	TEST REPOR	Т				
FCC ID :	2AUARSCANSR					
Test Report No:	TCT230731E907					
Date of issue:	Aug. 02, 2023					
Testing laboratory: :	SHENZHEN TONGCE TESTING	G LAB				
Testing location/ address:	2101 & 2201, Zhenchang Factor Subdistrict, Bao'an District, Sher People's Republic of China					
Applicant's name::	THINKCAR TECH CO., LTD.					
Address:	2606, building 4, phase II, Tiana Bantian, Longgang District, Shei		unity,			
Manufacturer's name :	THINKCAR TECH CO., LTD.					
Address:	2606, building 4, phase II, TiananYungu, Gangtou community, Bantian, Longgang District, Shenzhen, China					
Standard(s):	FCC CFR Title 47 Part 15 Subpart C Section 15.247 FCC KDB 558074 D01 15.247 Meas Guidance v05r02 ANSI C63.10:2013					
Product Name::	THINKSCAN MT, MUCAR MT, ⁻ THINKCHECK M70 PRO	THINKCHECK M70 MOTO	D,			
Trade Mark:	THINKCAR, XHINKCAR, MUCA	R				
Model/Type reference :	TKSR6, TKM70					
Rating(s):	Rechargeable Li-ion battery DC	3.7V	(\mathbf{c}^{*})			
Date of receipt of test item	Jul. 31, 2023					
Date (s) of performance of test:	Jul. 31, 2023 - Aug. 02, 2023	Ś				
Tested by (+signature) :	Rleo LIU	Pres WANGCED				
Check by (+signature) :	Beryl ZHAO	Boyle (TCT)				
Approved by (+signature):	Tomsin	Tomster				
General disclaimer:						

This report shall not be reproduced except in full, without the written approval of SHENZHEN TONGCE TESTING LAB. This document may be altered or revised by SHENZHEN TONGCE TESTING LAB personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

Table of Contents

1	General Product Information	,	3
	1.1. EUT description	<u>(</u>	3
	1.2. Model(s) list		3
	1.3. Operation Frequency		4
2.	Test Result Summary	<u>(0)</u>	5
3.	General Information		
	3.1. Test environment and mode		6
	3.2. Description of Support Units	2	7
4.	Facilities and Accreditations		8
	4.1. Facilities		8
	4.2. Location		8
	4.3. Measurement Uncertainty		8
5.	Test Results and Measurement Data		9
	5.1. Antenna requirement		9
	5.2. Radiated Spurious Emission Measurement		10
Α	ppendix B: Photographs of Test Setup		
	www.aliv. O. Dhatawaanha af EUT		

Appendix C: Photographs of EUT

TCT 通测检测 TESTING CENTRE TECHNOLOGY



TCT通测检测 1. General Product Information

1.1. EUT description

Product Name:	THINKSCAN MT, MUCAR MT, THINKCHECK M70 MOTO, THINKCHECK M70 PRO
Model/Type reference:	TKSR6
Sample Number:	TCT230731E906-0101
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(HT20)) 2422MHz~2452MHz (802.11n(HT40))
Channel Separation:	5MHz
Number of Channel:	11 for 802.11b/802.11g/802.11n(HT20) 7 for 802.11n(HT40)
Modulation Technology:	802.11b: Direct Sequence Spread Spectrum (DSSS) 802.11g/802.11n: Orthogonal Frequency Division Multiplexing(OFDM)
Data speed:	802.11b: 1Mbps, 2Mbps, 5.5Mbps, 11Mbps 802.11g: 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps 802.11n: Up to 150Mbps
Antenna Type:	Internal Antenna
Antenna Gain:	1dBi
Rating(s):	Rechargeable Li-ion battery DC 3.7V

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

No.	Model No	-	Tested with
1	TKSR6	(\mathbf{c}^{*})	
Other models	ТКМ70		
layout, differen			e identical in circuit and PCB test data of TKSR6 can



1.3. Operation Frequency

For 802.11b/g/n(HT20)

	Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
/	1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
1	2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
	3	2422MHz	6	2437MHz	9	2452MHz		

For 802.11n (HT40)

