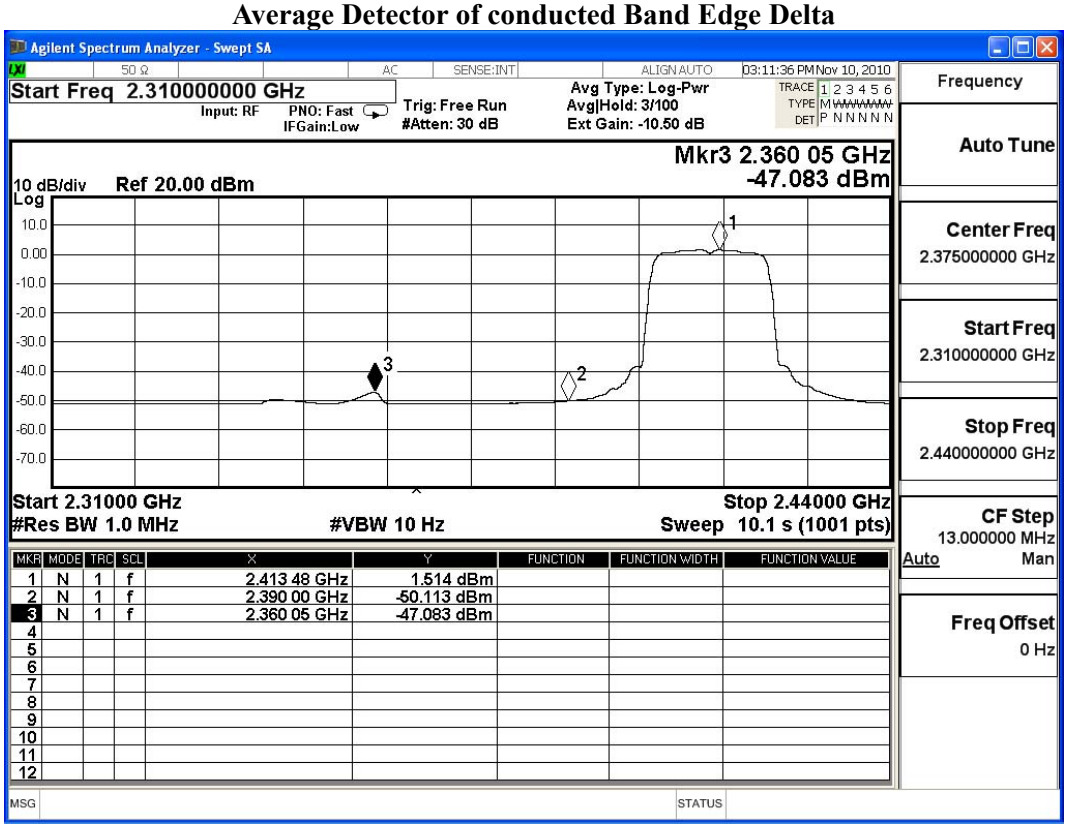
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_13Mbps(2.4G Band)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2462	31.892	73.51	105.402	Peak
Horizontal	2462	31.892	61.53	93.422	Average
Vertical	2462	30.48	72.49	102.97	Peak
Vertical	2462	30.48	61.22	91.7	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2483.5	105.402	50.48	54.922	Peak
Horizontal	2483.5	93.422	51.15	42.272	Average
Vertical	2483.5	102.97	50.48	52.49	Peak
Vertical	2483.5	91.7	51.15	40.55	Average

Note:

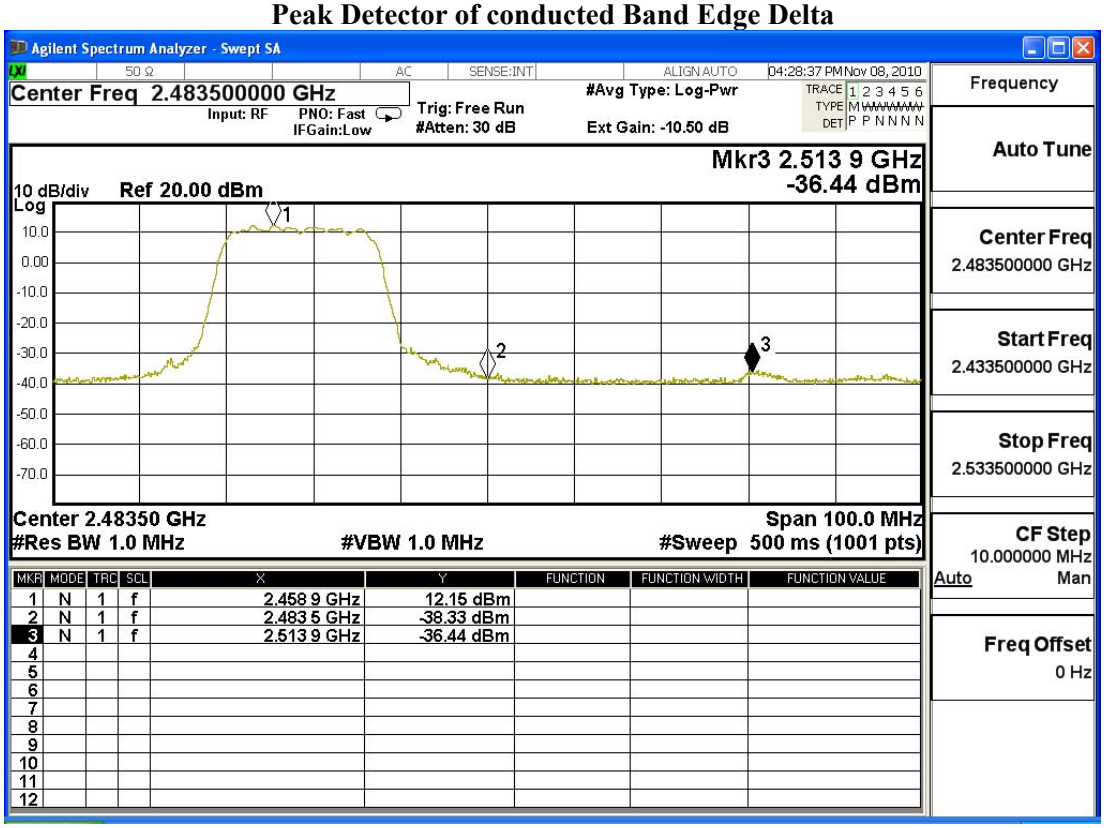
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

