China

FCC - TEST REPORT

Report Number	:	**60.792.17.008.01A (Revision 2.0)**	Date of Issue	: April 27, 2017
Model	:	**HG00734A-TX, HG00734B-TX**		
Product Type	:	**Wireless Bicycle Computer**		
Applicant	:	Lidl US Trading, LLC		
Address	:	3500 S. Clark Street, Arlington, Virginia, United States		
Production Facility	:	Fujian Youtong Industries Co., Ltd.		
Address	:	Building 7, Rujiang East Road 70, Mawei, Fuzhou, China		
Test Result	:	■**Positive** ☐**Negative**		
Total pages including Appendices	:	20		

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1 Table of Contents

TÜV SÜD HONG KONG LTD.
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2 Description of Equipment Under Test

Description of the Equipment Under Test

Product:	Wireless Bicycle Computer
Model no.:	HG00734A-RX, HG00734B-RX
FCC ID:	2AJ9O-HG734TX
Rating:	3.0VDC (1 x 3.0VDC “CR2032“ button cell battery)
Frequency:	125kHz
Antenna gain:	0 dBi
Number of operated Channel:	1
Description of the EUT:	The EUT is considered as wireless device, the frequency range is 125kHz. More details of EUT technical specification please refer to the User's Manual.

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3 Summary of Test Standards

Test Standards
FCC Part 15 Subpart C 10-1-15 Edition Federal Communications Commission, PART 15 — Radio Frequency Devices, Subpart B — Unintentional Radiators

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4 Details about the Test Laboratory

Site 1

Company name: TÜV SÜD Hong Kong Ltd.
3/F, West Wing, Lakeside 2,
10 Science Park West Avenue,
Science Park, Shatin, Hong Kong

Site 2

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13 Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2,
Shenzhen 518052, P.R.China
FCC test site number 502708

Emission Tests	
Test Item	Test Site
FCC Part 15 Subpart C	
FCC Title 47 Part 15.209 Radiated Emission	Site 2
FCC Title 47 Part 15.207 Conduct Emission	NIL
FCC Title 47 Part 15.203 Antenna Requirement	Site 2

4.1 Test Equipment Site List

Radiated Emission Test – Site 2

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	17-Aug-17
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	17-Aug-17
Horn Antenna	Rohde & Schwarz	HF907	102294	17-Aug-17
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	17-Aug-17
3m Semi-anechoic chamber	TDK	9X6X6	----	29-May-19

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4.2 Measurement System Uncertainty

Measurement System Uncertainty Emissions

System Measurement Uncertainty	
Items	**Extended Uncertainty**
Uncertainty for Radiated Emission in 3m chamber 9kHz-30MHz	4.54dB
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.83dB; Vertical: 4.91dB;

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5 Summary of Test Results

Emission Tests				
FCC Part 15 Subpart C				
Test Condition	Pages	Test Result		
		Pass	Fail	N/A
FCC Title 47 Part 15.209 Radiated Emission	10-11	☒	☐	☐
FCC Title 47 Part 15.207 Conduct Emission	NIL	☐	☐	☒
FCC Title 47 Part 15.203 Antenna Requirement	12	☒	☐	☐

Remark:
(1) EUT is transmitter only

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6 General Remarks

Remarks

Client informs that the HG00734B-TX have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction, with Wireless Bike Computer, HG00734A-TX. The difference lies only on different color of the different models. (Client's conformation letter shown at appendix D)

EMC tests were performed on model: HG00734A-TX

SUMMARY:

- All tests according to the regulations cited on page 5 were

■ - Performed

☐ - **Not** Performed

- The Equipment Under Test

■ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

Sample Received Date: February 21, 2017

Testing Start Date: February 22, 2017

Testing End Date: April 04, 2017

- TÜV SÜD HONG KONG LTD. -

Reviewed by: Prepared by:

TSENG Chi Kit	CHAN Kwan Ho Alex
EMC Project Engineer	EMC Project Engineer

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7 Emission Test Results

7.1 Radiated Emission

EUT: HG00734A-TX
Op Condition: On Mode
Test Specification: Antenna: Horizontal
Comment: 3.0VDC
Remark: 9kHz to 1GHz

Test Result
☒ Passed
☐ Not Passed

Frequency MHz	Result dBµV/m	Limit dBµV/m	Margin dB	Detector
0.125	59.03	105.7	46.67	Quasi Peak
50.915	18.69	40.00	21.31	Quasi Peak
103.538	17.62	43.50	25.88	Quasi Peak
214.845	18.42	43.50	25.08	Quasi Peak
426.063	25.22	46.00	20.78	Quasi Peak
729.127	30.57	46.00	15.43	Quasi Peak
948.893	32.91	46.00	13.09	Quasi Peak

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Radiated Emission

EUT: HG00734A-TX
Op Condition: On Mode
Test Specification: Antenna: Vertical
Comment: 3.0VDC
Remark: 9kHz to 1GHz

Test Result
☒ Passed
☐ Not Passed

Frequency MHz	Result dBµV/m	Limit dBµV/m	Margin dB	Detector
0.125	53.05	105.7	52.65	Quasi Peak
40.851	19.62	40.00	20.38	Quasi Peak
106.933	17.01	43.50	26.49	Quasi Peak
216.725	19.91	46.00	26.09	Quasi Peak
419.879	27.22	46.00	18.78	Quasi Peak
497.115	28.29	46.00	17.71	Quasi Peak
956.046	36.54	46.00	9.46	Quasi Peak

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7.2 Antenna Requirement

EUT:	HG00734A-TX
Op Condition:	On Mode
Test Specification:	FCC15.203
Comment:	3.0VDC

Test Result
☒ Passed
☐ Not Passed

Limit

For intentional device, according to FCC Title 47 Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

Antenna Connector Construction

The antenna used in this product is PCB antenna, and the maximum gain of this antenna is 0.0 dBi.

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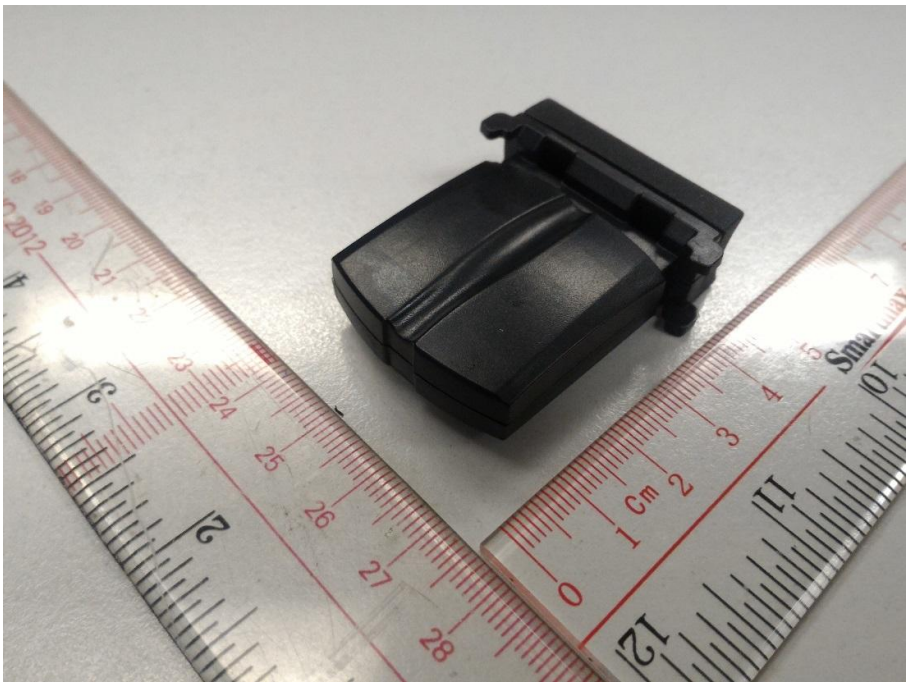
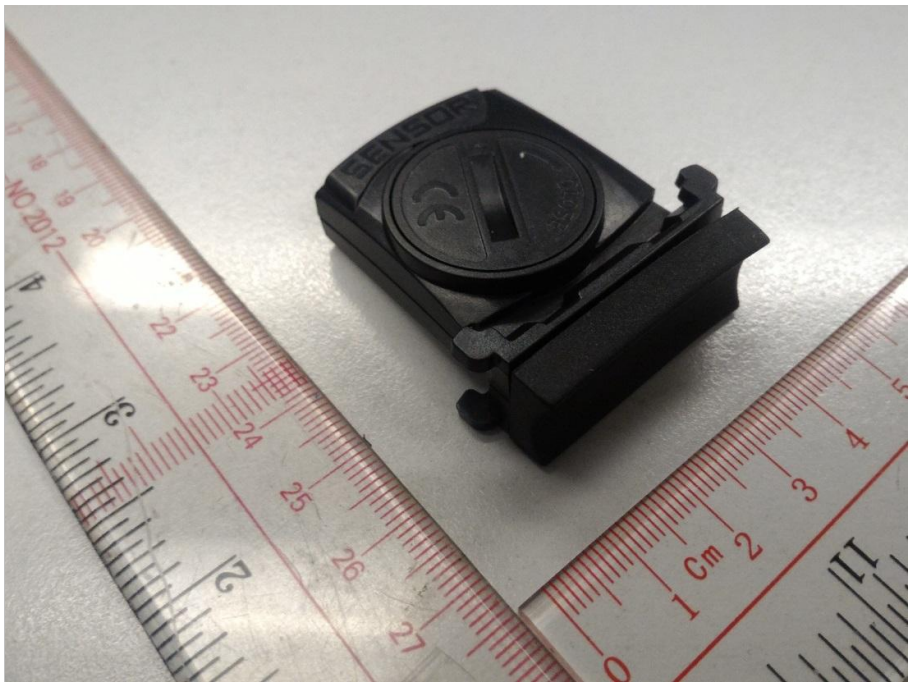
8 Appendix A - Photographs of EUT





