



**中认信通**  
CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



## TEST REPORT

**Applicant:** Fanvil Link Technology Co.,LTD

Address: Room 1517,Building G,Hualian City Panorama,27 Region, Bao'an District,  
Shenzhen China

**FCC ID:** 2BCUQ-I506W

**Product Name:** Indoor Unit

**Standard(s):** 47 CFR Part 15, Subpart E(15.407)  
ANSI C63.10-2013  
KDB 789033 D02 General U-NII Test Procedures New  
Rules v02r01

The above equipment has been tested and found compliant with the requirement of the relative standards  
by China Certification ICT Co., Ltd (Dongguan)

**Report Number:** CR230951413-00B

**Date Of Issue:** 2023/10/19

**Reviewed By:** Calvin Chen

*Calvin Chen*

Title: RF Engineer

**Approved By:** Sun Zhong

*Sun Zhong*

Title: Manager

**Test Laboratory:** China Certification ICT Co., Ltd (Dongguan)

No. 113, Pingkang Road, Dalang Town, Dongguan,  
Guangdong, China  
Tel: +86-769-82016888

### **Test Facility**

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

### **Declarations**

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

This report cannot be reproduced except in full, without prior written approval of the Company.

This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk “★”.

## CONTENTS

<b>TEST FACILITY .....</b>	<b>2</b>
<b>DECLARATIONS.....</b>	<b>2</b>
<b>DOCUMENT REVISION HISTORY .....</b>	<b>5</b>
<b>1. GENERAL INFORMATION.....</b>	<b>6</b>
<b>1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT) .....</b>	<b>6</b>
<b>1.2 DESCRIPTION OF TEST CONFIGURATION.....</b>	<b>8</b>
1.2.1 EUT Operation Condition:.....	8
1.2.2 Support Equipment List and Details .....	9
1.2.3 Support Cable List and Details .....	9
1.2.4 Block Diagram of Test Setup.....	9
<b>1.3 MEASUREMENT UNCERTAINTY .....</b>	<b>11</b>
<b>2. SUMMARY OF TEST RESULTS.....</b>	<b>12</b>
<b>3. REQUIREMENTS AND TEST PROCEDURES .....</b>	<b>13</b>
<b>3.1 AC LINE CONDUCTED EMISSIONS.....</b>	<b>13</b>
3.1.1 Applicable Standard.....	13
3.1.2 EUT Setup.....	14
3.1.3 EMI Test Receiver Setup .....	14
3.1.4 Test Procedure .....	15
3.1.5 Corrected Amplitude & Margin Calculation.....	15
<b>3.2 RADIATION SPURIOUS EMISSIONS.....</b>	<b>16</b>
3.2.1 Applicable Standard.....	16
3.2.2 EUT Setup.....	17
3.2.3 EMI Test Receiver & Spectrum Analyzer Setup .....	17
3.2.4 Test Procedure .....	18
3.2.5 Corrected Amplitude & Margin Calculation.....	18
<b>3.3 EMISSION BANDWIDTH.....</b>	<b>19</b>
3.3.1 Applicable Standard.....	19
3.3.2 EUT Setup.....	19
3.3.3 Test Procedure .....	19
<b>3.4 MAXIMUM CONDUCTED OUTPUT POWER.....</b>	<b>21</b>
3.4.1 Applicable Standard.....	21
3.4.2 EUT Setup.....	21
3.4.3 Test Procedure .....	21
<b>3.5 MAXIMUM POWER SPECTRAL DENSITY .....</b>	<b>22</b>
3.5.1 Applicable Standard.....	22
3.5.2 EUT Setup.....	22
3.5.3 Test Procedure .....	23
<b>3.7 DUTY CYCLE .....</b>	<b>24</b>
3.7.1 EUT Setup.....	24
3.7.2 Test Procedure .....	24
<b>3.8 ANTENNA REQUIREMENT.....</b>	<b>25</b>

3.8.1 Applicable Standard.....25  
3.8.2 Judgment.....25  
**4. Test DATA AND RESULTS..... 26**  
**4.1 AC LINE CONDUCTED EMISSIONS..... 26**  
**4.2 RADIATION SPURIOUS EMISSIONS .....39**  
**4.3 EMISSION BANDWIDTH: .....162**  
**4.4 MAXIMUM CONDUCTED OUTPUT POWER: .....176**  
**4.5 MAXIMUM POWER SPECTRAL DENSITY: .....178**  
**4.6 DUTY CYCLE:.....186**  
**5. RF EXPOSURE EVALUATION ..... 188**  
**6. EUT PHOTOGRAPHS ..... 189**  
**7. TEST SETUP PHOTOGRAPHS ..... 190**

---

## DOCUMENT REVISION HISTORY

---

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230951413-00B	Original Report	2023/10/19

## 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment under Test (EUT)

#### 1.1.1 General:

<b>EUT Name:</b>	Indoor Unit
<b>Trade Name:</b>	<b>Fanvil</b>
<b>EUT Model:</b>	i506W
<b>Multiple Models:</b>	i504W,Y504W,Y504W-Y
<b>Operation Frequency:</b>	5180-5240 MHz (802.11a/n ht20) 5190-5230 MHz(802.11n ht40) 5745-5825 MHz (802.11a/n ht20) 5755-5795 MHz(802.11n ht40)
<b>Maximum Average Output Power (Conducted):</b>	8.68dBm (5150-5250 MHz) 13.67dBm (5725-5850 MHz)
<b>Modulation Type:</b>	802.11a/n: OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM
<b>Rated Input Voltage:</b>	DC 12V from adapter or DC 48V from PoE
<b>Serial Number:</b>	CE&RE: 2ATU-1 for i506W, 2ATU-3 for i504W, 2ATU-4 for Y504W-Y RF: 2ATU-2
<b>EUT Received Date:</b>	2023/9/4
<b>EUT Received Status:</b>	Good
Note: The Multiple models are electrically identical with the test model. Please refer to the declaration letter for more detail, which was provided by manufacturer.	

#### 1.1.2 Operation Frequency Detail:

For 802.11a/n ht20:

5150-5250MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	149	5745
40	5200	153	5765
44	5220	157	5785
48	5240	161	5805
/	/	165	5825
Per section 15.31(m), the below frequencies were performed the test as below:			
36	5180	149	5745
40	5200	157	5785
48	5240	165	5825

For 802.11n ht40:

5150-5250MHz Band		5725-5850MHz Band	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	151	5755
46	5230	159	5795
Per section 15.31(m), the below frequencies were performed the test as below:			
38	5190	151	5755
46	5230	159	5795

**1.1.3 Antenna Information Detail▲:**

Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain	Remark
FPC	50	5.15~5.25GHz	4.6 dBi	For model i506W
		5.725~5.85GHz	5.0 dBi	
FPC	50	5.15~5.25GHz	3.8 dBi	For model i504W, Y504W, Y504W-Y
		5.725~5.85GHz	3.2 dBi	

The Method of §15.203 Compliance:

- Antenna must be permanently attached to the unit.
- Antenna must use a unique type of connector to attach to the EUT.
- Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

**1.1.4 Accessory Information:**

Accessory Description	Manufacturer	Model	Parameters
/	/	/	/

## 1.2 Description of Test Configuration

### 1.2.1 EUT Operation Condition:

<b>EUT Operation Mode:</b>		The system was configured for testing in Engineering Mode, which was provided by the manufacturer.		
<b>Equipment Modifications:</b>		No		
<b>EUT Exercise Software:</b>		sscom5.13.1.exe		
The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer ▲:				
<b>5150-5250 MHz Band:</b>				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5180	6Mbps	21
	Middle	5200	6Mbps	21
	Highest	5240	6Mbps	21
802.11n ht20	Lowest	5180	MCS0	21
	Middle	5200	MCS0	21
	Highest	5240	MCS0	21
802.11n ht40	Lowest	5190	MCS0	21
	Highest	5230	MCS0	21
<b>5725-5850 MHz Band:</b>				
Test Modes	Test Channels	Test Frequency (MHz)	Data rate	Power Level Setting
802.11a	Lowest	5745	6Mbps	21
	Middle	5785	6Mbps	21
	Highest	5825	6Mbps	21
802.11n ht20	Lowest	5745	MCS0	21
	Middle	5785	MCS0	21
	Highest	5825	MCS0	21
802.11n ht40	Lowest	5755	MCS0	21
	Highest	5795	MCS0	21
Note: The above are the worst-case data rates, which are determined for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations.				



**1.2.2 Support Equipment List and Details**

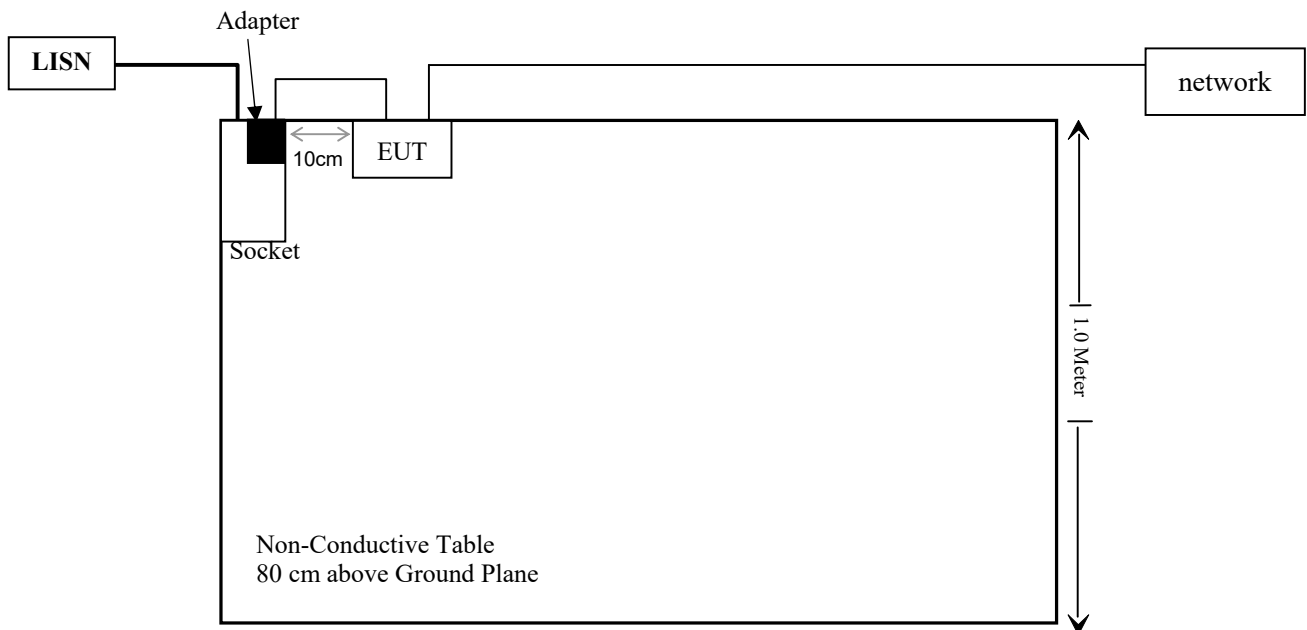
Manufacturer	Description	Model	Serial Number
GOSPELL	POE	G0720-480-050	212701319
TRANSIN	Adapter	TS-A012-120100E9	N/A

**1.2.3 Support Cable List and Details**

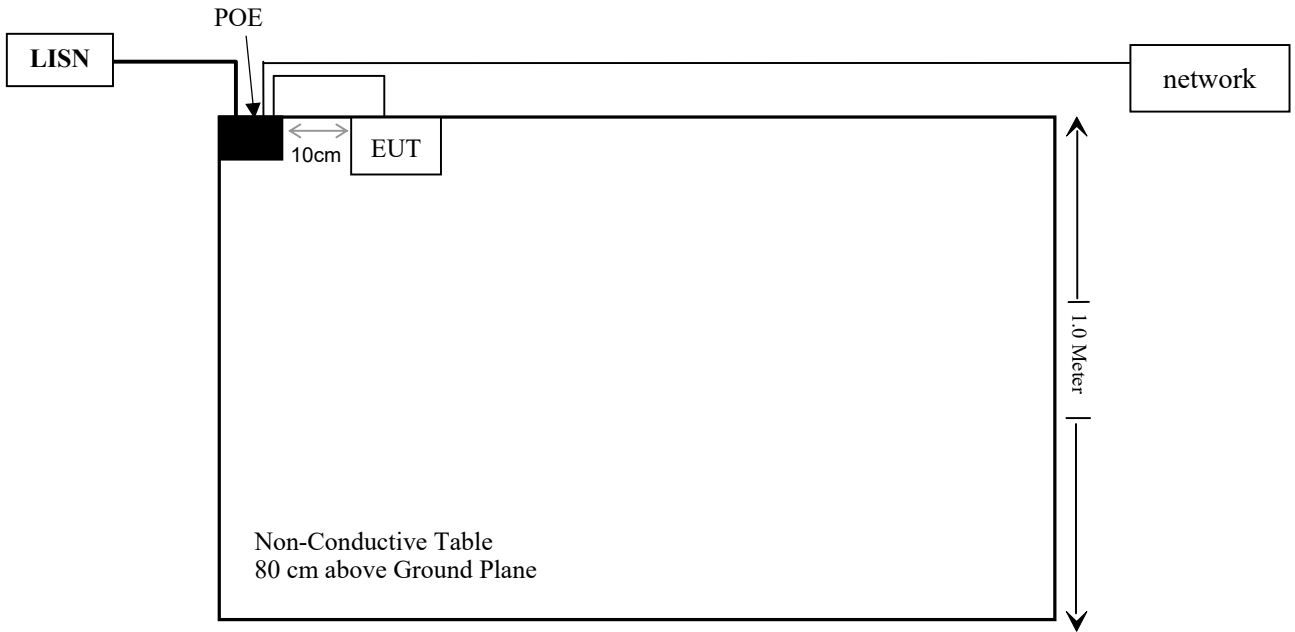
Cable Description	Length(m)	From Port	To
Un-shielded un-detachable DC Cable	2.0	Adapter	EUT
Un-shielded un-detachable AC Cable	1.2	LISN	Socket
Un-shielded detachable RJ45 Cable	10.0	EUT	network
Un-shielded detachable AC Cable	1.2	LISN/AC mains	POE
Un-shielded detachable RJ45 Cable	0.3	POE	EUT

**1.2.4 Block Diagram of Test Setup****For conducted emission**

Powered by Adapter:

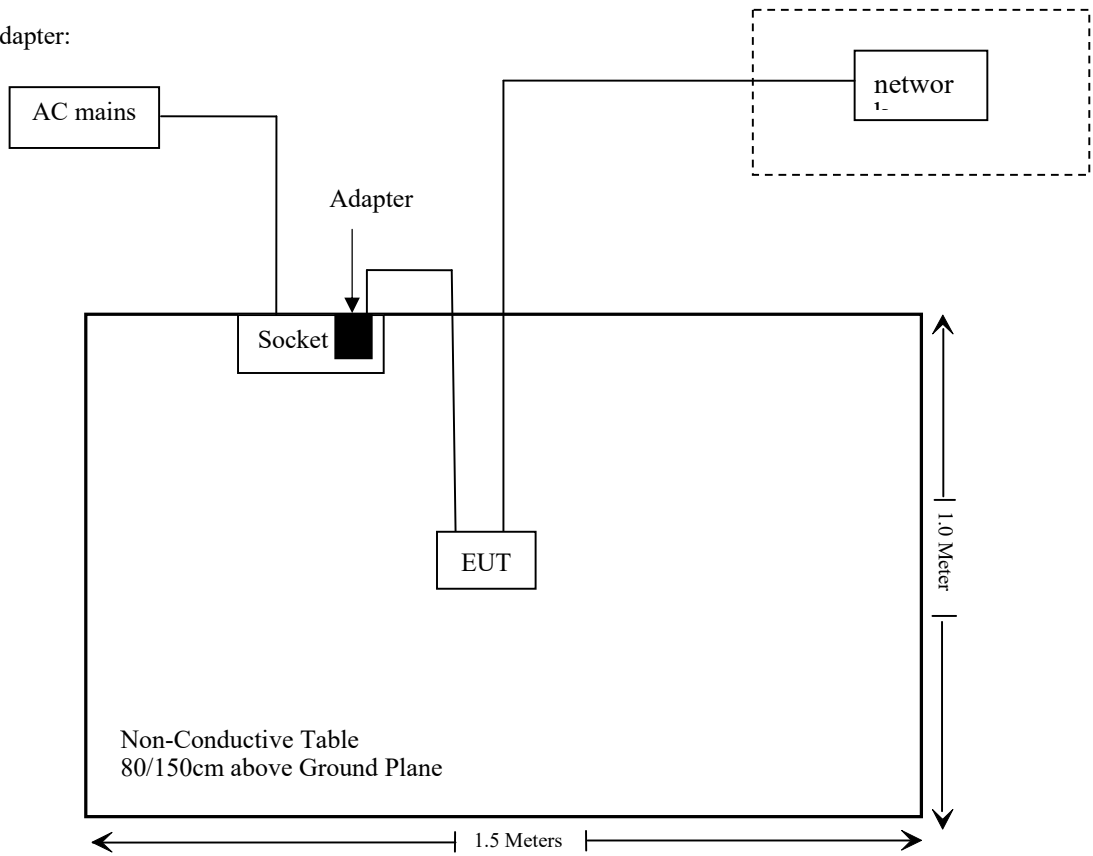


Powered by POE:

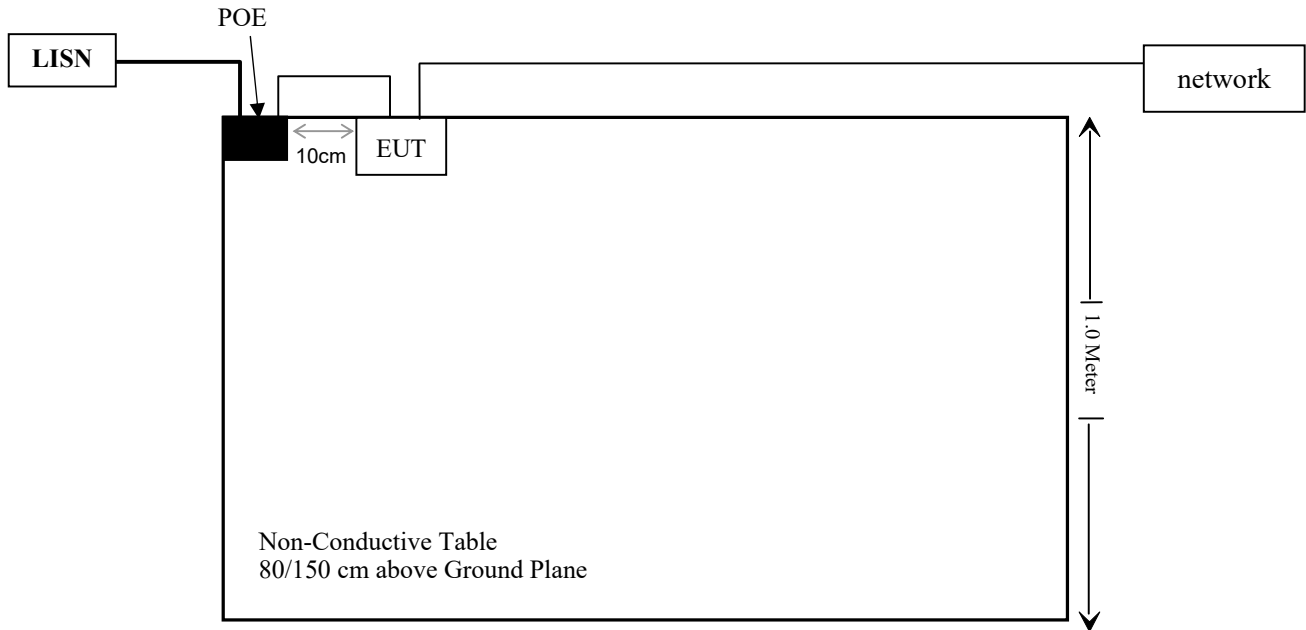


For Radiated Emissions:

Powered by Adapter:



Powered by Adapter:



### 1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Power Spectral Density, conducted	±0.61 dB
Unwanted Emissions, radiated	30M~200MHz: 4.15 dB, 200M~1GHz: 5.61 dB, 1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB, 18G~26.5G: 5.47 dB, 26.5G~40G: 5.63 dB
Unwanted Emissions, conducted	±1.26 dB
Temperature	±1 °C
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

## 2. SUMMARY OF TEST RESULTS

Standard(s) Section	Test Items	Result
§15.207(a)	AC line conducted emissions	Compliant
FCC§15.205& §15.209 &§15.407(b)	Radiated Spurious Emissions	Compliant
FCC§15.407(a) (e)	Emission Bandwidth	Compliant
FCC§15.407(a)	Maximum Conducted Output Power	Compliant
FCC§15.407 (a)	Power Spectral Density	Compliant
§15.203	Antenna Requirement	Compliant
§1.1307	RF Exposure Evaluation	Compliant

### 3. REQUIREMENTS AND TEST PROCEDURES

#### 3.1 AC Line Conducted Emissions

##### 3.1.1 Applicable Standard

FCC§15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50  $\mu$ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

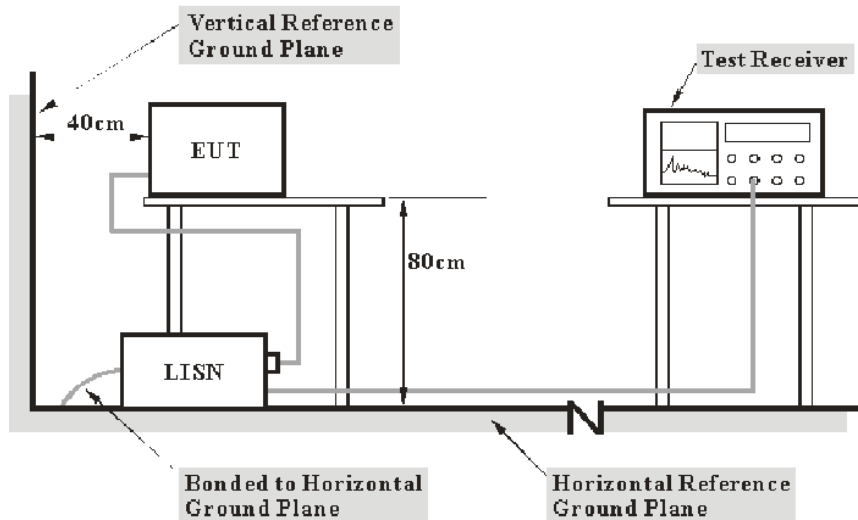
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000  $\mu$ V within the frequency band 535-1705 kHz, as measured using a 50  $\mu$ H/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

### 3.1.2 EUT Setup



- Note: 1. Support units were connected to second LISN.  
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

### 3.1.3 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

### 3.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

### 3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

## 3.2 Radiation Spurious Emissions

### 3.2.1 Applicable Standard

FCC §15.407 (b);

*Undesirable emission limits.* Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of - 27 dBm/MHz.

(4) For transmitters operating solely in the 5.725-5.850 GHz band:

(i) All emissions shall be limited to a level of - 27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(ii) Devices certified before March 2, 2017 with antenna gain greater than 10 dBi may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease by March 2, 2018. Devices certified before March 2, 2018 with antenna gain of 10 dBi or less may demonstrate compliance with the emission limits in § 15.247(d), but manufacturing, marketing and importing of devices certified under this alternative must cease before March 2, 2020.

(8) The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

(9) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in § 15.207.

(10) The provisions of § 15.205 apply to intentional radiators operating under this section.

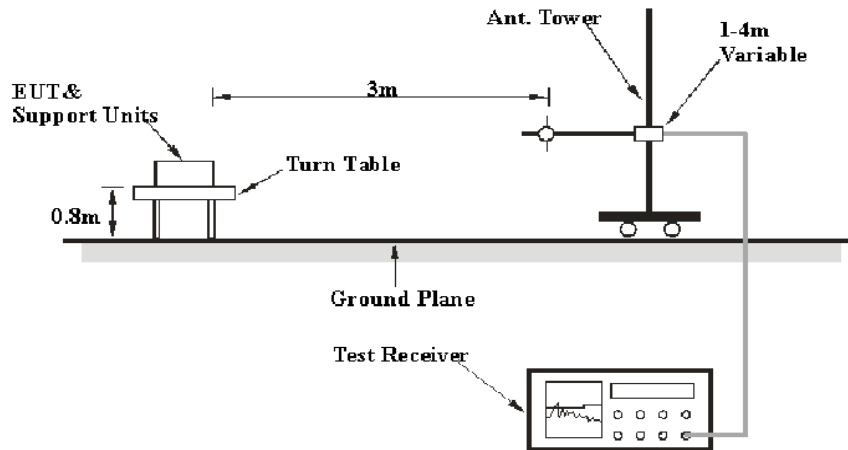
(11) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the upper and lower frequency band edges as the design of the equipment permits.

(c) The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

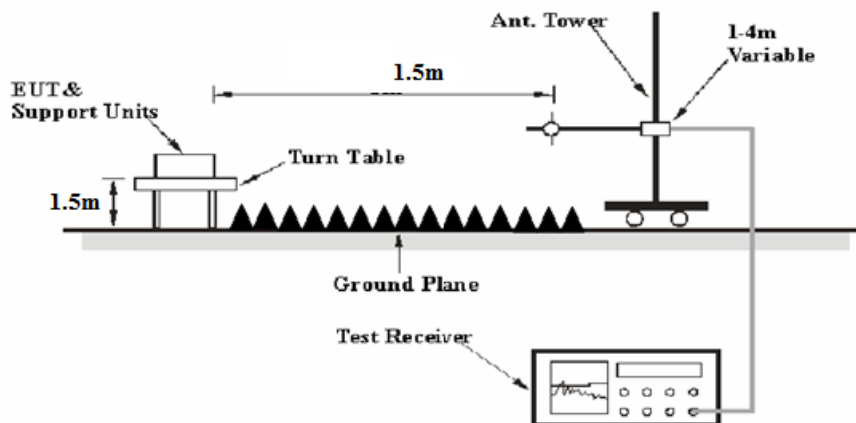


### 3.2.2 EUT Setup

#### Below 1GHz:



#### 1-40 GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was FCC 15.209, FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

### 3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

30MHz-1000MHz:

Measurement	RBW	Video B/W	IF B/W
QP	120 kHz	300 kHz	120kHz

1GHz- 40GHz:

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
AV	>98%	1MHz	10 Hz
	<98%	1MHz	≥1/T

Note: T is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

### 3.2.4 Test Procedure

During the radiated emission test, the adapter was connected to the first AC floor outlet.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, emission shall be computed as:  $E [dB\mu V/m] = EIRP[dBm] + 95.2$ , for  $d = 3$  meters.

According to C63.10, the above 1G test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.5m

Distance extrapolation Factor =  $20 \log (\text{specific distance } [3m] / \text{test distance } [1.5m])$  dB = 6.02 dB

All emissions under the average limit and under the noise floor have not recorded in the report.

### 3.2.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For 30MHz-1GHz:

Result = Reading + Factor

For 1GHz-40GHz

Result = Reading + Factor-Distance extrapolation Factor

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

### 3.3 Emission Bandwidth

#### 3.3.1 Applicable Standard

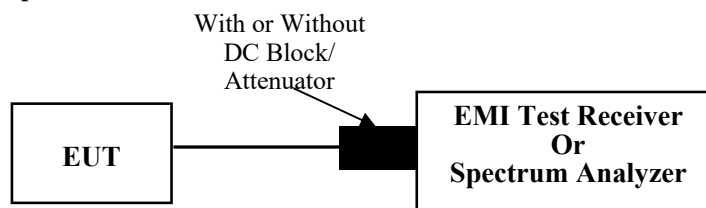
FCC §15.407 (a),(h)

(h)(2) Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating with any part of its 26 dB emission bandwidth in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems.

FCC §15.407 (e)

Within the 5.725-5.850 GHz and 5.850-5.895 GHz bands, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

#### 3.3.2 EUT Setup



#### 3.3.3 Test Procedure

##### 26dB Emission Bandwidth:

According to ANSI C63.10-2013 Section 12.4.1

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = peak.
- d) Trace mode = max hold
- e) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

##### 6 dB emission bandwidth:

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW)  $\geq 3$  RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) 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.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described in this section. For devices that use channel aggregation refer to III.A and III.C for determining emission bandwidth.

**99% Occupied Bandwidth:**

According to ANSI C63.10-2013 Section 12.4.2&6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than  $[10 \log (OBW/RBW)]$  below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

### 3.4 Maximum Conducted Output Power

#### 3.4.1 Applicable Standard

##### FCC §15.407(a) (1)(iv)

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

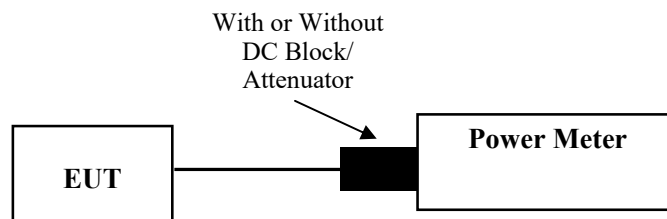
##### FCC §15.407(a) (2)

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

##### FCC §15.407(a) (3)(i)

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

#### 3.4.2 EUT Setup



#### 3.4.3 Test Procedure

According to ANSI C63.10-2013 Section 12.3.3.1

Method PM-G is measurement using a gated RF average power meter. Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

### 3.5 Maximum Power Spectral Density

#### 3.5.1 Applicable Standard

##### FCC §15.407(a) (1)(iv)

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

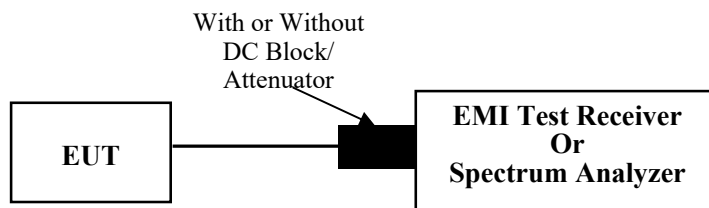
##### FCC §15.407(a) (2)

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

##### FCC §15.407(a) (3)(i)

For the band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

#### 3.5.2 EUT Setup



### 3.5.3 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01

**Duty cycle  $\geq 98\%$**

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-1 should be applied.

**Duty cycle  $< 98\%$ , duty cycle variations are less than  $\pm 2\%$**

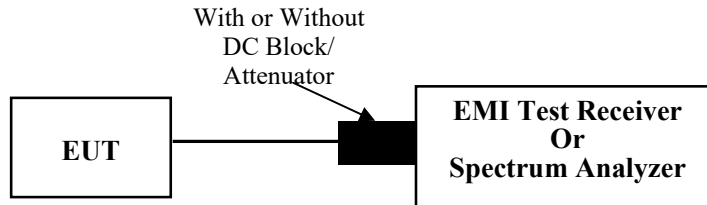
KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied.

**Duty cycle  $< 98\%$ , duty cycle variations exceed  $\pm 2\%$**

KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-3 should be applied.

### 3.7 Duty Cycle

#### 3.7.1 EUT Setup



#### 3.7.2 Test Procedure

According to ANSI C63.10-2013 Section 12.2

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

- 1) Set the center frequency of the instrument to the center frequency of the transmission.
- 2) Set  $RBW \geq OBW$  if possible; otherwise, set RBW to the largest available value.
- 3) Set  $VBW \geq RBW$ . Set detector = peak or average.
- 4) The zero-span measurement method shall not be used unless both RBW and VBW are  $> 50/T$  and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if  $T \leq 16.7 \mu s$ .)



## **3.8 Antenna Requirement**

### **3.8.1 Applicable Standard**

FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

### **3.8.2 Judgment**

**Result: Compliant.** Please refer to the Antenna Information detail in Section 1.

## 4. Test DATA AND RESULTS

### 4.1 AC Line Conducted Emissions

Serial Number:	2ATU-1,2ATU-3,2ATU-4	Test Date:	2023/09/27
Test Site:	CE	Test Mode:	Transmitting maximum output power mode(802.11a 5825MHz)
Tester:	David Huang	Test Result:	Pass

#### Environmental Conditions:

Temperature: (°C)	26.8	Relative Humidity: (%)	59	ATM Pressure: (kPa)	101.1
----------------------	------	---------------------------	----	------------------------	-------

#### Test Equipment List and Details:

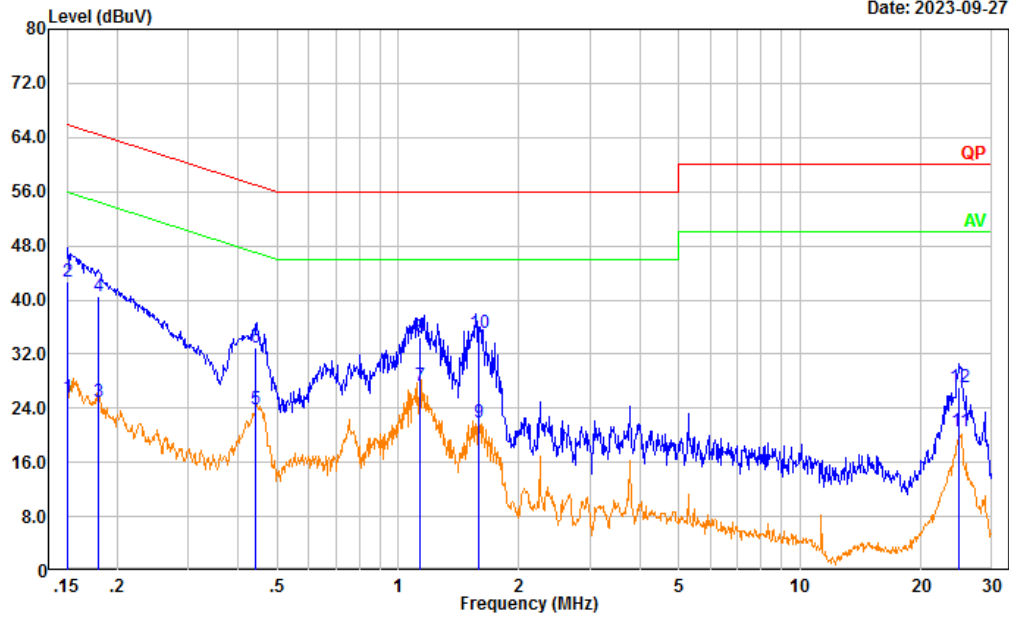
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2023/03/31	2024/03/30
R&S	EMI Test Receiver	ESR3	102726	2023/03/31	2024/03/30
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2023/08/06	2024/08/05
Audix	Test Software	E3	190306 (V9)	N/A	N/A

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Model: i506W (Adapter)

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: Line  
 Note:

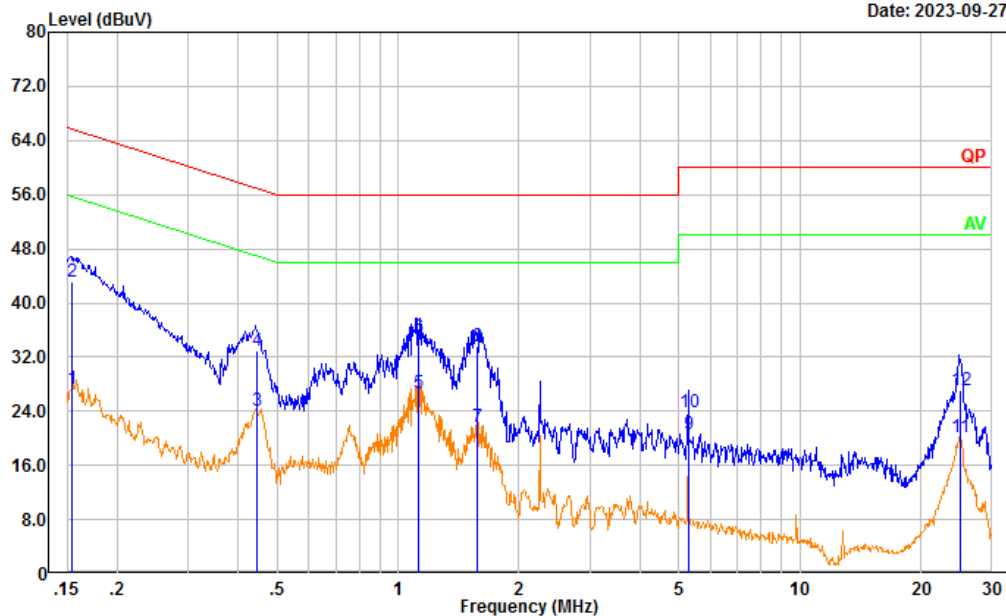
Date: 2023-09-27



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.151	16.07	9.61	25.68	55.95	30.27	Average
2	0.151	33.07	9.61	42.68	65.95	23.27	QP
3	0.180	15.27	9.61	24.88	54.49	29.61	Average
4	0.180	30.85	9.61	40.46	64.49	24.03	QP
5	0.440	14.18	9.61	23.79	47.06	23.27	Average
6	0.440	23.37	9.61	32.98	57.06	24.08	QP
7	1.132	17.75	9.62	27.37	46.00	18.63	Average
8	1.132	24.81	9.62	34.43	56.00	21.57	QP
9	1.590	12.35	9.63	21.98	46.00	24.02	Average
10	1.590	25.41	9.63	35.04	56.00	20.96	QP
11	24.895	10.84	9.81	20.65	50.00	29.35	Average
12	24.895	17.32	9.81	27.13	60.00	32.87	QP

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: neutral  
 Note:

