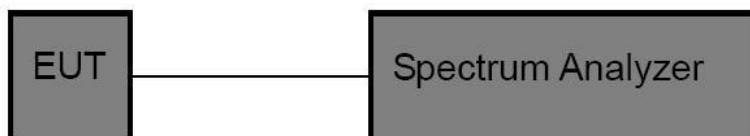


## 6. 6DB Occupy Bandwidth Test

### 6.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (a)(2)
Test Limit	≥500kHz

### 6.2. Test Setup



### 6.3. Test Procedure

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as:  
RBW = 100kHz, VBW≥3\*RBW  
Detector= Peak  
Trace mode= Max hold.  
Sweep- auto couple.
4. Mark the peak frequency and -6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

### 6.4. Test Data

Pass

Please refer to Appendix A of the Appendix Test Data.

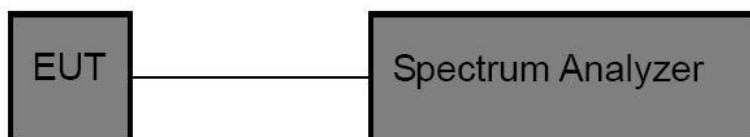


## 7. Power Spectral Density Test

### 7.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (e)
Test Limit	8dBm/3KHz

### 7.2. Test Setup



### 7.3. Test Procedure

1. Place the EUT on the table and set it in transmitting mode. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. Set the spectrum analyzer as RBW = 3kHz, VBW  $\geq 3 \times$  RBW, Span = 1.5x DTS BW
3. Record the max. reading.
4. Repeat the above procedure until the measurements for all frequencies are completed.

### 7.4. Test Data

Pass

Please refer to Appendix D of the Appendix Test Data.

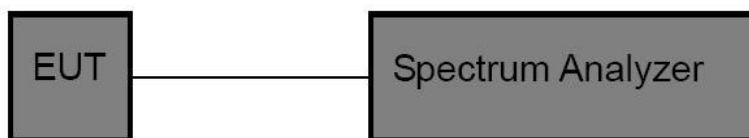


## 8. 100kHz Bandwidth of Frequency Band Edge Requirement

### 8.1. Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (d)
Test Limit	In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

### 8.2. Test Setup



### 8.3. Test Procedure

Using the following spectrum analyzer setting:

1. Set the RBW = 100KHz.
2. Set the VBW = 300KHz.
3. Sweep time = auto couple.
4. Detector function = peak.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.

### 8.4. Test Data

Pass

Please refer to Appendix E&F of the Appendix Test Data.





## 9. Antenna Requirement

### 9.1. Test Standard and Requirement

Test Standard	FCC Part15 Section 15.203 /247(c)
Requirement	<p>1) 15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> <p>2) 15.247(c) (1)(i) requirement: Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.</p>

### 9.2. Antenna Connected Construction

The antenna is a FPC antenna which permanently attached, and the best case gain of the antenna is 3.97dBi . It complies with the standard requirement.

