Variant FCC RF Test Report

APPLICANT	:	**Motorola Solutions, Inc.**
EQUIPMENT	:	**Access Point, Radio Module 6**
BRAND NAME	:	**Motorola**
MODEL NAME	:	**AP-6**
FCC ID	:	**UZ7AP6**
STANDARD	:	**FCC Part 15 Subpart E**
CLASSIFICATION	:	**(NII) Unlicensed National Information Infrastructure**

This is a variant report which is only valid together with the original test report. The product was received on Sep. 06, 2012 and completely tested on Oct. 19, 2012. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Jones Tsai

Jones Tsai / Manager

Testing Laboratory 1190

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR290603B	Rev. 01	This is a variant report by adding antenna6, 7, and 8. All the test cases were performed on original report which can be referred to Sporton Report NO. FR092308B and NO. FR092308-08.	Oct. 30, 2012

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.407(a)	A9.2	Maximum Conducted Output Power	≤ 17, 24, 30 dBm (depend on band)	Pass	-
3.2	15.407(a)	A9.2	Power Spectral Density	≤ 4, 11, 17 dBm (depend on band)	Pass	-
3.3	15.407(b)	A9.3	Unwanted Emissions	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	Under limit 0.51 dB at 5368.150 MHz
3.4	15.407(c)	A9.5	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.5	15.203 & 15.407(a)	A9.2	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

Motorola Solutions, Inc.
One Motorola Plaza, Holtsville, NY 11742-1300 USA

1.2 Manufacturer

Motorola Solutions, Inc.
One Motorola Plaza, Holtsville, NY 11742-1300 USA

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Access Point, Radio Module 6
Brand Name	Motorola
Model Name	AP-6
FCC ID	UZ7AP6
EUT supports Radios application	WLAN 11abgn
HW Version	DVT
SW Version	For RF: ART Rev 0.9 Build #16
EUT Stage	Production Unit

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Product Specification subjective to this standard	
Tx/Rx Frequency Range	5150 MHz ~ 5250 MHz 5250 MHz ~ 5350 MHz 5470 MHz ~ 5725 MHz
Maximum Output Power	**<4.5V>** **<MIMO Chain 1+2>** **<5150 MHz ~ 5250 MHz>** 802.11a : 15.48 dBm / 0.0353 W 802.11n HT20 : 16.45 dBm / 0.0442 W 802.11n HT40 : 16.93 dBm / 0.0493 W **<5250 MHz ~ 5350 MHz>** 802.11a : 22.65 dBm / 0.1841 W 802.11n HT20 : 23.45 dBm / 0.2213 W 802.11n HT40 : 23.45 dBm / 0.2213 W **<5470 MHz ~ 5725 MHz >** 802.11a : 22.83 dBm / 0.1919 W 802.11n HT20 : 22.83 dBm / 0.1919 W 802.11n HT40 : 22.93 dBm / 0.1963 W
	<3.3V> **<MIMO Chain 1+2>** **<5150 MHz ~ 5250 MHz>** 802.11a : 15.20 dBm / 0.0331 W 802.11n HT20 : 16.27 dBm / 0.0424 W 802.11n HT40 : 16.64 dBm / 0.0461 W **<5250 MHz ~ 5350 MHz>** 802.11a : 22.30 dBm / 0.1698 W 802.11n HT20 : 23.01 dBm / 0.2000 W 802.11n HT40 : 23.17 dBm / 0.2075 W **<5470 MHz ~ 5725 MHz >** 802.11a : 22.76 dBm / 0.1888 W 802.11n HT20 : 22.35 dBm / 0.1718 W 802.11n HT40 : 22.44 dBm / 0.1754 W
Type of Modulation	OFDM (BPSK / QPSK / 16QAM / 64QAM)
Data Rate	**802.11a MIMO mode:** 6/9/12/18/24/36/48/54 Mbps **802.11n HT20 MIMO mode:** MCS 8/9/10/11/12/13/14/15 **802.11n HT40 MIMO mode:** MCS 8/9/10/11/12/13/14/15

<Antenna Information>

Type	Model Number	2.4GHz				
		Peak Gain	Cable Loss (external)	Cable Loss (internal)	Net Peak Gain	Note
Dipole	ML-2452-APA2-01	3	0	1.3	1.7	Antenna 1
	ML-2452-HPA5-036	2.9	0.8	1.3	0.8	
	ML-5299-APA1-01R	N/A				
	ML-5299-HPA1-01R	N/A				
	ML-2499-HPA3-01R	4.6	1.3	1.3	2	
	ML-2499-APA2-01R	2	0	1.3	0.7	
	ML-2452-APA2GA1-01	2	0	1.3	0.7	
	ML-2452-APAG2A1-01	2.7	0	1.3	1.4	
	ML-2499-FHPA9-01R	10.5	0	1.3	9.2	Antenna 6
Panel	ML-2452-PNA5-01R	4.50	0.31	1.3	2.89	Antenna 2
Patch	ML-2452-PTA3M3-036	5	0	1.3	3.7	Antenna 3
	ML-5299-PTA1-0R	N/A				
	ML-2499-SD3-01R	4.8	1.3	1.3	2.2	
	ML-2452-PTA2M2-036	4	0	1.3	2.7	Antenna 7
	ML-2499-PNAHD-02R	7.5	0	1.3	6.2	Antenna 8
PIFA_MCN	MCN PIFA	2	0	0	2	Antenna 4
PIFA_NCAP	NCAP PIFA	3	0	0	3	Antenna 5

Type	Model Number	5GHz				
		Peak Gain	Cable Loss (external)	Cable Loss (internal)	Net Peak Gain	Note
Dipole	ML-2452-APA2-01	5	0	1.5	3.5	Antenna 1
	ML-2452-HPA5-036	4.9	1.1	1.5	2.3	
	ML-5299-APA1-01R	2	0	1.5	0.5	
	ML-5299-HPA1-01R	5	0.84	1.5	2.66	
	ML-2499-HPA3-01R	N/A				
	ML-2499-APA2-01R	N/A				
	ML-2452-APA2GA1-01	1	0	1.5	-0.5	
	ML-2452-APAG2A1-01	2	0	1.5	0.5	
	ML-2499-FHPA9-01R	N/A				Antenna 6
Panel	ML-2452-PNA5-01R	5.00	0.60	1.5	2.90	Antenna 2
Patch	ML-2452-PTA3M3-036	3	0	1.5	1.5	Antenna 3
	ML-5299-PTA1-0R	5	2	1.5	1.5	
	ML-2499-SD3-01R	N/A				
	ML-2452-PTA2M2-036	5	0	1.5	**3.5**	Antenna 7
	ML-2499-PNAHD-02R	N/A				Antenna 8
PIFA_MCN	MCN PIFA	4.5	0	0	4.5	Antenna 4
PIFA_NCAP	NCAP PIFA	6	0	0	6	Antenna 5

Note:

1. The Patch antenna 5GHz Net Peak gain worse case is ML-2452-PTA2M2-036 (Antenna 7).
2. The Dipole antenna adding ML-2452-APAG2A1-01 Antenna. The ML-2452-APAG2A1-01 Antenna Net Peak gain is less then ML-2452-APA2-01 Antenna. The test cases which can be referred to ML-2452-APA2-01 (Antenna 1).

1.4 Test site

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-3273456 / FAX: +886-3-3284978		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	TH02-HY	03CH07-HY	722060/4086B-1

1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart E
- FCC KDB 789033 D01 General UNII Test Procedures v01r02
- FCC KDB 662911 D01 Multiple Transmitter Output v01r02.
- ANSI C63.4-2003 and ANSI C63.10-2009
- IC RSS-210 Issued 8
- IC RSS-Gen Issue 3

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GW	GPC-60300	N/A	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Vostro 1510	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2 Test Configuration of Equipment Under Test

The EUT supports a 2 X 2 MIMO configuration which supports completely uncorrelated MIMO (Chain 1+2) modes, and is enabled by voltage 3.3V / 4.5V.

Pre-scanned tests were performed to determine the final configuration from all possible combinations, and the worst-case data rates are determined to the investigations by measuring the maximum power and PPSD across all the data rates, bandwidths, modulations and spatial stream modes.

Thus all tests were made with following data rates:
802.11a MIMO mode, 20 MHz Channel Bandwidth, 6 Mb/s, OFDM Modulation
802.11n HT20 MIMO mode, 20 MHz Channel Bandwidth, MCS8, OFDM Modulation
802.11n HT40 MIMO mode, 40 MHz Channel Bandwidth, MCS8, OFDM Modulation

Based on the worst configuration (modulation, data rate) found above, and based on different voltage level and different supported antenna type and gain, the module RF power setting is set individually to meet FCC compliance limit.

The details of test channels and bandwidth for RF conductive measurement and Radiated Spurious Emissions are listed next tables.

Ant.	Antenna type	Voltage	26dB EBW	Power	Spectral Density	Peak Excursion	Frequency Stability	99% Bandwidth	Radiated Spurious Emissions
7	**Patch**	4.5 V		✓	✓				✓
7	**Patch**	3.3 V		✓					✓

Note:

1 The output power of Antenna 7 (3.3V) was less than 4.5V, thus the Spectral Density can be excluded.

2 26dB EBW, Peak Excursion, Frequency Stability and 99% Bandwidth test result which can be referred to Sporton Report NO. FR092308B and NO. FR092308-08.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1	36	5180	44	5220
	38	**5190**	**46**	**5230**
	40	5200	48	5240

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2	52	5260	60	5300
	54	**5270**	**62**	**5310**
	56	5280	64	5320

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3	100	5500	116	5580
	102	**5510**	132	5660
	104	5520	**134**	**5670**
	108	5540	136	5680
	110	**5550**	140	5700
	112	5560		

Note: The above Frequency and Channel in boldface were 802.11n HT40.

2.2 Test Mode

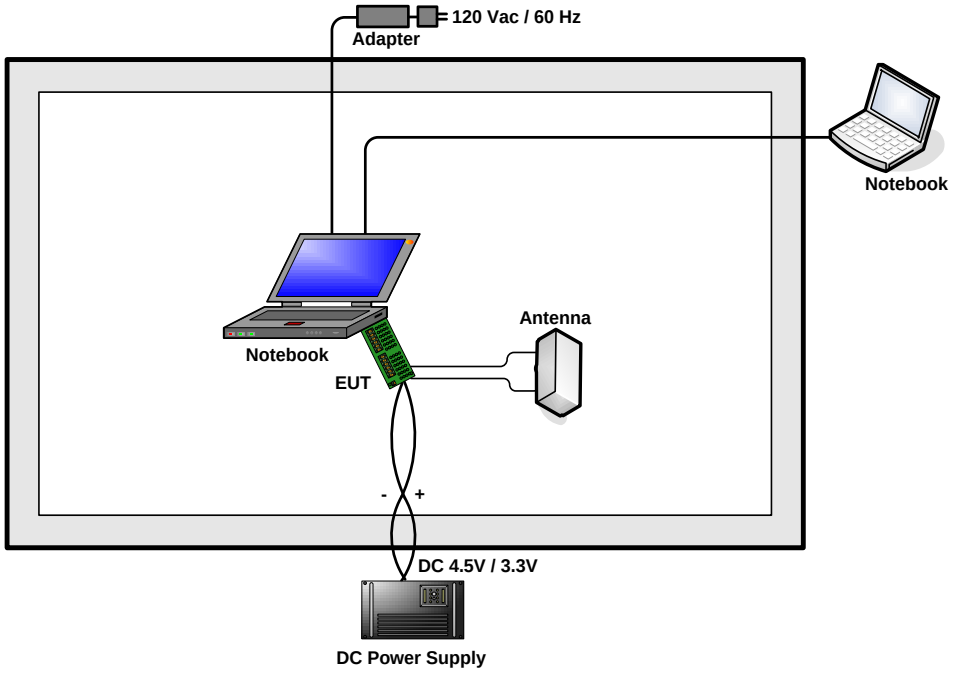
Antenna Information		
Antenna 7	Model Name	ML-2452-PTA2M2-036
	Antenna Type	Patch Antenna
	Antenna Gain	3.5 dBi

Test Cases	
Test Item	802.11a/n (Modulation : OFDM)
Conducted TCs	Mode 1: 802.11a_CH36_5180 MHz (Chain 1+2)
	Mode 2: 802.11a_CH44_5220 MHz (Chain 1+2)
	Mode 3: 802.11a_CH48_5240 MHz (Chain 1+2)
	Mode 4: 802.11a_CH52_5260 MHz (Chain 1+2)
	Mode 5: 802.11a_CH60_5300 MHz (Chain 1+2)
	Mode 6: 802.11a_CH64_5320 MHz (Chain 1+2)
	Mode 7: 802.11a_CH100_5500 MHz(Chain 1+2)
	Mode 8: 802.11a_CH116_5580 MHz (Chain 1+2)
	Mode 9: 802.11a_CH140_5700 MHz (Chain 1+2)
	Mode 10: 802.11n_CH36_5180 MHz (BW 20M, Chain 1+2)
	Mode 11: 802.11n_CH44_5220 MHz (BW 20M, Chain 1+2)
	Mode 12: 802.11n_CH48_5240 MHz (BW 20M, Chain 1+2)
	Mode 13: 802.11n_CH52_5260 MHz (BW 20M, Chain 1+2)
	Mode 14: 802.11n_CH60_5300 MHz (BW 20M, Chain 1+2)
	Mode 15: 802.11n_CH64_5320 MHz (BW 20M, Chain 1+2)
	Mode 16: 802.11n_CH100_5500 MHz (BW 20M, Chain 1+2)
	Mode 17: 802.11n_CH116_5580 MHz (BW 20M, Chain 1+2)
	Mode 18: 802.11n_CH140_5700 MHz (BW 20M, Chain 1+2)
	Mode 19: 802.11n_CH38_5190 MHz (BW 40M, Chain 1+2)
	Mode 20: 802.11n_CH46_5230 MHz (BW 40M, Chain 1+2)
	Mode 21: 802.11n_CH54_5270 MHz (BW 40M, Chain 1+2)
	Mode 22: 802.11n_CH62_5310 MHz (BW 40M, Chain 1+2)
	Mode 23: 802.11n_CH102_5510 MHz (BW 40M, Chain 1+2)
	Mode 24: 802.11n_CH110_5550 MHz (BW 40M, Chain 1+2)
	Mode 25: 802.11n_CH134_5670 MHz (BW 40M, Chain 1+2)

Test Cases	
Test Item	**802.11a/n (Modulation : OFDM)**
Radiated TCs	Mode 1: 802.11a_CH36_5180 MHz (Chain 1+2) Mode 2: 802.11a_CH44_5220 MHz (Chain 1+2) Mode 3: 802.11a_CH48_5240 MHz (Chain 1+2) Mode 4: 802.11a_CH52_5260 MHz (Chain 1+2) Mode 5: 802.11a_CH60_5300 MHz (Chain 1+2) Mode 6: 802.11a_CH64_5320 MHz (Chain 1+2) Mode 7: 802.11a_CH100_5500 MHz(Chain 1+2) Mode 8: 802.11a_CH116_5580 MHz (Chain 1+2) Mode 9: 802.11a_CH140_5700 MHz (Chain 1+2) Mode 10: 802.11n_CH36_5180 MHz (BW 20M, Chain 1+2) Mode 11: 802.11n_CH44_5220 MHz (BW 20M, Chain 1+2) Mode 12: 802.11n_CH48_5240 MHz (BW 20M, Chain 1+2) Mode 13: 802.11n_CH52_5260 MHz (BW 20M, Chain 1+2) Mode 14: 802.11n_CH60_5300 MHz (BW 20M, Chain 1+2) Mode 15: 802.11n_CH64_5320 MHz (BW 20M, Chain 1+2) Mode 16: 802.11n_CH100_5500 MHz (BW 20M, Chain 1+2) Mode 17: 802.11n_CH116_5580 MHz (BW 20M, Chain 1+2) Mode 18: 802.11n_CH140_5700 MHz (BW 20M, Chain 1+2) Mode 19: 802.11n_CH38_5190 MHz (BW 40M, Chain 1+2) Mode 20: 802.11n_CH46_5230 MHz (BW 40M, Chain 1+2) Mode 21: 802.11n_CH54_5270 MHz (BW 40M, Chain 1+2) Mode 22: 802.11n_CH62_5310 MHz (BW 40M, Chain 1+2) Mode 23: 802.11n_CH102_5510 MHz (BW 40M, Chain 1+2) Mode 24: 802.11n_CH110_5550 MHz (BW 40M, Chain 1+2) Mode 25: 802.11n_CH134_5670 MHz (BW 40M, Chain 1+2) Mode 26: 802.11n_CH38_5190 MHz (BW 40M, Chain 1+2) Mode 27: 802.11a_CH60_5300 MHz (Chain 1+2) Mode 28: 802.11n_CH134_5670 MHz (BW 40M, Chain 1+2)
Remark: Mode 1 to 25 of radiation test were performed on DC 4.5V and Mode 26 to 28 were performed on DC 3.3V.	

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



2.4 RF Utility

The programmed RF Utility “ART” is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testing. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

3 Test Result

3.1 Maximum Conducted Output Power Measurement

3.1.1 Limit of Maximum Conducted Output Power

For the band 5.15~5.25 GHz, the maximum conducted output power shall not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log B, where B is the 26 dB emissions bandwidth in 1-MHz. If transmitting antenna directional gain is greater than 6 dBi, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log B, where B is the 26 dB emissions bandwidth in 1-MHz. If transmitting antenna directional gain is greater than 6 dBi, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.1.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

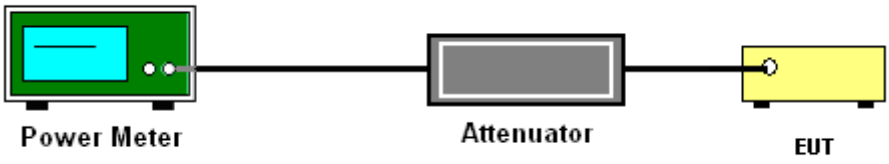
3.1.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D01 General UNII Test Procedures v01r02.

Method PM (Measurement using an RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
3. Measure the average power of the transmitter, and the average power is corrected with duty factor, 10 log(1/x), where x is the duty cycle.

3.1.4 Test Setup



3.1.5 Test Result of Maximum Conducted Output Power

<4.5V>

Test Mode :	802.11a	**Temperature :**	24~26℃
Test Engineer :	Alan Liu	**Relative Humidity :**	45~49%
Duty Cycle	100% for MIMO Chain 1+2(1) 100% for MIMO Chain 1+2(2)	**Duty Factor**	0.00dB for MIMO Chain 1+2(1) 0.00dB for MIMO Chain 1+2(2)

Channel	Frequency (MHz)	802.11a Output Power (dBm)					Max. Limits (dBm)	Pass /Fail
		Measured		Final				
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
36	5180	12.18	12.67	12.18	12.67	15.44	17	Pass
44	5220	12.20	12.73	12.20	12.73	15.48	17	Pass
48	5240	12.13	12.53	12.13	12.53	15.34	17	Pass
52	5260	19.06	19.21	19.06	19.21	22.15	24	Pass
60	5300	19.61	19.67	19.61	19.67	22.65	24	Pass
64	5320	19.48	19.52	19.48	19.52	22.51	24	Pass
100	5500	16.82	17.06	16.82	17.06	19.95	24	Pass
116	5580	19.65	19.98	19.65	19.98	22.83	24	Pass
140	5700	16.09	16.41	16.09	16.41	19.26	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. MIMO Chain 1+2 is a calculated result from sum of the power MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test limit.

Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Engineer :	Alan Liu	Relative Humidity :	45~49%
Duty Cycle	99.15% for MIMO Chain 1+2(1) 99.15% for MIMO Chain 1+2(2)	Duty Factor	0.04dB for MIMO Chain 1+2(1) 0.04dB for MIMO Chain 1+2(2)

Channel	Frequency (MHz)	802.11n HT20 Peak Output Power (dBm)					Max. Limits (dBm)	Pass /Fail
		Measured		Final				
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
36	5180	13.21	13.55	13.25	13.59	16.43	17	Pass
44	5220	13.34	13.46	13.38	13.50	16.45	17	Pass
48	5240	13.49	13.21	13.53	13.25	16.40	17	Pass
52	5260	20.29	20.41	20.33	20.45	23.40	24	Pass
60	5300	20.33	20.48	20.37	20.52	23.45	24	Pass
64	5320	19.70	20.00	19.74	20.04	22.90	24	Pass
100	5500	16.36	16.43	16.40	16.47	19.44	24	Pass
116	5580	19.67	19.89	19.71	19.93	22.83	24	Pass
140	5700	16.03	15.90	16.07	15.94	19.01	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. MIMO Chain 1+2 is a calculated result from sum of the power MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test limit.

Test Mode :	802.11n HT40	Temperature :	24~26℃
Test Engineer :	Alan Liu	Relative Humidity :	45~49%
Duty Cycle	98.30% for MIMO Chain 1+2(1) 98.30% for MIMO Chain 1+2(2)	Duty Factor	0.07dB for MIMO Chain 1+2(1) 0.07dB for MIMO Chain 1+2(2)

Channel	Frequency (MHz)	802.11n HT40 Peak Output Power (dBm)					Max. Limits (dBm)	Pass /Fail
		Measured		Final				
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
38	5190	13.63	13.98	13.70	14.05	16.89	17	Pass
46	5230	13.96	13.72	14.03	13.79	16.93	17	Pass
54	5270	20.27	20.46	20.34	20.53	23.45	24	Pass
62	5310	14.71	14.52	14.78	14.59	17.70	24	Pass
102	5510	13.13	13.03	13.20	13.10	16.17	24	Pass
110	5550	19.76	19.92	19.83	19.99	22.93	24	Pass
134	5670	15.72	15.86	15.79	15.93	18.88	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. MIMO Chain 1+2 is a calculated result from sum of the power MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test limit.

<3.3V>

Test Mode :	802.11a	**Temperature :**	24~26℃
Test Engineer :	Alan Liu	**Relative Humidity :**	45~49%
Duty Cycle	100% for MIMO Chain 1+2(1) 100% for MIMO Chain 1+2(2)	**Duty Factor**	0.00dB for MIMO Chain 1+2(1) 0.00dB for MIMO Chain 1+2(2)

Channel	Frequency (MHz)	802.11a Output Power (dBm)					Max. Limits (dBm)	Pass /Fail
		Measured		Final				
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
36	5180	11.77	12.56	11.77	12.56	15.19	17	Pass
44	5220	11.80	12.54	11.80	12.54	15.20	17	Pass
48	5240	11.80	12.16	11.80	12.16	14.99	17	Pass
52	5260	18.81	18.99	18.81	18.99	21.91	24	Pass
60	5300	19.13	19.45	19.13	19.45	22.30	24	Pass
64	5320	18.95	19.40	18.95	19.40	22.19	24	Pass
100	5500	16.27	16.73	16.27	16.73	19.52	24	Pass
116	5580	19.50	19.99	19.50	19.99	22.76	24	Pass
140	5700	15.70	15.99	15.70	15.99	18.86	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. MIMO Chain 1+2 is a calculated result from sum of the power MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test limit.

Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Engineer :	Alan Liu	Relative Humidity :	45~49%
Duty Cycle	99.15% for MIMO Chain 1+2(1) 99.15% for MIMO Chain 1+2(2)	Duty Factor	0.04dB for MIMO Chain 1+2(1) 0.04dB for MIMO Chain 1+2(2)

Channel	Frequency (MHz)	802.11n HT20 Peak Output Power (dBm)					Max. Limits (dBm)	Pass /Fail
		Measured		Final				
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
36	5180	12.85	13.35	12.89	13.39	16.15	17	Pass
44	5220	13.02	13.42	13.06	13.46	16.27	17	Pass
48	5240	13.07	13.19	13.11	13.23	16.18	17	Pass
52	5260	19.54	20.35	19.58	20.39	23.01	24	Pass
60	5300	19.59	20.24	19.63	20.28	22.97	24	Pass
64	5320	19.49	20.17	19.53	20.21	22.89	24	Pass
100	5500	15.86	16.22	15.90	16.26	19.09	24	Pass
116	5580	19.06	19.54	19.10	19.58	22.35	24	Pass
140	5700	15.74	15.57	15.78	15.61	18.70	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. MIMO Chain 1+2 is a calculated result from sum of the power MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test limit.

Test Mode :	802.11n HT40	Temperature :	24~26℃
Test Engineer :	Alan Liu	Relative Humidity :	45~49%
Duty Cycle	98.30% for MIMO Chain 1+2(1) 98.30% for MIMO Chain 1+2(2)	Duty Factor	0.07dB for MIMO Chain 1+2(1) 0.07dB for MIMO Chain 1+2(2)

Channel	Frequency (MHz)	802.11n HT40 Peak Output Power (dBm)					Max. Limits (dBm)	Pass /Fail
		Measured		Final				
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
38	5190	13.19	13.71	13.26	13.78	16.54	17	Pass
46	5230	13.53	13.58	13.60	13.65	16.64	17	Pass
54	5270	19.76	20.38	19.83	20.45	23.17	24	Pass
62	5310	14.25	14.17	14.32	14.24	17.29	24	Pass
102	5510	12.72	12.94	12.79	13.01	15.92	24	Pass
110	5550	19.21	19.50	19.28	19.57	22.44	24	Pass
134	5670	15.40	15.46	15.47	15.53	18.51	24	Pass

Note:

1. Final Output Power equals to Measured Output Power adds the duty factor.
2. MIMO Chain 1+2 is a calculated result from sum of the power MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test limit.

3.2 Power Spectral Density Measurement

3.2.1 Limit of Power Spectral Density

For the band 5.15–5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antenna directional gain is greater than 6 dBi, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.2.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

3.2.3 Test Procedures

The testing follows FCC KDB 789033 D01 General UNII Test Procedures v01r02.

Section E) Peak power spectral density (PPSD).

Note: Though the rule refers to “peak power spectral density”, the intent is to measure the maximum value of the time average of the power spectral density measured during a period of continuous transmission.

 # Method SA-2 #

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

1. The testing follows Method SA-2 of FCC KDB 789033 D01 General UNII Test Procedures v01r02.
   - Measure the duty cycle.
   - Set span to encompass the entire emission bandwidth (EBW) of the signal.
   - Set RBW = 1 MHz.
   - Set VBW ≥ 3 MHz.
   - Number of points in sweep ≥ 2 Span / RBW.
   - Sweep time = auto.
   - Detector = sample
   - Trace average at least 100 traces in power averaging mode.
   - Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and

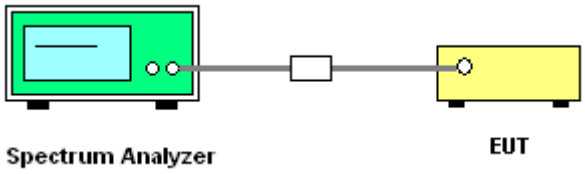
record it.

4. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v01r02.

Method (1): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

3.2.4 Test Setup



3.2.5 Test Result of Power Spectral Density

<4.5V>

Test Mode :	802.11a	**Temperature :**	24~26℃
Test Engineer :	Alan Liu	**Relative Humidity :**	45~49%
Duty Cycle:	100% for MIMO Chain 1+2(1) 100% for MIMO Chain 1+2(2)	**Duty Factor:**	0.00dB for MIMO Chain 1+2(1) 0.00dB for MIMO Chain 1+2(2)

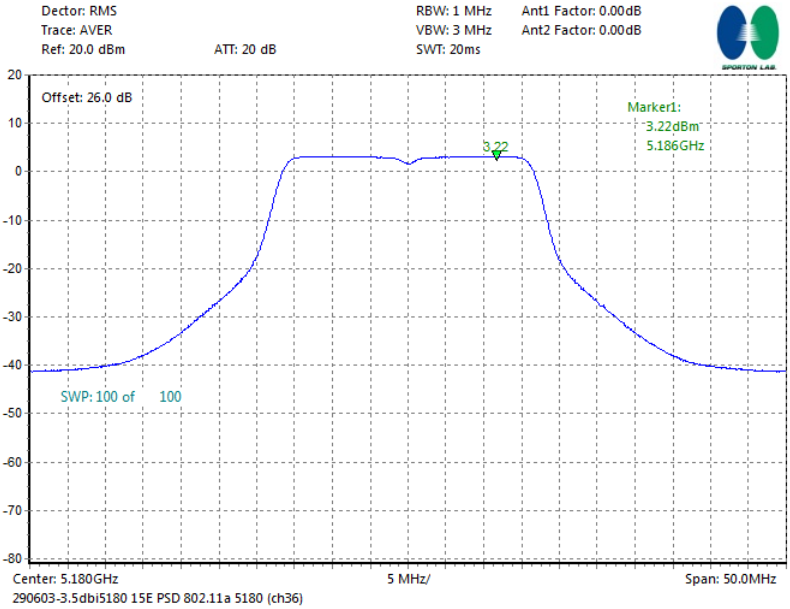
Channel	Frequency (MHz)	802.11a Measured PSD (dBm)			Max. Limits (dBm)	Pass /Fail
		Measured		Final		
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
36	5180	-0.05	0.49	3.22	3.49	Pass
44	5220	-0.01	0.57	3.28	3.49	Pass
48	5240	-0.05	0.36	3.15	3.49	Pass
52	5260	6.94	7.17	10.04	10.49	Pass
60	5300	7.08	7.05	10.06	10.49	Pass
64	5320	6.64	6.99	9.81	10.49	Pass
100	5500	4.14	4.38	7.26	10.49	Pass
116	5580	6.49	7.17	9.85	10.49	Pass
140	5700	3.94	4.01	6.97	10.49	Pass

Note:

1. Result of Final PSD equals to Measured PSD adds the duty factor if less than 98%.
2. Final MIMO Chain 1+2 is the bin-by-bin combination result from MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test Limit.

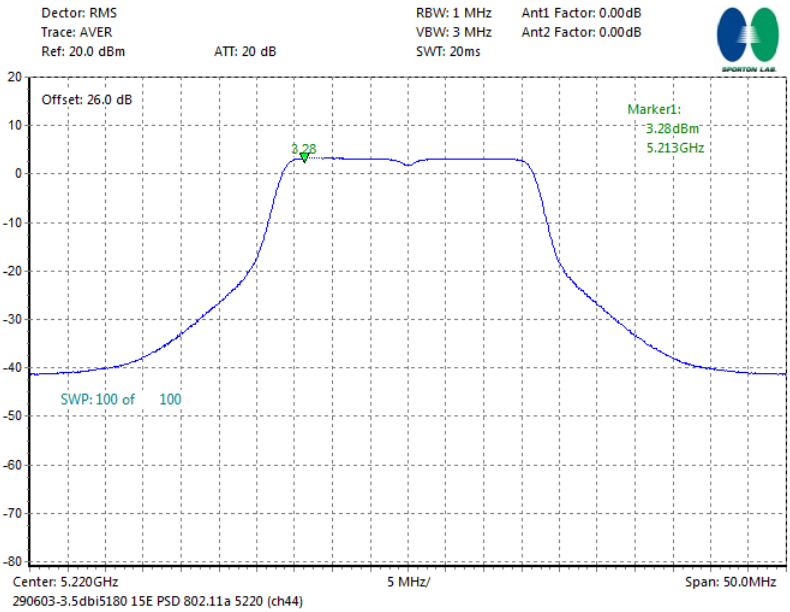
802.11a - MIMO Chain 1+2

PSD Plot on Channel 36



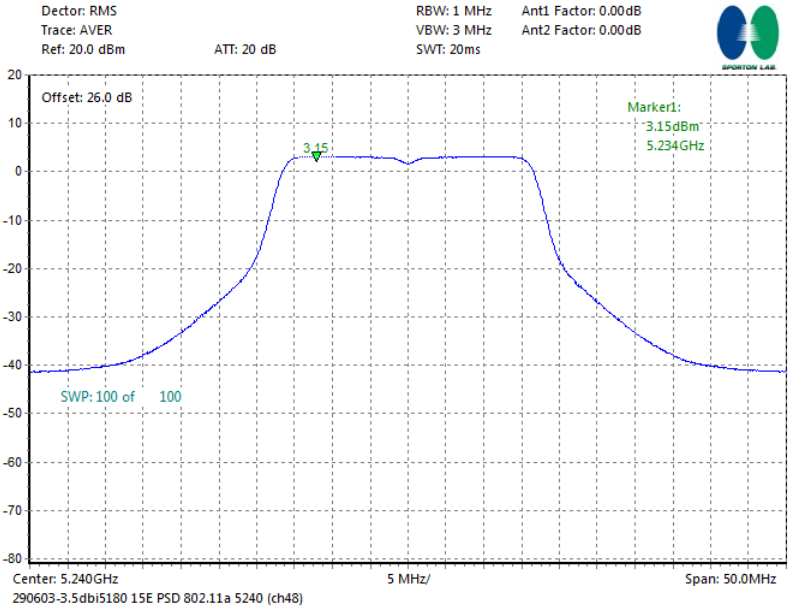
802.11a - MIMO Chain 1+2

PSD Plot on Channel 44



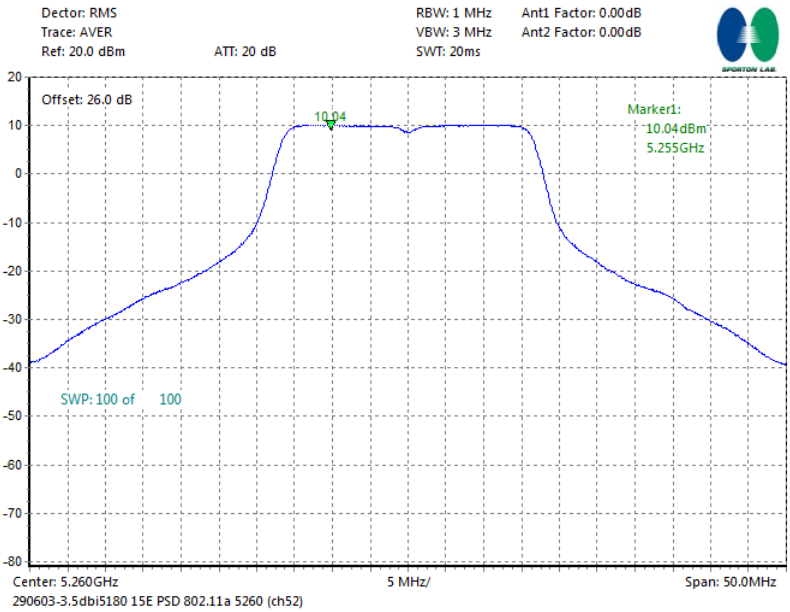
802.11a - MIMO Chain 1+2

PSD Plot on Channel 48



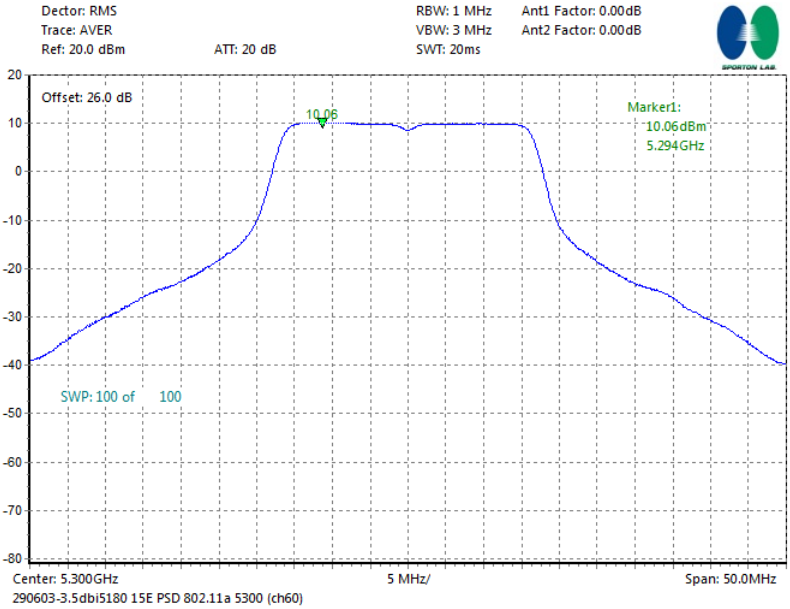
802.11a - MIMO Chain 1+2

PSD Plot on Channel 52



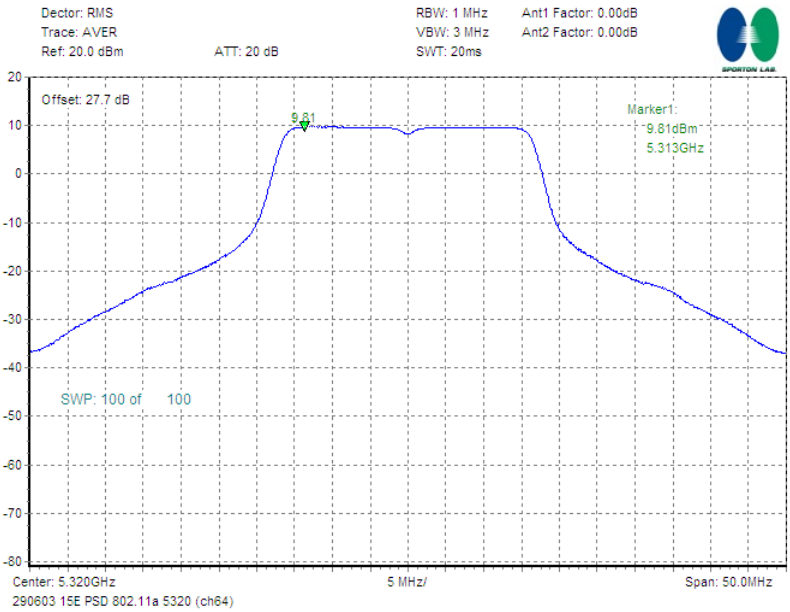
802.11a - MIMO Chain 1+2

PSD Plot on Channel 60



802.11a - MIMO Chain 1+2

PSD Plot on Channel 64

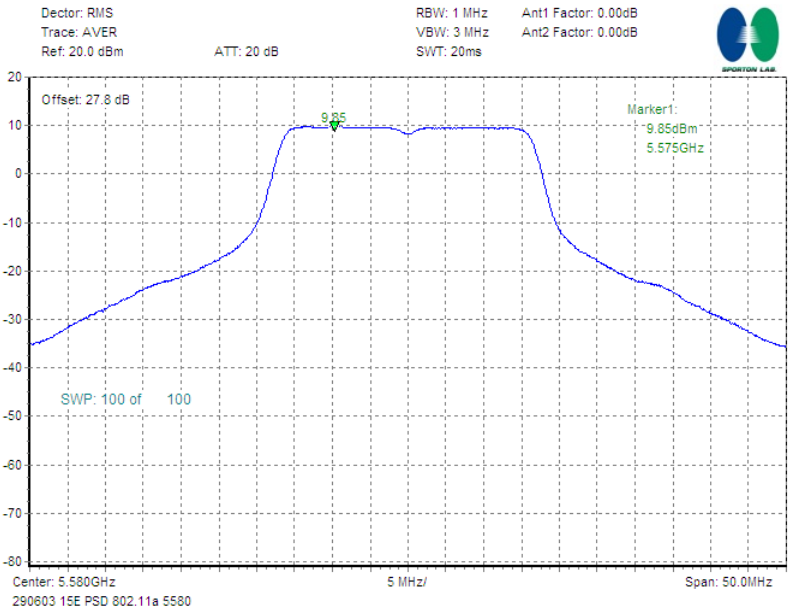


802.11a - MIMO Chain 1+2

PSD Plot on Channel 100

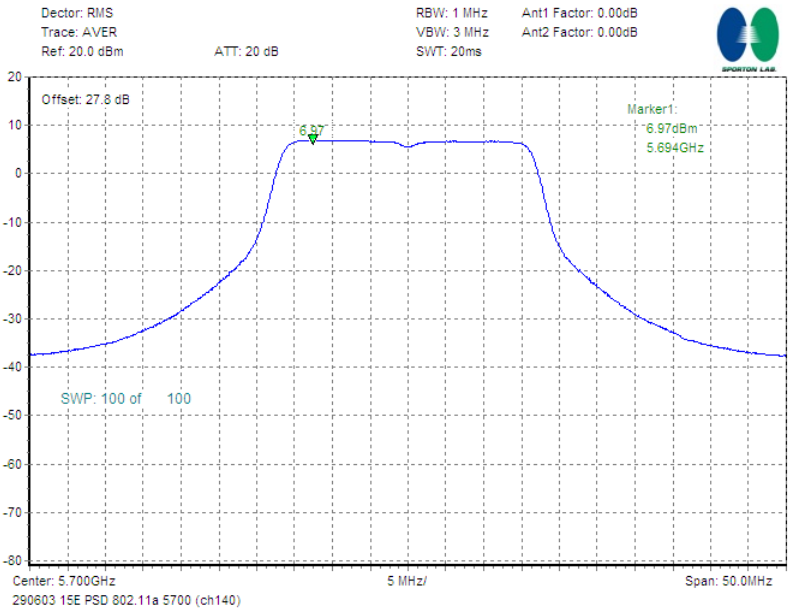
802.11a - MIMO Chain 1+2

PSD Plot on Channel 116



802.11a - MIMO Chain 1+2

PSD Plot on Channel 140



Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Engineer :	Alan Liu	Relative Humidity :	45~49%
Duty Cycle:	99.15% for MIMO Chain 1+2(1) 99.15% for MIMO Chain 1+2(2)	Duty Factor:	0.04dB for MIMO Chain 1+2(1) 0.04dB for MIMO Chain 1+2(2)

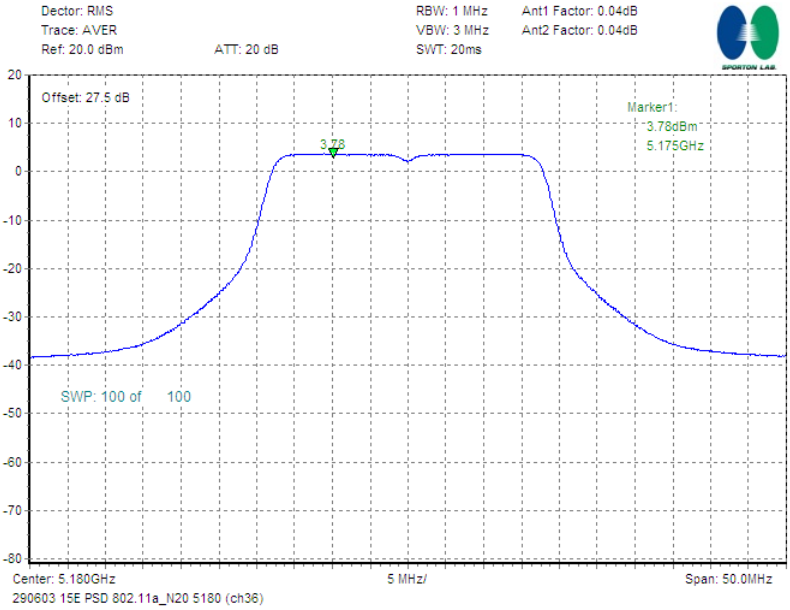
Channel	Frequency (MHz)	802.11n HT20 PSD (dBm)			Max. Limits (dBm)	Pass /Fail
		Measured		Final		
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
36	5180	0.51	1.17	3.78	4	Pass
44	5220	0.65	1.03	3.77	4	Pass
48	5240	0.79	0.58	3.58	4	Pass
52	5260	7.32	8.10	10.68	11	Pass
60	5300	7.58	8.27	10.84	11	Pass
64	5320	6.78	7.35	10.03	11	Pass
100	5500	3.45	3.85	6.60	11	Pass
116	5580	6.19	6.85	9.47	11	Pass
140	5700	3.28	3.47	6.41	11	Pass

Note:

1. Result of Final PSD equals to Measured PSD adds the duty factor if less than 98%.
2. Final MIMO Chain 1+2 is the bin-by-bin combination result from MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test Limit.

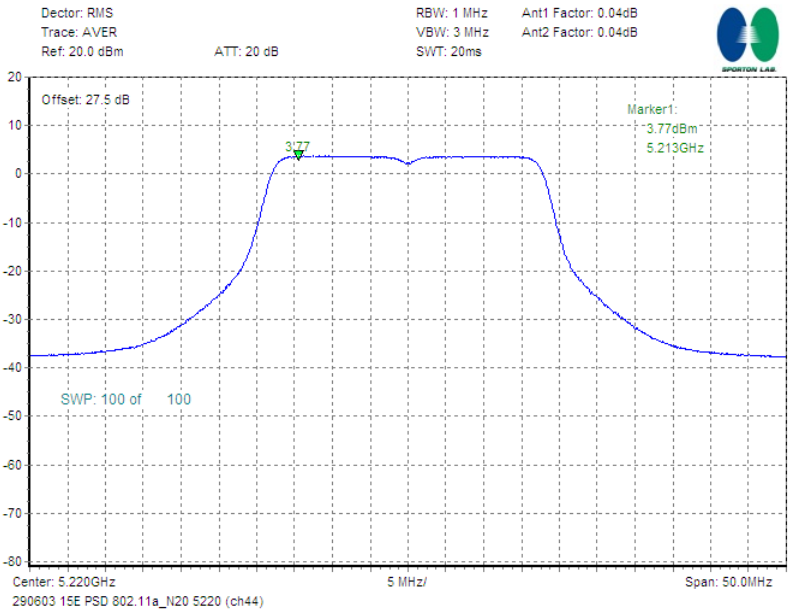
802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 36



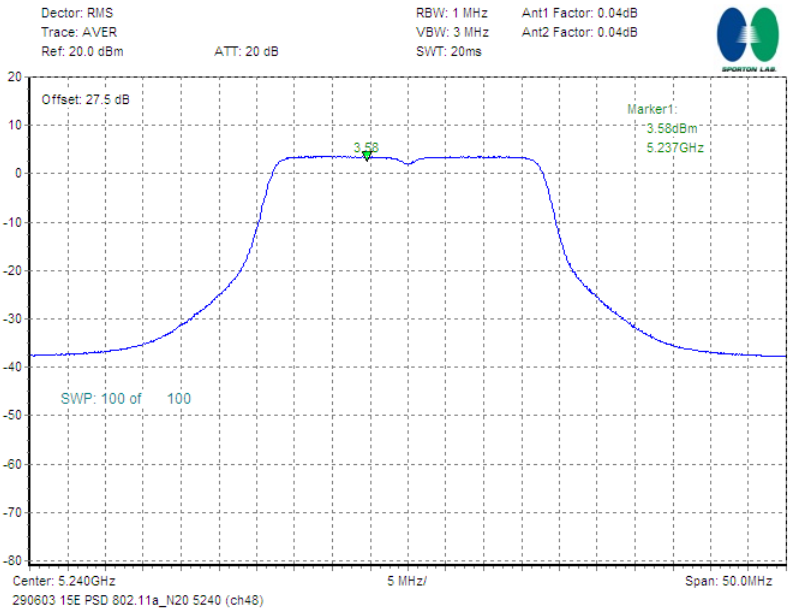
802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 44



802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 48

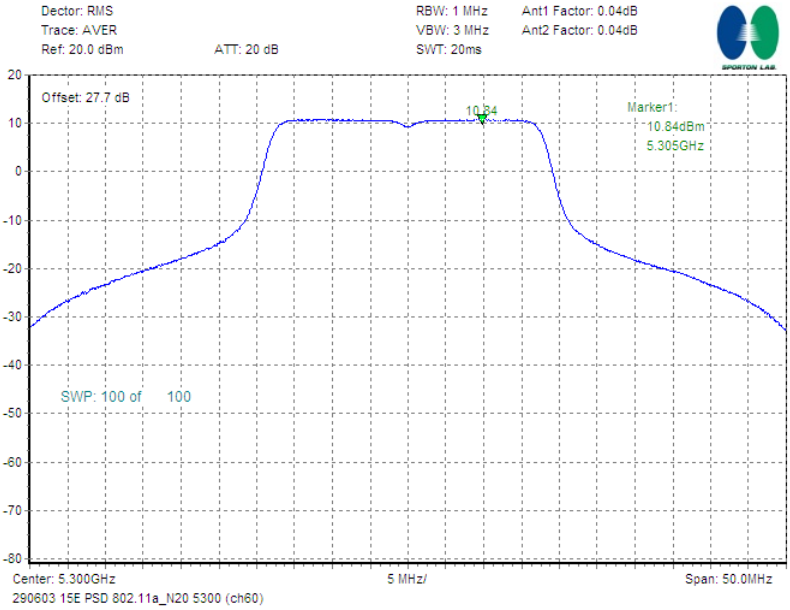


802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 52

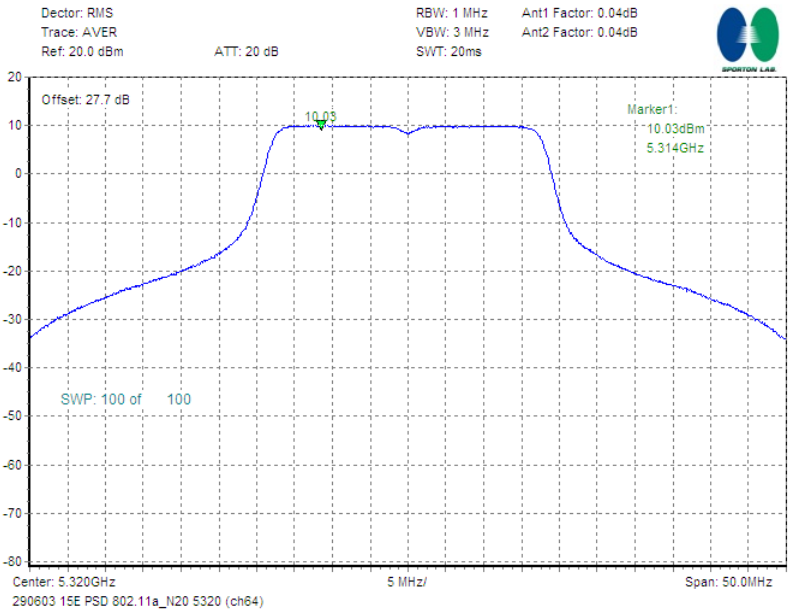
802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 60



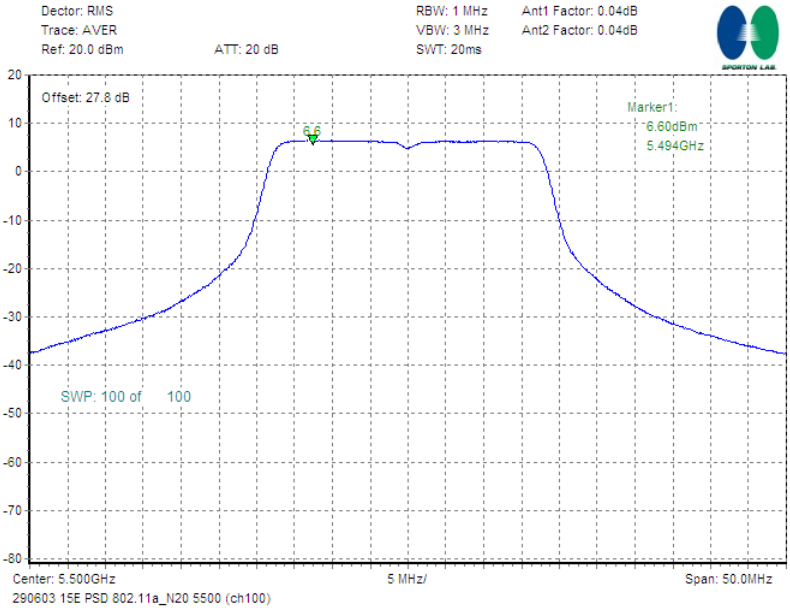
802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 64



802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 100

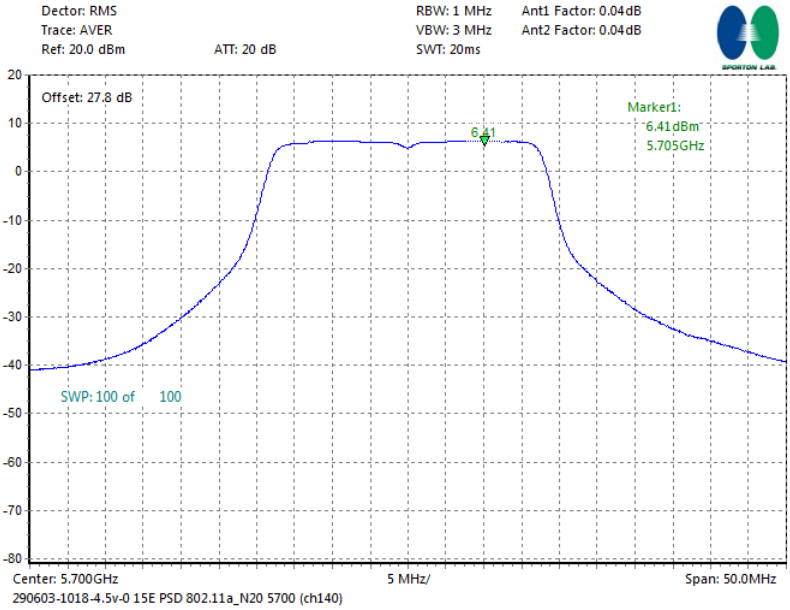


802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 116

802.11n HT20 – MIMO Chain 1+2

PSD Plot on Channel 140



Test Mode :	802.11n HT40	Temperature :	24~26℃
Test Engineer :	Alan Liu	Relative Humidity :	45~49%
Duty Cycle:	98.30% for MIMO Chain 1+2(1) 98.30% for MIMO Chain 1+2(2)	Duty Factor:	0.07dB for MIMO Chain 1+2(1) 0.07dB for MIMO Chain 1+2(2)

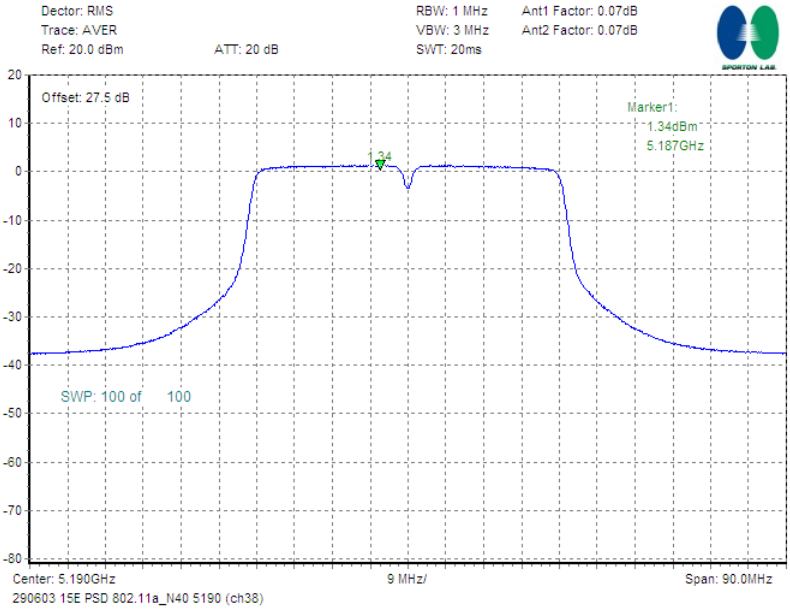
Channel	Frequency (MHz)	802.11n HT40 PSD (dBm)			Max. Limits (dBm)	Pass /Fail
		Measured		Final		
		MIMO Chain 1+2(1)	MIMO Chain 1+2(2)	MIMO Chain 1+2		
38	5190	-1.81	-1.35	1.34	4	Pass
46	5230	-1.50	-1.60	1.26	4	Pass
54	5270	5.22	5.54	8.23	11	Pass
62	5310	-1.35	-1.33	1.54	11	Pass
102	5510	-2.96	-2.84	-0.01	11	Pass
110	5550	3.53	4.04	6.70	11	Pass
134	5670	-0.04	0.13	2.93	11	Pass

Note:

1. Result of Final PSD equals to Measured PSD adds the duty factor if less than 98%.
2. Final MIMO Chain 1+2 is the bin-by-bin combination result from MIMO Chain 1+2(1) and MIMO Chain 1+2(2).
3. The section 3.5 of List of Antenna Requirements of this test report is used for test Limit.