Date: 2023-09-27

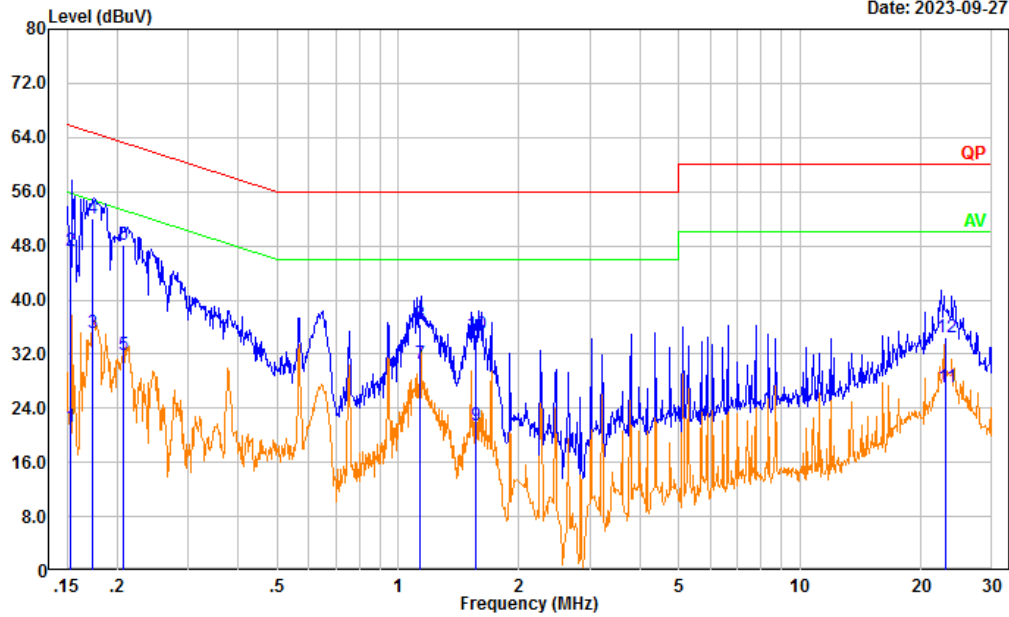


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.155	17.64	9.61	27.25	55.73	28.48	Average
2	0.155	33.44	9.61	43.05	65.73	22.68	QP
3	0.445	14.55	9.61	24.16	46.98	22.82	Average
4	0.445	23.29	9.61	32.90	56.98	24.08	QP
5	1.121	17.05	9.62	26.67	46.00	19.33	Average
6	1.121	25.25	9.62	34.87	56.00	21.13	QP
7	1.577	12.02	9.63	21.65	46.00	24.35	Average
8	1.577	23.88	9.63	33.51	56.00	22.49	QP
9	5.284	11.04	9.66	20.70	50.00	29.30	Average
10	5.284	14.23	9.66	23.89	60.00	36.11	QP
11	25.073	10.32	9.76	20.08	50.00	29.92	Average
12	25.073	17.44	9.76	27.20	60.00	32.80	QP

Model: i506W (POE)

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: Line  
 Note:

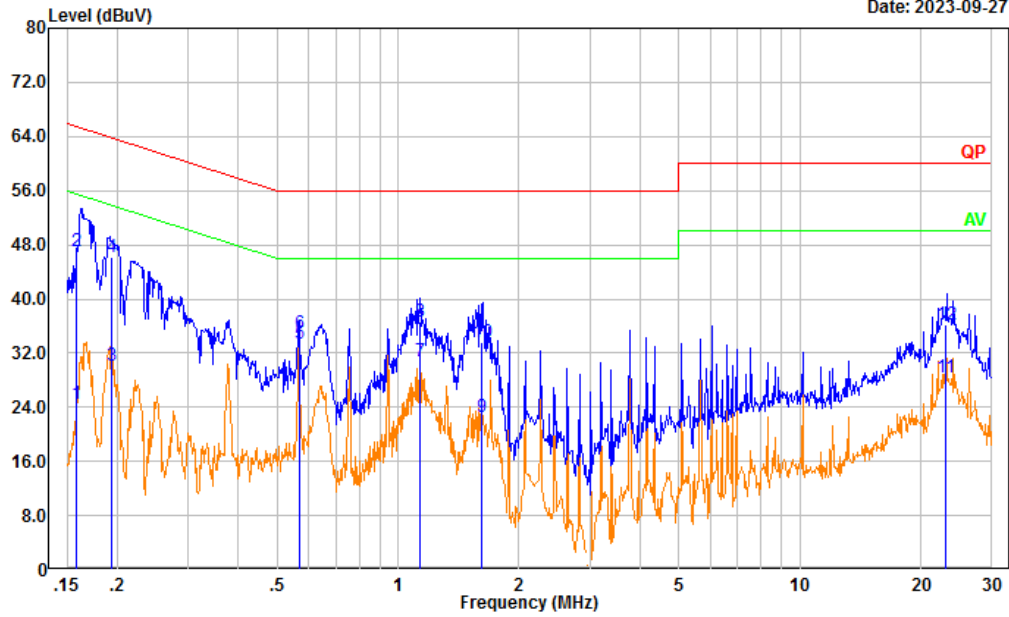
Date: 2023-09-27



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.153	11.73	9.61	21.34	55.81	34.47	Average
2	0.153	37.72	9.61	47.33	65.81	18.48	QP
3	0.173	25.61	9.61	35.22	54.79	19.57	Average
4	0.173	42.40	9.61	52.01	64.79	12.78	QP
5	0.207	22.17	9.61	31.78	53.32	21.54	Average
6	0.207	38.42	9.61	48.03	63.32	15.29	QP
7	1.134	20.92	9.62	30.54	46.00	15.46	Average
8	1.134	26.81	9.62	36.43	56.00	19.57	QP
9	1.566	11.87	9.63	21.50	46.00	24.50	Average
10	1.566	25.22	9.63	34.85	56.00	21.15	QP
11	23.077	17.25	9.81	27.06	50.00	22.94	Average
12	23.077	24.76	9.81	34.57	60.00	25.43	QP

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: neutral  
 Note:

Date: 2023-09-27

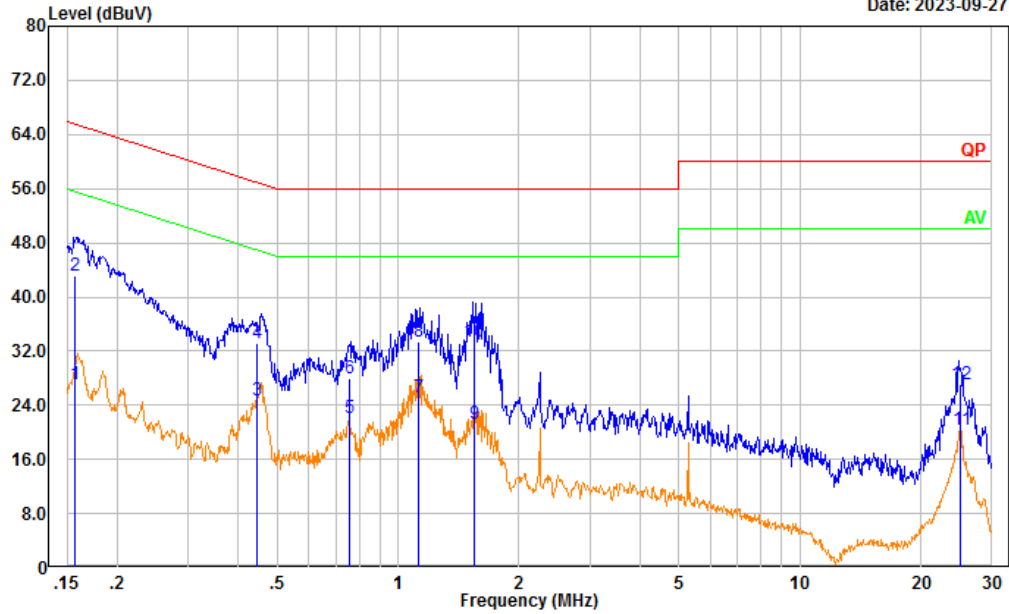


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.159	14.80	9.61	24.41	55.53	31.12	Average
2	0.159	37.46	9.61	47.07	65.53	18.46	QP
3	0.194	20.55	9.61	30.16	53.87	23.71	Average
4	0.194	36.54	9.61	46.15	63.87	17.72	QP
5	0.567	23.85	9.62	33.47	46.00	12.53	Average
6	0.567	25.39	9.62	35.01	56.00	20.99	QP
7	1.133	21.26	9.62	30.88	46.00	15.12	Average
8	1.133	27.07	9.62	36.69	56.00	19.31	QP
9	1.615	13.01	9.63	22.64	46.00	23.36	Average
10	1.615	24.05	9.63	33.68	56.00	22.32	QP
11	23.045	18.61	9.74	28.35	50.00	21.65	Average
12	23.045	26.55	9.74	36.29	60.00	23.71	QP

Model: i504W (Adapter)

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: Line  
 Note:

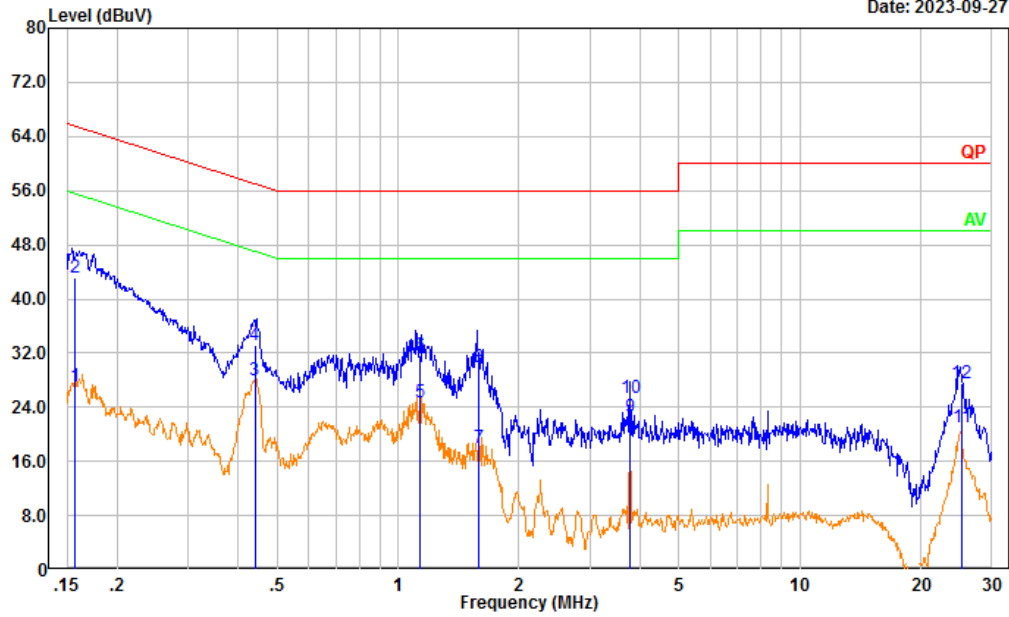
Date: 2023-09-27



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.157	17.57	9.61	27.18	55.65	28.47	Average
2	0.157	33.56	9.61	43.17	65.65	22.48	QP
3	0.445	15.09	9.61	24.70	46.97	22.27	Average
4	0.445	23.64	9.61	33.25	56.97	23.72	QP
5	0.756	12.57	9.62	22.19	46.00	23.81	Average
6	0.756	18.39	9.62	28.01	56.00	27.99	QP
7	1.122	15.63	9.62	25.25	46.00	20.75	Average
8	1.122	23.70	9.62	33.32	56.00	22.68	QP
9	1.542	11.64	9.63	21.27	46.00	24.73	Average
10	1.542	23.76	9.63	33.39	56.00	22.61	QP
11	25.138	10.53	9.81	20.34	50.00	29.66	Average
12	25.138	17.35	9.81	27.16	60.00	32.84	QP

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: neutral  
 Note:

Date: 2023-09-27



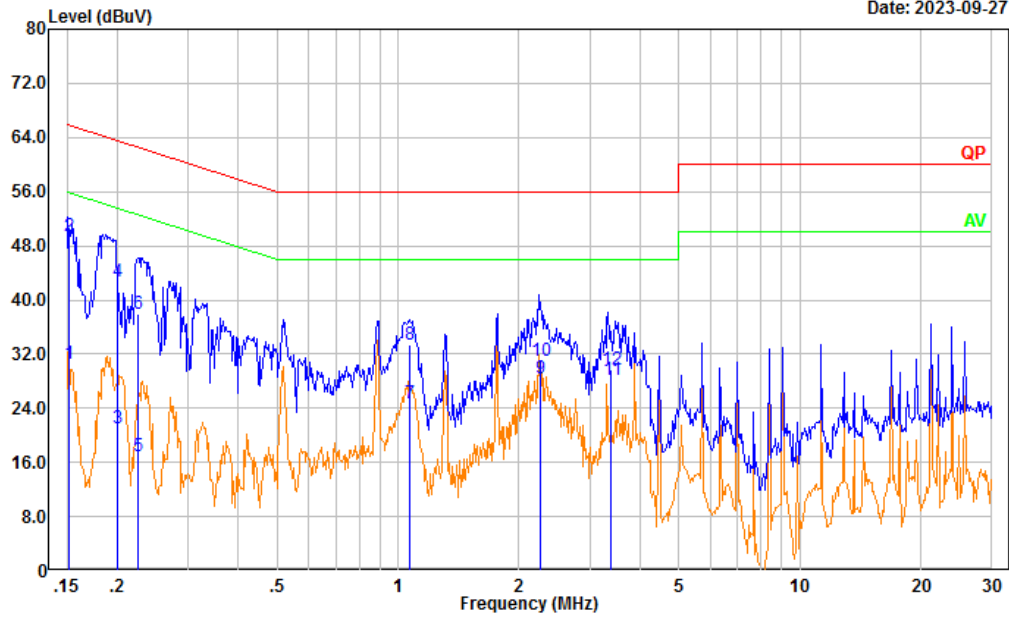
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.157	17.48	9.61	27.09	55.59	28.50	Average
2	0.157	33.55	9.61	43.16	65.59	22.43	QP
3	0.440	18.30	9.61	27.91	47.06	19.15	Average
4	0.440	23.57	9.61	33.18	57.06	23.88	QP
5	1.133	15.15	9.62	24.77	46.00	21.23	Average
6	1.133	22.06	9.62	31.68	56.00	24.32	QP
7	1.585	8.35	9.63	17.98	46.00	28.02	Average
8	1.585	20.18	9.63	29.81	56.00	26.19	QP
9	3.782	12.96	9.65	22.61	46.00	23.39	Average
10	3.782	15.62	9.65	25.27	56.00	30.73	QP
11	25.164	11.28	9.76	21.04	50.00	28.96	Average
12	25.164	17.71	9.76	27.47	60.00	32.53	QP



Model: i504W (POE)

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: Line  
 Note:

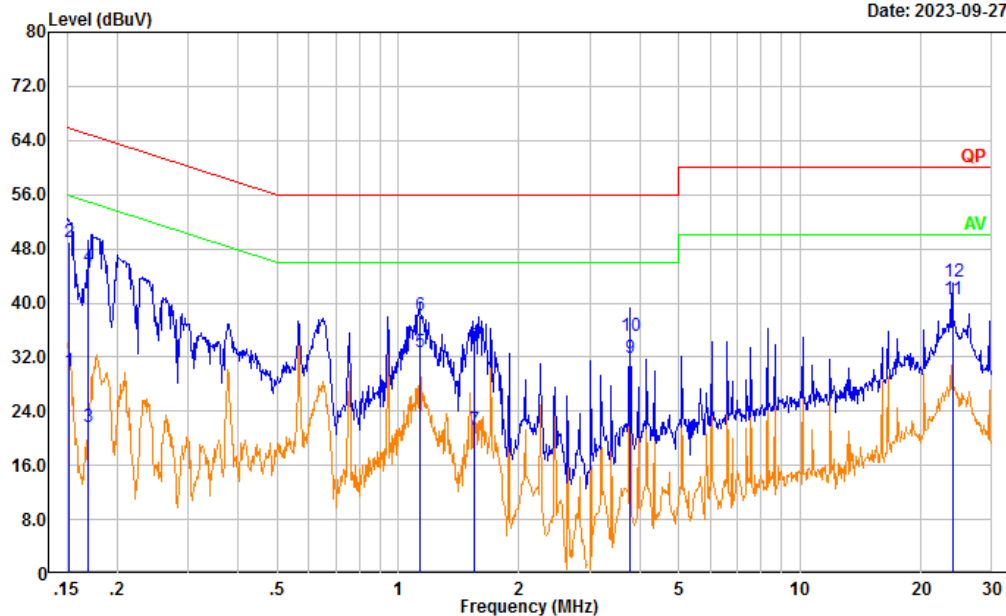
Date: 2023-09-27



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.151	20.92	9.61	30.53	55.93	25.40	Average
2	0.151	39.82	9.61	49.43	65.93	16.50	QP
3	0.200	11.38	9.61	20.99	53.63	32.64	Average
4	0.200	33.08	9.61	42.69	63.63	20.94	QP
5	0.226	7.21	9.61	16.82	52.60	35.78	Average
6	0.226	28.39	9.61	38.00	62.60	24.60	QP
7	1.073	15.15	9.62	24.77	46.00	21.23	Average
8	1.073	23.82	9.62	33.44	56.00	22.56	QP
9	2.267	18.78	9.64	28.42	46.00	17.58	Average
10	2.267	21.47	9.64	31.11	56.00	24.89	QP
11	3.395	18.62	9.65	28.27	46.00	17.73	Average
12	3.395	20.12	9.65	29.77	56.00	26.23	QP

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: neutral  
 Note:

Date: 2023-09-27

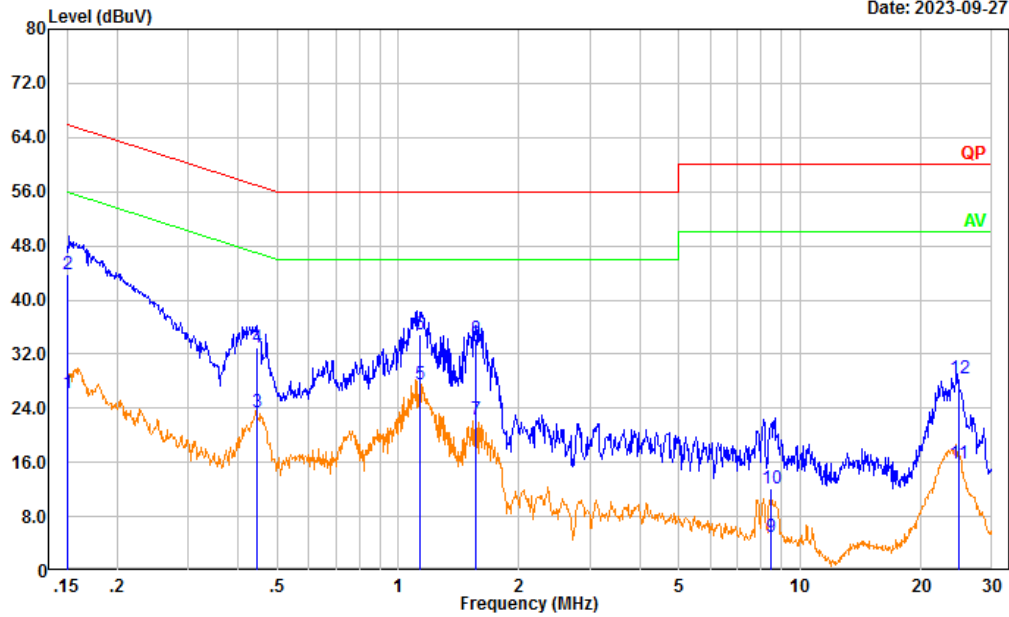


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.152	20.38	9.61	29.99	55.89	25.90	Average
2	0.152	39.49	9.61	49.10	65.89	16.79	QP
3	0.169	11.98	9.61	21.59	54.99	33.40	Average
4	0.169	35.62	9.61	45.23	64.99	19.76	QP
5	1.132	23.04	9.62	32.66	46.00	13.34	Average
6	1.132	28.52	9.62	38.14	56.00	17.86	QP
7	1.542	11.55	9.63	21.18	46.00	24.82	Average
8	1.542	23.93	9.63	33.56	56.00	22.44	QP
9	3.781	22.29	9.65	31.94	46.00	14.06	Average
10	3.781	25.45	9.65	35.10	56.00	20.90	QP
11	23.981	30.90	9.75	40.65	50.00	9.35	Average
12	23.981	33.46	9.75	43.21	60.00	16.79	QP

Model: Y504W-Y (Adapter)

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: Line  
 Note:

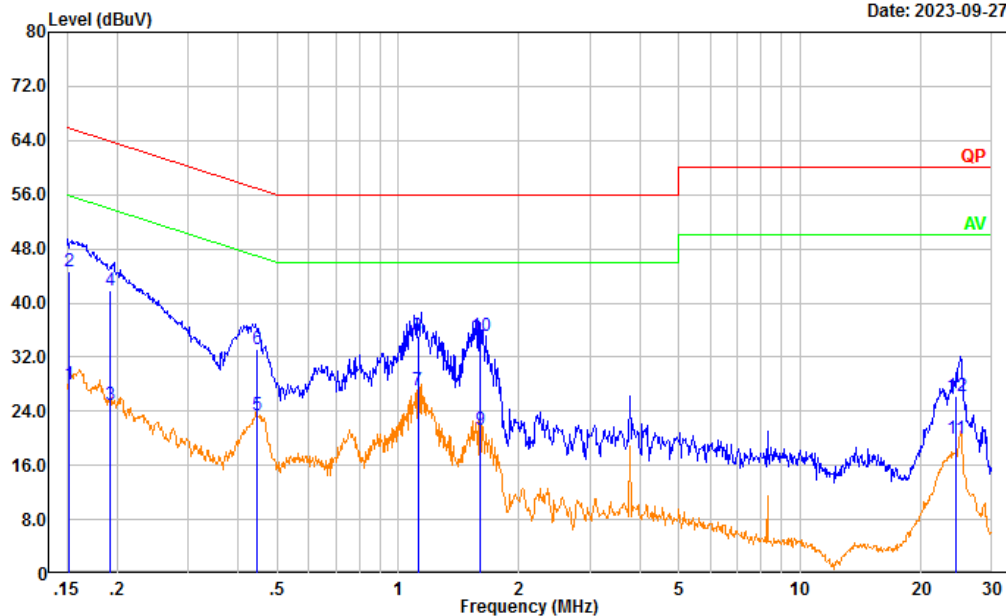
Date: 2023-09-27



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.150	16.71	9.61	26.32	55.99	29.67	Average
2	0.150	34.27	9.61	43.88	65.99	22.11	QP
3	0.444	13.83	9.61	23.44	46.98	23.54	Average
4	0.444	23.36	9.61	32.97	56.98	24.01	QP
5	1.132	17.99	9.62	27.61	46.00	18.39	Average
6	1.132	25.26	9.62	34.88	56.00	21.12	QP
7	1.566	12.66	9.63	22.29	46.00	23.71	Average
8	1.566	24.61	9.63	34.24	56.00	21.76	QP
9	8.458	-4.74	9.67	4.93	50.00	45.07	Average
10	8.458	2.41	9.67	12.08	60.00	47.92	QP
11	24.835	6.00	9.81	15.81	50.00	34.19	Average
12	24.835	18.64	9.81	28.45	60.00	31.55	QP

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: neutral  
 Note:

Date: 2023-09-27

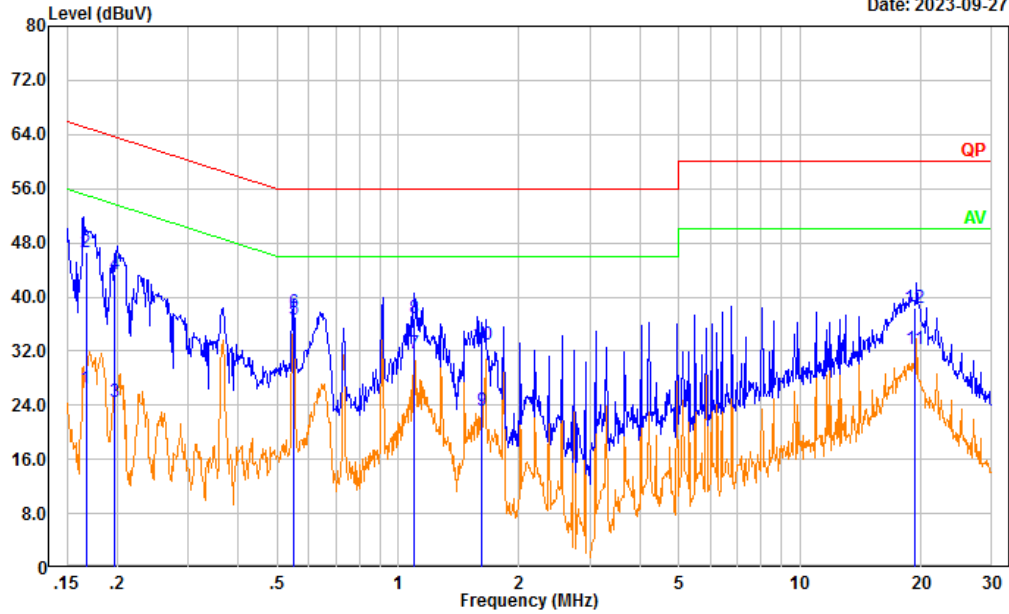


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.152	18.28	9.61	27.89	55.87	27.98	Average
2	0.152	35.13	9.61	44.74	65.87	21.13	QP
3	0.193	15.30	9.61	24.91	53.93	29.02	Average
4	0.193	32.20	9.61	41.81	63.93	22.12	QP
5	0.444	13.80	9.61	23.41	46.98	23.57	Average
6	0.444	23.54	9.61	33.15	56.98	23.83	QP
7	1.120	17.55	9.62	27.17	46.00	18.83	Average
8	1.120	25.48	9.62	35.10	56.00	20.90	QP
9	1.602	11.65	9.63	21.28	46.00	24.72	Average
10	1.602	25.49	9.63	35.12	56.00	20.88	QP
11	24.354	10.23	9.75	19.98	50.00	30.02	Average
12	24.354	16.43	9.75	26.18	60.00	33.82	QP

Model: Y504W-Y (POE)

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: Line  
 Note:

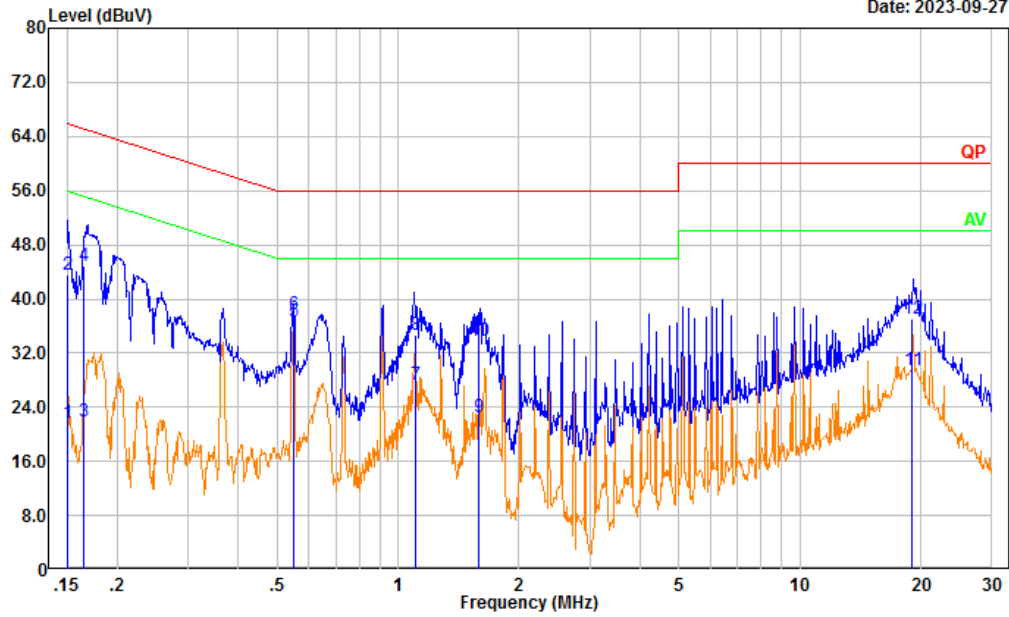
Date: 2023-09-27



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.167	16.89	9.61	26.50	55.10	28.60	Average
2	0.167	36.92	9.61	46.53	65.10	18.57	QP
3	0.197	14.98	9.61	24.59	53.74	29.15	Average
4	0.197	33.72	9.61	43.33	63.74	20.41	QP
5	0.550	27.03	9.61	36.64	46.00	9.36	Average
6	0.550	28.06	9.61	37.67	56.00	18.33	QP
7	1.098	22.04	9.62	31.66	46.00	14.34	Average
8	1.098	27.17	9.62	36.79	56.00	19.21	QP
9	1.612	13.62	9.63	23.25	46.00	22.75	Average
10	1.612	23.28	9.63	32.91	56.00	23.09	QP
11	19.228	22.54	9.77	32.31	50.00	17.69	Average
12	19.228	28.60	9.77	38.37	60.00	21.63	QP

Project No.: CR230951413-RF  
 Tester: David Huang  
 Port: neutral  
 Note:

Date: 2023-09-27



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.151	12.17	9.61	21.78	55.94	34.16	Average
2	0.151	33.87	9.61	43.48	65.94	22.46	QP
3	0.165	12.39	9.61	22.00	55.23	33.23	Average
4	0.165	35.32	9.61	44.93	65.23	20.30	QP
5	0.549	27.03	9.61	36.64	46.00	9.36	Average
6	0.549	28.01	9.61	37.62	56.00	18.38	QP
7	1.108	17.60	9.62	27.22	46.00	18.78	Average
8	1.108	25.14	9.62	34.76	56.00	21.24	QP
9	1.589	12.93	9.63	22.56	46.00	23.44	Average
10	1.589	24.27	9.63	33.90	56.00	22.10	QP
11	19.057	19.81	9.69	29.50	50.00	20.50	Average
12	19.057	27.34	9.69	37.03	60.00	22.97	QP

## 4.2 Radiation Spurious Emissions

Serial Number:	2ATU-1,2ATU-3,2ATU-4	Test Date:	2023/10/18~2023/10/19 for below 1GHz 2023/10/04~2023/10/19 for above 1GHz		
Test Site:	966-2,966-1	Test Mode:	Transmitting		
Tester:	Carl Xue, coco Tian, Mack Huang	Test Result:	Pass		
<b>Environmental Conditions:</b>					
Temperature: (°C)	25.5-26.9	Relative Humidity: (%)	53-63	ATM Pressure: (kPa)	101.0-101.1

### Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>30MHz-1GHz</b>					
Sunol Sciences	Antenna	JB6	A082520-6	2023/9/18	2026/9/17
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165	2023/7/16	2024/7/15
Audix	Test Software	E3	201021 (V9)	N/A	N/A
<b>1GHz-40GHz</b>					
AH	Double Ridge Guide Horn Antenna	SAS-571	1394	2023/2/22	2025/2/23
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/9	2023/11/8
Audix	Test Software	E3	201021 (V9)	N/A	N/A
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
PASTERNAK	Horn Antenna	PE9850/2F-20	072001	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2023/9/15	2024/9/14
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2023/8/6	2024/8/5
E-Microwave	Band Rejection Filter	2400-2483.5MHz	OE01902424	2023/8/6	2024/8/5
Mini Circuits	High Pass Filter	VHF-6010+	31119	2023/8/6	2024/8/5
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

### Test Data:

Please refer to the below table and plots.

Note: After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

**1) 30MHz-1GHz (maximum output power mode (802.11a mode))**

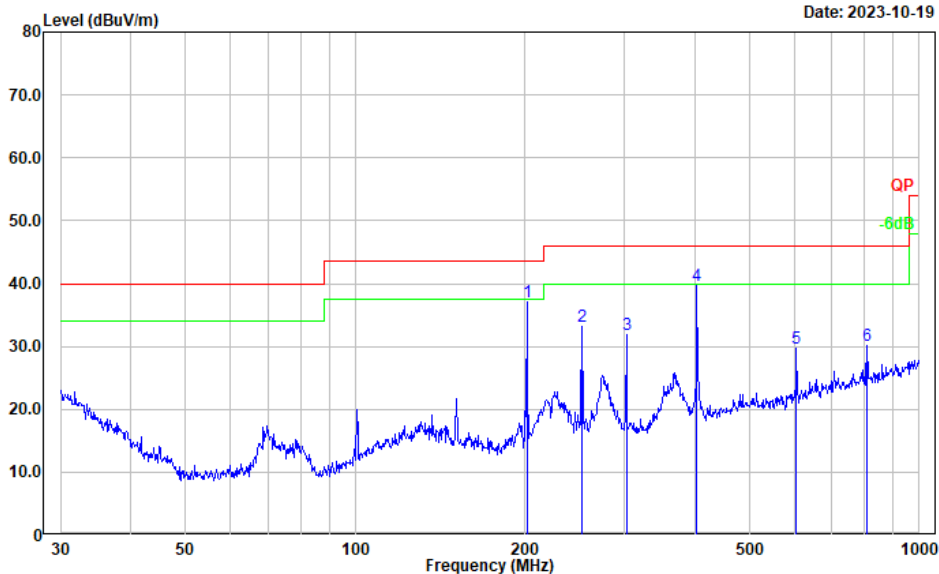
**5150-5250MHz band:**

Model: i506W (Adapter)

Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-19

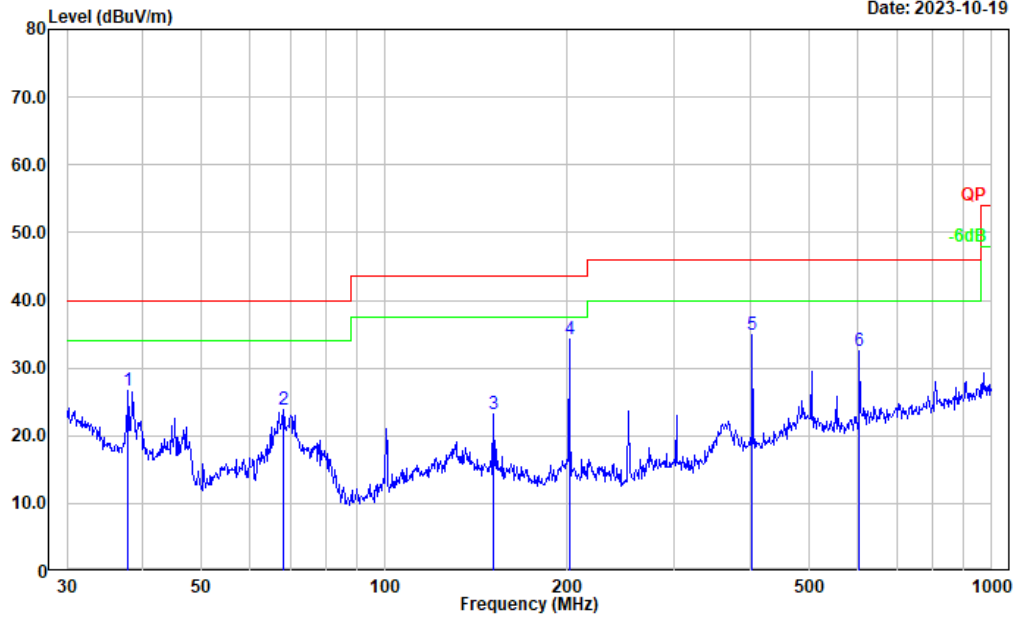


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	201.393	49.36	-12.25	37.11	43.50	6.39	Peak
2	252.063	46.35	-13.08	33.27	46.00	12.73	Peak
3	302.481	42.56	-10.61	31.95	46.00	14.05	Peak
4	403.250	48.38	-8.67	39.71	46.00	6.29	Peak
5	605.659	34.55	-4.85	29.70	46.00	16.30	Peak
6	807.429	32.24	-2.06	30.18	46.00	15.82	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

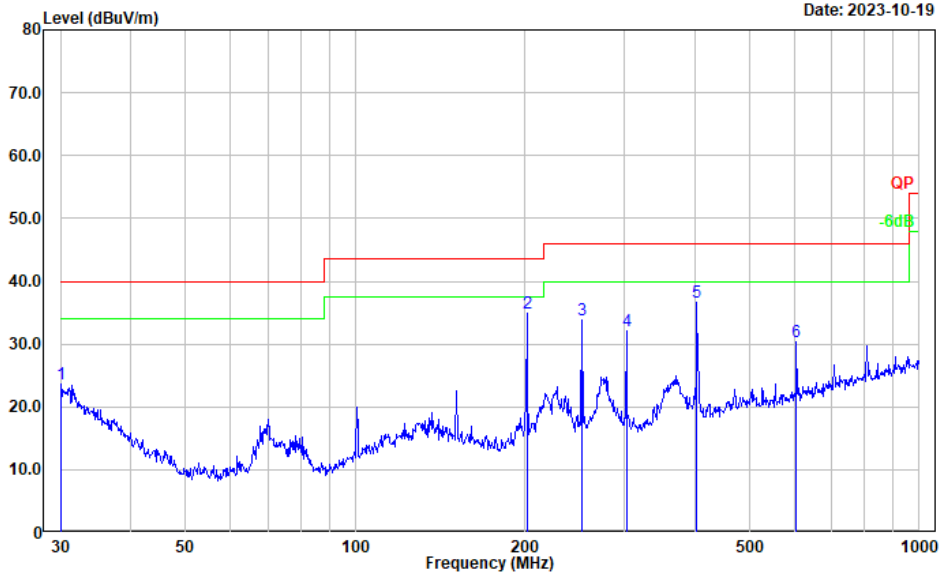


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	37.812	36.44	-9.72	26.72	40.00	13.28	Peak
2	68.151	40.68	-16.73	23.95	40.00	16.05	Peak
3	151.067	35.10	-11.95	23.15	43.50	20.35	Peak
4	201.393	46.59	-12.25	34.34	43.50	9.16	Peak
5	403.250	43.49	-8.67	34.82	46.00	11.18	Peak
6	605.659	37.38	-4.85	32.53	46.00	13.47	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

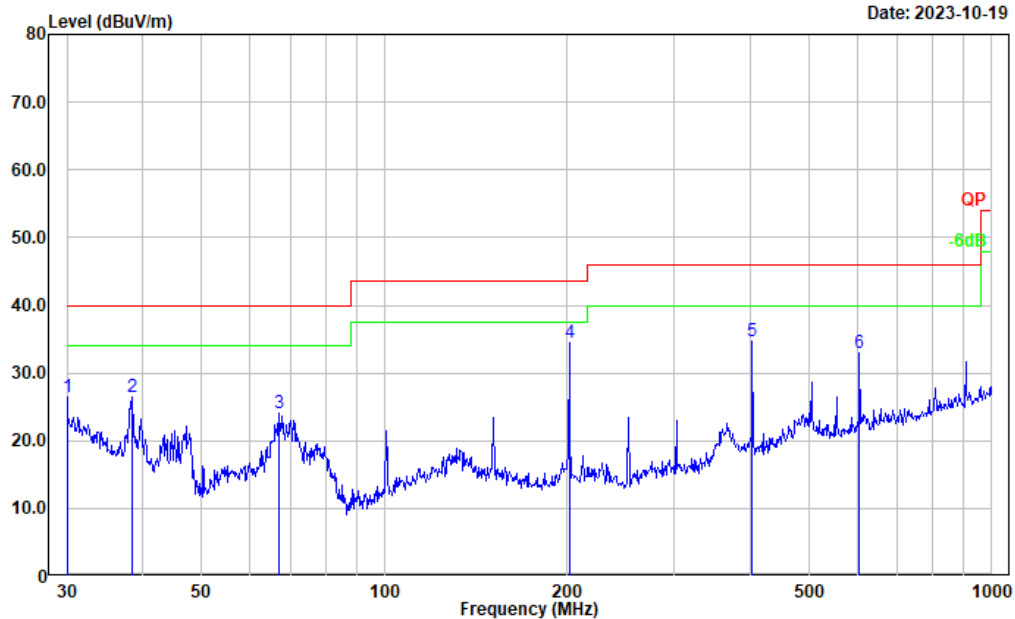
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	27.56	-3.88	23.68	40.00	16.32	Peak
2	201.393	47.23	-12.25	34.98	43.50	8.52	Peak
3	252.063	46.94	-13.08	33.86	46.00	12.14	Peak
4	302.481	42.66	-10.61	32.05	46.00	13.95	Peak
5	403.250	45.32	-8.67	36.65	46.00	9.35	Peak
6	605.659	35.12	-4.85	30.27	46.00	15.73	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

