

# **FCC Test Report**

Report No.: AGC09691210604FE04

FCC ID : 2ARN3-UWMIC9HU9

**APPLICATION PURPOSE** : Original Equipment

**PRODUCT DESIGNATION**: UHF Wireless Microphone System

**BRAND NAME** : Saramonic

**MODEL NAME** : UwMic9 HU9

**APPLICANT**: Shenzhen Jiayz Photo Industrial., Ltd

**DATE OF ISSUE** : Jun. 17, 2021

**STANDARD(S)** : FCC Part 15.236

REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd





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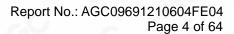
# **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	9 /	Jun. 17, 2021	Valid	Initial Release



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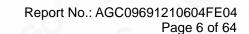
# 1. VERIFICATION OF CONFORMITY

Applicant	Shenzhen Jiayz Photo Industrial ., Ltd			
Address	A16 Building, Intelligent Terminal Industrial Park of Silicon Valley Power, Guanlan, Longhua District, Shenzhen, China			
Manufacturer	Shenzhen Jiayz Photo Industrial ., Ltd			
Address	A16 Building, Intelligent Terminal Industrial Park of Silicon Valley Power, Guanlan, Longhua District, Shenzhen, China			
Factory	Shenzhen Jiayz Photo Industrial ., Ltd			
Address	A16 Building, Intelligent Terminal Industrial Park of Silicon Valley Power, Guanlan, Longhua District, Shenzhen, China			
Product Designation	UHF Wireless Microphone System			
Brand Name	Saramonic			
Test Model	UwMic9 HU9			
Date of test	Jun. 07, 2021 to Jun. 17, 2021			
Deviation	No any deviation from the test method			
Condition of Test Sample	Normal			
Test Result Pass				
Report Template AGCRT-US-LPAS/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 Part 15.236.

Prepared By	keury chang	
	Kelly Cheng (Project Engineer)	Jun. 17, 2021
Reviewed By	Max Zhang	
	Max Zhang (Reviewer)	Jun. 17, 2021
Approved By	Formesticis	
GC GC	Forrest Lei (Authorized Officer)	Jun. 17, 2021

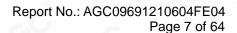




# 2. GENERAL INFORMATION

# 2.1. PRODUCT DESCRIPTION

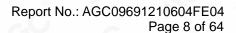
Operation Frequency	Group A : 514.560MHz -553.510MHz Group B: 556.510MHz -595.460MHz		
Maximum Radiated Power	Group A: 3.094dBm Group B: 2.891dBm		
Modulation	FM		
Number of channels	Group A: 96 Group B: 96		
Antenna Gain	0dBi		
Antenna Designation	PCB Antenna (Met 15.203 Antenna requirement)		
Hardware Version	HU9-RF-V03		
Software Version	V1.0		
Power Supply	DC 3V by battery		





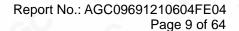
Channel list: Group A

Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
1	514.560	25	524.400	49	534.240	73	544.080
2	514.970	26	524.810	50	534.650	74	544.490
3	515.380	27	525.220	51	535.060	75	544.900
4	515.790	28	525.630	52	535.470	76	545.310
5	516.200	29	526.040	53	535.880	77	545.720
6	516.610	30	526.450	54	536.290	78	546.130
7	517.020	31	526.860	55	536.700	79	546.540
8	517.430	32	527.270	56	537.110	80	546.950
9	517.840	33	527.680	57	537.520	81	547.360
10	518.250	34	528.090	58	537.930	82	547.770
11	518.660	35	528.500	59	538.340	83	548.180
12	519.070	36	528.910	60	538.750	84	548.590
13	519.480	37	529.320	61	539.160	85	549.000
14	519.890	38	529.730	62	539.570	86	549.410
15	520.300	39	530.140	63	539.980	87	549.820
16	520.710	40	530.550	64	540.390	88	550.230
17	521.120	41	530.960	65	540.800	89	550.640
18	521.530	42	531.370	66	541.210	90	551.050
19	521.940	43	531.780	67	541.620	91	551.460
20	522.350	44	532.190	68	542.030	92	551.870
21	522.760	45	532.600	69	542.440	93	552.280
22	523.170	46	533.010	70	542.850	94	552.690
23	523.580	47	533.420	71	543.260	95	553.100
24	523.990	48	533.830	72	543.670	96	553.510





Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
1	556.510	25	566.350	49	576.190	73	586.030
2	556.920	26	566.760	50	576.600	74	586.440
3	557.330	27	567.170	51	577.010	75	586.850
4	557.740	28	567.580	52	577.420	76	587.260
5	558.150	29	567.990	53	577.830	77	587.670
6	558.560	30	568.400	54	578.240	78	588.080
7	558.970	31	568.810	55	578.650	79	588.490
8	559.380	32	569.220	56	579.060	80	588.900
9	559.790	33	569.630	57	579.470	81	589.310
10	560.200	34	570.040	58	579.880	82	589.720
11	560.610	35	570.450	59	580.290	83	590.130
12	561.020	36	570.860	60	580.700	84	590.540
13	561.430	37	571.270	61	581.110	85	590.950
14	561.840	38	571.680	62	581.520	86	591.360
15	562.250	39	572.090	63	581.930	87	591.770
16	562.660	40	572.500	64	582.340	88	592.180
17	563.070	41	572.910	65	582.750	89	592.590
18	563.480	42	573.320	66	583.160	90	593.000
19	563.890	43	573.730	67	583.570	91	593.410
20	564.300	44	574.140	68	583.980	92	593.820
21	564.710	45	574.550	69	584.390	93	594.230
22	565.120	46	574.960	70	584.800	94	594.640
23	565.530	47	575.370	71	585.210	95	595.050
24	565.940	48	575.780	72	585.620	96	595.460





## 2.2. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

#### 2.3. SPECIAL ACCESSORIES

Refer to section 5.2.

#### 2.4. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

#### 2.5. ANTENNA REQUIREMENT

This intentional radiator is designed with a permanently attached antenna of an antenna to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

For more information of the antenna, please refer to the APPENDIX B: PHOTOGRAPHS OF EUT.

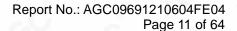


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# 3. MEASUREMENT UNCERTAINTY

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%.

Item	Measurement Uncertainty		
Uncertainty of Conducted Emission for AC Port	$U_c = \pm 3.1 \text{ dB}$		
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 4.0 \text{ dB}$		
Uncertainty of Radiated Emission above 1GHz	$U_c = \pm 4.8 \text{ dB}$		
Uncertainty of total RF power, conducted	$U_c = \pm 0.8 \text{ dB}$		
Uncertainty of spurious emissions, conducted	U <sub>c</sub> = ±2 %		
Uncertainty of Occupied Channel Bandwidth	U <sub>c</sub> = ±2 %		





# 4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION			
1	Group A TX mode at Low channel(CH01:514.56MHz)			
2 Group A TX mode at Middle channel(CH48: 533.830MHz)				
3 Group A TX mode at High channel(CH96: 553.510MHz)				
4 Group B TX mode at Low channel(CH01:556.510MHz)				
5 Group B TX mode at Middle channel(CH48: 575.780MHz)				
6 Group B TX mode at High channel(CH96: 595.460MHz)				

## Note:

- 1. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 2. For Conducted Test method, a temporary antenna connector is provided by the manufacture.
- 3. For battery operated equipment, the equipment tests are performed using a new battery.



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# 5. SYSTEM TEST CONFIGURATION

# **5.1. CONFIGURATION OF EUT SYSTEM**

Radiated Emission Configure:

#### **5.2 EQUIPMENT USED IN TESTED SYSTEM**

	Item	Equipment	Model No.	ID or Specification	Remark	
A 100 Miles	1	UHF Wireless Microphone System	UwMic9 HU9	2ARN3-UWMIC9HU9	EUT	

#### **5.3. SUMMARY OF TEST RESULTS**

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.203	Antenna requirement	Compliant
§15.236(d)(1)	Maximum radiated power	Compliant
§15.236(f)(2)	Occupied bandwidth	Compliant
§15.236(f)(3)	Frequency stability	Compliant
§15.236(g)	Emissions within the band	Compliant
§15.236(g)	Emissions outside of this band	Compliant
15.207	Line Conducted Emission	Not applicable

