



TEST REPORT

Report No. SST240408005EF03

Applicant: SHENZHEN ELECTRON TECHNOLOGY CO., LTD.

Address of Applicant: Bld.2, Yingfeng Industrial Zone, Tantou Community, Songgang Street, Bao'an, Shenzhen, China.

Product Name: Android Tablet

Trade Mark: /

Standard(s): FCC CFR Title 47 Part 15 Subpart E Section 15.247

FCC ID: 2ABC5-E0058

Test Report Form No: SST-RD-7.5-02-E01(A/0)

Date of sample receipt: 2024/5/6

Date of Test: 2024/5/6 - 2024/5/14

Date of report issued: 2024/5/16

*The equipment complies with the requirements according to the standard(s) or Specification above, it is applicable only to the tested sample identified in the report.

Prepared by:

Bob

Reviewed by:

Seven Zhan

Approved by:

Tiger



*The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Version	Description	Date of Issue
V1.0	Original	2024/5/16



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3 Test Summary

Test items	Basics standards	Result
Antenna requirement	FCC part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	Pass
Conducted Peak Output Power	FCC part 15.247 (b)(3)	Pass
Channel Bandwidth & 99% OCB	FCC part 15.247 (a)(2)	Pass
Power Spectral Density	FCC part 15.247 (e)	Pass
Band Edge	FCC part 15.247(d)	Pass
Spurious Emission	FCC part 15.205/15.209	Pass

Notes:

1: NA =Not Applicable

2: Determining compliance based on the results of the compliance measurement, not taking into account measurement uncertainty. If necessary, the applicant shall inform test lab in advance

3: Additions, Deviations and Exclusions from Standards: None.

4 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

The measurement uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Item	Uncertainty (\pm) (k=2, 95%)	
Output Power, Conducted	0.54	
Power Spectral Density, Conducted	1.28	
Spurious Emissions, Conducted	1.28	
Radiated Emissions(<1GHz)	9kHz~30MHz	2.6
	30MHz~1GHz	5.08
Radiated Emissions(>1GHz)	1GHz~6GHz	4.02
	6GHz~18GHz	4.62
	18GHz~40GHz	4.7
Occupied Bandwidth	1.14	
Conducted Emissions—AC mains	9kHz~150KHz	1.76
	150kHz~30MHz	2.52
Conducted Emissions—Telecom	2.64	

5 General Information

5.1 Client Information

Applicant: SHENZHEN ELECTRON TECHNOLOGY CO., LTD.
Address of applicant: Bld.2, Yingfeng Industrial Zone, Tantou Community, Songgang Street, Bao'an, Shenzhen, China.
Manufacturer: Same as applicant
Address of Manufacturer: Same as applicant
Factory: Same as applicant
Address of Factory: Same as applicant

5.2 General Description of EUT

Product Name:	Android Tablet
Model No.:	NW2493T, SW2493T
Test Model:	NW2493T
Test sample(s) ID:	24040800502
Sample(s) Status:	Continuously transmitter
S/N:	/
Hardware version:	/
Software version:	/
Operation Frequency:	2412MHz~2462MHz
Technic and Modulation:	802.11b: DSSS 802.11g/802.11n: OFDM 802.11ax: OFDMA
Supported bandwidth:	20MHz, 40MHz
Antenna gain:	Refer to section 5.7 for details
Power supply:	SW2493T: SWITCH MODE POWER SUPPLY Model No.: S065-1A180300B3 INPUT: AC 100-240V, 50/60Hz, 1.5A OUTPUT: DC 18V, 3.0A, 54.0W Or 5200mAh, 14.6V, 75.92Wh Lithium-ion Rechargeable Battery NW2493T: SWITCH ADAPTER Model No.: FJ-SW20171205000 INPUT: AC 100-240V, 50/60Hz, 1.5A MAX OUTPUT: DC 12V, 5.0A, 60.0W

5.3 Test mode(s)

Mode 1:	continuously transmitting, with its lowest data rate which emit the max power level
Mode 2:	
Mode 3:	

Channel list for 802.11							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz
3	2422MHz	6	2437MHz	9	2452MHz	X	



5.4 Test Facility

The test facility is recognized, certified, or accredited by these organizations:	FCC Accredited Lab Test Firm Registration Number: 638130 Designation Number: CN1359
	IC Registration Lab CAB Identifier No. CN0154
	A2LA Accreditation Lab Certificate No.:7057.01

Test Performed at:	Name GuangDong Set Sail Testing Co., Ltd.
	Address 101, No.19, Tianxin Hudie 1st Road, Huangjiang Town, Dongguan, Guangdong, China

5.5 Description of Support Units

Device Type	Brand	Model	Series No.	Note
Notebook PC	HP	ZHAN 66P	---	---

5.6 Additional Instructions

Test Software	Special test command used
Power level setup	Default

5.7 Antenna Information

Ant	Manufacturer	Model	Antenna Type	Antenna Gain (dBi)
1	Shenzhen Yishengbang Technology Co., Ltd	/	/	1.31

All above information provided by the applicant which is fully responsible for those information.

5.8 Others

<p>The laboratory responsible for all the information provided in the report, except those information provided by the applicant. The applicant shall fully responsible for the information they provided. The report would be invalid without a stamp of test laboratory and the signatures of compiler and approver. The laboratory has not been responsible for the sampling stage; the test report merely corresponds to the test sample received. Any objection to the test report shall submitted to the test laboratory within 15 days from the date of receipt of the report. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.</p>

6 Technical Requirement and Measurement Data

6.1 Generally requirement

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 shall be considered sufficient to comply with the provisions of this section. 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.

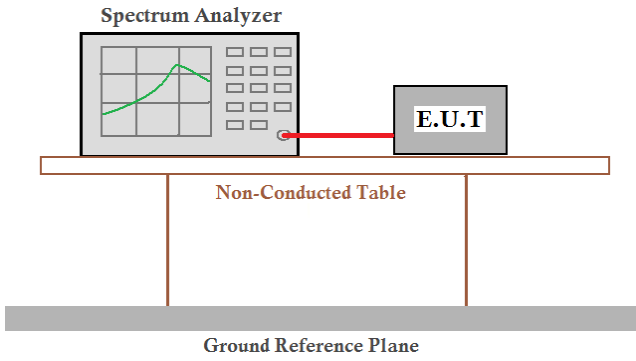
15.247(c) (1)(i) requirement:

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 shall be considered sufficient to comply with the provisions of this section. 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.

EUT Antenna:

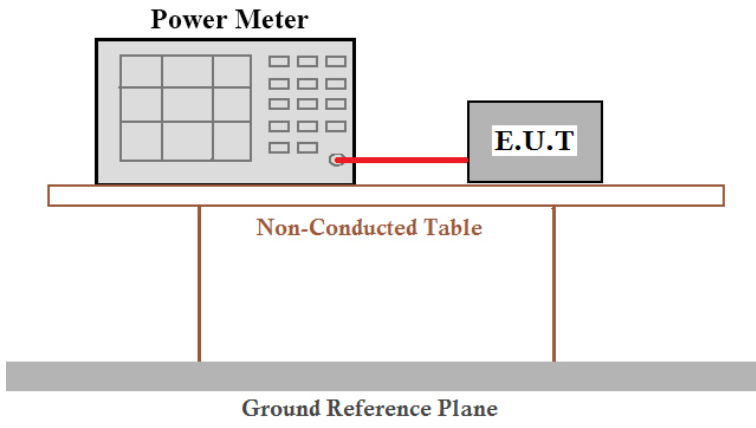
Reference to the appendix II for details

