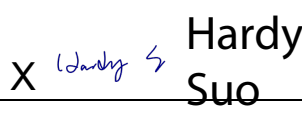



Prüfbericht-Nr.: <i>Test report no.:</i>	CN23T4C2 003	Auftrags-Nr.: <i>Order no.:</i>	168421836	Seite 1 von 24 <i>Page 1 of 24</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2023-03-21	
Auftraggeber: <i>Client:</i>	Lenovo (Beijing) Limited 201-H2-6, Floor 2, Building 2, No.6 Shangdi West Road, Haidian District, 100085 Beijing, P. R. China			
Prüfgegenstand: <i>Test item:</i>	ThinkBook Wireless Dock			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	L01WC014-CS-H			
Auftrags-Inhalt: <i>Order content:</i>	Test Report			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart E Section 15.407 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2023-03-21	Please refer to photo documents		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003448177-003, 004			
Prüfzeitraum: <i>Testing period:</i>	2023-03-27 to 2023-07-04			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>	 Hardy Suo		genehmigt von: <i>authorized by:</i>	 Lin Lin
Datum: <i>Date:</i>	2023-07-18		Ausstellungsdatum: <i>Issue date:</i>	2023-07-18
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / <i>Other:</i>	FCC ID: A5ML01WC014			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

v05

Prüfbericht-Nr.: CN23T4C2 003
Test report no.:

Seite 2 von 24
Page 2 of 24

Anmerkungen
Remarks

1	<p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.</p> <p>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>
2	<p>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.</p> <p><i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</i></p>
3	<p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.</p> <p>Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i></p> <p><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>
4	<p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p>

TEST SUMMARY**5.1.1 ANTENNA REQUIREMENT***RESULT: Pass***5.1.2 MAXIMUM OUTPUT POWER***RESULT: Pass***5.1.3 POWER SPECTRAL DENSITY***RESULT: Pass***5.1.4 FREQUENCY STABILITY***RESULT: Pass***5.1.5 26dB BANDWIDTH AND 99% BANDWIDTH***RESULT: Pass***5.1.6 6dB BANDWIDTH***RESULT: Pass***5.1.7 RADIATED SPURIOUS EMISSION***RESULT: Pass***5.1.8 DYNAMIC FREQUENCY SELECTION (DFS)***RESULT: Pass***5.1.9 CONDUCTED EMISSION ON AC MAINS***RESULT: Pass*

TABLE OF CONTENTS

1.	GENERAL REMARKS	5
1.1	COMPLEMENTARY MATERIALS	5
2.	TEST SITES	6
2.1	TEST FACILITIES.....	6
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS.....	6
2.3	TRACEABILITY	7
2.4	CALIBRATION	7
2.5	UNCERTAINTY OF MEASUREMENT.....	7
2.6	LOCATION OF ORIGINAL DATA.....	7
2.7	STATUS OF FACILITY USED FOR TESTING.....	7
3.	GENERAL PRODUCT INFORMATION	8
3.1	PRODUCT FUNCTION AND INTENDED USE.....	8
3.2	RATINGS AND SYSTEM DETAILS	8
3.3	INDEPENDENT OPERATION MODES	10
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS	10
3.5	SUBMITTED DOCUMENTS.....	10
4.	TEST SET-UP AND OPERATION MODES	12
4.1	PRINCIPLE OF CONFIGURATION SELECTION.....	12
4.2	TEST OPERATION	12
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	12
4.4	COUNTERMEASURES TO ACHIEVE ERM COMPLIANCE	12
4.5	TEST SETUP DIAGRAM.....	13
5.	TEST RESULTS	15
5.1	RADIO TEST REQUIREMENT & TEST SUITES (5GHZ BANDS)	15
5.1.1	<i>Antenna Requirement.....</i>	<i>15</i>
5.1.2	<i>Maximum output power</i>	<i>16</i>
5.1.3	<i>Power Spectral Density</i>	<i>17</i>
5.1.4	<i>Frequency Stability.....</i>	<i>18</i>
5.1.5	<i>26dB Bandwidth and 99% Bandwidth</i>	<i>19</i>
5.1.6	<i>6dB Bandwidth</i>	<i>20</i>
5.1.7	<i>Radiated Spurious Emission.....</i>	<i>21</i>
5.1.8	<i>Dynamic Frequency Selection (DFS).....</i>	<i>22</i>
5.1.9	<i>Conducted Emission on AC Mains.....</i>	<i>23</i>
6.	PHOTOGRAPHS OF THE TEST SET-UP	24
7.	LIST OF TABLES	24