С	hannel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
		- /	4	2427MHz	7	2442MHz		- (
)		5	2432MHz	8	2447MHz	6)-	(<
	3	2422MHz	6	2437MHz	9	2452MHz)

Note:

In section 15.31(*m*), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

802.11b/802.11g/802.11n (HT20)

Channel	Frequency
The lowest channel	2412MHz
The middle channel	2437MHz
The Highest channel	2462MHz

802.11n (HT40)

Frequency
2422MHz
2437MHz
2452MHz



2. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203/§15.247 (c)	PASS
AC Power Line Conducted Emission	§15.207	PASS
Conducted Peak Output Power	§15.247 (b)(3)	PASS
6dB Emission Bandwidth	§15.247 (a)(2)	PASS
Power Spectral Density	§15.247 (e)	PASS
Band Edge	§15.247(d)	PASS
Spurious Emission	§15.205/§15.209	PASS

Note:

1. PASS: Test item meets the requirement.

2. Fail: Test item does not meet the requirement.

3. N/A: Test case does not apply to the test object.

4. The test result judgment is decided by the limit of test standard.

5. Those test results (AC Power Line Conducted Emission, Conducted Output Power, 6dB Emission Bandwidth, Power Spectral Density, Band Edge) was based on FCC ID: 2AUARSCANSR; Change product name, product model No., trade mark and shell material, Radiated Emission has been retested.

TCT 通测检测 TESTING CENTRE TECHNOLOGY

3. General Information

3.1. Test environment and mode

Operating Environment:			
Condition	Radiated Emission		
Temperature:	25.1 °C		
Humidity:	52 % RH		
Atmospheric Pressure:	1010 mbar		
Test Software:			
Software Information:	Engineering mode		
Power Level:	Default		
Test Mode:			
Conducted Emission:	Charging		
Engineering mode: Keep the EUT in continuous transmitting by select			
The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con manipulating interconnectin	3m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having sing, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna heigh		
The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are sho We have verified the constr	.8m & 1.5m for the measurement below & above 1GHz 3m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having ting, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna heigh		
The sample was placed 0 above the ground plane of 3 colarities were performed. the EUT continuously work axis (X, Y & Z) and con- manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are sho We have verified the constru- were carried out with the EU report and defined as follow	.8m & 1.5m for the measurement below & above 1GHz 3m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having sing, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna height horizontal and vertical polarizations. The emissions wn in Test Results of the following pages. Uction and function in typical operation. All the test modes JT in transmitting operation, which was shown in this test vs:		
The sample was placed 0 above the ground plane of 3 colarities were performed. the EUT continuously work axis (X, Y & Z) and con- manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are sho We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data r	8 8 1.5m for the measurement below & above 1GHz 3m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having sing, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna height horizontal and vertical polarizations. The emissions wn in Test Results of the following pages. Uction and function in typical operation. All the test modes JT in transmitting operation, which was shown in this test		
The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are sho We have verified the constru- were carried out with the EU report and defined as follow Per-scan all kind of data r	.8m & 1.5m for the measurement below & above 1GHz 3m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having sing, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna height horizontal and vertical polarizations. The emissions wn in Test Results of the following pages. Uction and function in typical operation. All the test modes JT in transmitting operation, which was shown in this test vs:		
The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con- manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are sho We have verified the constr were carried out with the EU report and defined as follow Per-scan all kind of data r was worst case.	.8m & 1.5m for the measurement below & above 1GHz 3m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having sing, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna height horizontal and vertical polarizations. The emissions wn in Test Results of the following pages. Uction and function in typical operation. All the test modes JT in transmitting operation, which was shown in this test /s: ate in lowest channel, and found the follow list which it		
The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con- manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are sho We have verified the constr were carried out with the EU report and defined as follow Per-scan all kind of data r was worst case. Mode	.8m & 1.5m for the measurement below & above 1GHz 3m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having sing, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna height horizontal and vertical polarizations. The emissions wn in Test Results of the following pages. uction and function in typical operation. All the test modes JT in transmitting operation, which was shown in this test vs: ate in lowest channel, and found the follow list which it Data rate		
The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con- manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are sho We have verified the constr were carried out with the EU report and defined as follow Per-scan all kind of data r was worst case. Mode 802.11b	.8m & 1.5m for the measurement below & above 1GHz 3m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having sing, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna height horizontal and vertical polarizations. The emissions wn in Test Results of the following pages. uction and function in typical operation. All the test modes JT in transmitting operation, which was shown in this test /s: ate in lowest channel, and found the follow list which if Data rate 1Mbps 6Mbps		
The sample was placed 0 above the ground plane of 3 polarities were performed. the EUT continuously work axis (X, Y & Z) and con- manipulating interconnectin from 1m to 4m in both worst-case(Z axis) are sho We have verified the constr were carried out with the EU report and defined as follow Per-scan all kind of data r was worst case. Mode 802.11b 802.11g	.8m & 1.5m for the measurement below & above 1GHz .8m chamber. Measurements in both horizontal and vertica During the test, each emission was maximized by: having ting, investigated all operating modes, rotated about all 3 nsidered typical configuration to obtain worst position ng cables, rotating the turntable, varying antenna height horizontal and vertical polarizations. The emissions wn in Test Results of the following pages. uction and function in typical operation. All the test modes JT in transmitting operation, which was shown in this test /s: ate in lowest channel, and found the follow list which if 0		

