

Test Report

Report No. : MTi250521018-0101E1

Date of Issue : 2025-07-02

Applicant : ADATA Technology Co., Ltd.

Product : Rechargeable Li-Polymer Magnetic Power Bank

Model(s) : SR800 MAGNETIC

IC : 10809A-SR800

Shenzhen Microtest Co., Ltd.



Test Result Certification

Applicant	ADATA Technology Co., Ltd.
Applicant Address	25F., No. 533, Tanmei St., Neihu Dist., Taipei City 114 , Taiwan
Manufacturer	ADATA Technology Co., Ltd.
Manufacturer Address	25F., No. 533, Tanmei St., Neihu Dist., Taipei City 114 , Taiwan

Product description

Product name	Rechargeable Li-Polymer Magnetic Power Bank
Trademark	SR800 MAGNETIC
Model name	SR800 MAGNETIC
Series Model(s)	N/A

Testing Information

Date of test	2025-06-09 to 2025-06-12	
Test Result	Pass	
Prepared by:	Letter Lan	
Reviewed by:	David Lee	
Approved by:	Lewis Lian	

1 General Description

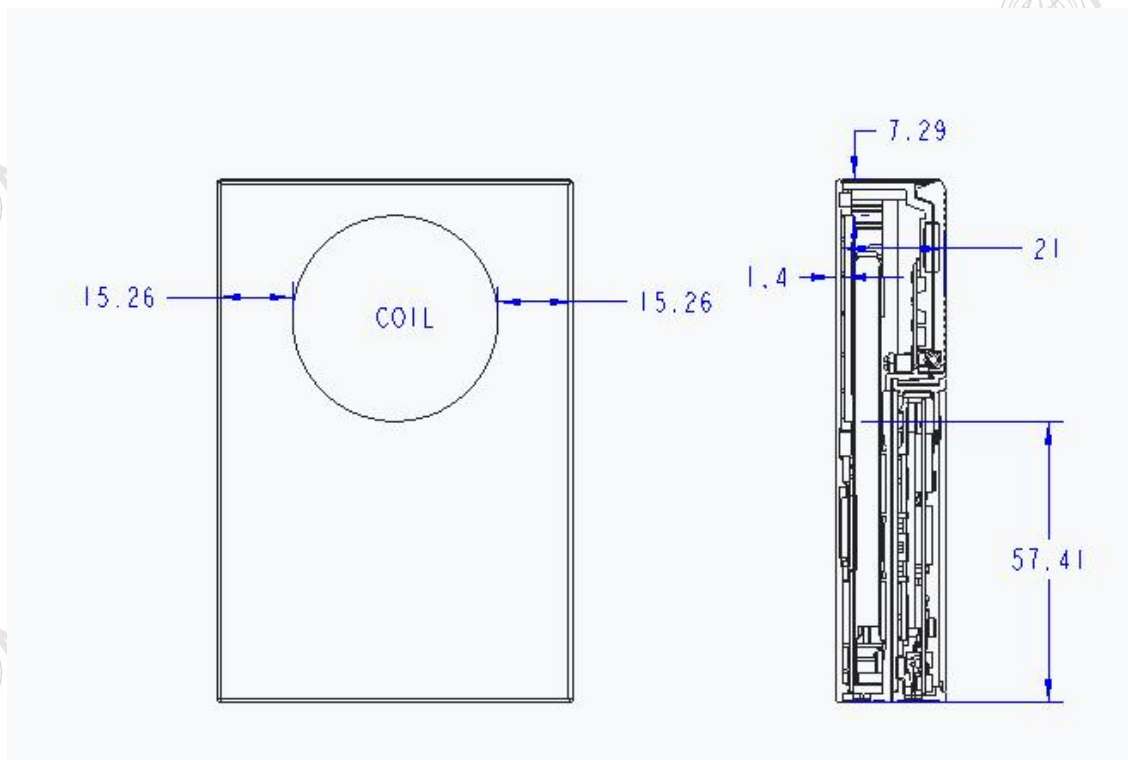
1.1 Description of the EUT

Product name:	Rechargeable Li-Polymer Magnetic Power Bank
Model name:	SR800 MAGNETIC
Series Model:	N/A
Model difference:	N/A
Electrical rating:	Power supply: Input: USB-C:5V/3A,9V/2A Max (máximo de) 18W Output: USB-C 5V/3A,9V/2.22A Max (máximo de) 20W Wireless Charge:5W/7.5W/10W/15W Output Salida máxima maximum output: USB-C + Wireless Output: DC5V/3A, 15W Li-ion Battery: Rated Voltage: 3.87V Rated Capacity:5000mAh
Accessories:	Type-C to Type-C cable 1m*1
Hardware version:	v1.1
Software version:	Z4
Test sample(s) number:	MTi250521018-0101S1001
EUT S/N:	N/A
RF specification:	
Operation frequency:	115-205kHz
Modulation type:	ASK
Antenna(s) type:	Coil

1.2 Wireless power transfer system description

Antenna Description:	
Antenna number:	one primary coil
Antenna type:	Coil Antenna
Input inductance:	Coil1: 6.5uH±10%
Method(s) of shielding	Passive shielding
Location(s) – coli to the outer surface of the enclosure(s)	Coil 1(Phone): Coil 1 to Top: 7.29mm Coil 1 to Left: 15.26mm Coil 1 to Right: 15.26mm Coil 1 to Front: 1.4mm Coil 1 to Rear: 21mm Coil 1 to Bottom: 57.41mm Note: See diagram on next page
Material of enclosure(s)	Plastic
Number of turns:	10turns
Coil diameter:	Outer radius: 43.3±1mm Inner radius: 20±1mm
Excitation levels	
excitation levels:	1.07A

Coli to the outer surface of the enclosure(s)



1.3 Description of test modes

All the test modes were carried out with the EUT in normal operation, the final test mode of the EUT was the worst test mode for emission test, which was shown in this report and defined as:

No.	Emission test modes
exposure from the WPT system during power transfer	
Mode 1	Charging mode: Wireless output (15W)
direct exposure from the WPT source	
Mode 2	Standby mode: not with client
Mode 3	Working in charging mode, then removing the client: Wireless output (15W)

Note: All test modes have been tested at all various battery levels, the test data of the report is only shown the worst mode (clients with 50% battery).

