8. Power Density

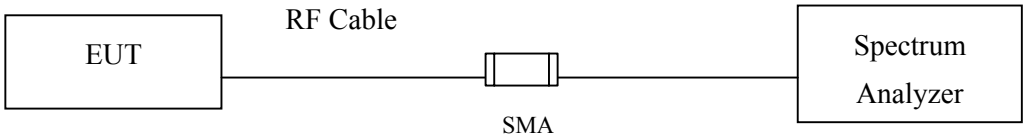
8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2012
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2012
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2012

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.

8.2. Test Setup



8.3. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

8.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW= 100 kHz, VBW≥300KHz, SPAN to 5-30 % greater than the EBW,
Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log (3 kHz/100 kHz = -15.2 dB).

8.5. Uncertainty

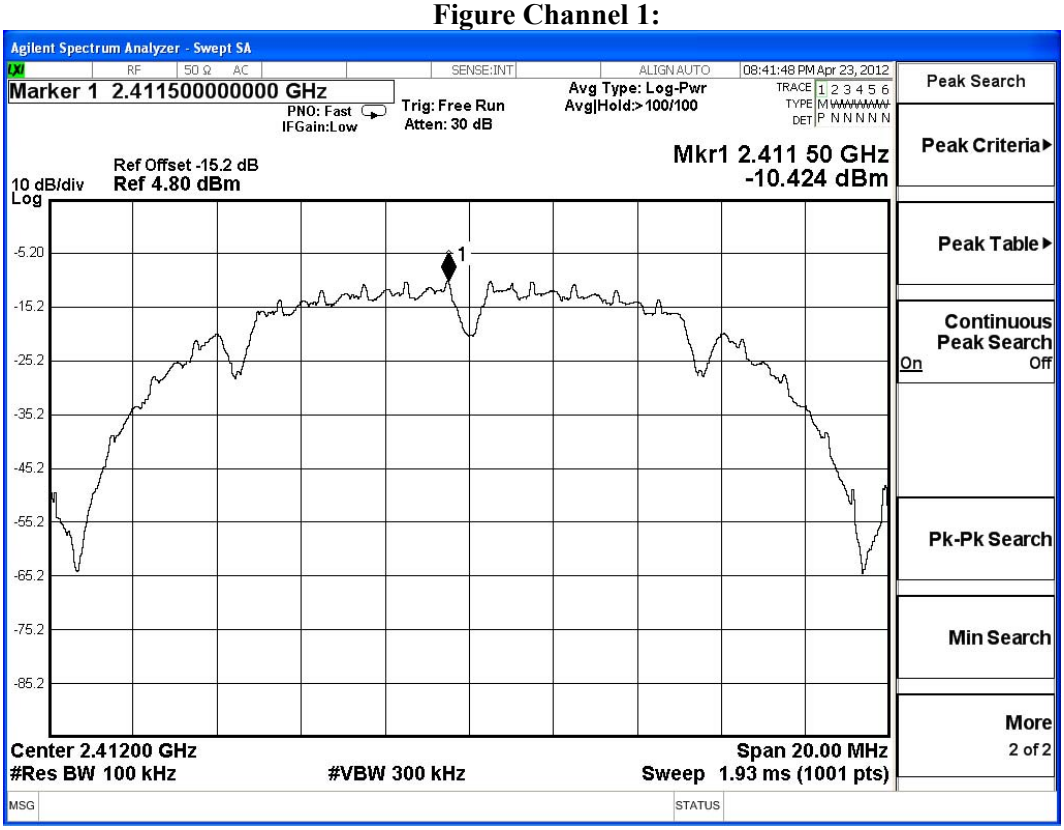
± 1.27 dB

8.6. Test Result of Power Density

Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412.00	-10.424	< 8dBm	Pass

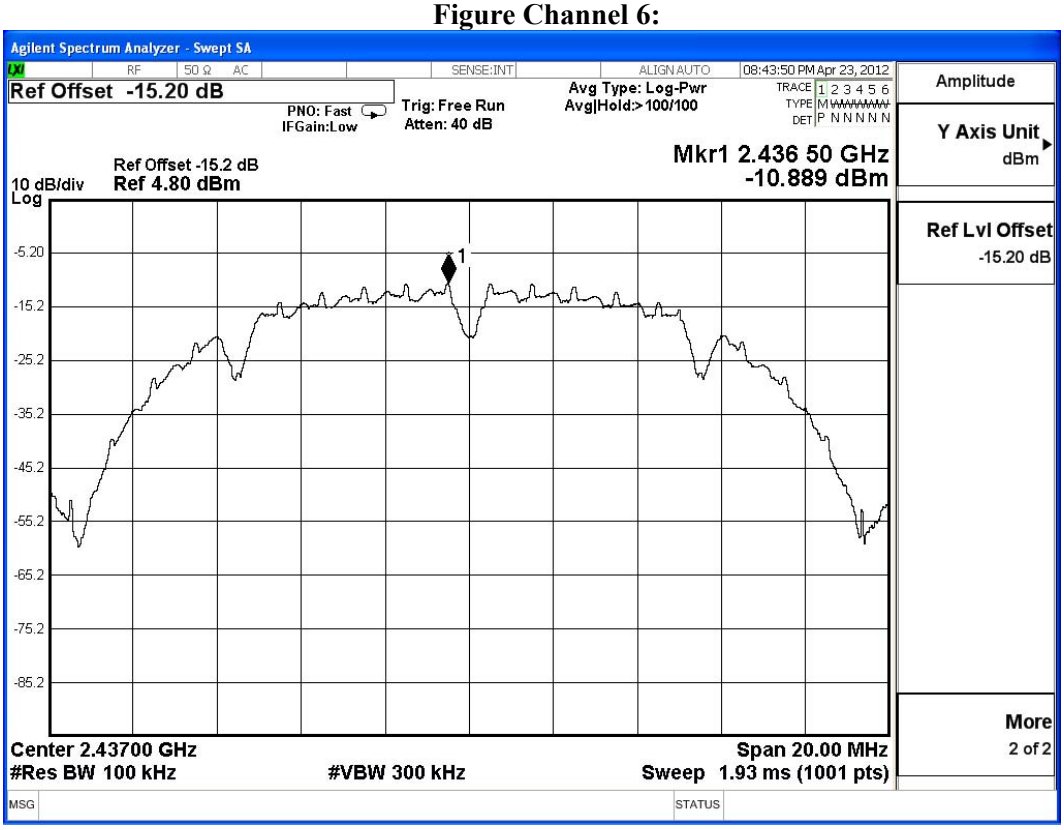
Figure Channel 1:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437.000	-10.889	< 8dBm	Pass

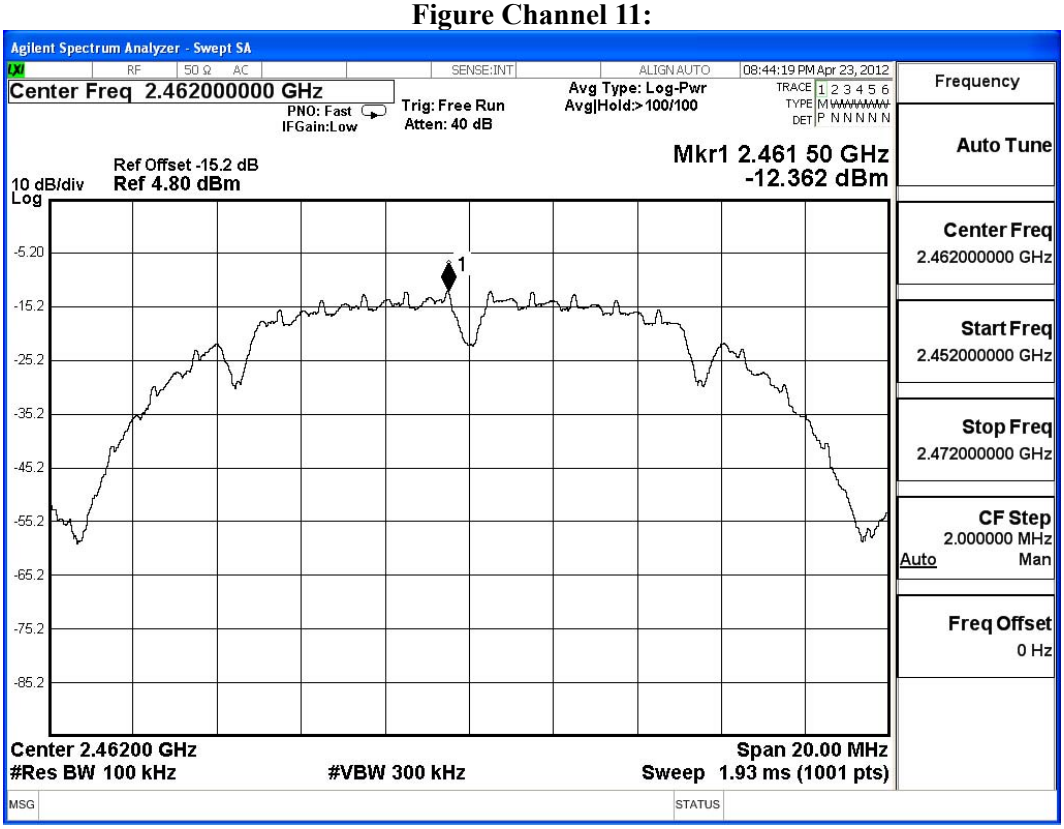
Figure Channel 6:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462.00	-12.362	< 8dBm	Pass

