5. RF antenna conducted test

5.1. Test Equipment

The following test equipments are used during the test:

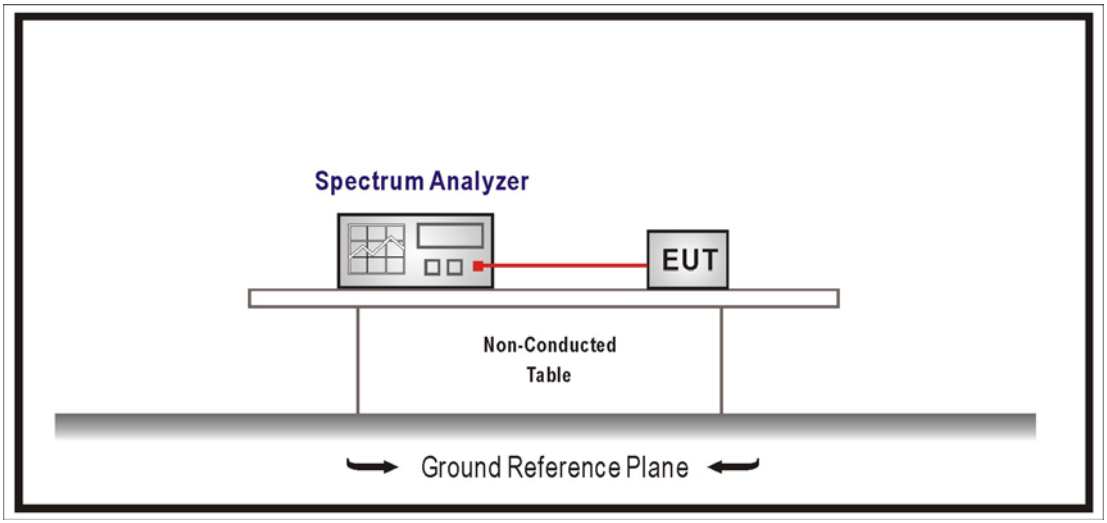
RF antenna conducted test / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2014/08/05

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

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 an RF conducted or 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 setup according to ANSI C63.4: 2009 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2012

5.6. Uncertainty

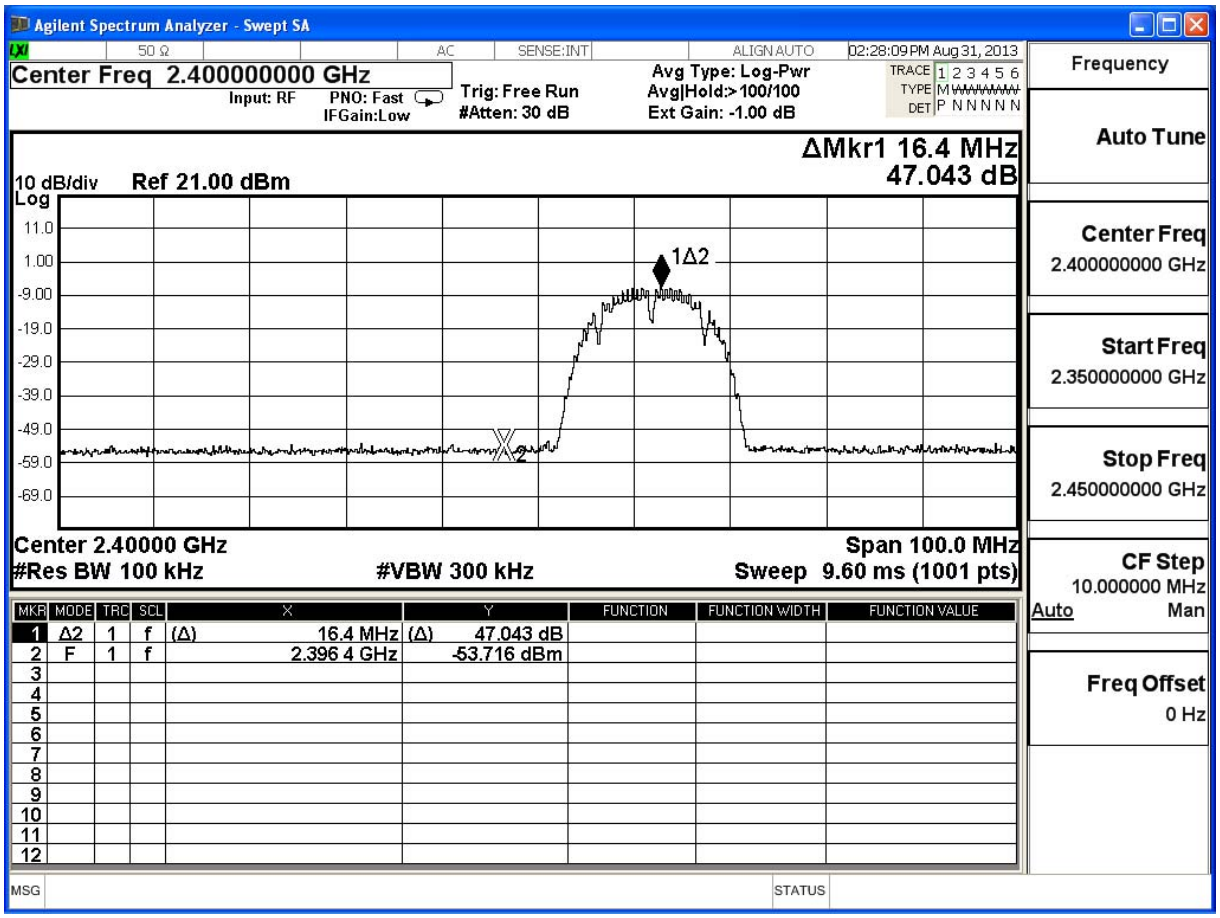
Conducted is defined as ± 1.27dB

5.7. Test Result

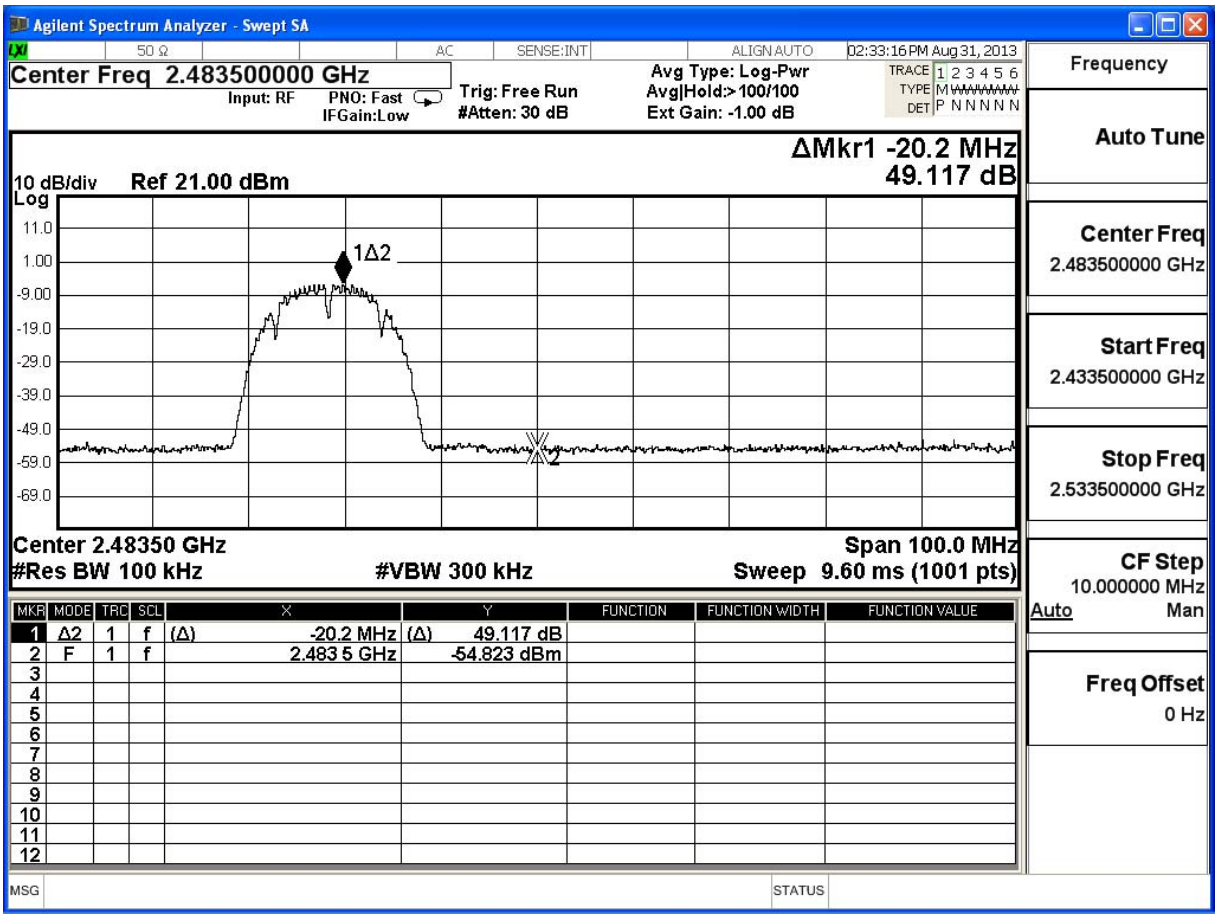
Product	Wireless Day/Night Cloud Camera		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/31	Test Site	SR7

IEEE 802.11b, ANT 0, Duty Cycle: 1				
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	47.04	≧20	Pass
11	2462	49.12	≧20	Pass

Channel 1 (2412MHz)



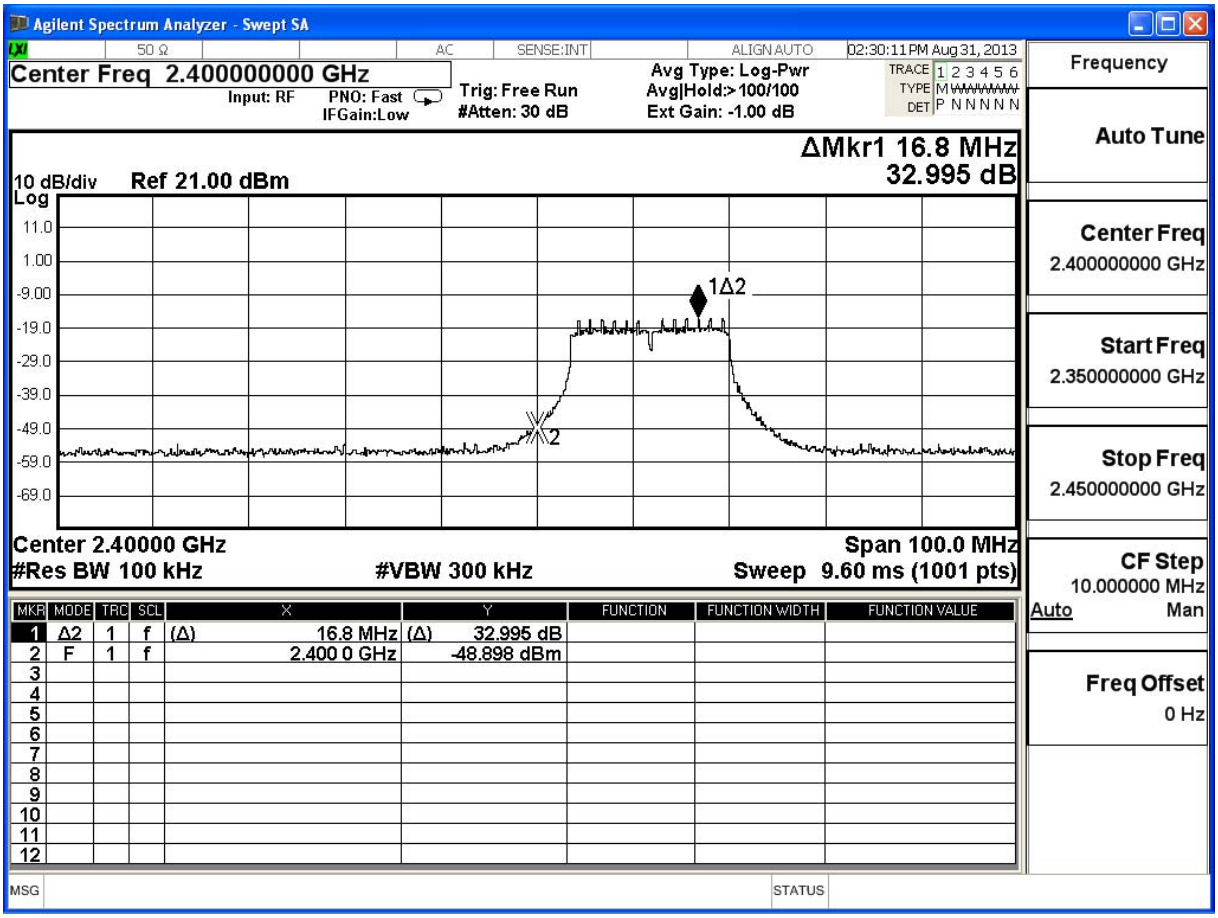
Channel 11 (2462MHz)



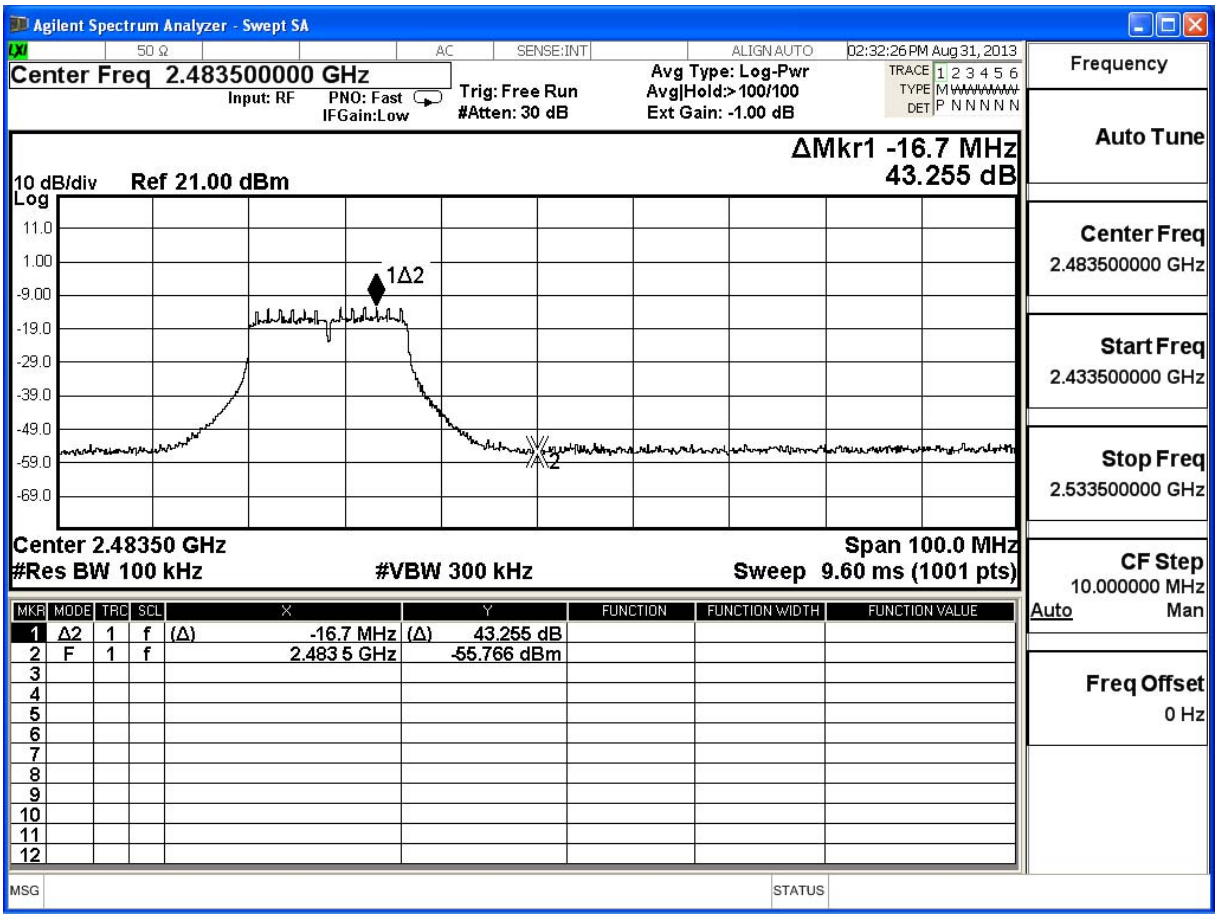
Product	Wireless Day/Night Cloud Camera		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/31	Test Site	SR7

IEEE 802.11g, ANT 0, Duty Cycle: 1				
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	33.00	≧20	Pass
11	2462	43.26	≧20	Pass

Channel 1 (2412MHz)



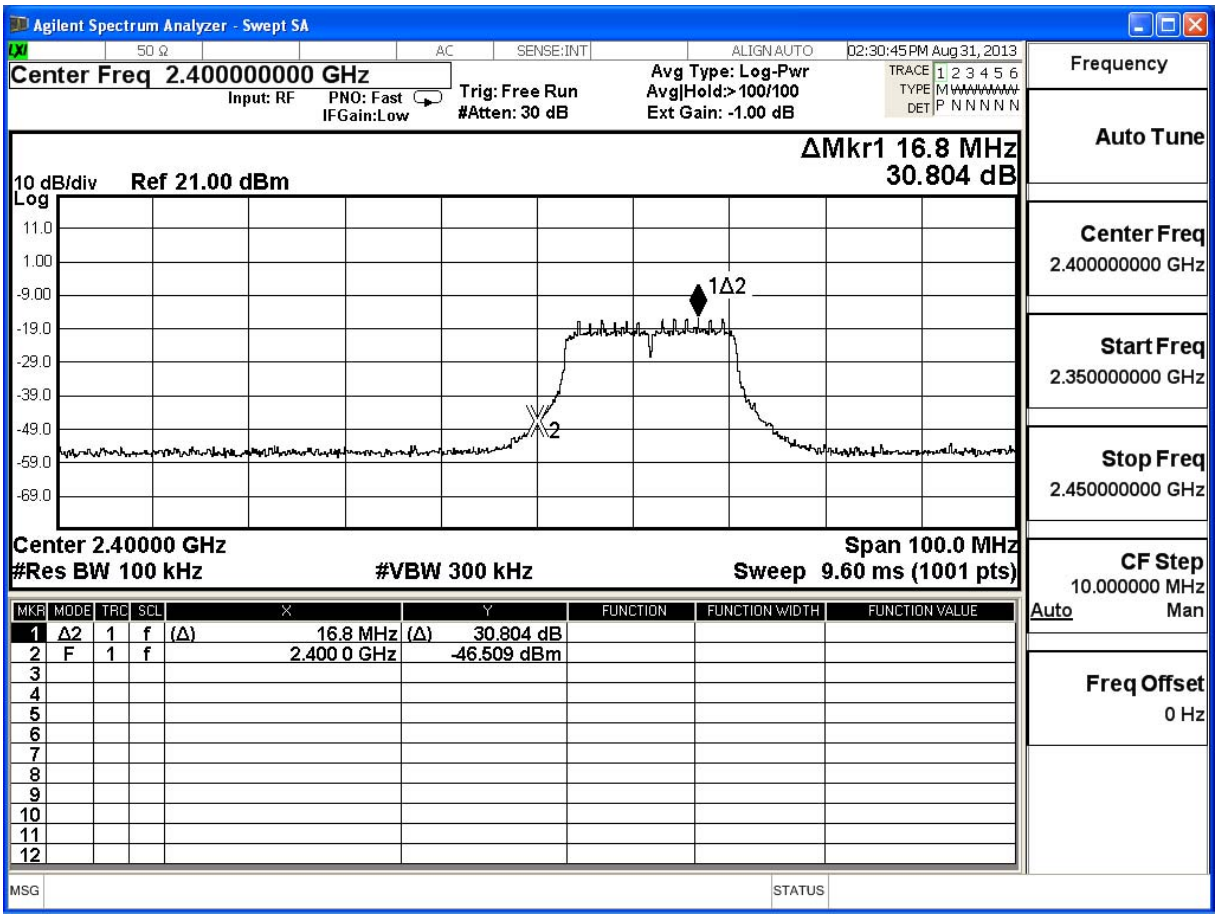
Channel 11 (2462MHz)



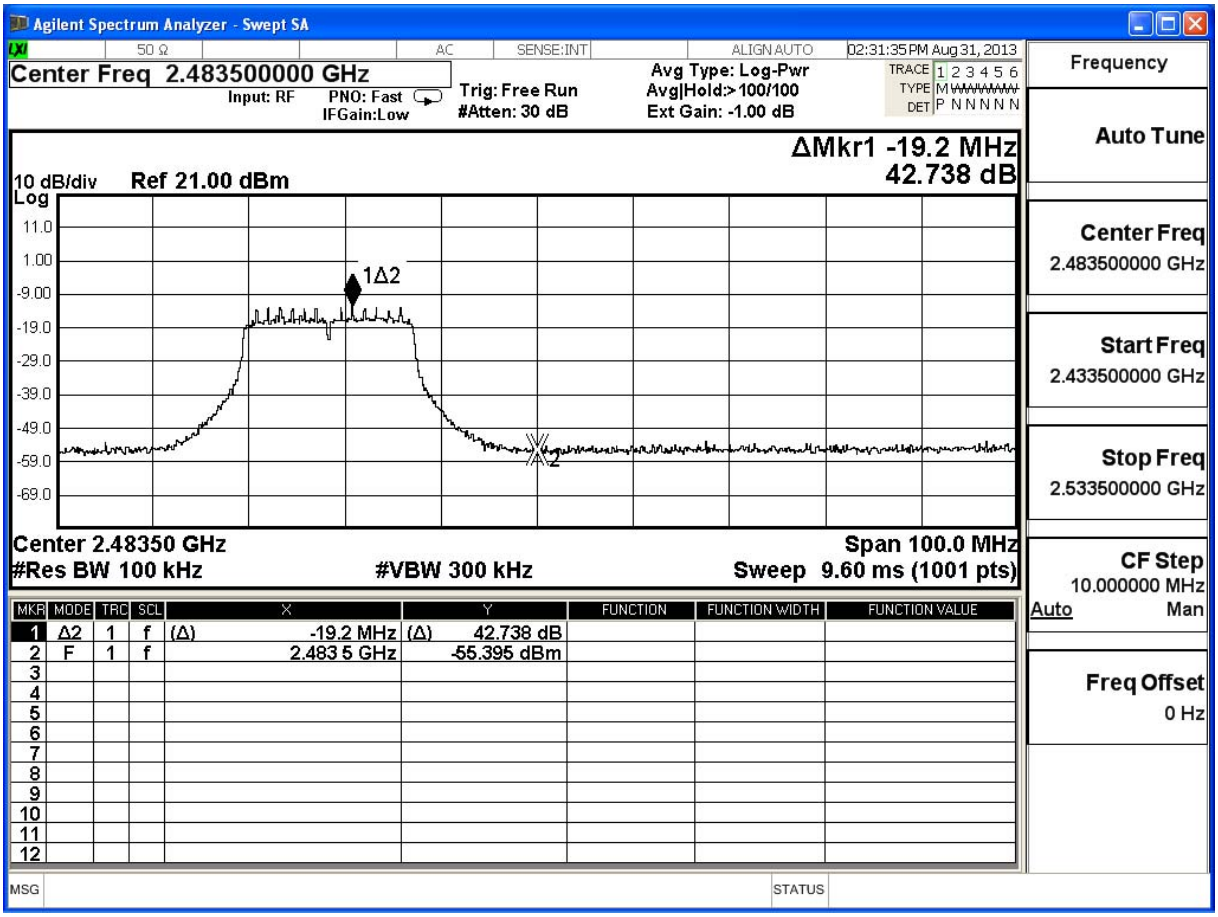
Product	Wireless Day/Night Cloud Camera		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/31	Test Site	SR7