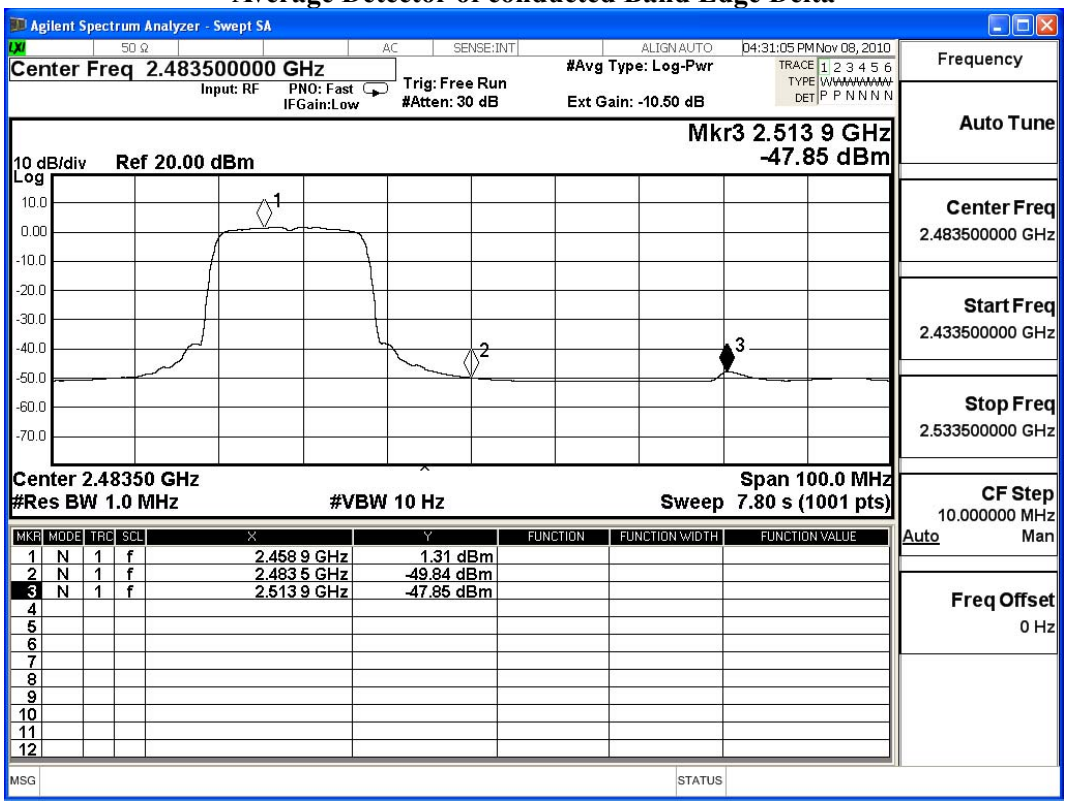
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2422	31.715	68.49	100.205	Peak
Horizontal	2422	31.715	58.53	90.245	Average
Vertical	2422	31.017	68.14	99.157	Peak
Vertical	2422	29.916	56.98	86.896	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2385.01	100.205	45.07	55.135	Peak
Horizontal	2390	90.245	47.3	42.945	Average
Vertical	2385.01	99.157	45.07	54.087	Peak
Vertical	2390	86.896	47.3	39.596	Average

Note:

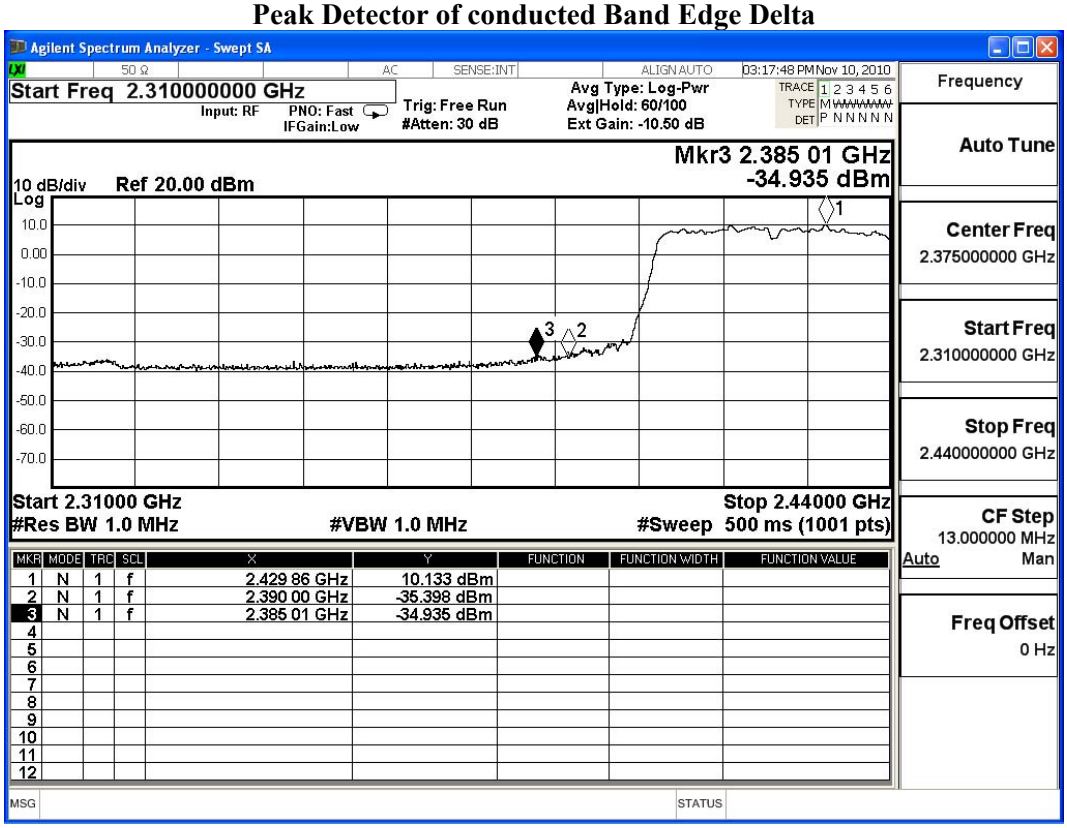
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