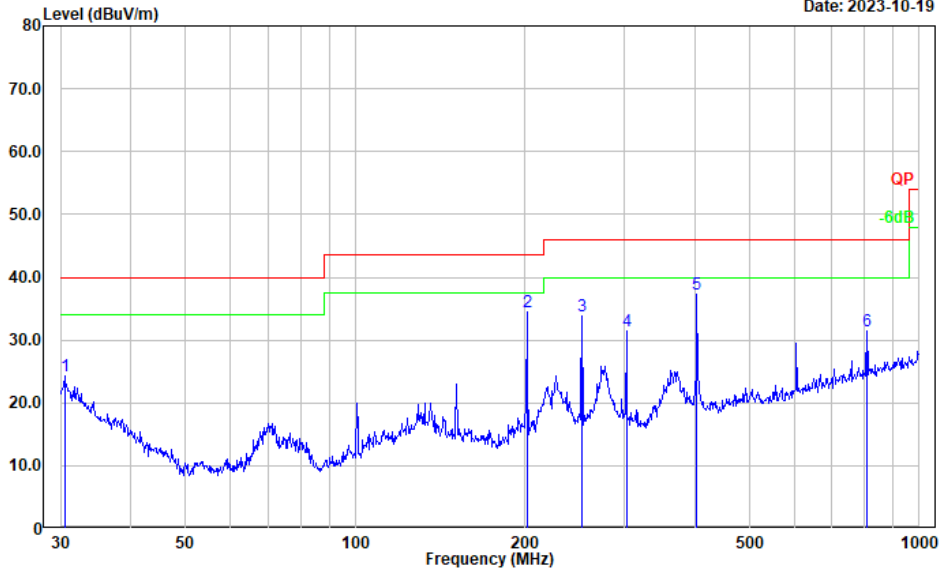


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.000	30.24	-3.80	26.44	40.00	13.56	Peak
2	38.481	36.72	-10.22	26.50	40.00	13.50	Peak
3	66.967	40.78	-16.80	23.98	40.00	16.02	Peak
4	201.393	46.69	-12.25	34.44	43.50	9.06	Peak
5	403.250	43.42	-8.67	34.75	46.00	11.25	Peak
6	605.659	37.78	-4.85	32.93	46.00	13.07	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

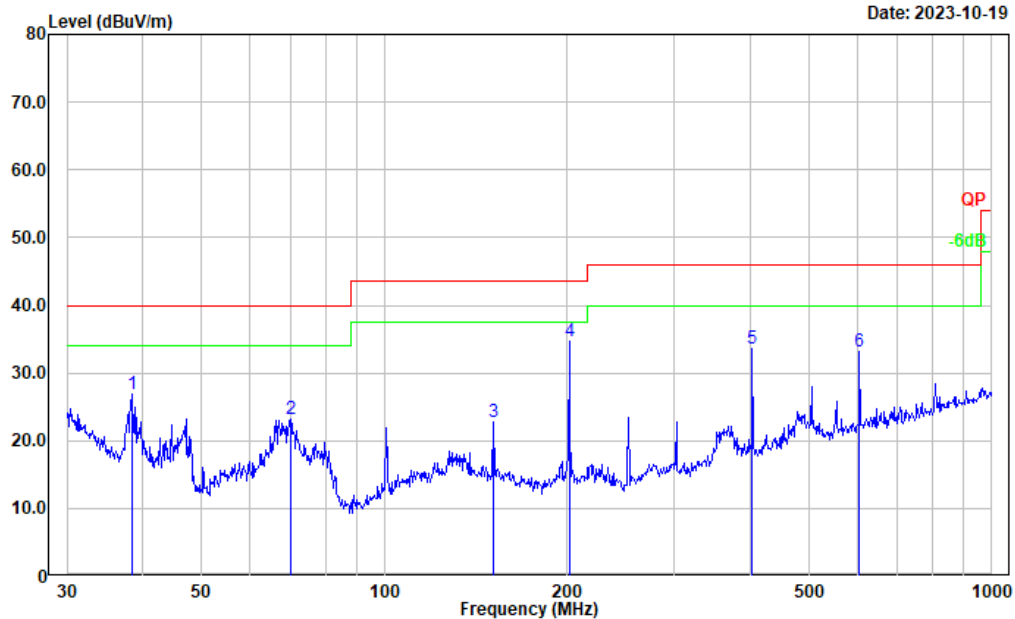
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.531	28.48	-4.20	24.28	40.00	15.72	Peak
2	201.393	46.68	-12.25	34.43	43.50	9.07	Peak
3	252.063	46.82	-13.08	33.74	46.00	12.26	Peak
4	302.481	42.14	-10.61	31.53	46.00	14.47	Peak
5	403.250	45.87	-8.67	37.20	46.00	8.80	Peak
6	807.429	33.53	-2.06	31.47	46.00	14.53	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19



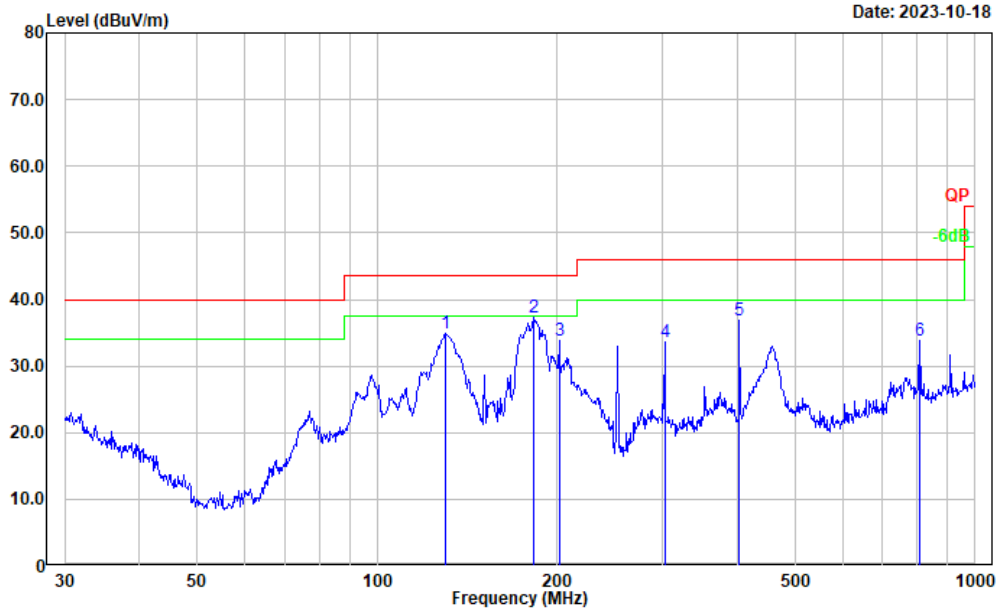
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	38.481	37.02	-10.22	26.80	40.00	13.20	Peak
2	70.090	39.68	-16.57	23.11	40.00	16.89	Peak
3	151.067	34.79	-11.95	22.84	43.50	20.66	Peak
4	201.393	46.92	-12.25	34.67	43.50	8.83	Peak
5	403.250	42.26	-8.67	33.59	46.00	12.41	Peak
6	605.659	38.00	-4.85	33.15	46.00	12.85	Peak

Model: i506W (POE)

Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

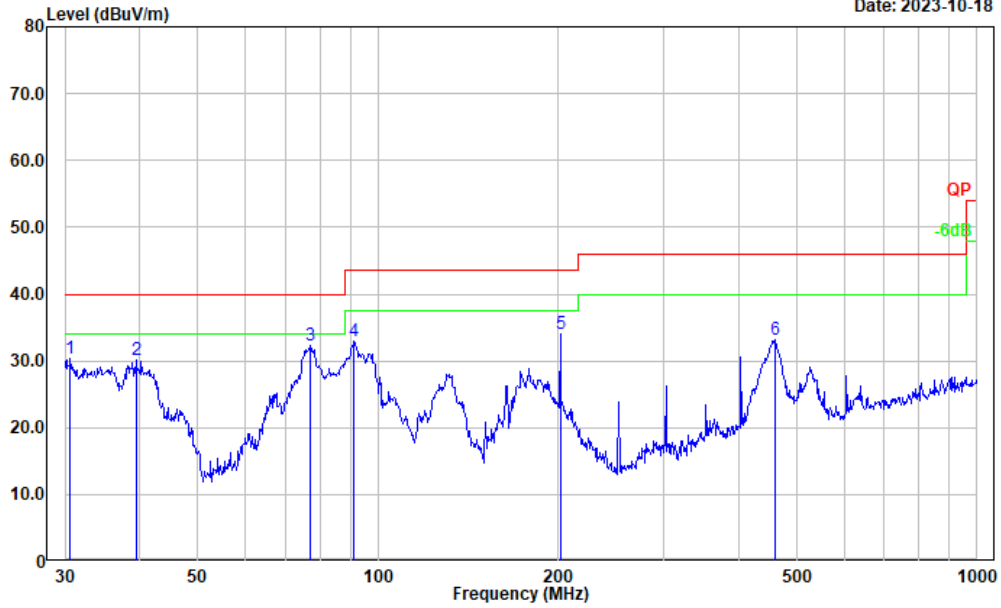
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	130.379	46.27	-11.31	34.96	43.50	8.54	Peak
2	182.559	50.89	-13.53	37.36	43.50	6.14	Peak
3	201.393	46.00	-12.25	33.75	43.50	9.75	Peak
4	302.481	44.24	-10.61	33.63	46.00	12.37	Peak
5	403.250	45.43	-8.67	36.76	46.00	9.24	Peak
6	807.429	35.91	-2.06	33.85	46.00	12.15	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

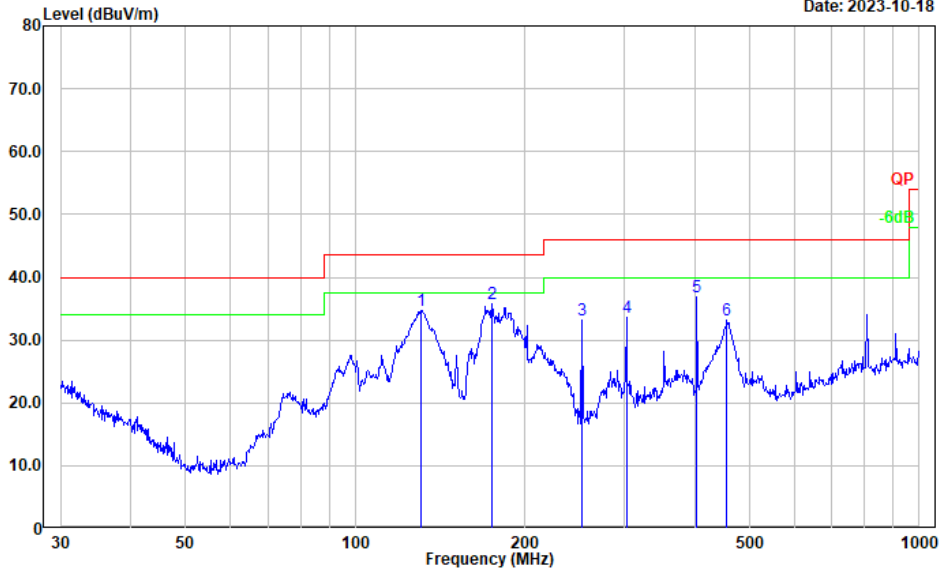


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.638	34.65	-4.28	30.37	40.00	9.63	Peak
2	39.437	41.22	-10.98	30.24	40.00	9.76	Peak
3	77.051	49.46	-17.17	32.29	40.00	7.71	Peak
4	91.175	49.51	-16.64	32.87	43.50	10.63	Peak
5	201.393	46.32	-12.25	34.07	43.50	9.43	Peak
6	459.114	39.79	-6.70	33.09	46.00	12.91	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-18

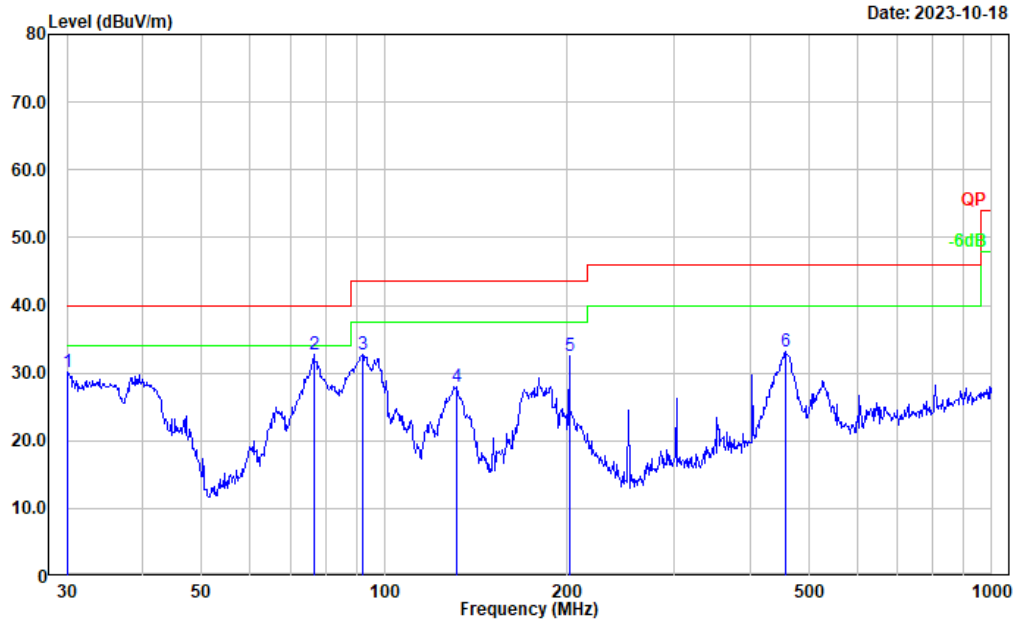


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	130.837	46.08	-11.32	34.76	43.50	8.74	Peak
2	175.037	49.03	-13.19	35.84	43.50	7.66	Peak
3	252.063	46.23	-13.08	33.15	46.00	12.85	Peak
4	302.481	44.29	-10.61	33.68	46.00	12.32	Peak
5	403.250	45.56	-8.67	36.89	46.00	9.11	Peak
6	455.906	39.88	-6.76	33.12	46.00	12.88	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

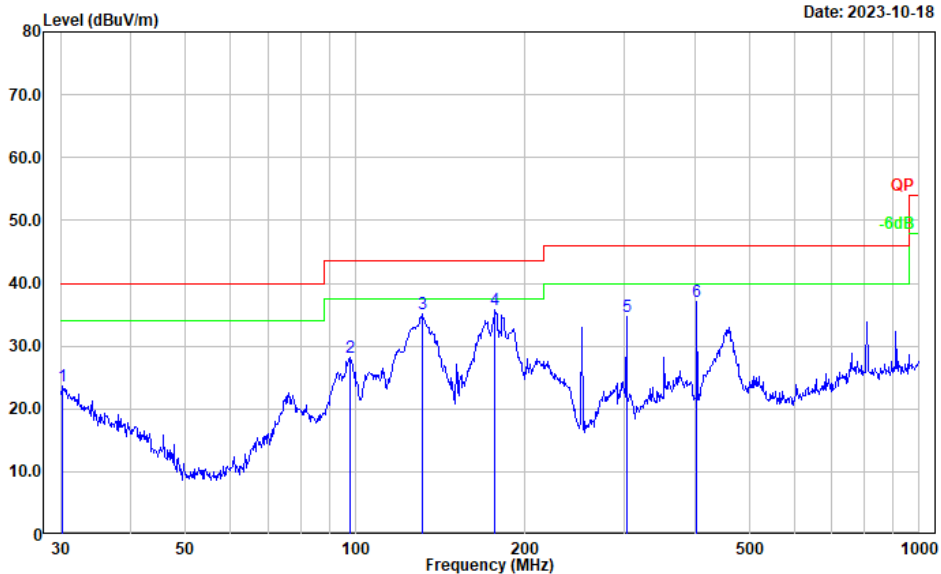


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.000	33.85	-3.80	30.05	40.00	9.95	Peak
2	76.512	49.87	-17.13	32.74	40.00	7.26	Peak
3	92.139	49.11	-16.41	32.70	43.50	10.80	Peak
4	131.297	39.34	-11.34	28.00	43.50	15.50	Peak
5	201.393	44.81	-12.25	32.56	43.50	10.94	Peak
6	457.507	39.81	-6.73	33.08	46.00	12.92	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

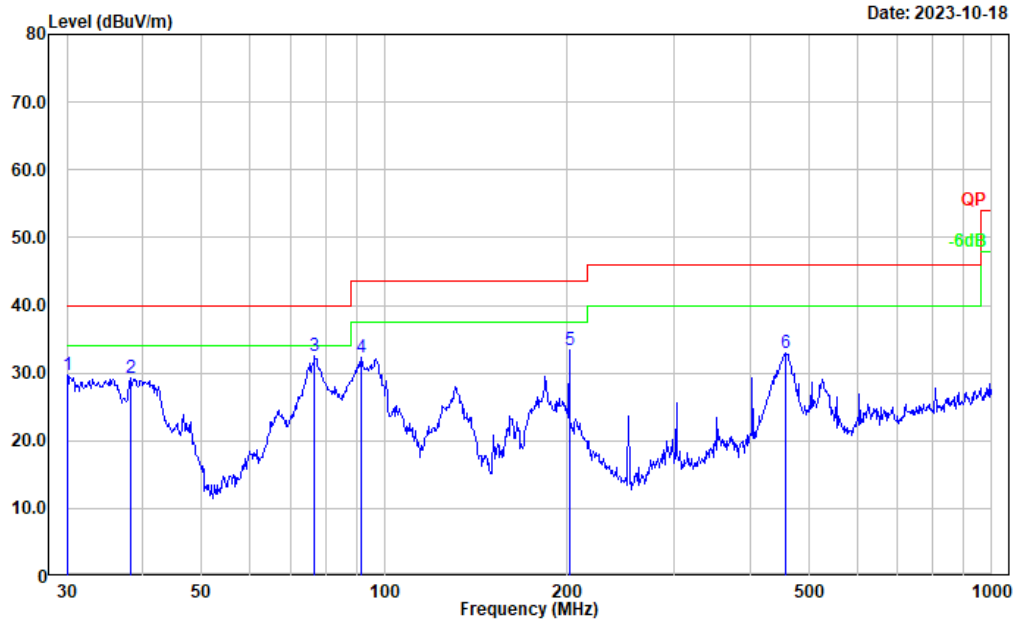
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.317	27.58	-4.04	23.54	40.00	16.46	Peak
2	98.142	42.88	-14.75	28.13	43.50	15.37	Peak
3	131.297	46.40	-11.34	35.06	43.50	8.44	Peak
4	176.888	49.10	-13.31	35.79	43.50	7.71	Peak
5	302.481	45.23	-10.61	34.62	46.00	11.38	Peak
6	403.250	45.64	-8.67	36.97	46.00	9.03	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

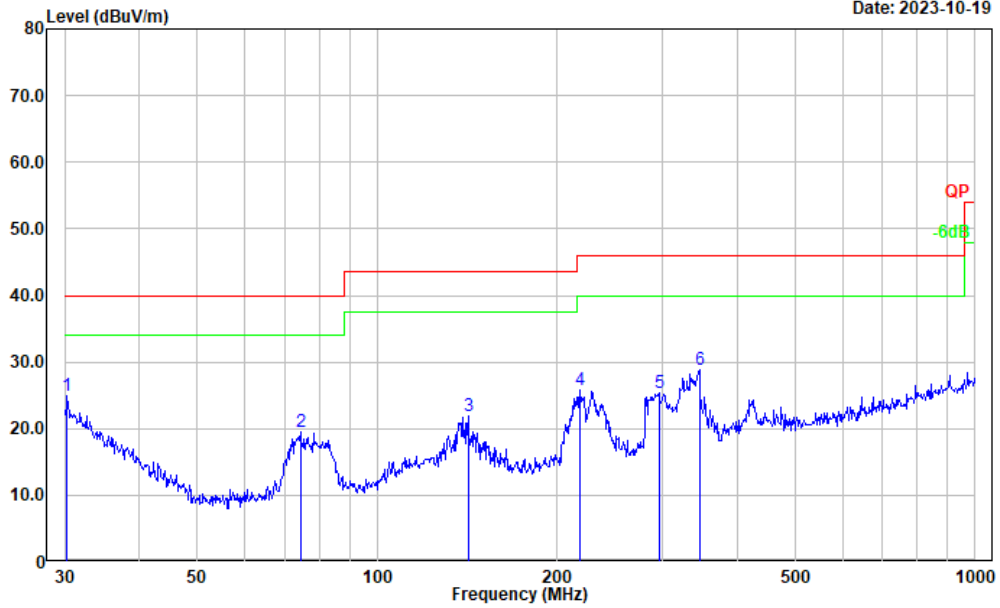


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	33.62	-3.88	29.74	40.00	10.26	Peak
2	38.212	39.39	-10.02	29.37	40.00	10.63	Peak
3	76.781	49.60	-17.15	32.45	40.00	7.55	Peak
4	91.495	48.79	-16.57	32.22	43.50	11.28	Peak
5	201.393	45.65	-12.25	33.40	43.50	10.10	Peak
6	457.507	39.69	-6.73	32.96	46.00	13.04	Peak

Model: i504W (Adapter)  
 Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

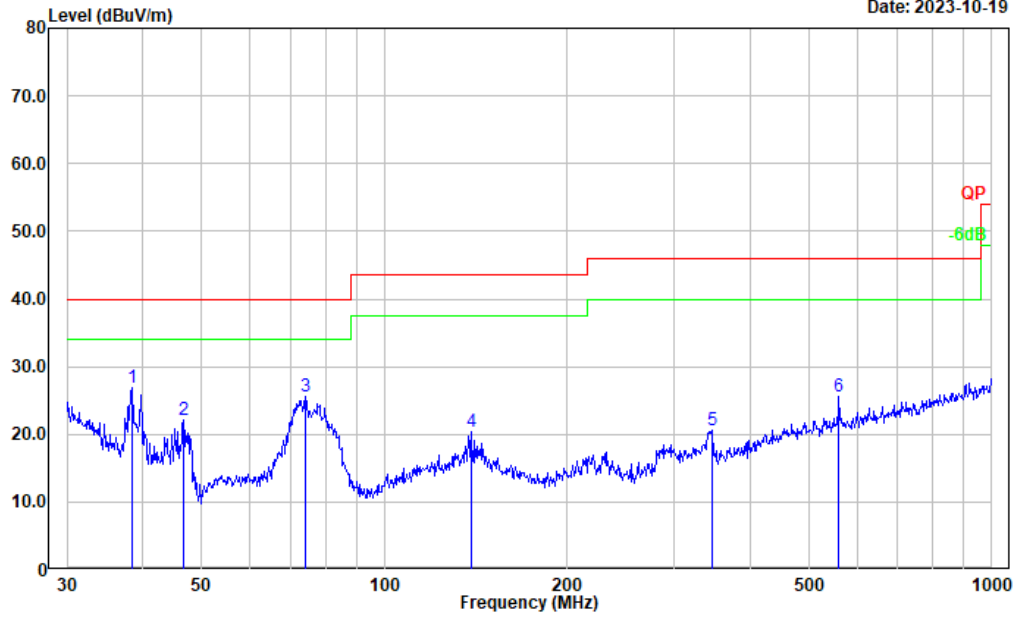
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.317	28.95	-4.04	24.91	40.00	15.09	Peak
2	74.396	36.47	-16.98	19.49	40.00	20.51	Peak
3	141.826	33.76	-11.82	21.94	43.50	21.56	Peak
4	218.309	38.62	-12.79	25.83	46.00	20.17	Peak
5	296.184	36.02	-10.74	25.28	46.00	20.72	Peak
6	345.595	38.87	-10.02	28.85	46.00	17.15	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

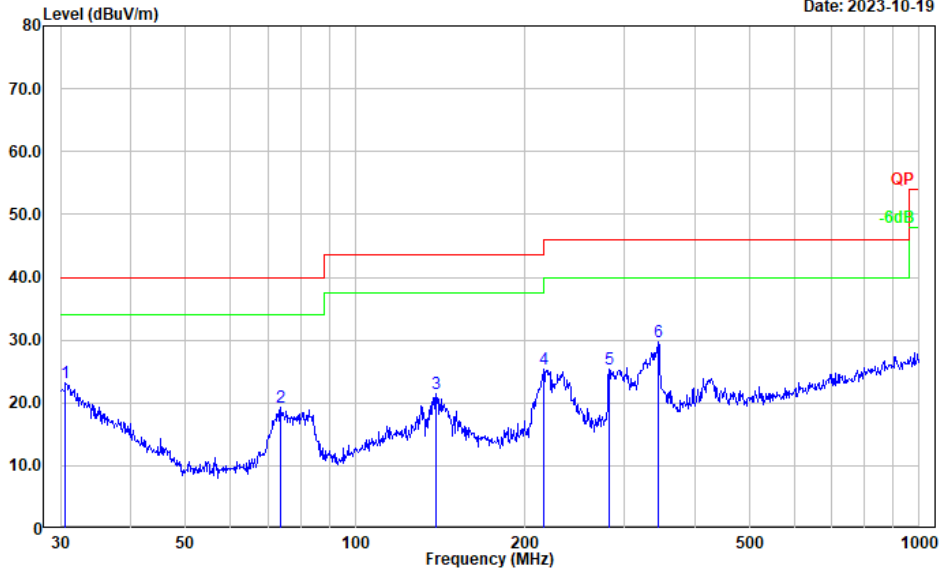


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	38.481	37.12	-10.22	26.90	40.00	13.10	Peak
2	46.666	37.22	-15.20	22.02	40.00	17.98	Peak
3	74.135	42.51	-16.96	25.55	40.00	14.45	Peak
4	138.874	32.11	-11.71	20.40	43.50	23.10	Peak
5	345.595	30.67	-10.02	20.65	46.00	25.35	Peak
6	560.693	31.24	-5.64	25.60	46.00	20.40	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

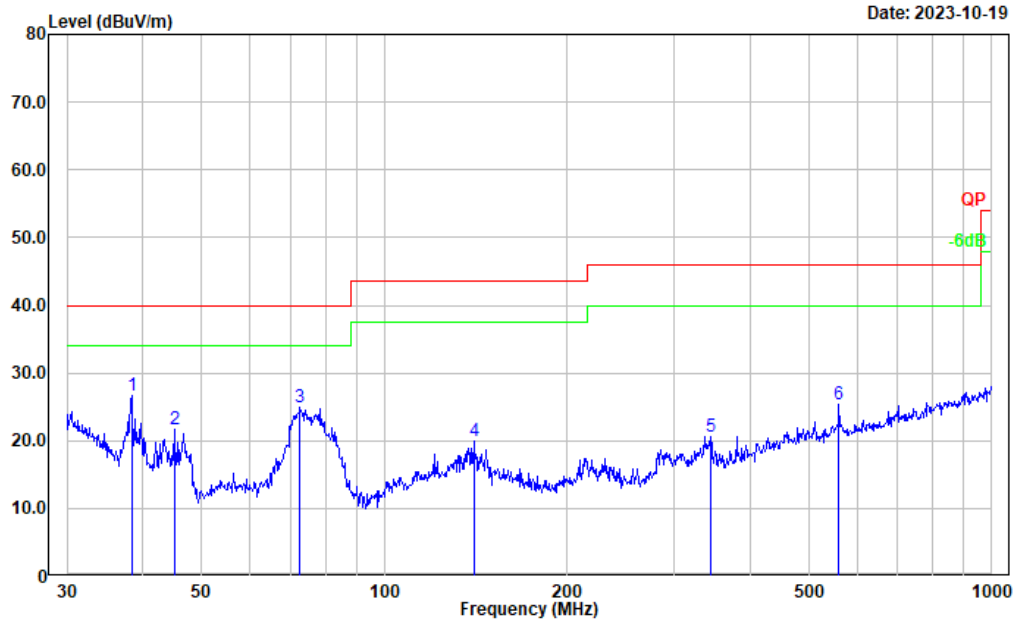
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.638	27.44	-4.28	23.16	40.00	16.84	Peak
2	73.617	36.24	-16.90	19.34	40.00	20.66	Peak
3	138.874	33.08	-11.71	21.37	43.50	22.13	Peak
4	215.268	38.01	-12.65	25.36	43.50	18.14	Peak
5	281.995	36.96	-11.56	25.40	46.00	20.60	Peak
6	344.386	39.74	-10.04	29.70	46.00	16.30	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

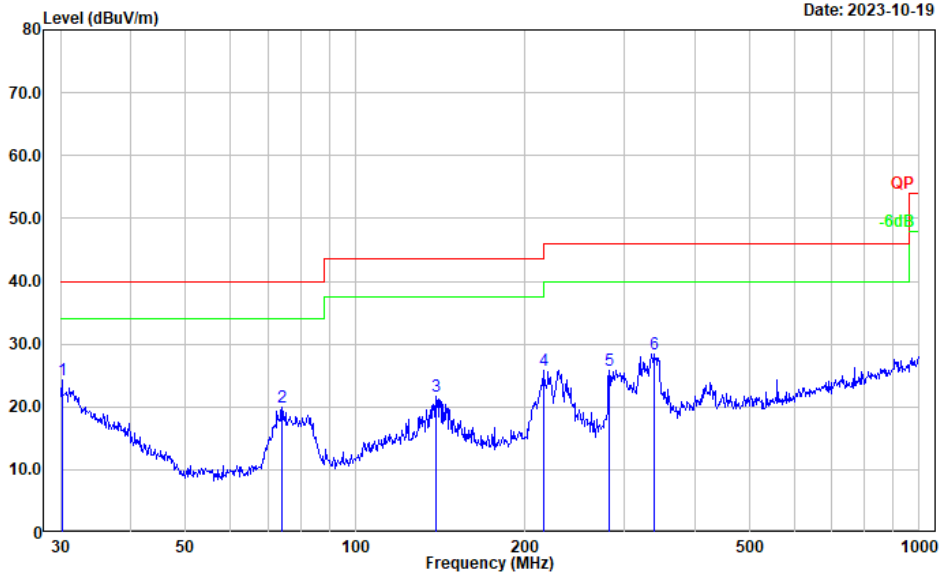


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	38.346	36.82	-10.12	26.70	40.00	13.30	Peak
2	45.058	35.94	-14.25	21.69	40.00	18.31	Peak
3	72.592	41.70	-16.78	24.92	40.00	15.08	Peak
4	140.342	31.80	-11.79	20.01	43.50	23.49	Peak
5	344.386	30.64	-10.04	20.60	46.00	25.40	Peak
6	560.693	30.91	-5.64	25.27	46.00	20.73	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-19

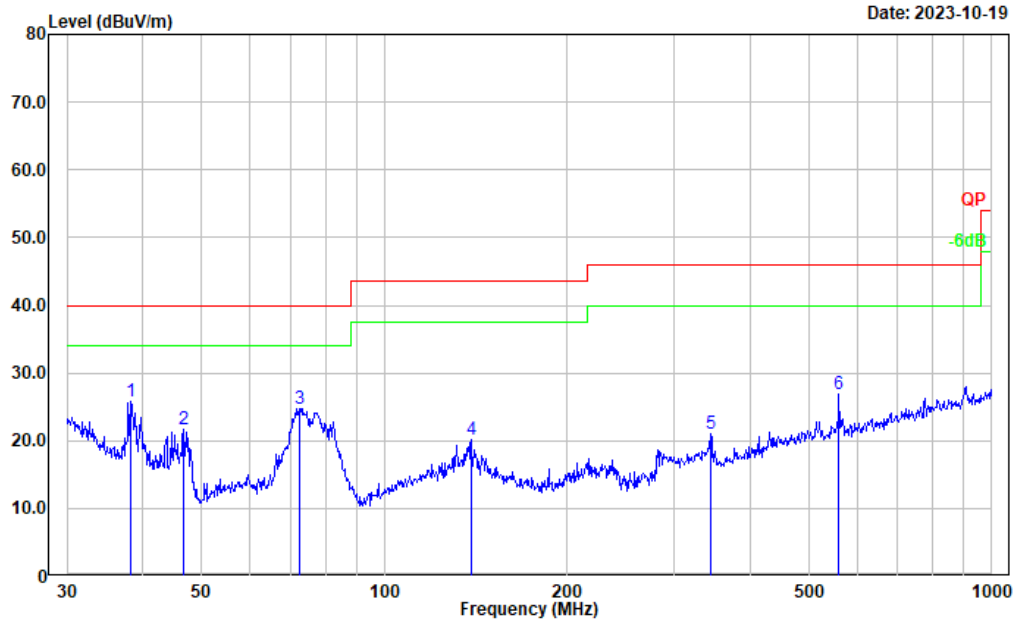


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.211	28.14	-3.96	24.18	40.00	15.82	Peak
2	74.135	36.80	-16.96	19.84	40.00	20.16	Peak
3	138.874	33.37	-11.71	21.66	43.50	21.84	Peak
4	215.268	38.51	-12.65	25.86	43.50	17.64	Peak
5	281.995	37.44	-11.56	25.88	46.00	20.12	Peak
6	338.400	38.45	-10.09	28.36	46.00	17.64	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

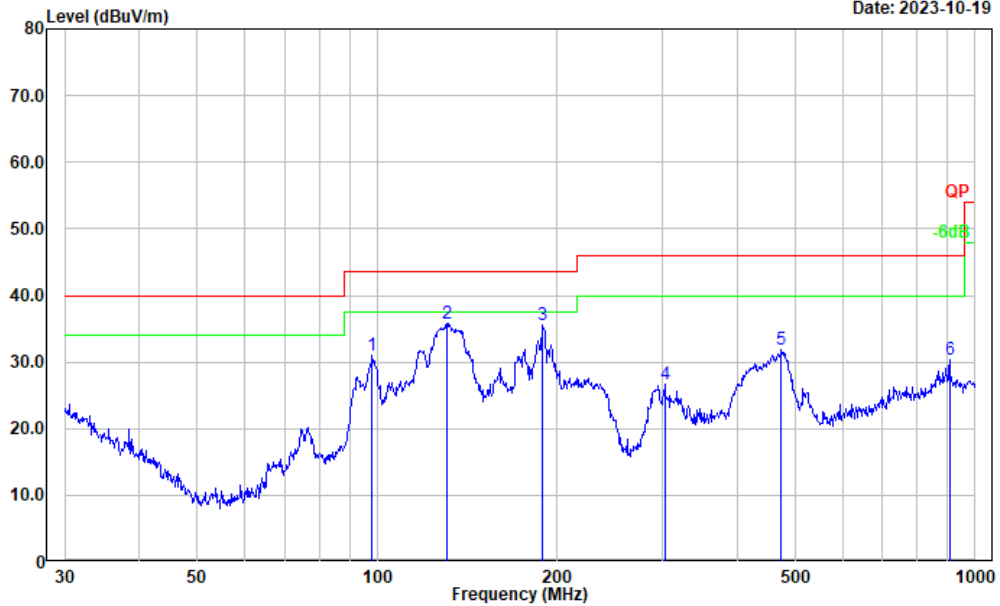


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	38.212	35.86	-10.02	25.84	40.00	14.16	Peak
2	46.666	36.98	-15.20	21.78	40.00	18.22	Peak
3	72.338	41.51	-16.78	24.73	40.00	15.27	Peak
4	138.874	31.87	-11.71	20.16	43.50	23.34	Peak
5	344.386	31.04	-10.04	21.00	46.00	25.00	Peak
6	560.693	32.62	-5.64	26.98	46.00	19.02	Peak

Model: i504W (POE)  
 Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

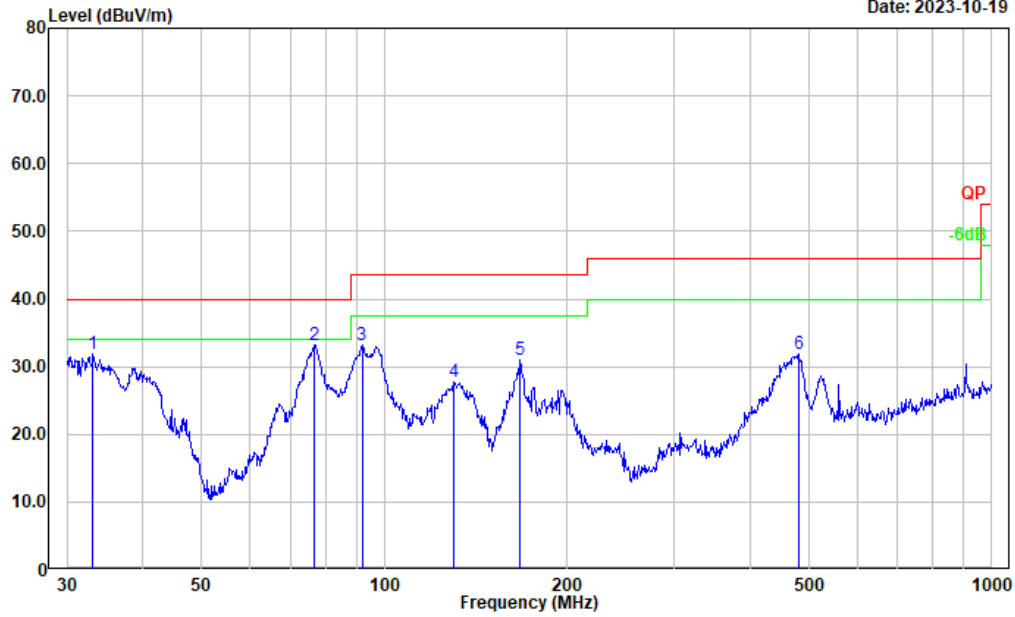
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	98.142	45.73	-14.75	30.98	43.50	12.52	Peak
2	130.837	47.07	-11.32	35.75	43.50	7.75	Peak
3	188.413	49.12	-13.49	35.63	43.50	7.87	Peak
4	302.481	37.23	-10.61	26.62	46.00	19.38	Peak
5	473.835	38.26	-6.30	31.96	46.00	14.04	Peak
6	906.482	31.14	-0.72	30.42	46.00	15.58	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