IEEE 802.11n (20MHz), ANT 0, Duty Cycle: 1				
Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
1	2412	30.80	≧20	Pass
11	2462	42.74	≧20	Pass

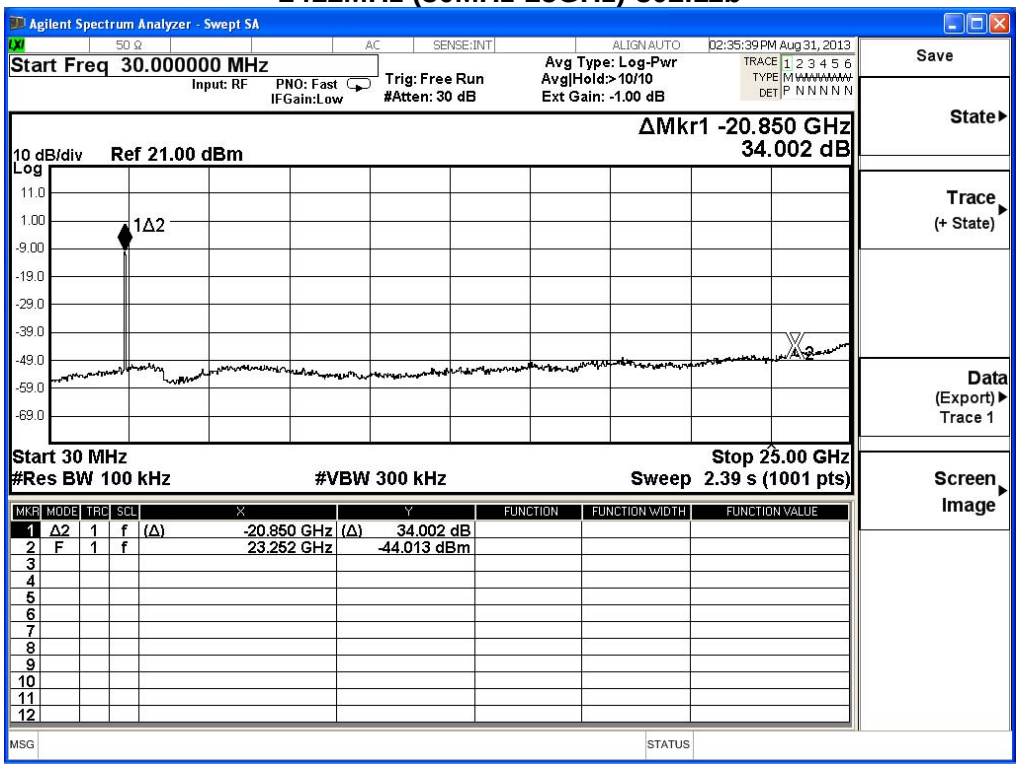
Channel 1 (2412MHz)



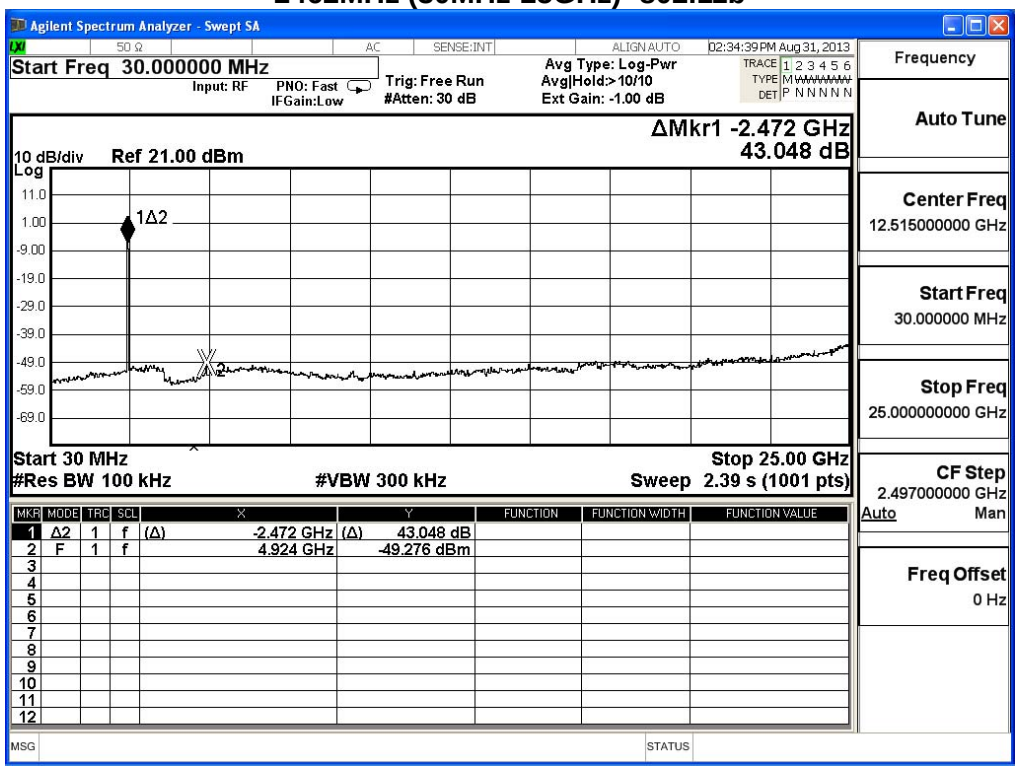
Channel 11 (2462MHz)



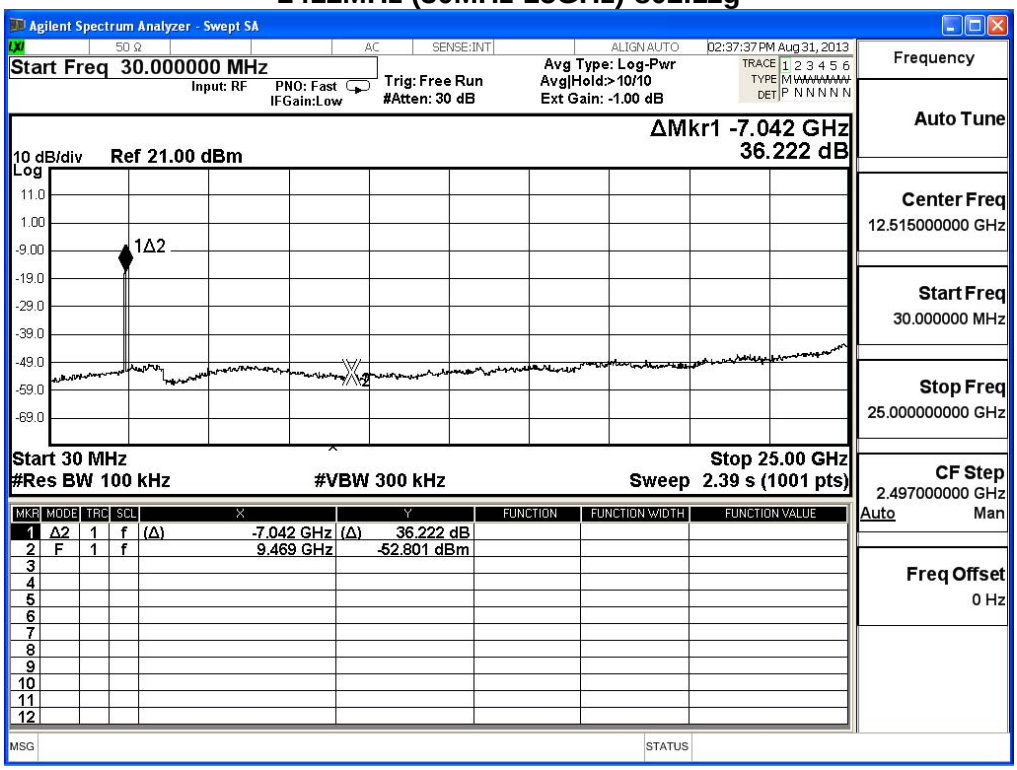
2412MHz (30MHz-25GHz)-802.11b



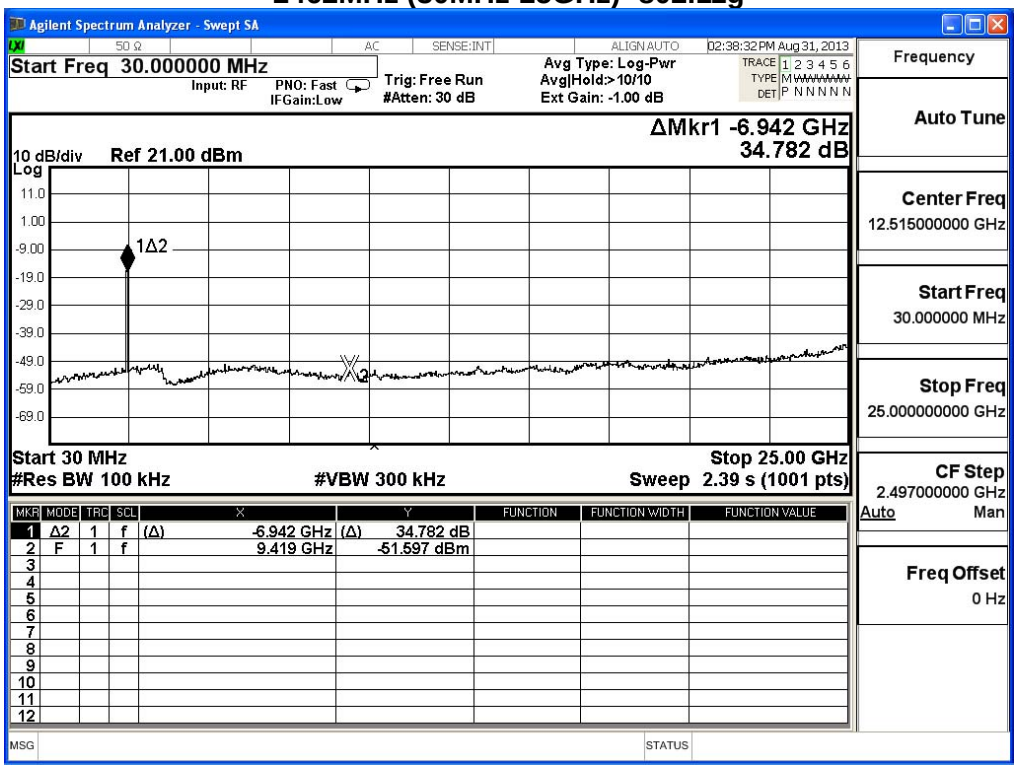
2462MHz (30MHz-25GHz) -802.11b



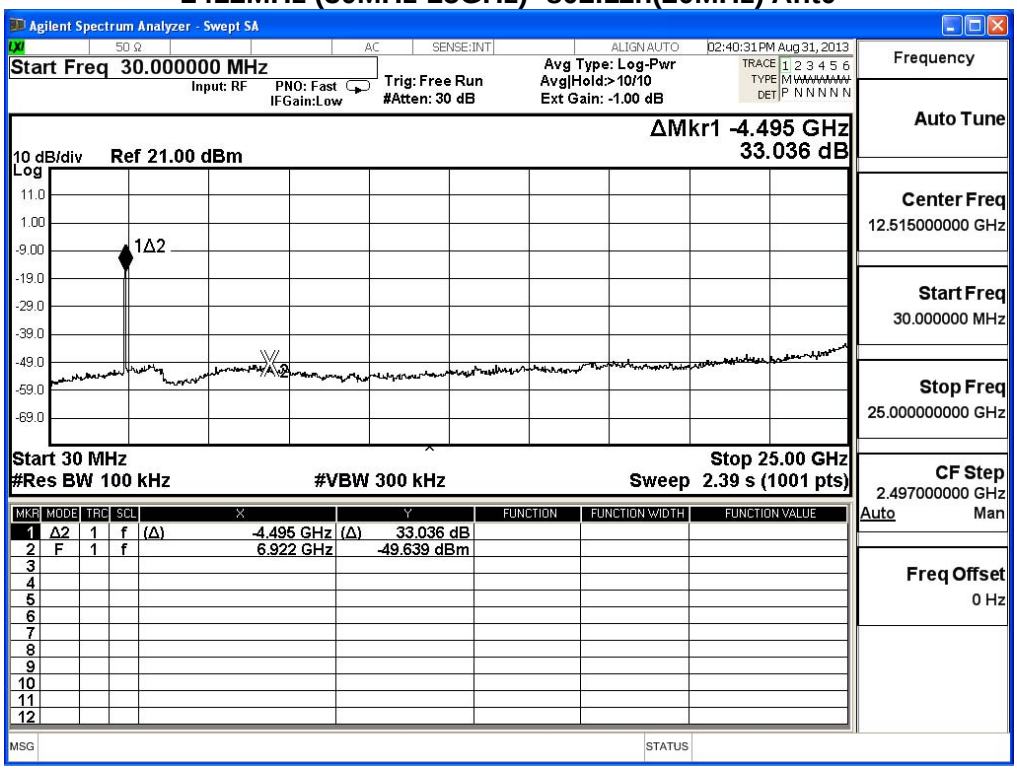
2412MHz (30MHz-25GHz)-802.11g



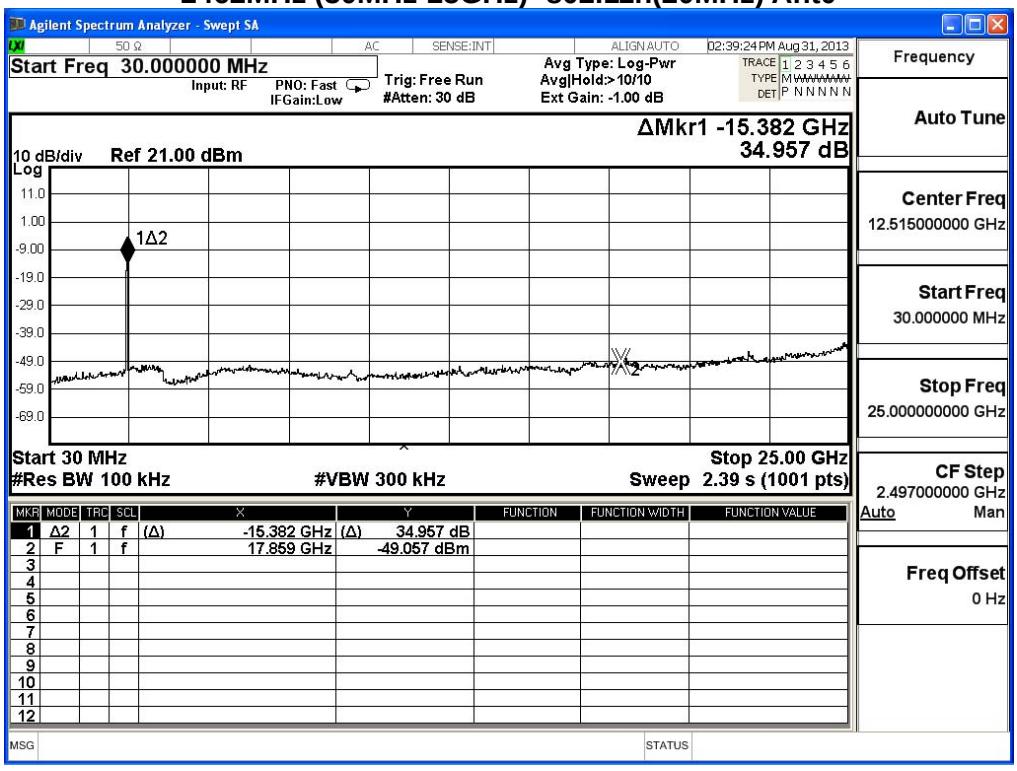
2462MHz (30MHz-25GHz) -802.11g



2412MHz (30MHz-25GHz)- 802.11n(20MHz) Ant0



2462MHz (30MHz-25GHz) -802.11n(20MHz) Ant0



6. Radiated Emission Band Edge

6.1. Test Equipment

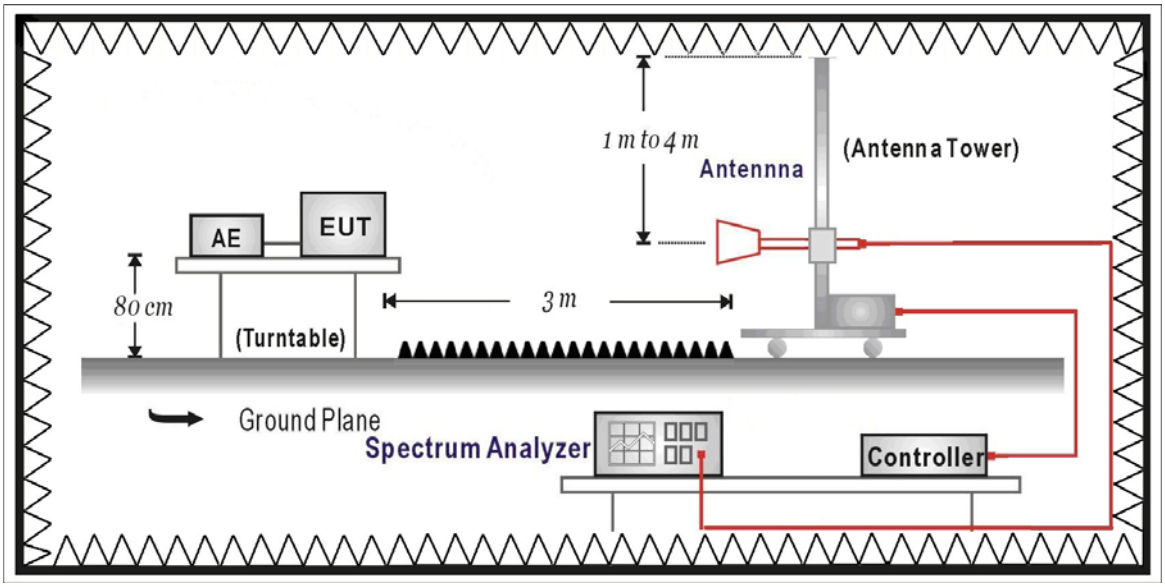
The following test equipments are used during the test:

Radiated Emission Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Double Ridged Guide Horn Antenna	Schwarzback	BBHA 9120	D743	2014/02/17
Spectrum Analyzer	Agilent	E4440A	MY46187335	2014/01/27
k Type Cable	Huber Suhner	Sucoflex 102	25623/2	2014/02/21

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup



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: 2009 and tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
The EUT and its simulators are placed on a turn table which is 0.8 meter above ground.
The turn table can rotate 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2012

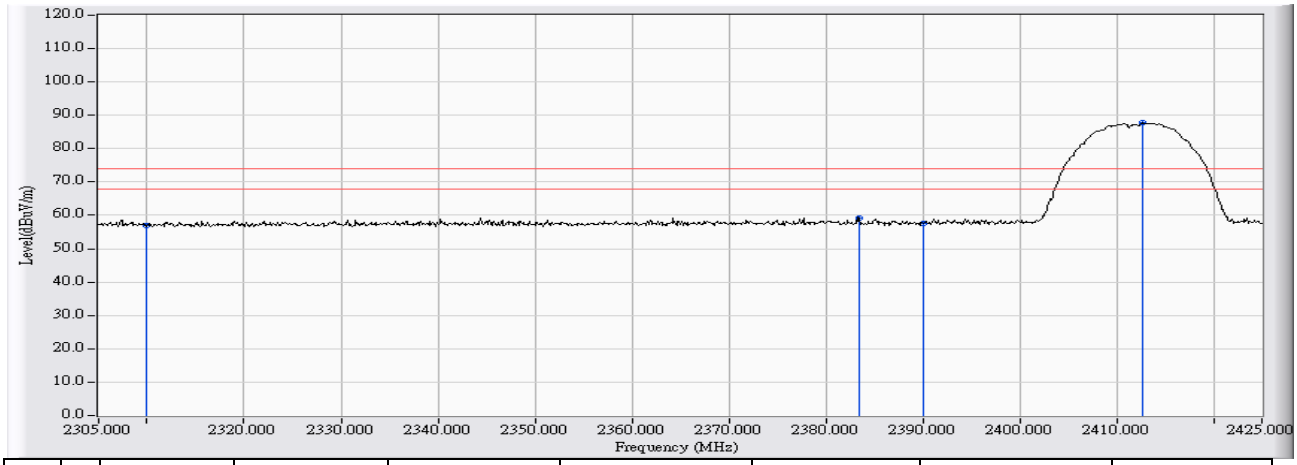
6.6. Uncertainty

The measurement uncertainty
± 3.9 dB above 1GHz

6.7. Test Result

Radiated is defined as

Site : CB1	**Time : 2013/08/27 - 15:31**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-X**

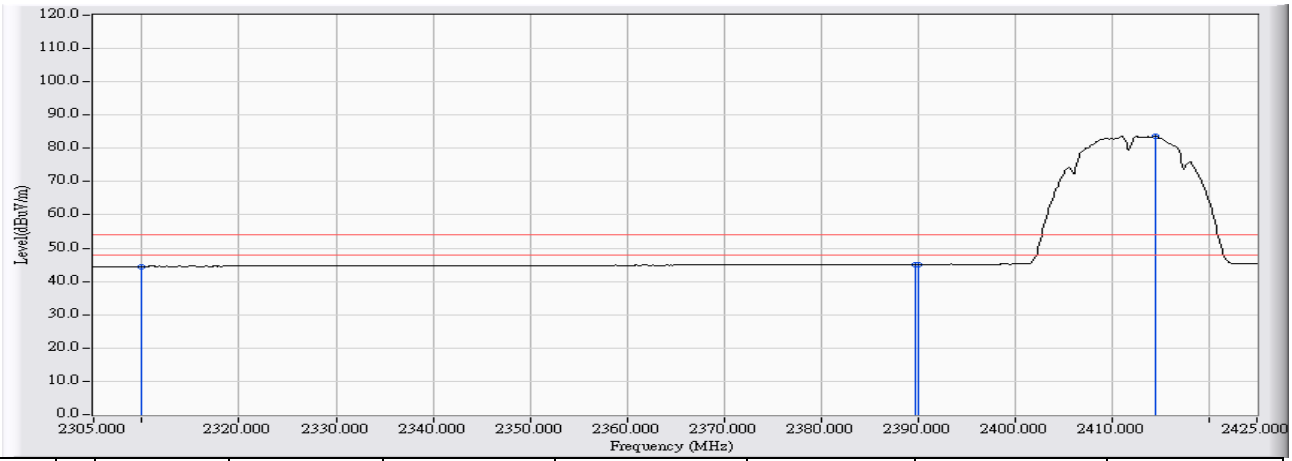


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	29.237	57.099	-16.901	74.000	PEAK
2		2383.480	28.052	31.025	59.077	-14.923	74.000	PEAK
3		2390.000	28.069	29.636	57.705	-16.295	74.000	PEAK
4	*	2412.760	28.128	59.592	87.720	13.720	74.000	PEAK

Note:

1. All readings 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. “ * ”, means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 15:32**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-X**

