

RF Exposure Evaluation Declaration

FCC ID: T2C-CP930W

APPLICANT: YEALINK(XIAMEN) NETWORK TECHNOLOGY CO., LTD

Application Type: Certification

Product: DECT Conference Phone

- Model No.: CP930W
- Brand Name: YEALINK
- FCC Classification: FCC Part 15 Spread Spectrum Transmitter(DSS) Unlicensed PCS Base Station (PUB)

Test Procedure(s): KDB 447498 D01v06

Reviewed By:

Approved By:





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.

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Revision History

Report No.	Version	Description	Issue Date	Note
1809RSU030-U4	Rev. 01	Initial Report	11-13-2018	Valid



1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name:	DECT Conference Phone	
Model No.:	CP930W	
Brand Name:	YEALINK	
Bluetooth Version:	v4.0 (Only support Bluetooth v3.0+HS)	
DECT Version:	v6.0	
Components		
Adapter:	Model: YLPS121000C-US	
	INPUT: 100-240V ~ 50/60Hz, 0.5A	
	OUTPUT: 12Vdc, 1.0A	
Battery:	Model:YLLR1865C7800WLS	
	P/N:1ICR20/57/73-3	
	Rating:3.6Vdc,7800mAh,28Wh	
	Limited Charge Voltage:4.2V	

1.2. Product Specification Subjective to this Standard

Bluetooth v3.0 Specification			
Operating Frequency:	2402~2480MHz		
Maximum Output Power:	8.16dBm		
Antenna Type:	FPC Antenna		
Antenna Gain:	3dBi		
DECT Specification	DECT Specification		
Frequency Range:	1921.536 ~ 1928.448MHz		
Maximum Output Power:	18.79dBm		
Antenna Type:	PCB		
Antenna Gain:	-1dBi		



2. RF Exposure Evaluation

2.1. Limits

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)

Frequency Range	Electric Field	Magnetic Field	Power Density	Average Time	
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm ²)	(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	

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

f= Frequency in MHz

Calculation Formula: $P_d = (P_{out}^*G)/(4^*P_i^*r^2)$

Where

 P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

P_i = 3.1416

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

Pd is the limit of MPE, 1mW/cm². 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.



2.2. Test Result of RF Exposure Evaluation

Product	DECT Conference Phone	
Test Item	RF Exposure Evaluation	

Test Mode	Frequency Band (MHz)	Maximum Output power (dBm)	Maximum EIRP (dBm)	Power Density at R = 20 cm (mW/cm ²)	Limit (mW/cm²)
DECT	1921.536 ~ 1928.448	18.79	17.79	0.0120	1
Bluetooth	2402 ~ 2480	5.16	8.16	0.0013	1

Note 1: Maximum EIRP(dBm) = Maximum output power(dBm) + Antenna Gain(dBi) Note 2: Antenna Gain refers to clause 1.2 of this report.

CONCULISON:

Due to DECT and Bluetooth can transmit simultaneously, so Max Power Density (R = 20 cm) = $0.0001+0.0158 = 0.0159 \text{ mW/cm}^2$. Therefore, the Min Safety Distance is 20cm.