

TEST REPORT

Application No.: KSCR2606001304HS
FCC ID: ZT5-F2
Applicant: Suzhou Armocon Technology Co.,Ltd.
Address of Applicant: 3-5/F No77 SuHong Middle Road SIP Jiangsu China
Manufacturer: Suzhou Armocon Technology Co.,Ltd.
Address of Manufacturer: 3-5/F No77 SuHong Middle Road SIP Jiangsu China
Factory: Suzhou Armocon Technology Co.,Ltd.
Address of Factory: 3-5/F No77 SuHong Middle Road SIP Jiangsu China
Equipment Under Test (EUT):
EUT Name: Handheld massager
Model No.: F2S™ Double Sonic, F2S™, F2™
Remark: Please refer to section 2 of this report which indicates which model was actually tested and which were electrically identical.
Trade Mark: LELO
Standard(s) : 47 CFR Part 15, Subpart C 15.247
Date of Receipt: 2026-06-03
Date of Test: 2026-06-04 to 2026-06-15
Date of Issue: 2026-06-16

Test Result:
Pass*

* In the configuration tested, the EUT complied with the standards specified above.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Revision Record			
Version	Description	Date	Remark
00	Add test data for new model F2S™ Double Sonic	2026-06-16	Base on SHCR241100223401

Authorized for issue by:				
Prepared By		Damon Zhou		
		Damon_Zhou/Project Engineer		
Approved By		Terry Hou		
		Terry Hou /Reviewer		

2 Test Summary

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2020) Section 6.10.5 & 11.12	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions Below 1GHz		ANSI C63.10 (2020) Section 6.4,6.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions Above 1GHz		ANSI C63.10 (2020) Section 6.6 & 11.12	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass

Remark: We add a new model F2S™ Double Sonic for this report, The difference with original model was show as below, Consider the difference a C2PC procedure was performance for the F2S™ Double Sonic, Only the RSE was test other test data was reference original report SHCR241100223401.

The difference with original model:

1. Model difference.
2. Battery capacity difference, F2S™ Double Sonic: 680mAh, F2S™, F2™: 520mAh.
3. Motor difference.
4. A few changes with PCB layout including changing or removing some components.

3 Contents

	Page
1 COVER PAGE	1
2 Test Summary.....	3
3 Contents	4
4 General Information.....	5
4.1 Details of E.U.T.	5
4.2 Description of Support Units	5
4.3 Measurement Uncertainty	5
4.4 Test Location	6
4.5 Test Facility.....	6
4.6 Deviation from Standards	6
4.7 Abnormalities from Standard Conditions	6
5 Equipment List	7
6 Radio Spectrum Matter Test Results	9
6.1 Radiated Emissions which fall in the restricted bands	9
6.2 Radiated Spurious Emissions Below 1GHz.....	28
6.3 Radiated Spurious Emissions Above 1GHz	33
7 Test Setup Photo	51
8 EUT Constructional Details (EUT Photos).....	51

4 General Information

4.1 Details of E.U.T.

Power supply:	DC 3.7V Rechargeable battery
Test voltage:	DC 3.7V
Operation Frequency:	2402MHz to 2480MHz
Modulation Type:	GFSK
Number of Channels:	40
Channel Spacing:	2MHz
Antenna Type:	Ceramic Antenna
Antenna Gain:	2 dBi (Provided by manufacturer)

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Laptop	Lenovo	ThinkPad X100e	/
Serial port adapter plate	/	Test Plate 3	/

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	8.4×10^{-8}
2	Timeout	2s
3	Duty Cycle	0.37%
4	Occupied Bandwidth	3%
5	RF Conducted Power	0.6dB
6	RF Power Density	2.9dB
7	Conducted Spurious Emissions	0.75dB
8	RF Radiated Power	5.2dB (Below 1GHz) 5.9dB (Above 1GHz)
9	Radiated Spurious Emission Test	4.2dB (Below 30MHz) 4.5dB (30MHz-1GHz) 5.1dB (1GHz-18GHz) 5.4dB (Above 18GHz)
10	Temperature Test	1°C
11	Humidity Test	3%
12	Supply Voltages	1.5%
13	Time	3%

Note: The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

4.4 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA).

- **FCC (Designation Number: CN1172)**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

- **VCCI (Member No:1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Item	Equipment	Manufacturer	Model	Inventory No	Cal Date	Cal. Due Date
RF Conducted Test						
1	Spectrum Analyzer	Keysight	N9020A	KUS1911E004-2	07/09/2025	07/08/2026
2	Spectrum Analyzer	Keysight	N9020A	KUS2001M001-2	07/09/2025	07/08/2026
3	Spectrum Analyzer	Keysight	N9030B	KSEM021-1	12/17/2025	12/16/2026
4	Signal Generator	R&S	SMBV100B	KSEM032	12/17/2025	12/16/2026
5	Signal Generator	R&S	SMW200A	KSEM020-1	07/09/2025	07/08/2026
6	Signal Generator	Agilent	N5182A	KUS2001M001-1	07/08/2025	07/07/2026
7	Signal Generator	Agilent	E8257C	KS301066	07/22/2025	07/21/2026
8	Radio Communication Test Station	Anritsu	MT8000A	KSEM001-1	07/09/2025	07/08/2026
9	Radio Communication Analyzer	Anritsu	MT8821C	KSEM002-1	12/17/2025	12/16/2026
10	Universal Radio Communication Tester	R&S	CMW500	KUS1911E004-1	07/08/2025	07/07/2026
11	Switcher	TST	FY562	KUS2001M001-4	12/17/2025	12/16/2026
12	Conducted Test Cable	Thermax	RF01-RF04	CZ301111-CZ301120	12/17/2025	12/16/2026
13	Temp. / Humidity Chamber	TERCHY	MHK-120AK	KS301190	07/15/2025	07/14/2026
14	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-5	12/30/2025	12/29/2026
15	Software	BST	TST-PASS	/	NCR	NCR
RF Radiated Test						
1	Spectrum Analyzer	R&S	FSV40	KUS1806E003	07/09/2025	07/08/2026
2	Universal Radio Communication Tester	R&S	CMW500	KSEM009-1	12/17/2025	12/16/2026
3	Signal Generator	Agilent	E8257C	KS301066	07/22/2025	07/21/2026
4	Loop Antenna (9KHz-30MHz)	COM-POWER	AL-130R	KUS1806E001	07/11/2025	07/10/2026
5	Bilog Antenna (30MHz-1GHz)	TESEQ	CBL 6112D	KUS1806E005	07/12/2025	07/11/2026
6	Horn-antenna(1-18GHz)	Schwarzbeck	BBHA9120D	KS301079	01/11/2026	01/10/2028
7	Horn Antenna(18-40GHz)	Schwarzbeck	BBHA9170	CZ301058	01/11/2026	01/10/2028
8	Amplifier(30MHz~1GHz)	TST	LNA009100G30	KSEM061	12/18/2025	12/17/2026
9	Amplifier(400MHz~8GHz)	TST	LNA004080G30	KSEM062	12/18/2025	12/17/2026
10	Amplifier(1GHz~18GHz)	TST	LNA010180G45	KSEM039	07/09/2025	07/08/2026
11	Amplifier(18~40GHz)	TST	LNA180400G40	KSEM038	07/09/2025	07/08/2026
12	RF Test Cable	REBES MICROWAVE	A81-SMSM-10M	CZ301097-CZ301100	11/14/2025	11/13/2026
13	Temperature & Humidity Recorder	Renke Control	RS-WS-N01-6J	KSEM024-4	12/30/2025	12/29/2026
14	Software	ESE	E3_V 6.111221a	/	NCR	NCR



Report No.: KSCR260600130401

Page: 8 of 51

15	Measurement Software	Tonscend	JS32-RE V5.0.0.1	/	NCR	NCR
16	Measurement Software	Tonscend	JS32-RSE V5.0.0.0	/	NCR	NCR

6 Radio Spectrum Matter Test Results

6.1 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2020) Section 6.10.5 & 11.12

Limit:

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 27.3 °C

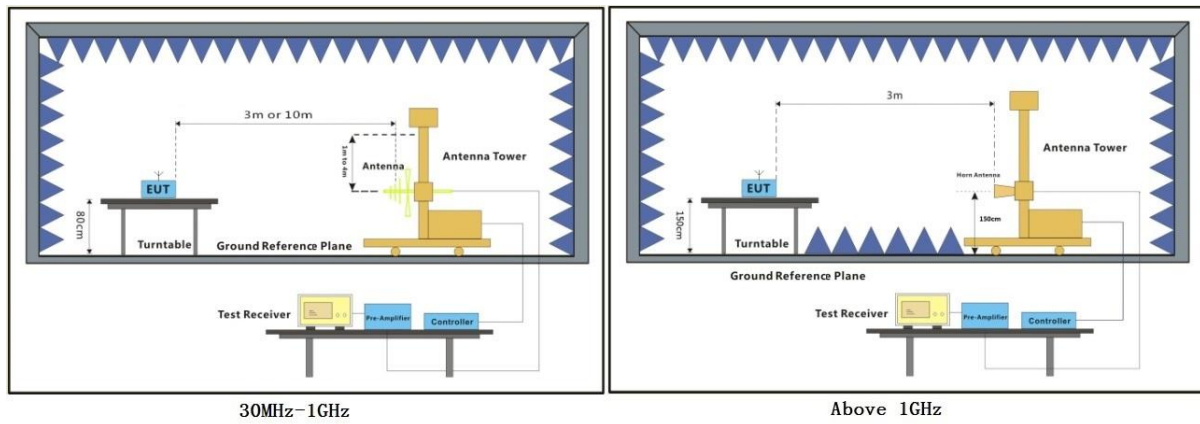
Humidity: 53.5 % RH

Atmospheric Pressure: 1010 mbar

6.1.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in continuously transmitting mode with GFSK modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in continuously transmitting mode with GFSK modulation.

6.1.3 Test Setup Diagram



6.1.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- d. The antenna 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.
- e. 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

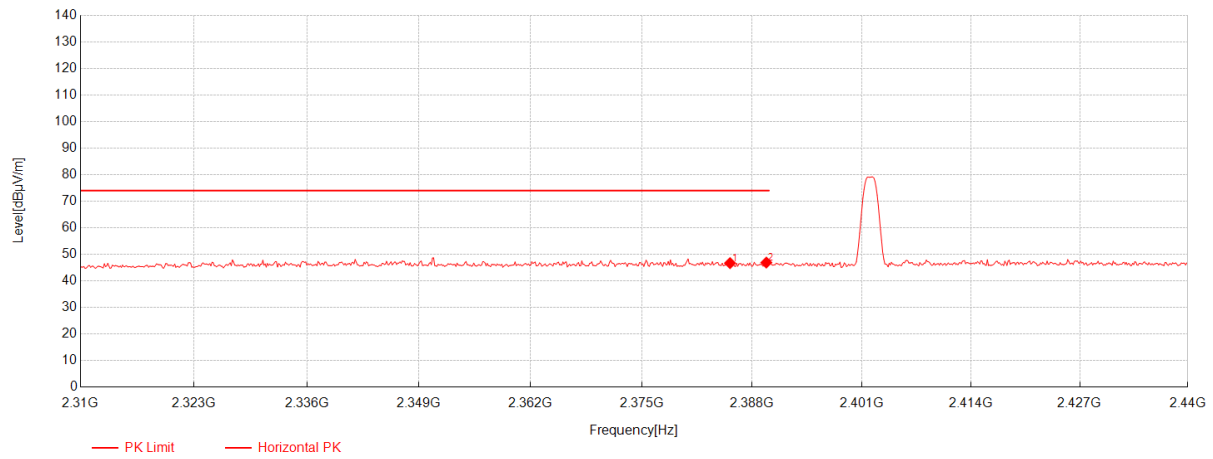
Remark 1: $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamp Factor}$

Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

Remark 3: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Peak detection (PK) and Average detection (AV) at frequency above 1GHz.

