



TEST REPORT

No.I23N00436-MPE

For

TCL Communication Ltd.

LINKHUB

Model Name: HH40L2

With

Hardware Version: TZ7.823.397

Software Version: HH40L2.1.01

FCC ID: 2ACCJB202

Issued Date: 2023-04-21

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.

Test Laboratory:

SAICT, Shenzhen Academy of Information and Communications Technology

Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China 518000.

Tel:+86(0)755-33322000, Fax:+86(0)755-33322001

Email: yewu@saict.ac.cn www.saict.ac.cn



REPORT HISTORY

Report Number	Revision	Description	Issue Date
I23N00436-MPE	Rev.0	1st edition	2023-04-21



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1. Summary of Test Report

1.1. Test Items

Description: LINKHUB
Model Name: HH40L2
Applicant's Name: TCL Communication Ltd.
Manufacturer's Name: TCL Communication 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

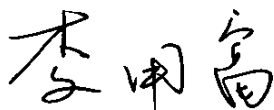
Address: Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China

1.5. Project Data

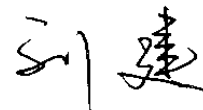
Testing Start Date: 2023-04-20

Testing End Date: 2023-04-20

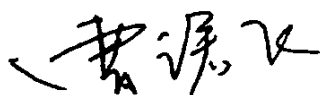
1.6. Signature



Li Yongfu
(Prepared this test report)



LiuJian
(Reviewed this test report)



Cao Junfei
(Approved this test report)



2. Client Information

2.1. Applicant Information

Company Name:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong, China
City:	Hong Kong
Country:	China
Telephone:	0086-755-3661 1621

2.2. Manufacturer Information

Company Name:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong, China
City:	Hong Kong
Country:	China
Telephone:	0086-755-3661 1621

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

3.1. About EUT

Description:	LINKHUB
Model name:	HH40L2
Condition of EUT as received:	No obvious damage in appearance
Frequency Bands:	PCS 1900, LTE Band 5/41, WLAN 2.4GHz
Tx Frequency:	1850 – 1910MHz (PCS 1900)
	824 – 849MHz (LTE Band 5)
	2496 – 2690MHz (LTE Band 41)
	2412 – 2462MHz (WLAN 2.4GHz)

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/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

Co-transmitting Evaluation Method

Conclusion:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

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

Band	Tune-up Power (dBm)	Maximum Antenna Gain (dBi)	EIRP (dBm)
PCS 1900	22.97	4.50	27.47
LTE Band 5	23.50	2.50	26.00
LTE Band 41	23.50	2.40	25.90
WLAN 2.4GHz (Antenna 0)	20.00	3.74	23.74
WLAN 2.4GHz (Antenna 1)	20.00	3.88	23.88
WLAN 2.4GHz MIMO	16.00	3.81	19.81

Note1: EIRP (dBm) = Tune-up Power (dBm) + Antenna Gain (dBi)

Note2:

GPRS 1900 GMSK	Measured timeslot-Averaged output power (dBm)	calculation	Source-based time-Averaged output power (dBm)
1Tx slot	32.0	-9.03	22.97



Power Density Calculations					
Distance (cm)	Evaluation Mode	EIRP (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Conclusion
20	PCS 1900	558.47	0.111	1.0	Pass
	LTE Band 5	398.11	0.079	0.55	Pass
	LTE Band 41	389.05	0.077	1.0	Pass
	WLAN 2.4GHz (Antenna 0)	236.59	0.047	1.0	Pass
	WLAN 2.4GHz (Antenna 1)	244.34	0.049	1.0	Pass
	WLAN 2.4GHz MIMO	95.72	0.019	1.0	Pass

Note1: The distance comes from the user's manual.

Note 2: $EIRP (mW) = 10^{[EIRP(dBm) / 10]}$

Co-transmitting Power Density Calculations			
Co-transmitting Mode	Co-transmitting Power Density / Limit	Limit	Conclusion
LTE Band 5 + WLAN 2.4GHz (Antenna 1)	0.193	1	Pass

Note: The Co-transmitting mode of above tables is for the worse case that has been evaluated.

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

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