

FCC TEST REPORT

for

Shanghai Nine Eagles Electronic Technology Co., Ltd.

WIFI CAMERA

Model No.: NE-OT015, NE-OT020, NE-OT021, NE-OT022, NE-OT023, NE-OT024, NE-OT025, NE-OT026, NE-OT027, NE-OT028, NE-OT029, NE-OT030

Prepared for : Shanghai Nine Eagles Electronic Technology Co., Ltd.

Address : Room 1104, Huaxiang Building, No. 80 Moling Road, Shanghai,

200070, China

Prepared By : Shenzhen Anbotek Compliance Laboratory Limited

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Report Number : R011408212E

Date of Test : Aug. 26~ Sept. 16, 2014

Date of Report : Sept. 17, 2014



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TEST REPORT

Applicant : Shanghai Nine Eagles Electronic Technology Co., Ltd.Manufacturer : Shanghai Nine Eagles Electronic Technology Co., Ltd.

EUT : WIFI CAMERA

Model No. : NE-OT015, NE-OT020, NE-OT021, NE-OT022, NE-OT023,

NE-OT024, NE-OT025, NE-OT026, NE-OT027, NE-OT028,

NE-OT029, NE-OT030

Serial No. : N.A.

Trade Mark : N.A.

Rating : DC 3.7V, 1200mA

Measurement Procedure Used:

FCC Part15 Subpart C, Paragraph 15.247

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Test:	Aug. 26~ Sept. 16, 2014
Prepared by :	Zock reng
	(Tested Engineer / Rock Zeng)
Reviewer:	Amy Ding
	(Project Manager / Amy Ding)
Approved & Authorized Signer :	Ton Aren
	(Manager / Tom Chen)



1. GENERAL INFORMATION

1.1. Description of Device (EUT)

EUT : WIFI CAMERA

Model Number : NE-OT015, NE-OT020, NE-OT021, NE-OT022, NE-OT023,

NE-OT024, NE-OT025, NE-OT026, NE-OT027, NE-OT028,

NE-OT029, NE-OT030

(Note: All samples are the same except the model number and appearance, so we prepare "NE-OT015" for EMC test only.)

Test Power Supply: DC 3.7V Via Battery

RF Transmission : 2412MHz~2462MHz (802.11b/802.11g/802.11n(HT20))

Frequency 2422MHz~2452MHz (802.11n(HT40))

Channels : 11 For (802.11b/802.11g/802.11n(HT20))

7 For (802.11n(HT40))

Modulation : 802.11b CCK

802.11g OFDM 802.11n MCS

Antenna Gain: : 2dBi

Applicant : Shanghai Nine Eagles Electronic Technology Co., Ltd.

Address : Room 1104, Huaxiang Building, No. 80 Moling Road, Shanghai,

200070, China

Manufacturer : Shanghai Nine Eagles Electronic Technology Co., Ltd.

Address : Room 1104, Huaxiang Building, No. 80 Moling Road, Shanghai,

200070, China

Factory : Shanghai Nine Eagles Electronic Technology Co., Ltd.

Address : Room 1104, Huaxiang Building, No. 80 Moling Road, Shanghai,

200070, China

Date of receipt : Aug. 15, 2014

Date of Test : Aug. 26~ Sept. 16, 2014



1.2. Auxiliary Equipment Used during Test

N/A

1.3. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS - LAB Code: L3503

Shenzhen Anbotek Compliance Laboratory Limited., Laboratory has been assessed and in compliance with CNAS/CL01: 2006 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

FCC-Registration No.: 752021

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registed and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 752021, July 10, 2013.

IC-Registration No.: 8058A-1

Shenzhen Anbotek Compliance Laboratory Limited., EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration 8058A, February 22, 2013.

Test Location

All Emissions tests were performed at

Shenzhen Anbotek Compliance Laboratory Limited. at 1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China

1.4. Measurement Uncertainty

Radiation Uncertainty : Ur = 4.3 dB

Conduction Uncertainty : Uc = 3.4dB



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4: 2009 and FCC Part 15, Paragraph 15.247.

2.1. Summary of Test Results

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107, 15.207	Conducted Emission Test	ŀ	N/A
FCC Part 15, Paragraph 15.247(b)(1)	Peak Output Power	PASS	Complies
FCC Part 15, Paragraph 15.247(a)(2)	6dB Bandwidth	PASS	Complies
FCC Part 15, Paragraph 15.247(c)	100kHz Bandwidth of Frequency Band Edges	PASS	Complies
FCC Part 15, Paragraph 15.209(a)(f)	Spurious Emission	PASS	Complies
FCC Part 15, Paragraph 15.247(a)(1)	Frequency Separation	-	N/A
FCC Part 15, Paragraph 15.247(a)(1)(iii)	Number of Hopping Frequency	-	N/A
FCC Part 15, Paragraph 15.247(a)(1)(iii)	Time of Occupancy	-	N/A
FCC Part 15, Paragraph 15.247(c)	Peak Power Density	PASS	Complies

2.2. Description of Test Modes

The EUT has been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting and receiving mode isprogrammed.

IEEE802.11b: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 1 Mbps lowest data rate (worst case) are chosen for the final testing.

IEEE802.11g: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6 Mbps lowest data rate (the worst case) are chosen for the final testing.

IEEE802.11n (HT20): Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with MCS 0 Mbps lowest data rate (the worst case) are chosen for the final testing.

IEEE802.11n (HT40): Channel 3(2422MHz), Channel 6(2437MHz) and Channel 9(2452MHz) with MCS 0 Mbps lowest data rate (the worst case) are chosen for the final testing.



2.3. List of channels:

√ - available

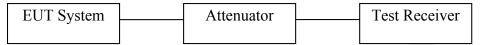
X - tested

Number	Frequency(MHz)		802.11	802.11
			b/g/n	b/g/n
			(HT20)	(HT40)
1	2412	√	X	
2	2417	√		
3	2422	√		X
4	2427	√		
5	2432	√		
6	2437	√	X	X
7	2442	√		
8	2447	√		
9	2452	√		X
10	2457	√		
11	2462	√	X	



3. FCC Part 15.247 Requirements for DSSS & OFDM Modulation

3.1 Test Setup



3.2 6dB Bandwidth

a. Limit

For the direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz.

b.Test Procedure

- 1. Place the EUT on the table and set it in the transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as:

RBW = 100kHz, $VBW \ge 3*RBW = 300kHz$,

Detector= Peak

Trace mode= Max hold.

Sweep- auto couple.

- 4. Mark the peak frequency and –6dB (upper and lower) frequency.
- 5. Repeat until all the rest channels are investigated.

20dB Bandwidth:

C63.10

Occupied Bandwidth (OBW=20dB Bandwidth

- 1. Set RBW=1%~5% OBW
- 2. Set the VBW≥3*RBW
- 3. Set the span range between 2 times and 5 times of the OBW
- 4. Sweep Time= Auto

Detector= Peak

Trace= Max hold

5. Once the reference level is established, the equipment is conditioned with typical modulating signals to produce the worst case (i.e. the widest) bandwidth. Unless otherwise specified for an unlicensed wireless device, measure the bandwidth at the -20dB levels with respect to the reference level.



c. Test Setup See 3.1

d. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analysis	Agilent	E4407B	US39390582	Aug. 09, 2014	1 Year
2.	Preamplifier	Instruments corporation	EMC01183 0	980100	Aug. 09, 2014	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 23, 2014	1 Year
4.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Aug. 09, 2013	3 Year
5.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A

e. Test Results

Pass.



f. Test Data 6dB Bandwidth

Test mode	: IEEE	802.111	b
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Channel	Frequency	Bandwidth	Limit	Results
Chamier	(MHz)	(MHz)	(kHz)	Results
Low	2412	10.00		Pass
Mid	2437	10.00	>500	Pass
High	2462	10.00		Pass

Test mode: IEEE 802.11g

Channel	Frequency	Bandwidth	Limit	Results
Chamie	(MHz)	(MHz)	(kHz)	Resuits
Low	2412	16.56		Pass
Mid	2437	16.56	>500	Pass
High	2462	16.56		Pass

Test mode: IEEE 802.11n (HT20)

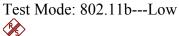
Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	17.68		Pass
Mid	2437	17.68	>500	Pass
High	2462	17.68		Pass

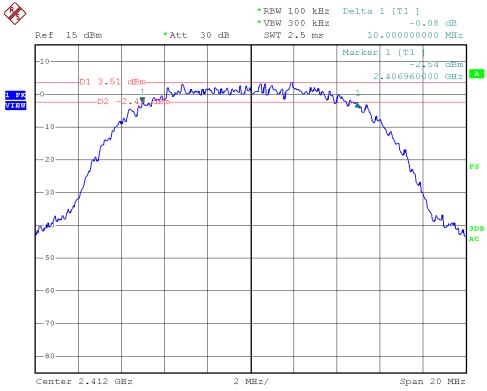
Test mode: IEEE 802.11n (HT40)

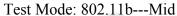
Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2422	36.48		Pass
Mid	2437	36.48	>500	Pass
High	2452	36.48		Pass

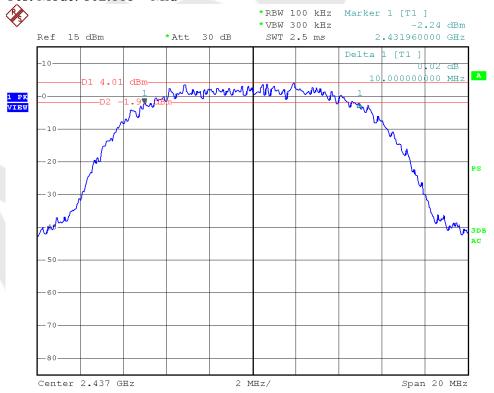
Test Plots See the following page.



