Frequency, MHz	Measured antenna factor, dB/m	Frequency, MHz	Measured antenna factor, dB/m
5400	-5.1	8200	1.1
5450	-4.6	8250	1.0
5500	-4.0	8300	0.8
5550	-3.5	8350	0.5
5600	-3.1	8400	0.3
5650	-3.3	8450	0.5
5700	-3.8	8500	0.8
5750	-4.3	8550	0.9
5800	-4.3	8600	0.9
5850	-4.0	8650	0.6
5900	-3.5	8700	0.0
5950	-3.2	8750	-0.3
6000	-3.2	8800	0.0
6050	-3.2	8850	0.5
6100	-3.3	8900	0.6
6150	-3.3	8950	0.4
6200	-3.1	9000	-0.3
6250	-2.9	9050	-1.0
6300	-2.8	9100	-1.2
6350	-3.0	9150	-0.6
6400	-3.2	9200	-0.1
6450	-3.4	9250	0.0
6500	-3.7	9300	-0.1
6550	-3.6	9350	-0.5
6600	-3.4	9400	-0.7
6650	-2.9	9450	-0.4
6700	-2.6	9500	0.2
6750	-2.5	9550	0.5
6800	-2.6	9600	0.5
6850	-2.8	9650	0.3
6900	-2.7	9700	0.0
6950	-2.3	9750	0.0
7000	-2.0	9800	0.6
7050	-1.9	9850	1.4
7100	-1.8	9900	1.8
7150	-1.8	9950	1.7
7200	-1.7	10000	1.4
7250	-1.7	10100	0.8
7300	-1.6	10200	1.2
7350	-1.5	10300	1.5
7400	-1.5	10400	1.1
7450	-1.3	10500	1.6
7500	-1.4	10600	3.0
7550	-1.3	10700	2.9
7600	-1.0	10800	1.3
7650	-0.7	10900	1.0
7700	-0.3	11000	1.1
7750	0.1	11100	0.7
7800	0.3	11200	1.1
7850	0.4	11300	1.5
7900	0.2	11400	1.4
7950	0.1	11500	0.6
8000	0.2	11600	1.0
8050	0.3	11700	1.4
8100	0.8	11800	0.7
8150	1.1	11900	0.9

Frequency, MHz	Measured antenna factor, dB/m
12400	2.1
12500	1.2
12600	1.3
12700	2.4
12800	1.8
12900	0.6
13000	0.9
13100	1.1
13200	0.7
13300	0.9
13400	1.8
13500	2.1
13600	1.2
13700	0.8
13800	1.2
13900	1.5
14000	1.7
14100	2.2
14200	2.8
14300	3.0
14400	3.0
14500	3.3
14600	4.0
14700	5.4
14800	5.4
14900	4.7
15000	3.1
15100	2.0
15200	1.5
15300	1.4
15400	1.7

Frequency, MHz	Measured antenna factor, dB/m
15500	1.9
15600	1.2
15700	0.2
15800	0.6
15900	1.2
16000	0.6
16100	0.6
16200	1.9
16300	2.2
16400	0.9
16500	0.7
16600	1.7
16700	1.3
16800	1.0
16900	2.0
17000	2.4
17100	1.8
17200	1.8
17300	2.5
17400	2.7
17500	3.1
17600	3.7
17700	4.3
17800	4.8
17900	5.7
18000	5.1

HL 5288: Trilog Antenna
Frankonia, model: ALX-8000E, s/n: 00809
30-1000 MHz

Frequency, MHz	Antenna factor, dB/m	Frequency, MHz	Antenna factor, dB/m
30	14.96	160	12.67
35	15.33	180	13.34
40	16.37	200	15.40
45	17.56	250	16.42
50	17.95	300	17.28
60	16.87	400	19.98
70	13.22	500	21.11
80	10.56	600	22.90
90	13.61	700	24.13
100	15.46	800	25.25
120	14.03	900	26.35
140	12.23	1000	27.18