3.2. Description of Support Units

TCT通测检测 TESTING CENTRE TECHNOLOGY

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
Adapter	JD-050200	2012010907576735	1	JD

Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
- 3. For conducted measurements (Output Power, 6dB Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.





4. Facilities and Accreditations

4.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

• FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC Registration No.: 10668A-1
 - SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

4.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China TEL: +86-755-27673339

4.3. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	± 3.10 dB
2	RF power, conducted	± 0.12 dB
3	Spurious emissions, conducted	± 0.11 dB
4	All emissions, radiated(<1 GHz)	± 4.56 dB
5	All emissions, radiated(1 GHz - 18 GHz)	± 4.22 dB
6	All emissions, radiated(18 GHz- 40 GHz)	± 4.36 dB



5. Test Results and Measurement Data

5.1. Antenna requirement

Standard requirement: FCC Part15 C Section 15.203 /247(c)

MIFI/ GPS

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

E.U.T Antenna:

The WIFI antenna is internal antenna which permanently attached, and the best case gain of the antenna is 1dBi.

Page 9 of 24

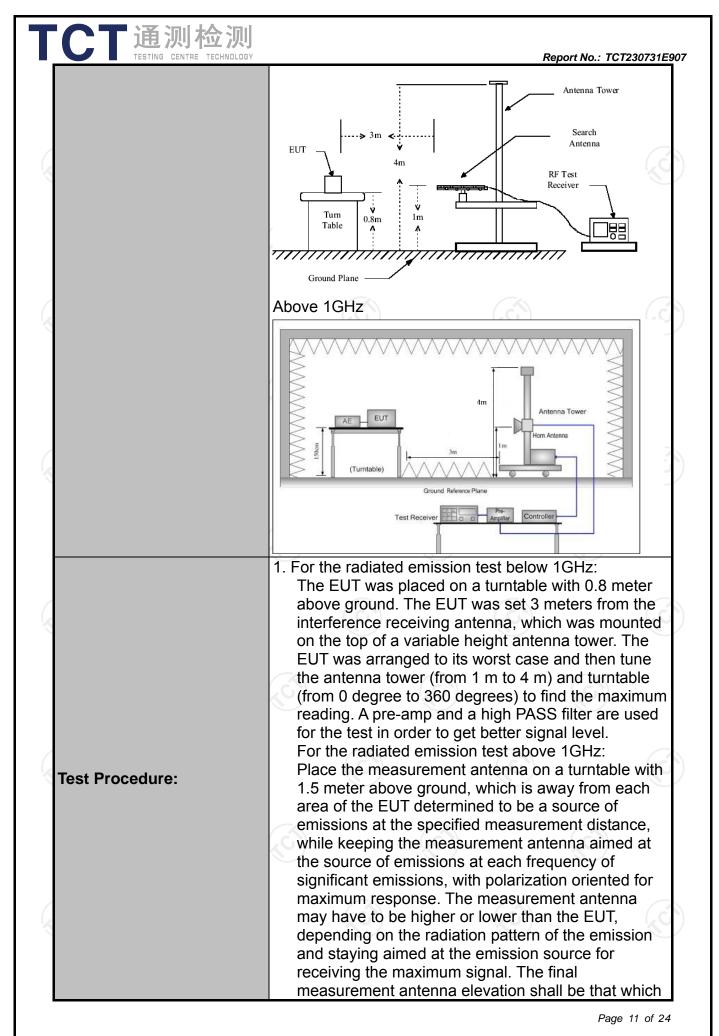
Antenna

5.2. Radiated Spurious Emission Measurement

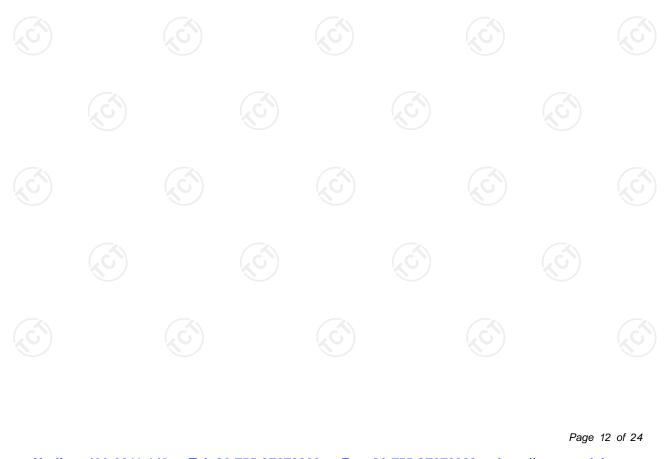
5.2.1. Test Specification

TCT通测检测 TESTING CENTRE TECHNOLOGY

Test Requirement:	FCC Part15	C Section	n 15.209	(\mathbf{G})		
Test Method:	ANSI C63.10): 2013				
