
FCC Test Report

Report No.: AGC10358200603FE02

FCC ID : 2AW3GTM-002

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION : Mouse

BRAND NAME : N/A

MODEL NAME : TM-002, TM-001, TM-003 , TM-005 , TM-006, TM-008, TM-009 , TM-010, TM-011, TM-012, TM-013, TM-014 , TM-015, TM-204, TM-205, TM-206, TM-207 , TM-208, TM-209, TM-210, TM-212, TM-213, TM-214, TM-215, TM-216

APPLICANT : Shenzhen Torich Electronic Technology Co., Ltd

DATE OF ISSUE : Aug. 27, 2020

STANDARD(S) : FCC Part 15.247

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Aug. 27, 2020	Valid	Initial Release

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TABLE OF CONTENTS

1. VERIFICATION OF COMPLIANCE	5
2. GENERAL INFORMATION.....	6
2.1. PRODUCT DESCRIPTION.....	6
2.2. TABLE OF CARRIER FREQUENCIES	6
2.3. RELATED SUBMITTAL(S)/GRANT(S)	7
2.4. TEST METHODOLOGY.....	7
2.5. SPECIAL ACCESSORIES	7
2.6. EQUIPMENT MODIFICATIONS	7
2.7. ANTENNA REQUIREMENT.....	7
3. MEASUREMENT UNCERTAINTY	8
4. DESCRIPTION OF TEST MODES.....	9
5. SYSTEM TEST CONFIGURATION	10
5.1. CONFIGURATION OF TESTED SYSTEM.....	10
5.2. EQUIPMENT USED IN TESTED SYSTEM	10
5.3. SUMMARY OF TEST RESULTS.....	10
6. TEST FACILITY	11
7. PEAK OUTPUT POWER	12
7.1. MEASUREMENT PROCEDURE	12
7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	12
7.3. LIMITS AND MEASUREMENT RESULT	13
8. 6 DB BANDWIDTH.....	15
8.1. MEASUREMENT PROCEDURE	15
8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	15
8.3. LIMITS AND MEASUREMENT RESULTS	15
9. CONDUCTED SPURIOUS EMISSION	17
9.1. MEASUREMENT PROCEDURE	17
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	17
9.3. MEASUREMENT EQUIPMENT USED	17
9.4. LIMITS AND MEASUREMENT RESULT	17
10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY	22

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10.1. MEASUREMENT PROCEDURE	22
10.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	22
10.3. MEASUREMENT EQUIPMENT USED	22
10.4. LIMITS AND MEASUREMENT RESULT	22
11. RADIATED EMISSION.....	24
11.1. MEASUREMENT PROCEDURE	24
11.2. TEST SETUP	25
11.3. LIMITS AND MEASUREMENT RESULT	26
11.4. TEST RESULT.....	26
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	36
APPENDIX B: PHOTOGRAPHS OF EUT	38

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1. VERIFICATION OF COMPLIANCE

Applicant	Shenzhen Torich Electronic Technology Co., Ltd
Address	4/5F, Unit B2, Fenghuang Gang 3Rd Industiral Area, Baotian 1st Road, No.231, Bao'An District, Shenzhen, China
Manufacturer	Shenzhen Torich Electronic Technology Co., Ltd
Address	4/5F, Unit B2, Fenghuang Gang 3Rd Industiral Area, Baotian 1st Road, No.231, Bao'An District, Shenzhen, China
Factory	Shenzhen Torich Electronic Technology Co., Ltd
Address	4/5F, Unit B2, Fenghuang Gang 3Rd Industiral Area, Baotian 1st Road, No.231, Bao'An District, Shenzhen, China
Product Designation	Mouse
Brand Name	N/A
Test Model	TM-002
Series Model	TM-001, TM-003 , TM-005 , TM-006, TM-008, TM-009 , TM-010, TM-011, TM-012, TM-013, TM-014 , TM-015, TM-204, TM-205, TM-206, TM-207 , TM-208, TM-209, TM-210, TM-212, TM-213, TM-214, TM-215, TM-216
Difference Description	All the same except for the model name.
Date of test	Jul. 24, 2020 to Aug. 26, 2020
Deviation	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Report Template	AGCRT-US-BLE/RF

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC part 15.247.

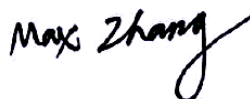
Prepared By



John Zeng
(Project Engineer)

Aug. 26, 2020

Reviewed By



Max Zhang
(Reviewer)

Aug. 27, 2020

Approved By



Forrest Lei
(Authorized Officer)

Aug. 27, 2020

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2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is designed as a “Mouse”. It is designed by way of utilizing the GFSK technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	2.40365GHz to 2.47965GHz
RF Output Power	-4.047dBm (Max)
Modulation	GFSK
Number of channels	16 Channel
Antenna Designation	PCB Antenna (Comply with requirements of the FCC part 15.203)
Antenna Gain	-1dBi
Hardware Version	V7.0
Software Version	V7.0
Power Supply	DC 5V

2.2. TABLE OF CARRIER FREQUENCIES

Channel Number	Frequency(MHz)	Channel Number	Frequency(MHz)
1	2403.65	9	2414.65
2	2426.65	10	2436.65
3	2441.65	11	2459.65
4	2463.65	12	2473.65
5	2407.65	13	2419.65
6	2422.65	14	2439.65
7	2445.65	15	2453.65
8	2466.65	16	2479.65

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2.3. RELATED SUBMITTAL(S)/GRANT(S)

This submittal(s) (test report) is intended for **FCC ID: 2AW3GTM-002** filing to comply with the FCC Part 15.247 requirements.

2.4. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

2.5. SPECIAL ACCESSORIES

Refer to section 5.2.

2.6. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.7. ANTENNA REQUIREMENT

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.

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3. MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

- Uncertainty of Conducted Emission, $U_c = \pm 3.1$ dB
- Uncertainty of Radiated Emission below 1GHz, $U_c = \pm 4.0$ dB
- Uncertainty of Radiated Emission above 1GHz, $U_c = \pm 4.8$ dB
- Uncertainty of total RF power, conducted, $U_c = \pm 0.8$ dB
- Uncertainty of RF power density, conducted, $U_c = \pm 2.6$ dB
- Uncertainty of spurious emissions, conducted, $U_c = \pm 2.7$ dB
- Uncertainty of Occupied Channel Bandwidth: $U_c = \pm 2$ %

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4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel TX(2403.65MHz)
2	Middle channel TX(2441.65MHz)
3	High channel TX(2479.65MHz)

Note:

1. Only the result of the worst case was recorded in the report, if no other cases.
2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
3. For Conducted Test method, a temporary antenna connector is provided by the manufacture.
4. Set the EUT into the individual test modes by pressing the EUT buttons..
5. For battery operated equipment, the equipment tests are performed using a new battery.

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5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF TESTED SYSTEM

Radiated Emission Configure:



5.2. EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Mouse	TM-002	2AW3GTM-002	EUT

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
15.247 (b)(3)	Peak Output Power	Compliant
15.247 (a)(2)	6 dB Bandwidth	Compliant
15.247 (d)	Conducted Spurious Emission	Compliant
15.247 (e)	Maximum Conducted Output Power Density	Compliant
15.209	Radiated Emission	Compliant
15.207	Conducted Emission	N/A

Note: The conducted emission tests at AC port are not required for devices which only employ battery power for operation.



6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance (Shenzhen) Co., Ltd is accredited by A2LA

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	May 15, 2020	May 14, 2022
EXA Signal Analyzer	Agilent	N9010A	MY53470504	Dec. 12, 2019	Dec. 11, 2020
2.4GHz Filter	EM Electronics	2400-2500MHz	N/A	Mar. 23, 2020	Mar. 22, 2022
Attenuator	ZHINAN	E-002	N/A	Aug. 26, 2019	Aug. 25, 2020
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Sep. 09, 2019	Sep. 08, 2021
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	May 22, 2020	May 21, 2022
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	May 17, 2019	May 16, 2021
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Oct. 15, 2019	Oct. 16, 2020
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 09, 2019	Jan. 08, 2021
Test software	Tonscend	JS32-RE (Ver.2.5)	N/A	N/A	N/A

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7. PEAK OUTPUT POWER

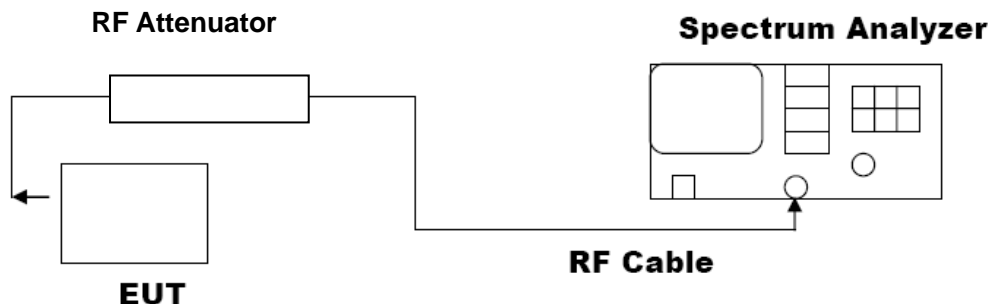
7.1. MEASUREMENT PROCEDURE

For peak power test:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. $RBW \geq DTS$ bandwidth
3. $VBW \geq 3 * RBW$.
4. $SPAN \geq VBW$.
5. Sweep: Auto.
6. Detector function: Peak.
7. Trace: Max hold.

Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

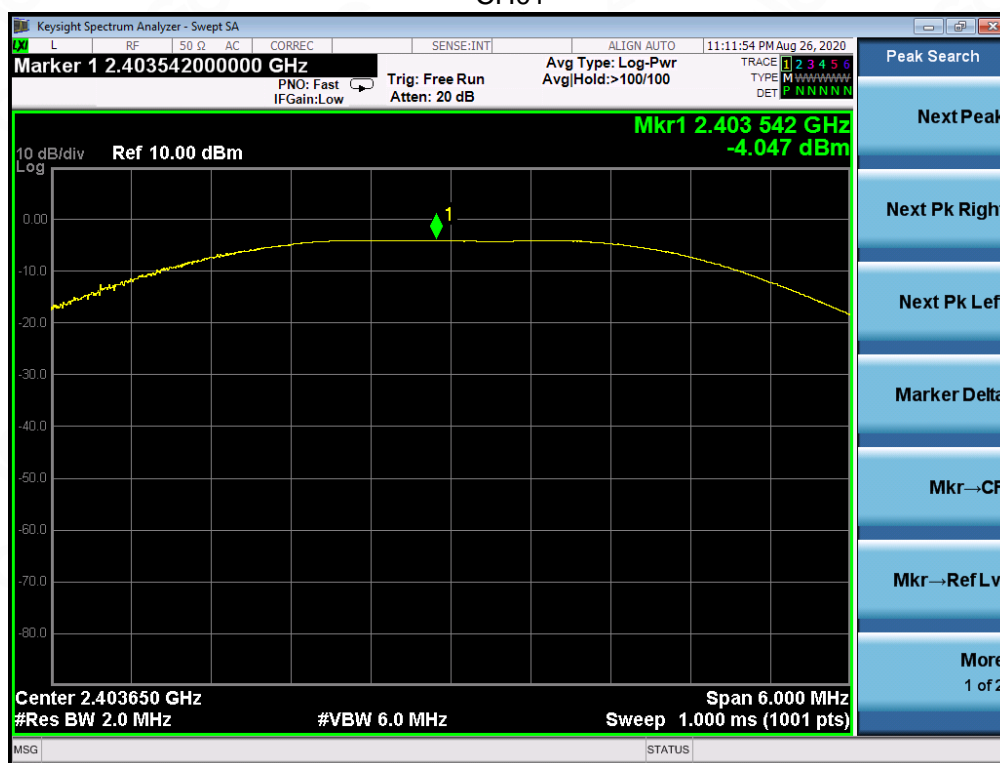
7.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION) PEAK POWER TEST SETUP



7.3. LIMITS AND MEASUREMENT RESULT

PEAK OUTPUT POWER MEASUREMENT RESULT FOR GFSK MODULATION			
Frequency (GHz)	EIRP (dBm)	Applicable Limits (dBm)	Pass or Fail
2.40365	-4.047	30	Pass
2.44165	-4.388	30	Pass
2.47965	-4.788	30	Pass

CH01



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CH03



CH16



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8. 6 DB BANDWIDTH

8.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 kHz, VBW \geq 3 \times RBW.
4. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

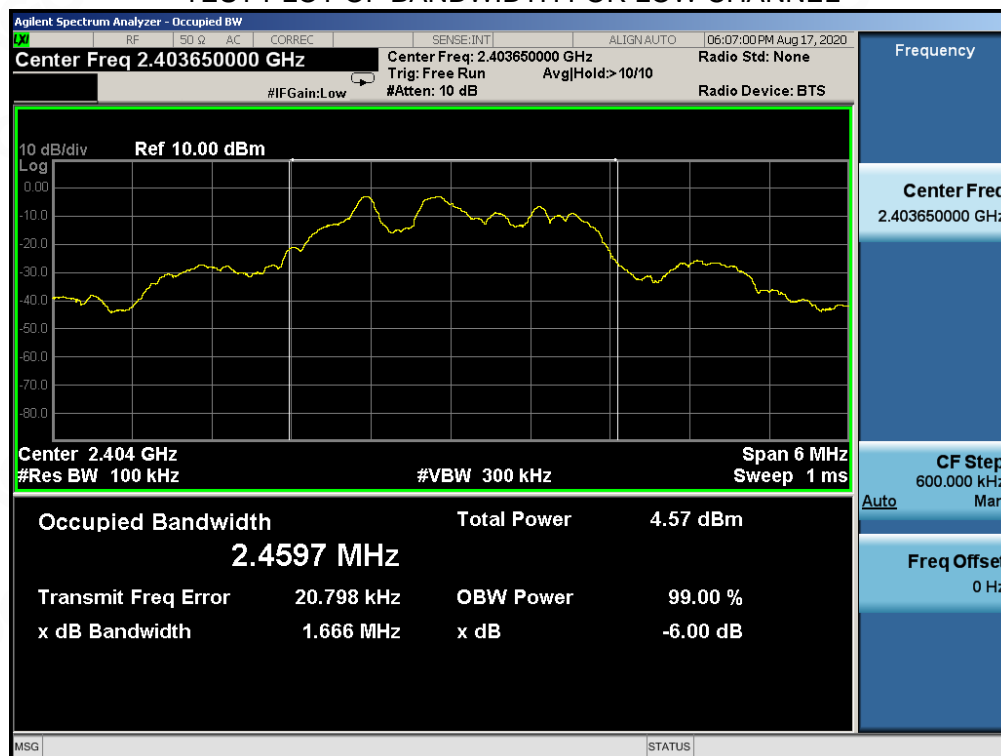
8.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

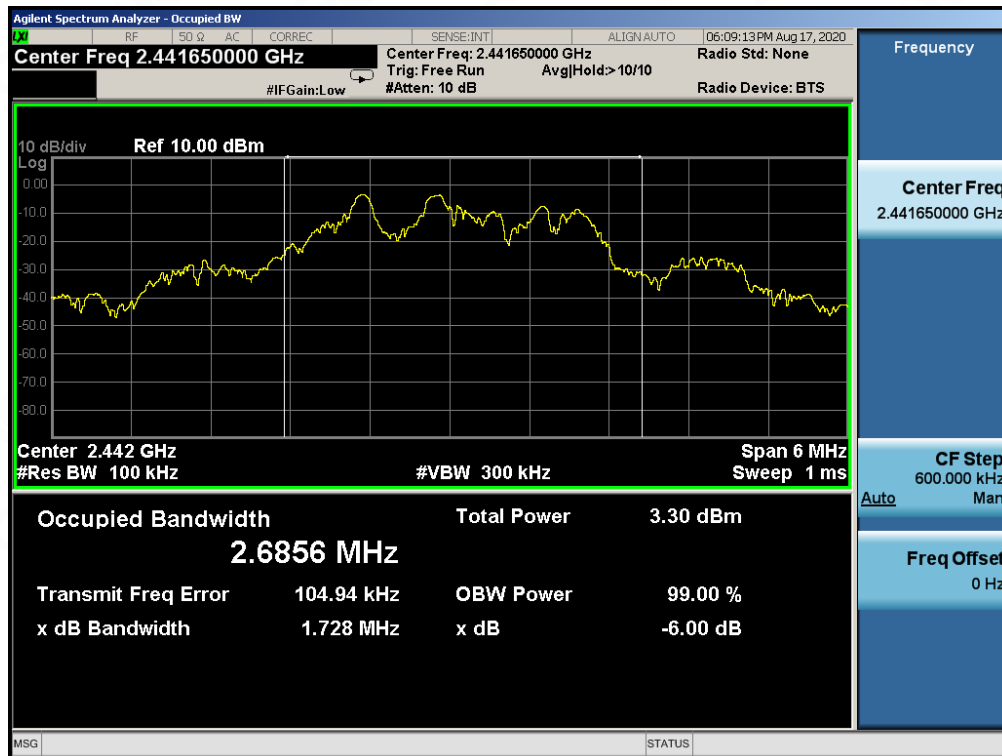
8.3. LIMITS AND MEASUREMENT RESULTS

LIMITS AND MEASUREMENT RESULT			
Applicable Limits	Applicable Limits		
	Test Data (kHz)		Criteria
>500KHZ	Low Channel	1666	PASS
	Middle Channel	1728	PASS
	High Channel	1828	PASS

