FCC CO-LOCATION RADIO TEST REPORT

FCC ID	:	**2AFZZK11AG**
Equipment	:	**Mobile Phone**
Brand Name	:	**POCO**
Model Name	:	**M2012K11AG**
Applicant	:	**Xiaomi Communications Co., Ltd. #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085**
Manufacturer	:	**Xiaomi Communications Co., Ltd. #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085**
Standard	:	**FCC Part 15 Subpart E §15.407**

The product was received on Jan. 11, 2021 and testing was started from Jan. 13, 2021 and completed on Jan. 26, 2021. 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 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
FR110409G	01	Initial issue of report	Feb. 08, 2021

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(b)	Unwanted Emissions	Pass	Under limit 3.23 dB at 5464.960 MHz
3.2	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Lucy Wu

1 General Description

1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, NFC, and GNSS.

Product Specification subjective to this standard	
Sample 1	EUT with Battery 1
Sample 2	EUT with Battery 2
Antenna Type	**WWAN:** PIFA Antenna **WLAN 5GHz:** <Ant. 11>: PIFA Antenna <Ant. 6>: PIFA Antenna **WLAN 2.4GHz:** <Ant. 11>: PIFA Antenna <Ant. 7>: PIFA Antenna **Bluetooth:** <Ant. 11>: PIFA Antenna <Ant. 7>: PIFA Antenna **GPS / Glonass / BDS / Galileo:** <L1 Ant.>: PIFA Antenna <L5 Ant.>: PIFA Antenna **NFC:** Planar Antenna

Antenna information		
2400 MHz ~ 2483.5 MHz (Bluetooth)	Peak Gain (dBi)	Ant. 11: -3.1 Ant. 7: -3.4
2400 MHz ~ 2483.5 MHz (WLAN)	Peak Gain (dBi)	Ant. 11: -3.1 Ant. 7: -3.4
5470 MHz ~ 5725 MHz	Peak Gain (dBi)	Ant. 11: -1.9 Ant. 6: -3.7

Remark: The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2 Modification of EUT

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

1.3 Testing Location

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.**
	03CH16-HY

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

FCC designation No.: TW0007

1.4 Applicable Standards

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

- FCC Part 15 Subpart C §15.247
- FCC Part 15 Subpart E
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02
- 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.
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- 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.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

2.1 Carrier Frequency and Channel

2400-2483.5 MHz Bluetooth - LE				2400-2483.5 MHz 802.11ax HE40		5470-5725 MHz 802.11ax HE40	
Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
00	2402	19	2440	03	2422	102	5510

Remark: During the Radiated Spurious Emission test, the EUT turn on the WWAN functions simultaneously.

2.2 Test Mode

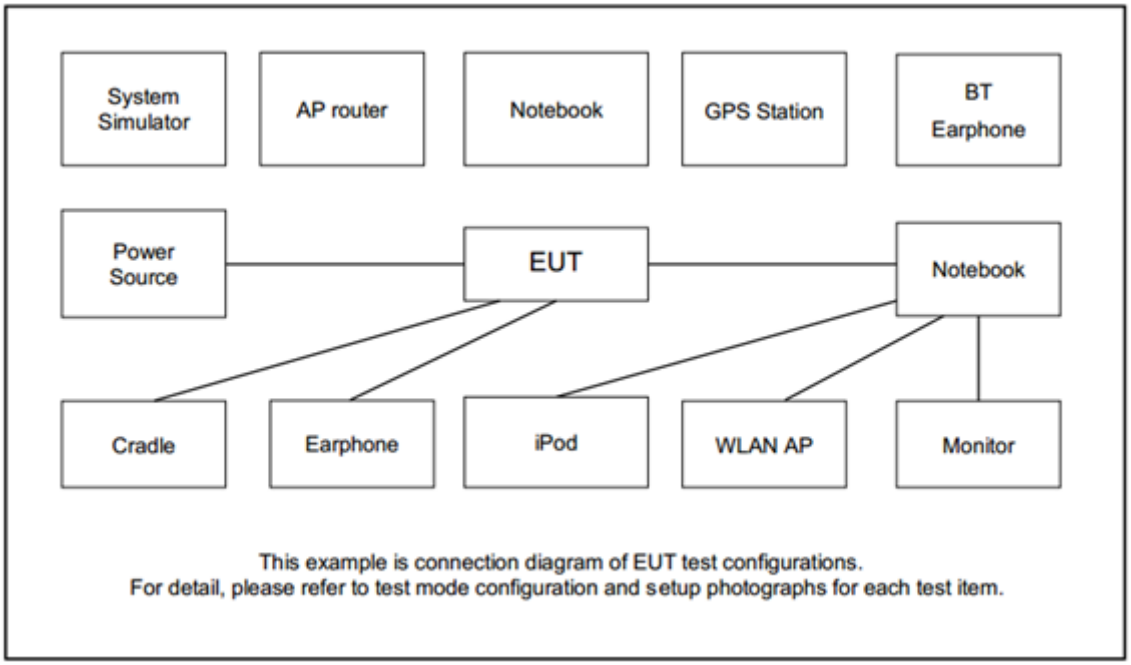
Final test modes are considering the modulation and worse data rates as below table.

<Co-Location>

Modulation	Data Rate
2.4GHz 802.11ax HE40 for MIMO Ant. 11+7 + 5GHz 802.11ax HE40 for MIMO Ant. 11+6+ LTE Band 7	MCS0 + MCS0 + QPSK
Bluetooth – LE for Ant. 11 + 5GHz 802.11ax HE40 for MIMO Ant. 11+6 + LTE Band 7	2Mbps + MCS0 + QPSK
Bluetooth – LE for Ant. 7 + 5GHz 802.11ax HE40 for MIMO Ant. 11+6 + LTE Band 7	2Mbps + MCS0 + QPSK

Remark: For Radiated Test Cases, the tests were performed with Sample 1.

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, 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.

3 Test Result

3.1 Unwanted Emissions Measurement

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

<Limit of Unwanted Emissions>

(1) 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

(2) 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.

3.1.1 Measuring Instruments

See list of measuring equipment of this test report.

3.1.2 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

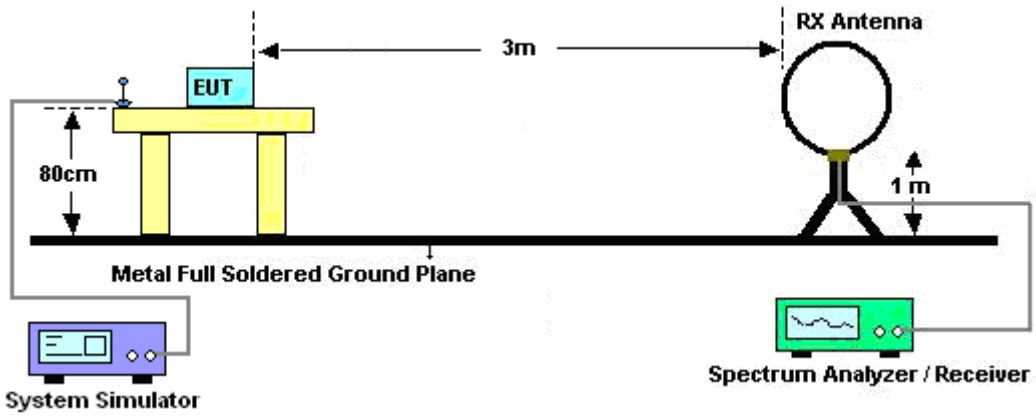
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - 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.

