MPE TEST REPORT

Applicant	Airspan Networks LTD
FCC ID	PIDAS62125V
Product	999-03-718-US
Brand	AirSpot 621V
Model	999-03-718-US
Marketing	My-ES-ZM-B41-42-43-48-VW-12
Report No.	R1902A0055-M2
Issue Date	May 5, 2019

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC 47 CFR Part 1 1.1310**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Yu Wang

Performed by: Yu Wang

Guangchang Fan

Approved by: Guangchang Fan

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1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.**The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test facility

CNAS (accreditation number:L2264)

TA Technology (Shanghai) Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

IC (recognition number is 8510A)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Canada to perform electromagnetic emission measurement.

VCCI (recognition number is C-4595, T-2154, R-4113, G-10766)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Japan to perform electromagnetic emission measurement.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3 Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
Address:	No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
City:	Shanghai
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E-mail:	xukai@ta-shanghai.com

1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Description of Equipment under Test

Client Information

Applicant	Airspan Networks LTD
Applicant address	777 Yamato Road, Boca Raton, Florida USA
Manufacturer	Airspan Networks LTD
Manufacturer address	777 Yamato Road, Boca Raton, Florida USA

General Technologies

Model	999-03-718-US
IMEI	860524031819954
Hardware Version	V3.0
Software Version	M-IDU-1.6.0.3_V1.7 CAT12_BYPASS_0.3.2.20_V1.4
Date of Testing:	February 16, 2019~ April 15, 2019

999-03-718-US (Report No: R1902A0055-M2) is a variant model of 999-03-716-US (Report No: R1902A0055-M1). Test values duplicated from Original for variant. There is no test for variant in this report. The detailed product change description please refers to the ANNEX B.

3 Maximum conducted output power (measured) and antenna Gain

The numeric gain (G) of the antenna with a gain specified in dB is determined by
Numeric gain (G)=10^(antenna gain/10)

Band	Maximum Conducted Output Power (dBm)		Antenna Gain (dBi)	Numeric gain
	(dBm)	(mW)		
LTE Band 41	24.000	251.189	8.000	6.310
WIFI 2.4G	18.850	76.736	2.500	1.778
WIFI 5G	21.390	137.721	3.000	1.995

4 Test Result

According to section 1.1310 of FCC 47 CFR Part 1, limits for maximum permissible exposure (MPE) are as following

TABLE 1 – LIMITS FOR MAXIMUN PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Averaging Time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3-30	1842/f	4.89/f	*(900/f2)	6
30-300	61.4	0.163	1.0	6
300-1500	.....	.....	f/300	6
1500-100,000	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
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
* = Plane-wave equivalent power density

Note1. Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational / controlled limits apply provided he or she is made aware of the potential for exposure.

Note2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The maximum permissible exposure for 300~1500 MHz is f/1500, for 1500~100,000MHz is 1.0.So

Band	The maximum permissible exposure
LTE Band 41	1.0mW/cm^2
Wi-Fi 2.4G	1.0mW/cm^2
Wi-Fi 5G	1.0mW/cm^2

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided. This calculation is based on the conducted power, considering maximum power and antenna gain. The formula shown in KDB 447498 D01 is used in the calculation.

Equation from KDB 447498 D01 General RF Exposure Guidance v06 (10/23/2015) is:

$$S = PG / 4\prod R^2$$

Where: S = power density (in appropriate units, e.g. mW/cm^2)

P = Time-average maximum tune up procedure (in appropriate units, e.g., mW)

G = the numeric gain of the antenna

R = distance to the center of radiation of the antenna (20 cm = limit for MPE)

Band	PG (mW)	Test Result (mW/cm^2)	Limit Value (mW/cm^2)	The MPE ratio	Conclusion
LTE Band 41	1584.893	0.315	1.000	0.315	Pass
Wi-Fi 2.4G	136.458	0.027	1.000	0.027	Pass
Wi-Fi 5G	274.789	0.055	1.000	0.055	Pass
Note: **R** = 20cm ∏= 3.1416 The MPE ratio = Mac Test Result÷Limit Value					