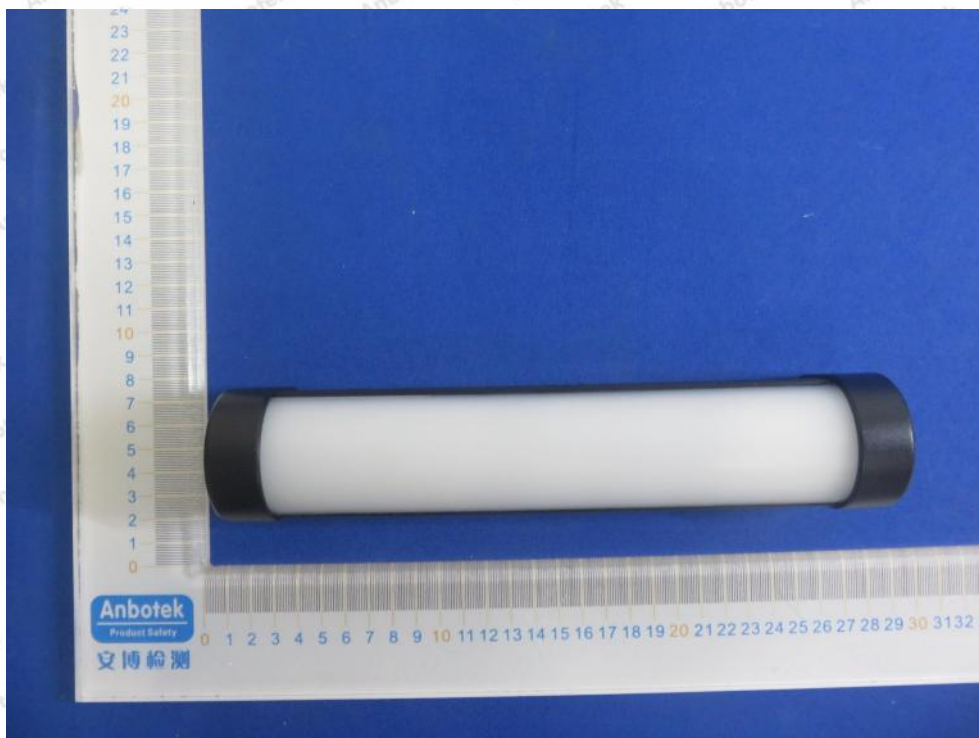
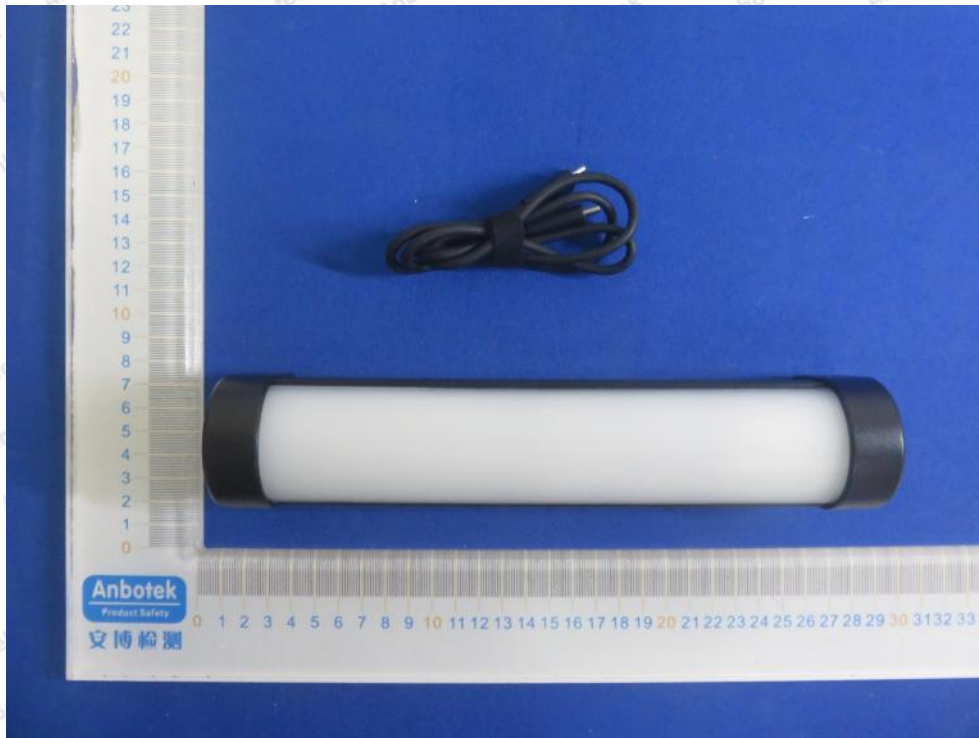