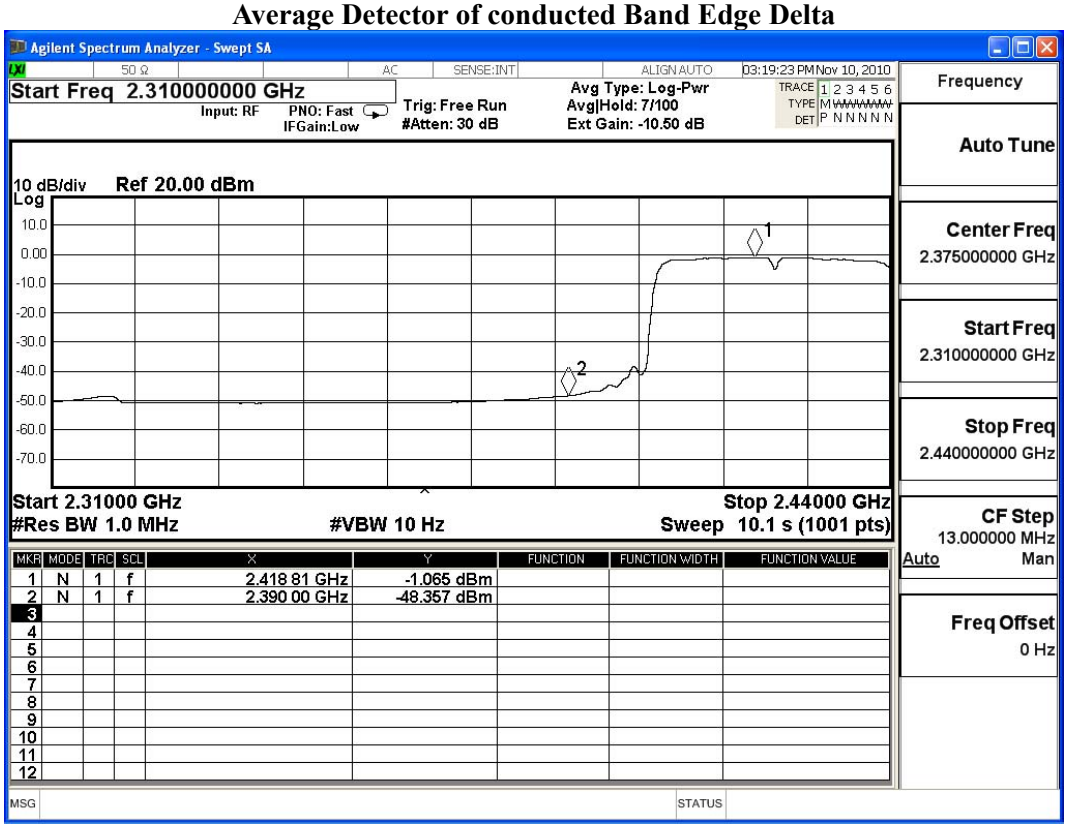
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta



Average Detector of conducted Band Edge Delta



Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_27Mbps(2.4G Band)

Fundamental Filed Strength

Antenna Pole	Frequency [MHz]	Correction Factor [dB/m]	Reading Level [dBuV]	Emission Level [dBuV/m]	Detector
Horizontal	2452	30.828	68.22	99.047	Peak
Horizontal	2452	30.828	57.4	88.227	Average
Vertical	2452	30.106	66.96	97.065	Peak
Vertical	2452	30.106	55.82	85.925	Average

Note: 1:Spectrum Analyzer setting:

Peak detector: RBW=1MHz, VBW=1MHz

Average detector: RBW=1MHz, VBW=10Hz

Band Edge Test Data

Antenna Pole	Test Frequency (MHz)	Fundamental (dBuV/m)	Δ (dB)	Band Edge Field Strength (dBuV/m)	Detector
Horizontal	2483.6	99.047	37.02	62.027	Peak
Horizontal	2483.5	88.227	45.6	42.627	Average
Vertical	2483.6	97.065	37.02	60.045	Peak
Vertical	2483.5	85.925	45.6	40.325	Average

Note:

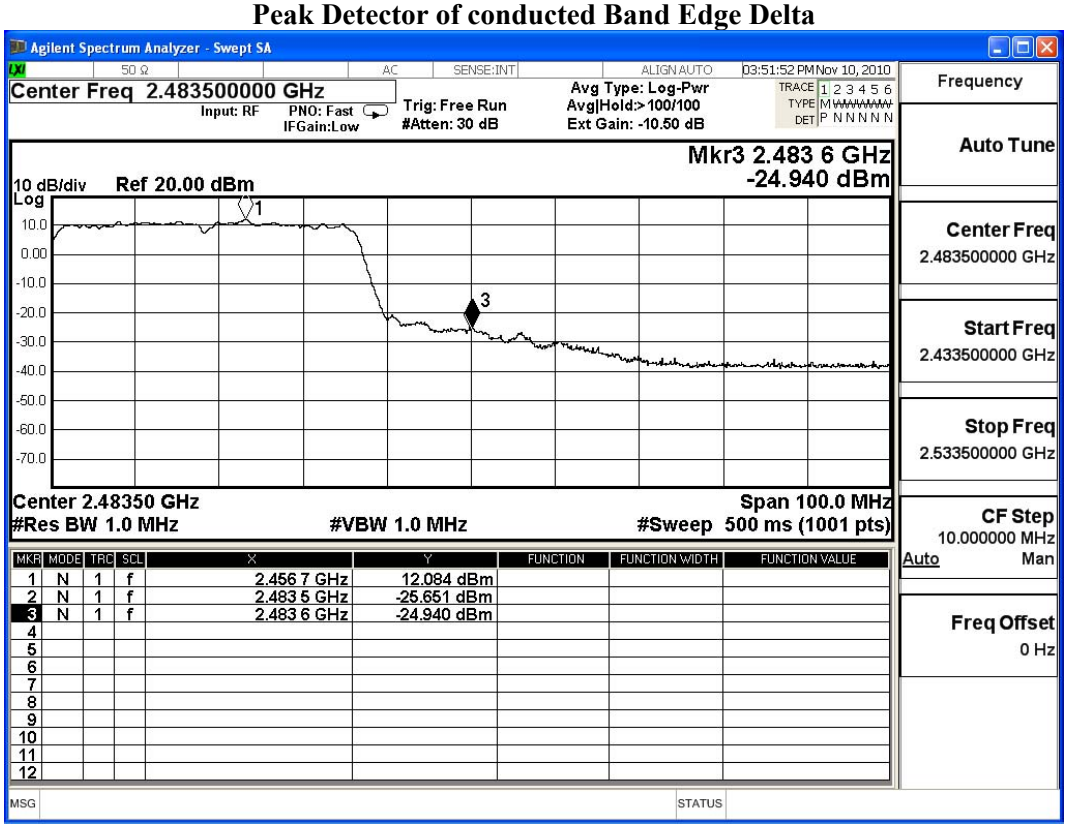
The Band Edge Field Strength was calculated using the Fundamental and Conducted Band Edge measurements per the Marker-Delta Method with the following formula:

Band Edge field Strength = F - Δ

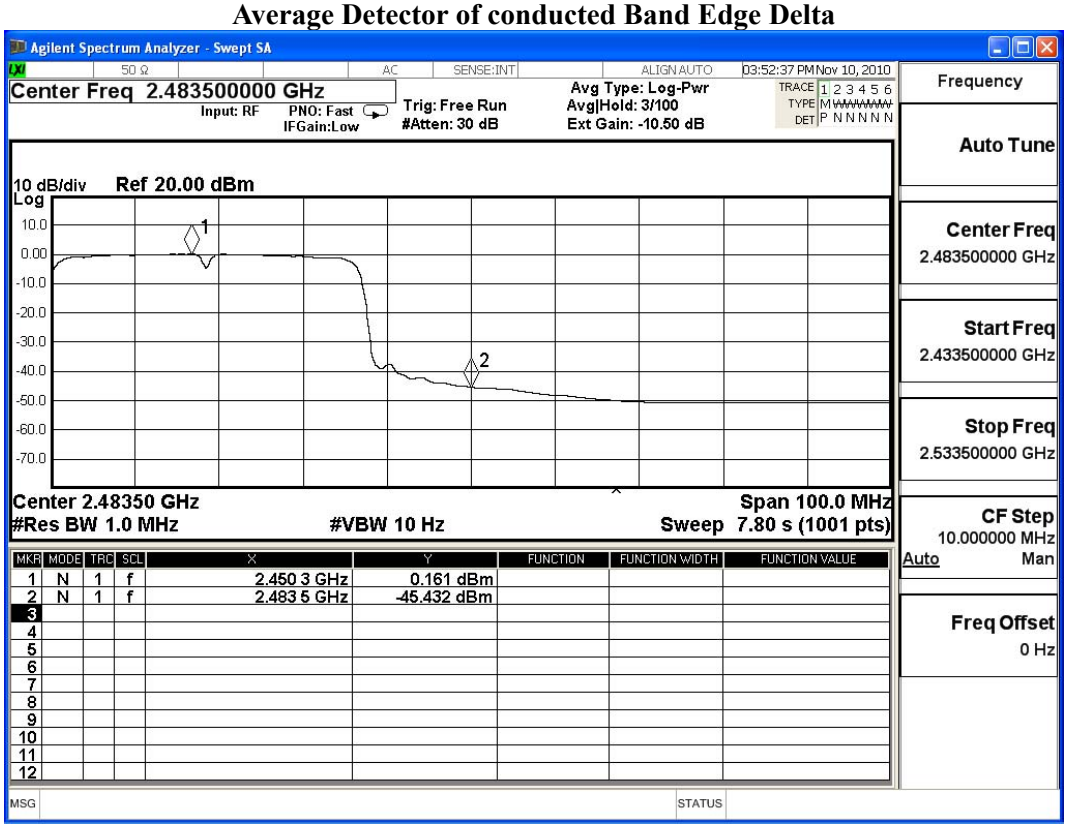
F = Fundamental field Strength (Peak or Average)

Δ = Conducted Band Edge Delta (Peak or Average)