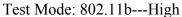


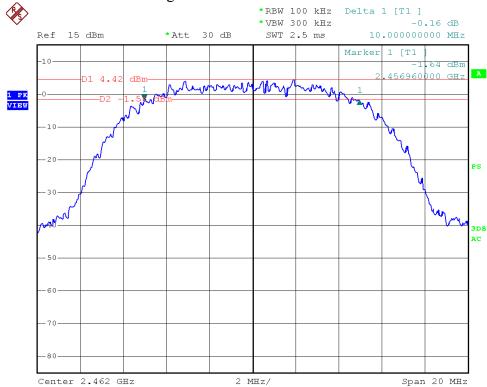


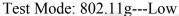


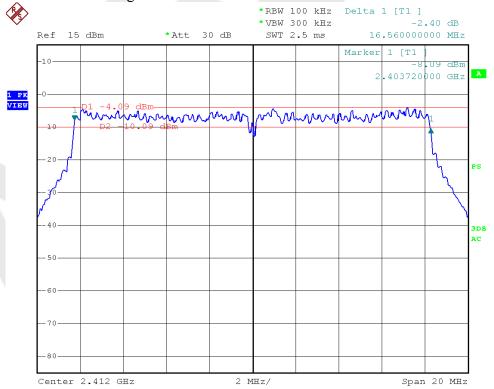




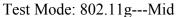


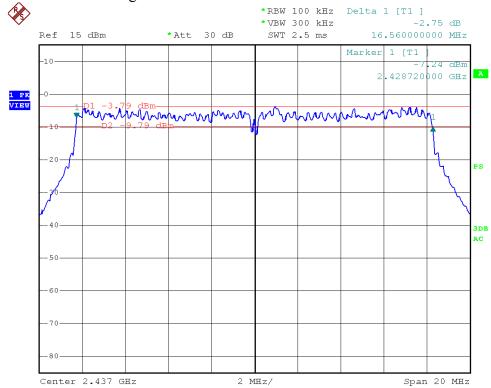




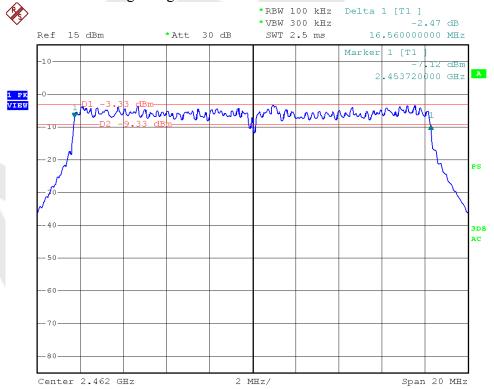






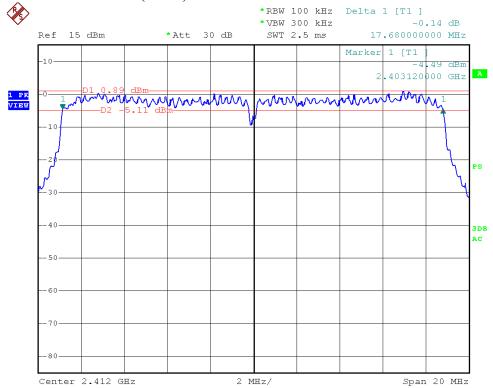


Test Mode: 802.11g---High

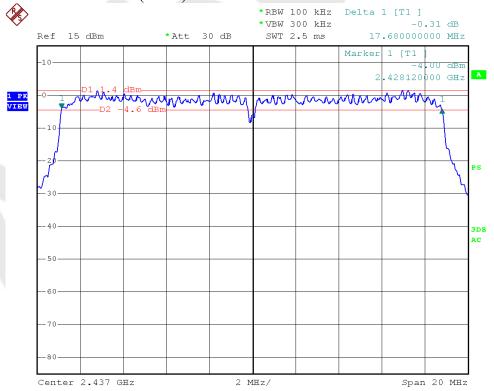






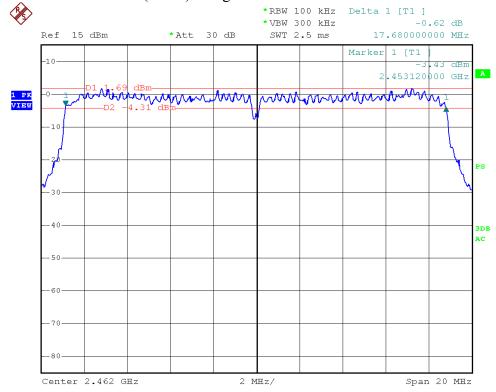


Test Mode: 802.11n (HT20)---Mid

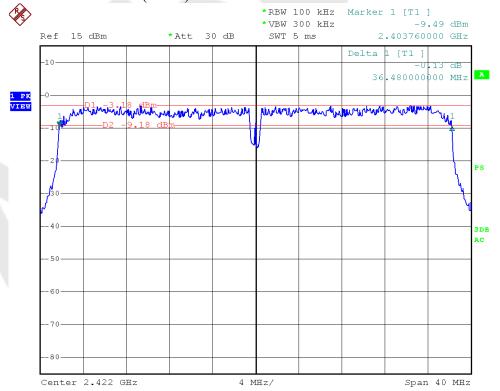








Test Mode: 802.11n (HT40)---Low



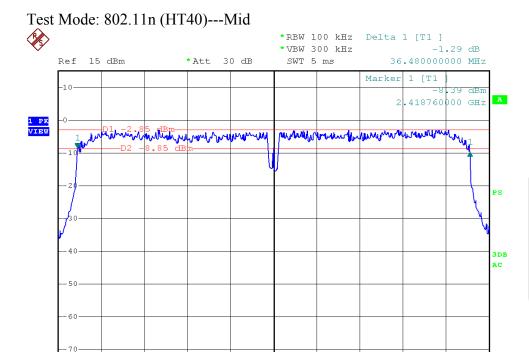
Span 40 MHz

Span 40 MHz

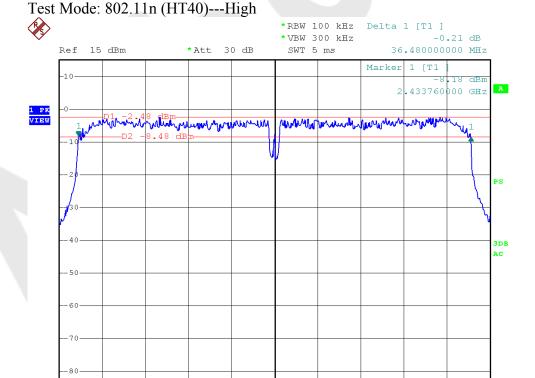


Center 2.437 GHz

Center 2.452 GHz



4 MHz/



4 MHz/



20dB Bandwidth

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	17.28	Pass
Mid	2437	17.28	Pass
High	2462	17.28	Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	17.60	Pass
Mid	2437	17.60	Pass
High	2462	17.60	Pass

Test mode: IEEE 802.11n (HT20)

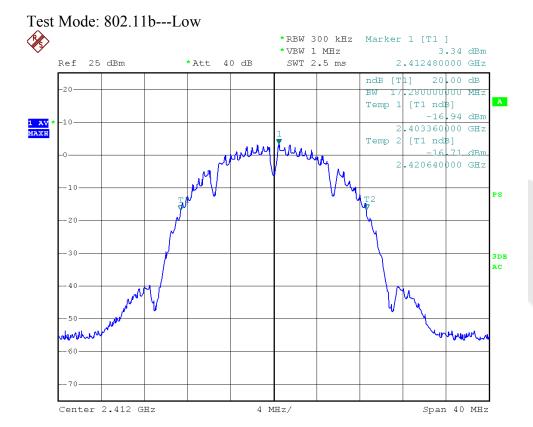
Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	18.88	Pass
Mid	2437	18.88	Pass
High	2462	18.88	Pass

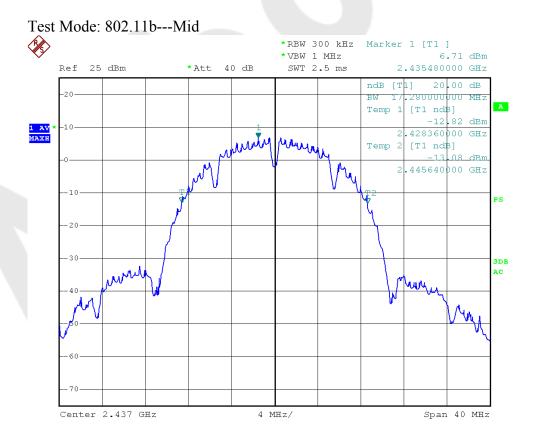
Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2422	37.76	Pass
Mid	2437	37.76	Pass
High	2452	37.92	Pass

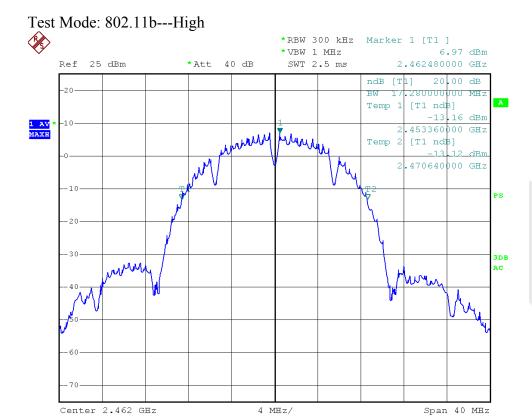
Test Plots See the following page.

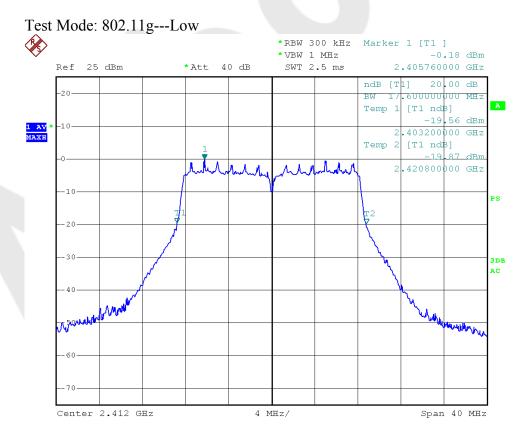




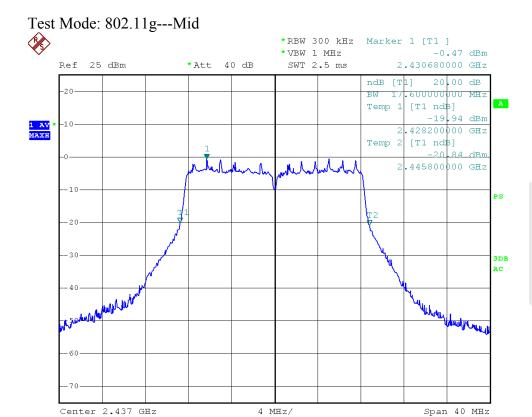


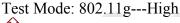


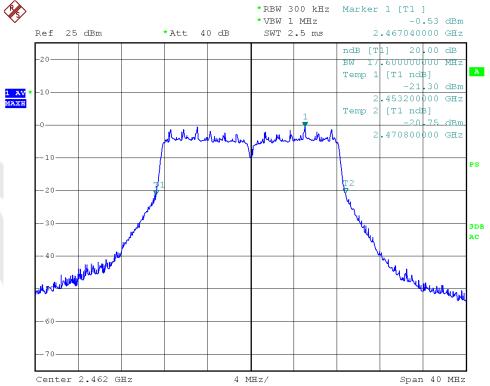








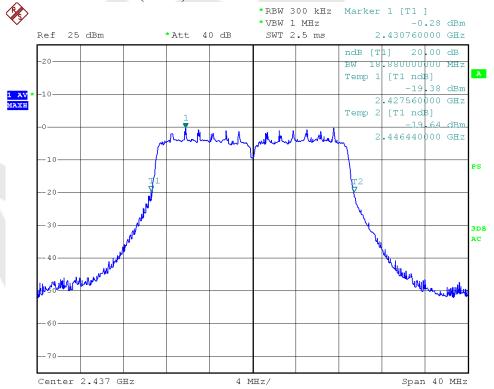






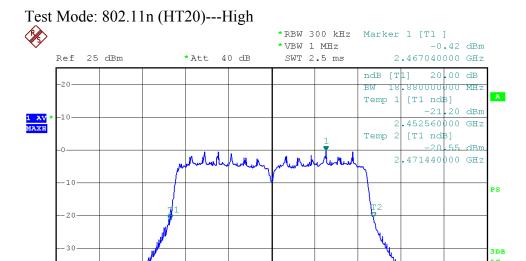






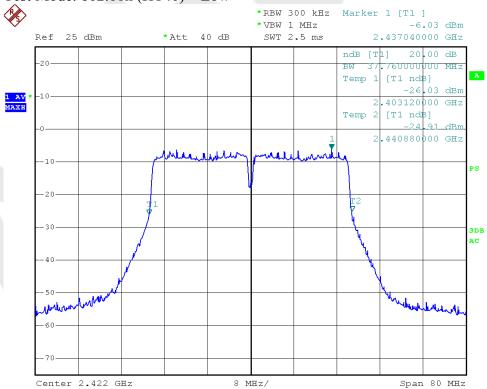
Span 40 MHz







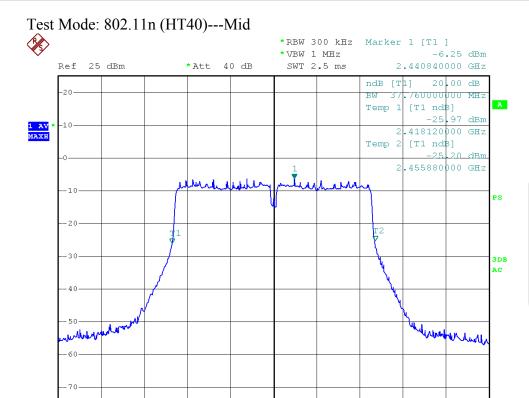
Center 2.462 GHz



4 MHz/

Span 80 MHz

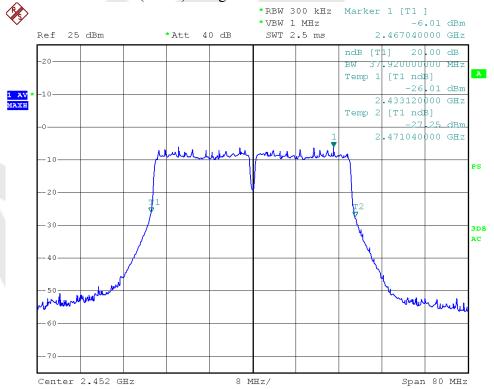




8 MHz/



Center 2.437 GHz





3.3. Maximum Output Power Test

a. Limit

The maximum peak output power of the intentional radiator shall not exceed the following:

- 1. For systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 watt (30dBm).
- 2. Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antenna of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

b. Configuration of Measurement

EUT	DC block ATT.	Test receiver
-----	---------------	---------------

c. Data Rates

IEEE802.11b: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 1 Mbps data rate (worst case) are chosen for the final testing.

IEEE802.11g: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6 Mbps data rate (the worst case) are chosen for the final testing.

IEEE802.11n (HT20: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6.5Mbps data rate (the worst case) are chosen for the final testing.