6.2 Duty Cycle

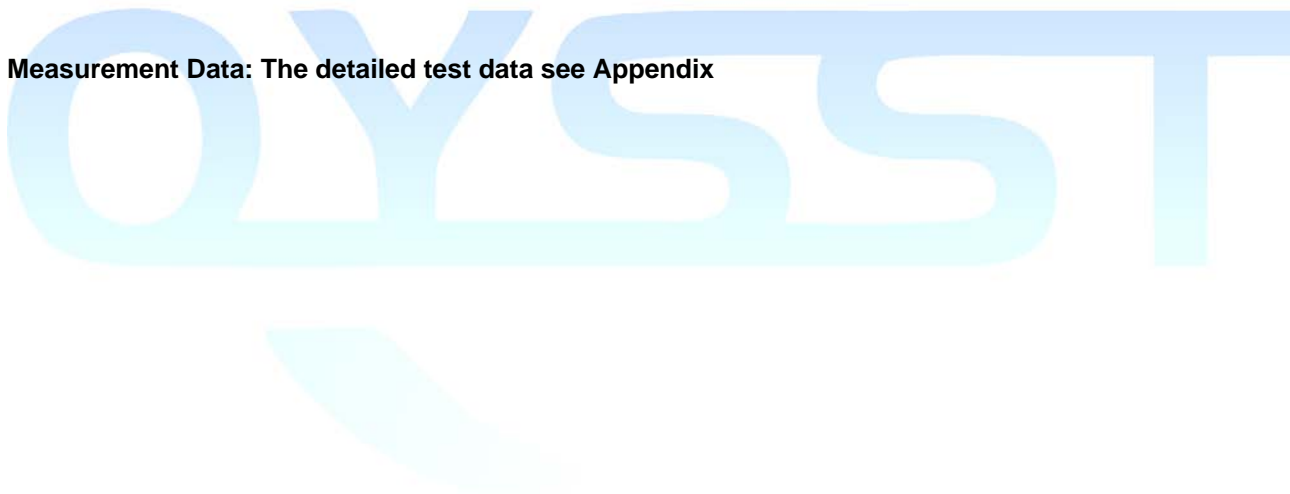
Limit
Report for use
Block diagram of Test Setup
 <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>
Test Instrument
Refer to Annex A for details
Test Procedures
<p>The transmitter output connected to the Spectrum Analyzer. Test according to Procedure 6.0)b in KDB 558074 v05r02.</p> <ol style="list-style-type: none"> 1.RBW=8 MHz(the largest available value) 2.VBW=8 MHz(>RBW) 3.SPAN = 0 Hz 4.Detector = Peak 5.Number of points in sweep: 30001 6.Trace mode: Clear write 7.Measure T_{total} and T_{on} 8.Calculate Duty Cycle = T_{on}/T_{total} and Duty Cycle Factor = $10\log(1/Duty\ Cycle)$
Verdict
Pass

Measurement Data: The detailed test data see Appendix

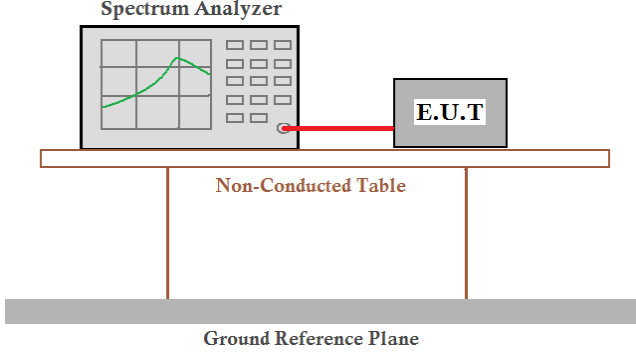
6.3 Conducted Peak Output Power

Limit
1W(30dBm)
Block diagram of Test Setup
 <p>The diagram illustrates the test setup. A Power Meter is connected to an E.U.T. (Equipment Under Test) via a red cable. Both are placed on a Non-Conducted Table. Below the table is a Ground Reference Plane.</p>
Test Instrument
Refer to Annex A for details
Test Procedures
Test applies to KDB558074 D01 15.247 Meas Guidance v05r02
Verdict
Pass

Measurement Data: The detailed test data see Appendix

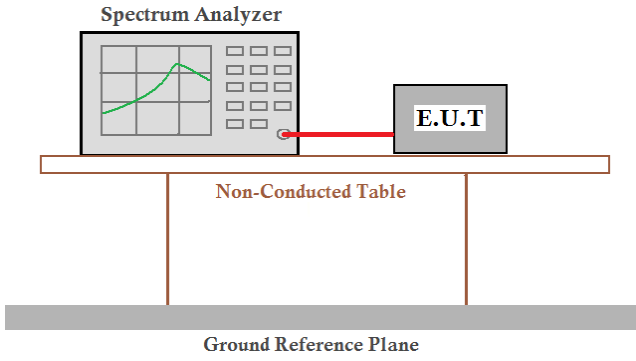


6.4 Channel Bandwidth

Limit
>500KHz
Block diagram of Test Setup
 <p>The diagram shows a Spectrum Analyzer on the left and an E.U.T. on the right, connected by a red cable. They are both on a table labeled 'Non-Conducted Table'. Below the table is a 'Ground Reference Plane'.</p>
Test Instrument
Refer to Annex A for details
Test Procedures
Test applies to KDB558074 D01 15.247 Meas Guidance v05r02
Verdict
Pass

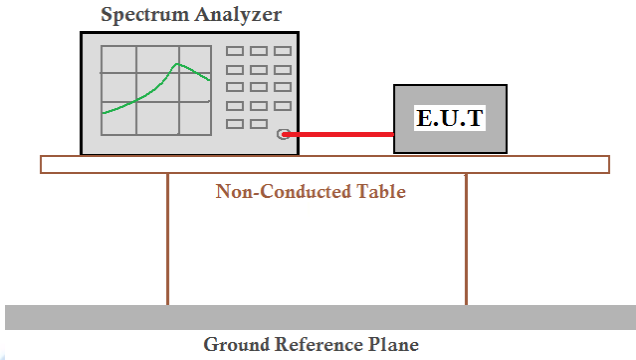
Measurement Data: The detailed test data see Appendix

6.5 Power Spectral Density

Limit
8dBm/3kHz
Block diagram of Test Setup
 <p style="text-align: center;">Spectrum Analyzer</p> <p style="text-align: center;">E.U.T</p> <p style="text-align: center;">Non-Conducted Table</p> <p style="text-align: center;">Ground Reference Plane</p>
Test Instrument
Refer to Annex A for details
Test Procedures
Test applies to KDB558074 D01 15.247 Meas Guidance v05r02
Verdict
Pass

Measurement Data: The detailed test data see Appendix

6.6 Conducted Emission

<p>Limit</p> <p>In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.</p>
<p>Block diagram of Test Setup</p>  <p>The diagram illustrates the test setup for conducted emission. A Spectrum Analyzer is connected via a red cable to an E.U.T. (Equipment Under Test). Both are placed on a Non-Conducted Table, which is supported by a Ground Reference Plane.</p>
<p>Test Instrument</p> <p>Refer to Annex A for details</p>
<p>Test Procedures</p> <p>Test applies to KDB558074 D01 15.247 Meas Guidance v05r02</p>
<p>Verdict</p> <p>Pass</p>

Measurement Data: The detailed test data see Appendix

6.7 Radiated Spurious Emission

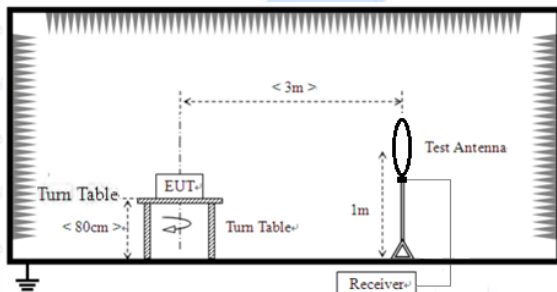
Limit			
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)	
0.009–0.490	2400/F(kHz)		300
0.490–1.705	24000/F(kHz)		30
1.705–30.0	30		30
30–88	100 **		3
88–216	150 **		3
216–960	200 **		3
Above 960	500		3

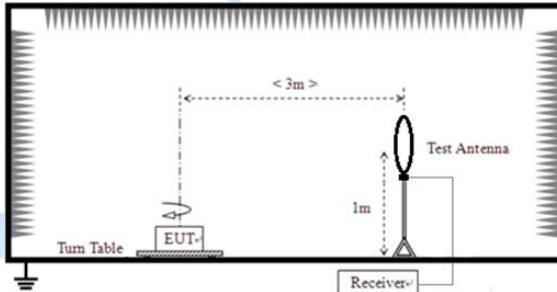
** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§ 15.231 and 15.241.

