



<b>Prüfbericht-Nr.:</b> <i>Test report no.:</i>	<b>60412423 001</b>	<b>Auftrags-Nr.:</b> <i>Order no.:</i>	168277703	Seite 1 von 20 Page 1 of 20																								
<b>Kunden-Referenz-Nr.:</b> <i>Client reference no.:</i>	N/A	<b>Auftragsdatum:</b> <i>Order date:</i>	2020-08-13																									
<b>Auftraggeber:</b> <i>Client:</i>	<b>Cherry GmbH</b> Cherrystr.,91275 Auerbach/OPf. Germany																											
<b>Prüfgegenstand:</b> <i>Test item:</i>	Wireless Desktop																											
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type no.:</i>	JD-70R (Trademark: CHERRY)																											
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	FCC approval																											
<b>Prüfgrundlage:</b> <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.249 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 CFR47 FCC Part 2: Section 2.1093																											
<b>Wareneingangsdatum:</b> <i>Date of sample receipt:</i>	2020-08-13	Please refer to photo documents																										
<b>Prüfmuster-Nr.:</b> <i>Test sample no.:</i>	A002887787-001, 002																											
<b>Prüfzeitraum:</b> <i>Testing period:</i>	2020-08-14 – 2020-09-18																											
<b>Ort der Prüfung:</b> <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.																											
<b>Prüflaboratorium:</b> <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.																											
<b>Prüfergebnis*:</b> <i>Test result*:</i>	Pass																											
<b>geprüft von:</b> <i>tested by:</i>	<b>genehmigt von:</b> <i>authorized by:</i>																											
<b>Datum:</b> <i>Date:</i> 2020-09-21			<b>Ausstellungsdatum:</b> <i>Issue date:</i> 2020-09-21 																									
<b>Stellung / Position</b>	Alex Lan / Senior Project Engineer	<b>Stellung / Position</b>	Winnie Hou / Technical Certifier																									
<b>Sonstiges / Other:</b>  FCC ID: GDDJD-70R																												
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>		<b>Prüfmuster vollständig und unbeschädigt</b> <i>Test item complete and undamaged:</i>																										
<table border="0"> <tr> <td>* Legende:</td> <td>1 = sehr gut</td> <td>2 = gut</td> <td>3 = befriedigend</td> <td>4 = ausreichend</td> <td>5 = mangelhaft</td> </tr> <tr> <td></td> <td>P(ass) = entspricht o.g. Prüfgrundlage(n)</td> <td>F(ail) = entspricht nicht o.g. Prüfgrundlage(n)</td> <td>N/A = nicht anwendbar</td> <td>N/T = nicht getestet</td> <td></td> </tr> <tr> <td>Legend:</td> <td>1 = very good</td> <td>2 = good</td> <td>3 = satisfactory</td> <td>4 = sufficient</td> <td>5 = poor</td> </tr> <tr> <td></td> <td>P(ass) = passed a.m. test specifications(s)</td> <td>F(ail) = failed a.m. test specifications(s)</td> <td>N/A = not applicable</td> <td>N/T = not tested</td> <td></td> </tr> </table>					* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft		P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet		Legend:	1 = very good	2 = good	3 = satisfactory	4 = sufficient	5 = poor		P(ass) = passed a.m. test specifications(s)	F(ail) = failed a.m. test specifications(s)	N/A = not applicable	N/T = not tested	
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<p><b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b></p> <p><i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i></p>																												

V05

## **Test Summary**

**5.1.1 ANTENNA REQUIREMENT**

*RESULT: Pass*

**5.1.2 FUNDAMENTAL & HARMONICS RADIATED EMISSION**

*RESULT: Pass*

**5.1.3 20dB BANDWIDTH**

*RESULT: Pass*

**5.1.4 RADIATED SPURIOUS EMISSION & BAND EDGE**

*RESULT: Pass*

**5.1.5 CONDUCTED EMISSION ON AC MAINS**

*RESULT: Pass*

**6.1.1 ELECTROMAGNETIC FIELDS**

*RESULT: Pass*

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## 1 General Remarks

### 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Photographs of the Test Set-up

Appendix B: Test Results of General 2.4GHz wireless.

## 2 Test Sites

### 2.1 Test Facilities

**TÜV Rheinland (Shenzhen) Co., Ltd. Testing Center**

No. 362 Huanguan Road Middle, Longhua District, Shenzhen 518110, People's Republic of China

FCC Registration No.: 694916

IC Registration No.: 25069

## 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

<b>Radio Spectrum Testing</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
Wireless Connectivity Tester	Rohde & Schwarz	CMW270	101375	2021-08-30
Signal Analyzer	Rohde & Schwarz	FSV 40	101441	2021-08-30
Vector Signal Generator	Rohde & Schwarz	SMBV100A	263301	2021-08-30
Signal Generator	Rohde & Schwarz	SMB100A	115186	2021-08-30
OSP	Rohde & Schwarz	OSP 150	101017	2021-12-20
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	Rohde & Schwarz	WMS32 (V10.40.10)	N/A	N/A
Power Meter	Rohde & Schwarz	NRP2	107105	2021-12-20
Wideband Power Sensor	Rohde & Schwarz	NRP-Z81	105350	2021-12-20
<b>Unwanted Emission Testing</b>				
<b>Equipment</b>	<b>Manufacturer</b>	<b>Model No.</b>	<b>Serial No.</b>	<b>Cal. Until</b>
Signal Generator	Rohde & Schwarz	SMB100A	180840	2021-08-30
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	165339	2021-08-30
Signal Analyzer	Rohde & Schwarz	FSV 40	101440	2021-08-30
System Controller Interface	Rohde & Schwarz	SCI-100	S10010036	N/A
Filterbank	Rohde & Schwarz	CDMA	100751	2021-08-30
Filterbank	Rohde & Schwarz	GSM	100811	2021-08-30
OSP	Rohde & Schwarz	OSP 120	102041	N/A
OSP	Rohde & Schwarz	OSP 150	101385	N/A
Pre-amplifier	Rohde & Schwarz	SCU08F1	08320030	2021-08-30
Amplifier	Rohde & Schwarz	SCU-18F	180079	2021-08-30
Amplifier	Rohde & Schwarz	SCU40A	100450	2021-09-03
Trilog Broadband Antenna (30 MHz - 1 GHz)	Schwarzbeck	VULB9162	192	2021-09-02
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218719	2021-09-02
Wideband Ridged Horn Antenna (12-18 GHz)	Steatite	QMS-00208	18312	2021-09-02
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19066	2021-09-02
Biconical Broadband Antenna (30 MHz - 1 GHz)	Schwarzbeck	VUBA 9117	357	2021-09-02

Double Ridged Broadband Horn Antenna (1 – 18 GHz)	Schwarzbeck	BBHA 9120 D	01760	2021-09-02
Broadband Horn Antenna (15 – 40 GHz)	Schwarzbeck	BBHA 9170	00862	2021-09-02
Test software	Rohde & Schwarz	EMC32 (V10.40.00)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NW9P2	N/A

**Conducted Emission on AC Mains**

Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR3	102428	2021-09-03
Artificial Mains Network	R&S	ENV216	102333	2021-08-19
Artificial Mains Network	R&S	ENV432	101411	2021-08-19
Attenuator	R&S	ESH2Z31	100300	2021-08-19
EMC32 test software	R&S	EMC32(Ver.10.50.01 )	N/A	N/A

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Item	Extended Uncertainty
Conducted Emission	± 2.68 dB
Radiated Emission (30-1000MHz)	Field strength (dB $\mu$ V/m) ± 5.16 dB
Radiated Emission (above 1000MHz)	Field strength (dB $\mu$ V/m) ± 2.22 dB
Radio Spectrum	± 4.51 dB

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Guangdong) Ltd. file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Testing Center Test facility located at No. 362 Huanguan Road Middle, Longhua District, Shenzhen 518110, People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

### 3 General Product Information

#### 3.1 Product Function and Intended Use

The EUT is Wireless USB Dongle; it supports general 2.4GHz wireless technology.

For details refer to the User Manual, Technical Description and Circuit Diagram.

#### 3.2 Ratings and System Details

**Table 2: Technical Specification of EUT**

General Information of EUT	Value
Kind of Equipment	Wireless Desktop
Type Designation	JD-70R
FCC ID	GDDJD-70R
Operating Voltage	DC 5V via USB interface
Testing Voltage	DC 5V
Operating Frequency	2408 ~ 2474MHz
Type of Modulation	GFSK
Channel Number	34 channel
Channel Separation	2 MHz
Antenna Type	Integral Antenna
Antenna number	1
Antenna Gain	-1.66 dBi Max

**Table 3: RF Channel and Frequency**

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
<b>00</b>	<b>2408.00</b>	09	2426.00	18	2444.00	27	2462.00
01	2410.00	10	2428.00	19	2446.00	28	2464.00
02	2412.00	11	2430.00	20	2448.00	29	2466.00
03	2414.00	12	2432.00	21	2450.00	30	2468.00
04	2416.00	13	2434.00	22	2452.00	31	2470.00
05	2418.00	14	2436.00	23	2454.00	32	2472.00
06	2420.00	15	2438.00	24	2456.00	<b>33</b>	<b>2474.00</b>
07	2422.00	<b>16</b>	<b>2440.00</b>	25	2458.00		
08	2424.00	17	2442.00	26	2460.00		



### 3.3 Independent Operation Modes

The basic operation modes are:

- A. On, transmitting mode
  - 1. Low channel
  - 2. Middle channel
  - 3. High channel
- B. On, normal operating
- C. Off

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- Application Form
- Block Diagram
- FCC/IC Label and Location Info
- Operation Description
- Photo Document
- Schematics
- User Manual

## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013 & ANSI C63.4:2014.

### 4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model
Notebook PC	Lenovo	ThinkPad X260

### 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

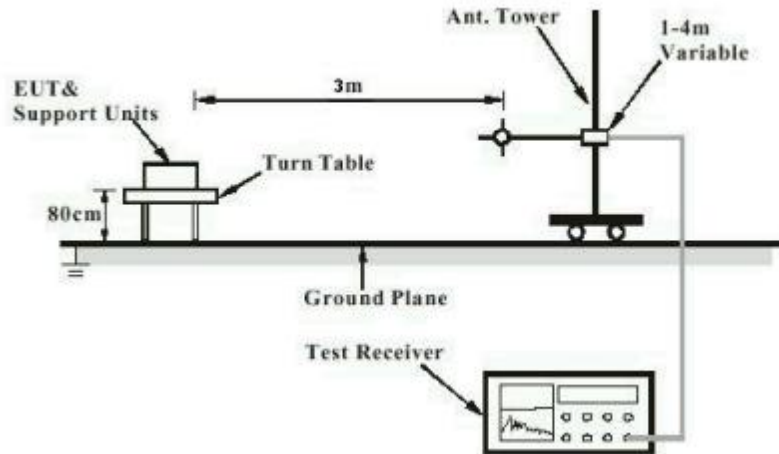


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

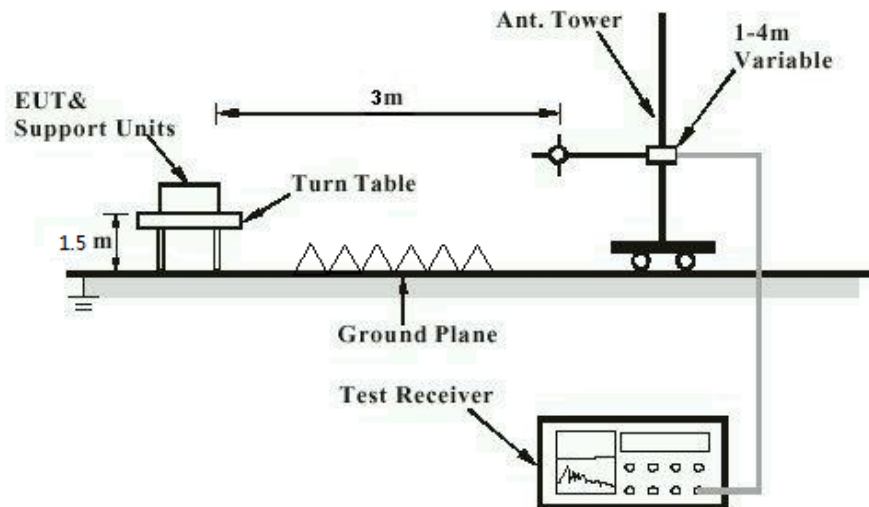


Diagram of Measurement Configuration for Mains Conduction Measurement

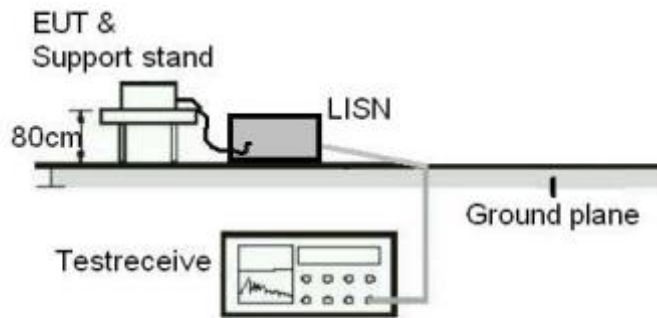
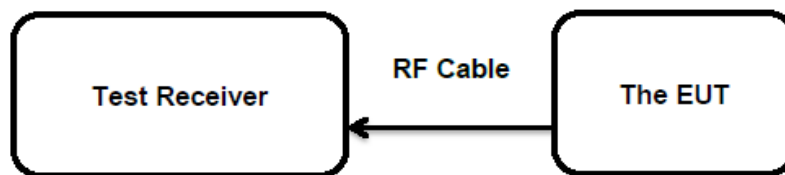


Diagram of Measurement Configuration for Conducted Transmitter Measurement



## 5 Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Antenna Requirement

**RESULT:****Pass****Test Specification**

Test standard : FCC Part 15.247(b)(4) and Part 15.203

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is -1.66 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

## 5.1.2 Fundamental & Harmonics Radiated Emission

**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.249(a)
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to FCC Part 15.209(a)
Kind of test site	: Shielded Room

**Test Setup**

Date of testing	: 26.08.2020
Input voltage	: DC 5V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 22 °C
Relative humidity	: 50 %
Atmospheric pressure	: 100 kPa

For the measurement records, refer to the appendix B.