IEEE802.11n (HT40: Channel 3(2422MHz), Channel 6(2437MHz) and Channel 9(2452MHz) with 13.5Mbps data rate (the worst case) are chosen for the final testing.

d. Test Procedure

This test was according the kDB 558074 9.2.2:

- 1. Set span to at least 1.5 times the OBW.
- 2. Set the RBW = $1\sim5\%$ of the OBW, not to exceed 1MHz.
- 3. Set VBW≥3*RBW.
- 4. Detector = Average.
- 5. Sweep time = auto couple.
- 6. Trace mode = max hold.
- 7. Allow trace to fully stabilize.

e. Test Equipment

Same as the equipment listed in 3.2.

f. Test Results

Pass.



g. Test Data

Test mode: IEEE 802.11b

Channel	Frequency	Maximum transmit power	Li	mit	Result	
Chamilei	(MHz)	(dBm)	(dBm)	(watts)	Result	
Low	2412	14.44			Pass	
Mid	2437	14.96	30	1	Pass	
High	2462	15.67			Pass	

Test mode: IEEE 802.11g

Channel	Frequency	Maximum transmit power	Li	mit	Result	
Chamilei	(MHz)	(dBm)	(dBm)	(watts)	Result	
Low	2412	10.70			Pass	
Mid	2437	12.11	30	1	Pass	
High	2462	12.39			Pass	

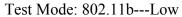
Test mode: IEEE 802.11n (HT20)

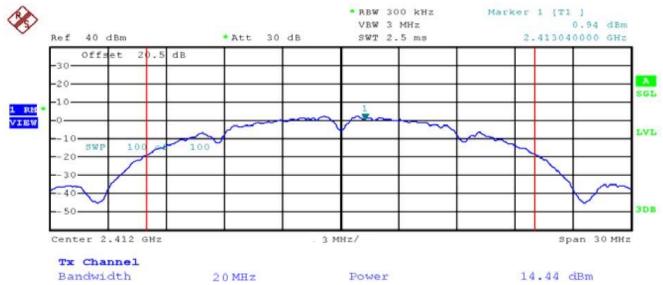
Channel	Frequency	Maximum transmit power	Li	mit	Result	
Chamie	(MHz)	(dBm)	(dBm)	(watts)	Kesuit	
Low	2412	10.93			Pass	
Mid	2437	11.45	30	1	Pass	
High	2462	12.24			Pass	

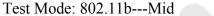
Test mode: IEEE 802.11n (HT40)

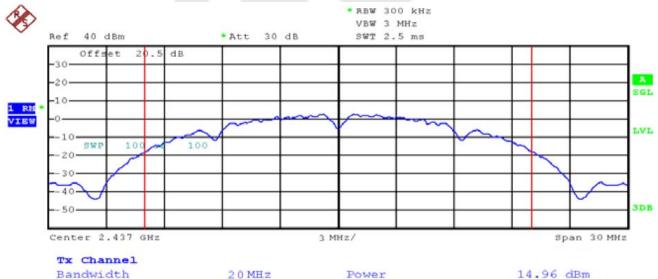
Channel	Frequency	Maximum transmit power	Li	mit	Result	
Chamie	(MHz)	(dBm)	(dBm)	(watts)	Resuit	
Low	2422	10.21			Pass	
Mid	2437	10.79	30	1	Pass	
High	2452	11.43			Pass	



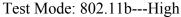


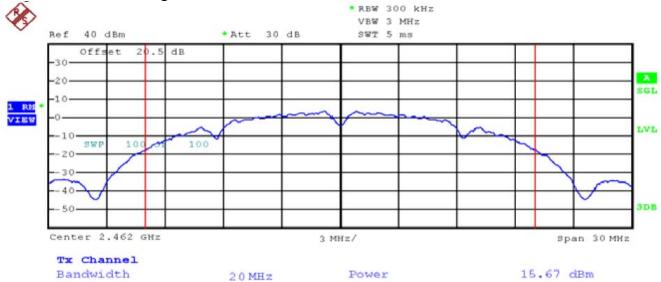




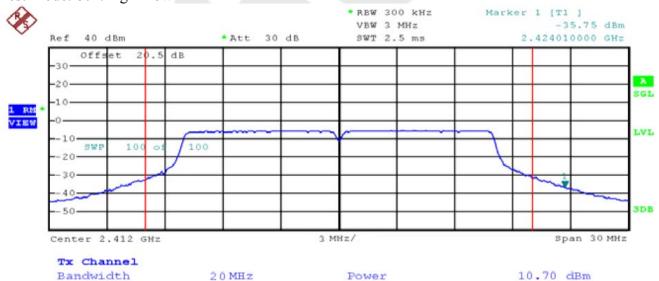




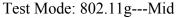


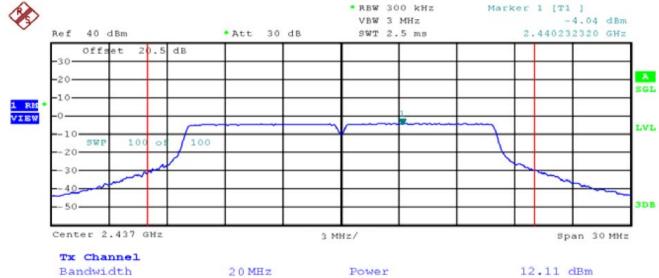


Test Mode: 802.11g---Low

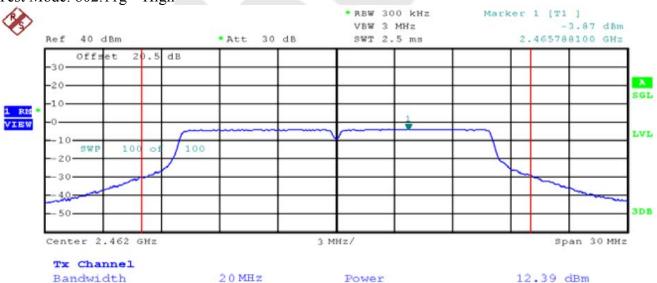






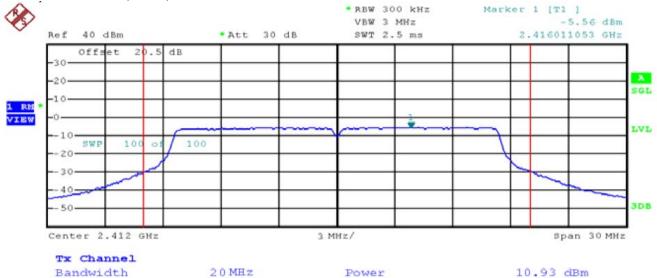


Test Mode: 802.11g---High

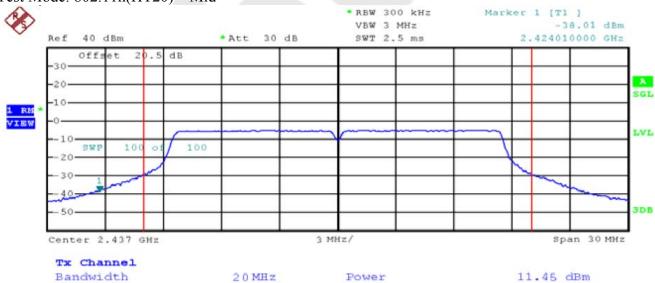






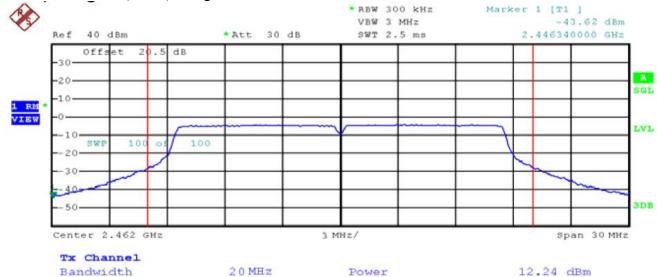




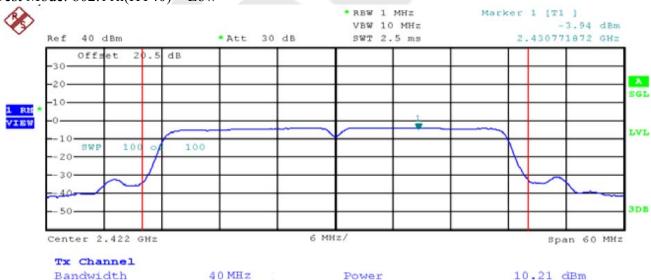






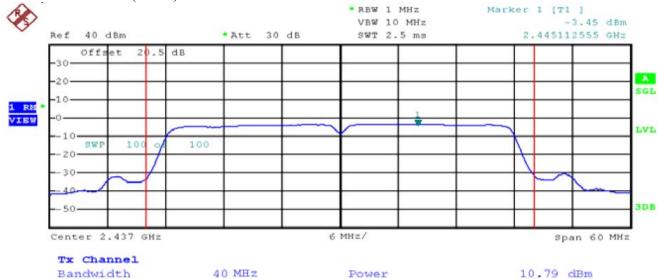


Test Mode: 802.11n(HT40)---Low

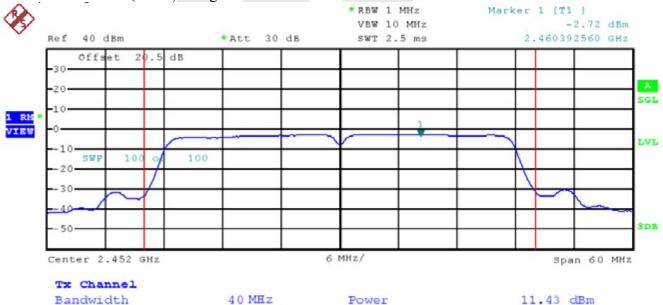














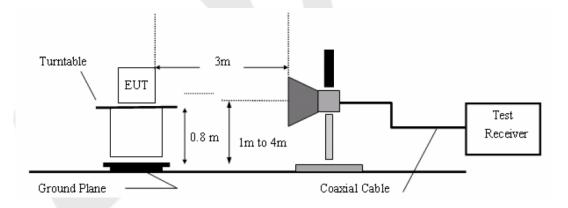
3.4. Band Edges Measurement

a. Limit

According to §15.247(c), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in15.209(a).

b. Test Procedure

- 1. Conducted Method:
- 1) Set RBW=100KHz, VBW=300KHz
- 2) Detector=peak
- 3) Sweep time= auto
- 4) Trace mode=max hold.
- 2. Radiated Method:
- 1) The EUT is placed on a turntable, which is 0.8m above the ground plane.
- 2) The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4) Peak detector: RBW=1MHz, VBW=3MHz, SWT=AUTO Average detector: RBW=1MHz, VBW=10Hz, SWT=AUTO The EUT is tested in 9*6*6 Chamber.
- 5) Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.



c. Test Equipment

Same as the equipment listed in 3.2.

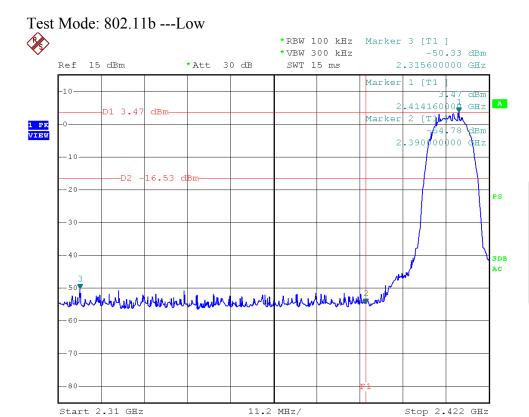
d. Test Results

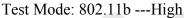
Pass.

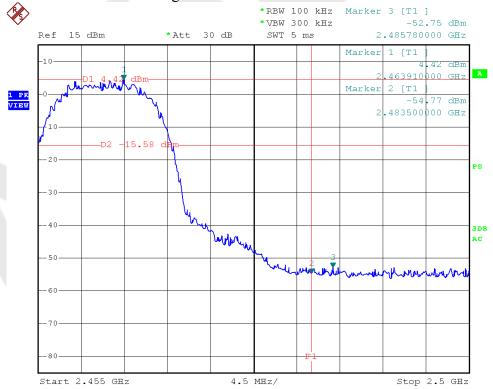
e. Test Plots

See the following page.

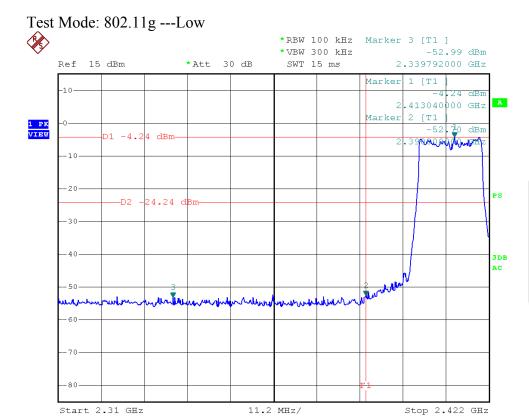


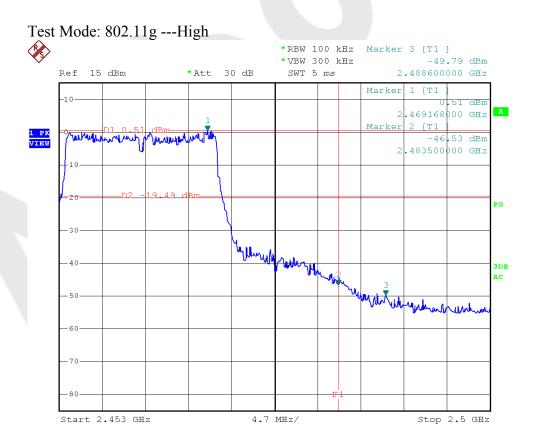








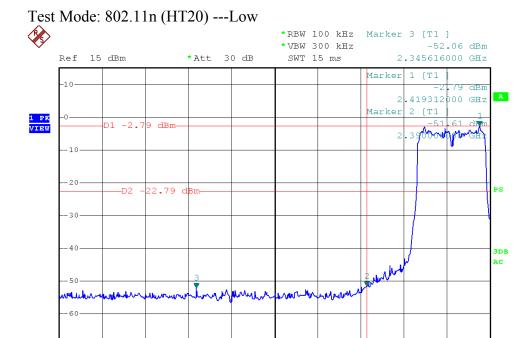




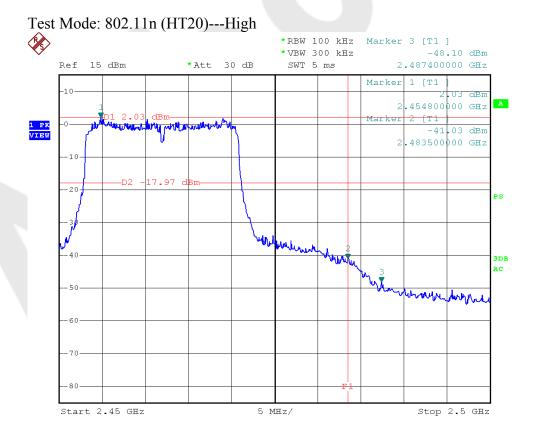
Stop 2.422 GHz



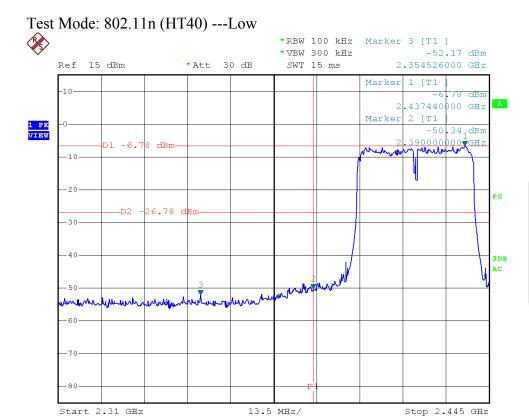
Start 2.31 GHz

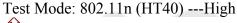


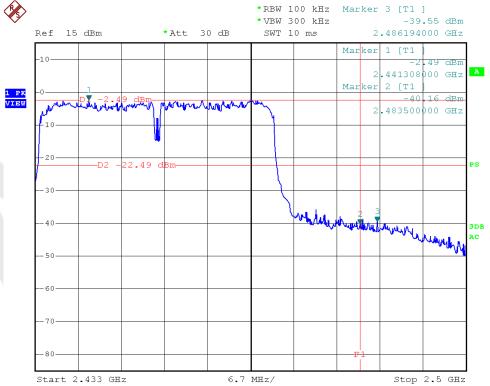
11.2 MHz/







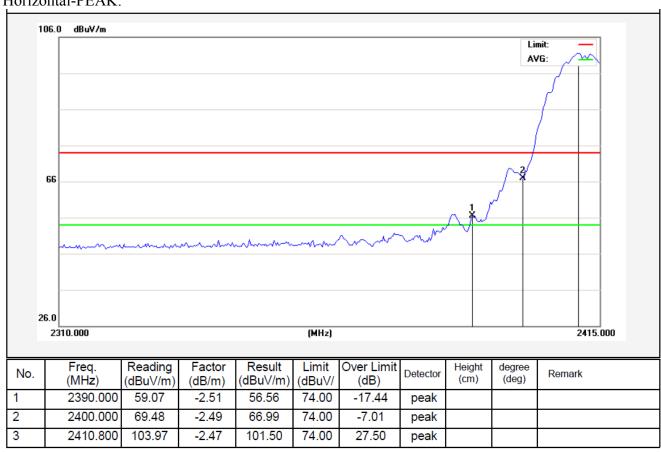




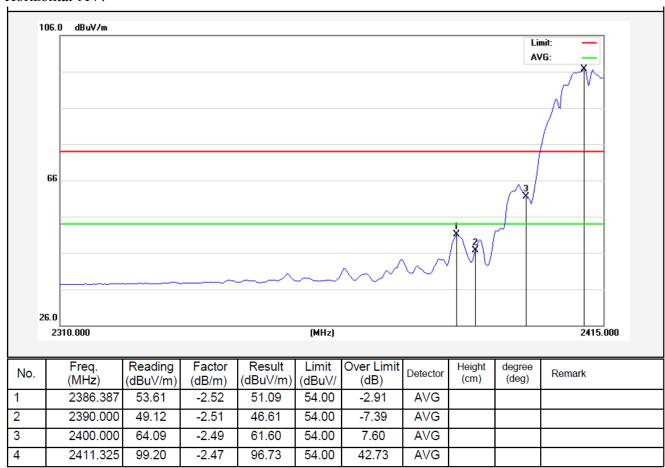


Test Mode: 802.11b

2412MHz

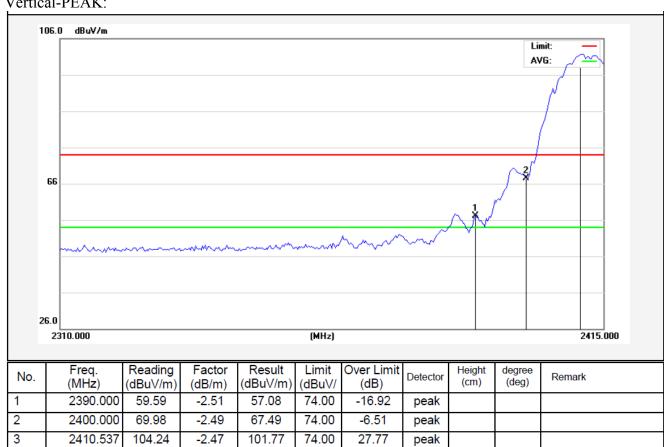




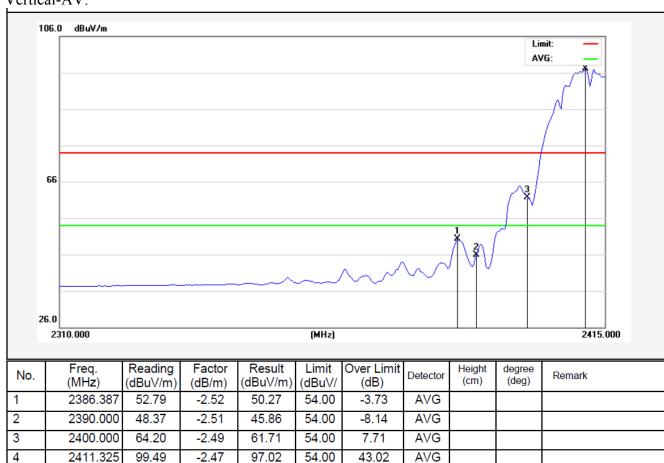




Test Mode: 802.11b



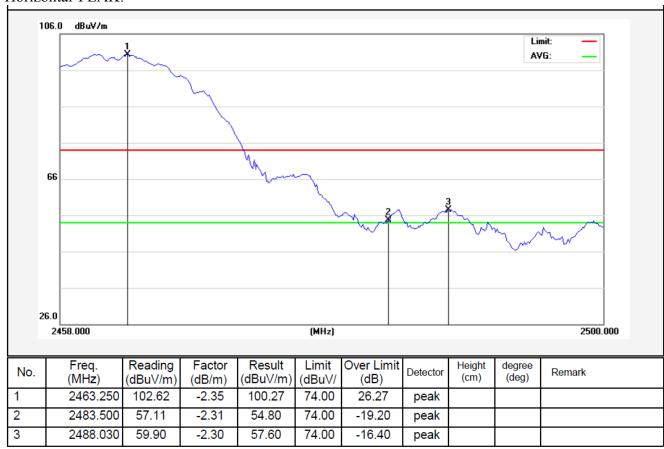






Test Mode: 802.11b

2462MHz

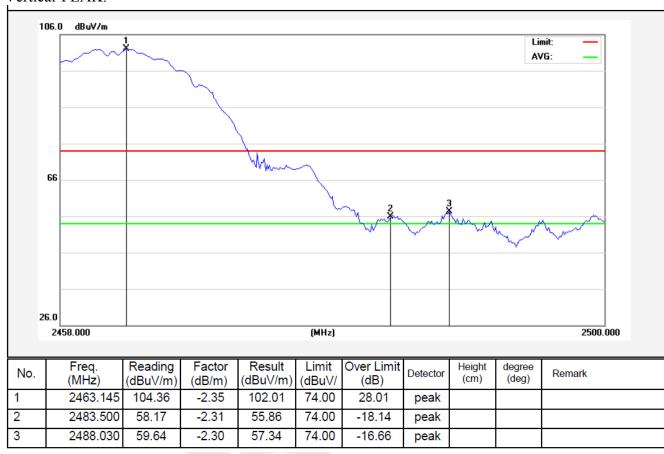




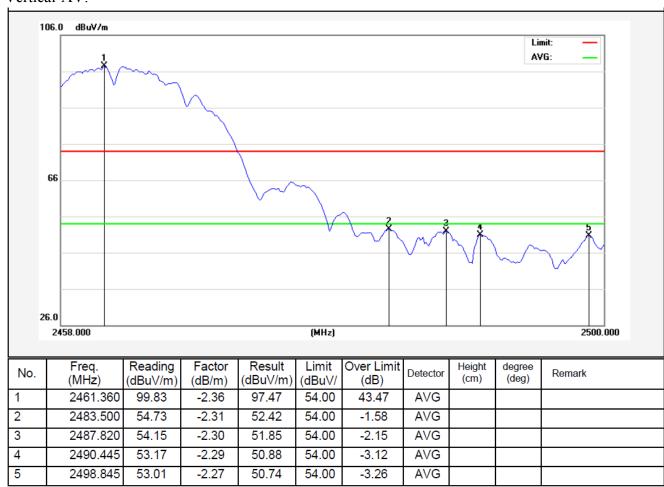




Test Mode: 802.11b







