

VARIANT FCC TEST REPORT

(Part 15, Subpart C)

Applicant:	BARTEC
Address:	Max-Eyth-Str.16 , 97980 Bad Mergentheim, Germany

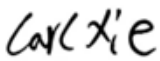
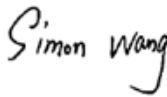
Manufacturer or Supplier:	BARTEC
Address:	Max-Eyth-Str.16 , 97980 Bad Mergentheim, Germany
Product:	Smartscanner / Smartphone
Brand Name:	BARTEC
Model Name:	SP9EX1/SC9EX1/SP9EX2/SC9EX2
FCC ID:	TBUSX9EX
Date of tests:	Dec. 20, 2025 ~ Jan. 05, 2026

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 15, Subpart C, Section 15.247**

☒ **ANSI C63.10-2020**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Carl Xie Engineer / Mobile Department	Approved by Simon Wang Manager / Mobile Department
	
Date: Jan. 05, 2026	Date: Jan. 05, 2026

BOOMWAVE TEST (SHENZHEN) CO., LTD. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. Without written approval of BOOMWAVE TEST (SHENZHEN) CO., LTD., the test report shall not be reproduced except in full.

TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1. SUMMARY OF TEST RESULTS.....	4
1.1 MEASUREMENT UNCERTAINTY	6
2 GENERAL INFORMATION	7
2.1 GENERAL DESCRIPTION OF EUT	7
2.2 DESCRIPTION OF TEST MODES	10
2.2.1 CONFIGURATION OF SYSTEM UNDER TEST	11
2.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL.....	11
2.3 DUTY CYCLE OF TEST SIGNAL	13
2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS	13
2.5 DESCRIPTION OF SUPPORT UNITS	14
3 TEST TYPES AND RESULTS.....	15
3.1 CONDUCTED EMISSION MEASUREMENT	15
3.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	15
3.1.2 TEST INSTRUMENTS.....	16
3.1.3 TEST PROCEDURES	17
3.1.4 DEVIATION FROM TEST STANDARD	17
3.1.5 TEST SETUP	18
3.1.6 EUT OPERATING CONDITIONS	18
3.1.7 TEST RESULTS	19
3.2 RADIATED EMISSION MEASUREMENT	21
3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT	21
3.2.2 TEST INSTRUMENTS.....	22
3.2.3 TEST PROCEDURES	23
3.2.4 DEVIATION FROM TEST STANDARD	23
3.2.5 TEST SETUP	24
3.2.6 EUT OPERATING CONDITIONS	25
3.2.7 TEST RESULTS	26
4 PHOTOGRAPHS OF THE TEST CONFIGURATION	48
5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	49



Test Report No.: PSZ-QSZ2510291415RF08

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-QSU2312140113RF10	Original release	Jul. 26, 2024
PSZ-QSZ2510291415RF08	Based on the original report, new product update HW, for specific changes please refer to the Product ASSY release notes document provided by the applicant. In this report verify power and RSE worst case. The verify results of conducted power are similar or lower. The RSE was verified based on the maximum value of the verify results of conducted power. So this report only replaces CE, RSE worst case (802.11ax(40MHz)_CH9/802.11ax(20MHz)RU FULL_CH11/BLE S8_CH19) and BANDEDGE (802.11ax(40MHz)_CH9/802.11ax(20MHz)RU FULL_CH11/BLE S8_CH39), other data please refer to original report.	Jan. 05, 2026

1. SUMMARY OF TEST RESULTS

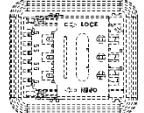
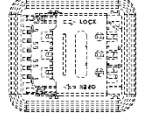
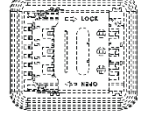
The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	TEST LAB*
15.207	AC Power Conducted Emission	Compliance	A
15.205 15.209	Radiated Emissions	Compliance	A
15.247(d)	Out of band Emission Measurement	Compliance	See note1
15.247(a)(2)	6dB bandwidth	Compliance	See note1
15.247(b)	Conducted Output power	Compliance	See note1
15.247(e)	Power Spectral Density	Compliance	See note1
15.203	Antenna Requirement	Compliance	See note1

Note :

1. Please refer to original report (Report No.: PSU-QSU2312140113RF10, FCC ID: TBUSX9EX).
2. In this report, for specific changes please refer to the documentation provided by the applicant (REV_F SC9EX1_SP9EX1_SC9EX2_SP9EX2 PCBA HW release notes (Ver. 6.0), REV_F SC9EX1_SP9EX1_SC9EX2_SP9EX2 Product ASSY release notes (Ver. 1.0) and SC9EX1_SP9EX1_SC9EX2_SP9EX2 SW release notes (Ver. 6.0)).
3. The differences between SC9EX1 and SP9EX1 the presence of the barcode scanner module and the "bump" on the back cover that model SC9EX1 incorporates the barcode scanner module, no differences on the PCBA between the variants(model:SP9EX1). We verified power and RSE worst case on parent product SC9EX1 and SP9EX1 variant, only the worst-case(SC9EX1) results are shown in the report.

4. The devices BARTEC SP9EX1 Smartphone and BARTEC SP9EX2 Smartphone share the same hardware and software. The same applies for the devices BARTEC SC9EX1 Smartscanner and BARTEC SC9EX2 Smartscanner. The only difference are the hazardous area marking of the devices, see table for clarification.

BARTEC SP9EX1 Smartphone	BARTEC SP9EX2 Smartphone
BARTEC SP9EX1 Type: 17-S19P-****/***** Mfr: BARTEC GmbH Max-Eyth-Strasse 16 97980 Bad Mergentheim, DE www.bartec.com   UL 24 ATEX 3153X II 1G Ex ia IIC T4 Ga II 2D Ex ia IIC T135°C Db IP64 IECEx UL 24.0004X Class I, Div 1, Groups A, B, C and D; Class II, Div 1, Groups E, F and G; Class III, T4 Zone 0, AEx ia IIC T4 Ga Zone 21, AEx ia IIC T135°C Db Zone 0, Ex ia IIC T4 Ga Zone 21, Ex ia IIC T135°C Db -20° < Ta < +55°C QR-code S/N: TTTTYYSSSSS MFD: MONTHY <i>reserved for logos of country approvals</i> USB port: USB-PD compatible – 5-20 Vdc / max 3 A DC-In port: 12 Vdc / max 1.5 A USB Um = 20 V / DCin Um = 12 V WARNING/ATTENTION: Use only replaceable battery pack BARTEC GmbH type: 17-S120-0020/**** Utiliser uniquement la batterie BARTEC GmbH type: 17-S120-0020/**** INTRINSICALLY SAFE/SECURITE INTRINSEQUE Warning - Substitution of components may impair intrinsic safety. Avertissement - La substitution des composants peut nuire à la sécurité intrinsèque.	BARTEC SP9EX2 Type: B7-S29P-****/***** Mfr: BARTEC GmbH Max-Eyth-Strasse 16 97980 Bad Mergentheim, DE www.bartec.com   UL 24 ATEX xxxxx II 3G Ex ic IIC T4 Gc II 3D Ex ic IIC T135°C Dc IP64 IECEx UL 24.xxxxx Class I, Div 2, Groups A, B, C and D; Class II, Div 2, Groups E, F and G; Class III, T4 Zone 2, AEx ic IIC T4 Gc Zone 22, AEx ic IIC T135°C Dc Zone 2, Ex ic IIC T4 Gc Zone 22, Ex ic IIC T135°C Dc -20° < Ta < +55°C QR-code S/N: TTTTYYSSSSS MFD: MONTHY <i>reserved for logos of country approvals</i> USB port: USB-PD compatible – 5-20 Vdc / max 3 A DC-In port: 12 Vdc / max 1.5 A USB Um = 20 V / DCin Um = 12 V WARNING/ATTENTION: Use only replaceable battery pack BARTEC GmbH type: B7-A220-0098/**** Utiliser uniquement la batterie BARTEC GmbH type: B7-A220-0098/**** INTRINSICALLY SAFE/SECURITE INTRINSEQUE Warning - Substitution of components may impair intrinsic safety. Avertissement - La substitution des composants peut nuire à la sécurité intrinsèque.
BARTEC SC9EX1 Smartscanner	BARTEC SC9EX2 Smartscanner
BARTEC SC9EX1 Type: 17-S19C-****/***** Mfr: BARTEC GmbH Max-Eyth-Strasse 16 97980 Bad Mergentheim, DE www.bartec.com   UL 24 ATEX 3153X II 1G Ex ia op is IIC T4 Ga II 2D Ex ia op is IIC T135°C Db IP64 IECEx UL 24.0004X Class I, Div 1, Groups A, B, C and D; Class II, Div 1, Groups E, F and G; Class III, T4 Zone 0, AEx ia op is IIC T4 Ga Zone 21, AEx ia op is IIC T135°C Db Zone 0, Ex ia op is IIC T4 Ga Zone 21, Ex ia op is IIC T135°C Db -20° < Ta < +55°C QR-code S/N: TTTTYYSSSSS MFD: MONTHY <i>reserved for logos of country approvals</i> USB port: USB-PD compatible – 5-20 Vdc / max 3 A DC-In port: 12 Vdc / max 1.5 A USB Um = 20 V / DCin Um = 12 V WARNING/ATTENTION: Use only replaceable battery pack BARTEC GmbH type: 17-S120-0020/**** Utiliser uniquement la batterie BARTEC GmbH type: 17-S120-0020/**** INTRINSICALLY SAFE/SECURITE INTRINSEQUE Warning - Substitution of components may impair intrinsic safety. Avertissement - La substitution des composants peut nuire à la sécurité intrinsèque.	BARTEC SC9EX2 Type: B7-S29C-****/***** Mfr: BARTEC GmbH Max-Eyth-Strasse 16 97980 Bad Mergentheim, DE www.bartec.com   UL 24 ATEX xxxxx II 3G Ex ic op is IIC T4 Gc II 3D Ex ic op is IIC T135°C Dc IP64 IECEx UL 24.xxxxx Class I, Div 2, Groups A, B, C and D; Class II, Div 2, Groups E, F and G; Class III, T4 Zone 2, AEx ic op is IIC T4 Gc Zone 22, AEx ic op is IIC T135°C Dc Zone 2, Ex ic op is IIC T4 Gc Zone 22, Ex ic op is IIC T135°C Dc -20° < Ta < +55°C QR-code S/N: TTTTYYSSSSS MFD: MONTHY <i>reserved for logos of country approvals</i> USB port: USB-PD compatible – 5-20 Vdc / max 3 A DC-In port: 12 Vdc / max 1.5 A USB Um = 20 V / DCin Um = 12 V WARNING/ATTENTION: Use only replaceable battery pack BARTEC GmbH type: B7-A220-0098/**** Utiliser uniquement la batterie BARTEC GmbH type: B7-A220-0098/**** INTRINSICALLY SAFE/SECURITE INTRINSEQUE Warning - Substitution of components may impair intrinsic safety. Avertissement - La substitution des composants peut nuire à la sécurité intrinsèque.

*Test Lab Information Reference

Lab A:

Boomwave Test (Shenzhen) Co., Ltd.

Lab Address:

Rm B38, Warehouse A5(Chiwan #1), #3 Chiwan 4th Rd, Chiwan Comm, Zhaoshang St, Nanshan Dist, Shenzhen, Guangdong, Shenzhen, China

Accredited Test Lab Cert 7607.01

The FCC Site Registration No. is 646781; The Designation No. is CN1429.

Boomwave Test (Shenzhen)
Co., Ltd.