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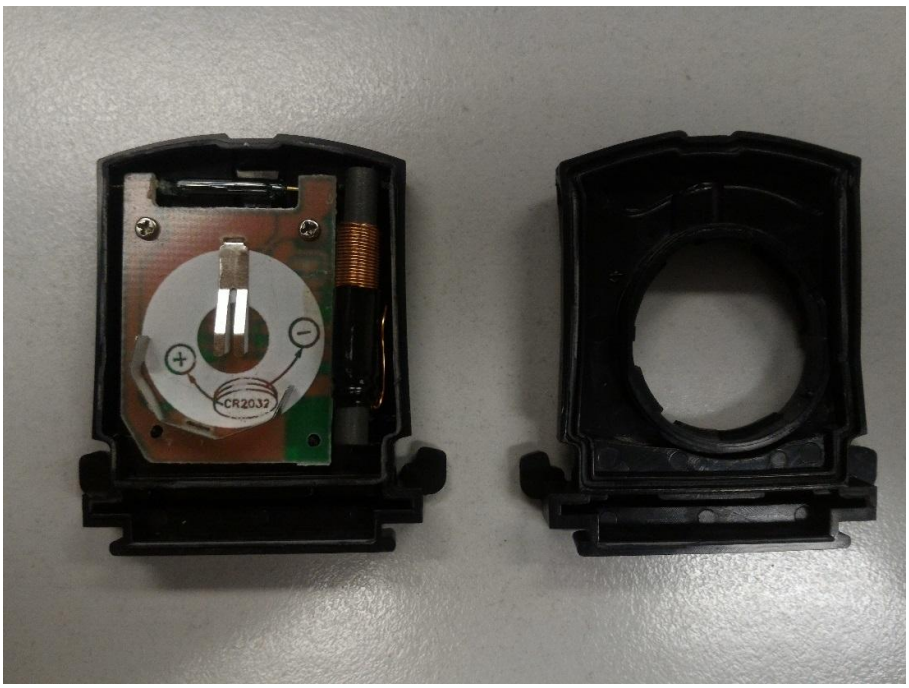
Appendix A



