

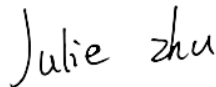
TEST REPORT

Applicant: North American Blue Tiger Company, LLC
Address: 2403 W Stan Schlueter Loop #690160, Killeen, TX 76549
Equipment Type: Blue Tiger Solare
Model Name: 17-160300
Brand Name: BLUE TIGER
FCC ID: 2ASKG00002
Test Standard: 47 CFR Part 2.1093
KDB 447498 D01 v06
Test Date: Apr. 21, 2022 - Jun. 08, 2022
Date of Issue: Jun. 22, 2022

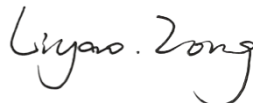
ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Julie Zhu



Checked by: Liyao Zong



Approved by: Wei Yanquan
(Chief Engineer)



Revision History		
Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Jun. 22, 2022</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, Guangdong Province, China
Phone Number	+86 755 6685 0100

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, Guangdong Province, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.
Description	All measurement facilities used to collect the measurement data are located at Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, Guangdong Province, China

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	North American Blue Tiger Company, LLC
Address	2403 W Stan Schlueter Loop #690160, Killeen, TX 76549

2.2 Manufacturer Information

Manufacturer	North American Blue Tiger Company, LLC
Address	2403 W Stan Schlueter Loop #690160, Killeen, TX 76549

2.3 Factory Information

Factory	OSM HUIZHOU LIMITED
Address	A02, Taixiang Road, High-tech Industrial Park, Sandong Town, Huicheng District, Huizhou City, Guangdong Province, China

2.4 General Description for Equipment under Test (EUT)

EUT Name	Blue Tiger Solare
Model Name Under Test	17-160300
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	R3.0A
Software Version	2.12.0
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	VDL
	Model No.	532530
	Serial No.	N/A
	Capacity	400 mAh
	Rated Voltage	3.7 V
	Limit Charge Voltage	4.2 V

2.6 Technical Information

Network and Wireless connectivity	Bluetooth (BR+EDR+BLE) NFC
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	Bluetooth	
Frequency Range	Bluetooth	2400 ~ 2483.5 MHz
Antenna Type	Bluetooth	PCB Antenna
Exposure Category	General Population/Uncontrolled Exposure	
EUT Stage	Portable Device	

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	KDB 447498 D01 v06	KDB 447498 General RF Exposure Guidance D01 v06

4 DEVICE CATEGORY AND LEVELS LIMITS

Portable Derives:

CFR Title 47 §2.1093(b)

(b) For purposes of this section, a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

FCC KDB 447498 D01 General RF Exposure Guidance v06 Limit

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions. The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.

a) 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:

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

Where

- o f (GHz) is the RF channel transmit frequency in GHz
- o Power and distance are rounded to the nearest mW and mm before calculation
- o The result is rounded to one 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.

b) For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):

1) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)]\}$ mW, for 100 MHz to 1500 MHz

2) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50$

mm) · 10] mW, for > 1500 MHz and \leq 6 GHz

c) For frequencies below 100 MHz, the following may be considered for SAR test exclusion (also illustrated in Appendix C):

1) For test separation distances > 50 mm and < 200 mm, the power threshold at the corresponding test separation distance at 100 MHz in step b) is multiplied by $[1 + \log(100/f(\text{MHz}))]$

2) For test separation distances \leq 50 mm, the power threshold determined by the equation in c) 1)

for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$

3) SAR measurement procedures are not established below 100 MHz.

5 ASSESSMENT RESULT

5.1 Output Power

Bluetooth					
Mode	BR+EDR			BLE	
	GFSK	$\pi/4$ -DQPSK	8-DPSK	GFSK (1Mbps)	GFSK (2Mbps)
Average Power (dBm)	2.27	1.80	1.75	1.98	2.11

5.2 Turn-up power

Mode	Conducted Power Range (dBm)
Bluetooth	1.00-2.50

5.3 RF Exposure Evaluation Result

Mode	Tune-up limit power (dBm)	Distance (mm)	Calculation Frequency (MHz)	Calculation Results	Threshold Value	Verdict
Bluetooth	2.5	5	2480	0.56	3.0	Compliance

5.4 Conclusion

This EUT is deemed to comply with the reference level limits, therefore the basic restrictions are compliant with human exposure limits.

Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
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5. The test data and results are only valid for the tested samples provided by the customer.
6. This report shall not be partially reproduced without the written permission of the laboratory.
7. Any objection shall be raised to the laboratory within 30 days after receiving the report.

--END OF REPORT--