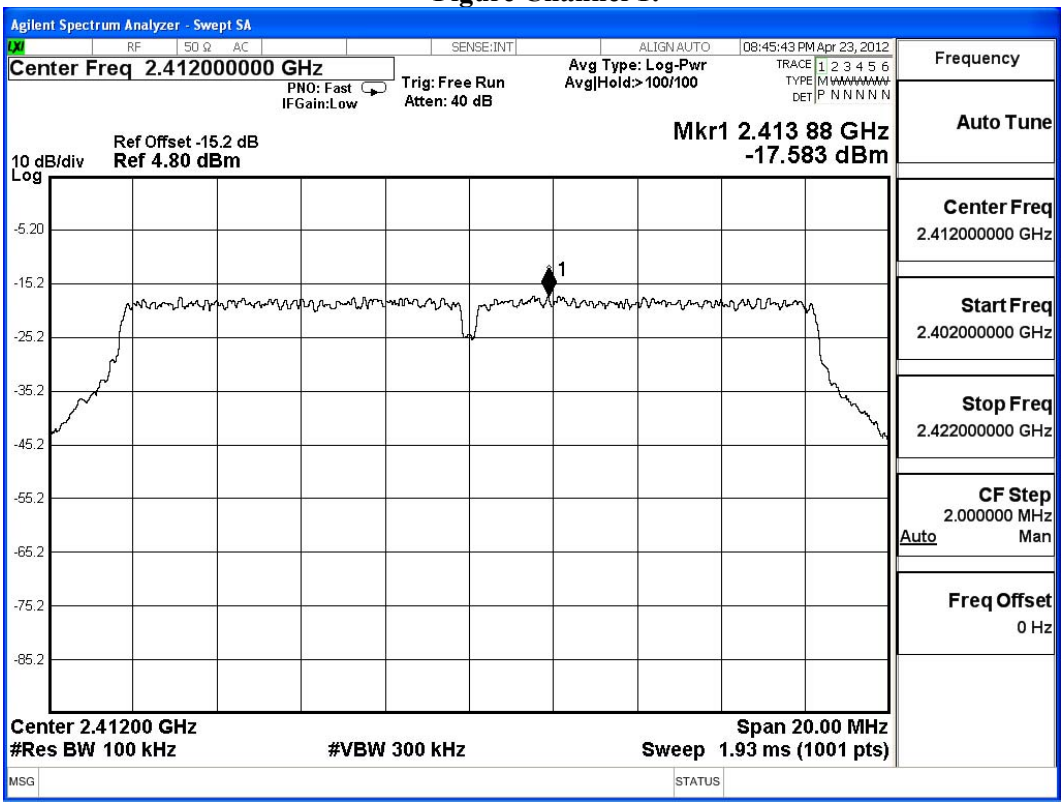
Figure Channel 11:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412.00	-17.583	< 8dBm	Pass

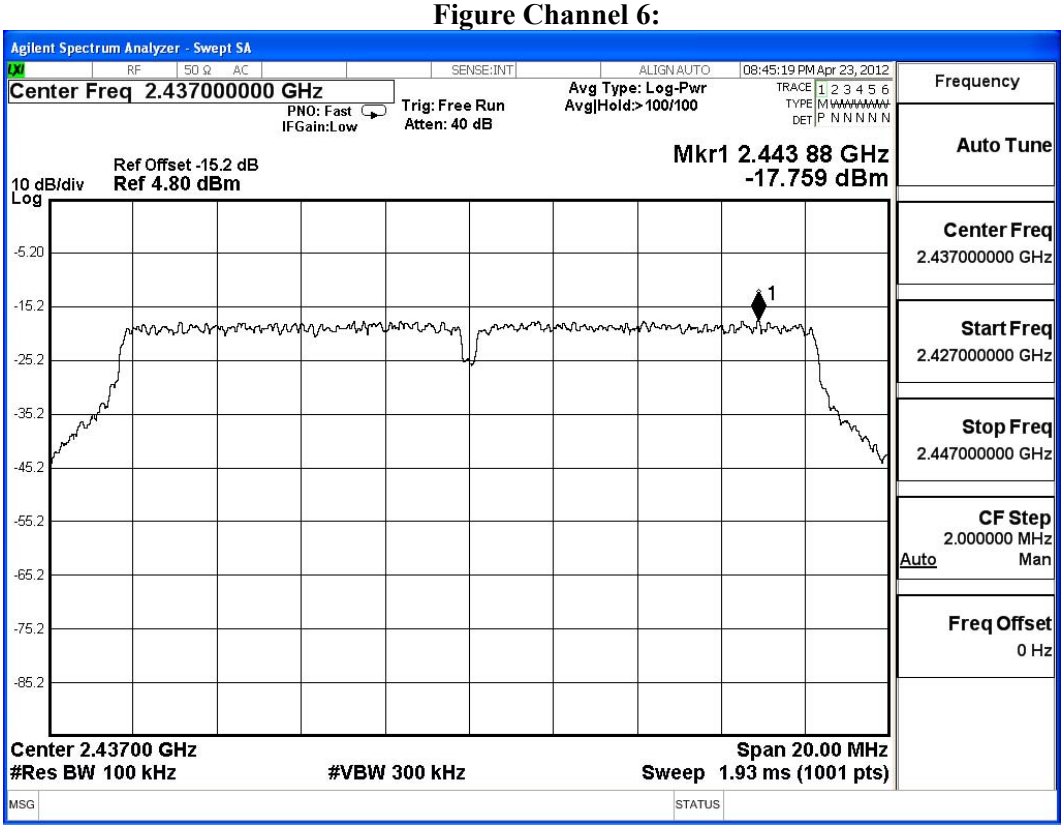
Figure Channel 1:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437.000	-17.759	< 8dBm	Pass

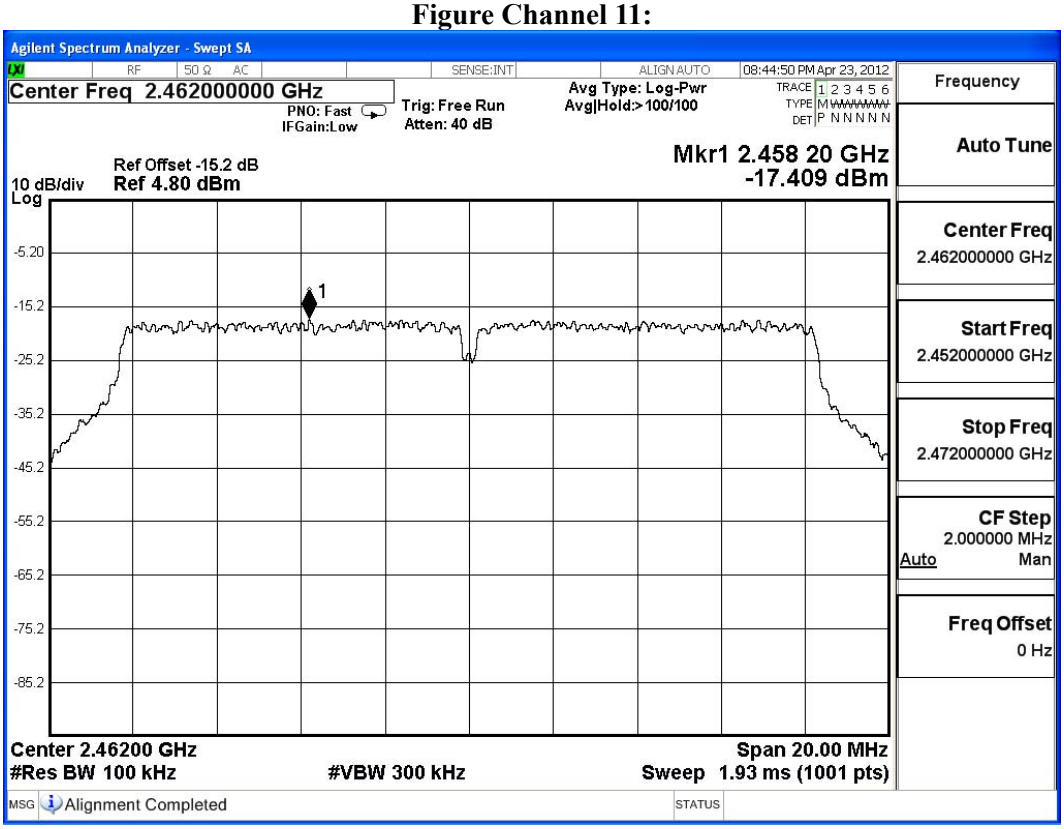
Figure Channel 6:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462.00	-17.409	< 8dBm	Pass