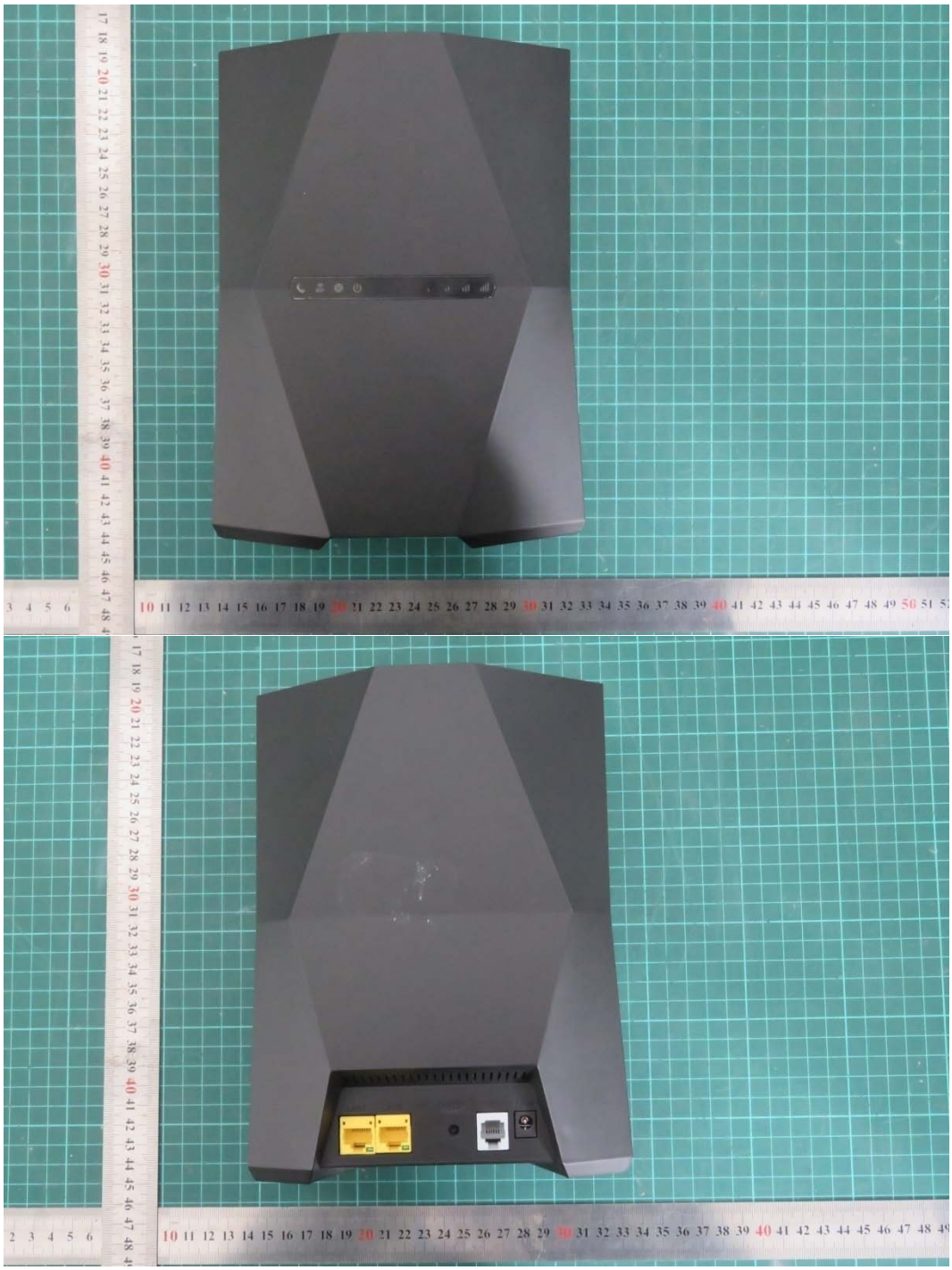
So the simultaneous transmitting antenna pairs as below:

∑of MPE ratios=WiFi 2.4G+ WiFi 5G+LTE =0.397<1

Note: For transmitters, minimum separation distance is 20cm, even if calculations indicate MPE distance is less.

ANNEX A： The EUT Appearance

A.1 EUT Appearance



a: EUT

Picture 1 EUT

ANNEX B: Product Change Description

We, zhongmi communication ,declare on our sole responsibility that the product,

999-03-718-US

is the variant of the initial certified product,

999-03-716-US

Except the following changes on the latest MODEL: AirSpot 621 B41

SOFTWARE MODIFICATIONS:

Protocol Stack changes: NO
MMS/STK changes: NO
JAVA changes: NO
Other changes detailed: ADD VOICE

HARDWARE MODIFICATION:

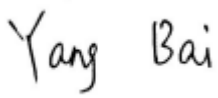
Band changes: NO
Power Amplifier changes: NO
Antenna changes: NO
PCB Layout changes: NO.
Components on PCB changes: NO
LCD changes: No
Speaker changes: NO
Camera changes: NO
Vibrator changes: NO
Bluetooth changes: NO
FM changes: NO
Other changes: ADD VOICE

MECHANICAL MODIFICATIONS:

Use new metal front/back cover or keypad: no
Mechanical shell changes: No.
Other changes detailed: ADD VOICE, ADD VOICE，CHANGE PRODUCT NAME，CHANGE BRAND NAME，CHANGE MODEL NAME

ACCESSORY MODIFICATIONS:

Battery changes: NO
AC Adaptor changes: ADD VOICE
Earphone changes: NO

Signature: 

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