FCC TEST REPORT

According to
FCC CFR Title 47 Part 15 Subpart C (15.247)

Applicant	:	**NINGBO DIYA ELECTRIC APPLIANCE CO.,LTD.**
Address	:	**SIMEN TOWN YUYAO CITY ZHEJIANG CHINA**
Manufacturer	:	**NINGBO DIYA ELECTRIC APPLIANCE CO.,LTD.**
Address	:	**SIMEN TOWN YUYAO CITY ZHEJIANG CHINA**
Equipment	:	**Remote Control Socket**
Model No.	:	**DR-1701**
FCC ID	:	**2AC2CDR-018**
Test Period	:	**Jun.07th,2018~ Sep.01th, 2018**

■The test result refers exclusively to the test presented test model / sample.

■Without written approval of **CERPASS TECHNOLOGY CORPORATION TEST LABORATORY** the test report shall not be reproduced exc- ept in full.

■The test report must not be used by the clients to claim product certification approval by **NVLAP** or any agency of the Government.

I HEREBY CERTIFY THAT :
The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.10 – 2013&FCC Part15.247**and the energy emitted by this equipment was *passed.*

Approved by: Laboratory Accreditation:

[signature]

Mark Liao / Assistant Manager

⊠   Cerpass Technology Corporation Test Laboratory

TAF LAB Code:	**1439**

Radio Frequency Exposure

LIMIT

For 2.4G Band: According to §15.247(i), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this chapter.

EUT Specification

EUT	Remote Control Socket
Frequency band (Operating)	☒ WLAN: 2.412GHz ~ 2.462GHz
Device category	☐ Portable (<20cm separation) ☒ Mobile (>20cm separation)
Exposure classification	☐ Occupational/Controlled exposure (S = 5mW/cm^2) ☒ General Population/Uncontrolled exposure (S=1mW/cm^2)
Antenna diversity	☒ Single antenna ☐ Multiple antennas ☐ Tx diversity ☐ Rx diversity ☒ Tx/Rx diversity
Max. output power for 2.4G Band	IEEE802.11b: 21.79 dBm (0.1510W) IEEE802.11g: 22.11 dBm (0.1626W) IEEE802.11n HT20: 21.13 dBm (0.1297W)
Antenna gain (Max)	3dBi for 2.4G Band
Evaluation applied	☒ MPE Evaluation* ☐ SAR Evaluation ☐ N/A

Remark:

1. *The maximum output power is <u>22.11dBm (0.1626W)</u> at <u>2462MHz</u> (with <u>numeric 2.00antenna gain.</u>) for2.4G band*
2. *DTS device is not subject to routine RF evaluation; MPE estimate is used to justify the compliance.*
3. *For mobile or fixed location transmitters, no SAR consideration applied. The maximum power density is 1.0 mW/cm^2 even if the calculation indicates that the power density would be larger.*

Note: Simultaneous transmission is not applicable for this EUT.

TEST RESULTS FOR 2.4G BAND

No non-compliance noted.

Calculation

Given $E = \dfrac{\sqrt{30 \times P \times G}}{d}$ & $S = \dfrac{E^2}{3770}$

> *Where   E = Field strength in Volts / meter*
> *P = Power in Watts*
> *G = Numeric antenna gain*
> *d = Distance in meters*
> *S = Power density in milliwatts / square centimeter*

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$S = \dfrac{30 \times P \times G}{3770 d^2}$

Changing to units of mW and cm, using:

> *P (mW) = P (W) / 1000 and*
> *d (cm) = d(m) / 100*

Yields

$S = \dfrac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \dfrac{P \times G}{d^2}$ ***Equation 1***

> *Where   d = Distance in cm*
> *P = Power in mW*
> *G = Numeric antenna gain*
> *S = Power density in mW / cm^2*

Maximum Permissible Exposure

Modulation Mode	Frequency band (MHz)	Max. Conducted output power(dBm)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm^2)	Limit (mW/cm2)
IEEE802.11b	2412-2462	21.79	3	20	0.0599	1
IEEE802.11g	2412-2462	22.11	3	20	0.0645	1
IEEE802.11n HT20	2412-2462	21.13	3	20	0.0515	1