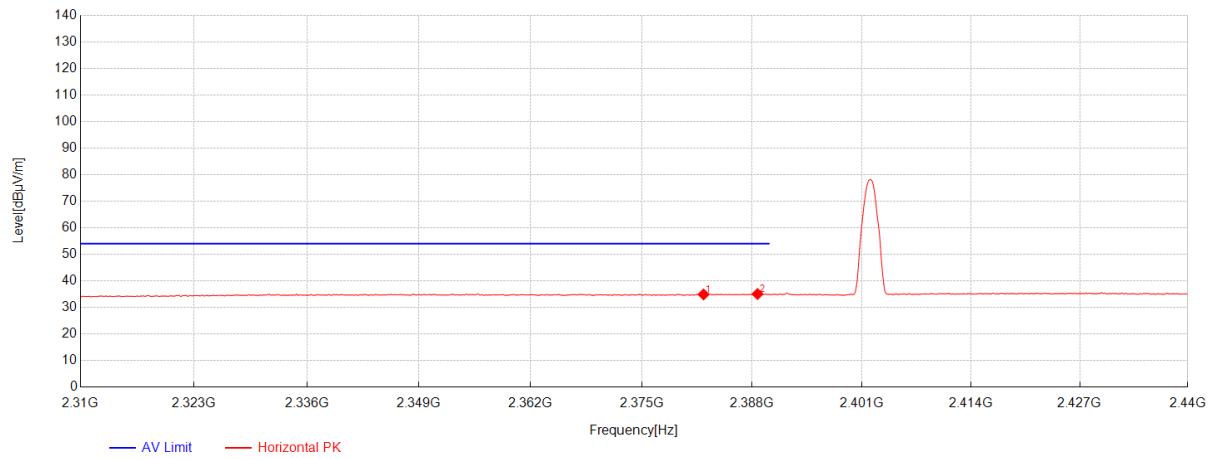
Remark 4: For fundamental and harmonic signal measurement, the resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.

BLE_1M_TX_CH_00_Horizontal_Peak



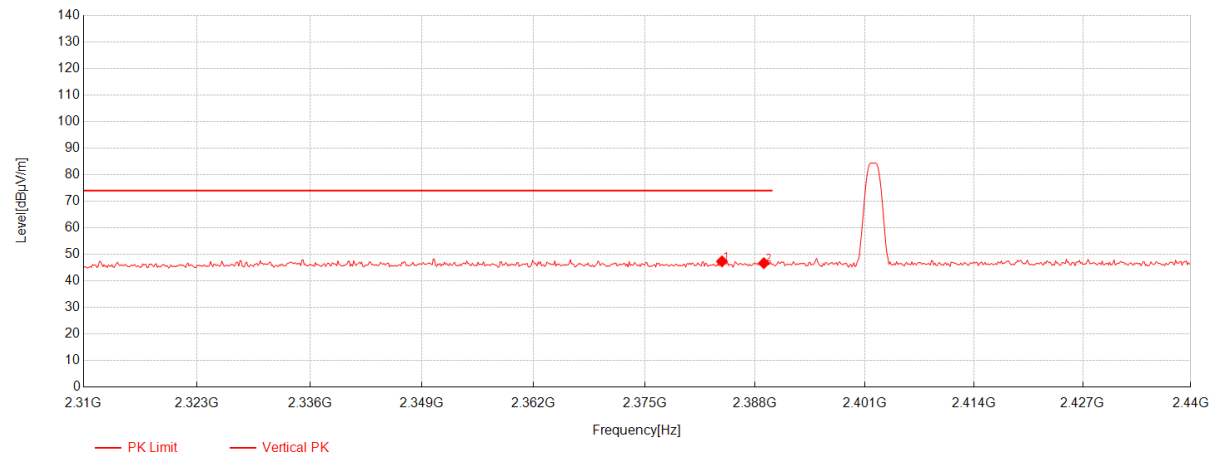
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2385.4	46.18	26.65	-26.15	46.68	74.00	27.32	Horizontal
2	2389.69	46.31	26.70	-26.13	46.88	74.00	27.12	Horizontal

BLE_1M_TX_CH_00_Horizontal_Average



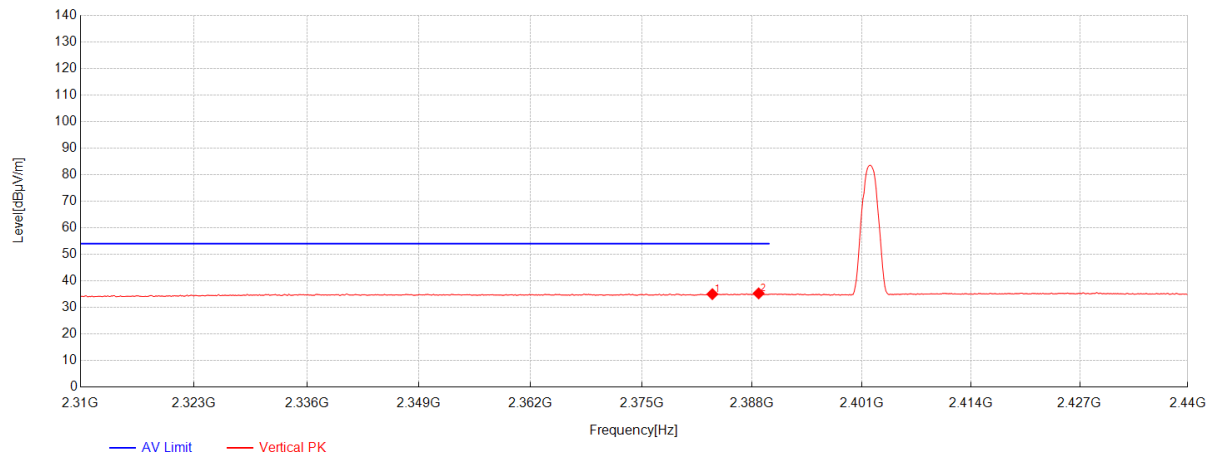
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2382.28	34.43	26.62	-26.16	34.89	54.00	19.11	Horizontal
2	2388.65	34.49	26.69	-26.13	35.05	54.00	18.95	Horizontal

BLE_1M_TX_CH_00_Vertical_Peak



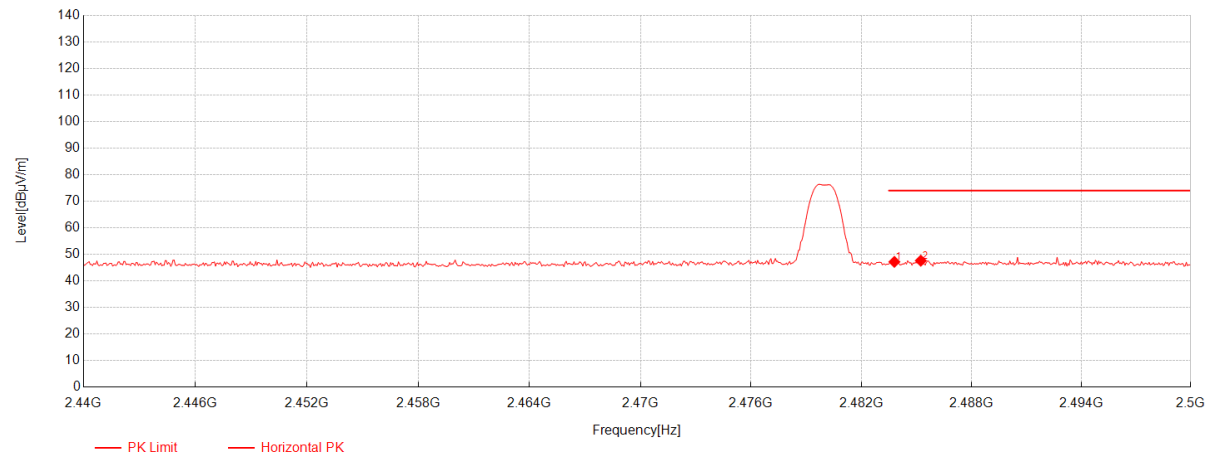
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2384.1	46.85	26.64	-26.15	47.34	74.00	26.66	Vertical
2	2389.04	46.09	26.69	-26.13	46.65	74.00	27.35	Vertical

BLE_1M_TX_CH_00_Vertical_Average



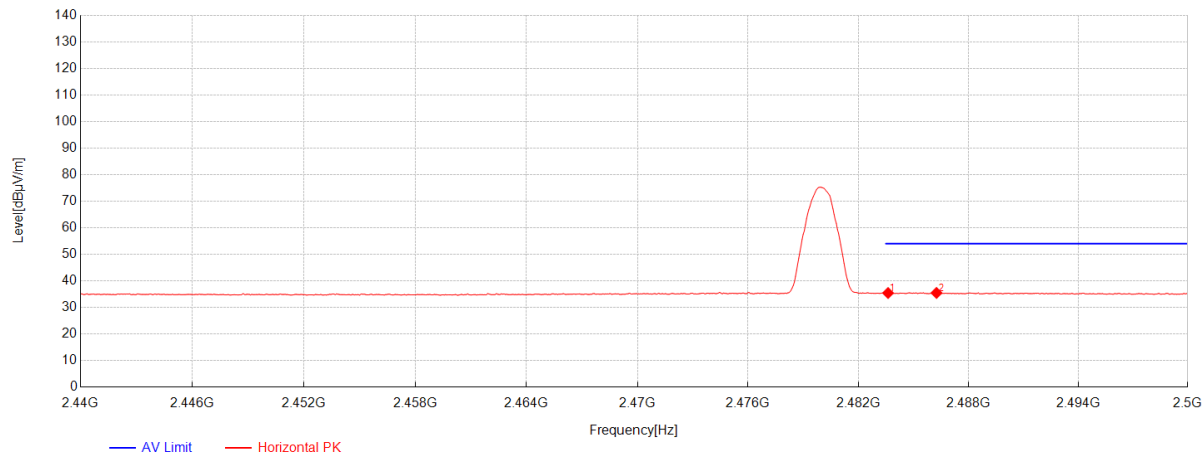
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2383.32	34.54	26.63	-26.16	35.01	54.00	18.99	Vertical
2	2388.78	34.73	26.69	-26.13	35.29	54.00	18.71	Vertical

BLE_1M_TX_CH_39_Horizontal



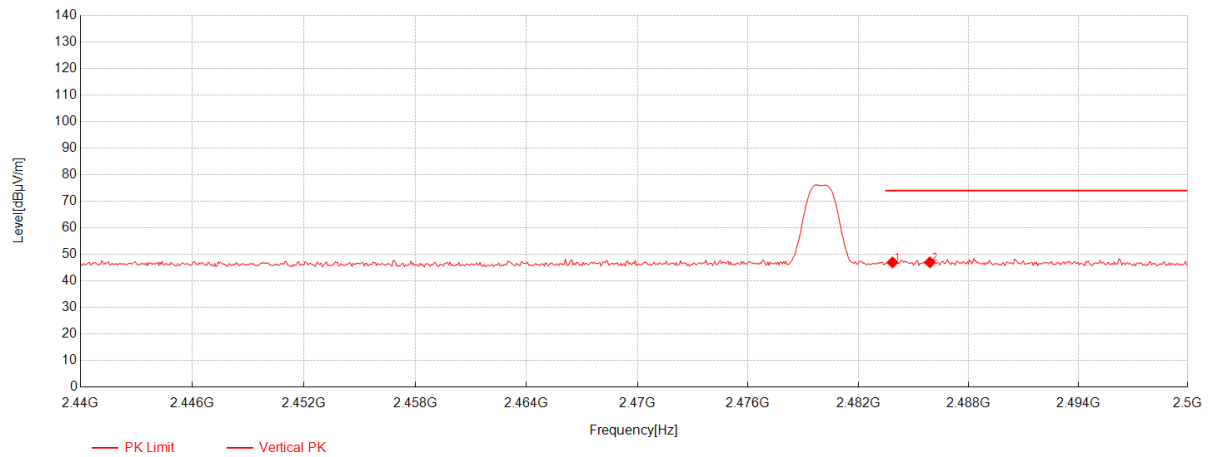
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.8	46.23	27.16	-26.24	47.15	74.00	26.85	Horizontal
2	2485.24	46.69	27.15	-26.24	47.60	74.00	26.40	Horizontal