Rm B38, Warehouse A5(Chiwan #1), #3 Chiwan
4th Rd, Chiwan Comm, Zhaoshang St, Nanshan
Dist, Shenzhen, Guangdong, Shenzhen, China

Mobile: +86 15118052731
Email: shimin.wang@boomwavelab.com

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
AC Power Conducted emissions	$\pm 2.70\text{dB}$
Radiated emissions (9KHz~30MHz)	$\pm 2.68\text{dB}$
Radiated emissions (30MHz~1GHz)	$\pm 4.98\text{dB}$
Radiated emissions (1GHz ~6GHz)	$\pm 4.70\text{dB}$
Radiated emissions (6GHz ~18GHz)	$\pm 4.60\text{dB}$
Radiated emissions (18GHz ~40GHz)	$\pm 4.12\text{dB}$
Conducted emissions	$\pm 4.01\text{dB}$
Occupied Channel Bandwidth	$\pm 43.58\text{KHz}$
Conducted Output power	$\pm 2.06\text{dB}$
Power Spectral Density	$\pm 0.85\text{ dB}$

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Smartscanner / Smartphone	
BRAND NAME	BARTEC	
MODEL NAME	SP9EX1/SC9EX1/SP9EX2/SC9EX2	
NOMINAL VOLTAGE	5.0V/9.0V/12.0Vdc (adapter) 3.2V/3.8V/4.2V/dc (battery)	
MODULATION	BLE	GFSK
	2.4G WIFI	DSSS,OFDM,OFDMA
TRANSMISSION RATE	BT_LE: 0.125 Mbps /0.5 Mbps /1 Mbps/2 Mbps	
	802.11b: 11/5.5/2.0/1.0 Mbps	
	802.11g: 54/48/36/24/18/9/6 Mbps	
	802.11n(HT20): up to 144.4 Mbps	
	802.11n(HT40): up to 300 Mbps	
	802.11(VHT20): up to 173.3 Mbps	
	802.11(VHT40): up to 400 Mbps	
	802.11ax(HE20)/ (RU26/52/106/242): up to 286.8 Mbps	
	802.11ax(HE40)/ (RU484): up to 573.5 Mbps	
OPERATING FREQUENCY	2412-2462MHz for 11b/g/n(HT20) /ax(HE20)/ ax(20M RU26/52/106/242) 2402-2480MHz for BT-LE(GFSK) 2422-2452MHz for 11n(HT40) /ax(HE40)/ax (40M RU484)	
MAX. OUTPUT POWER	WLAN: 618.98mW (Maximum)	
	BT-LE: 15.08mW (Maximum)	
	RU WLAN: 435.06mW (Maximum)	
ANTENNA GAIN	☒ Provided by client	
	BLE	ANT 5: -1.4dBi
	2.4G WIFI	ANT 5: -1.4dBi ANT 6: -1.4dBi
ANTENNA TYPE	BLE	ANT 5: Monopole Antenna
	2.4G WIFI	ANT 5: Monopole Antenna ANT 6: Monopole Antenna
HW VERSION	F	

Test Report No.: PSZ-QSZ2510291415RF08

SW VERSION	AWG1.250822.030 15030
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	USB cable: non-shielded cable, with w/o ferrite core, 0.8 meter

NOTE:

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- The EUT incorporates a MIMO function for WIFI and SISO function for BLE.

MODULATION MODE	TX/RX FUNCTION
802.11b	2TX /2RX
802.11g	2TX /2RX
802.11n(HT20)/ac(VHT20)/ax(HE20)	2TX /2RX
802.11n(HT40)/ /ac(VHT40)ax(HE40)	2TX /2RX
802.11ax(HE20)/ (RU26/52/106/242)	2TX /2RX
802.11ax(HE40)/ (RU484)	2TX /2RX
BT_LE(1MHz)	1TX /1RX
BT_LE(2MHz)	1TX /1RX
BT_LE(S2)	1TX /1RX
BT_LE(S8)	1TX /1RX

- For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
- Antenna gain and EUT conducted cable loss are provided by the customer, and the laboratory will record the results based on these items that involve these two parameters.

5. List of Accessory:

ACCESSORIES	BRAND	MANUFACTURER	MODEL	SPECIFICATION
Display(AMOLED)	EDO	Everdisplay Optronics Co., Ltd.	E611FCC74.A	N/A
Back cover	IV Techmould	N/A	N/A	N/A
Bezel	IV Techmould	N/A	N/A	N/A
Photo/Video Camera 1	Sunny Optical	N/A	F48N03A (Auto focus)	N/A
Photo/Video Camera 2	TrulyOpto	N/A	CSF208-B8BF-E(Fix focus)	N/A
CPU	Qualcomm	N/A	QCM6490	N/A
UFS	Kioxia	N/A	THGJFAT0T44BAIL	N/A
BT/WLAN Module	Murata	N/A	LBEE5QG2CX-830	N/A
NFC chipset	NXP	N/A	SN110TUK1	N/A
Battery	BARTEC	N/A	17-S1Z0-0020/****	4300 mAh, 3.68V
USB-C Cable	BARTEC	N/A	G7-A0Z0-0010	Length: 0.8m

2.2 DESCRIPTION OF TEST MODES

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20)/
/ac(VHT20)/ax(HE20)/ 802.11ax(HE20)/ (RU26/52/106/242):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

7 channels are provided for 802.11n (HT40)/ ac(VHT40)/ax(HE40)/ 802.11ax(HE40)/
(RU484):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
3	2422 MHz	7	2442 MHz
4	2427 MHz	8	2447 MHz
5	2432 MHz	9	2452 MHz
6	2437 MHz		

40 channels are provided for BT-LE (GFSK):

CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)	CHANNEL	FREQ. (MHZ)
0	2402	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	19	2440	29	2460	39	2480

2.2.1 CONFIGURATION OF SYSTEM UNDER TEST

Please see section 4 photographs of the test configuration for reference.

2.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports.
The worst case was found when positioned on Y axis for radiated emission. Following test modes were selected for the final test, and the final worst case is marked in boldface and recorded in the report:

EUT CONFIGURE MODE	APPLICABLE TO				MODE
	RE<1G	RE≥1G	PLC	APCM	
-	√	√	√	√	-

Where **RE<1G**: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE: No need to concern of Conducted Emission due to the EUT is powered by battery.

RADIATED EMISSION TEST (BELOW 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- ☒ The following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11ax(40MHz)	3 to 9	9	OFDM	MCS0
BT-LE	0 to 39	19	GFSK	0.125

Test Report No.: PSZ-QSZ2510291415RF08

RADIATED EMISSION TEST (ABOVE 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ The following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11ax(40MHz)	3 to 9	9	OFDM	MCS0
BT-LE	0 to 39	19	GFSK	0.125

POWER LINE CONDUCTED EMISSION TEST

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ The following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	DATA RATE (Mbps)
802.11ax(40MHz)	3 to 9	9	OFDM	MCS0

TEST CONDITION			
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	TEST VOLTAGE	TESTED BY
RE<1G	23deg. C, 70%RH	DC 5.0V/9.0V/12.0V By Adapter	Carl Xie
RE≥1G	23deg. C, 70%RH	DC 5.0V/9.0V/12.0V By Adapter	Carl Xie
PLC	25deg. C, 52%RH	DC 5.0V/9.0V/12.0V By Adapter	Carl Xie

2.3 DUTY CYCLE OF TEST SIGNAL

Please Refer to Appendix C.

2.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C, Section 15.247

KDB 558074 D01 DTS Meas Guidance v05r02

ANSI C63.10-2020

Note :

1. All test items have been performed and recorded as per the above standards.
2. The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (Certification). The test report has been issued separately.

2.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Laptop	Lenovo	Thinkpad E14	SL10W47313	N/A
2	Adapter	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB Line: non-shielded, Detachable 0.8m;

3 TEST TYPES AND RESULTS

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB μ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

3.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pulse limiter	SCHWARZBECK	VTSD 9561F	01579	2025/7/22	2026/7/21
ESR.EMI TEST RECEIVER	Rohde&SCHWARZ	ESR	101405	2025/6/30	2026/6/29
LISN	SCHWARZBECK	NSLK 8127	01216	2025/8/27	2026/8/26
Cable	Tonscend	/	/	2025/7/22	2026/7/21

NOTE:

1. The test was performed in CE shielded room.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GREGT/CHINA and NIM/CHINA.

3.1.3 TEST PROCEDURES

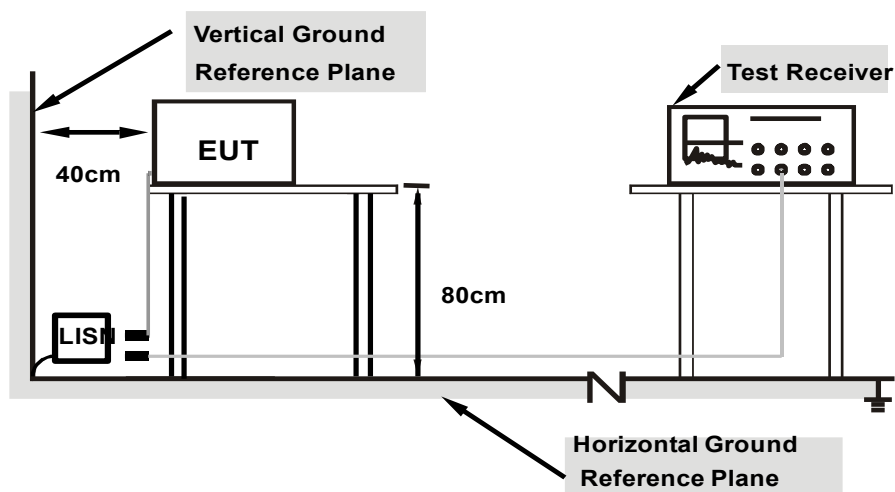
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

3.1.4 DEVIATION FROM TEST STANDARD

No deviation.

3.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
 2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.1.6 EUT OPERATING CONDITIONS

- Turned on the power and connected of all equipment.
- EUT was operated according to the type used was description in manufacturer's specifications or the User's Manual.

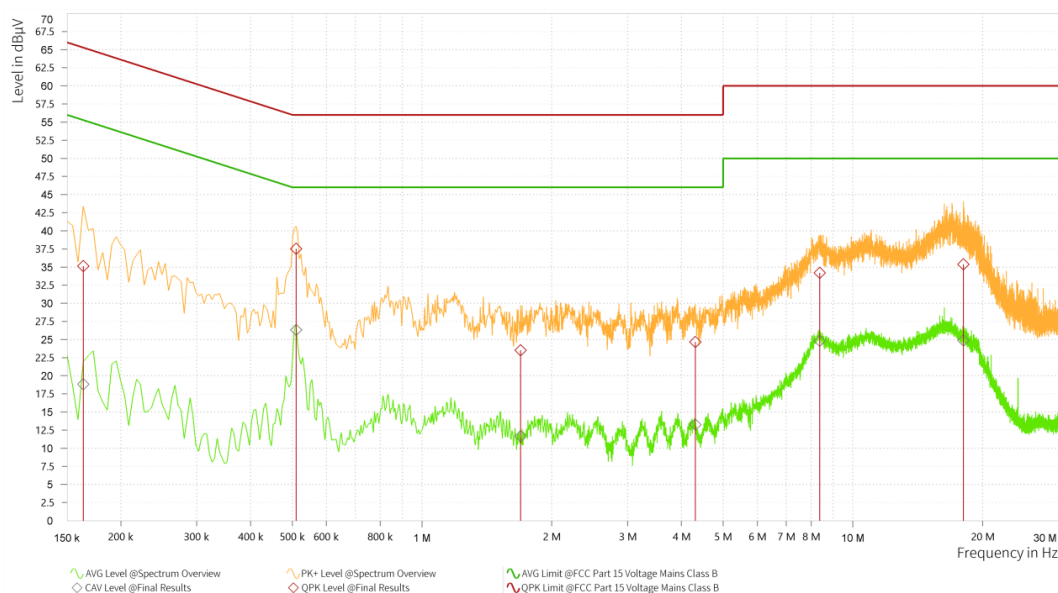
3.1.7 TEST RESULTS

CONDUCTED WORST-CASE DATA			
FREQUENCY RANGE	150KHz ~ 30MHz	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak (QP) / Average (AV), 9 kHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 51%RH
TESTED BY	Carl Xie		

Rg	Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	CAV Level [dBμV]	CAV: AVG Limit [dBμV]	CAV Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]
1	0.164	35.14	65.28	30.14	18.83	55.28	36.45	9.79	L1	9.000
1	0.510	37.51	56.00	18.49	26.32	46.00	19.68	9.75	L1	9.000
1	1.694	23.52	56.00	32.48	11.64	46.00	34.36	9.80	L1	9.000
1	4.308	24.65	56.00	31.35	13.24	46.00	32.76	10.07	L1	9.000
1	8.381	34.21	60.00	25.79	24.81	50.00	25.19	10.70	L1	9.000
1	18.056	35.38	60.00	24.62	24.86	50.00	25.14	13.04	L1	9.000

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Limit value - Emission level
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.

