Prüfbericht-Nr.: *Test report no.:*	**CN2226VJ 001**	**Auftrags-Nr.:** *Order no.:*	**168376943**	Seite 1 von **18** *Page 1 of 18*
Kunden-Referenz-Nr.: *Client reference no.:*	**N/A**	**Auftragsdatum:** *Order date:*	2022-06-13	
Auftraggeber: *Client:*	**Suzhou BLUE STONE New Power Co., Ltd.** Building 11 #No.58, Weixin Road, Suzhou Industrial Park, 215000 Jiangsu Province, P.R. China			
Prüfgegenstand: *Test item:*	VEHICLE CONTROL UNIT			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	BST-V1204GBXBLACSA			
Auftrags-Inhalt: *Order content:*	Test Report			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 15: Subpart C Section 15.247			
Wareneingangsdatum: *Date of sample receipt:*	2022-06-15	Please refer to Photo Document		
Prüfmuster-Nr.: *Test sample no:*	A003274585-004 A003324232-001~010			
Prüfzeitraum: *Testing period:*	2022-08-30 - 2022-09-13			
Ort der Prüfung: *Place of testing:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: *Test result*:*	Pass			
geprüft von: *tested by:* **Datum:** *Date:* 2022-11-07	Jonathan Li	**genehmigt von:** *authorized by:* **Ausstellungsdatum:** *Issue date:* 2022-11-07	Winnie Hou	
Stellung / *Position:*	Sachverständige(r) / Expert	**Stellung** / *Position:*	Sachverständige(r) / Expert	
Sonstiges / *Other:*	FCC ID: 2A8GZ4008023 Contains FCC ID: 2AK9DL508			

Zustand des Prüfgegenstandes bei Anlieferung: **Prüfmuster vollständig und unbeschädigt**
Condition of the test item at delivery: ***Test item complete and undamaged***

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.

V05

Test Summary

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER
RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY
RESULT: Pass

5.1.4 6DB BANDWIDTH
RESULT: Pass

5.1.5 99% BANDWIDTH
RESULT: Pass

5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH
RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION
RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: BLE and co-location test result

Appendix B: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.
No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China.

FCC Registration No.: 694916
ISED wireless device testing laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (SRD-Tonscend)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2022-09-28
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2022-09-28
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2022-09-28
DC power supply	Keysight	E3642A	MY61276100	2022-09-28
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2022-09-28
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2022-09-28
Test Software	Tonscend	JS1120-3	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2024-06-22
Unwanted Emission Testing (TS9975)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EMI Test Receiver	R&S	ESR 7	102021	2023-08-02
Signal Analyzer	R&S	FSV 40	101439	2023-08-01
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2023-08-01

OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2023-08-02
Amplifier	R&S	SCU-18F	180070	2023-08-02
Amplifier	R&S	SCU40A	100475	2023-08-02
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-08-06
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2024-08-06
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2024-08-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2023-08-06
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-06-22

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Parameter	Uncertainty (k=2)
RF output power, conducted	± 0.99 dB
Occupied Channel Bandwidth	± 2.08 %
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 0.89 dB
All emissions, radiated	± 4.17 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China. is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a VEHICLE CONTROL UNIT. It supports Bluetooth and WCDMA/LTE functions for vehicle use.

For details, refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	**Description**
Kind of Equipment	VEHICLE CONTROL UNIT
Type Designation	BST-V1204GBXBLACSA
FCC ID	2A8GZ4008023
Operating Voltage	DC 9~16V
Test Voltage	DC 12V
Operating Temperature Range	-40 °C ~ +85 °C
Technical Specification of Bluetooth LE	
Characteristic	**Description**
Frequency Range	2400 MHz to 2483.5 MHz
Type of Modulation	GFSK
Channel Number	40 channels
Data Rate	1Mbps
Channel Separation	2 MHz
Antenna Type	PCB layout antenna
Antenna Gain of Bluetooth	4.08 dBi

Table 3: RF Channel and Frequency of Bluetooth (BLE)

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (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**

3.3 Independent Operation Modes

The basic operation modes are:

A. On, Bluetooth Low Energy transmitting mode

1) Low Channel
2) Middle Channel
3) High Channel

B. On, Bluetooth + GSM/WCDMA/LTE mode

C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Block Diagram
- Schematics
- User Manual
- ID Label and Location Info

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model BST-V1204GBXBLACSA in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: Auxiliary Equipment Used during Test

Description	Manufacturer	Model	S/N	Rating
DC power Supply	Topward	3303D	809332	0-30 Volts, 0-3 Amps
Laptop	Lenovo	T480	PF-16A6N8	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

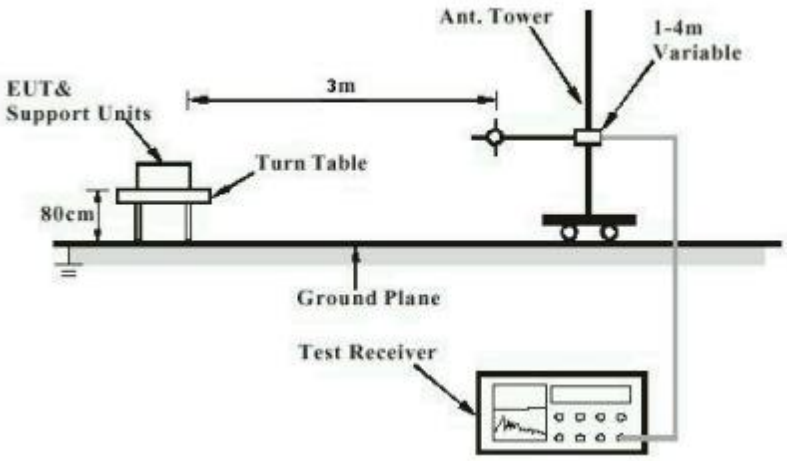


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

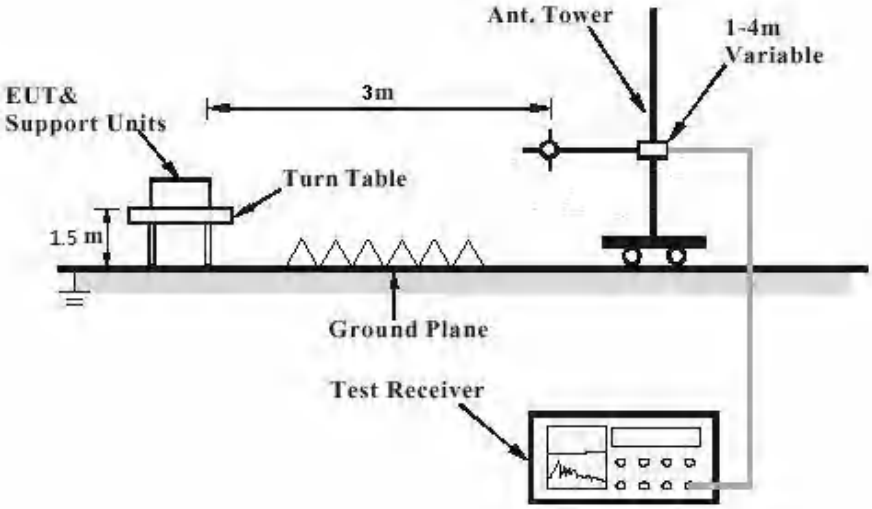
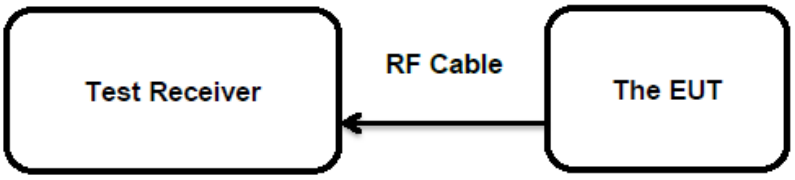


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification

Test standard : FCC Part 15.247(b)(4) and Part 15.203

According to the manufacturer declared, the EUT has a PCB layout antenna, the directional gain of antenna is 4.08dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Peak Conducted Output Power

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(b)(3)
Basic standard	:	ANSI C63.10: 2013
Limits	:	1.0 Watts
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-08-30
Input voltage	:	DC 12V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.3 Conducted Power Spectral Density

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(e)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 8 dBm / 3kHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-08-30
Input voltage	:	DC 12V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.4 6dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)(2)
Basic standard	:	ANSI C63.10: 2013
Limits	:	> 500 KHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-08-30
Input voltage	:	DC 12V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.5 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-08-30
Input voltage	:	DC 12V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-08-30
Input voltage	:	DC 12V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 ℃
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix A.

5.1.7 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205
Basic standard	:	ANSI C63.10: 2013, KDB 996369 D04
Limits	:	Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	2022-09-13
Input voltage	:	DC 12V
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	101 kPa

Remark:
Testing carried out within frequency range 9kHz to the tenth harmonics. Only the worst-case spurious emissions configuration of the each mode were reported.

Note1: The test plots of radiated spurious emissions beyond the limit are the fundamental radio frequency of BLE.

Note2: The host has BLE and 4G module; the Co-located radiated spurious emissions were preformed pre-can test and worst-case results were recorded.

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

7 List of Tables

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---End of Report---

Appendix A: Test Results of Bluetooth Low Energy and Co-location

APPENDIX A: TEST RESULTS OF BLUETOOTH LOW ENERGY AND CO-LOCATION **1**

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BLE + LTE *45*

Appendix A.1: Test Results of Maximum conducted output power

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	3.89	≤30	PASS
		2440	3.57	≤30	PASS
		2480	3.40	≤30	PASS

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

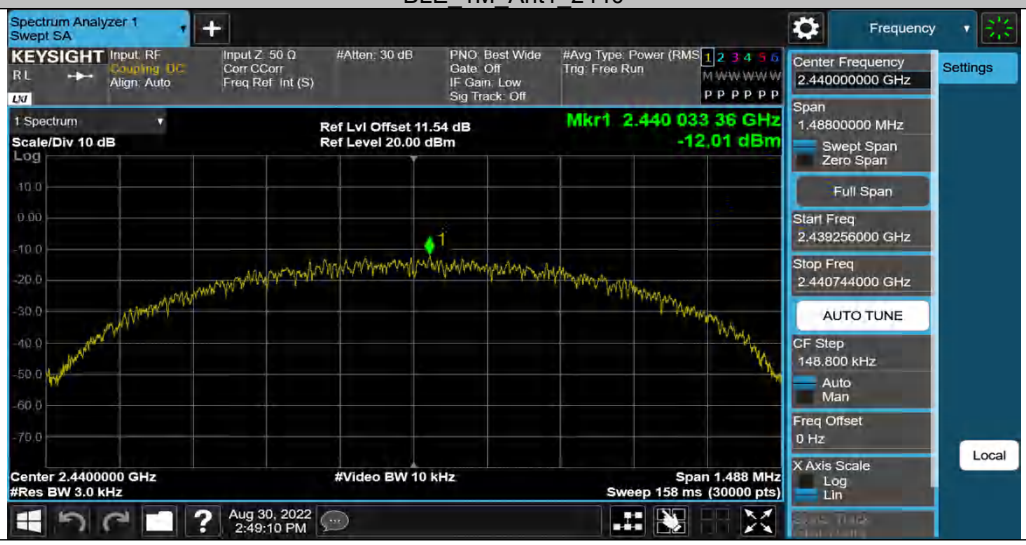
BLE_1M_Ant1_2480

Appendix A.2: Test Results of Conducted Power Spectral Density

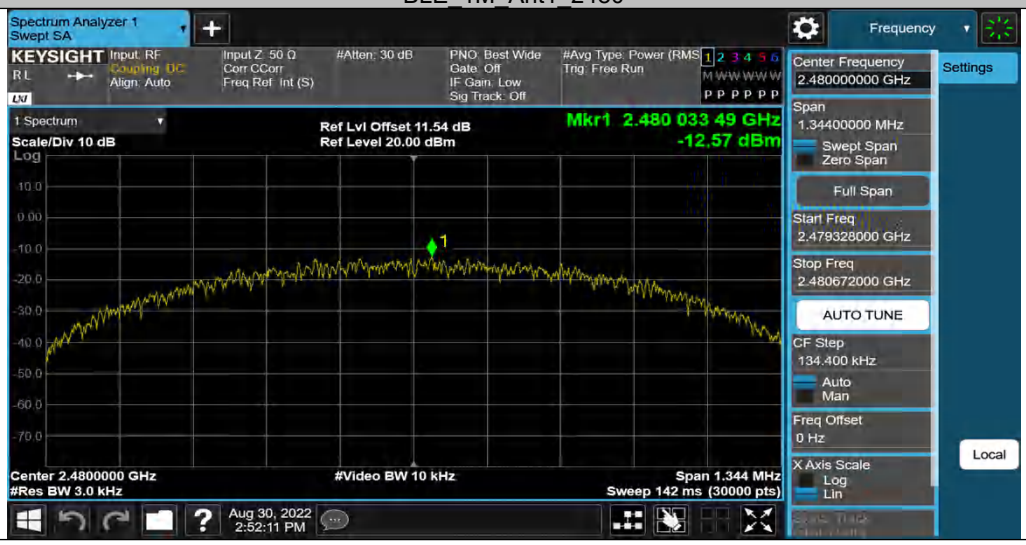
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.51	≤8.00	PASS
		2440	-12.01	≤8.00	PASS
		2480	-12.57	≤8.00	PASS

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix A.3: Test Results of 6dB Bandwidth

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.668	2401.680	2402.348	0.5	PASS
		2440	0.744	2439.636	2440.380	0.5	PASS
		2480	0.672	2479.680	2480.352	0.5	PASS

