

Longhorn Intelligent Tech Co.,Ltd

RF TEST REPORT

Report Type:

FCC Part 15.225 & ISSED RSS-210 RF report

MODEL:

ANC-8013S-SG80, ANC-8013S-DG40,
ANC-8013S-DG80

REPORT NUMBER:

2507B2346SHA-002

ISSUE DATE:

September 16, 2025

DOCUMENT CONTROL NUMBER:

TTRF15.225_V1 © 2018 Intertek



Applicant: Longhorn Intelligent Tech Co.,Ltd
Longhorn Hi-Tech Estate, Gongyeyuan Road, Dalang Street, Longhua New District, Shenzhen, Guangdong, China

Manufacturer: Longhorn Intelligent Tech Co.,Ltd
Longhorn Hi-Tech Estate, Gongyeyuan Road, Dalang Street, Longhua New District, Shenzhen, Guangdong, China

Factory: Longhorn Intelligent Tech Co.,Ltd
Floor 2-3, Emerging Industrial Park Factory Building, No. 72, Longhai Third Road, Xiqu, Dayawan District, Huizhou, Guangdong, China

FCC ID: 2APP2-ANC13

IC: 27568-ANC13

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

47CFR Part 15 (2024): Radio Frequency Devices (Subpart C)

ANSI C63.10 (2020): American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

RSS-210 Issue 11 (June 2024): Licence-Exempt Radio Apparatus: Category I Equipment

RSS-Gen Issue 5, Amendment 1 (March 2019): General Requirements for Compliance of Radio Apparatus

PREPARED BY:

REVIEWED BY:




Project Engineer
Sky Yang

Reviewer
Eric Li

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

TEST REPORT

Content

REVISION HISTORY.....	4
MEASUREMENT RESULT SUMMARY	5
1 GENERAL INFORMATION	6
1.1 DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	6
1.2 TECHNICAL SPECIFICATION.....	6
1.3 DESCRIPTION OF TEST FACILITY.....	7
2 TEST SPECIFICATIONS.....	8
2.1 STANDARDS OR SPECIFICATION	8
2.2 MODE OF OPERATION DURING THE TEST	8
2.3 TEST SOFTWARE LIST	8
2.4 TEST PERIPHERALS LIST.....	8
2.5 TEST ENVIRONMENT CONDITION:.....	8
2.6 INSTRUMENT LIST	9
2.7 MEASUREMENT UNCERTAINTY.....	9
3 FUNDAMENTAL EMISSION	10
3.1 LIMIT	10
3.2 MEASUREMENT PROCEDURE	10
3.3 TEST CONFIGURATION	11
3.4 TEST RESULTS OF FUNDAMENTAL EMISSIONS	12
4 SPURIOUS EMISSION	13
4.1 LIMIT	13
4.2 MEASUREMENT PROCEDURE	13
4.3 TEST RESULTS OF RADIATED EMISSIONS	15
5 FREQUENCY STABILITY (TEMPERATURE VARIATION)	19
5.1 TEST LIMIT	19
5.2 TEST CONFIGURATION	19
5.3 TEST PROCEDURE AND TEST SETUP	20
5.4 TEST PROTOCOL.....	20
6 FREQUENCY STABILITY (VOLTAGE VARIATION)	21
6.1 TEST LIMIT	21
6.2 TEST CONFIGURATION	21
6.3 TEST PROCEDURE AND TEST SETUP	21
6.4 TEST PROTOCOL.....	22
7 CONDUCTED EMISSIONS	23
7.1 LIMIT	23
7.2 TEST CONFIGURATION	23
7.3 MEASUREMENT PROCEDURE	24
7.4 TEST RESULTS OF CONDUCTED EMISSIONS.....	25
8 20DB BANDWIDTH	27
8.1 LIMIT.....	27
8.2 TEST CONFIGURATION	27
8.3 TEST PROCEDURE AND TEST SET UP	28
8.4 TEST PROTOCOL	29
9 ANTENNA REQUIREMENT.....	30

Revision History

Report No.	Version	Description	Issued Date
2507B2346SHA-002	Rev. 01	Initial issue of report	September 16, 2025

Measurement result summary

TEST ITEM	FCC REFERENCE	IC REFERENCE	RESULT
Fundamental emission	15.225(a) (b) (c)	RSS 210 B.6	Pass
Spurious emission	15.225(d)	RSS 210 B.6	Pass
Frequency stability	15.225(e)	RSS 210 B.6	Pass
Conducted emissions	15.207	RSS-Gen Issue 5 Clause 8.8	Pass
99% and 20dB Bandwidth	15.215(c)	RSS-Gen Issue 5 Clause 6.6	Pass
Antenna requirement	15.203	RSS-GEN 6.8	Pass

Notes: 1: NA =Not Applicable

2: Determination of the test conclusion is based on IEC Guide 115 in consideration of measurement uncertainty.

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	EV Charger
Type/Model:	ANC-8013S-SG80, ANC-8013S-DG40, ANC-8013S-DG80
Description of EUT:	The EUT is electric vehicle AC charger. EUT contains certified wireless modules. The LTE module FCC ID is XMR202008EC25AFXD, the LTE module IC is 10224A-022EC25AFXD. The WIFI module FCC ID is 2AFOS-WT32C3-SX and XMR2023FCU760KN, the WIFI module IC is 27481-WT32C3S1S2 and 10224A-023FCU760KN. ANC-8013S-SG80 only has one output, ANC-8013S-DG40 and ANC-8013S-DG80 have two outputs. All models are electrically identical except the rated output power. We choose ANC-8013S-DG80 to test as representative and list the results in this report.
Rating:	ANC-8013S-SG80: 208/240VAC, 50/60Hz, 80A max ANC-8013S-DG40: 208/240VAC, 50/60Hz, 40A max for each EV connector ANC-8013S-DG80: 208/240VAC, 50/60Hz, 80A max for single connector or dual connector
Category of EUT:	Class B
EUT type:	<input checked="" type="checkbox"/> Table top <input type="checkbox"/> Floor standing
Software Version:	-
Hardware Version:	-
Serial numbers:	A250728-44
Sample received date:	July 28, 2025
Date of test:	August 4, 2025 ~ August 19, 2025

1.2 Technical Specification

Frequency Range:	13.56 MHz ~ 13.56 MHz
Modulation:	ASK
Antenna:	PCB antenna

TEST REPORT

1.3 Description of Test Facility

Name:	Intertek Testing Services (Shanghai FTZ) Co., Ltd.
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L21189
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Member No.: 3598 (Registration No.: R-14243, G-10845, C-14723, T-12252)
	A2LA Accreditation Lab Certificate Number: 3309.02

2 TEST SPECIFICATIONS

2.1 Standards or specification

47CFR Part 15 (2024)

ANSI C63.10 (2020)

RSS-210 Issue 11 (June 2024)

RSS-Gen Issue 5, Amendment 1 (March 2019)

2.2 Mode of operation during the test

While testing, the internal modulation and continuously transmission was applied.

2.3 Test software list

Test Items	Software	Manufacturer	Version
Conducted emission	SKET Auto EMC Test Software	Keleto	V3.0
Radiated emission	SKET Auto EMC Test Software	Keleto	V3.0

2.4 Test peripherals list

Item No	Description	Band and Model	S/No

2.5 Test environment condition:

Test items	Temperature	Humidity
Radiated emission	26°C	53% RH
Power line conducted emission	27°C	53% RH

TEST REPORT

2.6 Instrument list

Conducted Emission					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
<input checked="" type="checkbox"/>	Test Receiver	R&S	ESR7	EC 6194	2026-02-17
<input checked="" type="checkbox"/>	A.M.N.	R&S	ESH2-Z5	EC 3119	2026-07-22
<input checked="" type="checkbox"/>	Shielded room	Zhongyu	-	EC 2838	2027-01-08
Radiated Emission					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
<input checked="" type="checkbox"/>	Test Receiver	R&S	ESIB 26	EC 3045	2026-08-17
<input checked="" type="checkbox"/>	TRILOG broadband Antenna	Schwarzbeck	VULB9168	EC 6402	2026-04-06
<input checked="" type="checkbox"/>	Active loop antenna	Schwarzbeck	FMZB1519	EC 5345	2026-08-09
<input checked="" type="checkbox"/>	Semi-anechoic chamber	Albatross project	-	EC 3048	2026-07-11
RF test					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9030B	EC 6078	2026-03-25
<input checked="" type="checkbox"/>	Climate chamber	GWS	MT3065	EC 6021	2026-03-07
Additional instrument					
Used	Equipment	Manufacturer	Type	Internal no.	Due date
<input checked="" type="checkbox"/>	Thermo-Hygrograph	Testo	175h1	EC 6640	2026-08-28
<input checked="" type="checkbox"/>	Thermo-Hygrograph	Testo	175h1	EC6642	2026-08-28

2.7 Measurement uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2)
Conducted emission at mains ports	9kHz ~ 150kHz	3.52 dB
	150kHz ~ 30MHz	3.19 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	3.06 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.02 dB
	6GHz ~ 18GHz	5.28 dB

3 Fundamental Emission

Test result: Pass

3.1 Limit

Frequencies (MHz)	Limit at 30m (dBuV/m)	Limit at 3m (dBuV/m)	Limit at 10m (dBuV/m)
13.110 – 13.410	40.50	80.50	59.58
13.410 – 13.553	50.50	90.50	69.55
13.553 – 13.567	84.00	124.00	103.07
13.567 – 13.710	50.50	90.50	69.55
13.710 – 14.010	40.50	80.50	59.58

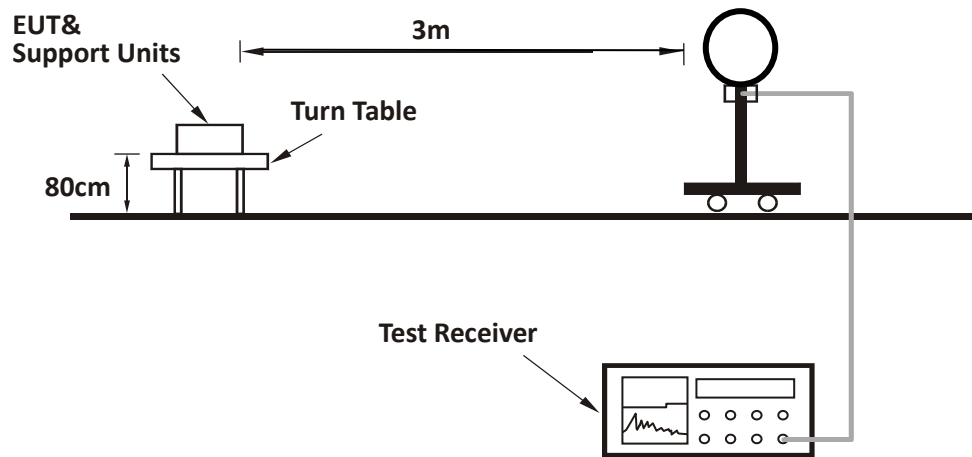
3.2 Measurement Procedure

- The EUT was placed on a 0.8m plank above the ground at a 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- Both X and Y axes of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to PK Detect Function and Specified Bandwidth with Maximum Hold Mode.

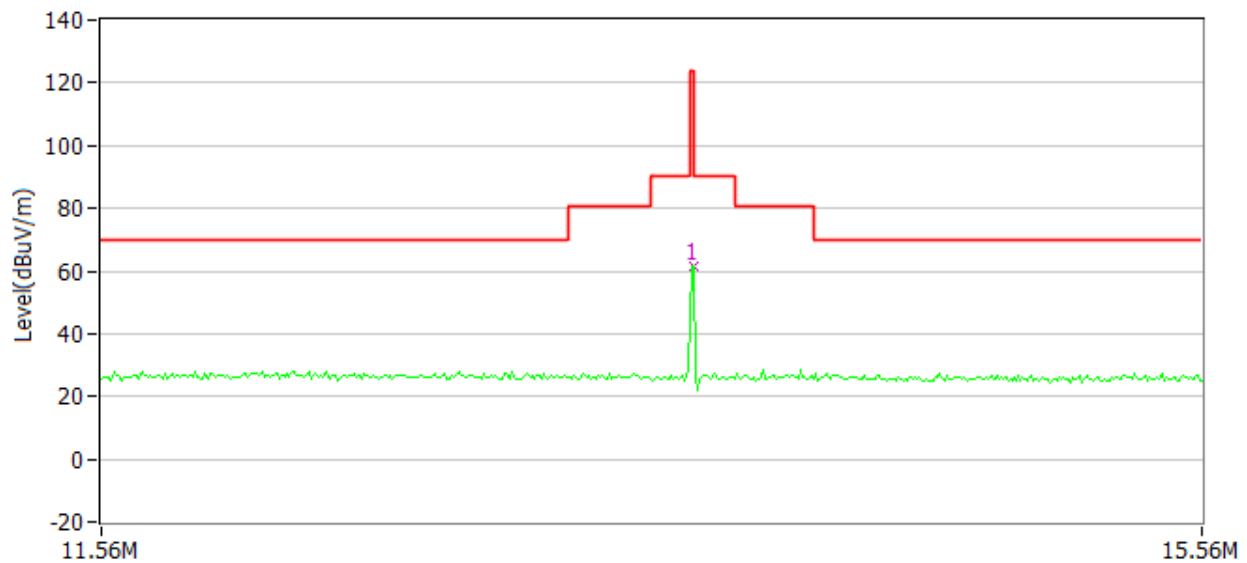
NOTE:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

3.3 Test Configuration



3.4 Test Results of Fundamental Emissions



Antenna Polarization	Frequency (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Delta	Detector
X	13.56	61.7	124.0	62.3	PK
Y	13.56	59.2	124.0	64.8	PK

Remark: 1. Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz), the value was added to Original Receiver Reading by the software automatically.
 2. Corrected Reading = Original Receiver Reading + Correct Factor
 3. Delta = Limit - Level

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB,
 Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10.00dBuV,
 Limit = 40.00dBuV/m.
 Then Correct Factor = 30.20 + 2.00 – 32.00 = 0.20dB/m;
 Level = 10dBuV + 0.20dB/m = 10.20dBuV/m;
 Delta = 40.00dBuV/m - 10.20dBuV/m = 29.80dB.

4 Spurious Emission

Test result: Pass

4.1 Limit

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

4.2 Measurement Procedure

For Radiated emission below 30MHz:

- The EUT was placed on a 0.8m plank above the ground at a 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- Both X and Y axes of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTE:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz:

- The EUT was placed on a 0.8m plank above the ground at a 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna 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.

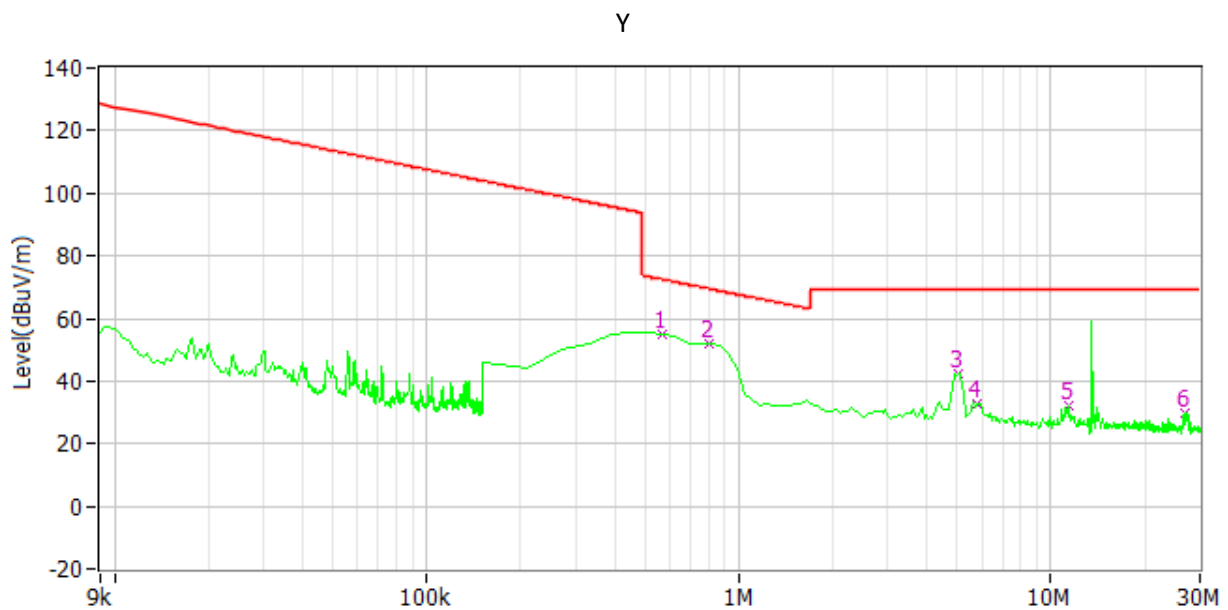
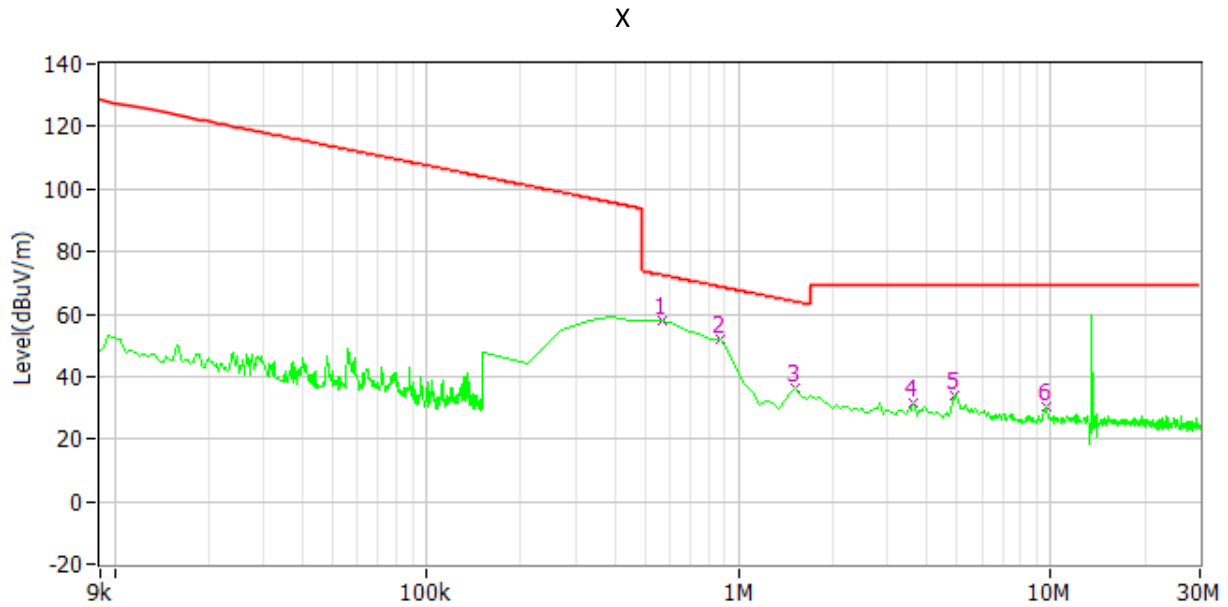
TEST REPORT

- d) For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e) The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f) The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- 3. All modes of operation were evaluated and the worst-case emissions were reported

4.3 Test Results of Radiated Emissions



TEST REPORT

Test data below 30MHz:

Frequency	Limit (dBuV/m)	Level (dBuV/m)	Delta (dB)	Detector	Polarity
568.737kHz	72.5	58.1	14.4	PK	X
867.836kHz	68.8	51.8	17.0	PK	X
1.526MHz	64.0	36.2	27.8	PK	X
3.620MHz	69.5	31.3	38.2	PK	X
4.876MHz	69.5	34.0	35.5	PK	X
9.602MHz	69.5	30.3	39.2	PK	X
568.737kHz	72.5	55.0	17.5	PK	Y
808.016kHz	69.5	51.7	17.8	PK	Y
5.055MHz	69.5	42.5	27.0	PK	Y
5.773MHz	69.5	33.0	36.5	PK	Y
11.336MHz	69.5	32.3	37.2	PK	Y
26.710MHz	69.5	30.0	39.5	PK	Y

Remark: 1. Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz), the value was added to Original Receiver Reading by the software automatically.

2. Level = Original Receiver Reading + Correct Factor

3. Delta = Limit - Level

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB,

Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10.00dBuV,

Limit = 40.00dBuV/m.

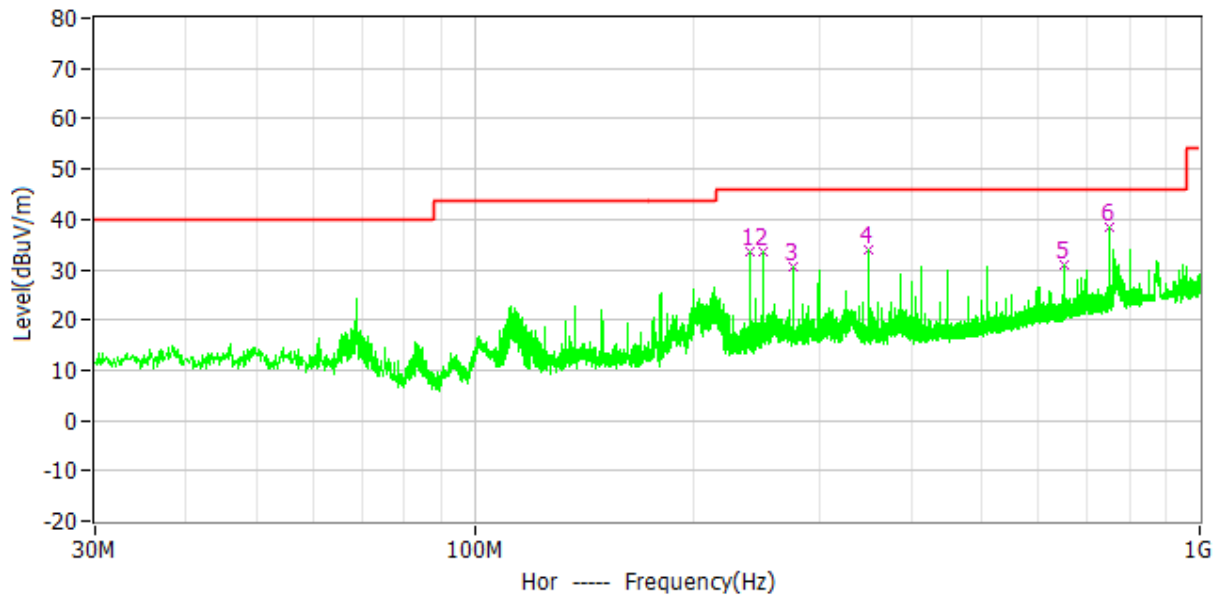
Then Correct Factor = $30.20 + 2.00 - 32.00 = 0.20\text{dB/m}$;

Level = $10\text{dBuV} + 0.20\text{dB/m} = 10.20\text{dBuV/m}$;

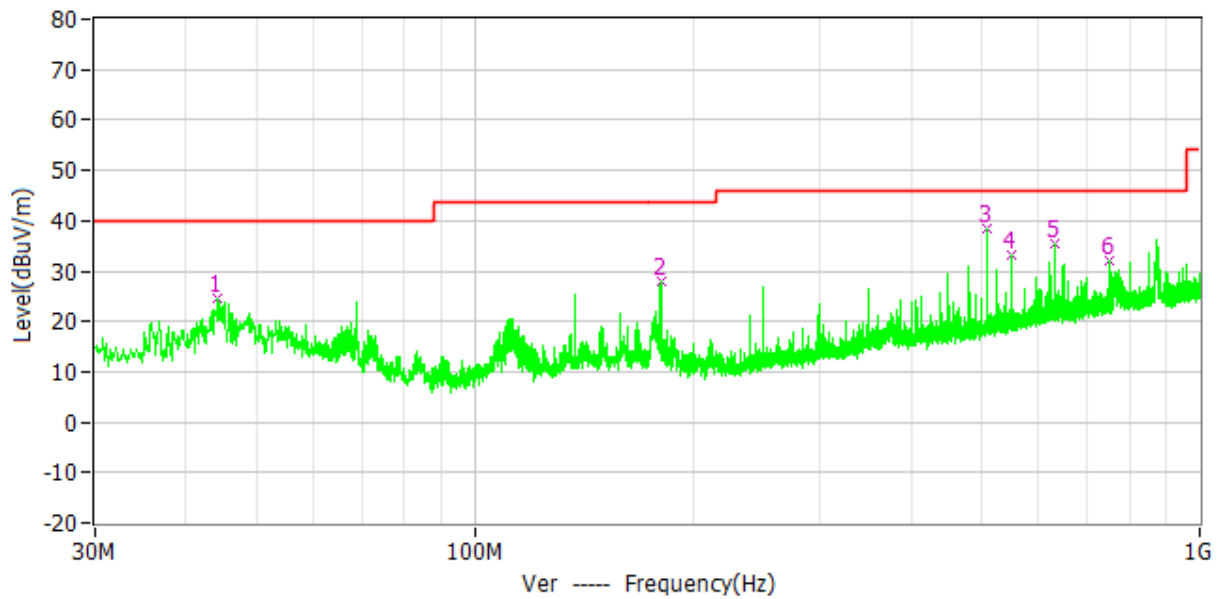
Delta = $40.00\text{dBuV/m} - 10.20\text{dBuV/m} = 29.80\text{dB}$.

TEST REPORT

H



V



TEST REPORT

Test data from 30MHz to 1000MHz:

Antenna Polarization	Frequency	Limit (dBuV/m)	Level (dBuV/m)	Delta (dB)	Detector
H	240.005MHz	46.0	33.5	12.5	QP
H	249.996MHz	46.0	33.7	12.3	QP
H	275.216MHz	46.0	30.4	15.6	QP
H	350.003MHz	46.0	34.0	12.0	QP
H	650.024MHz	46.0	30.9	15.1	QP
H	750.031MHz	46.0	38.4	7.6	QP
V	44.356MHz	40.0	24.6	15.4	QP
V	180.641MHz	43.5	28.1	15.4	QP
V	509.956MHz	46.0	38.3	7.7	QP
V	550.502MHz	46.0	33.3	12.7	QP
V	632.176MHz	46.0	35.6	10.4	QP
V	750.128MHz	46.0	32.0	14.0	QP

Remark: 1. Correct Factor = Antenna Factor + Cable Loss (+ Amplifier, for higher than 1GHz), the value was added to Original Receiver Reading by the software automatically.

2. Level = Original Receiver Reading + Correct Factor

3. Delta = Limit - Level

Example: Assuming Antenna Factor = 30.20dB/m, Cable Loss = 2.00dB,

Gain of Preamplifier = 32.00dB, Original Receiver Reading = 10.00dBuV,

Limit = 40.00dBuV/m.

Then Correct Factor = $30.20 + 2.00 - 32.00 = 0.20\text{dB/m}$;

Level = $10\text{dBuV} + 0.20\text{dB/m} = 10.20\text{dBuV/m}$;

Delta = $40.00\text{dBuV/m} - 10.20\text{dBuV/m} = 29.80\text{dB}$.

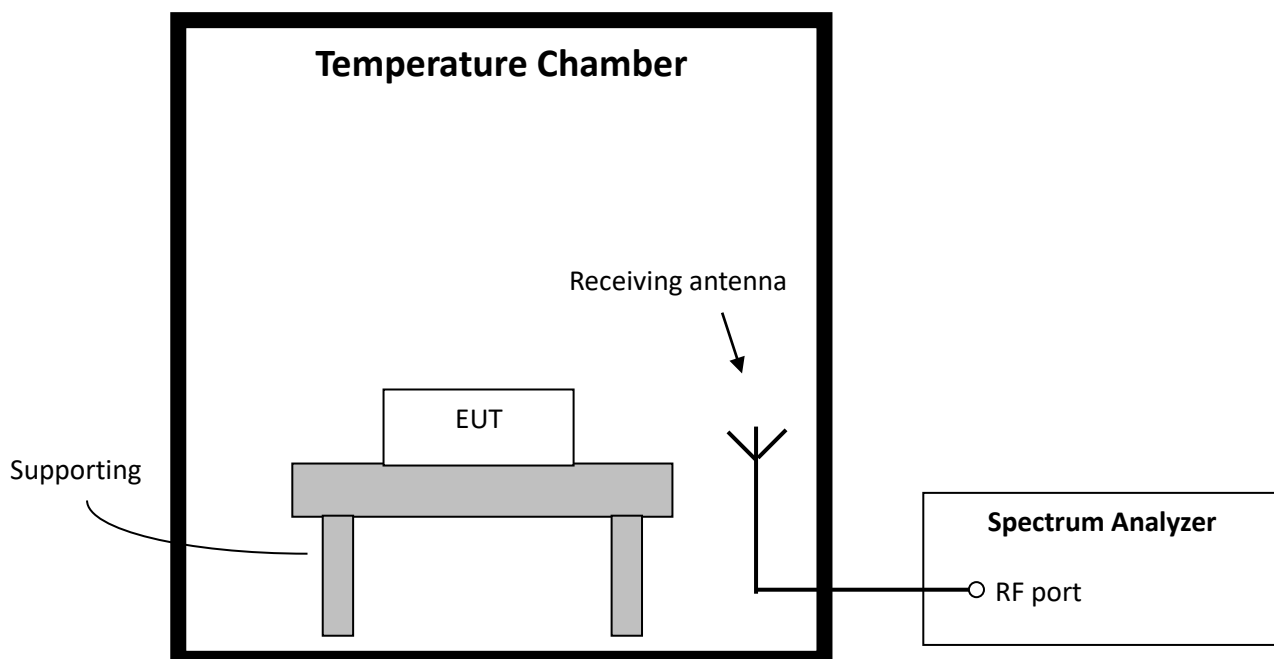
5 Frequency Stability (Temperature Variation)

Test result: PASS

5.1 Test limit

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ of the operating frequency over a temperature variation of -20 degrees to $+50$ degrees C at normal supply voltage.

5.2 Test Configuration



TEST REPORT

5.3 Test procedure and test setup

Test Procedure as per ANSI 63.10 clause 6.8.1.

5.4 Test protocol

Voltage (V)	Temp (°C)	Freq measured (MHz)	Freq nominal (MHz)	Tolerance (%)	Limit (%)
240	-20	13.5604	13.56	0.003	0.01
	-10	13.5597		-0.002	
	0	13.5596		-0.003	
	10	13.5602		0.001	
	20	13.5598		-0.001	
	30	13.5601		0.0007	
	40	13.5603		0.002	
	50	13.5602		0.001	

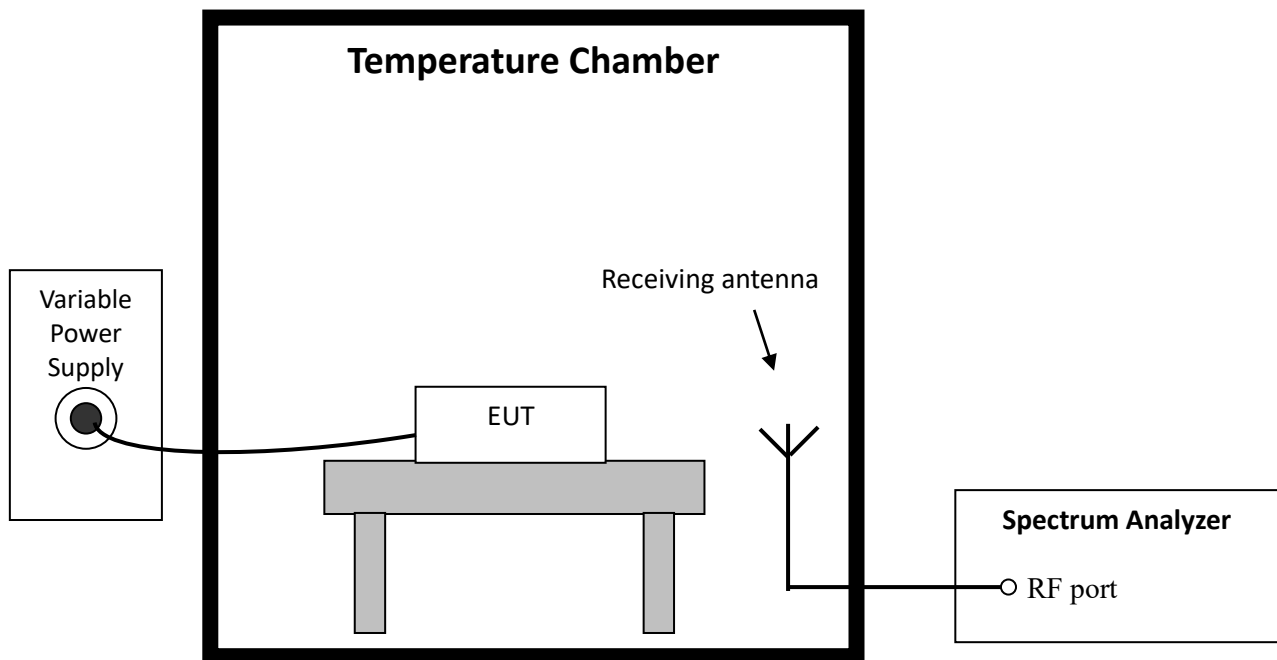
6 Frequency Stability (Voltage Variation)

Test result: PASS

6.1 Test limit

The frequency tolerance of the carrier signal shall be maintained within $\pm 0.01\%$ for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

6.2 Test Configuration



6.3 Test procedure and test setup

Test Procedure as per ANSI 63.10 clause 6.8.2.

6.4 Test protocol

Temp (°C)	Voltage (V)	Freq Measured (MHz)	Freq nominal (MHz)	Tolerance (%)	Limit (%)
20	176	13.5598	13.56	-0.001	±0.01
	208	13.5603		0.002	
	240	13.5599		-0.0007	
	276	13.5597		-0.002	

TEST REPORT

7 Conducted emissions

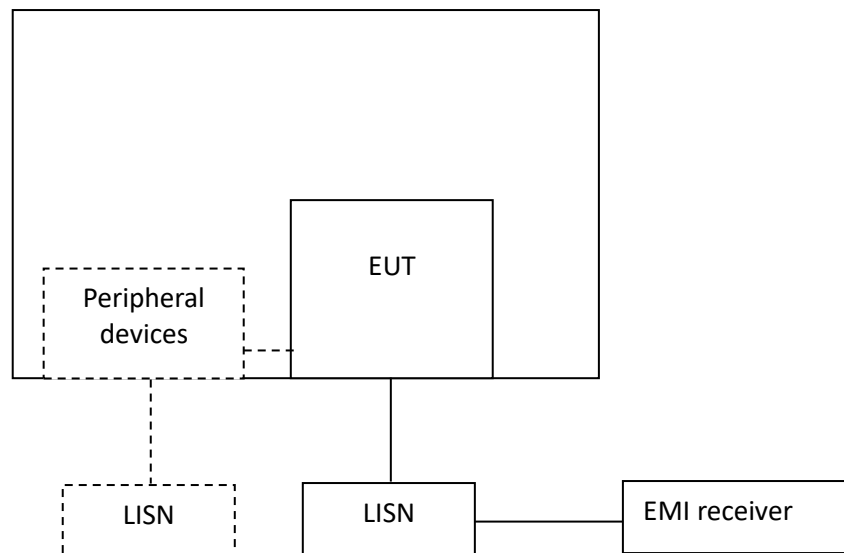
Test result: Pass

7.1 Limit

Frequency range (MHz)	Limits dB(μV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 ~ 56 *	56 ~ 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

Note: 1. * Means the limit decreasing linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz
 2. If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement using the receiver with an average detector need not be carried out.

7.2 Test Configuration



TEST REPORT**7.3 Measurement Procedure**

Measured levels of ac power-line conducted emission shall be the emission voltages from the voltage probe, where permitted, or across the 50 Ω LISN port (to which the EUT is connected), where permitted, terminated into a 50 Ω measuring instrument. All emission voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord by the use of mating plugs and receptacles on the LISN, if used. Equipment shall be tested with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended by the manufacturer. For those measurements using a LISN, the 50 Ω measuring port is terminated by a measuring instrument having 50 Ω input impedance. All other ports are terminated in 50 Ω loads.

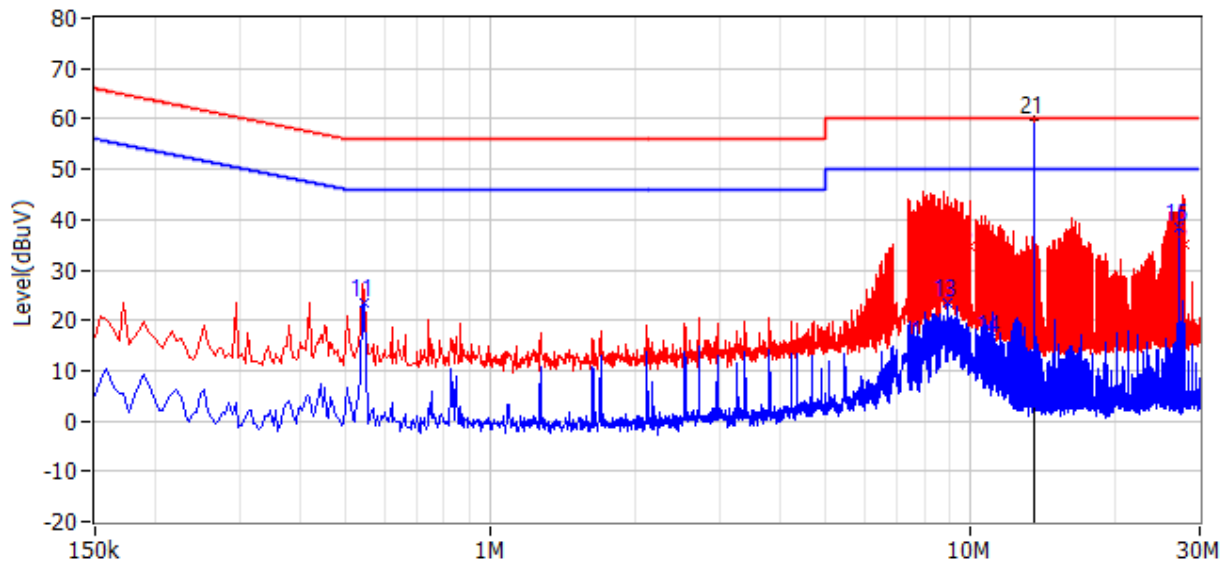
Tabletop devices shall be placed on a platform of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The vertical conducting plane or wall of an RF-shielded (screened) room shall be located 40 cm to the rear of the EUT. Floor-standing devices shall be placed either directly on the reference ground-plane or on insulating material as described in ANSI C63.4. All other surfaces of tabletop or floor-standing EUTs shall be at least 80 cm from any other grounded conducting surface, including the case or cases of one or more LISNs.

The bandwidth of the test receiver is set at 9 kHz.

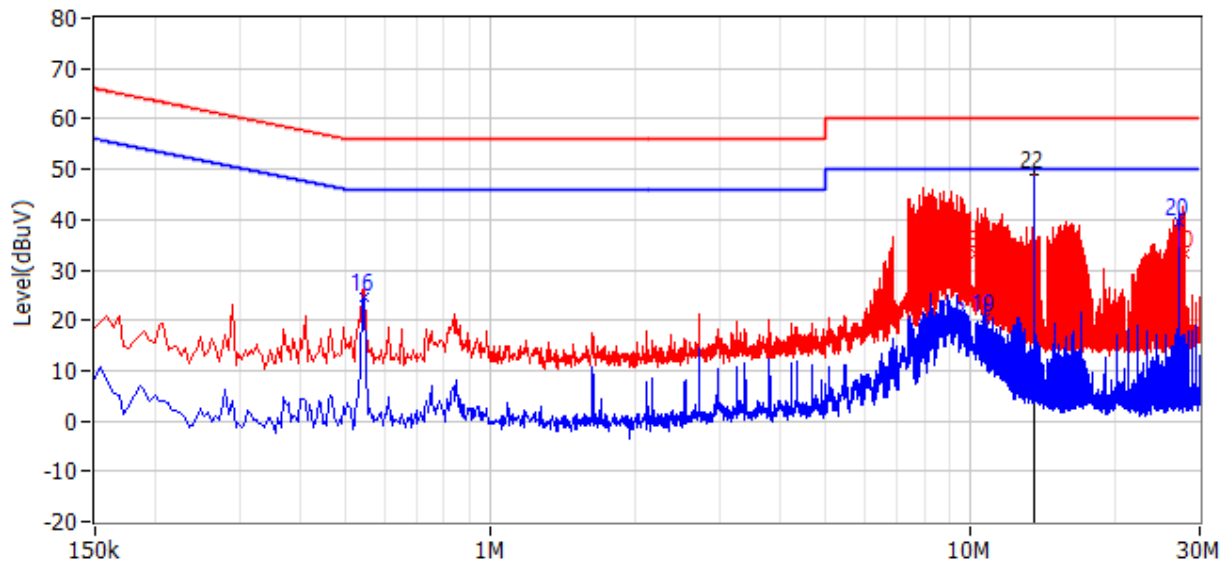
7.4 Test Results of Conducted Emissions

Test Voltage: 240VAC/60Hz

L1 Line



L2 Line



No.	Frequency	Limit dBuV	Level dBuV	Delta dB	Detector	Phase
1	7.994MHz	60.00	36.43	23.57	QP	L1
2	8.777MHz	60.00	35.77	24.23	QP	L1
3	9.951MHz	60.00	34.81	25.19	QP	L1
4	16.026MHz	60.00	30.84	29.16	QP	L1
5	27.812MHz	60.00	35.12	24.88	QP	L1
6	7.994MHz	60.00	36.86	23.14	QP	L2
7	9.159MHz	60.00	36.92	23.08	QP	L2
8	10.284MHz	60.00	33.14	26.86	QP	L2
9	11.598MHz	60.00	30.92	29.08	QP	L2
10	27.830MHz	60.00	33.20	26.80	QP	L2
11	546.000kHz	46.00	23.36	22.64	CAV	L1
12	8.007MHz	50.00	15.19	34.81	CAV	L1
13	8.975MHz	50.00	23.56	26.44	CAV	L1
14	11.027MHz	50.00	16.16	33.84	CAV	L1
15	27.123MHz	50.00	38.44	11.56	CAV	L1
16	546.000kHz	46.00	24.71	21.29	CAV	L2
17	8.228MHz	50.00	15.95	34.05	CAV	L2
18	9.384MHz	50.00	19.02	30.98	CAV	L2
19	10.721MHz	50.00	20.60	29.40	CAV	L2
20	27.119MHz	50.00	39.41	10.59	CAV	L2
21*	13.560MHz	-	-	-	-	L1
22*	13.560MHz	-	-	-	-	L2

Remark: 1. Factor = LISN Factor + Cable Loss, the value was added to Original Receiver Reading by the software automatically.

2. Level = Original Receiver Reading + Factor

3. Delta = Limit – Level

4. the emissions of 13.56MHz are the product's RF signal.

Example: Assuming LISN Factor = 10.00dB, Cable Loss = 2.00dB,
Original Receiver Reading = 10.00dBuV, Limit = 66.00dBuV.

Then Factor = 10.00 + 2.00 = 12.00dB;

Level = 10dBuV + 12.00dB = 22.00dBuV;

Delta = 66.00dBuV - 22.00dBuV = 44.00dB.

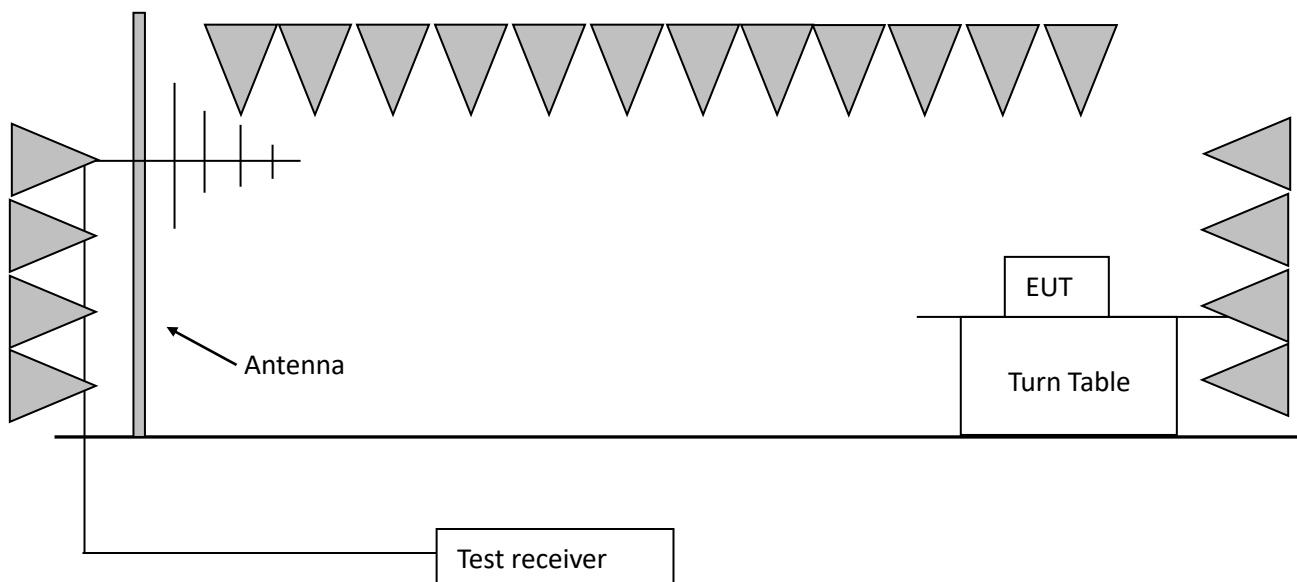
8 20dB Bandwidth

Test result: Pass

8.1 Limit

The 20dB bandwidth should be fallen in the allocated operating frequency range.
No limit for 99% bandwidth.

8.2 Test configuration



8.3 Test procedure and test set up

The measurement was applied in a 3m semi-anechoic chamber.

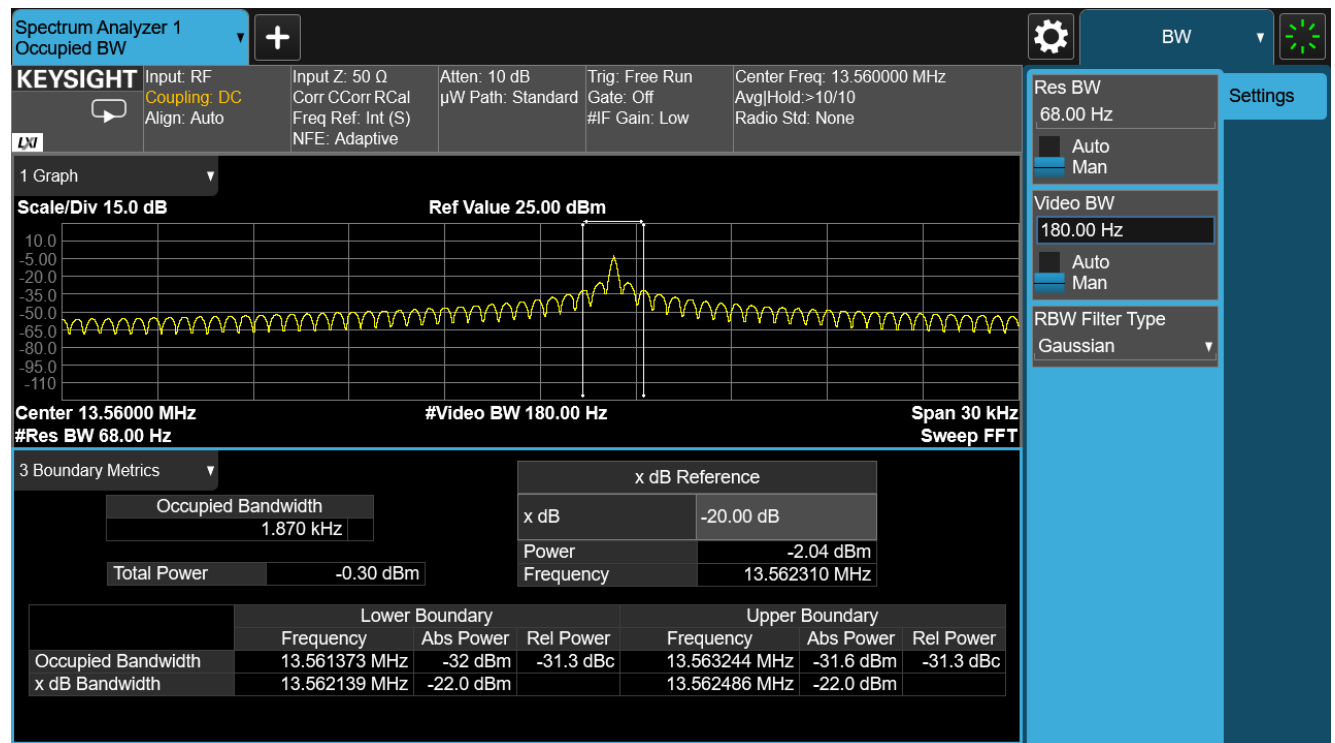
The center of the loop antenna shall be 1 m above the horizontal metal ground plane.

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set RBW = 1 % to 5 % of the OBW
3. Set VBW $\geq 3 \cdot$ RBW
4. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
5. Use the 99 % power bandwidth function of the instrument (if available).
6. the 20dB bandwidth is also measured with the same setting.

8.4 Test protocol

	Lower point (MHz)	Higher point (MHz)	Bandwidth (kHz)	Allocated bandwidth (MHz)
20dB Bandwidth	13.562139	13.562486	0.347	13.553 ~ 13.567
Occupied bandwidth	13.561373	13.563244	1.871	13.553 ~ 13.567



9 Antenna requirement

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 shall be considered sufficient to comply with the provisions of this section.

Result:

EUT uses permanently attached antenna to the intentional radiator, so it can comply with the provisions of this section.

***** END *****