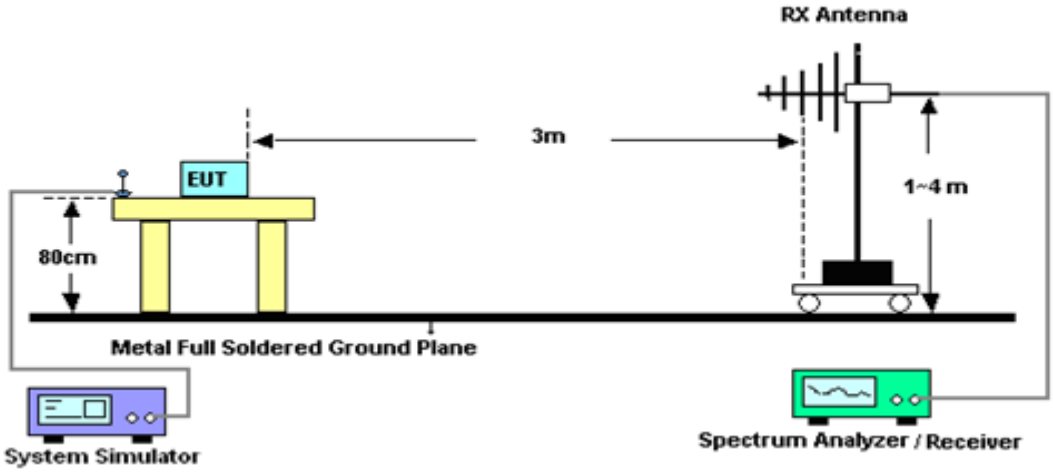
2. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The antenna is a broadband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

3.1.3 Test Setup

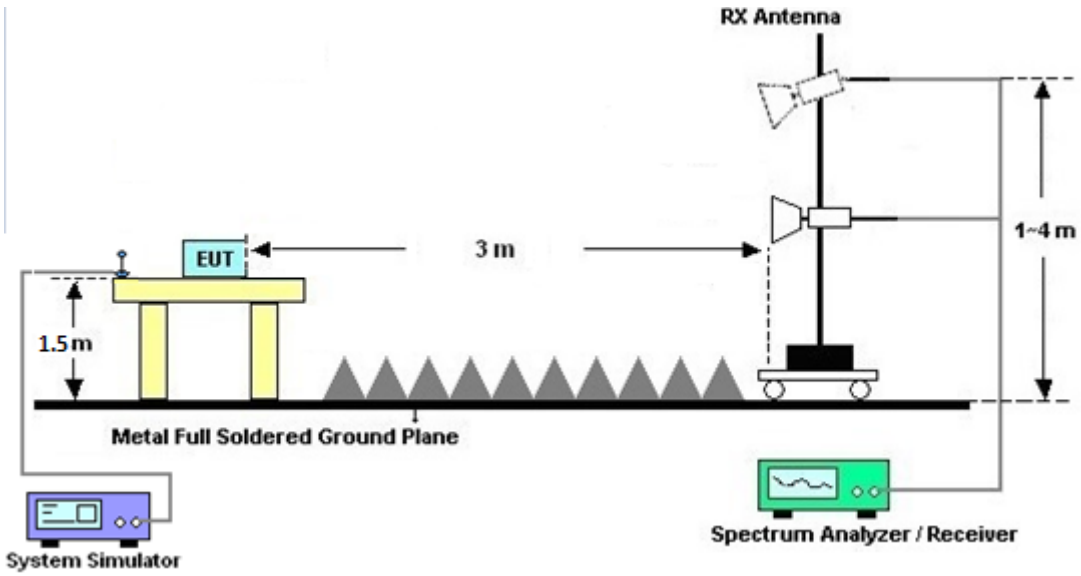
For radiated emissions below 30MHz



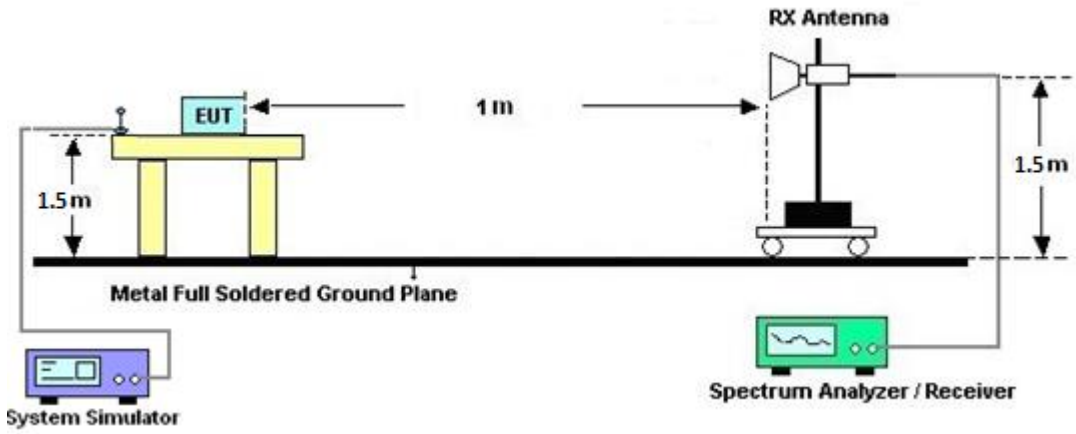
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

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

3.1.5 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix A and B.

3.1.6 Duty Cycle

Please refer to Appendix C.

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

Please refer to Appendix A and B.

3.2 Antenna Requirements

3.2.1 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.

3.2.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.2.3 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	Jul. 14, 2020	Jan. 13, 2021~ Jan. 26, 2021	Jul. 13, 2021	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01 N-06	47020 & 06	30MHz to 1GHz	Oct. 11, 2020	Jan. 13, 2021~ Jan. 26, 2021	Oct. 10, 2021	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Sep. 30, 2020	Jan. 13, 2021~ Jan. 26, 2021	Sep. 29, 2021	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-152 2	1G~18GHz	Sep. 29, 2020	Jan. 13, 2021~ Jan. 26, 2021	Sep. 28, 2021	Radiation (03CH16-HY)
Amplifier	EMCI	EMC051845S E	980729	1-18GHz	Jul. 10, 2020	Jan. 13, 2021~ Jan. 26, 2021	Jul. 09, 2021	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 576	18GHz ~40GHz	May 22, 2020	Jan. 13, 2021~ Jan. 26, 2021	May 21, 2021	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY532702 64	1GHz~26.5GHz	Dec. 10, 2020	Jan. 13, 2021~ Jan. 26, 2021	Dec. 09, 2021	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY572901 11	3Hz~26.5GHz	Dec. 11, 2020	Jan. 13, 2021~ Jan. 26, 2021	Dec. 10, 2021	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/ 4PE	NA	Aug. 29, 2020	Jan. 13, 2021~ Jan. 26, 2021	Aug. 28, 2021	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/ 4PE	NA	Aug. 29, 2020	Jan. 13, 2021~ Jan. 26, 2021	Aug. 28, 2021	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300 -5757	NA	Aug. 29, 2020	Jan. 13, 2021~ Jan. 26, 2021	Aug. 28, 2021	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Jan. 13, 2021~ Jan. 26, 2021	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jan. 13, 2021~ Jan. 26, 2021	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jan. 13, 2021~ Jan. 26, 2021	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jan. 13, 2021~ Jan. 26, 2021	N/A	Radiation (03CH16-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))	**4.5**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**6.3**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.7**

Appendix A. Radiated Spurious Emission

Test Engineer :	Karl Hou, Caster Liao and Andy Yang	Temperature :	20~25°C
		Relative Humidity :	50~60%

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7

WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant. Simultaneously	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)
802.11ax HE40 Ch03 2422MHz		2389.52	56.45	-17.55	74	40.69	27.56	18.48	30.28	167	315	P	H
		2385.32	44.99	-9.01	54	29.21	27.59	18.47	30.28	167	315	A	H
	*	2422	107.35	-	-	91.62	27.46	18.54	30.27	167	315	P	H
	*	2422	97.94	-	-	82.21	27.46	18.54	30.27	167	315	A	H
		2488.8	56.33	-17.67	74	40.51	27.4	18.67	30.25	167	315	P	H
		2497.9	44.31	-9.69	54	28.47	27.4	18.68	30.25	167	315	A	H
		2389.94	57.23	-16.77	74	41.47	27.56	18.48	30.28	370	34	P	V
		2389.94	46.25	-7.75	54	30.49	27.56	18.47	30.28	370	34	A	V
	*	2422	103.43	-	-	87.7	27.46	18.54	30.27	370	34	P	V
	*	2422	95.6	-	-	79.87	27.46	18.54	30.27	370	34	A	V
		2489.01	56.41	-17.59	74	40.59	27.4	18.67	30.25	370	34	P	V
		2499.58	44.43	-9.57	54	28.59	27.4	18.68	30.25	370	34	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant. Simultaneously	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)
802.11ax HE40 Ch102 5510MHz		5459.2	62.48	-11.52	74	47.06	31.62	13.52	29.72	100	118	P	H
		5464	64.37	-3.83	68.2	48.94	31.63	13.52	29.72	100	118	A	H
		5459.68	46.67	-7.33	54	31.25	31.62	13.52	29.72	100	118	P	H
	*	5510	111.18	-	-	95.67	31.68	13.56	29.73	100	118	A	H
	*	5510	100.4	-	-	84.89	31.68	13.56	29.73	100	118	P	H
		5751.77	55.01	-13.19	68.2	39.06	32	13.78	29.83	100	118	A	H
		5459.2	56.74	-17.26	74	41.32	31.62	13.52	29.72	349	97	P	V
		5468.32	59.4	-8.8	68.2	43.95	31.64	13.53	29.72	349	97	A	V
		5458	42.95	-11.05	54	27.53	31.62	13.52	29.72	349	97	P	V
	*	5510	104	-	-	88.49	31.68	13.56	29.73	349	97	A	V
	*	5510	94.99	-	-	79.48	31.68	13.56	29.73	349	97	P	V
		5764.055	54.33	-13.87	68.2	38.37	32	13.79	29.83	349	97	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (Harmonic @ 3m)