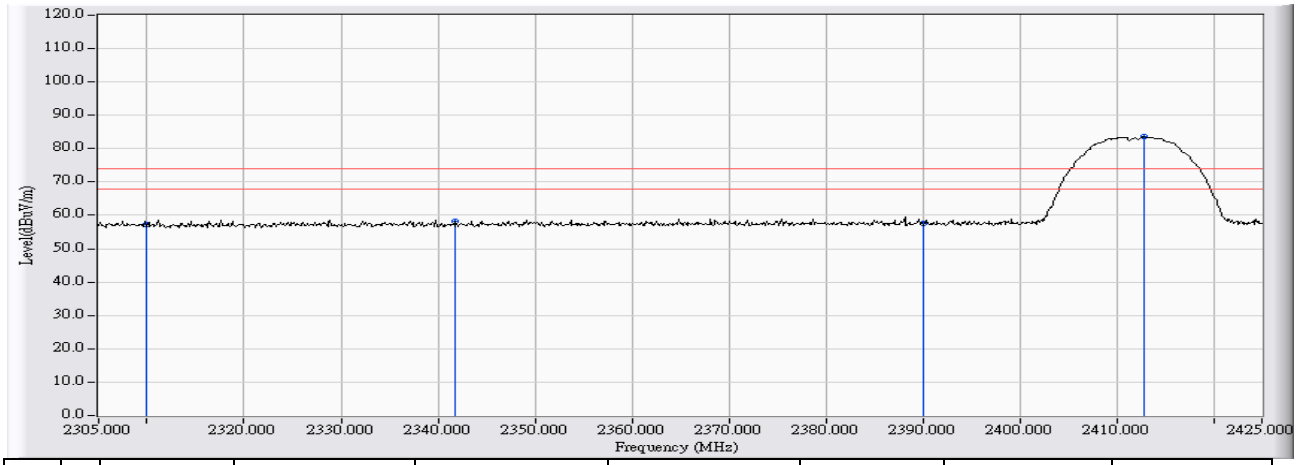


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.656	44.518	-9.482	54.000	AVERAGE
2		2389.720	28.068	17.025	45.093	-8.907	54.000	AVERAGE
3		2390.000	28.069	17.032	45.101	-8.899	54.000	AVERAGE
4	*	2414.560	28.133	55.510	83.643	29.643	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 15:34**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-X**

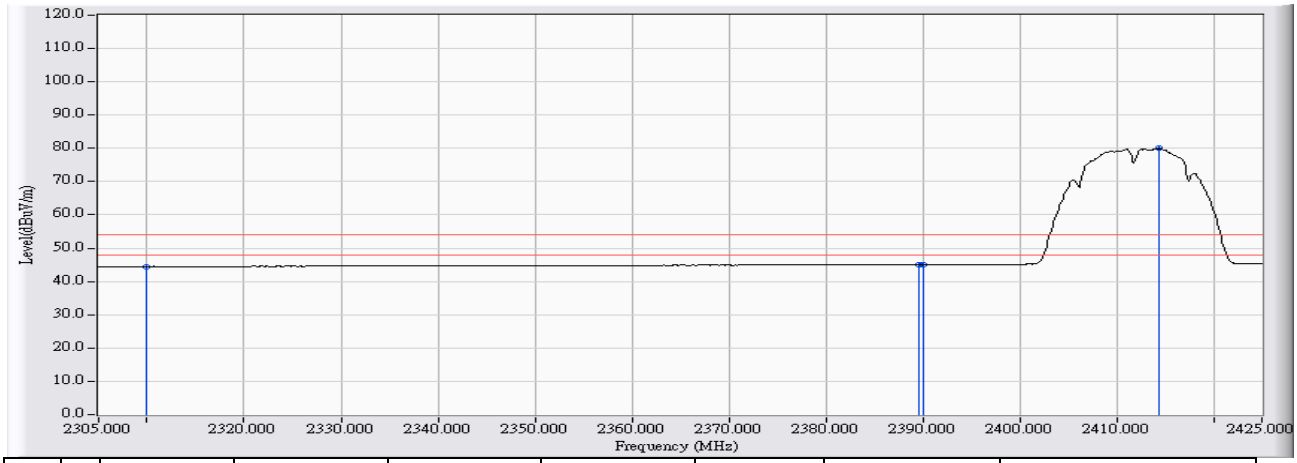


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	29.411	57.273	-16.727	74.000	PEAK
2		2341.720	27.944	30.432	58.376	-15.624	74.000	PEAK
3		2390.000	28.069	29.638	57.707	-16.293	74.000	PEAK
4	*	2412.880	28.128	55.396	83.524	9.524	74.000	PEAK

Note:

1. All readings 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. “ * ”, means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 15:35**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-X**

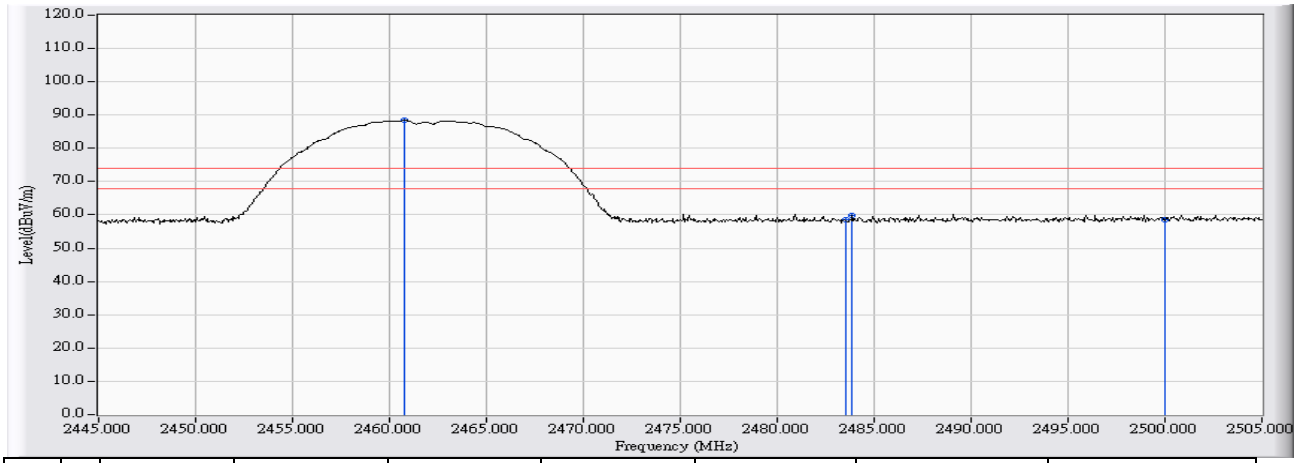


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.652	44.514	-9.486	54.000	AVERAGE
2		2389.600	28.068	17.003	45.071	-8.929	54.000	AVERAGE
3		2390.000	28.069	16.989	45.058	-8.942	54.000	AVERAGE
4	*	2414.440	28.132	51.824	79.956	25.956	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:13**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2462MHz_axis-X**

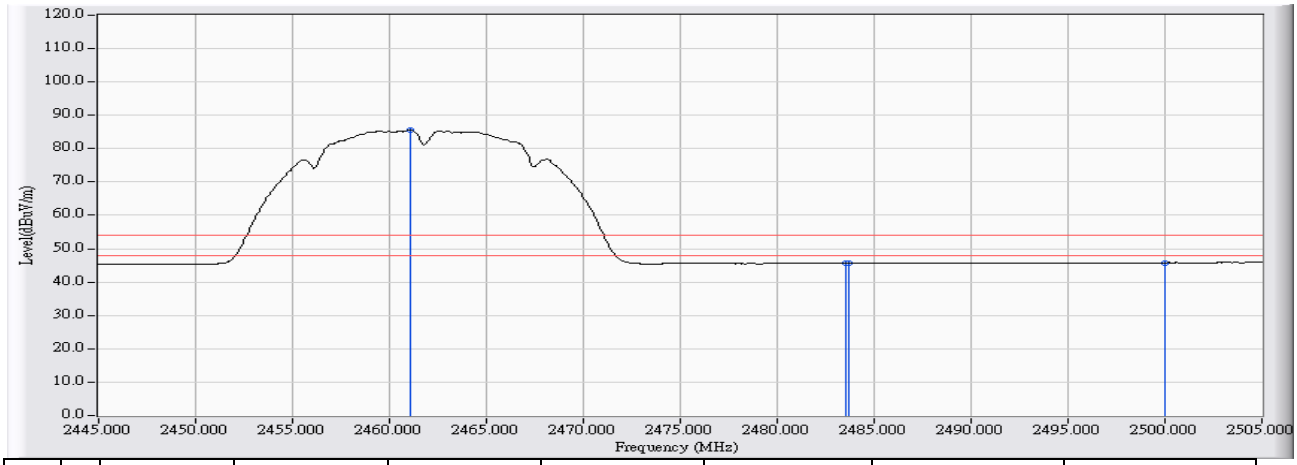


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2460.780	28.252	60.152	88.404	14.404	74.000	PEAK
2		2483.500	28.311	30.083	58.394	-15.606	74.000	PEAK
3		2483.880	28.311	31.471	59.783	-14.217	74.000	PEAK
4		2500.000	28.357	30.042	58.398	-15.602	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:14**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2462MHz_axis-X**

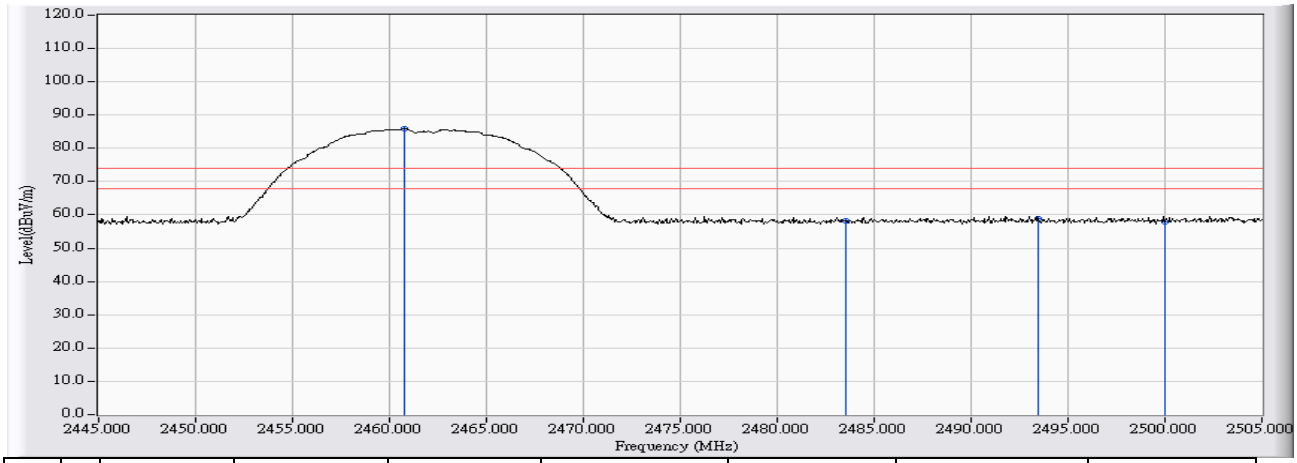


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.080	28.252	57.278	85.531	31.531	54.000	AVERAGE
2		2483.500	28.311	17.229	45.540	-8.460	54.000	AVERAGE
3		2483.700	28.312	17.270	45.581	-8.419	54.000	AVERAGE
4		2500.000	28.357	17.454	45.810	-8.190	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:16**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2462MHz_axis-X**

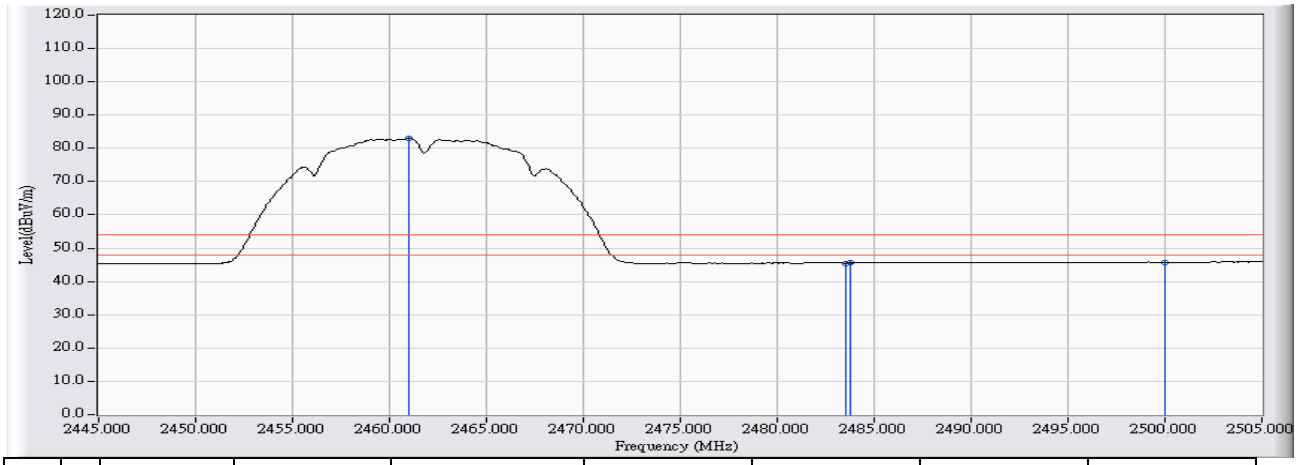


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2460.780	28.252	57.583	85.835	11.835	74.000	PEAK
2		2483.500	28.311	29.826	58.137	-15.863	74.000	PEAK
3		2493.480	28.337	30.493	58.830	-15.170	74.000	PEAK
4		2500.000	28.357	29.688	58.044	-15.956	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:17**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2462MHz_axis-X**

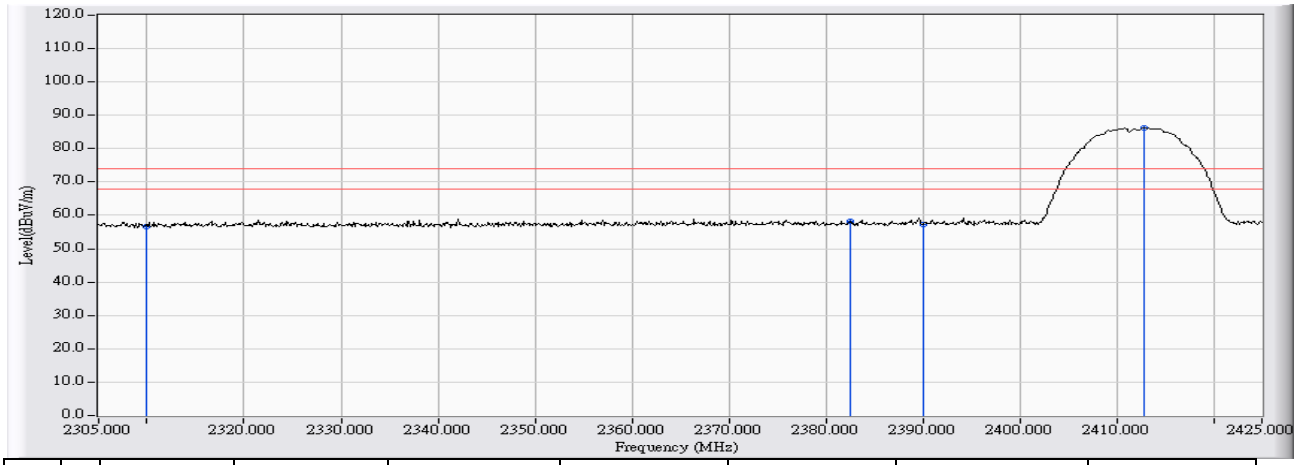


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2461.020	28.252	54.742	82.995	28.995	54.000	AVERAGE
2		2483.500	28.311	17.190	45.501	-8.499	54.000	AVERAGE
3		2483.760	28.311	17.224	45.536	-8.464	54.000	AVERAGE
4		2500.000	28.357	17.465	45.821	-8.179	54.000	AVERAGE

Note:

1. All readings 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. “ * ”, means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 15:45**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-Y**

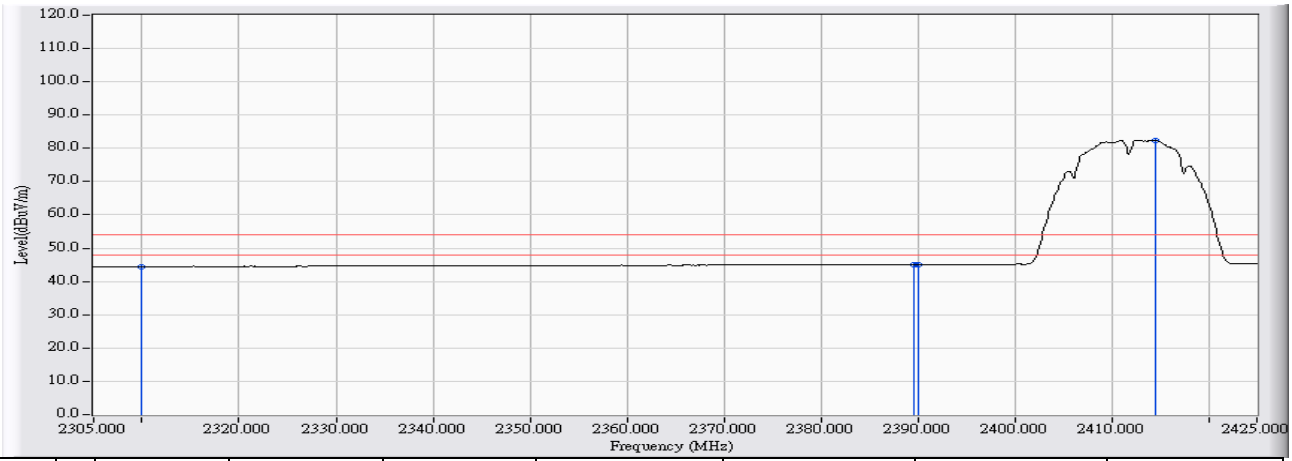


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	28.909	56.771	-17.229	74.000	PEAK
2		2382.520	28.050	30.214	58.264	-15.736	74.000	PEAK
3		2390.000	28.069	29.213	57.282	-16.718	74.000	PEAK
4	*	2412.880	28.128	58.172	86.300	12.300	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 15:47**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-Y**

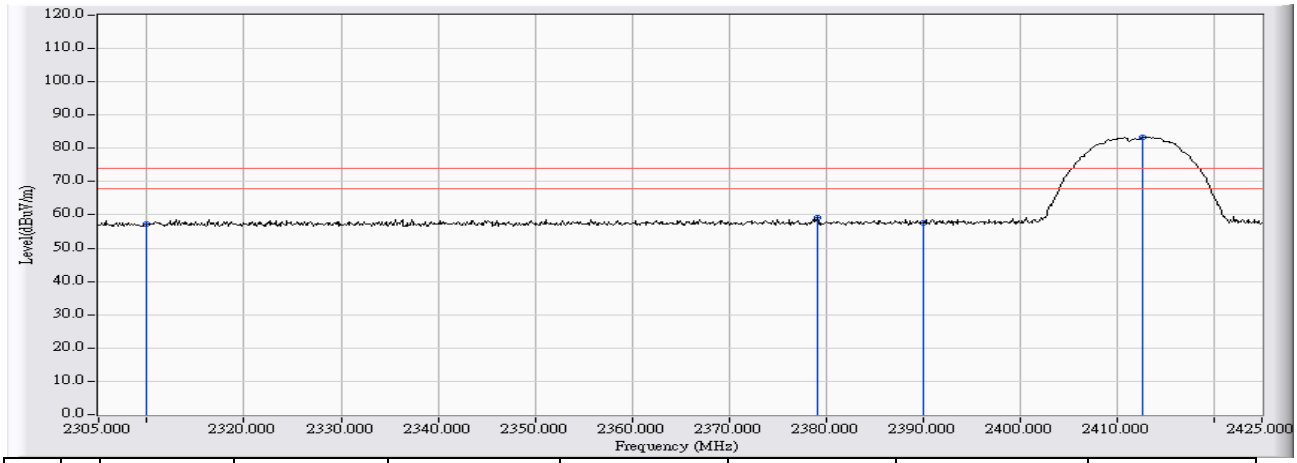


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.643	44.505	-9.495	54.000	AVERAGE
2		2389.600	28.068	17.009	45.077	-8.923	54.000	AVERAGE
3		2390.000	28.069	17.005	45.074	-8.926	54.000	AVERAGE
4	*	2414.560	28.133	54.363	82.496	28.496	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 15:52**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-Y**

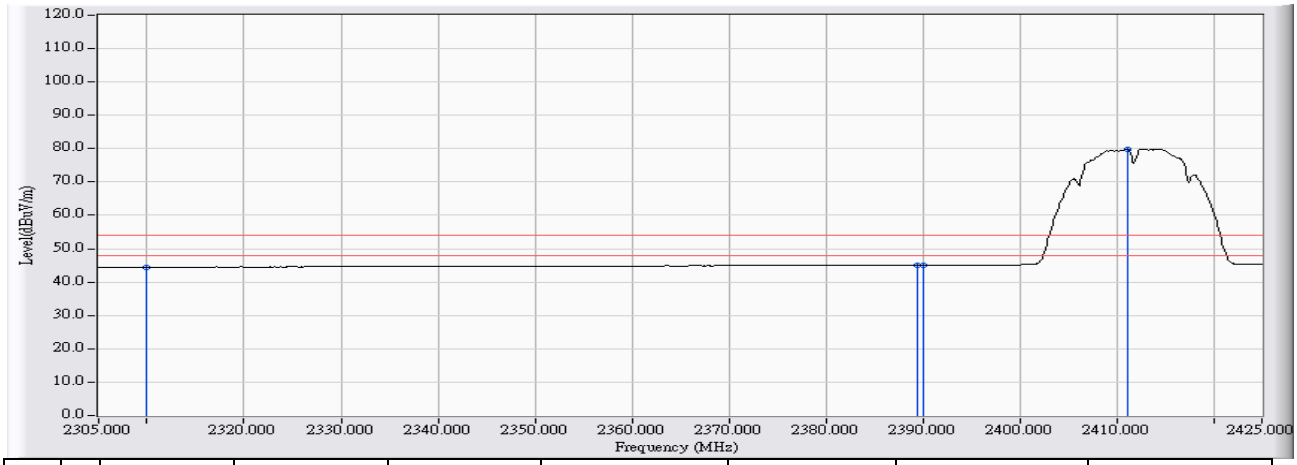


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	29.297	57.159	-16.841	74.000	PEAK
2		2379.160	28.041	31.276	59.317	-14.683	74.000	PEAK
3		2390.000	28.069	29.444	57.513	-16.487	74.000	PEAK
4	*	2412.760	28.128	55.276	83.404	9.404	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 15:52**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-Y**

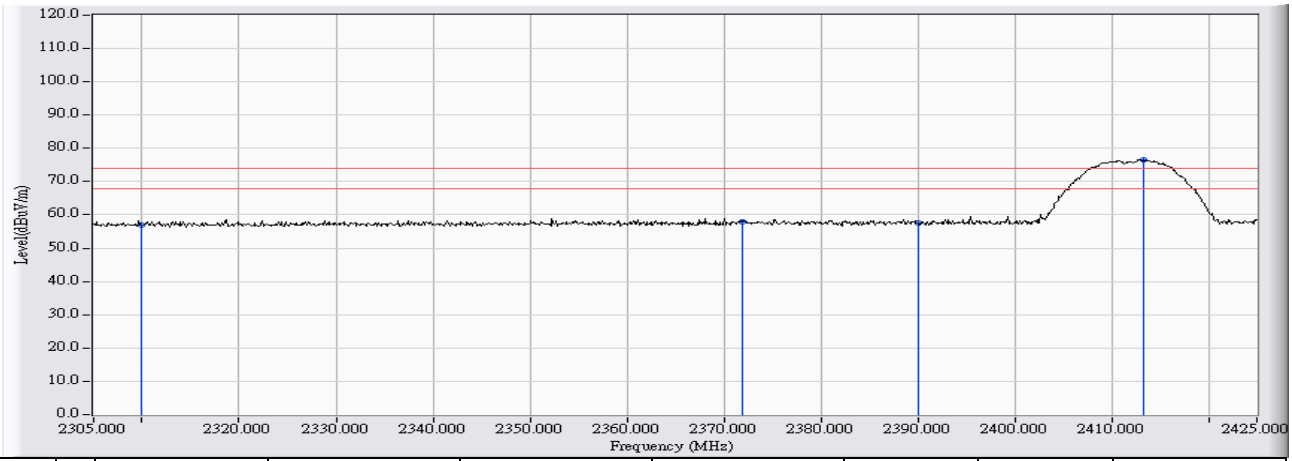


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.683	44.545	-9.455	54.000	AVERAGE
2		2389.480	28.067	16.985	45.053	-8.947	54.000	AVERAGE
3		2390.000	28.069	17.016	45.085	-8.915	54.000	AVERAGE
4	*	2411.080	28.123	51.797	79.921	25.921	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-Z**

