TEST REPORT

Part 15 Subpart C 15.247

Equipment under test HOME CCTV CAMER

Model name NS21-6QRY

Derivation model O2C1

FCC ID 2AJABNS21-6QRY

Applicant CNB Technology Inc

Manufacturer CNB Technology Inc

Date of test(s) 2016.08.23 ~ 2016.09.30

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	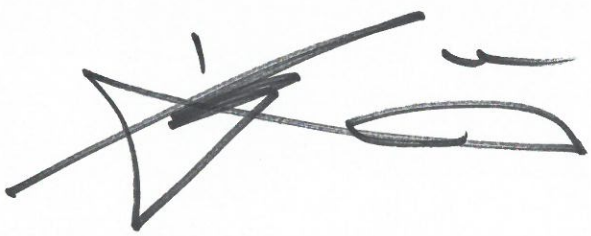
Hyeon-su Jang Test engineer	Jeff Do Technical manager

Revision history

Revision	Date of issue	Test report No.	Description
-	2016.10.01	KES-RF-16T0080	Initial
1	2016.10.05	KES-RF-16T0080-R1	Add a setup photo 9 ㎑ to 30 ㎒ and Radiated spurious emission test plots of 1 ㎓ to 3 ㎓.

TABLE OF CONTENTS

1. General information

Applicant:	CNB Technology Inc
Applicant address:	613-614, 99, Digital-ro 9-gil, Geumcheon-gu, Seoul South Korea
Test site:	KES Co., Ltd.
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FCC rule part(s):	15.247
FCC ID:	2AJABNS21-6QRY
Test device serial No.:	☒ Production ☐ Pre-production ☐ Engineering

1.1. EUT description

Equipment under test	HOME CAMERA
Frequency range	2412 ㎒ ~ 2462 ㎒(11b/g/n_HT20) 2422 ㎒ ~ 2452 ㎒(11n_HT40)
Modulation technique	DSSS, OFDM
Number of channels	2412 ㎒ ~ 2462 ㎒(11b/g/n_HT20): 11 2422 ㎒ ~ 2452 ㎒(11n_HT40): 7
Antenna type	Patch antenna(Antenna 0, Antenna 1)
Antenna gain	Antenna 0: 1.52 dBi, Antenna 1: 2.55 dBi
Power source	AC 120V Adapter

Note.
USB port is only power supply use. It cannot be communicated to PC via USB cable.

1.2. Test configuration

The **CNB Technology Inc FCC ID: 2AJABNS21-6QRY** was tested per the guidance of KDB 558074 D01 v03r05. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing

1.3. Device modifications

N/A

1.4. Derivation model information

Both model, legacy model and derivation model, use the same hardware and software. It is a management purpose.

1.5. Frequency/channel operations

Ch.	Frequency (㎒)	Mode
01	2412	802.11b/g/n_HT20
. .	. .	. .
06	2437	802.11b/g/n_HT20
. .	. .	. .
11	2462	802.11b/g/n_HT20

Ch.	Frequency (㎒)	Mode
03	2422	802.11n_HT40
. .	. .	. .
06	2437	802.11n_HT40
. .	. .	. .
09	2452	802.11n_HT40

1.6. Worst case data rate

1. Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.
2. Worst-case data rates were:
   802.11b: **11 Mbps (SISO)**
   802.11g: **24Mbps (SISO)**
   802.11n_HT20: **MCS0 (SISO)**
   802.11n_HT40: **MCS3 (SISO)**
   802.11n_HT20: **MCS15 (MIMO)**
   802.11n_HT40: **MCS12 (MIMO)**

1.7. Using antenna information

Mode	Bandwidth (㎒)	Antenna 0	Antenna 1 note1	Antenna 0+1
802.11b	20	✓	×	×
802.11g	20	✓	×	×
802.11n	20	✓	×	✓
802.11n	40	✓	×	✓

Antenna 0 gain(dBi)	Antenna 1 gain(dBi)	Total gain(dBi) Note2
1.52	2.55	5.05

Note.

1. When SISO is operated, Antenna 0 is transceiver and Antenna 1 is only receiver. (1T2R)
   When MIMO is operated, Antenna 0 and Antenna 1 are transceiver. (2T2R)
2. Ant Gain = $10\log[(10^{G1/20}+10^{G2/20}+\ldots+10^{GN/20})^2]/N_{ANT}$

2. Summary of tests

Reference	Parameter	Test results
15.247(a)(2)	6 dB bandwidth	Pass
15.247(b)(3)	Peak output power	Pass
15.247(e)	Power spectral density	Pass
15.205 15.209	Radiated restricted band and emission	Pass
15.247(d)	Conducted spurious emission and band edge	Pass
15.207(a)	AC conducted emissions	Pass

3. Test results

3.1. 6 dB bandwidth

Test procedure

KDB 558074 D01 v03r05 – Section 8.1 or 8.2
Used test method is section 8.1.

Section 8.1

1. RBW = 100 ㎑.
2. VBW ≥ 3 × RBW.
3. Detector = peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Section 8.2

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 ㎑, VBW ≥ 3 × RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

Limit

According to §15.247(a)(2), systems using digital modulation techniques may operate 902 ~ 928 ㎒, 2 400 ~ 2 483.5 ㎒, and 5 725 ~ 5 850 ㎒ bands. The minimum 6 dB bandwidth shall be at least 500 ㎑.

Test results

SISO (Antenna 0)

6 dB bandwidth of 20 ㎒ bandwidth				
Measured 6 dB bandwidth(㎒)				Limit(㎒)
Frequency(㎒)	802.11b	802.11g	802.11n	
2412	10.420	16.498	17.438	0.5
2437	10.420	16.498	17.656	
2462	10.347	16.498	17.800	

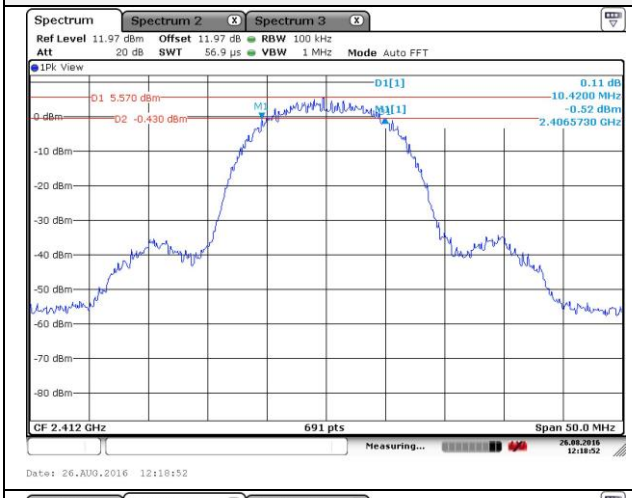
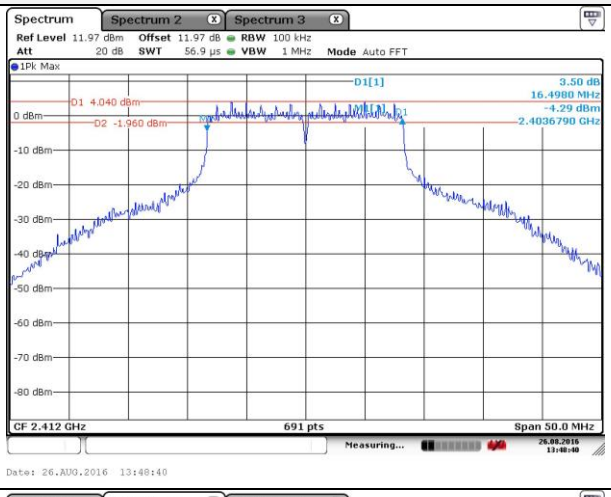
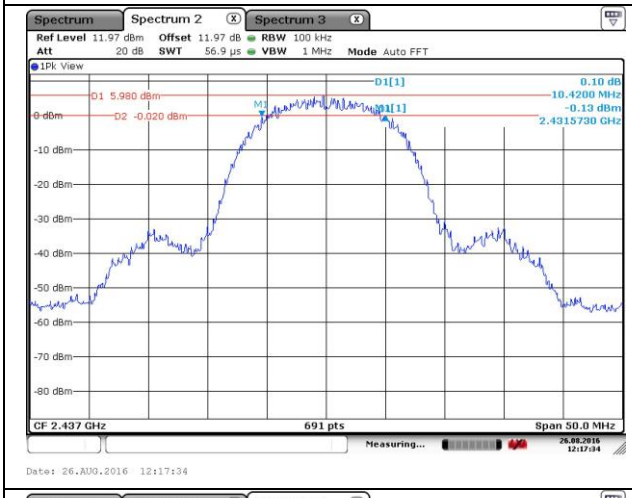
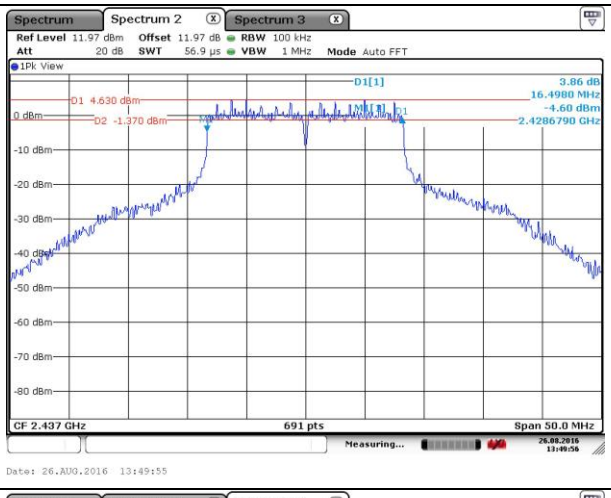
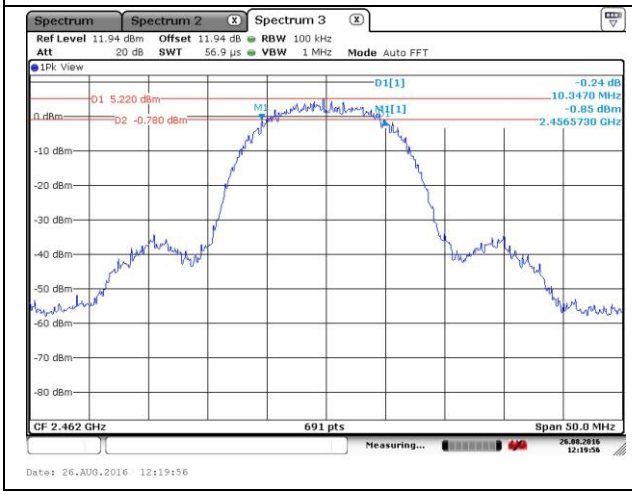
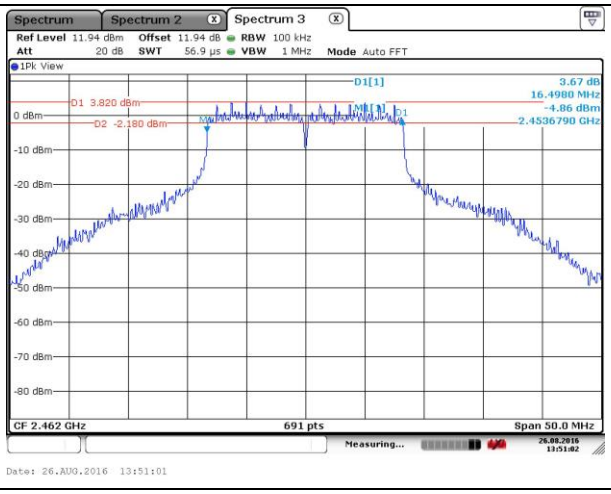
6 dB bandwidth of 40 ㎒ bandwidth		
Measured 6 dB bandwidth(㎒)		
Frequency(㎒)	802.11n	Limit(㎒)
2422	36.320	0.5
2437	36.470	
2452	36.470	

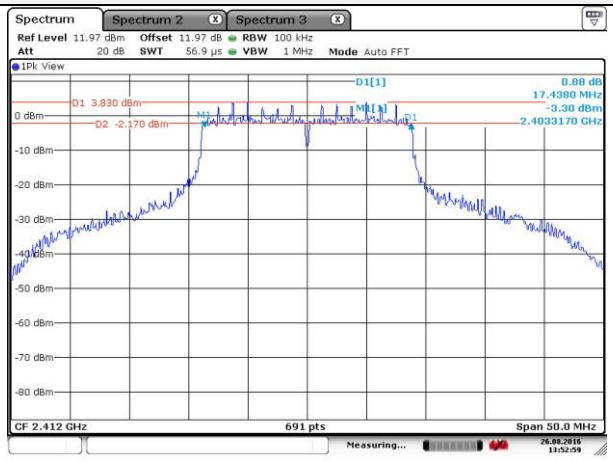
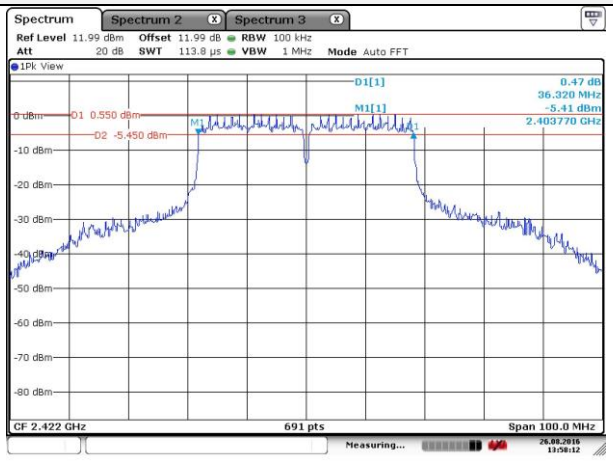
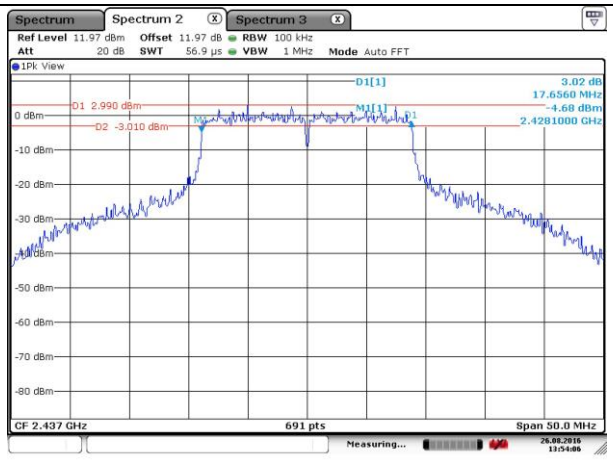
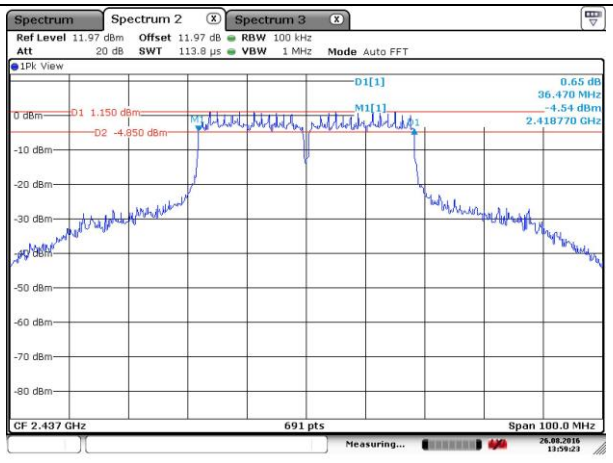
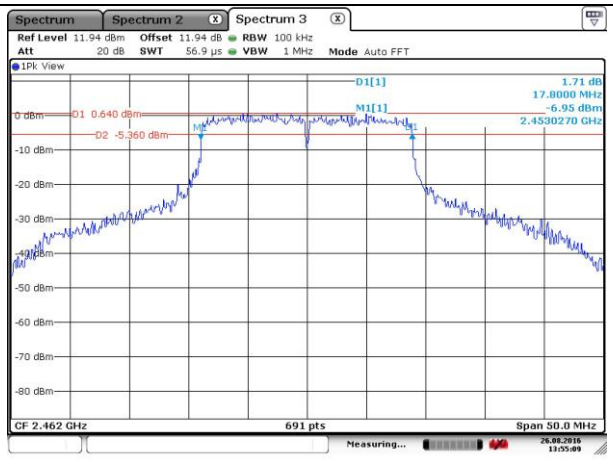
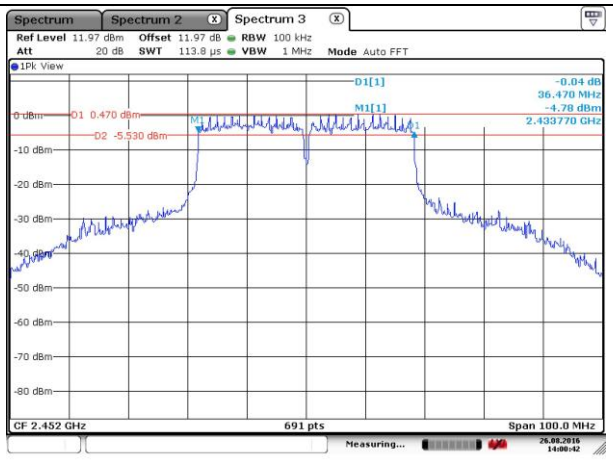
MIMO (Antenna 0+1)

