



FCC RADIO TEST REPORT

FCC ID : UZ7ET56DE
Equipment : Tablet
Brand Name : ZEBRA
Model Name : ET56DE
Applicant : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Manufacturer : Zebra Technologies Corporation
1 Zebra Plaza, Holtsville, NY 11742
Standard : FCC Part 15 Subpart E §15.407

The product was received on Jan. 16, 2019 and testing was started from Jun. 23, 2019 and completed on Aug. 05, 2019. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issued Date
FR911635E	01	Initial issue of report	Aug. 08, 2019



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i)	26dB Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)	Maximum Conducted Output Power	Pass	-
3.3	15.407(a)	Power Spectral Density	Pass	-
3.4	15.407(b)	Unwanted Emissions	Pass	Under limit 1.09 dB at 5470.000 MHz
3.5	15.207	AC Conducted Emission	Pass	Under limit 7.16 dB at 13.560 MHz
3.6	15.407(c)	Automatically Discontinue Transmission	Pass	-
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang**Report Producer: Ann Lee**



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Tablet
Brand Name	ZEBRA
Model Name	ET56DE
FCC ID	UZ7ET56DE
EUT supports Radios application	WCDMA/HSPA/LTE/NFC/GNSS WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE
HW Version	DV2
SW Version	Android version 8.1.0
FW Version	01-20-03-00-OG-U00-PRD
FW Version for TXBF	01-19-08-00-0G-U00-PLT
MFD	19Jun01
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

Specification of Accessories				
Spare Standard Battery 24.13Wh	Brand Name	Zebra	Model Name	BT-000393

Supported Unit Used in Test Configuration and System				
Cradle (Dock) for EMC	Brand Name	Zebra	Part Number	CRD-ET5X-1SCG1
Cradle (Dock) for RSE	Brand Name	Zebra	Part Number	CHG-ET5X-CBL1-01
Adapter	Brand Name	Zebra	Part Number	PWRBGA12V50W0WW
DC Cable	Brand Name	Zebra	Part Number	CBL-DC-388A1-01



1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Frequency Range	5180 MHz ~ 5240 MHz 5260 MHz ~ 5320 MHz 5500 MHz ~ 5720 MHz
Maximum Output Power to Antenna <CDD Mode>	<5180 MHz ~ 5240 MHz> <Ant. 1> 802.11a : 18.80 dBm / 0.0759 W 802.11a HT20 : 18.80 dBm / 0.0759 W 802.11a HT40 : 18.60 dBm / 0.0724 W 802.11ac VHT20: 18.90 dBm / 0.0776 W 802.11ac VHT40: 18.70 dBm / 0.0741 W 802.11ac VHT80: 18.00 dBm / 0.0631 W <Ant. 2> 802.11a : 18.80 dBm / 0.0759 W 802.11a HT20 : 18.70 dBm / 0.0741 W 802.11a HT40 : 18.60 dBm / 0.0724 W 802.11ac VHT20: 18.80 dBm / 0.0759 W 802.11ac VHT40: 18.70 dBm / 0.0741 W 802.11ac VHT80: 17.90 dBm / 0.0617 W MIMO <Ant. 1+2> 802.11a : 19.86 dBm / 0.0968 W 802.11a HT20 : 19.61 dBm / 0.0914 W 802.11a HT40 : 21.76 dBm / 0.1500 W 802.11ac VHT20: 19.71 dBm / 0.0935 W 802.11ac VHT40: 21.86 dBm / 0.1535 W 802.11ac VHT80: 19.96 dBm / 0.0991 W <5260 MHz ~ 5320 MHz> <Ant. 1> 802.11a : 18.40 dBm / 0.0692 W 802.11a HT20 : 18.20 dBm / 0.0661 W 802.11a HT40 : 18.10 dBm / 0.0646 W 802.11ac VHT20: 18.30 dBm / 0.0676 W 802.11ac VHT40: 18.20 dBm / 0.0661 W 802.11ac VHT80: 14.40 dBm / 0.0275 W <Ant. 2> 802.11a : 18.40 dBm / 0.0692 W 802.11a HT20 : 18.30 dBm / 0.0676 W 802.11a HT40 : 18.30 dBm / 0.0676 W 802.11ac VHT20: 18.40 dBm / 0.0692 W 802.11ac VHT40: 18.40 dBm / 0.0692 W 802.11ac VHT80: 14.40 dBm / 0.0275 W MIMO <Ant. 1+2> 802.11a : 19.71 dBm / 0.0935 W 802.11a HT20 : 19.16 dBm / 0.0824 W 802.11a HT40 : 21.11 dBm / 0.1291 W 802.11ac VHT20: 19.26 dBm / 0.0843 W 802.11ac VHT40: 21.21 dBm / 0.1321 W 802.11ac VHT80: 14.16 dBm / 0.0261 W



Standards-related Product Specification	
Maximum Output Power to Antenna <CDD Mode>	<5500 MHz ~ 5720 MHz> <Ant. 1> 802.11a : 19.90 dBm / 0.0977 W 802.11a HT20 : 19.80 dBm / 0.0955 W 802.11a HT40 : 18.80 dBm / 0.0759 W 802.11ac VHT20: 19.90 dBm / 0.0977 W 802.11ac VHT40: 18.90 dBm / 0.0776 W 802.11ac VHT80: 19.40 dBm / 0.0871 W <Ant. 2> 802.11a : 19.80 dBm / 0.0955 W 802.11a HT20 : 19.70 dBm / 0.0933 W 802.11a HT40 : 18.80 dBm / 0.0759 W 802.11ac VHT20: 19.80 dBm / 0.0776 W 802.11ac VHT40: 18.90 dBm / 0.0776 W 802.11ac VHT80: 19.30 dBm / 0.0871 W MIMO <Ant. 1+2> 802.11a : 19.71 dBm / 0.0935 W 802.11a HT20 : 19.01 dBm / 0.0796 W 802.11a HT40 : 21.81 dBm / 0.1517 W 802.11ac VHT20: 19.11 dBm / 0.0851 W 802.11ac VHT40: 21.91 dBm / 0.1552 W 802.11ac VHT80: 22.41 dBm / 0.1741 W
Maximum Output Power to Antenna <TXBF Mode>	<5180 MHz ~ 5240 MHz> MIMO <Ant. 1+2> 802.11ac VHT20: 20.91 dBm / 0.1233 W 802.11ac VHT40: 21.46 dBm / 0.1400 W 802.11ac VHT80: 19.76 dBm / 0.0946 W <5260 MHz ~ 5320 MHz> MIMO <Ant. 1+2> 802.11ac VHT20: 20.66 dBm / 0.1164 W 802.11ac VHT40: 21.26 dBm / 0.1337 W 802.11ac VHT80: 13.77 dBm / 0.0238 W <5500 MHz ~ 5720 MHz> MIMO <Ant. 1+2> 802.11ac VHT20: 20.71 dBm / 0.1178 W 802.11ac VHT40: 21.42 dBm / 0.1378 W 802.11ac VHT80: 22.31 dBm / 0.1702 W



Standards-related Product Specification														
99% Occupied Bandwidth <CDD Mode>		<Ant. 1> 802.11a : 16.90 MHz 802.11ac VHT20 : 18.00 MHz 802.11ac VHT40 : 36.60 MHz 802.11ac VHT80 : 76.80 MHz <Ant. 2> 802.11a : 16.80 MHz 802.11ac VHT20 : 17.95 MHz 802.11ac VHT40 : 36.70 MHz 802.11ac VHT80 : 76.80 MHz MIMO <Ant. 1> 802.11a : 16.75 MHz 802.11ac VHT20 : 17.90 MHz 802.11ac VHT40 : 36.70 MHz 802.11ac VHT80 : 76.80 MHz MIMO <Ant. 2> 802.11a : 16.70 MHz 802.11ac VHT20 : 17.85 MHz 802.11ac VHT40 : 36.60 MHz 802.11ac VHT80 : 76.92 MHz												
99% Occupied Bandwidth <TXBF Mode>		MIMO <Ant. 1> 802.11ac VHT20 : 17.98 MHz 802.11ac VHT40 : 38.26 MHz 802.11ac VHT80 : 78.88 MHz MIMO <Ant. 2> 802.11ac VHT20 : 18.03 MHz 802.11ac VHT40 : 37.76 MHz 802.11ac VHT80 : 78.88 MHz												
Antenna Type / Gain		<5180 MHz ~ 5240 MHz> Ant. 1 : Chip Antenna with gain 3.50 dBi Ant. 2 : Chip Antenna with gain 3.30 dBi <5260 MHz ~ 5320 MHz> Ant. 1 : Chip Antenna with gain 3.87 dBi Ant. 2 : Chip Antenna with gain 3.43 dBi <5500 MHz ~ 5720 MHz> Ant. 1 : Chip Antenna with gain 3.92 dBi Ant. 2 : Chip Antenna with gain 3.83 dBi												
Type of Modulation		802.11a/n : OFDM (BPSK/QPSK/16QAM/64QAM) 802.11ac : OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)												
Antenna Function Description		<table border="1"><thead><tr><th></th><th>Ant. 1</th><th>Ant. 2</th></tr></thead><tbody><tr><td>802.11 a/n/ac</td><td>V</td><td>V</td></tr><tr><td>802.11 a/n/ac MIMO</td><td>V</td><td>V</td></tr><tr><td>802.11 ac TXBF</td><td>V</td><td>V</td></tr></tbody></table>		Ant. 1	Ant. 2	802.11 a/n/ac	V	V	802.11 a/n/ac MIMO	V	V	802.11 ac TXBF	V	V
	Ant. 1	Ant. 2												
802.11 a/n/ac	V	V												
802.11 a/n/ac MIMO	V	V												
802.11 ac TXBF	V	V												

Note: MIMO Ant. 1+2 is a calculated result from sum of the power MIMO Ant. 1 and MIMO Ant. 2.



1.3 Modification of EUT

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

1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan 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 INC.	
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
Test Site No.	Sporton Site No.	
	03CH15-HY	

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

FCC designation No.: TW1190 and TW0007

1.5 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 v02r01.
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

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



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). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and 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 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

Single Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by VHT20)	MCS0
802.11n HT40 (Covered by VHT40)	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

MIMO Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by VHT20)	MCS0
802.11n HT40 (Covered by VHT40)	MCS0
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

TXBF Mode

Modulation	Data Rate
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS0

Test Cases	
AC Conducted Emission	Mode 1 : LTE Band 66 Idle + WLAN (5GHz) Link + Bluetooth Link + USB Cable (Type C) + SD Card (Data Link) + USB File Transfer with Notebook (Notebook to SD Card) + NFC On + Front Camera + AC Adaptor (PWRBGA12V50W0WW) with DC Cable (CBL-DC-388A1-01) + Dock (CRD-ET5X-1SCG1) (Charging with EUT)



<CDD Mode>

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11a	802.11a	802.11a
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
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
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
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
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	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle		-	-	138



<TXBF Mode>

Ch. #		Band I : 5150-5250 MHz	Band II : 5250-5350 MHz	Band III : 5470-5725MHz
		802.11ac VHT20	802.11ac VHT20	802.11ac VHT20
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
		802.11ac VHT40	802.11ac VHT40	802.11ac VHT40
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	-	-	106
M	Middle	42	58	-
H	High	-	-	122
Straddle		-	-	138



<CDD Mode>

<Ant. 1>

802.11a RF Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)						
		6M		9M	12M	18M	24M	36M	48M	54M
Duty Cycle (%)		95.37		93.40	91.40	88.20	85.00	79.90	75.20	72.90
CH 036	5180	18.80	CH 036	18.70	18.70	18.40	18.70	18.40	18.40	18.40
CH 044	5220	18.70								
CH 048	5240	18.70								
CH 052	5260	18.10	CH 060	18.30	18.30	18.10	18.30	18.10	18.20	18.20
CH 060	5300	18.40								
CH 064	5320	18.20								
CH 100	5500	19.70	CH 140	19.50	19.50	19.70	19.50	19.60	19.70	19.70
CH 116	5580	19.70								
CH 140	5700	19.90								
CH 144	5720	19.60								

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11n HT20 RF Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index						
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Duty Cycle (%)		94.96		91.10	87.70	84.70	79.50	75.00	73.10	71.60
CH 036	5180	18.60	CH 044	18.70	18.70	18.70	18.40	18.40	18.40	18.40
CH 044	5220	18.80								
CH 048	5240	18.70								
CH 052	5260	18.20	CH 052	18.10	18.10	18.00	17.80	17.80	17.80	17.80
CH 060	5300	18.10								
CH 064	5320	18.10								
CH 100	5500	19.00	CH 140	19.70	19.50	19.60	19.60	19.60	19.70	19.60
CH 116	5580	19.00								
CH 140	5700	19.80								
CH 144	5720	19.70								

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11n HT40 RF Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index						
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Duty Cycle (%)	93.77	89.30	85.30	81.60	76.00	71.20	69.30	67.50		
CH 038	5190	18.20	CH 046	18.50	18.50	18.50	18.50	18.50	18.50	18.50
CH 046	5230	18.60		17.90	17.90	17.90	17.90	17.90	17.90	17.90
CH 054	5270	18.10	CH 054	18.7	18.7	18.7	18.7	18.7	18.7	18.7
CH 062	5310	15.60		18.7	18.7	18.7	18.7	18.7	18.7	18.7
CH 102	5510	18.60	CH 134	18.7	18.7	18.7	18.7	18.7	18.7	18.7
CH 110	5550	18.70		18.7	18.7	18.7	18.7	18.7	18.7	18.7
CH 134	5670	18.80								
CH 142	5710	18.60								

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ac VHT20 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index							
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
Duty Cycle (%)	95.17	91.00	87.70	84.70	79.40	75.40	73.50	71.50	68.50		
CH 036	5180	18.70	CH 044	18.80	18.80	18.80	18.50	18.50	18.50	18.50	18.50
CH 044	5220	18.90		18.20	18.20	18.20	17.90	17.90	17.90	17.90	17.90
CH 048	5240	18.80	CH 052	18.20	18.20	18.10	17.90	17.90	17.90	17.90	17.90
CH 052	5260	18.30		19.80	19.60	19.70	19.70	19.70	19.80	19.70	19.70
CH 060	5300	18.20	CH 140	19.80	19.60	19.70	19.70	19.70	19.80	19.70	19.70
CH 064	5320	18.20		19.80	19.60	19.70	19.70	19.70	19.80	19.70	19.70
CH 100	5500	19.10	CH 140	19.80	19.60	19.70	19.70	19.70	19.80	19.70	19.70
CH 116	5580	19.10		19.80	19.60	19.70	19.70	19.70	19.80	19.70	19.70
CH 140	5700	19.90									
CH 144	5720	19.80									

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11ac VHT40 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
Duty Cycle (%)	94.49	89.40	85.40	81.80	76.20	71.50	69.70	67.80	65.00	63.30		
CH 038	5190	18.30	CH 046	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	
CH 046	5230	18.70	CH 054	18	18	18	18	18	18	18	18	
CH 054	5270	18.20	CH 134	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	
CH 062	5310	15.70										
CH 102	5510	18.70										
CH 110	5550	18.80										
CH 134	5670	18.90										
CH 142	5710	18.70										

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ac VHT80 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS0		80.60	74.90	70.40	63.30	58.80	57.20	55.40	52.60	51.70
Duty Cycle (%)	88.13	80.60	CH 042	17.70	17.70	17.60	17.60	17.60	17.60	17.60	17.70	17.60
CH 042	5210	18.00	CH 058	14.10	14.20	14.20	14.30	14.30	14.30	14.30	14.30	14.30
CH 058	5290	14.40	CH 122	19.10	19.20	19.20	19.10	19.00	19.10	19.10	19.00	19.00
CH 106	5530	18.00										
CH 122	5610	19.40										
CH 138	5690	19.30										

Note: The above Frequency and Channel in "*" were straddle Channel.



<Ant. 2>

802.11a RF Output Power (dBm)								
Power vs. Channel			Power vs Data Rate					
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)				
		6M		9M	12M	18M	24M	36M
Duty Cycle (%)		95.76		93.20	91.20	88.10	84.70	79.80
CH 036	5180	18.80	CH 036	18.70	18.70	18.50	18.70	18.50
CH 044	5220	18.70						18.50
CH 048	5240	18.60						
CH 052	5260	18.30	CH 060	18.30	18.30	18.10	18.30	18.10
CH 060	5300	18.40						18.10
CH 064	5320	18.30						
CH 100	5500	19.60	CH 140	19.70	19.70	19.60	19.50	19.60
CH 116	5580	19.60						19.60
CH 140	5700	19.80						
CH 144	5720	19.70						

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11n HT20 RF Output Power (dBm)								
Power vs. Channel			Power vs Data Rate					
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index				
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5
Duty Cycle (%)		94.65		91.10	87.70	84.40	79.30	74.90
CH 036	5180	18.70	CH 036	18.40	18.30	18.30	18.50	18.50
CH 044	5220	18.60						18.50
CH 048	5240	18.60						
CH 052	5260	18.30	CH 052	18.10	18.00	17.90	18.10	18.10
CH 060	5300	18.20						18.10
CH 064	5320	18.20						
CH 100	5500	18.90	CH 140	19.50	19.40	19.40	19.50	19.60
CH 116	5580	18.80						19.60
CH 140	5700	19.70						
CH 144	5720	19.60						

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11n HT40 RF Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index						
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Duty Cycle (%)		93.80		89.30	85.00	81.60	75.60	71.00	69.20	67.40
CH 038	5190	18.20	CH 046	18.50	18.50	18.50	18.50	18.50	18.50	18.40
CH 046	5230	18.60								
CH 054	5270	18.30	CH 054	18.20	18.20	18.20	18.20	18.20	18.20	18.10
CH 062	5310	15.60								
CH 102	5510	18.60	CH 142	18.5	18.5	18.4	18.4	18.4	18.4	18.4
CH 110	5550	18.70								
CH 134	5670	18.60								
CH 142	5710	18.80								

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ac VHT20 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index							
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
Duty Cycle (%)		95.09		91.00	87.60	84.10	79.10	75.20	73.20	71.40	68.50
CH 036	5180	18.80	CH 036	18.50	18.40	18.40	18.60	18.60	18.60	18.60	18.60
CH 044	5220	18.70									
CH 048	5240	18.70									
CH 052	5260	18.40	CH 052	18.20	18.10	18.00	18.20	18.20	18.20	18.20	18.20
CH 060	5300	18.30									
CH 064	5320	18.30									
CH 100	5500	19.00	CH 140	19.60	19.50	19.50	19.60	19.70	19.70	19.70	19.70
CH 116	5580	18.90									
CH 140	5700	19.80									
CH 144	5720	19.70									

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11ac VHT40 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
Duty Cycle (%)	94.48	89.40	85.40	81.80	76.10	71.50	69.70	67.90	65.00	63.20		
CH 038	5190	18.30	CH 046	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.6	
CH 046	5230	18.70	CH 054	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.3	
CH 054	5270	18.40	CH 062	15.70							18.2	
CH 062	5310		CH 102	5510	18.70							
CH 102	5510		CH 110	5550	18.80							
CH 110	5550		CH 134	5670	18.70							
CH 134	5670		CH 142	5710	18.90							

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ac VHT80 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
Duty Cycle (%)	87.81	80.60	74.70	70.20	63.20	58.90	57.30	55.50	52.70	51.80		
CH 042	5210	17.90	CH 042	17.50	17.50	17.50	17.50	17.50	17.50	17.50	17.50	
CH 058	5290	14.40	CH 058	14.00	14.10	14.10	14.10	14.00	14.10	14.10	14.10	
CH 106	5530	17.80	CH 122	18.90	19.00	19.00	18.90	18.90	18.90	18.90	18.90	
CH 122	5610	19.30	CH 138	19.20								

Note: The above Frequency and Channel in "*" were straddle Channel.



MIMO <Ant. 1+2>

802.11a RF Output Power (dBm)								
Power vs. Channel			Power vs Data Rate					
Channel	Frequency (MHz)	Data Rate (bps)	Channel	Data Rate (bps)				
				9M	12M	18M	24M	36M
Duty Cycle (%)		6M						48M
CH 036	5180	19.81	CH 044	19.81	19.81	19.66	19.51	19.71
CH 044	5220	19.86						
CH 048	5240	19.66	CH 052	19.66	19.66	19.46	19.31	19.56
CH 052	5260	19.71						
CH 060	5300	19.41	CH 140	19.66	19.66	19.56	19.36	19.66
CH 064	5320	19.31						
CH 100	5500	18.76	CH 140	19.66	19.66	19.56	19.36	19.61
CH 116	5580	18.81						
CH 140	5700	19.71	CH 144	19.26	19.26	19.26	19.26	19.26
CH 144	5720	19.26						

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11n HT20 RF Output Power (dBm)								
Power vs. Channel			Power vs Data Rate					
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index				
				MCS1	MCS2	MCS3	MCS4	MCS5
Duty Cycle (%)		MCS0		MCS6	MCS7			
CH 036	5180	19.61	CH 036	19.52	19.37	19.41	19.56	19.56
CH 044	5220	19.06						
CH 048	5240	19.46	CH 060	19.11	18.91	18.91	19.11	19.11
CH 052	5260	18.86						
CH 060	5300	19.16	CH 144	18.86	18.91	18.86	18.56	18.56
CH 064	5320	19.06						
CH 100	5500	18.51	CH 144	18.86	18.91	18.86	18.56	18.61
CH 116	5580	18.46						
CH 140	5700	18.96	CH 144	18.86	18.91	18.86	18.56	18.56
CH 144	5720	19.01						

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11n HT40 RF Output Power (dBm)										
Power vs. Channel			Power vs Data Rate							
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index						
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Duty Cycle (%)										
CH 038	5190	20.46	CH 046	21.46	21.41	21.41	21.71	21.71	21.71	21.71
CH 046	5230	21.76	CH 054	21.06	21.06	21.06	21.01	21.06	21.01	21.01
CH 054	5270	21.11	CH 062	18.16						
CH 062	5310	18.16	CH 102	21.21						
CH 102	5510	21.21	CH 110	21.61	21.56	21.56	21.46	21.51	21.51	21.51
CH 110	5550	21.81	CH 134	21.61						
CH 134	5670	21.61	CH 142	21.61						
CH 142	5710	21.61								

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ac VHT20 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index							
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
Duty Cycle (%)											
CH 036	5180	19.71	CH 036	19.62	19.47	19.51	19.66	19.66	19.66	19.66	19.66
CH 044	5220	19.16	CH 048	19.56							
CH 048	5240	19.56	CH 052	18.96							
CH 052	5260	18.96	CH 060	19.21	19.01	19.01	19.21	19.21	19.21	19.21	19.21
CH 060	5300	19.26	CH 064	19.16							
CH 064	5320	19.16	CH 100	18.61							
CH 100	5500	18.61	CH 116	18.56							
CH 116	5580	18.56	CH 140	19.06							
CH 140	5700	19.06	CH 144	18.96	19.01	18.96	18.66	18.66	18.71	18.66	18.66
CH 144	5720	19.11									

Note: The above Frequency and Channel in "*" were straddle Channel.



802.11ac VHT40 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
Duty Cycle (%)												
CH 038	5190	20.56	CH 046	21.56	21.51	21.51	21.81	21.81	21.81	21.81	21.81	21.81
CH 046	5230	21.86										
CH 054	5270	21.21	CH 054	21.16	21.16	21.16	21.11	21.16	21.11	21.11	21.16	21.11
CH 062	5310	18.26										
CH 102	5510	21.31	CH 110	21.71	21.66	21.66	21.56	21.61	21.61	21.61	21.61	21.61
CH 110	5550	21.91										
CH 134	5670	21.71										
CH 142	5710	21.71										

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ac VHT80 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
		MCS0		MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
Duty Cycle (%)												
CH 042	5210	19.96	CH 042	19.71	19.71	19.71	19.61	19.66	19.66	19.61	19.61	19.66
CH 058	5290	14.16	CH 058	13.91	13.96	13.96	13.96	13.91	13.91	13.91	13.91	13.86
CH 106	5530	20.66	CH 122	22.21	22.26	22.21	22.16	22.11	22.16	22.21	22.21	22.21
CH 122	5610	22.41										
CH 138	5690	22.36										

Note: The above Frequency and Channel in "*" were straddle Channel.



<TXBF Mode>

MIMO <Ant. 1+2>

802.11ac VHT20 RF Output Power (dBm)											
Power vs. Channel			Power vs Data Rate								
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index							
				MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
Duty Cycle (%)		MCS0									
CH 036	5180	20.91	CH 036	20.76	20.81	20.82	20.81	20.76	20.71	20.76	20.76
CH 044	5220	19.97									
CH 048	5240	20.76									
CH 052	5260	20.36									
CH 060	5300	20.32	CH 064	20.61	20.56	20.61	20.51	20.56	20.56	20.56	20.56
CH 064	5320	20.66									
CH 100	5500	19.92									
CH 116	5580	20.52	CH 144	20.61	20.61	20.61	20.56	20.61	20.66	20.61	20.61
CH 140	5700	19.11									
CH 144	5720	20.71									

Note: The above Frequency and Channel in "*" were straddle Channel.

802.11ac VHT40 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
				MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
Duty Cycle (%)		MCS0										
CH 038	5190	18.94	CH 046	21.31	21.31	21.26	21.31	21.21	21.31	21.26	21.21	21.21
CH 046	5230	21.46										
CH 054	5270	21.26	CH 054	21.21	21.21	21.21	21.22	21.22	21.22	21.22	21.23	21.17
CH 062	5310	13.92										
CH 102	5510	19.57	CH 134									
CH 110	5550	21.28										
CH 134	5670	21.42										
CH 142	5710	21.27										

Note: The above Frequency and Channel in "*" were straddle Channel.

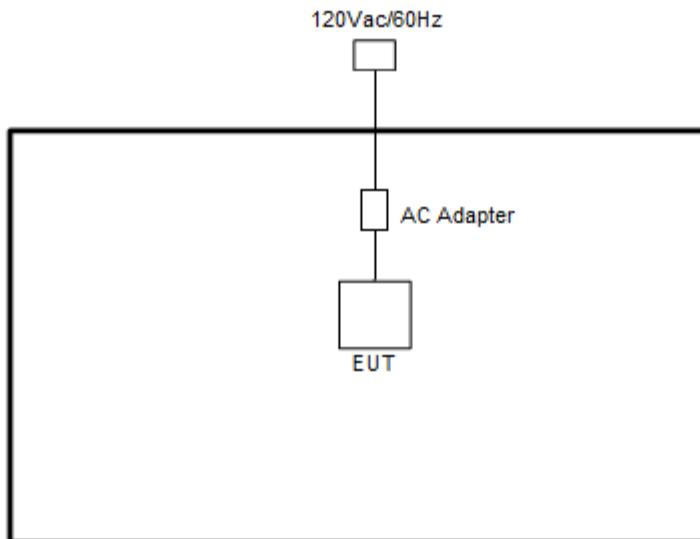


802.11ac VHT80 RF Output Power (dBm)												
Power vs. Channel			Power vs Data Rate									
Channel	Frequency (MHz)	MCS Index	Channel	MCS Index								
				MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
CH 042	5210	19.76	CH 042	19.36	19.36	19.31	19.31	19.36	19.31	19.26	19.31	19.31
CH 058	5290	13.77	CH 058	13.71	13.67	13.72	13.71	13.61	13.62	13.67	13.66	13.61
CH 106	5530	19.41	CH 122	21.92	21.97	21.87	21.91	22.01	21.91	21.86	21.87	21.82
CH 122	5610	22.31										
CH 138	5690	22.11										

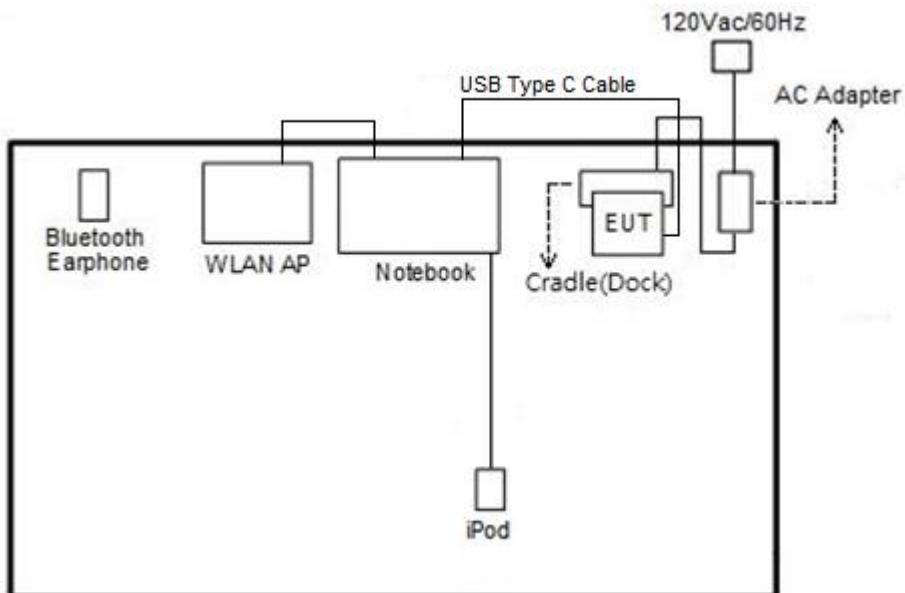
Note: The above Frequency and Channel in "*" were straddle Channel.

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>





2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
4.	WLAN AP	ASUS	RT-AC1750	MSQ-RTAC66U	N/A	Unshielded, 1.8m
5.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
6.	Notebook	DELL	Latitude E3340	FCC DoC/ Contains FCC ID: PD97260NGU	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
7.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
8.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A



2.5 EUT Operation Test Setup

The RF test items, utility “QRCT_qud.win.1.1_installer_10044.7” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

For TXBF mode, the modulation modes and data rates manipulated by the command lines in the engineering program made the EUT link to another EUT by power under the normal operation. The “adb” software tool was used to enable the EUT to transmit signals continuously.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 4.2 + 10 = 14.2 \text{ (dB)} \end{aligned}$$



3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Description of 26dB & 99% Occupied Bandwidth

This section is for reporting purpose only.

There is no restriction limits for bandwidth.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

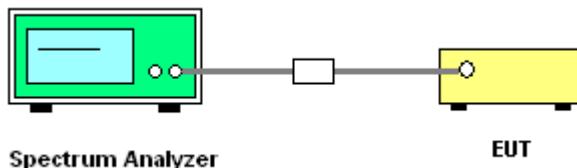
3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 * \text{RBW}$.
8. Measure and record the results in the test report.

3.1.4 Test Setup





3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

<CDD Mode>

Test Engineer :	Shiming Liu	Temperature :		21~25°C	
		Relative Humidity :		51~54%	

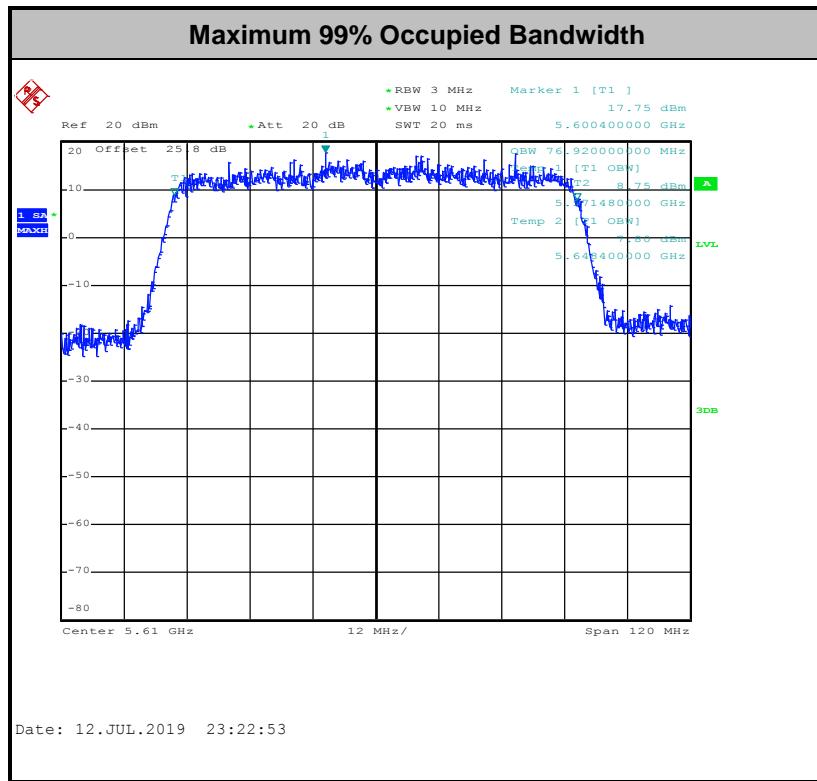
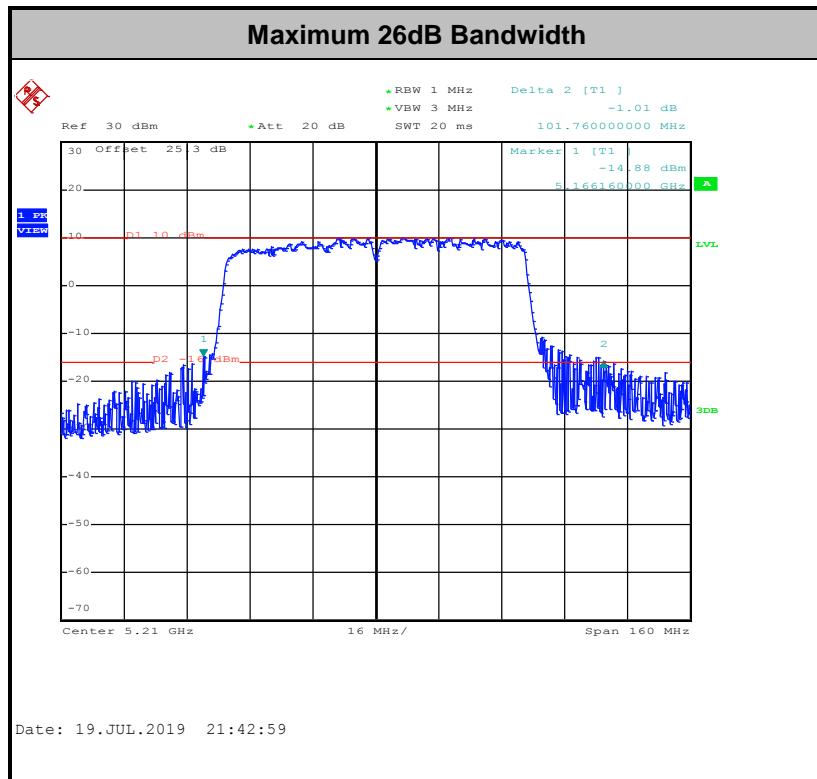
Band I													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	36	5180	16.70	16.70	24.75	24.80	-	-	22.23	22.23	
11a	6Mbps	1	44	5220	16.75	16.70	24.75	24.70	-	-	22.24	22.23	
11a	6Mbps	1	48	5240	16.70	16.70	25.05	24.90	-	-	22.23	22.23	
VHT20	MCS0	1	36	5180	17.90	17.90	25.70	26.30	-	-	22.53	22.53	
VHT20	MCS0	1	44	5220	17.95	17.95	25.95	26.60	-	-	22.54	22.54	
VHT20	MCS0	1	48	5240	18.00	17.85	25.70	26.40	-	-	22.55	22.52	
VHT40	MCS0	1	38	5190	36.50	36.50	41.82	41.77	-	-	23.01	23.01	
VHT40	MCS0	1	46	5230	36.50	36.60	41.94	41.94	-	-	23.01	23.01	
VHT80	MCS0	1	42	5210	76.68	76.68	97.28	101.76	-	-	23.01	23.01	
11a	6Mbps	2	36	5180	16.65	16.65	24.55	23.35	-	-	22.21	22.21	
11a	6Mbps	2	44	5220	16.70	16.70	24.70	24.45	-	-	22.23	22.23	
11a	6Mbps	2	48	5240	16.70	16.65	24.70	23.95	-	-	22.21	22.21	
VHT20	MCS0	2	36	5180	17.90	17.80	25.45	25.85	-	-	22.50	22.50	
VHT20	MCS0	2	44	5220	17.80	17.85	25.65	25.60	-	-	22.50	22.50	
VHT20	MCS0	2	48	5240	17.85	17.85	25.70	25.45	-	-	22.52	22.52	
VHT40	MCS0	2	38	5190	36.50	36.60	41.58	41.94	-	-	23.01	23.01	
VHT40	MCS0	2	46	5230	36.60	36.50	41.76	41.94	-	-	23.01	23.01	
VHT80	MCS0	2	42	5210	76.68	76.68	83.73	82.59	-	-	23.01	23.01	



Band II															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	52	5260	16.75	16.70	24.65	24.90	23.24	23.23	29.24	29.23	23.98	23.98	
11a	6Mbps	1	60	5300	16.75	16.70	24.65	24.95	23.24	23.23	29.24	29.23	23.98	23.98	
11a	6Mbps	1	64	5320	16.65	16.75	24.60	24.80	23.21	23.24	29.21	29.24	23.98	23.98	
VHT20	MCS0	1	52	5260	17.90	17.95	25.80	26.20	23.53	23.54	29.53	29.54	23.98	23.98	
VHT20	MCS0	1	60	5300	17.85	17.95	26.25	26.15	23.52	23.54	29.52	29.54	23.98	23.98	
VHT20	MCS0	1	64	5320	17.85	17.90	25.85	26.55	23.52	23.53	29.52	29.53	23.98	23.98	
VHT40	MCS0	1	54	5270	36.50	36.70	41.84	41.94	23.98	23.98	30.00	30.00	23.98	23.98	
VHT40	MCS0	1	62	5310	36.60	36.60	41.76	41.76	23.98	23.98	30.00	30.00	23.98	23.98	
VHT80	MCS0	1	58	5290	76.56	76.80	84.05	83.84	23.98	23.98	30.00	30.00	23.98	23.98	
11a	6Mbps	2	52	5260	16.75	16.65	24.70	24.75	23.21		29.21		23.98		
11a	6Mbps	2	60	5300	16.65	16.65	24.15	24.45	23.21		29.21		23.98		
11a	6Mbps	2	64	5320	16.70	16.70	24.40	24.25	23.23		29.23		23.98		
VHT20	MCS0	2	52	5260	17.90	17.85	25.80	25.50	23.52		29.52		23.98		
VHT20	MCS0	2	60	5300	17.85	17.85	26.25	25.55	23.52		29.52		23.98		
VHT20	MCS0	2	64	5320	17.90	17.80	25.90	25.60	23.50		29.50		23.98		
VHT40	MCS0	2	54	5270	36.70	36.60	41.58	41.94	23.98		30.00		23.98		
VHT40	MCS0	2	62	5310	36.70	36.50	41.88	42.00	23.98		30.00		23.98		
VHT80	MCS0	2	58	5290	76.68	76.92	84.11	84.39	23.98		30.00		23.98		



Band III																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
11a	6Mbps	1	100	5500	16.75	16.80	24.85	25.15	23.24	23.25	29.24	29.25	23.98	23.98	----	----
11a	6Mbps	1	116	5580	16.75	16.75	24.80	26.10	23.24	23.24	29.24	29.24	23.98	23.98	----	----
11a	6Mbps	1	140	5700	16.90	16.80	25.25	24.95	23.28	23.25	29.28	29.25	23.98	23.98	----	----
11a	6Mbps	1	144	5720	13.35	13.35	17.10	17.30	22.25	22.25	28.25	28.25	23.33	23.38	2.75	2.9
VHT20	MCS0	1	100	5500	17.85	17.95	26.20	26.60	23.52	23.54	29.52	29.54	23.98	23.98	----	----
VHT20	MCS0	1	116	5580	17.90	17.90	26.25	26.25	23.53	23.53	29.53	29.53	23.98	23.98	----	----
VHT20	MCS0	1	140	5700	18.00	17.90	26.90	26.65	23.55	23.53	29.55	29.53	23.98	23.98	----	----
VHT20	MCS0	1	144	5720	13.95	13.95	18.05	17.95	22.45	22.45	28.45	28.45	23.56	23.54	3.4	2.8
VHT40	MCS0	1	102	5510	36.60	36.60	41.76	42.00	23.98	23.98	30.00	30.00	23.98	23.98	----	----
VHT40	MCS0	1	110	5550	36.50	36.60	41.76	41.76	23.98	23.98	30.00	30.00	23.98	23.98	----	----
VHT40	MCS0	1	134	5670	36.60	36.60	42.12	41.94	23.98	23.98	30.00	30.00	23.98	23.98	----	----
VHT40	MCS0	1	142	5710	33.20	33.30	35.88	35.79	23.98	23.98	30.00	30.00	23.98	23.98	3.18	2.54
VHT80	MCS0	1	106	5530	76.68	76.80	83.84	84.27	23.98	23.98	30.00	30.00	23.98	23.98	----	----
VHT80	MCS0	1	122	5610	76.80	76.80	94.60	93.54	23.98	23.98	30.00	30.00	23.98	23.98	----	----
VHT80	MCS0	1	138	5690	73.40	73.40	77.08	81.50	23.98	23.98	30.00	30.00	23.98	23.98	2.54	3.24
11a	6Mbps	2	100	5500	16.70	16.70	24.10	24.15	23.23		29.23		23.98		----	----
11a	6Mbps	2	116	5580	16.70	16.65	24.20	23.95	23.21		29.21		23.98		----	----
11a	6Mbps	2	140	5700	16.70	16.65	24.30	23.75	23.21		29.21		23.98		----	----
11a	6Mbps	2	144	5720	13.30	13.35	17.00	17.00	22.24		28.24		23.30		2.6	2.9
VHT20	MCS0	2	100	5500	17.85	17.85	25.35	25.00	23.52		29.52		23.98		----	----
VHT20	MCS0	2	116	5580	17.90	17.80	25.60	25.35	23.50		29.50		23.98		----	----
VHT20	MCS0	2	140	5700	17.90	17.85	26.10	25.25	23.52		29.52		23.98		----	----
VHT20	MCS0	2	144	5720	13.90	13.90	17.70	17.75	22.43		28.43		23.48		3.4	2.55
VHT40	MCS0	2	102	5510	36.60	36.50	42.03	41.94	23.98		30.00		23.98		----	----
VHT40	MCS0	2	110	5550	36.70	36.60	42.31	41.94	23.98		30.00		23.98		----	----
VHT40	MCS0	2	134	5670	36.60	36.60	42.01	41.94	23.98		30.00		23.98		----	----
VHT40	MCS0	2	142	5710	33.20	33.20	35.79	35.97	23.98		30.00		23.98		2.52	2.54
VHT80	MCS0	2	106	5530	76.80	76.80	84.02	82.88	23.98		30.00		23.98		----	----
VHT80	MCS0	2	122	5610	76.80	76.92	84.12	84.44	23.98		30.00		23.98		----	----
VHT80	MCS0	2	138	5690	73.28	73.40	76.76	76.44	23.98		30.00		23.98		2.58	2.6



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<TXBF Modes>

Test Engineer :	Kai Liao	Temperature :				21~25°C	
		Relative Humidity :				51~54%	

Band I

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		Note
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
VHT20	MCS0	2	36	5180	17.98	17.98	26.22	26.07	-	-	22.55	22.55	
VHT20	MCS0	2	44	5220	17.98	17.98	26.67	26.22	-	-	22.55	22.55	
VHT20	MCS0	2	48	5240	17.98	17.98	28.52	28.67	-	-	22.55	22.55	
VHT40	MCS0	2	38	5190	37.26	37.56	46.48	46.66	-	-	23.01	23.01	
VHT40	MCS0	2	46	5230	37.86	37.66	59.16	70.49	-	-	23.01	23.01	
VHT80	MCS0	2	42	5210	78.40	78.88	85.35	82.80	-	-	23.01	23.01	

Band II

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)	Note	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
VHT20	MCS0	2	52	5260	17.98	18.03	27.37	28.12	23.55	23.55	29.55	29.55	23.98	23.98	
VHT20	MCS0	2	60	5300	17.93	18.03	26.87	27.52	23.54	23.54	29.54	29.54	23.98	23.98	
VHT20	MCS0	2	64	5320	17.98	17.98	25.77	29.87	23.55	23.55	29.55	29.55	23.98	23.98	
VHT40	MCS0	2	54	5270	37.76	37.76	57.27	73.28	23.98	23.98	30.00	30.00	23.98	23.98	
VHT40	MCS0	2	62	5310	37.46	37.56	47.11	48.46	23.98	23.98	30.00	30.00	23.98	23.98	
VHT80	MCS0	2	58	5290	77.68	77.80	87.43	87.91	23.98	23.98	30.00	30.00	23.98	23.98	



Band III																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Bandwidth In U-NII 2C (MHz)		26 dB Bandwidth In U-NII 2C (MHz)		IC 99% Bandwidth Power Limit (dBm)		IC 99% Bandwidth EIRP Limit (dBm)		FCC 26dB Bandwidth Power Limit (dBm)		6 dB Bandwidth for Straddle Channel (MHz)	
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2
VHT20	MCS0	2	100	5500	17.98	17.88	26.27	24.63	23.52	29.52	23.98	----	----	----	----	
VHT20	MCS0	2	116	5580	17.93	17.93	25.72	25.32	23.54	29.54	23.98	----	----	----	----	
VHT20	MCS0	2	140	5700	18.03	17.98	27.32	26.22	23.55	29.55	23.98	----	----	----	----	
VHT20	MCS0	2	144	5720	13.99	13.94	20.48	17.79	22.44	28.44	23.50	3.8913	3.8913	3.2516	3.2516	
VHT40	MCS0	2	102	5510	37.46	37.36	45.67	46.93	23.98	30.00	23.98	----	----	----	----	
VHT40	MCS0	2	110	5550	37.66	37.36	68.78	65.90	23.98	30.00	23.98	----	----	----	----	
VHT40	MCS0	2	134	5670	38.26	37.66	76.60	66.98	23.98	30.00	23.98	----	----	----	----	
VHT40	MCS0	2	142	5710	33.68	33.68	50.60	38.83	23.98	30.00	23.98	3.2516	3.2516	3.2516	3.2516	
VHT80	MCS0	2	106	5530	78.04	77.80	93.35	92.71	23.98	30.00	23.98	----	----	----	----	
VHT80	MCS0	2	122	5610	78.88	78.52	133.79	128.83	23.98	30.00	23.98	----	----	----	----	
VHT80	MCS0	2	138	5690	73.60	73.72	91.42	92.38	23.98	30.00	23.98	3.204	3.204	3.204	3.204	



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

- For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW. For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

For the 5.25–5.725 GHz bands:

- The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note that U-NII-2 band, devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.