WIFI Ant. Simultaneously	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)
802.11ax HE40 Ch03 2422MHz + 802.11ax HE40 Ch102 5510MHz + LTE Band 7 Ch21100 2535MHz		4844	55.77	-18.23	74	39.43	31.19	14.78	29.63	100	0	P	H
		4844	46.48	-7.52	54	30.14	31.19	14.78	29.63	100	0	A	H
		7311	45.96	-28.04	74	49.19	36.42	16.61	56.26	100	0	P	H
		11020	49.79	-24.21	74	45.74	40.08	19.76	55.79	100	0	P	H
		16530	48.46	-19.74	68.2	40.72	39.12	24.36	55.74	100	0	P	H
													H
		4844	55.46	-18.54	74	39.12	31.19	14.78	29.63	100	0	P	V
		4844	46.8	-7.2	54	30.46	31.19	14.78	29.63	100	0	A	V
		7311	44.86	-29.14	74	48.09	36.42	16.61	56.26	100	0	P	V
		11020	48.72	-25.28	74	44.67	40.08	19.76	55.79	100	0	P	V
		16530	48.18	-20.02	68.2	40.44	39.12	24.36	55.74	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (LF)

WIFI Ant. Simultaneously	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)
2.4GHz 802.11ax + 5GHz 802.11ax + LTE Band 7 LF		90.14	30.33	-13.17	43.5	46.8	14.73	1.45	32.65	-	-	P	H
		181.32	29.76	-13.74	43.5	45.28	15.12	2.21	32.85	-	-	P	H
		187.14	28.98	-14.52	43.5	44.55	15.05	2.25	32.87	-	-	P	H
		640.13	28.19	-17.81	46	29.93	26.47	4.35	32.56	-	-	P	H
		832.19	31.31	-14.69	46	30.34	28.66	5.03	32.72	-	-	P	H
		950.53	33.83	-12.17	46	29.29	30.73	5.44	31.63	100	0	P	H
													H
													H
													H
													H
													H
													H
		37.76	33.07	-6.93	40	44.41	20.64	0.8	32.78	100	0	P	V
		86.26	33.17	-6.83	40	50.13	14.3	1.41	32.67	-	-	P	V
		171.62	29.96	-13.54	43.5	45.01	15.64	2.13	32.82	-	-	P	V
		561.56	28.47	-17.53	46	30.85	26.24	4.05	32.67	-	-	P	V
		859.35	32.3	-13.7	46	30.51	29.26	5.13	32.6	-	-	P	V
		931.13	33.73	-12.27	46	30.29	29.99	5.38	31.93	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7

BLE + WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant. Simultaneously	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)
BLE CH 19 2440MHz		2365.58	56.31	-17.69	74	40.45	27.71	8.52	30.29	103	301	P	H
		2337.58	48.52	-5.48	54	32.62	27.82	8.46	30.3	103	301	A	H
	*	2440	103.42	-	-	87.69	27.42	8.66	30.27	103	301	P	H
	*	2440	102.95	-	-	87.22	27.42	8.66	30.27	103	301	P	H
		2499.37	57.4	-16.6	74	41.56	27.4	8.77	30.25	103	301	P	H
		2493.14	49.09	-4.91	54	33.26	27.4	8.76	30.25	103	301	A	H
		2388.68	56.48	-17.52	74	40.71	27.57	8.56	30.28	400	14	P	V
		2359.7	48.21	-5.79	54	32.33	27.74	8.51	30.29	400	14	A	V
	*	2440	100.53	-	-	84.8	27.42	8.66	30.27	400	14	P	V
	*	2440	100.07	-	-	84.34	27.42	8.66	30.27	400	14	P	V
		2498.95	58.28	-15.72	74	42.44	27.4	8.77	30.25	400	14	P	V
		2496.5	48.8	-5.2	54	32.96	27.4	8.77	30.25	400	14	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

BLE + WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant. Simultaneously	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)
802.11ax HE40 Ch102 5510MHz		5459.44	63.66	-10.34	74	48.24	31.62	13.52	29.72	100	116	P	H
		5464.96	64.97	-3.23	68.2	49.53	31.63	13.53	29.72	100	116	P	H
		5459.92	46.59	-7.41	54	31.17	31.62	13.52	29.72	100	116	A	H
	*	5510	110.7	-	-	95.19	31.68	13.56	29.73	100	116	P	H
	*	5510	101.34	-	-	85.83	31.68	13.56	29.73	100	116	A	H
		5755.235	55.04	-13.16	68.2	39.09	32	13.78	29.83	100	116	P	H
		5453.92	57.34	-16.66	74	41.93	31.61	13.52	29.72	314	24	P	V
		5468.8	58.87	-9.33	68.2	43.43	31.64	13.53	29.73	314	24	P	V
		5458.72	43.46	-10.54	54	28.04	31.62	13.52	29.72	314	24	A	V
	*	5510	107.54	-	-	92.03	31.68	13.56	29.73	314	24	P	V
	*	5510	96.94	-	-	81.43	31.68	13.56	29.73	314	24	A	V
		5742.32	53.75	-14.45	68.2	37.85	31.95	13.77	29.82	314	24	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (Harmonic @ 3m)

WIFI Ant. Simultaneously	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)
BLE CH 19 2440MHz + 802.11ax HE40 Ch102 5510MHz + LTE Band 7 Ch21100 2535MHz		4880	56.06	-17.94	74	39.77	31.14	14.78	29.63	100	0	P	H
		4880	44.68	-9.32	54	28.39	31.14	14.78	29.63	100	0	A	H
		7320	46.41	-27.59	74	49.61	36.44	16.62	56.26	100	0	P	H
		11020	49.05	-24.95	74	45	40.08	19.76	55.79	100	0	P	H
		16530	48.15	-20.05	68.2	40.41	39.12	24.36	55.74	100	0	P	H
													H
		4880	54.93	-19.07	74	38.64	31.14	14.78	29.63	100	0	P	V
		4880	45.95	-8.05	54	29.66	31.14	14.78	29.63	100	0	A	V
		7320	45.45	-28.55	74	48.65	36.44	16.62	56.26	100	0	P	V
		11020	48.97	-25.03	74	44.92	40.08	19.76	55.79	100	0	P	V
		16530	48.61	-19.59	68.2	40.87	39.12	24.36	55.74	100	0	P	V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (LF)

WIFI Ant. Simultaneously	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)
2.4GHz BLE + 5GHz 802.11ax LF + LTE Band 7 LF		86.26	30.93	-9.07	40	47.89	14.3	1.41	32.67	100	0	P	H
		115.36	27.62	-15.88	43.5	41.11	17.48	1.68	32.65	-	-	P	H
		154.16	20.41	-23.09	43.5	34.09	17.1	1.99	32.77	-	-	P	H
		183.26	28.88	-14.62	43.5	44.46	15.05	2.23	32.86	-	-	P	H
		790.48	30.99	-15.01	46	30.89	28.02	4.9	32.82	-	-	P	H
		956.35	33.98	-12.02	46	29.07	30.99	5.46	31.54	-	-	P	H
													H
													H
													H
													H
													H
													H
		32.91	33.92	-6.08	40	42.92	23.04	0.71	32.75	100	0	P	V
		44.55	33.21	-6.79	40	48.17	16.97	0.89	32.82	-	-	P	V
		77.53	29.17	-10.83	40	47.32	13.25	1.31	32.71	-	-	P	V
		181.32	31.5	-12	43.5	47.02	15.12	2.21	32.85	-	-	P	V
		826.37	31.2	-14.8	46	30.53	28.4	5.01	32.74	-	-	P	V
		942.77	34.14	-11.86	46	29.96	30.51	5.42	31.75	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7

BLE + WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant. Simultaneously	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)
BLE CH 00 2402MHz		2319.03	56.67	-17.33	74	40.76	27.86	18.35	30.3	138	96	P	H
		2383.395	48.82	-5.18	54	33.03	27.6	18.47	30.28	138	96	P	H
	*	2402	103.97	-	-	88.25	27.5	18.5	30.28	138	96	P	H
	*	2402	103.48	-	-	87.76	27.5	18.5	30.28	138	96	A	H
												P	H
												A	H
		2339.19	56.83	-17.17	74	40.92	27.82	18.39	30.3	291	70	P	V
		2366.28	48.99	-5.01	54	33.14	27.7	18.44	30.29	291	70	P	V
	*	2402	101.42	-	-	85.7	27.5	18.5	30.28	291	70	P	V
	*	2402	100.92	-	-	85.2	27.5	18.5	30.28	291	70	A	V
												P	V
												A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