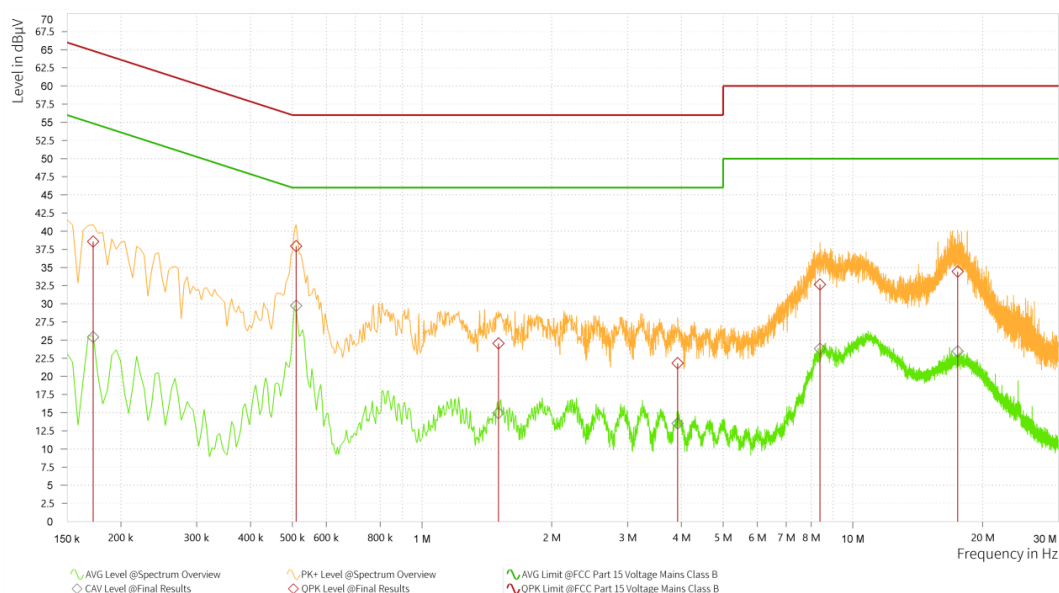


FREQUENCY RANGE	150KHz ~ 30MHz	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak (QP) / Average (AV), 9 kHz
INPUT POWER	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	26deg. C, 51%RH
TESTED BY	Carl Xie		

Rg	Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	CAV Level [dBμV]	CAV: AVG Limit [dBμV]	CAV Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]
1	0.173	38.57	64.84	26.27	25.40	54.84	29.44	9.79	N	9.000
1	0.510	37.93	56.00	18.07	29.74	46.00	16.26	9.75	N	9.000
1	1.505	24.55	56.00	31.45	14.94	46.00	31.06	9.79	N	9.000
1	3.921	21.83	56.00	34.17	13.52	46.00	32.48	10.04	N	9.000
1	8.390	32.67	60.00	27.33	23.81	50.00	26.19	10.70	N	9.000
1	17.507	34.44	60.00	25.56	23.46	50.00	26.54	12.89	N	9.000

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Limit value - Emission level
5. Correction factor = Insertion loss + Cable loss
7. Emission Level = Correction Factor + Reading Value.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

FREQUENCIES (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:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

3.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	2025/7/3	2026/7/2
BiConiLog Antenna	ETS-LINDGREN	3143B	161965	2025/7/17	2026/7/16
Horn Antenna	SCHWARZBECK	BBHA9120D	3297	2025/9/27	2026/9/26
Horn Antenna	STEATITE	QWH-SL-18-40-K-SG QMS-00361	15433	2025/7/19	2026/7/18
Preamplifier	Tonscend	TPA184045	AP24L8060388	2025/7/3	2026/7/2
MXE EMI Receiver	keysight	N9038B	MY50018017	2025/7/1	2026/6/30
MXG Vector Signal Generator	Keysight	N5183B	MY59100137	2025/6/30	2026/6/29
Preamplifier	Tonscend	TPA001330	806JSAPO40804251015	2025/6/30	2026/6/29
Preamplifier	Tonscend	TPA011845	AP24L8060392	2025/6/30	2026/6/29
Attenuator 6DB	SHX	TS2-6-6-A	230927166	2025/6/30	2026/6/29
Attenuator 6DB	SHX	TS2-6-6-A	230927165	2025/6/30	2026/6/29
Active Receive Loop Antenna	SCHWARZBECK	FMZB 1519 B	00173	2025/6/30	2026/6/29
Temp. & Humi. Recorder	Kejian	HTC-01	157246	2025/7/2	2026/7/1
HIGH pass FILTER_1-18	EWT	EWT-57-0222	EWT-57-0222	2025/6/30	2026/6/29
HIGH pass FILTER_7-18	EWT	EWT-57-0223	EWT-57-0223	2025/6/30	2026/6/29
HIGH pass FILTER_3-18	EWT	EWT-57-0221	EWT-57-0221	2025/6/30	2026/6/29
DC~1GHz Lowpass Filter	EWT	EWT-56-0649	EWT-56-0649	2025/7/3	2026/7/2
Cable 1	N/A	N/A	N/A	2025/9/28	2026/9/27
Cable 2	N/A	N/A	N/A	2025/9/28	2026/9/27
Cable 3	N/A	N/A	N/A	2025/9/28	2026/9/27

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GREGT/CHINA and NIM/CHINA.
2. The test was performed in 3m Chamber.
3. The FCC Site Registration No. is 646781; The Designation No. is CN1429.

3.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using fresh batteries. The turntable was rotated to maximize the emission level.

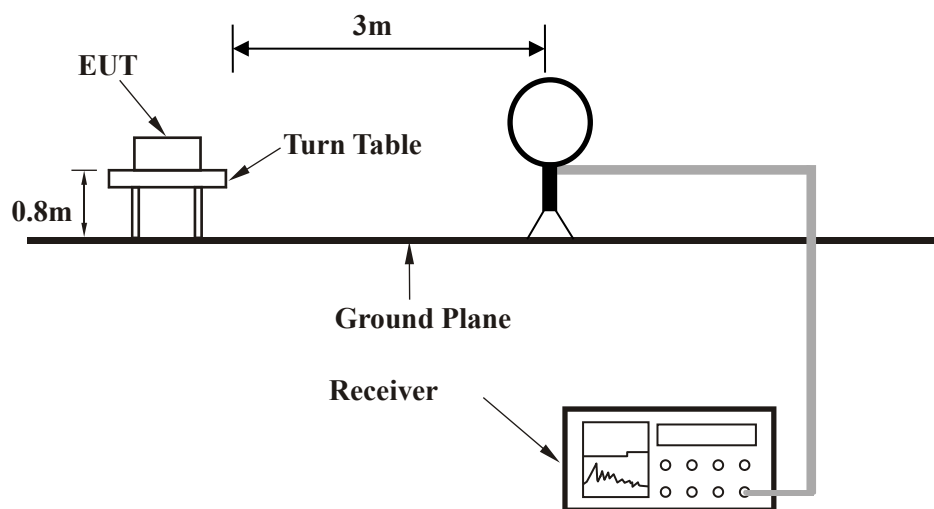
Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ($10 \log(1/\text{duty cycle})$).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

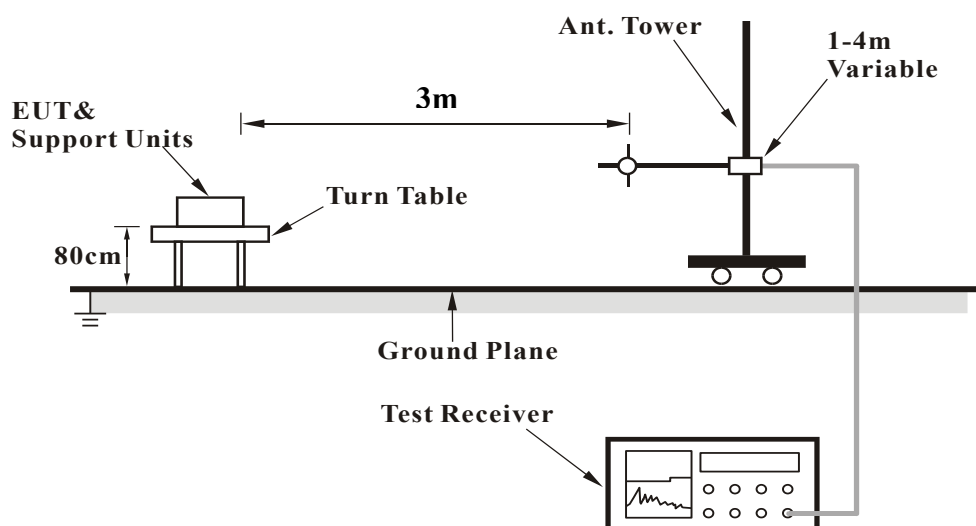
3.2.4 DEVIATION FROM TEST STANDARD

No deviation

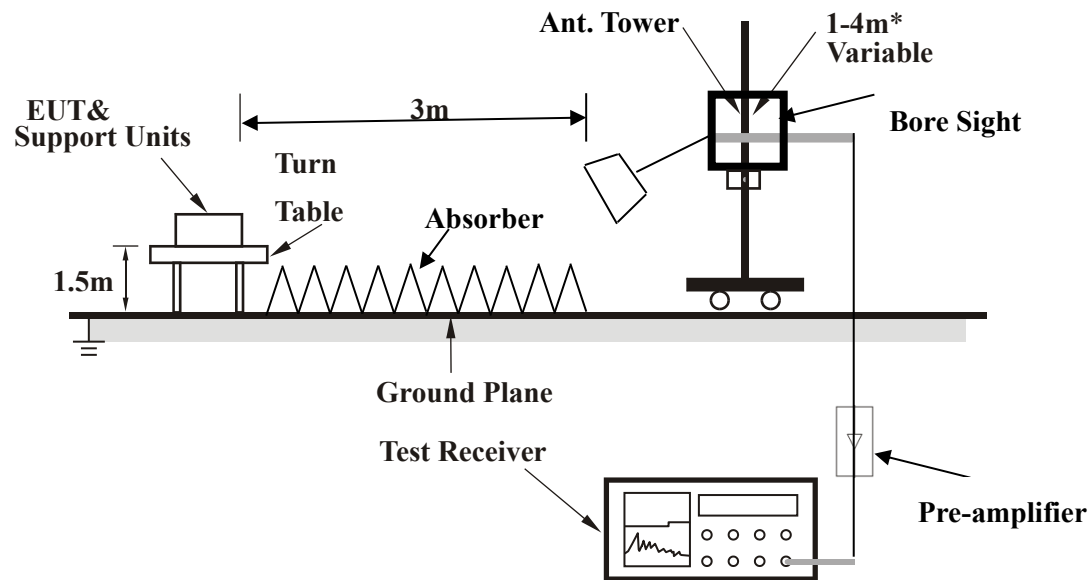
<Frequency Range 9KHz~30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna

Depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.2.6 EUT OPERATING CONDITIONS

- Set the EUT under full load condition and placed them on a testing table.
- Set the transmitter part of EUT under transmission condition continuously at specific channel frequency.
- The necessary accessories enable the EUT in full functions.

