



Test report No:
NIE: 2510bRCB.001

Test report

Citizen Broadband Radio Service Test report as per WINNForum Test Specification WINNF-TS-0122-V1.0

Identification of item tested	AirVelocity 1500 3550-3700MHz (B48)
Trademark	Not Provided
Model and /or type reference	AirVelocity 1500, LTE-TDD Base Station, CBSD
Other identification of the product	Not Provided
Features	CBSD, Domain Proxy, LTE-TDD 48
Manufacturer	AIRSPAN NETWORK INC 777 YAMATO ROAD SUIT 310 BOCA RATON, FLORIDA – 33431 UNITE STATES OF AMERICA
Final HW version	A9
Final SW version	CBSD: SR16.50 Domain Proxy: SR16.50
Test method requested, standard	WinnForum TEST SPECIFICATION WINNF-TS-0122-V1.0.0
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Gonzalo Casado (Lab Manager) 
Date of issue	2019-Apr-30
Report template No	FDT08_22

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Competences and guarantees

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DEKRA Certification, Inc. is a WInnForum Approved CBSD test laboratory.

In order to assure the traceability to other national and international laboratories, DEKRA Certification, Inc. has a calibration and maintenance program for its measurement equipment.

DEKRA Certification, Inc. guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Certification, Inc. at the time of performance of the test.

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The results presented in this Test Report apply only to the particular item under test established in this document.

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1. This report is only referred to the item that has undergone the test.
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Uncertainty

Uncertainty (factor k=2) was calculated according to the DEKRA Testing and Certification internal document PODT000.

Data provided by the client

DEKRA declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Samples undergoing test have been selected by: Airspan Network, Inc.

Sample M/01 is composed of the following elements:

Control N°	Description	Model	Serial N°	Hardware Version	Software Version	Date of reception
2510b.01	CBSD	AirVelocity 1500	E2DF330108BE	A9	SR16.50	3/28/2019
NA	Domain Proxy Software	Netspan	Not Applicable	Not Applicable	SR16.50	12/10/2018

1. Sample M/01 has undergone the test(s) specified in subclause "Test method requested".

Identification of the client

AIRSPAN NETWORK INC
777 YAMATO ROAD SUITE 310, BOCA RATON, FLORIDA – 33431
UNITE STATES OF AMERICA
(561) 893-8670

Testing period and place

Test Location	DEKRA Certification, Inc.
Test Location Address	405 Glenn Dr #12, Sterling, VA 20164
Date (start)	2019-Apr-01
Date (finish)	2019-Apr-02

