RF Exposure Evaluation Report

Product	:	Pilot Translating Earpiece
Trade mark	:	WAVERLYLABS
Model/Type reference	:	V100LR,V100LB,V100LW
Serial Number	:	N/A
Report Number	:	EED32J00237205
FCC ID	:	2AN4B-WLABSV1PL
Date of Issue	:	Nov. 23, 2017
Test Standards	:	47 CFR Part 1.1307 47 CFR Part 2.1093 KDB447498D01 v06
Test result	:	PASS

Prepared for:

Waverly Labs Inc.
19 Morris Ave Brooklyn New York United States 11205

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
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Reviewed by:	Kevin yang (Reviewer)	Approved by:	Sheek Luo (Lab supervisor)
Date:	Nov. 23, 2017		Check No.: 2392114011

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2 Version

Version No.	Date	Description
00	Nov. 23, 2017	Original

3 Contents

4 General Information

4.1 Client Information

Applicant:	Waverly Labs Inc.
Address of Applicant:	19 Morris Ave Brooklyn New York United States 11205
Manufacturer:	Waverly Labs Inc.
Address of Manufacturer:	19 Morris Ave Brooklyn New York United States 11205
Factory:	ShengHai Electronics (Shenzhen) Ltd.
Address of Factory:	Block 17-19, Hui Ming Ying Industry, Yan Chuan, Song Gang, Baoan County, Shenzhen, China 518105

4.2 General Description of EUT

Product Name:	Pilot Translating Earpiece
Model No.(EUT):	V100LR,V100LB,V100LW
Test Model No.:	V100LR
Trade Mark:	WAVERLYLABS
EUT Supports Radios application:	BT4.1 Dual mode, 2402-2480MHz

4.3 Product Specification subjective to this standard

Frequency Range:	2402-2480MHz
Modulation Type:	GFSK; 8DPSK; π/4DQPSK
Test Power Grade:	Class 1(manufacturer declare)
Test Software of EUT:	Blue Suite 2.4.8(manufacturer declare)
Antenna Type:	Monopole antenna
Antenna Gain:	0dBi
Power Supply:	Lithium-ion button cell:1x3.7V(Z55)=3.7V
Output Power:	8.0dBm
	The Maximum Conducted Output Power is declared by the client
Sample Received Date:	Oct. 25, 2017
Sample tested Date:	Oct. 25, 2017 Nov. 21, 2017
Remark: The tested sample(s) and the sample information are provided by the client. Model No.: V100LR,V100LB,V100LW Only the model V100LR was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with difference being color of appearance and model name.	

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China 518101
Telephone: +86 (0) 755 3368 3668 Fax:+86 (0) 755 3368 3385
No tests were sub-contracted.
FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v05

Standalone SAR test exclusion considerations

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 Exclusion Threshold condition, listed below, is satisfied.

5.1.2 Limits

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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation[17]

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

5.1.3 EUT RF Exposure

The Maximum Conducted Output Power is 8.0dBm declared by the client;

The best case gain of the antenna is 0dBi.

EIRP= 8.0dBm + 0dBi = 8.0dBm

8.0dBm logarithmic terms convert to numeric result is nearly 6.310mW

According to the formula. calculate the EIRP test result:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)]

General RF Exposure = (6.310mW / 5 mm) x √2.480GHz = 1.987 ①

SAR requirement:

S= 3.0 ② ;

① < ②.

So the SAR report is not required.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32J00237201 for EUT external and internal photos.

*** End of Report ***