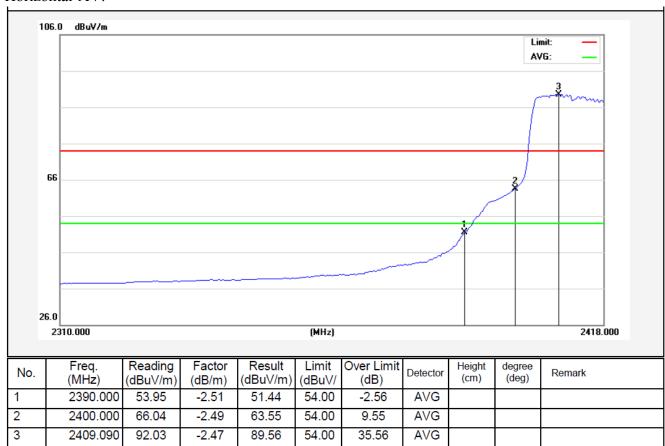


Test Mode: 802.11g

2412MHz

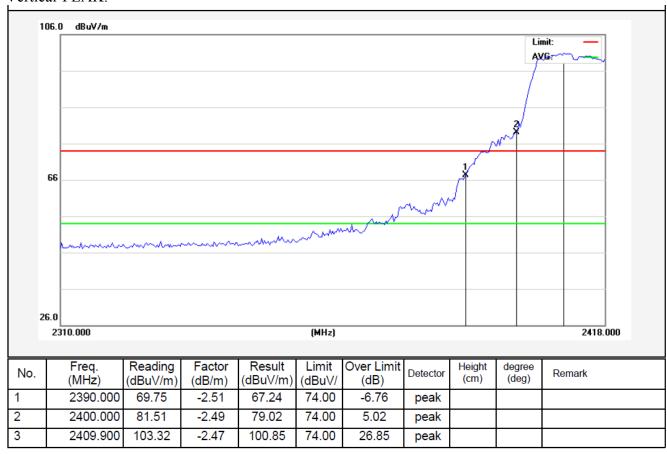




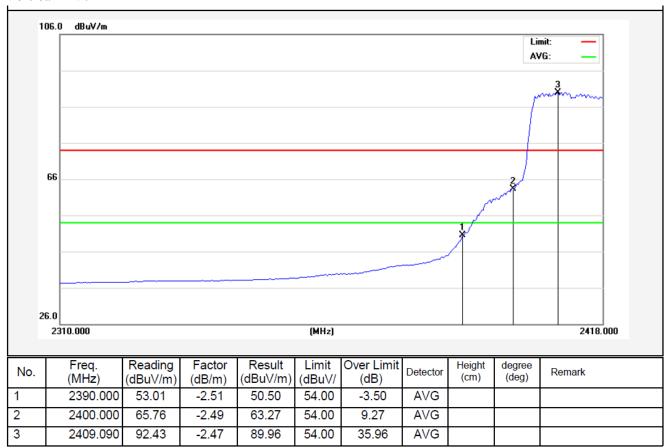




Test Mode: 802.11g



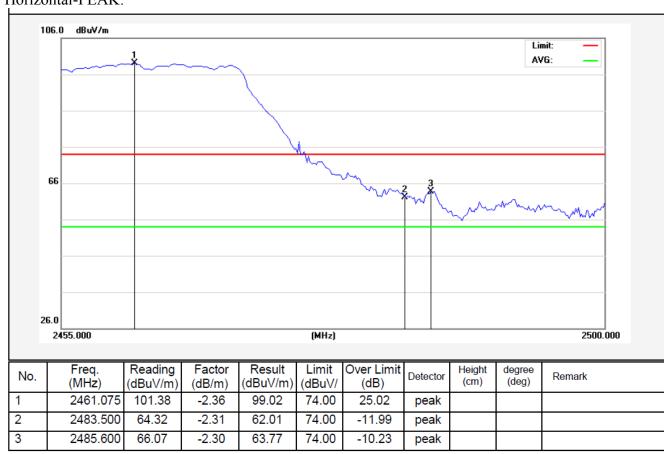




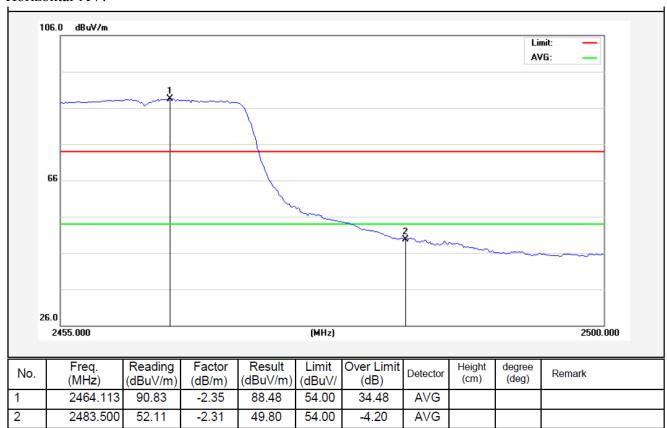


Test Mode: 802.11g

2462MHz

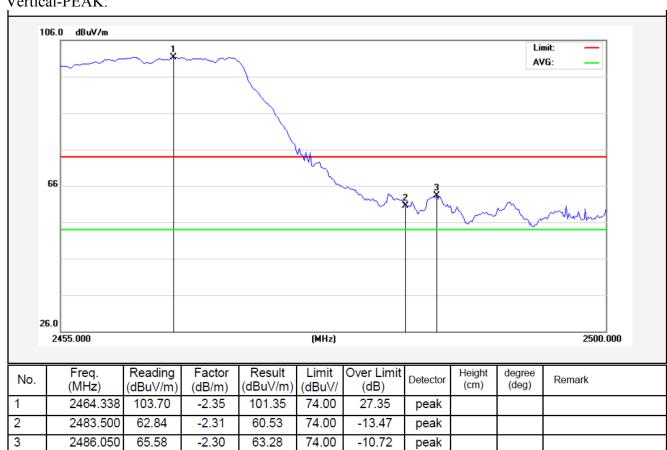




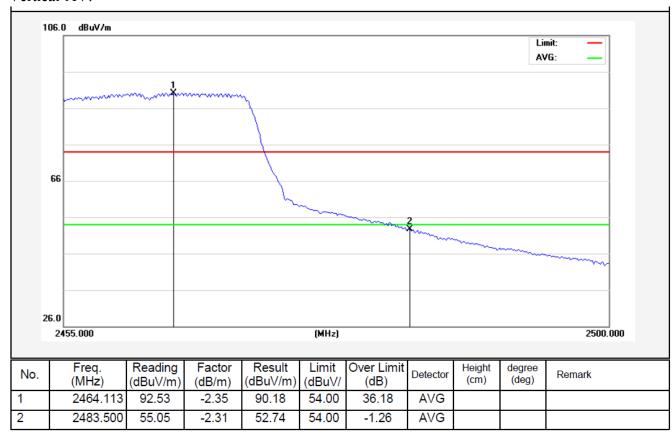




Test Mode: 802.11g



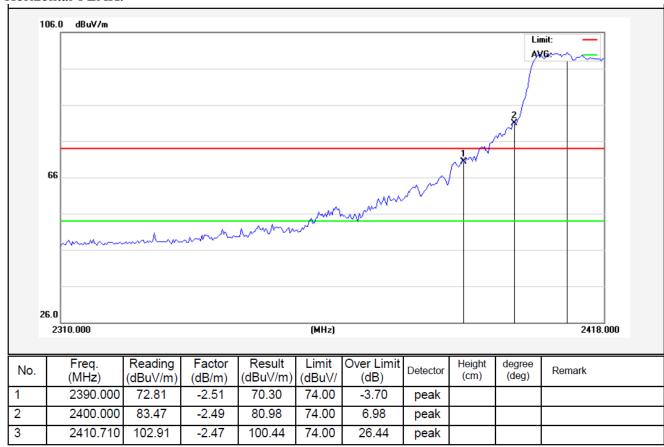




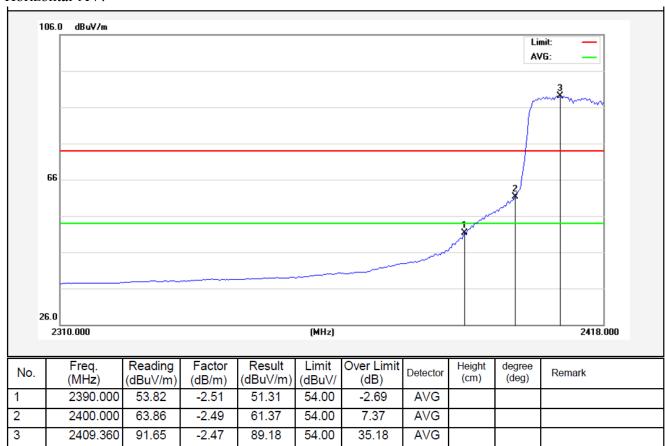


Test Mode: 802.11n (HT20)

2412MHz

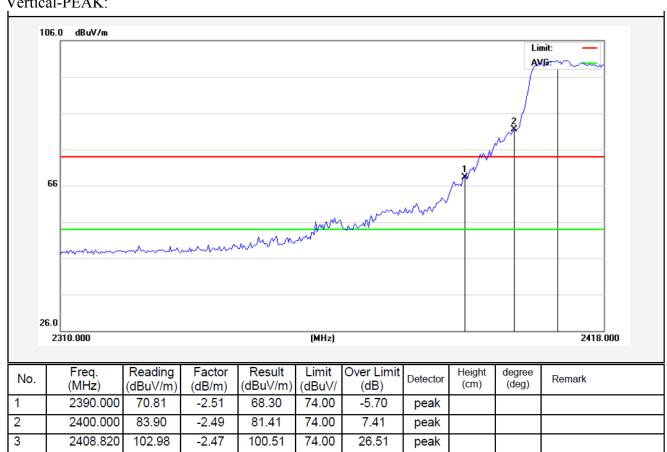




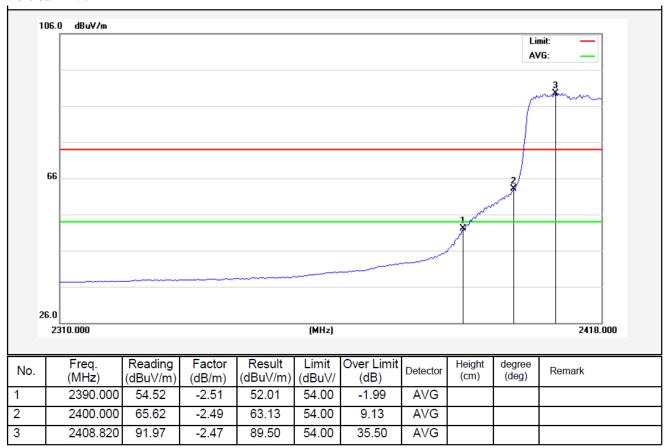




Test Mode: 802.11n (HT20)



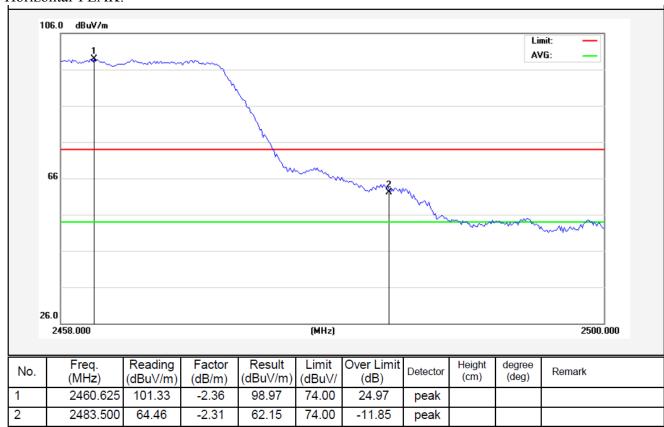




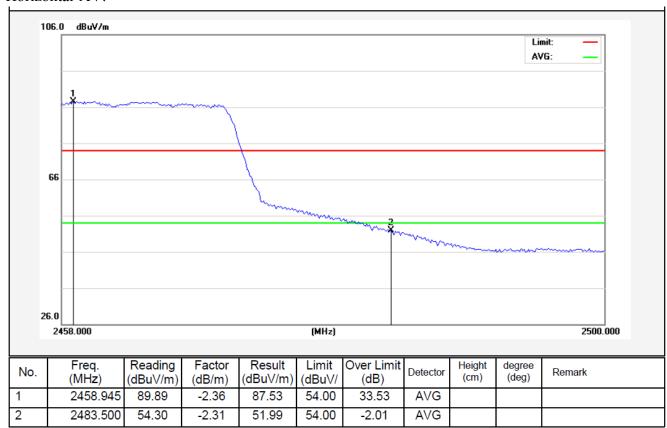


Test Mode: 802.11n (HT20)

