FCC RADIO TEST REPORT

FCC ID	:	**UZ7ET56ET**
Equipment	:	**Tablet**
Brand Name	:	**Zebra**
Model Name	:	**ET56ET**
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 Jul. 31, 2020 and testing was started from Aug. 12, 2020 and completed on Sep. 14, 2020. 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 test results in this variant 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.

Louis Wu

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
FR072904-01F	01	Initial issue of report	Sep. 17, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
-	15.403 (i)	6dB & 26dB Bandwidth	Not Required	-
-	2.1049	99% Occupied Bandwidth	Not Required	-
3.1	15.407 (a)	Maximum Conducted Output Power	Pass	-
-	15.407 (a)	Power Spectral Density	Not Required	-
3.2	15.407(b)	Unwanted Emissions	Pass	Under limit 3.42 dB at 32.910 MHz
-	15.207	AC Conducted Emission	Not Required	-
-	15.407 (c)	Automatically Discontinue Transmission	Not Required	-
3.3	15.203 & 15.407 (a)	Antenna Requirement	Pass	-

Note:

1. Not required means after assessing, test items are not necessary to carry out.

2. This is a variant report which can be referred Product Equality Declaration. All the test cases were performed on original report which can be referred to Sporton Report Number FR072903-01F as appendix E. Based on the original report, the test cases were verified.

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:
W8 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: Cindy Liu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Tablet
Brand Name	Zebra
Model Name	ET56ET
FCC ID	UZ7ET56ET
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	DV1
SW Version	Android 10
FW Version	10-13-05.00-QG-U00-PRD-HEL-04 (For TX) 10-11-23.00-QG-U00-PLT-HEL-04 (For TXBF only)
MFD	15JUL20
EUT Stage	Identical Prototype

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

Specification of Accessories				
Spare Standard Battery 36.75Wh	**Brand Name**	Zebra	**Part Number**	BT-000394

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 for Cradle	**Brand Name**	Zebra	**Part Number**	PWRBGA12V50W0WW
DC Cable for Cradle	**Brand Name**	Zebra	**Part Number**	CBL-DC-388A1-01
USB Cable	**Brand Name**	Zebra	**Part Number**	CBL-TC2X-USBC-01
Adapter	**Brand Name**	Zebra	**Part Number**	PWR-WUA5V12W0US

1.2 Product Specification of Equipment Under Test

<table>
<tr><th colspan="2">Product Specification subjective to this standard</th></tr>
<tr><td>Tx/Rx Channel Frequency Range</td><td>5745 MHz ~ 5825 MHz</td></tr>
<tr><td>Maximum Output Power to Antenna
<CDD Modes></td><td><Ant. 1>
802.11a : 20.10 dBm / 0.1023 W
802.11n HT20 : 20.10 dBm / 0.1023 W
802.11n HT40 : 19.20 dBm / 0.0832 W
802.11ac VHT20: 20.00 dBm / 0.1000 W
802.11ac VHT40: 19.10 dBm / 0.0813 W
802.11ac VHT80: 19.50 dBm / 0.0891 W
<Ant. 2>
802.11a : 20.30 dBm / 0.1072 W
802.11n HT20 : 20.50 dBm / 0.1122 W
802.11n HT40 : 19.60 dBm / 0.0912 W
802.11ac VHT20: 20.40 dBm / 0.1096 W
802.11ac VHT40: 19.50 dBm / 0.0891 W
802.11ac VHT80: 20.00 dBm / 0.1000 W
MIMO <Ant. 1 + 2>
802.11a : 23.46 dBm / 0.2218 W
802.11n HT20 : 23.56 dBm / 0.2270 W
802.11n HT40 : 22.36 dBm / 0.1722 W
802.11ac VHT20: 23.46 dBm / 0.2218 W
802.11ac VHT40: 22.26 dBm / 0.1683 W
802.11ac VHT80: 22.51 dBm / 0.1782 W</td></tr>
<tr><td>Maximum Output Power
<TXBF Modes></td><td>MIMO <Ant. 1 + 2>
802.11ac VHT20: 22.47 dBm / 0.1766 W
802.11ac VHT40: 21.36 dBm / 0.1368 W
802.11ac VHT80: 21.81 dBm / 0.1517 W</td></tr>
<tr><td>Antenna Type / Gain</td><td>Ant. 1: Chip Antenna with gain 1.84 dBi
Ant. 2: Chip Antenna with gain 2.35 dBi</td></tr>
<tr><td>Type of Modulation</td><td>802.11a/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
802.11ac : OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM)</td></tr>
<tr><td>Antenna Function Description</td><td>
<table>
<tr><th></th><th>Ant. 1</th><th>Ant. 2</th></tr>
<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>802.11ac TXBF</td><td>V</td><td>V</td></tr>
</table>
</td></tr>
</table>

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. EMC & Wireless Communications Laboratory
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

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
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.**
	03CH13-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. The TAF code is not including all the FCC KDB listed without accreditation.
3. 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

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: 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 (CDD Mode: X plane for Ant. 1 and MIMO Ant. 1 + 2, Z plane for Ant. 2; TXBF Mode: Z plane) were recorded in this report.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4 (U-NII-3)	149	5745	157	5785
	151*	5755	159*	5795
	153	5765	161	5805
	155#	5775	165	5825

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.

CDD Mode

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

TXBF Mode

Modulation	Data Rate
802.11ac VHT20	MCS0
802.11ac VHT40	MCS0
802.11ac VHT80	MCS6

<CDD Mode>

Ch. #		Band IV：5725-5850 MHz			
		802.11a	802.11n HT20	802.11n HT40	802.11ac VHT80
L	Low	149	-	151	-
M	Middle	-	-	-	155
H	High	165	165	159	-

<TXBF Mode>

Ch. #		Band IV：5725-5850 MHz		
		802.11ac VHT20	802.11ac VHT40	802.11ac VHT80
L	Low	-	-	-
M	Middle	157	-	155
H	High	-	159	-

Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

<CDD Mode>

<Ant. 1>

802.11a RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	Data Rate (bps)
		6M
CH 149	5745	**20.10**
CH 157	5785	19.90
CH 165	5825	19.80

802.11n HT20 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 149	5745	**20.10**
CH 157	5785	19.80
CH 165	5825	19.70

802.11n HT40 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 151	5755	**19.20**
CH 159	5795	19.10

802.11ac VHT20 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 149	5745	**20.00**
CH 157	5785	19.70
CH 165	5825	19.60

802.11ac VHT40 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 151	5755	**19.10**
CH 159	5795	19.00

802.11ac VHT80 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 155	5775	**19.50**

<Ant. 2>

802.11a RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	Data Rate (bps)
		6M
CH 149	5745	**20.30**
CH 157	5785	20.10
CH 165	5825	20.20

802.11n HT20 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 149	5745	**20.50**
CH 157	5785	20.40
CH 165	5825	20.30

802.11n HT40 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 151	5755	**19.60**
CH 159	5795	19.50

802.11ac VHT20 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 149	5745	**20.40**
CH 157	5785	20.30
CH 165	5825	20.20

802.11ac VHT40 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 151	5755	**19.50**
CH 159	5795	19.40

802.11ac VHT80 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 155	5775	**20.00**

MIMO <Ant. 1+2>

802.11a RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	Data Rate (bps)
		6M
CH 149	5745	23.21
CH 157	5785	**23.46**
CH 165	5825	23.26

802.11n HT20 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 149	5745	**23.56**
CH 157	5785	23.41
CH 165	5825	23.26

802.11n HT40 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 151	5755	**22.36**
CH 159	5795	22.26

802.11ac VHT20 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 149	5745	**23.46**
CH 157	5785	23.31
CH 165	5825	23.16

802.11ac VHT40 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 151	5755	**22.26**
CH 159	5795	22.16

802.11ac VHT80 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 155	5775	**22.51**

<TXBF Mode>

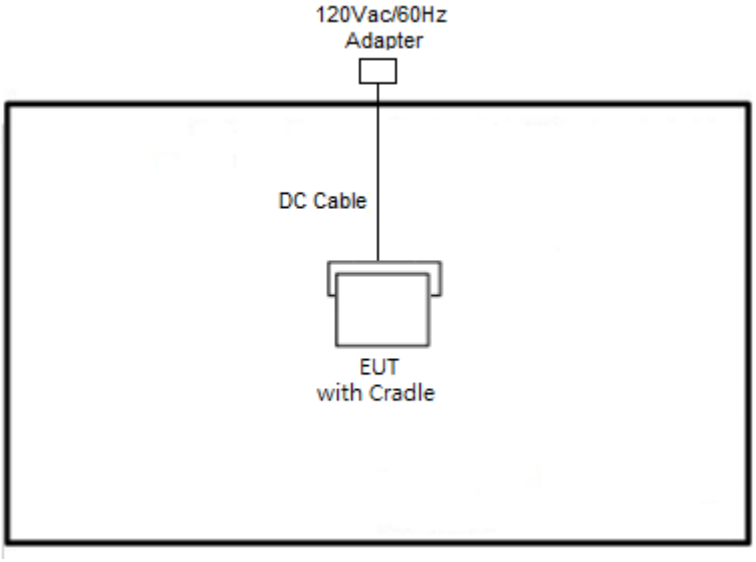
802.11ac VHT20 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 149	5745	21.96
CH 157	5785	22.06
CH 165	5825	**22.47**

802.11ac VHT40 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 151	5755	21.16
CH 159	5795	**21.36**

802.11ac VHT80 RF Output Power (dBm)		
Power vs. Channel		
Channel	Frequency (MHz)	MCS Index
		MCS0
CH 155	5775	**21.81**

2.3 Connection Diagram of Test System

<WLAN TX Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	ACER	N18Q13	N/A	N/A	N/A
2.	Notebook	Lenovo	E335	N/A	N/A	N/A
3.	USB Cable	SONY	AI-0612	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “QRCT V3.0.303.0” 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 “CMD” software tool was used to enable the EUT to transmit signals continuously.

3 Test Result

3.1 Maximum Conducted Output Power Measurement

3.1.1 Limit of Maximum Conducted Output Power

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W.

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.

3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

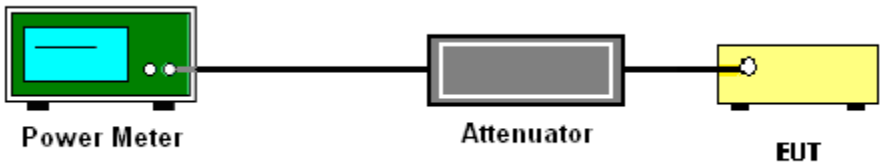
3.1.3 Test Procedures

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.

3.1.4 Test Setup



3.1.5 Test Result of Maximum Conducted Output Power

Test Engineer :	Jacob Yu	Temperature :	23.5~24.5℃
		Relative Humidity :	53~54.5%

<CDD Mode>

Band IV												
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	149	5745	20.10	20.30	-	30.00	30.00	1.84	2.35	Pass
11a	6Mbps	1	157	5785	19.90	20.10		30.00	30.00	1.84	2.35	Pass
11a	6Mbps	1	165	5825	19.80	20.20		30.00	30.00	1.84	2.35	Pass
HT20	MCS0	1	149	5745	20.10	20.50		30.00	30.00	1.84	2.35	Pass
HT20	MCS0	1	157	5785	19.80	20.40		30.00	30.00	1.84	2.35	Pass
HT20	MCS0	1	165	5825	19.70	20.30		30.00	30.00	1.84	2.35	Pass
HT40	MCS0	1	151	5755	19.20	19.60		30.00	30.00	1.84	2.35	Pass
HT40	MCS0	1	159	5795	19.10	19.50		30.00	30.00	1.84	2.35	Pass
VHT20	MCS0	1	149	5745	20.00	20.40		30.00	30.00	1.84	2.35	Pass
VHT20	MCS0	1	157	5785	19.70	20.30		30.00	30.00	1.84	2.35	Pass
VHT20	MCS0	1	165	5825	19.60	20.20		30.00	30.00	1.84	2.35	Pass
VHT40	MCS0	1	151	5755	19.10	19.50		30.00	30.00	1.84	2.35	Pass
VHT40	MCS0	1	159	5795	19.00	19.40		30.00	30.00	1.84	2.35	Pass
VHT80	MCS0	1	155	5775	19.50	20.00		30.00	30.00	1.84	2.35	Pass
11a	6Mbps	2	149	5745	20.10	20.30	23.21	30.00		2.35		Pass
11a	6Mbps	2	157	5785	20.40	20.50	23.46	30.00		2.35		Pass
11a	6Mbps	2	165	5825	20.20	20.30	23.26	30.00		2.35		Pass
HT20	MCS0	2	149	5745	20.40	20.70	**23.56**	30.00		2.35		Pass
HT20	MCS0	2	157	5785	20.30	20.50	23.41	30.00		2.35		Pass
HT20	MCS0	2	165	5825	20.20	20.30	23.26	30.00		2.35		Pass
HT40	MCS0	2	151	5755	19.30	19.40	22.36	30.00		2.35		Pass
HT40	MCS0	2	159	5795	19.20	19.30	22.26	30.00		2.35		Pass
VHT20	MCS0	2	149	5745	20.30	20.60	23.46	30.00		2.35		Pass
VHT20	MCS0	2	157	5785	20.20	20.40	23.31	30.00		2.35		Pass
VHT20	MCS0	2	165	5825	20.10	20.20	23.16	30.00		2.35		Pass
VHT40	MCS0	2	151	5755	19.20	19.30	22.26	30.00		2.35		Pass
VHT40	MCS0	2	159	5795	19.10	19.20	22.16	30.00		2.35		Pass
VHT80	MCS0	2	155	5775	19.40	19.60	22.51	30.00		2.35		Pass

Test Engineer :	Howard Lin	Temperature :	21~25℃
		Relative Humidity :	51~54%

<TXBF Mode>

Band IV												
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	149	5745	18.80	19.10	21.96	30.00		5.11		Pass
VHT20	MCS0	2	157	5785	19.00	19.10	22.06	30.00		5.11		Pass
VHT20	MCS0	2	165	5825	19.10	19.80	**22.47**	30.00		5.11		Pass
VHT40	MCS0	2	151	5755	18.10	18.20	21.16	30.00		5.11		Pass
VHT40	MCS0	2	159	5795	18.30	18.40	21.36	30.00		5.11		Pass
VHT80	MCS6	2	155	5775	19.00	18.60	21.81	30.00		5.11		Pass

3.2 Unwanted Emissions Measurement

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

3.2.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(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.

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

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

(3) KDB789033 D02 v02r01 G)2)c)

(i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit 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.