Peak Detector of conducted Band Edge Delta

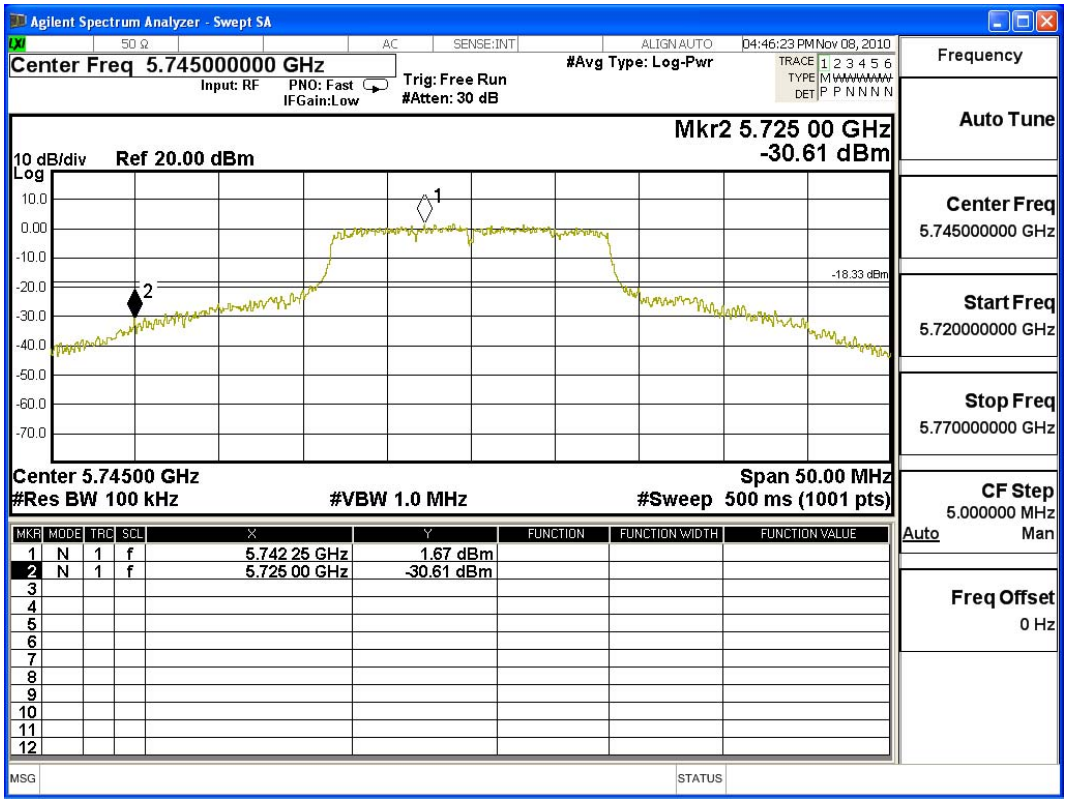


Average Detector of conducted Band Edge Delta



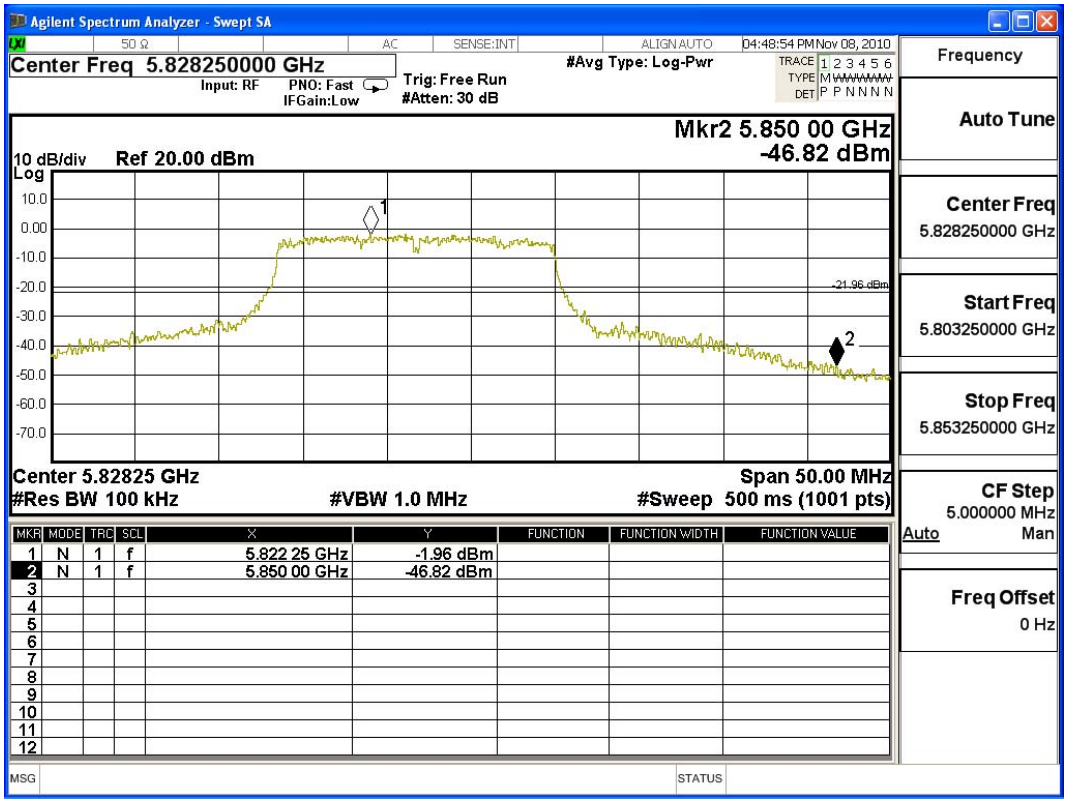
Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	32.280	>20	PASS