3.2.3 Test Procedures

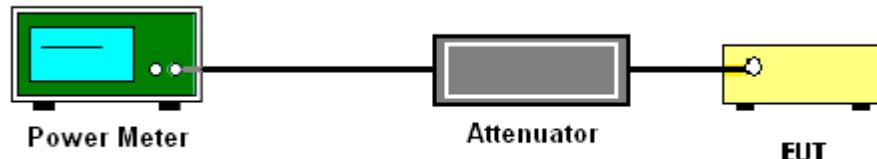
The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

3.2.4 Test Setup





3.2.5 Test Result of Maximum Conducted Output Power

<CDD Mode>

Test Engineer :	Shiming Liu	Temperature :	21~25°C
		Relative Humidity :	51~54%

FCC Band I													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail	
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	36	5180	18.80	18.80	-	24.00	24.00	3.50	3.30	Pass	
11a	6Mbps	1	44	5220	18.70	18.70		24.00	24.00	3.50	3.30	Pass	
11a	6Mbps	1	48	5240	18.70	18.60		24.00	24.00	3.50	3.30	Pass	
VHT20	MCS0	1	36	5180	18.70	18.80		24.00	24.00	3.50	3.30	Pass	
VHT20	MCS0	1	44	5220	18.90	18.70		24.00	24.00	3.50	3.30	Pass	
VHT20	MCS0	1	48	5240	18.80	18.70		24.00	24.00	3.50	3.30	Pass	
VHT40	MCS0	1	38	5190	18.30	18.30		24.00	24.00	3.50	3.30	Pass	
VHT40	MCS0	1	46	5230	18.70	18.70		24.00	24.00	3.50	3.30	Pass	
VHT80	MCS0	1	42	5210	18.00	17.90		24.00	24.00	3.50	3.30	Pass	
11a	6Mbps	2	36	5180	16.60	17.00		24.00	3.50		-	Pass	
11a	6Mbps	2	44	5220	16.90	16.80	19.86	24.00	3.50			Pass	
11a	6Mbps	2	48	5240	16.70	16.60	19.66	24.00	3.50			Pass	
VHT20	MCS0	2	36	5180	16.50	16.90	19.71	24.00	3.50			Pass	
VHT20	MCS0	2	44	5220	16.20	16.10	19.16	24.00	3.50			Pass	
VHT20	MCS0	2	48	5240	16.70	16.40	19.56	24.00	3.50			Pass	
VHT40	MCS0	2	38	5190	17.60	17.50	20.56	24.00	3.50			Pass	
VHT40	MCS0	2	46	5230	18.90	18.80	21.86	24.00	3.50			Pass	
VHT80	MCS0	2	42	5210	17.00	16.90	19.96	24.00	3.50			Pass	



FCC Band II													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	52	5260	18.10	18.30		23.98	23.98	3.87	3.43	30	Pass
11a	6Mbps	1	60	5300	18.40	18.40		23.98	23.98	3.87	3.43	30	Pass
11a	6Mbps	1	64	5320	18.20	18.30		23.98	23.98	3.87	3.43	30	Pass
VHT20	MCS0	1	52	5260	18.30	18.40		23.98	23.98	3.87	3.43	30	Pass
VHT20	MCS0	1	60	5300	18.20	18.30		23.98	23.98	3.87	3.43	30	Pass
VHT20	MCS0	1	64	5320	18.20	18.30		23.98	23.98	3.87	3.43	30	Pass
VHT40	MCS0	1	54	5270	18.20	18.40		23.98	23.98	3.87	3.43	30	Pass
VHT40	MCS0	1	62	5310	15.70	15.70		23.98	23.98	3.87	3.43	30	Pass
VHT80	MCS0	1	58	5290	14.40	14.40		23.98	23.98	3.87	3.43	30	Pass
11a	6Mbps	2	52	5260	16.70	16.70	19.71	23.98		3.87		30	Pass
11a	6Mbps	2	60	5300	16.40	16.40	19.41	23.98		3.87		30	Pass
11a	6Mbps	2	64	5320	16.30	16.30	19.31	23.98		3.87		30	Pass
VHT20	MCS0	2	52	5260	15.90	16.00	18.96	23.98		3.87		30	Pass
VHT20	MCS0	2	60	5300	16.30	16.20	19.26	23.98		3.87		30	Pass
VHT20	MCS0	2	64	5320	16.10	16.20	19.16	23.98		3.87		30	Pass
VHT40	MCS0	2	54	5270	18.20	18.20	21.21	23.98		3.87		30	Pass
VHT40	MCS0	2	62	5310	15.20	15.30	18.26	23.98		3.87		30	Pass
VHT80	MCS0	2	58	5290	11.30	11.00	14.16	23.98		3.87		30	Pass



FCC Band III													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
11a	6Mbps	1	100	5500	19.70	19.60		23.98	23.98	3.92	3.83	30	Pass
11a	6Mbps	1	116	5580	19.70	19.60		23.98	23.98	3.92	3.83	30	Pass
11a	6Mbps	1	140	5700	19.90	19.80		23.98	23.98	3.92	3.83	30	Pass
11a	6Mbps	1	144	5720	19.60	19.70		23.33	23.38	3.92	3.83	30	Pass
VHT20	MCS0	1	100	5500	19.10	19.00		23.98	23.98	3.92	3.83	30	Pass
VHT20	MCS0	1	116	5580	19.10	18.90		23.98	23.98	3.92	3.83	30	Pass
VHT20	MCS0	1	140	5700	19.90	19.80		23.98	23.98	3.92	3.83	30	Pass
VHT20	MCS0	1	144	5720	19.80	19.70		23.56	23.54	3.92	3.83	30	Pass
VHT40	MCS0	1	102	5510	18.70	18.70		23.98	23.98	3.92	3.83	30	Pass
VHT40	MCS0	1	110	5550	18.80	18.80		23.98	23.98	3.92	3.83	30	Pass
VHT40	MCS0	1	134	5670	18.90	18.70		23.98	23.98	3.92	3.83	30	Pass
VHT40	MCS0	1	142	5710	18.70	18.90		23.98	23.98	3.92	3.83	30	Pass
VHT80	MCS0	1	106	5530	18.00	17.80		23.98	23.98	3.92	3.83	30	Pass
VHT80	MCS0	1	122	5610	19.40	19.30		23.98	23.98	3.92	3.83	30	Pass
VHT80	MCS0	1	138	5690	19.30	19.20		23.98	23.98	3.92	3.83	30	Pass
11a	6Mbps	2	100	5500	15.80	15.70	18.76	23.98	23.98	3.92	3.92	30	Pass
11a	6Mbps	2	116	5580	15.70	15.90	18.81	23.98	23.98	3.92	3.92	30	Pass
11a	6Mbps	2	140	5700	16.70	16.70	19.71	23.98	23.98	3.92	3.92	30	Pass
11a	6Mbps	2	144	5720	16.30	16.20	19.26	23.30	23.30	3.92	3.92	30	Pass
VHT20	MCS0	2	100	5500	15.60	15.60	18.61	23.98	23.98	3.92	3.92	30	Pass
VHT20	MCS0	2	116	5580	15.40	15.70	18.56	23.98	23.98	3.92	3.92	30	Pass
VHT20	MCS0	2	140	5700	16.10	16.00	19.06	23.98	23.98	3.92	3.92	30	Pass
VHT20	MCS0	2	144	5720	16.10	16.10	19.11	23.48	23.48	3.92	3.92	30	Pass
VHT40	MCS0	2	102	5510	18.40	18.20	21.31	23.98	23.98	3.92	3.92	30	Pass
VHT40	MCS0	2	110	5550	18.90	18.90	21.91	23.98	23.98	3.92	3.92	30	Pass
VHT40	MCS0	2	134	5670	18.70	18.70	21.71	23.98	23.98	3.92	3.92	30	Pass
VHT40	MCS0	2	142	5710	18.70	18.70	21.71	23.98	23.98	3.92	3.92	30	Pass
VHT80	MCS0	2	106	5530	17.70	17.60	20.66	23.98	23.98	3.92	3.92	30	Pass
VHT80	MCS0	2	122	5610	19.40	19.40	22.41	23.98	23.98	3.92	3.92	30	Pass
VHT80	MCS0	2	138	5690	19.40	19.30	22.36	23.98	23.98	3.92	3.92	30	Pass



<TXBF Mode>

Test Engineer :	Kai Liao	Temperature :	21~25°C
		Relative Humidity :	51~54%

FCC Band I

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
VHT20	MCS0	2	36	5180	18.10	17.70	20.91	23.59	23.59	6.41	6.41	Pass
VHT20	MCS0	2	44	5220	17.30	16.60	19.97	23.59	23.59	6.41	6.41	Pass
VHT20	MCS0	2	48	5240	17.90	17.60	20.76	23.59	23.59	6.41	6.41	Pass
VHT40	MCS0	2	38	5190	16.40	15.40	18.94	23.59	23.59	6.41	6.41	Pass
VHT40	MCS0	2	46	5230	18.60	18.30	21.46	23.59	23.59	6.41	6.41	Pass
VHT80	MCS0	2	42	5210	16.80	16.70	19.76	23.59	23.59	6.41	6.41	Pass

FCC Band II

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
VHT20	MCS0	2	52	5260	17.50	17.20	20.36	23.32	23.32	6.66	6.66	30	Pass
VHT20	MCS0	2	60	5300	17.60	17.00	20.32	23.32	23.32	6.66	6.66	30	Pass
VHT20	MCS0	2	64	5320	17.70	17.60	20.66	23.32	23.32	6.66	6.66	30	Pass
VHT40	MCS0	2	54	5270	18.40	18.10	21.26	23.32	23.32	6.66	6.66	30	Pass
VHT40	MCS0	2	62	5310	11.20	10.60	13.92	23.32	23.32	6.66	6.66	30	Pass
VHT80	MCS0	2	58	5290	11.00	10.50	13.77	23.32	23.32	6.66	6.66	30	Pass



FCC Band III													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Average Conducted Power (dBm)			FCC Conducted Power Limit (dBm)		DG (dBi)		EIRP Power Limit (dBm)	Pass/Fail
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2		
VHT20	MCS0	2	100	5500	17.20	16.60	19.92	23.09	23.09	6.89	30	Pass	
VHT20	MCS0	2	116	5580	17.80	17.20	20.52	23.09	23.09	6.89	30	Pass	
VHT20	MCS0	2	140	5700	16.30	15.90	19.11	23.09	23.09	6.89	30	Pass	
VHT20	MCS0	2	144	5720	17.80	17.60	20.71	23.09	23.09	6.89	30	Pass	
VHT40	MCS0	2	102	5510	16.80	16.30	19.57	23.09	23.09	6.89	30	Pass	
VHT40	MCS0	2	110	5550	18.70	17.80	21.28	23.09	23.09	6.89	30	Pass	
VHT40	MCS0	2	134	5670	18.70	18.10	21.42	23.09	23.09	6.89	30	Pass	
VHT40	MCS0	2	142	5710	18.60	17.90	21.27	23.09	23.09	6.89	30	Pass	
VHT80	MCS0	2	106	5530	16.40	16.40	19.41	23.09	23.09	6.89	30	Pass	
VHT80	MCS0	2	122	5610	19.40	19.20	22.31	23.09	23.09	6.89	30	Pass	
VHT80	MCS0	2	138	5690	19.10	19.10	22.11	23.09	23.09	6.89	30	Pass	



3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

<FCC 14-30 CFR 15.407>

For the 5.15–5.25 GHz bands:

For mobile and portable client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band. For an indoor access point operating in the band 5.15–5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1.0 MHz band.

For the 5.25–5.725 GHz bands:

The maximum power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

For Straddle Channel, according to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, if the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance.

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Section F) Maximum power spectral density.

Method SA-3

(power averaging (rms) detection with max hold):

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW \geq 3 MHz
- Number of points in sweep \geq 2 Span / RBW.
- Sweep time \leq (number of points in sweep) \times 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.
- Detector = power averaging (rms).
- Trace mode = max hold.
- Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

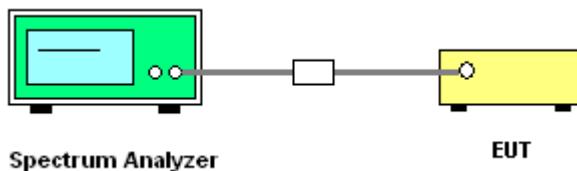


1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

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

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

3.3.4 Test Setup





3.3.5 Test Result of Power Spectral Density

<CDD Mode>

Test Engineer :	Shiming Liu	Temperature :		21~25°C
		Relative Humidity :		51~54%

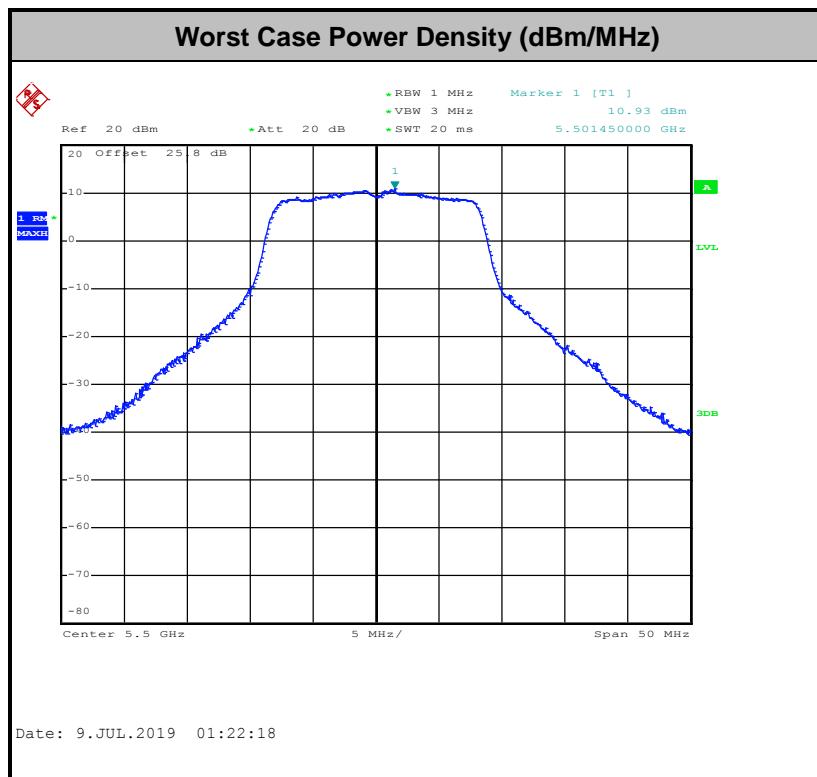
FCC Band I														
Mod.	Data Rate	NT X	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	36	5180	0.21	0.19	9.36	9.38		11.00	11.00	3.50	3.30	Pass
11a	6Mbps	1	44	5220	0.21	0.19	9.46	9.47		11.00	11.00	3.50	3.30	Pass
11a	6Mbps	1	48	5240	0.21	0.19	9.35	9.26		11.00	11.00	3.50	3.30	Pass
VHT20	MCS0	1	36	5180	0.21	0.22	9.70	9.76		11.00	11.00	3.50	3.30	Pass
VHT20	MCS0	1	44	5220	0.21	0.22	9.87	9.90	-	11.00	11.00	3.50	3.30	Pass
VHT20	MCS0	1	48	5240	0.21	0.22	10.17	9.44		11.00	11.00	3.50	3.30	Pass
VHT40	MCS0	1	38	5190	0.25	0.25	5.78	5.57		11.00	11.00	3.50	3.30	Pass
VHT40	MCS0	1	46	5230	0.25	0.25	6.08	5.96		11.00	11.00	3.50	3.30	Pass
VHT80	MCS0	1	42	5210	0.55	0.56	2.78	2.39		11.00	11.00	3.50	3.30	Pass
11a	6Mbps	2	36	5180	0.19	0.19			10.36	10.59		6.41		Pass
11a	6Mbps	2	44	5220	0.19	0.19			10.54	10.59		6.41		Pass
11a	6Mbps	2	48	5240	0.19	0.19			10.32	10.59		6.41		Pass
VHT20	MCS0	2	36	5180	0.22	0.20			10.50	10.59		6.41		Pass
VHT20	MCS0	2	44	5220	0.22	0.20			10.25	10.59		6.41		Pass
VHT20	MCS0	2	48	5240	0.22	0.20			10.34	10.59		6.41		Pass
VHT40	MCS0	2	38	5190	0.24	0.27			7.74	10.59		6.41		Pass
VHT40	MCS0	2	46	5230	0.24	0.27			9.26	10.59		6.41		Pass
VHT80	MCS0	2	42	5210	0.49	0.55			4.97	10.59		6.41		Pass



Band II														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	52	5260	0.21	0.19	8.70	9.00		11.00	11.00	3.87	3.43	Pass
11a	6Mbps	1	60	5300	0.21	0.19	9.18	9.31		11.00	11.00	3.87	3.43	Pass
11a	6Mbps	1	64	5320	0.21	0.19	9.28	9.52		11.00	11.00	3.87	3.43	Pass
VHT20	MCS0	1	52	5260	0.21	0.19	9.77	9.58		11.00	11.00	3.87	3.43	Pass
VHT20	MCS0	1	60	5300	0.21	0.19	9.49	9.57		11.00	11.00	3.87	3.43	Pass
VHT20	MCS0	1	64	5320	0.21	0.19	9.42	9.90	-	11.00	11.00	3.87	3.43	Pass
VHT40	MCS0	1	54	5270	0.21	0.19	5.32	5.58		11.00	11.00	3.87	3.43	Pass
VHT40	MCS0	1	62	5310	0.21	0.19	3.12	3.14		11.00	11.00	3.87	3.43	Pass
VHT80	MCS0	1	58	5290	0.21	0.19	-0.29	-0.93		11.00	11.00	3.87	3.43	Pass
11a	6Mbps	2	52	5260	0.19	0.19			-	10.16	10.34	6.66		Pass
11a	6Mbps	2	60	5300	0.19	0.19				10.08	10.34	6.66		Pass
11a	6Mbps	2	64	5320	0.19	0.19				9.98	10.34	6.66		Pass
VHT20	MCS0	2	52	5260	0.22	0.20				10.07	10.34	6.66		Pass
VHT20	MCS0	2	60	5300	0.22	0.20				10.32	10.34	6.66		Pass
VHT20	MCS0	2	64	5320	0.22	0.20				10.26	10.34	6.66		Pass
VHT40	MCS0	2	54	5270	0.24	0.27				8.24	10.34	6.66		Pass
VHT40	MCS0	2	62	5310	0.24	0.27				5.72	10.34	6.66		Pass
VHT80	MCS0	2	58	5290	0.49	0.55				-1.30	10.34	6.66		Pass



Band III														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	
11a	6Mbps	1	100	5500	0.21	0.19	10.93	10.46		11.00	11.00	3.92	3.83	Pass
11a	6Mbps	1	116	5580	0.21	0.19	10.85	10.69		11.00	11.00	3.92	3.83	Pass
11a	6Mbps	1	140	5700	0.21	0.19	10.31	10.12		11.00	11.00	3.92	3.83	Pass
11a	6Mbps	1	144	5720	0.21	0.19	10.08	10.03		11.00	11.00	3.92	3.83	Pass
VHT20	MCS0	1	100	5500	0.21	0.19	10.69	10.40		11.00	11.00	3.92	3.83	Pass
VHT20	MCS0	1	116	5580	0.21	0.19	10.75	10.60		11.00	11.00	3.92	3.83	Pass
VHT20	MCS0	1	140	5700	0.21	0.19	10.83	10.73	-	11.00	11.00	3.92	3.83	Pass
VHT20	MCS0	1	144	5720	0.21	0.19	10.76	10.88		11.00	11.00	3.92	3.83	Pass
VHT40	MCS0	1	102	5510	0.21	0.19	5.59	5.24		11.00	11.00	3.92	3.83	Pass
VHT40	MCS0	1	110	5550	0.21	0.19	5.92	5.96		11.00	11.00	3.92	3.83	Pass
VHT40	MCS0	1	134	5670	0.21	0.19	6.00	5.65		11.00	11.00	3.92	3.83	Pass
VHT40	MCS0	1	142	5710	0.21	0.19	5.60	5.86		11.00	11.00	3.92	3.83	Pass
VHT80	MCS0	1	106	5530	0.21	0.19	2.49	2.14		11.00	11.00	3.92	3.83	Pass
VHT80	MCS0	1	122	5610	0.21	0.19	4.18	4.02		11.00	11.00	3.92	3.83	Pass
VHT80	MCS0	1	138	5690	0.21	0.19	3.78	3.86		11.00	11.00	3.92	3.83	Pass
11a	6Mbps	2	100	5500	0.19	0.19			-	9.92	10.11	6.89		Pass
11a	6Mbps	2	116	5580	0.19	0.19				10.08	10.11	6.89		Pass
11a	6Mbps	2	140	5700	0.19	0.19				10.16	10.11	6.89		Pass
11a	6Mbps	2	144	5720	0.19	0.19				9.95	10.11	6.89		Pass
VHT20	MCS0	2	100	5500	0.22	0.20				10.01	10.11	6.89		Pass
VHT20	MCS0	2	116	5580	0.22	0.20				10.07	10.11	6.89		Pass
VHT20	MCS0	2	140	5700	0.22	0.20				9.82	10.11	6.89		Pass
VHT20	MCS0	2	144	5720	0.22	0.20				10.11	10.11	6.89		Pass
VHT40	MCS0	2	102	5510	0.24	0.27				8.11	10.11	6.89		Pass
VHT40	MCS0	2	110	5550	0.24	0.27				9.15	10.11	6.89		Pass
VHT40	MCS0	2	134	5670	0.24	0.27				8.69	10.11	6.89		Pass
VHT40	MCS0	2	142	5710	0.24	0.27				8.81	10.11	6.89		Pass
VHT80	MCS0	2	106	5530	0.49	0.55				5.04	10.11	6.89		Pass
VHT80	MCS0	2	122	5610	0.49	0.55				7.41	10.11	6.89		Pass
VHT80	MCS0	2	138	5690	0.49	0.55				7.34	10.11	6.89		Pass



Note: Average Power Density (dB) = Measured value+ Duty Factor



<TXBF Modes>

Test Engineer :	Kai Liao					Temperature :		21~25°C	
						Relative Humidity :		51~54%	

FCC Band I

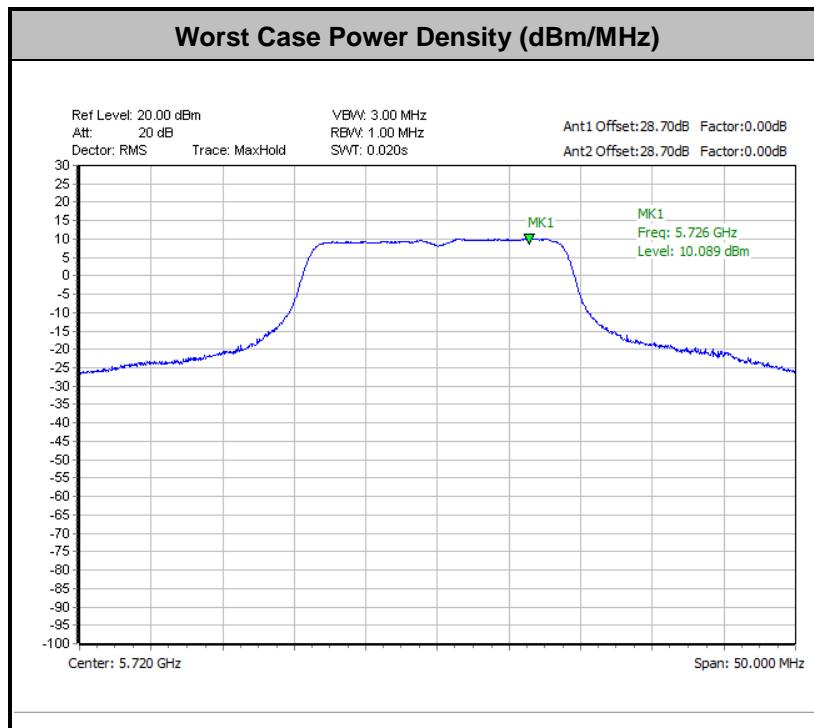
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)		Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2
VHT20	MCS0	2	36	5180	0.00	0.00	10.14	10.59	6.41	10.59	6.41	6.41	Pass
VHT20	MCS0	2	44	5220	0.00	0.00		10.59	6.41	10.59	6.41	6.41	Pass
VHT20	MCS0	2	48	5240	0.00	0.00		10.54	6.41	10.59	6.41	6.41	Pass
VHT40	MCS0	2	38	5190	0.00	0.00		6.05	6.41	10.59	6.41	6.41	Pass
VHT40	MCS0	2	46	5230	0.00	0.00		8.17	6.41	10.59	6.41	6.41	Pass
VHT80	MCS0	2	42	5210	0.00	0.00		6.06	6.41	10.59	6.41	6.41	Pass

Band II

Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)		Average PSD Limit (dBm/MHz)		DG (dBi)		Pass /Fail
					Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2
VHT20	MCS0	2	52	5260	0.00	0.00	10.08	10.34	6.66	10.34	6.66	6.66	Pass
VHT20	MCS0	2	60	5300	0.00	0.00		9.86	6.66	10.34	6.66	6.66	Pass
VHT20	MCS0	2	64	5320	0.00	0.00		10.09	6.66	10.34	6.66	6.66	Pass
VHT40	MCS0	2	54	5270	0.00	0.00		7.95	6.66	10.34	6.66	6.66	Pass
VHT40	MCS0	2	62	5310	0.00	0.00		0.55	6.66	10.34	6.66	6.66	Pass
VHT80	MCS0	2	58	5290	0.00	0.00		-0.69	6.66	10.34	6.66	6.66	Pass



Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Power Density (dBm/MHz)			Average PSD Limit (dBm/MHz)			DG (dBi)		Pass /Fail
							Ant 1	Ant 2	Ant 1	Ant 2	SUM	Ant 1	Ant 2		
					Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
VHT20	MCS0	2	100	5500	0.00	0.00			9.99	10.11		6.89			Pass
VHT20	MCS0	2	116	5580	0.00	0.00			10.04	10.11		6.89			Pass
VHT20	MCS0	2	140	5700	0.00	0.00			8.65	10.11		6.89			Pass
VHT20	MCS0	2	144	5720	0.00	0.00			10.09	10.11		6.89			Pass
VHT40	MCS0	2	102	5510	0.00	0.00			6.03	10.11		6.89			Pass
VHT40	MCS0	2	110	5550	0.00	0.00			7.42	10.11		6.89			Pass
VHT40	MCS0	2	134	5670	0.00	0.00			7.84	10.11		6.89			Pass
VHT40	MCS0	2	142	5710	0.00	0.00			7.84	10.11		6.89			Pass
VHT80	MCS0	2	106	5530	0.00	0.00			5.76	10.11		6.89			Pass
VHT80	MCS0	2	122	5610	0.00	0.00			9.39	10.11		6.89			Pass
VHT80	MCS0	2	138	5690	0.00	0.00			9.02	10.11		6.89			Pass





3.4 Unwanted Emissions Measurement

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

3.4.1 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 shall comply with the general field strength limits 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.

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



EIRP (dBm)	Field Strength at 3m (dB μ V/m)
- 27	68.3

(3) KDB789033 D02 v02r01 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).

3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
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

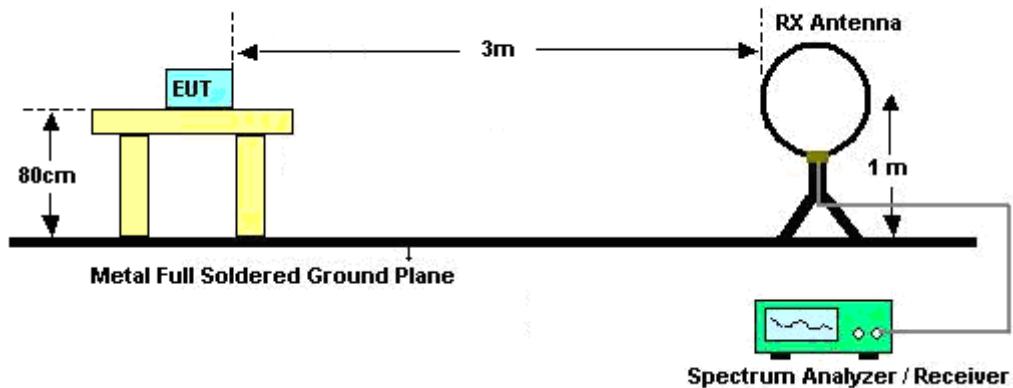


(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- 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.

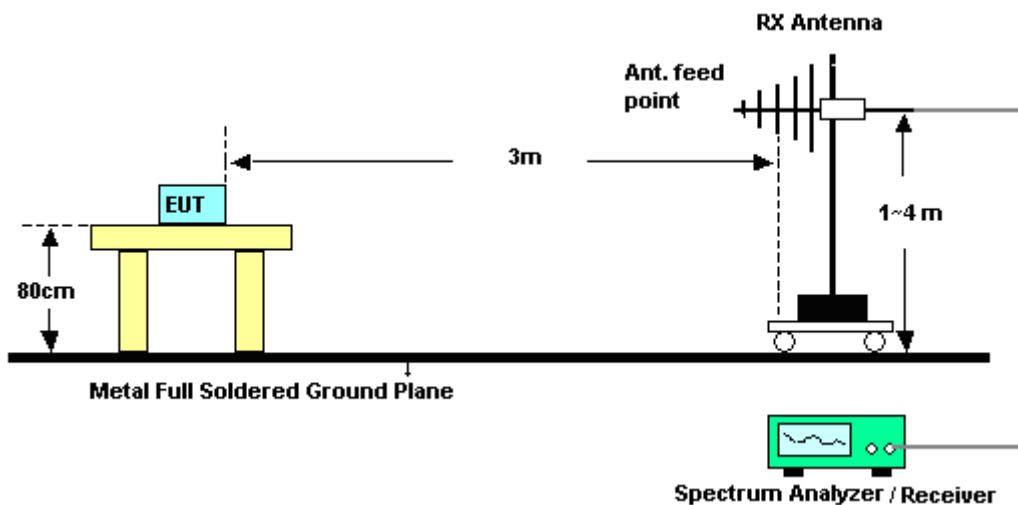
3.4.4 Test Setup

For radiated emissions below 30MHz

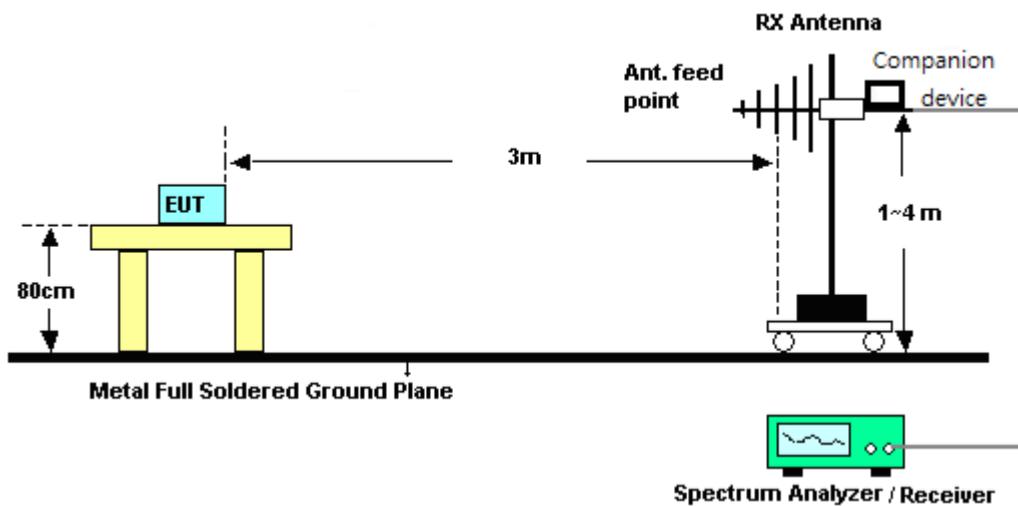


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

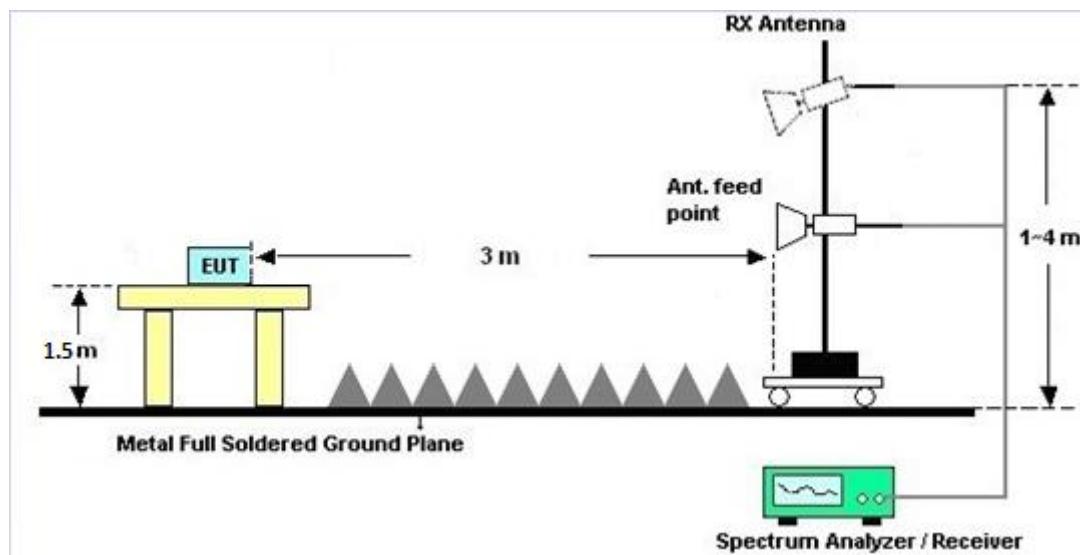


<TXBF Modes>

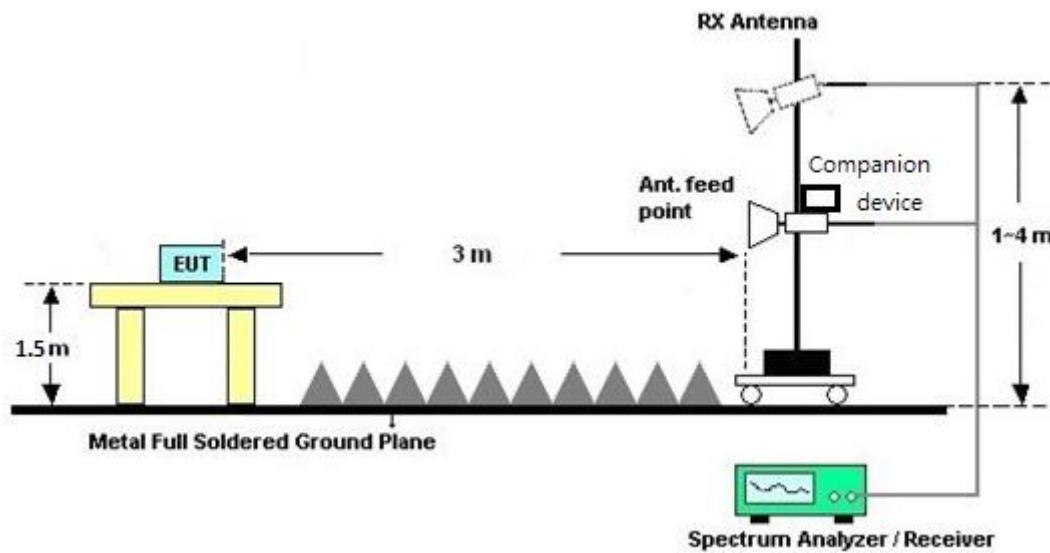


For radiated emissions above 1GHz

<CDD Mode>



<TXBF Modes>





3.4.5 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.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.4.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B and C.

3.4.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix B and C.



3.5 AC Conducted Emission Measurement

3.5.1 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.

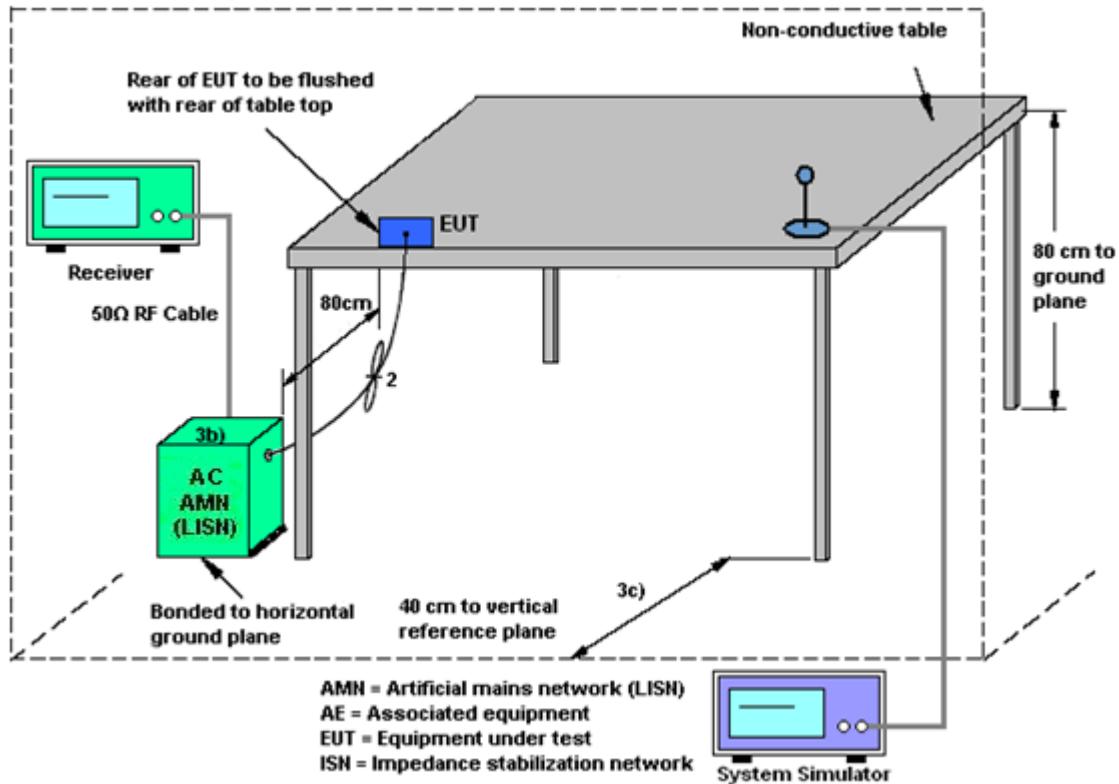
3.5.2 Measuring Instruments

See list of measuring equipment of this test report.

3.5.3 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.

3.5.4 Test Setup



3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix A.



3.6 Automatically Discontinue Transmission

3.6.1 Limit of Automatically Discontinue Transmission

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

3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Result of Automatically Discontinue Transmission

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.



3.7 Antenna Requirements

3.7.1 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.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = GANT + Array Gain, where Array Gain is as follows.

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

Array Gain = $10 \log(NANT/NSS=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $NANT \leq 4$.

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

The EUT supports CDD mode.

For power, the directional gain GANT 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.

<CDD Modes>						
	Ant. 1 (dBi)	Ant. 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	3.50	3.30	3.50	6.41	0.00	0.41
Band II	3.87	3.43	3.87	6.66	0.00	0.66
Band III	3.92	3.83	3.92	6.89	0.00	0.89

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

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

**TXBF modes**

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

$$\text{DirectionalGain} = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$ if the k th antenna is being fed by spatial stream j , or zero if it is not;
 G_k is the gain in dBi of the k th antenna.

The EUT supports beamforming for 802.11ac modes.

The directional gain calculation is following F)2)e)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.

	Ant 1 (dBi)	Ant 2 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band I	3.50	3.30	6.41	6.41	0.41	0.41
Band II	3.87	3.43	6.66	6.66	0.66	0.66
Band III	3.92	3.83	6.89	6.89	0.89	0.89

$\text{Power Limit Reduction} = \text{DG(Power)} - 6\text{dBi}, (\text{min} = 0)$

$\text{PSD Limit Reduction} = \text{DG(PSD)} - 6\text{dBi}, (\text{min} = 0)$



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jun. 23, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 12, 2018	Jun. 23, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Jun. 23, 2019	Nov. 13, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 09, 2018	Jun. 23, 2019	Nov. 08, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jun. 23, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Dec. 31, 2018	Jun. 23, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Dec. 31, 2018	Jun. 23, 2019	Dec. 30, 2019	Conduction (CO05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jan. 07, 2019	Jun. 23, 2019~Jul. 16, 2019	Jan. 06, 2020	Radiation (03CH15-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 06, 2018	Jun. 23, 2019~Jul. 16, 2019	Dec. 05, 2019	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL6111D&0 0800N1D01N-06	41912&05	30MHz to 1GHz	Feb. 12, 2019	Jun. 23, 2019~Jul. 16, 2019	Feb. 11, 2020	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1620	1G~18GHz	Oct. 17, 2018	Jun. 23, 2019~Jul. 16, 2019	Oct. 16, 2019	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 584	18GHz- 40GHz	Dec. 05, 2018	Jun. 23, 2019~Jul. 16, 2019	Dec. 04, 2019	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 28, 2018	Jun. 23, 2019~Jul. 16, 2019	Dec. 27, 2019	Radiation (03CH15-HY)
Preamplifier	Jet-Power	JPA0118-55-3 03	171000180 0055007	1GHz~18GHz	Apr. 01, 2019	Jun. 23, 2019~Jul. 16, 2019	Mar. 31, 2020	Radiation (03CH15-HY)
Preamplifier	Keysight	83017A	MY532701 95	1GHz~26.5GHz	Aug. 23, 2018	Jun. 23, 2019~Jul. 16, 2019	Aug. 22, 2019	Radiation (03CH15-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY541300 85	20Hz ~ 8.4GHz	Nov. 01, 2018	Jun. 23, 2019~Jul. 16, 2019	Oct. 31, 2019	Radiation (03CH15-HY)
Spectrum Analyzer	Agilent	E4446A	MY501801 36	3Hz~44GHz	Apr. 29, 2019	Jun. 23, 2019~Jul. 16, 2019	Apr. 28, 2020	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jun. 23, 2019~Jul. 16, 2019	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jun. 23, 2019~Jul. 16, 2019	N/A	Radiation (03CH15-HY)


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Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Software	Audix	E3 6.2009-8-24(k 5)	RK-00045 1	N/A	N/A	Jun. 23, 2019~ Jul. 16, 2019	N/A	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY36980/ 4	30M-18G	Apr. 15, 2019	Jun. 23, 2019~ Jul. 16, 2019	Apr. 14, 2020	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9838/4	30M-18G	Apr. 15, 2019	Jun. 23, 2019~ Jul. 16, 2019	Apr. 14, 2020	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY802430 /4	30M~18GHz	May 13, 2019	Jun. 23, 2019~ Jul. 16, 2019	May 12, 2020	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz-40GHz	Mar. 13, 2019	Jun. 23, 2019~ Jul. 16, 2019	Mar. 12, 2020	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30MHz-40GHz	Mar. 13, 2019	Jun. 23, 2019~ Jul. 16, 2019	Mar. 12, 2020	Radiation (03CH15-HY)
Filter	Wainwright	WLK4-1000-1 530-8000-40S S	SN11	1G Low Pass	Sep. 16, 2018	Jun. 23, 2019~ Jul. 16, 2019	Sep. 15, 2019	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872. 5-6750-18000 -40ST	SN3	6.75 GHz Highpass	Sep. 16, 2018	Jun. 23, 2019~ Jul. 16, 2019	Sep. 15, 2019	Radiation (03CH15-HY)
<CDD Mode>								
Power Sensor	DARE	RPR3006W	16I00054S NO10	10MHz~6GHz	Dec. 19, 2018	Jun. 28, 2019~ Aug. 05, 2019	Dec. 18, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100057	9kHz-40GHz	Nov. 21, 2018	Jun. 28, 2019~ Aug. 05, 2019	Nov. 20, 2019	Conducted (TH05-HY)
Switch Box & RF Cable	EM	EMSW18	SW107090 3	N/A	Dec 19, 2018	Jun. 28, 2019~ Aug. 05, 2019	Dec 18 2019	Conducted (TH05-HY)
<TXBF Mode>								
Power Sensor	DARE	RPR3006W	13I00030S NO32	9kHz~6GHz	Dec. 03, 2018	Jun. 23, 2019~ Aug. 05, 2019	Dec. 02, 2019	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV 30	100895	9kHz~30GHz	Apr. 24, 2019	Jun. 23, 2019~ Aug. 05, 2019	Apr. 23, 2020	Conducted (TH05-HY)
Switch Box & RF Cable	Burgeon	ETF-058	EC120838 2	N/A	Mar. 27, 2019	Jun. 23, 2019~ Aug. 05, 2019	Mar. 26, 2020	Conducted (TH05-HY)



5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{C(y)}$)	2.2
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{C(y)}$)	5.2
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{C(y)}$)	5.5
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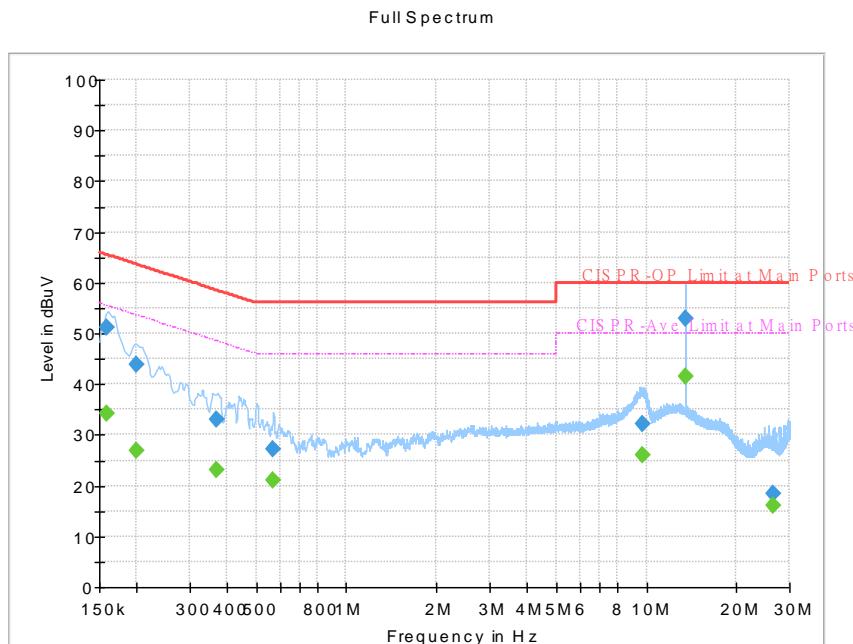
Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_{C(y)}$)	5.2
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Appendix A. AC Conducted Emission Test Results

Test Engineer :	Jimmy Chang	Temperature :	24~26°C
		Relative Humidity :	52~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

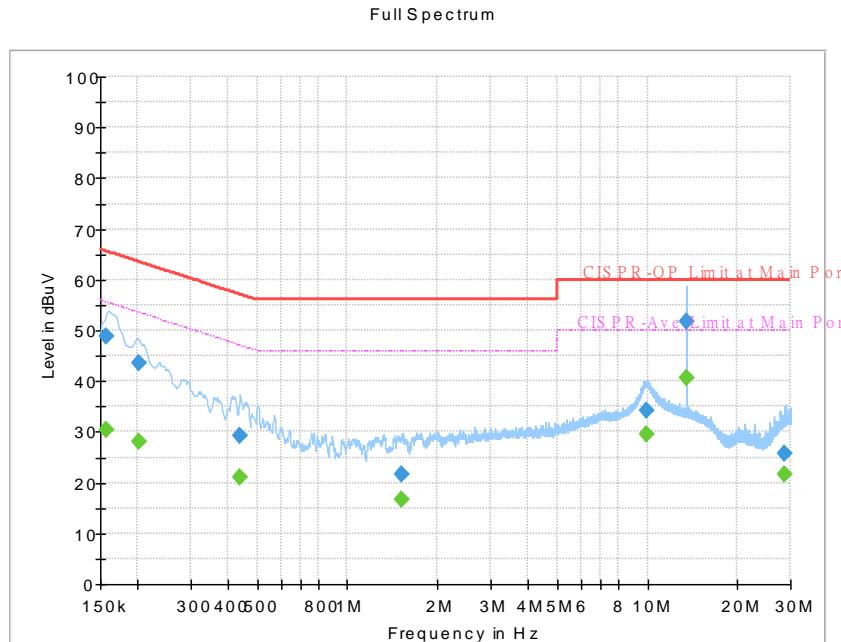


Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.159000	---	34.27	55.52	21.25	L1	OFF	19.4
0.159000	51.17	---	65.52	14.35	L1	OFF	19.4
0.199500	---	26.82	53.63	26.81	L1	OFF	19.4
0.199500	43.72	---	63.63	19.91	L1	OFF	19.4
0.370500	---	23.19	48.49	25.30	L1	OFF	19.4
0.370500	32.99	---	58.49	25.50	L1	OFF	19.4
0.570750	---	21.04	46.00	24.96	L1	OFF	19.4
0.570750	27.30	---	56.00	28.70	L1	OFF	19.4
9.764250	---	26.15	50.00	23.85	L1	OFF	19.6
9.764250	32.06	---	60.00	27.94	L1	OFF	19.6
13.560000	---	41.60	50.00	8.40	L1	OFF	19.6
13.560000	52.84	---	60.00	7.16	L1	OFF	19.6
26.598750	---	16.12	50.00	33.88	L1	OFF	19.7
26.598750	18.53	---	60.00	41.47	L1	OFF	19.7