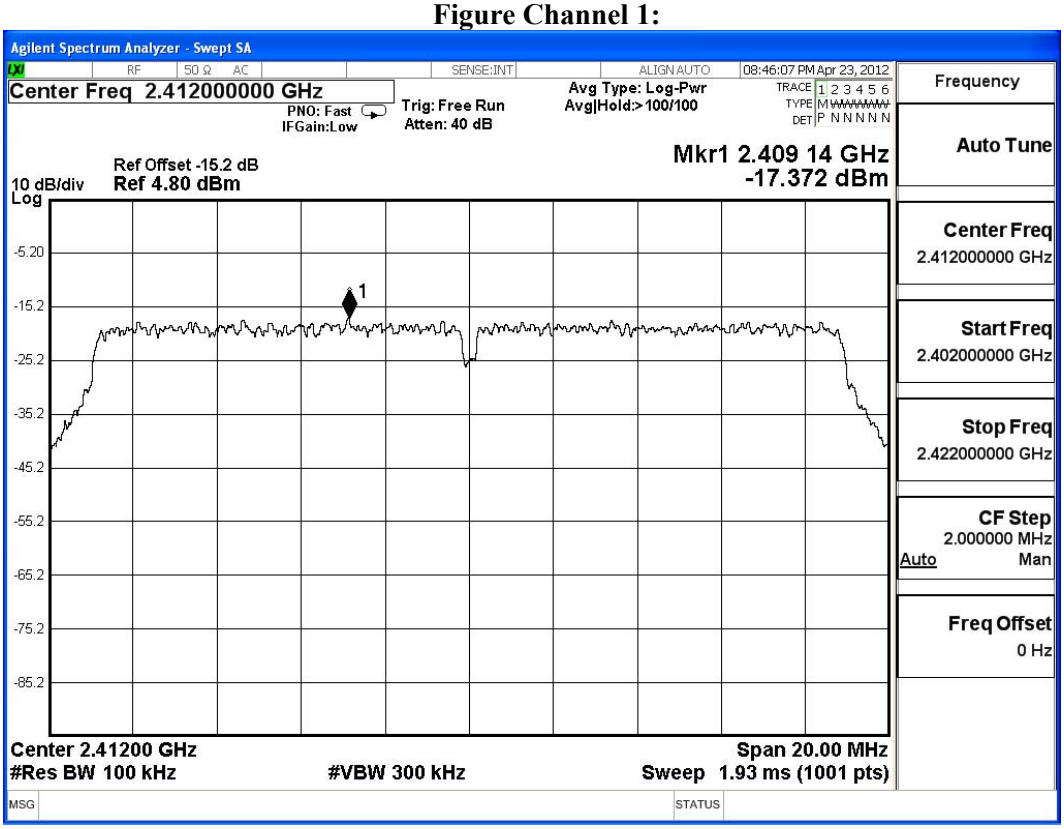
Figure Channel 11:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
1	2412.00	-17.372	< 8dBm	Pass

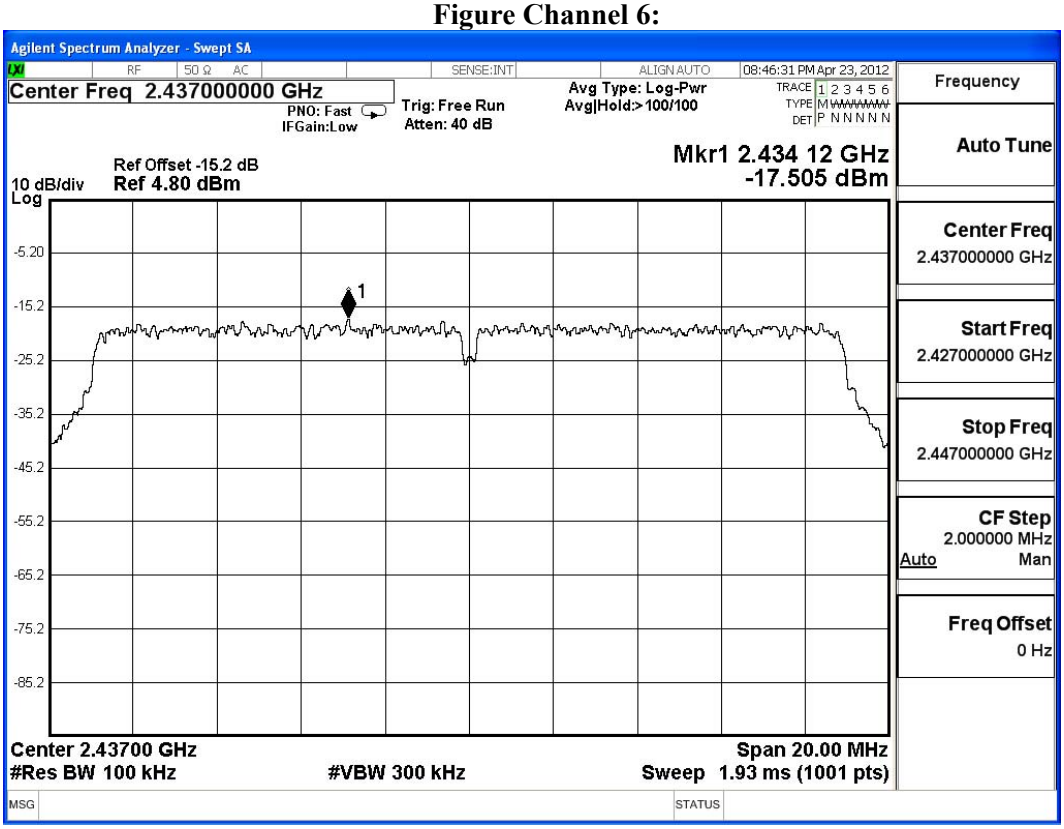
Figure Channel 1:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 3: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
6	2437.00	-17.505	< 8dBm	Pass

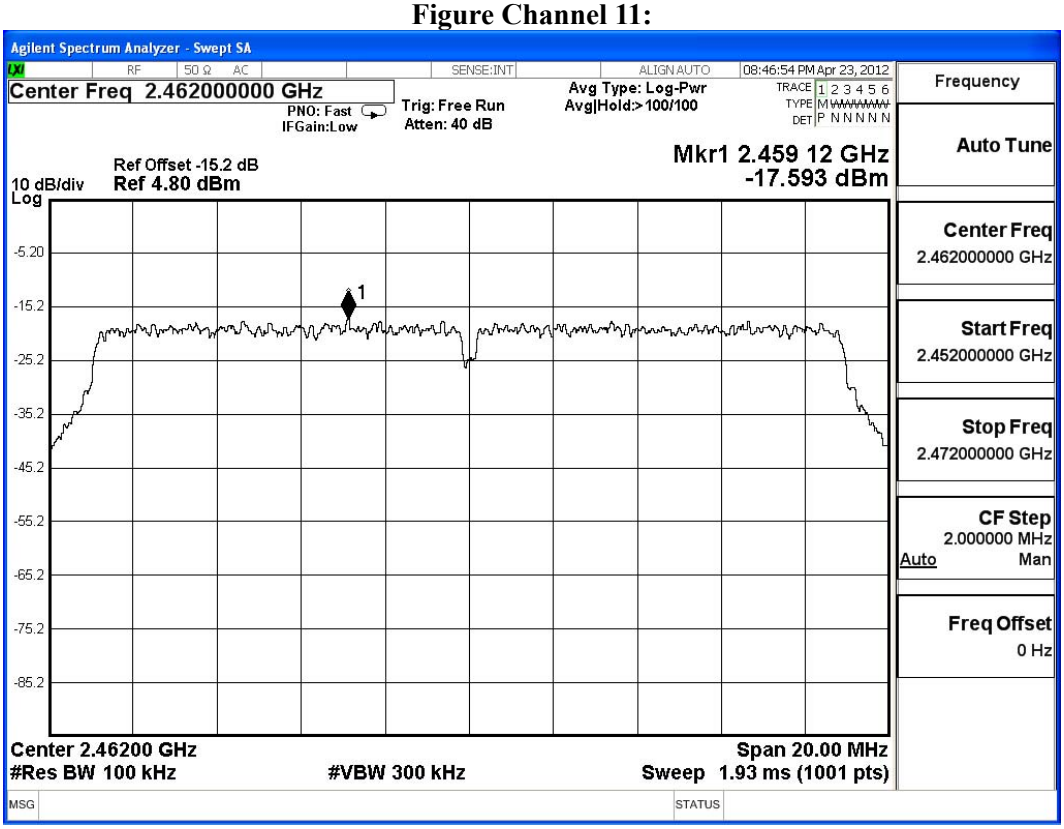
Figure Channel 6:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
11	2462.00	-17.593	< 8dBm	Pass

