

5.11.2 Transmitter Emission above 1GHz

Ant1:

Worse case mode:		GFSK(DH5)		Test channel:		Lowest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
2390	53.49	-9.2	44.29	74	-29.71	Peak	H
2400	55.89	-9.39	46.50	74	-27.50	Peak	H
4804	52.87	-4.33	48.54	74	-25.46	Peak	H
7206	50.15	1.01	51.16	74	-22.84	Peak	H
2390	54.16	-9.2	44.96	74	-29.04	Peak	V
2400	55.15	-9.39	45.76	74	-28.24	Peak	V
4804	53.60	-4.33	49.27	74	-24.73	Peak	V
7206	49.20	1.01	50.21	74	-23.79	Peak	V

Worse case mode:		GFSK(DH5)		Test channel:		Middle	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
4882	50.39	-4.11	46.28	74	-27.72	peak	H
7323	49.35	1.51	50.86	74	-23.14	peak	H
4882	53.74	-4.11	49.63	74	-24.37	peak	V
7323	49.16	1.51	50.67	74	-23.33	peak	V

Worse case mode:		GFSK(DH5)		Test channel:		Highest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
2483.5	54.48	-9.29	45.19	74	-28.81	Peak	H
4960	50.75	-4.04	46.71	74	-27.29	Peak	H
7440	50.42	1.57	51.99	74	-22.01	Peak	H
2483.5	54.35	-9.29	45.06	74	-28.94	Peak	V
4960	48.71	-4.04	44.67	74	-29.33	Peak	V
7440	49.21	1.57	50.78	74	-23.22	Peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Lowest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)		H/V
2390	54.23	-9.2	45.03	74	-28.97	Peak	H
2400	55.60	-9.39	46.21	74	-27.79	Peak	H
4804	52.48	-4.33	48.15	74	-25.85	Peak	H
7206	48.37	1.01	49.38	74	-24.62	Peak	H
2390	54.37	-9.2	45.17	74	-28.83	Peak	V
2400	56.03	-9.39	46.64	74	-27.36	Peak	V
4804	53.98	-4.33	49.65	74	-24.35	Peak	V
7206	49.07	1.01	50.08	74	-23.92	Peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Middle	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)		H/V
4882	52.91	-4.11	48.80	74	-25.20	peak	H
7323	50.47	1.51	51.98	74	-22.02	peak	H
4882	53.29	-4.11	49.18	74	-24.82	peak	V
7323	49.29	1.51	50.80	74	-23.20	peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Highest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)		H/V
2483.5	55.49	-9.29	46.20	74	-27.80	Peak	H
4960	53.10	-4.04	49.06	74	-24.94	Peak	H
7440	50.81	1.57	52.38	74	-21.62	Peak	H
2483.5	55.29	-9.29	46.00	74	-28.00	Peak	V
4960	49.60	-4.04	45.56	74	-28.44	Peak	V
7440	50.16	1.57	51.73	74	-22.27	Peak	V

Worse case mode:		8DPSK (3DH5)		Test channel:		Lowest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
2390	55.69	-9.2	46.49	74	-27.51	Peak	H
2400	55.18	-9.39	45.79	74	-28.21	Peak	H
4804	52.68	-4.33	48.35	74	-25.65	Peak	H
7206	48.81	1.01	49.82	74	-24.18	Peak	H
2390	53.83	-9.2	44.63	74	-29.37	Peak	V
2400	55.63	-9.39	46.24	74	-27.76	Peak	V
4804	54.21	-4.33	49.88	74	-24.12	Peak	V
7206	50.93	1.01	51.94	74	-22.06	Peak	V

Worse case mode:		8DPSK (3DH5)		Test channel:		Middle	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
4882	50.53	-4.11	46.42	74	-27.58	peak	H
7323	50.24	1.51	51.75	74	-22.25	peak	H
4882	52.05	-4.11	47.94	74	-26.06	peak	V
7323	49.71	1.51	51.22	74	-22.78	peak	V