Test Engineer :	Jimmy Chang	Temperature :	24~26°C
Test Voltage :	120Vac / 60Hz	Relative Humidity :	52~55%
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.156750	---	30.46	55.63	25.17	N	OFF	19.4
0.156750	48.91	---	65.63	16.72	N	OFF	19.4
0.201750	---	28.06	53.54	25.48	N	OFF	19.4
0.201750	43.48	---	63.54	20.06	N	OFF	19.4
0.438000	---	20.97	47.10	26.13	N	OFF	19.5
0.438000	29.17	---	57.10	27.93	N	OFF	19.5
1.515750	---	16.71	46.00	29.29	N	OFF	19.5
1.515750	21.52	---	56.00	34.48	N	OFF	19.5
9.917250	---	29.42	50.00	20.58	N	OFF	19.7
9.917250	34.07	---	60.00	25.93	N	OFF	19.7
13.560000	---	40.65	50.00	9.35	N	OFF	19.7
13.560000	51.84	---	60.00	8.16	N	OFF	19.7
28.545000	---	21.63	50.00	28.37	N	OFF	20.0
28.545000	25.72	---	60.00	34.28	N	OFF	20.0



Appendix B. Radiated Spurious Emission

Test Engineer :	Andy Yang, Karl Hou and BigShow Wang	Temperature :	23~26°C
		Relative Humidity :	55~65%

<CCD Mode>

Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		5147.94	55.65	-18.35	74	44.87	31.8	9.25	30.27	100	151	P	H
		5150	48.73	-5.27	54	37.94	31.8	9.26	30.27	100	151	A	H
	*	5180	115.78	-	-	105.09	31.67	9.29	30.27	100	151	P	H
	*	5180	108.37	-	-	97.68	31.67	9.29	30.27	100	151	A	H
													H
													H
		5146.38	52.18	-21.82	74	41.4	31.8	9.25	30.27	397	63	P	V
		5143.78	45.08	-8.92	54	34.3	31.8	9.25	30.27	397	63	A	V
	*	5180	110.79	-	-	100.1	31.67	9.29	30.27	397	63	P	V
	*	5180	103.13	-	-	92.44	31.67	9.29	30.27	397	63	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 44 5220MHz		5147.16	51.6	-22.4	74	40.82	31.8	9.25	30.27	100	151	P	H
		5149.76	42.92	-11.08	54	32.14	31.8	9.25	30.27	100	151	A	H
	*	5220	114.88	-	-	104.29	31.53	9.33	30.27	100	151	P	H
	*	5220	107.56	-	-	96.97	31.53	9.33	30.27	100	151	A	H
		5351.64	52.12	-21.88	74	41.57	31.4	9.42	30.27	100	151	P	H
		5354.44	43.35	-10.65	54	32.79	31.4	9.43	30.27	100	151	A	H
		5045.5	50.95	-23.05	74	40.19	31.9	9.14	30.28	397	58	P	V
		5150	41.09	-12.91	54	30.3	31.8	9.26	30.27	397	58	A	V
	*	5220	109.54	-	-	98.95	31.53	9.33	30.27	397	58	P	V
	*	5220	102.22	-	-	91.63	31.53	9.33	30.27	397	58	A	V
		5361.44	50.68	-23.32	74	40.05	31.47	9.43	30.27	397	58	P	V
		5350.8	41.46	-12.54	54	30.91	31.4	9.42	30.27	397	58	A	V
802.11a CH 48 5240MHz		5100.1	50.81	-23.19	74	39.99	31.9	9.2	30.28	100	152	P	H
		5147.42	41.68	-12.32	54	30.9	31.8	9.25	30.27	100	152	A	H
	*	5240	114.96	-	-	104.42	31.47	9.34	30.27	100	152	P	H
	*	5240	107.54	-	-	97	31.47	9.34	30.27	100	152	A	H
		5363.12	53.49	-20.51	74	42.86	31.47	9.43	30.27	100	152	P	H
		5350	42.98	-11.02	54	32.43	31.4	9.42	30.27	100	152	A	H
		5050.7	50.11	-23.89	74	39.34	31.9	9.15	30.28	390	62	P	V
		5103.74	41.21	-12.79	54	30.39	31.9	9.2	30.28	390	62	A	V
	*	5240	110	-	-	99.46	31.47	9.34	30.27	390	62	P	V
	*	5240	102.7	-	-	92.16	31.47	9.34	30.27	390	62	A	V
		5371.8	51.22	-22.78	74	40.58	31.47	9.44	30.27	390	62	P	V
		5372.92	41.31	-12.69	54	30.67	31.47	9.44	30.27	390	62	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	44.64	-23.56	68.2	52.46	39.37	13.57	60.76	100	0	P	H
		15540	45.06	-28.94	74	51.67	37.93	17.01	61.55	100	0	P	H
													H
													H
		10360	44.76	-23.44	68.2	52.58	39.37	13.57	60.76	100	0	P	V
		15540	44.86	-29.14	74	51.47	37.93	17.01	61.55	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	44.49	-23.71	68.2	52.27	39.53	13.65	60.96	100	0	P	H
		15660	44.23	-29.77	74	51.03	37.45	17.16	61.41	100	0	P	H
													H
													H
		10440	45.47	-22.73	68.2	53.25	39.53	13.65	60.96	100	0	P	V
		15660	44.48	-29.52	74	51.28	37.45	17.16	61.41	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	44.23	-23.97	68.2	52.02	39.58	13.68	61.05	100	0	P	H
		15720	45.09	-28.91	74	51.92	37.3	17.21	61.34	100	0	P	H
													H
													H
		10480	44.73	-23.47	68.2	52.52	39.58	13.68	61.05	100	0	P	V
		15720	44.65	-29.35	74	51.48	37.3	17.21	61.34	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		5148.2	57.61	-16.39	74	46.83	31.8	9.25	30.27	100	151	P	H
		5149.24	48.67	-5.33	54	37.89	31.8	9.25	30.27	100	151	A	H
	*	5180	115.42	-	-	104.73	31.67	9.29	30.27	100	151	P	H
	*	5180	107.82	-	-	97.13	31.67	9.29	30.27	100	151	A	H
													H
													H
		5147.94	53.75	-20.25	74	42.97	31.8	9.25	30.27	398	63	P	V
		5150	45.11	-8.89	54	34.32	31.8	9.26	30.27	398	63	A	V
	*	5180	110.31	-	-	99.62	31.67	9.29	30.27	398	63	P	V
	*	5180	102.74	-	-	92.05	31.67	9.29	30.27	398	63	A	V
													V
													V
802.11ac VHT20 CH 44 5220MHz		5149.76	52.17	-21.83	74	41.39	31.8	9.25	30.27	100	129	P	H
		5149.5	44.46	-9.54	54	33.68	31.8	9.25	30.27	100	129	A	H
	*	5220	115.16	-	-	104.57	31.53	9.33	30.27	100	129	P	H
	*	5220	107.57	-	-	96.98	31.53	9.33	30.27	100	129	A	H
		5357.52	52.45	-21.55	74	41.89	31.4	9.43	30.27	100	129	P	H
		5354.44	43.83	-10.17	54	33.27	31.4	9.43	30.27	100	129	A	H
		5099.32	50.78	-23.22	74	39.96	31.9	9.2	30.28	394	61	P	V
		5095.94	41.29	-12.71	54	30.47	31.9	9.2	30.28	394	61	A	V
	*	5220	112.53	-	-	101.94	31.53	9.33	30.27	394	61	P	V
	*	5220	104.02	-	-	93.43	31.53	9.33	30.27	394	61	A	V
		5361.72	50.82	-23.18	74	40.19	31.47	9.43	30.27	394	61	P	V
		5354.44	42.31	-11.69	54	31.75	31.4	9.43	30.27	394	61	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		5135.72	51.17	-22.83	74	40.37	31.83	9.24	30.27	109	148	P	H
		5144.04	42.01	-11.99	54	31.23	31.8	9.25	30.27	109	148	A	H
	*	5240	115.13	-	-	104.59	31.47	9.34	30.27	109	148	P	H
	*	5240	107.25	-	-	96.71	31.47	9.34	30.27	109	148	A	H
		5360.04	55.33	-18.67	74	44.77	31.4	9.43	30.27	109	148	P	H
	VHT20	5351.36	44.19	-9.81	54	33.64	31.4	9.42	30.27	109	148	A	H
	CH 48	5037.7	50.51	-23.49	74	39.76	31.9	9.13	30.28	388	59	P	V
	5240MHz	5147.94	41.32	-12.68	54	30.54	31.8	9.25	30.27	388	59	A	V
	*	5240	110.23	-	-	99.69	31.47	9.34	30.27	388	59	P	V
	*	5240	102.69	-	-	92.15	31.47	9.34	30.27	388	59	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		10360	44.15	-24.05	68.2	51.97	39.37	13.57	60.76	100	0	P	H
		15540	45.5	-28.5	74	52.11	37.93	17.01	61.55	100	0	P	H
													H
													H
		10360	45.17	-23.03	68.2	52.99	39.37	13.57	60.76	100	0	P	V
		15540	45.48	-28.52	74	52.09	37.93	17.01	61.55	100	0	P	V
													V
802.11ac VHT20 CH 44 5220MHz		10440	45.74	-22.46	68.2	53.52	39.53	13.65	60.96	100	0	P	H
		15660	44.19	-29.81	74	50.99	37.45	17.16	61.41	100	0	P	H
													H
													H
		10440	44.15	-24.05	68.2	51.93	39.53	13.65	60.96	100	0	P	V
		15660	44.96	-29.04	74	51.76	37.45	17.16	61.41	100	0	P	V
													V
802.11ac VHT20 CH 48 5240MHz		10480	45.09	-23.11	68.2	52.88	39.58	13.68	61.05	100	0	P	H
		15720	44.6	-29.4	74	51.43	37.3	17.21	61.34	100	0	P	H
													H
													H
		10480	44.29	-23.91	68.2	52.08	39.58	13.68	61.05	100	0	P	V
		15720	45.48	-28.52	74	52.31	37.3	17.21	61.34	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		5149.24	59.59	-14.41	74	48.81	31.8	9.25	30.27	100	150	P	H
		5150	51.9	-2.1	54	41.11	31.8	9.26	30.27	100	150	A	H
	*	5190	111.21	-	-	100.51	31.67	9.3	30.27	100	150	P	H
	*	5190	103.41	-	-	92.71	31.67	9.3	30.27	100	150	A	H
		5358.64	53.27	-20.73	74	42.71	31.4	9.43	30.27	100	150	P	H
		5362.84	43.8	-10.2	54	33.17	31.47	9.43	30.27	100	150	A	H
		5150	54.92	-19.08	74	44.13	31.8	9.26	30.27	397	57	P	V
		5149.76	46.36	-7.64	54	35.58	31.8	9.25	30.27	397	57	A	V
	*	5190	106.75	-	-	96.05	31.67	9.3	30.27	397	57	P	V
	*	5190	98.67	-	-	87.97	31.67	9.3	30.27	397	57	A	V
802.11ac VHT40 CH 46 5230MHz		5353.6	50.93	-23.07	74	40.37	31.4	9.43	30.27	397	57	P	V
		5351.92	41.86	-12.14	54	31.31	31.4	9.42	30.27	397	57	A	V
		5143.26	51.67	-22.33	74	40.89	31.8	9.25	30.27	110	149	P	H
		5150	43.16	-10.84	54	32.37	31.8	9.26	30.27	110	149	A	H
	*	5230	112.08	-	-	101.55	31.47	9.33	30.27	110	149	P	H
	*	5230	103.94	-	-	93.41	31.47	9.33	30.27	110	149	A	H
		5370.12	53.15	-20.85	74	42.51	31.47	9.44	30.27	110	149	P	H
		5350.24	45.54	-8.46	54	34.99	31.4	9.42	30.27	110	149	A	H
		5148.2	50.38	-23.62	74	39.6	31.8	9.25	30.27	393	61	P	V
		5094.9	41.22	-12.78	54	30.41	31.9	9.19	30.28	393	61	A	V
Remark	*	5230	107.18	-	-	96.65	31.47	9.33	30.27	393	61	P	V
	*	5230	99.36	-	-	88.83	31.47	9.33	30.27	393	61	A	V
		5375.44	49.81	-24.19	74	39.16	31.47	9.44	30.26	393	61	P	V
		5350	42.28	-11.72	54	31.73	31.4	9.42	30.27	393	61	A	V
		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		10380	44.84	-23.36	68.2	52.63	39.43	13.59	60.81	100	0	P	H
		15570	45.28	-28.72	74	51.98	37.77	17.05	61.52	100	0	P	H
													H
													H
		10380	44.83	-23.37	68.2	52.62	39.43	13.59	60.81	100	0	P	V
		15570	45.35	-28.65	74	52.05	37.77	17.05	61.52	100	0	P	V
													V
													V
802.11ac VHT40 CH 46 5230MHz		10460	45.24	-22.96	68.2	53.03	39.55	13.66	61	100	0	P	H
		15690	44.91	-29.09	74	51.74	37.35	17.19	61.37	100	0	P	H
													H
													H
		10460	45.29	-22.91	68.2	53.08	39.55	13.66	61	100	0	P	V
		15690	45.47	-28.53	74	52.3	37.35	17.19	61.37	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5148.2	59.23	-14.77	74	48.45	31.8	9.25	30.27	100	148	P	H
		5149.76	52.05	-1.95	54	41.27	31.8	9.25	30.27	100	148	A	H
	*	5210	108.32	-	-	97.74	31.53	9.32	30.27	100	148	P	H
	*	5210	100.72	-	-	90.14	31.53	9.32	30.27	100	148	A	H
		5352.2	53.06	-20.94	74	42.51	31.4	9.42	30.27	100	148	P	H
		5350.8	45.17	-8.83	54	34.62	31.4	9.42	30.27	100	148	A	H
		5137.02	51.75	-22.25	74	40.95	31.83	9.24	30.27	392	60	P	V
		5150	43.97	-10.03	54	33.18	31.8	9.26	30.27	392	60	A	V
	*	5210	103.39	-	-	92.81	31.53	9.32	30.27	392	60	P	V
	*	5210	95.96	-	-	85.38	31.53	9.32	30.27	392	60	A	V
		5368.44	51.3	-22.7	74	40.66	31.47	9.44	30.27	392	60	P	V
		5363.96	41.7	-12.3	54	31.07	31.47	9.43	30.27	392	60	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 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10420	43.88	-24.32	68.2	51.65	39.52	13.62	60.91	100	0	P	H
		15630	44.93	-29.07	74	51.75	37.5	17.12	61.44	100	0	P	H
													H
													H
		10420	45.67	-22.53	68.2	53.44	39.52	13.62	60.91	100	0	P	V
		15630	45.3	-28.7	74	52.12	37.5	17.12	61.44	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5135.32	50.52	-23.48	74	39.72	31.83	9.24	30.27	100	150	P	H
		5149.26	41.27	-12.73	54	30.49	31.8	9.25	30.27	100	150	A	H
	*	5260	115.59	-	-	105.1	31.4	9.36	30.27	100	150	P	H
	*	5260	108.21	-	-	97.72	31.4	9.36	30.27	100	150	A	H
		5355.36	52.8	-21.2	74	42.24	31.4	9.43	30.27	100	150	P	H
		5356.08	45.19	-8.81	54	34.63	31.4	9.43	30.27	100	150	A	H
		5110.84	50.29	-23.71	74	39.49	31.87	9.21	30.28	351	42	P	V
		5083.64	41.06	-12.94	54	30.26	31.9	9.18	30.28	351	42	A	V
	*	5260	108.49	-	-	98	31.4	9.36	30.27	351	42	P	V
	*	5260	101.07	-	-	90.58	31.4	9.36	30.27	351	42	A	V
802.11a CH 60 5300MHz		5456.4	51.18	-22.82	74	40.17	31.7	9.57	30.26	351	42	P	V
		5386.08	41.18	-12.82	54	30.46	31.53	9.45	30.26	351	42	A	V
		5082.28	51.1	-22.9	74	40.3	31.9	9.18	30.28	100	149	P	H
		5117.64	41.09	-12.91	54	30.28	31.87	9.22	30.28	100	149	A	H
	*	5300	115.67	-	-	105.15	31.4	9.39	30.27	100	149	P	H
	*	5300	108.12	-	-	97.6	31.4	9.39	30.27	100	149	A	H
		5354.4	56.37	-17.63	74	45.81	31.4	9.43	30.27	100	149	P	H
		5350.08	48.35	-5.65	54	37.8	31.4	9.42	30.27	100	149	A	H
		5046.24	49.85	-24.15	74	39.09	31.9	9.14	30.28	373	80	P	V
		5081.94	41.1	-12.9	54	30.3	31.9	9.18	30.28	373	80	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11a CH 64 5320MHz	*	5320	116.85	-	-	106.32	31.4	9.4	30.27	100	148	P	H
	*	5320	109.08	-	-	98.55	31.4	9.4	30.27	100	148	A	H
		5356	59.33	-14.67	74	48.77	31.4	9.43	30.27	100	148	P	H
		5351.04	50.22	-3.78	54	39.67	31.4	9.42	30.27	100	148	A	H
													H
													H
	*	5320	111.01	-	-	100.48	31.4	9.4	30.27	398	58	P	V
	*	5320	103.64	-	-	93.11	31.4	9.4	30.27	398	58	A	V
		5351.52	53.22	-20.78	74	42.67	31.4	9.42	30.27	398	58	P	V
		5351.04	45.63	-8.37	54	35.08	31.4	9.42	30.27	398	58	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 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	44.18	-24.02	68.2	51.98	39.63	13.69	61.12	100	0	P	H
		15780	44.69	-29.31	74	51.38	37.3	17.27	61.26	100	0	P	H
													H
													H
		10520	44.39	-23.81	68.2	52.19	39.63	13.69	61.12	100	0	P	V
		15780	45.2	-28.8	74	51.89	37.3	17.27	61.26	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	45.76	-28.24	74	53.47	39.8	13.71	61.22	100	0	P	H
		15900	44.56	-29.44	74	51.3	37	17.38	61.12	100	0	P	H
													H
													H
		10600	44.95	-29.05	74	52.66	39.8	13.71	61.22	100	0	P	V
		15900	44.71	-29.29	74	51.45	37	17.38	61.12	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	45.89	-28.11	74	53.64	39.8	13.72	61.27	100	0	P	H
		15960	43.38	-30.62	74	50.17	36.93	17.33	61.05	100	0	P	H
													H
													H
		10640	44.85	-29.15	74	52.6	39.8	13.72	61.27	100	0	P	V
		15960	43.97	-30.03	74	50.76	36.93	17.33	61.05	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		5131.24	50.41	-23.59	74	39.62	31.83	9.23	30.27	100	151	P	H
		5148.92	41.56	-12.44	54	30.78	31.8	9.25	30.27	100	151	A	H
	*	5260	115.36	-	-	104.87	31.4	9.36	30.27	100	151	P	H
	*	5260	107.69	-	-	97.2	31.4	9.36	30.27	100	151	A	H
		5361.6	53.89	-20.11	74	43.26	31.47	9.43	30.27	100	151	P	H
		5356.32	45.13	-8.87	54	34.57	31.4	9.43	30.27	100	151	A	H
		5095.88	49.88	-24.12	74	39.06	31.9	9.2	30.28	351	43	P	V
		5105.4	41.04	-12.96	54	30.21	31.9	9.21	30.28	351	43	A	V
	*	5260	107.95	-	-	97.46	31.4	9.36	30.27	351	43	P	V
	*	5260	100.37	-	-	89.88	31.4	9.36	30.27	351	43	A	V
802.11ac VHT20 CH 60 5300MHz		5423.52	50.41	-23.59	74	39.53	31.63	9.51	30.26	351	43	P	V
		5370.72	41.25	-12.75	54	30.61	31.47	9.44	30.27	351	43	A	V
		5089.42	50.79	-23.21	74	39.98	31.9	9.19	30.28	100	151	P	H
		5093.16	41.08	-12.92	54	30.27	31.9	9.19	30.28	100	151	A	H
	*	5300	115.27	-	-	104.75	31.4	9.39	30.27	100	151	P	H
	*	5300	107.55	-	-	97.03	31.4	9.39	30.27	100	151	A	H
		5352.48	58.32	-15.68	74	47.77	31.4	9.42	30.27	100	151	P	H
		5350.08	48.02	-5.98	54	37.47	31.4	9.42	30.27	100	151	A	H
		5058.48	49.71	-24.29	74	38.94	31.9	9.15	30.28	371	80	P	V
		5099.28	41.09	-12.91	54	30.27	31.9	9.2	30.28	371	80	A	V
802.11ac VHT20 CH 60 5300MHz	*	5300	107.87	-	-	97.35	31.4	9.39	30.27	371	80	P	V
	*	5300	99.27	-	-	88.75	31.4	9.39	30.27	371	80	A	V
		5360.64	50.65	-23.35	74	40.02	31.47	9.43	30.27	371	80	P	V
		5354.4	42.14	-11.86	54	31.58	31.4	9.43	30.27	371	80	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac	*	5320	116.37	-	-	105.84	31.4	9.4	30.27	100	147	P	H
	*	5320	108.62	-	-	98.09	31.4	9.4	30.27	100	147	A	H
		5356	58.66	-15.34	74	48.1	31.4	9.43	30.27	100	147	P	H
		5350.4	50.39	-3.61	54	39.84	31.4	9.42	30.27	100	147	A	H
													H
													H
	*	5320	107.97	-	-	97.44	31.4	9.4	30.27	389	91	P	V
	*	5320	100.4	-	-	89.87	31.4	9.4	30.27	389	91	A	V
		5356.16	52.27	-21.73	74	41.71	31.4	9.43	30.27	389	91	P	V
5320MHz		5350.24	43.86	-10.14	54	33.31	31.4	9.42	30.27	389	91	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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		10520	45.07	-23.13	68.2	52.87	39.63	13.69	61.12	100	0	P	H
		15780	44.85	-29.15	74	51.54	37.3	17.27	61.26	100	0	P	H
													H
													H
		10520	44.54	-23.66	68.2	52.34	39.63	13.69	61.12	100	0	P	V
		15780	44.83	-29.17	74	51.52	37.3	17.27	61.26	100	0	P	V
													V
802.11ac VHT20 CH 60 5300MHz		10600	44.62	-29.38	74	52.33	39.8	13.71	61.22	100	0	P	H
		15900	45.8	-28.2	74	52.54	37	17.38	61.12	100	0	P	H
													H
													H
		10600	44.2	-29.8	74	51.91	39.8	13.71	61.22	100	0	P	V
		15900	44.68	-29.32	74	51.42	37	17.38	61.12	100	0	P	V
													V
802.11ac VHT20 CH 64 5320MHz		10640	45.08	-28.92	74	52.83	39.8	13.72	61.27	100	0	P	H
		15960	44.19	-29.81	74	50.98	36.93	17.33	61.05	100	0	P	H
													H
													H
		10640	44.78	-29.22	74	52.53	39.8	13.72	61.27	100	0	P	V
		15940	44.22	-29.78	74	50.99	36.95	17.35	61.07	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		5149.6	52.86	-21.14	74	42.08	31.8	9.25	30.27	100	151	P	H
		5149.94	41.9	-12.1	54	31.12	31.8	9.25	30.27	100	151	A	H
	*	5270	112.37	-	-	101.88	31.4	9.36	30.27	100	151	P	H
	*	5270	104.34	-	-	93.85	31.4	9.36	30.27	100	151	A	H
		5351.28	57.86	-16.14	74	47.31	31.4	9.42	30.27	100	151	P	H
		5352.72	48.28	-5.72	54	37.73	31.4	9.42	30.27	100	151	A	H
		5059.5	50.36	-23.64	74	39.58	31.9	9.16	30.28	349	41	P	V
		5103.36	40.94	-13.06	54	30.12	31.9	9.2	30.28	349	41	A	V
	*	5270	104.32	-	-	93.83	31.4	9.36	30.27	349	41	P	V
	*	5270	96.29	-	-	85.8	31.4	9.36	30.27	349	41	A	V
802.11ac VHT40 CH 62 5310MHz		5415.12	50.46	-23.54	74	39.6	31.63	9.49	30.26	349	41	P	V
		5389.92	41.42	-12.58	54	30.7	31.53	9.45	30.26	349	41	A	V
		5055.76	50.44	-23.56	74	39.67	31.9	9.15	30.28	100	148	P	H
		5121.38	41.59	-12.41	54	30.78	31.87	9.22	30.28	100	148	A	H
	*	5310	110.23	-	-	99.71	31.4	9.39	30.27	100	148	P	H
	*	5310	102.38	-	-	91.86	31.4	9.39	30.27	100	148	A	H
		5353.68	60.34	-13.66	74	49.78	31.4	9.43	30.27	100	148	P	H
		5350.08	51.92	-2.08	54	41.37	31.4	9.42	30.27	100	148	A	H
		5099.28	50.12	-23.88	74	39.3	31.9	9.2	30.28	391	91	P	V
		5107.44	41.4	-12.6	54	30.6	31.87	9.21	30.28	391	91	A	V
Remark	*	5310	101.45	-	-	90.93	31.4	9.39	30.27	391	91	P	V
	*	5310	93.42	-	-	82.9	31.4	9.39	30.27	391	91	A	V
		5351.76	51.55	-22.45	74	41	31.4	9.42	30.27	391	91	P	V
		5350.56	43.85	-10.15	54	33.3	31.4	9.42	30.27	391	91	A	V



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		10540	43.6	-24.6	68.2	51.38	39.67	13.7	61.15	100	0	P	H
		15810	44.98	-29.02	74	51.61	37.3	17.3	61.23	100	0	P	H
													H
													H
		10540	44.17	-24.03	68.2	51.95	39.67	13.7	61.15	100	0	P	V
		15810	45.84	-28.16	74	52.47	37.3	17.3	61.23	100	0	P	V
													V
													V
802.11ac VHT40 CH 62 5310MHz		10620	44.94	-29.06	74	52.66	39.8	13.72	61.24	100	0	P	H
		15930	44.6	-29.4	74	51.35	36.97	17.36	61.08	100	0	P	H
													H
													H
		10620	44.33	-29.67	74	52.05	39.8	13.72	61.24	100	0	P	V
		15930	44.43	-29.57	74	51.18	36.97	17.36	61.08	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5103.02	50.65	-23.35	74	39.83	31.9	9.2	30.28	100	148	P	H
		5145.86	42.37	-11.63	54	31.59	31.8	9.25	30.27	100	148	A	H
	*	5290	106.04	-	-	95.53	31.4	9.38	30.27	100	148	P	H
	*	5290	98.27	-	-	87.76	31.4	9.38	30.27	100	148	A	H
		5357.52	59.86	-14.14	74	49.3	31.4	9.43	30.27	100	148	P	H
		5353.2	52.45	-1.55	54	41.9	31.4	9.42	30.27	100	148	A	H
		5093.5	50.47	-23.53	74	39.66	31.9	9.19	30.28	394	92	P	V
		5113.9	42.15	-11.85	54	31.34	31.87	9.22	30.28	394	92	A	V
	*	5290	97.58	-	-	87.07	31.4	9.38	30.27	394	92	P	V
	*	5290	90.07	-	-	79.56	31.4	9.38	30.27	394	92	A	V
		5357.04	52.58	-21.42	74	42.02	31.4	9.43	30.27	394	92	P	V
		5363.28	44.15	-9.85	54	33.52	31.47	9.43	30.27	394	92	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 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	44.46	-23.74	68.2	52.18	39.77	13.71	61.2	100	0	P	H
		15870	43.85	-30.15	74	50.6	37.06	17.35	61.16	100	0	P	H
													H
													H
		10580	44.81	-23.39	68.2	52.53	39.77	13.71	61.2	100	0	P	V
		15870	44.1	-29.9	74	50.85	37.06	17.35	61.16	100	0	P	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5456.4	55.72	-18.28	74	44.71	31.7	9.57	30.26	100	144	P	H
		5467.76	57.9	-10.3	68.2	46.87	31.7	9.59	30.26	100	144	P	H
		5442.48	46.06	-7.94	54	35.11	31.67	9.54	30.26	100	144	A	H
	*	5500	114.47	-	-	103.37	31.7	9.66	30.26	100	144	P	H
	*	5500	107.12	-	-	96.02	31.7	9.66	30.26	100	144	A	H
													H
		5453.84	51.45	-22.55	74	40.45	31.7	9.56	30.26	394	49	P	V
		5463.92	51.79	-16.41	68.2	40.77	31.7	9.58	30.26	394	49	P	V
		5460	42.78	-11.22	54	31.76	31.7	9.58	30.26	394	49	A	V
	*	5500	109.81	-	-	98.71	31.7	9.66	30.26	394	49	P	V
	*	5500	102.47	-	-	91.37	31.7	9.66	30.26	394	49	A	V
													V
802.11a CH 116 5580MHz		5440.72	51.95	-22.05	74	41	31.67	9.54	30.26	100	148	P	H
		5467.84	51.33	-16.87	68.2	40.3	31.7	9.59	30.26	100	148	P	H
		5446.24	42.35	-11.65	54	31.36	31.7	9.55	30.26	100	148	A	H
	*	5580	114.51	-	-	103.2	31.8	9.81	30.3	100	148	P	H
	*	5580	106.6	-	-	95.29	31.8	9.81	30.3	100	148	A	H
		5759.645	51.65	-16.55	68.2	40.11	32.07	9.87	30.4	100	148	P	H
		5392.48	50.76	-23.24	74	40.04	31.53	9.45	30.26	362	51	P	V
		5462.08	49.99	-18.21	68.2	38.97	31.7	9.58	30.26	362	51	P	V
		5457.04	41.27	-12.73	54	30.26	31.7	9.57	30.26	362	51	A	V
	*	5580	108.52	-	-	97.21	31.8	9.81	30.3	362	51	P	V
	*	5580	100.88	-	-	89.57	31.8	9.81	30.3	362	51	A	V
		5753.66	50.23	-17.97	68.2	38.68	32.07	9.87	30.39	362	51	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 140 5700MHz	*	5700	113.85	-	-	102.55	31.8	9.86	30.36	100	155	P	H
	*	5700	105.63	-	-	94.33	31.8	9.86	30.36	100	155	A	H
		5725.08	60.19	-8.01	68.2	48.78	31.93	9.86	30.38	100	155	P	H
													H
													H
													H
	*	5700	109.36	-	-	98.06	31.8	9.86	30.36	353	270	P	V
	*	5700	101.77	-	-	90.47	31.8	9.86	30.36	353	270	A	V
		5727.16	54.4	-13.8	68.2	42.99	31.93	9.86	30.38	353	270	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 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	46.05	-27.95	74	53.49	40.4	13.86	61.7	100	0	P	H
		16500	46.48	-21.72	68.2	50.03	38.6	17.55	59.7	100	0	P	H
													H
													H
		11000	46.2	-27.8	74	53.64	40.4	13.86	61.7	100	0	P	V
		16500	45.86	-22.34	68.2	49.41	38.6	17.55	59.7	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	45.9	-28.1	74	53.69	39.93	14.14	61.86	100	0	P	H
		16740	47.73	-20.47	68.2	49.68	39.78	17.92	59.65	100	0	P	H
													H
													H
		11160	46.65	-27.35	74	54.44	39.93	14.14	61.86	100	0	P	V
		16740	47.23	-20.97	68.2	49.18	39.78	17.92	59.65	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	44.79	-29.21	74	52.36	40	14.53	62.1	100	0	P	H
		17100	43.63	-24.57	68.2	44.27	40.5	18.24	59.38	100	0	P	H
													H
													H
		11400	45.23	-28.77	74	52.8	40	14.53	62.1	100	0	P	V
		17100	48.23	-19.97	68.2	48.87	40.5	18.24	59.38	100	0	P	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		5450.8	56.74	-17.26	74	45.74	31.7	9.56	30.26	100	149	P	H
		5464.72	58.35	-9.85	68.2	47.32	31.7	9.59	30.26	100	149	P	H
		5442.32	47.29	-6.71	54	36.34	31.67	9.54	30.26	100	149	A	H
	*	5500	115	-	-	103.9	31.7	9.66	30.26	100	149	P	H
	*	5500	107.41	-	-	96.31	31.7	9.66	30.26	100	149	A	H
													H
		5450.64	51.67	-22.33	74	40.67	31.7	9.56	30.26	393	53	P	V
		5468.88	52.79	-15.41	68.2	41.76	31.7	9.59	30.26	393	53	P	V
		5459.12	43.06	-10.94	54	32.04	31.7	9.58	30.26	393	53	A	V
	*	5500	110.6	-	-	99.5	31.7	9.66	30.26	393	53	P	V
	*	5500	102.94	-	-	91.84	31.7	9.66	30.26	393	53	A	V
													V
802.11ac VHT20 CH 116 5580MHz		5430.4	51.7	-22.3	74	40.77	31.67	9.52	30.26	100	147	P	H
		5461.84	50.74	-17.46	68.2	39.72	31.7	9.58	30.26	100	147	P	H
		5453.2	42.41	-11.59	54	31.41	31.7	9.56	30.26	100	147	A	H
	*	5580	113.67	-	-	102.36	31.8	9.81	30.3	100	147	P	H
	*	5580	105.96	-	-	94.65	31.8	9.81	30.3	100	147	A	H
		5759.96	52.33	-15.87	68.2	40.79	32.07	9.87	30.4	100	147	P	H
		5384.56	50.09	-23.91	74	39.37	31.53	9.45	30.26	350	270	P	V
		5465.44	49.66	-18.54	68.2	38.63	31.7	9.59	30.26	350	270	P	V
		5452.24	41.16	-12.84	54	30.16	31.7	9.56	30.26	350	270	A	V
	*	5580	107.81	-	-	96.5	31.8	9.81	30.3	350	270	P	V
	*	5580	100.15	-	-	88.84	31.8	9.81	30.3	350	270	A	V
		5749.88	50.78	-17.42	68.2	39.31	32	9.86	30.39	350	270	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5700	114.21	-	-	102.91	31.8	9.86	30.36	100	156	P	H
	*	5700	106.53	-	-	95.23	31.8	9.86	30.36	100	156	A	H
		5725.08	65.24	-2.96	68.2	53.83	31.93	9.86	30.38	100	156	P	H
													H
													H
													H
													H
													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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		11000	46.02	-27.98	74	53.46	40.4	13.86	61.7	100	0	P	H
		16500	46.72	-21.48	68.2	50.27	38.6	17.55	59.7	100	0	P	H
													H
													H
		11000	45.48	-28.52	74	52.92	40.4	13.86	61.7	100	0	P	V
		16500	46.26	-21.94	68.2	49.81	38.6	17.55	59.7	100	0	P	V
													V
802.11ac VHT20 CH 116 5580MHz		11160	45.42	-28.58	74	53.21	39.93	14.14	61.86	100	0	P	H
		16740	47.06	-21.14	68.2	49.01	39.78	17.92	59.65	100	0	P	H
													H
													H
		11160	45.51	-28.49	74	53.3	39.93	14.14	61.86	100	0	P	V
		16740	47.42	-20.78	68.2	49.37	39.78	17.92	59.65	100	0	P	V
													V
802.11ac VHT20 CH 140 5700MHz		11400	46	-28	74	53.57	40	14.53	62.1	100	0	P	H
		17100	49.32	-18.88	68.2	49.96	40.5	18.24	59.38	100	0	P	H
													H
													H
		11400	45.54	-28.46	74	53.11	40	14.53	62.1	100	0	P	V
		17100	49.15	-19.05	68.2	49.79	40.5	18.24	59.38	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		5459.92	59.44	-14.56	74	48.42	31.7	9.58	30.26	100	148	P	H
		5470	65.3	-2.9	68.2	54.26	31.7	9.6	30.26	100	148	P	H
		5458.96	50.74	-3.26	54	39.73	31.7	9.57	30.26	100	148	A	H
	*	5510	112.13	-	-	101.03	31.7	9.67	30.27	100	148	P	H
	*	5510	103.96	-	-	92.86	31.7	9.67	30.27	100	148	A	H
		5747.045	52.67	-15.53	68.2	41.2	32	9.86	30.39	100	148	P	H
		5458.72	52.81	-21.19	74	41.8	31.7	9.57	30.26	393	53	P	V
		5469.28	57.88	-10.32	68.2	46.84	31.7	9.6	30.26	393	53	P	V
		5459.44	44.91	-9.09	54	33.89	31.7	9.58	30.26	393	53	A	V
	*	5510	107.24	-	-	96.14	31.7	9.67	30.27	393	53	P	V
	*	5510	99.31	-	-	88.21	31.7	9.67	30.27	393	53	A	V
		5746.1	50.99	-17.21	68.2	39.52	32	9.86	30.39	393	53	P	V
802.11ac VHT40 CH 110 5550MHz		5453.2	52.96	-21.04	74	41.96	31.7	9.56	30.26	100	148	P	H
		5469.76	53.9	-14.3	68.2	42.86	31.7	9.6	30.26	100	148	P	H
		5453.92	44.81	-9.19	54	33.8	31.7	9.57	30.26	100	148	A	H
	*	5550	110.39	-	-	99.13	31.8	9.75	30.29	100	148	P	H
	*	5550	102.4	-	-	91.14	31.8	9.75	30.29	100	148	A	H
		5741.69	51.14	-17.06	68.2	39.67	32	9.86	30.39	100	148	P	H
		5434	50.82	-23.18	74	39.88	31.67	9.53	30.26	332	261	P	V
		5469.04	49.88	-18.32	68.2	38.85	31.7	9.59	30.26	332	261	P	V
		5457.04	41.84	-12.16	54	30.83	31.7	9.57	30.26	332	261	A	V
	*	5550	106.34	-	-	95.08	31.8	9.75	30.29	332	261	P	V
	*	5550	98.25	-	-	86.99	31.8	9.75	30.29	332	261	A	V
		5751.14	50.79	-17.41	68.2	39.31	32	9.87	30.39	332	261	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		5437.15	50.81	-23.19	74	39.87	31.67	9.53	30.26	100	157	P	H
		5466.2	49.87	-18.33	68.2	38.84	31.7	9.59	30.26	100	157	P	H
		5459.2	41.93	-12.07	54	30.91	31.7	9.58	30.26	100	157	A	H
	*	5670	111.57	-	-	100.31	31.75	9.86	30.35	100	157	P	H
	*	5670	103.33	-	-	92.07	31.75	9.86	30.35	100	157	A	H
	VHT40	5728.075	59.08	-9.12	68.2	47.67	31.93	9.86	30.38	100	157	P	H
CH 134		5368.9	51.07	-22.93	74	40.43	31.47	9.44	30.27	351	261	P	V
5670MHz	5461.3	49.17	-19.03	68.2	38.15	31.7	9.58	30.26	351	261	P	V	
	5438.9	41.49	-12.51	54	30.54	31.67	9.54	30.26	351	261	A	V	
*	5670	107.28	-	-	96.02	31.75	9.86	30.35	351	261	P	V	
*	5670	99.05	-	-	87.79	31.75	9.86	30.35	351	261	A	V	
	5729.125	55.62	-12.58	68.2	44.21	31.93	9.86	30.38	351	261	P	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		11020	46.59	-27.41	74	54.09	40.33	13.89	61.72	100	0	P	H
		16530	46.64	-21.56	68.2	50.03	38.7	17.6	59.69	100	0	P	H
													H
													H
		11020	47.29	-26.71	74	54.79	40.33	13.89	61.72	100	0	P	V
		16530	46.06	-22.14	68.2	49.45	38.7	17.6	59.69	100	0	P	V
													V
802.11ac VHT40 CH 110 5550MHz		11100	46.57	-27.43	74	54.39	40	13.98	61.8	100	0	P	H
		16650	46.71	-21.49	68.2	49.36	39.2	17.82	59.67	100	0	P	H
													H
													H
		11100	45.41	-28.59	74	53.23	40	13.98	61.8	100	0	P	V
		16650	46.63	-21.57	68.2	49.28	39.2	17.82	59.67	100	0	P	V
													V
802.11ac VHT40 CH 134 5670MHz		11340	45.13	-28.87	74	52.77	39.87	14.53	62.04	100	0	P	H
		17010	49.57	-18.63	68.2	50.56	40.5	18.09	59.58	100	0	P	H
													H
													H
		11340	45.7	-28.3	74	53.34	39.87	14.53	62.04	100	0	P	V
		17010	49.3	-18.9	68.2	50.29	40.5	18.09	59.58	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path 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	60.09	-13.91	74	49.09	31.7	9.56	30.26	100	145	P	H
		5467.84	61.18	-7.02	68.2	50.15	31.7	9.59	30.26	100	145	P	H
		5457.76	51.35	-2.65	54	40.34	31.7	9.57	30.26	100	145	A	H
	*	5530	107.09	-	-	95.93	31.73	9.71	30.28	100	145	P	H
	*	5530	99.38	-	-	88.22	31.73	9.71	30.28	100	145	A	H
		5759.96	53.58	-14.62	68.2	42.04	32.07	9.87	30.4	100	145	P	H
		5437.84	52.47	-21.53	74	41.53	31.67	9.53	30.26	386	51	P	V
		5464.96	51.47	-16.73	68.2	40.44	31.7	9.59	30.26	386	51	P	V
		5459.44	44.15	-9.85	54	33.13	31.7	9.58	30.26	386	51	A	V
	*	5536	102.59	-	-	91.37	31.77	9.73	30.28	386	51	P	V
	*	5536	94.91	-	-	83.69	31.77	9.73	30.28	386	51	A	V
		5734.445	51.3	-16.9	68.2	39.89	31.93	9.86	30.38	386	51	P	V
802.11ac VHT80 CH 122 5610MHz		5459.44	50.62	-23.38	74	39.6	31.7	9.58	30.26	100	157	P	H
		5466.64	52.12	-16.08	68.2	41.09	31.7	9.59	30.26	100	157	P	H
		5452.48	43.14	-10.86	54	32.14	31.7	9.56	30.26	100	157	A	H
	*	5610	106.69	-	-	95.36	31.8	9.85	30.32	100	157	P	H
	*	5610	99.14	-	-	87.81	31.8	9.85	30.32	100	157	A	H
		5730.035	57.43	-10.77	68.2	46.02	31.93	9.86	30.38	100	157	P	H
		5379.04	50.7	-23.3	74	39.99	31.53	9.44	30.26	351	219	P	V
		5466.4	50.17	-18.03	68.2	39.14	31.7	9.59	30.26	351	219	P	V
		5435.92	41.72	-12.28	54	30.78	31.67	9.53	30.26	351	219	A	V
	*	5610	101.16	-	-	89.83	31.8	9.85	30.32	351	219	P	V
	*	5610	93.51	-	-	82.18	31.8	9.85	30.32	351	219	A	V
		5727.83	52.21	-15.99	68.2	40.8	31.93	9.86	30.38	351	219	P	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 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	45.65	-28.35	74	53.34	40.13	13.94	61.76	100	0	P	H
		16590	46.66	-21.54	68.2	49.78	38.85	17.71	59.68	100	0	P	H
													H
													H
		11060	46.3	-27.7	74	53.99	40.13	13.94	61.76	100	0	P	V
		16590	47.39	-20.81	68.2	50.51	38.85	17.71	59.68	100	0	P	V
													V
													V
802.11ac VHT80 CH 122 5610MHz		11220	46.14	-27.86	74	53.86	39.88	14.32	61.92	100	0	P	H
		16830	47.83	-20.37	68.2	49.3	40.2	17.96	59.63	100	0	P	H
													H
													H
		11220	45.14	-28.86	74	52.86	39.88	14.32	61.92	100	0	P	V
		16830	48.14	-20.06	68.2	49.61	40.2	17.96	59.63	100	0	P	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5441.65	50.32	-23.68	74	39.37	31.67	9.54	30.26	100	156	P	H
		5460	50.11	-18.09	68.2	39.09	31.7	9.58	30.26	100	156	P	H
		5448.28	41.63	-12.37	54	30.64	31.7	9.55	30.26	100	156	A	H
	*	5720	113.95	-	-	102.53	31.93	9.86	30.37	100	156	P	H
	*	5720	106.46	-	-	95.04	31.93	9.86	30.37	100	156	A	H
		5913.25	53.57	-14.63	68.2	41.7	32.33	10.01	30.47	100	156	P	H
		5391.73	50.22	-23.78	74	39.5	31.53	9.45	30.26	328	258	P	V
		5462.71	49.48	-18.72	68.2	38.46	31.7	9.58	30.26	328	258	P	V
		5447.11	41.34	-12.66	54	30.35	31.7	9.55	30.26	328	258	A	V
	*	5720	110.23	-	-	98.81	31.93	9.86	30.37	328	258	P	V
	*	5720	102.72	-	-	91.3	31.93	9.86	30.37	328	258	A	V
		5876	52.78	-15.42	68.2	41	32.27	9.97	30.46	328	258	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	44.79	-29.21	74	52.35	40.07	14.51	62.14	100	0	P	H
		17160	48.32	-19.88	68.2	48.64	40.57	18.36	59.25	100	0	P	H
													H
													H
		11440	46.25	-27.75	74	53.81	40.07	14.51	62.14	100	0	P	V
		17160	48.59	-19.61	68.2	48.91	40.57	18.36	59.25	100	0	P	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 VHT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		5437.36	50.32	-23.68	74	39.38	31.67	9.53	30.26	100	156	P	H
		5464.27	49.84	-18.36	68.2	38.81	31.7	9.59	30.26	100	156	P	H
		5442.82	41.26	-12.74	54	30.31	31.67	9.54	30.26	100	156	A	H
	*	5720	113.2	-	-	101.78	31.93	9.86	30.37	100	156	P	H
	*	5720	105.55	-	-	94.13	31.93	9.86	30.37	100	156	A	H
		5881	53.89	-14.31	68.2	42.11	32.27	9.97	30.46	100	156	P	H
		5449.45	50.88	-23.12	74	39.88	31.7	9.56	30.26	330	258	P	V
		5460.37	49.97	-18.23	68.2	38.95	31.7	9.58	30.26	330	258	P	V
		5441.26	40.83	-13.17	54	29.88	31.67	9.54	30.26	330	258	A	V
	*	5720	109.5	-	-	98.08	31.93	9.86	30.37	330	258	P	V
	*	5720	101.93	-	-	90.51	31.93	9.86	30.37	330	258	A	V
		5912	52.98	-15.22	68.2	41.11	32.33	10.01	30.47	330	258	P	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		11440	45.42	-28.58	74	52.98	40.07	14.51	62.14	100	0	P	H
		17160	49.54	-18.66	68.2	49.86	40.57	18.36	59.25	100	0	P	H
													H
													H
		11440	45.37	-28.63	74	52.93	40.07	14.51	62.14	100	0	P	V
		17160	48.73	-19.47	68.2	49.05	40.57	18.36	59.25	100	0	P	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 VHT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		5435.02	50.35	-23.65	74	39.41	31.67	9.53	30.26	100	154	P	H
		5470	51.32	-16.88	68.2	40.28	31.7	9.6	30.26	100	154	P	H
		5439.7	41.34	-12.66	54	30.39	31.67	9.54	30.26	100	154	A	H
	*	5710	110.3	-	-	98.94	31.87	9.86	30.37	100	154	P	H
	*	5710	102.08	-	-	90.72	31.87	9.86	30.37	100	154	A	H
		5863.5	53.67	-14.53	68.2	41.94	32.23	9.95	30.45	100	154	P	H
		5442.82	50.39	-23.61	74	39.44	31.67	9.54	30.26	330	258	P	V
		5465.83	50.02	-18.18	68.2	38.99	31.7	9.59	30.26	330	258	P	V
		5423.32	40.85	-13.15	54	29.97	31.63	9.51	30.26	330	258	A	V
	*	5710	106.71	-	-	95.35	31.87	9.86	30.37	330	258	P	V
	*	5710	98.56	-	-	87.2	31.87	9.86	30.37	330	258	A	V
		5875.5	52.4	-15.8	68.2	40.63	32.27	9.96	30.46	330	258	P	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		11420	45.6	-28.4	74	53.17	40.03	14.52	62.12	100	0	P	H
		17130	49.21	-18.99	68.2	49.69	40.53	18.3	59.31	100	0	P	H
													H
													H
		11420	45.83	-28.17	74	53.4	40.03	14.52	62.12	100	0	P	V
		17130	49.44	-18.76	68.2	49.92	40.53	18.3	59.31	100	0	P	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 (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5456.86	50.24	-23.76	74	39.23	31.7	9.57	30.26	100	151	P	H
		5465.44	49.65	-18.55	68.2	38.62	31.7	9.59	30.26	100	151	P	H
		5449.84	42.07	-11.93	54	31.07	31.7	9.56	30.26	100	151	A	H
	*	5690	106.5	-	-	95.2	31.8	9.86	30.36	100	151	P	H
	*	5690	98.73	-	-	87.43	31.8	9.86	30.36	100	151	A	H
		5902.9	54.18	-14.02	68.2	42.35	32.3	10	30.47	100	151	P	H
		5402.26	51	-23	74	40.2	31.6	9.46	30.26	386	49	P	V
		5461.93	50.82	-17.38	68.2	39.8	31.7	9.58	30.26	386	49	P	V
		5434.24	41.82	-12.18	54	30.88	31.67	9.53	30.26	386	49	A	V
	*	5690	102.52	-	-	91.22	31.8	9.86	30.36	386	49	P	V
	*	5690	95.01	-	-	83.71	31.8	9.86	30.36	386	49	A	V
		5868.1	51.88	-16.32	68.2	40.14	32.23	9.96	30.45	386	49	P	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 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		11380	44.55	-29.45	74	52.13	39.97	14.53	62.08	100	0	P	H
		17070	49.2	-19	68.2	49.96	40.5	18.19	59.45	100	0	P	H
													H
													H
		11380	45.22	-28.78	74	52.8	39.97	14.53	62.08	100	0	P	V
		17070	48.54	-19.66	68.2	49.3	40.5	18.19	59.45	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 LF		30	22.67	-17.33	40	29.39	25.2	0.7	32.62	-	-	P	H
		107.6	26.91	-16.59	43.5	41.35	16.7	1.37	32.51	-	-	P	H
		296.75	25.35	-20.65	46	36.35	19.24	2.3	32.54	-	-	P	H
		364.65	27.96	-18.04	46	37.25	20.79	2.47	32.55	-	-	P	H
		832.19	35.71	-10.29	46	35.36	28.59	3.78	32.02	100	0	P	H
		896.21	34.07	-11.93	46	32.96	28.82	3.96	31.67	-	-	P	H
													H
													H
													H
													H
													H
													H
													V
		31.94	26.66	-13.34	40	34.42	24.14	0.72	32.62	-	-	P	V
		106.63	22.57	-20.93	43.5	37.01	16.7	1.37	32.51	-	-	P	V
		182.29	21.34	-22.16	43.5	37.02	14.9	1.91	32.49	-	-	P	V
		305.48	23.55	-22.45	46	34.5	19.3	2.29	32.54	-	-	P	V
		832.19	38.43	-7.57	46	38.08	28.59	3.78	32.02	100	0	P	V
		903.97	36.07	-9.93	46	34.67	29.06	3.96	31.62	-	-	P	V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5123.5	53.32	-20.68	74	42.54	31.83	9.23	30.28	100	183	P	H
		5149.76	44.04	-9.96	54	33.26	31.8	9.25	30.27	100	183	A	H
	*	5180	110.93	-	-	100.24	31.67	9.29	30.27	100	183	P	H
	*	5180	103.46	-	-	92.77	31.67	9.29	30.27	100	183	A	H
													H
													H
		5149.76	53.95	-20.05	74	43.17	31.8	9.25	30.27	306	59	P	V
		5149.5	43.93	-10.07	54	33.15	31.8	9.25	30.27	306	59	A	V
	*	5180	110.13	-	-	99.44	31.67	9.29	30.27	306	59	P	V
	*	5180	100.75	-	-	90.06	31.67	9.29	30.27	306	59	A	V
802.11a CH 44 5220MHz													V
		5124.54	52.19	-21.81	74	41.41	31.83	9.23	30.28	100	180	P	H
		5150	42.88	-11.12	54	32.09	31.8	9.26	30.27	100	180	A	H
	*	5220	112.66	-	-	102.07	31.53	9.33	30.27	100	180	P	H
	*	5220	104.97	-	-	94.38	31.53	9.33	30.27	100	180	A	H
		5353.04	50.65	-23.35	74	40.1	31.4	9.42	30.27	100	180	P	H
		5448.8	41.85	-12.15	54	30.85	31.7	9.56	30.26	100	180	A	H
		5139.62	51.11	-22.89	74	40.34	31.8	9.24	30.27	321	58	P	V
		5149.76	42.15	-11.85	54	31.37	31.8	9.25	30.27	321	58	A	V
	*	5220	111.18	-	-	100.59	31.53	9.33	30.27	321	58	P	V
	*	5220	103.8	-	-	93.21	31.53	9.33	30.27	321	58	A	V
		5405.12	50.43	-23.57	74	39.62	31.6	9.47	30.26	321	58	P	V
		5409.32	41.52	-12.48	54	30.7	31.6	9.48	30.26	321	58	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11a CH 48 5240MHz		5107.38	50.91	-23.09	74	40.11	31.87	9.21	30.28	100	181	P	H
		5150	41.97	-12.03	54	31.18	31.8	9.26	30.27	100	181	A	H
	*	5240	112.51	-	-	101.97	31.47	9.34	30.27	100	181	P	H
	*	5240	105.04	-	-	94.5	31.47	9.34	30.27	100	181	A	H
		5359.76	51.12	-22.88	74	40.56	31.4	9.43	30.27	100	181	P	H
		5350.8	42.25	-11.75	54	31.7	31.4	9.42	30.27	100	181	A	H
		5131.04	50.61	-23.39	74	39.82	31.83	9.23	30.27	317	57	P	V
		5147.42	41.6	-12.4	54	30.82	31.8	9.25	30.27	317	57	A	V
	*	5240	111.09	-	-	100.55	31.47	9.34	30.27	317	57	P	V
	*	5240	103.76	-	-	93.22	31.47	9.34	30.27	317	57	A	V
		5404.84	51.24	-22.76	74	40.43	31.6	9.47	30.26	317	57	P	V
		5377.4	41.62	-12.38	54	30.97	31.47	9.44	30.26	317	57	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	43.99	-24.21	68.2	51.81	39.37	13.57	60.76	100	0	P	H
		15540	45.29	-28.71	74	51.9	37.93	17.01	61.55	100	0	P	H
													H
													H
		10360	45.37	-22.83	68.2	53.19	39.37	13.57	60.76	100	0	P	V
		15540	45.37	-28.63	74	51.98	37.93	17.01	61.55	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	44.15	-24.05	68.2	51.93	39.53	13.65	60.96	100	0	P	H
		15660	44.55	-29.45	74	51.35	37.45	17.16	61.41	100	0	P	H
													H
													H
		10440	44.78	-23.42	68.2	52.56	39.53	13.65	60.96	100	0	P	V
		15660	44.62	-29.38	74	51.42	37.45	17.16	61.41	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	43.72	-24.48	68.2	51.51	39.58	13.68	61.05	100	0	P	H
		15720	44.79	-29.21	74	51.62	37.3	17.21	61.34	100	0	P	H
													H
													H
		10480	44.46	-23.74	68.2	52.25	39.58	13.68	61.05	100	0	P	V
		15720	46.14	-27.86	74	52.97	37.3	17.21	61.34	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		5149.76	54.95	-19.05	74	44.17	31.8	9.25	30.27	100	180	P	H
		5149.76	45.11	-8.89	54	34.33	31.8	9.25	30.27	100	180	A	H
	*	5180	110.7	-	-	100.01	31.67	9.29	30.27	100	180	P	H
	*	5180	103.17	-	-	92.48	31.67	9.29	30.27	100	180	A	H
													H
													H
		5148.72	53.3	-20.7	74	42.52	31.8	9.25	30.27	327	60	P	V
		5150	44.85	-9.15	54	34.06	31.8	9.26	30.27	327	60	A	V
	*	5180	109.47	-	-	98.78	31.67	9.29	30.27	327	60	P	V
	*	5180	101.87	-	-	91.18	31.67	9.29	30.27	327	60	A	V
													V
													V
802.11ac VHT20 CH 44 5220MHz		5068.64	51.89	-22.11	74	41.1	31.9	9.17	30.28	100	180	P	H
		5147.16	42.68	-11.32	54	31.9	31.8	9.25	30.27	100	180	A	H
	*	5220	112.6	-	-	102.01	31.53	9.33	30.27	100	180	P	H
	*	5220	104.42	-	-	93.83	31.53	9.33	30.27	100	180	A	H
		5394.76	50.73	-23.27	74	39.93	31.6	9.46	30.26	100	180	P	H
		5363.68	41.89	-12.11	54	31.26	31.47	9.43	30.27	100	180	A	H
		5147.16	50.94	-23.06	74	40.16	31.8	9.25	30.27	323	58	P	V
		5148.98	42.28	-11.72	54	31.5	31.8	9.25	30.27	323	58	A	V
	*	5220	110.87	-	-	100.28	31.53	9.33	30.27	323	58	P	V
	*	5220	103.34	-	-	92.75	31.53	9.33	30.27	323	58	A	V
		5383.56	50.99	-23.01	74	40.27	31.53	9.45	30.26	323	58	P	V
		5365.64	41.42	-12.58	54	30.79	31.47	9.43	30.27	323	58	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		5097.24	50.62	-23.38	74	39.8	31.9	9.2	30.28	100	178	P	H
		5148.72	41.87	-12.13	54	31.09	31.8	9.25	30.27	100	178	A	H
	*	5240	112.08	-	-	101.54	31.47	9.34	30.27	100	178	P	H
	*	5240	104.44	-	-	93.9	31.47	9.34	30.27	100	178	A	H
		5411.28	51.78	-22.22	74	40.96	31.6	9.48	30.26	100	178	P	H
	VHT20	5353.32	42.34	-11.66	54	31.79	31.4	9.42	30.27	100	178	A	H
	CH 48	5131.56	50.79	-23.21	74	40	31.83	9.23	30.27	356	57	P	V
	5240MHz	5148.2	41.38	-12.62	54	30.6	31.8	9.25	30.27	356	57	A	V
	*	5240	111.47	-	-	100.93	31.47	9.34	30.27	356	57	P	V
	*	5240	103.37	-	-	92.83	31.47	9.34	30.27	356	57	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		10360	44.16	-24.04	68.2	51.98	39.37	13.57	60.76	100	0	P	H
		15540	44.99	-29.01	74	51.6	37.93	17.01	61.55	100	0	P	H
													H
													H
		10360	43.66	-24.54	68.2	51.48	39.37	13.57	60.76	100	0	P	V
		15540	45.31	-28.69	74	51.92	37.93	17.01	61.55	100	0	P	V
													V
802.11ac VHT20 CH 44 5220MHz		10440	44.39	-23.81	68.2	52.17	39.53	13.65	60.96	100	0	P	H
		15660	44.74	-29.26	74	51.54	37.45	17.16	61.41	100	0	P	H
													H
													H
		10440	44.05	-24.15	68.2	51.83	39.53	13.65	60.96	100	0	P	V
		15660	45.08	-28.92	74	51.88	37.45	17.16	61.41	100	0	P	V
													V
802.11ac VHT20 CH 48 5240MHz		10480	43.73	-24.47	68.2	51.52	39.58	13.68	61.05	100	0	P	H
		15720	44.81	-29.19	74	51.64	37.3	17.21	61.34	100	0	P	H
													H
													H
		10480	43.93	-24.27	68.2	51.72	39.58	13.68	61.05	100	0	P	V
		15720	45.45	-28.55	74	52.28	37.3	17.21	61.34	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		5150	58.49	-15.51	74	47.7	31.8	9.26	30.27	302	180	P	H
		5149.76	49.36	-4.64	54	38.58	31.8	9.25	30.27	302	180	A	H
	*	5190	109	-	-	98.3	31.67	9.3	30.27	302	180	P	H
	*	5190	101.06	-	-	90.36	31.67	9.3	30.27	302	180	A	H
		5374.6	51.43	-22.57	74	40.79	31.47	9.44	30.27	302	180	P	H
		5372.08	41.88	-12.12	54	31.24	31.47	9.44	30.27	302	180	A	H
		5148.2	56.39	-17.61	74	45.61	31.8	9.25	30.27	341	58	P	V
		5149.5	48.43	-5.57	54	37.65	31.8	9.25	30.27	341	58	A	V
	*	5190	107.52	-	-	96.82	31.67	9.3	30.27	341	58	P	V
	*	5190	99.52	-	-	88.82	31.67	9.3	30.27	341	58	A	V
802.11ac VHT40 CH 46 5230MHz		5395.32	50.29	-23.71	74	39.49	31.6	9.46	30.26	341	58	P	V
		5365.36	41.51	-12.49	54	30.88	31.47	9.43	30.27	341	58	A	V
		5141.18	51.3	-22.7	74	40.52	31.8	9.25	30.27	100	179	P	H
		5149.24	43.5	-10.5	54	32.72	31.8	9.25	30.27	100	179	A	H
	*	5230	109.72	-	-	99.19	31.47	9.33	30.27	100	179	P	H
	*	5230	101.6	-	-	91.07	31.47	9.33	30.27	100	179	A	H
		5381.88	52.44	-21.56	74	41.72	31.53	9.45	30.26	100	179	P	H
		5353.88	42.79	-11.21	54	32.23	31.4	9.43	30.27	100	179	A	H
		5120.38	51.17	-22.83	74	40.36	31.87	9.22	30.28	318	60	P	V
		5150	42.81	-11.19	54	32.02	31.8	9.26	30.27	318	60	A	V
Remark	*	5230	108.21	-	-	97.68	31.47	9.33	30.27	318	60	P	V
	*	5230	100.18	-	-	89.65	31.47	9.33	30.27	318	60	A	V
		5393.92	51.18	-22.82	74	40.45	31.53	9.46	30.26	318	60	P	V
		5358.08	41.89	-12.11	54	31.33	31.4	9.43	30.27	318	60	A	V
		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		10380	43.51	-24.69	68.2	51.3	39.43	13.59	60.81	100	0	P	H
		15570	45.03	-28.97	74	51.73	37.77	17.05	61.52	100	0	P	H
													H
													H
		10380	44.89	-23.31	68.2	52.68	39.43	13.59	60.81	100	0	P	V
		15570	44.76	-29.24	74	51.46	37.77	17.05	61.52	100	0	P	V
													V
													V
802.11ac VHT40 CH 46 5230MHz		10460	44.12	-24.08	68.2	51.91	39.55	13.66	61	100	0	P	H
		15690	44.3	-29.7	74	51.13	37.35	17.19	61.37	100	0	P	H
													H
													H
		10460	44.58	-23.62	68.2	52.37	39.55	13.66	61	100	0	P	V
		15690	45.12	-28.88	74	51.95	37.35	17.19	61.37	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5149.5	69.12	-4.88	74	58.34	31.8	9.25	30.27	100	179	P	H
		5149.5	51.93	-2.07	54	41.15	31.8	9.25	30.27	100	179	A	H
	*	5210	106.29	-	-	95.71	31.53	9.32	30.27	100	179	P	H
	*	5210	98.65	-	-	88.07	31.53	9.32	30.27	100	179	A	H
		5397.56	51.94	-22.06	74	41.14	31.6	9.46	30.26	100	179	P	H
		5357.52	43.54	-10.46	54	32.98	31.4	9.43	30.27	100	179	A	H
		5148.72	65.34	-8.66	74	54.56	31.8	9.25	30.27	337	59	P	V
		5149.76	49.08	-4.92	54	38.3	31.8	9.25	30.27	337	59	A	V
	*	5210	105.18	-	-	94.6	31.53	9.32	30.27	337	59	P	V
	*	5210	97.54	-	-	86.96	31.53	9.32	30.27	337	59	A	V
		5353.32	50.94	-23.06	74	40.39	31.4	9.42	30.27	337	59	P	V
		5358.36	43.17	-10.83	54	32.61	31.4	9.43	30.27	337	59	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 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10420	44.88	-23.32	68.2	52.65	39.52	13.62	60.91	100	0	P	H
		15630	45.94	-28.06	74	52.76	37.5	17.12	61.44	100	0	P	H
													H
													H
		10420	44.98	-23.22	68.2	52.75	39.52	13.62	60.91	100	0	P	V
		15630	45.13	-28.87	74	51.95	37.5	17.12	61.44	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5146.54	50.17	-23.83	74	39.39	31.8	9.25	30.27	100	180	P	H
		5145.52	41.38	-12.62	54	30.6	31.8	9.25	30.27	100	180	A	H
	*	5260	112.64	-	-	102.15	31.4	9.36	30.27	100	180	P	H
	*	5260	105.02	-	-	94.53	31.4	9.36	30.27	100	180	A	H
		5350.32	52.38	-21.62	74	41.83	31.4	9.42	30.27	100	180	P	H
		5350.56	42.53	-11.47	54	31.98	31.4	9.42	30.27	100	180	A	H
		5078.2	50.94	-23.06	74	40.14	31.9	9.18	30.28	352	59	P	V
		5084.66	41.25	-12.75	54	30.45	31.9	9.18	30.28	352	59	A	V
	*	5260	110.9	-	-	100.41	31.4	9.36	30.27	352	59	P	V
	*	5260	103.51	-	-	93.02	31.4	9.36	30.27	352	59	A	V
802.11a CH 60 5300MHz		5457.12	51.24	-22.76	74	40.23	31.7	9.57	30.26	352	59	P	V
		5350.32	41.6	-12.4	54	31.05	31.4	9.42	30.27	352	59	A	V
		5048.96	49.74	-24.26	74	38.98	31.9	9.14	30.28	100	208	P	H
		5139.4	40.96	-13.04	54	30.16	31.83	9.24	30.27	100	208	A	H
	*	5300	112.46	-	-	101.94	31.4	9.39	30.27	100	208	P	H
	*	5300	104.65	-	-	94.13	31.4	9.39	30.27	100	208	A	H
		5357.76	53.86	-20.14	74	43.3	31.4	9.43	30.27	100	208	P	H
		5350.56	44.74	-9.26	54	34.19	31.4	9.42	30.27	100	208	A	H
		5057.12	50.1	-23.9	74	39.33	31.9	9.15	30.28	330	57	P	V
		5105.4	41.06	-12.94	54	30.23	31.9	9.21	30.28	330	57	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11a CH 64 5320MHz	*	5320	111.02	-	-	100.49	31.4	9.4	30.27	100	182	P	H
	*	5320	103.64	-	-	93.11	31.4	9.4	30.27	100	182	A	H
		5379.36	52.86	-21.14	74	42.15	31.53	9.44	30.26	100	182	P	H
		5352.16	44.26	-9.74	54	33.71	31.4	9.42	30.27	100	182	A	H
													H
													H
	*	5320	109.43	-	-	98.9	31.4	9.4	30.27	345	58	P	V
	*	5320	101.98	-	-	91.45	31.4	9.4	30.27	345	58	A	V
		5362.88	52.37	-21.63	74	41.74	31.47	9.43	30.27	345	58	P	V
		5352.16	43.56	-10.44	54	33.01	31.4	9.42	30.27	345	58	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 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	44.65	-23.55	68.2	52.45	39.63	13.69	61.12	100	0	P	H
		15780	44.91	-29.09	74	51.6	37.3	17.27	61.26	100	0	P	H
													H
													H
		10520	44.95	-23.25	68.2	52.75	39.63	13.69	61.12	100	0	P	V
		15780	44.43	-29.57	74	51.12	37.3	17.27	61.26	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	44.58	-29.42	74	52.29	39.8	13.71	61.22	100	0	P	H
		15900	44.56	-29.44	74	51.3	37	17.38	61.12	100	0	P	H
													H
													H
		10600	44.26	-29.74	74	51.97	39.8	13.71	61.22	100	0	P	V
		15900	44.83	-29.17	74	51.57	37	17.38	61.12	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	45	-29	74	52.75	39.8	13.72	61.27	100	0	P	H
		15960	44.28	-29.72	74	51.07	36.93	17.33	61.05	100	0	P	H
													H
													H
		10640	45.9	-28.1	74	53.65	39.8	13.72	61.27	100	0	P	V
		15960	43.82	-30.18	74	50.61	36.93	17.33	61.05	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		5121.38	50.67	-23.33	74	39.86	31.87	9.22	30.28	100	180	P	H
		5103.36	41.19	-12.81	54	30.37	31.9	9.2	30.28	100	180	A	H
	*	5260	112.36	-	-	101.87	31.4	9.36	30.27	100	180	P	H
	*	5260	104.46	-	-	93.97	31.4	9.36	30.27	100	180	A	H
		5364.72	51.37	-22.63	74	40.74	31.47	9.43	30.27	100	180	P	H
		5350.8	42.58	-11.42	54	32.03	31.4	9.42	30.27	100	180	A	H
		5099.28	50.55	-23.45	74	39.73	31.9	9.2	30.28	336	58	P	V
		5115.26	41.29	-12.71	54	30.48	31.87	9.22	30.28	336	58	A	V
	*	5260	111.56	-	-	101.07	31.4	9.36	30.27	336	58	P	V
	*	5260	102.81	-	-	92.32	31.4	9.36	30.27	336	58	A	V
802.11ac VHT20 CH 60 5300MHz		5351.52	50.95	-23.05	74	40.4	31.4	9.42	30.27	336	58	P	V
		5354.4	42.21	-11.79	54	31.65	31.4	9.43	30.27	336	58	A	V
		5068.68	50.1	-23.9	74	39.31	31.9	9.17	30.28	100	209	P	H
		5092.48	41.14	-12.86	54	30.33	31.9	9.19	30.28	100	209	A	H
	*	5300	111.75	-	-	101.23	31.4	9.39	30.27	100	209	P	H
	*	5300	104.13	-	-	93.61	31.4	9.39	30.27	100	209	A	H
		5352.72	52.87	-21.13	74	42.32	31.4	9.42	30.27	100	209	P	H
		5352	44.53	-9.47	54	33.98	31.4	9.42	30.27	100	209	A	H
		5041.82	49.67	-24.33	74	38.91	31.9	9.14	30.28	280	55	P	V
		5108.12	41.13	-12.87	54	30.33	31.87	9.21	30.28	280	55	A	V
802.11ac VHT20 CH 60 5300MHz	*	5300	110.74	-	-	100.22	31.4	9.39	30.27	280	55	P	V
	*	5300	103.21	-	-	92.69	31.4	9.39	30.27	280	55	A	V
		5450.4	52.62	-21.38	74	41.62	31.7	9.56	30.26	280	55	P	V
		5351.52	43.62	-10.38	54	33.07	31.4	9.42	30.27	280	55	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac	*	5320	110.52	-	-	99.99	31.4	9.4	30.27	100	181	P	H
	*	5320	102.83	-	-	92.3	31.4	9.4	30.27	100	181	A	H
		5354.24	55.25	-18.75	74	44.69	31.4	9.43	30.27	100	181	P	H
		5360	46.15	-7.85	54	35.59	31.4	9.43	30.27	100	181	A	H
													H
													H
	*	5320	108.95	-	-	98.42	31.4	9.4	30.27	367	57	P	V
	*	5320	101.29	-	-	90.76	31.4	9.4	30.27	367	57	A	V
		5359.36	52.36	-21.64	74	41.8	31.4	9.43	30.27	367	57	P	V
5320MHz		5350.56	44.27	-9.73	54	33.72	31.4	9.42	30.27	367	57	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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		10520	44.68	-23.52	68.2	52.48	39.63	13.69	61.12	100	0	P	H
		15780	45.04	-28.96	74	51.73	37.3	17.27	61.26	100	0	P	H
													H
													H
		10520	44.46	-23.74	68.2	52.26	39.63	13.69	61.12	100	0	P	V
		15780	45.17	-28.83	74	51.86	37.3	17.27	61.26	100	0	P	V
													V
802.11ac VHT20 CH 60 5300MHz		10600	44.55	-29.45	74	52.26	39.8	13.71	61.22	100	0	P	H
		15900	45.06	-28.94	74	51.8	37	17.38	61.12	100	0	P	H
													H
													H
		10600	44.45	-29.55	74	52.16	39.8	13.71	61.22	100	0	P	V
		15900	44.52	-29.48	74	51.26	37	17.38	61.12	100	0	P	V
													V
802.11ac VHT20 CH 64 5320MHz		10640	45.55	-28.45	74	53.3	39.8	13.72	61.27	100	0	P	H
		15960	44.69	-29.31	74	51.48	36.93	17.33	61.05	100	0	P	H
													H
													H
		10640	44.85	-29.15	74	52.6	39.8	13.72	61.27	100	0	P	V
		15960	44.48	-29.52	74	51.27	36.93	17.33	61.05	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		5074.46	50.73	-23.27	74	39.94	31.9	9.17	30.28	100	179	P	H
		5148.58	41.38	-12.62	54	30.6	31.8	9.25	30.27	100	179	A	H
	*	5270	109.14	-	-	98.65	31.4	9.36	30.27	100	179	P	H
	*	5270	101.19	-	-	90.7	31.4	9.36	30.27	100	179	A	H
		5350.56	53.61	-20.39	74	43.06	31.4	9.42	30.27	100	179	P	H
		5350.32	44.91	-9.09	54	34.36	31.4	9.42	30.27	100	179	A	H
		5070.38	51.48	-22.52	74	40.69	31.9	9.17	30.28	351	57	P	V
		5128.86	41.38	-12.62	54	30.59	31.83	9.23	30.27	351	57	A	V
	*	5270	108.2	-	-	97.71	31.4	9.36	30.27	351	57	P	V
	*	5270	100.12	-	-	89.63	31.4	9.36	30.27	351	57	A	V
802.11ac VHT40 CH 62 5310MHz		5359.44	52.72	-21.28	74	42.16	31.4	9.43	30.27	351	57	P	V
		5350.08	43.46	-10.54	54	32.91	31.4	9.42	30.27	351	57	A	V
		5109.48	50.84	-23.16	74	40.04	31.87	9.21	30.28	100	180	P	H
		5149.26	41.21	-12.79	54	30.43	31.8	9.25	30.27	100	180	A	H
	*	5310	107.69	-	-	97.17	31.4	9.39	30.27	100	180	P	H
	*	5310	99.63	-	-	89.11	31.4	9.39	30.27	100	180	A	H
		5353.44	59.36	-14.64	74	48.8	31.4	9.43	30.27	100	180	P	H
		5350.08	51.72	-2.28	54	41.17	31.4	9.42	30.27	100	180	A	H
		5112.88	50.28	-23.72	74	39.48	31.87	9.21	30.28	327	57	P	V
		5108.46	41.12	-12.88	54	30.32	31.87	9.21	30.28	327	57	A	V
Remark	*	5310	105.46	-	-	94.94	31.4	9.39	30.27	327	57	P	V
	*	5310	97.46	-	-	86.94	31.4	9.39	30.27	327	57	A	V
		5350.08	58.51	-15.49	74	47.96	31.4	9.42	30.27	327	57	P	V
		5350.08	49.15	-4.85	54	38.6	31.4	9.42	30.27	327	57	A	V



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		10540	43.92	-24.28	68.2	51.7	39.67	13.7	61.15	100	0	P	H
		15810	45.01	-28.99	74	51.64	37.3	17.3	61.23	100	0	P	H
													H
													H
		10540	44.94	-23.26	68.2	52.72	39.67	13.7	61.15	100	0	P	V
		15810	45.35	-28.65	74	51.98	37.3	17.3	61.23	100	0	P	V
													V
													V
802.11ac VHT40 CH 62 5310MHz		10620	45.45	-28.55	74	53.17	39.8	13.72	61.24	100	0	P	H
		15930	44.78	-29.22	74	51.53	36.97	17.36	61.08	100	0	P	H
													H
													H
		10620	45.03	-28.97	74	52.75	39.8	13.72	61.24	100	0	P	V
		15930	45.02	-28.98	74	51.77	36.97	17.36	61.08	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5130.56	50.72	-23.28	74	39.93	31.83	9.23	30.27	108	209	P	H
		5099.96	42.3	-11.7	54	31.48	31.9	9.2	30.28	108	209	A	H
	*	5290	103.74	-	-	93.23	31.4	9.38	30.27	108	209	P	H
	*	5290	96.19	-	-	85.68	31.4	9.38	30.27	108	209	A	H
		5356.08	60.04	-13.96	74	49.48	31.4	9.43	30.27	108	209	P	H
		5350.08	52.18	-1.82	54	41.63	31.4	9.42	30.27	108	209	A	H
		5086.36	50.83	-23.17	74	40.03	31.9	9.18	30.28	348	56	P	V
		5138.38	42.17	-11.83	54	31.37	31.83	9.24	30.27	348	56	A	V
	*	5290	102.21	-	-	91.7	31.4	9.38	30.27	348	56	P	V
	*	5290	94.65	-	-	84.14	31.4	9.38	30.27	348	56	A	V
		5360.4	58.54	-15.46	74	47.98	31.4	9.43	30.27	348	56	P	V
		5350.08	49.98	-4.02	54	39.43	31.4	9.42	30.27	348	56	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 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	43.84	-24.36	68.2	51.56	39.77	13.71	61.2	100	0	P	H
		15870	44.82	-29.18	74	51.57	37.06	17.35	61.16	100	0	P	H
													H
													H
		10580	44.13	-24.07	68.2	51.85	39.77	13.71	61.2	100	0	P	V
		15870	45	-29	74	51.75	37.06	17.35	61.16	100	0	P	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5454.64	54.98	-19.02	74	43.97	31.7	9.57	30.26	100	207	P	H
		5468.4	55.23	-12.97	68.2	44.2	31.7	9.59	30.26	100	207	P	H
		5459.6	45.25	-8.75	54	34.23	31.7	9.58	30.26	100	207	A	H
	*	5500	112.21	-	-	101.11	31.7	9.66	30.26	100	207	P	H
	*	5500	104.6	-	-	93.5	31.7	9.66	30.26	100	207	A	H
													H
		5454.64	52.26	-21.74	74	41.25	31.7	9.57	30.26	378	75	P	V
		5465.04	53.76	-14.44	68.2	42.73	31.7	9.59	30.26	378	75	P	V
		5458.48	43.83	-10.17	54	32.82	31.7	9.57	30.26	378	75	A	V
	*	5500	110.5	-	-	99.4	31.7	9.66	30.26	378	75	P	V
	*	5500	103.03	-	-	91.93	31.7	9.66	30.26	378	75	A	V
													V
802.11a CH 116 5580MHz		5404.96	51.75	-22.25	74	40.94	31.6	9.47	30.26	100	204	P	H
		5461.12	50.25	-17.95	68.2	39.23	31.7	9.58	30.26	100	204	P	H
		5459.68	41.6	-12.4	54	30.58	31.7	9.58	30.26	100	204	A	H
	*	5580	112.88	-	-	101.57	31.8	9.81	30.3	100	204	P	H
	*	5580	105.36	-	-	94.05	31.8	9.81	30.3	100	204	A	H
		5757.755	52.25	-15.95	68.2	40.7	32.07	9.87	30.39	100	204	P	H
		5427.04	51.2	-22.8	74	40.32	31.63	9.51	30.26	351	70	P	V
		5469.04	50.12	-18.08	68.2	39.09	31.7	9.59	30.26	351	70	P	V
		5459.2	41.56	-12.44	54	30.54	31.7	9.58	30.26	351	70	A	V
	*	5580	111.9	-	-	100.59	31.8	9.81	30.3	351	70	P	V
	*	5580	104.13	-	-	92.82	31.8	9.81	30.3	351	70	A	V
		5727.515	51.27	-16.93	68.2	39.86	31.93	9.86	30.38	351	70	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11a CH 140 5700MHz	*	5700	112.33	-	-	101.03	31.8	9.86	30.36	101	204	P	H
	*	5700	104.87	-	-	93.57	31.8	9.86	30.36	101	204	A	H
		5725.32	61.04	-7.16	68.2	49.63	31.93	9.86	30.38	101	204	P	H
													H
													H
													H
	*	5700	110.56	-	-	99.26	31.8	9.86	30.36	304	69	P	V
	*	5700	102.61	-	-	91.31	31.8	9.86	30.36	304	69	A	V
		5725.72	58.14	-10.06	68.2	46.73	31.93	9.86	30.38	304	69	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 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	46.66	-27.34	74	54.1	40.4	13.86	61.7	100	0	P	H
		16500	46.93	-21.27	68.2	50.48	38.6	17.55	59.7	100	0	P	H
													H
													H
		11000	47.21	-26.79	74	54.65	40.4	13.86	61.7	100	0	P	V
		16500	46.69	-21.51	68.2	50.24	38.6	17.55	59.7	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	44.75	-29.25	74	52.54	39.93	14.14	61.86	100	0	P	H
		16740	46.77	-21.43	68.2	48.72	39.78	17.92	59.65	100	0	P	H
													H
													H
		11160	45.21	-28.79	74	53	39.93	14.14	61.86	100	0	P	V
		16740	48.49	-19.71	68.2	50.44	39.78	17.92	59.65	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11400	46.21	-27.79	74	53.78	40	14.53	62.1	100	0	P	H
		17100	49.45	-18.75	68.2	50.09	40.5	18.24	59.38	100	0	P	H
													H
													H
		11400	45.44	-28.56	74	53.01	40	14.53	62.1	100	0	P	V
		17100	48.53	-19.67	68.2	49.17	40.5	18.24	59.38	100	0	P	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		5451.44	54.05	-19.95	74	43.05	31.7	9.56	30.26	100	207	P	H
		5468.56	55.34	-12.86	68.2	44.31	31.7	9.59	30.26	100	207	P	H
		5459.28	45.34	-8.66	54	34.32	31.7	9.58	30.26	100	207	A	H
	*	5500	111.58	-	-	100.48	31.7	9.66	30.26	100	207	P	H
	*	5500	104.01	-	-	92.91	31.7	9.66	30.26	100	207	A	H
													H
		5458.64	52.75	-21.25	74	41.74	31.7	9.57	30.26	378	75	P	V
		5462.96	52.94	-15.26	68.2	41.92	31.7	9.58	30.26	378	75	P	V
		5458.8	43.85	-10.15	54	32.84	31.7	9.57	30.26	378	75	A	V
	*	5500	111.1	-	-	100	31.7	9.66	30.26	378	75	P	V
	*	5500	102.37	-	-	91.27	31.7	9.66	30.26	378	75	A	V
													V
802.11ac VHT20 CH 116 5580MHz		5376.88	50.03	-23.97	74	39.38	31.47	9.44	30.26	100	205	P	H
		5467.6	49.6	-18.6	68.2	38.57	31.7	9.59	30.26	100	205	P	H
		5458.96	41.64	-12.36	54	30.63	31.7	9.57	30.26	100	205	A	H
	*	5580	112.49	-	-	101.18	31.8	9.81	30.3	100	205	P	H
	*	5580	104.82	-	-	93.51	31.8	9.81	30.3	100	205	A	H
		5753.345	51.64	-16.56	68.2	40.09	32.07	9.87	30.39	100	205	P	H
		5434.72	50.04	-23.96	74	39.1	31.67	9.53	30.26	349	73	P	V
		5465.44	50.4	-17.8	68.2	39.37	31.7	9.59	30.26	349	73	P	V
		5452.72	41.45	-12.55	54	30.45	31.7	9.56	30.26	349	73	A	V
	*	5580	111.24	-	-	99.93	31.8	9.81	30.3	349	73	P	V
	*	5580	103.5	-	-	92.19	31.8	9.81	30.3	349	73	A	V
		5744.525	50.68	-17.52	68.2	39.21	32	9.86	30.39	349	73	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5700	113.21	-	-	101.91	31.8	9.86	30.36	100	205	P	H
	*	5700	104.42	-	-	93.12	31.8	9.86	30.36	100	205	A	H
		5725	66.47	-1.73	68.2	55.06	31.93	9.86	30.38	100	205	P	H
													H
													H
													H
													H
													V
	*	5700	110.45	-	-	99.15	31.8	9.86	30.36	309	71	P	V
	*	5700	102.61	-	-	91.31	31.8	9.86	30.36	309	71	A	V
5700MHz		5725	61.28	-6.92	68.2	49.87	31.93	9.86	30.38	309	71	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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		11000	45.41	-28.59	74	52.85	40.4	13.86	61.7	100	0	P	H
		16500	46.61	-21.59	68.2	50.16	38.6	17.55	59.7	100	0	P	H
													H
													H
		11000	46.66	-27.34	74	54.1	40.4	13.86	61.7	100	0	P	V
		16500	46.05	-22.15	68.2	49.6	38.6	17.55	59.7	100	0	P	V
													V
													V
802.11ac VHT20 CH 116 5580MHz		11160	44.68	-29.32	74	52.47	39.93	14.14	61.86	100	0	P	H
		16740	47.63	-20.57	68.2	49.58	39.78	17.92	59.65	100	0	P	H
													H
													H
		11160	44.79	-29.21	74	52.58	39.93	14.14	61.86	100	0	P	V
		16740	48.67	-19.53	68.2	50.62	39.78	17.92	59.65	100	0	P	V
													V
													V
802.11ac VHT20 CH 140 5700MHz		11400	44.7	-29.3	74	52.27	40	14.53	62.1	100	0	P	H
		17100	50.35	-17.85	68.2	50.99	40.5	18.24	59.38	100	0	P	H
													H
													H
		11400	44.82	-29.18	74	52.39	40	14.53	62.1	100	0	P	V
		17100	48.82	-19.38	68.2	49.46	40.5	18.24	59.38	100	0	P	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 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		5459.68	60.64	-13.36	74	49.62	31.7	9.58	30.26	100	205	P	H
		5470	67.11	-1.09	68.2	56.07	31.7	9.6	30.26	100	205	P	H
		5459.92	50.92	-3.08	54	39.9	31.7	9.58	30.26	100	205	A	H
	*	5510	109.41	-	-	98.31	31.7	9.67	30.27	100	205	P	H
	*	5510	101.75	-	-	90.65	31.7	9.67	30.27	100	205	A	H
		5754.29	51.07	-17.13	68.2	39.52	32.07	9.87	30.39	100	205	P	H
		5459.68	59.08	-14.92	74	48.06	31.7	9.58	30.26	342	74	P	V
		5470	63.77	-4.43	68.2	52.73	31.7	9.6	30.26	342	74	P	V
		5459.92	49.08	-4.92	54	38.06	31.7	9.58	30.26	342	74	A	V
	*	5510	107.3	-	-	96.2	31.7	9.67	30.27	342	74	P	V
	*	5510	99.47	-	-	88.37	31.7	9.67	30.27	342	74	A	V
		5730.035	50.41	-17.79	68.2	39	31.93	9.86	30.38	342	74	P	V
802.11ac VHT40 CH 110 5550MHz		5451.28	53.11	-20.89	74	42.11	31.7	9.56	30.26	100	207	P	H
		5462.56	54.01	-14.19	68.2	42.99	31.7	9.58	30.26	100	207	P	H
		5458.24	43.7	-10.3	54	32.69	31.7	9.57	30.26	100	207	A	H
	*	5550	110.14	-	-	98.88	31.8	9.75	30.29	100	207	P	H
	*	5550	102.03	-	-	90.77	31.8	9.75	30.29	100	207	A	H
		5729.72	51.23	-16.97	68.2	39.82	31.93	9.86	30.38	100	207	P	H
		5458.48	51.29	-22.71	74	40.28	31.7	9.57	30.26	303	78	P	V
		5467.6	51.83	-16.37	68.2	40.8	31.7	9.59	30.26	303	78	P	V
		5458.96	42.47	-11.53	54	31.46	31.7	9.57	30.26	303	78	A	V
	*	5550	108.49	-	-	97.23	31.8	9.75	30.29	303	78	P	V
	*	5550	100.23	-	-	88.97	31.8	9.75	30.29	303	78	A	V
		5762.165	50.89	-17.31	68.2	39.35	32.07	9.87	30.4	303	78	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		5442.4	50.78	-23.22	74	39.83	31.67	9.54	30.26	100	205	P	H
		5462.7	49.49	-18.71	68.2	38.47	31.7	9.58	30.26	100	205	P	H
		5449.75	41.66	-12.34	54	30.66	31.7	9.56	30.26	100	205	A	H
	*	5670	109.5	-	-	98.24	31.75	9.86	30.35	100	205	P	H
	*	5670	101.33	-	-	90.07	31.75	9.86	30.35	100	205	A	H
	VHT40	5731.575	58.05	-10.15	68.2	46.64	31.93	9.86	30.38	100	205	P	H
CH 134		5391.3	50.39	-23.61	74	39.67	31.53	9.45	30.26	321	77	P	V
5670MHz	5464.45	50.44	-17.76	68.2	39.41	31.7	9.59	30.26	321	77	P	V	
	5457.45	41.48	-12.52	54	30.47	31.7	9.57	30.26	321	77	A	V	
*	5670	107.51	-	-	96.25	31.75	9.86	30.35	321	77	P	V	
*	5670	99.39	-	-	88.13	31.75	9.86	30.35	321	77	A	V	
	5728.95	55.35	-12.85	68.2	43.94	31.93	9.86	30.38	321	77	P	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		11020	46.41	-27.59	74	53.91	40.33	13.89	61.72	100	0	P	H
		16530	46.26	-21.94	68.2	49.65	38.7	17.6	59.69	100	0	P	H
													H
													H
		11020	45.83	-28.17	74	53.33	40.33	13.89	61.72	100	0	P	V
		16530	45.8	-22.4	68.2	49.19	38.7	17.6	59.69	100	0	P	V
													V
802.11ac VHT40 CH 110 5550MHz		11100	45.23	-28.77	74	53.05	40	13.98	61.8	100	0	P	H
		16650	45.75	-22.45	68.2	48.4	39.2	17.82	59.67	100	0	P	H
													H
													H
		11100	45.02	-28.98	74	52.84	40	13.98	61.8	100	0	P	V
		16650	46.18	-22.02	68.2	48.83	39.2	17.82	59.67	100	0	P	V
													V
802.11ac VHT40 CH 134 5670MHz		11340	46.14	-27.86	74	53.78	39.87	14.53	62.04	100	0	P	H
		17010	48.87	-19.33	68.2	49.86	40.5	18.09	59.58	100	0	P	H
													H
													H
		11340	44.91	-29.09	74	52.55	39.87	14.53	62.04	100	0	P	V
		17010	48.6	-19.6	68.2	49.59	40.5	18.09	59.58	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5459.68	61.08	-12.92	74	50.06	31.7	9.58	30.26	100	206	P	H
		5460.4	61.3	-6.9	68.2	50.28	31.7	9.58	30.26	100	206	P	H
		5459.68	51.97	-2.03	54	40.95	31.7	9.58	30.26	100	206	A	H
	*	5530	105.23	-	-	94.07	31.73	9.71	30.28	100	206	P	H
	*	5530	97.48	-	-	86.32	31.73	9.71	30.28	100	206	A	H
		5725.625	51.52	-16.68	68.2	40.11	31.93	9.86	30.38	100	206	P	H
		5459.68	57.17	-16.83	74	46.15	31.7	9.58	30.26	356	73	P	V
		5467.6	58.64	-9.56	68.2	47.61	31.7	9.59	30.26	356	73	P	V
		5458.48	49.85	-4.15	54	38.84	31.7	9.57	30.26	356	73	A	V
	*	5530	103.95	-	-	92.79	31.73	9.71	30.28	356	73	P	V
	*	5530	96.47	-	-	85.31	31.73	9.71	30.28	356	73	A	V
		5739.485	51.24	-16.96	68.2	39.76	32	9.86	30.38	356	73	P	V
802.11ac VHT80 CH 122 5610MHz		5443.6	51.59	-22.41	74	40.63	31.67	9.55	30.26	100	206	P	H
		5461.36	51.86	-16.34	68.2	40.84	31.7	9.58	30.26	100	206	P	H
		5456.56	43.09	-10.91	54	32.08	31.7	9.57	30.26	100	206	A	H
	*	5610	105.89	-	-	94.56	31.8	9.85	30.32	100	206	P	H
	*	5610	97.88	-	-	86.55	31.8	9.85	30.32	100	206	A	H
		5725.94	55.23	-12.97	68.2	43.82	31.93	9.86	30.38	100	206	P	H
		5368.48	50.72	-23.28	74	40.08	31.47	9.44	30.27	315	73	P	V
		5469.76	50.54	-17.66	68.2	39.5	31.7	9.6	30.26	315	73	P	V
		5458.48	42.45	-11.55	54	31.44	31.7	9.57	30.26	315	73	A	V
	*	5610	104.49	-	-	93.16	31.8	9.85	30.32	315	73	P	V
	*	5610	96.91	-	-	85.58	31.8	9.85	30.32	315	73	A	V
		5746.1	52.31	-15.89	68.2	40.84	32	9.86	30.39	315	73	P	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 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	45.32	-28.68	74	53.01	40.13	13.94	61.76	100	0	P	H
		16590	46.84	-21.36	68.2	49.96	38.85	17.71	59.68	100	0	P	H
													H
													H
		11060	46.43	-27.57	74	54.12	40.13	13.94	61.76	100	0	P	V
		16590	47.24	-20.96	68.2	50.36	38.85	17.71	59.68	100	0	P	V
													V
													V
802.11ac VHT80 CH 122 5610MHz		11220	45.42	-28.58	74	53.14	39.88	14.32	61.92	100	0	P	H
		16830	48.41	-19.79	68.2	49.88	40.2	17.96	59.63	100	0	P	H
													H
													H
		11220	44.64	-29.36	74	52.36	39.88	14.32	61.92	100	0	P	V
		16830	48.42	-19.78	68.2	49.89	40.2	17.96	59.63	100	0	P	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5391.34	49.87	-24.13	74	39.15	31.53	9.45	30.26	100	206	P	H
		5463.1	50.75	-17.45	68.2	39.73	31.7	9.58	30.26	100	206	P	H
		5419.03	41.11	-12.89	54	30.24	31.63	9.5	30.26	100	206	A	H
	*	5720	111.95	-	-	100.53	31.93	9.86	30.37	100	206	P	H
	*	5720	104.59	-	-	93.17	31.93	9.86	30.37	100	206	A	H
		5887.5	54.35	-13.85	68.2	42.53	32.3	9.98	30.46	100	206	P	H
		5391.73	50.73	-23.27	74	40.01	31.53	9.45	30.26	318	71	P	V
		5464.66	49.31	-18.89	68.2	38.28	31.7	9.59	30.26	318	71	P	V
		5428	41	-13	54	30.12	31.63	9.51	30.26	318	71	A	V
	*	5720	110.78	-	-	99.36	31.93	9.86	30.37	318	71	P	V
	*	5720	103.2	-	-	91.78	31.93	9.86	30.37	318	71	A	V
		5877.5	53.03	-15.17	68.2	41.25	32.27	9.97	30.46	318	71	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	44.54	-29.46	74	52.1	40.07	14.51	62.14	100	0	P	H
		17160	48.82	-19.38	68.2	49.14	40.57	18.36	59.25	100	0	P	H
													H
													H
		11440	46	-28	74	53.56	40.07	14.51	62.14	100	0	P	V
		17160	48.83	-19.37	68.2	49.15	40.57	18.36	59.25	100	0	P	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 VHT20 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		5399.92	49.6	-24.4	74	38.8	31.6	9.46	30.26	100	205	P	H
		5464.27	49.25	-18.95	68.2	38.22	31.7	9.59	30.26	100	205	P	H
		5459.59	41.4	-12.6	54	30.38	31.7	9.58	30.26	100	205	A	H
	*	5720	111.93	-	-	100.51	31.93	9.86	30.37	100	205	P	H
	*	5720	104.32	-	-	92.9	31.93	9.86	30.37	100	205	A	H
		5932.5	51.88	-16.32	68.2	39.95	32.37	10.04	30.48	100	205	P	H
		5451.4	49.64	-24.36	74	38.64	31.7	9.56	30.26	353	69	P	V
		5460.37	49.2	-19	68.2	38.18	31.7	9.58	30.26	353	69	P	V
		5451.79	41.22	-12.78	54	30.22	31.7	9.56	30.26	353	69	A	V
	*	5720	110.58	-	-	99.16	31.93	9.86	30.37	353	69	P	V
	*	5720	102.88	-	-	91.46	31.93	9.86	30.37	353	69	A	V
		5912.75	52.92	-15.28	68.2	41.05	32.33	10.01	30.47	353	69	P	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		11440	44.76	-29.24	74	52.32	40.07	14.51	62.14	100	0	P	H
		17160	48.5	-19.7	68.2	48.82	40.57	18.36	59.25	100	0	P	H
													H
													H
		11440	45.05	-28.95	74	52.61	40.07	14.51	62.14	100	0	P	V
		17160	49.09	-19.11	68.2	49.41	40.57	18.36	59.25	100	0	P	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 VHT40 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		5429.56	50.46	-23.54	74	39.53	31.67	9.52	30.26	100	205	P	H
		5466.61	50.16	-18.04	68.2	39.13	31.7	9.59	30.26	100	205	P	H
		5444.38	41.28	-12.72	54	30.32	31.67	9.55	30.26	100	205	A	H
	*	5710	109.24	-	-	97.88	31.87	9.86	30.37	100	205	P	H
	*	5710	101.18	-	-	89.82	31.87	9.86	30.37	100	205	A	H
		5870	52.66	-15.54	68.2	40.92	32.23	9.96	30.45	100	205	P	H
		5435.41	51.08	-22.92	74	40.14	31.67	9.53	30.26	354	70	P	V
		5463.49	49.58	-18.62	68.2	38.56	31.7	9.58	30.26	354	70	P	V
		5429.56	40.96	-13.04	54	30.03	31.67	9.52	30.26	354	70	A	V
	*	5710	107.83	-	-	96.47	31.87	9.86	30.37	354	70	P	V
	*	5710	99.73	-	-	88.37	31.87	9.86	30.37	354	70	A	V
		5908	52.2	-16	68.2	40.33	32.33	10.01	30.47	354	70	P	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		11420	45.09	-28.91	74	52.66	40.03	14.52	62.12	100	0	P	H
		17130	48.64	-19.56	68.2	49.12	40.53	18.3	59.31	100	0	P	H
													H
													H
		11420	45.76	-28.24	74	53.33	40.03	14.52	62.12	100	0	P	V
		17130	48.75	-19.45	68.2	49.23	40.53	18.3	59.31	100	0	P	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. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5394.07	50.66	-23.34	74	39.93	31.53	9.46	30.26	100	204	P	H
		5462.71	50.43	-17.77	68.2	39.41	31.7	9.58	30.26	100	204	P	H
		5431.9	42.44	-11.56	54	31.51	31.67	9.52	30.26	100	204	A	H
	*	5690	106.35	-	-	95.05	31.8	9.86	30.36	100	204	P	H
	*	5690	98.96	-	-	87.66	31.8	9.86	30.36	100	204	A	H
		5868.1	53.07	-15.13	68.2	41.33	32.23	9.96	30.45	100	204	P	H
		5373.4	51.76	-22.24	74	41.12	31.47	9.44	30.27	354	75	P	V
		5466.22	49.19	-19.01	68.2	38.16	31.7	9.59	30.26	354	75	P	V
		5459.59	42.33	-11.67	54	31.31	31.7	9.58	30.26	354	75	A	V
	*	5690	104.31	-	-	93.01	31.8	9.86	30.36	354	75	P	V
	*	5690	96.89	-	-	85.59	31.8	9.86	30.36	354	75	A	V
		5851	52.19	-16.01	68.2	40.5	32.2	9.93	30.44	354	75	P	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 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		11380	45.28	-28.72	74	52.86	39.97	14.53	62.08	100	0	P	H
		17070	48.5	-19.7	68.2	49.26	40.5	18.19	59.45	100	0	P	H
													H
													H
		11380	44.72	-29.28	74	52.3	39.97	14.53	62.08	100	0	P	V
		17070	48.86	-19.34	68.2	49.62	40.5	18.19	59.45	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WIFI 802.11ac VHT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 LF		30.97	23.54	-16.46	40	30.64	24.81	0.71	32.62	-	-	P	H
		115.36	27.14	-16.36	43.5	40.94	17.3	1.41	32.51	-	-	P	H
		287.05	24.78	-21.22	46	35.99	19.04	2.28	32.53	-	-	P	H
		561.56	27.52	-18.48	46	30.63	26.33	3.15	32.59	-	-	P	H
		832.19	35.47	-10.53	46	35.12	28.59	3.78	32.02	100	0	P	H
		885.54	33.89	-12.11	46	32.78	28.9	3.94	31.73			P	H
													H
													H
													H
													H
													H
													H
													V
		30	26.98	-13.02	40	33.7	25.2	0.7	32.62	-	-	P	V
		108.57	22.45	-21.05	43.5	36.77	16.81	1.38	32.51	-	-	P	V
		304.51	22.69	-23.31	46	33.63	19.3	2.3	32.54	-	-	P	V
		565.44	28.39	-17.61	46	31.43	26.39	3.16	32.59	-	-	P	V
		832.19	38.47	-7.53	46	38.12	28.59	3.78	32.02	100	0	P	V
		914.64	37.16	-8.84	46	35.31	29.39	3.98	31.52	-	-	P	V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Band 1 - 5150~5250MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 36 5180MHz		5148.46	56.37	-17.63	74	45.59	31.8	9.25	30.27	100	151	P	H
		5149.5	47.3	-6.7	54	36.52	31.8	9.25	30.27	100	151	A	H
	*	5180	117.06	-	-	106.37	31.67	9.29	30.27	100	151	P	H
	*	5180	109.6	-	-	98.91	31.67	9.29	30.27	100	151	A	H
													H
													H
		5146.38	52.74	-21.26	74	41.96	31.8	9.25	30.27	359	60	P	V
		5146.9	44.31	-9.69	54	33.53	31.8	9.25	30.27	359	60	A	V
	*	5180	113.81	-	-	103.12	31.67	9.29	30.27	359	60	P	V
	*	5180	106.6	-	-	95.91	31.67	9.29	30.27	359	60	A	V
802.11a CH 44 5220MHz													V
		5135.98	51.77	-22.23	74	40.97	31.83	9.24	30.27	100	150	P	H
		5149.5	43.98	-10.02	54	33.2	31.8	9.25	30.27	100	150	A	H
	*	5220	118.88	-	-	108.29	31.53	9.33	30.27	100	150	P	H
	*	5220	111.44	-	-	100.85	31.53	9.33	30.27	100	150	A	H
		5355.56	51.92	-22.08	74	41.36	31.4	9.43	30.27	100	150	P	H
		5354.44	43.7	-10.3	54	33.14	31.4	9.43	30.27	100	150	A	H
		5143.78	50.67	-23.33	74	39.89	31.8	9.25	30.27	394	59	P	V
		5150	42.13	-11.87	54	31.34	31.8	9.26	30.27	394	59	A	V
	*	5220	115.49	-	-	104.9	31.53	9.33	30.27	394	59	P	V
	*	5220	108.35	-	-	97.76	31.53	9.33	30.27	394	59	A	V
		5424.72	50.8	-23.2	74	39.92	31.63	9.51	30.26	394	59	P	V
		5354.72	41.75	-12.25	54	31.19	31.4	9.43	30.27	394	59	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11a CH 48 5240MHz		5060.58	51.95	-22.05	74	41.17	31.9	9.16	30.28	100	150	P	H
		5147.94	42.23	-11.77	54	31.45	31.8	9.25	30.27	100	150	A	H
	*	5240	118.34	-	-	107.8	31.47	9.34	30.27	100	150	P	H
	*	5240	111.09	-	-	100.55	31.47	9.34	30.27	100	150	A	H
		5357.24	52.46	-21.54	74	41.9	31.4	9.43	30.27	100	150	P	H
		5355.56	43.86	-10.14	54	33.3	31.4	9.43	30.27	100	150	A	H
		5142.22	51.48	-22.52	74	40.7	31.8	9.25	30.27	390	58	P	V
		5149.24	41.59	-12.41	54	30.81	31.8	9.25	30.27	390	58	A	V
	*	5240	115.24	-	-	104.7	31.47	9.34	30.27	390	58	P	V
	*	5240	107.95	-	-	97.41	31.47	9.34	30.27	390	58	A	V
		5382.16	50.65	-23.35	74	39.93	31.53	9.45	30.26	390	58	P	V
		5356.96	42.06	-11.94	54	31.5	31.4	9.43	30.27	390	58	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 36 5180MHz		10360	44	-24.2	68.2	51.82	39.37	13.57	60.76	100	0	P	H
		15540	44.67	-29.33	74	51.28	37.93	17.01	61.55	100	0	P	H
													H
													H
		10360	44.4	-23.8	68.2	52.22	39.37	13.57	60.76	100	0	P	V
		15540	46.08	-27.92	74	52.69	37.93	17.01	61.55	100	0	P	V
													V
													V
802.11a CH 44 5220MHz		10440	44.03	-24.17	68.2	51.81	39.53	13.65	60.96	100	0	P	H
		15660	44.38	-29.62	74	51.18	37.45	17.16	61.41	100	0	P	H
													H
													H
		10440	44.59	-23.61	68.2	52.37	39.53	13.65	60.96	100	0	P	V
		15660	45.74	-28.26	74	52.54	37.45	17.16	61.41	100	0	P	V
													V
													V
802.11a CH 48 5240MHz		10480	47.17	-21.03	68.2	55.18	39.58	13.68	61.27	100	0	P	H
		15720	45.15	-28.85	74	53	37.3	17.21	62.36	100	0	P	H
													H
													H
		10480	46.81	-21.39	68.2	54.82	39.58	13.68	61.27	100	0	P	V
		15720	45.24	-28.76	74	53.09	37.3	17.21	62.36	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		5149.24	55.45	-18.55	74	44.67	31.8	9.25	30.27	100	146	P	H
		5150	46.06	-7.94	54	35.27	31.8	9.26	30.27	100	146	A	H
	*	5180	116.81	-	-	106.12	31.67	9.29	30.27	100	146	P	H
	*	5180	109.24	-	-	98.55	31.67	9.29	30.27	100	146	A	H
													H
													H
		5146.9	53.51	-20.49	74	42.73	31.8	9.25	30.27	381	59	P	V
		5147.16	45.38	-8.62	54	34.6	31.8	9.25	30.27	381	59	A	V
	*	5180	113.6	-	-	102.91	31.67	9.29	30.27	381	59	P	V
	*	5180	105.88	-	-	95.19	31.67	9.29	30.27	381	59	A	V
													V
													V
802.11ac VHT20 CH 44 5220MHz		5149.76	52.28	-21.72	74	41.5	31.8	9.25	30.27	100	112	P	H
		5149.5	43.84	-10.16	54	33.06	31.8	9.25	30.27	100	112	A	H
	*	5220	117.99	-	-	107.4	31.53	9.33	30.27	100	112	P	H
	*	5220	110.36	-	-	99.77	31.53	9.33	30.27	100	112	A	H
		5396.72	51.58	-22.42	74	40.78	31.6	9.46	30.26	100	112	P	H
		5354.16	42.66	-11.34	54	32.1	31.4	9.43	30.27	100	112	A	H
		5134.68	51.19	-22.81	74	40.39	31.83	9.24	30.27	399	94	P	V
		5147.42	41.66	-12.34	54	30.88	31.8	9.25	30.27	399	94	A	V
	*	5220	112.9	-	-	102.31	31.53	9.33	30.27	399	94	P	V
	*	5220	105.26	-	-	94.67	31.53	9.33	30.27	399	94	A	V
		5368.44	50.39	-23.61	74	39.75	31.47	9.44	30.27	399	94	P	V
		5355.84	41.41	-12.59	54	30.85	31.4	9.43	30.27	399	94	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.	
802.11ac		5141.44	50.83	-23.17	74	40.05	31.8	9.25	30.27	100	148	P	H	
		5148.2	42.28	-11.72	54	31.5	31.8	9.25	30.27	100	148	A	H	
	*	5240	118.29	-	-	107.75	31.47	9.34	30.27	100	148	P	H	
	*	5240	110.64	-	-	100.1	31.47	9.34	30.27	100	148	A	H	
		5350.24	52.11	-21.89	74	41.56	31.4	9.42	30.27	100	148	P	H	
	VHT20		5352.48	43.78	-10.22	54	33.23	31.4	9.42	30.27	100	148	A	H
	CH 48		5129.22	50.75	-23.25	74	39.96	31.83	9.23	30.27	392	58	P	V
	5240MHz		5147.68	41.52	-12.48	54	30.74	31.8	9.25	30.27	392	58	A	V
	*	5240	115.19	-	-	104.65	31.47	9.34	30.27	392	58	P	V	
	*	5240	107.53	-	-	96.99	31.47	9.34	30.27	392	58	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		10360	46.26	-21.94	68.2	54.08	39.37	13.57	60.76	100	0	P	H
		15540	44.96	-29.04	74	51.57	37.93	17.01	61.55	100	0	P	H
													H
													H
		10360	44.67	-23.53	68.2	52.49	39.37	13.57	60.76	100	0	P	V
		15540	45.7	-28.3	74	52.31	37.93	17.01	61.55	100	0	P	V
													V
802.11ac VHT20 CH 44 5220MHz		10440	43.88	-24.32	68.2	51.66	39.53	13.65	60.96	100	0	P	H
		15660	44.33	-29.67	74	51.13	37.45	17.16	61.41	100	0	P	H
													H
													H
		10440	45.18	-23.02	68.2	52.96	39.53	13.65	60.96	100	0	P	V
		15660	44.74	-29.26	74	51.54	37.45	17.16	61.41	100	0	P	V
													V
802.11ac VHT20 CH 48 5240MHz		10480	44.57	-23.63	68.2	52.36	39.58	13.68	61.05	100	0	P	H
		15720	45.34	-28.66	74	52.17	37.3	17.21	61.34	100	0	P	H
													H
													H
		10480	44.83	-23.37	68.2	52.62	39.58	13.68	61.05	100	0	P	V
		15720	46.25	-27.75	74	53.08	37.3	17.21	61.34	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		5149.76	60.09	-13.91	74	49.31	31.8	9.25	30.27	100	154	P	H
		5150	51.35	-2.65	54	40.56	31.8	9.26	30.27	100	154	A	H
	*	5190	113.67	-	-	102.97	31.67	9.3	30.27	100	154	P	H
	*	5190	105.62	-	-	94.92	31.67	9.3	30.27	100	154	A	H
		5431.16	50.72	-23.28	74	39.79	31.67	9.52	30.26	100	154	P	H
		5362.56	42.51	-11.49	54	31.88	31.47	9.43	30.27	100	154	A	H
		5150	54.86	-19.14	74	44.07	31.8	9.26	30.27	354	59	P	V
		5148.98	46.82	-7.18	54	36.04	31.8	9.25	30.27	354	59	A	V
	*	5190	110.07	-	-	99.37	31.67	9.3	30.27	354	59	P	V
	*	5190	102.34	-	-	91.64	31.67	9.3	30.27	354	59	A	V
802.11ac VHT40 CH 46 5230MHz		5424.44	50.18	-23.82	74	39.3	31.63	9.51	30.26	354	59	P	V
		5458.32	41.18	-12.82	54	30.17	31.7	9.57	30.26	354	59	A	V
		5147.94	52.7	-21.3	74	41.92	31.8	9.25	30.27	100	151	P	H
		5150	44.58	-9.42	54	33.79	31.8	9.26	30.27	100	151	A	H
	*	5230	115.64	-	-	105.05	31.53	9.33	30.27	100	151	P	H
	*	5230	107.54	-	-	96.95	31.53	9.33	30.27	100	151	A	H
		5351.92	53.27	-20.73	74	42.72	31.4	9.42	30.27	100	151	P	H
		5350	46	-8	54	35.45	31.4	9.42	30.27	100	151	A	H
		5143.78	51.49	-22.51	74	40.71	31.8	9.25	30.27	391	58	P	V
		5143.78	42.84	-11.16	54	32.06	31.8	9.25	30.27	391	58	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		10380	43.58	-24.62	68.2	51.37	39.43	13.59	60.81	100	0	P	H
		15570	44.64	-29.36	74	51.34	37.77	17.05	61.52	100	0	P	H
													H
													H
		10380	44.52	-23.68	68.2	52.31	39.43	13.59	60.81	100	0	P	V
		15570	44.91	-29.09	74	51.61	37.77	17.05	61.52	100	0	P	V
													V
													V
802.11ac VHT40 CH 46 5230MHz		10460	44.09	-24.11	68.2	51.88	39.55	13.66	61	100	0	P	H
		15690	45.42	-28.58	74	52.25	37.35	17.19	61.37	100	0	P	H
													H
													H
		10460	44.3	-23.9	68.2	52.09	39.55	13.66	61	100	0	P	V
		15690	44.7	-29.3	74	51.53	37.35	17.19	61.37	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5135.72	58.49	-15.51	74	47.69	31.83	9.24	30.27	100	150	P	H
		5137.8	51.12	-2.88	54	40.32	31.83	9.24	30.27	100	150	A	H
	*	5210	110.7	-	-	100.12	31.53	9.32	30.27	100	150	P	H
	*	5210	102.79	-	-	92.21	31.53	9.32	30.27	100	150	A	H
		5417.72	51.02	-22.98	74	40.16	31.63	9.49	30.26	100	150	P	H
		5414.36	43.58	-10.42	54	32.72	31.63	9.49	30.26	100	150	A	H
		5148.98	56.58	-17.42	74	45.8	31.8	9.25	30.27	396	60	P	V
		5150	47.93	-6.07	54	37.14	31.8	9.26	30.27	396	60	A	V
	*	5210	106.16	-	-	95.58	31.53	9.32	30.27	396	60	P	V
	*	5210	98.52	-	-	87.94	31.53	9.32	30.27	396	60	A	V
		5411.28	50.28	-23.72	74	39.46	31.6	9.48	30.26	396	60	P	V
		5458.04	41.95	-12.05	54	30.94	31.7	9.57	30.26	396	60	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10420	44.57	-23.63	68.2	52.34	39.52	13.62	60.91	100	0	P	H
		15630	44.78	-29.22	74	51.6	37.5	17.12	61.44	100	0	P	H
													H
													H
		10420	44.01	-24.19	68.2	51.78	39.52	13.62	60.91	100	0	P	V
		15630	45.37	-28.63	74	52.19	37.5	17.12	61.44	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 52 5260MHz		5113.56	51.53	-22.47	74	40.73	31.87	9.21	30.28	100	150	P	H
		5149.26	41.66	-12.34	54	30.88	31.8	9.25	30.27	100	150	A	H
	*	5260	119.16	-	-	108.67	31.4	9.36	30.27	100	150	P	H
	*	5260	111.54	-	-	101.05	31.4	9.36	30.27	100	150	A	H
		5357.04	52.71	-21.29	74	42.15	31.4	9.43	30.27	100	150	P	H
		5355.84	44.31	-9.69	54	33.75	31.4	9.43	30.27	100	150	A	H
		5032.64	50.37	-23.63	74	39.72	31.8	9.13	30.28	365	59	P	V
		5120.7	41.34	-12.66	54	30.53	31.87	9.22	30.28	365	59	A	V
	*	5260	114.74	-	-	104.25	31.4	9.36	30.27	365	59	P	V
	*	5260	107.45	-	-	96.96	31.4	9.36	30.27	365	59	A	V
802.11a CH 60 5300MHz		5354.64	50.72	-23.28	74	40.16	31.4	9.43	30.27	365	59	P	V
		5361.12	41.72	-12.28	54	31.09	31.47	9.43	30.27	365	59	A	V
		5043.86	50.64	-23.36	74	39.88	31.9	9.14	30.28	100	150	P	H
		5140.08	41.42	-12.58	54	30.65	31.8	9.24	30.27	100	150	A	H
	*	5300	118.95	-	-	108.43	31.4	9.39	30.27	100	150	P	H
	*	5300	111.59	-	-	101.07	31.4	9.39	30.27	100	150	A	H
		5364.72	54.89	-19.11	74	44.26	31.47	9.43	30.27	100	150	P	H
		5350.32	47.25	-6.75	54	36.7	31.4	9.42	30.27	100	150	A	H
		5118.32	50.8	-23.2	74	39.99	31.87	9.22	30.28	382	56	P	V
		5096.22	41.17	-12.83	54	30.35	31.9	9.2	30.28	382	56	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 64 5320MHz	*	5320	117.4	-	-	106.87	31.4	9.4	30.27	100	149	P	H
	*	5320	110.09	-	-	99.56	31.4	9.4	30.27	100	149	A	H
		5364.96	56.77	-17.23	74	46.14	31.47	9.43	30.27	100	149	P	H
		5350.08	47.83	-6.17	54	37.28	31.4	9.42	30.27	100	149	A	H
													H
													H
	*	5320	113.86	-	-	103.33	31.4	9.4	30.27	359	59	P	V
	*	5320	106.02	-	-	95.49	31.4	9.4	30.27	359	59	A	V
		5352.96	52.8	-21.2	74	42.25	31.4	9.42	30.27	359	59	P	V
		5351.04	44.14	-9.86	54	33.59	31.4	9.42	30.27	359	59	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 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 52 5260MHz		10520	44.46	-23.74	68.2	52.26	39.63	13.69	61.12	100	0	P	H
		15780	45.4	-28.6	74	52.09	37.3	17.27	61.26	100	0	P	H
													H
													H
		10520	45.55	-22.65	68.2	53.35	39.63	13.69	61.12	100	0	P	V
		15780	44.98	-29.02	74	51.67	37.3	17.27	61.26	100	0	P	V
													V
													V
802.11a CH 60 5300MHz		10600	44.78	-29.22	74	52.49	39.8	13.71	61.22	100	0	P	H
		15900	45.2	-28.8	74	51.94	37	17.38	61.12	100	0	P	H
													H
													H
		10600	44.56	-29.44	74	52.27	39.8	13.71	61.22	100	0	P	V
		15900	44.89	-29.11	74	51.63	37	17.38	61.12	100	0	P	V
													V
													V
802.11a CH 64 5320MHz		10640	46.02	-27.98	74	53.77	39.8	13.72	61.27	100	0	P	H
		15960	44.12	-29.88	74	50.91	36.93	17.33	61.05	100	0	P	H
													H
													H
		10640	45.66	-28.34	74	53.41	39.8	13.72	61.27	100	0	P	V
		15960	44.36	-29.64	74	51.15	36.93	17.33	61.05	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		5063.24	50.2	-23.8	74	39.42	31.9	9.16	30.28	100	108	P	H
		5146.88	41.55	-12.45	54	30.77	31.8	9.25	30.27	100	108	A	H
	*	5260	118.1	-	-	107.61	31.4	9.36	30.27	100	108	P	H
	*	5260	110.57	-	-	100.08	31.4	9.36	30.27	100	108	A	H
		5351.52	52.33	-21.67	74	41.78	31.4	9.42	30.27	100	108	P	H
		5351.04	43.59	-10.41	54	33.04	31.4	9.42	30.27	100	108	A	H
		5096.56	50.06	-23.94	74	39.24	31.9	9.2	30.28	345	59	P	V
		5109.14	41.36	-12.64	54	30.56	31.87	9.21	30.28	345	59	A	V
	*	5260	114.66	-	-	104.17	31.4	9.36	30.27	345	59	P	V
	*	5260	106.91	-	-	96.42	31.4	9.36	30.27	345	59	A	V
802.11ac VHT20 CH 60 5300MHz		5365.92	50.66	-23.34	74	40.03	31.47	9.43	30.27	345	59	P	V
		5351.76	41.95	-12.05	54	31.4	31.4	9.42	30.27	345	59	A	V
		5055.08	50.86	-23.14	74	40.09	31.9	9.15	30.28	100	148	P	H
		5146.88	41.28	-12.72	54	30.5	31.8	9.25	30.27	100	148	A	H
	*	5300	119.15	-	-	108.63	31.4	9.39	30.27	100	148	P	H
	*	5300	111.47	-	-	100.95	31.4	9.39	30.27	100	148	A	H
		5357.04	55.83	-18.17	74	45.27	31.4	9.43	30.27	100	148	P	H
		5353.92	47.44	-6.56	54	36.88	31.4	9.43	30.27	100	148	A	H
		5081.6	50.82	-23.18	74	40.02	31.9	9.18	30.28	381	56	P	V
		5107.44	41.1	-12.9	54	30.3	31.87	9.21	30.28	381	56	A	V
802.11ac VHT20 CH 60 5300MHz	*	5300	115.28	-	-	104.76	31.4	9.39	30.27	381	56	P	V
	*	5300	107.55	-	-	97.03	31.4	9.39	30.27	381	56	A	V
		5359.44	53.12	-20.88	74	42.56	31.4	9.43	30.27	381	56	P	V
		5353.2	43.23	-10.77	54	32.68	31.4	9.42	30.27	381	56	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5320	117.58	-	-	107.05	31.4	9.4	30.27	100	148	P	H
	*	5320	109.95	-	-	99.42	31.4	9.4	30.27	100	148	A	H
		5370.72	56.71	-17.29	74	46.07	31.47	9.44	30.27	100	148	P	H
		5356.64	47.73	-6.27	54	37.17	31.4	9.43	30.27	100	148	A	H
													H
													H
	*	5320	112.98	-	-	102.45	31.4	9.4	30.27	400	58	P	V
	*	5320	105.11	-	-	94.58	31.4	9.4	30.27	400	58	A	V
		5362.88	53.49	-20.51	74	42.86	31.47	9.43	30.27	400	58	P	V
5320MHz		5350.24	44.4	-9.6	54	33.85	31.4	9.42	30.27	400	58	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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		10520	44.47	-23.73	68.2	52.27	39.63	13.69	61.12	100	0	P	H
		15780	44.53	-29.47	74	51.22	37.3	17.27	61.26	100	0	P	H
													H
													H
		10520	45.35	-22.85	68.2	53.15	39.63	13.69	61.12	100	0	P	V
		15780	44.91	-29.09	74	51.6	37.3	17.27	61.26	100	0	P	V
													V
802.11ac VHT20 CH 60 5300MHz		10600	44.5	-29.5	74	52.21	39.8	13.71	61.22	100	0	P	H
		15900	45.24	-28.76	74	51.98	37	17.38	61.12	100	0	P	H
													H
													H
		10600	45.31	-28.69	74	53.02	39.8	13.71	61.22	100	0	P	V
		15900	44.91	-29.09	74	51.65	37	17.38	61.12	100	0	P	V
													V
802.11ac VHT20 CH 64 5320MHz		10640	45.47	-28.53	74	53.22	39.8	13.72	61.27	100	0	P	H
		15960	44.98	-29.02	74	51.77	36.93	17.33	61.05	100	0	P	H
													H
													H
		10640	45.01	-28.99	74	52.76	39.8	13.72	61.27	100	0	P	V
		15960	44.18	-29.82	74	50.97	36.93	17.33	61.05	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		5122.06	50.37	-23.63	74	39.56	31.87	9.22	30.28	100	149	P	H
		5149.94	41.88	-12.12	54	31.1	31.8	9.25	30.27	100	149	A	H
	*	5270	115.72	-	-	105.23	31.4	9.36	30.27	100	149	P	H
	*	5270	107.94	-	-	97.45	31.4	9.36	30.27	100	149	A	H
		5358.96	56.05	-17.95	74	45.49	31.4	9.43	30.27	100	149	P	H
		5350.32	47.26	-6.74	54	36.71	31.4	9.42	30.27	100	149	A	H
		5078.88	50.43	-23.57	74	39.63	31.9	9.18	30.28	386	57	P	V
		5118.32	41.29	-12.71	54	30.48	31.87	9.22	30.28	386	57	A	V
	*	5270	112.64	-	-	102.15	31.4	9.36	30.27	386	57	P	V
	*	5270	104.6	-	-	94.11	31.4	9.36	30.27	386	57	A	V
802.11ac VHT40 CH 62 5310MHz		5351.52	52.31	-21.69	74	41.76	31.4	9.42	30.27	386	57	P	V
		5354.4	43.69	-10.31	54	33.13	31.4	9.43	30.27	386	57	A	V
		5099.62	49.76	-24.24	74	38.94	31.9	9.2	30.28	100	151	P	H
		5073.78	41.14	-12.86	54	30.35	31.9	9.17	30.28	100	151	A	H
	*	5310	111.83	-	-	101.31	31.4	9.39	30.27	100	151	P	H
	*	5310	104.03	-	-	93.51	31.4	9.39	30.27	100	151	A	H
		5350.08	61.2	-12.8	74	50.65	31.4	9.42	30.27	100	151	P	H
		5350.08	52.58	-1.42	54	42.03	31.4	9.42	30.27	100	151	A	H
		5092.14	49.75	-24.25	74	38.94	31.9	9.19	30.28	363	56	P	V
		5089.42	40.99	-13.01	54	30.18	31.9	9.19	30.28	363	56	A	V
Remark	*	5310	108.14	-	-	97.62	31.4	9.39	30.27	363	56	P	V
	*	5310	100.13	-	-	89.61	31.4	9.39	30.27	363	56	A	V
		5354.16	56.62	-17.38	74	46.06	31.4	9.43	30.27	363	56	P	V
		5350.08	47	-7	54	36.45	31.4	9.42	30.27	363	56	A	V



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		10540	44.25	-23.95	68.2	52.03	39.67	13.7	61.15	100	0	P	H
		15810	45.37	-28.63	74	52	37.3	17.3	61.23	100	0	P	H
													H
													H
		10540	43.49	-24.71	68.2	51.27	39.67	13.7	61.15	100	0	P	V
		15810	45.56	-28.44	74	52.19	37.3	17.3	61.23	100	0	P	V
													V
													V
802.11ac VHT40 CH 62 5310MHz		10620	45.5	-28.5	74	53.22	39.8	13.72	61.24	100	0	P	H
		15930	44.87	-29.13	74	51.62	36.97	17.36	61.08	100	0	P	H
													H
													H
		10620	44.47	-29.53	74	52.19	39.8	13.72	61.24	100	0	P	V
		15930	44.58	-29.42	74	51.33	36.97	17.36	61.08	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5048.28	49.86	-24.14	74	39.1	31.9	9.14	30.28	100	151	P	H
		5101.66	42.05	-11.95	54	31.23	31.9	9.2	30.28	100	151	A	H
	*	5290	105.33	-	-	94.82	31.4	9.38	30.27	100	151	P	H
	*	5290	97.87	-	-	87.36	31.4	9.38	30.27	100	151	A	H
		5357.28	59.94	-14.06	74	49.38	31.4	9.43	30.27	100	151	P	H
		5356.08	52.58	-1.42	54	42.02	31.4	9.43	30.27	100	151	A	H
		5097.58	50.02	-23.98	74	39.2	31.9	9.2	30.28	382	60	P	V
		5114.24	41.89	-12.11	54	31.08	31.87	9.22	30.28	382	60	A	V
	*	5290	100.46	-	-	89.95	31.4	9.38	30.27	382	60	P	V
	*	5290	93.02	-	-	82.51	31.4	9.38	30.27	382	60	A	V
		5361.84	54.91	-19.09	74	44.28	31.47	9.43	30.27	382	60	P	V
		5361.84	46.54	-7.46	54	35.91	31.47	9.43	30.27	382	60	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	44.84	-23.36	68.2	52.56	39.77	13.71	61.2	100	0	P	H
		15870	44.71	-29.29	74	51.46	37.06	17.35	61.16	100	0	P	H
													H
													H
		10580	44.24	-23.96	68.2	51.96	39.77	13.71	61.2	100	0	P	V
		15870	44.87	-29.13	74	51.62	37.06	17.35	61.16	100	0	P	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 100 5500MHz		5454	55.96	-18.04	74	44.95	31.7	9.57	30.26	100	150	P	H
		5469.68	57.2	-11	68.2	46.16	31.7	9.6	30.26	100	150	P	H
		5458.64	46.12	-7.88	54	35.11	31.7	9.57	30.26	100	150	A	H
	*	5500	116.14	-	-	105.04	31.7	9.66	30.26	100	150	P	H
	*	5500	108.66	-	-	97.56	31.7	9.66	30.26	100	150	A	H
													H
		5422.64	52.59	-21.41	74	41.72	31.63	9.5	30.26	394	56	P	V
		5468.24	52.57	-15.63	68.2	41.54	31.7	9.59	30.26	394	56	P	V
		5456.88	43.61	-10.39	54	32.6	31.7	9.57	30.26	394	56	A	V
	*	5500	113.46	-	-	102.36	31.7	9.66	30.26	394	56	P	V
	*	5500	106.08	-	-	94.98	31.7	9.66	30.26	394	56	A	V
802.11a CH 116 5580MHz		5402.8	51.07	-22.93	74	40.26	31.6	9.47	30.26	100	178	P	H
		5463.28	51.15	-17.05	68.2	40.13	31.7	9.58	30.26	100	178	P	H
		5452.72	42.42	-11.58	54	31.42	31.7	9.56	30.26	100	178	A	H
	*	5580	117.88	-	-	106.57	31.8	9.81	30.3	100	178	P	H
	*	5580	110.69	-	-	99.38	31.8	9.81	30.3	100	178	A	H
		5741.06	51.71	-16.49	68.2	40.24	32	9.86	30.39	100	178	P	H
		5458.96	51.05	-22.95	74	40.04	31.7	9.57	30.26	400	54	P	V
		5461.6	50.93	-17.27	68.2	39.91	31.7	9.58	30.26	400	54	P	V
		5452.72	41.79	-12.21	54	30.79	31.7	9.56	30.26	400	54	A	V
	*	5580	115.06	-	-	103.75	31.8	9.81	30.3	400	54	P	V
	*	5580	107.72	-	-	96.41	31.8	9.81	30.3	400	54	A	V
		5735.075	50.8	-17.4	68.2	39.32	32	9.86	30.38	400	54	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 140 5700MHz	*	5700	115.65	-	-	104.35	31.8	9.86	30.36	100	145	P	H
	*	5700	108.28	-	-	96.98	31.8	9.86	30.36	100	145	A	H
		5725.8	59.64	-8.56	68.2	48.23	31.93	9.86	30.38	100	145	P	H
													H
													H
													H
	*	5700	112.43	-	-	101.13	31.8	9.86	30.36	385	51	P	V
	*	5700	105.09	-	-	93.79	31.8	9.86	30.36	385	51	A	V
		5727.88	56.43	-11.77	68.2	45.02	31.93	9.86	30.38	385	51	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 802.11a (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 100 5500MHz		11000	46.25	-27.75	74	53.69	40.4	13.86	61.7	100	0	P	H
		16500	46.63	-21.57	68.2	50.18	38.6	17.55	59.7	100	0	P	H
													H
													H
		11000	46.33	-27.67	74	53.77	40.4	13.86	61.7	100	0	P	V
		16500	46.26	-21.94	68.2	49.81	38.6	17.55	59.7	100	0	P	V
													V
													V
802.11a CH 116 5580MHz		11160	49.77	-24.23	74	56.43	39.93	14.14	60.73	100	0	P	H
		16740	49.58	-18.62	68.2	51.88	39.78	17.92	60	100	0	P	H
													H
													H
		11160	49.33	-24.67	74	55.99	39.93	14.14	60.73	100	0	P	V
		16740	49.08	-19.12	68.2	51.38	39.78	17.92	60	100	0	P	V
													V
													V
802.11a CH 140 5700MHz		11340	44.95	-29.05	74	52.59	39.87	14.53	62.04	100	0	P	H
		17010	48.03	-20.17	68.2	49.02	40.5	18.09	59.58	100	0	P	H
													H
													H
		11340	45.41	-28.59	74	53.05	39.87	14.53	62.04	100	0	P	V
		17010	48.09	-20.11	68.2	49.08	40.5	18.09	59.58	100	0	P	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		5455.44	54.43	-19.57	74	43.42	31.7	9.57	30.26	100	146	P	H
		5466.96	57.24	-10.96	68.2	46.21	31.7	9.59	30.26	100	146	P	H
		5442.32	46.78	-7.22	54	35.83	31.67	9.54	30.26	100	146	A	H
	*	5500	116.7	-	-	105.6	31.7	9.66	30.26	100	146	P	H
	*	5500	109.3	-	-	98.2	31.7	9.66	30.26	100	146	A	H
													H
		5457.36	51.75	-22.25	74	40.74	31.7	9.57	30.26	393	56	P	V
		5468.72	53.85	-14.35	68.2	42.82	31.7	9.59	30.26	393	56	P	V
		5460	43.5	-10.5	54	32.48	31.7	9.58	30.26	393	56	A	V
	*	5500	113.1	-	-	102	31.7	9.66	30.26	393	56	P	V
	*	5500	104.96	-	-	93.86	31.7	9.66	30.26	393	56	A	V
													V
802.11ac VHT20 CH 116 5580MHz		5458.24	51.27	-22.73	74	40.26	31.7	9.57	30.26	100	144	P	H
		5463.76	51.3	-16.9	68.2	40.28	31.7	9.58	30.26	100	144	P	H
		5452.96	42.84	-11.16	54	31.84	31.7	9.56	30.26	100	144	A	H
	*	5580	118.57	-	-	107.26	31.8	9.81	30.3	100	144	P	H
	*	5580	110.95	-	-	99.64	31.8	9.81	30.3	100	144	A	H
		5728.145	52.32	-15.88	68.2	40.91	31.93	9.86	30.38	100	144	P	H
		5389.84	50.58	-23.42	74	39.86	31.53	9.45	30.26	334	77	P	V
		5463.76	50.31	-17.89	68.2	39.29	31.7	9.58	30.26	334	77	P	V
		5457.76	41.73	-12.27	54	30.72	31.7	9.57	30.26	334	77	A	V
	*	5580	114.48	-	-	103.17	31.8	9.81	30.3	334	77	P	V
	*	5580	106.63	-	-	95.32	31.8	9.81	30.3	334	77	A	V
		5743.265	50.44	-17.76	68.2	38.97	32	9.86	30.39	334	77	P	V



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Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5700	115.29	-	-	103.99	31.8	9.86	30.36	100	146	P	H
	*	5700	107.49	-	-	96.19	31.8	9.86	30.36	100	146	A	H
		5725.24	64.4	-3.8	68.2	52.99	31.93	9.86	30.38	100	146	P	H
													H
													H
													H
													H
	*	5700	112.02	-	-	100.72	31.8	9.86	30.36	386	50	P	V
	*	5700	103.94	-	-	92.64	31.8	9.86	30.36	386	50	A	V
		5725	61.55	-6.65	68.2	50.14	31.93	9.86	30.38	386	50	P	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		11000	46.78	-27.22	74	54.22	40.4	13.86	61.7	100	0	P	H
		16500	46.9	-21.3	68.2	50.45	38.6	17.55	59.7	100	0	P	H
													H
													H
		11000	46.25	-27.75	74	53.69	40.4	13.86	61.7	100	0	P	V
		16500	46.23	-21.97	68.2	49.78	38.6	17.55	59.7	100	0	P	V
													V
802.11ac VHT20 CH 116 5580MHz		11160	50.72	-23.28	74	57.38	39.93	14.14	60.73	400	107	P	H
		11160	39.4	-14.6	54	46.06	39.93	14.14	60.73	400	107	A	H
		16740	50.97	-17.23	68.2	53.27	39.78	17.92	60	100	0	P	H
													H
		11160	49.87	-24.13	74	56.53	39.93	14.14	60.73	100	0	P	V
		16740	50.74	-17.46	68.2	53.04	39.78	17.92	60	100	0	P	V
													V
802.11ac VHT20 CH 140 5700MHz		11400	44.91	-29.09	74	52.48	40	14.53	62.1	100	0	P	H
		17100	48.45	-19.75	68.2	49.09	40.5	18.24	59.38	100	0	P	H
													H
													H
		11400	45.12	-28.88	74	52.69	40	14.53	62.1	100	0	P	V
		17100	48.79	-19.41	68.2	49.43	40.5	18.24	59.38	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		5452.48	58.49	-15.51	74	47.49	31.7	9.56	30.26	100	145	P	H
		5470	65.81	-2.39	68.2	54.77	31.7	9.6	30.26	100	145	P	H
		5452.72	49.07	-4.93	54	38.07	31.7	9.56	30.26	100	145	A	H
	*	5510	113.95	-	-	102.85	31.7	9.67	30.27	100	145	P	H
	*	5510	105.99	-	-	94.89	31.7	9.67	30.27	100	145	A	H
		5741.69	52.47	-15.73	68.2	41	32	9.86	30.39	100	145	P	H
		5459.92	57.47	-16.53	74	46.45	31.7	9.58	30.26	384	73	P	V
		5468.56	61.74	-6.46	68.2	50.71	31.7	9.59	30.26	384	73	P	V
		5459.92	48.21	-5.79	54	37.19	31.7	9.58	30.26	384	73	A	V
	*	5510	109.1	-	-	98	31.7	9.67	30.27	384	73	P	V
	*	5510	101.44	-	-	90.34	31.7	9.67	30.27	384	73	A	V
		5737.595	52.26	-15.94	68.2	40.78	32	9.86	30.38	384	73	P	V
802.11ac VHT40 CH 110 5550MHz		5457.76	53.4	-20.6	74	42.39	31.7	9.57	30.26	100	144	P	H
		5468.8	55.56	-12.64	68.2	44.53	31.7	9.59	30.26	100	144	P	H
		5457.04	45.13	-8.87	54	34.12	31.7	9.57	30.26	100	144	A	H
	*	5550	115.58	-	-	104.32	31.8	9.75	30.29	100	144	P	H
	*	5550	107.59	-	-	96.33	31.8	9.75	30.29	100	144	A	H
		5729.72	52.69	-15.51	68.2	41.28	31.93	9.86	30.38	100	144	P	H
		5432.56	52.81	-21.19	74	41.88	31.67	9.52	30.26	387	50	P	V
		5462.08	51.79	-16.41	68.2	40.77	31.7	9.58	30.26	387	50	P	V
		5458.48	43.06	-10.94	54	32.05	31.7	9.57	30.26	387	50	A	V
	*	5550	112.27	-	-	101.01	31.8	9.75	30.29	387	50	P	V
	*	5550	104.41	-	-	93.15	31.8	9.75	30.29	387	50	A	V
		5763.425	51.48	-16.72	68.2	39.94	32.07	9.87	30.4	387	50	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		5357.7	50.89	-23.11	74	40.33	31.4	9.43	30.27	100	145	P	H
		5465.15	49.47	-18.73	68.2	38.44	31.7	9.59	30.26	100	145	P	H
		5452.9	41.72	-12.28	54	30.72	31.7	9.56	30.26	100	145	A	H
	*	5670	114.21	-	-	102.95	31.75	9.86	30.35	100	145	P	H
	*	5670	105.97	-	-	94.71	31.75	9.86	30.35	100	145	A	H
	VHT40	5735.95	60	-8.2	68.2	48.52	32	9.86	30.38	100	145	P	H
	CH 134	5369.95	49.71	-24.29	74	39.07	31.47	9.44	30.27	359	76	P	V
	5670MHz	5465.15	49.98	-18.22	68.2	38.95	31.7	9.59	30.26	359	76	P	V
		5425.95	40.98	-13.02	54	30.1	31.63	9.51	30.26	359	76	A	V
	*	5670	110.66	-	-	99.4	31.75	9.86	30.35	359	76	P	V
	*	5670	102.64	-	-	91.38	31.75	9.86	30.35	359	76	A	V
		5727.9	57.47	-10.73	68.2	46.06	31.93	9.86	30.38	359	76	P	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		11020	46.3	-27.7	74	53.8	40.33	13.89	61.72	100	0	P	H
		16530	47.6	-20.6	68.2	50.99	38.7	17.6	59.69	100	0	P	H
													H
													H
		11020	46.31	-27.69	74	53.81	40.33	13.89	61.72	100	0	P	V
		16530	46.15	-22.05	68.2	49.54	38.7	17.6	59.69	100	0	P	V
													V
802.11ac VHT40 CH 110 5550MHz		11100	44.94	-29.06	74	52.76	40	13.98	61.8	100	0	P	H
		16650	47.58	-20.62	68.2	50.23	39.2	17.82	59.67	100	0	P	H
													H
													H
		11100	45.05	-28.95	74	52.87	40	13.98	61.8	100	0	P	V
		16650	46.71	-21.49	68.2	49.36	39.2	17.82	59.67	100	0	P	V
													V
802.11ac VHT40 CH 134 5670MHz		11340	44.9	-29.1	74	52.54	39.87	14.53	62.04	100	0	P	H
		17010	48.69	-19.51	68.2	49.68	40.5	18.09	59.58	100	0	P	H
													H
													H
		11340	44.34	-29.66	74	51.98	39.87	14.53	62.04	100	0	P	V
		17010	48.53	-19.67	68.2	49.52	40.5	18.09	59.58	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5450.8	60.7	-13.3	74	49.7	31.7	9.56	30.26	100	144	P	H
		5467.84	63.43	-4.77	68.2	52.4	31.7	9.59	30.26	100	144	P	H
		5449.12	52.28	-1.72	54	41.28	31.7	9.56	30.26	100	144	A	H
	*	5530	109.47	-	-	98.31	31.73	9.71	30.28	100	144	P	H
	*	5530	101.71	-	-	90.55	31.73	9.71	30.28	100	144	A	H
		5748.62	51.54	-16.66	68.2	40.07	32	9.86	30.39	100	144	P	H
		5452	58.34	-15.66	74	47.34	31.7	9.56	30.26	400	72	P	V
		5469.52	57.56	-10.64	68.2	46.52	31.7	9.6	30.26	400	72	P	V
		5459.44	50.62	-3.38	54	39.6	31.7	9.58	30.26	400	72	A	V
	*	5530	105.85	-	-	94.69	31.73	9.71	30.28	400	72	P	V
	*	5530	98.16	-	-	87	31.73	9.71	30.28	400	72	A	V
		5752.715	49.99	-18.21	68.2	38.44	32.07	9.87	30.39	400	72	P	V
802.11ac VHT80 CH 122 5610MHz		5412.4	51.91	-22.09	74	41.06	31.63	9.48	30.26	100	176	P	H
		5464.96	52.17	-16.03	68.2	41.14	31.7	9.59	30.26	100	176	P	H
		5453.2	43.96	-10.04	54	32.96	31.7	9.56	30.26	100	176	A	H
	*	5610	110.88	-	-	99.55	31.8	9.85	30.32	100	176	P	H
	*	5610	103.84	-	-	92.51	31.8	9.85	30.32	100	176	A	H
		5733.5	53.66	-14.54	68.2	42.25	31.93	9.86	30.38	100	176	P	H
		5458.24	51.1	-22.9	74	40.09	31.7	9.57	30.26	398	52	P	V
		5460.64	51.24	-16.96	68.2	40.22	31.7	9.58	30.26	398	52	P	V
		5452.72	42.81	-11.19	54	31.81	31.7	9.56	30.26	398	52	A	V
	*	5610	108.42	-	-	97.09	31.8	9.85	30.32	398	52	P	V
	*	5610	101.02	-	-	89.69	31.8	9.85	30.32	398	52	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	46.36	-27.64	74	54.05	40.13	13.94	61.76	100	0	P	H
		16590	46.76	-21.44	68.2	49.88	38.85	17.71	59.68	100	0	P	H
													H
													H
		11060	45.76	-28.24	74	53.45	40.13	13.94	61.76	100	0	P	V
		16590	46.66	-21.54	68.2	49.78	38.85	17.71	59.68	100	0	P	V
													V
													V
802.11ac VHT80 CH 122 5610MHz		11220	45.9	-28.1	74	53.62	39.88	14.32	61.92	100	0	P	H
		16830	48.63	-19.57	68.2	50.1	40.2	17.96	59.63	100	0	P	H
													H
													H
		11220	44.83	-29.17	74	52.55	39.88	14.32	61.92	100	0	P	V
		16830	47.86	-20.34	68.2	49.33	40.2	17.96	59.63	100	0	P	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 802.11a (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 144 5720MHz		5399.92	52.49	-21.51	74	41.69	31.6	9.46	30.26	100	141	P	H
		5467.78	49.44	-18.76	68.2	38.41	31.7	9.59	30.26	100	141	P	H
		5452.96	41.69	-12.31	54	30.69	31.7	9.56	30.26	100	141	A	H
	*	5720	117.29	-	-	105.87	31.93	9.86	30.37	100	141	P	H
	*	5720	109.91	-	-	98.49	31.93	9.86	30.37	100	141	A	H
		5863.5	52.99	-15.21	68.2	41.26	32.23	9.95	30.45	100	141	P	H
		5414.35	50.44	-23.56	74	39.58	31.63	9.49	30.26	383	49	P	V
		5461.15	50.45	-17.75	68.2	39.43	31.7	9.58	30.26	383	49	P	V
		5400.31	41.25	-12.75	54	30.45	31.6	9.46	30.26	383	49	A	V
	*	5720	115.27	-	-	103.85	31.93	9.86	30.37	383	49	P	V
	*	5720	107.39	-	-	95.97	31.93	9.86	30.37	383	49	A	V
		5852.75	53.16	-15.04	68.2	41.46	32.2	9.94	30.44	383	49	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



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

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 144 5720MHz		11440	44.58	-29.42	74	52.14	40.07	14.51	62.14	100	0	P	H
		17160	49.22	-18.98	68.2	49.54	40.57	18.36	59.25	100	0	P	H
													H
													H
		11440	44.7	-29.3	74	52.26	40.07	14.51	62.14	100	0	P	V
		17160	48.78	-19.42	68.2	49.1	40.57	18.36	59.25	100	0	P	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 VHT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		5370.67	51	-23	74	40.36	31.47	9.44	30.27	100	100	P	H
		5460.76	50.3	-17.9	68.2	39.28	31.7	9.58	30.26	100	100	P	H
		5448.28	41.48	-12.52	54	30.49	31.7	9.55	30.26	100	100	A	H
	*	5720	116.29	-	-	104.87	31.93	9.86	30.37	100	100	P	H
	*	5720	108.51	-	-	97.09	31.93	9.86	30.37	100	100	A	H
		5895.75	52.64	-15.56	68.2	40.82	32.3	9.99	30.47	100	100	P	H
		5455.69	50.4	-23.6	74	39.39	31.7	9.57	30.26	321	77	P	V
		5469.73	50.88	-17.32	68.2	39.84	31.7	9.6	30.26	321	77	P	V
		5440.87	41.23	-12.77	54	30.28	31.67	9.54	30.26	321	77	A	V
	*	5720	113.98	-	-	102.56	31.93	9.86	30.37	321	77	P	V
	*	5720	106.33	-	-	94.91	31.93	9.86	30.37	321	77	A	V
		5924.5	52.06	-16.14	68.2	40.14	32.37	10.03	30.48	321	77	P	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		11440	44.66	-29.34	74	52.22	40.07	14.51	62.14	100	0	P	H
		17160	49.6	-18.6	68.2	49.92	40.57	18.36	59.25	100	0	P	H
													H
													H
		11440	45.04	-28.96	74	52.6	40.07	14.51	62.14	100	0	P	V
		17160	49.38	-18.82	68.2	49.7	40.57	18.36	59.25	100	0	P	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 VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak (P/A)	Avg. (H/V)
802.11ac VHT40 CH 142 5710MHz		5443.6	50.79	-23.21	74	39.83	31.67	9.55	30.26	100	141	P	H
		5466.22	50.99	-17.21	68.2	39.96	31.7	9.59	30.26	100	141	P	H
		5452.57	41.87	-12.13	54	30.87	31.7	9.56	30.26	100	141	A	H
	*	5710	114.74	-	-	103.38	31.87	9.86	30.37	100	141	P	H
	*	5710	106.73	-	-	95.37	31.87	9.86	30.37	100	141	A	H
		5885	53.62	-14.58	68.2	41.83	32.27	9.98	30.46	100	141	P	H
		5432.68	52.23	-21.77	74	41.3	31.67	9.52	30.26	387	46	P	V
		5469.34	50.17	-18.03	68.2	39.13	31.7	9.6	30.26	387	46	P	V
		5452.96	41.32	-12.68	54	30.32	31.7	9.56	30.26	387	46	A	V
	*	5710	111.89	-	-	100.53	31.87	9.86	30.37	387	46	P	V
	*	5710	103.6	-	-	92.24	31.87	9.86	30.37	387	46	P	V
		5946	52.49	-15.71	68.2	40.53	32.4	10.05	30.49	387	46	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - Straddle Channel

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		11420	45.49	-28.51	74	53.06	40.03	14.52	62.12	100	0	P	H
		17130	48.53	-19.67	68.2	49.01	40.53	18.3	59.31	100	0	P	H
													H
													H
		11420	45.63	-28.37	74	53.2	40.03	14.52	62.12	100	0	P	V
		17130	48.95	-19.25	68.2	49.43	40.53	18.3	59.31	100	0	P	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 (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5385.1	50.18	-23.82	74	39.46	31.53	9.45	30.26	100	141	P	H
		5463.49	49.21	-18.99	68.2	38.19	31.7	9.58	30.26	100	141	P	H
		5452.96	42.28	-11.72	54	31.28	31.7	9.56	30.26	100	141	A	H
	*	5690	110.64	-	-	99.34	31.8	9.86	30.36	100	141	P	H
	*	5690	103.32	-	-	92.02	31.8	9.86	30.36	100	141	A	H
		5935	52.69	-15.51	68.2	40.77	32.37	10.04	30.49	100	141	P	H
		5454.91	50.43	-23.57	74	39.42	31.7	9.57	30.26	387	50	P	V
		5468.56	49.18	-19.02	68.2	38.15	31.7	9.59	30.26	387	50	P	V
		5425.27	41.83	-12.17	54	30.95	31.63	9.51	30.26	387	50	A	V
	*	5690	107.62	-	-	96.32	31.8	9.86	30.36	387	50	P	V
	*	5690	100.26	-	-	88.96	31.8	9.86	30.36	387	50	A	V
		5865.4	51.16	-17.04	68.2	39.43	32.23	9.95	30.45	387	50	P	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		11380	44.82	-29.18	74	52.4	39.97	14.53	62.08	400	0	P	H
		17070	49.63	-18.57	68.2	50.39	40.5	18.19	59.45	400	0	P	H
													H
													H
		11380	45.19	-28.81	74	52.77	39.97	14.53	62.08	100	0	P	V
		17070	48.26	-19.94	68.2	49.02	40.5	18.19	59.45	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WIFI 802.11ac VHT80 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT80 LF		30.97	23.32	-16.68	40	30.42	24.81	0.71	32.62	-	-	P	H
		108.57	26.58	-16.92	43.5	40.9	16.81	1.38	32.51	-	-	P	H
		286.08	25.22	-20.78	46	36.45	19.02	2.28	32.53	-	-	P	H
		559.62	27.57	-18.43	46	30.74	26.27	3.15	32.59	-	-	P	H
		719.67	38.48	-7.52	46	40.2	27.18	3.46	32.36	100	0	P	H
		838.01	37.19	-8.81	46	36.51	28.88	3.79	31.99	-	-	P	H
													H
													H
													H
													H
													H
													H
													V
		30.97	26.86	-13.14	40	33.96	24.81	0.71	32.62	-	-	P	V
		107.6	22.48	-21.02	43.5	36.92	16.7	1.37	32.51	-	-	P	V
		222.06	25.23	-20.77	46	40.29	15.46	1.98	32.5	-	-	P	V
		245.34	25.19	-20.81	46	37.66	17.95	2.09	32.51	-	-	P	V
		718.7	36.13	-9.87	46	37.91	27.12	3.46	32.36	-	-	P	V
		838.01	38.05	-7.95	46	37.37	28.88	3.79	31.99	100	0	P	V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



<TXBF Mode>

Band 1 - 5150~5250MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT20 CH 36 5180MHz		5149.24	56.07	-17.93	74	45.29	31.8	9.25	30.27	100	180	P	H
		5150	46.89	-7.11	54	36.1	31.8	9.26	30.27	100	180	A	H
	*	5180	117.77	-	-	107.08	31.67	9.29	30.27	100	180	P	H
	*	5180	107.79	-	-	97.1	31.67	9.29	30.27	100	180	A	H
													H
													H
		5140.66	54.13	-19.87	74	43.36	31.8	9.24	30.27	324	61	P	V
		5150	44.83	-9.17	54	34.04	31.8	9.26	30.27	324	61	A	V
	*	5180	114.67	-	-	103.98	31.67	9.29	30.27	324	61	P	V
	*	5180	104.71	-	-	94.02	31.67	9.29	30.27	324	61	A	V
802.11ac VHT20 CH 44 5220MHz													V
		5134.16	52.06	-21.94	74	41.26	31.83	9.24	30.27	100	179	P	H
		5150	42.21	-11.79	54	31.42	31.8	9.26	30.27	100	179	A	H
	*	5220	117.17	-	-	106.58	31.53	9.33	30.27	100	179	P	H
	*	5220	107.81	-	-	97.22	31.53	9.33	30.27	100	179	A	H
		5426.68	52.59	-21.41	74	41.71	31.63	9.51	30.26	100	179	P	H
		5376	42.14	-11.86	54	31.49	31.47	9.44	30.26	100	179	A	H
		5088.4	51.48	-22.52	74	40.67	31.9	9.19	30.28	321	58	P	V
		5149.76	40.99	-13.01	54	30.21	31.8	9.25	30.27	321	58	A	V
	*	5220	114.75	-	-	104.16	31.53	9.33	30.27	321	58	P	V
	*	5220	105.08	-	-	94.49	31.53	9.33	30.27	321	58	A	V
		5421.08	49.87	-24.13	74	39	31.63	9.5	30.26	321	58	P	V
		5354.44	40.55	-13.45	54	29.99	31.4	9.43	30.27	321	58	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		5085.54	50.65	-23.35	74	39.85	31.9	9.18	30.28	100	180	P	H
		5150	40.95	-13.05	54	30.16	31.8	9.26	30.27	100	180	A	H
	*	5240	116.94	-	-	106.4	31.47	9.34	30.27	100	180	P	H
	*	5240	107.81	-	-	97.27	31.47	9.34	30.27	100	180	A	H
		5385.24	51.78	-22.22	74	41.06	31.53	9.45	30.26	100	180	P	H
		5376	42.23	-11.77	54	31.58	31.47	9.44	30.26	100	180	A	H
	VHT20	5070.72	50.42	-23.58	74	39.63	31.9	9.17	30.28	353	59	P	V
	CH 48	5148.72	40.13	-13.87	54	29.35	31.8	9.25	30.27	353	59	A	V
	*	5240	114.84	-	-	104.3	31.47	9.34	30.27	353	59	P	V
	*	5240	104.95	-	-	94.41	31.47	9.34	30.27	353	59	A	V
5240MHz		5434.8	50.42	-23.58	74	39.48	31.67	9.53	30.26	353	59	P	V
		5357.8	40.53	-13.47	54	29.97	31.4	9.43	30.27	353	59	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 36 5180MHz		10360	44.19	-24.01	68.2	52.01	39.37	13.57	60.76	100	0	P	H
		15540	44.29	-29.71	74	50.9	37.93	17.01	61.55	100	0	P	H
													H
													H
		10360	44.26	-23.94	68.2	52.08	39.37	13.57	60.76	100	0	P	V
		15540	44.4	-29.6	74	51.01	37.93	17.01	61.55	100	0	P	V
													V
802.11ac VHT20 CH 44 5220MHz		10440	45.21	-22.99	68.2	52.99	39.53	13.65	60.96	100	0	P	H
		15660	44.36	-29.64	74	51.16	37.45	17.16	61.41	100	0	P	H
													H
													H
		10440	44.27	-23.93	68.2	52.05	39.53	13.65	60.96	100	0	P	V
		15660	44.01	-29.99	74	50.81	37.45	17.16	61.41	100	0	P	V
													V
802.11ac VHT20 CH 48 5240MHz		10480	43.56	-24.64	68.2	51.35	39.58	13.68	61.05	100	0	P	H
		15720	45.13	-28.87	74	51.96	37.3	17.21	61.34	100	0	P	H
													H
													H
		10480	44.54	-23.66	68.2	52.33	39.58	13.68	61.05	100	0	P	V
		15720	45.62	-28.38	74	52.45	37.3	17.21	61.34	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		5150	68.85	-5.15	74	58.06	31.8	9.26	30.27	100	179	P	H
		5150	52.67	-1.33	54	41.88	31.8	9.26	30.27	100	179	A	H
	*	5190	110.41	-	-	99.71	31.67	9.3	30.27	100	179	P	H
	*	5190	101.61	-	-	90.91	31.67	9.3	30.27	100	179	A	H
		5422.48	52.47	-21.53	74	41.6	31.63	9.5	30.26	100	179	P	H
		5376	42.72	-11.28	54	32.07	31.47	9.44	30.26	100	179	A	H
		5140.92	62.42	-11.58	74	51.64	31.8	9.25	30.27	338	59	P	V
		5150	50.28	-3.72	54	39.49	31.8	9.26	30.27	338	59	A	V
	*	5190	108.35	-	-	97.65	31.67	9.3	30.27	338	59	P	V
	*	5190	98.13	-	-	87.43	31.67	9.3	30.27	338	59	A	V
802.11ac VHT40 CH 46 5230MHz		5438.16	51.07	-22.93	74	40.13	31.67	9.53	30.26	338	59	P	V
		5353.6	40.99	-13.01	54	30.43	31.4	9.43	30.27	338	59	A	V
		5148.98	54.49	-19.51	74	43.71	31.8	9.25	30.27	100	185	P	H
		5150	43.86	-10.14	54	33.07	31.8	9.26	30.27	100	185	A	H
	*	5230	116.62	-	-	106.09	31.47	9.33	30.27	100	185	P	H
	*	5230	109.25	-	-	98.72	31.47	9.33	30.27	100	185	A	H
		5437.32	52.03	-21.97	74	41.09	31.67	9.53	30.26	100	185	P	H
		5350	43.85	-10.15	54	33.3	31.4	9.42	30.27	100	185	A	H
		5146.9	52.04	-21.96	74	41.26	31.8	9.25	30.27	368	58	P	V
		5149.76	42.8	-11.2	54	32.02	31.8	9.25	30.27	368	58	A	V
Remark	*	5230	111.24	-	-	100.71	31.47	9.33	30.27	368	58	P	V
	*	5230	101.58	-	-	91.05	31.47	9.33	30.27	368	58	A	V
		5398.96	50.92	-23.08	74	40.12	31.6	9.46	30.26	368	58	P	V
		5350.52	41.86	-12.14	54	31.31	31.4	9.42	30.27	368	58	A	V
		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



Band 1 5150~5250MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 38 5190MHz		10380	44.85	-23.35	68.2	52.64	39.43	13.59	60.81	100	0	P	H
		15570	44.4	-29.6	74	51.1	37.77	17.05	61.52	100	0	P	H
													H
													H
		10380	44.53	-23.67	68.2	52.32	39.43	13.59	60.81	100	0	P	V
		15570	44.19	-29.81	74	50.89	37.77	17.05	61.52	100	0	P	V
													V
													V
802.11ac VHT40 CH 46 5230MHz		10460	44.96	-23.24	68.2	52.75	39.55	13.66	61	100	0	P	H
		15690	45.57	-28.43	74	52.4	37.35	17.19	61.37	100	0	P	H
													H
													H
		10460	44.02	-24.18	68.2	51.81	39.55	13.66	61	100	0	P	V
		15690	44.76	-29.24	74	51.59	37.35	17.19	61.37	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		5147.68	61.27	-12.73	74	50.49	31.8	9.25	30.27	100	178	P	H
		5145.86	51.82	-2.18	54	41.04	31.8	9.25	30.27	100	178	A	H
	*	5210	108.86	-	-	98.28	31.53	9.32	30.27	100	178	P	H
	*	5210	100.76	-	-	90.18	31.53	9.32	30.27	100	178	A	H
		5353.88	52.07	-21.93	74	41.51	31.4	9.43	30.27	100	178	P	H
		5376	42.34	-11.66	54	31.69	31.47	9.44	30.26	100	178	A	H
		5146.9	57.48	-16.52	74	46.7	31.8	9.25	30.27	339	58	P	V
		5148.72	48.18	-5.82	54	37.4	31.8	9.25	30.27	339	58	A	V
	*	5210	105.17	-	-	94.59	31.53	9.32	30.27	339	58	P	V
	*	5210	95.81	-	-	85.23	31.53	9.32	30.27	339	58	A	V
		5400.64	51.3	-22.7	74	40.5	31.6	9.46	30.26	339	58	P	V
		5350	41.07	-12.93	54	30.52	31.4	9.42	30.27	339	58	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 42 5210MHz		10420	43.83	-24.37	68.2	51.6	39.52	13.62	60.91	100	0	P	H
		15630	44.26	-29.74	74	51.08	37.5	17.12	61.44	100	0	P	H
													H
													H
		10420	44.15	-24.05	68.2	51.92	39.52	13.62	60.91	100	0	P	V
		15630	44.68	-29.32	74	51.5	37.5	17.12	61.44	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		5065.28	50.05	-23.95	74	39.27	31.9	9.16	30.28	100	184	P	H
		5145.52	40.27	-13.73	54	29.49	31.8	9.25	30.27	100	184	A	H
	*	5260	117.18	-	-	106.69	31.4	9.36	30.27	100	184	P	H
	*	5260	107.95	-	-	97.46	31.4	9.36	30.27	100	184	A	H
		5361.36	53.03	-20.97	74	42.4	31.47	9.43	30.27	100	184	P	H
		5350.08	42.84	-11.16	54	32.29	31.4	9.42	30.27	100	184	A	H
	CH 52	5092.48	49.81	-24.19	74	39	31.9	9.19	30.28	332	62	P	V
	5260MHz	5106.76	40.01	-13.99	54	29.21	31.87	9.21	30.28	332	62	A	V
	*	5260	114.86	-	-	104.37	31.4	9.36	30.27	332	62	P	V
	*	5260	105.24	-	-	94.75	31.4	9.36	30.27	332	62	A	V
802.11ac		5457.84	51.33	-22.67	74	40.32	31.7	9.57	30.26	332	62	P	V
		5350.08	41.09	-12.91	54	30.54	31.4	9.42	30.27	332	62	A	V
		5111.52	50.28	-23.72	74	39.48	31.87	9.21	30.28	100	185	P	H
		5145.52	40.07	-13.93	54	29.29	31.8	9.25	30.27	100	185	A	H
	*	5300	117.07	-	-	106.55	31.4	9.39	30.27	100	185	P	H
	*	5300	107.58	-	-	97.06	31.4	9.39	30.27	100	185	A	H
		5352.96	58.9	-15.1	74	48.35	31.4	9.42	30.27	100	185	P	H
		5350.56	46.76	-7.24	54	36.21	31.4	9.42	30.27	100	185	A	H
	CH 60	5074.46	50.83	-23.17	74	40.04	31.9	9.17	30.28	330	79	P	V
	5300MHz	5101.66	39.91	-14.09	54	29.09	31.9	9.2	30.28	330	79	A	V
VHT20	*	5300	113.88	-	-	103.36	31.4	9.39	30.27	330	79	P	V
	*	5300	104.74	-	-	94.22	31.4	9.39	30.27	330	79	A	V
		5354.16	53.27	-20.73	74	42.71	31.4	9.43	30.27	330	79	P	V
		5350.08	43.27	-10.73	54	32.72	31.4	9.42	30.27	330	79	A	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	*	5320	117.33	-	-	106.8	31.4	9.4	30.27	100	184	P	H
	*	5320	107.49	-	-	96.96	31.4	9.4	30.27	100	184	A	H
		5366.88	61.06	-12.94	74	50.42	31.47	9.44	30.27	100	184	P	H
		5350.08	51.26	-2.74	54	40.71	31.4	9.42	30.27	100	184	A	H
802.11ac													H
VHT20													H
CH 64	*	5320	115.53	-	-	105	31.4	9.4	30.27	311	59	P	V
5320MHz	*	5320	105.07	-	-	94.54	31.4	9.4	30.27	311	59	A	V
		5351.36	59.53	-14.47	74	48.98	31.4	9.42	30.27	311	59	P	V
		5350.08	48.75	-5.25	54	38.2	31.4	9.42	30.27	311	59	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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 52 5260MHz		10520	44.62	-23.58	68.2	52.42	39.63	13.69	61.12	100	0	P	H
		15780	44.99	-29.01	74	51.68	37.3	17.27	61.26	100	0	P	H
													H
													H
		10520	44.69	-23.51	68.2	52.49	39.63	13.69	61.12	100	0	P	V
		15780	45.16	-28.84	74	51.85	37.3	17.27	61.26	100	0	P	V
													V
802.11ac VHT20 CH 60 5300MHz		10600	44.81	-29.19	74	52.52	39.8	13.71	61.22	100	0	P	H
		15900	44.5	-29.5	74	51.24	37	17.38	61.12	100	0	P	H
													H
													H
		10600	44.66	-29.34	74	52.37	39.8	13.71	61.22	100	0	P	V
		15900	44.22	-29.78	74	50.96	37	17.38	61.12	100	0	P	V
													V
802.11ac VHT20 CH 64 5320MHz		10640	45.03	-28.97	74	52.78	39.8	13.72	61.27	100	0	P	H
		15960	43.48	-30.52	74	50.27	36.93	17.33	61.05	100	0	P	H
													H
													H
		10640	46.44	-27.56	74	54.19	39.8	13.72	61.27	100	0	P	V
		15960	43.46	-30.54	74	50.25	36.93	17.33	61.05	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		5107.1	50.97	-23.03	74	40.17	31.87	9.21	30.28	100	181	P	H
		5149.6	41.22	-12.78	54	30.44	31.8	9.25	30.27	100	181	A	H
	*	5270	115.15	-	-	104.66	31.4	9.36	30.27	100	181	P	H
	*	5270	104.54	-	-	94.05	31.4	9.36	30.27	100	181	A	H
		5355.84	64.49	-9.51	74	53.93	31.4	9.43	30.27	100	181	P	H
		5350.08	47.98	-6.02	54	37.43	31.4	9.42	30.27	100	181	A	H
		5109.14	49.99	-24.01	74	39.19	31.87	9.21	30.28	384	62	P	V
		5149.94	40.62	-13.38	54	29.84	31.8	9.25	30.27	384	62	A	V
	*	5270	110.3	-	-	99.81	31.4	9.36	30.27	384	62	P	V
	*	5270	102	-	-	91.51	31.4	9.36	30.27	384	62	A	V
802.11ac VHT40 CH 62 5310MHz		5353.2	57.01	-16.99	74	46.46	31.4	9.42	30.27	384	62	P	V
		5351.52	43.7	-10.3	54	33.15	31.4	9.42	30.27	384	62	A	V
		5065.96	50.32	-23.68	74	39.54	31.9	9.16	30.28	100	178	P	H
		5145.52	40.43	-13.57	54	29.65	31.8	9.25	30.27	100	178	A	H
	*	5310	109.47	-	-	98.95	31.4	9.39	30.27	100	178	P	H
	*	5310	99.27	-	-	88.75	31.4	9.39	30.27	100	178	A	H
		5352.72	64.25	-9.75	74	53.7	31.4	9.42	30.27	100	178	P	H
		5350.08	52.83	-1.17	54	42.28	31.4	9.42	30.27	100	178	A	H
		5076.84	49.85	-24.15	74	39.06	31.9	9.17	30.28	327	58	P	V
		5092.14	40.24	-13.76	54	29.43	31.9	9.19	30.28	327	58	A	V
Remark	*	5310	106.11	-	-	95.59	31.4	9.39	30.27	327	58	P	V
	*	5310	97.66	-	-	87.14	31.4	9.39	30.27	327	58	A	V
		5350.32	57.83	-16.17	74	47.28	31.4	9.42	30.27	327	58	P	V
		5350.32	48.38	-5.62	54	37.83	31.4	9.42	30.27	327	58	A	V



Band 2 5250~5350MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 54 5270MHz		10540	44.55	-23.65	68.2	52.33	39.67	13.7	61.15	100	0	P	H
		15810	45.2	-28.8	74	51.83	37.3	17.3	61.23	100	0	P	H
													H
													H
		10540	43.96	-24.24	68.2	51.74	39.67	13.7	61.15	100	0	P	V
		15810	45.26	-28.74	74	51.89	37.3	17.3	61.23	100	0	P	V
													V
													V
802.11ac VHT40 CH 62 5310MHz		10620	45.06	-28.94	74	52.78	39.8	13.72	61.24	100	0	P	H
		15930	44.35	-29.65	74	51.1	36.97	17.36	61.08	100	0	P	H
													H
													H
		10620	45.85	-28.15	74	53.57	39.8	13.72	61.24	100	0	P	V
		15930	44.77	-29.23	74	51.52	36.97	17.36	61.08	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 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		5055.08	49.98	-24.02	74	39.21	31.9	9.15	30.28	100	179	P	H
		5102.68	40.3	-13.7	54	29.48	31.9	9.2	30.28	100	179	A	H
	*	5290	104.03	-	-	93.52	31.4	9.38	30.27	100	179	P	H
	*	5290	94.04	-	-	83.53	31.4	9.38	30.27	100	179	A	H
		5369.76	60	-14	74	49.36	31.47	9.44	30.27	100	179	P	H
		5365.2	50.77	-3.23	54	40.14	31.47	9.43	30.27	100	179	A	H
		5095.2	50.42	-23.58	74	39.61	31.9	9.19	30.28	333	56	P	V
		5097.92	40.2	-13.8	54	29.38	31.9	9.2	30.28	333	56	A	V
	*	5290	99.44	-	-	88.93	31.4	9.38	30.27	333	56	P	V
	*	5290	89.08	-	-	78.57	31.4	9.38	30.27	333	56	A	V
		5350.32	55.97	-18.03	74	45.42	31.4	9.42	30.27	333	56	P	V
		5368.56	46.84	-7.16	54	36.2	31.47	9.44	30.27	333	56	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 58 5290MHz		10580	44.78	-23.42	68.2	52.5	39.77	13.71	61.2	100	0	P	H
		15870	44.65	-29.35	74	51.4	37.06	17.35	61.16	100	0	P	H
													H
													H
		10580	44.89	-23.31	68.2	52.61	39.77	13.71	61.2	100	0	P	V
		15870	44.41	-29.59	74	51.16	37.06	17.35	61.16	100	0	P	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 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		5455.44	56.39	-17.61	74	45.38	31.7	9.57	30.26	100	181	P	H
		5468.24	60.28	-7.92	68.2	49.25	31.7	9.59	30.26	100	181	P	H
		5460	46.29	-7.71	54	35.27	31.7	9.58	30.26	100	181	A	H
	*	5500	117.25	-	-	106.15	31.7	9.66	30.26	100	181	P	H
	*	5500	107.73	-	-	96.63	31.7	9.66	30.26	100	181	A	H
													H
5500MHz		5457.2	53.37	-20.63	74	42.36	31.7	9.57	30.26	308	77	P	V
		5468.88	56.14	-12.06	68.2	45.11	31.7	9.59	30.26	308	77	P	V
		5459.92	43.94	-10.06	54	32.92	31.7	9.58	30.26	308	77	A	V
	*	5500	115.2	-	-	104.1	31.7	9.66	30.26	308	77	P	V
	*	5500	105.13	-	-	94.03	31.7	9.66	30.26	308	77	A	V
													V
802.11ac		5413.6	50.65	-23.35	74	39.79	31.63	9.49	30.26	100	207	P	H
		5460.64	49.74	-18.46	68.2	38.72	31.7	9.58	30.26	100	207	P	H
		5452.72	40.7	-13.3	54	29.7	31.7	9.56	30.26	100	207	A	H
	*	5580	117.39	-	-	106.08	31.8	9.81	30.3	100	207	P	H
	*	5580	107.88	-	-	96.57	31.8	9.81	30.3	100	207	A	H
5580MHz		5740.115	50.69	-17.51	68.2	39.21	32	9.86	30.38	100	207	P	H
		5428.72	50.33	-23.67	74	39.4	31.67	9.52	30.26	334	73	P	V
		5470	49.21	-18.99	68.2	38.17	31.7	9.6	30.26	334	73	P	V
		5452.72	40.45	-13.55	54	29.45	31.7	9.56	30.26	334	73	A	V
	*	5580	115.79	-	-	104.48	31.8	9.81	30.3	334	73	P	V
	*	5580	105.35	-	-	94.04	31.8	9.81	30.3	334	73	A	V
		5756.81	50.05	-18.15	68.2	38.5	32.07	9.87	30.39	334	73	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac	*	5700	112.4	-	-	101.1	31.8	9.86	30.36	100	207	P	H
	*	5700	103.56	-	-	92.26	31.8	9.86	30.36	100	207	A	H
		5725.24	65.57	-2.63	68.2	54.16	31.93	9.86	30.38	100	207	P	H
													H
													H
													H
													H
													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 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 100 5500MHz		11000	45.64	-28.36	74	53.08	40.4	13.86	61.7	100	0	P	H
		16500	46.56	-21.64	68.2	50.11	38.6	17.55	59.7	100	0	P	H
													H
													H
		11000	45.82	-28.18	74	53.26	40.4	13.86	61.7	100	0	P	V
		16500	46.74	-21.46	68.2	50.29	38.6	17.55	59.7	100	0	P	V
													V
802.11ac VHT20 CH 116 5580MHz		11160	45.46	-28.54	74	53.25	39.93	14.14	61.86	100	0	P	H
		16740	46.7	-21.5	68.2	48.65	39.78	17.92	59.65	100	0	P	H
													H
													H
		11160	44.96	-29.04	74	52.75	39.93	14.14	61.86	100	0	P	V
		16740	49.94	-18.26	68.2	51.89	39.78	17.92	59.65	100	0	P	V
													V
802.11ac VHT20 CH 140 5700MHz		11400	45.31	-28.69	74	52.88	40	14.53	62.1	100	0	P	H
		17100	47.83	-20.37	68.2	48.47	40.5	18.24	59.38	100	0	P	H
													H
													H
		11400	46.39	-27.61	74	53.96	40	14.53	62.1	100	0	P	V
		17100	48.12	-20.08	68.2	48.76	40.5	18.24	59.38	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 - 5470~5725MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		5459.68	58.92	-15.08	74	47.9	31.7	9.58	30.26	100	205	P	H
		5470	66.99	-1.21	68.2	55.95	31.7	9.6	30.26	100	205	P	H
		5459.92	49.28	-4.72	54	38.26	31.7	9.58	30.26	100	205	A	H
	*	5510	111.88	-	-	100.78	31.7	9.67	30.27	100	205	P	H
	*	5510	102.84	-	-	91.74	31.7	9.67	30.27	100	205	A	H
		5738.225	51.88	-16.32	68.2	40.4	32	9.86	30.38	100	205	P	H
		5459.44	56.54	-17.46	74	45.52	31.7	9.58	30.26	346	76	P	V
		5470	63.55	-4.65	68.2	52.51	31.7	9.6	30.26	346	76	P	V
		5459.92	47.17	-6.83	54	36.15	31.7	9.58	30.26	346	76	A	V
	*	5510	109.75	-	-	98.65	31.7	9.67	30.27	346	76	P	V
	*	5510	99.98	-	-	88.88	31.7	9.67	30.27	346	76	A	V
		5748.935	50.72	-17.48	68.2	39.25	32	9.86	30.39	346	76	P	V
802.11ac VHT40 CH 110 5550MHz		5457.76	55.01	-18.99	74	44	31.7	9.57	30.26	100	209	P	H
		5464.48	54.36	-13.84	68.2	43.33	31.7	9.59	30.26	100	209	P	H
		5459.92	44	-10	54	32.98	31.7	9.58	30.26	100	209	A	H
	*	5550	115.11	-	-	103.85	31.8	9.75	30.29	100	209	P	H
	*	5550	105.31	-	-	94.05	31.8	9.75	30.29	100	209	A	H
		5749.25	51.95	-16.25	68.2	40.48	32	9.86	30.39	100	209	P	H
		5452.96	52.62	-21.38	74	41.62	31.7	9.56	30.26	352	76	P	V
		5466.16	52.64	-15.56	68.2	41.61	31.7	9.59	30.26	352	76	P	V
		5459.44	42.82	-11.18	54	31.8	31.7	9.58	30.26	352	76	A	V
	*	5550	112.13	-	-	100.87	31.8	9.75	30.29	352	76	P	V
	*	5550	103.07	-	-	91.81	31.8	9.75	30.29	352	76	A	V
		5730.35	51.37	-16.83	68.2	39.96	31.93	9.86	30.38	352	76	P	V



FCC RADIO TEST REPORT

Report No. : FR911635E

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol.
802.11ac		5440.3	50.11	-23.89	74	39.16	31.67	9.54	30.26	100	207	P	H
		5465.85	49.46	-18.74	68.2	38.43	31.7	9.59	30.26	100	207	P	H
		5458.5	40.49	-13.51	54	29.48	31.7	9.57	30.26	100	207	A	H
	*	5670	114.27	-	-	103.01	31.75	9.86	30.35	100	207	P	H
	*	5670	105.04	-	-	93.78	31.75	9.86	30.35	100	207	A	H
	VHT40	5725.45	63.56	-4.64	68.2	52.15	31.93	9.86	30.38	100	207	P	H
CH 134		5399.7	50.95	-23.05	74	40.15	31.6	9.46	30.26	323	77	P	V
5670MHz	5460	49.33	-18.87	68.2	38.31	31.7	9.58	30.26	323	77	P	V	
	5458.5	40.27	-13.73	54	29.26	31.7	9.57	30.26	323	77	A	V	
*	5670	111.06	-	-	99.8	31.75	9.86	30.35	323	77	P	V	
*	5670	101.46	-	-	90.2	31.75	9.86	30.35	323	77	A	V	
	5726.15	59.87	-8.33	68.2	48.46	31.93	9.86	30.38	323	77	P	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 102 5510MHz		11020	45.73	-28.27	74	53.23	40.33	13.89	61.72	100	0	P	H
		16530	45.74	-22.46	68.2	49.13	38.7	17.6	59.69	100	0	P	H
													H
													H
		11020	46.5	-27.5	74	54	40.33	13.89	61.72	100	0	P	V
		16530	45.97	-22.23	68.2	49.36	38.7	17.6	59.69	100	0	P	V
													V
802.11ac VHT40 CH 110 5550MHz		11100	45.44	-28.56	74	53.26	40	13.98	61.8	100	0	P	H
		16650	46.54	-21.66	68.2	49.19	39.2	17.82	59.67	100	0	P	H
													H
													H
		11100	45.51	-28.49	74	53.33	40	13.98	61.8	100	0	P	V
		16650	46.58	-21.62	68.2	49.23	39.2	17.82	59.67	100	0	P	V
													V
802.11ac VHT40 CH 134 5670MHz		11340	46.12	-27.88	74	53.76	39.87	14.53	62.04	100	0	P	H
		17010	47.87	-20.33	68.2	48.86	40.5	18.09	59.58	100	0	P	H
													H
													H
		11340	45.51	-28.49	74	53.15	39.87	14.53	62.04	100	0	P	V
		17010	48.53	-19.67	68.2	49.52	40.5	18.09	59.58	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Band 3 5470~5725MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		5458.72	61.31	-12.69	74	50.3	31.7	9.57	30.26	100	181	P	H
		5469.52	63.11	-5.09	68.2	52.07	31.7	9.6	30.26	100	181	P	H
		5459.44	52.42	-1.58	54	41.4	31.7	9.58	30.26	100	181	P	H
	*	5530	107.84	-	-	96.68	31.73	9.71	30.28	100	181	P	H
	*	5530	98.58	-	-	87.42	31.73	9.71	30.28	100	181	A	H
		5728.145	52.07	-16.13	68.2	40.66	31.93	9.86	30.38	100	181	P	H
		5457.76	58.05	-15.95	74	47.04	31.7	9.57	30.26	377	77	P	V
		5466.16	59.59	-8.61	68.2	48.56	31.7	9.59	30.26	377	77	P	V
		5458.48	48.84	-5.16	54	37.83	31.7	9.57	30.26	377	77	A	V
	*	5530	104.25	-	-	93.09	31.73	9.71	30.28	377	77	P	V
	*	5530	95.08	-	-	83.92	31.73	9.71	30.28	377	77	A	V
		5743.265	51.51	-16.69	68.2	40.04	32	9.86	30.39	377	77	P	V
802.11ac VHT80 CH 122 5610MHz		5457.76	52.63	-21.37	74	41.62	31.7	9.57	30.26	100	178	P	H
		5466.88	54.33	-13.87	68.2	43.3	31.7	9.59	30.26	100	178	P	H
		5459.92	43.29	-10.71	54	32.27	31.7	9.58	30.26	100	178	A	H
	*	5610	111.12	-	-	99.79	31.8	9.85	30.32	100	178	P	H
	*	5610	102	-	-	90.67	31.8	9.85	30.32	100	178	A	H
		5726.885	56.83	-11.37	68.2	45.42	31.93	9.86	30.38	100	178	P	H
		5453.2	50.96	-23.04	74	39.96	31.7	9.56	30.26	313	76	P	V
		5466.4	51.65	-16.55	68.2	40.62	31.7	9.59	30.26	313	76	P	V
		5459.92	41.51	-12.49	54	30.49	31.7	9.58	30.26	313	76	A	V
	*	5610	108.1	-	-	96.77	31.8	9.85	30.32	313	76	P	V
	*	5610	98.88	-	-	87.55	31.8	9.85	30.32	313	76	A	V
		5729.72	57.11	-11.09	68.2	45.7	31.93	9.86	30.38	313	76	P	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 106 5530MHz		11060	47.14	-26.86	74	54.83	40.13	13.94	61.76	100	0	P	H
		16590	46.77	-21.43	68.2	49.89	38.85	17.71	59.68	100	0	P	H
													H
													H
		11060	45.87	-28.13	74	53.56	40.13	13.94	61.76	100	0	P	V
		16590	47.57	-20.63	68.2	50.69	38.85	17.71	59.68	100	0	P	V
													V
													V
802.11ac VHT80 CH 122 5610MHz		11220	45.51	-28.49	74	53.23	39.88	14.32	61.92	100	0	P	H
		16830	48.01	-20.19	68.2	49.48	40.2	17.96	59.63	100	0	P	H
													H
													H
		11220	45.64	-28.36	74	53.36	39.88	14.32	61.92	100	0	P	V
		16830	48.02	-20.18	68.2	49.49	40.2	17.96	59.63	100	0	P	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 VHT20 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac		5389	50.99	-23.01	74	40.27	31.53	9.45	30.26	100	206	P	H
		5465.05	49.06	-19.14	68.2	38.03	31.7	9.59	30.26	100	206	P	H
		5452.96	40.22	-13.78	54	29.22	31.7	9.56	30.26	100	206	A	H
	*	5720	115.9	-	-	104.48	31.93	9.86	30.37	100	206	P	H
	*	5720	106.69	-	-	95.27	31.93	9.86	30.37	100	206	A	H
		5916.25	52.17	-16.03	68.2	40.3	32.33	10.02	30.48	100	206	P	H
5720MHz	CH 144	5455.3	51.25	-22.75	74	40.24	31.7	9.57	30.26	318	79	P	V
		5461.15	49.4	-18.8	68.2	38.38	31.7	9.58	30.26	318	79	P	V
		5452.96	40.06	-13.94	54	29.06	31.7	9.56	30.26	318	79	A	V
	*	5720	113.37	-	-	101.95	31.93	9.86	30.37	318	79	P	V
	*	5720	103.98	-	-	92.56	31.93	9.86	30.37	318	79	A	V
		5855.5	52.05	-16.15	68.2	40.32	32.23	9.94	30.44	318	79	P	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 VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT20 CH 144 5720MHz		11440	45.74	-28.26	74	53.3	40.07	14.51	62.14	100	0	P	H
		17160	49.27	-18.93	68.2	49.59	40.57	18.36	59.25	100	0	P	H
													H
													H
		11440	45.93	-28.07	74	53.49	40.07	14.51	62.14	100	0	P	V
		17160	48.72	-19.48	68.2	49.04	40.57	18.36	59.25	100	0	P	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 VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		5389.39	51.35	-22.65	74	40.63	31.53	9.45	30.26	100	208	P	H
		5463.88	49.25	-18.95	68.2	38.23	31.7	9.58	30.26	100	208	P	H
		5458.81	40.5	-13.5	54	29.49	31.7	9.57	30.26	100	208	A	H
	*	5710	113.95	-	-	102.59	31.87	9.86	30.37	100	208	P	H
	*	5710	104.76	-	-	93.4	31.87	9.86	30.37	100	208	A	H
		5928.25	52.79	-15.41	68.2	40.87	32.37	10.03	30.48	100	208	P	H
		5374.96	50.4	-23.6	74	39.76	31.47	9.44	30.27	304	75	P	V
		5461.93	48.75	-19.45	68.2	37.73	31.7	9.58	30.26	304	75	P	V
		5458.81	40.22	-13.78	54	29.21	31.7	9.57	30.26	304	75	A	V
	*	5710	109.87	-	-	98.51	31.87	9.86	30.37	304	75	P	V
	*	5710	100.67	-	-	89.31	31.87	9.86	30.37	304	75	A	V
		5943.25	53.06	-15.14	68.2	41.1	32.4	10.05	30.49	304	75	P	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 VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT40 CH 142 5710MHz		11420	45.81	-28.19	74	53.38	40.03	14.52	62.12	100	0	P	H
		17130	48.53	-19.67	68.2	49.01	40.53	18.3	59.31	100	0	P	H
													H
													H
		11420	45.19	-28.81	74	52.76	40.03	14.52	62.12	100	0	P	V
		17130	48.51	-19.69	68.2	48.99	40.53	18.3	59.31	100	0	P	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 (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		5415.13	50.87	-23.13	74	40.01	31.63	9.49	30.26	100	205	P	H
		5464.27	51.57	-16.63	68.2	40.54	31.7	9.59	30.26	100	205	P	H
		5459.98	40.57	-13.43	54	29.55	31.7	9.58	30.26	100	205	A	H
	*	5690	110.45	-	-	99.15	31.8	9.86	30.36	100	205	P	H
	*	5690	101.1	-	-	89.8	31.8	9.86	30.36	100	205	A	H
		5880.75	53.21	-14.99	68.2	41.43	32.27	9.97	30.46	100	205	P	H
		5441.26	50.65	-23.35	74	39.7	31.67	9.54	30.26	320	77	P	V
		5465.05	50.72	-17.48	68.2	39.69	31.7	9.59	30.26	320	77	P	V
		5456.47	40.33	-13.67	54	29.32	31.7	9.57	30.26	320	77	A	V
	*	5690	107.86	-	-	96.56	31.8	9.86	30.36	320	77	P	V
	*	5690	98.09	-	-	86.79	31.8	9.86	30.36	320	77	A	V
		5946.75	52.78	-15.42	68.2	40.82	32.4	10.05	30.49	320	77	P	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 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dB μ V/m)	Over Limit (dB)	Limit Line (dB μ V/m)	Read Level (dB μ V)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ac VHT80 CH 138 5690MHz		11380	44.79	-29.21	74	52.37	39.97	14.53	62.08	100	0	P	H
		17070	49.29	-18.91	68.2	50.05	40.5	18.19	59.45	100	0	P	H
													H
													H
		11380	44.68	-29.32	74	52.26	39.97	14.53	62.08	100	0	P	V
		17070	48.45	-19.75	68.2	49.21	40.5	18.19	59.45	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



Emission below 1GHz

WIFI 802.11ac VHT40 (LF @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ac VHT40 LF		80.44	30.15	-9.85	40	47.98	13.5	1.21	32.54	100	0	P	H
		95.96	31.7	-11.8	43.5	47.49	15.4	1.33	32.52	-	-	P	H
		143.49	27.14	-16.36	43.5	40.52	17.5	1.62	32.5	-	-	P	H
		490.75	32.22	-13.78	46	38.16	23.81	2.82	32.57	-	-	P	H
		875.84	31.5	-14.5	46	30.37	29	3.91	31.78	-	-	P	H
		948.59	33.25	-12.75	46	29.59	30.82	4.07	31.23	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													V
		93.05	35.19	-8.31	43.5	51.2	15.2	1.31	32.52	100	0	P	V
		214.3	30.52	-12.98	43.5	46.12	14.94	1.96	32.5	-	-	P	V
		263.77	28.63	-17.37	46	38.94	20	2.21	32.52	-	-	P	V
		434.49	29.47	-16.53	46	36.58	22.79	2.66	32.56	-	-	P	V
		619.76	30.06	-15.94	46	33.56	25.8	3.26	32.56	-	-	P	V
		843.83	31.23	-14.77	46	30.3	29.08	3.81	31.96	-	-	P	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	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1+2		(MHz)	(dB μ V/m)	(dB)	(dB μ V/m)	(dB μ V)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dB μ V/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dB μ V) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dB μ V/m) – Limit Line(dB μ V/m)

For Peak Limit @ 2390MHz:

1. Level(dB μ V/m)
 $= \text{Antenna Factor(dB/m)} + \text{Path Loss(dB)} + \text{Read Level(dB μ V)} - \text{Preamp Factor(dB)}$
 $= 32.22(\text{dB}/\text{m}) + 4.58(\text{dB}) + 54.51(\text{dB}\mu\text{V}) - 35.86 (\text{dB})$
 $= 55.45 (\text{dB}\mu\text{V}/\text{m})$
2. Over Limit(dB)
 $= \text{Level(dB}\mu\text{V}/\text{m)} - \text{Limit Line(dB}\mu\text{V}/\text{m)}$
 $= 55.45(\text{dB}\mu\text{V}/\text{m}) - 74(\text{dB}\mu\text{V}/\text{m})$
 $= -18.55(\text{dB})$

For Average Limit @ 2390MHz:

1. Level(dB μ V/m)
 $= \text{Antenna Factor(dB/m)} + \text{Path Loss(dB)} + \text{Read Level(dB}\mu\text{V)} - \text{Preamp Factor(dB)}$
 $= 32.22(\text{dB}/\text{m}) + 4.58(\text{dB}) + 42.6(\text{dB}\mu\text{V}) - 35.86 (\text{dB})$
 $= 43.54 (\text{dB}\mu\text{V}/\text{m})$
2. Over Limit(dB) = Level(dB μ V/m) – Limit Line(dB μ V/m)
 $= 43.54(\text{dB}\mu\text{V}/\text{m}) - 54(\text{dB}\mu\text{V}/\text{m})$
 $= -10.46(\text{dB})$

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



Appendix C. Radiated Spurious Emission

Test Engineer :	Andy Yang, Karl Hou and BigShow Wang	Temperature :	23~26°C
		Relative Humidity :	55~65%

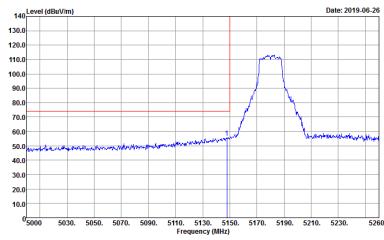
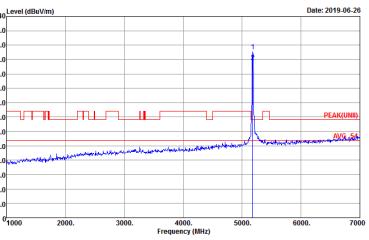
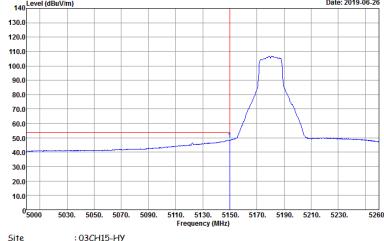
Note symbol

-L	Low channel location
-R	High channel location

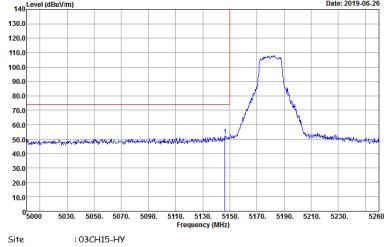
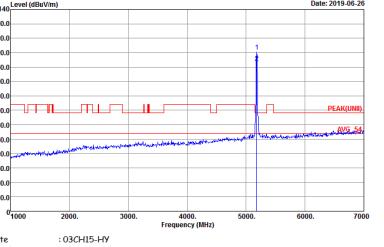
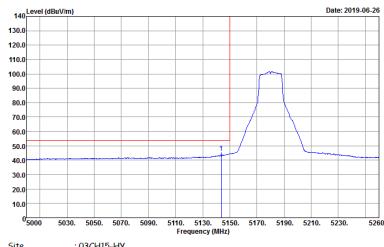


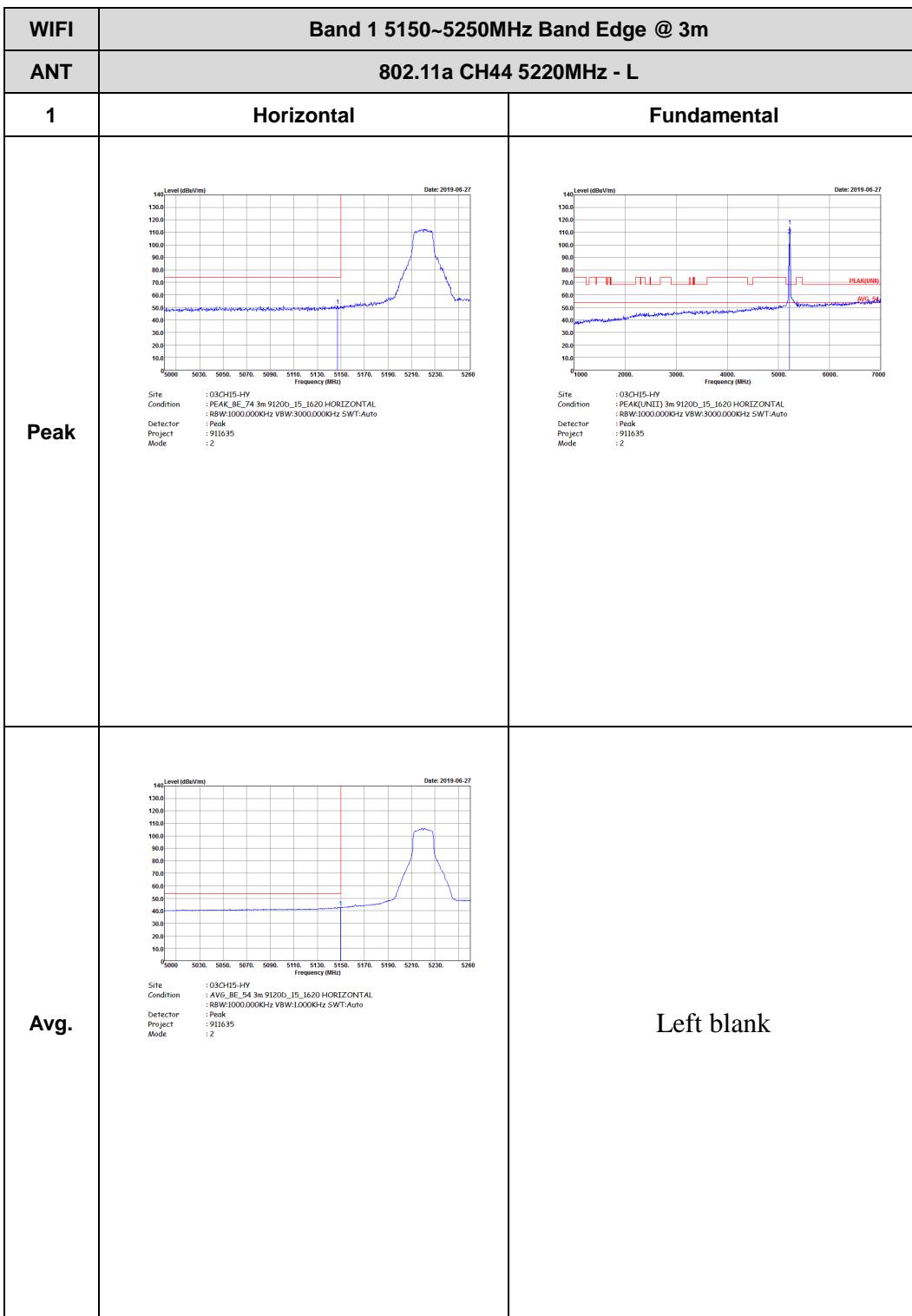
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Band 1 - 5150~5250MHz
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH15-HY Condition : PEAK_BE_74 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000Hz SWT:Auto Project : 911635 Mode : 1</p>	 <p>Site : 03CH15-HY Condition : PEAK(UNIT) 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000Hz SWT:Auto Project : 911635 Mode : 1</p>
Avg.	 <p>Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 1</p>	Left blank

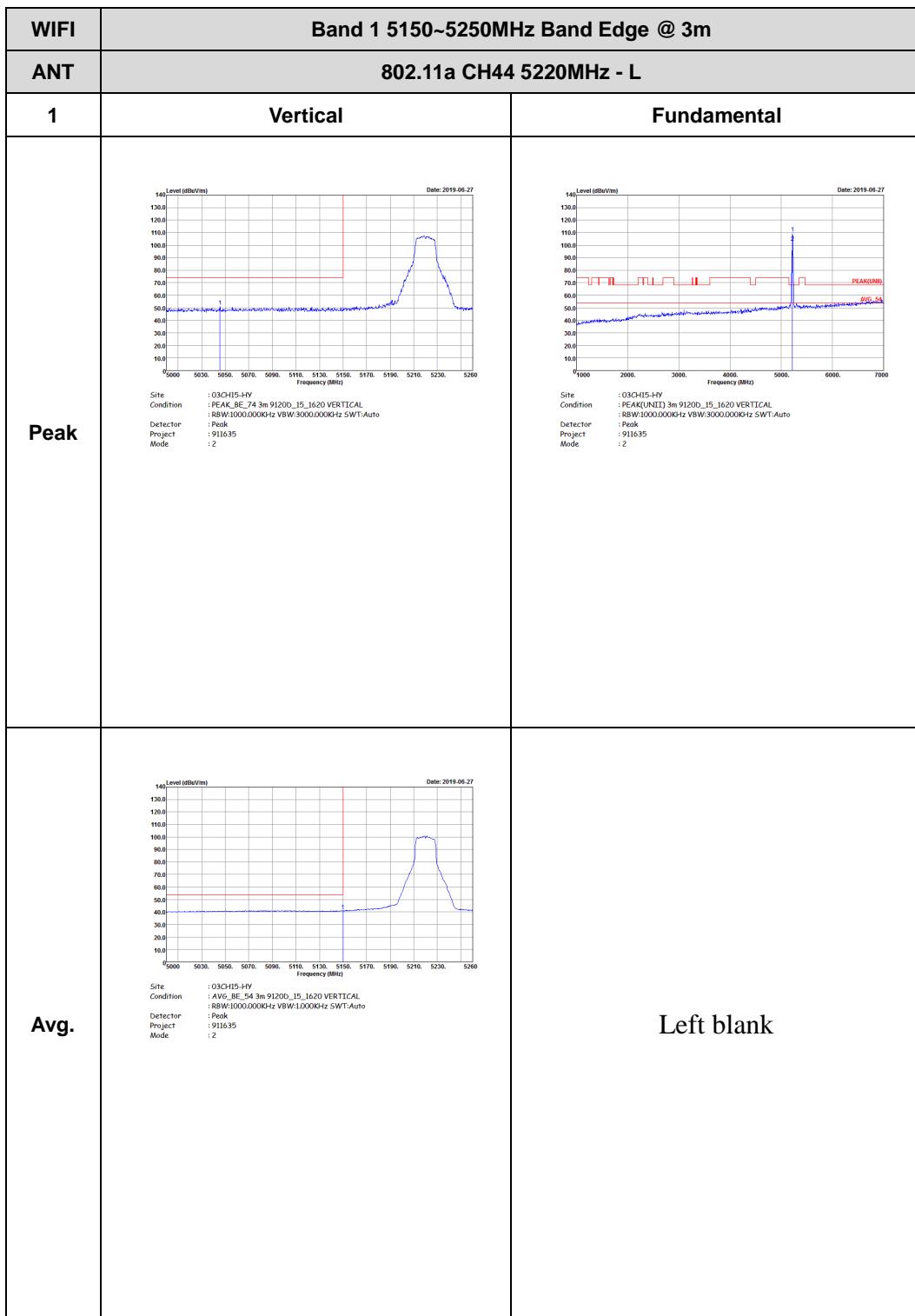


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH36 5180MHz	
1	Vertical	Fundamental
Peak	 <p>Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_15_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 1</p>	 <p>Site : 03CH15-HY Condition : PCAK(BE)I 3m 91200_15_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 1</p>
Avg.	 <p>Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 1</p>	Left blank



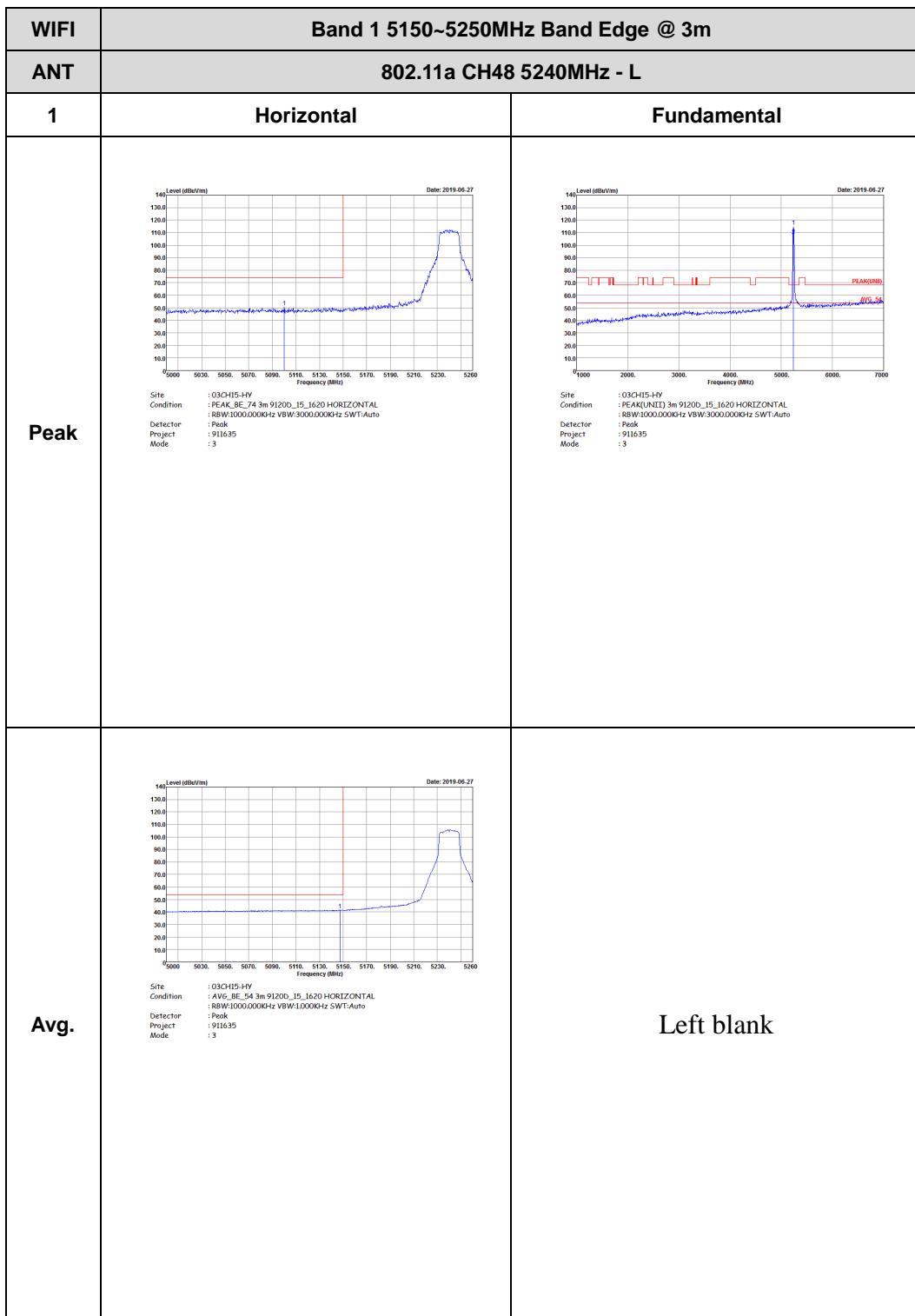


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PC4K_BE_74 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 2	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 2	Left blank



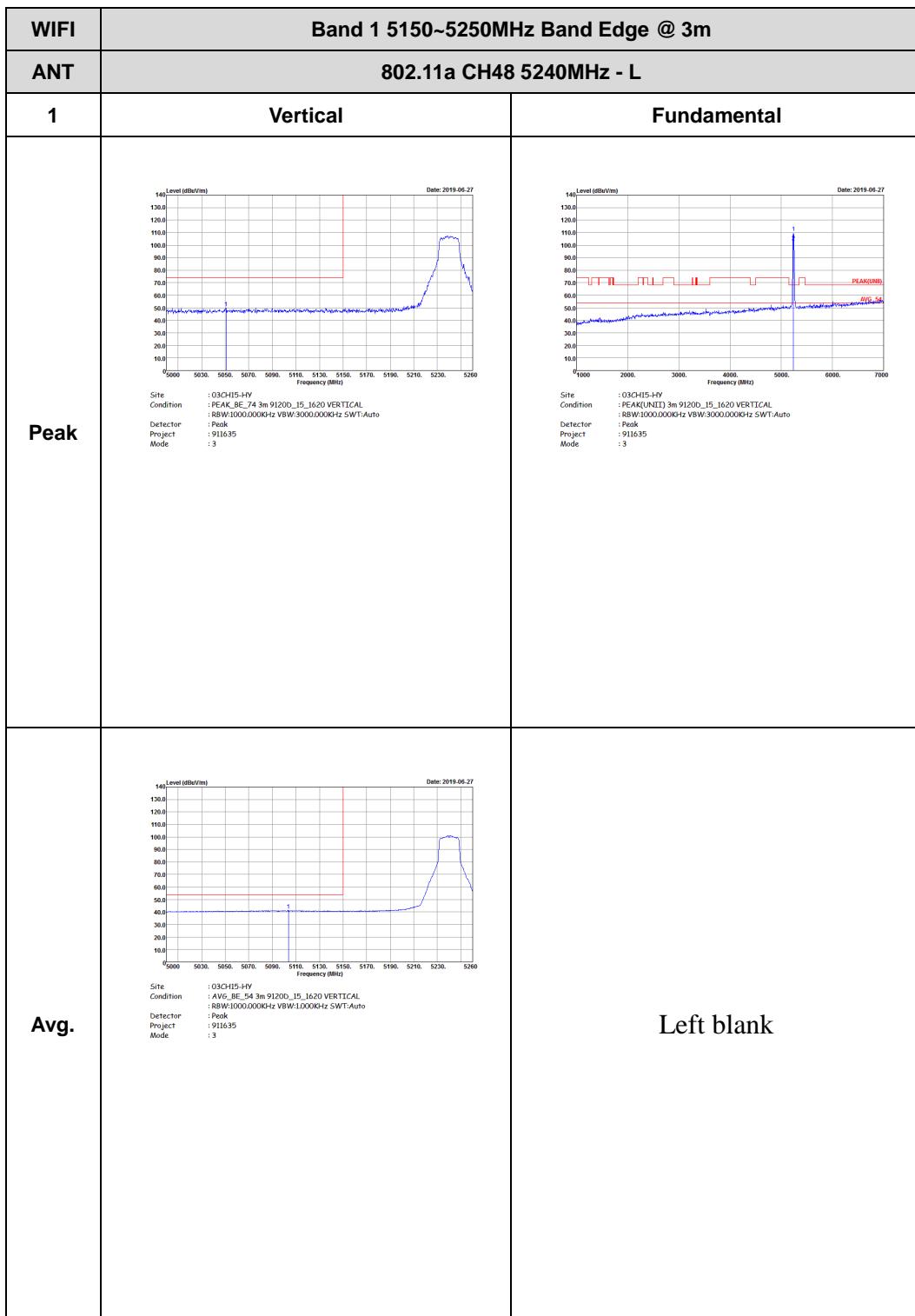


WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH44 5220MHz - R	
1	Vertical	Fundamental
Peak	 Date: 2019-06-27 Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 2	Left blank
Avg.	 Date: 2019-06-27 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 2	Left blank





WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PC4K_BE_74 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 3	Left blank
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 3	Left blank

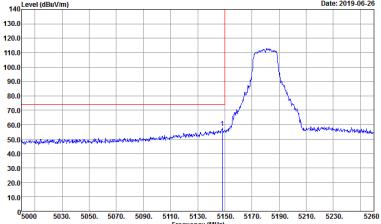
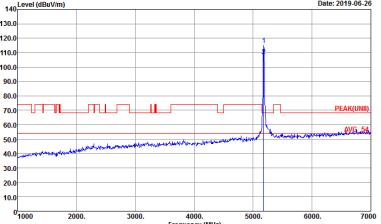
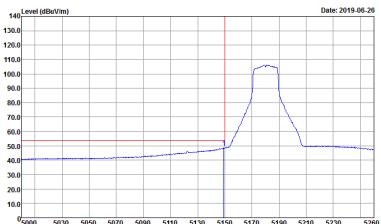




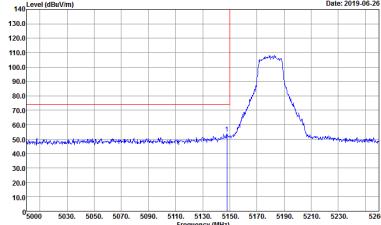
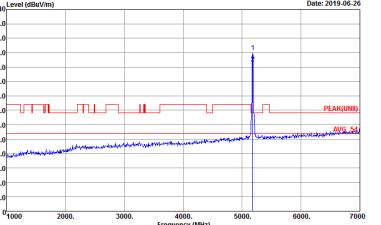
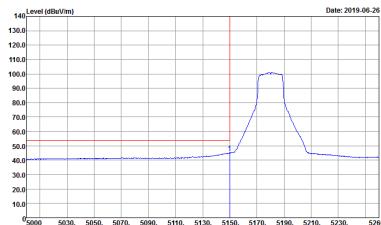
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11a CH48 5240MHz - R	
1	Vertical	Fundamental
Peak	<p>Date: 2019-06-27 Site: 03CH15-HV Condition: PC4K_BE_74 3m 91200_I5_1620 VERTICAL Detector: R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project: 911635 Mode: 3</p>	Left blank
Avg.	<p>Date: 2019-06-27 Site: 03CH15-HV Condition: AVG_BE_54 3m 91200_I5_1620 VERTICAL Detector: R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project: 911635 Mode: 3</p>	Left blank

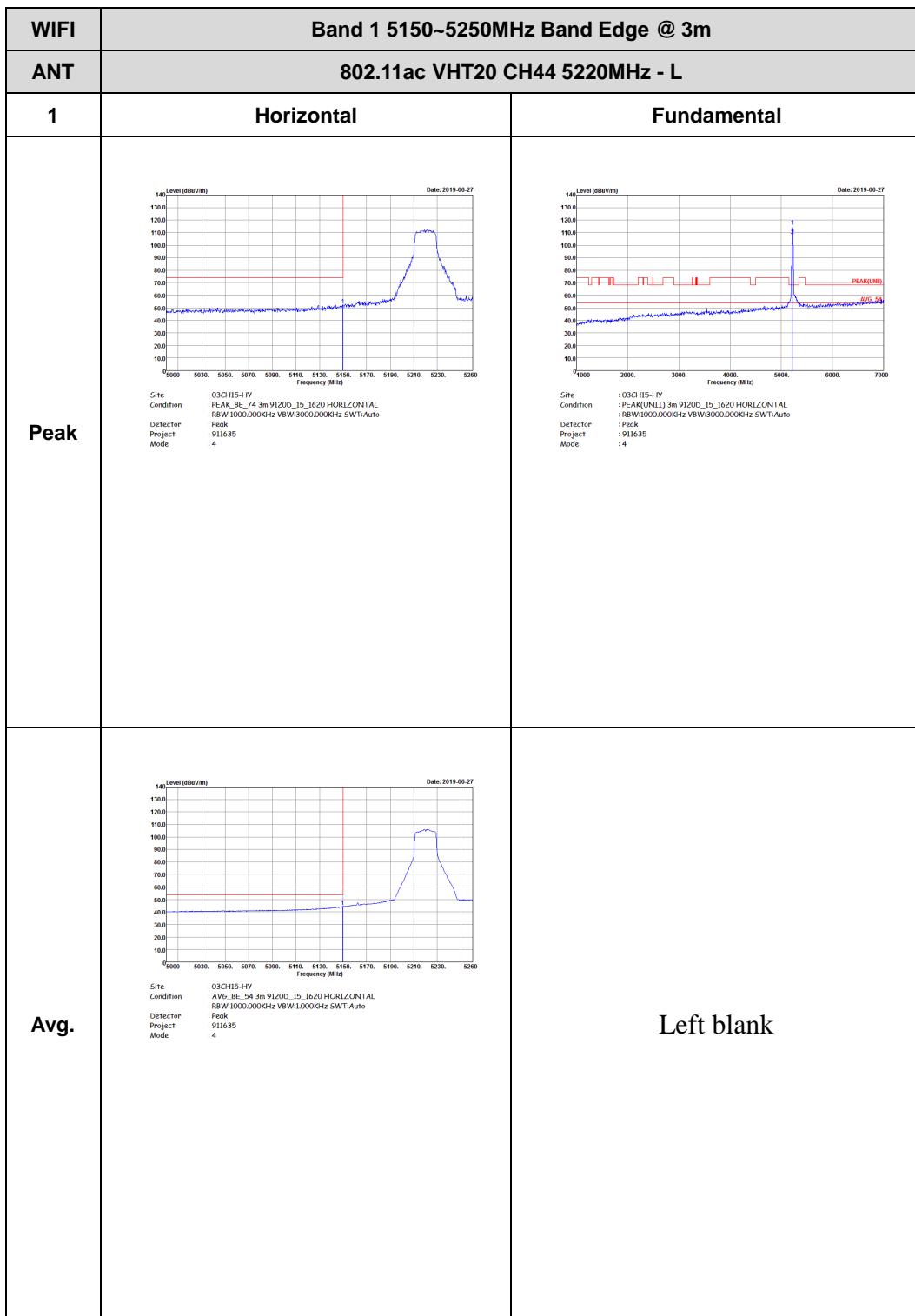


Band 1 5150~5250MHz
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH36 5180MHz	
1	Horizontal	Fundamental
Peak	 <p>Level (dBuV/m) vs Frequency (MHz) Date: 2019-06-26</p> <p>Site: 03CH15-HY Condition: PEAK_BE_74 3m 9120D_15_1620 HORIZONTAL :RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector: Peak Project: 911635 Mode: 4</p>	 <p>Level (dBuV/m) vs Frequency (MHz) Date: 2019-06-26</p> <p>Site: 03CH15-HY Condition: PEAK(UNIT) 3m 9120D_15_1620 HORIZONTAL :RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector: Peak Project: 911635 Mode: 4</p>
Avg.	 <p>Level (dBuV/m) vs Frequency (MHz) Date: 2019-06-26</p> <p>Site: 03CH15-HY Condition: AVG_BE_54 3m 9120D_15_1620 HORIZONTAL :RBW:1000.000KHz VBW:1.000KHz SWT:Auto Detector: Peak Project: 911635 Mode: 4</p>	Left blank



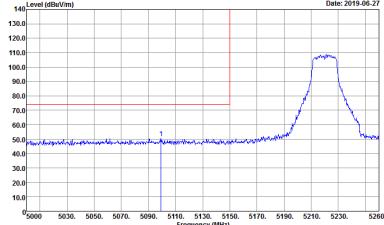
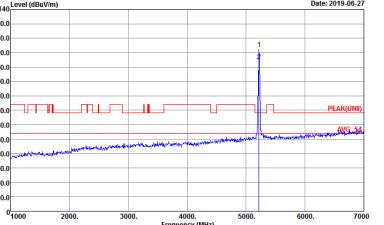
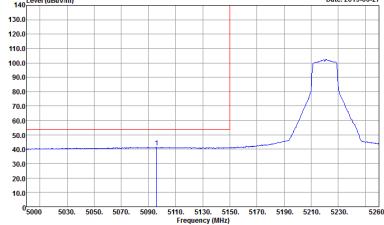
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH36 5180MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 4	 Site : 03CH15-HY Condition : PCAK(H)NII 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 4
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 4	Left blank



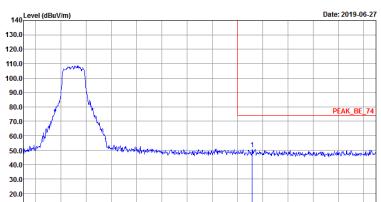


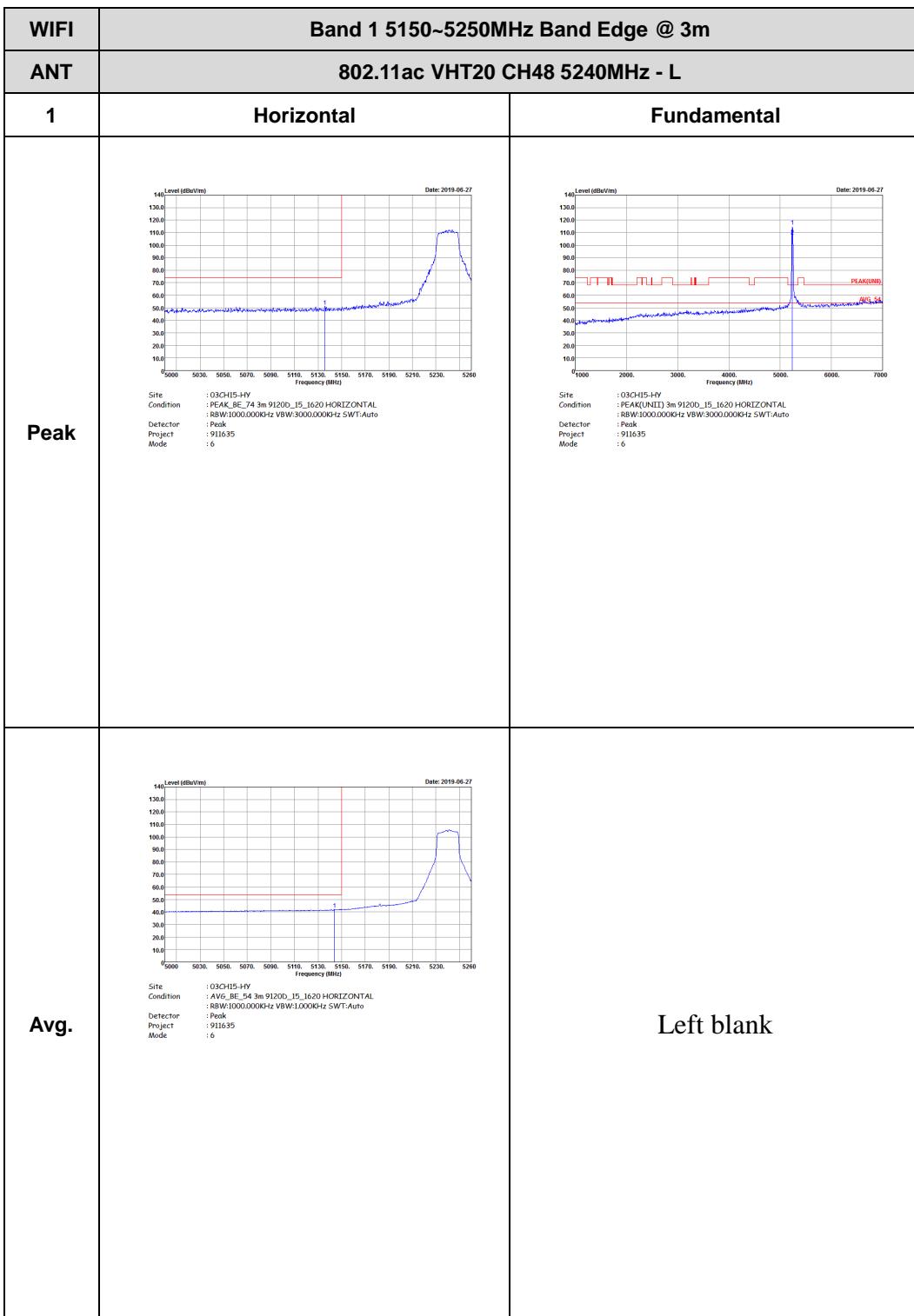
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH44 5220MHz - R	
1	Horizontal	Fundamental
Peak	<p>Level (dBm/V/m) vs Frequency (MHz) from 5180 to 5460. A sharp peak is labeled PEAK_BE_74 at approximately 5220 MHz.</p> <p>Date: 2019-06-27</p> <p>Site: 03CH15-HY Condition: PCMK_BE_74 3m 91200_I5_1620 HORIZONTAL Detector: R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project: 911635 Mode: 4</p>	Left blank
Avg.	<p>Level (dBm/V/m) vs Frequency (MHz) from 5180 to 5460. A broad average level is labeled AVG_BE_54 at approximately 5220 MHz.</p> <p>Date: 2019-06-27</p> <p>Site: 03CH15-HY Condition: AVG_BE_54 3m 91200_I5_1620 HORIZONTAL Detector: R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project: 911635 Mode: 4</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH44 5220MHz - L	
1	Vertical	Fundamental
Peak	 <p>Level (dBm/V/m) vs Frequency (MHz) Date: 2019-06-27</p> <p>Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 4</p>	 <p>Level (dBm/V/m) vs Frequency (MHz) Date: 2019-06-27</p> <p>Site : 03CH15-HY Condition : PCAK(H)I 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 4</p>
Avg.	 <p>Level (dBm/V/m) vs Frequency (MHz) Date: 2019-06-27</p> <p>Site : AVG_BE_54 3m 91200_I5_1620 VERTICAL Condition : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 911635 Mode : 4</p>	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH44 5220MHz - R	
1	Vertical	Fundamental
Peak	 <p>Level (dBm/V/m) vs Frequency (MHz) from 5180 to 5460. The plot shows a single sharp peak at 5210 MHz labeled 'PEAK_BE_74'. The y-axis ranges from 10.0 to 140.0 dBm/V/m. The x-axis ranges from 5180 to 5460 MHz. Test parameters: Site: 03CH15-HV, Condition: PCMK_BE_74 3m 91200_I5_1620 VERTICAL, Detector: R8W:1000.000KHz VBW:3000.000KHz SWT:Auto, Project: 911635, Mode: 4.</p>	Left blank
Avg.	 <p>Level (dBm/V/m) vs Frequency (MHz) from 5180 to 5460. The plot shows a broad peak at 5210 MHz labeled 'AVG_BE_54'. The y-axis ranges from 10.0 to 140.0 dBm/V/m. The x-axis ranges from 5180 to 5460 MHz. Test parameters: Site: 03CH15-HV, Condition: AVG_BE_54 3m 91200_I5_1620 VERTICAL, Detector: R8W:1000.000KHz VBW:1.000KHz SWT:Auto, Project: 911635, Mode: 4.</p>	Left blank





WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH48 5240MHz - R	
1	Horizontal	Fundamental
Peak	<p>Date: 2019-06-27</p> <p>Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 6</p>	Left blank
Avg.	<p>Date: 2019-06-27</p> <p>Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 6</p>	Left blank



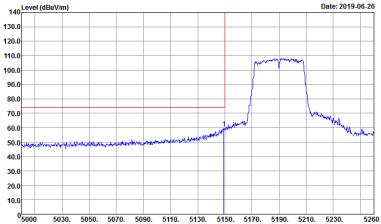
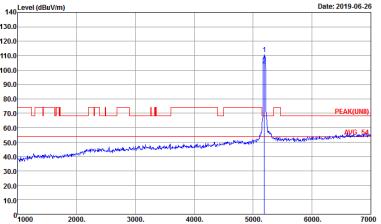
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH48 5240MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 6	 Site : 03CH15-HY Condition : PCAK(BE)I 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 6
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 6	Left blank



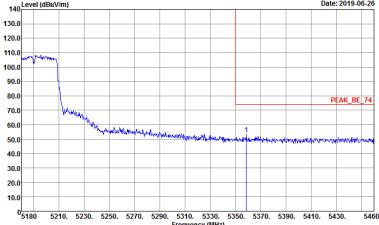
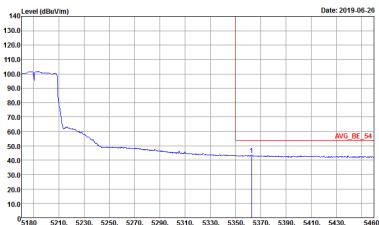
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH48 5240MHz - R	
1	Vertical	Fundamental
Peak	<p>Site : 03CH15-HY Condition : PCMK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 6</p>	Left blank
Avg.	<p>Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 6</p>	Left blank

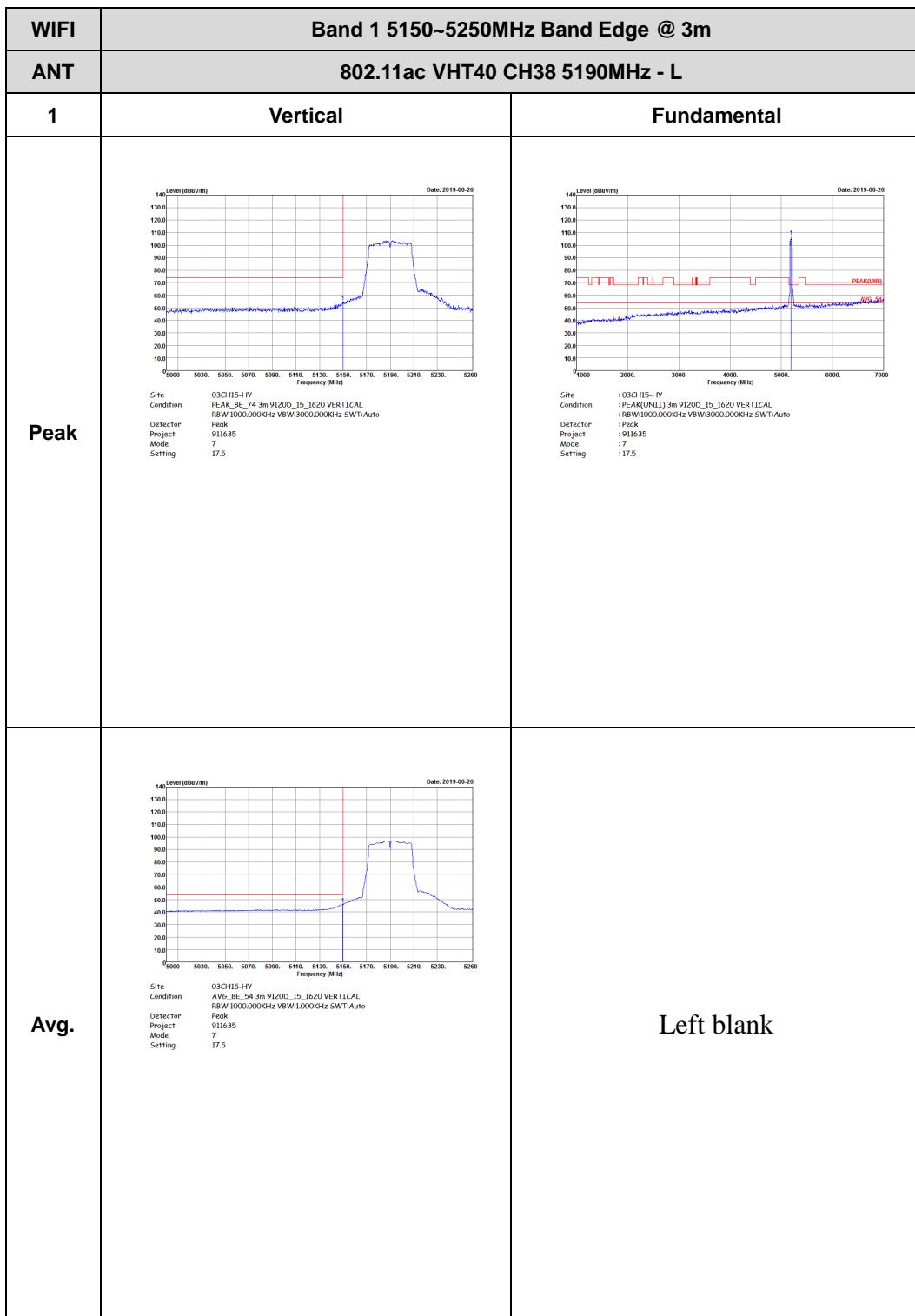


Band 1 5150~5250MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH38 5190MHz - L	
1	Horizontal	Fundamental
Peak	 <p>Site : 03CH15-HY Condition : PEAK(BE_74_3m_9120D_15_1620 HORIZONTAL : BW:1000.000KHz VBW:3000.000Hz SWT:Auto Detector : Peak Project : 911635 Mode : 7 Setting : 17.5</p>	 <p>Site : 03CH15-HY Condition : PEAK(BE_1HY_3m_9120D_15_1620 HORIZONTAL : BW:1000.000KHz VBW:3000.000Hz SWT:Auto Detector : Peak Project : 911635 Mode : 7 Setting : 17.5</p>
Avg.	 <p>Site : 03CH15-HY Condition : AVG_BE_54_3m_9120D_15_1620 HORIZONTAL : BW:1000.000KHz VBW:1.000Hz SWT:Auto Detector : Avg Project : 911635 Mode : 7 Setting : 17.5</p>	Left blank



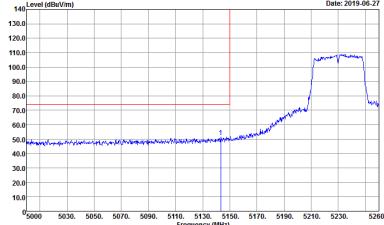
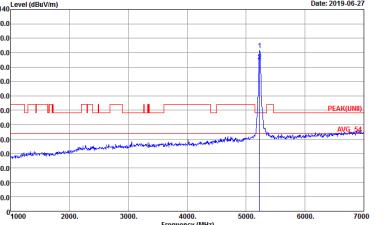
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH38 5190MHz - R	
1	Horizontal	Fundamental
Peak	 <p>Level (dBmV/m)</p> <p>Date: 2019-06-26</p> <p>Frequency (MHz)</p> <p>Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 911635 Setting : 7 Setting : 17.5</p>	Left blank
Avg.	 <p>Level (dBmV/m)</p> <p>Date: 2019-06-26</p> <p>Frequency (MHz)</p> <p>Site : AVG_BE_54 3m 91200_I5_1620_HORIZONTAL Condition : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 911635 Mode : 7 Setting : 17.5</p>	Left blank



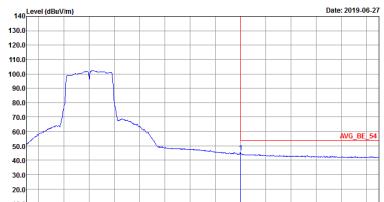


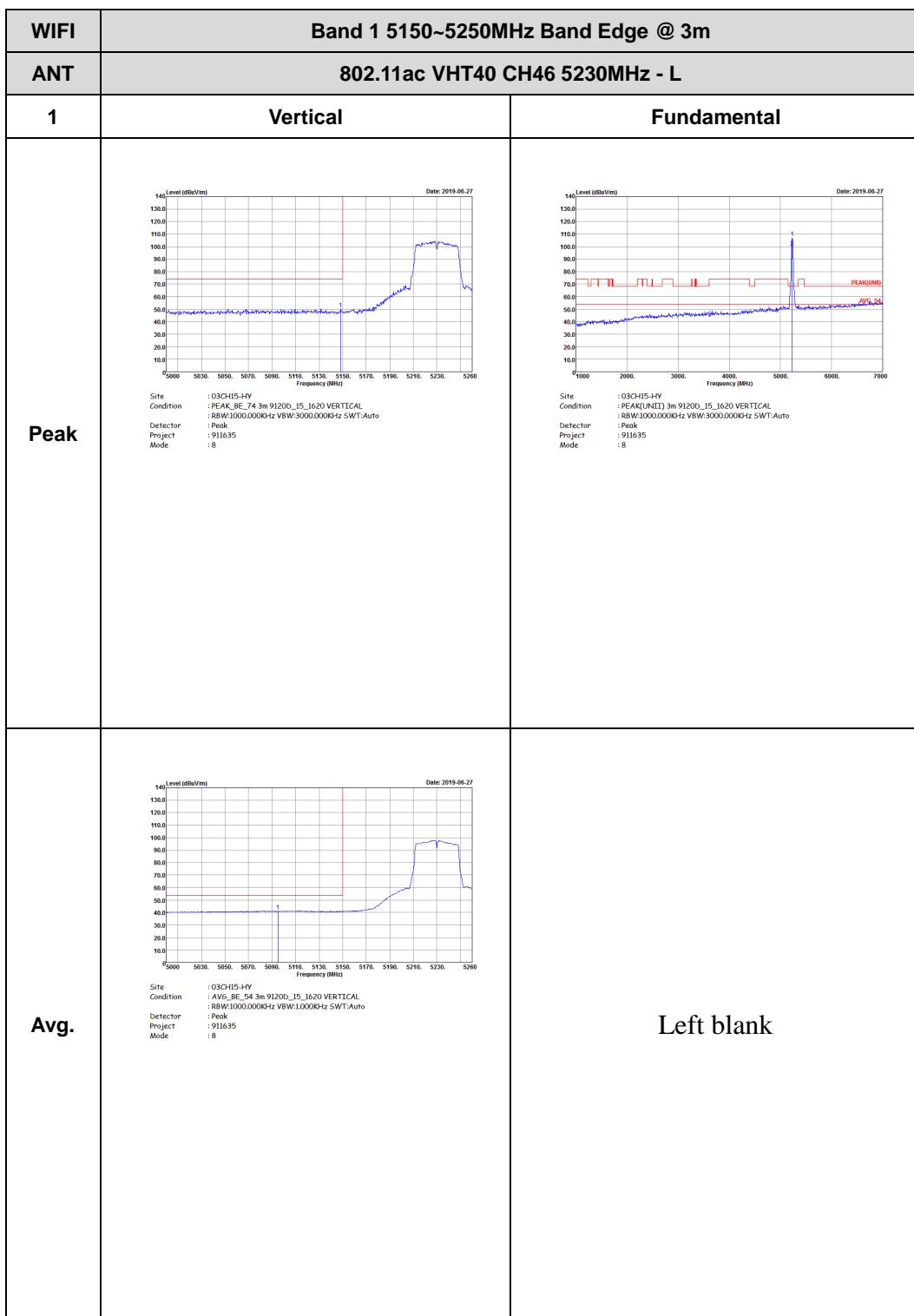
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH38 5190MHz - R	
1	Vertical	Fundamental
Peak	 Date: 2019-06-26 Site : 03CH15-HY Condition : PCMK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 7 Setting : 17.5	Left blank
Avg.	 Date: 2019-06-26 Site : AVG_BE_54 3m 91200_I5_1620 VERTICAL Condition : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 911635 Mode : 7 Setting : 17.5	Left blank



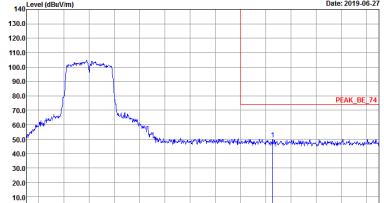
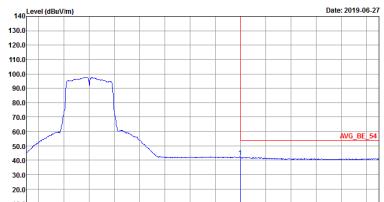
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH46 5230MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 8	 Site : 03CH15-HY Condition : PCAK(H)NII 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 8
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 8	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH46 5230MHz - R	
1	Horizontal	Fundamental
Peak	 <p>Level (dBmV/m)</p> <p>Date: 2019-06-27</p> <p>Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 8</p>	Left blank
Avg.	 <p>Level (dBmV/m)</p> <p>Date: 2019-06-27</p> <p>Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620_HORIZONTAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 8</p>	Left blank





WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH46 5230MHz - R	
1	Vertical	Fundamental
Peak	 <p>Level (dBmV/m)</p> <p>Date: 2019-06-27</p> <p>Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 8</p>	Left blank
Avg.	 <p>Level (dBmV/m)</p> <p>Date: 2019-06-27</p> <p>Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 8</p>	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 : 03CH15-HY Condition : PEAK(BE_74_3m_9120D_15_1620 HORIZONTAL : 8BW:1000.000kHz VBW:3000.000Hz SWT:Auto Detector : Peak Project : 911635 Mode : 9 Setting : 17.5	 Site : 03CH15-HY Condition : PEAK(UNI) 3m 9120D_15_1620 HORIZONTAL : 8BW:1000.000kHz VBW:3000.000Hz SWT:Auto Detector : Peak Project : 911635 Mode : 9 Setting : 17.5
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54_3m_9120D_15_1620 HORIZONTAL : 8BW:1000.000kHz VBW:3.000kHz SWT:Auto Detector : Peak Project : 911635 Mode : 9 Setting : 17.5	Left blank



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Horizontal	Fundamental
Peak	 Date: 2019-06-26 Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3.000KHz SWT:Auto Project : 911635 Mode : 9 Setting : 17.5 Left blank	
Avg.	 Date: 2019-06-26 Site : AVG_BE_54 3m 91200_I5_1620 HORIZONTAL Condition : R8W:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 911635 Mode : 9 Setting : 17.5 Left blank	



WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3.000KHz SWT:Auto Project : 911635 Mode : 9 Setting : 17.5	 Site : 03CH15-HY Condition : PCAK(BE)I 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3.000KHz SWT:Auto Project : 911635 Mode : 9 Setting : 17.5
Avg.	 Site : AVG_BE_54 3m 91200_I5_1620 VERTICAL Condition : R8W:1000.000KHz VBW:3.000KHz SWT:Auto Detector : Peak Project : 911635 Mode : 9 Setting : 17.5	Left blank