1.4 Description of support units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Support equipment list					
Description	Model	Serial No.	Firmware Version	Maximum charging power	Manufacturer
HUAWEI QUICK CHARGE	HW-200200ZP1	JN67LSN7N03451	V1.0	88W	HUAWEI
Moible Phone	Find X3	Bf6e6b3b	Android 13	15W	OPPO
Support cable list					
Description	Length (m)	From	To		
/	/	/	/		

2 Measurement uncertainty

Parameter	Expanded Uncertainty
Electric field measurements(3kHz~10MHz)	$\pm 14.8\%$
Electric field measurements(3kHz~10MHz)	$\pm 17.5\%$

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

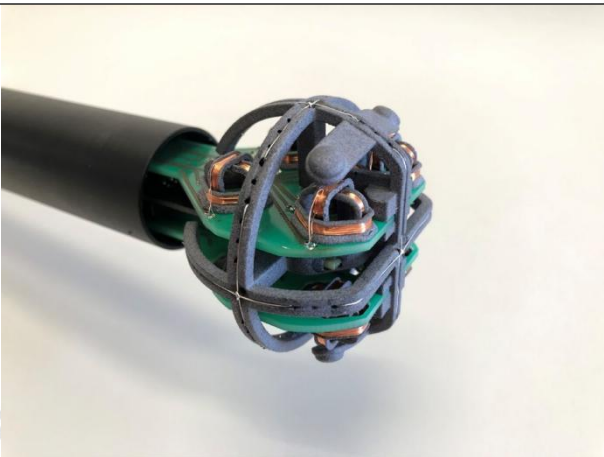
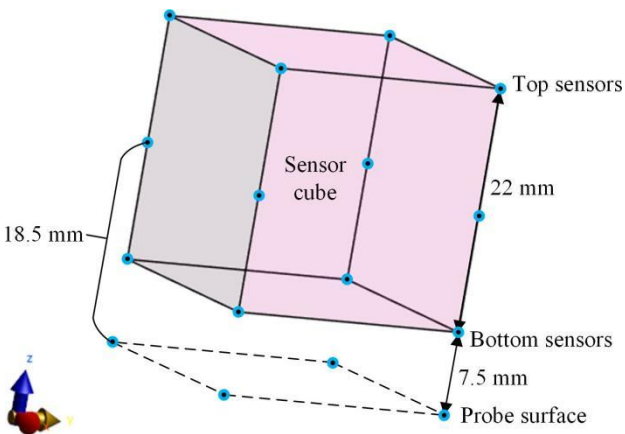
3 Test facilities and accreditations

3.1 Test laboratory

Test laboratory:	Shenzhen Microtest Co., Ltd.
Test site location:	101, No.7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86-755)88850135
Fax:	(86-755)88850136
CNAS Registration No.:	CNAS L5868
FCC Registration No.:	448573
IC Registration No.:	21760
CABID:	CN0093

4 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
MTI-E143	Near-field Electric and Electric Field Sensor System	SPEAG	MAGPy-8H3D+ED3 V2	3101	2024/03/12	2027/03/11
Test software: MAGPY.exe V2.6						

Test equipment: MAGPy-8H3D+ED3	
Diameter	60mm
1.8 isotropic H-field sensors	Concentric loops of 1cm ² arranged at the corner of a cube of 22mm side length
1 isotropic E-field sensor	Orthogonal dipole/monopole (arm length:50mm)
Measurement center	18.5mm from the probe tip
Dimensions	110*635*35mm (MAGPy-8H3D+E3D V2 & MAGPy-DAS V2)
 	

Probe parameters:

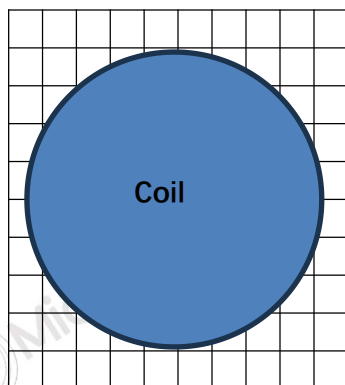
	Sensitivity [A/m or V/m]	Ampl. flatness [dB]	Linear range [A/m or V/m]	Linearity error [dB]	Sensor size [mm]	Isotropy [dB]
SPR-002 issue 2	H: ≤1 A/m E: ≤1 V/m	≤1	defined as a function of RL	≤0.5	≤ $d_{meas}/1.7^a$	≤1
MAGPy probe V2	H: 0.1 A/m E: 0.08 V/m	<0.2 (typ.)	H: 0.1–3200 A/m E: 0.1–2000 V/m	H: <0.2 (typ.) E: <0.5 (typ.)	H: 10 mm E: 50 mm	<0.5 (typ.)

5 Maximum Field Strength

5.1 locating the maximum Field Strength (MFS)

the coil parameters of the EUT:

1. Outer diameter: 43.3 ± 1 mm Inner diameter: 20 ± 1 mm Number of turns: 10
2. A grid of 5 mm by 5 mm is used due to the size of the coil of EUT and the test probe
3. The probe is used to measure the E-field & H-Field at the distance $z = 85$ mm from the surface of XY, XZ and YZ plane of the EUT. Measure step is 5 mm