BLE_1M_TX_CH_39_Horizontal_Average



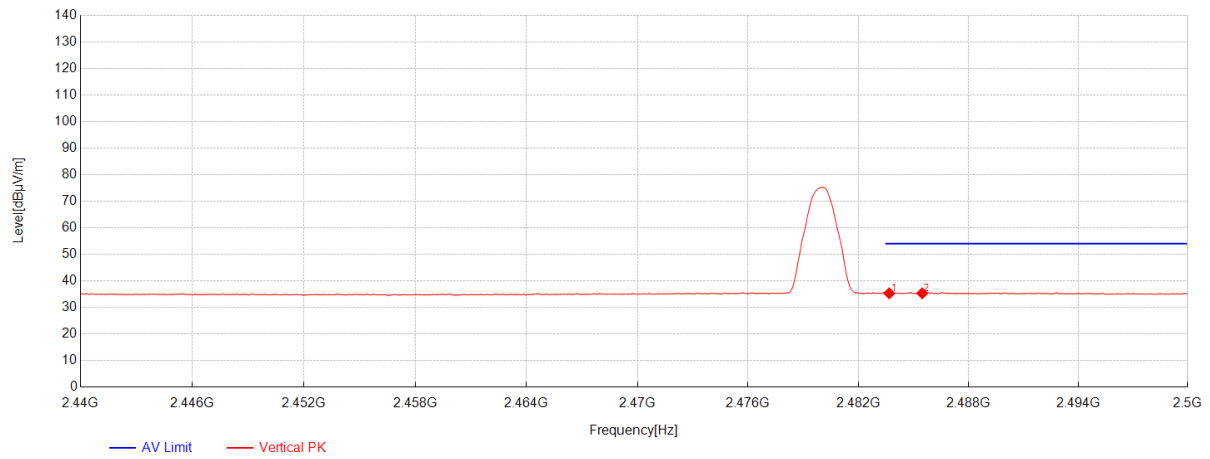
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.62	34.50	27.16	-26.24	35.42	54.00	18.58	Horizontal
2	2486.26	34.55	27.14	-26.24	35.45	54.00	18.55	Horizontal

BLE_1M_TX_CH_39_Vertical



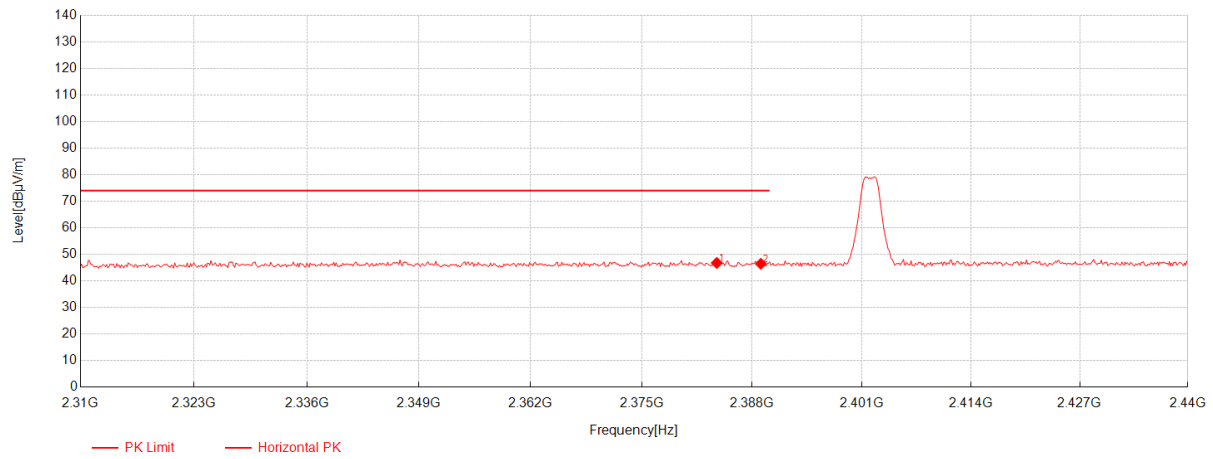
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2483.86	46.00	27.16	-26.24	46.92	74.00	27.08	Vertical
2	2485.9	46.07	27.14	-26.24	46.97	74.00	27.03	Vertical

BLE_1M_TX_CH_39_Veritical_Average



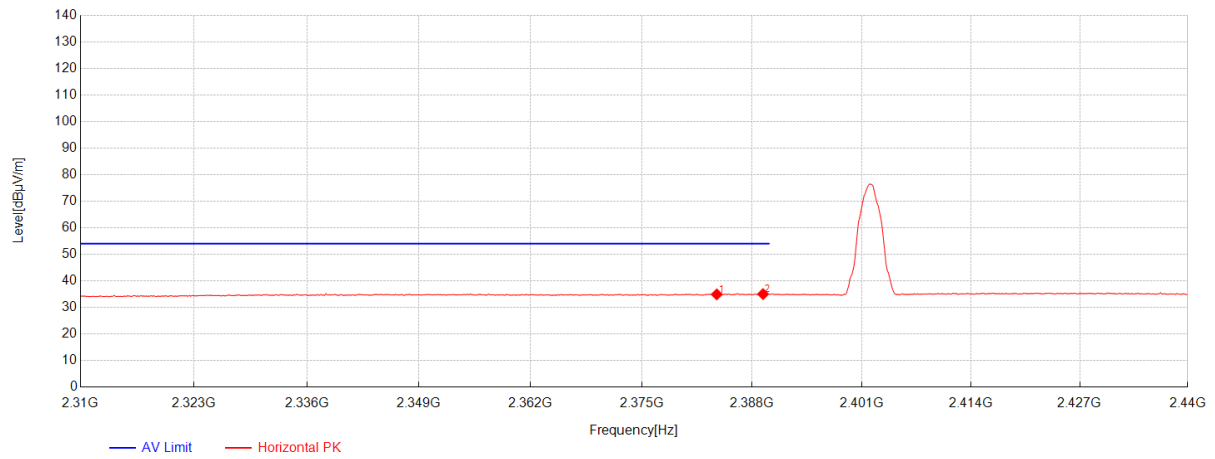
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2483.68	34.39	27.16	-26.24	35.31	54.00	18.69	Vertical
2	2485.48	34.40	27.15	-26.24	35.31	54.00	18.69	Vertical

BLE_2M_TX_CH_00_Horizontal_Peak



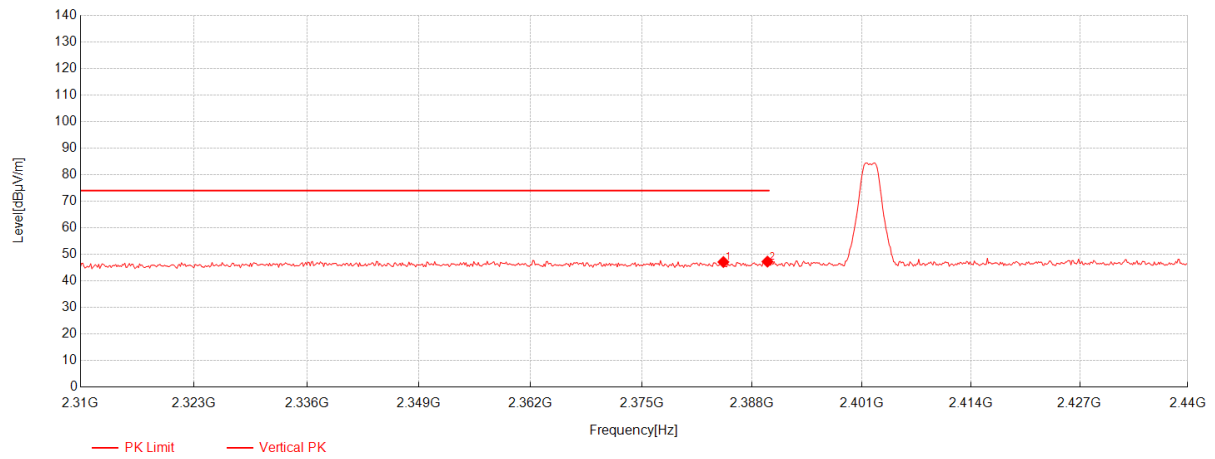
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2383.84	46.28	26.64	-26.16	46.76	74.00	27.24	Horizontal
2	2389.04	45.87	26.69	-26.13	46.43	74.00	27.57	Horizontal

BLE_2M_TX_CH_00_Horizontal_Average



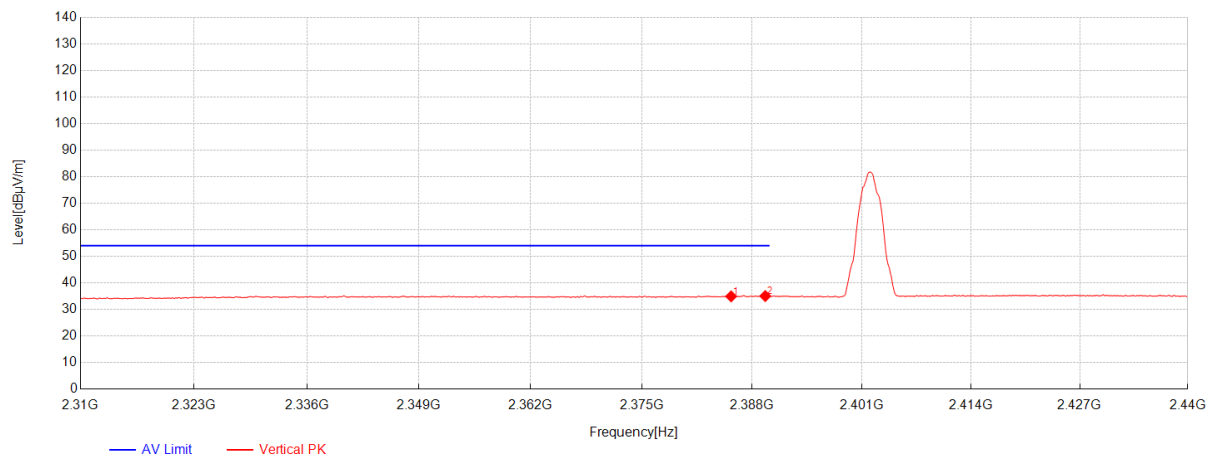
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2383.84	34.43	26.64	-26.16	34.91	54.00	19.09	Horizontal
2	2389.3	34.46	26.69	-26.13	35.02	54.00	18.98	Horizontal

BLE_2M_TX_CH_00_Vertical



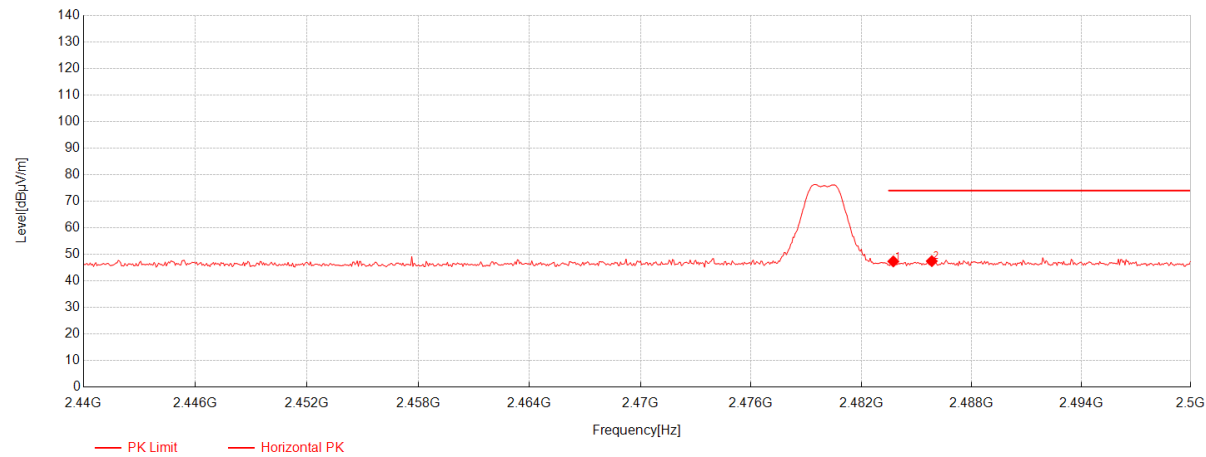
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2384.62	46.60	26.65	-26.15	47.10	74.00	26.90	Vertical
2	2389.82	46.68	26.70	-26.13	47.25	74.00	26.75	Vertical