6 dB bandwidth of 20 ㎒ bandwidth			
Measured 6 dB bandwidth(㎒)			
Frequency(㎒)	802.11n(Antenna 0)	802.11n(Antenna 1)	Limit(㎒)
2412	17.583	17.583	0.5
2437	17.583	17.438	
2462	17.511	17.583	

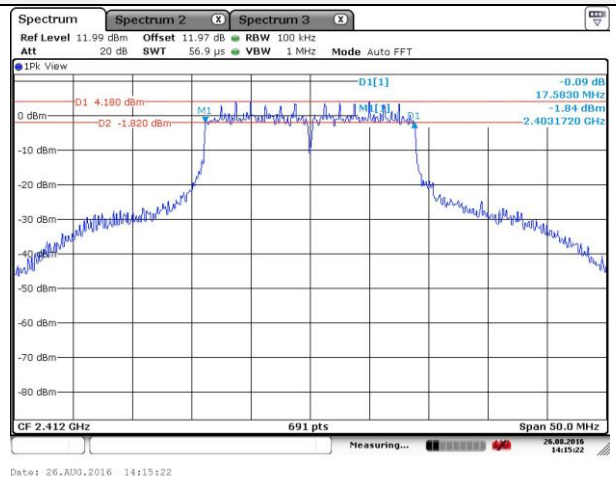
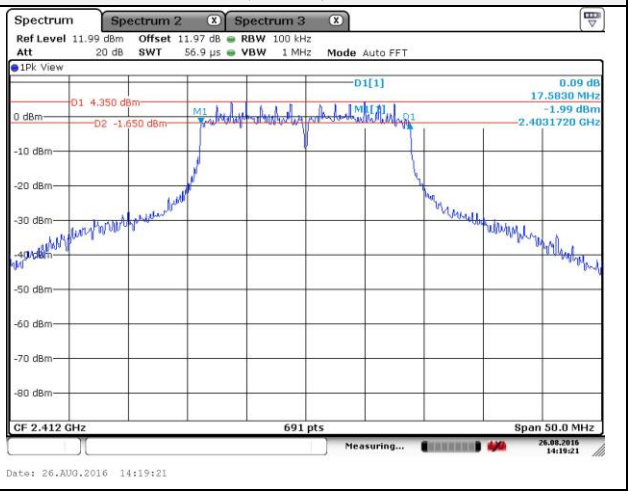
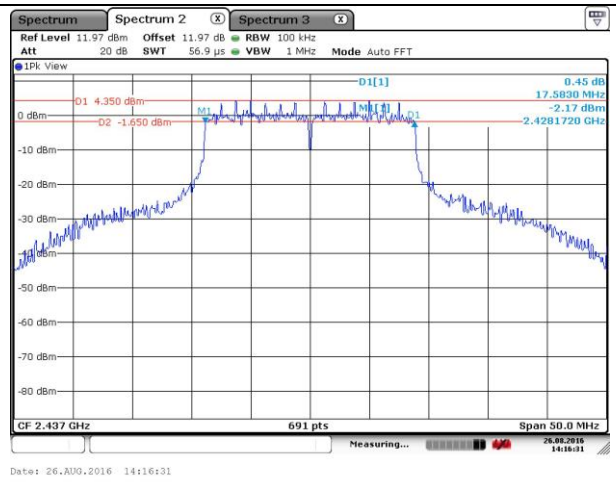
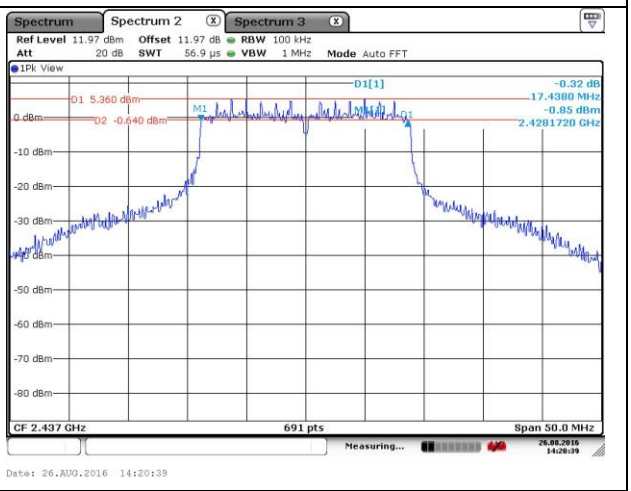
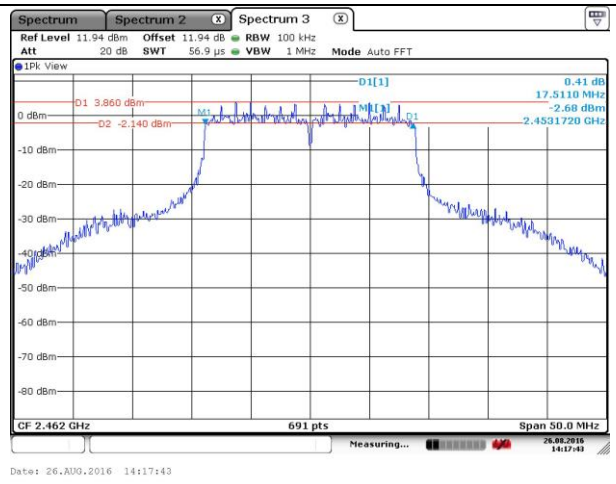
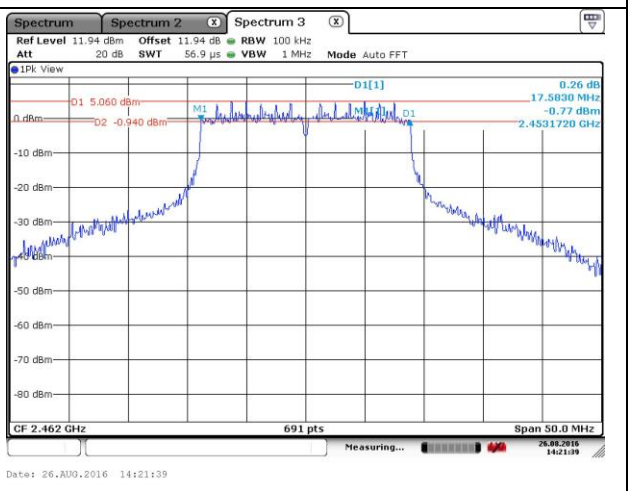
6 dB bandwidth of 40 ㎒ bandwidth			
Measured 6 dB bandwidth(㎒)			
Frequency(㎒)	802.11n(Antenna 0)	802.11n(Antenna 1)	Limit(㎒)
2422	36.180	36.470	0.5
2437	36.470	36.470	
2452	36.470	36.470	

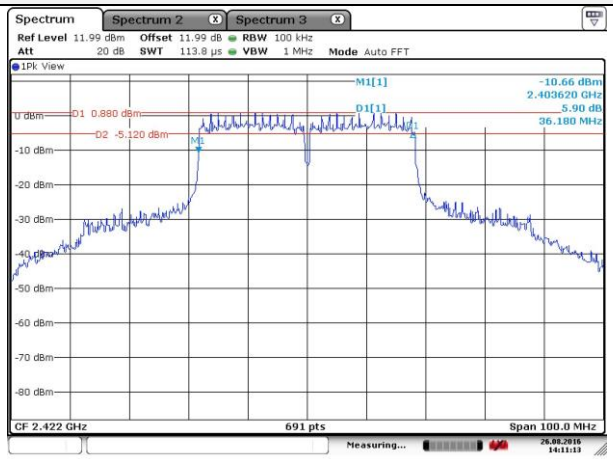
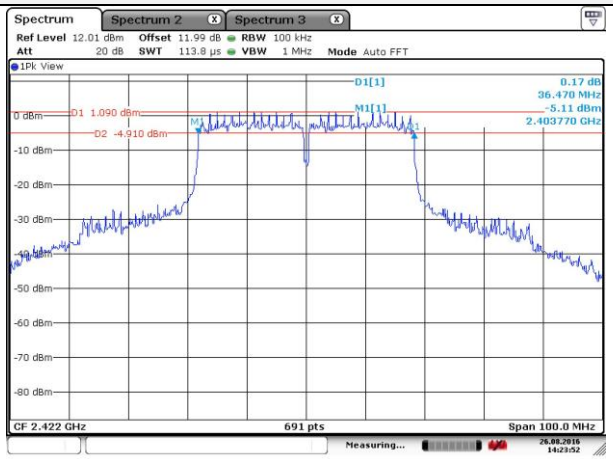
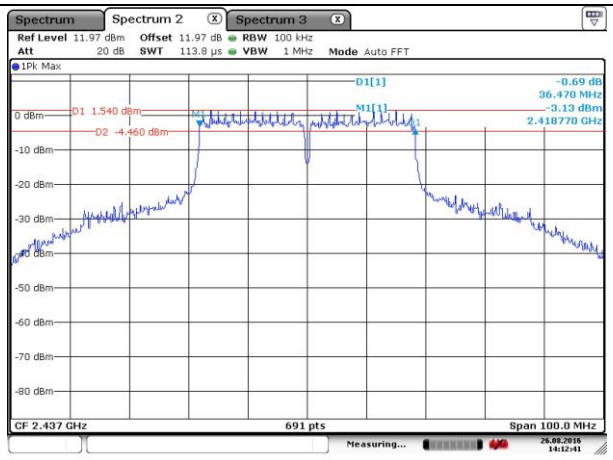
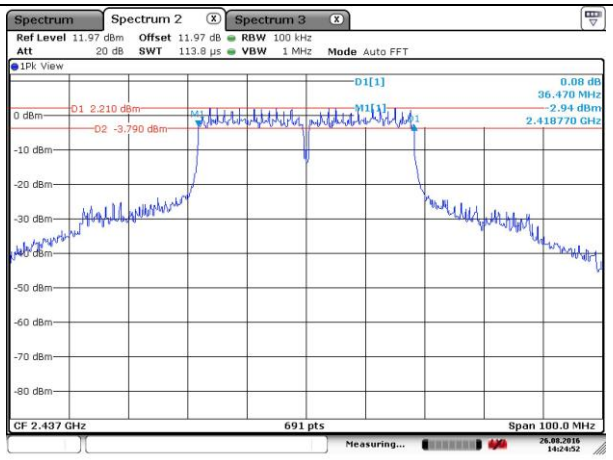
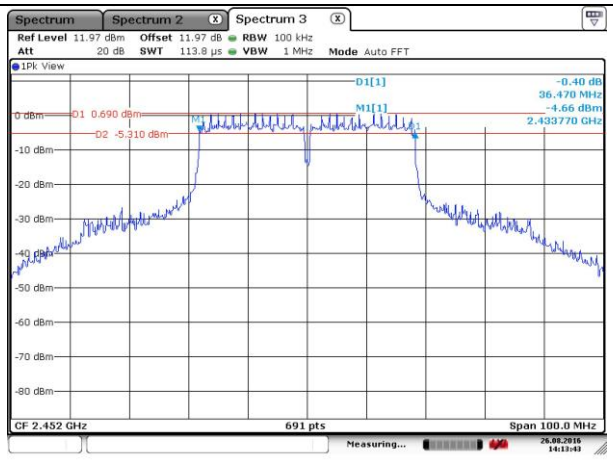
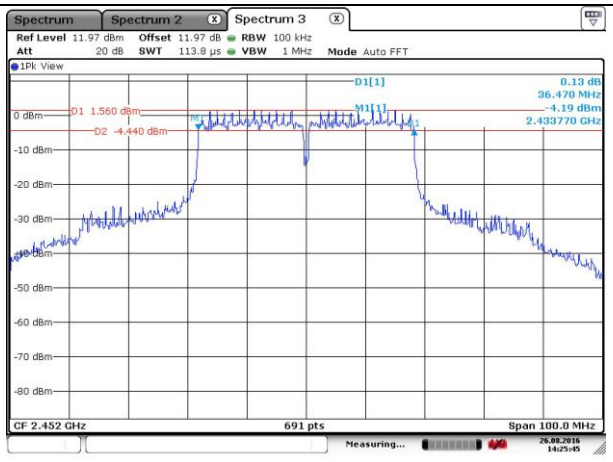
SISO

802.11b	802.11g
	
	
	

802.11n(HT20)	802.11n(HT40)
	
	
	

MIMO

802.11n(HT20) Antenna 0	802.11n(HT20) Antenna 1
	
	
	

802.11n(HT40) Antenna 0	802.11n(HT40) Antenna 1
	
	
	

3.2. Output power

Test procedure

KDB 558074 D01 v03r05 – section 9.1.1 or 9.1.2
Used test method is section 9.1.2.

