

GRANT OF EQUIPMENT  
AUTHORIZATION

Certification

Issued Under the Authority of the  
Federal Communications Commission

By:

LGAI Technological Center S.A. (APPLUS)  
Ronda de la Font del Carme, s/n <BR>P.O.  
Box 08193,  
Barcelona,  
Spain

Date of Grant: 02/05/2024

Application Dated: 02/05/2024

Shenzhen Intelligent Voice Technology Co., Ltd  
5th Floor, Building 7, Rundongsheng Industrial  
Park, No.467 of 107 National Rd,Longteng Community  
Xixiang street, Bao'an Dist, Shenzhen,  
China

Attention: chunxiaio liu , financial affairs

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is  
VALID ONLY for the equipment identified hereon for use under the Commission's  
Rules and Regulations listed below.

FCC IDENTIFIER: 2A7HI-S7

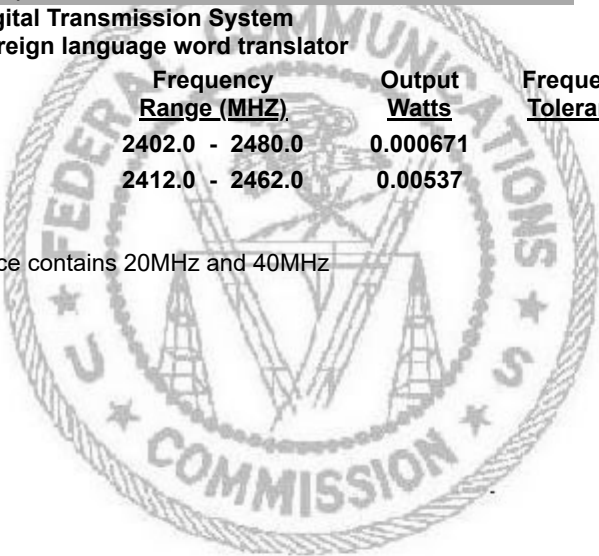
Name of Grantee: Shenzhen Intelligent Voice Technology  
Co., Ltd

Equipment Class: Digital Transmission System

Notes: Foreign language word translator

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
	15C	2402.0 - 2480.0	0.000671		
	15C	2412.0 - 2462.0	0.00537		

Output power listed is conducted power. The device contains 20MHz and 40MHz  
bandwidth.



# FCC TEST REPORT

## FCC ID: 2A7HI-S7

**Product** : Foreign language word translator

**Model Name** : S7, S1, S1PRO, S2, S2PRO, S3, S3PRO, S4, S4PRO, S5, S5PRO, S6, S6PRO, S7PRO, S8, S8PRO, S9, S9PRO, S10, S10PRO, S11, S11PRO, S12, S12PRO, S13, S13PRO, S14, S14PRO, S15, S15PRO, S16, S16PRO, S17, S17PRO, S18, S18PRO, S19, S19PRO, S20, S20PRO, T1, T1PRO, T2, T2PRO, T3, T3PRO, T4, T4PRO, T5, T5PRO, T6, T6PRO, T7, T7PRO, T8, T8PRO, T8+, T9, T9+, T9PRO, T10, T10PRO, T11, T11PRO, T12, T12PRO, T13, T13PRO, T14, T14PRO, T15, T15PRO, T16, T16PRO, T17, T17PRO, T18, T18PRO, T19, T19PRO, T20, T20PRO, T21, T21PRO, T22, T22PRO, T23, T23PRO, T24, T24PRO, T25, T25PRO, T26, T26PRO, T27, T27PRO, T28, T28PRO, T29, T29PRO, T30, T30PRO, NTL3000, NTL3000LA

**Brand** : N/A

**Report No.** : NCT24003236E1-2

Prepared for

**Shenzhen Intelligent Voice Technology Co., Ltd**  
5th Floor, Building 7, Rundongsheng Industrial Park, No.467 of 107 National Rd,  
Longteng Community, Xixiang street, Bao'an Dist, Shenzhen.China.

Prepared by

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## 1 TEST RESULT CERTIFICATION

Applicant : Shenzhen Intelligent Voice Technology Co., Ltd  
5th Floor, Building 7, Rundongsheng Industrial Park, No.467 of 107  
Address : National Rd, Longteng Community, Xixiang street, Bao'an Dist,  
Shenzhen.China.  
Manufacturer : Shenzhen MSAI Technology Co., Ltd.  
Address : 5th Floor, Building 4, Rundongsheng Industrial Park, Longteng  
Community, Xixiang street, Bao'an Dist, Shenzhen, China  
Product name : Foreign language word translator  
Model name : For details, see page 7 of the report  
Standards : FCC CFR47 Part 15 Section 15.247  
Test procedure : ANSI C63.10:2013  
Date of test : Jan. 20, 2024-Jan. 29, 2024  
Date of Issue : Jan. 30, 2024

This device described above has been tested by NCT, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of NCT, this document may be altered or revised by NCT, personal only, and shall be noted in the revision of the document.

Test Engineer:

Keven Wu / Engineer

Technical Manager:

Henry Wang / Manager



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## 2 Test Summary

Test Items	Test Requirement	Result
Conduct Emission	FCC part 15.207	PASS
Radiated Spurious Emissions	FCC part 15.205/15.209	PASS
Conducted Spurious Emission	FCC part 15.205/15.209	PASS
Band edge	FCC part 15.247(d)	PASS
6dB&99% Bandwidth	FCC part 15.247 (a)(2)	PASS
Maximum Peak Output Power	FCC part 15.247 (b)(3)	PASS
Power Spectral Density	FCC part 15.247 (e)	PASS
Antenna Requirement	FCC part 15.203/15.247 (c)	PASS

Remark:

"N/A" denotes test is not applicable in this Test Report.

### 3 General Information

#### 3.1 General Description of E.U.T.

Product Name	:	Foreign language word translator
Model Name	:	S7
Sample ID	:	24003236-001#
Sample(s) Status:	:	Engineer sample
Series Model	:	S1, S1PRO, S2, S2PRO, S3, S3PRO, S4, S4PRO, S5, S5PRO, S6, S6PRO, S7PRO, S8, S8PRO, S9, S9PRO, S10, S10PRO, S11, S11PRO, S12, S12PRO, S13, S13PRO, S14, S14PRO, S15, S15PRO, S16, S16PRO, S17, S17PRO, S18, S18PRO, S19, S19PRO, S20, S20PRO, T1, T1PRO, T2, T2PRO, T3, T3PRO, T4, T4PRO, T5, T5PRO, T6, T6PRO, T7, T7PRO, T8, T8PRO, T8+, T9, T9+, T9PRO, T10, T10PRO, T11, T11PRO, T12, T12PRO, T13, T13PRO, T14, T14PRO, T15, T15PRO, T16, T16PRO, T17, T17PRO, T18, T18PRO, T19, T19PRO, T20, T20PRO, T21, T21PRO, T22, T22PRO, T23, T23PRO, T24, T24PRO, T25, T25PRO, T26, T26PRO, T27, T27PRO, T28, T28PRO, T29, T29PRO, T30, T30PRO, NTL3000, NTL3000LA
Model Different.:	:	All the same except the model number.
Specification	:	802.11b/g/n HT20/n HT40
Operation Frequency	:	2412-2462MHz for 802.11b/g/n20; 2422-2452MHz for 802.11n40;
Number of Channel	:	11 channels for 802.11b/g/n20; 7 channels for 802.11n40;
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
Antenna installation	:	Internal Antenna
Antenna Gain	:	2.5dBi
Power supply	:	DC 3.7V by battery (820mAh); Charging input: DC 5V
Battery Information	:	Model: SZA532069 Nominal Voltage:3.7Vdc Nominal Capacity:820mAh/3.034Wh
Remark: the Antenna gain is provided by customer from Antenna spec. and the laboratory will not be responsible for the accumulated calculation results which covers the information provided by the applicant.		



### 3.2 Channel List

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (802.11b: 1 Mbps; 802.11g: 6 Mbps; 802.11n (HT20): MCS0; 802.11n (HT40): MCS0; were used for all test.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Frequency and Channel list for 802.11 b/g/n (HT20)/n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	5	2432	9	2452
2	2417	6	2437	10	2457
3	2422	7	2442	11	2462
4	2427	8	2447		

Test Frequency and Channel for 802.11 b/g/n (HT20/HT40):

Lowest Frequency		Middle Frequency		Highest Frequency	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	6	2437	11	2462
3	2422	6	2437	9	2452



## 3.3 Test Site

### Site Description

EMC Lab. : Accredited by CNAS, 2022-09-27

The certificate is valid until 2028.01.07

The Laboratory has been assessed and proved to be in compliance with CNAS-CL01:2006 (identical to ISO/IEC 17025:2017)

The Certificate Registration Number is L8251

Designation Number: CN1347

Test Firm Registration Number: 894804

Accredited by A2LA, June 14, 2023

The Certificate Registration Number is 6837.01

Accredited by Industry Canada, November 09, 2018

The Conformity Assessment Body Identifier is CN0150

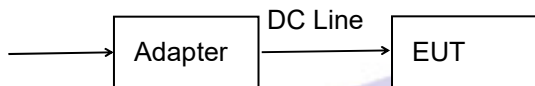
Company Number: 30806

Name of Firm : Shenzhen NCT Testing Technology Co., Ltd.

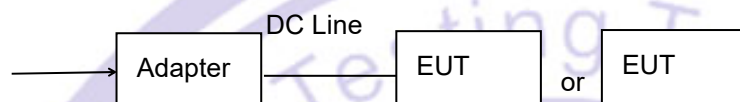
Site Location : A101&2F B2, Fuqiao 6th Area, Xintian Community, Fuhai Street, Baoan District, Shenzhen, People's Republic of China

## 3.4 Test Setup Configuration

Conducted Emission



Radiated Emission (30MHz-1GHz)



Radiated Emission(above 1GHz)



Conducted Spurious



## 3.5 Test Mode

Transmitting mode	Keep the EUT in continuously transmitting mode.
Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.	

Test Software	The prototype entered engineering mode
Power level setup	10

## 4 Equipment During Test

### 4.1 Equipments List

#### Conducted emission Test Equipment

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Date
944 Shielded Room	944 Room	/	EMToni	2022/5/31	2025/5/30
EMI Test Receiver	ESPI	101604	Rohde & Schwarz	2023/6/21	2024/6/20
LISN	ENV 216	102796	Rohde & Schwarz	2023/6/21	2024/6/20
LISN	VN1-13S	004023	CRANAGE	2023/6/21	2024/6/20
Cable	RG223-1500MM	NA	RG	2023/6/21	2024/6/20

#### Radiated emission & Radio Frequency Test Equipment

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Date
966 Shielded Room	966 Room	/	EMToni	2022/5/31	2025/5/30
EMI Test Receiver	ESCI	101178	Rohde & Schwarz	2023/6/21	2024/6/20
Amplifier (30MHz-1GHz)	BBV 9743 B	00374	SCHNWARZBECK	2023/6/21	2024/6/20
Bilog Antenna (30MHz-1GHz)	VULB9162	00473	SCHNWARZBECK	2023/3/19	2025/3/18
Horn antenna (1GHz-18GHz)	BBHA 9120 D	02622	SCHNWARZBECK	2023/3/19	2025/3/18
Preamplifier (1GHz-18GHz)	BBV 9718D	0024	SCHNWARZBECK	2023/6/21	2024/6/20
Spectrum Analyzer (10Hz-40GHz)	FSV 40	100952	Rohde & Schwarz	2023/6/21	2024/6/20
Preamplifier (18GHz-40GHz)	BBV 9721	0056	SCHNWARZBECK	2023/6/21	2024/6/20
Double Ridge Guide Horn Antenna (18GHz-40GHz)	SAS-574	588	A.H.System	2023/3/19	2025/3/18
Loop Antenna (9KHz-30MHz)	FMZB 1513-60	00115	SCHNWARZBECK	2023/6/21	2024/6/20
Amplifier (9KHz-30MHz)	BBV 9745	00109	CHNWARZBECK	2023/6/21	2024/6/20

MXG Signal Analyzer	N9020A	MY50510202	Agilent	2023/6/21	2024/6/20
MXG Vector Signal Generator	N5182A	MY50140020	Agilent	2023/6/21	2024/6/20
MXG Analog Signal Generator	N5181A	MY47420919	Agilent	2023/6/21	2024/6/20
Power Sensor	TR1029-2	512364	Techoy	2023/6/21	2024/6/20
RF Swith	TR1029-1	512364	Techoy	2023/6/21	2024/6/20
Cable	DA800-4000MM	NA	DA	2023/6/21	2024/6/20
Cable	DA800-11000MM	NA	DA	2023/6/21	2024/6/20

Other

Item	Name	Manufacturer	Model	Software version
1	EMC Conduction Test System	AUDIX	e3	6.120718
2	EMC radiation test system	AUDIX	e3	6.120718
3	RF test system	TACHOY	RFTest	V1.0.0
4	RF communication test system	TACHOY	RFTest	V1.0.0



## 4.2 Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	±1.0dB
Power Spectral Density, conducted	±2.2dB
Radio Frequency	± 1 x 10 <sup>-6</sup>
Bandwidth	± 1.5 x 10 <sup>-6</sup>
Time	±2%
Duty Cycle	±2%
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±3%
Conducted Emissions (150kHz~30MHz)	±3.64dB
Radiated Emission(9KHz~30MHz)	±4.51dB
Radiated Emission(30MHz~1GHz)	±5.03dB
Radiated Emission(1GHz~25GHz)	±4.74dB
Radiated Emission(25GHz~40GHz)	±3.38dB
Remark: The coverage Factor (k=2), and measurement Uncertainty for a level of Confidence of 95%	

## 4.3 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Foreign language word translator	N/A	T10	N/A	EUT
E-2	Adapter	N/A	A18A-050100U-US2	N/A	Auxiliary

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

## 5 Conducted Emission

Test Requirement: : FCC CFR 47 Part 15 Section 15.207  
Test Method : ANSI C63.10: 2013  
Test Result : PASS  
Frequency Range : 150kHz to 30MHz  
Class/Severity : Class B

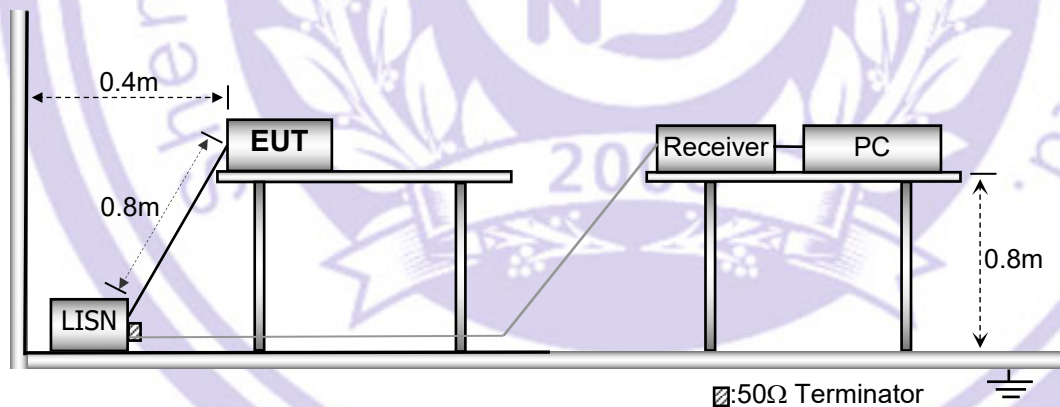
### 5.1 E.U.T. Operation

Operating Environment :

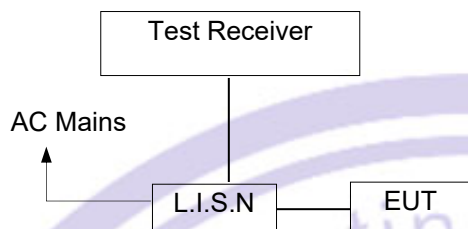
Temperature : 24.5 °C  
Humidity : 51.3 % RH  
Atmospheric Pressure : 101.11kPa

### 5.2 EUT Setup

The conducted emission tests were performed using the setup accordance with the ANSI C63.10:2013.



### 5.3 Test SET-UP (Block Diagram of Configuration)



### 5.4 Measurement Procedure

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured was complete.

### 5.5 Conducted Emission Limit

#### Conducted Emission

Frequency(MHz)	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

#### Note:

1. The lower limit shall apply at the transition frequencies
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### 5.6 Measurement Description

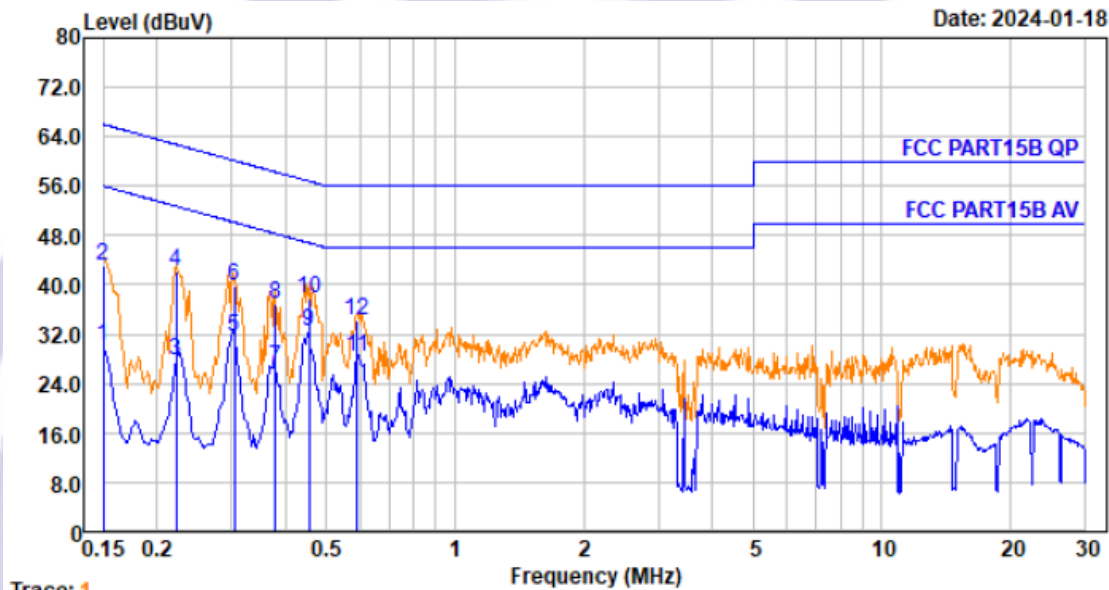
The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line.

### 5.7 Conducted Emission Test Result

Pass.

Please refer to the following pages.

Temperature:	26°C	Relative Humidity:	54%
Pressure:	101kPa	Phase :	L
Test Voltage :	DC 5V from Adapter input AC 120V/60Hz		



No.	Freq MHz	Cable Loss dB	LISN Factor dB/m	Receiver Reading dBuV	Emission Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark
1.	0.150	0.00	9.54	10.41	30.11	56.00	-25.89	Average
2.	0.150	0.00	9.54	23.40	43.10	66.00	-22.90	QP
3.	0.222	0.01	9.55	7.93	27.64	52.74	-25.10	Average
4.	0.222	0.01	9.55	22.50	42.21	62.74	-20.53	QP
5.	0.303	0.01	9.56	11.74	31.44	50.15	-18.71	Average
6.	0.303	0.01	9.56	20.20	39.90	60.15	-20.25	QP
7.	0.379	0.01	9.56	6.85	26.55	48.30	-21.75	Average
8.	0.379	0.01	9.56	17.10	36.80	58.30	-21.50	QP
9.	0.454	0.01	9.57	12.75	32.45	46.80	-14.35	Average
10.	0.454	0.01	9.57	18.10	37.80	56.80	-19.00	QP
11.	0.592	0.02	9.58	8.63	28.34	46.00	-17.66	Average
12.	0.592	0.02	9.58	14.59	34.30	56.00	-21.70	QP

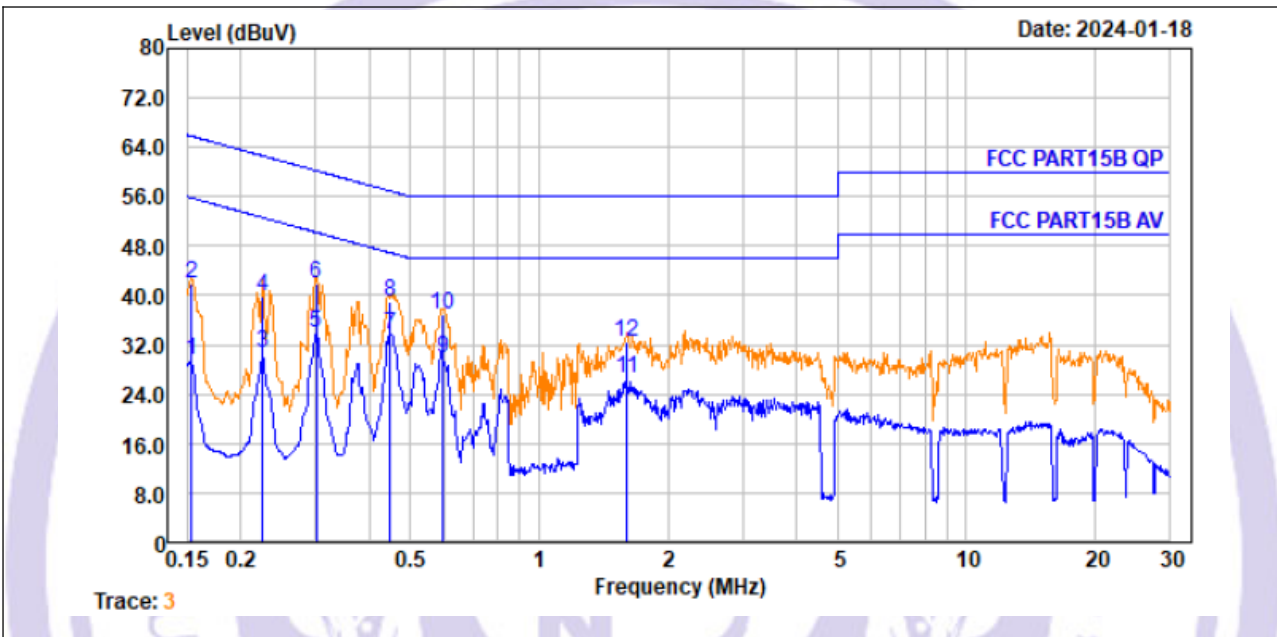
Notes: 1.An initial pre-scan was performed on the line and neutral lines with peak detector.

2.Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.

3.Measurement Level = Reading level + Correct Factor



Temperature:	26°C	Relative Humidity:	54%
Pressure:	101kPa	Phase :	N
Test Voltage :	DC 5V from Adapter input AC 120V/60Hz		



No.	Freq MHz	Cable Loss dB	LISN Factor dB/m	Receiver Reading dBuV	Emission Level dBuV/m	Limit dBuV/m	Over Limit dB	Remark
1.	0.154	0.00	9.53	9.92	29.61	55.78	-26.17	Average
2.	0.154	0.00	9.53	22.20	41.89	65.78	-23.89	QP
3.	0.226	0.01	9.55	11.02	30.72	52.61	-21.89	Average
4.	0.226	0.01	9.55	20.10	39.80	62.61	-22.81	QP
5.	0.302	0.01	9.56	14.31	34.01	50.19	-16.18	Average
6.	0.302	0.01	9.56	22.30	42.00	60.19	-18.19	QP
7.	0.449	0.01	9.58	14.06	33.77	46.89	-13.12	Average
8.	0.449	0.01	9.58	19.30	39.01	56.89	-17.88	QP
9.	0.595	0.02	9.58	10.24	29.95	46.00	-16.05	Average
10.	0.595	0.02	9.58	17.19	36.90	56.00	-19.10	QP
11.	1.610	0.04	9.58	6.91	26.60	46.00	-19.40	Average
12.	1.610	0.04	9.58	12.90	32.59	56.00	-23.41	QP

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.Measurement Level = Reading level + Correct Factor

## 6 Radiated Spurious Emissions

Test Requirement : FCC CFR47 Part 15 Section 15.209 & 15.247  
Test Method : ANSI C63.10:2013  
Test Result : PASS  
Measurement Distance : 3m  
Limit : See the follow table

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	$2400/F(\text{kHz})$	300	$10000 * 2400/F(\text{kHz})$	$20\log^{(2400/F(\text{kHz}))} + 80$
0.490 ~ 1.705	$24000/F(\text{kHz})$	30	$100 * 24000/F(\text{kHz})$	$20\log^{(24000/F(\text{kHz}))} + 40$
1.705 ~ 30	30	30	$100 * 30$	$20\log^{(30)} + 40$
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

### 6.1 EUT Operation

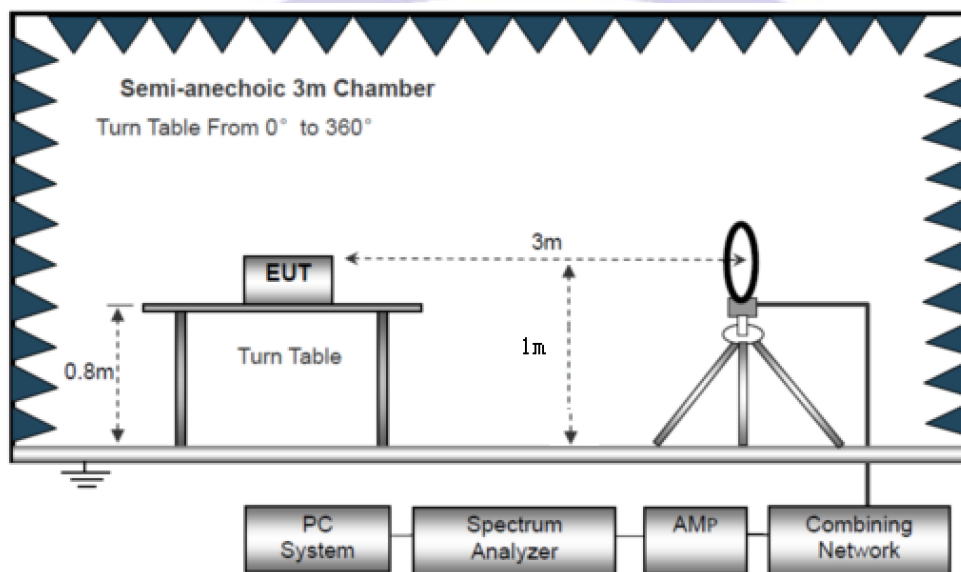
Operating Environment :

Temperature: : 24.5°C  
Humidity: : 52 % RH  
Atmospheric Pressure: : 101.11kPa  
Test Voltage : DC 3.7V

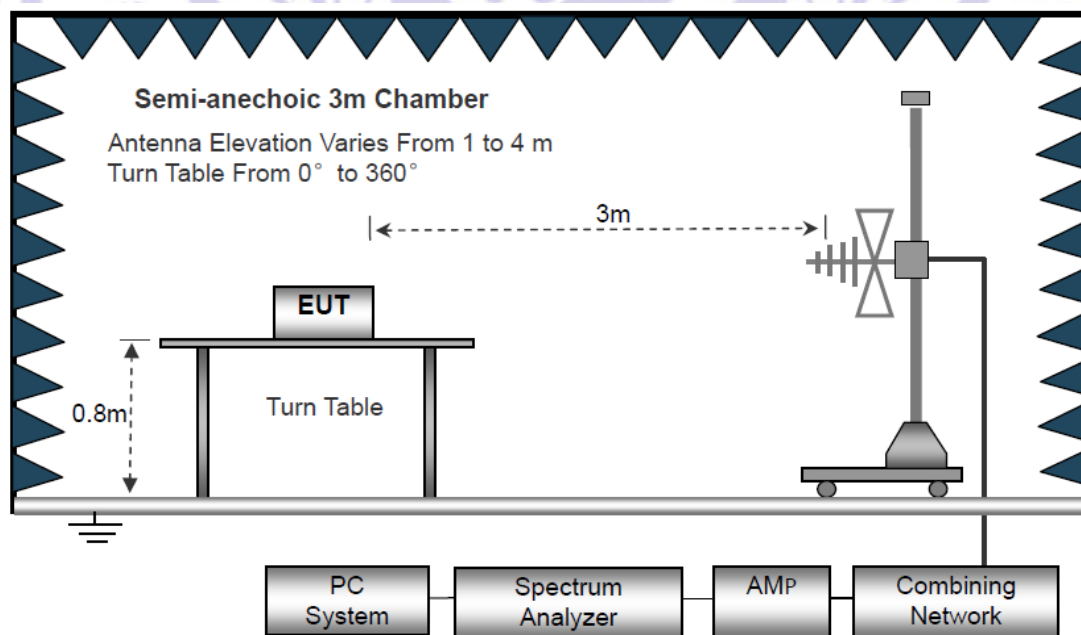
## 6.2 Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site

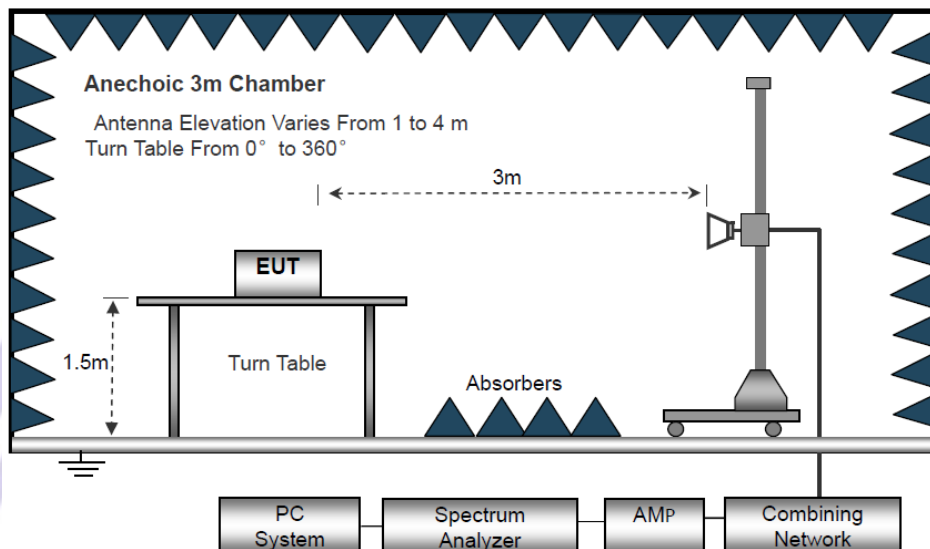
The test setup for emission measurement below 30MHz



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz



## 6.3 Spectrum Analyzer Setup

Below 30MHz			
IF Bandwidth	:	10kHz	
Resolution Bandwidth	:	10kHz	
Video Bandwidth	:	10kHz	
30MHz ~ 1GHz			
Detector	:	PK	QP
Resolution Bandwidth	:	100kHz	120kHz
Video Bandwidth	:	300kHz	300kHz
Above 1GHz			
Detector	:	PK	AV
Resolution Bandwidth	:	1MHz	1MHz
Video Bandwidth	:	3MHz	10Hz



## 6.4 Test Procedure

1. Below 1000MHz, The EUT was placed on a turn table which is 0.8m above ground plane, And above 1000MHz, The EUT was placed on a styrofoam table which is 1.5m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions. The spectrum was investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.
8. The test above 1GHz must be use the fully anechoic room, and the test below 1GHz use the half anechoic room

## 6.5 Summary of Test Results

### Test Frequency: 9KHz-30MHz

Freq. (MHz)	Ant.Pol. H/V	Emission Level (dBuV/m)	Limit 3m (dBuV/m)	Over (dB)
--	--	--	--	>20

**Note:**

The amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

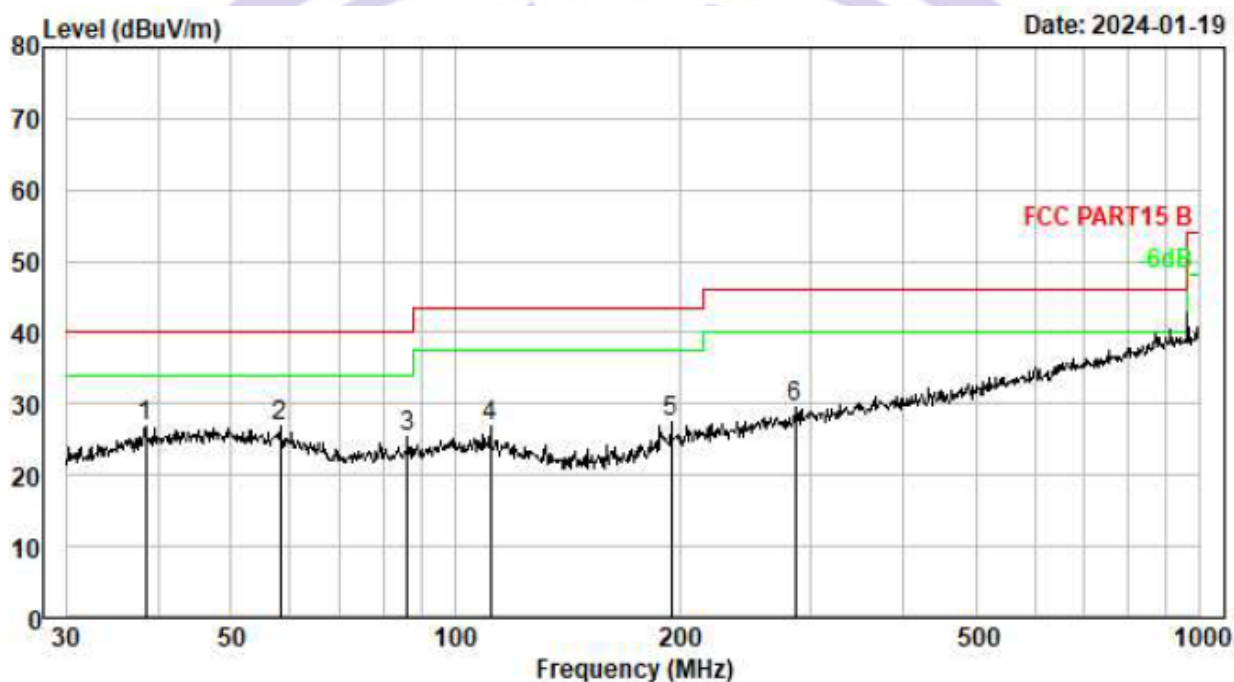
Distance extrapolation factor =  $40 \log(\text{Specific distance} / \text{test distance})$  (dB);  
Limit line = Specific limits (dBuV) + distance extrapolation factor.

### Test Frequency: 30MHz ~ 1GHz

All the modulation modes were tested the data of the worst mode (TX 802.11b Low Channel) are recorded in the following pages and the others modulation methods do not exceed the limits.

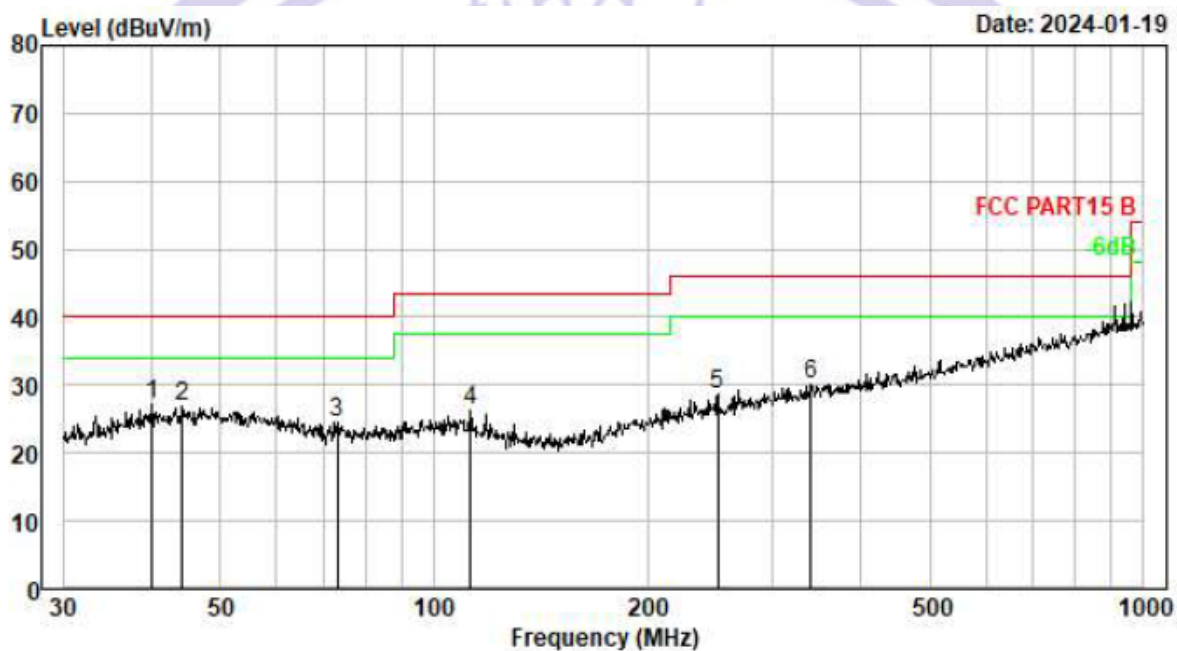
Please refer to the following test plots:

Temperature:	26°C	Relative Humidity:	54%
Pressure:	101 kPa	Polarization:	Horizontal
Test Voltage:	DC 3.7V by battery		



No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Preamp Gain dB	Receiver Reading dBμV	Emission Level dBμV/m	Limit dBμV/m	Over Limit dB	Remark
1	38.346	0.33	12.07	0.00	14.37	26.77	40.00	-13.23	QP
2	58.203	0.49	11.87	0.00	14.41	26.77	40.00	-13.23	QP
3	86.200	0.63	9.83	0.00	14.79	25.25	40.00	-14.75	QP
4	111.347	0.75	11.07	0.00	14.91	26.73	43.50	-16.77	QP
5	195.137	1.05	11.26	0.00	15.16	27.47	43.50	-16.03	QP
6	285.978	1.25	13.96	0.00	14.26	29.47	46.00	-16.53	QP

Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Polarization:	Vertical
Test Voltage:	DC 3.7V by battery		



No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Preamp Gain dB	Receiver Reading dBμV	Emission Level dBμV/m	Limit dBμV/m	Over Limit dB	Remark
1	39.994	0.35	12.50	0.00	14.29	27.14	40.00	-12.86	QP
2	44.120	0.38	12.59	0.00	13.89	26.86	40.00	-13.14	QP
3	73.103	0.57	9.50	0.00	14.40	24.47	40.00	-15.53	QP
4	112.524	0.75	10.97	0.00	14.69	26.41	43.50	-17.09	QP
5	251.180	1.18	13.03	0.00	14.36	28.57	46.00	-17.43	QP
6	339.589	1.34	14.95	0.00	13.87	30.16	46.00	-15.84	QP

Remark: Emission Level = Reading + Cable Loss + ANT Factor



**Test Frequency: From 1GHz to 25GHz**

Polar	Frequency	Meter Reading	Pre-amplifier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detect or Type
(H/V)	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel:2412MHz									
V	4824.00	50.93	34.12	5.03	32.39	54.23	74.00	-19.77	PK
V	4824.00	40.56	34.12	5.03	32.39	43.86	54.00	-10.14	AV
V	7236.00	44.76	32.54	6.29	35.86	54.37	74.00	-19.63	PK
V	7236.00	33.92	32.54	6.29	35.86	43.53	54.00	-10.47	AV
V	9648.00	47.15	32.98	7.55	38.40	60.12	74.00	-13.88	PK
V	9648.00	34.71	32.98	7.55	38.40	47.68	54.00	-6.32	AV
V	12060.00	42.01	32.09	8.93	39.00	57.85	74.00	-16.15	PK
V	12060.00	31.06	32.09	8.93	39.00	46.90	54.00	-7.10	AV
H	4824.00	48.66	34.12	5.03	32.39	51.96	74.00	-22.04	PK
H	4824.00	37.65	34.12	5.03	32.39	40.95	54.00	-13.05	AV
H	7236.00	47.13	32.54	6.29	35.86	56.74	74.00	-17.26	PK
H	7236.00	36.07	32.54	6.29	35.86	45.68	54.00	-8.32	AV
H	9648.00	44.08	32.98	7.55	38.40	57.05	74.00	-16.95	PK
H	9648.00	33.45	32.98	7.55	38.40	46.42	54.00	-7.58	AV
H	12060.00	38.35	32.09	8.93	39.00	54.19	74.00	-19.81	PK
H	12060.00	31.62	32.09	8.93	39.00	47.46	54.00	-6.54	AV

## Radiated Band Emission Measurement:

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detect or Type
Middle Channel:2437MHz									
V	4874.00	47.89	34.07	5.09	32.59	51.5	74.00	-22.50	PK
V	4874.00	36.82	34.07	5.09	32.59	40.43	54.00	-13.57	AV
V	7311.00	45.86	32.63	6.34	35.96	55.53	74.00	-18.47	PK
V	7311.00	34.04	32.63	6.34	35.96	43.71	54.00	-10.29	AV
V	9748.00	41.26	32.92	7.59	38.4	54.33	74.00	-19.67	PK
V	9748.00	29.24	32.92	7.59	38.4	42.31	54.00	-11.69	AV
V	12185.00	38.54	31.96	8.88	39.04	54.5	74.00	-19.50	PK
V	12185.00	26.07	31.96	8.88	39.04	42.03	54.00	-11.97	AV
H	4874.00	50.20	34.07	5.09	32.59	53.81	74.00	-20.19	PK
H	4874.00	37.19	34.07	5.09	32.59	40.8	54.00	-13.20	AV
H	7311.00	45.25	32.63	6.34	35.96	54.92	74.00	-19.08	PK
H	7311.00	33.12	32.63	6.34	35.96	42.79	54.00	-11.21	AV
H	9748.00	39.13	32.92	7.59	38.4	52.2	74.00	-21.80	PK
H	9748.00	28.34	32.92	7.59	38.4	41.41	54.00	-12.59	AV
H	12185.00	39.46	31.96	8.88	39.04	55.42	74.00	-18.58	PK
H	12185.00	29.47	31.96	8.88	39.04	45.43	54.00	-8.57	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detect or Type
High Channel:2462MHz									
V	4924.00	47.44	34.02	5.15	32.8	51.37	74.00	-22.63	PK
V	4924.00	38.42	34.02	5.15	32.8	42.35	54.00	-11.65	AV
V	7386.00	43.49	32.71	6.4	36.05	53.23	74.00	-20.77	PK
V	7386.00	33.91	32.71	6.4	36.05	43.65	54.00	-10.35	AV
V	9848.00	42.41	32.86	7.62	38.4	55.57	74.00	-18.43	PK
V	9848.00	29.82	32.86	7.62	38.4	42.98	54.00	-11.02	AV
V	12310.00	39.36	31.82	8.84	39.08	55.46	74.00	-18.54	PK
V	12310.00	29.13	31.82	8.84	39.08	45.23	54.00	-8.77	AV
H	4924.00	49.48	34.02	5.15	32.8	53.41	74.00	-20.59	PK
H	4924.00	38.47	34.02	5.15	32.8	42.4	54.00	-11.6	AV
H	7386.00	46.85	32.71	6.4	36.05	56.59	74.00	-17.41	PK
H	7386.00	33.46	32.71	6.4	36.05	43.2	54.00	-10.8	AV
H	9848.00	43.33	32.86	7.62	38.4	56.49	74.00	-17.51	PK
H	9848.00	31.69	32.86	7.62	38.4	44.85	54.00	-9.15	AV
H	12310.00	40.45	31.82	8.84	39.08	56.55	74.00	-17.45	PK
H	12310.00	28.03	31.82	8.84	39.08	44.13	54.00	-9.87	AV

Note:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,  
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
4. We test all the mode and recorded the worst mode (802.11b) in the report.



	Polar (H/V)	Frequenc y (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV /m)	Detec tor Type	Result
802.11b	Low Channel 2412MHz									
	H	2390.00	58.1	35.17	3.48	27.49	53.9	74.00	PK	PASS
	H	2390.00	49.92	35.17	3.48	27.49	45.72	54.00	AV	PASS
	H	2400.00	60.95	35.16	3.49	27.52	56.8	74.00	PK	PASS
	H	2400.00	50.08	35.16	3.49	27.52	45.93	54.00	AV	PASS
	V	2390.00	57.92	35.17	3.48	27.49	53.72	74.00	PK	PASS
	V	2390.00	51.05	35.17	3.48	27.49	46.85	54.00	AV	PASS
	V	2400.00	60.11	35.16	3.49	27.52	55.96	74.00	PK	PASS
	V	2400.00	50.39	35.16	3.49	27.52	46.24	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	58.77	35.11	3.56	27.75	54.97	74.00	PK	PASS
	H	2483.50	49.33	35.11	3.56	27.75	45.53	54.00	AV	PASS
	H	2500.00	59.17	35.1	3.57	27.8	55.44	74.00	PK	PASS
	H	2500.00	50.26	35.1	3.57	27.8	46.53	54.00	AV	PASS
	V	2483.50	58.72	35.11	3.56	27.75	54.92	74.00	PK	PASS
	V	2483.50	50.77	35.11	3.56	27.75	46.97	54.00	AV	PASS
	V	2500.00	58.87	35.1	3.57	27.8	55.14	74.00	PK	PASS
	V	2500.00	50.72	35.1	3.57	27.8	46.99	54.00	AV	PASS
802.11g	Low Channel 2412MHz									
	H	2390.00	57.68	35.17	3.48	27.49	53.48	74.00	PK	PASS
	H	2390.00	50.17	35.17	3.48	27.49	45.97	54.00	AV	PASS
	H	2400.00	59.55	35.16	3.49	27.52	55.4	74.00	PK	PASS
	H	2400.00	49.92	35.16	3.49	27.52	45.77	54.00	AV	PASS



802.11 n20	V	2390.00	57.5	35.17	3.48	27.49	53.3	74.00	PK	PASS
	V	2390.00	49.31	35.17	3.48	27.49	45.11	54.00	AV	PASS
	V	2400.00	59.2	35.16	3.49	27.52	55.05	74.00	PK	PASS
	V	2400.00	49.46	35.16	3.49	27.52	45.31	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	57.06	35.11	3.56	27.75	53.26	74.00	PK	PASS
	H	2483.50	49.34	35.11	3.56	27.75	45.54	54.00	AV	PASS
	H	2500.00	59.38	35.1	3.57	27.8	55.65	74.00	PK	PASS
	H	2500.00	49.51	35.1	3.57	27.8	45.78	54.00	AV	PASS
	V	2483.50	58.23	35.11	3.56	27.75	54.43	74.00	PK	PASS
	V	2483.50	50.44	35.11	3.56	27.75	46.64	54.00	AV	PASS
	V	2500.00	58.45	35.1	3.57	27.8	54.72	74.00	PK	PASS
	V	2500.00	49.9	35.1	3.57	27.8	46.17	54.00	AV	PASS
	Low Channel 2412MHz									
	H	2390.00	58.59	35.17	3.48	27.49	54.39	74.00	PK	PASS
	H	2390.00	50.66	35.17	3.48	27.49	46.46	54.00	AV	PASS
	H	2400.00	60.84	35.16	3.49	27.52	56.69	74.00	PK	PASS
	H	2400.00	50.37	35.16	3.49	27.52	46.22	54.00	AV	PASS
	V	2390.00	58.63	35.17	3.48	27.49	54.43	74.00	PK	PASS
	V	2390.00	51.05	35.17	3.48	27.49	46.85	54.00	AV	PASS
	V	2400.00	60.63	35.16	3.49	27.52	56.48	74.00	PK	PASS
	V	2400.00	50.55	35.16	3.49	27.52	46.4	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	58.7	35.11	3.56	27.75	54.9	74.00	PK	PASS
	H	2483.50	49.35	35.11	3.56	27.75	45.55	54.00	AV	PASS
	H	2500.00	59.8	35.1	3.57	27.8	56.07	74.00	PK	PASS

	H	2500.00	50.79	35.1	3.57	27.8	47.06	54.00	AV	PASS
	V	2483.50	58.89	35.11	3.56	27.75	55.09	74.00	PK	PASS
	V	2483.50	50.84	35.11	3.56	27.75	47.04	54.00	AV	PASS
	V	2500.00	58.68	35.1	3.57	27.8	54.95	74.00	PK	PASS
	V	2500.00	50.48	35.1	3.57	27.8	46.75	54.00	AV	PASS
802.11 n40	Low Channel 2422MHz									
	H	2390.00	58.57	35.17	3.48	27.49	54.37	74.00	PK	PASS
	H	2390.00	50.41	35.17	3.48	27.49	46.21	54.00	AV	PASS
	H	2400.00	61.25	35.16	3.49	27.52	57.1	74.00	PK	PASS
	H	2400.00	50.02	35.16	3.49	27.52	45.87	54.00	AV	PASS
	V	2390.00	58.31	35.17	3.48	27.49	54.11	74.00	PK	PASS
	V	2390.00	50.2	35.17	3.48	27.49	46.00	54.00	AV	PASS
	V	2400.00	59.87	35.16	3.49	27.52	55.72	74.00	PK	PASS
	V	2400.00	50.48	35.16	3.49	27.52	46.33	54.00	AV	PASS
	High Channel 2452MHz									
	H	2483.50	58.88	35.11	3.56	27.75	55.08	74.00	PK	PASS
	H	2483.50	49.67	35.11	3.56	27.75	45.87	54.00	AV	PASS
	H	2500.00	60.69	35.1	3.57	27.8	56.96	74.00	PK	PASS
	H	2500.00	50.86	35.1	3.57	27.8	47.13	54.00	AV	PASS
	V	2483.50	61.97	35.11	3.56	27.75	58.17	74.00	PK	PASS
	V	2483.50	50.13	35.11	3.56	27.75	46.33	54.00	AV	PASS
	V	2500.00	62.14	35.1	3.57	27.8	58.41	74.00	PK	PASS
	V	2500.00	50.71	35.1	3.57	27.8	46.98	54.00	AV	PASS
Remark:										
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit										

## **7 Conduct Band Edge And Spurious Emissions Measurement**

Test Requirement	:	FCC CFR47 Part 15 Section 15.247
Test Method	:	ANSI C63.10:2013
Test Limit	:	Regulation 15.247 (d), 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)). RSS-247 § 5.5: In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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 that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

### **7.1 Test Procedure**

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz, Sweep = auto  
Detector function = peak, Trace = max hold

### **7.2 Test Result**

Please see the attachment for the data.



## 8 6dB&99% Bandwidth Measurement

Test Requirement : FCC CFR47 Part 15 Section 15.247

Test Method : ANSI C63.10:2013

Test Limit : Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

### 8.1 Test Procedure

For 6dB Bandwidth Measurement

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 100kHz, VBW = 300kHz

For 99% Bandwidth Measurement

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer: RBW = 1%-5% OBW, VBW  $\geq$  3RBW

### 8.2 Test Result

Please see the attachment for the data.



## 9 Maximum Peak Output Power

Test Requirement	: FCC CFR47 Part 15 Section 15.247
Test Method	: ANSI C63.10:2013
Test Limit	: Regulation 15.247 (b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. RSS-247 § 5.4 (d) For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).

### 9.1 Test Procedure

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

**9.2 Test Result**

Mode	Test Channel	Peak Output Power (dBm)	LIMIT (dBm)	Result
802.11b	Low	6.25	30.00	<b>PASS</b>
	Moddle	4.86	30.00	<b>PASS</b>
	High	6.10	30.00	<b>PASS</b>
802.11g	Low	7.04	30.00	<b>PASS</b>
	Moddle	7.30	30.00	<b>PASS</b>
	High	7.10	30.00	<b>PASS</b>
802.11n HT20	Low	6.41	30.00	<b>PASS</b>
	Moddle	6.13	30.00	<b>PASS</b>
	High	6.54	30.00	<b>PASS</b>
802.11n HT40	Low	6.53	30.00	<b>PASS</b>
	Moddle	6.35	30.00	<b>PASS</b>
	High	6.93	30.00	<b>PASS</b>

## 10 Power Spectral density

Test Requirement	: FCC CFR47 Part 15 Section 15.247
Test Method	: ANSI C63.10:2013
Test Limit	: Regulation 15.247(f) The power spectral density conducted from the intentional radiator to the antenna due to the digital modulation operation of the hybrid system, with the frequency hopping operation turned off, shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### 10.1 Test Procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 3kHz. VBW = 10kHz, Span = 1.5 times the DTS channel bandwidth(6 dB bandwidth). Sweep = auto; Detector Function = Peak. Trace = Max hold.
3. Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. The limit is specified in one of the subparagraphs of this Section Submit this plot.

### 10.2 Test Result

Please see the attachment for the data.



## 11 Antenna Application

### 11.1 Antenna Requirement

For intentional device, according to FCC 47 CFR Section 15.203, 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. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

According to RSS-GEN section 6.8

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

### 11.2 Result

The EUT'S antenna, permanent attached antenna, is Internal Antenna. The antenna's gain is 2.5 dBi and meets the requirement.



## 12 Test Setup and EUT Photos

Reference to the attachment for details.

\*\*\*\*\*THE END REPORT\*\*\*\*\*





# CERTIFICATE *of* EXAMINATION



Certificate Validation

## NOTIFIED BODY EU-TYPE EXAMINATION CERTIFICATE

*DONY32-EU / 30 Jun 2022 / Rev A*

### Radio Equipment Directive (RED) 2014/53/EU

MiCOM Labs Inc., Notified Body Number 2280 declares, on the basis of the assessment of the tests and the technical documentation provided by the applicant that the following product complies with the essential requirements of the above noted Directive.

Product Name:

**AI Language Translator**

Approval Holder Name:

**Shenzhen Intelligent Voice Technology Co., Ltd**



  
**Gordon Hurst, Product Certifier**

This Certificate is Issued under the Authority of:

**MiCOM Labs Inc., 575 Boulder Court, Pleasanton, California 94566, USA**

Notified Body Number: 2280



# Notified Body EU-Type Examination Certificate

**DONY32-EU / 30 Jun 2022 / Rev A**

**for Radio Equipment Directive (RED) 2014/53/EU**

Product Name:

## AI Language Translator

Product Model Numbers: **T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T10PRO, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, NTL3000**

**Approval Holder:** **Shenzhen Intelligent Voice Technology Co., Ltd**, 5th Floor, Building 4, Rundongsheng Industrial Park, Longteng Community, Xixiang St, Baoan Dist, Shenzhen, China

**Product Manufacturer:** **Shenzhen Intelligent Voice Technology Co., Ltd**, 5th Floor, Building 4, Rundongsheng Industrial Park, Longteng Community, Xixiang St, Baoan Dist, Shenzhen, China

### Standards

Group	Name
Article 3.1(a) Health & Safety	EN 62479:2010
	EN 50663:2017
	IEC62133-2:2017
	EN 62368-1:2014+A11:2017
Article 3.1(b) Electromagnetic Compatibility	EN 301 489-1 V2.2.3
	EN 301 489-17 V3.2.4
	EN 55032:2015+A11:2020
	EN 55035:2017+A11:2020
	EN IEC 61000-3-2:2019
Article 3.2 Effective Use of Spectrum	EN 61000-3-3: 2013+ A1:2019
	EN 300 328 V2.2.2



# Notified Body EU-Type Examination Certificate

**DONY32-EU / 30 Jun 2022 / Rev A**

**for Radio Equipment Directive (RED) 2014/53/EU**

## Annex 1 to EU-Type Examination

### EU-Type examination on the essential requirements Article 3

<b>Article 3.1 - a) Health and Safety</b>	Assessed
<b>Article 3.1 - b) Electromagnetic compatibility</b>	Assessed
<b>Article 3.2 - Effective use of radio spectrum</b>	Assessed
<b>Article 3.3 - a) interworks with Accessories/Chargers</b>	Not Applicable
<b>Article 3.3 - b) interworks with Radio Networks</b>	Not Applicable
<b>Article 3.3 - c) can connect to interfaces</b>	Not Applicable
<b>Article 3.3 - d) does not harm the network, misuse network resources</b>	Not Applicable
<b>Article 3.3 - e) privacy protections</b>	Not Applicable
<b>Article 3.3 - f) fraud protections</b>	Not Applicable
<b>Article 3.3 - g) emergency services access</b>	Not Applicable
<b>Article 3.3 - h) assist users with disabilities</b>	Not Applicable
<b>Article 3.3 - i) integrity of software</b>	Not Applicable