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 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 ≥ 3 MHz
- Detector = Peak
- Sweep time = auto
- Trace mode = max hold

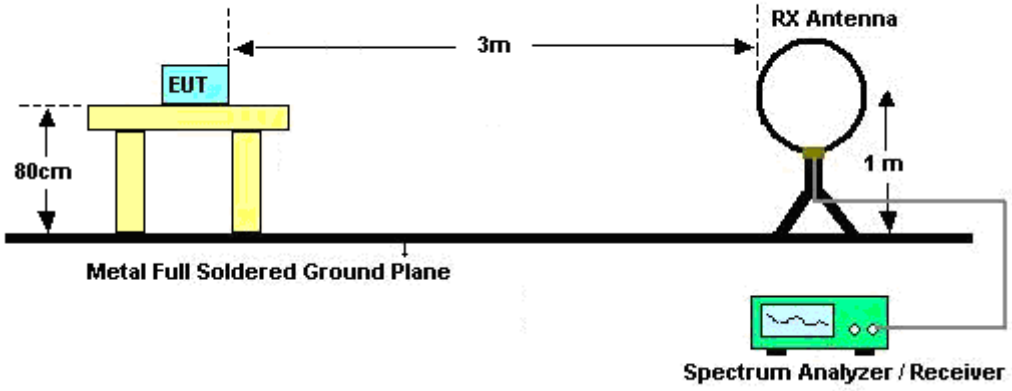
(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

- RBW = 1 MHz
- VBW = 10 Hz, when duty cycle is no less than 98 percent.
- VBW ≥ 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.

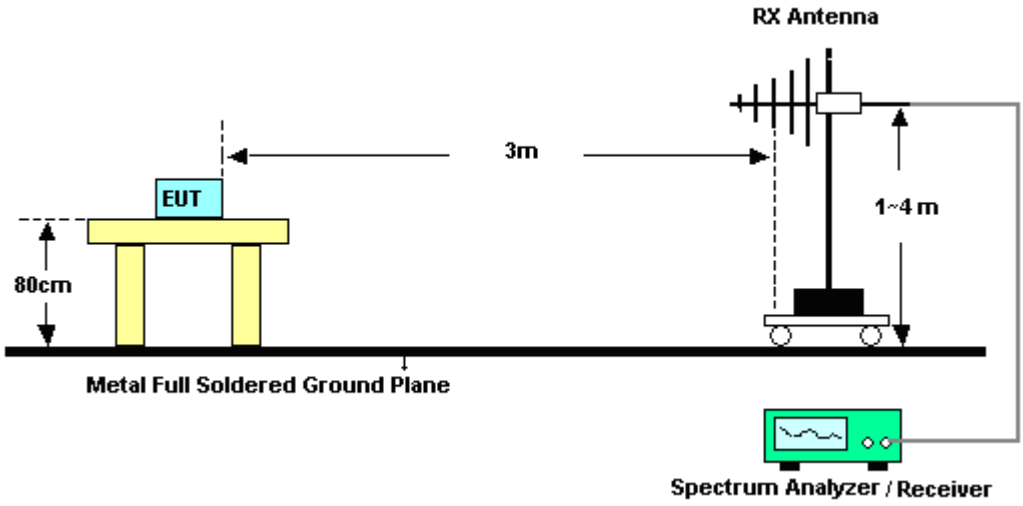
3.2.4 Test Setup

For radiated emissions below 30MHz

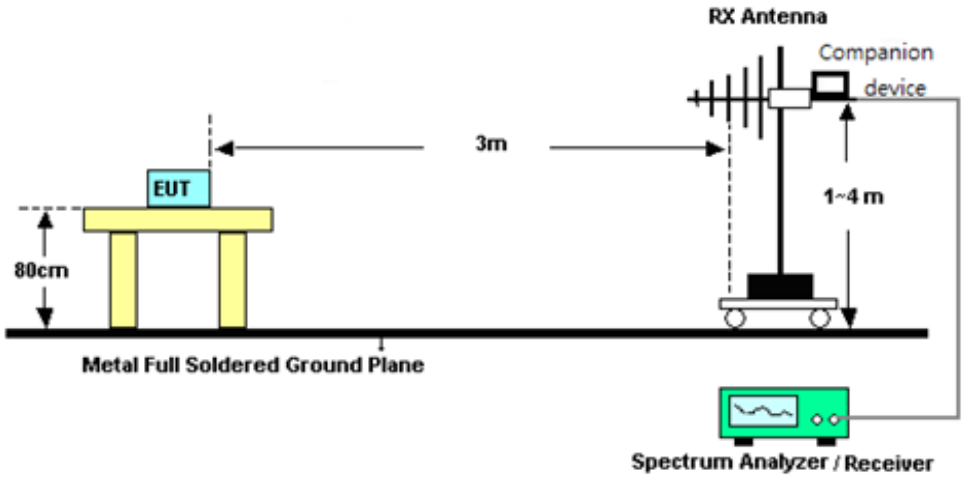


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

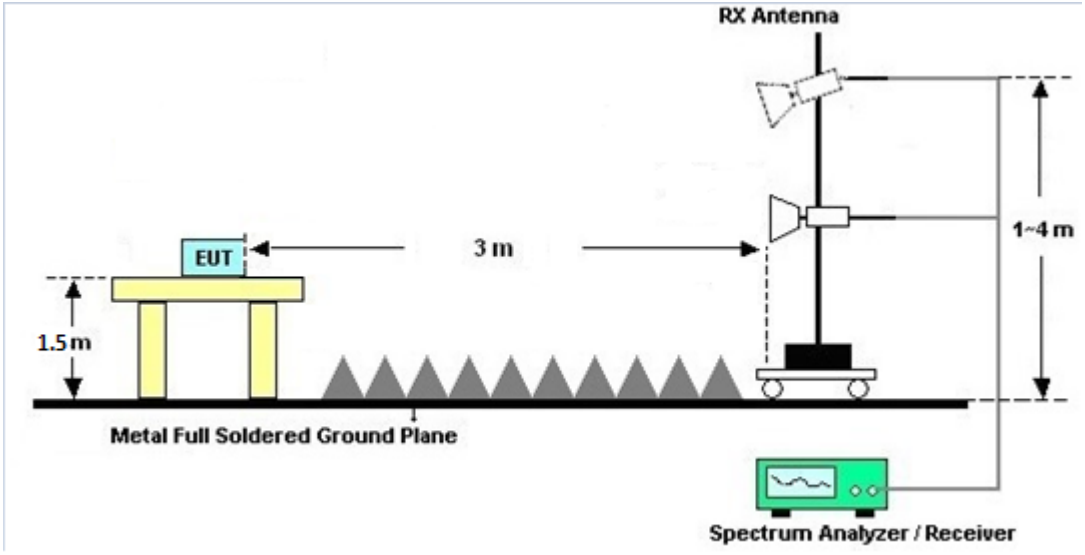


<TXBF Modes>

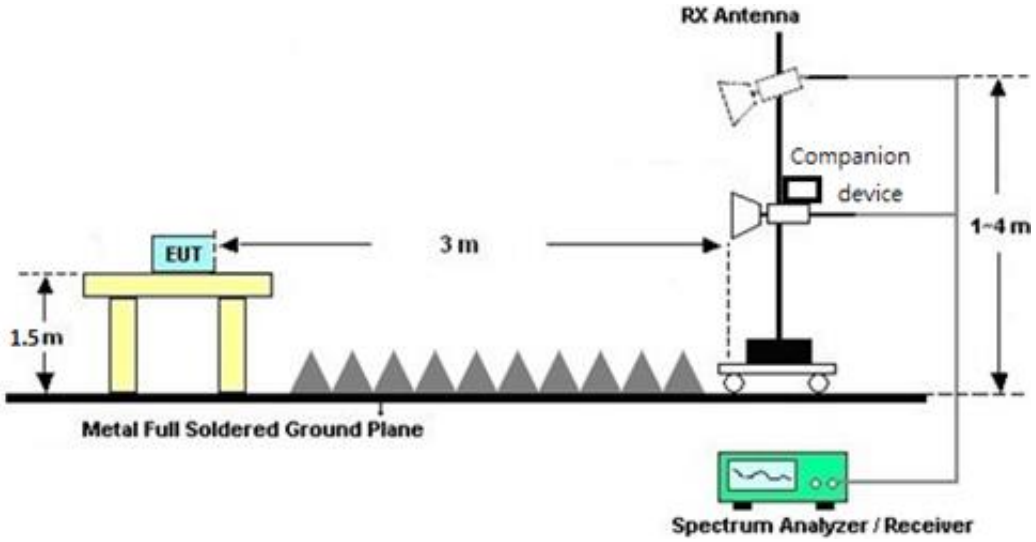


For radiated emissions from 1GHz to 18GHz

<CDD Mode>

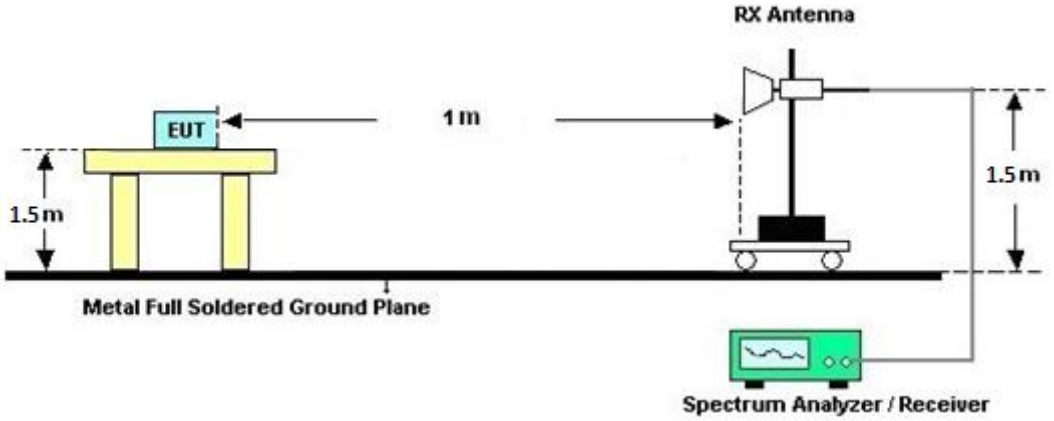


<TXBF Mode>

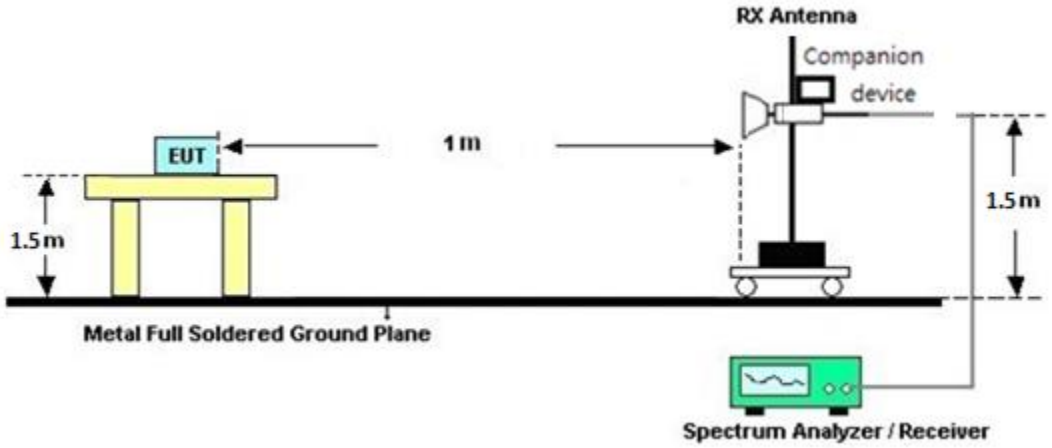


For radiated emissions above 18GHz

<CDD Mode>



<TXBF Mode>



3.2.5 Test Results of Radiated Emissions (9 kHz ~ 30 MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line 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.

3.2.6 Test Result of Radiated Band Edges

Please refer to Appendix A and B.

3.2.7 Duty Cycle

Please refer to Appendix C.

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

Please refer to Appendix A and B.

3.3 Antenna Requirements

3.3.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.3.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.3.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jan. 09, 2020	Aug. 30, 2020~ Sep. 04, 2020	Jan. 08, 2021	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	Jul. 15, 2020	Aug. 30, 2020~ Sep. 04, 2020	Jul. 14, 2021	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N1D01N-06	40103&07	30MHz to 1GHz	Apr. 29, 2020	Aug. 30, 2020~ Sep. 04, 2020	Apr. 28, 2021	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Dec. 10, 2019	Aug. 30, 2020~ Sep. 04, 2020	Dec. 09, 2020	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Oct. 28, 2019	Aug. 30, 2020~ Sep. 04, 2020	Oct. 27, 2020	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1590074	1GHz~18GHz	May 19, 2020	Aug. 30, 2020~ Sep. 04, 2020	May 18, 2021	Radiation (03CH13-HY)
Amplifier	Sonoma-Instrument	310 N	187282	9KHz~1GHz	Dec. 17, 2019	Aug. 30, 2020~ Sep. 04, 2020	Dec. 16, 2020	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 13, 2019	Aug. 30, 2020~ Sep. 04, 2020	Dec. 12, 2020	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303B	TP150115	N/A	Nov. 08, 2019	Aug. 30, 2020~ Sep. 04, 2020	Nov. 07, 2020	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz~30MHz	Mar. 12, 2020	Aug. 30, 2020~ Sep. 04, 2020	Mar. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Feb. 12, 2020	Aug. 30, 2020~ Sep. 04, 2020	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30M-18G	Feb. 12, 2020	Aug. 30, 2020~ Sep. 04, 2020	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M-18G	Feb. 12, 2020	Aug. 30, 2020~ Sep. 04, 2020	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30M~40GHz	Mar. 12, 2020	Aug. 30, 2020~ Sep. 04, 2020	Mar. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30M~40GHz	Mar. 12, 2020	Aug. 30, 2020~ Sep. 04, 2020	Mar. 11, 2021	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz~44GHz	Feb. 10, 2020	Aug. 30, 2020~ Sep. 04, 2020	Feb. 09, 2021	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Aug. 30, 2020~ Sep. 04, 2020	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Aug. 30, 2020~ Sep. 04, 2020	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Aug. 30, 2020~ Sep. 04, 2020	N/A	Radiation (03CH13-HY)
Software	AUDIX	E3 6.2009-8-24c	RK-001124	N/A	N/A	Aug. 30, 2020~ Sep. 04, 2020	N/A	Radiation (03CH13-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY54130085	20Hz ~ 8.4GHz	Nov. 01, 2019	Aug. 30, 2020~ Sep. 04, 2020	Oct. 31, 2020	Radiation (03CH13-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN6	6.75GHz High Pass Filter	Mar. 12, 2020	Aug. 30, 2020~ Sep. 04, 2020	Mar. 11, 2021	Radiation (03CH13-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN12	1.53GHz Low Pass Filter	Sep. 16, 2019	Aug. 30, 2020~ Sep. 04, 2020	Sep. 15, 2020	Radiation (03CH13-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
<CDD Mode>								
Hygrometer	Testo	HTC-1	2	N/A	Mar. 02, 2020	Aug. 12, 2020~ Sep. 14, 2020	Mar. 01, 2021	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015S NO36	10MHz~6GHz	Jan. 22, 2020	Aug. 12, 2020~ Sep. 14, 2020	Jan. 21, 2021	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz-30GHz	Nov. 26, 2019	Aug. 12, 2020~ Sep. 14, 2020	Nov. 25, 2020	Conducted (TH05-HY)
Switch Control Manframe	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2020	Aug. 12, 2020~ Sep. 14, 2020	Mar. 16, 2021	Conducted (TH05-HY)
<TXBF Mode>								
Hygrometer	Testo	HTC-1	2	N/A	Mar. 02, 2020	Aug. 14, 2020~ Sep.13, 2020	Mar. 01, 2021	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	17I00015S NO36	10MHz~6GHz	Jan. 22, 2020	Aug. 14, 2020~ Sep.13, 2020	Jan. 21, 2021	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP30	101067	9kHz-30GHz	Nov. 26, 2019	Aug. 14, 2020~ Sep.13, 2020	Nov. 25, 2020	Conducted (TH05-HY)
Switch Control Manframe	EM Electronics	EMSW18SE	SW200302	N/A	Mar. 17, 2020	Aug. 14, 2020~ Sep.13, 2020	Mar. 16, 2021	Conducted (TH05-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.4**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**5.0**

