



RF Exposure Evaluation Report

APPLICANT : Airspan Networks Inc.
EQUIPMENT : AirSpot 312,LTE ODU B42, B43, B48,
CAT 6, US
BRAND NAME : Airspan
MODEL NAME : My-Pro-ZM-B42-B43-B48-C6-US
FCC ID : PIDAS312A
STANDARD : 47 CFR Part 2.1091
FCC KDB 447498 D01 v06

We, Sporton International (Kunshan) Inc., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091 and FCC KDB 447498 D01 v06, and pass the limit. Without written approval of Sporton International (Kunshan) Inc., the test report shall not be reproduced except in full.

Rose Wang

Reviewed by: Rose Wang / Supervisor

Kat Yin

Approved by: Kat Yin / Manager



Sporton International (Kunshan) Inc.

***No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China***



Table of Contents

1. ADMINISTRATION DATA	4
1.1. Testing Laboratory	4
2. DESCRIPTION OF EQUIPMENT UNDER TEST (EUT)	5
3. MAXIMUM RF AVERAGE OUTPUT POWER AMONG PRODUCTION UNITS	6
4. RF EXPOSURE LIMIT INTRODUCTION	7
5. RADIO FREQUENCY RADIATION EXPOSURE EVALUATION	8
5.1. Standalone Power Density Calculation	8

**Revision History**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA9D1911	Rev. 01	Initial issue of report	Apr. 08, 2020



1. Administration Data

1.1. Testing Laboratory

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Testing Laboratory		
Test Firm	Sporton International (Kunshan) Inc.	
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958	
Test Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CN1257	314309

Applicant	
Company Name	Airspan Networks Inc.
Address	777 Yamato Rd, Suite 310, Boca Raton, Florida, 33431

Manufacturer	
Company Name	Airspan Networks Inc.
Address	777 Yamato Rd, Suite 310, Boca Raton, Florida, 33431



2. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	AirSpot 312,LTE ODU B42, B43, B48, CAT 6, US
Brand Name	Airspan
Model Name	My-Pro-ZM-B42-B43-B48-C6-US
FCC ID	PIDAS312A
Wireless Technology and Frequency Range	LTE Band 42: 3552.5 MHz ~ 3597.5 MHz LTE Band 43: 3602.5 MHz ~ 3697.5 MHz LTE Band 48: 3552.5 MHz ~ 3697.5 MHz
Mode	LTE: QPSK, 16QAM
HW Version	V1.0
SW Version	MG6_0.3.2.20_V0.4_CBSD-T14b
Antenna Gain	14dBi
EUT Stage	Identical Prototype

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.



3. Maximum RF average output power among production units

<LTE>

Mode		Maximum Average power(dBm)
LTE	Band 42	22.0
LTE	Band 43	22.0
LTE	Band 48	22.0



4. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	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/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



5. Radio Frequency Radiation Exposure Evaluation

5.1. Standalone Power Density Calculation

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm ²)	Limit (mW/cm ²)
LTE Band 48	3552.5	14	22.00	36.00	3.981	3981.072	0.792	1.000

Note:

1. For conservativeness, the lowest frequency of each band is used to determine the MPE limit of that band
2. Chose the maximum power to do MPE analysis.
3. LTE band 42 and LTE band 43 covered by LTE band 48 with the same power level, so only chose LTE band 48 to perform standalone power density calculation.

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.