3.2.7 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

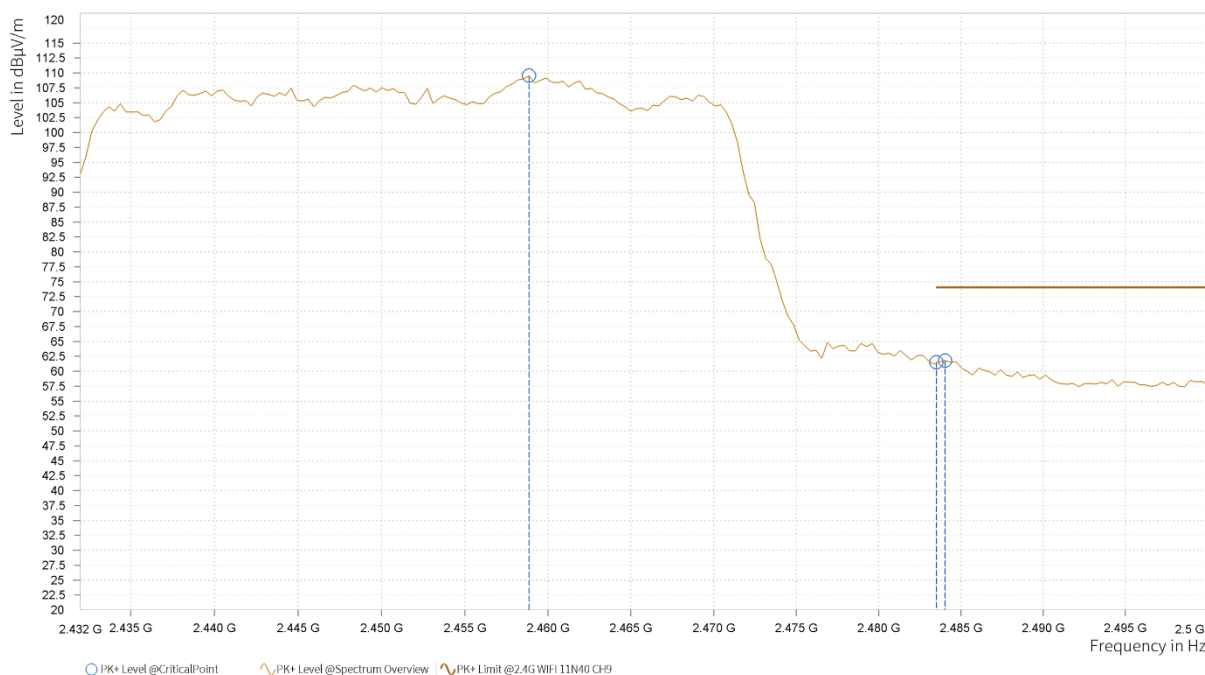
BAND EDGE MEASUREMENT

802.11ax (40MHz):

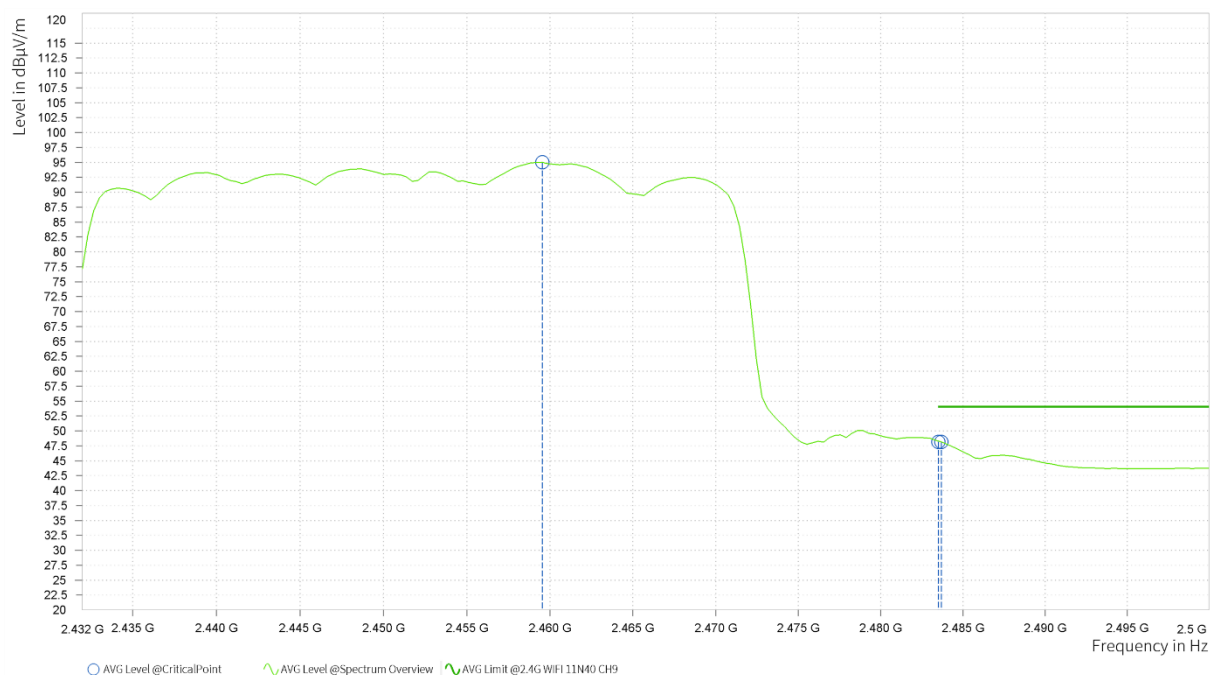
CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

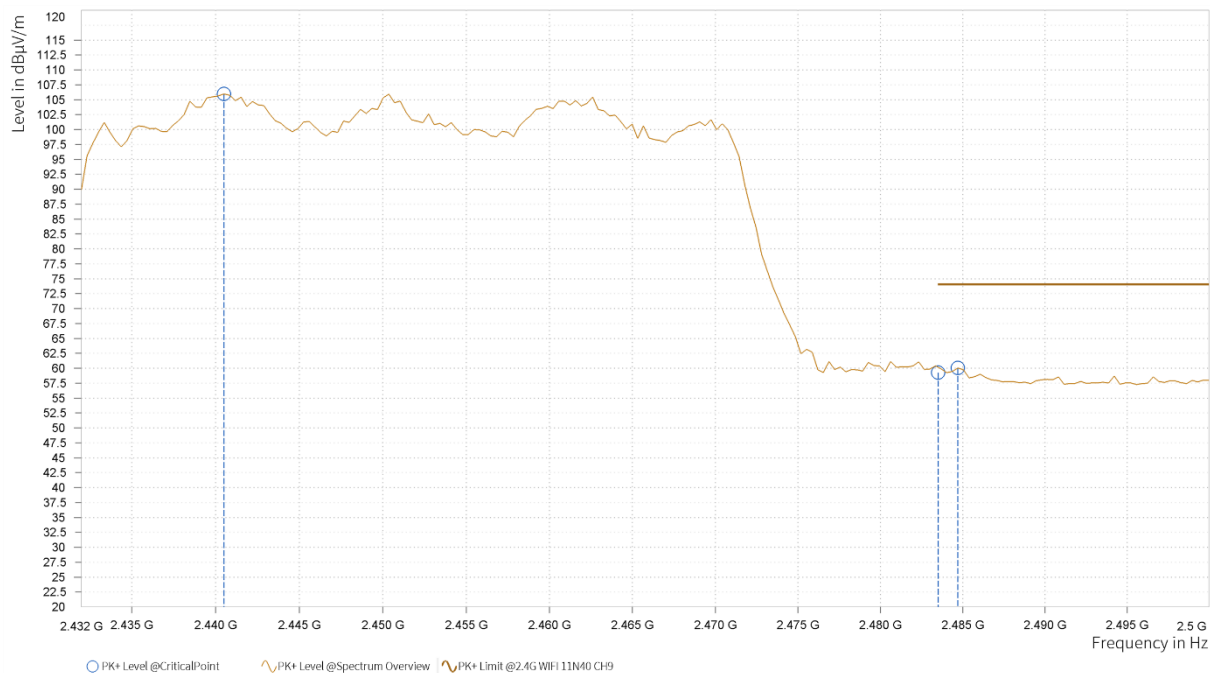
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	2,458.860	109.54			37.75	H	1	1.00
4	2,483.500	61.52	74.00	12.48	37.92	H	4.5	1.00
4	2,484.020	61.79	74.00	12.21	37.92	H	4.5	1.00



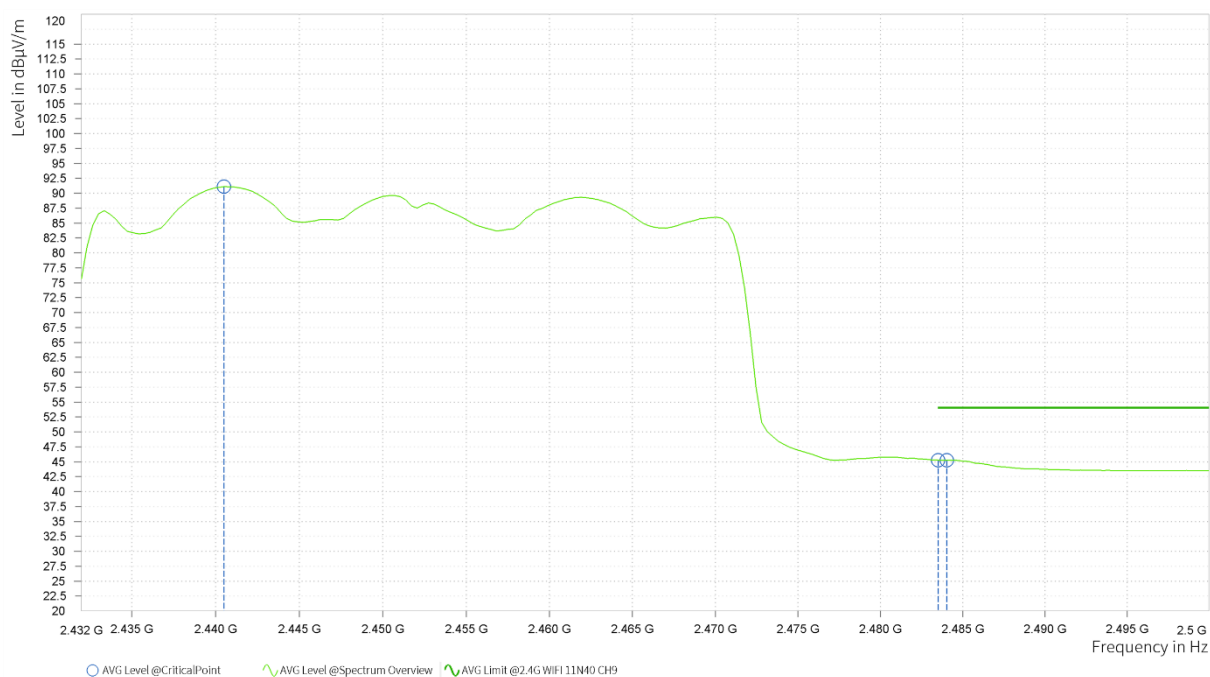
Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	2,459.540	95.01			37.75	H	359	1.00
4	2,483.500	48.16	54.00	5.84	37.92	H	4.5	1.00
4	2,483.680	48.16	54.00	5.84	37.92	H	4.5	1.00



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	2,440.500	105.96			37.68	V	1	1.00
4	2,483.500	59.25	74.00	14.75	37.81	V	345.8	1.00
4	2,484.700	60.04	74.00	13.96	37.81	V	1	1.00



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	2,440.500	91.10			37.68	V	1	1.00
4	2,483.500	45.27	54.00	8.73	37.81	V	4.5	1.00
4	2,484.020	45.27	54.00	8.73	37.81	V	4.5	1.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value–Emission level.
- 2452MHz: Fundamental frequency.