Appendix A. Radiated Spurious Emission

Test Engineer :	Daniel Lee, Jacky Hong and Wilson Wu	Temperature :	21.5~23.5°C
		Relative Humidity :	49.5~55.5%

<CDD Mode>

Band 4 - 5725~5850MHz

WIFI 802.11a (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		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5637.4	52.29	-15.91	68.2	40.93	31.83	6.34	26.81	101	231	P	H
		5684.8	52.23	-41.76	93.99	40.74	31.94	6.4	26.85	101	231	P	H
		5716.8	53.21	-56.7	109.91	41.62	32.03	6.44	26.88	101	231	P	H
		5724.4	56.29	-64.54	120.83	44.68	32.05	6.45	26.89	101	231	P	H
	*	5745	111.07	-	-	99.42	32.09	6.47	26.91	101	231	P	H
	*	5745	103.67	-	-	92.02	32.09	6.47	26.91	101	231	A	H
													H
													H
		5622.2	51.34	-16.86	68.2	39.95	31.86	6.33	26.8	239	19	P	V
		5691	52.39	-46.17	98.56	40.88	31.96	6.41	26.86	239	19	P	V
		5716.2	52.69	-57.05	109.74	41.1	32.03	6.44	26.88	239	19	P	V
		5723.8	55.43	-64.03	119.46	43.82	32.05	6.45	26.89	239	19	P	V
	*	5745	107.61	-	-	95.96	32.09	6.47	26.91	239	19	P	V
	*	5745	100.21	-	-	88.56	32.09	6.47	26.91	239	19	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	48.23	-25.77	74	53.53	40.07	10.43	55.8	100	0	P	H
		17235	48.52	-19.68	68.2	51.73	40.01	13.09	56.31	100	0	P	H
													H
													H
		11490	47.42	-26.58	74	52.72	40.07	10.43	55.8	100	0	P	V
		17235	48	-20.2	68.2	51.21	40.01	13.09	56.31	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5633.2	51.87	-16.33	68.2	40.51	31.83	6.34	26.81	100	231	P	H
		5694.2	51.53	-49.39	100.92	40	31.98	6.41	26.86	100	231	P	H
		5703	52.55	-53.49	106.04	40.99	32.01	6.42	26.87	100	231	P	H
		5722.6	52.55	-64.18	116.73	40.94	32.05	6.45	26.89	100	231	P	H
	*	5795	107.47	-	-	95.79	32.1	6.53	26.95	100	231	P	H
	*	5795	99.85	-	-	88.17	32.1	6.53	26.95	100	231	A	H
		5854.4	56.18	-55.99	112.17	44.32	32.32	6.54	27	100	231	P	H
		5862	53.54	-55.3	108.84	41.66	32.35	6.54	27.01	100	231	P	H
		5876	52.86	-51.6	104.46	40.94	32.4	6.54	27.02	100	231	P	H
		5930	52.39	-15.81	68.2	40.3	32.62	6.54	27.07	100	231	P	H
802.11n													H
HT40													H
CH 159		5604	51.57	-16.63	68.2	40.16	31.89	6.3	26.78	265	20	P	V
5795MHz		5684.4	51.79	-41.9	93.69	40.3	31.94	6.4	26.85	265	20	P	V
		5702.4	51.98	-53.89	105.87	40.43	32	6.42	26.87	265	20	P	V
		5724.4	52.09	-68.74	120.83	40.48	32.05	6.45	26.89	265	20	P	V
	*	5795	103.95	-	-	92.27	32.1	6.53	26.95	265	20	P	V
	*	5795	96.29	-	-	84.61	32.1	6.53	26.95	265	20	A	V
		5854	52.25	-60.83	113.08	40.39	32.32	6.54	27	265	20	P	V
		5855.6	52.25	-58.38	110.63	40.39	32.32	6.54	27	265	20	P	V
		5921.2	52.96	-18.04	71	40.9	32.58	6.54	27.06	265	20	P	V
		5930.6	50.94	-17.26	68.2	38.85	32.62	6.54	27.07	265	20	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11590	46.78	-27.22	74	52.31	39.83	10.49	55.85	100	0	P	H
		17385	48.91	-19.29	68.2	51.73	40.62	13.18	56.62	100	0	P	H
802.11n													H
HT40													H
CH 159		11590	46.36	-27.64	74	51.89	39.83	10.49	55.85	100	0	P	V
5795MHz		17385	47.7	-20.5	68.2	50.52	40.62	13.18	56.62	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5636.2	52.49	-15.71	68.2	41.13	31.83	6.34	26.81	100	231	P	H
		5695.4	55.87	-45.94	101.81	44.34	31.98	6.41	26.86	100	231	P	H
		5712.4	58.14	-50.53	108.67	46.57	32.02	6.43	26.88	100	231	P	H
		5724.6	58.19	-63.1	121.29	46.58	32.05	6.45	26.89	100	231	P	H
	*	5775	104.9	-	-	93.22	32.1	6.51	26.93	100	231	P	H
	*	5775	97.77	-	-	86.09	32.1	6.51	26.93	100	231	A	H
		5853.6	62.85	-51.14	113.99	51	32.31	6.54	27	100	231	P	H
		5857.4	60.63	-49.5	110.13	48.76	32.33	6.54	27	100	231	P	H
		5875.4	56.85	-48.05	104.9	44.93	32.4	6.54	27.02	100	231	P	H
		5939.8	52.3	-15.9	68.2	40.18	32.66	6.54	27.08	100	231	P	H
802.11ac													H
VHT80													H
CH 155		5632	52.3	-15.9	68.2	40.93	31.84	6.34	26.81	253	19	P	V
5775MHz		5692.2	53.07	-46.38	99.45	41.55	31.97	6.41	26.86	253	19	P	V
		5716.4	56.57	-53.22	109.79	44.98	32.03	6.44	26.88	253	19	P	V
		5721.4	56.14	-57.85	113.99	44.53	32.04	6.45	26.88	253	19	P	V
	*	5775	101.6	-	-	89.92	32.1	6.51	26.93	253	19	P	V
	*	5775	94.23	-	-	82.55	32.1	6.51	26.93	253	19	A	V
		5850.2	57.4	-64.34	121.74	45.56	32.3	6.54	27	253	19	P	V
		5858.2	56.53	-53.37	109.9	44.67	32.33	6.54	27.01	253	19	P	V
		5875.6	53.3	-51.45	104.75	41.38	32.4	6.54	27.02	253	19	P	V
		5947.4	51.43	-16.77	68.2	39.28	32.69	6.54	27.08	253	19	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11550	47.87	-26.13	74	53.27	39.95	10.47	55.82	100	0	P	H
		17325	47.52	-20.68	68.2	50.54	40.33	13.14	56.49	100	0	P	H
802.11ac													H
VHT80													H
CH 155		11550	47.31	-26.69	74	52.71	39.95	10.47	55.82	100	0	P	V
5775MHz		17325	48	-20.2	68.2	51.02	40.33	13.14	56.49	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

5GHz WIFI 802.11ac VHT80 (LF)

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)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
5GHz 802.11ac VHT80 LF		126.03	25.89	-17.61	43.5	39.39	17.67	0.99	32.16	-	-	P	H
		296.75	24.5	-21.5	46	35.92	19.11	1.47	32	-	-	P	H
		473.29	28	-18	46	34.89	23.52	1.87	32.28	-	-	P	H
		746.83	30.26	-15.74	46	31.66	28.03	2.35	31.78	-	-	P	H
		892.33	31.32	-14.68	46	31.57	28.75	2.65	31.65	-	-	P	H
		949.56	32.15	-13.85	46	29.97	30.5	2.69	31.01	100	0	P	H
													H
		32.91	36.53	-3.47	40	45.02	23.25	0.5	32.24	100	0	P	V
		91.11	25.76	-17.74	43.5	42.08	15.04	0.79	32.15	-	-	P	V
		124.09	24.62	-18.88	43.5	38.16	17.64	0.98	32.16	-	-	P	V
		729.37	29.77	-16.23	46	31.59	27.57	2.33	31.72	-	-	P	V
		832.19	29.92	-16.08	46	30.83	28.47	2.47	31.85	-	-	P	V
		934.04	31.33	-14.67	46	30.25	29.59	2.69	31.2	-	-	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	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 165 5825MHz	*	5825	107.7	-	-	95.94	32.2	6.54	26.98	100	154	P	H
	*	5825	100.37	-	-	88.61	32.2	6.54	26.98	100	154	A	H
		5854.6	52.93	-58.78	111.71	41.07	32.32	6.54	27	100	154	P	H
		5857.4	53.86	-56.27	110.13	41.99	32.33	6.54	27	100	154	P	H
		5877.6	53.22	-50.05	103.27	41.29	32.41	6.54	27.02	100	154	P	H
		5934.8	51.08	-17.12	68.2	38.97	32.64	6.54	27.07	100	154	P	H
													H
													H
	*	5825	106.76	-	-	95	32.2	6.54	26.98	380	101	P	V
	*	5825	99.69	-	-	87.93	32.2	6.54	26.98	380	101	A	V
		5852.2	51.95	-65.23	117.18	40.1	32.31	6.54	27	380	101	P	V
		5865.2	52.64	-55.3	107.94	40.75	32.36	6.54	27.01	380	101	P	V
		5887.8	52.78	-42.92	95.7	40.82	32.45	6.54	27.03	380	101	P	V
		5934.2	53.44	-14.76	68.2	41.33	32.64	6.54	27.07	380	101	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	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 165 5825MHz		11650	46.92	-27.08	74	52.72	39.55	10.53	55.88	100	0	P	H
		17475	49.09	-19.11	68.2	51.74	40.92	13.23	56.8	100	0	P	H
													H
													H
		11650	46.69	-27.31	74	52.49	39.55	10.53	55.88	100	0	P	V
		17475	49.84	-18.36	68.2	52.49	40.92	13.23	56.8	100	0	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5635.8	52.95	-15.25	68.2	41.59	31.83	6.34	26.81	100	205	P	H
		5695.6	54.19	-47.77	101.96	42.66	31.98	6.41	26.86	100	205	P	H
		5716.2	61.2	-48.54	109.74	49.61	32.03	6.44	26.88	100	205	P	H
		5721.8	62.51	-52.39	114.9	50.91	32.04	6.45	26.89	100	205	P	H
	*	5755	106.79	-	-	95.11	32.1	6.49	26.91	100	205	P	H
	*	5755	98.67	-	-	86.99	32.1	6.49	26.91	100	205	A	H
		5852.4	53.1	-63.63	116.73	41.25	32.31	6.54	27	100	205	P	H
		5867.2	52.41	-54.97	107.38	40.51	32.37	6.54	27.01	100	205	P	H
		5885.8	52.35	-44.83	97.18	40.4	32.44	6.54	27.03	100	205	P	H
		5949.8	51.97	-16.23	68.2	39.82	32.7	6.54	27.09	100	205	P	H
802.11n													H
HT40													H
CH 151		5628.2	54.02	-14.18	68.2	42.65	31.84	6.33	26.8	100	99	P	V
5755MHz		5698.8	55.5	-48.82	104.32	43.94	32	6.42	26.86	100	99	P	V
		5719.2	60.68	-49.9	110.58	49.08	32.04	6.44	26.88	100	99	P	V
		5724.4	62.9	-57.93	120.83	51.29	32.05	6.45	26.89	100	99	P	V
	*	5755	107.17	-	-	95.49	32.1	6.49	26.91	100	99	P	V
	*	5755	99.07	-	-	87.39	32.1	6.49	26.91	100	99	A	V
		5851.4	52.08	-66.93	119.01	40.23	32.31	6.54	27	100	99	P	V
		5871.4	53.11	-53.1	106.21	41.2	32.39	6.54	27.02	100	99	P	V
		5882	53.38	-46.62	100	41.44	32.43	6.54	27.03	100	99	P	V
		5946.8	53.3	-14.9	68.2	41.15	32.69	6.54	27.08	100	99	P	V
													V
													V

Remark

3. No other spurious found.
4. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11510	47.38	-26.62	74	52.66	40.07	10.45	55.8	100	0	P	H
		17265	47.89	-20.31	68.2	51.05	40.1	13.11	56.37	100	0	P	H
802.11n													H
HT40													H
CH 151		11510	47.37	-26.63	74	52.65	40.07	10.45	55.8	100	0	P	V
5755MHz		17265	48.34	-19.86	68.2	51.5	40.1	13.11	56.37	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5611.2	52.76	-15.44	68.2	41.36	31.88	6.31	26.79	100	186	P	H
		5699.6	65.1	-39.81	104.91	53.55	32	6.42	26.87	100	186	P	H
		5708.8	68.32	-39.35	107.67	56.74	32.02	6.43	26.87	100	186	P	H
		5724.6	71.15	-50.14	121.29	59.54	32.05	6.45	26.89	100	186	P	H
	*	5775	105.28	-	-	93.6	32.1	6.51	26.93	100	186	P	H
	*	5775	97.38	-	-	85.7	32.1	6.51	26.93	100	186	A	H
		5853.6	64.24	-49.75	113.99	52.39	32.31	6.54	27	100	186	P	H
		5856	64.84	-45.68	110.52	52.98	32.32	6.54	27	100	186	P	H
		5876.2	57.59	-46.72	104.31	45.67	32.4	6.54	27.02	100	186	P	H
		5927	52.12	-16.08	68.2	40.04	32.61	6.54	27.07	100	186	P	H
802.11ac													H
VHT80													H
CH 155		5649.4	53.51	-14.69	68.2	42.17	31.8	6.36	26.82	100	106	P	V
5775MHz		5693.4	62.64	-37.69	100.33	51.12	31.97	6.41	26.86	100	106	P	V
		5711.4	68.03	-40.36	108.39	56.46	32.02	6.43	26.88	100	106	P	V
		5723.8	69.96	-49.5	119.46	58.35	32.05	6.45	26.89	100	106	P	V
	*	5775	104.78	-	-	93.1	32.1	6.51	26.93	100	106	P	V
	*	5775	96.38	-	-	84.7	32.1	6.51	26.93	100	106	A	V
		5850.4	63.93	-57.36	121.29	52.09	32.3	6.54	27	100	106	P	V
		5855	62.47	-48.33	110.8	50.61	32.32	6.54	27	100	106	P	V
		5876.2	57	-47.31	104.31	45.08	32.4	6.54	27.02	100	106	P	V
		5935.8	52.38	-15.82	68.2	40.27	32.64	6.54	27.07	100	106	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11550	47.46	-26.54	74	52.86	39.95	10.47	55.82	100	0	P	H
		17325	48.35	-19.85	68.2	51.37	40.33	13.14	56.49	100	0	P	H
802.11ac													H
VHT80													H
CH 155		11550	47.18	-26.82	74	52.58	39.95	10.47	55.82	100	0	P	V
5775MHz		17325	47.62	-20.58	68.2	50.64	40.33	13.14	56.49	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 802.11n HT40 (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)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT40 LF		123.12	25.97	-17.53	43.5	39.48	17.67	0.98	32.16	-	-	P	H
		294.81	24.63	-21.37	46	36.13	19.04	1.47	32.01	-	-	P	H
		473.29	27.71	-18.29	46	34.6	23.52	1.87	32.28	-	-	P	H
		766.23	29.42	-16.58	46	30.86	28.02	2.38	31.84	-	-	P	H
		865.17	30.32	-15.68	46	30.55	28.97	2.54	31.74	-	-	P	H
		954.41	33.1	-12.9	46	30.66	30.68	2.7	30.94	100	0	P	H
													H
													H
		32.91	36.58	-3.42	40	45.07	23.25	0.5	32.24	100	0	P	V
		91.11	28.43	-15.07	43.5	44.75	15.04	0.79	32.15	-	-	P	V
		121.18	25.59	-17.91	43.5	39.24	17.53	0.97	32.15	-	-	P	V
		733.25	30.02	-15.98	46	31.7	27.73	2.33	31.74	-	-	P	V
		818.61	30.42	-15.58	46	32.04	27.81	2.46	31.89	-	-	P	V
		946.65	31.65	-14.35	46	29.66	30.34	2.69	31.04	-	-	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Band 4 - 5725~5850MHz