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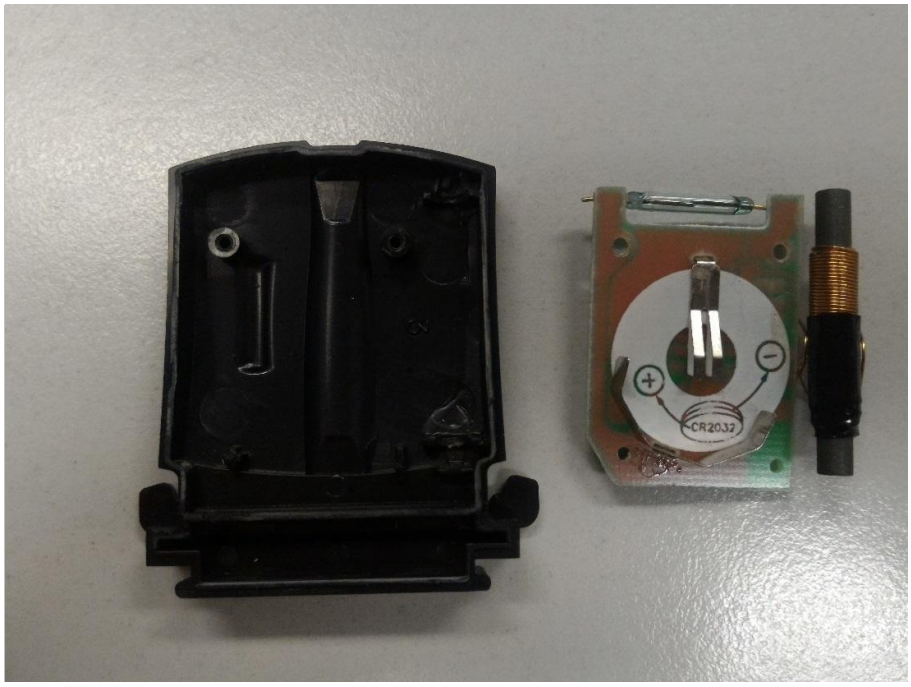
Appendix A



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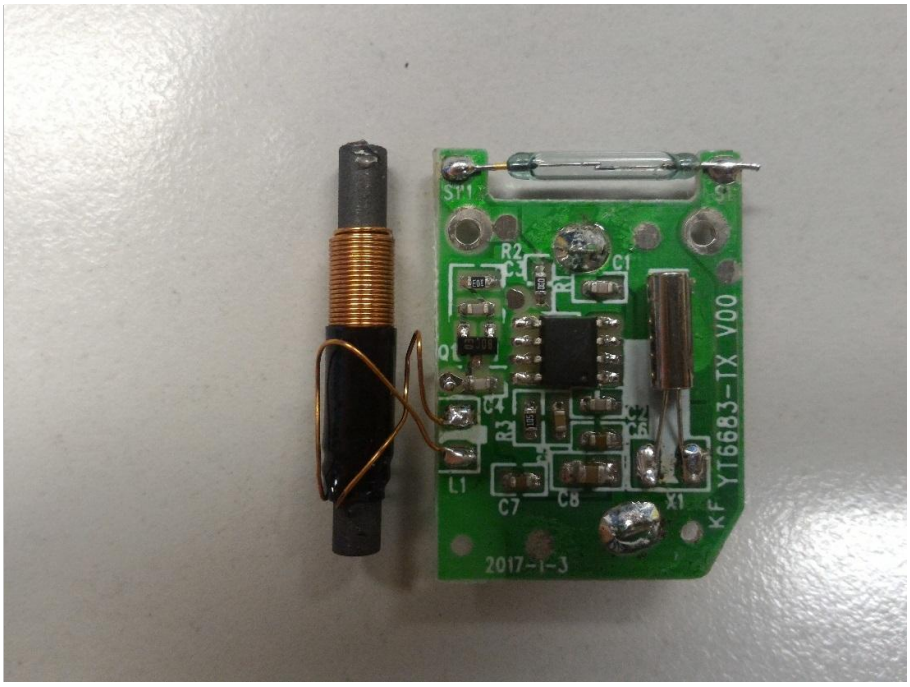
Appendix A