BLE_1M_Ant1_2402

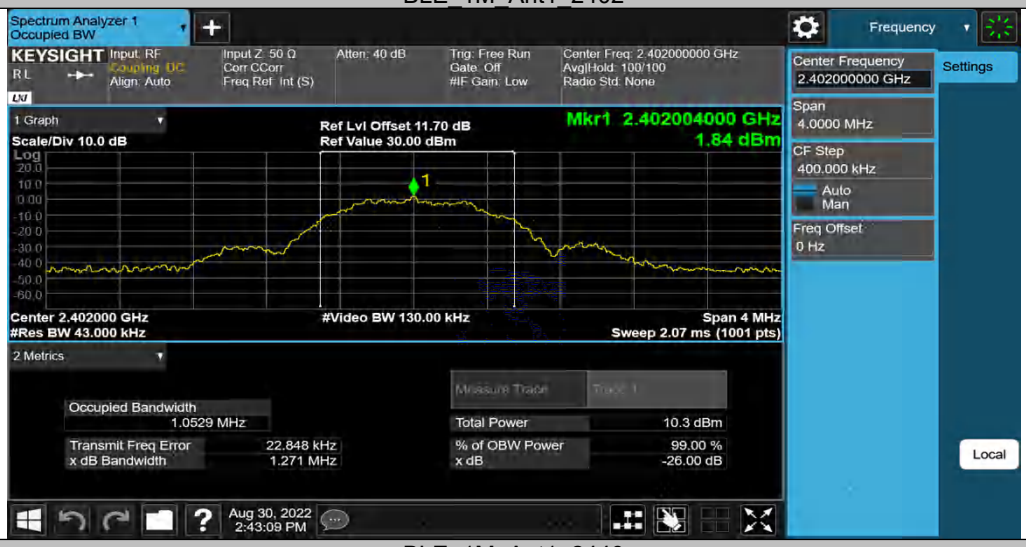
BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

Appendix A.4: Test Results of 99% Bandwidth

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0529	2401.4964	2402.5493	---	PASS
		2440	1.0505	2439.4898	2440.5403	---	PASS
		2480	1.0594	2479.4884	2480.5478	---	PASS

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

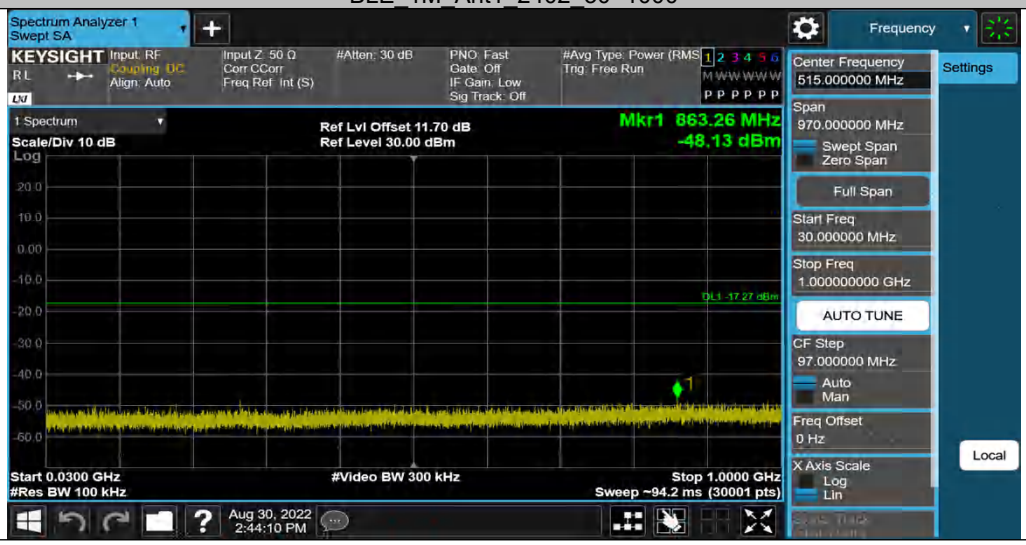
Appendix A.5: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	2.73	2.73	---	PASS
			30~1000	2.73	-48.13	≤-17.27	PASS
			1000~26500	2.73	-20.77	≤-17.27	PASS
		2440	Reference	1.67	1.67	---	PASS
			30~1000	1.67	-48.42	≤-18.33	PASS
			1000~26500	1.67	-20.99	≤-18.33	PASS
		2480	Reference	1.65	1.65	---	PASS
			30~1000	1.65	-48.12	≤-18.35	PASS
			1000~26500	1.65	-20.94	≤-18.35	PASS

BLE_1M_Ant1_2402_0~Reference

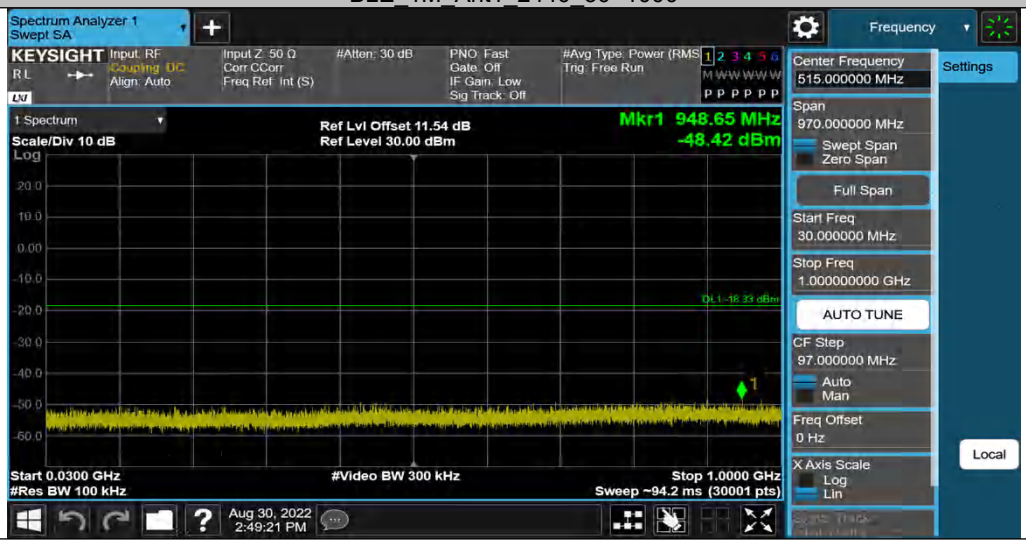
BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500

BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500

BLE_1M_Ant1_2480_0~Reference

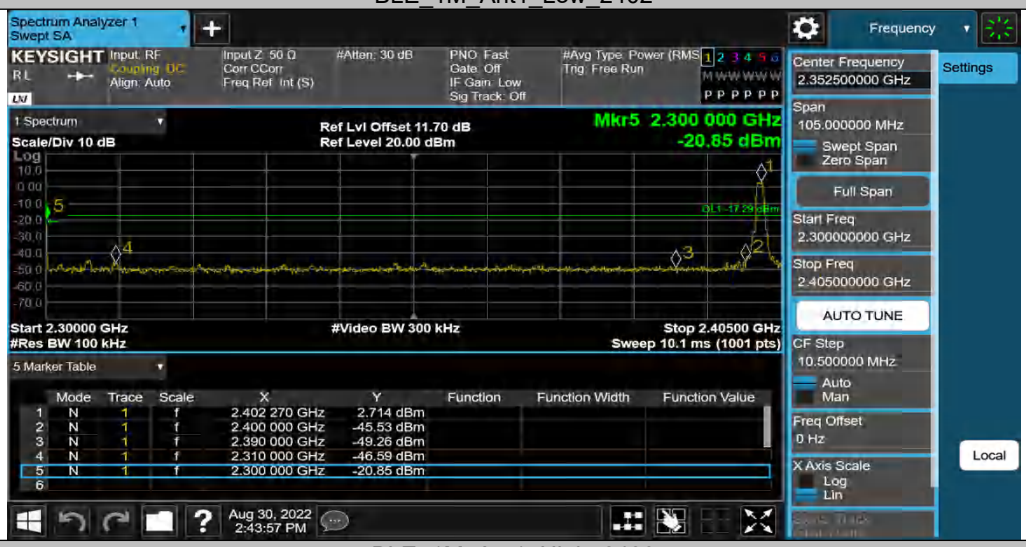
BLE_1M_Ant1_2480_30~1000

BLE_1M_Ant1_2480_1000~26500

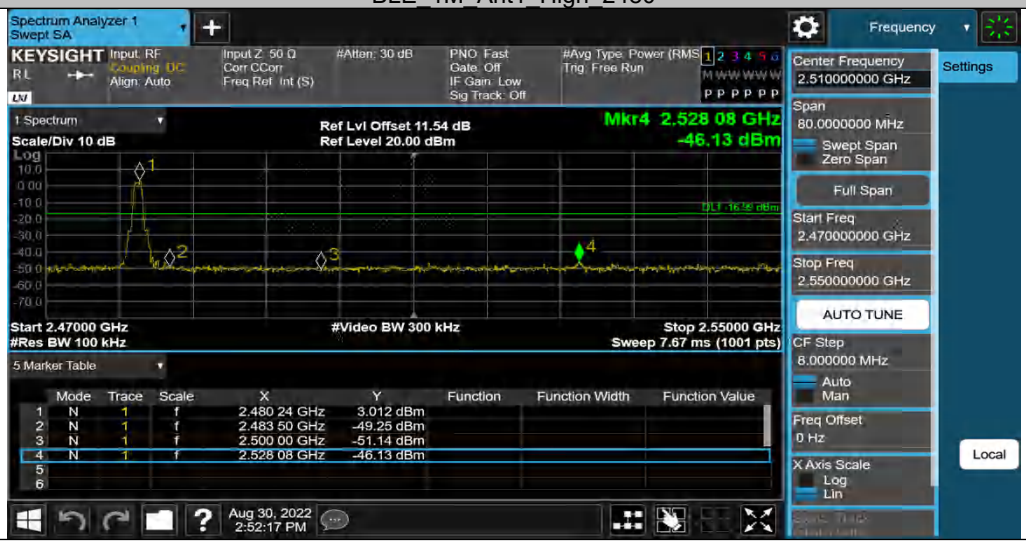
Band Edge

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	2.71	-20.85	≤-17.29	PASS
		High	2480	3.01	-46.13	≤-16.99	PASS

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



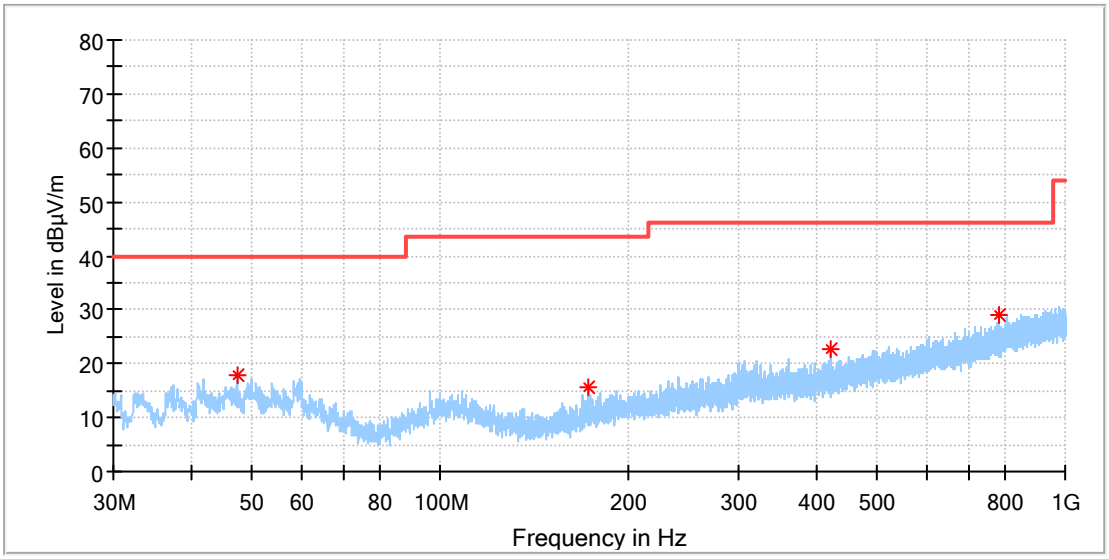
Appendix A.6: Test Results of Radiated Spurious Emissions

Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30 MHz - 1GHz

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

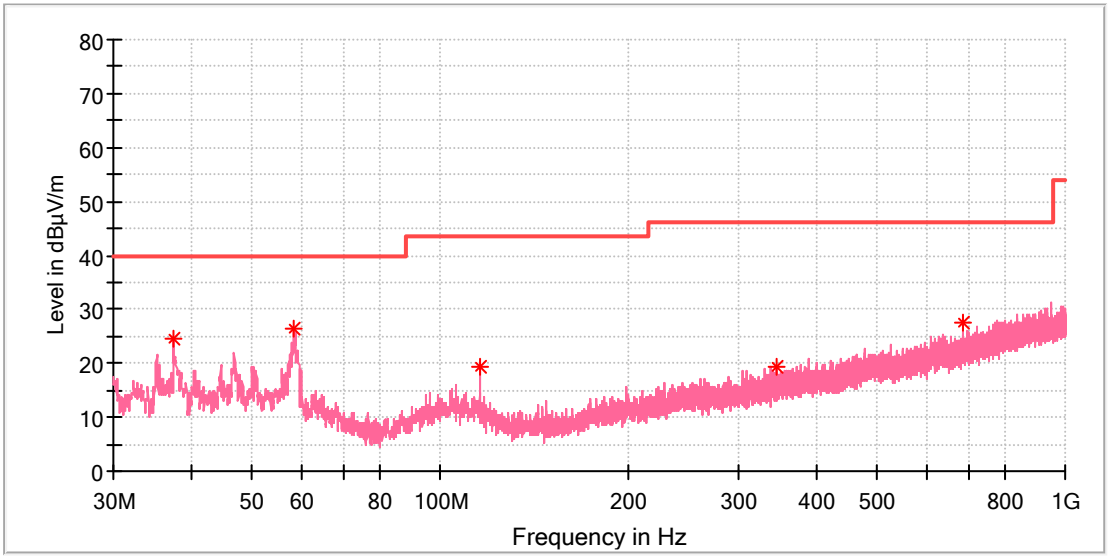
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
47.314500	17.71	40.00	22.29	100.0	H	343.0	-18.5
172.638500	15.73	43.50	27.77	100.0	H	227.0	-21.0
420.328000	22.54	46.00	23.46	100.0	H	263.0	-13.4
786.309000	29.17	46.00	16.83	100.0	H	105.0	-6.6

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.469000	24.46	40.00	15.54	100.0	V	343.0	-21.0
58.227000	26.44	40.00	13.56	100.0	V	21.0	-18.8
115.651000	19.22	43.50	24.28	100.0	V	322.0	-19.9
346.268500	19.53	46.00	26.47	100.0	V	126.0	-14.8
686.787000	27.46	46.00	18.54	100.0	V	3.0	-8.3

Final_Result

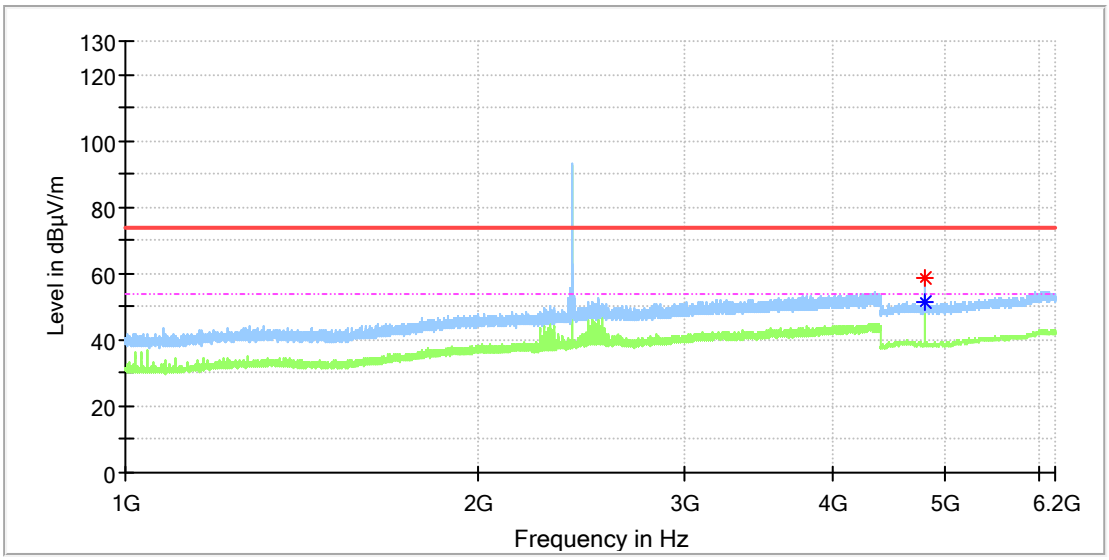
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

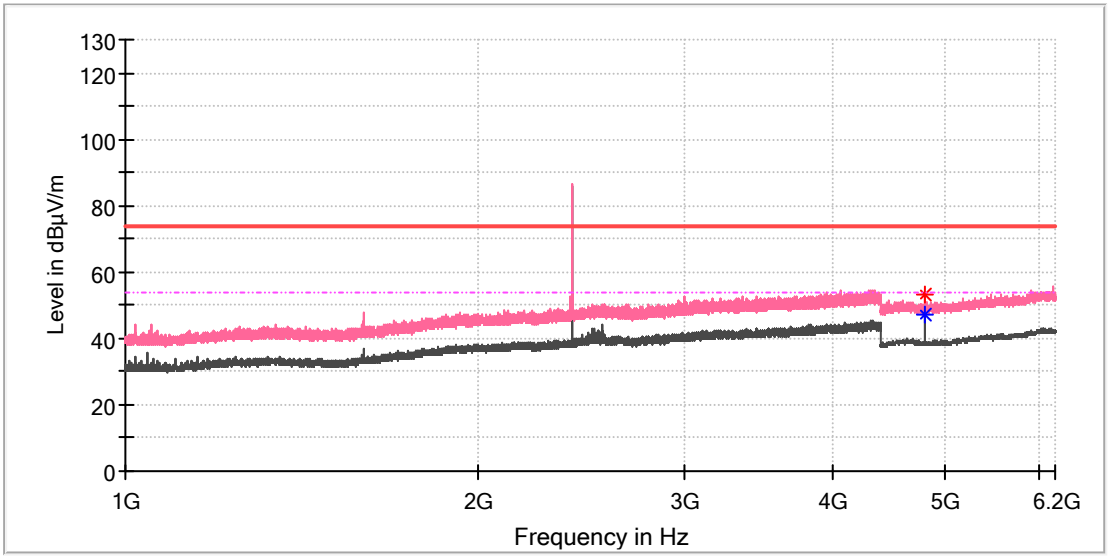
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.500000	58.59	---	74.00	15.41	100.0	H	89.0	11.8
4804.500000	---	51.61	54.00	2.39	100.0	H	213.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

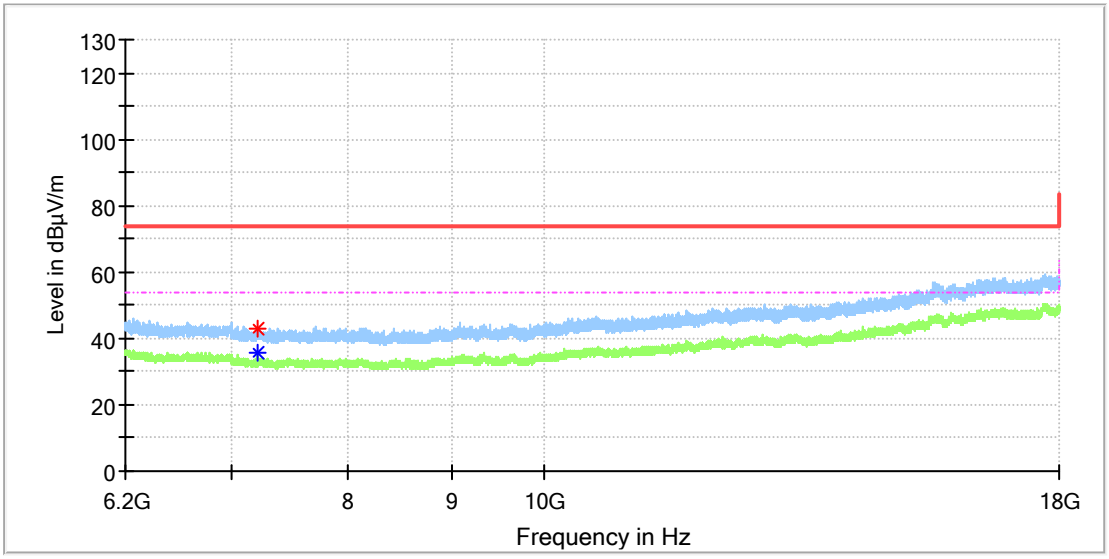
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.000000	53.05	---	74.00	20.95	100.0	V	263.0	11.8
4804.000000	---	47.34	54.00	6.66	100.0	V	263.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

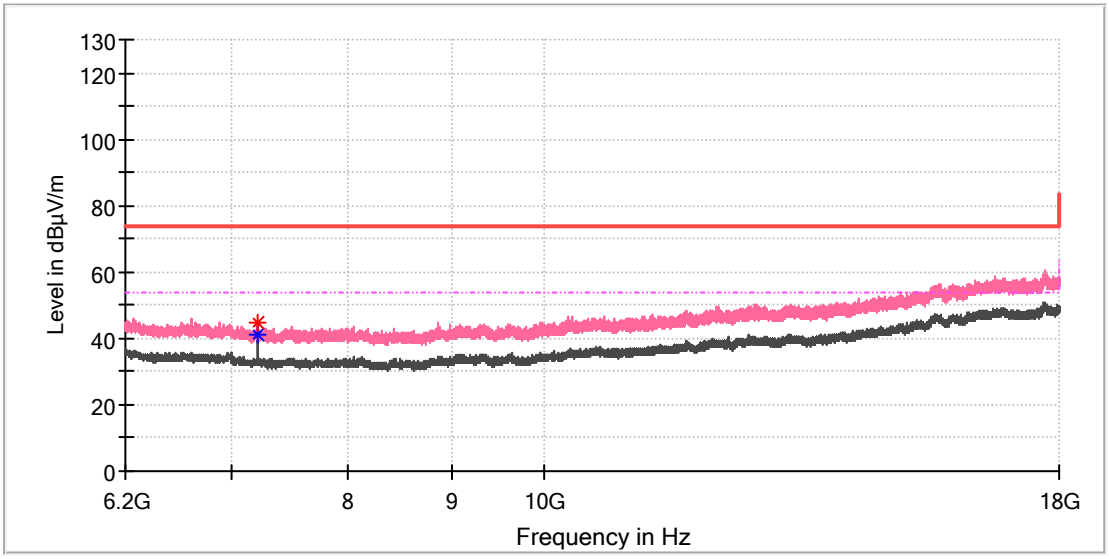
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7204.966667	---	35.73	54.00	18.27	100.0	H	81.0	8.8
7205.458333	43.13	---	74.00	30.87	100.0	H	94.0	8.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

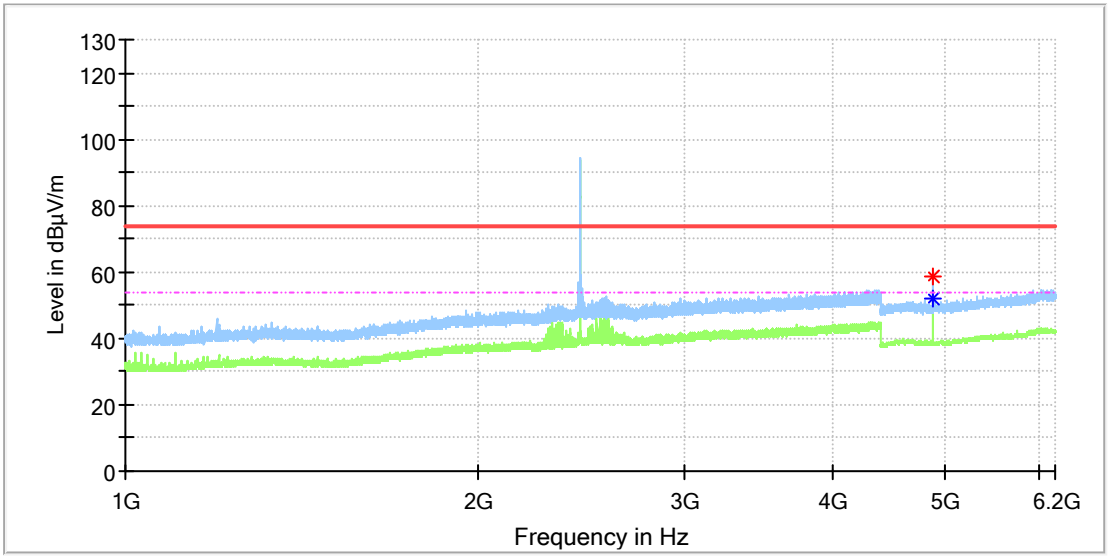
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.458333	44.95	---	74.00	29.05	100.0	V	174.0	8.8
7205.950000	---	41.20	54.00	12.80	100.0	V	272.0	8.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

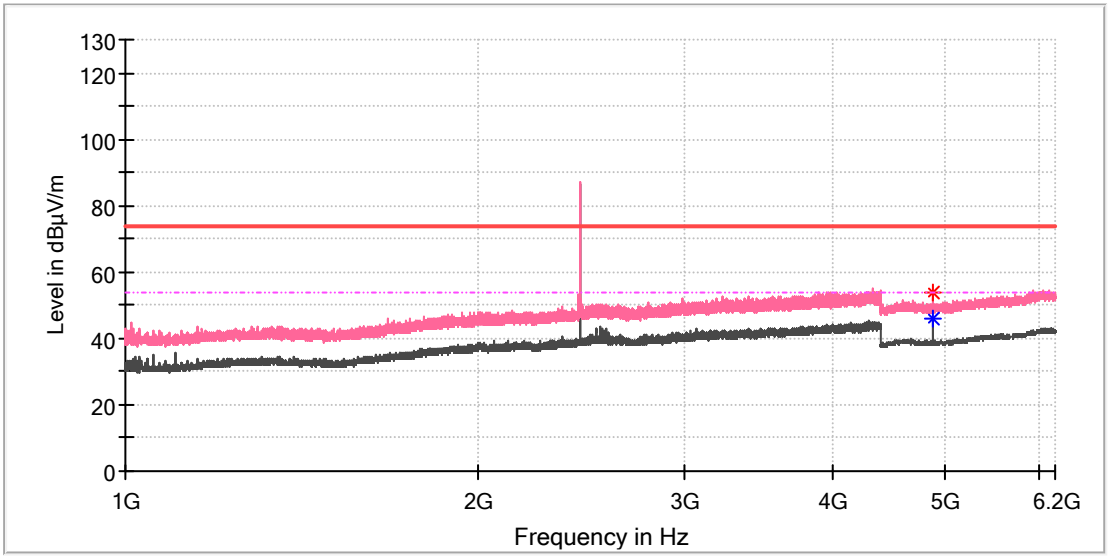
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4880.500000	58.50	---	74.00	15.50	100.0	H	90.0	11.8
4880.500000	---	51.95	54.00	2.05	100.0	H	90.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