Worse case mode:		8DPSK (3DH5)		Test channel:		Highest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
2483.5	56.78	-9.29	47.49	74	-26.51	Peak	H
4960	51.40	-4.04	47.36	74	-26.64	Peak	H
7440	49.53	1.57	51.10	74	-22.90	Peak	H
2483.5	55.69	-9.29	46.40	74	-27.60	Peak	V
4960	50.58	-4.04	46.54	74	-27.46	Peak	V
7440	49.74	1.57	51.31	74	-22.69	Peak	V

Ant2:

Worse case mode:		GFSK(DH5)		Test channel:		Lowest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
2390	53.49	-9.2	44.29	74	-29.71	Peak	H
2400	55.89	-9.39	46.50	74	-27.50	Peak	H
4804	52.87	-4.33	48.54	74	-25.46	Peak	H
7206	50.15	1.01	51.16	74	-22.84	Peak	H
2390	54.16	-9.2	44.96	74	-29.04	Peak	V
2400	55.15	-9.39	45.76	74	-28.24	Peak	V
4804	53.60	-4.33	49.27	74	-24.73	Peak	V
7206	49.20	1.01	50.21	74	-23.79	Peak	V

Worse case mode:		GFSK(DH5)		Test channel:		Middle	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
4882	50.39	-4.11	46.28	74	-27.72	peak	H
7323	49.35	1.51	50.86	74	-23.14	peak	H
4882	53.74	-4.11	49.63	74	-24.37	peak	V
7323	49.16	1.51	50.67	74	-23.33	peak	V

Worse case mode:		GFSK(DH5)		Test channel:		Highest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
2483.5	54.48	-9.29	45.19	74	-28.81	Peak	H
4960	50.75	-4.04	46.71	74	-27.29	Peak	H
7440	50.42	1.57	51.99	74	-22.01	Peak	H
2483.5	54.35	-9.29	45.06	74	-28.94	Peak	V
4960	48.71	-4.04	44.67	74	-29.33	Peak	V
7440	49.21	1.57	50.78	74	-23.22	Peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Lowest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)		H/V
2390	54.23	-9.2	45.03	74	-28.97	Peak	H
2400	55.60	-9.39	46.21	74	-27.79	Peak	H
4804	52.48	-4.33	48.15	74	-25.85	Peak	H
7206	48.37	1.01	49.38	74	-24.62	Peak	H
2390	54.37	-9.2	45.17	74	-28.83	Peak	V
2400	56.03	-9.39	46.64	74	-27.36	Peak	V
4804	53.98	-4.33	49.65	74	-24.35	Peak	V
7206	49.07	1.01	50.08	74	-23.92	Peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Middle	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)		H/V
4882	52.91	-4.11	48.80	74	-25.20	peak	H
7323	50.47	1.51	51.98	74	-22.02	peak	H
4882	53.29	-4.11	49.18	74	-24.82	peak	V
7323	49.29	1.51	50.80	74	-23.20	peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Highest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dB μ V)	(dB)	(dB μ V/m)	(dB μ V/m)	(dB)		H/V
2483.5	55.49	-9.29	46.20	74	-27.80	Peak	H
4960	53.10	-4.04	49.06	74	-24.94	Peak	H
7440	50.81	1.57	52.38	74	-21.62	Peak	H
2483.5	55.29	-9.29	46.00	74	-28.00	Peak	V
4960	49.60	-4.04	45.56	74	-28.44	Peak	V
7440	50.16	1.57	51.73	74	-22.27	Peak	V

Worse case mode:		8DPSK (3DH5)		Test channel:		Lowest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
2390	55.69	-9.2	46.49	74	-27.51	Peak	H
2400	55.18	-9.39	45.79	74	-28.21	Peak	H
4804	52.68	-4.33	48.35	74	-25.65	Peak	H
7206	48.81	1.01	49.82	74	-24.18	Peak	H
2390	53.83	-9.2	44.63	74	-29.37	Peak	V
2400	55.63	-9.39	46.24	74	-27.76	Peak	V
4804	54.21	-4.33	49.88	74	-24.12	Peak	V
7206	50.93	1.01	51.94	74	-22.06	Peak	V

Worse case mode:		8DPSK (3DH5)		Test channel:		Middle	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
4882	50.53	-4.11	46.42	74	-27.58	peak	H
7323	50.24	1.51	51.75	74	-22.25	peak	H
4882	52.05	-4.11	47.94	74	-26.06	peak	V
7323	49.71	1.51	51.22	74	-22.78	peak	V

Worse case mode:		8DPSK (3DH5)		Test channel:		Highest	
Frequency	Meter Reading	Factor	Emission Level	Limits	Over	Detector Type	Ant. Pol.
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)		H/V
2483.5	56.78	-9.29	47.49	74	-26.51	Peak	H
4960	51.40	-4.04	47.36	74	-26.64	Peak	H
7440	49.53	1.57	51.10	74	-22.90	Peak	H
2483.5	55.69	-9.29	46.40	74	-27.60	Peak	V
4960	50.58	-4.04	46.54	74	-27.46	Peak	V
7440	49.74	1.57	51.31	74	-22.69	Peak	V

Remark:

- The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- Scan from 9kHz to 25GHz, the disturbance above 10GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits 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. So, only the peak measurements were shown in the report.

6 Photographs - EUT Test Setup

6.1 Radiated Emission

9KHz~30MHz:



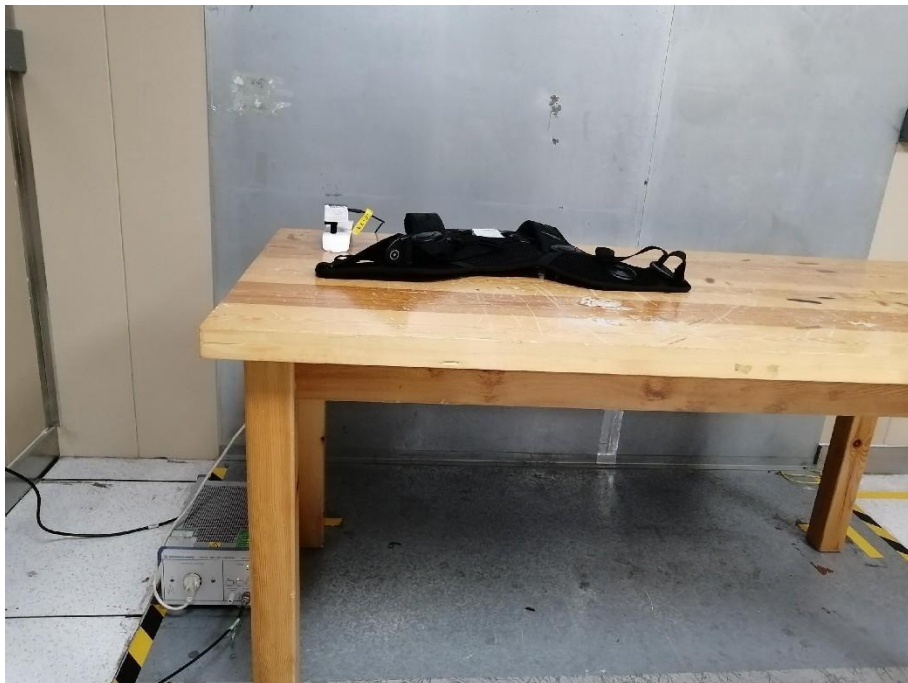
30MHz~1GHz:



Above 1GHz:

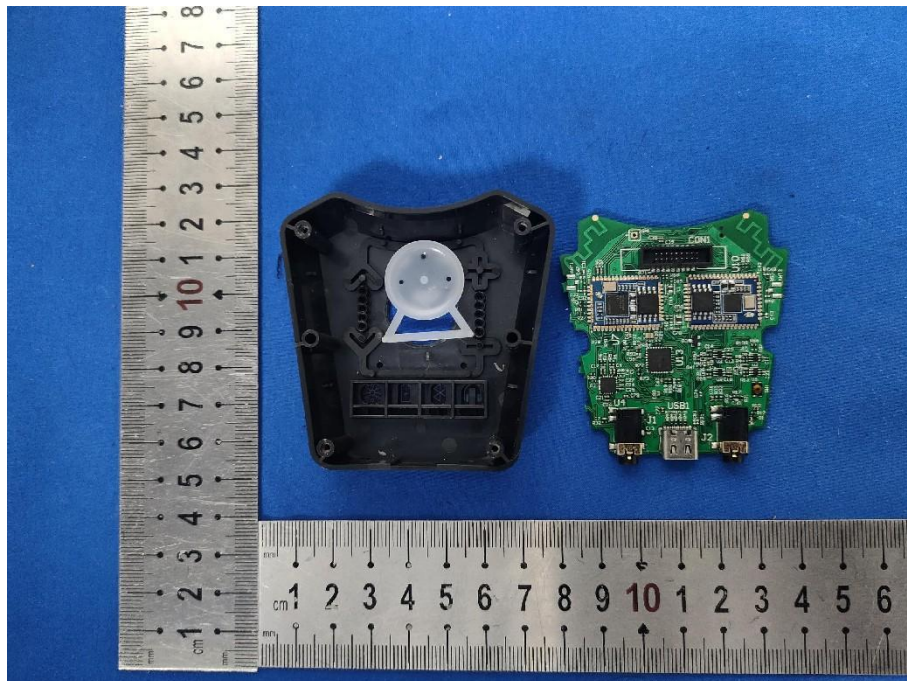
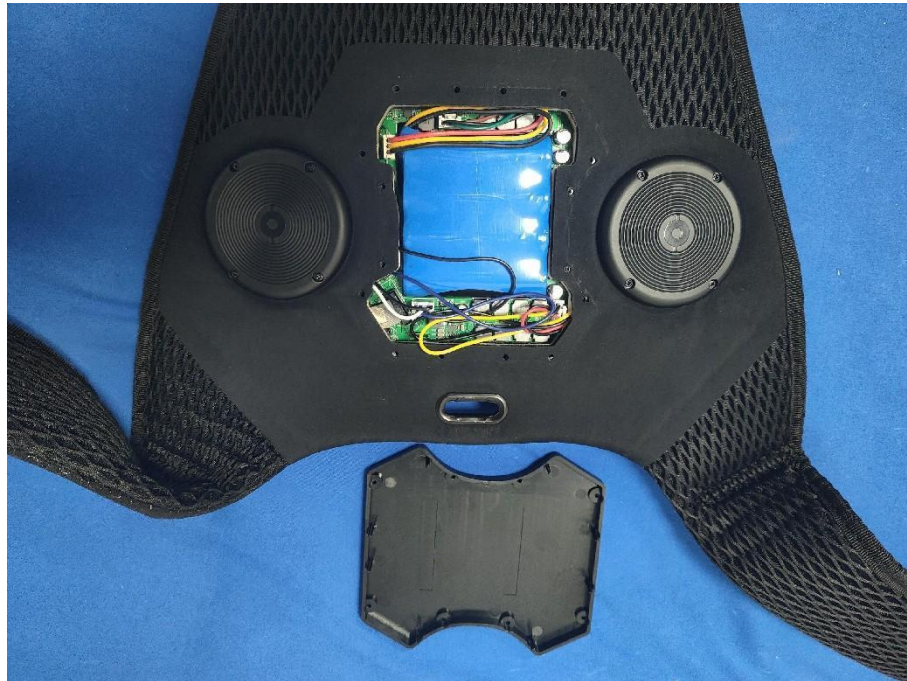


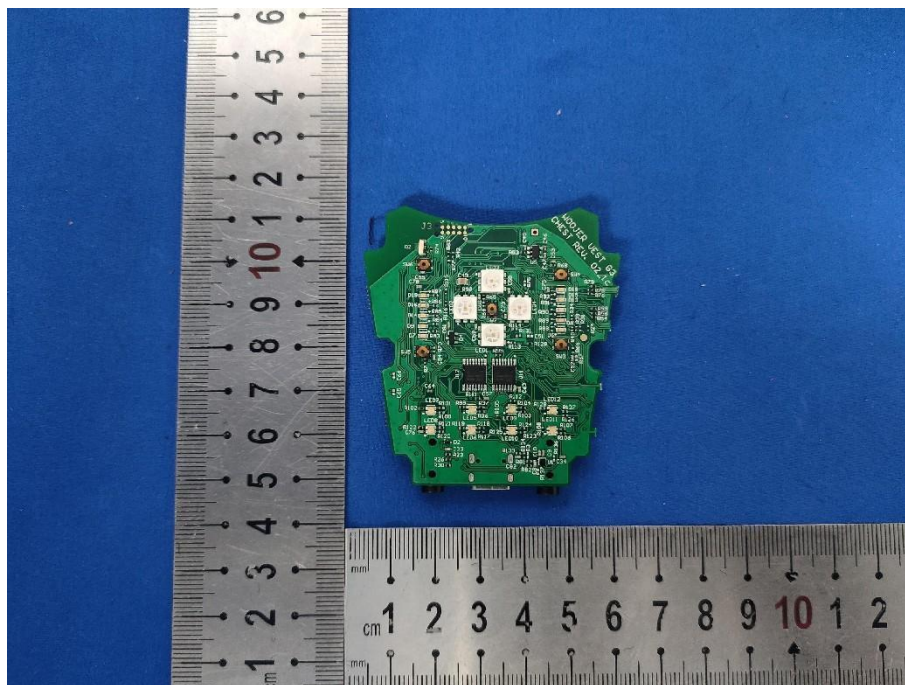
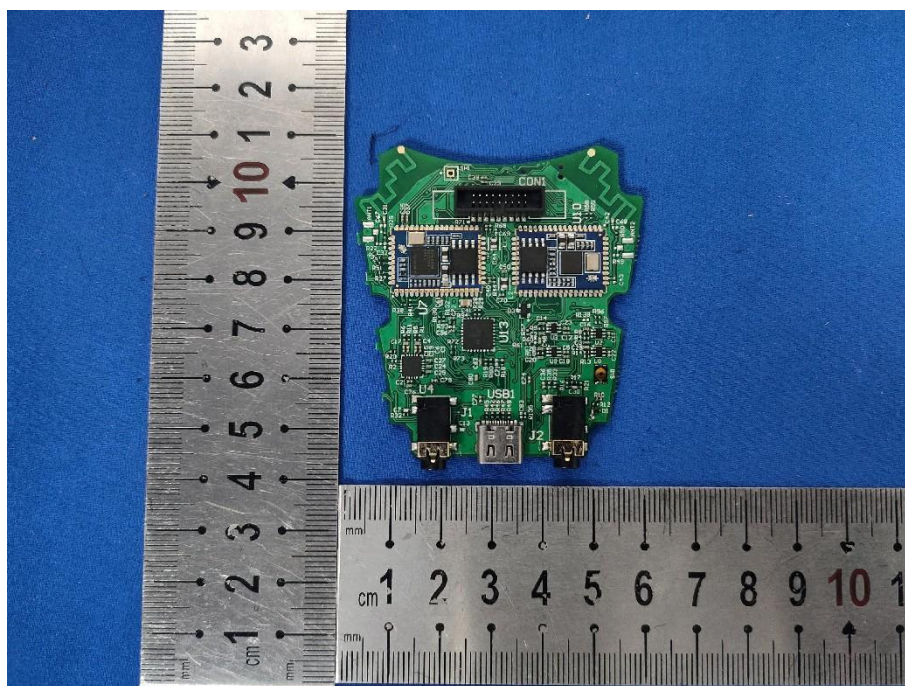
6.2 Conducted Emission

