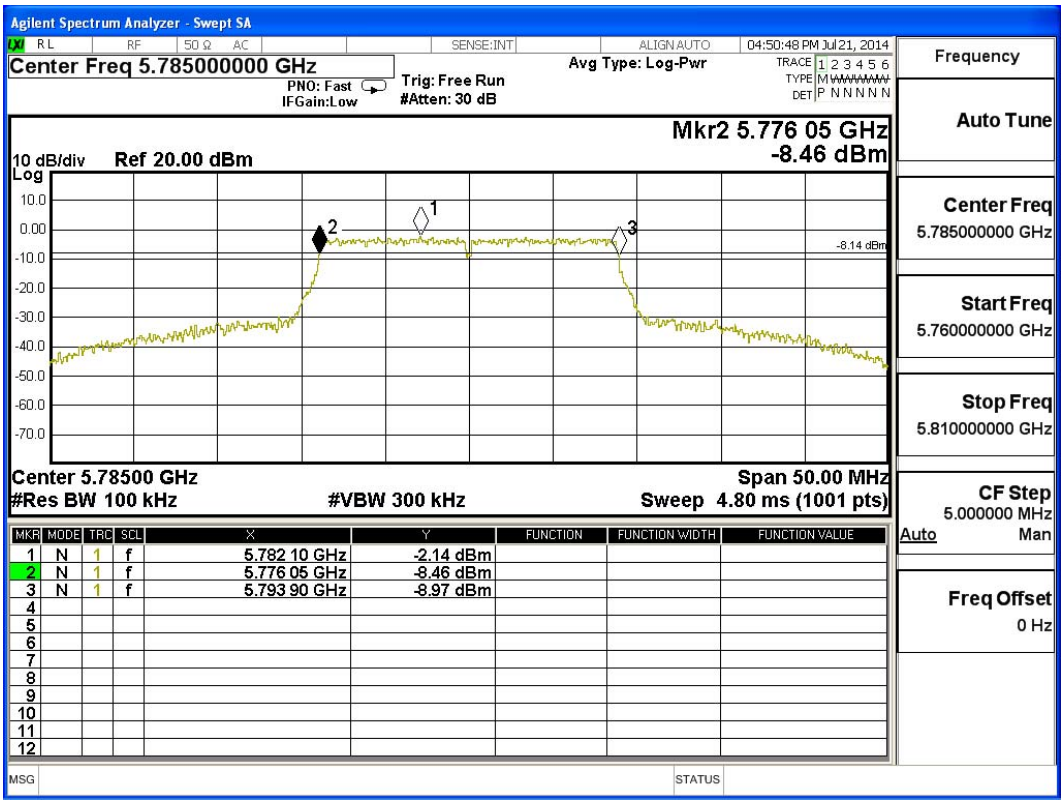
Product : Play-Fi Wireless Speaker
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17850	>500	Pass

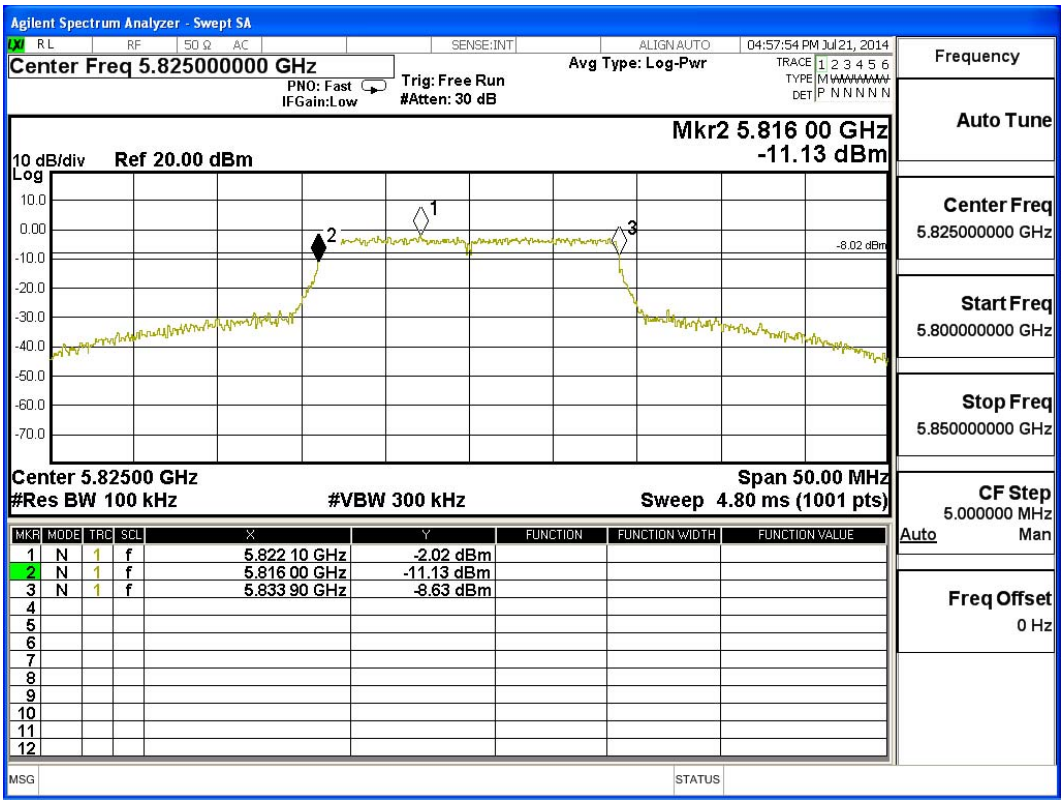
Figure Channel 157:



Product : Play-Fi Wireless Speaker
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17900	>500	Pass

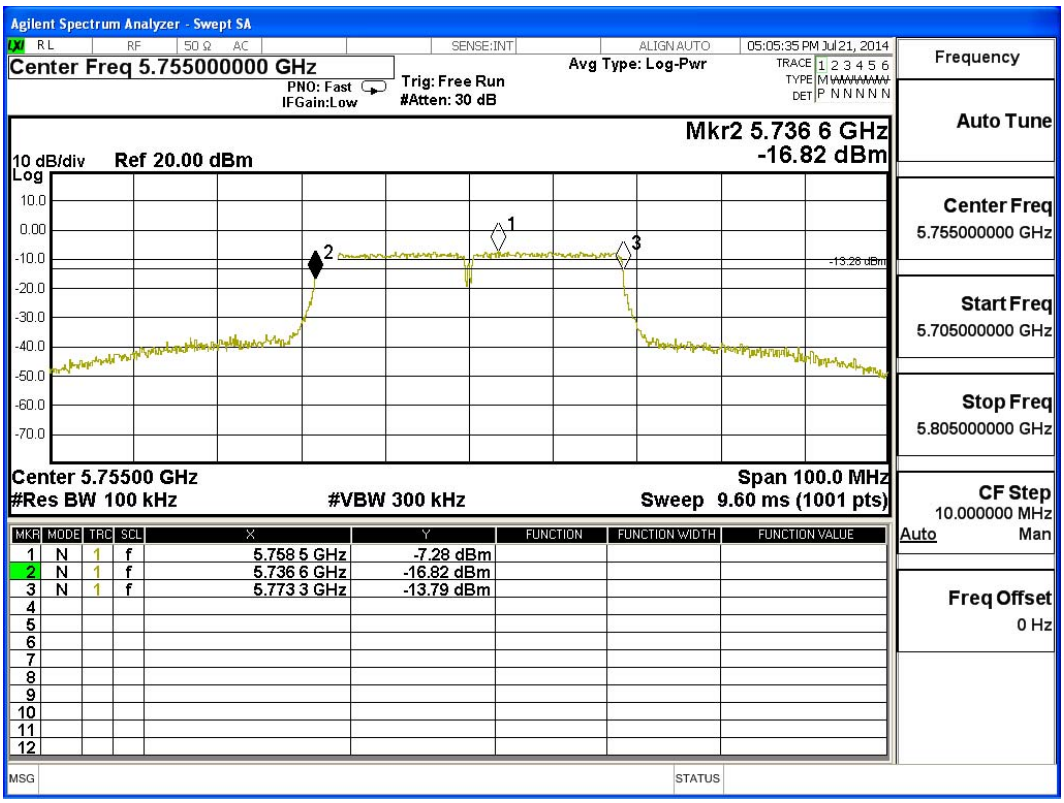
Figure Channel 165:



Product : Play-Fi Wireless Speaker
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36700	>500	Pass