Section 9.1.1

This procedure shall be used when the measurement instrument has available a resolution bandwidth that is gr eater than the DTS bandwidth.

1. Set the RBW ≥ DTS bandwidth.
2. Set VBW ≥ 3 × RBW.
3. Set span ≥ 3 × RBW
4. Sweep time = auto couple
5. Detector = peak
6. Trace mode = max hold
7. Allow trace to fully stabilize
8. Use peak marker function to determine the peak amplitude level

Section 9.1.2

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS ba ndwidth and shall utilize a fast-responding diode detector.

Limit

According to §15.247(b)(3), For systems using digital modulation in the 902~928 ㎒, 2 400~2 483.5 ㎒, and 5 725~5 850 ㎒ bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted out-put power. Maximum Conducted Out-put Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
According to §15.247(b)(4), The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 ㏈i. Except as shown in paragraph (c) of this section, if transmit-ting antennas of directional gain greater than 6 ㏈i are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 ㏈i.

Test results

SISO (Antenna 0)						
Measured output power (dBm)						
Mode	**2412 ㎒**		**2437 ㎒**		**2462 ㎒**	
	Peak	**Average**	**Peak**	**Average**	**Peak**	**Average**
11b	16.022	13.331	16.421	14.129	15.710	13.331
11g	20.825	12.942	21.573	13.228	20.969	13.169
11n	20.336	12.664	21.305	13.752	20.861	12.960
Mode	**2422 ㎒**		**2437 ㎒**		**2452 ㎒**	
	Peak	**Average**	**Peak**	**Average**	**Peak**	**Average**
11n	21.233	13.092	21.067	13.732	20.878	12.978

MIMO (Antenna 0+1)							
Measured output power (dBm)							
Mode	**Antenna**	**2412 ㎒**		**2437 ㎒**		**2462 ㎒**	
		Peak	**Average**	**Peak**	**Average**	**Peak**	**Average**
11n	0	20.435	13.465	20.735	13.927	20.215	13.017
	1	21.338	13.578	22.370	14.802	21.809	14.332
	Sum[note1]	23.920	16.532	24.639	17.397	24.095	16.734
Mode	**Antenna**	**2422 ㎒**		**2437 ㎒**		**2452 ㎒**	
		Peak	**Average**	**Peak**	**Average**	**Peak**	**Average**
11n	0	20.185	12.131	21.493	13.049	20.959	11.724
	1	22.084	12.675	22.664	14.354	22.517	13.754
	Sum[note1]	24.248	15.422	25.128	16.761	24.818	15.867

Note.

1. Sum= 10log(10^(Antenna 0/10)+10^(Antenna 1/10))

3.3. Power spectral density

Test procedure

KDB 558074 D01 v03r05– section 10.2

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW : 3 ㎑ ≤ RBW ≤ 100 ㎑
4. Set the VBW ≥ 3 × RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW(no less than 3 ㎑) and repeat.

Limit

According to §15.247(e), For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 ㏈m in any 3 ㎑ band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test results

SISO (Antenna 0)

PSD of 20 ㎒ bandwidth				
Measured PDS(dBm)				Limit(dBm)
Frequency(㎒)	802.11b	802.11g	802.11n	
2412	-8.57	-10.83	-10.83	8
2437	-7.93	-9.71	-10.90	
2462	-8.76	-10.65	-10.80	

PSD of 40 ㎒ bandwidth		
Measured PDS(dBm)		
Frequency(㎒)	802.11n	Limit(dBm)
2422	-14.67	8
2437	-13.84	
2452	-14.88	

MIMO (Antenna 0+1)

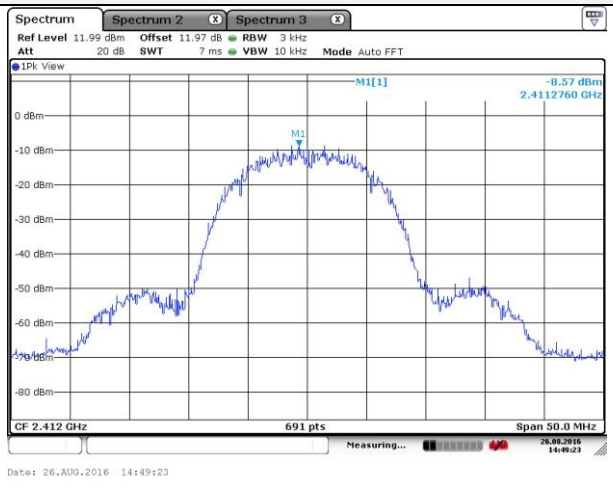
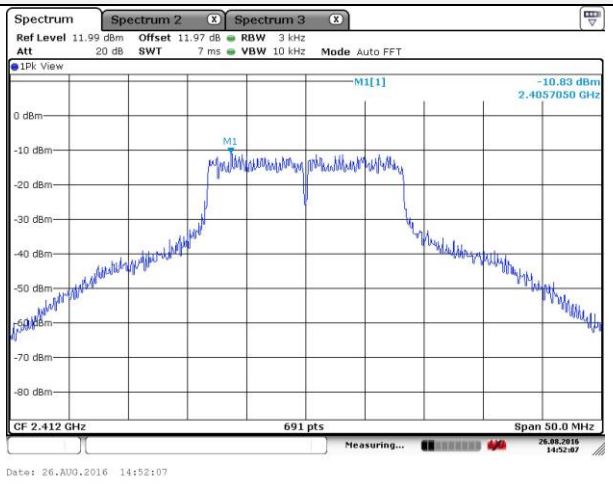
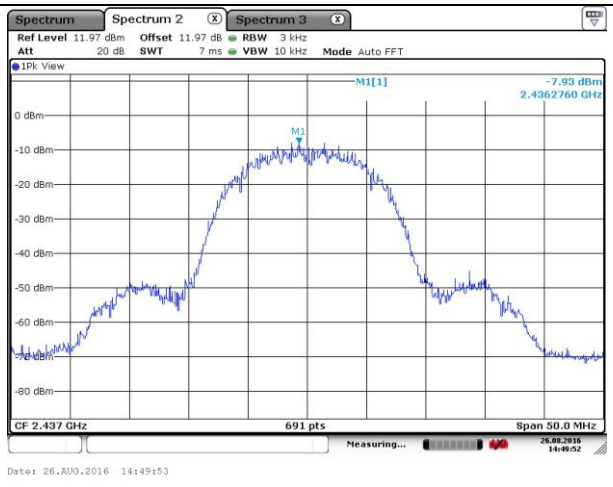
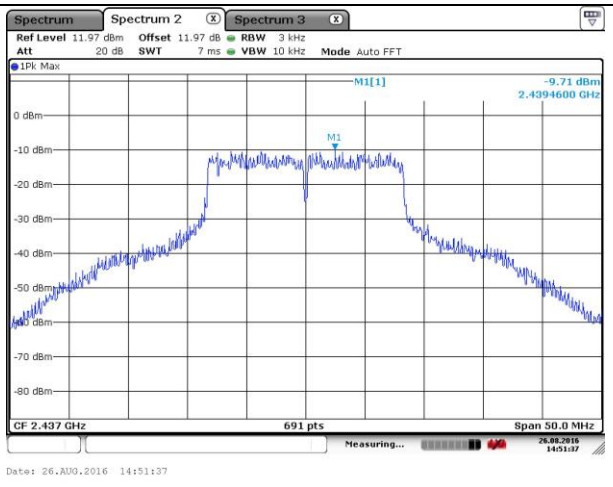
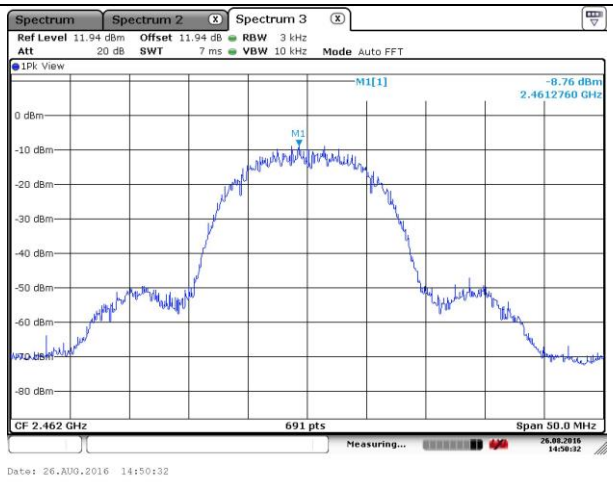
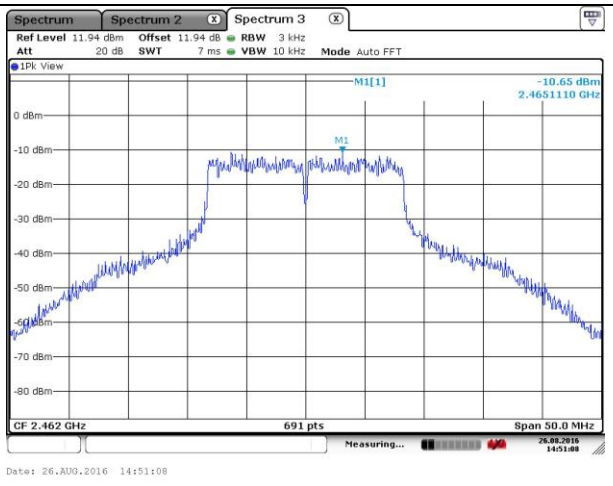
PSD of 20 ㎒ bandwidth				
Measured PDS(dBm)				
Frequency(㎒)	802.11n(Antenna 0)	802.11n(Antenna 1)	Sum note1	Limit(dBm)
2412	-11.44	-11.08	-8.25	8
2437	-10.95	-10.14	-7.52	
2462	-11.82	-10.63	-8.17	

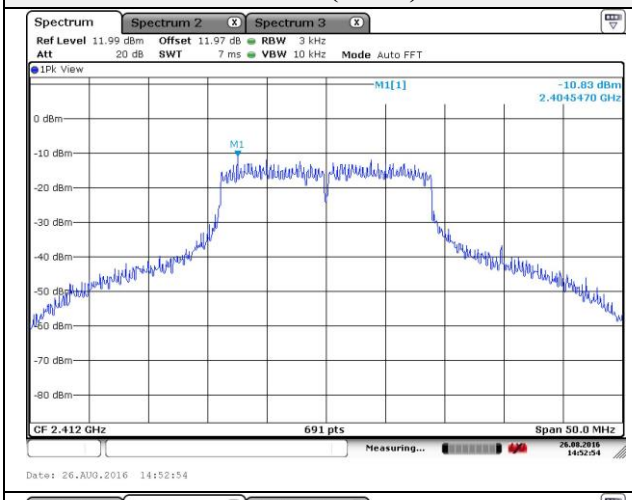
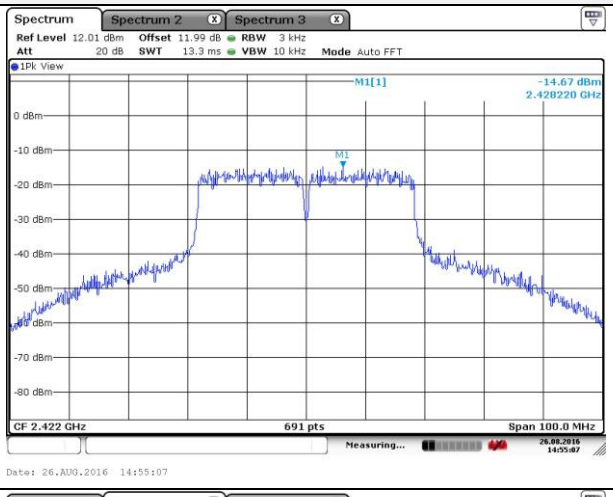
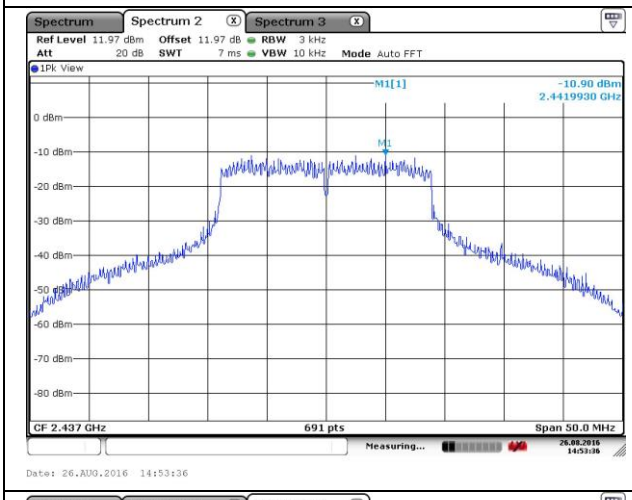
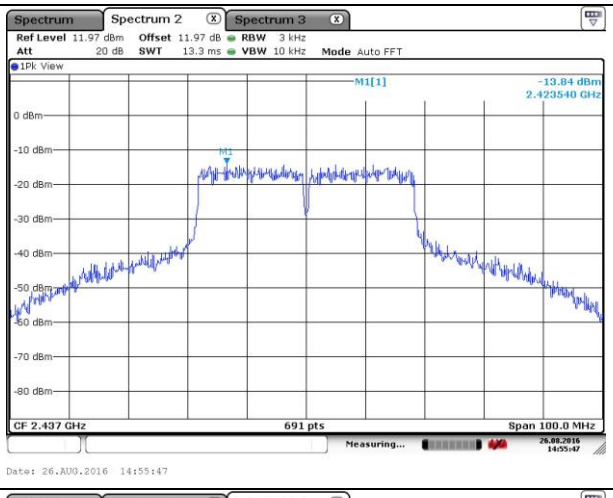
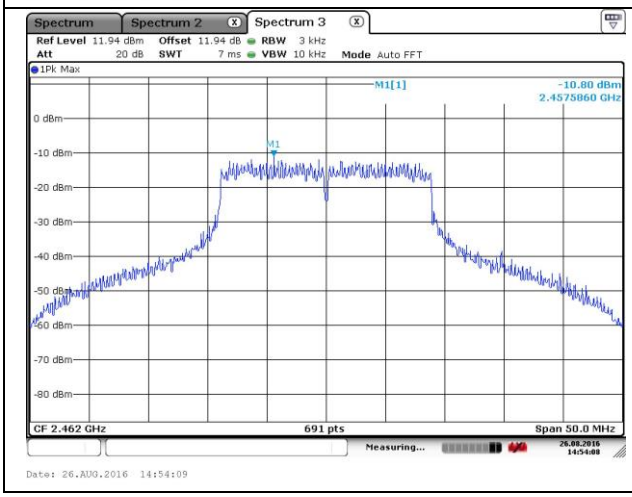
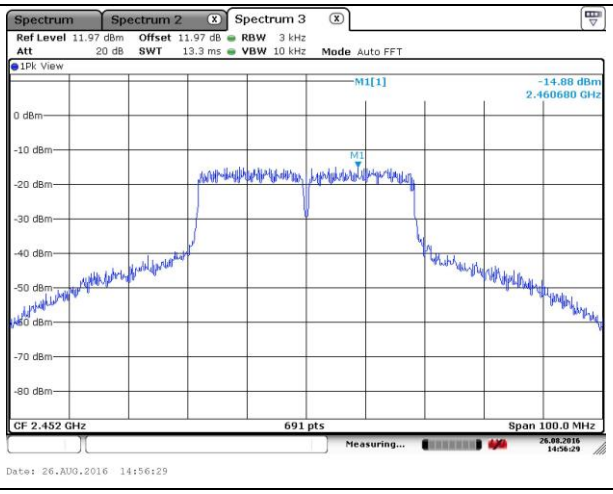
PSD of 40 ㎒ bandwidth				
Measured PDS(dBm)				
Frequency(㎒)	802.11n(Antenna 0)	802.11n(Antenna 1)	Sum note1	Limit(dBm)
2422	-13.40	-13.35	-10.36	8
2437	-13.18	-11.64	-9.33	
2452	-13.74	-12.55	-10.09	

Note.

