

MerchSource, LLC.

TEST REPORT

SCOPE OF WORK

SAR Assessment– 1015791, 101XXXX(where XXXX can be digits 0000-9999 which represent different customers)

REPORT NUMBER

220530008SZN-004

ISSUE DATE

July 16, 2022

[REVISED DATE]

[-----]

PAGES

16

DOCUMENT CONTROL NUMBER

RF Exposure

© 2017 INTERTEK



Test Report

Applicant : MerchSource, LLC.
7755 Irvine Center Drive, Suite 100, Irvine, California
92618, United States

Sample Description
Product : TRUE WIRELESS EARBUDS + QI CHARGING CASE
Model No. : 1015791, 101XXXX(where XXXX can be digits 0000-9999
which represent different customers)

Brand Name : Sharper Image
Electrical Rating : DC 5V through Qi charging pad

Date Received : May 30, 2022

Date Test Conducted : May 30, 2022 to June 17, 2022

Test Requested : Test for compliance with CFR 47 part 1
Test Method : Environmental evaluation and exposure limit according
to FCC CFR 47 part 1, 1.1307(c) and (d), 1.1310

Test Result : Pass
Conclusion : When determining of test conclusion, measurement
uncertainty of tests have been considered.

***** End of Page *****

Prepared and Checked By:

Approved By:

Robin Zhou
Senior Project Engineer

Ryan Chen
Project Engineer
Date: July 16, 2022

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Intertek Testing Services Shenzhen Ltd. Longhua Branch

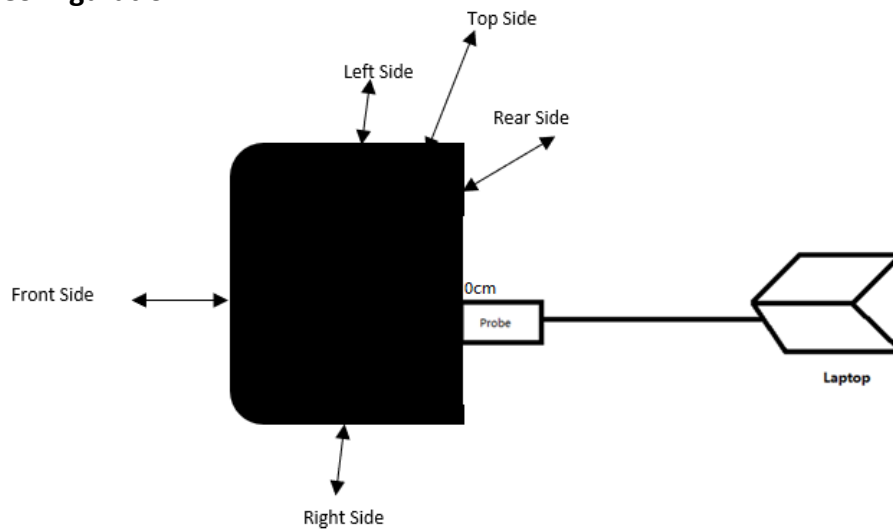
101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, ShenZhen.

