MPE Test Report

Report No.:	FVC-ESH-P20112382B-16
FCC ID:	T2C-A30
Product:	Video Conferencing Endpoint
Model:	MeetingBar A30
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.
Address:	309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China
Manufacturer:	YEALINK(XIAMEN) NETWORK TECHNOLOGY CO.,LTD.
Address:	309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, P.R. China
Issued By:	BUREAU VERITAS ADT (Shanghai) Corporation
Lab Address:	No. 829, Xinzhuan Road, Shanghai, P.R.China (201612)

ACCREDITED
Test Lab
Cert 2343.01

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Release Control Record

Issue No.	Description	Date Issued
FVC-ESH-P20112382B-16	Original release	Jan.23, 2021

1 Certificate of Conformity

Product: Video Conferencing Endpoint

Brand: Yealink

Test Model: MeetingBar A30

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.

Prepared by : Yuan ZHANG , **Date:** Jan.23, 2021

Project Engineer

Approved by : Daniel SUN , **Date:** Jan.23, 2021

EMC Lab Manager

2 General Description of EUT

BLE

Product	Video Conferencing Endpoint
Brand	Yealink
Test Model	MeetingBar A30
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 A30
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, π/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 A30
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

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 A30
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

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^2)	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^2

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^2)	Limit (mW/cm^2)
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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