RF Exposure Evaluation Report

1. Product Information

Product Name	Wireless charging mobile power supply
Test Model	TX5000
Power Supply	Input Voltage PD protocol: 9V Wireless Output: 10W/7.5W/5W Input/output interface: TYPE-C Two-way fast charge PD 18W Input interface: Lightning PD 9V Battery Capacity: 5000mAh//3.7V
Modulation Type	ASK
Frequency Range	111.0~205.0 kHz
Operation Frequency	137 kHz
Antenna Type	Coil Antenna
Hardware version	X0-7231 v2.0.6
Software version	APP 6.1.02
Accessories	Mobile phone
Exposure category	General population/uncontrolled environment
EUT Type	Production Unit
Device Type	portable Device

2. Evaluation Method

Per KDB 680106 D01 Section 3. RF Exposure Requirements;

1) Consumer wireless power transfer devices approved under Part 18 in some cases have to demonstrate compliance with RF exposure requirements. The potential for exposure must be assessed according to the operating configurations of the wireless system and the exposure conditions of users and bystanders. RF exposure must be evaluated with the client device(s) being charged by the primary at maximum output power. The RF exposure requirements must be determined in conjunction with the device operating characteristics, according to the mobile and portable exposure requirements in Section 2.1091 and Section 2.1093 of the rules. SAR and MPE limits do not cover the frequency range for wireless power transfer applications which operate below 100 kHz and 300 kHz respectively; therefore, RF exposure compliance needs to be determined with respect to 1.1307 (c) and (d) of the FCC rules.
2) Based on the design and implementation of the power transfer application, it must be clearly identified if mobile or portable RF exposure conditions apply. Devices that are installed to provide separation of at least 20 cm from users and bystanders may qualify for mobile exposure conditions. For some conditions where users and bystanders may be exposed at closer than 20 cm, section 2.1091(d) (4) of the rules may apply.
3) For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.
4) Portable exposure conditions from 100 kHz to 6 GHz are determined with respect to SAR requirements. Existing SAR systems and test procedures are generally intended for measurements above 100 MHz. While numerical modeling can be an alternative, the constraints of substantial computational resources at low frequencies could introduce further limitations. Under these circumstances, including operations below 100 kHz, the Commission may consider a combination of analytical analysis, field strength, radiated and conducted power measurements, in conjunction with some limited numerical modeling to assess compliance.
5) Depending on the operating frequency, existing SAR and MPE measurement procedures may be adapted to evaluate wireless power transfer devices for compliance with respect to mobile or portable exposure conditions. If the grantee or its test lab have any questions regarding RF exposure evaluation they should contact the FCC Laboratory with sufficient system operating configuration details to determine if RF exposure evaluation is necessary and, if required, how to apply specific test procedures. Below 100 MHz, when SAR testing is required and the device is operating at close proximity to persons, information on device design, implementation, operating configurations, exposure conditions of users and bystanders are needed to determine the evaluation and testing requirements. In addition, the influence of nearby objects may also need consideration according to the wireless power transfer system implementation; for example, the effects of placing the device, its coils or radiating elements on or near metallic surfaces

3. Evaluation Limit

3.1 Refer evaluation method

ANSI C95.1–1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio

Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
FCC KDB publication 680106 D01 RF Exposure Wireless Charging Apps v03: RF Exposure Considerations for Low Power Consumer Wireless Power Transfer Applications
FCC CFR 47 part1 1.1310: Radiofrequency radiation exposure limits.
FCC CFR 47 part2 2.1091: Radiofrequency radiation exposure evaluation: mobile devices
FCC CFR 47 part2 2.1093: Radiofrequency radiation exposure evaluation: portable devices
FCC CFR 47 part 18.107: Indusial, Scientific, and Medical Equipment

3.2 Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	$*900/f^2$	6
30-300	61.4	0.163	1.0	6
300-1,500	/	/	f/300	6
1,500-100,000	/	/	5	6

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm²)	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	$*180/f^2$	30
30-300	27.5	0.073	0.2	30
300-1,500	/	/	f/1500	30
1,500-100,000	/	/	1.0	30

F=frequency in MHz
*=Plane-wave equivalent power density

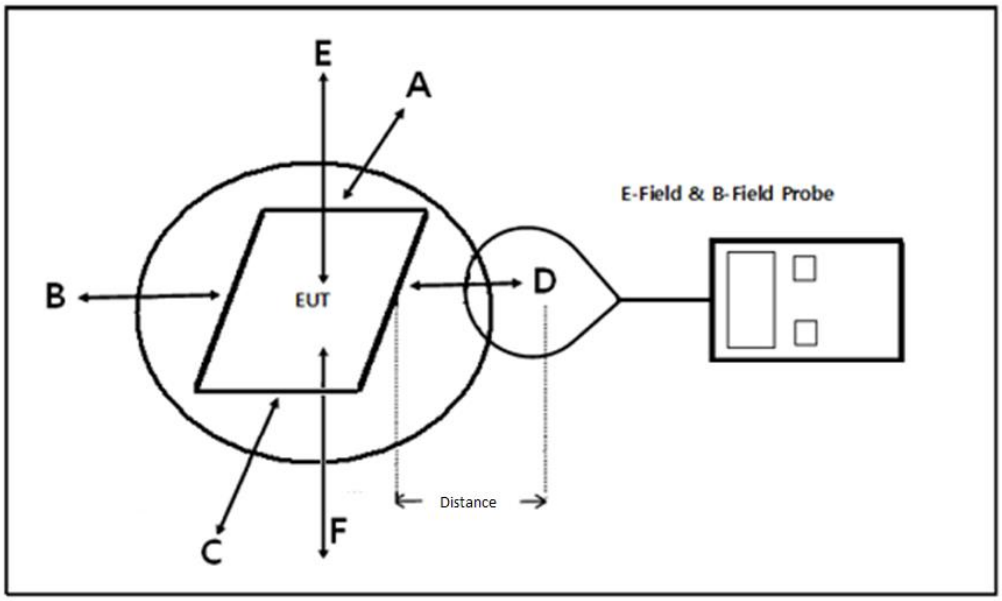
According to FCC KDB 680106 D01 Section 3. RF Exposure Requirements clause 3 the Emission-Limits in the frequency range from 100 KHz to 300 KHz should be assessed versus the limits at 300 KHz in Table 1 of CFR 47 – Section1.310 as following (measured distance shall be 15cm from the center of the probe to the edge of the device):

	E-Field	*/*	B-Field
Frequency	V/m	A/m	uT
0.3 MHz – 3.0 MHz	614	1.613	2.0
3.0 MHz – 30 MHz	824/f (=27.5_{30MHz})	2.19/f (=0.073_{30MHz})	--

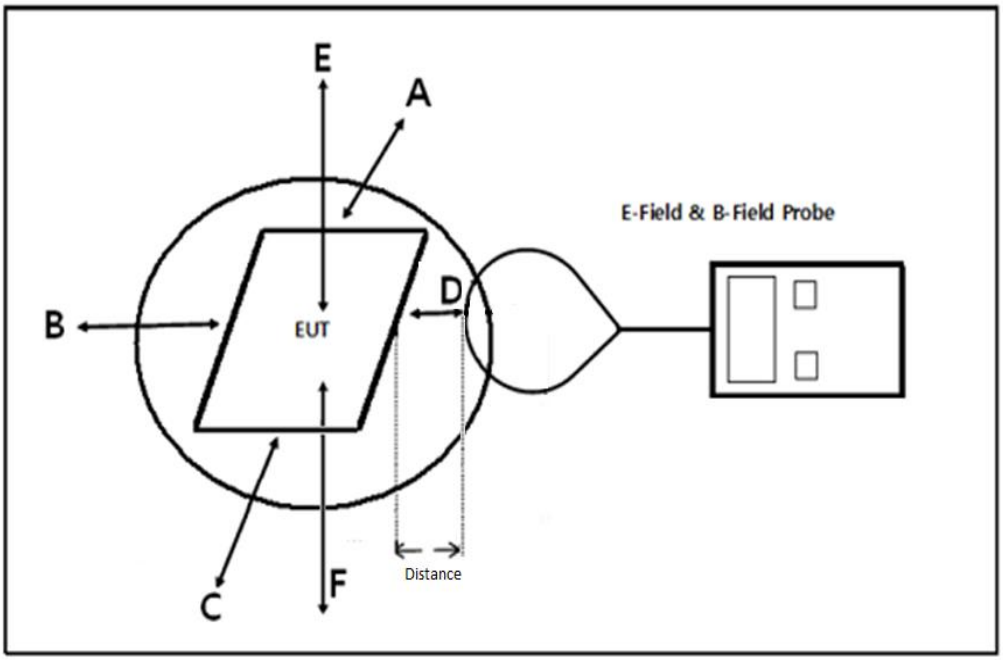
A KDB inquire was required to determine/confirm the applicable limits below 100 KHz.

4. Test Setup Diagram

Mobile RF exposure



Portable RF exposure



5. Test Equipment

Equipment	Manufacturer	Model	Serial no.	Calibrated date	Calibrated Due
Exposure Level Tester	Narda	ELT-400	N-0713	2022-10-29	2023-10-28
B-Field Probe	Narda	ELT-400	M-1154	2022-10-29	2023-10-28

6. Measurement Procedure

For mobile RF exposure

a) The RF exposure test was performed on 360 degree turn table in anechoic chamber.

b) The measurement probe was placed at test distance (15cm and 20cm) which is between the edge of the charger and the geometric center of probe.

c) The turn table was rotated 360d degree to search of highest strength.

d) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.

e) The EUT were measured according to the dictates of KDB 680106D01v03.

For portable RF exposure

a) The RF exposure test was performed on 360 degree turn table in anechoic chamber.

b) The measurement probe was placed at test distance (0cm) which is between the edge of the charger and the edge of probe.

c) The turn table was rotated 360d degree to search of highest strength.

d) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E, F) were completed.

e). Repeated measured (a) – (d) at measure distance from 0 cm to 20 cm, in 2 cm maximum increment measured from the edge of the device.

e) The EUT were measured according to the dictates of KDB 680106D01v03.

7. Equipment Approval Considerations

The EUT does comply with item 5.2 of KDB 680106 D01v03 as follows table;

Requirements of KDB 680106 D01	Yes / No	Description
Power transfer frequency is less than 1 MHz	Yes	The device operate in the frequency range 111.0 KHz - 205.0 KHz
Output power from each primary coil is less than 15 watts	Yes	The maximum output power of the primary coil is 10W.
The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	No	The transfer system includes single coil that is able to detect receiver device.
Client device is placed directly in contact with the transmitter.	Yes	Client device is placed directly in contact with the transmitter.
Mobile exposure conditions only(portable Exposure conditions are not covered by this exclusion).	No	This product is portable.
The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.	Yes	The EUT H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

In all other cases, unless excluded above, an RF exposure evaluation report must be reviewed and accepted through a KDB or PBA inquiry to enable authorization of the equipment. When evaluation is required to show compliance; for example, using field strength, power density, SAR measurements or computational modeling etc., the specific authorization requirements will be determined based on the results of the RF exposure evaluation.

8. E and H field Strength

Test Modes		
Mode 1	AC/DC Adapter (9V/2A+EUT+ Phone (Battery Status: <1%))	Record
Mode 2	AC/DC Adapter (9V/2A+EUT+ Phone (Battery Status: <50%))	Pre-tested
Mode 3	AC/DC Adapter (9V/2A+EUT+ Phone (Battery Status: <100%))	Pre-tested
Mode 4	EUT + Mobile Phone (Battery Status: <1%)	Pre-tested
Mode 5	EUT + Mobile Phone (Battery Status: <50%)	Pre-tested
Mode 6	EUT + Mobile Phone (Battery Status: 100%)	Pre-tested

Portable:

E-Field Strength at 0 cm from the edges surrounding the EUT and 0cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	38.521	40.905	43.127	37.954	44.460	307	614
50%	0.137	37.583	40.031	41.645	39.198	41.747	307	614
99%	0.137	37.314	40.186	42.192	38.874	42.723	307	614

H-Field Strength at 0 cm from the edges surrounding the EUT and 0cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.127	0.133	0.145	0.129	0.147	--	--
1%	A/m	0.102	0.106	0.116	0.103	0.117	0.815	1.63
50%	uT	0.118	0.124	0.135	0.120	0.137	--	--
50%	A/m	0.095	0.099	0.108	0.096	0.109	0.815	1.63
99%	uT	0.121	0.122	0.126	0.123	0.134	--	--
99%	A/m	0.096	0.098	0.101	0.099	0.107	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 2 cm from the edges surrounding the EUT and 2cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	38.823	39.329	40.508	39.728	43.182	307	614
50%	0.137	36.235	36.707	37.807	37.079	40.303	307	614
99%	0.137	34.510	38.501	39.447	35.622	40.979	307	614

H-Field Strength at 2 cm from the edges surrounding the EUT and 2cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.120	0.138	0.144	0.135	0.146	--	--
1%	A/m	0.096	0.111	0.115	0.108	0.117	0.815	1.63
50%	uT	0.112	0.129	0.134	0.126	0.137	--	--
50%	A/m	0.089	0.103	0.107	0.100	0.109	0.815	1.63
99%	uT	0.120	0.127	0.134	0.122	0.135	--	--
99%	A/m	0.096	0.101	0.107	0.098	0.108	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 4 cm from the edges surrounding the EUT and 4cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	37.427	41.143	40.496	38.018	43.352	307	614
50%	0.137	34.932	38.400	37.796	35.484	40.462	307	614
99%	0.137	34.591	36.674	39.137	37.552	41.262	307	614

H-Field Strength at 4 cm from the edges surrounding the EUT and 4cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.124	0.131	0.138	0.134	0.148	--	--
1%	A/m	0.099	0.105	0.110	0.108	0.118	0.815	1.63
50%	uT	0.116	0.122	0.129	0.126	0.138	--	--
50%	A/m	0.093	0.098	0.103	0.100	0.110	0.815	1.63
99%	uT	0.114	0.128	0.134	0.122	0.132	--	--
99%	A/m	0.092	0.102	0.107	0.098	0.106	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 6 cm from the edges surrounding the EUT and 6cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	39.037	41.170	43.237	39.829	41.673	307	614
50%	0.137	36.434	38.426	40.355	37.174	38.895	307	614
99%	0.137	35.669	36.600	37.848	37.649	40.309	307	614

H-Field Strength at 6 cm from the edges surrounding the EUT and 6cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.127	0.130	0.135	0.134	0.144	--	--
1%	A/m	0.102	0.104	0.108	0.107	0.115	0.815	1.63
50%	uT	0.119	0.122	0.126	0.125	0.134	--	--
50%	A/m	0.095	0.097	0.101	0.100	0.107	0.815	1.63
99%	uT	0.118	0.129	0.126	0.121	0.135	--	--
99%	A/m	0.094	0.103	0.101	0.096	0.108	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 8 cm from the edges surrounding the EUT and 8cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	38.097	41.285	42.645	39.072	43.230	307	614
50%	0.137	36.378	39.208	40.648	35.298	39.858	307	614
99%	0.137	36.394	37.551	38.060	36.702	39.022	307	614

H-Field Strength at 8 cm from the edges surrounding the EUT and 8cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.127	0.140	0.139	0.125	0.147	--	--
1%	A/m	0.102	0.112	0.111	0.100	0.118	0.815	1.63
50%	uT	0.119	0.130	0.130	0.117	0.137	--	--
50%	A/m	0.095	0.104	0.104	0.094	0.110	0.815	1.63
99%	uT	0.117	0.129	0.132	0.116	0.135	--	--
99%	A/m	0.094	0.103	0.106	0.093	0.108	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 10 cm from the edges surrounding the EUT and 10cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	38.759	41.709	43.567	38.958	41.624	307	614
50%	0.137	36.175	38.929	40.663	36.361	38.849	307	614
99%	0.137	34.226	37.549	38.408	35.192	40.850	307	614

H-Field Strength at 10 cm from the edges surrounding the EUT and 10cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.126	0.123	0.140	0.144	0.132	--	--
1%	A/m	0.100	0.099	0.112	0.115	0.106	0.815	1.63
50%	uT	0.129	0.115	0.131	0.134	0.124	--	--
50%	A/m	0.103	0.092	0.104	0.108	0.099	0.815	1.63
99%	uT	0.121	0.121	0.124	0.130	0.118	--	--
99%	A/m	0.097	0.097	0.099	0.104	0.094	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 12 cm from the edges surrounding the EUT and 12cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	38.628	41.653	41.372	39.769	42.517	307	614
50%	0.137	36.053	38.876	38.614	37.118	39.683	307	614
99%	0.137	34.434	39.236	38.550	34.808	39.584	307	614

H-Field Strength at 12 cm from the edges surrounding the EUT and 12cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.130	0.137	0.136	0.134	0.138	--	--
1%	A/m	0.104	0.110	0.108	0.107	0.111	0.815	1.63
50%	uT	0.121	0.128	0.127	0.125	0.129	--	--
50%	A/m	0.097	0.103	0.101	0.100	0.103	0.815	1.63
99%	uT	0.117	0.127	0.130	0.123	0.130	--	--
99%	A/m	0.094	0.102	0.104	0.098	0.104	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 14 cm from the edges surrounding the EUT and 14cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	37.219	41.150	42.212	37.322	44.300	307	614
50%	0.137	34.738	38.407	39.398	34.833	41.346	307	614
99%	0.137	34.514	39.063	39.465	34.869	39.655	307	614

H-Field Strength at 14 cm from the edges surrounding the EUT and 14cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.126	0.136	0.143	0.131	0.149	--	--
1%	A/m	0.101	0.109	0.115	0.105	0.119	0.815	1.63
50%	uT	0.118	0.127	0.134	0.123	0.139	--	--
50%	A/m	0.094	0.102	0.107	0.098	0.111	0.815	1.63
99%	uT	0.114	0.127	0.130	0.117	0.134	--	--
99%	A/m	0.091	0.101	0.104	0.093	0.107	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 16 cm from the edges surrounding the EUT and 16cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	38.933	41.599	43.552	39.188	41.963	307	614
50%	0.137	36.337	38.826	40.649	36.575	39.165	307	614
99%	0.137	33.821	38.148	39.027	35.755	41.128	307	614

H-Field Strength at 16 cm from the edges surrounding the EUT and 16cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.130	0.131	0.140	0.129	0.146	--	--
1%	A/m	0.104	0.105	0.112	0.103	0.117	0.815	1.63
50%	uT	0.121	0.122	0.131	0.120	0.136	--	--
50%	A/m	0.097	0.098	0.104	0.096	0.109	0.815	1.63
99%	uT	0.113	0.129	0.129	0.120	0.134	--	--
99%	A/m	0.091	0.103	0.103	0.096	0.108	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 18 cm from the edges surrounding the EUT and 18cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	36.485	39.061	40.781	40.499	42.212	307	614
50%	0.137	34.052	36.457	38.063	37.799	39.397	307	614
99%	0.137	34.526	36.643	39.528	34.999	41.742	307	614

H-Field Strength at 18 cm from the edges surrounding the EUT and 18cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.125	0.134	0.144	0.130	0.144	--	--
1%	A/m	0.100	0.108	0.115	0.104	0.115	0.815	1.63
50%	uT	0.116	0.126	0.134	0.121	0.134	--	--
50%	A/m	0.093	0.100	0.107	0.097	0.108	0.815	1.63
99%	uT	0.113	0.127	0.135	0.125	0.130	--	--
99%	A/m	0.091	0.101	0.108	0.100	0.104	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 20 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	36.442	40.951	42.798	38.066	42.346	307	614
50%	0.137	34.013	38.221	39.945	35.528	39.523	307	614
99%	0.137	36.270	40.222	41.752	37.989	44.799	307	614

H-Field Strength at 20 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.124	0.136	0.143	0.135	0.143	--	--
1%	A/m	0.100	0.108	0.115	0.108	0.114	0.815	1.63
50%	uT	0.116	0.127	0.134	0.126	0.133	--	--
50%	A/m	0.093	0.101	0.107	0.101	0.106	0.815	1.63
99%	uT	0.120	0.121	0.129	0.116	0.137	--	--
99%	A/m	0.096	0.097	0.104	0.093	0.110	0.815	1.63

Note: A/m=uT/1.25

Mobile :

E-Field Strength at 15 cm from the edges surrounding the EUT and 0cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	37.761	42.050	42.457	39.195	43.407	307	614
50%	0.137	37.825	39.479	41.846	37.901	42.731	307	614
99%	0.137	36.497	39.101	41.358	37.360	43.177	307	614

H-Field Strength at 15 cm from the edges surrounding the EUT and 0cm from the top surface of the EUT

Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.126	0.140	0.141	0.130	0.144	--	--
1%	A/m	0.100	0.112	0.113	0.104	0.115	0.815	1.63
50%	uT	0.126	0.131	0.139	0.126	0.142	--	--
50%	A/m	0.101	0.105	0.111	0.101	0.114	0.815	1.63
99%	uT	0.121	0.130	0.144	0.134	0.144	--	--
99%	A/m	0.097	0.104	0.115	0.107	0.115	0.815	1.63

Note: A/m=uT/1.25

E-Field Strength at 20 cm from the edges surrounding the EUT and 2cm from the top surface of the EUT

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					FCC E-Field Strength 50% Limits (V/m)	FCC E-Field Strength Limits (V/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	0.137	38.440	38.897	41.139	37.325	43.075	307	614
50%	0.137	37.599	38.849	43.287	37.799	44.685	307	614
99%	0.137	37.569	38.233	41.442	37.554	42.134	307	614

H-Field Strength at 20 cm from the edges surrounding the EUT and 2cm from the top surface of the EUT

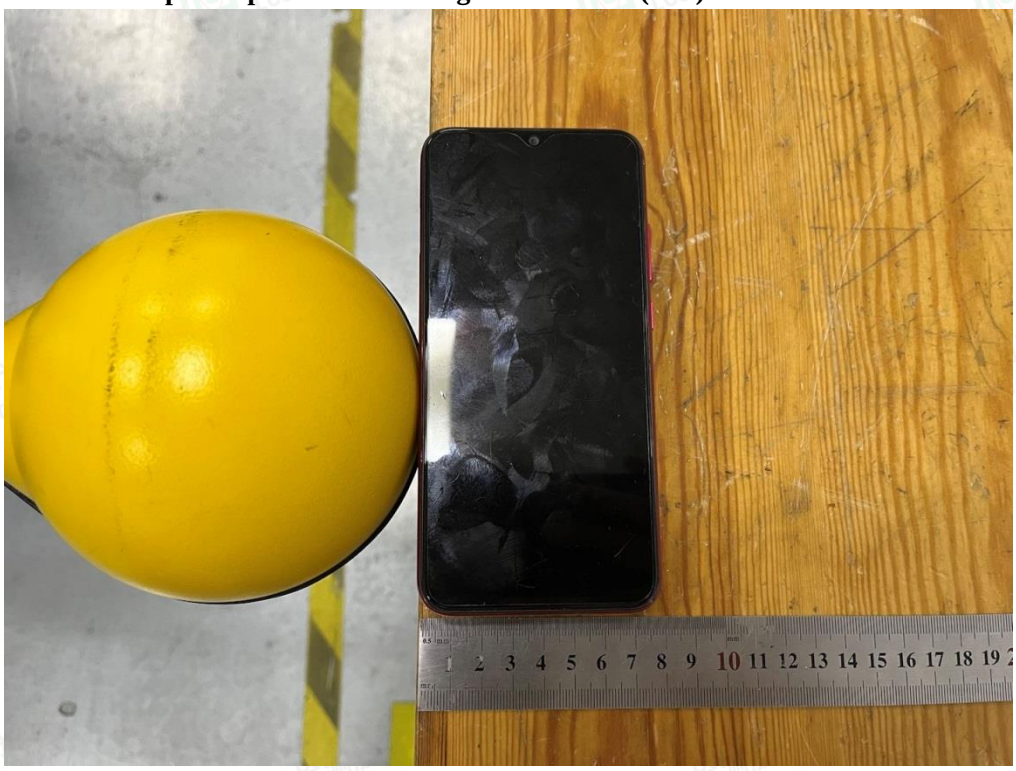
Charging Battery Level	Unit	Measured H-Field Strength Values (A/m)					FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
		Test Position A	Test Position B	Test Position C	Test Position D	Test Position E		
1%	uT	0.128	0.129	0.137	0.124	0.143	--	--
1%	A/m	0.102	0.103	0.109	0.099	0.115	0.815	1.63
50%	uT	0.125	0.129	0.144	0.126	0.149	--	--
50%	A/m	0.100	0.103	0.115	0.101	0.119	0.815	1.63
99%	uT	0.125	0.130	0.138	0.125	0.140	--	--
99%	A/m	0.100	0.104	0.110	0.100	0.112	0.815	1.63