### Description of Apparatus

Company Name	Shenzhen Intelligent Voice Technology Co., Ltd
Certification No.	DONY32-EU
Issue Date / Rev	30 Jun 2022 / Rev A
Equipment Description	AI Language Translator





# Notified Body EU-Type Examination Certificate

**DONY32-EU / 30 Jun 2022 / Rev A**

**for Radio Equipment Directive (RED) 2014/53/EU**

## Emission Information

Technology	Frequency MHz		Emission Designator	RF Power		
	From	To		Max	Type	Field Strength
2.4GWiFi	2412MHz	2472MHz	G1D,D1D	12.04dBm	EIRP	--
Bluetooth BR+EDR	2402MHz	2480MHz	F1D,G1D	1.99dBm	EIRP	--
Bluetooth BLE	2402MHz	2480MHz	F1D	4.14dBm	EIRP	--

## Technical Construction File Details: (Documents Reviewed)

### Technical Report(s):

Article 3.1(a) Health & Safety:  
 AIT22052005H1  
 AIT22052005S  
 Article 3.1(b) Electromagnetic Compatibility:  
 AIT22052005E1  
 Article 3.2 Effective Use of Spectrum:  
 AIT22052005W2  
 AIT22052005W3  
 AIT22052005W1

### Supporting Documentation:

Service Agreement  
 Agent Authorization  
 EU Application  
 EU Declaration of Conformity  
 Block Diagram  
 BOM or Parts List  
 External Photographs  
 Internal Photographs  
 Label and its Location  
 Operational Description  
 PCB Layout  
 Risk Assessment Report and other supporting documents (Radio)  
 Schematics  
 Test Setup - EU  
 User Manual  
 Battery Report:NCT20016314XI1-1

## Scope

This EU-Type Examination Certificate is given in respect of compliance of radio spectrum use Article 3 Paragraph 2 of the RED Directive 2014/53/EU. The scope of the evaluation and this certificate relates only to those items identified in 'Annex 1 to EU - Type Examination Certificate' for the specific product and Certificate number referenced above.

EU Type Examination was performed according to Module B: EU-type examination procedure per Annex III the Directive on the essential requirements in Article 3, for the specific product and Certificate Number referenced above.

This EU Type Examination Certificate is based upon the review of the Technical Documentation and supporting evidence for the adequacy of the technical design solution, it is only valid in conjunction with the attached Annexes. The scope of this statement relates to a single sample of the apparatus identified above and of the submitted documents only.



## Annex 2 to EU-Type Examination Obligations of the Applicant

### Ref RED 2014/53/EU Article 10 - Obligations of manufacturers

1. When placing their radio equipment on the market, manufacturers shall ensure that it has been designed and manufactured in accordance with the essential requirements set out in Article 3.
2. Manufacturers shall ensure that radio equipment shall be so constructed that it can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.
3. Manufacturers shall draw up the technical documentation referred to in Article 21 and carry out the relevant conformity assessment procedure referred to in Article 17 or have it carried out. Where compliance of radio equipment with the applicable requirements has been demonstrated by that conformity assessment procedure, manufacturers shall draw up an EU declaration of conformity and affix the CE marking.
4. Manufacturers shall keep the technical documentation and the EU declaration of conformity for 10 years after the radio equipment has been placed on the market.
5. Manufacturers shall ensure that procedures are in place for series production to remain in conformity with this Directive. Changes in radio equipment design or characteristics and changes in the harmonised standards or in other technical specifications by reference to which conformity of radio equipment is declared shall be adequately taken into account.

When deemed appropriate with regard to the risks presented by radio equipment, manufacturers shall, to protect the health and safety of end-users, carry out sample testing of radio equipment made available on the market, investigate, and, if necessary, keep a register of complaints, of non-conforming radio equipment and radio equipment recalls, and shall keep distributors informed of any such monitoring.

6. Manufacturers shall ensure that radio equipment which they have placed on the market bears a type, batch or serial number or other element allowing its identification, or, where the size or nature of the radio equipment does not allow it, that the required information is provided on the packaging, or in a document accompanying the radio equipment.
7. Manufacturers shall indicate on the radio equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted or, where the size or nature of radio equipment does not allow it, on its packaging, or in a document accompanying the radio equipment. The address shall indicate a single point at which the manufacturer can be contacted. The contact details shall be in a language easily understood by end-users and market surveillance authorities.
8. Manufacturers shall ensure that the radio equipment is accompanied by instructions and safety information in a language which can be easily understood by consumers and other end-users, as determined by the Member State concerned. Instructions shall include the information required to use radio equipment in accordance with its intended use. Such information shall include, where applicable, a description of accessories and components, including software, which allow the radio equipment to operate as intended. Such instructions and safety information, as well as any labelling, shall be clear, understandable and intelligible.

The following information shall also be included in the case of radio equipment intentionally emitting radio waves:

- (a) frequency band(s) in which the radio equipment operates;
- (b) maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates.

9. Manufacturers shall ensure that each item of radio equipment is accompanied by a copy of the EU declaration of conformity or by a simplified EU declaration of conformity. Where a simplified EU declaration of conformity is provided, it shall contain the exact internet address where the full text of the EU declaration of conformity can be obtained.

10. In cases of restrictions on putting into service or of requirements for authorisation of use, information available on the packaging shall allow the identification of the Member States or the geographical area within a Member State where restrictions on putting into service or requirements for authorisation of use exist. Such information shall be completed in the instructions accompanying the radio equipment. The Commission may adopt implementing acts specifying how to present that information. Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 45(2).



11. Manufacturers who consider or have reason to believe that radio equipment which they have placed on the market is not in conformity with this Directive shall immediately take the corrective measures necessary to bring that radio equipment into conformity, to withdraw it or recall it, if appropriate. Furthermore, where the radio equipment presents a risk, manufacturers shall immediately inform the competent national authorities of the Member States in which they made the radio equipment available on the market to that effect, giving details, in particular, of the noncompliance, of any corrective measures taken and of the results thereof.

12. Manufacturers shall, further to a reasoned request from a competent national authority, provide it with all the information and documentation in paper or electronic form necessary to demonstrate the conformity of the radio equipment with this Directive, in a language which can be easily understood by that authority. They shall cooperate with that authority, at its request, on any action taken to eliminate the risks posed by radio equipment which they have placed on the market.

#### Ref RED 2014/53/EU Article 11 - Authorised representatives

1. A manufacturer may, by a written mandate, appoint an authorised representative.

The obligations laid down in Article 10(1) and the obligation to draw up technical documentation laid down in Article 10(3) shall not form part of the authorised representative's mandate.

2. An authorised representative shall perform the tasks specified in the mandate received from the manufacturer. The mandate shall allow the authorised representative to do at least the following:

(a) keep the EU declaration of conformity and the technical documentation at the disposal of national market surveillance authorities for 10 years after the radio equipment has been placed on the market;

(b) further to a reasoned request from a competent national authority, provide that authority with all the information and documentation necessary to demonstrate the conformity of radio equipment;

(c) co-operate with the competent national authorities, at their request, on any action taken to eliminate the risks posed

#### Article 19 General principles of the CE marking

1. The CE marking shall be subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008.

2. On account of the nature of radio equipment, the height of the CE marking affixed to radio equipment may be lower than 5 mm, provided that it remains visible and legible.

#### Article 20 Rules and conditions for affixing the CE marking and the identification number of the notified body

1. The CE marking shall be affixed visibly, legibly and indelibly to the radio equipment or to its data plate, unless that is not possible or not warranted on account of the nature of radio equipment. The CE marking shall also be affixed visibly and legibly to the packaging.

2. The CE marking shall be affixed before the radio equipment is placed on the market.

3. Member States shall build upon existing mechanisms to ensure correct application of the regime governing the CE marking and shall take appropriate action in the event of improper use of that marking.