Document history

Report number	Date	Description
2510bRCB.001	2019-Apr-30	First release

Remarks and comments

1: The tests have been performed by the technical personnel: Indusha Chitepu

Testing verdicts

Not applicable :	N/A
Pass :	PASS
Fail :	FAIL
Not measured :	N/M

Summary

Standard :	WINNF-TS-0122
Band :	TDD 48
Total	PASS VERDICT
32	32

Appendix A: Test Results

Test Case ID	Test Case Name	Verdict	Date	Sample
WINNF.FT.D.REG.2	Domain Proxy Multi-Step registration	PASS	1-Apr-2019	M/01
WINNF.FT.D.REG.6	Domain Proxy Single-Step registration for CBSD with CPI signed data	PASS	1-Apr-2019	M/01
WINNF.FT.D.REG.9	Domain Proxy Missing Required parameters (responseCode 102)	PASS	1-Apr-2019	M/01
WINNF.FT.D.REG.11	Domain Proxy Pending registration (responseCode 200)	PASS	1-Apr-2019	M/01
WINNF.FT.D.REG.13	Domain Proxy Invalid parameters (responseCode 103)	PASS	1-Apr-2019	M/01
WINNF.FT.D.REG.15	Domain Proxy Blacklisted CBSD (responseCode 101)	PASS	1-Apr-2019	M/01
WINNF.FT.D.REG.17	Domain Proxy Unsupported SAS protocol version responseCode 100)	PASS	1-Apr-2019	M/01
WINNF.FT.D.REG.19	Domain Proxy Group Error (responseCode 201)	PASS	1-Apr-2019	M/01
WINNF.FT.C.GRA.1	Unsuccessful Grant responseCode=400 (INTERFERENCE)	PASS	1-Apr-2019	M/01
WINNF.FT.C.GRA.2	Unsuccessful Grant responseCode=401 (GRANT CONFLICT)	PASS	1-Apr-2019	M/01
WINNF.FT.D.HBT.2	Domain Proxy Heartbeat Success Case (first Heartbeat Response)	PASS	1-Apr-2019	M/01
WINNF.FT.C.HBT.3	Heartbeat responseCode=105 (DEREGISTER)	PASS	1-Apr-2019	M/01
WINNF.FT.C.HBT.5	Heartbeat responseCode=501 (SUSPENDED_GRANT) in First Heartbeat Response	PASS	1-Apr-2019	M/01
WINNF.FT.C.HBT.6	Heartbeat responseCode=501 (SUSPENDED_GRANT) in Subsequent Heartbeat Response	PASS	1-Apr-2019	M/01
WINNF.FT.C.HBT.7	Heartbeat responseCode=502 (UNSYNC OP PARAM)	PASS	1-Apr-2019	M/01
WINNF.FT.D.HBT.8	Domain Proxy Heartbeat responseCode=500 (TERMINATED_GRANT)	PASS	1-Apr-2019	M/01
WINNF.FT.C.HBT.9	Heartbeat Response Absent (First Heartbeat)	PASS	1-Apr-2019	M/01
WINNF.FT.C.HBT.10	Heartbeat Response Absent (Subsequent Heartbeat)	PASS	1-Apr-2019	M/01
WINNF.FT.C.HBT.11	Successful Grant Renewal in Heartbeat Test Case	PASS	1-Apr-2019	M/01
WINNF.FT.D.MES.2	Domain Proxy Registration Response contains measReportConfig	PASS	1-Apr-2019	M/01
WINNF.FT.D.RLQ.2	Domain Proxy Successful Relinquishment	PASS	1-Apr-2019	M/01
WINNF.FT.D.RLQ.4	Domain Proxy Unsuccessful Relinquishment, responseCode=102	PASS	1-Apr-2019	M/01

Test Case ID	Test Case Name	Verdict	Date	Sample
WINNF.FT.D.RLQ.6	Domain Proxy Unsuccessful Relinquishment, responseCode=103	PASS	1-Apr-2019	M/01
WINNF.FT.D.DRG.2	Domain Proxy Successful Deregistration	PASS	1-Apr-2019	M/01
WINNF.FT.D.DRG.4	Domain Proxy Deregistration responseCode=102	PASS	1-Apr-2019	M/01
WINNF.FT.C.DRG.5	Deregistration responseCode=103	PASS	1-Apr-2019	M/01
WINNF.FT.C.SCS.1	Successful TLS connection between UUT and SAS Test Harness	PASS	1-Apr-2019	M/01
WINNF.FT.C.SCS.2	TLS failure due to revoked certificate	PASS	1-Apr-2019	M/01
WINNF.FT.C.SCS.3	TLS failure due to expired server certificate	PASS	1-Apr-2019	M/01
WINNF.FT.C.SCS.4	TLS failure when SAS Test Harness certificate is issue by unknown CA	PASS	1-Apr-2019	M/01
WINNF.FT.C.SCS.5	TLS failure when certificate at the SAS Test Harness is corrupted	PASS	1-Apr-2019	M/01
WINNF.PT.C.HBT	UUT RF Transmit Power Measurement	PASS	2-Apr-2019	M/01

Appendix B: Test Systems

Description	Model	Control Number	SW Version
Test SAS harness	N/A	Laptop: CTC-5233-K	Test Harness:1.0.0.3 Laptop OS: Windows7
Signal Analyzer	EXA N9010A	0018	-

Appendix C: CBSD/ DP Supported Features

Condition	Feature Description	Supported
C1	Mandatory for UUT which supports multi-step registration message.	Y
C2	Mandatory for UUT which supports single-step registration with no CPI-signed data in the registration message. By definition, this is a subset of Category A devices which determine all registration information, including location, without CPI intervention.	N
C3	Mandatory for UUT which supports single-step registration containing CPI-signed data in the registration message.	Y
C4	Mandatory for UUT which supports RECEIVED_POWER_WITHOUT_GRANT measurement report type.	Y
C5	Mandatory for UUT which supports RECEIVED_POWER_WITH_GRANT measurement report type.	N
C6	Mandatory for UUT which supports parameter change being made at the UUT and prior to sending a deregistration.	N

Appendix D: Reference Standards and Procedures

Reference Standards

Test and Certification for Citizens Broadband Radio Service (CBRS); Conformance and Performance Test Technical Specification; CBSD/DP as Unit Under Test (UUT) Working Document WINNF-TS-0122	V1.0.0
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Test Procedures

PECB001_00: CBRS Alliance Certification Testing Based On WINN Forum CBRS CBSD Test Specification "WINNF-TS-0122"
