

Prepared by:

Reviewed by:

Approved by:

# **TEST REPORT**

Report No.	SST240723002EF01		
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-E0070		
Test Report Form No:	SST-RD-7.5-02-E01(A/0)		
Date of sample receipt:	2024/7/31		
Date of Test:	2024/7/31 - 2024/8/23		
Date of report issued:	2024/8/27		

\*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.

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\*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	2024/8/27





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## 3 Test Summary

Test items	Basics standards	Result
Antenna Requirement	15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	15.207	Pass
Conducted Peak Output Power	15.247 (b)(1)	Pass
20dB Occupied Bandwidth	15.247 (a)(1)	Pass
Carrier Frequencies Separation	15.247 (a)(1)	Pass
Hopping Channel Number	15.247 (a)(1)(iii)	Pass
Dwell Time	15.247 (a)(1)(iii)	Pass
Radiated Emission	15.205/15.209	Pass
Band Edge	15.247(d)	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 informing 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 (±) (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	
Radiated Emissions(<1012)	30MHz~1GHz	5.08	
	1GHz~6GHz	4.02	
Radiated Emissions(>1GHz)	6GHz~18GHz	4.62	
	18GHz~40GHz	4.7	
Occupied Bandwidth	1.14		
Conducted Emissions—AC mains	9kHz~150KHz	1.76	
Conducted Emissions—AC mains	150kHz~30MHz	2.52	
Conducted Emissions—Telecom	2.0	64	



# **5** General Information

# 5.1 Client Information

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

## 5.2 General Description of EUT

Product Name:	Android Tablet			
Model No.:	WF3205T			
Test Model:	WF3205T			
Test sample(s) ID:	24072300201			
Sample(s) Status:	Continuously transmitter			
S/N:	1			
Hardware Version:	1			
Software Version:	1			
Operation Frequency:	2402MHz~2480MHz			
Channel numbers:	79			
Channel separation:	1MHz			
Modulation type:	GFSK, Pi/4DQPSK, 8DPSK			
Antenna gain:	Refer to section 5.7 for details			
Power supply:	Adapter 1: SWITCH MODE POWER SUPPLY Model: S065-1A120500B3 Input: AC 200~250V, 50/60Hz, 1.5A Output: DC 12V, 5A, 60W Adapter 2: SWITCH ADAPTER Model No.: FJ-SW20171205000 INPUT: AC 100-240V, 50/60Hz, 1.5A MAX OUTPUT: DC 12V, 5.0A, 60.0W			

Both two adapters were test and found to compliance with relevant requirement, adapter 1(the worst condition) test result report.



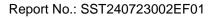
## 5.3 Test mode(s)

Mode 1:	continuously transmitting
Mode 2:	
Mode 3:	

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2402MHz	21	2422MHz	41	2442MHz	61	2462MHz
2	2403MHz	22	2423MHz	42	2443MHz	62	2463MHz
3	2404MHz	23	2424MHz	43	2444MHz	63	2464MHz
4	2405MHz	24	2425MHz	44	2445MHz	64	2465MHz
5	2406MHz	25	2426MHz	45	2446MHz	65	2466MHz
6	2407MHz	26	2427MHz	46	2447MHz	66	2467MHz
7	2408MHz	27	2428MHz	47	2448MHz	67	2468MHz
8	2409MHz	28	2429MHz	48	2449MHz	68	2469MHz
9	2410MHz	29	2430MHz	49	2450MHz	69	2470MHz
10	2411MHz	30	2431MHz	50	2451MHz	70	2471MHz
11	2412MHz	31	2432MHz	51	2452MHz	71	2472MHz
12	2413MHz	32	2433MHz	52	2453MHz	72	2473MHz
13	2414MHz	33	2434MHz	53	2454MHz	73	2474MHz
14	2415MHz	34	2435MHz	54	2455MHz	74	2475MHz
15	2416MHz	35	2436MHz	55	2456MHz	75	2476MHz
16	2417MHz	36	2437MHz	56	2457MHz	76	2477MHz
17	2418MHz	37	2438MHz	57	2458MHz	77	2478MHz
18	2419MHz	38	2439MHz	58	2459MHz	78	2479MHz
19	2420MHz	39	2440MHz	59	2460MHz	79	2480MHz
20	2421MHz	40	2441MHz	60	2461MHz		

#### Note:

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





## 5.4 Test Facility

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

	Name
	GuangDong Set Sail Testing Co., Ltd.
Test Performed at: 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 provided by manufacturer
Power level setup	Default

## 5.7 Antenna Information

Ant	Manufacturer	Model	Antenna Type	Antenna Gain (dBi)	Note
2	Shenzhen Yishengbang Technology Co., Ltd	/	/	2.96	WiFi, BT

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

## 5.8 Others

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.



# 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 Conducted Peak Output Power

limit
20.97dBm
Block diagram of Test Setup
Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane
Test Instrument
Refer to Annex A for details
Test Procedures
Fest applies to C63.10
/erdict
Pass





## 6.3 20dB Emission Bandwidth

Limit
Report only
Block diagram of Test Setup
Spectrum Analyzer E.U.T Non-Conducted Table
Ground Reference Plane
Test Instrument
Refer to Annex A for details
Test Procedures
Test applies to C63.10
Verdict
Pass

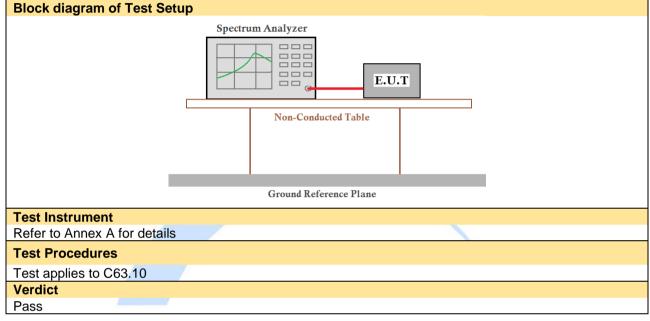




#### 6.4 Carrier Frequency Separation

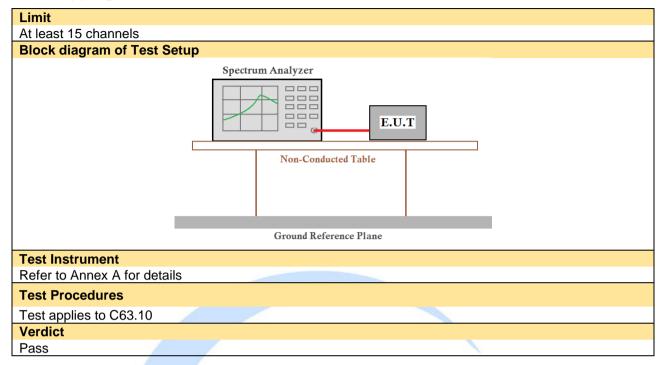
#### Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.





## 6.5 Hopping Channel Numbers







## 6.6 Dwell Time

Limit	
0.4s	
Block diagram of Test Setu	p
	Spectrum Analyzer E.U.T Non-Conducted Table
	Ground Reference Plane
Test Instrument	
Refer to Annex A for details	
Test Procedures	
Test applies to C63.10	
Verdict	
Pass	





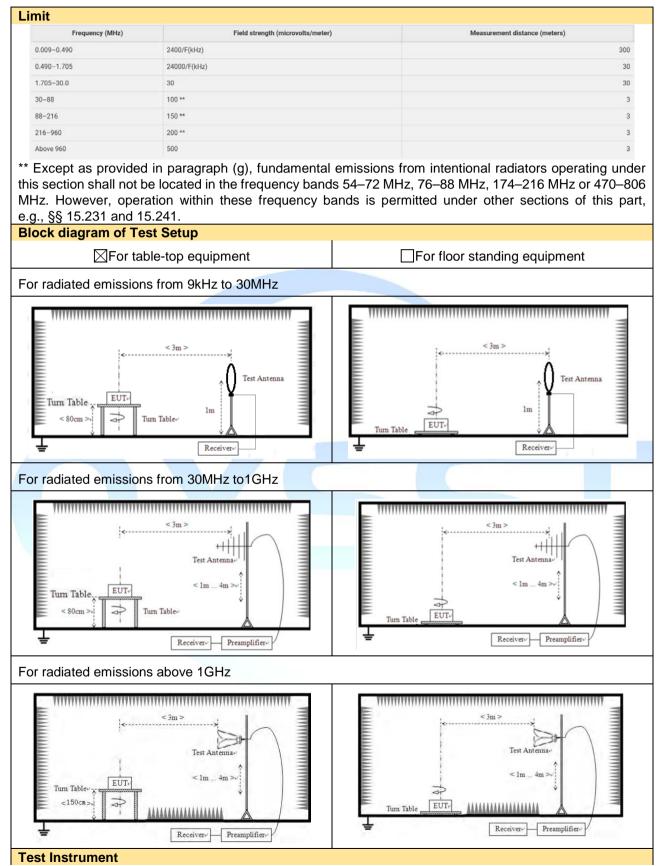
#### 6.7 Conducted Emission

# Limit 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. **Block diagram of Test Setup** Spectrum Analyzer E.U.T 6 Non-Conducted Table **Ground Reference Plane Test Instrument** Refer to Annex A for details **Test Procedures** Test applies to C63.10

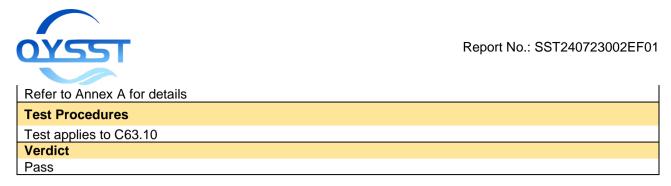
Verdict Pass



## 6.8 Radiated Spurious Emission



GuangDong Set Sail Testing Co., Ltd. 101, No.19, Tianxin Hudie 1st Road, Huangjiang Town, Dongguan, Guangdong, China



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.





est mod		Mode 1		Polarity	-	Horizontal	
est volta	age	AC 120V/	60Hz	Temp. /H	lum.	25 °C/60%	Ď
90 80 70 60 50 50 40 30 20			m		hunder	and an and a second of the second	
10 0 <sup>1</sup> 30	(indente-rection) indented and international statements of the second statements of t	zontal PK	100M	requency[iiz]			1G
0	M — QP Limit — Hor • QP Detector		100M		QP Margin [dB]	Polarity	1G Verdict
0 <sup>1</sup> 30	M — QP Limit — Hor • QP Detector D. Freq. [MHz]	zontal PK Factor	100M FI	requency[IIz]	QP Margin	Polarity Horizontal	
0 <sup>0</sup> 30	M — QP Limit — Hor • QP Detector D. Freq. [MHz] 108.9935	zontal PK Factor [dB]	100M P QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]		Verdict
0 30 NC	M - QP Limit - Hor • QP Detector D. Freq. [MHz] 108.9935 282.5787	Factor [dB] 12.51	100M QP Value [dBµV/m] 21.39	Pequency[Hz] QP Limit [dBµV/m] 43.50	QP Margin [dB] 22.11	Horizontal	Verdict PASS
0 30 NC	M - QP Limit - Hor • QP Detector D. Freq. [MHz] 108.9935 282.5787 334.3639	Factor [dB] 12.51 14.74	100М QP Value [dBµV/m] 21.39 31.59	requency[ <sup>1</sup> Iz] QP Limit [dBµV/m] 43.50 46.00	QP Margin [dB] 22.11 14.41	Horizontal Horizontal	Verdict PASS PASS
0 30 NC 1 2 3	M - QP Limit - Hor • QP Detector D. Freq. [MHz] 108.9935 282.5787 334.3639 375.0431	Factor [dB] 12.51 14.74 15.94	100M QP Value [dBµV/m] 21.39 31.59 28.72	requency[IIz] QP Limit [dBµV/m] 43.50 46.00 46.00	QP Margin [dB] 22.11 14.41 17.28	Horizontal Horizontal Horizontal	Verdict PASS PASS PASS

Note: Final Level =Receiver Read level + Factor Factor= Antenna Factor + Cable Loss – Preamplifier Factor Only the worst case report(GFSK 2402MHz)



est mode		Mode 1				Vertical	
est volta	ge	AC 120V/	60Hz	Temp. /H	lum.	25 °C/609	%
90 80 70 60 [U_/\_1] 10] 80 40 30 20			- Min		Minntenningham	Nie Andrew Kongerein	
10 0 30M	— QP Limit — Ve • QP Detector	rtical PK	100M	requency[iiz]			1G
0	QP Delector	rtical PK Factor [dB]			QP Margin [dB]	Polarity	1G Verdict
0 30M	GP Detector     Freq.	Factor	P Value	requency[liz] QP Limit	QP Margin		
NO.	• GP Detector Freq. [MHz]	Factor [dB]	P Value [dBμV/m]	requency[IIz] QP Limit [dBµV/m]	QP Margin [dB]	Polarity	Verdict
0	• GP Detector Freq. [MHz] 109.2804	Factor [dB] 12.52	QP Value [dBµV/m] 29.92	requency[liz] QP Limit [dBµV/m] 43.50	QP Margin [dB] 13.58	Polarity Vertical	Verdict PASS
NO.	<ul> <li>OP Detector</li> <li>Freq. [MHz]</li> <li>109.2804</li> <li>124.962</li> </ul>	Factor [dB] 12.52 10.10	Р QP Value [dBµV/m] 29.92 29.00	requency[llz] QP Limit [dBµV/m] 43.50 43.50	QP Margin [dB] 13.58 14.50	Polarity Vertical Vertical	Verdict PASS PASS
NO.	<ul> <li>CP Detector</li> <li>Freq. [MHz]</li> <li>109.2804</li> <li>124.962</li> <li>199.8908</li> </ul>	Factor [dB] 12.52 10.10 12.08	P Value [dBµV/m] 29.92 29.00 25.43	requency[liz] QP Limit [dBµV/m] 43.50 43.50 43.50	QP Margin [dB] 13.58 14.50 18.07	Polarity Vertical Vertical Vertical	Verdict PASS PASS PASS

Note: Final Level =Receiver Read level + Factor Factor= Antenna Factor + Cable Loss – Preamplifier Factor Only the worst case report(GFSK 2402MHz)



			tricted ba							
Test mode		Mode 1		T	emp. /Hum.		25 °C/60%			
Test voltage		AC 120V	//60Hz	Т	est channel		Lowest			
Peak value:										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	oss Factor (dBu)//m) (dBu)//m		Limit Line (dBuV/m)	Limit	Polarizatior		
2310	51.19	27.71	5.3	53.84	30.36	74	-43.64	Horizontal		
2390	51.7	27.91	5.4	53.82	31.19	74	-42.81	Horizontal		
2310	50.74	27.71	5.3	53.84	29.91	74	-44.09	Vertical		
			5.4 53.8							
2390	52.78	27.91	5.4	53.82	32.27	74	-41.73	Vertical		
2390 Average valu	ie:	1				74	1	Vertical		
		27.91 Antenna Factor (dB/m)	5.4 Cable Loss (dB)	53.82 Preamp Factor (dB)		74 Limit Line (dBuV/m)	Over			
<b>Average valι</b> Frequency	<b>Je:</b> Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Polarizatio		
Average valu Frequency (MHz)	<b>Je:</b> Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarizatio Horizontal		
Average valu Frequency (MHz) 2310	Je: Read Level (dBuV) 40.47	Antenna Factor (dB/m) 27.71	Cable Loss (dB) 5.3	Preamp Factor (dB) 53.84	Level (dBuV/m) 19.64	Limit Line (dBuV/m) 54	Over Limit (dB) -34.36	Vertical Polarization Horizontal Horizontal Vertical		



Test Result(Emissions in Non-restricted band)										
Test mode	Test mode         Mode 1         Temp. /Hum.         25 °C/60%							)		
Test voltage	st voltage AC 120V/60Hz					Test channel Highest				
Peak value:										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	ss Facto		Level (dBuV/m)	Limit Line (dBuV/m)	Limit	Polarization	
2483.5	48.61	28.16	5.51	53.8	8	28.48	74	-45.52	Horizontal	
2500	49.11	28.2	5.53	53.8	8	29.04	74	-44.96	Horizontal	
2483.5	48.56	28.16	5.51	53.8	8	28.43	74	-45.57	Vertical	
2500	49.34	28.2	5.53	53.8	8	29.27	74	-44.73	Vertical	
Average valu	ie:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Facto	Preamp Factor (dB)		Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
2483.5	44.99	28.16	5.51	53.8	3	24.86	54	-29.14	Horizontal	
2500	42.02	28.2	5.53	53.8	3	21.95	54	-32.05	Horizontal	
2483.5	43.54	28.16	5.51	53.8	3	23.41	54	-30.59	Vertical	
2500	42.3	28.2	5.53	53.8	3	22.23	54	-31.77	Vertical	
			vel + Fact							





Test Result(I	Emissions	in Restricte	d band)							
Test mode		Mode 1		Т	emp. /Hum.		25 °C/60%			
Test voltage		AC 120V/	60Hz	T	est channel		Lowest			
Peak value:					1					
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Factor (dB)		Limit Lin (dBuV/m		polarization		
4804	56.15	33.35	7.7	53.72	43.48	74	-30.52	Vertical		
7206	56.53	36.54	9.55	53.24	49.38	74	-24.62	Vertical		
9608	56.89	39.04	11.29	53.28	53.94	74	-20.06	Vertical		
4804	56.31	33.35	7.7	53.72	43.64	74	-30.36	Horizontal		
7206	56.17	36.54	9.55	53.24	49.02	74	-24.98	Horizontal		
9608	56.43	39.04	11.29	53.28	53.48	74	-20.52	Horizontal		
			~							
Average valu	le:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pream Factor (dB)		Limit Lin (dBuV/m		polarizatior		
4804	50.3	33.35	7.7	53.72	37.63	54	-16.37	Vertical		
7206	48.51	36.54	9.55	53.24	41.36	54	-12.64	Vertical		
9608	48.79	39.04	11.29	53.28	45.84	54	-8.16	Vertical		
4804	51.53	33.35	7.7	53.72	38.86	54	-15.14	Horizontal		
7206	48.63	36.54	9.55	53.24	41.48	54	-12.52	Horizontal		
9608	48.89	39.04	11.29	53.28	45.94	54	-8.06	Horizontal		



Test Result(I	Emissions	in Restricte	d band)								
Test mode		Mode 1				p. /Hum.		25 °C/60%			
Test voltage		AC 120V/	60Hz		Test	channel		Middle			
Peak value:											
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Fac	amp ctor B)	Level (dBuV/m)	Limit Lin (dBuV/m		polarization		
4882	56.89	33.57	7.77	53.	71	44.52	74	-29.48	Vertical		
7323	56.45	36.56	9.64	53.	26	49.39	74	-24.61	Vertical		
9764	57.27	39.11	11.39	53.	25	54.52	74	-19.48	Vertical		
4882	56.81	33.57	7.77	53.	71	44.44	74	-29.56	Horizontal		
7323	57.44	36.56	9.64	53.	26	50.38	74	-23.62	Horizontal		
9764	56.66	39.11	11.39	53.	25	53.91	74	-20.09	Horizontal		
Average valu	le:										
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Fac	amp ctor B)	Level (dBuV/m)	Limit Lin (dBuV/m		polarization		
4882	53.65	33.57	7.77	53.	71	41.28	54	-12.72	Vertical		
7323	50.66	36.56	9.64	53.	26	43.6	54	-10.4	Vertical		
9764	50.4	39.11	11.39	53.	25	47.65	54	-6.35	Vertical		
4882	50.49	33.57	7.77	53.	71	38.12	54	-15.88	Horizontal		
7323	50.37	36.56	9.64	53.	26	43.31	54	-10.69	Horizontal		
9764	52.86	39.11	11.39	53.	25	50.11	54	-3.89	Horizontal		



Test Result(	Emissions	in Restricte	d band)							
Test mode		Mode 1		Ten	np. /Hum.	25 °C/60%				
Test voltage		AC 120V/	60Hz Test chann			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)	limit	polarization		
4960	56.34	33.79	7.83	53.7	44.26	74	-29.74	Vertical		
7440	57.12	36.59	9.72	53.29	50.14	74	-23.86	Vertical		
9920	57.31	39.17	11.48	53.22	54.74	74	-19.26	Vertical		
4960	56.78	33.79	7.83	53.7	44.7	74	-29.3	Horizontal		
7440	56.26	36.59	9.72	53.29	49.28	74	-24.72	Horizontal		
9920	57.41	39.17	11.48	53.22	54.84	74	-19.16	Horizontal		
Average valu	ue:									
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Limit	polarization		
4960	50.05	33.79	7.83	53.7	37.97	54	-16.03	Vertical		
7440	49.03	36.59	9.72	53.29	42.05	54	-11.95	Vertical		
9920	50.78	39.17	11.48	53.22	48.21	54	-5.79	Vertical		
4960	49.03	33.79	7.83	53.7	36.95	54	-17.05	Horizontal		
7440	49.23	36.59	9.72	53.29	42.25	54	-11.75	Horizontal		
9920	51.94	39.17	11.48	53.22	49.37	54	-4.63	Horizontal		



## 6.9 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 free If the limit for the measurement with the detector, the equipment under test shall receiver with an average detector need r	average detector is met when us be deemed to meet both limits	
Block diagram of Test Setup		
For table-top equipment	☐For flo	or standing equipment
	o GROUND PLANE LEAST 0.5 m 5 Y3TEM POOTPRINT	
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  $\Omega$  LISN port (to which the EUT is connected), as terminated into a 50  $\Omega$  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  $\Omega$  measuring port is terminated into a 50  $\Omega$  EMI receiver or spectrum analyzer. All other ports are terminated into 50  $\Omega$  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 mode	Mode 1 Polarity				Line				
Fest voltage		AC 120	0V/60Hz		Temp. /Hum.		25	25 °C/60%	
100 90- 80 70 60 2 50 40 1 2 30 20 10 0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.ww Marine	With month of	Mytacholisakaja viruu		****	~		
-10 -10 -11 150k			1M	Freque	ency(Hz)		10	M	
150k OP Lin OP Do Fin	al Data L	.ist	- AV QP	QP	AV	AV	AV		Turce
150k QP Lir • QP De	stector • AV De	.ist	— AV			AV Limit [dBµV]		Verdict	Туре
150k - OP Lin • OP Do Fin	al Data L	<b>-ist</b> QP Value	QP Limit	QP Margin	AV Value	Limit	AV Margin		Туре
150k QP Lin QP Do Fin NO.	al Data L Freq. [MHz]	<mark>_ist</mark> QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	Limit [dBµV]	AV Margin [dB]	Verdict	
150k - OP Lin • OP Do Fin NO. 1	al Data L Freq. [MHz] 0.15	<b>.ist</b> QP Value [dBµV] 56.28	QP Limit [dBµV] 66.00	QP Margin [dB] 9.72	ΑV Value [dBμV] 34.38	Limit [dBµV] 56.00	AV Margin [dB] 21.62	Verdict	L
150k - QP Lin • QP De Fin NO. 1 2	al Data L Freq. [MHz] 0.15 0.168	List QP Value [dBµV] 56.28 53.71	QP Limit [dBµV] 66.00 65.06	QP Margin [dB] 9.72 11.35	AV Value [dBµV] 34.38 32.64	Limit [dBµV] 56.00 55.06	AV Margin [dB] 21.62 22.42	Verdict PASS PASS	L
150k - OP Lin • OP Do Fin NO. 1 2 3	AV Description           al Data L           Freq.           [MHz]           0.15           0.168           0.204	. <b>ist</b> QP Value [dBµV] 56.28 53.71 51.36	— AV QP Limit [dBµV] 66.00 65.06 63.45	QP Margin [dB] 9.72 11.35 12.09	AV Value [dBµV] 34.38 32.64 29.41	Limit [dBµV] 56.00 55.06 53.45	AV Margin [dB] 21.62 22.42 24.04	Verdict PASS PASS PASS	L L L



t voltage		Mode 1 AC 120V/60Hz			Polarity Temp. /Hum.			Neutral 25 °C/60%	
100 90 80 70 60		<u>A0 1200</u>			(N)				
	mmm		Mahardy Madd	non and the one	drouidedddddd		~		
		it PK Detector	AV	Frequ	ency[Hz]			JWI	5
Fin	al Data I	list							
	Freq. [MHz]	QP Value [dBµV]	QP Limit [dBµV]	QP Margin [dB]	AV Value [dBµV]	AV Limit [dBµV]	AV Margin [dB]	Verdict	Туре
NO.									
NO.	0.15	59.12	66.00	6.88	35.00	56.00	21.00	PASS	N
			66.00 65.52	6.88 10.08	35.00 33.83	56.00 55.52	21.00 21.69	PASS PASS	N N
1	0.15	59.12							
1	0.15	59.12 55.44	65.52	10.08	33.83	55.52	21.69	PASS	N
1 2 3	0.15 0.159 0.1995	59.12 55.44 50.75	65.52 63.63	10.08 12.88	33.83 30.16	55.52 53.63	21.69 23.47	PASS PASS	N N

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Test Setup Photo Reference to the appendix I for details.

#### **EUT Constructional Details** 8 Reference to the **appendix II** for details.





# Annex A -- Test Instruments list

Radiated Emiss	ion:					
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	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	Thermohygrometer	КТЈ	TA218A	879030	1 year	2024.04.18
1	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	Thermohygrometer	КТЈ	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	КТЈ	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	/	/