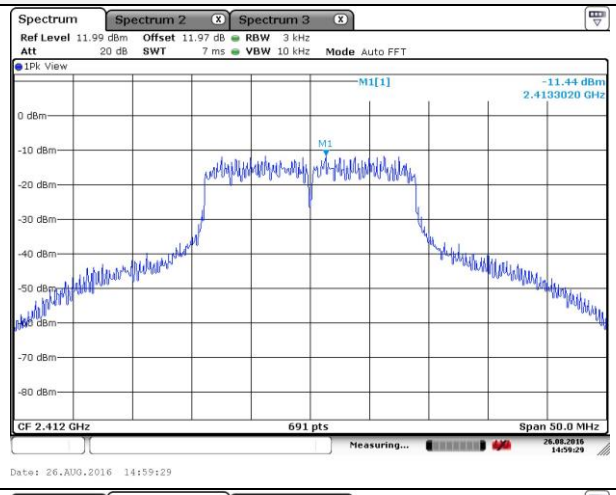
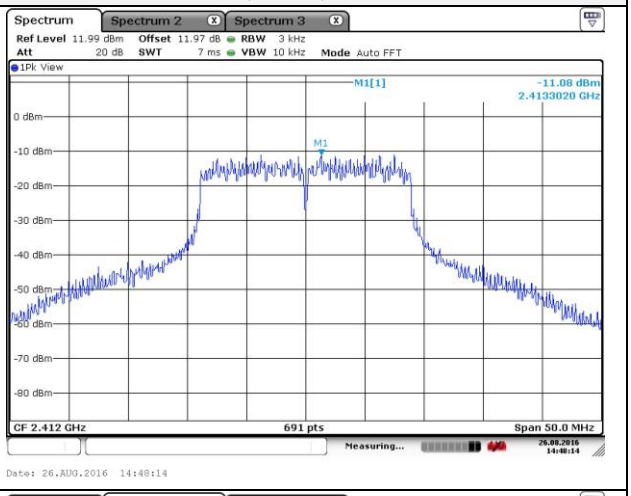
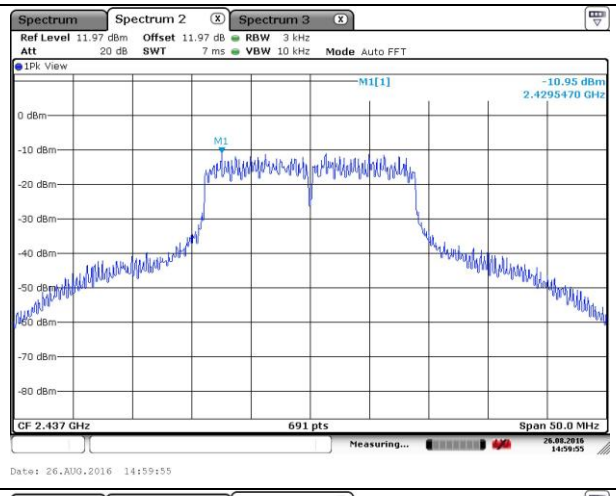
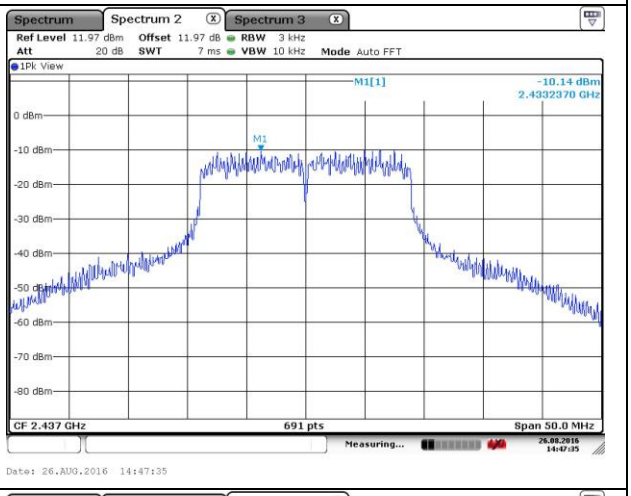
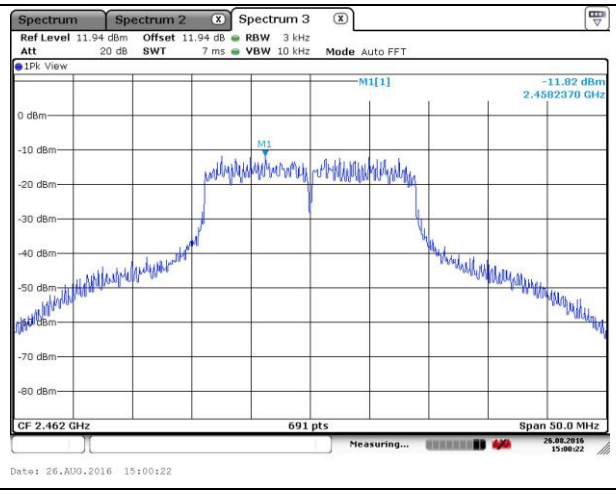
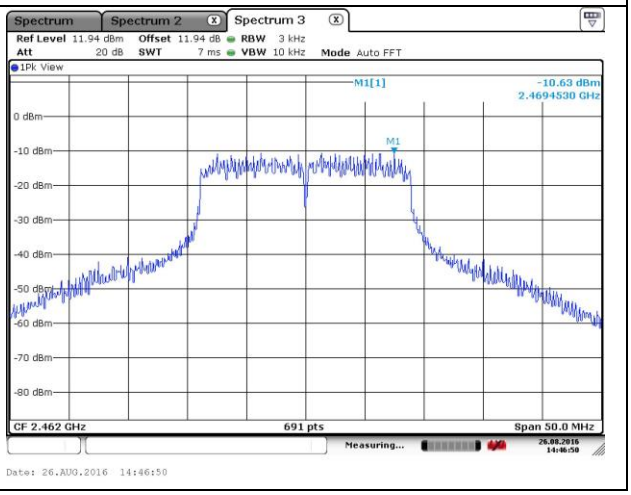
1. Sum= $10\log(10^{\wedge(\text{Antenna 0}/10)}+10^{\wedge(\text{Antenna 1}/10)})$

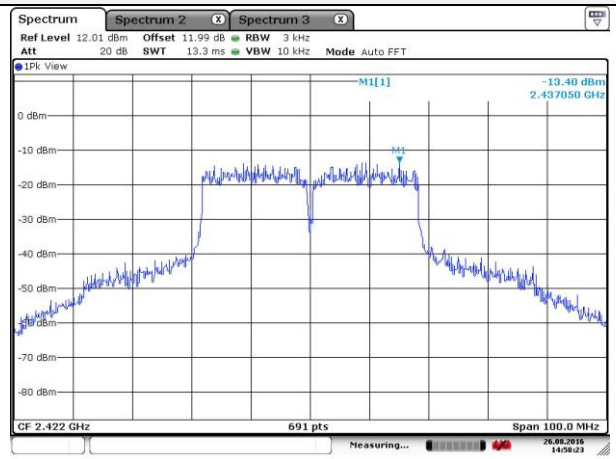
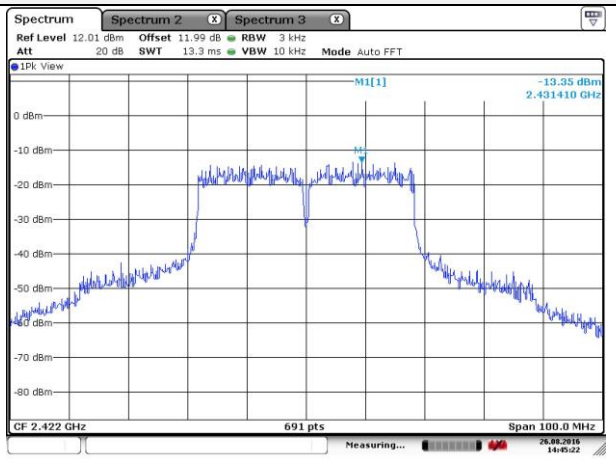
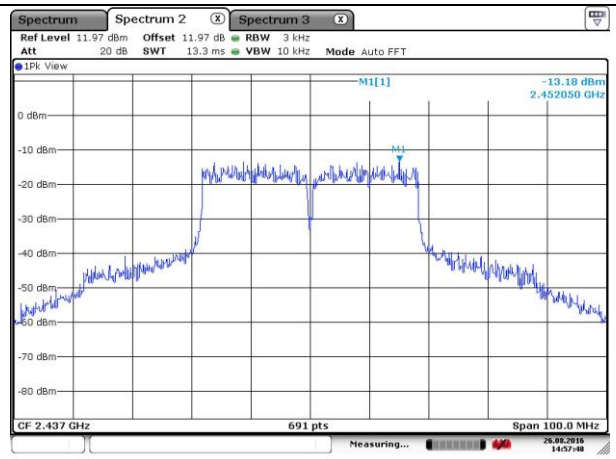
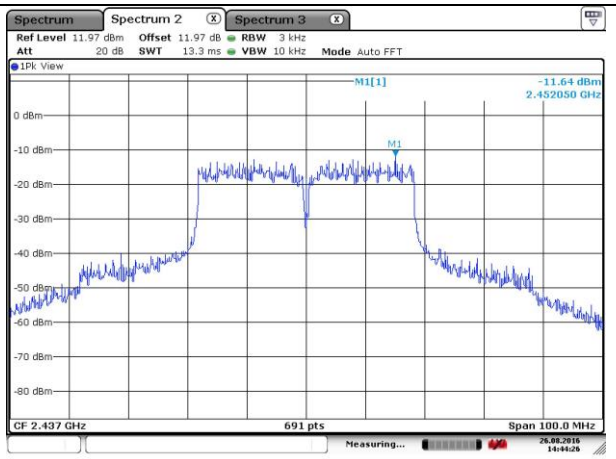
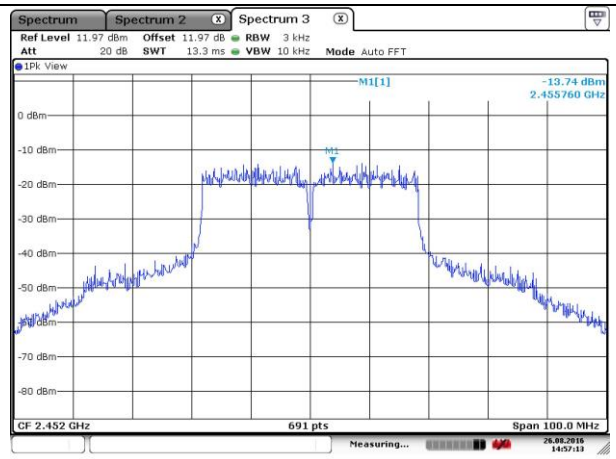
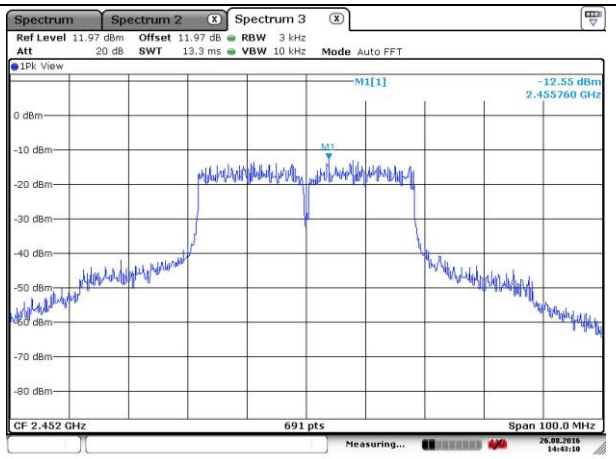
SISO

802.11b	802.11g
	
	
	

802.11n(HT20)	802.11n(HT40)
	
	
	

MIMO

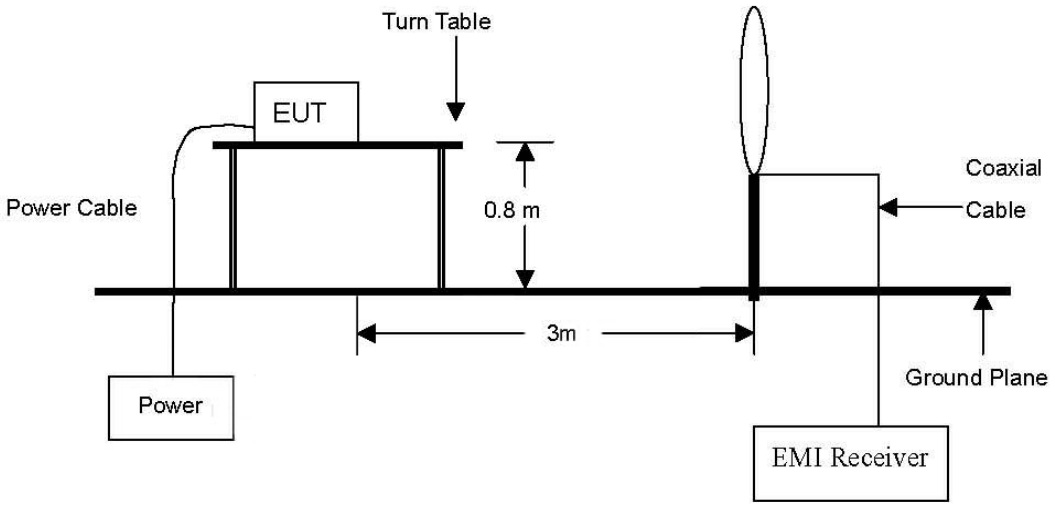
802.11n(HT20) Antenna 0	802.11n(HT20) Antenna 1
	