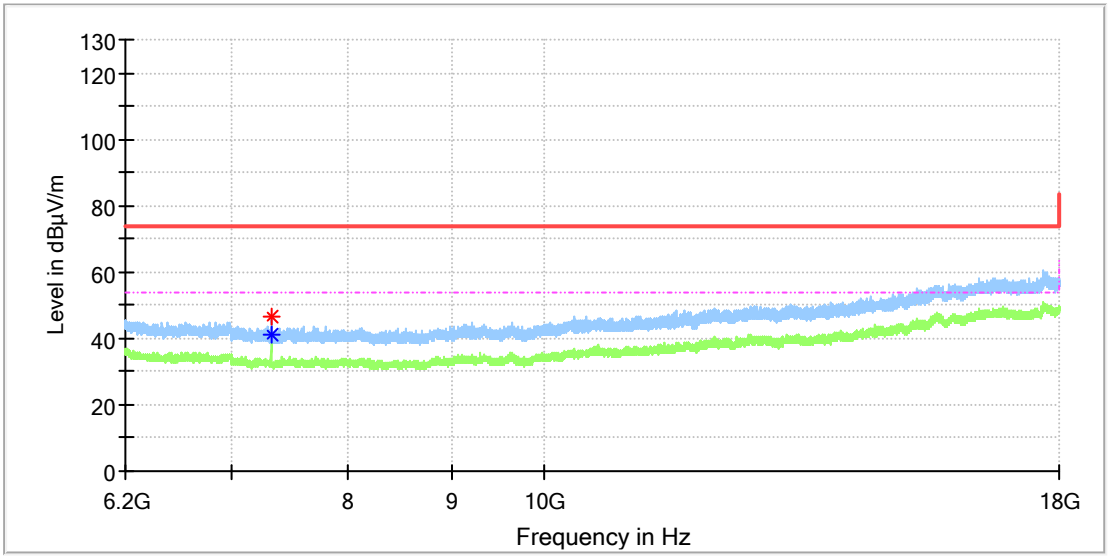
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4879.500000	54.02	---	74.00	19.98	100.0	V	251.0	11.8
4879.500000	---	45.68	54.00	8.32	100.0	V	251.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

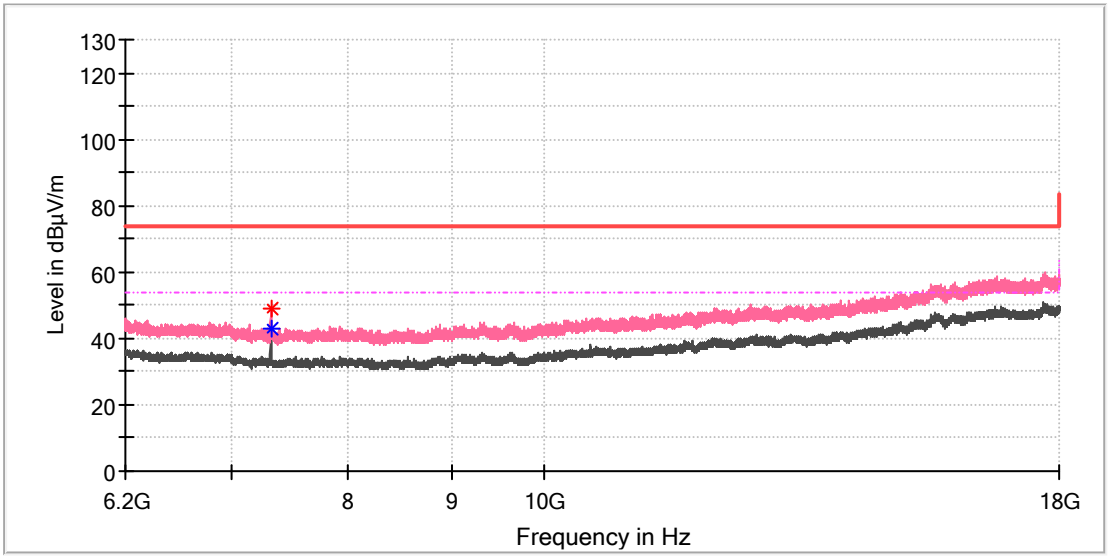
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7319.033333	46.64	---	74.00	27.36	100.0	H	145.0	8.2
7319.525000	---	41.04	54.00	12.96	100.0	H	59.0	8.2

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

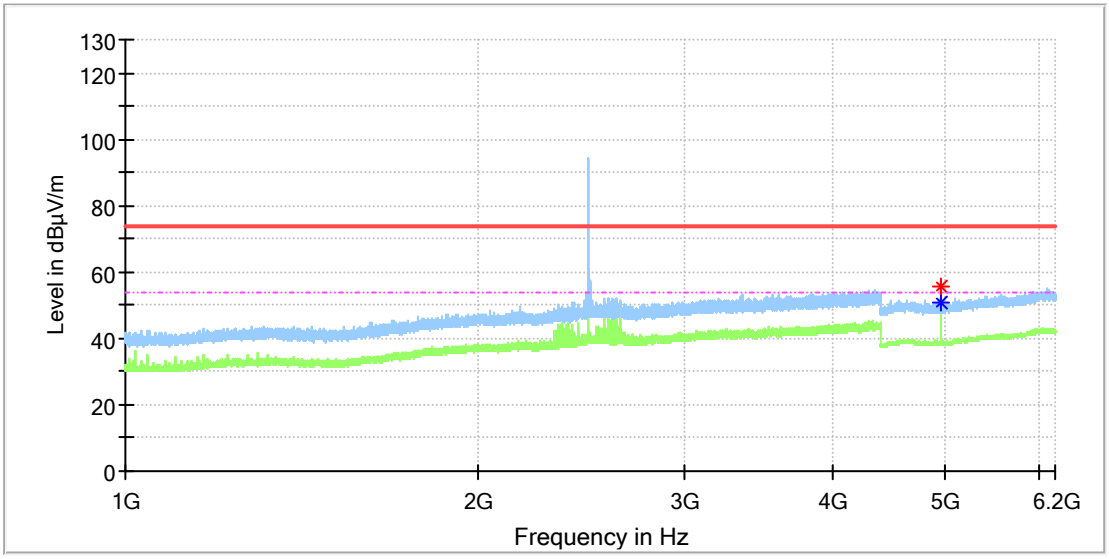
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7320.016667	48.84	---	74.00	25.16	100.0	V	185.0	8.2
7320.508333	---	43.13	54.00	10.87	100.0	V	110.0	8.2

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

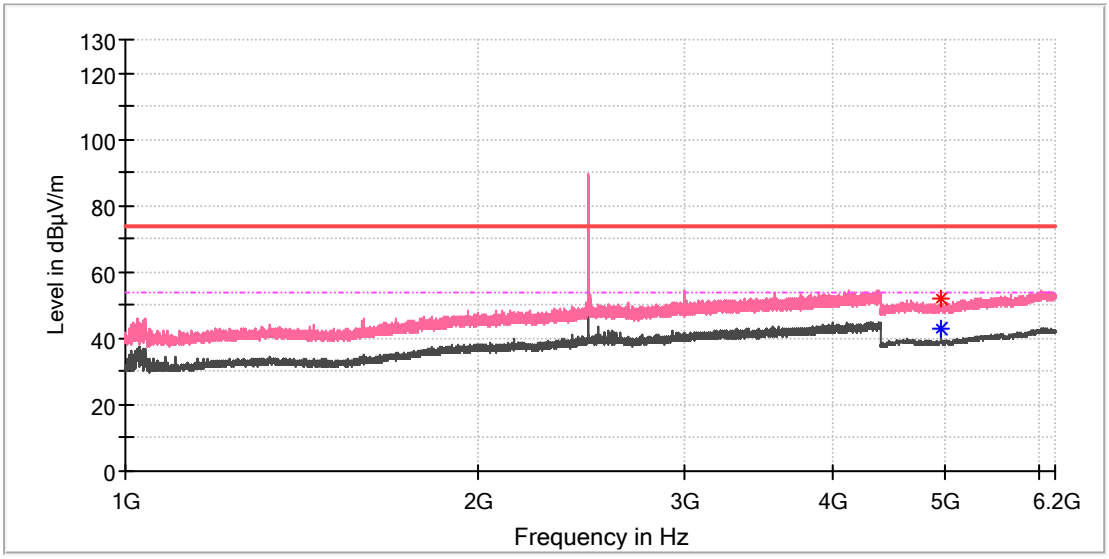
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.000000	---	50.57	54.00	3.43	100.0	H	157.0	11.8
4960.500000	55.87	---	74.00	18.13	100.0	H	164.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

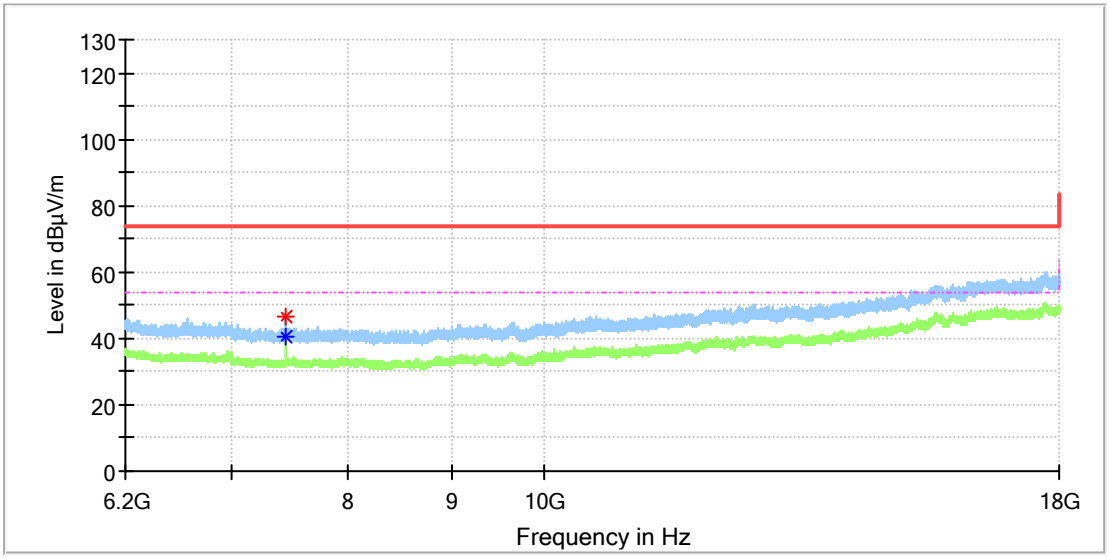
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4959.500000	51.83	---	74.00	22.17	100.0	V	251.0	11.8
4960.000000	---	43.23	54.00	10.77	100.0	V	292.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

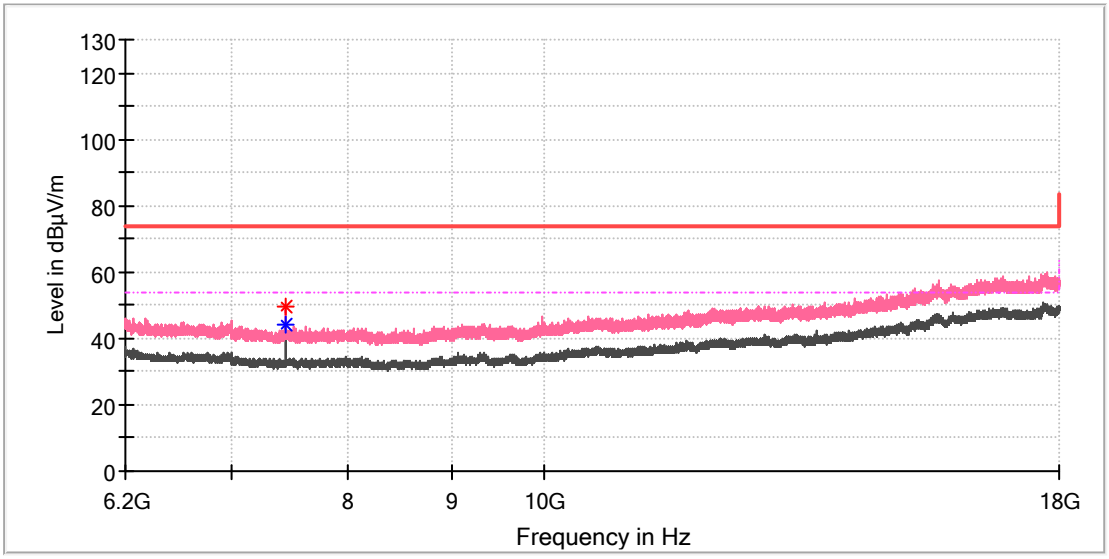
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7440.966667	46.52	---	74.00	27.48	100.0	H	132.0	8.4
7440.966667	---	40.40	54.00	13.60	100.0	H	132.0	8.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7440.475000	---	43.89	54.00	10.11	100.0	V	216.0	8.4
7440.966667	49.28	---	74.00	24.72	100.0	V	9.0	8.4