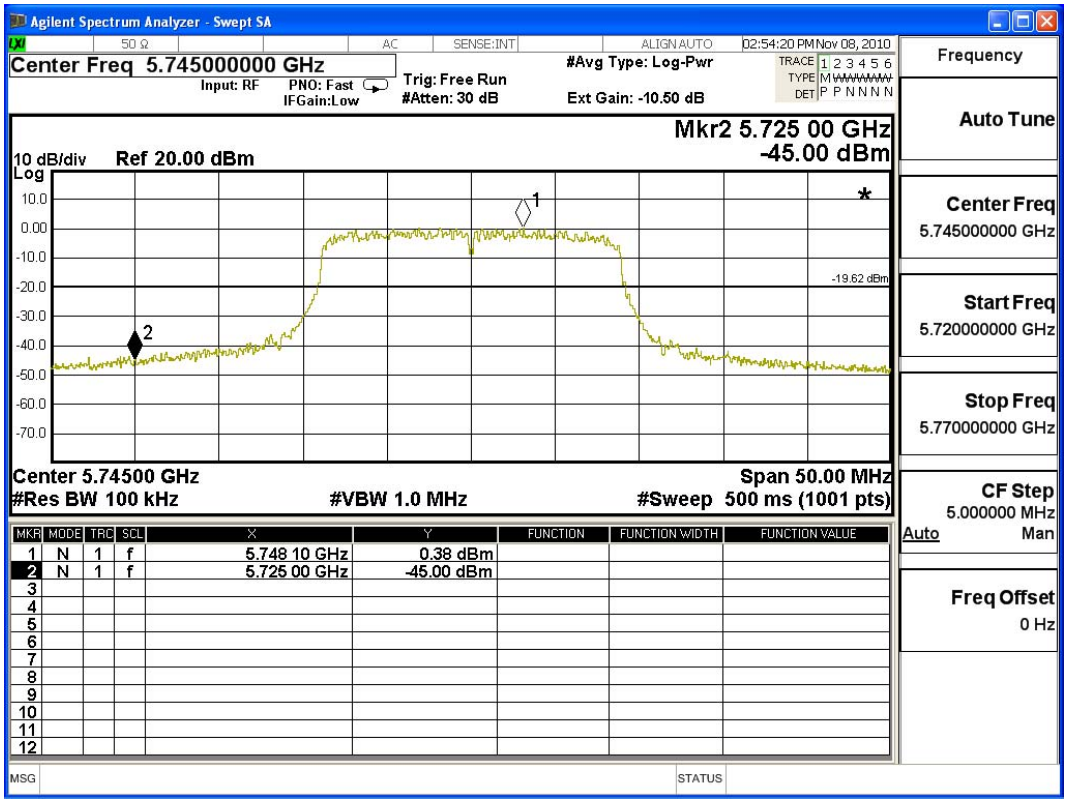
Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	44.860	>20	PASS



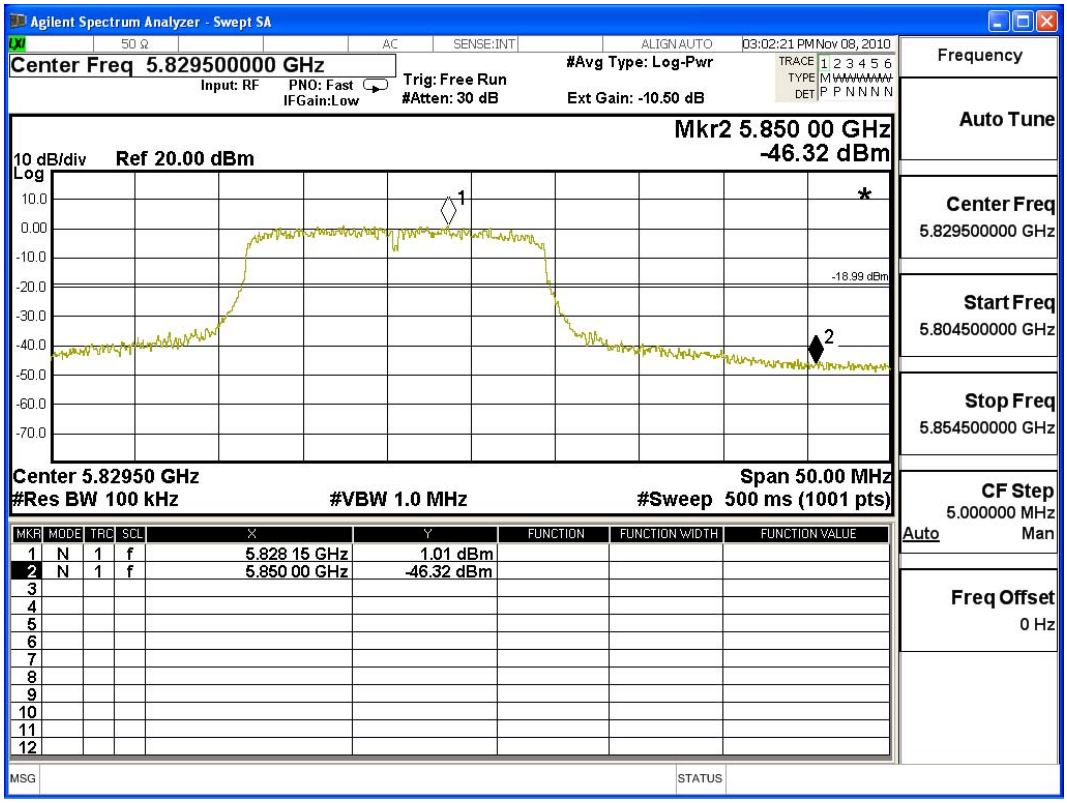
Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band)