Tel: (86 755) 8601 6288

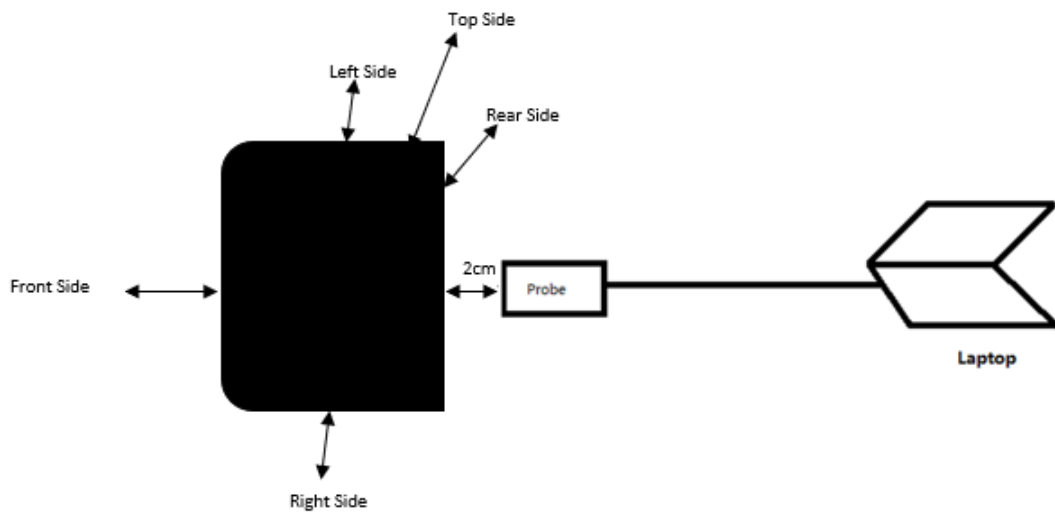
Fax: (86 755) 8601 6751

Test Report

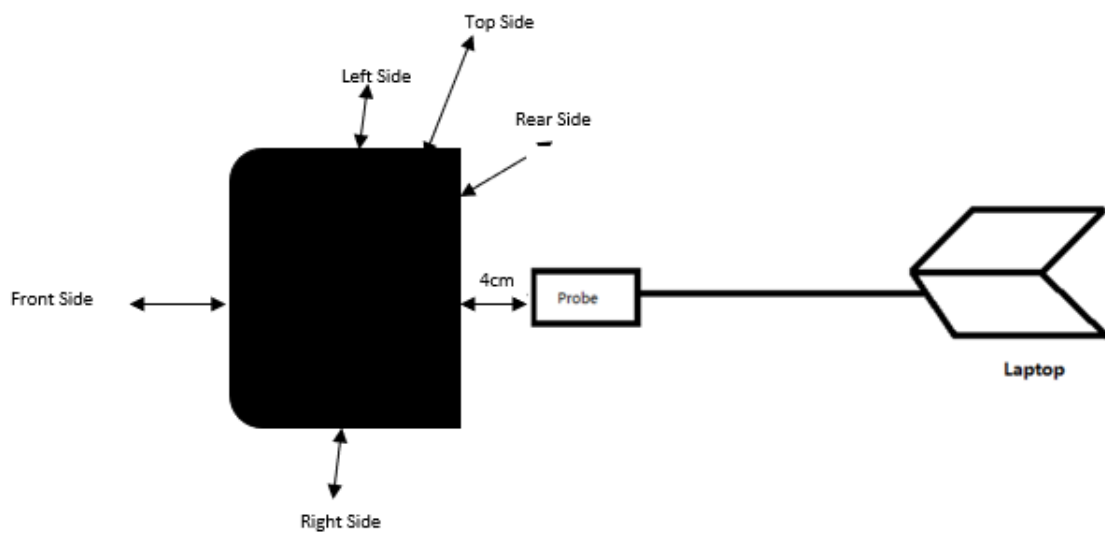
Test Setup Configuration



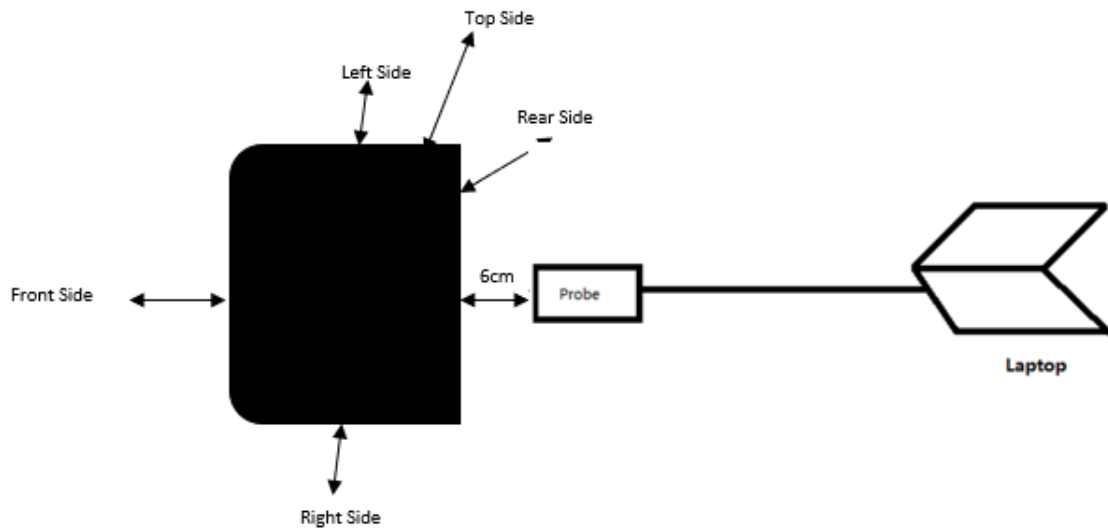
Test Distance: 0cm



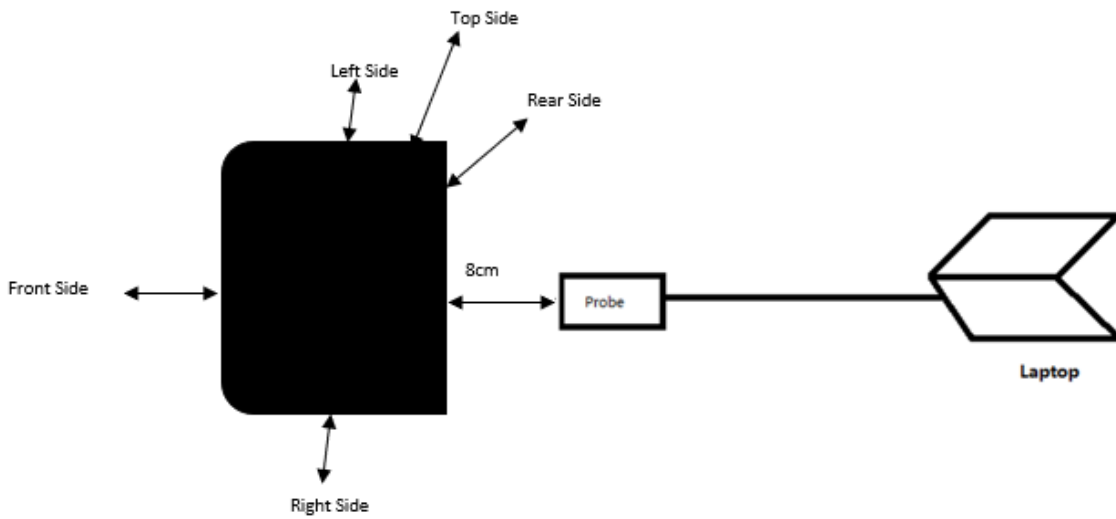
Test Distance: 2cm



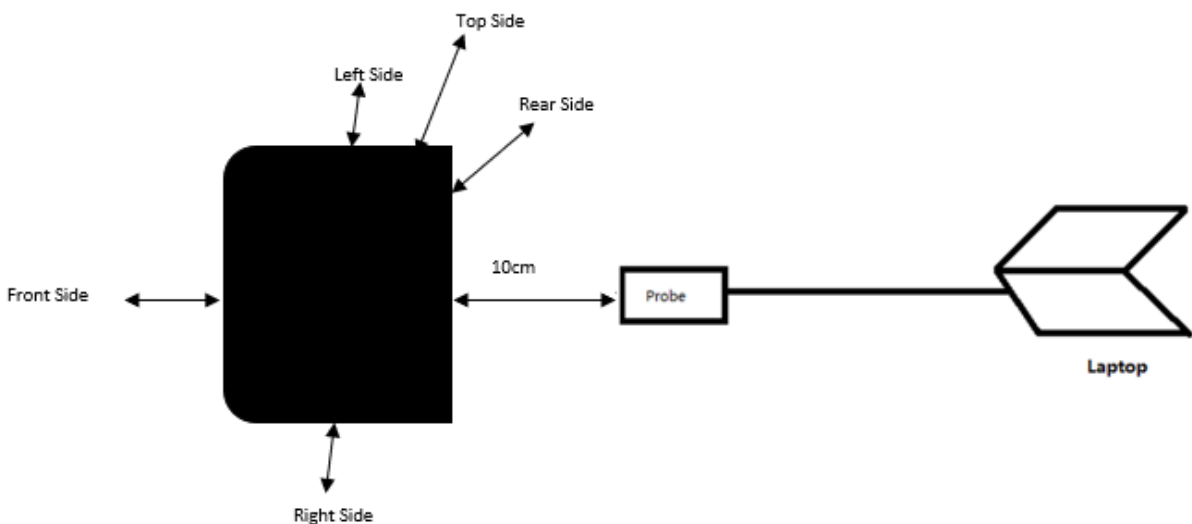
Test Distance: 4cm



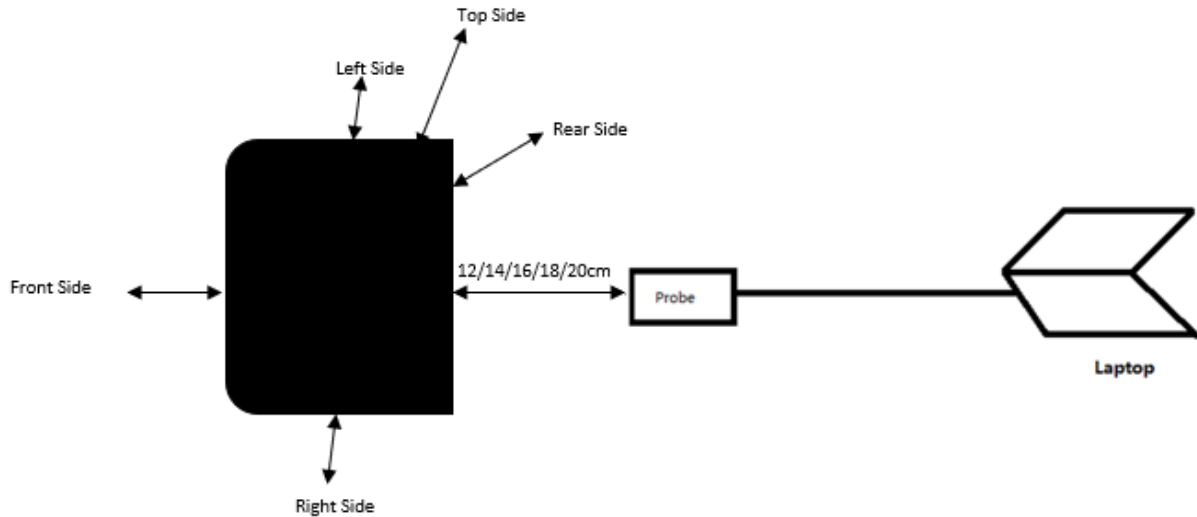
Test Distance: 6cm



Test Distance: 8cm



Test Distance: 10cm



Test Distance: 12, 14cm, 16cm, 18, 20cm

Note

- The RF exposure test is performed in the shield room.
- The test distance is between the edge of the charger and the the measurement probe.

The Model: 101XXXX(where XXXX can be digits 0000-9999 which represent different customers) is the same as the Model: 1015791 in hardware aspect. The difference in model number serves as marketing strategy.

Test Equipment List

Name of instrument	Model	Manufacturer	Cal. Date	Due Date
Electric and Magnetic Field Analyzer	EHP-200A	Narda	Jul 23, 2021	Jul 23, 2022

Support Equipment List

Description	Manufacturer	Detail
Type C USB Cable	Gotek	Unshielded, Length 25cm
Qi charging pad	Onn.	Model: ONB18WI701 Input: 5V, 2A(Max) Output: 10W (Max)
Adapter	XIAOMI	Input: 100-240Vac 50/60Hz Output: 5Vdc, 2.5A (Max)

Reference Limit:

Environmental evaluation and exposure limit according to FCC CFR 47 part 1, 1.1307(c) and (d), 1.1310

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation.