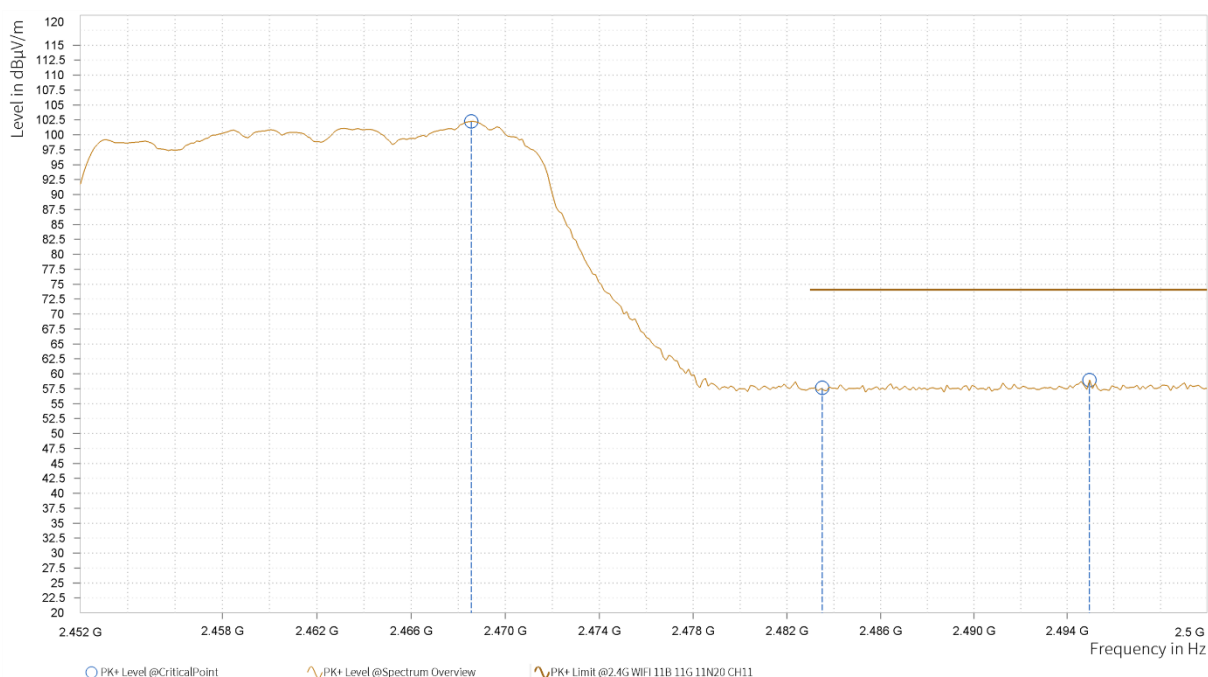
2.4G WIFI-RU

802.11ax (20MHz) (RU FULL):

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

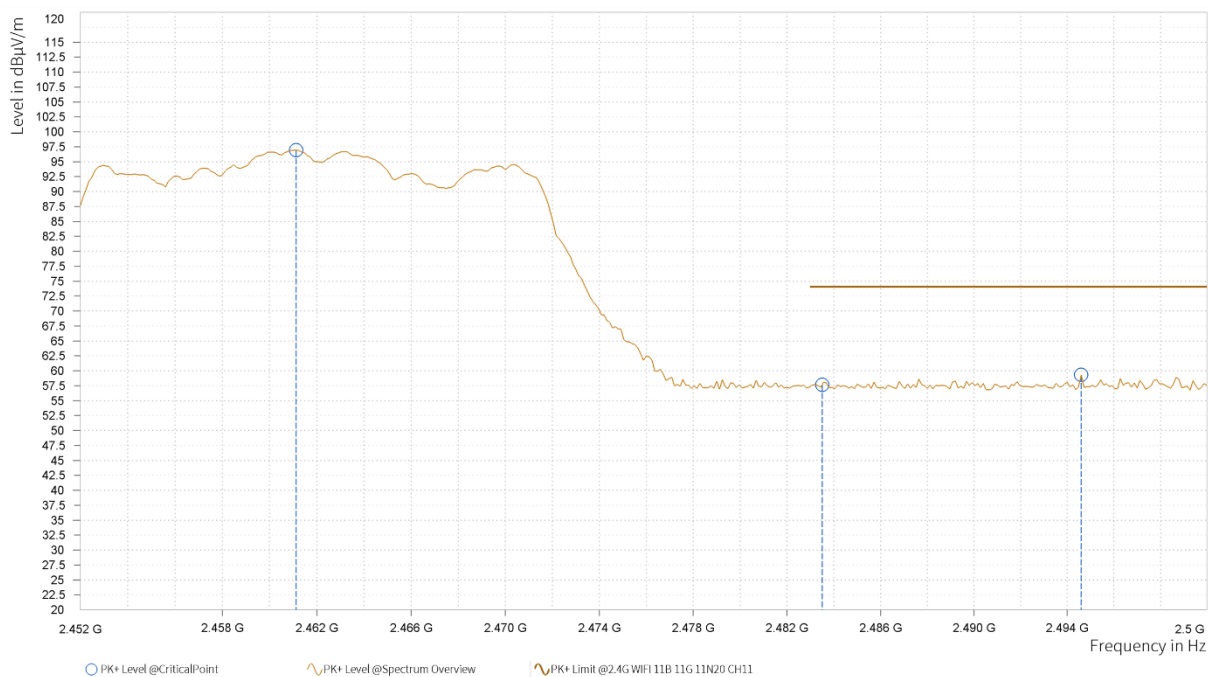
Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,468.560	102.22			37.83	H	311.5	1.00
2	2,483.500	57.65	74.00	16.35	37.91	H	359.1	1.00
2	2,494.960	58.95	74.00	15.05	37.98	H	221.8	1.00



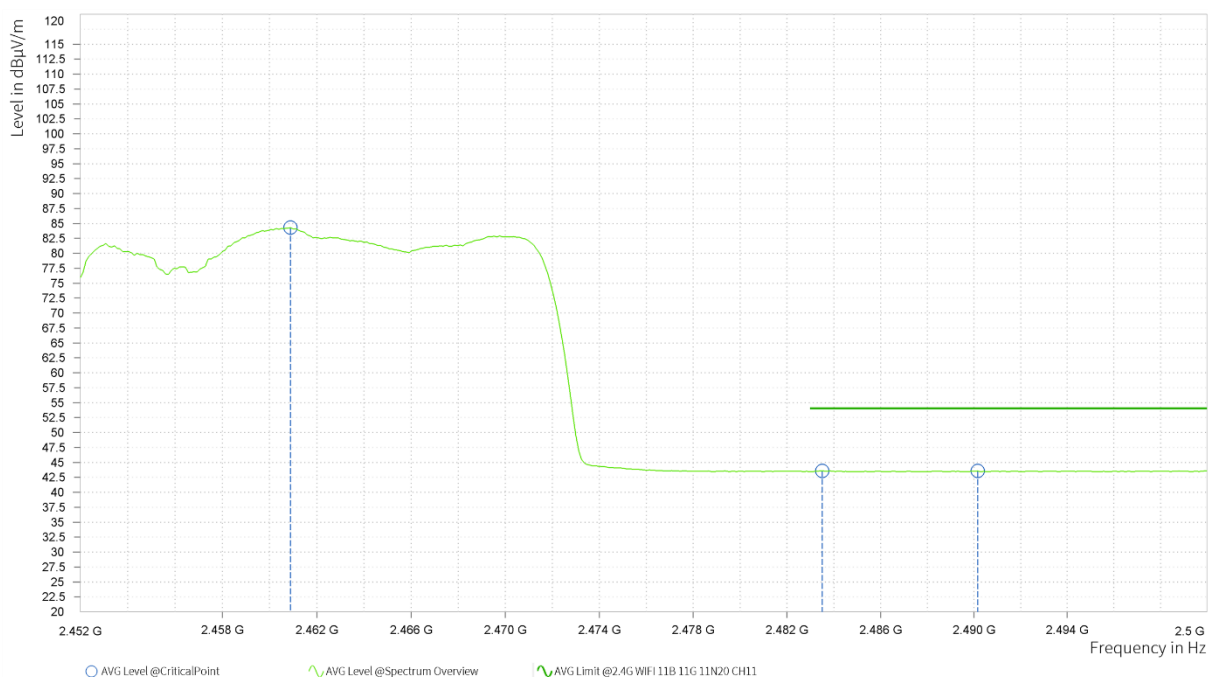
Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,467.960	88.84			37.82	H	312.8	1.00
2	2,483.500	43.69	54.00	10.31	37.91	H	5.2	1.00
2	2,494.240	43.76	54.00	10.24	37.98	H	5.2	1.00



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,461.120	96.91			37.80	V	1	1.00
2	2,483.500	57.64	74.00	16.36	37.81	V	68.9	2.00
2	2,494.600	59.32	74.00	14.68	37.81	V	113.1	2.00



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,460.880	84.29			37.80	V	1	1.00
2	2,483.500	43.59	54.00	10.41	37.81	V	1	1.00
2	2,490.160	43.56	54.00	10.44	37.81	V	16.4	2.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value–Emission level.
- 2412MHz: Fundamental frequency.

RADIATED EMISSION

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

802.11ax(40MHz):

CHANNEL	TX Channel 9	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

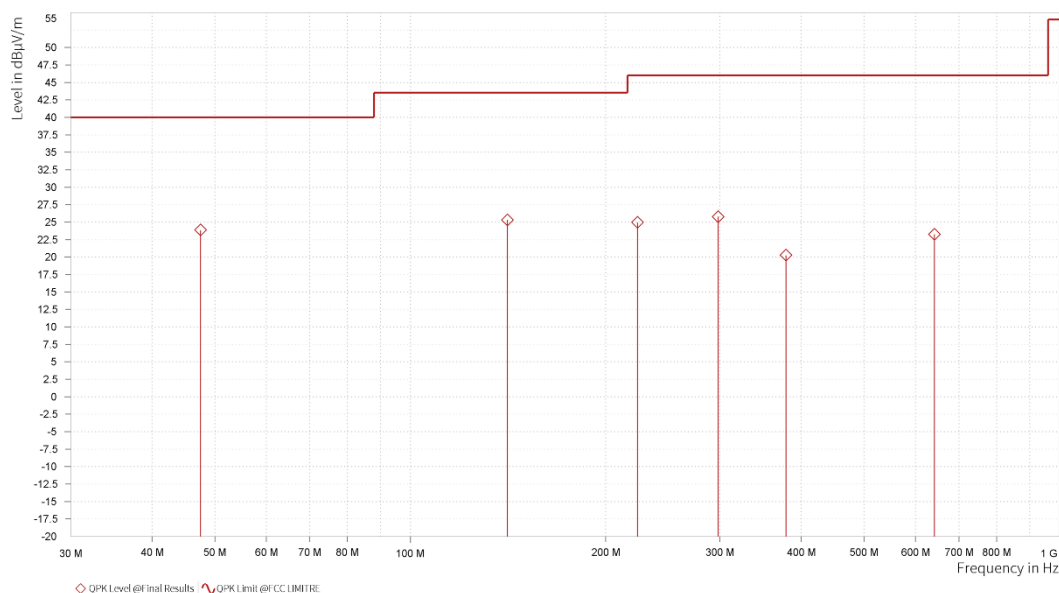
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]
1	47.509	23.87	40.00	16.13	-10.17	H	355.8	2.00	120.000
1	141.114	25.31	43.50	18.19	-15.41	H	79.8	2.00	120.000
1	223.855	24.95	46.00	21.05	-10.43	H	79.8	2.00	120.000
1	298.011	25.76	46.00	20.24	-7.35	H	282.6	1.00	120.000
1	379.006	20.25	46.00	25.75	-4.81	H	282.6	1.00	120.000
1	641.440	23.26	46.00	22.74	-2.40	H	359.1	1.00	120.000

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor

Margin value = Limit value- Emission level.



