



TEST REPORT

Report No. SST240416006EF04

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 15.407

FCC ID: 2ABC5-E0059

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

Date of sample receipt: 2024/4/18

Date of Test: 2024/4/19 - 2024/5/21

Date of report issued: 2024/5/23

*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 Chan

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	2024/5/17



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3 Test Summary

Test items	Basics standards	Result
Antenna requirement	FCC part 15.203	PASS
Automatically discontinue transmission	FCC part 15.407(c)	Pass
AC Power Line Conducted Emission	FCC part 15.207	PASS
99% Bandwidth	Report only	PASS
Emission Bandwidth	FCC part 15.407(a)	PASS
Conducted Output Power	FCC part 15.407(a)(1)(2)	PASS
Power Spectral Density	FCC part 15.407(a) (1)(2)	PASS
Undesirable Emission	FCC part 15.407(b), 15.205/15.209	PASS
Radiated Emission	FCC part 15.205/15.209	PASS
Frequency Stability	FCC part 15.407(g)	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.:	EP1095T
Test sample(s) ID:	24041600602
Sample(s) Status:	Continuously transmitter
S/N:	/
Hardware version:	T30-T616-V2.0
Software version:	039_ums9230_6h10_Natv_k515__t30_full_YLD_EP1095T_20240410
Operation Frequency:	5180MHz~5240MHz
Technical specific:	802.11a, 802.11n, 802.11ac
Supported bandwidth:	20MHz, 40MHz, 80MHz
Modulation technology:	OFDM
Antenna gain:	Refer to section 5.7 for details
Power supply:	AC/DC Adapter Model No.: JHD-AP013U-050200BB-B INPUT: AC 100-240V, 50/60Hz, 0.35A OUTPUT: DC 5V, 2.0A Or 7000mAh, 3.8V, 26.6Wh Lithium-ion Rechargeable Battery

Channel list for 802.11							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	54	5270MHz	104	5520MHz	122	5610MHz
38	5190MHz	56	5280MHz	106	5530MHz	124	5620MHz
40	5200MHz	58	5290MHz	108	5540MHz	126	5630MHz
42	5210MHz	60	5300MHz	110	5550MHz	128	5640MHz
44	5220MHz	62	5310MHz	112	5560MHz	132	5660MHz
46	5230MHz	64	5320MHz	116	5580MHz	134	5670MHz
48	5240MHz	100	5500MHz	118	5590MHz	136	5680MHz
52	5260MHz	102	5510MHz	120	5600MHz	140	5700MHz

5.3 Test mode(s)

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

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

None

5.6 Additional Instructions

Test Software	Test software built-in by manufacturer
Power level setup	Default

5.7 Antenna Information

Ant	Manufacturer	Model	Antenna Type	Antenna Gain (dBi)
1	SHENZHEN Xingyuanchuang TECHNOLOGY CO.,LTD	/	/	1.54

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.</p> <p>The applicant shall fully responsible for the information they provided.</p> <p>The report would be invalid without a stamp of test laboratory and the signatures of compiler and approver.</p> <p>The laboratory has not been responsible for the sampling stage; the test report merely corresponds to the test sample received.</p> <p>Any objection to the test report shall submitted to the test laboratory within 15 days from the date of receipt of the report.</p> <p>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.

15.407 requirement:

If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

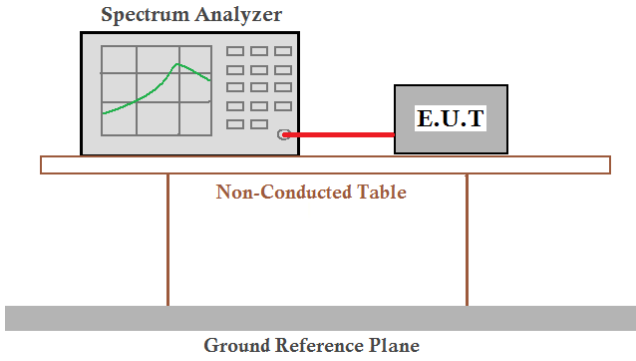
EUT Antenna:

Reference to the appendix II for details

15.407(c) requirement:

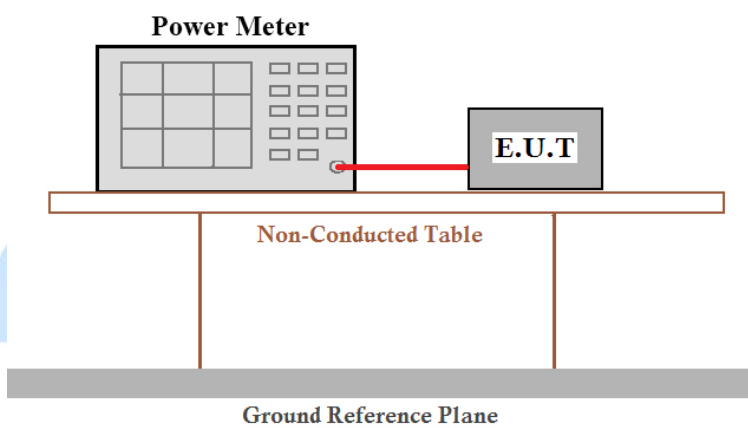
The applicant declares that the device (FCC Part 15 Subpart E Section 15.407) shall automatically discontinue transmission in cases of absence of information to transmit, or operational failure.

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 B.2 in KDB 789033 D02 v02r01.</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

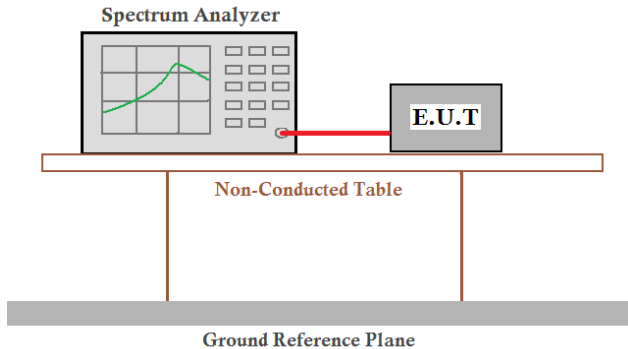
Measurement Data: The detailed test data see Appendix

6.3 Conducted Output Power

Limit	
Frequency band(MHz)	Maximum conducted power
5150-5250	≤1W(30dBm) for master device
	≤250Mw(23.98dBm) for client device
5250-5350	≤250Mw(23.98dBm) for client device or 11dBm+10logB*
5470-5725	≤250Mw(23.98dBm) for client device or 11dBm+10logB*
Remark: *Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.	
Block diagram of Test Setup	
 <p>The diagram illustrates the test setup. A Power Meter 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	
Test applies to ANSI C63.10:2013 & KDB 789033 D02 v02r01	
Verdict	
Pass	

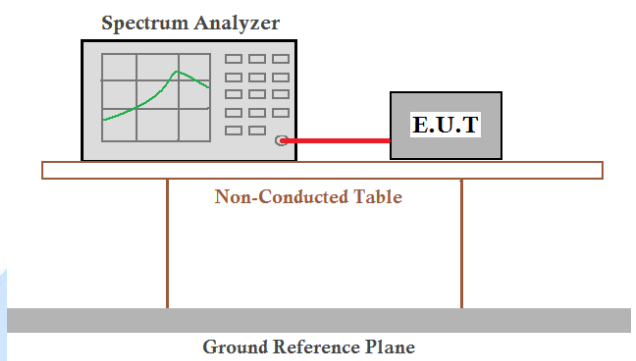
Measurement Data: The detailed test data see Appendix

6.4 Emission Bandwidth

Limit
Report only
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
Test applies to ANSI C63.10:2013 & KDB 789033 D02 v02r01
Verdict
Pass

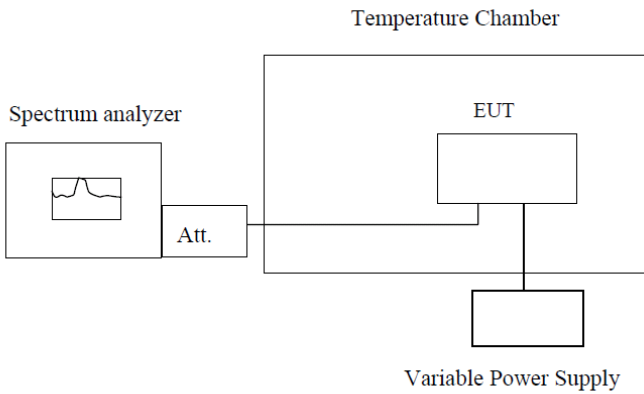
Measurement Data: The detailed test data see Appendix

6.5 Power Spectral Density

Limit	
Frequency band (MHz)	Maximum power spectral density
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
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	
Test applies to ANSI C63.10:2013 & KDB 789033 D02 v02r01	
Verdict	
Pass	

Measurement Data: The detailed test data see Appendix

6.6 Frequency Stability

Limit
Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified
Block diagram of Test Setup
 <p style="text-align: center;">Temperature Chamber</p> <p style="text-align: center;">Spectrum analyzer Att. EUT</p> <p style="text-align: center;">Variable Power Supply</p> <p style="text-align: center;">Note : Measurement setup for testing on Antenna connector</p>
Test Instrument
Refer to Annex A for details
Test Procedures
Test applies to ANSI C63.10:2013, FCC Part 2.1055.
Verdict
Pass

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.