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3 – 1.34	614	1.63	(100) *	30

Note: * = Plane wave equivalent power density

Test Result: Pass

H-Field Strength at 0 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0742	0.0954	0.0963	0.0881	0.0486	0.0398	1.63
0.112-0.205	50% Battery Level	0.0696	0.0893	0.0900	0.0817	0.0446	0.0294	1.63
0.112-0.205	99% Battery Level	0.0470	0.0594	0.0595	0.0529	0.0275	0.0189	1.63
0.112-0.205	Stand-by	0.0032	0.0033	0.0035	0.0037	0.0052	0.0099	1.63

E-Field Strength at 0 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1743	0.2190	0.2162	0.1970	0.1122	0.0815	614
0.112-0.205	50% Battery Level	0.1888	0.2410	0.2456	0.2213	0.1085	0.0724	614
0.112-0.205	99% Battery Level	0.1025	0.1022	0.0889	0.0411	0.0154	0.0312	614
0.112-0.205	Stand-by	0.0729	0.0815	0.0785	0.0699	0.0490	0.0291	614

H-Field Strength at 2 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0737	0.0950	0.0956	0.0868	0.0475	0.0386	1.63
0.112-0.205	50% Battery Level	0.0687	0.0883	0.0891	0.0811	0.0436	0.0288	1.63
0.112-0.205	99% Battery Level	0.0462	0.0592	0.0582	0.0515	0.0269	0.0176	1.63
0.112-0.205	Stand-by	0.0029	0.0031	0.0033	0.0028	0.0048	0.0091	1.63

E-Field Strength at 2 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1732	0.2181	0.2154	0.1955	0.1106	0.0806	614
0.112-0.205	50% Battery Level	0.1878	0.2407	0.2448	0.2211	0.1068	0.0714	614
0.112-0.205	99% Battery Level	0.1008	0.1018	0.0871	0.0407	0.0153	0.0308	614
0.112-0.205	Stand-by	0.0708	0.0805	0.0780	0.0680	0.0476	0.0284	614

H-Field Strength at 4 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0735	0.0950	0.0961	0.0873	0.0479	0.0388	1.63
0.112-0.205	50% Battery Level	0.0685	0.0880	0.0894	0.0815	0.0433	0.0293	1.63
0.112-0.205	99% Battery Level	0.0467	0.0584	0.0586	0.0522	0.0262	0.0177	1.63
0.112-0.205	Stand-by	0.0023	0.0022	0.0029	0.0031	0.0041	0.0094	1.63

E-Field Strength at 4 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1739	0.2170	0.2158	0.1953	0.1114	0.0798	614
0.112-0.205	50% Battery Level	0.1881	0.2402	0.2448	0.2197	0.1070	0.0723	614
0.112-0.205	99% Battery Level	0.1008	0.1015	0.0886	0.0408	0.0150	0.0295	614
0.112-0.205	Stand-by	0.0724	0.0814	0.0772	0.0697	0.0470	0.0277	614

H-Field Strength at 6 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0730	0.0943	0.0956	0.0878	0.0482	0.0396	1.63
0.112-0.205	50% Battery Level	0.0690	0.0890	0.0894	0.0805	0.0444	0.0284	1.63
0.112-0.205	99% Battery Level	0.0469	0.0581	0.0591	0.0526	0.0262	0.0179	1.63
0.112-0.205	Stand-by	0.0026	0.0020	0.0031	0.0037	0.0049	0.0093	1.63

E-Field Strength at 6 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1724	0.2183	0.2138	0.1947	0.1118	0.0800	614
0.112-0.205	50% Battery Level	0.1867	0.2398	0.2441	0.2197	0.1081	0.0712	614
0.112-0.205	99% Battery Level	0.1008	0.1010	0.0888	0.0393	0.0146	0.0308	614
0.112-0.205	Stand-by	0.0708	0.0814	0.0762	0.0676	0.0488	0.0283	614

H-Field Strength at 8 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0736	0.0951	0.0961	0.0880	0.0483	0.0397	1.63
0.112-0.205	50% Battery Level	0.0684	0.0883	0.0894	0.0806	0.0439	0.0281	1.63
0.112-0.205	99% Battery Level	0.0458	0.0584	0.0585	0.0517	0.0268	0.0180	1.63
0.112-0.205	Stand-by	0.0026	0.0028	0.0024	0.0030	0.0045	0.0090	1.63

E-Field Strength at 8 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1726	0.2175	0.2157	0.1967	0.1101	0.0796	614
0.112-0.205	50% Battery Level	0.1884	0.2392	0.2451	0.2200	0.1061	0.0703	614
0.112-0.205	99% Battery Level	0.1021	0.1004	0.0879	0.0394	0.0140	0.0305	614
0.112-0.205	Stand-by	0.0718	0.0801	0.0761	0.0689	0.0485	0.0283	614

H-Field Strength at 10 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0733	0.0947	0.0960	0.0869	0.0484	0.0384	1.63
0.112-0.205	50% Battery Level	0.0694	0.0888	0.0889	0.0804	0.0435	0.0282	1.63
0.112-0.205	99% Battery Level	0.0464	0.0591	0.0593	0.0521	0.0265	0.0175	1.63
0.112-0.205	Stand-by	0.0025	0.0032	0.0030	0.0030	0.0051	0.0094	1.63

