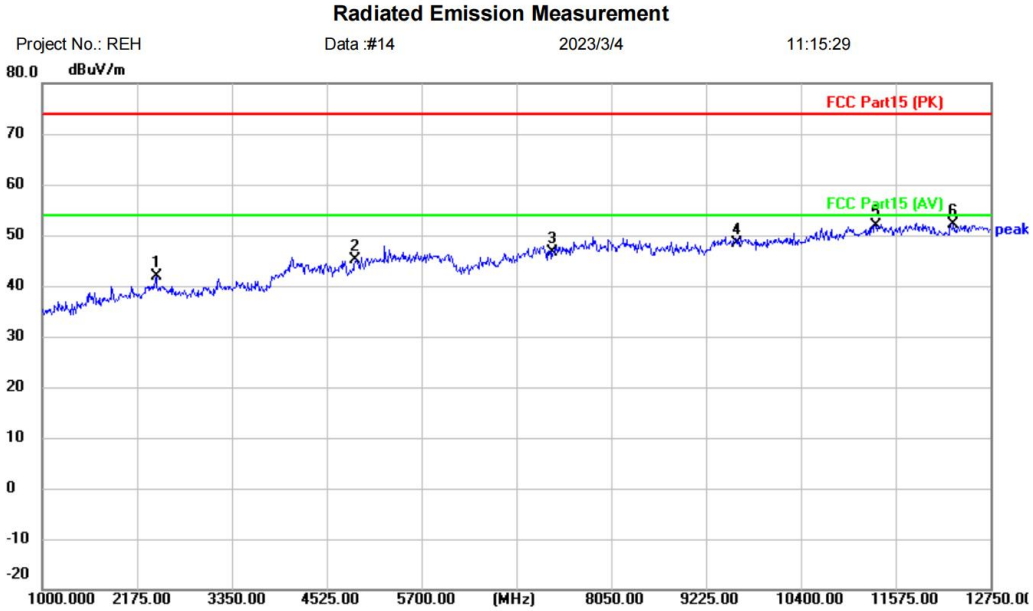
[TestMode: TX mid channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-M
Note: TX-1

Polarization: *Vertical*
Power:

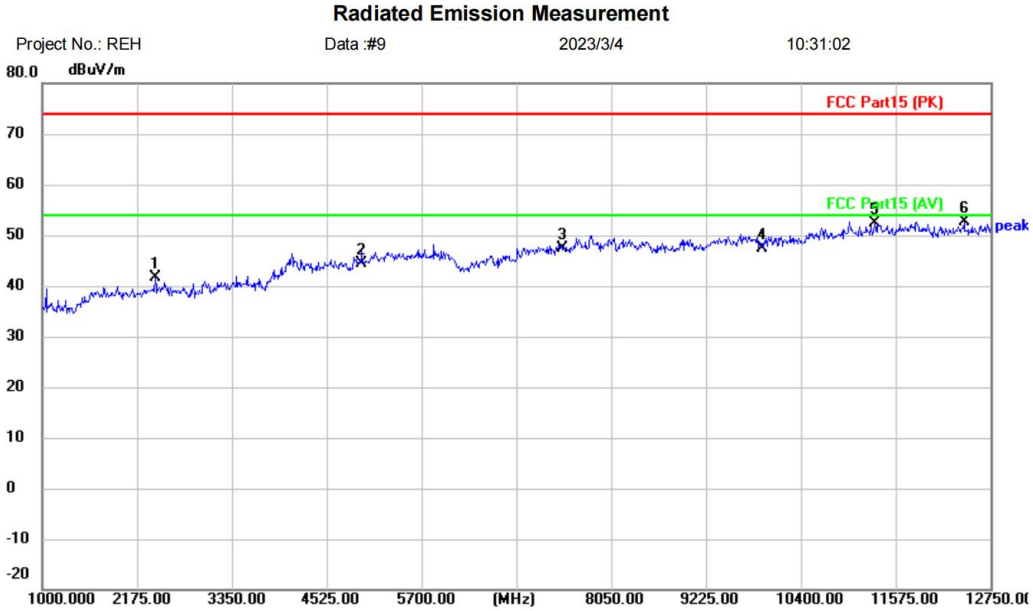
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2410.000	43.09	-1.26	41.83	74.00	-32.17	peak	
2		4884.000	40.64	4.37	45.01	74.00	-28.99	peak	
3		7326.000	38.51	8.21	46.72	74.00	-27.28	peak	
4		9608.000	37.44	10.90	48.34	74.00	-25.66	peak	
5		11328.250	38.36	13.59	51.95	74.00	-22.05	peak	
6	*	12291.750	38.16	13.88	52.04	74.00	-21.96	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Test Result: Pass

[TestMode: TX high channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-H
Note: TX-1

Polarization: ***Horizontal***
Power:

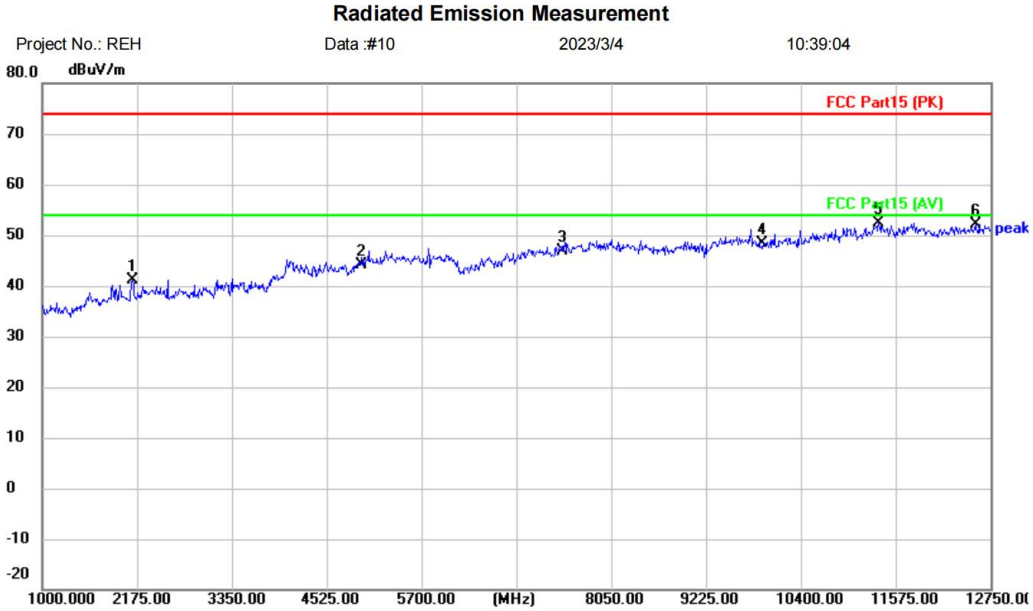
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2398.250	42.85	-1.14	41.71	74.00	-32.29	peak	
2		4960.000	38.89	5.42	44.31	74.00	-29.69	peak	
3		7440.000	38.81	8.48	47.29	74.00	-26.71	peak	
4		9920.000	35.79	11.69	47.48	74.00	-26.52	peak	
5		11316.500	38.80	13.59	52.39	74.00	-21.61	peak	
6	*	12421.000	38.75	13.88	52.63	74.00	-21.37	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Test Result: Pass