WIFI 802.11n HT20 (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)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
	*	5825	115.96	-	-	104.2	32.2	6.54	26.98	263	70	P	H
	*	5825	108.36	-	-	96.6	32.2	6.54	26.98	263	70	A	H
		5850	60.37	-61.83	122.2	48.53	32.3	6.54	27	263	70	P	H
		5861.6	56.54	-52.41	108.95	44.66	32.35	6.54	27.01	263	70	P	H
		5877	56.23	-47.48	103.71	44.3	32.41	6.54	27.02	263	70	P	H
		5934.4	52.74	-15.46	68.2	40.63	32.64	6.54	27.07	263	70	P	H
802.11n													H
HT20													H
CH 165	*	5825	114.96	-	-	103.2	32.2	6.54	26.98	100	104	P	V
5825MHz	*	5825	107.06	-	-	95.3	32.2	6.54	26.98	100	104	A	V
		5850	60	-62.2	122.2	48.16	32.3	6.54	27	100	104	P	V
		5855.8	56.6	-53.98	110.58	44.74	32.32	6.54	27	100	104	P	V
		5911.8	54.38	-23.56	77.94	42.34	32.55	6.54	27.05	100	104	P	V
		5937.6	53.16	-15.04	68.2	41.05	32.65	6.54	27.08	100	104	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 165 5825MHz		11650	46.88	-27.12	74	52.68	39.55	10.53	55.88	100	0	P	H
		17475	48.35	-19.85	68.2	51	40.92	13.23	56.8	100	0	P	H
													H
		11650	46.77	-27.23	74	52.57	39.55	10.53	55.88	100	0	P	V
		17475	49.02	-19.18	68.2	51.67	40.92	13.23	56.8	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5637.4	52.46	-15.74	68.2	41.1	31.83	6.34	26.81	100	205	P	H
		5698	60.05	-43.68	103.73	48.5	31.99	6.42	26.86	100	205	P	H
		5719.4	68.61	-42.02	110.63	57.01	32.04	6.44	26.88	100	205	P	H
		5720.4	65.41	-46.3	111.71	53.81	32.04	6.44	26.88	100	205	P	H
	*	5755	112.97	-	-	101.29	32.1	6.49	26.91	100	205	P	H
	*	5755	105.47	-	-	93.79	32.1	6.49	26.91	100	205	A	H
		5853.4	52.98	-61.47	114.45	41.13	32.31	6.54	27	100	205	P	H
		5858.4	53.67	-56.18	109.85	41.81	32.33	6.54	27.01	100	205	P	H
		5885.2	53.46	-44.17	97.63	41.51	32.44	6.54	27.03	100	205	P	H
		5929.8	52.45	-15.75	68.2	40.36	32.62	6.54	27.07	100	205	P	H
802.11n													H
HT40													H
CH 151		5613	52.39	-15.81	68.2	40.99	31.87	6.32	26.79	100	172	P	V
5755MHz		5694.4	57.36	-43.71	101.07	45.83	31.98	6.41	26.86	100	172	P	V
		5717.2	66.15	-43.87	110.02	54.56	32.03	6.44	26.88	100	172	P	V
		5722	64.02	-51.34	115.36	52.42	32.04	6.45	26.89	100	172	P	V
	*	5755	110.47	-	-	98.79	32.1	6.49	26.91	100	172	P	V
	*	5755	102.37	-	-	90.69	32.1	6.49	26.91	100	172	A	V
		5852.8	52.23	-63.59	115.82	40.38	32.31	6.54	27	100	172	P	V
		5858.8	53.47	-56.26	109.73	41.6	32.34	6.54	27.01	100	172	P	V
		5896.6	52.49	-36.69	89.18	40.5	32.49	6.54	27.04	100	172	P	V
		5944	51.99	-16.21	68.2	39.85	32.68	6.54	27.08	100	172	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11510	48.19	-25.81	74	53.47	40.07	10.45	55.8	100	0	P	H
802.11n		17265	47.57	-20.63	68.2	50.73	40.1	13.11	56.37	100	0	P	H
HT40													H
CH 151		11510	47.64	-26.36	74	52.92	40.07	10.45	55.8	100	0	P	V
5755MHz		17265	48.58	-19.62	68.2	51.74	40.1	13.11	56.37	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5636.6	52.99	-15.21	68.2	41.63	31.83	6.34	26.81	100	235	P	H
		5695.4	58.06	-43.75	101.81	46.53	31.98	6.41	26.86	100	235	P	H
		5719.8	61.2	-49.54	110.74	49.6	32.04	6.44	26.88	100	235	P	H
		5724.4	62.71	-58.12	120.83	51.1	32.05	6.45	26.89	100	235	P	H
	*	5775	108.78	-	-	97.1	32.1	6.51	26.93	100	235	P	H
	*	5775	101.38	-	-	89.7	32.1	6.51	26.93	100	235	A	H
		5853.4	62.28	-52.17	114.45	50.43	32.31	6.54	27	100	235	P	H
		5858.8	65.54	-44.19	109.73	53.67	32.34	6.54	27.01	100	235	P	H
		5877	59.2	-44.51	103.71	47.27	32.41	6.54	27.02	100	235	P	H
		5929.6	52.48	-15.72	68.2	40.39	32.62	6.54	27.07	100	235	P	H
802.11ac													H
VHT80													H
CH 155		5614.4	51.75	-16.45	68.2	40.35	31.87	6.32	26.79	100	157	P	V
5775MHz		5695.6	56.42	-45.54	101.96	44.89	31.98	6.41	26.86	100	157	P	V
		5714	59.69	-49.43	109.12	48.1	32.03	6.44	26.88	100	157	P	V
		5720.8	56.52	-56.1	112.62	44.92	32.04	6.44	26.88	100	157	P	V
	*	5775	106.18	-	-	94.5	32.1	6.51	26.93	100	157	P	V
	*	5775	97.98	-	-	86.3	32.1	6.51	26.93	100	157	A	V
		5853.8	63.35	-50.19	113.54	51.49	32.32	6.54	27	100	157	P	V
		5855	61.2	-49.6	110.8	49.34	32.32	6.54	27	100	157	P	V
		5877.4	56.87	-46.55	103.42	44.94	32.41	6.54	27.02	100	157	P	V
		5930.6	52.55	-15.65	68.2	40.46	32.62	6.54	27.07	100	157	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11550	47.27	-26.73	74	52.67	39.95	10.47	55.82	100	0	P	H
		17325	47.74	-20.46	68.2	50.76	40.33	13.14	56.49	100	0	P	H
802.11ac													H
VHT80													H
CH 155		11550	47.58	-26.42	74	52.98	39.95	10.47	55.82	100	0	P	V
5775MHz		17325	47.5	-20.7	68.2	50.52	40.33	13.14	56.49	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 802.11n HT20 (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)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11n HT20 LF		127	25.39	-18.11	43.5	38.8	17.76	0.99	32.16	-	-	P	H
		295.78	25.1	-20.9	46	36.56	19.07	1.47	32	-	-	P	H
		473.29	31.66	-14.34	46	38.55	23.52	1.87	32.28	-	-	P	H
		842.86	30.07	-15.93	46	30.56	28.84	2.48	31.81	-	-	P	H
		886.51	32.5	-13.5	46	32.75	28.79	2.63	31.67	-	-	P	H
		940.83	32.54	-13.46	46	31	29.97	2.69	31.12	100	0	P	H
													H
													H
		32.91	35.92	-4.08	40	44.41	23.25	0.5	32.24	100	0	P	V
		91.11	28.56	-14.94	43.5	44.88	15.04	0.79	32.15	-	-	P	V
		120.21	25.16	-18.34	43.5	38.78	17.56	0.97	32.15	-	-	P	V
		473.29	27.36	-18.64	46	34.25	23.52	1.87	32.28	-	-	P	V
		852.56	30.8	-15.2	46	31.12	28.97	2.49	31.78	-	-	P	V
		890.39	32.94	-13.06	46	33.22	28.74	2.64	31.66	-	-	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<TXBF Mode>

Band 4 - 5725~5850MHz

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)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5625	51.78	-16.42	68.2	40.4	31.85	6.33	26.8	245	297	P	H
		5669.4	51.52	-31.07	82.59	40.1	31.88	6.38	26.84	245	297	P	H
		5717	53	-56.96	109.96	41.41	32.03	6.44	26.88	245	297	P	H
		5721.4	53.51	-60.48	113.99	41.9	32.04	6.45	26.88	245	297	P	H
	*	5785	111.99	-	-	100.31	32.1	6.52	26.94	245	297	P	H
	*	5785	103.93	-	-	92.25	32.1	6.52	26.94	245	297	A	H
		5850.4	54.2	-67.09	121.29	42.36	32.3	6.54	27	245	297	P	H
		5862.8	53.1	-55.51	108.61	41.22	32.35	6.54	27.01	245	297	P	H
		5889	52.87	-41.94	94.81	40.9	32.46	6.54	27.03	245	297	P	H
		5936	51.7	-16.5	68.2	39.59	32.64	6.54	27.07	245	297	P	H
802.11ac													H
VHT20													H
CH 157		5620	52.31	-15.89	68.2	40.93	31.86	6.32	26.8	345	288	P	V
5785MHz		5695	51.63	-49.88	101.51	40.1	31.98	6.41	26.86	345	288	P	V
		5711.4	52.34	-56.05	108.39	40.77	32.02	6.43	26.88	345	288	P	V
		5720.2	51.53	-59.73	111.26	39.93	32.04	6.44	26.88	345	288	P	V
	*	5785	110.43	-	-	98.75	32.1	6.52	26.94	345	288	P	V
	*	5785	102.38	-	-	90.7	32.1	6.52	26.94	345	288	A	V
		5854.6	52.75	-58.96	111.71	40.89	32.32	6.54	27	345	288	P	V
		5855.2	52.37	-58.37	110.74	40.51	32.32	6.54	27	345	288	P	V
		5904.6	52.35	-30.91	83.26	40.34	32.52	6.54	27.05	345	288	P	V
		5938	51.35	-16.85	68.2	39.24	32.65	6.54	27.08	345	288	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11570	46.69	-27.31	74	52.15	39.89	10.48	55.83	100	0	P	H
		17355	48.55	-19.65	68.2	51.46	40.48	13.16	56.55	100	0	P	H
802.11ac													H
VHT20													H
CH 157		11570	47.17	-26.83	74	52.63	39.89	10.48	55.83	100	0	P	V
5785MHz		17355	48.85	-19.35	68.2	51.76	40.48	13.16	56.55	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5610	51.73	-16.47	68.2	40.33	31.88	6.31	26.79	141	297	P	H
		5685.2	52.36	-41.92	94.28	40.87	31.94	6.4	26.85	141	297	P	H
		5711.6	52.01	-56.44	108.45	40.44	32.02	6.43	26.88	141	297	P	H
		5724.4	52.06	-68.77	120.83	40.45	32.05	6.45	26.89	141	297	P	H
	*	5795	107.4	-	-	95.72	32.1	6.53	26.95	141	297	P	H
	*	5795	99.16	-	-	87.48	32.1	6.53	26.95	141	297	A	H
		5854.6	57.15	-54.56	111.71	45.29	32.32	6.54	27	141	297	P	H
		5864	55.55	-52.73	108.28	43.66	32.36	6.54	27.01	141	297	P	H
		5875.6	54.56	-50.19	104.75	42.64	32.4	6.54	27.02	141	297	P	H
		5926	51.38	-16.82	68.2	39.3	32.6	6.54	27.06	141	297	P	H
802.11ac													H
VHT40													H
CH 159		5624.2	51.55	-16.65	68.2	40.17	31.85	6.33	26.8	342	267	P	V
5795MHz		5698.4	52.76	-51.26	104.02	41.21	31.99	6.42	26.86	342	267	P	V
		5714.8	53.07	-56.28	109.35	41.48	32.03	6.44	26.88	342	267	P	V
		5721	52.88	-60.2	113.08	41.27	32.04	6.45	26.88	342	267	P	V
	*	5795	106.35	-	-	94.67	32.1	6.53	26.95	342	267	P	V
	*	5795	98.23	-	-	86.55	32.1	6.53	26.95	342	267	A	V
		5851.4	55.49	-63.52	119.01	43.64	32.31	6.54	27	342	267	P	V
		5860.8	56	-53.17	109.17	44.13	32.34	6.54	27.01	342	267	P	V
		5887.2	52.93	-43.21	96.14	40.97	32.45	6.54	27.03	342	267	P	V
		5935	52.18	-16.02	68.2	40.07	32.64	6.54	27.07	342	267	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11590	46.99	-27.01	74	52.52	39.83	10.49	55.85	100	0	P	H
		17385	48.99	-19.21	68.2	51.81	40.62	13.18	56.62	100	0	P	H
802.11ac													H
VHT40													H
CH 159		11590	46.65	-27.35	74	52.18	39.83	10.49	55.85	100	0	P	V
5795MHz		17385	48.29	-19.91	68.2	51.11	40.62	13.18	56.62	100	0	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5613	55.55	-12.65	68.2	44.15	31.87	6.32	26.79	135	293	P	H
		5690	68.74	-29.09	97.83	57.23	31.96	6.41	26.86	135	293	P	H
		5705.4	71.52	-35.19	106.71	59.95	32.01	6.43	26.87	135	293	P	H
		5723.6	76.38	-42.63	119.01	64.77	32.05	6.45	26.89	135	293	P	H
	*	5775	106.66	-	-	94.98	32.1	6.51	26.93	135	293	P	H
	*	5775	100.72	-	-	89.04	32.1	6.51	26.93	135	293	A	H
		5854.6	67.92	-43.79	111.71	56.06	32.32	6.54	27	135	293	P	H
		5860.2	72.92	-36.42	109.34	61.05	32.34	6.54	27.01	135	293	P	H
		5875.4	66.61	-38.29	104.9	54.69	32.4	6.54	27.02	135	293	P	H
		5925	53.7	-14.5	68.2	41.62	32.6	6.54	27.06	135	293	P	H
802.11ac													H
VHT80													H
CH 155		5637.4	53.88	-14.32	68.2	42.52	31.83	6.34	26.81	352	271	P	V
5775MHz		5694.6	68.76	-32.46	101.22	57.23	31.98	6.41	26.86	352	271	P	V
		5720	73.89	-36.91	110.8	62.29	32.04	6.44	26.88	352	271	P	V
		5725	74.28	-47.92	122.2	62.67	32.05	6.45	26.89	352	271	P	V
	*	5775	105.09	-	-	93.41	32.1	6.51	26.93	352	271	P	V
	*	5775	99.33	-	-	87.65	32.1	6.51	26.93	352	271	A	V
		5850.2	68.66	-53.08	121.74	56.82	32.3	6.54	27	352	271	P	V
		5859.8	69.51	-39.94	109.45	57.64	32.34	6.54	27.01	352	271	P	V
		5875.6	62.22	-42.53	104.75	50.3	32.4	6.54	27.02	352	271	P	V
		5937.8	52.11	-16.09	68.2	40	32.65	6.54	27.08	352	271	P	V
													V
													V