Frequency Range:	9 kHz to 25 (GHz				
Measurement Distance:	3 m		(C)			
Antenna Polarization:	Horizontal &	Vertical				
Operation mode:	Transmitting	mode wi	th modulat	ion	(
	Frequency	Detector	RBW	VBW	Remark	
	9kHz- 150kHz	Quasi-pea		1kHz	Quasi-peak Value	
Receiver Setup:	150kHz- Quasi-pe 30MHz			30kHz	Quasi-peak Value	
•	30MHz-1GHz	Quasi-pea	k 120KHz	300KHz	Quasi-peak Value	
		Peak	1MHz	3MHz	Peak Value	
	Above 1GHz	Peak	1MHz	10Hz	Average Value	
	Frequen	ICV	Field Stre		Measurement	
			(microvolts		Distance (meters)	
	0.009-0.4		2400/F(I		300	
	0.490-1.7		24000/F(KHZ)	30	
	1.705-3		<u>30</u> 100		30	
	88-216		150		3	
Limit:	216-96		200		3	
Linnt.	Above 9		500		3	
	Frequency		ld Strength ovolts/meter)	Measure Distan (meter	ce Detector	
	Above 1GHz	2 - (500 5000	3	Average Peak	
	For radiated	emission	s below 30)MHz		
	Di	stance = 3m			Computer	
	+		\frown			
		· · · ()т г	Pre -/	Amplifier	
Test setup:	C. Sm	D Turn table]_1m		leceñver	
		Grour	ad Plane			
		-				



TCT 通测检测	
TESTING CENTRE TECHNOLOGY	Report No.: TCT230731E907
	 maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission
	 level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported. 5. Use the following spectrum analyzer settings: (1) Span shall wide enough to fully capture the emission being measured; (2) Set RBW=120 kHz for f < 1 GHz; VBW ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold; (3) Set RBW = 1 MHz, VBW= 3MHz for f >1 GHz for
	peak measurement. For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent. VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Test results:	PASS