Note: A/m=uT/1.25

9. Test Setup Photos

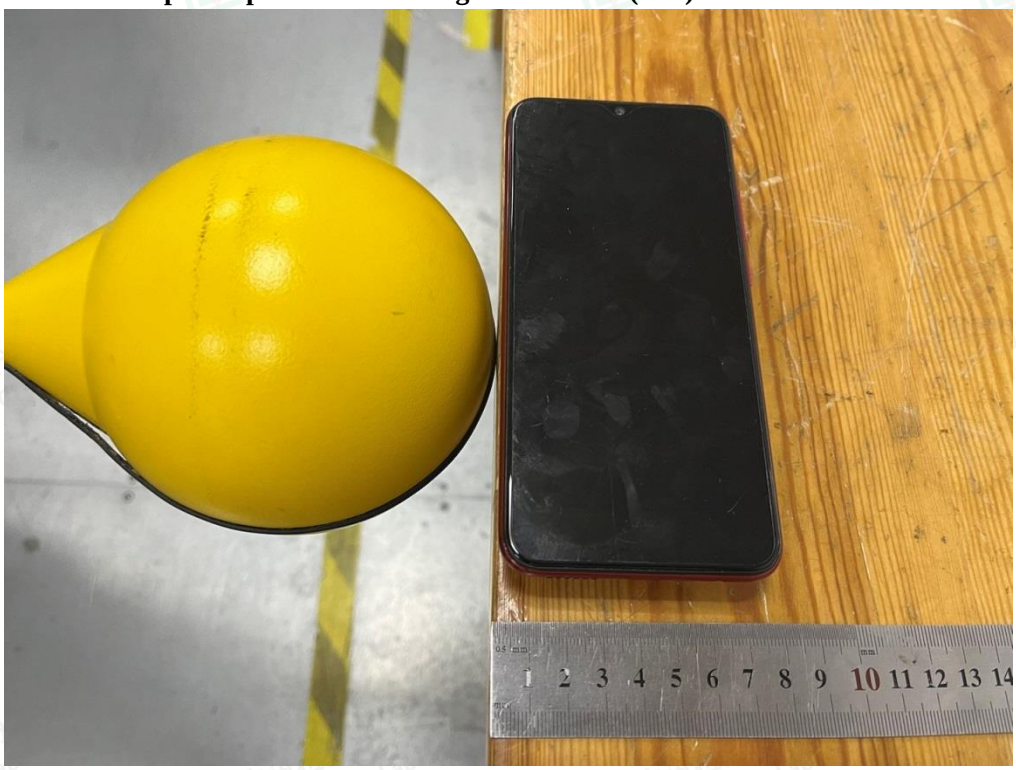
9.1. for Portable

9.1.1Test Position A - Exposure photo from side edge surface-Rear (0cm)



(TM4)

9.1.2Test Position B - Exposure photo from side edge surface-Left (0cm)

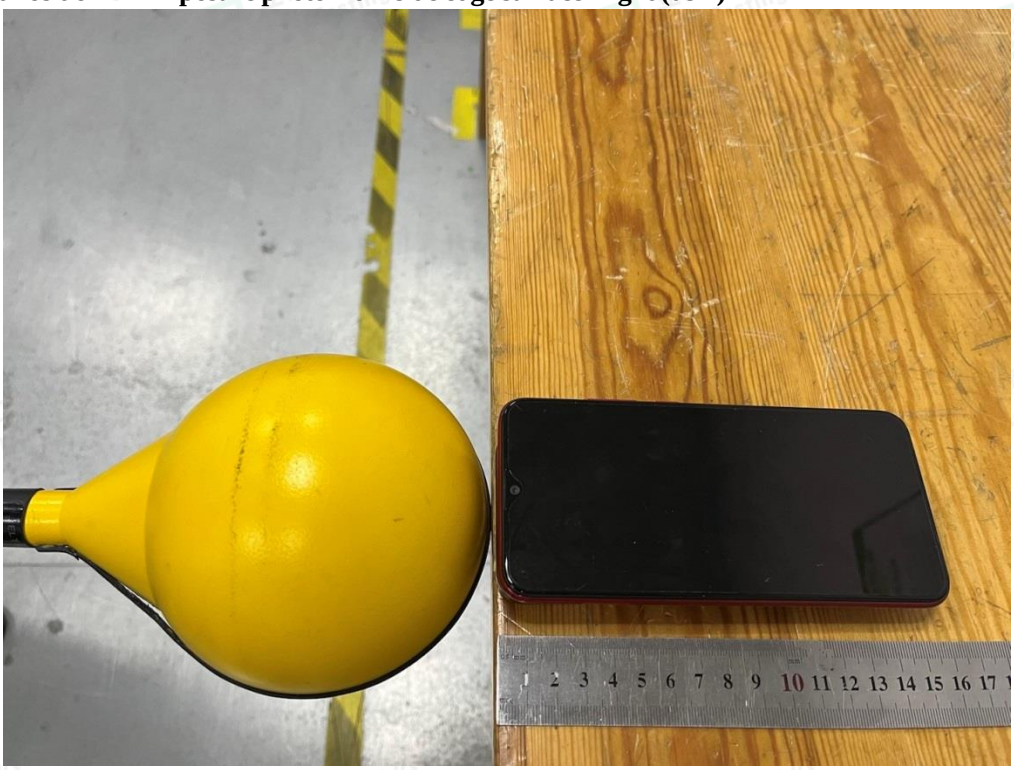


(TM4)

9.1.3Test Position C - Exposure photo from side edge surface-Front (0cm)

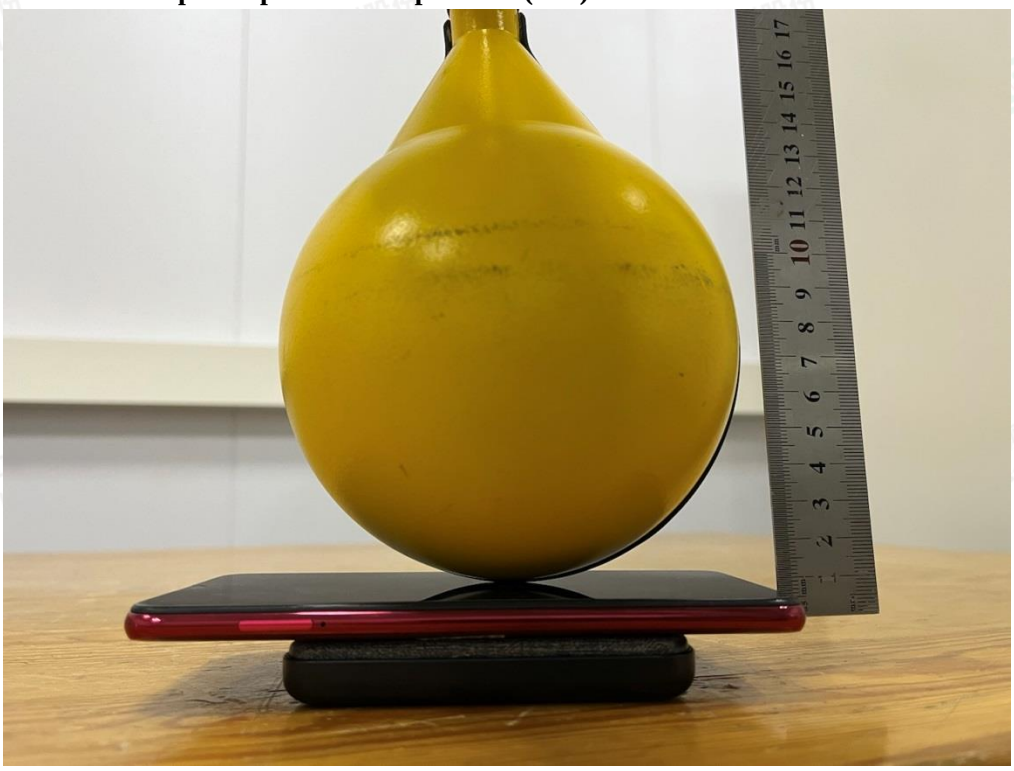
(TM4)