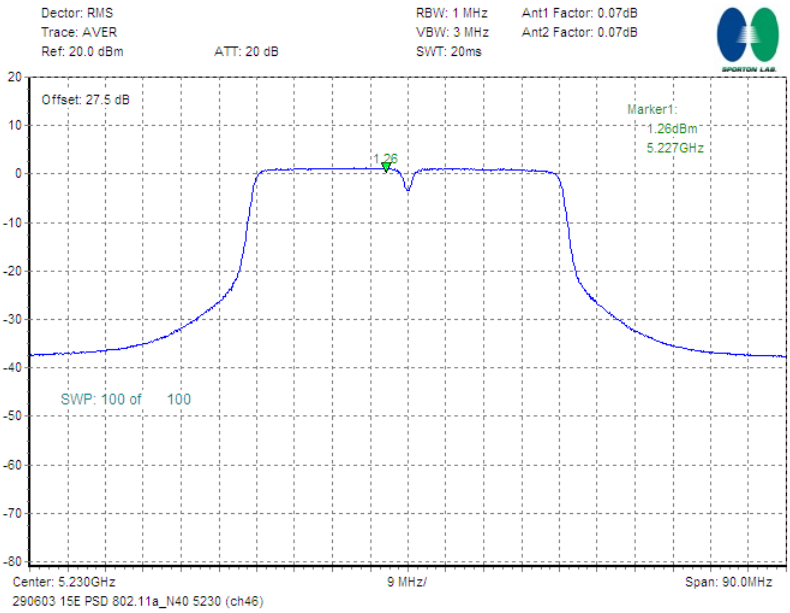
802.11n HT40 – MIMO Chain 1+2

PSD Plot on Channel 38



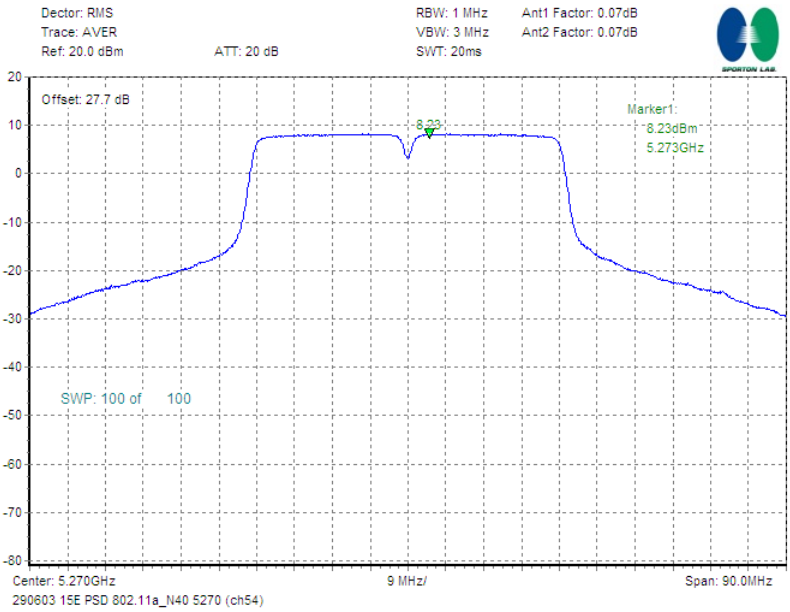
802.11n HT40 – MIMO Chain 1+2

PSD Plot on Channel 46



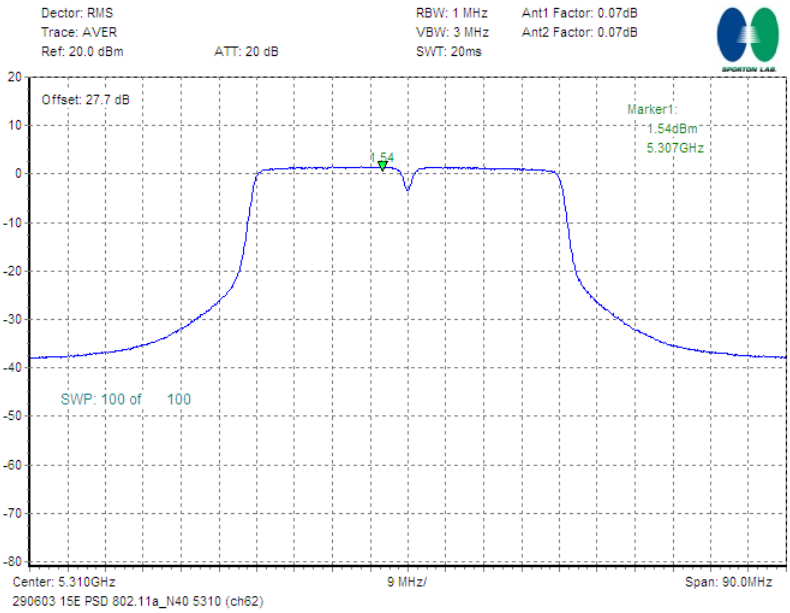
802.11n HT40 – MIMO Chain 1+2

PSD Plot on Channel 54



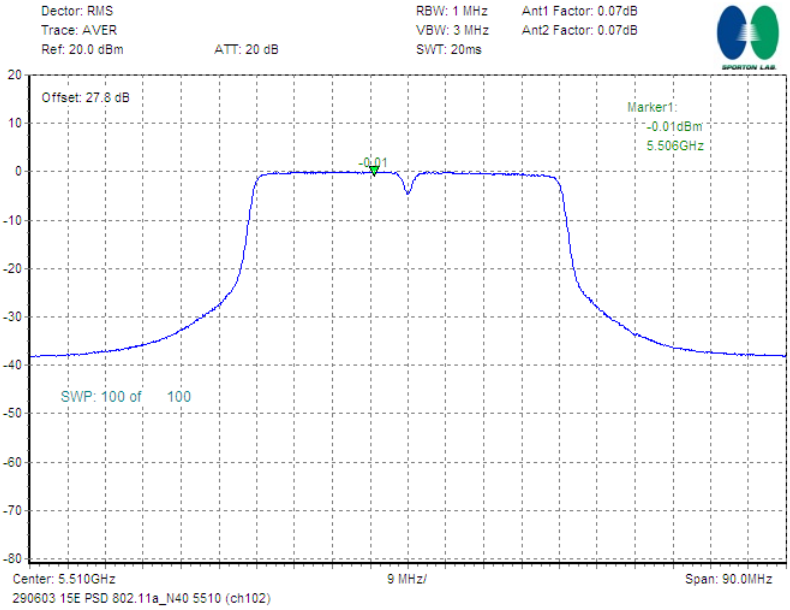
802.11n HT40 – MIMO Chain 1+2

PSD Plot on Channel 62



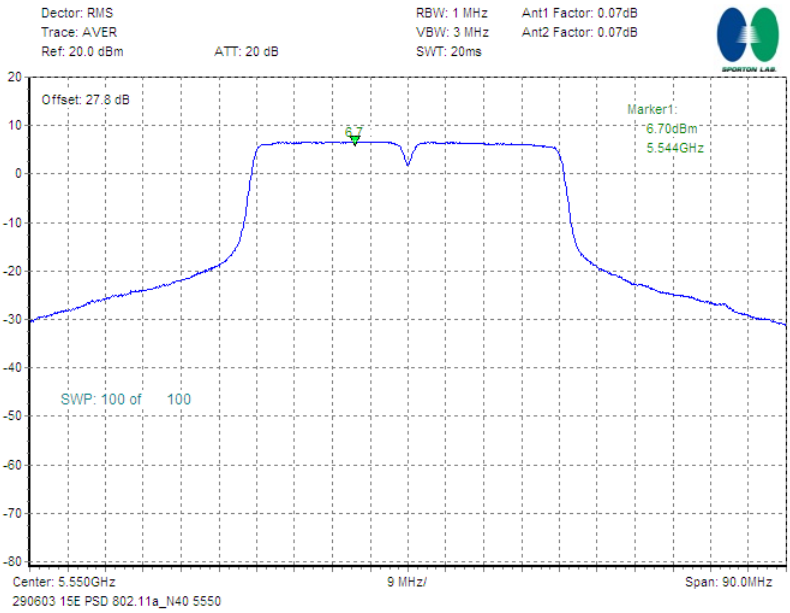
802.11n HT40 – MIMO Chain 1+2

PSD Plot on Channel 102



802.11n HT40 – MIMO Chain 1+2

PSD Plot on Channel 110



802.11n HT40 – MIMO Chain 1+2

PSD Plot on Channel 134

3.3 Unwanted Emissions Measurement

This section as specified in FCC Part 15.407(b) is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement. The unwanted emissions shall comply with 15.407(b)(1) to (6), and restricted bands per FCC Part15.205.

3.3.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.

For transmitters operating in the 5.47-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.

(2) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table,

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

EIRP (dBm)	Field Strength at 3m (dBuV/m)
-17	78.3
- 27	68.3

3.3.2 Measuring Instruments

The section 4.0 of List of Measuring Equipment of this test report is used for test.

3.3.3 Test Procedures

1. The testing follows the guidelines in fulfills ANSI C63.4-2003 and the guidelines in ANSI C63.10-2009 test site requirement and FCC KDB 789033 D01 General UNII Test Procedures v01r02.

   Section G) Unwanted emissions measurement.

   (1) Procedure for Unwanted Emissions Measurements Below 1000MHz

   - RBW = 120 KHz
   - VBW = 300 KHz
   - Detector = Peak
   - Trace mode = max hold

   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz

   - The setting follows the G) 5) of FCC KDB 789033.
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - The setting follows G) 6) of FCC KDB 789033.
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

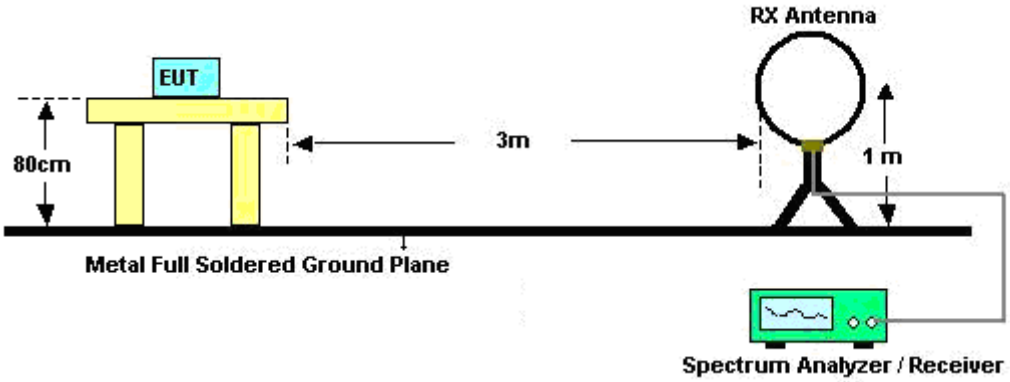
Antenna	Band	Duty Cycle(%)	T(us)	1/T(KHz)	VBW Setting
1+2(1)	802.11a	100	-	-	10Hz
1+2(2)	802.11a	100	-	-	
1+2(1)	802.11n (BW 20MHz)	99.15	-	-	10Hz
1+2(2)	802.11n (BW 20MHz)	99.15	-	-	
1+2(1)	802.11n (BW 40MHz)	98.3	-	-	10Hz
1+2(2)	802.11n (BW 40MHz)	98.3	-	-	

2. The EUT was placed on a rotatable table top 0.8 meter above ground.

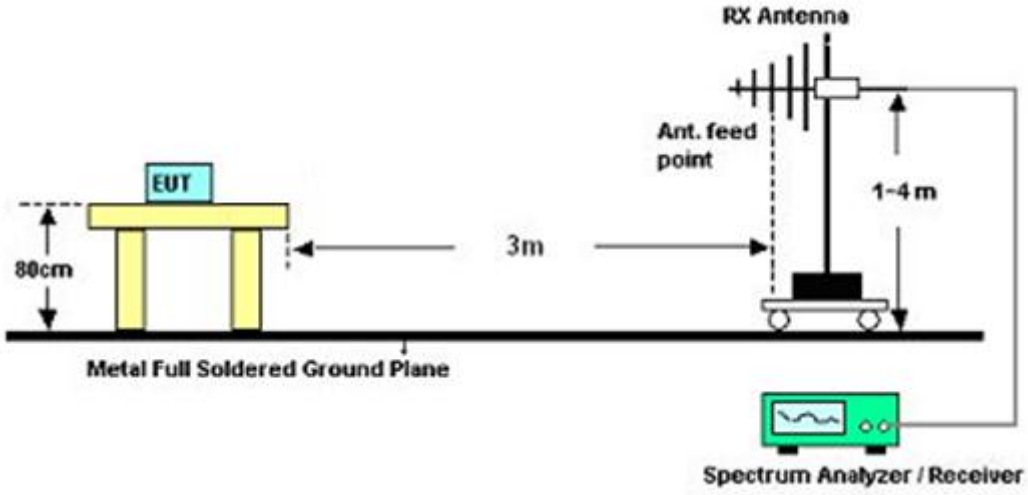
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.3.4 Test Setup

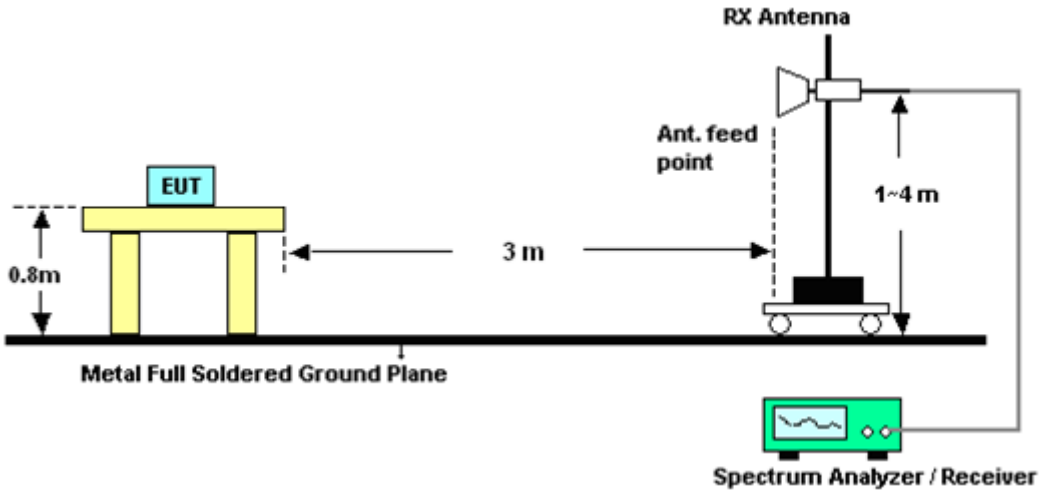
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.3.5 Test Results of Radiated Emissions (9 KHz ~ 30 MHz)

The low frequency, which started from 9 KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.3.6 Test Result of Radiated Band Edges

Test Mode :	Mode 1	Temperature :	22~24°C
Test Band :	802.11a	Relative Humidity :	50~52%
Test Channel :	36	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5137.4	58.37	-15.63	74	47.73	34.25	9.37	32.98	153	63	Peak
5149.7	44.75	-9.25	54	34.02	34.29	9.41	32.97	153	63	Average
5458.79	56.04	-17.96	74	43.94	35.07	9.94	32.91	153	63	Peak
5451.86	42.71	-11.29	54	30.65	35.07	9.9	32.91	153	63	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5141.75	57.06	-16.94	74	46.33	34.29	9.41	32.97	100	192	Peak
5146.4	44.22	-9.78	54	33.49	34.29	9.41	32.97	100	192	Average
5407.64	54.03	-19.97	74	42.15	34.94	9.86	32.92	100	192	Peak
5390.92	40.72	-13.28	54	28.92	34.9	9.82	32.92	100	192	Average

Test Mode :	Mode 3	Temperature :	22~24°C
Test Band :	802.11a	Relative Humidity :	50~52%
Test Channel :	48	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5111.75	57.72	-16.28	74	47.17	34.2	9.33	32.98	100	51	Peak
5113.25	44.29	-9.71	54	33.74	34.2	9.33	32.98	100	51	Average
5406.32	53.56	-20.44	74	41.68	34.94	9.86	32.92	100	51	Peak
5350	39.87	-14.13	54	28.25	34.81	9.74	32.93	100	51	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5129.6	57.87	-16.13	74	47.23	34.25	9.37	32.98	104	22	Peak
5131.1	46.66	-7.34	54	36.02	34.25	9.37	32.98	104	22	Average
5403.68	58.64	-15.36	74	46.8	34.94	9.82	32.92	104	22	Peak
5369.91	45.62	-8.38	54	33.92	34.85	9.78	32.93	104	22	Average