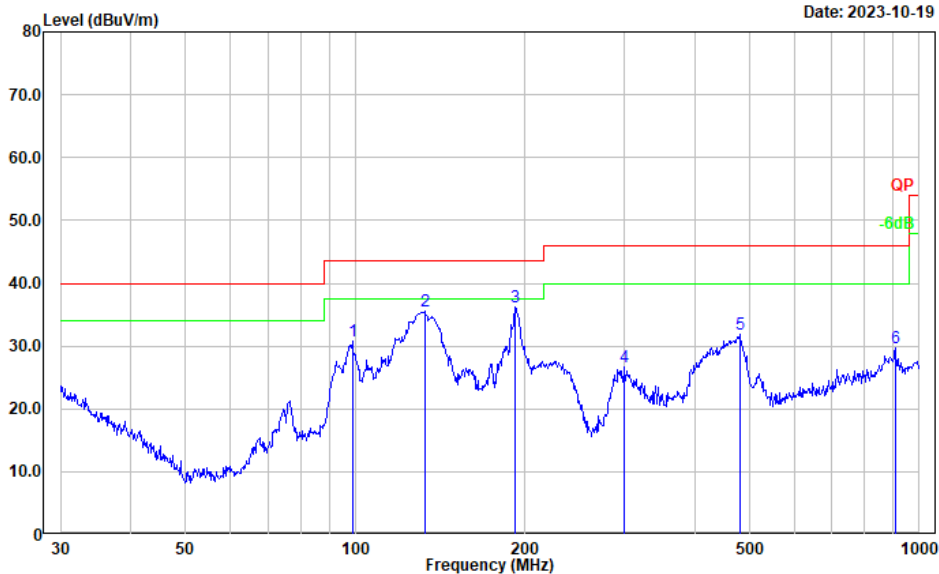


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	33.095	37.93	-6.16	31.77	40.00	8.23	Peak
2	76.512	50.28	-17.13	33.15	40.00	6.85	Peak
3	91.816	49.75	-16.50	33.25	43.50	10.25	Peak
4	129.923	38.94	-11.29	27.65	43.50	15.85	Peak
5	167.237	43.49	-12.59	30.90	43.50	12.60	Peak
6	480.528	38.02	-6.25	31.77	46.00	14.23	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

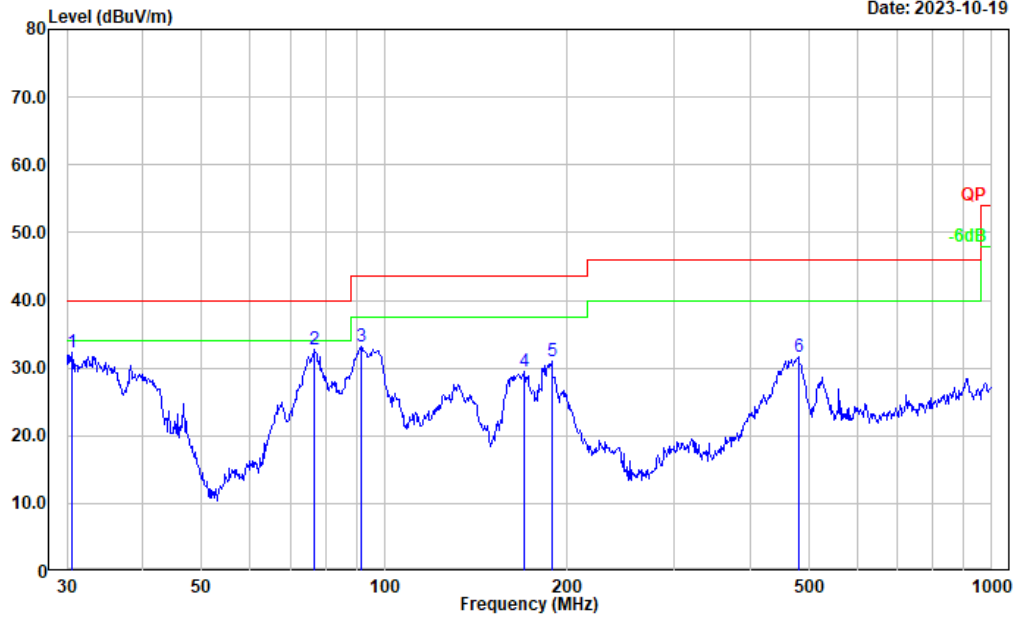
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	98.833	45.34	-14.59	30.75	43.50	12.75	Peak
2	132.685	46.91	-11.45	35.46	43.50	8.04	Peak
3	192.419	49.40	-13.13	36.27	43.50	7.23	Peak
4	300.367	37.23	-10.63	26.60	46.00	19.40	Peak
5	482.216	38.03	-6.27	31.76	46.00	14.24	Peak
6	906.482	30.40	-0.72	29.68	46.00	16.32	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

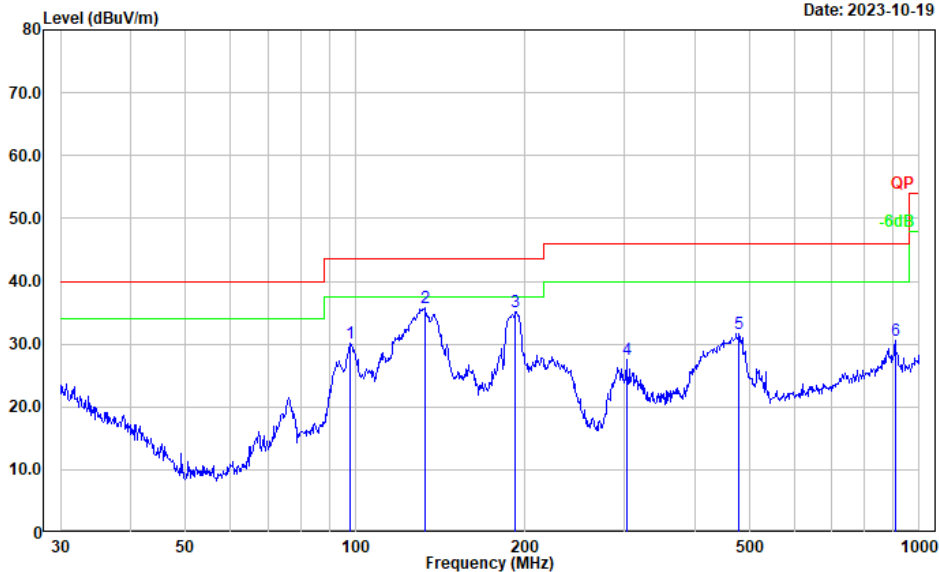


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.638	36.52	-4.28	32.24	40.00	7.76	Peak
2	76.781	49.99	-17.15	32.84	40.00	7.16	Peak
3	91.495	49.78	-16.57	33.21	43.50	10.29	Peak
4	170.195	42.38	-12.86	29.52	43.50	13.98	Peak
5	188.413	44.54	-13.49	31.05	43.50	12.45	Peak
6	480.528	37.91	-6.25	31.66	46.00	14.34	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

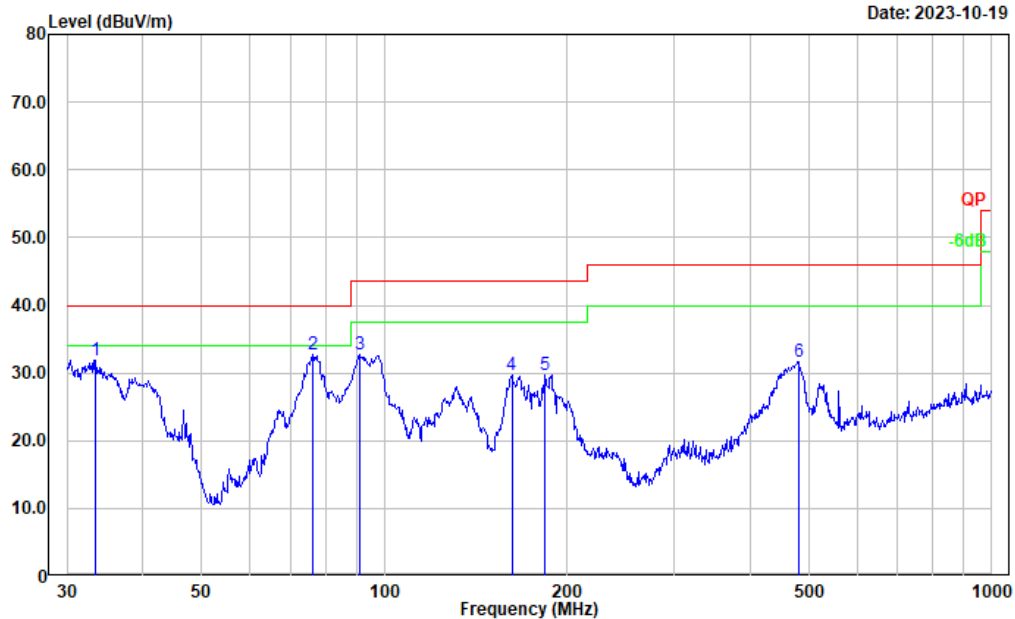
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	98.142	44.91	-14.75	30.16	43.50	13.34	Peak
2	132.685	47.32	-11.45	35.87	43.50	7.63	Peak
3	192.419	48.23	-13.13	35.10	43.50	8.40	Peak
4	302.481	38.13	-10.61	27.52	46.00	18.48	Peak
5	478.846	37.91	-6.26	31.65	46.00	14.35	Peak
6	906.482	31.39	-0.72	30.67	46.00	15.33	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19



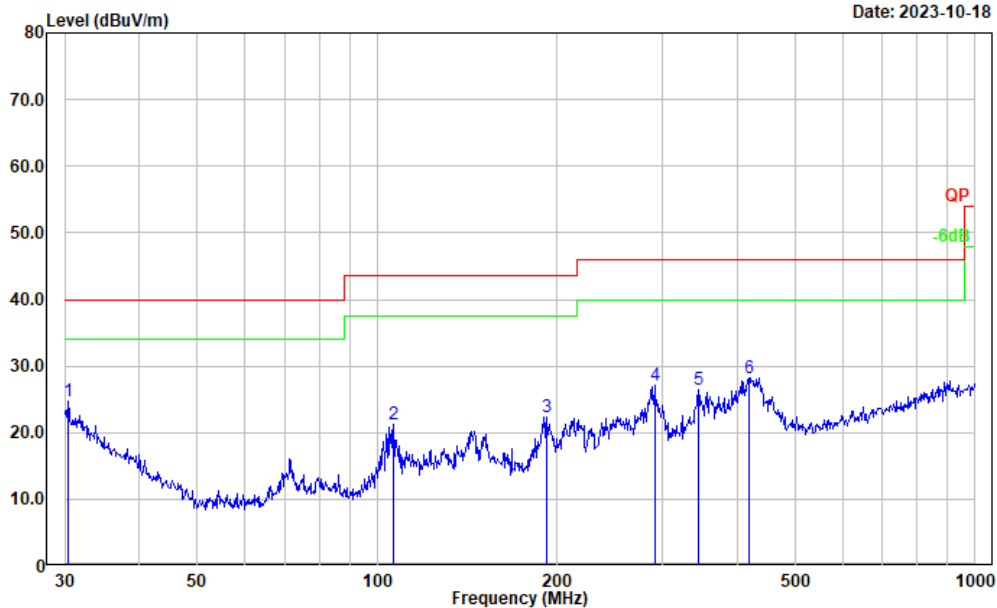
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	33.445	38.36	-6.42	31.94	40.00	8.06	Peak
2	76.244	49.79	-17.08	32.71	40.00	7.29	Peak
3	90.855	49.36	-16.72	32.64	43.50	10.86	Peak
4	162.041	41.75	-12.15	29.60	43.50	13.90	Peak
5	183.844	43.31	-13.52	29.79	43.50	13.71	Peak
6	480.528	37.87	-6.25	31.62	46.00	14.38	Peak

Model: Y504W-Y (Adapter)

Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-18

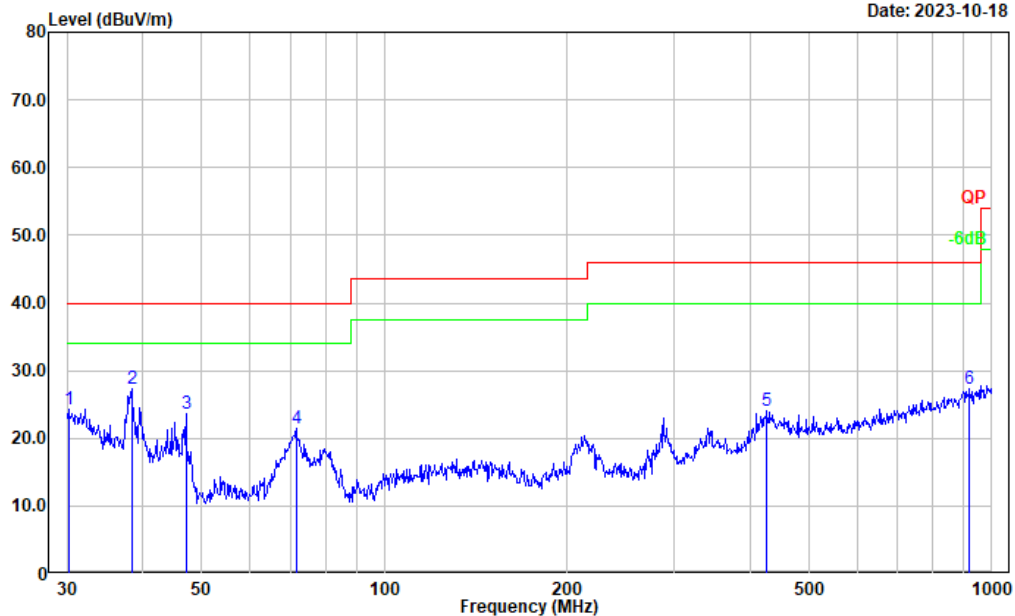


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.424	28.80	-4.13	24.67	40.00	15.33	Peak
2	106.385	34.29	-13.07	21.22	43.50	22.28	Peak
3	192.419	35.37	-13.13	22.24	43.50	21.26	Peak
4	291.036	38.01	-11.00	27.01	46.00	18.99	Peak
5	344.386	36.55	-10.04	26.51	46.00	19.49	Peak
6	417.641	36.30	-8.02	28.28	46.00	17.72	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

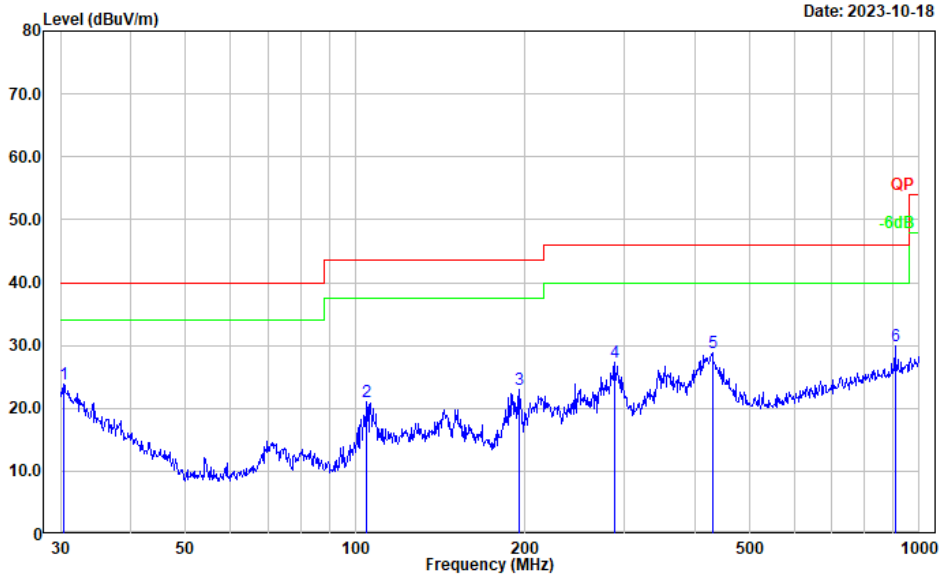


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.211	28.20	-3.96	24.24	40.00	15.76	Peak
2	38.346	37.43	-10.12	27.31	40.00	12.69	Peak
3	47.160	39.03	-15.48	23.55	40.00	16.45	Peak
4	71.581	38.25	-16.72	21.53	40.00	18.47	Peak
5	426.521	31.72	-7.65	24.07	46.00	21.93	Peak
6	919.287	28.07	-0.66	27.41	46.00	18.59	Peak

Middle Channel

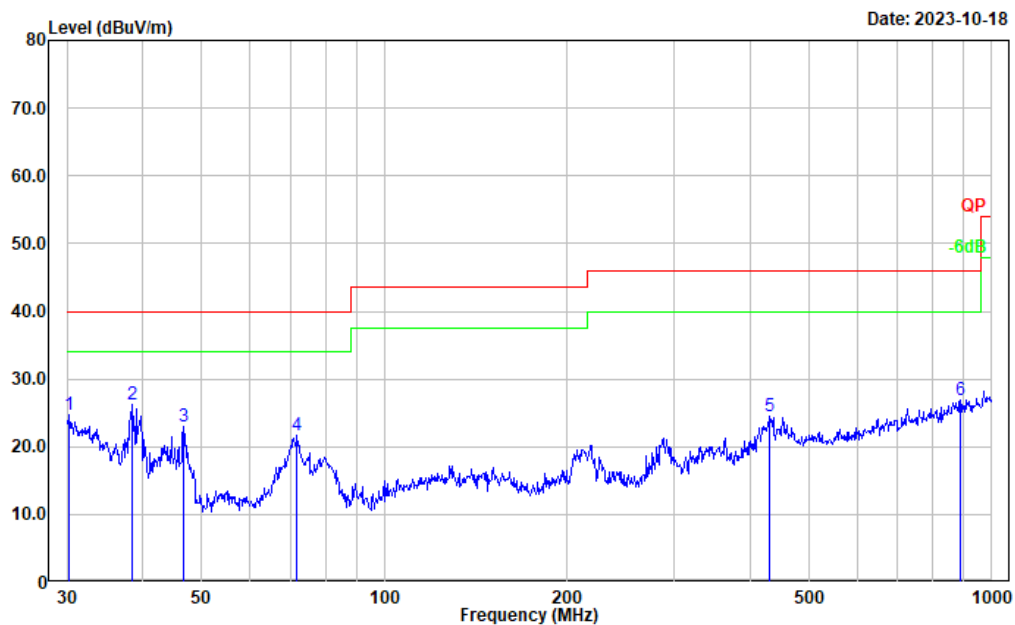
Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.424	27.94	-4.13	23.81	40.00	16.19	Peak
2	104.903	34.42	-13.38	21.04	43.50	22.46	Peak
3	195.137	35.71	-12.76	22.95	43.50	20.55	Peak
4	287.990	38.61	-11.19	27.42	46.00	18.58	Peak
5	429.523	36.34	-7.51	28.83	46.00	17.17	Peak
6	906.482	30.70	-0.72	29.98	46.00	16.02	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

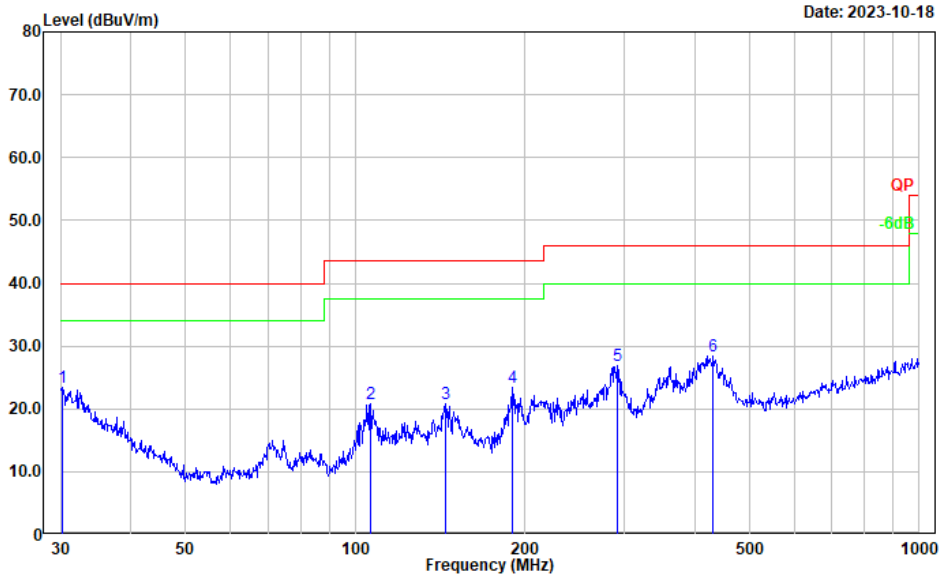


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.317	28.70	-4.04	24.66	40.00	15.34	Peak
2	38.481	36.45	-10.22	26.23	40.00	13.77	Peak
3	46.666	38.15	-15.20	22.95	40.00	17.05	Peak
4	71.832	38.40	-16.74	21.66	40.00	18.34	Peak
5	429.523	31.95	-7.51	24.44	46.00	21.56	Peak
6	887.610	28.01	-1.09	26.92	46.00	19.08	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

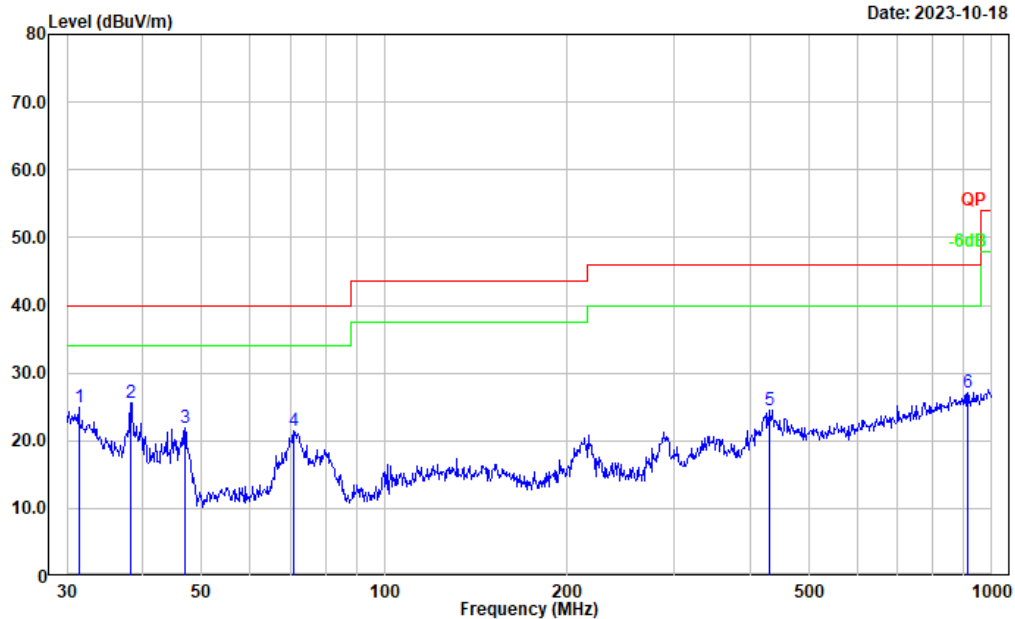
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.211	27.37	-3.96	23.41	40.00	16.59	Peak
2	106.385	33.87	-13.07	20.80	43.50	22.70	Peak
3	144.335	32.73	-11.86	20.87	43.50	22.63	Peak
4	189.739	36.98	-13.47	23.51	43.50	19.99	Peak
5	291.036	37.82	-11.00	26.82	46.00	19.18	Peak
6	431.032	35.95	-7.46	28.49	46.00	17.51	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18



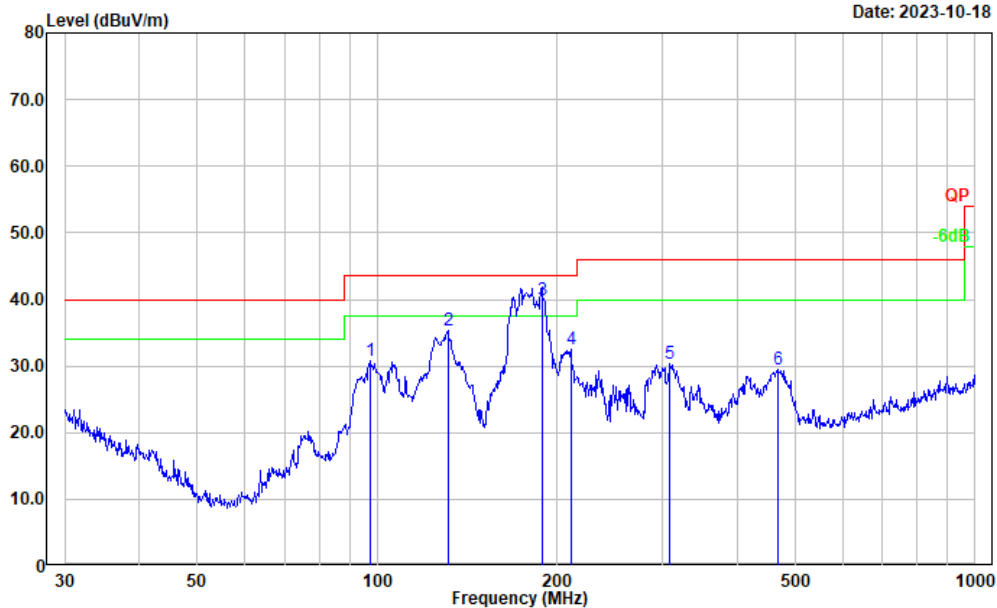
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	31.399	29.85	-4.86	24.99	40.00	15.01	Peak
2	38.212	35.61	-10.02	25.59	40.00	14.41	Peak
3	46.995	37.18	-15.39	21.79	40.00	18.21	Peak
4	70.832	38.14	-16.64	21.50	40.00	18.50	Peak
5	429.523	32.11	-7.51	24.60	46.00	21.40	Peak
6	912.862	27.74	-0.62	27.12	46.00	18.88	Peak

Model: Y504W-Y (POE)

Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

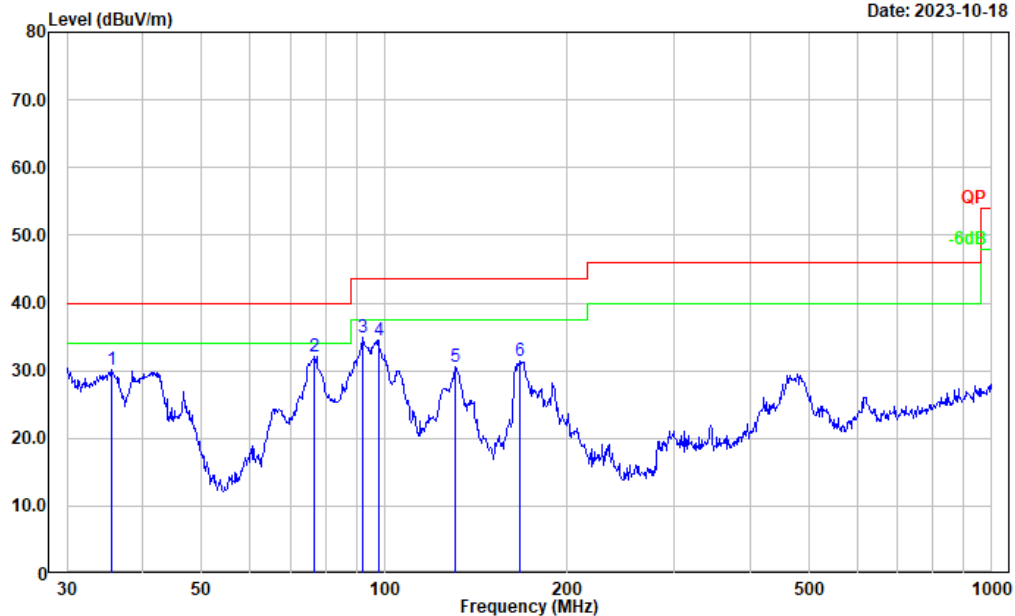
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	97.115	45.92	-15.05	30.87	43.50	12.63	Peak
2	131.297	46.61	-11.34	35.27	43.50	8.23	Peak
3	188.413	53.30	-13.49	39.81	43.50	3.69	QP
4	210.786	44.96	-12.52	32.44	43.50	11.06	Peak
5	308.913	40.96	-10.60	30.36	46.00	15.64	Peak
6	467.235	35.90	-6.41	29.49	46.00	16.51	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

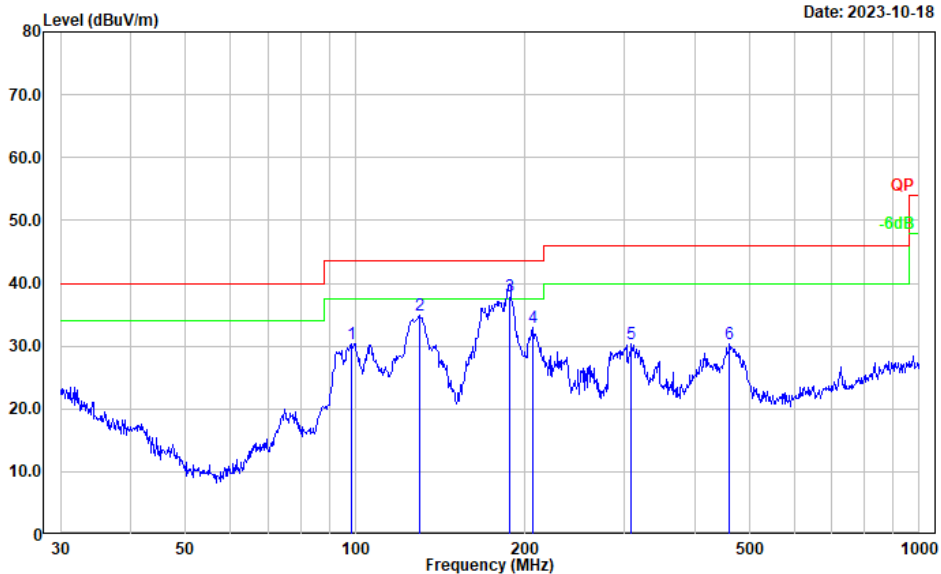


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	35.499	38.17	-8.00	30.17	40.00	9.83	Peak
2	76.781	49.33	-17.15	32.18	40.00	7.82	Peak
3	92.139	51.29	-16.41	34.88	43.50	8.62	Peak
4	97.798	49.39	-14.85	34.54	43.50	8.96	Peak
5	130.837	41.83	-11.32	30.51	43.50	12.99	Peak
6	167.237	43.94	-12.59	31.35	43.50	12.15	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-18

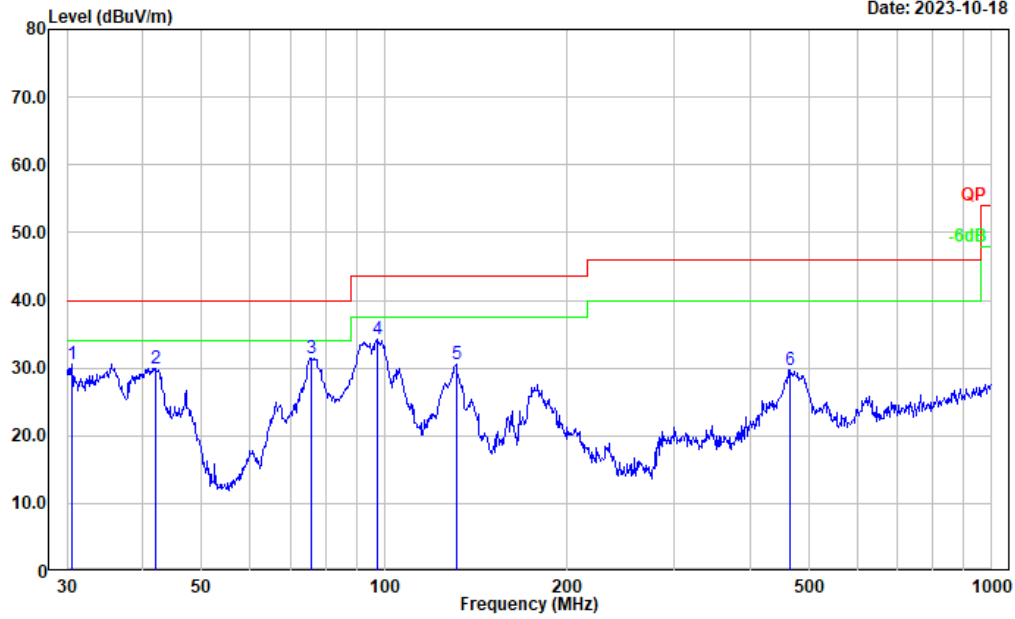


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	98.487	45.07	-14.66	30.41	43.50	13.09	Peak
2	130.379	46.28	-11.31	34.97	43.50	8.53	Peak
3	187.753	51.46	-13.51	37.95	43.50	5.55	QP
4	206.398	45.38	-12.40	32.98	43.50	10.52	Peak
5	308.913	40.92	-10.60	30.32	46.00	15.68	Peak
6	460.727	36.98	-6.66	30.32	46.00	15.68	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

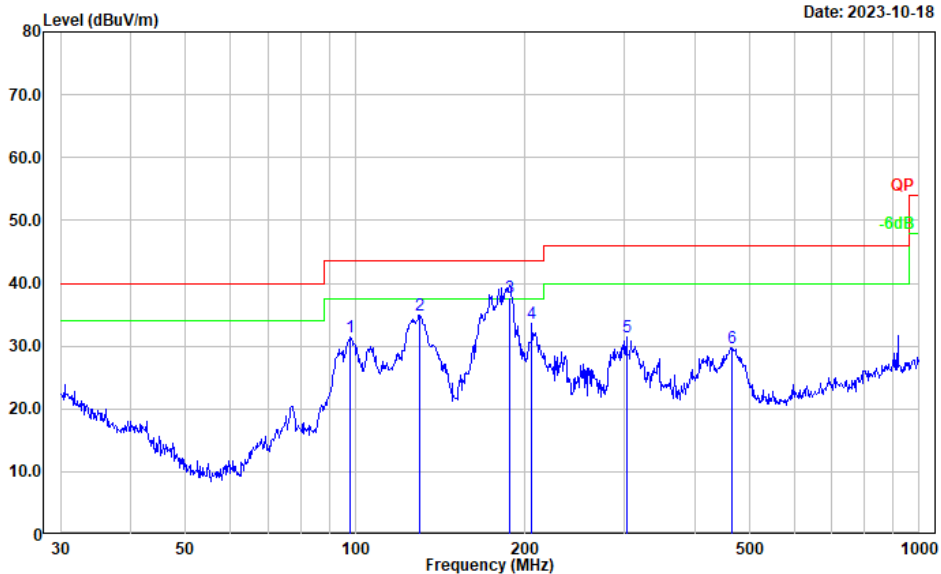


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.638	34.80	-4.28	30.52	40.00	9.48	Peak
2	42.007	42.37	-12.51	29.86	40.00	10.14	Peak
3	75.977	48.57	-17.06	31.51	40.00	8.49	Peak
4	97.115	49.32	-15.05	34.27	43.50	9.23	Peak
5	131.297	41.86	-11.34	30.52	43.50	12.98	Peak
6	465.599	36.14	-6.46	29.68	46.00	16.32	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

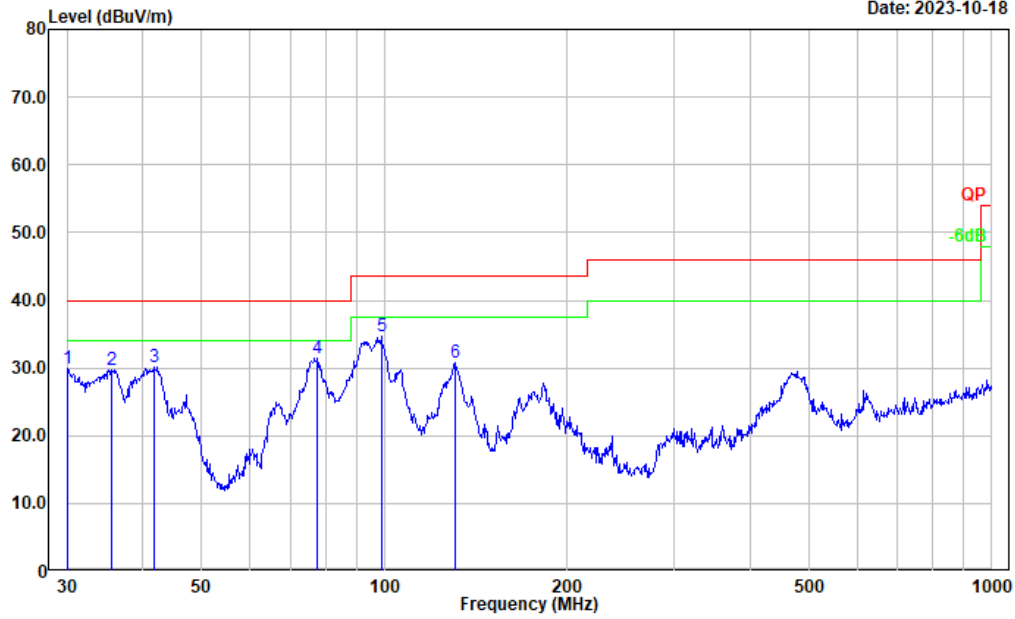
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	98.142	46.25	-14.75	31.50	43.50	12.00	Peak
2	130.379	46.29	-11.31	34.98	43.50	8.52	Peak
3	187.753	51.19	-13.51	37.68	43.50	5.82	QP
4	205.675	45.90	-12.38	33.52	43.50	9.98	Peak
5	302.481	41.94	-10.61	31.33	46.00	14.67	Peak
6	465.599	36.19	-6.46	29.73	46.00	16.27	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.105	33.85	-3.88	29.97	40.00	10.03	Peak
2	35.499	37.77	-8.00	29.77	40.00	10.23	Peak
3	41.860	42.53	-12.43	30.10	40.00	9.90	Peak
4	77.593	48.67	-17.23	31.44	40.00	8.56	Peak
5	98.833	49.29	-14.59	34.70	43.50	8.80	Peak
6	130.837	42.01	-11.32	30.69	43.50	12.81	Peak