BLE_2M_TX_CH_00_Vertical_Average



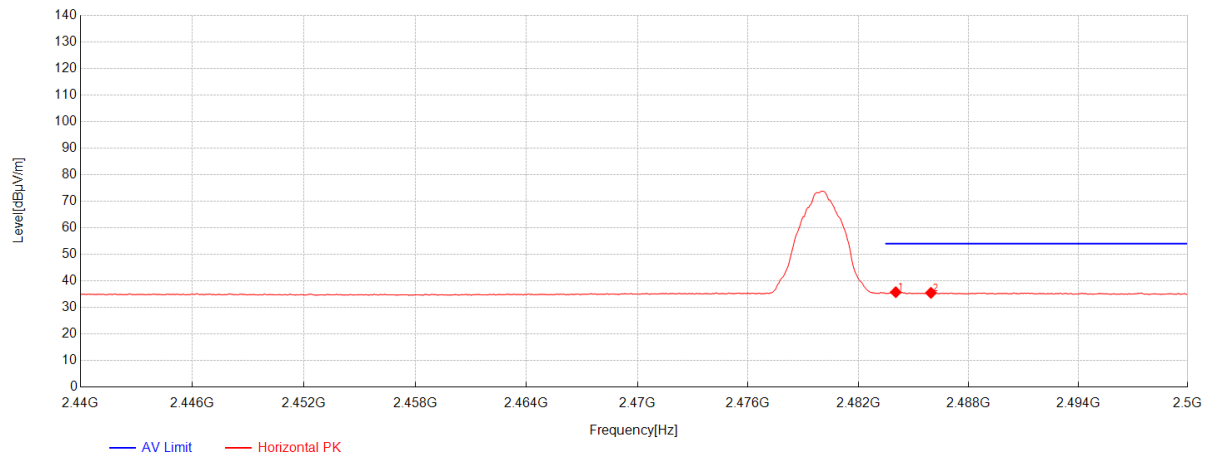
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2385.53	34.40	26.66	-26.15	34.91	54.00	19.09	Vertical
2	2389.56	34.46	26.70	-26.13	35.03	54.00	18.97	Vertical

BLE_2M_TX_CH_39_Horizontal_Peak



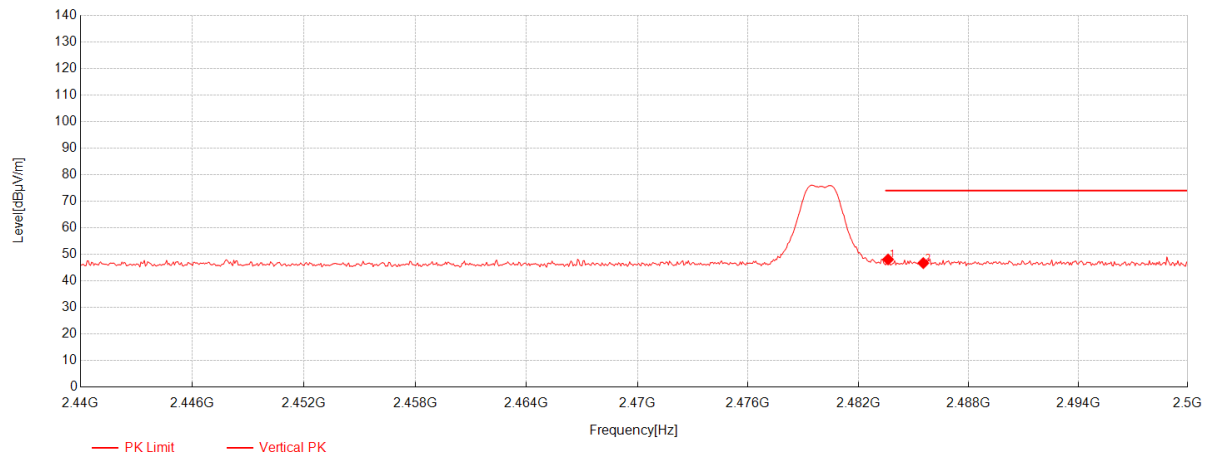
Data List								
NO.	Frequency [MHz]	Reading [dBµV]	AF [dB/m]	Factor [dB]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Polarity
1	2483.74	46.40	27.16	-26.24	47.32	74.00	26.68	Horizontal
2	2485.84	46.52	27.14	-26.24	47.42	74.00	26.58	Horizontal

BLE_2M_TX_CH_39_Horizontal_Average



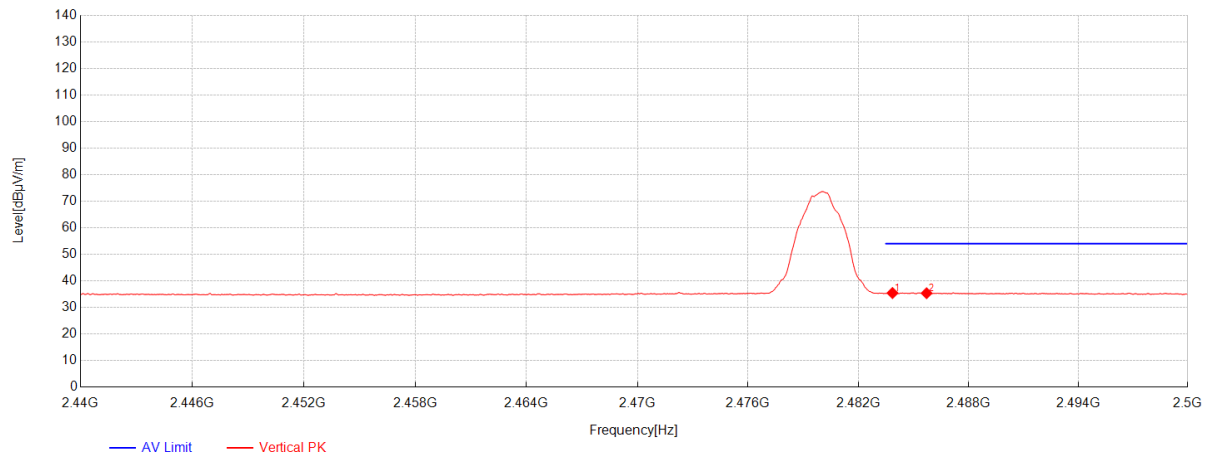
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2484.04	34.81	27.16	-26.24	35.73	54.00	18.27	Horizontal
2	2485.96	34.58	27.14	-26.24	35.48	54.00	18.52	Horizontal

BLE_2M_TX_CH_39_Vertical



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2483.62	47.14	27.16	-26.24	48.06	74.00	25.94	Vertical
2	2485.54	45.78	27.14	-26.24	46.68	74.00	27.32	Vertical

BLE_2M_TX_CH_39_Veritical_Average



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	2483.86	34.50	27.16	-26.24	35.42	54.00	18.58	Vertical
2	2485.72	34.45	27.14	-26.24	35.35	54.00	18.65	Vertical

6.2 Radiated Spurious Emissions Below 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2020) Section 6.4,6.5

Limit:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)	Field strength (dBμV/m@3m)
0.009-0.490	2400/F(kHz)	300	128.5 to 93.8
0.490-1.705	24000/F(kHz)	30	73.8 to 62.9
1.705-30.0	30	30	69.60
30-88	100	3	40.0
88-216	150	3	43.5
216-960	200	3	46.0
960-1000	500	3	54.0

Note : The above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 27.3 °C

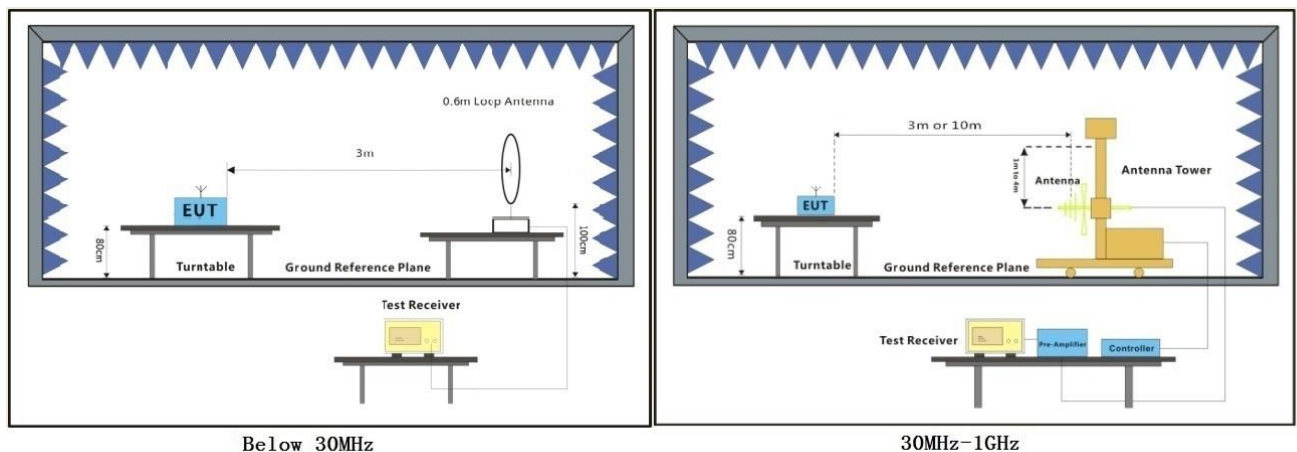
Humidity: 53.6 % RH

Atmospheric Pressure: 1010 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in continuously transmitting mode with GFSK modulation.
Pre-scan	01	TX mode(2Mbps)_Keep the EUT in continuously transmitting mode with GFSK modulation.

6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8m above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3m or 10m away from the interference-receiving antenna, which was mounted on the variable-height antenna tower.
- c. The antenna height is varied from 1m to 4m 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 1m to 4m (for the test frequency of below 30MHz, the antenna was tuned to heights 1m) 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. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using quasi-peak method as specified and then reported in a data sheet.
- g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- i. Repeat above procedures until all frequencies measured was complete.

Remark:

1. At frequencies below 1GHz, measurements may be performed at a distance different to specified in the regulations.

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

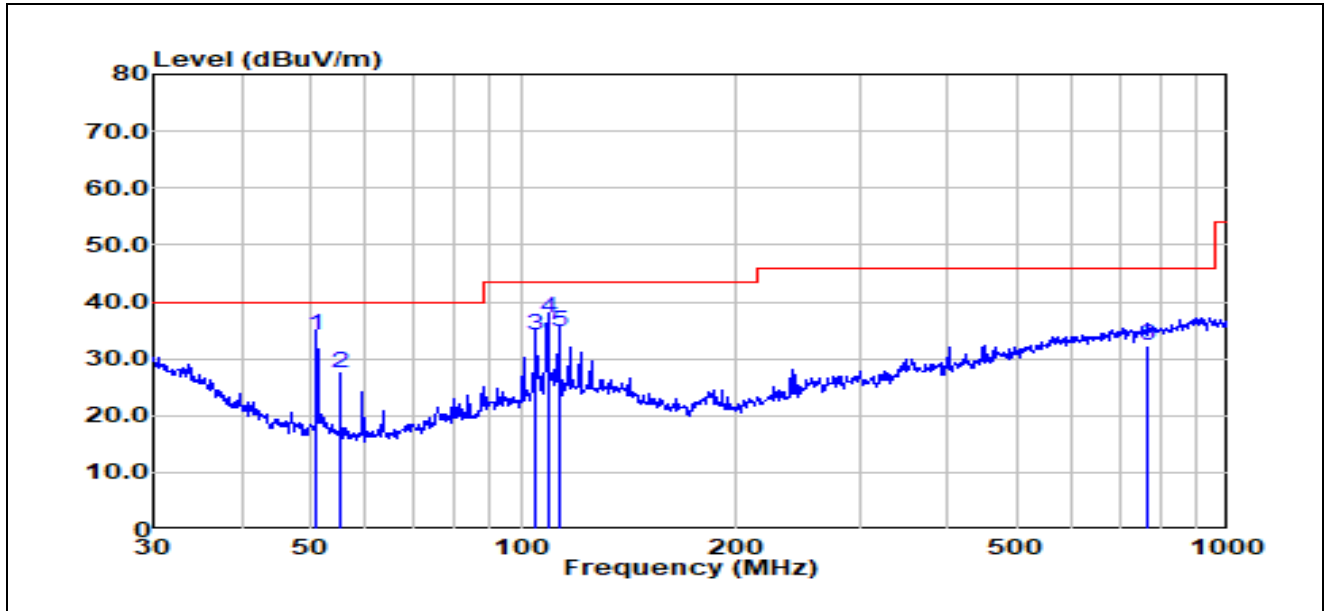
EX. Below 30MHz, Aux Factor = 40 dB/decade of distance, the aux factor is $40\log(3/300) = -80\text{dB}$ (for 3m test distance).

EX. Above 30MHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(10/3) = 10.46\text{dB}$ (for 10m test distance).