Test Mode :	Mode 4	Temperature :	22~24°C
Test Band :	802.11a	Relative Humidity :	50~52%
Test Channel :	52	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5144	63.01	-10.99	74	52.28	34.29	9.41	32.97	136	50	Peak
5136.35	48.78	-5.22	54	38.14	34.25	9.37	32.98	136	50	Average
5350.99	59.39	-14.61	74	47.77	34.81	9.74	32.93	136	50	Peak
5362.76	44.63	-9.37	54	32.93	34.85	9.78	32.93	136	50	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5000.6	66.07	-7.93	74	56	33.9	9.17	33	170	28	Peak
5000.9	52.33	-1.67	54	42.26	33.9	9.17	33	170	28	Average
5355.72	66.69	-7.31	74	55.07	34.81	9.74	32.93	170	28	Peak
5357.04	52.96	-1.04	54	41.3	34.81	9.78	32.93	170	28	Average

Test Mode :	Mode 6	Temperature :	22~24°C
Test Band :	802.11a	Relative Humidity :	50~52%
Test Channel :	64	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5026.55	60.65	-13.35	74	50.45	33.99	9.21	33	149	285	Peak
5004.95	47.75	-6.25	54	37.64	33.94	9.17	33	149	285	Average
5350.77	60.94	-13.06	74	49.32	34.81	9.74	32.93	149	285	Peak
5368.48	46.85	-7.15	54	35.15	34.85	9.78	32.93	149	285	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5071.4	65.88	-8.12	74	55.51	34.07	9.29	32.99	200	27	Peak
5023.85	52.9	-1.1	54	42.7	33.99	9.21	33	200	27	Average
5352.75	71.01	-2.99	74	59.39	34.81	9.74	32.93	200	27	Peak
5350	53.42	-0.58	54	41.8	34.81	9.74	32.93	200	27	Average

Test Mode :	Mode 7	Temperature :	22~24°C
Test Band :	802.11a	Relative Humidity :	50~52%
Test Channel :	100	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	56.25	-12.05	68.3	44.11	35.11	9.94	32.91	156	322	Peak
5725	51.99	-16.31	68.3	40	35.33	9.92	33.26	156	322	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	60.68	-7.62	68.3	48.54	35.11	9.94	32.91	198	329	Peak
5725	53.87	-14.43	68.3	41.88	35.33	9.92	33.26	198	329	Peak

Test Mode :	Mode 9	Temperature :	22~24°C
Test Band :	802.11a	Relative Humidity :	50~52%
Test Channel :	140	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	54.34	-13.96	68.3	42.2	35.11	9.94	32.91	164	320	Peak
5725	58.7	-9.6	68.3	46.71	35.33	9.92	33.26	164	320	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	58.45	-9.85	68.3	46.31	35.11	9.94	32.91	190	334	Peak
5725	63.15	-5.15	68.3	51.16	35.33	9.92	33.26	190	334	Peak

Test Mode :	Mode 10	Temperature :	22~24°C
Test Band :	802.11n HT20	Relative Humidity :	50~52%
Test Channel :	36	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5147.9	65.35	-8.65	74	54.62	34.29	9.41	32.97	100	66	Peak
5150	49.67	-4.33	54	38.94	34.29	9.41	32.97	100	66	Average
5352.09	56.94	-17.06	74	45.32	34.81	9.74	32.93	100	66	Peak
5351.43	42.98	-11.02	54	31.36	34.81	9.74	32.93	100	66	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	70.69	-3.31	74	59.96	34.29	9.41	32.97	195	330	Peak
5150	53.1	-0.9	54	42.37	34.29	9.41	32.97	195	330	Average
5398.18	64.25	-9.75	74	52.41	34.94	9.82	32.92	195	330	Peak
5396.97	50.79	-3.21	54	38.95	34.94	9.82	32.92	195	330	Average

Test Mode :	Mode 12	Temperature :	22~24°C
Test Band :	802.11n HT20	Relative Humidity :	50~52%
Test Channel :	48	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5122.1	56.38	-17.62	74	45.79	34.2	9.37	32.98	100	30	Peak
5121.5	43.3	-10.7	54	32.71	34.2	9.37	32.98	100	30	Average
5351.54	52.2	-21.8	74	40.58	34.81	9.74	32.93	100	30	Peak
5350	40.01	-13.99	54	28.39	34.81	9.74	32.93	100	30	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5015	54	-20	74	43.89	33.94	9.17	33	100	31	Peak
5000	41.16	-12.84	54	31.09	33.9	9.17	33	100	31	Average
5409.07	59.64	-14.36	74	47.76	34.94	9.86	32.92	100	31	Peak
5402.58	46.09	-7.91	54	34.25	34.94	9.82	32.92	100	31	Average

Test Mode :	Mode 13	Temperature :	22~24°C
Test Band :	802.11n HT20	Relative Humidity :	50~52%
Test Channel :	52	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.8	60.82	-13.18	74	50.09	34.29	9.41	32.97	150	314	Peak
5147.6	47.16	-6.84	54	36.43	34.29	9.41	32.97	150	314	Average
5367.49	61.57	-12.43	74	49.87	34.85	9.78	32.93	150	314	Peak
5368.15	48.33	-5.67	54	36.63	34.85	9.78	32.93	150	314	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5131.55	65.95	-8.05	74	55.31	34.25	9.37	32.98	200	346	Peak
5132.3	51.46	-2.54	54	40.82	34.25	9.37	32.98	200	346	Average
5421.5	63.86	-10.14	74	51.94	34.98	9.86	32.92	200	346	Peak
5350.77	50.53	-3.47	54	38.91	34.81	9.74	32.93	200	346	Average

Test Mode :	Mode 15	Temperature :	22~24°C
Test Band :	802.11n HT20	Relative Humidity :	50~52%
Test Channel :	64	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5084.45	62.59	-11.41	74	52.17	34.12	9.29	32.99	163	320	Peak
5085.65	49.06	-4.94	54	38.64	34.12	9.29	32.99	163	320	Average
5350.99	63.4	-10.6	74	51.78	34.81	9.74	32.93	163	320	Peak
5350	48.95	-5.05	54	37.33	34.81	9.74	32.93	163	320	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5005.4	64.21	-9.79	74	54.1	33.94	9.17	33	198	322	Peak
5019.65	50.76	-3.24	54	40.65	33.94	9.17	33	198	322	Average
5351.43	70.73	-3.27	74	59.11	34.81	9.74	32.93	198	322	Peak
5350	52.31	-1.69	54	40.69	34.81	9.74	32.93	198	322	Average

Test Mode :	Mode 16	Temperature :	22~24°C
Test Band :	802.11n HT20	Relative Humidity :	50~52%
Test Channel :	100	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	56.69	-11.61	68.3	44.55	35.11	9.94	32.91	156	321	Peak
5725	53.13	-15.17	68.3	41.14	35.33	9.92	33.26	156	321	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	58.64	-9.66	68.3	46.5	35.11	9.94	32.91	196	329	Peak
5725	53.88	-14.42	68.3	41.89	35.33	9.92	33.26	196	329	Peak

Test Mode :	Mode 18	Temperature :	22~24°C
Test Band :	802.11n HT20	Relative Humidity :	50~52%
Test Channel :	140	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5439.12	55.79	-18.21	74	43.77	35.03	9.9	32.91	100	42	Peak
5469.04	43.12	-10.88	54	30.98	35.11	9.94	32.91	100	42	Average
5725.56	61.78	-12.22	74	49.79	35.33	9.92	33.26	100	42	Peak
5725	47.77	-6.23	54	35.78	35.33	9.92	33.26	100	42	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5418.8	59	-15	74	47.08	34.98	9.86	32.92	100	146	Peak
5469.84	46.25	-7.75	54	34.11	35.11	9.94	32.91	100	146	Average
5725.16	60.51	-13.49	74	48.52	35.33	9.92	33.26	100	146	Peak
5725	45.07	-8.93	54	33.08	35.33	9.92	33.26	100	146	Average

Test Mode :	Mode 19	Temperature :	22~24°C
Test Band :	802.11n HT40	Relative Humidity :	50~52%
Test Channel :	38	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	63.87	-10.13	74	53.14	34.29	9.41	32.97	167	281	Peak
5150	50.15	-3.85	54	39.42	34.29	9.41	32.97	167	281	Average
5355.06	54.2	-19.8	74	42.58	34.81	9.74	32.93	167	281	Peak
5368.48	40.56	-13.44	54	28.86	34.85	9.78	32.93	167	281	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	68.81	-5.19	74	58.08	34.29	9.41	32.97	160	20	Peak
5150	53.46	-0.54	54	42.73	34.29	9.41	32.97	160	20	Average
5457.14	56.65	-17.35	74	44.55	35.07	9.94	32.91	160	20	Peak
5459.56	43.45	-10.55	54	31.35	35.07	9.94	32.91	160	20	Average

Test Mode :	Mode 20	Temperature :	22~24°C
Test Band :	802.11n HT40	Relative Humidity :	50~52%
Test Channel :	46	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5136.95	63.57	-10.43	74	52.93	34.25	9.37	32.98	124	64	Peak
5142.65	50.06	-3.94	54	39.33	34.29	9.41	32.97	124	64	Average
5359.02	58.27	-15.73	74	46.61	34.81	9.78	32.93	124	64	Peak
5358.91	44.46	-9.54	54	32.8	34.81	9.78	32.93	124	64	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	66.61	-7.39	74	55.88	34.29	9.41	32.97	200	344	Peak
5150	53.02	-0.98	54	42.29	34.29	9.41	32.97	200	344	Average
5353.85	63.39	-10.61	74	51.77	34.81	9.74	32.93	200	344	Peak
5351.21	50.52	-3.48	54	38.9	34.81	9.74	32.93	200	344	Average

Test Mode :	Mode 21	Temperature :	22~24°C
Test Band :	802.11n HT40	Relative Humidity :	50~52%
Test Channel :	54	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5061.8	63.05	-10.95	74	52.72	34.07	9.25	32.99	161	66	Peak
5014.4	48.96	-5.04	54	38.85	33.94	9.17	33	161	66	Average
5350.66	61.2	-12.8	74	49.58	34.81	9.74	32.93	161	66	Peak
5350	47.13	-6.87	54	35.51	34.81	9.74	32.93	161	66	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.55	64.71	-9.29	74	53.98	34.29	9.41	32.97	172	27	Peak
5139.8	51.54	-2.46	54	40.86	34.29	9.37	32.98	172	27	Average
5353.3	66.29	-7.71	74	54.67	34.81	9.74	32.93	172	27	Peak
5350	50.95	-3.05	54	39.33	34.81	9.74	32.93	172	27	Average

Test Mode :	Mode 22	Temperature :	22~24°C
Test Band :	802.11n HT40	Relative Humidity :	50~52%
Test Channel :	62	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5123.75	52.75	-21.25	74	42.11	34.25	9.37	32.98	109	45	Peak
5138.6	39.53	-14.47	54	28.89	34.25	9.37	32.98	109	45	Average
5350.88	63.53	-10.47	74	51.91	34.81	9.74	32.93	109	45	Peak
5350	48.1	-5.9	54	36.48	34.81	9.74	32.93	109	45	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5020.85	58.51	-15.49	74	48.31	33.99	9.21	33	168	35	Peak
5019.95	45.11	-8.89	54	35	33.94	9.17	33	168	35	Average
5350.66	68.78	-5.22	74	57.16	34.81	9.74	32.93	168	35	Peak
5350	53.44	-0.56	54	41.82	34.81	9.74	32.93	168	35	Average

Test Mode :	Mode 102	Temperature :	22~24°C
Test Band :	802.11n HT40	Relative Humidity :	50~52%
Test Channel :	102	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	58.61	-9.69	68.3	46.47	35.11	9.94	32.91	156	317	Peak
5725	50.95	-17.35	68.3	38.96	35.33	9.92	33.26	156	317	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	63.4	-4.9	68.3	51.26	35.11	9.94	32.91	197	341	Peak
5725	51.51	-16.79	68.3	39.52	35.33	9.92	33.26	197	341	Peak

Test Mode :	Mode 25	Temperature :	22~24°C
Test Band :	802.11n HT40	Relative Humidity :	50~52%
Test Channel :	134	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	55.67	-12.63	68.3	43.53	35.11	9.94	32.91	152	321	Peak
5725	55.22	-13.08	68.3	43.23	35.33	9.92	33.26	152	321	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	57.04	-11.26	68.3	44.9	35.11	9.94	32.91	199	30	Peak
5725	59.5	-8.8	68.3	47.51	35.33	9.92	33.26	199	30	Peak

Test Mode :	Mode 26	Temperature :	22~24°C
Test Band :	802.11n HT40	Relative Humidity :	50~52%
Test Channel :	38	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5149.55	58.32	-15.68	74	47.59	34.29	9.41	32.97	105	22	Peak
5150	41.93	-12.07	54	31.2	34.29	9.41	32.97	105	22	Average
5405	53.37	-20.63	74	41.49	34.94	9.86	32.92	105	22	Peak
5406.43	40.06	-13.94	54	28.18	34.94	9.86	32.92	105	22	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5148.8	66.33	-7.67	74	55.6	34.29	9.41	32.97	105	22	Peak
5150	49.9	-4.1	54	39.17	34.29	9.41	32.97	105	22	Average
5359.13	56.42	-17.58	74	44.76	34.81	9.78	32.93	105	22	Peak
5356.82	42.68	-11.32	54	31.02	34.81	9.78	32.93	105	22	Average

Test Mode :	Mode 28	Temperature :	22~24°C
Test Band :	802.11n HT40	Relative Humidity :	50~52%
Test Channel :	134	Test Engineer :	Kyle Jhuang

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	53.18	-15.12	68.3	41.04	35.11	9.94	32.91	108	25	Peak
5725	52.44	-15.86	68.3	40.45	35.33	9.92	33.26	108	25	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5470	58.59	-9.71	68.3	46.45	35.11	9.94	32.91	108	25	Peak
5725	58.42	-9.88	68.3	46.43	35.33	9.92	33.26	108	25	Peak