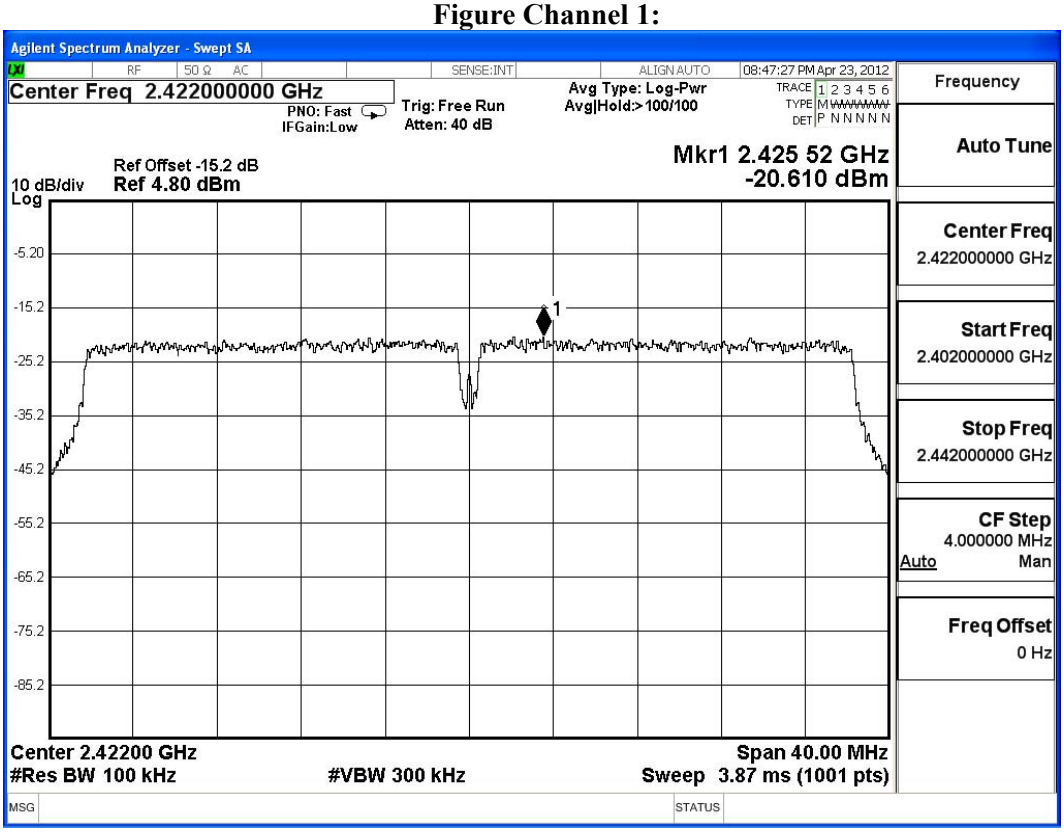
Figure Channel 11:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
1	2422.00	-20.610	< 8dBm	Pass

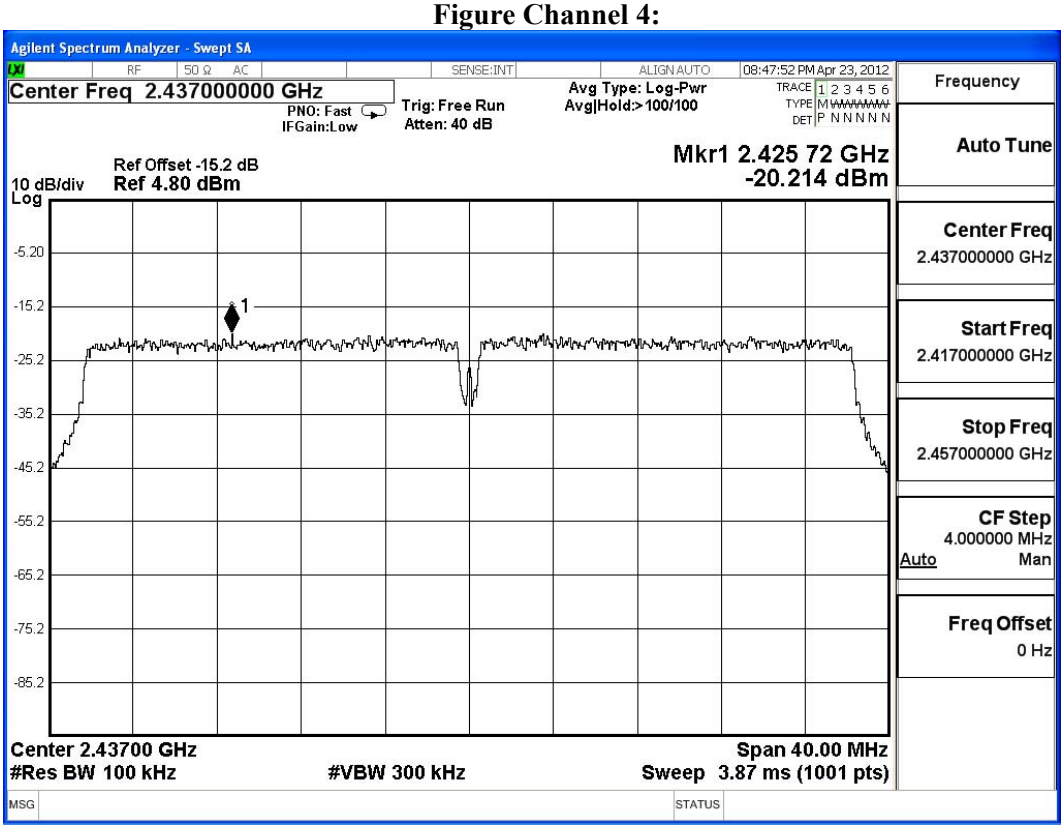
Figure Channel 1:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 4: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
4	2437.00	-20.214	< 8dBm	Pass

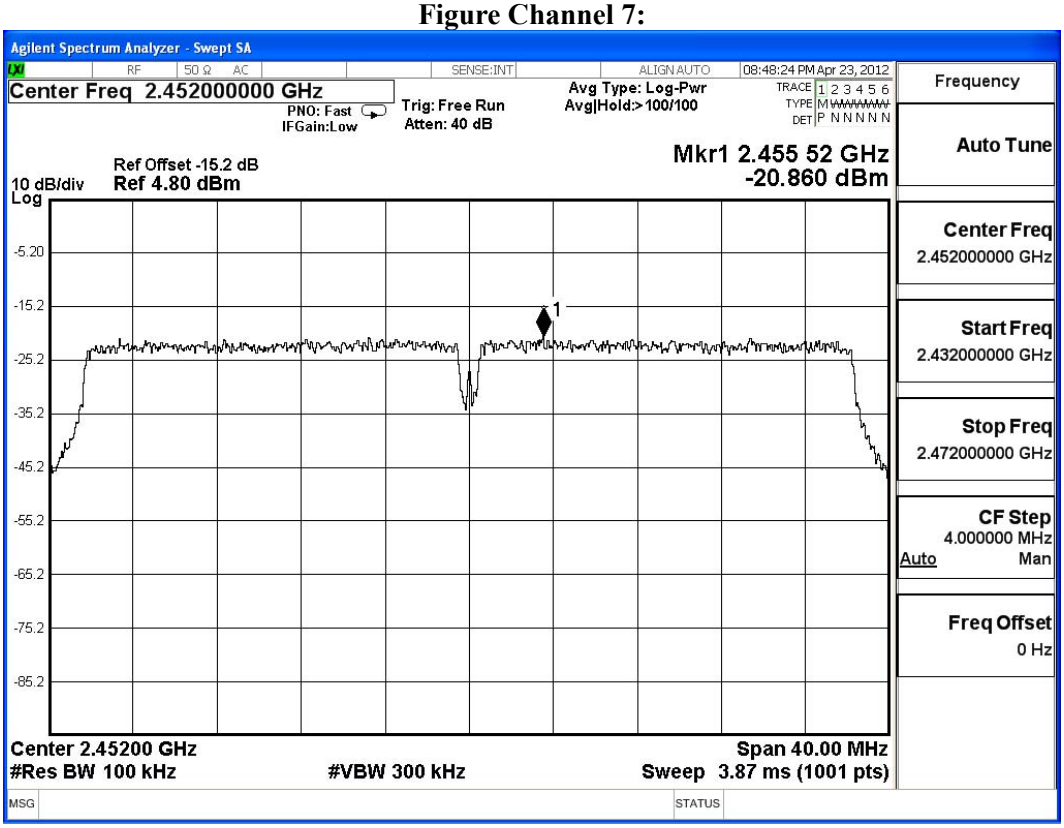
Figure Channel 4:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452MHz) -MCU 162MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
7	2452.00	-20.860	< 8dBm	Pass