2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

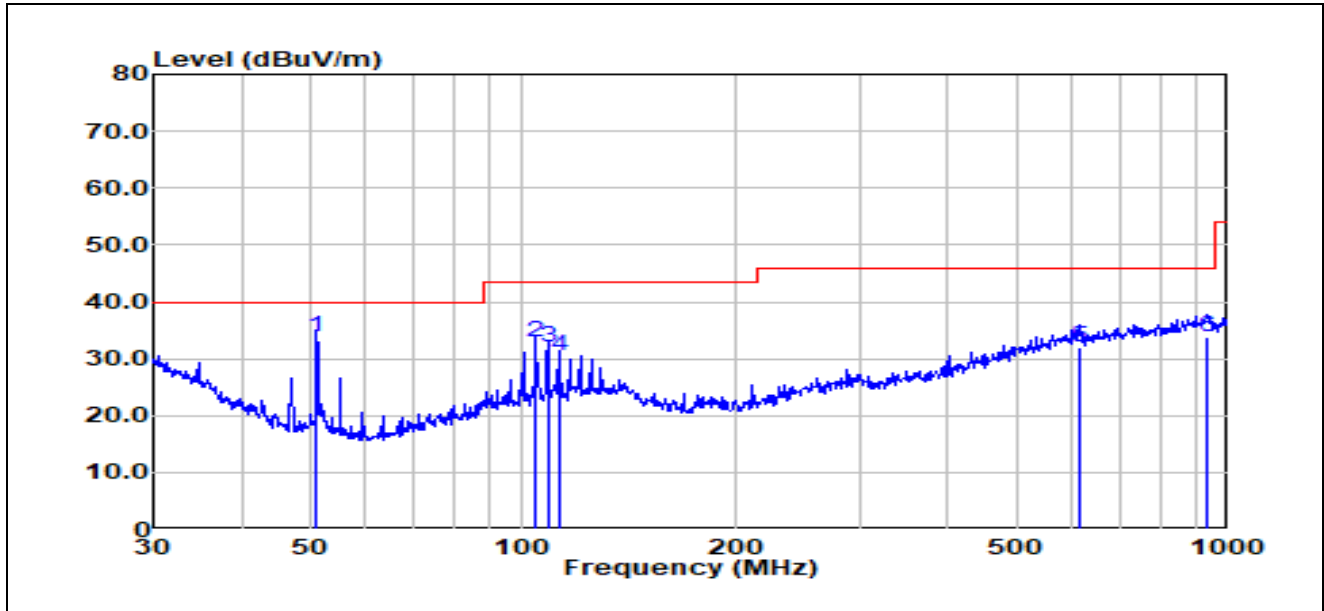
3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the worst-case test curve is displayed.

Test Mode: 00; Polarity: Horizontal



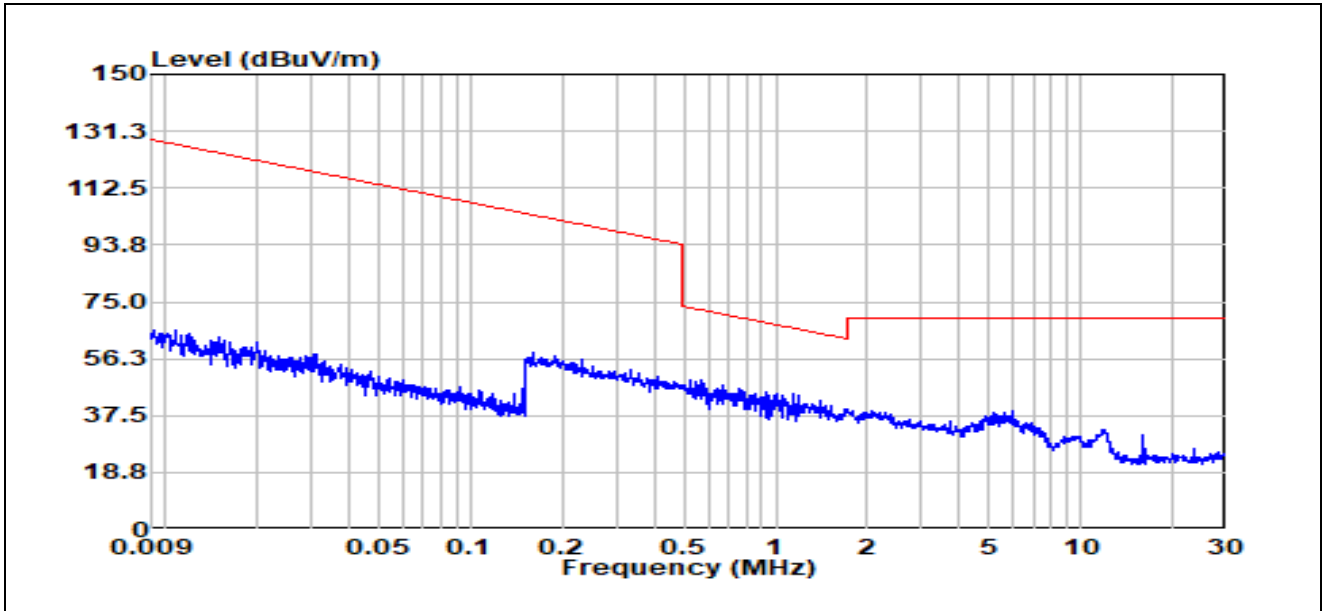
No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	51.12	21.58	12.55	34.13	40.00	-5.87	150	262	QP
2	55.22	15.29	12.17	27.46	40.00	-12.54	150	178	QP
3	104.54	15.29	18.84	34.13	43.50	-9.37	150	165	QP
4	108.65	17.75	19.34	37.09	43.50	-6.41	150	131	QP
5	112.52	15.20	19.62	34.82	43.50	-8.68	150	58	QP
6	768.75	1.98	30.21	32.19	46.00	-13.81	150	271	QP

Test Mode: 00; Polarity: Vertical

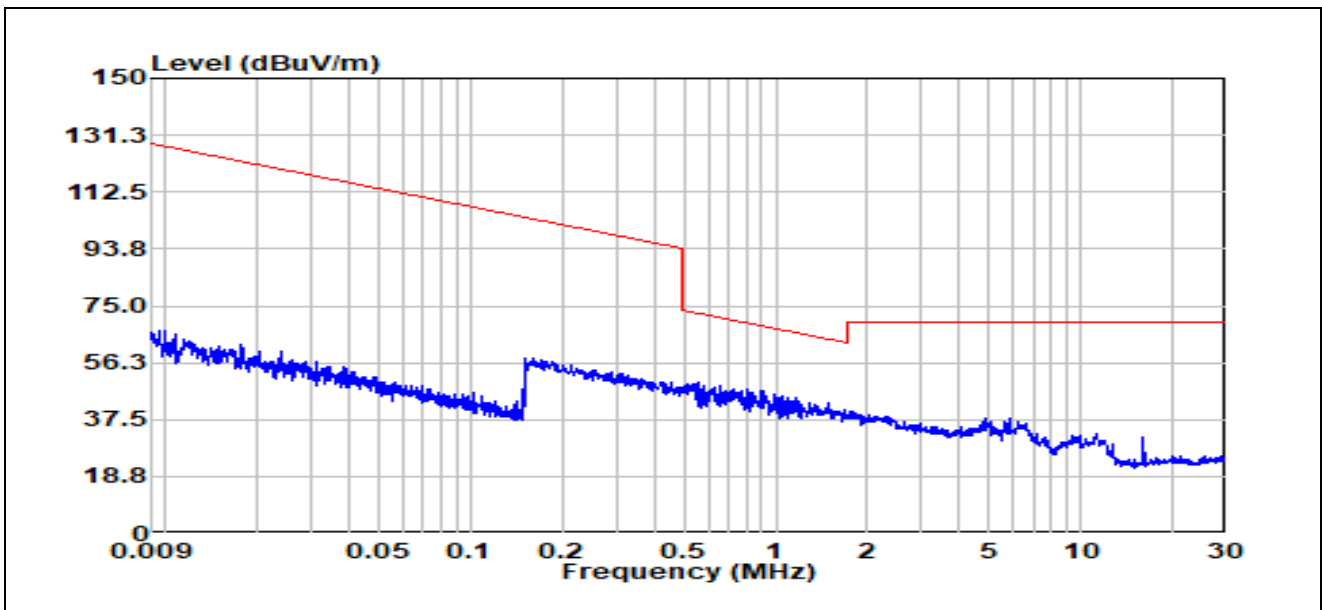


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	51.12	21.37	12.55	33.92	40.00	-6.08	150	163	QP
2	104.54	14.11	18.84	32.95	43.50	-10.55	150	275	QP
3	108.65	12.75	19.34	32.09	43.50	-11.41	150	128	QP
4	112.52	10.85	19.62	30.47	43.50	-13.03	150	78	QP
5	614.21	3.19	28.74	31.93	46.00	-14.07	150	152	QP
6	935.55	2.43	31.45	33.88	46.00	-12.12	150	168	QP

Test Mode: 00; Polarity: Horizontal



Test Mode: 00; Polarity: Vertical



6.3 Radiated Spurious Emissions Above 1GHz

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209

Test Method: ANSI C63.10 (2020) Section 6.6 & 11.12

Limit:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance(meters)
Above 1000	500	3

Note:

At Above 18GHz, measurements may be performed at a distance shorter than that specified in the regulations

Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor+ Aux Factor (if applicable)

The aux factor needs to be added when measurements are performed at a distance other than the limit distance provided.

EX. Above 18GHz, Aux Factor = 20 dB/decade of distance, the aux factor is $20\log(1/3) = -9.54\text{dB}$ (for 1m test distance).

6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 27.3 °C

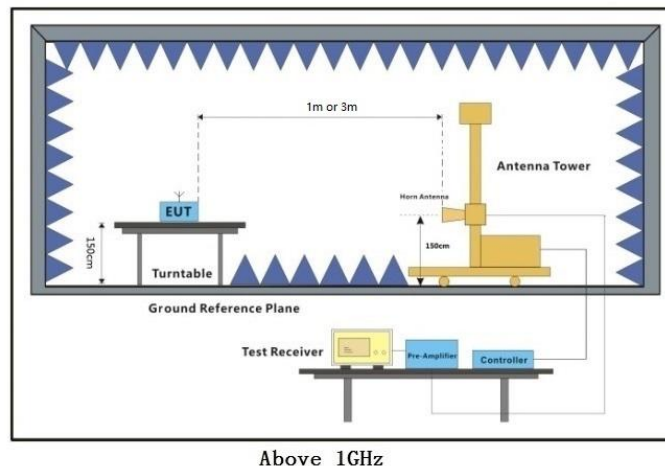
Humidity: 53.6 % RH

Atmospheric Pressure: 1010 mbar

6.3.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	00	TX mode(1Mbps)_Keep the EUT in continuously transmitting mode with GFSK modulation.
Final test	01	TX mode(2Mbps)_Keep the EUT in continuously transmitting mode with GFSK modulation.

6.3.3 Test Setup Diagram



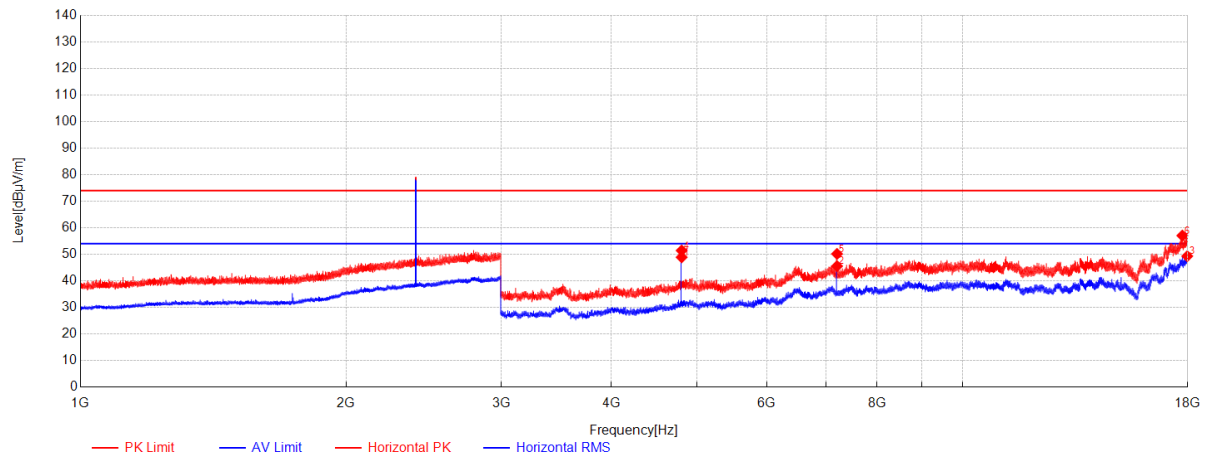
6.3.4 Measurement Procedure and Data

- a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5m above the ground at a 3m fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3m away from the interference-receiving antenna from 1GHz to 18GHz, and 1m away from the interference-receiving antenna above 18GHz.
- b. The interference-receiving antenna was mounted on the variable-height antenna tower, with its boresight facing the EUT throughout the test.
- c. The antenna height is varied from 1m to 4m 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 1m to 4m 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. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- g. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- h. Repeat above procedures until all frequencies measured was complete.

