TEST REPORT

Report Reference No..... :	**HS261010039-2ER**
Compiled by (position+printed name+signature)..:	File administrators Rock Ren
Supervised by (position+printed name+signature)..:	Project Engineer Snow Wu
Approved by (position+printed name+signature)..:	RF Manager Smile Xu
Date of issue..... :	Oct. 15, 2026

Testing Laboratory Name..... :	**Shenzhen Huasheng Test Technology Co., Ltd.**
Address..... :	101 and 201, No. 48, Rifu Road, East Area, Baishixia Community, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China

Applicant's name..... :	**Shenzhen Huafurui Technology Co., Ltd.**
Address..... :	Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China

Test specification..... :	
Standard..... :	**ETSI EN 301 489-1 V2.2.3 (2019-11)** **ETSI EN 301 489-17 V3.3.1 (2024-09)** **EN 55032:2015+AC:2016+A1:2020+A11:2020** **EN 55035:2017+A11:2020** **EN IEC 61000-3-2:2019+A2:2024** **EN 61000-3-3:2013+A2:2021+AC:2022**

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Test item description.....:	**Smartwatch**
Trade Mark.....:	CUBOT
Manufacturer.....:	Shenzhen Huafurui Technology Co., Ltd.
Model/Type reference..... :	G1
List Model.....:	N/A
Hardware version.....:	V1.0
Software version..... :	V1.0
Ratings.....:	DC 3.85V From battery and DC 5.0V From external circuit
Result.....:	**PASS**

TEST REPORT

Equipment under Test	:	Smartwatch
Model /Type	:	G1
Listed Models	:	N/A
Applicant	:	**Shenzhen Huafurui Technology Co., Ltd.**
Address	:	Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China
Manufacturer	:	**Shenzhen Huafurui Technology Co., Ltd.**
Address	:	Unit 601-03, 6/F, Block A, Building 1, Ganfeng Technology Building, No. 993 Jiaxian Road, Xiangjiaotang Community, Bantian Street, Longgang District, Shenzhen, P.R. China

Test Result	**PASS**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. TEST STANDARDS

The tests were performed according to following standards:

ETSI EN 301 489-1 V2.2.3 (2019-11)–ElectroMagnetic Compatibility (EMC) tandard for radio equipment and services;Part 1: Common technical requirements;Harmonised Standard for ElectroMagnetic Compatibility
ETSI EN 301 489-17 V3.3.1 (2024-09)–ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard for ElectroMagnetic Compatibility
EN 55032:2015+AC:2016+A1:2020+A11:2020- Electromagnetic compatibility of multimedia equipment - Emission Requirements
EN 55035:2017+A11:2020- Electromagnetic compatibility of multimedia equipment - Immunity requirements
EN IEC 61000-3-2:2019+A2:2024-Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase)
EN 61000-3-3:2013+A2:2021+AC:2022- Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection

2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	Sep. 29, 2026
Testing commenced on	:	Sep. 29, 2026
Testing concluded on	:	Oct. 15, 2026

2.2. Product Description

Product Name:	Smartwatch
Model/Type reference:	G1
Power supply:	DC 3.85V From battery and DC 5.0V From external circuit
Adapter information (Auxiliary test supplied by test Lab):	DC 5V
BR/EDR	
BT Modulation Type	GFSK, π/4DQPSK, 8DPSK
Bluetooth	Supported BR+EDR
Channel number:	79
Antenna Type	Internal antenna
ANT Gain	1.70 dBi

2.3. EUT operation mode

Test mode	BT	Adapter
1	■	■

Note:
1. ■ is operation mode.

Test item	Test mode (Worse case mode)
Conducted emission	Mode 1
Radiated emission	Mode 1
EMS	Mode 1

2.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer
○ - supplied by the lab

○	/	M/N:	/
		Manufacturer:	/

2.5. Modifications

No modifications were implemented to meet testing criteria.

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen Huasheng Test Technology Co., Ltd.
101 and 201, No. 48, Rifu Road, East Area, Baishixia Community, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China

3.2. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	25°C
Relative Humidity	55 %
Air Pressure	989 hPa

3.3. Test Description

Emission Measurement		
Radiated Emission	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 55032:2015+AC:2016+A1:2020+A11:2020	PASS
Conducted Emission(AC Mains)	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 55032:2015+AC:2016+A1:2020+A11:2020	PASS
Harmonic Current Emissions	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN IEC 61000-3-2:2019+A2:2024	N/A
Voltage Fluctuations and Flicker	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 61000-3-3:2013+A2:2021+AC:2022	N/A
Immunity Measurement		
Electrostatic Discharge	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 55035:2017+A11:2020	PASS
RF Electromagnetic Field	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 55035:2017+A11:2020	PASS
Fast Transients Common Mode	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 55035:2017+A11:2020	PASS
RF Common Mode 0,15 MHz to 80 MHz	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 55035:2017+A11:2020	PASS
Voltage Dips and Interruptions	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 55035:2017+A11:2020	PASS
Surges	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-17 V3.3.1 (2024-09) EN 55035:2017+A11:2020	PASS

Remark:1. N/A means “not applicable”.
2.The measurement uncertainty is not included in the test result.

3.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01” Electromagnetic compatibility

and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen Huasheng Test Technology Co., Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.
Hereafter the best measurement capability for Shenzhen Huasheng Test Technology Co., Ltd. :

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	9KHz~30MHz	3.02 dB	(1)
Radiated Emission	30~1000MHz	4.06 dB	(1)
Radiated Emission	1~18GHz	5.14 dB	(1)
Radiated Emission	18-40GHz	5.38 dB	(1)
Conducted Disturbance	0.15~30MHz	2.14 dB	(1)
Output Peak power	30MHz~18GHz	0.55 dB	(1)
Power spectral density	/	0.57 dB	(1)
Spectrum bandwidth	/	1.1%	(1)
Radiated spurious emission (30MHz-1GHz)	30~1000MHz	4.10 dB	(1)
Radiated spurious emission (1GHz-18GHz)	1~18GHz	4.32 dB	(1)
Radiated spurious emission (18GHz-40GHz)	18-40GHz	5.54 dB	(1)

（1）This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.5. Equipments Used during the Test

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	EMI Test Receiver	R&S	ESPI	HS-307	Oct. 17, 2025	Oct. 17, 2026
2	Artificial Mains	R&S	ENV-216	HS -308	Oct. 17, 2025	Oct. 17, 2026
3	Artificial Mains	R&S	ENV-216	HS-314	Oct. 17, 2025	Oct. 17, 2026
4	ISN	Schwarzbeck	NTFM8158	HS-407	Oct. 17, 2025	Oct. 17, 2026
5	ISN	Schwarzbeck	CAT58158	HS-408	Oct. 17, 2025	Oct. 17, 2026
6	ISN	Schwarzbeck	CAT38158	HS-409	Oct. 17, 2025	Oct. 17, 2026
7	Universal Radio Communication	R&S	CMW500	HS-302	Oct. 17, 2025	Oct. 17, 2026
8	EMI Test Software	Tonscend	TS®JS32-CE	N/A	N/A	N/A

Harmonic Current/ Voltage Fluctuation and Flicker						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	Harmonic and Flicker Analyzer	Voltech	PM6000	HS-339	Oct. 17, 2025	Oct. 17, 2026
2	Universal Radio Communication	R&S	CMW500	HS-302	Oct. 17, 2025	Oct. 17, 2026

Electrostatic Discharge						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	ESD Simulators	NOISEKEN	ESS-100L(A)	HS-315	Oct. 17, 2025	Oct. 17, 2026
2	Universal Radio Communication	R&S	CMW500	HS-302	Oct. 17, 2025	Oct. 17, 2026

Radiated Emission						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	ULTRA-BROADBAND ANTENNA	Schwarzbeck	VULB9163	HS-310	Oct. 17, 2025	Oct. 17, 2026
2	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	HS-306	Oct. 17, 2025	Oct. 17, 2026
3	Horn Antenna	Schwarzbeck	BBHA 9120D	HS-309	Oct. 17, 2025	Oct. 17, 2026
4	Universal Radio Communication	CMW500	R&S	HS-302	Oct. 17, 2025	Oct. 17, 2026
5	Band-reject filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-DZA66	HS-410	Oct. 17, 2025	Oct. 17, 2026
6	Band-reject filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-DZA64	HS-411	Oct. 17, 2025	Oct. 17, 2026
7	Band-reject filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-DZA63	HS-411	Oct. 17, 2025	Oct. 17, 2026
8	High-pass filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-GTA10	HS-412	Oct. 17, 2025	Oct. 17, 2026
9	High-pass filter	Xi'an Xingbo Technology Co.,Ltd	XBLBQ-GTA18	HS-402	Oct. 17, 2025	Oct. 17, 2026
10	EMI Test Software	Tonscend	TS®JS32-RE	N/A	N/A	N/A