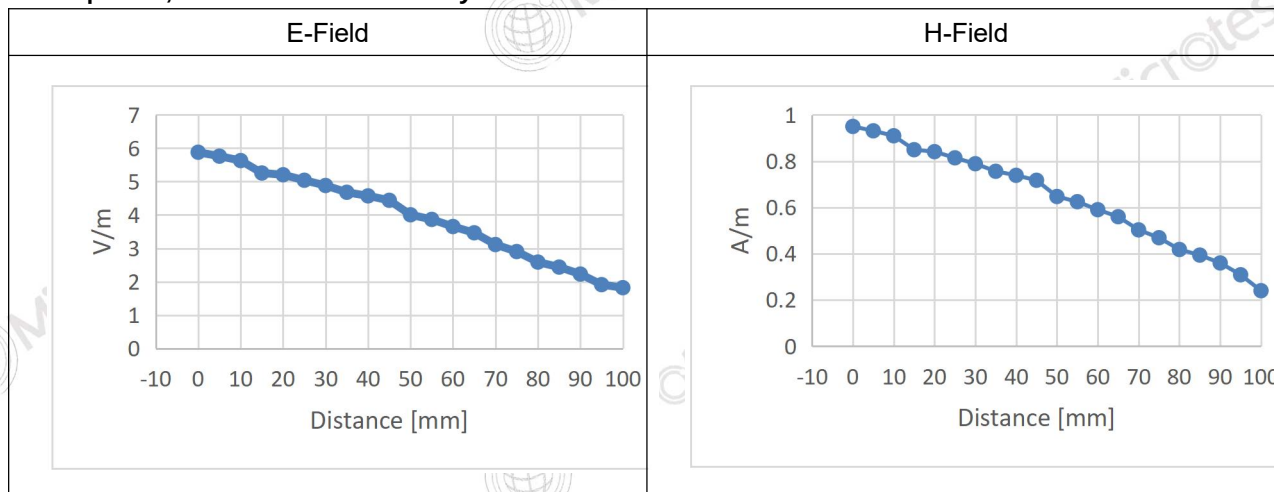
5.2 Test result

Note 1: The samples are measured where $d_{\text{meas}} \geq 1.7D_p$ (8.5cm) (Equation 1 in RSS-102.NS.MEAS) is met.

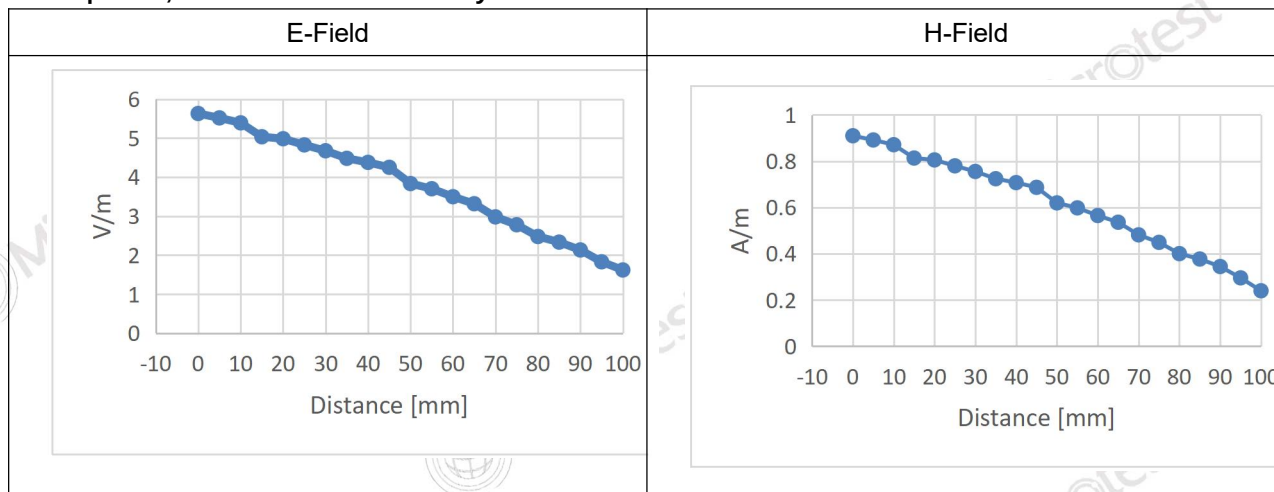
Note 2: Tested the top side using 1%, 50%, and 99% of the client's battery level. Then use the worst battery level configuration to test the rest side.

Wireless output Phone(15W) (115-205kHz): The MFS of the E-field is located at 0mm from the center of the coil and at the top side. (clients with 1% battery level)

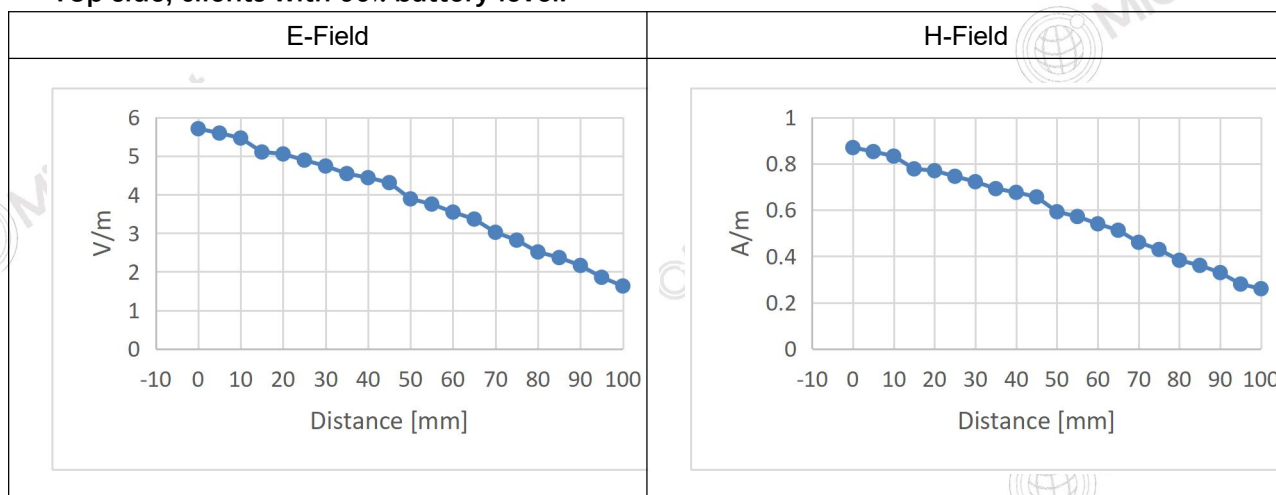
Top side, clients with 1% battery level:



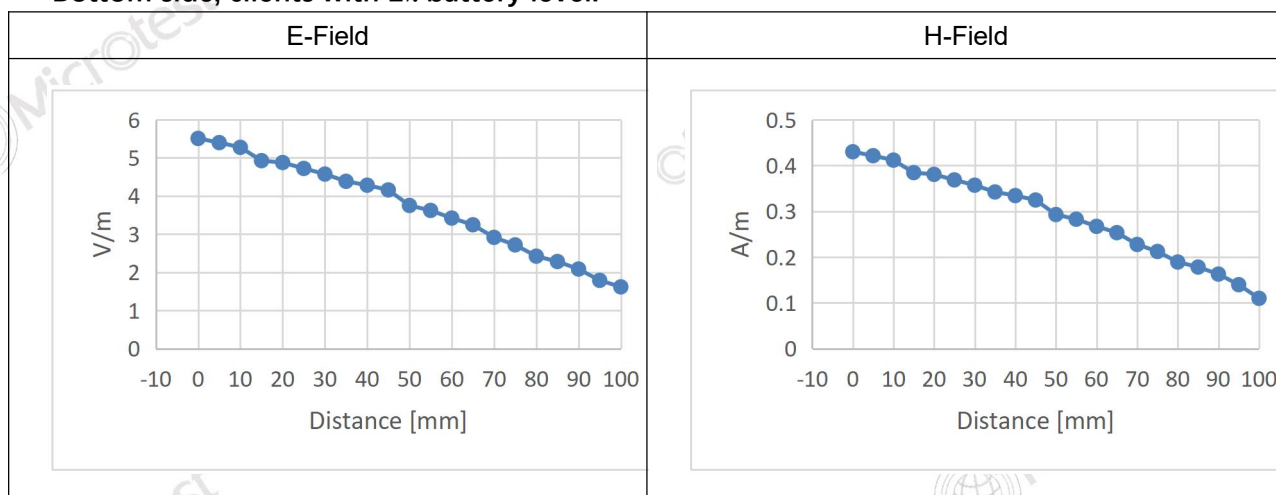
Top side, clients with 50% battery level:



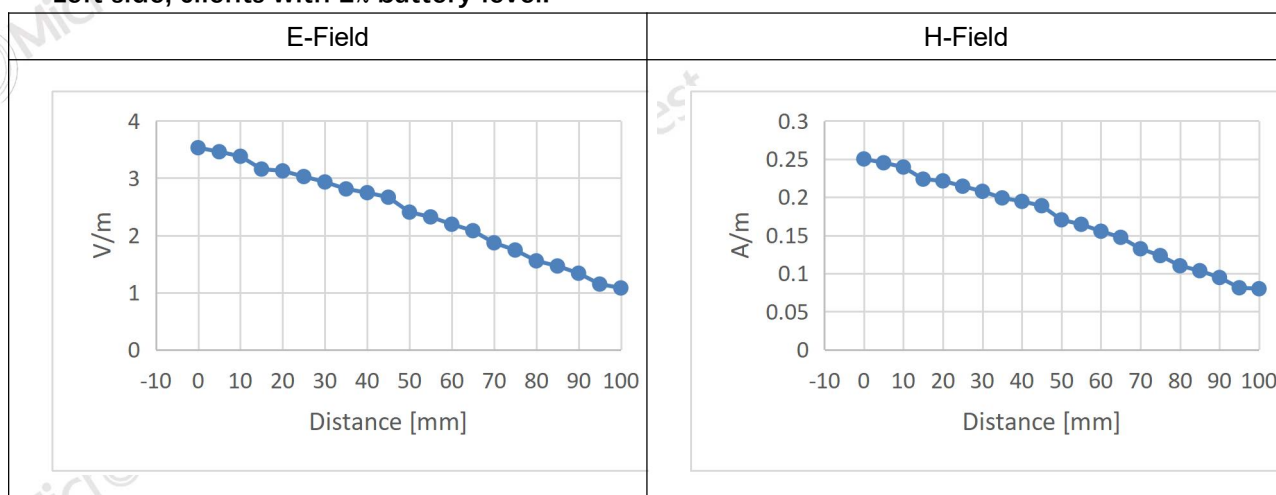
Top side, clients with 99% battery level:



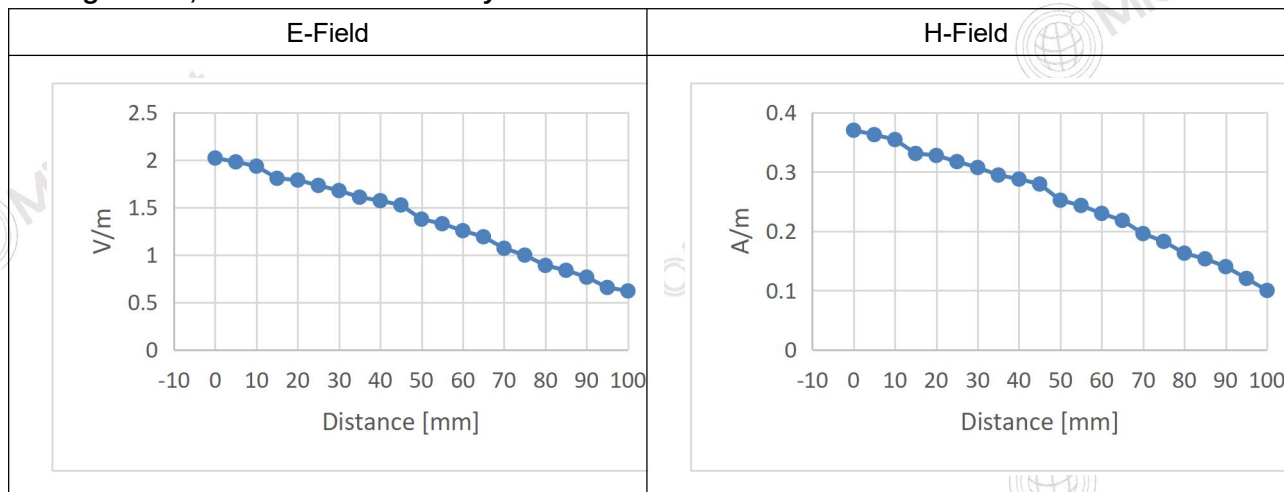
Bottom side, clients with 1% battery level:



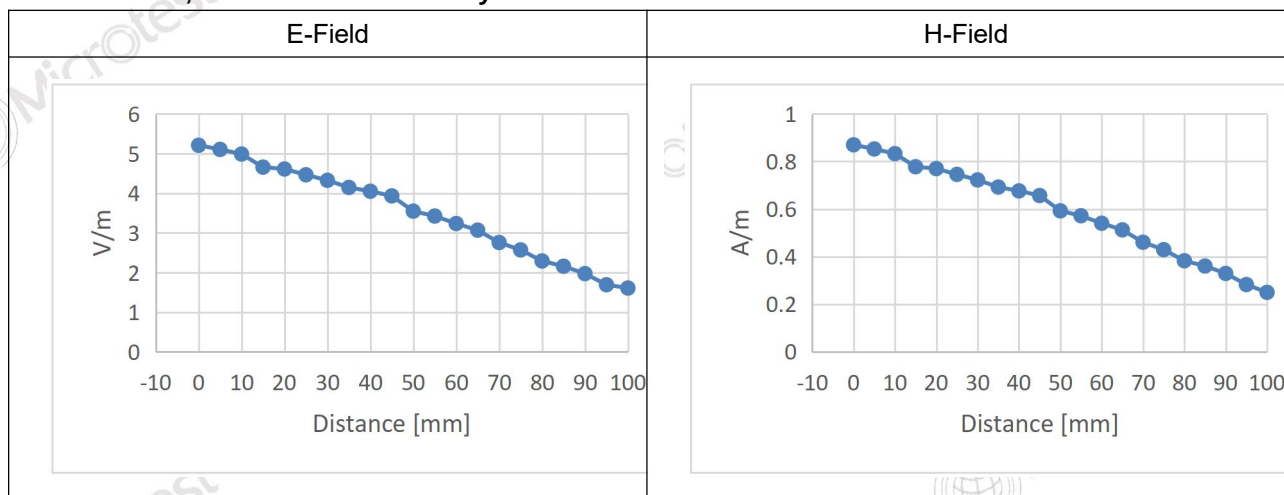
Left side, clients with 1% battery level:



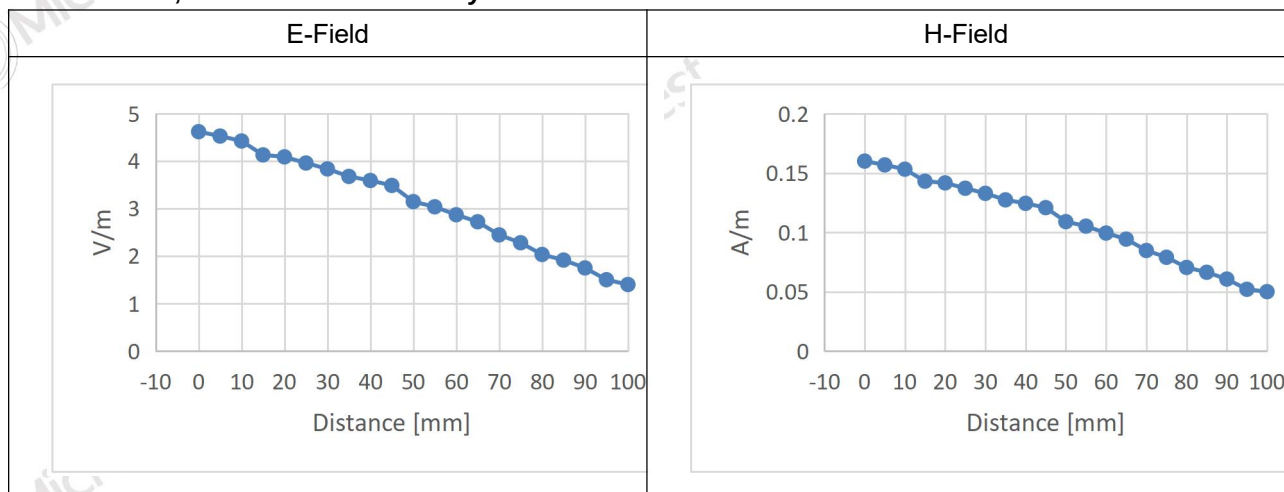
Right side, clients with 1% battery level:



Front side, clients with 1% battery level:

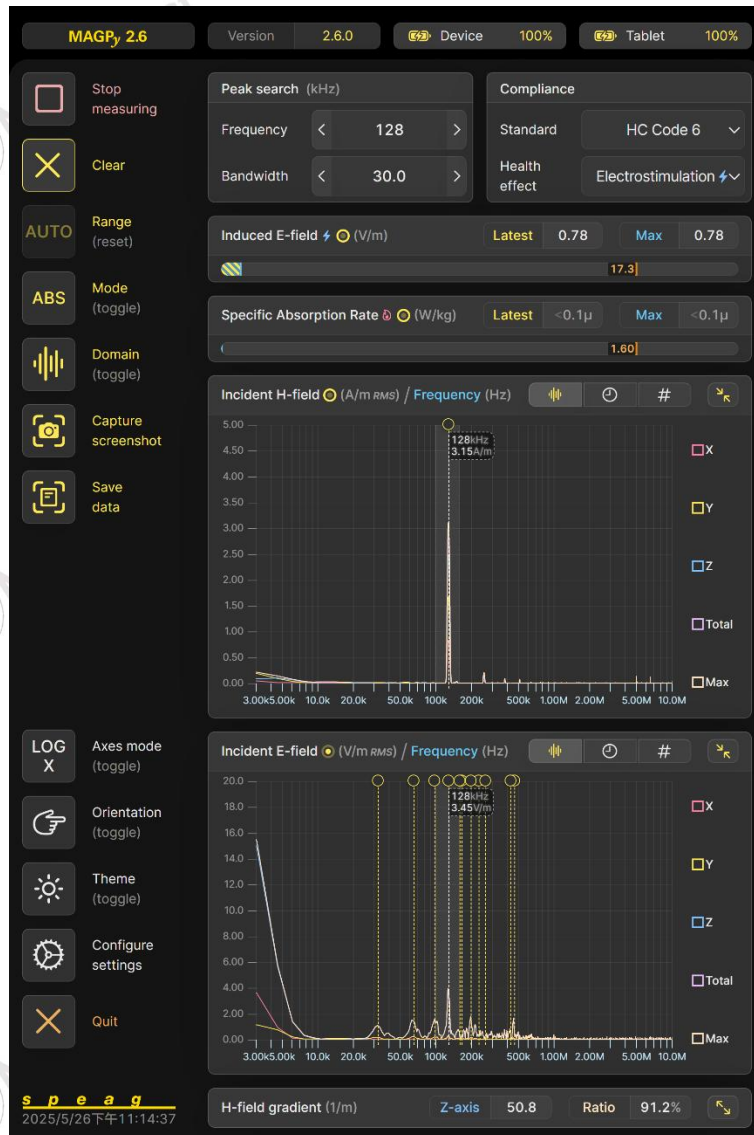


Rear side, clients with 1% battery level:



5.3 Spectrum test plot

15W, 128kHz:



6 Curve-Fitting analysis of E-field

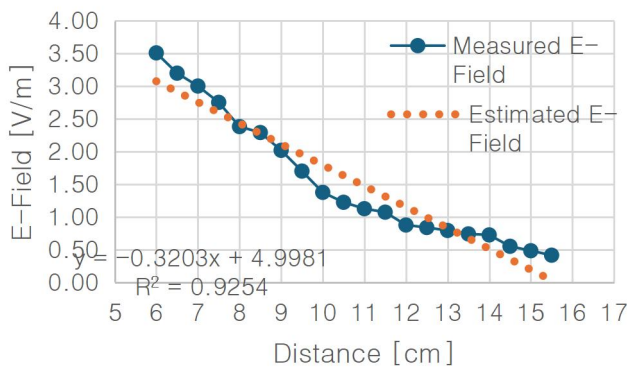
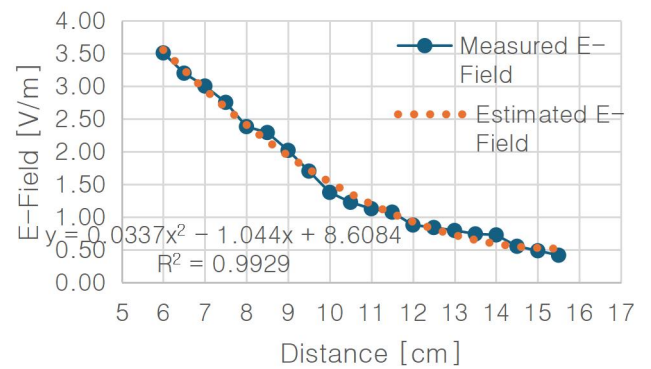
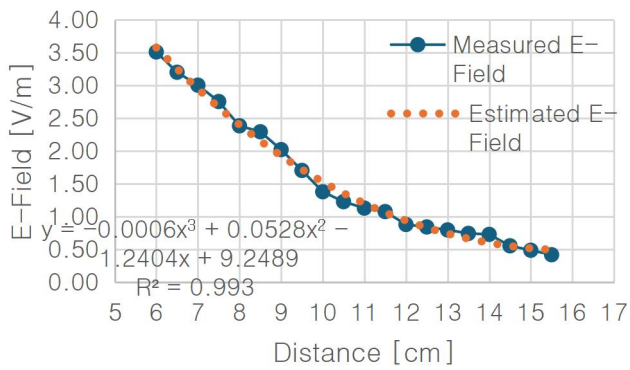
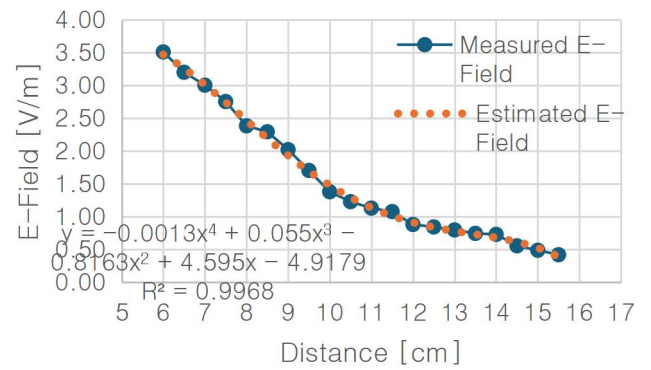
Test mode 1: Wireless output (15W), clients with 1% battery)

Note: MFS is located, the 20 measurement points at varying (z-direction) that be used to build the predictive model.

Data collecting:

Measured distance (cm)	E-field strength (V/m)
6	3.51
6.5	3.20
7	3.00
7.5	2.75
8	2.38
8.5	2.29
9	2.02
9.5	1.70
10	1.38
10.5	1.23
11	1.13
11.5	1.07
12	0.88
12.5	0.84
13	0.79
13.5	0.74
14	0.73
14.5	0.55
15	0.48
15.5	0.42
Calculate at 0cm	8.61

Performing Curve-fitting :

Model 1: Linear Regression

Model 2: Quadratic Regression

Model 3: Cubic Regression

Model 4: 4th Order Regression


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Analyzing the Results

Parameter	Linear Regression Model	Quadratic Regression Model	Cubic Regression Model	4 th Order Regression Model
Multiple R	0.962	0.996	0.997	0.998
R Square	0.925	0.993	0.993	0.997
Adjusted R Square	0.921	0.992	0.992	0.996
Standard Error (S)	0.276	0.088	0.090	0.062
Number of data point used	20	20	20	20
Estimated electric field strength at touch position [V/m]	5.00	8.61	9.25	-4.92

As shown in table above, the **Quadratic Regression Model** produced the Lowest standard error, and is below the minimum standard error threshold of 15% that ISED prescribes. There results indicate that the prediction value presents the lowest variance between the lower and upper bounds (7.99V/m to 9.23V/m). The regression analysis utilized a confidence level of 95%, which is the minimum value that should be used by applicants.

Dued to the **4th Order Regression Model** of the minimum standard error threshold of 15% that ISED prescribes the lower and upper bounds (-12.24V/m to 2.40 V/m), the lower and upper bounds of the 4th Order regression model does not be below the applicable limits. ISED notes that significantdifferences between the upper and lower bounds typically indicatethat the model is not suitable for regression analysis.

Note1: the **4th Order Regression Model** and higher order models were not selected as evidence of overfit were shown by the lower bounds.