Remark:

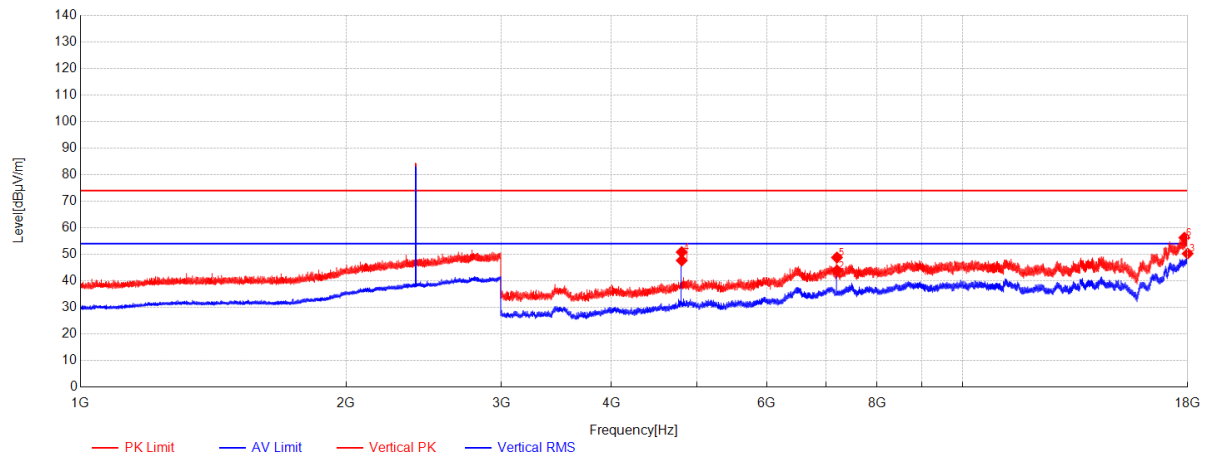
1. Scan from 1GHz to 10th harmonic of the highest frequency or 40 GHz, whichever is lower.
2. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
3. For the frequency above 18GHz, testing had been executed under all test modes, only the worst-case test curve is displayed in the report.
4. For devices with multiple operating modes, measurements on the middle channel is used to determine the worst-case mode(s).

BLE_1M_TX_CH_00_Horizontal



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4804	67.43	31.49	-50.04	48.88	54.00	5.12	Horizontal
2	7207	57.92	36.23	-48.61	45.54	54.00	8.46	Horizontal
3	17979.5	47.61	43.20	-41.51	49.30	54.00	4.70	Horizontal
4	4803.5	69.98	31.49	-50.04	51.43	74.00	22.57	Horizontal
5	7206.5	62.51	36.23	-48.61	50.13	74.00	23.87	Horizontal
6	17750.5	56.69	42.70	-42.36	57.03	74.00	16.97	Horizontal

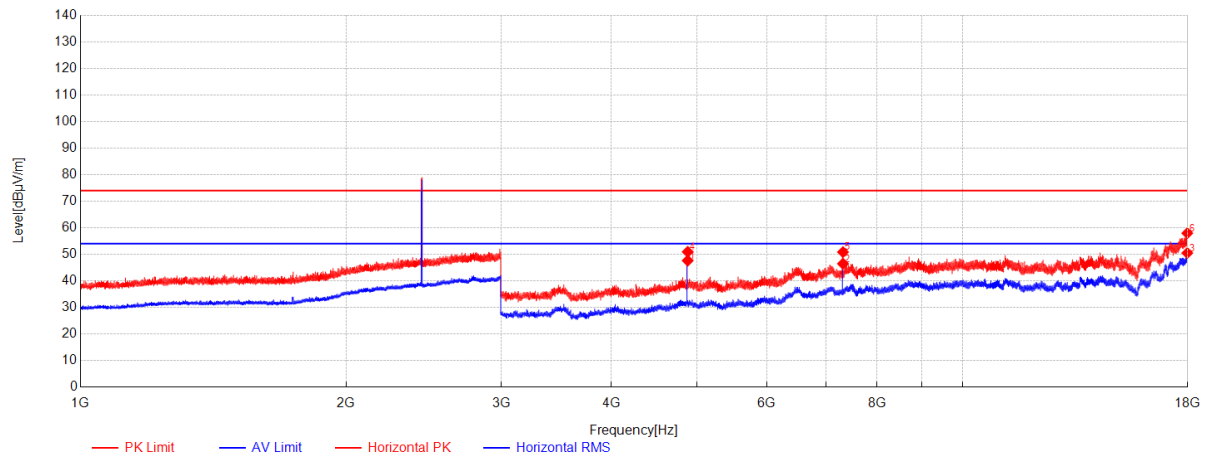
BLE_1M_TX_CH_00_Vertical



Data List

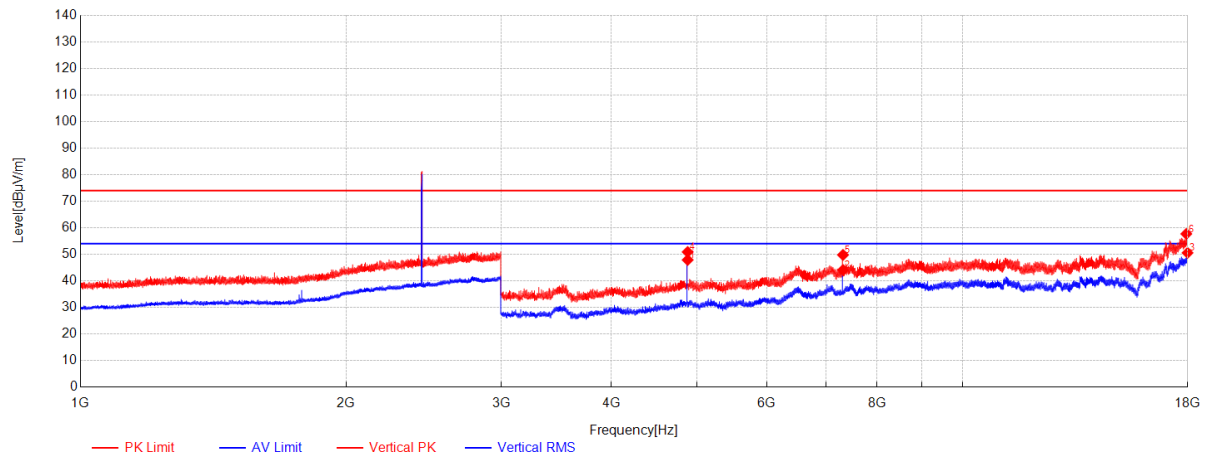
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4805	66.22	31.49	-50.05	47.66	54.00	6.34	Vertical
2	7207	56.30	36.23	-48.61	43.92	54.00	10.08	Vertical
3	17998.5	48.23	43.20	-41.19	50.24	54.00	3.76	Vertical
4	4804.5	69.35	31.49	-50.04	50.80	74.00	23.20	Vertical
5	7205	61.18	36.22	-48.61	48.79	74.00	25.21	Vertical
6	17845	56.68	42.81	-43.24	56.25	74.00	17.75	Vertical

BLE_1M_TX_CH_19_Horizontal



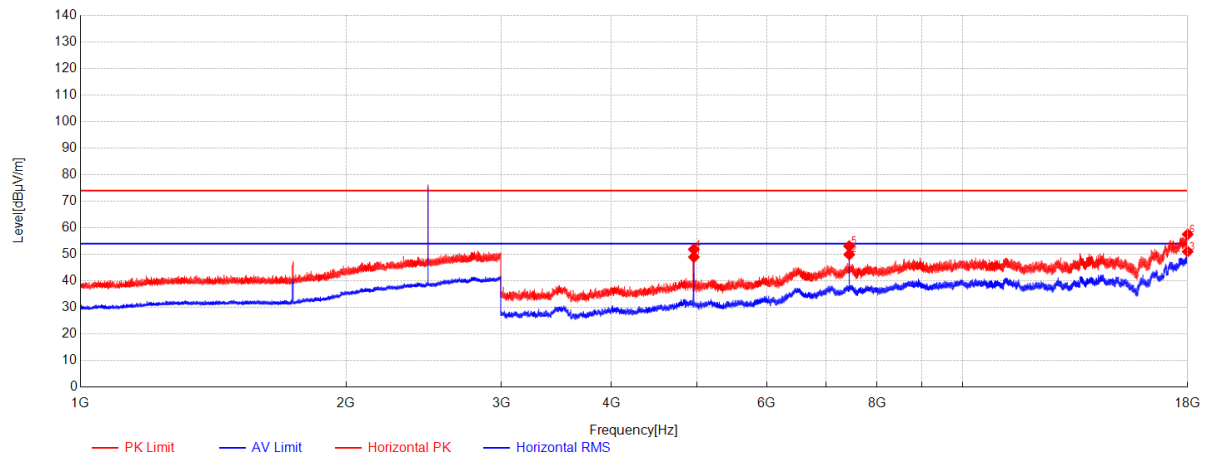
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4880.5	66.78	31.46	-50.61	47.63	54.00	6.37	Horizontal
2	7319.5	58.61	36.34	-48.51	46.44	54.00	7.56	Horizontal
3	17981.5	48.75	43.20	-41.48	50.47	54.00	3.53	Horizontal
4	4880.5	70.07	31.46	-50.61	50.92	74.00	23.08	Horizontal
5	7319.5	63.00	36.34	-48.51	50.83	74.00	23.17	Horizontal
6	17981	56.21	43.20	-41.49	57.92	74.00	16.08	Horizontal

BLE_1M_TX_CH_19_Vertical



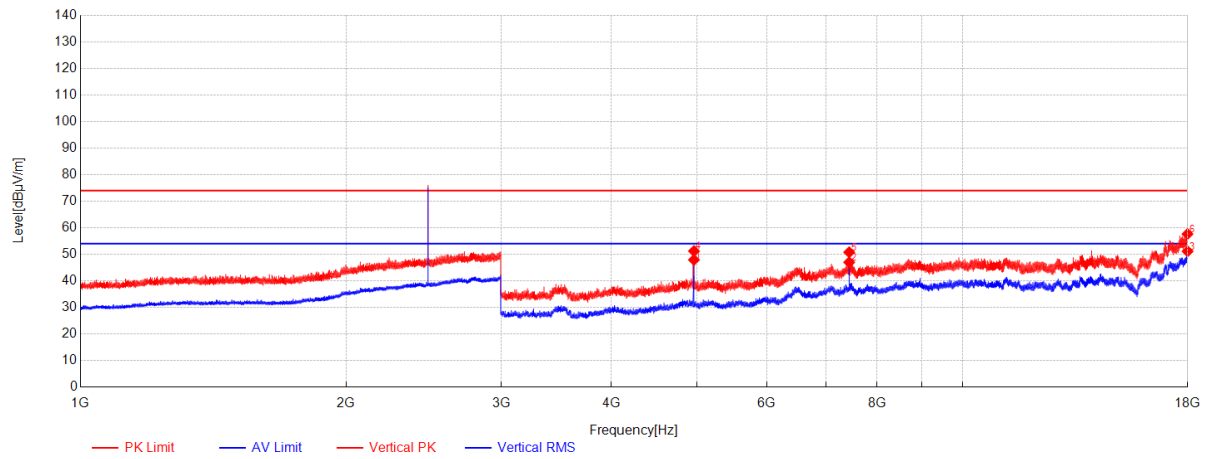
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4880	67.02	31.46	-50.60	47.88	54.00	6.12	Vertical
2	7321	56.24	36.34	-48.50	44.08	54.00	9.92	Vertical
3	17993.5	48.61	43.20	-41.27	50.54	54.00	3.46	Vertical
4	4879.5	70.00	31.46	-50.60	50.86	74.00	23.14	Vertical
5	7319.5	61.93	36.34	-48.51	49.76	74.00	24.24	Vertical
6	17935.5	56.89	43.06	-42.27	57.68	74.00	16.32	Vertical

BLE_1M_TX_CH_39_Horizontal



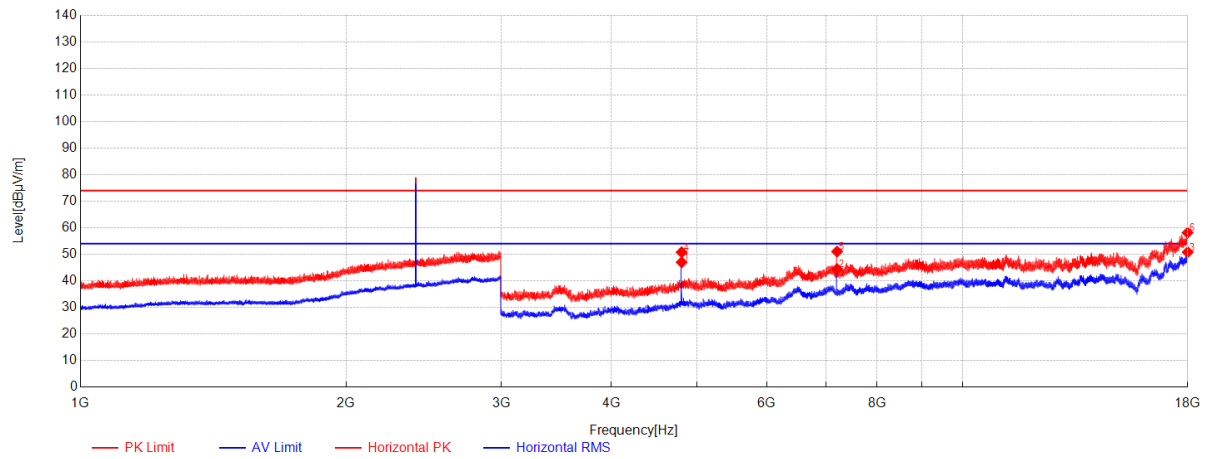
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4960	68.12	31.56	-50.71	48.97	54.00	5.03	Horizontal
2	7439.5	61.16	36.22	-47.47	49.91	54.00	4.09	Horizontal
3	17999	48.99	43.20	-41.18	51.01	54.00	2.99	Horizontal
4	4959.5	71.03	31.56	-50.71	51.88	74.00	22.12	Horizontal
5	7439	64.31	36.22	-47.47	53.06	74.00	20.94	Horizontal
6	17999	55.49	43.20	-41.18	57.51	74.00	16.49	Horizontal

BLE_1M_TX_CH_39_Verical



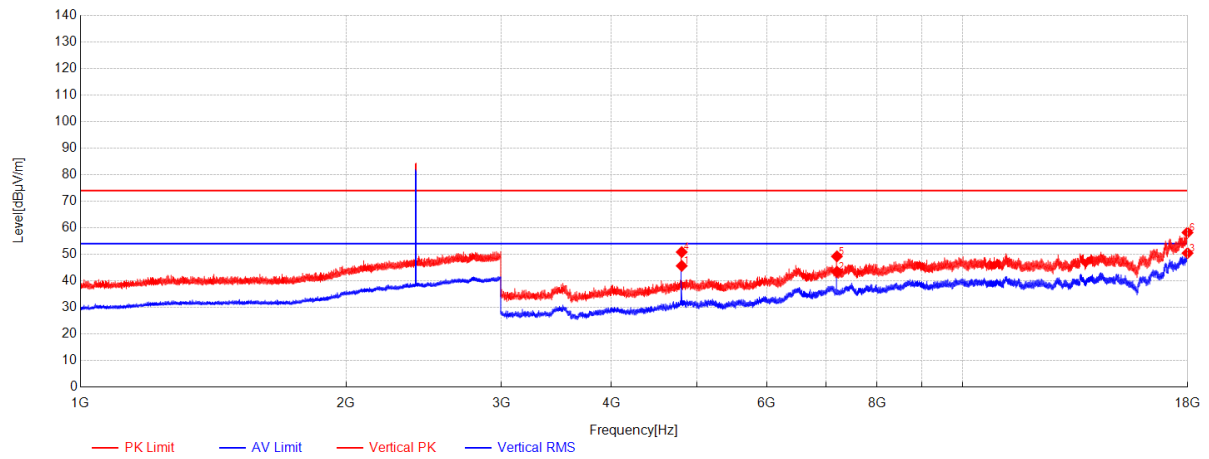
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4960.5	67.05	31.56	-50.71	47.90	54.00	6.10	Vertical
2	7439.5	58.22	36.22	-47.47	46.97	54.00	7.03	Vertical
3	17998	49.11	43.20	-41.19	51.12	54.00	2.88	Vertical
4	4960.5	70.36	31.56	-50.71	51.21	74.00	22.79	Vertical
5	7439.5	62.01	36.22	-47.47	50.76	74.00	23.24	Vertical
6	17990.5	55.73	43.20	-41.32	57.61	74.00	16.39	Vertical

BLE_2M_TX_CH_00_Horizontal



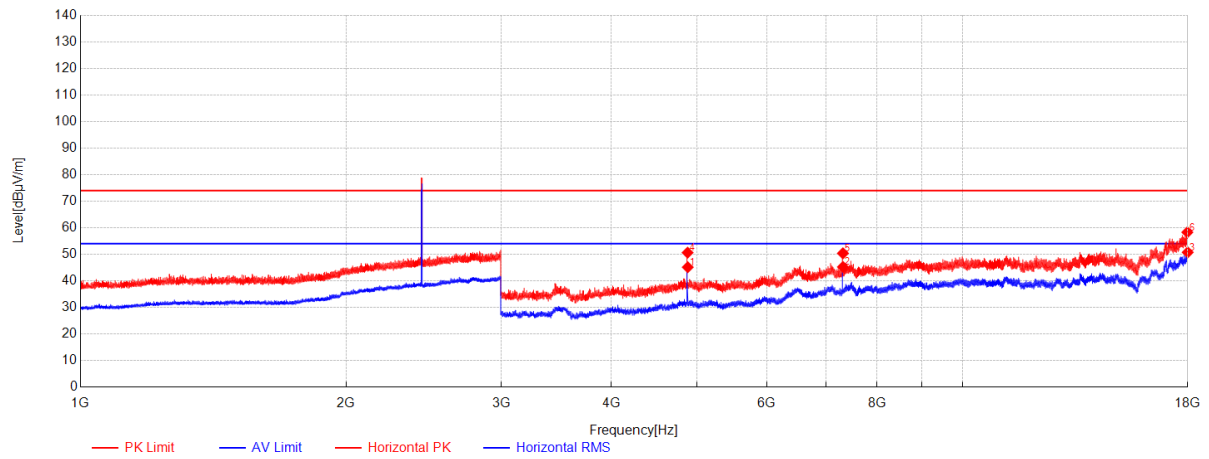
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4803.5	65.55	31.49	-50.04	47.00	54.00	7.00	Horizontal
2	7207.5	56.84	36.23	-48.61	44.46	54.00	9.54	Horizontal
3	18000	48.77	43.20	-41.16	50.81	54.00	3.19	Horizontal
4	4803	69.31	31.49	-50.03	50.77	74.00	23.23	Horizontal
5	7207.5	63.39	36.23	-48.61	51.01	74.00	22.99	Horizontal
6	17992	56.20	43.20	-41.30	58.10	74.00	15.90	Horizontal

BLE_2M_TX_CH_00_Vertical



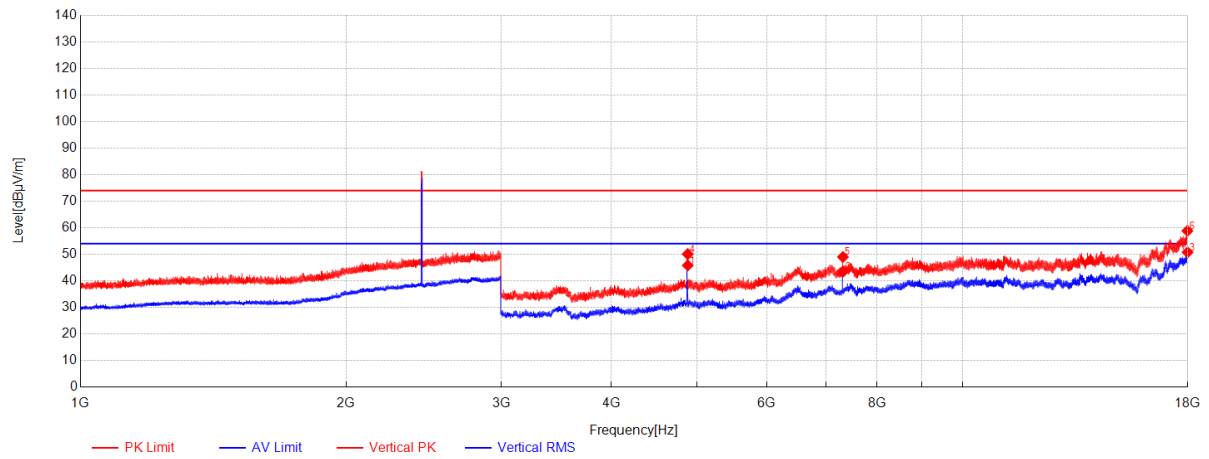
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4804.5	64.20	31.49	-50.04	45.65	54.00	8.35	Vertical
2	7205	55.83	36.22	-48.61	43.44	54.00	10.56	Vertical
3	17994	48.50	43.20	-41.26	50.44	54.00	3.56	Vertical
4	4804.5	69.38	31.49	-50.04	50.83	74.00	23.17	Vertical
5	7204.5	61.61	36.22	-48.61	49.22	74.00	24.78	Vertical
6	17991	56.29	43.20	-41.31	58.18	74.00	15.82	Vertical

BLE_2M_TX_CH_19_Horizontal



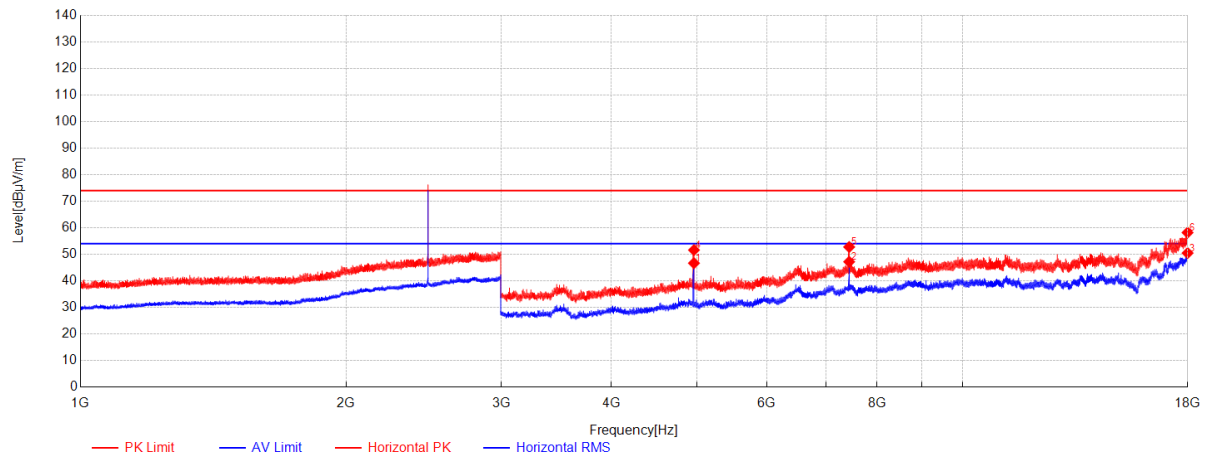
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4881	64.28	31.46	-50.61	45.13	54.00	8.87	Horizontal
2	7319	57.41	36.34	-48.52	45.23	54.00	8.77	Horizontal
3	18000	48.69	43.20	-41.16	50.73	54.00	3.27	Horizontal
4	4879	69.75	31.46	-50.59	50.62	74.00	23.38	Horizontal
5	7318.5	62.54	36.34	-48.52	50.36	74.00	23.64	Horizontal
6	17983.5	56.52	43.20	-41.44	58.28	74.00	15.72	Horizontal