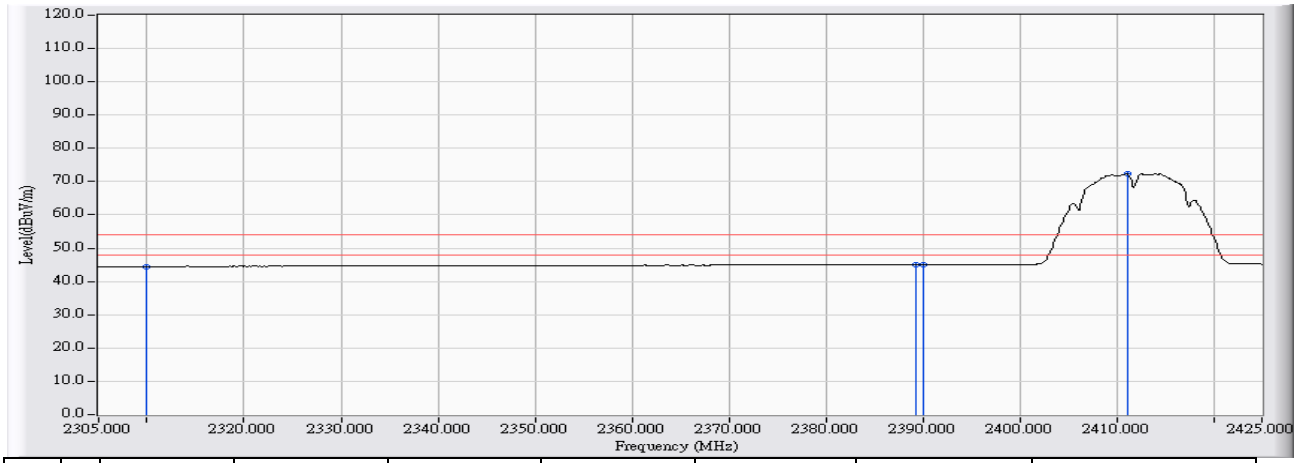


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	28.999	56.861	-17.139	74.000	PEAK
2		2371.960	28.022	29.975	57.997	-16.003	74.000	PEAK
3		2390.000	28.069	29.516	57.585	-16.415	74.000	PEAK
4	*	2413.360	28.130	48.402	76.531	2.531	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:02**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-Z**

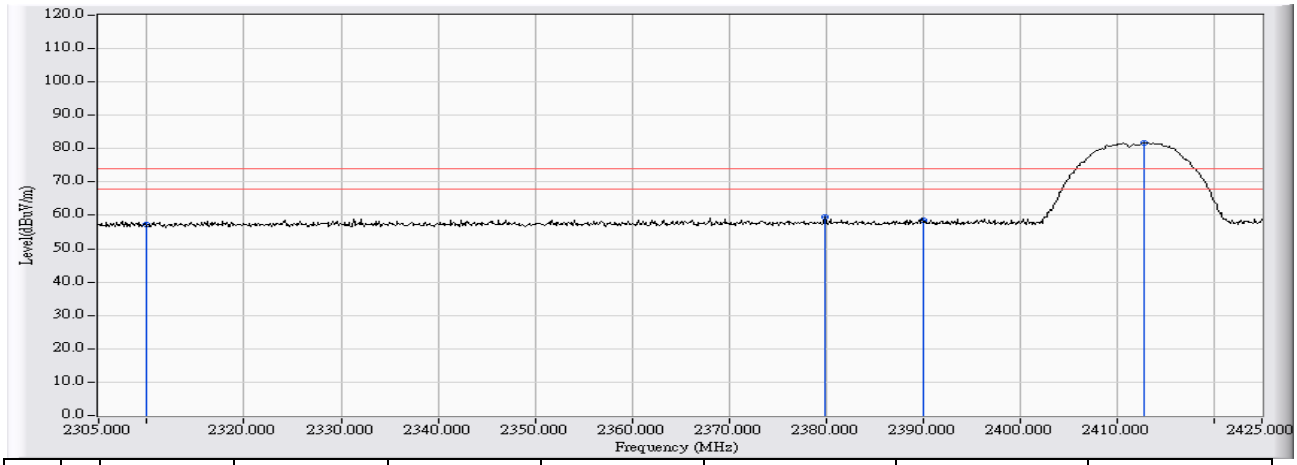


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.652	44.514	-9.486	54.000	AVERAGE
2		2389.240	28.067	16.991	45.058	-8.942	54.000	AVERAGE
3		2390.000	28.069	17.013	45.082	-8.918	54.000	AVERAGE
4	*	2411.080	28.123	44.200	72.324	18.324	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:05**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-Z**

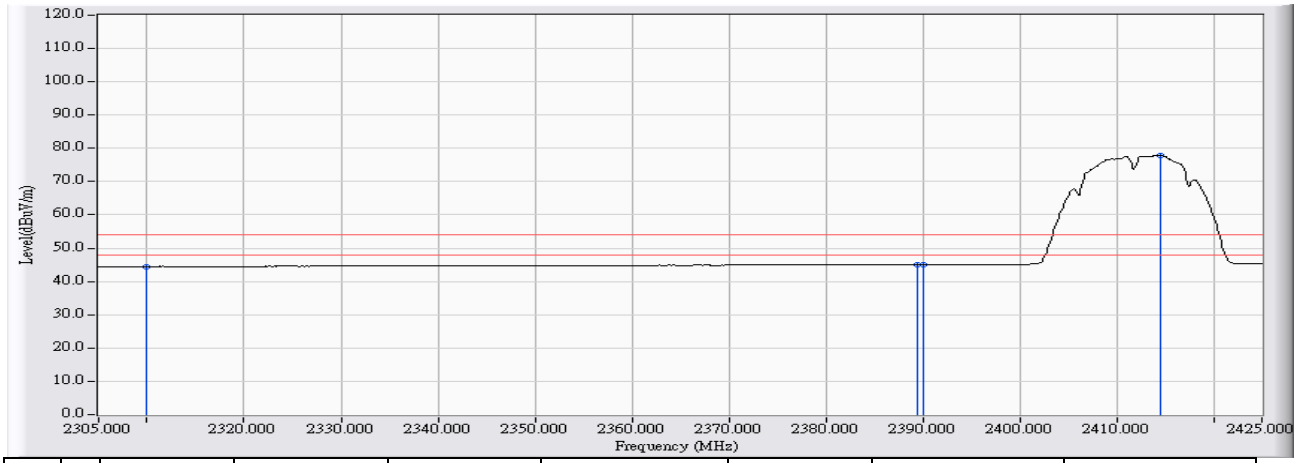


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	29.248	57.110	-16.890	74.000	PEAK
2		2379.880	28.043	31.459	59.502	-14.498	74.000	PEAK
3		2390.000	28.069	30.590	58.659	-15.341	74.000	PEAK
4	*	2412.880	28.128	53.657	81.785	7.785	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:06**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11b_2412MHz_axis-Z**

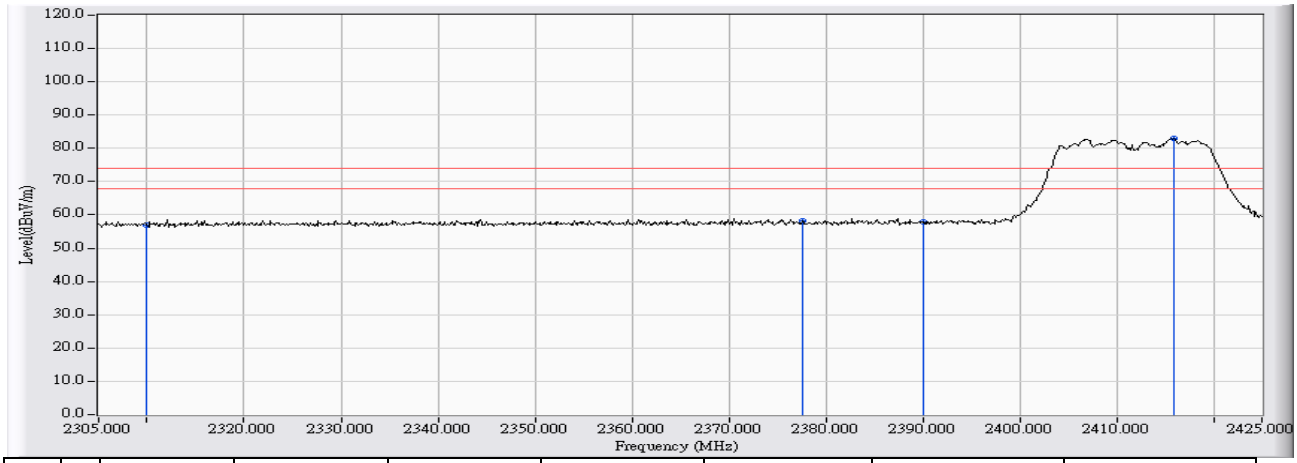


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.641	44.503	-9.497	54.000	AVERAGE
2		2389.480	28.067	17.020	45.088	-8.912	54.000	AVERAGE
3		2390.000	28.069	17.008	45.077	-8.923	54.000	AVERAGE
4	*	2414.560	28.133	49.877	78.010	24.010	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:21**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11g_2412MHz_axis-X**

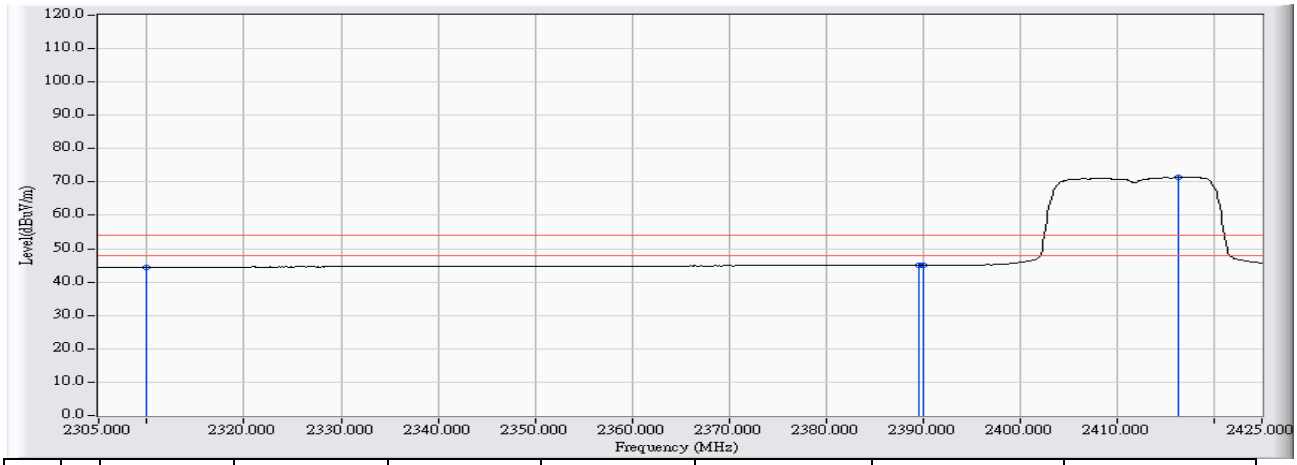


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	28.925	56.787	-17.213	74.000	PEAK
2		2377.600	28.037	30.312	58.349	-15.651	74.000	PEAK
3		2390.000	28.069	29.910	57.979	-16.021	74.000	PEAK
4	*	2415.880	28.136	54.807	82.943	8.943	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:22**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11g_2412MHz_axis-X**

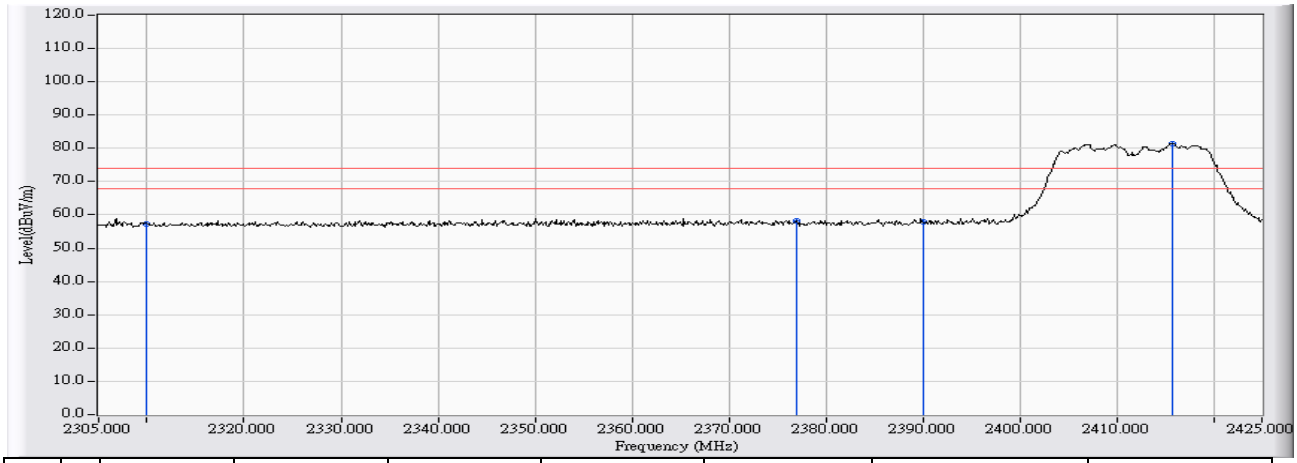


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.627	44.489	-9.511	54.000	AVERAGE
2		2389.600	28.068	16.938	45.006	-8.994	54.000	AVERAGE
3		2390.000	28.069	16.972	45.041	-8.959	54.000	AVERAGE
4	*	2416.360	28.137	43.361	71.498	17.498	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:25**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11g_2412MHz_axis-X**

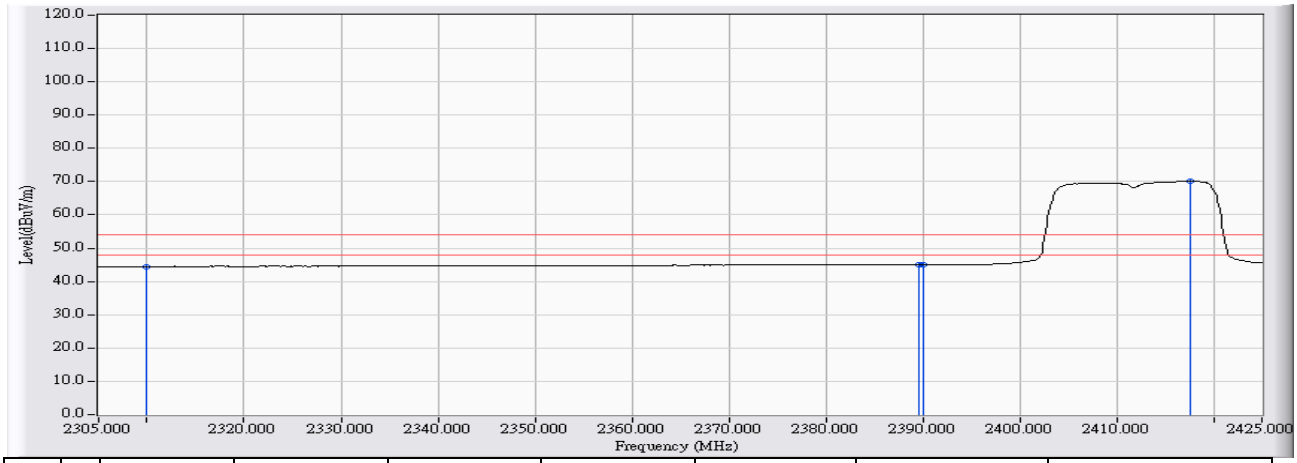


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	29.469	57.331	-16.669	74.000	PEAK
2		2377.000	28.035	30.251	58.286	-15.714	74.000	PEAK
3		2390.000	28.069	29.939	58.008	-15.992	74.000	PEAK
4	*	2415.760	28.135	53.328	81.464	7.464	74.000	PEAK

Note:

1. All readings 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. “ * ”, means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:25**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11g_2412MHz_axis-X**

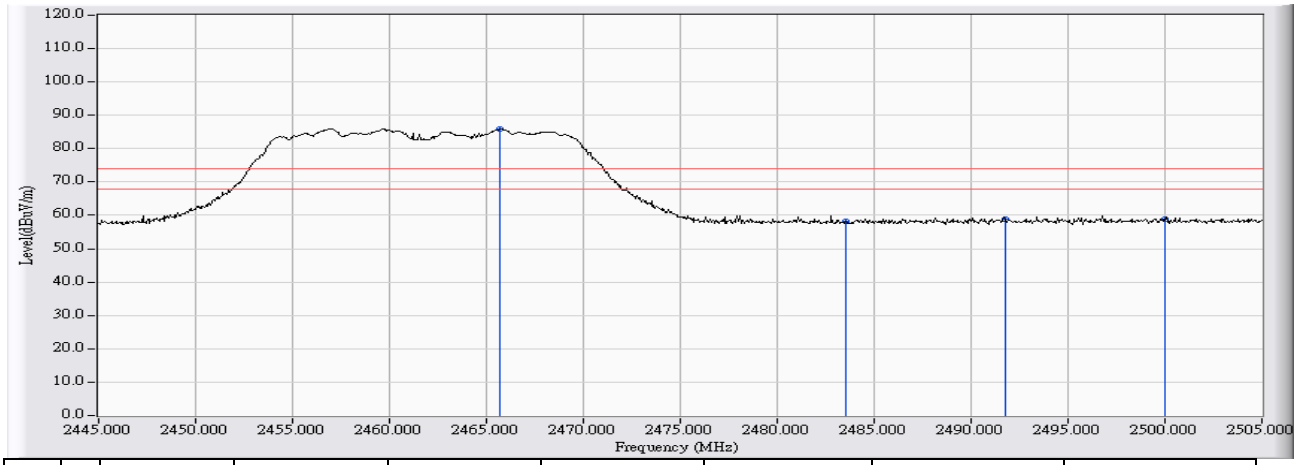


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.646	44.508	-9.492	54.000	AVERAGE
2		2389.600	28.068	17.040	45.108	-8.892	54.000	AVERAGE
3		2390.000	28.069	17.005	45.074	-8.926	54.000	AVERAGE
4	*	2417.680	28.141	41.960	70.101	16.101	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:29**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11g_2462MHz_axis-X**

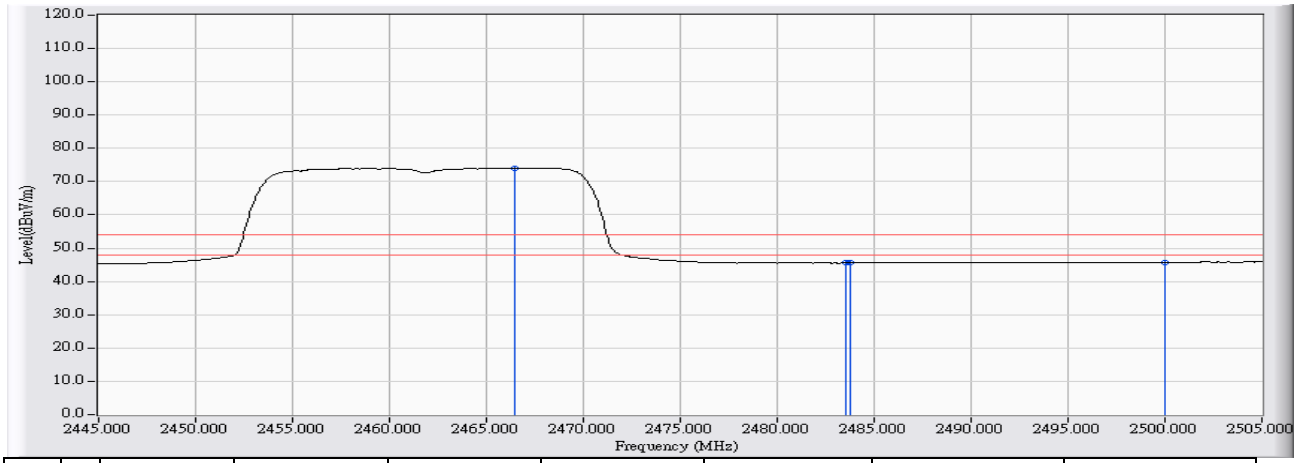


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2465.700	28.265	57.638	85.903	11.903	74.000	PEAK
2		2483.500	28.311	29.768	58.079	-15.921	74.000	PEAK
3		2491.740	28.333	30.684	59.016	-14.984	74.000	PEAK
4		2500.000	28.357	30.376	58.732	-15.268	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:29**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11g_2462MHz_axis-X**

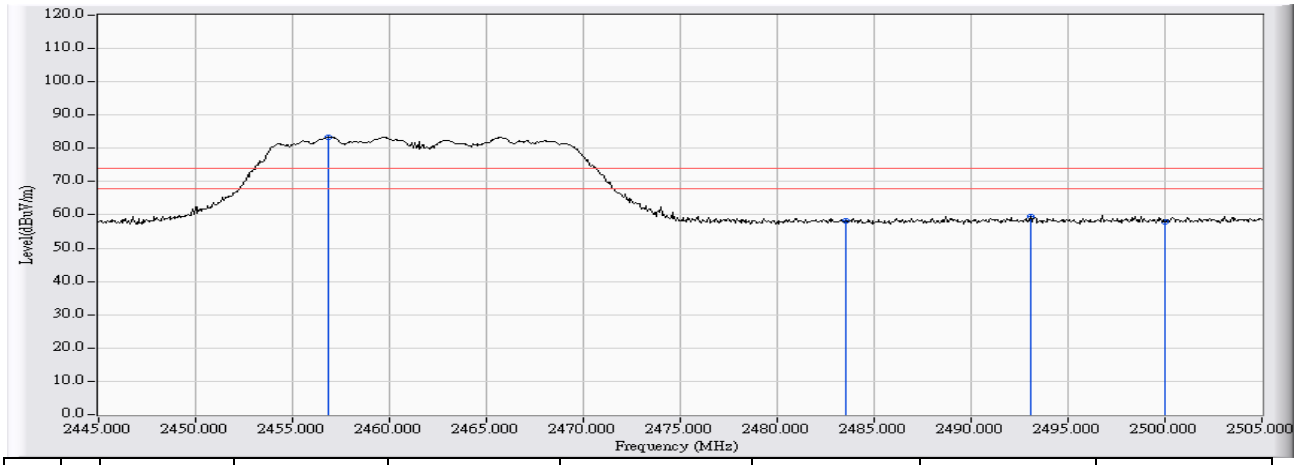


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2466.480	28.267	45.887	74.154	20.154	54.000	AVERAGE
2		2483.500	28.311	17.270	45.581	-8.419	54.000	AVERAGE
3		2483.760	28.311	17.250	45.562	-8.438	54.000	AVERAGE
4		2500.000	28.357	17.442	45.798	-8.202	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:32**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11g_2462MHz_axis-X**