Note2: the lower bound and upper bound calculated by the model.

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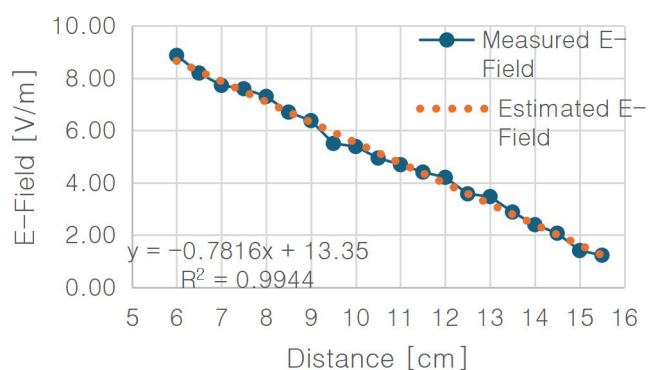
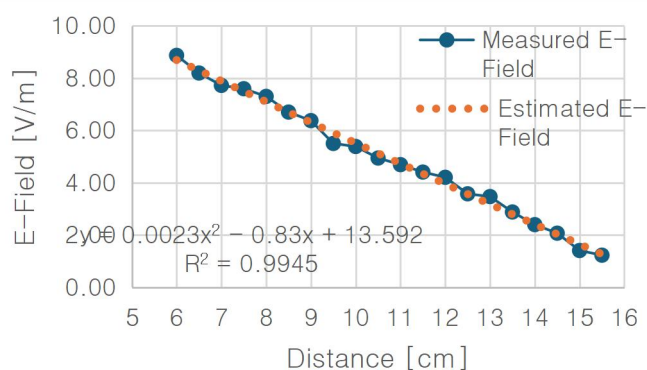
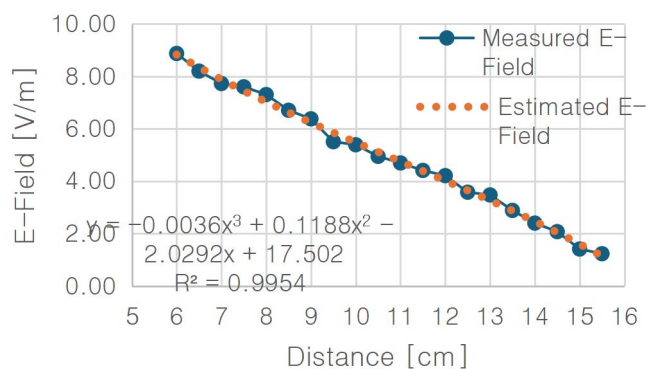
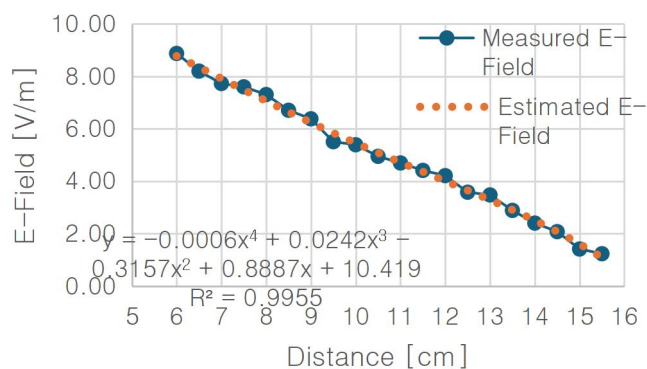
Test mode 2: Standby mode (not with client) (115-205kHz)

Note: MFS is located, the 20 measurement points at varying (z-direction) that be used to build the predictive model.

Data collecting:

Measured distance (cm)	E-field strength (Coil1) (V/m)
6	8.87
6.5	8.20
7	7.72
7.5	7.60
8	7.30
8.5	6.70
9	6.38
9.5	5.50
10	5.39
10.5	4.95
11	4.69
11.5	4.41
12	4.21
12.5	3.58
13	3.47
13.5	2.88
14	2.40
14.5	2.07
15	1.41
15.5	1.23
Calculate at 0cm	17.50

Performing Curve-fitting :

Model 1: Linear Regression

Model 2: Quadratic Regression

Model 3: Cubic Regression

Model 4: 4th Order Regression


Analyzing the Results

Parameter	Linear Regression Model	Quadratic Regression Model	Cubic Regression Model	4 th Order Regression Model
Multiple R	0.997	0.997	0.998	0.998
R Square	0.994	0.994	0.995	0.996
Adjusted R Square	0.994	0.994	0.994	0.994
Standard Error (S)	0.178	0.182	0.172	0.174
Number of data point used	20	20	20	20
Estimated electric field strength at touch position [V/m]	13.35	13.59	17.50	10.42

As shown in table above, the **Cubic Regression Model** produced the Lowest standard error, and is below the minimum standard error threshold of 15% that ISED prescribes. There results indicate that the prediction value presents the lowest variance between the lower and upper bounds (12.59V/m to 22.41V/m). The regression analysis utilized a confidence level of 95%, which is the minimum value that should be used by applicants.

Dued to the **4th Order Regression Model** of the minimum standard error threshold of 15% that ISED prescribes the lower and upper bounds (-10.07 V/m to 30.90 V/m), the lower and upper bounds of the 4th Order regression model does not be below the applicable limits. ISED notes that significantdifferences between the upper and lower bounds typically indicatethat the model is not suitable for regression analysis.

Note1: the **Cubic Regression Model** were not selected as evidence of overfit were shown by the increase of S.

Note2: the **4th Order Regression Model** and higher order models were not selected as evidence of overfit were shown by the lower bounds.

Note3: the lower bound and upper bound calculated by the model.