	
	

802.11n(HT40) Antenna 0	802.11n(HT40) Antenna 1
	
	
	

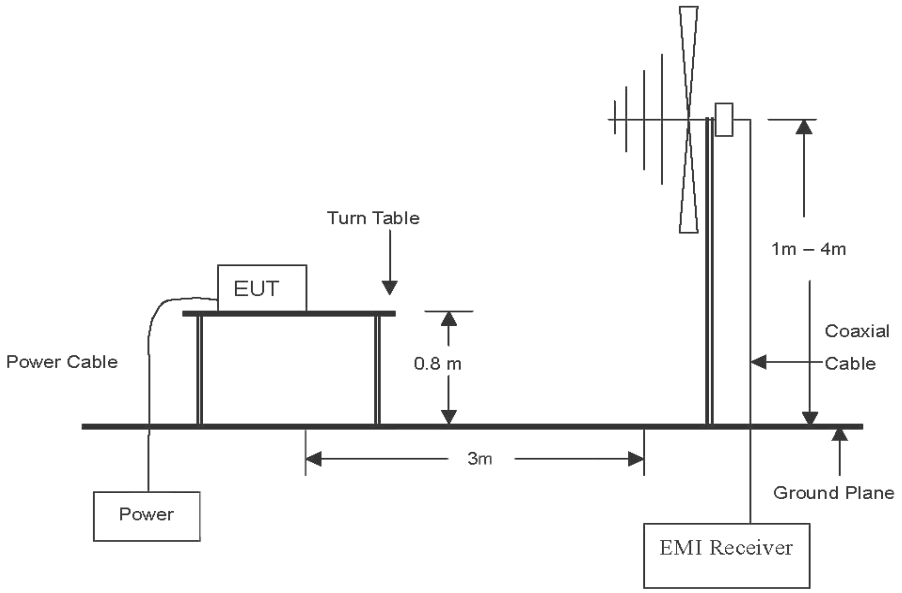
3.4. Radiated restricted band and emissions

Test setup

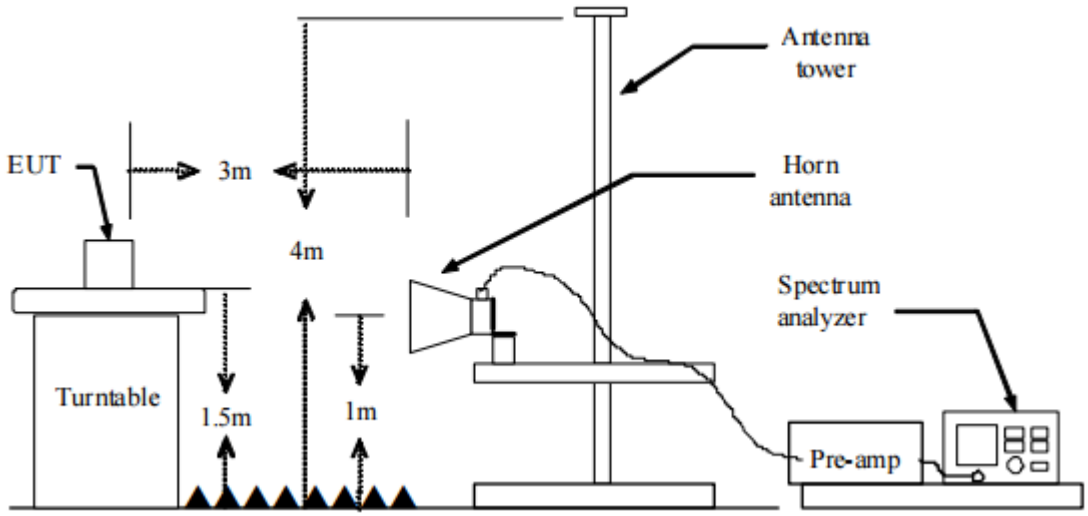
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 ㎑ to 30 ㎒ Emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 ㎒ to 1 ㎓ emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 ㎓ to the tenth harmonic of the highest fundamental frequency or to 40 ㎓ emissions, whichever is lower.



Test procedure below 30 ㎒

1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter anechoic chamber test site. The table was rotated 360 degrees to determine the position of the highest radiation.
2. Then antenna is a loop antenna is fixed at one meter above the ground to determine the maximum value of the field strength. Both parallel and perpendicular of the antenna are set to make the measurement.
3. For each suspected emission, the EUT was arranged to its worst case and then the table was turned from 0 degrees to 360 degrees to find the maximum reading.
4. The test-receiver system was set to average or quasi peak detect function and Specified Bandwidth with Maximum hold mode.

Test procedure above 30 ㎒

1. Spectrum analyzer settings for f < 1 ㎓:
   ① Span = wide enough to fully capture the emission being measured
   ② RBW = 100 ㎑
   ③ VBW ≥ RBW
   ④ Detector = quasi peak
   ⑤ Sweep time = auto
   ⑥ Trace = max hold
2. Spectrum analyzer settings for f ≥1 ㎓: Peak
   ① Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
   ② RBW = 1 ㎒
   ③ VBW ≥ 3 ㎒
   ④ Detector = peak
   ⑤ Sweep time = auto
   ⑥ Trace = max hold
   ⑦ Trace was allowed to stabilize

3. Spectrum analyzer settings for $f \geq 1$ ㎓: Average
   ① Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
   ② RBW = 1 ㎒
   ③ VBW ≥ 3 × RBW
   ④ Detector = RMS, if span/(# of points in sweep) ≤ (RBW/2). Satisfying this condition may require increasing the number of points in the sweep or reducing the span. If this condition cannot be satisfied, then the detector mode shall be set to peak.
   ⑤ Averaging type = power(i.e., RMS)
      1) As an alternative, the detector and averaging type may be set for linear voltage averaging.
      2) Some instruments require linear display mode in order to use linear voltage averaging. Log or ㏈ averaging shall not be used.
   ⑥ Sweep = auto
   ⑦ Trace = max hold
   ⑧ Perform a trace average of at least 100 traces.
   ⑨ A correction factor shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle. The correction factor is computed as follows:

      1) If power averaging (RMS) mode was used in step ⑤, then the applicable correction factor is 10 log(1/x), where x is the duty cycle.
      2) If linear voltage averaging mode was used in step ⑤, then the applicable correction factor is 20 log(1/x), where x is the duty cycle.
      3) If a specific emission is demonstrated to be continuous (≥ 98 percent duty cycle) rather than turning on and off with the transmit cycle, then no duty cycle correction is required for that emission.

Note.

1. f <30 ㎒, extrapolation factor of 40 ㏈/decade of distance. $F_d = 40\log(D_m/Ds)$
   $f \geq 30$ ㎒, extrapolation factor of 20 ㏈/decade of distance. $F_d = 20\log(D_m/Ds)$
   Where:
   F_d = Distance factor in ㏈
   D_m = Measurement distance in meters
   D_s = Specification distance in meters
3. CF(Correction factors(㏈)) = Antenna factor(㏈/m) + Cable loss(㏈) + or Amp. gain(㏈) + or F_d(㏈)
4. Field strength(㏈㎶/m) = Level(㏈㎶) + CF (㏈) + or DCF(㏈)
5. Margin(㏈) = Limit(㏈㎶/m) - Field strength(㏈㎶/m)
6. Emissions below 18 ㎓ were measured at a 3 meter test distance while emissions above 18 ㎓ were measured at a 1 meter test distance with the application of a distance correction factor.
7. The fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z, it was determined that **X orientation** was worst-case orientation; therefore, all final radiated testing was performed with the EUT in **X orientation.**
8. The worst-case emissions are reported however emissions whose levels were not within 20 ㏈ of respective limits were not reported.

Limit

According to 15.209(a), for an intentional radiator devices, the general required of field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values：

Frequency (㎒)	Distance (Meters)	Radiated (㎶/m)
0.009 ~ 0.490	300	2400/F(㎑)
0.490 ~ 1.705	30	24000/F(㎑)
1.705 ~ 30.0	30	30
30 ~ 88	3	100**
88 ~ 216	3	150**
216 ~ 960	3	200**
Above 960	3	500

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54 ~ 72 ㎒, 76 ~ 88 ㎒, 174 ~ 216 ㎒ or 470 ~ 806 ㎒. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

Duty cycle

Regarding to KDB 558074 D01_v03r05, 6.0, the maximum duty cycles of all modes were investigated and set the spectrum analyzer as below.

Set RBW ≥ OBW if possible; otherwise, set RBW to the largest available value. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T and the number of sweep points across duration T exceeds 100.

Test mode	T_{on} time (㎳)	Period (㎳)	Duty cycle (Linear)	Duty cycle (%)	Duty cycle correction factor (㏈)
802.11b	10.00	10.00	1	100	0
802.11g	10.00	10.00	1	100	0
802.11n(HT20)	10.00	10.00	1	100	0
802.11n(HT40)	10.00	10.00	1	100	0

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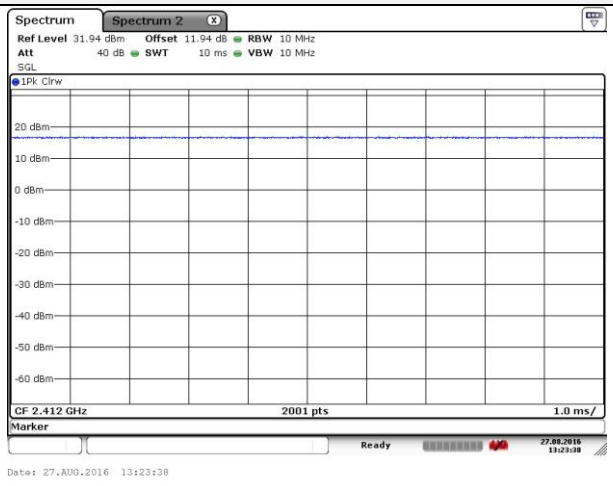
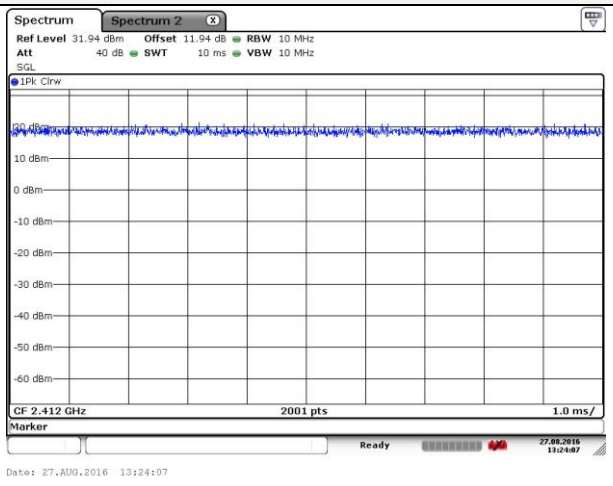
Duty cycle (Linear) = T_{on} time/Period

DCF(Duty cycle correction factor (㏈)) = 10log(1/duty cycle)