Electrical Fast Transient						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	Fast Transient Burst Simulator	Prima	EFT61004TA	HS-316	Oct. 17, 2025	Oct. 17, 2026

2	Coupling Clamp	Prima	EFT-CLAMP	HS-317	Oct. 17, 2025	Oct. 17, 2026
3	Universal Radio Communication	R&S	CMW500	HS-302	Oct. 17, 2025	Oct. 17, 2026

Surge						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	Lightning Surge Generator	Prima	SUG61005TB	HS-318	Oct. 17, 2025	Oct. 17, 2026
2	Lightning Surge Generator	Prima	SUG10/700TA	HS-319	Oct. 17, 2025	Oct. 17, 2026
3	Universal Radio Communication	R&S	CMW500	HS-302	Oct. 17, 2025	Oct. 17, 2026

Dips						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	Cycle Sag Simulator	Prima	DRP61011TA	HS-321	Oct. 17, 2025	Oct. 17, 2026
2	Universal Radio Communication	R&S	CMW500	HS-302	Oct. 17, 2025	Oct. 17, 2026

RF Field Strength Susceptibility						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	SIGNAL GENERATOR	Agilent	N5182A	HS-305	Oct. 17, 2025	Oct. 17, 2026
2	POWER AMPLIFIER	AR	150W1000	HS-413	Oct. 17, 2025	Oct. 17, 2026
3	POWER AMPLIFIER	Mictop	MPA-1000-6000-100	HS-414	Oct. 17, 2025	Oct. 17, 2026
4	DUAL DIRECTIONAL COUPLER	AR	DC6080	HS-415	Oct. 17, 2025	Oct. 17, 2026
5	POWER METER	Agilent	E4419B	HS-416	Oct. 17, 2025	Oct. 17, 2026
6	Power sensor	Agilent	E9301A	HS-417	Oct. 17, 2025	Oct. 17, 2026
7	Power sensor	Agilent	8483A	HS-418	Oct. 17, 2025	Oct. 17, 2026
8	TRANSMITTING ANTENNA	AR	AT1080	HS-419	Oct. 17, 2025	Oct. 17, 2026
9	TRANSMITTING ANTENNA	Schwarzbeck	STLP 9149	HS-420	Oct. 17, 2025	Oct. 17, 2026
10	Radio Communication Tester	R&S	CMW500	HS-302	Oct. 17, 2025	Oct. 17, 2026
11	Audio Analyzer	R&S	UPL	HS-421	Oct. 17, 2025	Oct. 17, 2026

Conducted Susceptibility						
Item	Test Equipment	Manufacturer	Model No.	Equipment No.	Last Cal.	Cal.Due
1	CS Test system	Schloder	CDG 6000-75	HS-322	Oct. 17, 2025	Oct. 17, 2026
2	CDN M2+M3	Zhinan	ZN3750	HS-323	Oct. 17, 2025	Oct. 17, 2026
3	6dB Attenuator	Schloder	CDG60100	HS-324	Oct. 17, 2025	Oct. 17, 2026
4	EM Clamp	Schloder	EMCL-20	HS-325	Oct. 17, 2025	Oct. 17, 2026
5	Audio Analyzer	R&S	UPL	HS-421	Oct. 17, 2025	Oct. 17, 2026
6	Universal Radio Communication	R&S	CMW500	HS-302	Oct. 17, 2025	Oct. 17, 2026

Test Equipment	Manufacturer	Model No.	Version number	Calibration Date	Calibration Due Date
EMI Test Software	Tonscend	TS®JS32-RE	5.0.0.2	N/A	N/A
EMI Test Software	Tonscend	TS®JS32-CE	5.0.0.1	N/A	N/A
RF Test Software	Tonscend	TS®JS1120-3	3.1.65	N/A	N/A
RF Test Software	Tonscend	TS®JS1120	3.1.46	N/A	N/A

4. TEST CONDITIONS AND RESULTS

4.1. EMISSION

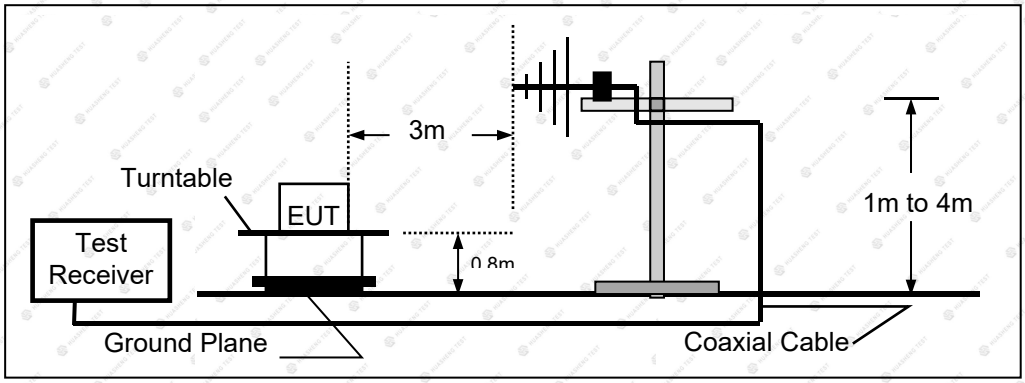
4.1.1. Radiated Emission

LIMIT

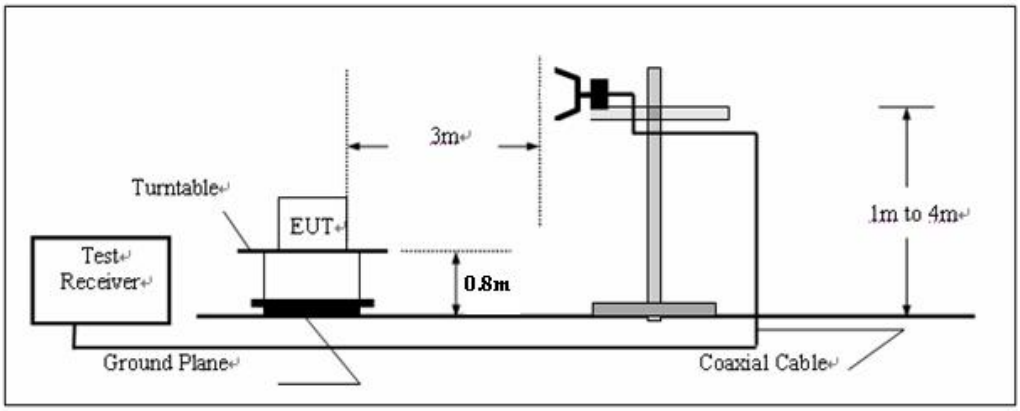
Please refer to ETSI EN301489-1 Clause 8.2.3, Table 4 and EN55032 Annex A, Table A.2,A.3, and Class B

TEST CONFIGURATION

a) Radiated emission test set-up, frequency below 1000MHz:



b) Radiated emission test set-up, frequency above 1000MHz



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 8.2.3 and EN55032 Annex A for the measurement methods

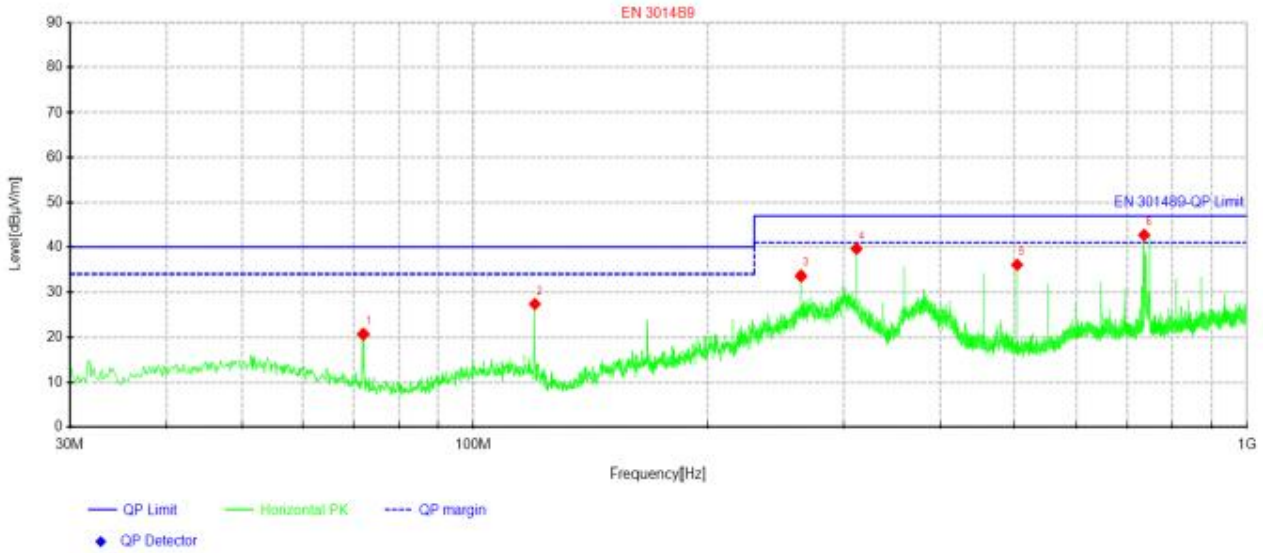
TEST RESULTS

Passed

Please refer to the below test data:

Note: While performing the testing, the notch filter is used for avoiding test instrument overload.