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Test mode 3: Wireless output Phone(15W) , clients with 1% battery)

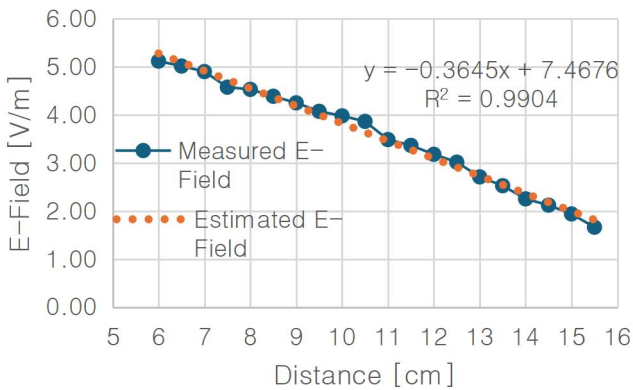
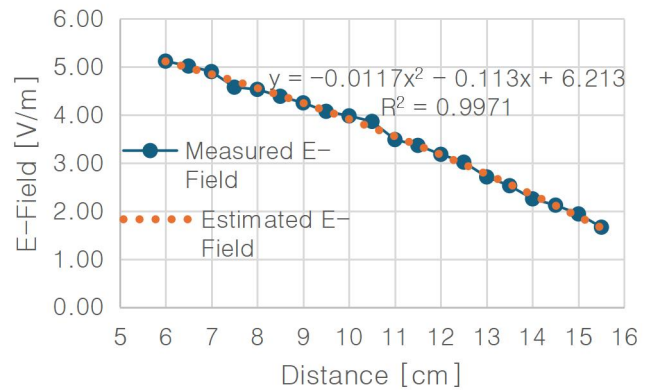
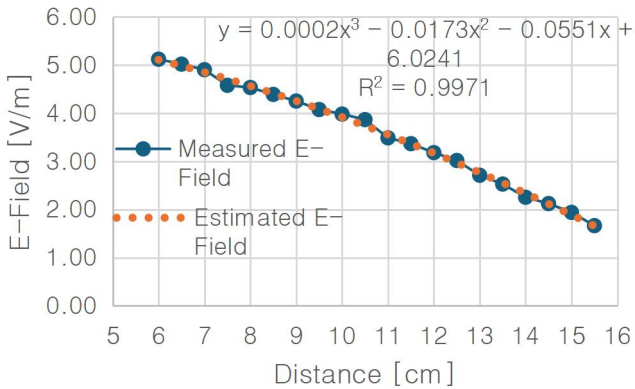
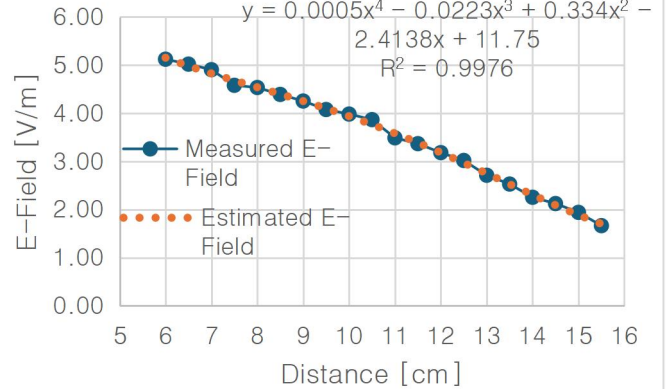
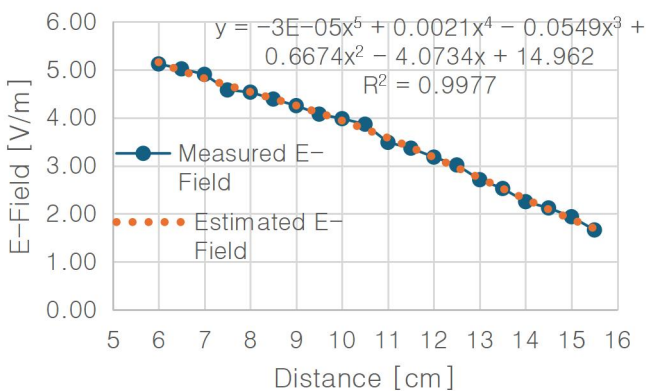
Note: MFS is located, the 20 measurement points at varying (z-direction) that be used to build the predictive model.

Data collecting:

Measured distance (cm)	E-field strength (Coil1) (V/m)
6	5.12
6.5	5.02
7	4.90
7.5	4.58
8	4.53
8.5	4.39
9	4.25
9.5	4.08
10	3.98
10.5	3.87
11	3.49
11.5	3.37
12	3.18
12.5	3.02
13	2.71
13.5	2.53
14	2.25
14.5	2.12
15	1.94
15.5	1.66
Calculate at 0cm	11.75



Performing Curve-fitting

Model 1: Linear Regression

Model 2: Quadratic Regression

Model 3: Cubic Regression

Model 4: 4th Order Regression

Model 5: 5th Order Regression


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Analyzing the Results

Parameter	Linear Regression Model	Quadratic Regression Model	Cubic Regression Model	4th Order Regression Model	5th Order Regression Model
Multiple R	0.994	0.997	0.997	0.997	0.998
R Square	0.993	0.994	0.994	0.994	0.996
Adjusted R Square	0.992	0.993	0.993	0.993	0.995
Standard Error (S)	0.148	0.072	0.071	0.073	0.064
Number of data point used	20	20	20	20	20
Estimated electric field strength at touch position [V/m]	8.60	4.86	4.60	4.31	12.63

As shown in table above, the **4th Order Regression Model** produced the Lowest standard error, and is below the minimum standard error threshold of 15% that ISED prescribes. There results indicate that the prediction value presents the lowest variance between the lower and upper bounds (4.81 V/m to 18.70 V/m). The regression analysis utilized a confidence level of 95%, which is the minimum value that should be used by applicants.

Dued to the **5th Order Regression Model** of the minimum standard error threshold of 15% that ISED prescribes the lower and upper bounds (-15.12 V/m to 45.04 V/m), the lower and upper bounds of the 4th Order regression model does not be below the applicable limits. ISED notes that significant differences between the upper and lower bounds typically indicate that the model is not suitable for regression analysis.

Note1: the **5th Order Regression Model** and higher order models were not selected as evidence of overfit were shown by the lower and upper bounds.

Note2: the lower bound and upper bound calculated by the model.

Statement

1. This report is invalid without the seal and signature of the laboratory.
2. The test results of this report are only responsible for the samples submitted. Client shall be responsible for representativeness of the sample and authenticity of the material.
3. The report shall not be partially reproduced without the written consent of the Laboratory.
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***** END OF REPORT *****