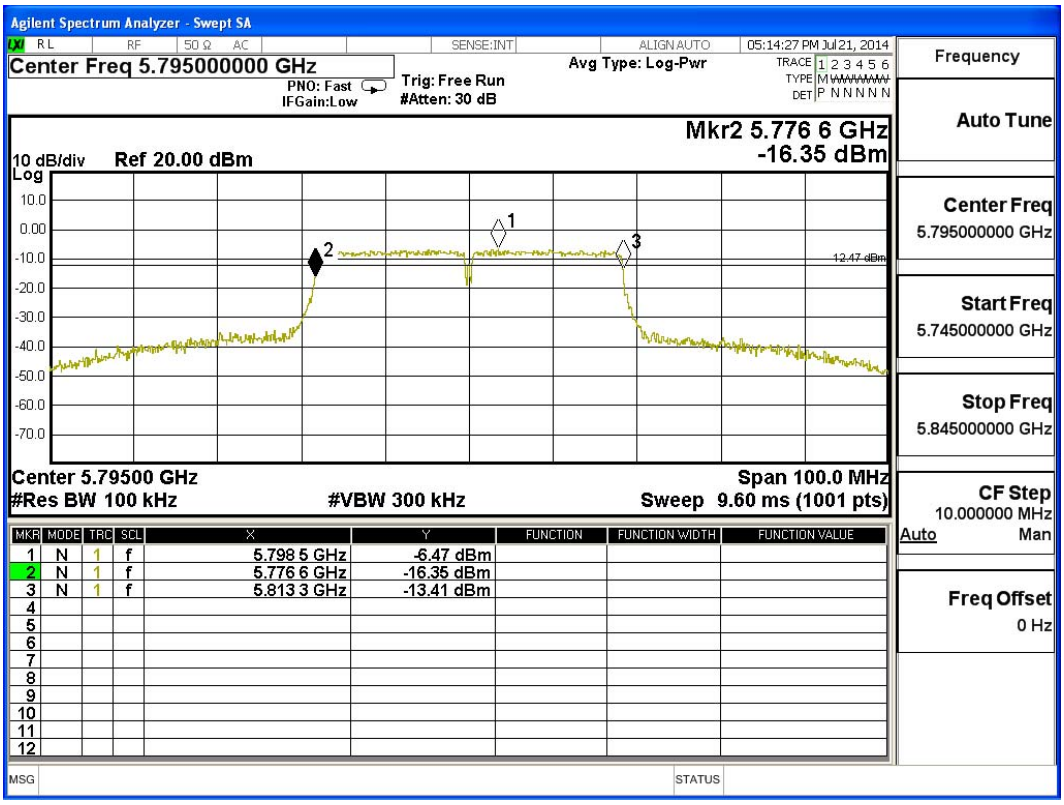
Figure Channel 151:



Product : Play-Fi Wireless Speaker
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5795MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36700	>500	Pass

Figure Channel 159:



8. Power Density

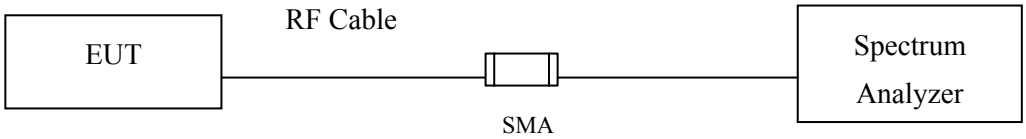
8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
X	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

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 C63.10, 2009; tested according to DTS test procedure of KDB 558074 for compliance to FCC 47CFR 15.247 requirements.
The maximum power spectral density using KDB 558074 section 10.2 PKPSD (peak PSD) method.

8.5. Uncertainty

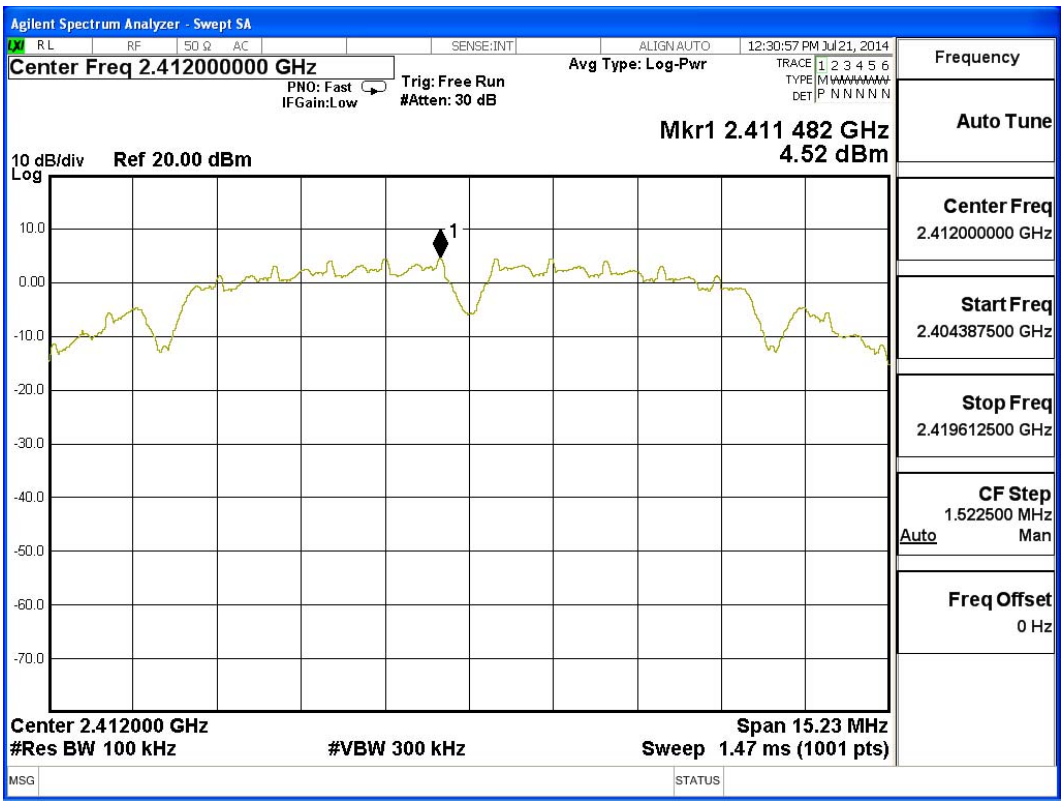
± 1.27 dB

8.6. Test Result of Power Density

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

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412.00	4.520	< 8dBm	Pass

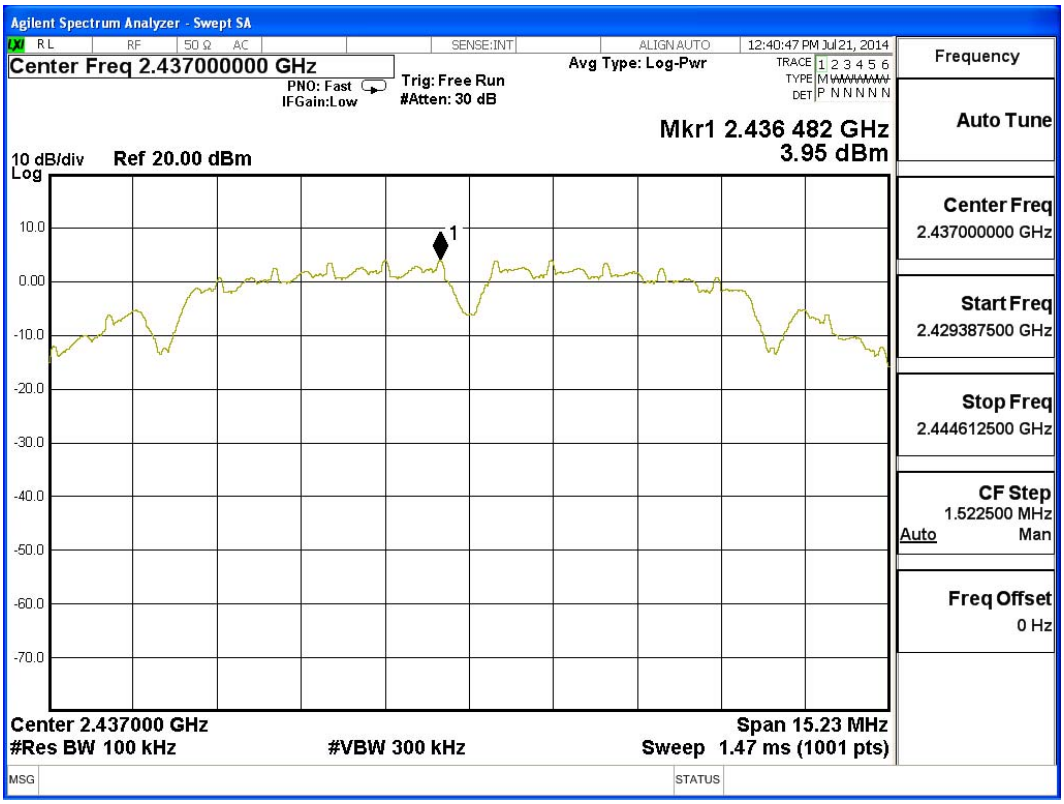
Figure Channel 1:



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

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437.000	3.950	< 8dBm	Pass

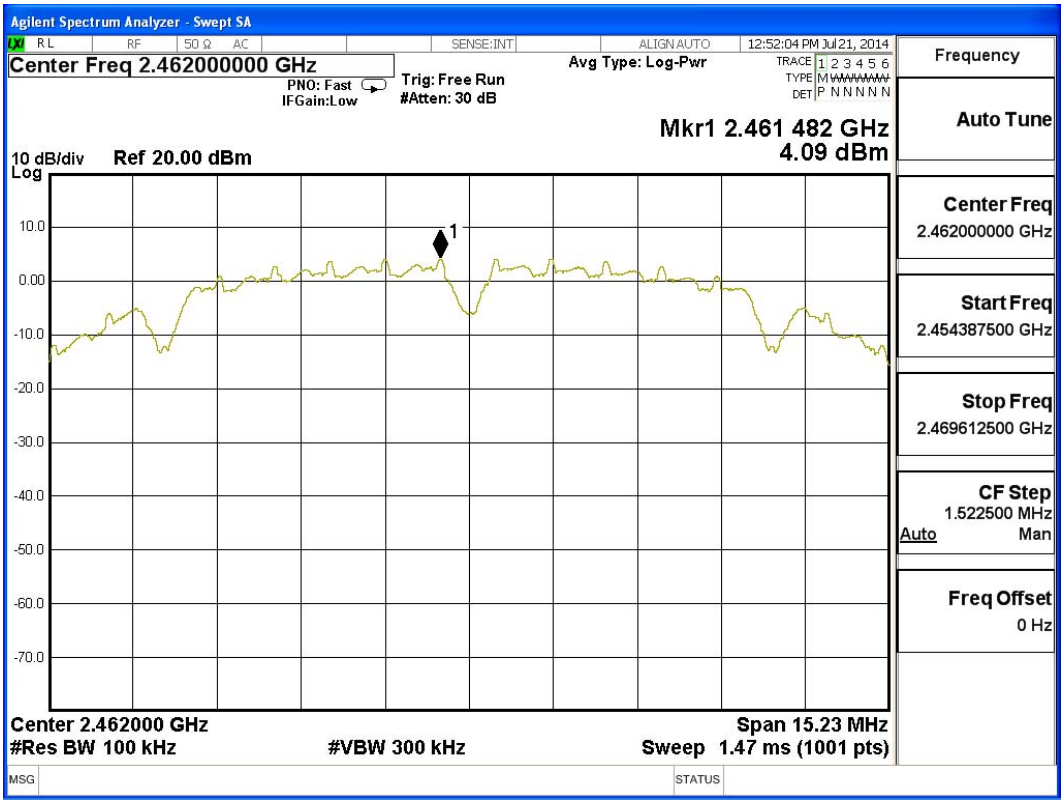
Figure Channel 6:



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

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462.00	4.090	< 8dBm	Pass

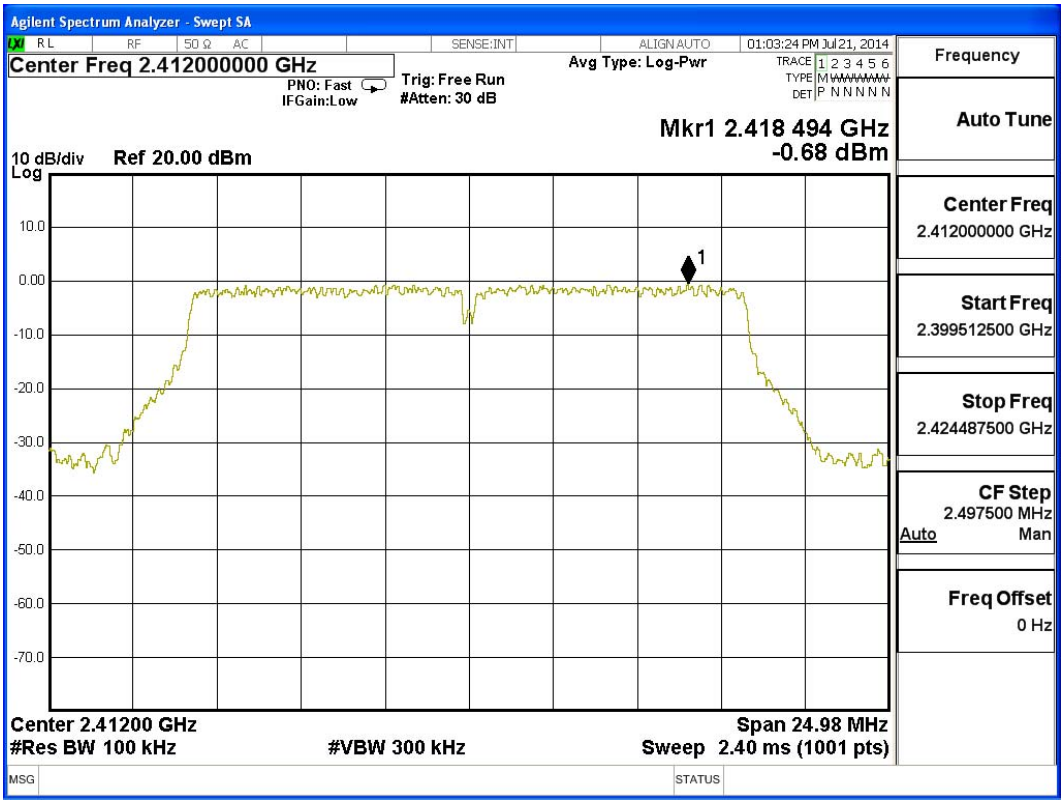
Figure Channel 11:



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

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412.00	-0.680	< 8dBm	Pass

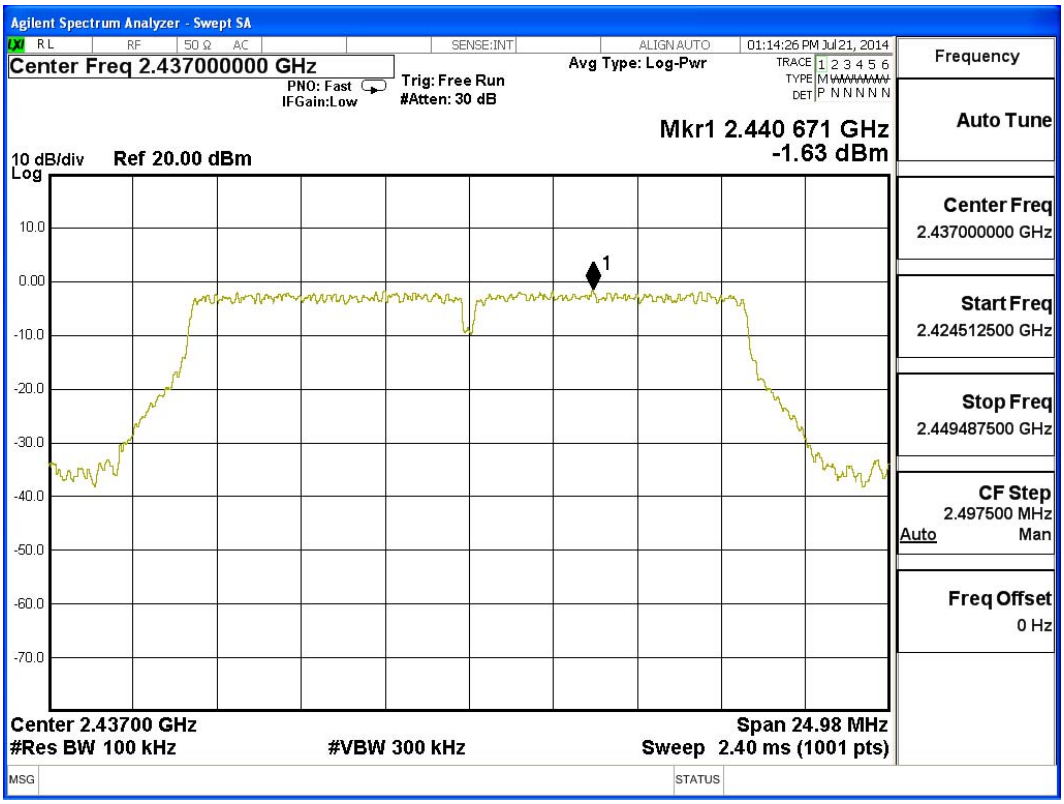
Figure Channel 1:



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

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437.000	-1.630	< 8dBm	Pass

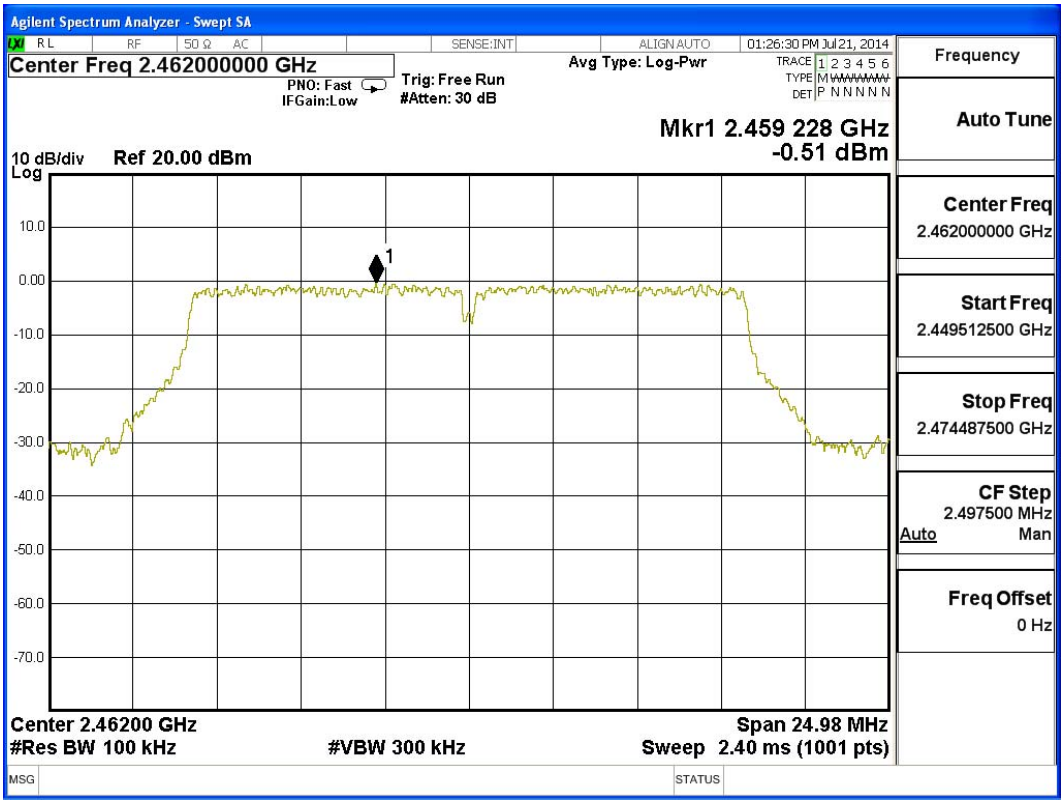
Figure Channel 6:



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

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462.00	-0.510	< 8dBm	Pass

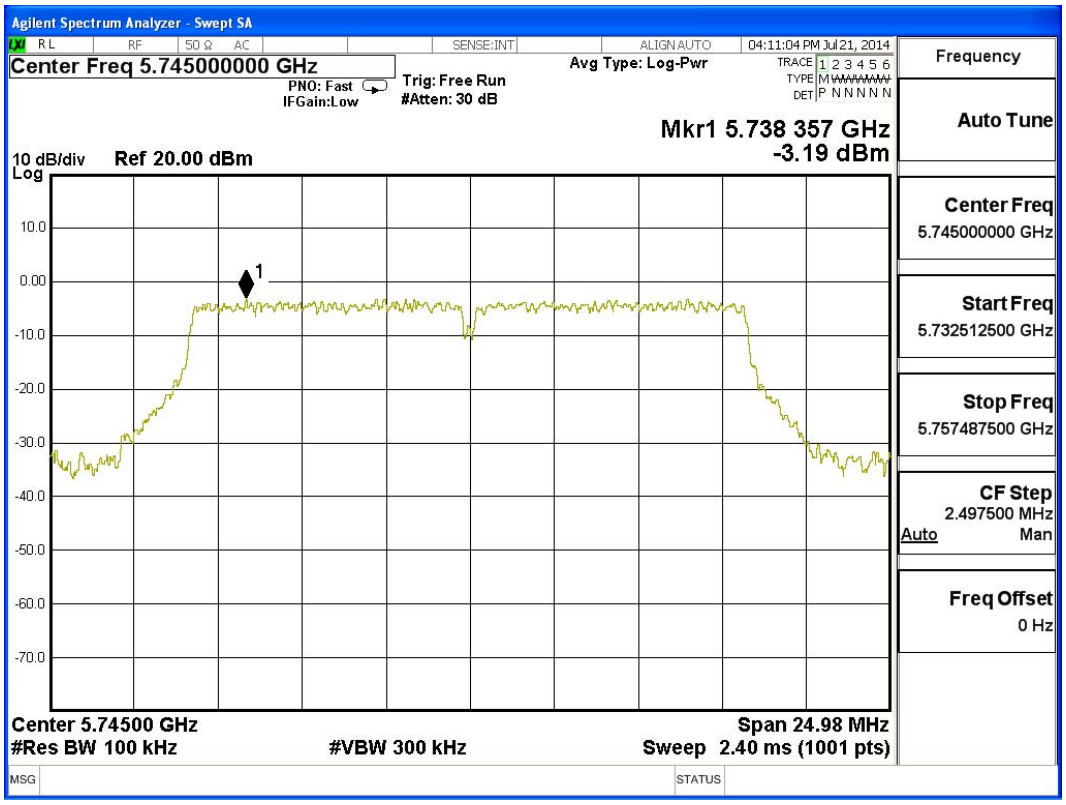
Figure Channel 11:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5745MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745.000	-3.190	< 8dBm	Pass

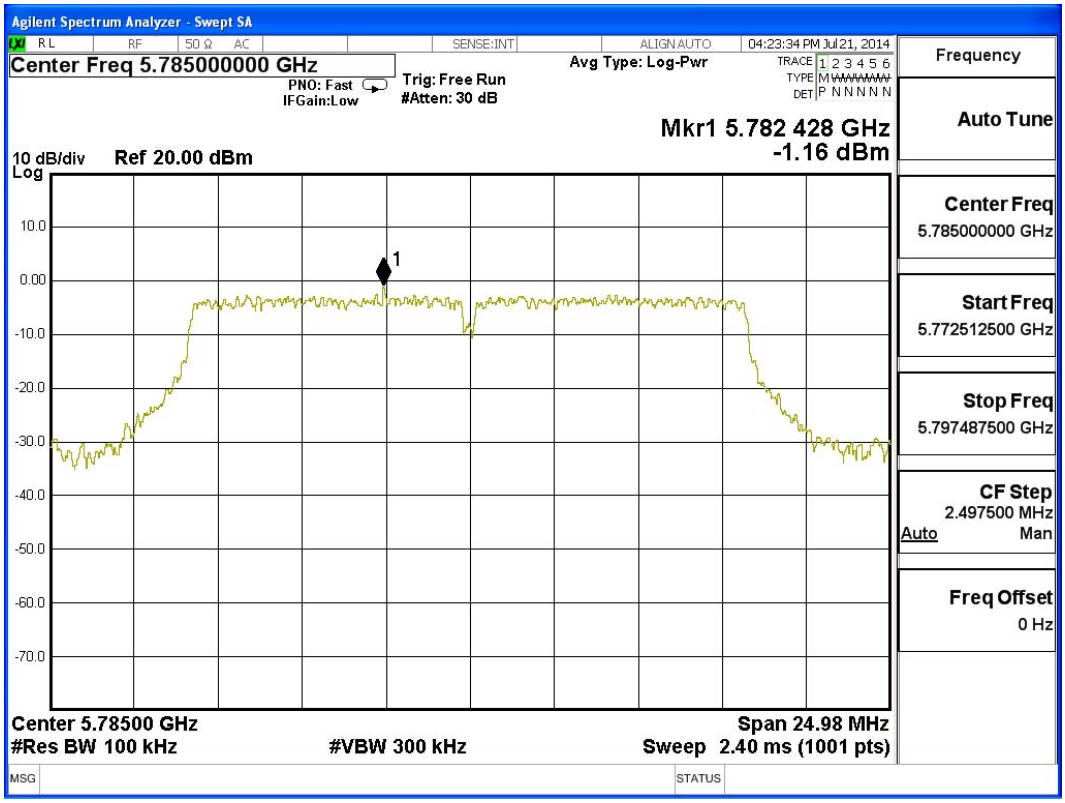
Figure Channel 149:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5785MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
157	5785.000	-1.160	< 8dBm	Pass