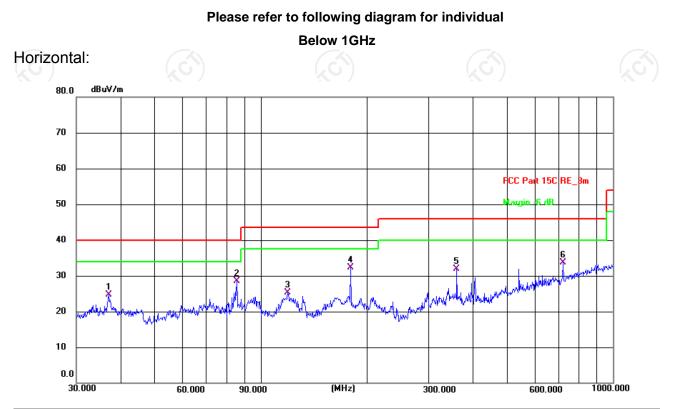
5.2.2. Test Instruments

	Radiated Em	nission Test Site	e (966)	
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
EMI Test Receiver	R&S	ESIB7	100197	Jun. 29, 2024
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 29, 2024
Pre-amplifier	SKET	LNPA_0118G- 45	SK2021012 102	Feb. 20, 2024
Pre-amplifier	SKET	LNPA_1840G- 50	SK2021092 03500	Feb. 20, 2024
Pre-amplifier	HP	8447D	2727A05017	Jun. 27, 2024
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jul. 02, 2024
Broadband Antenna	Schwarzbeck	VULB9163	340	Jul. 01, 2024
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jul. 01, 2024
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Feb. 24, 2024
Antenna Mast	Keleto	RE-AM	1	/
Coaxial cable	SKET	RC-18G-N-M	1	Feb. 24, 2024
Coaxial cable	SKET	RC_40G-K-M	1	Feb. 24, 2024
EMI Test Software	Shurple Technology	EZ-EMC		1



Page 13 of 24

5.2.3. Test Data



Site: #1 3m Anechoic Chamber Polarization: Horizontal Temperature: 25.1(C) Humidity: 52 %

Limit: FCC Part 15C RE_3m

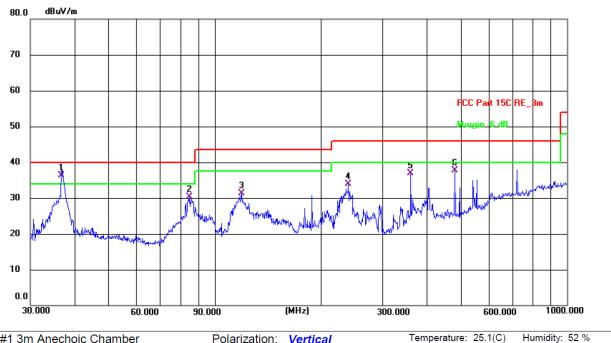
Power: DC 3.7 V

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	37.0248	11.03	13.67	24.70	40.00	-15.30	QP	Ρ	
2	85.5973	19.32	9.13	28.45	40.00	-11.55	QP	Р	
3	119.4360	13.24	12.08	25.32	43.50	-18.18	QP	Р	
4 *	180.0164	20.45	11.93	32.38	43.50	-11.12	QP	Р	
5	360.4476	16.28	15.56	31.84	46.00	-14.16	QP	Р	
6	721.7258	10.78	22.84	33.62	46.00	-12.38	QP	Ρ	

Page 14 of 24

Report No.: TCT230731E907

Vertical:



Site: #1 3m Anechoic Chamber Polarization: Vertical

Limit: FCC Part 15C RE_3m

Power: DC 3.7 V Frequency Reading Factor Level Limit Margin Detector P/F Remark No. (MHz) (dBuV) (dB/m) (dBuV/m) (dBuV/m) (dB) 36.7661 22.60 13.65 36.25 40.00 -3.75 QP Ρ 1 * 2 84.9993 21.24 9.15 30.39 40.00 -9.61 QP Ρ 3 119.4360 19.14 12.08 31.22 43.50 -12.28 QP Ρ 239.9873 21.27 12.72 33.99 46.00 -12.01 Ρ 4 QP 360.4476 37.00 46.00 5 21.44 15.56 -9.00 QP Ρ 6 480.5276 19.24 18.55 37.79 46.00 -8.21 QP Ρ

Note: 1. The low frequency, which started from 9KHz~30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported

2. Measurements were conducted in all three channels (high, middle, low) and all modulation(802.11b, 802.11g, 802.11n(HT20), 802.11n(HT40)), and the worst case Mode (Highest channel and 802.11b) was submitted only.