Block diagram of Test Setup

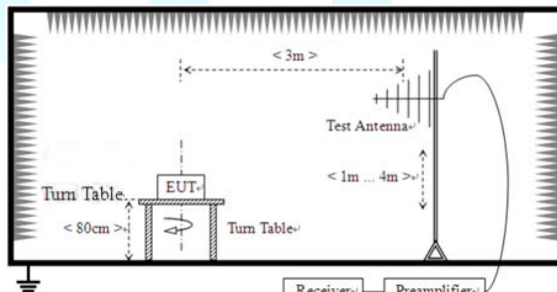
For table-top equipment
 For floor standing equipment

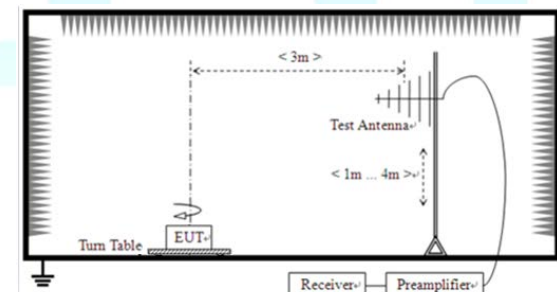
For radiated emissions from 9kHz to 30MHz



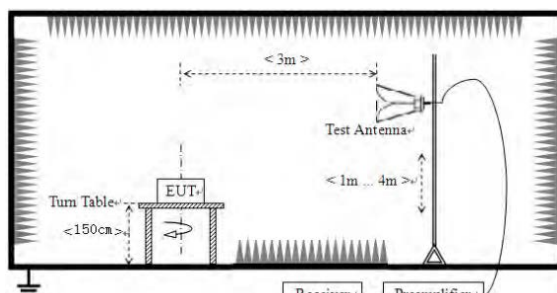


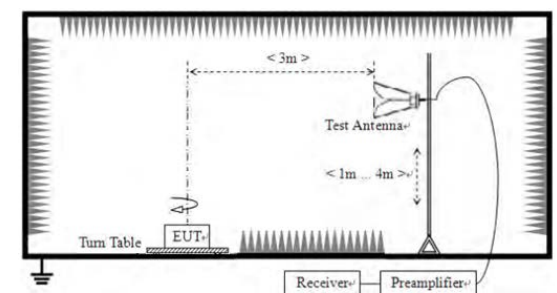
For radiated emissions from 30MHz to 1GHz





For radiated emissions above 1GHz





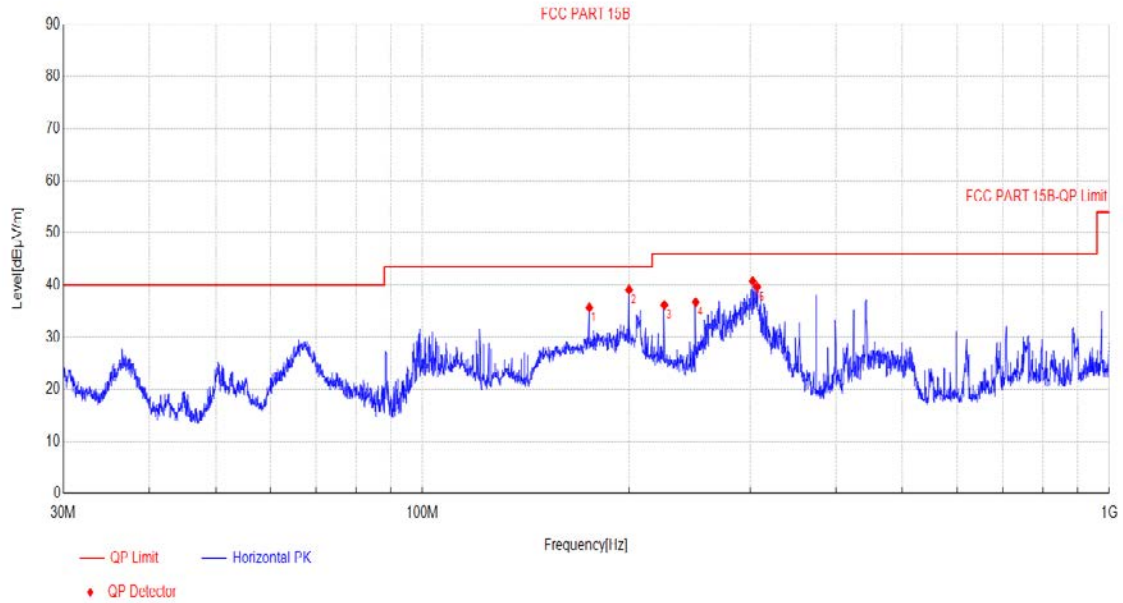
Test Instrument

Refer to Annex A for details
Test Procedures
Test applies to KDB558074 D01 15.247 Meas Guidance v05r02 & C63.10
Verdict
Pass

Note: The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o), the test result no need to reported.



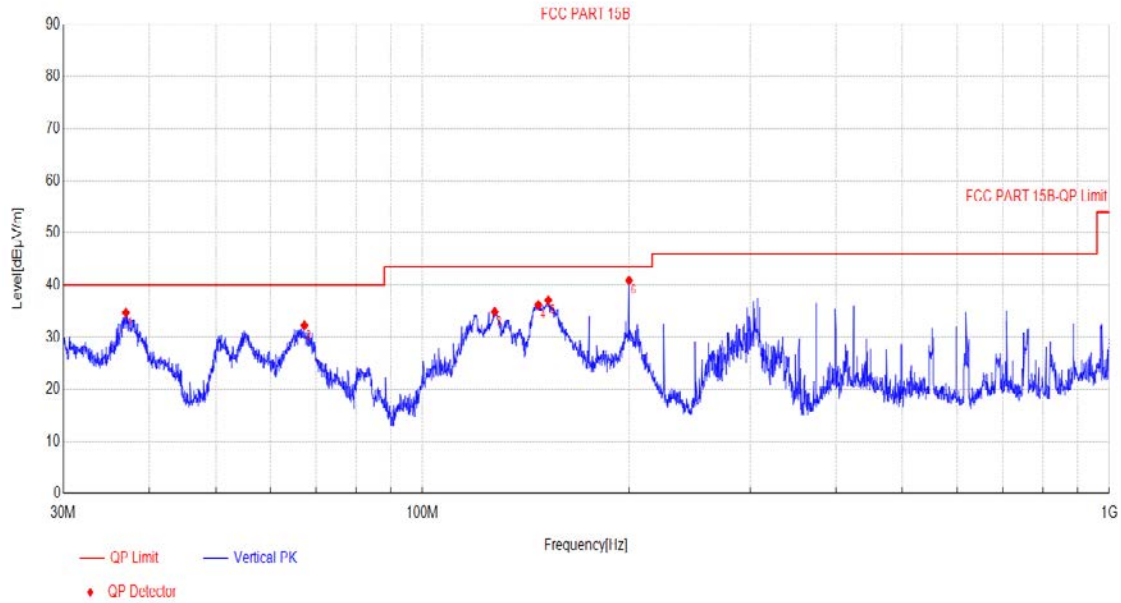
Test Result(30M~1GHz)			
Test mode	Mode 1	Polarity	Horizontal
Test voltage	AC 120V/60Hz	Temp. /Hum.	25 °C/60%



NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity	Verdict
1	174.9596	-19.06	35.69	43.50	7.81	Horizontal	PASS
2	199.8908	-17.29	39.10	43.50	4.40	Horizontal	PASS
3	224.9972	-16.53	36.18	46.00	9.82	Horizontal	PASS
4	249.9493	-15.78	36.74	46.00	9.26	Horizontal	PASS
5	302.5716	-14.22	40.78	46.00	5.22	Horizontal	PASS
6	307.1134	-14.10	39.67	46.00	6.33	Horizontal	PASS

Note: Final Level = Receiver Read level + Factor
 Factor = Antenna Factor + Cable Loss - Preamplifier Factor
 Only the worst case report (802.11g 2437MHz)

Test Result(30M~1GHz)			
Test mode	Mode 1	Polarity	Vertical
Test voltage	AC 120V/60Hz	Temp. /Hum.	25 °C/60%



NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity	Verdict
1	36.9905	-17.84	34.70	40.00	5.30	Vertical	PASS
2	67.3065	-18.74	32.27	40.00	7.73	Vertical	PASS
3	127.3948	-19.63	34.89	43.50	8.61	Vertical	PASS
4	147.4742	-20.54	36.20	43.50	7.30	Vertical	PASS
5	152.4684	-20.56	37.09	43.50	6.41	Vertical	PASS
6	199.8908	-17.29	40.89	43.50	2.61	Vertical	PASS

Note: Final Level = Receiver Read level + Factor
 Factor = Antenna Factor + Cable Loss - Preamplifier Factor
 Only the worst case report (802.11g 2437MHz)

Test Result(Emissions in Non-restricted band)			
Test mode	Mode 1	Temp. /Hum.	25 °C/60%
Test voltage	AC 120V/60Hz	Test channel	802.11b, lowest

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824	53.18	33.63	7.78	53.71	40.88	74	-33.12	Vertical
7236	51.43	36.57	9.66	53.27	44.39	74	-29.61	Vertical
9648	53.45	39.12	11.41	53.24	50.74	74	-23.26	Vertical
4824	51.09	33.63	7.78	53.71	38.79	74	-35.21	Horizontal
7236	52.67	36.57	9.66	53.27	45.63	74	-28.37	Horizontal
9648	51.15	39.12	11.41	53.24	48.44	74	-25.56	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824	46.86	33.63	7.78	53.71	34.56	54	-19.44	Vertical
7236	49.07	36.57	9.66	53.27	42.03	54	-11.97	Vertical
9648	48.94	39.12	11.41	53.24	46.23	54	-7.77	Vertical
4824	48.44	33.63	7.78	53.71	36.14	54	-17.86	Horizontal
7236	49.47	36.57	9.66	53.27	42.43	54	-11.57	Horizontal
9648	46.74	39.12	11.41	53.24	44.03	54	-9.97	Horizontal

Note: Final Level = Receiver Read level + Factor

Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor

The worst condition report

Emissions from 18GHz to 25GHz is same as ambient noise so not report

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11b, Middle			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	52.1	33.55	7.76	53.71	39.7	74	-34.3	Vertical
7311	51.6	36.56	9.63	53.26	44.53	74	-29.47	Vertical
9748	52.86	39.1	11.38	53.25	50.09	74	-23.91	Vertical
4874	53.4	33.55	7.76	53.71	41	74	-33	Horizontal
7311	51.32	36.56	9.63	53.26	44.25	74	-29.75	Horizontal
9748	51.34	39.1	11.38	53.25	48.57	74	-25.43	Horizontal
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	49.61	33.55	7.76	53.71	37.21	54	-16.79	Vertical
7311	45.24	36.56	9.63	53.26	38.17	54	-15.83	Vertical
9748	46.21	39.1	11.38	53.25	43.44	54	-10.56	Vertical
4874	45.47	33.55	7.76	53.71	33.07	54	-20.93	Horizontal
7311	47.73	36.56	9.63	53.26	40.66	54	-13.34	Horizontal
9748	47.85	39.1	11.38	53.25	45.08	54	-8.92	Horizontal
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The worst condition report Emissions from 18GHz to 25GHz is same as ambient noise so not report</p>								

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11b, Highest			
Peak value:								
Frequency (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	polarization
4924	52.58	33.69	7.8	53.71	40.36	74	-33.64	Vertical
7386	51.08	36.58	9.68	53.28	44.06	74	-29.94	Vertical
9848	51.08	39.14	11.44	53.23	48.43	74	-25.57	Vertical
4924	53.63	33.69	7.8	53.71	41.41	74	-32.59	Horizontal
7386	52.98	36.58	9.68	53.28	45.96	74	-28.04	Horizontal
9848	52.62	39.14	11.44	53.23	49.97	74	-24.03	Horizontal
Average value:								
Frequency (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	polarization
4924	46.86	33.69	7.8	53.71	34.64	54	-19.36	Vertical
7386	46.73	36.58	9.68	53.28	39.71	54	-14.29	Vertical
9848	48.6	39.14	11.44	53.23	45.95	54	-8.05	Vertical
4924	46.32	33.69	7.8	53.71	34.1	54	-19.9	Horizontal
7386	48.23	36.58	9.68	53.28	41.21	54	-12.79	Horizontal
9848	46.76	39.14	11.44	53.23	44.11	54	-9.89	Horizontal
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The worst condition report Emissions from 18GHz to 25GHz is same as ambient noise so not report</p>								

Test Result(Emissions in Non-restricted band)			
Test mode	Mode 1	Temp. /Hum.	25 °C/60%
Test voltage	AC 120V/60Hz	Test channel	802.11g, lowest

Peak value:

Frequency (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	polarization
4824	51.49	33.41	7.72	53.72	38.9	74	-35.1	Vertical
7236	53.61	36.55	9.58	53.25	46.49	74	-27.51	Vertical
9648	51.36	39.06	11.32	53.27	48.47	74	-25.53	Vertical
4824	51.81	33.41	7.72	53.72	39.22	74	-34.78	Horizontal
7236	51.09	36.55	9.58	53.25	43.97	74	-30.03	Horizontal
9648	51.93	39.06	11.32	53.27	49.04	74	-24.96	Horizontal

Average value:

Frequency (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	polarization
4824	44.52	33.41	7.72	53.72	31.93	54	-22.07	Vertical
7236	44.55	36.55	9.58	53.25	37.43	54	-16.57	Vertical
9648	44.58	39.06	11.32	53.27	41.69	54	-12.31	Vertical
4824	44.67	33.41	7.72	53.72	32.08	54	-21.92	Horizontal
7236	44.33	36.55	9.58	53.25	37.21	54	-16.79	Horizontal
9648	45.89	39.06	11.32	53.27	43	54	-11	Horizontal

Note: Final Level = Receiver Read level + Factor
 Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor
 The worst condition report
 Emissions from 18GHz to 25GHz is same as ambient noise so not report

Test Result(Emissions in Non-restricted band)			
Test mode	Mode 1	Temp. /Hum.	25 °C/60%
Test voltage	AC 120V/60Hz	Test channel	802.11g, Middle

Peak value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	51.38	33.55	7.76	53.71	38.98	74	-35.02	Vertical
7311	51.14	36.56	9.63	53.26	44.07	74	-29.93	Vertical
9748	53.47	39.1	11.38	53.25	50.7	74	-23.3	Vertical
4874	52.92	33.55	7.76	53.71	40.52	74	-33.48	Horizontal
7311	51.23	36.56	9.63	53.26	44.16	74	-29.84	Horizontal
9748	51.24	39.1	11.38	53.25	48.47	74	-25.53	Horizontal

Average value:

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	47.7	33.55	7.76	53.71	35.3	54	-18.7	Vertical
7311	45.75	36.56	9.63	53.26	38.68	54	-15.32	Vertical
9748	47.05	39.1	11.38	53.25	44.28	54	-9.72	Vertical
4874	45.98	33.55	7.76	53.71	33.58	54	-20.42	Horizontal
7311	45.27	36.56	9.63	53.26	38.2	54	-15.8	Horizontal
9748	45.55	39.1	11.38	53.25	42.78	54	-11.22	Horizontal

Note: Final Level = Receiver Read level + Factor
 Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor
 The worst condition report
 Emissions from 18GHz to 25GHz is same as ambient noise so not report

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11g, Highest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	51.57	33.69	7.8	53.71	39.35	74	-34.65	Vertical
7386	52.37	36.58	9.68	53.28	45.35	74	-28.65	Vertical
9848	51.79	39.14	11.44	53.23	49.14	74	-24.86	Vertical
4924	52.28	33.69	7.8	53.71	40.06	74	-33.94	Horizontal
7386	51.98	36.58	9.68	53.28	44.96	74	-29.04	Horizontal
9848	53.97	39.14	11.44	53.23	51.32	74	-22.68	Horizontal
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	46.93	33.69	7.8	53.71	34.71	54	-19.29	Vertical
7386	46.67	36.58	9.68	53.28	39.65	54	-14.35	Vertical
9848	45.55	39.14	11.44	53.23	42.9	54	-11.1	Vertical
4924	46.2	33.69	7.8	53.71	33.98	54	-20.02	Horizontal
7386	45.19	36.58	9.68	53.28	38.17	54	-15.83	Horizontal
9848	45.67	39.14	11.44	53.23	43.02	54	-10.98	Horizontal
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The worst condition report Emissions from 18GHz to 25GHz is same as ambient noise so not report</p>								

Test Result(Emissions in Non-restricted band)			
Test mode	Mode 1	Temp. /Hum.	25 °C/60%
Test voltage	AC 120V/60Hz	Test channel	802.11n20, lowest

Peak value:

Frequency (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	polarization
4824	53.86	33.41	7.72	53.72	41.27	74	-32.73	Vertical
7236	51.07	36.55	9.58	53.25	43.95	74	-30.05	Vertical
9648	51.9	39.06	11.32	53.27	49.01	74	-24.99	Vertical
4824	51.09	33.41	7.72	53.72	38.5	74	-35.5	Horizontal
7236	52.99	36.55	9.58	53.25	45.87	74	-28.13	Horizontal
9648	51.27	39.06	11.32	53.27	48.38	74	-25.62	Horizontal

Average value:

Frequency (MHz)	Read Level (dBUV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBUV/m)	Limit Line (dBUV/m)	Over Limit (dB)	polarization
4824	46.49	33.41	7.72	53.72	33.9	54	-20.1	Vertical
7236	47.71	36.55	9.58	53.25	40.59	54	-13.41	Vertical
9648	46.82	39.06	11.32	53.27	43.93	54	-10.07	Vertical
4824	46.43	33.41	7.72	53.72	33.84	54	-20.16	Horizontal
7236	48.18	36.55	9.58	53.25	41.06	54	-12.94	Horizontal
9648	47.08	39.06	11.32	53.27	44.19	54	-9.81	Horizontal

Note: Final Level = Receiver Read level + Factor
 Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor
 The worst condition report
 Emissions from 18GHz to 25GHz is same as ambient noise so not report

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11n20, Middle			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	51.1	33.55	7.76	53.71	38.7	74	-35.3	Vertical
7311	51.49	36.56	9.63	53.26	44.42	74	-29.58	Vertical
9748	51.29	39.1	11.38	53.25	48.52	74	-25.48	Vertical
4874	51.44	33.55	7.76	53.71	39.04	74	-34.96	Horizontal
7311	52.76	36.56	9.63	53.26	45.69	74	-28.31	Horizontal
9748	52.44	39.1	11.38	53.25	49.67	74	-24.33	Horizontal
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	47.35	33.55	7.76	53.71	34.95	54	-19.05	Vertical
7311	46.15	36.56	9.63	53.26	39.08	54	-14.92	Vertical
9748	47.68	39.1	11.38	53.25	44.91	54	-9.09	Vertical
4874	48.79	33.55	7.76	53.71	36.39	54	-17.61	Horizontal
7311	49.72	36.56	9.63	53.26	42.65	54	-11.35	Horizontal
9748	47.92	39.1	11.38	53.25	45.15	54	-8.85	Horizontal
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The worst condition report Emissions from 18GHz to 25GHz is same as ambient noise so not report</p>								

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11n20, Highest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	51.7	33.69	7.8	53.71	39.48	74	-34.52	Vertical
7386	52.32	36.58	9.68	53.28	45.3	74	-28.7	Vertical
9848	51.34	39.14	11.44	53.23	48.69	74	-25.31	Vertical
4924	51.48	33.69	7.8	53.71	39.26	74	-34.74	Horizontal
7386	51.58	36.58	9.68	53.28	44.56	74	-29.44	Horizontal
9848	53.78	39.14	11.44	53.23	51.13	74	-22.87	Horizontal
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	48.38	33.69	7.8	53.71	36.16	54	-17.84	Vertical
7386	47.99	36.58	9.68	53.28	40.97	54	-13.03	Vertical
9848	46.43	39.14	11.44	53.23	43.78	54	-10.22	Vertical
4924	47.48	33.69	7.8	53.71	35.26	54	-18.74	Horizontal
7386	47.89	36.58	9.68	53.28	40.87	54	-13.13	Horizontal
9848	48.76	39.14	11.44	53.23	46.11	54	-7.89	Horizontal
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The worst condition report Emissions from 18GHz to 25GHz is same as ambient noise so not report</p>								

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ax20, lowest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824	51.28	33.63	7.78	53.71	38.98	74	-35.02	Vertical
7236	52.87	36.57	9.66	53.27	45.83	74	-28.17	Vertical
9648	51.14	39.12	11.41	53.24	48.43	74	-25.57	Vertical
4824	51.58	33.63	7.78	53.71	39.28	74	-34.72	Horizontal
7236	52.21	36.57	9.66	53.27	45.17	74	-28.83	Horizontal
9648	51.03	39.12	11.41	53.24	48.32	74	-25.68	Horizontal
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4824	47.87	33.63	7.78	53.71	35.57	54	-18.43	Vertical
7236	46.2	36.57	9.66	53.27	39.16	54	-14.84	Vertical
9648	47.75	39.12	11.41	53.24	45.04	54	-8.96	Vertical
4824	48.89	33.63	7.78	53.71	36.59	54	-17.41	Horizontal
7236	47.01	36.57	9.66	53.27	39.97	54	-14.03	Horizontal
9648	46.33	39.12	11.41	53.24	43.62	54	-10.38	Horizontal
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The worst condition report Emissions from 18GHz to 25GHz is same as ambient noise so not report</p>								

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ax20, Middle			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	52.49	33.55	7.76	53.71	40.09	74	-33.91	Vertical
7311	51.59	36.56	9.63	53.26	44.52	74	-29.48	Vertical
9748	52.75	39.1	11.38	53.25	49.98	74	-24.02	Vertical
4874	51.14	33.55	7.76	53.71	38.74	74	-35.26	Horizontal
7311	52.23	36.56	9.63	53.26	45.16	74	-28.84	Horizontal
9748	51.12	39.1	11.38	53.25	48.35	74	-25.65	Horizontal
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4874	47.79	33.55	7.76	53.71	35.39	54	-18.61	Vertical
7311	47.24	36.56	9.63	53.26	40.17	54	-13.83	Vertical
9748	46.59	39.1	11.38	53.25	43.82	54	-10.18	Vertical
4874	46.46	33.55	7.76	53.71	34.06	54	-19.94	Horizontal
7311	47.56	36.56	9.63	53.26	40.49	54	-13.51	Horizontal
9748	48.69	39.1	11.38	53.25	45.92	54	-8.08	Horizontal
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The worst condition report Emissions from 18GHz to 25GHz is same as ambient noise so not report</p>								