[TestMode: TX high channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-H
Note: TX-1

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

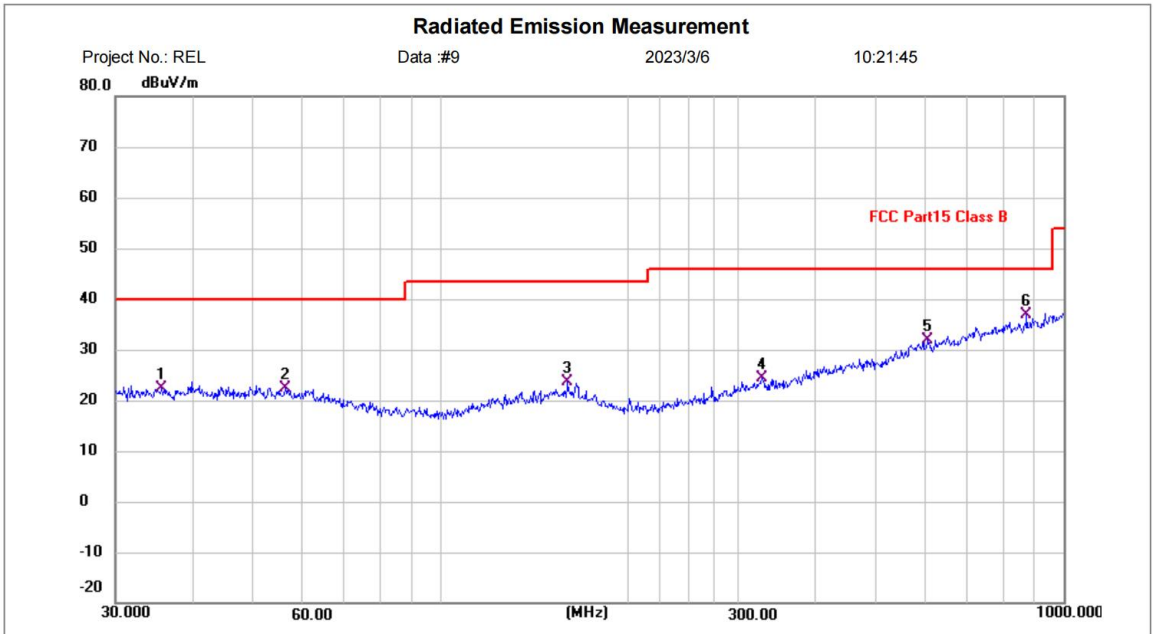
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2116.250	45.12	-3.94	41.18	74.00	-32.82	peak	
2		4960.000	38.79	5.42	44.21	74.00	-29.79	peak	
3		7440.000	38.36	8.48	46.84	74.00	-27.16	peak	
4		9920.000	36.67	11.69	48.36	74.00	-25.64	peak	
5	*	11363.500	38.73	13.62	52.35	74.00	-21.65	peak	
6		12562.000	38.26	13.88	52.14	74.00	-21.86	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Test Result: Pass

Test engineer sample no: RX-1

[TestMode: TX mode (SE) below 1G]; [Polarity: Horizontal]



Site
Limit: FCC Part15 Class B
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX mode
Note: RX-1

Polarization: *Horizontal*
Power:

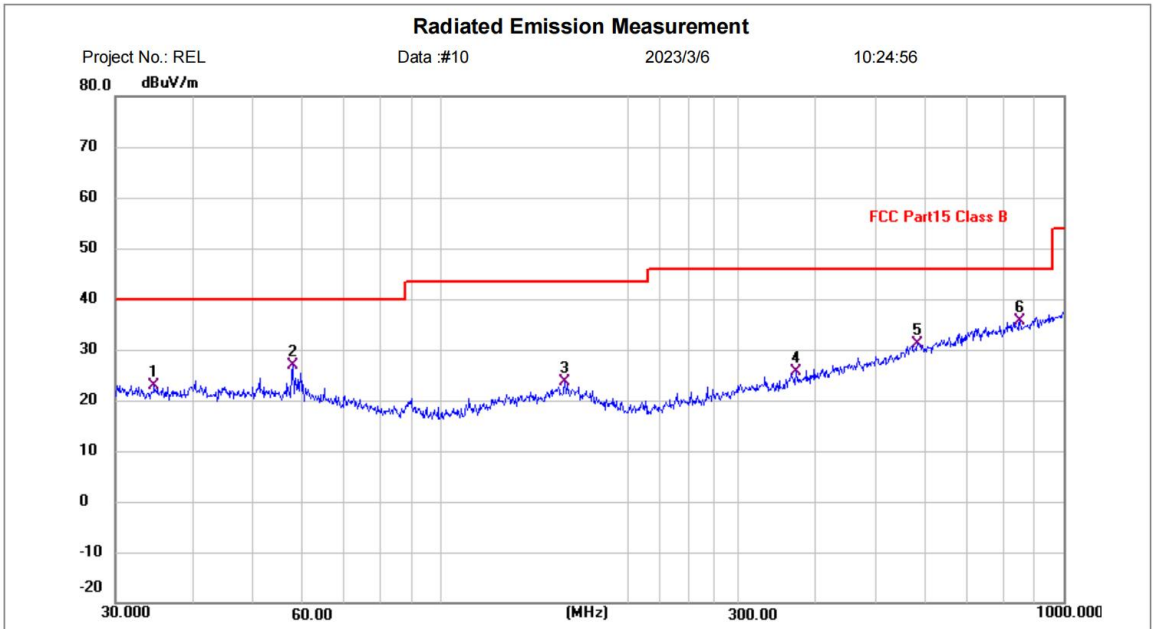
Temperature: (C)
Humidity: %RH

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	35.6239	-0.62	22.88	22.26	40.00	-17.74	QP	P	
2	56.1974	-0.28	22.70	22.42	40.00	-17.58	QP	P	
3	159.7844	0.06	23.47	23.53	43.50	-19.97	QP	P	
4	327.8872	0.05	24.35	24.40	46.00	-21.60	QP	P	
5	605.6592	1.05	30.76	31.81	46.00	-14.19	QP	P	
6 *	872.1832	2.70	34.12	36.82	46.00	-9.18	QP	P	

*:Maximum data x:Over limit !:over margin

Test Result: Pass

[TestMode: TX mode (SE) below 1G]; [Polarity: Vertical]



Site
Limit: FCC Part15 Class B
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX mode
Note: RX-1

Polarization: *Vertical*
Power:

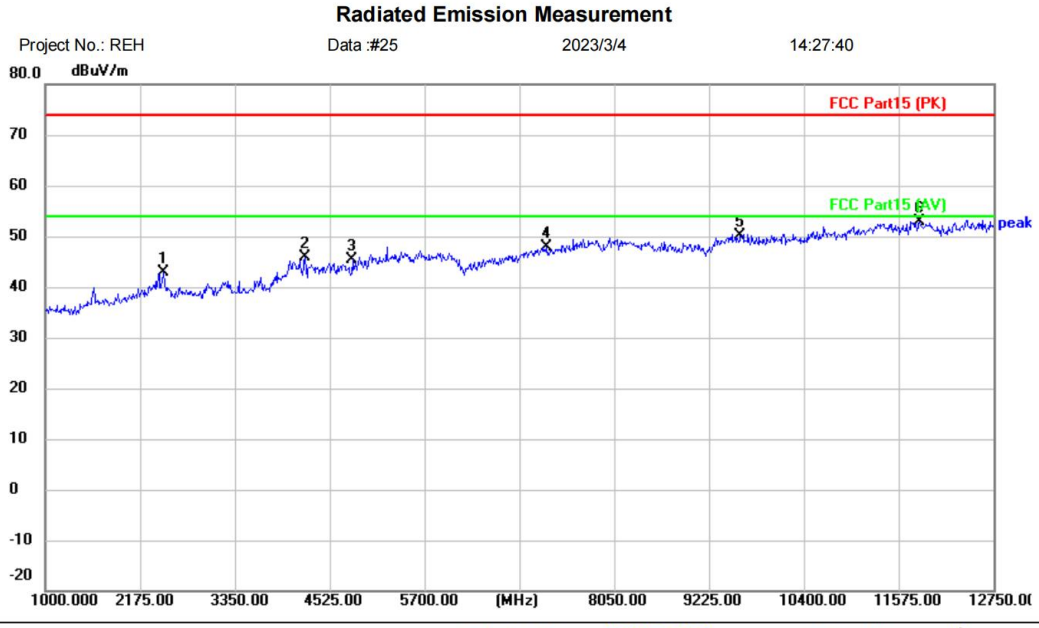
Temperature: (C)
Humidity: %RH

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	34.6385	0.05	22.85	22.90	40.00	-17.10	QP	P	
2	57.7962	4.41	22.47	26.88	40.00	-13.12	QP	P	
3	158.1123	0.57	23.18	23.75	43.50	-19.75	QP	P	
4	372.0045	0.53	25.07	25.60	46.00	-20.40	QP	P	
5	582.7424	0.76	30.45	31.21	46.00	-14.79	QP	P	
6 *	851.0353	1.50	34.02	35.52	46.00	-10.48	QP	P	

*:Maximum data x:Over limit !:over margin

Test Result: Pass

[TestMode: TX low channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-L
Note: RX-1

Polarization: ***Horizontal***
Power:

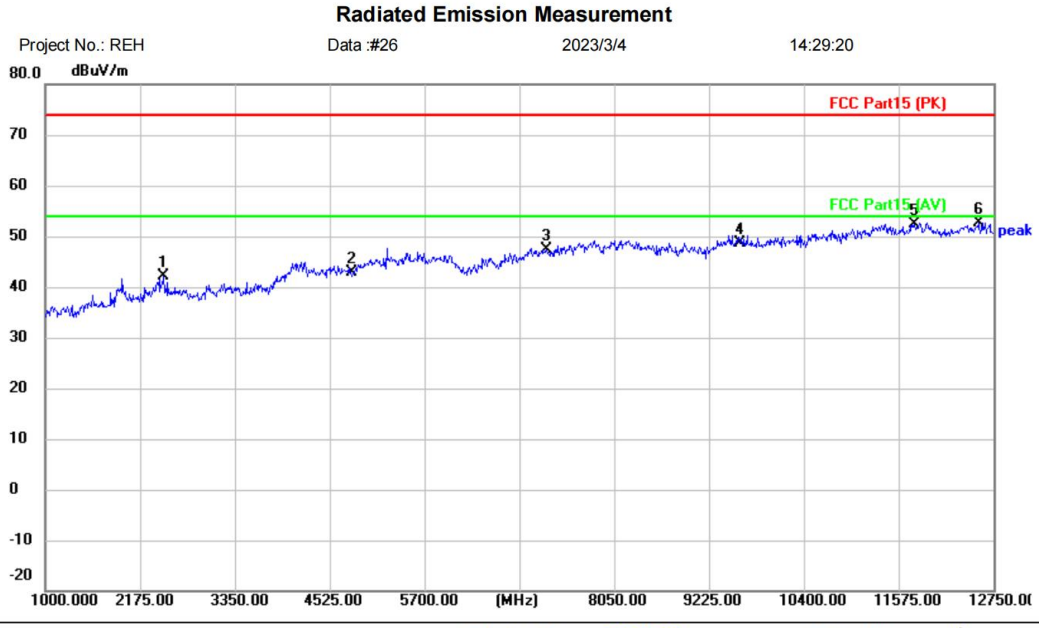
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2468.750	44.68	-1.91	42.77	74.00	-31.23	peak	
2		4219.500	41.06	4.81	45.87	74.00	-28.13	peak	
3		4804.000	41.41	4.05	45.46	74.00	-28.54	peak	
4		7206.000	39.93	7.93	47.86	74.00	-26.14	peak	
5		9608.000	39.21	10.90	50.11	74.00	-23.89	peak	
6	*	11833.500	39.18	13.82	53.00	74.00	-21.00	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Test Result: Pass

[TestMode: TX low channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-L
Note: RX-1

Polarization: *Vertical*
Power:

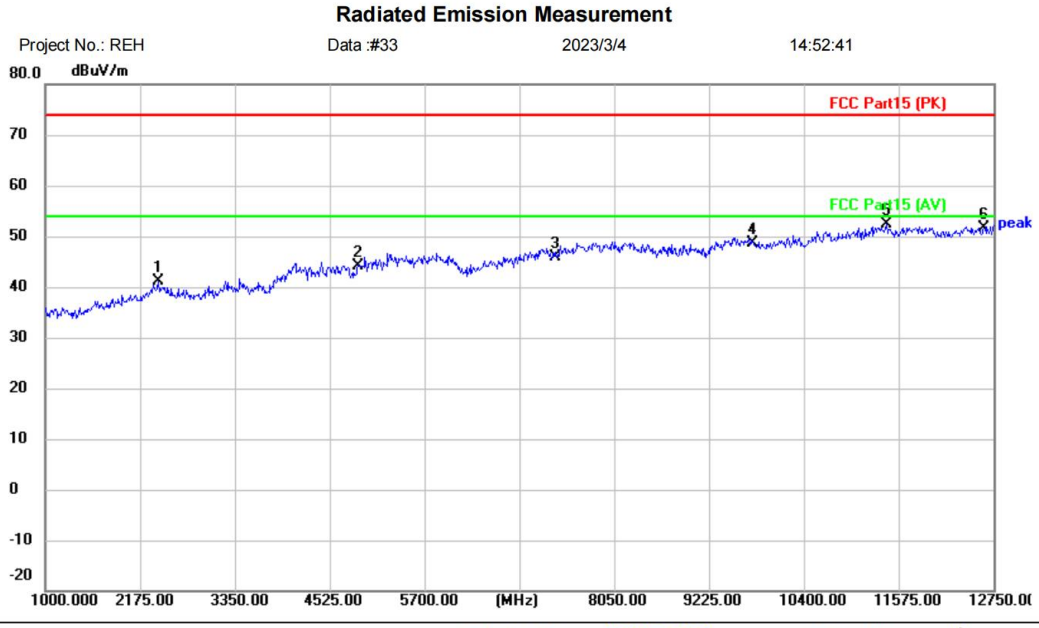
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2468.750	44.11	-1.91	42.20	74.00	-31.80	peak	
2		4804.000	38.89	4.05	42.94	74.00	-31.06	peak	
3		7206.000	39.52	7.93	47.45	74.00	-26.55	peak	
4		9608.000	37.73	10.90	48.63	74.00	-25.37	peak	
5		11774.750	38.60	13.80	52.40	74.00	-21.60	peak	
6	*	12562.000	38.81	13.88	52.69	74.00	-21.31	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Test Result: Pass

[TestMode: TX mid channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-M
Note: RX-1

Polarization: *Horizontal*
Power:

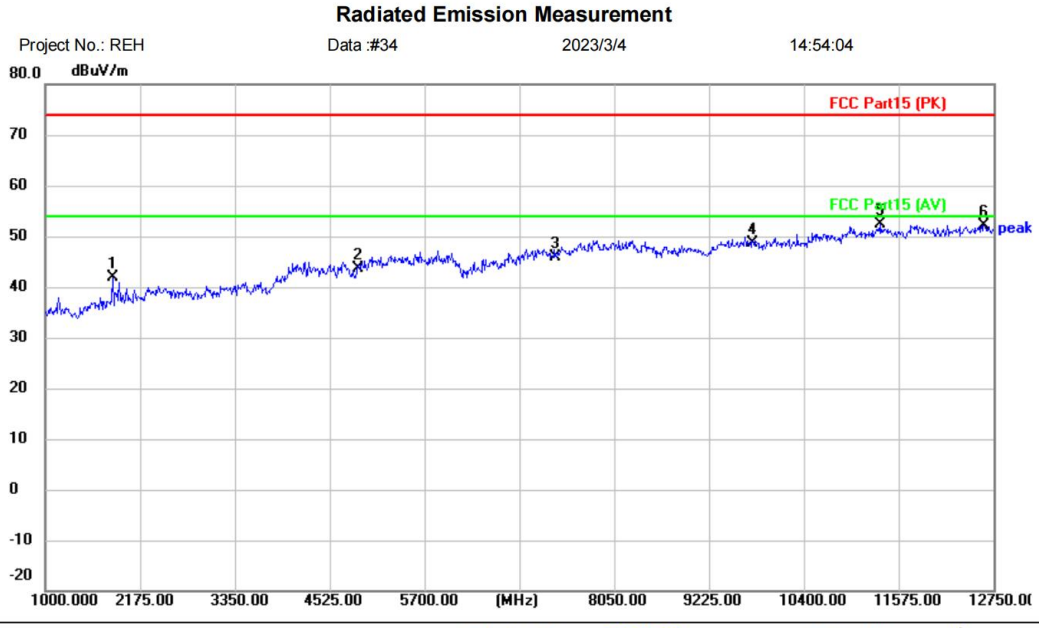
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2398.250	42.26	-1.14	41.12	74.00	-32.88	peak	
2		4884.000	39.65	4.37	44.02	74.00	-29.98	peak	
3		7326.000	37.66	8.21	45.87	74.00	-28.13	peak	
4		9768.000	37.33	11.31	48.64	74.00	-25.36	peak	
5	*	11422.250	38.82	13.64	52.46	74.00	-21.54	peak	
6		12632.500	37.86	13.86	51.72	74.00	-22.28	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Test Result: Pass

[TestMode: TX mid channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-M
Note: RX-1

Polarization: *Vertical*
Power:

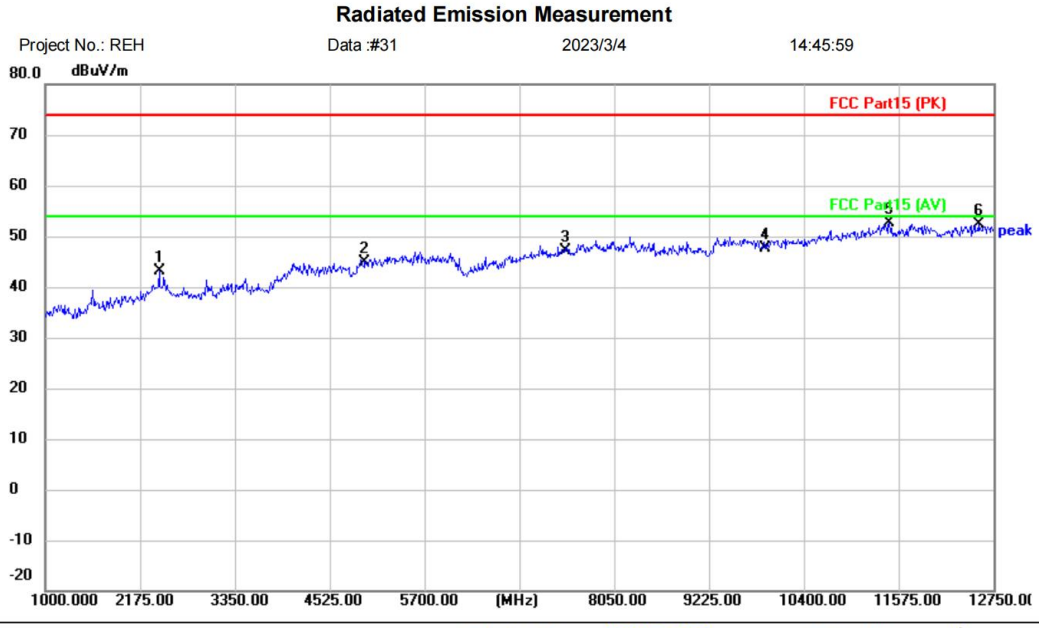
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		1834.250	46.89	-4.98	41.91	74.00	-32.09	peak	
2		4884.000	39.34	4.37	43.71	74.00	-30.29	peak	
3		7326.000	37.75	8.21	45.96	74.00	-28.04	peak	
4		9768.000	37.26	11.31	48.57	74.00	-25.43	peak	
5	*	11351.750	38.67	13.61	52.28	74.00	-21.72	peak	
6		12632.500	38.34	13.86	52.20	74.00	-21.80	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Test Result: Pass

[TestMode: TX high channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-H
Note: RX-1

Polarization: *Horizontal*
Power:

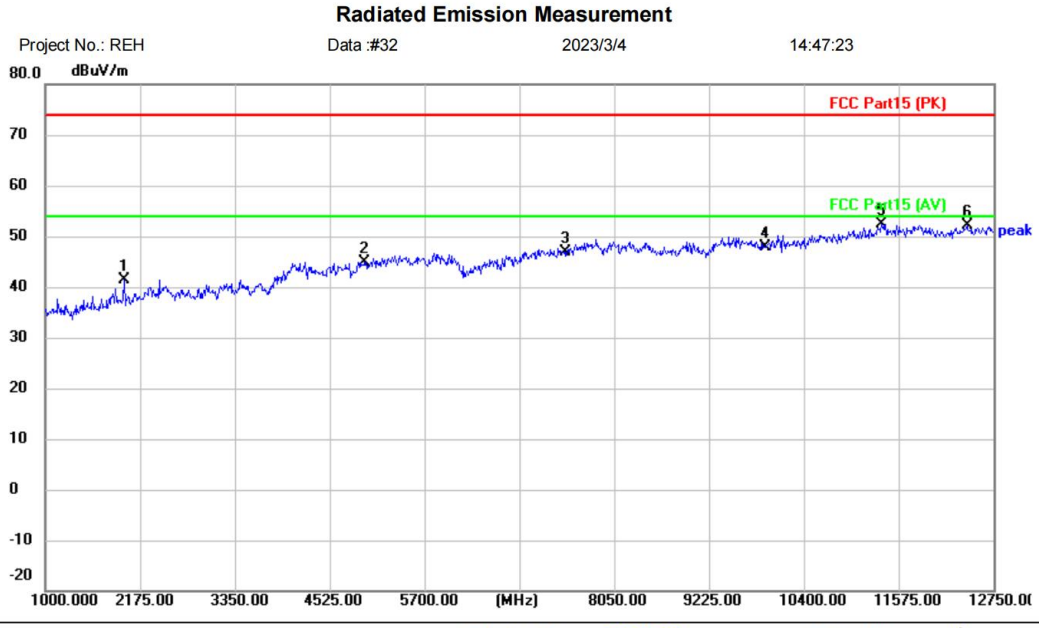
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		2410.000	44.46	-1.26	43.20	74.00	-30.80	peak	
2		4960.000	39.34	5.42	44.76	74.00	-29.24	peak	
3		7440.000	38.64	8.48	47.12	74.00	-26.88	peak	
4		9920.000	35.95	11.69	47.64	74.00	-26.36	peak	
5	*	11457.500	38.99	13.66	52.65	74.00	-21.35	peak	
6		12562.000	38.54	13.88	52.42	74.00	-21.58	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Test Result: Pass

[TestMode: TX high channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX-H
Note: RX-1

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		1975.250	45.99	-4.54	41.45	74.00	-32.55	peak	
2		4960.000	39.42	5.42	44.84	74.00	-29.16	peak	
3		7440.000	38.48	8.48	46.96	74.00	-27.04	peak	
4		9920.000	36.25	11.69	47.94	74.00	-26.06	peak	
5	*	11363.500	38.73	13.62	52.35	74.00	-21.65	peak	
6		12421.000	38.16	13.88	52.04	74.00	-21.96	peak	

*:Maximum data x:Over limit !:over margin (Reference Only

Test Result: Pass

Remark:

1. Final Level =Receiver Read level + Correct factor
2. Correct factor = Antenna Factor + Cable Loss – Preamplifier Factor
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

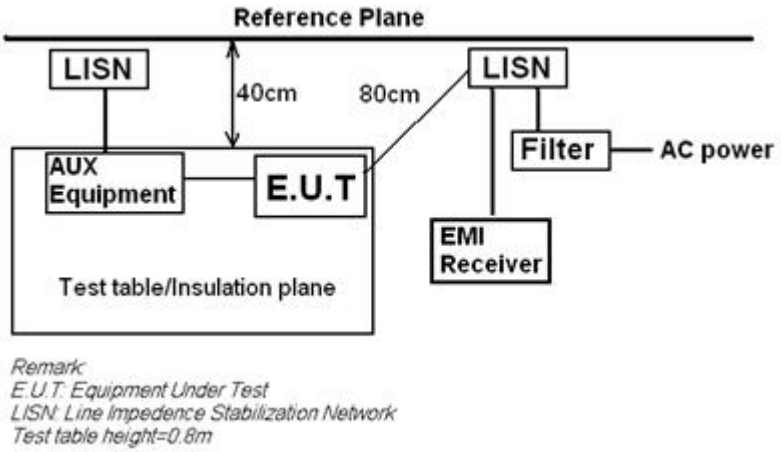
12 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
engineer sample no:	TX-1
Tester	Jozu
Temperature	25℃
Humidity	60%

12.1 LIMITS

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50
*Decreases with the logarithm of the frequency.		

12.2 BLOCK DIAGRAM OF TEST SETUP



Remark
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m

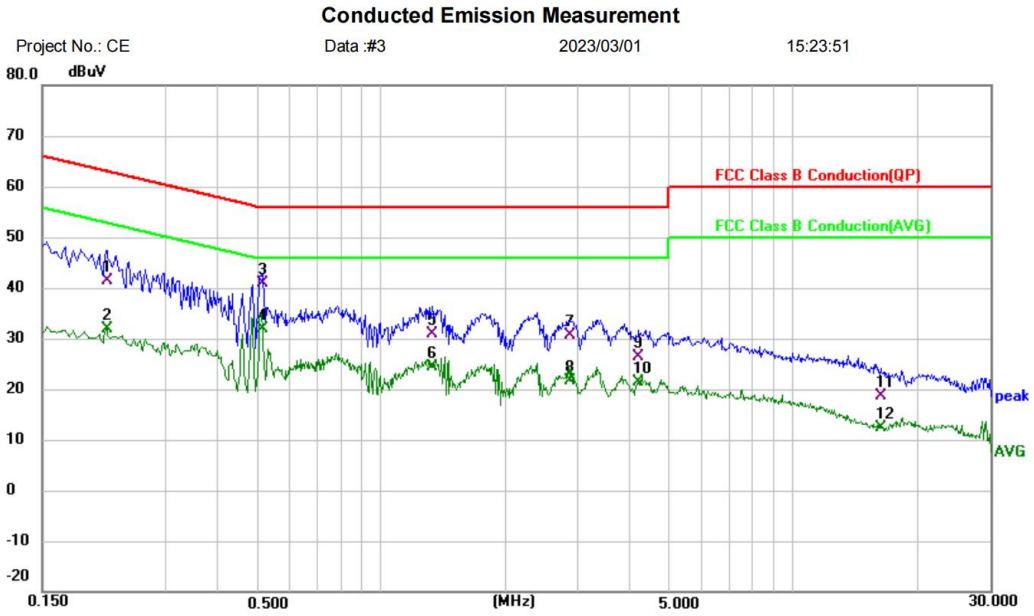
12.3 PROCEDURE

1) The mains terminal disturbance voltage test was conducted in a shielded room.
2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50H + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as

the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.
Remark: LISN=Read Level+ Cable Loss+ LISN Factor

12.4 TEST DATA

[TestMode: TX]; [Line: Line] ;[Power:AC120V/60Hz]



Site
Limit: FCC Class B Conduction(QP)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX mode
Note: TX-1

Phase: *L1*
Power:

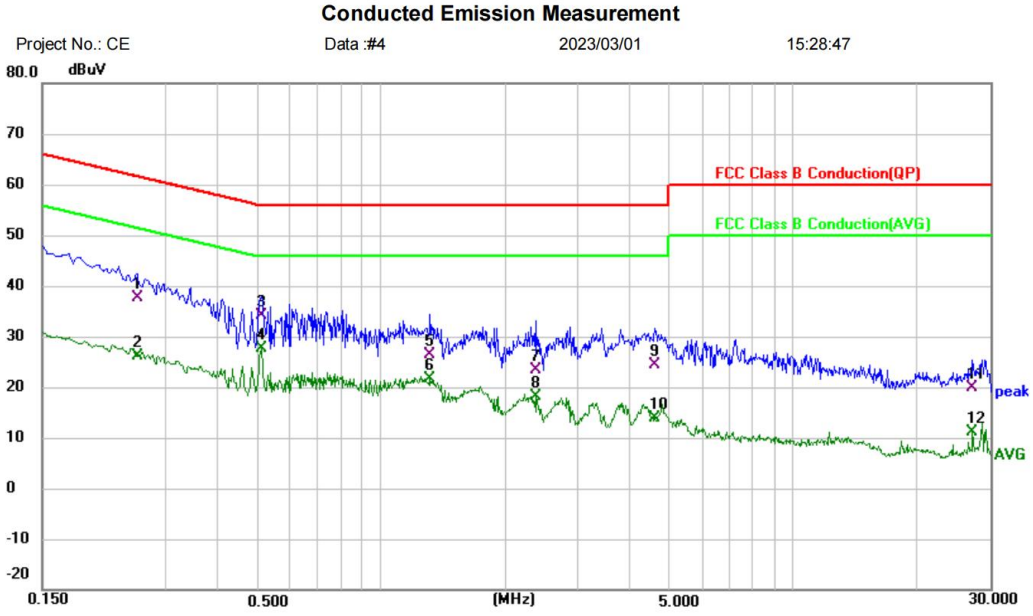
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2140	30.82	10.55	41.37	63.05	-21.68	QP	
2		0.2140	21.27	10.55	31.82	53.05	-21.23	AVG	
3		0.5140	30.74	10.08	40.82	56.00	-15.18	QP	
4	*	0.5140	21.79	10.08	31.87	46.00	-14.13	AVG	
5		1.3260	20.77	10.18	30.95	56.00	-25.05	QP	
6		1.3260	14.16	10.18	24.34	46.00	-21.66	AVG	
7		2.8660	20.29	10.23	30.52	56.00	-25.48	QP	
8		2.8660	11.47	10.23	21.70	46.00	-24.30	AVG	
9		4.2140	16.40	10.08	26.48	56.00	-29.52	QP	
10		4.2140	11.26	10.08	21.34	46.00	-24.66	AVG	
11		16.2300	8.57	9.95	18.52	60.00	-41.48	QP	
12		16.2300	2.36	9.95	12.31	50.00	-37.69	AVG	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Test Result: Pass

[TestMode: TX]; [Line: Nutral] ;[Power:AC120V/60Hz]



Site
Limit: FCC Class B Conduction(QP)
EUT: GEEK ONE
M/N: AMP06
Mode: BLE TX mode
Note: TX-1

Phase: *N*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2540	27.14	10.57	37.71	61.63	-23.92	QP	
2		0.2540	15.50	10.57	26.07	51.63	-25.56	AVG	
3		0.5100	24.14	10.05	34.19	56.00	-21.81	QP	
4	*	0.5100	17.56	10.05	27.61	46.00	-18.39	AVG	
5		1.3140	16.24	10.04	26.28	56.00	-29.72	QP	
6		1.3140	11.48	10.04	21.52	46.00	-24.48	AVG	
7		2.3660	13.28	10.07	23.35	56.00	-32.65	QP	
8		2.3660	7.95	10.07	18.02	46.00	-27.98	AVG	
9		4.6060	14.43	9.85	24.28	56.00	-31.72	QP	
10		4.6060	4.04	9.85	13.89	46.00	-32.11	AVG	
11		27.1620	9.94	9.94	19.88	60.00	-40.12	QP	
12		27.1620	1.13	9.94	11.07	50.00	-38.93	AVG	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Test Result: Pass

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss.

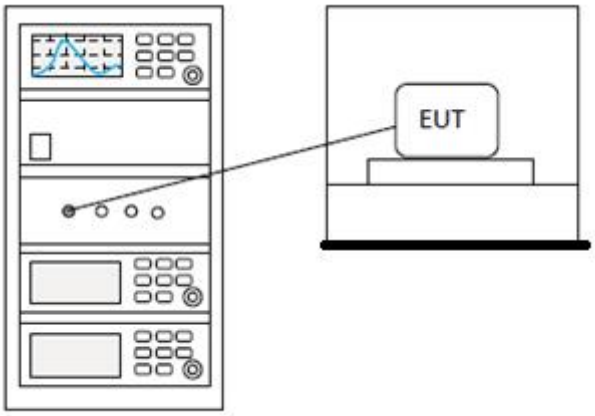
13 CONDUCTED BAND EDGES MEASUREMENT

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.8 & Section 11.13.3.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

13.1 LIMITS

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)).

13.2 BLOCK DIAGRAM OF TEST SETUP



13.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

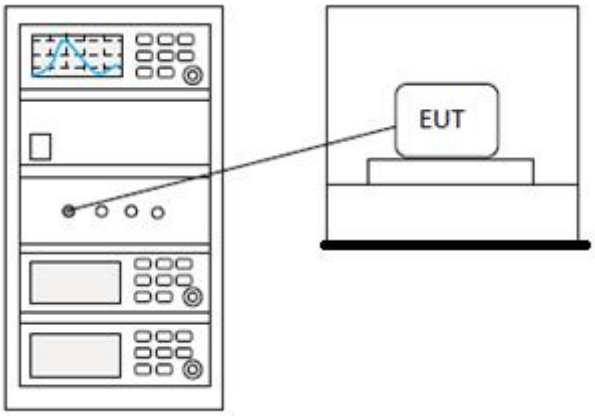
14 CONDUCTED SPURIOUS EMISSIONS

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.6 & Section 11.11
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

14.1 LIMITS

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)).

14.2 BLOCK DIAGRAM OF TEST SETUP



14.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

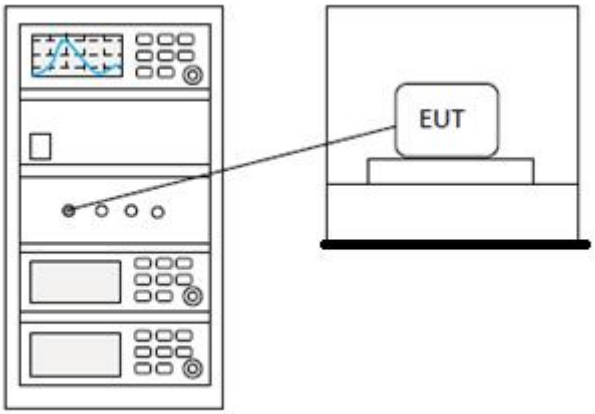
15 POWER SPECTRUM DENSITY

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.10.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

15.1 LIMITS

Limit:	≤8dBm in any 3 kHz band during any time interval of continuous transmission

15.2 BLOCK DIAGRAM OF TEST SETUP



15.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

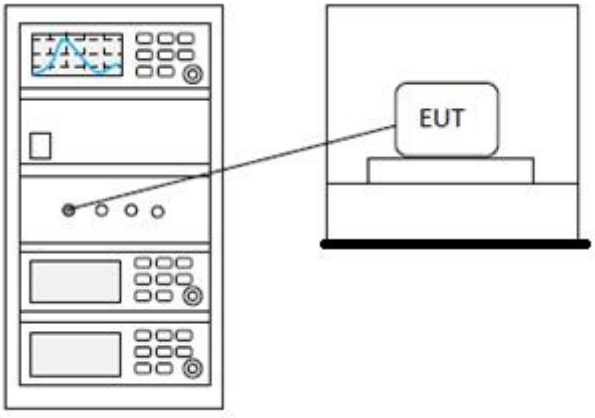
16 CONDUCTED PEAK OUTPUT POWER

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.5
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

16.1 LIMITS

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

16.2 BLOCK DIAGRAM OF TEST SETUP



16.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

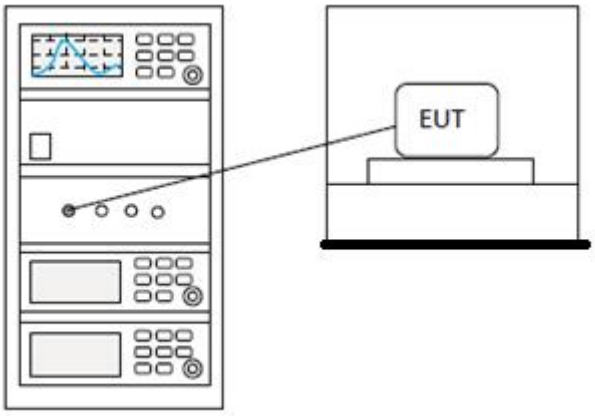
17 MINIMUM 6DB BANDWIDTH

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.8.1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

17.1 LIMITS

Limit:	≥500 kHz

17.2 BLOCK DIAGRAM OF TEST SETUP



17.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

18 ANTENNA REQUIREMENT

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	N/A

18.1 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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:
The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 1.9(TX) dBi, 1.7(RX) dBi.

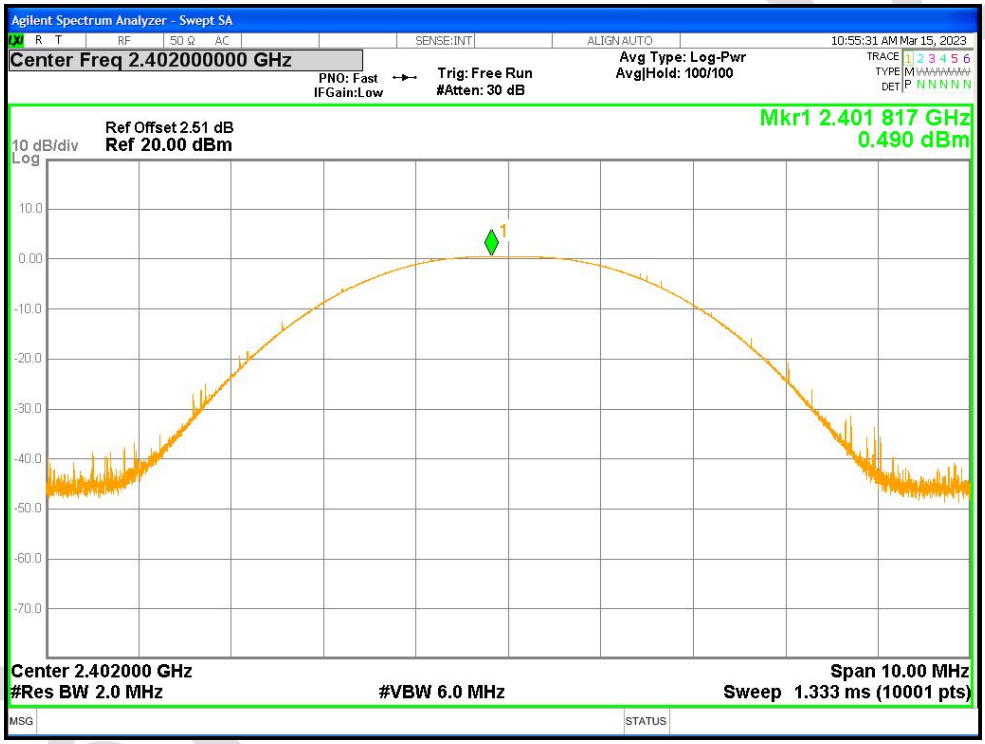
19 APPENDIX

19.1 TEST ENGINEER SAMPLE NO: TX-1

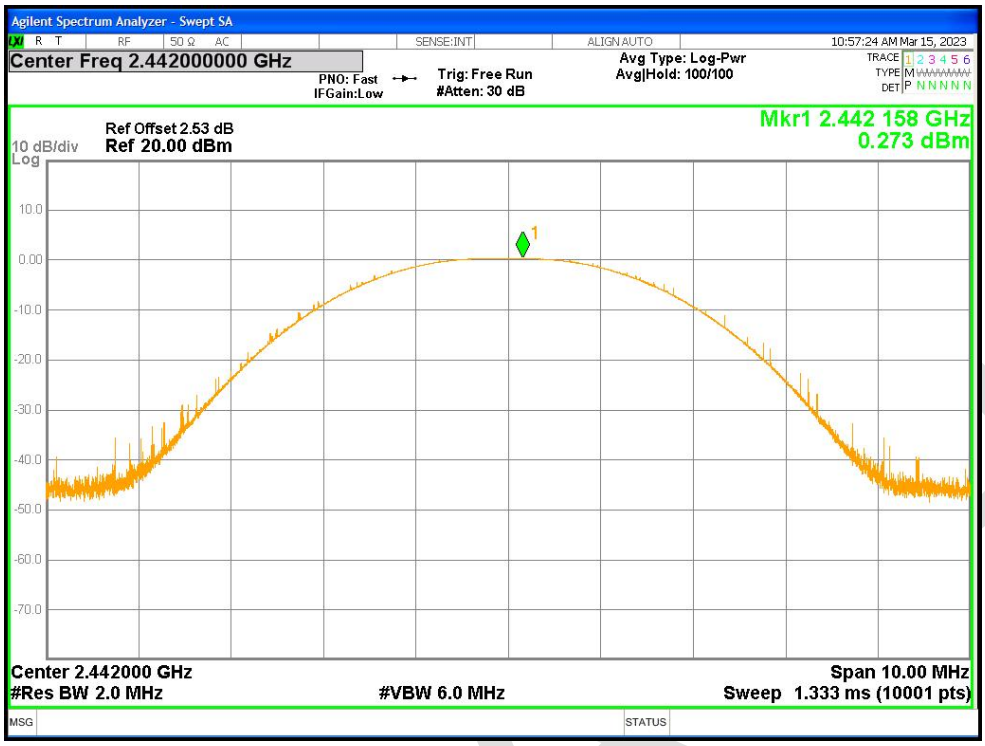
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant1	0.49	30	Pass
NVNT	BLE	2442	Ant1	0.273	30	Pass
NVNT	BLE	2480	Ant1	0.39	30	Pass