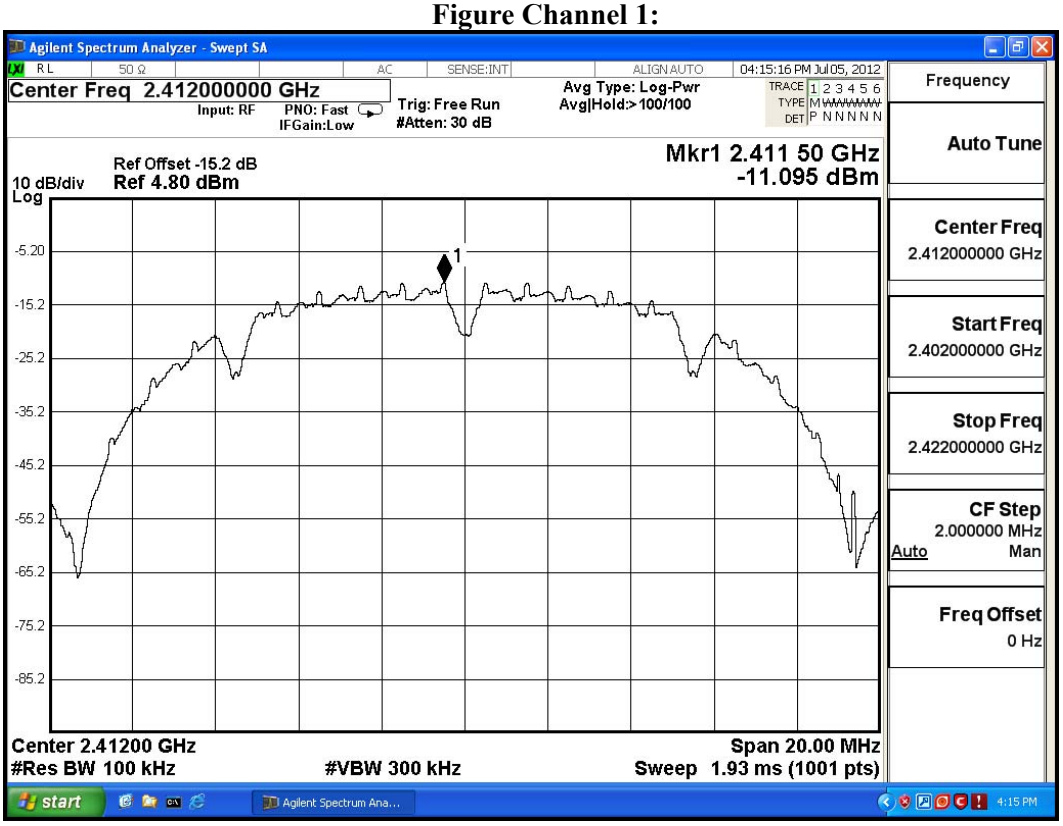
Figure Channel 7:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2412MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412.00	-11.095	< 8dBm	Pass

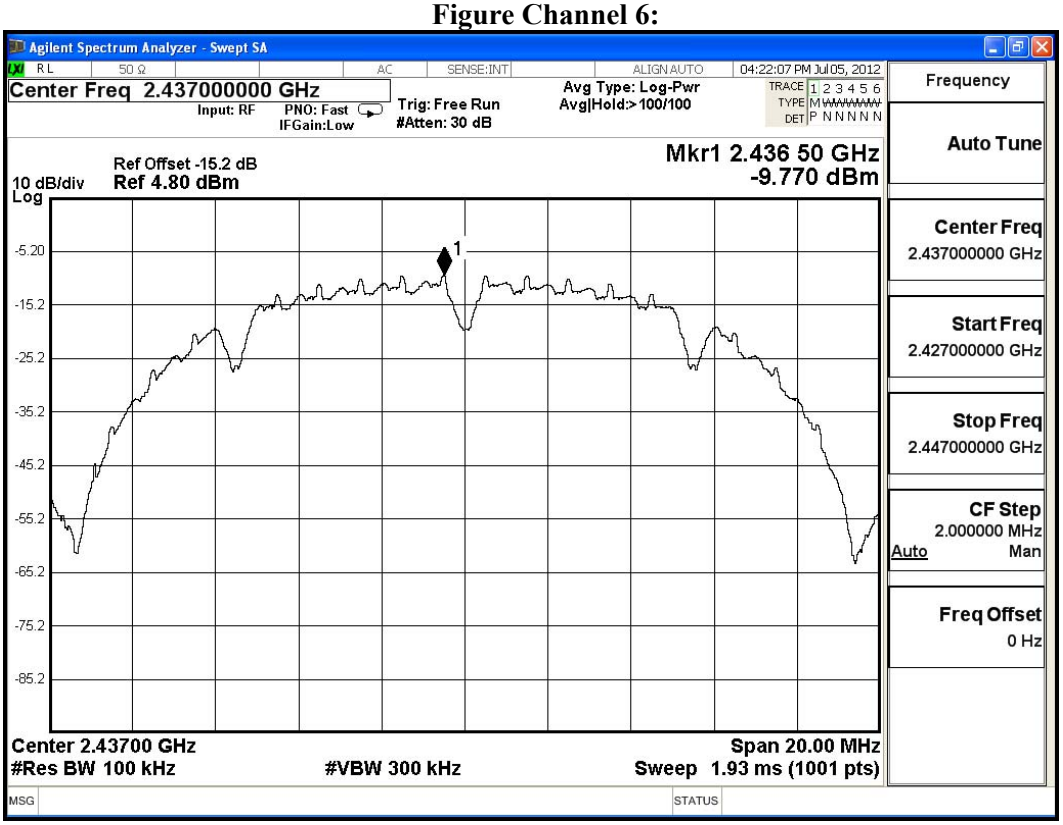
Figure Channel 1:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2437MHz) - MCU 166MHz

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437.000	-9.770	< 8dBm	Pass

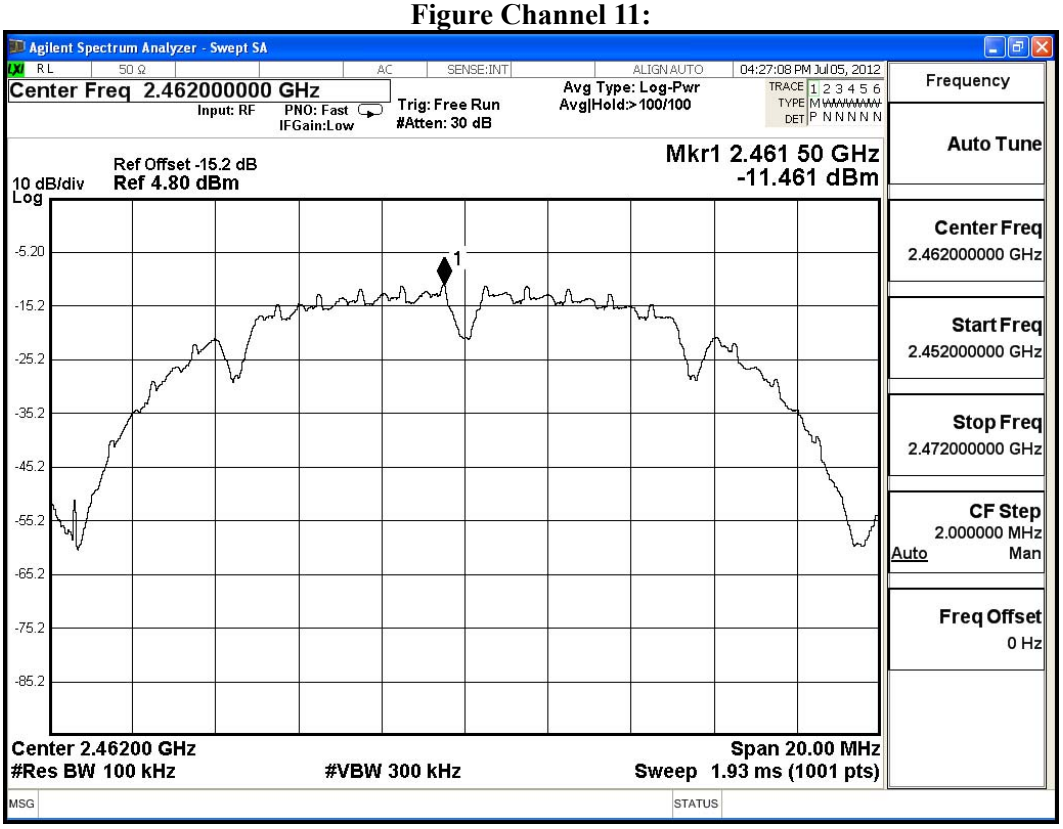
Figure Channel 6:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmit (802.11b 1Mbps) (2462MHz) - MCU 166MHz

