

TEST REPORT

Product Name : GEL BEAD CAR SHOOTER
Model Number : ET-0780
FCC ID : 2ADM5-ET-0780

Prepared for : Zeeva International Limited
Address : Suite 1007B, 10th Floor, Exchange Tower, 33 Wang Chiu Road, Kowloon Bay, Hong Kong, China

Prepared by : EMTEK (DONGGUAN) CO., LTD.
Address : -1&2/F., Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base, No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China

TEL: +86-0769-22807078
FAX: +86-0769-22807079

Report Number : EDG2306060170E00102R
Date(s) of Tests : June 06, 2023 to June 26, 2023
Date of issue : June 26, 2023

Table of Contents

1. TEST RESULT CERTIFICATION	3
2. EUT SPECIFICATION	5
3. TEST REQUIREMENT	6
4. MEASUREMENT RESULT	7



1. TEST RESULT CERTIFICATION

Applicant : Zeeva International Limited
 Address : Suite 1007B, 10th Floor, Exchange Tower, 33 Wang Chiu Road, Kowloon Bay, Hong Kong, China
 Manufacturer : Zeeva International Limited
 Address : Suite 1007B, 10th Floor, Exchange Tower, 33 Wang Chiu Road, Kowloon Bay, Hong Kong, China
 EUT : GEL BEAD CAR SHOOTER
 Model Name : ET-0780
 Trademark : N/A

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
§ 1.1307(b), § 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 § 1.1307(b), § 2.1093..

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

Date of Test : June 06, 2023 to June 26, 2023

Prepared by : 
 Xia Yang /Editor

Reviewer : 
 Tim Dong/ Supervisor

Approve & Authorized Signer :  
 Sam Lv / Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2306060170E00102R	/	Original Report



2. EUT Specification

Characteristics	Description
Product:	GEL BEAD CAR SHOOTER
Model Number:	ET-0780
Modulation:	GFSK
SKU#:	9087480, 9087481
UPC#:	1922342811108, 1922342811115
UPC#:	BLUE MULTI, GREEN MULTI
Operating Frequency Range(s) :	2415MHz-2469MHz
Number of Channels:	16 Channels
Transmit Power Max:	77.74 dBuV@3m
Antenna Type:	Wire Antenna
Antenna Gain:	0 dBi
Power supply:	DC 3.0V from battery
Evaluation applied:	<input type="checkbox"/> MPE Evaluation <input checked="" type="checkbox"/> SAR Evaluation

3. Test Requirement

RF EXPOSURE EVALUATION

According to KDB 447498 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:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR,}^{24} \text{ where}$$

- $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation²⁵
- 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 qualify for TCB approval.

One antenna is available for the EUT. The minimum separation distance is 5mm.

According to ANSI C63.10-2013

9.5 Equations to calculate EIRP

Calculate the EIRP from the radiated field strength in the far field using Equation (22):

$$\text{EIRP} = E + 20\log(d) - 104.7 \quad (22)$$

where

EIRP is the equivalent isotropically radiated power, in dBm

E is the field strength of the emission at the measurement distance, in dBμV/m

d is the measurement distance, in m

Calculate the EIRP from the conducted power using Equation (23):

$$\text{EIRP} = P - G \quad (23)$$

where

EIRP is the equivalent isotropically radiated power, in dBm

P is the measured power at feedpoint of the EUT antenna, in dBm

G is the gain of the EUT radiating element (antenna), in dBi

By combining Formula (22) and Formula (23), the result is

$$P = E + 20\log(d) - 104.7 + G$$

4. Measurement Result

Antenna gain: 0 dBi

Channel Freq. (MHz)	Max Field Strength (dBuV/m)	peak output power (dBm)	Tune upPower (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2415	73.40	-21.7576	-22±1	-21	0.00246882	3
2444	69.62	-25.5376	-26±1	-25	0.00098874	3
2469	77.74	-17.4176	-18±1	-17	0.00627033	3

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

*** End of Report ***