

Product

FCC ID

Trade mark

Serial Number **Report Number** 

Date of Issue

Test result

**Test Standards** 

Model/Type reference



## **RF Exposure Evaluation Report**

NAVIGATION MULTIMEDIA
-----------------------

- RECEIVER
- Stinger 2
- UN1880, UN1880X
- N/A
- EED32K00161903
- **XBDUN1880**
- Jul. 26, 2018 47 CFR Part 1.1307(2015) 47 CFR Part 1.1310(2015) KDB447498D01v06
- PASS

Prepared for:

AAMP of Florida, Inc. dba AAMP Global 15500 Lightwave Dr. Suite 202, Clearwater, FL 33760

Prepared by: Centre Testing International Group Co., Ltd. Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China TEL: +86-755-3368 3668 FAX: +86-755-3368 3385



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Date:

Kevin yang (Reviewer)

Jul. 26, 2018

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Report Sea

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Check No.:3096305697

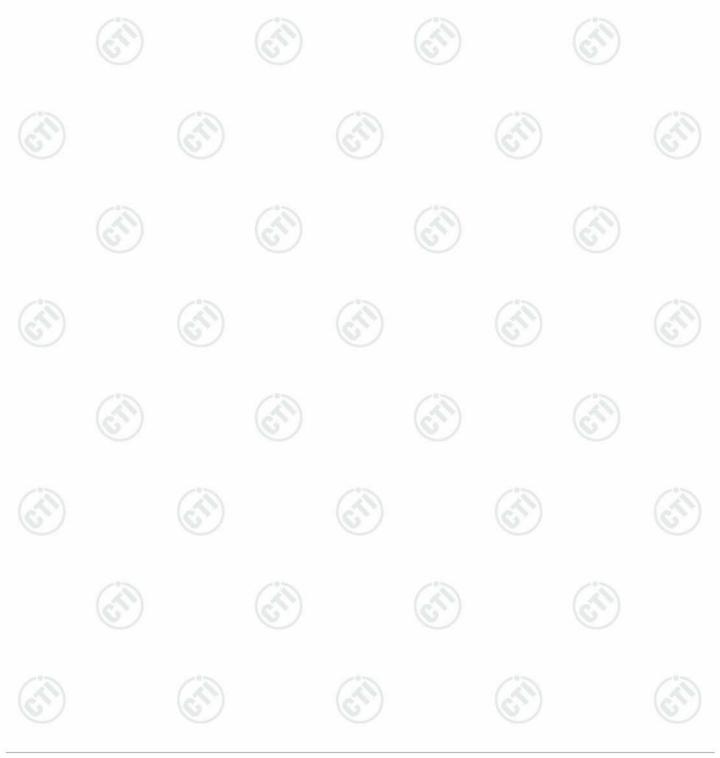




Report No. : EED32K00161903

Page 2 of 8

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<b>3</b> 1 COV	Conter		1903				Page	e 3 of 8
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Page 4 of 8

Report No. : EED32K00161903

## 4 General Information

#### 4.1 Client Information

Applicant:	AAMP of Florida, Inc. dba AAMP Global			
Address of Applicant:	15500 Lightwave Dr. Suite 202, Clearwater, FL 33760			
Manufacturer: SKYPINE ELECTRONICS (SHEN ZHEN) CO., LTD.				
Address of Manufacturer:	A1 Building, No.6, Xinxing Industrial Park, Xinhe Village, Fuyong Town, Bao'an District, Shenzhen City, Guangdong Province, China			
Factory:	SKYPINE ELECTRONICS (SHEN ZHEN) CO., LTD.			
Address of Factory:	A1 Building, No.6, Xinxing Industrial Park, Xinhe Village, Fuyong Town, Bao'an District, Shenzhen City, Guangdong Province, China			

## 4.2 General Description of EUT

Product Name:	NAVIGATION MULTIMEDIA RECEIVER	
Model No.(EUT):	UN1880, UN1880X	
Test Model No.:	UN1880	G
Trade mark:	Stinger	
EUT Supports Radios application:	4.2 BT Dual mode, 2402-2480MHz	