Remark

3. No other spurious found.
4. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11550	47.19	-26.81	74	52.59	39.95	10.47	55.82	100	0	P	H
		17325	48.61	-19.59	68.2	51.63	40.33	13.14	56.49	100	0	P	H
802.11ac													H
VHT80													H
CH 155		11550	47.09	-26.91	74	52.49	39.95	10.47	55.82	100	0	P	V
5775MHz		17325	48.29	-19.91	68.2	51.31	40.33	13.14	56.49	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

5GHz WIFI 802.11ac VHT80 (LF)

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)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		125.06	25.92	-17.58	43.5	39.51	17.59	0.98	32.16	-	-	P	H
		297.72	25.77	-20.23	46	37.16	19.14	1.47	32	-	-	P	H
		473.29	30.22	-15.78	46	37.11	23.52	1.87	32.28	-	-	P	H
		551.86	28.35	-17.65	46	33.18	25.58	1.99	32.4	-	-	P	H
		792.42	29.44	-16.56	46	30.88	28.05	2.44	31.93	-	-	P	H
		870.02	31.54	-14.46	46	31.75	28.96	2.56	31.73	100	0	P	H
5GHz													H
802.11ac													H
VHT80		41.64	36.23	-3.77	40	49.13	18.82	0.56	32.28	100	0	P	V
LF		98.87	34.36	-9.14	43.5	49.7	15.95	0.82	32.11	-	-	P	V
		473.29	27.98	-18.02	46	34.87	23.52	1.87	32.28	-	-	P	V
		664.38	27.33	-18.67	46	30.77	26.24	2.19	31.87	-	-	P	V
		773.02	30.26	-15.74	46	31.66	28.07	2.39	31.86	-	-	P	V
		861.29	31.21	-14.79	46	31.44	29	2.52	31.75	-	-	P	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	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

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.
				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(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(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 43.54 (dBμV/m)

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

= 43.54(dBμV/m) – 54(dBμV/m)

= -10.46(dB)

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

Appendix B. Radiated Spurious Emission Plots

Test Engineer :	Daniel Lee, Jacky Hong and Wilson Wu	**Temperature :**	21.5~23.5°C
		Relative Humidity :	49.5~55.5%

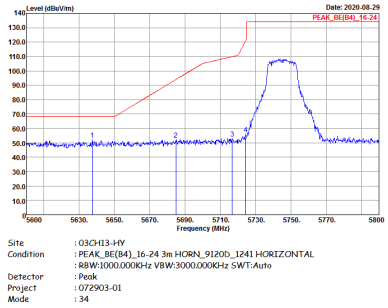
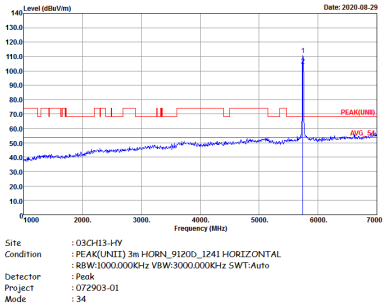
Note symbol

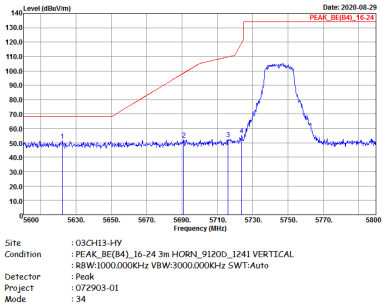
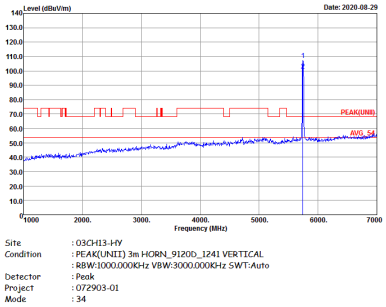
-L	**Low channel location**
-R	**High channel location**

<CDD Mode>

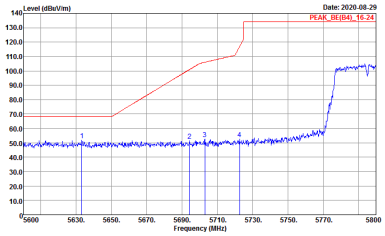
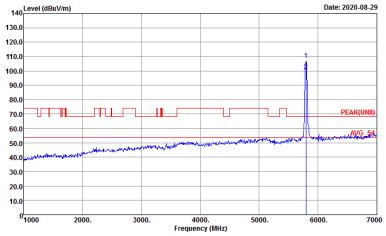
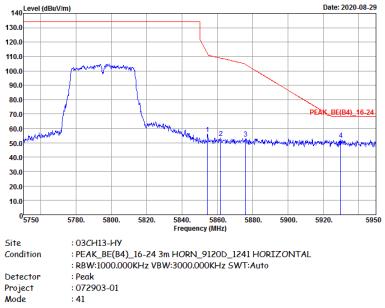
Band 4 - 5725~5850MHz

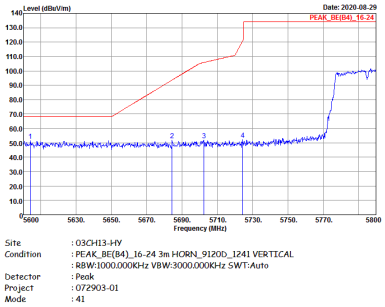
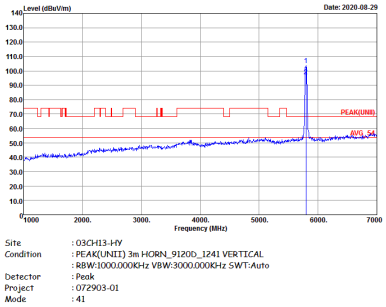
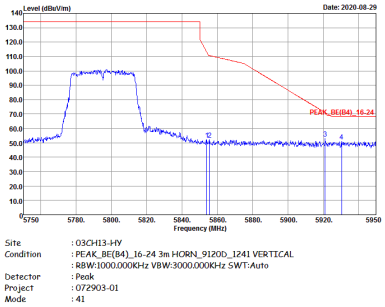
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Fundamental
Peak		

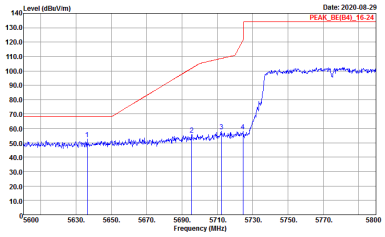
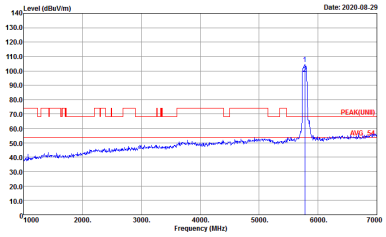
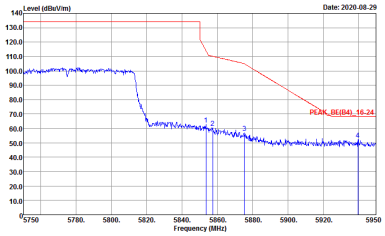
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
1	Vertical	Fundamental
Peak		

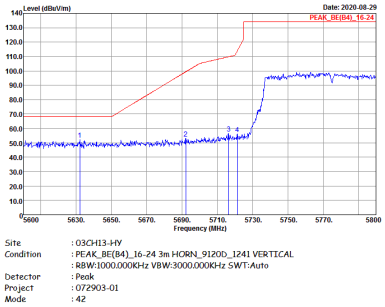
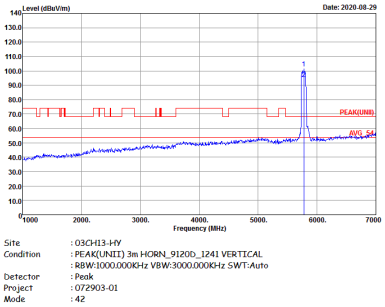
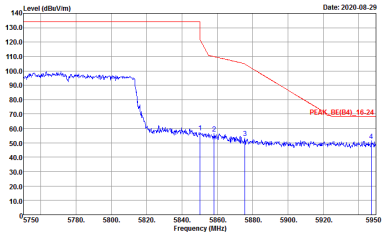
Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Vertical	Fundamental
Peak		
Peak		Left blank

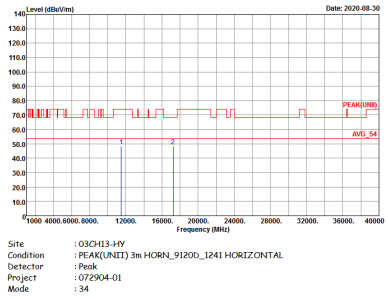
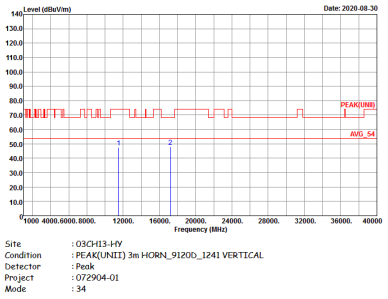
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072903-01 Mode : 42	 Site : 03CH13-HV Condition : PEAK(UNII) 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072903-01 Mode : 42
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072903-01 Mode : 42	Left blank

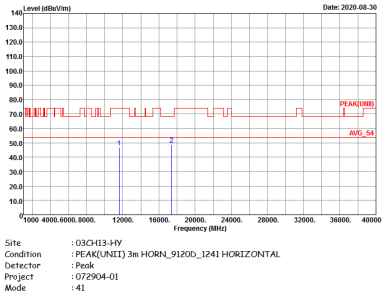
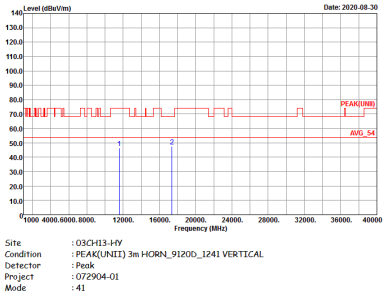
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072903-01 Mode : 42	 Site : 03CH13-HV Condition : PEAK(UNII) 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072903-01 Mode : 42
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072903-01 Mode : 42	Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

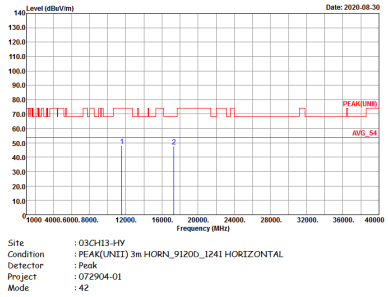
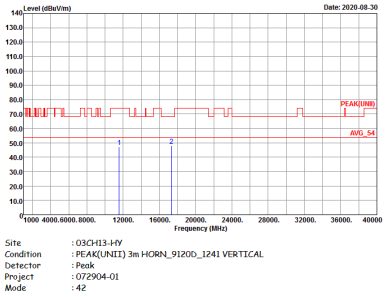
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
1	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH159 5795MHz	
1	Horizontal	Vertical
Peak Avg.		

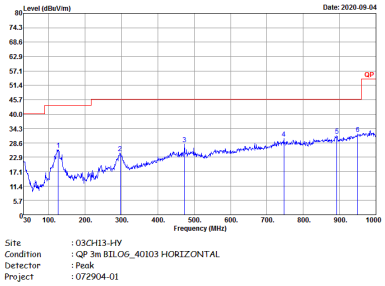
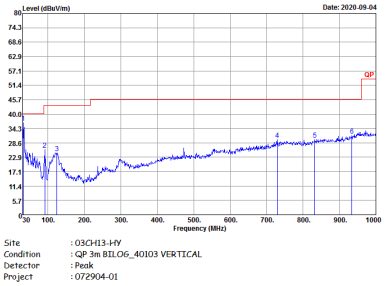
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1	Horizontal	Vertical
Peak Avg.		