9.1.4Test Position D - Exposure photo from side edge surface-Right (0cm)



(TM4)

9.1.5Test Position E - Exposure photo from top surface (0cm)

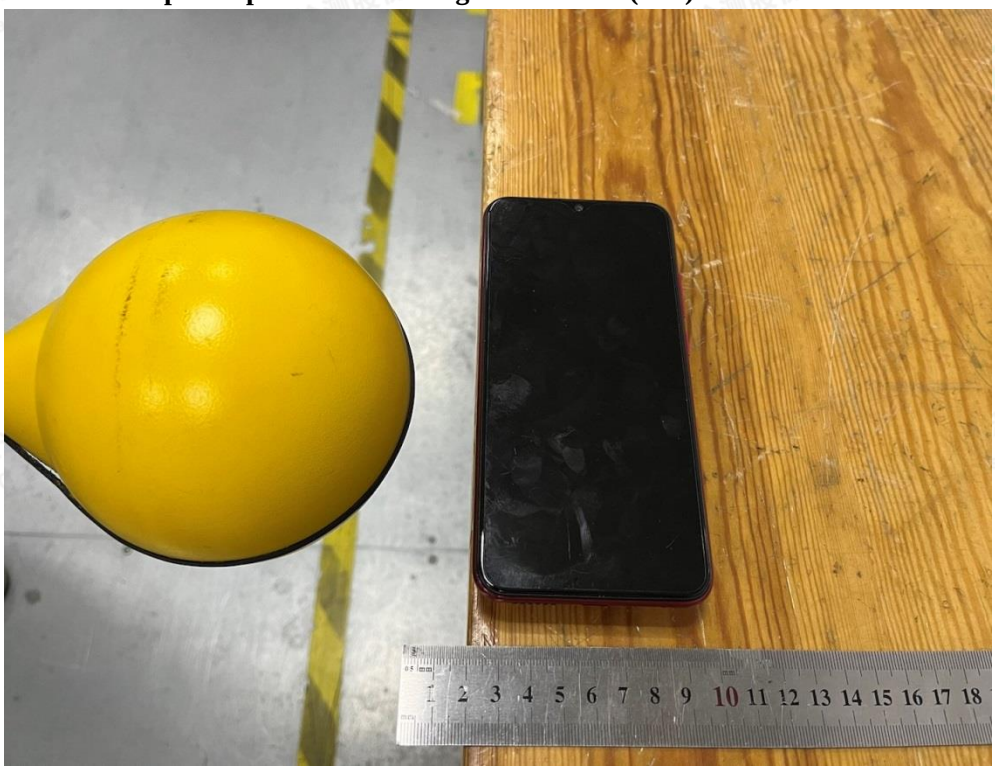


(TM4)

9.2.1Test Position A - Exposure photo from side edge surface-Rear (2cm)

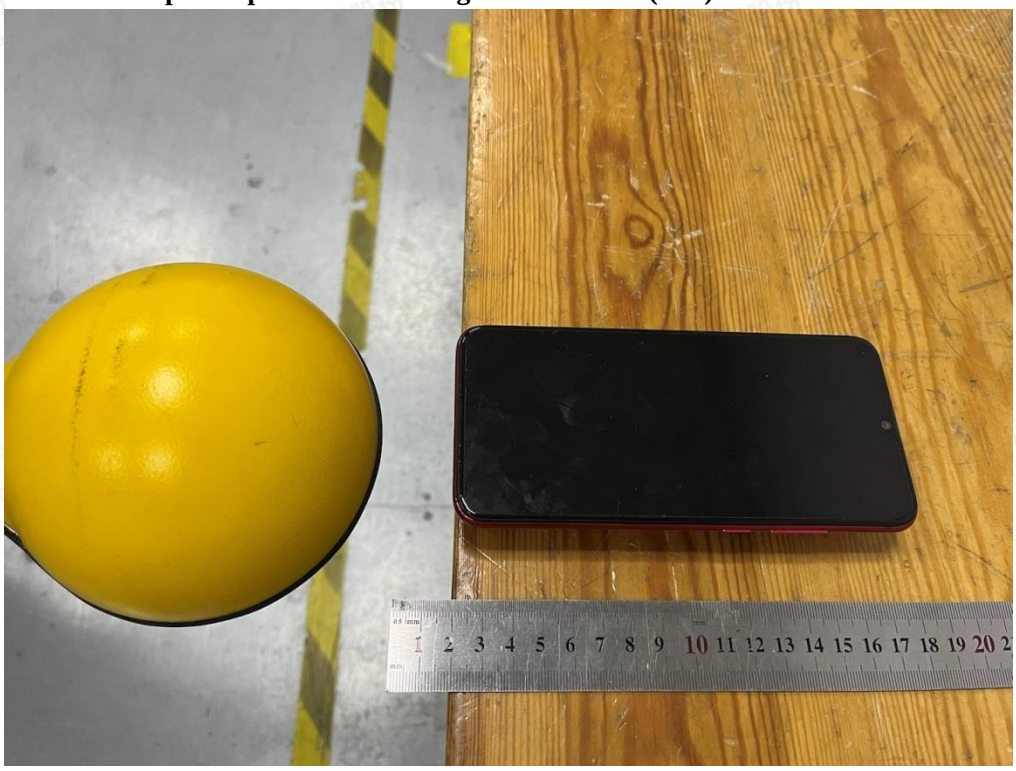
(TM4)

9.2.2Test Position B - Exposure photo from side edge surface-Left (2cm)



(TM4)

9.2.3Test Position C - Exposure photo from side edge surface-Front (2cm)

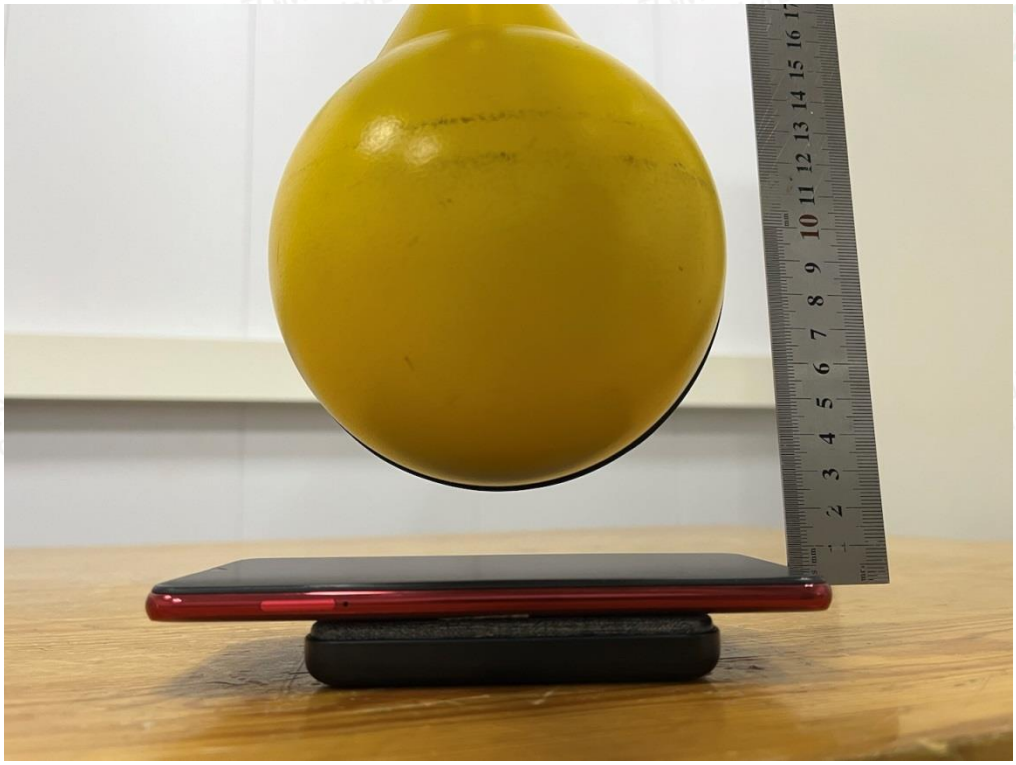


(TM4)