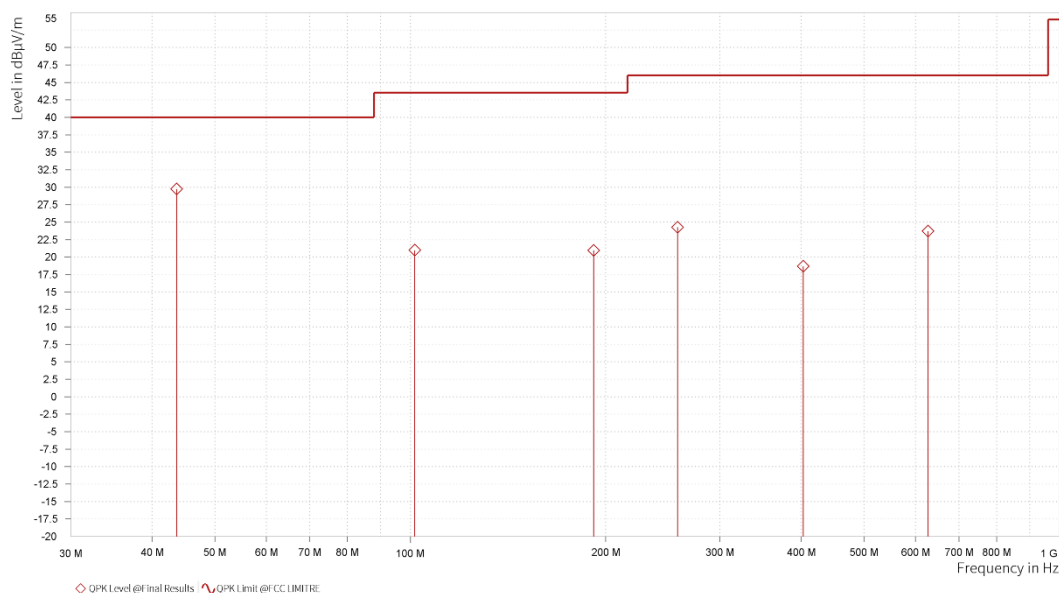
CHANNEL	TX Channel 9	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]
1	43.677	29.72	40.00	10.28	-10.42	V	282.6	1.00	120.000
1	101.635	20.97	43.50	22.53	-12.21	V	359	1.00	120.000
1	191.651	20.95	43.50	22.55	-11.52	V	4.9	1.00	120.000
1	257.902	24.26	46.00	21.74	-8.89	V	220.9	2.00	120.000
1	402.723	18.67	46.00	27.33	-4.04	V	282.6	1.00	120.000
1	627.132	23.69	46.00	22.31	-2.30	V	1	2.00	120.000

REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.



Test Report No.: PSZ-QSZ2510291415RF08
ABOVE 1GHz WORST-CASE DATA:

Note: 1. For radiated emissions testing, the full testing range of different modes have been scanned, only the worst case harmonic data is reported in the sheet.

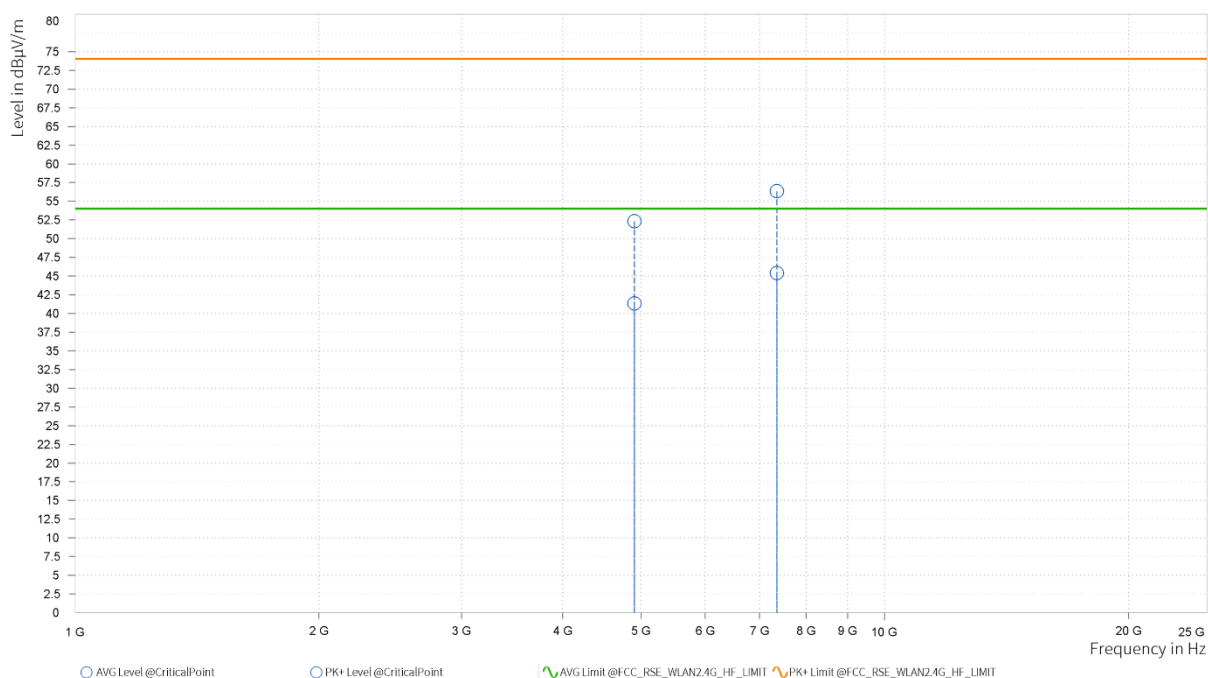
2. All other emissions were greater than 20dB below the limit was not recorded

802.11ax(40MHz):

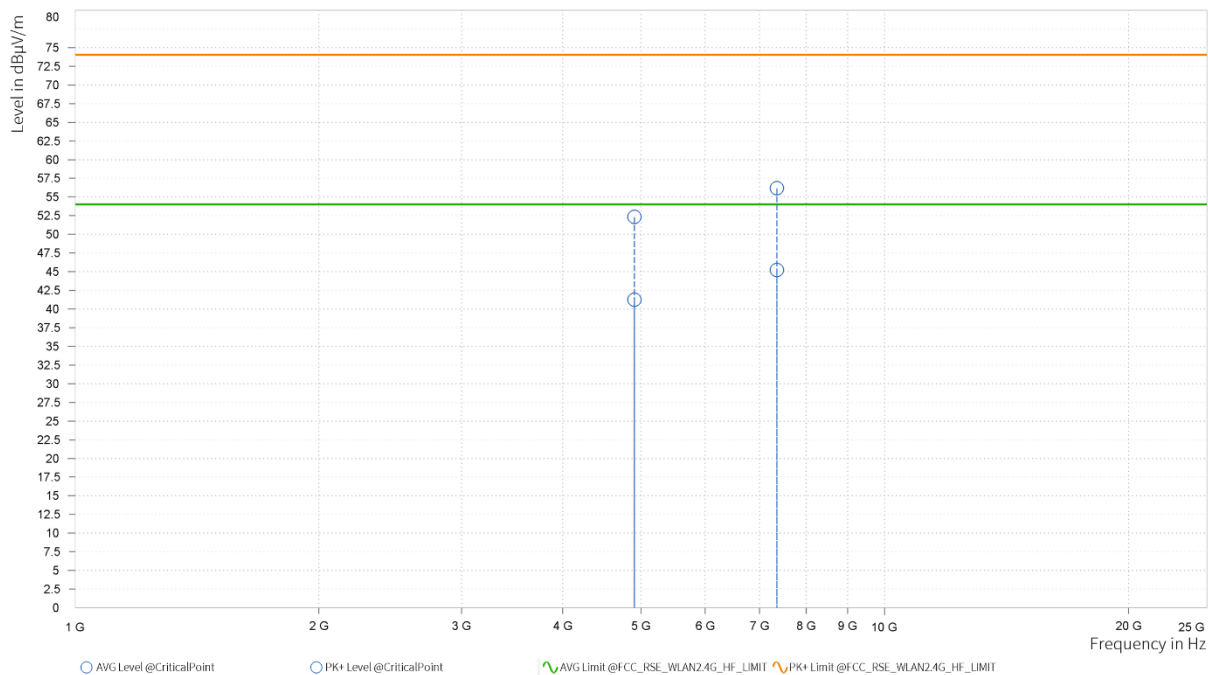
CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,904.000	52.32	74.00	21.68	41.35	54.00	12.65	16.12	H	2.6	2.00
2	7,356.000	56.35	74.00	17.65	45.39	54.00	8.61	21.27	H	244.8	2.00



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,904.000	52.32	74.00	21.68	41.23	54.00	12.77	16.12	V	0.9	2.00
2	7,356.000	56.17	74.00	17.83	45.23	54.00	8.77	21.27	V	359	2.00


REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 2437MHz: Fundamental frequency.

Test Report No.: PSZ-QSZ2510291415RF08

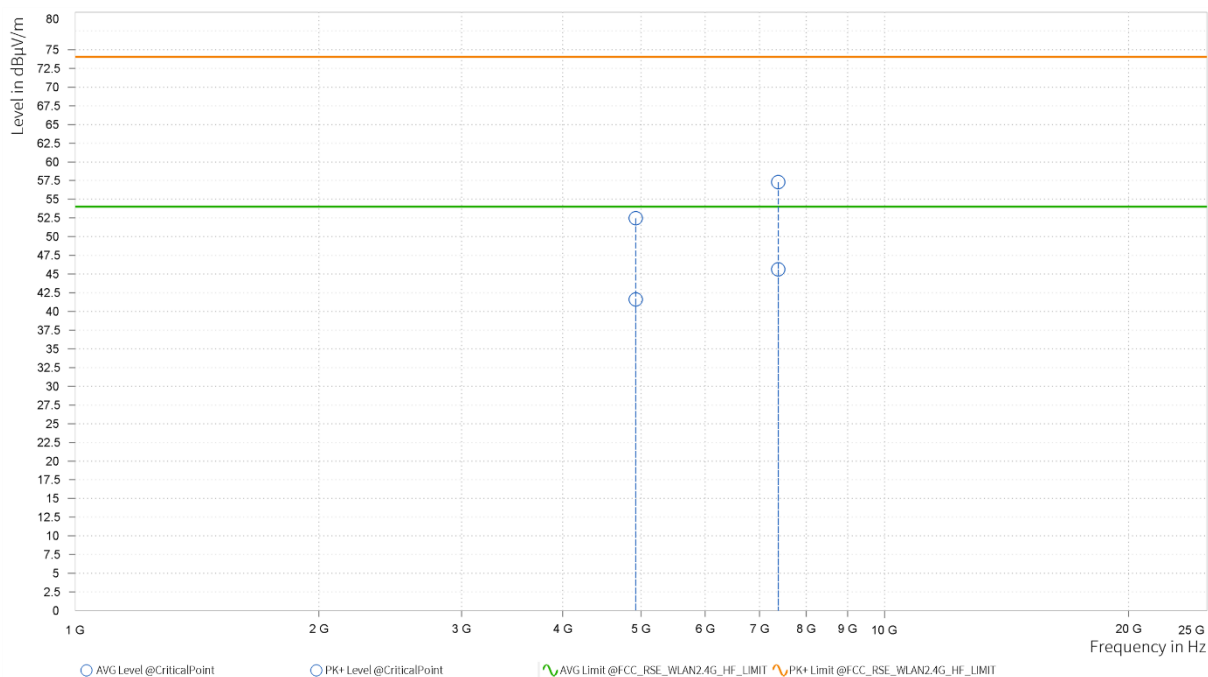
2.4G WIFI-RU

802.11ax (20MHz) (RU FULL):