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462.00	-11.461	< 8dBm	Pass

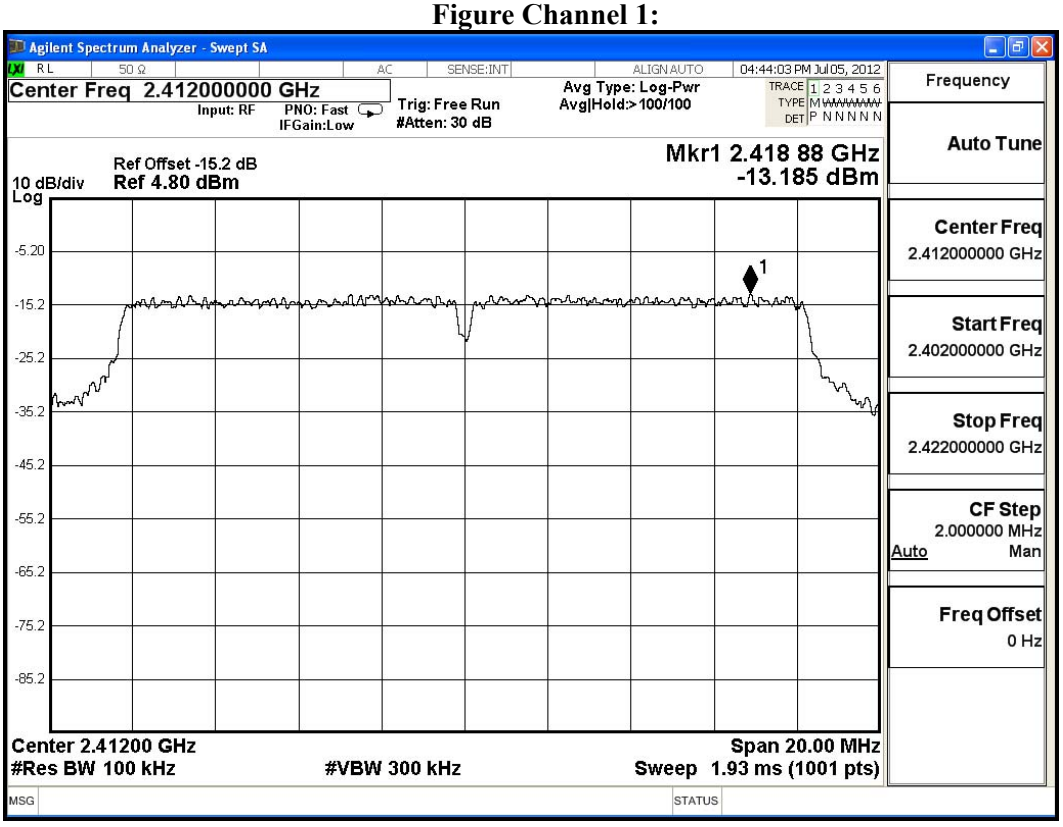
Figure Channel 11:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2412MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412.00	-13.185	< 8dBm	Pass

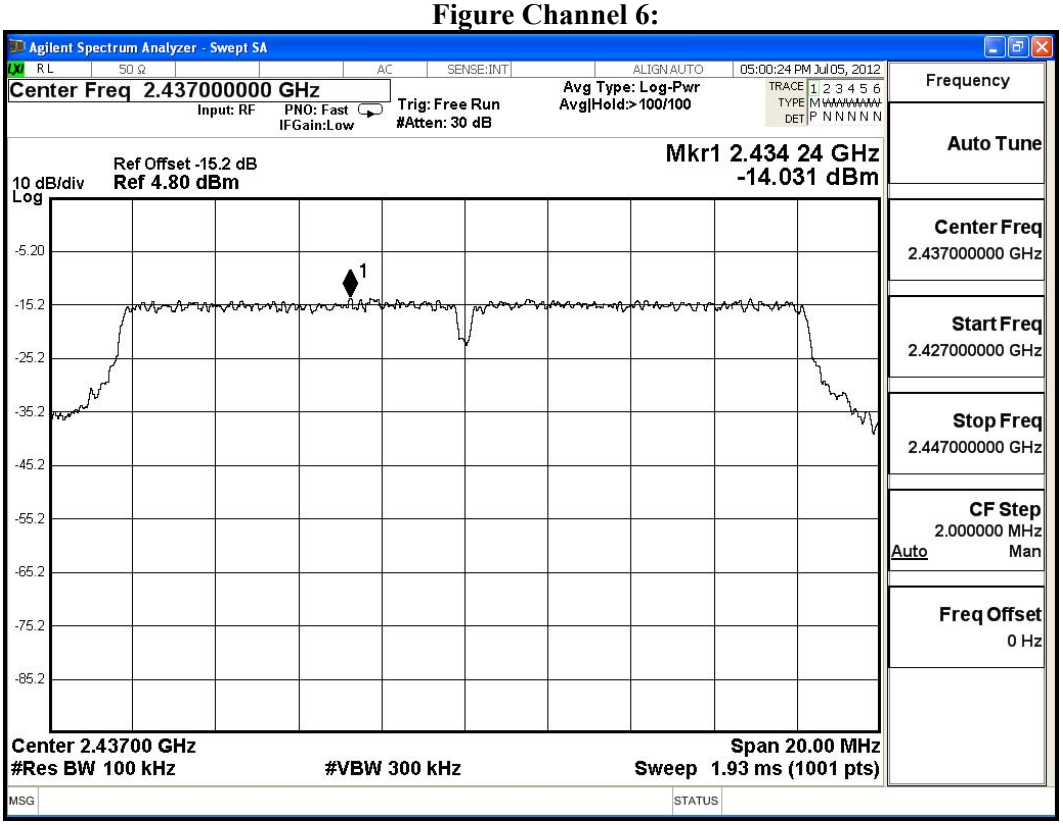
Figure Channel 1:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2437MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437.000	-14.031	< 8dBm	Pass

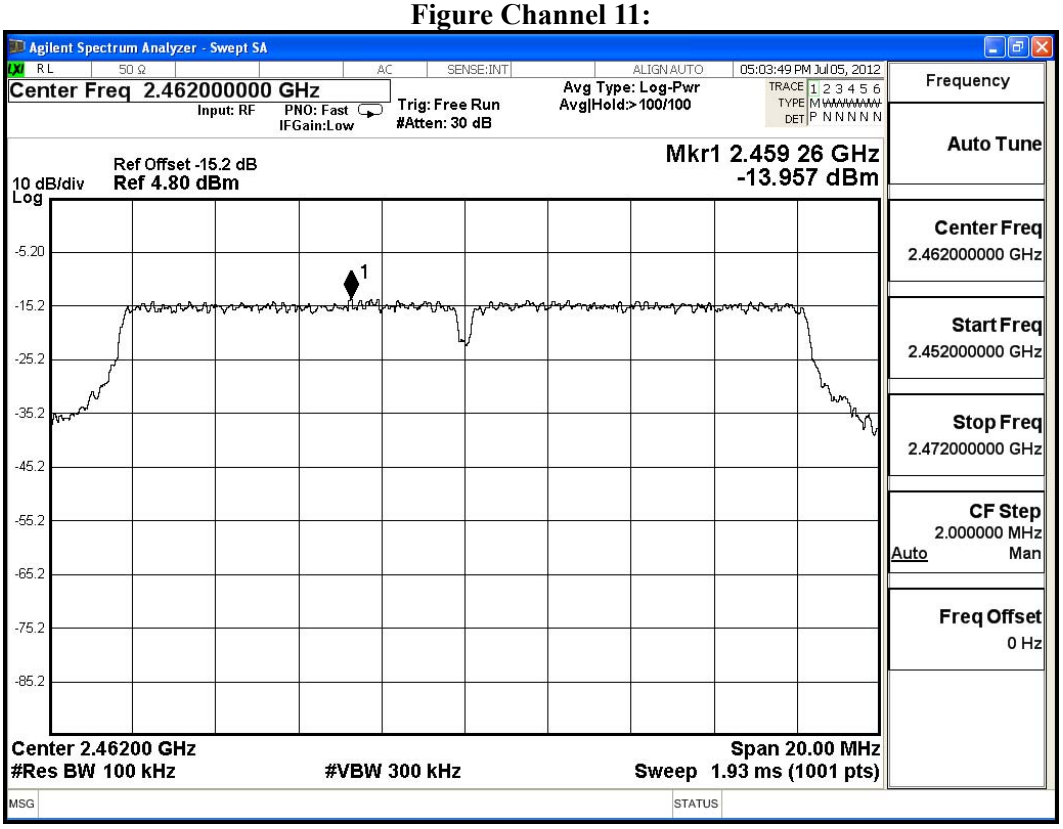
Figure Channel 6:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmit (802.11g 6Mbps) (2462MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462.00	-13.957	< 8dBm	Pass