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5745	45.380	>20	PASS



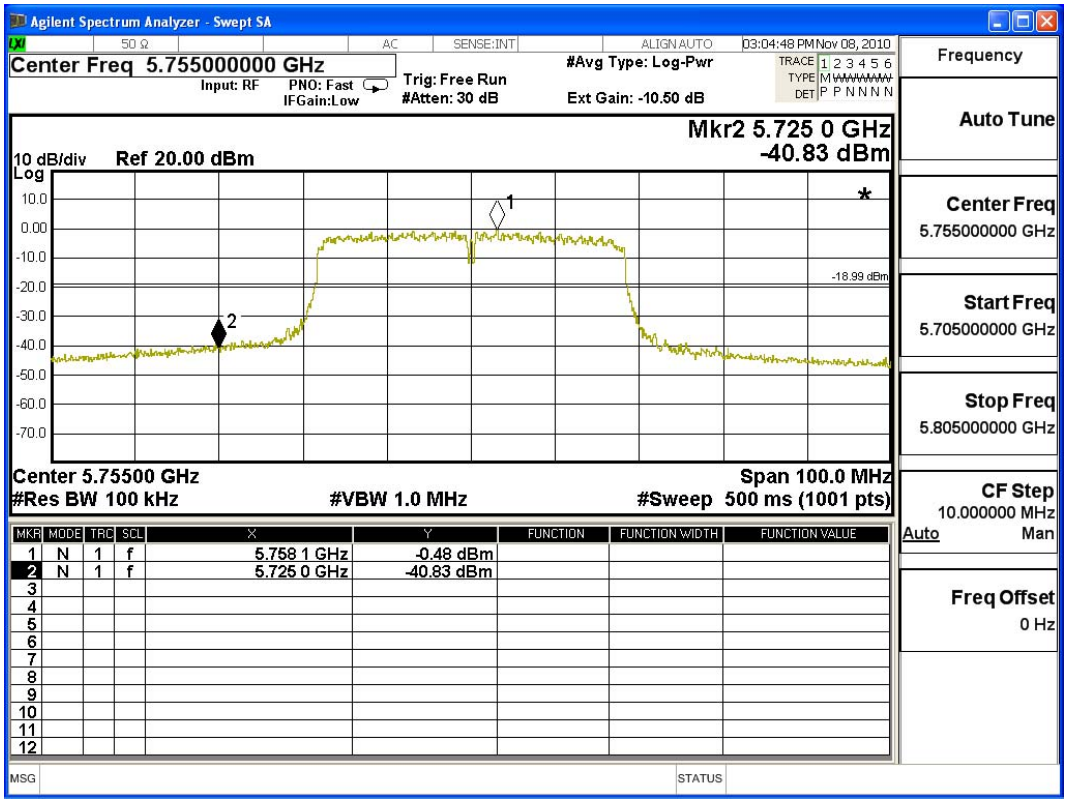
Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_13Mbps(5G Band)

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5825	47.330	>20	PASS



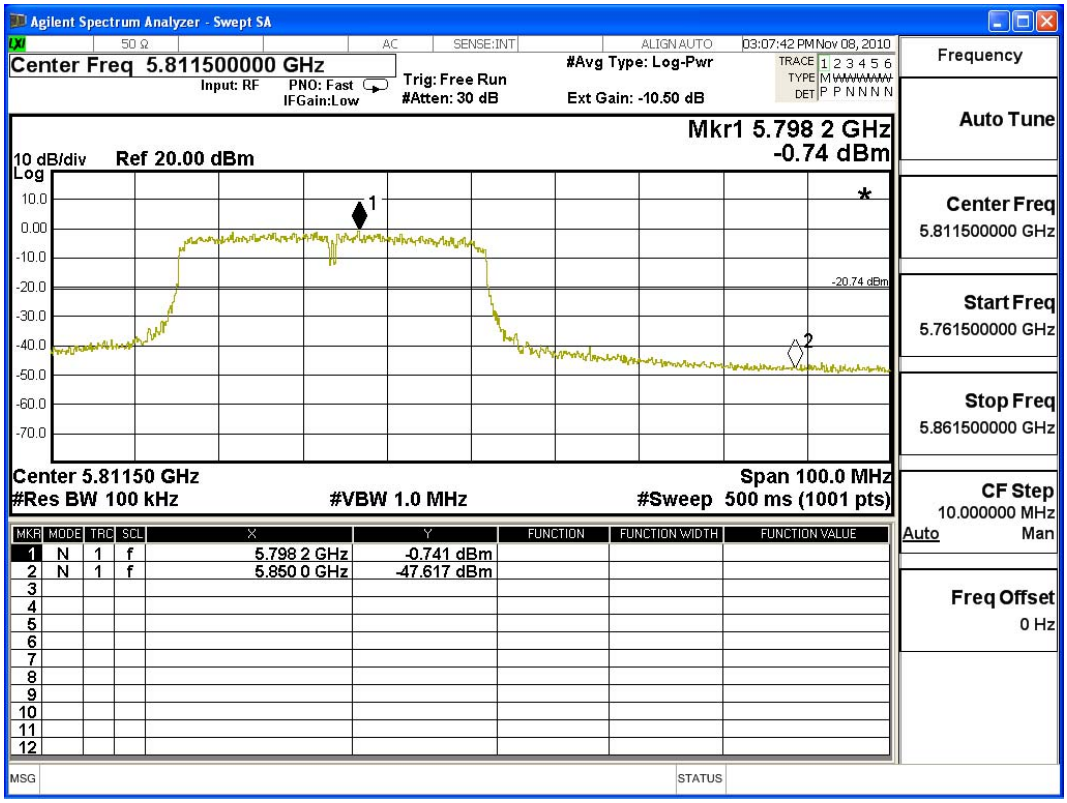
Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band)

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5755	40.350	>20	PASS



Product : Push2TV
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_27Mbps(5G Band)

Test Frequency (MHz)	Measurement Level Δ (dB)	Limit Δ (dB)	Result
5795	46.876	>20	PASS



7. Occupied Bandwidth

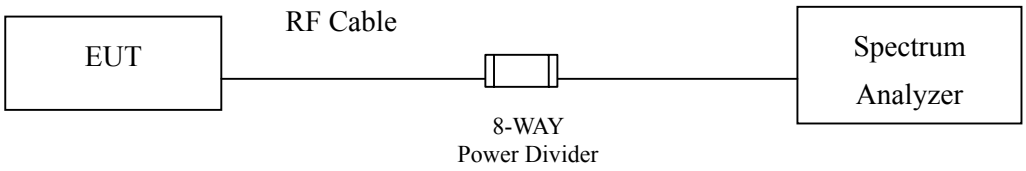
7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2010
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2010
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2010
X	8-WAY Power Divider	JFW	50PD-647 / 526770 0916	Apr., 2010

Note:

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
2. The test instruments marked with "X" are used to measure the final test results.
3. The power combiner is used for measure 11n mode.

7.2. Test Setup



7.3. Limits

The minimum bandwidth shall be at least 500 kHz.

7.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Mar. 2005 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 100 kHz, Span greater than RBW.