Test mode:	Mode 1	Polarization	Horizontal



Suspected Data List

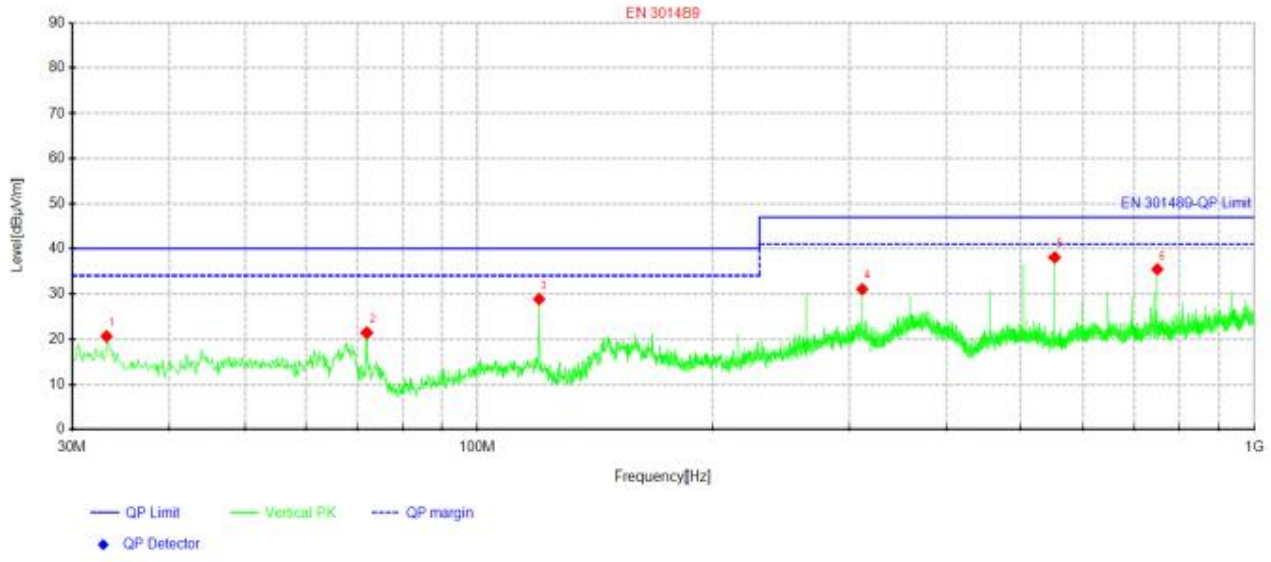
NO.	Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	71.9525	36.08	20.64	-15.44	40.00	19.36	100	323	Horizontal
2	119.967	41.68	27.42	-14.26	40.00	12.58	100	136	Horizontal
3	264.012	45.97	33.63	-12.34	47.00	13.37	100	217	Horizontal
4	311.906	50.99	39.65	-11.34	47.00	7.35	100	184	Horizontal
5	503.966	45.26	36.03	-9.23	47.00	10.97	100	311	Horizontal
6	736.16	47.74	42.73	-5.01	47.00	4.27	100	160	Horizontal

Note:1).Level (dBµV/m)= Reading (dBµV/m)+ Factor (dB/m)

2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

3). Margin(dB) = Limit (dBµV/m) - Level (dBµV/m)

Test mode:	Mode 1	Polarization	Vertical



Suspected Data List

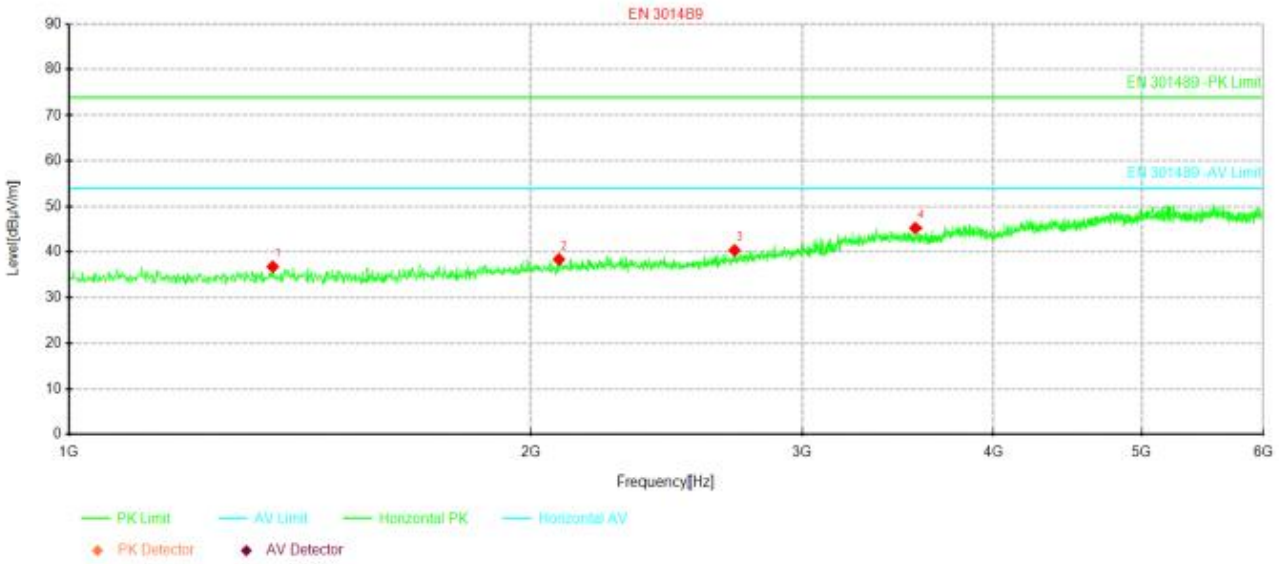
NO.	Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	33.1525	34.81	20.61	-14.20	40.00	19.39	100	14	Vertical
2	71.9525	36.83	21.39	-15.44	40.00	18.61	100	104	Vertical
3	119.967	43.16	28.90	-14.26	40.00	11.10	100	267	Vertical
4	311.906	42.47	31.13	-11.34	47.00	15.87	100	185	Vertical
5	551.981	46.58	38.03	-8.55	47.00	8.97	100	104	Vertical
6	750.103	40.10	35.37	-4.73	47.00	11.63	100	185	Vertical

Note:1).Level (dBµV/m)= Reading (dBµV/m)+ Factor (dB/m)

2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

3). Margin(dB) = Limit (dBµV/m) - Level (dBµV/m)

Test mode:	Mode 1	Polarization	Horizontal



Suspected Data List

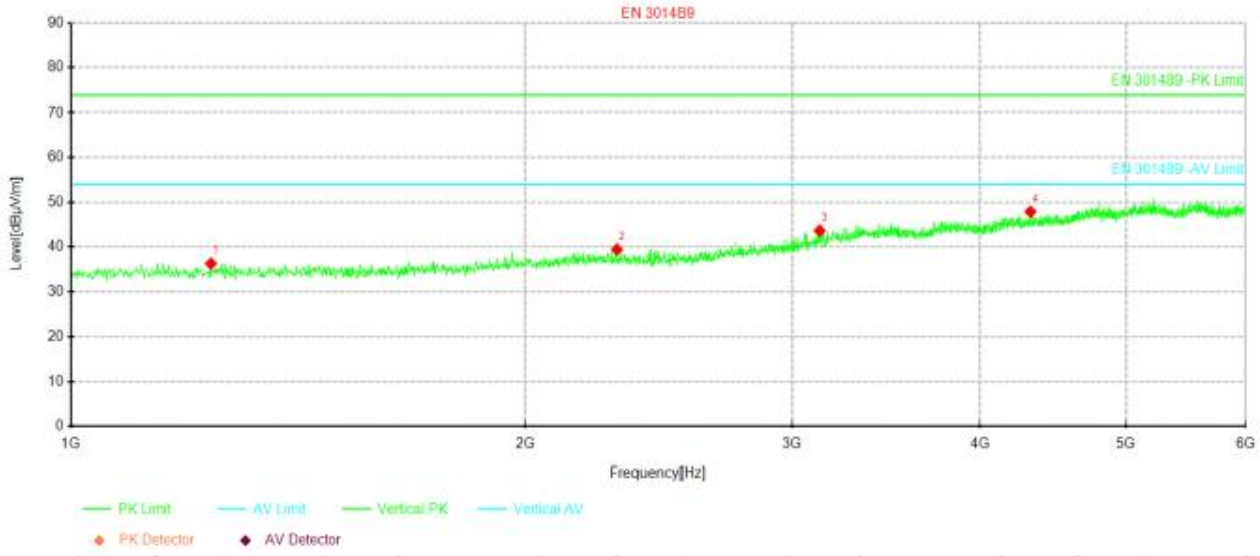
NO.	Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1357.5	101.39	36.69	-64.70	74.00	37.31	100	170	Horizontal
2	2087.5	100.91	38.32	-62.59	74.00	35.68	100	160	Horizontal
3	2711.25	101.61	40.32	-61.29	74.00	33.68	100	220	Horizontal
4	3558.75	105.24	45.25	-59.99	74.00	28.75	100	130	Horizontal

Note:1).Level (dBµV/m)= Reading (dBµV/m)+ Factor (dB/m)

2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

3). Margin(dB) = Limit (dBµV/m) - Level (dBµV/m)

Test mode:	Mode 1	Polarization	Vertical



Suspected Data List

NO.	Freq. [MHz]	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1238.75	101.16	36.21	-64.95	74.00	37.79	100	180	Vertical
2	2303.75	101.83	39.39	-62.44	74.00	34.61	100	320	Vertical
3	3128.75	104.11	43.64	-60.47	74.00	30.36	100	90	Vertical
4	4321.25	105.57	47.92	-57.65	74.00	26.08	100	120	Vertical

Note:1).Level (dBµV/m)= Reading (dBµV/m)+ Factor (dB/m)

2). Factor(dB/m)=Antenna Factor (dB/m) + Cable loss (dB) - Pre Amplifier gain (dB)

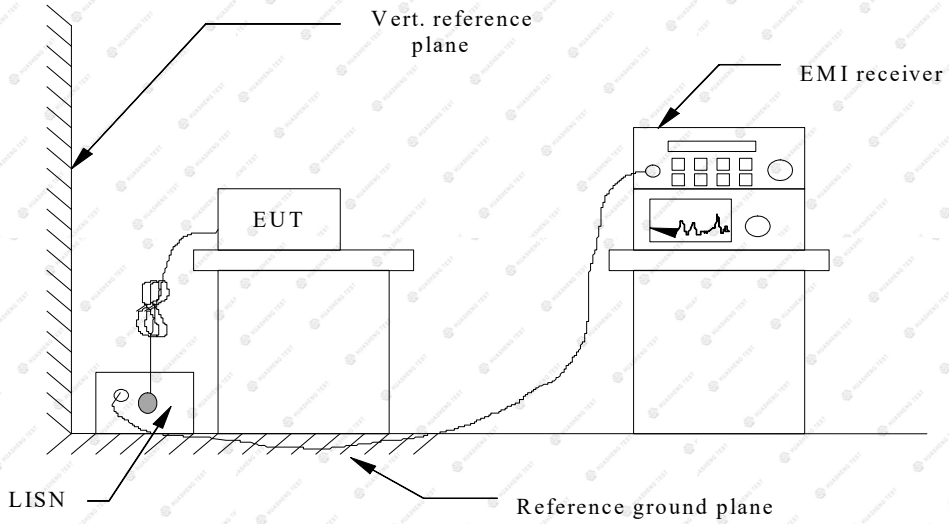
3). Margin(dB) = Limit (dBµV/m) - Level (dBµV/m)

4.1.2. Conducted Emission

LIMIT

Please refer to ETSI EN301489-1 Clause 8.4.3, Table 8 and EN55032 Annex A, Table A.10, A.12

TEST CONFIGURATION



TEST PROCEDURE

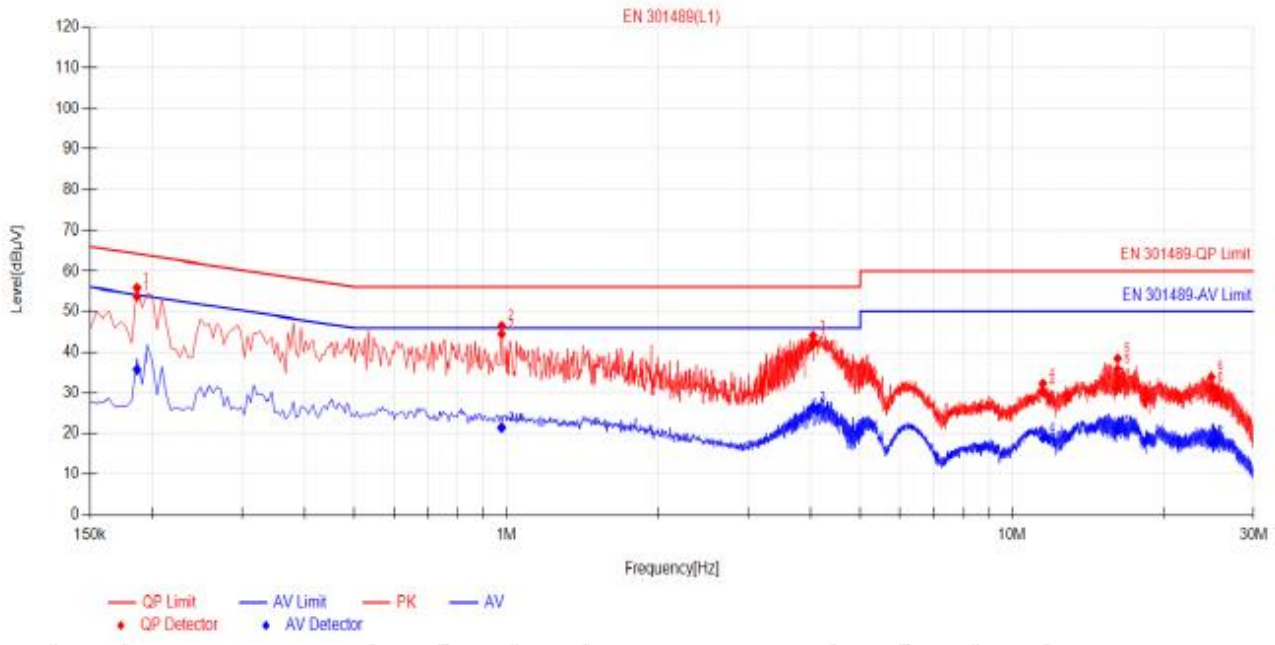
Please refer to ETSI EN 301 489-1 Clause 8.4.3 and EN55032 Annex A for the measurement methods.

TEST RESULTS

Passed

Please refer to the below test data:

Test mode:	Mode 1	Polarization	L



Final Data List

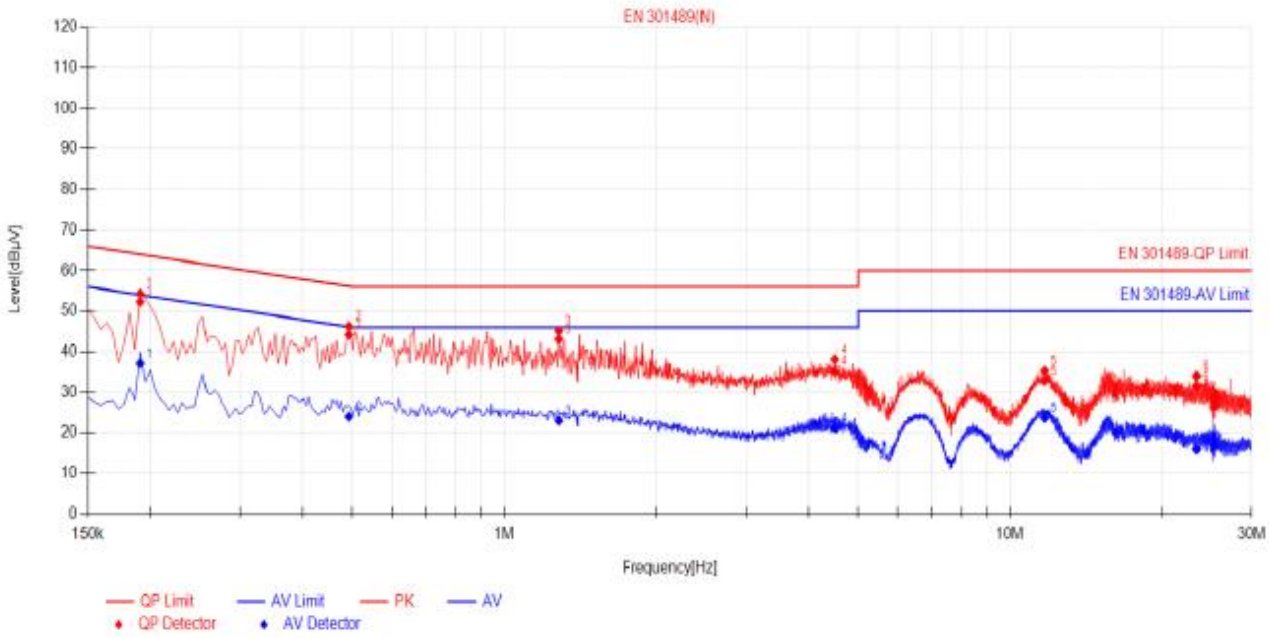
NO.	Freq. [MHz]	Factor [dB]	QP Reading[dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.186	10.03	43.69	53.72	64.21	10.49	25.65	35.68	54.21	18.53	PASS
2	0.978	9.94	34.52	44.46	56.00	11.54	11.50	21.44	46.00	24.56	PASS
3	4.047	9.92	32.14	42.06	56.00	13.94	16.48	26.40	46.00	19.60	PASS
4	11.5125	10.27	19.87	30.14	60.00	29.86	8.57	18.84	50.00	31.16	PASS
5	16.152	10.33	25.49	35.82	60.00	24.18	10.40	20.73	50.00	29.27	PASS
6	24.7245	10.50	20.82	31.32	60.00	28.68	7.40	17.90	50.00	32.10	PASS