BLE + WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant. Simultaneously	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)
802.11ax HE40 Ch102 5510MHz		5458.96	63.34	-10.66	74	47.92	31.62	13.52	29.72	100	117	P	H
		5463.52	64.54	-3.66	68.2	49.11	31.63	13.52	29.72	100	117	P	H
		5459.68	46.99	-7.01	54	31.57	31.62	13.52	29.72	100	117	A	H
	*	5510	110.8	-	-	95.29	31.68	13.56	29.73	100	117	P	H
	*	5510	101.51	-	-	86	31.68	13.56	29.73	100	117	A	H
		5750.825	53.59	-14.61	68.2	37.64	32	13.78	29.83	100	117	P	H
		5459.68	57.5	-16.5	74	42.08	31.62	13.52	29.72	314	24	P	V
		5465.2	61.88	-6.32	68.2	46.44	31.63	13.53	29.72	314	24	P	V
		5459.44	43.6	-10.4	54	28.18	31.62	13.52	29.72	314	24	A	V
	*	5510	107.1	-	-	91.59	31.68	13.56	29.73	314	24	P	V
	*	5510	96.95	-	-	81.44	31.68	13.56	29.73	314	24	A	V
		5746.415	53.56	-14.64	68.2	37.63	31.98	13.77	29.82	314	24	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (Harmonic @ 3m)

WIFI Ant. Simultaneously	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)
BLE CH 00 2402MHz + 802.11ax HE40 Ch102 5510MHz + LTE Band 7 Ch21100 2535MHz		4804	57.11	-16.89	74	39.98	31.11	14.78	28.76	100	0	P	H
		4804	45.77	-8.23	54	28.64	31.11	14.78	28.76	100	0	A	H
		11020	49.31	-24.69	74	45.26	40.08	19.76	55.79	100	0	P	H
		16530	48.39	-19.81	68.2	40.65	39.12	24.36	55.74	100	0	P	H
													H
													H
		4804	57.19	-16.81	74	40.06	31.11	14.78	28.76	100	0	P	V
		4804	45.92	-8.08	54	28.79	31.11	14.78	28.76	100	0	A	V
		11020	50.47	-23.53	74	46.42	40.08	19.76	55.79	100	0	P	V
		16530	48.81	-19.39	68.2	41.07	39.12	24.36	55.74	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

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (LF)

WIFI Ant. Simultaneously	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)
2.4GHz BLE + 5GHz 802.11ax LF + LTE Band 7 LF		76.56	24.8	-15.2	40	43.13	13.09	1.3	32.72	-	-	P	H
		108.57	27.91	-15.59	43.5	41.97	16.95	1.62	32.63	-	-	P	H
		121.18	26.04	-17.46	43.5	39.48	17.5	1.73	32.67	-	-	P	H
		181.32	29.5	-14	43.5	45.02	15.12	2.21	32.85	-	-	P	H
		746.83	32.08	-13.92	46	31.88	28.13	4.69	32.62	-	-	P	H
		932.1	34.12	-11.88	46	30.61	30.04	5.39	31.92	100	0	P	H
													H
													H
													H
													H
													H
													H
		44.55	31.97	-8.03	40	46.93	16.97	0.89	32.82	100	0	P	V
		63.95	31.09	-8.91	40	50.76	11.94	1.17	32.78	-	-	P	V
		119.24	26.41	-17.09	43.5	39.83	17.53	1.71	32.66	-	-	P	V
		179.38	30.9	-12.6	43.5	46.37	15.18	2.2	32.85	-	-	P	V
		746.83	31.34	-14.66	46	31.14	28.13	4.69	32.62	-	-	P	V
		958.29	34.52	-11.48	46	29.49	31.07	5.47	31.51	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
-	The signal is **Unintentional Radiators**.
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.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
Simultaneously		(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

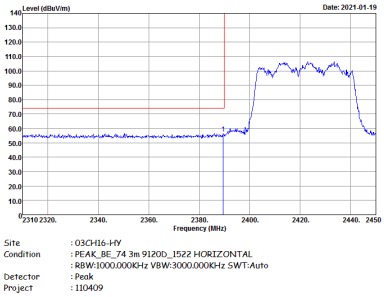
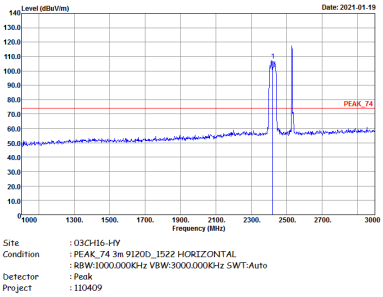
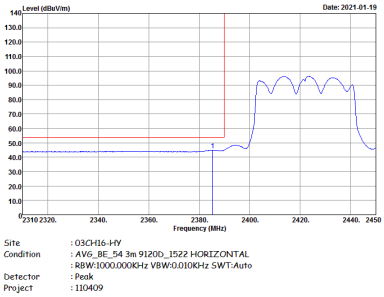
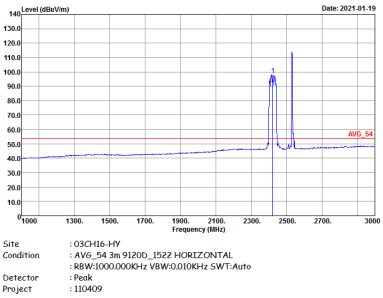
Test Engineer :	Karl Hou, Caster Liao and Andy Yang	**Temperature :**	20~25°C
		Relative Humidity :	50~60%

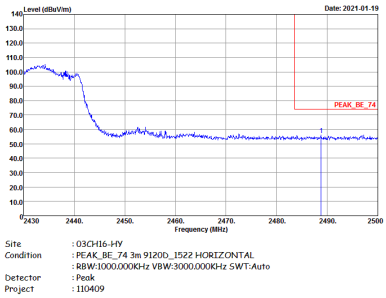
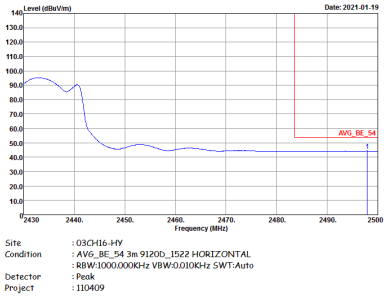
Note symbol

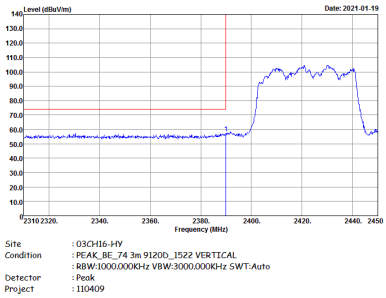
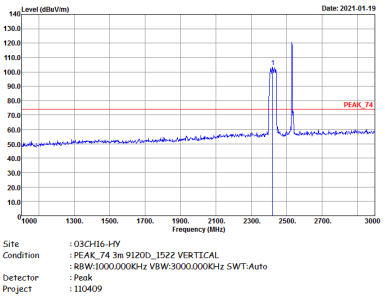
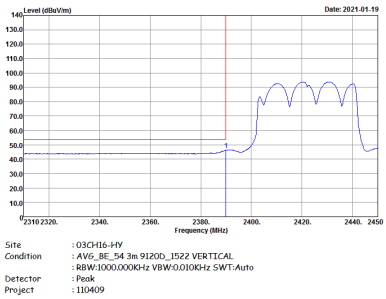
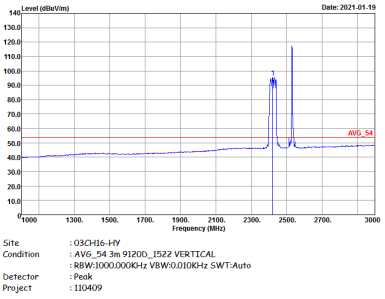
-L	**Low channel location**
-R	**High channel location**

