ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LOW-POWER, NON-LICENSED TRANSMITTER

Test Report No.	**: W168R-D035**
AGR No.	**: A168A-146**
Applicant	**: LG Innotek Co., Ltd.**
Address	**: 26, Hanamsandan 5beon-ro Gwangsan-gu, 506-731, Gwangju, Korea**
Manufacturer	**: SUZHOU NIHONE Electronics Technology Co., LTD.**
Address	**: No.185 XiaoXiang Road Suzhou High tech Zone**
Type of Equipment	**: Electronic Shelf Label**
FCC ID.	**: YZP-REBETZ74A**
Model Name	**: REBE-TZ74A**
Multiple Model Name	**: REBE-MZ74A**
Serial number	**: N/A**
Total page of Report	**: 6 pages (including this page)**
Date of Incoming	**: August 01, 2016**
Date of issue	**: August 24, 2016**

SUMMARY

The equipment complies with the regulation; ***FCC PART 15 SUBPART C Section 15.247***

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

Reviewed by: Ki-Hong, Nam / Asst, Chief Engineer, ONETECH Corp.

Approved by: Sung-Ik, Han/ Managing Director, ONETECH Corp.

ONETECH Corp.: 43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do, 12735, Korea (TEL: 82-31-799-9500, FAX: 82-31-799-9599)

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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
W168R-D035	August 24, 2016	Initial Issue	All

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1. VERIFICATION OF COMPLIANCE

Applicant	: LG Innotek Co., Ltd.
Address	: 26, Hanamsandan 5beon-ro Gwangsan-gu, 506-731, Gwangju, Korea
Contact Person	: Jeong, Inchang / Director
Telephone No.	: +86-62-950-0332
FCC ID	: YZP-REBETZ74A
Model Name	: REBE-TZ74A
Serial Number	: N/A
Date	: August 24, 2016

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	Electronic Shelf Label
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247
Modifications on the Equipment to Achieve Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

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2. GENERAL INFORMATION

2.1 Product Description

The LG Innotek Co., Ltd., Model REBE-TZ74A (referred to as the EUT in this report) is a Electronic Shelf Label. The product specification described herein was obtained from product data sheet or user's manual.

Device Type	Electronic Shelf Label
Temperature Range	0 ℃ ~ +40 ℃
Operating Frequency	2 405 MHz ~ 2 480 MHz
RF Output Power	5.34 dBm
Number of Channel	16 Channel
Modulation Type	O-QPSK
Antenna Type	PCB Pattern Antenna
USED RF CHIP	Marker: TEXAS INSRUMENTS Model Name: CC2530
Antenna Gain	3.10 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	16 MHz
RATED SUPPLY VOLTAGE	3.0 V Battery(CR2477-3P)

2.2 Alternative type(s)/model(s); also covered by this test report.

-. The following lists consist of the added model and their differences.

Model Name	Differences	Tested
REBE-TZ74A	Basic Model. (DISPLAY: COLOR)	☑
REBE-MZ74A	These models are identical to basic model except for the DISPLAY. (DISPLAY: MONO)	☐

Note: 1. Applicant consigns only basic model to test. Therefore this test report just guarantees the units, which have been tested.

2. The Applicant/manufacturer is responsible for the compliance of all variants.

3. EUT MODIFICATIONS

-. None

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4.1 RF Exposure Limit

According to the FCC rule §1.1310, the limit for General Population/Uncontrolled exposure is 1 mW/cm² for the device operating 1 500 ~ 100 000 MHz.

4.2 EUT Description

Kind of EUT	Electronic Shelf Label
Operating Frequency Band	☐ Wireless Microphone: 494.000 MHz ~ 501.000 MHz and 498.200 MHz ~ 505.200 MHz ☐ WLAN: 2 412 MHz ~ 2 462 MHz ☐ WLAN: 5 180 MHz ~ 5 320 MHz / 5 500 MHz ~ 5 700 MHz ☐ WLAN: 5 745 MHz ~ 5 825 MHz ☐ Bluetooth: 2 402 MHz ~ 2 480 MHz ■ Zigbee: 2 405 MHz ~ 2 480 MHz
Device Category	☐ Portable (< 20 cm separation) ☐ Mobile (> 20 cm separation) ■ Others
Max. Output Power	5.34 dBm
Used Antenna	PCB Pattern Antenna
Used Antenna Gain	3.10 dBi
Exposure Evaluation Applied	■ MPE ☐ SAR ☐ N/A

4.3 Test Result

According to above equation, the following result was obtained.

Operating Mode	Target Power W/tolerance	Max tune up power		Antenna Gain		Safe Distance (cm)	Power Density (mW/cm²) @ 20 cm Separation	Limit (mW/cm²)
	(dBm)	(dBm)	(mW)	Log	Linear			
Zigbee	1.5 ± 0.5	2.0	1.58	3.1	2.04	0.51	0.000 6	1.00

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