

# **RF Exposure Evaluation Declaration**

Product Name :	Zipp		
Model No. :	LTH300		
FCC ID :	Y2SLTH300		
IC ID :	9452A-LTH300		

Applicant : LIBRATONE A/S

Address : Marielundvej 43A, DK-2730 Herlev, Denmark

Date of Receipt :	Dec. 07, 2015
Issued Date :	Jan. 19, 2016
Report No. :	15C2023R-RF-US-P20V01
Report Version :	V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government. The test report shall not be reproduced without the written approval of QuieTek Corporation.



Tes	st	Report Certification Issued Date : Jan. 19, 2016 Report No. : 15C2023R-RF-US-P20V01
		QuieTek
		a DEKRA company
Product Name	:	Zipp
Applicant	:	LIBRATONE A/S
Address	:	Marielundvej 43A, DK-2730 Herlev, Denmark
Manufacturer	:	Goertek Inc
Address	:	No 268 Dongfang Rd., New&high-tech Industry
		Development Zone Weifang Shandong Province 261031,
		PRC.
Model No.	:	LTH300
FCC ID	:	Y2SLTH300
IC	:	9452A-LTH300
EUT Voltage	:	AC 100~240V, 50/60Hz, 1.0A
Brand Name	:	LIBRATONE
Applicable Standard	:	KDB 447498D01V06V02
		FCC Part1.1310(b)
Test Result	:	Complied
Performed Location	:	Suzhou EMC Laboratory
		No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,
		215006, Jiangsu, China
		TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
		FCC Registration Number: 800392; IC Lab Code: 4075B
Documented By	:	Alse Ni
		(Senior Engineering Adm. Specialist: Alice Ni )
Reviewed By	:	Frankhe
		(Senior Engineer: Frank He)
Approved By	:	Harry 2han
		(Engineering Manager : Harry Zhao)



## Laboratory Information

We, **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC, TAF
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site :<u>http://www.quietek.com/tw/ctg/cts/accreditations.htm</u> The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : <u>http://www.quietek.com/</u>

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

#### HsinChu Testing Laboratory :

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## History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
15C2023R-RF-US-P20V01	V1.0	Initial Issued Report	Jan. 19, 2016



## 1. RF Exposure Evaluation

## 1.1. Limits

According to FCC 1.1310: 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 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Average Time (Minutes)	
(A) Limits for C	(A) Limits for Occupational/ Control Exposures				
300-1500			F/300	6	
1500-100,000			5	6	
(B) Limits for General Population/ Uncontrolled Exposures					
300-1500			F/1500	6	
1500-100,000			1	30	

F= Frequency in MHz

Friis Formula

Friis transmission formula: Pd = (Pout\*G)/(4\*pi\*r2)

Where

Pd = power density in mW/cm2

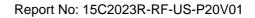
Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Pd id the limit of MPE, 1 mW/cm2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.





## 1.2. Test Procedure

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

The temperature and related humidity:  $18^\circ$ C and 78% RH.

## 1.3. Test Result of RF Exposure Evaluation

Product	•	Zipp
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

#### • Antenna Gain:

Antenna	Manufacturer	Model No.	Peak Gain
PIFA Antenna	Goertek	N/A	1.2dBi for 2.4GHz



#### RF Exposure Evaluation

## • Output Power into Antenna & RF Exposure Evaluation Distance:

		Maximum Output	Power Density at R =
Test Mode	Frequency Band (MHz)	Power to Antenna	20 cm
		(mW)	(mW/cm2)
Bluetooth	2402~2480MHz	4.6452	0.001218

Note: The standalone power density Pd (4th column) at a distance of 20 cm calculated from the Friis transmission formula is below the limit of 1 mW/cm2.

—— The End