7.5. Uncertainty

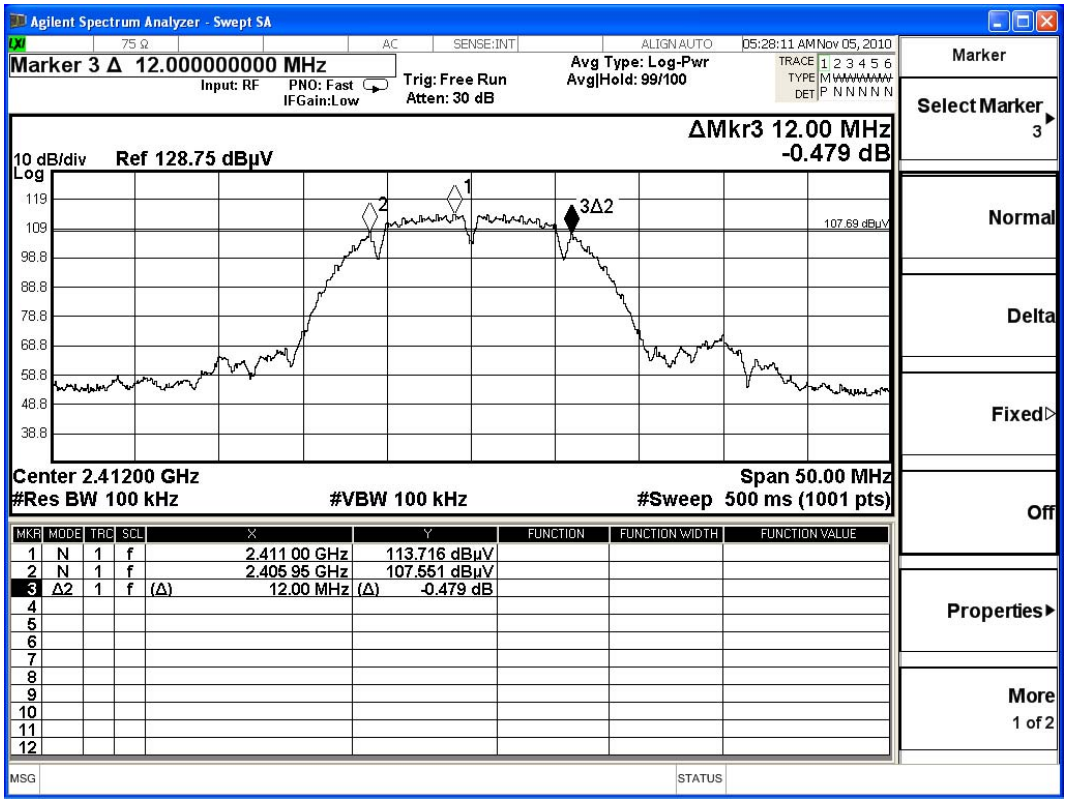
± 150Hz

7.6. Test Result of Occupied Bandwidth

Product : Push2TV
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	12000	>500	Pass

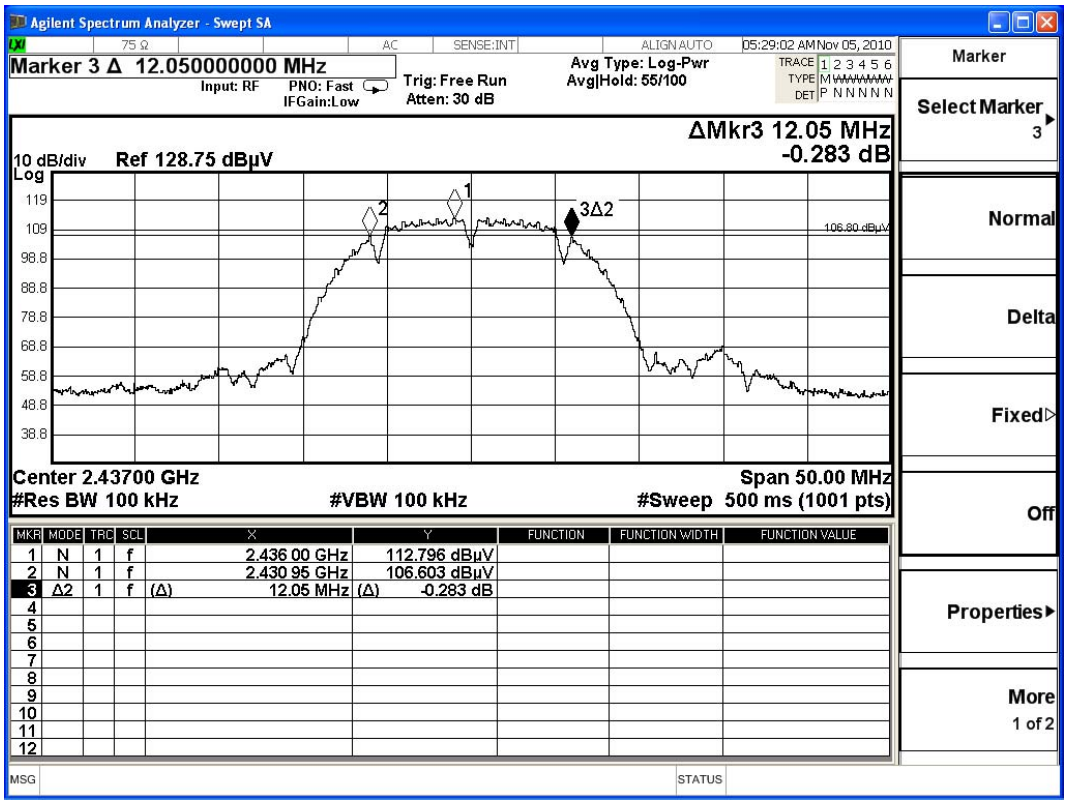
Figure Channel 1:



Product : Push2TV
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
6	2437.00	12050	>500	Pass

Figure Channel 6:



Product : Push2TV
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
11	2462.00	10300	>500	Pass

Figure Channel 11: