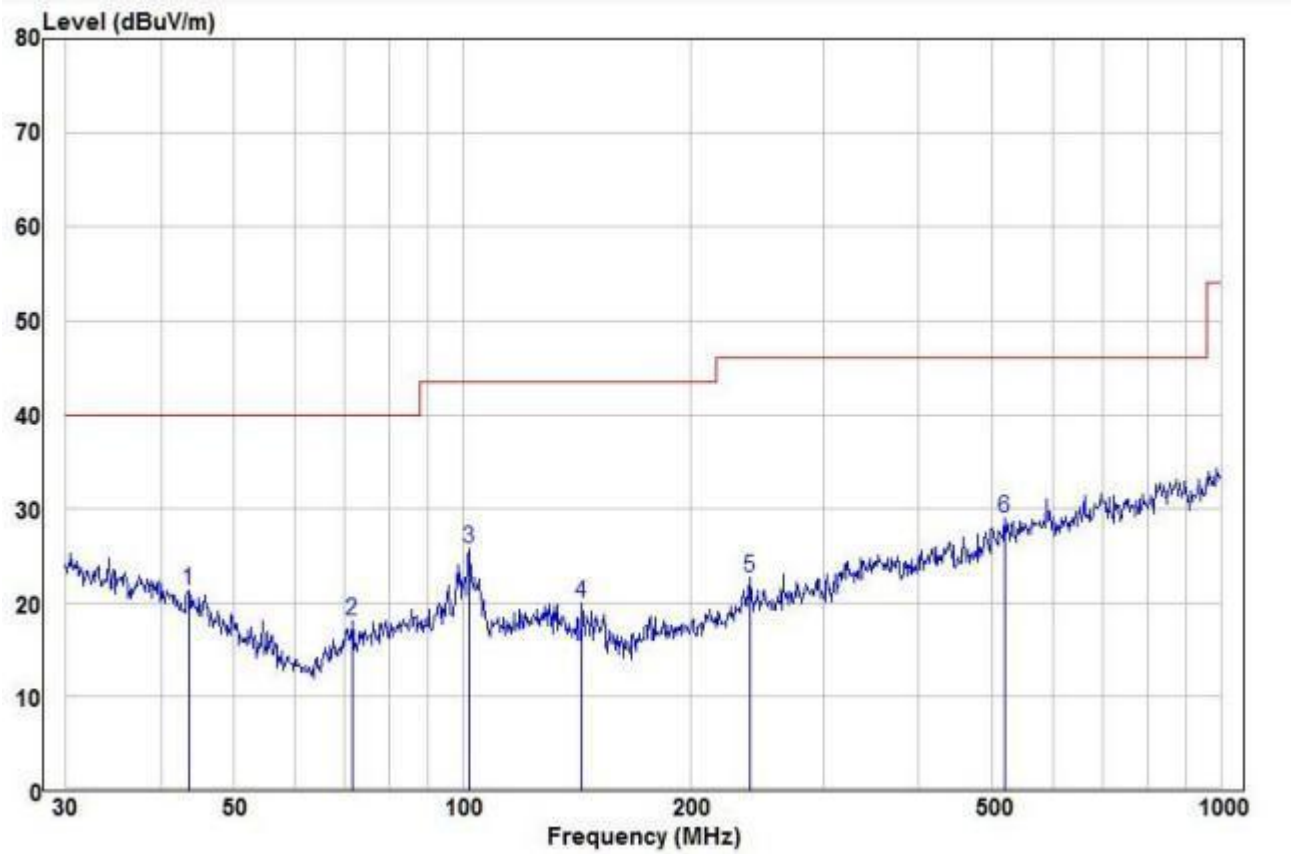
Test mode:	Transmitting	Horizontal



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark	Pol/Phase
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1	43.51	10.20	11.15	21.35	40.00	-18.65	Peak	HORIZONTAL
2	71.58	9.66	8.41	18.07	40.00	-21.93	Peak	HORIZONTAL
3	102.00	15.14	10.55	25.69	43.50	-17.81	Peak	HORIZONTAL
4	143.83	11.72	8.21	19.93	43.50	-23.57	Peak	HORIZONTAL
5	239.15	11.16	11.46	22.62	46.00	-23.38	Peak	HORIZONTAL
6 pp	519.06	10.56	18.48	29.04	46.00	-16.96	Peak	HORIZONTAL

Remark:
The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Factor= Antenna Factor + Cable Factor – Preamplifier Factor,
Level = Read Level + Factor,
Over Limit=Level-Limit Line.

5.11.2 Transmitter Emission above 1GHz

Worse case mode:		GFSK(DH5)		Test channel:		Lowest	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2390	56.18	-9.2	46.98	74	-27.02	**Peak**	**H**
2400	56.10	-9.39	46.71	74	-27.29	Peak	H
4804	52.87	-4.33	48.54	74	-25.46	Peak	H
7206	48.84	1.01	49.85	74	-24.15	Peak	H
2390	54.99	-9.2	45.79	74	-28.21	**Peak**	**V**
2400	55.04	-9.39	45.65	74	-28.35	Peak	V
4804	53.61	-4.33	49.28	74	-24.72	Peak	V
7206	51.10	1.01	52.11	74	-21.89	Peak	V

Worse case mode:		GFSK(DH5)		Test channel:		Middle	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
4882	52.63	-4.11	48.52	74	-25.48	peak	H
7323	50.83	1.51	52.34	74	-21.66	peak	H
4882	52.52	-4.11	48.41	74	-25.59	peak	V
7323	50.69	1.51	52.20	74	-21.80	peak	V

Worse case mode:		GFSK(DH5)		Test channel:		Highest	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2483.5	54.29	-9.29	45.00	74	-29.00	**Peak**	**H**
4960	52.10	-4.04	48.06	74	-25.94	Peak	H
7440	48.38	1.57	49.95	74	-24.05	Peak	H
2483.5	54.12	-9.29	44.83	74	-29.17	**Peak**	**V**
4960	49.73	-4.04	45.69	74	-28.31	Peak	V
7440	48.39	1.57	49.96	74	-24.04	Peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Lowest	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2390	56.20	-9.2	47.00	74	-27.00	**Peak**	**H**
2400	55.71	-9.39	46.32	74	-27.68	Peak	H
4804	54.20	-4.33	49.87	74	-24.13	Peak	H
7206	48.88	1.01	49.89	74	-24.11	Peak	H
2390	55.19	-9.2	45.99	74	-28.01	**Peak**	**V**
2400	56.99	-9.39	47.60	74	-26.40	Peak	V
4804	53.93	-4.33	49.60	74	-24.40	Peak	V
7206	49.18	1.01	50.19	74	-23.81	Peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Middle	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
4882	50.41	-4.11	46.30	74	-27.70	peak	H
7323	49.04	1.51	50.55	74	-23.45	peak	H
4882	51.96	-4.11	47.85	74	-26.15	peak	V
7323	49.53	1.51	51.04	74	-22.96	peak	V

Worse case mode:		π /4DQPSK (2DH5)		Test channel:		Highest	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2483.5	54.44	-9.29	45.15	74	-28.85	**Peak**	**H**
4960	50.44	-4.04	46.40	74	-27.60	Peak	H
7440	49.91	1.57	51.48	74	-22.52	Peak	H
2483.5	53.28	-9.29	43.99	74	-30.01	**Peak**	**V**
4960	49.63	-4.04	45.59	74	-28.41	Peak	V
7440	51.03	1.57	52.60	74	-21.40	Peak	V

Worse case mode:	8DPSK (3DH5)		Test channel:		Lowest	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2390	54.95	-9.2	45.75	74	-28.25	**Peak**	**H**
2400	56.45	-9.39	47.06	74	-26.94	Peak	H
4804	52.33	-4.33	48.00	74	-26.00	Peak	H
7206	50.49	1.01	51.50	74	-22.50	Peak	H
2390	53.97	-9.2	44.77	74	-29.23	**Peak**	**V**
2400	55.88	-9.39	46.49	74	-27.51	Peak	V
4804	53.44	-4.33	49.11	74	-24.89	Peak	V
7206	48.82	1.01	49.83	74	-24.17	Peak	V

Worse case mode:	8DPSK (3DH5)		Test channel:		Middle	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
4882	51.24	-4.11	47.13	74	-26.87	peak	H
7323	49.27	1.51	50.78	74	-23.22	peak	H
4882	52.82	-4.11	48.71	74	-25.29	peak	V
7323	51.18	1.51	52.69	74	-21.31	peak	V

Worse case mode:	8DPSK (3DH5)		Test channel:		Highest	
Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Over (dB)	Detector Type	Ant. Pol. H/V
2483.5	54.99	-9.29	45.70	74	-28.30	**Peak**	**H**
4960	51.01	-4.04	46.97	74	-27.03	Peak	H
7440	49.08	1.57	50.65	74	-23.35	Peak	H
2483.5	54.50	-9.29	45.21	74	-28.79	**Peak**	**V**
4960	50.31	-4.04	46.27	74	-27.73	Peak	V
7440	50.04	1.57	51.61	74	-22.39	Peak	V

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

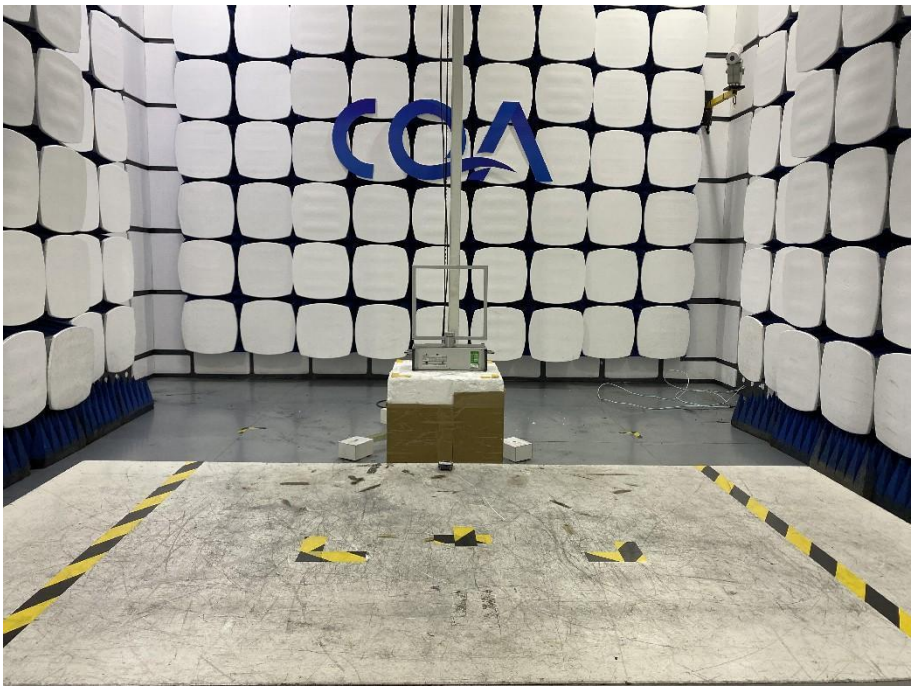
   Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

2) 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.

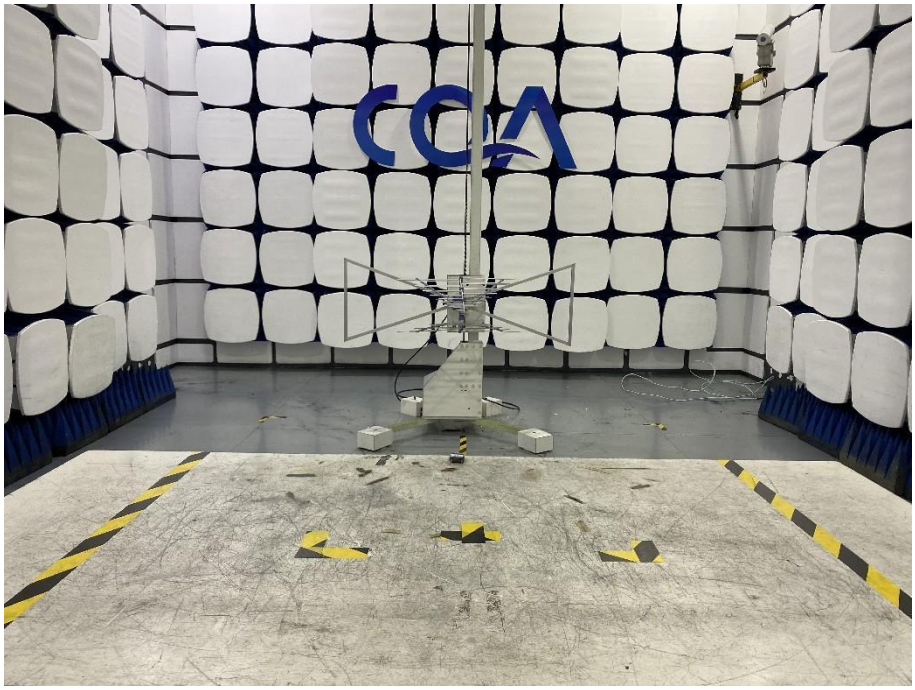
6 Photographs - EUT Test Setup

6.1 Radiated Emission

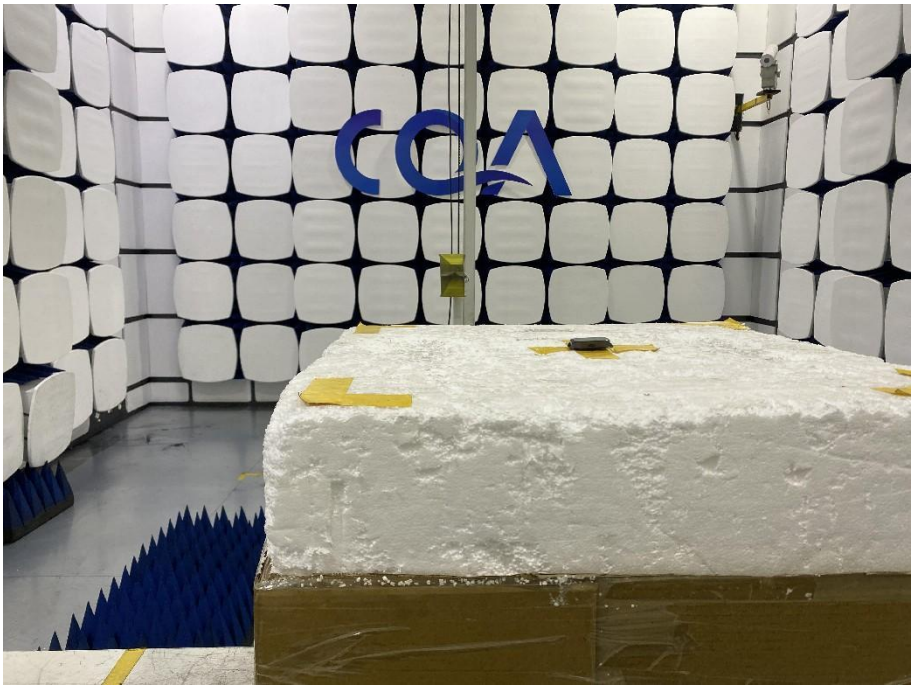
9KHz~30MHz:



30MHz~1GHz:



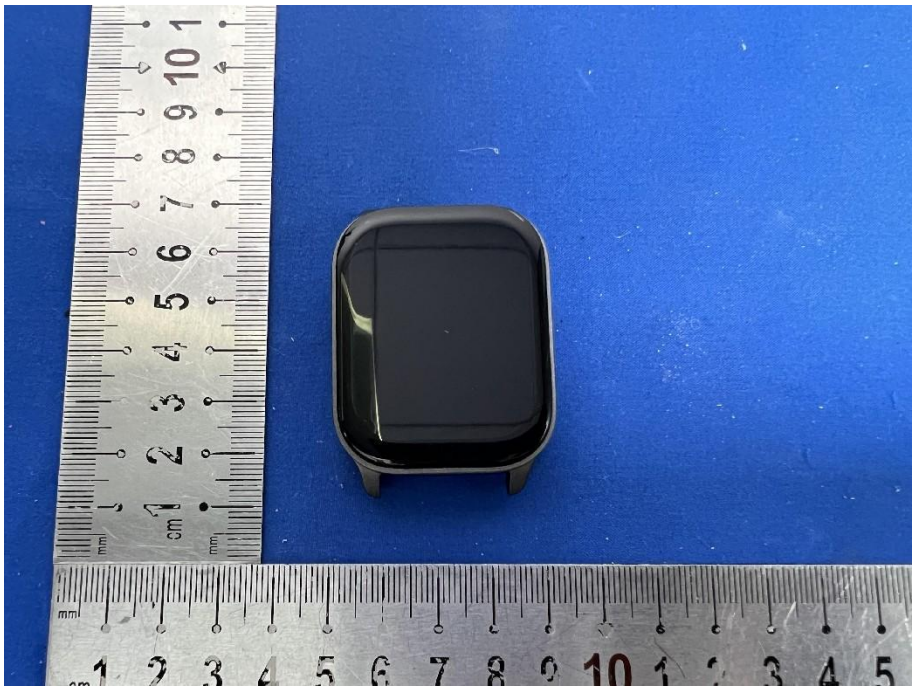
Above 1GHz:

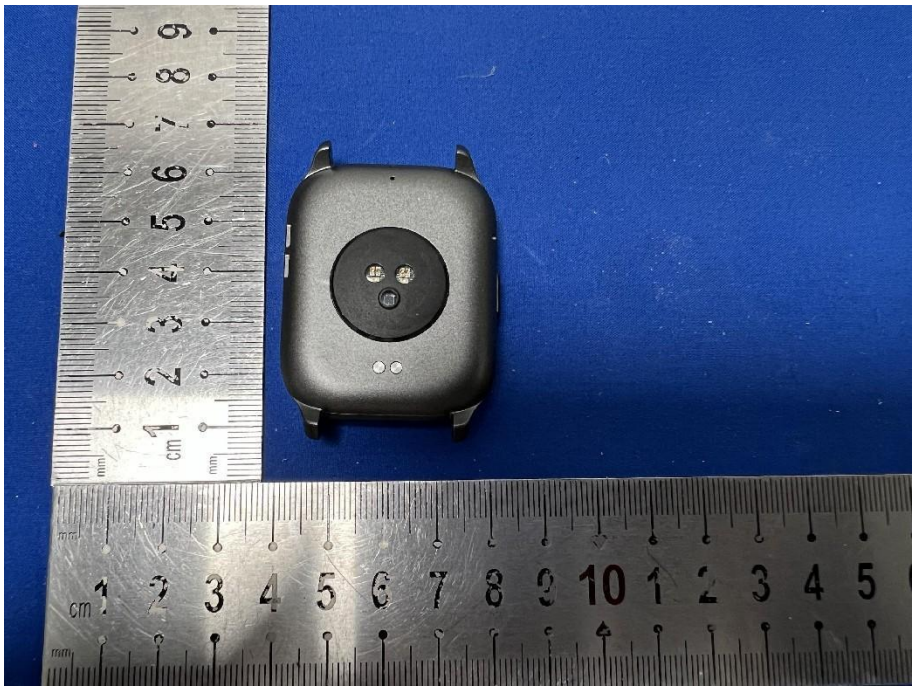


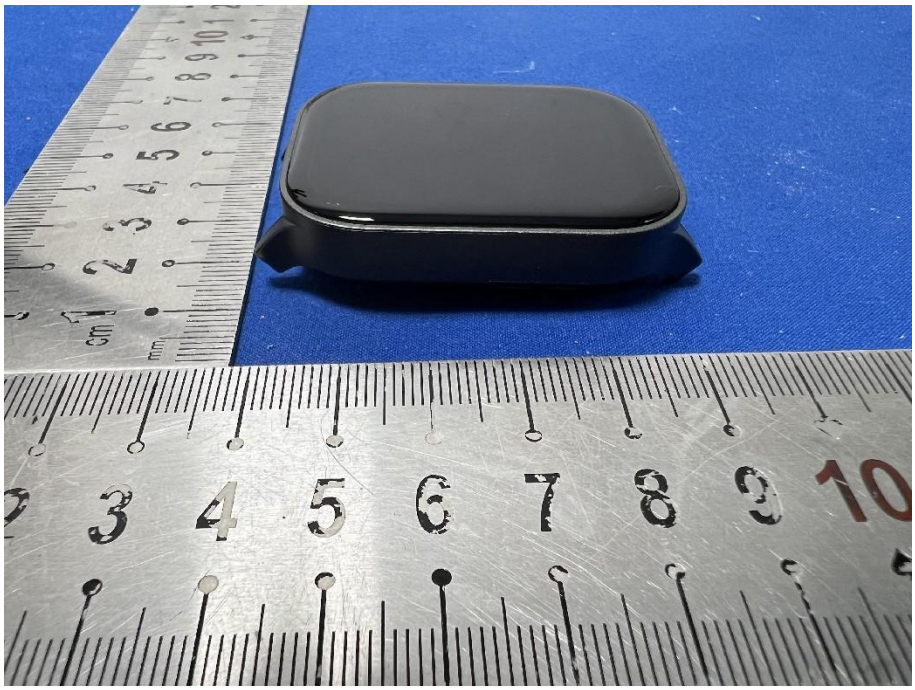
6.2 Conducted Emission

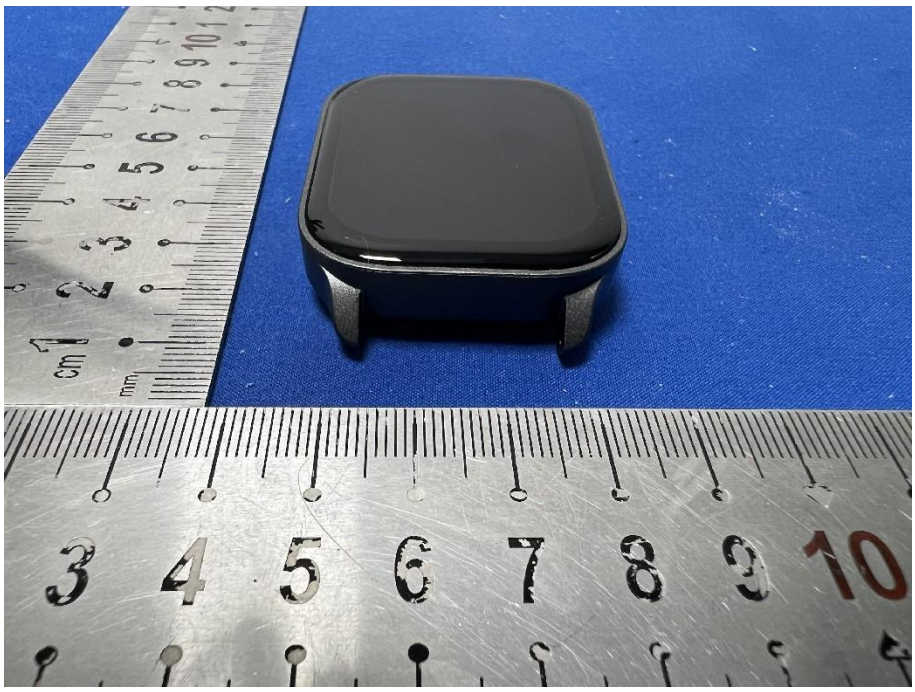
7 Photographs - EUT Constructional Details

