SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch

198 Kezhu Road, Scientech Park, Guangzhou Economic & Technological
Development District, Guangzhou, China 510663

Telephone: +86 (0) 20 82155555
Fax: +86 (0) 20 82075059
Email: ee.guangzhou@sgs.com

TEST REPORT

Application No.:	GZEM1712007151ME
Applicant:	Shenzhen Dongdixin Technology Co., Ltd.
Address of Applicant:	No.3 Building XiliBaimang Xusheng Industrial Estate, Nanshan, Shenzhen, Guangdong, China
Manufacturer:	The Same as Applicant
Address of Manufacturer:	The Same as Applicant
Factory:	The Same as Applicant
Address of Factory:	The Same as Applicant
Equipment Under Test (EUT):	
FCC ID:	2AKMI-LT5018C-R
EUT Name:	Wireless 3-in-1 Pain Relief Device
Model No.:	LT5018C
Standard(s) :	47 CFR Part 15, Subpart C 15.247
Date of Receipt:	2017-12-12
Date of Test:	2017-12-28
Date of Issue:	2018-01-19
Test Result:	**Pass***

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

SGS-CSTC STANDARDS TECHNICAL SERVICES CO., LTD. GUANGZHOU BRANCH 电子电气实验室
Jan. 2018

Kobe Jian
Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		2018-01-19		Original

Authorized for issue by:				
Tested By		 **Curry_Wu /Project Engineer**		2017-12-28 **Date**
Checked By		 **Ricky_Liu /Reviewer**		2018-01-19 **Date**

2 Test Summary

Radio Spectrum Technical Requirement				
Item	**Standard**	**Method**	**Requirement**	**Result**
Antenna Requirement	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(c)	Pass

N/A: Not applicable

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Minimum 6dB Bandwidth	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.8.1	47 CFR Part 15, Subpart C 15.247a(2)	Pass
Conducted Peak Output Power	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.5	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.6	47 CFR Part 15, Subpart C 15.247(d)	Pass
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.8	47 CFR Part 15, Subpart C 15.247(d)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.4	47 CFR Part 15, Subpart C 15.205 & 15.209	Pass
Conducted Emissions at Mains Terminals	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.2	FCC PART 15 C section 15.207	Pass

3 Contents

4 General Information

4.1 Details of E.U.T.

Power Supply:	DC 3.7V 250mAh 0.925Wh rechargeable battery PL402035
Adapter:	Model: AKN1G-0500030VU
	Input: AC 100-240V 50/60Hz 0.2A
	Output: DC 5V 0.3A
Test Voltage:	DC 4V for working
	AC 120V for charging
Cable:	0.8m USB cable
Antenna Gain	2 dBi
Antenna Type	Chip Antenna
Channel Spacing	2MHz
Modulation Type	GFSK
Number of Channels	40
Operation Frequency	2402MHz to 2480MHz
BT Version:	4.0 for BLE only
Power Class	<10mW

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Remote Controller	Shenzhen Dongdixin Technology	N/A	317080035000006
Mobile Phone	SAMSUNG	GT-9500	RV1D82X8W9X
Notebook	IBM	T30	S/N78-3VMLX06/01

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.25×10^{-8}
2	Duty cycle	0.37%
3	Occupied Bandwidth	3%
4	RF Conducted power	0.75dB
5	RF Power Density	2.84dB
6	Conducted Spurious Emissions	0.75dB
7	RF Radiated Power	4.5dB (below 1GHz)
		4.8dB (above 1GHz)
8	Radiated Spurious Emission Test	4.5dB (30MHz-1GHz)
		4.8dB (1GHz-18GHz)
9	Conducted Emission	1.02 dB (9kHz to 150kHz)
		1.05 dB (150kHz to 30MHz)
10	Temperature	0.4°C
11	Humidity	1.3%
12	Supply Voltages	1.5%
13	Time	3%

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,

198 Kezhu Road, Scientech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.

4.5 Test Facility

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

- **NVLAP (Lab Code: 200611-0)**

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **CNAS (Lab Code: L0167)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2006 accreditation criteria for testing laboratories (identical to

ISO/IEC 17025:2005 General Requirements) for the Competence of Testing Laboratories.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818, Jul 13, 2017.

- **Industry Canada (Registration No.: 4620B-1)**

The 3m/10m Alternate Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Certification and Engineering of Industry Canada for radio equipment testing with Registration No. 4620B-1.

- **VCCI (Registration No.: R-2460, C-2584, G-449 and T-1179)**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2460, C-2584，G-449 and T-1179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Minimum 6dB Bandwidth					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Spectrum analyser	Agilent Technologies	N9010A	EMC2138	2017-11-15	2018-11-14

Conducted Peak Output Power					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Spectrum analyser	Agilent Technologies	N9010A	EMC2138	2017-11-15	2018-11-14

Power Spectrum Density					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Spectrum analyser	Agilent Technologies	N9010A	EMC2138	2017-11-15	2018-11-14

Conducted Band Edges Measurement					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Spectrum analyser	Agilent Technologies	N9010A	EMC2138	2017-11-15	2018-11-14

Conducted Spurious Emissions					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Spectrum analyser	Agilent Technologies	N9010A	EMC2138	2017-11-15	2018-11-14

Conducted Emissions at Mains Terminals (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Shielding Room	Zhong Yu	8m x 3m x 3.8m	EMC0306	N/A	N/A
Two-line v-netwok	R&S	ENV216	EMC0118	2017-01-20	2018-01-19
LISN	SCHAFFNER CHASE	MN2050D/1	EMC0102	2017-09-20	2018-09-19
EMI Test Receiver	Rohde & Schwarz	ESCS30	EMC0506	2017-11-27	2018-11-26
Coaxial Cable	HangTianXing	2m	EMC0107	2016-07-24	2018-07-23
Voltage Probe	SGS	N/A	EMC0106	2016-04-05	2018-04-04
Conical metal housing	SGS-EMC	N/A	EMC0167	2016-04-19	2018-04-18

Radiated Emissions which fall in the restricted bands					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI Test Receiver	Rohde & Schwarz	ESIB26	EMC0522	2017-01-20	2018-01-19
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC0056	2017-01-20	2018-01-19
RI High frequency Cable	SGS	20 m	EMC0528	2016-04-19	2018-04-18
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKMESS-ELEKTRONIK	VULB 9160	EMC2025	2016-09-08	2019-09-07
Bi-log Type Antenna	Schaffner -Chase	CBL6112B	EMC0524	2016-09-08	2019-09-07
Bilog Type Antenna	Schaffner -Chase	CBL6143	EMC0519	2017-05-04	2020-05-03
Horn Antenna 1GHz-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2016-09-09	2019-09-08
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2017-01-20	2018-01-19
Amplifier	HP	8447F	EMC2065	2017-06-19	2018-06-18
PRE AMPLIFIER MH648A	ANRITSU CORP	MH648A	EMC2086	2017-11-20	2018-11-19
Active Loop Antenna	EMCO	6502	EMC0523	2016-02-27	2018-02-26
High Pass Filter(915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2017-01-20	2018-01-19
2.4GHz filter	Micro-Tronics	BRM 50702	EMC2069	2017-01-20	2018-01-19
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2016-04-30	2018-04-29

Radiated Spurious Emissions					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
EMI Test Receiver	Rohde & Schwarz	ESIB26	EMC0522	2017-01-20	2018-01-19
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC0056	2017-01-20	2018-01-19
RI High frequency Cable	SGS	20 m	EMC0528	2016-04-19	2018-04-18
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKMESS-ELEKTRONIK	VULB 9160	EMC2025	2016-09-08	2019-09-07
Bi-log Type Antenna	Schaffner -Chase	CBL6112B	EMC0524	2016-09-08	2019-09-07
Bilog Type Antenna	Schaffner -Chase	CBL6143	EMC0519	2017-05-04	2020-05-03
Horn Antenna 1GHz-18GHz	SCHWARZBECK MESS-ELEKTRONIK	BBHA 9120D	EMC2026	2016-09-09	2019-09-08
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2017-01-20	2018-01-19
Amplifier	HP	8447F	EMC2065	2017-06-19	2018-06-18
PRE AMPLIFIER MH648A	ANRITSU CORP	MH648A	EMC2086	2017-11-20	2018-11-19
Active Loop Antenna	EMCO	6502	EMC0523	2016-02-27	2018-02-26
High Pass Filter(915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2017-01-20	2018-01-19
2.4GHz filter	Micro-Tronics	BRM 50702	EMC2069	2017-01-20	2018-01-19
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2016-04-30	2018-04-29

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DMM	Fluke	73	EMC0006	2017-07-26	2018-07-25
DMM	Fluke	73	EMC0007	2017-07-26	2018-07-25

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203 & 15.247(c)

6.1.2 Conclusion

Standard Requirement:

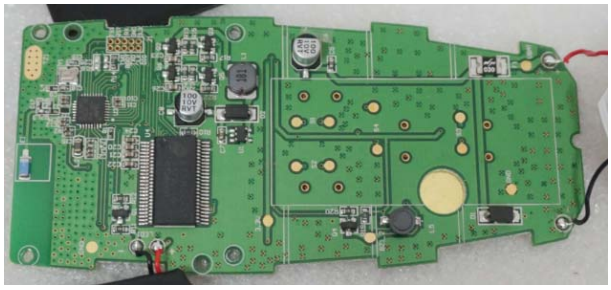
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 2 dBi.



Test result: The unit does meet the FCC requirements.

7 Radio Spectrum Matter Test Results

7.1 Minimum 6dB Bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.247a(2)

Test Method: ANSI C63.10 (2013) Section 11.8.1

Limit: ≥500 kHz

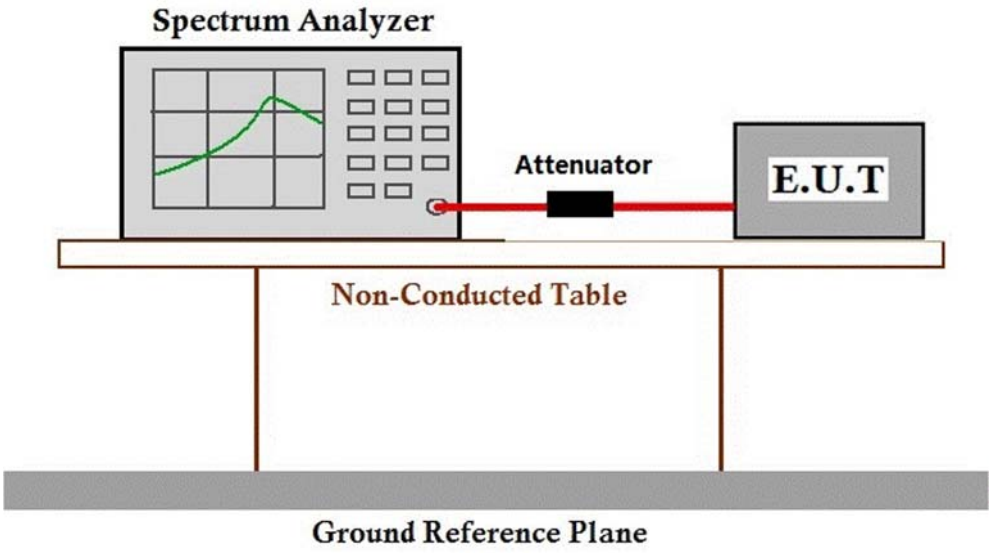
7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 22.1 °C Humidity: 45.2 % RH Atmospheric Pressure: 1020 mbar

Test Mode: a: TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.1.2 Test Setup Diagram



7.1.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

7.2 Conducted Peak Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.247(b)(3)

Test Method: ANSI C63.10 (2013) Section 7.8.5

Limit:

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥50 hopping channels
	0.25 for 25≤ hopping channels <50
	1 for digital modulation
2400-2483.5	1 for ≥75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

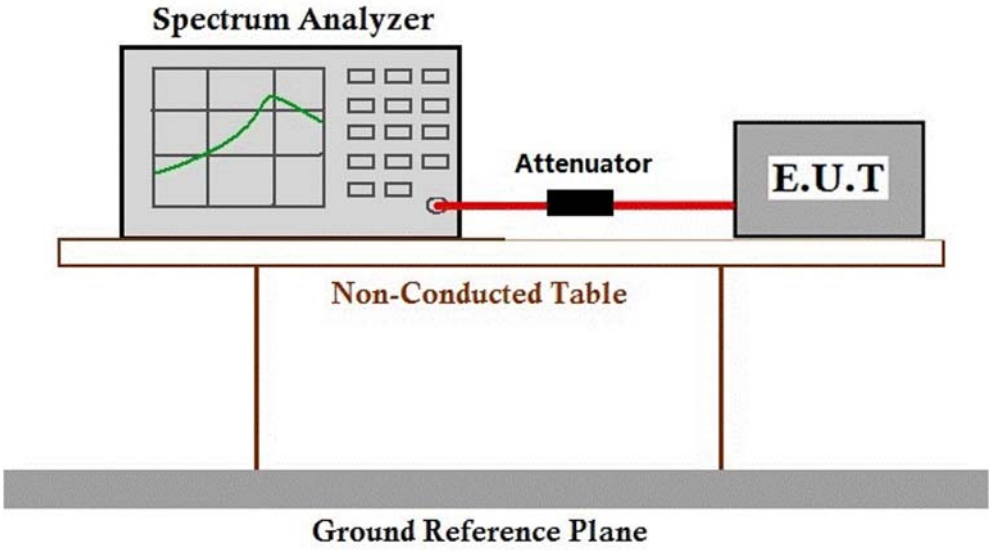
7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 22.1 °C Humidity: 45.2 % RH Atmospheric Pressure: 1020 mbar

Test Mode: a: TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.2.2 Test Setup Diagram



7.2.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

7.3 Power Spectrum Density

Test Requirement	47 CFR Part 15, Subpart C 15.247(e)
Test Method:	ANSI C63.10 (2013) Section 11.10.2
Limit:	≤8dBm in any 3 kHz band during any time interval of continuous transmission

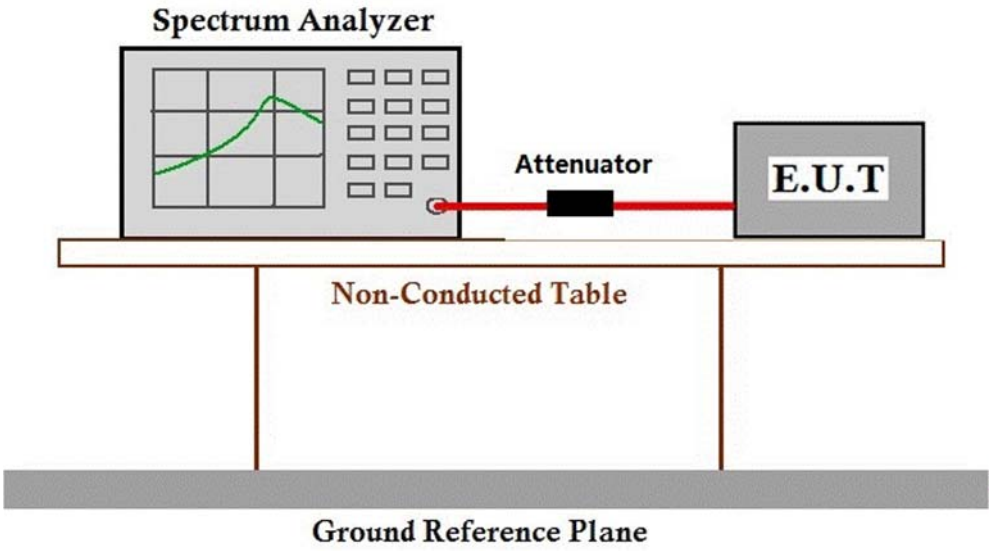
7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 22.0 °C Humidity: 45.2 % RH Atmospheric Pressure: 1020 mbar

Test Mode: a: TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.3.2 Test Setup Diagram



7.3.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

7.4 Conducted Band Edges Measurement

Test Requirement	47 CFR Part 15, Subpart C 15.247(d)
Test Method:	ANSI C63.10 (2013) Section 7.8.6
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)

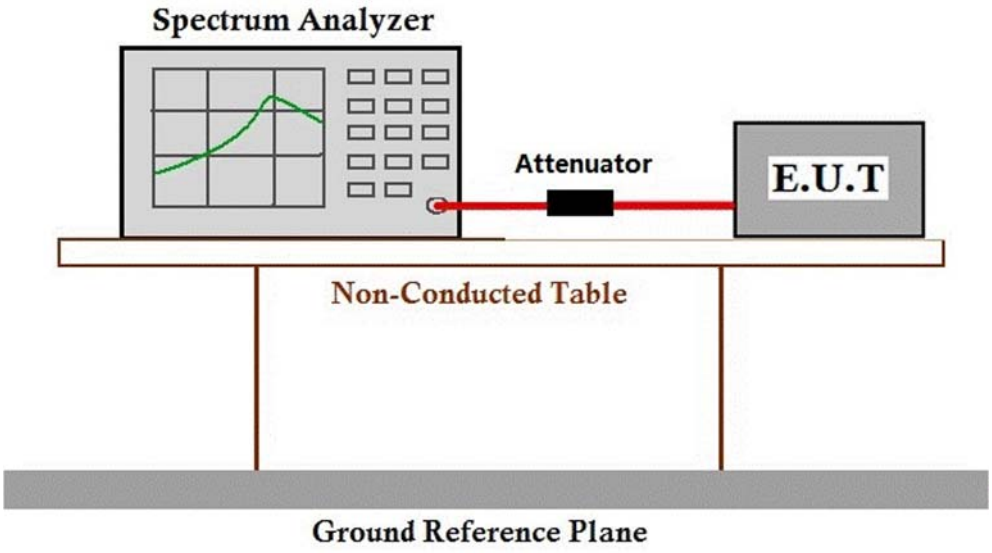
7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 22.0 °C Humidity: 45.2 % RH Atmospheric Pressure: 1020 mbar

Test Mode: a: TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.4.2 Test Setup Diagram



7.4.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

7.5 Conducted Spurious Emissions

Test Requirement	47 CFR Part 15, Subpart C 15.247(d)
Test Method:	ANSI C63.10 (2013) Section 7.8.8
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)

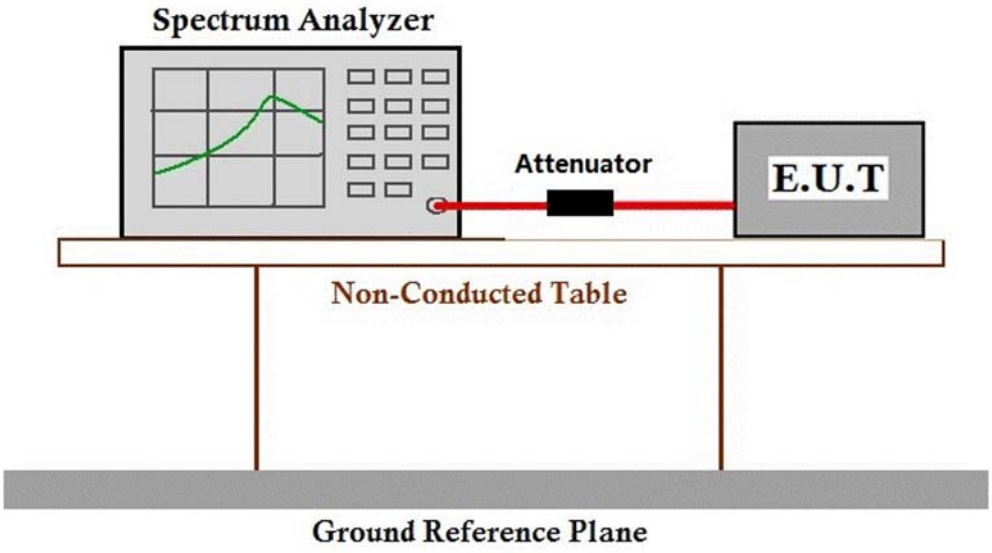
7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 22.0 °C Humidity: 45.2 % RH Atmospheric Pressure: 1020 mbar

Test Mode: a: TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.5.2 Test Setup Diagram



7.5.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.247

7.6 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 (2013) Section 6.10.5
Measurement Distance: 3m
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.		

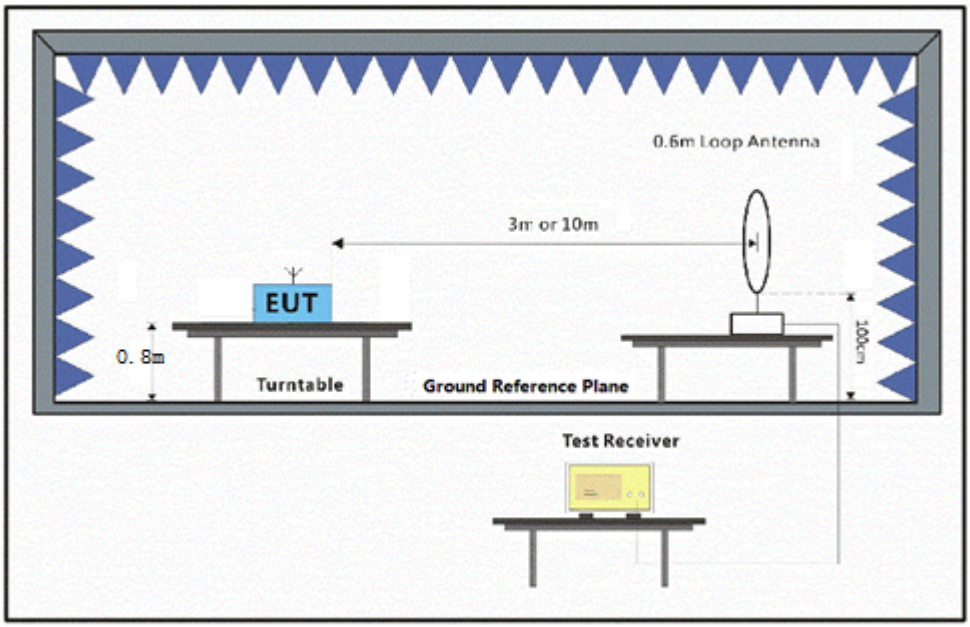
7.6.1 E.U.T. Operation

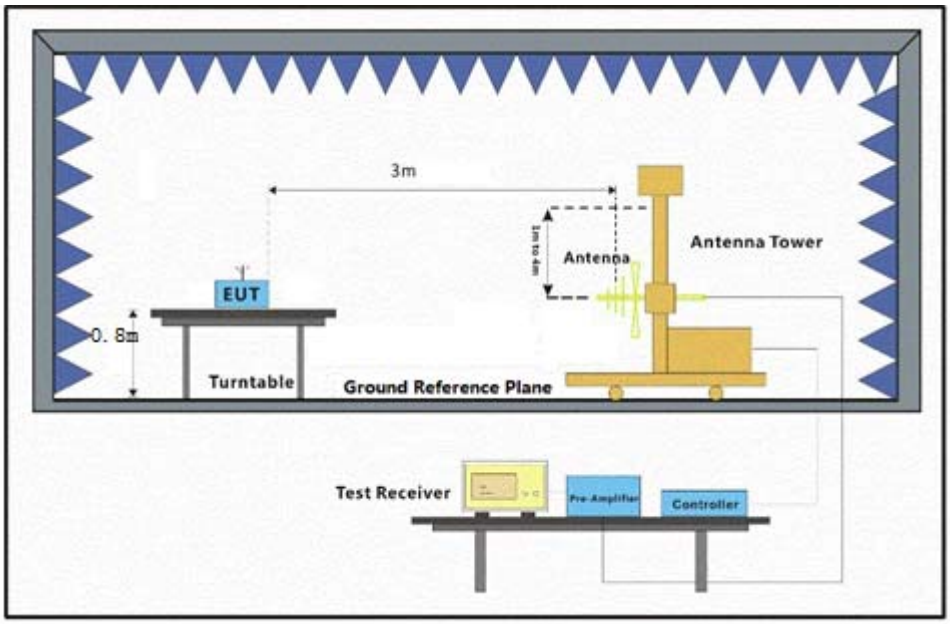
Operating Environment:

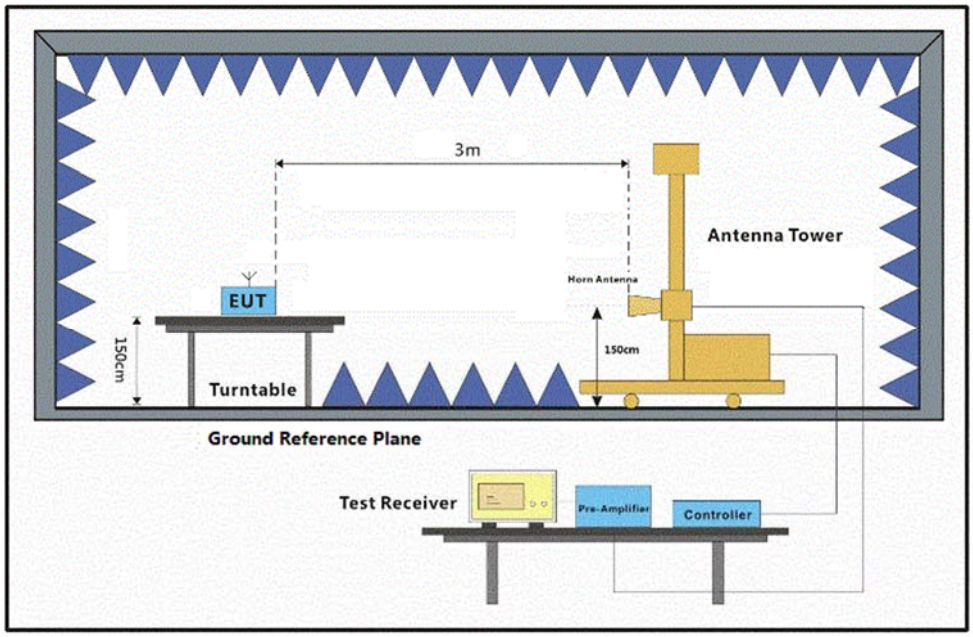
Temperature: 23 °C Humidity: 55 % RH Atmospheric Pressure: 1020 mbar

Test Mode: a: TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.6.2 Test Setup Diagram







7.6.3 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: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

Mode:a; Polarization:Horizontal; Modulation:GFSK; Channel:Low

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	34.91	26.25	6.80	39.07	28.89	54.00	-25.11	HORIZONTAL	Average
2	2310.000	43.49	26.25	6.80	39.07	37.47	74.00	-36.53	HORIZONTAL	Peak
3	2390.000	38.04	26.43	6.87	39.10	32.24	54.00	-21.76	HORIZONTAL	Average
4	2390.000	52.04	26.43	6.87	39.10	46.24	74.00	-27.76	HORIZONTAL	Peak
5	2483.500	35.55	26.58	7.07	39.14	30.06	54.00	-23.94	HORIZONTAL	Average
6	2483.500	45.26	26.58	7.07	39.14	39.77	74.00	-34.23	HORIZONTAL	Peak
7	2500.000	34.40	26.60	7.10	39.14	28.96	54.00	-25.04	HORIZONTAL	Average
8	2500.000	43.52	26.60	7.10	39.14	38.08	74.00	-35.92	HORIZONTAL	Peak

Mode:a; Polarization:Vertical; Modulation:GFSK; Channel:Low

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	33.48	26.25	6.80	39.07	27.46	54.00	-26.54	VERTICAL	Average
2	2310.000	43.24	26.25	6.80	39.07	37.22	74.00	-36.78	VERTICAL	Peak
3	2390.000	32.94	26.43	6.87	39.10	27.14	54.00	-26.86	VERTICAL	Average
4	2390.000	45.11	26.43	6.87	39.10	39.31	74.00	-34.69	VERTICAL	Peak
5	2483.500	33.19	26.58	7.07	39.14	27.70	54.00	-26.30	VERTICAL	Average
6	2483.500	43.23	26.58	7.07	39.14	37.74	74.00	-36.26	VERTICAL	Peak
7	2500.000	32.65	26.60	7.10	39.14	27.21	54.00	-26.79	VERTICAL	Average
8	2500.000	42.27	26.60	7.10	39.14	36.83	74.00	-37.17	VERTICAL	Peak

Mode:a; Polarization:Horizontal; Modulation:GFSK; Channel:High

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	34.01	26.25	6.80	39.07	27.99	54.00	-26.01	HORIZONTAL	Average
2	2310.000	42.26	26.25	6.80	39.07	36.24	74.00	-37.76	HORIZONTAL	Peak
3	2390.000	32.83	26.43	6.87	39.10	27.03	54.00	-26.97	HORIZONTAL	Average
4	2390.000	42.47	26.43	6.87	39.10	36.67	74.00	-37.33	HORIZONTAL	Peak
5	2483.500	56.05	26.58	7.07	39.14	50.56	54.00	-3.44	HORIZONTAL	Average
6	2483.500	70.09	26.58	7.07	39.14	64.60	74.00	-9.40	HORIZONTAL	Peak
7	2500.000	39.46	26.60	7.10	39.14	34.02	54.00	-19.98	HORIZONTAL	Average
8	2500.000	50.39	26.60	7.10	39.14	44.95	74.00	-29.05	HORIZONTAL	Peak

Mode:a; Polarization:Vertical; Modulation:GFSK; Channel:High

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	32.34	26.25	6.80	39.07	26.32	54.00	-27.68	VERTICAL	Average
2	2310.000	42.55	26.25	6.80	39.07	36.53	74.00	-37.47	VERTICAL	Peak
3	2390.000	33.53	26.43	6.87	39.10	27.73	54.00	-26.27	VERTICAL	Average
4	2390.000	42.75	26.43	6.87	39.10	36.95	74.00	-37.05	VERTICAL	Peak
5	2483.500	43.49	26.58	7.07	39.14	38.00	54.00	-16.00	VERTICAL	Average
6	2483.500	57.59	26.58	7.07	39.14	52.10	74.00	-21.90	VERTICAL	Peak
7	2500.000	33.37	26.60	7.10	39.14	27.93	54.00	-26.07	VERTICAL	Average
8	2500.000	42.68	26.60	7.10	39.14	37.24	74.00	-36.76	VERTICAL	Peak

7.7 Radiated Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.205 & 15.209
Test Method: ANSI C63.10 (2013) Section 6.10.4
Measurement Distance: 3m
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.		

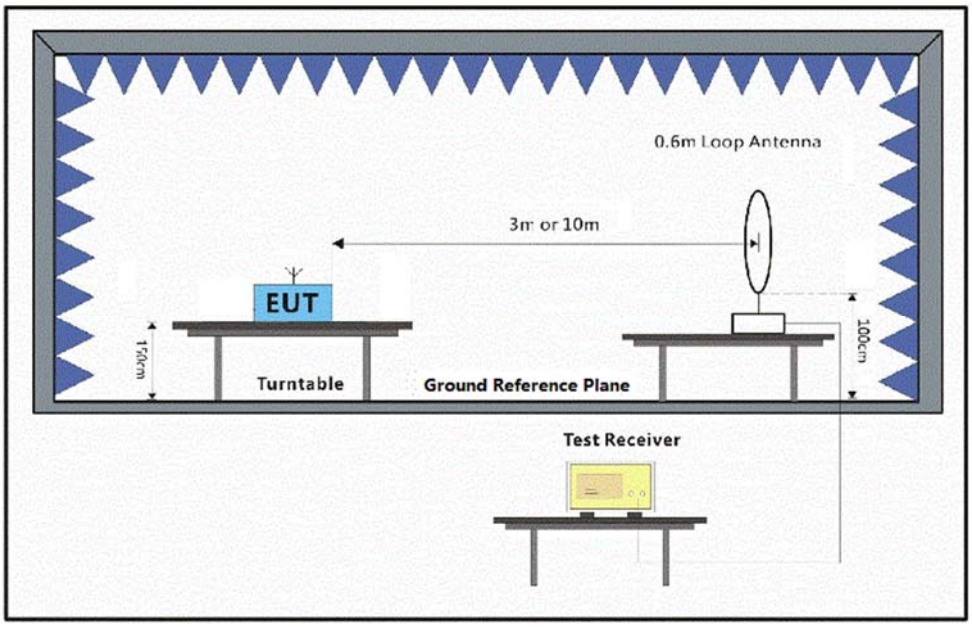
7.7.1 E.U.T. Operation

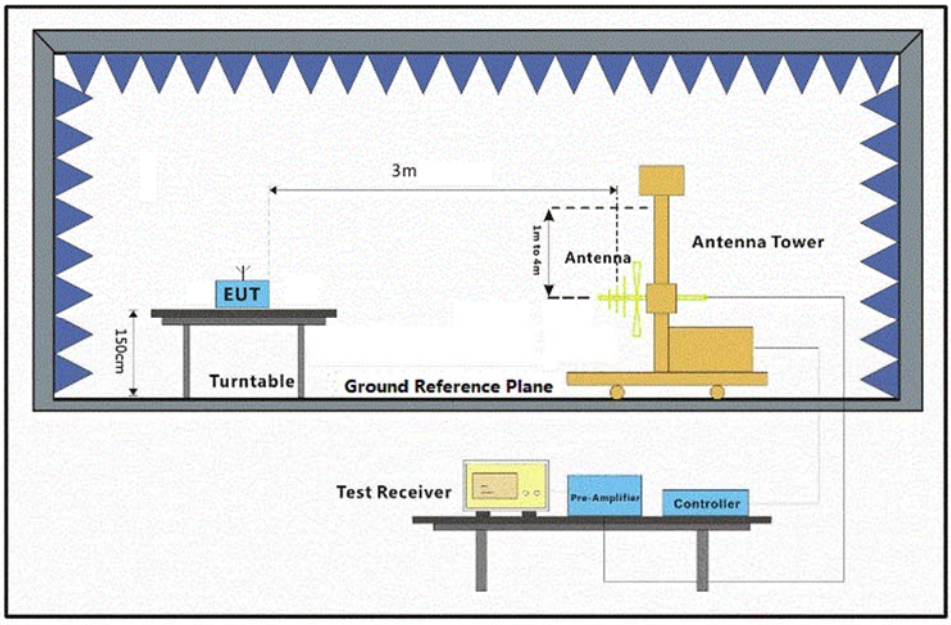
Operating Environment:

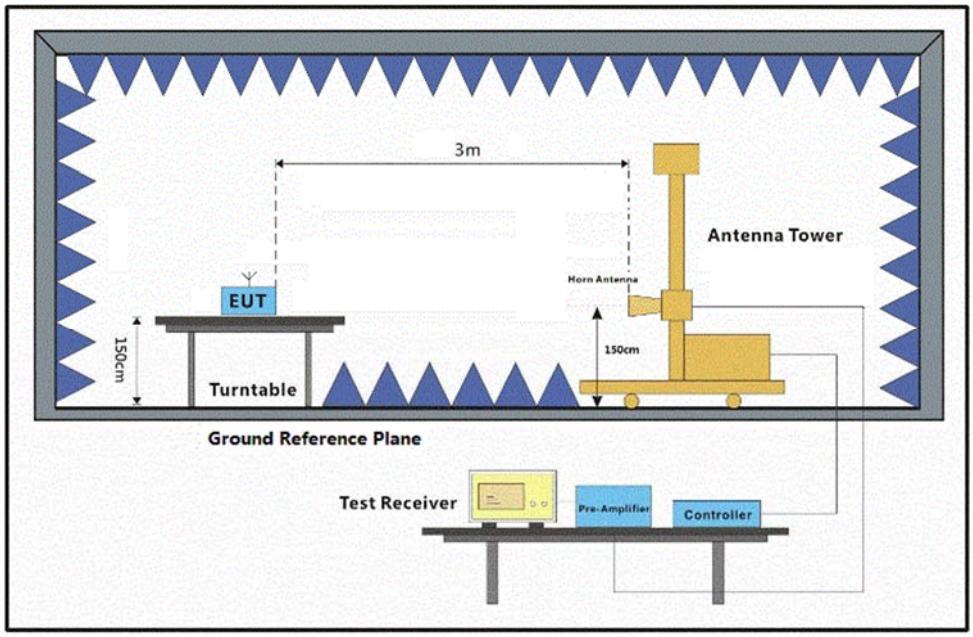
Temperature: 23 °C Humidity: 55 % RH Atmospheric Pressure: 1020 mbar

Test Mode: a: TX mode_Keep the EUT in continuously transmitting mode with GFSK modulation

7.7.2 Test Setup Diagram







7.7.3 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: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

9KHz~30 MHz Field Strength of Unwanted Emissions. Quasi-Peak Measurement

The measurements with Loop antenna and the amplitude of spurious emissions from the radiator are attenuated more than 20dB below the limit, so the test data were not recorded in the test report.

Mode:a; Polarization:Horizontal; Modulation:GFSK; Channel:Low

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	37.548	24.88	13.75	0.70	27.00	12.33	40.00	-27.67	HORIZONTAL	QP
2	48.672	25.51	14.44	0.70	27.00	13.65	40.00	-26.35	HORIZONTAL	QP
3	60.069	25.36	14.10	0.80	27.00	13.26	40.00	-26.74	HORIZONTAL	QP
4	142.324	25.10	13.06	1.28	26.83	12.61	43.50	-30.89	HORIZONTAL	QP
5	177.509	26.44	12.78	1.42	26.70	13.94	43.50	-29.56	HORIZONTAL	QP
6	912.862	30.49	23.51	3.13	27.63	29.50	46.00	-16.50	HORIZONTAL	QP

Mode:a; Polarization:Horizontal; Modulation:GFSK; Channel:Low

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	4803.556	56.19	30.79	9.95	40.21	56.72	74.00	-17.28	HORIZONTAL	Peak
2	4804.556	45.40	30.79	9.95	40.21	45.93	54.00	-8.07	HORIZONTAL	Average
3	7206.038	33.06	35.45	12.73	39.25	41.99	54.00	-12.01	HORIZONTAL	Average
4	7206.038	42.19	35.45	12.73	39.25	51.12	74.00	-22.88	HORIZONTAL	Peak
5	8319.836	26.06	36.22	13.71	38.95	37.04	54.00	-16.96	HORIZONTAL	Average
6	8319.836	34.68	36.22	13.71	38.95	45.66	74.00	-28.34	HORIZONTAL	Peak
7	9608.257	27.38	37.51	14.48	37.97	41.40	54.00	-12.60	HORIZONTAL	Average
8	9608.257	37.10	37.51	14.48	37.97	51.12	74.00	-22.88	HORIZONTAL	Peak
9	10948.780	23.66	39.90	14.98	37.95	40.59	54.00	-13.41	HORIZONTAL	Average
10	10948.780	32.91	39.90	14.98	37.95	49.84	74.00	-24.16	HORIZONTAL	Peak
11	12060.700	32.37	39.46	15.83	38.09	49.57	54.00	-4.43	HORIZONTAL	Average
12	12060.700	35.26	39.46	15.83	38.09	52.46	74.00	-21.54	HORIZONTAL	Peak

Mode:a; Polarization:Vertical; Modulation:GFSK; Channel:Low

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	39.162	28.57	13.72	0.70	27.00	15.99	40.00	-24.01	VERTICAL	QP
2	49.707	26.41	14.49	0.70	27.00	14.60	40.00	-25.40	VERTICAL	QP
3	63.092	25.56	13.75	0.80	27.00	13.11	40.00	-26.89	VERTICAL	QP
4	143.830	25.76	13.11	1.28	26.83	13.32	43.50	-30.18	VERTICAL	QP
5	177.509	26.68	12.78	1.42	26.70	14.18	43.50	-29.32	VERTICAL	QP
6	857.025	30.33	23.03	3.10	27.70	28.76	46.00	-17.24	VERTICAL	QP

Mode:a; Polarization:Vertical; Modulation:GFSK; Channel:Low

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	4804.419	41.23	30.79	9.95	40.21	41.76	54.00	-12.24	VERTICAL	Average
2	4804.419	49.27	30.79	9.95	40.21	49.80	74.00	-24.20	VERTICAL	Peak
3	6018.999	32.04	32.35	11.11	39.88	35.62	54.00	-18.38	VERTICAL	Average
4	6018.999	41.95	32.35	11.11	39.88	45.53	74.00	-28.47	VERTICAL	Peak
5	7206.114	32.81	35.45	12.73	39.25	41.74	54.00	-12.26	VERTICAL	Average
6	7206.114	42.00	35.45	12.73	39.25	50.93	74.00	-23.07	VERTICAL	Peak
7	9608.789	24.21	37.51	14.48	37.97	38.23	54.00	-15.77	VERTICAL	Average
8	9608.789	35.67	37.51	14.48	37.97	49.69	74.00	-24.31	VERTICAL	Peak
9	12060.250	25.80	39.46	15.83	38.09	43.00	54.00	-11.00	VERTICAL	Average
10	12060.250	33.79	39.46	15.83	38.09	50.99	74.00	-23.01	VERTICAL	Peak
11	16268.140	22.98	38.94	19.34	38.56	42.70	54.00	-11.30	VERTICAL	Average
12	16268.140	31.60	38.94	19.34	38.56	51.32	74.00	-22.68	VERTICAL	Peak

Mode:a; Polarization:Horizontal; Modulation:GFSK; ; Channel:middle

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	4884.975	37.78	30.95	10.02	40.22	38.53	54.00	-15.47	HORIZONTAL	Average
2	4884.975	46.27	30.95	10.02	40.22	47.02	74.00	-26.98	HORIZONTAL	Peak
3	6267.553	31.72	33.41	11.43	39.70	36.86	54.00	-17.14	HORIZONTAL	Average
4	6267.553	41.02	33.41	11.43	39.70	46.16	74.00	-27.84	HORIZONTAL	Peak
5	7326.260	28.86	35.74	12.93	39.22	38.31	54.00	-15.69	HORIZONTAL	Average
6	7326.260	37.77	35.74	12.93	39.22	47.22	74.00	-26.78	HORIZONTAL	Peak
7	8891.725	25.73	36.44	14.14	38.52	37.79	54.00	-16.21	HORIZONTAL	Average
8	8891.725	34.08	36.44	14.14	38.52	46.14	74.00	-27.86	HORIZONTAL	Peak
9	9768.240	25.03	37.74	14.44	37.90	39.31	54.00	-14.69	HORIZONTAL	Average
10	9768.240	33.56	37.74	14.44	37.90	47.84	74.00	-26.16	HORIZONTAL	Peak
11	12210.440	23.17	39.21	16.05	38.10	40.33	54.00	-13.67	HORIZONTAL	Average
12	12210.440	32.53	39.21	16.05	38.10	49.69	74.00	-24.31	HORIZONTAL	Peak

Mode:a; Polarization:Vertical; Modulation:GFSK; ; Channel:middle

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	4884.975	33.19	30.95	10.02	40.22	33.94	54.00	-20.06	VERTICAL	Average
2	4884.975	43.22	30.95	10.02	40.22	43.97	74.00	-30.03	VERTICAL	Peak
3	7326.646	27.77	35.74	12.93	39.22	37.22	54.00	-16.78	VERTICAL	Average
4	7326.646	39.83	35.74	12.93	39.22	49.28	74.00	-24.72	VERTICAL	Peak
5	8465.379	25.27	36.11	13.79	38.86	36.31	54.00	-17.69	VERTICAL	Average
6	8465.379	34.80	36.11	13.79	38.86	45.84	74.00	-28.16	VERTICAL	Peak
7	9748.257	23.37	37.70	14.45	37.90	37.62	54.00	-16.38	VERTICAL	Average
8	9748.257	33.26	37.70	14.45	37.90	47.51	74.00	-26.49	VERTICAL	Peak
9	10948.780	22.49	39.90	14.98	37.95	39.42	54.00	-14.58	VERTICAL	Average
10	10948.780	32.08	39.90	14.98	37.95	49.01	74.00	-24.99	VERTICAL	Peak
11	12210.700	26.33	39.21	16.05	38.10	43.49	54.00	-10.51	VERTICAL	Average
12	12210.700	34.03	39.21	16.05	38.10	51.19	74.00	-22.81	VERTICAL	Peak

Mode:a; Polarization:Horizontal; Modulation:GFSK; Channel:High

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	4960.993	36.36	31.05	10.07	40.23	37.25	54.00	-16.75	HORIZONTAL	Average
2	4960.993	44.52	31.05	10.07	40.23	45.41	74.00	-28.59	HORIZONTAL	Peak
3	5984.305	32.12	32.29	11.09	39.90	35.60	54.00	-18.40	HORIZONTAL	Average
4	5984.305	40.32	32.29	11.09	39.90	43.80	74.00	-30.20	HORIZONTAL	Peak
5	7440.646	29.78	35.92	13.04	39.20	39.54	54.00	-14.46	HORIZONTAL	Average
6	7440.646	37.20	35.92	13.04	39.20	46.96	74.00	-27.04	HORIZONTAL	Peak
7	9920.684	24.30	37.92	14.41	37.84	38.79	54.00	-15.21	HORIZONTAL	Average
8	9920.684	33.30	37.92	14.41	37.84	47.79	74.00	-26.21	HORIZONTAL	Peak
9	12400.440	23.05	38.93	16.29	38.12	40.15	54.00	-13.85	HORIZONTAL	Average
10	12400.440	32.74	38.93	16.29	38.12	49.84	74.00	-24.16	HORIZONTAL	Peak
11	15310.070	23.34	39.30	18.65	38.49	42.80	54.00	-11.20	HORIZONTAL	Average
12	15310.070	31.99	39.30	18.65	38.49	51.45	74.00	-22.55	HORIZONTAL	Peak

Mode:a; Polarization:Vertical; Modulation:GFSK; Channel:High

	Freq	ReadAntenna Level	Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	4279.589	32.83	29.87	9.37	40.13	31.94	54.00	-22.06	VERTICAL	Average
2	4279.589	41.94	29.87	9.37	40.13	41.05	74.00	-32.95	VERTICAL	Peak
3	4960.993	34.82	31.05	10.07	40.23	35.71	54.00	-18.29	VERTICAL	Average
4	4960.993	43.71	31.05	10.07	40.23	44.60	74.00	-29.40	VERTICAL	Peak
5	6159.797	31.40	32.84	11.26	39.80	35.70	54.00	-18.30	VERTICAL	Average
6	6159.797	40.37	32.84	11.26	39.80	44.67	74.00	-29.33	VERTICAL	Peak
7	7440.267	29.04	35.92	13.04	39.20	38.80	54.00	-15.20	VERTICAL	Average
8	7440.267	37.92	35.92	13.04	39.20	47.68	74.00	-26.32	VERTICAL	Peak
9	9920.991	27.70	37.92	14.41	37.84	42.19	54.00	-11.81	VERTICAL	Average
10	9920.991	36.79	37.92	14.41	37.84	51.28	74.00	-22.72	VERTICAL	Peak
11	12400.250	23.33	38.93	16.29	38.12	40.43	54.00	-13.57	VERTICAL	Average
12	12400.250	32.71	38.93	16.29	38.12	49.81	74.00	-24.19	VERTICAL	Peak

7.8 Conducted Emissions at Mains Terminals 150 kHz to 30 MHz

Test Requirement	FCC Part 15 C section 15.207
Test Method:	ANSI C63.10 (2013) Section 6.2
Frequency Range:	150 kHz to 30 MHz
Limit:	
0.15M-0.5MHz	66dB(μV)-56dB(μV) quasi-peak, 56dB(μV)-46dB(μV) average
0.5M-5MHz	56dB(μV) quasi-peak, 46dB(μV) average
5M-30MHz	60dB(μV) quasi-peak, 50dB(μV) average
Detector:	Peak for pre-scan (9kHz resolution bandwidth) 0.15M to 30MHz

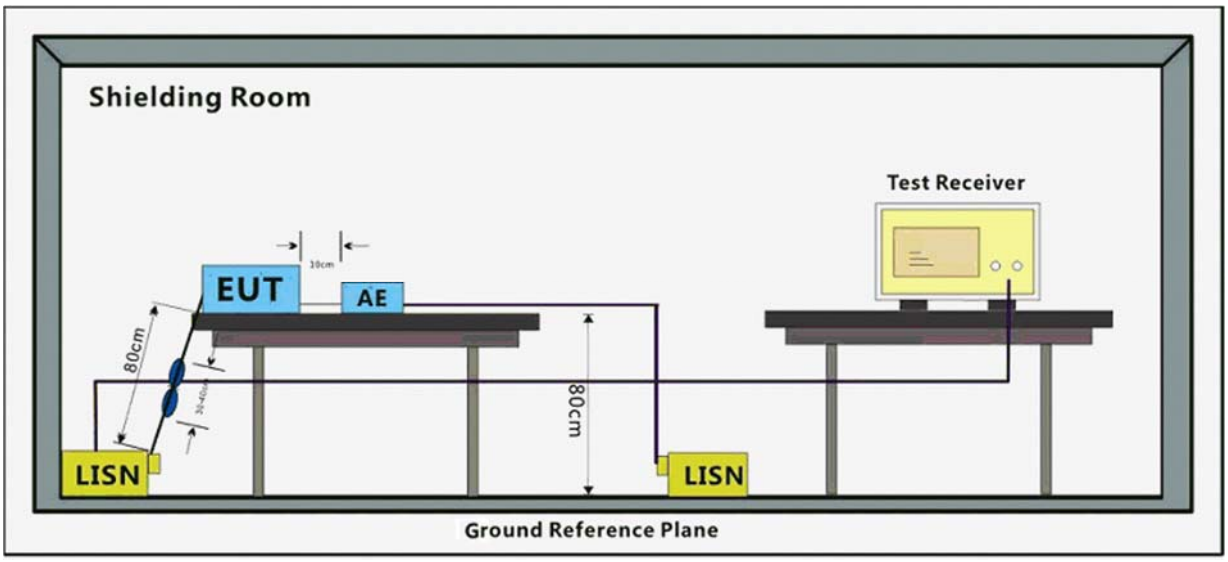
7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 25.7 °C Humidity: 42.4 % RH Atmospheric Pressure: 1020 mbar

Test Mode: e: BT+Charging mode_Keep the EUT pairing with other devices and Charging

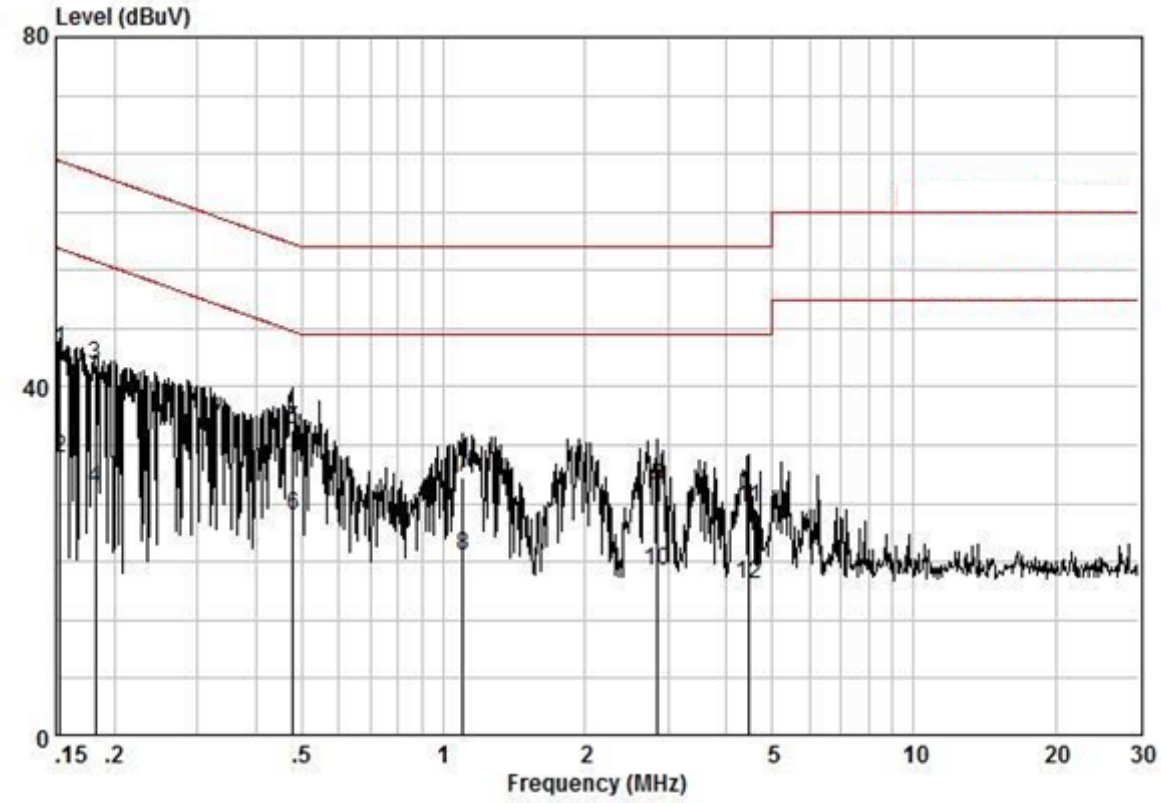
7.8.2 Test Setup Diagram



7.8.3 Measurement Data

An initial pre-scan was performed with peak detector. Quasi-Peak or Average measurement were performed at the frequencies with maximized peak emission were detected.

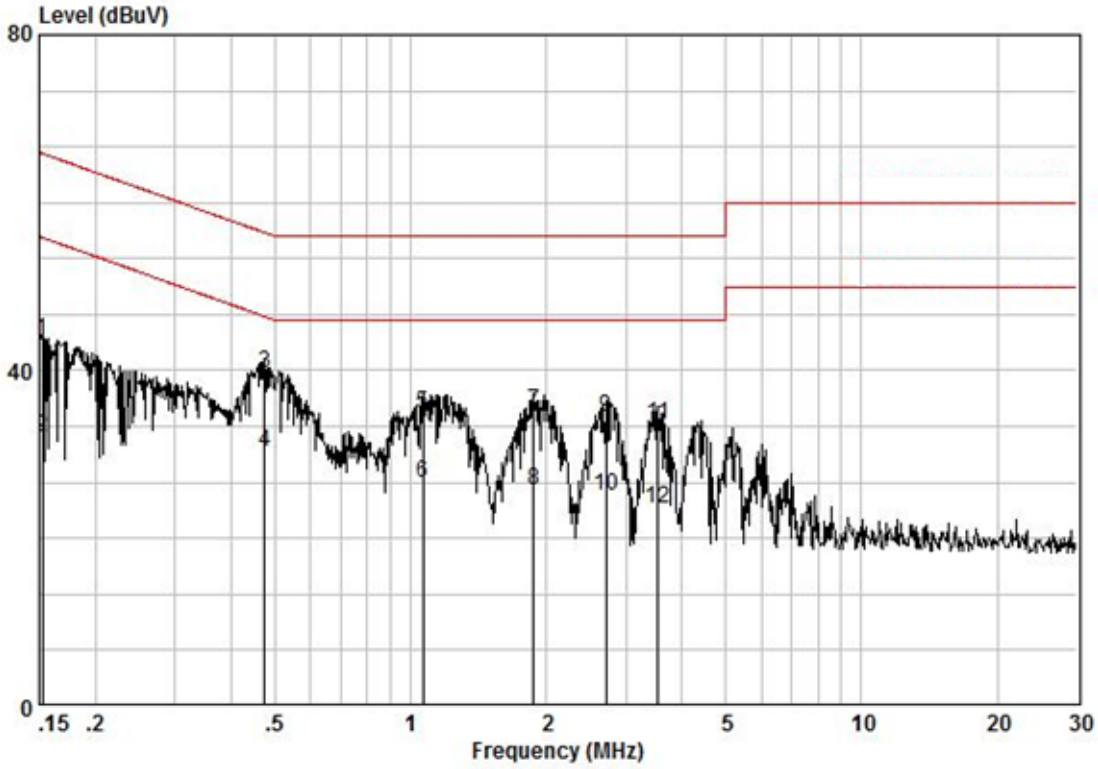
Mode:e; Line:Live Line



Pol :LIVE
No :
Model :

Frequency MHz	read level dBuV	Cable Loss dB	LISN Factor dB	Measured level dBuV	Limit Line dBuV	Over limit dB	Remark
0.15	34.74	0.10	9.47	44.31	65.82	-21.51	QP
0.15	22.15	0.10	9.47	31.72	55.82	-24.10	AVERAGE
0.18	32.74	0.10	9.57	42.41	64.37	-21.96	QP
0.18	18.70	0.10	9.57	28.37	54.37	-26.00	AVERAGE
0.48	25.20	0.20	9.65	35.04	56.36	-21.32	QP
0.48	15.40	0.20	9.65	25.24	46.36	-21.12	AVERAGE
1.10	19.72	0.30	9.63	29.65	56.00	-26.35	QP
1.10	10.87	0.30	9.63	20.80	46.00	-25.20	AVERAGE
2.85	18.48	0.52	9.62	28.61	56.00	-27.39	QP
2.85	8.89	0.52	9.62	19.02	46.00	-26.98	AVERAGE
4.48	15.96	0.67	9.63	26.25	56.00	-29.75	QP
4.48	7.19	0.67	9.63	17.48	46.00	-28.52	AVERAGE

Mode:e; Line:Neutral Line



Pol :NEUTRAL
No :
Model :

Frequency MHz	read level dBuV	Cable Loss dB	LISN Factor dB	Measured level dBuV	Limit Line dBuV	Over limit dB	Remark
0.15	34.16	0.10	9.39	43.65	65.87	-22.22	QP
0.15	22.66	0.10	9.39	32.15	55.87	-23.72	AVERAGE
0.47	29.82	0.19	9.55	39.57	56.45	-16.88	QP
0.47	20.62	0.19	9.55	30.37	46.45	-16.08	AVERAGE
1.07	25.06	0.30	9.58	34.94	56.00	-21.06	QP
1.07	16.73	0.30	9.58	26.61	46.00	-19.39	AVERAGE
1.88	25.26	0.38	9.53	35.16	56.00	-20.84	QP
1.88	15.78	0.38	9.53	25.68	46.00	-20.32	AVERAGE
2.71	24.50	0.50	9.55	34.55	56.00	-21.45	QP
2.71	15.11	0.50	9.55	25.16	46.00	-20.84	AVERAGE
3.55	23.36	0.59	9.58	33.53	56.00	-22.47	QP
3.55	13.37	0.59	9.58	23.54	46.00	-22.46	AVERAGE

8 Appendix

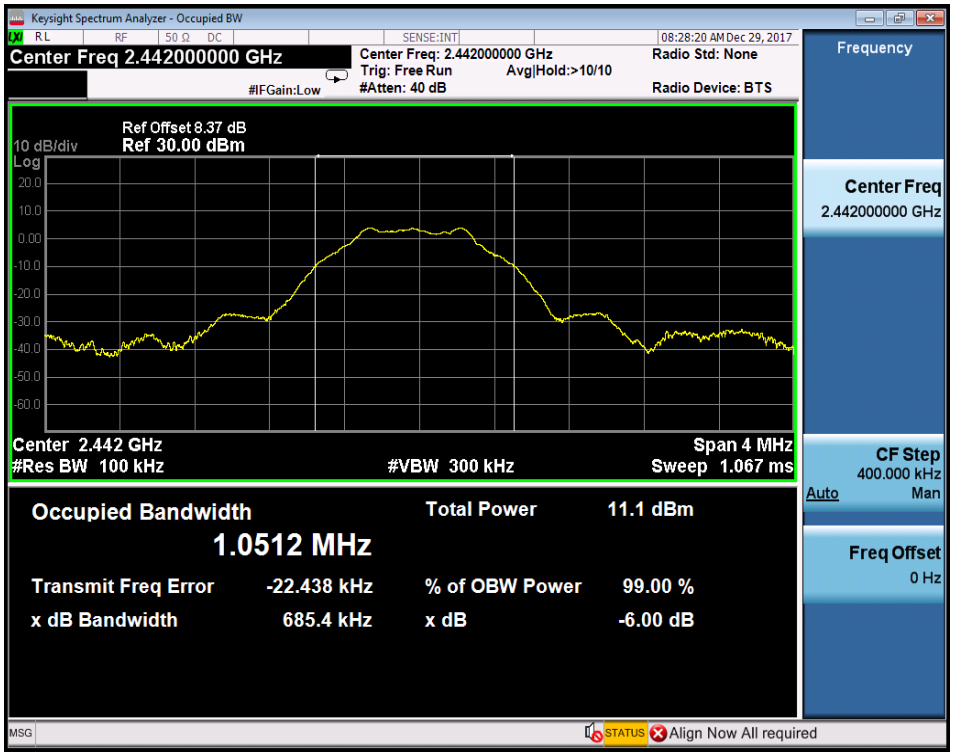
8.1 Appendix 15.247

1.6dB Bandwidth

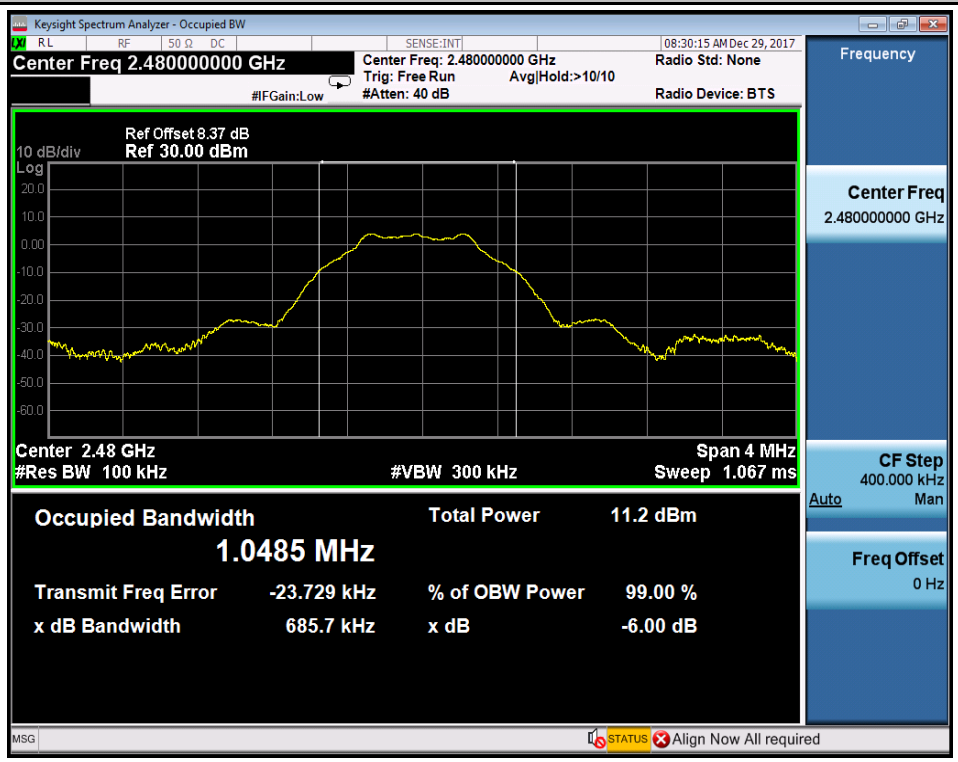
Test Mode	Test Channel	Ant	OBW[MHz]	Measured 6dB bandwidth [MHz]	Limit [MHz]	Verdict
BLE	2402	Ant1	1.0522	0.6827	0.5	PASS
BLE	2442	Ant1	1.0512	0.6854	0.5	PASS
BLE	2480	Ant1	1.0485	0.6857	0.5	PASS

TEST PLOT
6dB Bandwidth_BLE_2402_Ant1

6dB Bandwidth_BLE_2442_Ant1



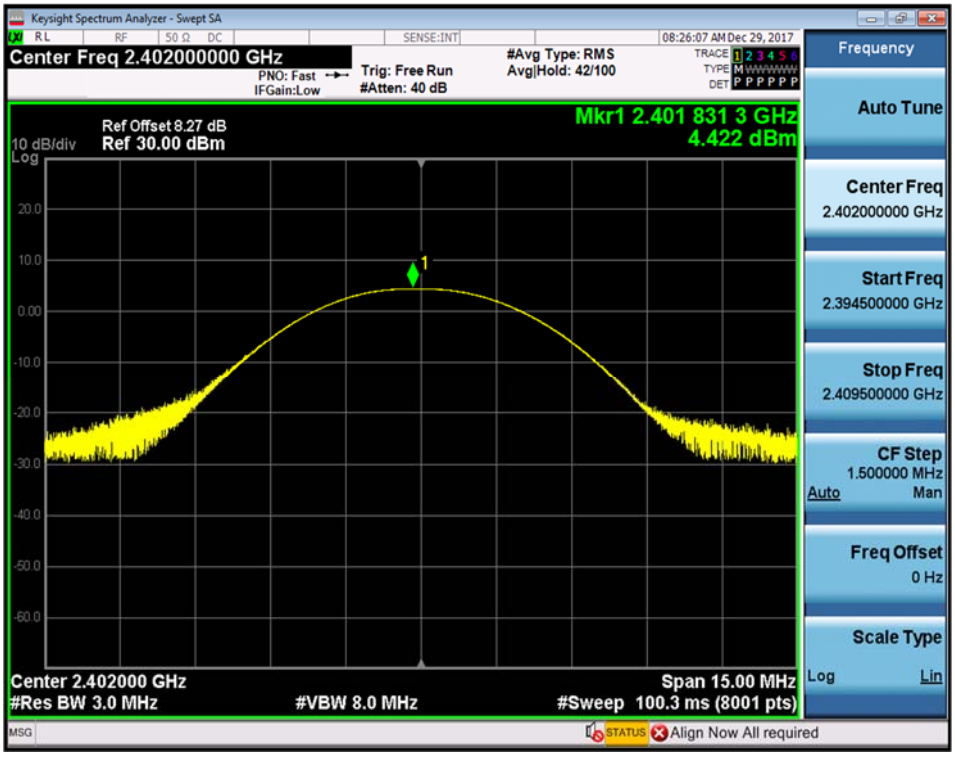
6dB Bandwidth_BLE_2480_Ant1



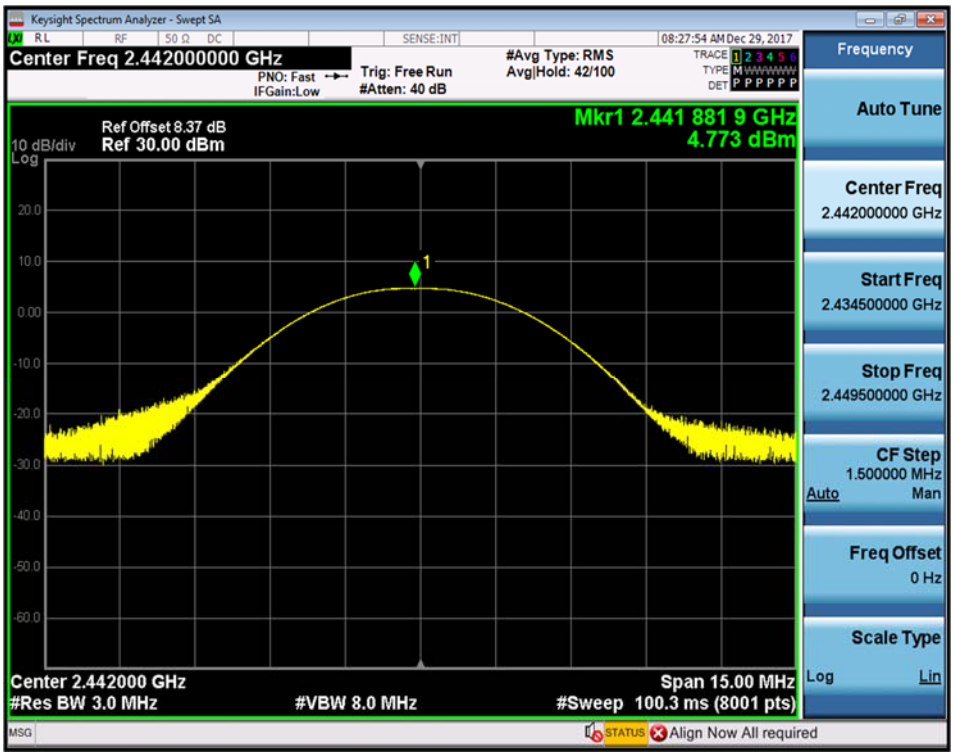
2.Maximum peak conducted output power

Test Mode	Test Channel	Ant	Power[dBm]	Limit[dBm]	Verdict
BLE	2402	Ant1	4.422	30	PASS
BLE	2442	Ant1	4.773	30	PASS
BLE	2480	Ant1	4.79	30	PASS

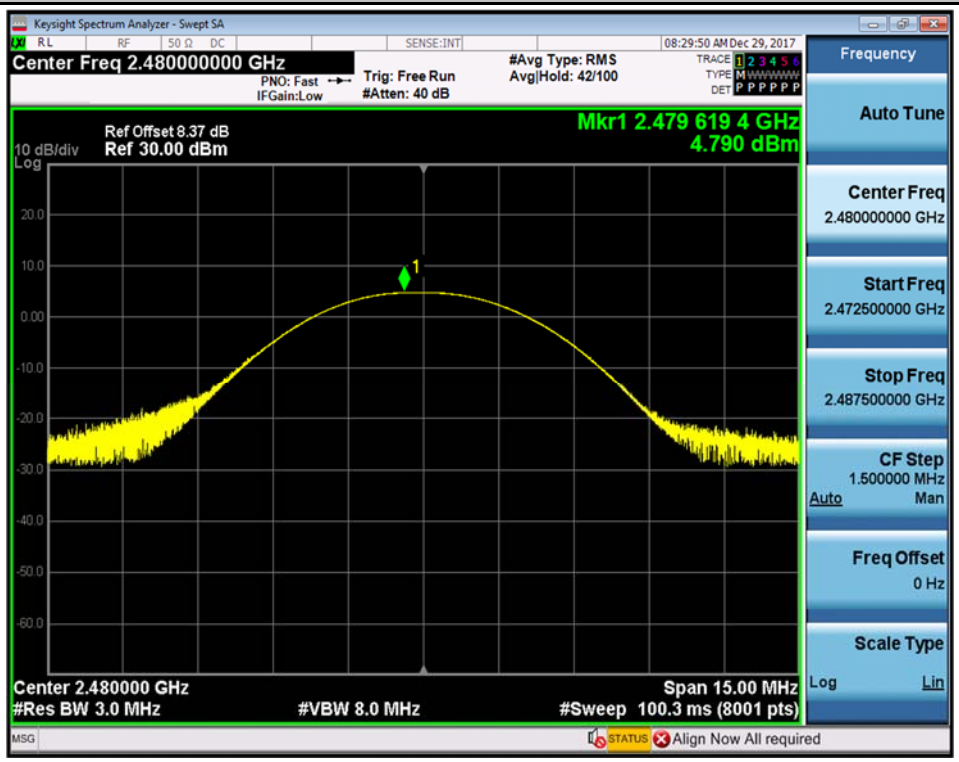
TEST PLOT
Maximum peak conducted output power_BLE_2402_Ant1



Maximum peak conducted output power_BLE_2442_Ant1



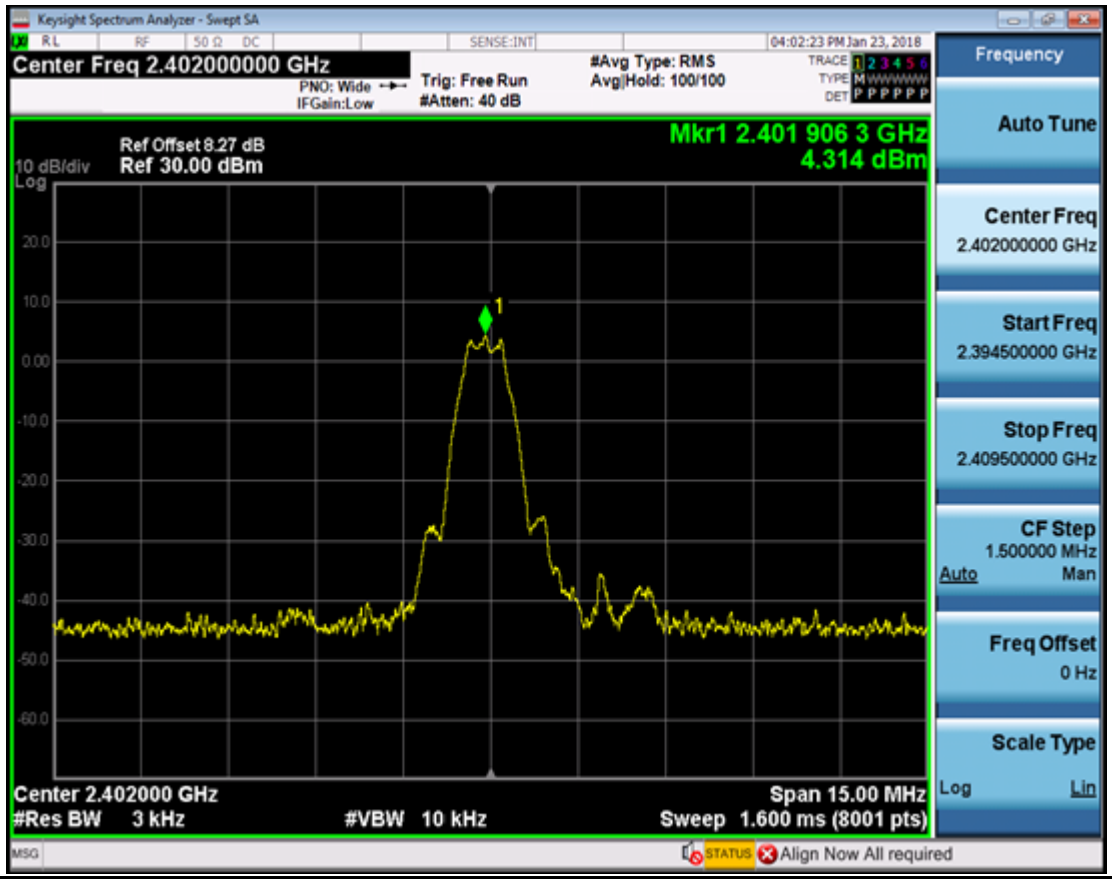
Maximum peak conducted output power_BLE_2480_Ant1



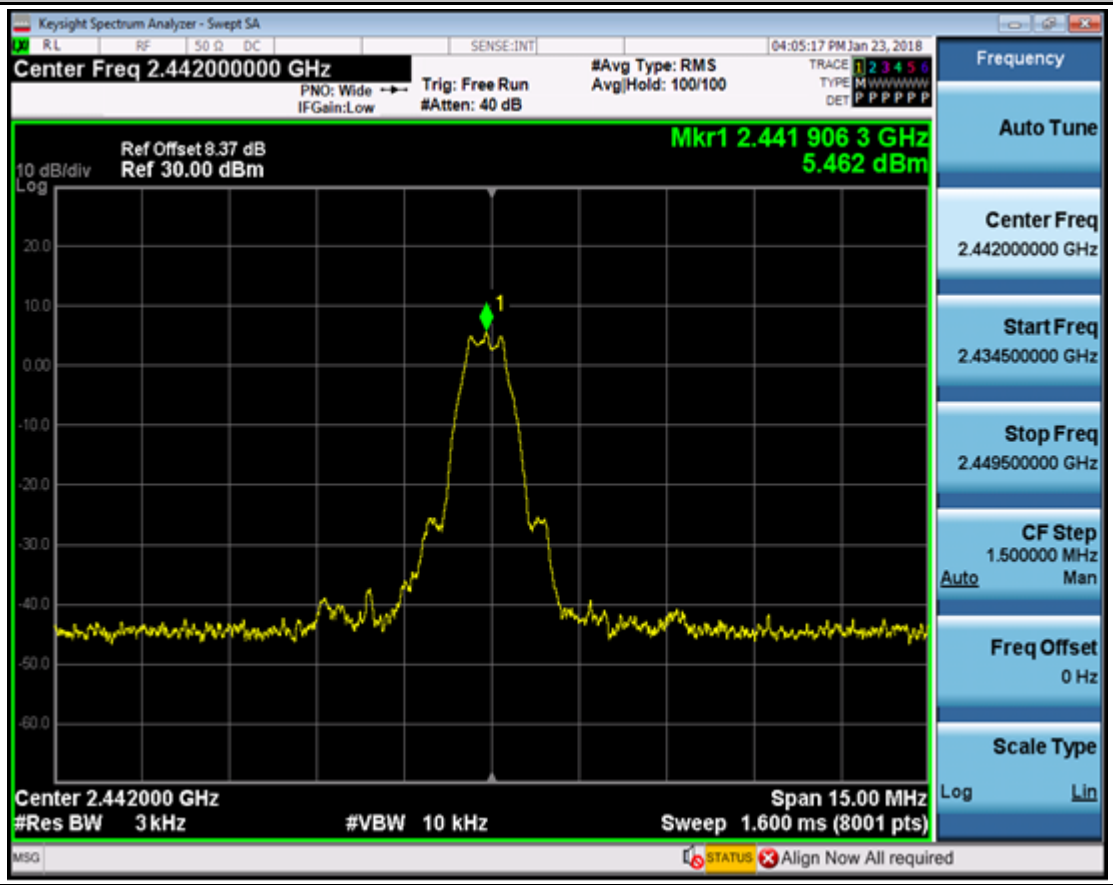
3.Maximum Peak power spectral density

Test Mode	Test Channel	Ant	Result [dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	2402	Ant1	4.314	8.00	PASS
BLE	2442	Ant1	5.462	8.00	PASS
BLE	2480	Ant1	5.777	8.00	PASS

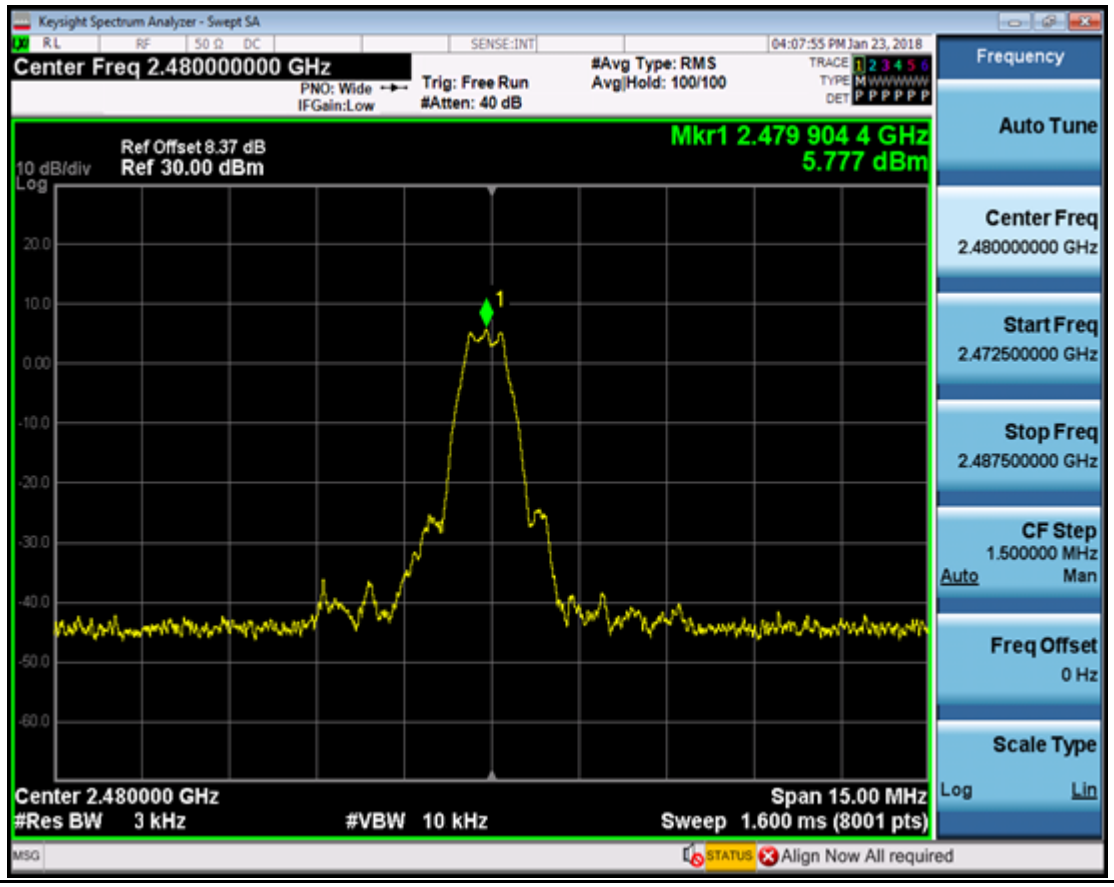
TEST PLOT
Maximum Peak power spectral density_BLE_2402_Ant1



Maximum Peak power spectral density_BLE_2442_Ant1



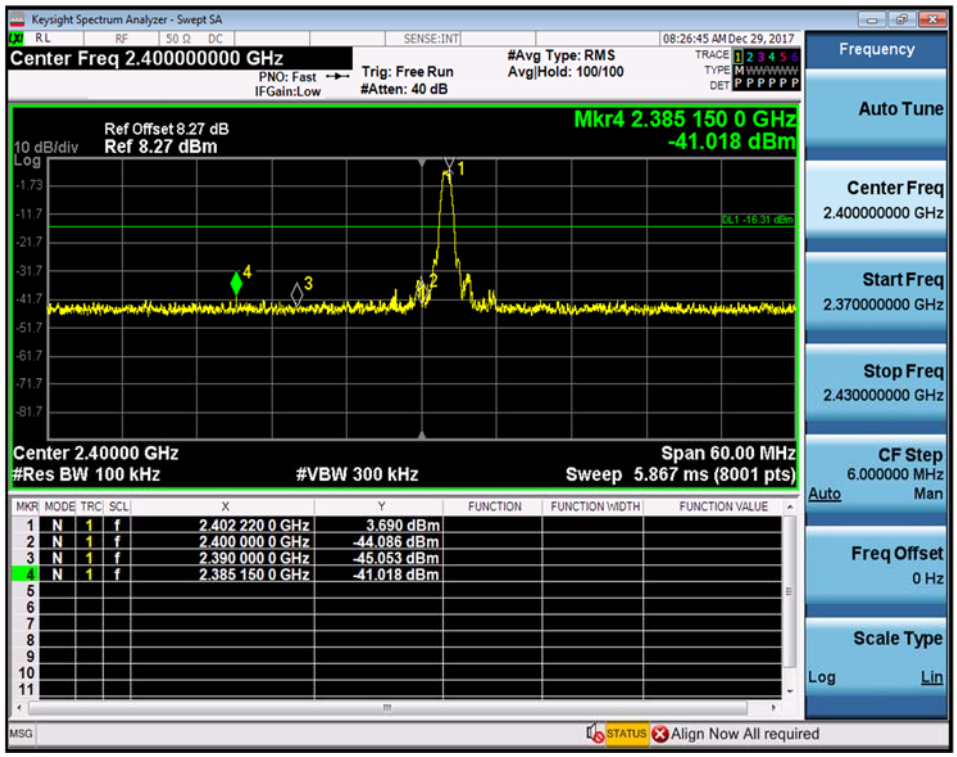
Maximum Peak power spectral density_BLE_2480_Ant1



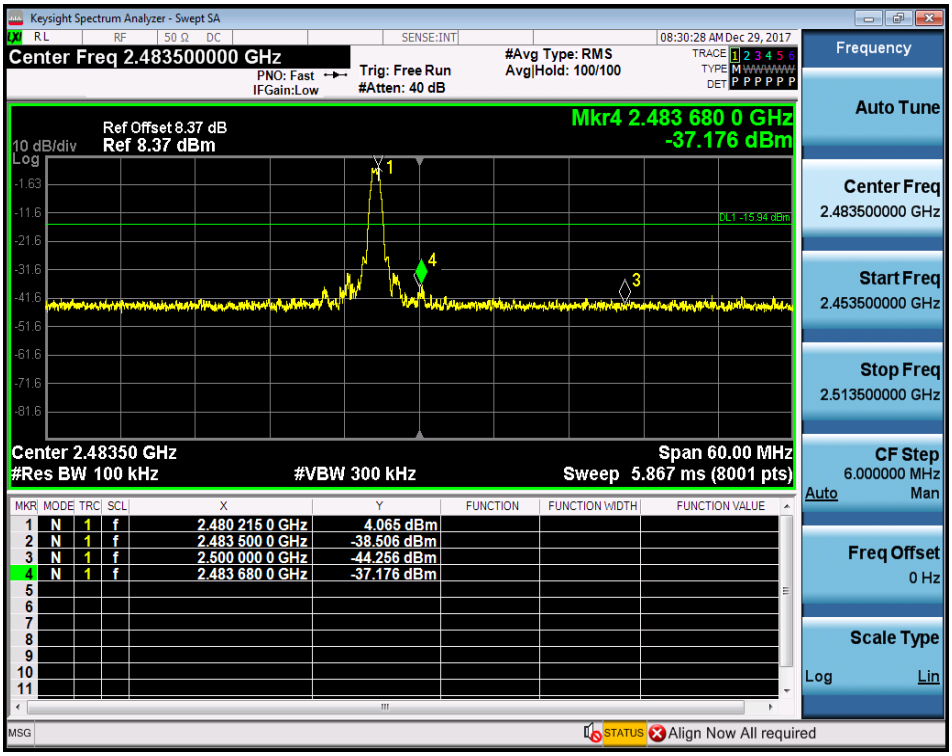
4.Band-edge for RF Conducted Emissions

Test Mode	Test Channel	Ant	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
BLE	2402	Ant1	3.690	-41.018	-16.31	PASS
BLE	2480	Ant1	4.065	-37.176	-15.94	PASS

TEST PLOT
Band-edge for RF Conducted Emissions_BLE_2402_Ant1

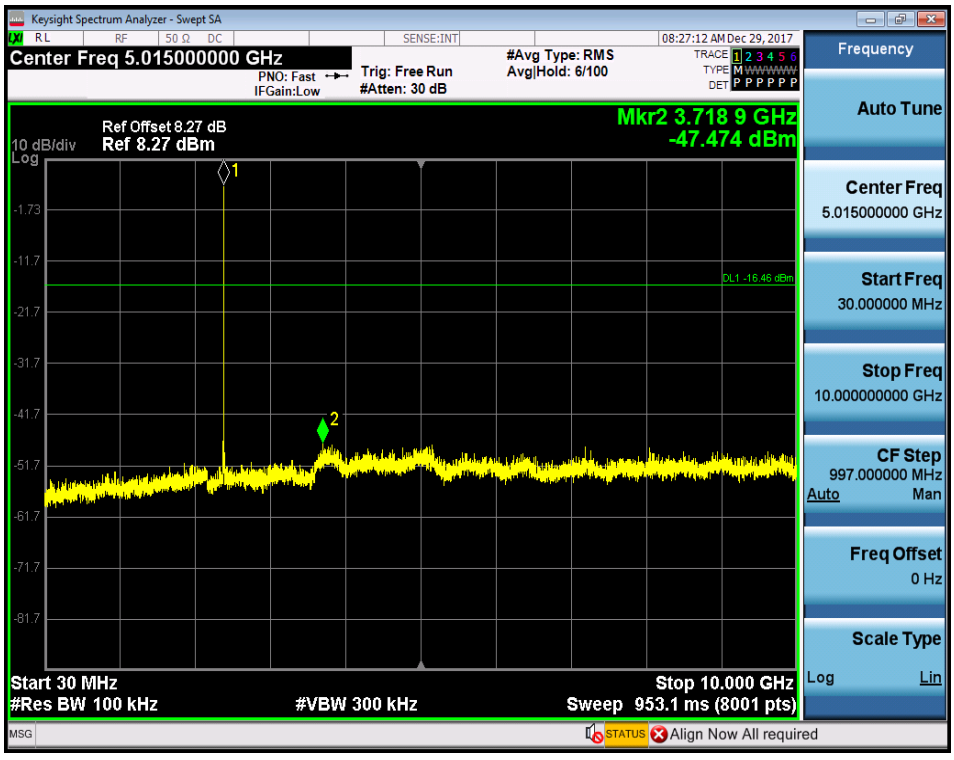


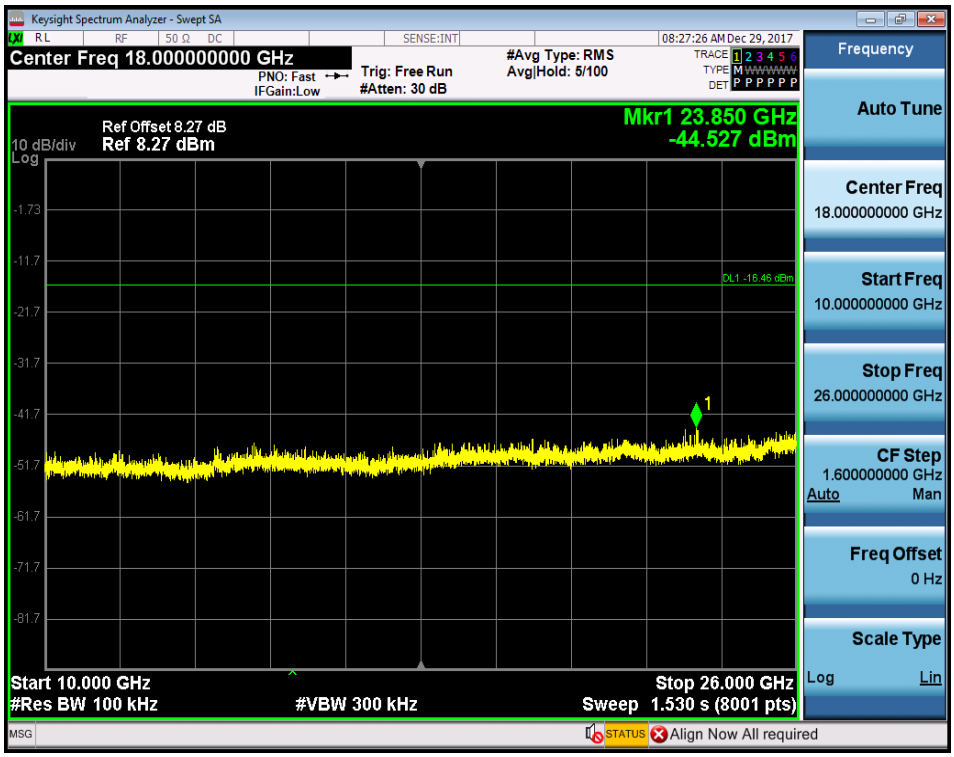
Band-edge for RF Conducted Emissions_BLE_2480_Ant1

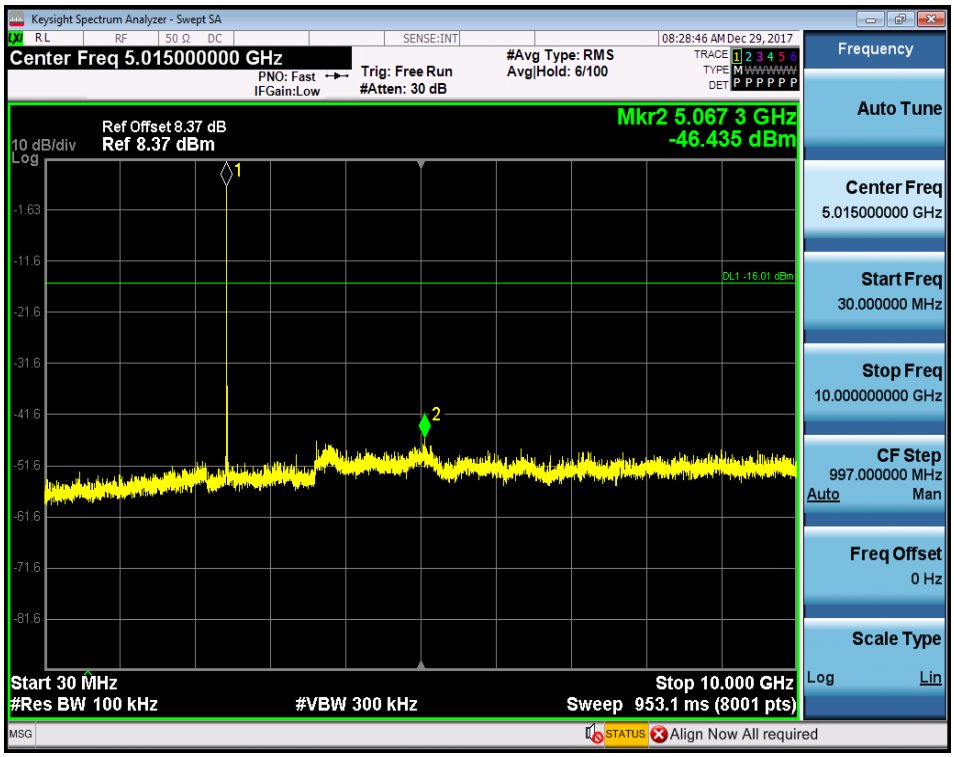
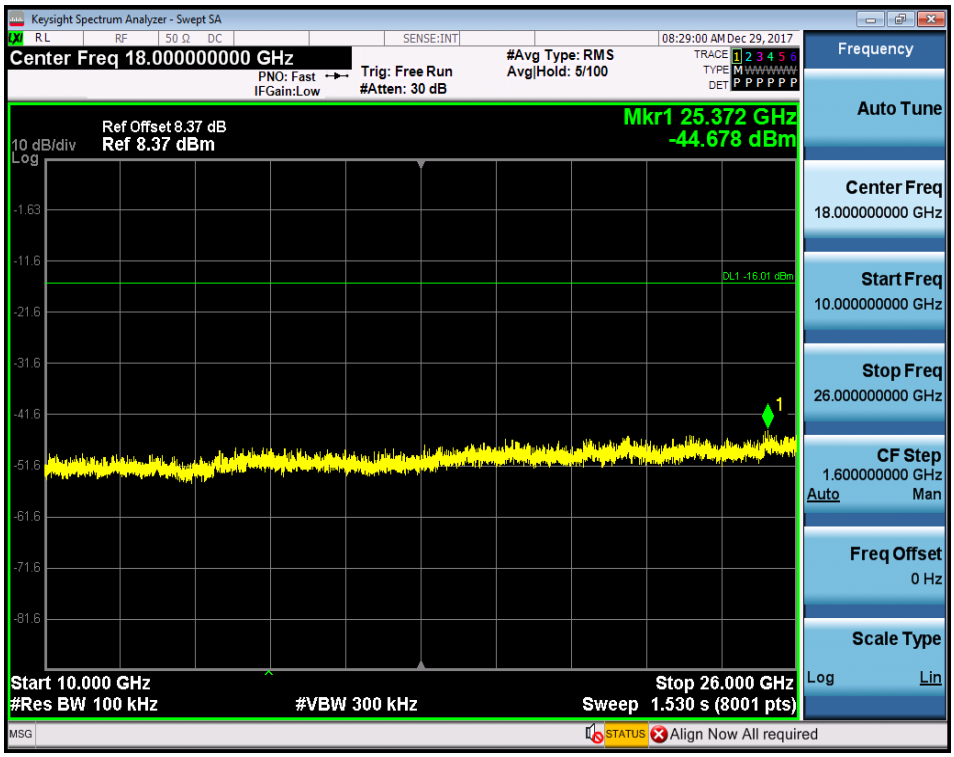


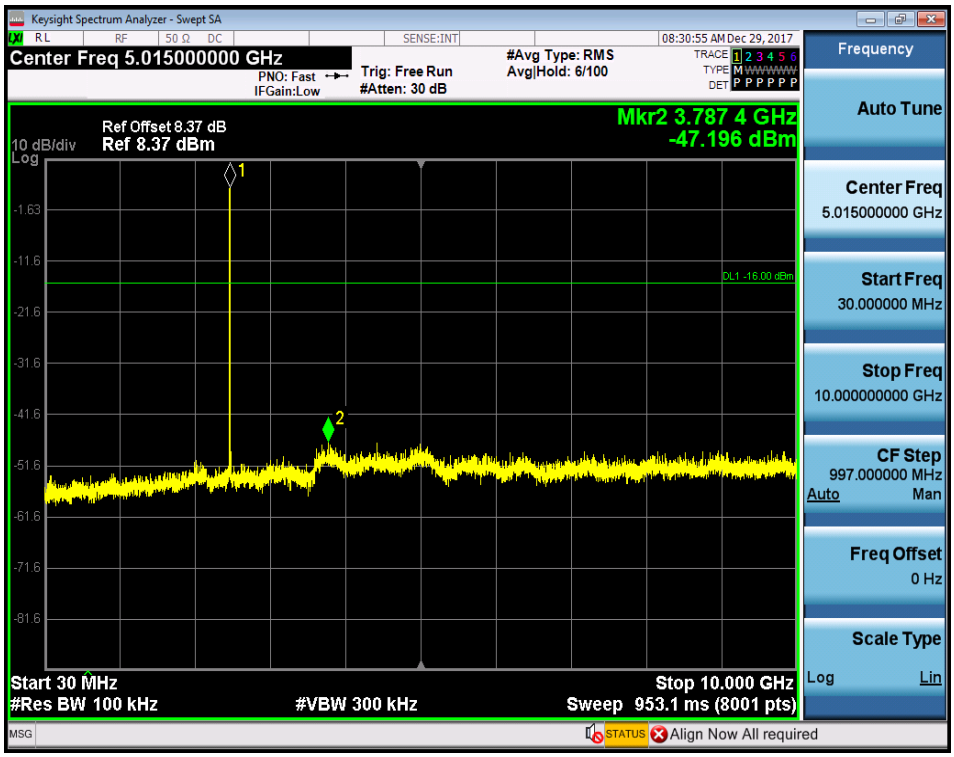
5.RF Conducted Spurious Emissions

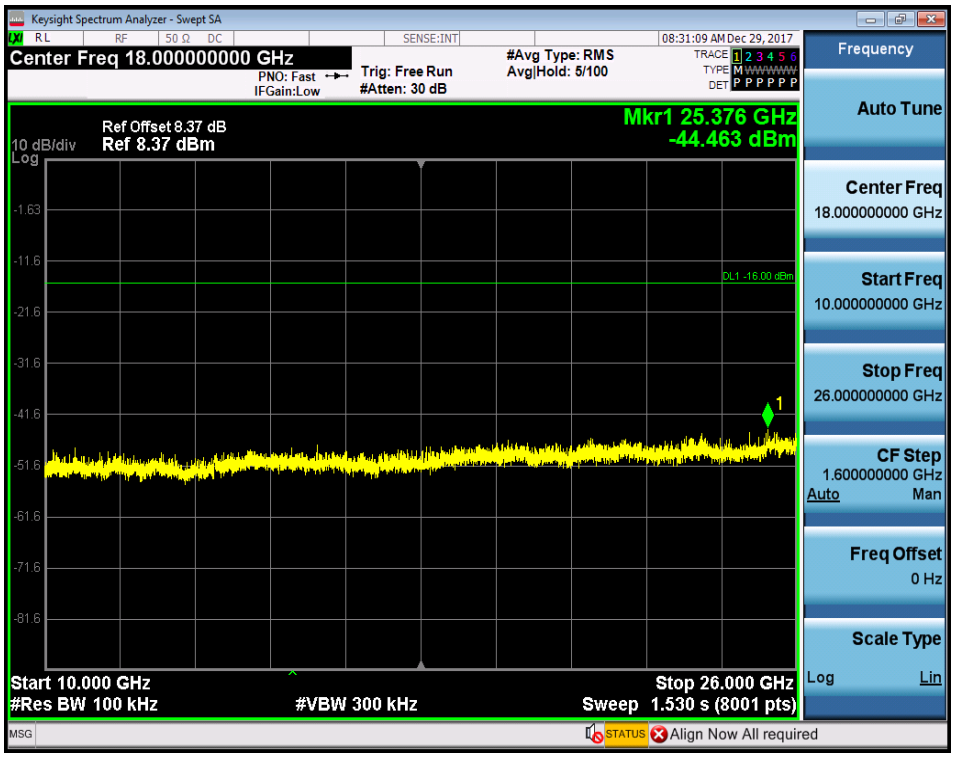
Test Mode	Test Channel	Ant	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]	Max. Level [dBm]	Verdict
BLE	2402	Ant1	30	10000	100	300	3.539	-47.474	PASS
BLE	2402	Ant1	10000	26000	100	300	3.539	-44.527	PASS
BLE	2442	Ant1	30	10000	100	300	3.989	-46.435	PASS
BLE	2442	Ant1	10000	26000	100	300	3.989	-44.678	PASS
BLE	2480	Ant1	30	10000	100	300	4	-47.196	PASS
BLE	2480	Ant1	10000	26000	100	300	4	-44.463	PASS

TEST PLOT	
RF Conducted Spurious Emissions_BLE_2402_Ant1	
Pref	
CSE_1	

CSE_2	
RF Conducted Spurious Emissions_BLE_2442_Ant1	
Pref	

CSE_1	
CSE_2	

RF Conducted Spurious Emissions_BLE_2480_Ant1	
Pref	
CSE_1	

CSE_2	

--End of Report—