



FCC RF Test Report

APPLICANT : FUJITSU LIMITED
EQUIPMENT : FUJITSU STYLISTIC Q series
BRAND NAME : FUJITSU
MODEL NAME : Q507
FCC ID : EJE-WB0103
STANDARD : FCC Part 15 Subpart E §15.407
CLASSIFICATION : (NII) Unlicensed National Information Infrastructure

The product was received on Mar. 28, 2017 and testing was completed on Jun. 02, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in 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: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.



TABLE OF CONTENTS

SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant	5
1.2 Manufacturer	5
1.3 Product Feature of Equipment Under Test	5
1.4 Modification of EUT	5
1.5 Testing Location	6
1.6 Applicable Standards	6
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	7
2.1 Carrier Frequency Channel	8
2.2 Pre-Scanned RF Power	9
2.3 Test Mode	15
2.4 Connection Diagram of Test System	17
2.5 Support Unit used in test configuration and system	17
2.6 EUT Operation Test Setup	17
3 TEST RESULT	18
3.1 Unwanted Radiated Emission Measurement	18
3.2 AC Conducted Emission Measurement	24
3.3 Antenna Requirements	26
4 LIST OF MEASURING EQUIPMENT	27
5 UNCERTAINTY OF EVALUATION	28
APPENDIX A. AC CONDUCTED EMISSION TEST RESULT	
APPENDIX B. RADIATED SPURIOUS EMISSION	
APPENDIX C. RADIATED SPURIOUS EMISSION PLOTS	
APPENDIX D. DUTY CYCLE PLOTS	
APPENDIX E. SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR732858D	Rev. 01	Initial issue of report	Jun. 01, 2017
FR732858D	Rev. 02	Adding AC Conducted Emission test data	Jun. 05, 2017



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.407(b)	Unwanted Emissions	15.407(b) 15.209(a)	Pass	Under limit 2.17 dB at 5143.040 MHz
3.2	15.207	AC Conducted Emission	15.207(a)	Pass	Under limit 13.90 dB at 0.150 MHz
3.3	15.203 & 15.407(a)	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

FUJITSU LIMITED

1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, 211-8588 Japan

1.2 Manufacturer

FUJITSU LIMITED

1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, 211-8588 Japan

1.3 Product Feature of Equipment Under Test

Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac

Product Specification subjective to this standard	
Integrated WLAN Module	Brand Name: Intel Model Name: 7265D2W
Antenna Type	WLAN: PIFA Antenna Bluetooth: PIFA Antenna

1.4 Modification of EUT

No modifications are made to the EUT during all test items.

1.5 Testing Location

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	Sporton Site No.	
	TH05-HY	CO05-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.	
Test Site Location	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C. TEL: +86-0512-5790-0158 FAX: +86-0512-5790-0958	
Test Site No.	Sporton Site No.	FCC Registration No.
	03CH03-KS	306251

Note: The test site complies with ANSI C63.4 2014 requirement.

1.6 Applicable 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 D02 General UNII Test Procedures New Rules v01r04.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ FCC KDB 644545 D03 Guidance for IEEE 802.11ac New Rules v01.
- ♦ ANSI C63.10-2013

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5150-5250 MHz Band 1 (U-NII-1)	36	5180	44	5220
	38*	5190	46*	5230
	40	5200	48	5240
	42 [#]	5210		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5250-5350 MHz Band 2 (U-NII-2A)	52	5260	60	5300
	54*	5270	62*	5310
	56	5280	64	5320
	58 [#]	5290		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5470-5725 MHz Band 3 (U-NII-2C)	100	5500	112	5560
	102*	5510	116	5580
	104	5520	132	5660
	106 [#]	5530	134*	5670
	108	5540	136	5680
	110*	5550	140	5700

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
TDWR Channel	118*	5590	124	5620
	120	5600	126*	5630
	122 [#]	5610	128	5640

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
Straddle Channel	138 [#]	5690	144	5720
	142*	5710		

Note:

1. The above Frequency and Channel in "*" were 802.11n HT40 and 802.11ac VHT40.
2. The above Frequency and Channel in "[#]" were 802.11ac VHT80.



2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and data rate associated with the highest power were chosen for full test in the following tables.

SISO <Ant. 1>

5GHz 802.11a mode Output Power (dBm)			
Channel	CH 36	CH 44	CH 48
Frequency (MHz)	5180	5220	5240
Avg. Power	12.85	12.92	12.99

5GHz 802.11a mode Output Power (dBm)			
Channel	CH 52	CH 60	CH 64
Frequency (MHz)	5260	5300	5320
Avg. Power	12.83	12.85	12.89

5GHz 802.11a mode Output Power (dBm)			
Channel	CH 100	CH 116	CH 140
Frequency (MHz)	5500	5580	5700
Avg. Power	12.82	12.90	12.93

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 36	CH 44	CH 48
Frequency (MHz)	5180	5220	5240
Avg. Power	12.84	12.82	12.96

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 52	CH 60	CH 64
Frequency (MHz)	5260	5300	5320
Avg. Power	12.90	12.86	12.92

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 100	CH 116	CH 140
Frequency (MHz)	5500	5580	5700
Avg. Power	12.93	12.78	12.77

5GHz 802.11n HT40 mode Output Power (dBm)				
Channel	CH 38	CH 46	CH 54	CH 62
Frequency (MHz)	5190	5230	5270	5310
Avg. Power	12.89	12.99	12.71	12.90



5GHz 802.11n HT40 mode Output Power (dBm)			
Channel	CH 102	CH 110	CH134
Frequency (MHz)	5510	5550	5670
Avg. Power	12.98	12.93	12.86

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 36	CH 44	CH 48
Frequency (MHz)	5180	5220	5240
Avg. Power	12.78	12.91	12.83

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 52	CH 60	CH 64
Frequency (MHz)	5260	5300	5320
Avg. Power	12.64	12.77	12.78

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 100	CH 116	CH 140
Frequency (MHz)	5500	5580	5700
Avg. Power	12.96	12.68	12.82

5GHz 802.11n VHT40 mode Output Power (dBm)				
Channel	CH 38	CH 46	CH 54	CH 62
Frequency (MHz)	5190	5230	5270	5310
Avg. Power	12.83	12.89	12.74	12.77

5GHz 802.11n VHT40 mode Output Power (dBm)			
Channel	CH 102	CH 110	CH134
Frequency (MHz)	5510	5550	5670
Avg. Power	12.86	12.84	12.78

5GHz 802.11n VHT80 mode Output Power (dBm)				
Channel	CH 42	CH 58	CH106	CH122
Frequency (MHz)	5210	5290	5530	5610
Avg. Power	12.82	12.76	12.80	12.79



SISO <Ant. 2>

5GHz 802.11a mode Output Power (dBm)			
Channel	CH 36	CH 44	CH 48
Frequency (MHz)	5180	5220	5240
Avg. Power	12.65	12.90	12.86

5GHz 802.11a mode Output Power (dBm)			
Channel	CH 52	CH 60	CH 64
Frequency (MHz)	5260	5300	5320
Avg. Power	12.78	12.65	12.72

5GHz 802.11a mode Output Power (dBm)			
Channel	CH 100	CH 116	CH 140
Frequency (MHz)	5500	5580	5700
Avg. Power	12.70	12.89	12.76

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 36	CH 44	CH 48
Frequency (MHz)	5180	5220	5240
Avg. Power	12.81	12.78	12.91

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 52	CH 60	CH 64
Frequency (MHz)	5260	5300	5320
Avg. Power	12.81	12.75	12.87

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 100	CH 116	CH 140
Frequency (MHz)	5500	5580	5700
Avg. Power	12.91	12.71	12.76

5GHz 802.11n HT40 mode Output Power (dBm)				
Channel	CH 38	CH 46	CH 54	CH 62
Frequency (MHz)	5190	5230	5270	5310
Avg. Power	12.82	12.92	12.63	12.82



5GHz 802.11n HT40 mode Output Power (dBm)			
Channel	CH 102	CH 110	CH134
Frequency (MHz)	5510	5550	5670
Avg. Power	12.83	12.84	12.72

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 36	CH 44	CH 48
Frequency (MHz)	5180	5220	5240
Avg. Power	12.70	12.58	12.76

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 52	CH 60	CH 64
Frequency (MHz)	5260	5300	5320
Avg. Power	12.56	12.71	12.73

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 100	CH 116	CH 140
Frequency (MHz)	5500	5580	5700
Avg. Power	12.79	12.62	12.77

5GHz 802.11n VHT40 mode Output Power (dBm)				
Channel	CH 38	CH 46	CH 54	CH 62
Frequency (MHz)	5190	5230	5270	5310
Avg. Power	12.82	12.88	12.73	12.76

5GHz 802.11n VHT40 mode Output Power (dBm)			
Channel	CH 102	CH 110	CH134
Frequency (MHz)	5510	5550	5670
Avg. Power	12.78	12.73	12.70

5GHz 802.11n VHT80 mode Output Power (dBm)				
Channel	CH 42	CH 58	CH106	CH122
Frequency (MHz)	5210	5290	5530	5610
Avg. Power	12.73	12.61	12.79	12.73



MIMO <Ant. 1+2>

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 36	CH 44	CH 48
Frequency (MHz)	5180	5220	5240
Avg. Power	12.66	12.53	12.68

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 52	CH 60	CH 64
Frequency (MHz)	5260	5300	5320
Avg. Power	12.98	12.82	12.70

5GHz 802.11n HT20 mode Output Power (dBm)			
Channel	CH 100	CH 116	CH 140
Frequency (MHz)	5500	5580	5700
Avg. Power	12.85	12.62	12.60

5GHz 802.11n HT40 mode Output Power (dBm)				
Channel	CH 38	CH 46	CH 54	CH 62
Frequency (MHz)	5190	5230	5270	5310
Avg. Power	12.84	12.53	12.55	12.85

5GHz 802.11n HT40 mode Output Power (dBm)			
Channel	CH 102	CH 110	CH134
Frequency (MHz)	5510	5550	5670
Avg. Power	12.86	12.85	12.68

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 36	CH 44	CH 48
Frequency (MHz)	5180	5220	5240
Avg. Power	12.61	12.64	12.83

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 52	CH 60	CH 64
Frequency (MHz)	5260	5300	5320
Avg. Power	12.68	12.52	12.61

5GHz 802.11n VHT20 mode Output Power (dBm)			
Channel	CH 100	CH 116	CH 140
Frequency (MHz)	5500	5580	5700
Avg. Power	12.62	12.85	12.98



5GHz 802.11n VHT40 mode Output Power (dBm)				
Channel	CH 38	CH 46	CH 54	CH 62
Frequency (MHz)	5190	5230	5270	5310
Avg. Power	12.89	12.70	12.98	12.52

5GHz 802.11n VHT40 mode Output Power (dBm)			
Channel	CH 102	CH 110	CH134
Frequency (MHz)	5510	5550	5670
Avg. Power	12.64	12.83	12.87

5GHz 802.11n VHT80 mode Output Power (dBm)				
Channel	CH 42	CH 58	CH106	CH122
Frequency (MHz)	5210	5290	5530	5610
Avg. Power	12.91	12.75	12.98	12.64

2.3 Test Mode

Final test mode of conducted test items and radiated spurious emissions are considering the modulation and worse data rates from the power table described in section 2.2.

Single Antenna

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT80	MCS0

MIMO Antenna

Modulation	Data Rate
802.11n HT20	MCS0
802.11n HT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (5GHz) Link + Bluetooth Link + TC + TF
Remark: 1. TC stands for Test Configuration, and consists of Adapter, USB (USB device), SD Card, earphone, and HDMI Cable. 2. TF stands for Test Function, and consists of H-Pattern, MPEG4 and Camera.	

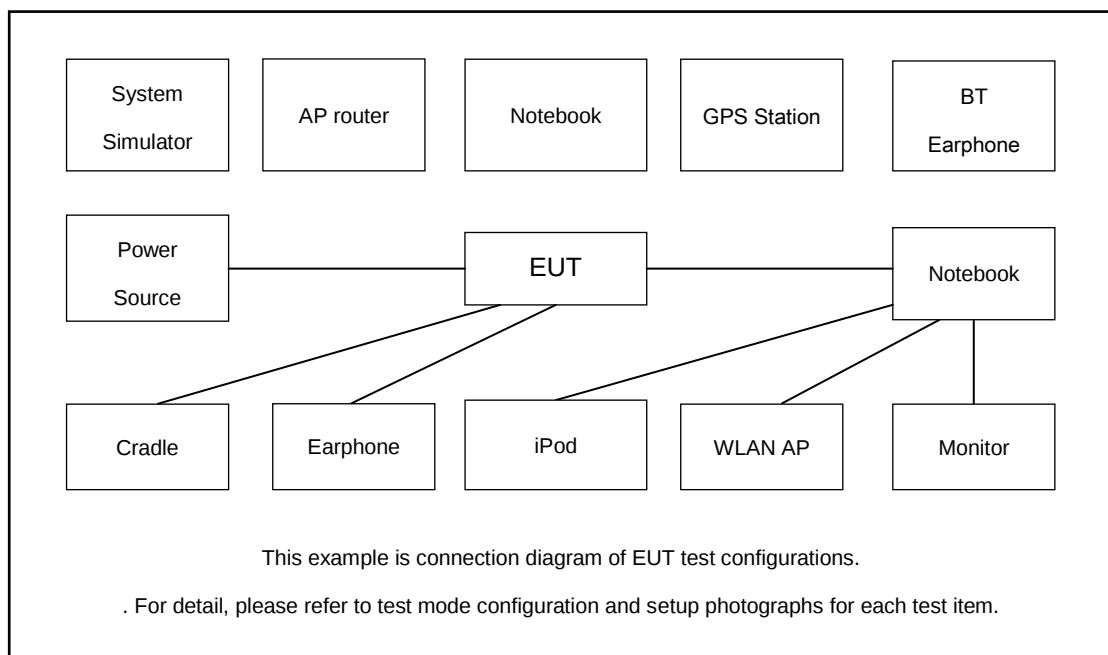


Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT20	802.11n HT20	802.11n HT20
L	Low	36	52	100
M	Middle	44	60	116
H	High	48	64	140
Straddle		-	-	144

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11n HT40	802.11n HT40	802.11n HT40
L	Low	38	54	102
M	Middle	-	-	110
H	High	46	62	134
Straddle		-	-	142

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ac VHT80	802.11ac VHT80	802.11ac VHT80
L	Low	-	-	-
M	Middle	42	58	106
H	High	-	-	-
Straddle		-	-	138

2.4 Connection Diagram of Test System



2.5 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	D-Link	DIR-865L	KA2IR865LA1	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	P20G	FCC DoC/ Contains FCC ID: QDS-BRCM1051	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	LCD Monitor	DELL	U2410	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
4.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
5.	USB HD	Lenovo	F310S	FCC DoC	Shielded, 0.5 m	N/A
6.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A
7.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

2.6 EUT Operation Test Setup

The RF test items, programmed RF utility, "DRTU" installed in the notebook make the EUT provide functions like channel selection and power level for continuous transmitting and receiving signals.

3 Test Result

3.1 Unwanted Radiated Emission Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.1.1 Limit of Unwanted Emissions

- (1) For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725MHz 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.

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



EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.3

(3) KDB789033 D01 v01r04 G)2)c)

- (i) Section 15.407(b)(1) to (b)(3) specify the unwanted emission limits for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz.³
- (ii) Section 15.407(b)(4) specifies the unwanted emission limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are in terms of a Peak detector. An alternative to the band emissions mask is specified in Section 15.407(b)(4)(ii). The alternative limits are based on the highest antenna gain specified in the filing. There are also marketing and importation restrictions for the devices using the alternative limit.⁴

Note 3: An out-of-band emission that complies with both the average and peak limits of Section 15.209 is not required to satisfy the -27 dBm/MHz peak emission limit.

Note 4: Only devices with antenna gains of 10 dBi or less may be approved using the emission limits specified in Section 15.247(d) till March 2, 2018; all other devices operating in this band must use the mask specified in Section 15.407(b)(4)(i).

3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.



3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v01r04.

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

- RBW = 1 MHz
- VBW $\geq$ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

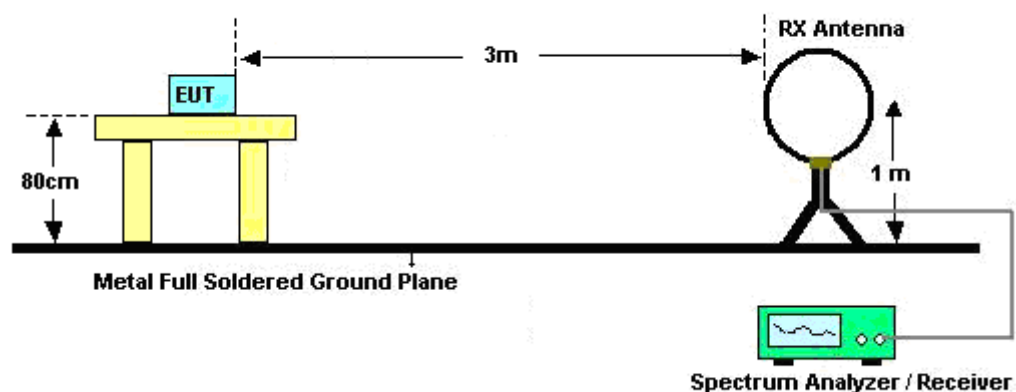
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW $\geq 1/T$, 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.

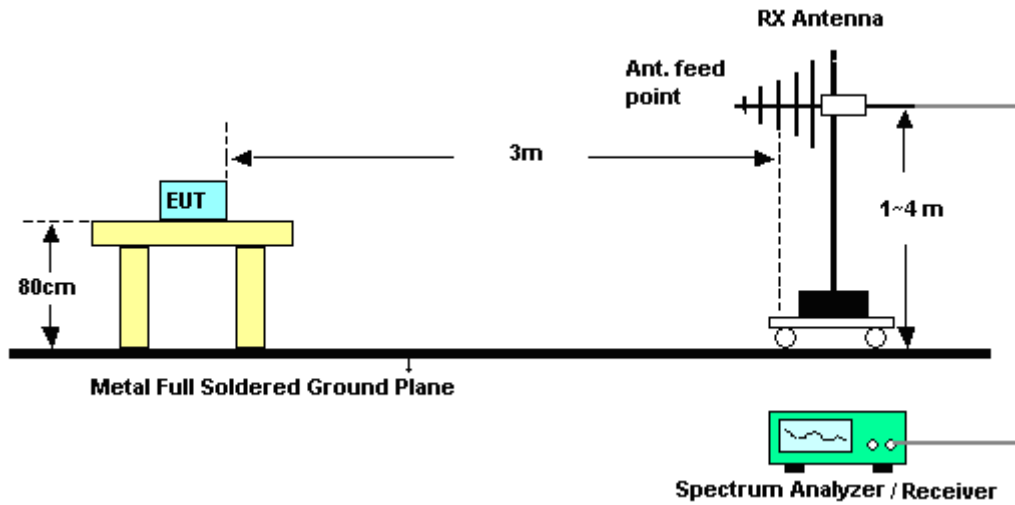
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband 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.

3.1.4 Test Setup

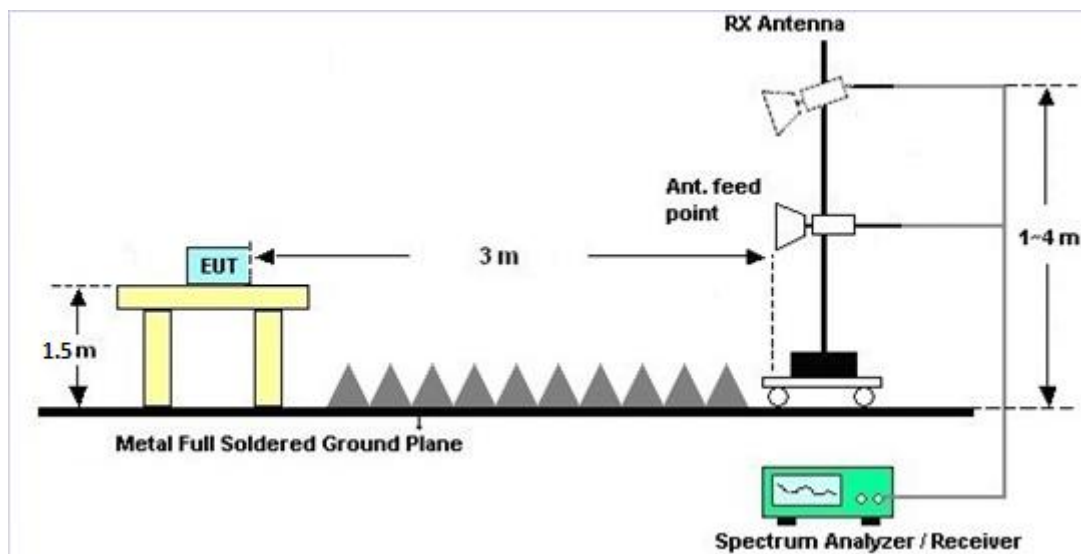
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





3.1.5 Test Results of Radiated Spurious 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 was not reported.

3.1.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.1.7 Duty Cycle

Please refer to Appendix D.

3.1.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix B and C.

3.2 AC Conducted Emission Measurement

3.2.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

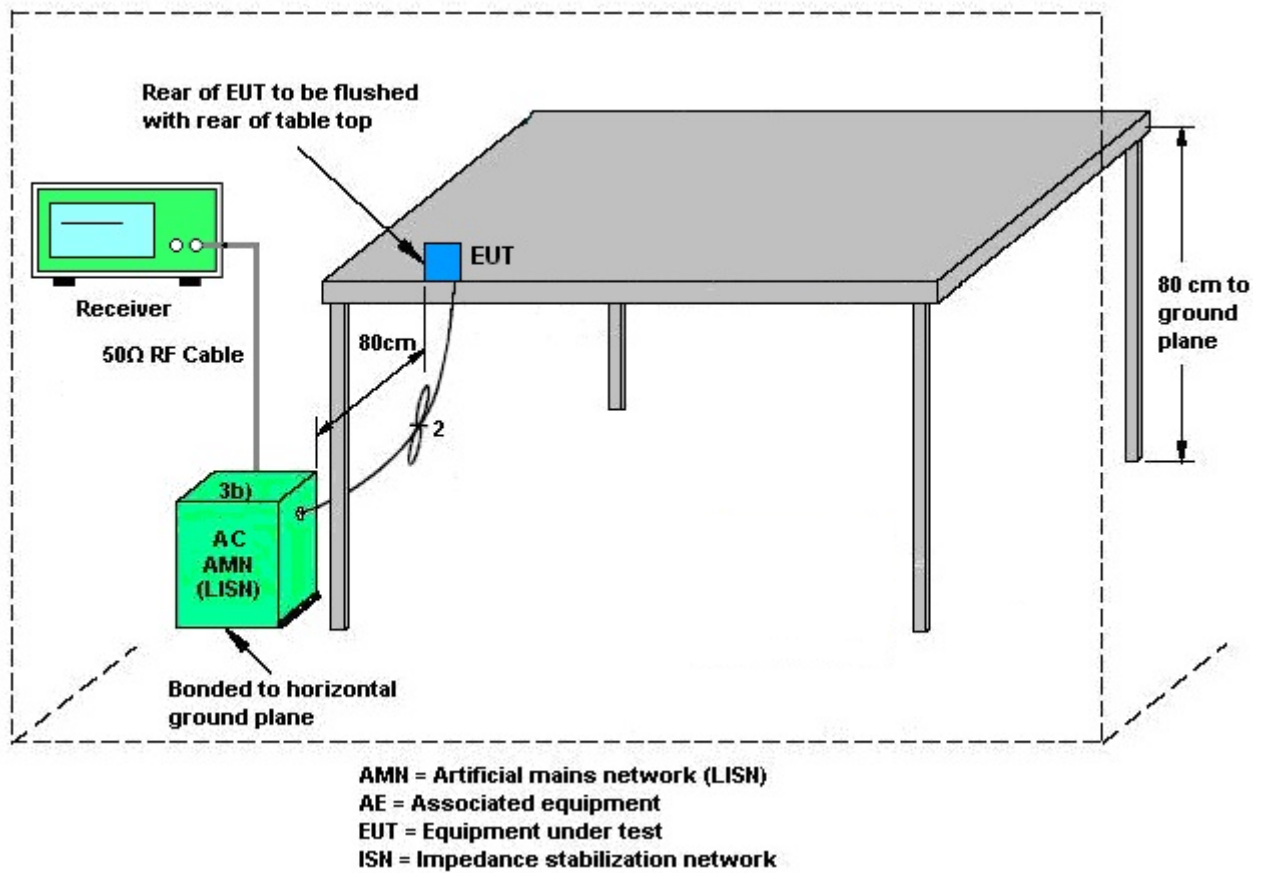
3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.2.4 Test Setup



3.2.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

3.3 Antenna Requirements

3.3.1 Standard Applicable

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.

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.3.3 Antenna Gain

CDD modes

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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 $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant 1 (dBi)	Ant 2 (dBi)				
Band I	-2.04	-2.91	-2.04	0.55	0.00	0.00
Band II	-1.88	-2.42	-1.88	0.86	0.00	0.00
Band III	-1.15	-1.19	-1.15	1.84	0.00	0.00

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

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



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Power Meter	Anritsu	ML2495A	0932001	300MHz~40GHz	Sep. 29, 2016	Apr. 29, 2017 ~ May 02, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	0846202	300MHz~40GHz	Sep. 29, 2016	Apr. 29, 2017 ~ May 02, 2017	Sep. 28, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Jul. 17, 2016	Apr. 29, 2017 ~ May 02, 2017	Jul. 16, 2017	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 02, 2017	N/A	Conduction (CO05-HY)
DC- LISN	Rohde & Schwarz	ESH3-Z6	100485	0.1MHz-200MHz	Jun. 04, 2016	Jun. 02, 2017	Jun. 03, 2017	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI 7	100724	9kHz~7GHz	Aug. 30, 2016	Jun. 02, 2017	Aug. 29, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 29, 2016	Jun. 02, 2017	Nov. 28, 2017	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 06, 2016	Jun. 02, 2017	Dec. 05, 2017	Conduction (CO05-HY)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct..22.2016	May 27, 2017 ~ May 29, 2017	Oct..21.2017	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44GHz	Apr. 18, 2017	May 27, 2017 ~ May 29, 2017	Apr.17, 2018	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 23, 2016	May 27, 2017 ~ May 29, 2017	Nov.22, 2017	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz-2GHz	Apr. 22, 2017	May 27, 2017 ~ May 29, 2017	Apr 21, 2018	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1356	1GHz~18GHz	Apr. 22, 2017	May 27, 2017 ~ May 29, 2017	Apr 21, 2018	Radiation (03CH03-KS)
SHF-EHF Horn	com-power	AH-840	101070	18GHz ~40GHz	Oct. 19, 2016	May 27, 2017 ~ May 29, 2017	Oct. 18, 2017	Radiation (03CH03-KS)
Amplifier	com-power	PA-103A	161069	1MHz ~1000MHz / 32 dB	Apr 18, 2017	May 27, 2017 ~ May 29, 2017	Apr 17, 2018	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840-35-H G	1887435	18~40GHz	Oct. 13, 2016	May 27, 2017 ~ May 29, 2017	Oct. 12, 2017	Radiation (03CH03-KS)
high gain Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	2025788	1Ghz-18Ghz	Apr. 18, 2017	May 27, 2017 ~ May 30, 2017	Apr. 17, 2018	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 13, 2016	May 27, 2017 ~ May 29, 2017	Oct. 12, 2017	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	May 27, 2017 ~ May 29, 2017	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	May 27, 2017 ~ May 29, 2017	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	May 27, 2017 ~ May 29, 2017	NCR	Radiation (03CH03-KS)



5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.7
--	-----

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.6
--	-----

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5
--	-----

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.5
--	-----



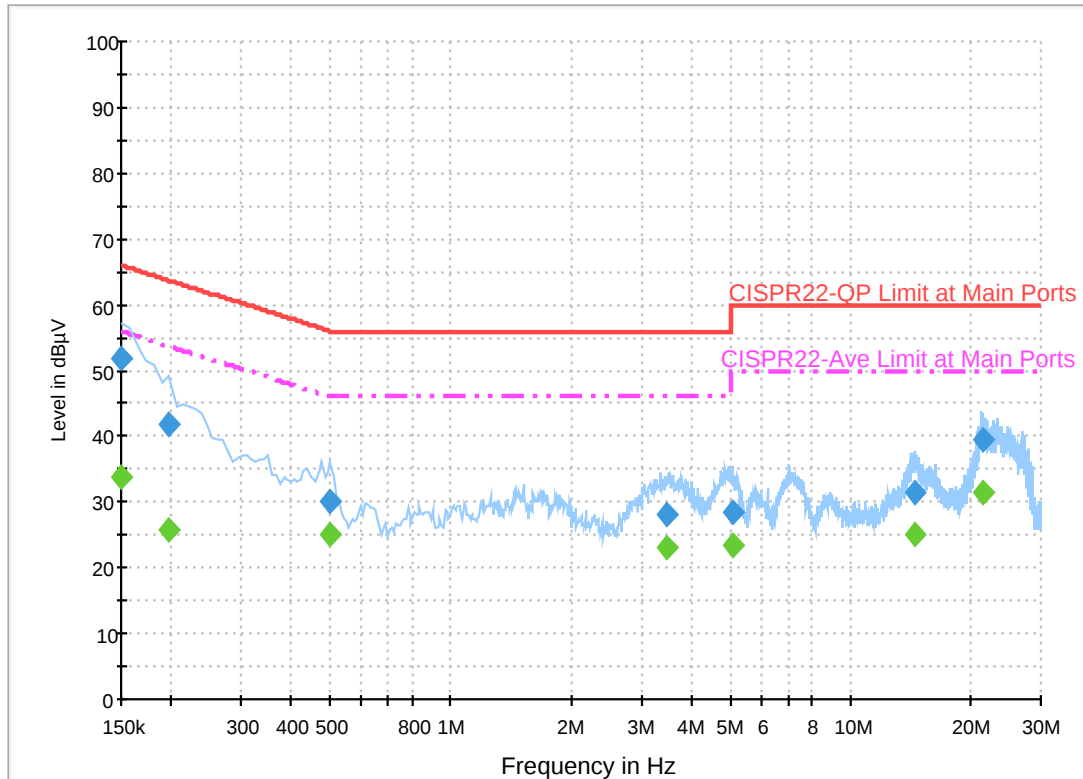
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Marlowe Ho	Temperature :	24~25°C
		Relative Humidity :	58~60%

EUT Information

Report NO : 732858
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

ENV216 Auto Test FCC Power Bar - L



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	52.0	Off	L1	19.6	14.0	66.0
0.198000	41.7	Off	L1	19.6	22.0	63.7
0.502000	30.2	Off	L1	19.6	25.8	56.0
3.478000	28.0	Off	L1	19.7	28.0	56.0
5.102000	28.4	Off	L1	19.8	31.6	60.0
14.470000	31.4	Off	L1	20.3	28.6	60.0
21.462000	39.4	Off	L1	20.7	20.6	60.0

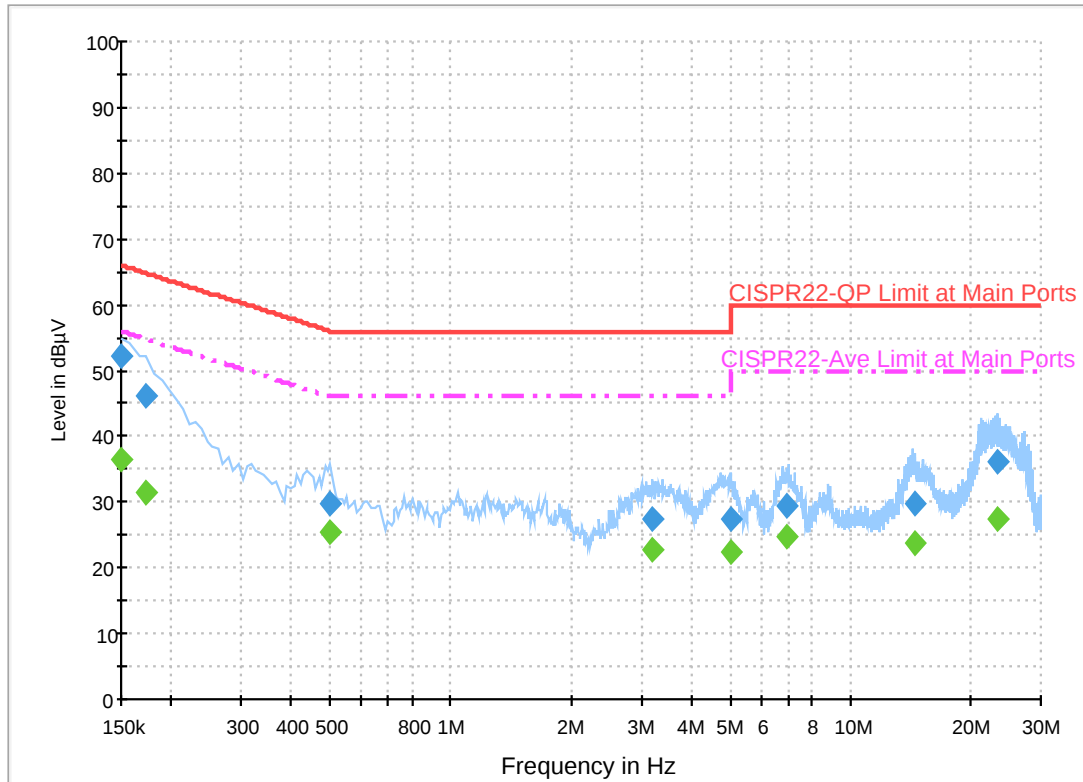
Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	33.7	Off	L1	19.6	22.3	56.0
0.198000	25.7	Off	L1	19.6	28.0	53.7
0.502000	25.0	Off	L1	19.6	21.0	46.0
3.478000	23.2	Off	L1	19.7	22.8	46.0
5.102000	23.5	Off	L1	19.8	26.5	50.0
14.470000	25.2	Off	L1	20.3	24.8	50.0
21.462000	31.3	Off	L1	20.7	18.7	50.0

EUT Information

Report NO : 732858
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Neutral

ENV216 Auto Test FCC Power Bar - N



Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	52.1	Off	N	19.5	13.9	66.0
0.174000	46.2	Off	N	19.5	18.6	64.8
0.502000	29.8	Off	N	19.5	26.2	56.0
3.190000	27.6	Off	N	19.6	28.4	56.0
5.038000	27.4	Off	N	19.8	32.6	60.0
6.918000	29.5	Off	N	19.9	30.5	60.0
14.478000	29.8	Off	N	20.4	30.2	60.0
23.294000	36.3	Off	N	20.9	23.7	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	36.5	Off	N	19.5	19.5	56.0
0.174000	31.5	Off	N	19.5	23.3	54.8
0.502000	25.5	Off	N	19.5	20.5	46.0
3.190000	22.7	Off	N	19.6	23.3	46.0
5.038000	22.3	Off	N	19.8	27.7	50.0
6.918000	24.7	Off	N	19.9	25.3	50.0
14.478000	23.9	Off	N	20.4	26.1	50.0
23.294000	27.3	Off	N	20.9	22.7	50.0



Appendix B. Radiated Spurious Emission

Test Engineer :	Rich Sun	Temperature :	21~23°C
		Relative Humidity :	41~43%

Band 1 - 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		5147.2	51.18	-22.82	74	48.62	31.17	7.92	36.53	100	192	P	H
		5150	40.71	-13.29	54	38.15	31.17	7.92	36.53	100	192	A	H
	*	5184	96	-	-	93.44	31.14	7.94	36.52	100	192	P	H
	*	5184	88.72	-	-	86.16	31.14	7.94	36.52	100	192	A	H
													H
													H
		5147.04	53.5	-20.5	74	50.94	31.17	7.92	36.53	327	166	P	V
		5150	41.84	-12.16	54	39.28	31.17	7.92	36.53	327	166	A	V
	*	5176	97.81	-	-	95.25	31.14	7.94	36.52	327	166	P	V
	*	5176	90.41	-	-	87.85	31.14	7.94	36.52	327	166	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5133.92	46.88	-27.12	74	44.32	31.19	7.91	36.54	100	195	P	H
		5148.64	37.55	-16.45	54	34.99	31.17	7.92	36.53	100	195	A	H
	*	5222	96.08	-	-	93.48	31.11	7.99	36.5	100	195	P	H
	*	5222	88.77	-	-	86.17	31.11	7.99	36.5	100	195	A	H
		5373.36	44.91	-29.09	74	41.98	30.96	8.39	36.42	100	195	P	H
		5378.94	36.33	-17.67	54	33.38	30.94	8.43	36.42	100	195	A	H
		5148.48	47.44	-26.56	74	44.88	31.17	7.92	36.53	340	160	P	V
		5148.16	37.81	-16.19	54	35.25	31.17	7.92	36.53	340	160	A	V
	*	5218	97.71	-	-	95.11	31.11	7.99	36.5	340	160	P	V
	*	5218	90.4	-	-	87.8	31.11	7.99	36.5	340	160	A	V
		5379.48	44.99	-29.01	74	42.04	30.94	8.43	36.42	340	160	P	V
		5376.6	36.5	-17.5	54	33.57	30.96	8.39	36.42	340	160	A	V



802.11n HT20 CH 48 5240MHz	*	5236	96.31	-	-	93.67	31.09	8.04	36.49	100	205	P	H
	*	5236	89.01	-	-	86.37	31.09	8.04	36.49	100	205	A	H
		5374.44	45.32	-28.68	74	42.39	30.96	8.39	36.42	100	205	P	H
		5357.7	36.75	-17.25	54	33.86	30.98	8.34	36.43	100	205	A	H
													H
													H
	*	5238	96.45	-	-	93.81	31.09	8.04	36.49	292	79	P	V
	*	5238	88.97	-	-	86.33	31.09	8.04	36.49	292	79	A	V
		5398.74	46.64	-27.36	74	43.64	30.93	8.48	36.41	292	79	P	V
		5396.04	36.52	-17.48	54	33.52	30.93	8.48	36.41	292	79	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	39.6	-34.4	74	56.51	37.4	11.84	66.15	100	0	P	H
		15540	48.24	-25.76	74	58.84	39.56	15.04	65.2	300	0	P	H
													H
													H
		10360	39.47	-34.53	74	56.38	37.4	11.84	66.15	300	360	P	V
		15540	46.49	-27.51	74	57.09	39.56	15.04	65.2	300	0	P	V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	39.35	-34.65	74	56.09	37.47	11.89	66.1	100	360	P	H
		15660	56.47	-17.53	74	67.12	39.75	15.15	65.55	290	245	P	H
		15660	45.15	-8.85	54	55.8	39.75	15.15	65.55	290	245	A	H
													H
		10440	41.09	-32.91	74	57.83	37.47	11.89	66.1	100	0	P	V
		15660	56.75	-17.25	74	67.4	39.75	15.15	65.55	300	96	P	V
		15660	45.51	-8.49	54	56.16	39.75	15.15	65.55	300	96	A	V
													V
802.11n HT20 CH 48 5240MHz		10480	40.37	-33.63	74	57	37.52	11.92	66.07	300	360	P	H
		15720	46.32	-27.68	74	56.99	39.86	15.22	65.75	300	0	P	H
													H
													H
		10480	40.79	-33.21	74	57.42	37.52	11.92	66.07	300	0	P	V
		15720	47.98	-26.02	74	58.65	39.86	15.22	65.75	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5145.6	56.16	-17.84	74	53.6	31.17	7.92	36.53	351	115	P	H
	!	5150	48.71	-5.29	54	46.15	31.17	7.92	36.53	351	115	A	H
	*	5186	95.95	-	-	93.39	31.14	7.94	36.52	351	115	P	H
	*	5186	88.67	-	-	86.11	31.14	7.94	36.52	351	115	A	H
		5363.46	45.5	-28.5	74	42.57	30.96	8.39	36.42	351	115	P	H
		5358.42	36.7	-17.3	54	33.81	30.98	8.34	36.43	351	115	A	H
		5149.44	51.56	-22.44	74	49	31.17	7.92	36.53	400	267	P	V
		5150	42.97	-11.03	54	40.41	31.17	7.92	36.53	400	267	A	V
	*	5196	91.68	-	-	89.12	31.12	7.95	36.51	400	267	P	V
	*	5196	85.14	-	-	82.58	31.12	7.95	36.51	400	267	A	V
		5358.6	44.45	-29.55	74	41.56	30.98	8.34	36.43	400	267	P	V
		5367.24	35.73	-18.27	54	32.8	30.96	8.39	36.42	400	267	A	V
802.11n HT40 CH 46 5230MHz		5149.6	49.86	-24.14	74	47.3	31.17	7.92	36.53	331	117	P	H
		5149.12	41.95	-12.05	54	39.39	31.17	7.92	36.53	331	117	A	H
	*	5226	96.69	-	-	94.05	31.09	8.04	36.49	331	117	P	H
	*	5226	89.55	-	-	86.91	31.09	8.04	36.49	331	117	A	H
		5356.44	46.45	-27.55	74	43.56	30.98	8.34	36.43	331	117	P	H
		5392.44	38.09	-15.91	54	35.14	30.94	8.43	36.42	331	117	A	H
		5103.68	46.84	-27.16	74	44.28	31.22	7.9	36.56	397	267	P	V
		5149.44	38.13	-15.87	54	35.57	31.17	7.92	36.53	397	267	A	V
	*	5222	92.33	-	-	89.73	31.11	7.99	36.5	397	267	P	V
	*	5222	84.62	-	-	82.02	31.11	7.99	36.5	397	267	A	V
		5361.12	45.92	-28.08	74	42.99	30.96	8.39	36.42	397	267	P	V
		5358.06	36.23	-17.77	54	33.34	30.98	8.34	36.43	397	267	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n VHT80 CH42 5210MHz		5132.48	62.43	-11.57	74	59.87	31.19	7.91	36.54	341	111	P	H
	!	5143.04	51.83	-2.17	54	49.27	31.17	7.92	36.53	341	111	A	H
	*	5188	93	-	-	90.44	31.14	7.94	36.52	341	111	P	H
	*	5188	85.82	-	-	83.26	31.14	7.94	36.52	341	111	A	H
		5354.28	46.75	-27.25	74	43.86	30.98	8.34	36.43	341	111	P	H
		5350.5	38.43	-15.57	54	35.54	30.98	8.34	36.43	341	111	A	H
		5148.48	56.44	-17.56	74	53.88	31.17	7.92	36.53	100	286	P	V
		5138.72	45.29	-8.71	54	42.73	31.19	7.91	36.54	100	286	A	V
	*	5196	87.22	-	-	84.66	31.12	7.95	36.51	100	286	P	V
	*	5196	80.3	-	-	77.74	31.12	7.95	36.51	100	286	A	V
		5359.68	45.55	-28.45	74	42.66	30.98	8.34	36.43	100	286	P	V
		5353.02	37.31	-16.69	54	34.42	30.98	8.34	36.43	100	286	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		5130.4	47.65	-26.35	74	45.09	31.19	7.91	36.54	100	205	P	H
		5146.56	37.84	-16.16	54	35.28	31.17	7.92	36.53	100	205	A	H
	*	5264	97.59	-	-	94.88	31.06	8.12	36.47	100	205	P	H
	*	5264	90.07	-	-	87.36	31.06	8.12	36.47	100	205	A	H
													H
													H
		5115.2	47.21	-26.79	74	44.65	31.2	7.91	36.55	299	160	P	V
		5147.68	37.83	-16.17	54	35.27	31.17	7.92	36.53	299	160	A	V
	*	5264	98.05	-	-	95.34	31.06	8.12	36.47	299	160	P	V
	*	5264	90.86	-	-	88.15	31.06	8.12	36.47	299	160	A	V
													V
													V
802.11n HT20 CH 60 5300MHz		5144	46.88	-27.12	74	44.32	31.17	7.92	36.53	100	203	P	H
		5143.04	37.56	-16.44	54	35	31.17	7.92	36.53	100	203	A	H
	*	5302	97.48	-	-	94.71	31.02	8.21	36.46	100	203	P	H
	*	5302	90.34	-	-	87.57	31.02	8.21	36.46	100	203	A	H
		5393.9	46.8	-27.2	74	43.85	30.94	8.43	36.42	100	203	P	H
		5359.1	37.89	-16.11	54	35	30.98	8.34	36.43	100	203	A	H
		5140.64	48.01	-25.99	74	45.45	31.17	7.92	36.53	317	160	P	V
		5143.2	37.8	-16.2	54	35.24	31.17	7.92	36.53	317	160	A	V
	*	5304	97.8	-	-	95.03	31.02	8.21	36.46	317	160	P	V
	*	5304	90.24	-	-	87.47	31.02	8.21	36.46	317	160	A	V
		5350.01	48.11	-25.89	74	45.22	30.98	8.34	36.43	317	160	P	V
		5350.5	37.41	-16.59	54	34.52	30.98	8.34	36.43	317	160	A	V



802.11n HT20 CH 64 5320MHz	*	5318	97.67	-	-	94.85	31.01	8.26	36.45	100	203	P	H
	*	5318	89.71	-	-	86.89	31.01	8.26	36.45	100	203	A	H
		5356.9	48.35	-25.65	74	45.46	30.98	8.34	36.43	100	203	P	H
		5350.2	39.53	-14.47	54	36.64	30.98	8.34	36.43	100	203	A	H
													H
													H
	*	5316	96.07	-	-	93.25	31.01	8.26	36.45	329	161	P	V
	*	5316	88.97	-	-	86.15	31.01	8.26	36.45	329	161	A	V
		5351.1	48.44	-25.56	74	45.55	30.98	8.34	36.43	329	161	P	V
		5350.5	38.88	-15.12	54	35.99	30.98	8.34	36.43	329	161	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	37.96	-36.04	74	54.5	37.56	11.94	66.04	100	360	P	H
		15780	45.21	-28.79	74	55.91	39.94	15.27	65.91	100	0	P	H
													H
													H
		10520	39.73	-34.27	74	56.27	37.56	11.94	66.04	100	360	P	V
		15780	46.79	-27.21	74	57.49	39.94	15.27	65.91	100	0	P	V
													V
													V
802.11n HT20 CH 60 5300MHz		10600	39.37	-34.63	74	55.7	37.65	12	65.98	100	360	P	H
													H
													H
													H
		10600	38.52	-35.48	74	54.85	37.65	12	65.98	100	360	P	V
													V
													V
													V
802.11n HT20 CH 64 5320MHz		10640	39.47	-34.53	74	55.73	37.68	12.02	65.96	100	0	P	H
		15960	46.57	-27.43	74	57.34	40.24	15.45	66.46	100	360	P	H
													H
													H
		10640	39.72	-34.28	74	55.98	37.68	12.02	65.96	100	360	P	V
		15960	47.42	-26.58	74	58.19	40.24	15.45	66.46	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5110.24	47.11	-26.89	74	44.55	31.2	7.91	36.55	335	123	P	H
		5145.28	38.45	-15.55	54	35.89	31.17	7.92	36.53	335	123	A	H
	*	5262	94.51	-	-	91.8	31.06	8.12	36.47	335	123	P	H
	*	5262	87.1	-	-	84.39	31.06	8.12	36.47	335	123	A	H
		5355.2	46.5	-27.5	74	43.61	30.98	8.34	36.43	335	123	P	H
		5396.5	37.83	-16.17	54	34.83	30.93	8.48	36.41	335	123	A	H
		5117.44	45.97	-28.03	74	43.41	31.2	7.91	36.55	100	286	P	V
		5116.8	36.88	-17.12	54	34.32	31.2	7.91	36.55	100	286	A	V
	*	5262	90.54	-	-	87.83	31.06	8.12	36.47	100	286	P	V
	*	5262	83.07	-	-	80.36	31.06	8.12	36.47	100	286	A	V
		5393.6	45.29	-28.71	74	42.34	30.94	8.43	36.42	100	286	P	V
		5399.2	36.82	-17.18	54	33.82	30.93	8.48	36.41	100	286	A	V
802.11n HT40 CH 62 5310MHz		5129.28	46.64	-27.36	74	44.08	31.19	7.91	36.54	329	113	P	H
		5146.56	38.24	-15.76	54	35.68	31.17	7.92	36.53	329	113	A	H
	*	5314	94.88	-	-	92.06	31.01	8.26	36.45	329	113	P	H
	*	5314	87.05	-	-	84.23	31.01	8.26	36.45	329	113	A	H
		5350.9	55.04	-18.96	74	52.15	30.98	8.34	36.43	329	113	P	H
		5350	45.63	-8.37	54	42.74	30.98	8.34	36.43	329	113	A	H
		5116	45.18	-28.82	74	42.62	31.2	7.91	36.55	100	291	P	V
		5147.2	36.56	-17.44	54	34	31.17	7.92	36.53	100	291	A	V
	*	5314	91.15	-	-	88.33	31.01	8.26	36.45	100	291	P	V
	*	5314	83.34	-	-	80.52	31.01	8.26	36.45	100	291	A	V
		5350	49.8	-24.2	74	46.91	30.98	8.34	36.43	100	291	P	V
		5350.2	42.3	-11.7	54	39.41	30.98	8.34	36.43	100	291	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5146.88	49.36	-24.64	74	46.8	31.17	7.92	36.53	335	111	P	H
		5148.32	39.82	-14.18	54	37.26	31.17	7.92	36.53	335	111	A	H
	*	5276	92.12	-	-	89.38	31.04	8.17	36.47	335	111	P	H
	*	5276	85	-	-	82.26	31.04	8.17	36.47	335	111	A	H
		5357.9	63.08	-10.92	74	60.19	30.98	8.34	36.43	335	111	P	H
	!	5355	50.84	-3.16	54	47.95	30.98	8.34	36.43	335	111	A	H
		5145.6	45.94	-28.06	74	43.38	31.17	7.92	36.53	100	292	P	V
		5148.32	36.85	-17.15	54	34.29	31.17	7.92	36.53	100	292	A	V
	*	5304	88.18	-	-	85.41	31.02	8.21	36.46	100	292	P	V
	*	5304	80.73	-	-	77.96	31.02	8.21	36.46	100	292	A	V
		5363	57.53	-16.47	74	54.6	30.96	8.39	36.42	100	292	P	V
	!	5354.9	48.55	-5.45	54	45.66	30.98	8.34	36.43	100	292	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		5453.84	46.37	-27.63	74	43.49	30.88	8.38	36.38	119	343	P	H
		5449.04	37.93	-16.07	54	35.05	30.88	8.38	36.38	119	343	A	H
	*	5496	94.83	-	-	92.03	30.85	8.32	36.37	119	343	P	H
	*	5496	87.68	-	-	84.88	30.85	8.32	36.37	119	343	A	H
													H
													H
		5466.32	47.59	-26.41	74	44.75	30.86	8.35	36.37	325	111	P	V
		5449.2	37.6	-16.4	54	34.72	30.88	8.38	36.38	325	111	A	V
	*	5496	94.41	-	-	91.61	30.85	8.32	36.37	325	111	P	V
	*	5496	87.08	-	-	84.28	30.85	8.32	36.37	325	111	A	V
													V
													V
802.11n HT20 CH 116 5580MHz		5429.2	45.69	-28.31	74	42.78	30.89	8.41	36.39	220	265	P	H
		5469.2	35.9	-18.1	54	33.06	30.86	8.35	36.37	220	265	A	H
	*	5582	92.38	-	-	89.82	30.75	8.13	36.32	220	265	P	H
	*	5582	84.86	-	-	82.3	30.75	8.13	36.32	220	265	A	H
		5743.32	47.66	-26.34	74	44.16	31.44	8.34	36.28	220	265	P	H
		5738.52	36.96	-17.04	54	33.46	31.44	8.34	36.28	220	265	A	H
		5453.04	45.79	-28.21	74	42.91	30.88	8.38	36.38	301	0	P	V
		5468.88	36.76	-17.24	54	33.92	30.86	8.35	36.37	301	0	A	V
	*	5578	94.58	-	-	91.98	30.76	8.16	36.32	301	0	P	V
	*	5578	87.24	-	-	84.64	30.76	8.16	36.32	301	0	A	V
		5742.84	46.16	-27.84	74	42.66	31.44	8.34	36.28	301	0	P	V
		5744.36	37.09	-16.91	54	33.59	31.44	8.34	36.28	301	0	A	V



802.11n HT20 CH 140 5700MHz	*	5698	94.36	-	-	91.33	31.07	8.25	36.29	100	348	P	H
	*	5698	87.29	-	-	84.26	31.07	8.25	36.29	100	348	A	H
		5753.24	48.18	-25.82	74	44.53	31.56	8.37	36.28	100	348	P	H
		5725.01	39.02	-14.98	54	35.67	31.32	8.31	36.28	100	348	A	H
													H
													H
	*	5696	95.57	-	-	92.54	31.07	8.25	36.29	298	0	P	V
	*	5696	88.05	-	-	85.02	31.07	8.25	36.29	298	0	A	V
		5729.56	49.92	-24.08	74	46.57	31.32	8.31	36.28	298	0	P	V
		5725.01	39.33	-14.67	54	35.98	31.32	8.31	36.28	298	0	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		11000	40.39	-33.61	74	55.78	38.06	12.25	65.7	100	0	P	H
		16500	49.73	-24.27	74	58.59	40.55	15.54	64.95	100	360	P	H
													H
													H
		11000	41.45	-32.55	74	56.84	38.06	12.25	65.7	100	0	P	V
		16500	50.6	-23.4	74	59.46	40.55	15.54	64.95	200	360	P	V
													V
													V
802.11n HT20 CH 116 5580MHz		11160	40.23	-33.77	74	55.21	38.24	12.36	65.58	100	0	P	H
													H
													H
													H
		11160	40.71	-33.29	74	55.69	38.24	12.36	65.58	100	0	P	V
													V
													V
													V
802.11n HT20 CH 140 5700MHz		11400	41.03	-32.97	74	55.43	38.49	12.52	65.41	100	0	P	H
													H
													H
													H
		11400	40.06	-33.94	74	54.46	38.49	12.52	65.41	100	360	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5469.04	53.38	-20.62	74	50.54	30.86	8.35	36.37	314	111	P	H
		5469.52	47.11	-6.89	54	44.27	30.86	8.35	36.37	314	111	A	H
	*	5504	96.07	-	-	93.31	30.83	8.29	36.36	314	111	P	H
	*	5504	88.69	-	-	85.93	30.83	8.29	36.36	314	111	A	H
		5756.6	45.68	-28.32	74	42.03	31.56	8.37	36.28	314	111	P	H
		5754.2	37.2	-16.8	54	33.55	31.56	8.37	36.28	314	111	A	H
		5467.92	51.17	-22.83	74	48.33	30.86	8.35	36.37	100	299	P	V
		5470	43.34	-10.66	54	40.5	30.86	8.35	36.37	100	299	A	V
	*	5502	94.13	-	-	91.37	30.83	8.29	36.36	100	299	P	V
	*	5502	86.93	-	-	84.17	30.83	8.29	36.36	100	299	A	V
		5734.92	45.85	-28.15	74	42.35	31.44	8.34	36.28	100	299	P	V
		5730.2	37.29	-16.71	54	33.94	31.32	8.31	36.28	100	299	A	V
802.11n HT40 CH 110 5550MHz		5464.88	46.72	-27.28	74	43.88	30.86	8.35	36.37	311	110	P	H
		5464.56	38.2	-15.8	54	35.36	30.86	8.35	36.37	311	110	A	H
	*	5546	93.62	-	-	90.93	30.8	8.23	36.34	311	110	P	H
	*	5546	86.99	-	-	84.3	30.8	8.23	36.34	311	110	A	H
		5753.32	46.87	-27.13	74	43.22	31.56	8.37	36.28	311	110	P	H
		5754.12	37.25	-16.75	54	33.6	31.56	8.37	36.28	311	110	A	H
		5440.08	46.07	-27.93	74	43.16	30.89	8.41	36.39	100	296	P	V
		5459.92	37.45	-16.55	54	34.57	30.88	8.38	36.38	100	296	A	V
	*	5558	92.33	-	-	89.68	30.78	8.2	36.33	100	296	P	V
	*	5558	85.08	-	-	82.43	30.78	8.2	36.33	100	296	A	V
		5754.76	46.45	-27.55	74	42.8	31.56	8.37	36.28	100	296	P	V
		5761.16	37.13	-16.87	54	33.48	31.56	8.37	36.28	100	296	A	V



802.11n HT40 CH 134 5670MHz		5452.88	45.54	-28.46	74	42.66	30.88	8.38	36.38	299	108	P	H
		5466	37	-17	54	34.16	30.86	8.35	36.37	299	108	A	H
	*	5676	93.34	-	-	90.46	30.95	8.22	36.29	299	108	P	H
	*	5676	85.88	-	-	83	30.95	8.22	36.29	299	108	A	H
		5733.56	48.42	-25.58	74	45.07	31.32	8.31	36.28	299	108	P	H
		5732.28	39.8	-14.2	54	36.45	31.32	8.31	36.28	299	108	A	H
		5410.8	44.79	-29.21	74	41.79	30.93	8.48	36.41	100	296	P	V
		5467.12	36.48	-17.52	54	33.64	30.86	8.35	36.37	100	296	A	V
	*	5672	90.4	-	-	87.52	30.95	8.22	36.29	100	296	P	V
	*	5672	82.88	-	-	80	30.95	8.22	36.29	100	296	A	V
		5739.4	46.68	-27.32	74	43.18	31.44	8.34	36.28	100	296	P	V
		5734.2	38.42	-15.58	54	35.07	31.32	8.31	36.28	100	296	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5469.2	62.44	-11.56	74	59.6	30.86	8.35	36.37	314	111	P	H
	!	5464.4	48.4	-5.6	54	45.56	30.86	8.35	36.37	314	111	A	H
	*	5514	91.93	-	-	89.21	30.81	8.26	36.35	314	111	P	H
	*	5514	84.8	-	-	82.08	30.81	8.26	36.35	314	111	A	H
		5749.32	45.62	-28.38	74	42.12	31.44	8.34	36.28	314	111	P	H
		5739.32	37.2	-16.8	54	33.7	31.44	8.34	36.28	314	111	A	H
		5467.28	57.9	-16.1	74	55.06	30.86	8.35	36.37	100	299	P	V
		5466.48	46	-8	54	43.16	30.86	8.35	36.37	100	299	A	V
	*	5514	89.08	-	-	86.36	30.81	8.26	36.35	100	299	P	V
	*	5514	82.48	-	-	79.76	30.81	8.26	36.35	100	299	A	V
		5761.32	44.57	-29.43	74	40.92	31.56	8.37	36.28	100	299	P	V
		5737.4	36.57	-17.43	54	33.07	31.44	8.34	36.28	100	299	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 144 5720MHz	*	5722	96.64	-	-	93.29	31.32	8.31	36.28	300	266	P	H
	*	5722	89.31	-	-	85.96	31.32	8.31	36.28	300	266	A	H
													H
													H
													H
													H
	*	5716	95.84	-	-	92.65	31.19	8.28	36.28	295	360	P	V
	*	5716	88.75	-	-	85.56	31.19	8.28	36.28	295	360	A	V
													V
													V
													V
													V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		11440	42.11	-31.89	74	56.43	38.53	12.54	65.39	100	360	P	H
													H
													H
													H
		11440	41.26	-32.74	74	55.58	38.53	12.54	65.39	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz	*	5714	94.21	-	-	91.02	31.19	8.28	36.28	301	113	P	H
	*	5714	86.76	-	-	83.57	31.19	8.28	36.28	301	113	A	H
													H
													H
													H
													H
	*	5704	90.86	-	-	87.67	31.19	8.28	36.28	100	268	P	V
	*	5704	84.32	-	-	81.13	31.19	8.28	36.28	100	268	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz	*	5710	90.67	-	-	87.48	31.19	8.28	36.28	302	114	P	H
	*	5710	83.22	-	-	80.03	31.19	8.28	36.28	302	114	A	H
													H
													H
													H
													H
	*	5714	87.12	-	-	83.93	31.19	8.28	36.28	100	267	P	V
	*	5714	79.77	-	-	76.58	31.19	8.28	36.28	100	267	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WIFI 802.11n VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n VHT80 LF		34.85	35.26	-4.74	40	40.2	25.7	0.71	31.35	100	20	P	H
		57.16	28.25	-11.75	40	43.8	14.96	0.9	31.41			P	H
		76.56	27.88	-12.12	40	43.21	15.1	1.07	31.5			P	H
		229.82	30.26	-15.74	46	42.88	17.12	1.73	31.47			P	H
		323.91	34.09	-11.91	46	42.57	20.61	2.21	31.3			P	H
		702.21	30.24	-15.76	46	29.99	27.95	3.35	31.05			P	H
													H
													H
													H
													H
													H
													H
		35.82	30.13	-9.87	40	35.56	25.2	0.72	31.35	110	50	P	V
		46.49	24.83	-15.17	40	37.21	18.2	0.84	31.42			P	V
		220.12	32.19	-13.81	46	44.85	17.08	1.73	31.47			P	V
		288.02	31.69	-14.31	46	42.08	18.96	2.04	31.39			P	V
		345.25	35.29	-10.71	46	42.65	21.58	2.29	31.23			P	V
		462.62	28.78	-17.22	46	32.46	24.88	2.68	31.24			P	V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



Band 1 - 5150~5250MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 CH 42 5210MHz		5148.48	58.06	-15.94	74	55.5	31.17	7.92	36.53	320	57	P	H
	!	5149.12	48.84	-5.16	54	46.28	31.17	7.92	36.53	320	57	A	H
	*	5212	87.9	-	-	85.3	31.11	7.99	36.5	320	57	P	H
	*	5212	80.8	-	-	78.2	31.11	7.99	36.5	320	57	A	H
		5355.9	47.02	-26.98	74	44.13	30.98	8.34	36.43	320	57	P	H
		5351.22	38.72	-15.28	54	35.83	30.98	8.34	36.43	320	57	A	H
		5147.36	59.7	-14.3	74	57.14	31.17	7.92	36.53	333	173	P	V
	!	5148.64	50.79	-3.21	54	48.23	31.17	7.92	36.53	333	173	A	V
	*	5226	89.3	-	-	86.66	31.09	8.04	36.49	333	173	P	V
	*	5226	82.1	-	-	79.46	31.09	8.04	36.49	333	173	A	V
		5355.72	45.58	-28.42	74	42.69	30.98	8.34	36.43	333	173	P	V
		5350.86	37.76	-16.24	54	34.87	30.98	8.34	36.43	333	173	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



Band 1 - 5150~5250MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 36 5180MHz		5132	47.98	-26.02	74	45.42	31.19	7.91	36.54	100	195	P	H
		5130.88	37.66	-16.34	54	35.1	31.19	7.91	36.54	100	195	A	H
	*	5176	96.66	-	-	94.1	31.14	7.94	36.52	100	195	P	H
	*	5176	89.11	-	-	86.55	31.14	7.94	36.52	100	195	A	H
													H
													H
		5137.92	50.26	-23.74	74	47.7	31.19	7.91	36.54	317	175	P	V
		5146.88	37.77	-16.23	54	35.21	31.17	7.92	36.53	317	175	A	V
	*	5184	97.29	-	-	94.73	31.14	7.94	36.52	317	175	P	V
	*	5184	90.25	-	-	87.69	31.14	7.94	36.52	317	175	A	V
													V
													V
802.11n HT20 CH 44 5220MHz		5144.32	46.41	-27.59	74	43.85	31.17	7.92	36.53	100	192	P	H
		5149.99	36.89	-17.11	54	34.33	31.17	7.92	36.53	100	192	A	H
	*	5218	96.17	-	-	93.57	31.11	7.99	36.5	100	192	P	H
	*	5218	88.64	-	-	86.04	31.11	7.99	36.5	100	192	A	H
		5363.64	46.02	-27.98	74	43.09	30.96	8.39	36.42	100	192	P	H
		5376.24	35.99	-18.01	54	33.06	30.96	8.39	36.42	100	192	A	H
		5118.4	47.77	-26.23	74	45.21	31.2	7.91	36.55	317	175	P	V
		5149.99	36.9	-17.1	54	34.34	31.17	7.92	36.53	317	175	A	V
	*	5218	97.32	-	-	94.72	31.11	7.99	36.5	317	175	P	V
	*	5218	89.95	-	-	87.35	31.11	7.99	36.5	317	175	A	V
		5374.08	45.55	-28.45	74	42.62	30.96	8.39	36.42	317	175	P	V
		5376.6	36.01	-17.99	54	33.08	30.96	8.39	36.42	317	175	A	V



802.11n HT20 CH 48 5240MHz	*	5236	96.68	-	-	94.04	31.09	8.04	36.49	100	171	P	H
	*	5236	88.77	-	-	86.13	31.09	8.04	36.49	100	171	A	H
		5359.86	46.36	-27.64	74	43.47	30.98	8.34	36.43	100	171	P	H
		5397.3	36.38	-17.62	54	33.38	30.93	8.48	36.41	100	171	A	H
													H
													H
	*	5240	97.02	-	-	94.38	31.09	8.04	36.49	304	173	P	V
	*	5240	89.06	-	-	86.42	31.09	8.04	36.49	304	173	A	V
		5373.18	44.33	-29.67	74	41.4	30.96	8.39	36.42	304	173	P	V
		5349.96	35.25	-18.75	54	32.36	30.98	8.34	36.43	304	173	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 36 5180MHz		10360	40.31	-33.69	74	57.22	37.4	11.84	66.15	100	172	P	H
													H
													H
													H
		10360	40.98	-33.02	74	57.89	37.4	11.84	66.15	100	360	P	V
													V
													V
													V
802.11n HT20 CH 44 5220MHz		10440	39.28	-34.72	74	56.02	37.47	11.89	66.1	100	0	P	H
													H
													H
													H
		10440	40.2	-33.8	74	56.94	37.47	11.89	66.1	100	360	P	V
													V
													V
													V
802.11n HT20 CH 48 5240MHz		10480	39.48	-34.52	74	56.11	37.52	11.92	66.07	100	213	P	H
													H
													H
													H
		10480	40.51	-33.49	74	57.14	37.52	11.92	66.07	100	360	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 38 5190MHz		5147.84	55.06	-18.94	74	52.5	31.17	7.92	36.53	329	117	P	H
		5148.48	47.43	-6.57	54	44.87	31.17	7.92	36.53	329	117	A	H
	*	5196	95.85	-	-	93.29	31.12	7.95	36.51	329	117	P	H
	*	5196	88.14	-	-	85.58	31.12	7.95	36.51	329	117	A	H
		5358.96	45.83	-28.17	74	42.94	30.98	8.34	36.43	329	117	P	H
		5352.84	37.55	-16.45	54	34.66	30.98	8.34	36.43	329	117	A	H
		5147.84	51.43	-22.57	74	48.87	31.17	7.92	36.53	301	163	P	V
		5149.92	44.26	-9.74	54	41.7	31.17	7.92	36.53	301	163	A	V
	*	5186	93.94	-	-	91.38	31.14	7.94	36.52	301	163	P	V
	*	5186	85.84	-	-	83.28	31.14	7.94	36.52	301	163	A	V
		5388.84	44.57	-29.43	74	41.62	30.94	8.43	36.42	301	163	P	V
		5352.66	36.7	-17.3	54	33.81	30.98	8.34	36.43	301	163	A	V
802.11n HT40 CH 46 5230MHz		5132.96	47.95	-26.05	74	45.39	31.19	7.91	36.54	346	115	P	H
		5149.44	39.03	-14.97	54	36.47	31.17	7.92	36.53	346	115	A	H
	*	5218	95.21	-	-	92.61	31.11	7.99	36.5	346	115	P	H
	*	5218	87.74	-	-	85.14	31.11	7.99	36.5	346	115	A	H
		5367.42	46.95	-27.05	74	44.02	30.96	8.39	36.42	346	115	P	H
		5380.74	37.6	-16.4	54	34.65	30.94	8.43	36.42	346	115	A	H
		5147.36	46.31	-27.69	74	43.75	31.17	7.92	36.53	298	162	P	V
		5133.6	37.67	-16.33	54	35.11	31.19	7.91	36.54	298	162	A	V
	*	5218	93.4	-	-	90.8	31.11	7.99	36.5	298	162	P	V
	*	5218	86.38	-	-	83.78	31.11	7.99	36.5	298	162	A	V
		5353.56	44.92	-29.08	74	42.03	30.98	8.34	36.43	298	162	P	V
		5354.28	36.86	-17.14	54	33.97	30.98	8.34	36.43	298	162	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5144.64	56.35	-17.65	74	53.79	31.17	7.92	36.53	100	194	P	H
	!	5148.48	48.37	-5.63	54	45.81	31.17	7.92	36.53	100	194	A	H
	*	5222	91.27	-	-	88.67	31.11	7.99	36.5	100	194	P	H
	*	5222	86.22	-	-	83.62	31.11	7.99	36.5	100	194	A	H
		5364	45.21	-28.79	74	42.28	30.96	8.39	36.42	100	194	P	H
		5364	37.84	-16.16	54	34.91	30.96	8.39	36.42	100	194	A	H
		5145.44	57.4	-16.6	74	54.84	31.17	7.92	36.53	318	176	P	V
	!	5146.4	50.91	-3.09	54	48.35	31.17	7.92	36.53	318	176	A	V
	*	5196	93.47	-	-	90.91	31.12	7.95	36.51	318	176	P	V
	*	5196	87.33	-	-	84.77	31.12	7.95	36.51	318	176	A	V
		5379.3	45.34	-28.66	74	42.39	30.94	8.43	36.42	318	176	P	V
		5350.68	37.63	-16.37	54	34.74	30.98	8.34	36.43	318	176	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 - 5250~5350MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 52 5260MHz		5145.6	46.88	-27.12	74	44.32	31.17	7.92	36.53	100	196	P	H
		5104.32	36.36	-17.64	54	33.8	31.22	7.9	36.56	100	196	A	H
	*	5264	96.78	-	-	94.07	31.06	8.12	36.47	100	196	P	H
	*	5264	89.76	-	-	87.05	31.06	8.12	36.47	100	196	A	H
													H
													H
		5116.16	46.36	-27.64	74	43.8	31.2	7.91	36.55	314	178	P	V
		5104.48	36.66	-17.34	54	34.1	31.22	7.9	36.56	314	178	A	V
	*	5258	98.15	-	-	95.48	31.07	8.08	36.48	314	178	P	V
	*	5258	90.59	-	-	87.92	31.07	8.08	36.48	314	178	A	V
													V
													V
802.11n HT20 CH 60 5300MHz		5113.12	47.68	-26.32	74	45.12	31.2	7.91	36.55	100	195	P	H
		5143.04	36.26	-17.74	54	33.7	31.17	7.92	36.53	100	195	A	H
	*	5304	96.62	-	-	93.85	31.02	8.21	36.46	100	195	P	H
	*	5304	88.68	-	-	85.91	31.02	8.21	36.46	100	195	A	H
		5386.6	46.94	-27.06	74	43.99	30.94	8.43	36.42	100	195	P	H
		5359.9	36.59	-17.41	54	33.7	30.98	8.34	36.43	100	195	A	H
		5138.56	45.95	-28.05	74	43.39	31.19	7.91	36.54	305	179	P	V
		5144.32	36.17	-17.83	54	33.61	31.17	7.92	36.53	305	179	A	V
	*	5304	98	-	-	95.23	31.02	8.21	36.46	305	179	P	V
	*	5304	90.06	-	-	87.29	31.02	8.21	36.46	305	179	A	V
		5397.8	46.61	-27.39	74	43.61	30.93	8.48	36.41	305	179	P	V
		5364	36.65	-17.35	54	33.72	30.96	8.39	36.42	305	179	A	V



802.11n HT20 CH 64 5320MHz	*	5318	96.52	-	-	93.7	31.01	8.26	36.45	100	194	P	H
	*	5318	88.4	-	-	85.58	31.01	8.26	36.45	100	194	A	H
		5399.6	46.43	-27.57	74	43.43	30.93	8.48	36.41	100	194	P	H
		5350.01	36.89	-17.11	54	34	30.98	8.34	36.43	100	194	A	H
													H
													H
	*	5324	97.13	-	-	94.31	31.01	8.26	36.45	302	178	P	V
	*	5324	89.6	-	-	86.78	31.01	8.26	36.45	302	178	A	V
		5355.1	47.98	-26.02	74	45.09	30.98	8.34	36.43	302	178	P	V
		5350.01	37.09	-16.91	54	34.2	30.98	8.34	36.43	302	178	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 52 5260MHz		10520	40.55	-33.45	74	57.09	37.56	11.94	66.04	100	0	P	H
													H
													H
													H
		10520	39.96	-34.04	74	56.5	37.56	11.94	66.04	100	0	P	V
													V
													V
													V
802.11n HT20 CH 60 5300MHz		10600	39.73	-34.27	74	56.06	37.65	12	65.98	100	360	P	H
													H
													H
													H
		10600	40	-34	74	56.33	37.65	12	65.98	100	0	P	V
													V
													V
													V
802.11n HT20 CH 64 5320MHz		10640	39.77	-34.23	74	56.03	37.68	12.02	65.96	100	0	P	H
													H
													H
													H
		10640	40.84	-33.16	74	57.1	37.68	12.02	65.96	100	360	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 54 5270MHz		5121.92	47.95	-26.05	74	45.39	31.2	7.91	36.55	339	117	P	H
		5107.68	38.65	-15.35	54	36.09	31.2	7.91	36.55	339	117	A	H
	*	5262	94.73	-	-	92.02	31.06	8.12	36.47	339	117	P	H
	*	5262	87.61	-	-	84.9	31.06	8.12	36.47	339	117	A	H
		5368.6	45.66	-28.34	74	42.73	30.96	8.39	36.42	339	117	P	H
		5374.5	38.28	-15.72	54	35.35	30.96	8.39	36.42	339	117	A	H
		5144.32	46.03	-27.97	74	43.47	31.17	7.92	36.53	301	162	P	V
		5142.88	37.31	-16.69	54	34.75	31.17	7.92	36.53	301	162	A	V
	*	5260	93.18	-	-	90.47	31.06	8.12	36.47	301	162	P	V
	*	5260	85.9	-	-	83.19	31.06	8.12	36.47	301	162	A	V
		5361.2	45	-29	74	42.07	30.96	8.39	36.42	301	162	P	V
		5359.2	37.05	-16.95	54	34.16	30.98	8.34	36.43	301	162	A	V
802.11n HT40 CH 62 5310MHz		5147.2	46.55	-27.45	74	43.99	31.17	7.92	36.53	334	118	P	H
		5144.16	38.61	-15.39	54	36.05	31.17	7.92	36.53	334	118	A	H
	*	5306	94.72	-	-	91.95	31.02	8.21	36.46	334	118	P	H
	*	5306	87.12	-	-	84.35	31.02	8.21	36.46	334	118	A	H
		5350.3	52.57	-21.43	74	49.68	30.98	8.34	36.43	334	118	P	H
		5350.2	43.89	-10.11	54	41	30.98	8.34	36.43	334	118	A	H
		5149.76	45.85	-28.15	74	43.29	31.17	7.92	36.53	315	226	P	V
		5147.84	37.3	-16.7	54	34.74	31.17	7.92	36.53	315	226	A	V
	*	5298	92.95	-	-	90.18	31.02	8.21	36.46	315	226	P	V
	*	5298	84.36	-	-	81.59	31.02	8.21	36.46	315	226	A	V
		5352	51.03	-22.97	74	48.14	30.98	8.34	36.43	315	226	P	V
		5350	41.38	-12.62	54	38.49	30.98	8.34	36.43	315	226	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5129.6	46.84	-27.16	74	44.28	31.19	7.91	36.54	100	206	P	H
		5124.8	38.91	-15.09	54	36.35	31.19	7.91	36.54	100	206	A	H
	*	5314	91.02	-	-	88.2	31.01	8.26	36.45	100	206	P	H
	*	5314	84.33	-	-	81.51	31.01	8.26	36.45	100	206	A	H
		5373.18	59.6	-14.4	74	56.67	30.96	8.39	36.42	100	206	P	H
	!	5372.64	48.4	-5.6	54	45.47	30.96	8.39	36.42	100	206	A	H
		5142.88	48.44	-25.56	74	45.88	31.17	7.92	36.53	302	177	P	V
		5149.44	39.87	-14.13	54	37.31	31.17	7.92	36.53	302	177	A	V
	*	5274	92.75	-	-	90.04	31.06	8.12	36.47	302	177	P	V
	*	5274	86.17	-	-	83.46	31.06	8.12	36.47	302	177	A	V
		5373.18	58.42	-15.58	74	55.49	30.96	8.39	36.42	302	177	P	V
	!	5373.54	48.89	-5.11	54	45.96	30.96	8.39	36.42	302	177	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 100 5500MHz		5468.88	54.84	-19.16	74	52	30.86	8.35	36.37	302	295	P	H
		5469.68	40.9	-13.1	54	38.06	30.86	8.35	36.37	302	295	A	H
	*	5502	97.65	-	-	94.89	30.83	8.29	36.36	302	295	P	H
	*	5502	90.09	-	-	87.33	30.83	8.29	36.36	302	295	A	H
													H
													H
		5457.04	47.61	-26.39	74	44.73	30.88	8.38	36.38	296	351	P	V
		5469.36	38.8	-15.2	54	35.96	30.86	8.35	36.37	296	351	A	V
	*	5498	97.06	-	-	94.3	30.83	8.29	36.36	296	351	P	V
	*	5498	89.1	-	-	86.34	30.83	8.29	36.36	296	351	A	V
													V
													V
802.11n HT20 CH 116 5580MHz		5423.44	46.53	-27.47	74	43.58	30.91	8.44	36.4	100	204	P	H
		5416.56	38.11	-15.89	54	35.16	30.91	8.44	36.4	100	204	A	H
	*	5582	96.07	-	-	93.51	30.75	8.13	36.32	100	204	P	H
	*	5582	88.3	-	-	85.74	30.75	8.13	36.32	100	204	A	H
		5733.72	45.79	-28.21	74	42.44	31.32	8.31	36.28	100	204	P	H
		5738.68	36.6	-17.4	54	33.1	31.44	8.34	36.28	100	204	A	H
		5450	45.99	-28.01	74	43.11	30.88	8.38	36.38	318	356	P	V
		5468.24	36.96	-17.04	54	34.12	30.86	8.35	36.37	318	356	A	V
	*	5584	95.65	-	-	93.09	30.75	8.13	36.32	318	356	P	V
	*	5584	88.56	-	-	86	30.75	8.13	36.32	318	356	A	V
		5746.84	46.26	-27.74	74	42.76	31.44	8.34	36.28	318	356	P	V
		5736.76	37.82	-16.18	54	34.32	31.44	8.34	36.28	318	356	A	V



802.11n HT20 CH 140 5700MHz	*	5704	95.22	-	-	92.03	31.19	8.28	36.28	100	359	P	H
	*	5704	87.34	-	-	84.15	31.19	8.28	36.28	100	359	A	H
		5730.76	47.81	-26.19	74	44.46	31.32	8.31	36.28	100	359	P	H
		5725.72	39.47	-14.53	54	36.12	31.32	8.31	36.28	100	359	A	H
													H
													H
	*	5702	95.94	-	-	92.75	31.19	8.28	36.28	301	149	P	V
	*	5702	88.84	-	-	85.65	31.19	8.28	36.28	301	149	A	V
		5727	49.8	-24.2	74	46.45	31.32	8.31	36.28	301	149	P	V
		5725	40.79	-13.21	54	37.44	31.32	8.31	36.28	301	149	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 100 5500MHz		11000	41.59	-32.41	74	56.98	38.06	12.25	65.7	100	360	P	H
		16500	48.03	-25.97	74	56.89	40.55	15.54	64.95	100	0	P	H
													H
													H
		11000	42.1	-31.9	74	57.49	38.06	12.25	65.7	100	0	P	V
		16494	48.71	-25.29	74	57.62	40.55	15.54	65	100	360	P	V
													V
													V
802.11n HT20 CH 116 5580MHz		11160	40.73	-33.27	74	55.71	38.24	12.36	65.58	100	0	P	H
		16740	50.6	-23.4	74	58.56	40.67	15.57	64.2	300	65	P	H
		16740	43.51	-10.49	54	51.47	40.67	15.57	64.2	300	65	A	H
													H
		11160	40.95	-33.05	74	55.93	38.24	12.36	65.58	100	360	P	V
		16740	49.55	-24.45	74	57.51	40.67	15.57	64.2	100	0	P	V
		16740	41.27	-12.73	54	49.23	40.67	15.57	64.2	100	0	A	V
													V
802.11n HT20 CH 140 5700MHz		11400	39.98	-34.02	74	54.38	38.49	12.52	65.41	100	360	P	H
													H
													H
													H
		11400	40.39	-33.61	74	54.79	38.49	12.52	65.41	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 102 5510MHz		5467.92	51.89	-22.11	74	49.05	30.86	8.35	36.37	300	114	P	H
		5469.84	44.8	-9.2	54	41.96	30.86	8.35	36.37	300	114	A	H
	*	5498	93.08	-	-	90.32	30.83	8.29	36.36	300	114	P	H
	*	5498	85.95	-	-	83.19	30.83	8.29	36.36	300	114	A	H
		5734.04	45.62	-28.38	74	42.27	31.32	8.31	36.28	300	114	P	H
		5760.04	37.23	-16.77	54	33.58	31.56	8.37	36.28	300	114	A	H
		5469.52	50.91	-23.09	74	48.07	30.86	8.35	36.37	100	304	P	V
		5469.04	42.91	-11.09	54	40.07	30.86	8.35	36.37	100	304	A	V
	*	5502	91.3	-	-	88.54	30.83	8.29	36.36	100	304	P	V
	*	5502	84.12	-	-	81.36	30.83	8.29	36.36	100	304	A	V
		5765	45.44	-28.56	74	41.79	31.56	8.37	36.28	100	304	P	V
		5762.52	37.13	-16.87	54	33.48	31.56	8.37	36.28	100	304	A	V
802.11n HT40 CH 110 5550MHz		5445.36	45.64	-28.36	74	42.73	30.89	8.41	36.39	310	114	P	H
		5469.84	38.07	-15.93	54	35.23	30.86	8.35	36.37	310	114	A	H
	*	5540	92.64	-	-	89.95	30.8	8.23	36.34	310	114	P	H
	*	5540	85.62	-	-	82.93	30.8	8.23	36.34	310	114	A	H
		5727.08	45.73	-28.27	74	42.38	31.32	8.31	36.28	310	114	P	H
		5748.12	37.19	-16.81	54	33.69	31.44	8.34	36.28	310	114	A	H
		5436.24	45.33	-28.67	74	42.42	30.89	8.41	36.39	318	181	P	V
		5470	37.46	-16.54	54	34.62	30.86	8.35	36.37	318	181	A	V
	*	5538	91.32	-	-	88.63	30.8	8.23	36.34	318	181	P	V
	*	5538	83.43	-	-	80.74	30.8	8.23	36.34	318	181	A	V
		5746.36	44.58	-29.42	74	41.08	31.44	8.34	36.28	318	181	P	V
		5750.28	36.79	-17.21	54	33.29	31.44	8.34	36.28	318	181	A	V



802.11n HT40 CH 134 5670MHz		5414.96	45.29	-28.71	74	42.34	30.91	8.44	36.4	299	116	P	H
		5459.28	36.93	-17.07	54	34.05	30.88	8.38	36.38	299	116	A	H
	*	5678	91.48	-	-	88.6	30.95	8.22	36.29	299	116	P	H
	*	5678	83.71	-	-	80.83	30.95	8.22	36.29	299	116	A	H
		5727.08	46.83	-27.17	74	43.48	31.32	8.31	36.28	299	116	P	H
		5733.72	38.92	-15.08	54	35.57	31.32	8.31	36.28	299	116	A	H
		5443.6	45.41	-28.59	74	42.5	30.89	8.41	36.39	304	191	P	V
		5420.72	36.38	-17.62	54	33.43	30.91	8.44	36.4	304	191	A	V
	*	5660	89.97	-	-	87.25	30.82	8.19	36.29	304	191	P	V
	*	5660	82.24	-	-	79.52	30.82	8.19	36.29	304	191	A	V
		5750.84	46.29	-27.71	74	42.79	31.44	8.34	36.28	304	191	P	V
		5736.92	37.84	-16.16	54	34.34	31.44	8.34	36.28	304	191	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5452.72	54.04	-19.96	74	51.16	30.88	8.38	36.38	100	206	P	H
		5453.52	46.41	-7.59	54	43.53	30.88	8.38	36.38	100	206	A	H
	*	5514	87.95	-	-	85.23	30.81	8.26	36.35	100	206	P	H
	*	5514	82.3	-	-	79.58	30.81	8.26	36.35	100	206	A	H
		5740.44	46.14	-27.86	74	42.64	31.44	8.34	36.28	100	206	P	H
		5763.8	38.2	-15.8	54	34.55	31.56	8.37	36.28	100	206	A	H
		5452.4	54.45	-19.55	74	51.57	30.88	8.38	36.38	300	360	P	V
	!	5465.68	49.06	-4.94	54	46.22	30.86	8.35	36.37	300	360	A	V
	*	5512	88.53	-	-	85.77	30.83	8.29	36.36	300	360	P	V
	*	5512	82.31	-	-	79.55	30.83	8.29	36.36	300	360	A	V
		5745.64	45.64	-28.36	74	42.14	31.44	8.34	36.28	300	360	P	V
		5740.6	38.65	-15.35	54	35.15	31.44	8.34	36.28	300	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 CH 144 5720MHz	*	5724	96.61	-	-	93.26	31.32	8.31	36.28	301	108	P	H
	*	5724	88.44	-	-	85.09	31.32	8.31	36.28	301	108	A	H
													H
													H
													H
													H
	*	5722	96.89	-	-	93.54	31.32	8.31	36.28	325	149	P	V
	*	5722	89.4	-	-	86.05	31.32	8.31	36.28	325	149	A	V
													V
													V
													V
													V
Remark	1. No other spurious found.												
	2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 144 5720MHz		11440	39.55	-34.45	74	53.87	38.53	12.54	65.39	100	0	P	H
													H
													H
													H
		11440	40.39	-33.61	74	54.71	38.53	12.54	65.39	100	0	P	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 142 5710MHz	*	5702	93.6	-	-	90.41	31.19	8.28	36.28	322	176	P	H
	*	5702	85.06	-	-	81.87	31.19	8.28	36.28	322	176	A	H
													H
													H
													H
													H
	*	5702	90.48	-	-	87.29	31.19	8.28	36.28	316	190	P	V
	*	5702	83.25	-	-	80.06	31.19	8.28	36.28	316	190	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz	*	5708	88.53	-	-	85.34	31.19	8.28	36.28	400	299	P	H
	*	5708	82.1	-	-	78.91	31.19	8.28	36.28	400	299	A	H
													H
													H
													H
													H
	*	5710	88.48	-	-	85.29	31.19	8.28	36.28	316	155	P	V
	*	5710	81.93	-	-	78.74	31.19	8.28	36.28	316	155	A	V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	Peak or Average
H/V	Horizontal or Vertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Level(dBμV/m) =

Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



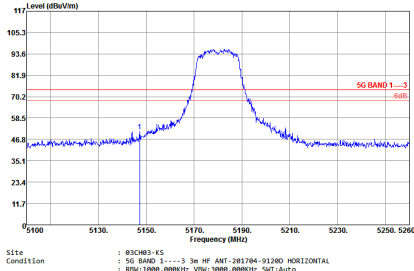
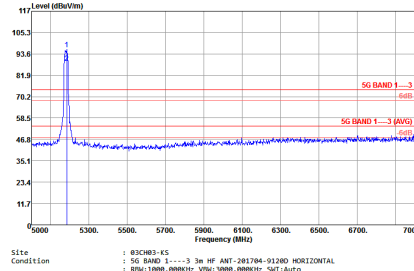
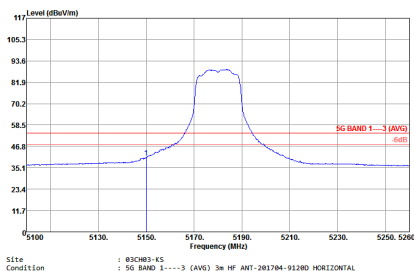
Appendix C. Radiated Spurious Emission

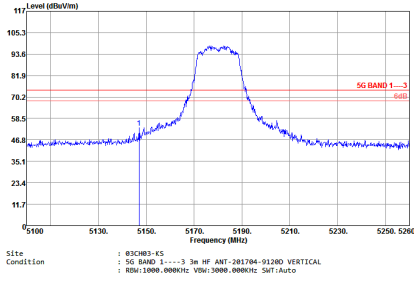
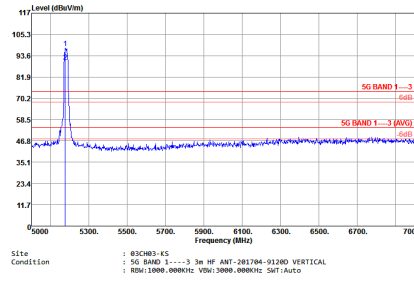
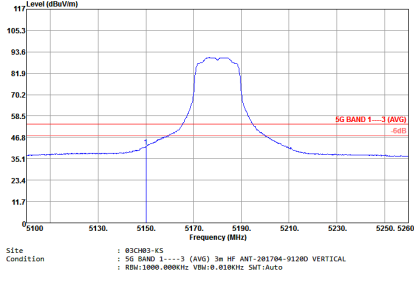
Test Engineer :	Rich Sun	Temperature :	21~23°C
		Relative Humidity :	41~43%

Note symbol

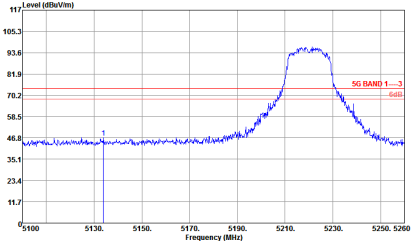
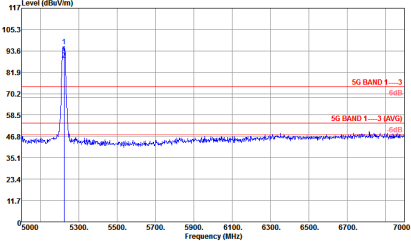
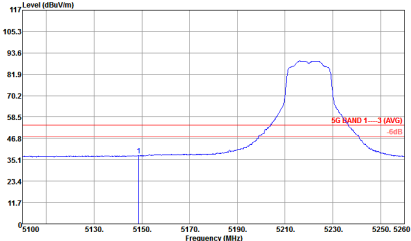
-L	Low channel location
-R	High channel location

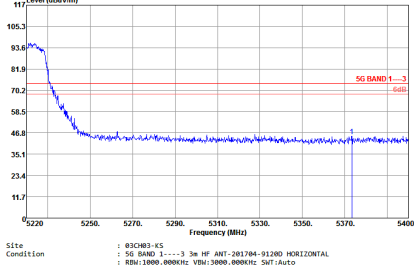
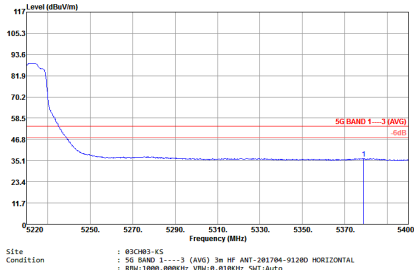
Band 1 - 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

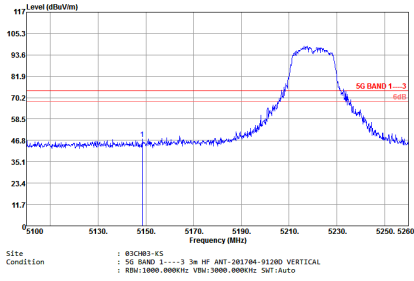
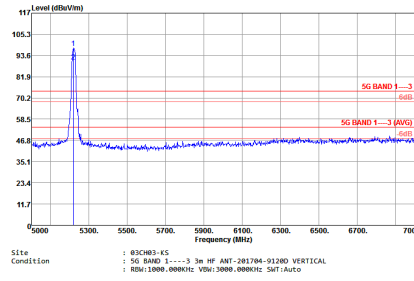
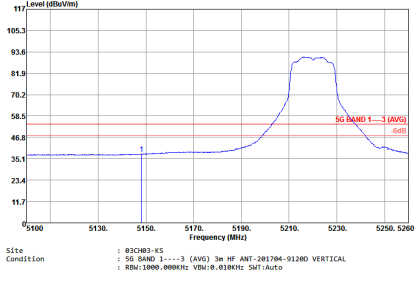
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak	 Site Condition : 80CH83-KS : SG BAND 1----3 3m HF ANT-281704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto	 Site Condition : 80CH83-KS : SG BAND 1----3 3m HF ANT-281704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto
Avg.	 Site Condition : 80CH83-KS : SG BAND 1----3 (AVG) 3m HF ANT-281704-91280 HORIZONTAL : RBW:1000.000KHz VSW:9.430KHz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak		
Avg.		Left blank



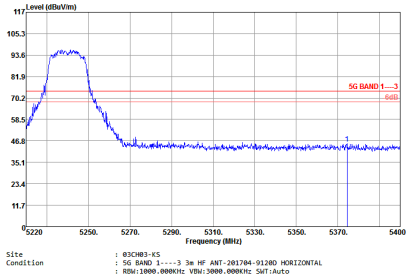
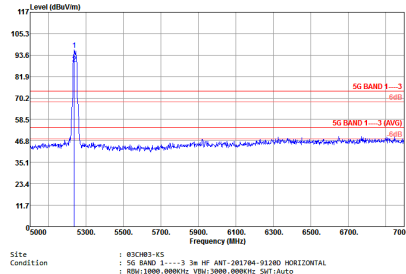
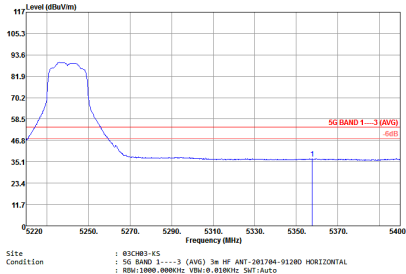
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 83CH83-KS Condition : 5G BAND 1-3 3m HF ANT-281784-91280 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto	 Site : 83CH83-KS Condition : 5G BAND 1-3 3m HF ANT-281784-91280 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto
Avg.	 Site : 83CH83-KS Condition : 5G BAND 1-3 (AVG) 3m HF ANT-281784-91280 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto	Left blank

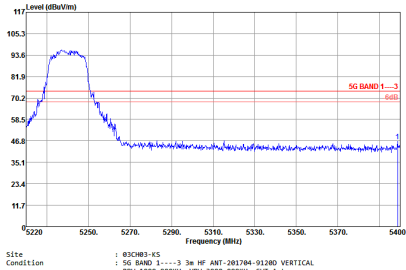
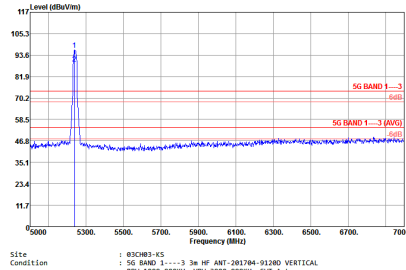
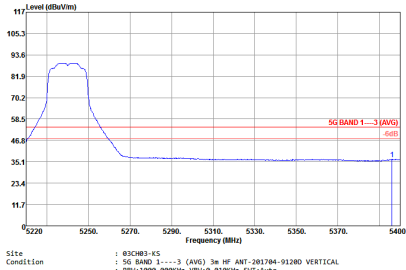
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH83-KS : 5G BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VBN:3000.000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CH83-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VBN:3.030KHz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1----3 3m HF ANT-201704-91200 VERTICAL : RBW:1000.000KHz VBN:3000.000KHz SMT:Auto	 Site : 83CH83-KS Condition : SG BAND 1----3 3m HF ANT-201704-91200 VERTICAL : RBW:1000.000KHz VBN:3000.000KHz SMT:Auto
Avg.	 Site : 83CH83-KS Condition : SG BAND 1----3 (AVG) 3m HF ANT-201704-91200 VERTICAL : RBW:1000.000KHz VBN:9.433KHz SMT:Auto	Left blank



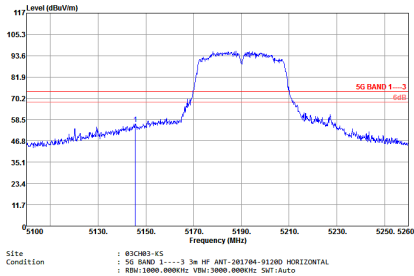
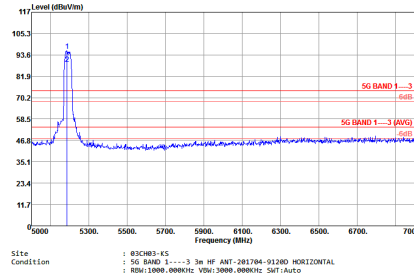
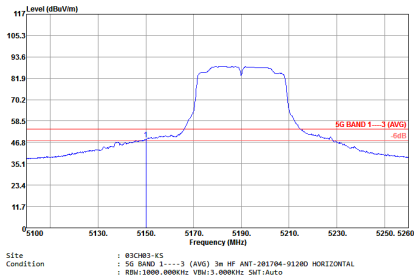
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1	Vertical	Fundamental
Peak	Site Condition : 83CHB3-KS : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RES:1000.0000Hz VSW:3000.0000Hz SMT:Auto	Left blank
Avg.	Site Condition : 83CHB3-KS : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RES:1000.0000Hz VSW:3000.0000Hz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CHB3-KS : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RSN:1000.000KHz VBN:3000.000KHz SMT:Auto	 Site Condition : 83CHB3-KS : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RSN:1000.000KHz VBN:3000.000KHz SMT:Auto
Avg.	 Site Condition : 83CHB3-KS : SG BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RSN:1000.000KHz VBN:3.030KHz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1	Vertical	Fundamental
Peak	 Site Condition : 83CHB3-KS : 5G BAND 1-3-3 3m HF ANT-201704-91280 VERTICAL : RSN:1000.000KHz VBN:3000.000KHz SMT:Auto	 Site Condition : 83CHB3-KS : 5G BAND 1-3-3 3m HF ANT-201704-91280 VERTICAL : RSN:1000.000KHz VBN:3000.000KHz SMT:Auto
Avg.	 Site Condition : 83CHB3-KS : 5G BAND 1-3-3 (AVG) 3m HF ANT-201704-91280 VERTICAL : RSN:1000.000KHz VBN:3000.000KHz SMT:Auto	Left blank

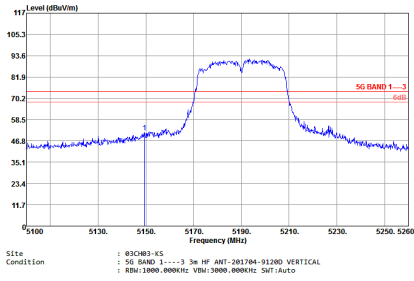
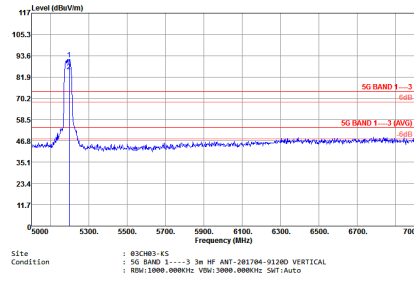
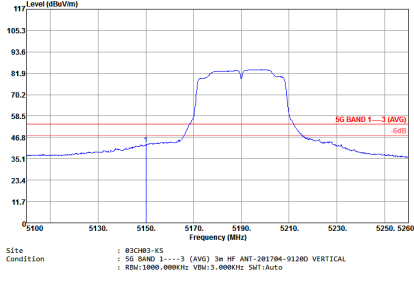


Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

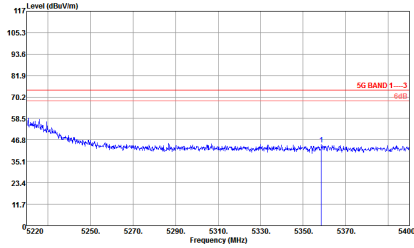
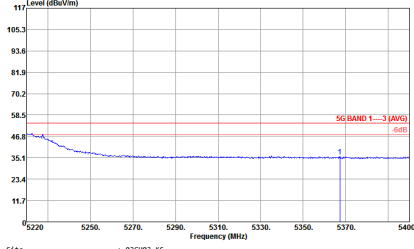
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank



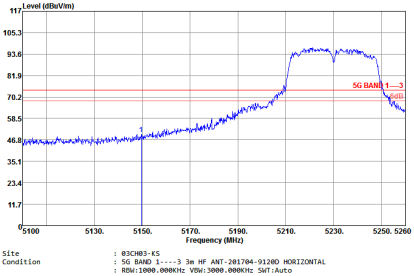
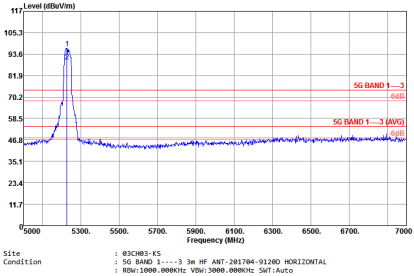
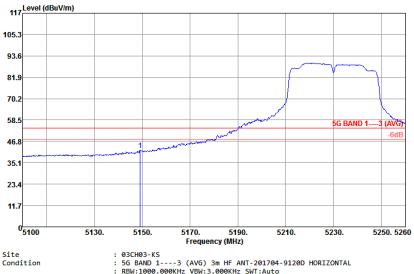
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak	Site Condition : 83CH83-KS : 5G BAND 1----3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SMT:Auto	Left blank
Avg.	Site Condition : 83CH83-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

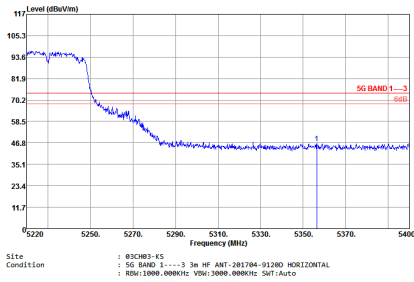
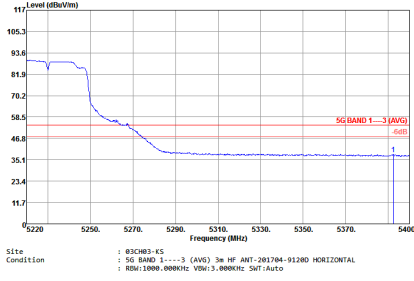


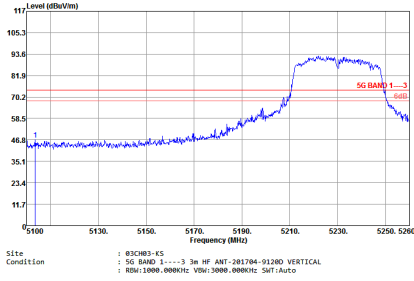
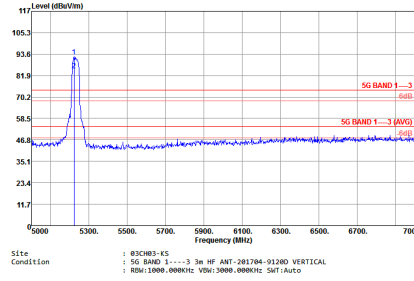
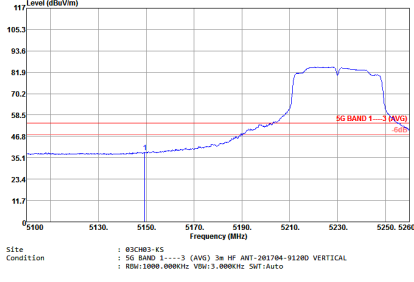
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1	Vertical	Fundamental
Peak	 Site Condition : 83CH83-KS : 5G BAND 1----3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank
Avg.	 Site Condition : 83CH83-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Horizontal	Fundamental
Peak		
Avg.		Left blank



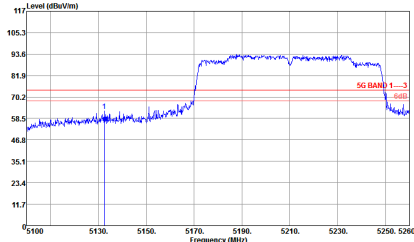
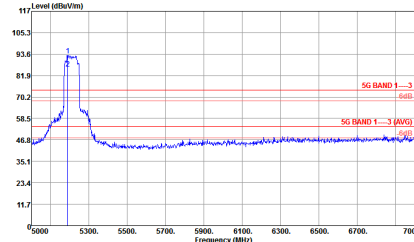
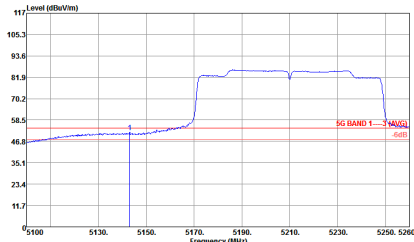
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CHB3-KS : 5G BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CHB3-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1	Vertical	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto
Avg.	 Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank

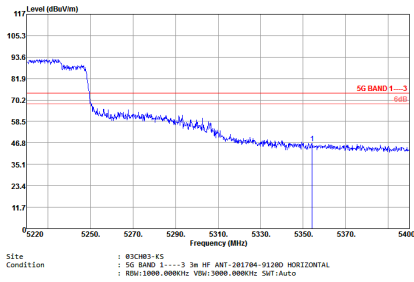
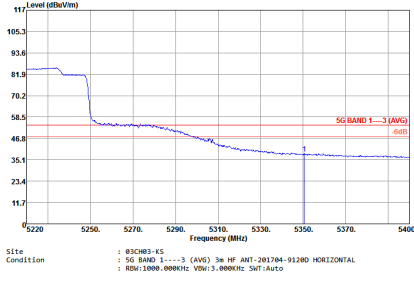


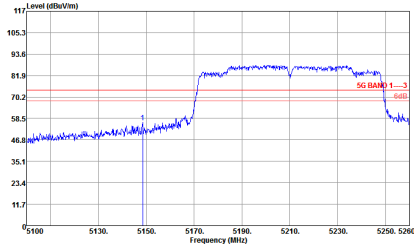
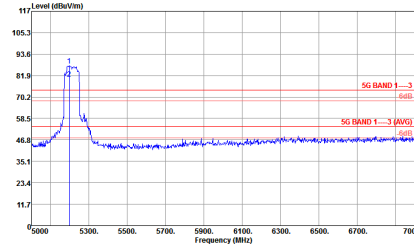
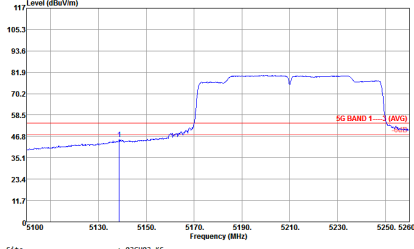
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak	Site Condition : 83CH83-KS : 5G BAND 1----3 3m HF ANT-201704-01200 VERTICAL : RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank
Avg.	Site Condition : 83CH83-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank

Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto
Avg.	 Site Condition : 83CH03-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto	Left blank



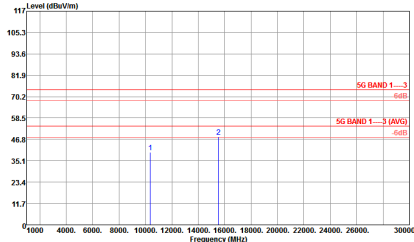
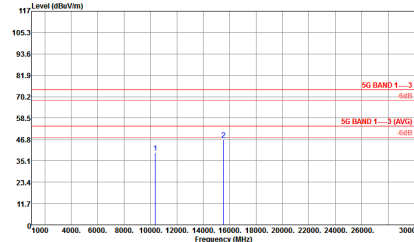
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CHB3-KS : 5G BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CHB3-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Vertical	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto
Avg.	 Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Vertical	Fundamental
Peak	Site Condition : 83CH83-KS : 5G BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank
Avg.	Site Condition : 83CH83-KS : 5G BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank

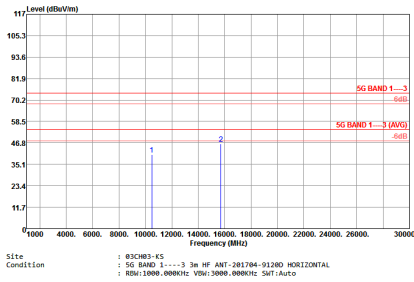
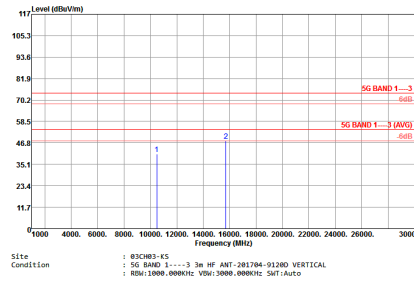
Band 1 - 5150~5250MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 802.11n HT20 CH36 5180MHz HORIZONTAL : 5G BAND 1-3 : 5150~5250MHz : RSM:1000.000kHz VSM:3000.000kHz SAT:Auto	 Site Condition : 802.11n HT20 CH36 5180MHz VERTICAL : 5G BAND 1-3 : 5150~5250MHz : RSM:1000.000kHz VSM:3000.000kHz SAT:Auto

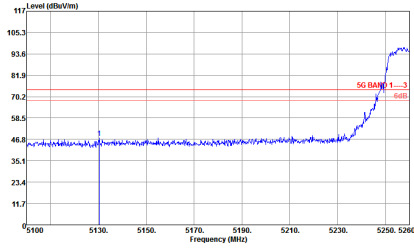
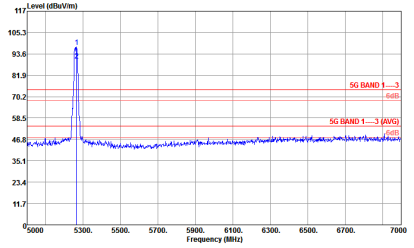
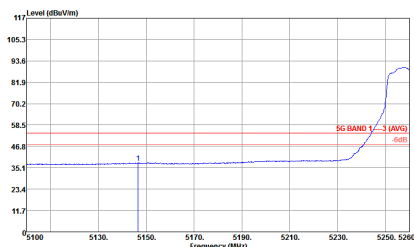


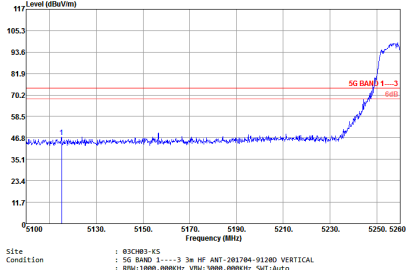
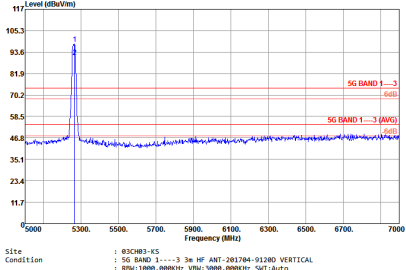
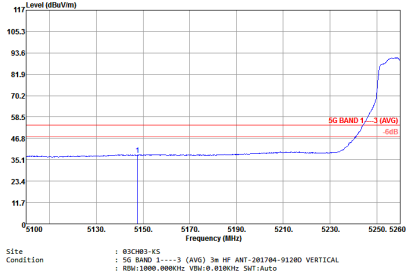
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH44 5220MHz	
1	Horizontal	Vertical
Peak Avg.	Site Condition : 802.11n HT20 CH44 5220MHz : SG BAND 1-3 : RSN:1000.0000Hz VSW:3000.0000Hz SMT:Auto	Site Condition : 802.11n HT20 CH44 5220MHz : SG BAND 1-3 : RSN:1000.0000Hz VSW:3000.0000Hz SMT:Auto



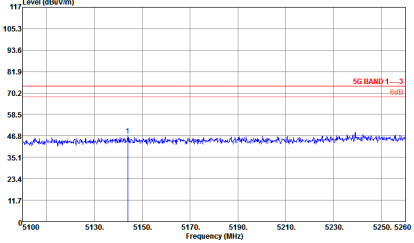
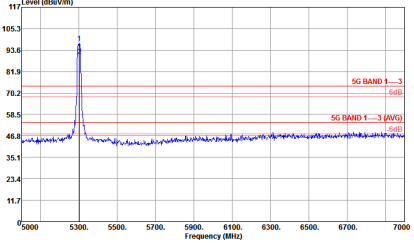
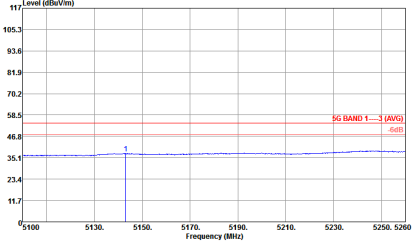
WIFI	Band 1 5150~5250MHz Harmonic @ 3m	
ANT	802.11n HT20 CH48 5240MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 2 - 5250~5350MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CMB3-KS : 5G BAND 1----3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SMT:Auto	 Site Condition : 83CMB3-KS : 5G BAND 1----3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SMT:Auto
Avg.	 Site Condition : 83CMB3-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VBW:9.430KHz SMT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH52 5260MHz - L	
1	Vertical	Fundamental
Peak	 Site : 83CHB3-KS Condition : 5G BAND 1-3 @ 3m HF ANT-201704-91280 VERTICAL : RSN:1000.0000KHz VBN:3000.0000KHz SMT:Auto	 Site : 83CHB3-KS Condition : 5G BAND 1-3 @ 3m HF ANT-201704-91280 VERTICAL : RSN:1000.0000KHz VBN:3000.0000KHz SMT:Auto
Avg.	 Site : 83CHB3-KS Condition : 5G BAND 1-3 @ 3m HF ANT-201704-91280 VERTICAL : RSN:1000.0000KHz VBN:3000.0000KHz SMT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH83-KS : SG BAND 1-3 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3000.000KHz SMT:Auto	 Site Condition : 83CH83-KS : SG BAND 1-3 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3000.000KHz SMT:Auto
Avg.	 Site Condition : 83CH83-KS : SG BAND 1-3 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3000.000KHz SMT:Auto	Left blank

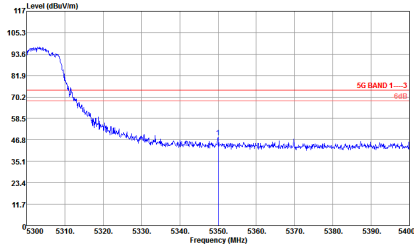
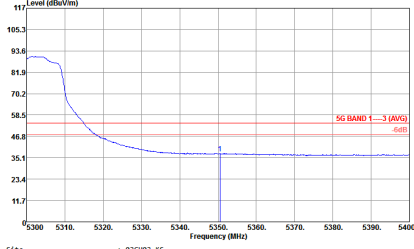


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Horizontal	Vertical
Peak	Site Condition : 83CHB3-KS : SG BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.0000Hz VSW:0.0000Hz SWT:Auto	Left blank
Avg.	Site Condition : 83CHB3-KS : SG BAND 1----3 (AVG) 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.0000Hz VSW:0.0000Hz SWT:Auto	Left blank

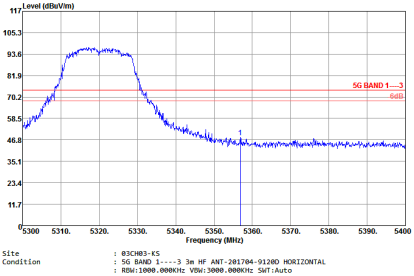
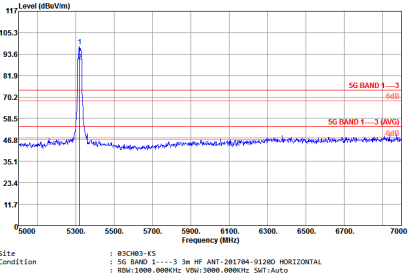
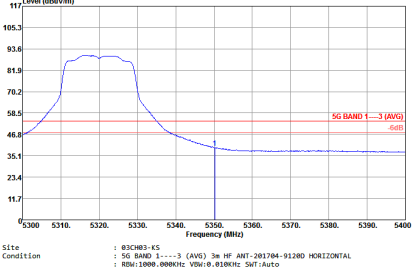


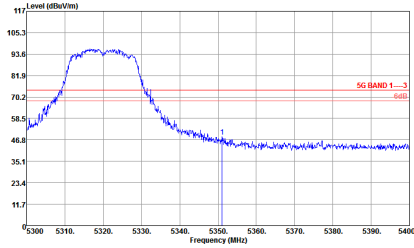
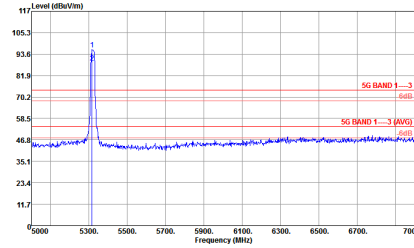
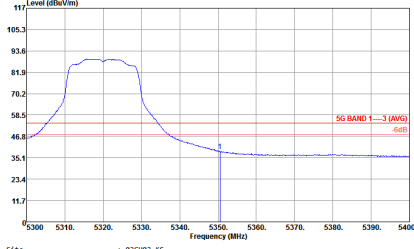
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - L	
1	Vertical	Fundamental
Peak	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto
Avg.	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:0.0000Hz SMT:Auto	Left blank



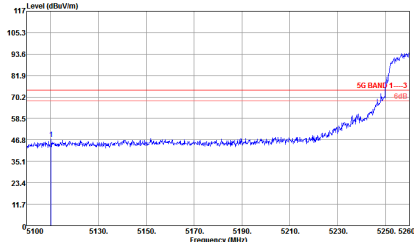
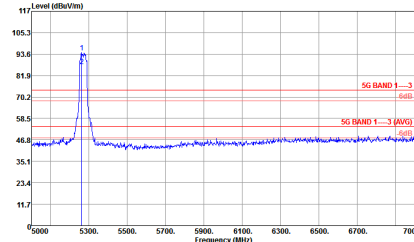
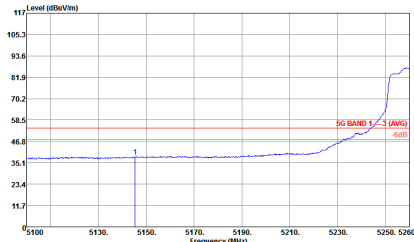
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH60 5300MHz - R	
1	Vertical	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL RES:1000.0000Hz VSW:0.0000Hz SMT:Auto	Left blank
Avg.	 Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL RES:1000.0000Hz VSW:0.0000Hz SMT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 HORIZONTAL : RSM:1000.000KHz VSW:3000.000KHz SMT:Auto	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 HORIZONTAL : RSM:1000.000KHz VSW:3000.000KHz SMT:Auto
Avg.	 Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RSM:1000.000KHz VSW:3.030KHz SMT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Vertical	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto
Avg.	 Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:0.0000Hz SMT:Auto	Left blank

Band 2 5250~5350MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto
Avg.	 Site Condition : 83CH03-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-01200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto	Left blank

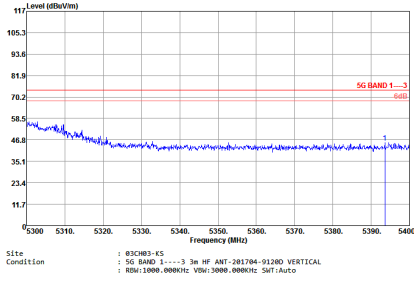
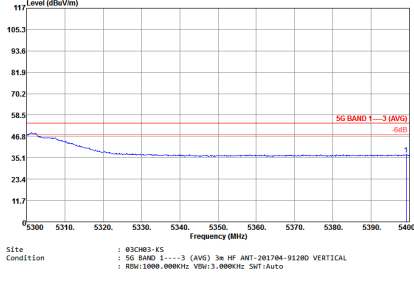


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1	Horizontal	Fundamental
Peak	Site : 83CHB3-KS Condition : SG BAND 1-3 3m HF ANT-201704-01280 HORIZONTAL RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	Site : 83CHB3-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-01280 HORIZONTAL RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank



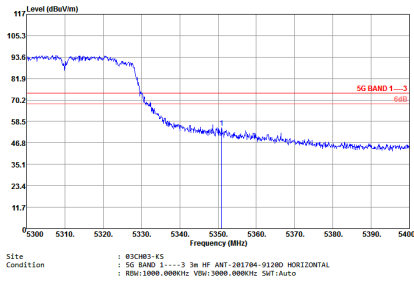
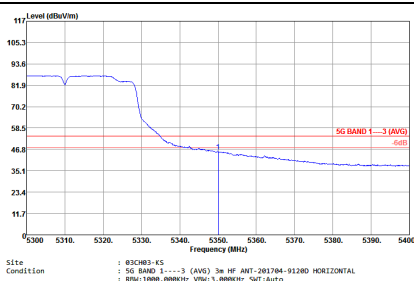
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - L	
1	Vertical	Vertical
Peak	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto
Avg.	Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-91280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH54 5270 - R	
1	Vertical	Vertical
Peak	 Site : 83C8B3-KS Condition : SG BAND 1----3 3m HF ANT-201704-01200 VERTICAL RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank
Avg.	 Site : 83C8B3-KS Condition : SG BAND 1----3 (AVG) 3m HF ANT-201704-01200 VERTICAL RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank



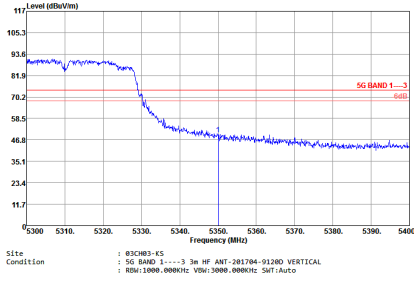
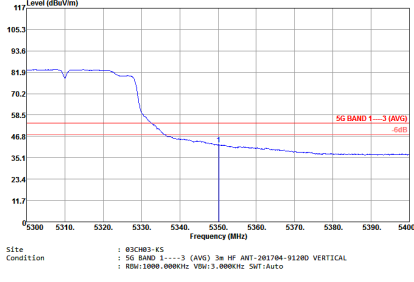
WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Horizontal	Fundamental
Peak	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto
Avg.	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CHB3-KS : SG BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank
Avg.	 Site Condition : 83CHB3-KS : SG BAND 1----3 (AVG) 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank

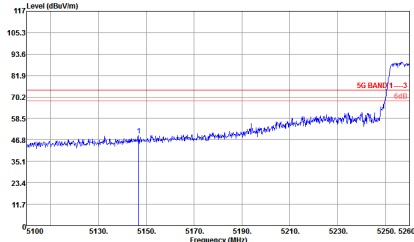
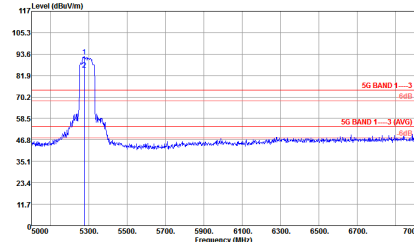
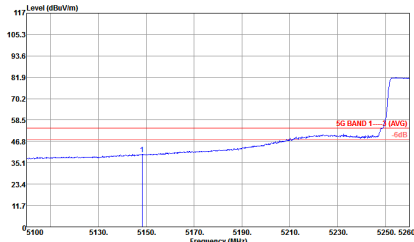


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - L	
1	Vertical	Fundamental
Peak	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91200 VERTICAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91200 VERTICAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto
Avg.	Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-91200 VERTICAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11n HT40 CH62 5310 - R	
1	Vertical	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank
Avg.	 Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank

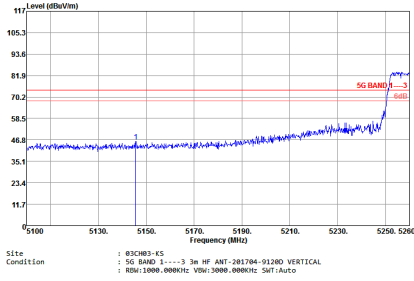
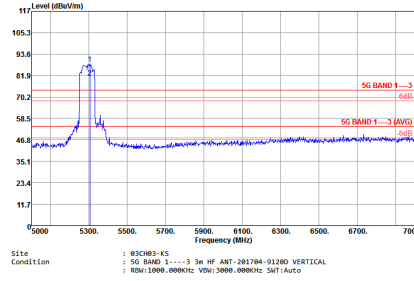
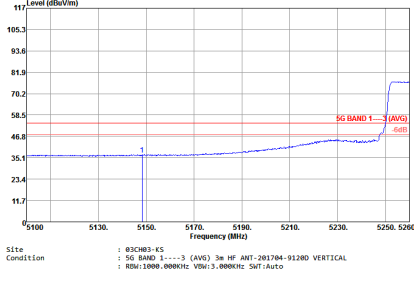
Band 2 5250~5350MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto
Avg.	 Site Condition : 83CH03-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

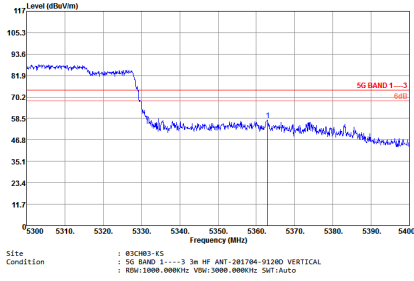
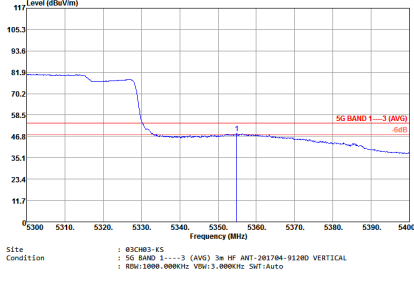


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Horizontal	Fundamental
Peak	Site Condition : 83CH83-KS : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	Site Condition : 83CH83-KS : SG BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

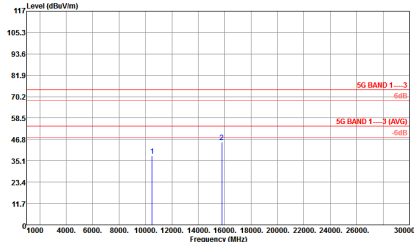
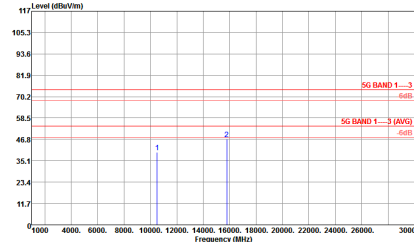


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - L	
1	Vertical	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSN:1000.0000Hz VSW:3000.0000Hz SMT:Auto	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSN:1000.0000Hz VSW:3000.0000Hz SMT:Auto
Avg.	 Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RSN:1000.0000Hz VSW:3000.0000Hz SMT:Auto	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH58 5290MHz - R	
1	Vertical	Fundamental
Peak	 Site Condition : 802.11ac VHT80 CH58 5290MHz - R : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.00000Hz VSW:3.00000Hz SMT:Auto	Left blank
Avg.	 Site Condition : 802.11ac VHT80 CH58 5290MHz - R : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.00000Hz VSW:3.00000Hz SMT:Auto	Left blank

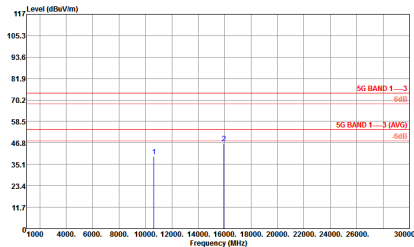
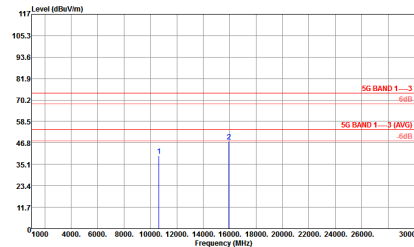
Band 2 - 5250~5350MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH52 5260MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 802.11n HT20 CH52 5260MHz HORIZONTAL : 5G BAND 1-3 : 5250~5350MHz : RSM:1000.000kHz VSM:3000.000kHz SAT:Auto	 Site Condition : 802.11n HT20 CH52 5260MHz VERTICAL : 5G BAND 1-3 : 5250~5350MHz : RSM:1000.000kHz VSM:3000.000kHz SAT:Auto

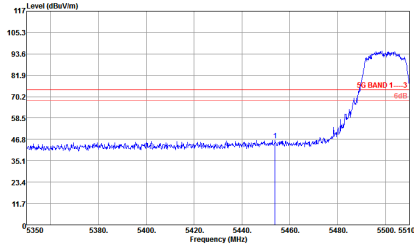
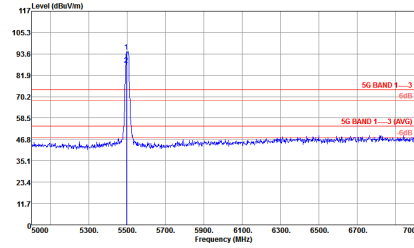
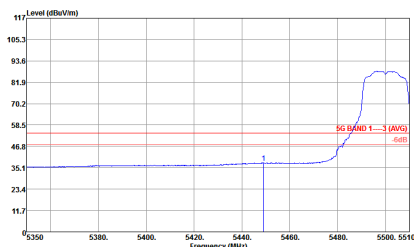


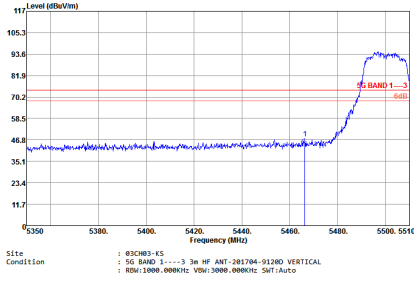
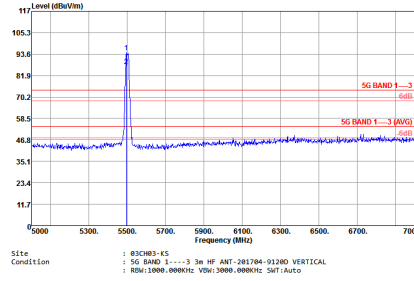
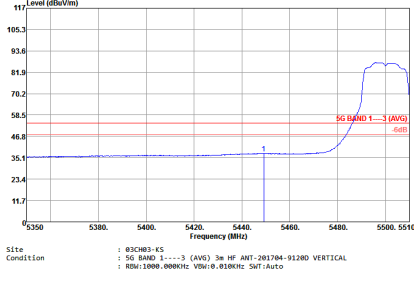
WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH60 5300MHz	
1	Horizontal	Vertical
Peak Avg.		

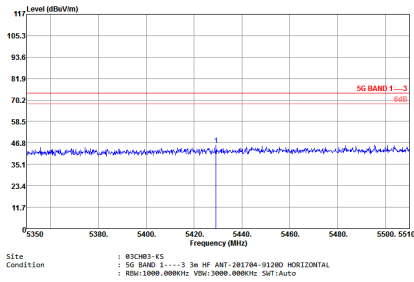
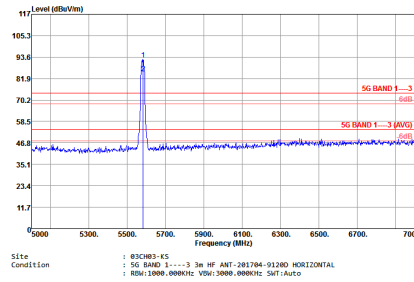
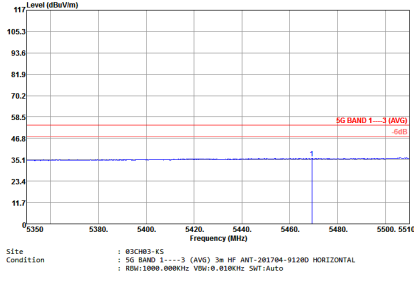


WIFI	Band 2 5250~5350MHz Harmonic @ 3m	
ANT	802.11n HT20 CH64 5320MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 802.11n-KS : SG BAND 1-3 3m HF ANT-281784-91280 HORIZONTAL : RSM:1000.000KHz VSW:3000.000KHz SMT:Auto	 Site Condition : 802.11n-KS : SG BAND 1-3 3m HF ANT-281784-91280 VERTICAL : RSM:1000.000KHz VSW:3000.000KHz SMT:Auto

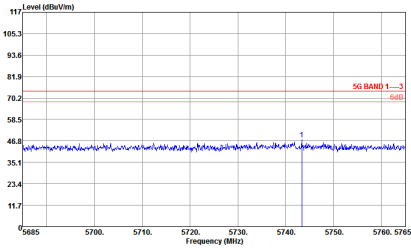
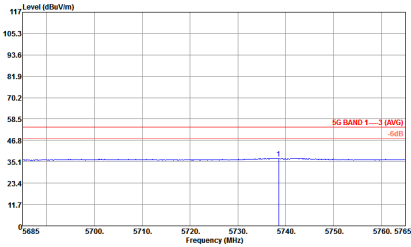
Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

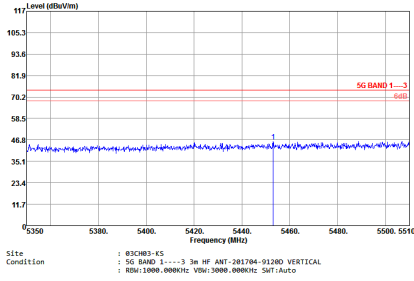
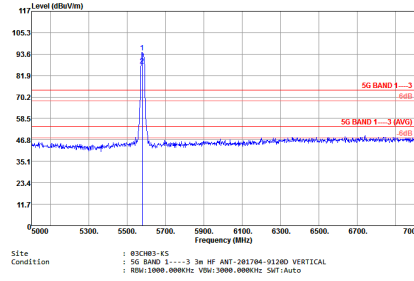
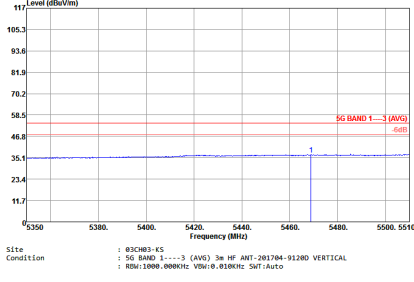
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CMB3-KS : 5G BAND 1----3 3m HF ANT-281704-91280 HORIZONTAL : RBW:10000.0000Hz VSW:3000.0000Hz SMT:Auto	 Site Condition : 83CMB3-KS : 5G BAND 1----3 3m HF ANT-281704-91280 HORIZONTAL : RBW:10000.0000Hz VSW:3000.0000Hz SMT:Auto
Avg.	 Site Condition : 83CMB3-KS : 5G BAND 1----3 (AVG) 3m HF ANT-281704-91280 HORIZONTAL : RBW:10000.0000Hz VSW:9.4300Hz SMT:Auto	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Vertical	Fundamental
Peak	 Site Condition : 802.11n HT20 CH100 5500MHz VSWR:1.0000Hz VSW:1.0000Hz SMT:Auto	 Site Condition : 802.11n HT20 CH100 5500MHz VSWR:1.0000Hz VSW:1.0000Hz SMT:Auto
Avg.	 Site Condition : 802.11n HT20 CH100 5500MHz VSWR:1.0000Hz VSW:1.0000Hz SMT:Auto	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 802.11n HT20 CH116 5580MHz - L : SG BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3000.000KHz SMT:Auto	 Site Condition : 802.11n HT20 CH116 5580MHz - L : SG BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3000.000KHz SMT:Auto
Avg.	 Site Condition : 802.11n HT20 CH116 5580MHz - L : SG BAND 1----3 (AVG) 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3000.000KHz SMT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CHB3-KS : SG BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3000.000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CHB3-KS : SG BAND 1----3 (AVG) 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:0.030KHz SMT:Auto	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - L	
1	Vertical	Fundamental
Peak	 Site Condition : 802.11n HT20 CH116 5580MHz - L : SG BAND 1-3 (dB) : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto	 Site Condition : 802.11n HT20 CH116 5580MHz - L : SG BAND 1-3 (dB) : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto
Avg.	 Site Condition : 802.11n HT20 CH116 5580MHz - L : SG BAND 1-3 (AVG) (dB) : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH116 5580MHz - R	
1	Vertical	Fundamental
Peak	Site Condition : 83CH83-KS : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto	Left blank
Avg.	Site Condition : 83CH83-KS : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:0.0100Hz SMT:Auto	Left blank

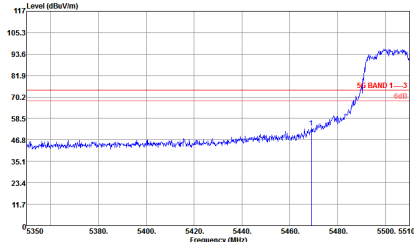
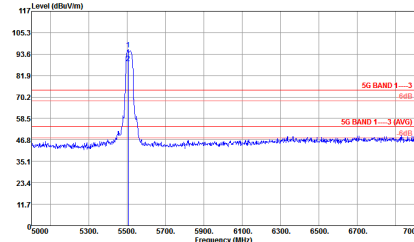
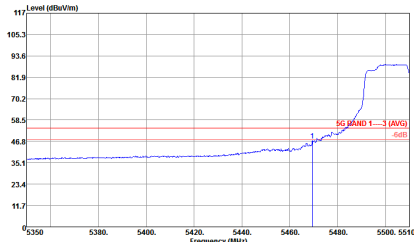


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Fundamental
Peak	Site : 83CH83-KS Condition : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto	Site : 83CH83-KS Condition : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto
Avg.	Site : 83CH83-KS Condition : SG BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:0.030KHz SMT:Auto	Left blank

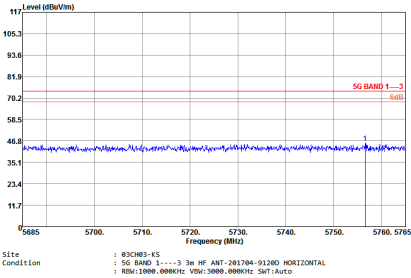
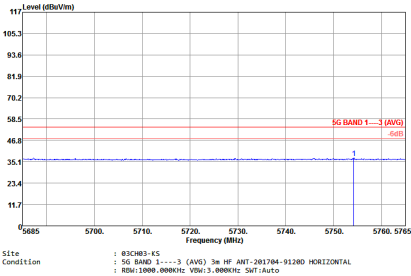


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Vertical	Fundamental
Peak.	Site : 803CH3-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto	Site : 803CH3-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:3000.0000Hz SMT:Auto
Avg.	Site : 803CH3-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.0000Hz VSW:0.0000Hz SMT:Auto	Left blank

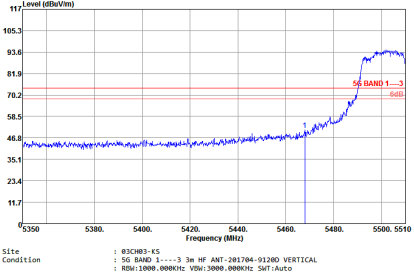
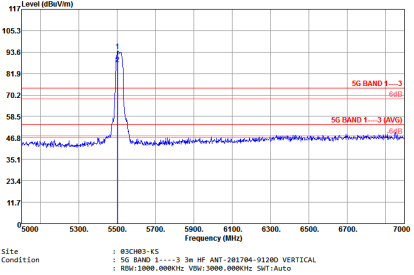
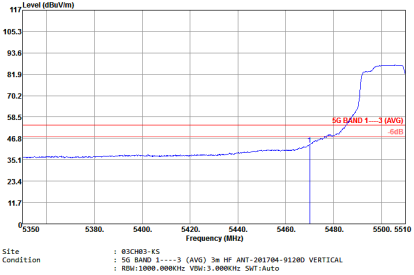
Band 3 5470~5725MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000KHz SMT:Auto	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000KHz SMT:Auto
Avg.	 Site Condition : 83CH03-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-01200 HORIZONTAL : RBW:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

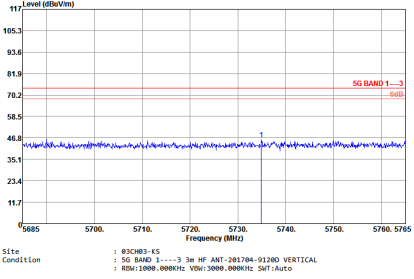
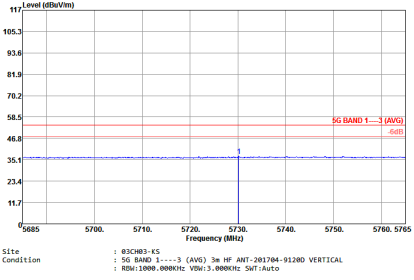


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - L	
1	Vertical	Fundamental
Peak	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 VERTICAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto	 Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 VERTICAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto
Avg.	 Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-91280 VERTICAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH102 5510MHz - R	
1	Vertical	Fundamental
Peak	 Site Condition : 83CHB3-KS : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CHB3-KS : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1	Horizontal	Fundamental
Peak	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 HORIZONTAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-91280 HORIZONTAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto
Avg.	Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

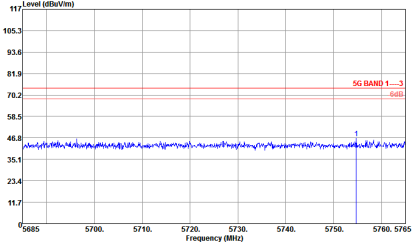
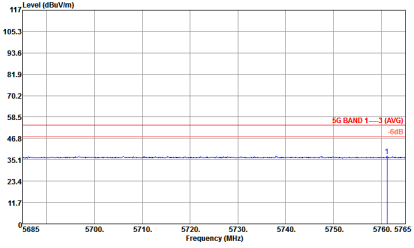


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1	Horizontal	Fundamental
Peak	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 HORIZONTAL RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 HORIZONTAL RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank



WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - L	
1	Vertical	Fundamental
Peak		
Avg.		Left blank

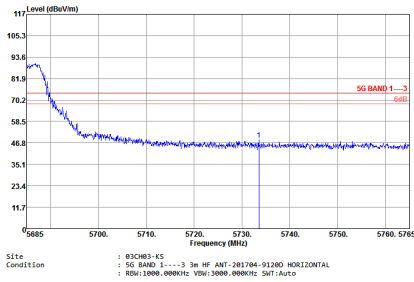
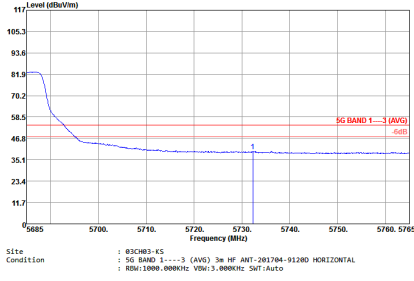


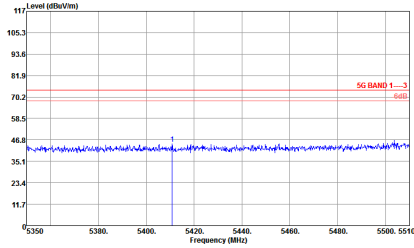
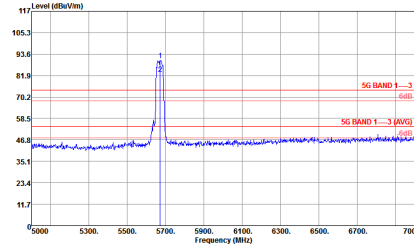
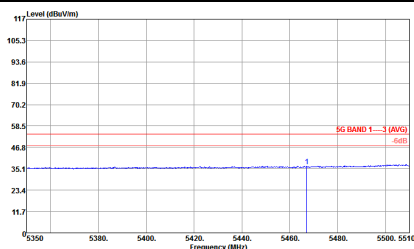
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH110 5550MHz - R	
1	Vertical	Fundamental
Peak	 Site : 83CH3-KS Condition : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	 Site : 83CH3-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

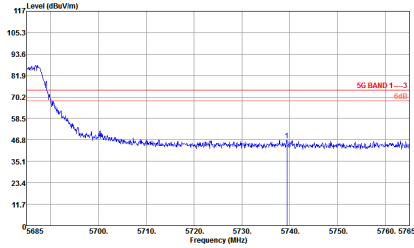
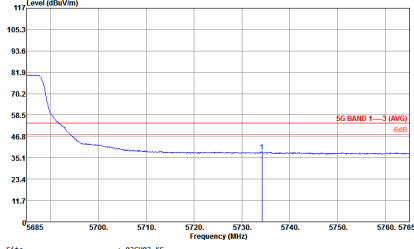


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1	Horizontal	Fundamental
Peak	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01280 HORIZONTAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto	Site : 83CH83-KS Condition : SG BAND 1-3 3m HF ANT-201704-01280 HORIZONTAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto
Avg.	Site : 83CH83-KS Condition : SG BAND 1-3 (AVG) 3m HF ANT-201704-01280 HORIZONTAL : RSM:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

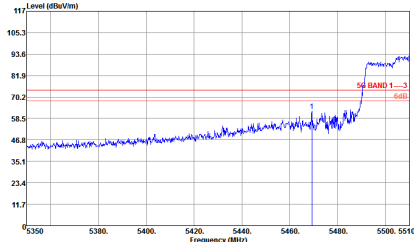
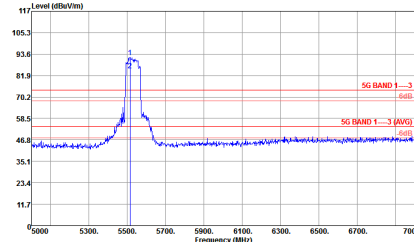
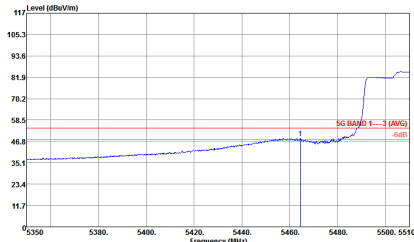


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CHB3-KS : SG BAND 1----3 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CHB3-KS : SG BAND 1----3 (AVG) 3m HF ANT-201704-01200 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

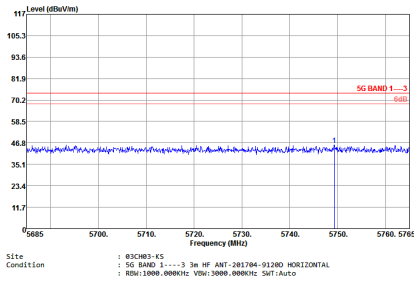
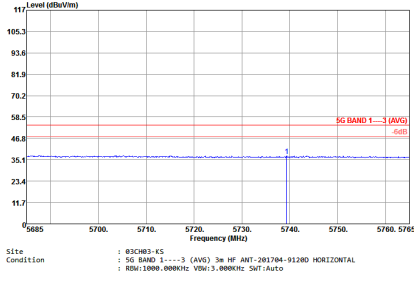
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - L	
1	Vertical	Fundamental
Peak	 Site Condition : 802.11n HT40 CH134 5670MHz - L : SG BAND 1-3 (AVERAGE) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.000MHz VSW:3.000MHz SMT:Auto	 Site Condition : 802.11n HT40 CH134 5670MHz - L : SG BAND 1-3 (AVERAGE) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.000MHz VSW:3.000MHz SMT:Auto
Avg.	 Site Condition : 802.11n HT40 CH134 5670MHz - L : SG BAND 1-3 (AVERAGE) 3m HF ANT-201704-01200 VERTICAL : RSM:1000.000MHz VSW:3.000MHz SMT:Auto	Left blank

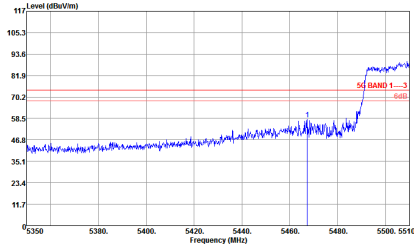
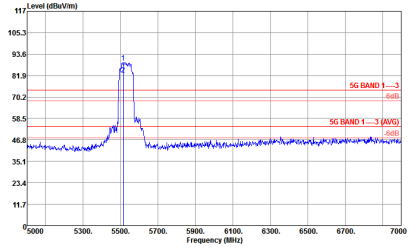
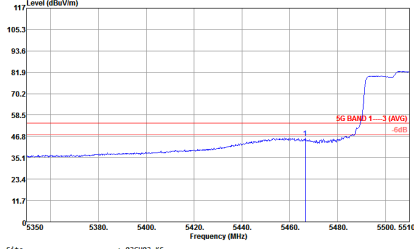
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11n HT40 CH134 5670MHz - R	
1	Vertical	Fundamental
Peak	 Site Condition : 83CH83-KS : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank
Avg.	 Site Condition : 83CH83-KS : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RES:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank

Band 3 5470~5725MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

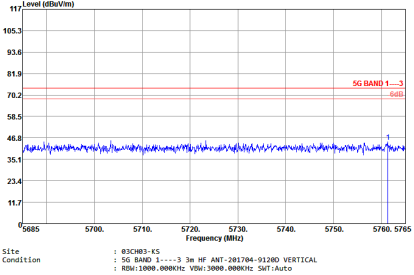
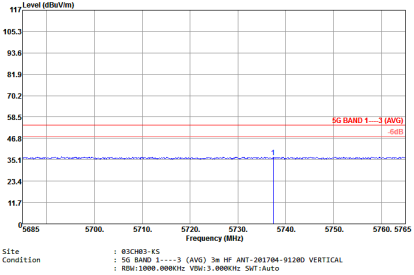
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3.000.000Hz SMT:Auto
Avg.	 Site Condition : 83CH03-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank



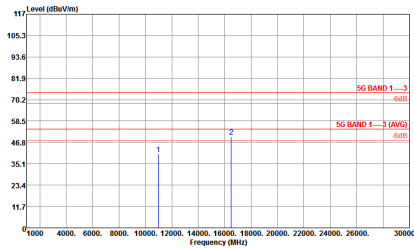
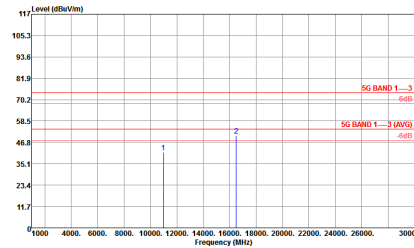
WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1	Horizontal	Fundamental
Peak	 Site Condition : 83CHB3-KS : 5G BAND 1-3 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CHB3-KS : 5G BAND 1-3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - L	
1	Vertical	Fundamental
Peak	 Site Condition : 83CH03-KS : SG BAND 1-3 3m HF ANT-201704-01280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	 Site Condition : 83CH03-KS : SG BAND 1-3 3m HF ANT-201704-01280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto
Avg.	 Site Condition : 83CH03-KS : SG BAND 1-3 (AVG) 3m HF ANT-201704-01280 VERTICAL : RSM:1000.0000Hz VSW:3.0000Hz SMT:Auto	Left blank

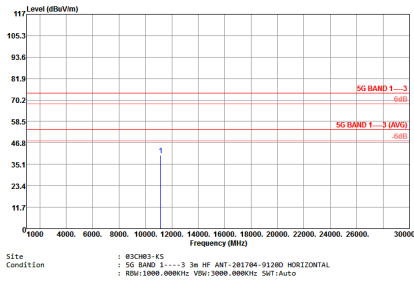
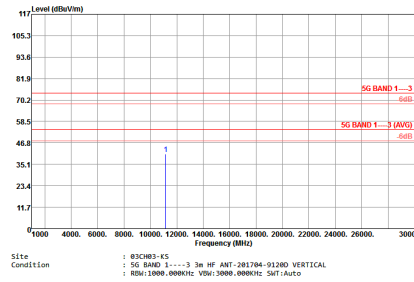


WIFI	Band 3 5470~5725MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH106 5530MHz - R	
1	Vertical	Fundamental
Peak	 Site Condition : 83CH83-KS : SG BAND 1-3 3m HF ANT-201704-01200 VERTICAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CH83-KS : SG BAND 1-3 (AVG) 3m HF ANT-201704-01200 VERTICAL : RES:1000.000KHz VSW:3.000KHz SMT:Auto	Left blank

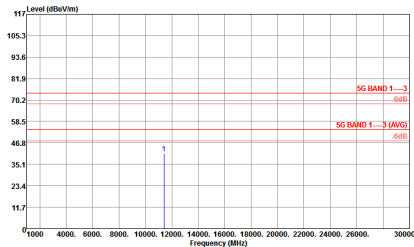
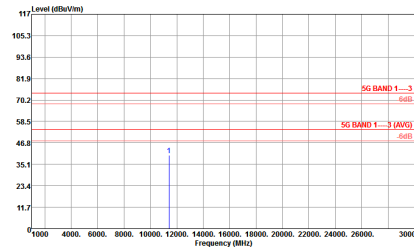
Band 3 - 5470~5725MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH100 5500MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 802.11n HT20 CH100 5500MHz : 5G BAND 1-3 5470~5725MHz HP ANT-281704-91280 HORIZONTAL : RSM:10000.000000Hz VSM:30000.000000Hz SAT:Auto	 Site Condition : 802.11n HT20 CH100 5500MHz : 5G BAND 1-3 5470~5725MHz HP ANT-281704-91280 VERTICAL : RSM:10000.000000Hz VSM:30000.000000Hz SAT:Auto

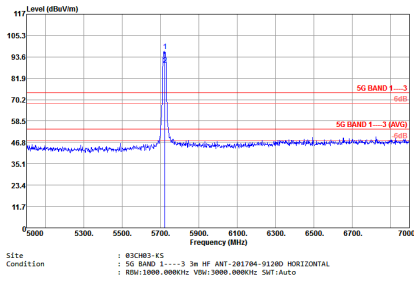
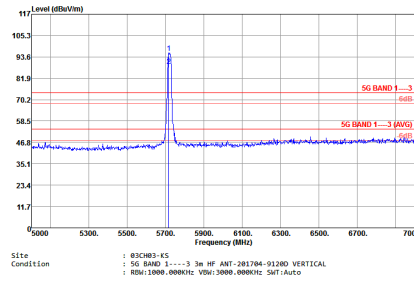


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH116 5580MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 802.11n HT20 CH116 5580MHz HORIZONTAL : RSM:1000.000MHz VSW:3000.000Hz SMT:Auto	 Site Condition : 802.11n HT20 CH116 5580MHz VERTICAL : RSM:1000.000MHz VSW:3000.000Hz SMT:Auto

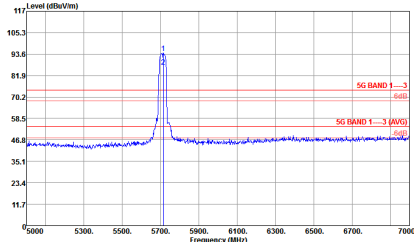
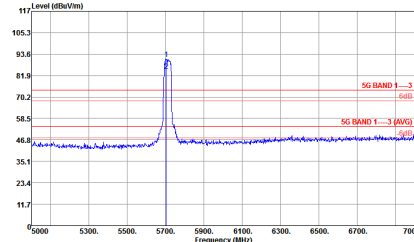


WIFI	Band 3 5470~5725MHz Harmonic @ 3m	
ANT	802.11n HT20 CH140 5700MHz	
1	Horizontal	Vertical
Peak Avg.	 Site : 802.11n-3 Condition : SG BAND 1-3 3m HF ANT-281784-91280 HORIZONTAL : RSM:1000.000KHz VSW:3000.000KHz SMT:Auto	 Site : 802.11n-3 Condition : SG BAND 1-3 3m HF ANT-281784-91280 VERTICAL : RSM:1000.000KHz VSW:3000.000KHz SMT:Auto

Band 3 - Straddle Channel
WIFI 802.11n HT20 (Fundamental @ 3m)

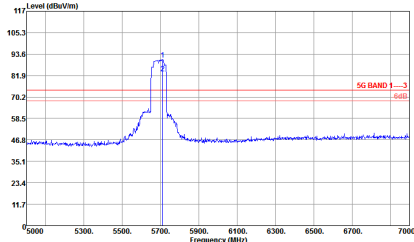
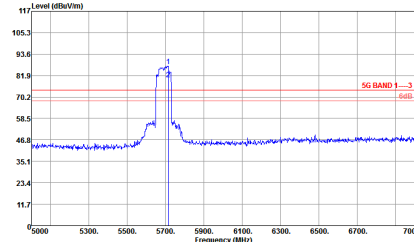
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 3 – Straddle Channel
WIFI 802.11n HT40 (Fundamental @ 3m)

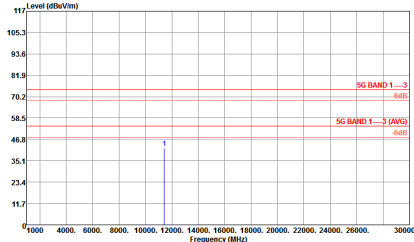
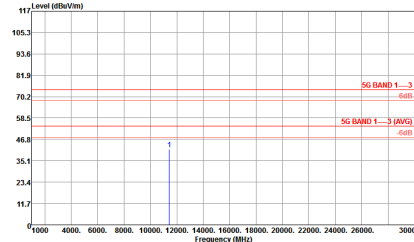
WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11n HT40 CH142 5710MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 83CH3-KS : 5G BAND 1-3 3m HF ANT-281784-91280 HORIZONTAL : RMS:1000.0000Hz VSW:3.0000.0000Hz SMT:Auto	 Site Condition : 83CH3-KS : 5G BAND 1-3 3m HF ANT-281784-91280 VERTICAL : RMS:1000.0000Hz VSW:3.0000.0000Hz SMT:Auto



Band 3 – Straddle Channel
WIFI 802.11ac VHT80 (Fundamental @ 3m)

WIFI	Band 3 Straddle Channel Fundamental @ 3m	
ANT	802.11ac VHT80 CH138 5690MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 83CH3-KS : 5G BAND 1-3 3m HF ANT-281784-91280 HORIZONTAL : RMS:100W, 00001C, VSW:3.00W, 00001C, SUT:Auto	 Site Condition : 83CH3-KS : 5G BAND 1-3 3m HF ANT-281784-91280 VERTICAL : RMS:100W, 00001C, VSW:3.00W, 00001C, SUT:Auto

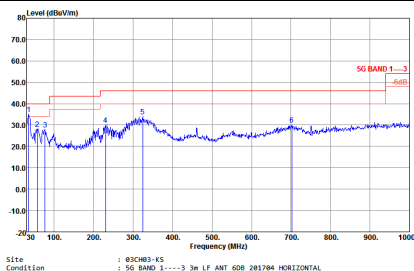
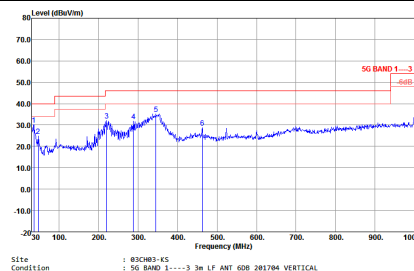
Band 3 - Straddle Channel
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI	Band 3 Straddle Channel Harmonic @ 3m	
ANT	802.11n HT20 CH144 5720MHz	
1	Horizontal	Vertical
Peak Avg.	 Site Condition : 802.11n HT20 CH144 5720MHz HORIZONTAL : 5G BAND 1-3-3 3m HP ANT-281704-91280 HORIZONTAL : RSM:1000.0000Hz VSW:3000.0000Hz SAT:Auto	 Site Condition : 802.11n HT20 CH144 5720MHz VERTICAL : 5G BAND 1-3-3 3m HP ANT-281704-91280 VERTICAL : RSM:1000.0000Hz VSW:3000.0000Hz SAT:Auto

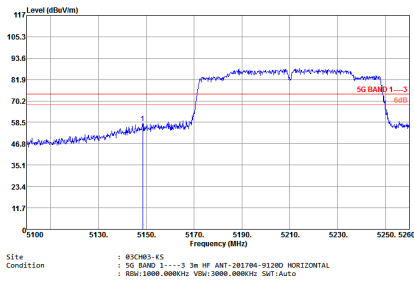
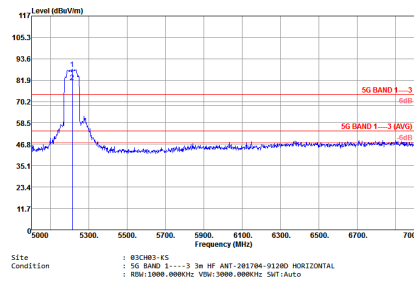
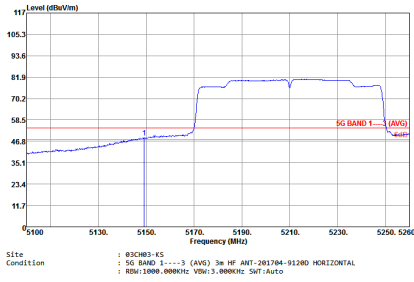
Band 3 – Straddle Channel

Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1	Horizontal	Vertical
QP / Peak	 Site Condition : 802.11ac VHT80 LF ANT 600 281784 HORIZONTAL : 5G BAND 1-3 5m LP ANT 600 281784 HORIZONTAL : RSM:100.0000kHz VSM:300.0000kHz SMT:Auto	 Site Condition : 802.11ac VHT80 LF ANT 600 281784 VERTICAL : 5G BAND 1-3 5m LP ANT 600 281784 VERTICAL : RSM:100.0000kHz VSM:300.0000kHz SMT:Auto

Band 1 - 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
2	Horizontal	Fundamental
Peak	 Site : 83CH3-KS Condition : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL RBW:100K,000KHz VSW:3000,000KHz SMT:Auto	 Site : 83CH3-KS Condition : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL RBW:100K,000KHz VSW:3000,000KHz SMT:Auto
Avg.	 Site : 83CH3-KS Condition : SG BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL RBW:100K,000KHz VSW:3,000KHz SMT:Auto	Left blank

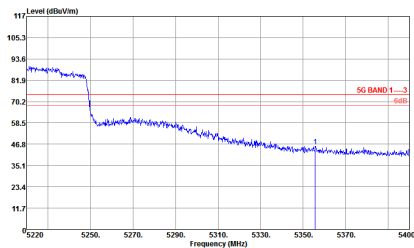
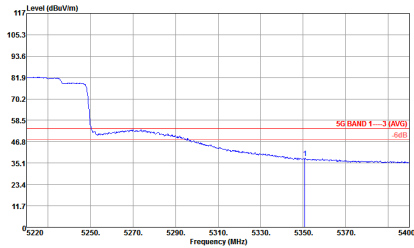


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
2	Horizontal	Fundamental
Peak	Site Condition : 83CMB3-KS : SG BAND 1----3 3m HP ANT-201704-91280 HORIZONTAL : RBW:10000.00000Hz VSW:3.00000Hz Sd1:Auto	Left blank
Avg.	Site Condition : 83CMB3-KS : SG BAND 1----3 (AVG) 3m HP ANT-201704-91280 HORIZONTAL : RBW:10000.00000Hz VSW:3.00000Hz Sd1:Auto	Left blank

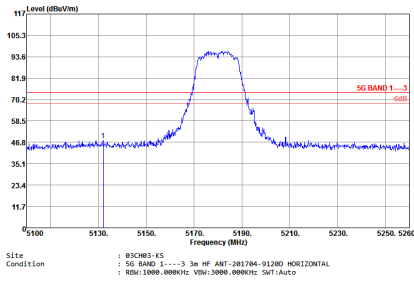
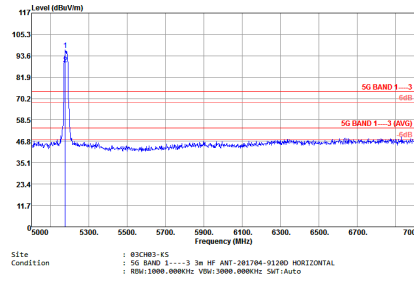
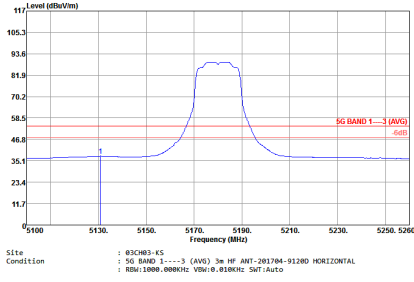


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
2	Vertical	Fundamental
Peak	Site : 83CWB3-K5 Condition : SG BAND 1----3 3m HP ANT-201704-91280 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SMT:Auto	Site : 83CWB3-K5 Condition : SG BAND 1----3 3m HP ANT-201704-91280 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SMT:Auto
Avg.	Site : 83CWB3-K5 Condition : SG BAND 1----3 (AVG) 3m HP ANT-201704-91280 VERTICAL : RBW:1000.000kHz VBW:3.000kHz SMT:Auto	Left blank

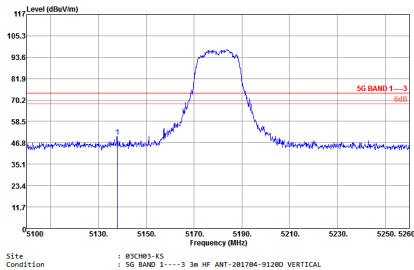
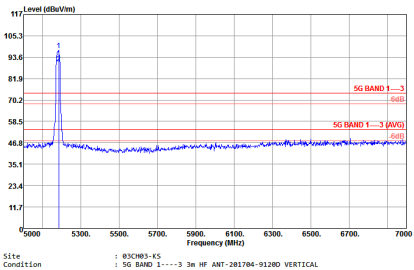
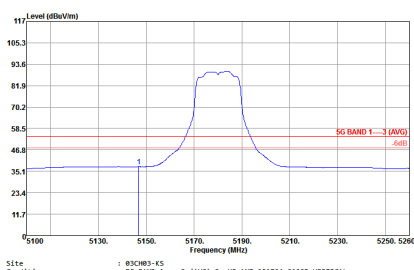


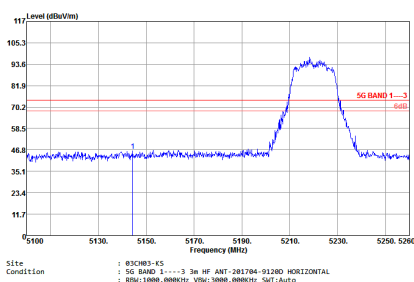
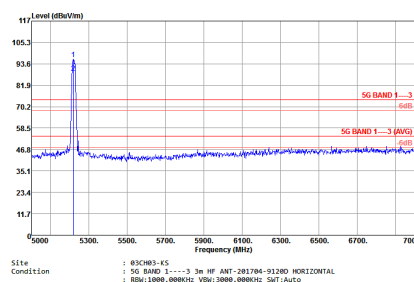
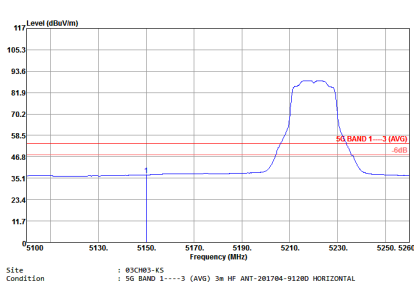
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
2	Vertical	Fundamental
Peak	 Site : 83C8B3-KS Condition : SG BAND 1----3 3m HP ANT-201704-91280 VERTICAL : RBW:1000.0000KHz VBW:3000.0000KHz SMT:Auto	Left blank
Avg.	 Site : 83C8B3-KS Condition : SG BAND 1----3 (AVG) 3m HP ANT-201704-91280 VERTICAL : RBW:1000.0000KHz VBW:3.0000KHz SMT:Auto	Left blank

Band 1 - 5150~5250MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 802.11n HT20 CH36 5180MHz HORIZONTAL : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000kHz VSW:3000.000kHz SMT:Auto	 Site Condition : 802.11n HT20 CH36 5180MHz HORIZONTAL : SG BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000kHz VSW:3000.000kHz SMT:Auto
Avg.	 Site Condition : 802.11n HT20 CH36 5180MHz HORIZONTAL : SG BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000kHz VSW:0.910kHz SMT:Auto	Left blank



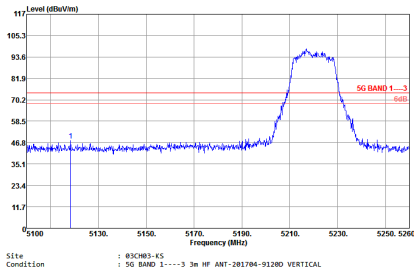
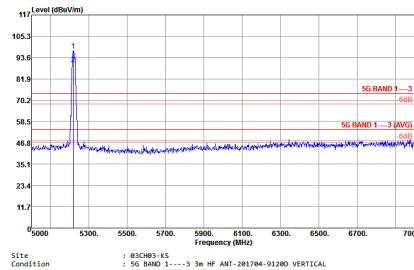
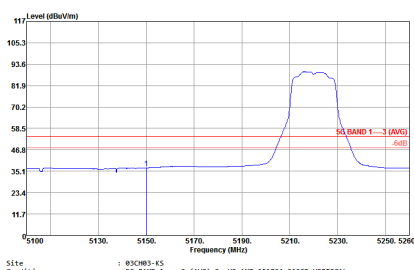
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH36 5180MHz	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

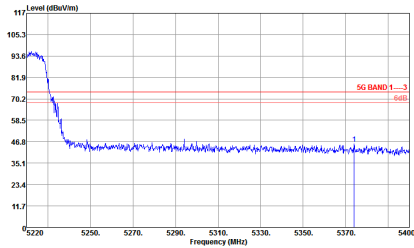
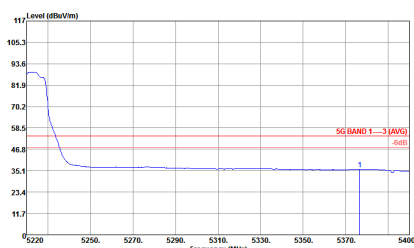
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 802.11n HT20 CH44 5220MHz HORIZONTAL : SG BAND 1---3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.0000Hz VSW:3000.0000Hz SAT:Auto	 Site Condition : 802.11n HT20 CH44 5220MHz HORIZONTAL : SG BAND 1---3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.0000Hz VSW:3000.0000Hz SAT:Auto
Avg.	 Site Condition : 802.11n HT20 CH44 5220MHz HORIZONTAL : SG BAND 1---3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.0000Hz VSW:3000.0000Hz SAT:Auto	Left blank



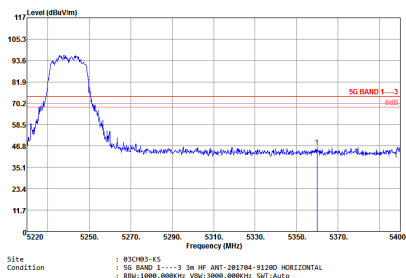
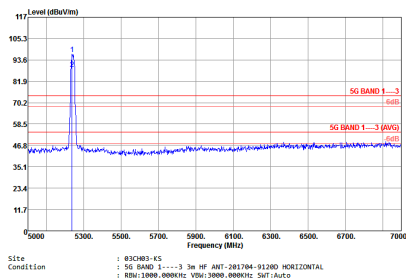
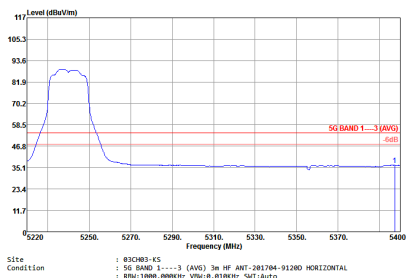
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Horizontal	Fundamental
Peak	Site Condition : 03CWB3-KS : 5G BAND 1-3 (Peak) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:1000.000KHz SMT:Auto	Left blank
Avg.	Site Condition : 03CWB3-KS : 5G BAND 1-3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:10.000KHz SMT:Auto	Left blank

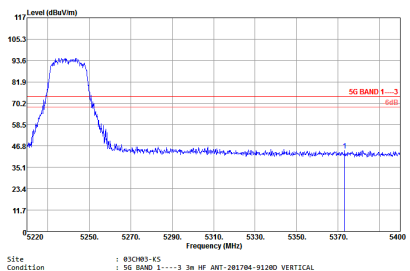
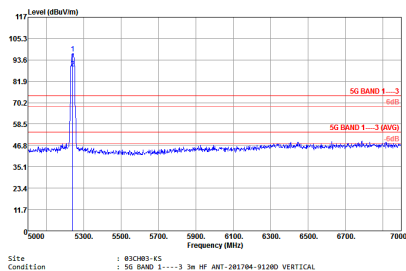
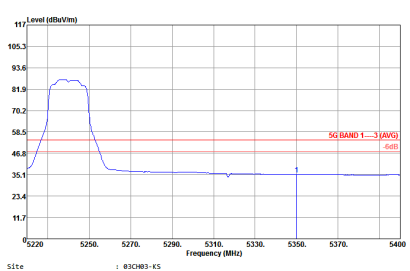


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

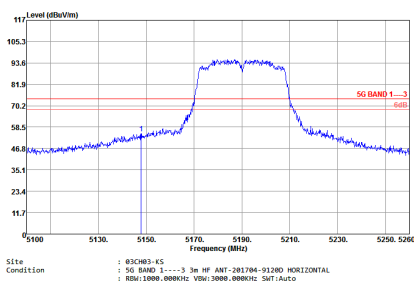
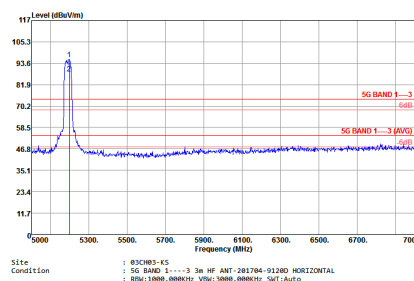
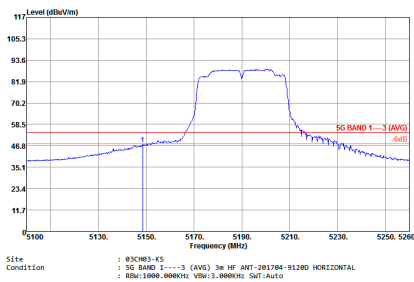
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH44 5220MHz - R	
1+2	Vertical	Fundamental
Peak	 Site Condition : 83CMB3-KS : 5G BAND 1-3-3 3m HP ANT-281784-91280 VERTICAL : RBW:1000.0000KHz VBW:3000.0000KHz SMT:Auto	Left blank
Avg.	 Site Condition : 83CMB3-KS : 5G BAND 1-3-3 (AVG) 3m HP ANT-281784-91280 VERTICAL : RBW:1000.0000KHz VBW:3000.0000KHz SMT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 83CH03-KS : 5G BAND 1-3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto	 Site Condition : 83CH03-KS : 5G BAND 1-3 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto
Avg.	 Site Condition : 83CH03-KS : 5G BAND 1-3 (AVG) 3m HF ANT-201704-91200 HORIZONTAL : RBW:1000.000KHz VSW:3000.000KHz SMT:Auto	Left blank

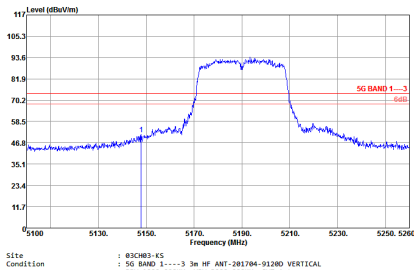
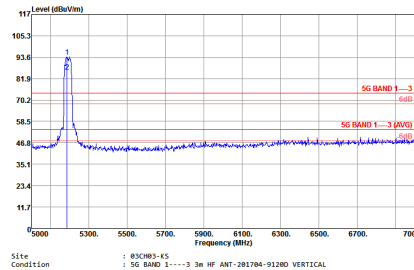
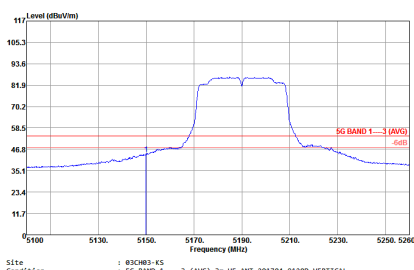
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT20 CH48 5240MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

Band 1 5150~5250MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 83CMB3-KS : 5G BAND 1----3 3m HF ANT-281784-91280 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SMT:Auto	 Site Condition : 83CMB3-KS : 5G BAND 1----3 3m HF ANT-281784-91280 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SMT:Auto
Avg.	 Site Condition : 83CMB3-KS : 5G BAND 1----3 (AVG) 3m HF ANT-281784-91280 HORIZONTAL : RBW:1000.000KHz VBW:3.000KHz SMT:Auto	Left blank

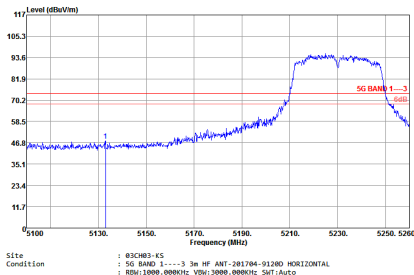
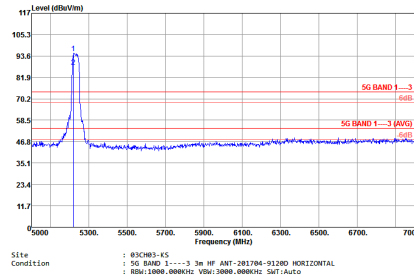
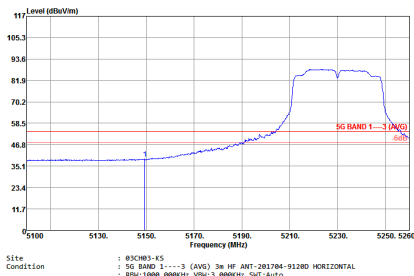


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Horizontal	Fundamental
Peak	Site Condition : 83CMB3-KS : 5G BAND 1-3-3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.0000KHz VBW:3.0000KHz SMT:Auto	Left blank
Avg.	Site Condition : 83CMB3-KS : 5G BAND 1-3-3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.0000KHz VBW:3.0000KHz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

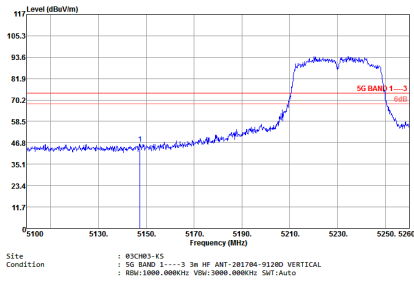
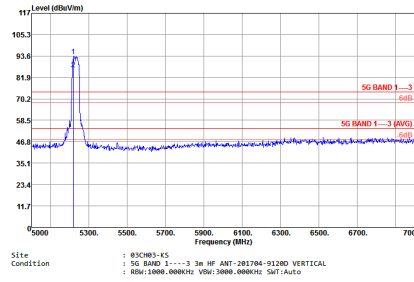
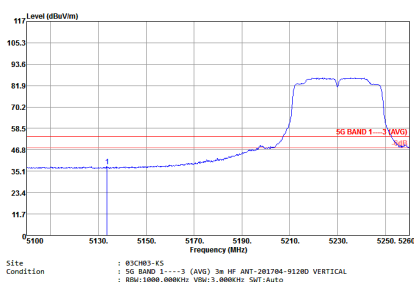


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH38 5190MHz - R	
1+2	Vertical	Fundamental
Peak	Site : 03CMB3-KS Condition : 5G BAND 1-3 (AVG) 3m HF ANT-201704-91280 VERTICAL RSM:1000.000000Hz VSW:3.000000Hz SMT:Auto	Left blank
Avg.	Site : 03CMB3-KS Condition : 5G BAND 1-3 (AVG) 3m HF ANT-201704-91280 VERTICAL RSM:1000.000000Hz VSW:3.000000Hz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 03CH03-KS : SG BAND 1----3 3e HP ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3.000KHz SAT:Auto	 Site Condition : 03CH03-KS : SG BAND 1----3 3e HP ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3.000KHz SAT:Auto
Avg.	 Site Condition : 03CH03-KS : SG BAND 1----3 (AVG) 3e HP ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VSW:3.000KHz SAT:Auto	Left blank



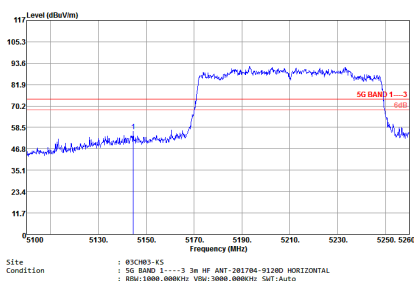
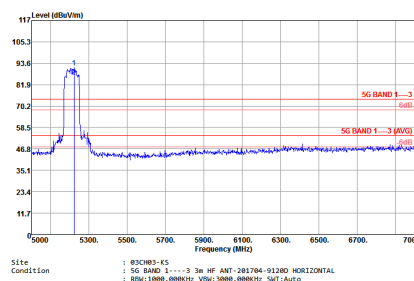
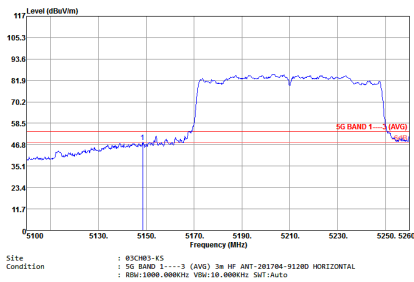
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Horizontal	Fundamental
Peak	Site Condition : 85CMB3-E5 : 5G BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:10000.000000Hz VBW:30000.000000Hz SMT:Auto	Left blank
Avg.	Site Condition : 85CMB3-E5 : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:10000.000000Hz VBW:30000.000000Hz SMT:Auto	Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - L	
1+2	Vertical	Fundamental
Peak		
Avg.		Left blank

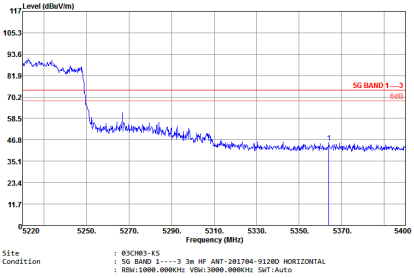
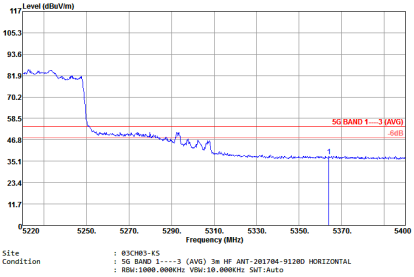


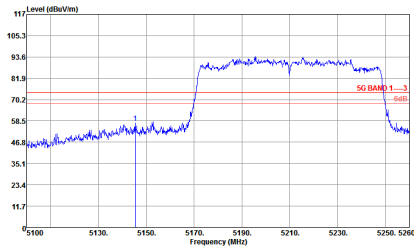
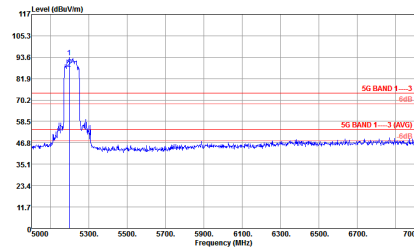
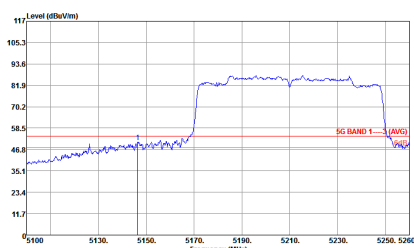
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11n HT40 CH46 5230MHz - R	
1+2	Vertical	Fundamental
Peak	Site : 83C8B3-KS Condition : 5G BAND 1----3 3m HF ANT-201704-91280 VERTICAL RBW:1000.0000Hz VBW:3.0000Hz SMT:Auto	Left blank
Avg.	Site : 83C8B3-KS Condition : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91280 VERTICAL RBW:1000.0000Hz VBW:3.0000Hz SMT:Auto	Left blank

Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Horizontal	Fundamental
Peak	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SMT:Auto	 Site Condition : 83CH03-KS : 5G BAND 1----3 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SMT:Auto
Avg.	 Site Condition : 83CH03-KS : 5G BAND 1----3 (AVG) 3m HF ANT-201704-91280 HORIZONTAL : RBW:1000.000KHz VBW:10.000KHz SMT:Auto	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1+2	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1+2	Vertical	Fundamental
Peak	 Site Condition : 83CMB3-KS : 5G BAND 1-3-3 3m HP ANT-201704-91280 VERTICAL : RBW:1000.0000Hz VSW:3000.0000Hz SMT:Auto	 Site Condition : 83CMB3-KS : 5G BAND 1-3-3 3m HP ANT-201704-91280 VERTICAL : RBW:1000.0000Hz VSW:3000.0000Hz SMT:Auto
Avg.	 Site Condition : 83CMB3-KS : 5G BAND 1-3-3 (AVG) 3m HP ANT-201704-91280 VERTICAL : RBW:1000.0000Hz VSW:30.0000Hz SMT:Auto	Left blank