The antenna factor shall be added to receiver reading in dBμV to obtain field strength in dBμV/m.

above 1000 MHz

Frequency, MHz	Antenna factor, dB/m	Frequency, MHz	Antenna factor, dB/m
1000	26.9	3600	38.9
1100	28.1	3700	39.4
1200	28.4	3800	39.4
1300	29.6	3900	39.6
1400	29.1	4000	39.7
1500	30.4	4100	39.8
1600	30.7	4200	40.5
1700	31.5	4300	40.9
1800	32.3	4400	41.1
1900	32.6	4500	41.4
2000	32.5	4600	41.3
2100	32.9	4700	41.6
2200	33.5	4800	41.9
2300	33.2	4900	42.3
2400	33.7	5000	42.7
2500	34.6	5100	43.0
2600	34.7	5200	42.9
2700	34.6	5300	43.5
2800	35.0	5400	43.6
2900	35.5	5500	44.3
3000	36.2	5600	44.7
3100	36.8	5700	45.0
3200	36.8	5800	45.0
3300	37.0	5900	45.3
3400	37.5	6000	45.9
3500	38.2		

The antenna factor shall be added to receiver reading in dBμV to obtain field strength in dBμV/m.

10 APPENDIX C Measurement uncertainties

Expanded uncertainty at 95% confidence in Hermon Labs EMC measurements

Test description	Expanded uncertainty
Transmitter tests	
Carrier power conducted at antenna connector	± 1.7 dB
Carrier power radiated (substitution method)	± 4.5 dB
Occupied bandwidth	±8%
Conducted emissions at RF antenna connector	9 kHz to 2.9 GHz: ± 2.6 dB 2.9 GHz to 6.46 GHz: ± 3.5 dB 6.46 GHz to 13.2 GHz: ± 4.3 dB 13.2 GHz to 22.0 GHz: ± 5.0 dB 22.0 GHz to 26.8 GHz: ± 5.5 dB 26.8 GHz to 40.0 GHz: ± 4.8 dB
Spurious emissions radiated 30 MHz – 40 GHz (substitution method)	± 4.5 dB
Frequency error	30 – 300 MHz: ± 50.5 Hz (1.68 ppm) 300 – 1000 MHz: ± 168 Hz (0.56 ppm)
Transient frequency behaviour	187 Hz ± 13.9 %
Duty cycle, timing (Tx ON / OFF) and average factor measurements	± 1.0 %
Unintentional radiator tests	
Conducted emissions with LISN	9 kHz to 150 kHz: ± 3.9 dB 150 kHz to 30 MHz: ± 3.8 dB
Radiated emissions at 3 m measuring distance Horizontal polarization Vertical polarization	 Biconilog antenna: ± 5.3 dB Biconical antenna: ± 5.0 dB Log periodic antenna: ± 5.3 dB Double ridged horn antenna: ± 5.3 dB Biconilog antenna: ± 6.0 dB Biconical antenna: ± 5.7 dB Log periodic antenna: ± 6.0 dB Double ridged horn antenna: ± 6.0 dB

Hermon Laboratories is accredited by A2LA for calibration according to present requirements of ISO/IEC 17025 and NCSL Z540-1. The accreditation is granted to perform calibration of parameters that are listed in the Scope of Hermon Laboratories Accreditation.

Hermon Laboratories calibrates its reference and transfer standards by calibration laboratories accredited to ISO/IEC 17025 by a mutually recognized Accreditation Body or by a recognized national metrology institute. All reference and transfer standards used in the calibration system are traceable to national or international standards.

In-house calibration of all test and measurement equipment is performed on a regular basis according to Hermon Laboratories calibration procedures, manufacturer calibration/verification procedures or procedures defined in the relevant standards. The Hermon Laboratories test and measurement equipment is calibrated within the tolerances specified by the manufacturers and/or by the relevant standards.

