

TEST REPORT

Reference No...... : WTD25D02032206W003
FCC ID : KE3-3003818
Applicant..... : Radio Systems Corporation
Address..... : 10427 PetSafe Way, Knoxville, TN 37932, United States
Manufacturer : Radio Systems Corporation
Address..... : 10427 PetSafe Way, Knoxville, TN 37932, United States
Product..... : PetSafe Guardian GPS 2.0 Dog Fence & Tracking
Invisible Fence GPS Flex Fence
Model(s). : RFA-669, RIF00-18101
Standards..... : FCC 47CFR Part 2 Subpart J Section 2.1091
Date of Receipt sample : 2025-03-06
Date of Test : 2025-03-11 to 2025-03-17
Date of Issue..... : 2025-03-24
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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3. Revision History

Test Report No.	Date of Receipt Sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD25D02032206W003	2025-03-06	2025-03-11 to 2025-03-17	2025-03-24	Original	-	Valid

4. General Information

4.1. General Description of E.U.T.

Product:	PetSafe Guardian GPS 2.0 Dog Fence & Tracking Invisible Fence GPS Flex Fence
Model(s):	RFA-669, RIF00-18101
Model Description:	Only the product name, model name, appearance and battery are different. The other respects are same. The model name of PetSafe Guardian GPS 2.0 Dog Fence & Tracking is RFA-669. The model name of Invisible Fence GPS Flex Fence is RIF00-18101.
Test Sample No.:	1-1/1
Hardware Version:	Collar PCBA rev #006 Collar PCB rev #003
Software Version:	R001

4.2. Details of E.U.T.

Operation Frequency:	LTE Band 2: 1850~1910MHz LTE Band 5: 824~849MHz LTE Band 12: 699~716MHz LTE Band 13: 777~787MHz LTE Band 14: 788~798MHz LTE Band 66: 1701~1780MHz LTE Band 71: 663~698MHz
Max. RF output power:	LTE Band 2: 23.17dBm LTE Band 5: 23.48dBm LTE Band 12: 23.97dBm LTE Band 13: 23.84dBm LTE Band 14: 23.48dBm LTE Band 66: 23.41dBm LTE Band 71: 23.78dBm
EIRP/ERP	LTE Band 2: 27.29dBm LTE Band 5: 23.92dBm LTE Band 12: 24.26dBm LTE Band 13: 24.13dBm LTE Band 14: 23.77dBm LTE Band 66: 27.53dBm LTE Band 71: 22.58dBm
Type of Modulation:	LTE: QPSK, 16QAM
Antenna installation:	LTE: FPC ANT
Antenna Gain:	LTE Band 2: 4.12dBi LTE Band 5: 2.59dBi LTE Band 12: 2.44dBi LTE Band 13: 2.44dBi

LTE Band 14: 2.44dBi

LTE Band 66: 4.12dBi

LTE Band 71: 0.95dBi

Note:

#: The antenna gain is provided by the applicant, and the applicant should be responsible for its authenticity, WALTEK lab has not verified the authenticity of its information.

Ratings:

DC 3.7V for battery

4.3. Test Facility

The test facility has a test site registered with the following organizations:

ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.

Waltek Testing Group Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A, October 15, 2016.

FCC Designation No.: CN1201. Test Firm Registration No.: 523476.

Waltek Testing Group Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration number 523476, September 10, 2019.

4.4. Subcontracted

Whether parts of tests for the product have been subcontracted to other labs:

☐ Yes ☒ No

If Yes, list the related test items and lab information:

Test Lab: N/A

Lab address: N/A

Test items: N/A

4.5. Abnormalities from Standard Conditions

None.

5. Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	FCC Part 2.1091	PASS

6. RF Exposure

Test Requirement: FCC 47CFR Part 2 Subpart J Section 2.1091

Evaluation Method: FCC 47CFR Part 1 Subpart I Section 1.1310,
KDB 447498 D01 General RF Exposure Guidance v06

6.1. Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

6.2. The procedures / limit

Table 1 to § 1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(i) 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	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
(ii) 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	<30

f = frequency in MHz. * = Plane-wave equivalent power density.

6.3. MPE Calculation Method

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

S = power density (in appropriate units, e.g. mW/cm²)

P = output power to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

From the peak EUT RF output power, the minimum mobile separation distance, R=20cm, as well as the gain of the used antenna, the RF power density can be obtained

6.4. Radio Frequency Radiation Exposure Evaluation

Band	Antenna Gain (dBi)	Antenna Gain (numeric)	Max. average Output Power (dBm)	average Output Power (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)
LTE B2	4.12	2.58	23.17	207.49	0.106580	1.0
LTE B5	2.59	1.82	23.48	222.84	0.080477	0.55
LTE B12	2.44	1.75	23.97	249.46	0.087031	0.47
LTE B13	2.44	1.75	23.84	242.10	0.084464	0.52
LTE B14	2.44	1.75	23.48	222.84	0.077745	0.53
LTE B66	4.12	2.58	23.41	219.28	0.112635	1.0
LTE B71	0.95	1.24	23.78	238.78	0.059112	0.44
BLE	1.48	1.41	10.51	11.25	0.003145	1.0

Simultaneous Transmission

Mode	Power Density (mW/cm ²)	Limit (mW/cm ²)
BLE+LTE	0.11578	1.0

Note:

1. For conservativeness, the lowest frequency of each band is used to determine the MPE limit of that band.
2. Chose the maximum power to do MPE analysis.
3. The BLE output power refer to the report (FCC ID: QOQ-GM240S).

Conclusion:

RF Exposure is FCC compliant.

=====End of Report=====