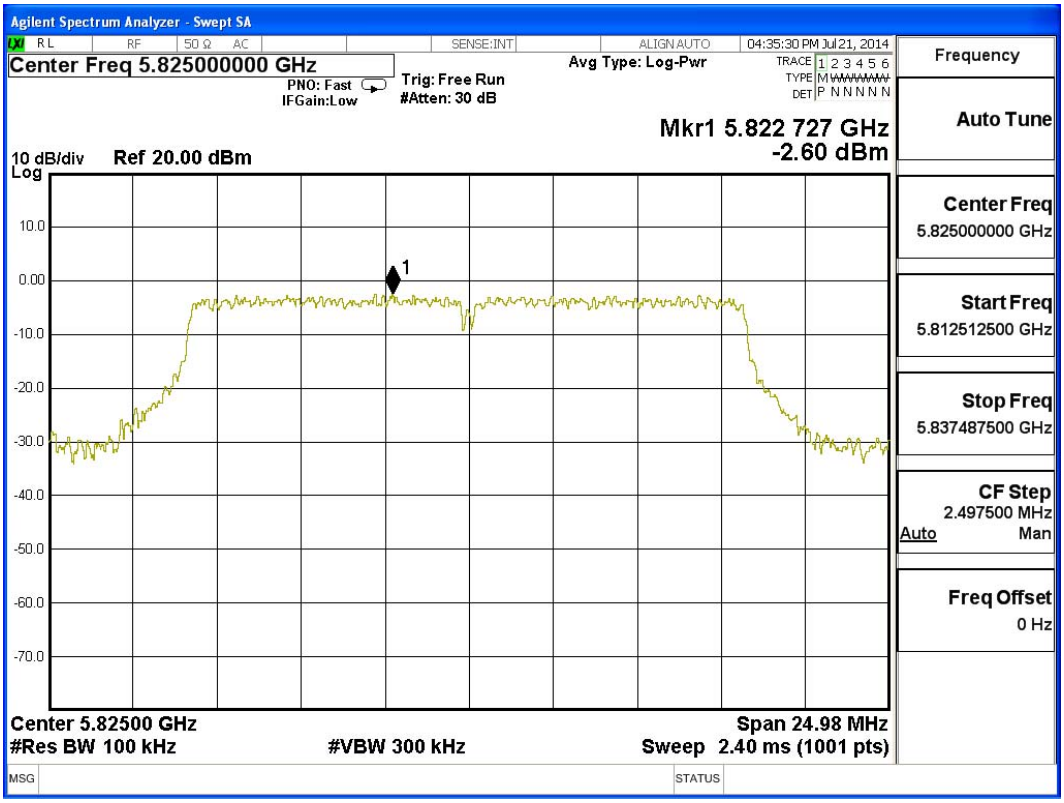
Figure Channel 157:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 3: Transmit - 802.11a 6Mbps (5825MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
165	5825.000	-2.600	< 8dBm	Pass

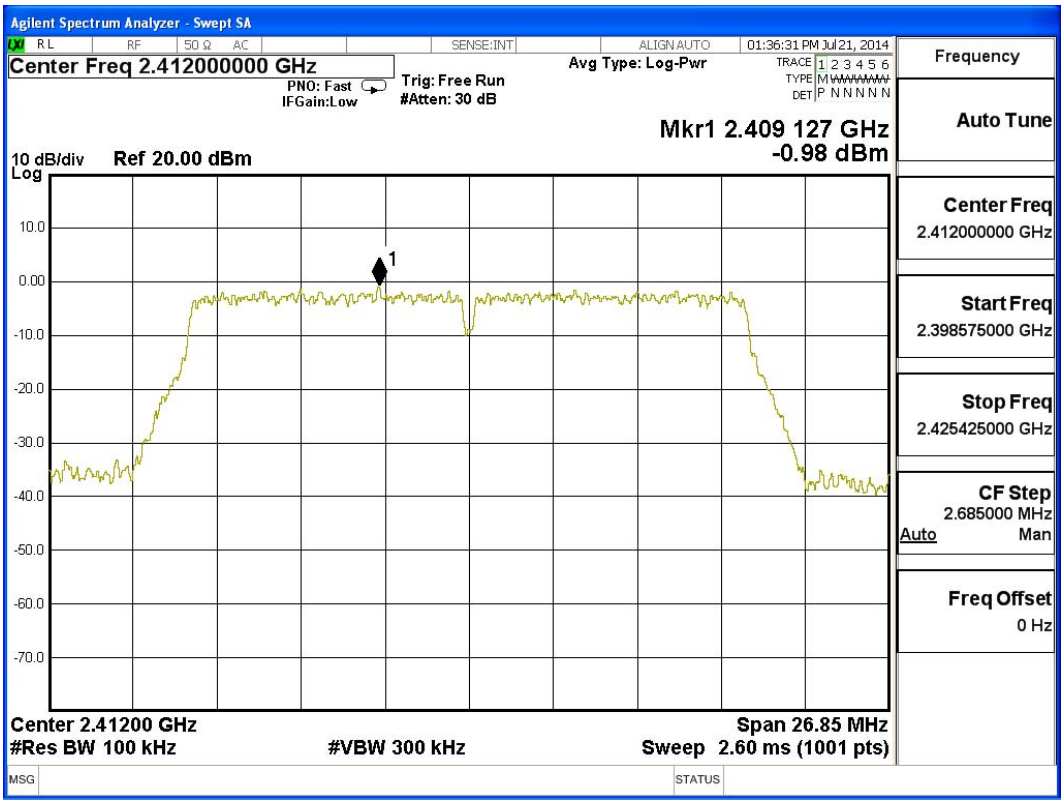
Figure Channel 165:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2412MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412.00	-0.980	< 8dBm	Pass

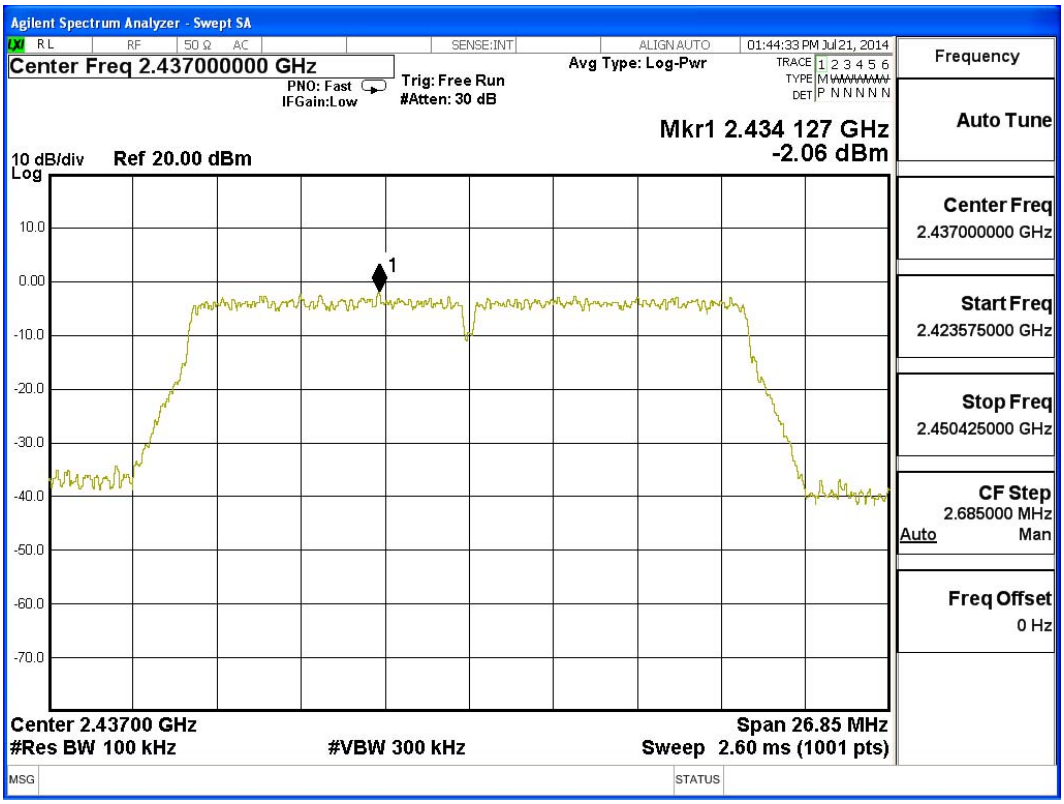
Figure Channel 1:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437.000	-2.060	< 8dBm	Pass