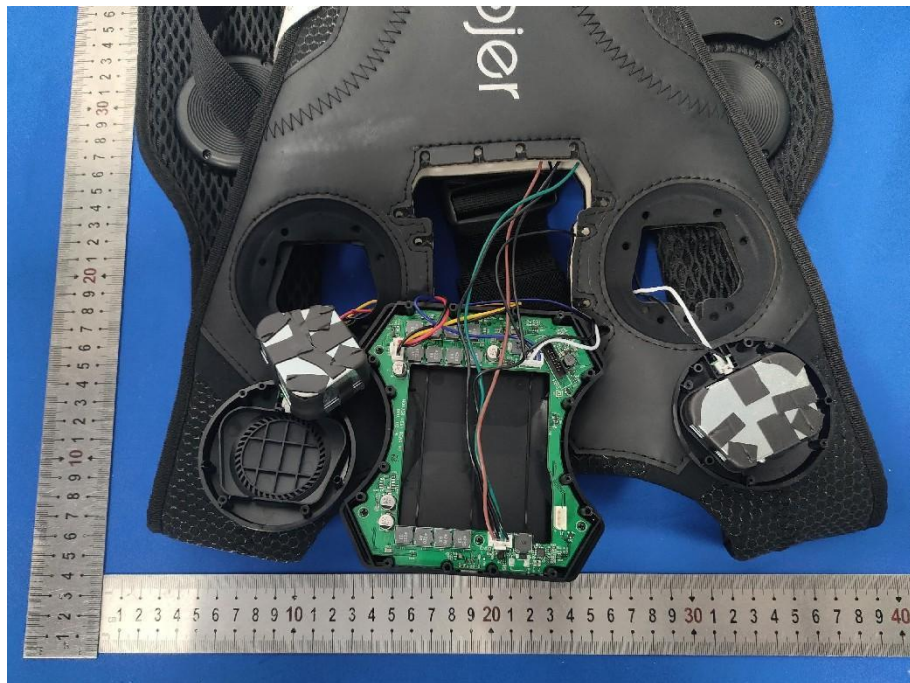


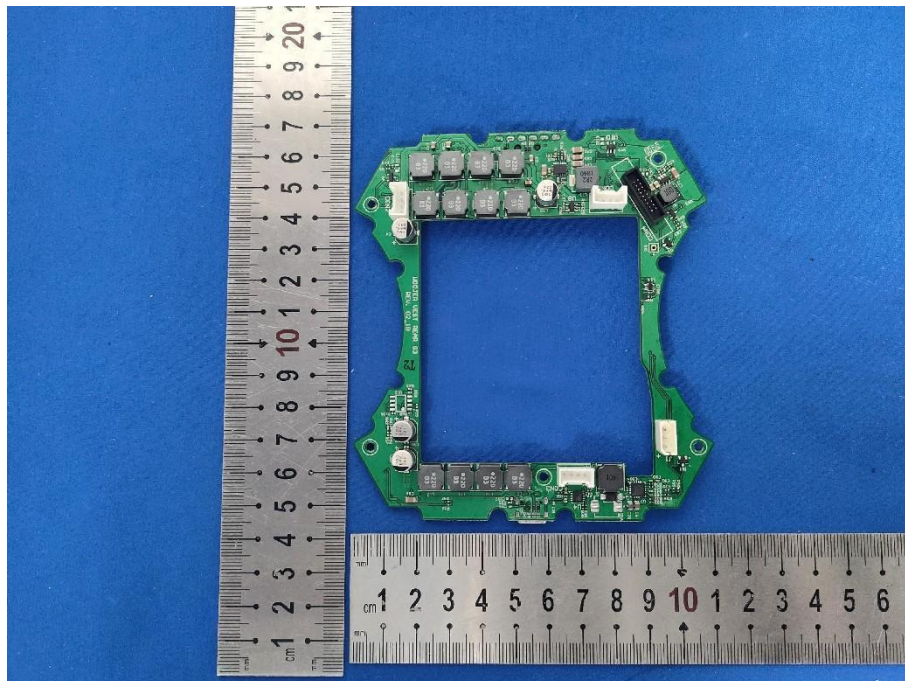
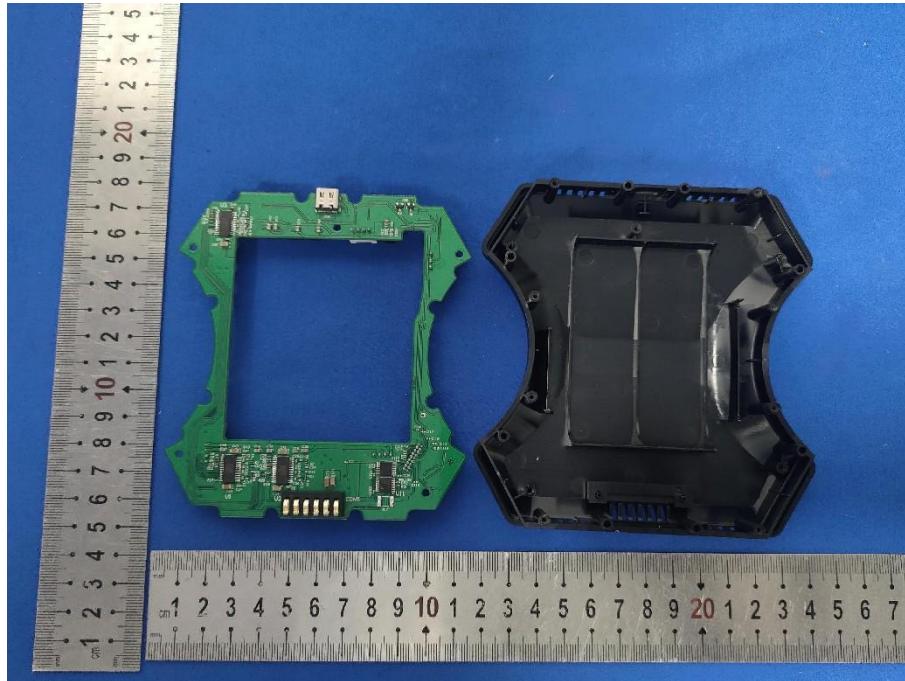
7 Photographs - EUT Constructional Details

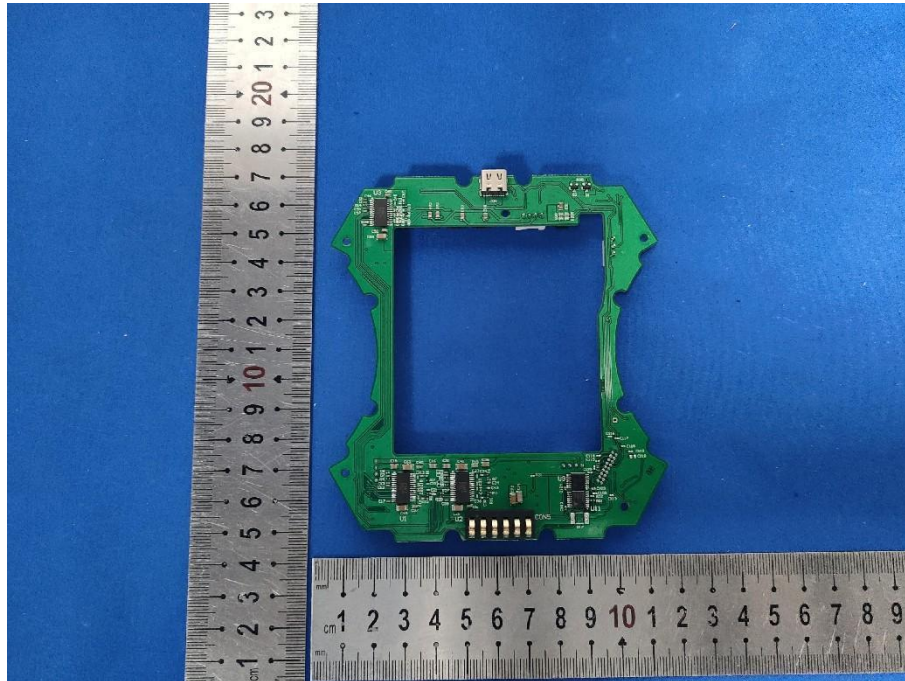












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