RF Exposure Evaluation Report

Product Name : BIKE POWER TRAINER

Model No. : NOZA V

FCC ID. : 2A2P5NOZAV

Applicant : Acer Gadget Inc.

Address : 6th Floor, No. 68 Ruiguang Road, Neihu District, Taipei City

Date of Receipt : Jan. 25, 2022

Date of Declaration : Apr. 28, 2022

Report No. : 2210755R-RFUSMPEV02-A

Report Version : V1.0

Issued Date: Apr. 28, 2022
Report No.: 2210755R-RFUSMPEV02-A

Product Name	BIKE POWER TRAINER	
Applicant	Acer Gadget Inc.	
Address	6th Floor, No. 68 Ruiguang Road, Neihu District, Taipei City	
Manufacturer	Acer Gadget Inc.	
Model No.	NOZA V	
FCC ID.	2A2P5NOZAV	
Trade Name	XPLOVA	
Applicable Standard	KDB 447498 D01 v06	☒ Minimum test separation distance ≥ 20 cm ☐ For low power devices
Test Result	Complied	

Documented By : Ida Tung

(Project Specialist / Ida Tung)

Tested By : Jack Hsu

(Senior Engineer / Jack Hsu)

Approved By : Tim Sung

(Manager / Tim Sung)

Revision History

Report No.	Version	Description	Issued Date
2210755R-RFUSMPEV02-A	V1.0	Initial issue of report.	Apr. 28, 2022

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	BIKE POWER TRAINER
Trade Name	XPLOVA
Model No.	NOZA V
FCC ID.	2A2P5NOZAV
Frequency Range	ANT+: 2457MHz Bluetooth: 2402-2480MHz
Channel Control	Auto
Antenna Type	PCB Antenna
Antenna Gain	Refer to the table “Antenna List”

1.2. Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Darfon Electronics Corp.	NOZA V	PCB Antenna	-13.8dBi for 2.4GHz

2. Test Facility

Site Description	:	Accredited by TAF Accredited Number: 3023
Test Laboratory	:	DEKRA Testing and Certification Co., Ltd
Address	:	No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan
Performed Location	:	No. 26, Huaya 1st Rd., Guishan Dist.,Taoyuan City 333411, Taiwan, R.O.C.
Phone number	:	+886-3-275-7255
Fax number	:	+866-3-327-8031
Email address	:	info.tw@dekra.com
Website	:	http://www.dekra.com.tw

3. RF Exposure Evaluation

3.1. Standard Applicable

According to KDB 447498 D01 (7.1), A minimum test separation distance ≥ 20 cm is required between the antenna and radiating structures of the device and nearby persons to apply mobile device exposure limits.

3.2. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

Friis Formula

Friis transmission formula: $Pd = (Pout*G)/(4*pi*r^2)$

Where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is ≤ 1.0

3.3. Test Result of RF Exposure Evaluation

Product : BIKE POWER TRAINER
Test Item : RF Exposure Evaluation

Bluetooth

Band	Frequency (MHz)	Conducted maximum Peak Power (dBm)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit (mW/cm2)
BT	2480	4.02	-13.8	0.000021	1

Note: The conducted output power is refer to report No.: 2210755R-RFUSBLEV01-A from the DEKRA.

ANT+

Band	Frequency (MHz)	Conducted maximum Peak Power (dBm)	Antenna Gain (dBi)	Power Density at R = 20 cm (mW/cm2)	Limit (mW/cm2)
ANT+	2457	1.57	-13.8	0.000012	1

Note: The conducted output power is refer to report No.: 2210755R-RFUSOTHV13-A from the DEKRA.

Results	PASS