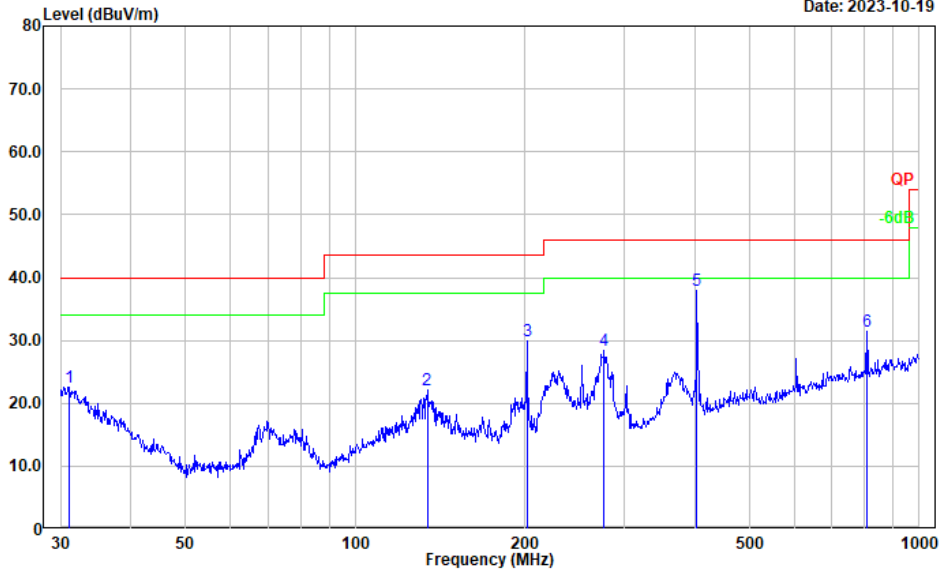
**5725-5850 MHz Band:**

Model: i506W (Adapter)

Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

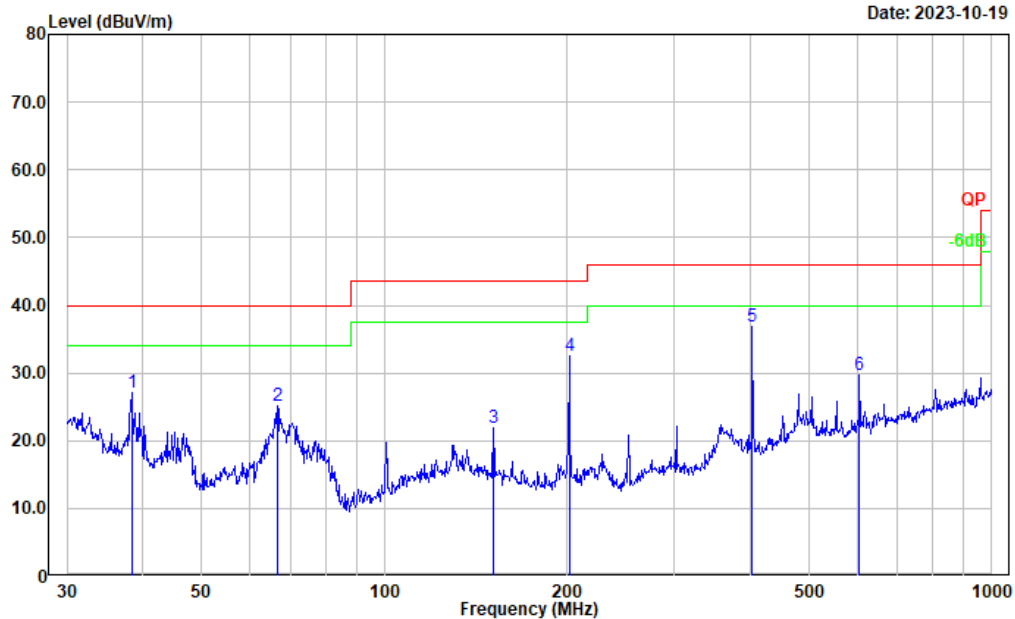
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.071	27.23	-4.61	22.62	40.00	17.38	Peak
2	134.088	33.56	-11.52	22.04	43.50	21.46	Peak
3	201.393	42.21	-12.25	29.96	43.50	13.54	Peak
4	276.124	40.23	-11.89	28.34	46.00	17.66	Peak
5	403.250	46.69	-8.67	38.02	46.00	7.98	Peak
6	807.429	33.47	-2.06	31.41	46.00	14.59	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

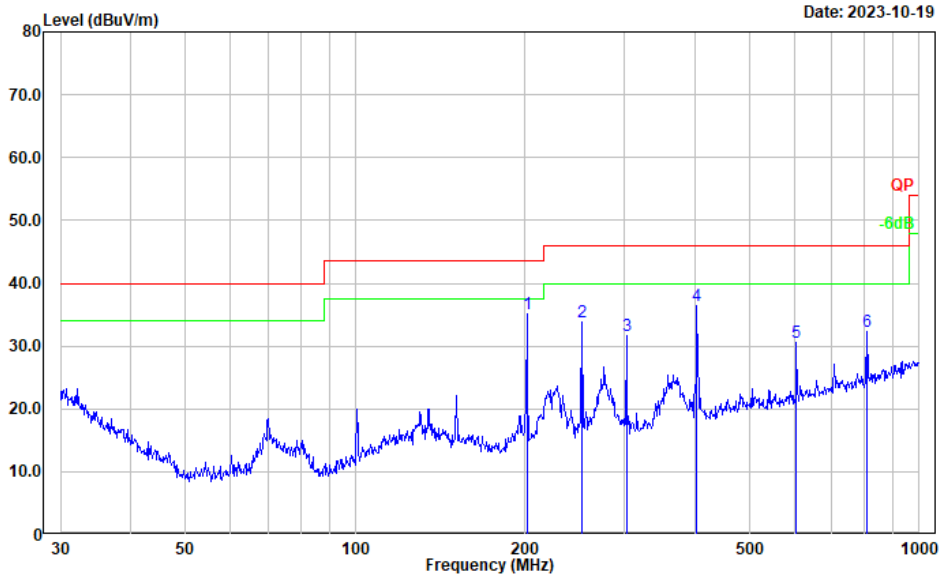


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	38.346	37.13	-10.12	27.01	40.00	12.99	Peak
2	66.733	41.94	-16.83	25.11	40.00	14.89	Peak
3	151.067	33.88	-11.95	21.93	43.50	21.57	Peak
4	201.393	44.82	-12.25	32.57	43.50	10.93	Peak
5	403.250	45.54	-8.67	36.87	46.00	9.13	Peak
6	605.659	34.46	-4.85	29.61	46.00	16.39	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

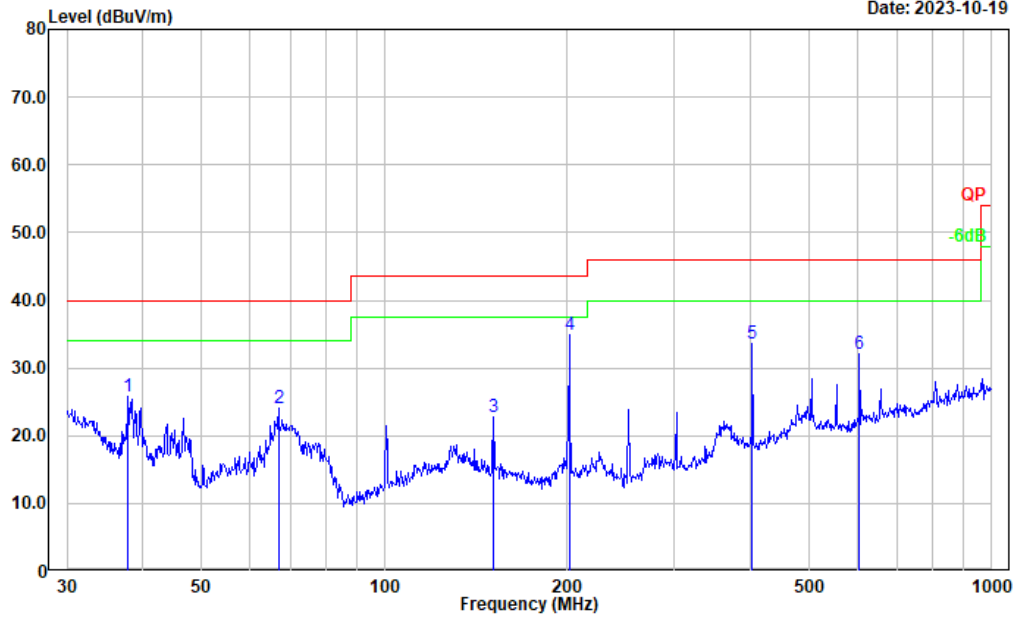
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	201.393	47.33	-12.25	35.08	43.50	8.42	Peak
2	252.063	46.93	-13.08	33.85	46.00	12.15	Peak
3	302.481	42.34	-10.61	31.73	46.00	14.27	Peak
4	403.250	45.11	-8.67	36.44	46.00	9.56	Peak
5	605.659	35.35	-4.85	30.50	46.00	15.50	Peak
6	807.429	34.43	-2.06	32.37	46.00	13.63	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

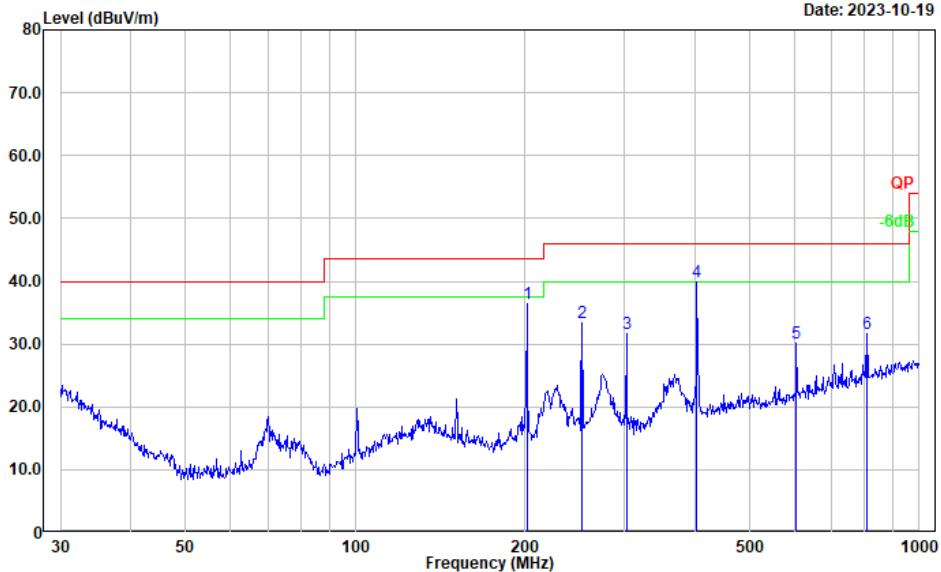


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	37.812	35.44	-9.72	25.72	40.00	14.28	Peak
2	66.967	40.76	-16.80	23.96	40.00	16.04	Peak
3	151.067	34.64	-11.95	22.69	43.50	20.81	Peak
4	201.393	47.24	-12.25	34.99	43.50	8.51	Peak
5	403.250	42.24	-8.67	33.57	46.00	12.43	Peak
6	605.659	36.97	-4.85	32.12	46.00	13.88	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-19

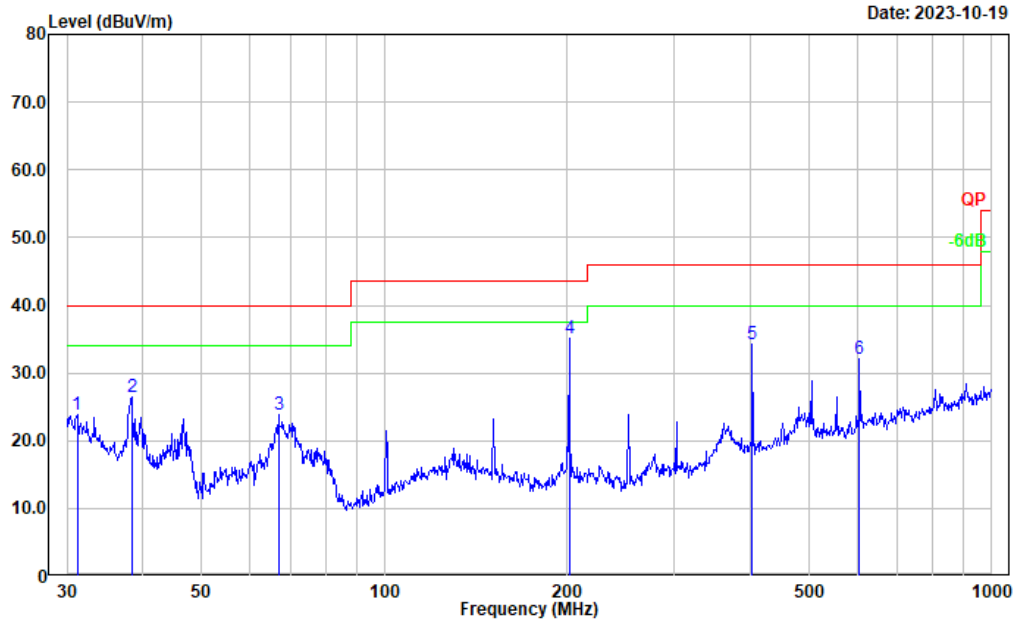


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	201.393	48.59	-12.25	36.34	43.50	7.16	Peak
2	252.063	46.38	-13.08	33.30	46.00	12.70	Peak
3	302.481	42.18	-10.61	31.57	46.00	14.43	Peak
4	403.250	48.60	-8.67	39.93	46.00	6.07	Peak
5	605.659	35.02	-4.85	30.17	46.00	15.83	Peak
6	807.429	33.78	-2.06	31.72	46.00	14.28	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19



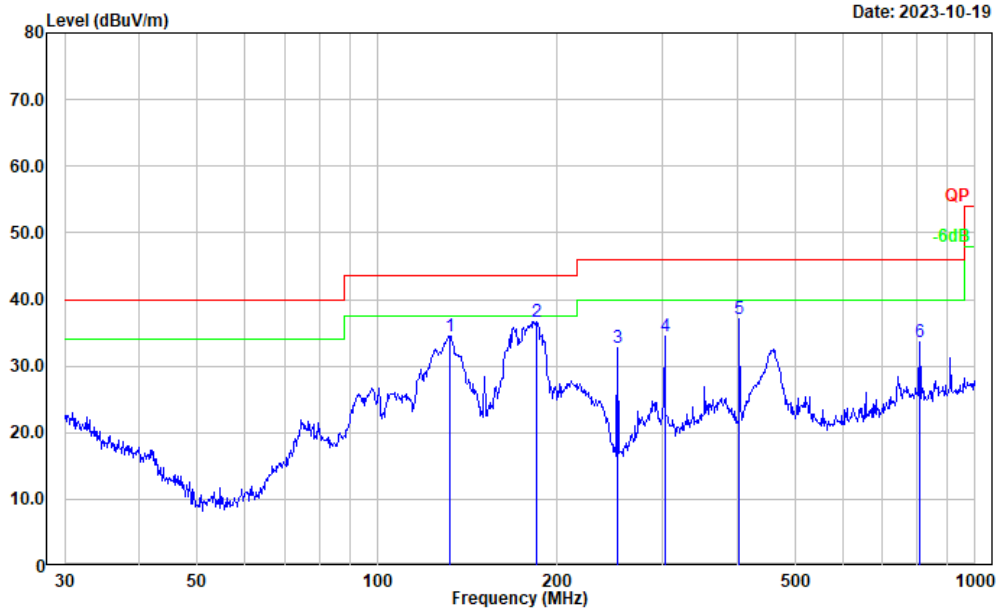
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.180	28.60	-4.69	23.91	40.00	16.09	Peak
2	38.346	36.61	-10.12	26.49	40.00	13.51	Peak
3	66.967	40.58	-16.80	23.78	40.00	16.22	Peak
4	201.393	47.43	-12.25	35.18	43.50	8.32	Peak
5	403.250	42.85	-8.67	34.18	46.00	11.82	Peak
6	605.659	37.04	-4.85	32.19	46.00	13.81	Peak

Model: i506W (POE)

Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

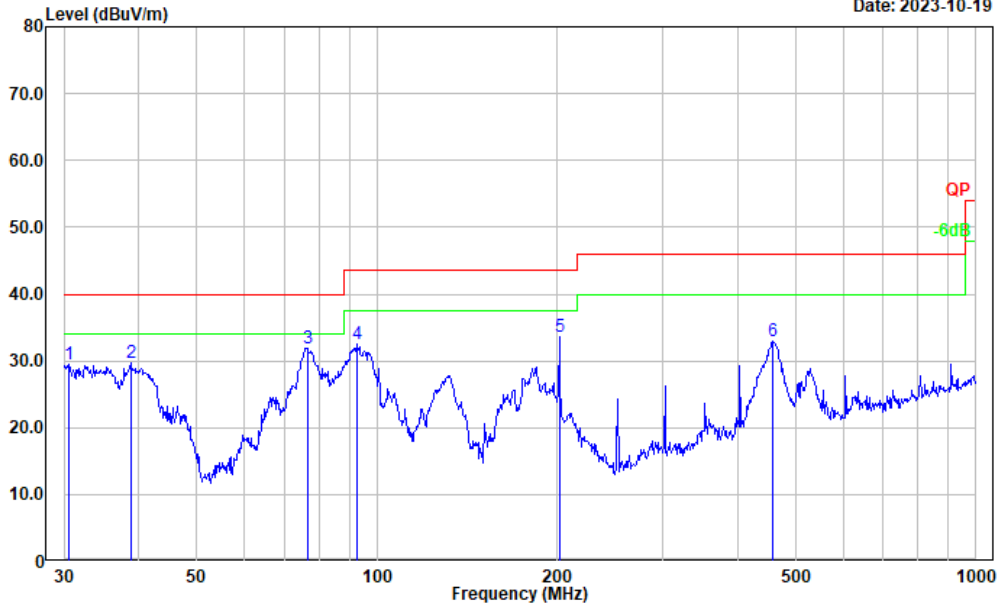
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	132.221	45.94	-11.40	34.54	43.50	8.96	Peak
2	184.490	50.14	-13.52	36.62	43.50	6.88	Peak
3	252.063	45.84	-13.08	32.76	46.00	13.24	Peak
4	302.481	45.08	-10.61	34.47	46.00	11.53	Peak
5	403.250	45.85	-8.67	37.18	46.00	8.82	Peak
6	807.429	35.67	-2.06	33.61	46.00	12.39	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

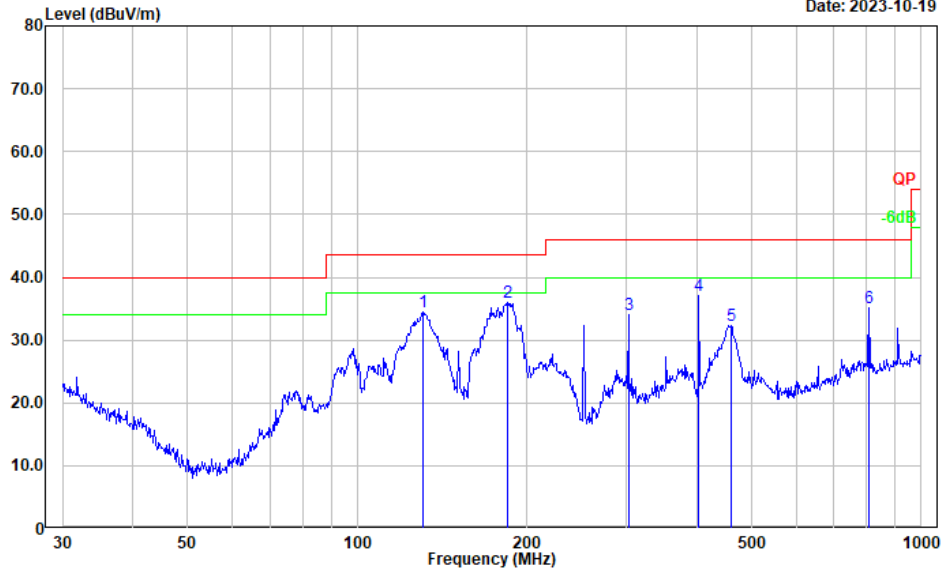


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.531	33.64	-4.20	29.44	40.00	10.56	Peak
2	38.752	40.22	-10.43	29.79	40.00	10.21	Peak
3	76.512	49.09	-17.13	31.96	40.00	8.04	Peak
4	92.787	48.74	-16.22	32.52	43.50	10.98	Peak
5	201.393	45.85	-12.25	33.60	43.50	9.90	Peak
6	457.507	39.77	-6.73	33.04	46.00	12.96	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

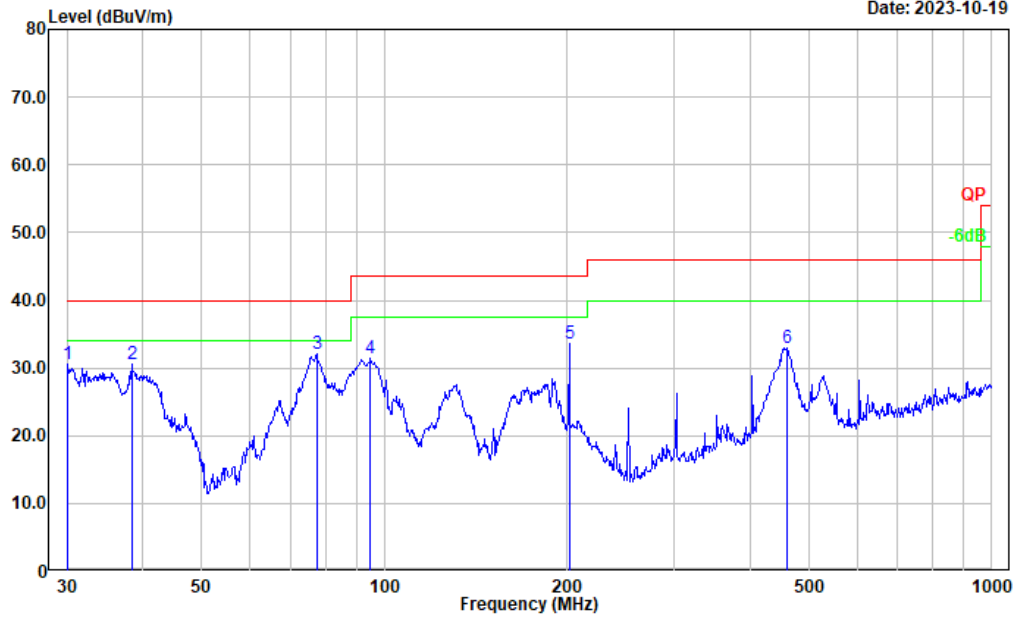
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	130.837	45.78	-11.32	34.46	43.50	9.04	Peak
2	184.490	49.61	-13.52	36.09	43.50	7.41	Peak
3	302.481	44.59	-10.61	33.98	46.00	12.02	Peak
4	403.250	45.76	-8.67	37.09	46.00	8.91	Peak
5	459.114	39.05	-6.70	32.35	46.00	13.65	Peak
6	807.429	37.24	-2.06	35.18	46.00	10.82	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

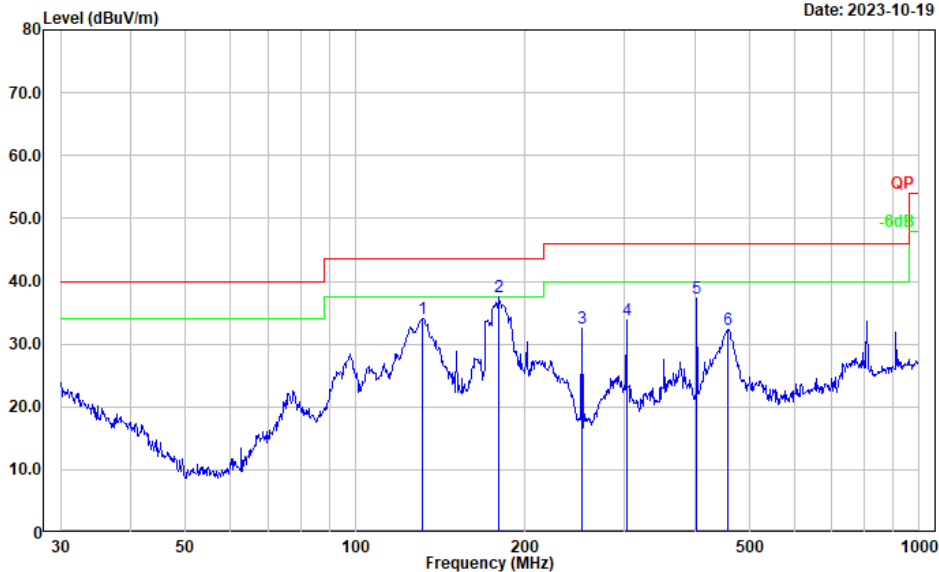


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.105	34.39	-3.88	30.51	40.00	9.49	Peak
2	38.346	40.74	-10.12	30.62	40.00	9.38	Peak
3	77.321	49.28	-17.21	32.07	40.00	7.93	Peak
4	94.760	47.19	-15.69	31.50	43.50	12.00	Peak
5	201.393	45.91	-12.25	33.66	43.50	9.84	Peak
6	460.727	39.56	-6.66	32.90	46.00	13.10	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

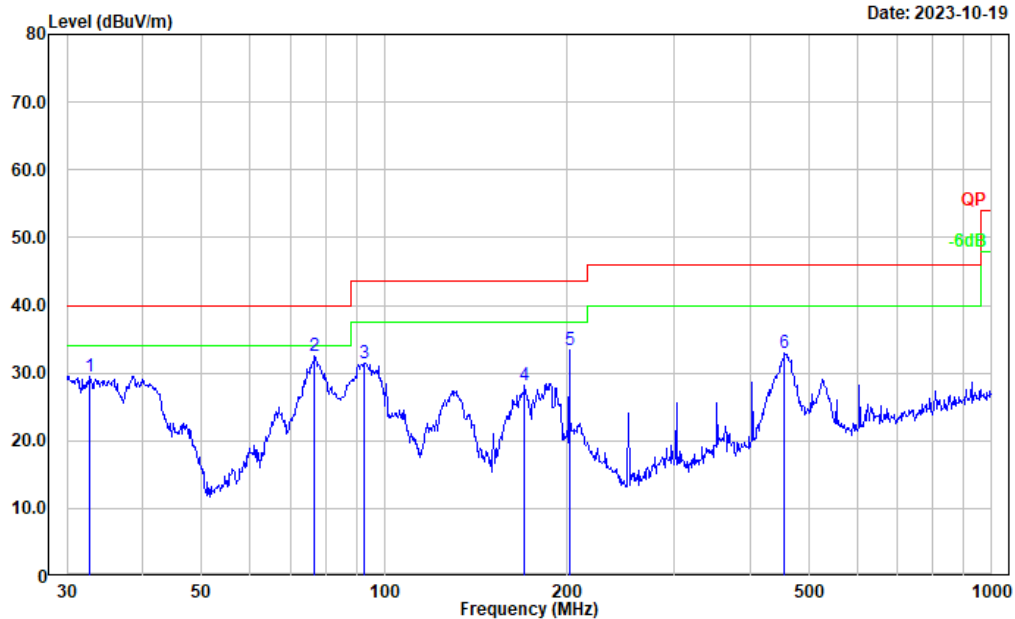
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	131.297	45.45	-11.34	34.11	43.50	9.39	Peak
2	180.017	50.93	-13.53	37.40	43.50	6.10	Peak
3	252.063	45.68	-13.08	32.60	46.00	13.40	Peak
4	302.481	44.47	-10.61	33.86	46.00	12.14	Peak
5	403.250	45.96	-8.67	37.29	46.00	8.71	Peak
6	457.507	39.11	-6.73	32.38	46.00	13.62	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

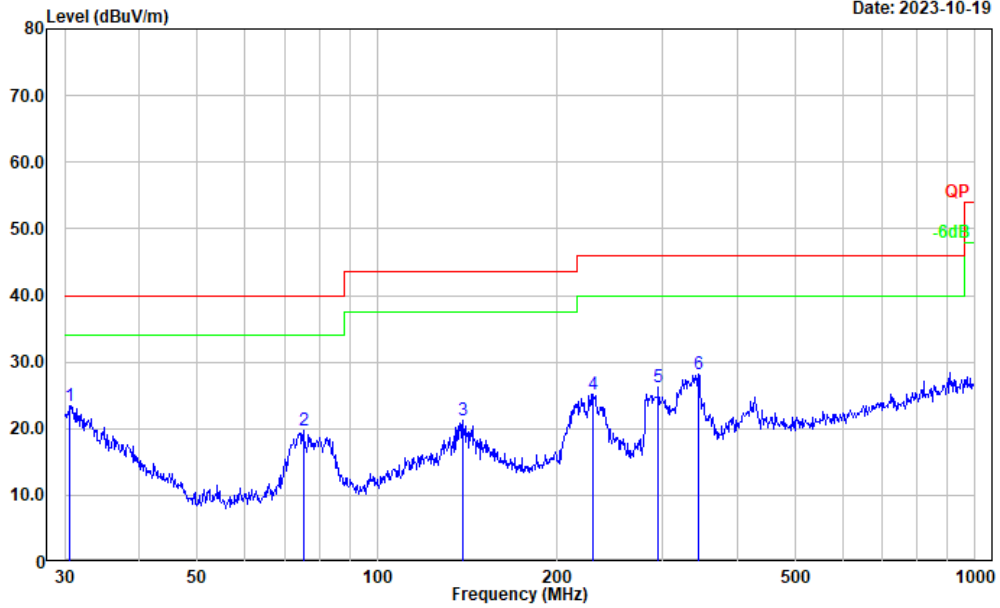


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	32.749	35.41	-5.89	29.52	40.00	10.48	Peak
2	76.781	49.65	-17.15	32.50	40.00	7.50	Peak
3	92.787	47.75	-16.22	31.53	43.50	11.97	Peak
4	170.195	41.05	-12.86	28.19	43.50	15.31	Peak
5	201.393	45.74	-12.25	33.49	43.50	10.01	Peak
6	455.906	39.62	-6.76	32.86	46.00	13.14	Peak

Model: i504W (Adapter)  
 Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-19

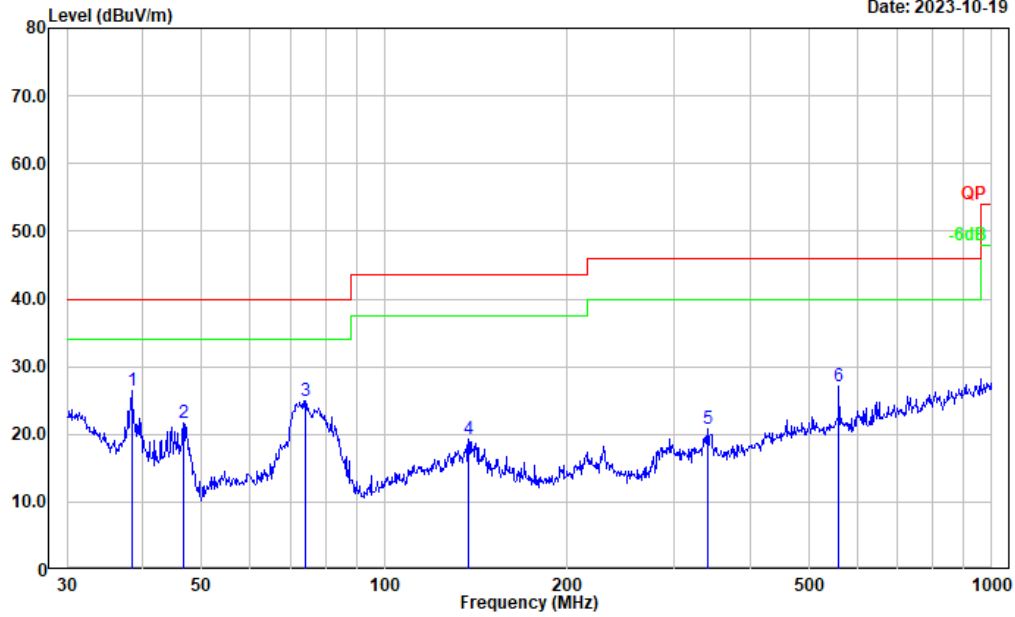


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.638	27.68	-4.28	23.40	40.00	16.60	Peak
2	75.182	36.70	-17.00	19.70	40.00	20.30	Peak
3	138.874	32.92	-11.71	21.21	43.50	22.29	Peak
4	229.293	38.29	-13.03	25.26	46.00	20.74	Peak
5	295.147	36.91	-10.77	26.14	46.00	19.86	Peak
6	344.386	38.17	-10.04	28.13	46.00	17.87	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

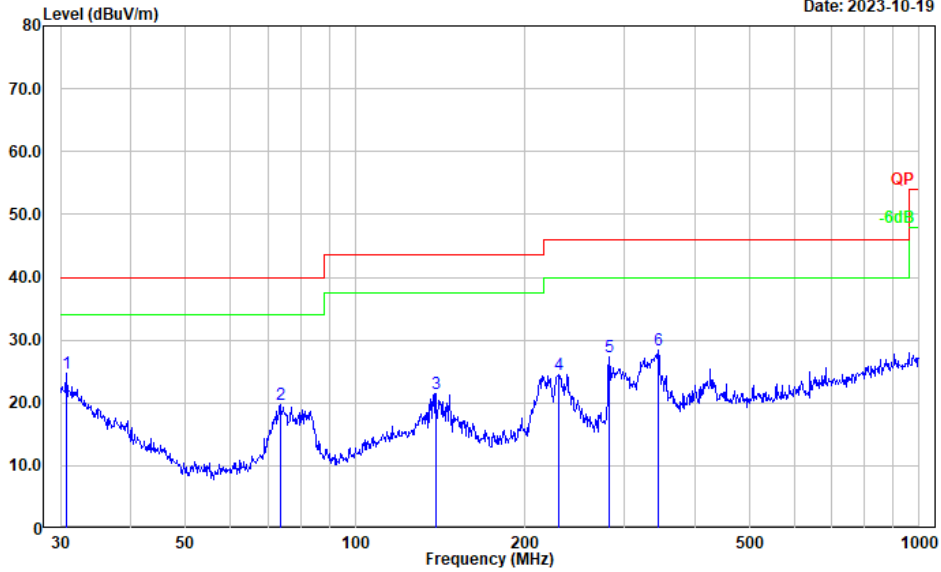


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	38.346	36.55	-10.12	26.43	40.00	13.57	Peak
2	46.666	36.78	-15.20	21.58	40.00	18.42	Peak
3	74.135	41.95	-16.96	24.99	40.00	15.01	Peak
4	137.420	30.95	-11.67	19.28	43.50	24.22	Peak
5	340.782	30.93	-10.05	20.88	46.00	25.12	Peak
6	560.693	32.68	-5.64	27.04	46.00	18.96	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

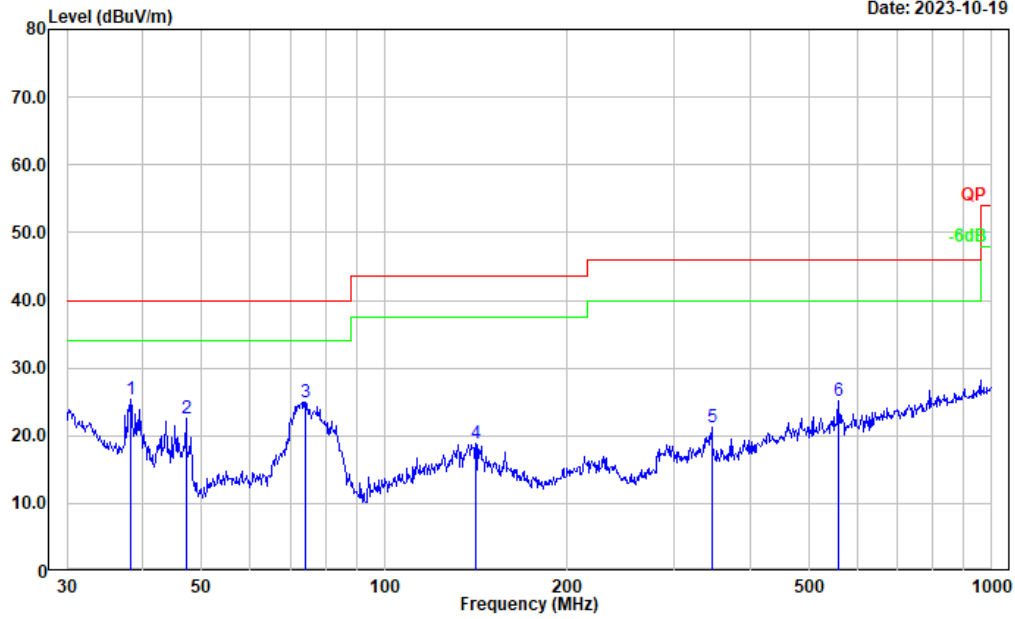
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.745	28.99	-4.36	24.63	40.00	15.37	Peak
2	73.617	36.63	-16.90	19.73	40.00	20.27	Peak
3	138.874	33.25	-11.71	21.54	43.50	21.96	Peak
4	229.293	37.60	-13.03	24.57	46.00	21.43	Peak
5	281.995	38.81	-11.56	27.25	46.00	18.75	Peak
6	344.386	38.43	-10.04	28.39	46.00	17.61	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

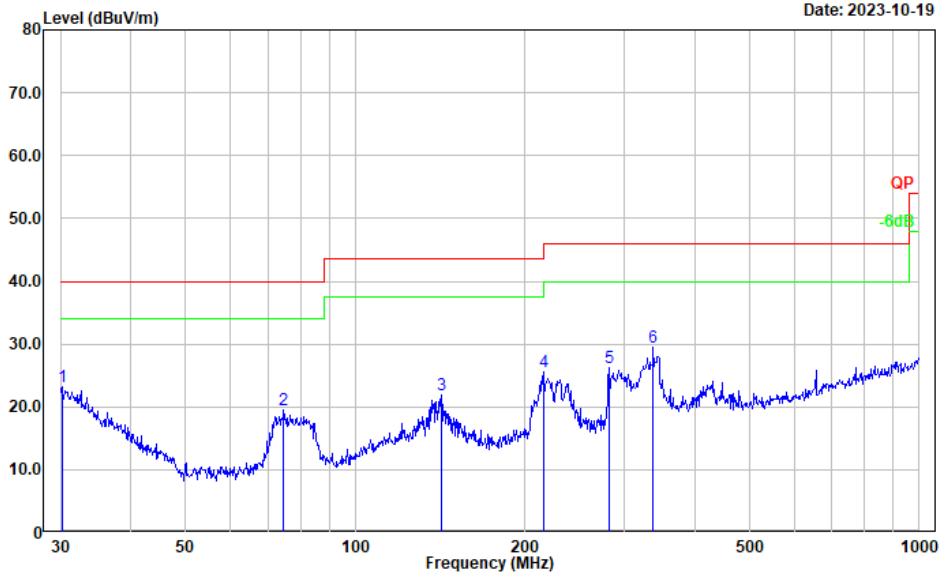


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	38.212	35.35	-10.02	25.33	40.00	14.67	Peak
2	47.160	37.95	-15.48	22.47	40.00	17.53	Peak
3	74.135	41.89	-16.96	24.93	40.00	15.07	Peak
4	141.330	30.62	-11.83	18.79	43.50	24.71	Peak
5	345.595	31.16	-10.02	21.14	46.00	24.86	Peak
6	558.730	30.83	-5.65	25.18	46.00	20.82	Peak

