

Human Exposure Report

FCC ID: RWO-RZ010253

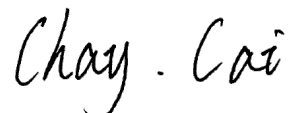
Project No. : 2508C464
Equipment : Gaming Mouse
Brand Name :  RAZER,
Test Model : RZ01-0253
Series Model : RZ01-0253, RZ01-0253XXXX-XXXX (X can be 0-9 or A-Z)
Hardware Version : V0.00.40
Software Version : V1.0
Applicant : Razer Inc.
Address : 9 Pasteur, Irvine, CA 92618, USA
Manufacturer : RAZER (ASIA-PACIFIC) PTE. LTD.
Address : Razer SEA HQ, 1 One-north Crescent, #02-01, Singapore 138538
Factory : RAZER TECHNOLOGY AND DEVELOPMENT (SHENZHEN) CO., LTD
Address : East Wing, 3rd Floor, Block 2, Phase 1 of Vision Shenzhen Business Park Keji South Road, Hi-Tech Industrial Park, Shenzhen 518057, China
Date of Receipt : Aug. 18, 2025
Date of Test : Aug. 18, 2025 ~ Dec. 05, 2025
Issued Date : Dec. 08, 2025
Test Sample : Engineering Sample No.: DG920250818143
Standard(s) : 47 CFR PART 1, Subpart I, Section 1.1310
 KDB 680106 D01 Wireless Power Transfer v04

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. (Dongguan)

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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-3-2508C464	R00	Original Report.	Dec. 08, 2025	Valid

1. GENERAL INFORMATION

1.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.

BTL's Registration Number for FCC: 747969

BTL's Designation Number for FCC: CN1377

1.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$))

The BTL measurement uncertainty as below table:

Test Items	<i>U</i>
Electrical Field strength (EF 0391(NBM), 100 kHz - 3 GHz)	13.288%
Magnetic Field strength (ESM-100, 5 Hz - 400 kHz)	6.220%

2. APPLICABLE STANDARD

2.1 LIMITS

For 47 CFR PART 1, Subpart I, Section 1.1310:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational / Controlled Exposures				
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
300-1500	/	/	f/300	6
1500-100000	/	/	5	6
(B) Limits for General Population / Uncontrolled Exposures				
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
300-1500	/	/	f/1500	30
1500-100000	/	/	1.0	30

F=frequency in MHz
 *=Plane-wave equivalent power density
 RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules.
 The emissions should be within the limits at 300kHz in Table 1 of 1.1310 (use the 300kHz limits for 150kHz: 614V/m, 1.63A/m).

3. MEASUREMENT INSTRUMENTS LIST

Human Exposure					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	E-Field Probe	Narda Safety Test Solutions GmbH	EF 0391(NBM)	A-0253	Jul. 17, 2026
2	NARDA Broadband Field Meter	Narda Safety Test Solutions GmbH	NBM-520	B-0138	Jul. 17, 2026
3	3D H/E Fieldmeter	maschek Elektronik	ESM-100	971965	Nov. 17, 2026

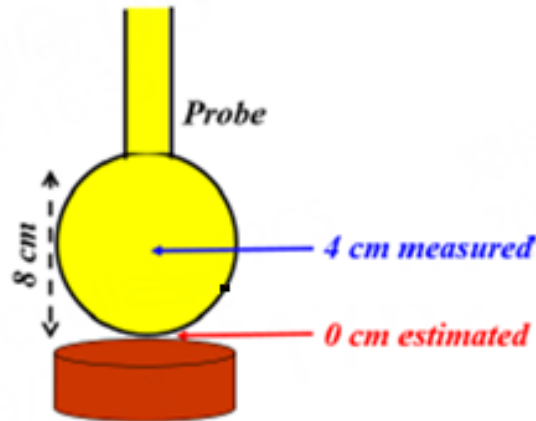
Remark:

(1) All calibration period of equipment list is one year.

