



EN 62479:2010
EN 50663:2017

ASSESSMENT REPORT

For

KIDdesigns Inc.

1299 Main Street, Rahway NJ 07065, U.S.A.

Tested Model: FR-V200
Multiple Models: CA-V200CW, MS-V200, MS-V200MM, PW-V200, SM-V200, ST-V200, SW-V200E7, TS-V200, M₁-V200M₂M₃M₄M₅M₆M₇M₈M₉M₁₀

Report Type: Original Report	Product Type: V200 WALKIE TALKIES
Report Number: <u>RSZ190815K49</u>	
Report Date: <u>2019-12-06</u>	
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TABLE OF CONTENTS

GENERAL INFORMATION.....	3
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....	3
OBJECTIVE	3
RELATED SUBMITTAL(S)/GRANT(S).....	3
TEST METHODOLOGY	3
RF EXPOSURE MEASUREMENT	4
EN 62479:2010 §4.1 & §4.2 - MAXIMUM EMITTED AVERAGE POWER.....	7
TEST PROCEDURE	7
TEST DATA	7
EXHIBIT A - PRODUCT CE LABELING.....	8
PROPOSED CE LABEL FORMAT	8
PROPOSED LOCATION OF LABEL ON EUT	8
EXHIBIT B - EUT PHOTOGRAPHS	9
PRODUCT SIMILARITY DECLARATION LETTER	15

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	V200 WALKIE TALKIES
Tested Model	FR-V200
Multiple Model	CA-V200CW, MS-V200, MS-V200MM, PW-V200, SM-V200, ST-V200, SW-V200E7, TS-V200, M ₁ -V200M ₂ M ₃ M ₄ M ₅ M ₆ M ₇ M ₈ M ₉ M ₁₀
Voltage Range	DC 9V
Date of Test	2019-11-28
Sample serial number	190815K49(Assigned by Shenzhen BAACL)
Received date	2019-08-15
Sample/EUT Status	Good condition

Notes: This series products model: CA-V200CW, MS-V200, MS-V200MM, PW-V200, SM-V200, ST-V200, SW-V200E7, TS-V200, M₁-V200M₂M₃M₄M₅M₆M₇M₈M₉M₁₀ and FR-V200 are identical schematics. Model FR-V200 was selected for fully testing, the detailed information can be referred to the declaration letter.

Objective

This report is prepared on behalf of *KIDdesigns Inc.* in accordance with EN 62479: 2010 Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz); EN 50663:2017 Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz).

The objective is to determine the compliance of EUT with EN 62479: 2010, EN 50663:2017.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All measurements contained in this report were conducted with EN 62479: 2010.

RF Exposure Measurement

1. Introduction

This generic standard applies to low power electronic and electrical apparatus for which no dedicated product – or product family standard regarding human exposure to electromagnetic fields applies.

The frequency range covered is 10 MHz to 300 GHz.

The object of this standard is to demonstrate the compliance of such apparatus with the basic restrictions on exposure of the general public to electric, magnetic and electromagnetic fields and contact current.

2. Compliance Criteria

2.1 General considerations

Compliance of electromagnetic emissions from electronic and electrical equipment with the basic restrictions usually is determined by measurements and, in some cases, calculation of the exposure level. If the electrical power used by or radiated by the equipment is sufficiently low, the electromagnetic fields emitted will be incapable of producing exposures that exceed the basic restrictions. This standard provides simple EMF assessment procedures for this low power equipment.

Any relevant compliance assessment procedure which is consistent with the state of the art, reproducible and gives valid results can be used.

For transmitters intended for use with more than one antenna configuration option, the combination of transmitter and antenna(s) which generates the highest available antenna power and/or average total radiated power shall be assessed.

Four routes, which as described as follows, can be used to demonstrate compliance with this standard:

A Typical usage, installation and the physical characteristics of equipment make it inherently compliant with the applicable EMF exposure levels such as those listed in the bibliography. This low-power equipment includes unintentional (or non-intentional) radiators, for example incandescent light bulbs and audio/visual (A/V) equipment, information technology equipment (ITE) and multimedia equipment (MME) that does not contain radio transmitters. NOTE Equipment is described as A/V equipment, ITE or MME if its main use is playback/recording of music, voice or images, or processing of digital information.

