

FCC Test Report

Report No.: AGC00793220502FE03

FCC ID : 2A6VXS9

APPLICATION PURPOSE: Original Equipment

PRODUCT DESIGNATION: Wireless Lavalier Microphone

BRAND NAME : N/A

S9, S10, S11, S12, S13, S14, S15, P10, P11, P12, P13, P14,

MODEL NAME : P15, J10, J11, J12, J13, K1, K1S, K2, K2S, K3, K3S, K60,

K61, K62, V8, V8S

CLIENT Shenzhen Shisuo Intelligent Electronic Technology Co.,

Ltd

DATE OF ISSUE : May 25, 2022

STANDARD(S)

TEST PROCEDURE(S) : FCC Part 15 Rules

REPORT VERSION: V1.0

Attestation of Global Complane (Shenzhen) Co., Ltd





Page 2 of 34

REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	May 25, 2022	Valid	Initial Release



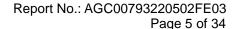
TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY	5
2. GENERAL INFORMATION	6
2.1. PRODUCT DESCRIPTION	6
2.2. TABLE OF CARRIER FREQUENCY	7
3. MEASUREMENT UNCERTAINTY	ε
4. DESCRIPTION OF TEST MODES	g
5. SYSTEM TEST CONFIGURATION	10
5.1. CONFIGURATION OF EUT SYSTEM	10
5.2 EQUIPMENT USED IN TESTED SYSTEM	10
5.3. SUMMARY OF TEST RESULTS	10
6. TEST FACILITY	11
7. RADIATED EMISSION	12
7.1TEST LIMIT	12
7.2. MEASUREMENT PROCEDURE	13
7.3. TEST SETUP	
7.4. TEST RESULT	16
8. BAND EDGE EMISSION	23
8.1. MEASUREMENT PROCEDURE	23
8.2 TEST SETUP	
8.3 RADIATED TEST RESULT	23
9. 20DB BANDWIDTH	28
9.1. MEASUREMENT PROCEDURE	28
9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)	28
9.3. MEASUREMENT RESULTS	29
10. FCC LINE CONDUCTED EMISSION TEST	31
10.1. LIMITS OF LINE CONDUCTED EMISSION TEST	31
10.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST	31



Report No.: AGC00793220502FE03 Page 4 of 34

APPENDIX B: PHOTOGRAPHS OF THE EUT	35
APPENDIX A: PHOTOGRAPHS OF TEST SETUP	35
10.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST	33
10.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST	32
10.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST	32





1. VERIFICATION OF CONFORMITY

Applicant	Shenzhen Shisuo Intelligent Electronic Technology Co., Ltd.		
Address	Room 402, No. 1, Gangbei Industrial Zone, Jixiang Community, Longcheng Street, Longgang District, Shenzhen, China		
Manufacturer	Shenzhen Shisuo Intelligent Electronic Technology Co., Ltd.		
Address	Room 402, No. 1, Gangbei Industrial Zone, Jixiang Community, Longcheng Street, Longgang District, Shenzhen, China		
Factory	Shenzhen Shisuo Intelligent Electronic Technology Co., Ltd.		
Address	Room 402, No. 1, Gangbei Industrial Zone, Jixiang Community, Longcheng Street, Longgang District, Shenzhen, China		
Product Designation	Wireless Lavalier Microphone		
Brand Name N/A			
Test Model S9			
Series Model S10, S11, S12, S13, S14, S15, P10, P11, P12, P13, P14, P15, J10, J11, J			
Difference description	e description All the series models are the same as the test model except for the model name		
Date of test	May 16, 2022 to May 25, 2022		
Deviation	No any deviation from the test method		
Condition of Test Sample	Normal		
Test Result	Pass		
Report Template	AGCRT-US-BR/RF		
-			

We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.249.

Prepared By	Alan Duan	
	Alan Duan (Project Engineer)	May 25, 2022
Reviewed By	Calin Lin	
	Calvin Liu (Reviewer)	May 25, 2022
Approved By	Max Zhang	
	Max Zhang (Authorized Officer)	May 25, 2022

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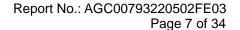
Page 6 of 34

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

A major technical description of EUT is described as following

Operation Frequency 2.402 GHz to 2.480GHz	
Maximum field strength	82.13dBuV/m(average)@3m
Modulation	GFSK
Number of channels 79	
Antenna Gain	3.5dBi
Antenna Designation	Ceramic Chip Antenna (Met 15.203 Antenna requirement)
Hardware Version	V1.1
Software Version	V1.0
Power Supply	DC 3.7V by battery or DC 5V by adapter





2.2. TABLE OF CARRIER FREQUENCY

Channel	Frequency	Channel	Frequency	Channel	Frequency
Number	(MHz)	Number	(MHz)	Number	(MHz)
0	2402	27	2429	54	2456
1	2403	28	2430	55	2457
2	2404	29	2431	56	2458
3	2405	30	2432	57	2459
4	2406	31	2433	58	2460
5	2407	32	2434	59	2461
6	2408	33	2435	60	2462
7	2409	34	2436	61	2463
8	2410	35	2437	62	2464
9	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		



Page 8 of 34

3. MEASUREMENT UNCERTAINTY

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

- Uncertainty of Conducted Emission, Uc = ±3.2 dB
- Uncertainty of Radiated Emission below 1GHz, Uc = ±3.9 dB
- Uncertainty of Radiated Emission above 1GHz, Uc = ±4.8 dB
- Uncertainty of Occupied Channel Bandwidth: Uc = ±2 %



Page 9 of 34

4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	Low channel GFSK
2	Middle channel GFSK
3	High channel GFSK

Note:

- 1. Only the result of the worst case was recorded in the report, if no other cases.
- 2. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 3. The EUT adjusts the frequency through the button.

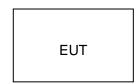


Page 10 of 34

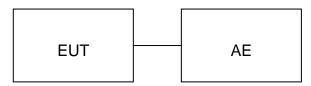
5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Radiated Emission Configure:



Conducted Emission Configure:



5.2 EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Wireless Lavalier Microphone	S9	2A6VXS9	EUT
2	Wired headset		N/A	AE
3	Adapter	ZL-PCB0100020502000	N/A	AE

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.249&15.209	Radiated Emission	Compliant
§15.249	Band Edges	Compliant
§15.215	20dB bandwidth	Compliant
§15.207	Conducted Emission	Compliant



Page 11 of 34

6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Comm Fuhai Street, Bao'an District, Shenzhen, Guangdong, China	
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

TEST EQUIPMENT OF RADIATED EMISSION TEST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	10096	Sep. 06, 2021	Sep. 05, 2022
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Nov. 17, 2021	Nov. 16, 2022
2.4GHz Fliter	EM Electronics	2400-2500MHz	N/A	Mar. 22, 2022	Mar. 21, 2024
Attenuator	ZHINAN	E-002	N/A	Sep. 03, 2020	Sep. 02, 2022
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Oct. 31, 2021	Oct. 30, 2023
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	Mar. 12, 2022	Mar. 11, 2024
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Apr. 23, 2021	Apr. 22, 2023
Broadband Preamplifier	ETS LINDGREN	3117PA	00225134	Sep. 03, 2020	Sep. 02, 2022
ANTENNA	SCHWARZBECK	VULB9168	494	Jan. 08, 2020	Jan. 07, 2023



Page 12 of 34

7. RADIATED EMISSION

7.1TEST LIMIT

Standard FCC15.249

Fundamental Frequency	Field Strength of Fundamental	Field Strength of Harmonics
	(millivolts/meter)	(microvolts/meter)
900-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

Standard FCC 15.209

Frequency	Distance	Field Strengths Limit			
(MHz)	Meters	μ V/m	dB(μV)/m		
0.009 ~ 0.490	300	2400/F(kHz)			
0.490 ~ 1.705	30	24000/F(kHz)			
1.705 ~ 30	30	30			
30 ~ 88	3	100	40.0		
88 ~ 216	3	150	43.5		
216 ~ 960	3	200	46.0		
960 ~ 1000	3	500	54.0		
Above 1000	3	Other:74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)			

Remark:

- (1) Emission level dB μ V = 20 log Emission level μ V/m
- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.



Report No.: AGC00793220502FE03 Page 13 of 34

7.2. MEASUREMENT PROCEDURE

- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use minimum resolution bandwidth of 1 MHz. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 8.If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.



Page 14 of 34

The following table is the setting of spectrum analyzer and receiver.

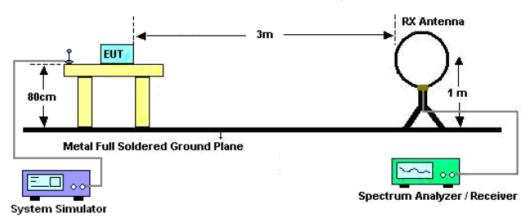
Spectrum Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP
	1GHz~26.5GHz
Start ~Stop Frequency	RBW 2.4MHz/ VBW 8MHz for Peak,
	RBW 2.4MHz/10Hz for Average

Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

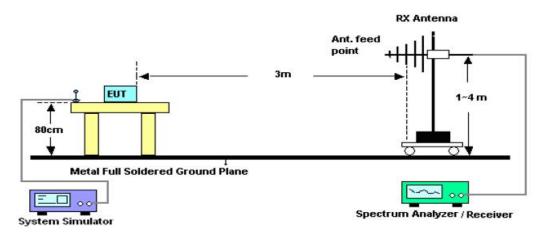


7.3. TEST SETUP

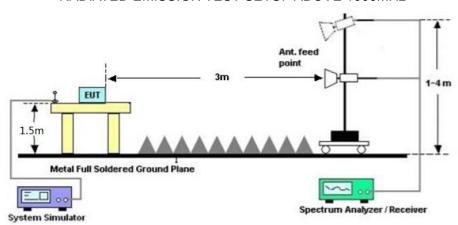
Radiated Emission Test-Setup Frequency Below 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz





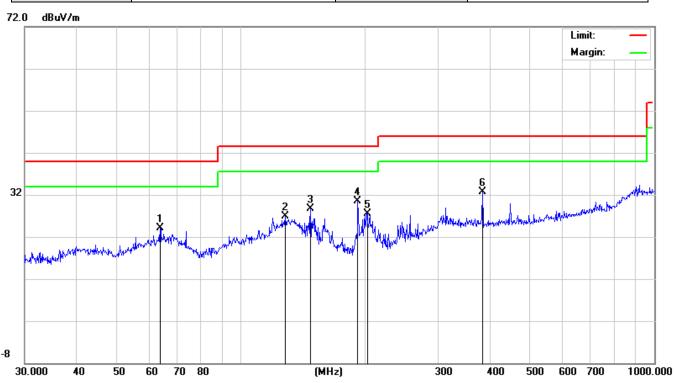
7.4. TEST RESULT

RADIATED EMISSION BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

RADIATED EMISSION 30MHz-1GHZ

EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25 ℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Horizontal

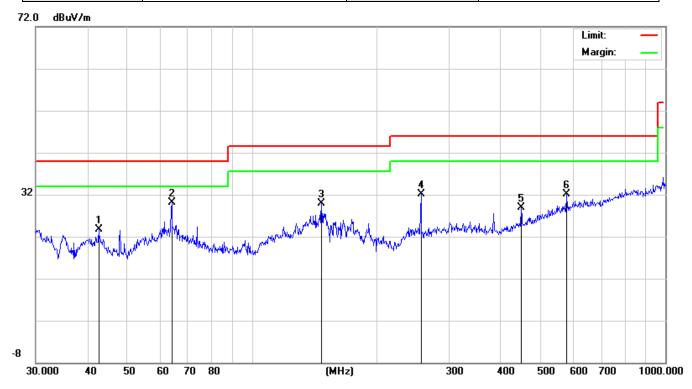


No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		63.7588	7.42	16.72	24.14	40.00	-15.86	peak
2		128.1130	9.10	17.84	26.94	43.50	-16.56	peak
3		147.4036	11.54	17.10	28.64	43.50	-14.86	peak
4	*	191.7450	16.47	14.04	30.51	43.50	-12.99	peak
5		202.1005	13.45	14.08	27.53	43.50	-15.97	peak
6		383.9318	12.11	20.64	32.75	46.00	-13.25	peak

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EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25 ℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Vertical

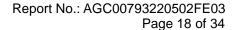


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		42.6000	9.16	14.64	23.80	40.00	-16.20	peak
2	*	63.9827	13.11	16.97	30.08	40.00	-9.92	peak
3	,	147.4036	12.48	17.47	29.95	43.50	-13.55	peak
4	2	256.5210	13.72	18.37	32.09	46.00	-13.91	peak
5	4	147.9821	8.41	20.42	28.83	46.00	-17.17	peak
6	į	76.6443	7.89	24.26	32.15	46.00	-13.85	peak

RESULT: PASS

Note:

Factor=Antenna Factor + Cable loss, Over=Measurement-Limit.





The "Factor" value can be calculated automatically by software of measurement system.



Page 19 of 34

FIELD STRENGTH OF FUNDAMENTAL

EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25 ℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Modulation :	GFSK	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
2402	108.68	-9.61	99.07	114.00	-14.93	peak	
2402	91.73	-9.61	82.12	94.00	-11.88	AVG	
2441	92.79	-9.61	83.18	114.00	-30.83	peak	
2441	87.25	-9.61	77.64	94.00	-16.36	AVG	
2480	105.31	-9.61	95.70	114.00	-18.30	peak	
2480 76.61 -9.61 67.00 94.00 -27.00 AVG							
Remark:							
Factor = Ante	Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Modulation :	GFSK	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
2402	108.74	-9.61	99.13	114.00	-14.87	peak	
2402	91.74	-9.61	82.13	94.00	-11.87	AVG	
2441	95.98	-9.61	86.37	114.00	-27.63	peak	
2441	82.16	-9.61	72.55	94.00	-21.45	AVG	
2480	106.14	-9.61	96.53	114.00	-17.47	peak	
2480 86.58 -9.61 76.97 94.00 -17.03 AVG							
Remark:							
Factor = Ante	Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

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Test Mode :

Mode 1

Report No.: AGC00793220502FE03

Page 20 of 34

RADIATED EMISSION ABOVE 1GHZ

EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Horizontal

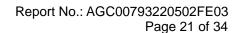
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4804	48.66	3.76	52.42	74.00	-21.58	peak
4804	43.58	3.76	47.34	54.00	-6.66	AVG
7206	42.57	8.17	50.74	74.00	-23.26	peak
7206 38.69 8.17 46.86 54.00 -7.14 AVG						
Remark:						
Factor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4804	47.96	3.76	51.72	74.00	-22.28	peak
4804	43.84	3.76	47.60	54.00	-6.40	AVG
7206	42.11	8.17	50.28	74.00	-23.72	peak
7206 37.53 8.17 45.70 54.00 -8.30 AVG						
Remark:						
-actor = Antenna Factor + Cable Loss – Pre-amplifier.						

Polarization:

Vertical





EUT :	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 2	Polarization :	Horizontal

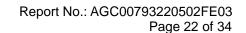
Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4882	47.16	3.78	50.94	74.00	-23.06	peak
4882	43.55	3.78	47.33	54.00	-6.67	AVG
7323	43.82	8.23	52.05	74.00	-21.95	peak
7323 39.69 8.23 47.92 54.00 -6.08 AVG						
Remark:						
actor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25 ℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V

Test Mode : Mode 2 Polarization : Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4882	48.89	3.78	52.67	74.00	-21.33	peak
4882	42.64	3.78	46.42	54.00	-7.58	AVG
7323	44.18	8.23	52.41	74.00	-21.59	peak
7323	39.92	8.23	48.15	54.00	-5.85	AVG
Remark:						

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





EUT: Wireless Lavalier Microphone		Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 3	Polarization :	Horizontal

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type
4960	47.86	3.81	51.67	74.00	-22.33	peak
4960	44.24	3.81	48.05	54.00	-5.95	AVG
7440	42.18	8.27	50.45	74.00	-23.55	peak
7440 38.65 8.27 46.92 54.00 -7.08 AVG						
Remark:						
actor = Antenna Factor + Cable Loss – Pre-amplifier.						

EUT: Wireless Lavalier Microphone		Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 3	Polarization :	Vertical

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)	value Type	
4960	48.67	3.81	52.48	74.00	-21.52	peak	
4960	43.18	3.81	46.99	54.00	-7.01	AVG	
7440	44.54	8.27	52.81	74.00	-21.19	peak	
7440	7440 40.29 8.27 48.56 54.00 -5.44 AVG						
Remark:							
Factor = Antenna Factor + Cable Loss – Pre-amplifier.							

Note: Other emissions from 8G to 25 GHz are considered as ambient noise. No recording in the test report. Factor=Antenna Factor + Cable loss - Amplifier gain, Margin=Level-Limit.

The "Factor" value can be calculated automatically by software of measurement system.



8. BAND EDGE EMISSION

8.1TEST LIMIT

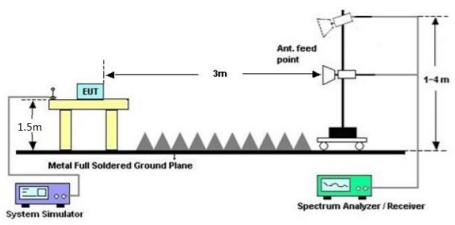
	Limit of the Field Strength (dBμV/m)				
Frequency Band	Peak	Average			
f≤2390MHz	74	54			
f≥2483.5MHz	74	54			

8.2. MEASUREMENT PROCEDURE

- 1. The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.
- 2. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission: (a) PEAK: RBW=1MHz, VBW=3MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz; VBW=1/on time(1KHz) / Sweep=AUTO
- 3. Other procedures refer to clause 7.2.

8.3 TEST SETUP

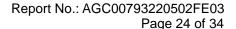
RADIATED EMISSION TEST SETUP



8.4 TEST RESULT

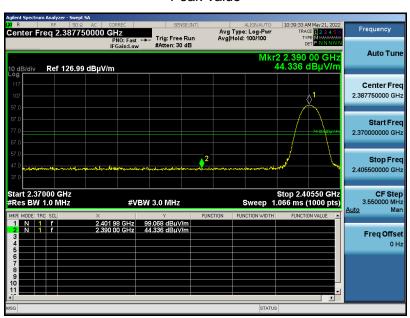
Note:

- 1. Factor=Antenna Factor + Cable loss Amplifier gain. Field Strength=Factor + Reading level
- 2. The factor had been edited in the "Input Correction" of the Spectrum Analyzer. So the Amplitude of test plots is equal to Reading level plus the Factor in dB. Use the A dB(μ V) to represent the Amplitude. Use the F dB(μ V/m) to represent the Field Strength. So A=F.

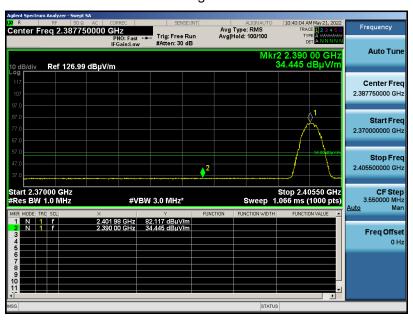




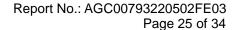
EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Horizontal



Average Value

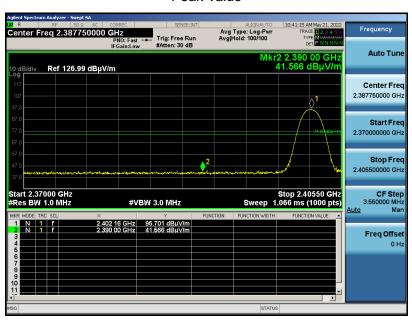


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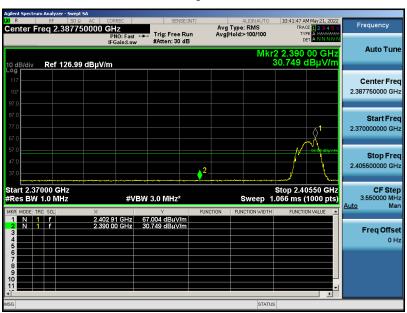




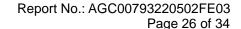
EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 1	Polarization :	Vertical



Average Value

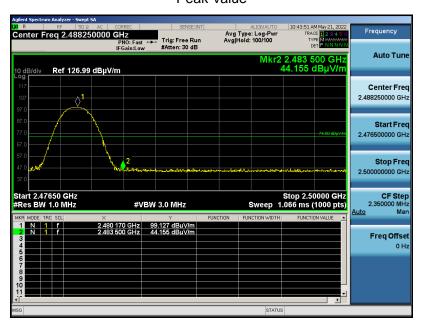


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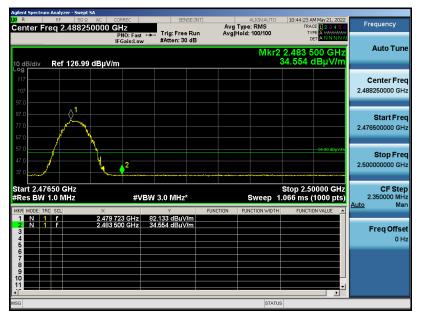




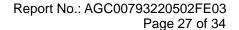
EUT :	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 3	Polarization :	Horizontal



Average Value

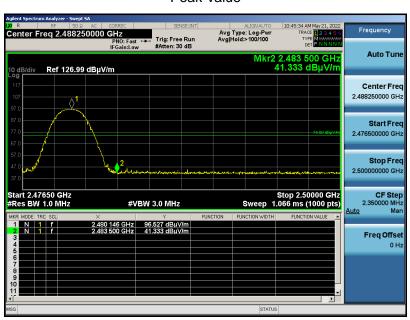


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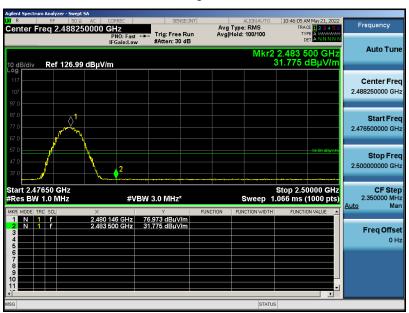




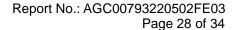
EUT:	Wireless Lavalier Microphone	Model Name. :	S9
Temperature :	25℃	Relative Humidity:	55%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	Mode 3	Polarization :	Vertical



Average Value



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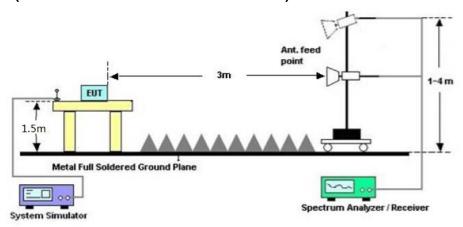


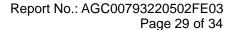
9. 20DB BANDWIDTH

9.1. MEASUREMENT PROCEDURE

- 1. Set the EUT Work on the top, the middle and the bottom operation frequency individually.
- 2. Set SPA Centre Frequency = Operation Frequency, RBW= 30 KHz, VBW≥ 3×RBW.
- 3. Set SPA Trace 1 Max hold, then View.

9.2. TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)







9.3. MEASUREMENT RESULTS

TEST ITEM	20DB BANDWIDTH
TEST MODULATION	GFSK

Test Data (MHz)	Criteria	
Low Channel	1.070	PASS
Middle Channel	1.064	PASS
High Channel	1.077	PASS

TEST PLOT OF BANDWIDTH FOR LOW CHANNEL

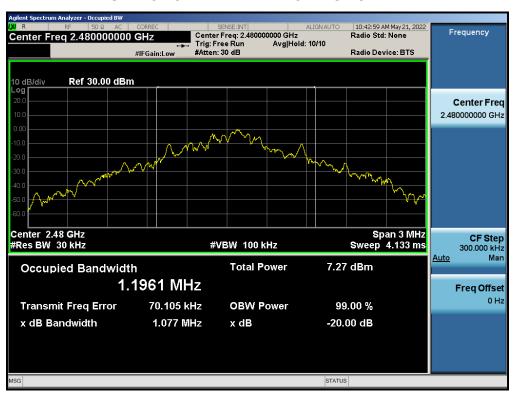




TEST PLOT OF BANDWIDTH FOR MIDDLE CHANNEL



TEST PLOT OF BANDWIDTH FOR HIGH CHANNEL





10. FCC LINE CONDUCTED EMISSION TEST

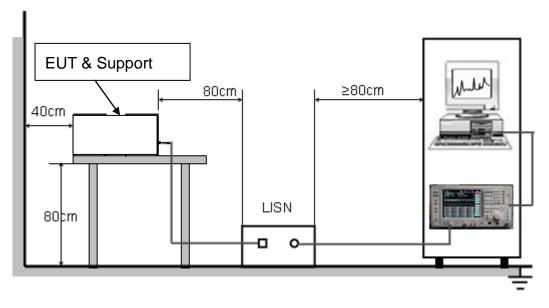
10.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Francis	Maximum RF Line Voltage				
Frequency	Q.P.(dBuV)	Average(dBuV)			
150kHz~500kHz	66-56	56-46			
500kHz~5MHz	56	46			
5MHz~30MHz	60	50			

Note:

- 1. The lower limit shall apply at the transition frequency.
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

10.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST





Page 32 of 34

10.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- 2. Support equipment, if needed, was placed as per ANSI C63.10.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
- 4. All support equipments received AC120VV/60Hz power from a LISN, if any.
- 5. The EUT received charging voltage by adapter which received 120V/60Hzpower by a LISN..
- 6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.
- 9. The test mode(s) were scanned during the preliminary test.

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

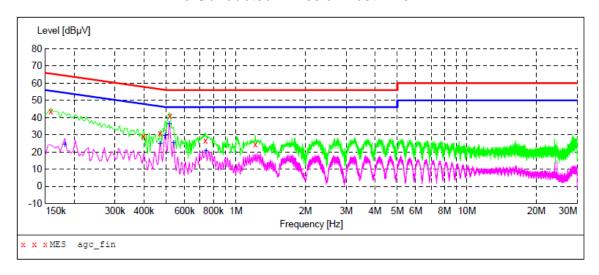
10.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

- EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
- 2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
- 3. The test data of the worst case condition(s) was reported on the Summary Data page.



10.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

Line Conducted Emission Test Line 1-L



MEASUREMENT RESULT: "agc_fin"

2022/5/21	9:39					
Frequen M	cy Level Hz dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0.1580	00 43.50	6.8	66	22.1	QP	L1
0.3980	00 29.00	5.7	58	28.9	QP	L1
0.4700	00 31.00	5.5	57	25.5	QP	L1
0.5180	00 41.10	5.4	56	14.9	QP	L1
0.7380	00 26.80	5.4	56	29.2	QP	L1
1.2140	00 24.60	5.7	56	31.4	QP	L1

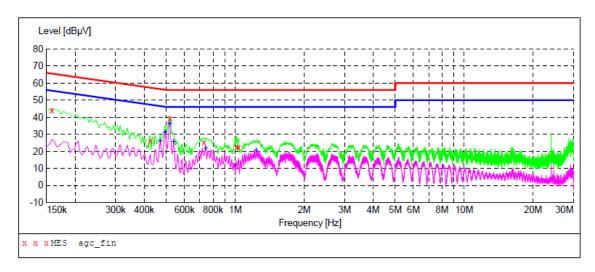
MEASUREMENT RESULT: "agc fin2"

2022/5/21	9:39					
Frequen M	.cy Level Hz dBµV		Limit dBµV	Margin dB	Detector	Line
0.1820	00 24.50	6.7	54	29.9	AV	L1
0.4700	00 24.70	5.5	47	21.8	AV	L1
0.4940	00 29.60	5.4	46	16.5	AV	L1
0.5140	00 36.50	5.4	46	9.5	AV	L1
0.5380	00 25.30	5.4	46	20.7	AV	L1
0.7420	00 20.50	5.4	46	25.5	AV	L1

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Line Conducted Emission Test Line 2-N



MEASUREMENT RESULT: "agc_fin"

2022/	/5/21 9:35						
Fr	equency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
0	.158000	43.90	6.8	66	21.7	QP	N
0	.426000	26.30	5.6	57	31.0	QP	N
0	.518000	39.40	5.4	56	16.6	QP	N
0	.730000	25.40	5.4	56	30.6	QP	N
1	.014000	22.70	5.5	56	33.3	QP	N
1	.034000	22.50	5.5	56	33.5	QP	N

MEASUREMENT RESULT: "agc fin2"

2	022/5/21 9:3	5					
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line
	0.470000	26.30	5.5	47	20.2	AV	N
	0.494000	31.10	5.4	46	15.0	AV	N
	0.518000	36.40	5.4	46	9.6	AV	N
	0.538000	25.80	5.4	46	20.2	AV	N
	0.742000	21.80	5.4	46	24.2	AV	N
	1.234000	20.50	5.7	46	25.5	AV	N

RESULT: PASS





APPENDIX A: PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC00793220502AP01

APPENDIX B: PHOTOGRAPHS OF THE EUT

Refer to the Report No.: AGC00793220502AP02

----END OF REPORT----



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