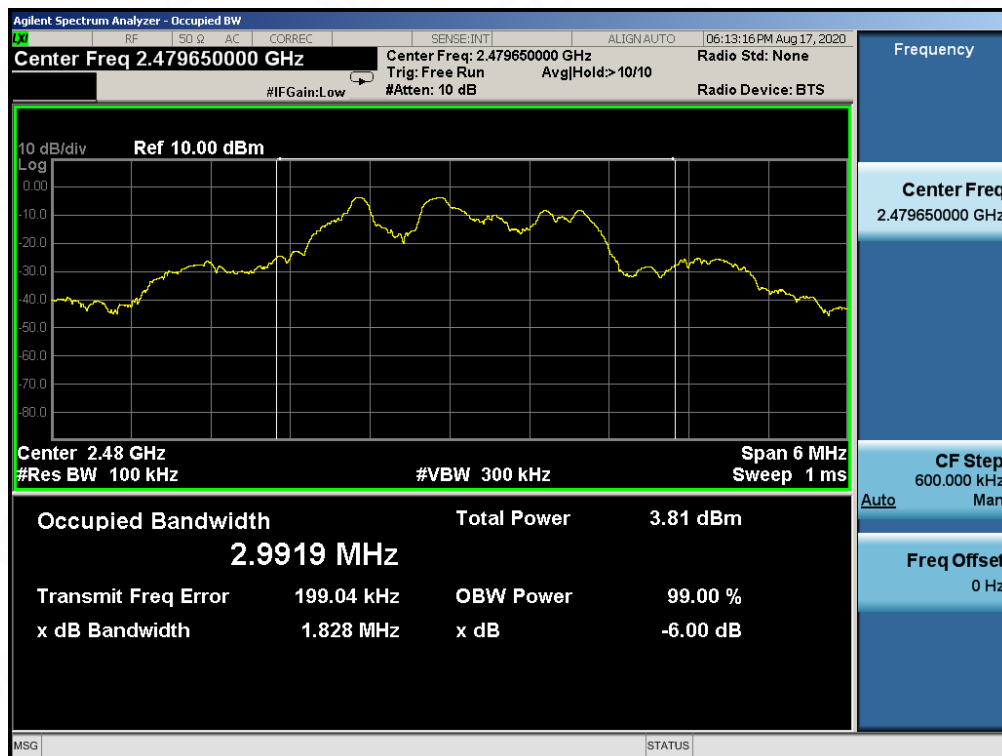
TEST PLOT OF BANDWIDTH FOR LOW CHANNEL



TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL



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9. CONDUCTED SPURIOUS EMISSION

9.1. MEASUREMENT PROCEDURE

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
3. Set SPA Trace 1 Max hold, then View.

Note: The EUT was tested according to ANSI C63.10 for compliance to FCC PART 15.247 requirements.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The same as described in section 7.2.

9.3. MEASUREMENT EQUIPMENT USED

The same as described in section 6.

9.4. LIMITS AND MEASUREMENT RESULT

LIMITS AND MEASUREMENT RESULT		
Applicable Limits	Measurement Result	
	Test Data	Criteria
In any 100 kHz Bandwidth Outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produce by the intentional radiator shall be at least 20 dB below that in 100KHz bandwidth within the band that contains the highest level of the desired power.	At least -20dBc than the reference level	PASS

GFSK MODULATION IN MIDDLE CHANNEL



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GFSK MODULATION IN HIGH CHANNEL



Note: The peak emissions without marker on the above plots are fundamental wave and need not to compare with the limit.

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TEST RESULT FOR BAND EDGE GFSK MODULATION IN LOW CHANNEL



GFSK MODULATION IN HIGH CHANNEL



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10. MAXIMUM CONDUCTED OUTPUT POWER SPECTRAL DENSITY

10.1. MEASUREMENT PROCEDURE

- (1). Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- (2). Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- (3). Set the SPA Trace 1 Max hold, then View.

Note: The method of PKPSD in the KDB 558074 item 10.2 was used in this testing.

10.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

Refer to Section 7.2.

10.3. MEASUREMENT EQUIPMENT USED

Refer to Section 6.

10.4. LIMITS AND MEASUREMENT RESULT

Channel No.	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low Channel	-16.886	8	Pass
Middle Channel	-17.479	8	Pass
High Channel	-17.993	8	Pass

TEST PLOT OF SPECTRAL DENSITY FOR LOW CHANNEL



TEST PLOT OF SPECTRAL DENSITY FOR MIDDLE CHANNEL



TEST PLOT OF SPECTRAL DENSITY FOR HIGH CHANNEL



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11. RADIATED EMISSION

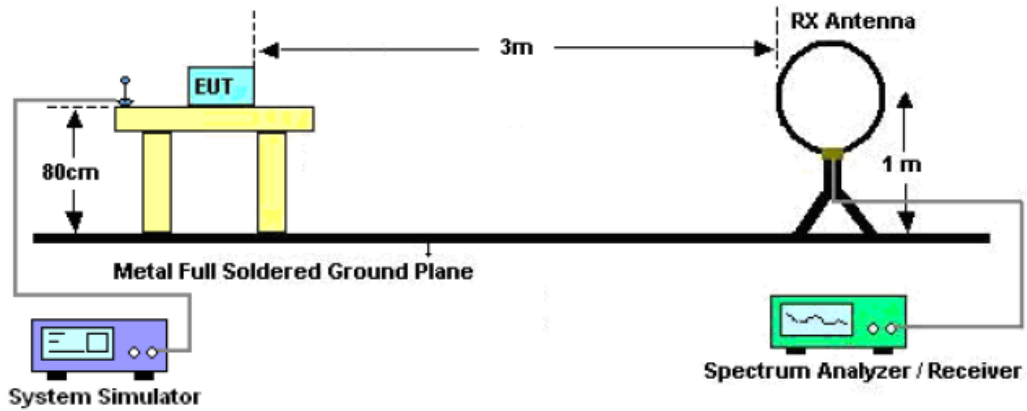
11.1. MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

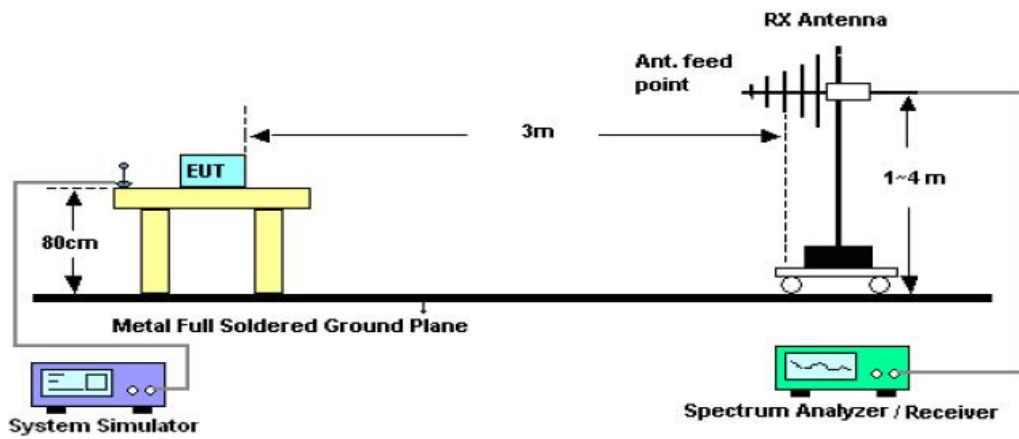


11.2. TEST SETUP

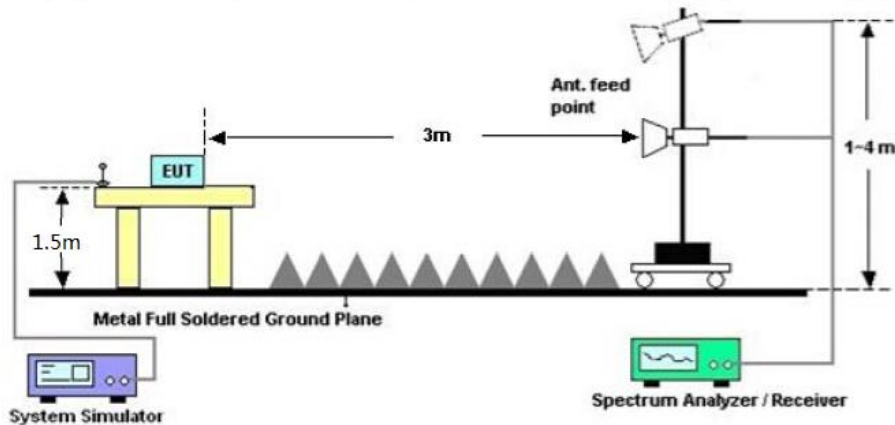
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



11.3. LIMITS AND MEASUREMENT RESULT

15.209 Limit in the below table has to be followed

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

Note: All modes were tested for restricted band radiated emission, the test records reported below are the worst result compared to other modes.

11.4. TEST RESULT

RADIATED EMISSION BELOW 30MHz

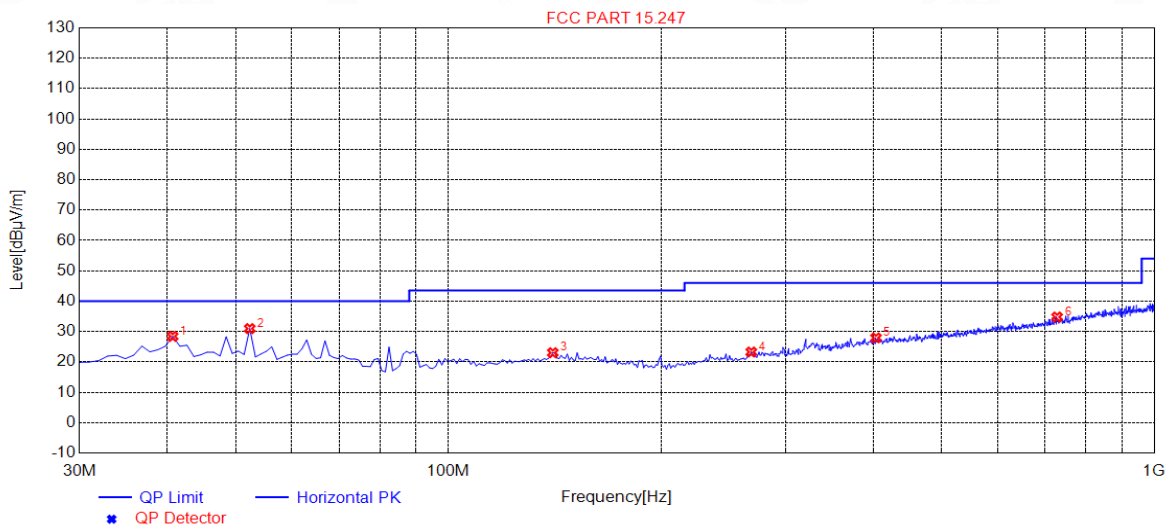
The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



RADIATED EMISSION BELOW 1GHZ

EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal



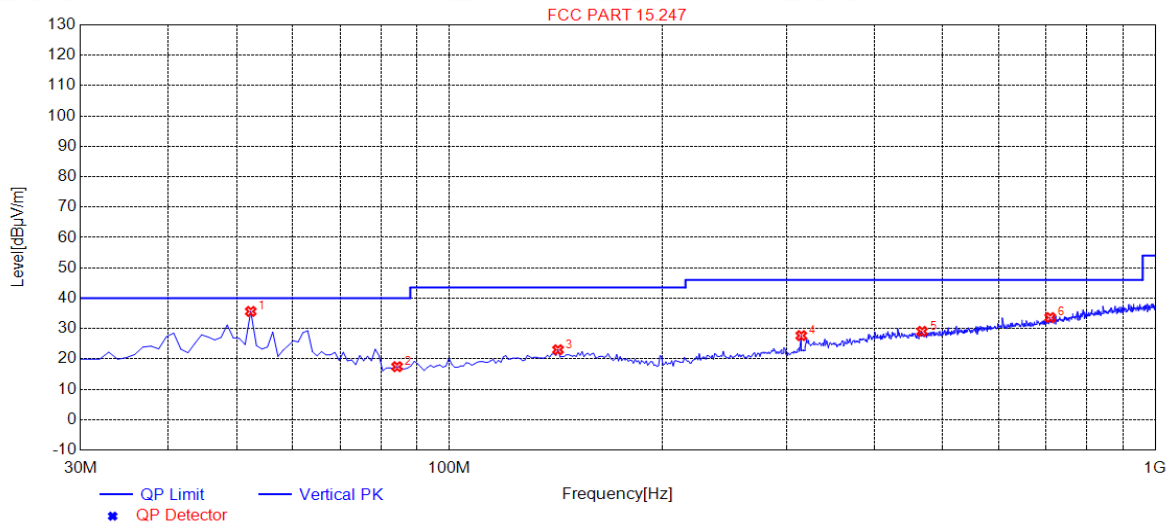
NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	40.6700	28.43	17.91	40.00	11.57	200	84	Horizontal
2	52.3100	30.97	17.49	40.00	9.03	200	193	Horizontal
3	140.5800	23.04	17.88	43.50	20.46	200	357	Horizontal
4	268.6200	23.27	18.30	46.00	22.73	100	78	Horizontal
5	403.4500	27.92	22.90	46.00	18.08	100	316	Horizontal
6	728.4000	34.79	29.67	46.00	11.21	100	355	Horizontal

RESULT: PASS

Report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Department" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15 days after the issuance of the test report. For further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical



NO.	Freq. [MHz]	Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	52.3100	35.64	17.49	40.00	4.36	100	1	Vertical
2	84.3200	17.44	13.19	40.00	22.56	100	3	Vertical
3	142.5200	23.02	17.88	43.50	20.48	100	122	Vertical
4	315.1800	27.67	19.48	46.00	18.33	100	284	Vertical
5	467.4700	29.07	24.36	46.00	16.93	100	357	Vertical
6	709.9700	33.62	29.17	46.00	12.38	100	38	Vertical

RESULT: PASS

Note:

1. Factor=Antenna Factor + Cable loss, Margin= Limit.-Level.
2. All test modes had been tested. The mode 1 is the worst case and recorded in the report.

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RADIATED EMISSION ABOVE 1GHZ

EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4807.300	45.38	0.08	45.46	74	-28.54	peak
4807.300	35.13	0.08	35.21	54	-18.79	AVG
7210.950	40.89	2.21	43.1	74	-30.9	peak
7210.950	31.07	2.21	33.28	54	-20.72	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4807.300	45.07	0.08	45.15	74	-28.85	peak
4807.300	34.23	0.08	34.31	54	-19.69	AVG
7210.950	39.82	2.21	42.03	74	-31.97	peak
7210.950	30.13	2.21	32.34	54	-21.66	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4883.300	46.23	0.14	46.37	74	-27.63	peak
4883.300	36.48	0.14	36.62	54	-17.38	AVG
7324.950	40.18	2.36	42.54	74	-31.46	peak
7324.950	30.15	2.36	32.51	54	-21.49	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 2	Antenna	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4883.300	46.34	0.14	46.48	74	-27.52	peak
4883.300	38.14	0.14	38.28	54	-15.72	AVG
7324.950	42.57	2.36	44.93	74	-29.07	peak
7324.950	31.09	2.36	33.45	54	-20.55	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4959.300	46.38	0.22	46.6	74	-27.4	peak
4959.300	35.42	0.22	35.64	54	-18.36	AVG
7438.950	40.12	2.64	42.76	74	-31.24	peak
7438.950	30.57	2.64	33.21	54	-20.79	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Value Type
4959.300	43.39	0.22	43.61	74	-30.39	peak
4959.300	34.27	0.22	34.49	54	-19.51	AVG
7438.950	39.61	2.64	42.25	74	-31.75	peak
7438.950	30.01	2.64	32.65	54	-21.35	AVG

Remark:
Factor = Antenna Factor + Cable Loss – Pre-amplifier.

RESULT: PASS

Note:

The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.

Factor = Antenna Factor + Cable loss - Amplifier gain, Over=Measure-Limit.

The “Factor” value can be calculated automatically by software of measurement system.



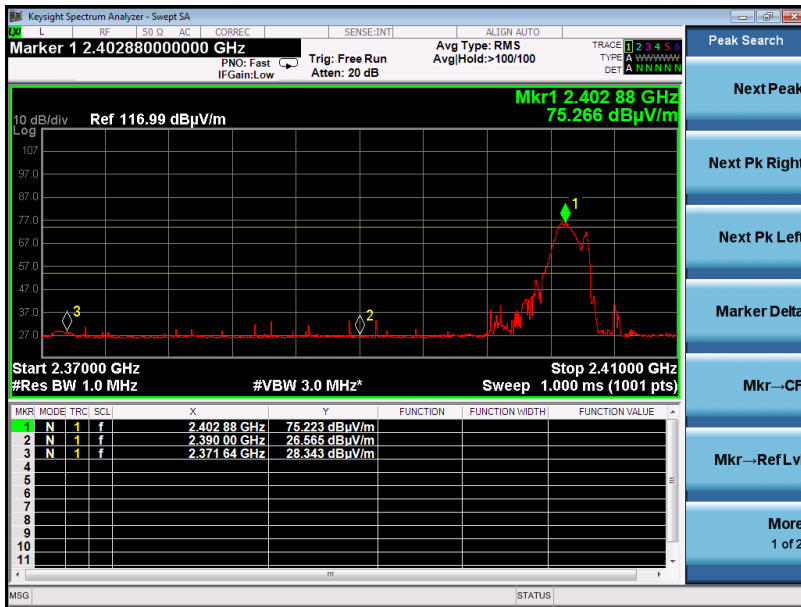
TEST RESULT FOR RESTRICTED BANDS REQUIREMENTS

EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Horizontal

PK



AV



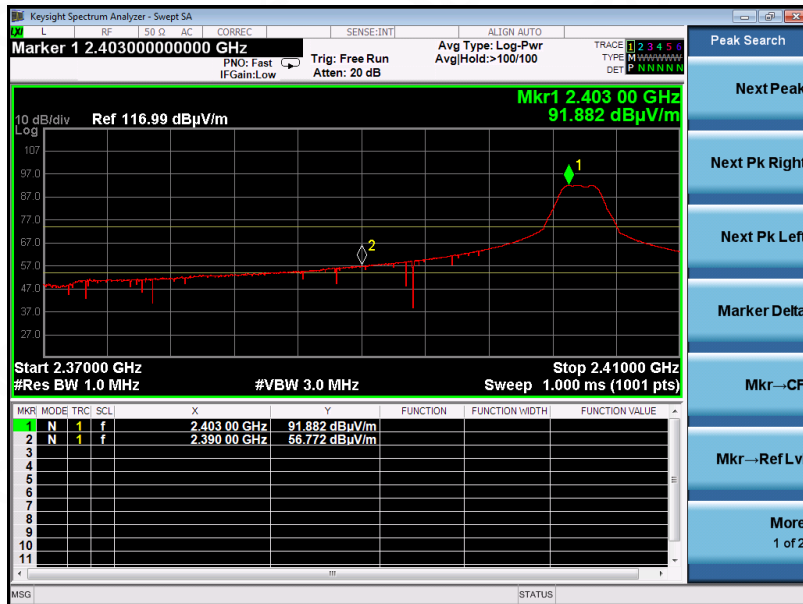
RESULT: PASS

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EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 1	Antenna	Vertical

PK



AV



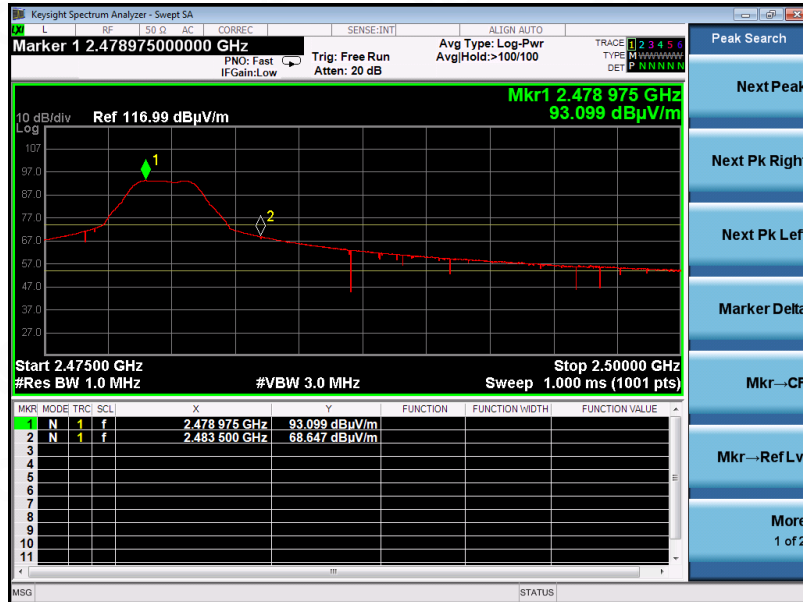
RESULT: PASS

This report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection amp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15 days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Horizontal

PK



AV



RESULT: PASS

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Tel: +86-755 2523 4088 E-mail: agc@agc-cert.com Web: http://cn.agc-cert.com/



EUT	Mouse	Model Name	TM-002
Temperature	25° C	Relative Humidity	55.4%
Pressure	960hPa	Test Voltage	Normal Voltage
Test Mode	Mode 3	Antenna	Vertical

PK



AV



RESULT: PASS

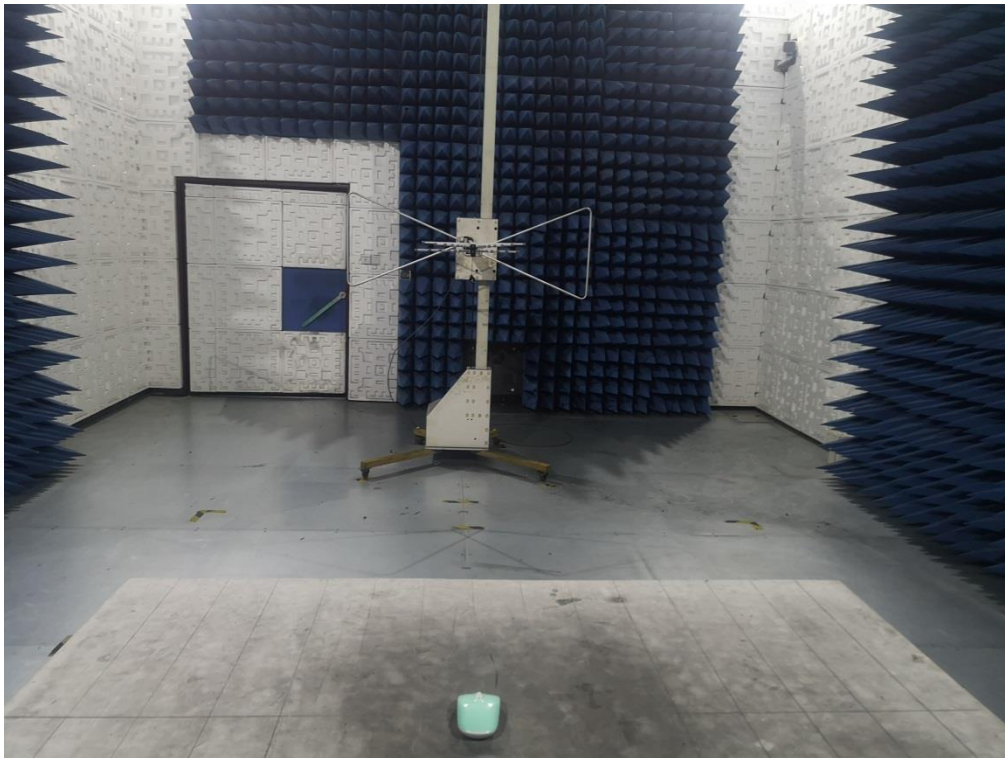
Note: The factor had been edited in the “Input Correction” of the Spectrum Analyzer.

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APPENDIX A: PHOTOGRAPHS OF TEST SETUP