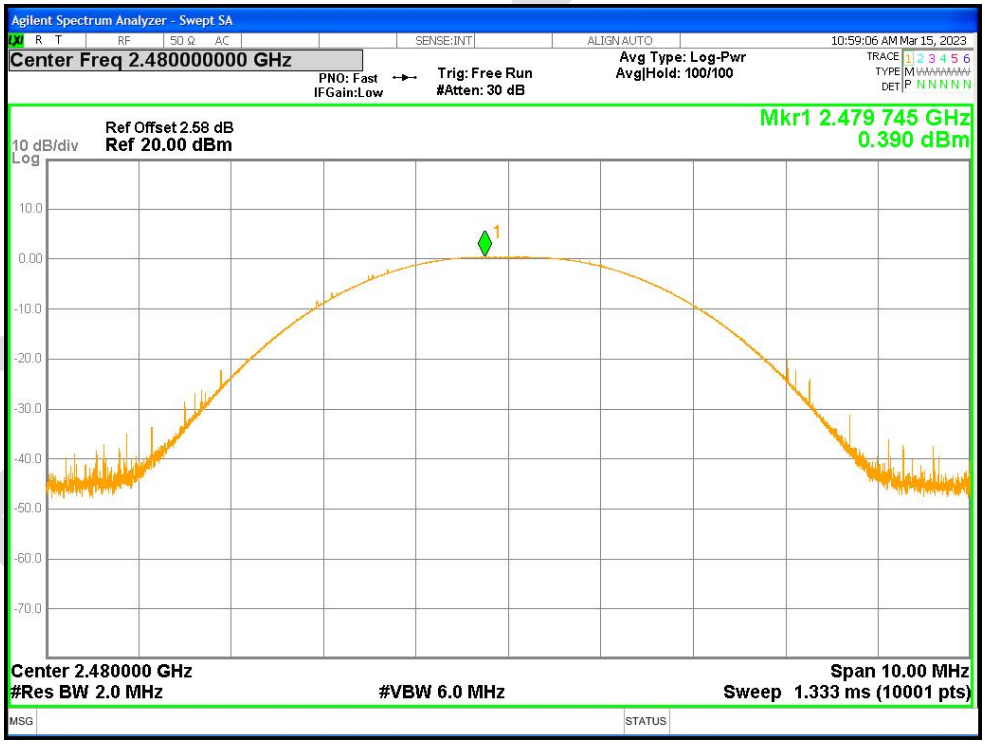
Power NVNT BLE 2402MHz Ant1



Power NVNT BLE 2442MHz Ant1



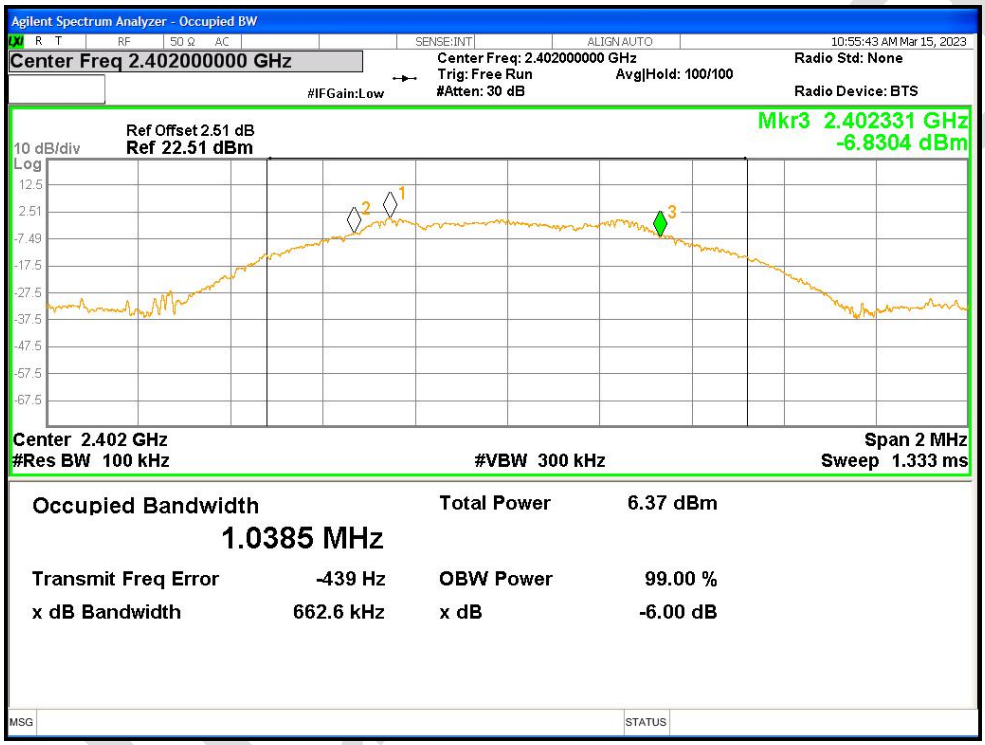
Power NVNT BLE 2480MHz Ant1



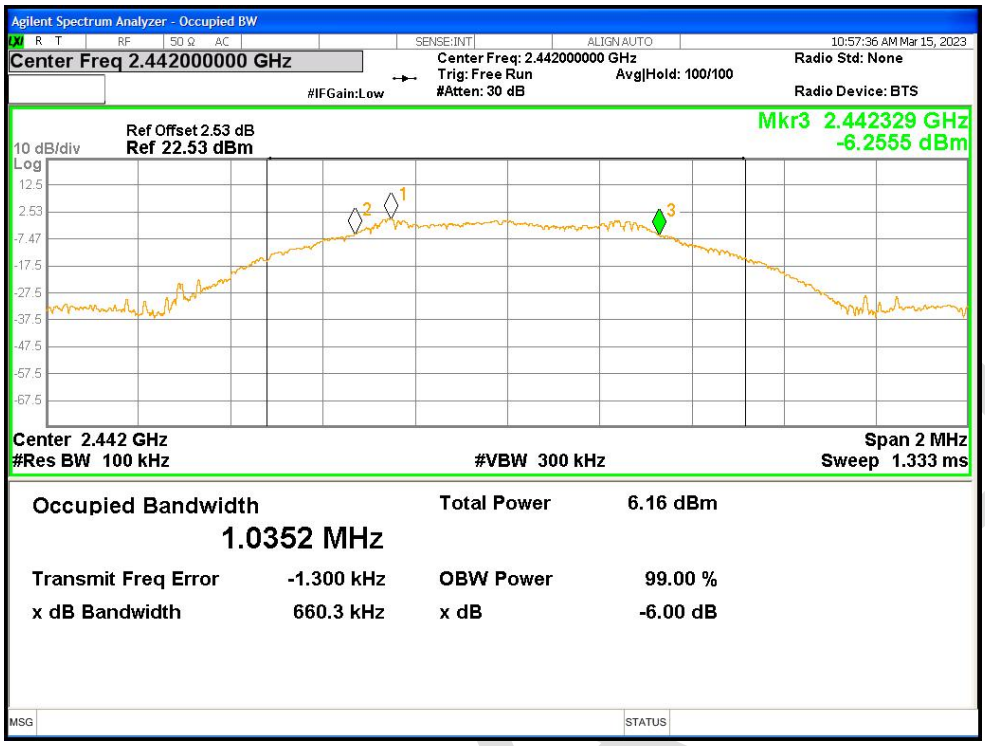
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE	2402	Ant1	0.663	0.5	Pass
NVNT	BLE	2442	Ant1	0.66	0.5	Pass
NVNT	BLE	2480	Ant1	0.658	0.5	Pass

-6dB Bandwidth NVNT BLE 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2442MHz Ant1



-6dB Bandwidth NVNT BLE 2480MHz Ant1