E-Field Strength at 10 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1738	0.2175	0.2146	0.1960	0.1116	0.0808	614
0.112-0.205	50% Battery Level	0.1873	0.2387	0.2441	0.2211	0.1084	0.0701	614
0.112-0.205	99% Battery Level	0.1002	0.1017	0.0873	0.0401	0.0132	0.0311	614
0.112-0.205	Stand-by	0.0706	0.0808	0.0773	0.0683	0.0484	0.0290	614

H-Field Strength at 12 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0732	0.0945	0.0959	0.0879	0.0481	0.0388	1.63
0.112-0.205	50% Battery Level	0.0694	0.0891	0.0900	0.0816	0.0440	0.0291	1.63
0.112-0.205	99% Battery Level	0.0459	0.0586	0.0592	0.0520	0.0274	0.0184	1.63
0.112-0.205	Stand-by	0.0032	0.0031	0.0033	0.0029	0.0049	0.0085	1.63

E-Field Strength at 12 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1741	0.2172	0.2150	0.1949	0.1109	0.0797	614
0.112-0.205	50% Battery Level	0.1876	0.2400	0.2435	0.2195	0.1068	0.0717	614
0.112-0.205	99% Battery Level	0.1024	0.1012	0.0870	0.0389	0.0140	0.0291	614
0.112-0.205	Stand-by	0.0722	0.0802	0.0770	0.0691	0.0470	0.0281	614

H-Field Strength at 14 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0735	0.0943	0.0954	0.0873	0.0475	0.0398	1.63
0.112-0.205	50% Battery Level	0.0686	0.0880	0.0897	0.0811	0.0432	0.0293	1.63
0.112-0.205	99% Battery Level	0.0461	0.0581	0.0595	0.0517	0.0271	0.0179	1.63
0.112-0.205	Stand-by	0.0024	0.0024	0.0033	0.0029	0.0052	0.0087	1.63

E-Field Strength at 14 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1737	0.2181	0.2139	0.1957	0.1119	0.0803	614
0.112-0.205	50% Battery Level	0.1868	0.2392	0.2434	0.2199	0.1070	0.0713	614
0.112-0.205	99% Battery Level	0.1013	0.1009	0.0879	0.0402	0.0147	0.0294	614
0.112-0.205	Stand-by	0.0726	0.0806	0.0784	0.0696	0.0488	0.0287	614

H-Field Strength at 16 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0737	0.0943	0.0950	0.0870	0.0484	0.0398	1.63
0.112-0.205	50% Battery Level	0.0688	0.0891	0.0898	0.0814	0.0438	0.0285	1.63
0.112-0.205	99% Battery Level	0.0469	0.0582	0.0588	0.0527	0.0271	0.0188	1.63
0.112-0.205	Stand-by	0.0029	0.0020	0.0023	0.0027	0.0048	0.0098	1.63

E-Field Strength at 16 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1736	0.2179	0.2153	0.1963	0.1121	0.0796	614
0.112-0.205	50% Battery Level	0.1878	0.2390	0.2444	0.2194	0.1070	0.0702	614
0.112-0.205	99% Battery Level	0.1002	0.1000	0.0875	0.0405	0.0138	0.0300	614
0.112-0.205	Stand-by	0.0708	0.0808	0.0781	0.0677	0.0468	0.0284	614

H-Field Strength at 18 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0737	0.0952	0.0949	0.0880	0.0473	0.0386	1.63
0.112-0.205	50% Battery Level	0.0696	0.0885	0.0899	0.0812	0.0433	0.0289	1.63
0.112-0.205	99% Battery Level	0.0460	0.0592	0.0595	0.0520	0.0273	0.0182	1.63
0.112-0.205	Stand-by	0.0022	0.0023	0.0027	0.0026	0.0040	0.0098	1.63

E-Field Strength at 18 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1740	0.2185	0.2155	0.1951	0.1115	0.0811	614
0.112-0.205	50% Battery Level	0.1876	0.2396	0.2439	0.2193	0.1069	0.0702	614
0.112-0.205	99% Battery Level	0.1017	0.0999	0.0871	0.0397	0.0131	0.0297	614
0.112-0.205	Stand-by	0.0729	0.0798	0.0769	0.0679	0.0470	0.0272	614

H-Field Strength at 20 cm surrounding the EUT

Frequency Range (MHz)	EUT Operation mode	Probe Position Front (A/m)	Probe Position Rear (A/m)	Probe Position Left (A/m)	Probe Position Right (A/m)	Probe Position Top (A/m)	Probe Position Bottom (A/m)	Limits (A/m)
0.112-0.205	1% Battery Level	0.0739	0.0950	0.0963	0.0875	0.0485	0.0397	1.63
0.112-0.205	50% Battery Level	0.0695	0.0892	0.0886	0.0806	0.0441	0.0285	1.63
0.112-0.205	99% Battery Level	0.0460	0.0583	0.0589	0.0516	0.0272	0.0181	1.63
0.112-0.205	Stand-by	0.0027	0.0028	0.0032	0.0034	0.0047	0.0091	1.63