B The input power level to electrical or electronic components that are capable of radiating electromagnetic energy in the relevant frequency range is so low that the available antenna power and/or the average total radiated power cannot exceed the low-power exclusion level defined in 2.2.

C The available antenna power and/or the average total radiated power are limited by product standards for transmitters to levels below the low-power exclusion level defined in 2.2.

D Measurements or calculations show that the available antenna power and/or the average total radiated power are below the low-power exclusion level defined in 2.2.

If none of these routes can be used, then the equipment is deemed to be out of the scope of this standard and EMF assessment for conformity assessment purposes shall be made according to other standards, such as IEC 62311 or other EMF product standards.

2.2 Low-power exclusion level (P_{max})

Low-power electronic and electrical equipment is deemed to comply with the provisions of this standard if it can be demonstrated using routes B, C or D that the available antenna power and/or the average total radiated power is less than or equal to the applicable low-power exclusion level P_{max} .

Annex A contains example values for Pmax derived from existing exposure limits listed in the bibliography, such as the ICNIRP guidelines [1], IEEE Std C95.1-1999 [2], and IEEE Std C95.1-2005 [3].

For wireless devices operated close to a person’s body with available antenna powers and/or average total radiated powers higher than the Pmax values given in Annex A, the alternative Pmax values (called Pmax’), described in Annex B can also be used.

For low power equipment using pulsed signals, other limits may apply in addition to those considered in Annex A and Annex B. Both ICNIRP guidelines [1] and IEEE standards [2], [3] have specific restrictions on exposures to pulsed fields, and the requirements of those standards with respect to exposure to pulses shall be met. Annex C discusses this topic further.

2.3 Exposure to multiple transmitting sources

If equipment under test (EUT) is equipped with multiple intentional radiators, the overall conformity assessment might require more than just the assessment of conformity of each one of the radiators separately. The effect of multiple intentional radiators should be considered in the conformity assessment process.

Technical Report IEC 62630 [8] provides generic guidance on how to assess the EMFs generated by multiple intentional radiators.

3. Limit

3.1 Annex A

Table A.1 – Example values of SAR-based Pmax for some cases described by ICNIRP, IEEE Std C95.1-1999 and IEEE Std C95.1-2005

Guideline / Standard	SAR limit, SARmax W/kg	Averaging mass, m g	Pmax mW	Exposure tier ^a	Region of body ^a
ICNIRP [1]	2	10	20	General public	Head and trunk
	4	10	40	General public	Limbs
	10	10	100	Occupational	Head and trunk
	20	10	200	Occupational	Limbs
IEEE Std C95.1-1999 [2]	1,6	1	1,6	Uncontrolled environment	Head, trunk, arms, legs
	4	10	40	Uncontrolled environment	Hands, wrists, feet and ankles
	8	1	8	Controlled environment	Head, trunk, arms, legs
	20	10	200	Controlled environment	Hands, wrists, feet and ankles
IEEE Std C95.1-2005 [3]	2	10	20	Action level	Body except extremities and pinnae
	4	10	40	Action level	Extremities and pinnae
	10	10	100	Controlled environment	Body except extremities and pinnae
	20	10	200	Controlled environment	Extremities and pinnae

^a Consult the appropriate standard for more information and definitions of terms.