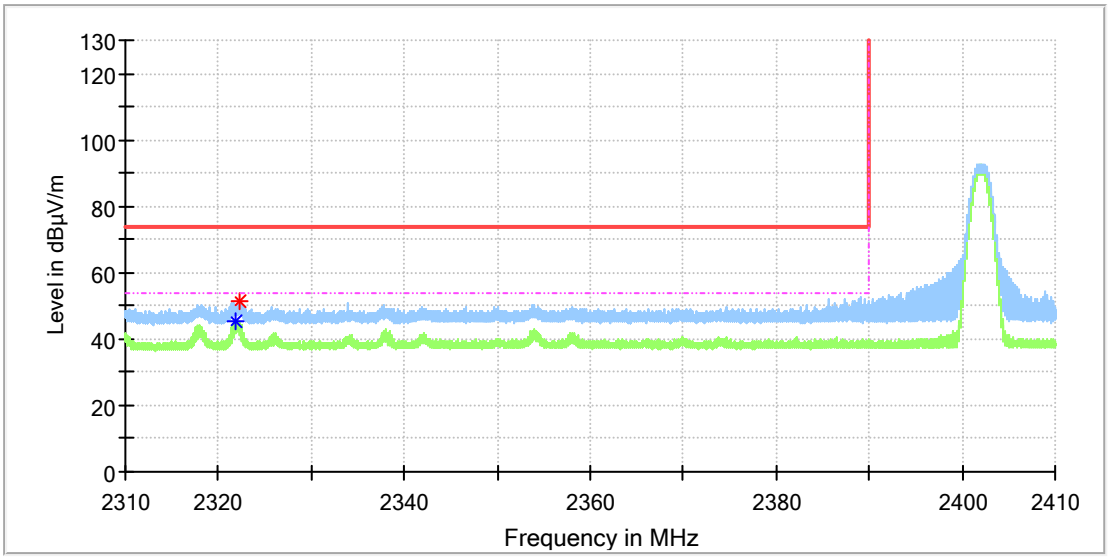
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Appendix A.7: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

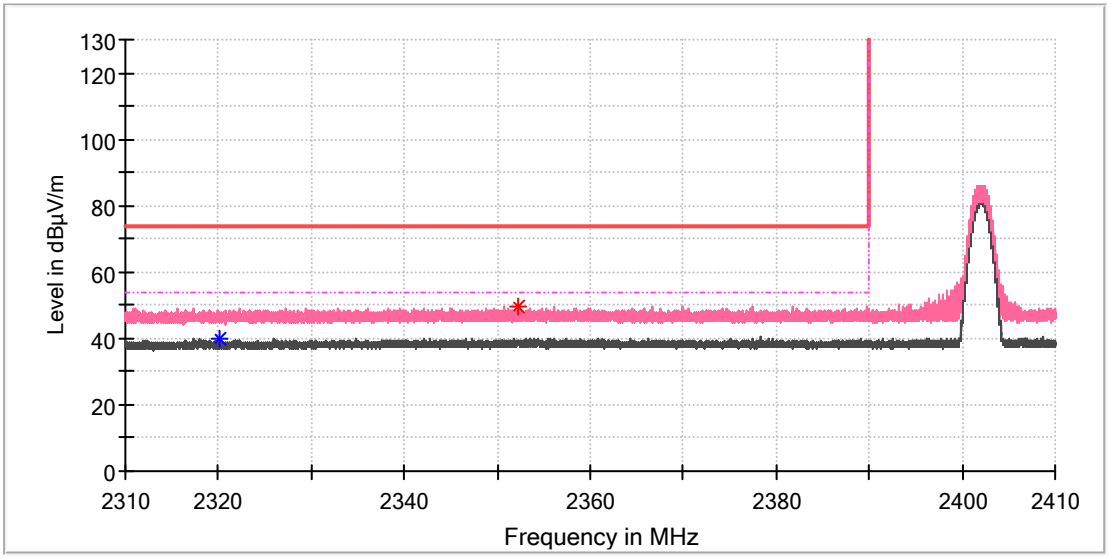
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2321.865000	---	45.38	54.00	8.62	100.0	H	40.0	6.6
2322.265000	51.09	---	74.00	22.91	100.0	H	84.0	6.6

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

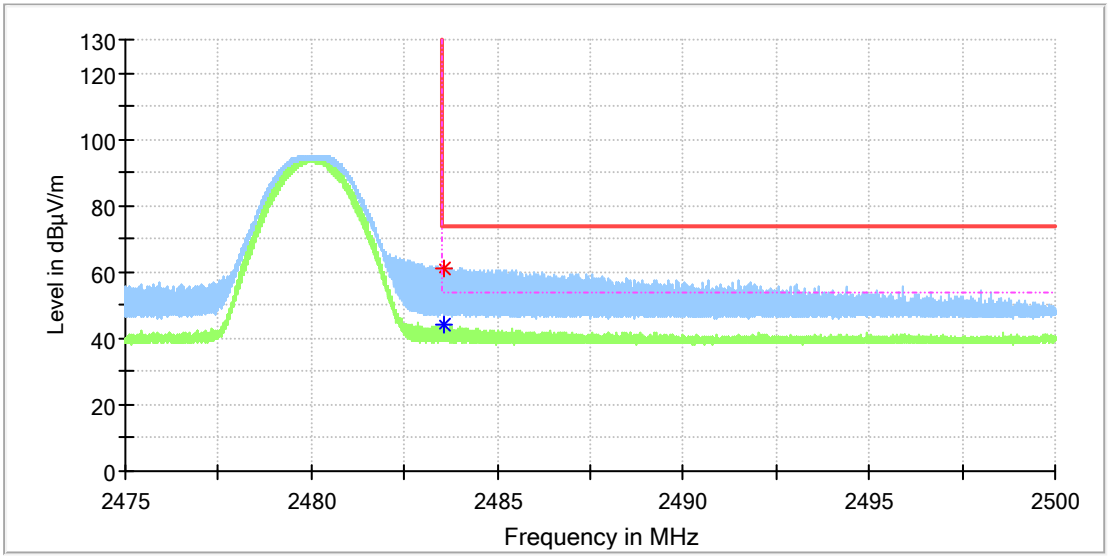
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2320.200000	---	40.02	54.00	13.98	100.0	V	0.0	6.6
2352.345000	49.82	---	74.00	24.18	100.0	V	336.0	6.9

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

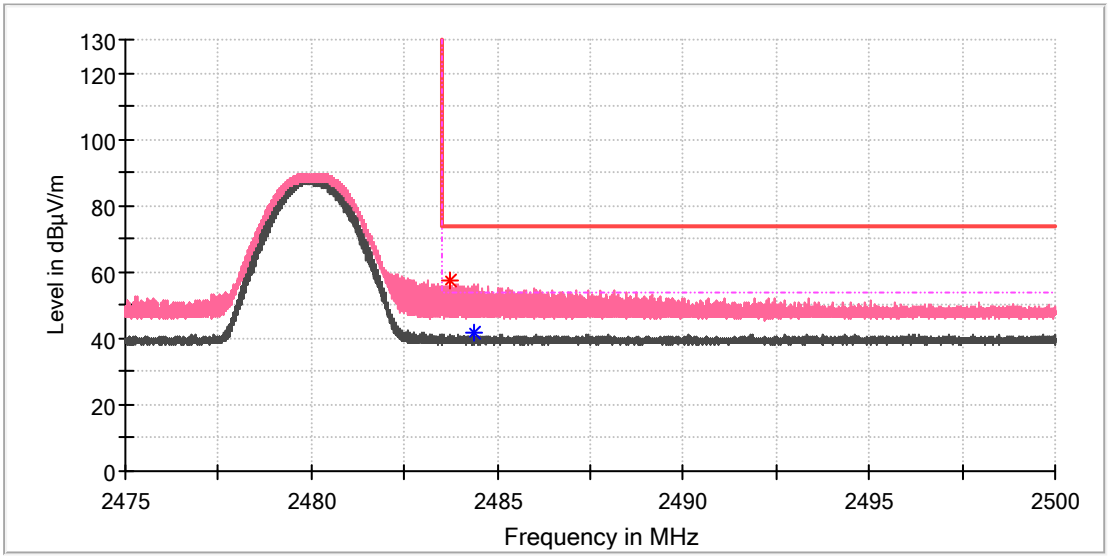
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.585000	---	44.07	54.00	9.93	100.0	H	246.0	7.4
2483.585000	61.30	---	74.00	12.70	100.0	H	246.0	7.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.748750	57.15	---	74.00	16.85	100.0	V	251.0	7.4
2484.400000	---	41.54	54.00	12.46	100.0	V	31.0	7.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

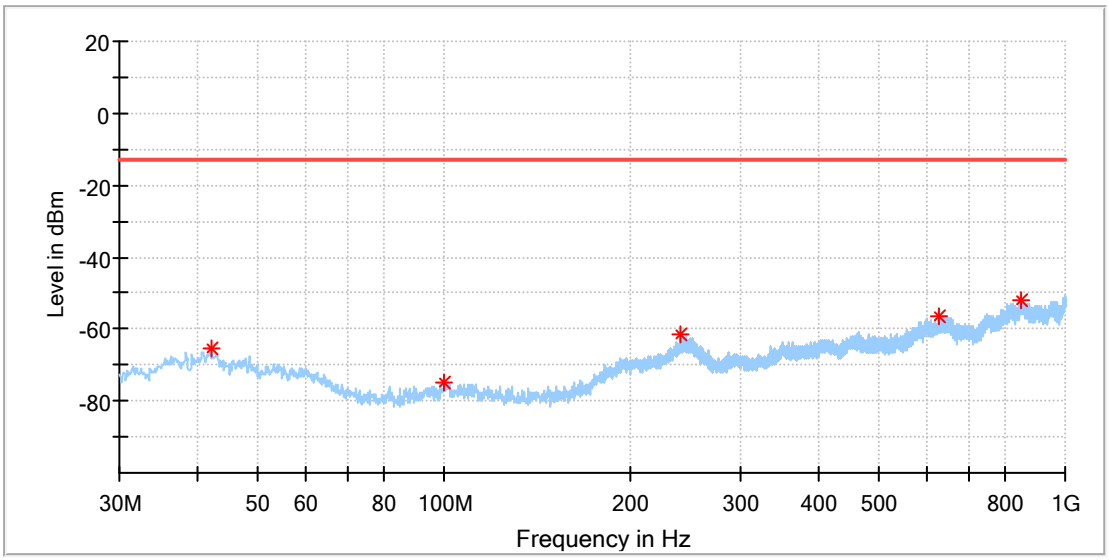
Appendix A.8: Test Results of Radiated Spurious Emissions, Co-location

BLE + GSM

Test Report

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+GSM850
Order No/Sample No:	168376943/A003324232-002
Test Voltage::	DC 12V From DC Source
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



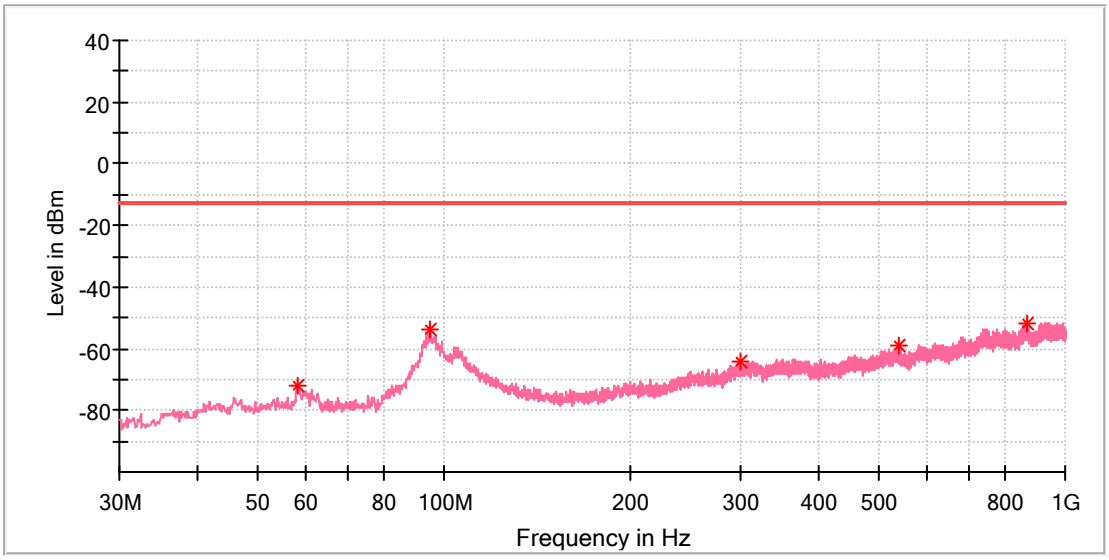
Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
42.125000	-65.59	-13.00	52.59	100.0	H	166.0	-112.3
100.082500	-74.87	-13.00	61.87	100.0	H	161.0	-120.8
239.641250	-61.56	-13.00	48.56	100.0	H	240.0	-110.6
624.610000	-56.73	-13.00	43.73	100.0	H	354.0	-105.5
848.316250	-51.88	-13.00	38.88	100.0	H	318.0	-100.2

Test Report

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+GSM850
Order No/Sample No:	168376943/A003324232-002
Test Voltage::	DC 12V From DC Source
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