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of 5G Wi-Fi_AP6275PR3

Appendix B: Test Results of 5G Wi-Fi_AP6275S

Appendix C: Photographs of the Test Set-up

2. Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China

FCC Accreditation Designation No.: CN1260

ISED Wireless Device Testing Laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

TÜV Rheinland (Shenzhen) Co., Ltd.

Radio Spectrum Testing (SRD-Tonscend)					
Equip. No.	Description	Manufacturer	Model	Serial No.	Calibrated until (DD.MM.YYYY)
9039436	EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	10.10.2023
9039437	MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	10.10.2023
9039438	EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	10.10.2023
9039439	DC Power Supply	Keysight	E3642A	MY61276100	10.10.2023
9039440	Wireless Connectivity Tester	R&S	CMW270	102505	10.10.2023
9039441	Power Control Unit	Tonscend	JS0806-4ADC	N/A	10.10.2023
9039442	Automation Control Unit	Tonscend	JS0806-2	21C8060396	10.10.2023
9039443	Test Software	Tonscend	JS1120-3	N/A	N/A
9039444	Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A
Unwanted Emission Testing (TS9975)					
Equip. No.	Description	Manufacturer	Model	Serial No.	Calibrated until (DD.MM.YYYY)
G1826021	EMI Test Receiver	R&S	ESR 7	102021	02.08.2023
G1826023	Signal Analyzer	R&S	FSV 40	101439	01.08.2023
G1826024	System Controller Interface	R&S	SCI-100	S10010038	N/A
G1826025	Filterbank	R&S	Wlan	100759	01.08.2023
G1826026	OSP	R&S	OSP 120	102040	N/A
G1826028	Pre-amplifier	R&S	SCU08F1	08320031	02.08.2023
G1826029	Amplifier	R&S	SCU-18F	180070	02.08.2023
G1826030	Amplifier	R&S	SCU40A	100475	02.08.2023
G1826031	Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	06.08.2024
G1826032	Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	06.08.2024
G1826033	Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	27.08.2024
G1826034	Active Loop Antenna	Schwarzbeck	FMZB 1513	302	06.08.2024

G1826036	Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
G1826037	Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
G1826433	3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	22.06.2024
Conducted Emission					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until	
EMI Test Receiver	R&S	ESR3	102428	2023-07-31	
Artificial Mains Network	R&S	ENV216	102333	2023-08-01	
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A	

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Uncertainty of Measurement

The value of the measurement uncertainty of each parameter is listed as below:

Table 2: Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	± 0.99 dB
Occupied Channel Bandwidth	± 2.08 %
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 0.89 dB
All emissions, radiated	± 4.17 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, Shenzhen 518110, People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3. General Product Information

3.1 Product Function and Intended Use

The EUT (**E**quipment **U**nder **T**est) is a ThinkBook Wireless Dock. It supports 2.4/5G Wi-Fi and WPT functions.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification

General Information of EUT	Value
Kind of Equipment	ThinkBook Wireless Dock
Type Designation	L01WC014-CS-H
Trademark	Lenovo
Operating Temperature Range	0 °C ~ +40 °C
Operating Voltage:	DC 20V@6.75A input via AC Adapter
Testing Voltage:	AC 120V, 60Hz
Radiofrequency operating mode	1) 2.4GHz Wi-Fi: operating within 2400-2483.5MHz, supports 20MHz Bandwidth and IEEE 802.11 b/g/n20/ax20 2) 5GHz Wi-Fi: operating within 5150-5850MHz, supports 20MHz/40MHz/80MHz Bandwidth and IEEE 802.11 a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80 3) WPT: operating within 110~205KHz
Technical Specification of 5GHz Wi-Fi of AP6275PR3	
Operating Frequency	5150 – 5250 MHz for 802.11 a/n-HT20/n-HT40/ac HT20/ac HT40/ac HT80/ax HE20/ax HE40/ax HE80 5725 – 5850 MHz for 802.11 a/n-HT20/n-HT40/ac HT20/ac HT40/ac HT80/ax HE20/ax HE40/ax HE80
Type of Modulation	OFDM(BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)
Data Rate	1) 6/9/12/18/24/36/48/54 Mbps for 802.11a 2) MCS0 ~ MCS9 for 802.11 20/n40/ac20/ac40/ac80 3) HE0 ~ HE11 for 802.11 ax20/ax40/ax80
Multi-RU	No, full RU
Channel Number	7 channels for 5150 – 5250 MHz 8 channels for 5725 – 5850 MHz
Channel Separation	20MHz, 40MHz, 80MHz
Antenna Type	Integral Antenna
Antenna Number	1Tx1Rx for SISO mode (ANT2 or ANT4) 2Tx2Rx for MIMO mode (ANT2+ANT4)
Antenna Gain	5150 – 5250 MHz: ANT2=2.45dBi, ANT4=2.87dBi 5725 – 5850 MHz: ANT2=2.84dBi, ANT4=0.37dBi (provided by client)
Type of Product	Client Device without Radar Detection

TX Power Control (TPC)	Supported
The type of wideband data transmission equipment	DTS
Technical Specification of 5GHz Wi-Fi of AP6275S	
Operating Frequency	5150 – 5250 MHz for 802.11 a/n-HT20/n-HT40/ac HT20/ac HT40/ac HT80/ax HE20/ax HE40/ax HE80 5250 – 5350 MHz for 802.11 a/n-HT20/n-HT40/ac HT20/ac HT40/ac HT80/ax HE20/ax HE40/ax HE80 5470 – 5725 MHz for 802.11 a/n-HT20/n-HT40/ac HT20/ac HT40/ac HT80/ax HE20/ax HE40/ax HE80 5725 – 5850 MHz for 802.11 a/n-HT20/n-HT40/ac HT20/ac HT40/ac HT80/ax HE20/ax HE40/ax HE80
Type of Modulation	OFDM(BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM) OFDMA(BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)
Data Rate	1) 6/9/12/18/24/36/48/54 Mbps for 802.11a 2) MCS0 ~ MCS9 for 802.11 20/n40/ac20/ac40/ac80 3) HE0 ~ HE11 for 802.11 ax20/ax40/ax80
Multi-RU	Yes
Channel Number	7 channels for 5150 – 5250 MHz 7 channels for 5250 – 5350 MHz 21 channels for 5470 – 5725 MHz 8 channels for 5725 – 5850 MHz
Channel Separation	20MHz, 40MHz, 80MHz
Antenna Type	Integral Antenna
Antenna Number	1Tx1Rx for SISO mode (ANT1 or ANT3) 2Tx2Rx for MIMO mode (ANT1+ANT3)
Antenna Gain	5150 – 5250 MHz: ANT1=2.35dBi, ANT3=1.5dBi 5250 – 5350 MHz: ANT1=2.35dBi, ANT3=1.5dBi 5470 – 5725 MHz: ANT1=2.96dBi, ANT3=2.83dBi 5725 – 5850 MHz: ANT1=2.9dBi, ANT3=2.44dBi (provided by client)
Type of Product	Client Device without Radar Detection
TX Power Control (TPC)	Supported
The type of wideband data transmission equipment	DTS
*Remark: L01WC014-CS-H has two 2.4GHz Wi-Fi modules AP6275PR3 and AP6275S.	