3.2 Annex B

$$P_{\max}' = \exp \left[A s + B s^2 + C \ln(BW) + D \right] \quad (\text{B.1})$$

For compliance with the SAR limit of $SAR_{\max} = 2 \text{ W/kg}$ averaged over $m = 10 \text{ g}$ in ICNIRP Guidelines [1] and IEEE Std C95.1-2005 [3], use Equations (B.2) to (B.5) in Equation (B.1):

$$A = (-0,4588f^3 + 4,407f^2 - 6,112f + 2,497)/100 \quad (\text{B.2})$$

$$B = (0,1160f^3 - 1,402f^2 + 3,504f - 0,4367)/1000 \quad (\text{B.3})$$

$$C = (-0,1333f^3 + 11,89f^2 - 110,8f + 301,4)/1000 \quad (\text{B.4})$$

$$D = -0,03540f^3 + 0,5023f^2 - 2,297f + 6,104 \quad (\text{B.5})$$

EN 62479:2010 §4.1 & §4.2 - MAXIMUM EMITTED AVERAGE POWER

Test Procedure

Refer to EN 62479:2010 §4.1 & §4.2

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	52 %
ATM Pressure:	101.0 kPa

The testing was performed by Leo Huang on 2019-11-28.

Test Mode: Transmitting

For the worst case:

Mode	Maximum Tune up EIRP (dBm)	Maximum Tune up EIRP (mW)	Limit (mW)	Result
SRD	-27.8	0.0017	20	Pass

Note:

For DECT:

The Maximum tune-up power is -29.0dBm, the antenna gain is 1.2dBi, so the MAX EIRP is -27.8dBm.

Conclusion:

The RF Exposure is compliance.

EXHIBIT A - PRODUCT CE LABELING

Proposed CE Label Format



Specification: The CE marking shall be affixed visibly, legibly and indelibly to the radio equipment or to its data plate, unless that is not possible or not warranted on account of the nature of radio equipment. The CE marking shall also be affixed visibly and legibly to the packaging.