2462MHz

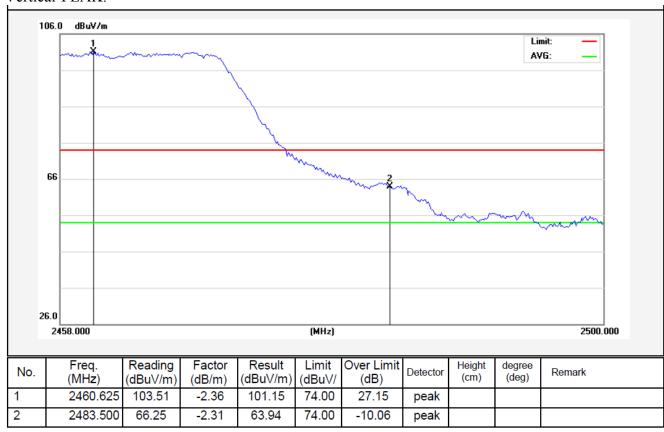




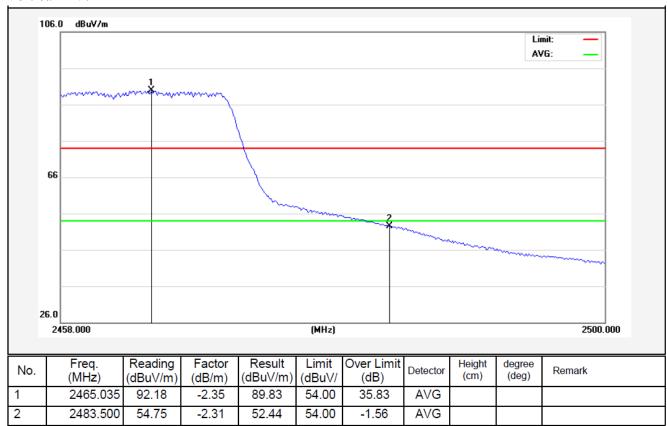




Test Mode: 802.11n (HT20)



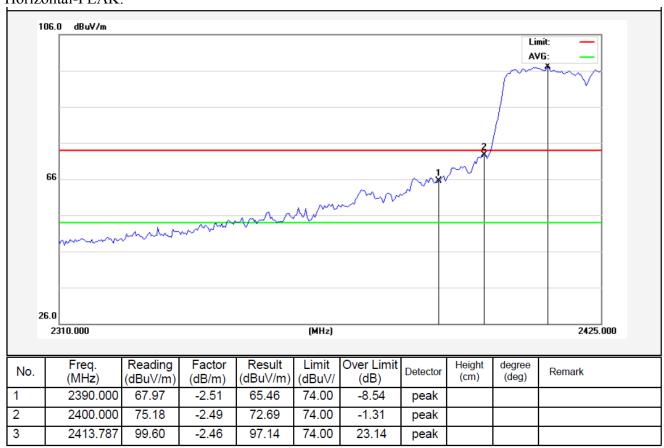




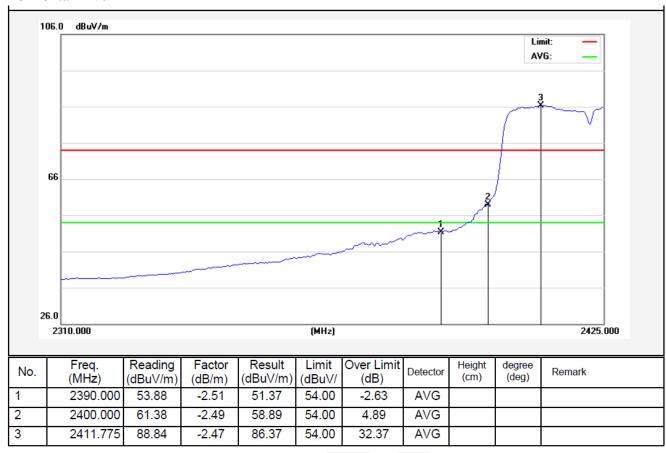


Test Mode: 802.11n (HT40)

2422MHz

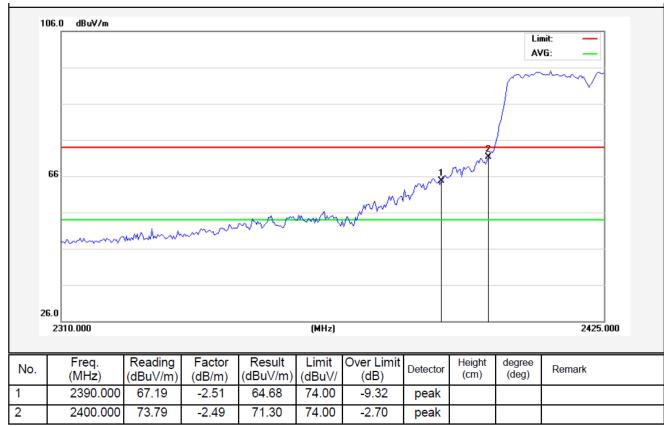




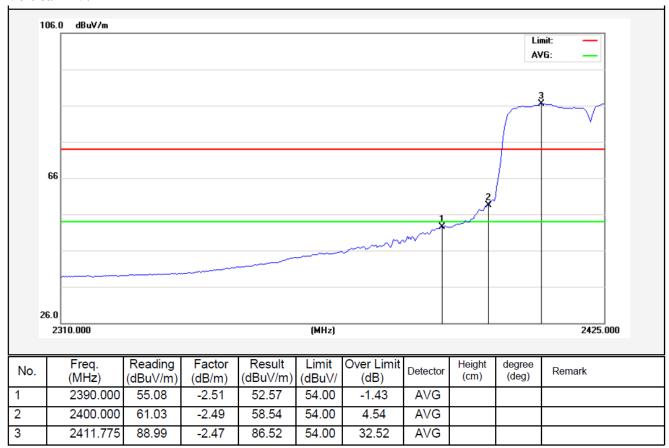




Test Mode: 802.11n (HT40)



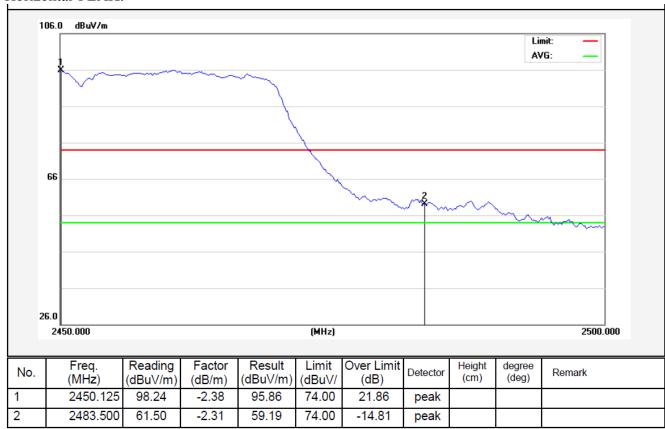




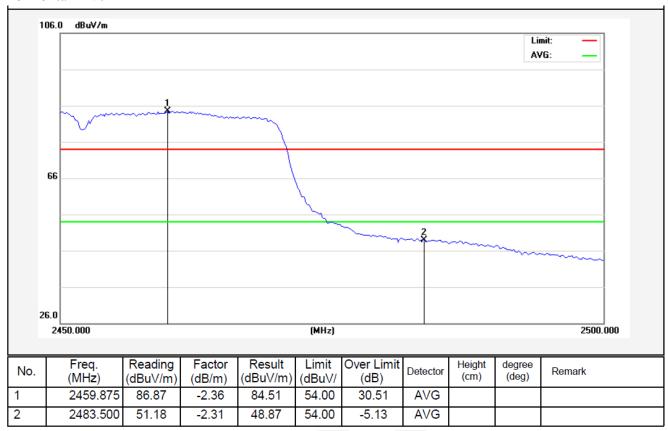


Test Mode: 802.11n (HT40)

2452MHz

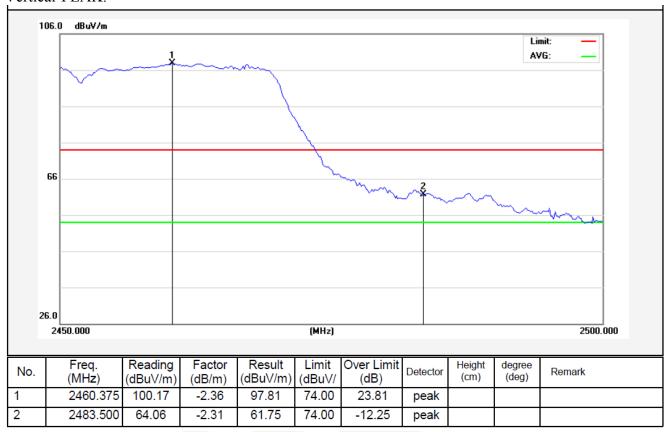




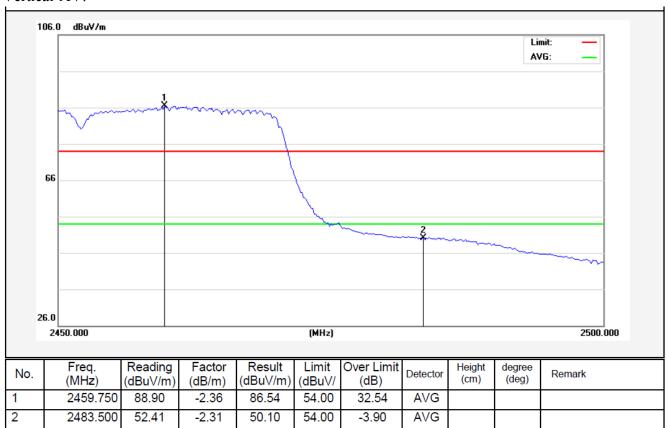




Test Mode: 802.11n (HT40)









3.5. Peak Power Spectral Density

a. Limit

- 1. For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.
- 2. The direct sequence operating of the hybrid system, with the frequency hopping operation turned off, shall comply with the power density requirements of paragraph (d) of this section.

b. Test Procedure

- 1. Place the EUT on the table and set it in transmitting mode. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 2. Set the spectrum analyzer as RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS BW, Sweep=500s
- 3. Record the max. reading.
- 4. Repeat the above procedure until the measurements for all frequencies are completed.

c. Test Equipment

Same as the equipment listed in 3.2.

d. Test Setup

See 3.1

e. Test Results

Pass

f. Test Data

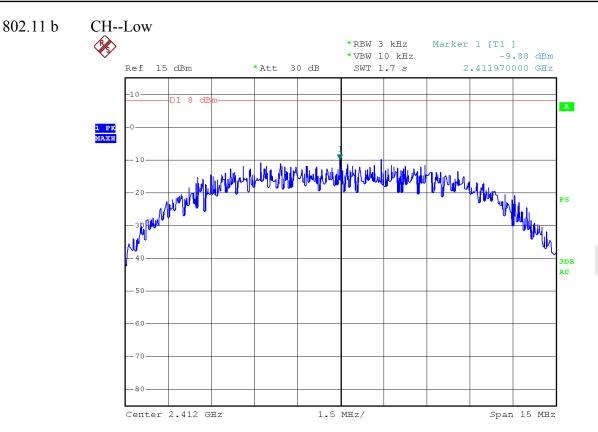
Please refer to the following data.

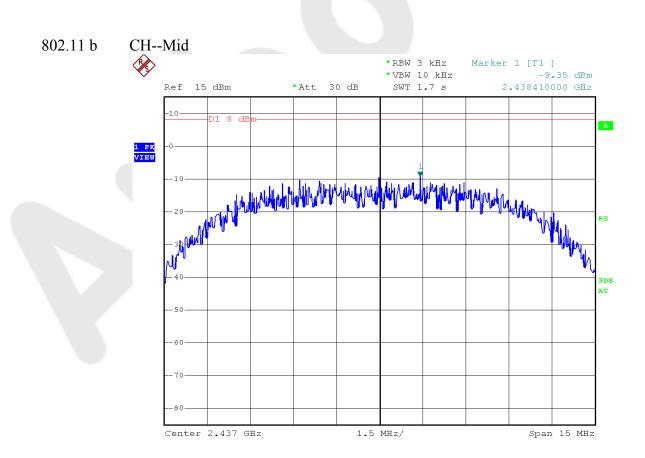
g. Test Plot See the following pages



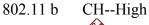
Test mode: IEE	E 802.11b				
Channel	Frequency (MHz)	PPSD (dBm/3KHz)	Σ PPSD (dBm/3KHz)	Limit (dBm)	Result
Low	2412	-9.88	-		Pass
Mid	2437	-9.35	-	8.00	Pass
High	2462	-8.94	-		Pass
Test mode: IEEE 802.11g					
Channel	Frequency	PPSD	Σ PPSD	Limit	Result
Chamici	(MHz)	(dBm)	(dBm)	(dBm)	Result
Low	2412	-13.64	-		Pass
Mid	2437	-12.90	-	8.00	Pass
High	2462	-12.40	-		Pass
Test mode: IEEE 802.11n (HT20)					
Channel	Frequency	PPSD	Σ PPSD	Limit	Result
	(MHz)	(dBm/3KHz)	(dBm/3KHz)	(dBm)	
Low	2412	-12.65	-		Pass
Mid	2437	-12.59	-	8.00	Pass
High	2462	-11.67	-		Pass
T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E 002 11 (VIII	40)			
Test mode: IEE	E 802.11n (HT4		Faran		
Channel	Frequency	PPSD	Σ PPSD	Limit	Result
_	(MHz)	(dBm/3KHz)	(dBm/3KHz)	(dBm)	_
Low	2422	-12.43	-	0.00	Pass
Mid	2437	-12.27	-	8.00	Pass
High	2452	-11.91	-		Pass