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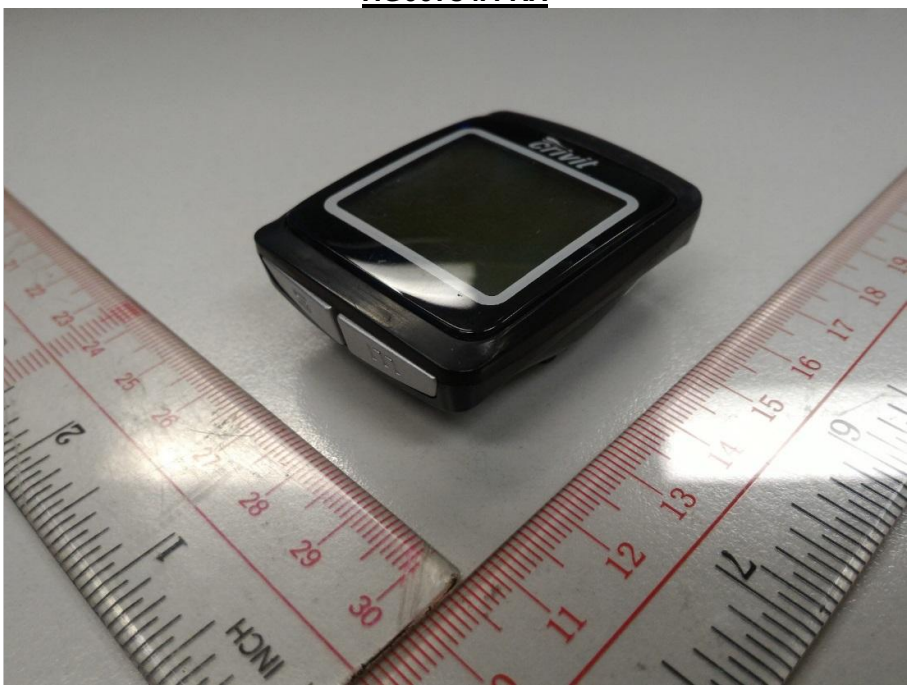
9 Appendix B - Test Support Equipment

HG00734A-RX



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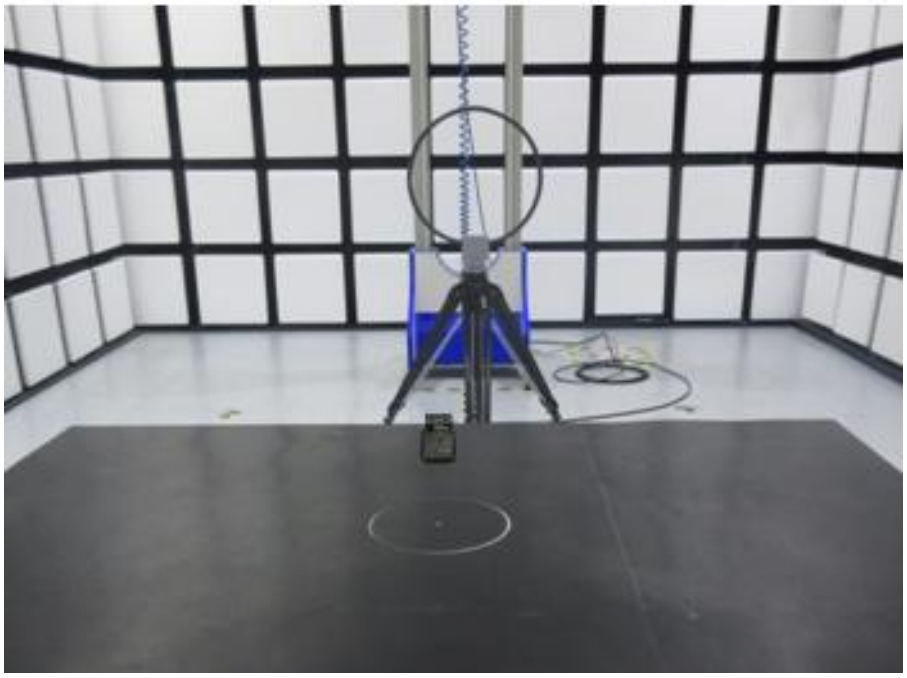
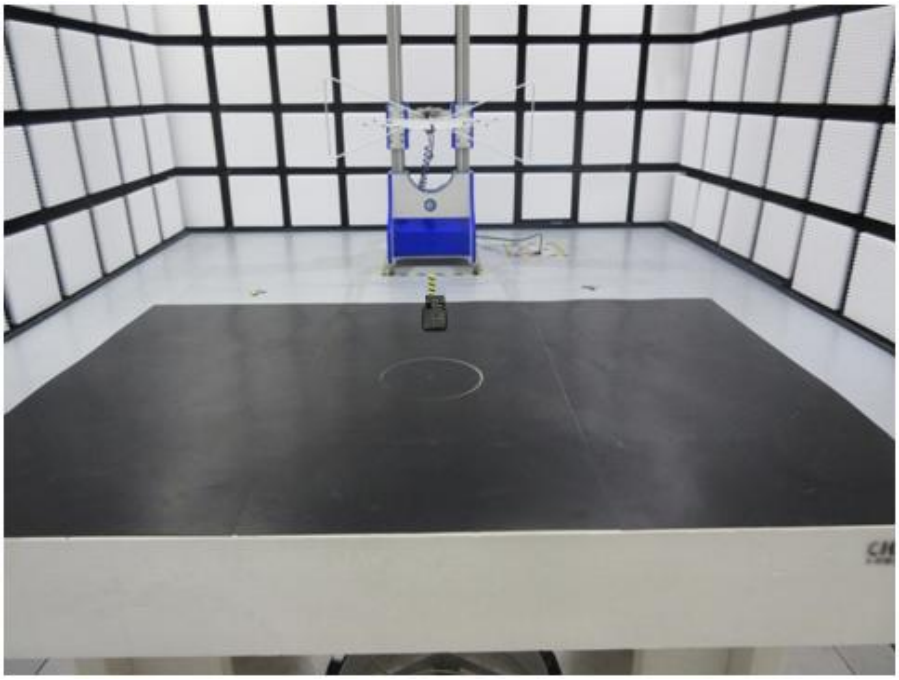
10 Appendix C - Setup Photographs of EUT

