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Dates of Tests: April 02 ,2024 ~ May 03 ,2024
Test Report S/N: LR500112405E
Test Site : LTA CO., LTD.

CERTIFICATION OF COMPLIANCE

FCC ID. **2BF8ORL-CDEJ-SC-100**

APPLICANT **ROBOLINK INC.**

Equipment Class : **Digital Transmission System (DTS)**
Manufacturing Description : **Drone Controller**
Manufacturer : **ALUX CO., LTD.**
Model name : **RL-CDEJ-SC-100**
Variant Model name : **-**
Test Device Serial No.: : **Identical prototype**
Rule Part(s) : **FCC Part 15.247 Subpart C ; ANSI C63.10 - 2013**
Frequency Range : **2403 ~ 2480 MHz**
Max. Output Power : **Max -3.11 dBm - Conducted**
Data of issue : **May 07 ,2024**

This test report is issued under the authority of:

Ja-Beom Koo, Manager

The test was supervised by:

Eun-Hwan Jung, Test Engineer

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1. General information

1-1 Test Performed

Company name : LTA Co., Ltd.
 Address : 243, Jubug-ri, Yangji-Myeon, Youngin-Si, Kyunggi-Do, Korea. 449-822
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Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the “General requirements for the competents of calibration and testing laboratory”.

1-2 Accredited agencies

LTA Co., Ltd. is approved to perform EMC testing by the following agencies:

Agency	Country	Accreditation No.	Validity	Reference
RRA	KOREA	KR0049	-	EMC accredited Lab.
FCC	U.S.A	649054	2025-03-29	FCC CAB
VCCI	JAPAN	C-4948,	2026-09-10	VCCI registration
VCCI	JAPAN	T-2416,	2026-09-10	VCCI registration
VCCI	JAPAN	R-4483(10 m),	2026-10-15	VCCI registration
VCCI	JAPAN	G-847	2024-12-13	VCCI registration
IC	CANADA	5799A-1	2024-08-15	IC filing

2. Information about test item

2-1 Client & Manufacturer

Client Company name : ROBOLINK INC.
 Address : 5075 Shoreham Pl. Ste 110, San Diego, CA 92122 USA
 Tel / Fax : +1-858-876-5123 / -
 Manufacturer : ALUX CO., LTD.
 Address : 1602 (1 Office), 16Floor, Seed Cube Chang-dong, 61, Madeul-ro 13-gil, Dobong-gu, Seoul, 01413 Republic of Korea
 Tel / Fax : +1-858-876-5123 / -

2-2 Equipment Under Test (EUT)

Model name : ROBOLINK INC.
 Serial number : Identical prototype
 Date of receipt : April 02 ,2024
 EUT condition : Pre-production, not damaged
 Antenna type : Wire Antenna (Max Gain : 0 dBi)
 Frequency Range : 2403 ~ 2480 MHz
 RF output power : Max -3.11 dBm – Conducted
 Type of Modulation : GFSK
 Power Source : DC 3.7 V

2-3 Tested frequency

Bluetooth	LOW	MID	HIGH
Frequency (MHz)	2403	2440	2480

2-4 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
-	-	-	-

3. Test Report

3.1 Summary of tests

FCC Part Section(s)	Parameter	Limit	Test Condition	Status (note 1)
§ 1.1310 and §2.1091	RF EXPOSURE EVULATION	-	-	C

Note 1: C=Complies NC=Not Complies NT=Not Tested NA=Not Applicable

3.2 RF EXPOSURE EVULATION

1.1 Limit

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength	Magnetic field Strength	Power density (mW/cm ²)	Averaging time
1.34 - 30.....	824/f	2.19/f	*(180/ f ²)	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	f/1500	30
1500 - 100.000.....	1.0	30

F = frequency in MHz
 * = Plane-wave equivalent power density

1.2 MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

Power density at the specific separation:

<p>$S = PG/(4R^2\pi)$</p> <p>$S = (0.49 * 1.00) / (4 * 20^2 * \pi)$</p> <p>$S = 0.0001 \text{ mW/cm}^2$</p>	<p>Where,</p> <p>S = Maximum power density (mW/cm²)</p> <p>P = Power input to the antenna (mW)</p> <p>G = Numeric power gain of the antenna</p> <p>R = Distance to the center of the radiation of the antenna (20 cm = limit for MPE)</p>
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1.3 MAXIMUM PERMISSIBLE EXPOSURE Prediction

- Calculated under the worst-case conditions of each mode.

(Measured power -3.0 dBm ± 0.5dB)

2.4GHz Mode

Max Peak output Power at antenna input terminal	-3.11	dBm
Max Peak output Power at antenna input terminal	0.49	mW
Prediction distance	20	cm
Prediction frequency	2480	MHz
Antenna Gain(typical)	0	dBi
Antenna Gain(numeric)	1.00	-

SAR Test exclusion thresholds for 100MHz to 6GHz at test separation distance ≤ 50 mm = **Used**

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f}(\text{GHz})]$

$= [0.49 / 5] * [\sqrt{2.480}] = 0.15 \leq 3.0$, for 1g SAR

Thus, SAR for this device is not required.