Proposed Location of Label on EUT

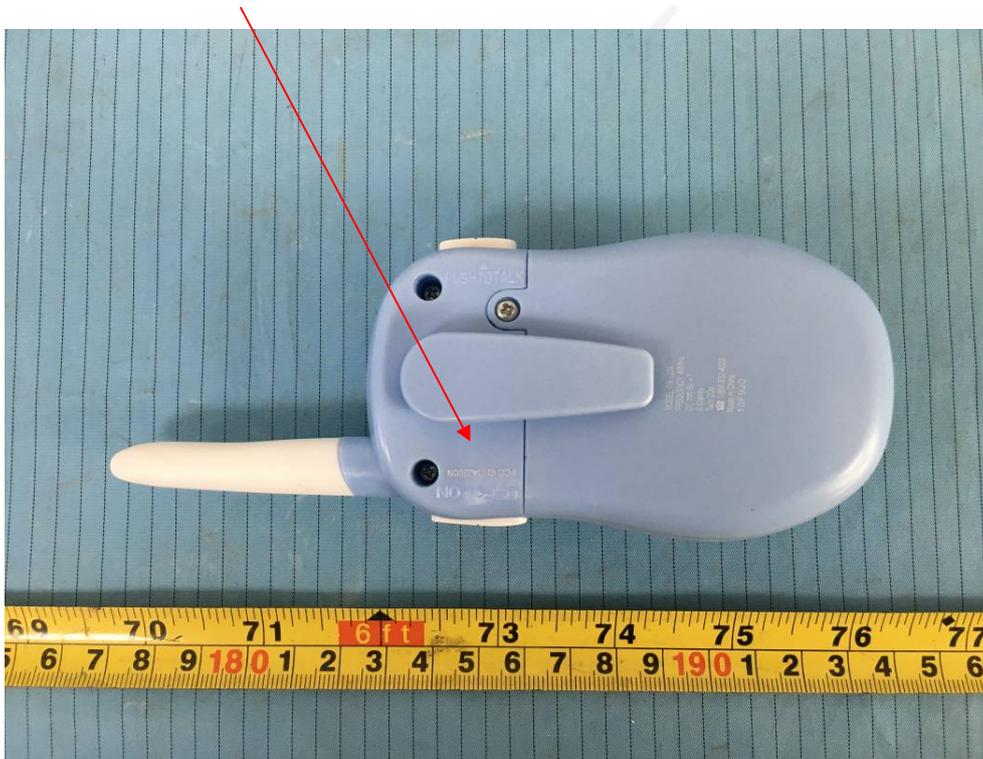
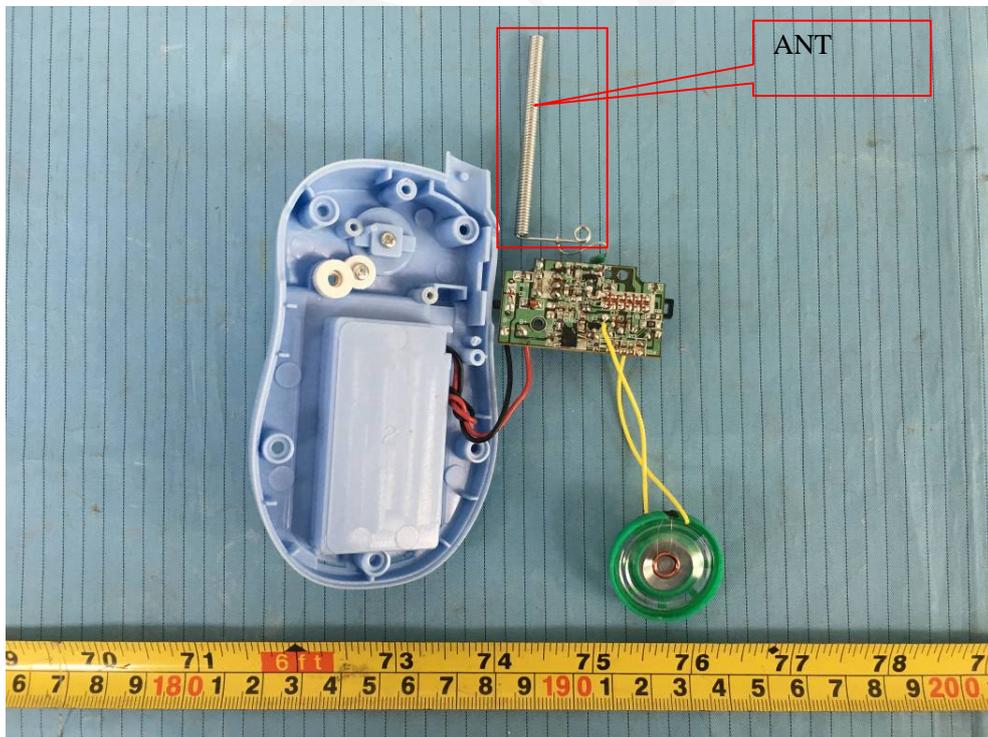
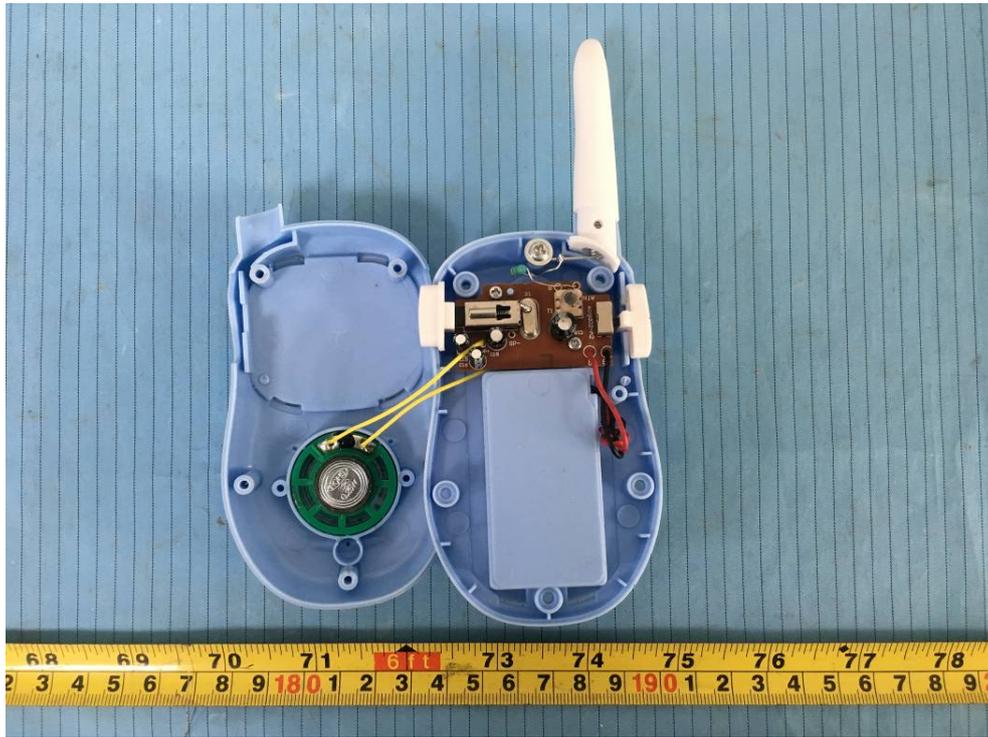


