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Report No.: 1707RSU03506 Report Version: Issue Date: 09-01-2017

# **RF Exposure Evaluation Declaration**

FCC ID: T2C-CP920

YEALINK(XIAMEN) NETWORK TECHNOLOGY APPLICANT:

CO.,LTD

**Application Type:** Certification

**Product: HD IP Conference Phone** 

Model No.: CP920

**Brand Name:** YEALINK

Digital Transmission System (DTS) **FCC Classification:** 

FCC Part 15 Spread Spectrum Transmitter(DSS)

**Test Procedure(s):** KDB 447498 D01v06

Test Date: May 05 ~ June 05, 2017

: Suny Sun (Sunny Sun) Reviewed By

Approved By

(Marlin Chen)





The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

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# **Revision History**

Report No.	Version	Description	Issue Date	Note
1707RSU03506	Rev. 01	Initial report	09-01-2017	Valid

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## 1. PRODUCT INFORMATION

## 1.1. Equipment Description

Product Name:	HD IP Conference Phone		
Model No.:	CP960		
Brand Name:	YEALINK		
Wi-Fi Specification:	802.11a/b/g/n/ac		
Bluetooth Version:	v3.0 + HS, v4.0		
Antenna Gain	0dBi		

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## 2. RF Exposure Evaluation

## 2.1. Limits

### **FCC Rules:**

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

## LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range	Electric Field	Magnetic Field	Power Density	Average Time
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm <sup>2</sup> )	(Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500			f/1500	6
1500-100,000			1	30

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### Formula as follows:

f= Frequency in MHz

Calculation Formula:  $Pd = (Pout*G)/(4*pi*r^2)$ 

Where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

r = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

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## 2.2. Test Result of RF Exposure Evaluation

Product	HD IP Conference Phone
Test Item	RF Exposure Evaluation

Antenna Gain: Refer to Section 1.1

### For Wi-Fi Band:

Test Mode	Frequency Band	Maximum Average	Power Density at	FCC
	(MHz)	Output Power	r = 20 cm	Limit
		(dBm)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )
802.11b/g/n	2412 ~ 2462	14.15	0.0052	1

### For Bluetooth Band:

Test Mode	Frequency Band	Maximum Output	Power Density at	FCC
	(MHz)	Power	r = 20 cm	Limit
		(dBm)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )
BLE	2402 ~ 2480	8.01	0.0013	1
DH5/2DH5/3DH5	2402 ~ 2480	8.87	0.0015	1

### **CONCLUSION:**

Both of the WLAN, Bluetooth & DECT can transmit simultaneously. Therefore, the Max Power Density at r (20 cm) =  $0.0052 \text{mW/cm}^2 + 0.0015 \text{mW/cm}^2 = 0.0067 \text{mW/cm}^2 < 1 \text{mW/cm}^2$ . So the EUT complies with the FCC requirement.

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- The End