TEST REPORT

Report Number	:	TZ0059250209FRF20
Product Name	:	Cycling Computer
Model/Type reference	:	BC200, BC201, BC202, BC203, BC204, BC205, BC206, BC207, BC208, BC209, BC210, BC220, BC230, BC240, BC250, BC260, BC270, BC280, BC290
FCC ID	:	2AF9HBC220
Prepared for	:	Shenzhen CooSpo Tech Co., Ltd Room 602, 1# building, Lingyun Factory, Liufang Road 2nd, Xingdong Community, Bao'an District, Shenzhen, Guangdong, China.

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: 2013
Date of Test	:	Feb. 12, 2025 ~ Mar. 27, 2025
Date of Issue	:	Mar. 27, 2025

Prepared by	:	Nancy Li (File administrators)	
Reviewed by	:	Max Zhang (Technical Manager)	
Approved by	:	Matte He (General Manager)	

** Report Revise Record **

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Mar. 27, 2025	Valid	Initial release

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1. GENERAL INFORMATION

1.1. Client Information

Applicant	:	Shenzhen CooSpo Tech Co., Ltd
Address	:	Room 602, 1# building, Lingyun Factory, Liufang Road 2nd, Xingdong Community, Bao'an District, Shenzhen, Guangdong, China.
Manufacturer	:	Shenzhen CooSpo Tech Co., Ltd
Address	:	Room 602, 1# building, Lingyun Factory, Liufang Road 2nd, Xingdong Community, Bao'an District, Shenzhen, Guangdong, China.

1.2. Description of Device (EUT)

Product Name	:	Cycling Computer
Trade Mark	:	COOSPO
Model Number	:	BC200, BC201, BC202, BC203, BC204, BC205, BC206, BC207, BC208, BC209, BC210, BC220, BC230, BC240, BC250, BC260, BC270, BC280, BC290
Model Declaration	:	All the series models are the same as the test model except for the model names.
Test Model	:	BC200
Power Supply	:	DC 3.85V by Battery or DC 5V by adapter
Hardware version	:	V1.2
Software version	:	V1.0.1

1.3. Wireless Function Tested in this Report

Short Range Device		
Operation Frequency	:	2457MHz
Modulation Technology	:	GFSK
Antenna Type and Gain	:	PCB Antenna with 0.31dBi Gain

Note 1: Antenna position refer to EUT Photos.
Note 2: the above information was supplied by the applicant.

Channel List

Channel	Frequency (MHz)
01	2457

Test Frequency List

Type	Test Frequency	
	Channel	Frequency (MHz)
SRD	01	2457

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:	A8A-05015U-US2
		Input:	100-240V~50/60Hz 0.35A
		Output:	DC5V,1.5A

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)	:	±3.26dB	(1)
Radiation Uncertainty(30MHz~1000MHz)	:	±3.92dB	(1)
Radiation Uncertainty(1GHz~40GHz)	:	±5.62dB	(1)
Conduction Uncertainty	:	±2.71dB	(1)
Occupied Channel Bandwidth	:	±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 Channel 01	Record

2. TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.10-2013, 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, 15.249 under the FCC Rules Part 15 Subpart C.

2.3. Test Sample

Sample ID	Description
TZ0059250209–1#	Engineer sample – continuous transmit
TZ0059250209–2#	Normal sample – Intermittent transmit

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
/	/	/	/	/	/	/	/

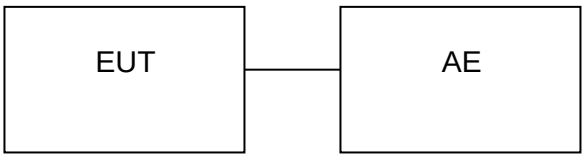
3.3. Block Diagram/Schematics

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
§15.249(a)	Field Strength of Fundamental	TZ0059250209–1#	Compliant
§15.209&§15.249(a)	Radiated Emission	TZ0059250209–1# TZ0059250209–2#	Compliant
§15.209&§15.249(d)	Band Edge Emission	TZ0059250209–1#	Compliant
/	-20dB Bandwidth	TZ0059250209–1#	Compliant
§15.207(a)	Conducted Emissions	TZ0059250209–2#	Compliant
§15.203	Antenna Requirements	TZ0059250209–1#	Compliant

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

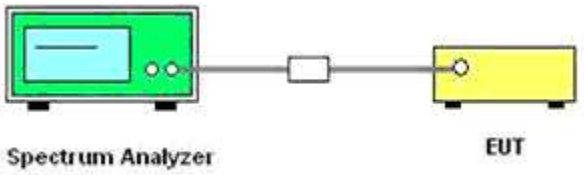
5. TEST RESULT

5.1. Bandwidth Measurement

5.1.1. Standard Applicable

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

1. Set the parameters of SPA as below:
2. Centre frequency = Operation Frequency
3. RBW=30kHz, VBW=100kHz
4. Span: 3MHz
5. Sweep time: Auto
6. Set the EUT to continue transmitting mode. Allow the trace to stabilize. Use the “N dB down” function of SPA to define the bandwidth.
7. Record the plots and Reported.

5.1.4. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.1.5. Test Result

Temperature	25.6℃	Humidity	61%
Test Engineer	Tony Luo	Configurations	TX Mode

Mode	Freq (MHz)	-20dB Bandwidth (kHz)	Limit (kHz)	Conclusion
Mode 1	2457	951.5	/	PASS

Channel 2457MHz

5.2. Radiated Emissions Measurement

5.2.1. Standard Applicable

15.249 (a)

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

(1) The above field strength limits are specified at a distance of 3 meters.

(2) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

(3) As shown in §15.35(b), for frequencies above 1000 MHz, the field strength limits in this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

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

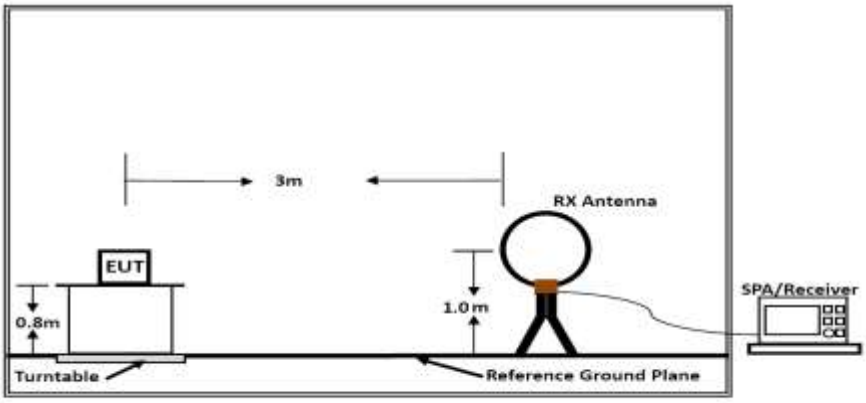
The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 3 MHz for Average
RB / VB (Emission in non-restricted band)	1MHz / 1MHz for Peak, 1 MHz / 3 MHz for Average

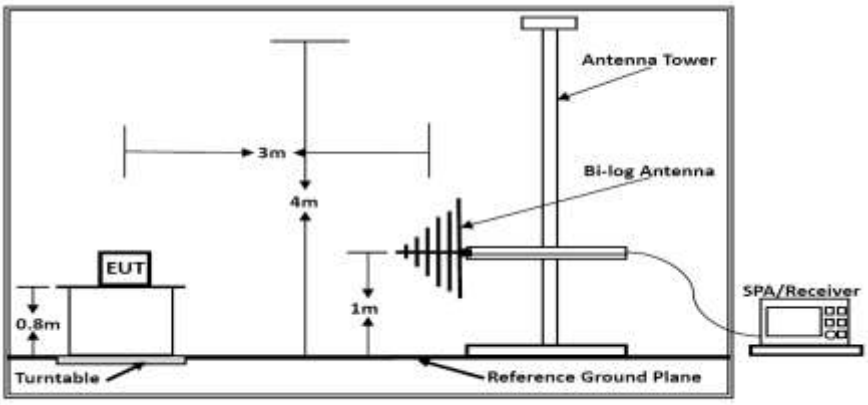
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB/VB 200Hz/1KHz for QP/AVG
Start ~ Stop Frequency	150kHz~30MHz / RB/VB 9kHz/30KHz for QP/AVG
Start ~ Stop Frequency	30MHz~1000MHz / RB/VB 120kHz/1MHz for QP

5.2.3. Block Diagram of Test Setup

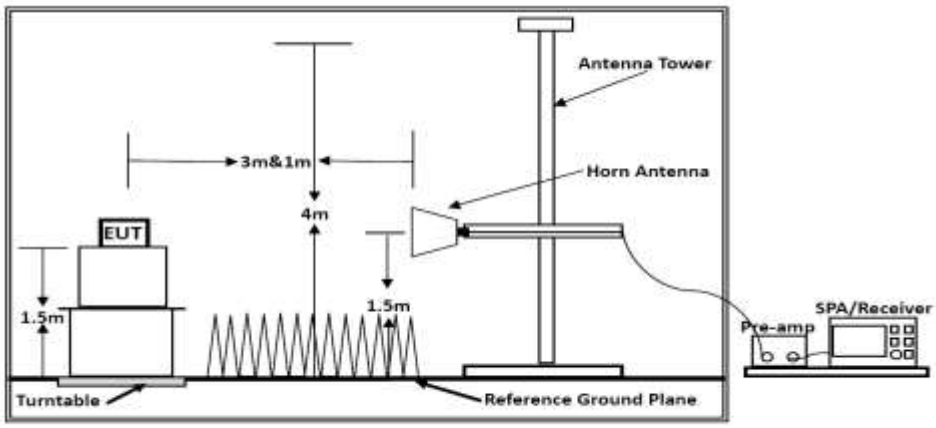
For radiated emissions below 30MHz



Below 30MHz



Below 1GHz



Above 1GHz

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 (± 45°) 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.

3) Sequence of testing 1 GHz to 40 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 rotatable table with 1.5 m height is used.
--- 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 scan range is 1 meter to 2.5 meter.
--- At each turntable position and antenna polarization the analyzer sweeps with peak detection 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 (± 45°) and antenna movement between 1 and 4 meters. This procedure is repeated for both antenna polarizations.
--- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
--- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, 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	26.5℃	Humidity	58%
Test Engineer	Tony Luo	Configurations	Mode 1
Test Voltage	DC 3.85V by Battery		

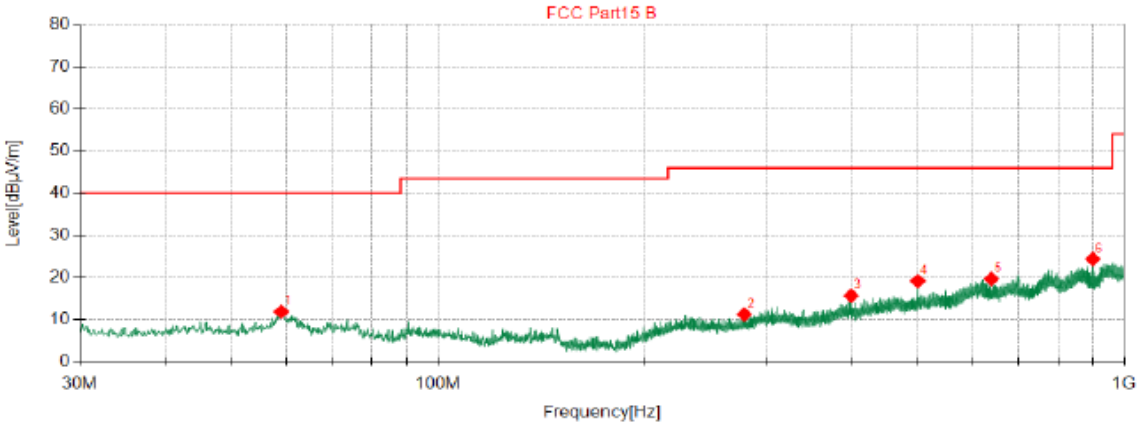
Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Over Limit (dBuV)	Remark
-	-	-	-	See Note

Note:
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
Limit line = specific limits (dBuV) + distance extrapolation factor.

Results of Radiated Emissions (30MHz~1GHz)

Temperature	24.8℃	Humidity	63%
Test Engineer	Tony Luo	Configurations	Mode 1

Vertical

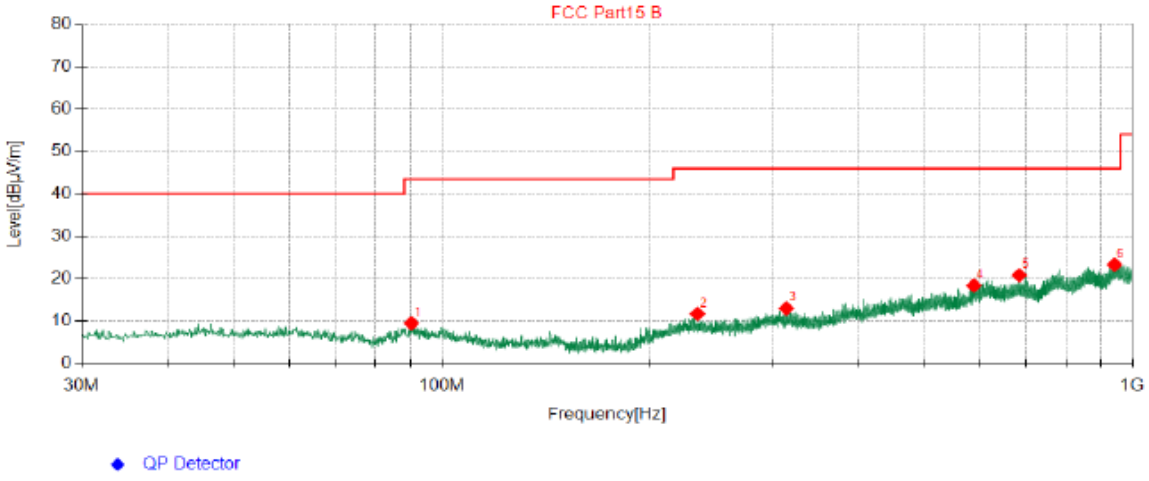


Suspected Data List

NO.	Freq. [MHz]	Reading [dBµV]	Factor [dB/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	58.97	27.45	-15.50	11.95	40.00	28.05	100	6	Vertical
2	279.1	24.53	-13.24	11.29	46.00	34.71	100	48	Vertical
3	399.6	25.78	-10.05	15.73	46.00	30.27	100	217	Vertical
4	499.9	27.27	-8.06	19.21	46.00	26.79	100	326	Vertical
5	640.0	24.80	-5.09	19.71	46.00	26.29	100	13	Vertical
6	899.9	25.48	-1.04	24.44	46.00	21.56	100	29	Vertical

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

Horizontal



Suspected Data List									
NO.	Freq. [MHz]	Reading [dBµV]	Factor [dB/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	90.14	27.21	-17.66	9.55	43.50	33.95	100	30	Horizontal
2	234.1	26.13	-14.36	11.77	46.00	34.23	100	91	Horizontal
3	315.0	25.44	-12.39	13.05	46.00	32.95	100	281	Horizontal
4	589.0	24.29	-5.86	18.43	46.00	27.57	100	73	Horizontal
5	685.2	25.40	-4.53	20.87	46.00	25.13	100	199	Horizontal
6	941.8	23.90	-0.55	23.35	46.00	22.65	100	33	Horizontal

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

Results of Radiated Emissions (1GHz-25GHz)

Channel 01 / 2457MHz

Freq. MHz	Reading dBμV	Ant. Fac. dB/m	Pre. Fac. dB	Cab. Loss dB	Level dBμV/m	Limit dBμV/m	Margin dB	Remark	Pol.
4914.00	58.04	33.06	35.04	3.94	60.00	74.00	14.00	Peak	Horizontal
4914.00	39.47	33.06	35.04	3.94	41.43	54.00	12.57	Average	Horizontal
4914.00	56.43	33.06	35.04	3.94	58.39	74.00	15.61	Peak	Vertical
4914.00	41.14	33.06	35.04	3.94	43.10	54.00	10.90	Average	Vertical

Notes:
1. Measuring frequencies from 9 KHz - 10th harmonic or 26.5GHz (which is less), No emission found between lowest internal used/generated frequency to 30MHz.
2. Radiated emissions measured in frequency range from 9 KHz ~10th harmonic or 26.5GHz (which is less) were made with an instrument using Peak detector mode.
3. Level = Reading + Ant. Fac - Pre. Fac. + Cab. Loss. Margin = Limit – Level.

Results of Field Strength of Fundamental

Peak Value					
Frequency (MHz)	Measured Level@3m (dBμV/m)	Correction Factor dB/m	Field Strength (dBμV/m)	Limit @3m (dBμV/m)	Polarity
2457	58.92	34.59	93.51	114.00	Horizontal
2457	58.83	34.59	93.42	114.00	Vertical
Average Value					
Frequency (MHz)	Measured Level@3m (dBμV/m)	Correction Factor dB/m	Field Strength (dBμV/m)	Limit @3m (dBμV/m)	Polarity
2457	58.33	34.59	92.92	94.00	Horizontal
2457	58.27	34.59	92.86	94.00	Vertical

Note:
1. Corr. Factor= Antenna Factor (dB/m) + Cable Loss (dB)
2. RBW=3MHz/VBW=10MHz

Results of Band Edge Emission

Temperature	27.4℃	Humidity	58%
Test Engineer	Tony Luo	Configurations	TX Mode

Channel 01 / 2457 MHz										
Item (Mark)	Freq. MHz	Reading dBµV	Ant. Fac. dB/m	PRM Factor dB	Cable Loss dB	Level dBµV/m	Limit dBµV/m	Margin dB	Detector	Pol.
1	2400.00	56.04	29.99	30.21	8.35	64.17	74	9.83	Peak	Horizontal
1	2400.00	37.70	29.99	30.21	8.35	45.83	54	8.17	AV[5]	Horizontal
2	2400.00	58.97	29.99	30.21	8.35	67.10	74	6.90	Peak	Vertical
2	2400.00	40.45	29.99	30.21	8.35	48.58	54	5.42	AV[5]	Vertical

Channel 01 / 2457 MHz										
Item (Mark)	Freq. MHz	Reading dBµV	Ant. Fac. dB/m	PRM Factor dB	Cable Loss dB	Level dBµV/m	Limit dBµV/m	Margin dB	Detector	Pol.
3	2483.50	54.04	30.25	30.25	8.5	62.54	74	11.46	Peak	Horizontal
3	2483.50	29.03	30.25	30.25	8.5	37.53	54	16.47	AV[5]	Horizontal
4	2483.50	51.84	30.25	30.25	8.5	60.34	74	13.66	Peak	Vertical
4	2483.50	25.33	30.25	30.25	8.5	33.83	54	20.17	AV[5]	Vertical
5	2488.81	59.12	30.25	30.25	8.5	67.62	74	6.38	Peak	Horizontal
5	2493.22	35.62	30.25	30.25	8.5	44.12	54	9.88	AV[5]	Horizontal
6	2496.71	47.91	30.25	30.25	8.5	56.41	74	17.59	Peak	Vertical
6	2497.99	35.99	30.25	30.25	8.5	44.49	54	9.51	AV[5]	Vertical

Remark:
1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
2. The other emission levels were very low against the limit.
3. Margin = Limit - Emission Level.
4. The average measurement was not performed when the peak measured data under the limit of average detection.
5. Detector AV is setting spectrum/receiver. RBW=1MHz/VBW=3MHz/Sweep time=Auto/Detector=Average.

5.3. AC Power line conducted emissions

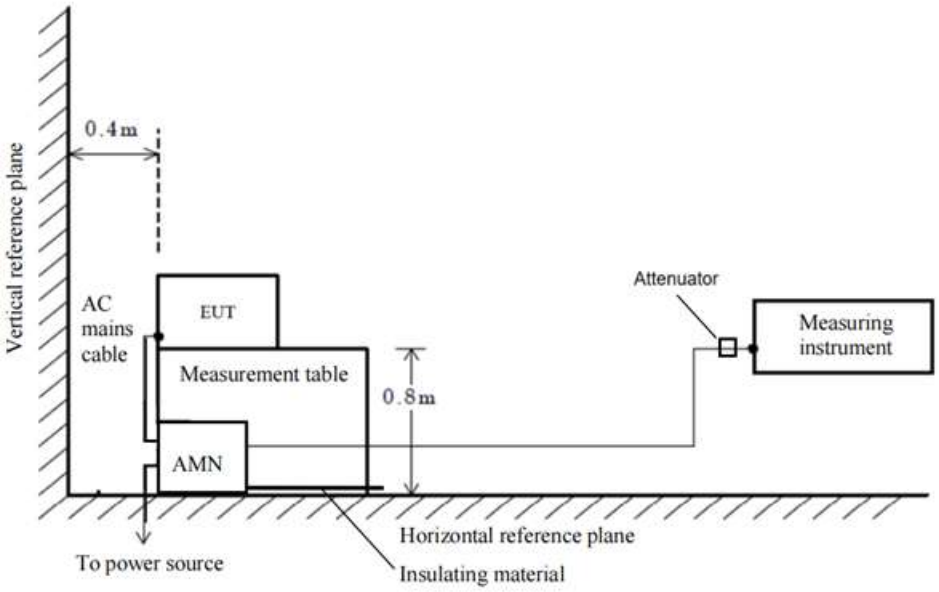
5.3.1. Standard Applicable

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 (dBμV)	
	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.

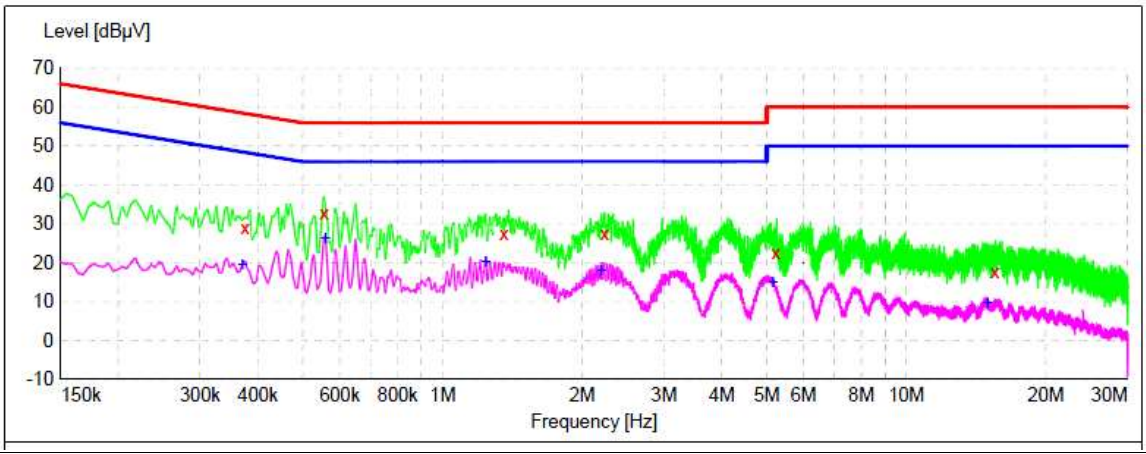
5.3.3. Test Results

Temperature	24.5℃	Humidity	62%
Test Engineer	Allen Lai	Configurations	TX Mode
Test Voltage	DC 5V by adapter		

PASS

The test data please refer to following page.

Neutral Line

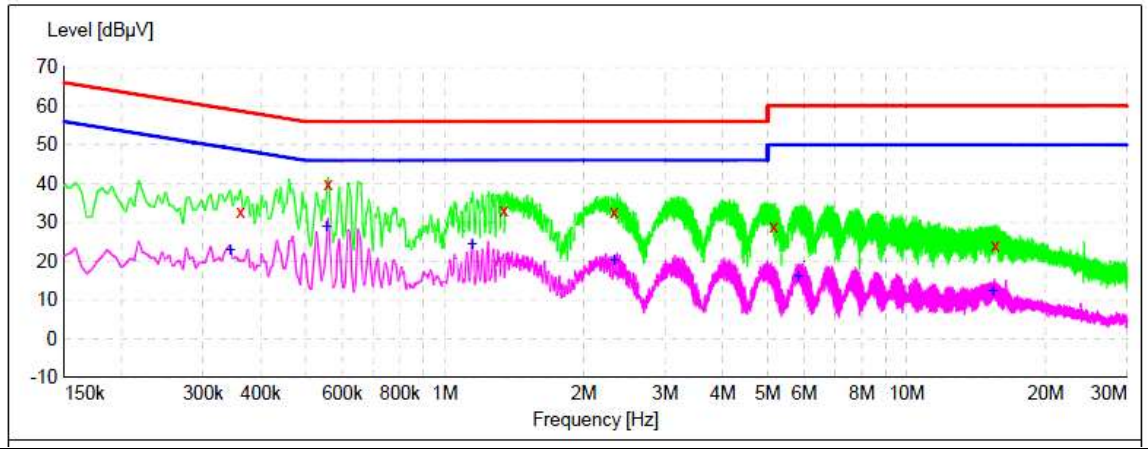


Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.375000	29.00	10.1	58	29.4	QP	N	GND
0.555000	32.70	9.9	56	23.3	QP	N	GND
1.356000	27.30	9.7	56	28.7	QP	N	GND
2.233500	27.60	9.7	56	28.4	QP	N	GND
5.235000	22.50	9.8	60	37.5	QP	N	GND
15.504000	17.70	9.9	60	42.3	QP	N	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.370500	19.40	10.1	49	29.1	AV	N	GND
0.559500	26.30	9.9	46	19.7	AV	N	GND
1.239000	20.30	9.7	46	25.7	AV	N	GND
2.197500	18.10	9.7	46	27.9	AV	N	GND
5.158500	15.00	9.8	50	35.0	AV	N	GND
14.946000	9.60	9.9	50	40.4	AV	N	GND

Note:
1. Margin(dB)= Limit(dBµV) - Level(dBµV)
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 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
0.361500	32.80	10.1	59	25.9	QP	L1	GND
0.559500	39.80	9.9	56	16.2	QP	L1	GND
1.342500	33.00	9.7	56	23.0	QP	L1	GND
2.328000	32.80	9.7	56	23.2	QP	L1	GND
5.163000	29.00	9.8	60	31.0	QP	L1	GND
15.549000	24.10	9.9	60	35.9	QP	L1	GND

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.343500	23.10	10.1	49	26.0	AV	L1	GND
0.555000	29.10	9.9	46	16.9	AV	L1	GND
1.144500	24.50	9.7	46	21.5	AV	L1	GND
2.328000	20.10	9.7	46	25.9	AV	L1	GND
5.815500	16.10	9.8	50	33.9	AV	L1	GND
15.364500	12.30	9.9	50	37.7	AV	L1	GND

Note:
1. Margin(dB)= Limit(dBµV) - Level(dBµV)
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 9 kHz (150 kHz—30 MHz), Step size: 4 kHz, Scan time: auto.

5.4. Antenna Requirements

5.4.1. 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.

5.4.2. Antenna Connected Construction

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

5.4.3. 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	2024-01-04	2025-01-03
2	MXA Signal Analyzer	Keysight	N9020A	MY52091623	2024-12-31	2025-12-30
3	Loop Antenna	schwarzbeck	FMZB1519 B	00023	2022-11-13	2025-11-12
4	Wideband Antenna	schwarzbeck	VULB 9163	958	2022-11-13	2025-11-12
5	Horn Antenna	schwarzbeck	BBHA 9120D	01989	2022-11-13	2025-11-12
6	EMI Test Receiver	R&S	ESCI	100849/003	2024-01-04	2025-01-03
7	EMI Test Receiver	R&S	ESCI	100849/003	2024-12-31	2025-12-30
8	Controller	MF	MF7802	N/A	N/A	N/A
9	Amplifier	schwarzbeck	BBV 9743	209	2024-01-04	2025-01-03
10	Amplifier	schwarzbeck	BBV 9743	209	2024-12-31	2025-12-30
11	Amplifier	Tonscend	TSAMP-05 18SE	--	2024-01-04	2025-01-03
12	Amplifier	Tonscend	TSAMP-05 18SE	--	2024-12-31	2025-12-30
13	RF Cable(below 1GHz)	HUBER+SUHN ER	RG214	N/A	2024-01-04	2025-01-03
14	RF Cable(below 1GHz)	HUBER+SUHN ER	RG214	N/A	2024-12-31	2025-12-30
15	RF Cable(above 1GHz)	HUBER+SUHN ER	RG214	N/A	2024-01-04	2025-01-03
16	RF Cable(above 1GHz)	HUBER+SUHN ER	RG214	N/A	2024-12-31	2025-12-30
17	Artificial Mains	ROHDE & SCHWARZ	ENV 216	101333-IP	2024-01-04	2025-01-03
18	Artificial Mains	ROHDE & SCHWARZ	ENV 216	101333-IP	2024-12-31	2025-12-30
19	Horn Antenna	A-INFO	LB-180400-KF	J211020657	2023-10-12	2025-10-11
20	Amplifier	Chenyi	EMC184045SE	980508	2024-09-20	2025-09-19
21	Fixed Attenuator	Mini circuits	BW-S6-2W 263A+	N/A	2024-12-31	2025-12-30

Test software used:

Item	Test Software	Manufacturer	Name	Version
1	EMI Test Software	ROHDE & SCHWARZ	ES-K1	V1.71
2	RE Test software	Tonscend	JS32-RE	V5.0.0.0

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----------