Table 4: RF Channel and Frequency of 5GHz Wi-Fi 802.11 a/n/ac/ax

U-NII-1					
20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

U-NII-2A

20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270	58	5290
56	5280	62	5310		
60	5300				
64	5320				

U-NII-2C					
20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	102	5510	106	5530
104	5520	110	5550	122	5610
108	5540	118	5590	138	5690
112	5560	126	5630		
116	5580	134	5670		
120	5600	142	5710		
124	5620				
128	5640				
132	5660				
136	5680				
140	5700				
144	5720				

U-NII-3					
20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, 5GHz Wi-Fi 802.11 a/n/ac/ax wireless transmitting mode
 - 1) Low Channel
 - 2) Middle Channel
 - 3) High Channel
- B. On, Normal Operation
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

Prüfbericht - Nr.: CN23T4C2 003
Test Report No.

Seite 11 von 24
Page 11 of 24

- Application Form
- Circuit Diagram
- Instruction Manual
- Photo Documents
- Technical Description
- Bill of Material
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013 and ANSI C63.4: 2014.

According to clause 3.1, all tests were performed on model L01WC014-CS-H in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Laptop	Lenovo	T480	PF-16A6N8	N/A
Portable Laptop	Lenovo	ThinkPad T480	10Q67059	N/A
HDMI Display	PHILIPS	272P7V	N/A	AC 100-240V
USB-C Display	Lenovo	A19238QP1	V307KY40	AC 100-240V
USB Disk	Kingston	DTX/32G	N/A	N/A
Intelligent wireless charging full function test module	N/A	YBZ	N/A	5W, 7.5W, 10W, 15W
AC/DC Adapter	Lenovo	ADL135SLC3A	N/A	Input: 100-240V~2.5A, 50/60Hz Output: 20V, 6.75A, 135.0W

4.4 Countermeasures to Achieve ERM Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF). No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