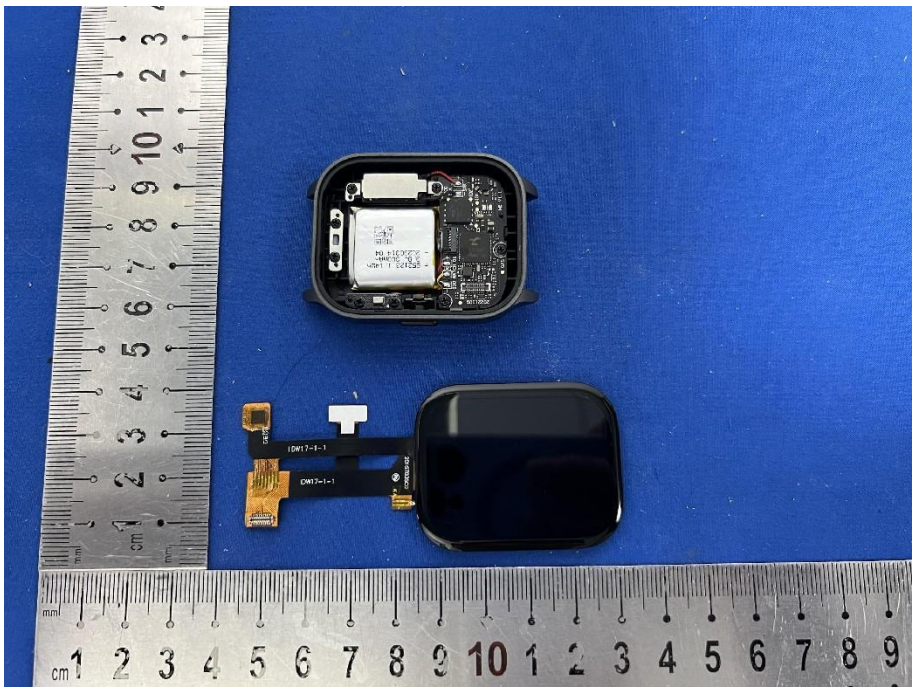
1#

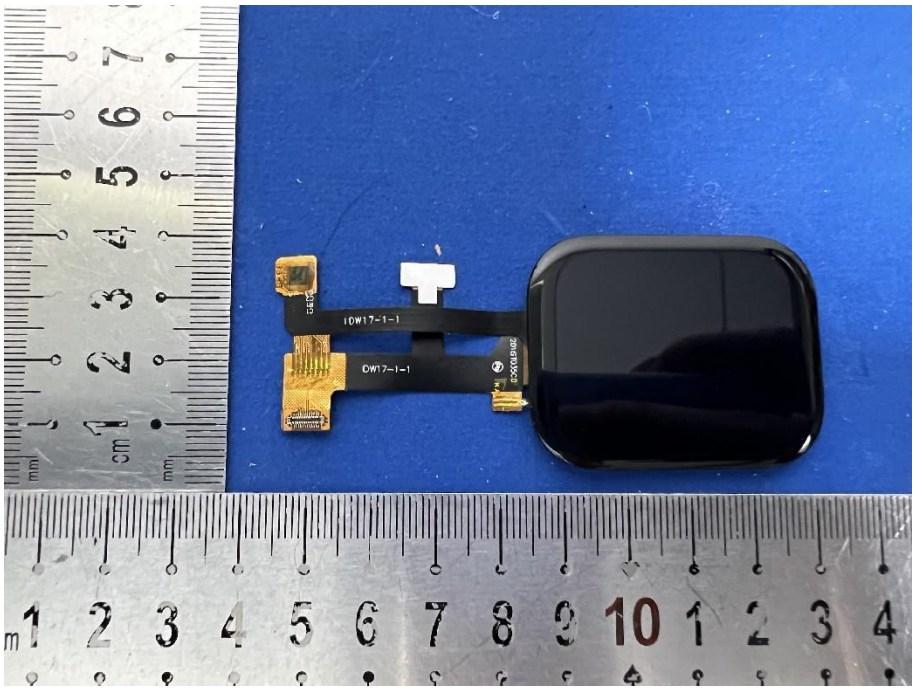


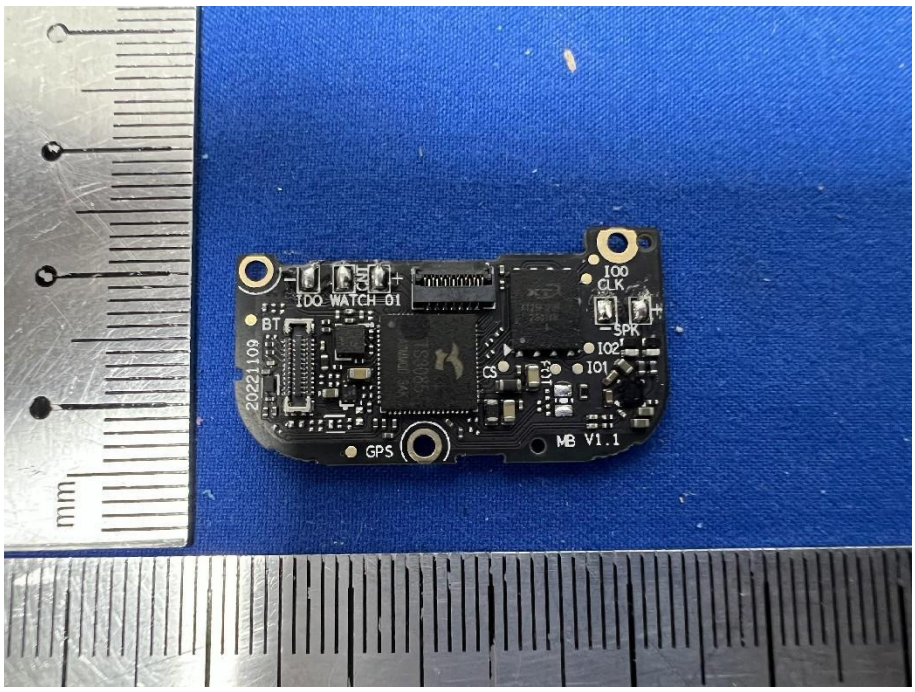


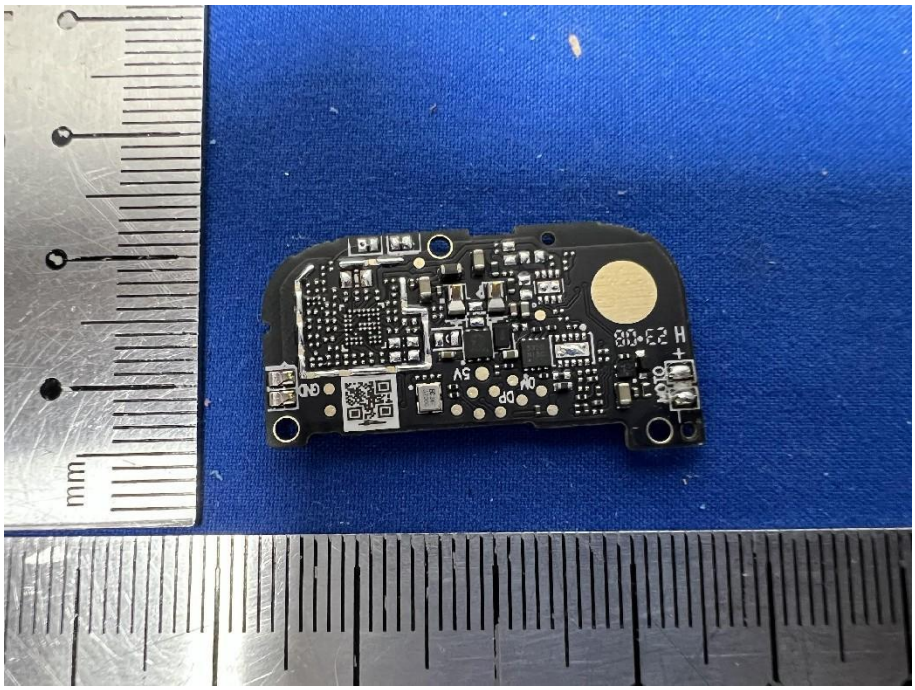