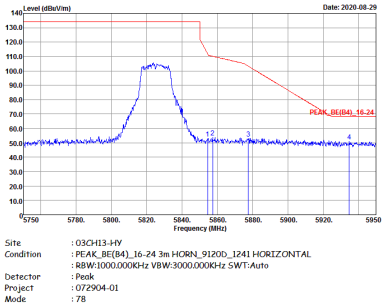
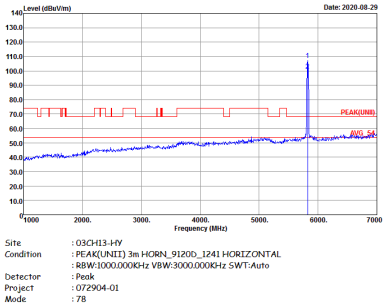
Emission below 1GHz

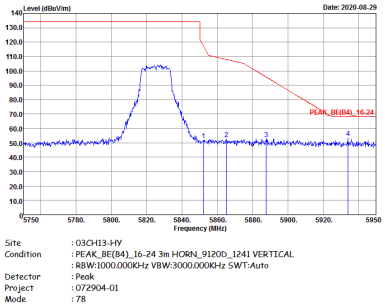
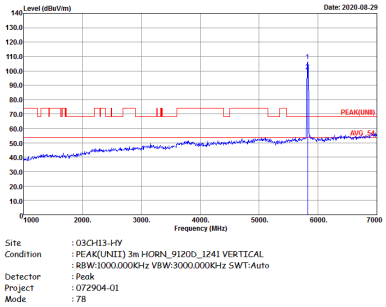
5GHz WIFI 802.11ac VHT80 (LF)

WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1	Horizontal	Vertical
QP / Peak		

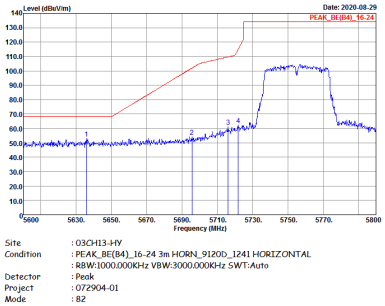
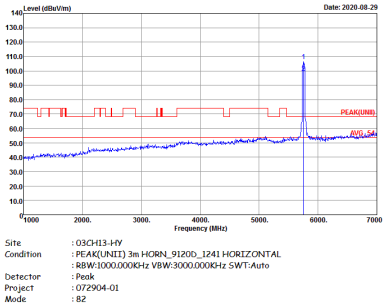
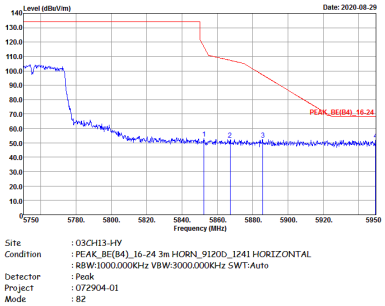
Band 4 - 5725~5850MHz

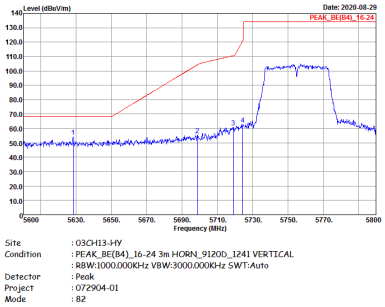
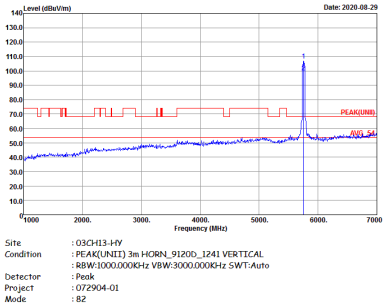
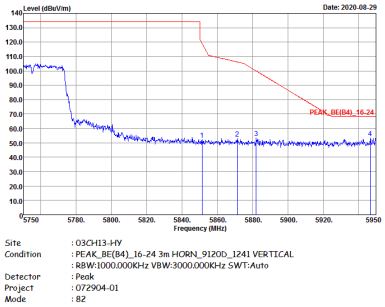
WIFI 802.11a (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
2	Horizontal	Fundamental
Peak		

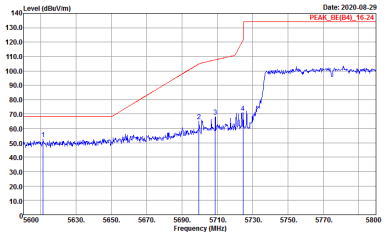
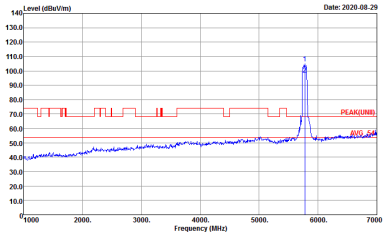
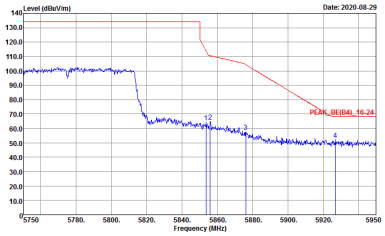
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
2	Vertical	Fundamental
Peak		

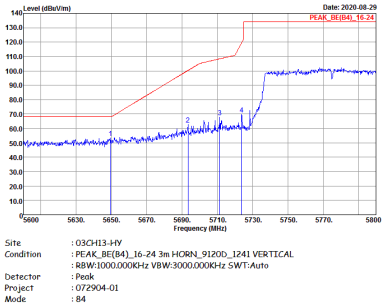
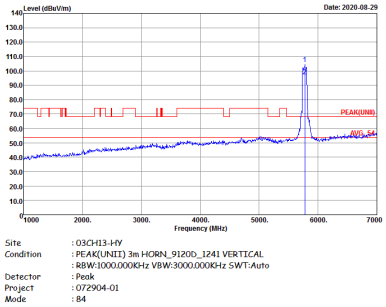
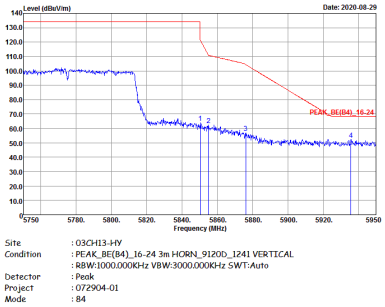
Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
2	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
2	Vertical	Fundamental
Peak		
Peak		Left blank

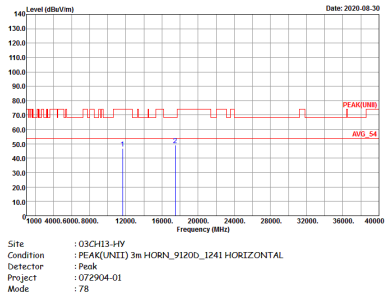
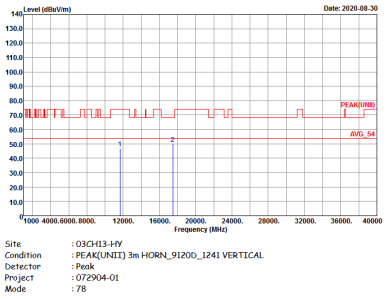
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : B4	 Site : 03CH13-HV Condition : PEAK(UNII) 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : B4
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : B4	Left blank

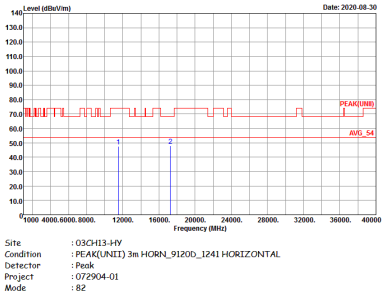
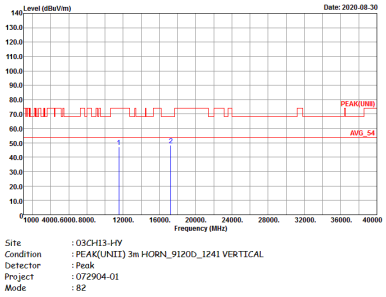
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
2	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

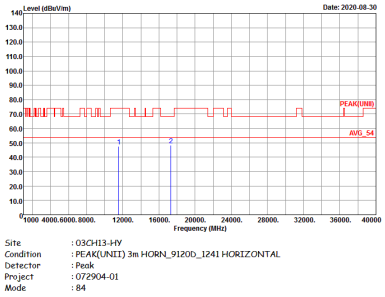
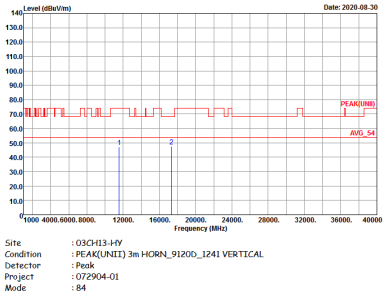
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
2	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
2	Horizontal	Vertical
Peak Avg.		

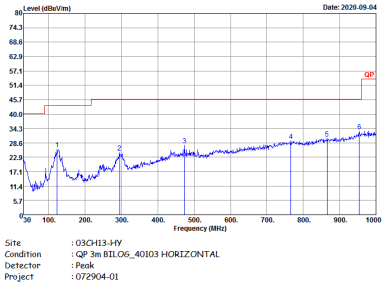
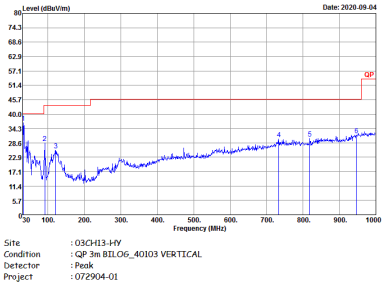
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
2	Horizontal	Vertical
Peak Avg.		

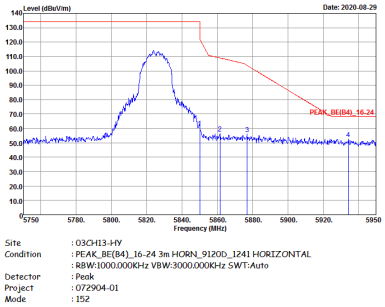
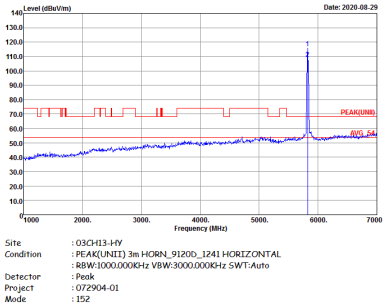
Emission below 1GHz

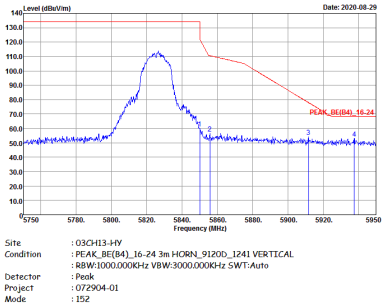
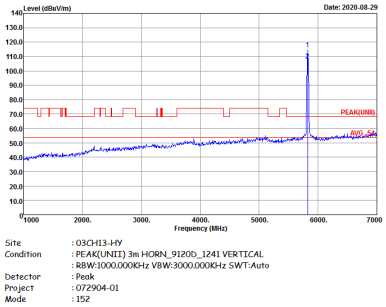
5GHz WIFI 802.11n HT40 (LF)

WIFI	5GHz WIFI	
ANT	802.11n HT40 LF	
2	Horizontal	Vertical
QP / Peak		

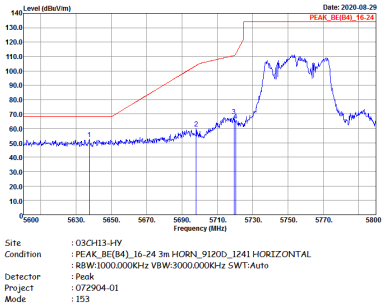
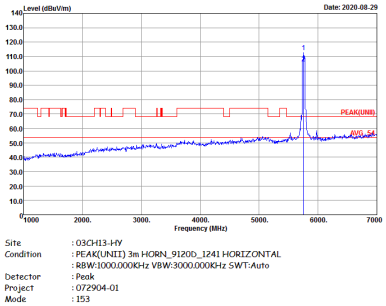
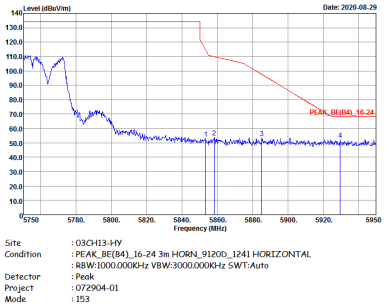
Band 4 - 5725~5850MHz

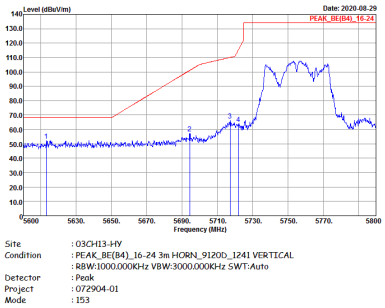
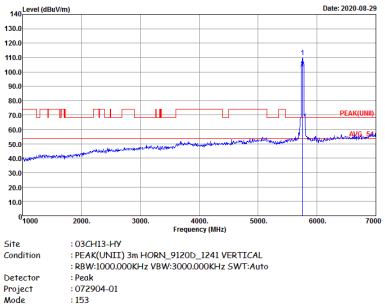
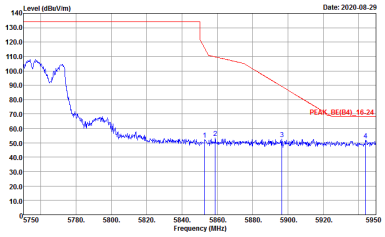
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Horizontal	Fundamental
Peak		

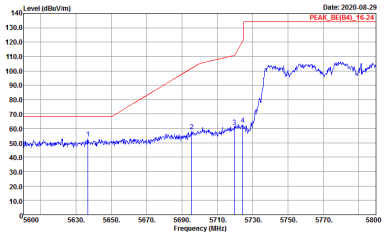
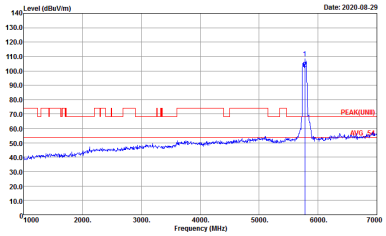
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Vertical	Fundamental
Peak		

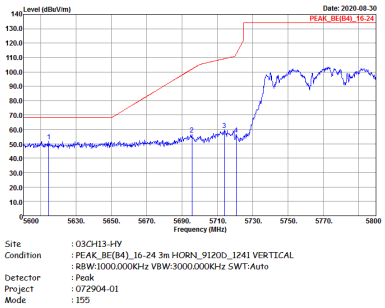
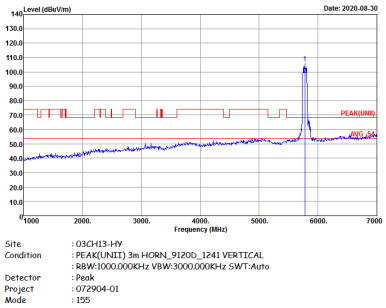
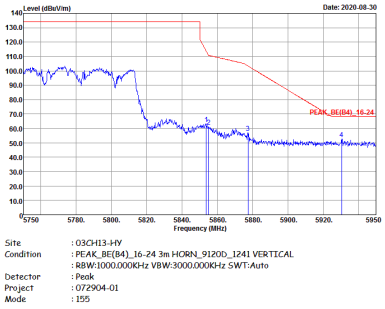
Band 4 5725~5850MHz
WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 153	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 153
Peak	 Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 153	Left blank

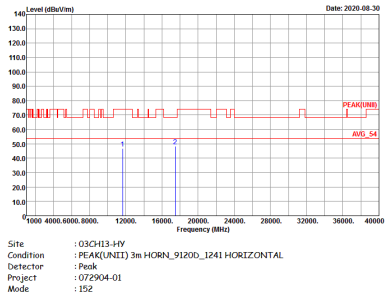
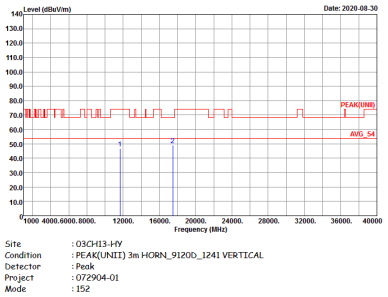
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 155	 Site : 03CH13-HV Condition : PEAK(UNII) 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 155
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 155	Left blank

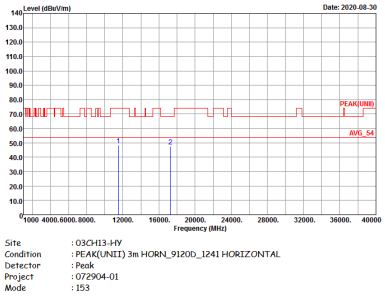
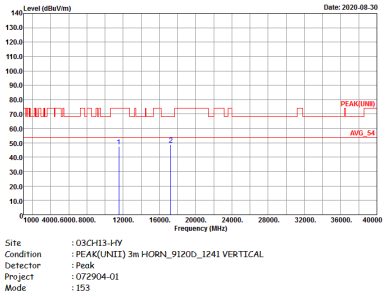
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11n HT20 (Harmonic @ 3m)

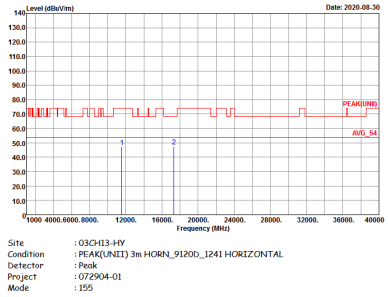
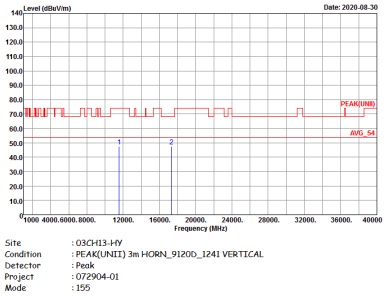
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT20 CH165 5825MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz
WIFI 802.11n HT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11n HT40 CH151 5755MHz	
1+2	Horizontal	Vertical
Peak Avg.		