9.2.4Test Position D - Exposure photo from side edge surface-Right (2cm)

(TM4)

9.2.5Test Position E - Exposure photo from top surface (2cm)

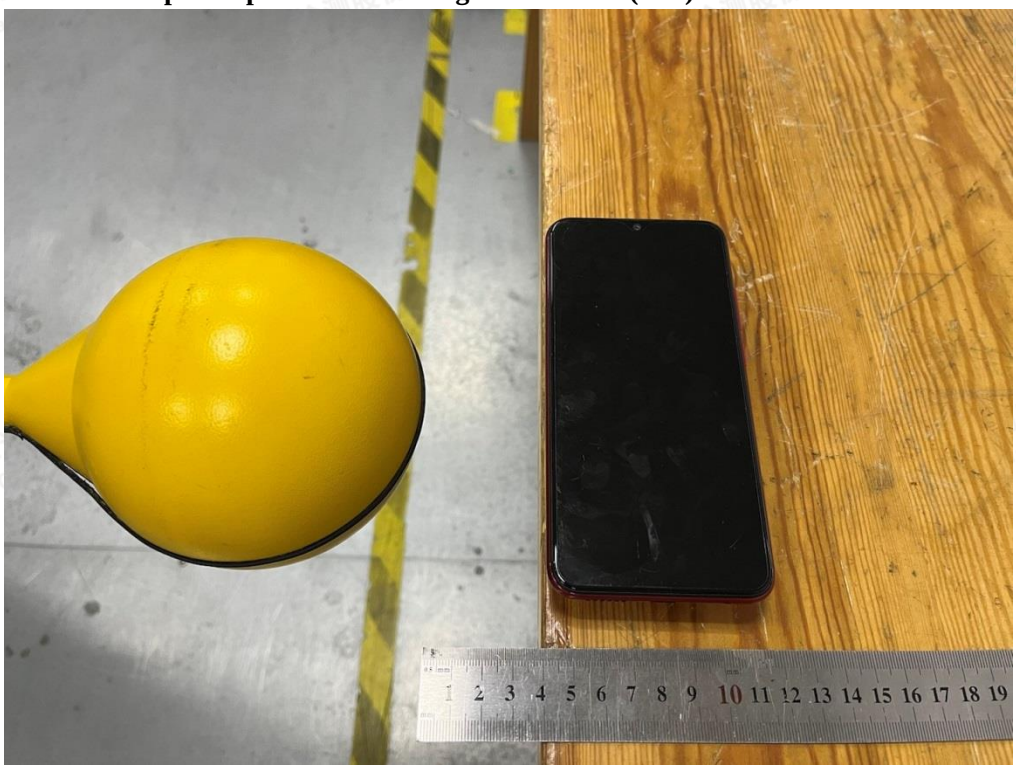


(TM4)

9.3.1Test Position A - Exposure photo from side edge surface-Rear (4cm)

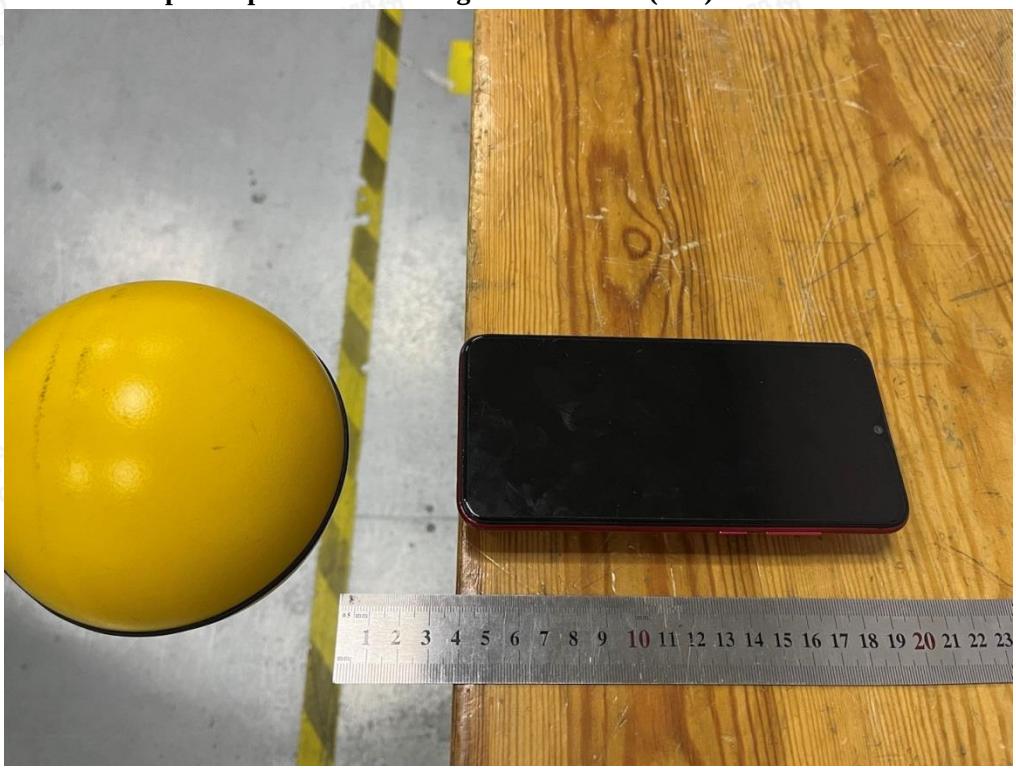
(TM4)

9.3.2Test Position B - Exposure photo from side edge surface-Left (4cm)



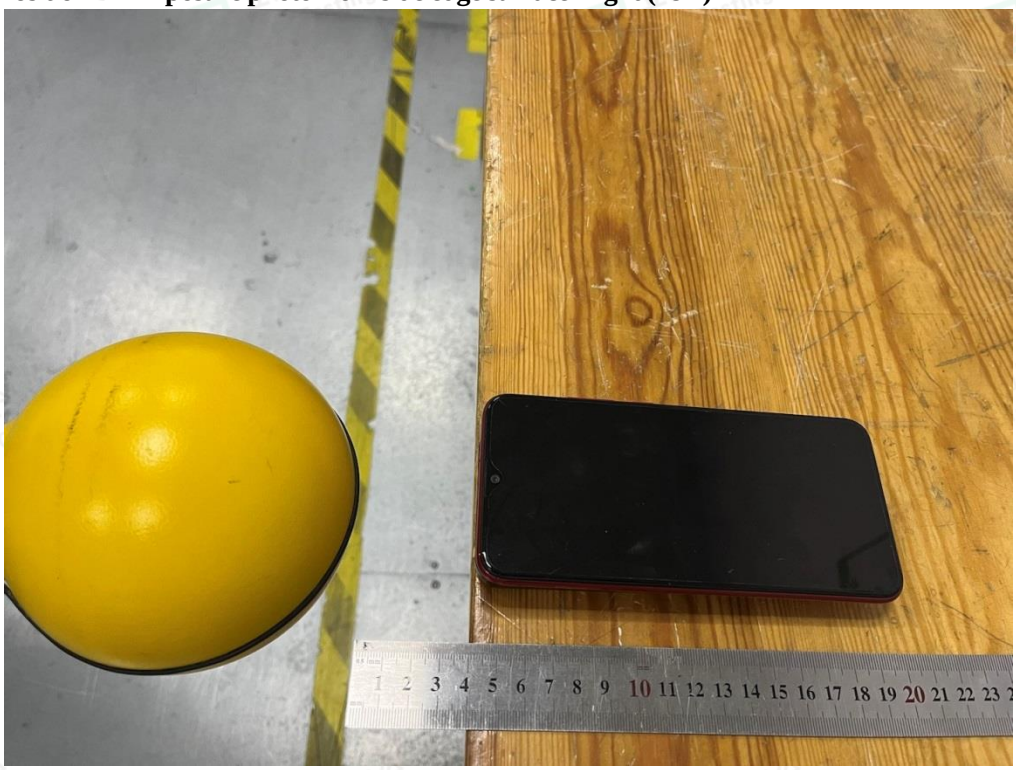
(TM4)