### Photo of Conducted Emission Measurement







**APPENDIX II -- EXTERNAL PHOTOGRAPH****Shenzhen Anbotek Compliance Laboratory Limited**

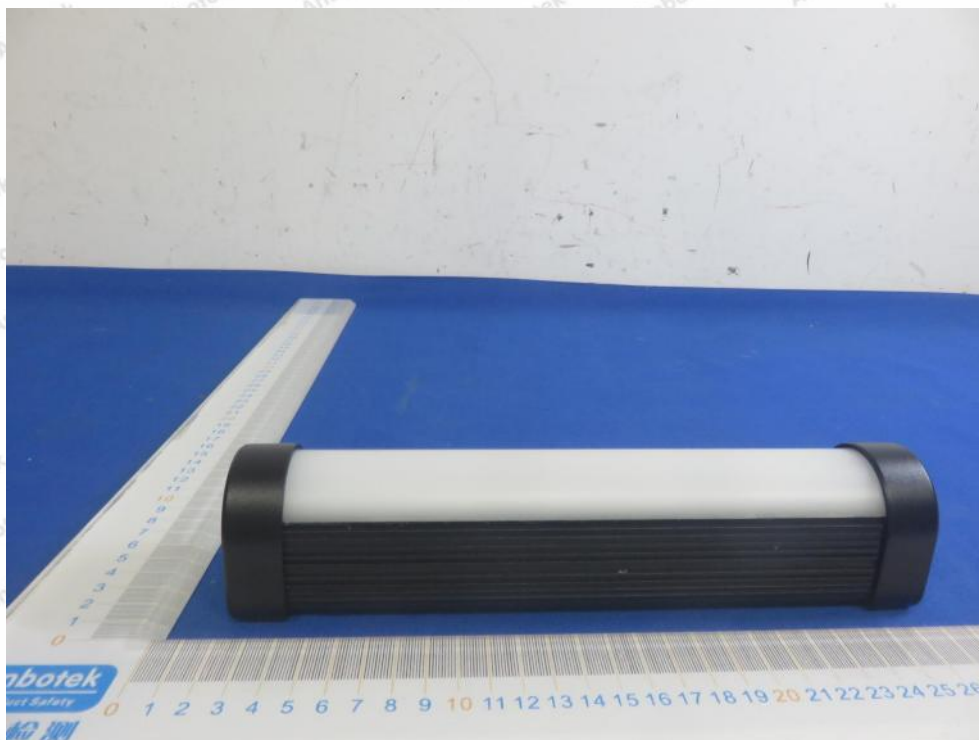
Address: 1/F., Building D, Sogood Science and Technology Park, Sanwei Community, Hangcheng Street, Bao'an District, Shenzhen, Guangdong, China.  
Tel: (86) 0755-26066440 Fax: (86) 0755-26014772 Email: service@anbotek.com

**Code: AB-RF-05-b**

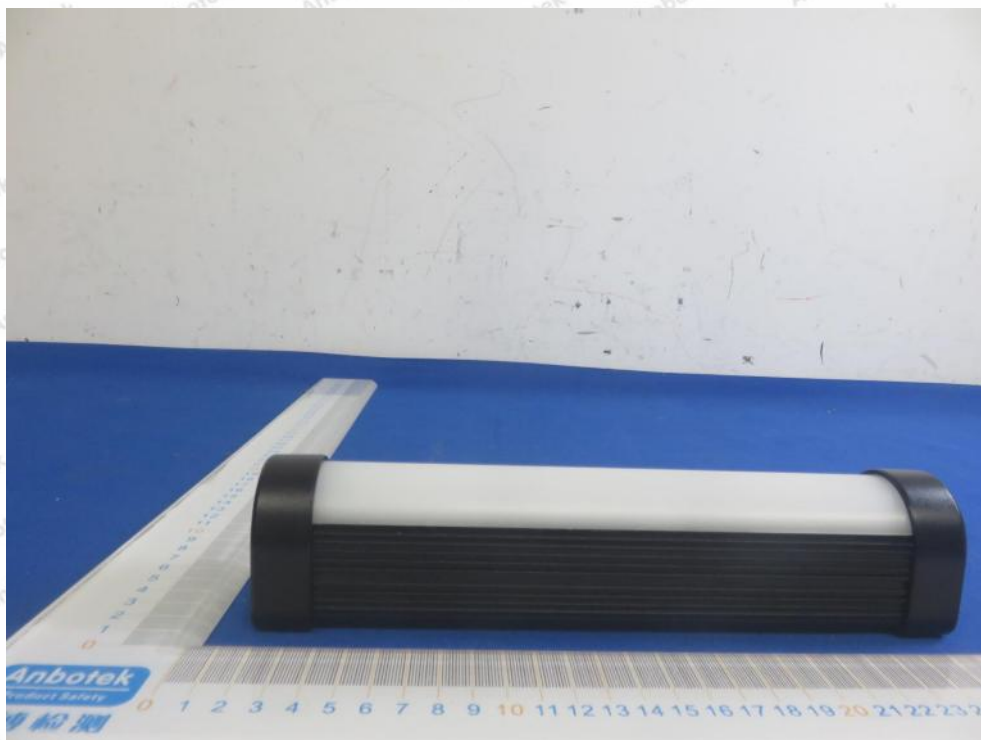
Hotline  
400-003-0500  
www.anbotek.com.cn





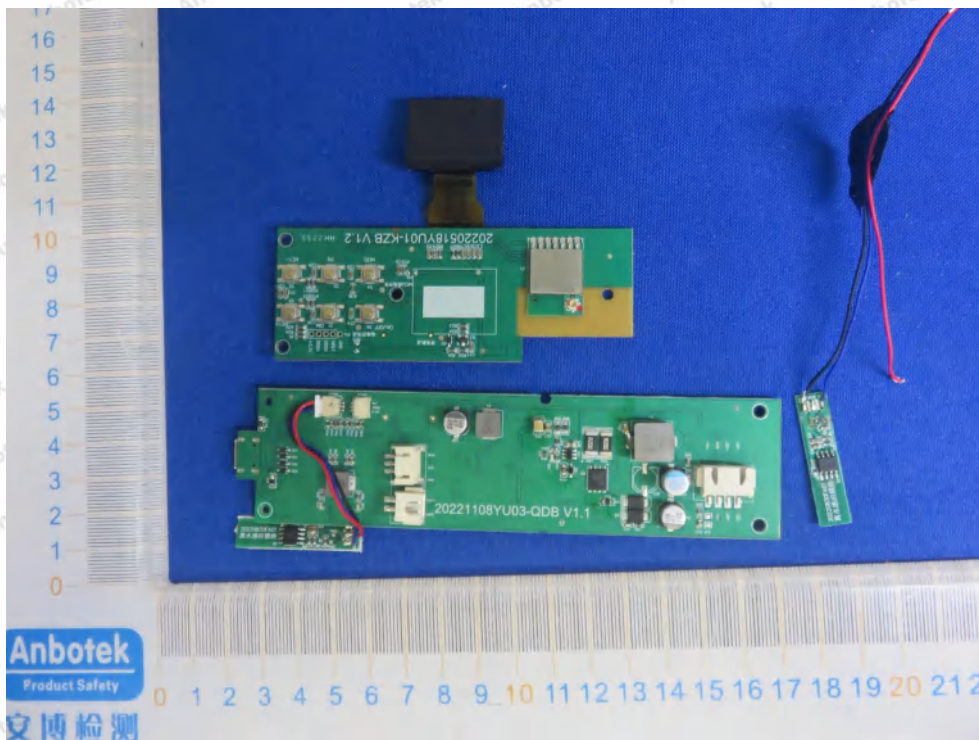




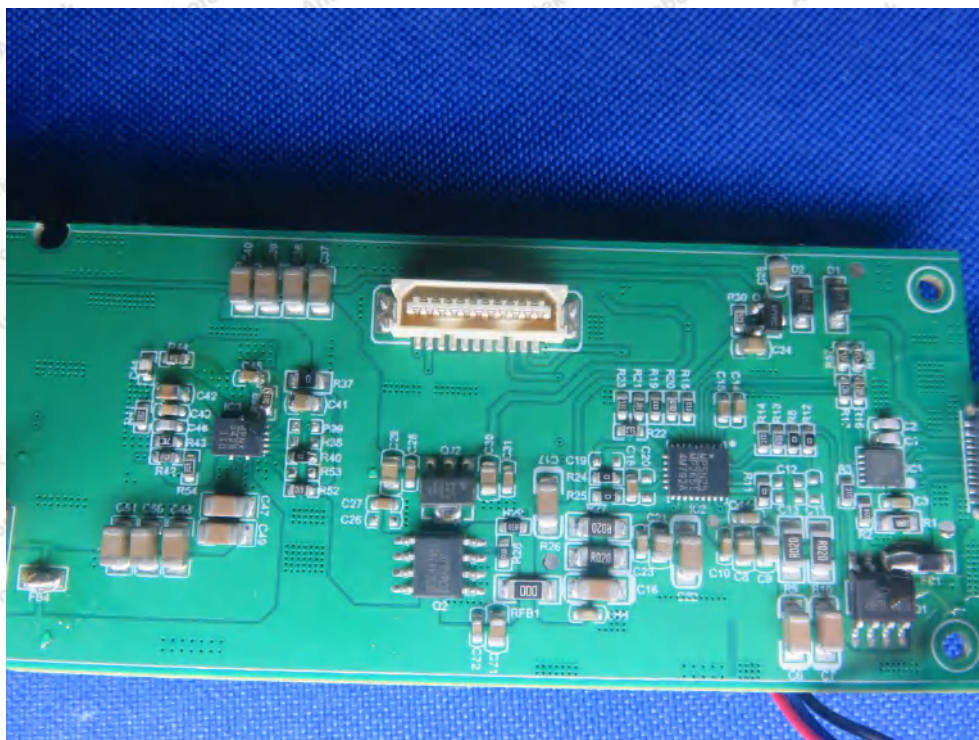
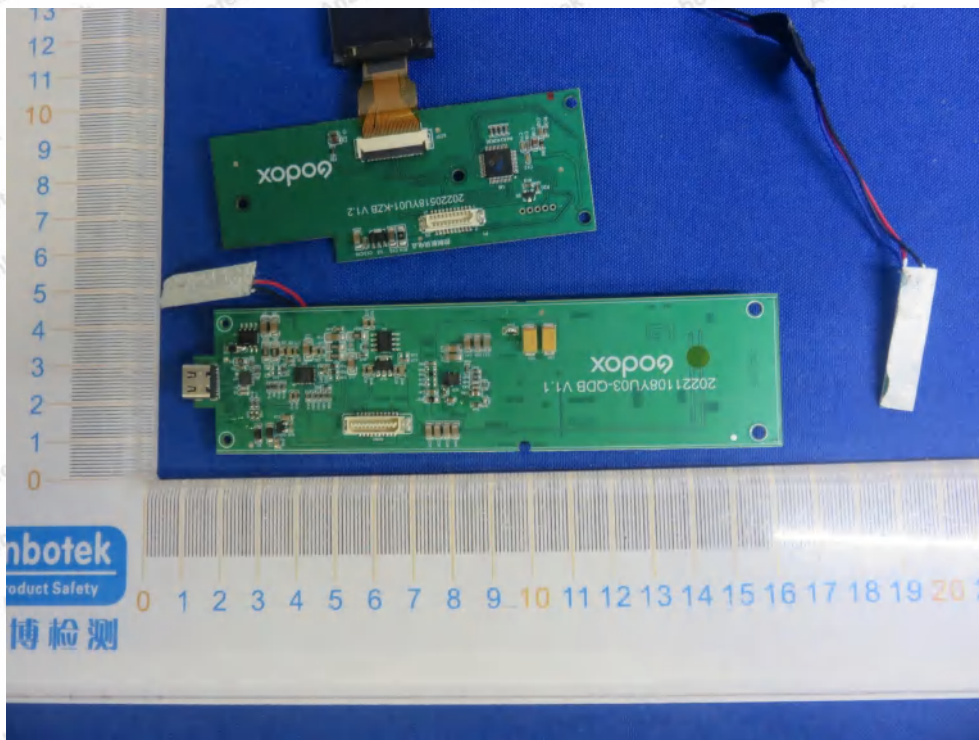