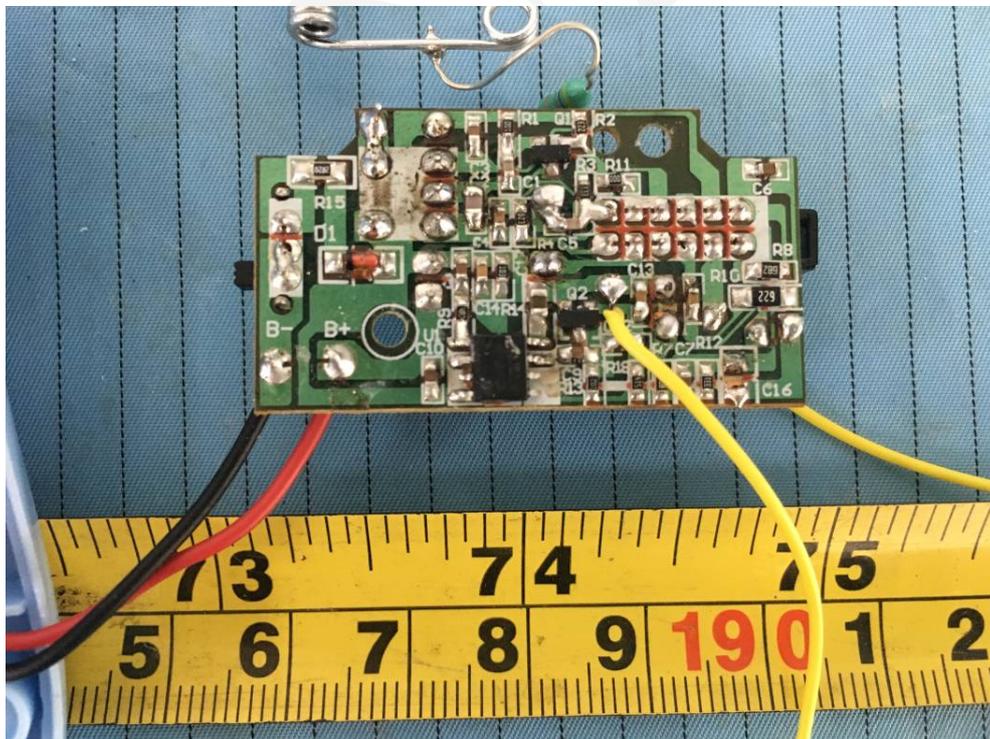
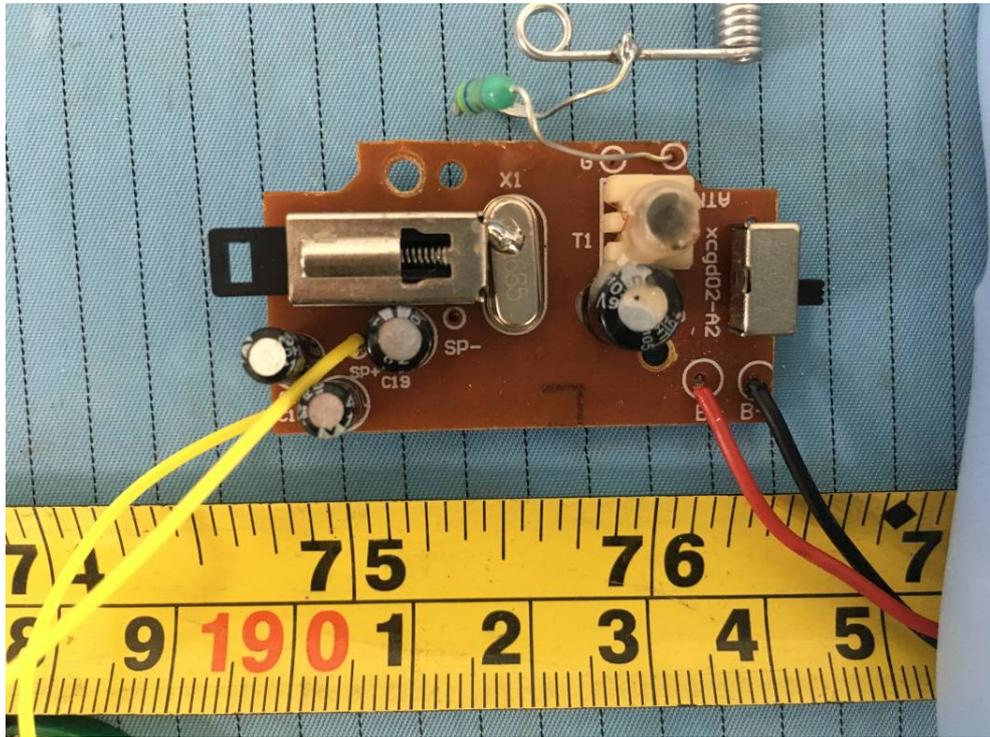
EXHIBIT B - EUT PHOTOGRAPHS