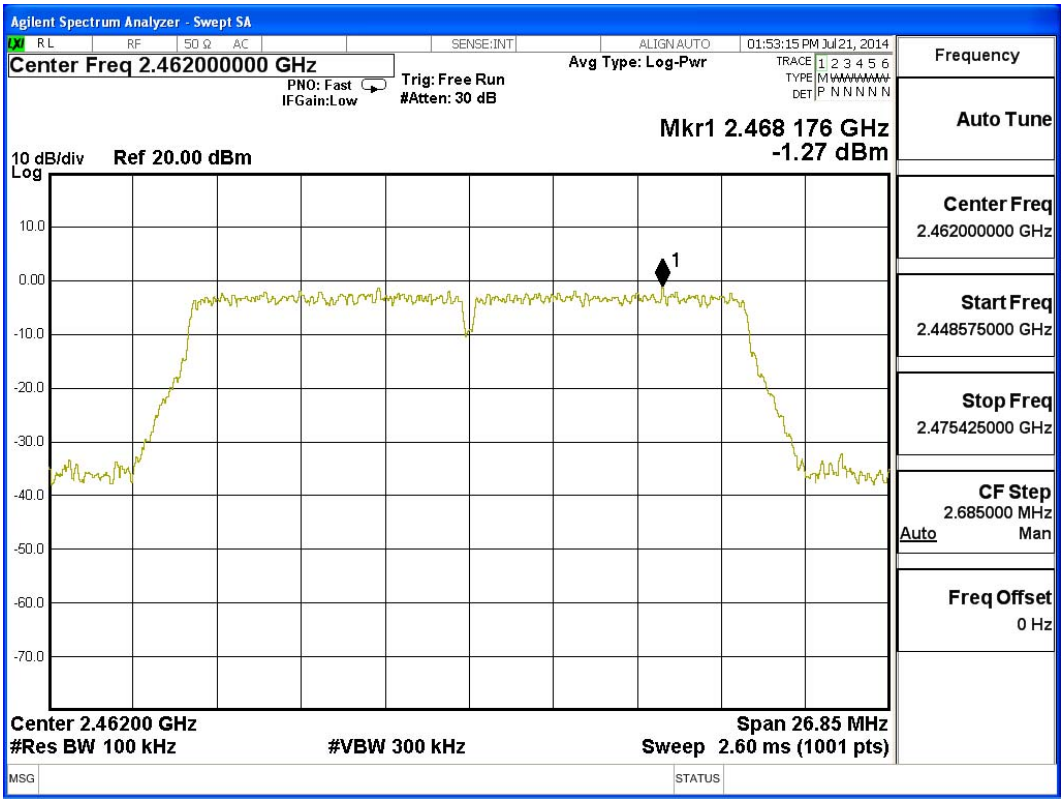
Figure Channel 6:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 4: Transmit - 802.11n-20BW_7.2Mbps(2.4G Band) (2462MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
11	2462.00	-1.270	< 8dBm	Pass

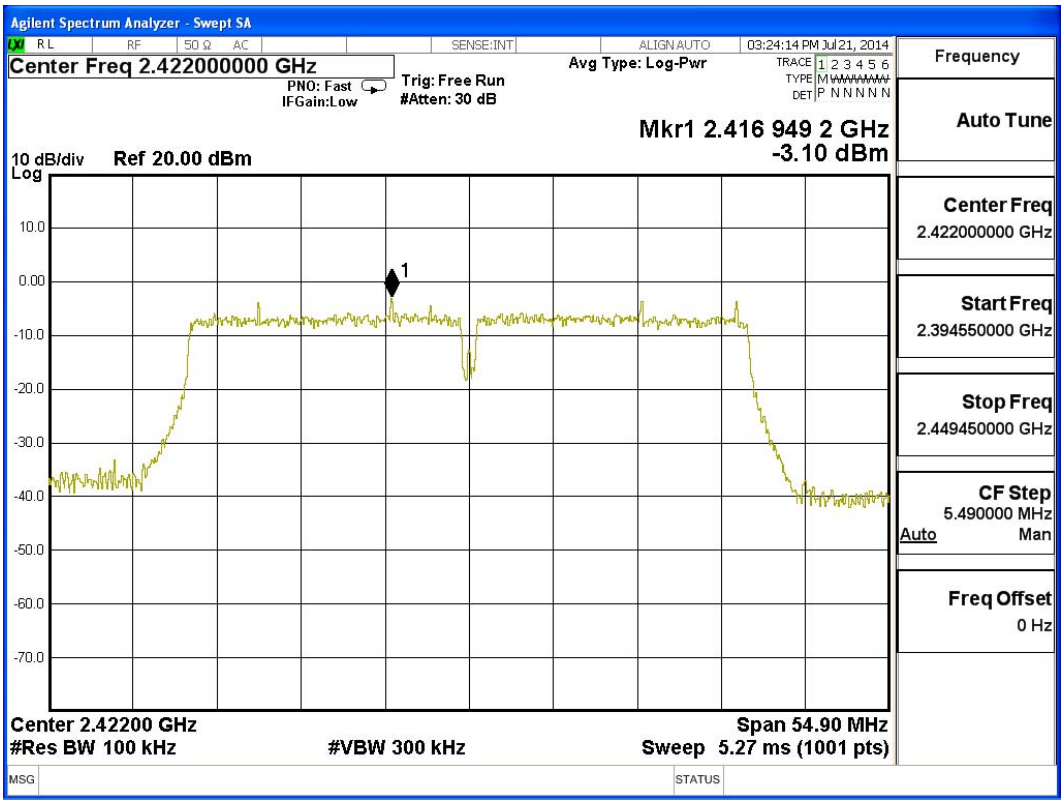
Figure Channel 11:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2422MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
3	2422.00	-3.100	< 8dBm	Pass

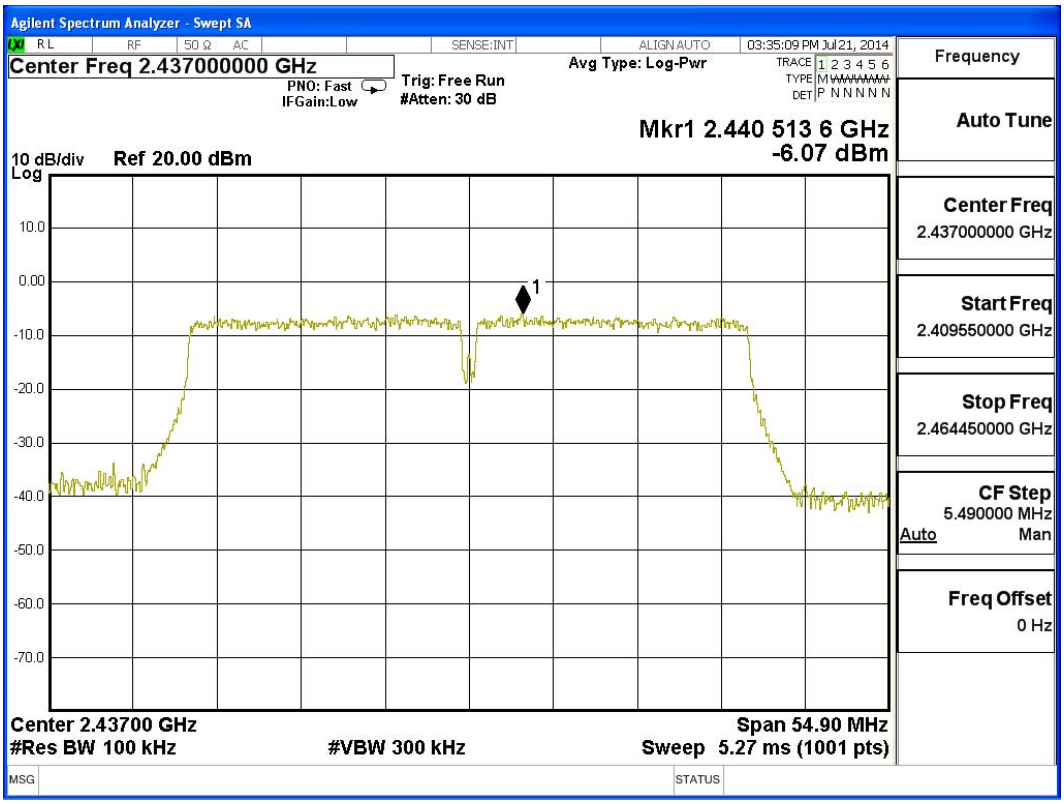
Figure Channel 3:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2437MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
6	2437.000	-6.070	< 8dBm	Pass