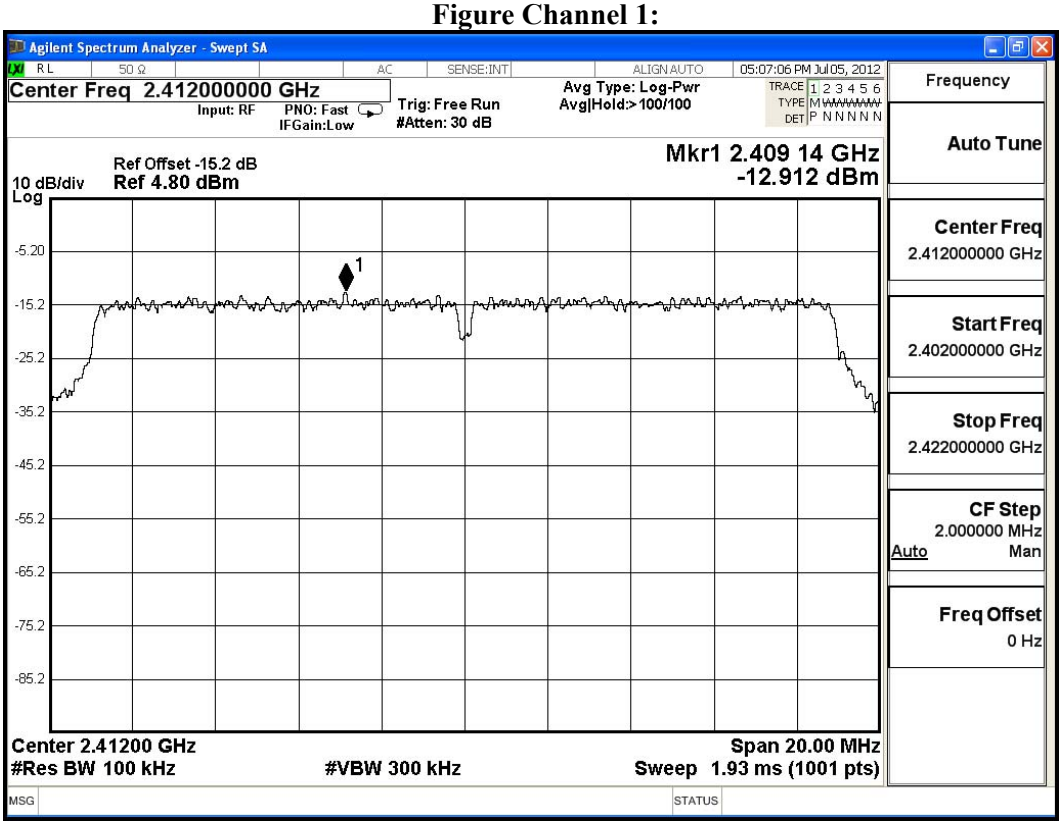
Figure Channel 11:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
1	2412.00	-12.912	< 8dBm	Pass

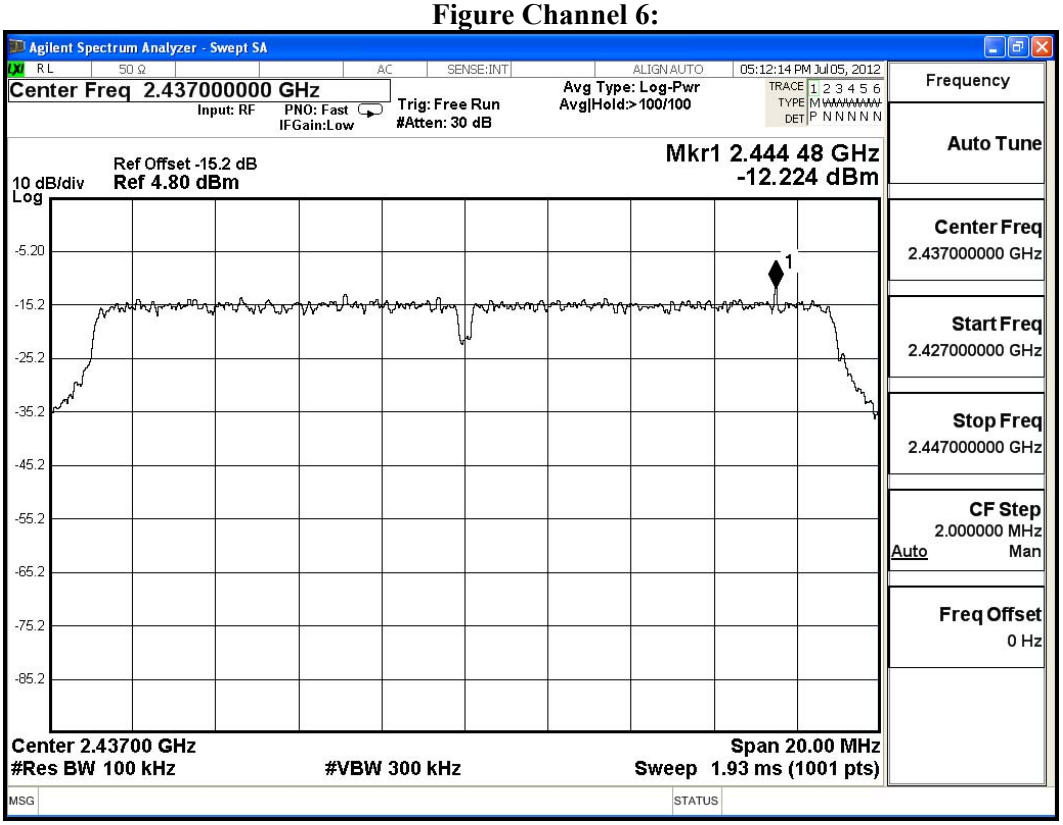
Figure Channel 1:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 3: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
6	2437.00	-12.224	< 8dBm	Pass

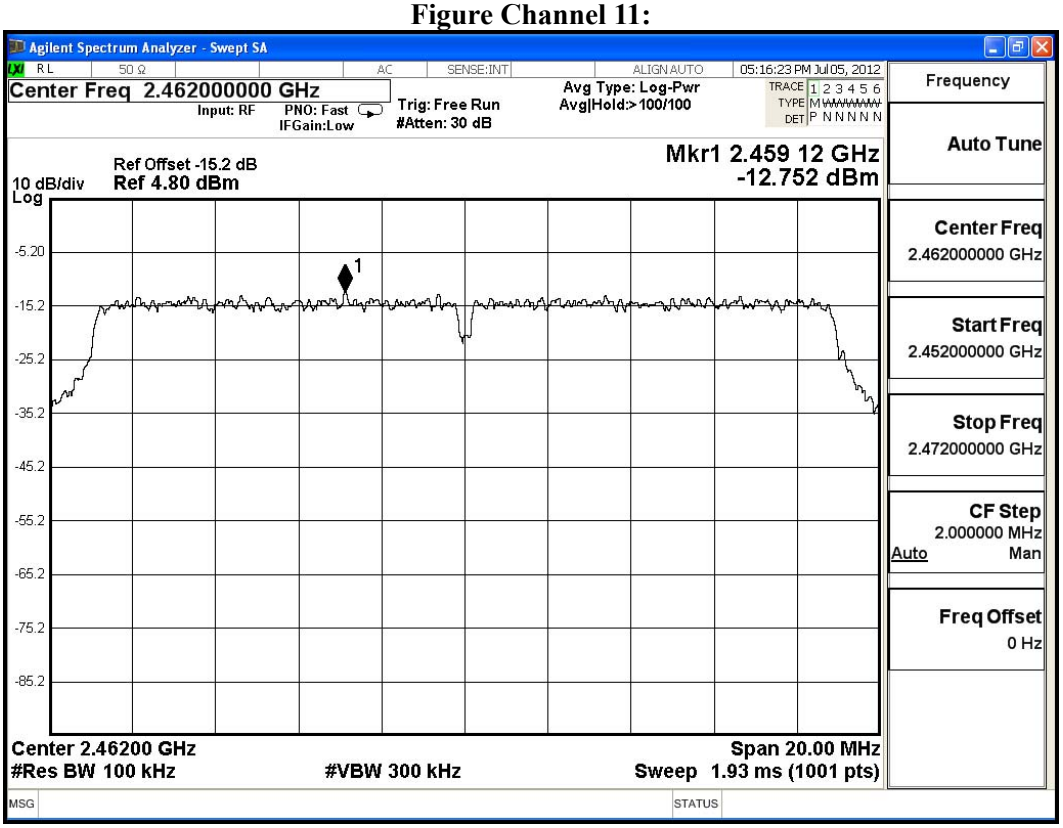
Figure Channel 6:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
11	2462.00	-12.752	< 8dBm	Pass