The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9–90 kHz, 110–490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

Undesirable emission limits: the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

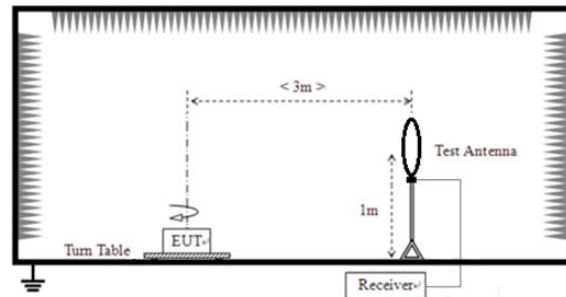
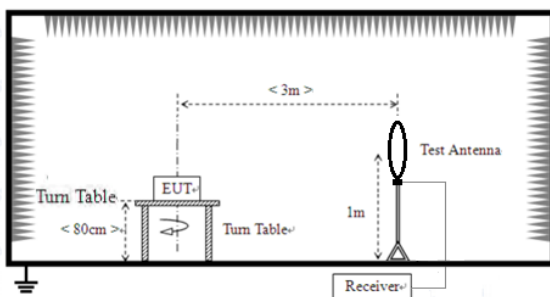
- (1) For transmitters operating in the 5.15–5.25 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25–5.35 GHz band: All emissions outside of the 5.15–5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) 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.

Block diagram of Test Setup

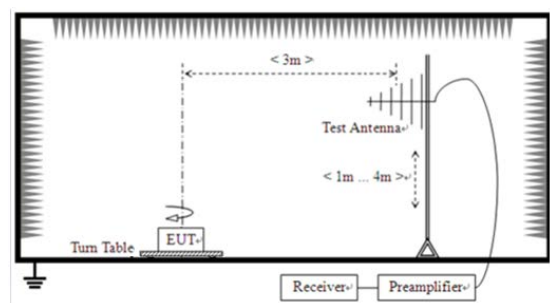
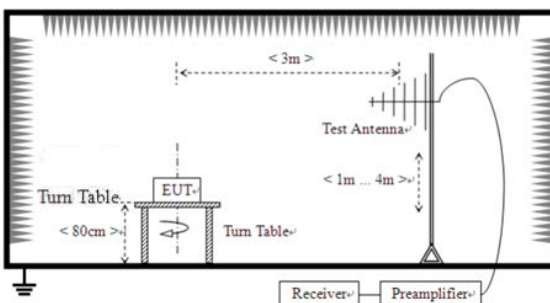
 For table-top equipment

 For floor standing equipment

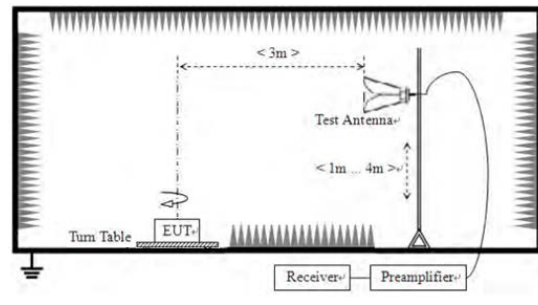
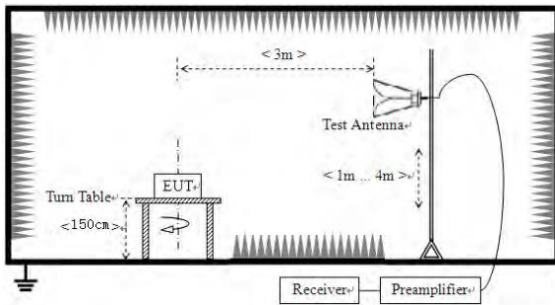
For radiated emissions from 9kHz to 30MHz



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 ANSI C63.10:2013 & KDB 789033 D02 v02r01

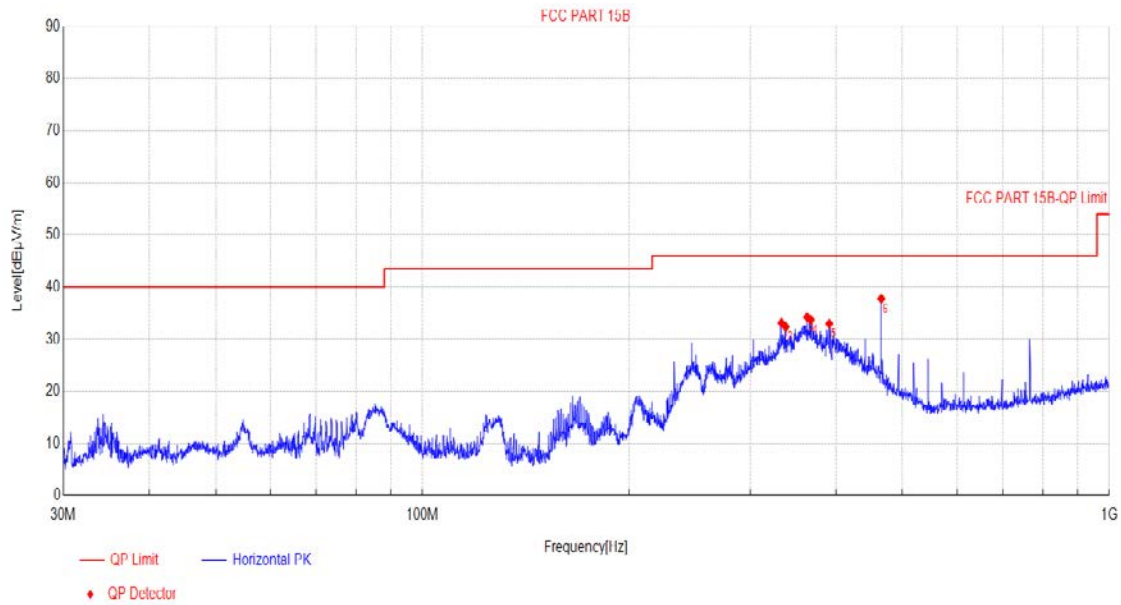
Verdict

Pass

Note:

1. 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.
2. The undesirable spurious emission range from 18GHz to 40GHz is as low as the cabinet noise, so there is no report
3. According to KDB 789033 D02 v02r01 section G) 1) (d), for For measurements above 1000 MHz @ 3m distance, the limit of field strength is computed as follows:
 $E[\text{dBuV/m}] = \text{EIRP}[\text{dBm}] + 95.2;$
 For example, if $\text{EIRP} = -27\text{dBm}$
 $E[\text{dBuV/m}] = -27 + 95.2 = 68.2\text{dBuV/m}.$

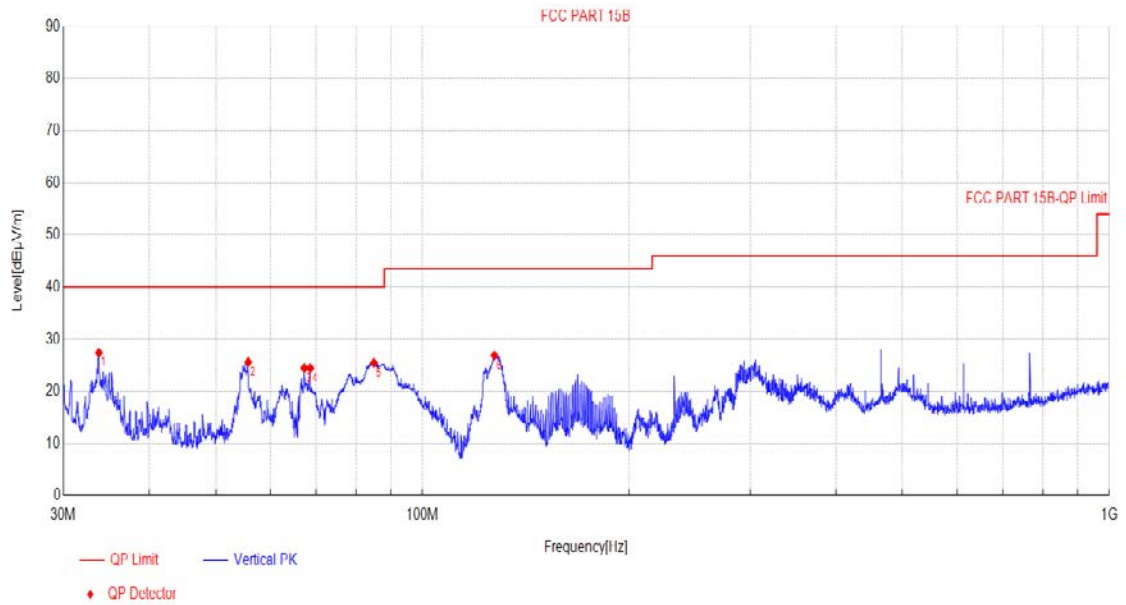
Test Result(30M~1GHz)			
Test mode	Mode 1	Polarity	Horizontal
Test voltage	AC 120V/60Hz	Temp. /Hum.	25 °C/60%