PRODUCT SIMILARITY DECLARATION LETTER

KIDdesigns Inc.
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 Email: Mchinone@sditech.com

Product Similarity Declaration

Dec. 6, 2019

To Whom It May Concern,

We, KIDdesigns Inc., hereby declare that we have a product named as V200 WALKIE TALKIES (Model number: FR-V200) was tested by BACL, meanwhile, for our marketing purpose, we would like to list series models (CA-V200CW, MS-V200, MS-V200MM, PW-V200, SM-V200, ST-V200, SW-V200E7, TS-V200, $M_1 - V200$ $M_2M_3M_4M_5M_6M_7M_8M_9M_{10}$) on reports and certificate, all the models are internal construction and electrically identical. Only different in colour and brands variation.

Model: $M_1 - V200$ $M_2M_3M_4M_5M_6M_7M_8M_9M_{10}$ ($M_1 - M_{10}$, please refer to following for details)

Model No. Table

Part of model #	M_1	M_2	M_3	M_4	M_5	M_6	M_7	M_8	M_9	M_{10}
Number of digit(s)	2	2	1	1	1 to 2	1	1 to 2	1	2	1
Description	2 digits alphabets by "a" - "Z" for brand	2 digits alphabets combination by "a" - "Z" special character version Or blank	"." Or blank	"U" for Europe version Or blank	"E" for English content Or "F" for English & French version Or "3" for 3 language version Or "11" for Europe version with 11 languages	"X" for no sound chip Or "E" for Sound chip with speech or sound effect Or "M" for sound chip with Music	"0"- "9" for year version Or "V0" - "V9" for year version	"M" for Movie version brand Or blank	"AK" for Walmart exclusive Or "AP" for Apple exclusive Or "KS" for Kohl's exclusive Or "TG" for Target exclusive blank	"i" for inner carton required Or "z" for direct to consumer on-line packaging Or blank

We confirm that all information above is true, and we'll be responsible for all the consequences. Please contact me if you have any question.

Sincerely Yours,

Signature: 
 Sammi Tsui
 Title: Safety Engineer

******* END OF REPORT *******