Note:1).Level (dBµV)= Reading (dBµV)+ Factor (dB)

2). Factor (dB)=insertion loss of LISN (dB) + Cable loss (dB)

3). Margin(dB) = Limit (dBµV) - Level (dBµV)

Test mode:	Mode 1	Polarization	N



Final Data List

NO.	Freq. [MHz]	Factor [dB]	QP Reading[dBµV]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Reading [dBµV]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict
1	0.1905	9.99	42.31	52.30	64.01	11.71	27.13	37.12	54.01	16.89	PASS
2	0.492	10.00	34.22	44.22	56.13	11.91	14.02	24.02	46.13	22.11	PASS
3	1.284	10.17	32.91	43.08	56.00	12.92	12.81	22.98	46.00	23.02	PASS
4	4.4925	10.10	25.07	35.17	56.00	20.83	11.07	21.17	46.00	24.83	PASS
5	11.7195	10.41	22.46	32.87	60.00	27.13	13.23	23.64	50.00	26.36	PASS
6	23.3745	10.66	20.91	31.57	60.00	28.43	5.27	15.93	50.00	34.07	PASS

Note:1).Level (dBµV)= Reading (dBµV)+ Factor (dB)

2). Factor (dB)=insertion loss of LISN (dB) + Cable loss (dB)

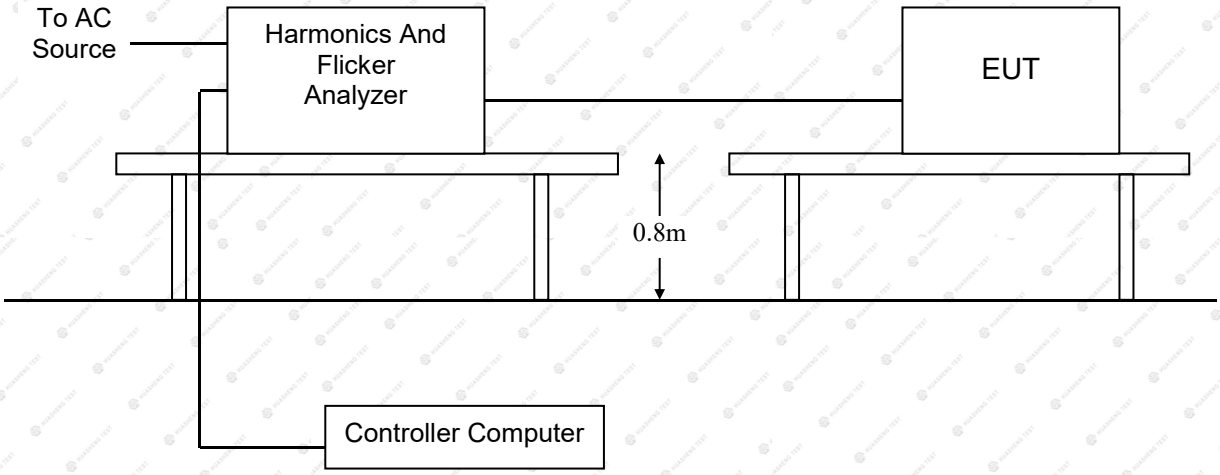
3). Margin(dB) = Limit (dBµV) - Level (dBµV)

4.1.3. Harmonic Current Emission

LIMIT

Please refer to EN 61000-3-2

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-3-2 for the measurement methods.

TEST RESULTS

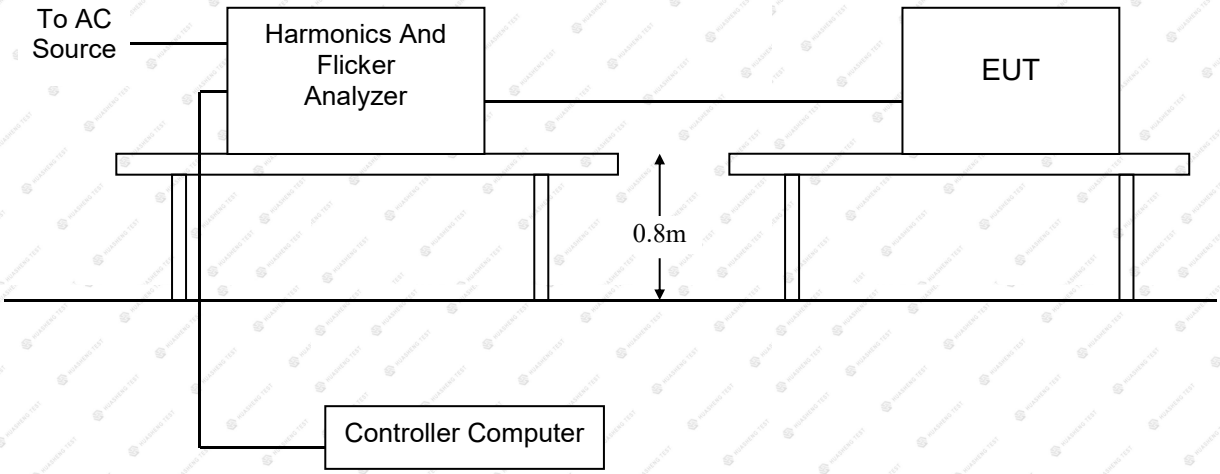
The power of this product is less than 75W, So this test item is not applicable for the EUT.

4.1.4. Voltage Fluctuation and Flicker

LIMIT

Please refer to EN 61000-3-3

TEST CONFIGURATION



TEST PROCEDURE

Please refer to EN 61000-3-3 for the measurement methods.

TEST RESULTS

The maximum input power of the EUT is less than 20W, which unlikely to produce significant voltage fluctuation. Therefore this test item is not applicable for the EUT.
See clause 6.1*** *** EN 61000-3-3, clause 6.1:" ... Tests need not be made on equipment which is unlikely to produce significant voltage fluctuations or flicker. ..."

4.2. IMMUNITY

4.2.1. Performance criteria

■ ETSI EN301489-1

General performance criteria

• performance criterion A applies for immunity tests with phenomena of a continuous nature;

• performance criterion B applies for immunity tests with phenomena of a transient nature.

•The equipment shall meet the minimum performance criteria as specified in the following.

Criteria	During test	After test
A	Operate as intended No loss of function No unintentional responses	Operate as intended No loss of function No degradation of performance No loss of stored data or user programmable functions
B	May show loss of function No unintentional responses	Operate as intended Lost function(s) shall be self-recoverable No degradation of performance No loss of stored data or user programmable functions
NOTE: Where "operate as intended" or "no loss of function" is specified, the EUT shall demonstrate correct functioning as described in clause 5.		

■ ETSI EN301489-17

General performance criteria

• Performance criteria A for immunity tests with phenomena of a continuous nature;

• Performance criteria B for immunity tests with phenomena of a transient nature;

• Performance criteria C for immunity tests with power interruptions exceeding a certain time.

The equipment shall meet the minimum performance criteria as specified in the following.

Criteria	During test	After test
A	Shall operate as intended. (See note). Shall be no loss of function. Shall be no unintentional transmissions.	Shall operate as intended. Shall be no degradation of performance. Shall be no loss of function. Shall be no loss of critical stored data.
B	May be loss of function.	Functions shall be self-recoverable. Shall operate as intended after recovering. Shall be no loss of critical stored data.
C	May be loss of function.	Functions shall be recoverable by the operator. Shall operate as intended after recovering. Shall be no loss of critical stored data.
NOTE: Operate as intended during the test allows a level of degradation in accordance with clause 6.2.2.		