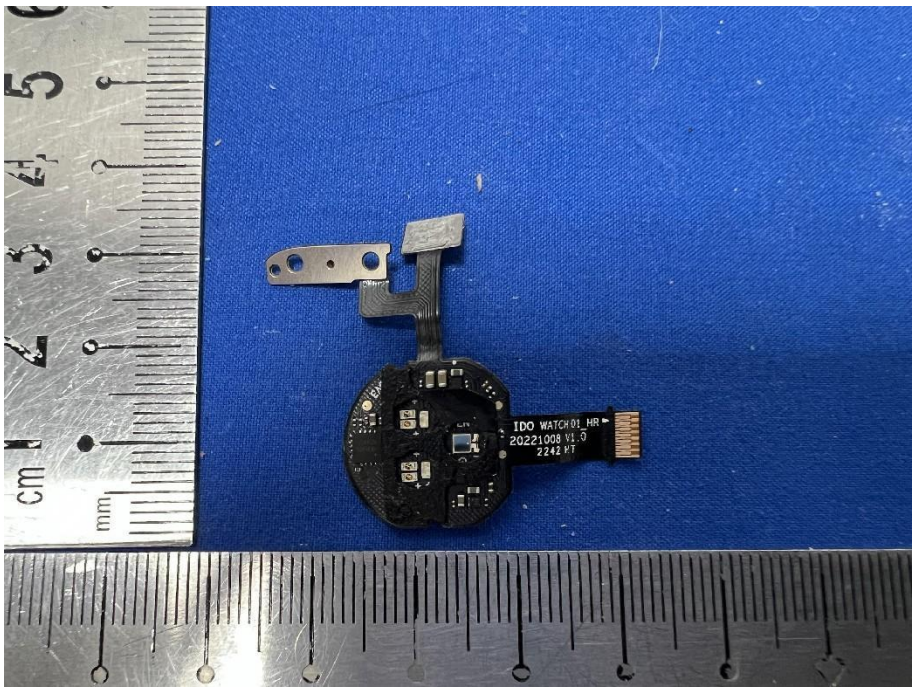


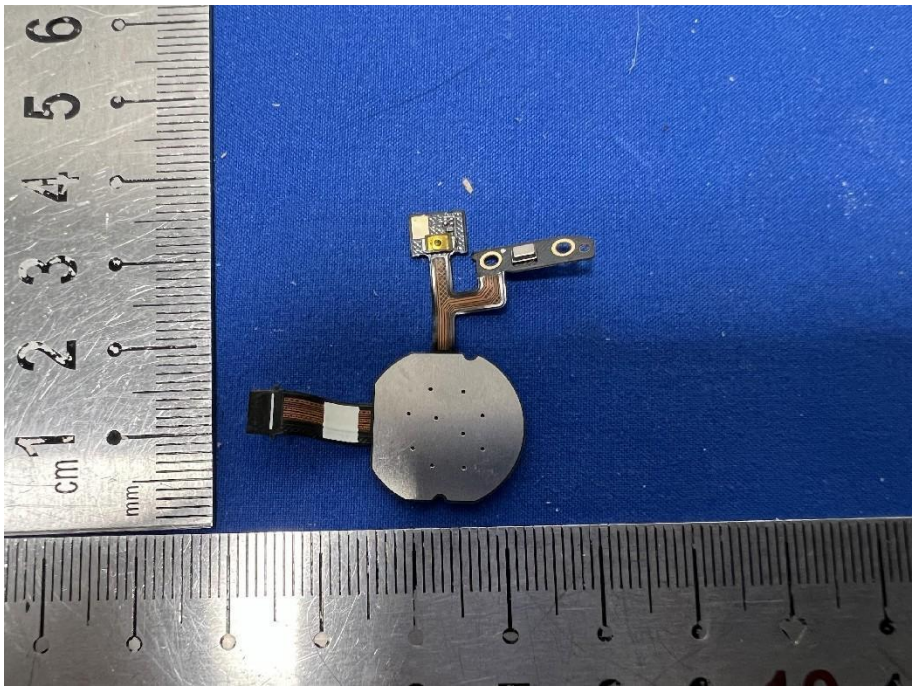


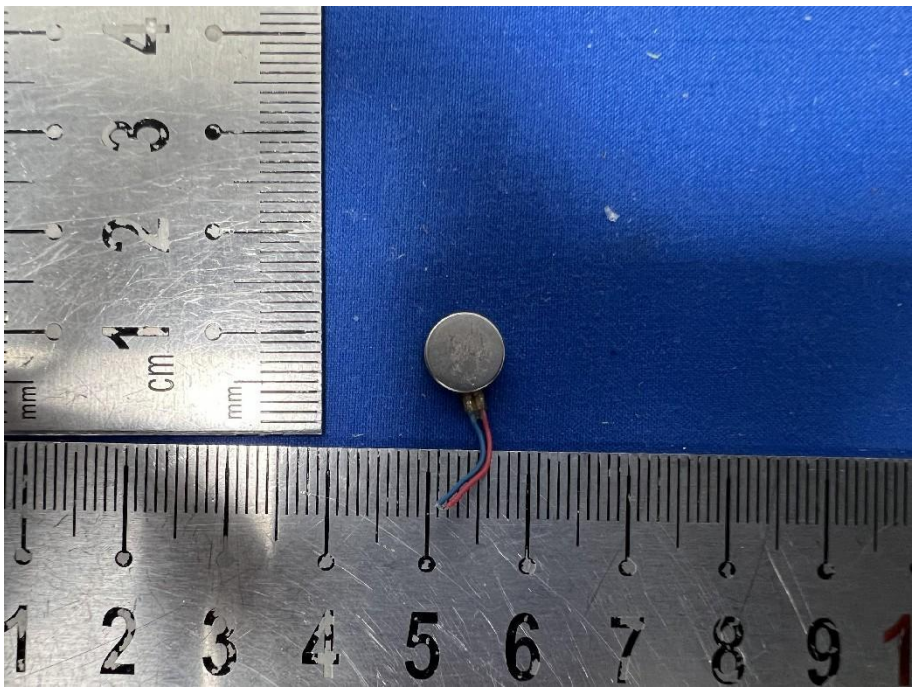

DW17-1-1
DW17-1-1

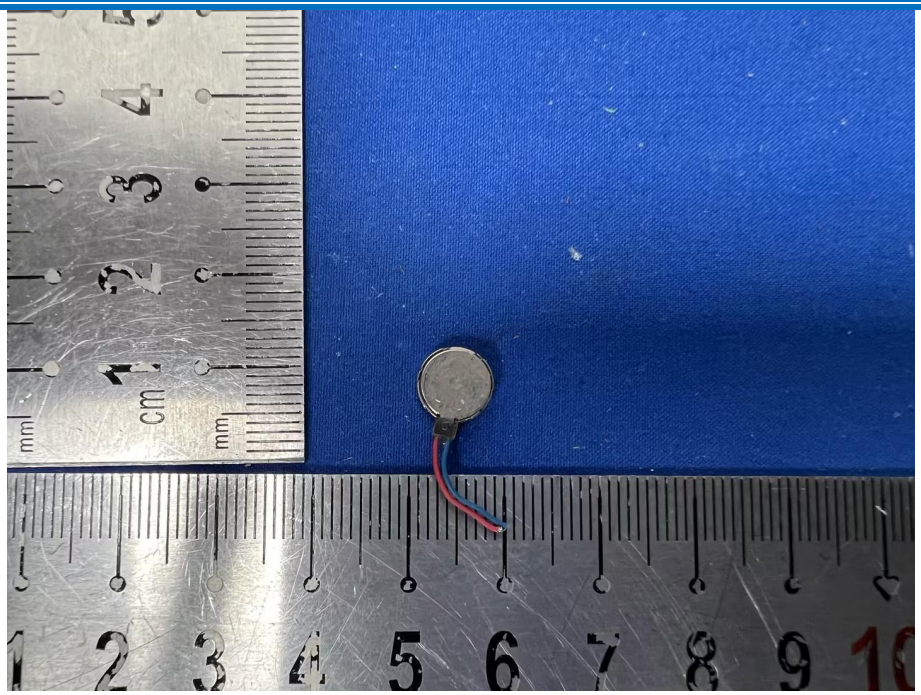

IDO_WATCH_01
BT
GPS