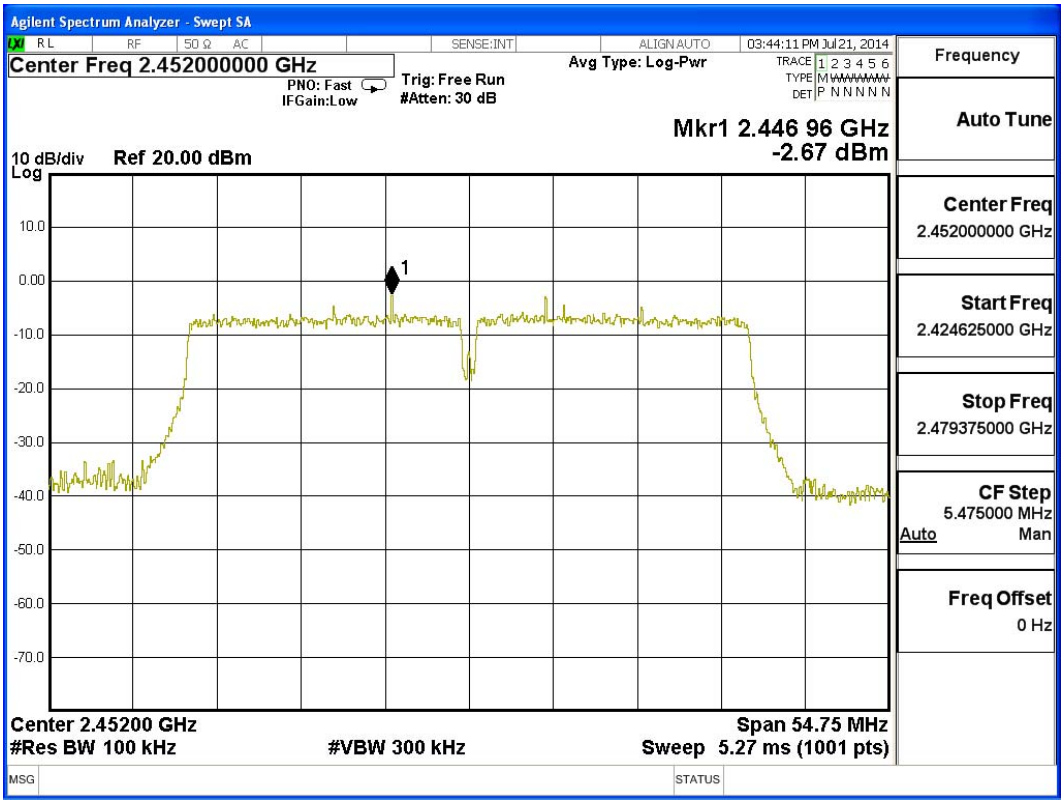
Figure Channel 6:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 5: Transmit - 802.11n-40BW_15Mbps(2.4G Band) (2452MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
09	2452.00	-2.670	< 8dBm	Pass

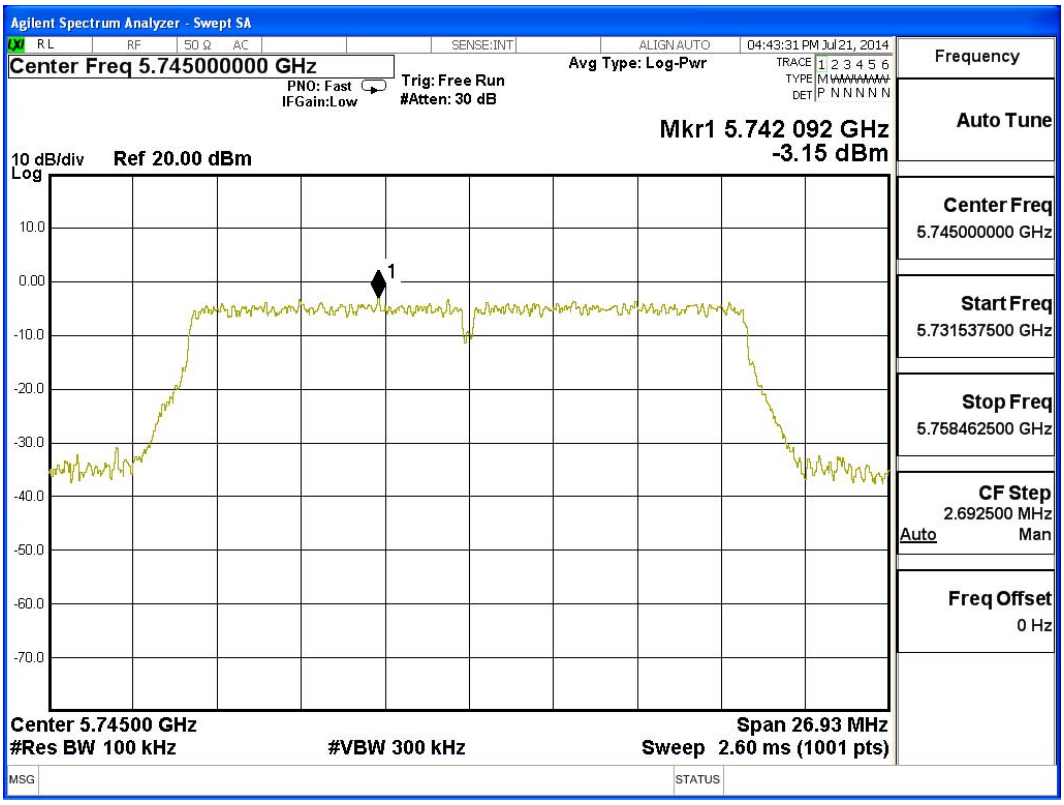
Figure Channel 9:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5745MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
149	5745.00	-3.150	< 8dBm	Pass

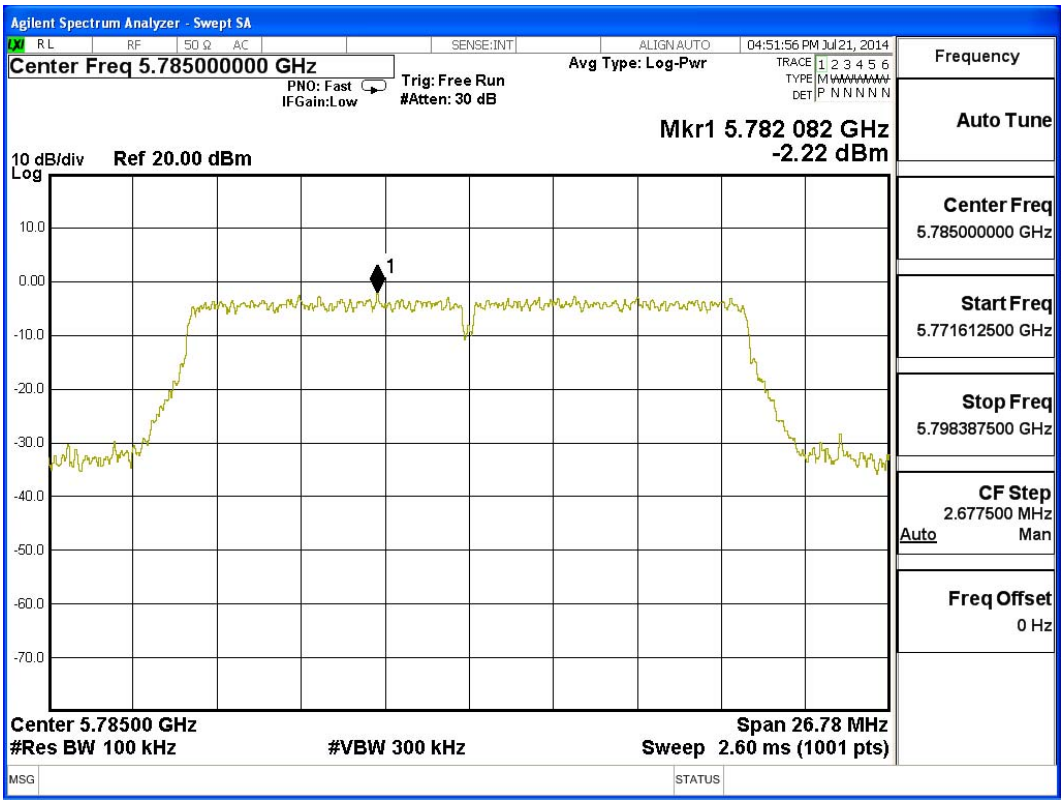
Figure Channel 149:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
157	5785.000	-2.220	< 8dBm	Pass