Performance criteria for Continuous phenomena

For equipment that supports a PER or FER, the minimum performance level shall be a PER or FER less than or equal to 10 %.

For equipment that does not support a PER or a FER, the minimum performance level shall be no loss of the wireless transmission function needed for the intended use of the equipment.

Performance criteria for Continuous phenomena

The performance criteria A shall apply.

Where the EUT is a transmitter in standby mode, unintentional transmission shall not occur during the test.

Where the EUT is a transceiver in receive mode, unintentional transmission shall not occur during the test.

Performance criteria for Transient phenomena

The performance criteria B shall apply, except for voltage dips greater than or equal to 100 ms and voltage interruptions of 5 000 ms duration, for which performance criteria C shall apply.

Where the EUT is a transmitter in standby mode, unintentional transmission shall not occur as a result of the application of the test.

Where the EUT is a transceiver in receive mode, unintentional transmission shall not occur as a result of the application of the test.

■ Performance Criterion of EN55035

Criterion A: The equipment shall continue to operate as intended without operator intervention. No degradation of performance of loss of function is allowed below a performance level specified by the manufacturer when the equipment is used as intended.

Criterion B: After the test, the equipment shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the equipment is used as intended.

Criterion C: Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions.

4.2.2. Monitoring EUT in Immunity Test

For RF Electromagnetic Field Test

no loss of the wireless transmission function PER <10%	Establish wireless link between the EUT and CMW500(Which connected to a monitor outside the chamber through cable), Monitoring the wireless connection on CMW500

For others exept RF Electromagnetic Field Test

no loss of the wireless transmission function	Establish wireless link between the EUT and CMW500, Monitoring the wireless connection on CMW500

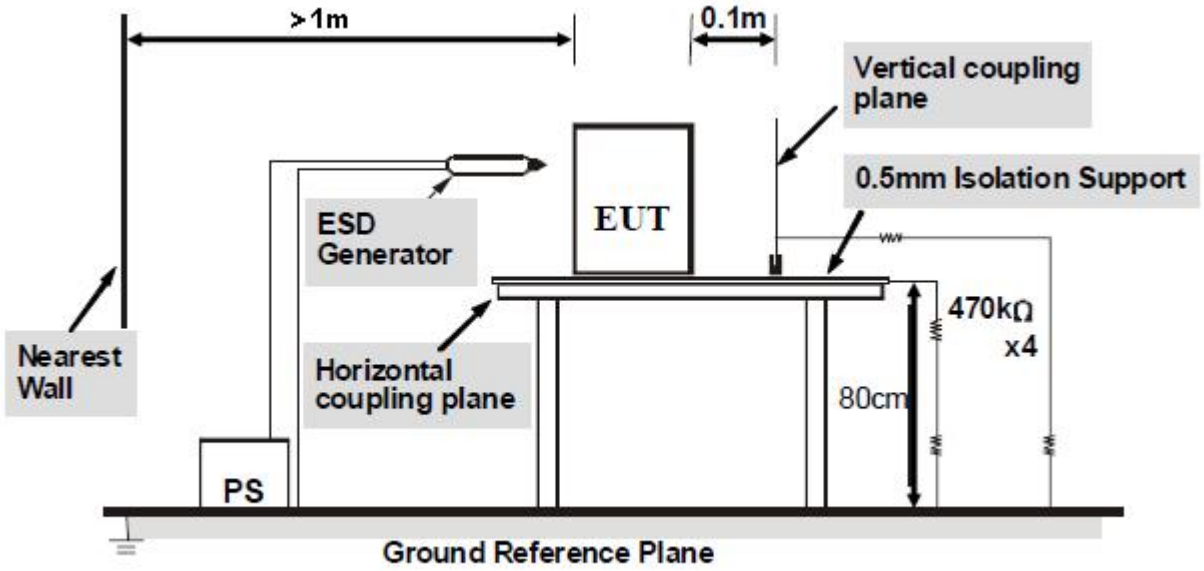
4.2.3. Electrostatic Discharge

LIMIT

SEVERITY LEVELS OF ELECTROSTATIC DISCHARGE

Test level: Contact Discharge at ±2KV, ±4KV Air Discharge at ±2KV, ±4KV, ±8KV

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.3.2 , EN 55035 and EN 61000-4-2 for the measurement methods.

Contact Discharge:

The ESD generator is held perpendicular to the surface to which the discharge is applied and the tip of the discharge electrode touch the surface of EUT. Then turn the discharge switch. The generator is then re-triggered for a new single discharge and repeated at least 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Air Discharge:

Air discharge is used where contact discharge can't be applied. The round discharge tip of the discharge electrode shall be approached as fast as possible to touch the EUT. After each discharge, the discharge electrode shall be removed from the EUT. The generator is then re-triggered for a new single discharge and repeated at least 10 times for each pre-selected test point. This procedure shall be repeated until all the air discharge completed.

Indirect discharge for horizontal coupling plane:

At least 10 single discharges shall be applied to the horizontal coupling plane, at points on each side of the EUT.

Indirect discharge for vertical coupling plane:

At least 10 single discharges shall be applied to the center of one vertical edge of the coupling plane. The coupling plane, of dimensions 0.5m X 0.5m, is placed parallel to, and positioned at a distance of 0.1m from the EUT. Discharges shall be applied to the coupling plane, with this plane in sufficient different positions that the four faces of the EUT are completely illuminated.

TEST MODE

Please reference to the section 2.3

TEST RESULTS

Direct discharge				
Type of discharge	Discharge voltage (KV)	Observations Performance	Criteria Level	Result
Contact discharge	±2	No degradation in performance of the EUT was observed (A)	B	Pass
	±4	A	B	
Air discharge	±2	A	B	
	±4	A	B	
	±8	A	B	
Indirect discharge				
Type of discharge	Discharge voltage (KV)	Observations Performance	Criteria Level	Result
HCP (6 sides)	±2	A	B	Pass
	±4	A	B	
VCP (4 sides)	±2	A	B	
	±4	A	B	

Remark: The ancillary equipment's specification for an acceptable level of performance or degradation of performance during and/or after the ESD tests.

4.2.4. RF Electromagnetic Field

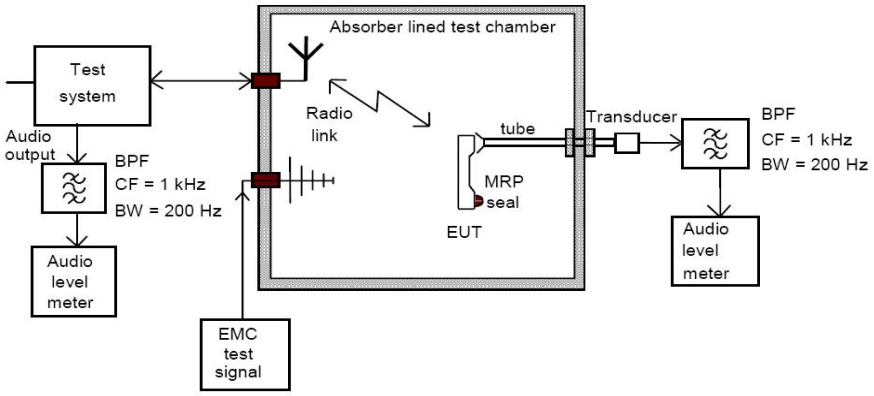
PERFORMANCE CRITERION

Criteria A

TEST LEVEL

3V/m (80%, 1kHz Amplitude Modulation)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.2.2 and EN 61000-4-3 for the measurement methods.

TEST MODE

Please reference to the section 2.3

TEST RESULTS

Frequency	Level	Modulation	Antenna Polarization	EUT Face	Observations (Performance Criterion)	Result
80MHz-6GHz	3 V/m	1 kHz, 80 % Amp. Mod, 1 % increment, dwell time=3seconds	V	Front	A	Pass
			H		A	Pass
			V	Rear	A	Pass
			H		A	Pass
			V	Left	A	Pass
			H		A	Pass
			V	Right	A	Pass
			H		A	Pass
			V	Top	A	Pass
			H		A	Pass
			V	Bottom	A	Pass
			H		A	Pass

Remark: A: No degradation in performance of the EUT was observed.

Note：During and after test, the EUT's (BT) PER less than 10%, there is no any degradation of performance.