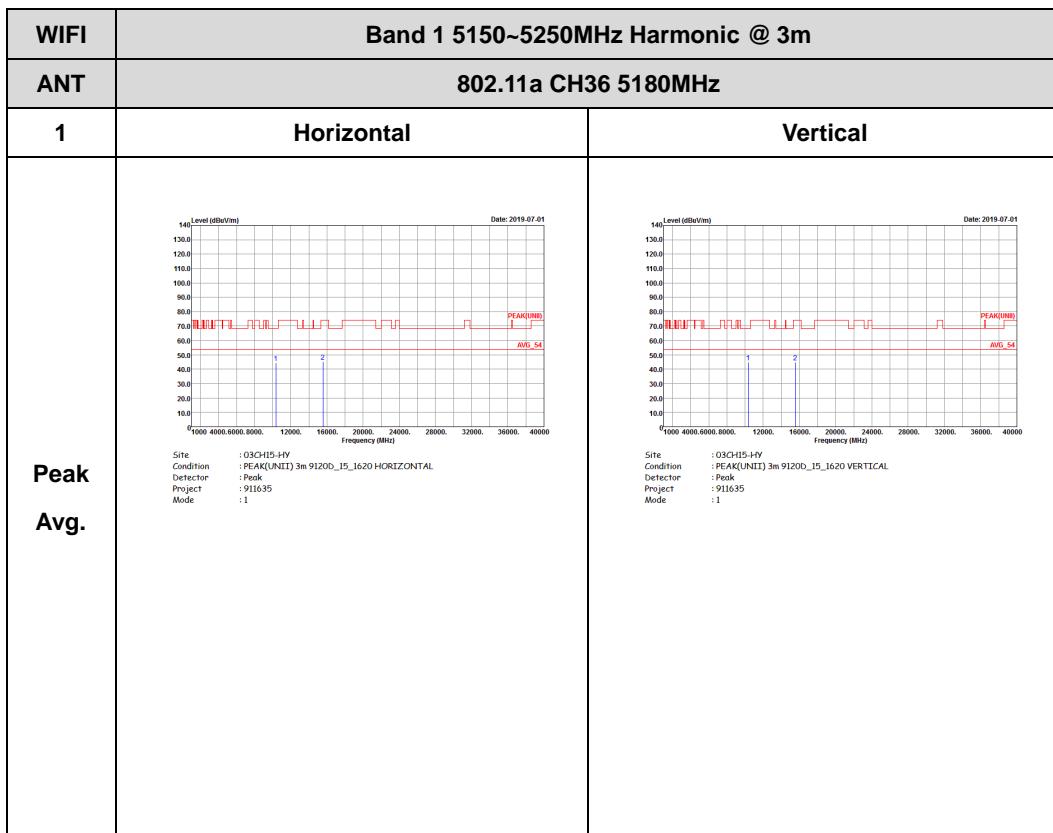


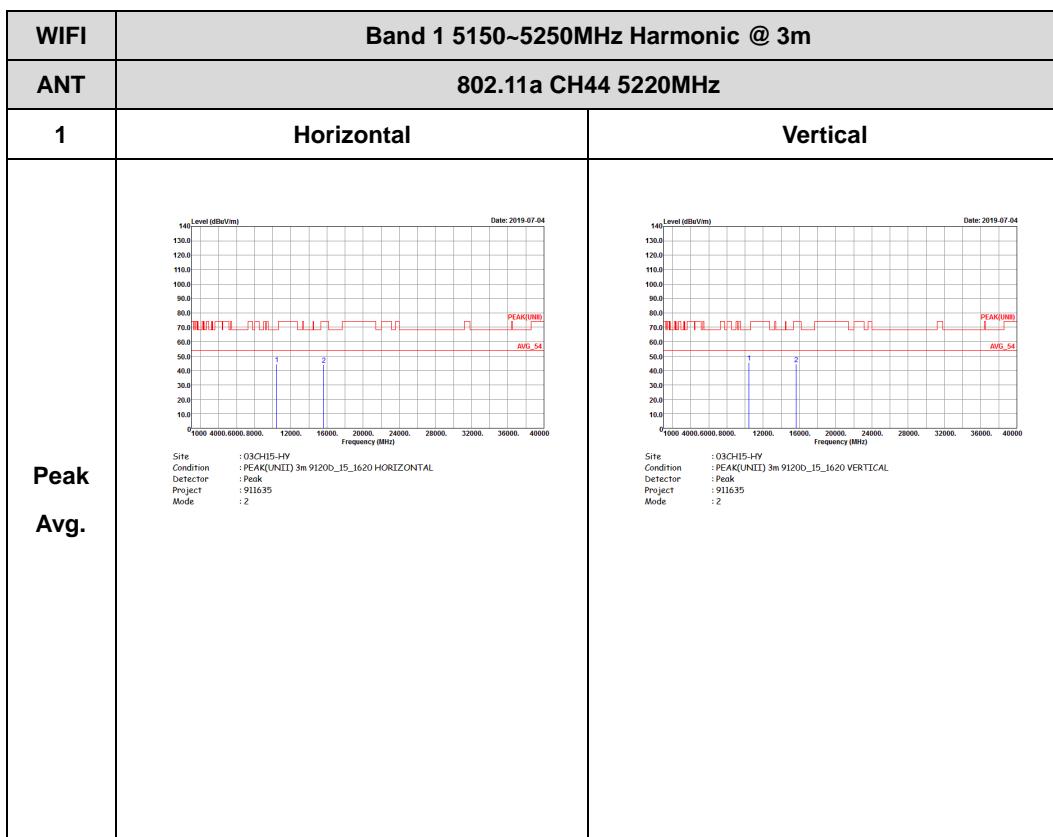
WIFI	Band 1 5150~5250MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH42 5210MHz - R	
1	Vertical	Fundamental
Peak	 Date: 2019-06-26 Site : 03CH15-HV Condition : PCAK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3.000KHz SWT:Auto Project : 911635 Mode : 9 Setting : 17.5	Left blank
Avg.	 Date: 2019-06-26 Site : 03CH15-HV Condition : AVG_BE_54 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3.000KHz SWT:Auto Project : 911635 Mode : 9 Setting : 17.5	Left blank

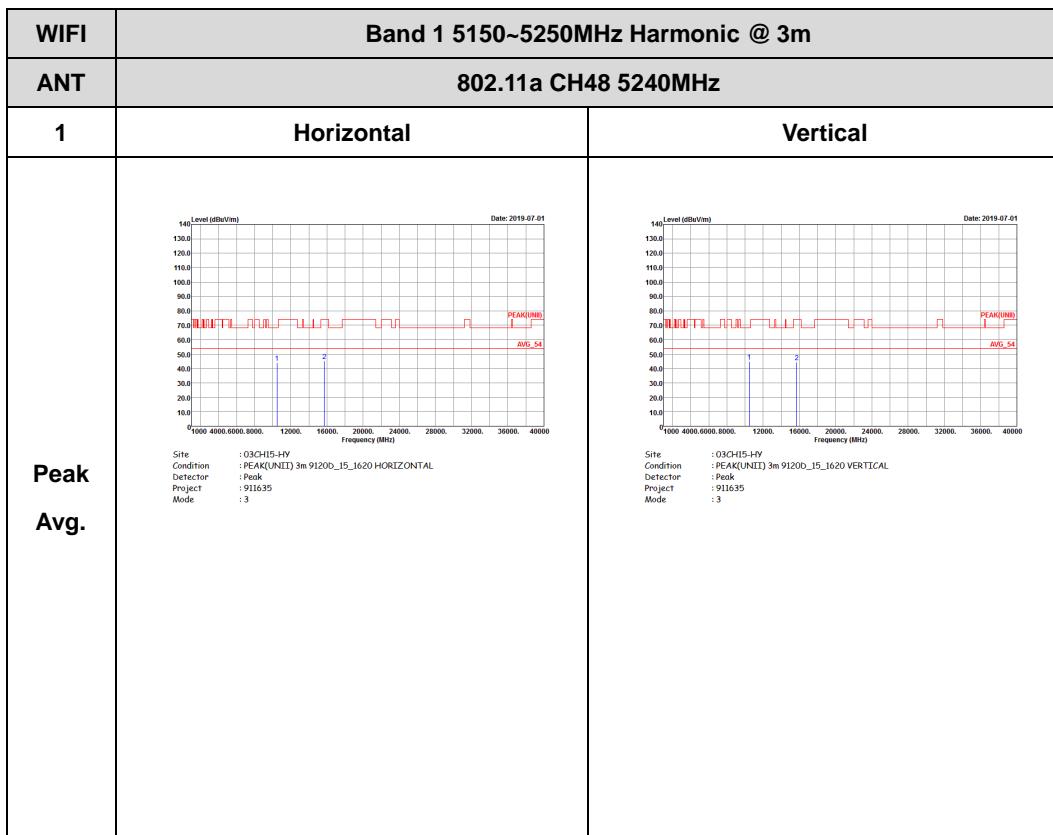


Band 1 - 5150~5250MHz

WIFI 802.11a (Harmonic @ 3m)

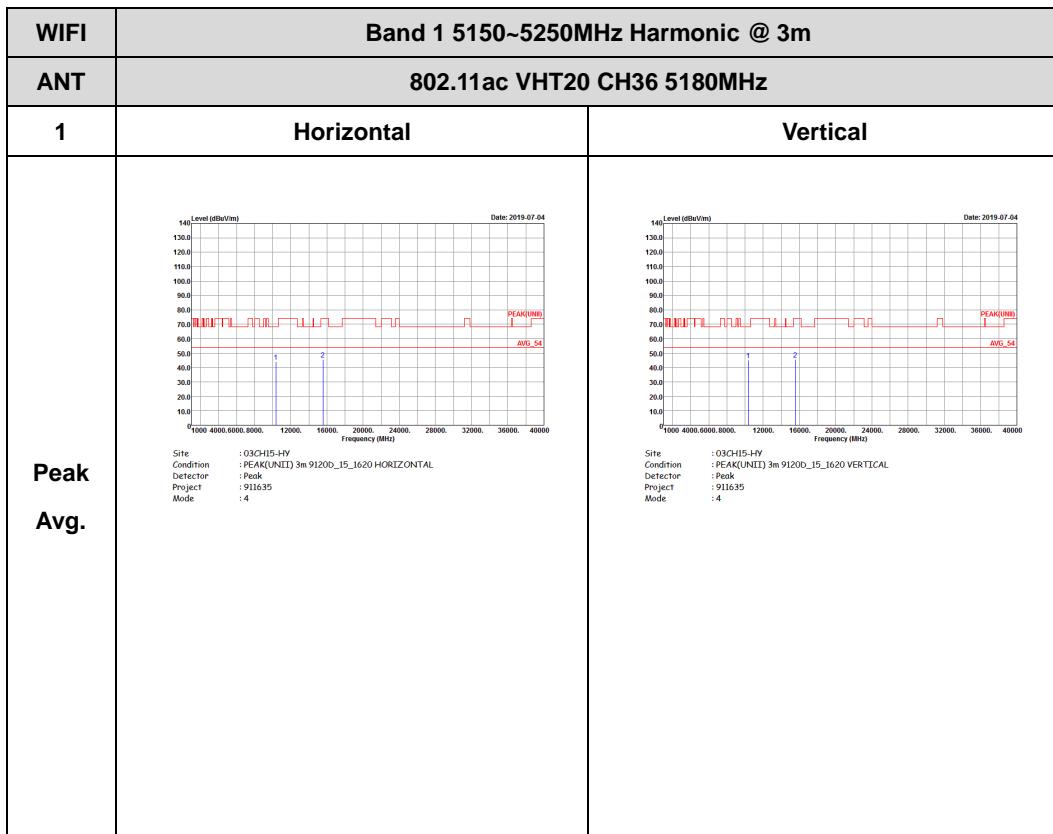


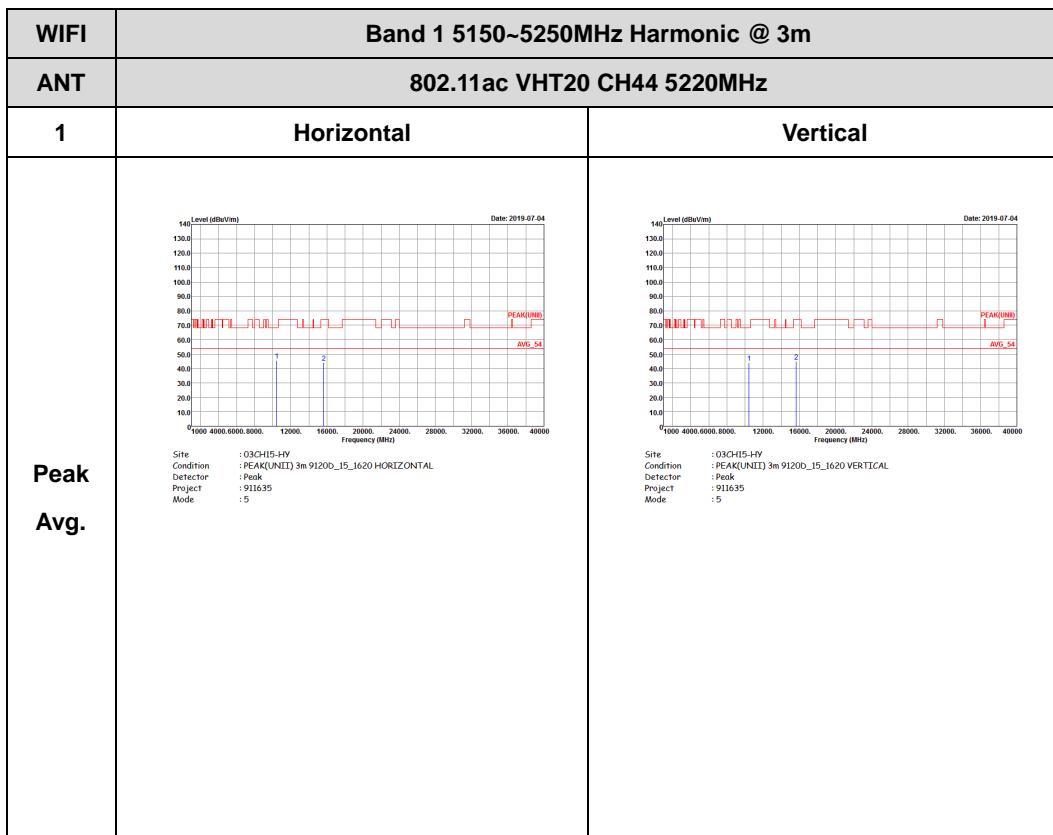


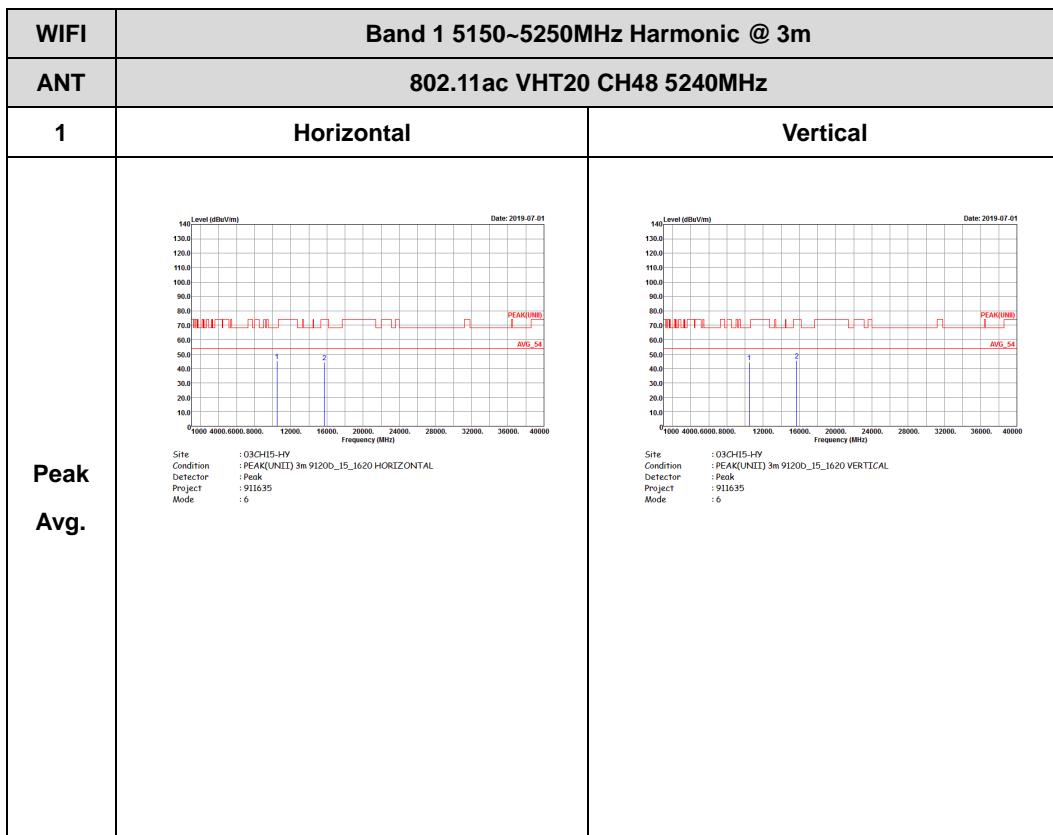




Band 1 5150~5250MHz
WIFI 802.11ac VHT20 (Harmonic @ 3m)

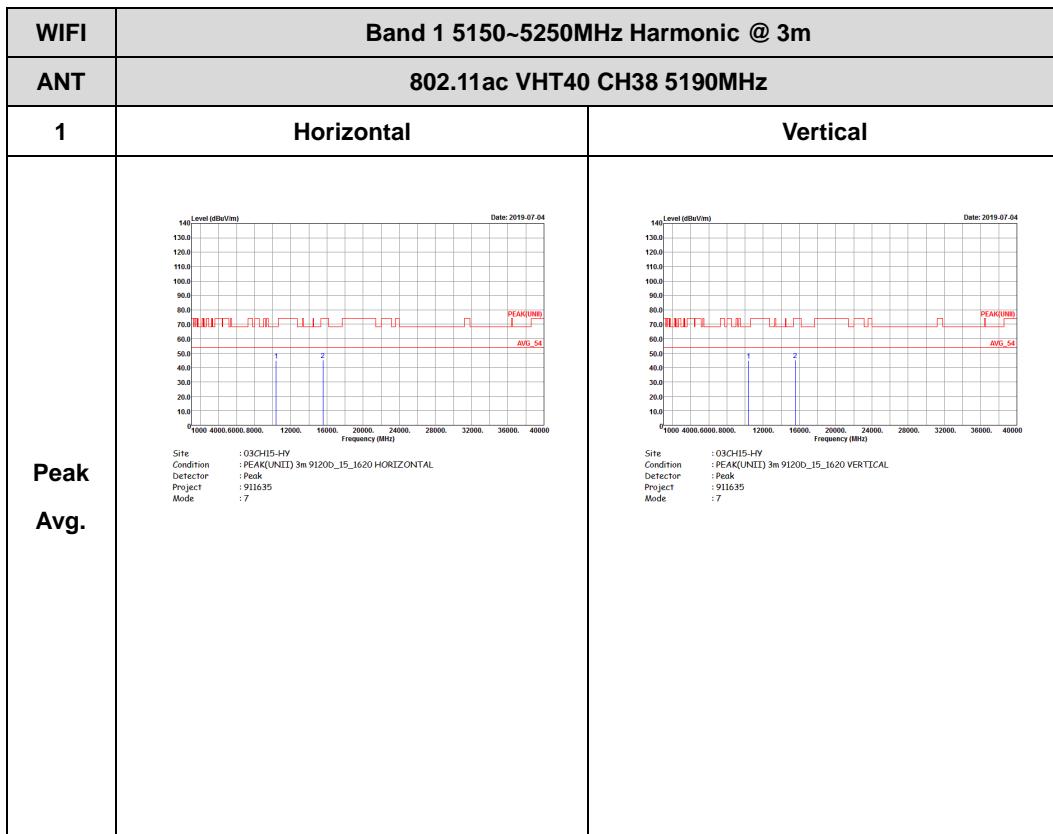


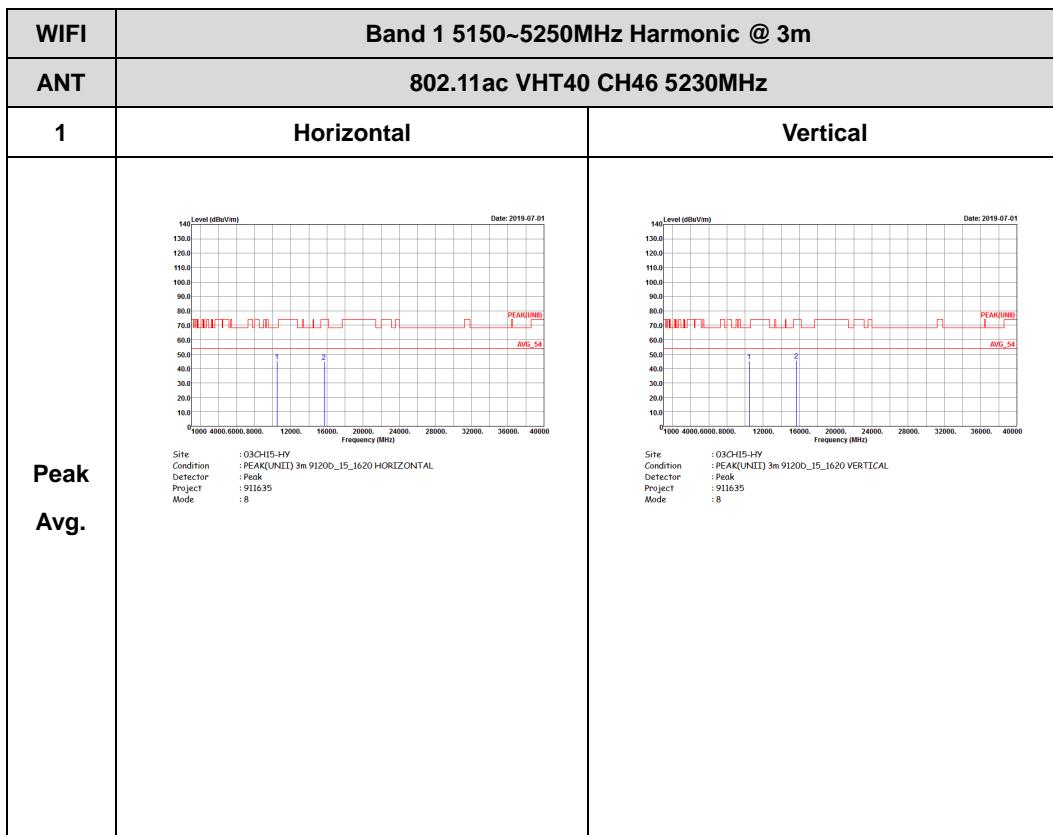






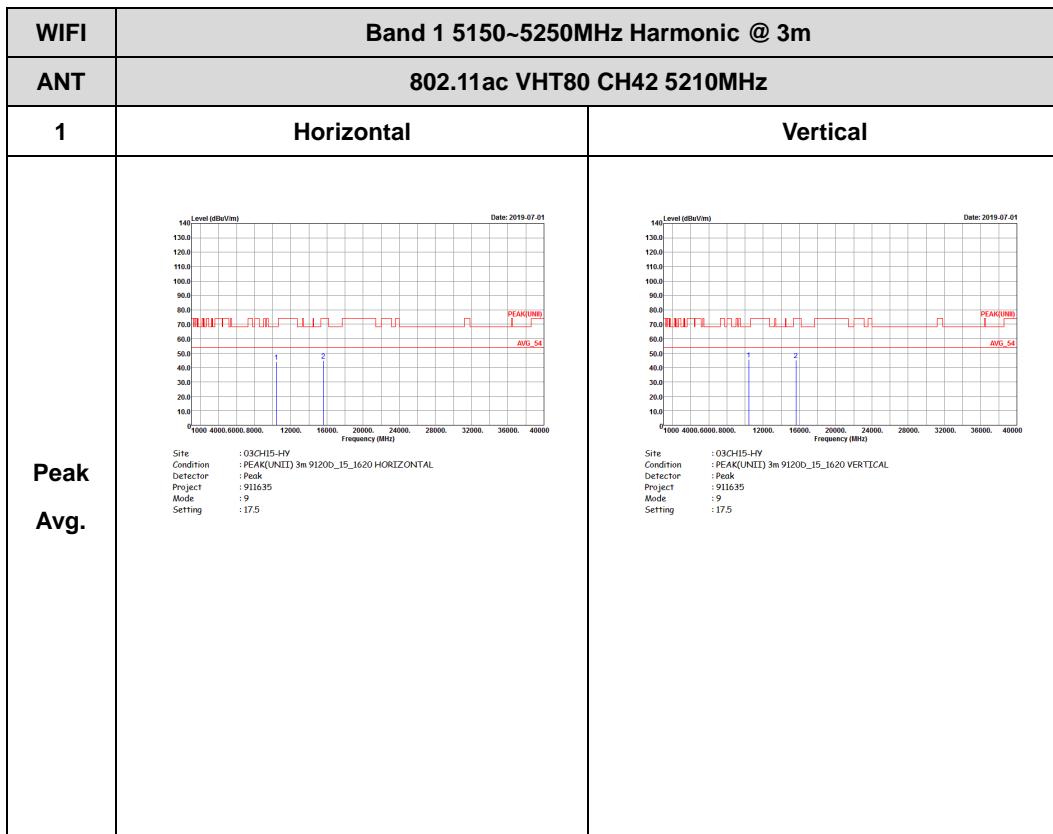
Band 1 5150~5250MHz
WIFI 802.11ac VHT40 (Harmonic @ 3m)







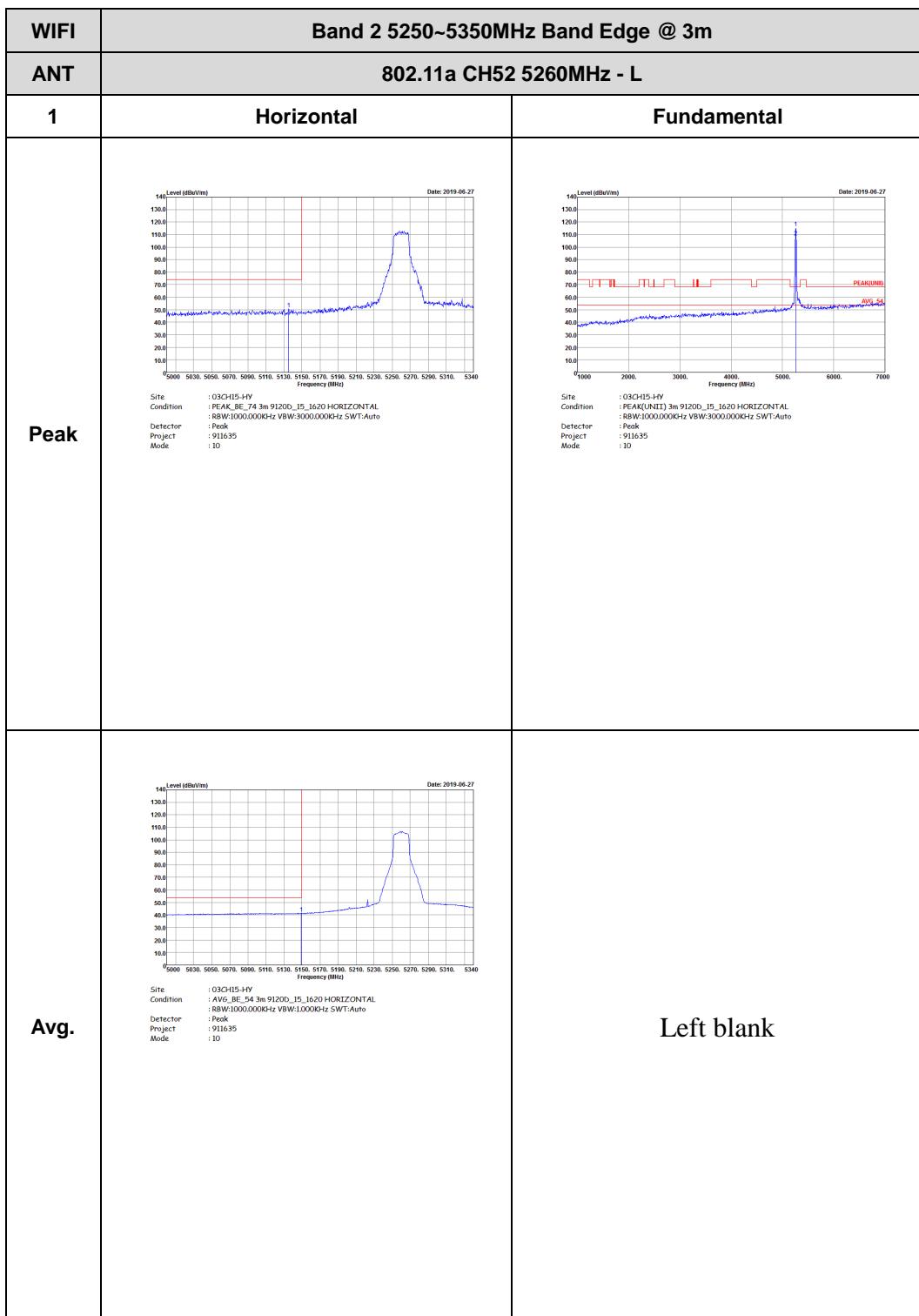
Band 1 5150~5250MHz
WIFI 802.11ac VHT80 (Harmonic @ 3m)





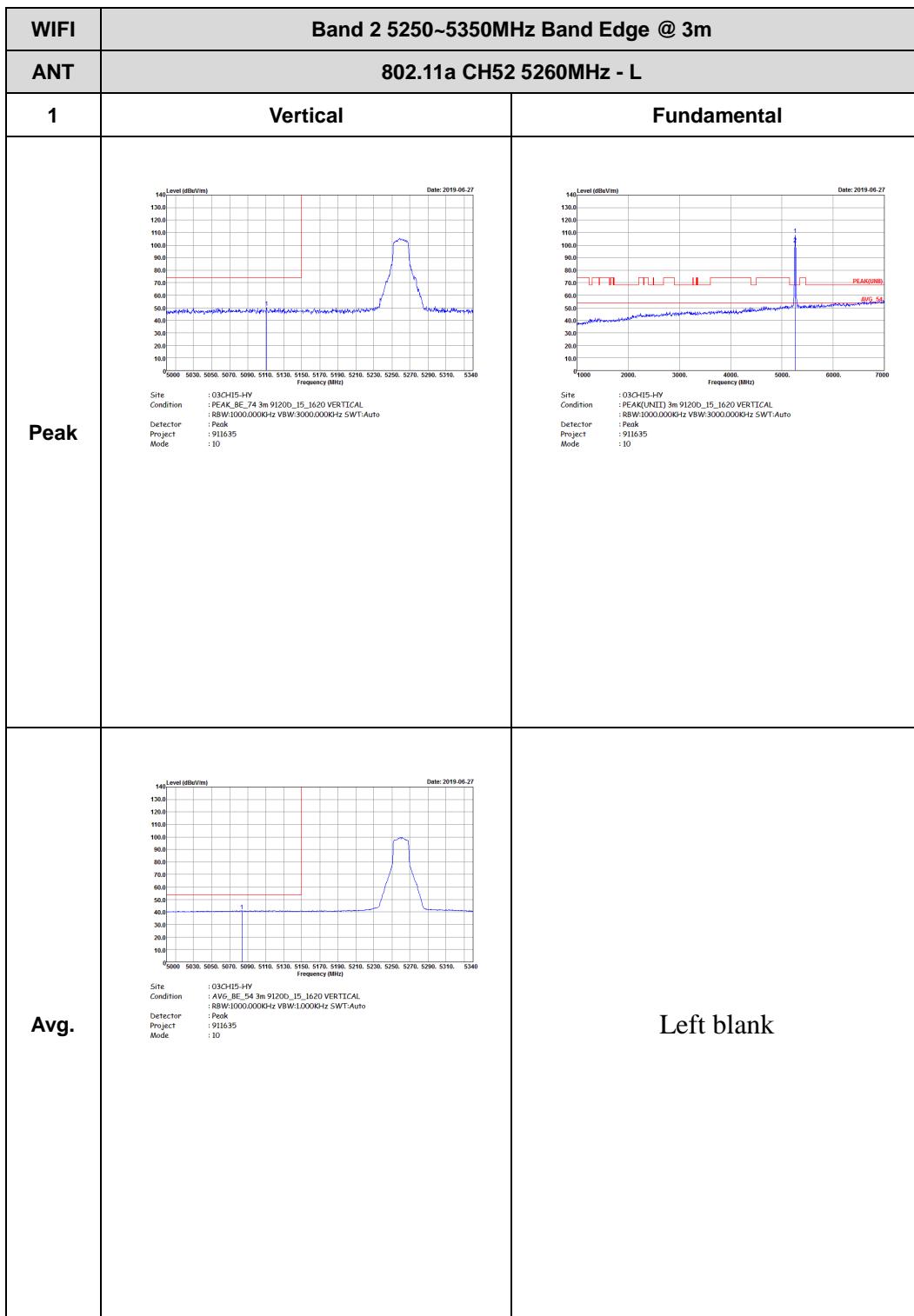
Band 2 - 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)



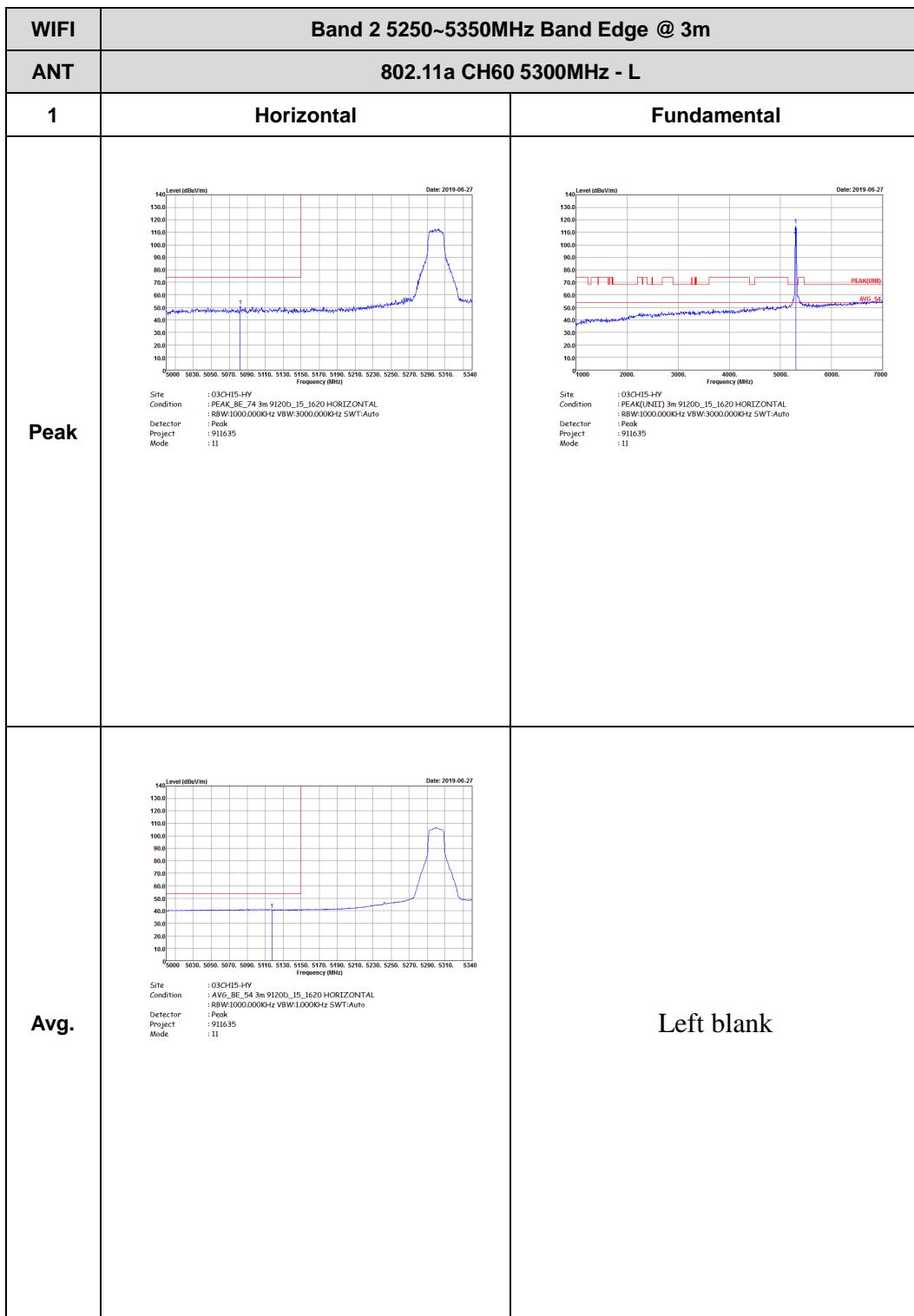


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak	<p>Level (dBm/V/m) vs Frequency (MHz) from 5220 to 5460. The plot shows a single sharp peak labeled 'PEAK_BE_74' at approximately 5260 MHz. The y-axis ranges from 10.0 to 140.0 dBm/V/m. The x-axis ranges from 5220 to 5460 MHz. A red vertical line marks the center of the peak.</p> <p>Date: 2019-06-27</p> <p>Site: 03CH15-HV Condition: PCMK_BE_74 3m 91200_I5_1620_HORIZONTAL Detector: R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project: 911635 Mode: 10</p>	Left blank
Avg.	<p>Level (dBm/V/m) vs Frequency (MHz) from 5220 to 5460. The plot shows a broad average level labeled 'AVG_BE_54' centered around 5260 MHz. The y-axis ranges from 10.0 to 140.0 dBm/V/m. The x-axis ranges from 5220 to 5460 MHz. A red vertical line marks the center of the average level.</p> <p>Date: 2019-06-27</p> <p>Site: 03CH15-HV Condition: AVG_BE_54 3m 91200_I5_1620_HORIZONTAL Detector: R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project: 911635 Mode: 10</p>	Left blank



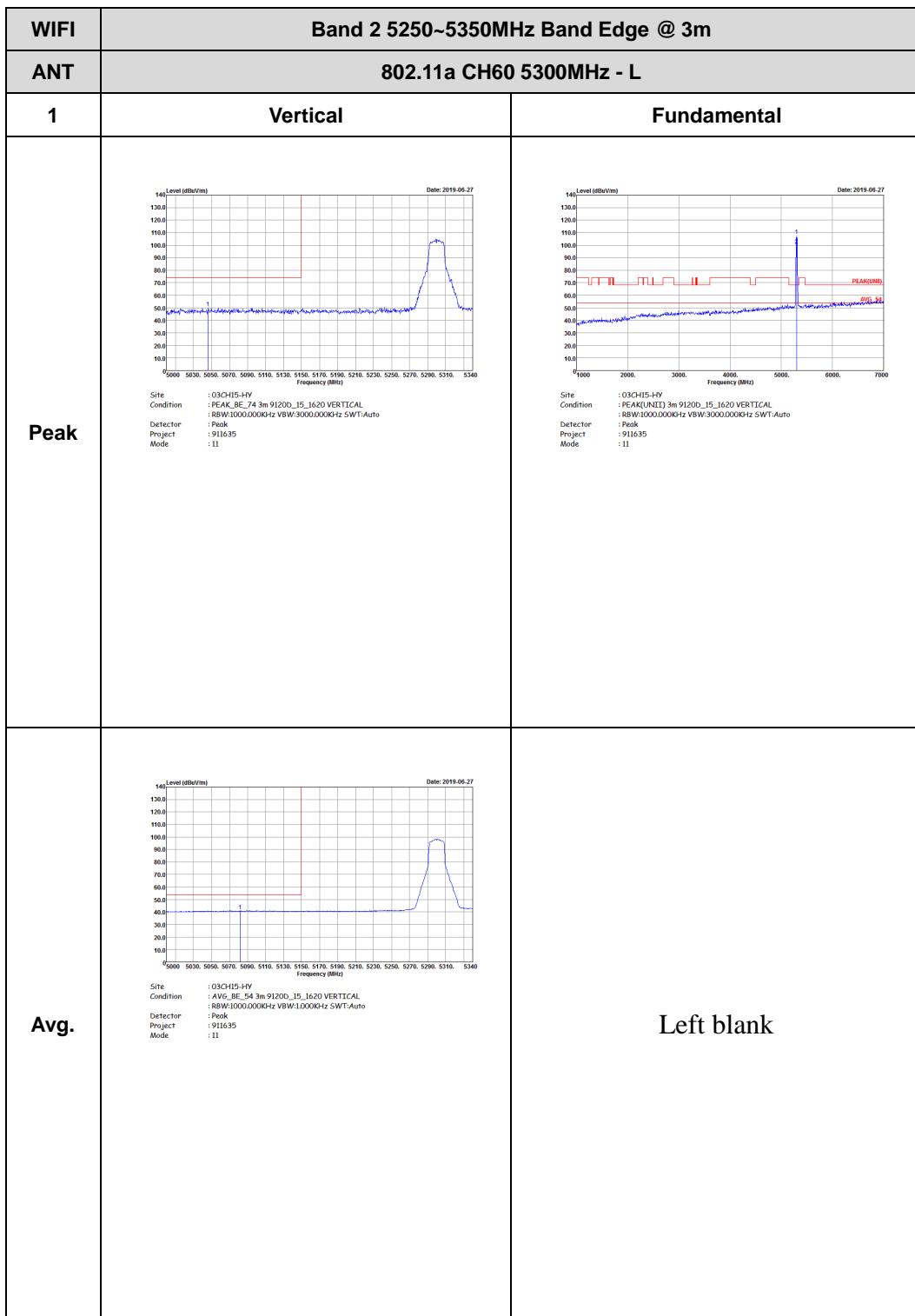


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH52 5260MHz - R	
1	Vertical	Fundamental
Peak	<p>Level (dBm/V/m)</p> <p>Date: 2019-06-27</p> <p>Frequency (MHz)</p> <p>Site : 03CH15-HV Condition : PCMK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : IO</p>	Left blank
Avg.	<p>Level (dBm/V/m)</p> <p>Date: 2019-06-27</p> <p>Frequency (MHz)</p> <p>Site : 03CH15-HV Condition : AVG_BE_54 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : IO</p>	Left blank





WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Horizontal	Fundamental
Peak	 Date: 2019-06-27 Site : 03CH15-HV Condition : PCMK_BE_74 3m 91200_I5_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : II The plot shows a sharp peak labeled "PEAK_BE_74" at approximately 5290 MHz, reaching about 115 dBm/V/m.	Left blank
Avg.	 Date: 2019-06-27 Site : AVG_BE_54 3m 91200_I5_1620 HORIZONTAL Condition : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 911635 Mode : II The plot shows a broader peak labeled "AVG_BE_54" at approximately 5290 MHz, reaching about 100 dBm/V/m.	Left blank





WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH60 5300MHz - R	
1	Vertical	Fundamental
Peak	<p>Level (dBmV/m)</p> <p>Date: 2019-06-27</p> <p>Frequency (MHz)</p> <p>Site : 03CH15-HY Condition : PCMK_BE_74 3m 91200_I5_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : II</p>	Left blank
Avg.	<p>Level (dBmV/m)</p> <p>Date: 2019-06-27</p> <p>Frequency (MHz)</p> <p>Site : AVG_BE_54 3m 91200_I5_1620 VERTICAL Condition : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 911635 Mode : II</p>	Left blank



WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAK_BE_74 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 12 Site : 03CH15-HY Condition : PCAK(UNI) 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 12	
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 12	Left blank

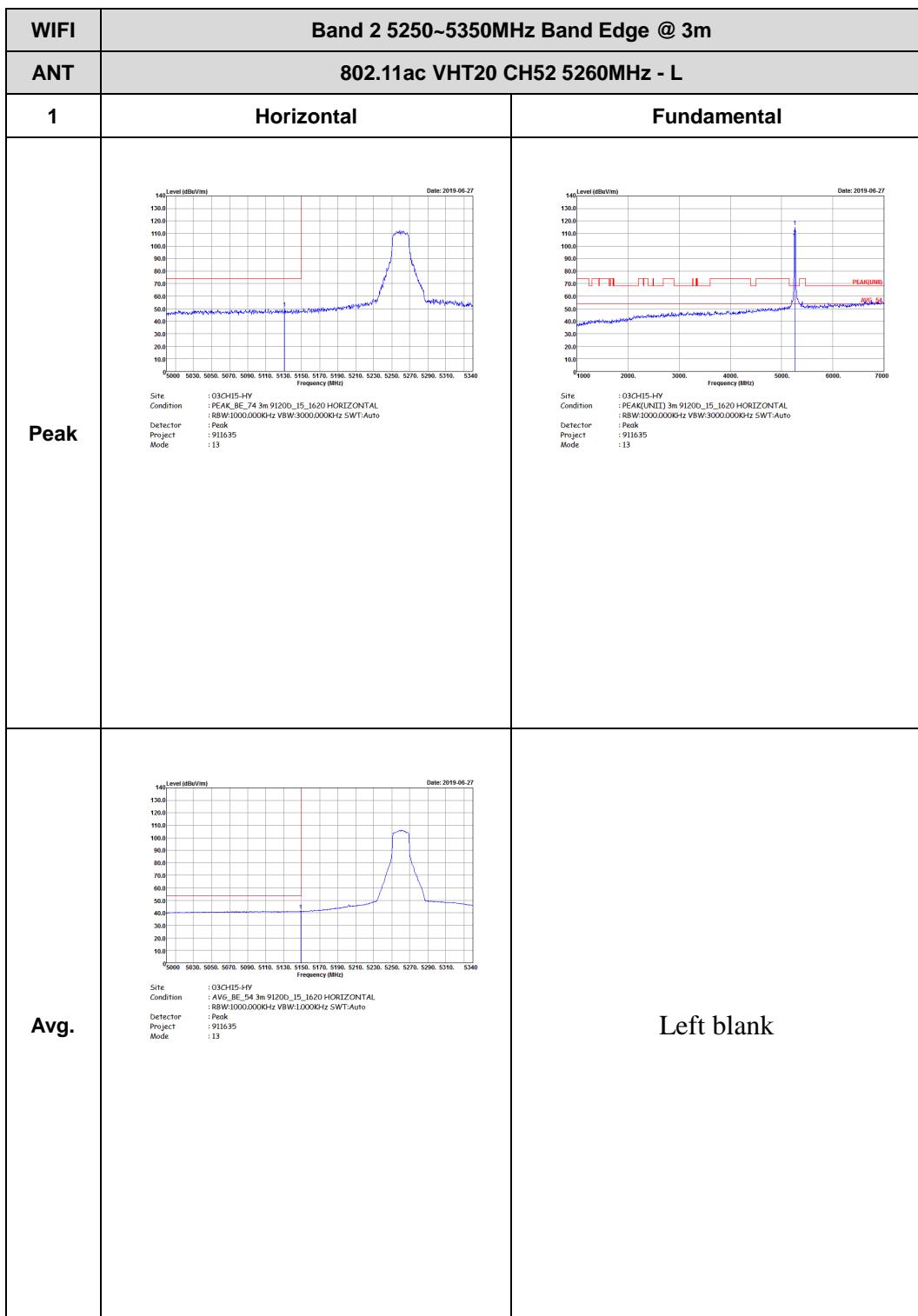


WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11a CH64 5320MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH15-HY Condition : PCAKC_BE_74 3m 91200_15_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 12	 Site : 03CH15-HY Condition : PCAKC_BE_74 3m 91200_15_1620 VERTICAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 12
Avg.	 Site : 03CH15-HY Condition : AVG_BE_54 3m 91200_15_1620 VERTICAL Detector : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Project : 911635 Mode : 12	Left blank



Band 2 5250~5350MHz

WIFI 802.11ac VHT20 (Band Edge @ 3m)





WIFI	Band 2 5250~5350MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH52 5260MHz - R	
1	Horizontal	Fundamental
Peak	 Date: 2019-06-27 Site : 03CH15-HV Condition : PCMK_BE_74 3m 91200_I5_1620 HORIZONTAL Detector : R8W:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 911635 Mode : 13	Left blank
Avg.	 Date: 2019-06-27 Site : AVG_BE_54 3m 91200_I5_1620 HORIZONTAL Condition : R8W:1000.000KHz VBW:1.000KHz SWT:Auto Detector : Peak Project : 911635 Mode : 13	Left blank