9.3.3Test Position C - Exposure photo from side edge surface-Front (4cm)



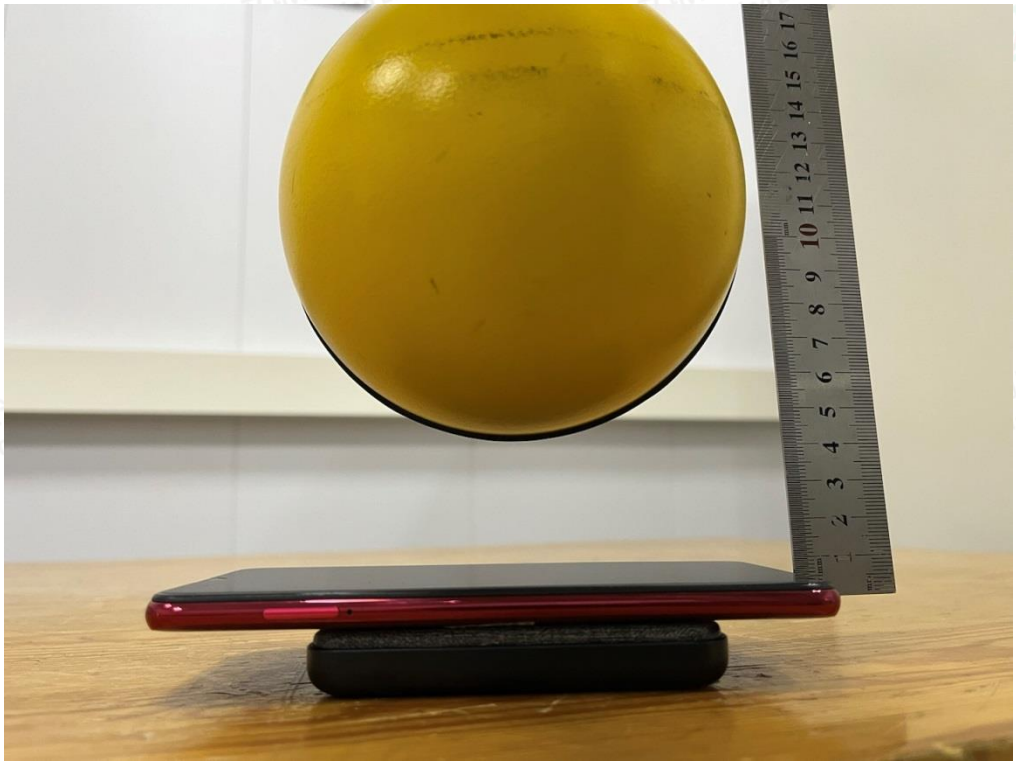
(TM4)

9.3.4Test Position D - Exposure photo from side edge surface-Right (4cm)



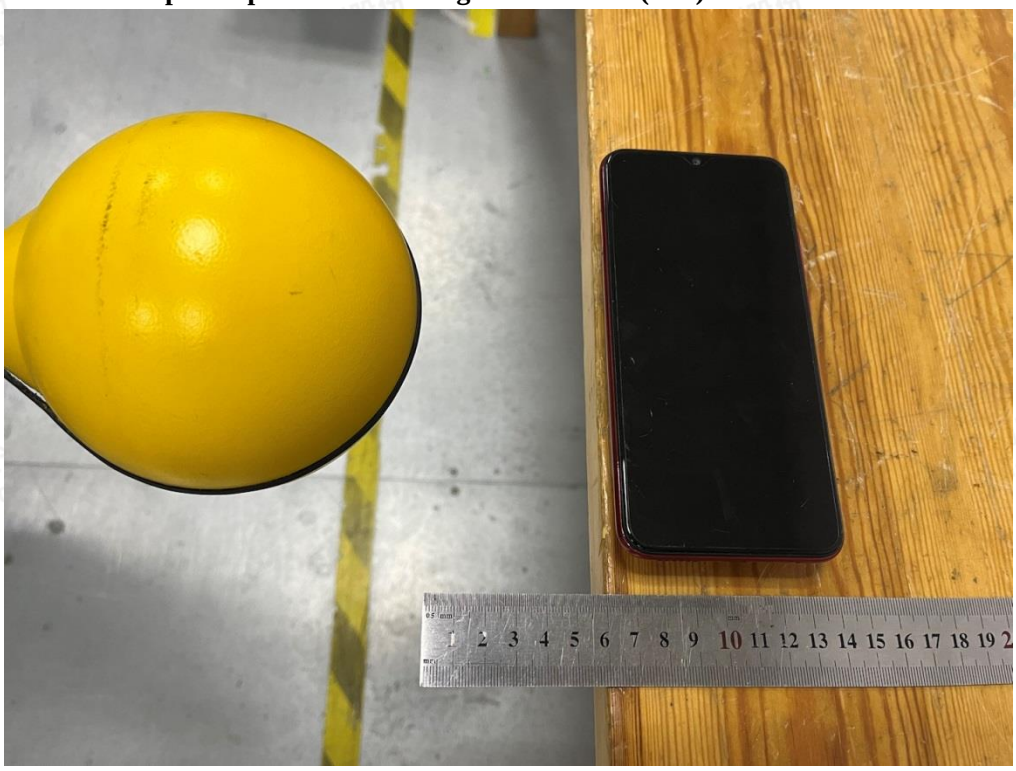
(TM4)

9.3.5Test Position E - Exposure photo from top surface (4cm)



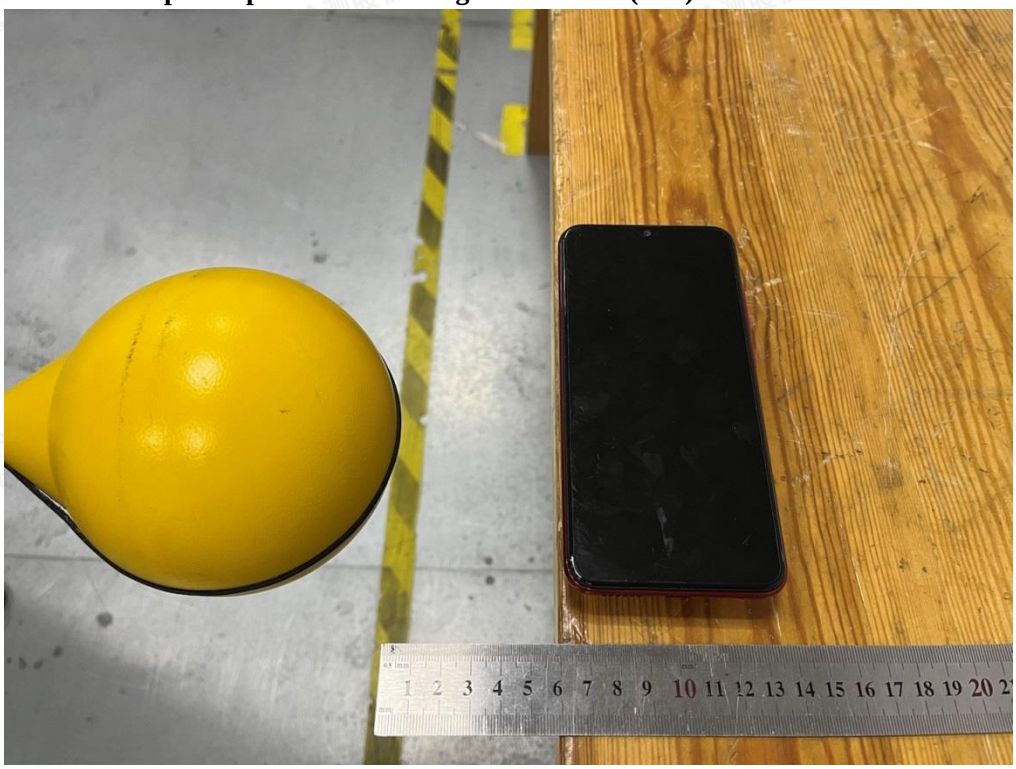
(TM4)