3. Freq. = Emission frequency in MHz Measurement $(dB\mu V/m) = Reading \, level \, (dB\mu V) + Corr. Factor \, (dB)$

Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

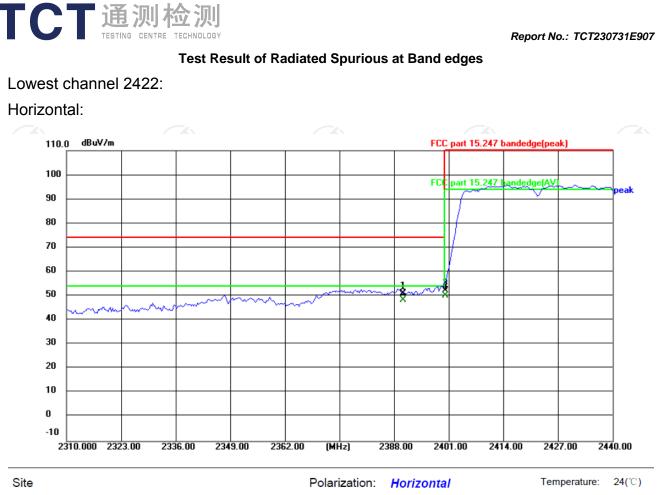
Limit $(dB\mu V/m) = Limit$ stated in standard

Margin (dB) = Measurement (dB μ V/m) – Limits (dB μ V/m)

* is meaning the worst frequency has been tested in the test frequency range

Page 15 of 24

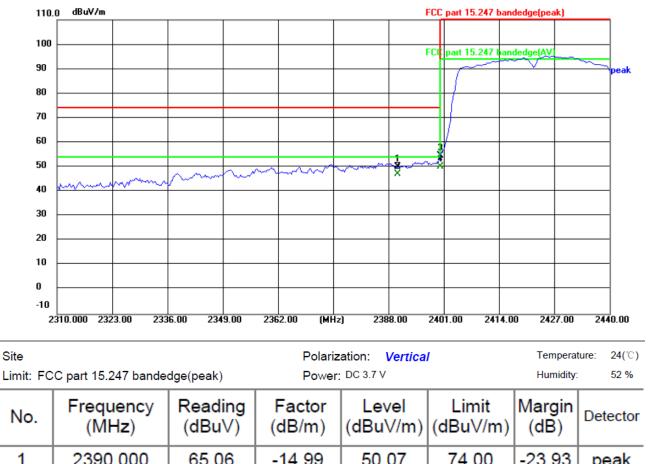
Report No.: TCT230731E907



Limit: FC	C part 15.247 bande	dge(peak)	Power:	DC 3.7 V	Humidity:	52 %	
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2390.000	66.02	-14.99	51.03	74.00	-22.97	peak
2	2390.000	63.35	-14.99	48.36	54.00	-5.64	AVG
3	2400.000	67.11	-14.95	52.16	74.00	-21.84	peak
4 *	2400.000	65.01	-14.95	50.06	54.00	-3.94	AVG

Page 16 of 24

Vertical:



	(((((()	
1	2390.000	65.06	-14.99	50.07	74.00	-23.93	peak
2	2390.000	62.25	-14.99	47.26	54.00	-6.74	AVG
3	2400.000	69.75	-14.95	54.80	74.00	-19.20	peak
4 *	2400.000	65.11	-14.95	50.16	54.00	-3.84	AVG
					-		

Page 17 of 24

Report No.: TCT230731E907 Highest channel 2452: Horizontal: 110.0 dBuV/m 100 90 80 FCC part 15.247 bandedge(peak) 70 60 CC part 15.247 bandedge(AV 50 eak ŝ 40 30