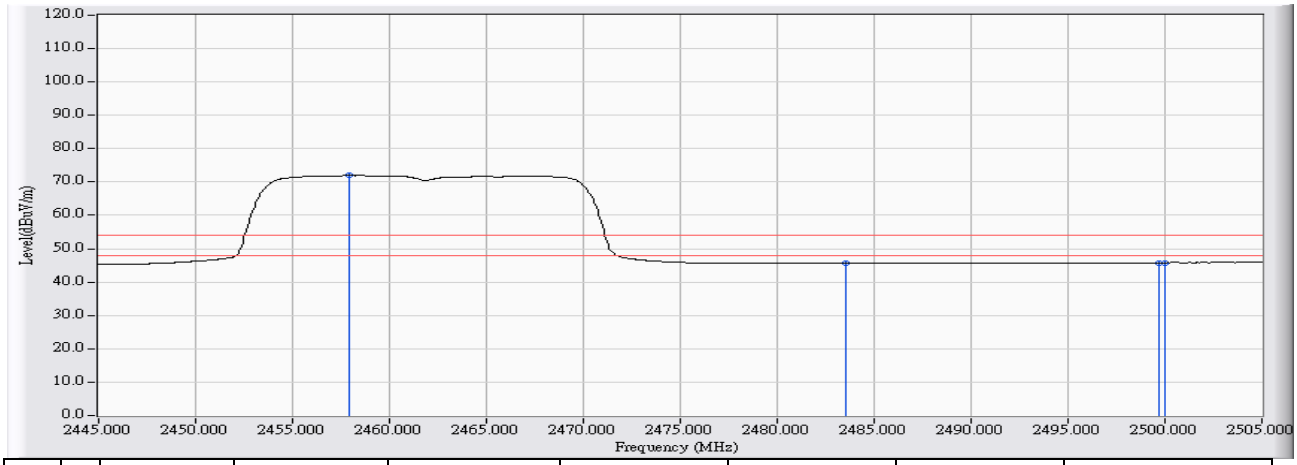


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2456.880	28.242	55.233	83.475	9.475	74.000	PEAK
2		2483.500	28.311	29.813	58.124	-15.876	74.000	PEAK
3		2493.060	28.336	31.065	59.401	-14.599	74.000	PEAK
4		2500.000	28.357	29.618	57.974	-16.026	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:32**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11g_2462MHz_axis-X**

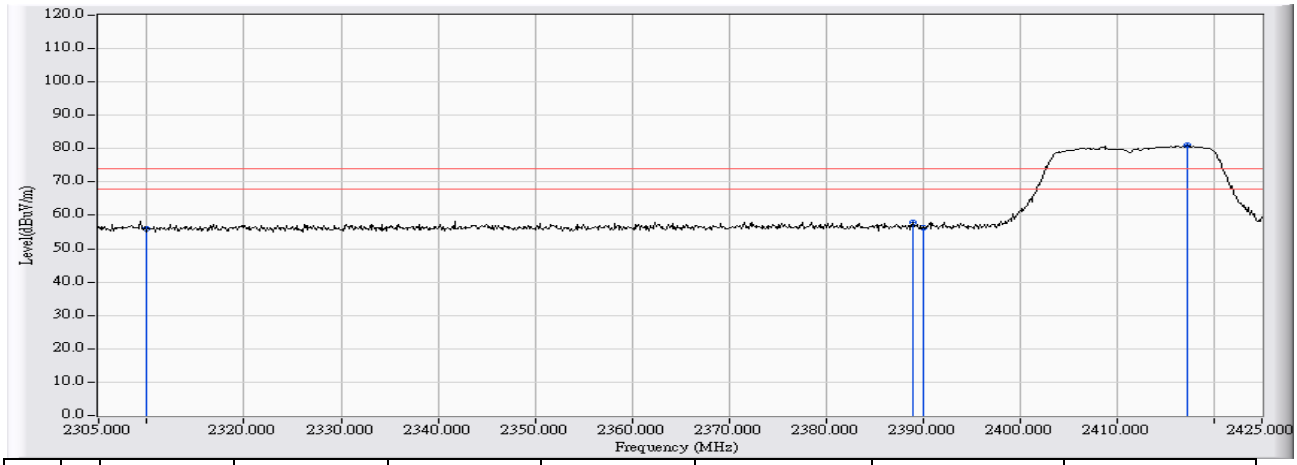


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2457.900	28.244	43.703	71.948	17.948	54.000	AVERAGE
2		2483.500	28.311	17.283	45.594	-8.406	54.000	AVERAGE
3		2499.720	28.355	17.464	45.819	-8.181	54.000	AVERAGE
4		2500.000	28.357	17.468	45.824	-8.176	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:37**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11n(20MHz)_2412MHz_axis-X**

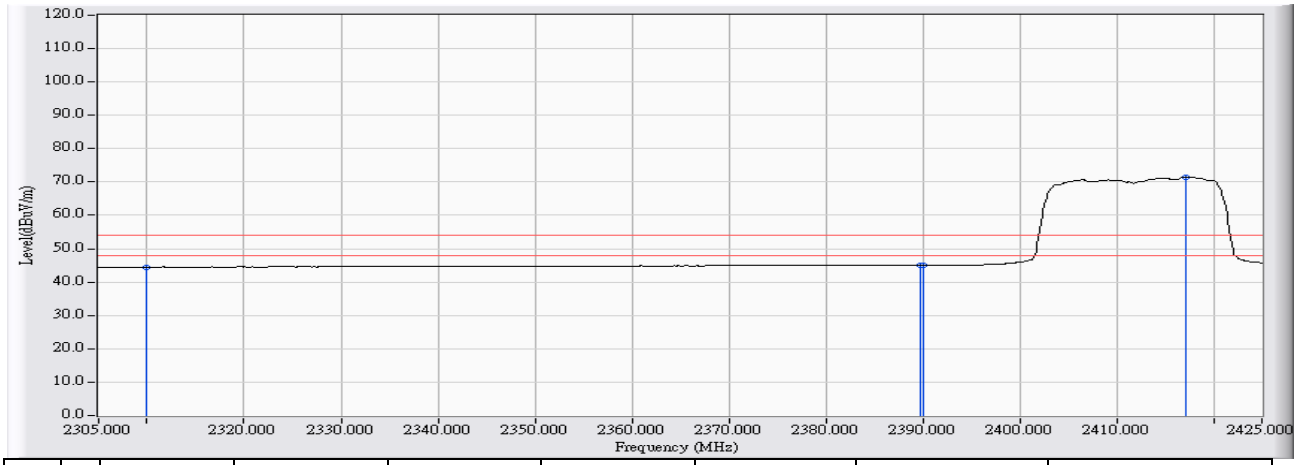


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	28.064	55.926	-18.074	74.000	PEAK
2		2389.000	28.067	29.717	57.783	-16.217	74.000	PEAK
3		2390.000	28.069	28.135	56.204	-17.796	74.000	PEAK
4	*	2417.320	28.139	52.804	80.944	6.944	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:38**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11n(20MHz)_2412MHz_axis-X**

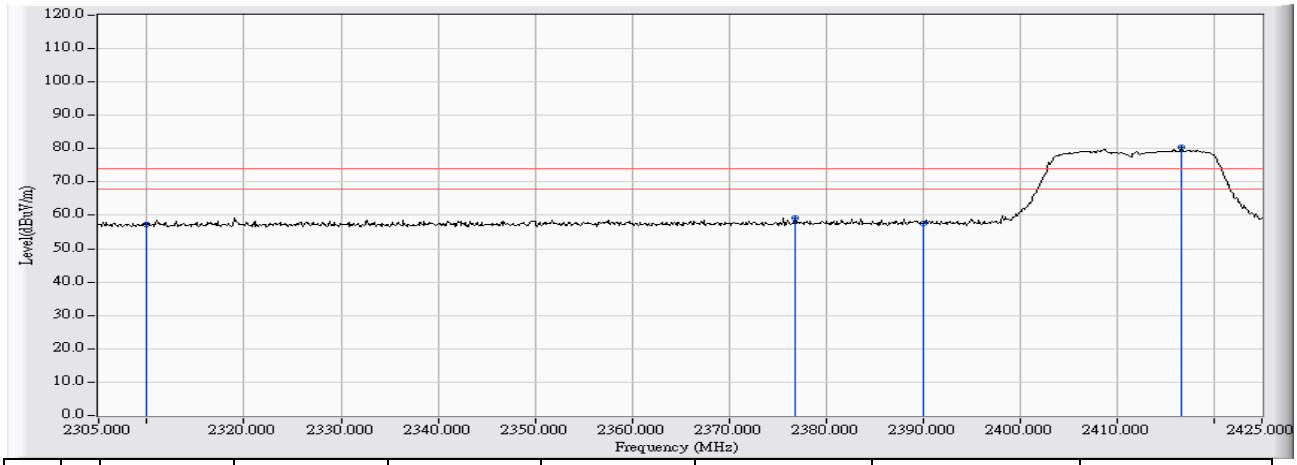


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.636	44.498	-9.502	54.000	AVERAGE
2		2389.720	28.068	17.042	45.110	-8.890	54.000	AVERAGE
3		2390.000	28.069	17.008	45.077	-8.923	54.000	AVERAGE
4	*	2417.200	28.139	43.405	71.544	17.544	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:42**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11n(20MHz)_2412MHz_axis-X**

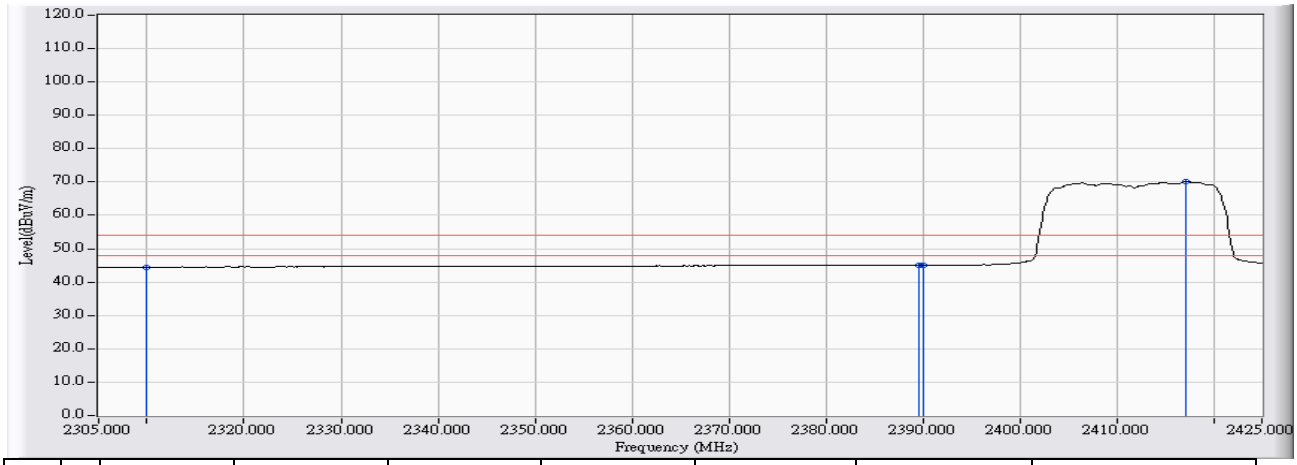


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	29.513	57.375	-16.625	74.000	PEAK
2		2376.880	28.035	31.253	59.288	-14.712	74.000	PEAK
3		2390.000	28.069	29.572	57.641	-16.359	74.000	PEAK
4	*	2416.720	28.139	52.347	80.485	6.485	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:43**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11n(20MHz)_2412MHz_axis-X**

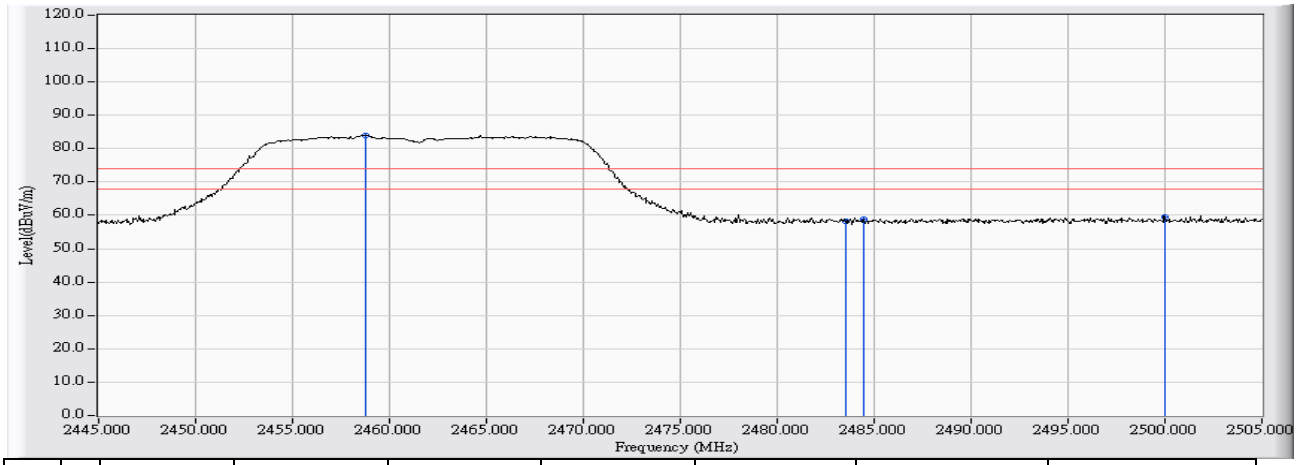


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	27.862	16.632	44.494	-9.506	54.000	AVERAGE
2		2389.600	28.068	17.027	45.095	-8.905	54.000	AVERAGE
3		2390.000	28.069	17.009	45.078	-8.922	54.000	AVERAGE
4	*	2417.200	28.139	41.913	70.052	16.052	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:49**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11n(20MHz)_2462MHz_axis-X**

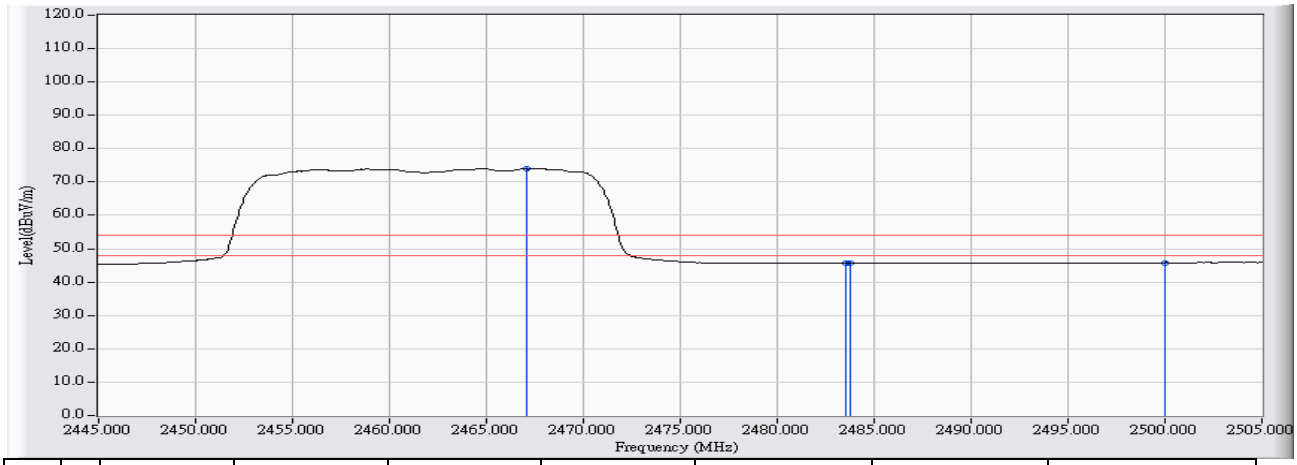


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2458.740	28.247	55.808	84.055	10.055	74.000	PEAK
2		2483.500	28.311	29.951	58.262	-15.738	74.000	PEAK
3		2484.480	28.313	30.401	58.714	-15.286	74.000	PEAK
4		2500.000	28.357	31.176	59.532	-14.468	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:50**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - HORIZONTAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11n(20MHz)_2462MHz_axis-X**

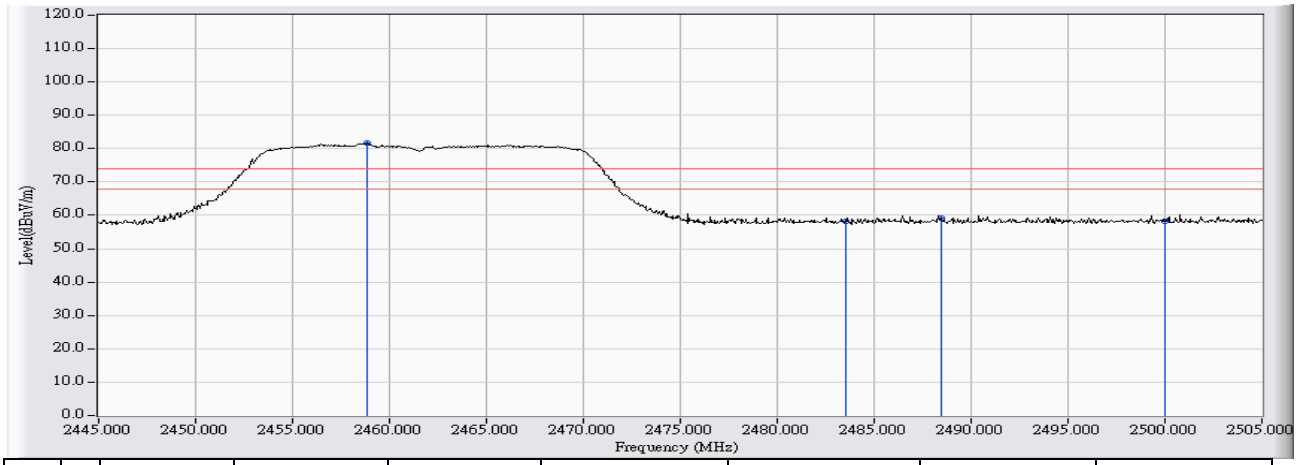


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2467.080	28.269	45.814	74.082	20.082	54.000	AVERAGE
2		2483.500	28.311	17.286	45.597	-8.403	54.000	AVERAGE
3		2483.760	28.311	17.287	45.599	-8.401	54.000	AVERAGE
4		2500.000	28.357	17.467	45.823	-8.177	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:52**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11n(20MHz)_2462MHz_axis-X**

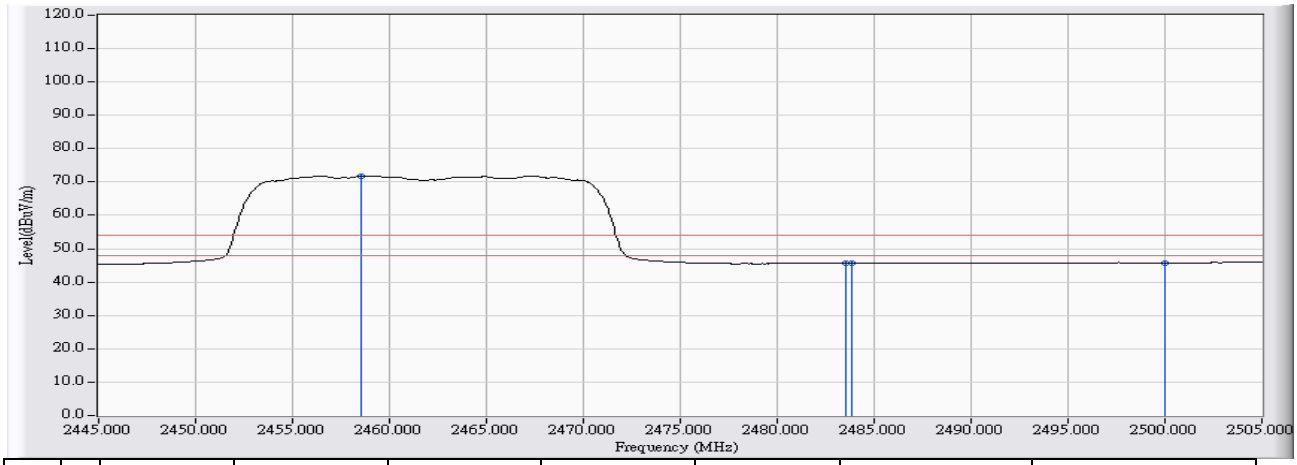


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2458.860	28.247	53.379	81.626	7.626	74.000	PEAK
2		2483.500	28.311	29.819	58.130	-15.870	74.000	PEAK
3		2488.440	28.324	31.014	59.338	-14.662	74.000	PEAK
4		2500.000	28.357	29.886	58.242	-15.758	74.000	PEAK

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2013/08/27 - 16:54**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G-1_0901 - VERTICAL	**Power : DC 5V**
EUT : SPORTS CAM	**Note : Mode 1: Transmit (Power by PC)** **802.11n(20MHz)_2462MHz_axis-X**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2458.500	28.246	43.491	71.737	17.737	54.000	AVERAGE
2		2483.500	28.311	17.233	45.544	-8.456	54.000	AVERAGE
3		2483.820	28.311	17.267	45.579	-8.421	54.000	AVERAGE
4		2500.000	28.357	17.457	45.813	-8.187	54.000	AVERAGE

Note:

1. All readings 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. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. Occupied Bandwidth

7.1. Test Equipment

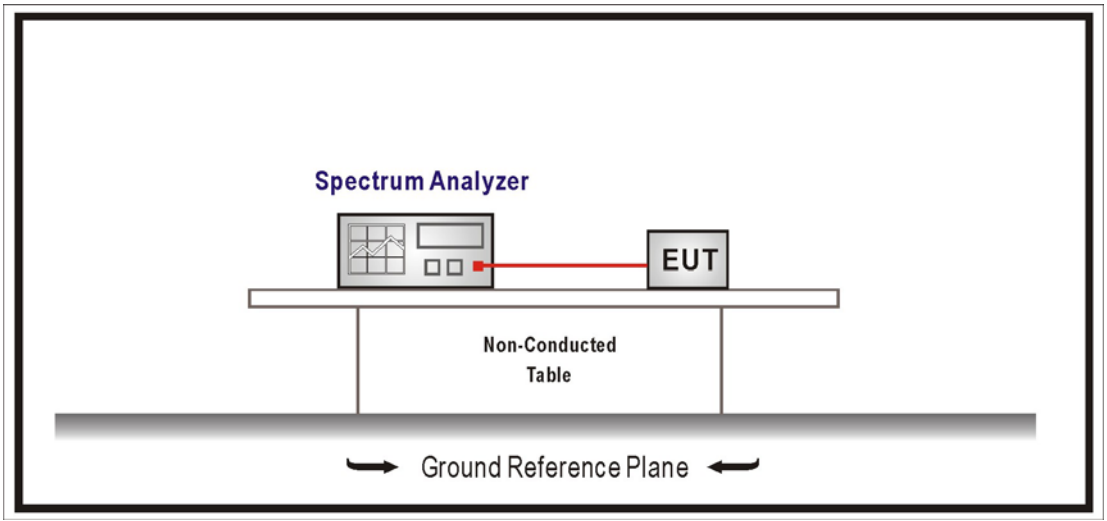
The following test equipments are used during the test:

Occupied Bandwidth / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2014/08/05

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. Test Procedures

The EUT was setup according to ANSI C63.4: 2009; tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW = 1% of EBW, Span greater than RBW.