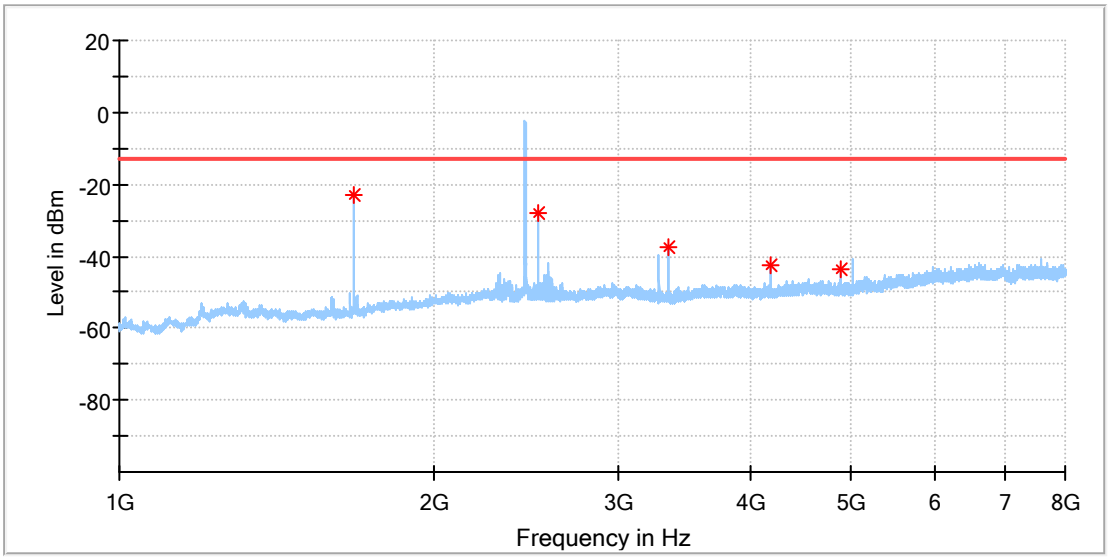
Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
58.008750	-72.21	-13.00	59.21	100.0	V	329.0	-121.2
94.626250	-53.90	-13.00	40.90	100.0	V	216.0	-99.6
300.872500	-64.13	-13.00	51.13	100.0	V	166.0	-111.1
541.068750	-59.19	-13.00	46.19	100.0	V	235.0	-107.8
867.473750	-51.71	-13.00	38.71	100.0	V	349.0	-100.8

Test Report

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+GSM850
Order No/Sample No:	168376943/A003324232-002
Test Voltage::	DC 12V From DC Source
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



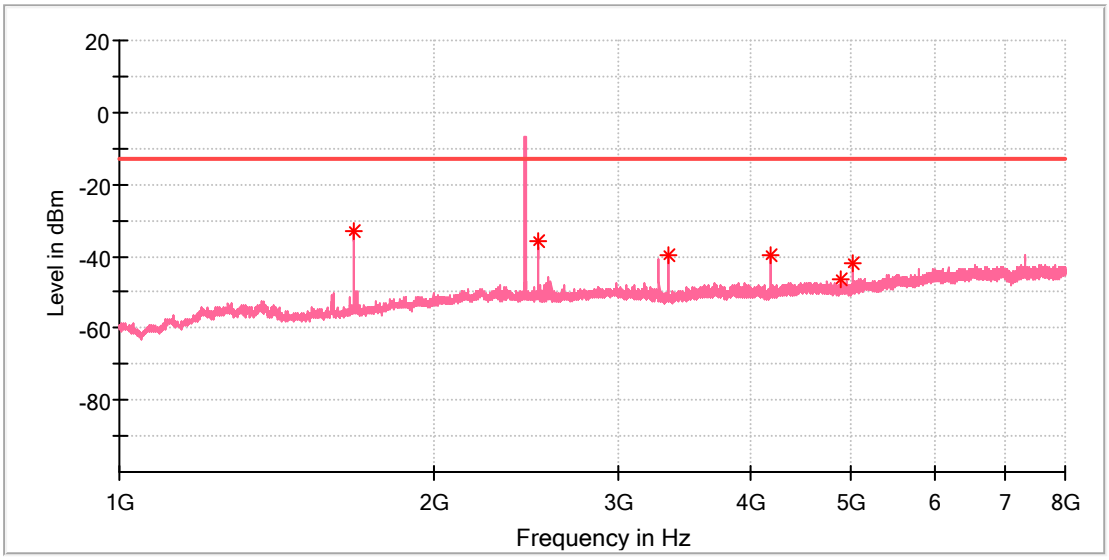
Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1673.500000	-23.18	-13.00	10.18	100.0	H	301.0	-92.5
2511.000000	-27.85	-13.00	14.85	100.0	H	140.0	-88.3
3347.500000	-37.22	-13.00	24.22	100.0	H	345.0	-88.2
4185.000000	-42.52	-13.00	29.52	100.0	H	28.0	-86.8
4880.000000	-43.70	-13.00	30.70	100.0	H	345.0	-85.8

Test Report

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+GSM850
Order No/Sample No:	168376943/A003324232-002
Test Voltage::	DC 12V From DC Source
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



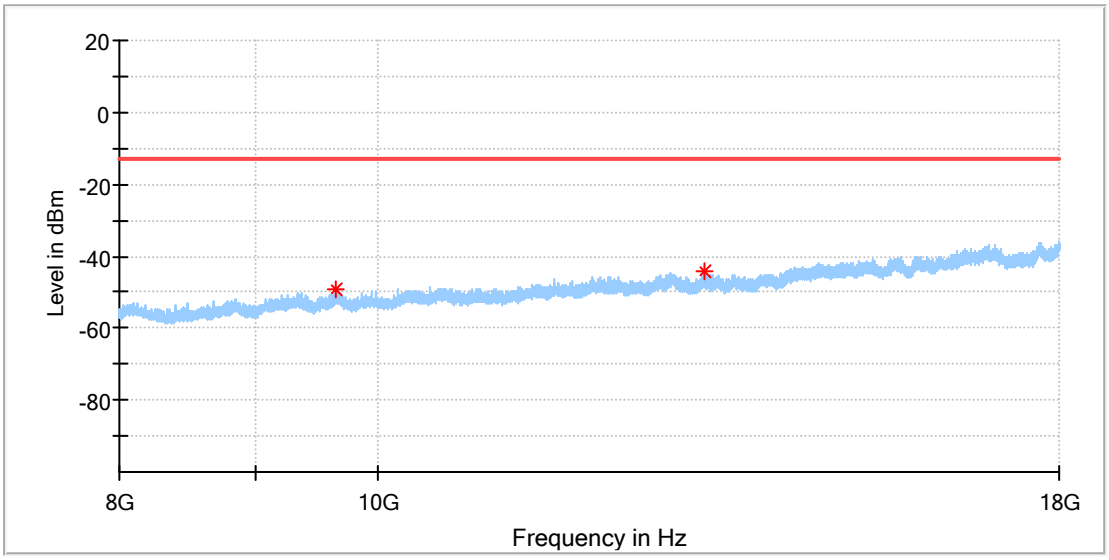
Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1673.500000	-33.13	-13.00	20.13	100.0	V	139.0	-92.2
2510.500000	-35.76	-13.00	22.76	100.0	V	263.0	-88.2
3348.000000	-39.62	-13.00	26.62	100.0	V	93.0	-88.3
4184.500000	-39.64	-13.00	26.64	100.0	V	23.0	-86.8
4880.500000	-46.26	-13.00	33.26	100.0	V	172.0	-85.8
5022.500000	-41.70	-13.00	28.70	100.0	V	84.0	-85.5

Test Report

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+GSM850
Order No/Sample No:	168376943/A003324232-002
Test Voltage::	DC 12V From DC Source
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



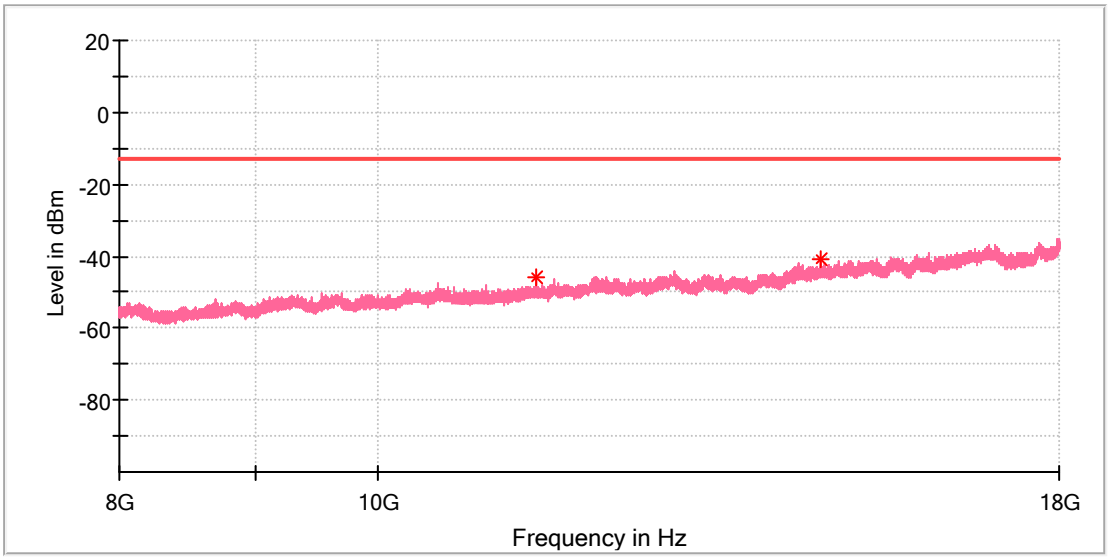
Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
9647.500000	-49.06	-13.00	36.06	100.0	H	125.0	-83.3
13263.500000	-44.44	-13.00	31.44	100.0	H	34.0	-79.4

Test Report

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+GSM850
Order No/Sample No:	168376943/A003324232-002
Test Voltage::	DC 12V From DC Source
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



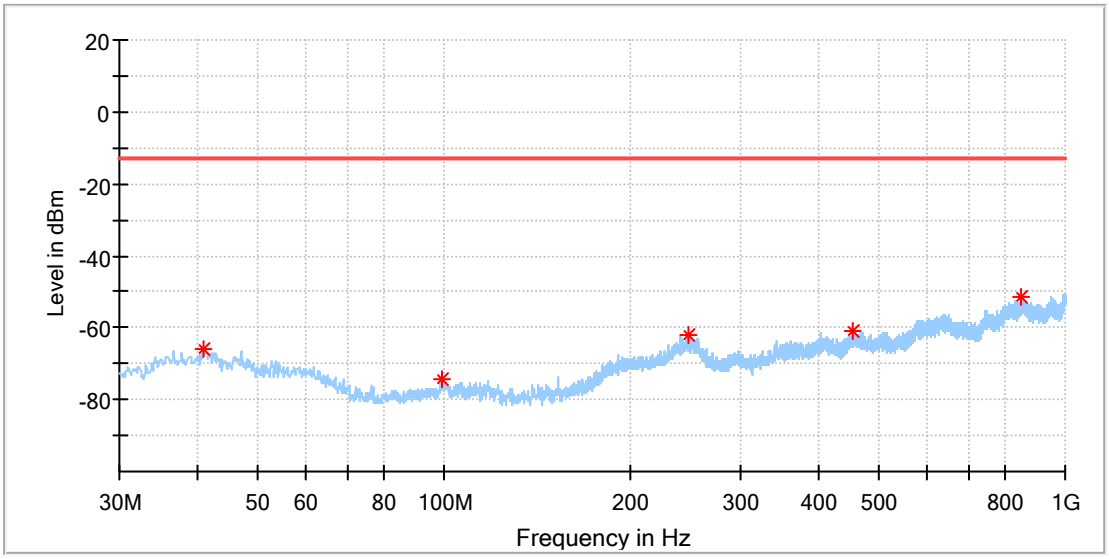
Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
11470.000000	-45.66	-13.00	32.66	100.0	V	255.0	-81.1
14643.000000	-40.95	-13.00	27.95	100.0	V	44.0	-77.3

BLE + WCDMA

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+WCDMA
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 27
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

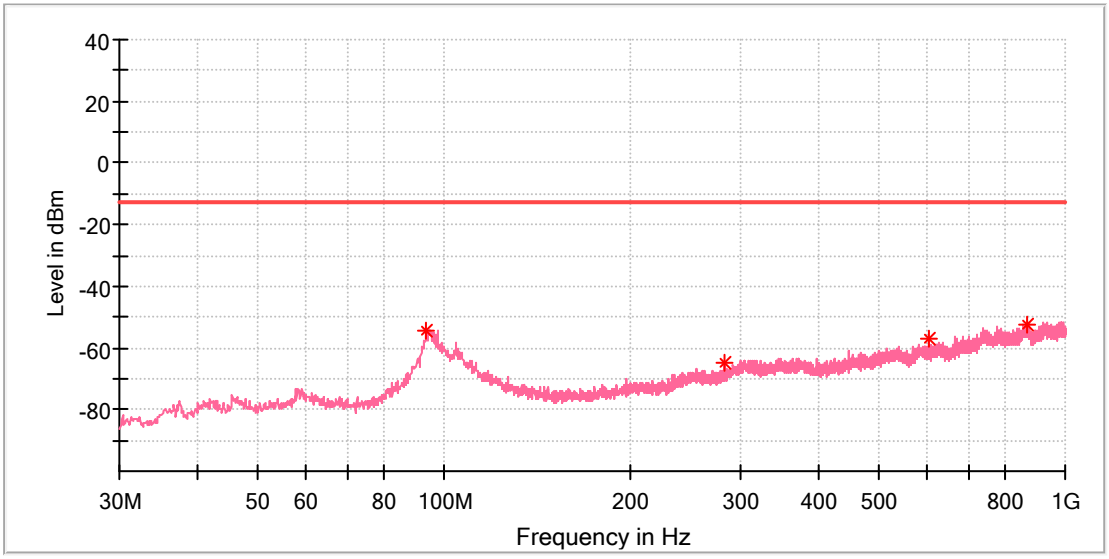


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
40.912500	-66.17	-13.00	53.17	100.0	H	218.0	-112.4
99.476250	-74.34	-13.00	61.34	100.0	H	328.0	-121.0
248.007500	-62.08	-13.00	49.08	100.0	H	322.0	-110.0
454.011250	-60.72	-13.00	47.72	100.0	H	7.0	-108.7
851.953750	-51.22	-13.00	38.22	100.0	H	52.0	-100.2