NO.	Freq. [MHz]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Polarity	Verdict
1	333.1937	-13.39	33.12	46.00	12.88	Horizontal	PASS
2	337.8989	-13.26	32.41	46.00	13.59	Horizontal	PASS
3	363.0764	-12.57	34.24	46.00	11.76	Horizontal	PASS
4	367.5588	-12.44	33.73	46.00	12.27	Horizontal	PASS
5	391.157	-11.79	32.96	46.00	13.04	Horizontal	PASS
6	465.6884	-10.66	37.77	46.00	8.23	Horizontal	PASS

Note: Final Level = Receiver Read level + Factor
 Factor = Antenna Factor + Cable Loss - Preamplifier Factor
 Only the worst case report (802.11ac(HT20) 5180MHz)

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	33.7976	-18.22	27.41	40.00	12.59	Vertical	PASS
2	55.7472	-16.10	25.60	40.00	14.40	Vertical	PASS
3	67.3065	-18.74	24.46	40.00	15.54	Vertical	PASS
4	68.6169	-19.13	24.44	40.00	15.56	Vertical	PASS
5	84.9774	-20.76	25.46	40.00	14.54	Vertical	PASS
6	127.2832	-19.61	26.88	43.50	16.62	Vertical	PASS

Note: Final Level = Receiver Read level + Factor
 Factor = Antenna Factor + Cable Loss - Pre-amplifier Factor
 Only the worst case report (802.11ac(HT20) 5180MHz)

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ac20, 5180MHz			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10360	53.86	39.34	11.73	53.2	51.73	68.2	-16.47	Vertical
15540	51.45	38.92	14.71	52.85	52.23	68.2	-15.97	Vertical
10360	51.96	39.34	11.73	53.2	49.83	68.2	-18.37	Horizontal
15540	52.7	38.92	14.71	52.85	53.48	68.2	-14.72	Horizontal
10360	46.22	39.34	11.73	53.2	44.09	54	-9.91	Vertical
15540	47.09	38.92	14.71	52.85	47.87	54	-6.13	Vertical
10360	46.87	39.34	11.73	53.2	44.74	54	-9.26	Horizontal
15540	46.59	38.92	14.71	52.85	47.37	54	-6.63	Horizontal

*Note: Final Level =Receiver Read level + Factor
 Factor= Antenna Factor + Cable Loss – Preamplifier Factor
 Only the worst case report
 The level of emissions from 18GHz to 40GHz is same as the ambient noise, so no data report here.*

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ac20, 5200MHz			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10400	52.47	39.36	11.76	53.2	50.39	68.2	-17.81	Vertical
15600	51.19	38.96	14.73	52.78	52.1	68.2	-16.1	Vertical
10400	51.35	39.36	11.76	53.2	49.27	68.2	-18.93	Horizontal
15600	51.66	38.96	14.73	52.78	52.57	68.2	-15.63	Horizontal
10400	45.14	39.36	11.76	53.2	43.06	54	-10.94	Vertical
15600	45.46	38.96	14.73	52.78	46.37	54	-7.63	Vertical
10400	45.02	39.36	11.76	53.2	42.94	54	-11.06	Horizontal
15600	46.24	38.96	14.73	52.78	47.15	54	-6.85	Horizontal

*Note: Final Level =Receiver Read level + Factor
 Factor= Antenna Factor + Cable Loss – Preamplifier Factor
 Only the worst case report
 The level of emissions from 18GHz to 40GHz is same as the ambient noise, so no data report here.*

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ac20, 5240MHz			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10480	51.95	39.39	11.82	53.2	49.96	68.2	-18.24	Vertical
15720	52.83	39.03	14.78	52.64	54	68.2	-14.2	Vertical
10480	51.75	39.39	11.82	53.2	49.76	68.2	-18.44	Horizontal
15720	52.79	39.03	14.78	52.64	53.96	68.2	-14.24	Horizontal
10480	46.96	39.39	11.82	53.2	44.97	54	-9.03	Vertical
15720	47.52	39.03	14.78	52.64	48.69	54	-5.31	Vertical
10480	46.03	39.39	11.82	53.2	44.04	54	-9.96	Horizontal
15720	46.86	39.03	14.78	52.64	48.03	54	-5.97	Horizontal

Note: Final Level =Receiver Read level + Factor
 Factor= Antenna Factor + Cable Loss – Preamplifier Factor
 Only the worst case report
 The level of emissions from 18GHz to 40GHz is same as the ambient noise, so no data report here.

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ac40, 5190MHz			
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamplifier Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
10380	53.52	39.35	11.75	53.2	51.42	68.2	-16.78	Vertical
15570	51.66	38.94	14.72	52.82	52.5	68.2	-15.7	Vertical
10380	51.8	39.35	11.75	53.2	49.7	68.2	-18.5	Horizontal
15570	51.9	38.94	14.72	52.82	52.74	68.2	-15.46	Horizontal
10380	45.9	39.35	11.75	53.2	43.8	54	-10.2	Vertical
15570	45.47	38.94	14.72	52.82	46.31	54	-7.69	Vertical
10380	45.55	39.35	11.75	53.2	43.45	54	-10.55	Horizontal
15570	45.15	38.94	14.72	52.82	45.99	54	-8.01	Horizontal

Note: Final Level =Receiver Read level + Factor
 Factor= Antenna Factor + Cable Loss – Preamplifier Factor
 Only the worst case report
 The level of emissions from 18GHz to 40GHz is same as the ambient noise, so no data report here.

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ac40, 5230MHz			
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
10460	51.47	39.38	11.8	53.2	49.45	68.2	-18.75	Vertical
15690	53.87	39.01	14.77	52.67	54.98	68.2	-13.22	Vertical
10460	52.48	39.38	11.8	53.2	50.46	68.2	-17.74	Horizontal
15690	51.33	39.01	14.77	52.67	52.44	68.2	-15.76	Horizontal
10460	44.82	39.38	11.8	53.2	42.8	54	-11.2	Vertical
15690	44.69	39.01	14.77	52.67	45.8	54	-8.2	Vertical
10460	44.41	39.38	11.8	53.2	42.39	54	-11.61	Horizontal
15690	44.81	39.01	14.77	52.67	45.92	54	-8.08	Horizontal

Note: Final Level =Receiver Read level + Factor
 Factor= Antenna Factor + Cable Loss – Preamplifier Factor
 Only the worst case report
 The level of emissions from 18GHz to 40GHz is same as the ambient noise, so no data report here.

Test Result(Emissions in Non-restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ac80, 5210MHz			
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
10420	51.7	39.37	11.77	53.2	49.64	68.2	-18.56	Vertical
15630	51.8	38.98	14.74	52.74	52.78	68.2	-15.42	Vertical
10420	51.88	39.37	11.77	53.2	49.82	68.2	-18.38	Horizontal
15630	51.94	38.98	14.74	52.74	52.92	68.2	-15.28	Horizontal
10420	44.48	39.37	11.77	53.2	42.42	54	-11.58	Vertical
15630	45.51	38.98	14.74	52.74	46.49	54	-7.51	Vertical
10420	44.72	39.37	11.77	53.2	42.66	54	-11.34	Horizontal
15630	44.65	38.98	14.74	52.74	45.63	54	-8.37	Horizontal

Note: Final Level =Receiver Read level + Factor
 Factor= Antenna Factor + Cable Loss – Preamplifier Factor
 Only the worst case report
 The level of emissions from 18GHz to 40GHz is same as the ambient noise, so no data report here.

Test Result(Emissions in Restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ac20			
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
5150	55.12	33.87	8.01	53.64	43.36	68.2	-24.84	Horizontal
5350	54.17	33.83	8.17	53.56	42.61	68.2	-25.59	Horizontal
5150	54.78	33.87	8.01	53.64	43.02	68.2	-25.18	Vertical
5350	54.98	33.83	8.17	53.56	43.42	68.2	-24.78	Vertical
5150	47.66	33.87	8.01	53.64	35.9	54	-18.1	Horizontal
5350	46.87	33.83	8.17	53.56	35.31	54	-18.69	Horizontal
5150	46.72	33.87	8.01	53.64	34.96	54	-19.04	Vertical
5350	46.67	33.83	8.17	53.56	35.11	54	-18.89	Vertical

Note:

1. Final Level =Receiver Read level + Factor
2. Factor= Antenna Factor + Cable Loss – Preamplifier Factor
3. Only the worst case report

Test Result(Emissions in Restricted band)								
Test mode	Mode 1			Temp. /Hum.	25 °C/60%			
Test voltage	AC 120V/60Hz			Test channel	802.11ac40			
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
5150	53.46	33.87	8.01	53.64	41.7	68.2	-26.5	Horizontal
5350	53.1	33.83	8.17	53.56	41.54	68.2	-26.66	Horizontal
5150	53.74	33.87	8.01	53.64	41.98	68.2	-26.22	Vertical
5350	53.58	33.83	8.17	53.56	42.02	68.2	-26.18	Vertical
5150	48.03	33.87	8.01	53.64	36.27	54	-17.73	Horizontal
5350	49.7	33.83	8.17	53.56	38.14	54	-15.86	Horizontal
5150	48.53	33.87	8.01	53.64	36.77	54	-17.23	Vertical
5350	48.27	33.83	8.17	53.56	36.71	54	-17.29	Vertical

Note:

1. Final Level =Receiver Read level + Factor
2. Factor= Antenna Factor + Cable Loss – Preamplifier Factor
3. Only the worst case report

Test Result(Emissions in Restricted band)								
Test mode		Mode 1		Temp. /Hum.		25 °C/60%		
Test voltage		AC 120V/60Hz		Test channel		802.11ac80		
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
5150	53.04	33.87	8.01	53.64	41.28	68.2	-26.92	Horizontal
5350	53.61	33.83	8.17	53.56	42.05	68.2	-26.15	Horizontal
5150	55.21	33.87	8.01	53.64	43.45	68.2	-24.75	Vertical
5350	53.77	33.83	8.17	53.56	42.21	68.2	-25.99	Vertical
5150	49.4	33.87	8.01	53.64	37.64	54	-16.36	Horizontal
5350	50.78	33.83	8.17	53.56	39.22	54	-14.78	Horizontal
5150	48.61	33.87	8.01	53.64	36.85	54	-17.15	Vertical
5350	50.79	33.83	8.17	53.56	39.23	54	-14.77	Vertical

Note:

1. Final Level =Receiver Read level + Factor
2. Factor= Antenna Factor + Cable Loss – Preamplifier Factor
3. Only the worst case report

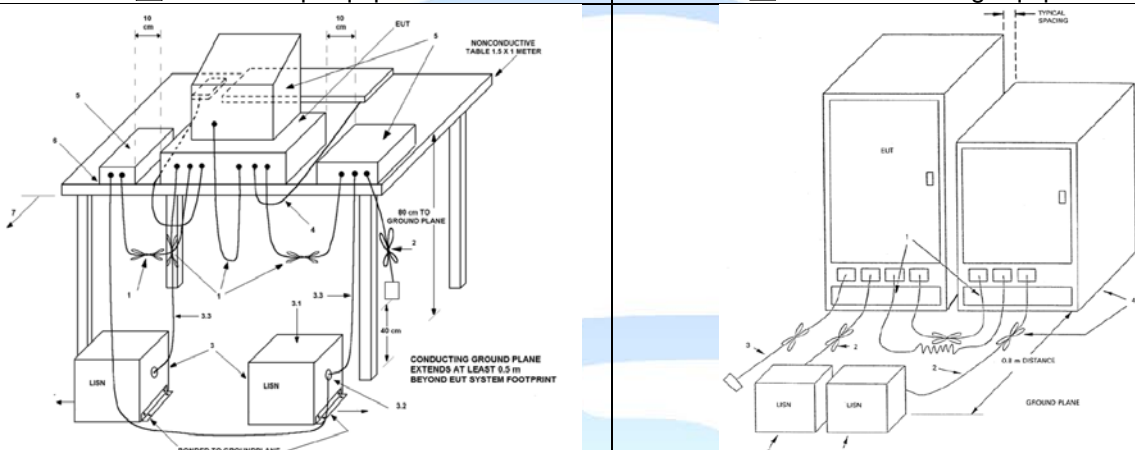
6.8 Conducted Emissions

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

For table-top equipment For floor standing equipment



Test Instrument
 Refer to Annex A for details

Test Procedures

The measurement was performed in a shield room.

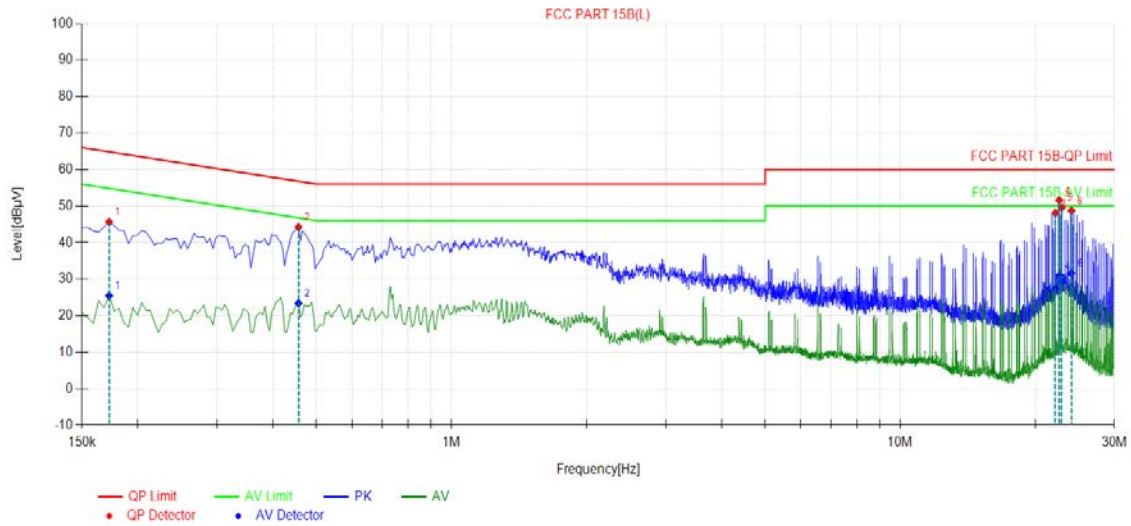
Measured levels of ac power-line conducted emission shall be the radio-noise voltage from the voltage probe, where permitted, or across the 50 Ω LISN port (to which the EUT is connected), as terminated into a 50 Ω EMI receiver or spectrum analyzer. All radio-noise voltage and current measurements shall 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.

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.

The bandwidth of the test receiver is set at 9 kHz.

Verdict
 Pass

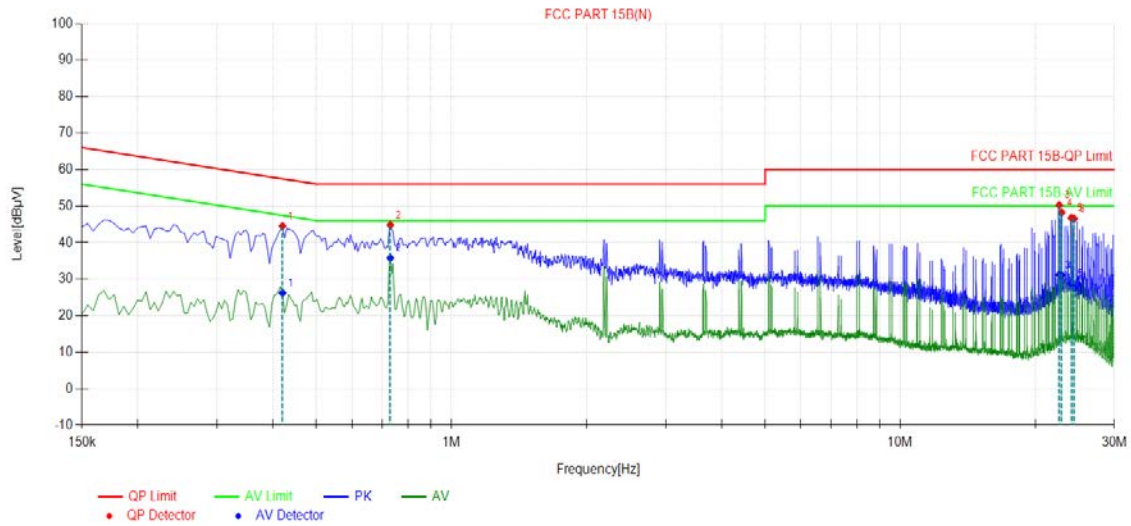
Test Result			
Test mode	Mode 1	Polarity	Line
Test voltage	AC 120V/60Hz	Temp. /Hum.	25 °C/60%



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	0.1725	45.63	64.84	19.21	25.48	54.84	29.36	PASS	L
2	0.456	44.23	56.77	12.54	23.41	46.77	23.36	PASS	L
3	22.1775	48.10	60.00	11.90	27.48	50.00	22.52	PASS	L
4	22.614	51.61	60.00	8.39	30.99	50.00	19.01	PASS	L
5	22.9155	49.58	60.00	10.42	29.07	50.00	20.93	PASS	L
6	24.081	48.73	60.00	11.27	31.62	50.00	18.38	PASS	L

Note: Final Level = Receiver Read level + Factor
 Factor = LISN Factor + Cable Loss
 Only the worst case report (1 802.11a 5180MHz)

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	0.42	44.53	57.45	12.92	26.24	47.45	21.21	PASS	N
2	0.7305	44.82	56.00	11.18	35.77	46.00	10.23	PASS	N
3	22.614	50.27	60.00	9.73	31.22	50.00	18.78	PASS	N
4	22.902	48.25	60.00	11.75	31.07	50.00	18.93	PASS	N
5	24.072	46.76	60.00	13.24	28.83	50.00	21.17	PASS	N
6	24.4005	46.54	60.00	13.46	27.66	50.00	22.34	PASS	N

Note: Final Level = Receiver Read level + Factor
 Factor = LISN Factor + Cable Loss
 Only the worst case report (1 802.11a 5180MHz)

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	Thermohygrometer	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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