TEST REPORT

No.I21N01062-MPE

For

Rootcloud technology CO., LTD

T-AMS PRO

Model Name: LI1520-DC-T-GL PRO

With

Hardware Version: V1.0

Software Version: V1.0

FCC ID: 2AO7J-LI1520

Issued Date: 2020-07-05

Designation Number: CN1210

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
I21N01062-MPE	Rev.0	1st edition	2021-07-05

CONTENTS

1. Summary of Test Report

1.1. Test Items

Description:	T-AMS PRO
Model Name:	LI1520-DC-T-GL PRO
Applicant's name:	Rootcloud technology CO., LTD
Manufacturer's Name:	Rootcloud technology CO., LTD

1.2. Test Standards

FCC Part 2 (Section 2.1091 and 1.1310), 447498 D03 Supplement C Cross-Reference v01, IEEE C95.1-1992

1.3. Test Result

Pass

1.4. Testing Location

Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

1.5. Project Data

Testing Start Date: 2021-07-05 Testing End Date: 2021-07-05

1.6. Signature

Li Yongfu
(Prepared this test report)

Zhang Yunzhuan
(Reviewed this test report)

Cao Junfei
(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	Rootcloud technology CO., LTD
Address	Room 303-309, No. 3, East Road, Pazhou Avenue, Haizhu District, Guangzhou 510335
City:	Guangzhou
Country:	China
Telephone:	+86 18306678502

2.2. Manufacturer Information

Company Name:	Rootcloud technology CO., LTD
Address:	Room 303-309, No. 3, East Road, Pazhou Avenue, Haizhu District, Guangzhou 510335
City:	Guangzhou
Country:	China
Telephone:	+86 18306678502

3. Equipment under Test (EUT) and Ancillary Equipment (AE)

Description:	T-AMS PRO
Model name:	LI1520-DC-T-GL PRO
Condition of EUT as received:	No obvious damage in appearance
Frequency Bands:	GSM850/1900, WCDMA Band 2/4/5, Bluetooth, LTE Band 2/4/5/7/12/13/18/19/25/26/38/41, WLAN 2.4G
Test device Production information:	Production unit
Tx Frequency:	824 – 849MHz (GSM850)
	1850 – 1910MHz (GSM1900)
	1850 – 1910MHz (WCDMA Band 2)
	1710 – 1755MHz (WCDMA Band 4)
	824 – 849MHz (WCDMA Band 5)
	1850 – 1910MHz (LTE Band 2)
	1710 – 1755MHz (LTE Band 4)
	824 – 849MHz (LTE Band 5)
	2500 – 2570MHz (LTE Band 7)
	699 – 716MHz (LTE Band 12)
	777 – 787MHz (LTE Band 13)
	815 – 830MHz (LTE Band 18)
	830 – 845MHz (LTE Band 19)
	1850 – 1915MHz (LTE Band 25)
	814 – 849MHz (LTE Band 26)
	2570 – 2620MHz (LTE Band 38)
	2496 – 2690MHz (LTE Band 41)
	2402 – 2480MHz (Bluetooth)
	2412 – 2462MHz (WLAN 2.4G)

4. Test Methodology

FCC Part 2 (Section 2.1091 and 1.1310)
447498 D03 Supplement C Cross-Reference v01
IEEE C95.1-1992

5. General Description

5.1. Evaluation Distance

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

5.2. Evaluation Method

Evaluation Method

$P_d = (P_{out}*G) / (4*pi*R^2)$

Where

P_d = power density in mW/cm^2

P_{out} = 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

Co-transmitting Evaluation Method

Conclusion:

CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

6. Assessment Result

6.1. Reference Levels Limits

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
30–300	27.5	0.073	0.2	30
300–1500	.....	.....	f/1500	30
1500–100,000	.....	.....	1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density

6.2. Reference Levels Evaluation

Antenna band	Maximum gain (dBi)	Tune-up Power (dBm)
GSM850	-1.40	26.0
GSM1900	0.55	23.0
WCDMA Band 2	-0.68	25.0
WCDMA Band 4	1.55	25.0
WCDMA Band 5	-1.40	25.0
LTE Band 2	-1.43	25.0
LTE Band 4	0.83	25.0
LTE Band 5	-0.21	25.0
LTE Band 7	4.35	25.0
LTE Band 12	1.51	25.0
LTE Band 13	-0.73	25.0
LTE Band 18	-0.21	25.0
LTE Band 19	-0.76	25.0
LTE Band 25	0.55	25.0
LTE Band 26	-0.21	25.0
LTE Band 38	4.35	25.0
LTE Band 41	4.35	25.0
Bluetooth	2.00	1.5
WLAN 2.4G	1.50	16.5