## 4.3 Product Specification subjective to this standard

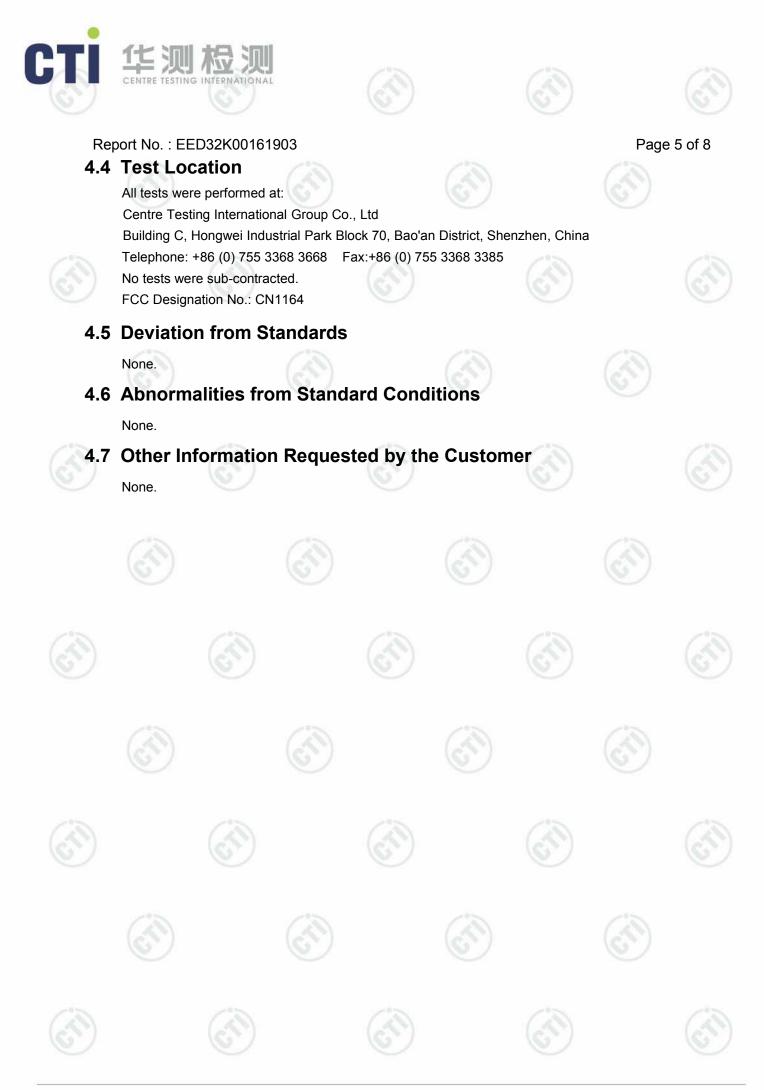
Frequency Range:	2402-2480MHz				
Antenna Type:	2.4GHz Inverted-F Antenna				
Antenna Gain:	0dBi				
Power Supply:	Supply by DC 12V				
Conduct Peak Power:	7.102dBm				
Conduct Peak Power.	TheConduct Peak Power data refer to the reportEED32K00161901.				
Firmware version:	AJ0107(manufacturer declare)				
Hardware version:	R1(manufacturer declare)				
Sample Received Date:	Jun. 25, 2018				
Sample tested Date:	Jun. 25, 2018 to Jul. 25, 2018				

The tested sample(s) and the sample information are provided by the client.

Model No.:UN1880, UN1880X

Only the model of UN1880 is tested, since their electrical circuit design, layout, components used and internal wiring are identical, the shape and the material are identical, only the outer decoration is different.









Report No. : EED32K00161903

### **RF Exposure Evaluation**

#### Page 6 of 8

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## 5.1 RF Exposure Compliance Requirement

#### 5.1.1 Limits

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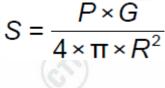
According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

TABLE 1-LIMITS FOR	MAXIMUM	PERMISSIBLE	EXPOSURE	(MPE)
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Frequency range (MHz)	Electric field strength (V/m) Magnetic field strength (A/m) Power density (mW/cm <sup>2</sup> )		Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)	
(A) Lim	its for Occupational	/Controlled Exposur	es		
0.3–3.0	614	1.63	*(100)	6	
3.0–30	1842/f	4.89/f	*(900/f2)		
30–300	61.4	0.163	1.0		
300–1500			f/300	6	
1500–100,000			5	6	
(B) Limits	ior General Populati	on/Uncontrolled Exp	osure		
0.3–1.34	614	1.63	*(100)	30	
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30	

0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

A rough estimation of the expected exposure in power flux density on a given point can be made with the following equation:



## Where:

radiator

S = power density

P = power input to the antenna

G = numeric gain of the antenna in the direction of interest relative to an isotropic

R= distance to the centre of radiation of the antenna

EIRP = P\*G

The antenna of the product, under normal use condition is at least 20 cm away from the body of the user.

Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. Therefore, the S of the device is calculated with R=20cm,

and if it is below the limit S, then we can conclude the device complies with the rules.

### 5.1.2 Test Procedure

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







Page 7 of 8

Report No. : EED32K00161903

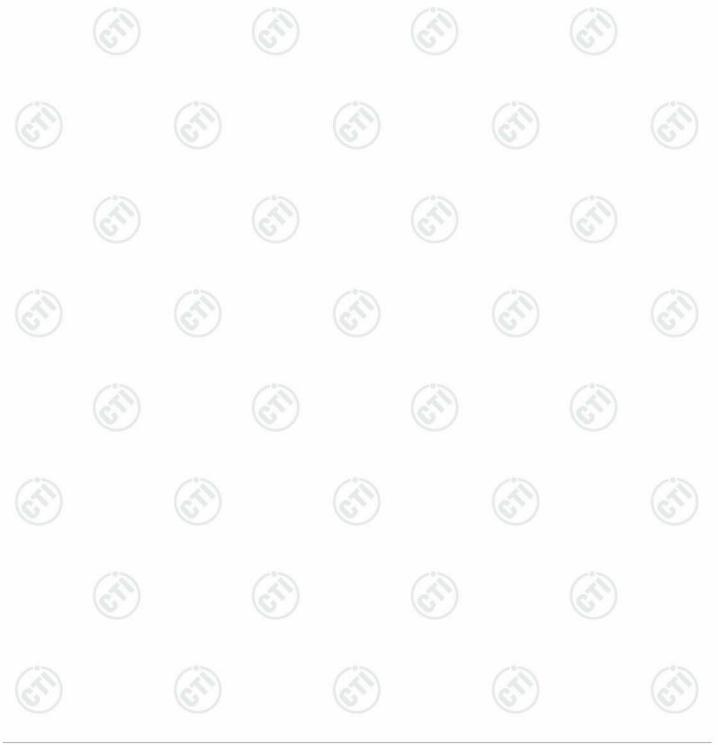
### 5.1.3 EUT RF Exposure Evaluation

#### Antenna Gain: 0dBi

Output Power Into Antenna & RF Exposure Evaluation Distance:

a	Channel	Frequency (MHz)	Max Conducted Peak Output Power(dBm)	Gain (dBi)	EIRP <sup>*</sup> (dBm)	EIRP (mW)	R (cm)	S (mW/cm²)	Limit (mW/cm²)	Result
6	Highest	2480	7.102	0	7.102	5.13	20	0.001	1.0	Pass

Note: Refer to report No. EED32K00161901 for EUT test Max Conducted Peak Output Power value.



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Report No. : EED32K00161903

Page 8 of 8

## **PHOTOGRAPHS OF EUT Constructional Details**

Refer to Report No. EED32K00161901 for EUT external and internal photos.

\*\*\* End of Report \*\*\*

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