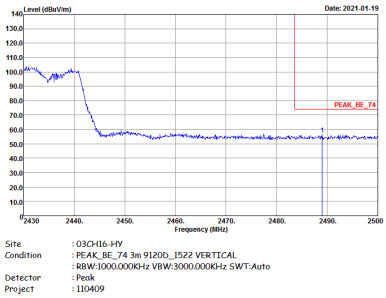
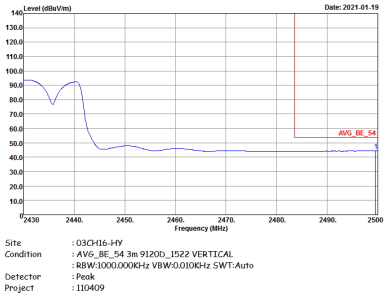
2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7

WIFI 802.11ax HE40 (Band Edge @ 3m)

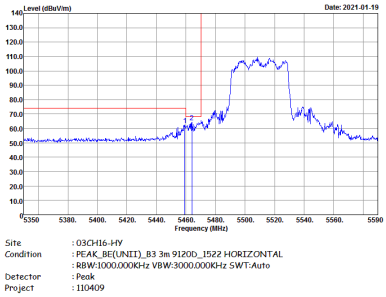
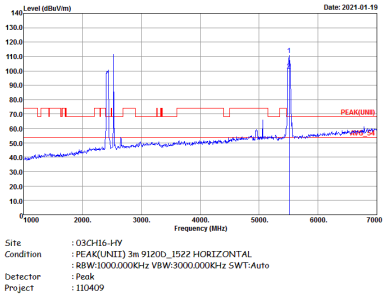
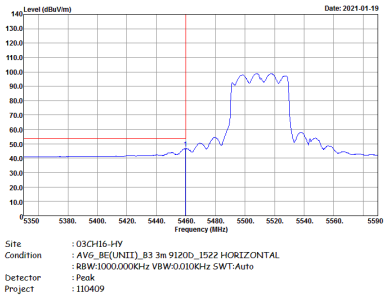
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch03 2422MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		
Avg.		

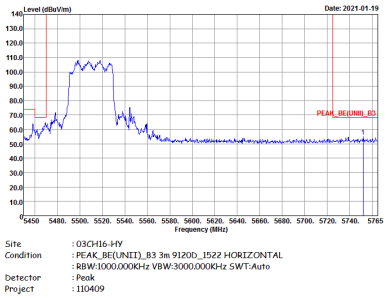
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch03 2422MHz - R	
Simultaneously	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

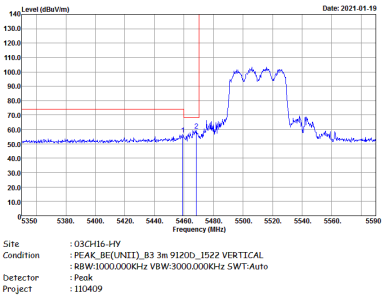
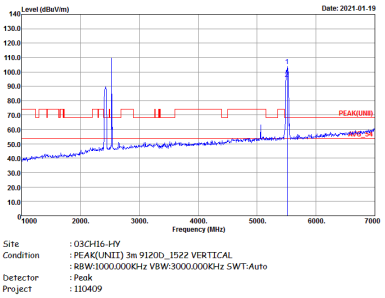
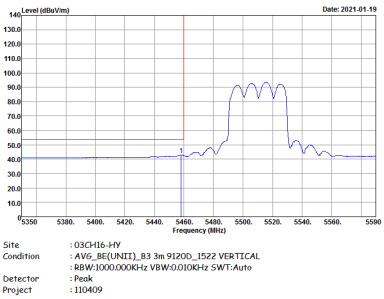
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch03 2422MHz - L	
Simultaneously	Vertical	Fundamental
Peak		
Avg.		

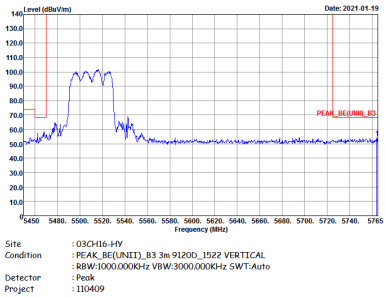
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch03 2422MHz - R	
Simultaneously	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

WIFI 802.11ax HE40 (Band Edge @ 3m)

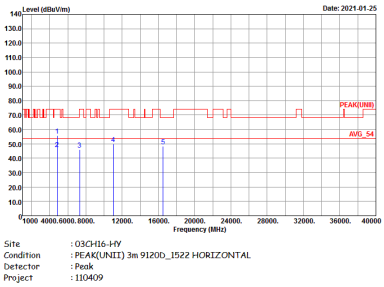
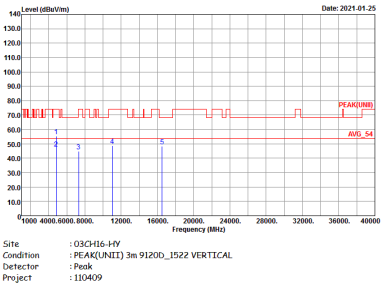
WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - R	
Simultaneously	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Vertical	Fundamental
Peak		
Avg.		Left blank

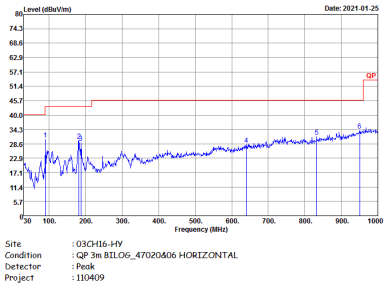
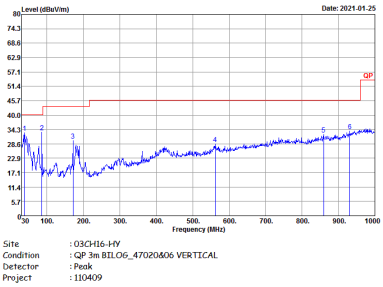
WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - R	
Simultaneously	Vertical	Fundamental
Peak		Left blank

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz + Band 3 5470-5725MHz + LTE Band 7 Harmonic @ 3m	
Ant.	802.11ax HE40 Ch03 2422MHz + 802.11ax HE40 Ch102 5510MHz + LTE Band 7 Ch21100 2535MHz	
Simultaneously	Horizontal	Vertical
Peak Avg.		

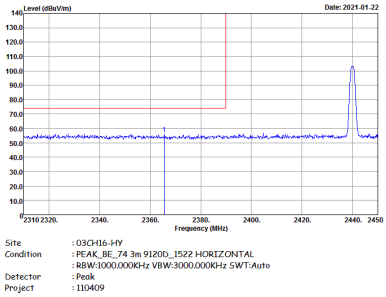
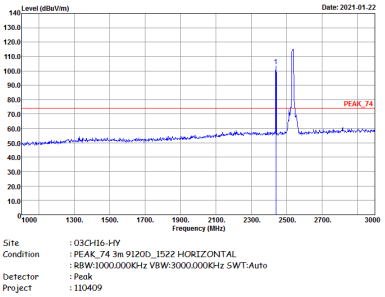
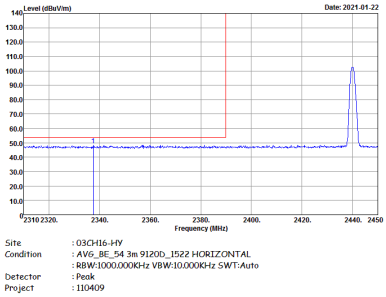
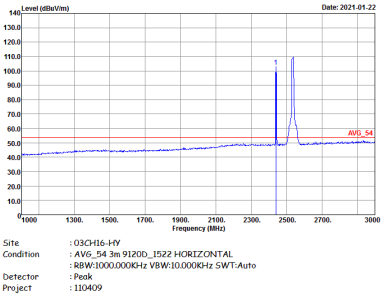
Emission below 1GHz

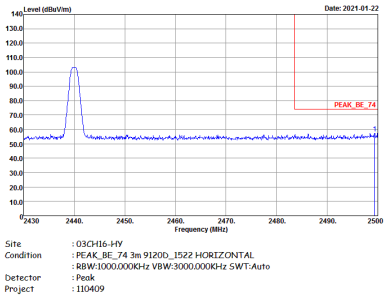
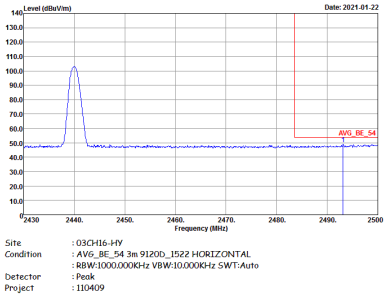
2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (LF)