### 5.1.3 20dB Bandwidth

**RESULT:**
**Pass**
**Test Specification**

 Test standard : FCC Part 15.215  
 Basic standard : ANSI C63.10: 2013  
 Kind of test site : Shielded Room

**Test Setup**

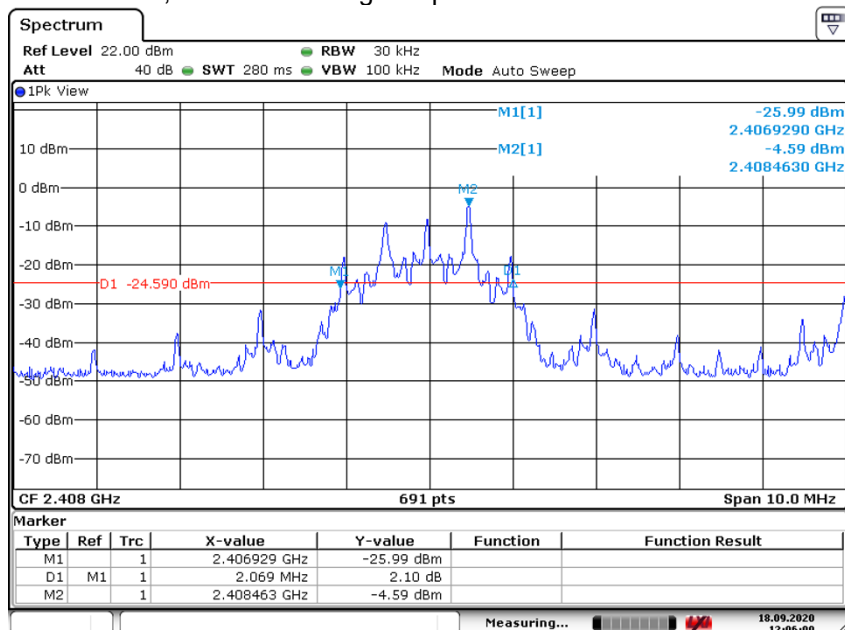
 Date of testing : 18.09.2020  
 Input voltage : DC 5V  
 Operation mode : A  
 Ambient temperature : 22 °C  
 Relative humidity : 50 %  
 Atmospheric pressure : 100 kPa

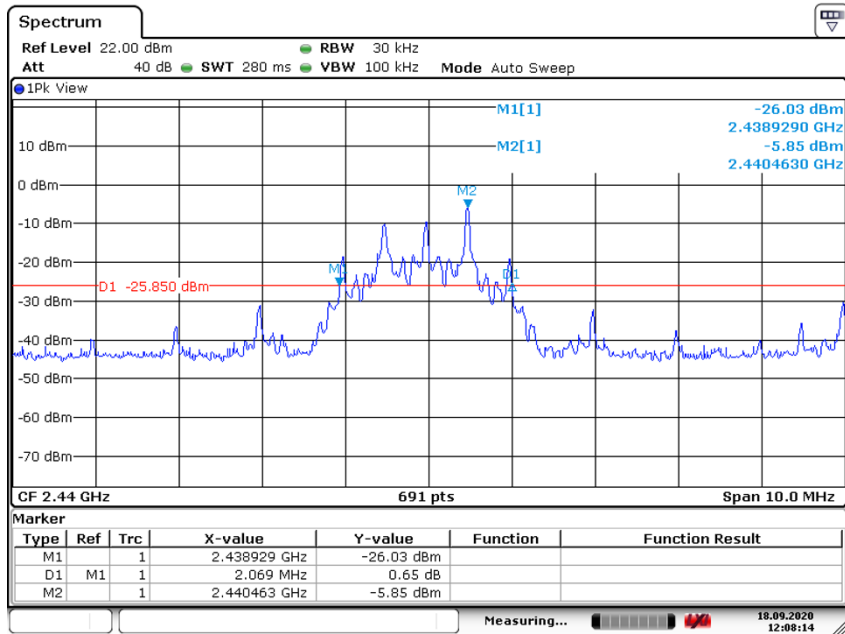
For details refer to following test result.

**Table 5: Test Result of 20dB Bandwidth**

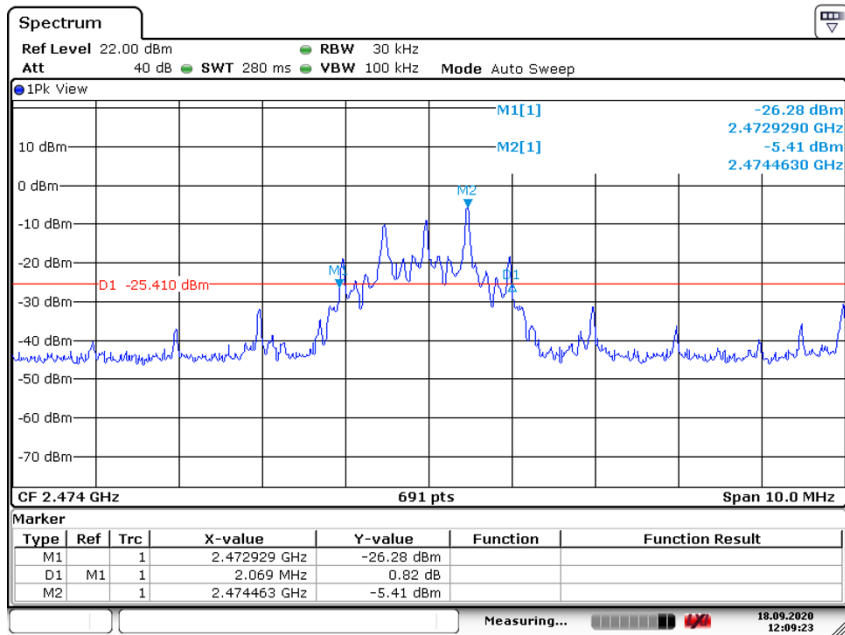
Test Channel (MHz)	20dB Bandwidth (MHz)	Limit (MHz)
2408	2.069	Within the assigned frequency band 2400~2483.5MHz
2440	2.069	
2474	2.069	
<b>Maximum Measured Value</b>	2.069	

For the measurement records, refer to following test plot:





Date: 18.SEP.2020 12:08:14



Date: 18.SEP.2020 12:09:22



### 5.1.4 Radiated Spurious Emission & Band Edge

**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.249 (d) & FCC Part 15.205
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site	: 3m Semi-anechoic Chamber

**Test Setup**

Date of testing	: 26.08.2020
Input voltage	: DC 5V
Operation mode	: A
Ambient temperature	: 22 °C
Relative humidity	: 50 %
Atmospheric pressure	: 100 kPa

**Remark:**

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix B.

## 5.1.5 Conducted Emission on AC Mains

**RESULT:****Pass****Test Specification**

Test standard	: FCC Part 15.207(a)
Basic standard	: ANSI C63.10: 2013
Frequency range	: 0.15 – 30MHz
Limits	: FCC Part 15.207(a) RSS-Gen Table 3
Kind of test site	: Shielded Room

**Test Setup**

Date of testing	: 14.08.2020
Input voltage	: DC 5V (supplied by PC)
Operation mode	: C
Earthing	: Not connected
Ambient temperature	: 25 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B.

## 6 Safety Human Exposure

### 6.1 Radio Frequency Exposure Compliance

#### 6.1.1 Electromagnetic Fields

**RESULT:****Pass****Test Specification**

Test standard : CFR47 FCC Part 2: Section 2.1093  
CFR47 FCC Part 1: Section 1.1310  
FCC KDB Publication 447498 D01 v06

**➤ Measurement Record:**

The separation distance of the EUT should be 5mm. The measured maximum specified e.i.r.p of the Keyboard is 97.23dBuV/m $\approx$  2.00dBm, which is far below the SAR exclusion threshold level 10 mW (Appendix A, SAR Test Exclusion Thresholds for 100 MHz – 6 GHz and  $\leq$ 50 mm), hence the EUT is excluded from SAR evaluation according to FCC KDB publication 447498 D01: Mobile and Portable RF Exposure. Guidance v06.

