

# TEST REPORT

FCC MPE Test for ETGFFRBU01  
Certification

**APPLICANT**  
LG Innotek Co., Ltd.

**REPORT NO.**  
HCT-RF-2106-FI010

**DATE OF ISSUE**  
June 14, 2021

**Tested by**  
Jin Gwan Lee



**Technical Manager**  
Se Wook Park



Accredited by KOLAS, Republic of KOREA

**HCT CO., LTD.**  
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고객비밀  
CUSTOMER SECRET



# TEST REPORT

FCC MPE Test for  
ETGFFRBU01

**REPORT NO.**

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**Additional Model**

-

**Applicant**

**LG Innotek Co., Ltd.**

E1/E3, 30, Magokjungang 10-ro, Gangseo-gu, Seoul, 07796, Korea

**Eut Type  
Model Name**

Wi-Fi Dongle  
ETGFFRBU01

**FCC ID**

YZP-ETGFFRBU01

**Frequency range**

2 412 MHz ~ 2 472 MHz (WLAN)  
5 180 MHz ~ 5 825 MHz (UNII)

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

This test results were applied only to the test methods required by the standard.

## REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	June 14, 2021	Initial Release

### Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules under normal use and maintenance

This laboratory is not accredited for the test results marked \*.

The above Test Report is the accredited test result by (KS Q) ISO/IEC 17025 AND KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.(HCT Accreditation No.: KT197)

\* The report shall not be reproduced except in full(only partly) without approval of the laboratory.

## RF Exposure Statement

### 1. Limit

According to § 1.1310, § 2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f <sup>2</sup> )	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	.....	.....	f/1500	30
1500 - 100.000.....	.....	.....	1.0	30

F = frequency in MHz

\* = Plane-wave equivalent power density

### 2. Maximum Permissible Exposure Prediction

Prediction of MPE limit at a given distance

$$S = PG/4\pi R^2$$

S = Power density

P = Power input to antenna

G = Power gain to the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

### 3. RESULTS

#### 3-1. DTS

Average output Power at antenna input terminal	20.00	dBm
Average output Power at antenna input terminal	100.00	mW
Prediction distance	20.00	cm
Prediction frequency	2412 – 2472	MHz
Antenna Gain(typical)	4.51	dBi
Antenna Gain(numeric)	2.82	-
Power density at prediction frequency( S)	0.0562	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

#### 2.1091

EIRP	24.51	(dBm)
ERP	22.36	(dBm)
ERP	0.172	(W)
ERP Limit	3.00	(W)
MARGIN	12.41	(dB)

### 3-1. UNII

Average output Power at antenna input terminal	18.00	dBm
Average output Power at antenna input terminal	63.10	mW
Prediction distance	20.00	cm
Prediction frequency	5180 – 5825	MHz
Antenna Gain(typical)	4.51	dBi
Antenna Gain(numeric)	2.82	-
Power density at prediction frequency( S)	0.0355	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

### 2.1091

EIRP	22.51	(dBm)
ERP	20.36	(dBm)
ERP	0.109	(W)
ERP Limit	3.00	(W)
MARGIN	14.41	(dB)