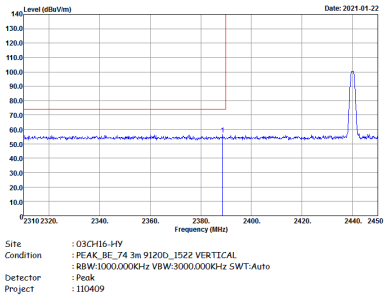
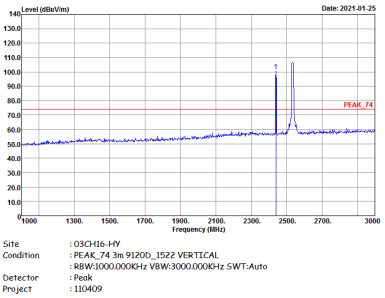
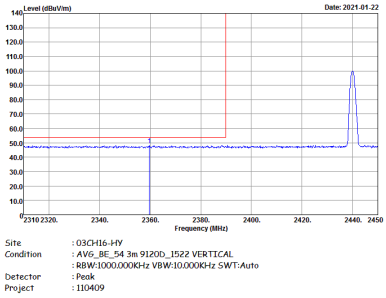
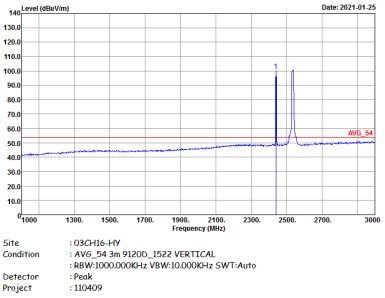
WIFI	2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7	
Ant.	802.11ax HE40 + 802.11ax HE40 + LTE Band 7 LF	
Simultaneously	Horizontal	Vertical
QP / Peak		

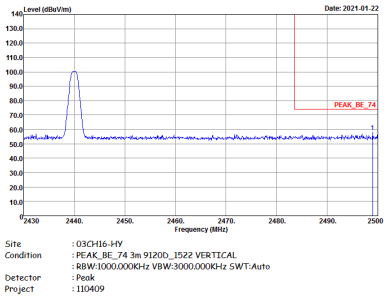
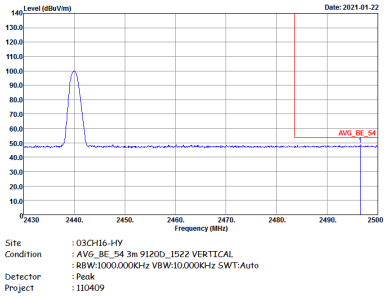
2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7

BLE + WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	BLE(2M) Ch19 2440MHz	
Simultaneously	Horizontal	Fundamental
Peak		
Avg.		

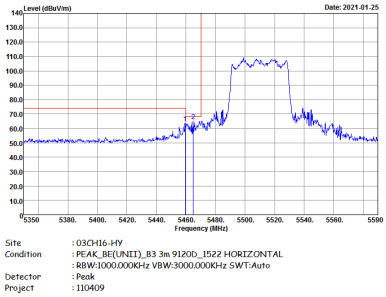
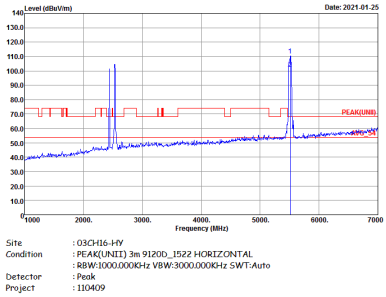
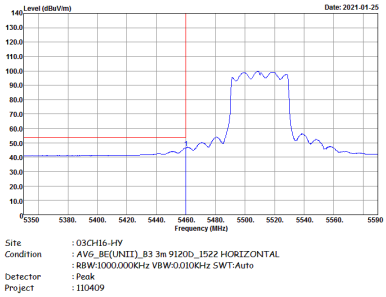
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	BLE(2M) Ch19 2440MHz	
Simultaneously	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank

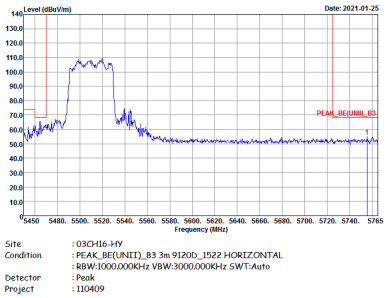
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	BLE(2M) Ch19 2440MHz	
Simultaneously	Horizontal	Fundamental
Peak		
Avg		

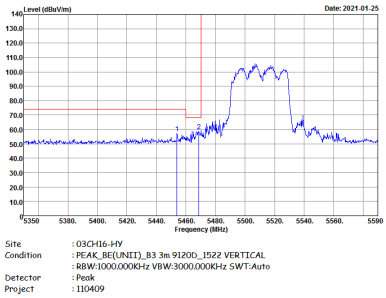
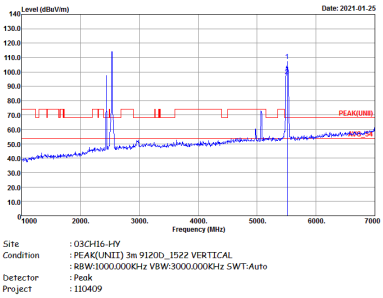
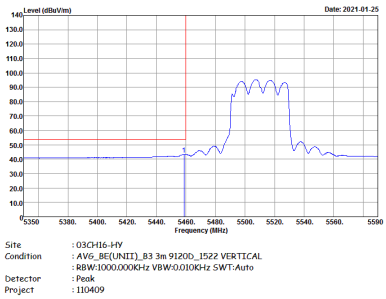
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	BLE(2M) Ch19 2440MHz	
Simultaneously	Horizontal	Fundamental
Peak		Left blank
Avg		Left blank

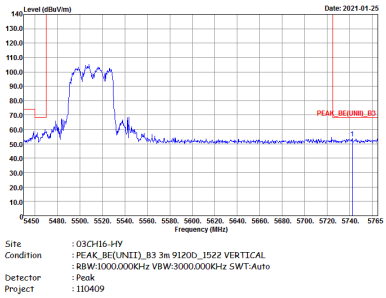
2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7

BLE + WIFI 802.11ax HE40 (Band Edge @ 3m)

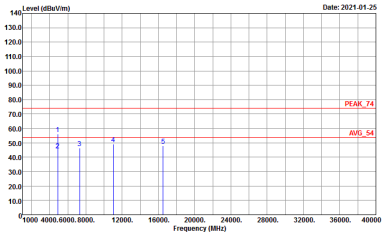
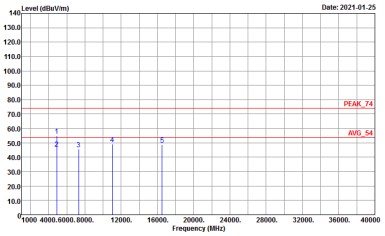
WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		
Avg.		Left blank

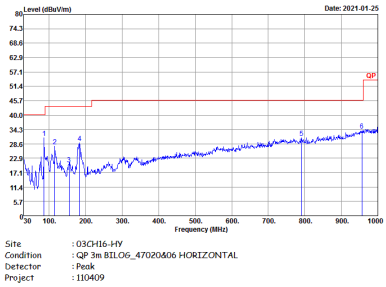
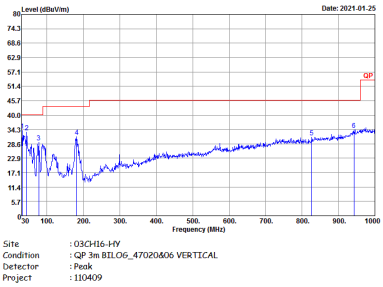
WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		Left blank

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz + Band 3 5470-5725MHz + LTE Band 7 Harmonic @ 3m	
Ant.	BLE(2M)_Ch19 + 802.11ax (HE40)_Ch102 + LTE Band 7 Ch21100 2535MHz	
Simultaneously	Horizontal	Fundamental
Peak Avg.	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 110409	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 VERTICAL Detector : Peak Project : 110409

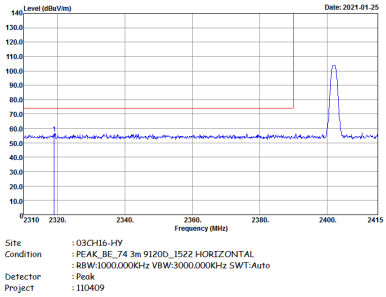
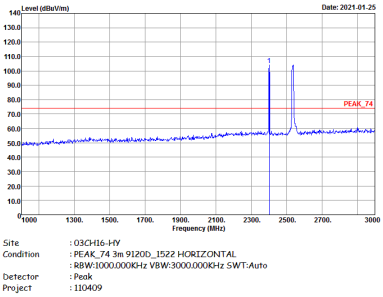
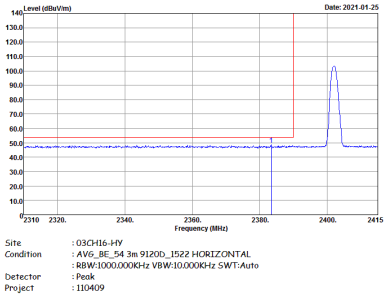
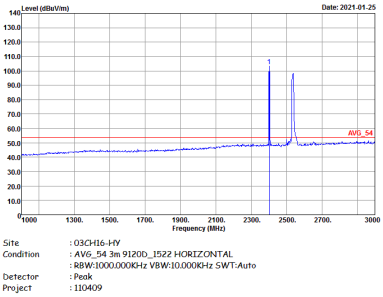
Emission below 1GHz