7.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

7.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2012

7.6. Uncertainty

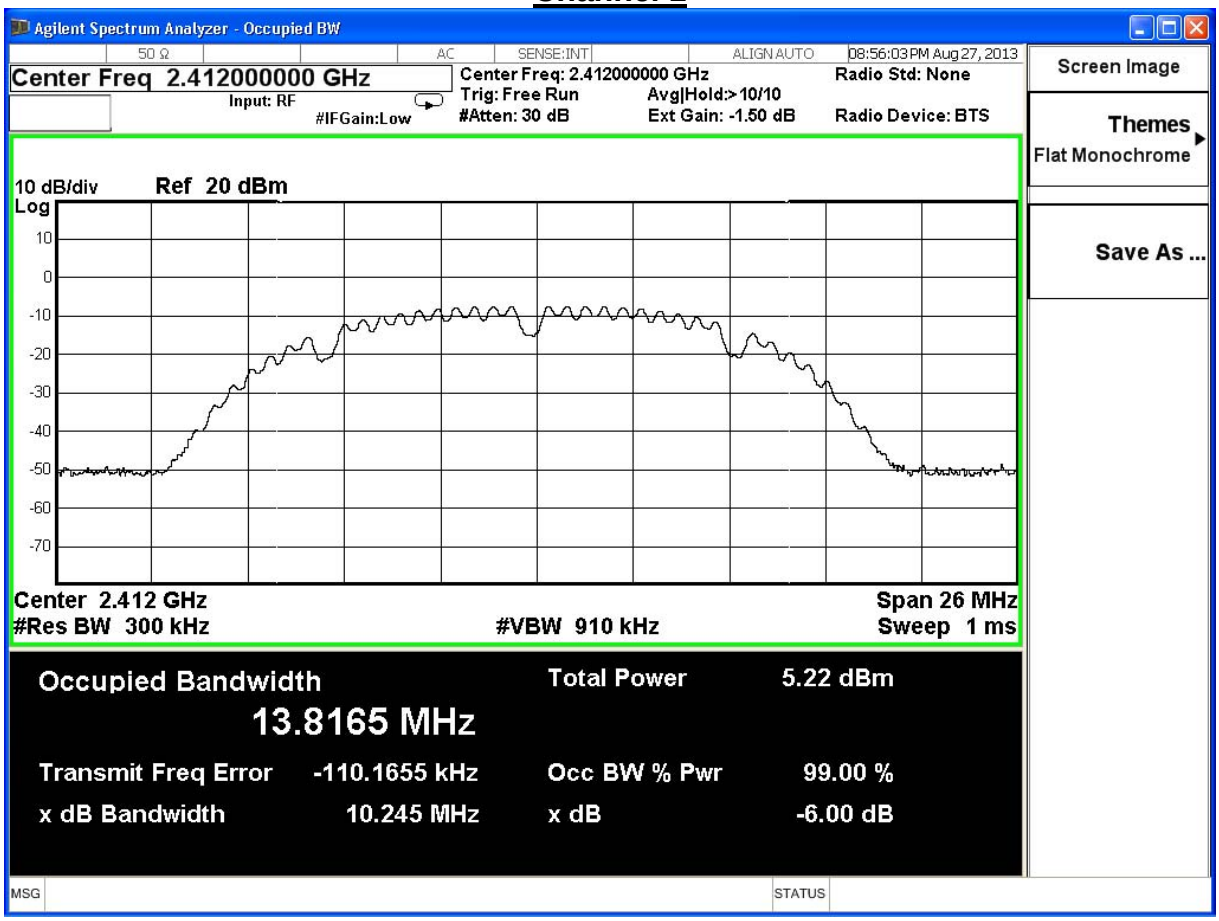
The measurement uncertainty is defined as ±150Hz

7.7. Test Result

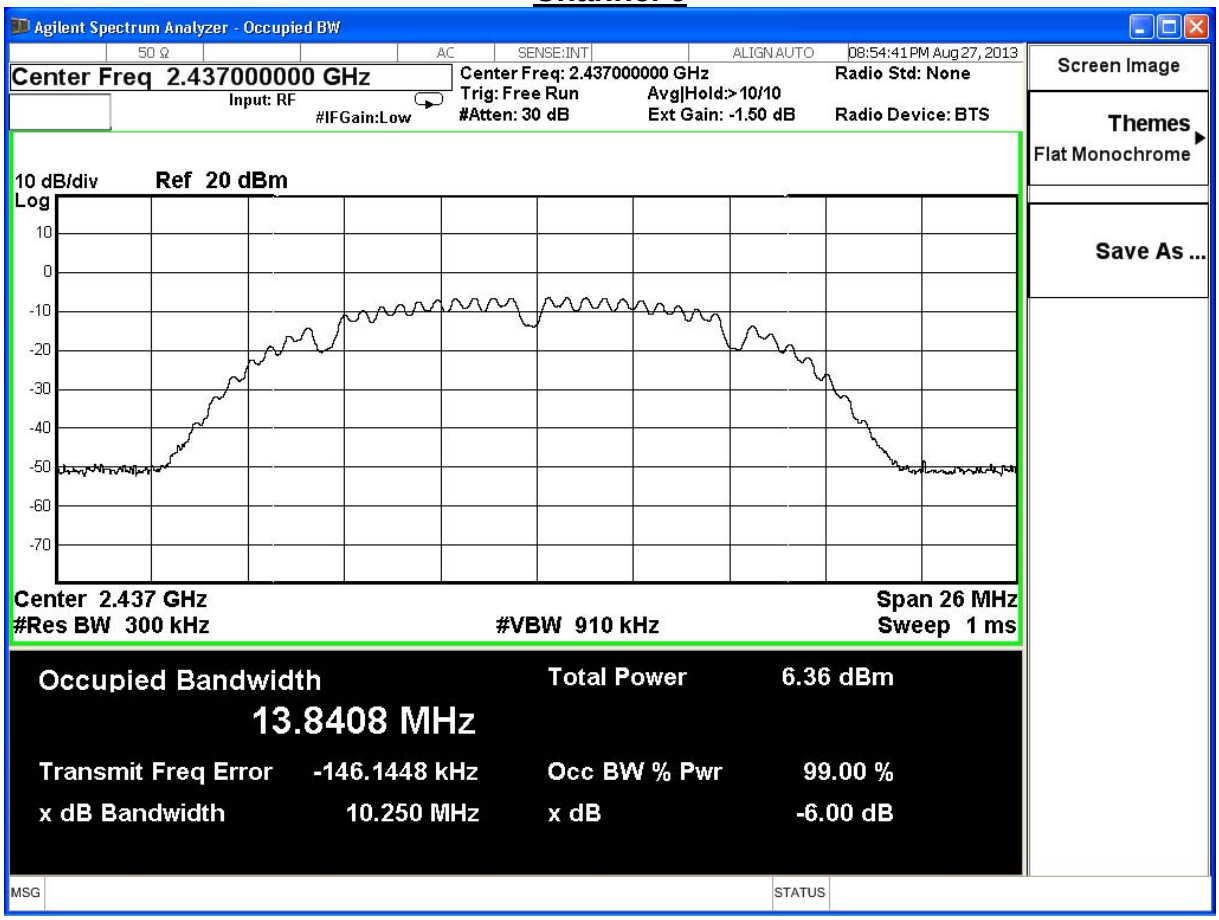
Product	Wireless Day/Night Cloud Camera		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/27	Test Site	SR7

802.11 b, ANT 0				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Required Limit (MHz)	Result
1	2412	10.25	≧0.5	Pass
6	2437	10.25	≧0.5	Pass
11	2462	10.24	≧0.5	Pass

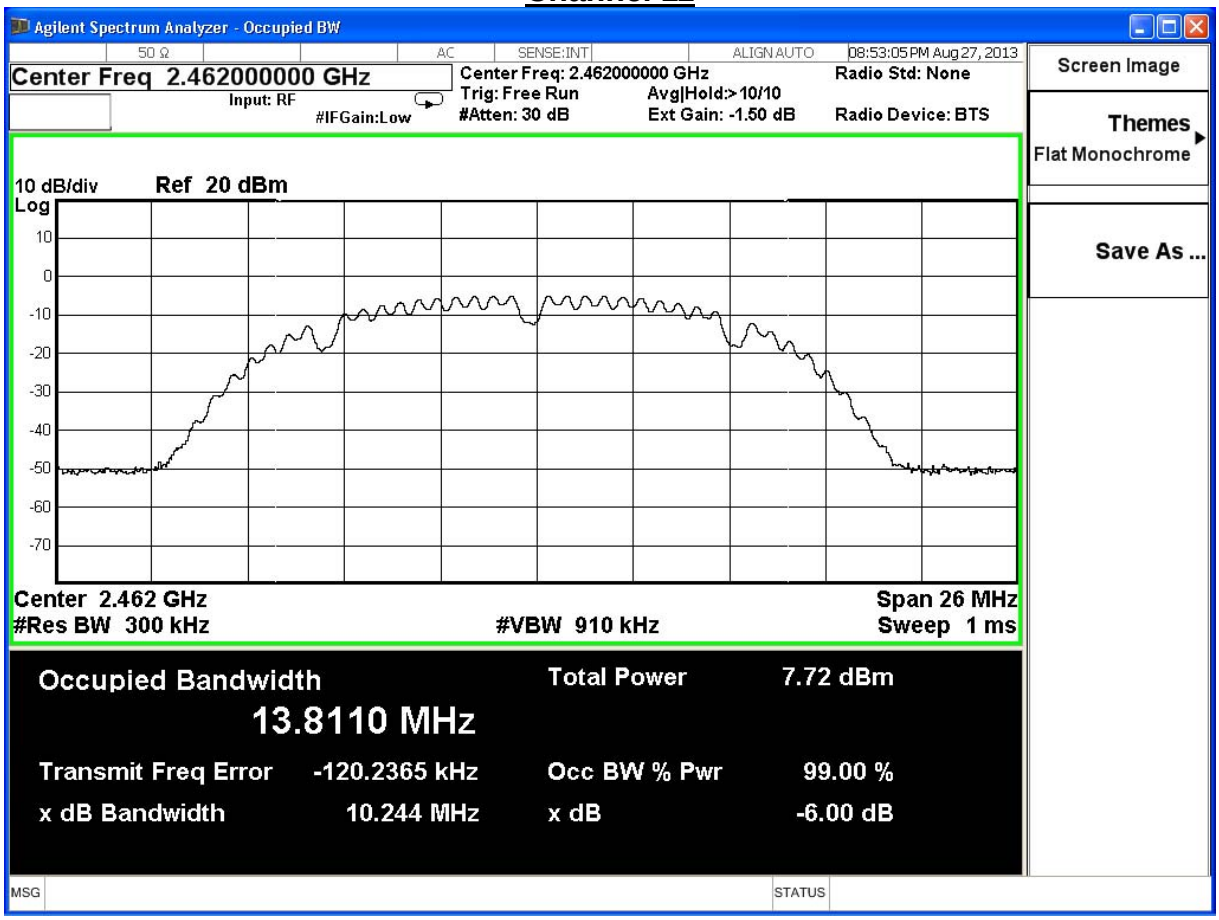
Channel 1



Channel 6


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
08:54:41 PM Aug 27, 2013
Center Freq 2.437000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.437000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>10/10
Ext Gain: -1.50 dB
Radio Std: None
Radio Device: BTS
Screen Image
Themes
Flat Monochrome
Save As ...
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.437 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 26 MHz
Sweep 1 ms
Occupied Bandwidth
13.8408 MHz
Total Power
6.36 dBm
Transmit Freq Error
-146.1448 kHz
Occ BW % Pwr
99.00 %
x dB Bandwidth
10.250 MHz
x dB
-6.00 dB
MSG
STATUS

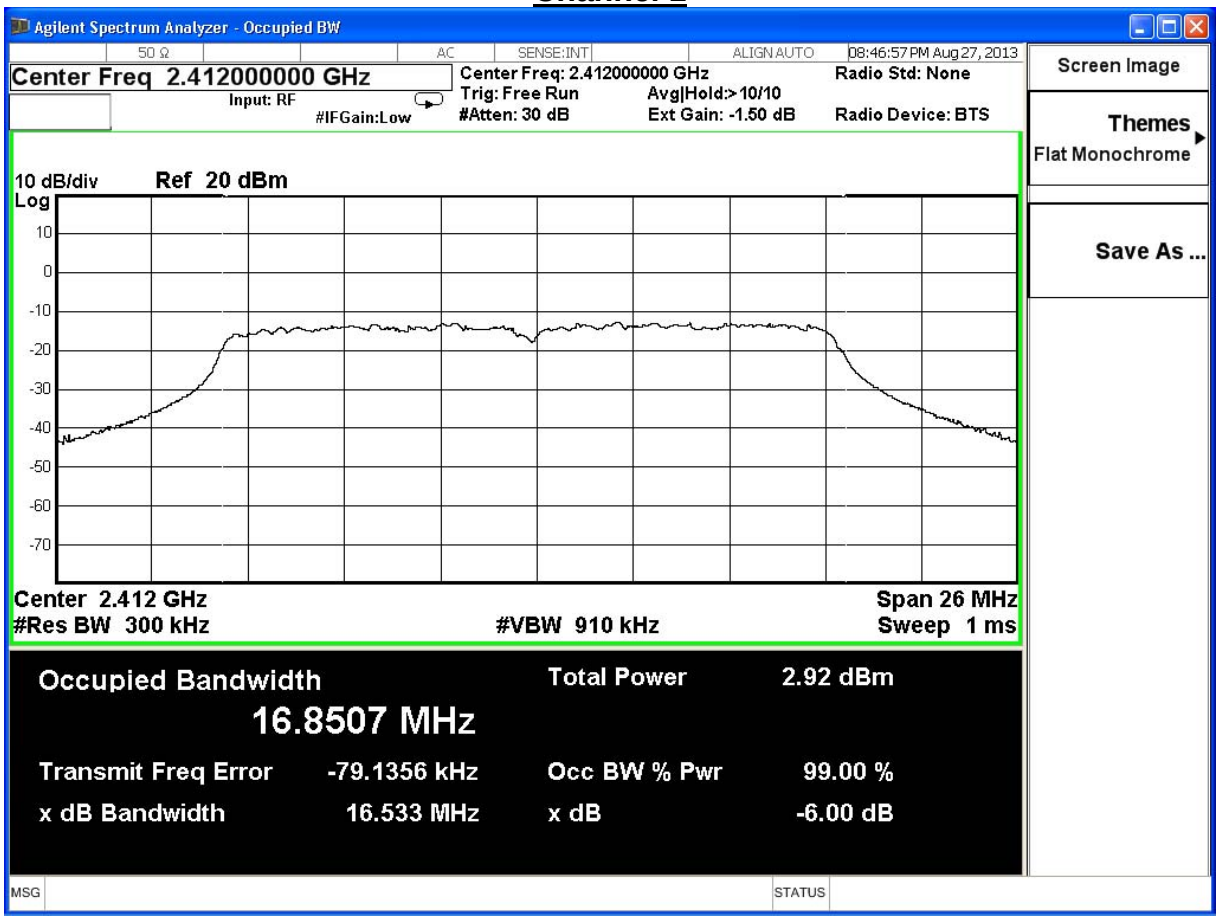
Channel 11


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
08:53:05 PM Aug 27, 2013
Center Freq 2.462000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.462000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>10/10
Ext Gain: -1.50 dB
Radio Std: None
Radio Device: BTS
Screen Image
Themes
Flat Monochrome
Save As ...
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.462 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 26 MHz
Sweep 1 ms
Occupied Bandwidth
13.8110 MHz
Total Power
7.72 dBm
Transmit Freq Error
-120.2365 kHz
Occ BW % Pwr
99.00 %
x dB Bandwidth
10.244 MHz
x dB
-6.00 dB
MSG
STATUS

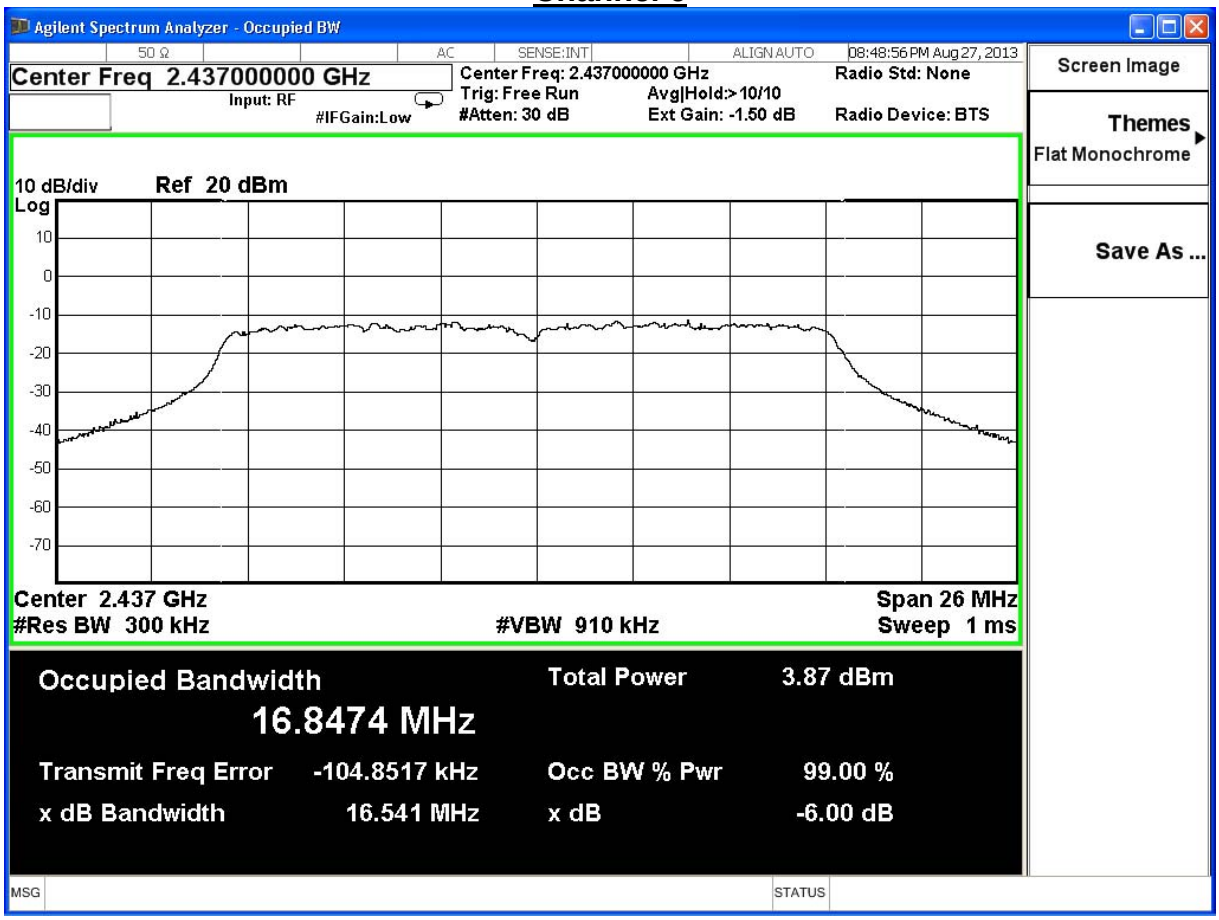
Product	Wireless Day/Night Cloud Camera		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/27	Test Site	SR7

IEEE 802.11g, ANT 0				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Required Limit (MHz)	Result
1	2412	16.53	≧0.5	Pass
6	2437	16.54	≧0.5	Pass
11	2462	16.53	≧0.5	Pass

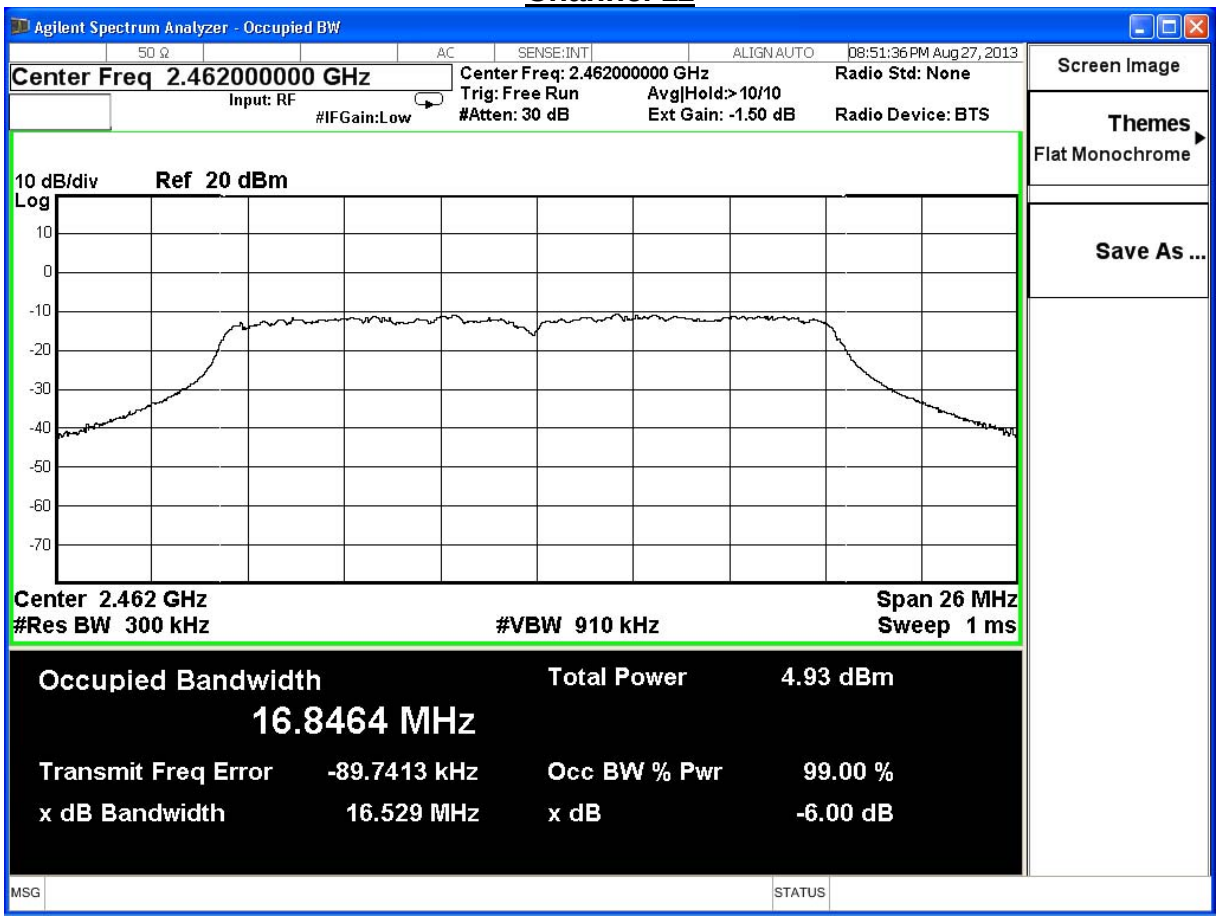
Channel 1



Channel 6


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
08:48:56 PM Aug 27, 2013
Center Freq 2.437000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.437000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>10/10
Ext Gain: -1.50 dB
Radio Std: None
Radio Device: BTS
Screen Image
Themes
Flat Monochrome
Save As ...
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.437 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 26 MHz
Sweep 1 ms
Occupied Bandwidth
16.8474 MHz
Total Power
3.87 dBm
Transmit Freq Error
-104.8517 kHz
Occ BW % Pwr
99.00 %
x dB Bandwidth
16.541 MHz
x dB
-6.00 dB
MSG
STATUS