E-Field Strength at 20 cm surrounding the EUT

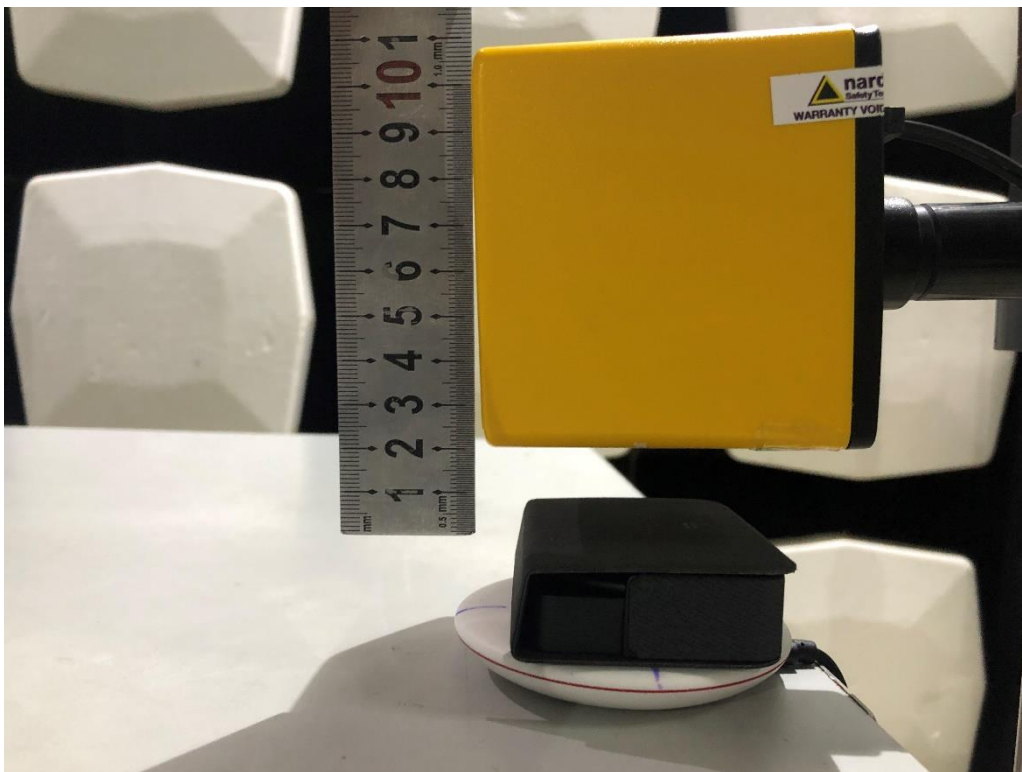
Frequency Range (MHz)	EUT Operation mode	Probe Position Front (V/m)	Probe Position Rear (V/m)	Probe Position Left (V/m)	Probe Position Right (V/m)	Probe Position Top (V/m)	Probe Position Bottom (V/m)	Limits (V/m)
0.112-0.205	1% Battery Level	0.1743	0.2167	0.2140	0.1957	0.1104	0.0807	614
0.112-0.205	50% Battery Level	0.1888	0.2391	0.2451	0.2210	0.1081	0.0715	614
0.112-0.205	99% Battery Level	0.1019	0.1012	0.0878	0.0395	0.0153	0.0294	614
0.112-0.205	Stand-by	0.0725	0.0801	0.0775	0.0693	0.0488	0.0285	614

Configuration photo of the test:

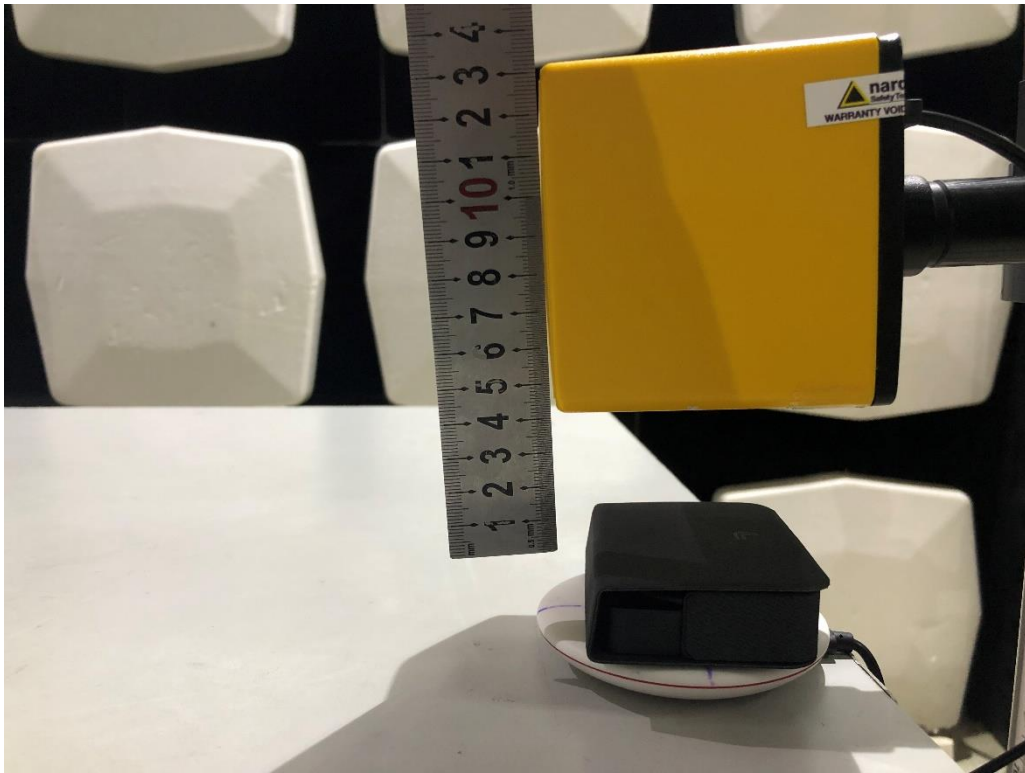
E-Field and H-Field Test Setup photos



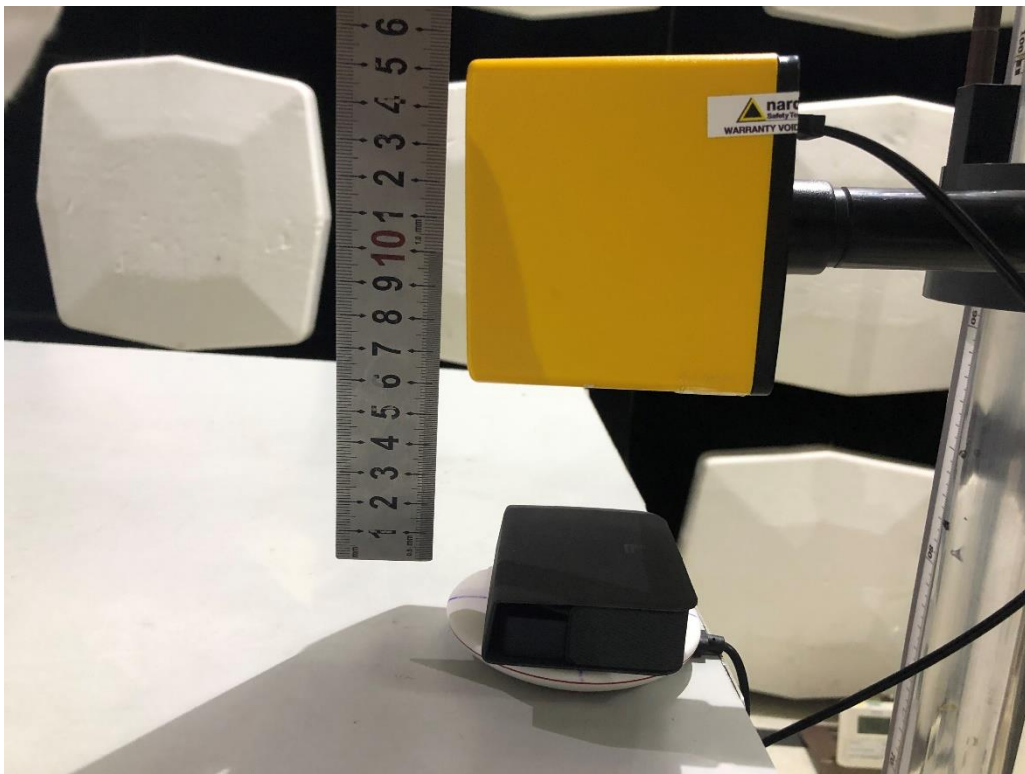
Test Distance: 0 cm



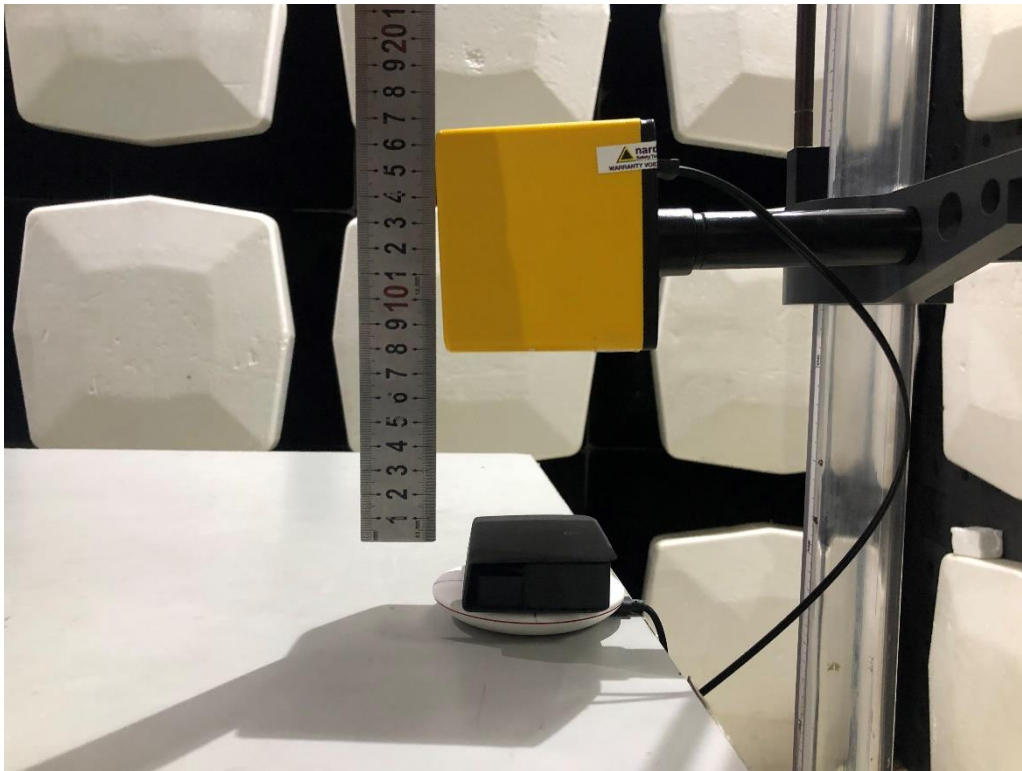
Test Distance: 2 cm