CS
IO0
CLK
SPK
IO2
IO1
MB V1.1
20221109

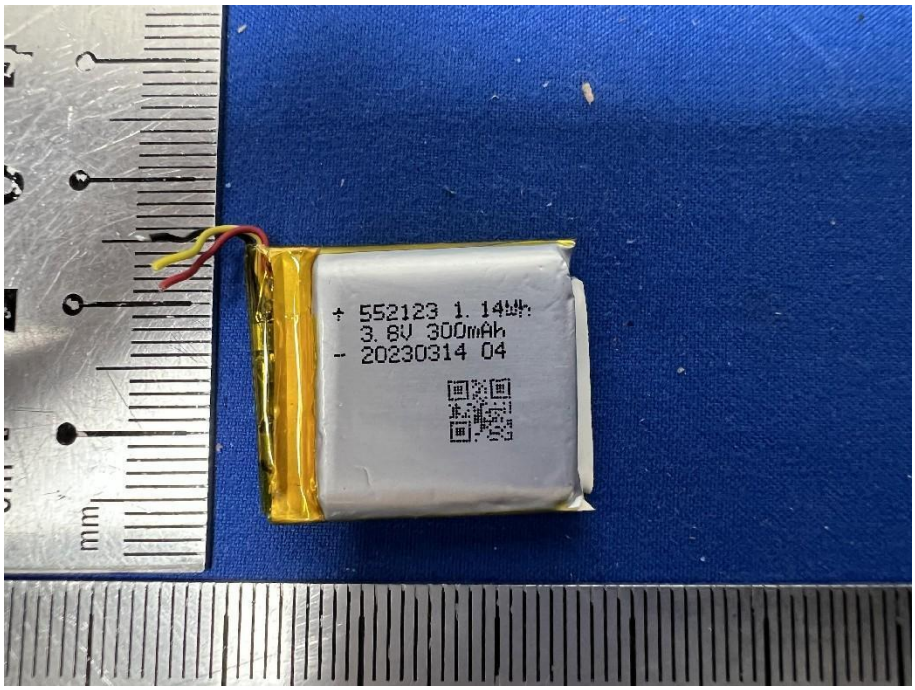

GND
5V
0V
DP


IDO WATCH 01_HR
20221008 V1.0
2242 MT

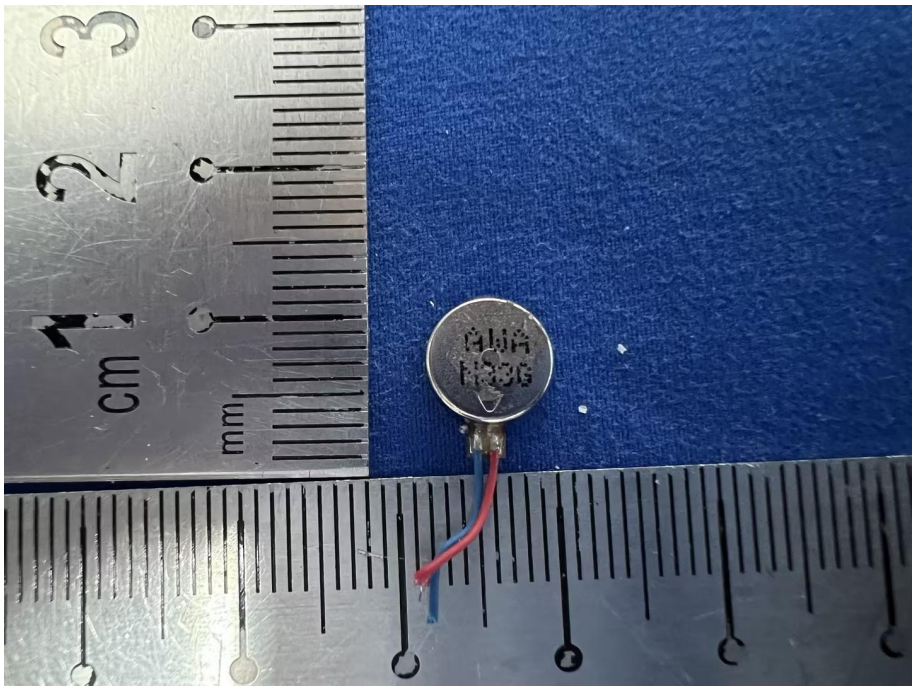