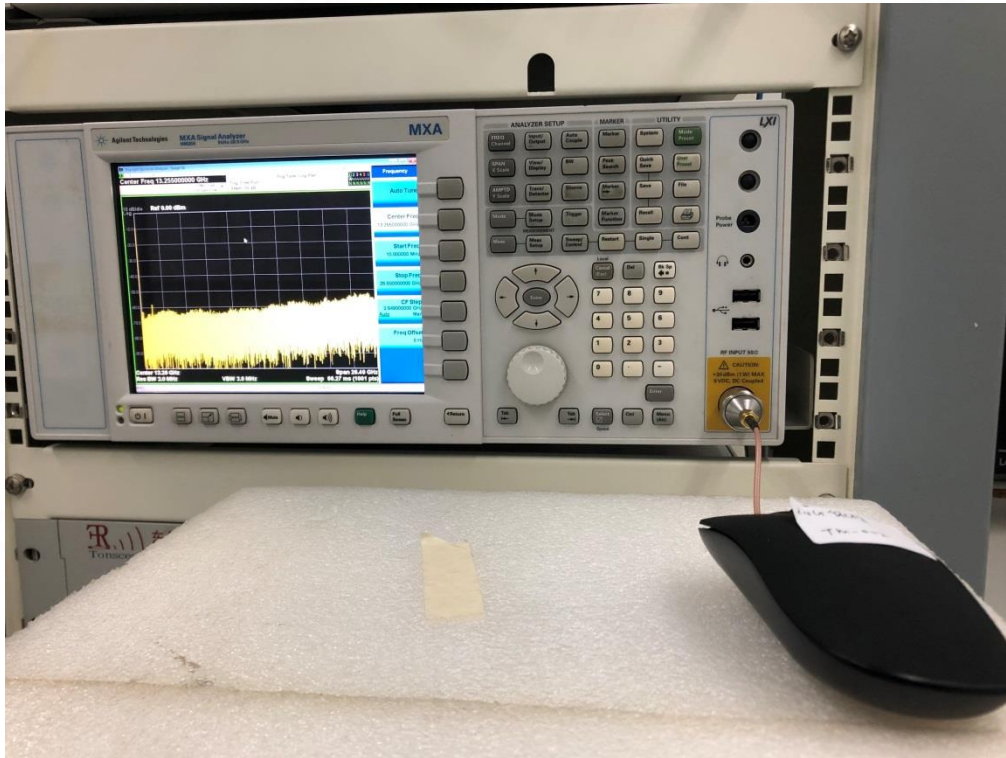
RADIATED EMISSION TEST SETUP BELOW 1GHZ



RADIATED EMISSION TEST SETUP ABOVE 1GHZ



CONDUCTED TEST SETUP



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APPENDIX B: PHOTOGRAPHS OF EUT TOP VIEW OF EUT



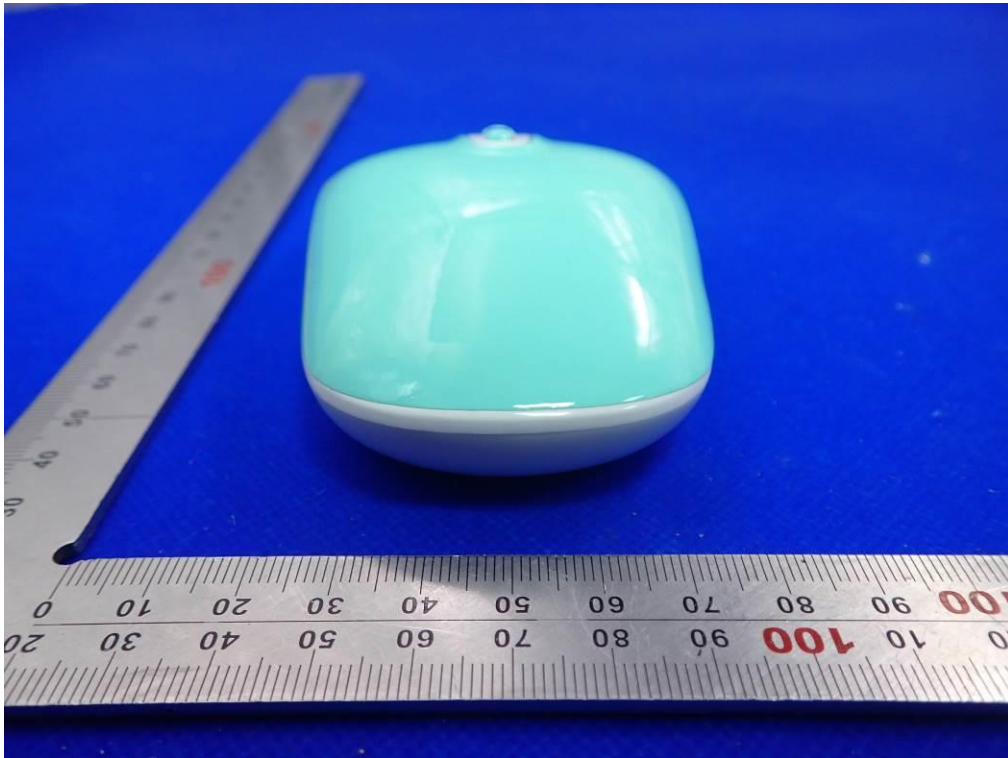
BOTTOM VIEW OF EUT



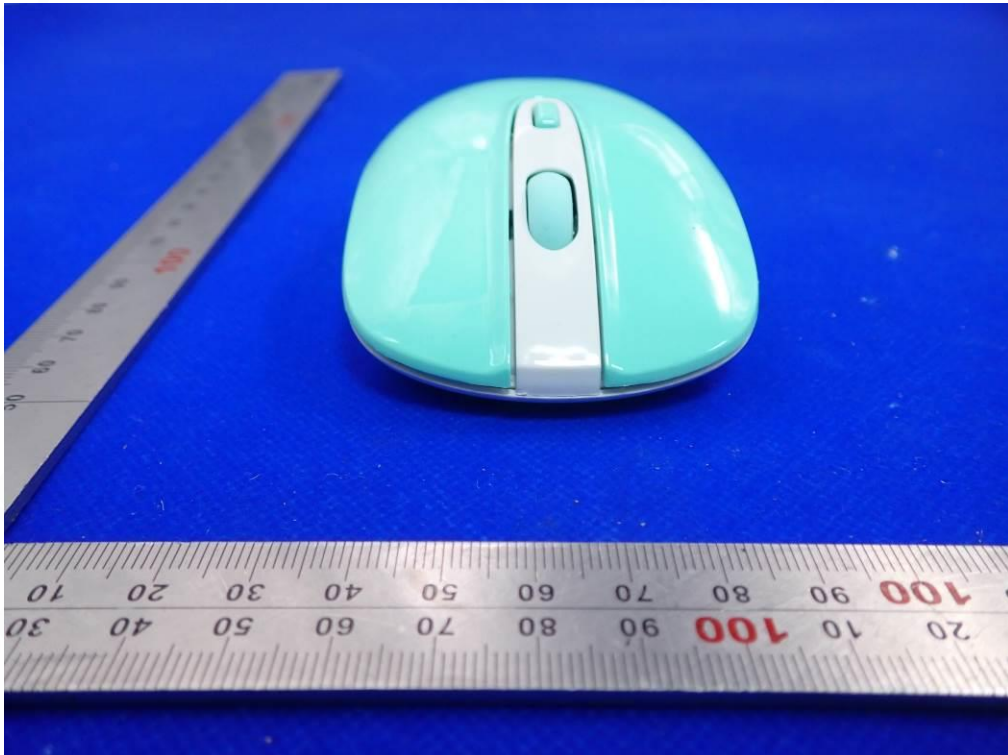
any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection
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FRONT VIEW OF EUT



BACK VIEW OF EUT



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LEFT VIEW OF EUT



RIGHT VIEW OF EUT



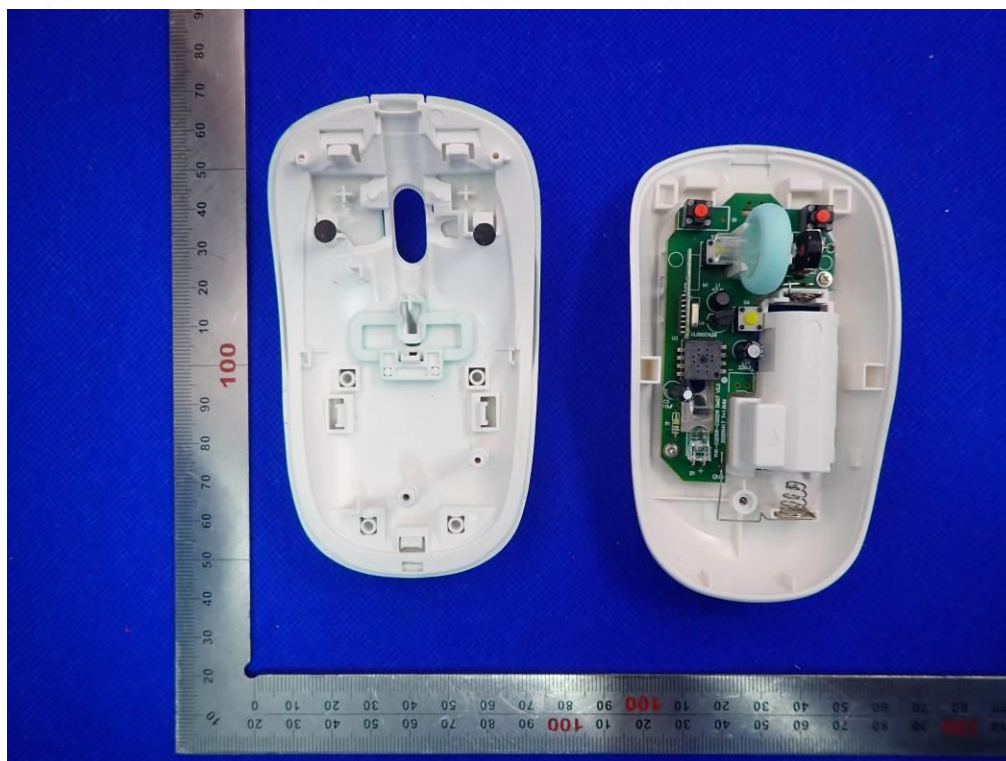
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OPEN VIEW OF EUT-1



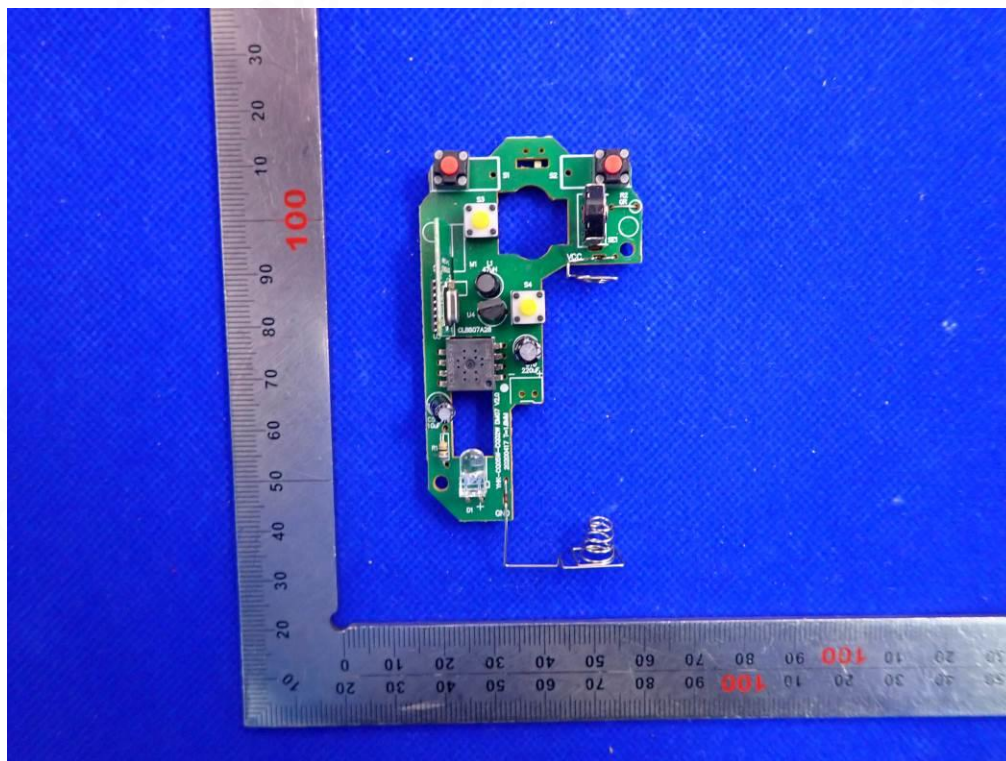
OPEN VIEW OF EUT-2



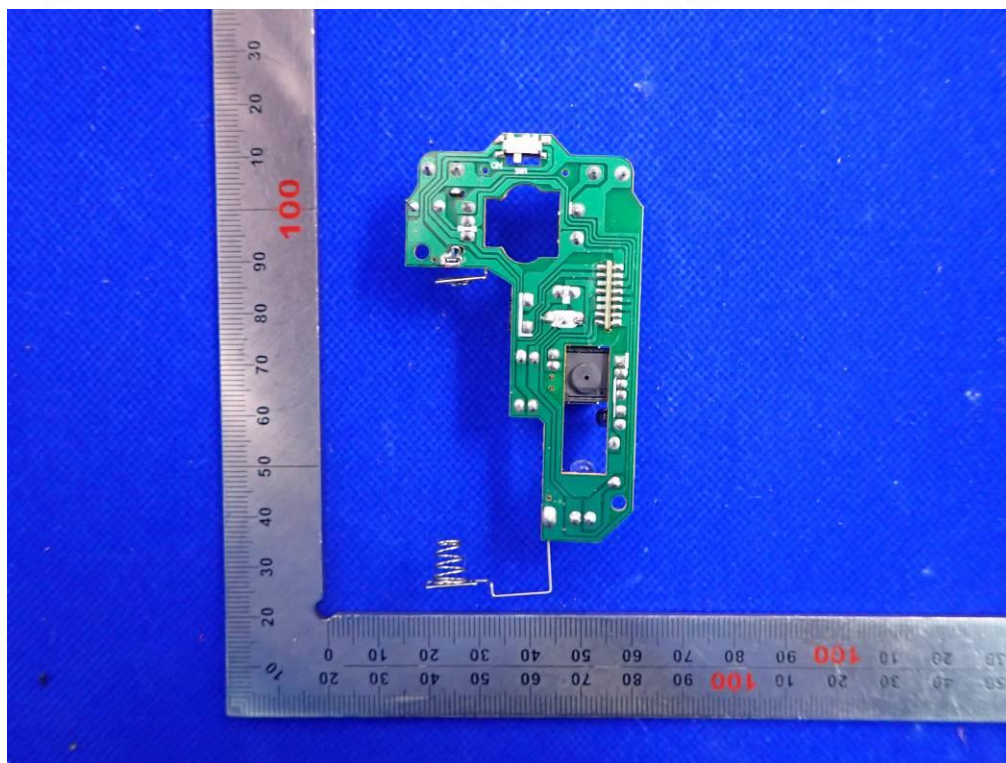
any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection
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INTERNAL VIEW-1 OF EUT



INTERNAL VIEW-2 OF EUT



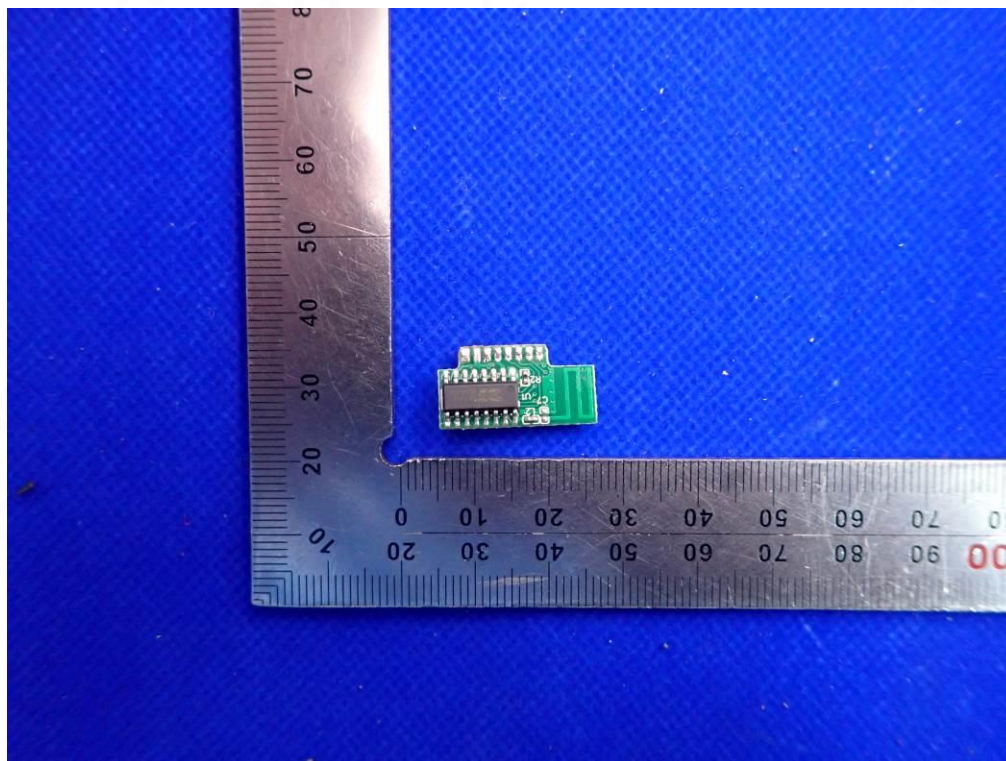
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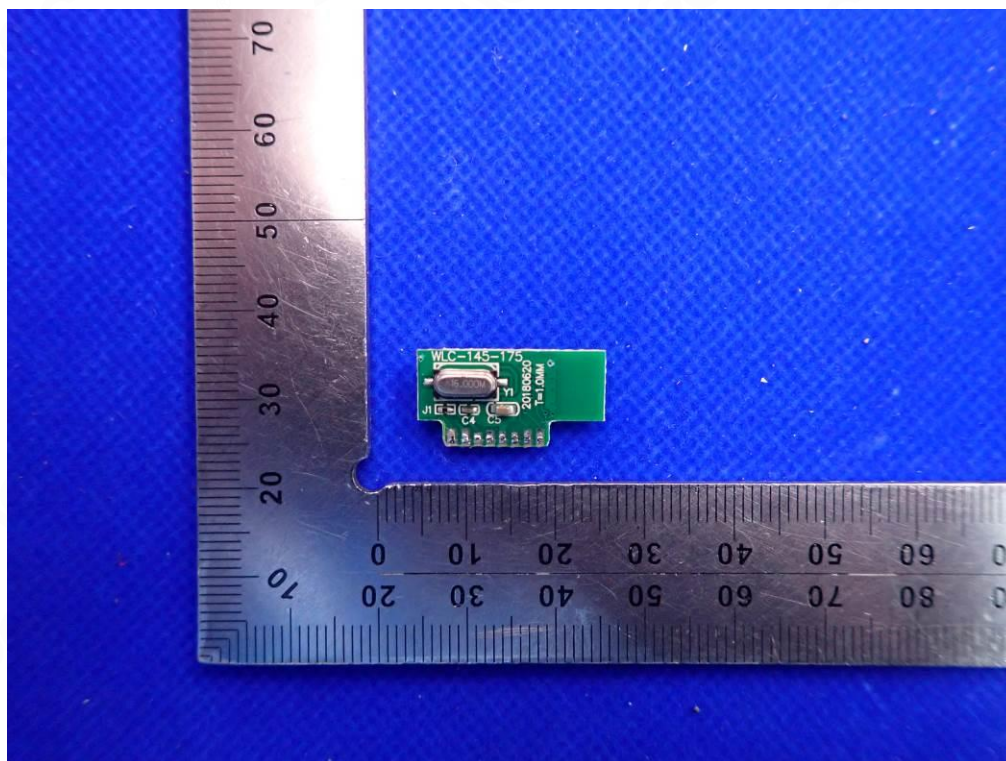


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INTERNAL VIEW-3 OF EUT



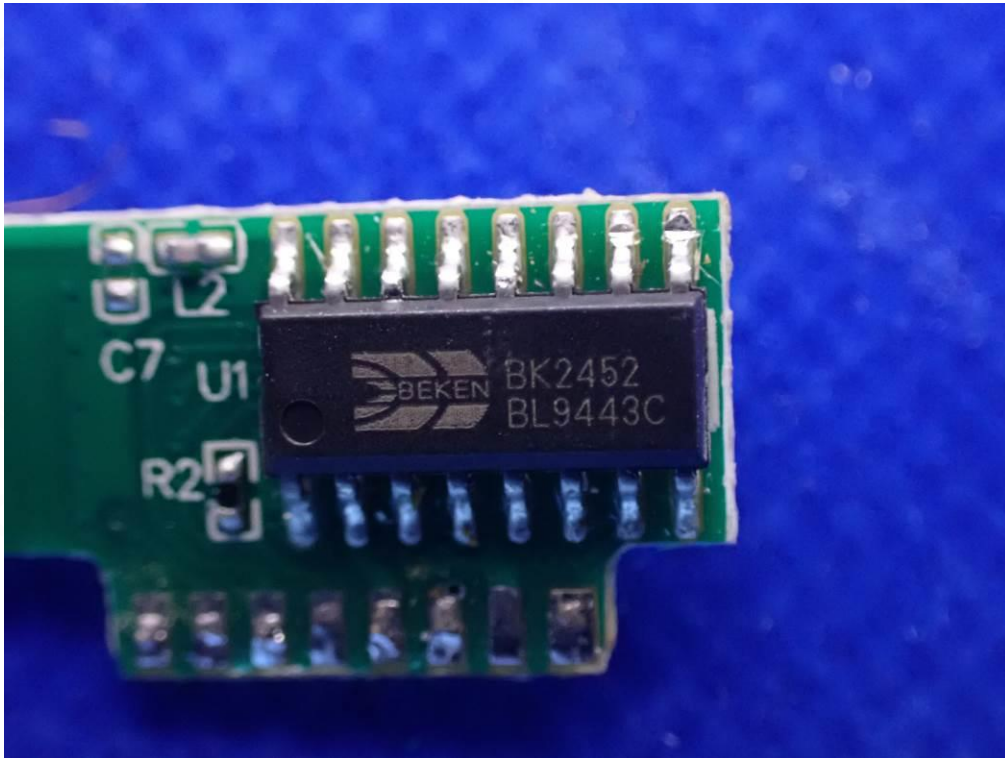
INTERNAL VIEW-4 OF EUT



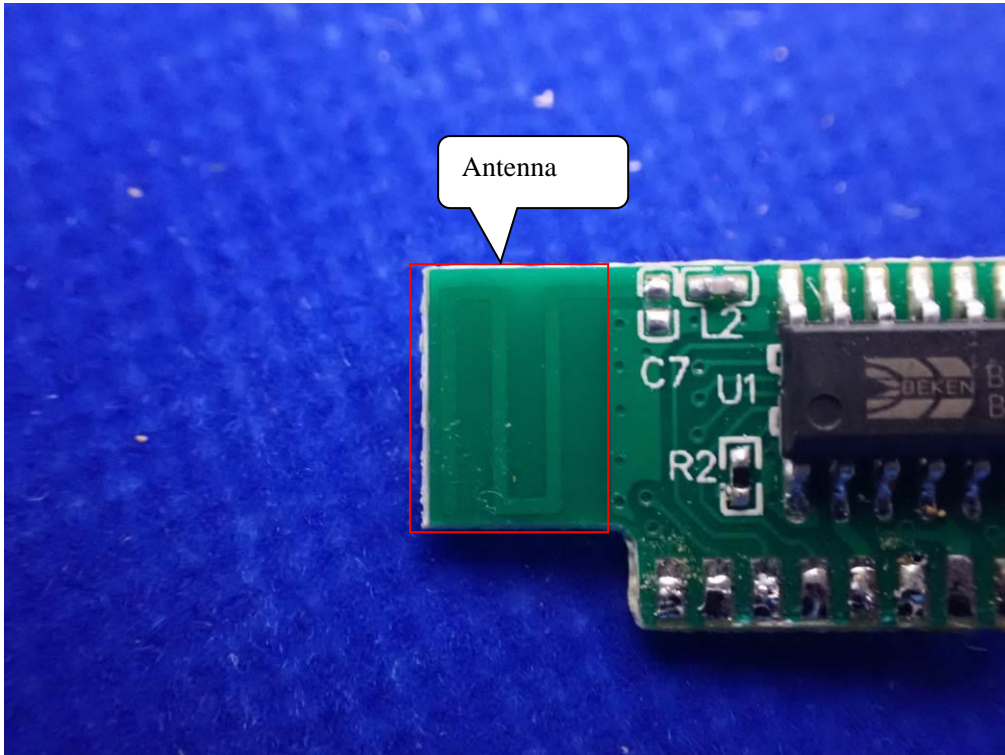
any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection
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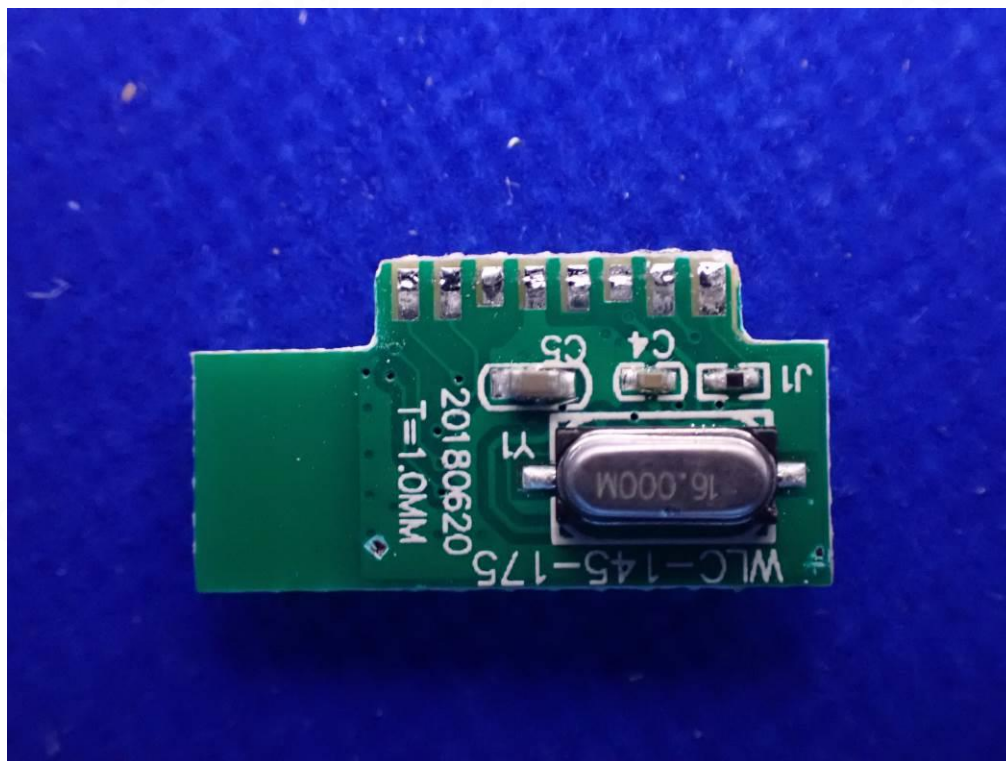
INTERNAL VIEW-5 OF EUT



INTERNAL VIEW-6 OF EUT



INTERNAL VIEW-7 OF EUT



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

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Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the “Company”) solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the “Clients”).
2. Any report issued by Company as a result of this application for testing services (the “Report”) shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
4. The non-CMA report issued by AGC is only permitted to be used by the client as internal reference use and shall not be used for public demonstration purpose.
5. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
6. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
7. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
8. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
9. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
10. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

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