



TEST REPORT

Report Number : TZ0271260103FRF16
Product Name : DP 5 LCD w. TOUCH and NFC (two color versions)
Model/Type reference : Midas HMI
FCC ID : XBE-MIDASHMI
Prepared for : LINAK A/S
Group Headquarters, Smedevænget 8, Guderup DK-6430 Nordborg, Denmark

Prepared By : Shenzhen Tongzhou Testing Co.,Ltd.
1st Floor, Building 1, Haomai High-tech Park, Huating Road 387, Dalang Street,
Longhua, Shenzhen, China
Standards : FCC CFR Title 47 Part 15 Subpart C,
ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 and its Errata
Date of Test : 2026-04-23 ~ 2026-05-17
Date of Issue : 2026-05-18

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(Authorized Officer)



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The test report apply only to the specific sample(s) tested under stated test conditions.

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**** Report Revise Record ****

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V1.0	/	2026-05-18	Valid	Initial release





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1. GENERAL INFORMATION

1.1. Client Information

Applicant	: LINAK A/S
Address	: Group Headquarters, Smedevænget 8, Guderup DK-6430 Nordborg, Denmark
Manufacturer	: LINAK A/S
Address	: Group Headquarters, Smedevænget 8, Guderup DK-6430 Nordborg, Denmark

1.2. Description of Device (EUT)

Product Name	: DP 5 LCD w. TOUCH and NFC (two color versions)
Trade Mark	: LINAK
Model Number	: Midas HMI
Model Declaration	: N/A
Test Model	: Midas HMI
Power Supply	: Compatible with LINAK DESKLINE Control Box; CBD6S, and other DESKLINE products. Maximum DC voltage on peripheral DC connectors is 40V.
Hardware version	: V1.0
Software version	: V1.0

1.3. Wireless Function Tested in this Report

Short Range Device	
Operation Frequency	: 13.56MHz
Modulation Technology	: ASK
Antenna Type and Gain	: Internal antenna with 0dBi Gain

Note 1: Antenna position refer to EUT Photos.

Note 2: the above information was supplied by the applicant.





1.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● supplied by the manufacturer

○ supplied by the lab

○	Adapter	Model:	ASW0552-290200028
		Input:	100-240V 50-60Hz Max 16A
		Output:	40.0V/2.0A

1.5. Description of Test Facility

FCC

Designation Number: CN1275

Test Firm Registration Number: 167722

Shenzhen Tongzhou Testing Co.,Ltd has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA

Certificate Number: 5463.01

Shenzhen Tongzhou Testing Co.,Ltd has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

IC

ISED#: 22033

CAB identifier: CN0099

Shenzhen Tongzhou Testing Co.,Ltd has been listed by Innovation, Science and Economic Development Canada to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.4 and CISPR 16-1-4:2010





1.6. Statement of the Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the Shenzhen Tongzhou Testing Co.,Ltd’s quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

1.7. Measurement Uncertainty

Test Item		Uncertainty	Note
Radiation Uncertainty(9KHz~30MHz)	:	$\pm 3.26\text{dB}$	(1)
Radiation Uncertainty(30MHz~1000MHz)	:	$\pm 3.92\text{dB}$	(1)
Radiation Uncertainty(1GHz~40GHz)	:	$\pm 5.62\text{dB}$	(1)
Conduction Uncertainty	:	$\pm 2.71\text{dB}$	(1)
Occupied Channel Bandwidth	:	$\pm 3.0\%$	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

1.8. Description of Test Modes

The EUT has been tested under operating condition.

This test was performed with EUT in X, Y, Z position and the worst case was found when EUT in X position.

Test Modes:		
Mode 1	Transmitting at 13.56MHz	Record
Note: All test modes were pre-tested, but we only recorded the worst case in this report.		





2. TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.10-2020+Cor.

1-2023+C63.10a-2024 and its Errata, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

The radiated testing was performed at an antenna-to-EUT distance of 3 meters. All radiated and conducted emissions measurement was performed at Shenzhen Tongzhou Testing Co.,Ltd

2.1. EUT Configuration

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

2.2. EUT Exercise

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.205, 15.207, 15.209, 15.225 under the FCC Rules Part 15 Subpart C.

2.3. Test Sample

Sample ID	Description
TZ0271260103-1#	Normal sample





3. SYSTEM TEST CONFIGURATION

3.1. Justification

The system was configured for testing in a continuous transmits condition.

3.2. Special Accessories

No.	Equipment	Manufacturer	Model No.	Serial No.	Length	shielded/ unshielded	Notes
/	/	/	/	/	/	/	/

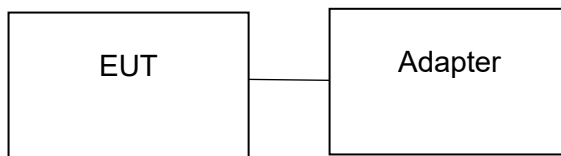
3.3. Block Diagram/Schematics

Please refer to the related document

3.4. Equipment Modifications

Shenzhen Tongzhou Testing Co.,Ltd has not done any modification on the EUT.

3.5. Configuration of Tested System





4. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Sample ID	Result
§15.225(e)	Frequency Stability	TZ0271260103-1#	Compliant
§15.225(a)(b)(c)(d) §15.209&§15.205(a)	Field Strength of fundamental and radiated emission	TZ0271260103-1#	Compliant
§15.215	-20dB Bandwidth	TZ0271260103-1#	Compliant
§15.207(a)	Conducted Emissions	TZ0271260103-1#	Compliant
§15.203	Antenna Requirements	TZ0271260103-1#	Compliant

Remark: The measurement uncertainty is not included in the test result.





5. TEST RESULT

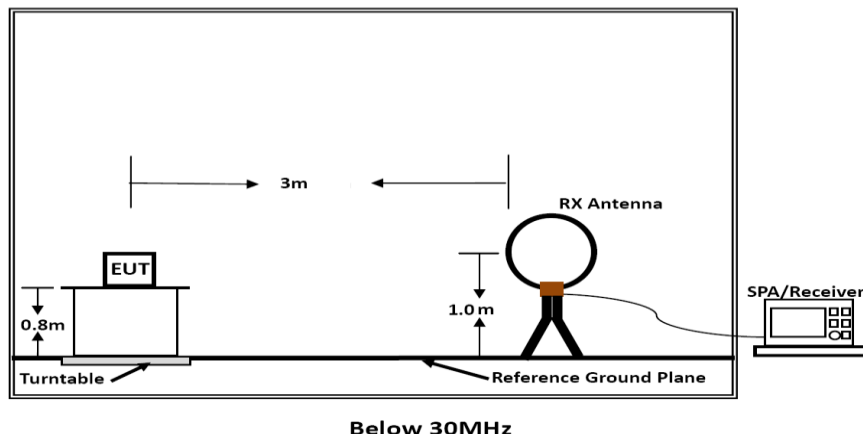
5.1. Bandwidth Measurement

5.1.1. Standard Applicable

CFR 47 Part 15.215(c).

Bandwidth is determined at the points 20 dB down from the modulated carrier.

5.1.2. Block Diagram of Test Setup



5.1.3. Test Procedures

Set the parameters of SPA as below:

1. Centre frequency = Operation Frequency
2. The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be at least three times RBW, unless otherwise specified by the applicable requirement. Span: 1kHz, Sweep time: Auto
3. Set the EUT to continue transmitting mode. Allow the trace to stabilize. Use the "N dB down" function of SPA to define the bandwidth.
4. Measured the spectrum width with power higher than 20dB below carrier.
5. Record the plots and reported.

Note: According to the standard, the resolution bandwidth (RBW) shall be within 1% to 5% of the actual occupied bandwidth. However, due to the ASK modulation, the RBW requirement cannot be met. Therefore, the measurement was carried out with RBW set to 100 Hz.

5.1.4. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

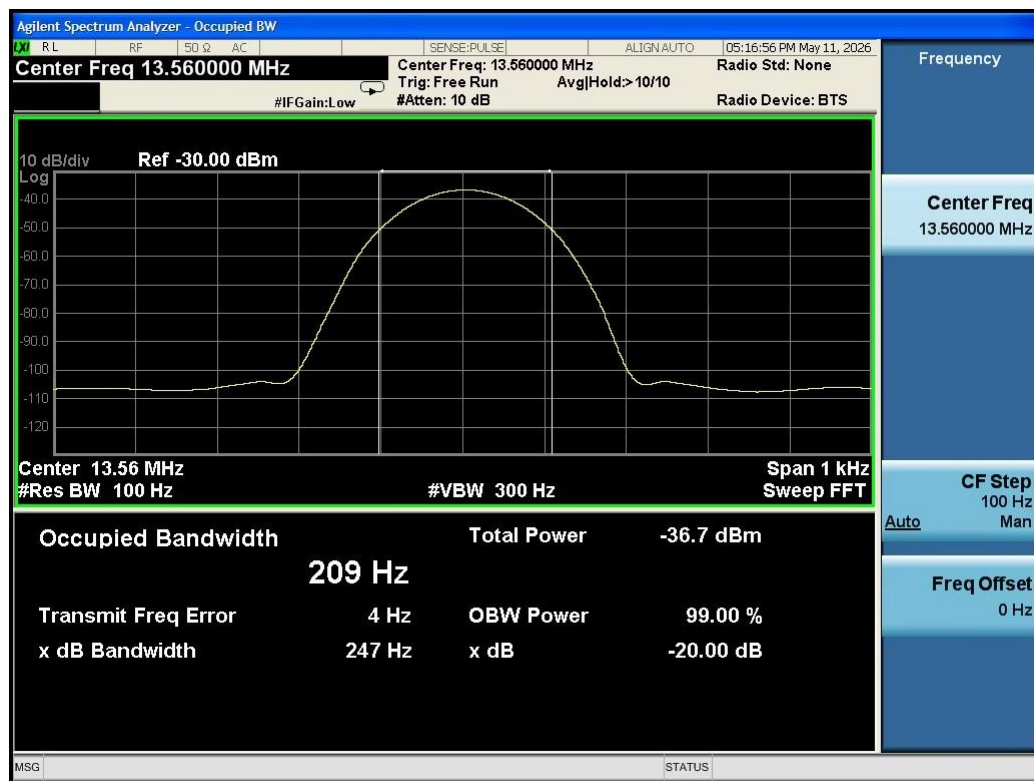




5.1.5. Test Result

Temperature	22.8°C	Humidity	55%
Test Engineer	Tony Luo	Configurations	Mode 1
Test Voltage	DC 40V	/	/

Mode	Freq (MHz)	-20dB Bandwidth (Hz)	Limit (Hz)	Conclusion
Tx Mode	13.56	247	/	PASS





5.2. Radiated Emissions Measurement

5.2.1. Standard Applicable

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in §15.209.

15.209(a):

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





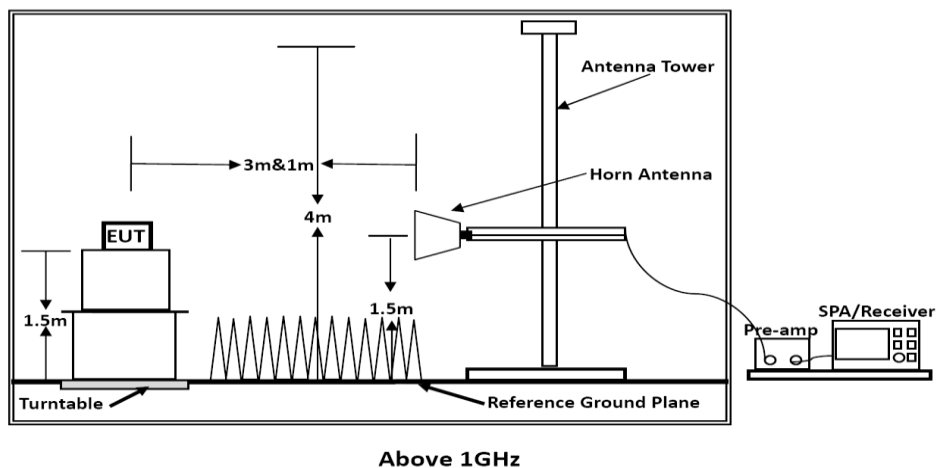
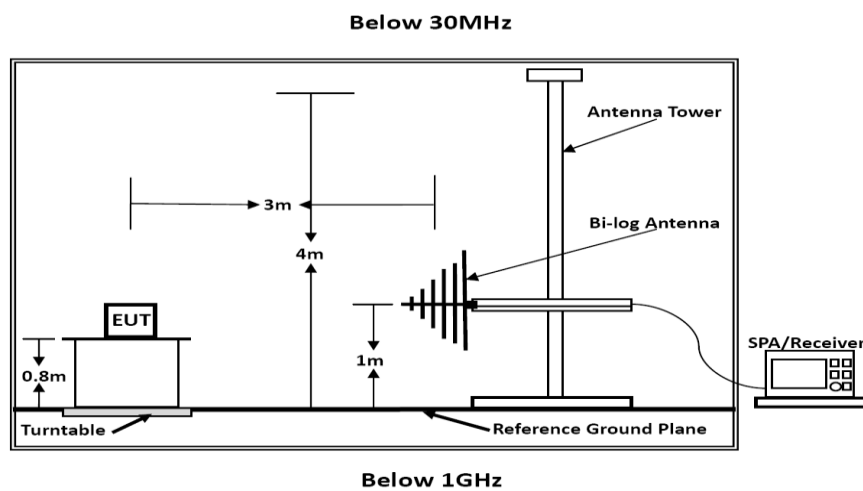
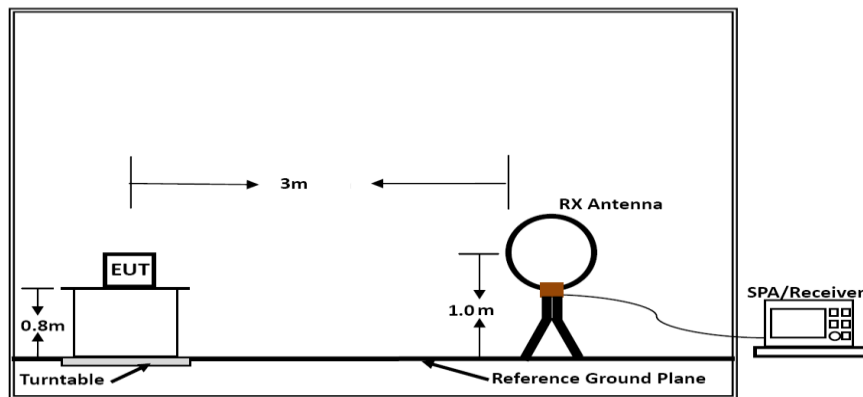
5.2.2. Measuring Instruments and Setting

The following table is the setting of spectrum analyzer and receiver.

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB/VB 200Hz/1KHz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB/VB 9kHz/30KHz for QP/AVG
Start ~ Stop Frequency	30MHz~1000MHz / RB/VB 120kHz/1MHz for QP

5.2.3. Block Diagram of Test Setup

For radiated emissions below 30MHz





5.2.4. Test Procedures

1) Sequence of testing 9 kHz to 30 MHz

Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.
- If the EUT is a floor standing device, it is placed on the ground.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions.
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

Premeasurement:

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna height is 1.0 meter.
- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

- Identified emissions during the premeasurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).
- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.
- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

2) Sequence of testing 30 MHz to 1 GHz

Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

Premeasurement:

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna is polarized vertical and horizontal.
- The antenna height changes from 1 to 3 meter.
- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

- The final measurement will be performed with minimum the six highest peaks.
- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable position ($\pm 45^\circ$) and antenna movement between 1 and 4 meter.
- The final measurement will be done with QP detector with an EMI receiver.
- The final levels, frequency, measuring time, bandwidth, antenna height, antenna polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.





5.2.5. EUT Operation during Test

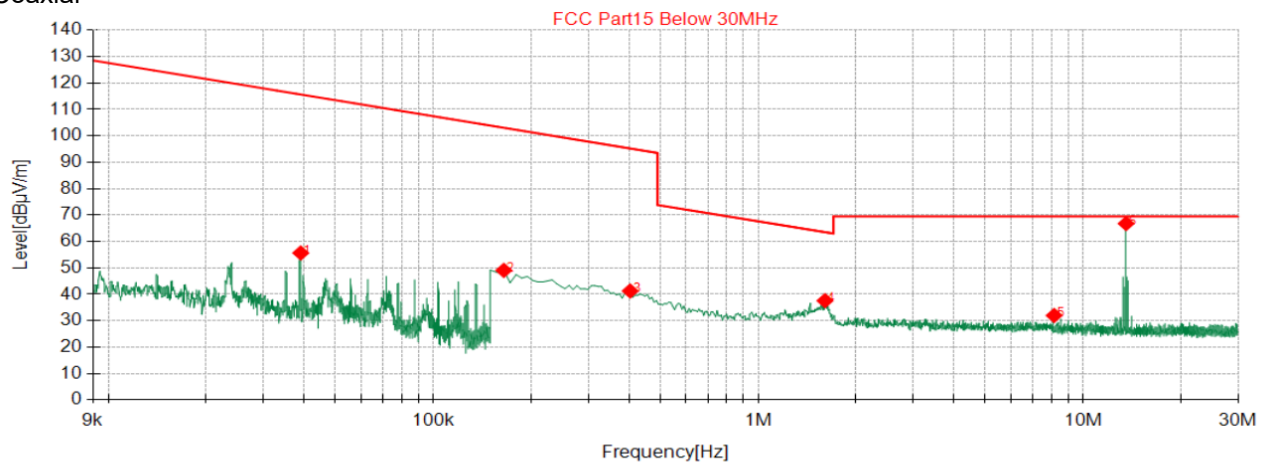
The EUT was programmed to be in continuously transmitting mode.

5.2.6. Test Results

Results of Radiated Emissions (9 KHz~30MHz)

Temperature	22.5℃	Humidity	56%
Test Engineer	Tony Luo	Configurations	Mode 1
Test Voltage	DC 40V	/	/

Coaxial



◆ QP Detector

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	0.039	35.60	20.04	55.64	115.64	60.00	100	178	Coaxial
2	0.164	29.04	20.00	49.04	103.03	53.99	100	126	Coaxial
3	0.403	21.11	20.14	41.25	95.20	53.95	100	134	Coaxial
4	1.605	17.26	20.31	37.57	63.52	25.95	100	134	Coaxial
5	8.142	11.49	20.48	31.97	69.50	37.53	100	330	Coaxial
6	13.56	46.43	20.34	66.77			100	21	Coaxial

Note:

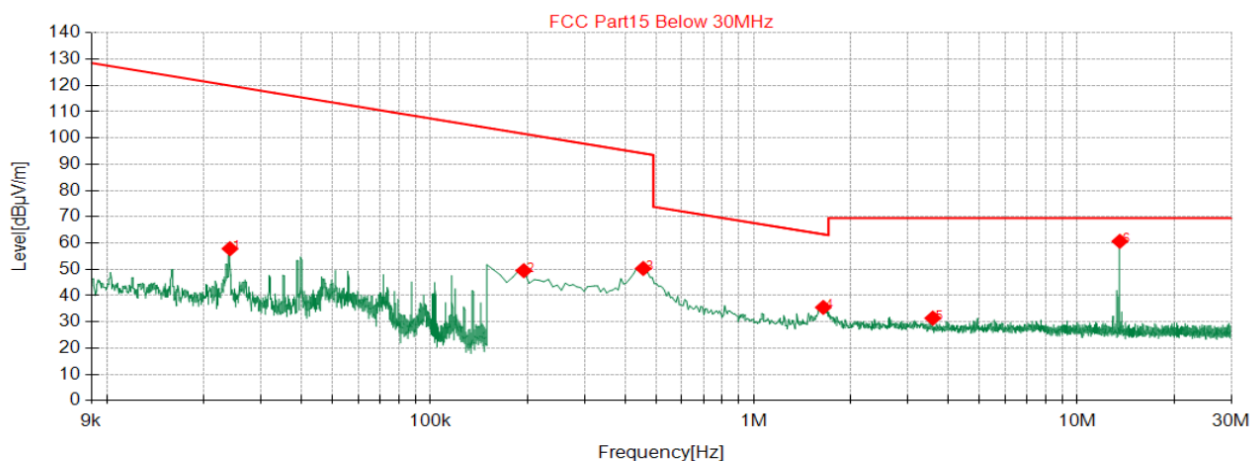
Distance extrapolation factor = 40 log (specific distance / test distance) (dB).

Limit line = specific limits (dBuV) + distance extrapolation factor.





Coplanar



◆ QP Detector

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	0.024	37.89	19.95	57.84	119.89	62.05	100	175	Coplanar
2	0.194	29.45	20.02	49.47	101.58	52.11	100	8	Coplanar
3	0.455	30.12	20.18	50.30	94.13	43.83	100	88	Coplanar
4	1.642	15.19	20.31	35.50	63.32	27.82	100	284	Coplanar
5	3.582	11.15	20.25	31.40	69.50	38.10	100	327	Coplanar
6	13.56	40.30	20.34	60.64			100	270	Coplanar

Note:

Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).

Limit line = specific limits (dBμV) + distance extrapolation factor.

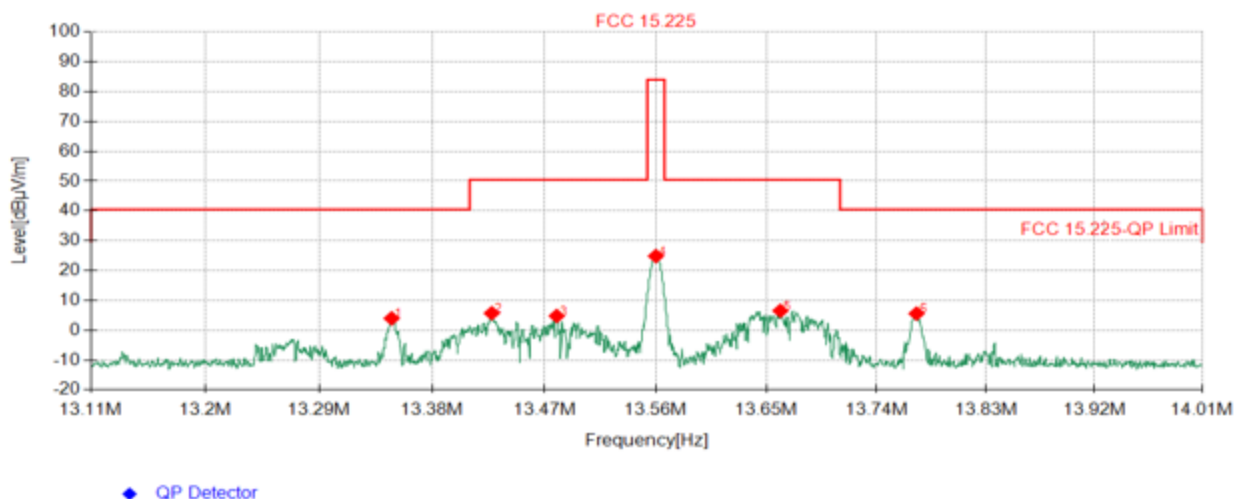




Results of the field strength of fundamental emission and mask

Temperature	22.5℃	Humidity	56%
Test Engineer	Tony Luo	Configurations	Mode 1
Test Voltage	DC 40V	/	/

Coaxial



NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	13.3476	23.61	-19.64	3.97	40.51	36.54	100	80	Coaxial
2	13.4277	25.35	-19.64	5.71	50.47	44.76	100	225	Coaxial
3	13.4799	24.43	-19.65	4.78	50.47	45.69	100	72	Coaxial
4	13.56	44.50	-19.66	24.84	84.00	59.16	100	190	Coaxial
5	13.66125	26.19	-19.68	6.51	50.47	43.96	100	160	Coaxial
6	13.77285	25.27	-19.69	5.58	40.51	34.93	100	168	Coaxial

Note:

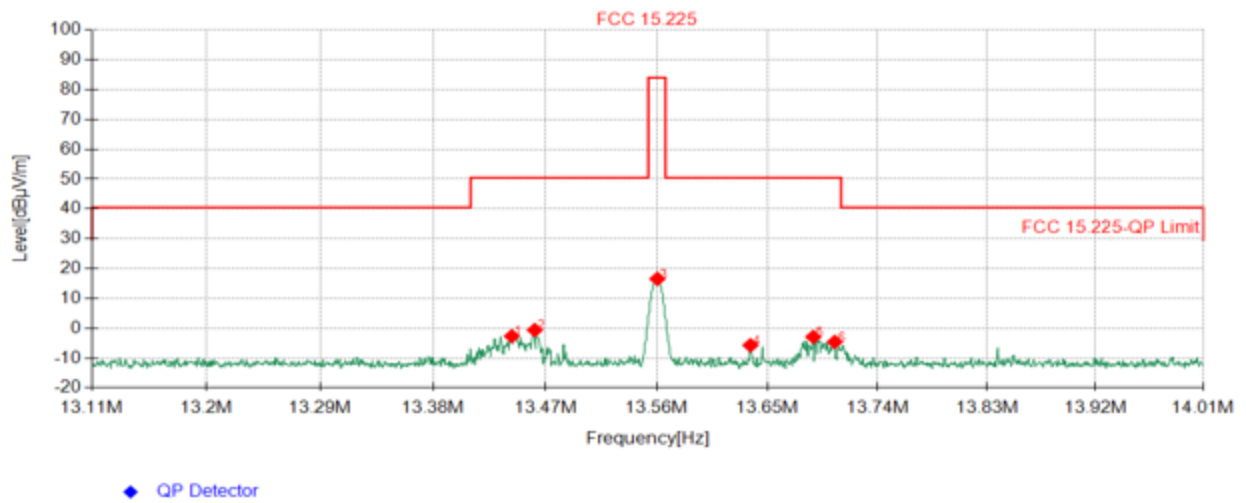
Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).

Radiated emission measurements were performed at a test distance of 3 m. The regulatory limits are specified at 30 m, and the corresponding distance extrapolation factor has already been applied in the Factor column.





Coplanar



NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	13.443	16.99	-19.65	-2.66	50.47	53.13	100	256	Coplanar
2	13.46145	19.03	-19.65	-0.62	50.47	51.09	100	275	Coplanar
3	13.56045	36.22	-19.66	16.56	84.00	67.44	100	267	Coplanar
4	13.63605	13.97	-19.68	-5.71	50.47	56.18	100	267	Coplanar
5	13.68735	16.77	-19.68	-2.91	50.47	53.38	100	240	Coplanar
6	13.7049	15.08	-19.69	-4.61	50.47	55.08	100	275	Coplanar

Note:

Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB).

Radiated emission measurements were performed at a test distance of 3 m. The regulatory limits are specified at 30 m, and the corresponding distance extrapolation factor has already been applied in the Factor column.

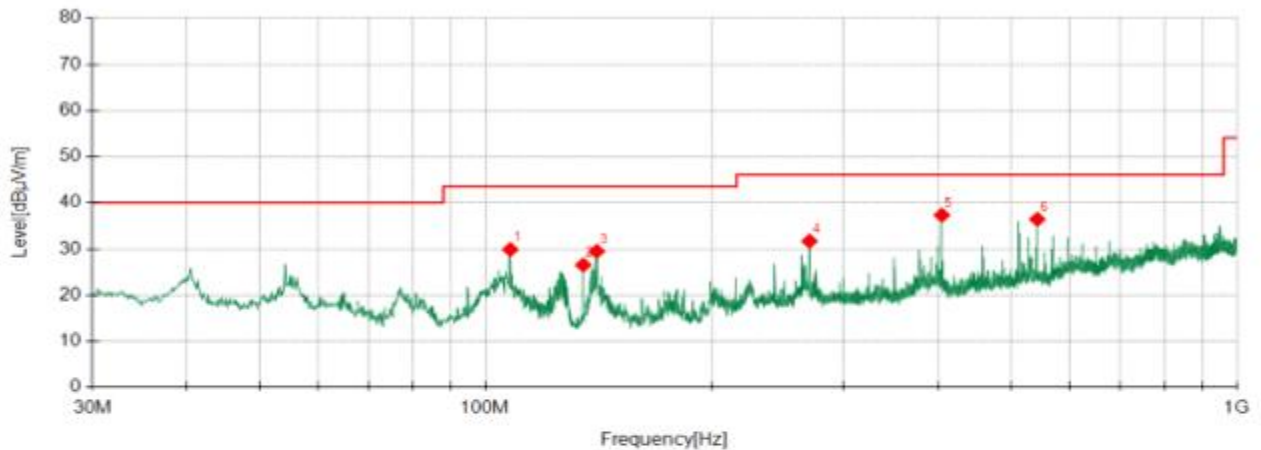




Results of Radiated Emissions (30MHz~1GHz)

Temperature	22.5℃	Humidity	56%
Test Engineer	Tony Luo	Configurations	Mode 1
Test Voltage	DC 40V	/	/

Vertical



◆ QP Detector

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	107.9	17.17	12.67	29.84	43.50	13.66	100	320	Vertical
2	135.0	16.41	10.08	26.49	43.50	17.01	100	52	Vertical
3	140.7	19.20	10.26	29.46	43.50	14.04	100	360	Vertical
4	269.9	16.03	15.63	31.66	46.00	14.34	100	17	Vertical
5	405.0	19.28	18.01	37.29	46.00	8.71	100	355	Vertical
6	542.4	15.12	21.27	36.39	46.00	9.61	100	64	Vertical

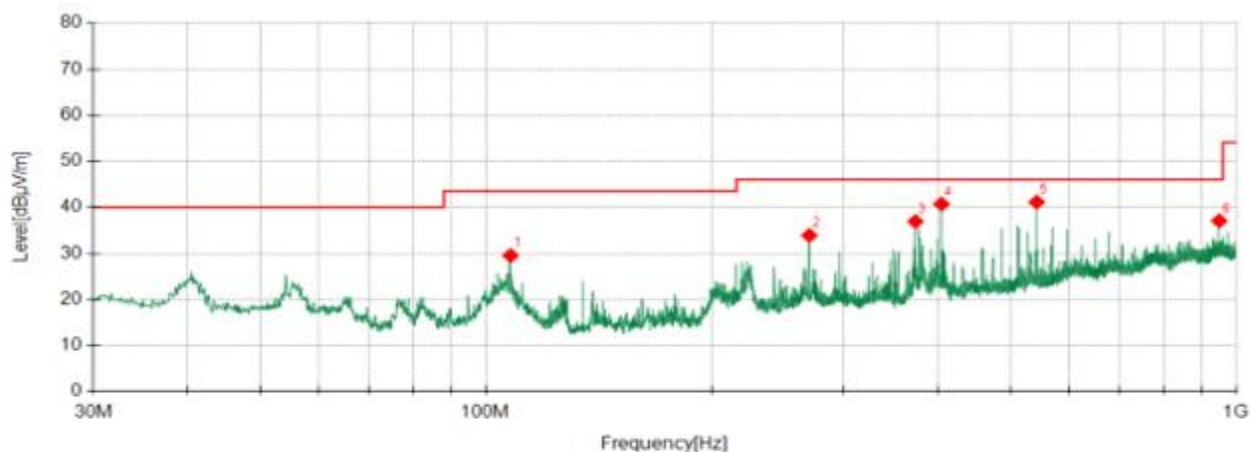
***Note:

1. Level [dBμV/m] = Reading [dBμV] + Factor [dB/m]
2. Margin [dB] = Limit [dBμV/m] - Level [dBμV/m]





Horizontal



◆ QP Detector

Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	107.9	16.83	12.67	29.50	43.50	14.00	100	334	Horizontal
2	269.9	18.24	15.63	33.87	46.00	12.13	100	57	Horizontal
3	373.8	18.90	17.99	36.89	46.00	9.11	100	48	Horizontal
4	405.0	22.67	18.01	40.68	46.00	5.32	100	69	Horizontal
5	542.4	19.83	21.27	41.10	46.00	4.90	100	69	Horizontal
6	949.3	9.99	27.04	37.03	46.00	8.97	100	107	Horizontal

***Note:

1. Level [dBμV/m] = Reading [dBμV] + Factor [dB/m]

2. Margin [dB] = Limit [dBμV/m] - Level [dBμV/m]





5.3. AC Power line conducted emissions

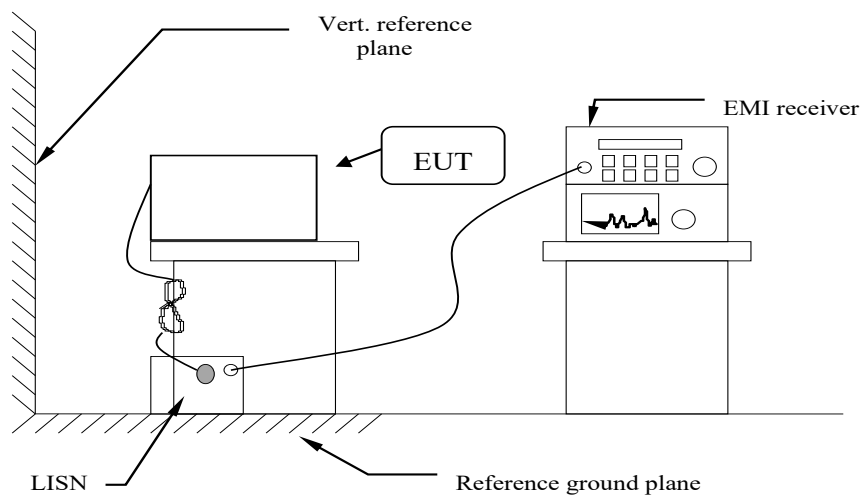
5.3.1. Standard Applicable

According to §15.207 (a): For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range are listed as follows:

Frequency Range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

* Decreasing linearly with the logarithm of the frequency

5.3.2. Block Diagram of Test Setup



Note: the distance between LISN and Vertical reference plane is 40 cm and the distance between LISN and EUT is 80 cm.

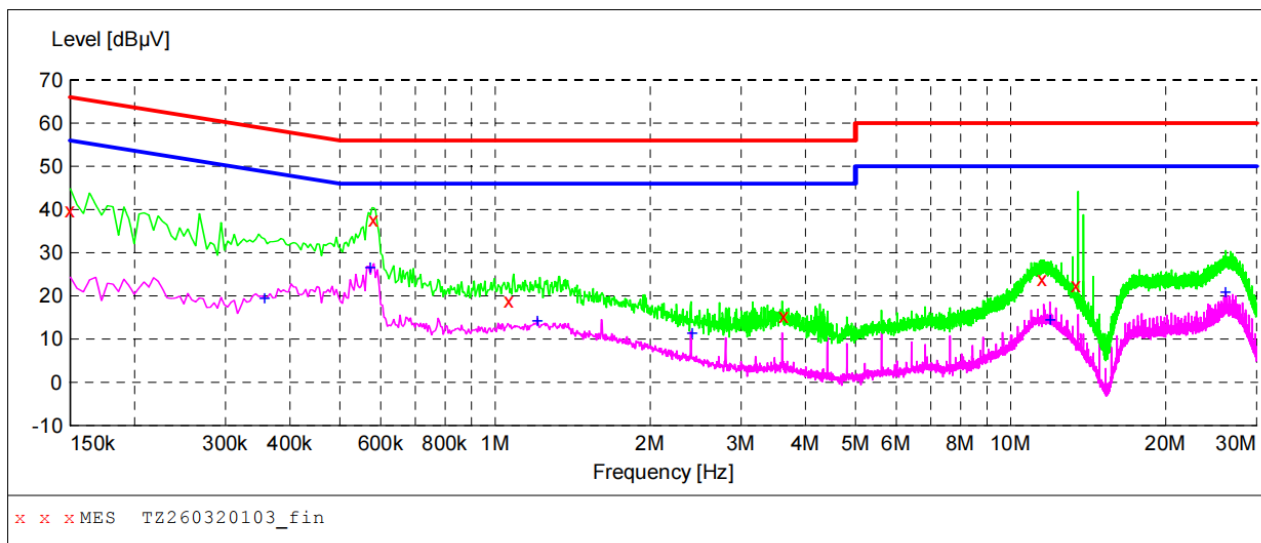
5.3.3. Test Results

Temperature	22.5°C	Humidity	56%
Test Engineer	Tony Luo	Configurations	Mode 1
Test Voltage	AC 120V/60Hz	/	/





Neutral Line



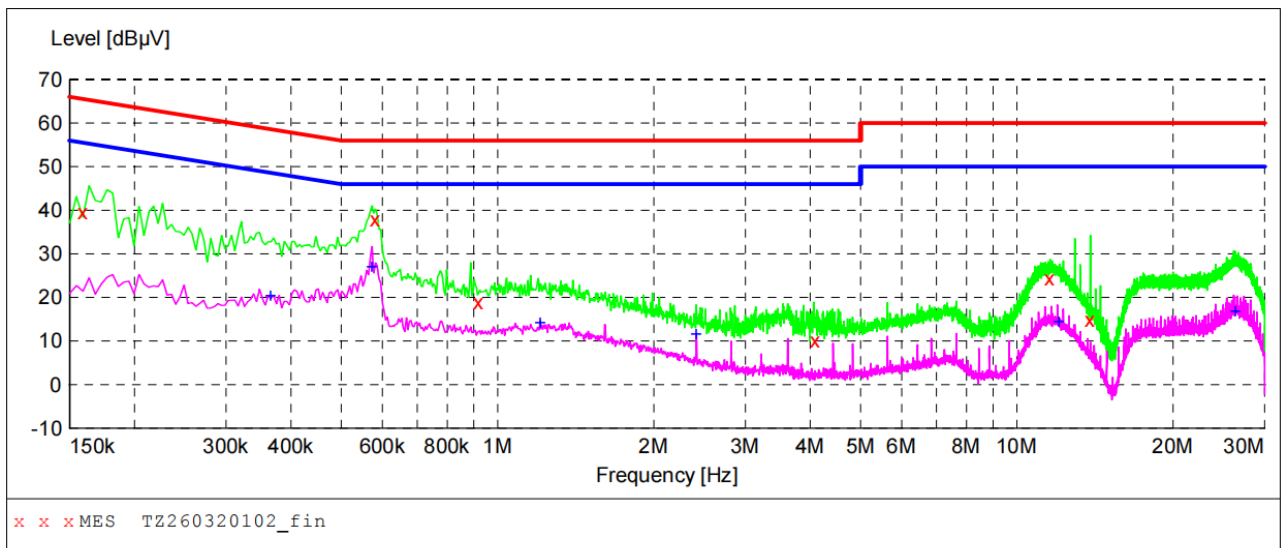
Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	39.80	9.6	66	26.2	QP	N	GND
0.582000	37.60	9.6	56	18.4	QP	N	GND
1.063500	19.00	9.7	56	37.0	QP	N	GND
3.624000	15.40	9.7	56	40.6	QP	N	GND
11.535000	23.80	9.7	60	36.2	QP	N	GND
13.429500	22.40	9.7	60	37.6	QP	N	GND

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.357000	19.40	9.7	49	29.4	AV	N	GND
0.573000	26.50	9.6	46	19.5	AV	N	GND
1.207500	14.10	9.7	46	31.9	AV	N	GND
2.413500	11.30	9.7	46	34.7	AV	N	GND
11.962500	14.40	9.7	50	35.6	AV	N	GND
26.164500	20.70	9.8	50	29.3	AV	N	GND

Note:

1. $\text{Margin(dB)} = \text{Limit(dB}\mu\text{V)} - \text{Level(dB}\mu\text{V)}$
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.



**Live Line**

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.159000	39.50	9.6	66	26.0	QP	L1	GND
0.582000	37.80	9.6	56	18.2	QP	L1	GND
0.919500	18.80	9.7	56	37.2	QP	L1	GND
4.092000	10.20	9.7	56	45.8	QP	L1	GND
11.575500	24.30	9.7	60	35.7	QP	L1	GND
13.816500	14.80	9.7	60	45.2	QP	L1	GND

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.366000	20.30	9.7	49	28.3	AV	L1	GND
0.573000	26.90	9.6	46	19.1	AV	L1	GND
1.207500	14.10	9.7	46	31.9	AV	L1	GND
2.413500	11.50	9.7	46	34.5	AV	L1	GND
12.084000	14.40	9.7	50	35.6	AV	L1	GND
26.425500	16.80	9.8	50	33.2	AV	L1	GND

Note:

1. $\text{Margin(dB)} = \text{Limit(dB}\mu\text{V)} - \text{Level(dB}\mu\text{V)}$
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.



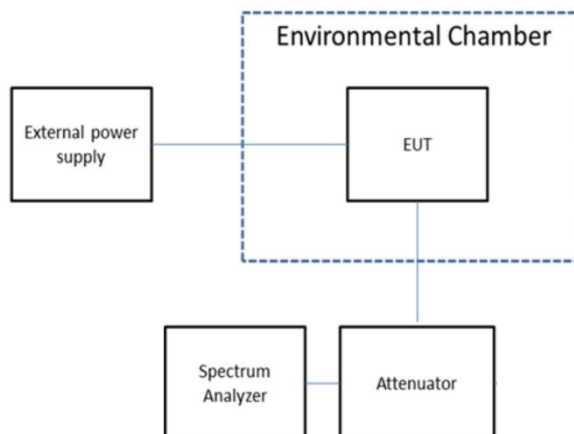


5.4. Frequency Stability

5.4.1. Standard Applicable

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, and 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.

5.4.2. Block Diagram of Test Setup



5.4.3. Test Procedures

Frequency stability versus environmental temperature

1. Setup the configuration for frequencies measurement inside an environment chamber, Install new battery in the EUT.
2. Turn on EUT and set SA center frequency to the EUT radiated frequency. Set SA Resolution Bandwidth to 300Hz and Video Resolution Bandwidth to 1kHz and Frequency Span to 10kHz. Record this frequency as reference frequency.
3. Set the temperature of chamber to 50°C . Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. While maintaining a constant temperature inside the chamber, turn the EUT on and measure the EUT operating frequency.
4. Repeat step 2 with a 10°C decreased per stage until the lowest temperature -30°C is measured, record all measured frequencies on each temperature step.

Frequency stability versus input voltage

1. Setup the configuration per figure 1 for frequencies measured at temperature if it is within 15°C to 25°C . Otherwise, an environment chamber set for a temperature of 20°C shall be used. The EUT shall be powered by normal voltage.
2. Set SA center frequency to the EUT radiated frequency. Set SA Resolution Bandwidth to 300Hz and Video Resolution Bandwidth to 1kHz. Record this frequency as reference frequency.
3. Supply the EUT primary voltage at the operating end point which is specified by manufacturer and record the frequency.

5.4.4. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.





5.4.5. Test Results

Test conditions		Frequency error (ppm)
Voltage Condition	Temp (°C)	
NV	-20	3.54
	-10	3.33
	0	3.37
	10	3.33
	20	3.42
	30	3.66
	40	3.19
	50	3.41
LV	20	3.33
HV	20	3.51
Limit(ppm) ±0.01% of the operating frequency is 100ppm		100
Result		PASS





5.5. Antenna Requirements

5.5.1. Standard Applicable

According to antenna requirement of §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. 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. The manufacturer may design the unit so that a broken antenna can be re-placed by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this Part are not exceeded.

5.5.2. Antenna Connected Construction

The antenna is an Internal antenna connect to PCB board and no consideration of replacement. Please see EUT photo for details.

5.5.3. Results

Compliance





6. LIST OF MEASURING EQUIPMENTS

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date
1	MXA Signal Analyzer	Keysight	N9020A	MY52091623	2026-01-11	2027-01-10
2	Loop Antenna	schwarzbeck	FMZB1519 B	00023	2025-10-18	2028-10-17
3	Wideband Antenna	schwarzbeck	VULB 9163	958	2025-10-18	2028-10-17
4	Horn Antenna	schwarzbeck	BBHA 9120D	01989	2025-10-18	2028-10-17
5	EMI Test Receiver	R&S	ESCI	100849/003	2026-01-11	2027-01-10
6	Controller	MF	MF7802	N/A	N/A	N/A
7	Amplifier	schwarzbeck	BBV 9743	209	2026-01-11	2027-01-10
8	Amplifier	Tonscend	TSAMP-05 18SE	--	2026-01-11	2027-01-10
9	RF Cable(below 1GHz)	HUBER+SUHNER	RG214	N/A	2026-01-11	2027-01-10
10	RF Cable(above 1GHz)	HUBER+SUHNER	RG214	N/A	2026-01-11	2027-01-10
11	Artificial Mains	ROHDE & SCHWARZ	ENV 216	101333-IP	2026-01-11	2027-01-10
12	Amplifier	Chengyi	EMC18404 5SE	980508	2026-01-11	2027-01-10
13	Spectrum Analyzer	R&S	FSV40	101321	2026-01-11	2027-01-10

Test software used:

Item	Test Software	Manufacturer	Name	Version
1	EMI Test Software	ROHDE & SCHWARZ	ESK1	V1.71
2	RE test software	Tonscend	JS32-RE	V5.0.0.0
3	Test Software	Tonscend	JS1120-3	V3.2.22





7. TEST SETUP PHOTOGRAPHS OF EUT

Please refer to separated files for Test Setup Photos of the EUT.

8. EXTERIOR PHOTOGRAPHS OF EUT

Please refer to separated files for External Photos of the EUT.

9. INTERIOR PHOTOGRAPHS OF EUT

Please refer to separated files for Internal Photos of the EUT.

-----THE END OF REPORT-----