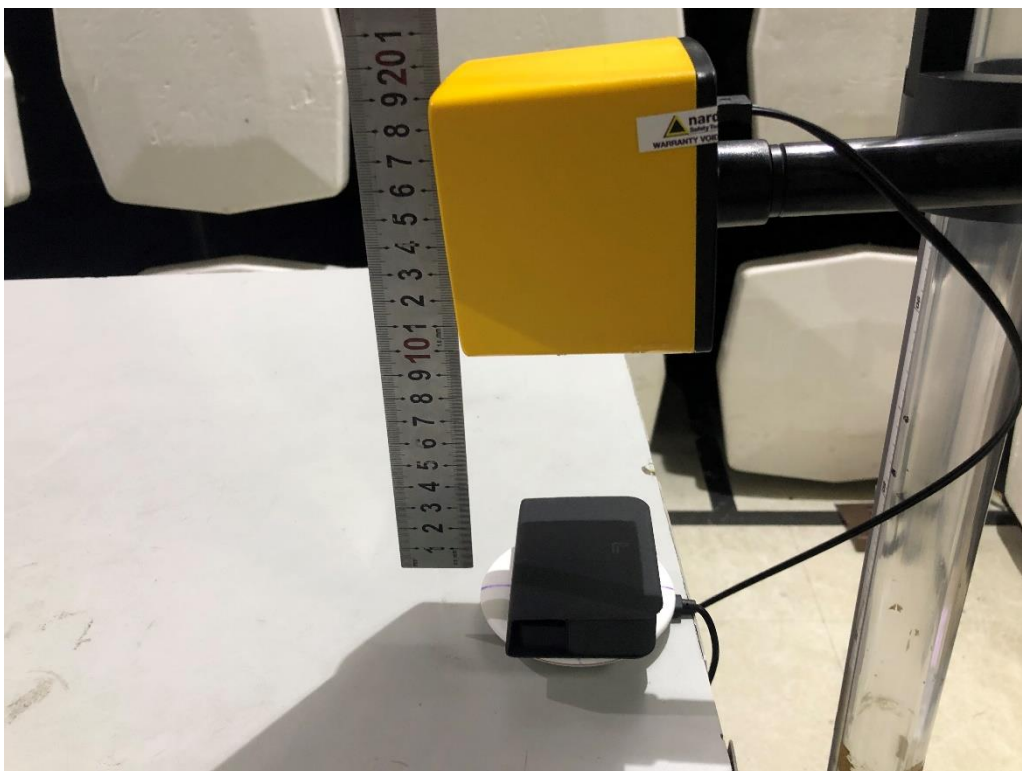
Test Distance: 4 cm



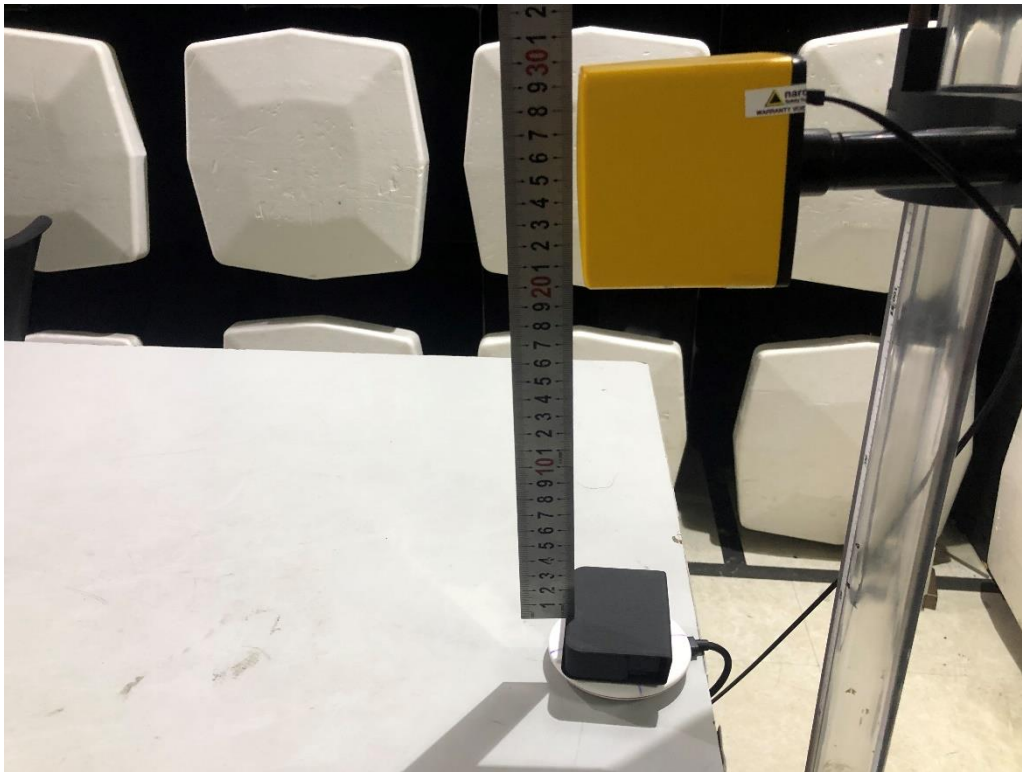
Test Distance: 6 cm



Test Distance: 8 cm



Test Distance: 10 cm



Test Distance: 20 cm

***** End of Report*****