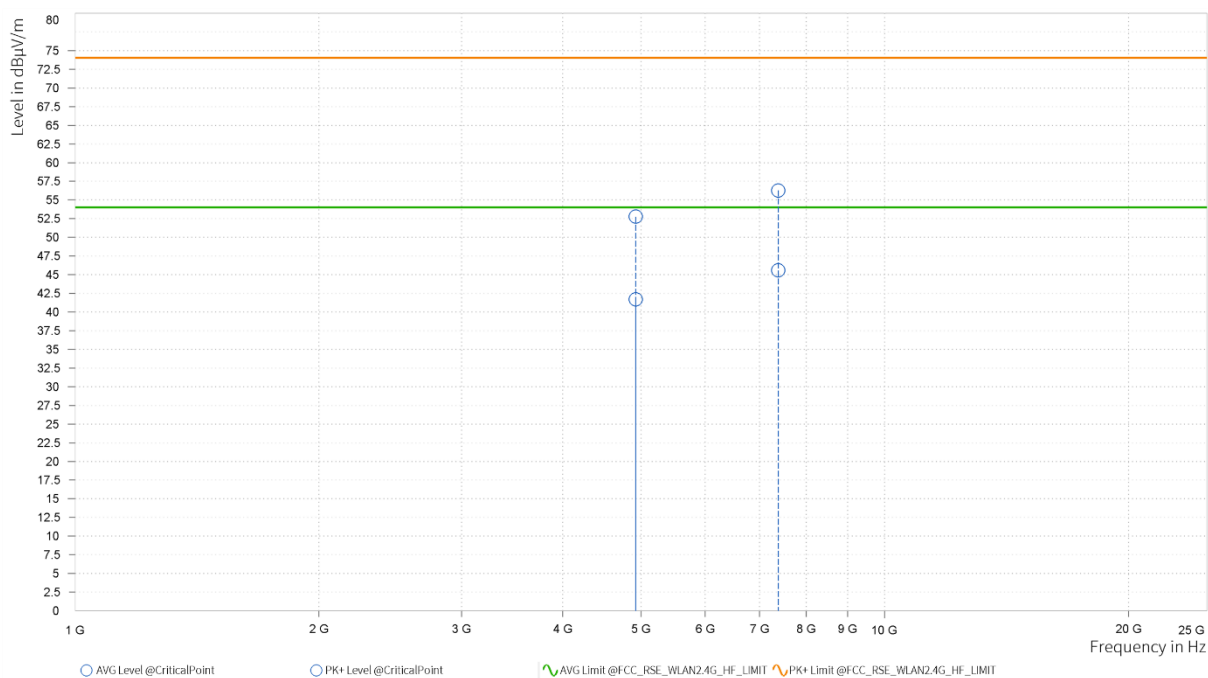
CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,924.000	52.46	74.00	21.54	41.63	54.00	12.37	16.17	H	359	2.00
2	7,386.000	57.29	74.00	16.71	45.61	54.00	8.39	21.32	H	127.1	1.00



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,924.000	52.77	74.00	21.23	41.71	54.00	12.29	16.17	V	1	2.00
2	7,386.000	56.28	74.00	17.72	45.58	54.00	8.42	21.32	V	359	2.00


REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value- Emission level.
- 2437MHz: Fundamental frequency.

Test Report No.: PSZ-QSZ2510291415RF08

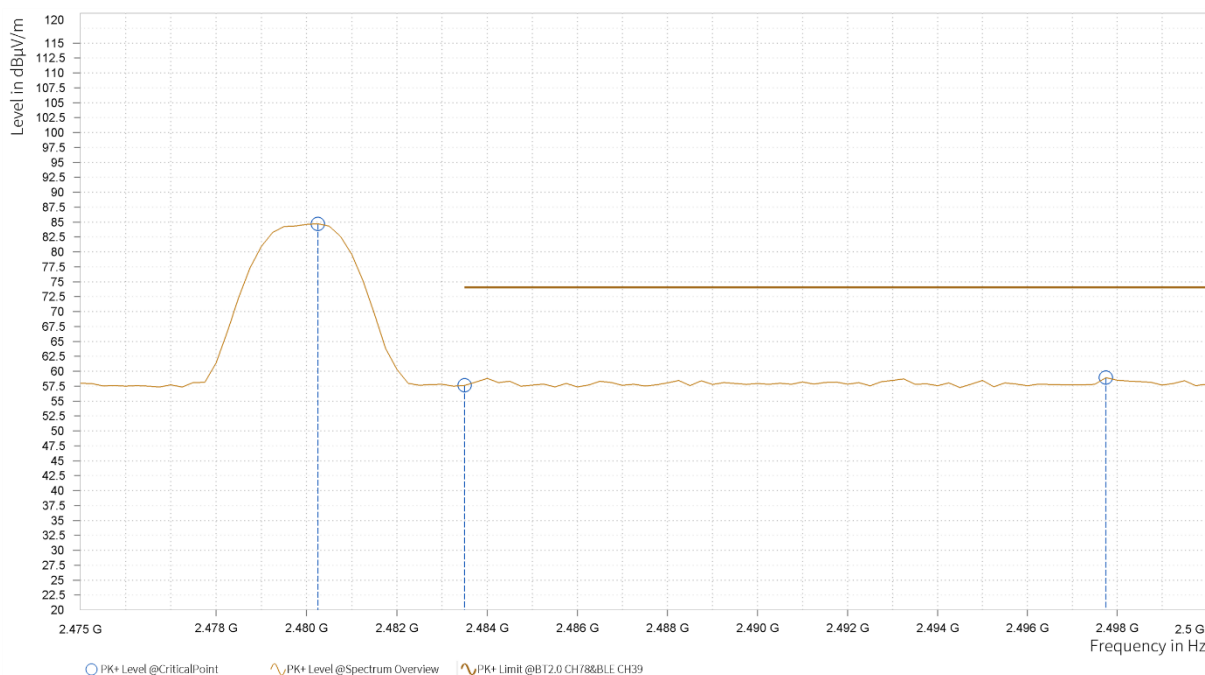
BAND EDGE MEASUREMENT

BT-LE_S8

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.250	84.72			37.90	H	148.9	2.00
6	2,483.500	57.63	74.00	16.37	37.92	H	5.1	1.00
6	2,497.750	58.92	74.00	15.08	38.00	H	60.5	2.00

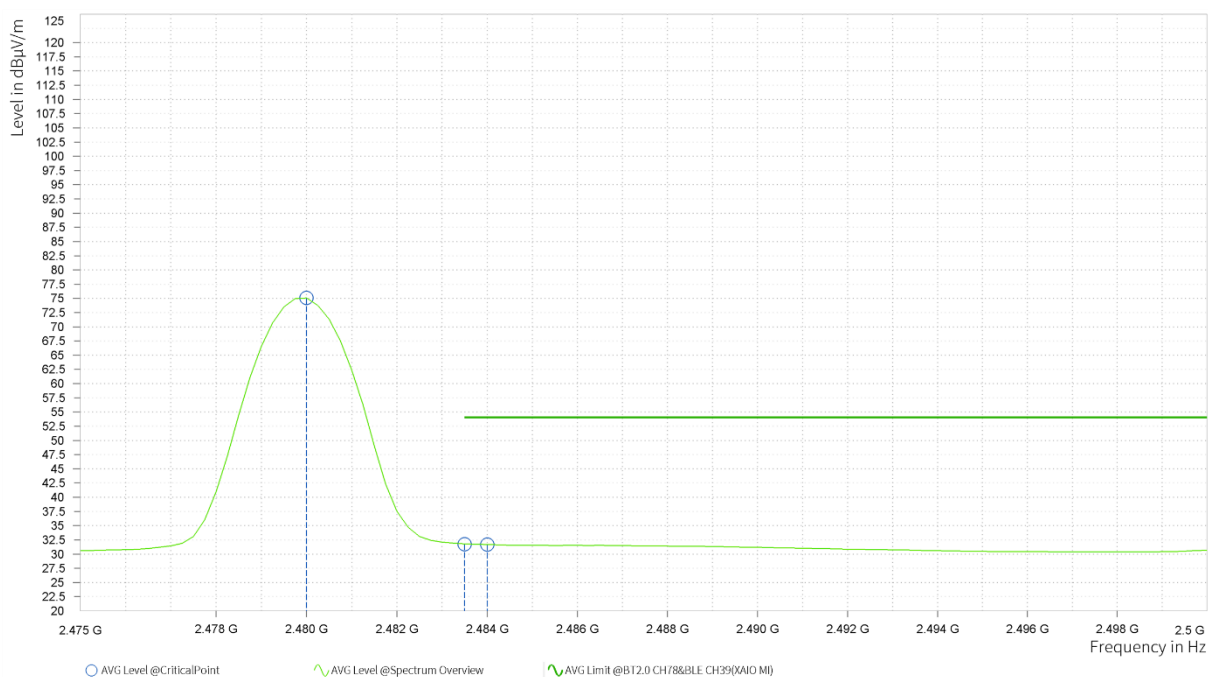


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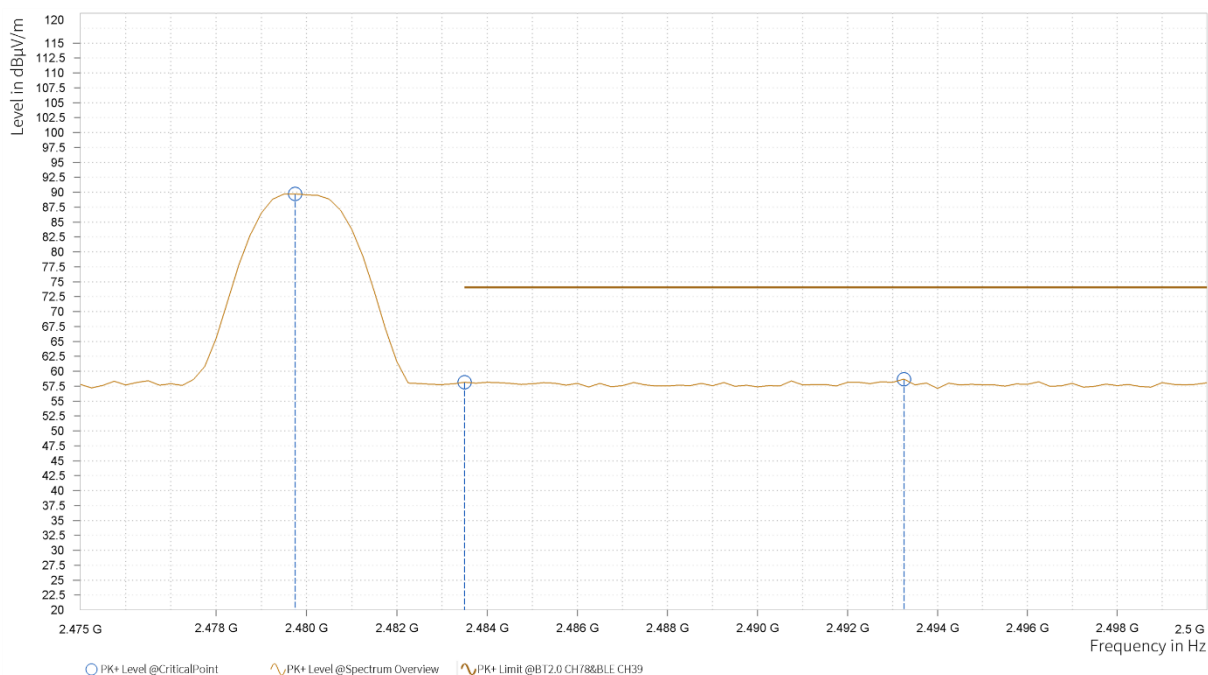
Rm B38, Warehouse A5(Chiwan #1), #3 Chiwan
4th Rd, Chiwan Comm, Zhaoshang St, Nanshan
Dist, Shenzhen, Guangdong, Shenzhen, China

Mobile: +86 15118052731
Email:shimin.wang@boomwavelab.com

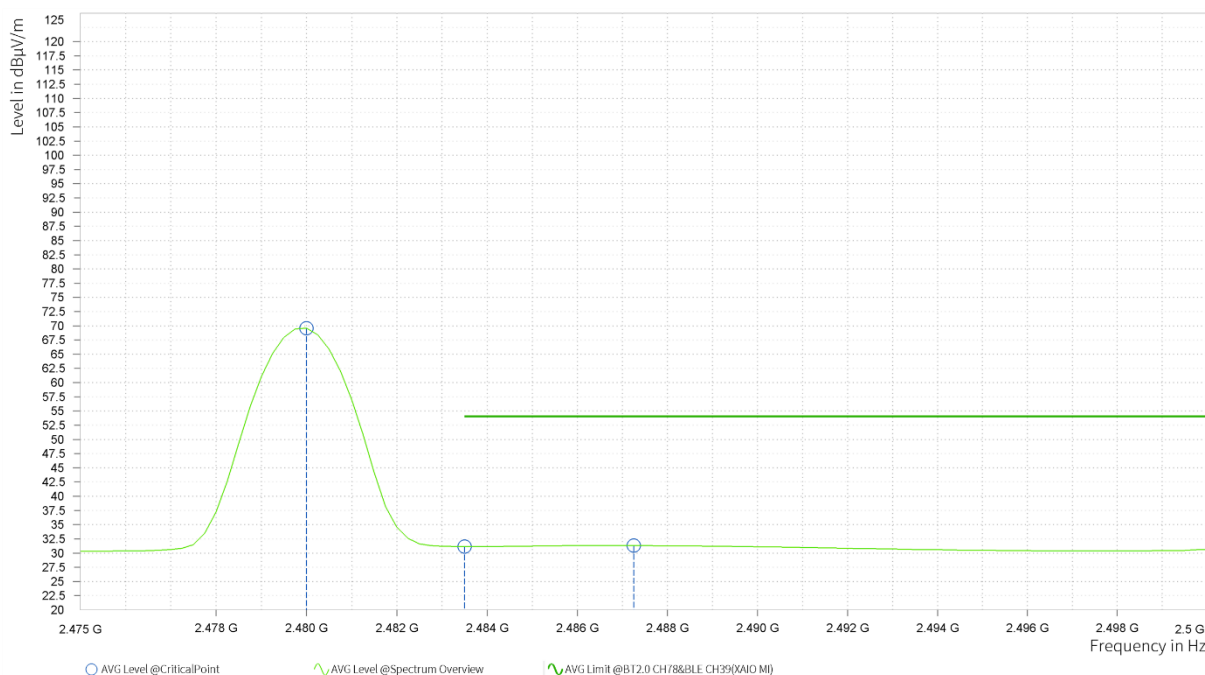
Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	75.07			6.29	H	245.4	1.00
6	2,483.500	31.73	54.00	22.27	6.30	H	245.4	1.00
6	2,484.000	31.68	54.00	22.32	6.30	H	245.4	1.00



Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,479.750	89.72			37.81	V	5.1	1.00
6	2,483.500	58.15	74.00	15.85	37.81	V	1.8	2.00
6	2,493.250	58.68	74.00	15.32	37.81	V	145.3	2.00



Rg	Frequency [MHz]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	69.58			6.29	V	1	2.00
6	2,483.500	31.17	54.00	22.83	6.30	V	1.1	2.00
6	2,487.250	31.32	54.00	22.68	6.30	V	1.1	2.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value–Emission level.
2. 2480MHz: Fundamental frequency.

RADIATED EMISSION

BELOW 1GHz WORST-CASE DATA:

30 MHz – 1GHz data:

BT-LE _S8

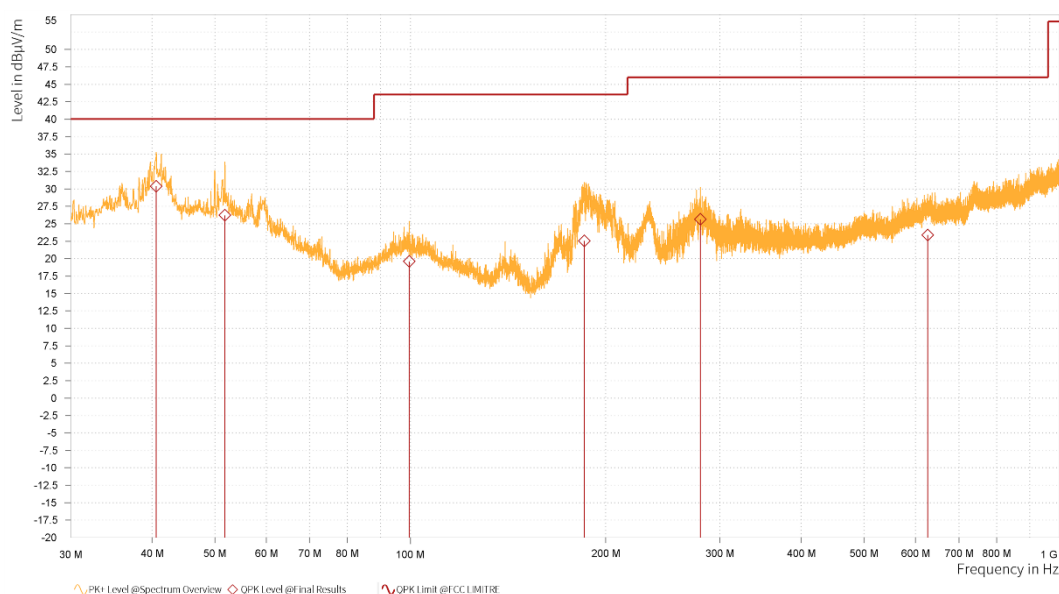
CHANNEL	TX Channel 19	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]
1	40.622	30.38	40.00	9.62	-11.17	H	351.3	2.00	120.000
1	51.825	26.20	40.00	13.80	-10.10	H	207.7	2.00	120.000
1	99.646	19.59	43.50	23.91	-12.22	H	359	2.00	120.000
1	185.443	22.55	43.50	20.95	-12.42	H	287.4	1.00	120.000
1	279.678	25.61	46.00	20.39	-8.10	H	287.4	1.00	120.000
1	626.599	23.37	46.00	22.63	-2.29	H	359	1.00	120.000

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



Test Report No.: PSZ-QSZ2510291415RF08

CHANNEL	TX Channel 19	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]
1	35.481	29.63	40.00	10.37	-12.54	V	284.9	1.00	120.000
1	93.196	23.95	43.50	19.55	-13.46	V	71.4	2.00	120.000
1	142.423	19.96	43.50	23.54	-15.43	V	355.8	2.00	120.000
1	189.614	16.87	43.50	26.63	-11.69	V	284.9	1.00	120.000
1	386.572	18.82	46.00	27.18	-4.55	V	284.9	1.00	120.000
1	627.326	23.45	46.00	22.55	-2.31	V	355.8	2.00	120.000

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value





Test Report No.: PSZ-QSZ2510291415RF08

ABOVE 1GHz TEST DATA

Note: 1. For radiated emissions testing , the full testing range of different modes have been scanned , only the worst case harmonic data is reported in the sheet.

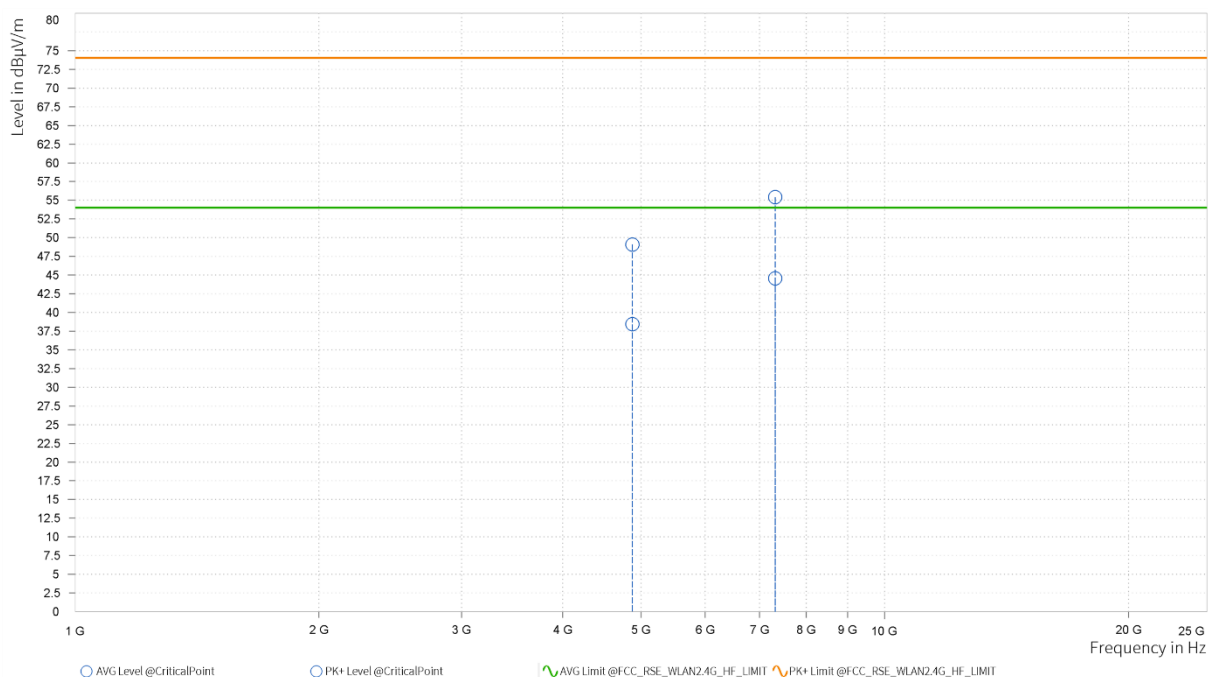
2. All other emissions were greater than 20dB below the limit was not recorded

BT-LE _S8

CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	49.08	74.00	24.92	38.43	54.00	15.57	14.77	H	1	2.00
2	7,320.000	55.42	74.00	18.58	44.55	54.00	9.45	21.11	H	269.9	2.00

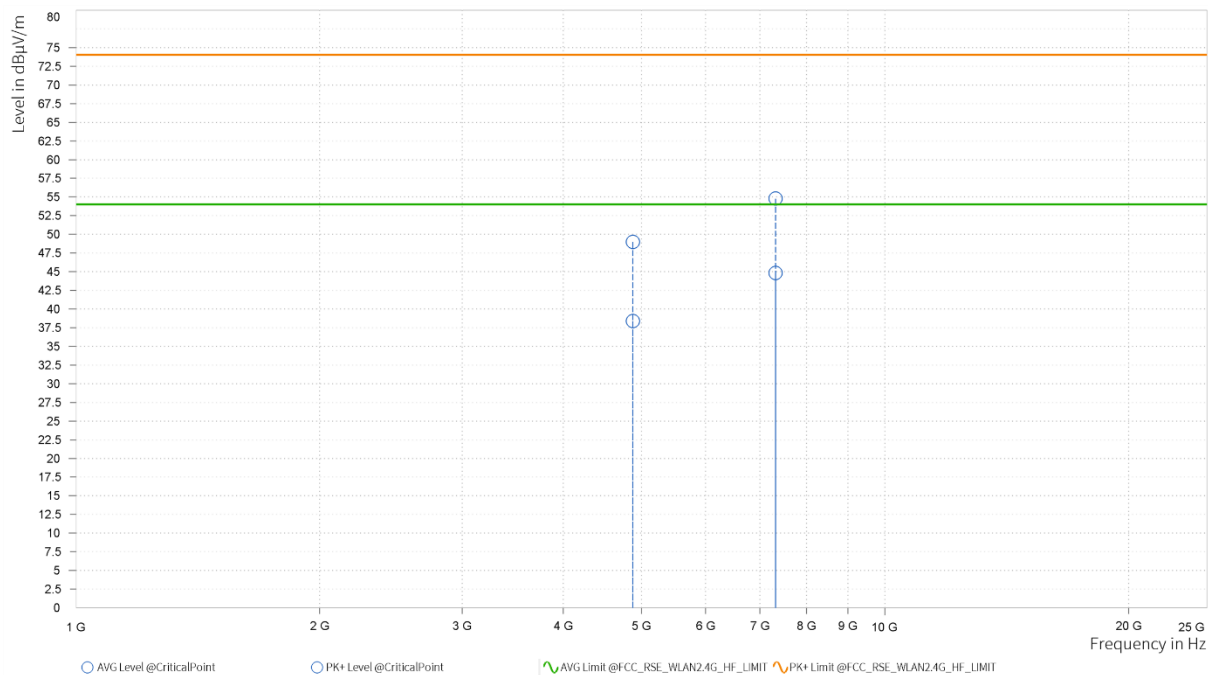


Boomwave Test (Shenzhen)
Co., Ltd.

Rm B38, Warehouse A5(Chiwan #1), #3 Chiwan
4th Rd, Chiwan Comm, Zhaoshang St, Nanshan
Dist, Shenzhen, Guangdong, Shenzhen, China

Mobile: +86 15118052731
Email:shimin.wang@boomwavelab.com

Rg	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	48.98	74.00	25.02	38.38	54.00	15.62	14.77	V	1	2.00
2	7,320.000	54.78	74.00	19.22	44.82	54.00	9.18	21.11	V	1	2.00



REMARKS:

- Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
Margin value = Limit value–Emission level.
- 2440MHz: Fundamental frequency.



Test Report No.: PSZ-QSZ2510291415RF08

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



Test Report No.: PSZ-QSZ2510291415RF08

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

--END--