3.3.7 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

Test Mode :	Mode 1	**Temperature :**	22~24°C
Test Channel :	36	**Relative Humidity :**	50~52%
Test Engineer :	Kyle Jhuang	**Polarization :**	Horizontal
Remark :	1. 5180 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5180	111.5	-	-	100.64	34.38	9.45	32.97	153	63	Peak
5180	100.03	-	-	89.17	34.38	9.45	32.97	153	63	Average

Test Mode :	Mode 1	**Temperature :**	22~24°C
Test Channel :	36	**Relative Humidity :**	50~52%
Test Engineer :	Kyle Jhuang	**Polarization :**	Vertical
Remark :	1. 5180 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5180	109.13	-	-	98.27	34.38	9.45	32.97	100	192	Peak
5180	97.25	-	-	86.39	34.38	9.45	32.97	100	192	Average

Test Mode :	Mode 2	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5132.45	44	-10	54	33.36	34.25	9.37	32.98	164	66	Average
5138	56.82	-17.18	74	46.18	34.25	9.37	32.98	164	66	Peak
5220	112.02	-	-	100.99	34.46	9.53	32.96	164	66	Peak
5220	100.63	-	-	89.6	34.46	9.53	32.96	164	66	Average
5448.23	54.82	-19.18	74	42.76	35.07	9.9	32.91	164	66	Peak
5460	41.21	-12.79	54	29.11	35.07	9.94	32.91	164	66	Average

Test Mode :	Mode 2	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5128.7	45.35	-8.65	54	34.71	34.25	9.37	32.98	103	20	Average
5134.85	58.23	-15.77	74	47.59	34.25	9.37	32.98	103	20	Peak
5220	113.83	-	-	102.8	34.46	9.53	32.96	103	20	Peak
5220	102.84	-	-	91.81	34.46	9.53	32.96	103	20	Average
5365.18	59.76	-14.24	74	48.06	34.85	9.78	32.93	103	20	Peak
5369.69	46.46	-7.54	54	34.76	34.85	9.78	32.93	103	20	Average

Test Mode :	Mode 3	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	110.16	-	-	99.08	34.51	9.53	32.96	100	51	Peak
5240	98.1	-	-	86.97	34.51	9.57	32.95	100	51	Average

Test Mode :	Mode 3	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	113.82	-	-	102.74	34.51	9.53	32.96	104	22	Peak
5240	102.24	-	-	91.11	34.51	9.57	32.95	104	22	Average

Test Mode :	Mode 4	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	114.11	-	-	102.94	34.55	9.57	32.95	136	50	Peak
5260	104.24	-	-	92.98	34.59	9.62	32.95	136	50	Average

Test Mode :	Mode 4	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	122.42	-	-	111.16	34.59	9.62	32.95	170	28	Peak
5260	111.05	-	-	99.79	34.59	9.62	32.95	170	28	Average

Test Mode :	Mode 5	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5012.3	47.22	-6.78	54	37.11	33.94	9.17	33	178	45	Average
5015	60.42	-13.58	74	50.31	33.94	9.17	33	178	45	Peak
5300	114.4	-	-	103	34.68	9.66	32.94	178	45	Peak
5300	104.7	-	-	93.3	34.68	9.66	32.94	178	45	Average
5350	46.79	-7.21	54	35.17	34.81	9.74	32.93	178	45	Average
5356.16	60.42	-13.58	74	48.76	34.81	9.78	32.93	178	45	Peak

Test Mode :	Mode 5	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5000.6	64.56	-9.44	74	54.49	33.9	9.17	33	169	33	Peak
5001.2	51.28	-2.72	54	41.21	33.9	9.17	33	169	33	Average
5300	121.42	-	-	110.02	34.68	9.66	32.94	169	33	Peak
5300	109.76	-	-	98.36	34.68	9.66	32.94	169	33	Average
5365.73	66.92	-7.08	74	55.22	34.85	9.78	32.93	169	33	Peak
5368.15	53.49	-0.51	54	41.79	34.85	9.78	32.93	169	33	Average

Test Mode :	Mode 6	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
66.45	29.26	-10.74	40	53.97	6.24	0.82	31.77	-	-	Peak
120.45	29.71	-13.79	43.5	48.53	11.7	1.1	31.62	-	-	Peak
249.51	35.37	-10.63	46	52.47	12.53	1.53	31.16	-	-	Peak
497.4	32.46	-13.54	46	42.88	18.04	2.44	30.9	-	-	Peak
624.8	33.81	-12.19	46	41.5	19.99	2.76	30.44	-	-	Peak
746.6	37.77	-8.23	46	43.95	21.3	3.05	30.53	100	57	Peak
5320	114.35	-	-	102.87	34.72	9.7	32.94	149	285	Peak
5320	103.77	-	-	92.29	34.72	9.7	32.94	149	285	Average

Test Mode :	Mode 6	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
67.26	32.72	-7.28	40	57.44	6.24	0.82	31.78	100	211	Peak
122.88	32.31	-11.19	43.5	51.09	11.7	1.12	31.6	-	-	Peak
240.06	29.74	-16.26	46	47.48	11.93	1.53	31.2	-	-	Peak
500.2	28.55	-17.45	46	38.89	18.1	2.45	30.89	-	-	Peak
622	35.46	-10.54	46	43.2	19.97	2.75	30.46	-	-	Peak
666.1	36.1	-9.9	46	43.29	20.33	2.87	30.39	-	-	Peak
5320	120.58	-	-	109.1	34.72	9.7	32.94	200	27	Peak
5320	108.86	-	-	97.38	34.72	9.7	32.94	200	27	Average

Test Mode :	Mode 7	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5199.8	57.07	-11.23	68.3	46.12	34.42	9.49	32.96	156	322	Peak
5456.24	58.12	-15.88	74	46.02	35.07	9.94	32.91	156	322	Peak
5406	44.9	-9.1	54	33.02	34.94	9.86	32.92	156	322	Average
5500	110.64	-	-	98.32	35.2	10.02	32.9	156	322	Peak
5500	98.57	-	-	86.25	35.2	10.02	32.9	156	322	Average

Test Mode :	Mode 7	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5203.2	62.43	-5.87	68.3	51.48	34.42	9.49	32.96	198	329	Peak
5459.12	62.31	-11.69	74	50.21	35.07	9.94	32.91	198	329	Peak
5460	49.23	-4.77	54	37.13	35.07	9.94	32.91	198	329	Average
5500	115.92	-	-	103.6	35.2	10.02	32.9	198	329	Peak
5500	103.87	-	-	91.55	35.2	10.02	32.9	198	329	Average

Test Mode :	Mode 8	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5232.4	63.31	-4.99	68.3	52.23	34.51	9.53	32.96	166	321	Peak
5350	47.55	-6.45	54	35.93	34.81	9.74	32.93	166	321	Average
5435.12	60.99	-13.01	74	48.97	35.03	9.9	32.91	166	321	Peak
5470	56.64	-11.66	68.3	44.5	35.11	9.94	32.91	166	321	Peak
5580	114.13	-	-	101.92	35.24	9.99	33.02	166	321	Peak
5580	101.58	-	-	89.37	35.24	9.99	33.02	166	321	Average
5725	55.17	-13.13	68.3	43.18	35.33	9.92	33.26	166	321	Peak

Test Mode :	Mode 8	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5307.4	65.46	-2.84	68.3	54.06	34.68	9.66	32.94	192	340	Peak
5350.16	49.74	-4.26	54	38.12	34.81	9.74	32.93	192	340	Average
5350.32	63.89	-10.11	74	52.27	34.81	9.74	32.93	192	340	Peak
5470	60.38	-7.92	68.3	48.24	35.11	9.94	32.91	192	340	Peak
5580	118.57	-	-	106.36	35.24	9.99	33.02	192	340	Peak
5580	107.46	-	-	95.25	35.24	9.99	33.02	192	340	Average
5725	58	-10.3	68.3	46.01	35.33	9.92	33.26	192	340	Peak

Test Mode :	Mode 9	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5218	61.03	-7.27	68.3	50	34.46	9.53	32.96	164	320	Peak
5460	59.48	-14.52	74	47.38	35.07	9.94	32.91	164	320	Peak
5368.08	46.66	-7.34	54	34.96	34.85	9.78	32.93	164	320	Average
5700	111.37	-	-	99.34	35.32	9.93	33.22	164	320	Peak
5700	99.38	-	-	87.36	35.31	9.93	33.22	164	320	Average

Test Mode :	Mode 9	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5312.2	65.37	-2.93	68.3	53.89	34.72	9.7	32.94	190	334	Peak
5371.28	51.82	-2.18	54	40.12	34.85	9.78	32.93	190	334	Average
5402.8	65.65	-8.35	74	53.81	34.94	9.82	32.92	190	334	Peak
5700	116.18	-	-	104.16	35.31	9.93	33.22	190	334	Peak
5700	104.03	-	-	92.01	35.31	9.93	33.22	190	334	Average

Test Mode :	Mode 10	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5180 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5180	113.42	-	-	102.56	34.38	9.45	32.97	100	66	Peak
5180	100.96	-	-	90.1	34.38	9.45	32.97	100	66	Average

Test Mode :	Mode 10	Temperature :	22~24°C
Test Channel :	36	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5180 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5180	114.01	-	-	103.15	34.38	9.45	32.97	195	330	Peak
5180	103.89	-	-	93.03	34.38	9.45	32.97	195	330	Average

Test Mode :	Mode 11	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5136.8	43.66	-10.34	54	33.02	34.25	9.37	32.98	125	63	Average
5002.25	57.31	-16.69	74	47.24	33.9	9.17	33	125	63	Peak
5220	111.26	-	-	100.23	34.46	9.53	32.96	125	63	Peak
5220	98.65	-	-	87.62	34.46	9.53	32.96	125	63	Average
5430.74	54.38	-19.62	74	42.36	35.03	9.9	32.91	125	63	Peak
5453.95	40.76	-13.24	54	28.66	35.07	9.94	32.91	125	63	Average

Test Mode :	Mode 11	Temperature :	22~24°C
Test Channel :	44	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5220 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5127.65	45.12	-8.88	54	34.48	34.25	9.37	32.98	103	20	Average
5129.9	57.96	-16.04	74	47.32	34.25	9.37	32.98	103	20	Peak
5220	113.42	-	-	102.39	34.46	9.53	32.96	103	20	Peak
5220	101.35	-	-	90.32	34.46	9.53	32.96	103	20	Average
5356.38	59.35	-14.65	74	47.69	34.81	9.78	32.93	103	20	Peak
5368.37	46.64	-7.36	54	34.94	34.85	9.78	32.93	103	20	Average

Test Mode :	Mode 12	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	108.62	-	-	97.54	34.51	9.53	32.96	100	30	Peak
5240	96.86	-	-	85.73	34.51	9.57	32.95	100	30	Average

Test Mode :	Mode 12	Temperature :	22~24°C
Test Channel :	48	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5240 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5240	110.39	-	-	99.31	34.51	9.53	32.96	100	31	Peak
5240	96.83	-	-	85.7	34.51	9.57	32.95	100	31	Average

Test Mode :	Mode 13	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	114.21	-	-	102.95	34.59	9.62	32.95	150	314	Peak
5260	104.32	-	-	93.06	34.59	9.62	32.95	150	314	Average

Test Mode :	Mode 13	Temperature :	22~24°C
Test Channel :	52	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5260 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5260	114.72	-	-	103.46	34.59	9.62	32.95	200	346	Peak
5260	106.6	-	-	95.34	34.59	9.62	32.95	200	346	Average

Test Mode :	Mode 14	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5001.2	58.36	-15.64	74	48.29	33.9	9.17	33	164	314	Peak
5031.2	45.4	-8.6	54	35.2	33.99	9.21	33	164	314	Average
5300	114.58	-	-	103.18	34.68	9.66	32.94	164	314	Peak
5300	104.58	-	-	93.18	34.68	9.66	32.94	164	314	Average
5367.93	57.59	-16.41	74	45.89	34.85	9.78	32.93	164	314	Peak
5368.48	44.61	-9.39	54	32.91	34.85	9.78	32.93	164	314	Average

Test Mode :	Mode 14	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5000	52.07	-1.93	54	42	33.9	9.17	33	170	27	Average
5003.75	65.33	-8.67	74	55.22	33.94	9.17	33	170	27	Peak
5300	114.97	-	-	103.57	34.68	9.66	32.94	170	27	Peak
5300	108.82	-	-	97.42	34.68	9.66	32.94	170	27	Average
5352.09	65.51	-8.49	74	53.89	34.81	9.74	32.93	170	27	Peak
5353.3	52.02	-1.98	54	40.4	34.81	9.74	32.93	170	27	Average

Test Mode :	Mode 15	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5320	114.07	-	-	102.59	34.72	9.7	32.94	163	320	Peak
5320	102.77	-	-	91.29	34.72	9.7	32.94	163	320	Average

Test Mode :	Mode 15	Temperature :	22~24°C
Test Channel :	64	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5320 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5320	114.74	-	-	103.26	34.72	9.7	32.94	198	322	Peak
5320	106.05	-	-	94.57	34.72	9.7	32.94	198	322	Average

Test Mode :	Mode 16	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5217.4	57.51	-10.79	68.3	46.48	34.46	9.53	32.96	156	321	Peak
5406.48	45.13	-8.87	54	33.25	34.94	9.86	32.92	156	321	Average
5407.28	57.93	-16.07	74	46.05	34.94	9.86	32.92	156	321	Peak
5500	109.33	-	-	97.09	35.16	9.98	32.9	156	321	Peak
5500	97.59	-	-	85.27	35.2	10.02	32.9	156	321	Average

Test Mode :	Mode 16	Temperature :	22~24°C
Test Channel :	100	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5500 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5223.2	63.58	-4.72	68.3	52.55	34.46	9.53	32.96	196	329	Peak
5460	60.28	-13.72	74	48.18	35.07	9.94	32.91	196	329	Peak
5460	47.97	-6.03	54	35.87	35.07	9.94	32.91	196	329	Average
5500	113.4	-	-	101.08	35.2	10.02	32.9	196	329	Peak
5500	101.63	-	-	89.31	35.2	10.02	32.9	196	329	Average

Test Mode :	Mode 17	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5217.4	63.77	-4.53	68.3	52.74	34.46	9.53	32.96	182	311	Peak
5459.28	60.8	-13.2	74	48.7	35.07	9.94	32.91	182	311	Peak
5460.08	47.48	-6.52	54	35.38	35.07	9.94	32.91	182	311	Average
5470	57.49	-10.81	68.3	45.35	35.11	9.94	32.91	182	311	Peak
5580	112.31	-	-	100.05	35.24	10	32.98	182	311	Peak
5580	100.84	-	-	88.63	35.24	9.99	33.02	182	311	Average
5725	54.02	-14.28	68.3	42.03	35.33	9.92	33.26	182	311	Peak