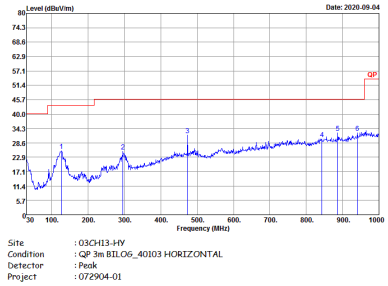
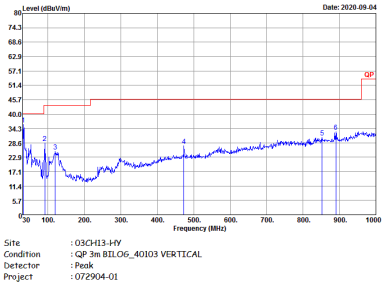
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

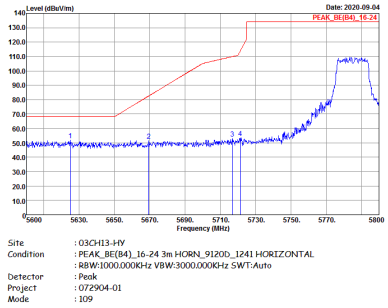
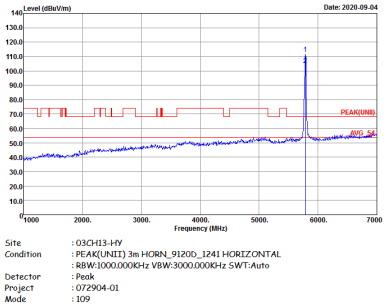
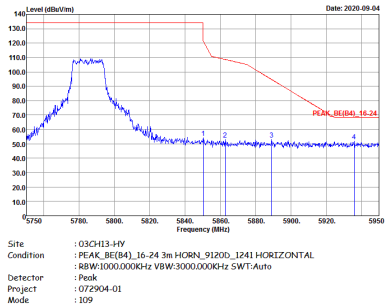
5GHz WIFI 802.11n HT20 (LF)

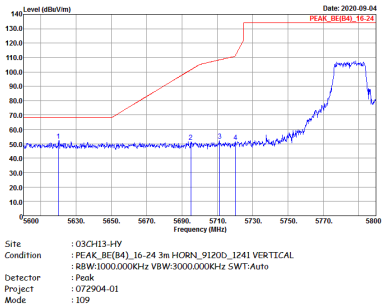
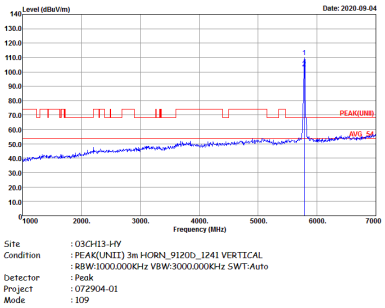
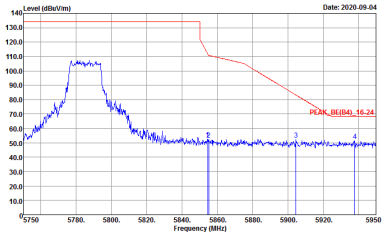
WIFI	5GHz WIFI	
ANT	802.11n HT20 LF	
1+2	Horizontal	Vertical
QP / Peak		

<TXBF Mode>

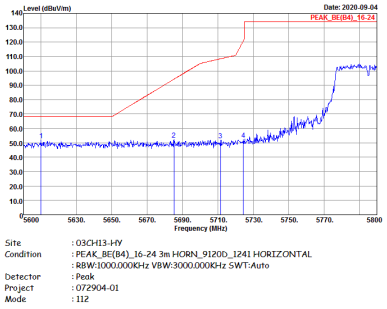
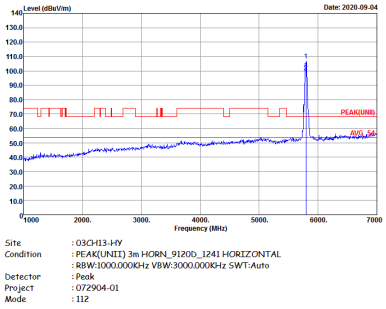
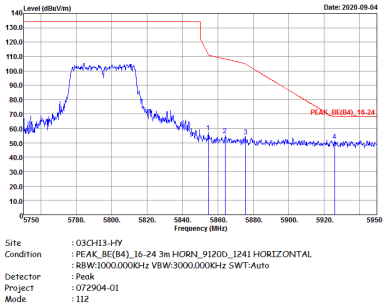
Band 4 - 5725~5850MHz

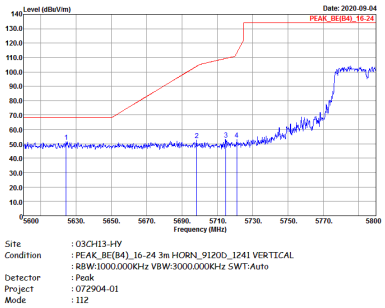
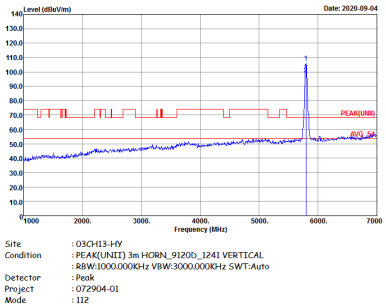
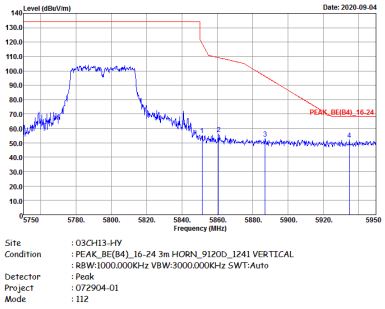
WIFI 802.11ac VHT20 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

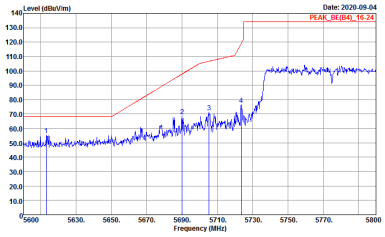
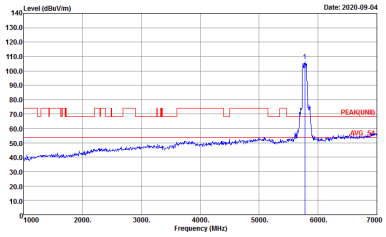
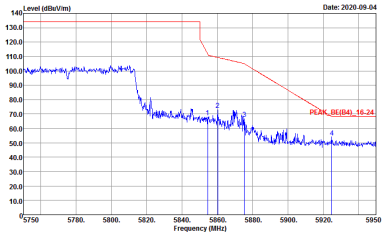
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Vertical	Fundamental
Peak	 Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 109	 Site : 03CH13-HY Condition : PEAK(UNII) 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 109
Peak	 Site : 03CH13-HY Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 109	Left blank

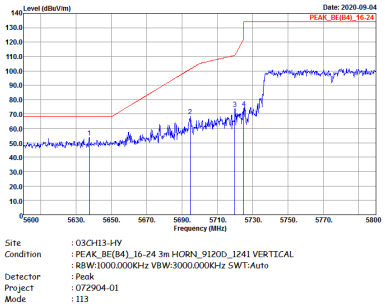
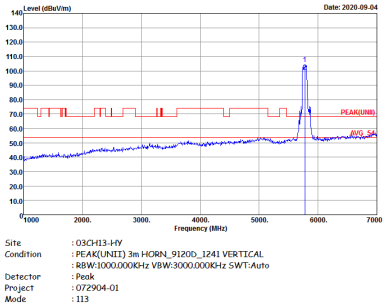
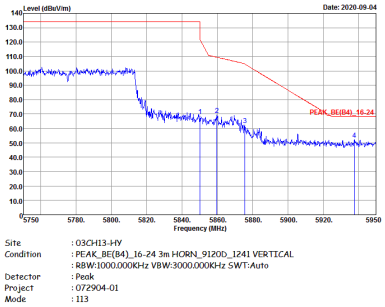
Band 4 5725~5850MHz
WIFI 802.11ac VHT40 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

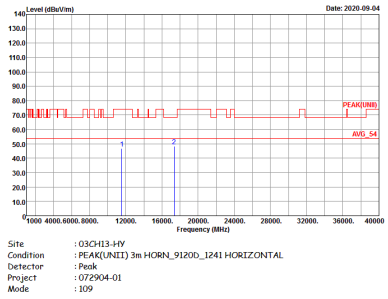
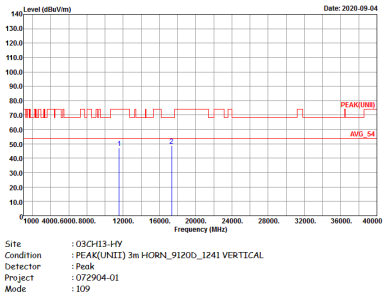
Band 4 5725~5850MHz
WIFI 802.11ac VHT80 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Fundamental
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 113	 Site : 03CH13-HV Condition : PEAK(UNII) 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 113
Peak	 Site : 03CH13-HV Condition : PEAK_BE(B4)_16-24 3m HORN_9120D_1241 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 072904-01 Mode : 113	Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Vertical	Fundamental
Peak		
Peak		Left blank

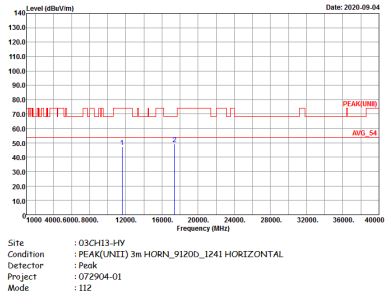
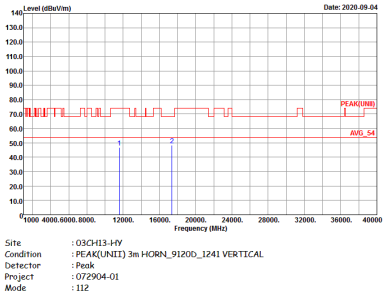
Band 4 - 5725~5850MHz

WIFI 802.11ac VHT20 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT20 CH157 5785MHz	
1+2	Horizontal	Vertical
Peak Avg.		

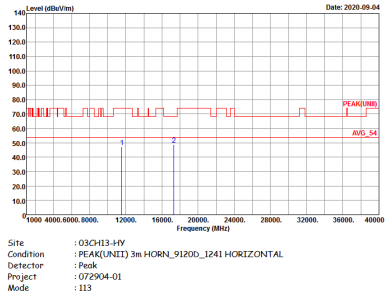
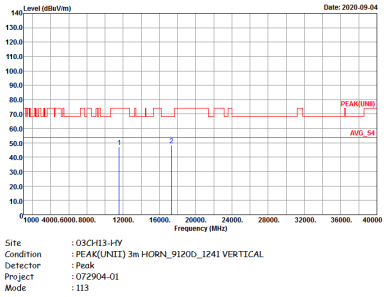
Band 4 5725~5850MHz

WIFI 802.11ac VHT40 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT40 CH159 5795MHz	
1+2	Horizontal	Vertical
Peak Avg.		

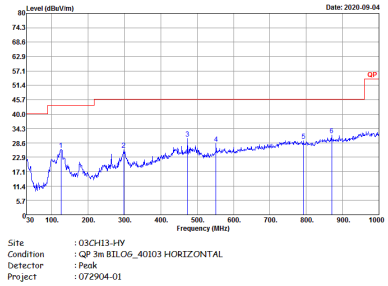
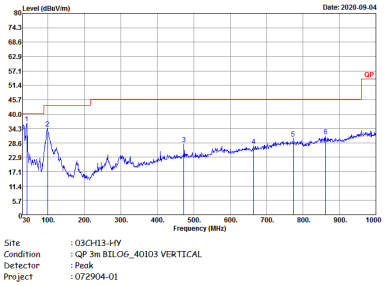
Band 4 5725~5850MHz

WIFI 802.11ac VHT80 (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ac VHT80 CH155 5775MHz	
1+2	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

5GHz WIFI 802.11ac VHT80 (LF)

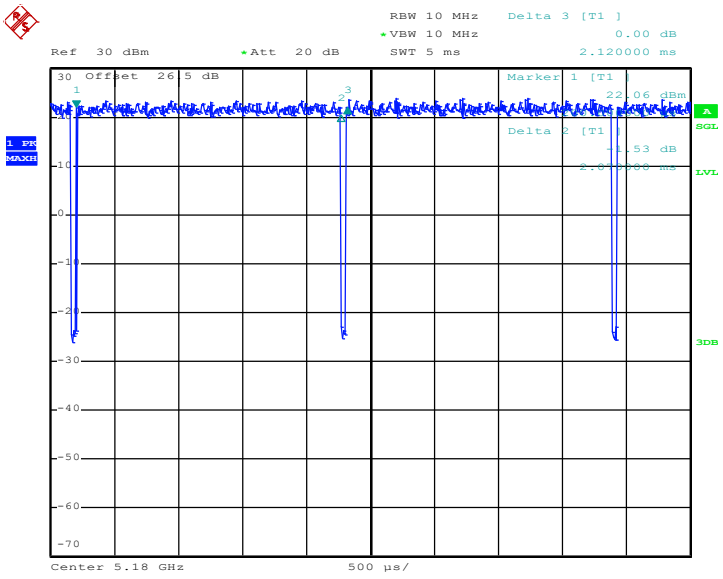
WIFI	5GHz WIFI	
ANT	802.11ac VHT80 LF	
1+2	Horizontal	Vertical
QP / Peak		

Appendix C. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
1	802.11a	97.64	2070	0.48	1kHz	0.10
2	802.11a	97.64	2065	0.48	1kHz	0.10
1+2	5GHz 802.11n HT20 for Ant. 1	97.97	1935	0.52	1kHz	0.09
1+2	5GHz 802.11n HT20 for Ant. 2	97.97	1935	0.52	1kHz	0.09
1	5GHz 802.11n HT40	97.16	1540	0.65	1kHz	0.13
2	5GHz 802.11n HT40	97.16	1540	0.65	1kHz	0.13
1+2	5GHz 802.11n HT40 for Ant. 1	97.78	1545	0.65	1kHz	0.10
1+2	5GHz 802.11n HT40 for Ant. 2	97.48	1550	0.65	1kHz	0.11
1	5GHz 802.11ac VHT80	94.82	732	1.37	3kHz	0.23
2	5GHz 802.11ac VHT80	95.31	732	1.37	3kHz	0.21
1+2	5GHz 802.11ac VHT80 for Ant. 1	94.82	732	1.37	3kHz	0.23
1+2	5GHz 802.11ac VHT80 for Ant. 2	95.34	736	1.36	3kHz	0.21