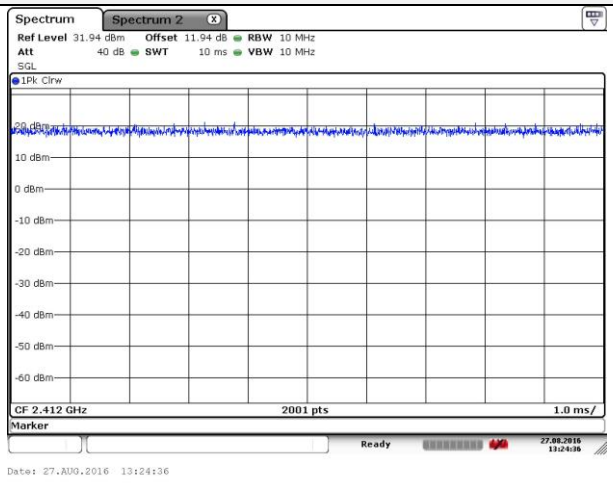
802.11b // Middle channel



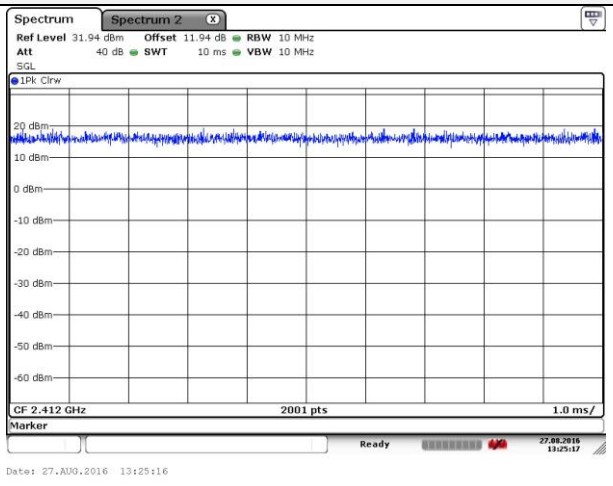
802.11g // Middle channel



802.11n(HT20) // Middle channel



802.11n(HT40) // Middle channel



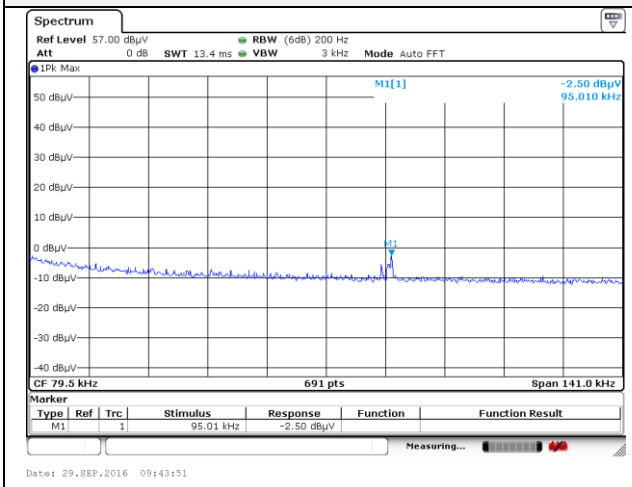
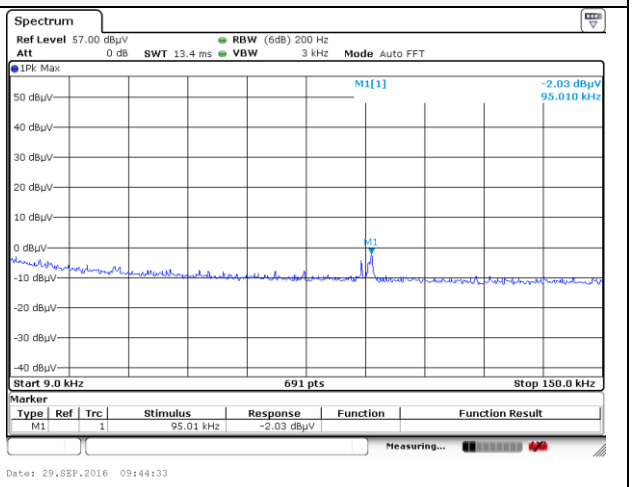
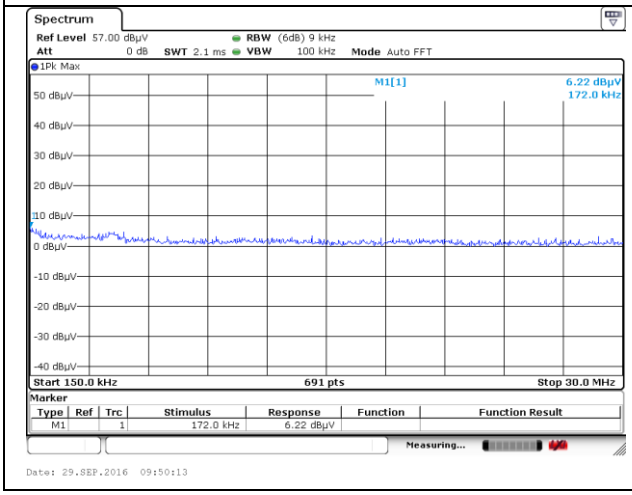
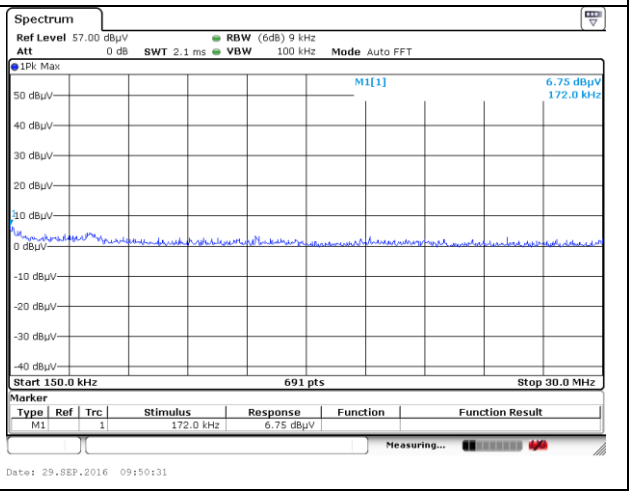
Test results (Below 30 ㎒)

Mode: 802.11b

Distance of measurement: 3 meter

Channel: 6(Worst case)

Frequency (㎒)	Level (dB㎶)	Ant. Pol. (H/V)	CF (dB)	F_d (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
No spurious emissions were detected within 20 dB of the limit							

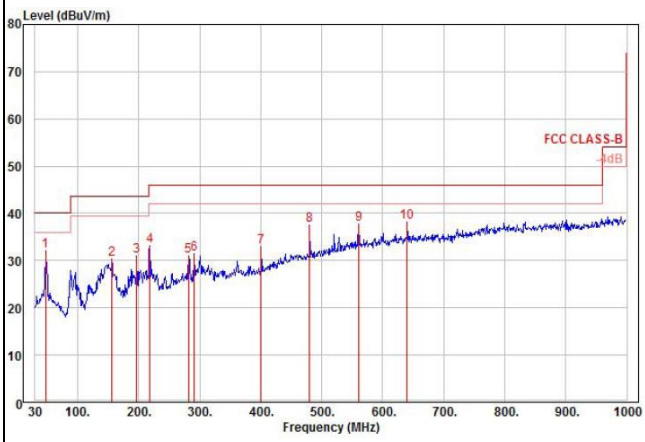
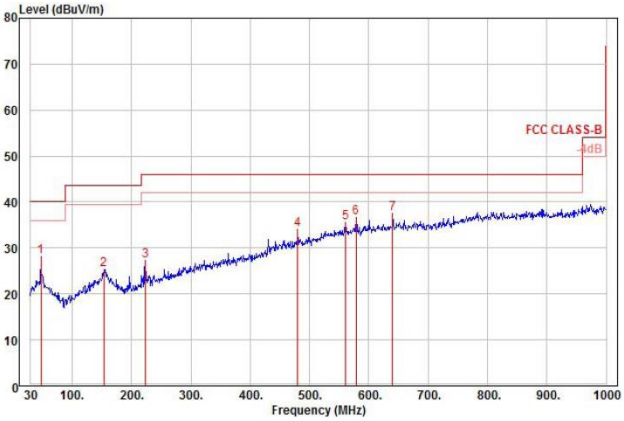
Horizontal	Vertical
	
	

Test results (Below 1 000 ㎒) – Worst case

Mode: 802.11b

Distance of measurement: 3 meter

Channel: 6(Worst case)

Horizontal	Vertical
	

	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dBuV/m	dB		
1	47.46	31.94	17.76	13.72	0.46	0.00	40.00	-8.06		horizontal
2	156.10	30.25	16.46	13.05	0.74	0.00	43.50	-13.25		horizontal
3	196.84	30.88	19.82	10.29	0.77	0.00	43.50	-12.62		horizontal
4	218.18	33.08	21.42	10.81	0.85	0.00	46.00	-12.92		horizontal
5	282.20	31.01	16.72	13.16	1.13	0.00	46.00	-14.99		horizontal
6	290.93	31.39	16.73	13.49	1.17	0.00	46.00	-14.61		horizontal
7	400.54	32.94	15.59	16.09	1.26	0.00	46.00	-13.06		horizontal
8	480.08	37.47	18.28	17.86	1.33	0.00	46.00	-8.53		horizontal
9	560.59	37.72	16.60	19.55	1.57	0.00	46.00	-8.28		horizontal
10 pp	640.13	38.19	15.73	20.80	1.66	0.00	46.00	-7.81		horizontal

	Freq	Level	Read Level	Ant Factor	Cable Loss	Preamp Factor	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dB/m	dB	dB	dBuV/m	dB		
1	47.46	28.11	13.93	13.72	0.46	0.00	40.00	-11.89		vertical
2	153.19	25.36	11.63	13.00	0.73	0.00	43.50	-18.14		vertical
3	224.00	27.19	15.30	11.02	0.87	0.00	46.00	-18.81		vertical
4	480.08	34.09	14.90	17.86	1.33	0.00	46.00	-11.91		vertical
5	560.59	35.61	14.49	19.55	1.57	0.00	46.00	-10.39		vertical
6	579.02	36.57	15.09	19.94	1.54	0.00	46.00	-9.43		vertical
7 pp	640.13	37.58	15.12	20.80	1.66	0.00	46.00	-8.42		vertical

Test results (Above 1 000 ㎒)

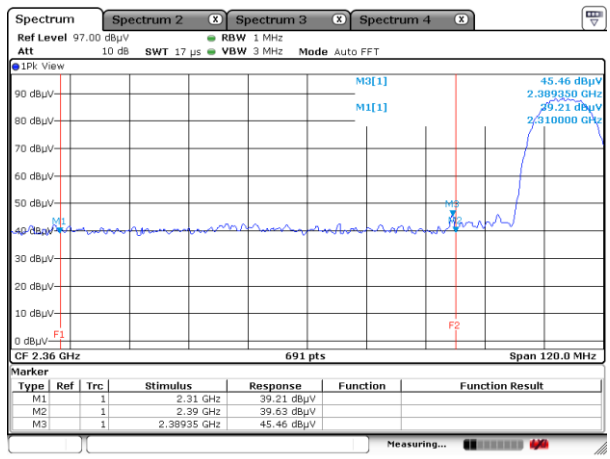
Mode: 802.11b

Distance of measurement: 3 meter

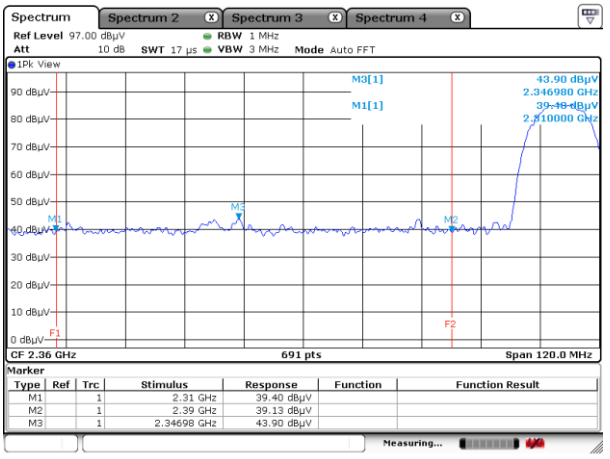
Channel: 01

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2389.35	45.46	Peak	H	-9.77	-	35.69	74.00	38.31
2346.98	43.90	Peak	V	-9.90	-	34.00	74.00	40.00
3206.00	49.49	Peak	H	-7.89	-	41.60	74.00	32.40
3575.00	48.75	Peak	H	-6.95	-	41.80	74.00	32.20
4834.00	48.56	Peak	V	-4.01	-	44.55	74.00	29.45

Restricted band // Horizontal // Peak



Restricted band // Vertical // Peak

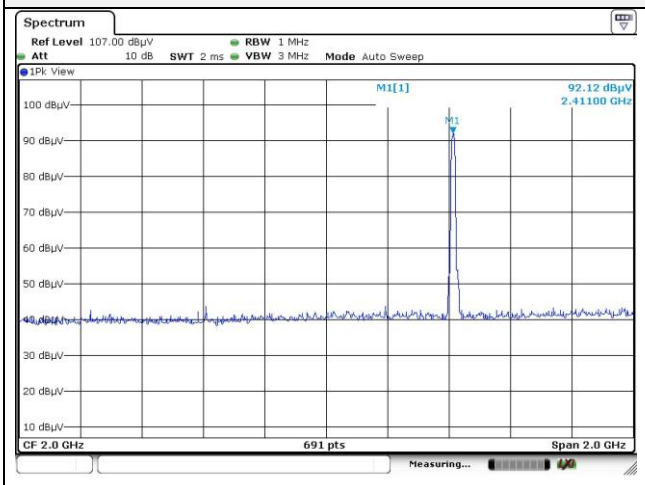
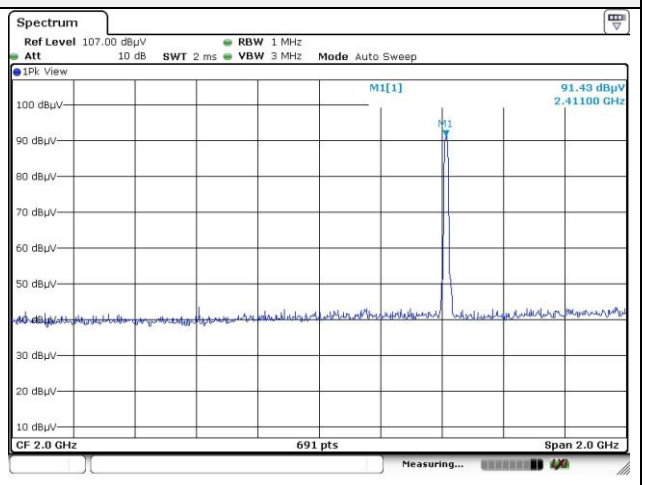
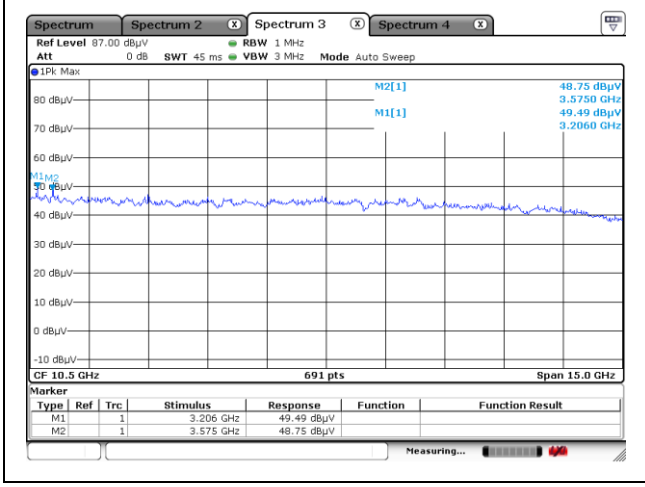
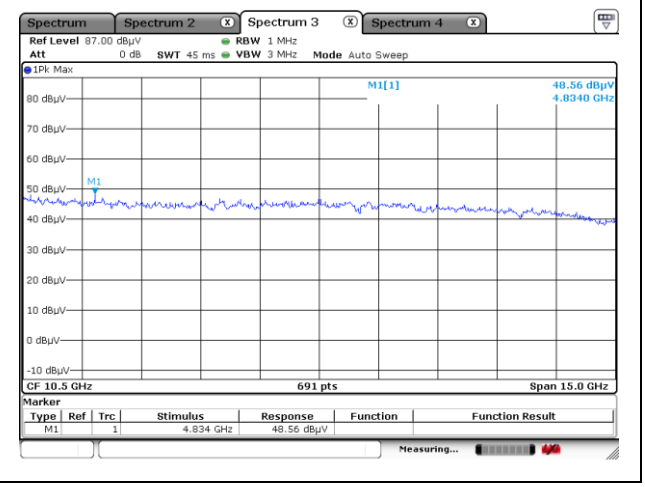


Restricted band // Horizontal // Average

N/A

Restricted band // Vertical // Average

N/A

Horizontal // Peak for 1 ㎓ to 3 ㎓	Vertical // Peak for 1 ㎓ to 3 ㎓
	
Horizontal // Peak for 3 ㎓ to 18 ㎓	**Vertical // Peak for 3 ㎓ to 18 ㎓**
	

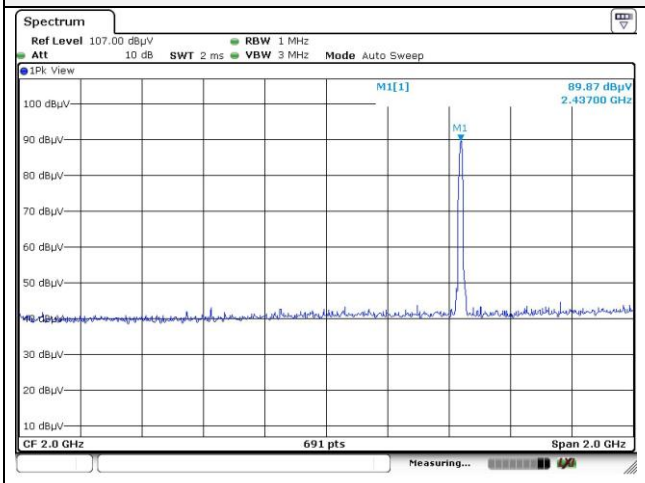
Mode: 802.11b

Distance of measurement: 3 meter

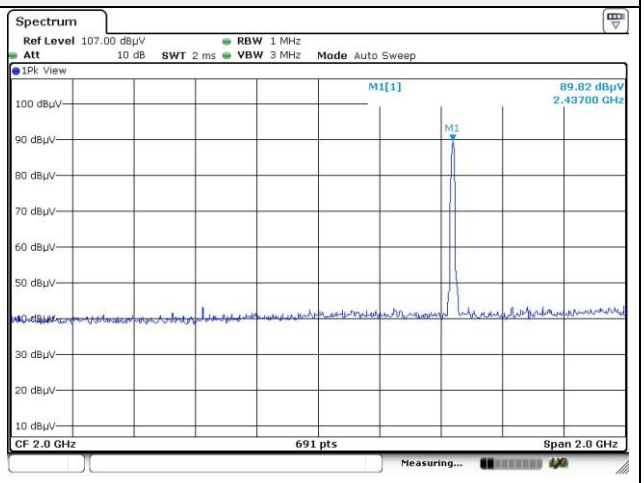
Channel: 06

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
No spurious emission were detected above 3 ㎓.								