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ax20, Highest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	51.07	33.69	7.8	53.71	38.85	74	-35.15	Vertical
7386	51.16	36.58	9.68	53.28	44.14	74	-29.86	Vertical
9848	52.61	39.14	11.44	53.23	49.96	74	-24.04	Vertical
4924	51.89	33.69	7.8	53.71	39.67	74	-34.33	Horizontal
7386	51.56	36.58	9.68	53.28	44.54	74	-29.46	Horizontal
9848	51.93	39.14	11.44	53.23	49.28	74	-24.72	Horizontal
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
4924	46.59	33.69	7.8	53.71	34.37	54	-19.63	Vertical
7386	46.2	36.58	9.68	53.28	39.18	54	-14.82	Vertical
9848	47.12	39.14	11.44	53.23	44.47	54	-9.53	Vertical
4924	46.83	33.69	7.8	53.71	34.61	54	-19.39	Horizontal
7386	47.85	36.58	9.68	53.28	40.83	54	-13.17	Horizontal
9848	47.36	39.14	11.44	53.23	44.71	54	-9.29	Horizontal
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The worst condition report Emissions from 18GHz to 25GHz is same as ambient noise so not report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11b, lowest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	62.09	27.71	5.3	53.84	41.26	74	-32.74	Horizontal
2390	66.52	27.91	5.4	53.82	46.01	74	-27.99	Horizontal
2310	62.52	27.71	5.3	53.84	41.69	74	-32.31	Vertical
2390	65.35	27.91	5.4	53.82	44.84	74	-29.16	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	53.62	27.71	5.3	53.84	32.79	54	-21.21	Horizontal
2390	58	27.91	5.4	53.82	37.49	54	-16.51	Horizontal
2310	52.39	27.71	5.3	53.84	31.56	54	-22.44	Vertical
2390	58.89	27.91	5.4	53.82	38.38	54	-15.62	Vertical
<p>Note: Final Level =Receiver Read level + Factor Factor= Antenna Factor + Cable Loss – Preamplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1		Temp. /Hum.	25 °C/60%				
Test voltage	AC 120V/60Hz		Test channel	802.11b, Highest				
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	58.11	28.16	5.51	53.8	37.98	74	-36.02	Horizontal
2500	49.03	22.8	5.53	53.8	23.56	74	-50.44	Horizontal
2483.5	57.91	28.16	5.51	53.8	37.78	74	-36.22	Vertical
2500	52.34	22.8	5.53	53.8	26.87	74	-47.13	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	47.64	28.16	5.51	53.8	27.51	54	-26.49	Horizontal
2500	44.77	22.8	5.53	53.8	19.3	54	-34.7	Horizontal
2483.5	52.53	28.16	5.51	53.8	32.4	54	-21.6	Vertical
2500	43.38	22.8	5.53	53.8	17.91	54	-36.09	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1		Temp. /Hum.	25 °C/60%				
Test voltage	AC 120V/60Hz		Test channel	802.11g, lowest				
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	60.83	27.71	5.3	53.84	40	74	-34	Horizontal
2390	66.64	27.91	5.4	53.82	46.13	74	-27.87	Horizontal
2310	62.95	27.71	5.3	53.84	42.12	74	-31.88	Vertical
2390	67.35	27.91	5.4	53.82	46.84	74	-27.16	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	50.23	27.71	5.3	53.84	29.4	54	-24.6	Horizontal
2390	57.38	27.91	5.4	53.82	36.87	54	-17.13	Horizontal
2310	51.22	27.71	5.3	53.84	30.39	54	-23.61	Vertical
2390	58.67	27.91	5.4	53.82	38.16	54	-15.84	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Preamp Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1		Temp. /Hum.		25 °C/60%			
Test voltage	AC 120V/60Hz		Test channel		802.11g, Highest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	58.86	28.16	5.51	53.8	38.73	74	-35.27	Horizontal
2500	53	22.8	5.53	53.8	27.53	74	-46.47	Horizontal
2483.5	60.32	28.16	5.51	53.8	40.19	74	-33.81	Vertical
2500	52.79	22.8	5.53	53.8	27.32	74	-46.68	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	48.86	28.16	5.51	53.8	28.73	54	-25.27	Horizontal
2500	42.56	22.8	5.53	53.8	17.09	54	-36.91	Horizontal
2483.5	49.95	28.16	5.51	53.8	29.82	54	-24.18	Vertical
2500	40.17	22.8	5.53	53.8	14.7	54	-39.3	Vertical
<p>Note: Final Level =Receiver Read level + Factor Factor= Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1		Temp. /Hum.	25 °C/60%				
Test voltage	AC 120V/60Hz		Test channel	802.11n20, lowest				
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	60.87	27.71	5.3	53.84	40.04	74	-33.96	Horizontal
2390	66.78	27.91	5.4	53.82	46.27	74	-27.73	Horizontal
2310	59.58	27.71	5.3	53.84	38.75	74	-35.25	Vertical
2390	63.85	27.91	5.4	53.82	43.34	74	-30.66	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	48.72	27.71	5.3	53.84	27.89	54	-26.11	Horizontal
2390	54.59	27.91	5.4	53.82	34.08	54	-19.92	Horizontal
2310	51.71	27.71	5.3	53.84	30.88	54	-23.12	Vertical
2390	57.07	27.91	5.4	53.82	36.56	54	-17.44	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11n20, Highest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	59.34	28.16	5.51	53.8	39.21	74	-34.79	Horizontal
2500	50.82	22.8	5.53	53.8	25.35	74	-48.65	Horizontal
2483.5	60.67	28.16	5.51	53.8	40.54	74	-33.46	Vertical
2500	53.07	22.8	5.53	53.8	27.6	74	-46.4	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	52.72	28.16	5.51	53.8	32.59	54	-21.41	Horizontal
2500	44.1	22.8	5.53	53.8	18.63	54	-35.37	Horizontal
2483.5	48.77	28.16	5.51	53.8	28.64	54	-25.36	Vertical
2500	44.46	22.8	5.53	53.8	18.99	54	-35.01	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1		Temp. /Hum.		25 °C/60%			
Test voltage	AC 120V/60Hz		Test channel		802.11n40, lowest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	60.91	27.71	5.3	53.84	40.08	74	-33.92	Horizontal
2390	65.28	27.91	5.4	53.82	44.77	74	-29.23	Horizontal
2310	62.07	27.71	5.3	53.84	41.24	74	-32.76	Vertical
2390	68.3	27.91	5.4	53.82	47.79	74	-26.21	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	49.82	27.71	5.3	53.84	28.99	54	-25.01	Horizontal
2390	56.89	27.91	5.4	53.82	36.38	54	-17.62	Horizontal
2310	48.47	27.71	5.3	53.84	27.64	54	-26.36	Vertical
2390	54.99	27.91	5.4	53.82	34.48	54	-19.52	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Preamp Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11n40, Highest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	59.77	28.16	5.51	53.8	39.64	74	-34.36	Horizontal
2500	53.41	22.8	5.53	53.8	27.94	74	-46.06	Horizontal
2483.5	60.55	28.16	5.51	53.8	40.42	74	-33.58	Vertical
2500	53.46	22.8	5.53	53.8	27.99	74	-46.01	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	47.1	28.16	5.51	53.8	26.97	54	-27.03	Horizontal
2500	43.02	22.8	5.53	53.8	17.55	54	-36.45	Horizontal
2483.5	51.37	28.16	5.51	53.8	31.24	54	-22.76	Vertical
2500	44.72	22.8	5.53	53.8	19.25	54	-34.75	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ax20, lowest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	60.02	27.71	5.3	53.84	39.19	74	-34.81	Horizontal
2390	68.65	27.91	5.4	53.82	48.14	74	-25.86	Horizontal
2310	59.39	27.71	5.3	53.84	38.56	74	-35.44	Vertical
2390	68.55	27.91	5.4	53.82	48.04	74	-25.96	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	51.46	27.71	5.3	53.84	30.63	54	-23.37	Horizontal
2390	58.22	27.91	5.4	53.82	37.71	54	-16.29	Horizontal
2310	52.51	27.71	5.3	53.84	31.68	54	-22.32	Vertical
2390	55.22	27.91	5.4	53.82	34.71	54	-19.29	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1		Temp. /Hum.	25 °C/60%				
Test voltage	AC 120V/60Hz		Test channel	802.11ax20, Highest				
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	60.71	28.16	5.51	53.8	40.58	74	-33.42	Horizontal
2500	50.79	22.8	5.53	53.8	25.32	74	-48.68	Horizontal
2483.5	60.04	28.16	5.51	53.8	39.91	74	-34.09	Vertical
2500	51.29	22.8	5.53	53.8	25.82	74	-48.18	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	48.26	28.16	5.51	53.8	28.13	54	-25.87	Horizontal
2500	42.77	22.8	5.53	53.8	17.3	54	-36.7	Horizontal
2483.5	49.03	28.16	5.51	53.8	28.9	54	-25.1	Vertical
2500	41.74	22.8	5.53	53.8	16.27	54	-37.73	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

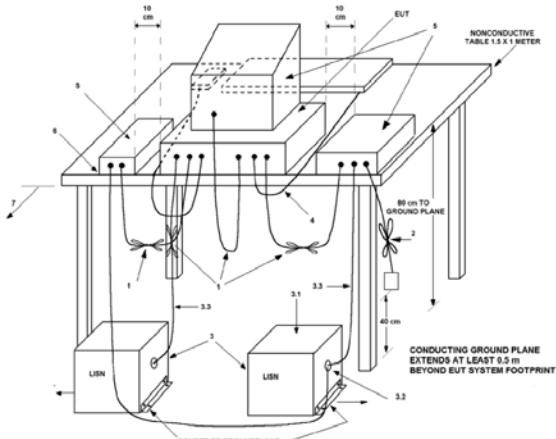
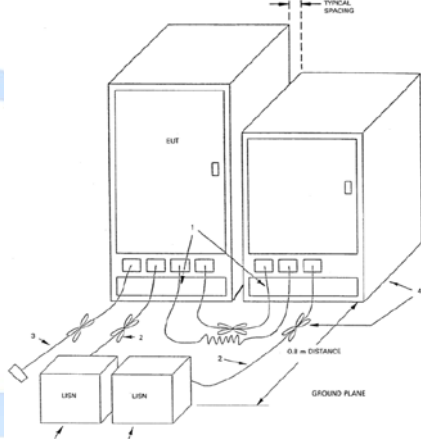
Test Result(Emissions in Restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ax40, lowest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	60.2	27.71	5.3	53.84	39.37	74	-34.63	Horizontal
2390	69	27.91	5.4	53.82	48.49	74	-25.51	Horizontal
2310	63.93	27.71	5.3	53.84	43.1	74	-30.9	Vertical
2390	69.36	27.91	5.4	53.82	48.85	74	-25.15	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2310	51.86	27.71	5.3	53.84	31.03	54	-22.97	Horizontal
2390	56.05	27.91	5.4	53.82	35.54	54	-18.46	Horizontal
2310	53.21	27.71	5.3	53.84	32.38	54	-21.62	Vertical
2390	57.94	27.91	5.4	53.82	37.43	54	-16.57	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

Test Result(Emissions in Restricted band)								
Test mode	Mode 1		Temp. /Hum.		25 °C/60%			
Test voltage	AC 120V/60Hz		Test channel		802.11ax40, Highest			
Peak value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	57.43	28.16	5.51	53.8	37.3	74	-36.7	Horizontal
2500	54.86	22.8	5.53	53.8	29.39	74	-44.61	Horizontal
2483.5	58.77	28.16	5.51	53.8	38.64	74	-35.36	Vertical
2500	52.13	22.8	5.53	53.8	26.66	74	-47.34	Vertical
Average value:								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
2483.5	48.29	28.16	5.51	53.8	28.16	54	-25.84	Horizontal
2500	40.83	22.8	5.53	53.8	15.36	54	-38.64	Horizontal
2483.5	52.64	28.16	5.51	53.8	32.51	54	-21.49	Vertical
2500	47.95	22.8	5.53	53.8	22.48	54	-31.52	Vertical
<p>Note: Final Level = Receiver Read level + Factor Factor = Antenna Factor + Cable Loss – Pre-amplifier Factor The emission levels of other frequencies are very lower than the limit and not show in test report. The worst condition report</p>								

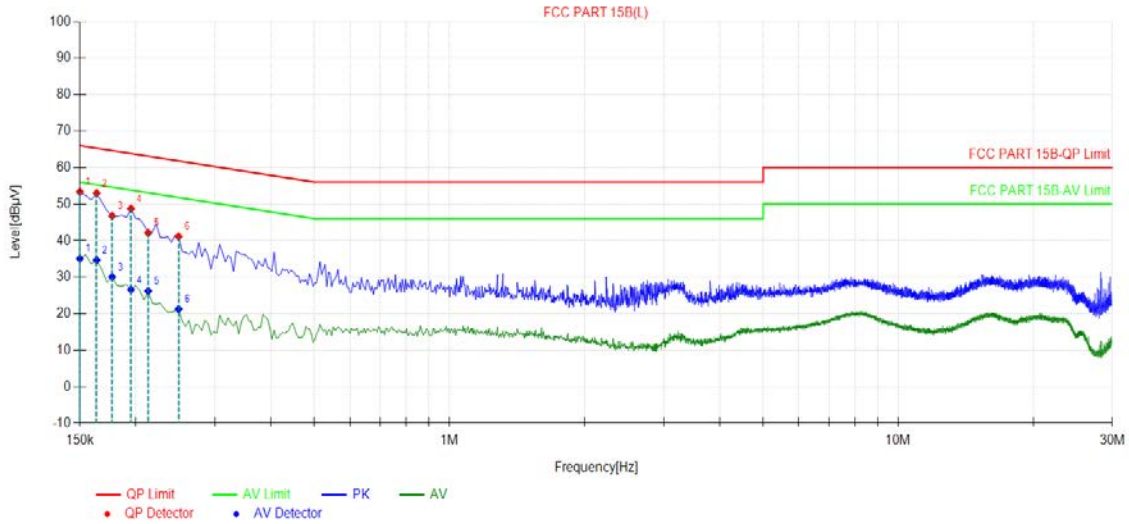
6.8 Conducted Emissions

Limit		
Frequency (MHz)	Quasi-peak	Average
0.15~0.50	66 to 56*	56 to 46*
0.50~5.0	56	46
5.0~30	60	50

*Decreases with the logarithm of the frequency.
 If the limit for the measurement with the average detector is met when using a receiver with a quasi-peak detector, the equipment under test shall be deemed to meet both limits and the measurement using the receiver with an average detector need not be carried out

Block diagram of Test Setup	
<input checked="" type="checkbox"/> For table-top equipment	<input type="checkbox"/> For floor standing equipment
	
Test Instrument	
Refer to Annex A for details	
Test Procedures	
<p>The measurement was performed in a shield room.</p> <p>Measured levels of ac power-line conducted emission shall be the radio-noise voltage from the voltage probe, where permitted, or across the 50 Ω LISN port (to which the EUT is connected), as terminated into a 50 Ω EMI receiver or spectrum analyzer. All radio-noise voltage and current measurements shall be made on each current-carrying conductor at the plug end of the EUT power cord or calibrated extension cord by the use of mating plugs and receptacles on the EUT and LISN, if used. The manufacturer shall test equipment with power cords that are normally supplied or recommended by the manufacturer and that have electrical and shielding characteristics that are the same as those cords normally supplied or recommended. For measurements using a LISN, the 50 Ω measuring port is terminated into a 50 Ω EMI receiver or spectrum analyzer. All other ports are terminated into 50 Ω loads.</p> <p>Table top devices shall be placed on a platform of nominal size 1 m by 1.5 m, raised 80 cm above the reference ground plane. The vertical conducting plane or wall of an RF-shielded (screened) room shall be located 40 cm to the rear of the EUT. Floor-standing devices shall be placed either directly on the reference ground-plane or on insulating material as described in ANSI C63.4. All other surfaces of tabletop or floor-standing EUTs shall be at least 80 cm from any other grounded conducting surface, including the case or cases of one or more LISNs.</p> <p>The bandwidth of the test receiver is set at 9 kHz.</p>	
Verdict	
Pass	

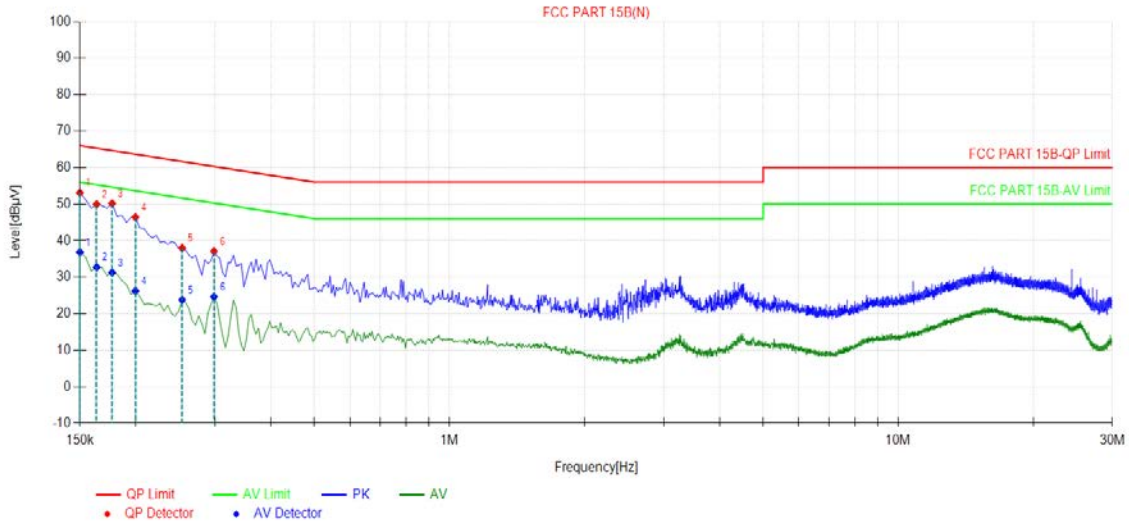
Test Result			
Test mode	Mode 1	Polarity	Line
Test voltage	AC 120V/60Hz	Temp. /Hum.	25 °C/60%



Final Data List									
NO.	Freq. [MHz]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict	Type
1	0.15	53.35	66.00	12.65	35.07	56.00	20.93	PASS	L
2	0.1635	53.00	65.28	12.28	34.67	55.28	20.61	PASS	L
3	0.177	46.77	64.63	17.86	30.08	54.63	24.55	PASS	L
4	0.195	48.75	63.82	15.07	26.60	53.82	27.22	PASS	L
5	0.213	42.10	63.09	20.99	26.22	53.09	26.87	PASS	L
6	0.249	41.13	61.79	20.66	21.26	51.79	30.53	PASS	L

Note: Final Level = Receiver Read level + Factor
 Factor = LISN Factor + Cable Loss
 Only the worst case report (802.11b 2462MHz)

Test Result			
Test mode	Mode 1	Polarity	Neutral
Test voltage	AC 120V/60Hz	Temp. /Hum.	25 °C/60%



Final Data List									
NO.	Freq. [MHz]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict	Type
1	0.15	53.09	66.00	12.91	36.84	56.00	19.16	PASS	N
2	0.1635	49.95	65.28	15.33	32.73	55.28	22.55	PASS	N
3	0.177	50.18	64.63	14.45	31.26	54.63	23.37	PASS	N
4	0.1995	46.39	63.63	17.24	26.23	53.63	27.40	PASS	N
5	0.2535	37.97	61.64	23.67	23.81	51.64	27.83	PASS	N
6	0.2985	37.08	60.28	23.20	24.63	50.28	25.65	PASS	N

Note: Final Level = Receiver Read level + Factor
 Factor = LISN Factor + Cable Loss
 Only the worst case report (802.11b 2462MHz)

7 Test Setup Photo

Reference to the **appendix I** for details.

8 EUT Constructional Details

Reference to the **appendix II** for details.



Annex A --Test Instruments list

Radiated Emission:						
Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. cycle	Cal.Date
SST-E-SAC001	3m Semi- Anechoic Chamber	BOST	966	/	3 years	2023.01.07
SST-E-SCC001	Control Room	BOST	333	/	3 years	2023.01.07
SST-E-SAC002	Breiband TRILOG Messantenne	Schwarzbeck	VULB 9162	00556	1 year	2024.04.20
SST-E-SAC004	Broad-band Horn Antenna	Schwarzbeck	BBHA 9120 D	02783	1 year	2024.04.16
SST-E-SCC003	EMI Test Receiver	R&S	ESU 8	100372	1 year	2024.04.16
SST-E-SCC004	Amplifier	Schwarzbeck	BBV 9744	00327	1 year	2024.04.16
SST-E-SCC015	Amplifie (1-18GHz)	TSTPASS	LNA10180G45	TSAM2303003	1 year	2024.04.16
SST-E-SCC016	Amplifier (40G)	RFsystem	TRLA-180400G45B	23060801	1 year	2024.04.16
SST-E-SAC006	Broadband Horn Antenna (40G)	Schwarzbeck	BBHA9170	01306	1 year	2024.04.17
SST-E-RSC010	Spectrum analyzer	R&S	FSV40-N	/	1 year	2024.04.16
SST-E-SAC007	Loop Antenna	Schwarzbeck	FMZB 1513-60B	1513-60B 044	1 year	2024.04.17
SST-E-SAC005	5W 6dB attenuator	/	DC-6GHz	/	Internal calibration	/
SST-E-EMC006	Thermohyrometer	KTJ	TA218A	879030	1 year	2024.04.18
/	EMI Test Software	Tonscend	TS+	/	/	/

Conducted Emission						
Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. cycle	Cal.Date
SST-E-CSC001	Shielding Room	BOST	854	/	3 year	2023.01.07
SST-E-CSC002	EMI Test Receiver	R&S	ESR3	103057	1 year	2024.04.16
SST-E-CSC003	LISN	R&S	ENV 216	102832	1 year	2024.04.16
SST-E-CSC004	ISN	R&S	NTFM 8158	00347	1 year	2024.04.16
SST-E-CSC007	Antenna port test assembly	/	DC-3GHz	/	Internal calibration	/
SST-E-EMC011	Thermohyrometer	KTJ	TA218A	879036	1 year	2024.04.18
/	EMI Test Software	Tonscend	TS+	V4.0	/	/

RF conducted						
Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. cycle	Cal.Date
SST-E-RSC001	Shielding Room	BOST	543	/	3 year	2023.01.07
SST-E-RSC007	Spectrum analyzer	keysight	N9020A	MY51280659	1 year	2024.04.16
SST-E-RSC008	Analog signal source	Agilent	N5181A	MY48180054	1 year	2024.04.16
SST-E-RSC009	Vector signal source	keysight	N5172B	MY57281610	1 year	2024.04.16
SST-E-EMC007	Thermohyrometer	KTJ	TA218A	879032	1 year	2024.04.18
SST-E-RSC010	Spectrum analyzer	R&S	FSV40-N	/	1 year	2024.04.16
SST-E-RSC015-1	Power meter 1	TST	TST V2	/	1 year	2024.04.16
/	Test Software	TST PASS	TST PASS	V2.0	/	/

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