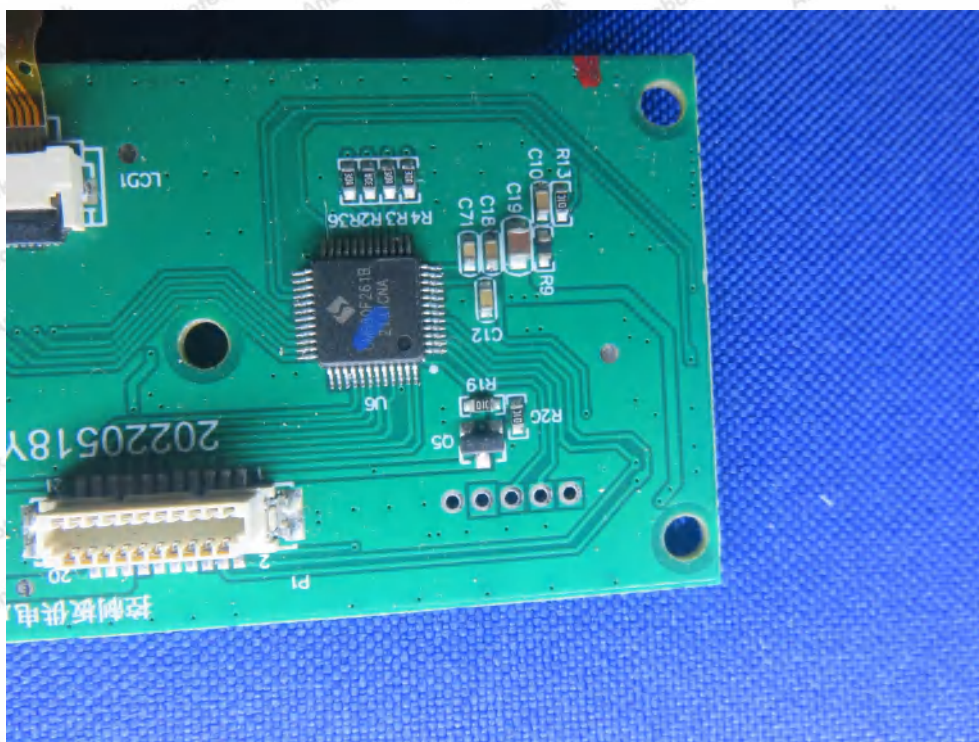
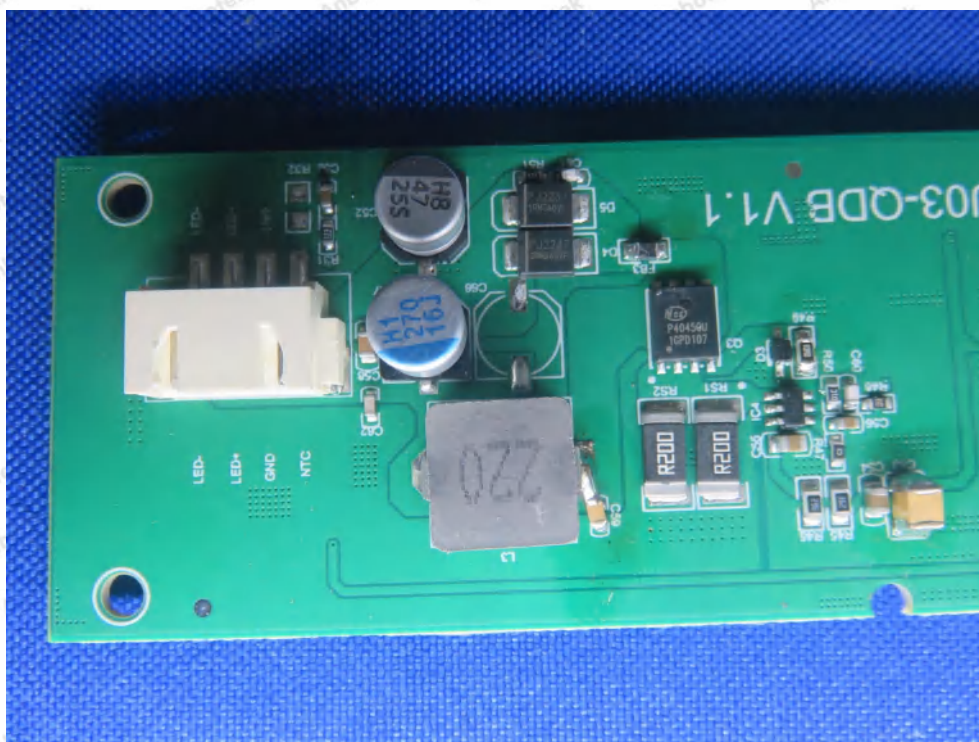


**APPENDIX III -- INTERNAL PHOTOGRAPH**

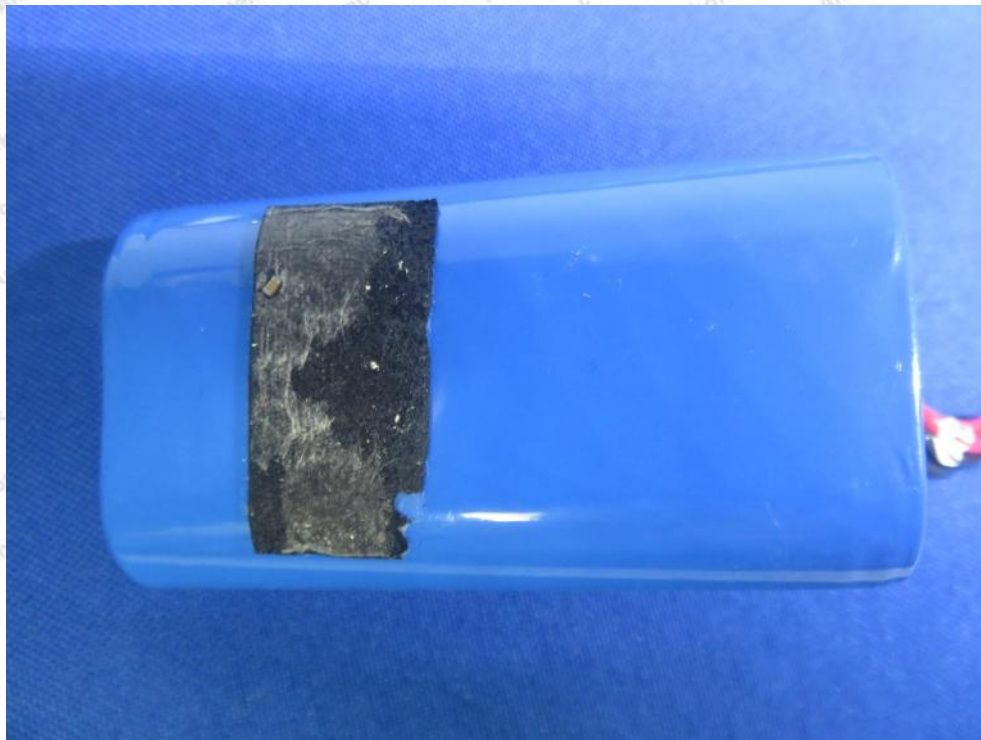
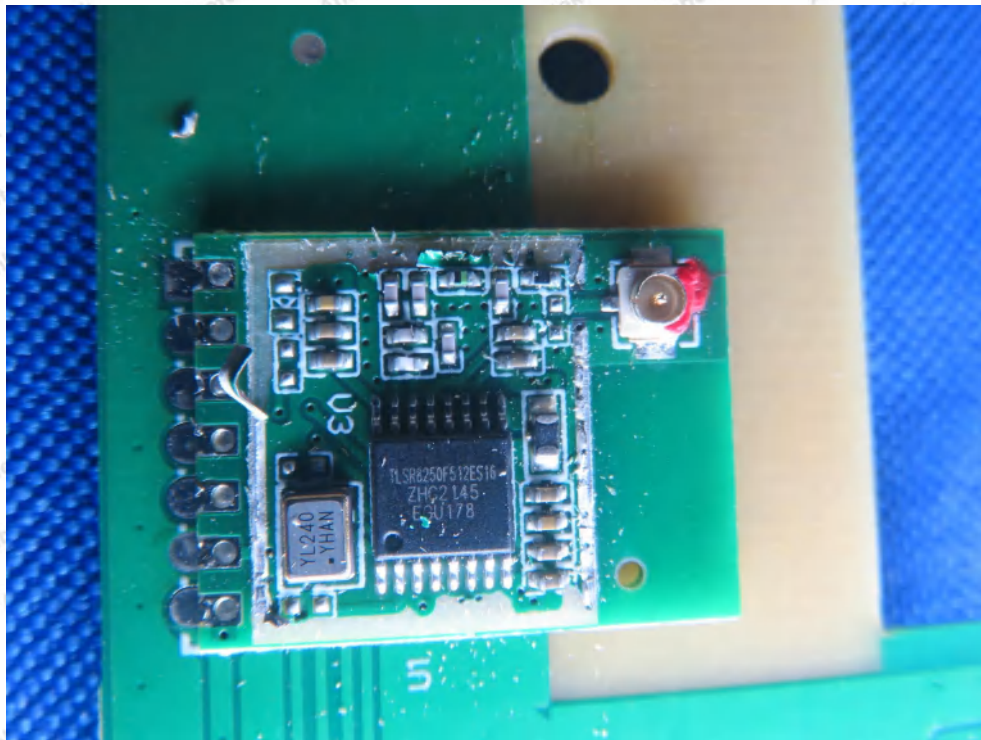
















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## Appendix Test Data

Report No.:	18220WC20176001	Test Sample No.:	1-2-2
Start Test Date:	2022.8.4	Finish Test Date:	2022.8.24
Test Engineer:	<i>Tony He</i>	Auditor:	<i>Edward Pan</i>
Temperature:	26.3℃	Relative Humidity:	47 %
Pressure:	1012 hPa		

## Appendix A: DTS Bandwidth

## Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.678	2401.690	2402.368	≥0.5	PASS
		2440	0.662	2439.700	2440.362	≥0.5	PASS
		2480	0.668	2479.696	2480.364	≥0.5	PASS
BLE_2M	Ant1	2402	1.345	2401.380	2402.725	≥0.5	PASS
		2440	1.310	2439.405	2440.715	≥0.5	PASS
		2480	1.365	2479.380	2480.745	≥0.5	PASS





## Test Graphs





BLE\_2M\_Ant1\_2402



BLE\_2M\_Ant1\_2440







## Appendix B: Occupied Channel Bandwidth

### Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0216	2401.5157	2402.5373	---	PASS
		2440	1.0088	2439.5275	2440.5363	---	PASS
		2480	1.0042	2479.5281	2480.5323	---	PASS
BLE_2M	Ant1	2402	2.0523	2401.0061	2403.0584	---	PASS
		2440	2.0477	2439.0188	2441.0665	---	PASS
		2480	2.0484	2479.0081	2481.0565	---	PASS