## 7 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix A.

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## Appendix B: Test Results of General 2.4GHz

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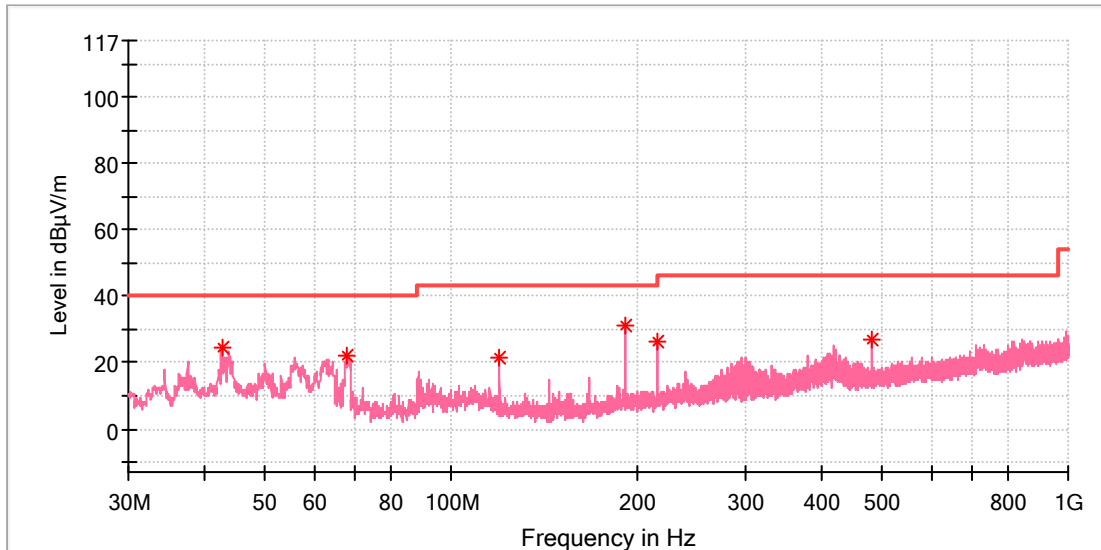
Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz -26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

**Appendix B.1: Fundamental & Harmonics Radiated Emission**

30MHz - 1GHz

**EUT Information**

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: Low channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

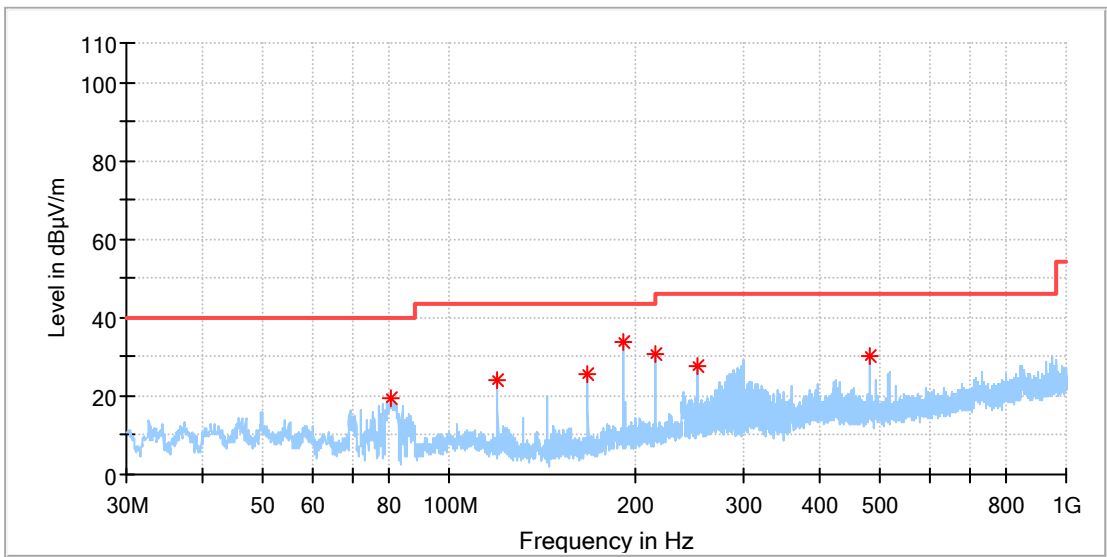


**Critical Freqs**

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
42.513000	24.20	---	40.00	15.80	100.0	V	69.0	-19.7
67.830000	22.23	---	40.00	17.77	100.0	V	61.0	-21.4
119.967500	21.27	---	43.50	22.23	100.0	V	252.0	-21.1
191.990000	31.26	---	43.50	12.24	100.0	V	233.0	-19.7
215.997500	26.27	---	43.50	17.23	100.0	V	233.0	-19.0
479.983000	26.69	---	46.00	19.31	100.0	V	262.0	-12.6

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: Low channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

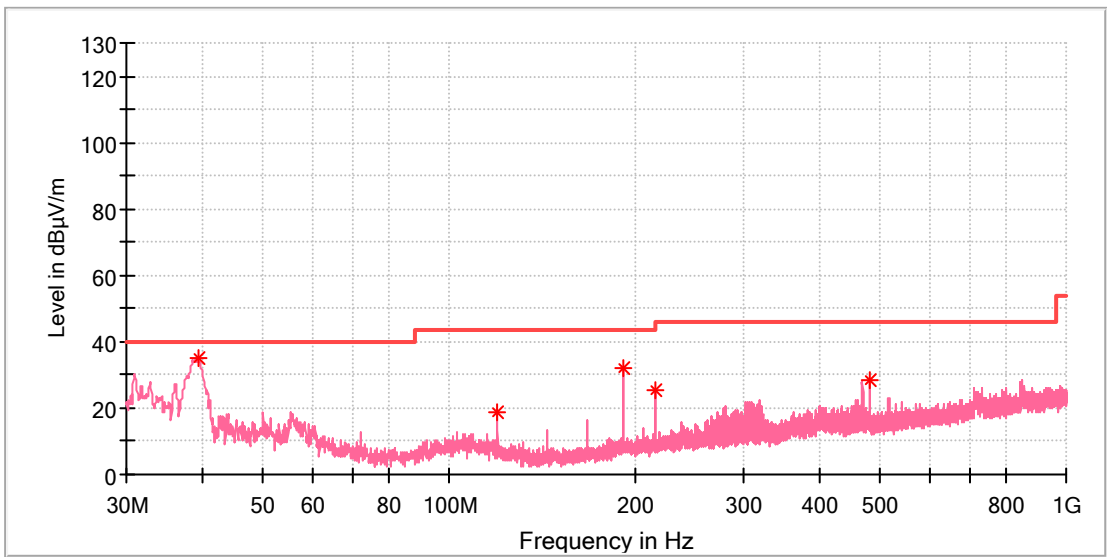


### Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
80.682500	19.69	---	40.00	20.31	100.0	H	146.0	-23.6
119.967500	24.00	---	43.50	19.50	100.0	H	318.0	-21.1
167.982500	25.77	---	43.50	17.73	100.0	H	118.0	-21.7
191.990000	33.78	---	43.50	9.72	100.0	H	196.0	-19.7
215.997500	30.63	---	43.50	12.87	100.0	H	226.0	-19.0
251.984500	27.69	---	46.00	18.31	100.0	H	1.0	-17.6
480.031500	30.03	---	46.00	15.97	100.0	H	268.0	-12.6

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: High channel  
 Test Voltage: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



