

RF EXPOSURE EVALUATION REPORT

Product Name: Base Station
Trade Mark: AEGISLINK
Model No.: ABSZ
Add. Model No.: N/A
Report Number: 25122021530RFC-5
Test Standards: FCC 47 CFR Part 2.1091
FCC ID: 2A6RONBL
Test Result: PASS
Date of Issue: February 5, 2026

Prepared for:

SMARTIE INTERNATIONAL LLC.
160 Greentree Drive, Suite 101 DOVER DELAWARE 19904 USA

Prepared by:

Shenzhen UnionTrust Quality and Technology Co., Ltd.
16/F, Block A, Building 6th, Baoneng Science and Technology Park,
Longhua Street, Longhua District, Shenzhen, China
TEL: +86-755-2823 0888
FAX: +86-755-2823 0886

Prepared by:



David Chen
Senior Project Engineer

Reviewed by:



Henry Lu
Team Leader

Approved by:



Kevin Liang
Assistant Manager

Date:

February 5, 2026

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F, Block A, Building 6th, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-RF-FCCPART2.1091-V2.0

Version

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1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	SMARTIE INTERNATIONAL LLC.
Address of Applicant:	160 Greentree Drive,Suite 101 DOVER DELAWARE 19904 USA
Manufacturer:	SMARTIE INTERNATIONAL LLC.
Address of Manufacturer:	160 Greentree Drive,Suite 101 DOVER DELAWARE 19904 USA

1.2 EUT INFORMATION

1.2.1 General Description of EUT

Product Name:	Base Station	
Model No.:	ABSZ	
Trade Mark:	AEGISLINK	
DUT Stage:	Identical Prototype	
Product Category:	Mobile devices	
EUT Supports Function: (Provided by the customer)	2.4 GHz ISM Band:	Bluetooth V4.2
		IEEE 802.11b/g/n
	912.475MHz	
Sample Received Date:	December 16, 2025	
Note: The product have two color options: black and white.		

Remark: The above EUT's information was provided by customer. Please refer to the specifications or user's manual for more detailed description.

1.2.2 Description of Accessories

Refer to Report Appendix 2 for accessories.

1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

EUT Supports Function		RF Test Report
2.4 GHz ISM Band:	Bluetooth V4.2	25122021530RFC-1
	IEEE 802.11b/g/n	25122021530RFC-2
		25122021530RFC-3
912.475MHz		25122021530RFC-4

1.4 OTHER INFORMATION

None.

1.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product, according to the specifications of the manufacturers. It must comply with the requirements of the following standards:

FCC 47 CFR Part 2.1091

All test items have been performed and recorded as per the above standards

1.6 TEST LOCATION

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F, Block A, Building 6th, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, China

Telephone: +86 (0) 755 2823 0888

Fax: +86 (0) 755 2823 0886

1.7 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L9069

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

A2LA-Lab Certificate No.: 4312.01

Shenzhen UnionTrust Quality and Technology Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

ISED Wireless Device Testing Laboratories

CAB identifier: CN0032

FCC Accredited Lab.

Designation Number: CN1194

Test Firm Registration Number: 259480

1.8 DEVIATION FROM STANDARDS

None.

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1.9 ABNORMALITIES FROM STANDARD CONDITIONS

None.

1.10 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

2. EQUIPMENT LIST

Please refer to the RF test report.



3. RF EXPOSURE EVALUATION

3.1 REFERENCE DOCUMENTS FOR EVALUATION

No.	Identity	Document Title
1	FCC 47 CFR Part 2.1091	Radiofrequency radiation exposure evaluation: mobile devices.
2	FCC 47 CFR Part 1.1307	Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.
3	FCC 47 CFR Part 1.1310	Radiofrequency radiation exposure limits.
4	KDB 447498 D04 Interim General RF Exposure Guidance v01	RF EXPOSURE PROCEDURES AND EQUIPMENT AUTHORIZATION POLICIES FOR MOBILE AND PORTABLE DEVICES

3.2 RF EXPOSURE COMPLIANCE REQUIREMENT

3.2.1 Definitions

Mobile devices: For purposes of this section, the definitions in § 1.1307(b)(2) of this chapter shall apply. A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the RF source's radiating structure(s) and the body of the user or nearby persons. In this context, the term "fixed location" means that the device is physically secured at one location and is not able to be easily moved to another location while transmitting. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal desktop computer, are considered to be mobile devices if they meet the 20-centimeter separation requirement.