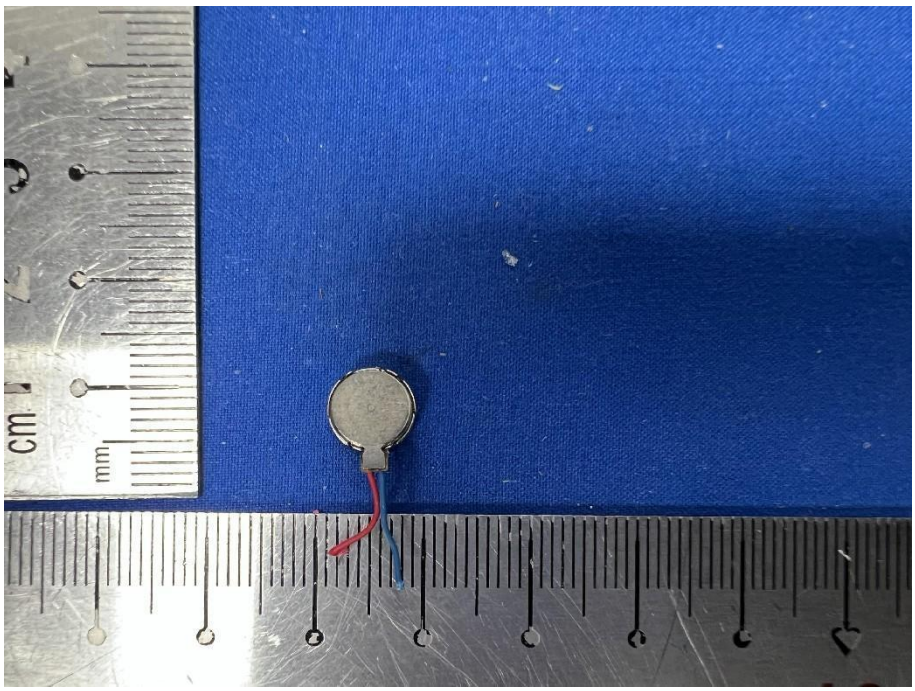


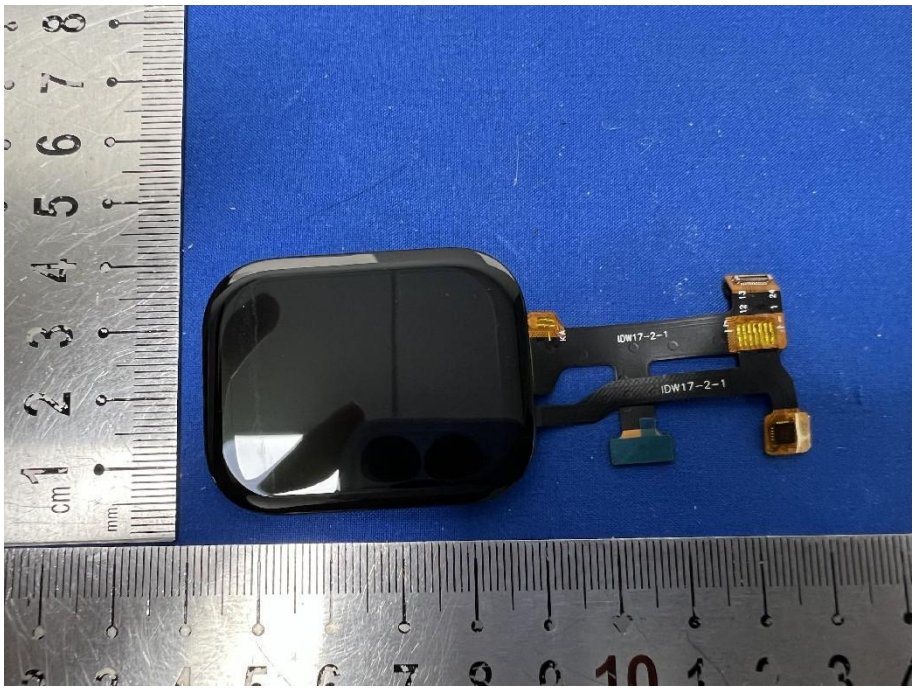


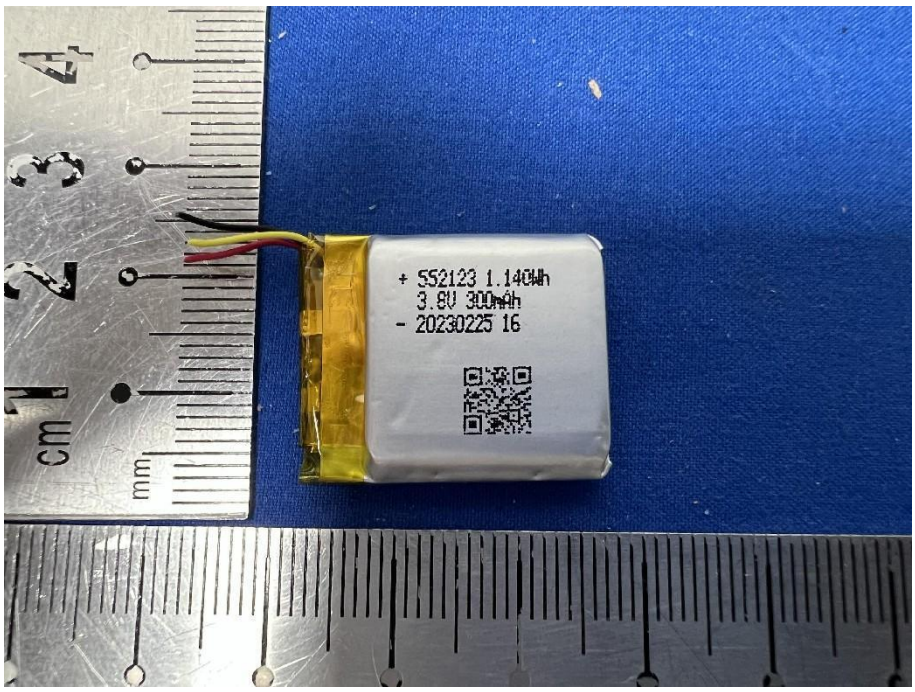

552123 1.14Wh
3.8V 300mAh
20230314 04

2#









*** END OF REPORT ***