4.2.5. Surges

PERFORMANCE CRITERION

Criteria B

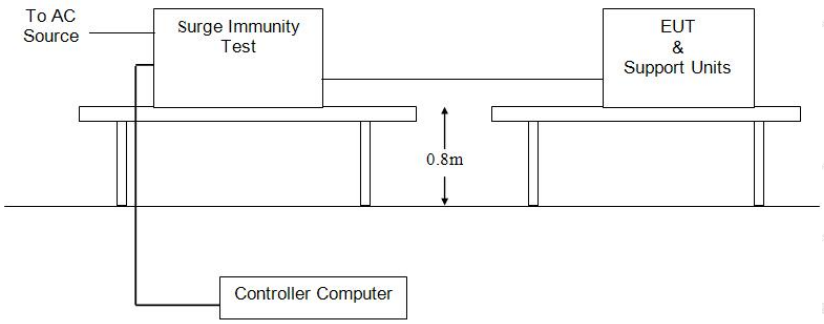
TEST LEVEL

1kV Line to Line: Differential mode

2kV Line to Ground: Common mode

(Voltage Waveform: 1.2/50 us; Current Waveform: 8/20 us)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.8.2 and EN 61000-4-5 for the measurement methods.

TEST RESULTS

Location	Level(kV)	Pulse No	Surge Interval	Phase(deg)	Observations (Performance Criterion)	Result
L-N	± 1	5	60s	0°	A	Pass
				90°	A	Pass
				180°	A	Pass
				270°	A	Pass

Remark: A: No degradation in performance of the EUT was observed.

4.2.6. RF- Common Mode 0.15MHz to 80MHz

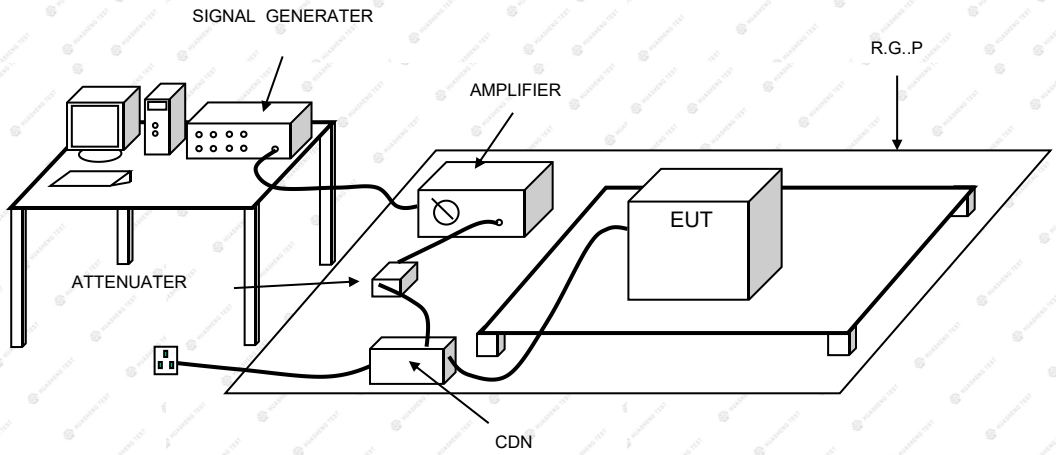
PERFORMANCE CRITERION

Criteria A

TEST LEVEL

3Vrms on AC main port (80%, 1kHz Amplitude Modulation)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.5.2 and EN 61000-4-6 for the measurement methods.

TEST RESULTS

Frequency	Injected Position	Coupling Direct/Clamp	Level	Modulation	Observations (Performance Criterion)	Result
150kHz to 80MHz	AC Mains	Direct	3Vrms	1 kHz, 80 % Amp. Mod, 1 % increment, dwell time=3seconds	A	Pass

Remark: A: No degradation in performance of the EUT was observed

Note：During and after test, the EUT's (BT) PER less than 10%, there is no any degradation of performance.

4.2.7. Fast Transients Common Mode

PERFORMANCE CRITERION

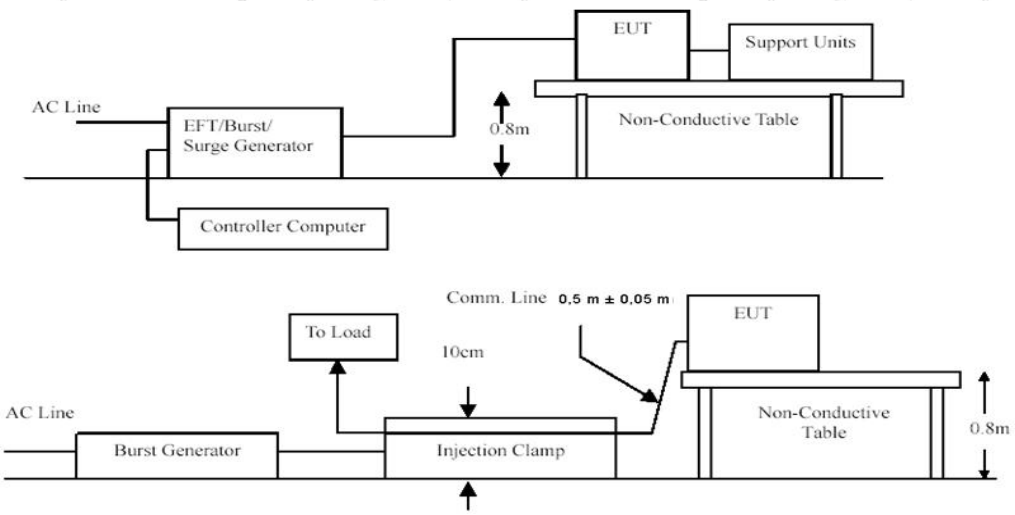
Criteria B

TEST LEVEL

1KV for AC main port

(Impulse Frequency: 5 kHz; Tr/Th: 5/50ns; Burst Duration: 15ms; Burst Period: 3Hz)

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.4.2， EN55035 and EN 61000-4-4 for the measurement methods.

TEST RESULTS

Lead under Test	Level (±Kv)	Coupling Direct/Clamp	Observations (Performance Criterion)	Result
L	±1	Direct	A	Pass
N	±1	Direct	A	Pass
L-N	±1	Direct	A	Pass

Remark: A: No degradation in performance of the EUT was observed.

4.2.8. Voltage Dips and Interruptions

PERFORMANCE CRITERION

>95% VD, 0.5 period----Performance criterion: B

>95% VD, 1.0 period----Performance criterion: B

30% VD, 25 period----Performance criterion: C

>95% VI, 250 period----Performance criterion: C

TEST LEVEL

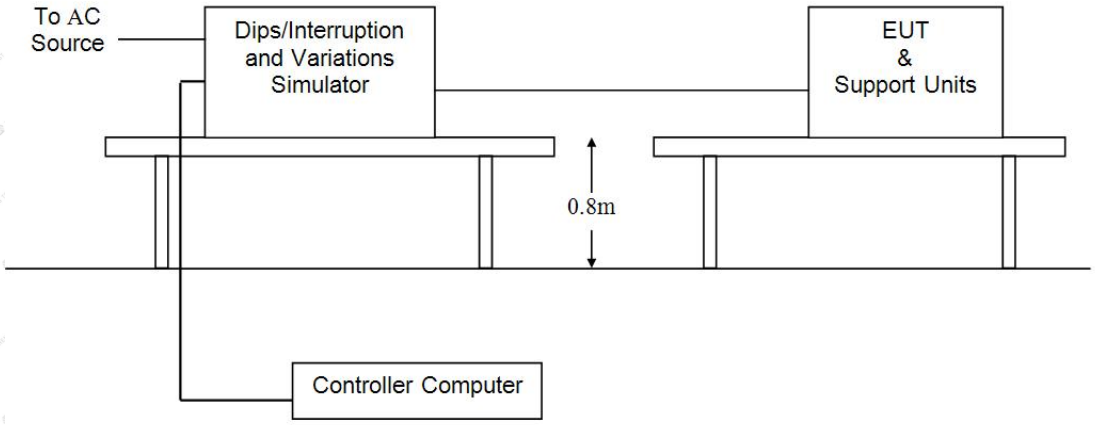
0% of VT(Supply Voltage) for 0.5 period

0% of VT(Supply Voltage) for 1.0 period

70% of VT(Supply Voltage) for 25 period

0% of VT(Supply Voltage) for 250 period

TEST CONFIGURATION



TEST PROCEDURE

Please refer to ETSI EN 301 489-1 Clause 9.7.2 and EN 61000-4-11 for the measurement methods.