Power Density Calculations				
Evaluation Mode	**Maximum E.I.R.P. (mW)**	**Power Density (mW/cm²)**	**Limit (mW/cm²)**	**Conclusion**
GSM850	288.40	0.0574	0.55	Pass
GSM1900	226.46	0.0451	1.00	Pass
WCDMA Band 2	270.40	0.0538	1.00	Pass
WCDMA Band 4	451.86	0.0899	1.00	Pass
WCDMA Band 5	229.09	0.0456	0.55	Pass
LTE Band 2	227.51	0.0453	1.00	Pass
LTE Band 4	382.82	0.0762	1.00	Pass
LTE Band 5	301.30	0.0599	0.55	Pass
LTE Band 7	860.99	0.1713	1.00	Pass
LTE Band 12	447.71	0.0891	0.47	Pass
LTE Band 13	267.30	0.0532	0.52	Pass
LTE Band 18	301.30	0.0599	0.54	Pass
LTE Band 19	265.46	0.0528	0.55	Pass
LTE Band 25	358.92	0.0714	1.00	Pass
LTE Band 26	301.30	0.0599	0.54	Pass
LTE Band 38	860.99	0.1713	1.00	Pass
LTE Band 41	860.99	0.1713	1.00	Pass
Bluetooth	2.24	0.0004	1.00	Pass
WLAN 2.4G	63.10	0.0126	1.00	Pass

Co-transmitting Power Density Calculations			
Co-transmitting Mode	**Co-transmitting Power density**	**Limit**	**Conclusion**
GSM850 + WLAN 2.4G	0.12	1	Pass
GSM1900+ WLAN 2.4G	0.06	1	Pass
WCDMA Band 2+ WLAN 2.4G	0.07	1	Pass
WCDMA Band 4+ WLAN 2.4G	0.10	1	Pass
WCDMA Band 5+ WLAN 2.4G	0.10	1	Pass
LTE Band 2+ WLAN 2.4G	0.06	1	Pass
LTE Band 4+ WLAN 2.4G	0.09	1	Pass
LTE Band 5+ WLAN 2.4G	0.12	1	Pass
LTE Band 7+ WLAN 2.4G	0.18	1	Pass
LTE Band 12+ WLAN 2.4G	0.20	1	Pass
LTE Band 13+ WLAN 2.4G	0.11	1	Pass
LTE Band 18+ WLAN 2.4G	0.12	1	Pass
LTE Band 19+ WLAN 2.4G	0.11	1	Pass
LTE Band 25+ WLAN 2.4G	0.08	1	Pass
LTE Band 26+ WLAN 2.4G	0.12	1	Pass
LTE Band 38+ WLAN 2.4G	0.18	1	Pass
LTE Band 41+ WLAN 2.4G	0.18	1	Pass
GSM850 + Bluetooth	0.10	1	Pass
GSM1900 + Bluetooth	0.05	1	Pass
WCDMA Band 2 + Bluetooth	0.05	1	Pass
WCDMA Band 4 + Bluetooth	0.09	1	Pass
WCDMA Band 5 + Bluetooth	0.08	1	Pass
LTE Band 2 + Bluetooth	0.05	1	Pass
LTE Band 4 + Bluetooth	0.08	1	Pass
LTE Band 5 + Bluetooth	0.11	1	Pass
LTE Band 7 + Bluetooth	0.17	1	Pass
LTE Band 12 + Bluetooth	0.19	1	Pass
LTE Band 13 + Bluetooth	0.10	1	Pass
LTE Band 18 + Bluetooth	0.11	1	Pass
LTE Band 19 + Bluetooth	0.10	1	Pass
LTE Band 25 + Bluetooth	0.07	1	Pass
LTE Band 26 + Bluetooth	0.11	1	Pass
LTE Band 38 + Bluetooth	0.17	1	Pass
LTE Band 41 + Bluetooth	0.17	1	Pass

Conclusion: According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.

*****END OF REPORT*****