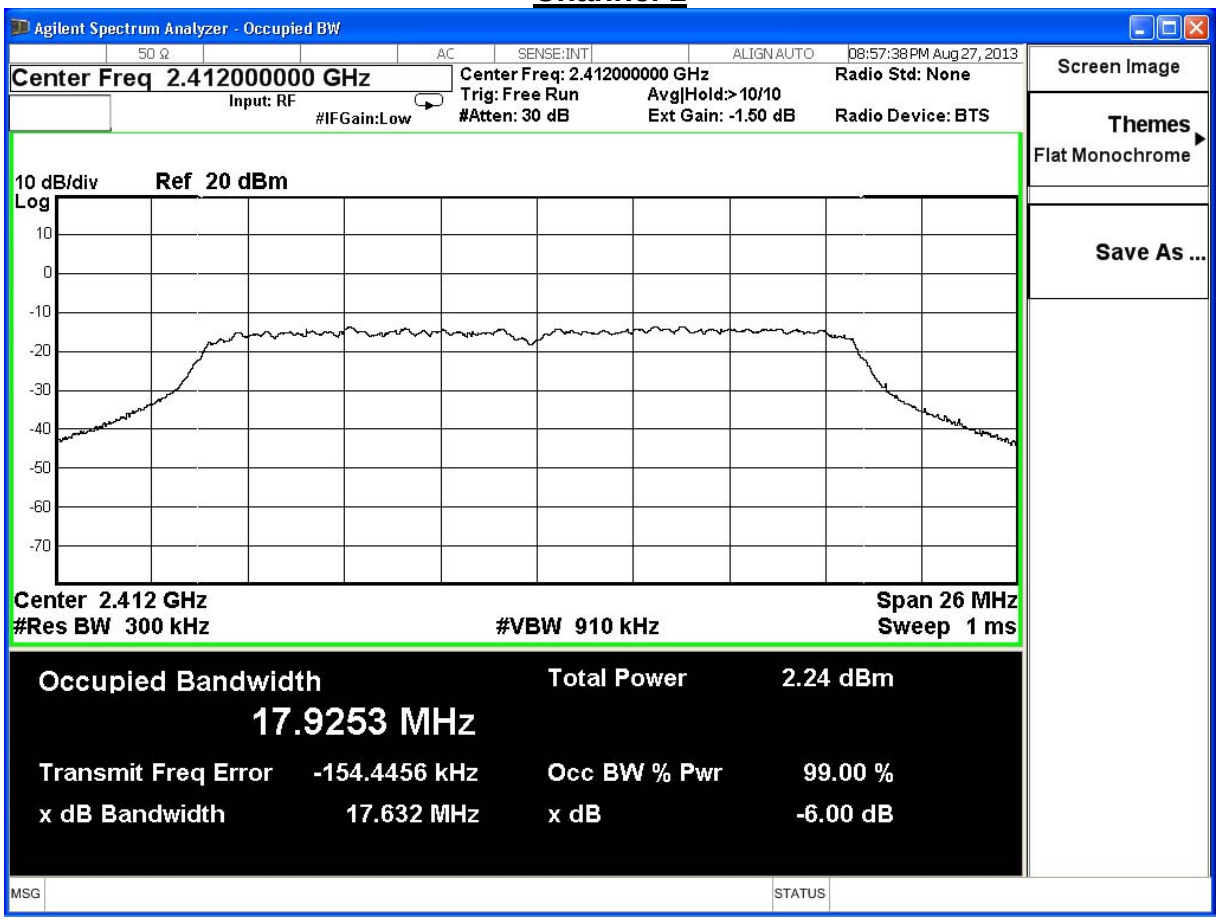
Channel 11


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
08:51:36 PM Aug 27, 2013
Center Freq 2.462000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.462000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>10/10
Ext Gain: -1.50 dB
Radio Std: None
Radio Device: BTS
Screen Image
Themes
Flat Monochrome
Save As ...
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.462 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 26 MHz
Sweep 1 ms
Occupied Bandwidth
16.8464 MHz
Total Power
4.93 dBm
Transmit Freq Error
-89.7413 kHz
Occ BW % Pwr
99.00 %
x dB Bandwidth
16.529 MHz
x dB
-6.00 dB
MSG
STATUS

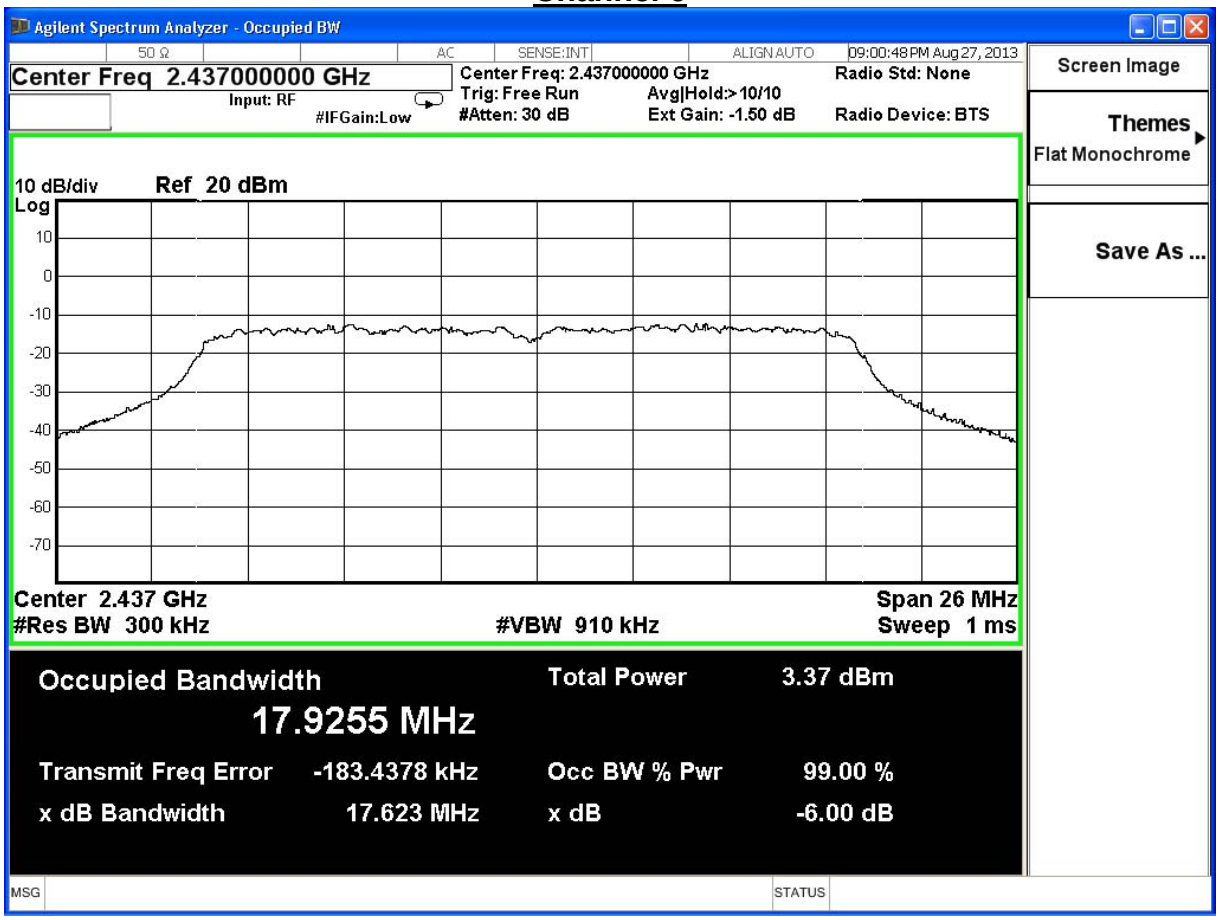
Product	Wireless Day/Night Cloud Camera		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/27	Test Site	SR7

IEEE 802.11n (20MHz), ANT 0				
Channel No.	Frequency (MHz)	Measure Level (MHz)	Required Limit (MHz)	Result
1	2412	17.63	≧0.5	Pass
6	2437	17.62	≧0.5	Pass
11	2462	17.62	≧0.5	Pass

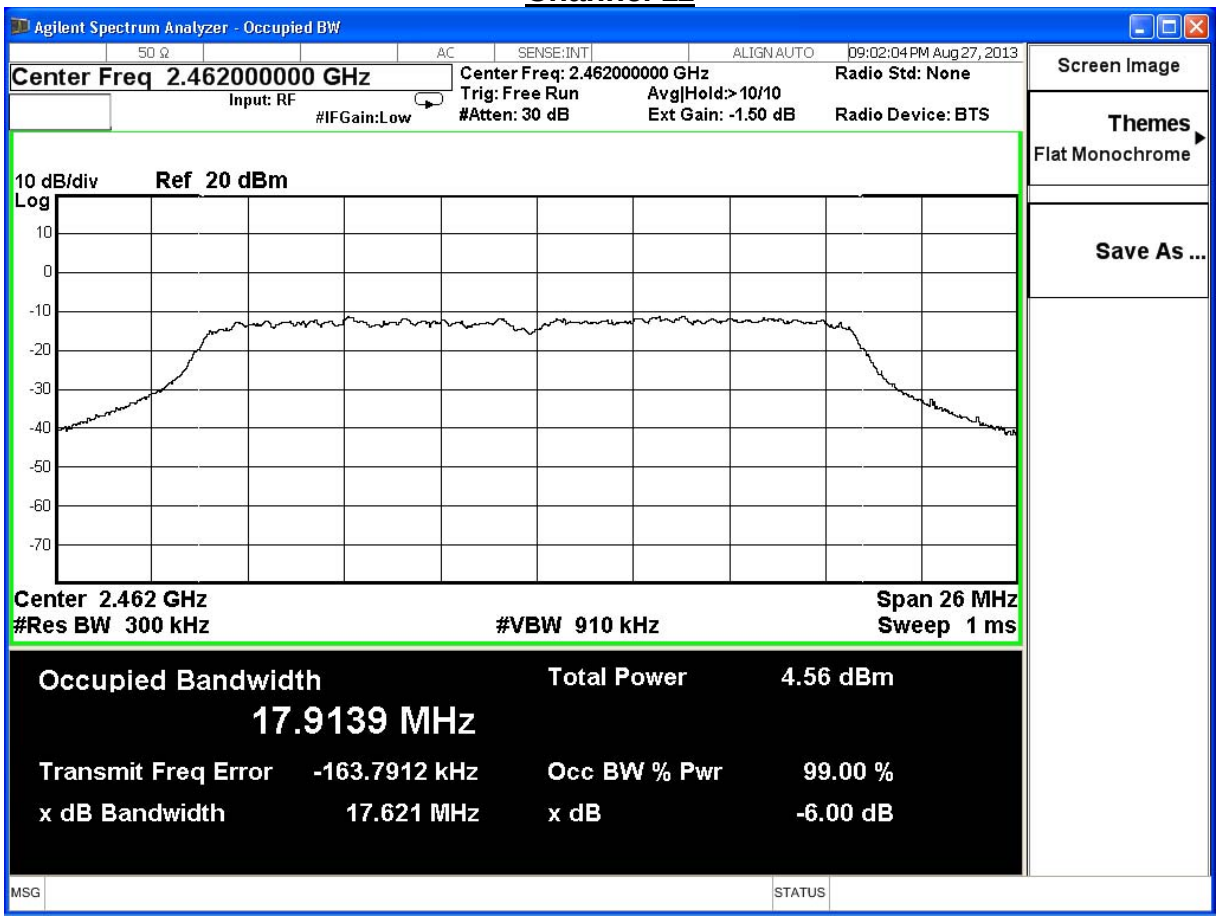
Channel 1



Channel 6


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
09:00:48 PM Aug 27, 2013
Center Freq 2.437000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.437000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>10/10
Ext Gain: -1.50 dB
Radio Std: None
Radio Device: BTS
Screen Image
Themes
Flat Monochrome
Save As ...
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.437 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 26 MHz
Sweep 1 ms
Occupied Bandwidth
17.9255 MHz
Total Power
3.37 dBm
Transmit Freq Error
-183.4378 kHz
Occ BW % Pwr
99.00 %
x dB Bandwidth
17.623 MHz
x dB
-6.00 dB
MSG
STATUS

Channel 11


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
09:02:04 PM Aug 27, 2013
Center Freq 2.462000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.462000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>10/10
Ext Gain: -1.50 dB
Radio Std: None
Radio Device: BTS
Screen Image
Themes
Flat Monochrome
Save As ...
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center 2.462 GHz
#Res BW 300 kHz
#VBW 910 kHz
Span 26 MHz
Sweep 1 ms
Occupied Bandwidth
17.9139 MHz
Total Power
4.56 dBm
Transmit Freq Error
-163.7912 kHz
Occ BW % Pwr
99.00 %
x dB Bandwidth
17.621 MHz
x dB
-6.00 dB
MSG
STATUS

8. Power Density

8.1. Test Equipment

The following test equipment is used during the test:

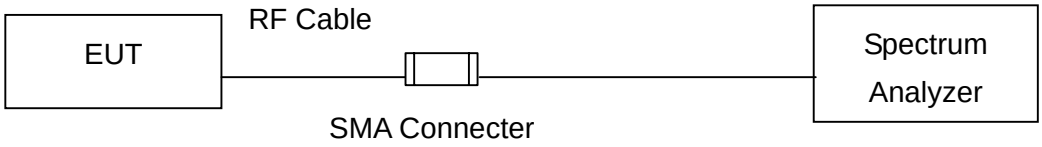
Power Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2014/08/05

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

8.2. Test Setup

IEEE 802.11 b / g / n (20M) MODE



8.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2009; tested according to DTS test procedure of Jan. 2012 KDB558074 for compliance to FCC 47CFR 15.247 requirements.
Set RBW= 100 kHz, Set VBW= 300 kHz, Sweep time=Auto, Set detector=Peak detector

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2012

8.6. Uncertainty

The measurement uncertainty is defined as ±1.27dB.

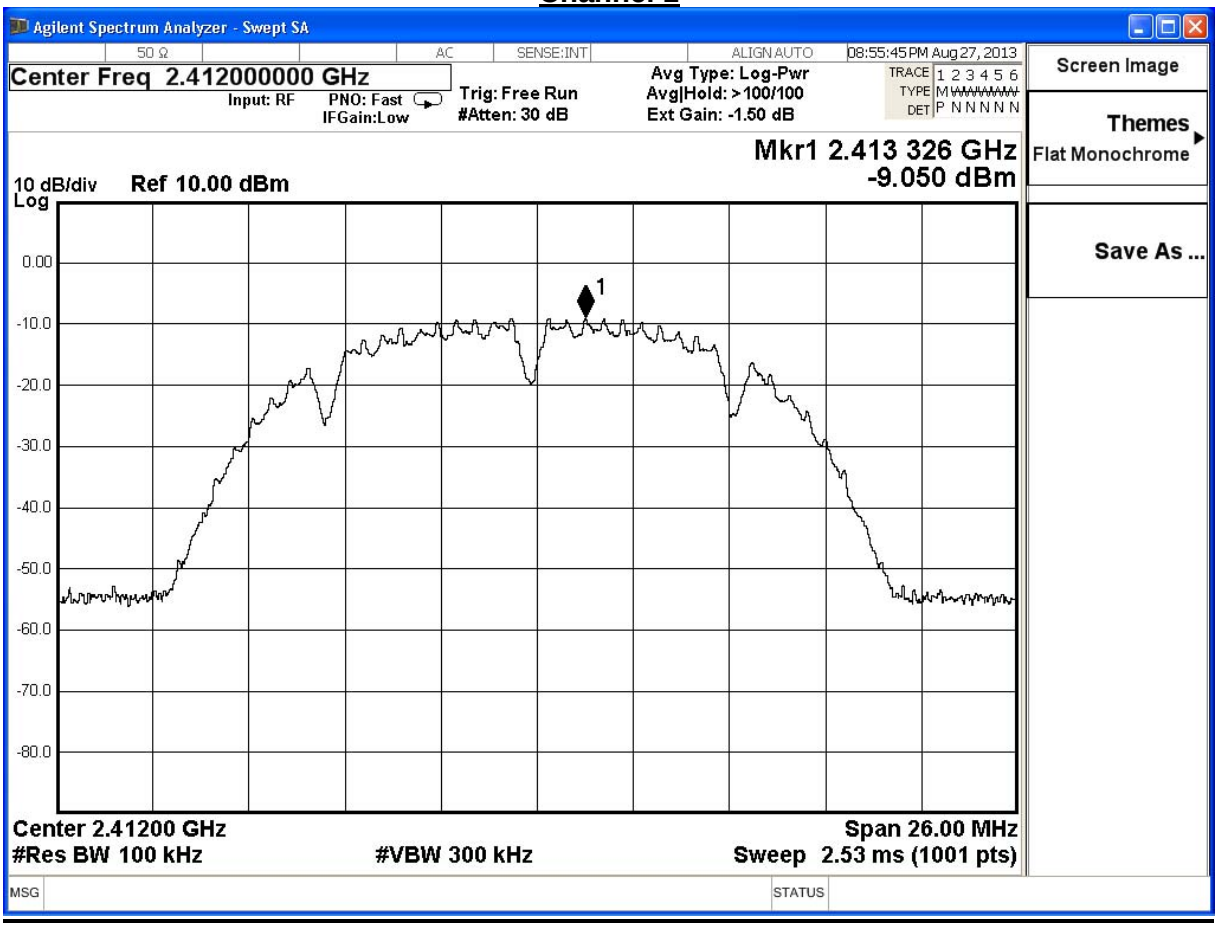
8.7. Test Result

Product	Wireless Day/Night Cloud Camera		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/27	Test Site	SR7

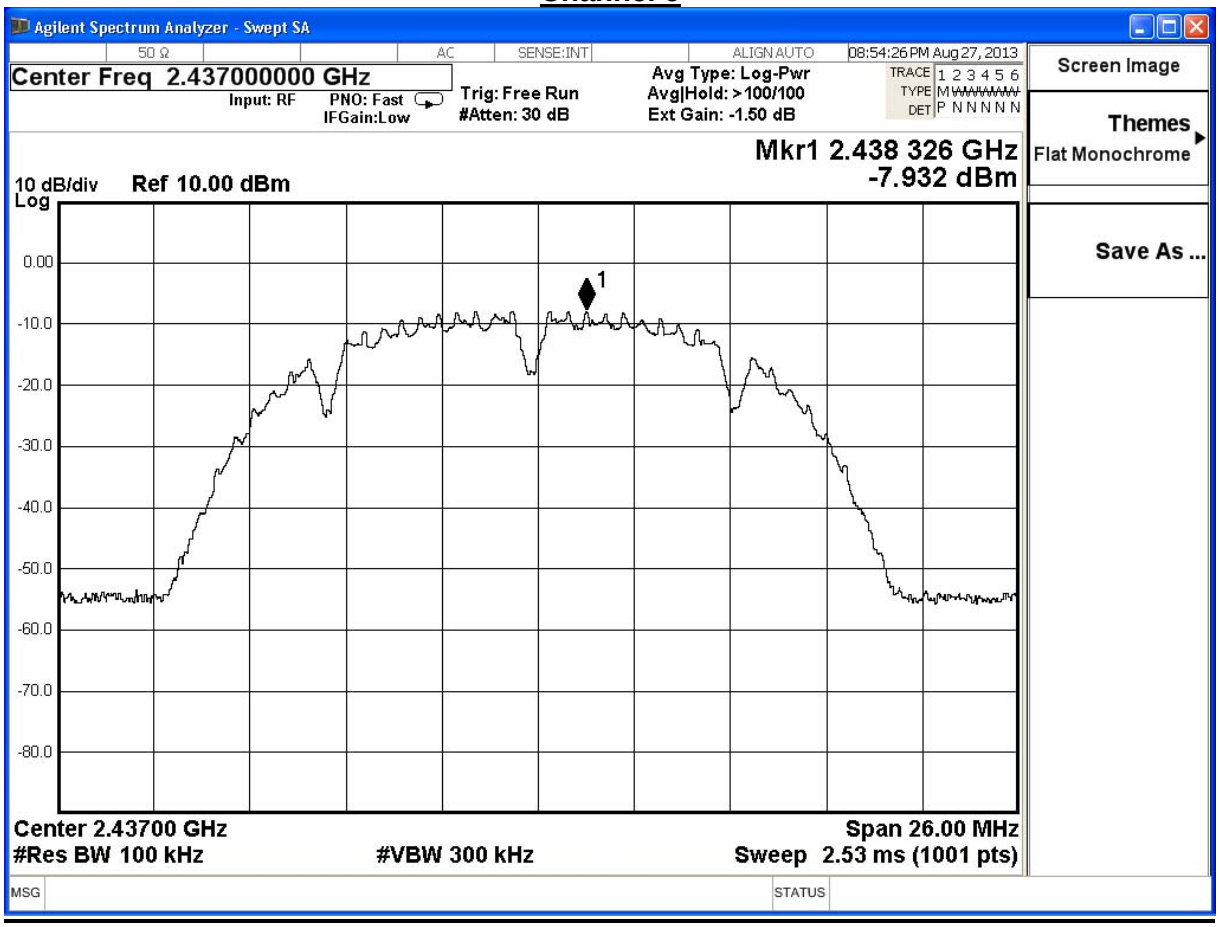
IEEE 802.11b, ANT 0					
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-9.05	-24.25	≦8	Pass
6	2437	-7.93	-23.13	≦8	Pass
11	2462	-6.22	-21.42	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB
Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

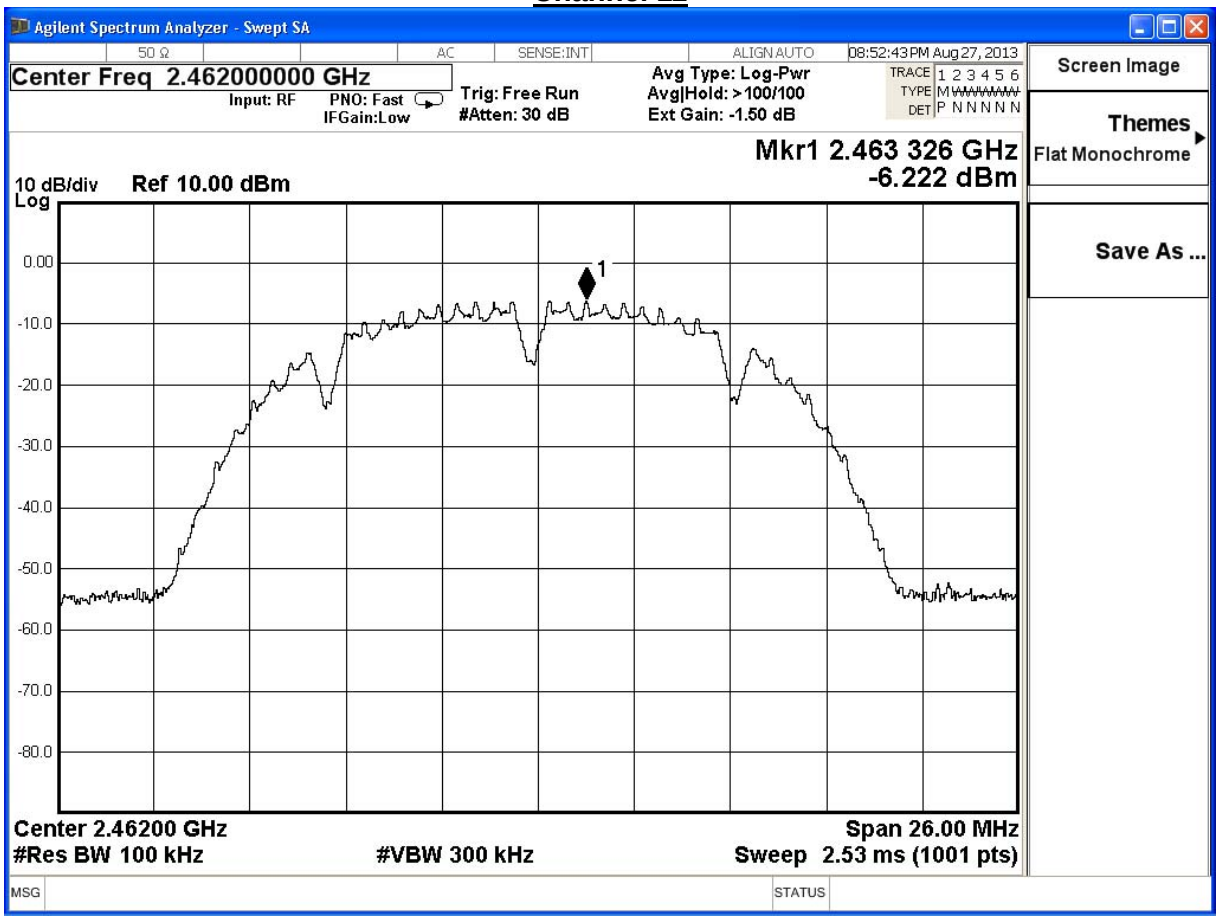
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
08:54:26 PM Aug 27, 2013
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: >100/100
Ext Gain: -1.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.438 326 GHz
-7.932 dBm
10 dB/div
Log
Ref 10.00 dBm
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
Center 2.43700 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 26.00 MHz
Sweep 2.53 ms (1001 pts)
MSG
STATUS
Screen Image
Themes
Flat Monochrome
Save As ...