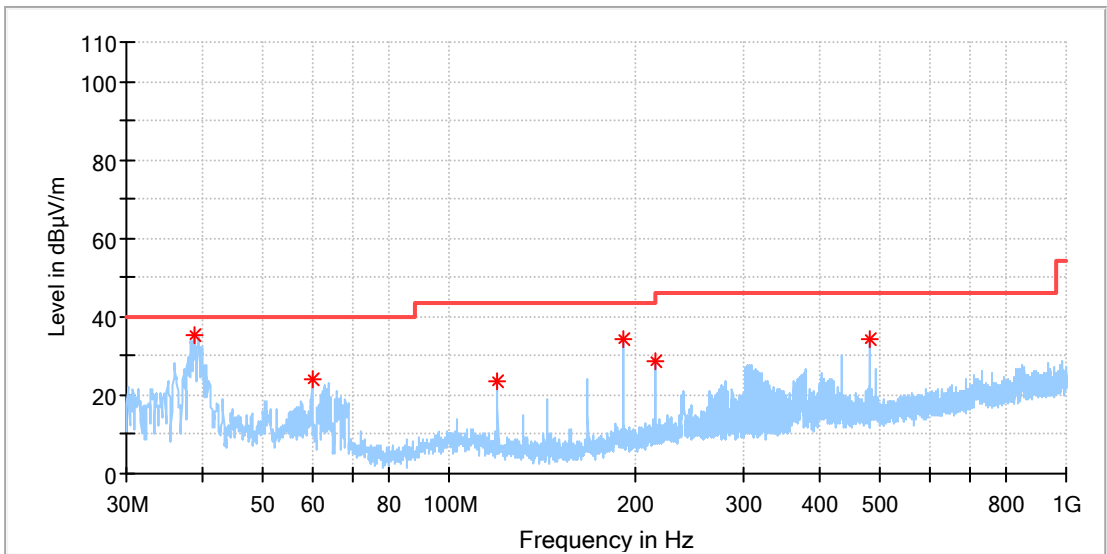
### Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
39.166500	35.11	---	40.00	4.89	100.0	V	168.0	-20.7
120.016000	19.05	---	43.50	24.45	100.0	V	264.0	-21.1
191.990000	32.02	---	43.50	11.48	100.0	V	223.0	-19.7
215.997500	25.58	---	43.50	17.92	100.0	V	234.0	-19.0
479.983000	28.50	---	46.00	17.50	100.0	V	311.0	-12.6



### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: High channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



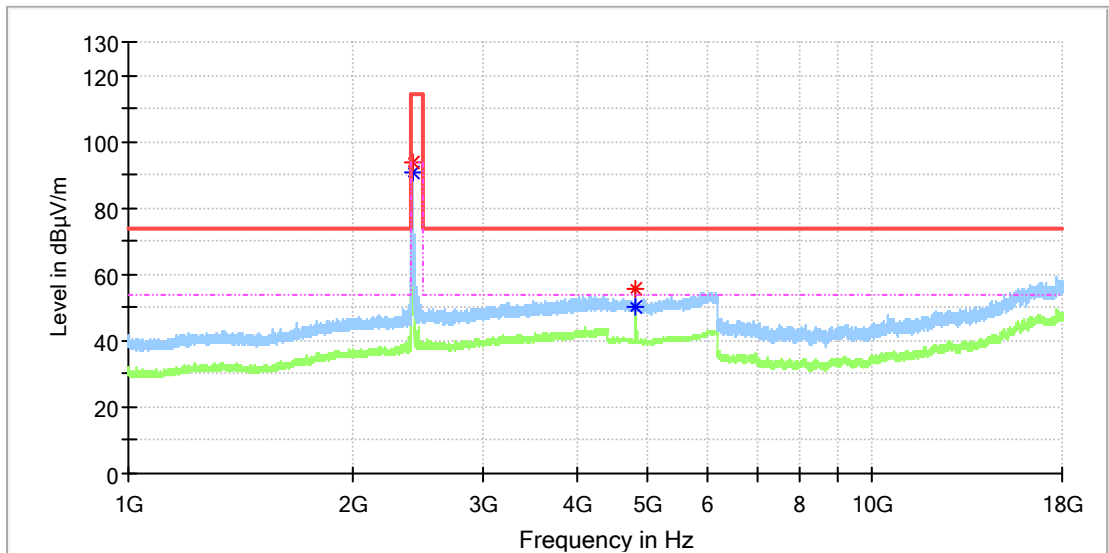
### Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
38.778500	35.14	---	40.00	4.86	100.0	H	358.0	-20.8
59.973000	23.92	---	40.00	16.08	100.0	H	270.0	-19.3
119.967500	23.44	---	43.50	20.06	100.0	H	328.0	-21.1
191.990000	34.02	---	43.50	9.48	100.0	H	200.0	-19.7
215.949000	28.85	---	43.50	14.65	100.0	H	220.0	-19.0
479.983000	34.18	---	46.00	11.82	100.0	H	104.0	-12.6

1GHz - 18GHz

### EUT Information

EUT Name:	Wireless Desktop
Model:	JD-70R
Test Mode:	Low channel
Test Voltage::	DC 5V from USB
Remark:	Temp 22 Humi:50%
Test Standard:	FCC 15.249
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

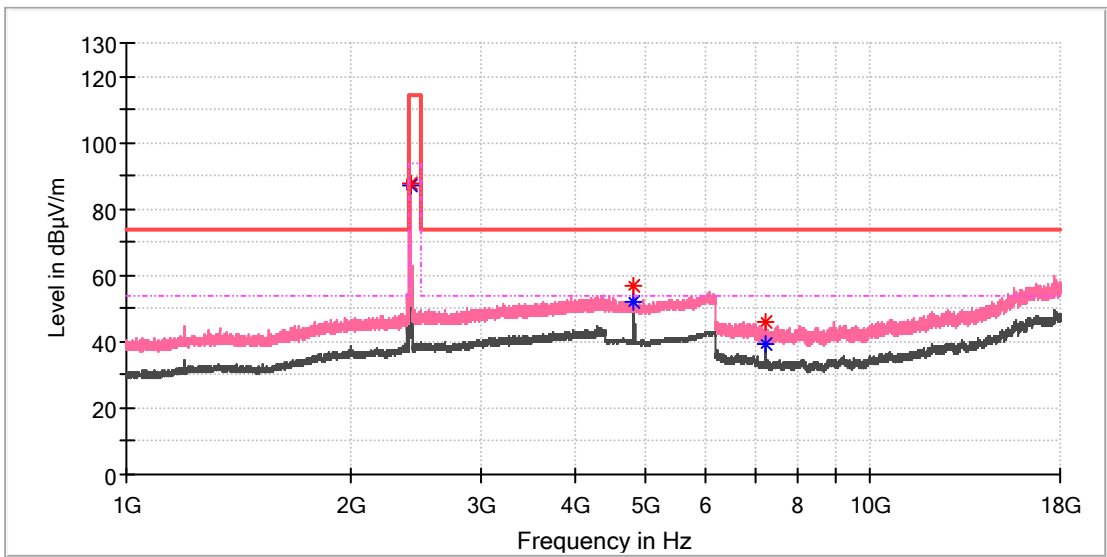


### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2408.237500	93.88	---	114.00	20.12	100.0	H	157.0	7.1
2408.450000	---	90.68	94.00	3.32	100.0	H	157.0	7.1
4816.000000	---	50.21	54.00	3.79	100.0	H	190.0	13.5
4816.000000	55.43	---	74.00	18.57	100.0	H	190.0	13.5

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: Low channel  
 Test Voltage: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