High Channel

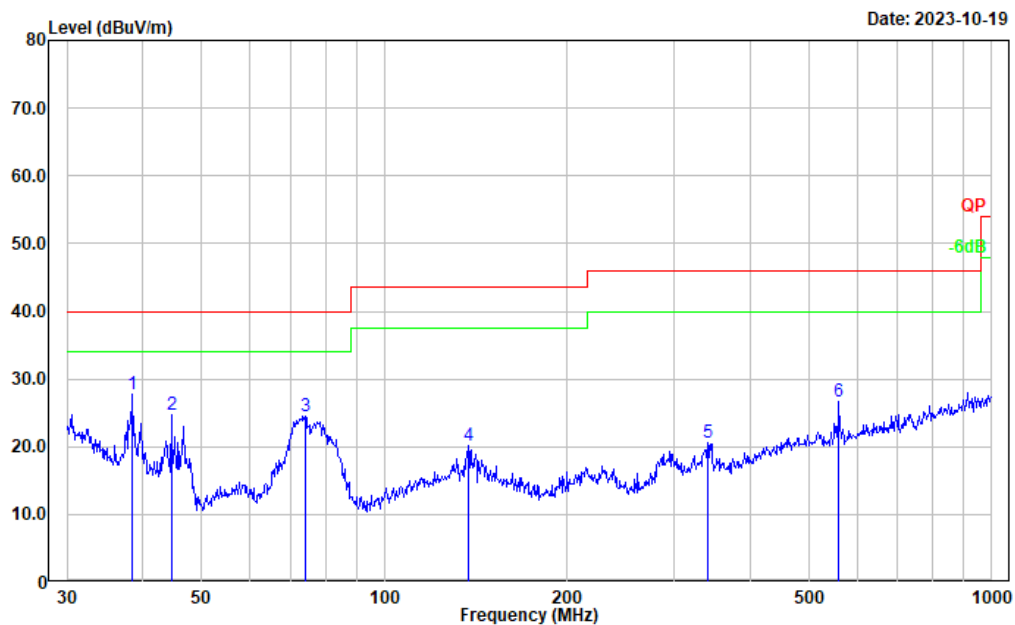
Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.211	27.05	-3.96	23.09	40.00	16.91	Peak
2	74.657	36.58	-16.97	19.61	40.00	20.39	Peak
3	141.826	33.82	-11.82	22.00	43.50	21.50	Peak
4	215.268	38.24	-12.65	25.59	43.50	17.91	Peak
5	281.995	37.74	-11.56	26.18	46.00	19.82	Peak
6	337.216	39.53	-10.10	29.43	46.00	16.57	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

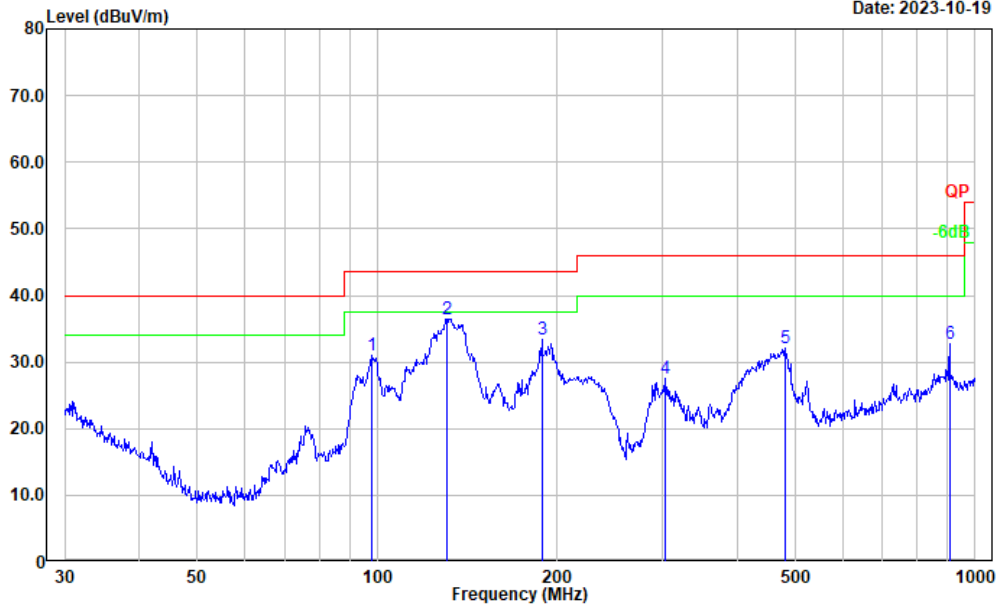


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	38.481	38.05	-10.22	27.83	40.00	12.17	Peak
2	44.587	38.81	-14.00	24.81	40.00	15.19	Peak
3	74.135	41.51	-16.96	24.55	40.00	15.45	Peak
4	137.420	31.75	-11.67	20.08	43.50	23.42	Peak
5	340.782	30.55	-10.05	20.50	46.00	25.50	Peak
6	560.693	32.35	-5.64	26.71	46.00	19.29	Peak

Model: i504W (POE)  
 Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

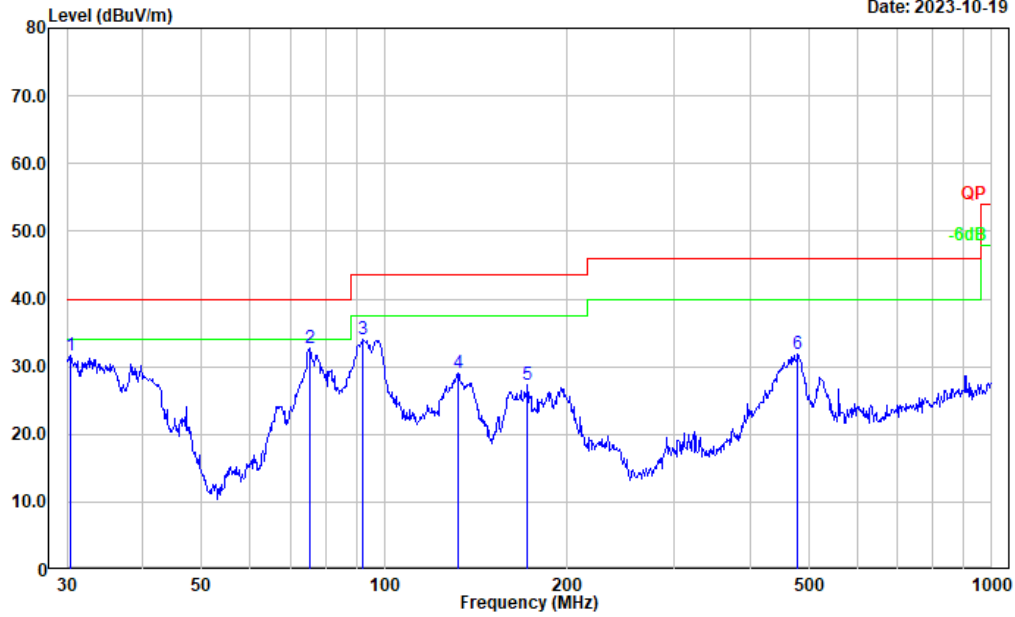
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	98.142	45.67	-14.75	30.92	43.50	12.58	Peak
2	130.837	47.84	-11.32	36.52	43.50	6.98	Peak
3	188.413	46.85	-13.49	33.36	43.50	10.14	Peak
4	303.544	38.03	-10.59	27.44	46.00	18.56	Peak
5	480.528	38.28	-6.25	32.03	46.00	13.97	Peak
6	906.482	33.43	-0.72	32.71	46.00	13.29	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

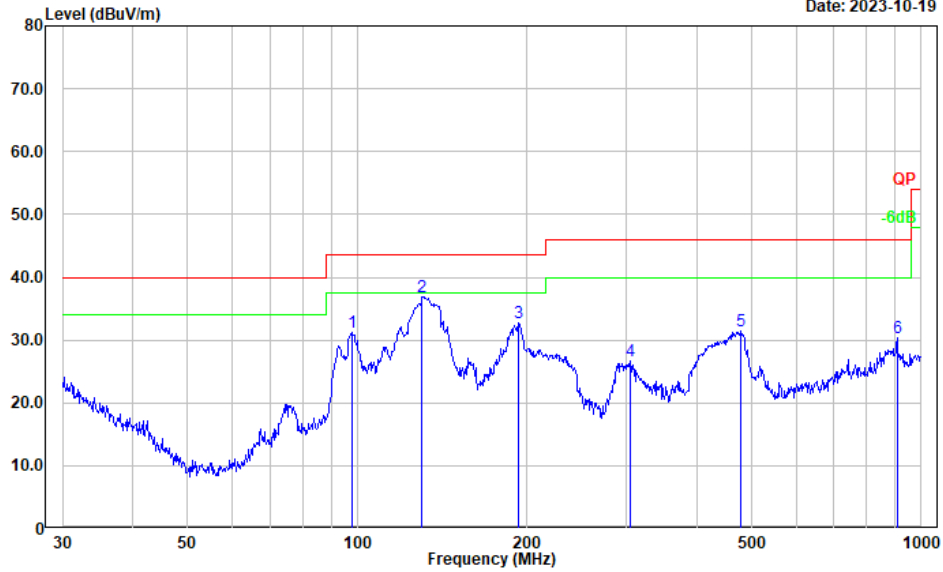


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.424	35.80	-4.13	31.67	40.00	8.33	Peak
2	75.182	49.68	-17.00	32.68	40.00	7.32	Peak
3	92.139	50.36	-16.41	33.95	43.50	9.55	Peak
4	132.221	40.51	-11.40	29.11	43.50	14.39	Peak
5	171.995	40.34	-12.95	27.39	43.50	16.11	Peak
6	478.846	38.16	-6.26	31.90	46.00	14.10	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-19

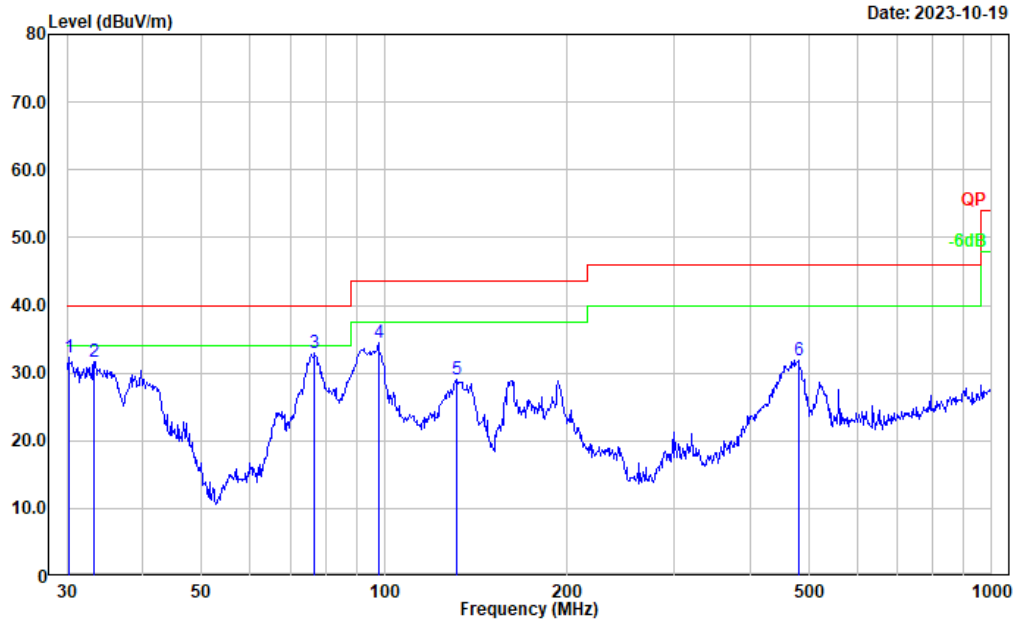


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	97.798	46.10	-14.85	31.25	43.50	12.25	Peak
2	130.379	48.24	-11.31	36.93	43.50	6.57	Peak
3	193.095	45.74	-13.04	32.70	43.50	10.80	Peak
4	304.610	37.13	-10.57	26.56	46.00	19.44	Peak
5	478.846	37.73	-6.26	31.47	46.00	14.53	Peak
6	906.482	31.06	-0.72	30.34	46.00	15.66	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

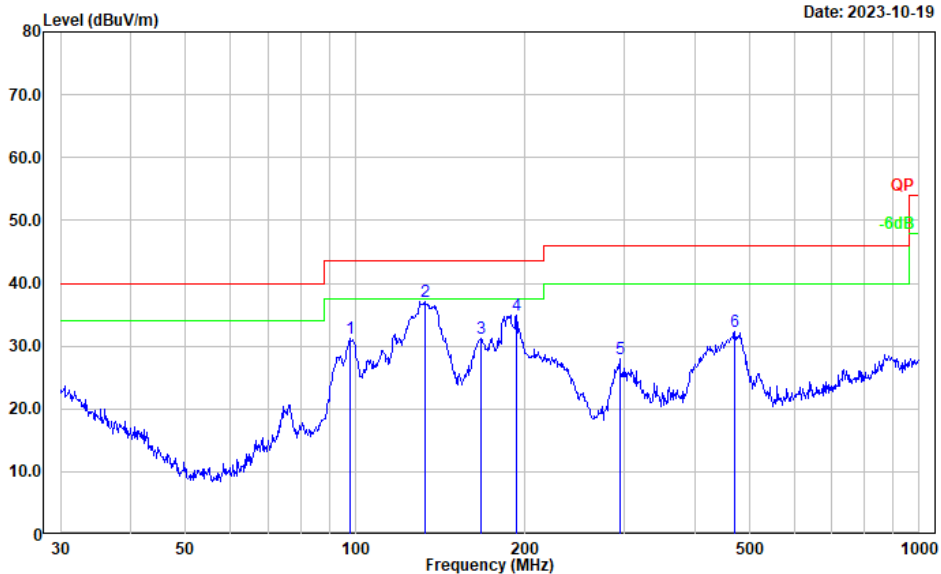


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.211	36.29	-3.96	32.33	40.00	7.67	Peak
2	33.211	37.93	-6.24	31.69	40.00	8.31	Peak
3	76.781	50.01	-17.15	32.86	40.00	7.14	Peak
4	97.798	49.23	-14.85	34.38	43.50	9.12	Peak
5	131.758	40.39	-11.37	29.02	43.50	14.48	Peak
6	480.528	38.13	-6.25	31.88	46.00	14.12	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

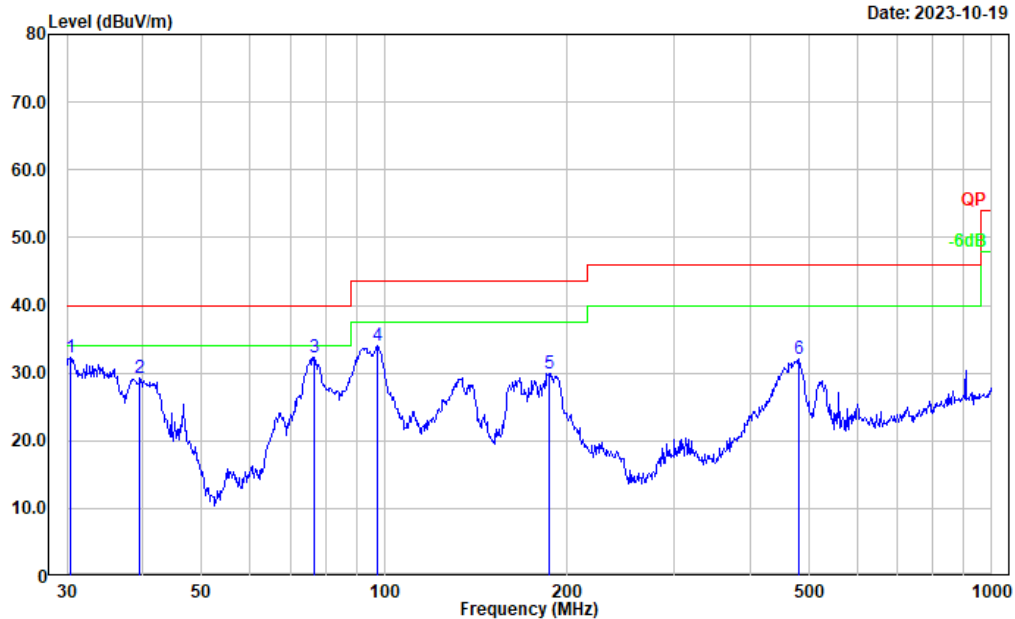
Date: 2023-10-19



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	98.142	45.90	-14.75	31.15	43.50	12.35	Peak
2	133.151	48.62	-11.49	37.13	43.50	6.37	Peak
3	167.237	43.76	-12.59	31.17	43.50	12.33	Peak
4	193.095	47.91	-13.04	34.87	43.50	8.63	Peak
5	294.114	38.82	-10.83	27.99	46.00	18.01	Peak
6	470.523	38.57	-6.33	32.24	46.00	13.76	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-19

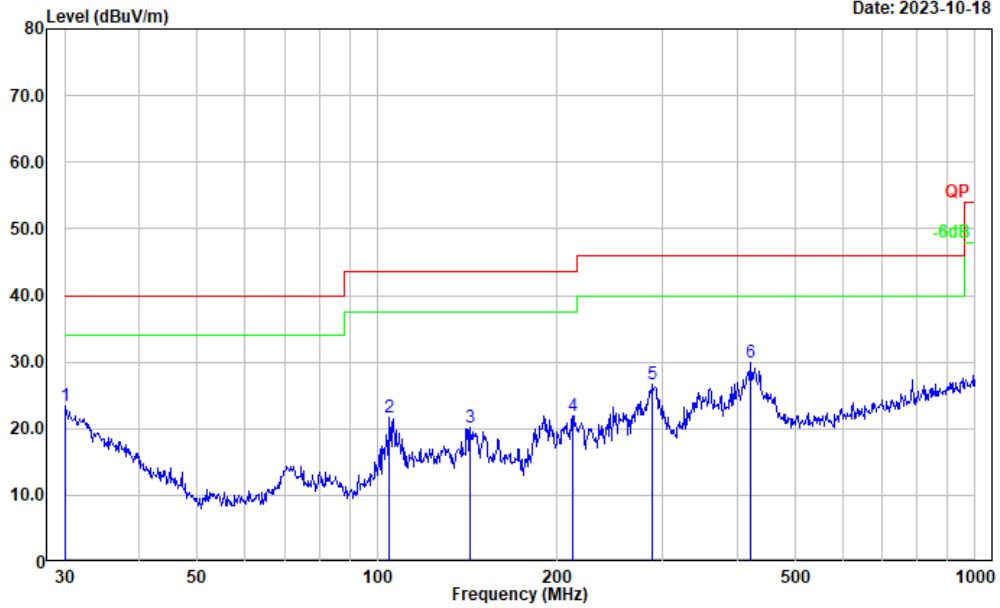


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.424	36.44	-4.13	32.31	40.00	7.69	Peak
2	39.576	40.31	-11.08	29.23	40.00	10.77	Peak
3	76.512	49.34	-17.13	32.21	40.00	7.79	Peak
4	97.115	49.01	-15.05	33.96	43.50	9.54	Peak
5	186.441	43.50	-13.53	29.97	43.50	13.53	Peak
6	482.216	38.27	-6.27	32.00	46.00	14.00	Peak

Model: Y504W-Y (Adapter)  
 Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

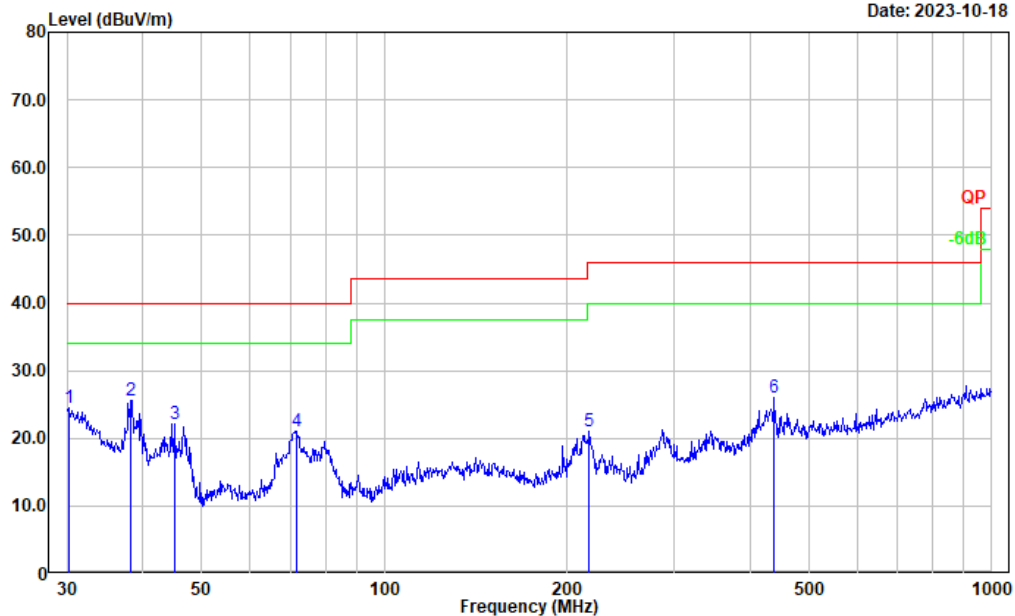
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.000	27.18	-3.80	23.38	40.00	16.62	Peak
2	104.903	35.14	-13.38	21.76	43.50	21.74	Peak
3	143.326	31.99	-11.83	20.16	43.50	23.34	Peak
4	212.270	34.56	-12.57	21.99	43.50	21.51	Peak
5	289.002	37.75	-11.12	26.63	46.00	19.37	Peak
6	422.058	37.69	-7.83	29.86	46.00	16.14	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

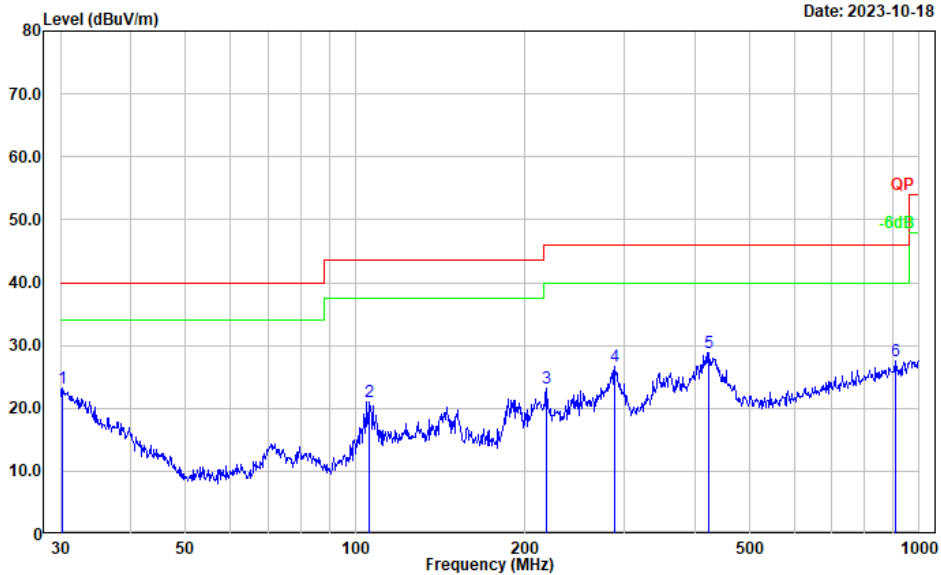


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.317	28.47	-4.04	24.43	40.00	15.57	Peak
2	38.212	35.57	-10.02	25.55	40.00	14.45	Peak
3	45.058	36.43	-14.25	22.18	40.00	17.82	Peak
4	71.581	37.68	-16.72	20.96	40.00	19.04	Peak
5	217.544	33.70	-12.76	20.94	46.00	25.06	Peak
6	438.655	33.23	-7.31	25.92	46.00	20.08	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

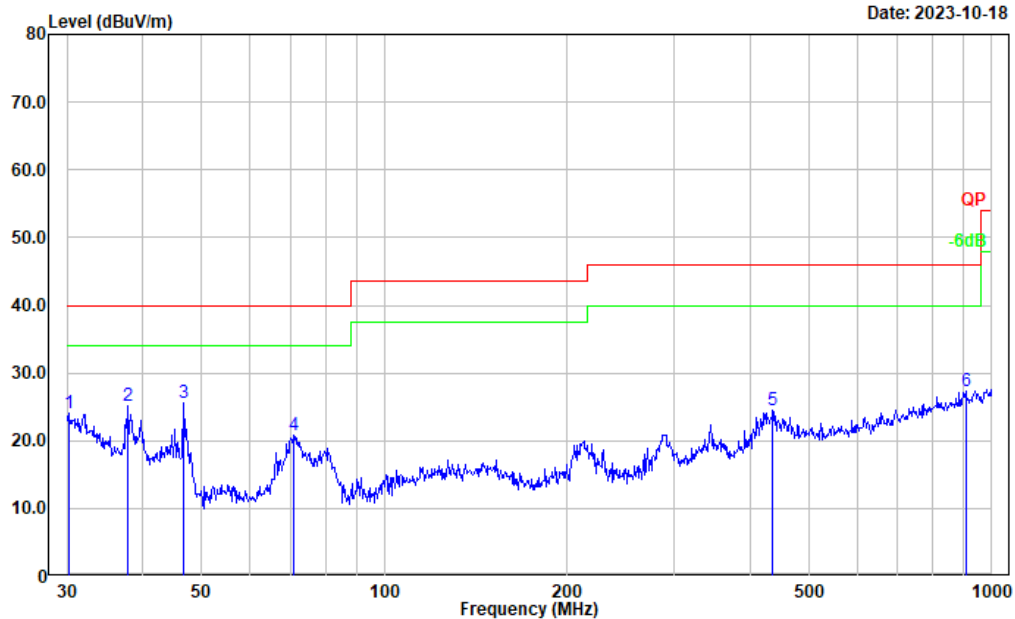
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.317	27.21	-4.04	23.17	40.00	16.83	Peak
2	106.013	34.18	-13.16	21.02	43.50	22.48	Peak
3	218.309	36.08	-12.79	23.29	46.00	22.71	Peak
4	287.990	37.87	-11.19	26.68	46.00	19.32	Peak
5	423.540	36.67	-7.77	28.90	46.00	17.10	Peak
6	906.482	28.29	-0.72	27.57	46.00	18.43	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

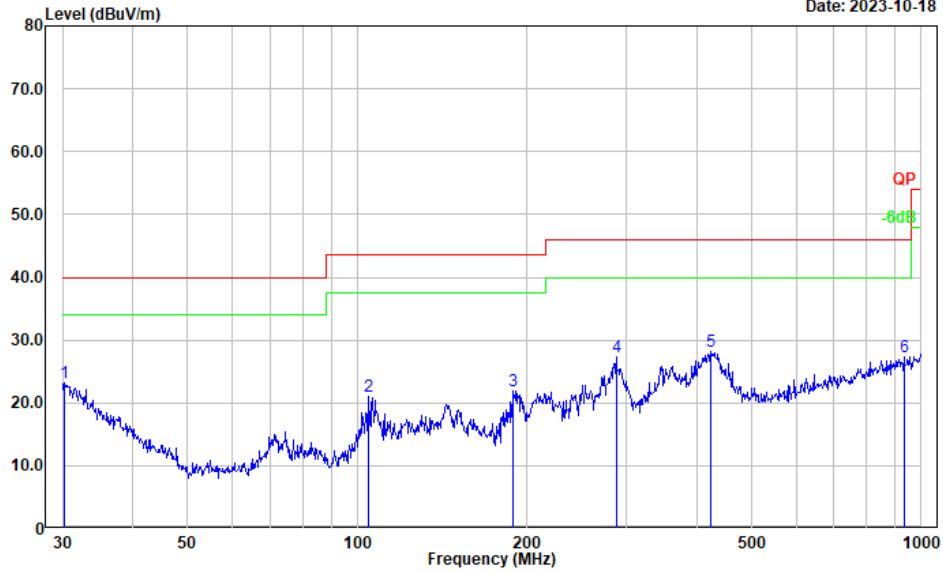


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.211	28.03	-3.96	24.07	40.00	15.93	Peak
2	37.812	34.88	-9.72	25.16	40.00	14.84	Peak
3	46.666	40.68	-15.20	25.48	40.00	14.52	Peak
4	70.832	37.48	-16.64	20.84	40.00	19.16	Peak
5	435.590	31.81	-7.35	24.46	46.00	21.54	Peak
6	906.482	28.09	-0.72	27.37	46.00	18.63	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

Date: 2023-10-18

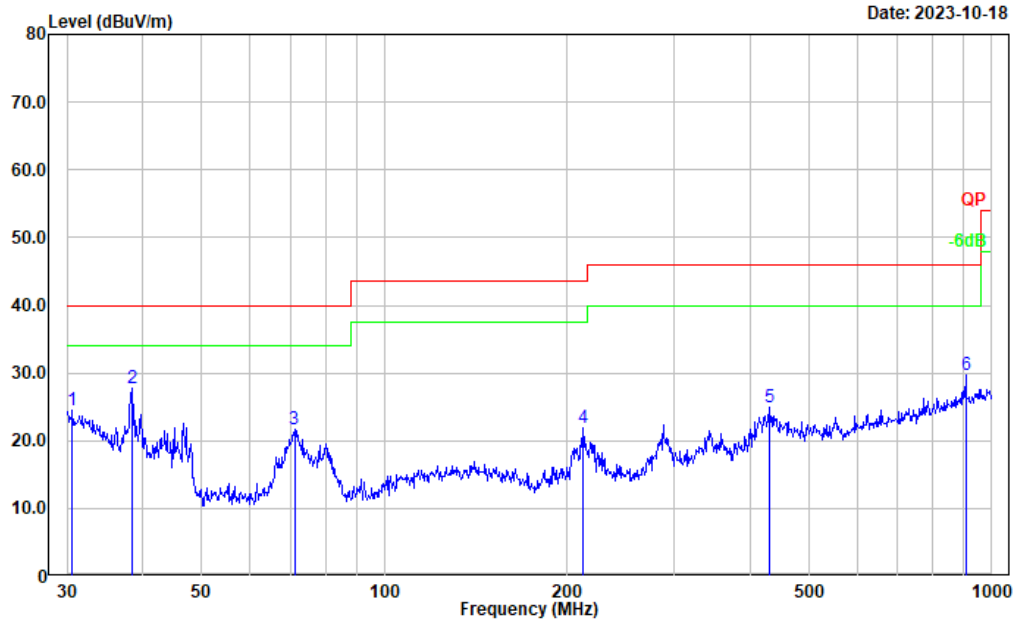


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.317	27.21	-4.04	23.17	40.00	16.83	Peak
2	104.903	34.46	-13.38	21.08	43.50	22.42	Peak
3	188.413	35.45	-13.49	21.96	43.50	21.54	Peak
4	287.990	38.52	-11.19	27.33	46.00	18.67	Peak
5	423.540	35.96	-7.77	28.19	46.00	17.81	Peak
6	932.272	27.81	-0.58	27.23	46.00	18.77	Peak



Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18



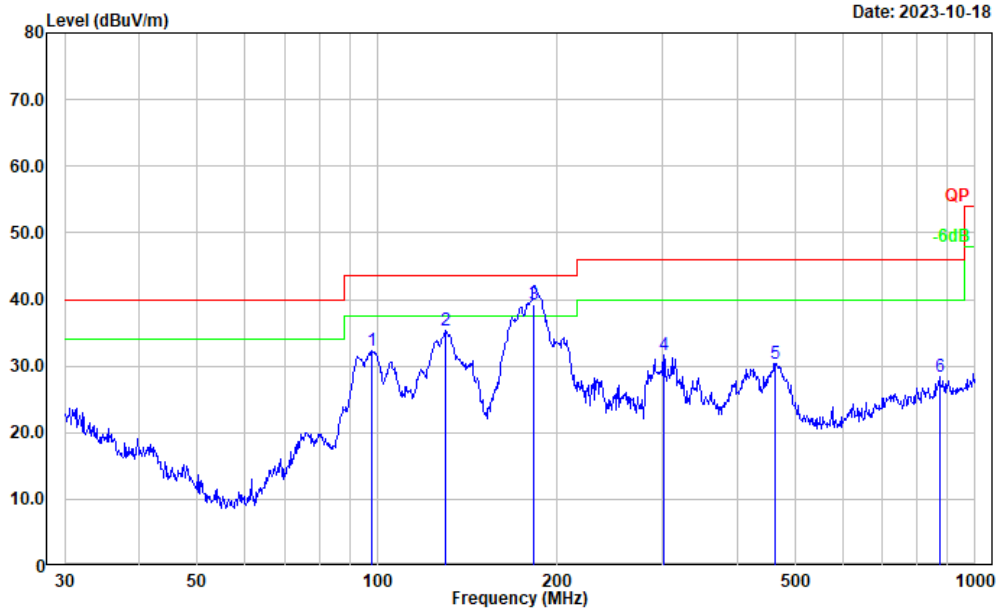
No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.638	28.83	-4.28	24.55	40.00	15.45	Peak
2	38.346	37.81	-10.12	27.69	40.00	12.31	Peak
3	71.080	38.46	-16.68	21.78	40.00	18.22	Peak
4	212.270	34.44	-12.57	21.87	43.50	21.63	Peak
5	431.032	32.42	-7.46	24.96	46.00	21.04	Peak
6	906.482	30.43	-0.72	29.71	46.00	16.29	Peak

Model: Y504W-Y (POE)

Low Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

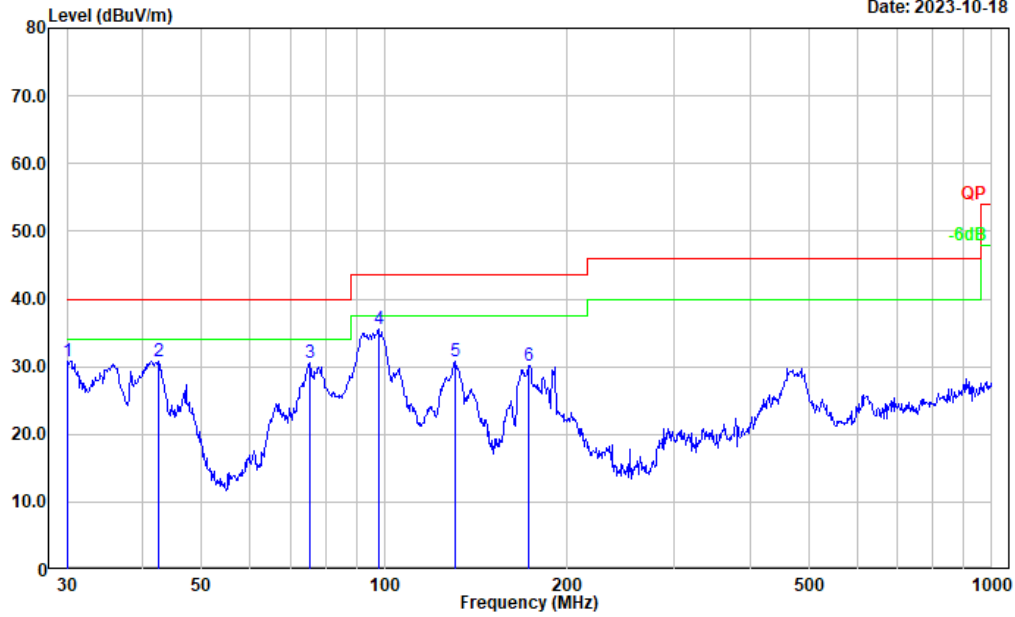
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	97.798	47.14	-14.85	32.29	43.50	11.21	Peak
2	129.923	46.55	-11.29	35.26	43.50	8.24	Peak
3	182.559	52.69	-13.53	39.16	43.50	4.34	QP
4	301.422	42.33	-10.61	31.72	46.00	14.28	Peak
5	463.970	36.95	-6.51	30.44	46.00	15.56	Peak
6	872.183	29.70	-1.22	28.48	46.00	17.52	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

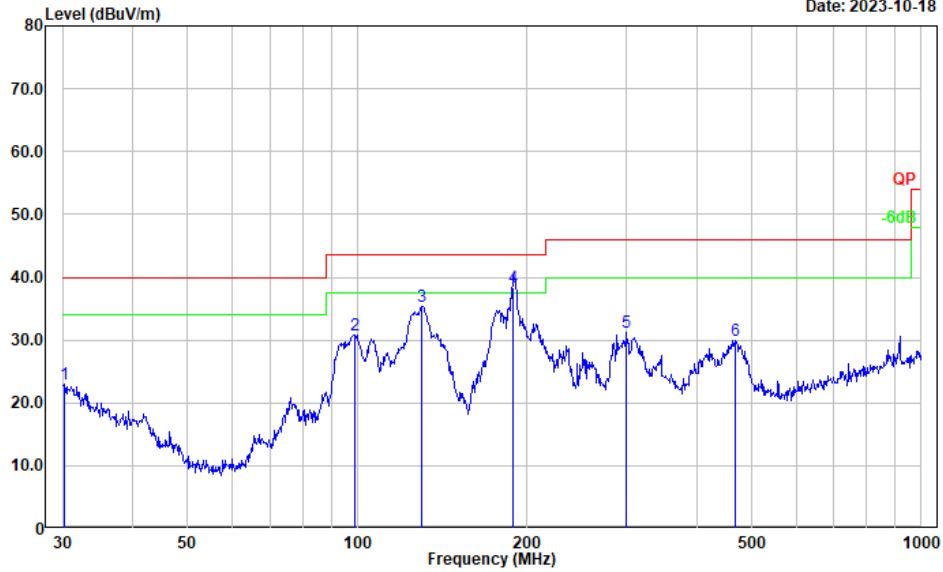


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.000	34.61	-3.80	30.81	40.00	9.19	Peak
2	42.451	43.66	-12.78	30.88	40.00	9.12	Peak
3	75.182	47.63	-17.00	30.63	40.00	9.37	Peak
4	97.798	50.47	-14.85	35.62	43.50	7.88	Peak
5	130.837	42.01	-11.32	30.69	43.50	12.81	Peak
6	172.599	43.21	-12.98	30.23	43.50	13.27	Peak