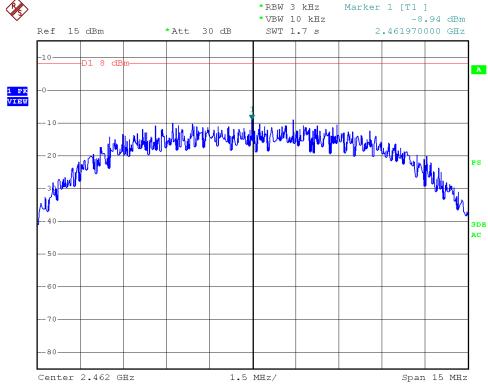


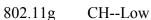


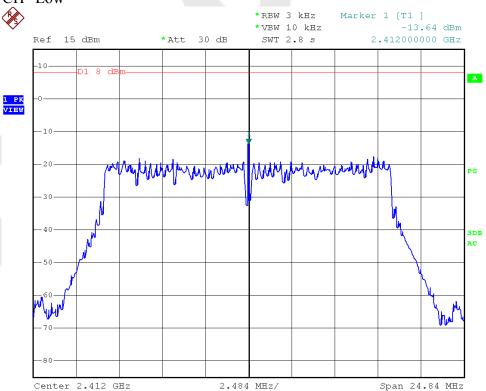






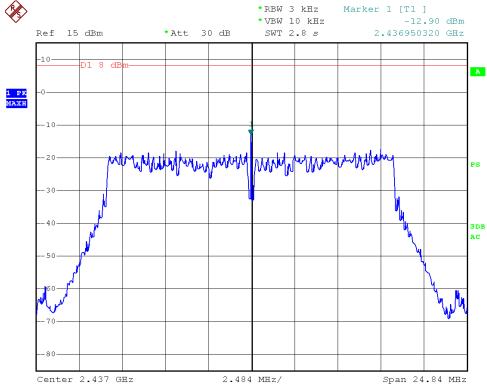




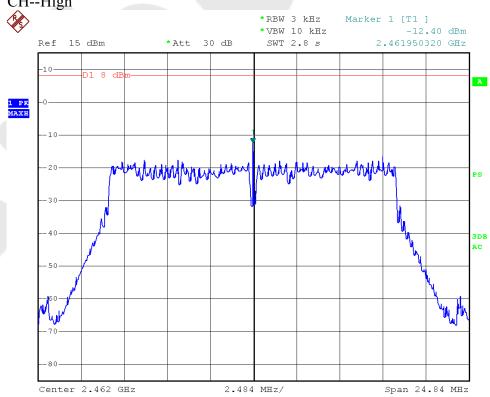




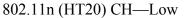


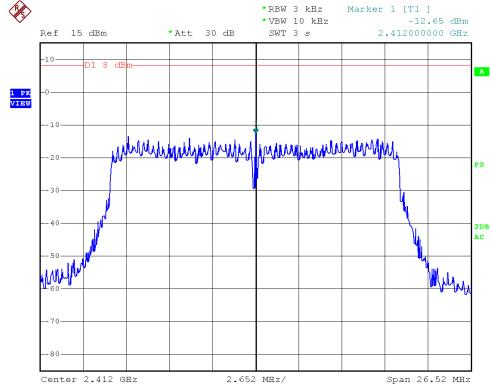


802.11g CH--High

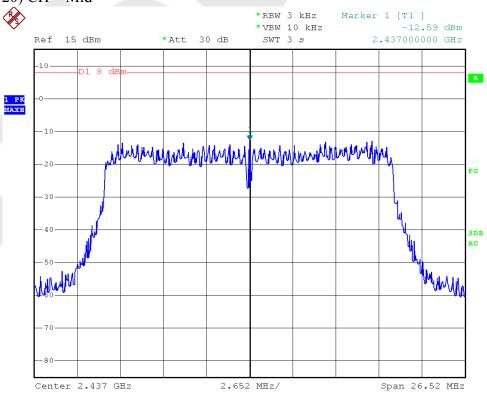




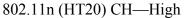


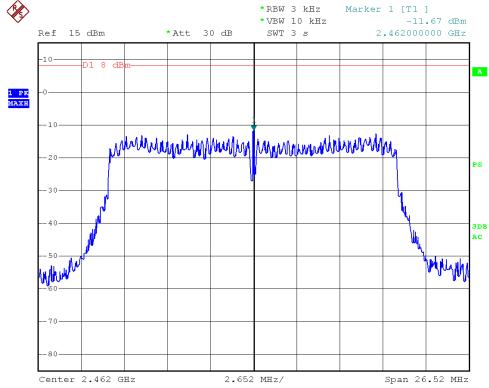


802.11n (HT20) CH-Mid

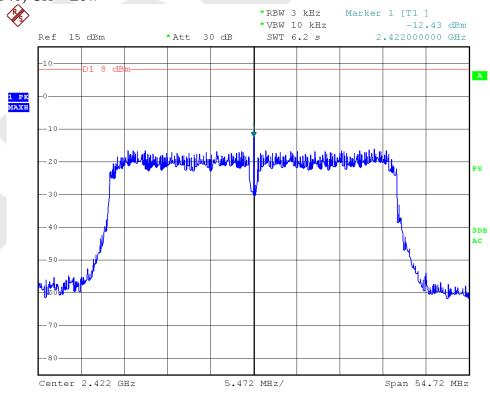






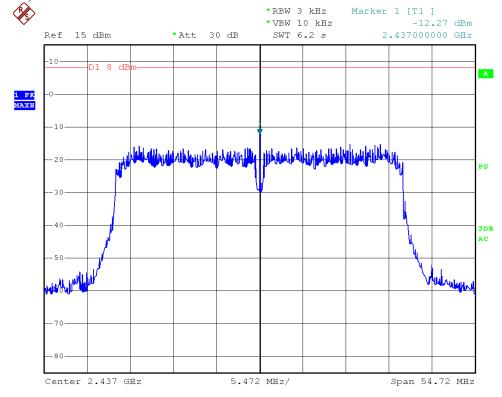


802.11n (HT40) CH—Low

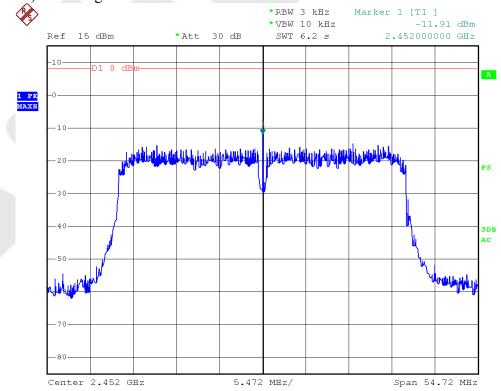








802.11n (HT40) CH—High





3.6. Radiated Emissions

3.6.1.1. Test Limits (< 30 MHZ)

Frequency	Field Strength	Measurement Distance	
(MHz)	(microvolts/meter)	(meter)	_
0.009-0.490	2400/F(kHz)	300	
0.490-1.705	24000/F(kHz)	30	
1.705-30.0	30	30	

3.6.1.2. Test Limits (\geq 30 MHZ)

FIELD STRENGTH	FIELD STRENGTH	S15.209	
of Fundamental:	of Harmonics	30 - 88 MHz	40 dBuV/m
@3M			
902-928 MHZ		88 - 216 MHz	43.5
2.4-2.4835 GHz		216 - 960 MHz	46
$94 dB\mu V/m @3m$	54 dBμV/m @3m	ABOVE 960 MHz	54dBuV/m

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

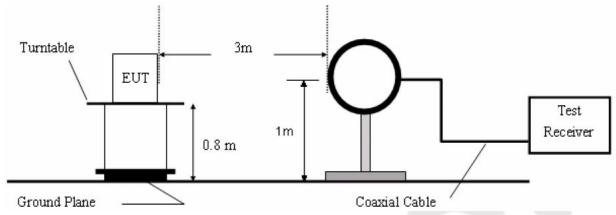
Test Equipment

	T est Equipment					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Preamplifier	Instruments corporation	EMC01183 0	980100	Aug. 09, 2014	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 23, 2014	1 Year
3.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Aug. 09, 2013	3 Year
4.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Apr. 23, 2013	3 Year
5.	Pre-amplifier	SONOMA	310N	186860	Apr. 23, 2014	1 Year
6.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A

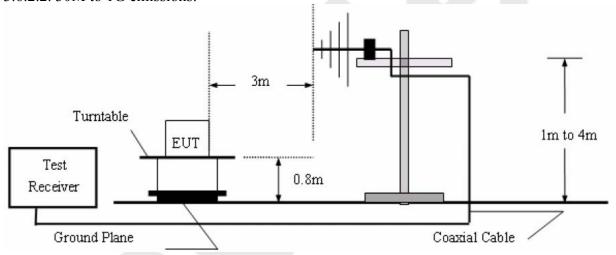


3.6.2. Test Configuration:

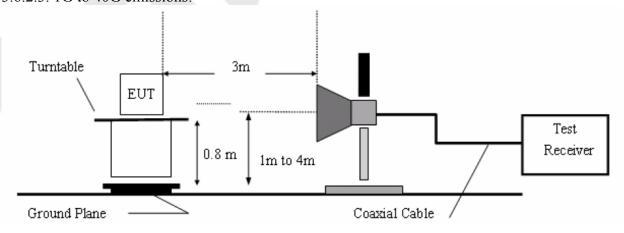
3.6.2.1. 9k to 30MHz emissions:



3.6.2.2. 30M to 1G emissions:



3.6.2.3. 1G to 40G emissions:





3.6.3. Test Procedure

The EUT is placed on a turn table which is 0.8 meter high above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can be moved up and down from 1 to 4 meters to find out the maximum emission level. Both horizontal and vertical polarization of the antenna are set on test.

Measurements are made on 9KHz to 30MHz and 30MHz to 26GHz range with the transmitter set to the lowest, middle, and highest channels.

All readings from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. All reading are above 1GHz, peak & average values with a resolution bandwidth of 1MHz.

The EUT is tested in 9*6*6 Chamber.

The test results are listed in Section 3.6.4.

3.6.4. Test Results

Please refer to the following pages.

