



## MPE Test Report

**Report No.:** FVC-ESH-P20112379B-16

**FCC ID:** T2C-A20

**Product:** Video Conferencing Endpoint

**Model:** MeetingBar A20

**Received Date:** Dec.30, 2020

**Test Date:** Jan.02 to Jan.22, 2021

**Issued Date:** Jan.23, 2021

**Applicant:** YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.

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**Manufacturer:** YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.

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**Issued By:** BUREAU VERITAS ADT (Shanghai) Corporation

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### Release Control Record

Issue No.	Description	Date Issued
FVC-ESH-P20112379B-16	Original release	Jan.23, 2021



# 1 Certificate of Conformity

**Product:** Video Conferencing Endpoint

**Brand:** Yealink

**Test Model:** MeetingBar A20

**Applicant:** YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.

**Test Date:** Jan.02 to Jan.22, 2021

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **BUREAU VERITAS ADT (Shanghai) Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

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, Date:

Jan.23, 2021

Approved by :



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EMC Lab Manager

, Date:

Jan.23, 2021

## 2 General Description of EUT

### BLE

Product	Video Conferencing Endpoint
Brand	Yealink
Test Model	MeetingBar A20
Power Rating	I/P: 48V ===, 0.7A for Video Conferencing Endpoint; I/P: 100-240Vac, 50/60Hz, 1.0A; O/P: 48V ===, 0.7A for AC Adapter.
Modulation Type	GFSK
Modulation Technology	Bluetooth Low Energy 4.2
Operating Frequency	2402MHz ~ 2480MHz
Number of Channel	40
Output Power	-1.84dBm
Antenna Type	PCB Antenna
Antenna Connector	--
Antenna Gain	3dBi

Note: For more details, please refer to the User's manual of the EUT.

### BT

Product	Video Conferencing Endpoint
Brand	Yealink
Test Model	MeetingBar A20
Power Rating	I/P: 48V ===, 0.7A for Video Conferencing Endpoint; I/P: 100-240Vac, 50/60Hz, 1.0A; O/P: 48V ===, 0.7A for AC Adapter.
Modulation Type	GFSK, $\pi/4$ -DQPSK, 8DPSK
Modulation Technology	BT-EDR, FHSS
Operating Frequency	2402MHz ~ 2480MHz
Number of Channel	79
Output Power	5.54dBm
Antenna Type	PCB antenna
Antenna Connector	--
Antenna Gain	3dBi

Note: For more details, please refer to the User's manual of the EUT.

#### WIFI 2.4G

Product	Video Conferencing Endpoint
Brand	Yealink
Test Model	MeetingBar A20
Power Rating	I/P: 48V ===, 0.7A for Video Conferencing Endpoint; I/P: 100-240Vac, 50/60Hz, 1.0A; O/P: 48V ===, 0.7A for AC Adapter.
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	DSSS, OFDM
Operating Frequency	2412~2462MHz
Number of Channel	11b/g/n(HT20):11;11n(HT40):7
Output Power	16.24dBm
Antenna Type	PCB Antenna
Antenna Connector	--
Antenna Gain	Ant1:3dBi Ant2:3dBi MIMO Gain:6.01dBi

Note: For more details, please refer to the User's manual of the EUT.

#### WIFI 5G

Product	Video Conferencing Endpoint
Brand	Yealink
Test Model	MeetingBar A20
Power Rating	I/P: 48V ===, 0.7A for Video Conferencing Endpoint; I/P: 100-240Vac, 50/60Hz, 1.0A; O/P: 48V ===, 0.7A for AC Adapter.
Modulation Type	OFDM
Modulation Technology	802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM) 802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Operating Frequency	5150 ~ 5250MHz, 5250 ~ 5350MHz, 5470 ~ 5725MHz, 5745 ~ 5850MHz
Number of Channel	5150 ~ 5250MHz:7, 5250 ~ 5350MHz:7, 5470 ~ 5725MHz:18,5745 ~ 5850MHz:7
Output Power	17.24dBm
Antenna Type	PCB Antenna
Antenna Connector	--
Antenna Gain	Ant1:3dBi Ant2:3dBi MIMO Gain:6.01dBi

Note: For more details, please refer to the User's manual of the EUT.

### 3 RF Exposure

#### 3.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1,500	-	-	F/1500	30
1,500-100,000	-	-	1.0	30

F = Frequency in MHz

#### 3.2 MPE Calculation Formula

Power density (S) is calculated according to the formula:

$$S = PG / (4\pi R^2)$$

Where S = power density in mW/cm<sup>2</sup>

P = transmit power in mW

G = numeric gain of transmit antenna (numeric gain=Log-1(dB antenna gain/10))

R = distance (cm)

The antenna of this product, under normal use condition, is at least 20cm from the body of the user. So the device is classified as Mobile Device.

### 3.3 Calculation Result of Maximum Permissible Exposure

Frequency Band (MHz)	Max. Conducted Output power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
BLE					
2402-2480	-1.84	3	20	0.0002600	1
BT					
2402-2480	5.54	3	20	0.0014222	1
WIFI 2.4GHz					
2412-2462	16.24	3	20	0.0167090	1
WIFI 5GHz					
5150-5850	17.24	3	20	0.02103538	1

**Conclusion:**

**The calculation result of MPE is less than the limit.**

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