9.4.1Test Position A - Exposure photo from side edge surface-Rear (6cm)



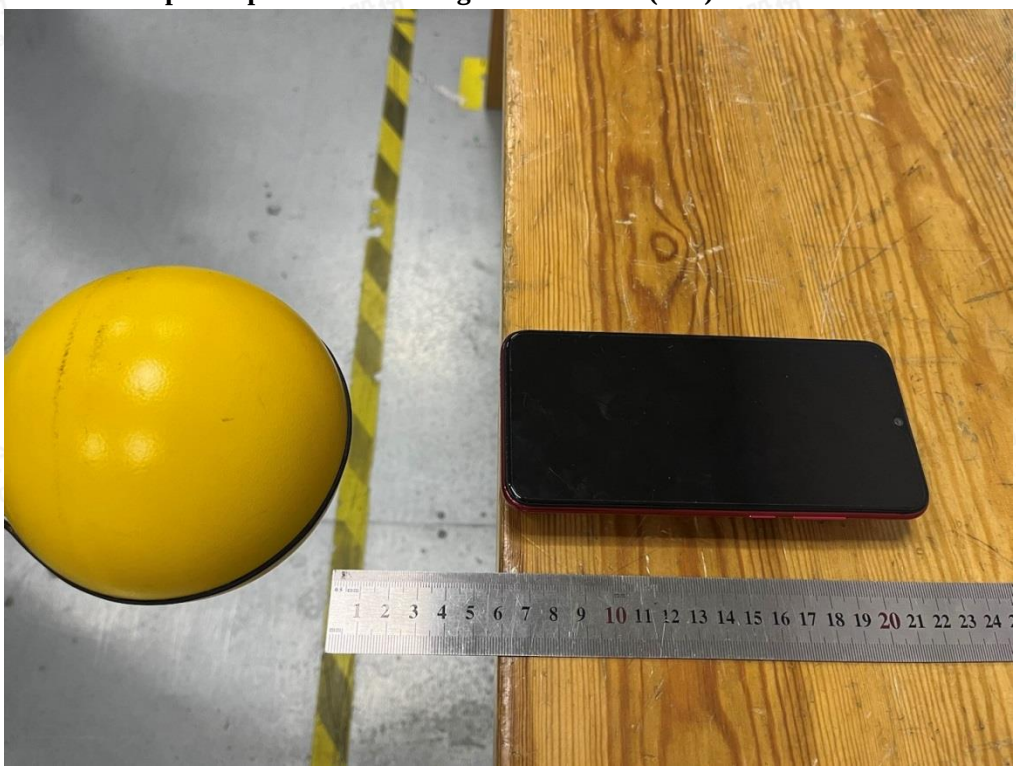
(TM4)

9.4.2Test Position B - Exposure photo from side edge surface-Left (6cm)



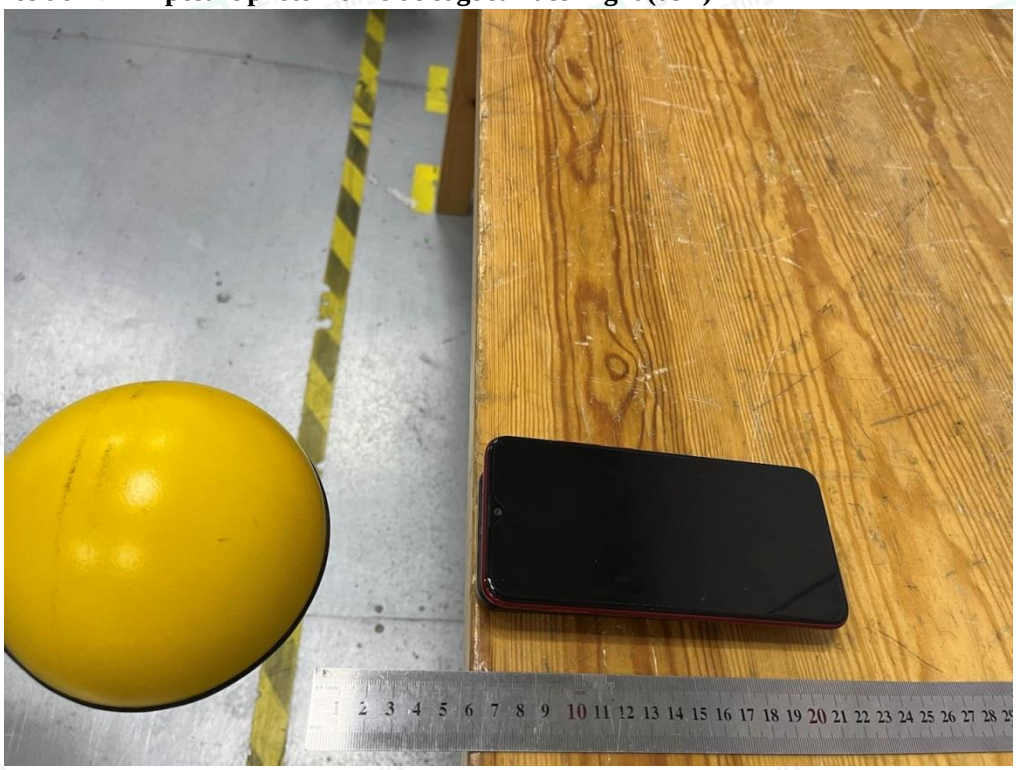
(TM4)

9.4.3Test Position C - Exposure photo from side edge surface-Front (6cm)



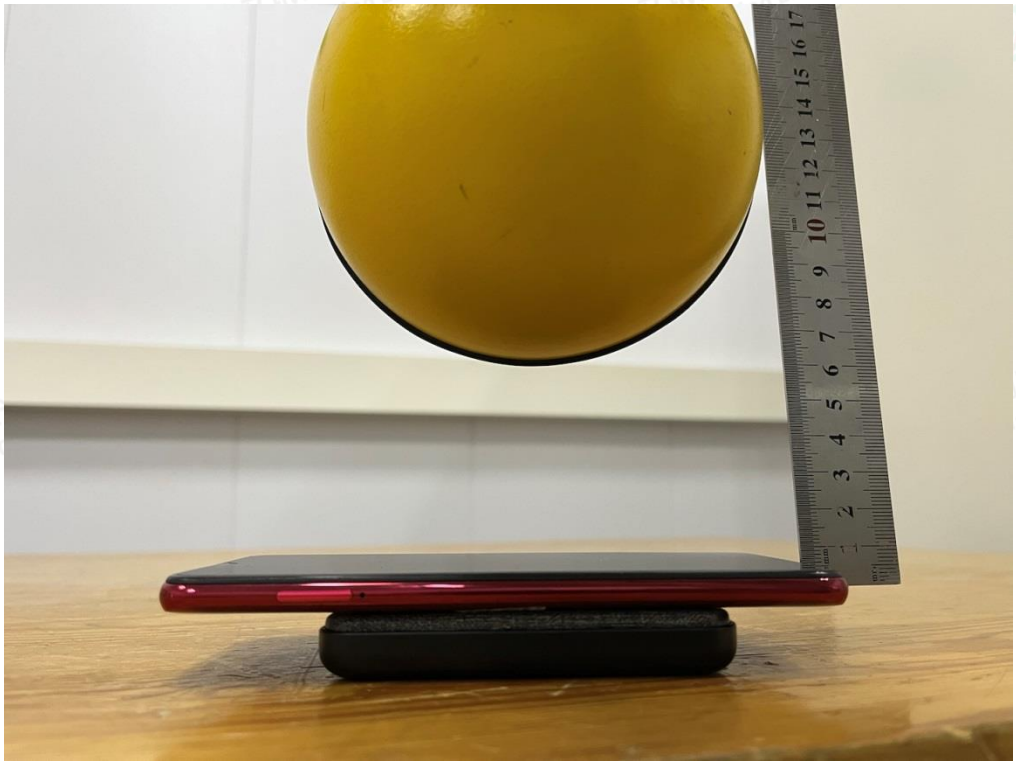
(TM4)

9.4.4Test Position D - Exposure photo from side edge surface-Right (6cm)



(TM4)

9.4.5Test Position E - Exposure photo from top surface (6cm)



(TM4)