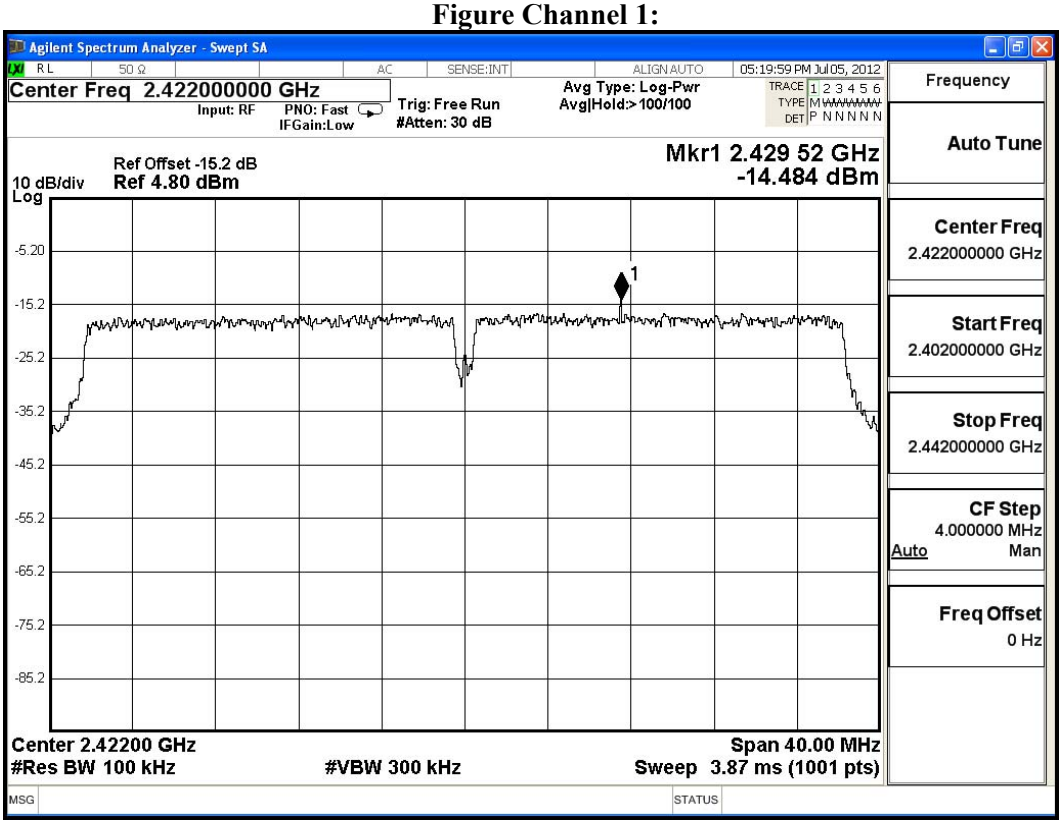
Figure Channel 11:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
1	2422.00	-14.484	< 8dBm	Pass

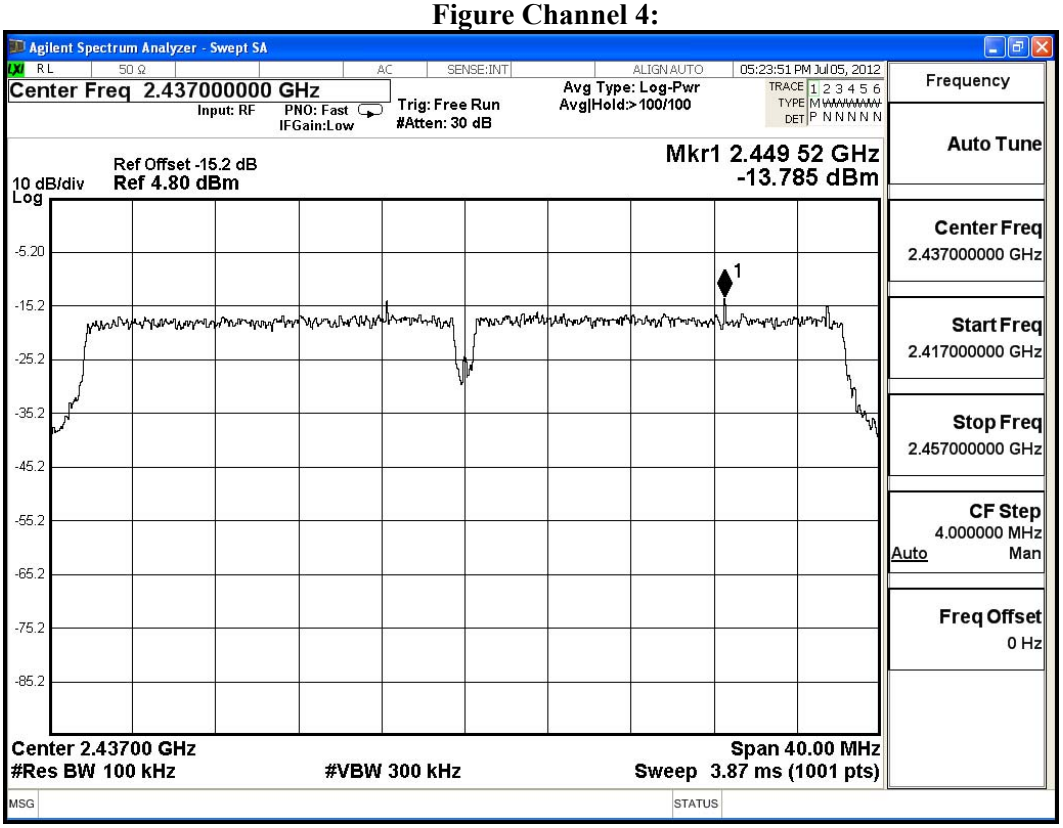
Figure Channel 1:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 4: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
4	2437.00	-13.785	< 8dBm	Pass

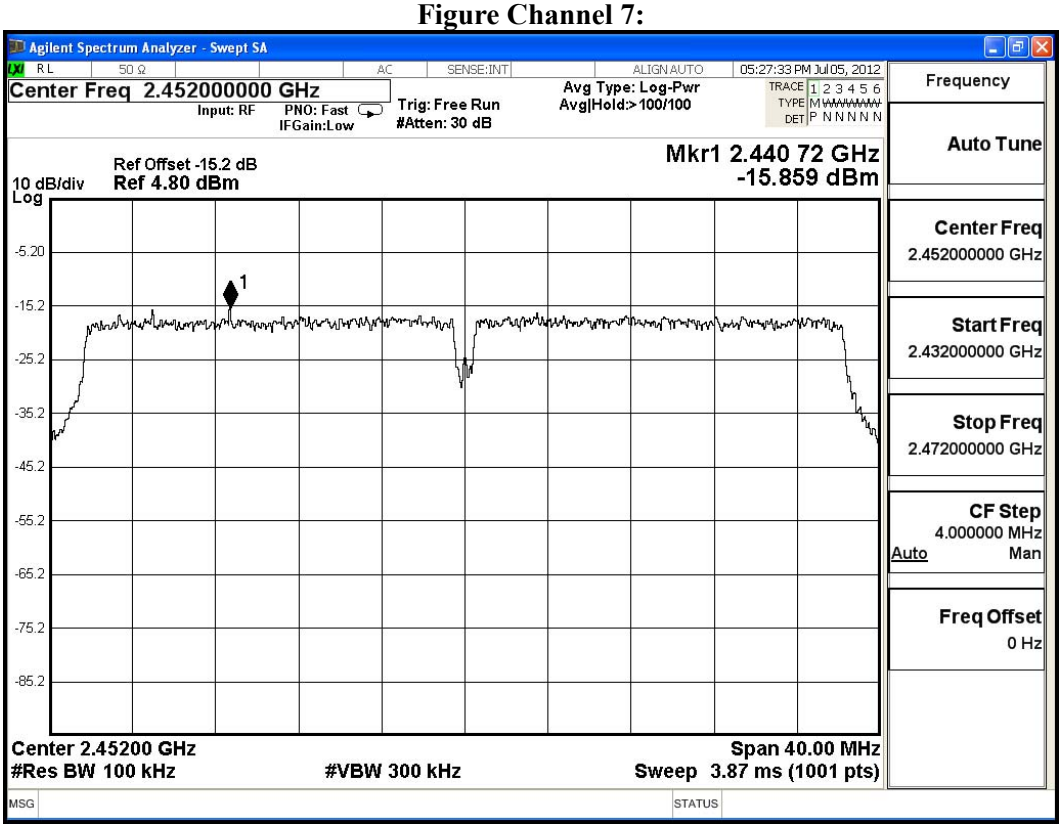
Figure Channel 4:



Product : Play-Fi Receiver
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452MHz) -MCU 166MHz

Channel No.	Frequency (MHz)	Power (dBm)	Limit (dBm)	Result
7	2452.00	-15.859	< 8dBm	Pass

Figure Channel 7:



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.