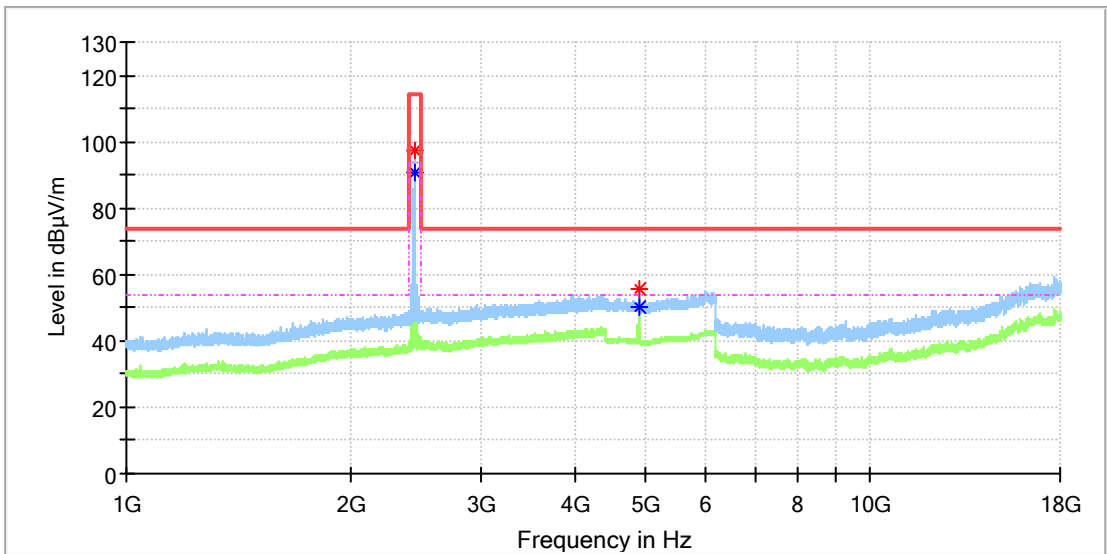


### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2408.025000	---	87.28	94.00	6.72	100.0	V	0.0	7.1
2408.237500	87.90	---	114.00	26.10	100.0	V	0.0	7.1
4816.000000	---	51.78	54.00	2.22	100.0	V	101.0	13.5
4816.000000	56.75	---	74.00	17.25	100.0	V	101.0	13.5
7217.258333	45.70	---	74.00	28.30	100.0	V	241.0	8.7
7217.750000	---	39.26	54.00	14.74	100.0	V	241.0	8.7

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: Mid channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

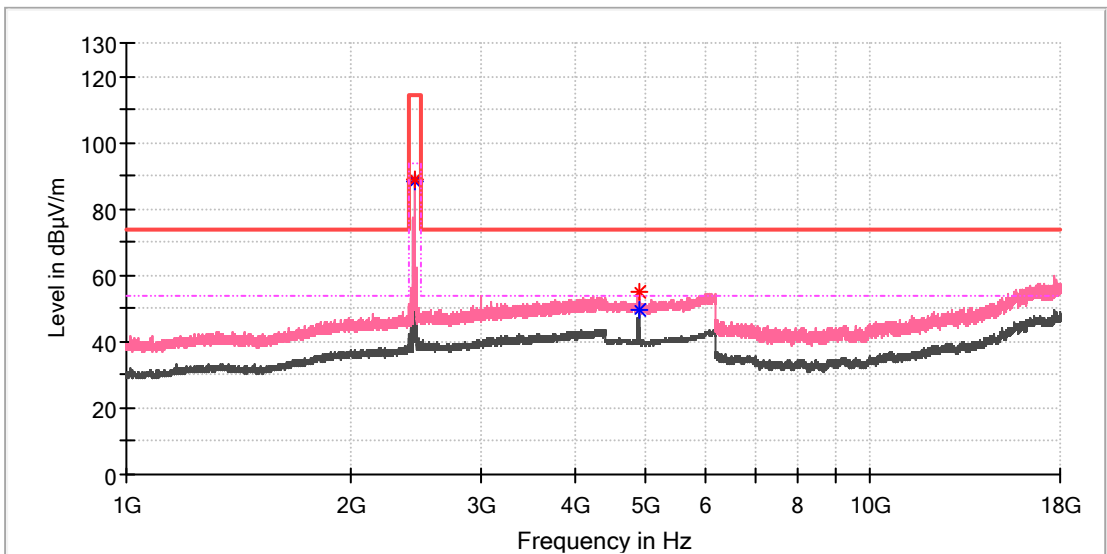


### Critical\_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2439.262500	---	90.86	94.00	3.14	100.0	H	259.0	7.4
2439.864375	97.23	---	114.00	16.77	100.0	H	259.0	7.4
4879.500000	55.34	---	74.00	18.66	100.0	H	280.0	13.4
4880.000000	---	50.44	54.00	3.56	100.0	H	280.0	13.4

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: Mid channel  
 Test Voltage: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

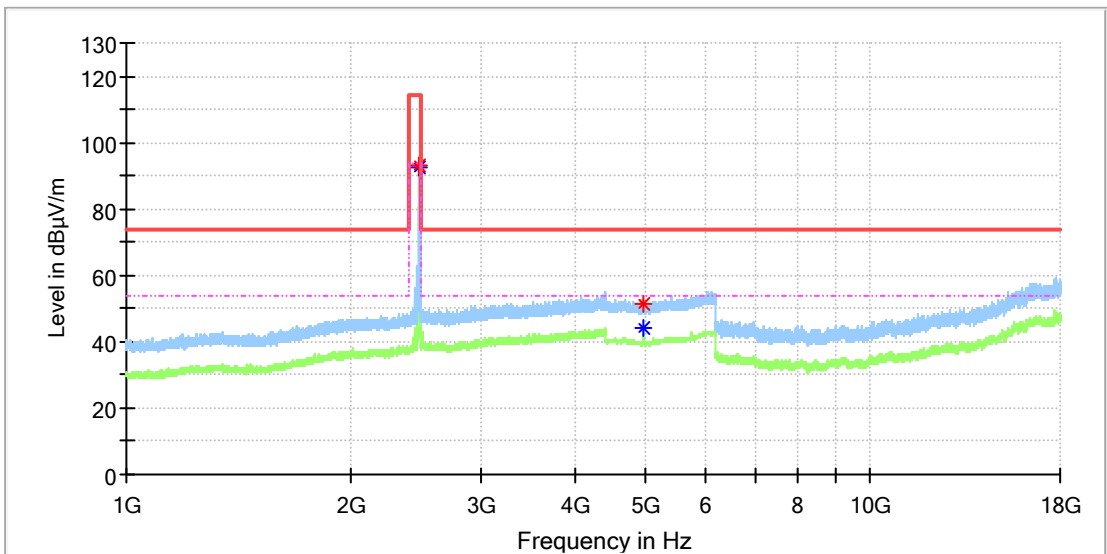


### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2439.900000	---	88.34	94.00	5.66	100.0	V	0.0	7.4
2440.325000	88.92	---	114.00	25.08	100.0	V	0.0	7.4
4880.000000	55.15	---	74.00	18.85	100.0	V	309.0	13.4
4880.000000	---	49.62	54.00	4.38	100.0	V	309.0	13.4

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: High channel  
 Test Voltage: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

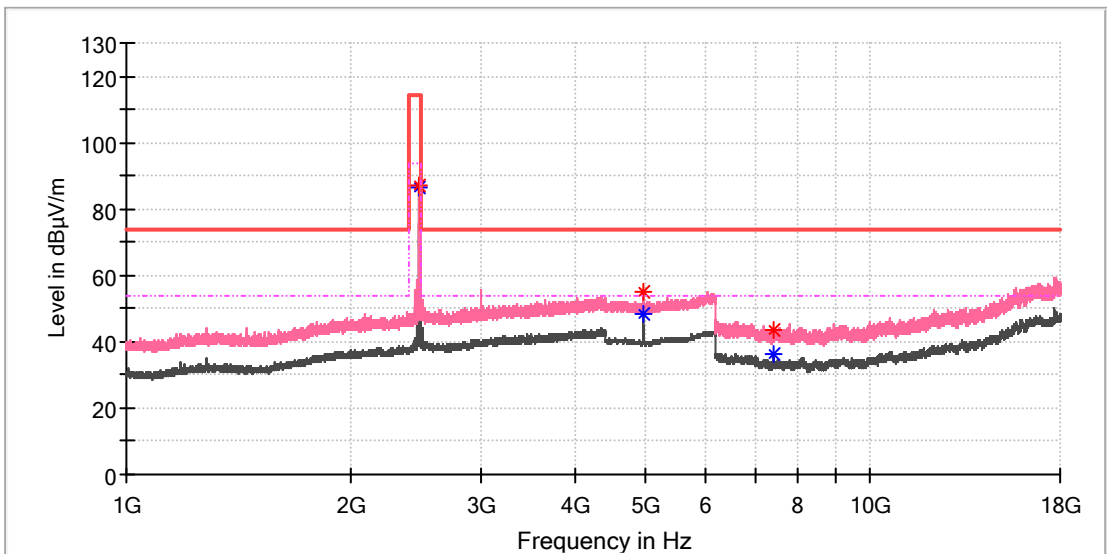


### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2473.900000	---	92.40	94.00	1.60	100.0	H	37.0	7.4
2474.112500	93.05	---	114.00	20.95	100.0	H	37.0	7.4
4948.000000	51.64	---	74.00	22.36	100.0	H	18.0	13.2
4948.000000	---	44.03	54.00	9.97	100.0	H	18.0	13.2