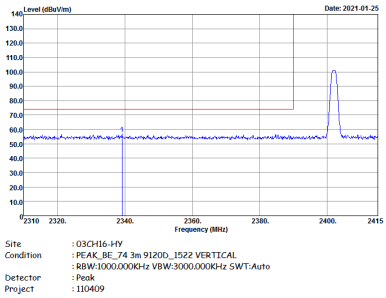
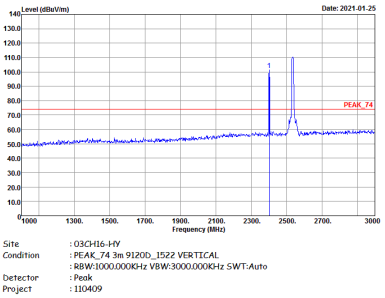
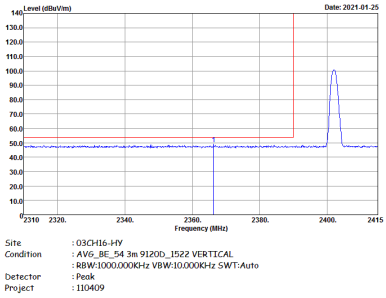
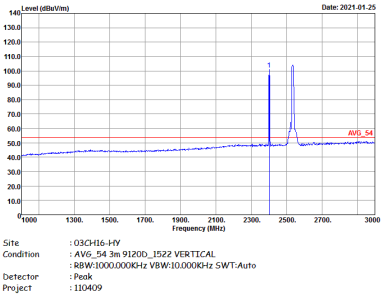
2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (LF)

WIFI	2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7	
Ant.	BLE(2M) + 802.11ax HE40 + LTE Band 7 LF	
Simultaneously	Horizontal	Vertical
QP / Peak		

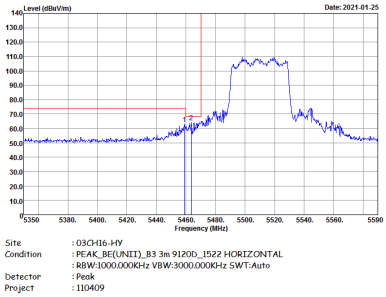
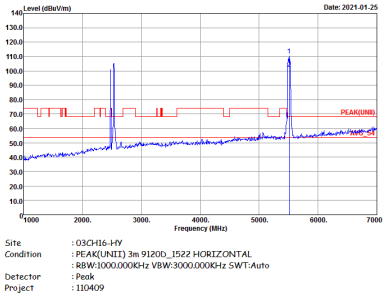
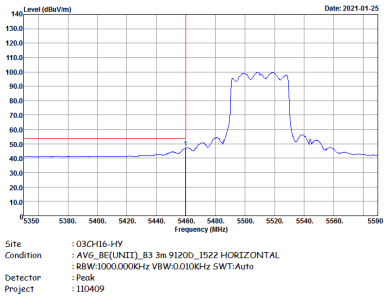
2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7

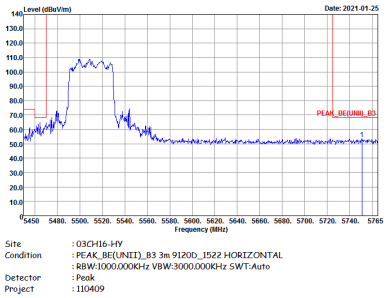
BLE + WIFI 802.11ax HE40 (Band Edge @ 3m)

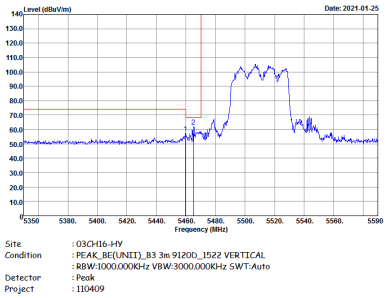
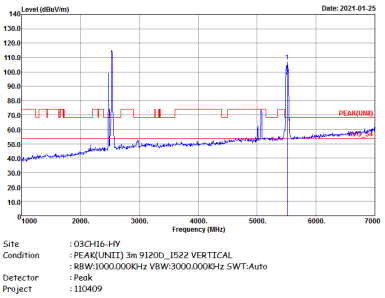
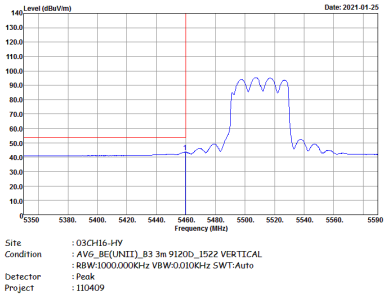
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	BLE(2M) Ch00 2402MHz	
Simultaneously	Horizontal	Fundamental
Peak		
Avg.		

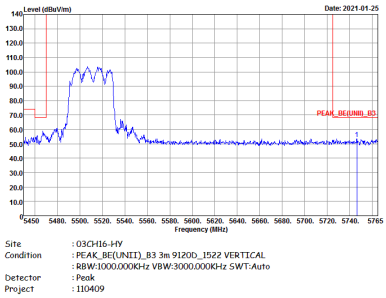
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
Ant.	BLE(2M) Ch00 2402MHz	
Simultaneously	Horizontal	Fundamental
Peak		
Avg		

BLE + WIFI 802.11ax HE40 (Band Edge @ 3m)

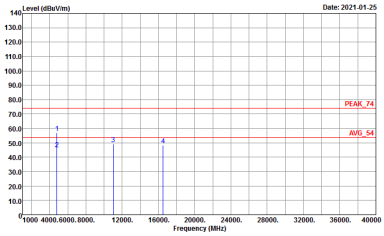
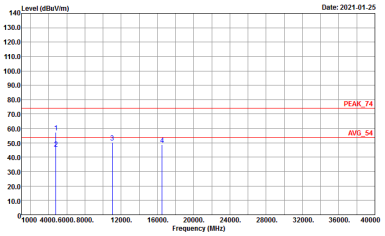
WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		
Avg.		Left blank

WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		Left blank

WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		
Avg.		Left blank

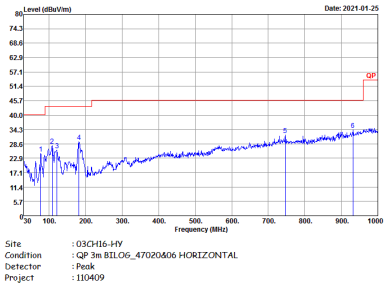
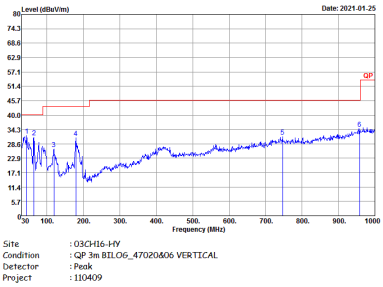
WIFI	Band 3 5470-5725MHz Band Edge @ 3m	
Ant.	802.11ax HE40 Ch102 5510MHz - L	
Simultaneously	Horizontal	Fundamental
Peak		Left blank

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz + Band 3 5470-5725MHz + LTE Band 7 Harmonic @ 3m	
Ant.	BLE(2M)_Ch00 + 802.11ax (HE40)_Ch102 + LTE Band 7 Ch21100 2535MHz	
Simultaneously	Horizontal	Fundamental
Peak Avg.	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 HORIZONTAL Detector : Peak Project : 110409	 Site : 03CH16-HY Condition : PEAK_74 3m 9120D_1522 VERTICAL Detector : Peak Project : 110409

Emission below 1GHz

2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7 (LF)

