



RF Exposure Evaluation Declaration

FCC ID: PIDAV2700CBL
Applicant: Airspan Networks Inc

Application Type: Certification
Product: AirVelocity2700, 3.6-3.8GHz (n77P/78P), FM, PoE/DC
Model No.: AV27-F360-P4CXP-FM-C, AV27-F360-P4CXP-CN-C
Brand Name: Airspan
Test Procedure(s): FCC part 2.1091

Reviewed By:

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Approved By:

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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
2105RSU063-U3	Rev. 01	Initial Report	08-26-2021	Invalid
2105RSU063-U3	Rev. 02	Updated with TCB's comment	09-18-2021	Valid

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1.4. Product Information

Product Name	AirVelocity2700, 3.6-3.8GHz (n77P/78P),FM,PoE/D
Model No.	AV27-F360-P4CXP-FM-C, AV27-F360-P4CXP-CN-C
Serial No.	1EU211900010, 1EU212000014
Hardware Version	AM5
Software Version	V1.5.X
Operating Band (s)	5G NR n77 Band
Frequency Range	3700 ~ 3800 MHz
Modulation Type	QPSK, 16QAM, 64QAM, 256QAM
Max EIRP Power Density	AV27-F360-P4CXP-FM-C: 17.82dBm/MHz AV27-F360-P4CXP-CN-C: 31.52dBm/MHz
Antenna Information	Refer to section 1.5
Remark: “AV27-F360-P4CXP-FM-C” is internal variant, “AV27-F360-P4CXP-CN-C” is the external variant; - The internal & external variants have the same circuits, only install the different antenna.	

1.5. Description of Available Antennas

Band Support	Antenna Type	Manufacturer	Model	Antenna Gain
n77	Omni Internal	Galtronics	02102466-07186-X	5.8 dBi
n77	Directional External	ALPHA	AW3647	19.5 dBi
			AW3035	17.0 dBi
			AW3023	18.0 dBi
Remark: 1. This device operate with Multiple Antennas Using Multiple-input, Multiple-output (MIMO) Technology for Uncorrelated Transmission. 2. 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. Limit of Maximum Permissible Exposure

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 (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	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: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

P_d is the limit of MPE, 1mW/cm². 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. Calculated Results

Product	AirVelocity2700, 3.6-3.8GHz (n77P/78P),FM,PoE/D
Test Item	RF Exposure Evaluation

Test Mode	Frequency Band (MHz)	Maximum EIRP (dBm)	Tune-up Factor	Limit (mW/cm ²)	Compliance Distance (cm)
n77	3700 ~ 3800	48.76	2	1	98

CONCLUSION:

The Compliance Distance is 98cm for AirVelocity2700, 3.6-3.8GHz (n77P/78P),FM,PoE/D installed without any other radio equipment.

_____ The End _____

Appendix A - EUT Photograph

Refer to "2105RSU063-UE" file.