<Ant. 1>

802.11a



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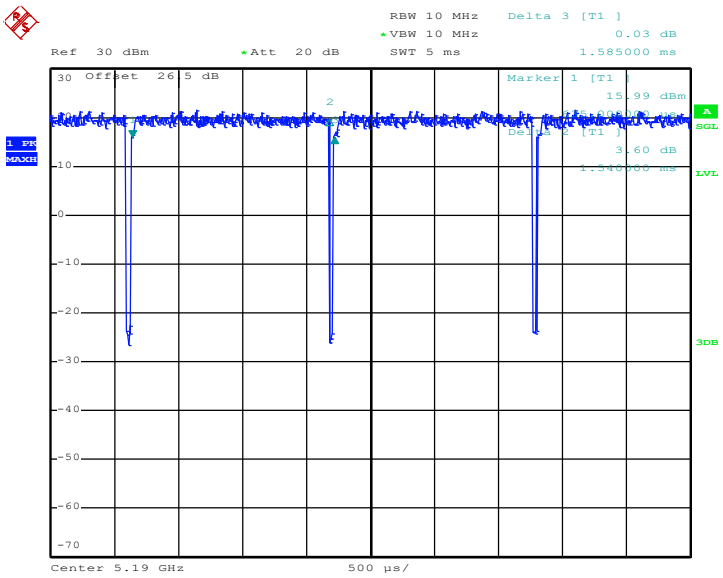

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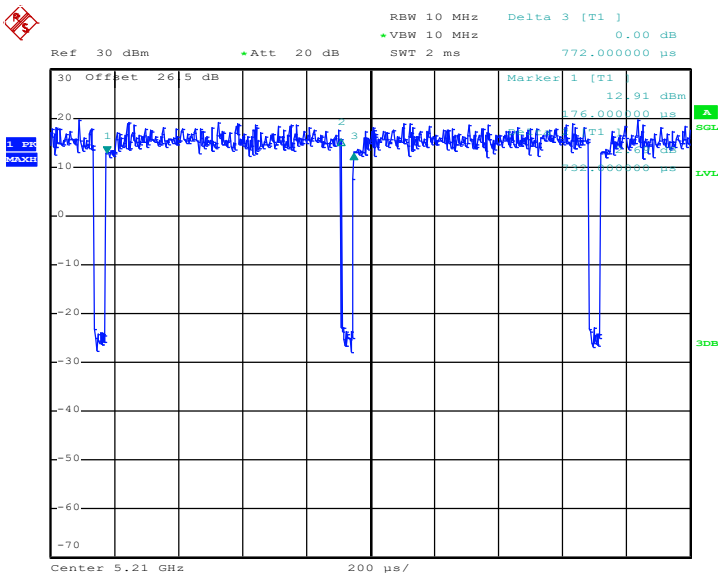

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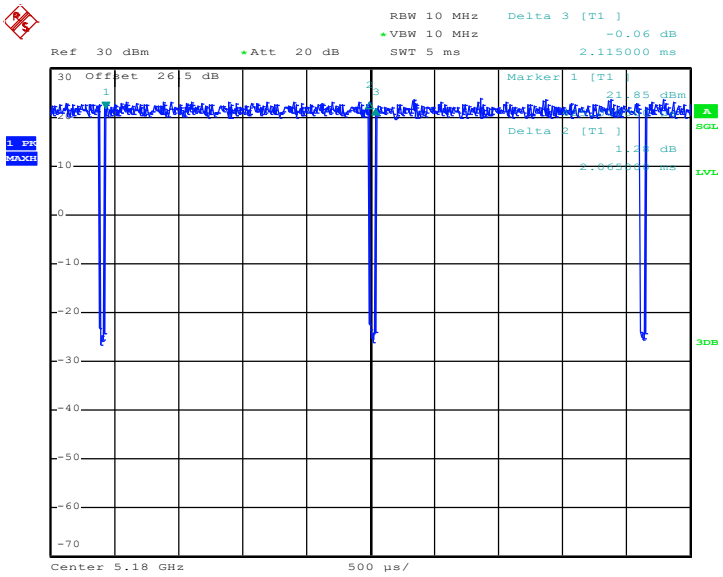

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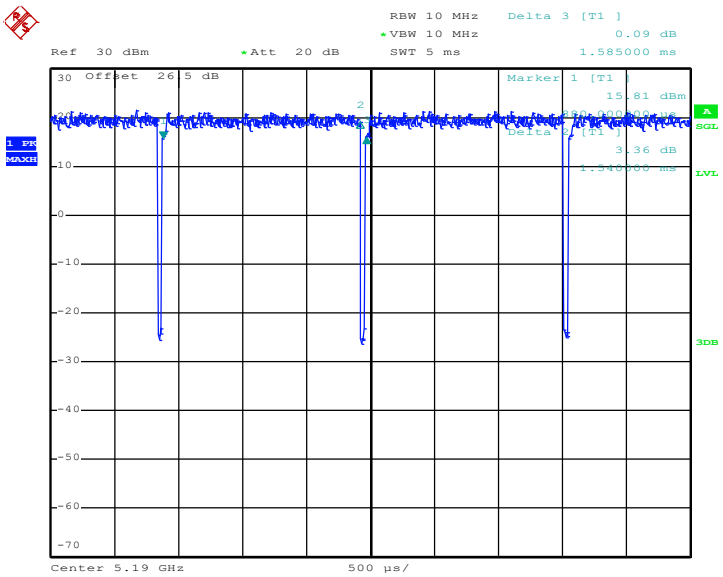

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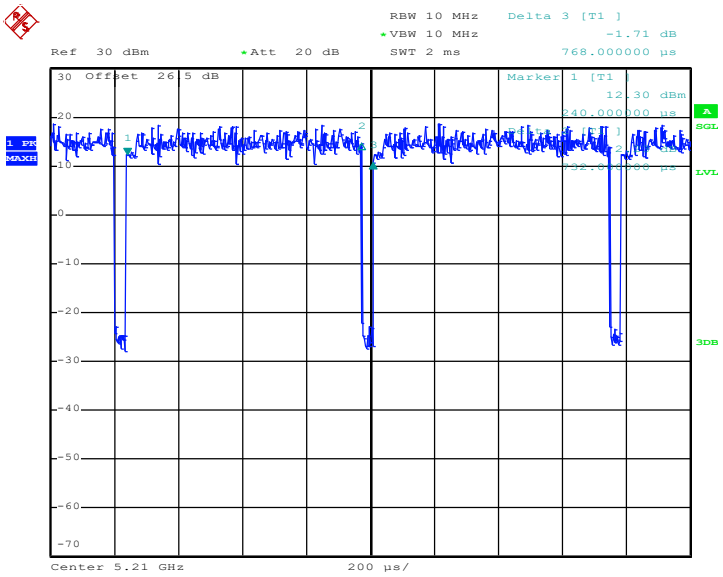

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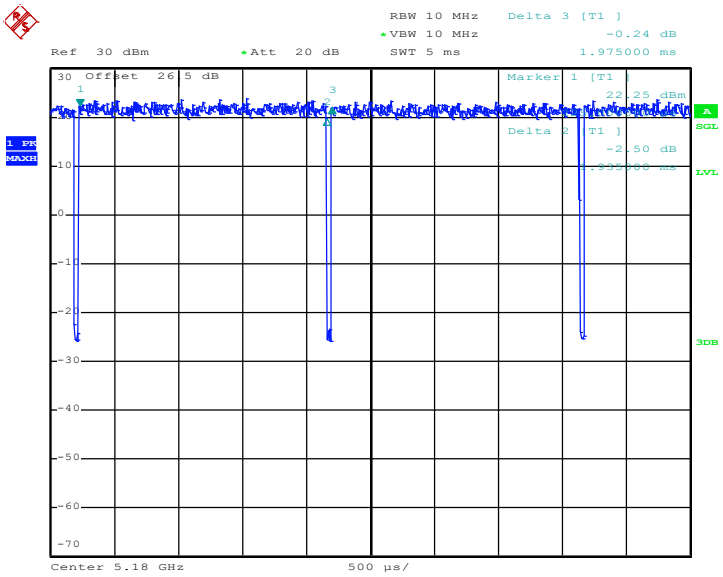

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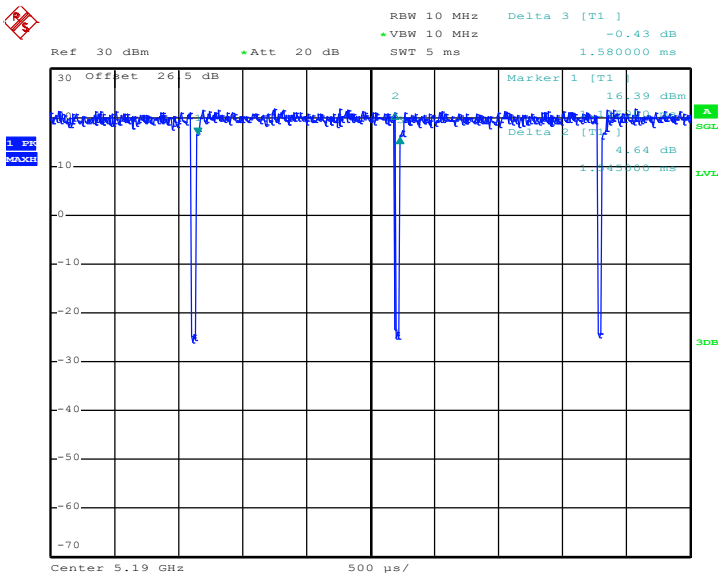

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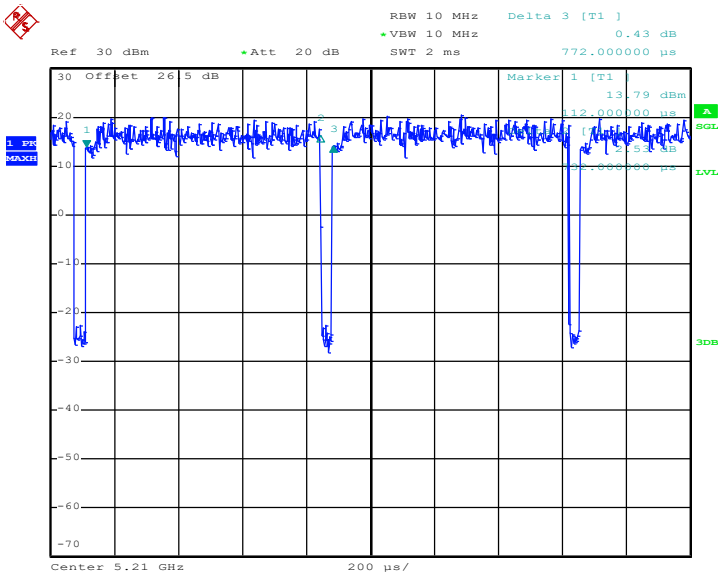

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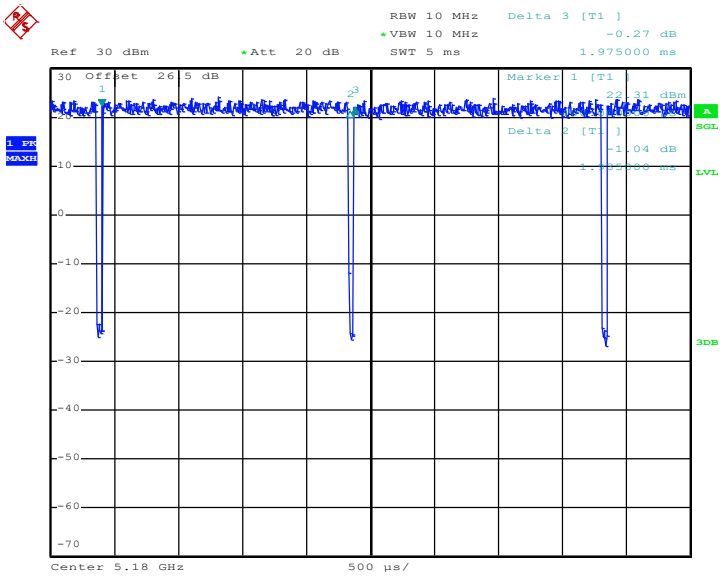

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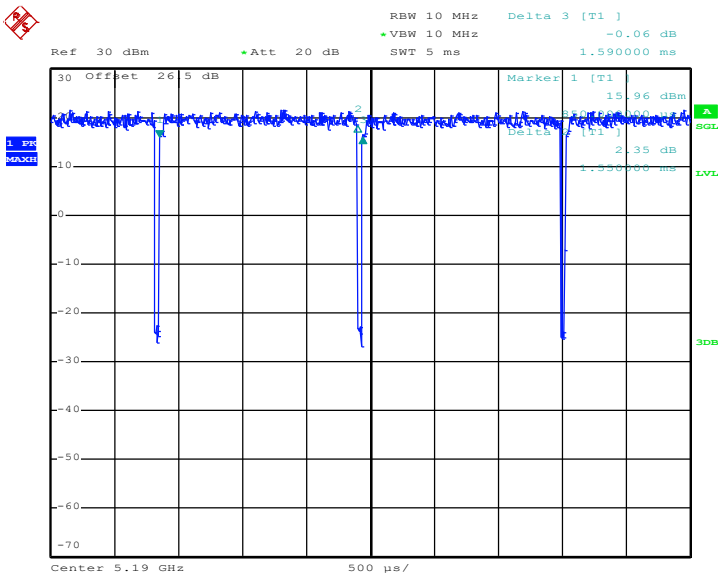

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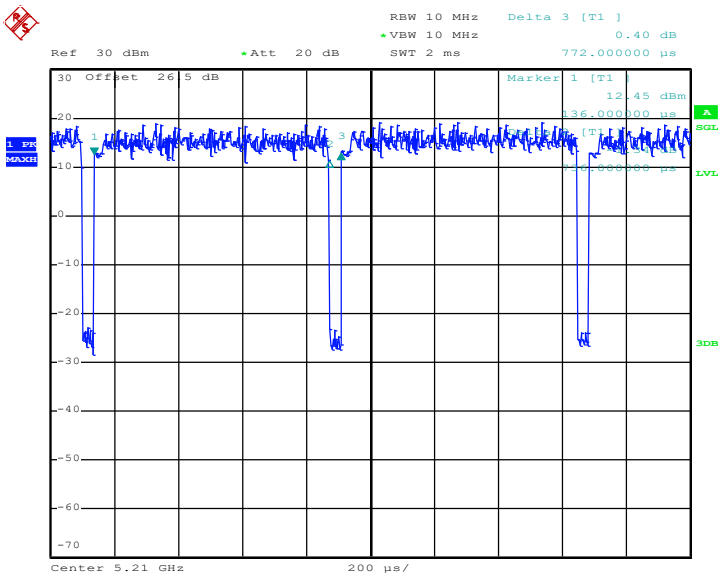

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