FCC MPE TEST REPORT

Project Number	**: EA1804C-091**
Test Report Number	**: TR-W1806-006**
Type of Equipment	**: Digital Smart Door Lock Set**
Model Name	**: GKW-2000D**
FCC ID	**: 2APR8-GKW2000D**
ISED Cert. Number	**: 24013-GKW2000D**
Multiple Model Name	**: N/A**
Applicant	**: Guardtec**
Address	**: #1203-1204, Hansin IT Tower, 272 Digital-ro, Guro-gu, Seoul, Korea 08389**
Manufacturer	**: Guardtec**
Address	**: #1203-1204, Hansin IT Tower, 272 Digital-ro, Guro-gu, Seoul, Korea 08389**
Regulation	**: FCC Part 15 Subpart C Section 15.247, IC RSS-247 Issue2**
Total page of Report	**: 5 Pages**
Date of Receipt	**: 2018-04-26**
Date of Issue	**: 2018-06-12**
Test Result	**: PASS**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

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Release Control Record

Issue Report No.	Issued Date	Revisions	Effect Section
TR-W1806-006	2018-06-12	Initial Release	All

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1. EUT (Equipment Under Test)

1.1 General Description

The Guardtec, Model GKW-2000D (referred to as the EUT in this report) is a Digital Smart Door Lock Set. The EUT is a device for transferring Bluetooth signal to an Smart phone through wireless communication.

1.2 RF Output Power

Operating Mode	Channel	Frequency (MHz)	Conducted Output Power (dBm)
Bluetooth LE	Middle	2 440	-6.73

2. TEST RESULT

2.1 Bluetooth LE

According to FCC KDB 447498 D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] x [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,

where,

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to two decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

For the present device, the conducted output power is -6.73 dBm at Middle Channel

So, max. power of channel, including tune-up tolerance = 0.21 mW
min. test separation distance = 50 mm
f(GHz) = 2.44

(max. power of channel, including tune-up tolerance, mW)/ (min. test separation distance, mm)] X [√f(GHz)]
= (0.21 / 50) x (√2.44) = 0.01 ≤ 3.00

Hence the SAR Exclusion Threshold condition is satisfied and the SAR evaluation for general population exposure conditions is not required.