2450.000 2455.00

2460.00

2465.00

2470.00

Site Limit: FCC part 15.247 bandedge(peak)			Polariz Power:	Temperat Humidity:	ure: 24(°C) 52 %		
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	64.19	-14.58	49.61	74.00	-24.39	peak
2 *	2483.500	59.86	-14.58	45.28	54.00	-8.72	AVG

(MHz)

2480.00

2485.00

2490.00

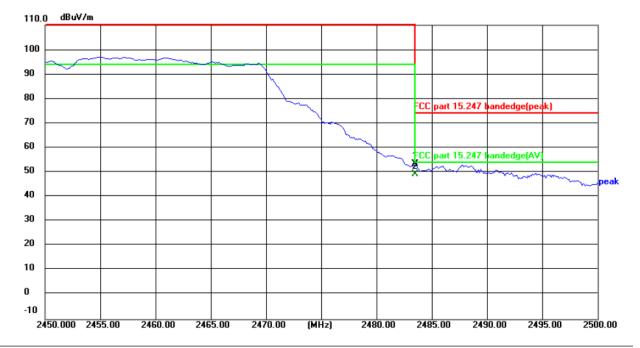
2495.00

2500.00

Page 18 of 24

Report No.: TCT230731E907

Vertical:



Site Limit: FC	C part 15.247 bande	dge(peak)	Polariz Power:	ation: Vertica DC 3.7 V	Temperat Humidity:	· · ·	
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2483.500	68.09	-14.58	53.51	74.00	-20.49	peak
2 *	2483.500	<mark>63.8</mark> 4	-14.58	49.26	54.00	-4.74	AVG

Note:

- 1. Peak Final Emission Level=Peak Reading + Correction Factor;
- 2. Correction Factor= Antenna Factor + Cable loss Pre-amplifier
- 3. Measurements were conducted in all modulation(802.11b, 802.11g, 802.11n(HT20), 802.11n(HT40)), and the worst case Mode 802.11n(HT40)) was submitted only.



ТС	TESTING	测检	IOLOGY	Above odulation T		lb	Rep	ort No.: TCT2	30731E907
			L	ow channe	I: 2412 MH	Z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4824	Н	45.91		0.75	46.66	(74	54	-7.34
7236	Н	36.28		9.87	46.15		74	54	-7.85
	Н								
			•						
4824	V	44.53		0.75	45.28	~~	74	54	-8.72
7236	V	34.07		9.87	43.94	G`}	74	54	-10.06

			М	iddle chanr	nel: 2437MH	Ηz			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4874	Н	45.36		0.97	46.33		74	54	-7.67
7311	Н	36.72		9.83	46.55		74	54	-7.45
	H				(
			Ň)	X				
4874	V	45.49		0.97	46.46		74	54	-7.54
7311	V	35.15		9.83	44.98		74	54	-9.02
	V								
		()		(.0					(.c.)

			H	ligh channe	el: 2462 MH	Z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4924	H	44.68		1.18	45.86		74	54	-8.14
7386	Ĩ	34.24		10.07	44.31		74	54	-9.69
	Н								
4924	V	46.03		1.18	47.21		74	54	-6.79
7386	V	34.87		10.07	44.94		74	54	-9.06
	V								

V

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dBµV/m)-Average limit (dBµV/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "--- "in the above table mean that the reading of emissions is attenuated more than 20 dB

below the limits or the field strength is too small to be measured.

TC		测检 CENTRE TECHN	须J				Rep	ort No.: TCT2	30731E907
			Μ	odulation T	ype: 802.11	lg			
			L	ow channe	I: 2412 MH	z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4824	Н	45.03		0.75	45.78		74	54	-8.22
7236	Н	34.76		9.87	44.63		74	54	-9.37
<u> </u>	Н			0)		<u> </u>		
4824	V	43.58		0.75	44.33		74	54	-9.67
7236	V	34.12		9.87	43.99		74	54	-10.01
	V)		G`)			

Middle channel: 2437MHz										
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)	
4874	Н	44.37		0.97	45.34		74	54	-8.66	
7311	Н	34.90		9.83	44.73		74	54	-9.27	
	Н									
				6	(
4874	V	45.64		0.97	46.61 📉		74	54	-7.39	
7311	V	35.21		9.83	45.04		74	54	-8.96	
	V									

