# YUNEEC International (China) Co., Ltd.

# wireless video transfer system

**Main Model: LK58** Serial Model: N/A

June 03, 2014 Report No.: 14050005-FCC-H1-V1 (This report supersedes NONE)



**Modifications made to the product: None** 

This Test Report is Issued Under the Authority of: Ray Zhao Alex Liu **Compliance Engineer Technical Manager** 

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## **Laboratory Introduction**

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**Accreditations for Conformity Assessment** 

Country/Region	Scope	
USA	EMC, RF/Wireless, Telecom	
Canada	EMC, RF/Wireless, Telecom	
Taiwan	EMC, RF, Telecom, Safety	
Hong Kong	RF/Wireless ,Telecom	
Australia	EMC, RF, Telecom, Safety	
Korea	EMI, EMS, RF, Telecom, Safety	
Japan	EMI, RF/Wireless, Telecom	
Singapore	EMC, RF, Telecom	
Europe	Europe EMC, RF, Telecom, Safety	

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RF Exposure Evaluation Report for wireless video transfer system
Main Model: LK58
Serial Model: N/A

To: FCC 2.1091: 2013

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## 1. EXECUTIVE SUMMARY & EUT INFORMATION

The purpose of this test programme was to demonstrate compliance of the YUNEEC International (China) Co., Ltd., wireless video transfer system and model: LK58against the current Stipulated Standards. The wireless video transfer system has demonstrated compliance with the FCC 2.1091: 2013.

### **EUT Information**

<b>EUT Description</b>	wireless video transfer system		
Main Model	LK58		
Serial Model	N/A		
Antenna Gain	5.8G: 0dBi		
Input Power	DC 5V		
Maximum Conducted Peak Power to Antenna	25.2dBm		
Classification Per Stipulated Test Standard	FCC 2.1091: 2013		

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2.	TECHNICAL DETAILS
Purpose	Compliance testing of wireless video transfer system with stipulated standard
Applicant / Client	YUNEEC International (China) Co., Ltd. No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu, China
Manufacturer	YUNEEC International (China) Co., Ltd. No.388, Zhengwei Road, Jinxi Town, Kunshan, Jiangsu, China
Laboratory performing the tests	SIEMIC (Nanjing-China) Laboratories NO.2-1,Longcang Dadao, Yuhua Economic Development Zone, Nanjing, China Tel: +86(25)86730128/86730129 Fax: +86(25)86730127 Email: China@siemic.com.cn
Test report reference number	14050005-FCC-H1-V1
Date EUT received	March 25, 2014
Standard applied	FCC 2.1091: 2013
Dates of test	April 04 to May 30, 2014
No of Units	#1
<b>Equipment Category</b>	DTS
Trade Name	YUNEEC
RF Operating Frequency (ies)	5745 MHz
Number of Channels	5.8G: 1
Modulation	OFDM
Port	HDMI Port, Shutter Port, IR Port, Power
FCC ID	2ABB5-LK58

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## 3. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

## FCC §2.1091 - MAXIMUM PERMISSIBLE EXPOSURE (MPE)

#### **Applicable Standard**

According to §1.1307(b)(1), 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 level in excess of the Commission's guidelines.

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

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure						
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Averaging Time (minutes)		
0.3-1.34	614	1.63	*(100)	30		
1.34-30	824/f	2.19/f	*(180/f2)	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

Test Data

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

Where: S = power density (in appropriate units, e.g. mW/cm2)

P = power input to the antenna (in appropriate units, e.g., mW).

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

<sup>\* =</sup> Plane-wave equivalent power density



5.8G:

Maximum peak output power at antenna input terminal: 25.2(dBm) Maximum peak output power at antenna input terminal: 331.13 (mW) 8 of 8 www.siemic.com

Prediction distance: >20 (cm) Predication frequency: 5745 (MHz) Antenna Gain 1 (typical): 0 (dBi) Antenna Gain 2 (typical): 0 (dBi)

The worst case is power density at predication frequency at 20 cm: 0.066 (mW/cm2) MPE limit for general population exposure at prediction frequency: 1.0 (mW/cm2)

0.066(mW/cm2) < 1.0(mW/cm2)

**Result: Pass**