Middle Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

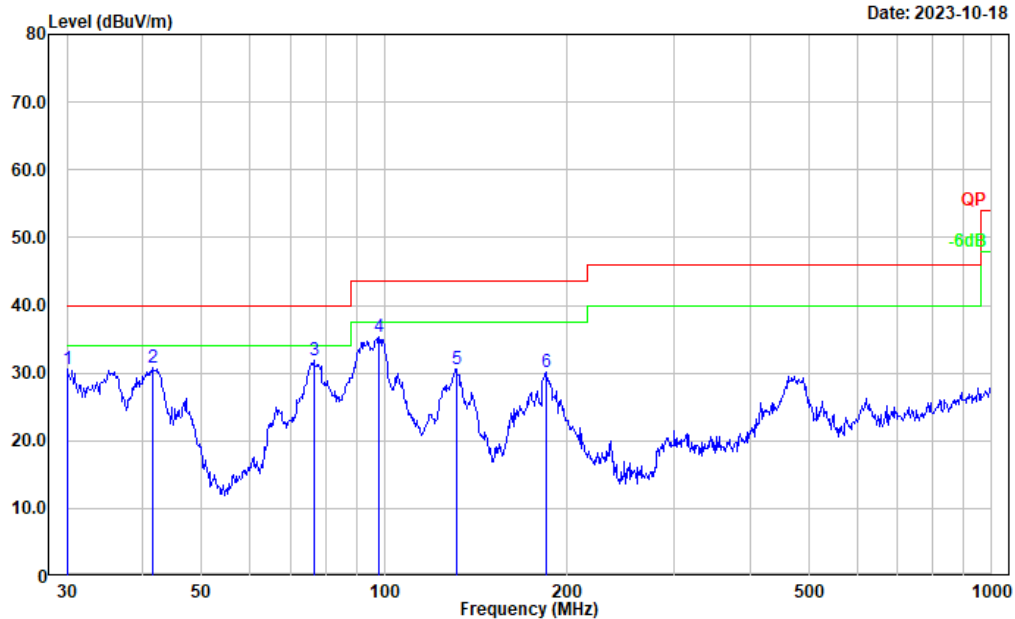
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.317	27.12	-4.04	23.08	40.00	16.92	Peak
2	98.833	45.38	-14.59	30.79	43.50	12.71	Peak
3	129.923	46.73	-11.29	35.44	43.50	8.06	Peak
4	188.413	51.89	-13.49	38.40	43.50	5.10	QP
5	300.367	41.86	-10.63	31.23	46.00	14.77	Peak
6	467.235	36.38	-6.41	29.97	46.00	16.03	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18

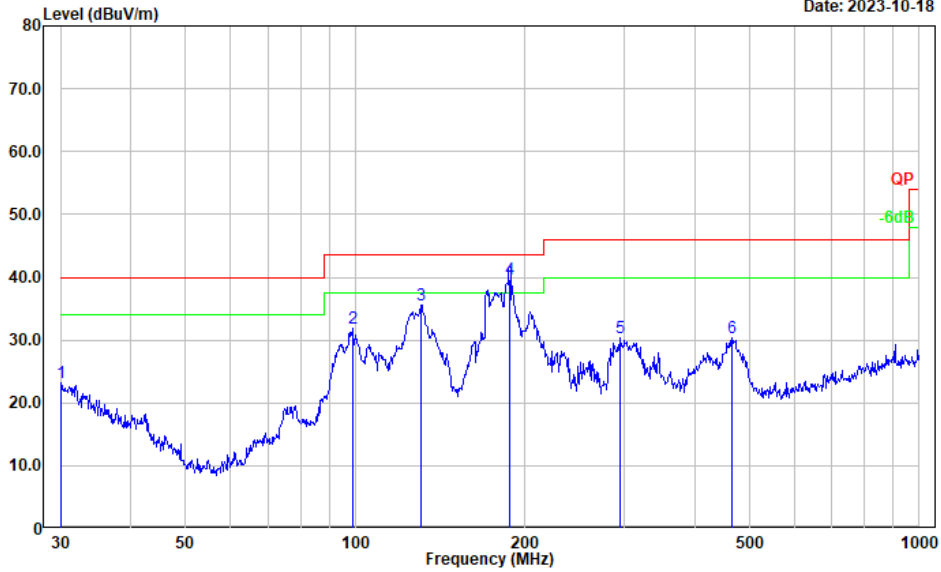


No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.000	34.32	-3.80	30.52	40.00	9.48	Peak
2	41.567	43.00	-12.27	30.73	40.00	9.27	Peak
3	76.512	48.98	-17.13	31.85	40.00	8.15	Peak
4	98.142	50.06	-14.75	35.31	43.50	8.19	Peak
5	131.297	41.91	-11.34	30.57	43.50	12.93	Peak
6	184.490	43.61	-13.52	30.09	43.50	13.41	Peak

High Channel

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: horizontal  
 Note:

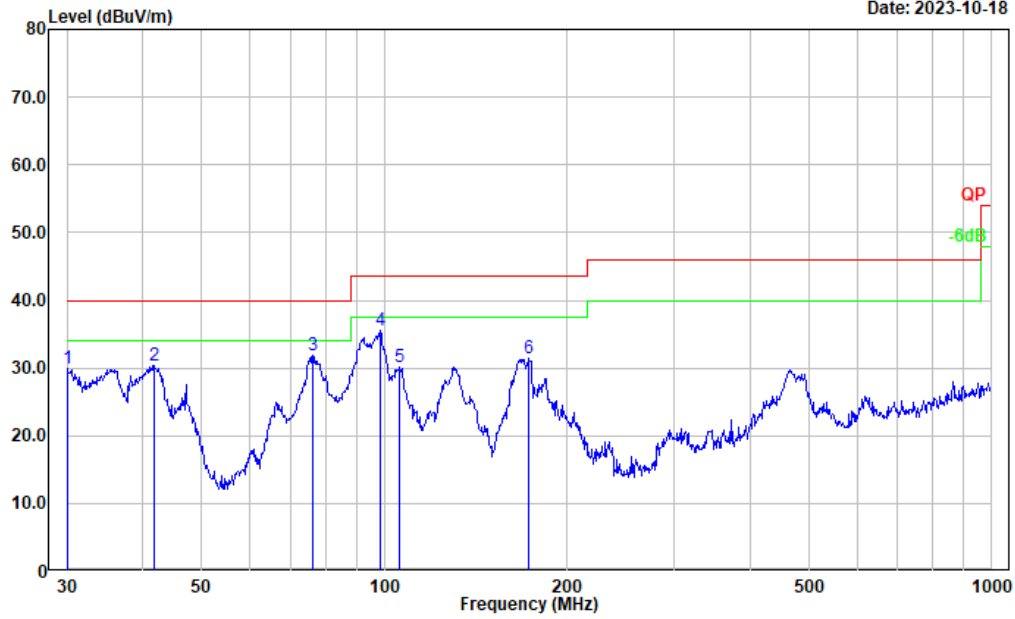
Date: 2023-10-18



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	27.15	-3.88	23.27	40.00	16.73	Peak
2	98.833	46.50	-14.59	31.91	43.50	11.59	Peak
3	130.837	46.89	-11.32	35.57	43.50	7.93	Peak
4	187.753	53.17	-13.51	39.66	43.50	3.84	QP
5	294.114	41.09	-10.83	30.26	46.00	15.74	Peak
6	465.599	36.81	-6.46	30.35	46.00	15.65	Peak

Project No.: CR230951413-RF  
 Tester: Carl Xue  
 Polarization: vertical  
 Note:

Date: 2023-10-18



No.	Frequency (MHz)	Reading (dB $\mu$ V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)	Detector
1	30.000	33.69	-3.80	29.89	40.00	10.11	Peak
2	41.860	42.77	-12.43	30.34	40.00	9.66	Peak
3	76.244	48.99	-17.08	31.91	40.00	8.09	Peak
4	98.487	50.25	-14.66	35.59	43.50	7.91	Peak
5	106.013	43.28	-13.16	30.12	43.50	13.38	Peak
6	173.205	44.52	-13.03	31.49	43.50	12.01	Peak

**2) 1GHz-40GHz: (i506W&Adapter)****5150-5250MHz:****802.11a:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5180	MHz		
5150.000	31.67	PK	H	32.62	64.29	74.00	9.71
5150.000	17.54	AV	H	32.62	50.16	54.00	3.84
5150.000	31.72	PK	V	32.62	64.34	74.00	9.66
5150.000	17.30	AV	V	32.62	49.92	54.00	4.08
10360.000	37.59	PK	H	13.16	50.75	68.20	17.45
10360.000	38.21	PK	H	13.16	51.37	68.20	16.83
Middle Channel:				5200	MHz		
10400.000	36.86	PK	H	13.14	50.00	68.20	18.20
10400.000	37.94	PK	H	13.14	51.08	68.20	17.12
High Channel:				5240	MHz		
5350.000	31.66	PK	H	33.01	64.67	74.00	9.33
5350.000	17.24	AV	H	33.01	50.25	54.00	3.75
5350.000	31.92	PK	V	33.01	64.93	74.00	9.07
5350.000	17.49	AV	V	33.01	50.50	54.00	3.50
10480.000	36.79	PK	H	12.84	49.63	68.20	18.57
10480.000	37.89	PK	H	12.84	50.73	68.20	17.47



**802.11n ht20:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5180 MHz							
5150.000	31.15	PK	H	32.62	63.77	74.00	10.23
5150.000	17.26	AV	H	32.62	49.88	54.00	4.12
5150.000	31.91	PK	V	32.62	64.53	74.00	9.47
5150.000	17.73	AV	V	32.62	50.35	54.00	3.65
10360.000	37.68	PK	H	13.16	50.84	68.20	17.36
10360.000	38.01	PK	H	13.16	51.17	68.20	17.03
Middle Channel: 5200 MHz							
10400.000	36.85	PK	H	13.14	49.99	68.20	18.21
10400.000	37.76	PK	H	13.14	50.90	68.20	17.30
High Channel: 5240 MHz							
5350.000	31.39	PK	H	33.01	64.40	74.00	9.60
5350.000	17.27	AV	H	33.01	50.28	54.00	3.72
5350.000	31.22	PK	V	33.01	64.23	74.00	9.77
5350.000	17.78	AV	V	33.01	50.79	54.00	3.21
10480.000	38.64	PK	H	12.84	51.48	68.20	16.72
10480.000	39.77	PK	H	12.84	52.61	68.20	15.59

**802.11n ht40:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5190 MHz							
5150.000	31.85	PK	H	32.62	64.47	74.00	9.53
5150.000	17.74	AV	H	32.62	50.36	54.00	3.64
5150.000	31.76	PK	V	32.62	64.38	74.00	9.62
5150.000	17.58	AV	V	32.62	50.20	54.00	3.80
10380.000	36.61	PK	H	13.15	49.76	68.20	18.44
10380.000	37.64	PK	V	13.15	50.79	68.20	17.41
High Channel: 5230 MHz							
5350.000	31.82	PK	H	33.01	64.83	74.00	9.17
5350.000	17.19	AV	H	33.01	50.20	54.00	3.80
5350.000	31.04	PK	V	33.01	64.05	74.00	9.95
5350.000	17.10	AV	V	33.01	50.11	54.00	3.89
10460.000	36.56	PK	H	12.92	49.48	68.20	18.72
10460.000	37.53	PK	V	12.92	50.45	68.20	17.75

**5725-5850MHz:****802.11a:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5745	MHz		
11490.000	35.17	PK	H	14.65	49.82	74.00	24.18
11490.000	22.63	AV	H	14.65	37.28	54.00	16.72
11490.000	36.82	PK	V	14.65	51.47	74.00	22.53
11490.000	23.68	AV	V	14.65	38.33	54.00	15.67
Middle Channel:				5785	MHz		
11570.000	35.59	PK	H	14.80	50.39	74.00	23.61
11570.000	22.61	AV	H	14.80	37.41	54.00	16.59
11570.000	36.62	PK	V	14.80	51.42	74.00	22.58
11570.000	23.51	AV	V	14.80	38.31	54.00	15.69
High Channel:				5825	MHz		
11650.000	35.19	PK	H	15.04	50.23	74.00	23.77
11650.000	22.68	AV	H	15.04	37.72	54.00	16.28
11650.000	36.07	PK	V	15.04	51.11	74.00	22.89
11650.000	23.08	AV	V	15.04	38.12	54.00	15.88

**802.11n ht20:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5745	MHz		
11490.000	35.66	PK	H	14.65	50.31	74.00	23.69
11490.000	22.67	AV	H	14.65	37.32	54.00	16.68
11490.000	36.92	PK	V	14.65	51.57	74.00	22.43
11490.000	23.80	AV	V	14.65	38.45	54.00	15.55
Middle Channel:				5785	MHz		
11570.000	35.68	PK	H	14.80	50.48	74.00	23.52
11570.000	22.69	AV	H	14.80	37.49	54.00	16.51
11570.000	36.73	PK	V	14.80	51.53	74.00	22.47
11570.000	23.62	AV	V	14.80	38.42	54.00	15.58
High Channel:				5825	MHz		
11650.000	35.27	PK	H	15.04	50.31	74.00	23.69
11650.000	22.62	AV	H	15.04	37.66	54.00	16.34
11650.000	36.20	PK	V	15.04	51.24	74.00	22.76
11650.000	23.17	AV	V	15.04	38.21	54.00	15.79

**802.11n ht40:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5755				MHz			
11510.000	35.44	PK	H	14.65	50.09	74.00	23.91
11510.000	23.86	AV	H	14.65	38.51	54.00	15.49
11510.000	36.46	PK	V	14.65	51.11	74.00	22.89
11510.000	24.19	AV	V	14.65	38.84	54.00	15.16
High Channel: 5795				MHz			
11590.000	35.63	PK	H	14.88	50.51	74.00	23.49
11590.000	23.68	AV	H	14.88	38.56	54.00	15.44
11590.000	36.17	PK	V	14.88	51.05	74.00	22.95
11590.000	24.09	AV	V	14.88	38.97	54.00	15.03

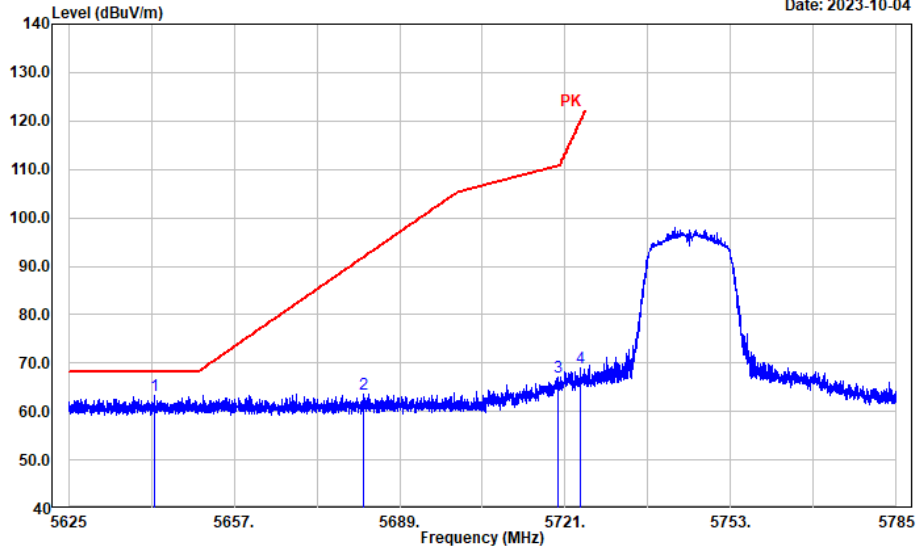
**Test plots for Band Edge Measurements (Radiated)**

**802.11a Low Channel**

**Test Channel: 5745MHz Ant. Polar. : Horizontal**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



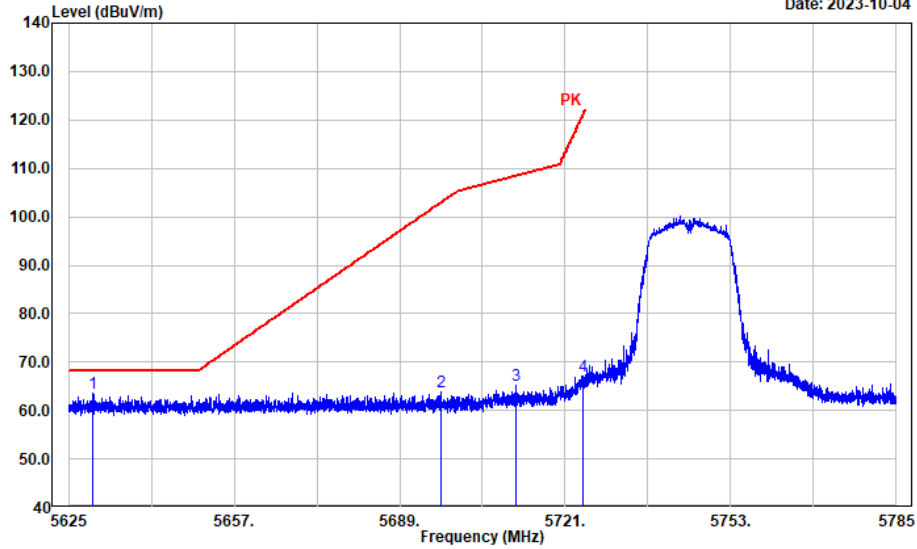
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5641.579	29.80	33.48	63.28	68.20	4.92	Peak
2	5682.003	30.18	33.50	63.68	91.92	28.24	Peak
3	5719.707	33.73	33.49	67.22	110.72	43.50	Peak
4	5724.028	35.59	33.48	69.07	119.98	50.91	Peak

802.11a Low Channel

Test Channel: 5745MHz Ant. Polar.: Vertical

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Vertical  
 Note:

Date: 2023-10-04



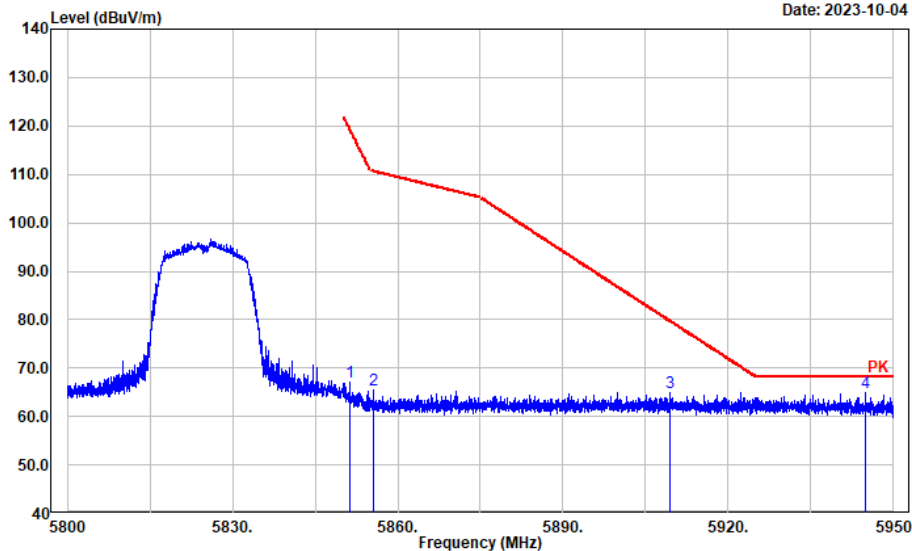
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5629.801	30.08	33.46	63.54	68.20	4.66	Peak
2	5696.950	30.23	33.51	63.74	102.95	39.21	Peak
3	5711.449	31.62	33.49	65.11	108.41	43.30	Peak
4	5724.412	33.55	33.48	67.03	120.86	53.83	Peak

802.11a High Channel

Test Channel: 5825MHz Ant. Polar. : Horizontal

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



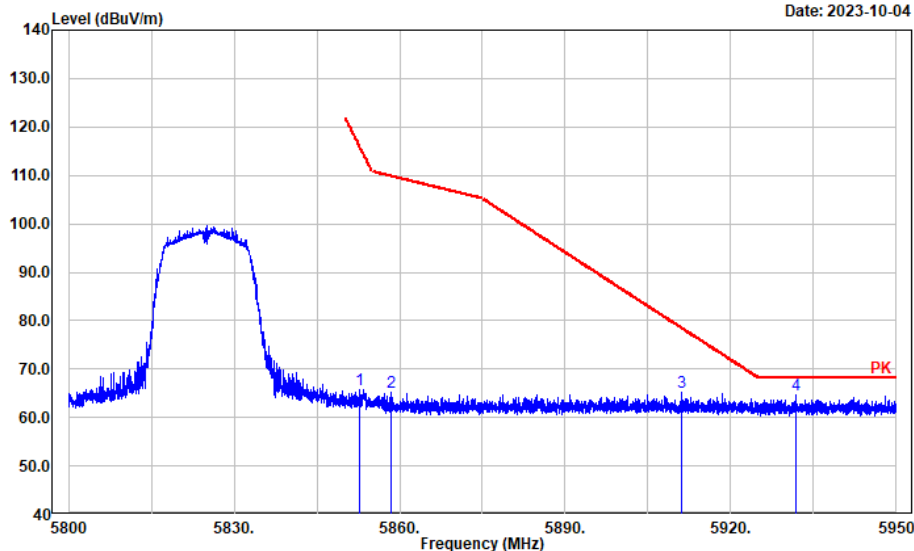
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5851.220	33.50	33.49	66.99	119.42	52.43	Peak
2	5855.541	31.95	33.51	65.46	110.65	45.19	Peak
3	5909.492	31.31	33.69	65.00	79.64	14.64	Peak
4	5944.899	31.37	33.65	65.02	68.20	3.18	Peak

802.11a High Channel

Test Channel: 5825MHz Ant. Polar. : Vertical

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Vertical  
 Note:

Date: 2023-10-04



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5852.630	32.37	33.50	65.87	116.20	50.33	Peak
2	5858.362	31.80	33.52	65.32	109.86	44.54	Peak
3	5911.022	31.58	33.69	65.27	78.51	13.24	Peak
4	5931.696	30.92	33.66	64.58	68.20	3.62	Peak

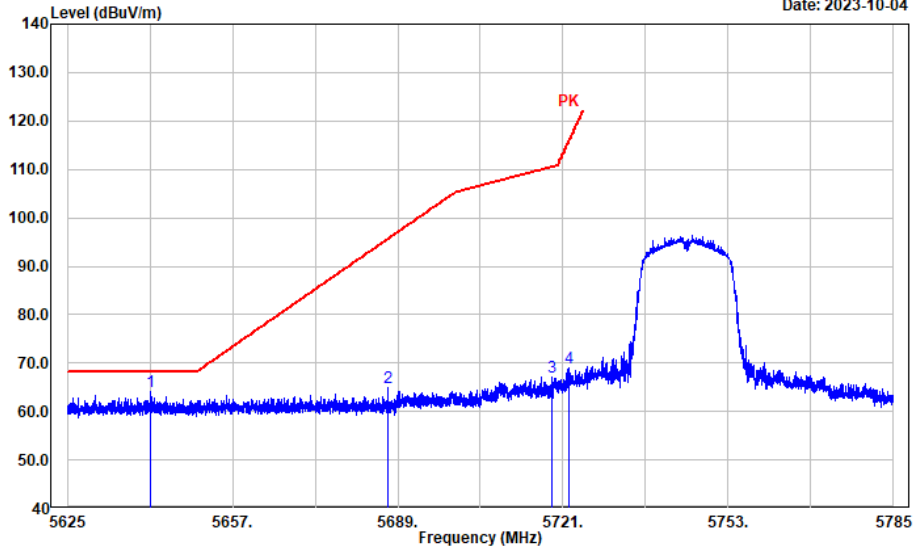


802.11n 20 Low Channel

Test Channel: 5745MHz Ant. Polar.: Horizontal

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



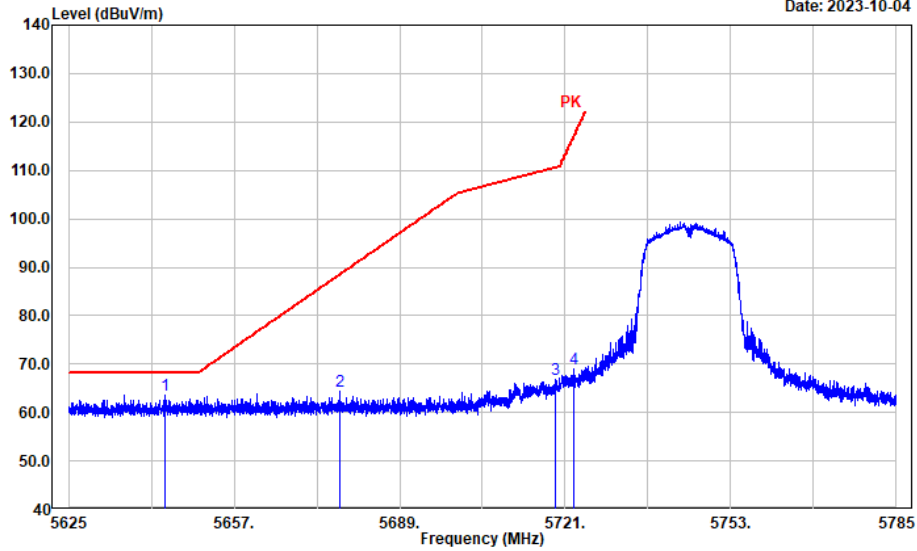
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5641.227	30.56	33.48	64.04	68.20	4.16	Peak
2	5687.156	31.45	33.50	64.95	95.73	30.78	Peak
3	5718.779	33.72	33.49	67.21	110.46	43.25	Peak
4	5722.107	35.41	33.48	68.89	115.61	46.72	Peak

802.11n 20 Low Channel

Test Channel: 5745MHz Ant. Polar. : Vertical

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Vertical  
 Note:

Date: 2023-10-04



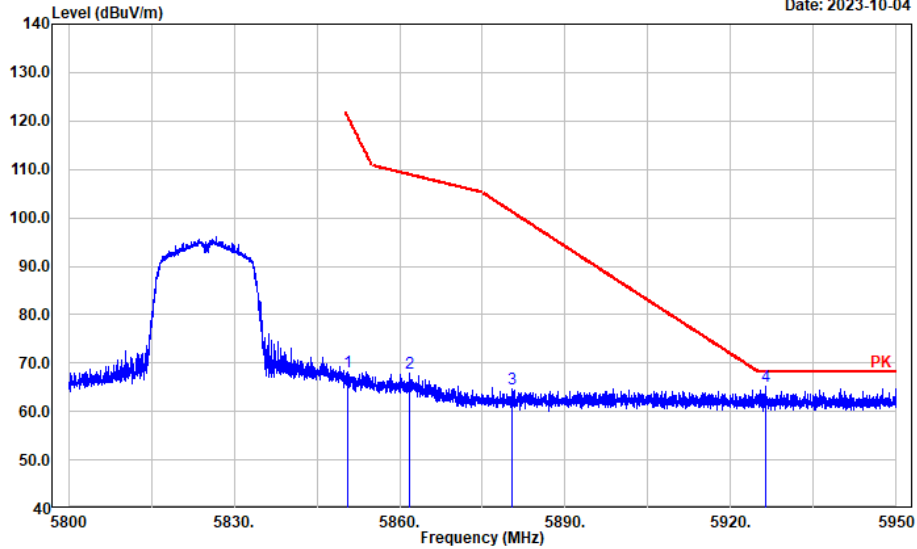
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5643.756	30.05	33.48	63.53	68.20	4.67	Peak
2	5677.491	30.87	33.50	64.37	88.58	24.21	Peak
3	5719.067	33.27	33.49	66.76	110.54	43.78	Peak
4	5722.651	35.40	33.48	68.88	116.85	47.97	Peak

802.11n 20 High Channel

Test Channel: 5825MHz Ant. Polar. : Horizontal

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



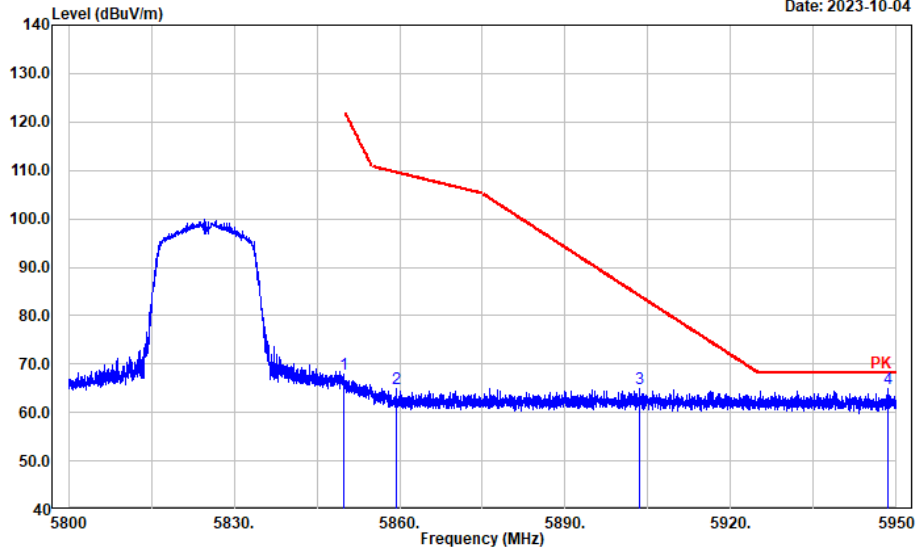
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5850.560	34.78	33.49	68.27	120.92	52.65	Peak
2	5861.813	34.28	33.54	67.82	108.89	41.07	Peak
3	5880.446	31.15	33.62	64.77	101.15	36.38	Peak
4	5926.295	31.57	33.67	65.24	68.20	2.96	Peak

802.11n 20 High Channel

Test Channel: 5825MHz Ant. Polar. : Vertical

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Vertical  
 Note:

Date: 2023-10-04



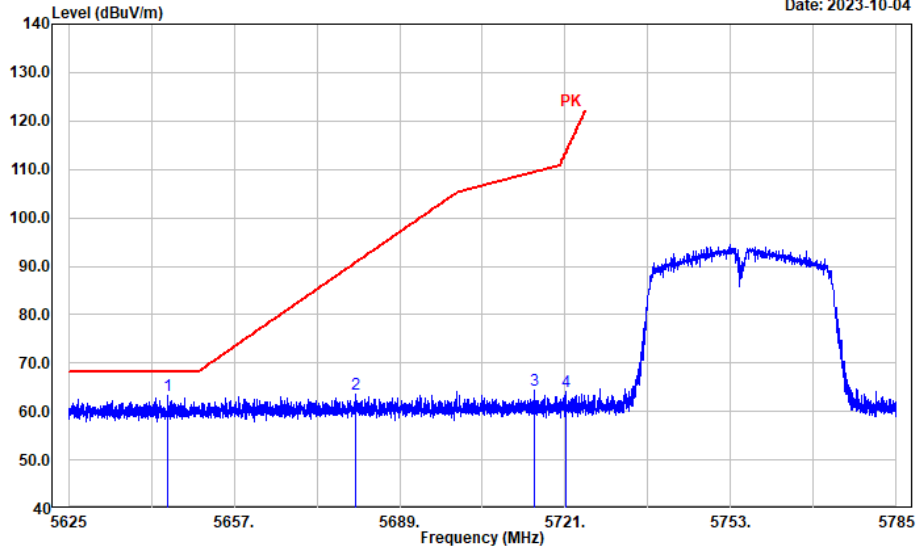
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5849.870	34.42	33.49	67.91	68.20	0.29	Peak
2	5859.352	31.37	33.53	64.90	109.58	44.68	Peak
3	5903.491	31.24	33.70	64.94	84.08	19.14	Peak
4	5948.410	31.22	33.64	64.86	68.20	3.34	Peak

802.11n ht40 Low Channel

Test Channel: 5755MHz Ant. Polar. : Horizontal

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



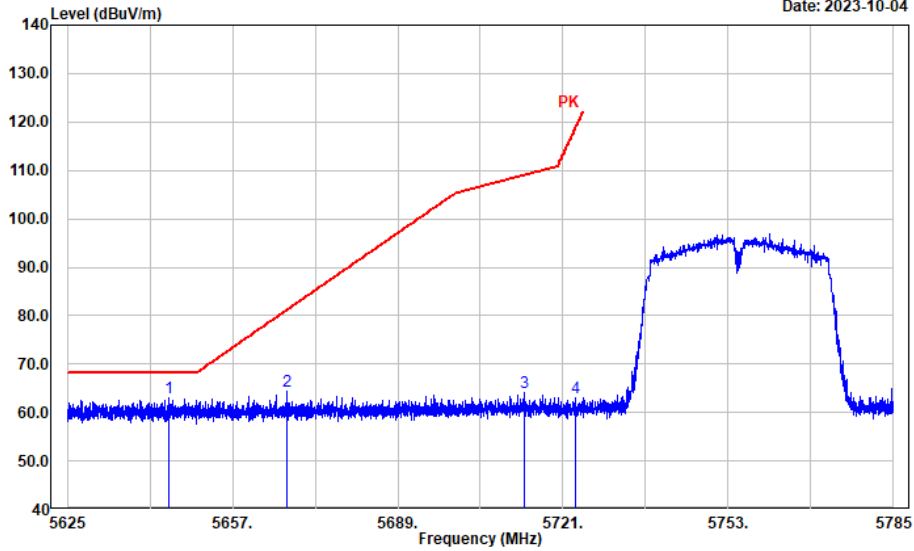
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5644.172	29.94	33.48	63.42	68.20	4.78	Peak
2	5680.595	30.21	33.50	63.71	90.88	27.17	Peak
3	5715.130	30.89	33.50	64.39	109.44	45.05	Peak
4	5721.211	30.64	33.49	64.13	113.56	49.43	Peak

802.11n ht40 Low Channel

Test Channel: 5755MHz Ant. Polar.: Vertical

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Vertical  
 Note:

Date: 2023-10-04



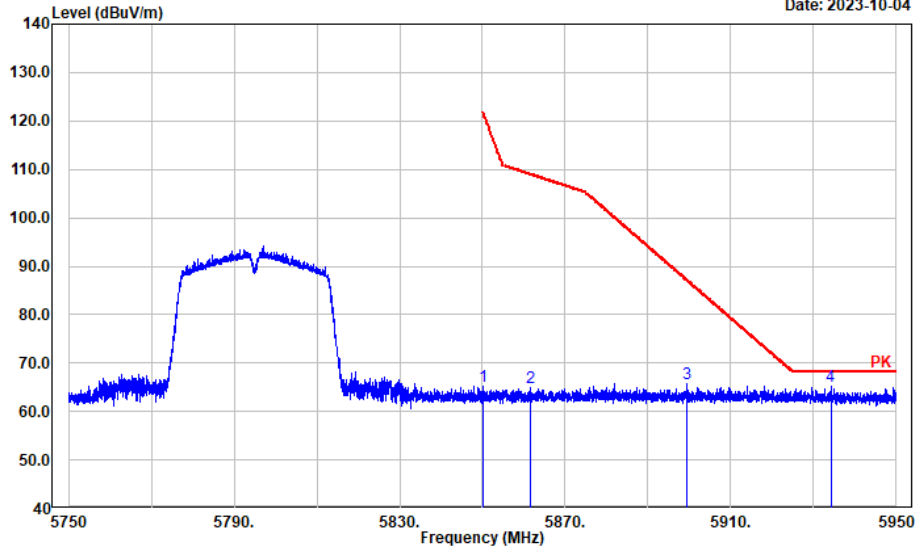
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5644.780	29.49	33.48	62.97	68.20	5.23	Peak
2	5667.568	30.97	33.50	64.47	81.24	16.77	Peak
3	5713.562	30.52	33.50	64.02	109.00	44.98	Peak
4	5723.355	29.60	33.48	63.08	118.45	55.37	Peak

**802.11n ht40 High Channel**

**Test Channel: 5795MHz Ant. Polar. : Horizontal**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



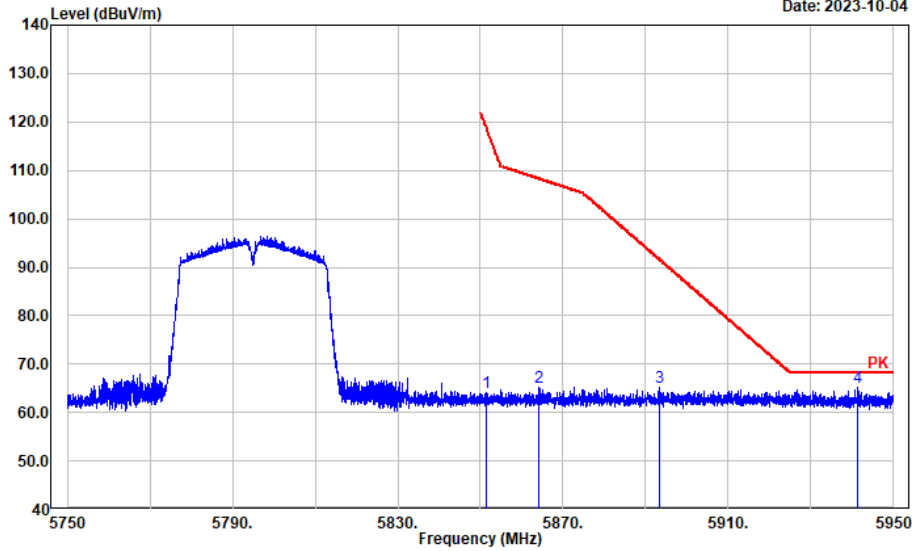
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5850.300	31.70	33.49	65.19	121.52	56.33	Peak
2	5861.462	31.28	33.54	64.82	108.99	44.17	Peak
3	5899.470	32.06	33.71	65.77	87.05	21.28	Peak
4	5934.157	31.51	33.66	65.17	68.20	3.03	Peak