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+WCDMA
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 27
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

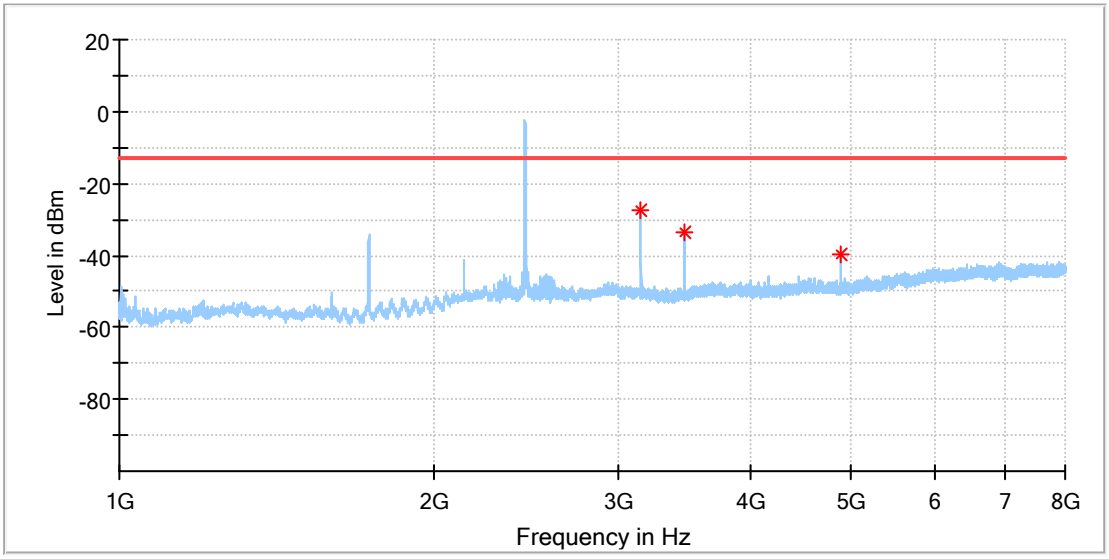


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
93.413750	-54.29	-13.00	41.29	100.0	V	190.0	-101.0
282.563750	-64.72	-13.00	51.72	100.0	V	196.0	-113.9
603.027500	-57.13	-13.00	44.13	100.0	V	196.0	-107.5
867.352500	-52.34	-13.00	39.34	100.0	V	202.0	-100.8

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+WCDMA
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 27
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

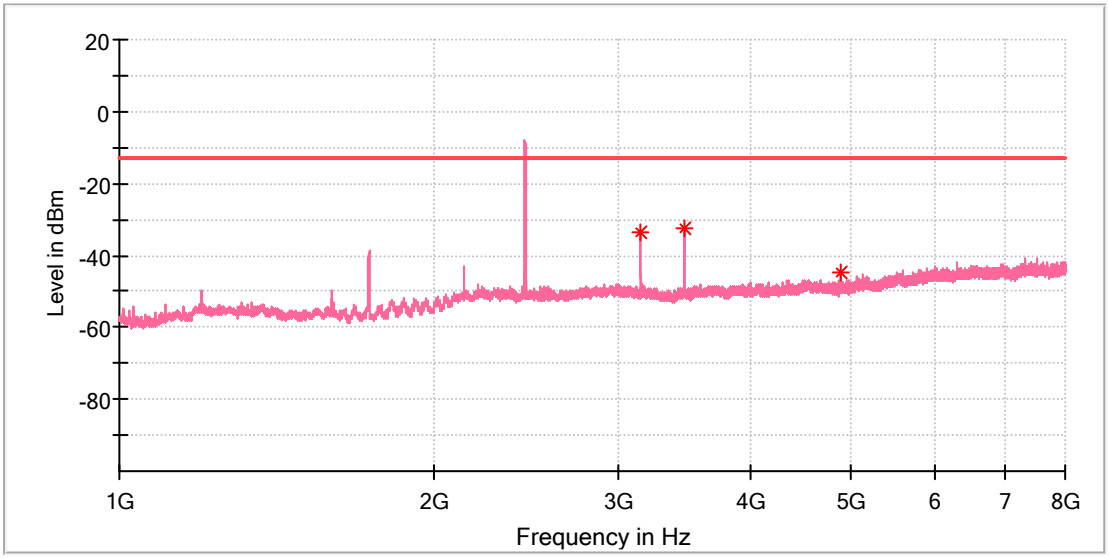


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
3148.000000	-27.22	-13.00	14.22	100.0	H	209.0	-86.7
3467.500000	-33.65	-13.00	20.65	100.0	H	155.0	-88.1
4880.000000	-39.48	-13.00	26.48	100.0	H	265.0	-85.8

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+WCDMA
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 27
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

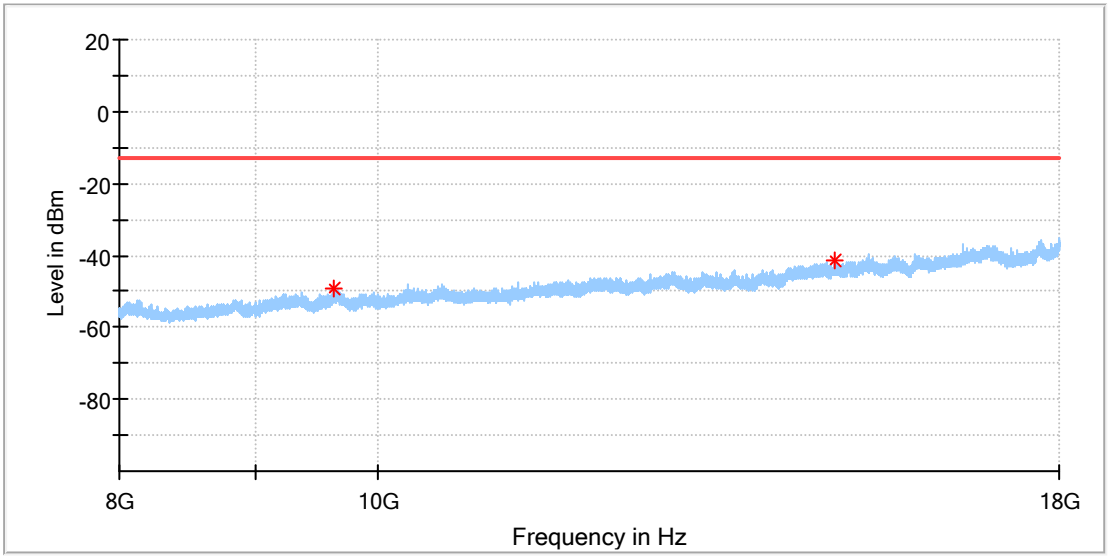


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
3146.000000	-33.71	-13.00	20.71	100.0	V	275.0	-86.8
3466.500000	-32.63	-13.00	19.63	100.0	V	95.0	-87.8
4880.000000	-44.58	-13.00	31.58	100.0	V	158.0	-85.8

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+WCDMA
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 27
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

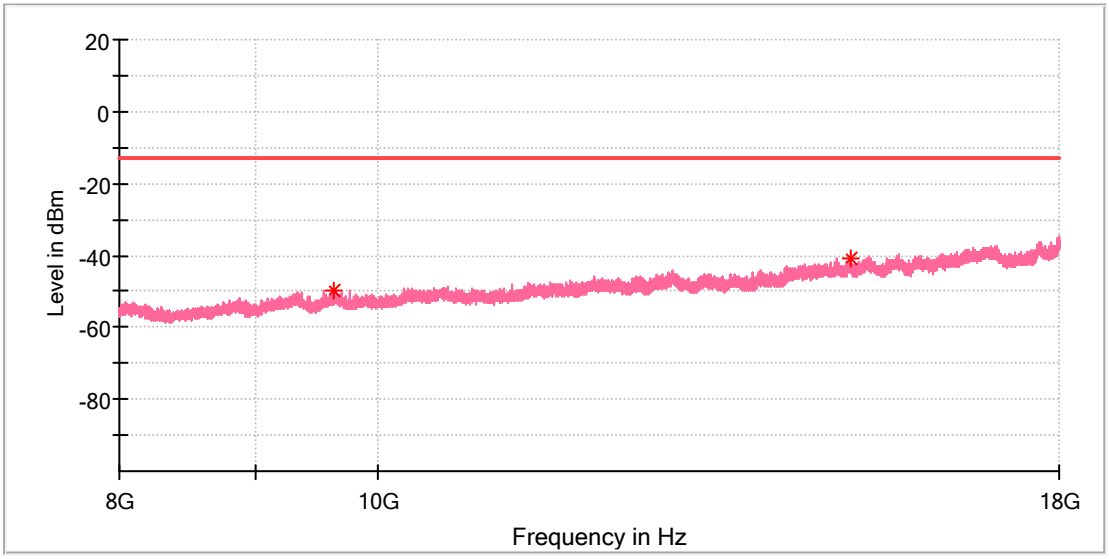


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
9630.500000	-49.25	-13.00	36.25	100.0	H	157.0	-83.6
14843.500000	-41.18	-13.00	28.18	100.0	H	188.0	-77.0

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+WCDMA
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 27
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



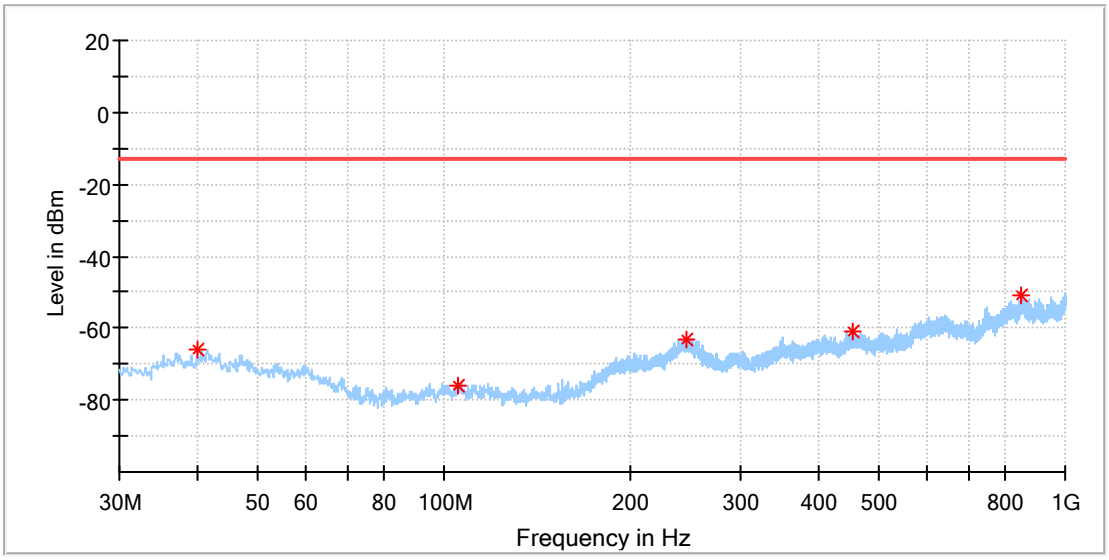
Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
9632.500000	-49.78	-13.00	36.78	100.0	V	156.0	-83.8
15042.000000	-41.05	-13.00	28.05	100.0	V	0.0	-77.5

BLE + LTE

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+LTE
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

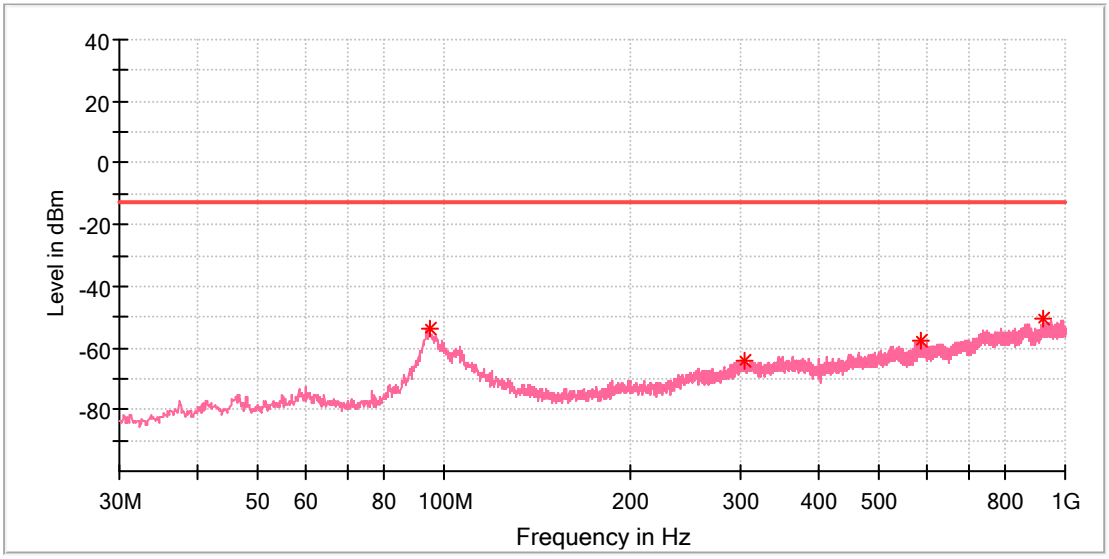


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
39.942500	-66.15	-13.00	53.15	100.0	H	315.0	-113.3
105.175000	-75.82	-13.00	62.82	100.0	H	0.0	-121.3
246.431250	-62.89	-13.00	49.89	100.0	H	264.0	-110.0
455.587500	-61.03	-13.00	48.03	100.0	H	75.0	-108.7
847.225000	-51.00	-13.00	38.00	100.0	H	359.0	-100.4