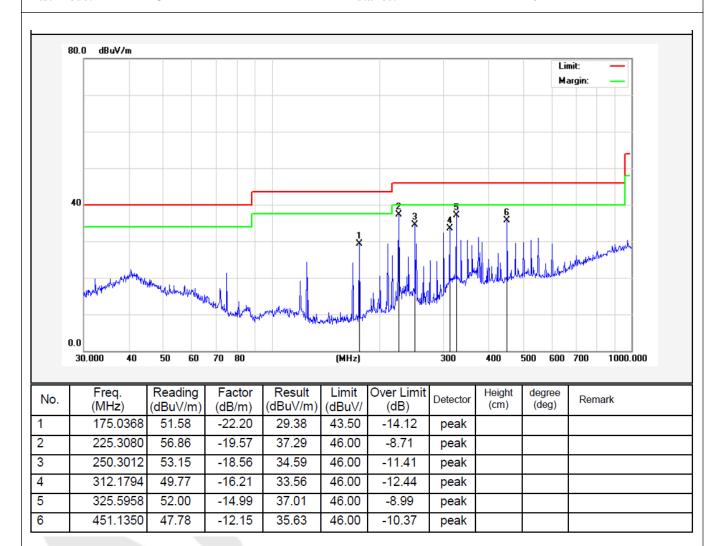


Job No.: 011408212E **Polarization: Horizontal**

DC 3.7V Standard: (RE)FCC PART15 C _3m **Power Source:**

Test item: **Radiation Test** Temp.(C)/Hum.(%RH): 24.3(C)/55%RH

Test Mode: On **Distance:** 3m

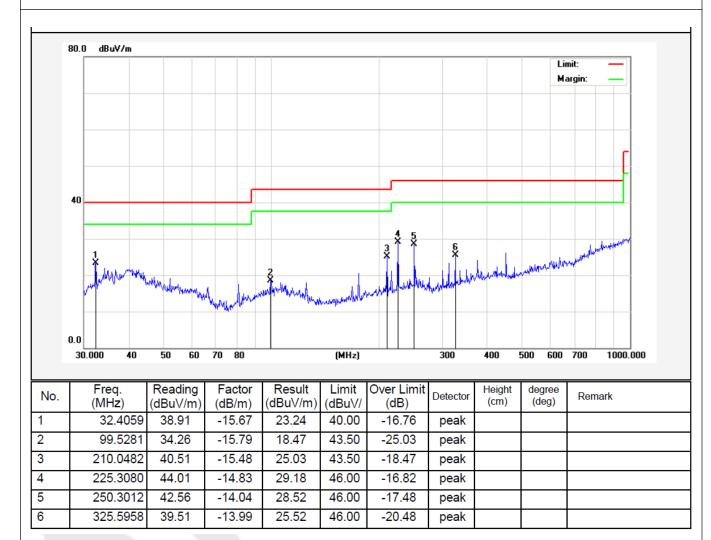




Standard: (RE)FCC PART15 C _3m Power Source: DC 3.7V

Test item: Radiation Test Temp.(C)/Hum.(%RH): 24.3(C)/55%RH

Test Mode: On Distance: 3m



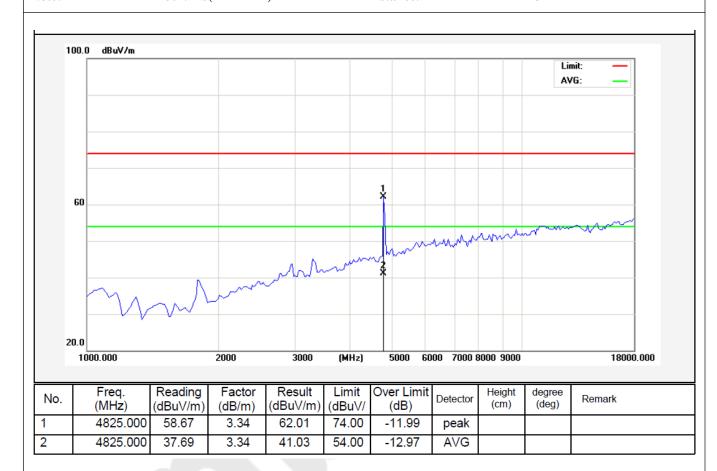


Job No.: 011408212E Polarization: Horizontal

Standard: (RE)FCC PART15 C _3m Power Source: DC 3.7V

Test item: Radiation Test Temp.(C)/Hum.(%RH): 24.3(C)/55%RH

Note: 802.11b(2412MHz) Distance: 3m

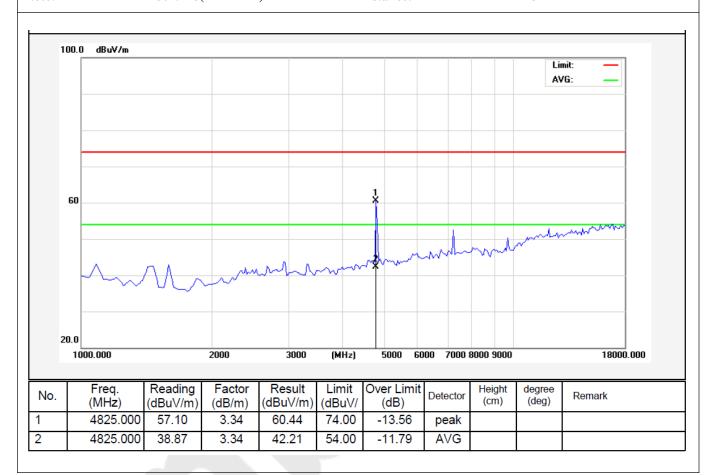




Standard: (RE)FCC PART15 C _3m Power Source: DC 3.7V

Test item: Radiation Test Temp.(C)/Hum.(%RH): 24.3(C)/55%RH

Note: 802.11b(2412MHz) Distance: 3m



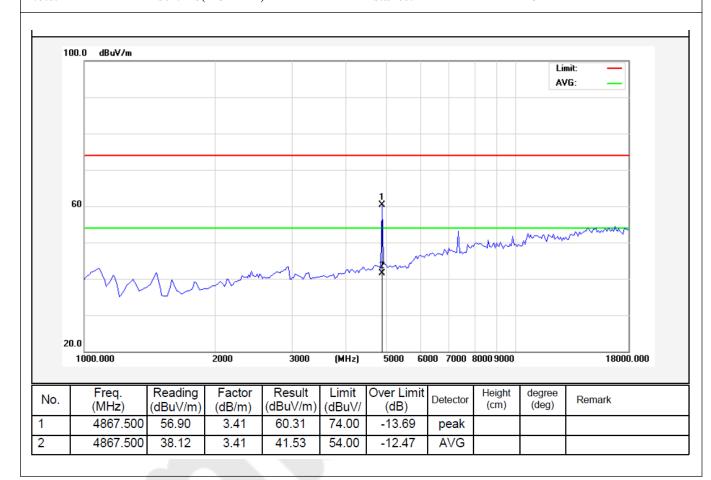


Job No.: 011408212E Polarization: Horizontal

Standard: (RE)FCC PART15 C _3m Power Source: DC 3.7V

Test item: Radiation Test Temp.(C)/Hum.(%RH): 24.3(C)/55%RH

Note: 802.11b(2437MHz) Distance: 3m

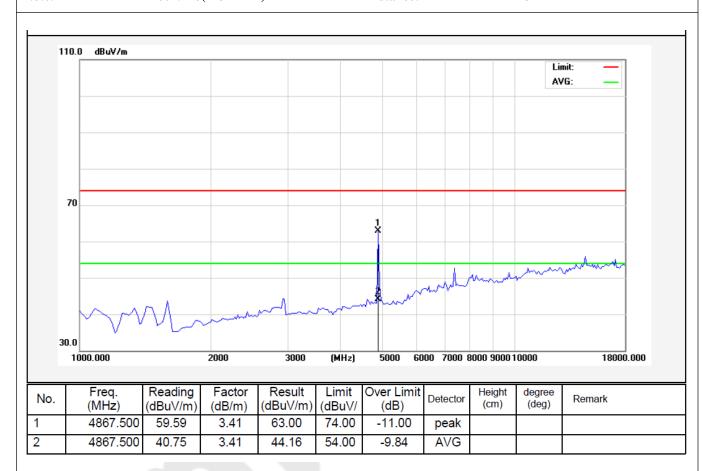




Standard: (RE)FCC PART15 C _3m Power Source: DC 3.7V

Test item: Radiation Test Temp.(C)/Hum.(%RH): 24.3(C)/55%RH

Note: 802.11b(2437MHz) Distance: 3m



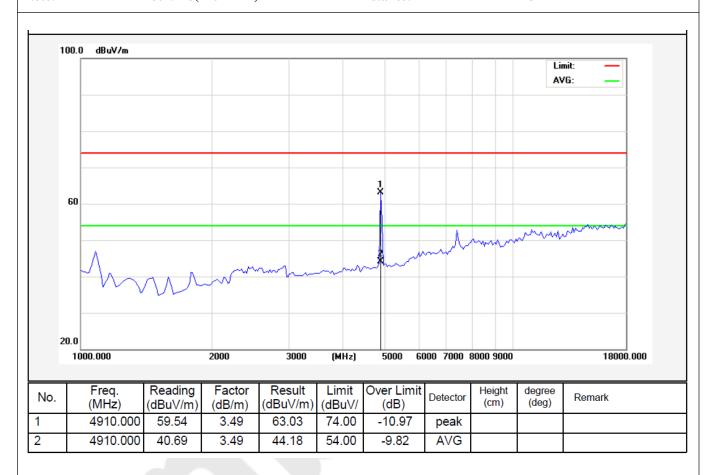


Job No.: 011408212E Polarization: Horizontal

Standard: (RE)FCC PART15 C _3m Power Source: DC 3.7V

Test item: Radiation Test Temp.(C)/Hum.(%RH): 24.3(C)/55%RH

Note: 802.11b(2462MHz) Distance: 3m

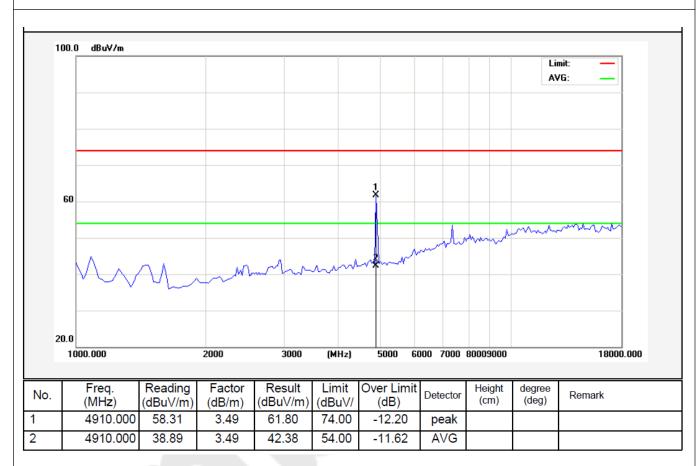




Standard: (RE)FCC PART15 C _3m Power Source: DC 3.7V

Test item: Radiation Test Temp.(C)/Hum.(%RH): 24.3(C)/55%RH

Note: 802.11b(2462MHz) Distance: 3m





4. PHOTOGRAPH

4.1. Photo of Radiation Emission Test





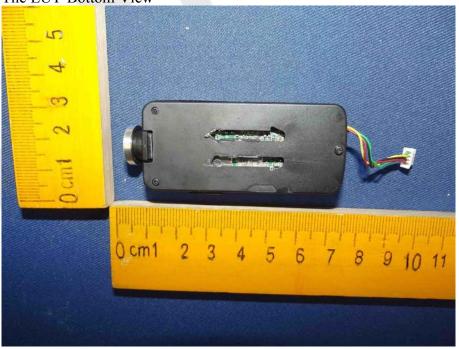


APPENDIX I (EXTERNAL PHOTOS)

Figure 1
The EUT-Top View



Figure 2
The EUT-Bottom View







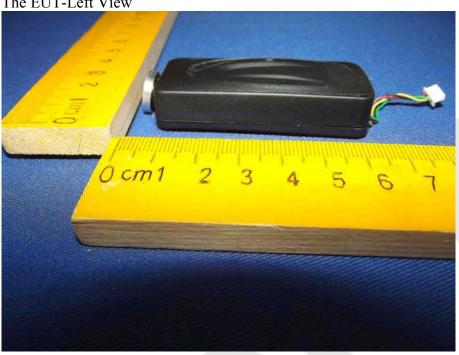


Figure 4
The EUT-Right View

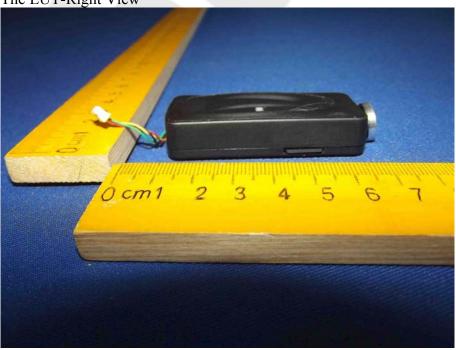








Figure 6
The EUT-Back View



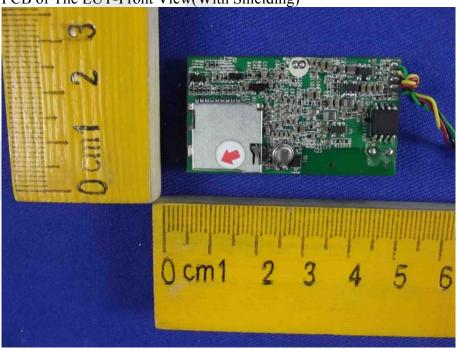


APPENDIX II (INTERNAL PHOTOS)

Figure 7
The EUT-Inside View



Figure 8 PCB of The EUT-Front View(With Shielding)







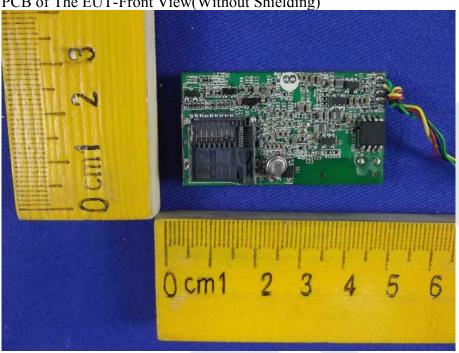


Figure 10 PCB of The EUT-Back View