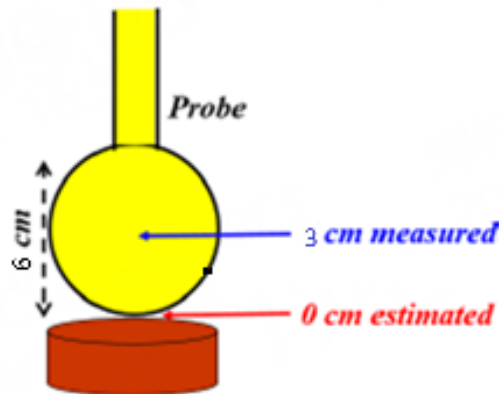
4. TEST PROCEDURE

(a) Test setup example diagram:

For E-Field measure:



For H-Field measure:



- (b) Test performed with all the radiating structures operating at maximum power at the same time.
- (c) Evaluate each edge surface of the host/client pair and identify the worst surface.
- (d) E-Field Estimated, Measurements are taken along worst surface the device from 4cm~28cm in 4cm minimum increment.
H-Field Estimated, Measurements are taken along worst surface the device from 3cm~27cm in 3cm minimum increment.
- (e) Proceed to collect the 11 measurement points that will be used to build the predictive model by curve-fitting. For polynomial regression models, the order of the model shall be increased until signs of over fitting become evident.
- (f) Using polynomial regression techniques to predict estimated values at touch position (0 cm).
- (g) For validation purposes: If the value to show a 30% agreement between the mode and the probe measurements for the two closest points to the device surface, and with 2cm increments. Then this extrapolation method is reasonable.

5. TEST RESULTS

The field strength results of the probe sensor with a center distance of 4cm~28cm from the surface of the EUT coil are as follows:

Distance (cm)	E-Field (V/m)
4	7.76
6	7.41
8	7.12
10	6.80
12	6.59
14	6.21
16	6.05
18	5.86
20	5.66
22	5.47
24	5.29
26	4.94
28	4.72

The H-field strength results of the probe sensor with a center distance of 3cm ~ 27cm and 6~26cm from the surface of the EUT coil are as follows:

Distance (cm)	H-Field (A/m)
3	0.541
5	0.519
7	0.485
9	0.431
11	0.396
13	0.356
15	0.306
17	0.262
19	0.211
21	0.196
23	0.191
25	0.186
27	0.182
6	0.4910
8	0.4530
10	0.4120
12	0.3740
14	0.3280
16	0.2870
18	0.2390
20	0.2380
22	0.1940
24	0.1880
26	0.1840

Use the polynomial regression techniques to estimate the results of 4cm through 8cm:
for E-Field:

E-Field Measure Value (V/m)	E-Field Estimated Value (V/m)	Agreement Ratio	Limits
7.76	8.120	4.64%	30%

As the model is sufficient, the 0cm E-Field value can be estimated through the results of 4cm, the 0cm H-Field value can be estimated through the results of 3cm.

E-Field Estimated Value (V/m)	Limits (V/m)	H-Field Estimated Value (A/m)	Limits (A/m)
8.479	614	0.705	1.63

Remark:

- (1) All surface had been evaluated, the worst surface is Right and recorded.
- (2) The EUT has the maximum average output power when the support unit is in low power and being charged by EUT.
- (3) Analyzing results:
E-Field:

Parameter	Linear Regression Model	Quadratic Regression Model	Cubic Regression Model
Multiple R	0.993	0.999	0.999
R^2	0.986	0.998	0.999
Adjusted R^2	0.985	0.998	0.998
Standard Error (S)*	0.102	0.035	0.037
Number of data points used	11	11	11
Estimated electric field strength at touch position (V/m)	8.096	8.479	8.528

* The units of the standard error are the units of the measured variable V/m.

As shown in the table above, the quadratic regression model produced the lowest standard error. From the model, the estimated E-field strength at touch position 8.479 V/m.

Note that the cubic regression model was not selected as evidence of over fit were shown by the increase of S.

H-Field:

Parameter	Linear Regression Model	Quadratic Regression Model	Cubic Regression Model	4th Order Regression Model	5th Order Regression Model	6th Order Regression Model	7th Order Regression Model	8th Order Regression Model
Multiple R	0.993	0.994	0.999	0.999	0.999	1.000	1.000	1.000
R^2	0.986	0.988	0.998	0.998	0.999	0.999	1.000	1.000
Adjusted R^2	0.985	0.985	0.997	0.997	0.998	0.998	0.999	0.998
Standard Error (S)*	0.016111	0.015806	0.007626	0.007042	0.006257	0.005656	0.005018	0.006034
Number of data points used	11	11	11	11	11	11	11	11
Estimated magnetic field strength at touch position (A/m)	0.608	0.628	0.547	0.588	0.505	0.347	0.705	0.949

* The units of the standard error are the units of the measured variable A/m.

As shown in the table above, the 7th Order regression model produced the lowest standard error. From the model, the estimated H-field strength at touch position 0.705A/m.

Note that the 8th Order regression model was not selected as evidence of over fit were shown by the increase of S.

End of Test Report