TEST REPORT

Product Name : VVTR IRL BATTERY GRIP
Model Number : VIRL5000KIT-NOC
FCC ID : 2AYU6-VIRL5000

Prepared for	:	Shenzhen Andy optoelectronics technology limited
Address	:	302, building B5, Dongfang Jianfu Yijing Industrial City, Guangming New district Shenzhen
Prepared by	:	EMTEK (DONGGUAN) CO., LTD.
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Report Number	:	EDG2302280206E00102R
Date(s) of Tests	:	March 28, 2023 to April 11, 2023
Date of issue	:	April 11, 2023

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1. TEST RESULT CERTIFICATION

Applicant	:	Shenzhen Andy optoelectronics technology limited
Address	:	302, building B5, Dongfang Jianfu Yijing Industrial City, Guangming New district Shenzhen
Manufacturer	:	Shenzhen isber Technology Co., Ltd
Address	:	602, building a, Fuyong Hubin Science Park, Bao'an District, Shenzhen
Factory	:	Shenzhen isber Technology Co., Ltd
Address	:	602, building a, Fuyong Hubin Science Park, Bao'an District, Shenzhen
EUT	:	VVTR IRL BATTERY GRIP
Model Name	:	VIRL5000KIT-NOC
Trademark	:	N/A

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	**TEST RESULT**
§ 15.247(i), § 2.1093	**PASS**

The above equipment was tested by EMTEK(DONGGUAN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules FCC § 15.247(i), § 2.1093.

The test results of this report relate only to the tested sample identified in this report

Date of Test : March 28, 2023 to April 11, 2023

Prepared by : Xia Yang /Editor

Reviewer : Tim Dong/ Supervisor

Approve & Authorized Signer : Sam Lv / Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2302280206E00102R	/	Original Report

2. EUT Specification

Characteristics	Description
Product:	VVTR IRL BATTERY GRIP
Model Number:	VIRL5000KIT-NOC
Sample:	2#
Device Type:	Bluetooth V5.0
Data Rate:	1Mbps for GFSK modulation
Modulation:	GFSK
Operating Frequency Range(s) :	2402-2480MHz
Number of Channels:	40 Channels
Transmit Power Max:	-2.76 dBm(0.000530W)
Antenna Gain:	-0.58 dBi
Power supply:	DC 5V from USB, DC 3.7V from battery
Evaluation applied:	☐ MPE Evaluation ☒ SAR Evaluation

3. Test Requirement

RF EXPOSURE EVALUATION

According to §15.247(i) and §1.1307(b)(1), 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 level in excess of the Commission's guidelines.

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*)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,[24] where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation[25]
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to quality for TCB approval.
One antenna is available for the EUT. The minimum separation distance is 5mm.

4. Measurement Result

Antenna gain:-0.58 dBi

BLE_1M

Transmit Frequency(MHz)	Mode	Measured Power (dBm)	Tune upPower (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2402	GFSK	-2.76	-3±1	-2	0.1955764	3
2440	GFSK	-3.14	-4±1	-3	0.1565759	3
2480	GFSK	-4.48	-5±1	-4	0.1253880	3

According to KDB 447498, no stand-alone required for BT antenna, and no simultaneous SAR measurement is required.

*** End of Report ***