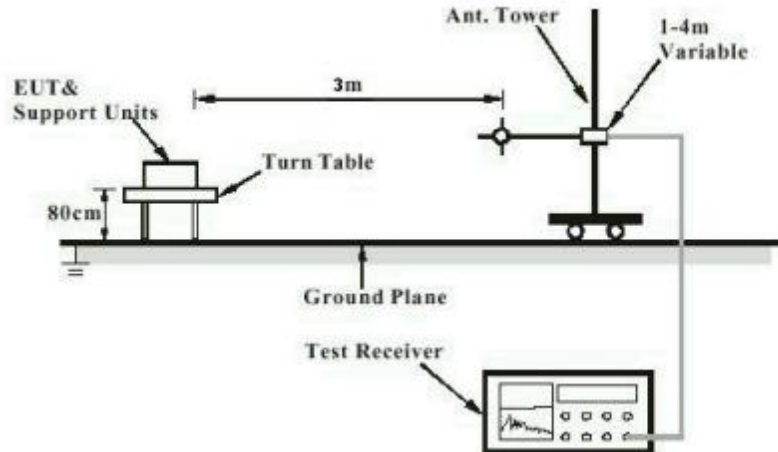


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

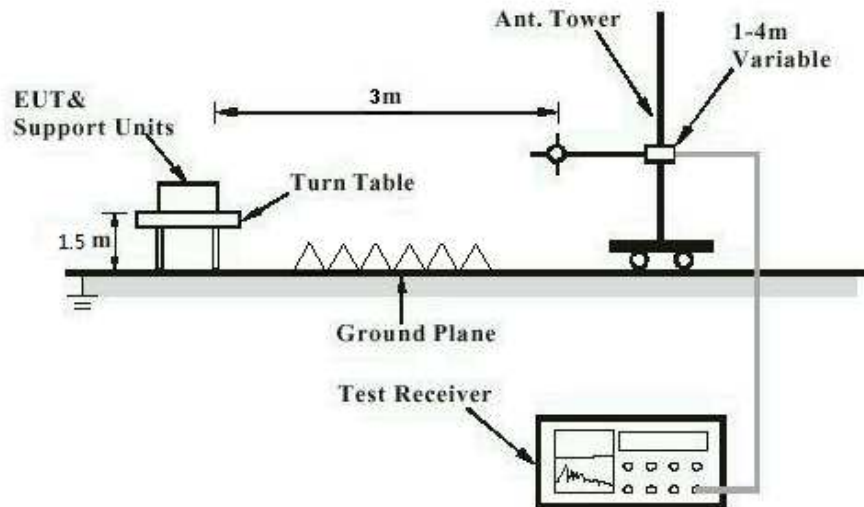


Diagram of Measurement Configuration for Mains Conduction Measurement

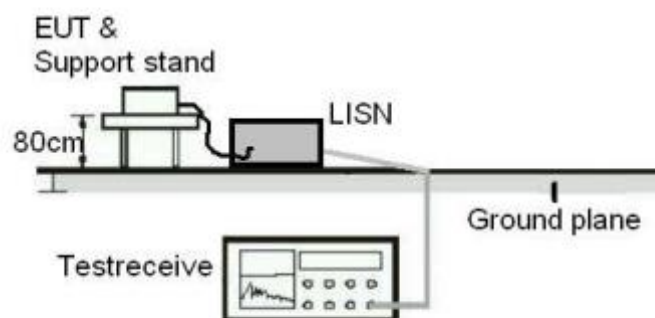


Diagram of Measurement Configuration for Conducted Transmitter Measurement

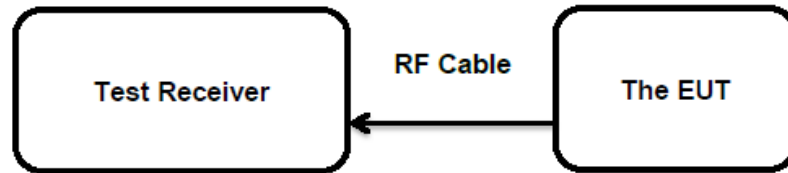
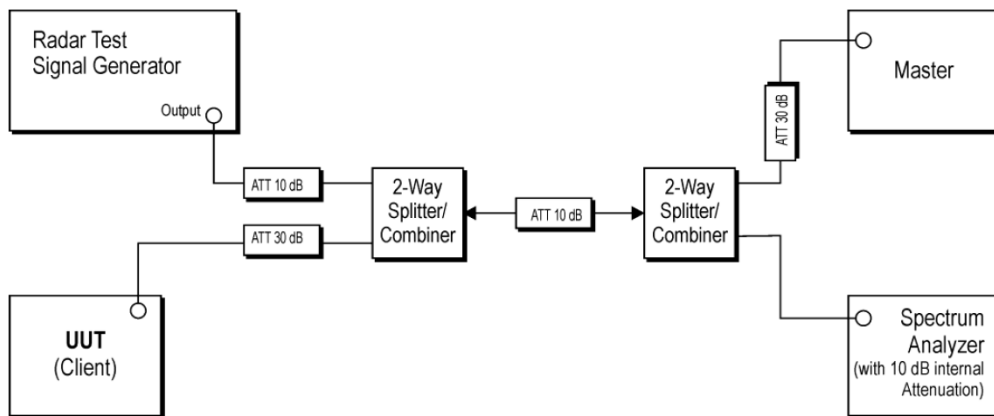


Diagram of Measurement Configuration for Dynamic Frequency Selection (DFS)



5. Test Results

5.1 Radio Test Requirement & Test Suites (5GHz Bands)

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.203

According to the manufacturer declared, the EUT has integral antennas, the max. uncorrelated antenna gain antenna is 2.96dBi, permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Therefore the EUT is considered sufficient to comply with the provision.

Prüfbericht - Nr.: CN23T4C2 003
Test Report No.Seite 16 von 24
Page 16 of 24**5.1.2 Maximum output power****RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.407 (a)
Basic standard	: ANSI C63.10:2013 <250mW (24dBm) (5150-5250MHz) *<250mW (24dBm) (5250-5350MHz, 5470-5725MHz)
Limits	: *250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz, where is lesser. <1W (30dBm) (5725-5850MHz)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-03-27 to 2023-07-04
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Refer to attached Appendix A, B for details of test data.