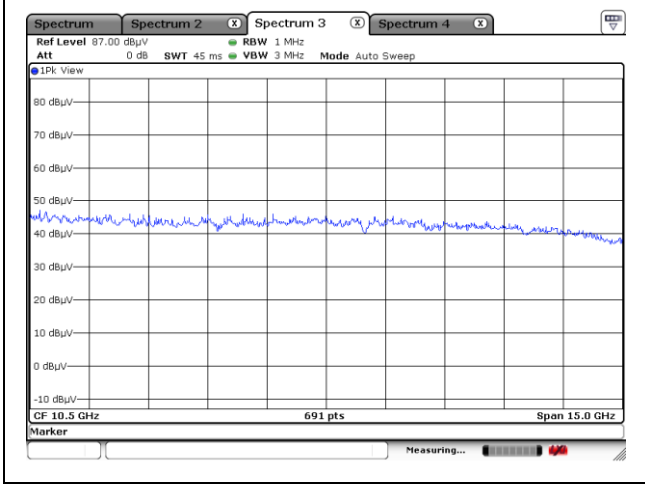
Horizontal // Peak for 1 ㎓ to 3 ㎓



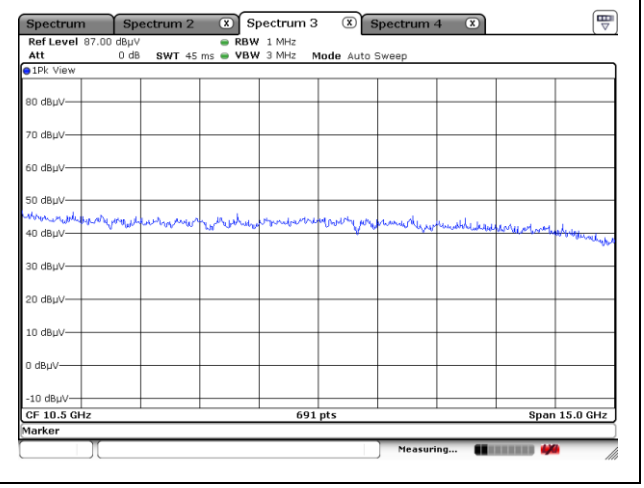
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



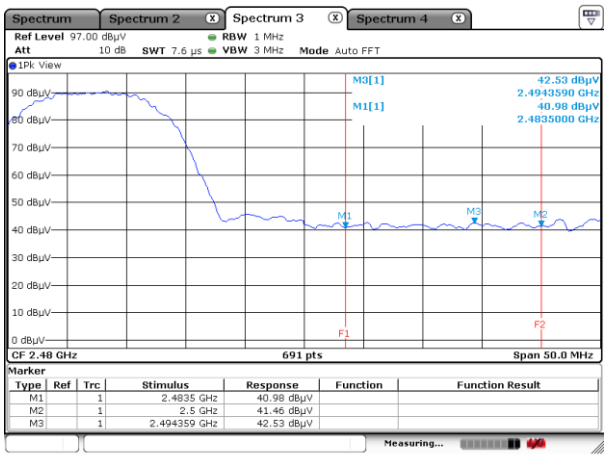
Mode: 802.11b

Distance of measurement: 3 meter

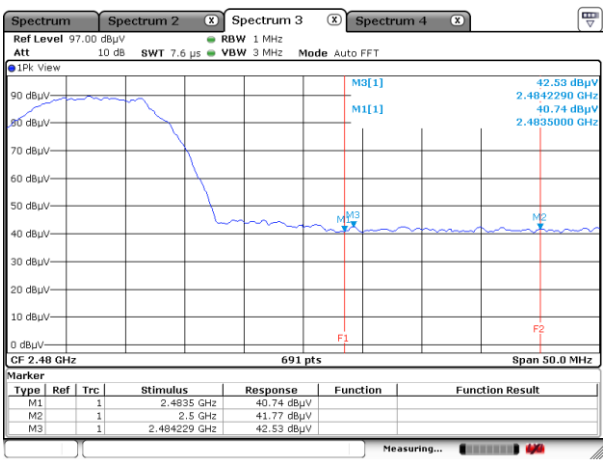
Channel: 11

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2494.36	42.53	Peak	H	-9.36	-	33.17	74.00	40.83
2484.23	42.53	Peak	V	-9.40	-	33.13	74.00	40.87

Restricted band // Horizontal // Peak



Restricted band // Vertical // Peak

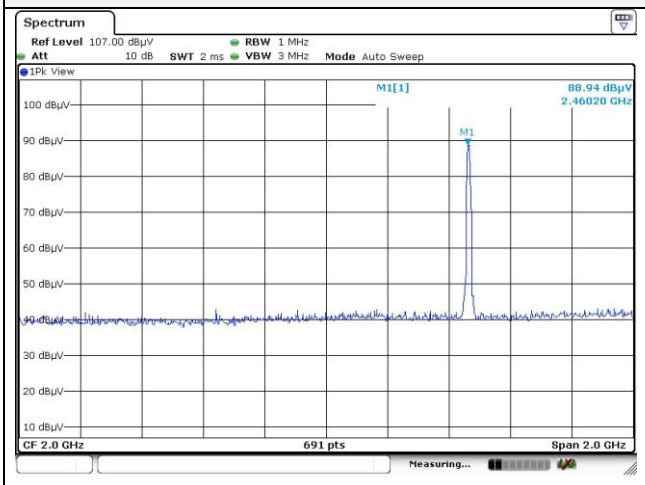
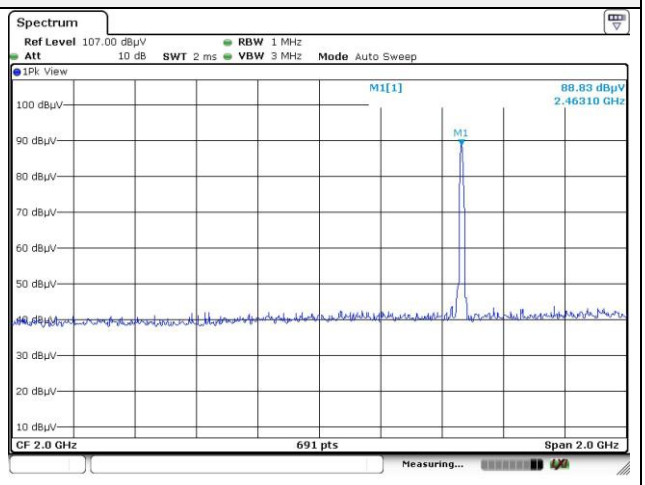
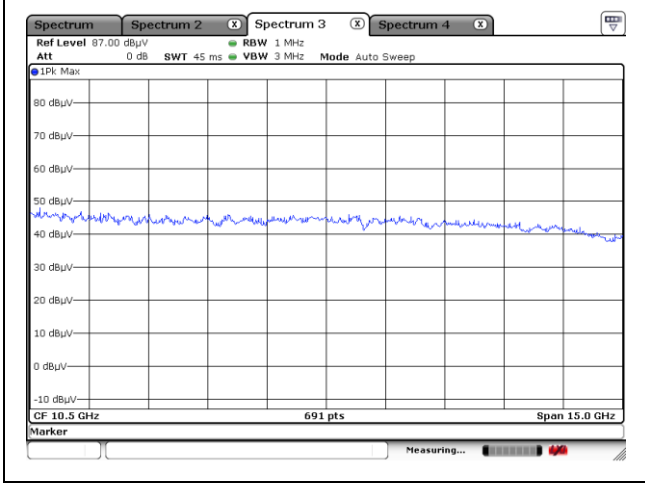
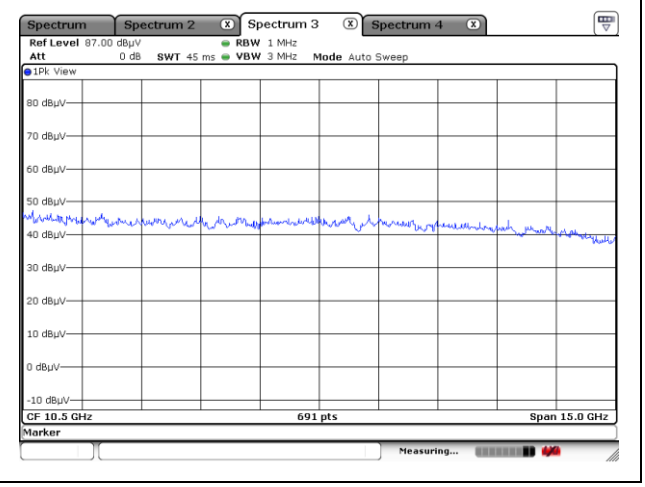


Restricted band // Horizontal // Average

N/A

Restricted band // Vertical // Average

N/A

Horizontal // Peak for 1 ㎓ to 3 ㎓	Vertical // Peak for 1 ㎓ to 3 ㎓
	
Horizontal // Peak for 3 ㎓ to 18 ㎓	**Vertical // Peak for 3 ㎓ to 18 ㎓**
	

Note.
1. No spurious emission were detected above 3 ㎓.

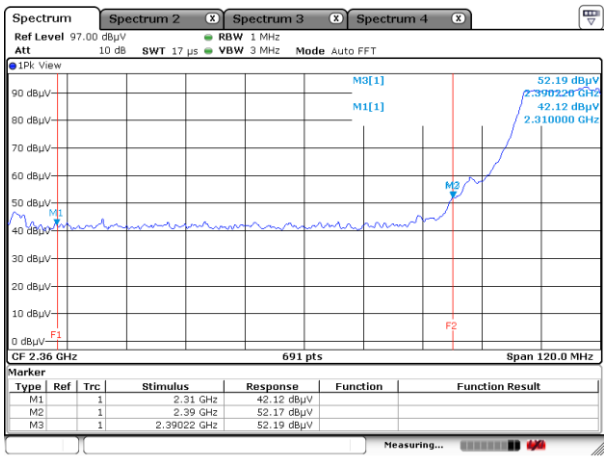
Mode: 802.11g

Distance of measurement: 3 meter

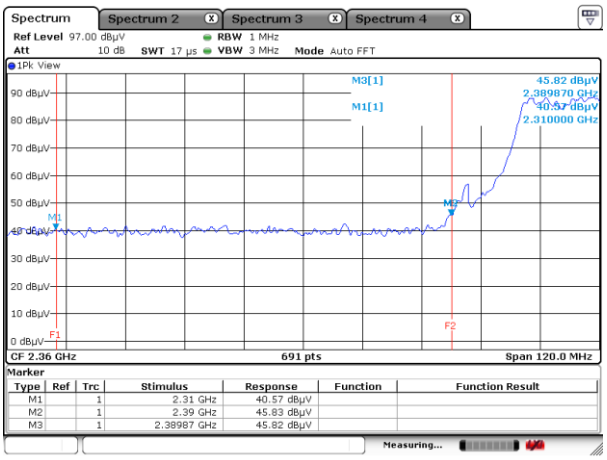
Channel: 01

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2390.00	52.17	Peak	H	-9.77	-	42.40	74.00	31.60
2390.00	45.83	Peak	V	-9.77	-	36.06	74.00	37.94