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: High channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

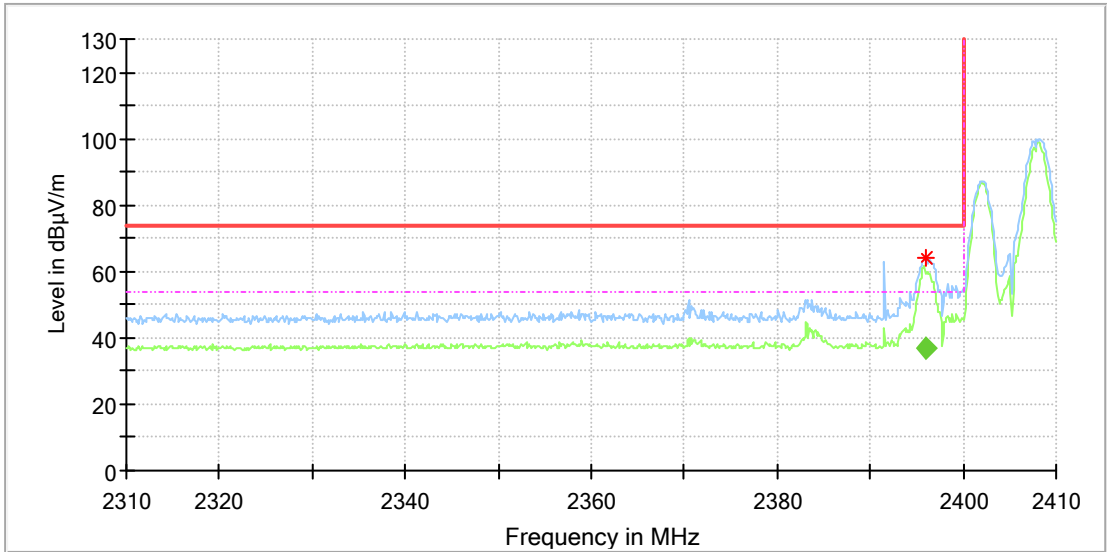
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2473.900000	---	86.50	94.00	7.50	100.0	V	355.0	7.4
2474.112500	87.15	---	114.00	26.85	100.0	V	355.0	7.4
4948.000000	---	48.24	54.00	5.76	100.0	V	97.0	13.2
4948.500000	55.07	---	74.00	18.93	100.0	V	97.0	13.2
7414.908333	43.56	---	74.00	30.44	100.0	V	236.0	8.3
7415.891667	---	36.15	54.00	17.85	100.0	V	60.0	8.3

Note: The measurement results 2402-2483.5MHz was exclusion band, when Band Reject Filter used. So only the radiated spurious emissions of out this exclusion band were evaluated.

### Appendix B.2: Test Results of Radiated Emissions in Restricted Bands

#### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: Low channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



#### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2396.000000	63.82	---	74.00	10.18	100.0	H	282.0	7.0

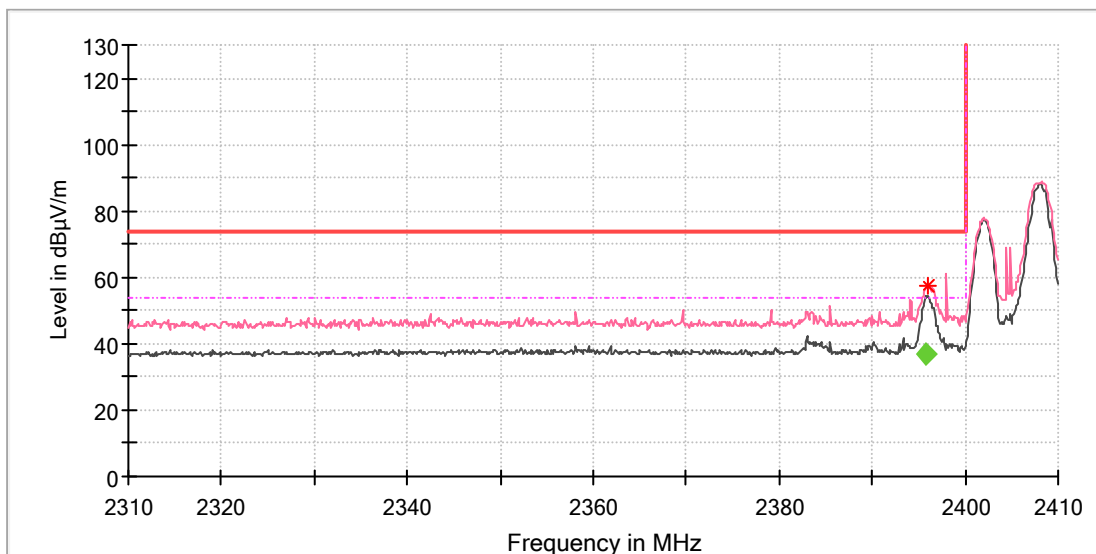
#### Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2395.988500	---	37.09	54.00	16.92	100.0	H	308.0	7.0



### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: Low channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

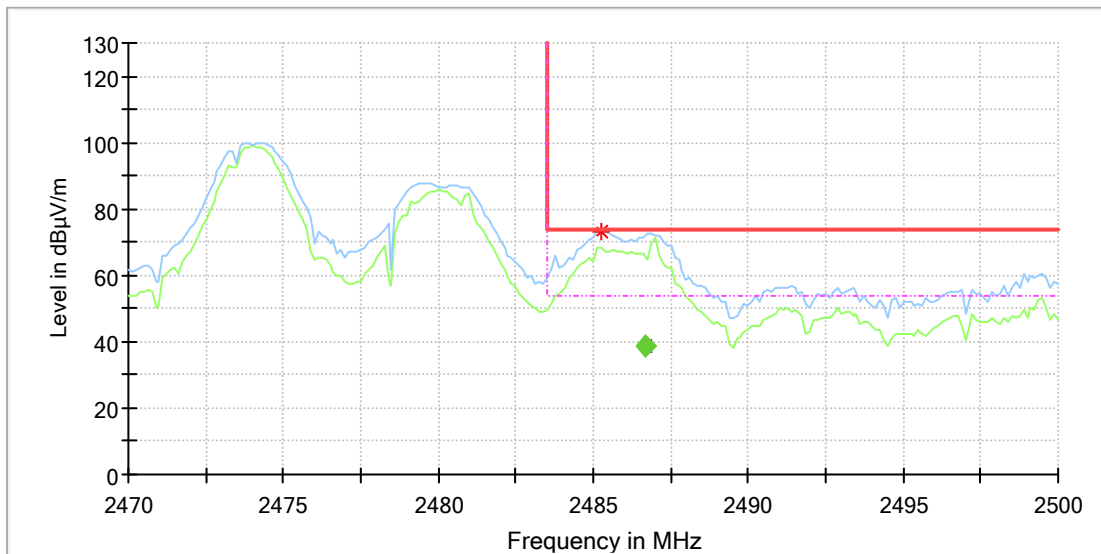
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2396.000000	57.32	---	74.00	16.68	100.0	V	231.0	7.0

### Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2395.863063	---	36.67	54.00	17.33	103.0	V	259.0	7.0

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: High channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical\_Freqs

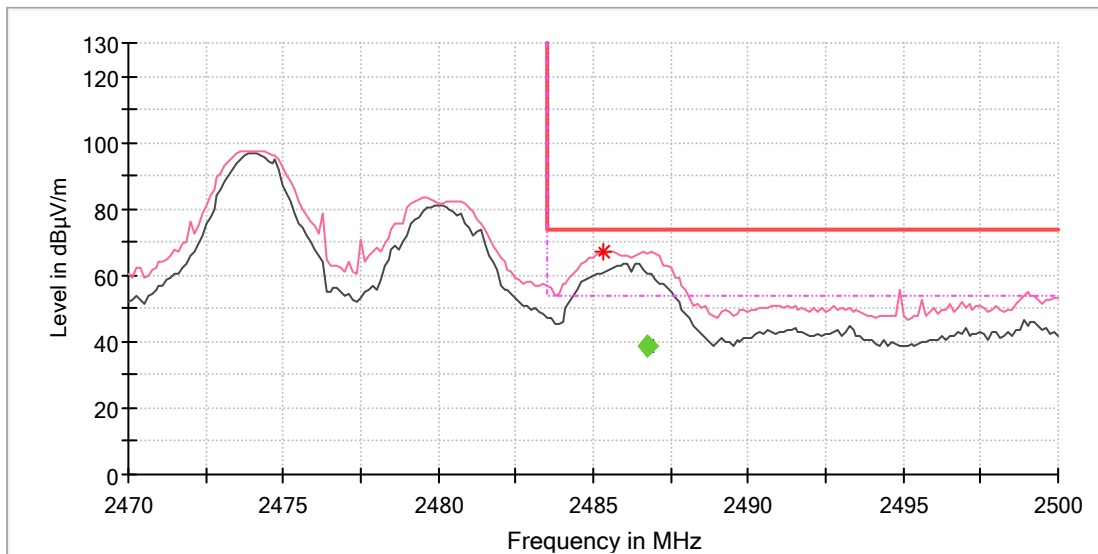
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.276375	73.42	---	74.00	0.58	100.0	H	244.0	7.4

### Final\_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.706813	---	38.52	54.00	15.48	125.0	H	278.0	7.4

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: High channel  
 Test Voltage:: DC 5V from USB  
 Remark: Temp 22 Humi:50%  
 Test Standard: FCC 15.249  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.292563	67.21	---	74.00	6.79	100.0	V	260.0	7.4

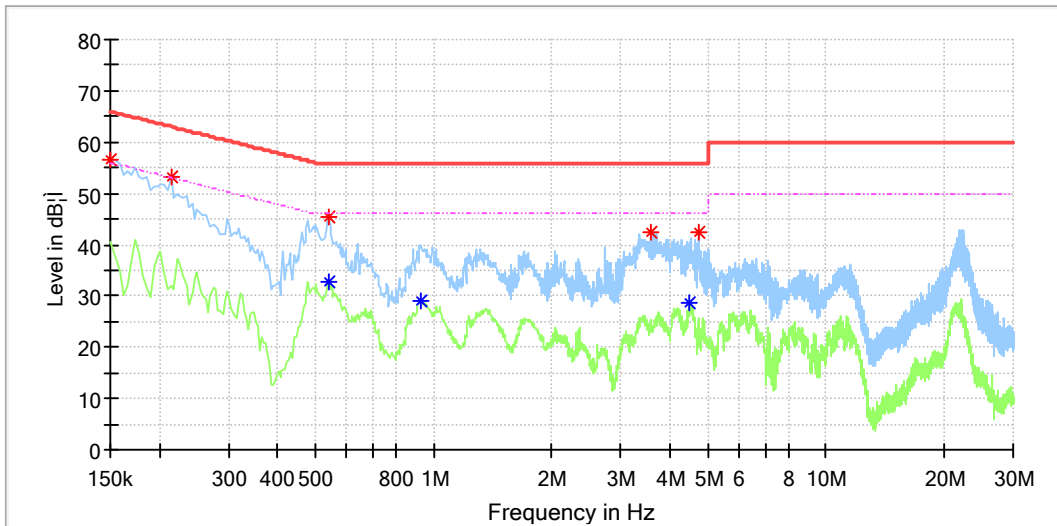
### Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.752313	---	38.62	54.00	15.38	140.0	V	258.0	7.4

### Appendix B.3: Test Results of Conducted Emission on AC Mains

#### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: ON  
 Test Voltage: AC120V/60Hz  
 Test By: OUYANG  
 Review By: Gary Chen  
 Remark: SR2

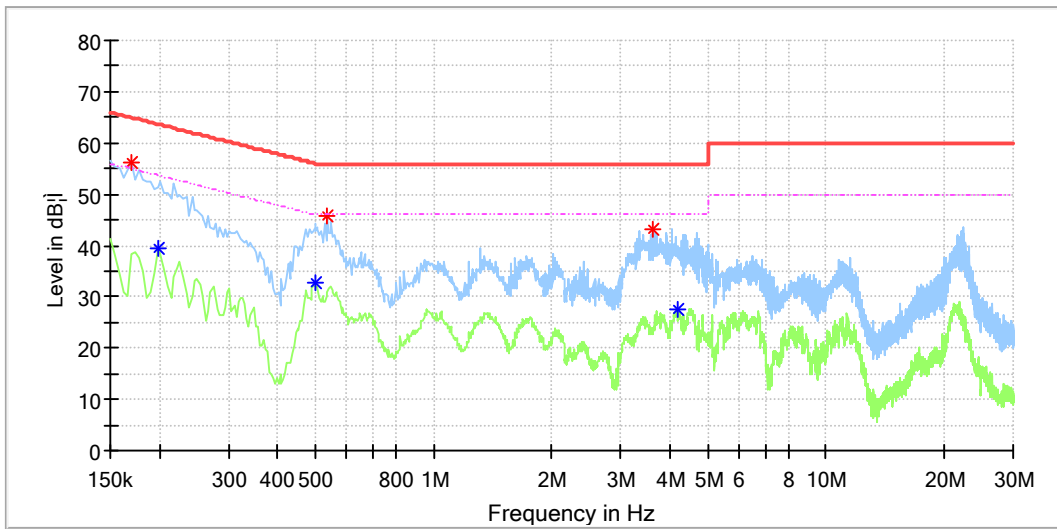


#### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.150000	56.70	---	66.00	9.30	L1	9.7
0.214000	53.38	---	63.05	9.67	L1	9.7
0.540000	---	32.70	46.00	13.30	L1	9.7
0.540000	45.35	---	56.00	10.65	L1	9.7
0.924000	---	29.20	46.00	16.80	L1	9.7
3.584000	42.57	---	56.00	13.43	L1	9.8
4.504000	---	28.78	46.00	17.22	L1	9.8
4.736000	42.57	---	56.00	13.43	L1	9.8

### EUT Information

EUT Name: Wireless Desktop  
 Model: JD-70R  
 Test Mode: ON  
 Test Voltage: AC120V/60Hz  
 Test By: OUYANG  
 Review By: Gary Chen  
 Remark: SR2



### Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.170000	56.05	---	64.96	8.91	N	9.7
0.198000	---	39.48	53.69	14.22	N	9.7
0.498000	---	32.64	46.03	13.40	N	9.7
0.536000	45.86	---	56.00	10.14	N	9.7
3.624000	43.27	---	56.00	12.73	N	9.8
4.172000	---	27.43	46.00	18.57	N	9.8