11 APPENDIX D Test laboratory description

Tests were performed at Hermon Laboratories Ltd., which is a fully independent, private, EMC, Radio, Safety, Environmental and Telecommunication testing facility.
Hermon Laboratories is recognized and accredited by the Federal Communications Commission (USA) for relevant parts of Code of Federal Regulations 47 (CFR 47), Test Firm Registration Number is 927748, Designation Number is IL1001; Recognized by Innovation, Science and Economic Development Canada for wireless and terminal testing (ISED), ISED #2186A, CAB identifier is IL1001; Certified by VCCI, Japan (the registration numbers are R-10808 for OATS, R-1082 for anechoic chamber, G-10869 for RE measurements above 1 GHz, C-10845 for conducted emissions site and T-11606 for conducted emissions at telecommunication ports).
The laboratory is accredited by American Association for Laboratory Accreditation (USA) according to ISO/IEC 17025 for electromagnetic compatibility, product safety, telecommunications testing, environmental simulation and calibration (for exact scope please refer to Certificate No. 839.01, 839.03 and 839.04).

Address: P.O. Box 23, Binyamina 3055001, Israel.
Telephone: +972 4628 8001
Fax: +972 4628 8277
e-mail: mail@hermonlabs.com
website: www.hermonlabs.com

Person for contact: Mr. Michael Nikishin, EMC&Radio group manager

12 APPENDIX E Specification references

FCC 47CFR part 96: 2020	Citizens Broaband Radio Service
FCC 47CFR part 1: 2020	Practice and procedure
FCC 47CFR part 2: 2020	Frequency allocations and radio treaty matters; general rules and regulations

13 APPENDIX F Manufacturer's declaration

We, the undersigned,

Company: Airspan Networks Inc.
Address: Bareket Bldg,2 Negev St. Airport City ,Ben Gurion
Country: Israel
Telephone number: +972- (0)3-9777483
Fax number: +972- (0)3-9777400

declare under our sole responsibility that the following equipment:

Brand/Item	*Type/Model*	**Short Product description**
AirSpan Indoor 5G NR Base station	AirStar 1200 5G, 3.55-3.7GHz (n48) PoE	5G NR Base station

is electronically/electrically/mechanically identical to the following equipment (including Software/Hardware version(s)):

Brand/Item	*Type/Model*	**Short Product description**
AirSpan Indoor 5G NR Base station	AirStar 1900 5G, 3.55-3.7GHz (n48) PoE	5G NR Base station

The reason for name change is: AirStar 1200 & AirStar 1900 are the same it's only with different marketing description

01.03.2022

Zion Levi

Airspan Networks Inc.

Compliances Team Leader

14 APPENDIX G Abbreviations and acronyms

A	ampere
AC	alternating current
A/m	ampere per meter
AM	amplitude modulation
AVRG	average (detector)
BB	broad band
cm	centimeter
dB	decibel
dBm	decibel referred to one milliwatt
dB(μV)	decibel referred to one microvolt
dB(μV/m)	decibel referred to one microvolt per meter
dB(μA)	decibel referred to one microampere
dBΩ	decibel referred to one Ohm
DC	direct current
EIRP	equivalent isotropically radiated power
ERP	effective radiated power
EUT	equipment under test
F	frequency
GHz	gigahertz
GND	ground
H	height
HL	Hermon laboratories
Hz	hertz
ITE	information technology equipment
k	kilo
kHz	kilohertz
LISN	line impedance stabilization network
LO	local oscillator
m	meter
MHz	megahertz
min	minute
mm	millimeter
ms	millisecond
μs	microsecond
NA	not applicable
NB	narrow band
NT	not tested
OATS	open area test site
Ω	Ohm
QP	quasi-peak
PM	pulse modulation
PS	power supply
RE	radiated emission
RF	radio frequency
rms	root mean square
Rx	receive
s	second
T	temperature
Tx	transmit
V	volt
VA	volt-ampere

END OF DOCUMENT