Restricted band // Horizontal // Peak



Restricted band // Vertical // Peak

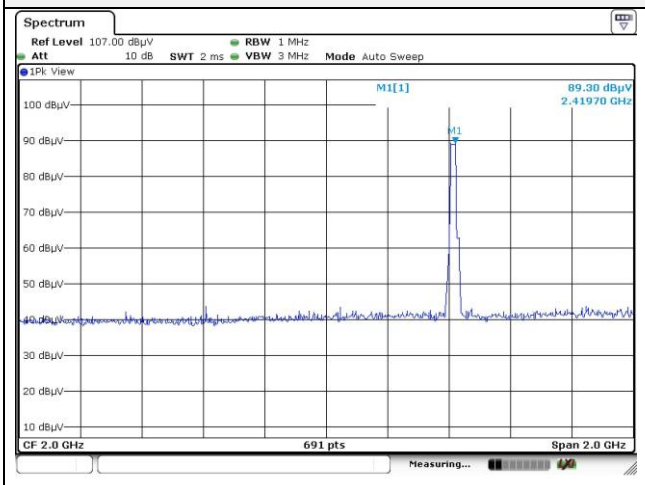
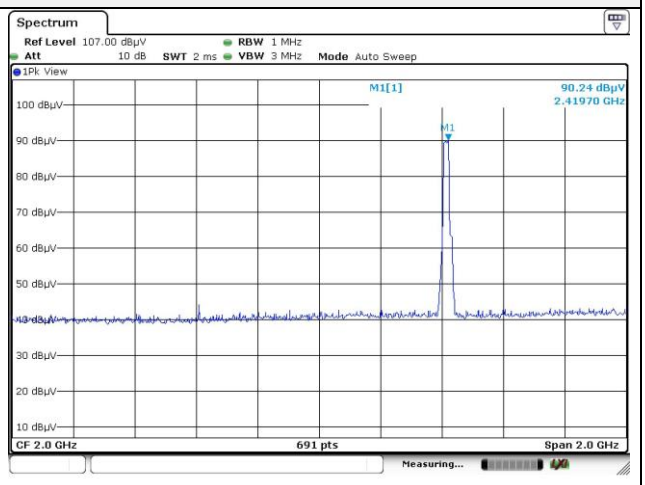
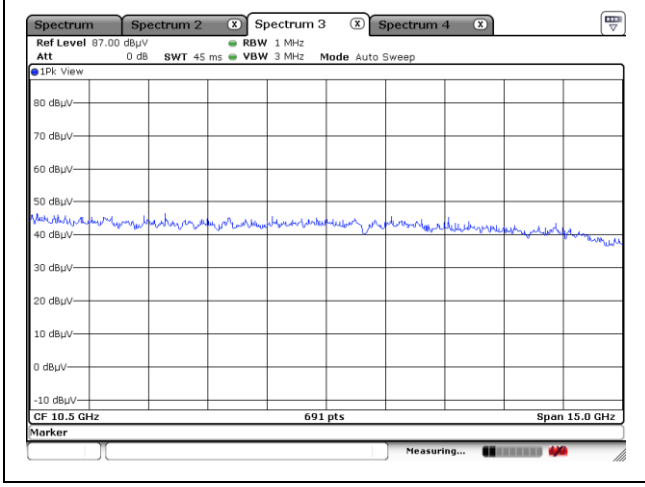
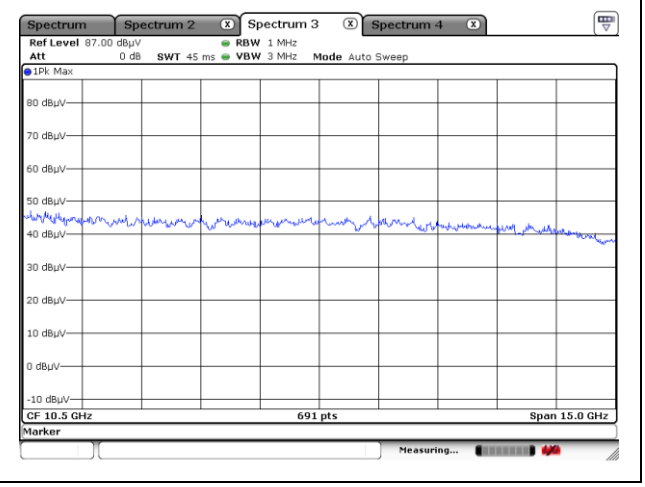


Restricted band // Horizontal // Average

N/A

Restricted band // Vertical // Average

N/A

Horizontal // Peak for 1 ㎓ to 3 ㎓	Vertical // Peak for 1 ㎓ to 3 ㎓
	
Horizontal // Peak for 3 ㎓ to 18 ㎓	**Vertical // Peak for 3 ㎓ to 18 ㎓**
	

Note.
1. No spurious emission were detected above 3 ㎓.

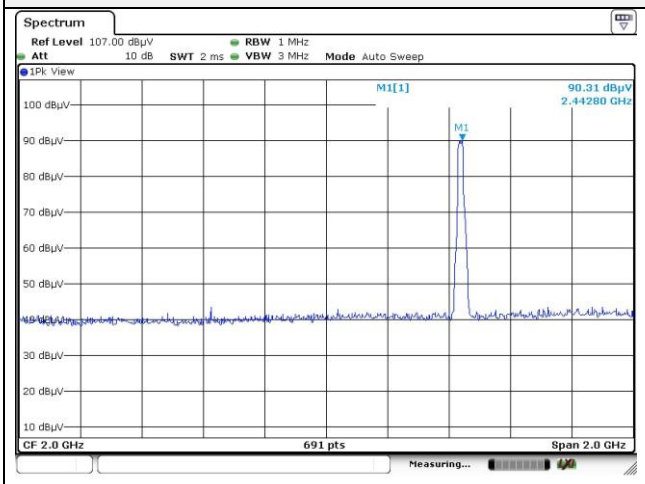
Mode: 802.11g

Distance of measurement: 3 meter

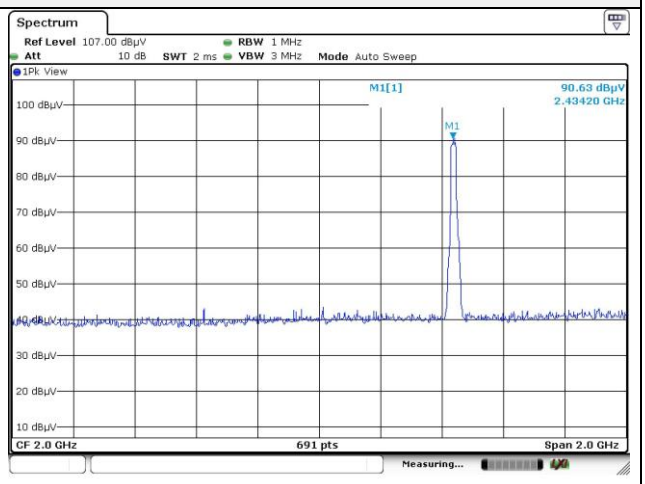
Channel: 06

Frequency (㎒)	Level (dBμV)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
No spurious emission were detected above 3 ㎓.								

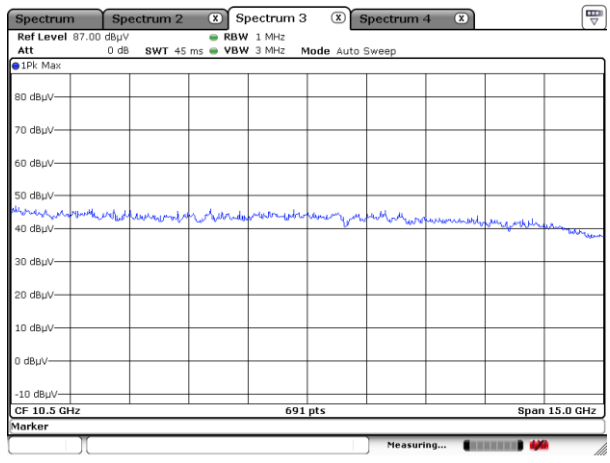
Horizontal // Peak for 1 ㎓ to 3 ㎓



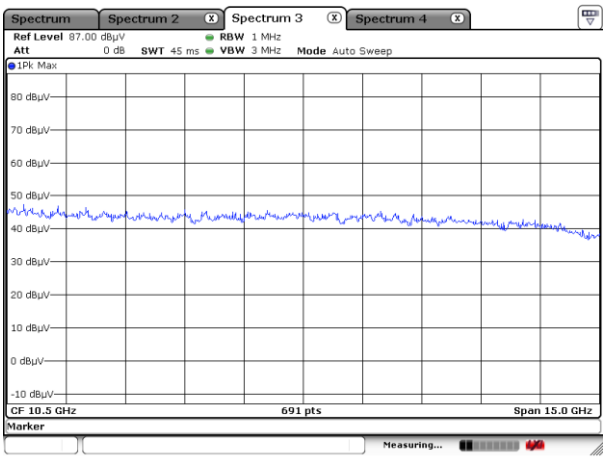
Vertical // Peak for 1 ㎓ to 3 ㎓



Horizontal // Peak for 3 ㎓ to 18 ㎓



Vertical // Peak for 3 ㎓ to 18 ㎓



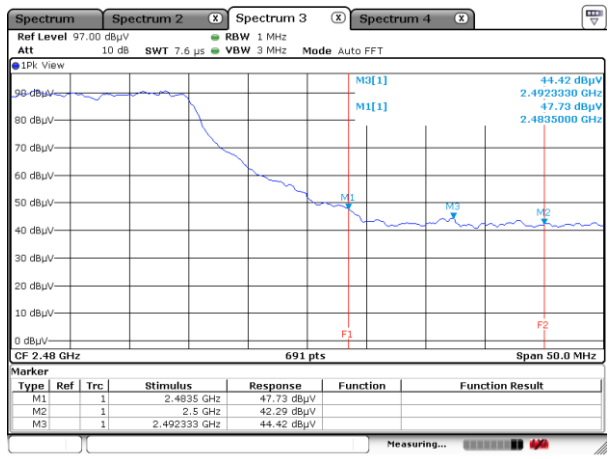
Mode: 802.11g

Distance of measurement: 3 meter

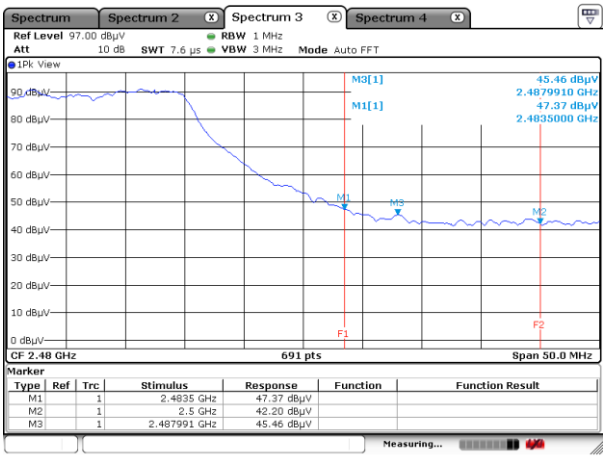
Channel: 11

Frequency (㎒)	Level (dB㎶)	Detect mode	Ant. Pol. (H/V)	CF (dB)	DCF (dB)	Field strength (dB㎶/m)	Limit (dB㎶/m)	Margin (dB)
2483.50	47.73	Peak	H	-9.41	-	38.32	74.00	35.68
2483.50	47.37	Peak	V	-9.41	-	37.96	74.00	36.04

Restricted band // Horizontal // Peak



Restricted band // Vertical // Peak

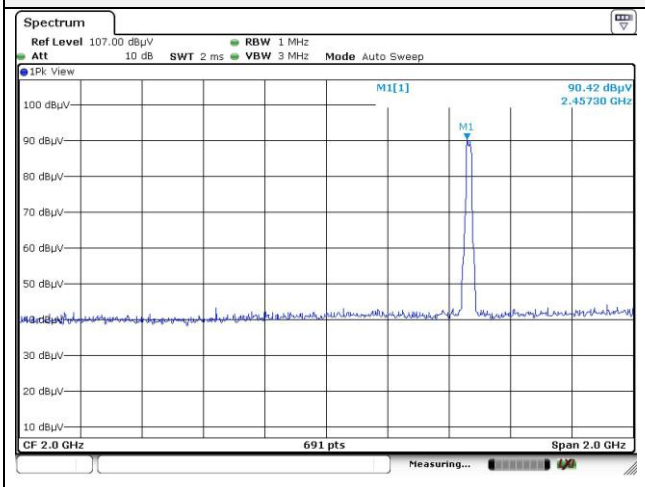
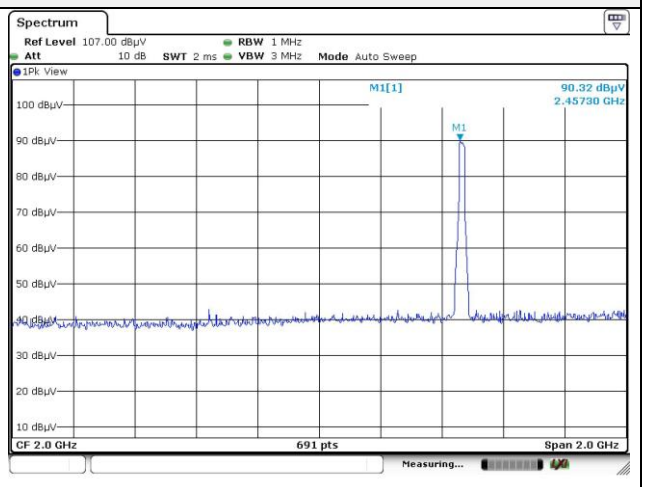
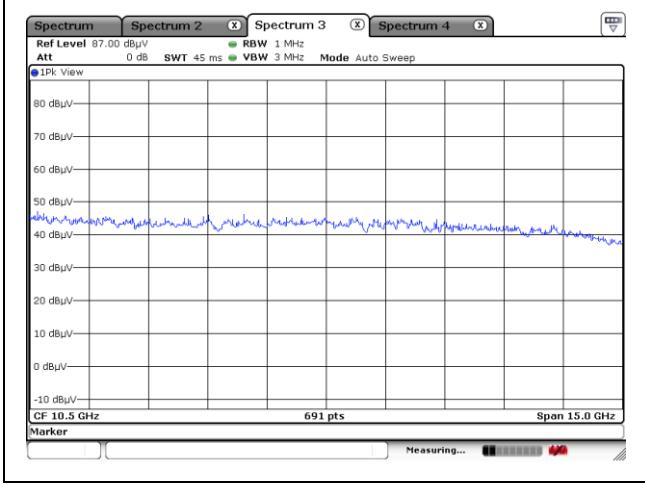
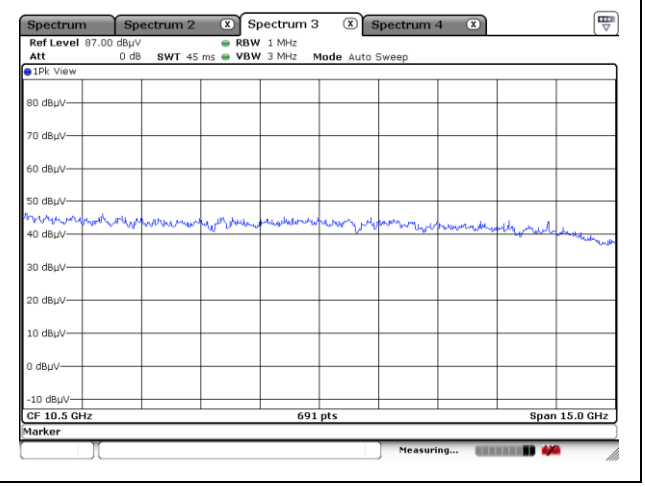


Restricted band // Horizontal // Average

N/A

Restricted band // Vertical // Average

N/A

Horizontal // Peak for 1 ㎓ to 3 ㎓	Vertical // Peak for 1 ㎓ to 3 ㎓
	
Horizontal // Peak for 3 ㎓ to 18 ㎓	**Vertical // Peak for 3 ㎓ to 18 ㎓**
	

Note.
1. No spurious emission were detected above 3 ㎓.