WINNF-TS-0122 Spot Check Report

Applicant	**Telrad Networks Ltd**
Equipment	**CPE-12300SG-PRO-1D-3.x**
Brand Name	**Telrad**
Model Name	**735400**
FCC ID	**ARA-CPE12300SG**
Reference	**WINNF-TS-0122 Version V1.0.1**

This is a validation test report. The validation is leveraged conducted PSD value from FCC ID: ARA-CPE12300HG SAS report No: FG0O1219. There is no SW design change between FCC ID: ARA-CPE12300HG and FCC ID: ARA-CPE12300SG. The difference between these two models is that CPE-12300SG-PRO-1D-3.x antenna gain is 13 dBi, but CPE-12300HG-PRO-1D-3.x antenna gain is 17 dBi as declared by manufacturer.

The product was received on Oct. 12, 2020 and testing was started from Oct. 12, 2020 and completed on Dec. 02, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in WINNF-TS-0122 Version V1.0.1 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

Table of Contents

Revision History

Report No.	Version	Description	Issued Date
FG0O1219-01	01	Initial issue of report	Dec. 09, 2020

Reviewed by: Thomas Chen
Report Producer: Dara Chiu

1. Administration Data

1.1 Testing Laboratory

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
Test Site Location	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	DFS02-HY
Test Engineer	Thomas Chen
Temperature	21 ~ 25 ℃
Relative Humidity	50 ~ 56 %

1.2 Applicant

Company Name	Telrad Networks Ltd
Address	Industrial Center PO Box 6118 Lod, 711600 Israel

1.3 Manufacturer

Company Name	Asiatelco
Address	No. 68 Huatuo Road, Building-8, Zhangjiang Hi-Tech Park, Pudong, Shanghai, PRC

2. General Information

2.1 Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	CPE-12300SG-PRO-1D-3.x
Brand Name	Telrad
Model Name	735400
FCC ID	ARA-CPE12300SG
Professional Installation	☒ Yes ☐ No
UUT Category	☐ Category A ☒ Category B ☒ CPE-CBSD product
Unit Under Test in Test ID	☒ UUT with Domain Proxy ☐ UUT without Domain Proxy
UUT Antenna Gain	13 dBi
UUT HW Version	P3
UUT FW Version	GDM7243A_ARM1_FW_df921e74cb_Rev24722_20062219
UUT SW Version	KT2A_OJ71_TRD_US_1.0.0.4
UUT Serial Number	AT110820A023, AT110820A026
Domain Proxy SW Version	BreezeVIEW Version 7.2.0.030.69 (API 4.7.7.4, YANG 720.450 [2018-11-27])
Device Power Class	LTE Band 48: Power Class 3

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
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.

2.2 Protocol Test Summary

Section	Test Case ID	Test Case Title	Test Result
7.1.4.1.1	WINNF.PT.C.HBT	UUT RF Transmit Power Measurement	PASS

2.3 [WINNF.PT.C.HBT] UUT RF Transmit Power Measurement

#	Test Execution Steps	Results
1	Ensure the following conditions are met for test entry: • UUT has successfully completed SAS Discovery and Authentication with the SAS Test Harness • UUT has registered with the SAS, with CBSD ID = C • UUT has a single valid grant G with parameters {lowFrequency = F_L, highFrequency = F_H, maxEirp = P_i}, with grant in AUTHORIZED state, and grantExpireTime set to a value far past the duration of this test case *Note: in order for the UUT to request a grant with the parameters {lowFrequency, highFrequency, maxEirp), the SAS Test Harness may need to provide appropriate guidance in the availableChannel object of the spectrumInquiry response message, and the operationParam object of the grant response message. Alternately, the UUT vendor may provide the ability to set those parameters on the UUT so that the UUT will request a grant with those parameters.*	--

2	UUT and SAS Test Harness perform a series of Heartbeat Request/Response cycles, which continues until the other test steps are complete. Messaging for each cycle is as follows:
	• UUT sends Heartbeat Request, including:
	  ○ *cbsdId* = C
	  ○ *grantId* = G
	• SAS Test Harness responds with Heartbeat Response, including:
	  ○ *cbsdId* = C
	  ○ *grantId* = G
	  ○ *transmitExpireTime* = current UTC time + 200 seconds
	  ○ *responseCode* = 0
		--

#	Test Execution Steps	Results
3	Tester performs power measurement on RF interface(s) of UUT, and verifies it complies with the maxEirp setting, P_i. The RF measurement method is out of scope of this document, but may include additional configuration of the UUT, as required, to fulfil the requirements of the power measurement method. *Note: it may be required for the vendor to provide a method or configuration to bring the UUT to a mode which is required by the measurement methodology. Any such mode is vendor-specific and depends upon UUT behavior and the measurement methodology.*	PASS

3. RF Performance Test validation

The validation is leveraged conducted PSD value from FCC ID: ARA-CPE12300HG SAS report.

There is no SW design change between FCC ID: ARA-CPE12300HG and FCC ID: ARA-CPE12300SG.

The difference between these two models is that CPE-12300SG-PRO-1D-3.x antenna gain is 13 dBi, but CPE-12300HG-PRO-1D-3.x antenna gain is 17 dBi as declared by manufacturer.

Center Frequency [MHz]	Bandwidth [MHz]	Granted maxEIRP [dBm/MHz]	Conducted PSD [dBm/MHz]	Antenna Gain [dBi]	UUT MaxEIRP [dBm/MHz]
3605	10	23	1.18	13	14.18 dBm
		25	3.26		16.26 dBm
		27	5.14		18.14 dBm
		29	7.56		20.56 dBm
		31	8.65		21.65 dBm
		33	8.74		21.74 dBm
		35	8.89		21.89 dBm

———THE END———