Channel 11

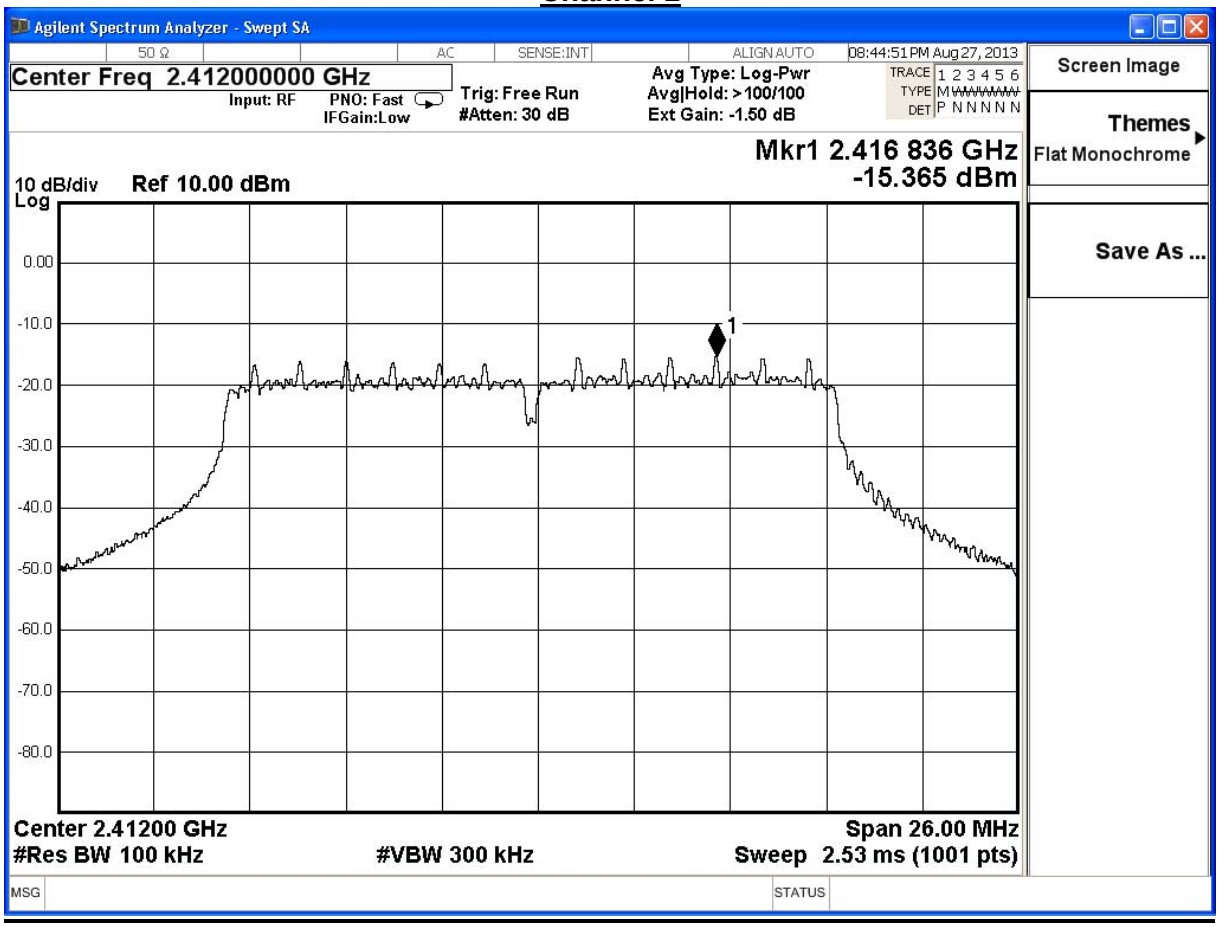

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
08:52:43 PM Aug 27, 2013
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: >100/100
Ext Gain: -1.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.463 326 GHz
-6.222 dBm
10 dB/div
Log
Ref 10.00 dBm
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
Center 2.46200 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 26.00 MHz
Sweep 2.53 ms (1001 pts)
MSG
STATUS
Screen Image
Themes
Flat Monochrome
Save As ...

Product	Wireless Day/Night Cloud Camera		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/27	Test Site	SR7

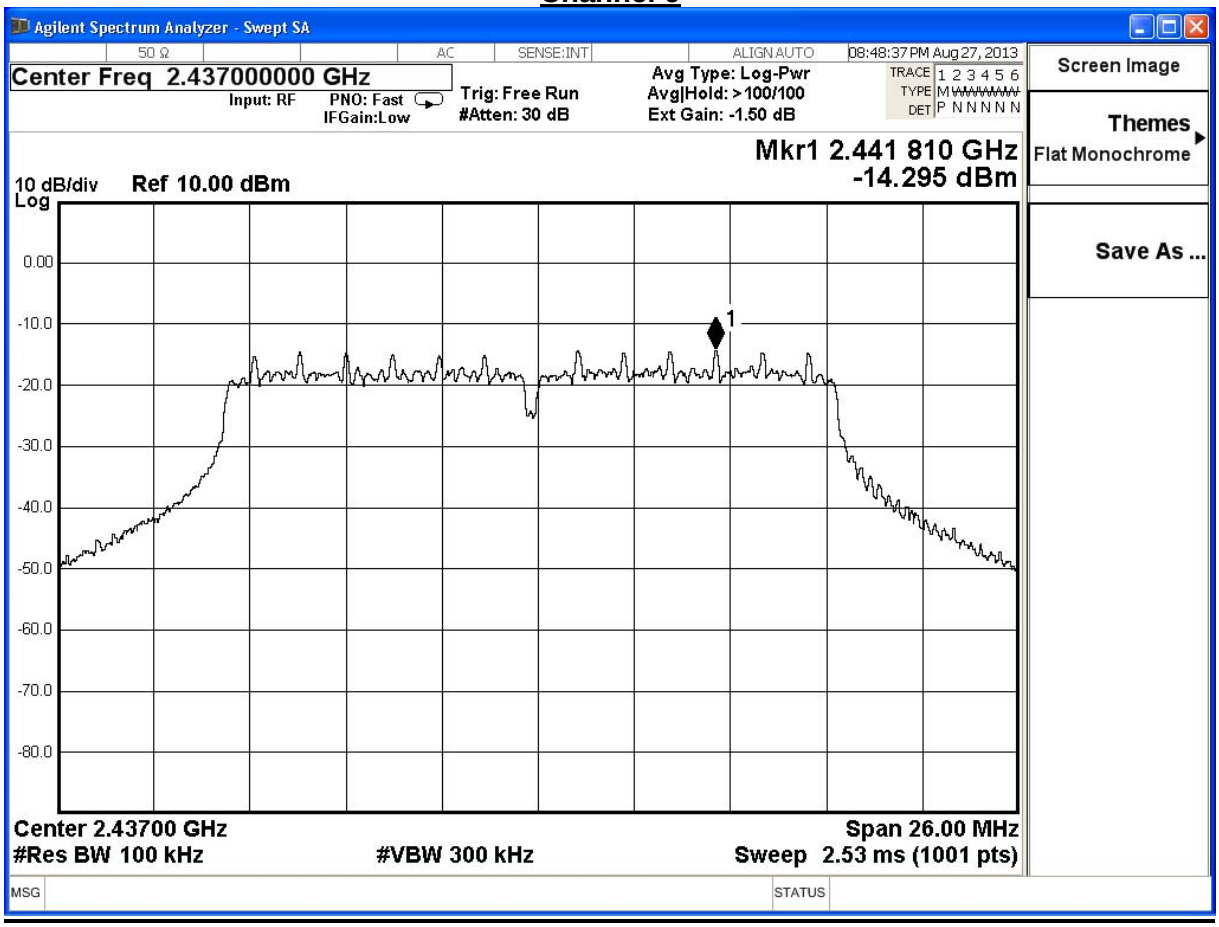
IEEE 802.11g, ANT 0					
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-15.36	-30.56	≦8	Pass
6	2437	-14.29	-29.49	≦8	Pass
11	2462	-13.11	-28.31	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB
Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

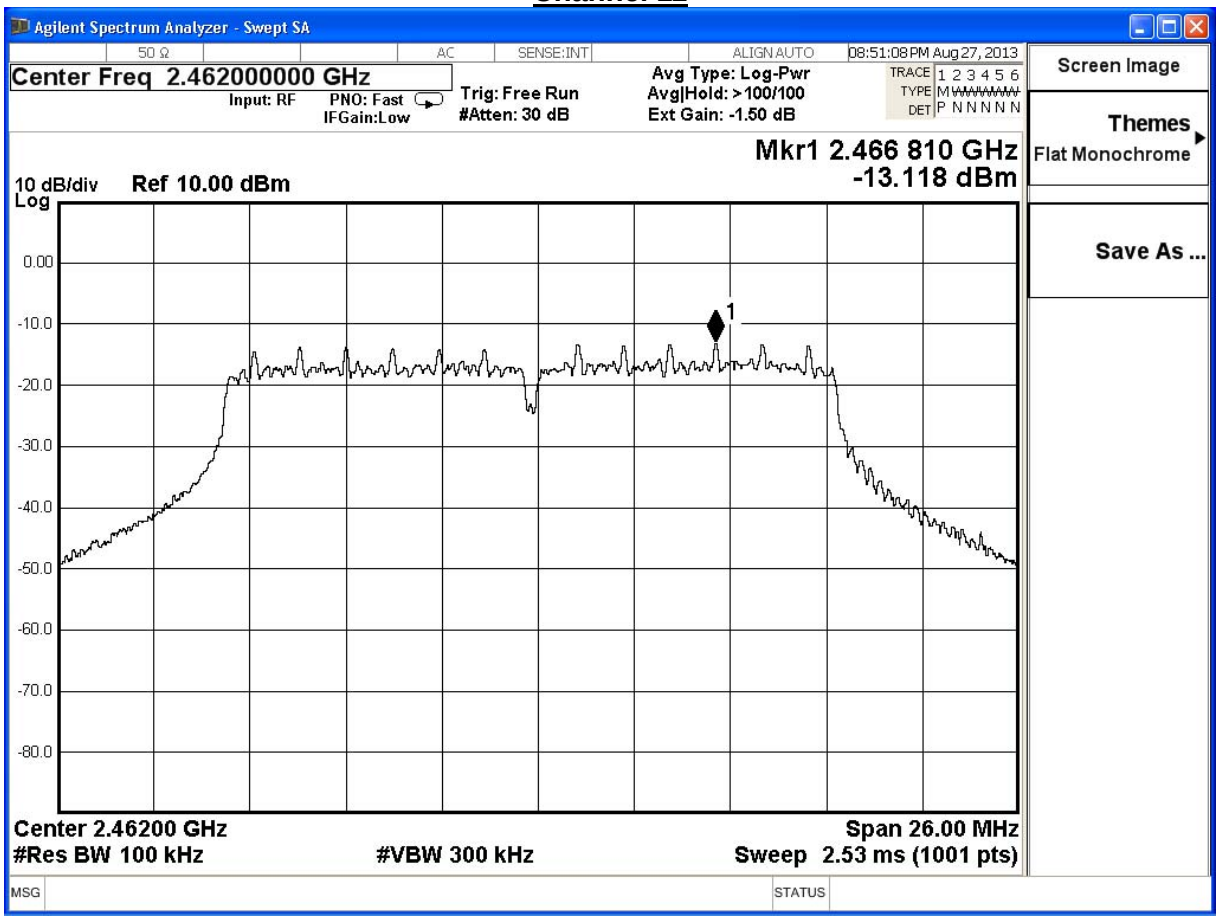
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
08:48:37 PM Aug 27, 2013
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: >100/100
Ext Gain: -1.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.441 810 GHz
-14.295 dBm
10 dB/div
Log
Ref 10.00 dBm
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
1
Center 2.43700 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 26.00 MHz
Sweep 2.53 ms (1001 pts)
MSG
STATUS
Screen Image
Themes
Flat Monochrome
Save As ...

Channel 11

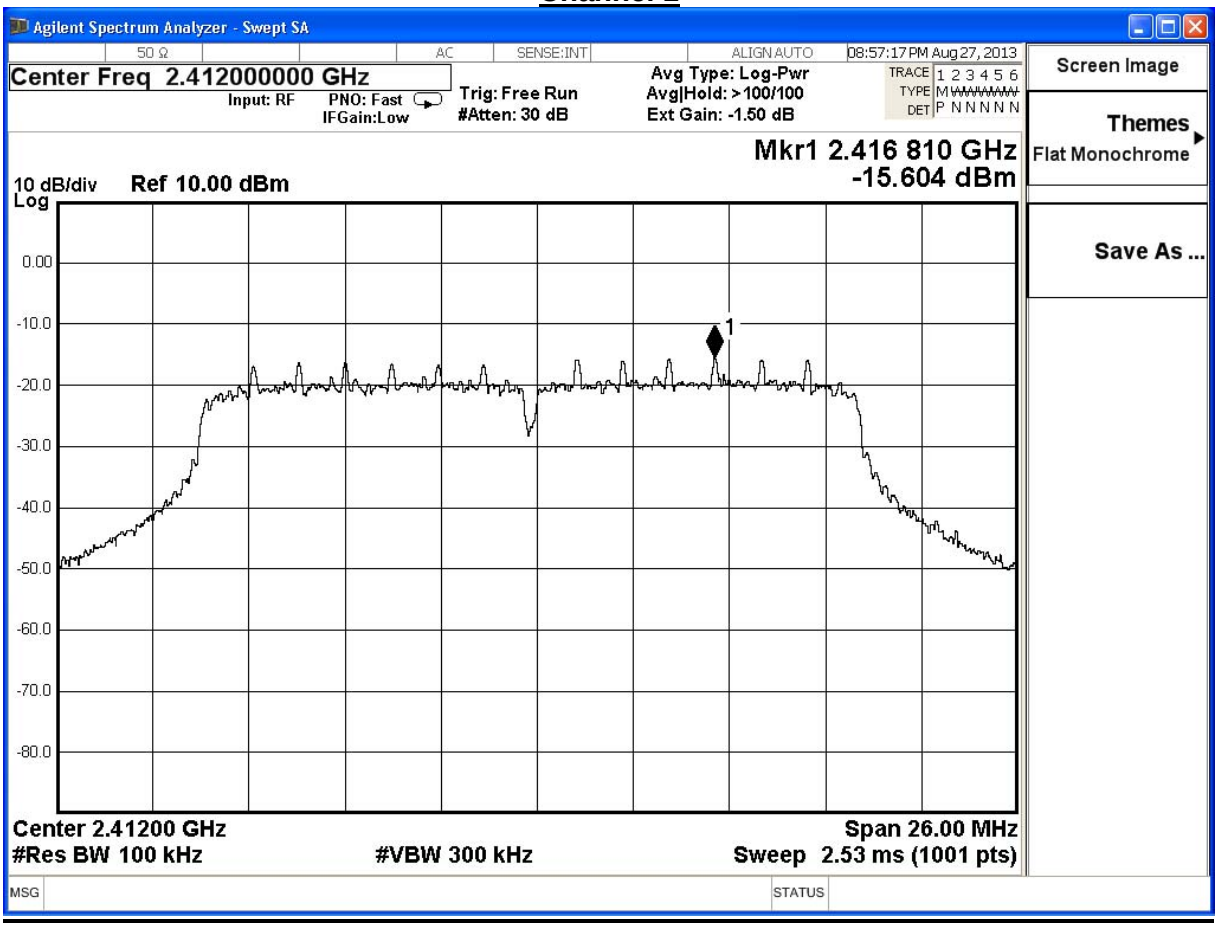

Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
08:51:08 PM Aug 27, 2013
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: >100/100
Ext Gain: -1.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.466 810 GHz
-13.118 dBm
10 dB/div
Log
Ref 10.00 dBm
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
Center 2.46200 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 26.00 MHz
Sweep 2.53 ms (1001 pts)
MSG
STATUS
Screen Image
Themes
Flat Monochrome
Save As ...

Product	Wireless Day/Night Cloud Camera		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (Power by PC)		
Date of Test	2013/08/27	Test Site	SR7

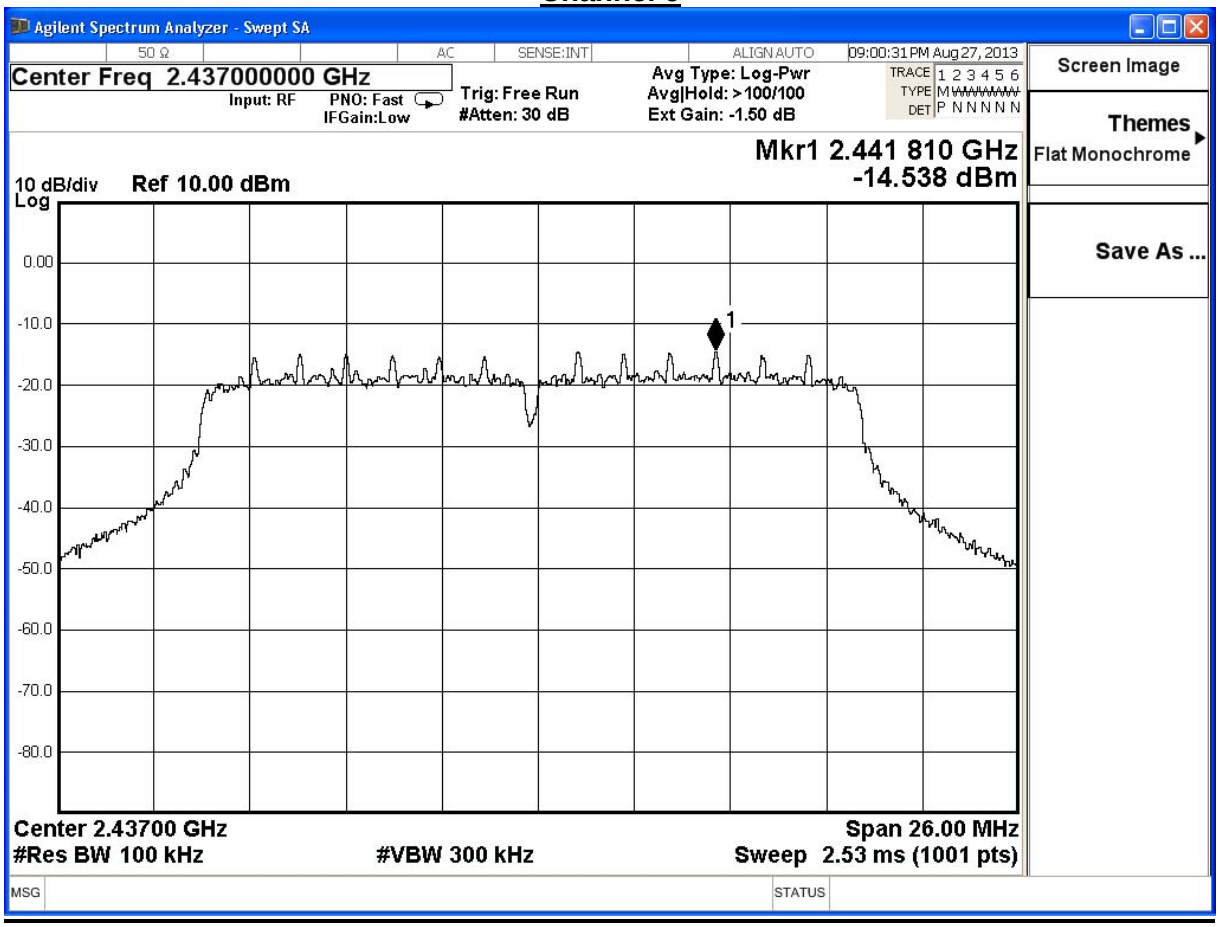
IEEE802.11n_20MHz, ANT 0					
Channel No.	Frequency (MHz)	Reading Level (dBm)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-15.60	-30.80	≦8	Pass
6	2437	-14.53	-29.73	≦8	Pass
11	2462	-13.35	-28.55	≦8	Pass

Note: Measure Level = Reading level + BWCF = Reading level -15.2 dB
Bandwidth correction factor (BWCF) = 10log (3 kHz/100kHz)

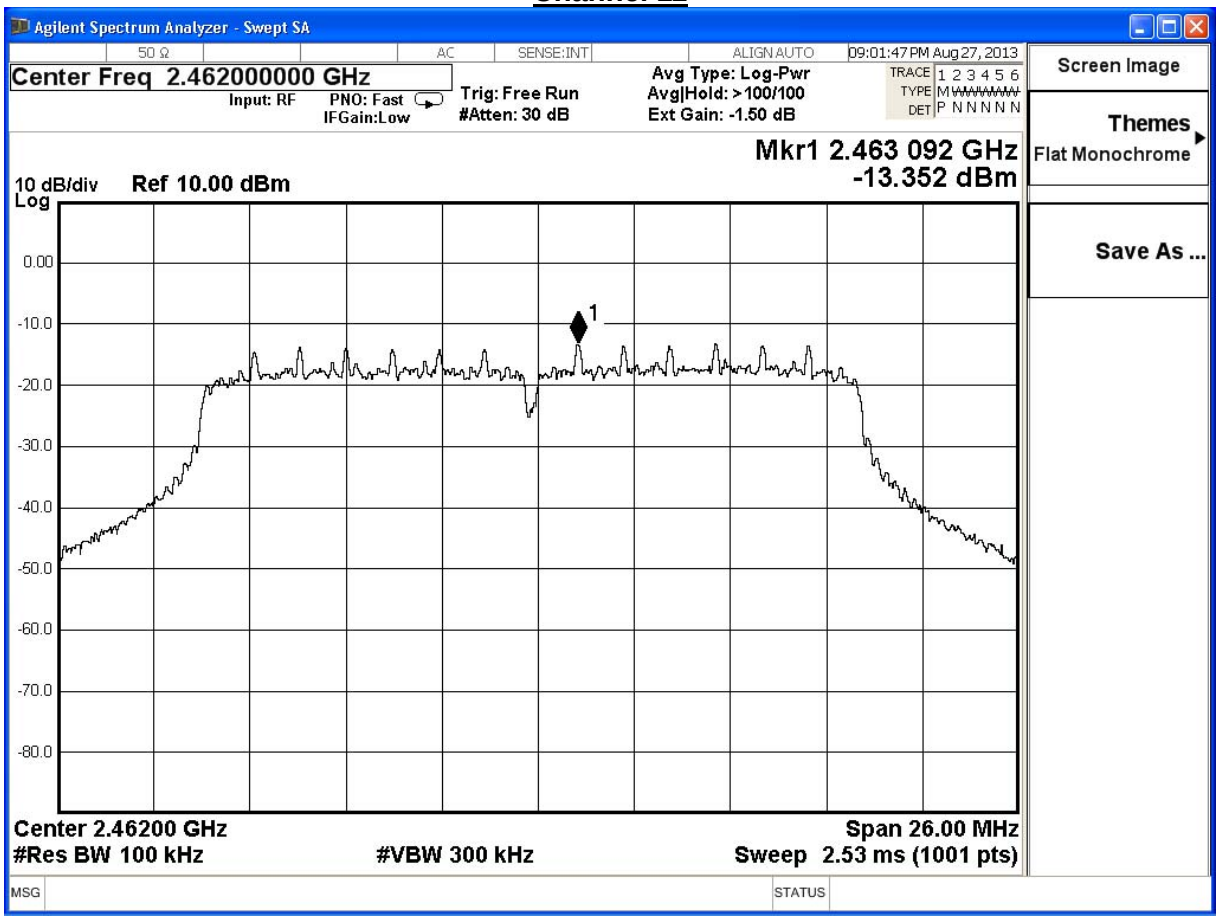
Channel 1



Channel 6


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
09:00:31 PM Aug 27, 2013
Center Freq 2.437000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: >100/100
Ext Gain: -1.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.441 810 GHz
-14.538 dBm
10 dB/div
Log
Ref 10.00 dBm
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
1
Center 2.43700 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 26.00 MHz
Sweep 2.53 ms (1001 pts)
MSG
STATUS
Screen Image
Themes
Flat Monochrome
Save As ...

Channel 11


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
09:01:47 PM Aug 27, 2013
Center Freq 2.462000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: >100/100
Ext Gain: -1.50 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.463 092 GHz
-13.352 dBm
10 dB/div
Log
Ref 10.00 dBm
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
Center 2.46200 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 26.00 MHz
Sweep 2.53 ms (1001 pts)
MSG
STATUS
Screen Image
Themes
Flat Monochrome
Save As ...