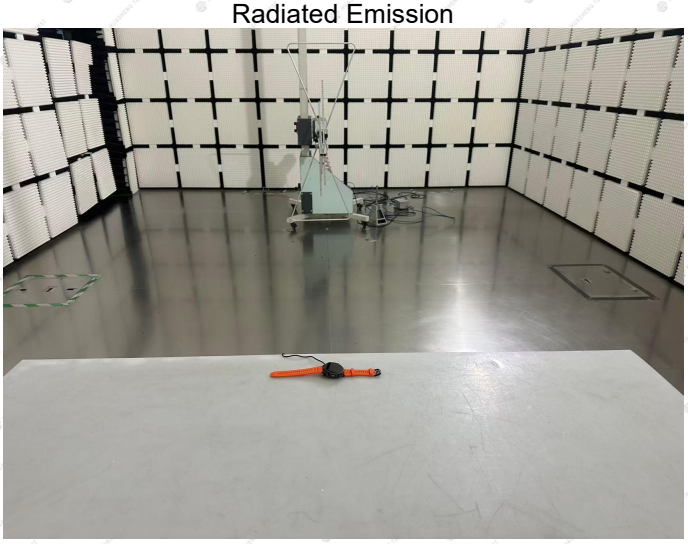
TEST RESULTS

Test Level % UT	Duration (Periods)	Phase angle	No. of drop out	Time between dropout	Observations (Performance Criterion)	Result
0	0.5	0°, 90°, 180°, 270°	3	10s	A	Pass
0	1.0	0°, 90°, 180°, 270°	3	10s	A	Pass
70	25	0°, 90°, 180°, 270°	3	10s	A	Pass
0	250	0°, 90°, 180°, 270°	3	10s	B	Pass

Remark :
A: No degradation in performance of the EUT was observed.
B: During the test, the power shut down, after the experiment, the function can automatically return to normal

5. Test Set-up Photos of the EUT

Radiated Emission

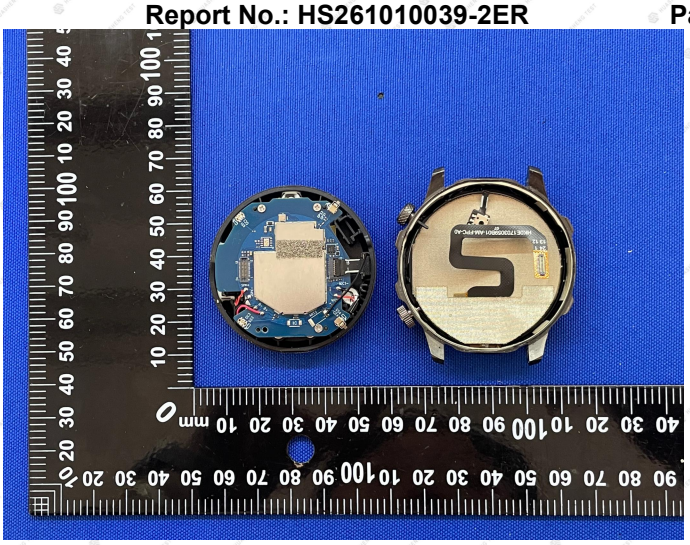


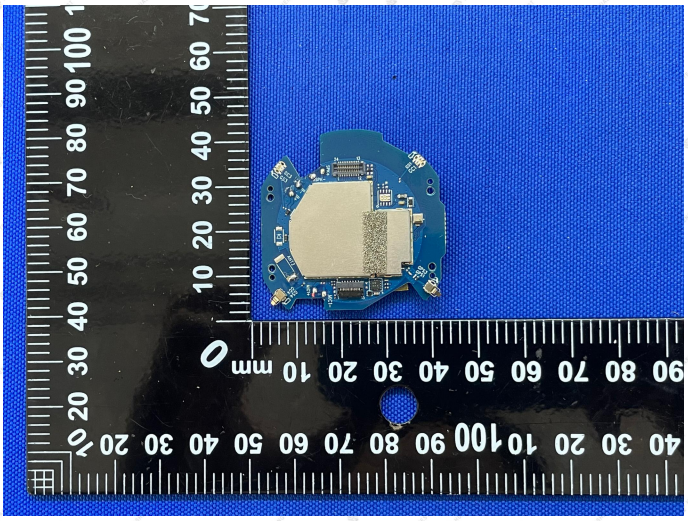
6. External and Internal Photos of the EUT

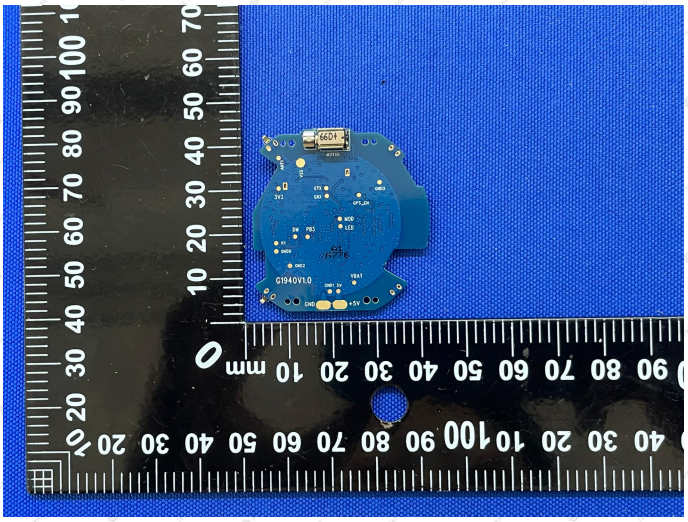


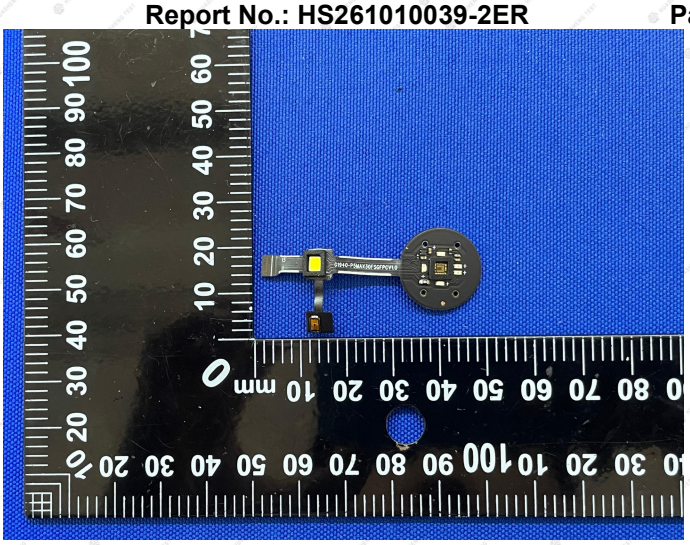


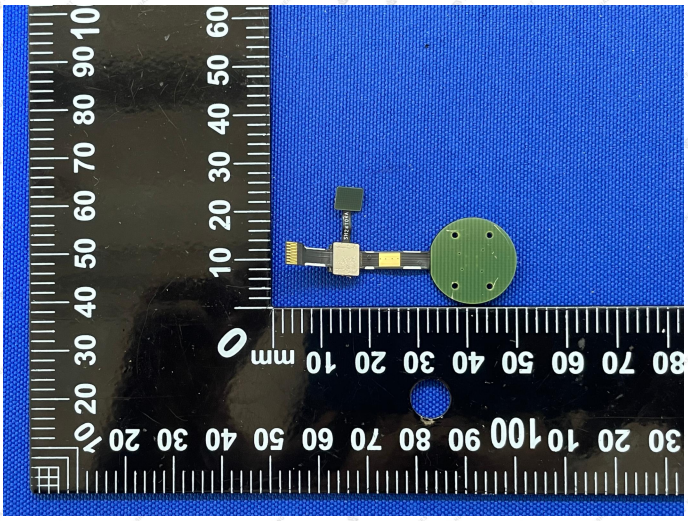


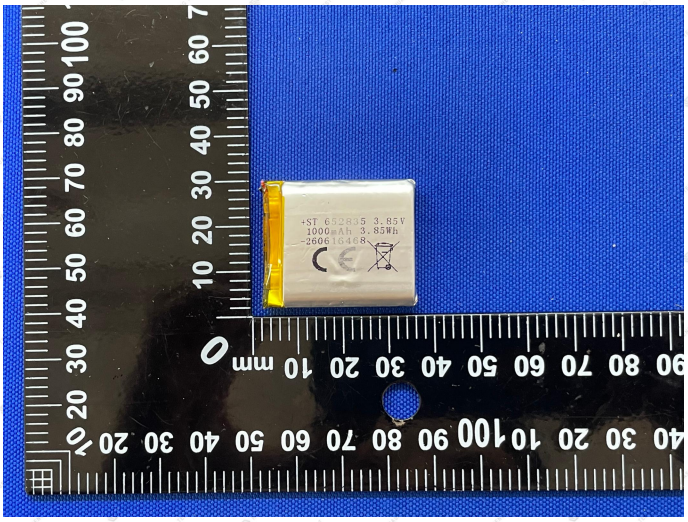





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