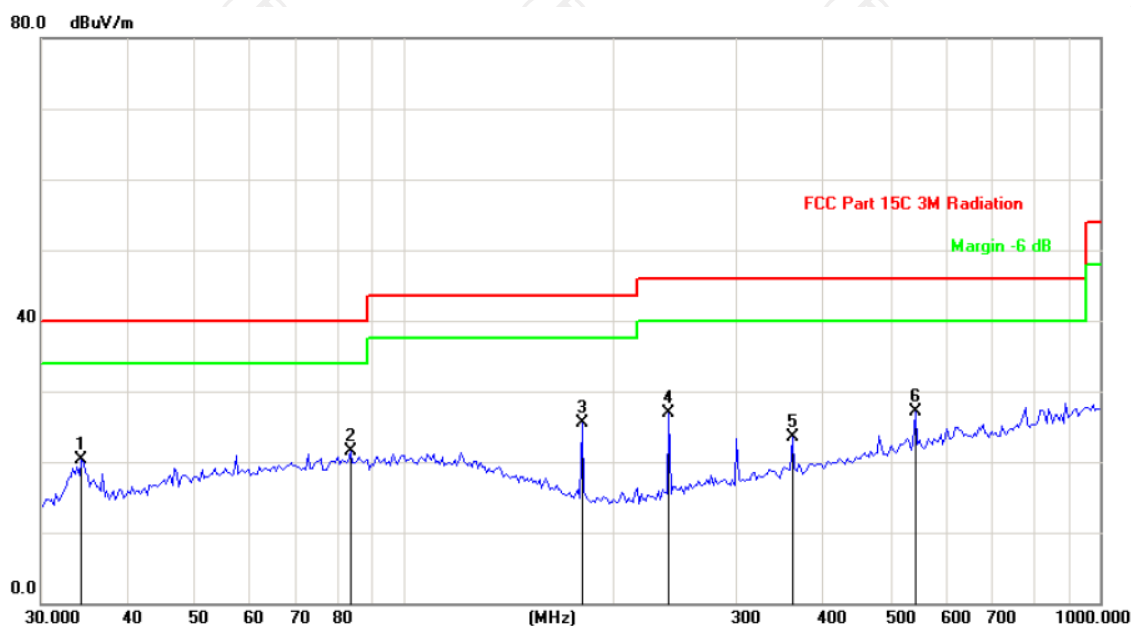


Please refer to following diagram for individual

Below 1GHz

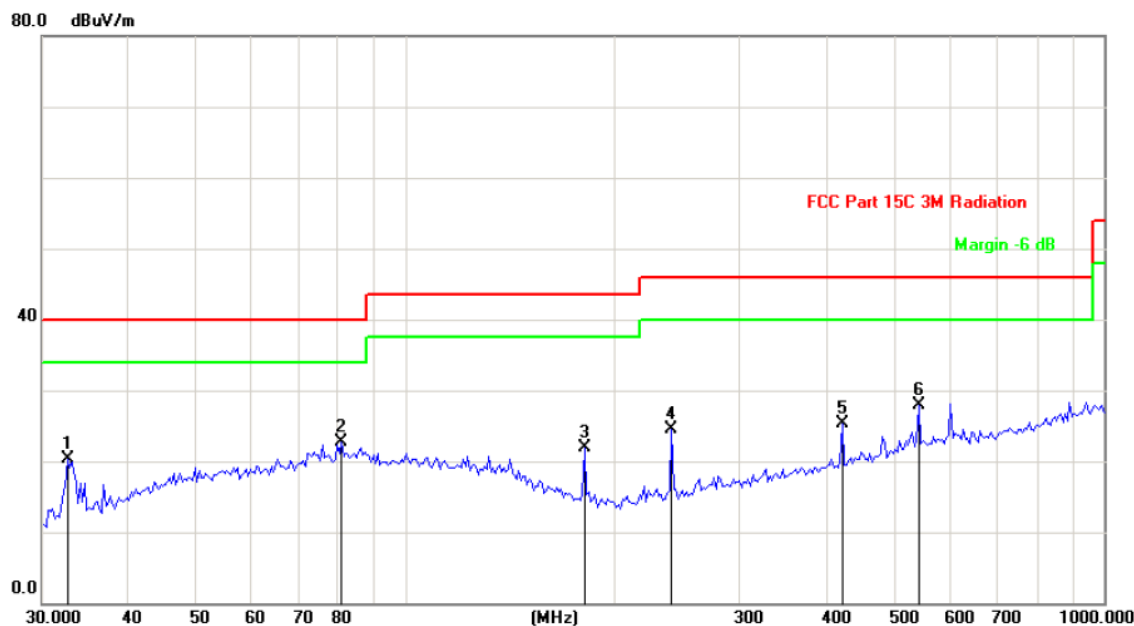
Horizontal:



Site: Polarization: **Horizontal** Temperature: 25
Limit: FCC Part 15C 3M Radiation Power: AC 120V/60Hz Humidity: 55 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		34.2852	31.42	-11.02	20.40	40.00	-19.60	peak
2		83.6937	35.85	-14.38	21.47	40.00	-18.53	peak
3	*	180.0304	40.47	-14.91	25.56	43.50	-17.94	peak
4		240.1442	39.78	-12.85	26.93	46.00	-19.07	peak
5		360.9775	33.06	-9.53	23.53	46.00	-22.47	peak
6		542.6104	34.18	-7.06	27.12	46.00	-18.88	peak

Vertical:



Site: Polarization: **Vertical** Temperature: 25
Limit: FCC Part 15C 3M Radiation Power: AC 120V/60Hz Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector
		MHz	dBuV	dB	dBuV/m	dB/m	dB	
1		32.6395	31.33	-11.02	20.31	40.00	-19.69	peak
2	*	80.8042	38.99	-16.20	22.79	40.00	-17.21	peak
3		180.0304	36.86	-14.91	21.95	43.50	-21.55	peak
4		240.1442	37.42	-12.85	24.57	46.00	-21.43	peak
5		421.3287	34.07	-8.68	25.39	46.00	-20.61	peak
6		542.6104	34.98	-7.06	27.92	46.00	-18.08	peak

Note: 1. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported

2. Measurements were conducted in all three channels (high, middle, low) and two modulation (GFSK, Pi/4 DQPSK) and the worst case Mode (middle channel and Pi/4 DQPSK) was submitted only.

3. Freq. = Emission frequency in MHz

Measurement (dBuV/m) = Reading level (dBuV) + Corr. Factor (dB)

Correction Factor= Antenna Factor + Cable loss – Pre-amplifier

Limit (dBuV/m) = Limit stated in standard

Margin (dB) = Measurement (dBuV/m) – Limits (dBuV/m)

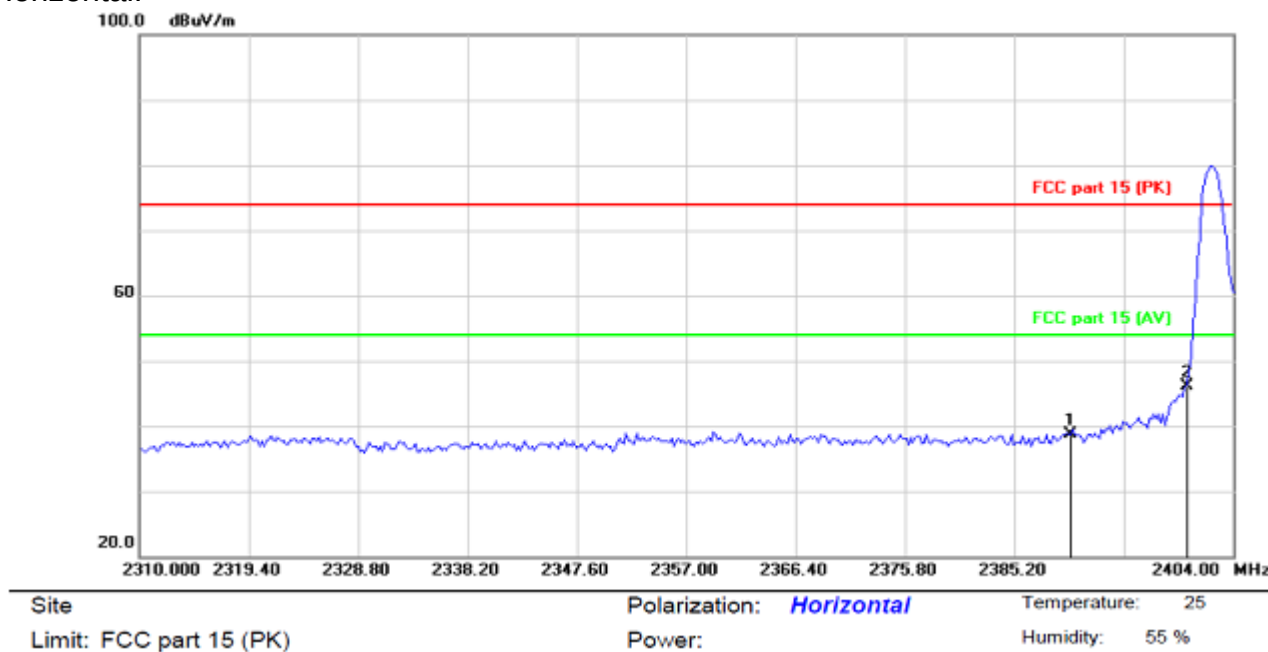
Any value more than 10dB below limit have not been specifically reported

* is meaning the worst frequency has been tested in the test frequency range

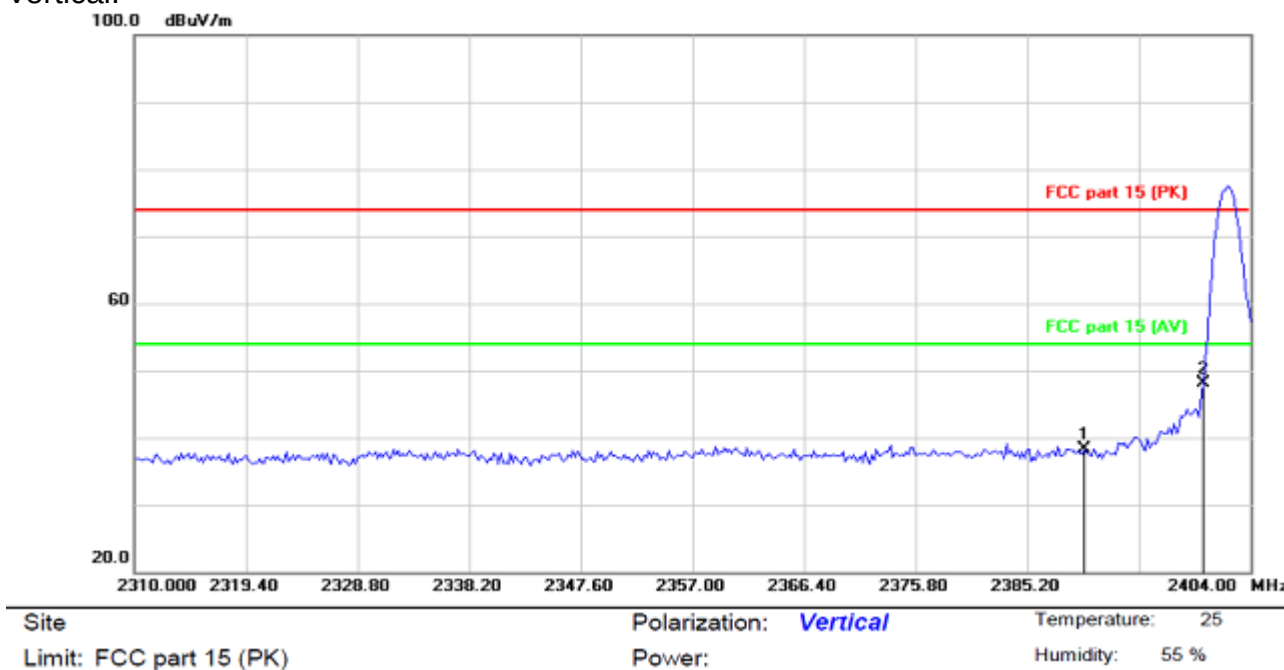
Test Result of Radiated Spurious at Band edges

Lowest channel 2402:

Horizontal:



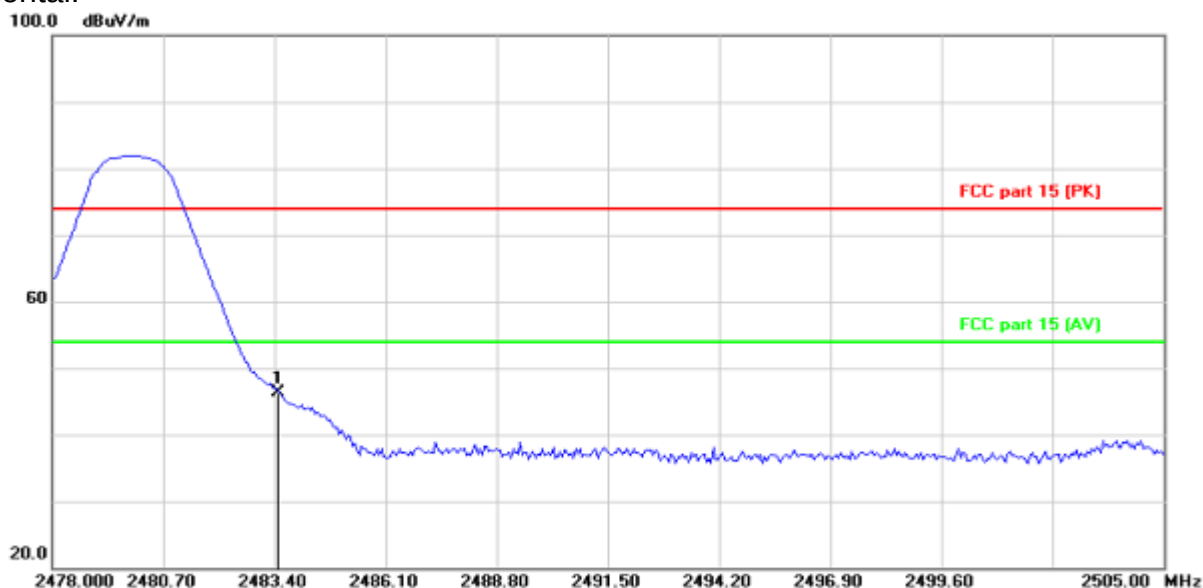
Vertical:



Frequency (MHz)	Ant. Pol. H/V	Peak (dBμV/m)	Duty cycle factor (dB/m)	AV (dBμV/m)	Peak limit (dBμV/m)	AV limit (dBμV/m)	PK Margin (dB)	AVG Margin (dB)
2390	H	38.75	-6.67	32.08	74	54	-35.25	-21.92
2390	V	46.20	-6.67	39.53	74	54	-27.80	-14.47
2400	H	38.27	-6.67	31.60	74	54	-35.73	-22.40
2400	V	48.07	-6.67	41.40	74	54	-25.93	-12.60

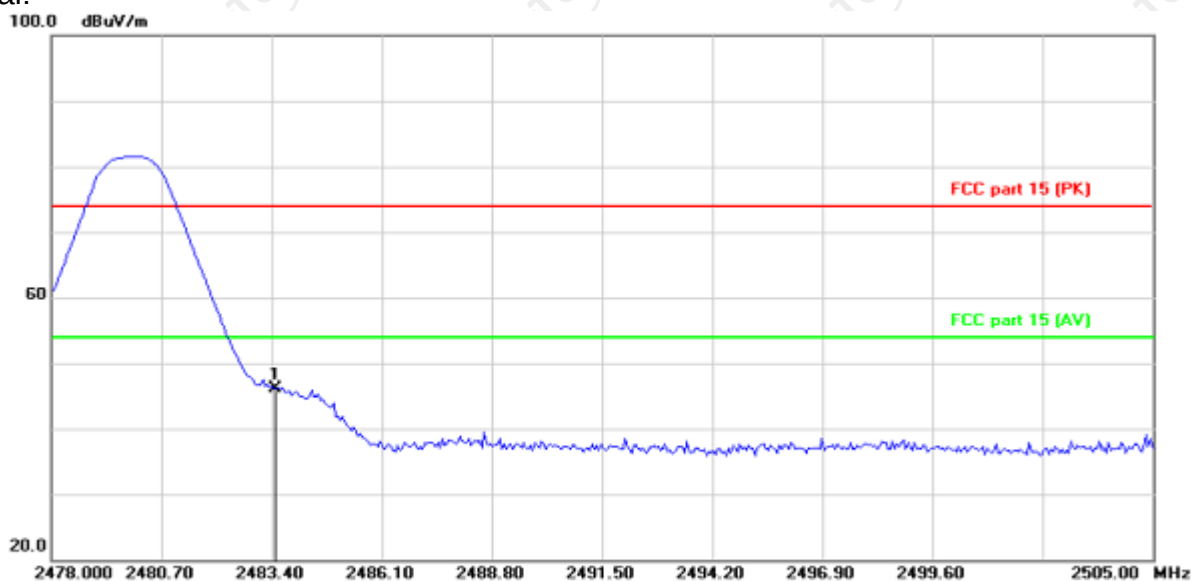
Highest channel 2480:

Horizontal:



Site: Limit: FCC part 15 (PK) Polarization: **Horizontal** Temperature: 25
Power: Humidity: 55 %

Vertical:



Site: Limit: FCC part 15 (PK) Polarization: **Vertical** Temperature: 25
Power: Humidity: 55 %

Frequency (MHz)	Ant. Pol. H/V	Peak (dBμV/m)	Duty cycle factor (dB/m)	AV (dBμV/m)	Peak limit (dBμV/m)	AV limit (dBμV/m)	PK Margin (dB)	AVG Margin (dB)
2483.5	H	46.35	-6.67	39.68	74	54	-27.65	-14.32
2483.5	V	46.19	-6.67	39.52	74	54	-27.81	-14.48

Note: Measurements were conducted in all two modulation (GFSK, Pi/4DQPSK), and the worst case Mode (Pi/4DQPSK) was submitted only.

Above 1GHz

Modulation Type: Pi/4DQPSK

Low channel: 2402 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4804	H	44.52	---	0.66	45.18	---	74	54	-8.82
7206	H	32.81	---	9.50	42.31	---	74	54	-11.69
---	H	---	---	---	---	---	---	---	---
4804	V	42.13	---	0.66	42.79	---	74	54	-11.21
7206	V	32.48	---	9.50	41.98	---	74	54	-12.02
---	V	---	---	---	---	---	---	---	---

Middle channel: 2441 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4882	H	43.58	---	0.99	44.57	---	74	54	-9.43
7323	H	31.37	---	9.87	41.24	---	74	54	-12.76
---	H	---	---	---	---	---	---	---	---
4882	V	42.60	---	0.99	43.59	---	74	54	-10.41
7323	V	33.11	---	9.87	42.98	---	74	54	-11.02
---	V	---	---	---	---	---	---	---	---

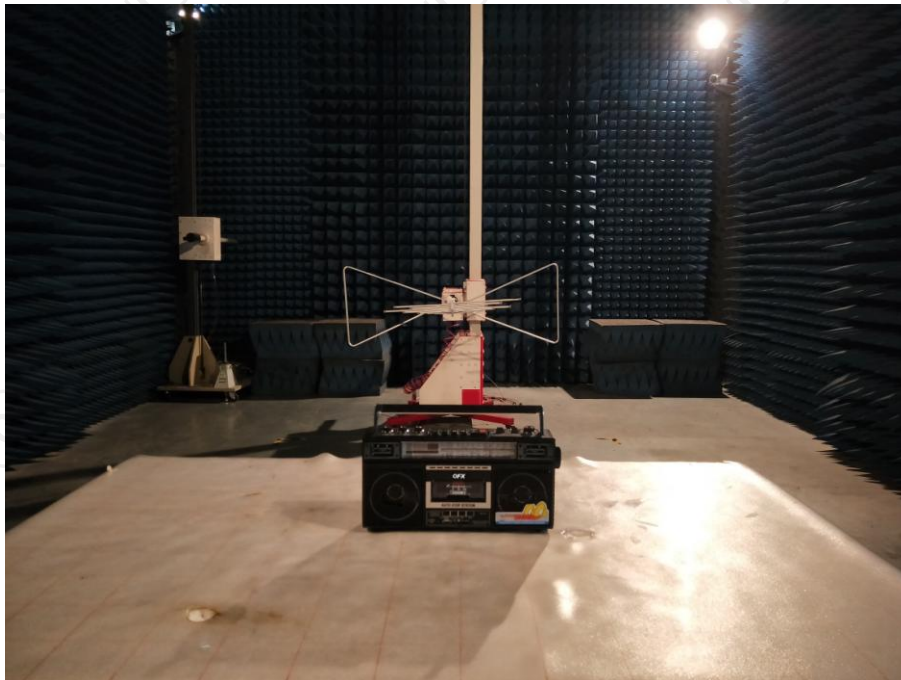
High channel: 2480 MHz

Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBμV)	AV reading (dBμV)	Correction Factor (dB/m)	Emission Level		Peak limit (dBμV/m)	AV limit (dBμV/m)	Margin (dB)
					Peak (dBμV/m)	AV (dBμV/m)			
4960	H	44.87	---	1.33	46.20	---	74	54	-7.80
7440	H	34.44	---	10.22	44.66	---	74	54	-9.34
---	H	---	---	---	---	---	---	---	---
4960	V	45.04	---	1.33	46.37	---	74	54	-7.63
7440	V	34.12	---	10.22	44.34	---	74	54	-9.66
---	V	---	---	---	---	---	---	---	---

Note:

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss – Pre-amplifier
2. Margin (dB) = Emission Level (Peak) (dBμV/m)-Average limit (dBμV/m)
3. The emission levels of other frequencies are very lower than the limit and not show in test report.
4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency.
5. Data of measurement shown “---”in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.
6. Measurements were conducted in all two modulation (GFSK, Pi/4 DQPSK), and the worst case Mode (Pi/4DQPSK) was submitted only.
7. All the restriction bands are compliance with the limit of 15.209.

Appendix A: Photographs of Test Setup
Product: MULTI-FUNCTIONAL BLUETOOTH RADIO
Model: J-220BT
Radiated Emission



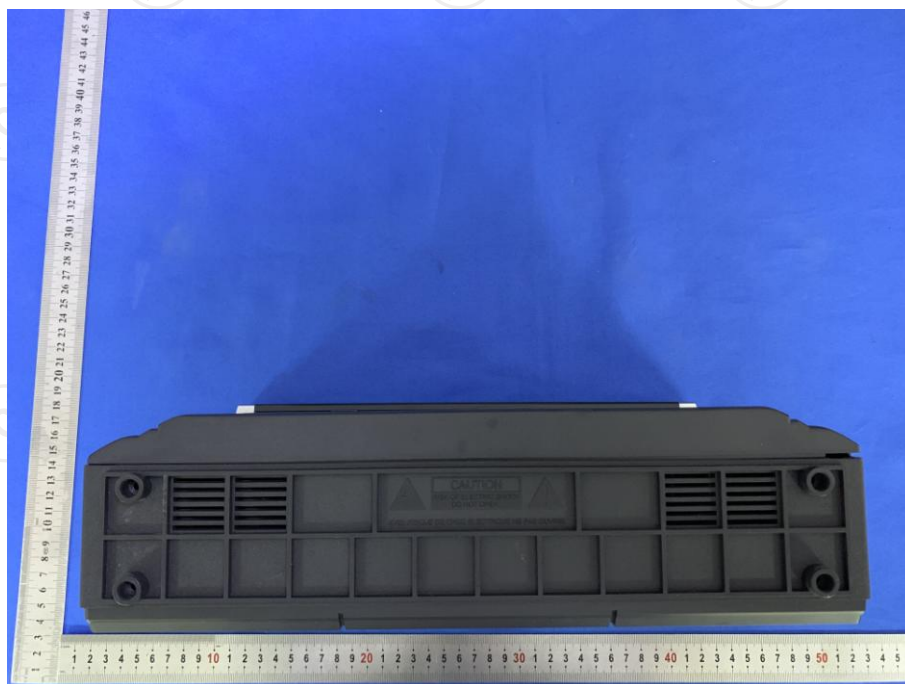
Conducted Emission



Appendix B: Photographs of EUT
Product: MULTI-FUNCTIONAL BLUETOOTH RADIO
Model: J-220BT
External Photos

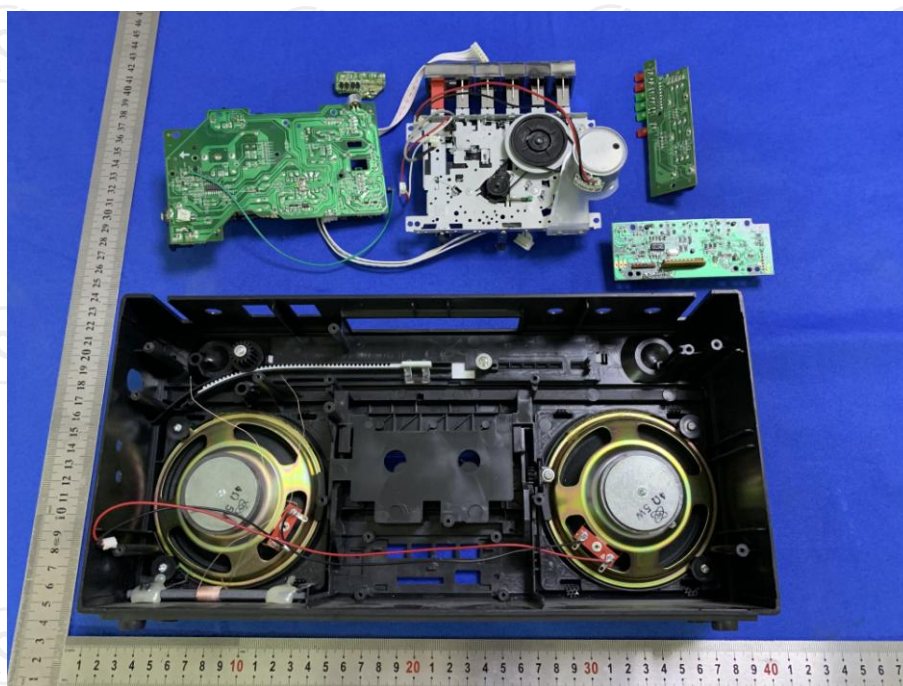
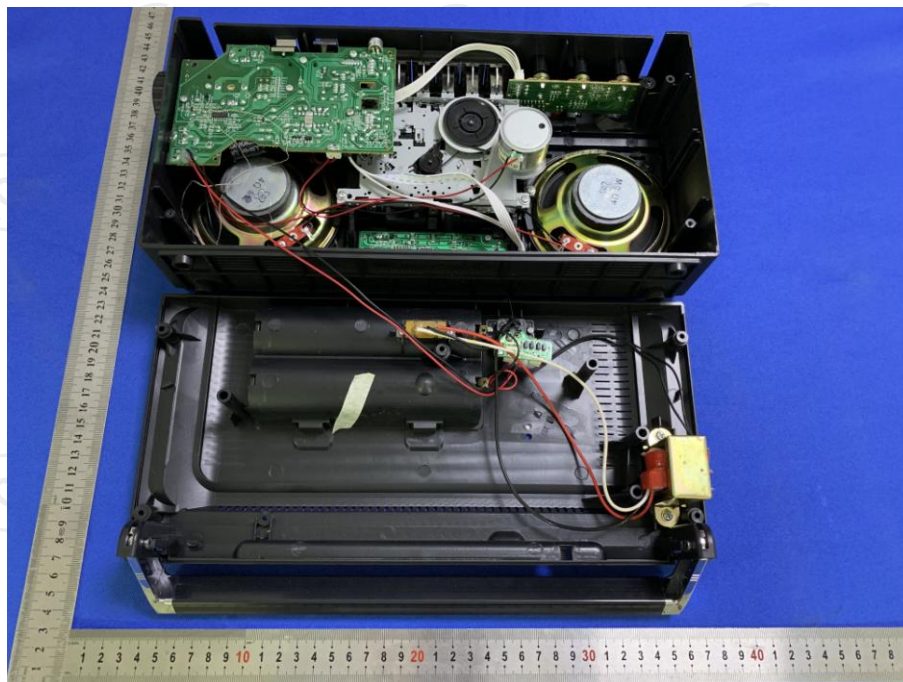


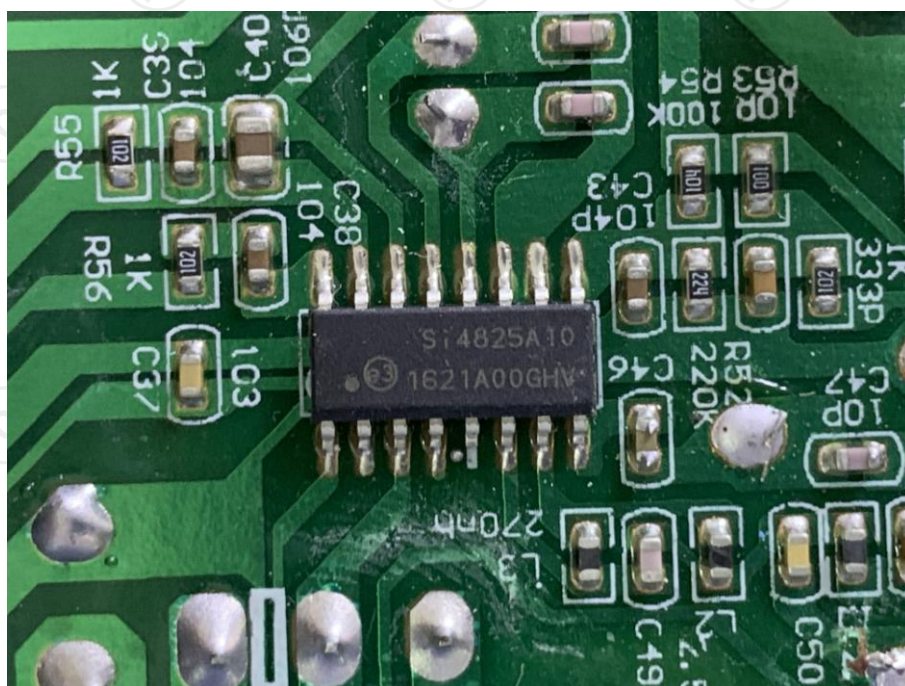
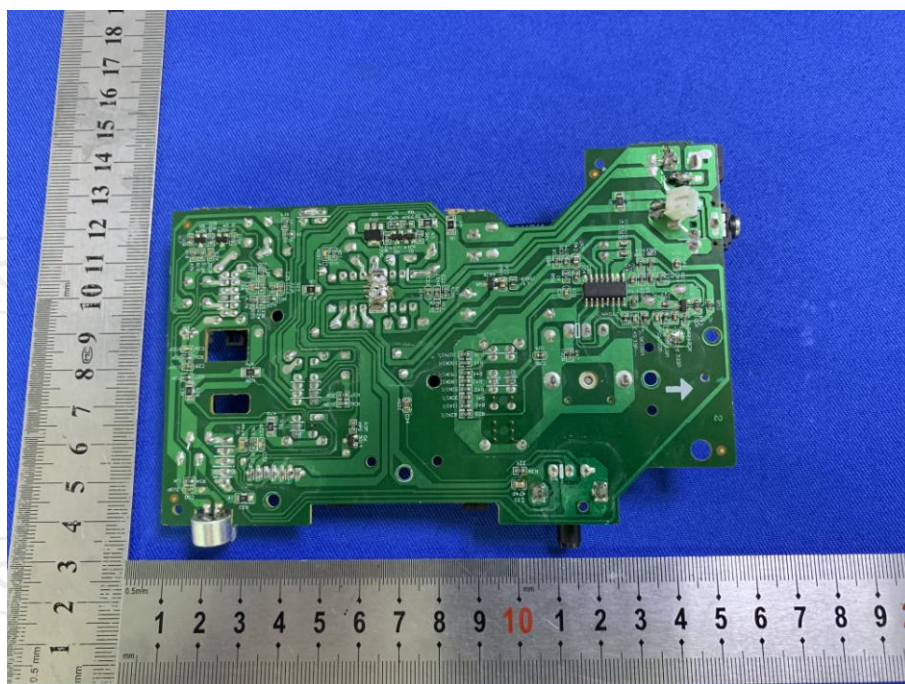


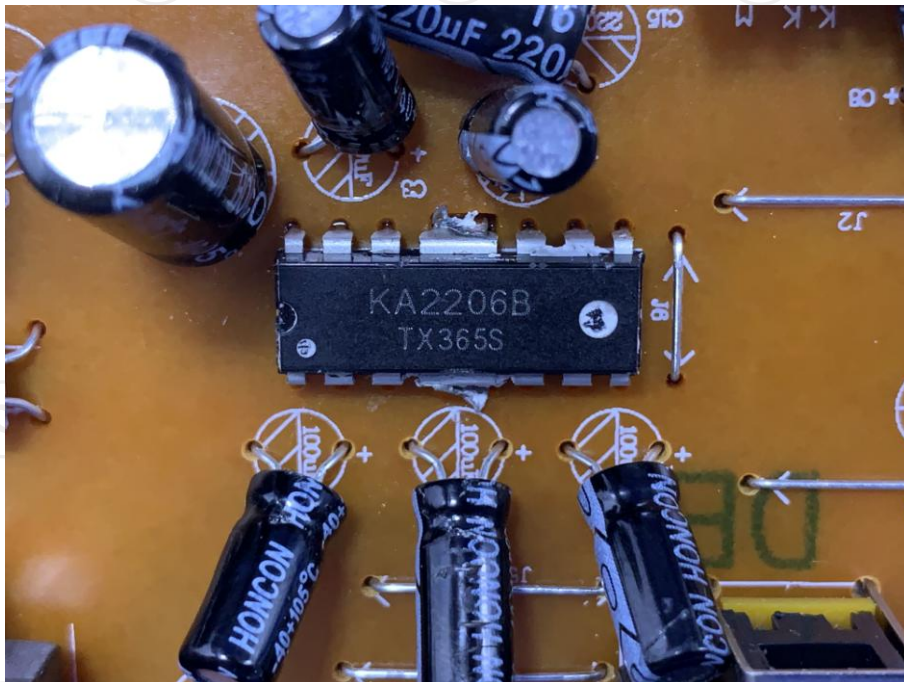
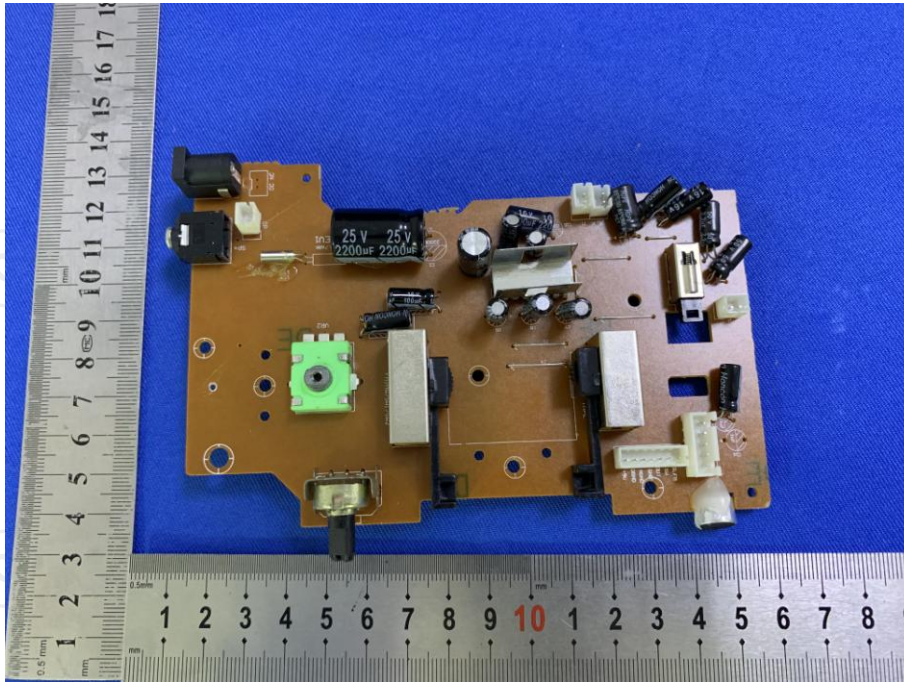


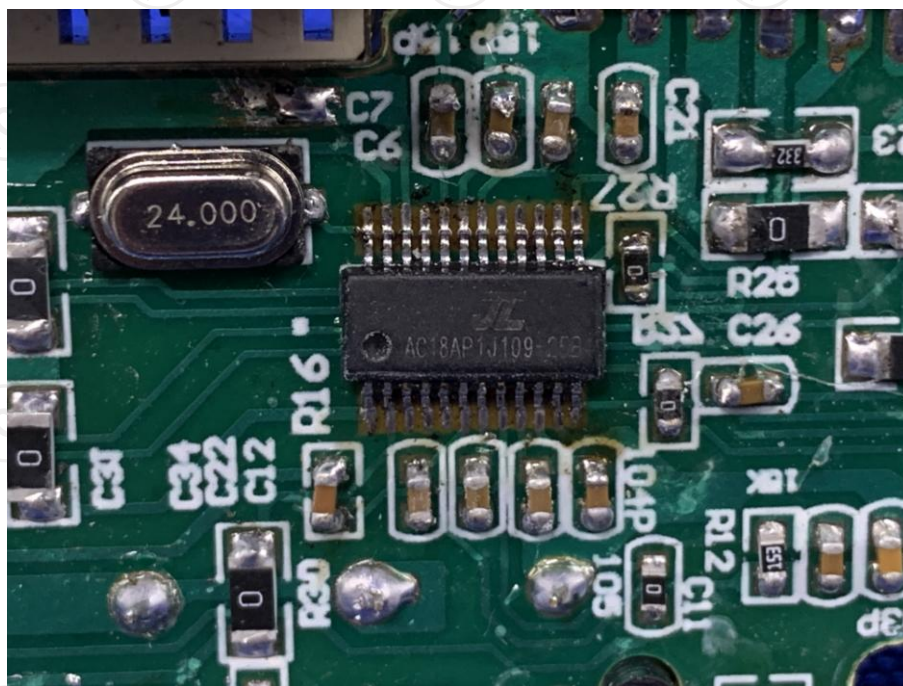
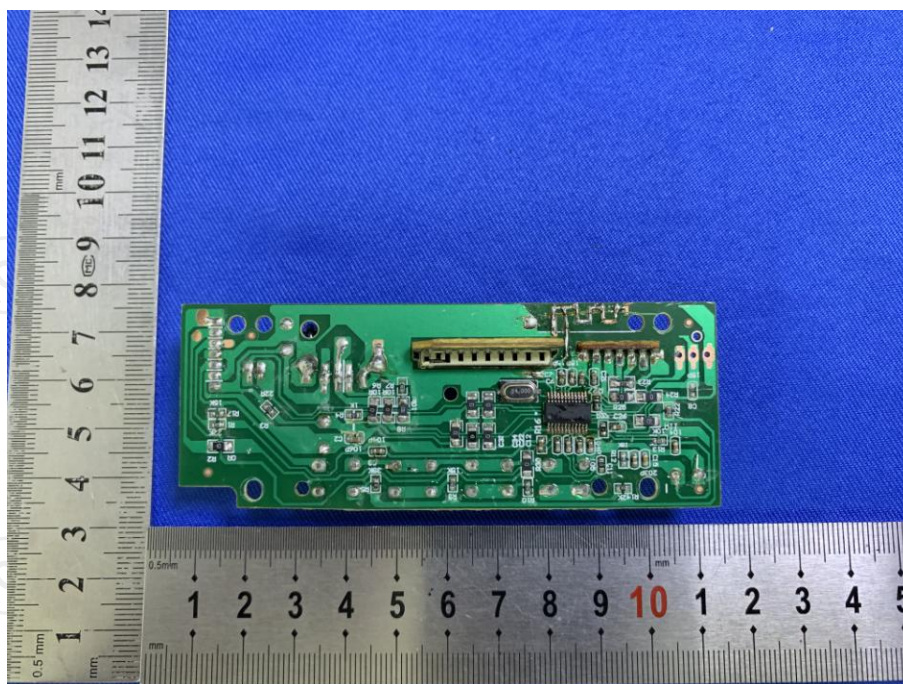


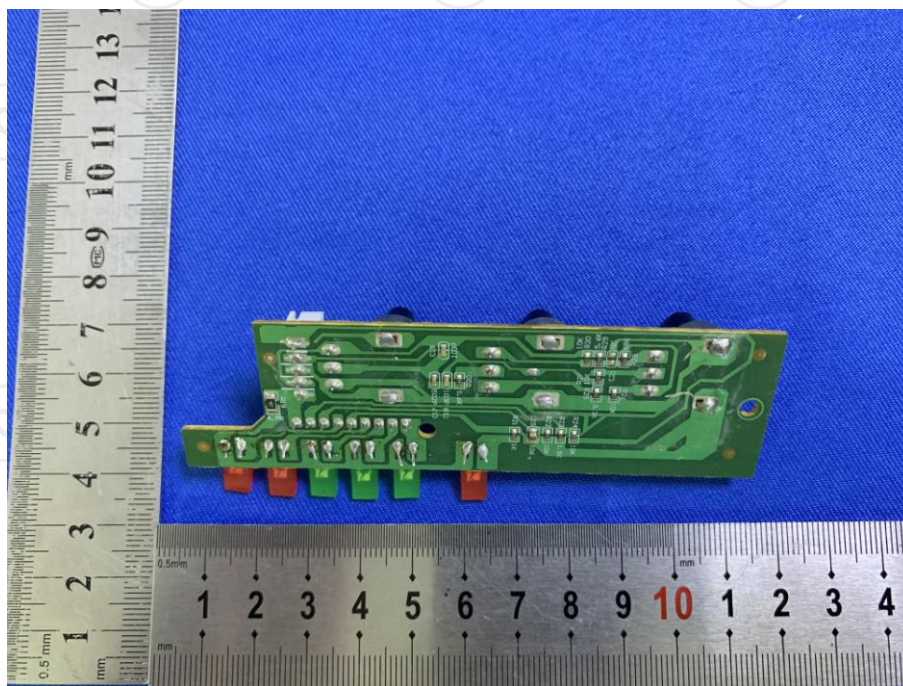
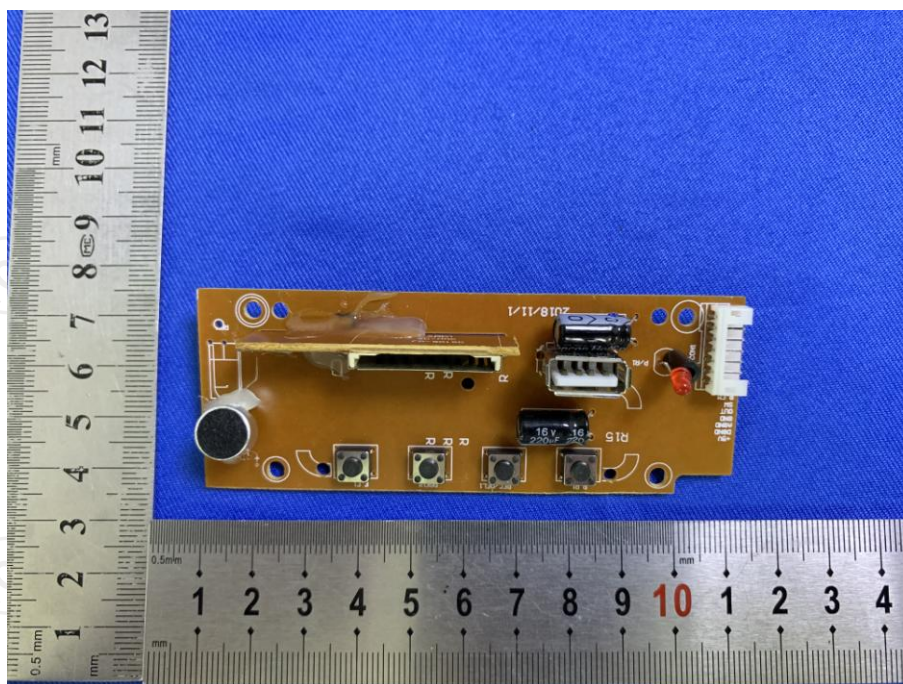
Product: MULTI-FUNCTIONAL BLUETOOTH RADIO
Model: J-220BT
Internal Photos

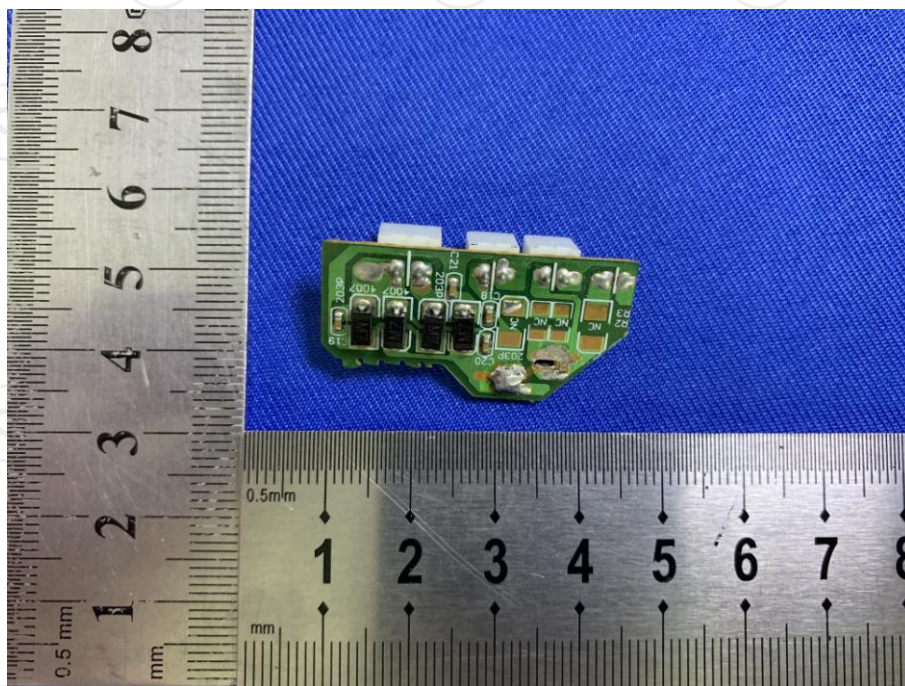
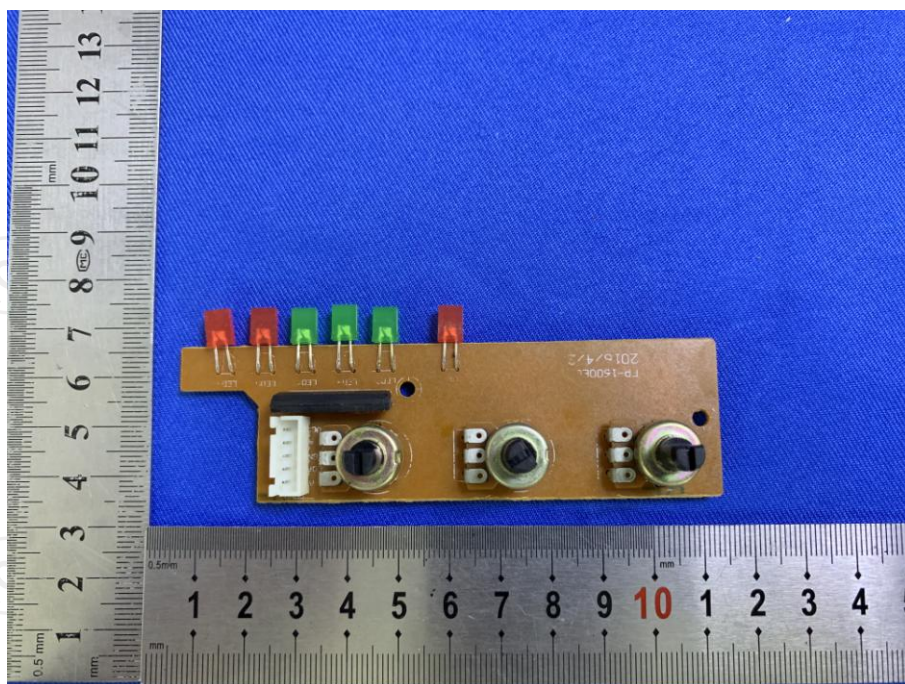


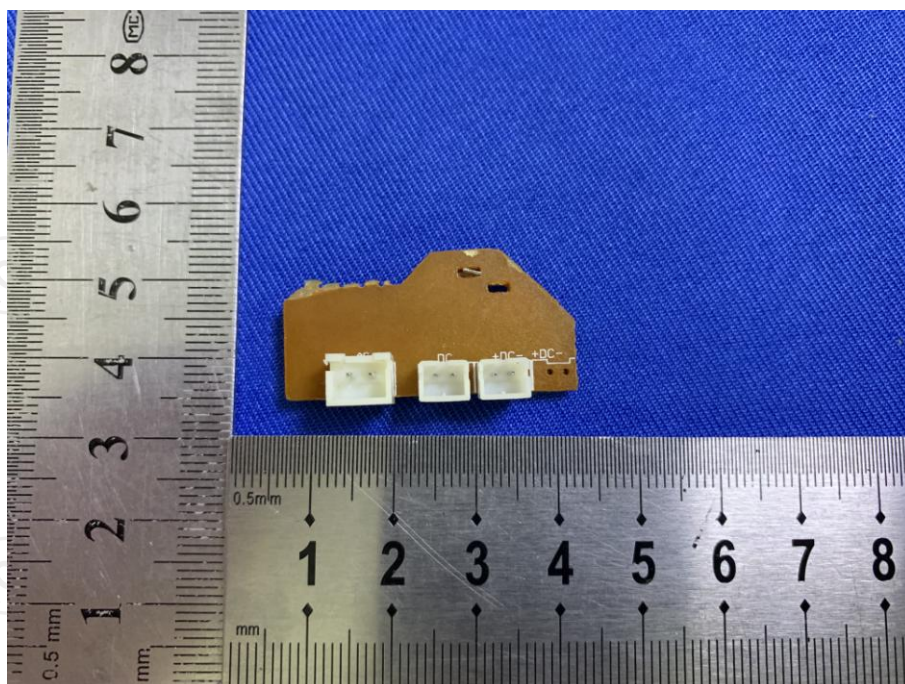












*******END OF REPORT*******