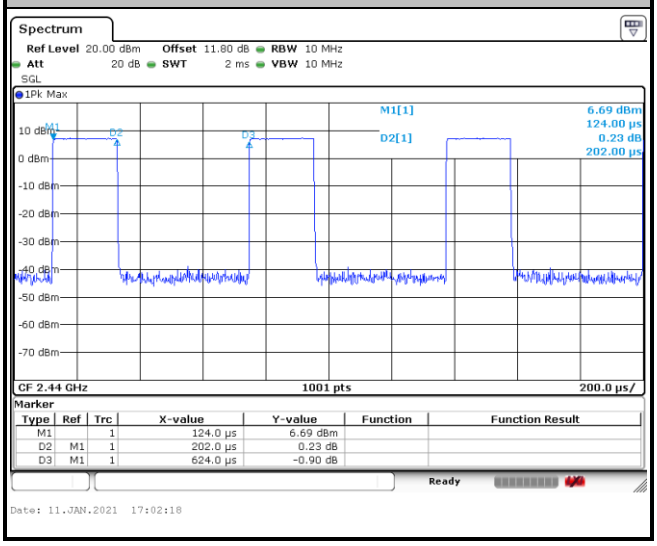
WIFI	2.4GHz 2400~2483.5MHz + Band 3 - 5470-5725MHz + LTE Band 7	
Ant.	BLE(2M) + 802.11ax HE40 + LTE Band 7 LF	
Simultaneously	Horizontal	Vertical
QP / Peak		

Appendix C. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting	Duty Factor(dB)
11	Bluetooth -LE for 2Mbps	32.37	202	4.95	10kHz	4.90
7	Bluetooth –LE for 2Mbps	32.59	204	4.90	10kHz	4.87
11+7	2.4GHz 802.11ax HE40 Full RU for Ant. 11	100.00	-	-	10Hz	0.00
11+7	2.4GHz 802.11ax HE40 Full RU for Ant. 7	100.00	-	-	10Hz	0.00
11+6	5GHz 802.11ax HE40 Full RU for Ant. 11	100.00	-	-	10Hz	0.00
11+6	5GHz 802.11ax HE40 Full RU for Ant. 6	100.00	-	-	10Hz	0.00

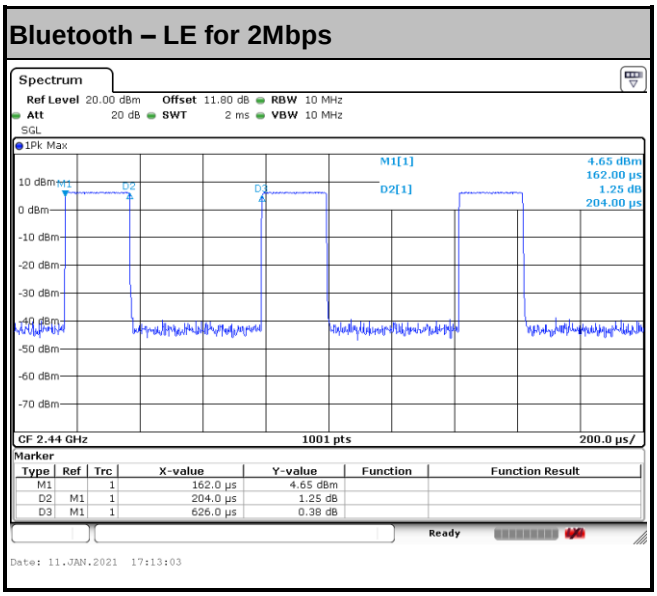
<Ant. 11>

Bluetooth – LE for 2Mbps



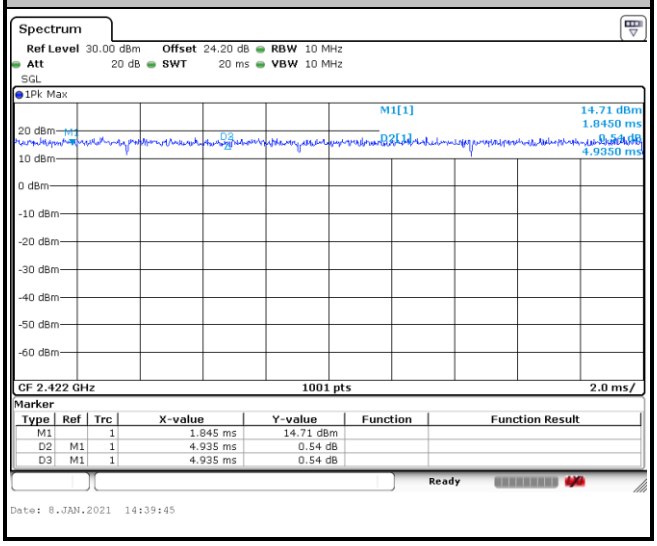
<Ant. 7>

Bluetooth – LE for 2Mbps



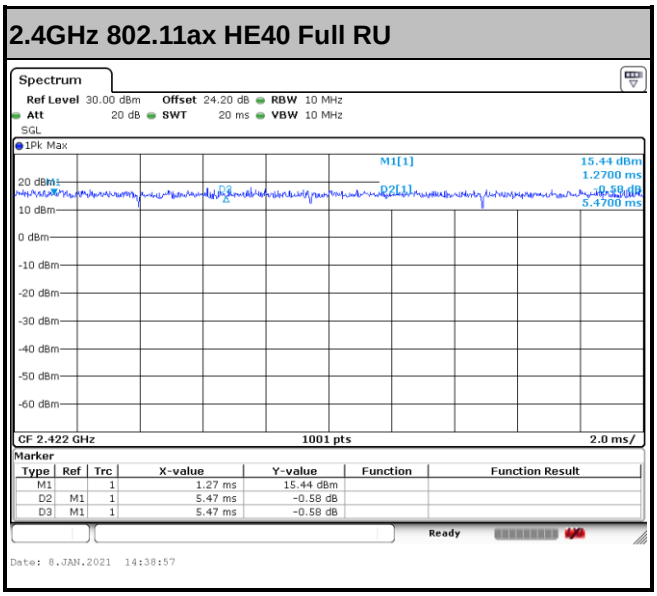
MIMO <Ant. 11>

2.4GHz 802.11ax HE40 Full RU



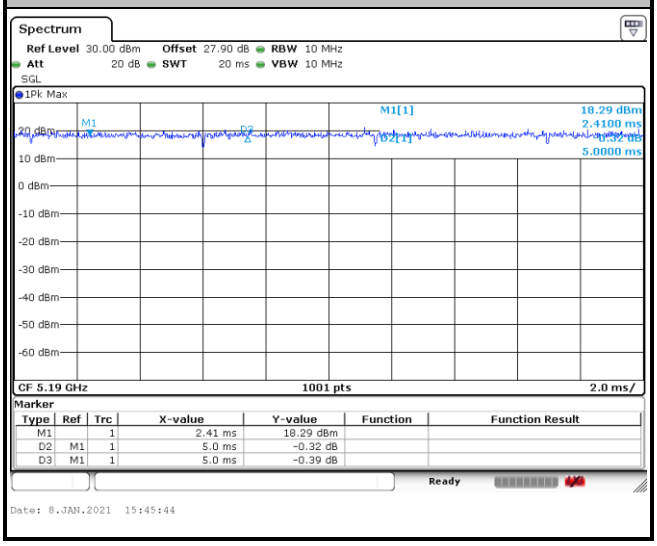
MIMO <Ant. 7>

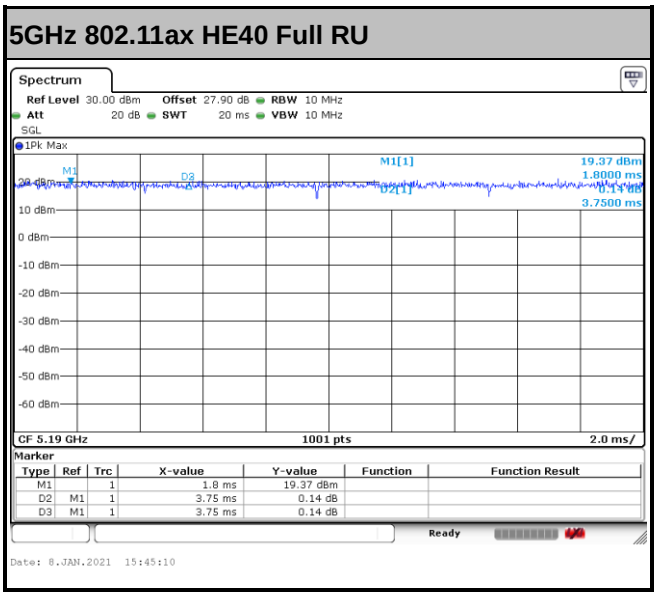
2.4GHz 802.11ax HE40 Full RU



MIMO <Ant. 11>

5GHz 802.11ax HE40 Full RU



MIMO <Ant. 6>

5GHz 802.11ax HE40 Full RU