

TEST REPORT

Product Name Model Numbe	, -, -, -, -, -, -, -,			
FCC ID	Max, JL9, JL9 Pro, JL9 Plus, JL9 Max, JL3 : 2A79Y-X1			
Prepared for Address Prepared by Address	 Dongguan Xinjia Laser Technology Co.,Ltd. Room 602, No.419, Jinxing Road, Liaobu Town, Dongguan City, Guangdong Province EMTEK (DONGGUAN) CO., LTD. -1&2/F.,Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base, No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China TEL: +86-0769-22807078 FAX: +86-0769-22807079 			

Report Number	:	EDG2406250151	E00101R
Date(s) of Tests	:	june 25, 2024 to	july 08, 2024
Date of issue	:	july 08, 2024	



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1 **TEST RESULT CERTIFICATION**

Applicant	:	Dongguan Xinjia Laser Technology Co.,Ltd.
Address	:	Room 602, No.419, Jinxing Road, Liaobu Town, Dongguan City, Guangdong Province
Manufacturer	:	Dongguan Xinjia Laser Technology Co.,Ltd.
Address	:	Room 602, No.419, Jinxing Road, Liaobu Town, Dongguan City, Guangdong Province
Factory	:	Dongguan Xinjia Laser Technology Co.,Ltd.
Address	:	Room 602, No.419, Jinxing Road, Liaobu Town, Dongguan City, Guangdong Province
EUT	:	Laser engraving machine
Model Name	:	JL3 Pro, A6, A6 Pro, A6 Plus, A6 Max, L2, L2 Pro, L2 Plus, L2 Max, X1, X1 Pro, X1 Plus, X1 Max, JL9, JL9 Pro, JL9 Plus, JL9 Max, JL3
Trademark	:	WAINLUX

Measurement Procedure Used:

APPLICABLE STANDARDS					
STANDARD	TEST RESULT				
FCC 47 CFR Part 2 , Subpart J FCC 47 CFR Part 15, Subpart C	PASS				
IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021) IC RSS-247 Issue 2(02-2017)	PASS				

The above equipment was tested by EMTEK (DONGGUAN) 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 the requirements of FCC Rules Part 2 and Part 15.247

The test results of this report relate only to the tested sample identified in this report.

Date of Test : june 25, 2024 to july 08, 2024 Warren Deng Prepared by : Warren Deng /Editor Reviewer : Tim Dong /Supervisor Approve & Authorized Signer : Sam Lv / Manager

EMTEK (Dongguan) Co., Ltd.



Modified History

Version	Report No.	Revision Date	Summary
V1.0	EDG2406250151E00101R	/	Original Report



 东莞市信測科技有限公司

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 EMTEK (Dongguan) Co., Ltd.

 Hd: -182/F .,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone,
 Dongguan, Guangdong,China Http://www.emtek.com.cn



EUT TECHNICAL DESCRIPTION 2

Characteristics	Description			
Product:	Laser engraving machine			
Model Number:	JL3 Pro, A6, A6 Pro, A6 Plus, A6 Max, L2, L2 Pro, L2 Plus, L2 Max, X1, X1 Pro, X1 Plus, X1 Max, JL9, JL9 Pro, JL9 Plus, JL9 Max, JL3 Note: All models are the same, except the model name. Select model JL3 Pro here to complete all the tests.			
Sample Number:	2#			
IEEE 802.11 WLAN Mode Supported:	802.11b 802.11g 802.11n(20MHz channel bandwidth) 802.11n(40MHz channel bandwidth)			
Modulation:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;			
Operating Frequency Range:	2412-2462MHz for 802.11b/g/n(HT20); 2422-2452MHz for 802.11n(HT40);			
Number of Channels:	11 channels for 802.11b/g/n(HT20); 7 Channels for 802.11n(HT40);			
Transmit Power Max:	14.53dBm(0.028379 W)			
Antenna Type:	FPC antenna			
Antenna Gain:	Antenna: 3.05 dBi			
Power Supply:	AC 100-240V, 50/60Hz			
Date of Received	june 25, 2024			
Temperature Range	0°C ~ +45°C			

Note: for more details, please refer to the User's manual of the EUT.



3 SUMMARY OF TEST RESULT

FCC Part Clause	IC Part Clause	Test Parameter	Verdict	Remark
15.247(a)(2)	RSS-247 5.2(a) RSS-Gen 6.7	Emission Bandwidth	PASS	
15.247(b)(3)	RSS-247 5.4(d) RSS-Gen 6.12	Maximum Peak Conducted Output Power	PASS	
15.247(e)	RSS-247 5.2(b) RSS-Gen 6.12	Maximum Power Spectral Density Level	PASS	
15.247(d)	RSS-247 5.5	Unwanted Emission Into Non-Restricted Frequency Bands	PASS	
15.247(d)	RSS-247 5.5	Unwanted Emission Into Restricted Frequency Bands (conducted)	PASS	
15.247(d) 15.209 15.205	RSS-Gen 8.9 RSS-Gen 8.10 RSS-Gen 6.13 RSS-247 3.3 RSS-247 5.5	Radiated Spurious Emission	PASS	
15.207	RSS-Gen 8.8	Conducted Emission Test	PASS	
15.203 15.247(b)	RSS-Gen 6.8 RSS-247 5.4	Antenna Application	PASS	
NOTE2: Acc		KDB 558074, the report use radiated me		

restricted frequency bands. In addition, the radiated test is also performed to ensure the emissions emanating from the device cabinet also comply with the applicable limits.

RELATED SUBMITTAL(S) / GRANT(S):

This submittal(s) (test report) is intended for **FCC ID: 2A79Y-X1** filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules.



4 TEST METHODOLOGY

4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to its specifications, the EUT must comply with the requirements of the following standards: FCC 47 CFR Part 2, Subpart J FCC 47 CFR Part 15, Subpart C IC RSS-GEN, Issue 5(04-2018)+A1(03-2019)+A2(02-2021) IC RSS-247 Issue 2(02-2017) FCC KDB 558074 D01 15.247 Meas Guidance v05r02 FCC KDB 662911 D01 Multiple Transmitter Output v02r01

4.2 MEASUREMENT EQUIPMENT USED Conducted Emission Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCI	100137	2024/4/29	1Year
AMN	Rohde&Schwarz	ENV216	101209	2024/4/28	1Year
AMN	Rohde&Schwarz	ENV216	100017	2024/4/28	1Year
RF Switching Unit	CDS	RSU-M2	38401	2024/4/28	1Year
AMN	Schwarzbeck	NNLK8121	8121-641	2024/4/28	1Year
AMN	Rohde&Schwarz	ESH3-Z6	101101	2024/4/28	1Year
AMN	Rohde&Schwarz	ESH3-Z6	101102	2024/4/28	1Year
Power Splitters & Dividers	Weinschel Associates	WA1506A	A1066	2024/4/28	1Year
Current Probe	FCC	F-52	8377	2024/4/28	1Year
Passive voltage probe	Rohde&Schwarz	ESH2-Z3	100122	2024/4/28	1Year

For Spurious Emissions Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	Rohde&Schwarz	ESCI	101415	2024/4/28	1Year
Bi-log Hybrid Antenna	Schwarzbeck	VULB9163	141	2024/5/5	1Year
Pre-Amplifie	HP	8447F	OPTH64	2024/4/28	1 Year
Signal Analyzer	R&S	FSV30	103039	2024/4/28	1 Year
Horn Antenna	Schwarzbeck	BBHA9120D	1272	2024/5/5	1Year
Horn Antenna	Schwarzbeck	BBHA9170	9170-567	2024/5/5	1Year
Pre-Amplifie	LUNAR EM	PM1-18-40	J1010000081	2024/4/28	1Year
Loop antenna	Schwarzbeck	FMZB1519	1519-012	2024/5/5	1Year

For other test items:

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
Wireless Connectivity Tester	R&S	CMW270	102543	2024/4/29	1Year
Automatic Control Unit	Tonscend	JS0806-2	2118060480	2024/4/29	1Year
Signal Analyzer	KEYSIGHT	N9010B	MY60242456	2024/4/29	1Year
Analog Signal Generator	KEYSIGHT	N5173B	MY61252625	2024/4/29	1Year
UP/DOWN-Converter	R&S	CMW-Z800A	100274	2024/4/29	1Year
Vector Signal Generator	KEYSIGHT	N5182B	MY61252674	2024/4/29	1Year
Frequency Extender	KEYSIGHT	N5182BX07	MY59362541	2024/4/29	1Year
Temperature&Humidity test chamber	ESPEC	EL-02KA	12107166	2024/4/29	1 Year

Remark: Each piece of equipment is scheduled for calibration once a year.



4.3 DESCRIPTION OF TEST MODES

The EUT has been tested under its typical operating condition.

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (802.11b: 1 Mbps; 802.11g: 6 Mbps; 802.11n (HT20): MCS0; 802.11n (HT40): MCS0;) were used for all test.

Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	5	2432	9	2452
2	2417	6	2437	10	2457
3	2422	7	2442	11	2462
4	2427	8	2447		

Frequency and Channel list for 802.11 b/g/n(HT20):

Frequency and Channel list for 802.11n(HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	6	2437	9	2452
4	2427	7	2442		
5	2432	8	2447		

Test Frequency and Channel for 802.11 b/g/n(HT20):

Lowest F	Frequency	Middle F	requency	Highes	st Frequency
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	6	2437	11	2462

Test Frequency and channel for 802.11n(HT40):

Lowest F	Frequency	Middle F	Middle Frequency Highest Frequency		st Frequency
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	6	2437	9	2452

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FACILITIES AND ACCREDITATIONS 5

FACILITIES 5.1

All measurement facilities used to collect the measurement data are located at: EMTEK (DONGGUAN) CO., LTD.

-1&2/F.,Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base, No.9,

Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong,

ChinaEQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with preselectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.2 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description		
EMC Lab.	:	Accredited by CNAS, 2020.08.27 The certificate is valid until 2024.07.05 The Laboratory has been assessed and proved to be in compliance with CNAS/CL01:2018 The Certificate Registration Number is L3150 Accredited by FCC Designation Number: CN1300 Test Firm Registration Number: 945551
		Accredited by A2LA, April 05, 2021 The Certificate Registration Number is 4321.02
		Accredited by Industry Canada The Certificate Registration Number is CN0113
Name of Firm Site Location	:	EMTEK (DONGGUAN) CO., LTD. -1&2/F.,Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base, No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China



6 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Parameter	Measurement Uncertainty
Radio Frequency	±1x10^-5
Maximum Peak Output Power Test	±1.0dB
Conducted Emissions Test	±2.0dB
Radiated Emission Test	±2.0dB
Power Density	±2.0dB
Occupied Bandwidth Test	±1.0dB
Band Edge Test	±3dB
All emission, radiated	±3dB
Antenna Port Emission	±3dB
Temperature	±0.5°C
Humidity	±3%

Measurement Uncertainty for a level of Confidence of 95%

 东赛市信测科技有限公司

 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层,第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail: project@emtek.com.cn

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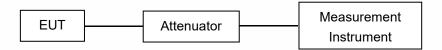
 Add: -1&2/F .,Building 2,Zone A,Zhongda Marine Biotechnology Research and Development Base ,No.9, Xincheng Avenue,Songshanhu High-technology Industrial Development Zone,
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7 SETUP OF EQUIPMENT UNDER TEST

7.1 RADIO FREQUENCY TEST SETUP 1

The WLAN component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



7.2 RADIO FREQUENCY TEST SETUP 2

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10. The test distance is 3m.The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360° , and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

Below 30MHz:

The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna (loop antenna). The Antenna should be positioned with its plane vertical at the specified distance from the EUT and rotated about its vertical axis for maximum response at each azimuth about the EUT. The center of the loop shall be 1 m above the ground. For certain applications, the loop antenna plane may also need to be positioned horizontally at the specified distance from the EUT.

Above 30MHz:

The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360° , and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

Above 1GHz:

The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360° , and the receive antenna has two polarizations Vertical (V) and Horizontal (H).

Measurements shall be taken, using the following steps, at a test site that has been validated using the procedures of ANSI C63.4 or the latest CISPR 16-1-4 for measurements above 1 GHz, so as to simulate a near free-space environment (see RSS-Gen for applicable versions of ANSI and CISPR standards). (1) Line the ground plane with absorbers between the transmitter and the receive antenna to minimize reflections. The absorbers used should have a minimum-rated attenuation of 20 dB through the measurement frequency range of interest. The absorbers shall be positioned to replicate the layout used when compliance with the applicable acceptability criterion was achieved, as set forth in the aforementioned standards on site validation.

(2) Set the height of the receive antenna to 1.5 m. The receive antenna must be one that was designed and fabricated to operate over the entire frequency range of interest, for example, an appropriate standard gain horn.

(3) The distance between the receive antenna and the radiating source shall be sufficient in order to ensure far-field conditions.

(4) Mount the transmitter at a height of 1.5 m.

(5) Configure the device under test (DUT) to produce the maximum power spectral density as measured while assessing compliance with Section 6.2.2 (i.e. channel frequency, modulation type and data rate). If the DUT is equipped with a detachable antenna and the antenna is intended for remote installation (i.e.



tower-mounted), the DUT may be substituted with a suitable signal generator. The level and frequency settings on the generator shall be set so as to reproduce the maximum power spectral density, measured within a 1 MHz bandwidth, obtained while assessing compliance to Section 6.2.2.

(6) Position the transmitter or the radiating antenna so that elevation pattern measurements can be taken. (7) Find the 0° reference point in the horizontal plane.

(8) Care should be taken when positioning the receive antenna to avoid cross-polarization. Antennas of known mounting polarization should be assessed with the receive antenna oriented in the same polarity. If the polarization of the transmit antenna is unknown or the transmit antenna can be mounted in either polarization, e.i.r.p. measurements should be performed to find which

mounting polarity provides the highest e.i.r.p. value. Testing shall be carried out with the receive antenna and the DUT mounted in each polarity.

(9) The emission shall be centred on the display of the spectrum analyzer with the following settings: i. If the power spectral density of the DUT was assessed with a peak detector and the antenna cannot be detached from the DUT, the spectrum analyzer shall be set to a peak detector with a resolution bandwidth and video bandwidth of 1 MHz.

ii. If the power spectral density of the DUT was assessed using a sample detector with power averaging and the antenna cannot be detached from the DUT, the spectrum analyzer shall be set to a sample detector, configured to produce 100 power averages and set with a resolution bandwidth, as well as a video bandwidth of 1 MHz.

iii. If the antenna can be detached from the DUT, a continuous wave (CW) signal equal to that of the power spectral density measurement may be used, the spectrum analyzer shall be set to peak detector with a resolution bandwidth and video bandwidth of 1 MHz.

(10) Rotate the turntable 360° recording the field strength at each step. Throughout the main beam of the antenna, the step size shall be kept to a maximum of 1°.

Once outside the main beam of the antenna, the maximum step size shall be as follows, when compared to the requirements of Section 6.2.2:

i. Between 0° and 8°, maximum step size of 2°:

ii. Between 8° and 40°, maximum step size of 4°;

iii. Between 40° and 45°, maximum step size of 1°;

iv. Between 45° and 90°, maximum step size of 5°.

Once the mask reaches 90°, the mask will be inverted and the step size will follow in the same manner as above.

For the purpose of this procedure, the main beam of the antenna is defined as the 3 dB beamwidth. (11) Convert the measured field strength values in terms of e.i.r.p. density (dBW/1 MHz) using the following equation:

e.i.r.p density(dBW/MHz)=10log((E*r)²/30)

E = field strength in V/m

r = measurement distance in metres

(12) Plot the results against the emission mask with reference to the horizontal plane.

(13) Using the plot, the 0° can be rotated to determine the worst-case installation tilt angle.

(14) Testing shall be performed using the highest gain antenna for every antenna type, if applicable.

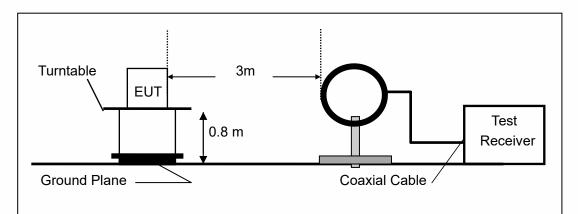
(15) Antenna type(s), antenna model number(s), and worst-case tilt angle(s) necessary to remain compliant with the elevation mask requirement set forth in Section 6.2.2(3) of RSS-247 shall be clearly

indicated in the user manual.

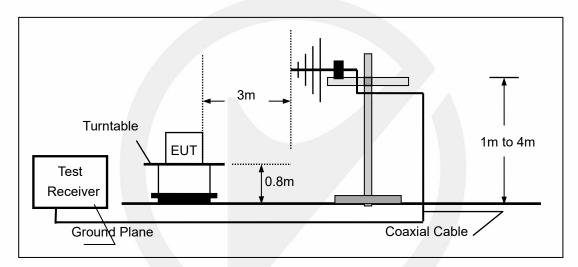
The following figure is an example of a polar elevation mask measured using the Method 1 reference to dBµV/m at 3 m.



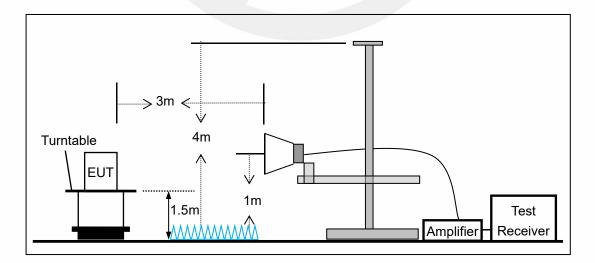
(a) Radiated Emission Test Set-Up, Frequency Below 30MHz



(b) Radiated Emission Test Set-Up, Frequency Below 1000MHz



(c) Radiated Emission Test Set-Up, Frequency above 1000MHz



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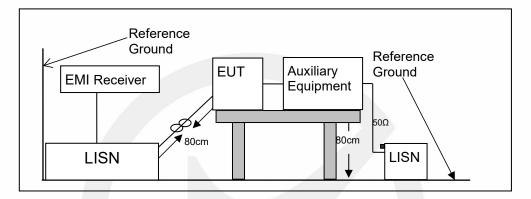


7.3 CONDUCTED EMISSION TEST SETUP

The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

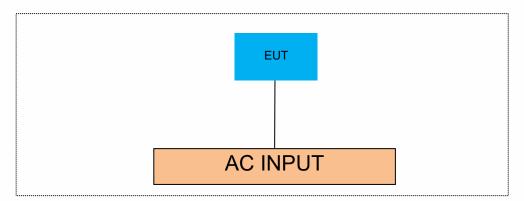
Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.8 m.

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.





7.4 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM



7.5 SUPPORT EQUIPMENT

EUT Cable List and Details							
Description	Manufacturer	Model	Serial Number				
Adapter	Shenzhen KaiLiYuan Technology Co., Ltd	K651-240250 0U	/				

Auxiliary Cable List and Details						
Cable Description Length (m) Shielded/Unshielded With / Without Ferri						
/	1	1	/			

Auxiliary Equipment List and Details							
Description	Manufacturer	Model	Serial Number				
Notebook	Lenovo	E46L	11S168003748Z0LR0 6E0HG				
1	1	1	/				

Notes:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



8 TEST REQUIREMENTS

8.1 DTS 6DB BANDWIDTH

8.1.1 Applicable Standard

According to FCC Part15.247 (a)(2) and KDB 558074 D01 15.247 Meas Guidance v05r02 According to RSS-247 5.2(a)

8.1.2 Conformance Limit

The minimum -6 dB bandwidth shall be at least 500 kHz.

8.1.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.1.4 Test Procedure

The EUT was operating in WIFI mode and controlled its channel. Printed out the test result from the spectrum by hard copy function.

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.

Set to the maximum power setting and enable the EUT transmit continuously

Set RBW = 100 kHz.

Set the video bandwidth (VBW) =300 kHz.

Set Span=2 times OBW

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

Allow the trace to stabilize.

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Measure and record the results in the test report.

8.1.5 Test Results

Temperature:	25°C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

Note: N/A

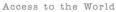


TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	9.480	2407.000	2416.480	0.5	PASS
11B	Ant1	2437	9.600	2432.000	2441.600	0.5	PASS
11B	Ant1	2462	8.920	2457.400	2466.320	0.5	PASS
11G	Ant1	2412	16.400	2403.760	2420.160	0.5	PASS
11G	Ant1	2437	16.400	2428.760	2445.160	0.5	PASS
11G	Ant1	2462	16.360	2453.800	2470.160	0.5	PASS
11N20SISO	Ant1	2412	17.560	2403.200	2420.760	0.5	PASS
11N20SISO	Ant1	2437	17.560	2428.200	2445.760	0.5	PASS
11N20SISO	Ant1	2462	17.320	2453.440	2470.760	0.5	PASS
11N40SISO	Ant1	2422	33.440	2405.120	2438.560	0.5	PASS
11N40SISO	Ant1	2437	33.280	2420.360	2453.640	0.5	PASS
11N40SISO	Ant1	2452	33.280	2435.360	2468.640	0.5	PASS



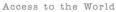


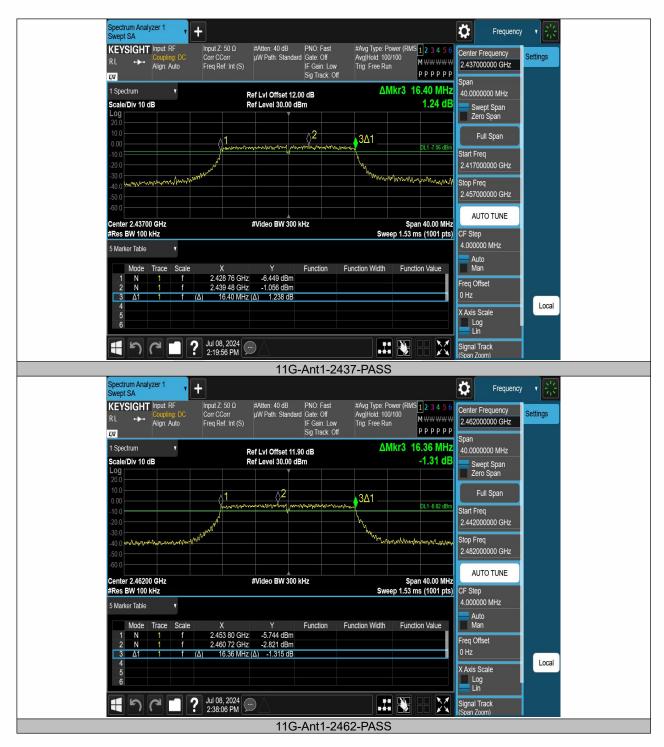




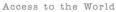


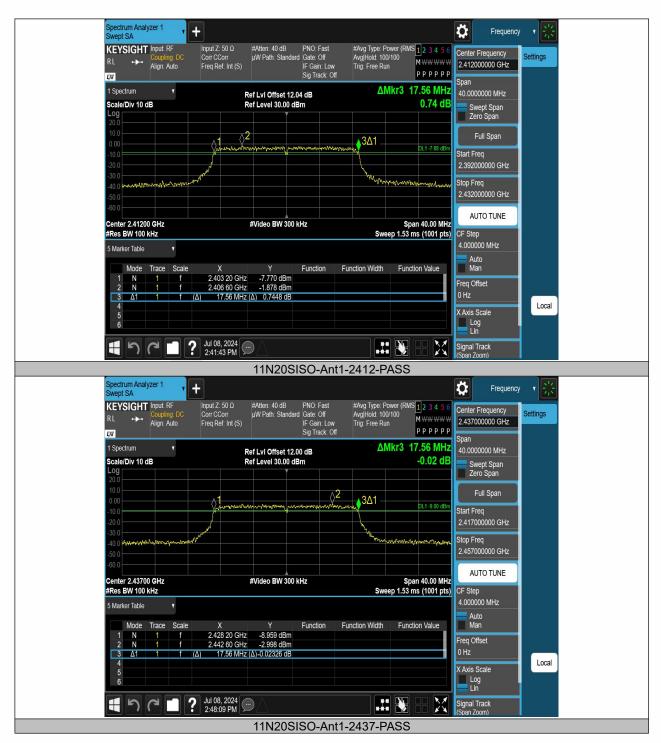




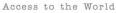


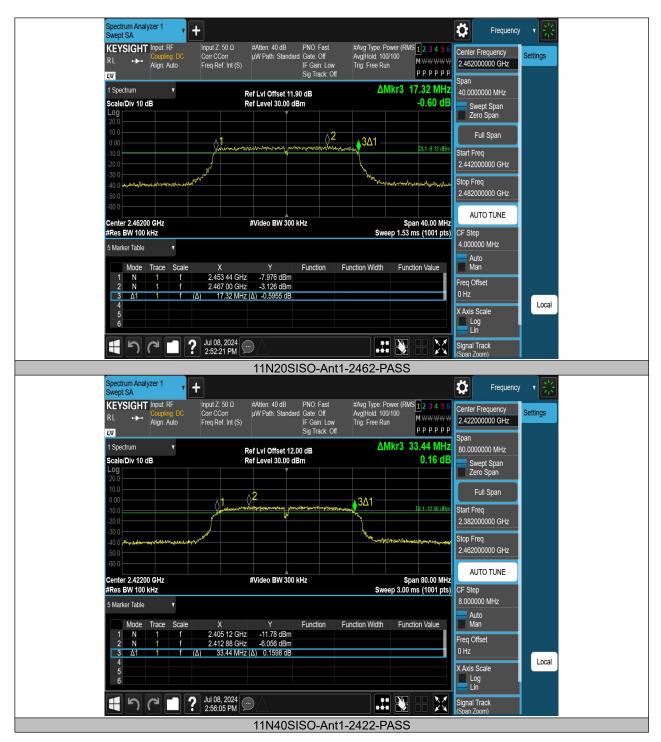




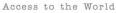


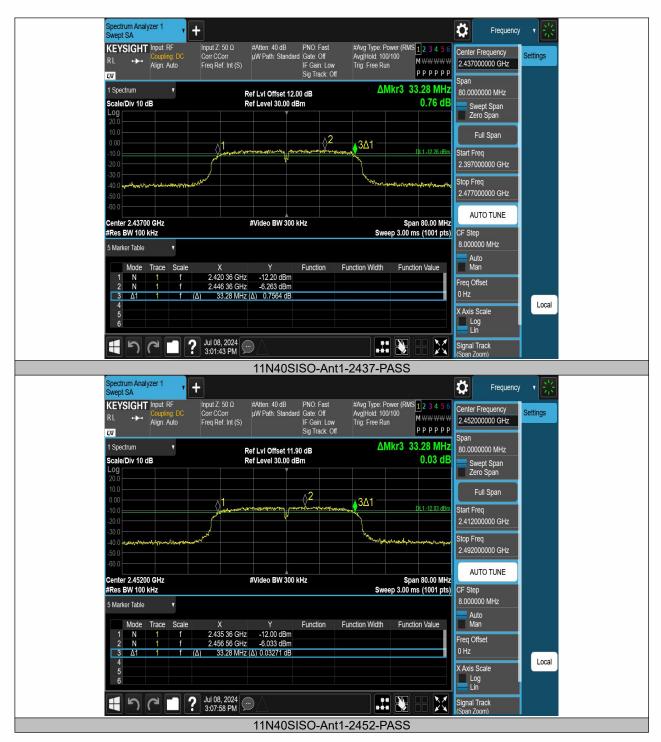














8.2 DTS 99% BANDWIDTH

8.2.1 Applicable Standard

According to RSS-Gen 6.7 and KDB 558074 D01 DTS Meas Guidance v05r02

8.2.2 Test Configuration

Test according to clause 7.1 radio frequency test setup 1

8.2.3 Test Procedure

The EUT was operating in Bluetooth mode and controlled its channel. Printed out the test result from the spectrum by hard copy function.

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.

Set to the maximum power setting and enable the EUT transmit continuously

Set RBW = 1%-5% OBW.

Set the video bandwidth (VBW) \geq 3*RBW.

Set Span=approximately 2 to 3 times the 20 dB bandwidth.

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

Allow the trace to stabilize.

Use the 99 % power bandwidth function of the instrument

Measure the maximum width of the emission.

If this value varies with different modes of operation (e.g., data rate, modulation format, etc.), repeat this test for each variation.

Measure and record the results in the test report.

8.2.4 Test Results

Temperature:	25°C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

Note: N/A



TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.570	2405.0912	2418.6612		
11B	Ant1	2437	13.425	2430.2050	2443.6300		
11B	Ant1	2462	13.849	2454.9758	2468.8248		
11G	Ant1	2412	16.653	2403.6619	2420.3149		
11G	Ant1	2437	16.685	2428.6572	2445.3422		
11G	Ant1	2462	16.681	2453.6331	2470.3141		
11N20SISO	Ant1	2412	17.455	2403.2472	2420.7022		
11N20SISO	Ant1	2437	17.470	2428.2607	2445.7307		
11N20SISO	Ant1	2462	17.474	2453.2345	2470.7085		
11N40SISO	Ant1	2422	34.923	2404.5283	2439.4513		
11N40SISO	Ant1	2437	34.981	2419.5327	2454.5137		
11N40SISO	Ant1	2452	34.829	2434.5826	2469.4116		



Access to the World





Access to the World





Access to the World





Spectrum Analyzer 1 Occupied BW Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Atten: 40 dB Trig: Free Run µW Path: Standard Gate: Off #IF Gain: Low Center Freq: 2.412000000 GHz KEYSIGHT Input: RF Center Frequency 2.412000000 GHz Avg|Hold: 100/100 Radio Std: None Settings Align: Auto L)(I Span Mkr1 2.411160000 GHz 1 Graph 40.000 MHz Ref LvI Offset 12.04 dB Ref Value 30.00 dBm 4.17 dBm Scale/Div 10.0 dB CF Step Log 4.000000 MHz ♦1 Auto Man Freq Offset A AM A Shi da anti-Center 2.41200 GHz #Res BW 430.00 kHz Span 40 MHz Sweep 1.00 ms (1001 pts) #Video BW 1.3000 MHz 2 Metrics Occupied Bandwidth 17.455 MHz 18 0 dBm Total Power -25.292 kHz % of OBW Power Transmit Freq Error 99.00 % Local x dB Bandwidth 20.81 MHz x dB -26.00 dB モアア CP エア Jul 08, 2024 💬 X 11N20SISO-Ant1-2412 Spectrum Analyzer 1 Occupied BW Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Atten: 40 dB Trig: Free Run μW Path: Standard Gate: Off #IF Gain: Low Center Freq: 2.437000000 GHz Avg|Hold: 100/100 Radio Std: None KEYSIGHT Input: RF Center Frequency Settings Align: Auto 2.437000000 GHz L)(I Spar Mkr1 2.436280000 GHz 1 Graph 40.000 MHz Ref LvI Offset 12.00 dB 3.34 dBm Ref Value 30.00 dBm Scale/Div 10.0 dB CF Step 4.000000 MHz Auto Man Freq Offset 0 Hz where have have and Archedy Center 2.43700 GHz #Res BW 430.00 kHz #Video BW 1.3000 MHz Span 40 MHz Sweep 1.00 ms (1001 pts) 2 Metrics Occupied Bandwidth 17.470 MHz Total Power 17.0 dBm -4.343 kHz 20.17 MHz 99.00 % -26.00 dB Transmit Freq Error % of OBW Power Local x dB Bandwidth x dB \mathbb{X} 11N20SISO-Ant1-2437



Spectrum Analyzer 1 Occupied BW Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Center Freq: 2.462000000 GHz Avg|Hold: 100/100 Radio Std: None Atten: 40 dB Trig: Free Run µW Path: Standard Gate: Off #IF Gain: Low KEYSIGHT Input: RF Center Frequency 2.462000000 GHz Settings Align: Auto L)(I Span Mkr1 2.462800000 GHz 1 Graph 40.000 MHz Ref LvI Offset 11.90 dB Ref Value 30.00 dBm 3.64 dBm Scale/Div 10.0 dB CF Step Log 4.000000 MHz ▲1 Auto Man Freq Offset Center 2.46200 GHz #Res BW 430.00 kHz Span 40 MHz Sweep 1.00 ms (1001 pts) #Video BW 1.3000 MHz 2 Metrics Occupied Bandwidth 17.474 MHz 17 2 dBm Total Power -28.533 kHz % of OBW Power Transmit Freq Error 99.00 % Local x dB Bandwidth 20.14 MHz x dB -26.00 dB H C C I ? Jul 08, 2024 💬 X 11N20SISO-Ant1-2462 Spectrum Analyzer 1 Occupied BW Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Atten: 40 dB Trig: Free Run μW Path: Standard Gate: Off #IF Gain: Low Center Freq: 2.422000000 GHz Avg|Hold: 100/100 Radio Std: None KEYSIGHT Input: RF Center Frequency Settings Align: Auto 2.422000000 GHz L)(I Spar Mkr1 2.423600000 GHz 1 Graph Ref Lvi Offset 12.00 dB Ref Value 30.00 dBm 80.000 MHz 3.67 dBm Scale/Div 10.0 dB CF Step 8.000000 MHz **^**1 Auto Man Freq Offset 0 Hz Center 2.42200 GHz #Res BW 820.00 kHz #Video BW 2.7000 MHz Span 80 MHz Sweep 1.00 ms (1001 pts) 2 Metrics Occupied Bandwidth 34.923 MHz Total Power 17.7 dBm -10.217 kHz 39.14 MHz 99.00 % -26.00 dB Transmit Freq Error % of OBW Power Local x dB Bandwidth x dB \mathbb{X} 11N40SISO-Ant1-2422



Spectrum Analyzer 1 Occupied BW Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Atten: 40 dB Trig: Free Run µW Path: Standard Gate: Off #IF Gain: Low Center Freq: 2.437000000 GHz KEYSIGHT Input: RF Center Frequency 2.437000000 GHz Avg|Hold: 100/100 Radio Std: None Settings Align: Auto L)(I Span Mkr1 2.445880000 GHz 1 Graph 80.000 MHz Ref LvI Offset 12.00 dB Ref Value 30.00 dBm 3.78 dBm Scale/Div 10.0 dB CF Step Log 8.000000 MHz 1 Auto Man Freq Offset Center 2.43700 GHz #Res BW 820.00 kHz Span 80 MHz Sweep 1.00 ms (1001 pts) #Video BW 2.7000 MHz 2 Metrics Occupied Bandwidth 34 981 MHz 17.3 dBm Total Power 23.177 kHz 39.18 MHz % of OBW Power Transmit Freq Error 99.00 % Local x dB Bandwidth x dB -26.00 dB ー つ つ **ロ ?** Jul 08, 2024 💬 X 11N40SISO-Ant1-2437 Spectrum Analyzer 1 Occupied BW Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S) Atten: 40 dB Trig: Free Run μW Path: Standard Gate: Off #IF Gain: Low Center Freq: 2.452000000 GHz Avg|Hold: 100/100 Radio Std: None KEYSIGHT Input: RF Center Frequency Settings Align: Auto 2.452000000 GHz L)(I Spar Mkr1 2.453520000 GHz 1 Graph Ref Lvi Offset 11.90 dB Ref Value 30.00 dBm 80.000 MHz 3.56 dBm Scale/Div 10.0 dB CF Step 8.000000 MHz ▲1 Auto Man Freq Offset 0 Hz Center 2.45200 GHz #Res BW 820.00 kHz #Video BW 2.7000 MHz Span 80 MHz Sweep 1.00 ms (1001 pts) 2 Metrics Occupied Bandwidth 34.829 MHz Total Power 17.4 dBm 99.00 % -26.00 dB Transmit Freq Error -2.856 kHz % of OBW Power Local x dB Bandwidth 39.13 MHz x dB \mathbb{X} 11N40SISO-Ant1-2452



8.3 MAXIMUM PEAK CONDUCTED OUTPUT POWER

8.3.1 **Applicable Standard**

According to FCC Part15.247 (b)(3) and KDB 558074 D01 15.247 Meas Guidance v05r02 According to RSS-247 5.4(d) and RSS-Gen 6.12

8.3.2 **Conformance Limit**

The maximum conducted output power of the intentional radiator for systems using digital modulation in the 2400 - 2483.5 MHz bands shall not exceed: 1 Watt (30dBm).

8.3.3 **Test Configuration**

Test according to clause 6.1 radio frequency test setup

8.3.4 **Test Procedure**

a) Set span to at least 1.5 times the OBW.

b) Set RBW = 1-5% of the OBW, not to exceed 1 MHz.

c) Set VBW \geq 3 x RBW.

d) Number of points in sweep $\geq 2 \times \text{span} / \text{RBW}$. (This gives bin-to-bin spacing $\leq \text{RBW}/2$, so that narrowband signals are not lost between frequency bins.)

e) Sweep time = auto.

f) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

g) If transmit duty cycle < 98 %, use a sweep trigger with the level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle \geq 98 %, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".

h) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

i) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

According to FCC Part 15.247(b)(4):

Conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Note: If antenna Gain exceeds 6 dBi, then Output power Limit=30-(Gain- 6)

8.3.5 **Test Results**

Temperature:	25 °C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

Note: N/A



Test Mode	Antenn a	Frequency[MH z]	Averag e power [dBm]	Duty Cycle [%]	DC Facto r [dBm]	Resu It [dBm]	Limit [dBm]	Gai n [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdi ct
11B	Ant1	2412	14.53	100.0 0	0.00	14.53	≤30.0 0	3.0 5	17.5 8	≪ 36.00	PASS
11B	Ant1	2437	13.75	100.0 0	0.00	13.75	≤30.0 0	3.0 5	16.8 0	≪ 36.00	PASS
11B	Ant1	2462	14.26	100.0 0	0.00	14.26	≤30.0 0	3.0 5	17.3 1	≤36.0 0	PASS
11G	Ant1	2412	11.70	100.0 0	0.00	11.70	≤30.0 0	3.0 5	14.7 5	≪ 36.00	PASS
11G	Ant1	2437	12.34	100.0 0	0.00	12.34	≤30.0 0	3.0 5	15.3 9	≪ 36.00	PASS
11G	Ant1	2462	10.97	100.0 0	0.00	10.97	≤30.0 0	3.0 5	14.0 2	≪ 36.00	PASS
11N20SIS O	Ant1	2412	11.54	100.0 0	0.00	11.54	≤30.0 0	3.0 5	14.5 9	≪ 36.00	PASS
11N20SIS O	Ant1	2437	10.56	100.0 0	0.00	10.56	≤30.0 0	3.0 5	13.6 1	≪ 36.00	PASS
11N20SIS O	Ant1	2462	10.75	100.0 0	0.00	10.75	≤30.0 0	3.0 5	13.8 0	≪ 36.00	PASS
11N40SIS O	Ant1	2422	10.58	100.0 0	0.00	10.58	≤30.0 0	3.0 5	13.6 3	≪ 36.00	PASS
11N40SIS O	Ant1	2437	10.12	100.0 0	0.00	10.12	≤30.0 0	3.0 5	13.1 7	≪ 36.00	PASS
11N40SIS O	Ant1	2452	10.21	100.0 0	0.00	10.21	≤30.0 0	3.0 5	13.2 6	≪ 36.00	PASS

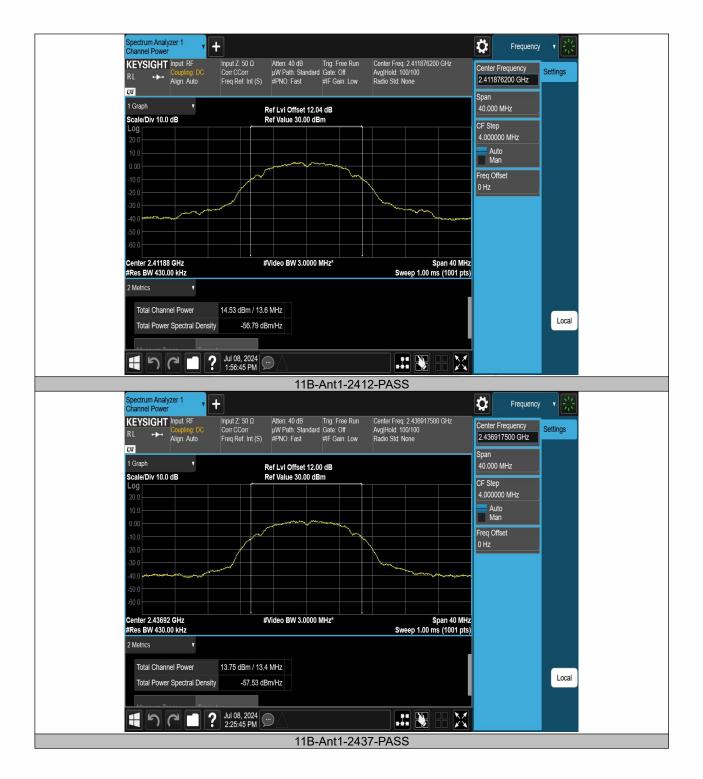
 东莞市信測科技有限公司

 地址:广东省东莞市松山湖高新技术产业开发区新城大道9号中大海洋生物科技研发基地A区2号办公楼负一层、第二层 网址:Http://www.emtek.com.cn 邮箱:E-mail:project@emtek.com.cn

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 Dongguan, Guangdong,China Http://www.emtek.com.cn







Spectrum Analyzer 1 Channel Power Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)
 Atten: 40 dB
 Trig: Free Run

 μW Path: Standard
 Gate: Off

 #PNO: Fast
 #IF Gain: Low
 Center Freq: 2.461900300 GHz Avg|Hold: 100/100 Radio Std: None KEYSIGHT Input: RF Center Frequency 2.461900300 GHz Settings Align: Auto L)(I Span 1 Graph 40.000 MHz Ref LvI Offset 11.90 dB Ref Value 30.00 dBm Scale/Div 10.0 dB CF Step Log 4.000000 MHz Auto Man Freq Offset Center 2.46190 GHz #Res BW 430.00 kHz #Video BW 3.0000 MHz* Span 40 MHz Sweep 1.00 ms (1001 pts) 2 Metrics Total Channel Power 14.26 dBm / 13.8 MHz Local -57.15 dBm/Hz Total Power Spectral Density 目のでで? Jul 23, 2024 🗩 X 11B-Ant1-2462-PASS Spectrum Analyzer 1 Channel Power Ö + Frequency Center Freq: 2.411988400 GHz Avg|Hold: 100/100 Radio Std: None Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)
 Atten: 40 dB
 Trig: Free Run

 μW Path: Standard
 Gate: Off

 #PNO: Fast
 #IF Gain: Low
 KEYSIGHT Input: RF Center Frequency Settings Align: Auto 2.411988400 GHz L)(I Spar 1 Graph V Ref Lvi Offset 12.04 dB Ref Value 30.00 dBm 40.000 MHz Scale/Div 10.0 dB CF Step 4.000000 MHz _0g Auto Man Freq Offset 0 Hz Center 2.41199 GHz #Res BW 430.00 kHz #Video BW 3.0000 MHz* Span 40 MHz Sweep 1.00 ms (1001 pts) 2 Metrics 11.70 dBm / 16.7 MHz Total Channel Power Local Total Power Spectral Density -60.52 dBm/Hz II (08, 2024) 2:33:12 PM X 11G-Ant1-2412-PASS



Spectrum Analyzer 1 Channel Power Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)
 Atten: 40 dB
 Trig: Free Run

 μW Path: Standard
 Gate: Off

 #PNO: Fast
 #IF Gain: Low
 Center Freq: 2.436999700 GHz KEYSIGHT Input: RF Center Frequency 2.436999700 GHz Avg|Hold: 100/100 Radio Std: None Settings Align: Auto L)(I Span 1 Graph 40.000 MHz Ref LvI Offset 12.00 dB Ref Value 30.00 dBm Scale/Div 10.0 dB CF Step Log 4.000000 MHz Auto Man Freq Offset Center 2.43700 GHz #Res BW 430.00 kHz #Video BW 3.0000 MHz* Span 40 MHz Sweep 1.00 ms (1001 pts) 2 Metrics Total Channel Power 12.34 dBm / 16.7 MHz Local -59.88 dBm/Hz Total Power Spectral Density **モアア (* 11) ?** Jul 08, 2024 💬 X 11G-Ant1-2437-PASS Spectrum Analyzer 1 Channel Power Ö + Frequency Input Z: 50 Ω Corr CCorr Freq Ref: Int (S)
 Atten: 40 dB
 Trig: Free Run

 μW Path: Standard
 Gate: Off

 #PNO: Fast
 #IF Gain: Low
 Center Freq: 2.461973600 GHz Avg|Hold: 100/100 Radio Std: None KEYSIGHT Input: RF Center Frequency Settings Align: Auto 2.461973600 GHz L)(I Spar 1 Graph V Ref Lvi Offset 11.90 dB Ref Value 30.00 dBm 40.000 MHz Scale/Div 10.0 dB CF Step 4.000000 MHz _0g Auto Man Freq Offset 0 Hz Center 2.46197 GHz #Res BW 430.00 kHz #Video BW 3.0000 MHz* Span 40 MHz Sweep 1.00 ms (1001 pts) 2 Metrics 10.97 dBm / 16.7 MHz Total Channel Power Local Total Power Spectral Density -61.25 dBm/Hz II (08, 2024) 2:38:20 PM X 11G-Ant1-2462-PASS



Spectrum Analyzer 1 Channel Power	Frequency	y y Siz	
KEYSIGHT Input RF Input Z 50 Ω Atten: 40 dB Trig: Free Run Center Freq: 2.411974700 GHz RI Coupling: DC Corr Corr μW Path: Standard Gate: Off Avg]Hold: 100/100	Center Frequency	Settings	
RL → Align Auto Freq Ref. Int (S) #PNO: Fast #IF Gain Low Radio Std. None	2.411974700 GHz		
1 Graph Y Ref LvI Offset 12.04 dB	Span 40.000 MHz		
Scale/Div 10.0 dB Ref Value 30.00 dBm	CF Step		
	4.000000 MHz		
	Auto Man		
-10.0	Freq Offset	1	
-20.0	0 Hz		
-30.0			
-50.0			
-60.0			
Center 2.41197 GHz #Video BW 3.0000 MHz* Span 40 MHz #Res BW 430.00 kHz Sweep 1.00 ms (1001 pts)			
2 Metrics v			
Total Channel Power 11.54 dBm / 17.5 MHz			
Total Power Spectral Density -60.88 dBm/Hz		Local	
╡り┍゙ ᆸ ? Jul 08, 2024 2:41:57 PM			
11N20SISO-Ant1-2412-PASS			
Channel Power	Frequency	/ 1 器	
KEYSIGHT Input RF Input Z 50 Ω Atten: 40 dB Trig: Free Run Center Free: 2.436995700 GHz RL → Augn. Auto Free Ref. Int (S) #PNO Fast #HF Gain. Low Avgl.Hold: 100/100	Center Frequency	Settings	
Align: Auto Freq Ref. Int (S) #PNO: Fast #IF Gain: Low Radio Std: None	2.436995700 GHz		
1 Graph Ref Lvl Offset 12.00 dB	Span 40.000 MHz		
Scale/Div 10.0 dB Ref Value 30.00 dBm	CF Step		
20.0	4.000000 MHz	1	
	Auto Man		
-10.0	Freq Offset		
-20.0	0 Hz		
-50.0			
-60.0			
Center 2.43700 GHz #Video BW 3.0000 MHz* Span 40 MHz #Res BW 430.00 kHz Sweep 1.00 ms (1001 pts)			
2 Metrics V			
Total Channel Power 10.56 dBm / 17.5 MHz			
Total Power Spectral Density -61.87 dBm/Hz		Local	
Manual Torrest			
II 0 C I ? Jul 08, 2024			
11N20SISO-Ant1-2437-PASS			



KEYSIGHT Input: RF	+				
KEYSIGHT Input: RF			\$	Frequency v	
DI Coupling: DC	Input Z: 50 Ω Atten: 40 dB Corr CCorr µW Path: Stand		0 Center I	requency Settings	
Align: Auto	Freq Ref: Int (S) #PNO: Fast	#IF Gain: Low Radio Std: None		1500 GHz	
1 Graph v	Ref LvI Offset 1	1.90 dB	Span 40.000	MHz	
Scale/Div 10.0 dB	Ref Value 30.00	dBm	CF Step		
20.0			4.0000		
10.0			Aut Ma		
-10.0			Freq Of 0 Hz	set	
-20.0					
-40.0 -40.0	harden and the second s		Annalantana		
-50.0					
-60.0					
Center 2.46197 GHz #Res BW 430.00 kHz	#Video BW 3.00		Span 40 MHz 1.00 ms (1001 pts)		
2 Metrics v					
Total Channel Power	10.75 dBm / 17.5 MHz				
Total Power Spectral Densi	ity -61.67 dBm/Hz			Local	
H	- 4				
1 n a l i	? Jul 08, 2024 2:52:34 PM				
		SISO-Ant1-2462-PA			
Spectrum Analyzer 1 Channel Power	+		\$	Frequency v	
Chariner rower					
KEYSIGHT Input: RF	Input Z: 50 Ω Atten: 40 dB	Trig: Free Run Center Freq: 2.42		requency	
KEYSIGHT Input: RF RL ↔ Coupling: DC Align: Auto	Input Z: 50 Ω Atten: 40 dB Corr CCorr μW Path: Stand Freq Ref: Int (S) #PNO: Fast		0 Center i	requency Settings 9800 GHz	
KEYSIGHT Input: RF RL ↔ Coupling: DC Align: Auto	Corr CCorr µW Path: Stanc Freq Ref: Int (S) #PNO: Fast	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None	0 2.4219 Span	9800 GHz	
KEYSIGHT Input: RF RL ↔ INT Align: Auto 1 Graph ▼ Scale/Div 10.0 dB	Corr CCorr µW Path: Stand	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4219 Span 80.000	9800 GHz	
KEYSIGHT Input: RF RL F Coupling: DC DXI 1 Graph	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4219 Span	9800 GHz	
KEYSIGHT Input RF RL → Coupling: DC Align: Auto Log 20.0 10.0	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4213 Span 80.000 CF Step 8.0000 Aut	9800 GHz MHz 0 MHz	
KEYSIGHT Input RF RL ↔ Coupling: DC Align: Auto Scale/Div 10.0 dB Log 20.0 0.00	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4219 Span 80.000 CF Step 8.0000	9800 GHz MHz 0 MHz	
KEYSIGHT Input RF RL → Coupling: DC Align: Auto Log 20.0 10.0	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4213 Span 80.000 CF Step 8.0000 Autor Ma	9800 GHz MHz 0 MHz	
KEYSIGHT Input: RF RL ++ Coupling: DC Align: Auto U Scale/Div 10.0 dB Log 20 0 10 0 0.00	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4213 Span 80.000 CF Step 8.0000 Aut Ma	9800 GHz MHz 0 MHz	
KEYSIGHT Input: RF RL → VI Align: Auto 1 Graph ▼ Scale/Div 10.0 dB ■ Log ■ 20.0 ■ 10.0 ■ 0.00 ■ -10.0 ■ -20.0 ■ -30.0 ■	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4213 Span 80.000 CF Step 8.0000 Aut Ma	9800 GHz MHz 0 MHz	
KEYSIGHT Input: RF RL ++ Coupling: DC Align: Auto U Scale/Div 10.0 dB Log 20 0 10 0 0.00	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4213 Span 80.000 CF Step 8.0000 Aut Ma	9800 GHz MHz 0 MHz	
KEYSIGHT Input: RF RL → Coupling: DC Align: Auto X 1 Graph ▼ Scale/Div 10.0 dB ▼ Log ▼ 20.0 ■ 10.0 ■ 0.00 ■ -10.0 ■ -20.0 ■ -30.0 ■ -60.0 ■ Center 2.42199 GHz ■	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off #F Gain: Low Radio Std. None (2.00 dB) dBm	0 Center 1 2.4213 Span 80.000 CF Step 8.0000 Aut Ma Freq Of 0 Hz	9800 GHz MHz 0 MHz	
KEYSIGHT Input: RF RL → Coupling: DC Aign: Auto X 1 Graph ▼ Scale/Div 10.0 dB ▼ Log ▼ 20.0 ■ 10.0 ■ 0.00 ■ -20.0 ■ -30.0 ■ -60.0 ■ Center 2.42199 GHz #Res BW 820.00 kHz	Corr CCorr Freq Ref. Int (S) #PNO. Fast Ref Lvi Offset 1 Ref Value 30.00	dard Gate: Off #F Gain: Low Radio Std. None (2.00 dB) dBm	0 2.4213 Span 80.000 CF Step 8.0000 Aut 9 Hz 9 Hz	9800 GHz MHz 0 MHz	
KEYSIGHT Input RF RL → Couping: DC Align: Auto Align: Auto I Graph ▼ Scale/Div 10.0 dB ■ Log ■ 200 ■ 100 ■ 200 ■ -00	Corr CCorr Freq Ref. Int (S) #PNO. Fast Ref Lvi Offset 1 Ref Value 30.00 #Video BW 3.00	dard Gate: Off #F Gain: Low Radio Std. None (2.00 dB) dBm	0 Center 1 2.4213 Span 80.000 CF Step 8.0000 Aut Ma Freq Of 0 Hz	9800 GHz MHz 0 MHz	
KEYSIGHT Input RF RL Imput RF I Graph Imput RF Scale/Div 10.0 dB Imput RF Log Imput RF 20 0 Imput RF 10 0 Imput RF 20 0 Imput RF 10 0 Imput RF 20 0 Imput RF Center 2.42199 GHz Imput RF #Res BW 820.00 kHz Imput RF 2 Metrics Imput RF Total Channel Power Imput RF	Corr CCorr Freq Ref. Int (S) #PNO. Fast Ref Lvi Offset 1 Ref Value 30.00 #Video BW 3.00 #Video BW 3.00	dard Gate: Off #F Gain: Low Radio Std. None (2.00 dB) dBm	0 Center 1 2.4213 Span 80.000 CF Step 8.0000 Aut Ma Freq Of 0 Hz	9800 GHz MHz 0 MHz	
KEYSIGHT Input RF RL → Couping: DC Align: Auto Align: Auto I Graph ▼ Scale/Div 10.0 dB ■ Log ■ 200 ■ 100 ■ 200 ■ -00	Corr CCorr Freq Ref. Int (S) #PNO. Fast Ref Lvi Offset 1 Ref Value 30.00 #Video BW 3.00 #Video BW 3.00	dard Gate: Off #F Gain: Low Radio Std. None (2.00 dB) dBm	0 Center 1 2.4213 Span 80.000 CF Step 8.0000 Aut Ma Freq Of 0 Hz	9800 GHz WHz 0 MHz bet	
KEYSIGHT Input: RF RL → VU Align: Auto 1 Graph ▼ Scale/Div 10.0 dB 0 Log 0 20 0 0 10 0 0 000 0 -00 0	Corr CCorr Freq Ref. Int (S) #PNO. Fast Ref Lvi Offset 1 Ref Value 30.00 #Video BW 3.00 #Video BW 3.00	dard Gate: Off #F Gain: Low Radio Std. None (2.00 dB) dBm	0 Center 1 2.4219 Span 80.000 CF Step 8.0000 Aut 0 Hz 5pan 90 MHz 1.00 ms (1001 pts)	9800 GHz WHz 0 MHz bet	
KEYSIGHT Input: RF RL → Coupling: DC Align: Auto Log 20.0 10.0	Corr CCorr Freq Ref: Int (S) #PNO: Fast Ref Lvi Offset 1	dard Gate: Off Avg Hold: 100/10 #IF Gain: Low Radio Std: None 12.00 dB	0 2.4213 Span 80.000 CF Step 8.0000 Aut	9800 GHz MHz 0 MHz	