

DUETECH

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

Test Report No. : W173R-D017

AGR No. : A173A-193

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-REBETZ75A

Model Name : REBE-TZ75A

Multiple Model Name : REBE-MZ75B

Serial number : N/A

Total page of Report : 6 pages (including this page)

Date of Incoming : March 14, 2017

Date of issue : March 22, 2017

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:

Keun-Young, Choi / Vice President ONETECH Corp.

Report No.: W173R-D017

It should not be reproduced except in full, without the written approval of ONETECH Corp.





CONTENTS

	FAGE
1. VERIFICATION OF COMPLIANCE	4
2. GENERAL INFORMATION	5
2.1 PRODUCT DESCRIPTION	5
2.2 ALTERNATIVE TYPE(S)/MODEL(S); ALSO COVERED BY THIS TEST REPORT	5
4. EUT MODIFICATIONS	5
4.1 RF EXPOSURE LIMIT	6
4.2 EUT DESCRIPTION	
4.3 TEST RESULT	6

Report No.: W173R-D017



Page 3 of 6 Report No.: W173R-D017

REVISION HISTORY

Issued Report No.	Issued Date	Revisions	Effect Section
W173R-D017	March 22, 2017	Initial Issue	All

DOCUMENT HISTORY

Revision No.	Issued Date	Revisions	Effect Section
Original	March 22, 2017	Initial Issue	-



Page 4 of 6 Report No.: W173R-D017

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-REBETZ75A

Model Name : REBE-TZ75A

Serial Number : N/A

Date : March 22, 2017

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	Codification
AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED	FOG DART 15 SURDART OF CALL 15 247
UNDER FCC RULES PART(S)	FCC PART 15 SUBPART C Section 15.247
Modifications on the Equipment to Achieve	None
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.



DUETECH

2. GENERAL INFORMATION

2.1 Product Description

The LG Innotek Co., Ltd., Model REBE-TZ75A (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 °C ~ +40 °C			
Operating Frequency	2 405 MHz ~ 2 480 MHz			
RF Output Power	5.44 dBm			
Number of Channel	16 Channel			
Modulation Type	O-QPSK			
Antenna Type	PCB Pattern Antenna			
HGED DE CHID	Marker: TEXAS INSTRUMENTS			
USED RF CHIP	Model Name: CC2630			
Antenna Gain	0.56 dBi			
List of each Osc. or crystal	24.747			
Freq.(Freq. >= 1 MHz)	24 MHz			
RATED SUPPLY VOLTAGE	3.0 V Battery			

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
DEDE TZZS	Basic Model.	D
REBE-TZ75A	(DISPLAY: COLOR)	☑
REBE-MZ75B	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.

4. EUT MODIFICATIONS

-. None

Report No.: W173R-D017



Page 6 of 6 Report No.: W173R-D017

4.1 RF Exposure Limit

According to the FCC rule 1.1310, the limit for General Population/Uncontrolled exposure is 1 mW/cm^2 for the device operating $1 500 \sim 100\ 000\ \text{MHz}$.

4.2 EUT Description

4.2 EU1 Description					
Kind of EUT	Electronic Shelf Label				
	☐ Wireless Microphone: 494.000 MHz ~ 501.000 MHz				
	and 498.200 MHz ~ 505.200 MHz				
	□ WLAN: 2 412 MHz ~ 2 462 MHz				
Operating Frequency Band	□ 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				
	☐ Portable (< 20 cm separation)				
Device Category	☐ Mobile (> 20 cm separation)				
	■ Others				
Max. Output Power	5.44 dBm				
Used Antenna	PCB Pattern Antenna				
Used Antenna Gain	0.56 dBi				
	■ MPE				
Exposure Evaluation Applied	□ 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	Power Density (mW/cm²)	Limit
	(dBm)	(dBm)	(mW)	Log	Linear	(cm)	@ 20 cm Separation	(mW/cm²)
Zigbee	5.0 ± 0.5	5.50	3.55	0.56	1.14	0.57	0.000 8	1.00