Radiated Emission





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11 Appendix D - General Product Information

Radiofrequency radiation exposure evaluation

According to KDB 447498 D01v06 section 4.3.1, For frequencies below 100 MHz and test separation distances ≤ 50 mm, the Numeric threshold is determined as:

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

Step b)
{[Power allowed at numeric threshold for 50mm in step a)] + [(test separation distance – 50mm) · (f(MHz)/150)]} mW

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

Step c) 2)
For test separation distances ≤ 50mm, the power threshold determined by the equation in c) 1) for 50mm and 100MHz is multiplied by ½.

>> The fundamental frequency of the EUT is 125kHz, the test separation distance is ≤ 50mm.
(Manufacturer specified the separation distance is: 20mm)

Step a)
>> Numeric threshold, mW / 50mm * √0.1GHz ≤ 3.0
Numeric threshold ≤ 474.3mW

Step b)
>> Numeric threshold ≤ 474.3mW + (50mm-50mm * 100MHz/150)
Numeric threshold ≤ 474.3mW

Step c) 1) & c) 2)
>> Numeric threshold ≤ 474.3mW * [1 + log 100/100MHz] * ½
Numeric threshold ≤ 237.15mW

>> The power of EUT measured is: -44.3dBm = 0.00044926mW
Which is smaller than the Numeric threshold.
Therefore, the device is exempt from stand-alone SAR test requirements.

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Appendix D

LIDL US LLC. 3500 S Clark Street, Arlington, VA 22202

To: TÜV SÜD HKG Ltd.

Attention: **Mr. Edmond Fung**
From: **Mr. David Matter**_____ Date: April 7, 2017
Fax No: Total Page (Cover Included): 1

Declaration Letter

Subject: Declaration Letter for Model Number

We:

Officially notify TÜV SÜD HKG Ltd. that the <<Additional Model>> have the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction, with <<PRODUCT>>, <<Main Test Model>>.
The difference lies only on different color of the different models.

<<Additional Model >>: HG00734B-TX, HG00734B-RX

<<Main Test Model >>: HG00734A-TX, HG00734A-RX

<<Product>>: Wireless Bicycle Computer

Applicant:

Matter

Digitally signed by Matter
DN: cn=Matter, o=LIDL, ou=LLC, email=david.matter@lidl.us, c=US
Date: 2017.04.07 08:46:17 -04'00'

04/07/2017
(Date)

(Applicant's authorized signature and company Chop)