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+LTE
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

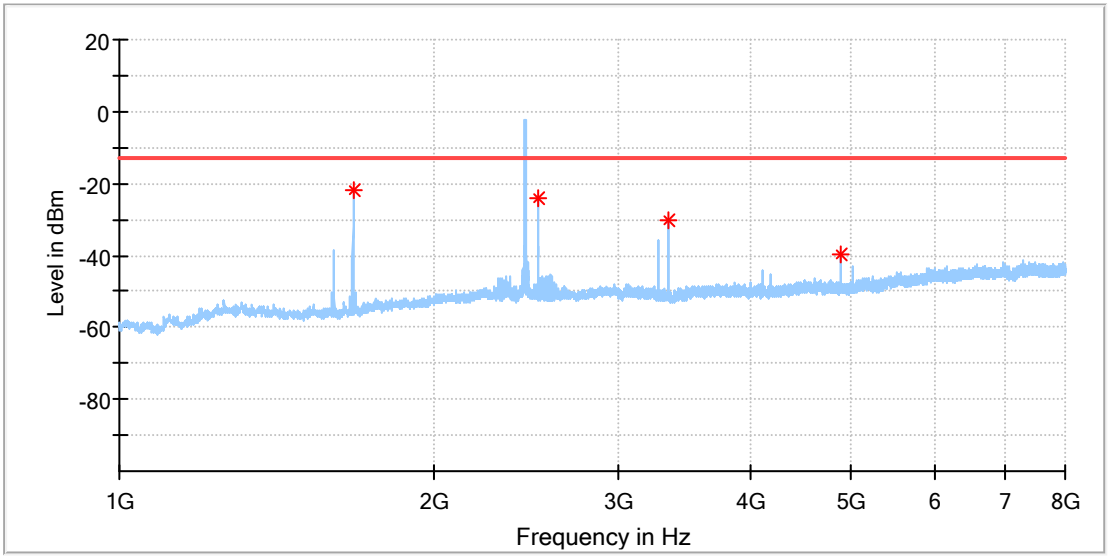


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
94.868750	-53.46	-13.00	40.46	100.0	V	268.0	-99.6
305.358750	-63.92	-13.00	50.92	100.0	V	282.0	-111.0
584.840000	-57.60	-13.00	44.60	100.0	V	74.0	-106.6
922.885000	-50.59	-13.00	37.59	100.0	V	190.0	-100.6

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+LTE
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

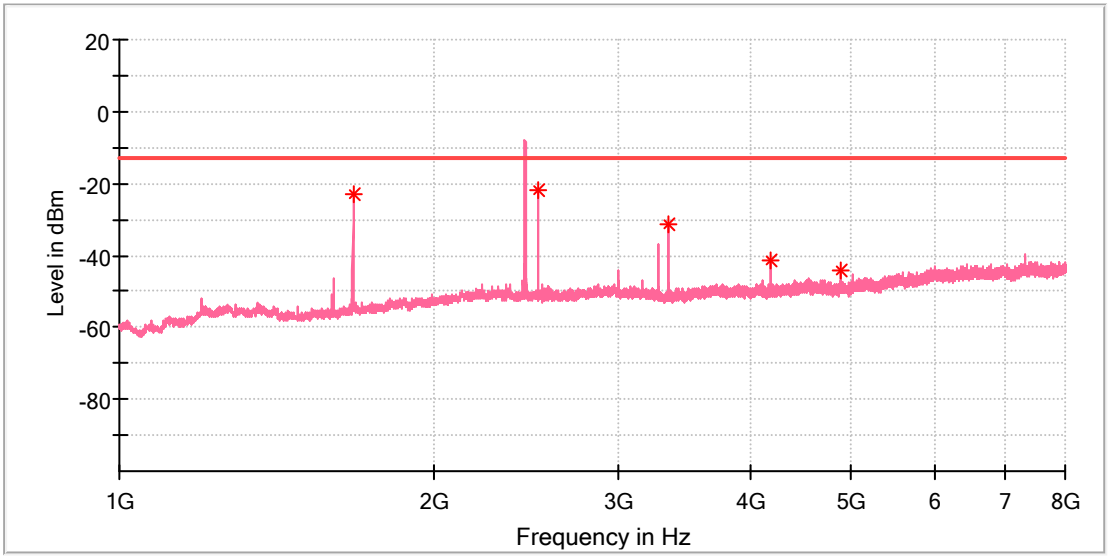


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1672.000000	-21.82	-13.00	8.82	100.0	H	189.0	-92.5
2508.500000	-23.91	-13.00	10.91	100.0	H	175.0	-88.3
3344.500000	-30.10	-13.00	17.10	100.0	H	150.0	-88.2
4880.000000	-39.45	-13.00	26.45	100.0	H	274.0	-85.8

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+LTE
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

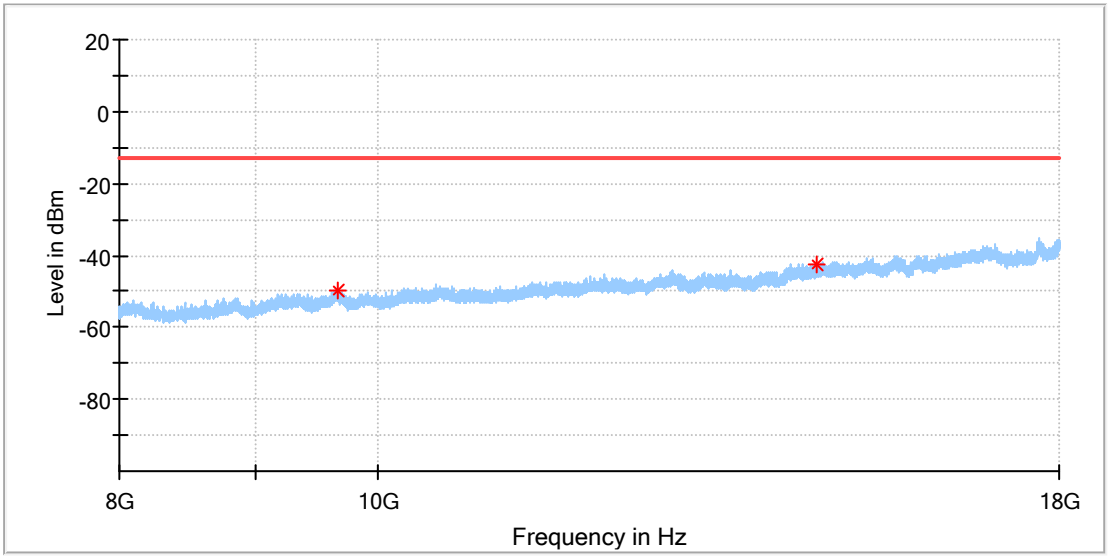


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
1672.000000	-22.91	-13.00	9.91	100.0	V	171.0	-92.2
2508.500000	-21.88	-13.00	8.88	100.0	V	90.0	-88.2
3344.000000	-31.17	-13.00	18.17	100.0	V	25.0	-88.3
4180.000000	-41.18	-13.00	28.18	100.0	V	190.0	-86.8
4879.500000	-43.91	-13.00	30.91	100.0	V	68.0	-85.8

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+LTE
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

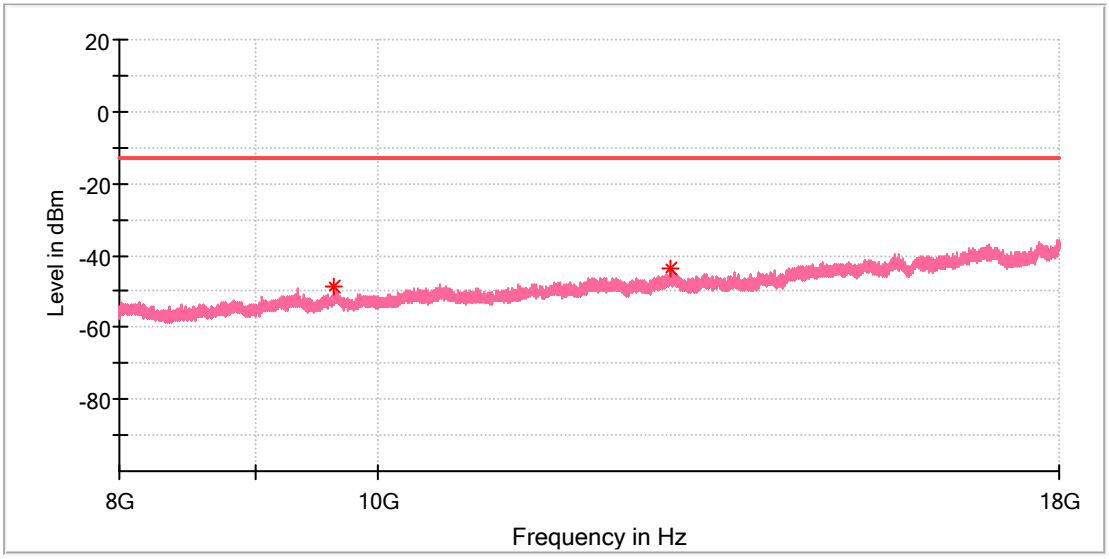


Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
9661.000000	-49.91	-13.00	36.91	100.0	H	355.0	-83.3
14607.000000	-42.39	-13.00	29.39	100.0	H	198.0	-77.1

EUT Information

EUT Name:	VEHICLE CONTROL UNIT
Model:	BST-V1204GBXBLACSA
Test Mode:	BLE+LTE
Order No/Sample No:	168376943/A003324232-010
Test Voltage:	DC 12V From DC Source
Remark:	Temp 23 Humi:58%
Test Standard:	FCC Part 22
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
9623.000000	-48.74	-13.00	35.74	100.0	V	100.0	-83.9
12863.500000	-43.89	-13.00	30.89	100.0	V	359.0	-79.1

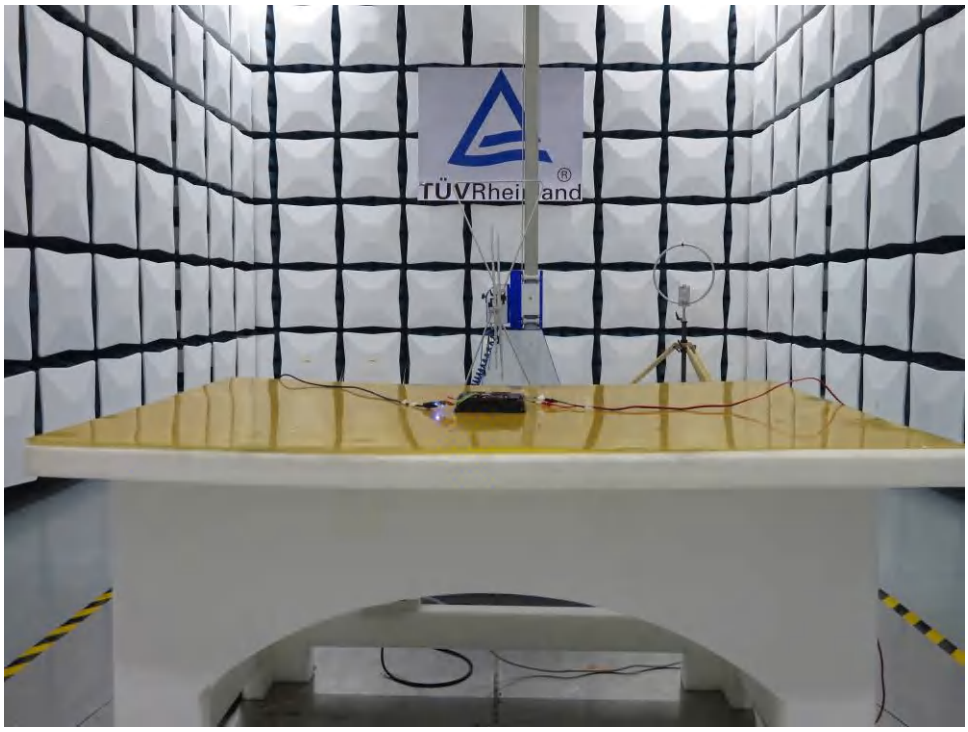
---End of Appendix---

Appendix B: Photographs of the Test Set-Up

APPENDIX B: PHOTOGRAPHS OF THE TEST SET-UP 1

PHOTOGRAPH 1: SET-UP PHOTO FOR RADIATED SPURIOUS EMISSION, BELOW 1GHZ 2
PHOTOGRAPH 2: SET-UP PHOTO FOR RADIATED SPURIOUS EMISSION, ABOVE 1GHZ 2

Photograph 1: Set-up photo for Radiated Spurious Emission, Below 1GHz



Photograph 2: Set-up photo for Radiated Spurious Emission, Above 1GHz

---End of Appendix---