3.2.2 Limits

3.2.2.1 FCC 47 CFR Part 2.1091

➤ Single RF sources

Evaluation of compliance with the exposure limits in § 1.1310 of this chapter, and preparation of an EA if the limits are exceeded, is necessary for mobile devices with single RF sources having either more than an available maximum time-averaged power of 1 mW or more than the ERP listed in Table 1 to § 1.1307(b)(3)(i)(C), whichever is greater. For mobile devices not exempt by § 1.1307(b)(3)(i)(C) at distances from 20 centimeters to 40 centimeters and frequencies from 0.3 GHz to 6 GHz, evaluation of compliance with the exposure limits in § 1.1310 of this chapter is necessary if the ERP of the device is greater than ERP_{20cm} in the formula below. If the ERP of a single RF source at distances from 20 centimeters to 40 centimeters and frequencies from 0.3 GHz to 6 GHz is not easily obtained, then the available maximum time-averaged power may be used (i.e., without consideration of ERP) in comparison with the following formula only if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

d = the minimum separation distance (cm) in any direction from any part of the device antenna(s) or radiating structure(s) to the body of the device user.

➤ Multiple mobile or portable RF sources

For multiple mobile or portable RF sources within a device operating in the same time averaging period, routine environmental evaluation is required if the formula in § 1.1307(b)(3)(ii)(B) of this chapter is applied to determine the exemption ratio and the result is greater than 1.

$$\sum_{i=0}^a \frac{P_i}{P_{th,i}} + \sum_{j=0}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=0}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where:

a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for P_{th} , including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

P_i = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

$P_{th,i}$ = the exemption threshold power (P_{th}) according to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i.

ERP_j = the ERP of fixed, mobile, or portable RF source j.

$ERP_{th,j}$ = exemption threshold ERP for fixed, mobile, or portable RF source j, at a distance of at least $\lambda/2\pi$ according to the applicable formula of paragraph (b)(3)(i)(C) of this section.

$Evaluated_k$ = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

$Exposure\ Limit_k$ = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k, as applicable from § 1.1310 of this chapter.

3.2.2.2 KDB 447498 D04 V01

MPE-based Exemption: General frequency and separation-distance dependent MPE-based effective radiated power (ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

3.2.3 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3.3 RF EXPOSURE EVALUATION CALCULATION RESULTS

Note:

1. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

3.3.1 Single RF sources Calculation

Operating Mode	Freq.	Tune-up Power	Tolerance	Antenna Gain	Calculated maximum ERP (P_{ant})		RF Exposure limit (P_{th})	Results
	(MHz)	(dBm)		(dBi)	(dBm)	(mW)	(mW)	
Bluetooth BR + EDR	2402-2480	2.0	+1.5/-2.5	3.42	4.77	2.9992	3060.00	PASS
Bluetooth LE	2402-2480	0.5	+0.5/-1.5	3.42	2.27	1.6866	3060.00	PASS
IEEE 802.11b/g/n / 2.4GHz	2412-2462	20.0	+1.5/-1.5	3.42	22.77	189.2344	3060.00	PASS
912.475MHz	912.475	N/A	N/A	N/A	-12.22	0.0600	1861.45	PASS
1). The EIRP and ERP calculated method is shown as below: $EIRP = \text{Average Power} + \text{Antenna Gain}$ $ERP = EIRP - 2.15dB$								

3.3.2 Multiple RF sources Calculation

3.3.2.1 List of Mode for Simultaneous Multi-band Transmission

No.	Configurations	Support/Not Support
1	WLAN + Bluetooth	No
2	WLAN + 912.475MHz	No
3	Bluetooth + 912.475MHz	No
4	WLAN + Bluetooth + 912.475MHz	No

APPENDIX 1 PHOTOS OF TEST SETUP

N/A

APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal Photos.

*** End of Report ***

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