The conducted emission tests at AC port are not required for devices which only employ battery power for operation



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## 6. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd			
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, 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	May 15, 2021	May 14, 2022
EXA Signal Analyzer	Aglient	N9020A	MY52090123	Sep. 03, 2020	Sep. 02, 2021
Attenuator	Wariors	W13	11324	Aug. 21, 2020	Aug. 20, 2021
Horn antenna	ETS-LINDGREN	3117	00154520	Sep. 03, 2020	Sep. 02, 2021
Active loop antenna (9K-30MHz)	ZHINAN	ZN30900C	18051	May 22, 2020	May 21, 2022
Double-Ridged Waveguide Horn	ETS-LINDGREN	3117	00034609	May 17, 2021	May 16, 2022
Broadband Preamplifier	ETS-LINDGREN	3117PA	00225134	Sep. 03, 2020	Sep. 02, 2021
ANTENNA	SCHWARZBECK	VULB9168	494	Sep. 20, 2019	Sep. 19, 2021
Wireless communication tester	HP	8920B	US35010161	Sep. 03, 2020	Sep. 02, 2021
Test software	Tonscend	JS32-RE (Ver. 2.5)	N/A	N/A	N/A



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#### 7. OUPUT POWER

#### 7.1. TEST LIMIT

The power may not exceed the following values.

470-608 MHz bands: 50 mW EIRP

#### 7.2. MEASUREMENT PROCEDURE

☐EIRP Test Method

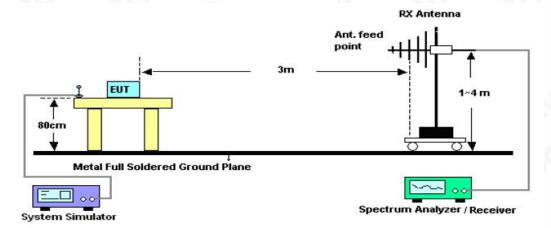
- 1. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 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 emission, 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. EIRP [dBm] = E[dB( $\mu$ V)/m]-95.3
- 4.7dB shall be added as an upper bound on the field strength that would be observed on a test range with a ground plane for frequencies between 30MHz and 1000MHz, or an additional 6dB shall be added for frequencies below 30 MHz.
- Conducted Power Test Method
- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. RBW ≥ OBW.
- 3. VBW  $\geq$ 3 x RBW.
- 4. Span  $\ge$ 2 x OBW.
- 5. Sweep time  $\geq$  10 x (number of points in sweep) x (transmission symbol period)
- 6. Detector function: Peak.
- 7. Trace: Max hold.
- 8. Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.

the dest results of the test report.

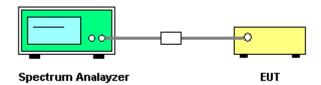


## 7.3. TEST SETUP

☐ EIRP Test Method



## ⊠Conducted Power Test Method





## 7.4. TEST RESULT

## Group A

Test Channel	Peak Power	Limit
(MHz)	(dBm)	(dBm)
514.560	2.942	17
533.830	3.094	17
553.510	2.959	17

# Group B

Test Channel	Peak Power	Limit
(MHz)	(dBm)	(dBm)
556.510	2.873	17
575.870	2.857	17
595.460	2.891	17



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## 8. OCCUPIED BANDWIDTH

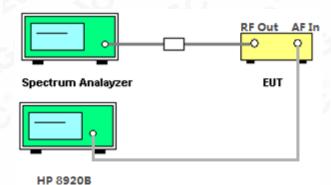
#### 8.1. TEST LIMIT

The operating bandwidth shall not exceed 200 kHz.

#### **8.2. MEASUREMENT PROCEDURE**

- 1. For the occupied bandwidth measurements, the input signal shall be a 1 kHz tone. The level of the tone shall be set to the manufacturer's maximum rated input to the modulator.
- 2. Set the EUT Work on operation frequency.
- 3. Set Span = approximately 1.5 times the occupied bandwidth, centered on a channel
  The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video
  bandwidth (VBW) shall be approximately three times RBW; Sweep = auto; Detector function = peak
- 4. Set SPA Trace 1 Max hold, then View.

#### 8.3. TEST SET-UP

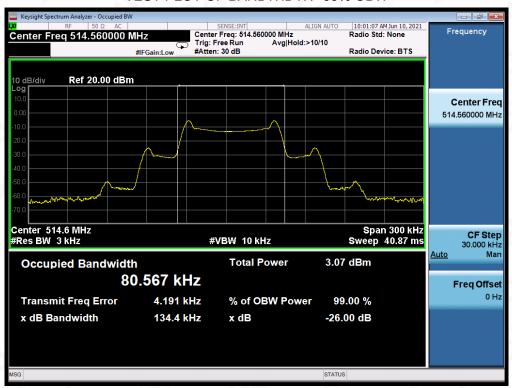


## **8.4. MEASUREMENT RESULTS**

## Group A

Test Channel	-20dBc EBW (kHz)	99% OBW (kHz)	Limit (kHz)
514.560MHz	139.4	80.567	200
533.830MHz	138.4	80.436	200
553.510MHz	136.3	80.428	200





#### -20dBc EBW



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## -20dBc EBW



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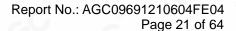




#### -20dBc EBW



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# Group B

Test Channel	-20dBc EBW (kHz)	99% OBW (kHz)	Limit (kHz)
556.510MHz	136.4	80.440	200
575.870MHz	136.6	80.454	200
595.460MHz	139.8	80.262	200





#### -20dBc EBW



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#### -20dBc EBW



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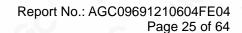




#### -20dBc EBW



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# 9. FREQUENCY STABILITY

#### 9.1. TEST LIMIT

The frequency tolerance of the carrier signal shall be maintained within  $\pm 0.005\%$  of the operating frequency over a temperature variation of -30 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

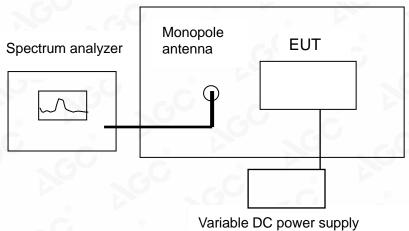
#### 9.2. MEASUREMENT PROCEDURE

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the EUT Work on the operation frequency.
- 3. Set SPA Centre Frequency = Operation Frequency, RBW= 1 KHz, VBW ≫ × RBW.
- 4. Set SPA Trace 1 Max hold, then View.
- 5. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
- 6. Extreme temperature rule is -30°C~50°C.



#### 9.3. TEST SET-UP

# Temperature Chamber



## 9.4. TEST RESULT

# **Group A**

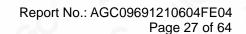
Test frequency: 514.560MHz

Voltage vs. Frequency Stability (Test Temperature: 20°C)

Voltage(V)	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion
2.55	514.5737		<b>⊗</b>	
3.00	514.5706	0.0137	0.03	PASS
3.45	514.5728	(0)		- 6

# Temperature vs. Frequency Stability (Test Voltage: 3V)

Temperature	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion
-30℃	514.5715	- 0	· ·	- 60
-20℃	514.5736		C o	
-10℃	514.5738		2.0	0
0℃	514.5737	(0)		
10℃	514.5729	0.0138	0.03	PASS
20℃	514.5706	a c	⊗	
30℃	514.5722	.69	· ·	
<b>40</b> ℃	514.5719		-C	®
50℃	514.5726	(8)		-C





Test frequency: 533.830MHz

Voltage vs. Frequency Stability (Test Temperature: 20°C)

Voltage(V)	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion
2.55	533.8351			
3.00	533.8350	0.0053	0.03	PASS
3.45	533.8353		0	

## Temperature vs. Frequency Stability (Test Voltage: 3V)

Temperature	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion
-30℃	533.8354		© (S)	
<b>-20</b> ℃	533.8356		-6	(8)
-10℃	533.8359	(8)		- C
0℃	533.8355			
10℃	533.8352	0.0059	0.03	PASS
20℃	533.8350			8
30℃	533.8358	©		· ·
<b>40</b> ℃	533.8357	0		
50℃	533.8355	0		

Test frequency: 553.510MHz

Voltage vs. Frequency Stability (Test Temperature: 20°C)

Voltage(V)	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion
2.55	553.5142	0	F. 100	- G
3.00	553.5140	0.0042	0.03	PASS
3.45	553.5141	- 60		

## Temperature vs. Frequency Stability (Test Voltage: 3V)

Temperature	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion
-30℃	553.5141		2.0	
<b>-20</b> ℃	553.5143	@		
-10℃	553.5144			
0℃	553.5146	a c	®	PASS
10℃	553.5148	0.0049	0.03	
20℃	553.5140		<b>10</b>	8
30℃	553.5147	8		a.C
40℃	553.5149		(0)	
<b>50</b> ℃	553.5145		0	



# **Group B**

Test frequency: 556.510MHz

Voltage vs. Frequency Stability (Test Temperature: 20°C)

Voltage(V)	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion	
2.55	556.515	8			
3.00	556.516	0.008	0.03	PASS	
3.45	556.518				

# Temperature vs. Frequency Stability (Test Voltage: 3V)

Temperature	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion	
-30℃	556.514				
<b>-20</b> ℃	556.517	(8)		C.O.	
-10℃	556.518	,0	©		
0℃	556.519	- 6	· ·		
<b>10</b> ℃	556.515	0.009	0.03	PASS	
20℃	556.516	0			
30℃	556.513				
40℃	556.511	60	⊗		
50℃	556.512		O C.	®	

Test frequency: 575.870MHz

# Voltage vs. Frequency Stability (Test Temperature: 20°C)

Voltage(V)	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion	
2.55	575.8732	3 a.C	®		
3.00	575.8730	0.0035	0.03	PASS	
3.45	575.8735	0	6	0	

# Temperature vs. Frequency Stability (Test Voltage: 3V)

Temperature	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion
-30℃	575.8731	®		-6
-20℃	575.8734			
-10℃	575.8736	10 2C	8	
0℃	575.8737		20	@
10℃	575.8739	0.0039	0.03	PASS
20℃	575.8730	· · · · · · · · · · · · · · · · · · ·		- 60
30℃	575.8738	3 - 6	®	NO.
40℃	575.8733		-G	
50℃	575.8736		6 20	8

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Bedicated Pestino/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test result presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15day after the issuence of the test report Further enquiry of validity or verification of the test report should be addressed to AGC by agc@agc-cert.com.



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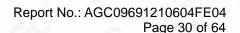
Test frequency: 595.460MHz

Voltage vs. Frequency Stability (Test Temperature: 20°C)

Voltage(V)	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion	
2.55	595.4666			(8)	
3.00	595.4660	0.0066	0.03	PASS	
3.45	595.4664	8			

# Temperature vs. Frequency Stability (Test Voltage: 3V)

Temperature	Measurement Frequency (MHz)	Max. Deviation (MHz)	Limit (MHz)	Conclusion	
-30℃	595.4662	6	⊗		
-20℃	595.4664		- C		
-10℃	595.4663		\O =.C	8	
0℃	595.4668			6.C	
10℃	595.4667	0.0069	0.03	PASS	
20℃	595.4660	- 60	©		
30℃	595.4665		60 -6	8	
40℃	595.4669	®		·C	
50℃	595.4663			J	





## 10. EMISSIONS WITHIN THE BAND AND OUTSIDE THE BAND

#### 10.1. TEST LIMIT

Emissions within the band from one megahertz below to one megahertz above the carrier frequency shall comply with the emission mask in §8.3 of ETSI EN 300 422-1 V1.4.2 (2011-08).

Emissions outside of this band shall comply with the limits specified in section 8.4 of ETSI EN 300 422-1 V1.4.2 (2011-08).

#### **10.2. MEASUREMENT PROCEDURE**

#### Emission outside the band:

- 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 emission, 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. EIRP [dBm] = E[dB( $\mu$ V)/m] 95.2

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
Start ~Stop Frequency	1000MHz~6000MHz/RB 1MHz for QP

#### Emission within the band:

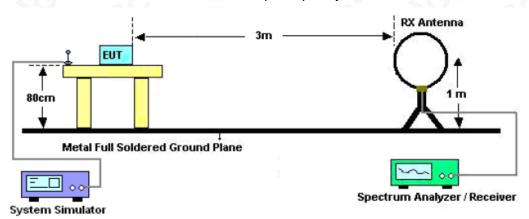
Method of Measurement for Analogue Systems in ETSI EN 300 422-1 Subclass 8.3.1 ☐Method of Measurement for Digital Systems in ETSI EN 300 422-1 Subclass 8.3.2



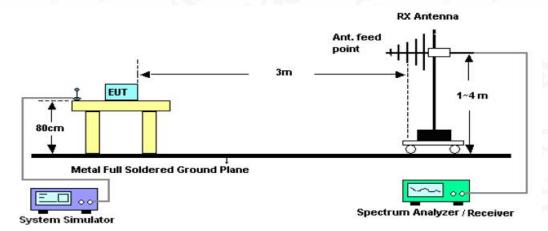
# 10.3. TEST SETUP

## Emission outside the band

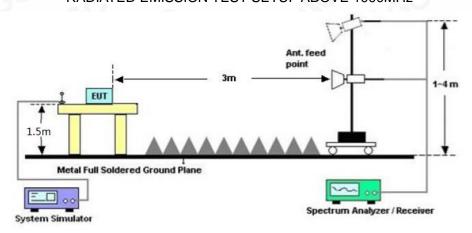
Radiated Emission Test-Setup Frequency Below 30MHz



#### RADIATED EMISSION TEST SETUP 30MHz-1000MHz

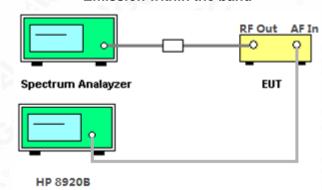


## RADIATED EMISSION TEST SETUP ABOVE 1000MHz





## **Emission within the band**

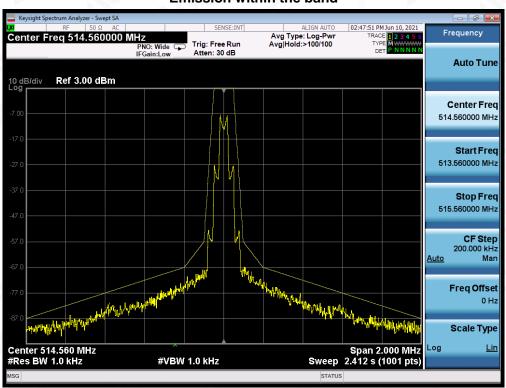


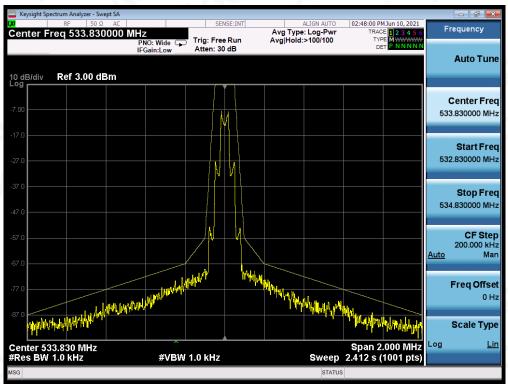


#### 10.4. TEST RESULT

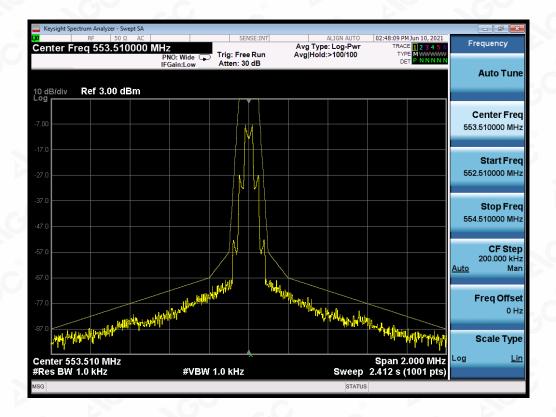
## Group A

# **Emission within the band**









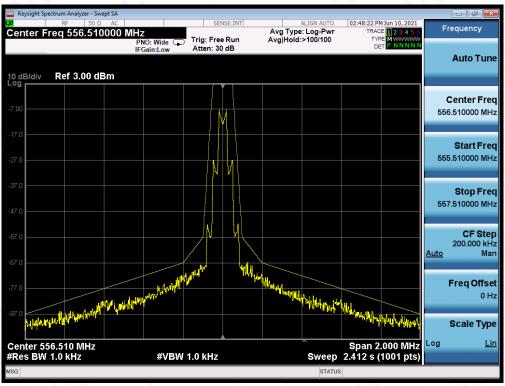
#### Note:

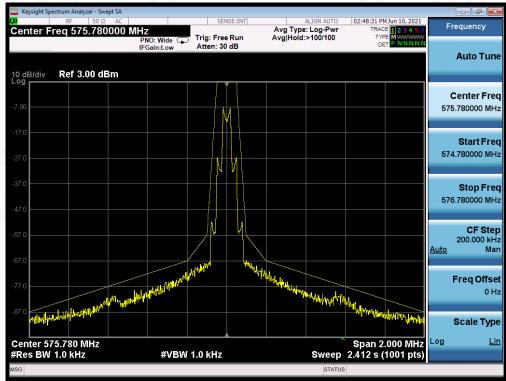
- 1. The manufacturer declared that the channel bandwidth is 200KHz.
- 2. The carrier power is the ref level, and the factor had been edited in the "Input Correction" of the Spectrum Analyzer.



#### Group B

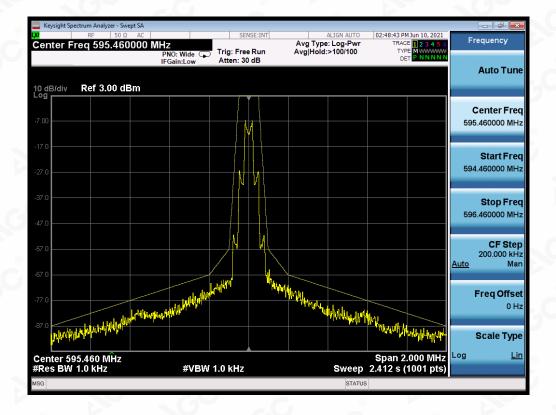
#### **Emission within the band**





g/Inspection
The test results
If the test report.





#### Note:

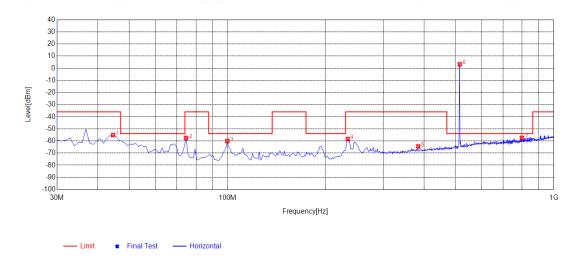
- 1. The manufacturer declared that the channel bandwidth is 200KHz.
- 2. The carrier power is the ref level, and the factor had been edited in the "Input Correction" of the Spectrum Analyzer.



Group A

CH01
Emission outside the band 30-1000MHz

EUT:	UHF Wireless Microphone System	Model Name:	UwMic9 HU9
Temperature:	25℃	Relative Humidity:	60%
Pressure:	986 Pa	Test Voltage:	Normal
Test Mode:	Transmitting at 514.560MHz	Polarization:	Horizontal

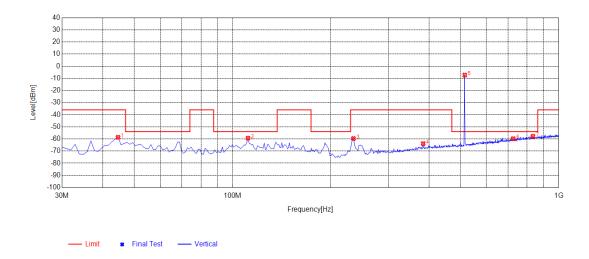


NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	44.5500	-89.52	-55.13	-36.00	19.13	34.39	317	Horizontal
2	74.6200	-85.26	-57.53	-36.00	21.53	27.73	27	Horizontal
3	99.8400	-84.64	-60.02	-54.00	6.02	24.62	27	Horizontal
4	233.7000	-89.40	-58.45	-36.00	22.45	30.95	135	Horizontal
5	384.0500	-98.55	-64.52	-36.00	28.52	34.03	193	Horizontal
6	515.0000	-33.62	3.24	-54.00	-57.24	36.86	193	Horizontal
7	798.2400	-100.85	-57.49	-54.00	3.49	43.36	60	Horizontal

**RESULT: PASS** 



EUT:	UHF Wireless Microphone System	Model Name:	UwMic9 HU9
Temperature:	25℃	Relative Humidity:	60%
Pressure:	986 Pa	Test Voltage:	Normal
Test Mode:	Transmitting at 514.560MHz	Polarization:	Vertical



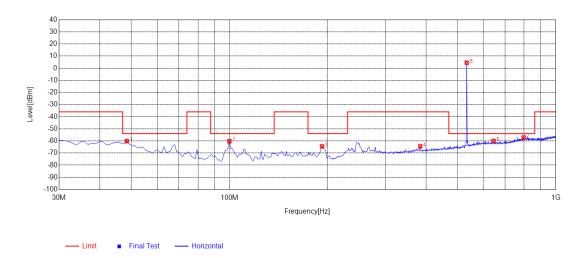
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	44.5500	-87.58	-58.68	-36.00	22.68	28.90	348	Vertical
2	111.4800	-90.83	-59.40	-54.00	5.40	31.43	298	Vertical
3	234.6700	-88.40	-59.69	-36.00	23.69	28.71	58	Vertical
4	384.0500	-98.19	-63.85	-36.00	27.85	34.34	9	Vertical
5	515.0000	-44.07	-7.33	-54.00	-46.67	36.74	282	Vertical
6	724.5200	-100.75	-59.81	-54.00	5.81	40.94	191	Vertical
7	833.1600	-100.51	-57.83	-54.00	3.83	42.68	1	Vertical

**RESULT: PASS** 



CH48
Emission outside the band 30-1000MHz

EUT:	UHF Wireless Microphone System	Model Name:	UwMic9 HU9
Temperature:	25℃	Relative Humidity:	60%
Pressure:	986 Pa	Test Voltage:	Normal
Test Mode:	Transmitting at 533.830MHz	Polarization:	Horizontal

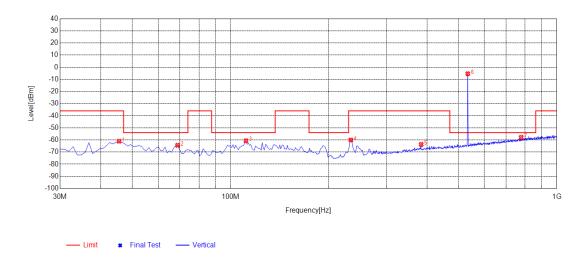


N	0	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	1	48.4300	-94.01	-60.14	-54.00	6.14	33.87	209	Horizontal
2	2	99.8400	-84.85	-60.23	-54.00	6.23	24.62	92	Horizontal
3	3	191.9900	-92.41	-64.45	-54.00	10.45	27.96	184	Horizontal
4	1	384.0500	-98.46	-64.43	-36.00	28.43	34.03	117	Horizontal
5	5	533.4300	-32.97	4.54	-54.00	-58.54	37.51	201	Horizontal
(	6	644.0100	-99.96	-59.99	-54.00	5.99	39.97	267	Horizontal
7	7	797.2700	-100.43	-57.10	-54.00	3.10	43.33	0	Horizontal

**RESULT: PASS** 



EUT:	UHF Wireless Microphone System	Model Name:	UwMic9 HU9
Temperature:	25℃	Relative Humidity:	60%
Pressure:	986 Pa	Test Voltage:	Normal
Test Mode:	Transmitting at 533.830MHz	Polarization:	Vertical



NO	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	45.5200	-90.13	-61.07	-36.00	25.07	29.06	9	Vertical
2	68.8000	-92.74	-64.43	-54.00	10.43	28.31	315	Vertical
3	111.4800	-92.11	-60.68	-54.00	6.68	31.43	207	Vertical
4	233.7000	-88.69	-60.05	-36.00	24.05	28.64	298	Vertical
5	384.0500	-98.07	-63.73	-36.00	27.73	34.34	290	Vertical
6	533.4300	-42.55	-5.38	-54.00	-48.62	37.17	282	Vertical
7	777.8700	-99.85	-57.90	-54.00	3.90	41.95	324	Vertical

**RESULT: PASS**