

EMF TEST REPORT

Test Report No. : OT-253-RWD-015
Reception No. : 2412004707
Applicant : Remote Solution Co., Ltd.
Address : 92, Chogokri, Nammyun, Kimchon City, Kyungbuk, 740-871, South Korea
Manufacturer : Remote Solution Co., Ltd.
Address : 326-14, Apo-daero, Nam-myeon, Gimcheon-si, Gyeongsangbuk-do, 39662, South Korea
Type of Equipment : Remote control Unit
FCC ID. : TX4RD54L
Model Name : RD54L
Multiple Model Name : RD54L00, RD54L01
Serial number : N/A
Total page of Report : 6 pages (including this page)
Date of Incoming : December 14, 2024
Date of issue : March 18, 2025

SUMMARY

The equipment complies with the regulation; **FCC CFR 47 PART 2.1093**

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.

This report is not correlated with the "KS Q ISO/IEC 17025 and KOLAS accreditation" of Korean Laboratory Accreditation Scheme.



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Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-253-RWD-015	March 18, 2025	Initial Release	All

1. VERIFICATION OF COMPLIANCE

Applicant : Remote Solution Co., Ltd.

Address : 92, Chogokri, Nammyun, Kimchon City, Kyungbuk, 740-871, South Korea

Contact Person : Byung-Cheol, Kim / Manager

Telephone No. : +82-54-420-4517

FCC ID : TX4RD54L

Model Name : RD54L

Brand Name : Remotesolution

Serial Number : N/A

Date : March 18, 2025

EQUIPMENT CLASS	DTS – DIGITAL TRNSMISSION SYSTEM
E.U.T. DESCRIPTION	Remote control Unit
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	KDB 447498 D01 General RF Exposure Guidance v06
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT	Certification
AUTHORIZATION REQUESTED	
Modifications on the Equipment to Achieve Compliance	None

- 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.

2. GENERAL INFORMATION

2.1 Product Description

The Remote Solution Co., Ltd., Model RD54L (referred to as the EUT in this report) is a Remote control Unit. The product specification described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	Remote control Unit
OPERATING FREQUENCY	2 425 MHz ~ 2 475 MHz
NUMBER OF CHANNEL	3 Channel
MODULATION TYPE	DSSS
RF OUTPUT POWER	-2.75 dBm
ANTENNA TYPE	PCB Antenna
ANTENNA GAIN	3.32 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	24 MHz
RATED SUPPLY VOLTAGE	DC 3.0 V

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
RD54L	Basic Model	<input checked="" type="checkbox"/>
RD54L00, RD54L01	The model is identical to basic model except for the design.	<input type="checkbox"/>

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

4. RF Exposure Evaluation

4.1 Standard Applicable

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to the procedure, KDB 447498 D06, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW}) / (\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

4.2 EUT Description

Kind of EUT	Remote control Unit
Device Category	<input checked="" type="checkbox"/> Portable (< 20 cm separation) <input type="checkbox"/> Mobile (> 20 cm separation) <input type="checkbox"/> Others
Exposure	<input type="checkbox"/> MPE <input type="checkbox"/> SAR
Evaluation Applied	<input checked="" type="checkbox"/> SAR Exemption

4.3 Test Result of SAR Exclusion for Portable Devices

$$[(\text{Max. Power of channel, including tune-up tolerance, mW}) / (\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] \\ = (1.44/5) \times \sqrt{2.475} = 0.452 < 3$$

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Antenna Gain (dBi)	E.I.R.P power (dBm)	E.I.R.P power (mW)	Separation distance (mm)	RF exposure
2 475.00	-2.75 ± 1.0	-1.75	3.32	1.57	1.44	5	0.452