(\mathbf{G})		High channel: 2462 MHz									
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)		
4924	H_	43.45		1.18	44.63		74	54	-9.37		
7386	H	35.89		10.07	45.96	<u></u>	74	54	-8.04		
	H			/	🏹	<u> </u>					
4924	V	45.63		1.18	46.81		74	54	-7.19		
7386	V	34.08		10.07	44.15		74	54	-9.85		
	V	(JC)		(20)		2G				
						•		•			

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

TC	TESTING	测检 CENTRE TECH					Rep	ort No.: TCT2	30731E907
				lation Type		/			
				ow channe		Z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4824	Н	46.14		0.75	46.89		74	54	-7.11
7236	Н	36.79		9.87	46.66		74	54	-7.34
	Н			0	J		<u> </u>		
4824	V	46.52		0.75	47.27		74	54	-6.73
7236	V	35.07	(k	9.87	44.94	×	74	54	-9.06
	V)	(2	G`)			

Middle channel: 2437MHz										
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)		Margin (dB)	
4874	Н	45.24		0.97	46.21		74	54	-7.79	
7311	Н	36.80		9.83	46.63		74	54	-7.37	
	Н									
					(
4874	V	45.36		0.97	46.33	<u> </u>	74	54	-7.67	
7311	V	35.71		9.83	45.54		74	54	-8.46	
	V									

(G)		(6)	F	ligh channe	el: 2462 MH				
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)		Margin (dB)
4924	H_	44.69		1.18	45.87		74	54	-8.13
7386	H	35.43	(.6)	10.07	45.50	<u></u>	74	54	-8.50
	H			/		<u> </u>			
								1	
4924	V	43.28		1.18	44.46		74	54	-9.54
7386	V	34.60		10.07	44.67		74	54	-9.33
	V	tzG`		(5)		2G 2)		

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

TC	TESTING	测检 CENTRE TECHN					Rep	ort No.: TCT2	30731E907
			Modu	lation Type	: 802.11n (ł	HT40)			
			L	ow channe	I: 2422 MH	Z			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBuV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4844	Н	43.71		0.75	44.46		74	54	-9.54
7266	Н	34.55		9.87	44.42		74	54	-9.58
	Н			0) <u></u>		<u> </u>		
4824	V	45.26		0.75	46.01		74	54	-7.99
7236	V	37.93		9.87	47.8		74	54	-6.2
	V)	(<u> </u>			

Middle channel: 2437MHz										
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)	
4874	Н	44.61		0.97 🛸	45.58		74	54	-8.42	
7311	Н	36.04		9.83	45.87		74	54	-8.13	
	Н									
				2	(
4874	V	46.27		0.97	47.24 📉	9)	74	54	-6.76	
7311	V	36.85		9.83	46.68		74	54	-7.32	
	V									

(G)		(.6)	F	ligh channe		(.G)			
Frequency (MHz)	Ant. Pol. H/V	Peak reading (dBµV)	AV reading (dBµV)	Correction Factor (dB/m)	Emissic Peak (dBµV/m)	n Level AV (dBµV/m)	Peak limit (dBµV/m)	AV limit (dBµV/m)	Margin (dB)
4904	H-	46.30		1.18	47.48		74	54	-6.52
7356	H	36.19		10.07	46.26	<u></u>	74	54	-7.74
	H			/		<u> </u>			
4004	M	45.50		1 10	46.74	[74	E 4	7.00
4904	V	45.56		1.18	46.74		74	54	-7.26
7356	V	34.23		10.07	44.30		74	54	-9.70
	V	+ 7 6`)		<u>, G-+</u>		

1. Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier

2. Margin (dB) = Emission Level (Peak) (dB μ V/m)-Average limit (dB μ V/m)

3. The emission levels of other frequencies are very lower than the limit and not show in test report.

4. Measurements were conducted from 1 GHz to the 10th harmonic of highest fundamental frequency. The highest test frequency is 25GHz.

5. Data of measurement shown "---"in the above table mean that the reading of emissions is attenuated more than 20 dB below the limits or the field strength is too small to be measured.