Test Mode :	Mode 17	Temperature :	22~24°C
Test Channel :	116	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5580 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5228.2	64.46	-3.84	68.3	53.38	34.51	9.53	32.96	194	341	Peak
5413.52	49	-5	54	37.08	34.98	9.86	32.92	194	341	Average
5413.68	62.3	-11.7	74	50.38	34.98	9.86	32.92	194	341	Peak
5470	60.8	-7.5	68.3	48.66	35.11	9.94	32.91	194	341	Peak
5580	117.93	-	-	105.72	35.24	9.99	33.02	194	341	Peak
5580	105.73	-	-	93.52	35.24	9.99	33.02	194	341	Average
5725	55.77	-12.53	68.3	43.78	35.33	9.92	33.26	194	341	Peak

Test Mode :	Mode 18	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5150	47.22	-6.78	54	36.49	34.29	9.41	32.97	100	42	Average
5151.6	60.33	-13.67	74	49.6	34.29	9.41	32.97	100	42	Peak
5700	109.07	-	-	97.04	35.32	9.93	33.22	175	35	Peak
5700	97.01	-	-	84.99	35.31	9.93	33.22	175	35	Average

Test Mode :	Mode 18	Temperature :	22~24°C
Test Channel :	140	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5700 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222.4	44.01	-9.99	54	32.98	34.46	9.53	32.96	100	146	Average
5224.2	56.84	-17.16	74	45.81	34.46	9.53	32.96	100	146	Peak
5700	113.5	-	-	101.48	35.31	9.93	33.22	192	332	Peak
5700	101.52	-	-	89.5	35.31	9.93	33.22	192	332	Average

Test Mode :	Mode 19	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5190	107.04	-	-	96.18	34.38	9.45	32.97	167	281	Peak
5190	93.88	-	-	82.97	34.38	9.49	32.96	167	281	Average

Test Mode :	Mode 19	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5190	110.81	-	-	99.9	34.38	9.49	32.96	160	20	Peak
5190	97.78	-	-	86.87	34.38	9.49	32.96	160	20	Average

Test Mode :	Mode 20	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5230 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5230	115.25	-	-	104.17	34.51	9.53	32.96	124	64	Peak
5230	102.15	-	-	91.07	34.51	9.53	32.96	124	64	Average

Test Mode :	Mode 20	Temperature :	22~24°C
Test Channel :	46	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5230 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5230	117.6	-	-	106.52	34.51	9.53	32.96	200	344	Peak
5230	105.25	-	-	94.17	34.51	9.53	32.96	200	344	Average

Test Mode :	Mode 21	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5270 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5270	113.55	-	-	102.29	34.59	9.62	32.95	161	66	Peak
5270	100.77	-	-	89.51	34.59	9.62	32.95	161	66	Average

Test Mode :	Mode 21	Temperature :	22~24°C
Test Channel :	54	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5270 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5270	118.63	-	-	107.37	34.59	9.62	32.95	172	27	Peak
5270	105.86	-	-	94.6	34.59	9.62	32.95	172	27	Average

Test Mode :	Mode 22	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5310 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5310	105.62	-	-	94.14	34.72	9.7	32.94	109	45	Peak
5310	92.76	-	-	81.28	34.72	9.7	32.94	109	45	Average

Test Mode :	Mode 22	Temperature :	22~24°C
Test Channel :	62	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5310 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5310	111.31	-	-	99.83	34.72	9.7	32.94	168	35	Peak
5310	98.43	-	-	86.95	34.72	9.7	32.94	168	35	Average

Test Mode :	Mode 23	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5510 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5214.2	55.36	-12.94	68.3	44.33	34.46	9.53	32.96	156	317	Peak
5449.04	55.68	-18.32	74	43.62	35.07	9.9	32.91	156	317	Peak
5460.08	42.62	-11.38	54	30.52	35.07	9.94	32.91	156	317	Average
5510	104.14	-	-	91.82	35.2	10.02	32.9	156	317	Peak
5510	91.31	-	-	78.99	35.2	10.02	32.9	156	317	Average

Test Mode :	Mode 23	Temperature :	22~24°C
Test Channel :	102	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5510 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5194.2	58.55	-9.75	68.3	47.6	34.42	9.49	32.96	197	341	Peak
5459.12	58.88	-15.12	74	46.78	35.07	9.94	32.91	197	341	Peak
5460	46.19	-7.81	54	34.09	35.07	9.94	32.91	197	341	Average
5510	107.72	-	-	95.4	35.2	10.02	32.9	197	341	Peak
5510	95	-	-	82.68	35.2	10.02	32.9	197	341	Average

Test Mode :	Mode 24	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5550 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5195.8	61.93	-6.37	68.3	50.98	34.42	9.49	32.96	156	321	Peak
5404.4	49.06	-4.94	54	37.18	34.94	9.86	32.92	156	321	Average
5432.4	62.34	-11.66	74	50.32	35.03	9.9	32.91	156	321	Peak
5470	60.07	-8.23	68.3	47.93	35.11	9.94	32.91	156	321	Peak
5550	110.23	-	-	97.94	35.22	10.01	32.94	156	321	Peak
5550	97.72	-	-	85.47	35.23	10	32.98	156	321	Average
5725	55.15	-13.15	68.3	43.16	35.33	9.92	33.26	156	321	Peak

Test Mode :	Mode 24	Temperature :	22~24°C
Test Channel :	110	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5550 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5222.6	65.55	-2.75	68.3	54.52	34.46	9.53	32.96	197	340	Peak
5452.24	64.69	-9.31	74	52.59	35.07	9.94	32.91	197	340	Peak
5460	51.46	-2.54	54	39.36	35.07	9.94	32.91	197	340	Average
5470	63.28	-5.02	68.3	51.14	35.11	9.94	32.91	197	340	Peak
5550	115.74	-	-	103.49	35.23	10	32.98	197	340	Peak
5550	102.13	-	-	89.88	35.23	10	32.98	197	340	Average
5725	57.09	-11.21	68.3	45.1	35.33	9.92	33.26	197	340	Peak

Test Mode :	Mode 25	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5670 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5220	61.65	-6.65	68.3	50.62	34.46	9.53	32.96	152	321	Peak
5370.48	58.52	-15.48	74	46.82	34.85	9.78	32.93	152	321	Peak
5442.16	45.6	-8.4	54	33.58	35.03	9.9	32.91	152	321	Average
5670	106.44	-	-	94.34	35.29	9.95	33.14	152	321	Peak
5670	94.4	-	-	82.34	35.3	9.94	33.18	152	321	Average

Test Mode :	Mode 25	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5670 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5318.4	67.78	-0.52	68.3	56.3	34.72	9.7	32.94	199	30	Peak
5363.28	64.68	-9.32	74	52.98	34.85	9.78	32.93	199	30	Peak
5364.56	51.72	-2.28	54	40.02	34.85	9.78	32.93	199	30	Average
5670	114.66	-	-	102.6	35.3	9.94	33.18	199	30	Peak
5670	101.44	-	-	89.38	35.3	9.94	33.18	199	30	Average

Test Mode :	Mode 26	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5190	96.38	-	-	85.47	34.38	9.49	32.96	105	22	Peak
5190	84.12	-	-	73.21	34.38	9.49	32.96	105	22	Average

Test Mode :	Mode 26	Temperature :	22~24°C
Test Channel :	38	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5190 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5190	109.77	-	-	98.86	34.38	9.49	32.96	105	22	Peak
5190	96.57	-	-	85.66	34.38	9.49	32.96	105	22	Average

Test Mode :	Mode 27	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
66.45	32.36	-7.64	40	57.07	6.24	0.82	31.77	-	-	Peak
151.77	31.78	-11.72	43.5	50.9	11.06	1.21	31.39	-	-	Peak
248.97	38.39	-7.61	46	55.49	12.53	1.53	31.16	100	85	Peak
499.5	31.81	-14.19	46	42.17	18.08	2.45	30.89	-	-	Peak
622	35.42	-10.58	46	43.16	19.97	2.75	30.46	-	-	Peak
747.3	38.03	-7.97	46	44.21	21.3	3.05	30.53	-	-	Peak
5088.5	49.58	-4.42	54	39.16	34.12	9.29	32.99	101	39	Average
5089.4	62.99	-11.01	74	52.53	34.16	9.29	32.99	101	39	Peak
5300	108.59	-	-	97.19	34.68	9.66	32.94	101	39	Peak
5300	97.71	-	-	86.31	34.68	9.66	32.94	101	39	Average
5431.84	54.05	-19.95	74	42.03	35.03	9.9	32.91	101	39	Peak
5460	41.41	-12.59	54	29.31	35.07	9.94	32.91	101	39	Average

Test Mode :	Mode 27	Temperature :	22~24°C
Test Channel :	60	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5300 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
66.45	33.45	-6.55	40	58.16	6.24	0.82	31.77	100	257	Peak
122.34	29.16	-14.34	43.5	47.96	11.7	1.11	31.61	-	-	Peak
248.97	31.06	-14.94	46	48.16	12.53	1.53	31.16	-	-	Peak
324.5	34.81	-11.19	46	50.18	13.98	1.83	31.18	-	-	Peak
624.8	35.35	-10.65	46	43.04	19.99	2.76	30.44	-	-	Peak
749.4	36.98	-9.02	46	43.11	21.34	3.06	30.53	-	-	Peak
5137.55	46.32	-7.68	54	35.68	34.25	9.37	32.98	101	39	Average
5139.05	59.41	-14.59	74	48.77	34.25	9.37	32.98	101	39	Peak
5300	118.62	-	-	107.22	34.68	9.66	32.94	101	39	Peak
5300	106.02	-	-	94.62	34.68	9.66	32.94	101	39	Average
5410.17	51.33	-2.67	54	39.45	34.94	9.86	32.92	101	39	Average
5412.92	65.37	-8.63	74	53.45	34.98	9.86	32.92	101	39	Peak

Test Mode :	Mode 28	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Horizontal
Remark :	1. 5670 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5312.6	57.32	-10.98	68.3	45.84	34.72	9.7	32.94	108	25	Peak
5391.28	43.07	-10.93	54	31.27	34.9	9.82	32.92	108	25	Average
5393.04	55.92	-18.08	74	44.12	34.9	9.82	32.92	108	25	Peak
5670	100.3	-	-	88.24	35.3	9.94	33.18	108	25	Peak
5670	87.41	-	-	75.35	35.3	9.94	33.18	108	25	Average

Test Mode :	Mode 28	Temperature :	22~24°C
Test Channel :	134	Relative Humidity :	50~52%
Test Engineer :	Kyle Jhuang	Polarization :	Vertical
Remark :	1. 5670 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5176.4	59.79	-8.51	68.3	48.93	34.38	9.45	32.97	108	25	Peak
5429.2	47.04	-6.96	54	35.02	35.03	9.9	32.91	108	25	Average
5429.68	60.11	-13.89	74	48.09	35.03	9.9	32.91	108	25	Peak
5670	110.78	-	-	98.72	35.3	9.94	33.18	108	25	Peak
5670	97.95	-	-	85.89	35.3	9.94	33.18	108	25	Average

3.4 Automatically Discontinue Transmission

3.4.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Result of Automatically Discontinue Transmission

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3.5 Antenna Requirements

3.5.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2) ,if transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.5.2 Antenna Connected Construction

The antennas types used in this product are Dipole Antenna, Panel Antenna, Patch Antenna and PIFA Antenna with non-standard connectors and it is considered to meet antenna requirement of FCC.

3.5.3 Antenna Gain

When the antenna gain of EUT is over 6 dBi, the maximum peak output power and PSD limit should be reduced as following table.

	11a	11n
Composite gain (dBi)	3.5	3.5
PSD Array gain (dBi)	3.01	0
Power limit reduction (dBi)	0	0
PSD limit reduction	0.51	0

Power limit reduction = Composite gain – 6dBi, (min = 0)

PSD limit reduction = Composite gain + PSD Array gain – 6dBi, (min = 0)

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Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = 10 log(N_{ANT}/N_{SS}=1) dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100055	9kHz~40GHz	Jun. 06, 2012	Sep. 04, 2012 ~ Oct. 19, 2012	Jun. 05, 2013	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	0932001	300MHz~40GHz	Sep. 21, 2011	Sep. 04, 2012 ~ Sep. 19, 20s12	Sep. 20, 2012	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	1036004	300MHz~40GHz	Sep. 08, 2012	Sep. 20, 2012 ~ Oct. 19, 2012	Sep. 07, 2013	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 21, 2011	Sep. 04, 2012 ~ Sep. 19, 2012	Sep. 20, 2012	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	1027253	300MHz~40GHz	Sep. 08, 2012	Sep. 20, 2012 ~ Oct. 19, 2012	Sep. 07, 2013	Conducted (TH02-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2726	30MHz ~ 1GHz	Oct. 22, 2011	Oct. 02, 2012 ~ Oct. 05, 2012	Oct. 21, 2012	Radiation (03CH07-HY)
Spectrum Analyzer	R&S	FSP30	101067	9KHz ~ 30GHz	Dec. 06, 2011	Oct. 02, 2012 ~ Oct. 05, 2012	Dec. 05, 2012	Radiation (03CH07-HY)
Double Ridge Horn Antenna	EMCO	3117	00066583	1GHz ~ 18GHz	Aug. 01, 2012	Oct. 02, 2012 ~ Oct. 05, 2012	Jul. 31, 2013	Radiation (03CH07-HY)
Pre Amplifier	Agilent	8449B	3008A02362	1GHz ~ 26.5GHz	Dec. 05, 2011	Oct. 02, 2012 ~ Oct. 05, 2012	Dec. 04, 2012	Radiation (03CH07-HY)
Pre Amplifier	COM-POWER	PA-103A	161241	10-1000MHz.32 dB.GAIN	Feb. 27, 2012	Oct. 02, 2012 ~ Oct. 05, 2012	Feb. 26, 2013	Radiation (03CH07-HY)
Signal Analyzer	Rohde & Schwarz	FSQ	200578/026	20Hz~26.5GHz	Feb. 06, 2012	Oct. 02, 2012 ~ Oct. 05, 2012	Feb. 05, 2013	Radiation (03CH07-HY)
Pre Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	159088	1GHz ~ 18GHz	Mar. 10, 2012	Oct. 02, 2012 ~ Oct. 05, 2012	Mar. 09, 2013	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz ~ 40GHz	Oct. 21, 2011	Oct. 02, 2012 ~ Oct. 05, 2012	Oct. 20, 2012	Radiation (03CH07-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9KHz ~ 30MHz	Jul. 03, 2012	Oct. 02, 2012 ~ Oct. 05, 2012	Jul. 02, 2014	Radiation (03CH07-HY)

5 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.54**

Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.72**