BLE_2M_TX_CH_19_Vertical



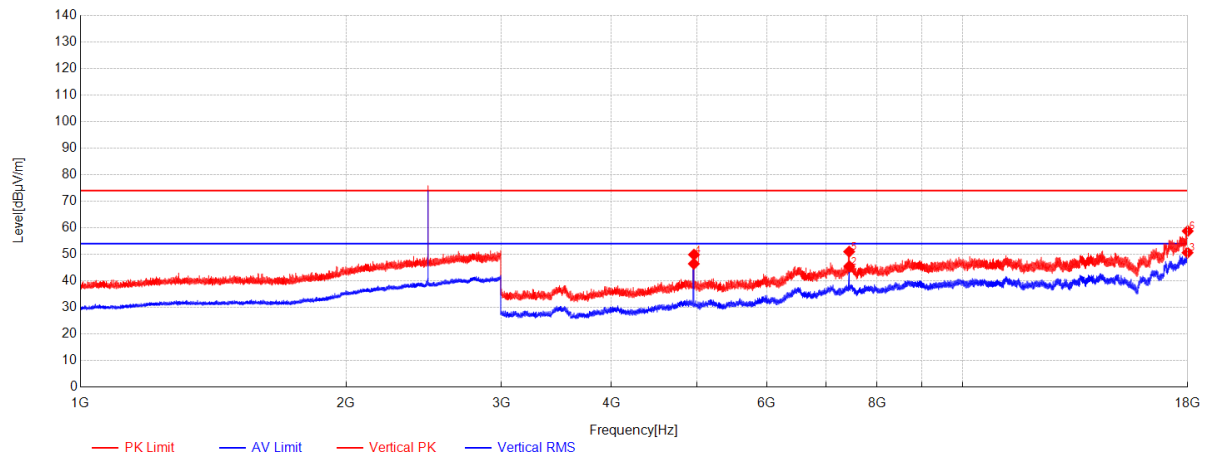
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4881.5	64.96	31.46	-50.61	45.81	54.00	8.19	Vertical
2	7322	55.71	36.34	-48.49	43.56	54.00	10.44	Vertical
3	17995.5	48.80	43.20	-41.24	50.76	54.00	3.24	Vertical
4	4881	69.22	31.46	-50.61	50.07	74.00	23.93	Vertical
5	7318.5	61.15	36.34	-48.52	48.97	74.00	25.03	Vertical
6	17987.5	56.99	43.20	-41.38	58.81	74.00	15.19	Vertical

BLE_2M_TX_CH_39_Horizontal



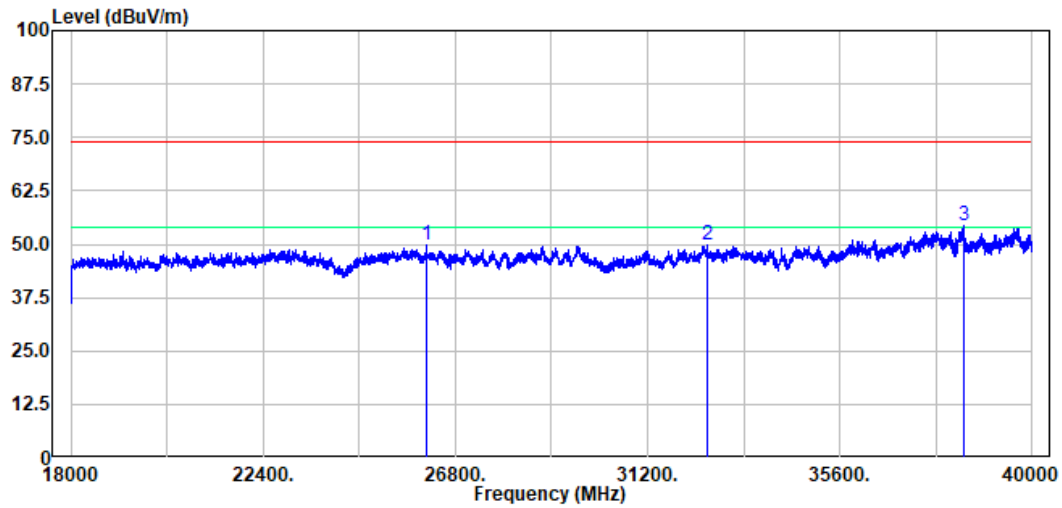
Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4960.5	65.81	31.56	-50.71	46.66	54.00	7.34	Horizontal
2	7439	58.43	36.22	-47.47	47.18	54.00	6.82	Horizontal
3	17997	48.47	43.20	-41.21	50.46	54.00	3.54	Horizontal
4	4961	70.74	31.57	-50.71	51.60	74.00	22.40	Horizontal
5	7438.5	64.00	36.22	-47.48	52.74	74.00	21.26	Horizontal
6	17992	56.26	43.20	-41.30	58.16	74.00	15.84	Horizontal

BLE_2M_TX_CH_39_Verical



Data List								
NO.	Frequency [MHz]	Reading [dBμV]	AF [dB/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity
1	4959.5	65.57	31.56	-50.71	46.42	54.00	7.58	Vertical
2	7441.5	56.74	36.22	-47.45	45.51	54.00	8.49	Vertical
3	17993	48.67	43.20	-41.28	50.59	54.00	3.41	Vertical
4	4961	69.00	31.57	-50.71	49.86	74.00	24.14	Vertical
5	7439	62.24	36.22	-47.47	50.99	74.00	23.01	Vertical
6	18000	56.68	43.20	-41.16	58.72	74.00	15.28	Vertical

BLE_1M_TX_CH_00_Horizontal

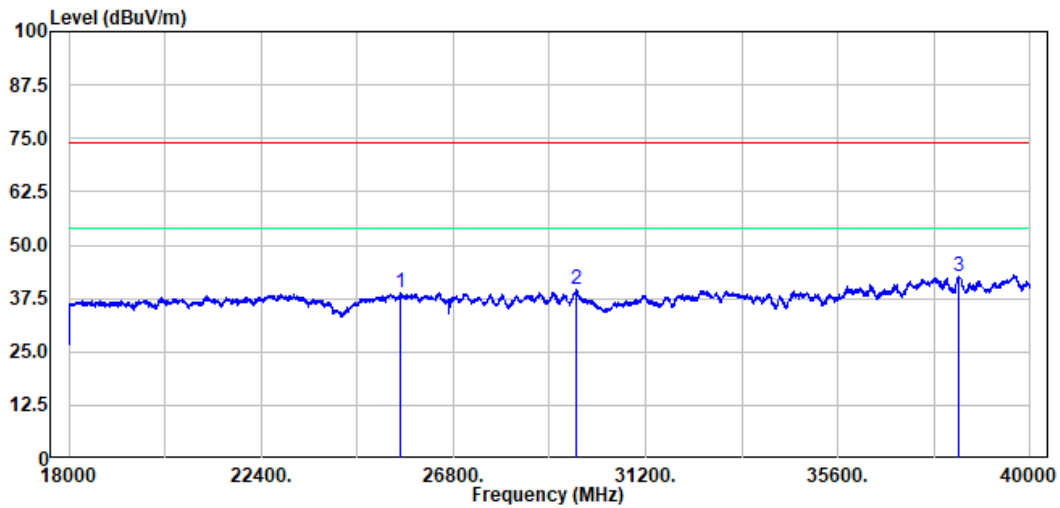


Antenna Polarity :Horizontal

No.	Freq	Read level	Antenna Factor	Cable Loss	Preamplifier Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	26132.83	54.63	39.78	10.70	55.31	49.80	74.00	-24.20	Peak
2	32553.71	53.26	40.67	11.96	56.11	49.78	74.00	-24.22	Peak
3	38437.69	51.88	43.13	14.39	55.23	54.17	74.00	-19.83	Peak

Notes: Emission Level=Read Level+Antenna Factor+Cable loss-Preamplifier Factor

BLE_1M_TX_CH_00_Horizontal

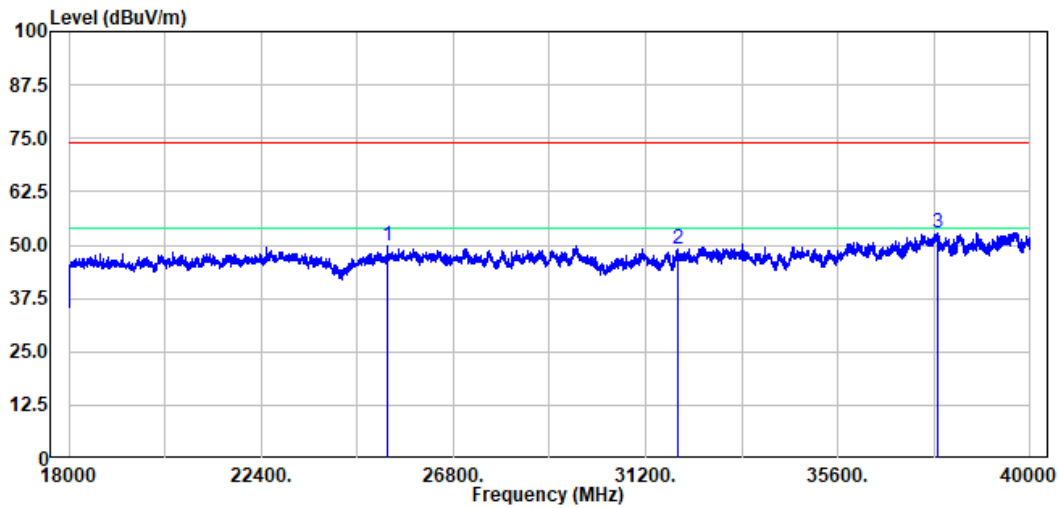


Antenna Polarity :Horizontal

No.	Freq	Read level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	25595.92	42.95	39.70	10.88	54.79	38.74	54.00	-15.26	Average
2	29618.32	43.65	40.11	11.49	55.58	39.67	54.00	-14.33	Average
3	38376.07	40.24	43.10	14.30	55.05	42.59	54.00	-11.41	Average

Notes: Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

BLE_1M_TX_CH_00_Vertical

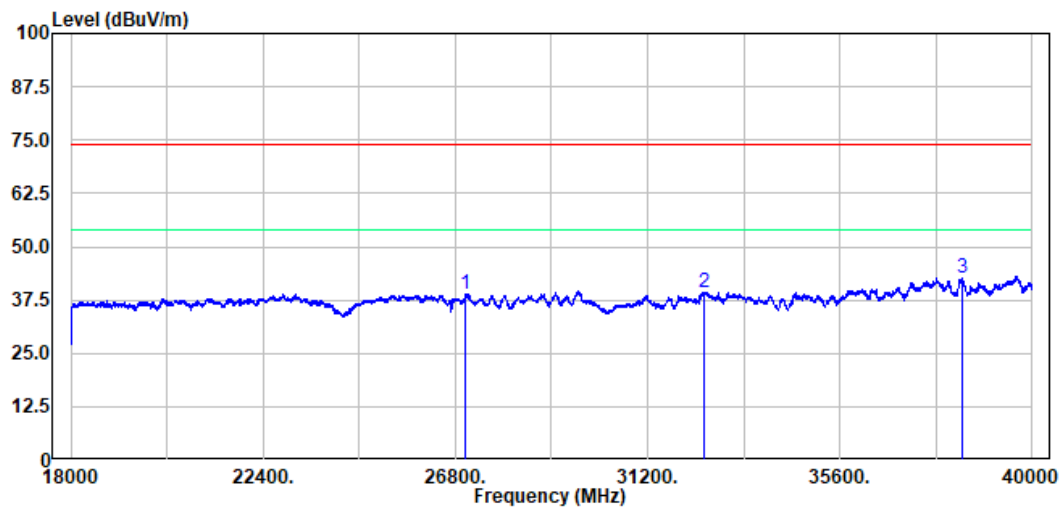


Antenna Polarity :Vertical

No.	Freq	Read level	Antenna Factor	Cable Loss	Preamplifier Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	25287.86	54.03	39.66	10.93	54.81	49.81	74.00	-24.19	Peak
2	31941.99	52.84	40.55	12.15	56.36	49.18	74.00	-24.82	Peak
3	37874.38	50.41	42.85	13.94	54.20	53.00	74.00	-21.00	Peak

Notes: Emission Level=Read Level+Antenna Factor+Cable loss-Preamplifier Factor

BLE_1M_TX_CH_00_Vertical



Antenna Polarity :Vertical

No.	Freq	Read level	Antenna Factor	Cable Loss	Preamp Factor	Emission Level	Limit Line	Over Limit	Remark
	MHz	dBuv	dB/m	dB	dB	dBuv/m	dBuv/m	dB	
1	27035.01	42.65	39.88	11.06	54.75	38.84	54.00	-15.16	Average
2	32483.30	42.82	40.66	11.89	56.01	39.36	54.00	-14.64	Average
3	38420.09	40.49	43.12	14.36	55.18	42.79	54.00	-11.21	Average

Notes: Emission Level=Read Level+Antenna Factor+Cable loss-Preamp Factor

7 Test Setup Photo

Refer to Appendix - Test Setup Photo for KSCR2606001304HS

8 EUT Constructional Details (EUT Photos)

Refer to Appendix_Photographs of EUT Constructional Details for KSCR2606001304HS

- End of the Report -