5.1.3 Power Spectral Density**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.407 (a)
Basic standard	: ANSI C63.10:2013 <11dBm/MHz (5150-5250MHz 5250-5350MHz, 5470-5725MHz)
Limits	: 5725MHz) <30dBm/500KHz (5725-5850MHz)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-03-27 to 2023-07-04
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Refer to attached Appendix A, B for details of test data.

5.1.4 Frequency Stability**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.407 (g)
Basic standard	: ANSI C63.10:2013
Limits	: Within assigned bands
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-03-27 to 2023-07-04
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Refer to attached Appendix A, B for details of test data.

Prüfbericht - Nr.: CN23T4C2 003
Test Report No.Seite 19 von 24
Page 19 of 24**5.1.5 26dB Bandwidth and 99% Bandwidth****RESULT:****Pass****Test Specification**

Test standard : FCC Part 15.407
Basic standard : ANSI C63.10:2013
Limits : N/A
Kind of test site : Shielded Room

Test Setup

Date of testing : 2023-03-27 to 2023-07-04
Input voltage : AC 120V, 60Hz
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 25 °C
Relative humidity : 56 %
Atmospheric pressure : 101 kPa

Refer to attached Appendix A, B for details of test data.

Prüfbericht - Nr.: CN23T4C2 003
Test Report No.Seite 20 von 24
Page 20 of 24**5.1.6 6dB Bandwidth****RESULT:****Pass****Test Specification**

Test standard : FCC Part 15.407 (e)
Basic standard : ANSI C63.10:2013
Limits : At least 500KHz (5725-5850MHz)
Kind of test site : Shielded Room

Test Setup

Date of testing : 2023-03-27 to 2023-07-04
Input voltage : AC 120V, 60Hz
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 25 °C
Relative humidity : 56 %
Atmospheric pressure : 101 kPa

Refer to attached Appendix A, B for details of test data.

5.1.7 Radiated Spurious Emission**RESULT:****Pass****Test Specification**

Test standard : FCC Part 15.407(b) & FCC Part 15.205 & FCC Part 15.209
Basic standard : ANSI C63.10:2013

Limits :

- For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

Emissions outside the band 5470-5600 MHz and 5650-5725 MHz shall not exceed -27 dBm/MHz e.i.r.p.

- For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
- Restricted Bands meet the requirement of 15.209 limit

Kind of test site : 3m Semi-Anechoic Chamber (below 1GHz)
3m Anechoic Chamber (above 1GHz)

Test Setup

Date of testing : 2023-03-27 to 2023-07-04
Input voltage : AC 120V, 60Hz
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 23 °C
Relative humidity : 48 %
Atmospheric pressure : 101 kPa

Refer to attached Appendix A, B for details of test data.

Prüfbericht - Nr.: CN23T4C2 003
Test Report No.Seite 22 von 24
Page 22 of 24**5.1.8 Dynamic Frequency Selection (DFS)****RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.407(h)
Basic standard	: ANSI C63.4:2014 5250-5350MHz, 5470-5725MHz Channel Move Time: Within 10 seconds.
Limits	: Channel Closing Transmission Time: 200ms+aggregate of 60ms over remaining 10s period; Non-Occupancy Period: at least 30 minutes.
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-03-27 to 2023-07-04
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Ambient temperature	: 23 °C
Relative humidity	: 48 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A, B.

Prüfbericht - Nr.: CN23T4C2 003
Test Report No.Seite 23 von 24
Page 23 of 24**5.1.9 Conducted Emission on AC Mains****RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.207
Basic standard	: ANSI C63.4:2014
Frequency range	: 0.15 – 30MHz
Classification	: Class B
Limits	: FCC Part 15.107(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-03-27
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Earthing	: Connected
Ambient temperature	: 23.0 °C
Relative humidity	: 50.8 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A, B.

6. Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix C.

7. List of Tables

Table 1: List of Test and Measurement Equipment.....	6
Table 2: Measurement Uncertainty.....	7
Table 3: Technical Specification.....	8
Table 4: RF Channel and Frequency of 5GHz Wi-Fi 802.11 a/n/ac/ax.....	9
Table 5: List of Accessories and Auxiliary Equipment.....	12