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Report No.: 2203RSU006-U2 Report Version: V01 Issue Date: 05-24-2022

# **RF Exposure Evaluation Declaration**

FCC ID: PIDAV2700

**Applicant:** Airspan Networks Inc

Product: AirVelocity2700, 3.55-3.7GHz (n48),FM,PoE/DC

Model No.: AV27-N48-P4CXP-FM-C

Brand Name: Airspan

Test Procedure(s): FCC part 2.1091

Reviewed By:

Kevin Guo

Approved By:

Robin Wu

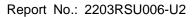
Robin Wu

Robin Wu

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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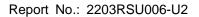
## **Revision History**

Report No.	Version	Description	Issue Date	Note
2203RSU006-U2	Rev. 01	Initial Report	05-24-2022	Valid



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### 1. General Information

#### 1.1. Applicant

Airspan Networks Inc

777 Yamato Road Suite 310 Boca Raton FL 33431 USA

#### 1.2. Manufacturer

Airspan Networks Inc

777 Yamato Road Suite 310 Boca Raton FL 33431 USA

## 1.3. Testing Facility

$\boxtimes$	Test Site – MRT Suzhou Laboratory					
	Laboratory Location (Suzhou - Wuzhong)					
	D8 Building, No.2	Tian'edang Rd., W	uzhong Economic De	onomic Development Zone, Suzhou, China		
	4b Building, Liand	do U Valley, No.200	Xingpu Rd., Shengpu	ı Town, Suzhou Indu	strial Park, China	
	Laboratory Accre	editations				
	A2LA: 3628.01		CNAS	i: L10551		
	FCC: CN1166		ISED: CN0001			
	VCCI:	□R-20025	□G-20034	□C-20020	□T-20020	
	VCCI.	□R-20141	□G-20134	□C-20103	□T-20104	
	Test Site – MRT Shenzhen Laboratory					
	Laboratory Loca	tion (Shenzhen)				
	1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, Chin					
	Laboratory Accre	editations				
	A2LA: 3628.02	CNAS: L10551				
	FCC: CN1284 ISED: CN0105					
	Test Site – MRT Taiwan Laboratory					
	Laboratory Location (Taiwan)  No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)					
	Laboratory Accreditations					
	TAF: L3261-1907	25				
	FCC: 291082, TW	/3261	ISED:	TW3261		



#### 1.4. Product Information

Product Name	AirVelocity2700, 3.55-3.7GHz (n48),FM,PoE/DC	
Model No.	AV27-N48-P4CXP-FM-C	
Operating Band	5G NR n48	
CBSD Category	Category A CBSD	
Antenna Information	Refer to section 1.6	
Emission Designator	Refer to Section 1.7	
	DC 42-57V/1A	
Voltage Range	PoE 41.1-57V/1A	

#### Remark:

The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.

#### 1.5. Antenna Details

Band Support Antenna Type		Manufacturer	Antenna Gain	
n48	Omni Internal	Galtronics	5.00 dBi	

#### Remark:

- 1. This device can operate with 2Tx and 4Tx mode.
- 2. This device operates with Multiple Antennas Using Multiple-input, Multiple-output (MIMO) Technology for Uncorrelated Transmission.
- 3. The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.





### 2. RF Exposure Evaluation

#### 2.1. Test 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)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range	Electric Field	Magnetic Field	Power Density	Average Time			
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm <sup>2</sup> )	(Minutes)			
	(A) Limits for Occupational/ Control Exposures						
300-1500			f/300 6				
1500-100,000	00-100,000		5	6			
(B) Limits for General Population/ Uncontrolled Exposures							
300-1500			f/1500	6			
1500-100,000			1	30			

f= Frequency in MHz

Calculation Formula:  $Pd = (Pout*G)/(4*pi*r^2)$ 

Where

Pd = power density in mW/cm<sup>2</sup>

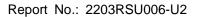
Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

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

Pd is the limit of MPE, 1mW/cm<sup>2</sup>. 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

Product	AirVelocity2700, 3.55-3.7GHz (n48),FM,PoE/DC
Test Item	RF Exposure Evaluation

Test Mode	Frequency	Maximum	Tune-up	Pd	Limit	Compliance
	Band (MHz)	EIRP (dBm)	Factor	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )	Distance (cm)
n48	3550 ~ 3700	28.75	2	0.2364	1	20

#### **CONCLUSION:**

The Power Density at R (20 cm) = 0.2364mW/cm<sup>2</sup> < 1mW/cm<sup>2</sup>.

So the compliance distance is 20cm for device installed without any other radio equipment.



<b>Appendix</b>	Δ_	FUT	Photo	aranh
Appelluix	A -	EUI	FIIOU	Julabii

Refer to "2203RSU006-UE" file.

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