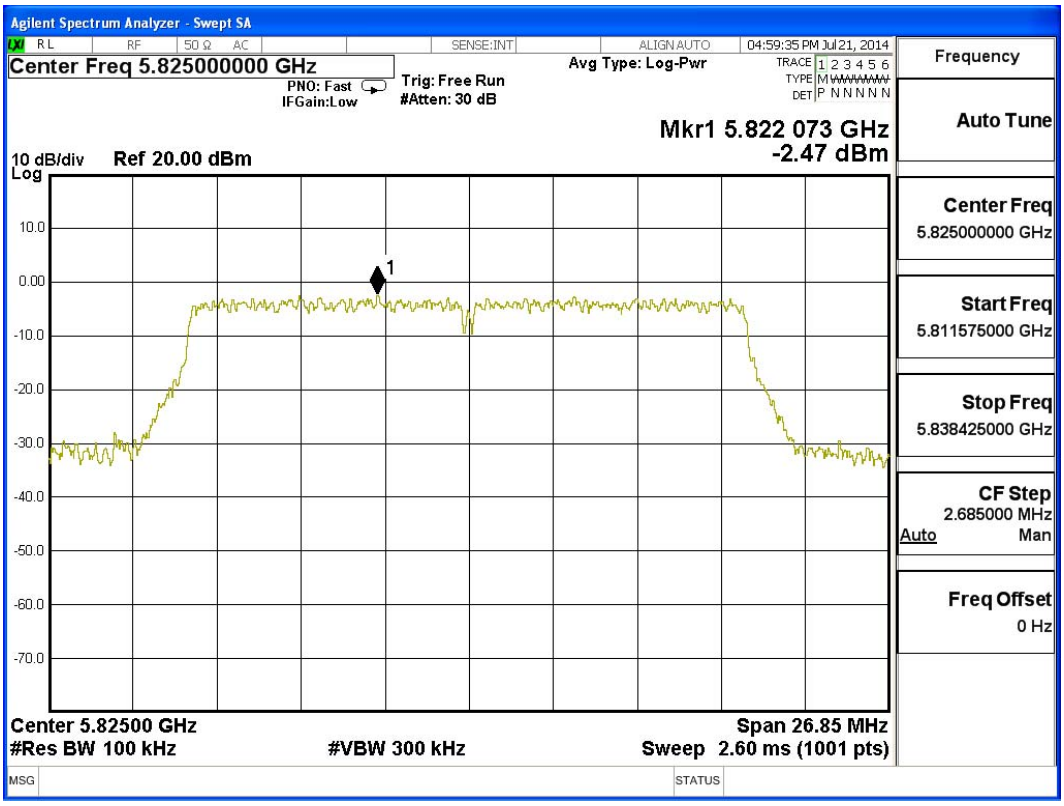
Figure Channel 157:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 6: Transmit - 802.11n-20BW_7.2Mbps(5G Band) (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
165	5825.00	-2.470	< 8dBm	Pass

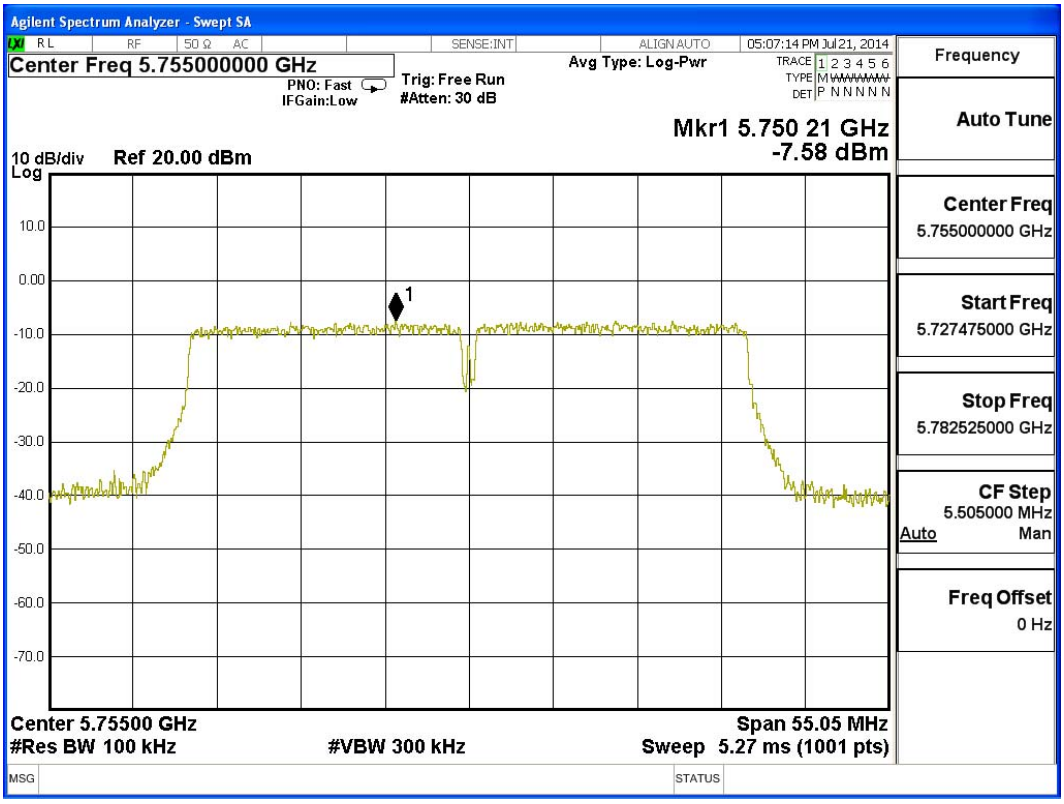
Figure Channel 165:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3 OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5755MHz)

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
151	5755.00	-7.580	< 8dBm	Pass

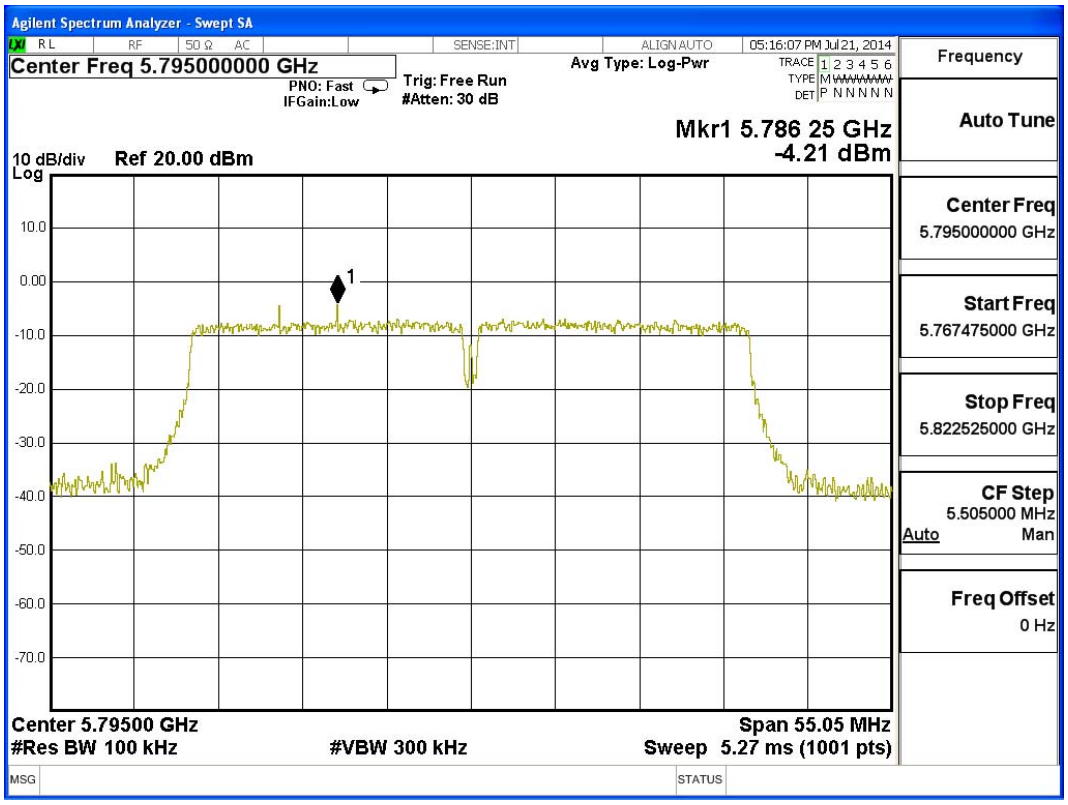
Figure Channel 151:



Product : Play-Fi Wireless Speaker
Test Item : Power Density Data
Test Site : No.3OATS
Test Mode : Mode 7: Transmit - 802.11n-40BW_15Mbps(5G Band) (5795MHz)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
159	5795.000	-4.210	< 8dBm	Pass

Figure Channel 159:



9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs