

# **FCC Test Report**

Test report
On Behalf of
SHENZHEN JINGWEIXIAN TECHNOLOGY CO.,LTD
For
Photo Printer
Model No.: DHP511

FCC ID: 2AVGR-DHP511

Prepared For: SHENZHEN JINGWEIXIAN TECHNOLOGY CO.,LTD

Building C, XinHang Technology Park, No. 229 Qingshui Road, Longgang District

Shenzhen, 518116 China

Prepared By: Shenzhen HUAK Testing Technology Co., Ltd.

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Date of Test: Oct. 07, 2023 ~ Oct. 31, 2023

Date of Report: Oct. 31, 2023

Report Number: HK2310074547-1E

Page 2 of 72 Report No.: HK2310074547-1E

### **Test Result Certification**

Applicant's name ...... SHENZHEN JINGWEIXIAN TECHNOLOGY CO.,LTD

Building C, XinHang Technology Park, No. 229 Qingshui Road,

Longgang District Shenzhen, 518116 China

Manufacture's Name...... SHENZHEN JINGWEIXIAN TECHNOLOGY CO.,LTD

Building C, XinHang Technology Park, No. 229 Qingshui Road,

Longgang District Shenzhen, 518116 China

**Product description** 

Trade Mark:

Product name...... Photo Printer

Model and/or type reference .: DHP511

FCC Rules and Regulations Part 15 Subpart C Section 15.247

ANSI C63.10: 2013

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Date of Test .....

Date of Issue...... Oct. 31, 2023

Test Result..... Pass

Testing Engineer

(Gary Oian)

Technical Manager

LACI

(Eden Hu)

Authorized Signatory:

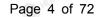
Jason Mou

(Jason Zhou)



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\*\* Modified History \*\*

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	Oct. 31, 2023	Jason Zhou
<sub>m</sub> G	m/G	-m/G	G MG



# 1. Test Result Summary

#### 1.1. Test Procedures and Results

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203/§15.247(b)(4)	PASS
AC Power Line Conducted Emission	§15.207	PASS
Conducted Peak Output Power	§15.247(b)(3)	PASS
6dB Emission Bandwidth	§15.247(a)(2)	PASS
Power Spectral Density	§15.247(e)	PASS
Band Edge	§15.247(d)	PASS
Spurious Emission	§15.205/§15.209	PASS

#### Note:

- 1. PASS: Test item meets the requirement.
- 2. Fail: Test item does not meet the requirement.
- 3. N/A: Test case does not apply to the test object.
- 4. The test result judgment is decided by the limit of test standard.

# 1.2. Information of the Test Laboratory

Shenzhen HUAK Testing Technology Co., Ltd. Add.: 1-2/F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

Testing Laboratory Authorization:

A2LA Accreditation Code is 4781.01. FCC Designation Number is CN1229. Canada IC CAB identifier is CN0045. CNAS Registration Number is L9589.

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# 1.3. Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , 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 %.

No.	ltem	MU
1	Conducted Emission	±2.71dB
2	RF power, conducted	±0.37dB
3 HUAKTE	Spurious emissions, conducted	±0.11dB
4	All emissions, radiated(<1G)	±3.90dB
5	All emissions, radiated(>1G)	±4.28dB
6	Temperature	±0.1°C
7	Humidity	±1.0%



# 2. EUT Description

# 2.1. General Description of EUT

Equipment:	Photo Printer
Model Name:	DHP511
Series Model:	N/A HUAKTE
Model Difference:	N/A
FCC ID:	2AVGR-DHP511
Antenna Type:	PCB Antenna
Antenna Gain:	-7.91dBi
Operation frequency:	802.11b/g/n 20:2412~2462 MHz 802.11n 40: 2422~2452MHz
Number of Channels:	802.11b/g/n20: 11CH 802.11n 40: 7CH
Modulation Type:	CCK/OFDM/DBPSK/DAPSK
Power Source:	DC 24V From Adapter
Power Rating:	DC 24V From Adapter

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2.2. Carrier Frequency of Channels

Channel List For 802.11b/802.11g/802.11n (HT20)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452	-STING	

Channel List For 802.11n (HT40)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
STING_	X TESTING	04	2427	07	2442	- TESTIN	WTE
@ H		05	2432	08	2447	HILAK	Monage Home
03	2422	06	2437	09	2452		

#### 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 below:

## 2.3. Operation of EUT During Testing

**Operating Mode** 

The mode is used: Transmitting mode for 802.11b/802.11g/802.11n (HT20)

Low Channel: 2412MHz Middle Channel: 2437MHz High Channel: 2462MHz

The mode is used: Transmitting mode for 802.11n (HT40)

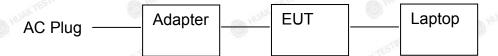
Low Channel: 2422MHz Middle Channel: 2437MHz High Channel: 2452MHz

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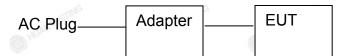


## 2.4. Description of Test Setup

Operation of EUT during conducted testing and below 1GHz radiation testing:



Operation of EUT during radiation testing:



The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. The worst case is X position

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# 2.5. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Trade Mark	Model/Type No.	Specification	Remark
a 1	Photo Printer	Skycut	DHP511	N/A	EUT
<b>2</b>	Adapter	N/A	BLJ38W240160P-T	Input: 100-240V, 50/60Hz, 1.0A Output: 24V, 1.6A	Accessory
3	Laptop	Lenovo	TP00096A	Input: DC 20V, 2.25A/3.25A	Peripheral
4	RF Cable	N/A	N/A	Length:0.1m	Peripheral
HUAKTES	HUAKTESI	HUP	TES HUAK TES	HUANTEST	AUAK TES .
	9		(a)		3)

#### Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
- 3. For conducted measurements (Output Power, 6dB Emission Bandwidth, Power Spectral Density, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

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## 3. Genera Information

## 3.1. Test Environment and Mode

perating Environment:				
Temperature:	25.0 °C	HUAKTESII	HUAKT	
Humidity:	56 % RH	<b>®</b>	0	
Atmospheric Pressure:	1010 mbar	AK TESTING	(9	
est Mode:			200-	
Engineering mode:	Keep the EUT in continuous transmitting by select channel and modulations			

The sample was placed (0.8m below 1GHz, 1.5m above 1GHz) above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages. For the full battery state and The output power to the maximum state.

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We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

# Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate
802.11b	1Mbps
802.11g	6Mbps
802.11n(H20)	6.5Mbps
802.11n(H40)	13.5Mbps

#### **Final Test Mode:**

Operation mode:

Keep the EUT in continuous transmitting with modulation

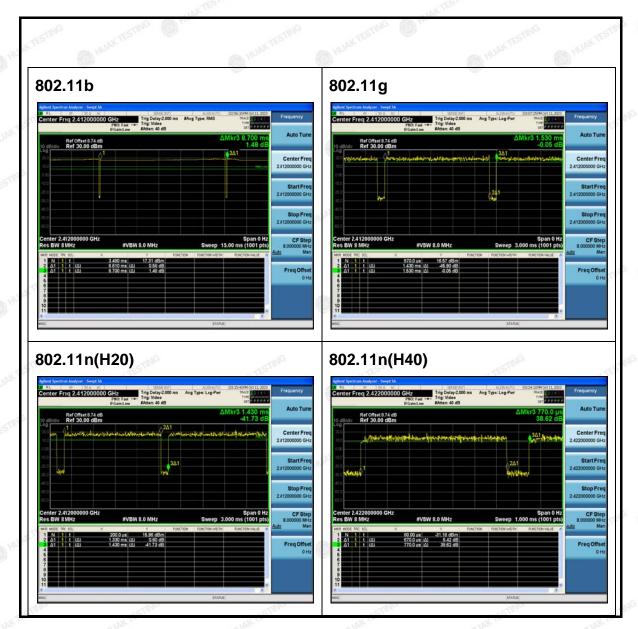
- 1. For WIFI function, the engineering test program was provided and enabled to make EUT continuous transmit/receive.
- 2.According to ANSI C63.10 standards, the test results are both the "worst case" and "worst setup" 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20), 13.5Mbps for 802.11n(H40).

3. Mode Test Duty Cycle

Tool Buly Gyolo		ang.
Mode	Duty Cycle	Duty Cycle Factor (dB)
802.11b	0.99	-0.004
802.11g	0.93	-0.32
802.11n(H20)	0.93	-0.32
802.11n(H40)	0.87	-0.60

Test plots as follows:







# 4. Test Results and Measurement Data

## 4.1. Conducted Emission

### **Test Specification**

ANSI C63.10:2013  150 kHz to 30 MHz  Receiver setup:  RBW=9 kHz, VBW=30 kHz, Sweep time=auto  Frequency range Limit (dBuV) (MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50  Reference Plane	TIME	7100					
Receiver setup:   RBW=9 kHz, VBW=30 kHz, Sweep time=auto	Test Requirement:	HURKTES HURKTES					
Receiver setup:    RBW=9 kHz, VBW=30 kHz, Sweep time=auto	Test Method:	ANSI C63.10:2013					
Frequency range   Limit (dBuV)   (MHz)   Quasi-peak   Average   0.15-0.5   66 to 56*   56 to 46*   0.5-5   56   46   5-30   60   50	Frequency Range:	150 kHz to 30 MHz					
(MHz) Quasi-peak Average 0.15-0.5 66 to 56* 56 to 46* 0.5-5 56 46 5-30 60 50  Reference Plane 40cm LISN	Receiver setup:	time=auto					
40cm  E.U.T AC power 80cm LISN	Limits:	Average 56 to 46* 46					
Test table/Insulation plane  Remark  E.U.T. Equipment Under Test  LISN Line Impedence Statilization Network  Test table height=0.8m	Test Setup:						
Test Mode: transmitting with modulation	Test Mode:	transmitting with modulation					
line impedance stabilization network (L.I.S.N.). The provides a 500hm/50uH coupling impedance for measuring equipment.  2. The peripheral devices are also connected to the measuring power through a LISN that provides a 500hm/50 coupling impedance with 500hm termination. (Please refer to the block diagram of the test setup as photographs).  3. Both sides of A.C. line are checked for maximal conducted interference. In order to find the maximal emission, the relative positions of equipment and all sides and sides of equipment and all sides are stabilization network (L.I.S.N.). The provides a 500hm/50 when the sides are also connected to the measuring equipment.	Test Procedure:	<ol> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to</li> </ol>					
Test Result: PASS	Test Result:	STING					



#### **Test Instruments**

Conducted Emission Shielding Room Test Site (843)						
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due	
Receiver	R&S	ESR-7	HKE-005	Feb. 17, 2023	Feb. 16, 2024	
LISN	R&S	ENV216	HKE-002	Feb. 17, 2023	Feb. 16, 2024	
Coax cable (9KHz-30MHz)	Times	381806-002	N/A	Feb. 17, 2023	Feb. 16, 2024	
10dB Attenuator	Schwarzbeck	VTSD9561F	HKE-153	Feb. 17, 2023	Feb. 16, 2024	
Conducted test software	Tonscend	TS+ Rev 2.5.0.0	HKE-081	N/A	N/A	

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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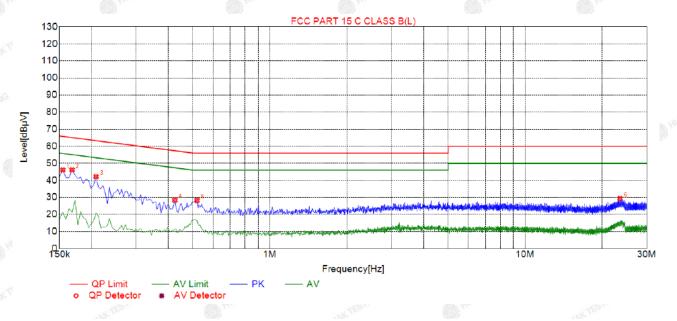
### 4.2. Test Result

Remark: All the test modes completed for test. only the worst result

Of was reported as below:

Conducted Emission on Line Terminal of the power line (150 kHz to 30MHz)



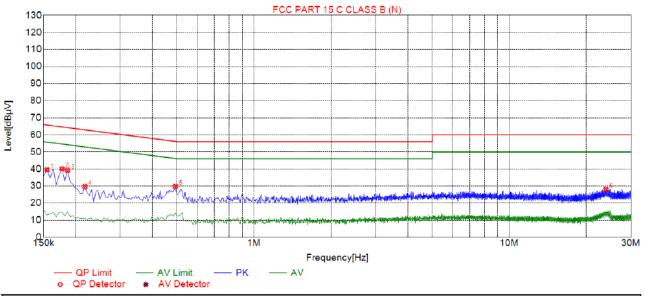


	Suspected List								
60233	NO.	Freq. [MHz]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Reading [dBµV]	Detector	Туре
	1	0.1545	46.09	20.03	65.75	19.66	26.06	PK	L
	2	0.1680	46.13	20.01	65.06	18.93	26.12	PK	L
8	3	0.2085	42.17	20.04	63.26	21.09	22.13	PK	L
ď	4	0.4245	28.40	20.04	57.36	28.96	8.36	PK	L
1	5	0.5190	28.21	20.04	56.00	27.79	8.17	PK	L
	6	23.5365	29.41	20.21	60.00	30.59	9.20	PK	L

Remark: Margin = Limit - Level

Correction factor = Cable lose + LISN insertion loss Level=Test receiver reading + correction factor

#### Test Specification: Neutral



Sus	Suspected List									
NO.	Freq. [MHz]	Level [dBµV]	Factor [dB]	Limit [dBµV]	Margin [dB]	Reading [dBµV]	Detector	Туре		
1	0.1545	39.52	20.03	65.75	26.23	19.49	PK	N		
2	0.1770	40.06	20.05	64.63	24.57	20.01	PK	N		
3	0.1860	39.16	20.05	64.21	25.05	19.11	PK	N		
4	0.2175	29.67	20.05	62.91	33.24	9.62	PK	N		
5	0.4920	29.78	20.04	56.13	26.35	9.74	PK	N		
6	23.9055	28.00	20.22	60.00	32.00	7.78	PK	N		

Remark: Margin = Limit – Level Correction factor = Cable lose + LISN insertion loss Level=Test receiver reading + correction factor

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# 4.3. Maximum Conducted Output Power

## **Test Specification**

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)				
Test Method:	KDB 558074 D01 15.247 Meas Guidance v05r02				
Limit:	30dBm				
Test Setup:	RF automatic control unit  EUT  HUMPTESTING  HUMPTESTING  HUMPTESTING  HUMPTESTING  HUMPTESTING  HUMPTESTING  HUMPTESTING				
Test Mode:	Transmitting mode with modulation				
Test Procedure:	<ol> <li>The testing follows the Measurement Procedure of FCC KDB 558074 D01 15.247 Meas Guidance v05r02.</li> <li>The RF output of EUT was connected to the RF automatic control unit by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Measure the Peak output power and record the results in the test report.</li> </ol>				
Test Result:	PASS				

#### **Test Instruments**

RF Test Room							
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due		
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 17, 2023	Feb. 16, 2024		
Power meter	Agilent	E4419B	HKE-085	Feb. 17, 2023	Feb. 16, 2024		
Power Sensor	Agilent	E9300A	HKE-086	Feb. 17, 2023	Feb. 16, 2024		
RF cable	Times	1-40G	HKE-034	Feb. 17, 2023	Feb. 16, 2024		
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 17, 2023	Feb. 16, 2024		

Note: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).



# **Test Data**

Mode	Mode Test Channel		Maximum Peak Conducted Output Power	LIMIT
		(MHz)	(dBm)	dBm
802.11b	CH01	2412	14.87	30
802.11b	CH06	2437	13.63	30
802.11b	CH11	2462	13.67	30
802.11g	CH01	2412	13.68	30
802.11g	CH06	2437	14.36	30
802.11g	CH11	2462	14.40	30
802.11n(HT20)	CH01	2412	13.18	30
802.11n(HT20)	CH06	2437	12.98	30
802.11n(HT20)	CH11	2462	12.90	30
802.11n(HT40)	CH03	2422	12.76	30
802.11n(HT40)	CH06	2437	12.72	30
802.11n(HT40)	CH09	2452	12.84	30
				l

Note: 1.The test results including the cable lose.

## 4.4. Emission Bandwidth

## **Test Specification**

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)				
Test Method:	KDB 558074 D01 15.247 Meas Guidance v05r02				
Limit:	>500kHz				
Test Setup:	Spectrum Analyzer EUT	MG			
Test Mode:	Transmitting mode with modulation				
Test Procedure:	<ol> <li>The testing follows FCC KDB Publication 558074 D01 15.247 Meas Guidance v05r02.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz.</li> <li>Measure and record the results in the test report.</li> </ol>				
Test Result:	PASS				

#### **Test Instruments**

RF Test Room						
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due	
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 17, 2023	Feb. 16, 2024	
RF cable	Times	1-40G	HKE-034	Feb. 17, 2023	Feb. 16, 2024	
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 17, 2023	Feb. 16, 2024	

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

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## **Test data**

Toot shannel	6dB Emission Bandwidth (MHz)						
Test channel	802.11b	802.11g	802.11n(H20)	802.11n(H40)			
Lowest	8.08	16.08	15.12	35.20			
Middle	8.04	15.12	15.08	35.68			
Highest	8.04	16.28	15.40	35.36			
Limit:	3 MILAKTES	>!	500kHz	- O O			
Test Result:	TOX	TESTING WUAKTESTI	PASS	TIME WAY TESTING			

Test plots as follows:



### 802.11b Modulation

#### Lowest channel



#### Middle channel



#### Highest channel



#### 802.11g Modulation

#### Lowest channel



#### Middle channel



#### Highest channel



TEICATION.

#### 802.11n (HT20) Modulation

#### Lowest channel



#### Middle channel



#### Highest channel



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#### 802.11n (HT40) Modulation

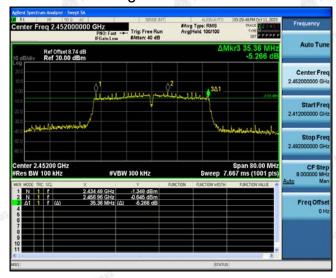
#### Lowest channel



#### Middle channel



#### Highest channel





# 4.5. Power Spectral Density

# **Test Specification**

Test Requirement:	FCC Part15 C Section 15.247 (e)					
Test Method:	KDB 558074 D01 15.247 Meas Guidance v05r02					
Limit:	The average power spectral density shall not be greate than 8dBm in any 3kHz band at any time interval ocontinuous transmission.					
Test Setup:	Spectrum Analyzer					
Test Mode:	Transmitting mode with modulation					
Test Procedure:	<ol> <li>The testing follows Measurement procedure 10.2 method PKPSD of FCC KDB Publication 558074 D01 15.247 Meas Guidance v05r02.</li> <li>The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Make the measurement with the spectrum analyzer's resolution bandwidth (RBW): 3 kHz ≤ RBW ≤ 100 kHz. Video bandwidth VBW ≥ 3 x RBW. Set the span to at least 1.5 times the OBW.</li> <li>Detector = Peak, Sweep time = auto couple.</li> <li>Employ trace averaging (Peak) mode over a minimum of 100 traces. Use the peak marker function to determine the maximum power level.</li> <li>Measure and record the results in the test report.</li> </ol>					
Test Result:	PASS (Market Market Mar					

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#### **Test Instruments**

RF Test Room						
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due	
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 17, 2023	Feb. 16, 2024	
RF Cable (9KHz-26.5GHz)	Tonscend	170660	N/A	Feb. 17, 2023	Feb. 16, 2024	
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 17, 2023	Feb. 16, 2024	
RF test software	Tonscend	JS1120-B Version 2.6	HKE-083	N/A	N/A	

**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).



Test data

EUT Set Mode	Channel	Test Result (dBm/30kHz)	Result (dBm/3kHz)				
	Lowest	1.06	-8.94				
802.11b	Middle	0.76	-9.24				
	Highest	0.55	-9.45				
	Lowest	0.37	-9.63				
802.11g	Middle	0.31	-9.69				
	Highest	-0.14	-10.14				
	Lowest	-0.29	-10.29				
802.11n(H20)	Middle	-0.80	-10.80				
	Highest	-1.84	-11.84				
	Lowest	-2.40	-12.40				
802.11n(H40)	Middle	-2.78	-12.78				
	Highest	-2.88	-12.88				
PSD test result (dE	3m/3kHz)= PSD	test result (dBm/30k	Hz)-10				
Limit: 8dBm/3kHz							
Test Result:	, TESTI	PASS					

Test plots as follows:

#### 802.11b Modulation

#### Lowest channel



#### Middle channel

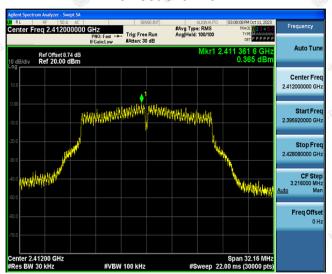


#### Highest channel

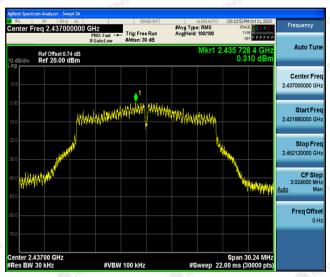


#### 802.11g Modulation

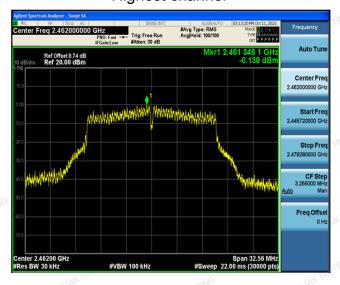
#### Lowest channel



Middle channel



Highest channel



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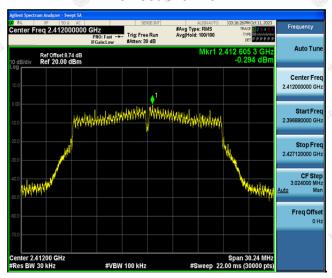
TEL: +86-755 2302 9901 FAX: +86-755 2302 9901 E-mail: service@cer-mark.com

Add: 1-2F., Building B2, Junfeng Zhongcheng Zhizao Innovation Park, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China



#### 802.11n (HT20) Modulation

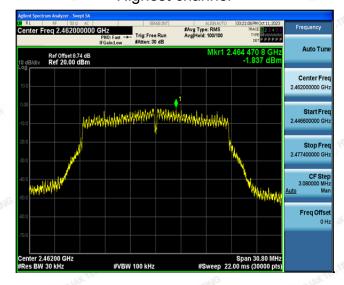
#### Lowest channel



Middle channel



Highest channel



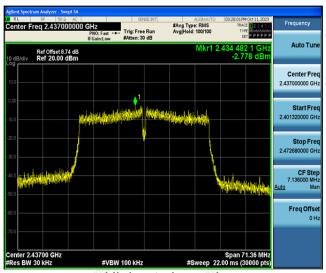


#### 802.11n (HT40) Modulation

#### Lowest channel



Middle channel



Highest channel





# 4.6. Conducted Band Edge and Spurious Emission Measurement

## **Test Specification**

Test Requirement:	FCC Part15 C Section 15.247 (d)				
Test Method:	KDB 558074 D01 15.247 Meas Guidance v05r02				
Limit:	In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement and radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).				
Test Setup:	Spectrum Analyzer EUT				
Test Mode:	Transmitting mode with modulation				
Test Procedure:	<ol> <li>Transmitting mode with modulation</li> <li>The testing follows FCC KDB Publication 558074 D01 15.247 Meas Guidance v05r02.</li> <li>The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.</li> <li>Set to the maximum power setting and enable the EUT transmit continuously.</li> <li>Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).</li> <li>Measure and record the results in the test report.</li> <li>The RF fundamental frequency should be excluded</li> </ol>				
	against the limit line in the operating frequency band.				

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#### **Test Instruments**

RF Test Room						
Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due	
Spectrum analyzer	Agilent	N9020A	HKE-048	Feb. 17, 2023	Feb. 16, 2024	
High pass filter unit	Tonscend	JS0806-F	HKE-055	Feb. 17, 2023	Feb. 16, 2024	
RF Cable (9KHz-26.5GHz)	Tonscend	170660	N/A	Feb. 17, 2023	Feb. 16, 2024	
RF automatic control unit	Tonscend	JS0806-2	HKE-060	Feb. 17, 2023	Feb. 16, 2024	
RF test software	Tonscend	JS1120-B Version 2.6	HKE-083	N/A	N/A	

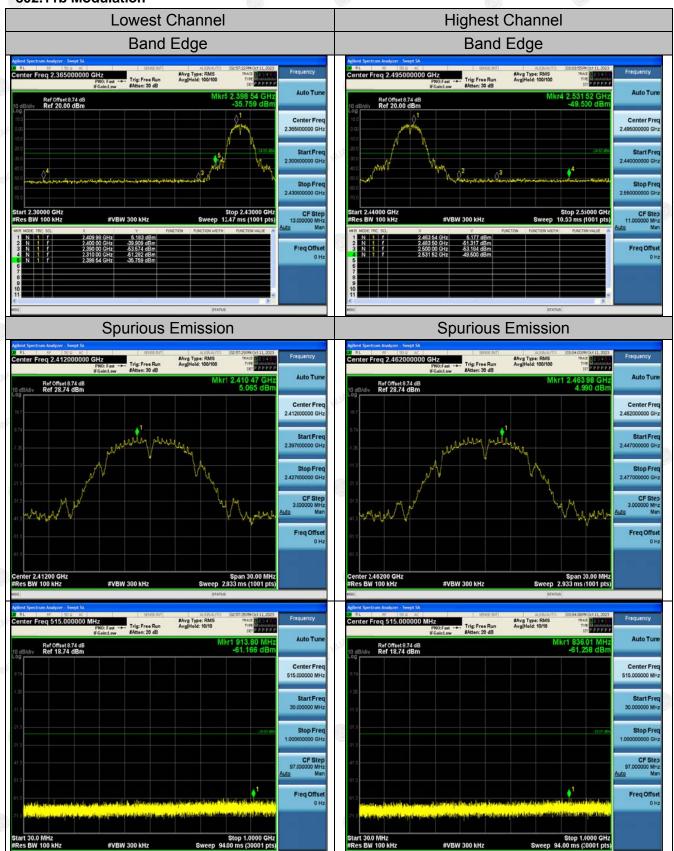
**Note:** The calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).

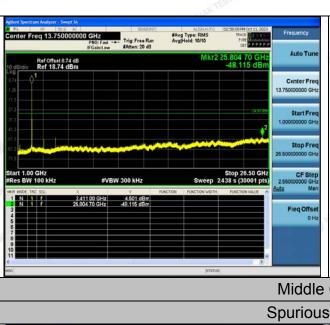
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#### **Test Data**

#### 802.11b Modulation



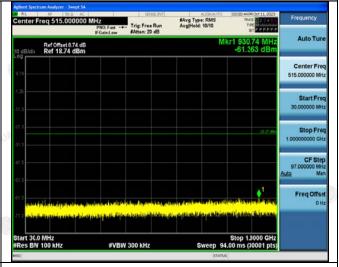




### Middle Channel

### Spurious Emission







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