**802.11n ht40 High Channel**

**Test Channel: 5795MHz Ant. Polar. : Vertical**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Vertical  
 Note:

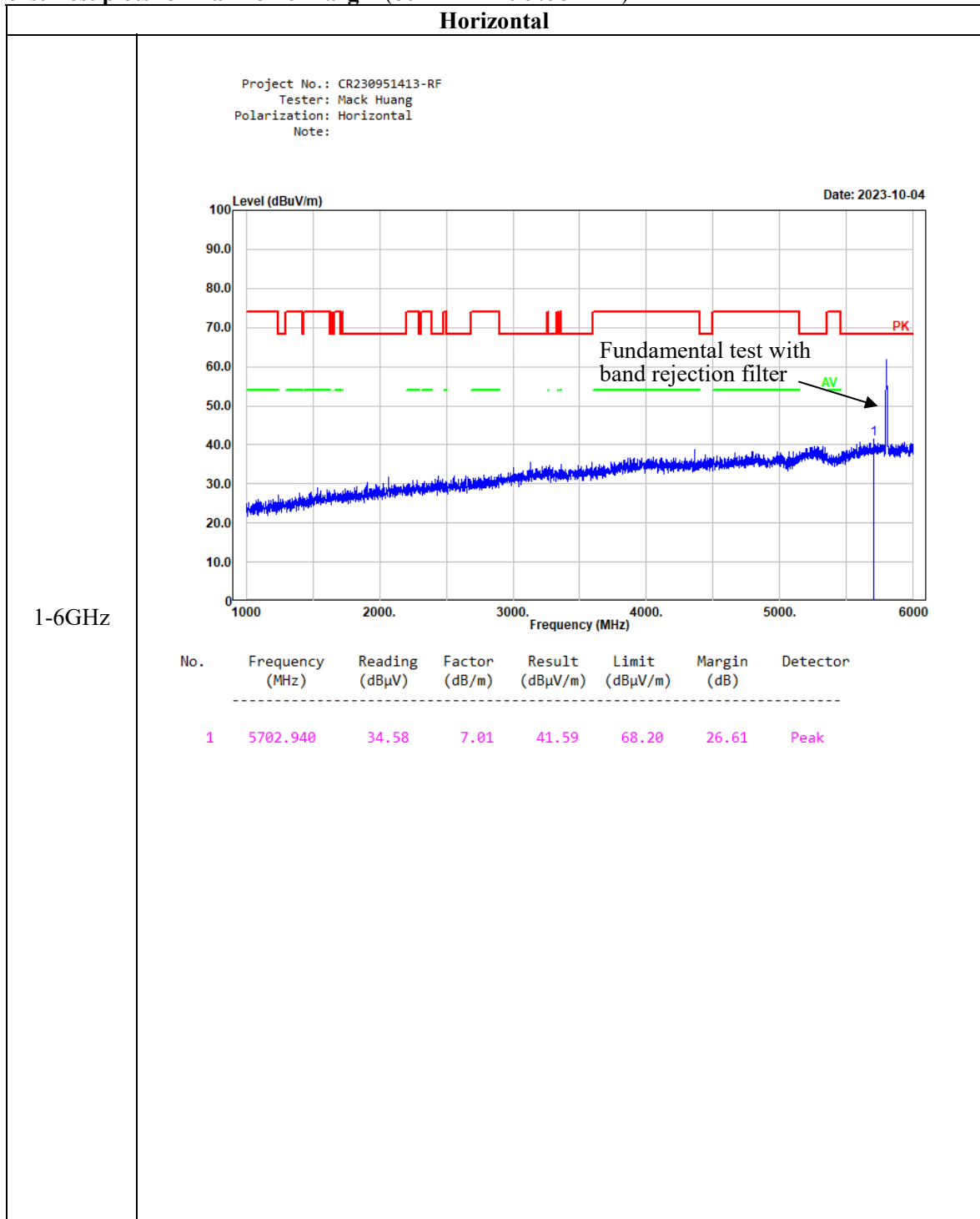
Date: 2023-10-04



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5851.300	30.61	33.50	64.11	119.23	55.12	Peak
2	5864.103	31.67	33.56	65.23	108.25	43.02	Peak
3	5893.269	31.47	33.68	65.15	91.64	26.49	Peak
4	5941.278	31.49	33.66	65.15	68.20	3.05	Peak



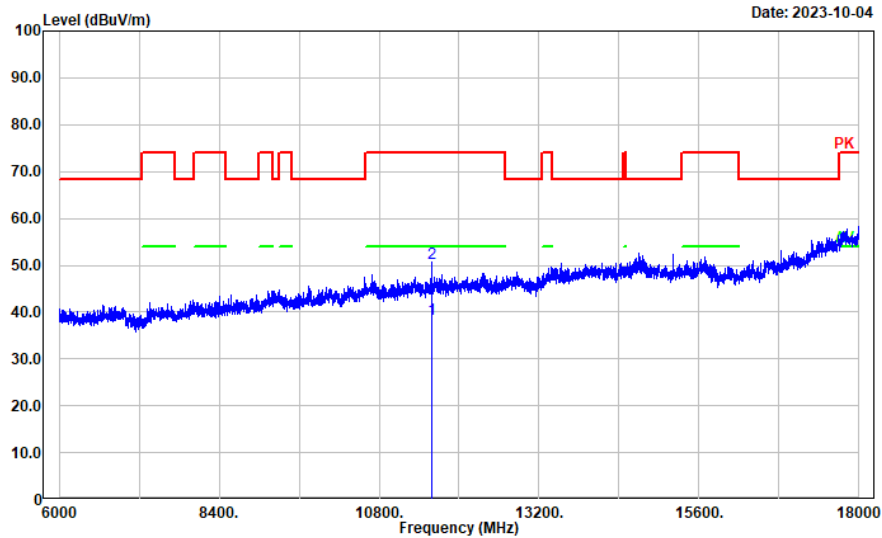
**Worst Test plots for Harmonic Margin (802.11n ht40 5795MHz)**



**Horizontal**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



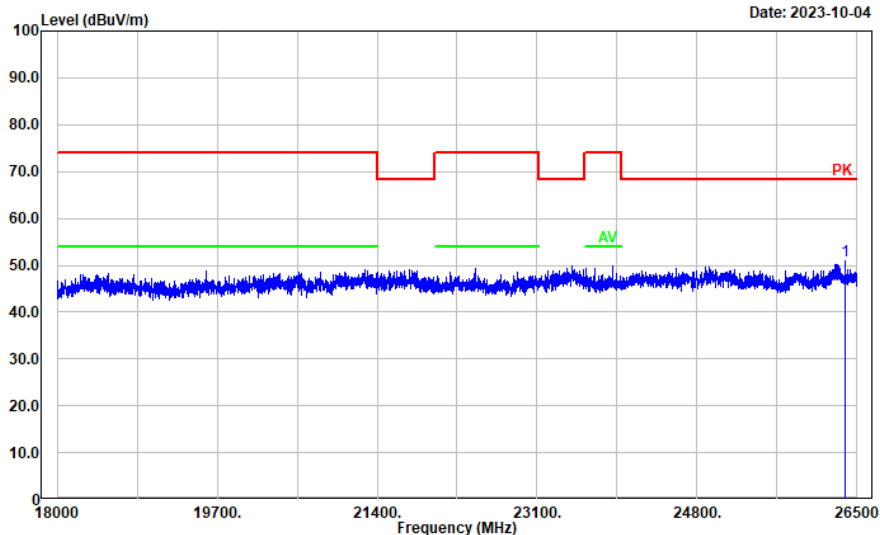
6-18GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11590.000	23.68	14.88	38.56	54.00	15.44	Average
2	11590.000	35.63	14.88	50.51	74.00	23.49	Peak

**Horizontal**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



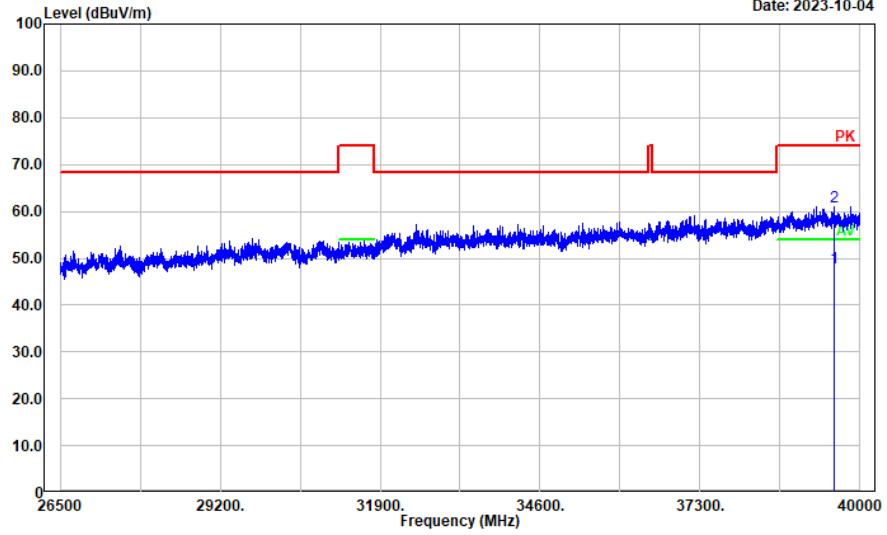
18-26.5GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	26372.470	50.22	0.75	50.97	68.20	17.23	Peak

**Horizontal**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Horizontal  
 Note:

Date: 2023-10-04



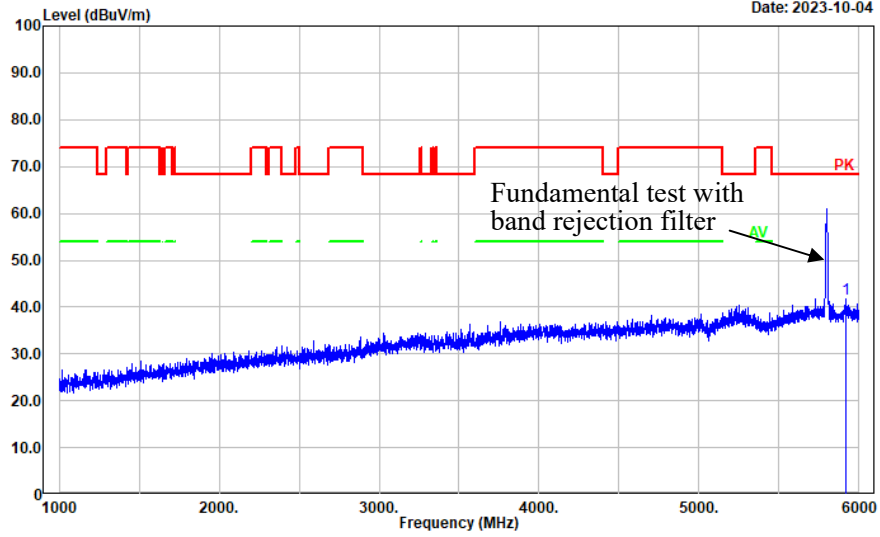
26.5-40GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39554.410	37.92	9.96	47.88	54.00	6.12	Average
2	39554.410	51.13	9.96	61.09	74.00	12.91	Peak

**Vertical**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Vertical  
 Note:

Date: 2023-10-04



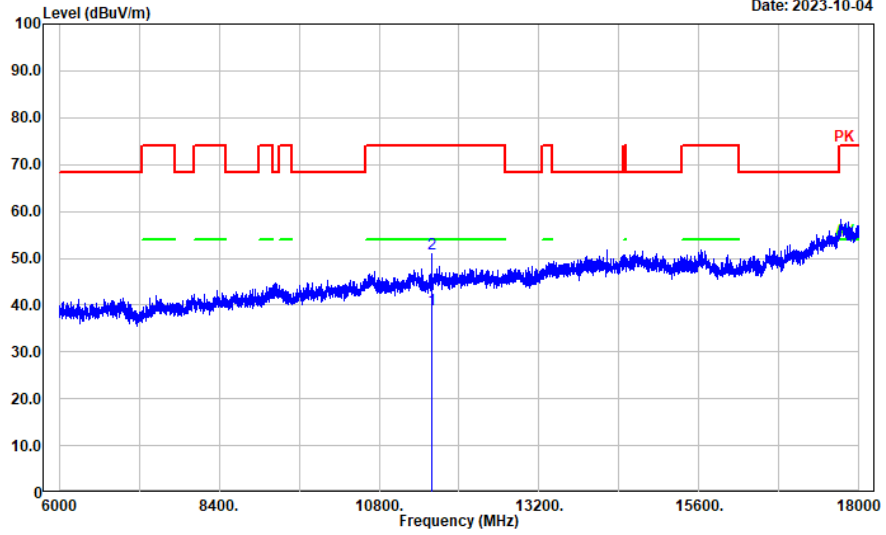
1-6GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5919.984	34.46	7.22	41.68	68.20	26.52	Peak

**Vertical**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: Vertical  
 Note:

Date: 2023-10-04



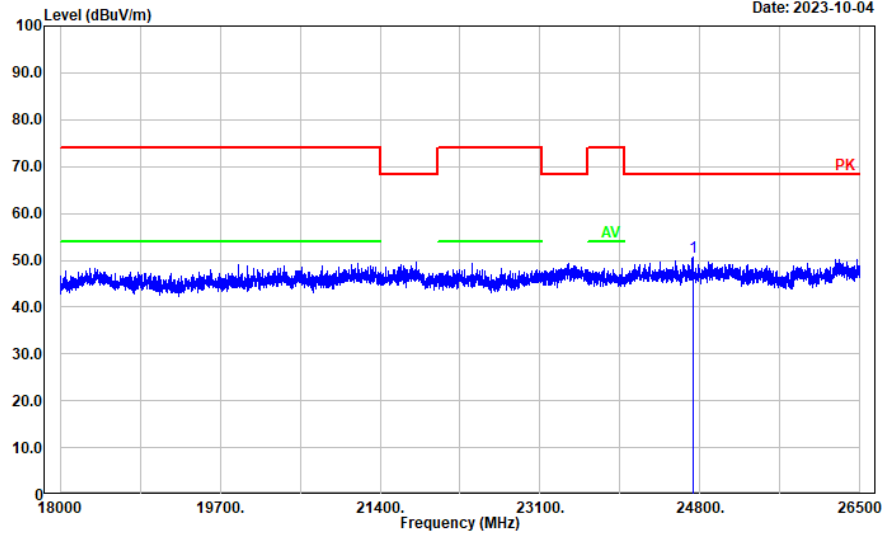
6-18GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11590.000	24.09	14.88	38.97	54.00	15.03	Average
2	11590.000	36.17	14.88	51.05	74.00	22.95	Peak

**Vertical**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: vertical  
 Note:

Date: 2023-10-04

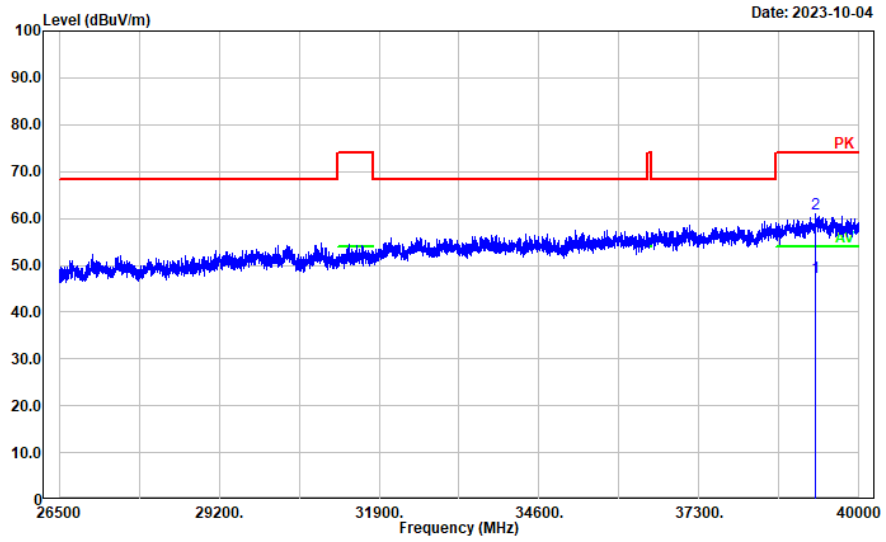


18-26.5GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	24724.850	51.28	-0.59	50.69	68.20	17.51	Peak

**Vertical**

Project No.: CR230951413-RF  
 Tester: Mack Huang  
 Polarization: vertical  
 Note:



26.5-40GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39260.050	37.30	10.20	47.50	54.00	6.50	Average
2	39260.050	50.79	10.20	60.99	74.00	13.01	Peak



**1GHz-40GHz: (i504W&Adapter)****5150-5250MHz:****802.11a Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5180	MHz		
5150.000	31.37	PK	H	32.83	64.20	74.00	9.80
5150.000	16.99	AV	H	32.83	49.82	54.00	4.18
5150.000	32.26	PK	V	32.83	65.09	74.00	8.91
5150.000	17.88	AV	V	32.83	50.71	54.00	3.29
10360.000	35.63	PK	H	14.45	50.08	68.20	18.12
10360.000	35.86	PK	V	14.45	50.31	68.20	17.89
Middle Channel:				5200	MHz		
10400.000	35.85	PK	H	14.52	50.37	68.20	17.83
10400.000	36.07	PK	V	14.52	50.59	68.20	17.61
High Channel:				5240	MHz		
5350.000	31.69	PK	H	32.70	64.39	74.00	9.61
5350.000	17.93	AV	H	32.70	50.63	54.00	3.37
5350.000	31.58	PK	V	32.70	64.28	74.00	9.72
5350.000	16.82	AV	V	32.70	49.52	54.00	4.48
10480.000	36.18	PK	H	14.40	50.58	68.20	17.62
10480.000	36.42	PK	V	14.40	50.82	68.20	17.38

**802.11n ht20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel: 5180 MHz							
5150.000	32.19	PK	H	32.83	65.02	74.00	8.98
5150.000	16.91	AV	H	32.83	49.74	54.00	4.26
5150.000	31.08	PK	V	32.83	63.91	74.00	10.09
5150.000	17.80	AV	V	32.83	50.63	54.00	3.37
10360.000	35.74	PK	H	14.45	50.19	68.20	18.01
10360.000	35.99	PK	V	14.45	50.44	68.20	17.76
Middle Channel: 5200 MHz							
10400.000	36.01	PK	H	14.52	50.53	68.20	17.67
10400.000	36.23	PK	V	14.52	50.75	68.20	17.45
High Channel: 5240 MHz							
5350.000	32.52	PK	H	32.70	65.22	74.00	8.78
5350.000	17.85	AV	H	32.70	50.55	54.00	3.45
5350.000	31.39	PK	V	32.70	64.09	74.00	9.91
5350.000	16.74	AV	V	32.70	49.44	54.00	4.56
10480.000	36.34	PK	H	14.40	50.74	68.20	17.46
10480.000	36.56	PK	V	14.40	50.96	68.20	17.24

**802.11n ht40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5190	MHz		
5150.000	31.97	PK	H	32.83	64.80	74.00	9.20
5150.000	17.51	AV	H	32.83	50.34	54.00	3.66
5150.000	26.86	PK	V	32.83	59.69	74.00	14.31
5150.000	17.40	AV	V	32.83	50.23	54.00	3.77
10380.000	35.61	PK	H	14.49	50.10	68.20	18.10
10380.000	35.88	PK	V	14.49	50.37	68.20	17.83
High Channel:				5230	MHz		
5350.000	31.13	PK	H	32.70	63.83	74.00	10.17
5350.000	17.36	AV	H	32.70	50.06	54.00	3.94
5350.000	32.02	PK	V	32.70	64.72	74.00	9.28
5350.000	17.25	AV	V	32.70	49.95	54.00	4.05
10460.000	36.03	PK	H	14.43	50.46	68.20	17.74
10460.000	36.26	PK	V	14.43	50.69	68.20	17.51

**5725-5850MHz****802.11a Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5745	MHz		
11490.000	44.88	PK	H	15.47	60.35	74.00	13.65
11490.000	31.30	AV	H	15.47	46.77	54.00	7.23
11490.000	43.86	PK	V	15.47	59.33	74.00	14.67
11490.000	31.38	AV	V	15.47	46.85	54.00	7.15
Middle Channel:				5785	MHz		
11570.000	45.29	PK	H	15.69	60.98	74.00	13.02
11570.000	31.78	AV	H	15.69	47.47	54.00	6.53
11570.000	44.05	PK	V	15.69	59.74	74.00	14.26
11570.000	31.62	AV	V	15.69	47.31	54.00	6.69
High Channel:				5825	MHz		
11650.000	44.80	PK	H	16.02	60.82	74.00	13.18
11650.000	31.29	AV	H	16.02	47.31	54.00	6.69
11650.000	43.56	PK	V	16.02	59.58	74.00	14.42
11650.000	31.13	AV	V	16.02	47.15	54.00	6.85

**802.11n ht20 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5745	MHz		
11490.000	44.92	PK	H	15.47	60.39	74.00	13.61
11490.000	32.27	AV	H	15.47	47.74	54.00	6.26
11490.000	44.19	PK	V	15.47	59.66	74.00	14.34
11490.000	31.85	AV	V	15.47	47.32	54.00	6.68
Middle Channel:				5785	MHz		
11570.000	45.21	PK	H	15.69	60.90	74.00	13.10
11570.000	31.55	AV	H	15.69	47.24	54.00	6.76
11570.000	43.95	PK	V	15.69	59.64	74.00	14.36
11570.000	31.44	AV	V	15.69	47.13	54.00	6.87
High Channel:				5825	MHz		
11650.000	44.70	PK	H	16.02	60.72	74.00	13.28
11650.000	31.04	AV	H	16.02	47.06	54.00	6.94
11650.000	43.44	PK	V	16.02	59.46	74.00	14.54
11650.000	30.93	AV	V	16.02	46.95	54.00	7.05

**802.11n ht40 Mode:**

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	Reading (dB $\mu$ V)	Detector					
Low Channel:				5755	MHz		
11510.000	44.95	PK	H	15.46	60.41	74.00	13.59
11510.000	32.15	AV	H	15.46	47.61	54.00	6.39
11510.000	44.30	PK	V	15.46	59.76	74.00	14.24
11510.000	31.87	AV	V	15.46	47.33	54.00	6.67
High Channel:				5795	MHz		
11590.000	47.11	PK	H	15.77	62.88	74.00	11.12
11590.000	34.86	AV	H	15.77	50.63	54.00	3.37
11590.000	46.39	PK	V	15.77	62.16	74.00	11.84
11590.000	33.78	AV	V	15.77	49.55	54.00	4.45

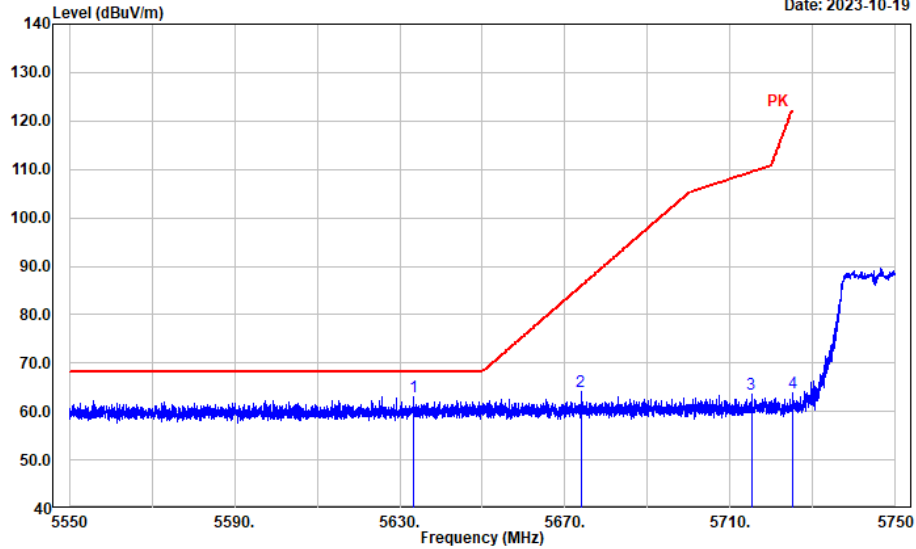
**Test plots for Band Edge Measurements (Radiated)**

**802.11a Low Channel**

**Test Channel: 5745MHz Ant. Polar. : Horizontal**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:

Date: 2023-10-19



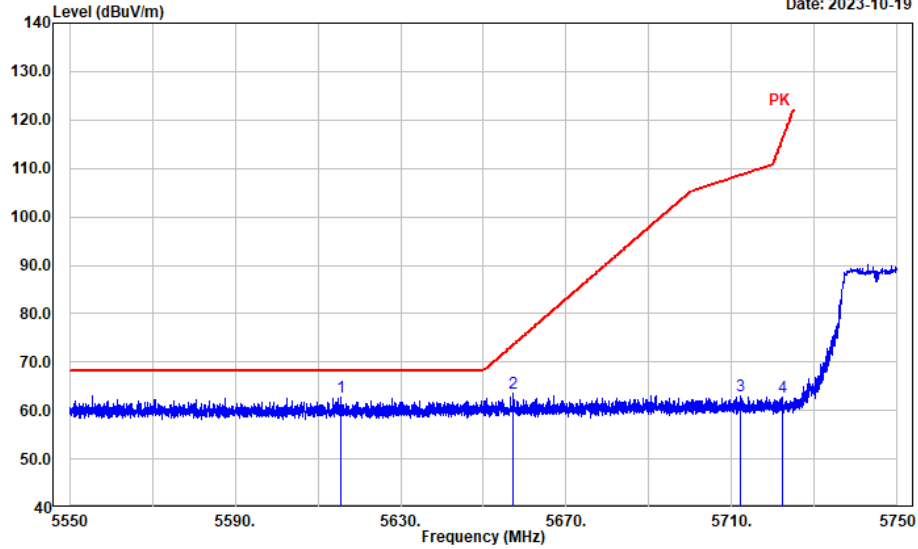
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5633.217	30.24	32.90	63.14	68.20	5.06	Peak
2	5673.825	31.12	32.99	64.11	85.87	21.76	Peak
3	5715.113	30.57	33.03	63.60	109.43	45.83	Peak
4	5725.195	30.87	33.03	63.90	68.20	4.30	Peak

802.11a Low Channel

Test Channel: 5745MHz Ant. Polar. : Vertical

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: vertical  
 Note:

Date: 2023-10-19



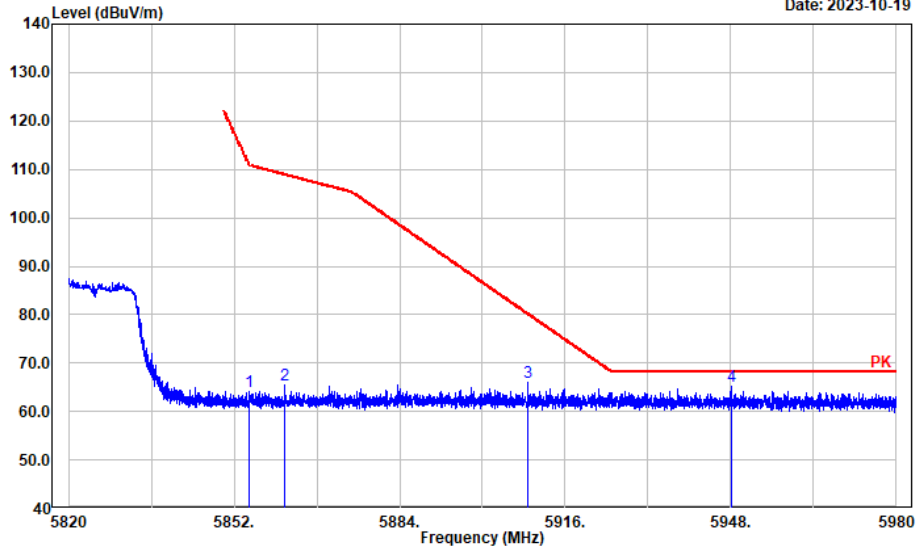
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5615.653	29.84	32.86	62.70	68.20	5.50	Peak
2	5657.142	30.55	32.96	63.51	73.50	9.99	Peak
3	5712.232	30.03	33.03	63.06	108.63	45.57	Peak
4	5722.274	29.65	33.03	62.68	115.99	53.31	Peak

802.11a High Channel

Test Channel: 5825MHz Ant. Polar. : Horizontal

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:

Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5855.015	30.95	33.22	64.17	110.80	46.63	Peak
2	5861.833	32.08	33.26	65.34	108.88	43.54	Peak
3	5908.786	32.65	33.46	66.11	80.16	14.05	Peak
4	5948.218	31.62	33.46	65.08	68.20	3.12	Peak

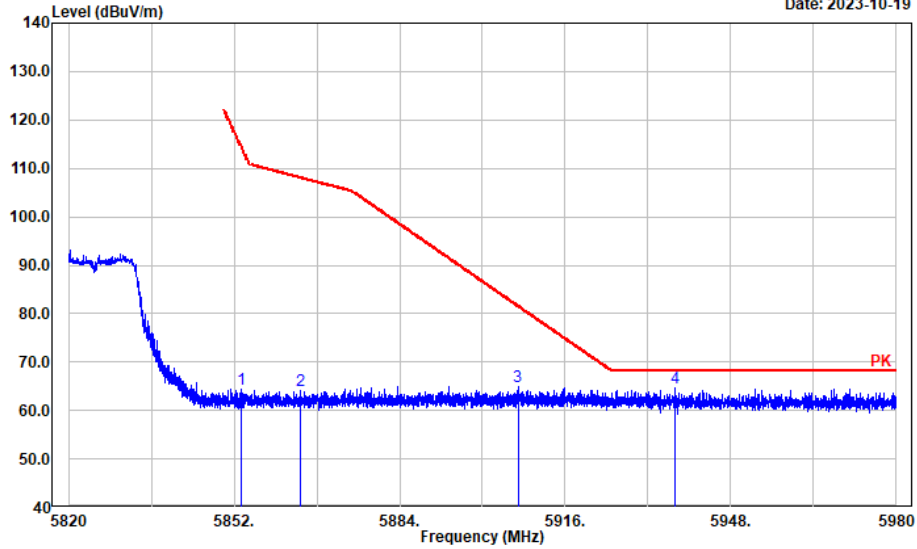


802.11a High Channel

Test Channel: 5825MHz Ant. Polar. : Vertical

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: vertical  
 Note:

Date: 2023-10-19

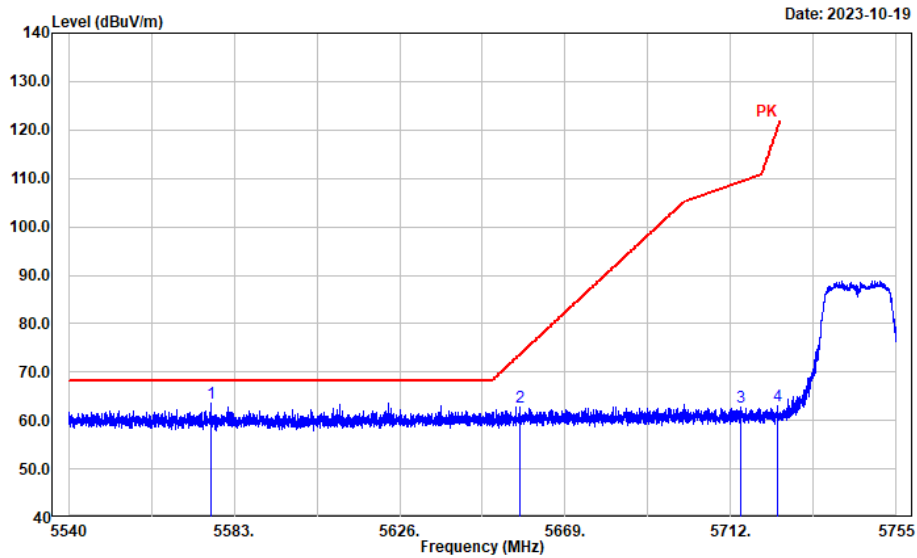


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5853.447	31.16	33.21	64.37	114.34	49.97	Peak
2	5864.841	30.84	33.27	64.11	108.04	43.93	Peak
3	5906.865	31.54	33.47	65.01	81.58	16.57	Peak
4	5937.271	31.29	33.46	64.75	68.20	3.45	Peak

802.11n 20 Low Channel

Test Channel: 5745MHz Ant. Polar. : Horizontal

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:



Date: 2023-10-19

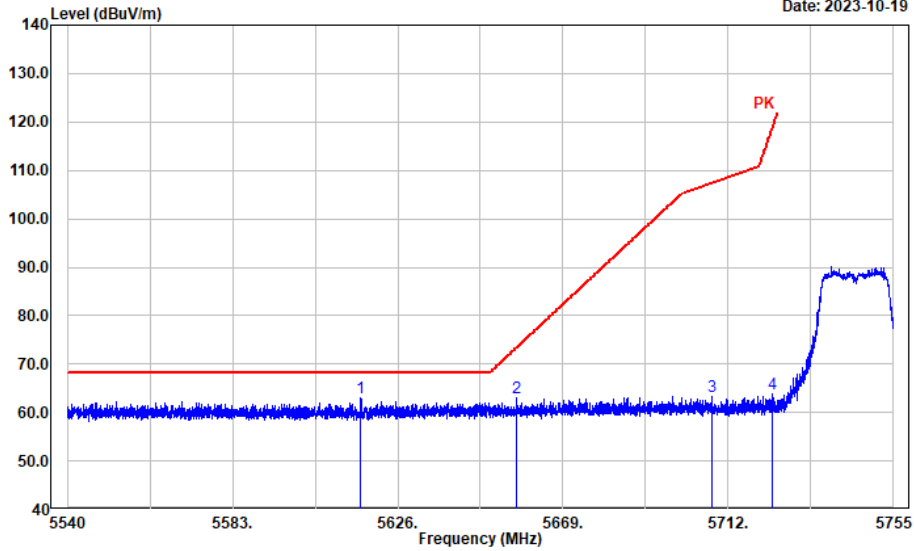
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5576.858	30.91	32.80	63.71	68.20	4.49	Peak
2	5657.155	29.94	32.96	62.90	73.51	10.61	Peak
3	5714.744	29.82	33.03	62.85	109.33	46.48	Peak
4	5724.034	29.92	33.03	62.95	120.00	57.05	Peak

802.11n 20 Low Channel

Test Channel: 5745MHz Ant. Polar. : Vertical

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: vertical  
 Note:

Date: 2023-10-19



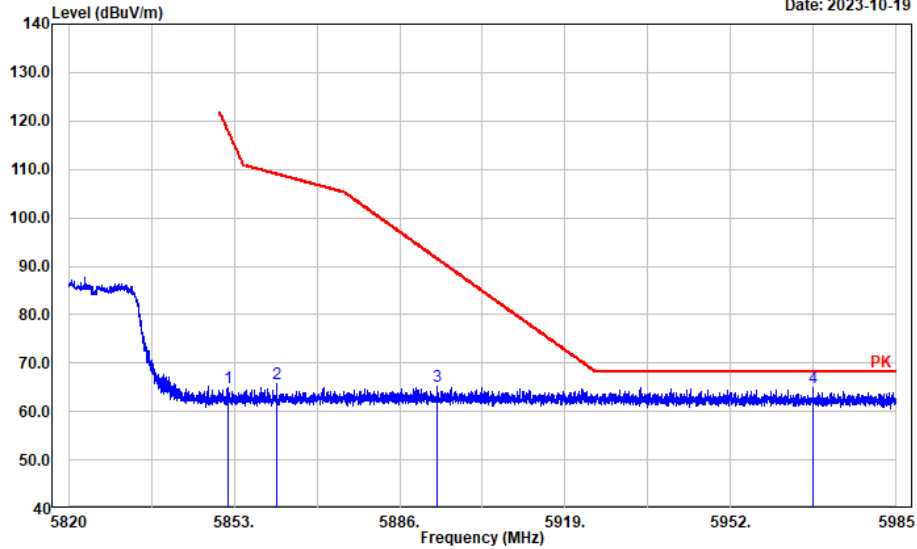
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5616.254	30.17	32.86	63.03	68.20	5.17	Peak
2	5656.983	30.09	32.96	63.05	73.39	10.34	Peak
3	5707.690	30.32	33.03	63.35	107.36	44.01	Peak
4	5723.389	30.74	33.03	63.77	118.53	54.76	Peak

802.11n 20 High Channel

Test Channel: 5825MHz Ant. Polar. : Horizontal

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:

Date: 2023-10-19



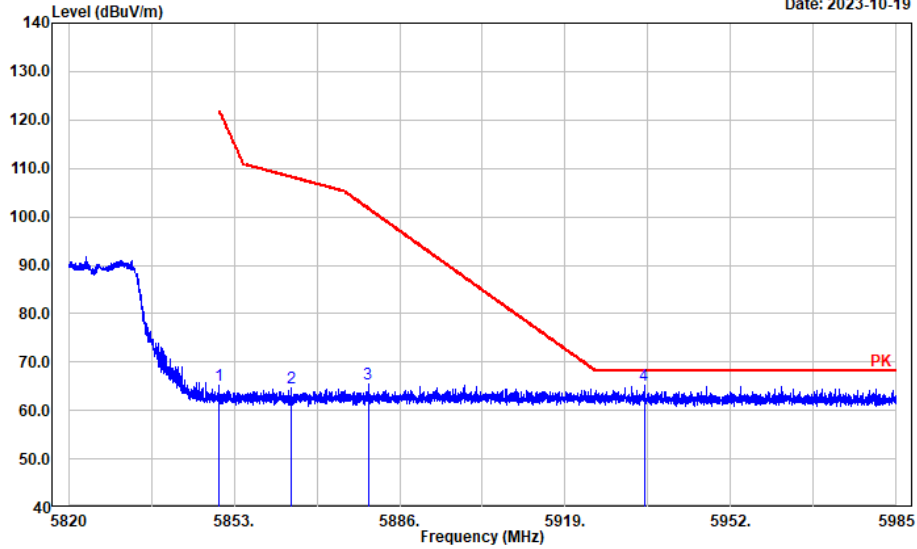
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5851.917	31.63	33.20	64.83	117.83	53.00	Peak
2	5861.555	32.43	33.26	65.69	108.96	43.27	Peak
3	5893.473	31.68	33.43	65.11	91.49	26.38	Peak
4	5968.464	31.46	33.53	64.99	68.20	3.21	Peak

802.11n 20 High Channel

Test Channel: 5825MHz Ant. Polar. : Vertical

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: vertical  
 Note:

Date: 2023-10-19



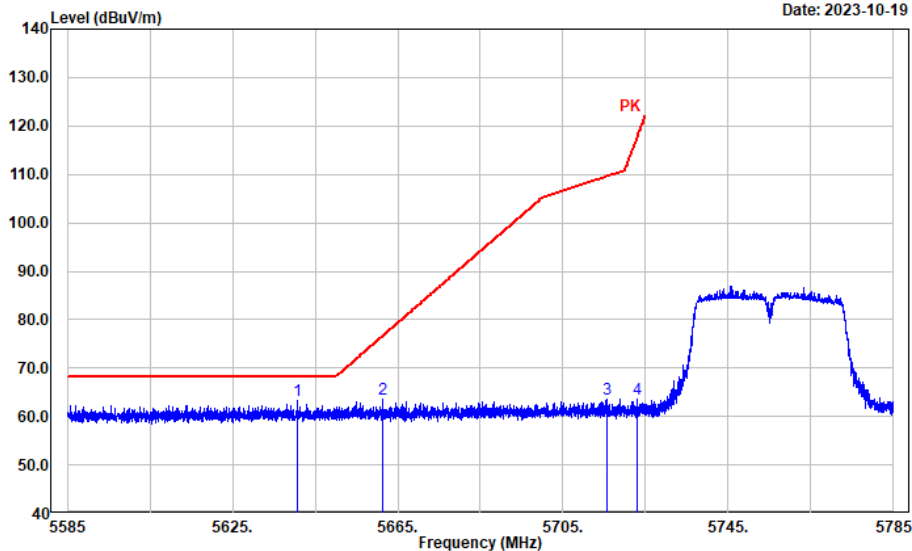
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5849.970	32.04	33.19	65.23	68.20	2.97	Peak
2	5864.460	31.40	33.27	64.67	108.15	43.48	Peak
3	5879.709	32.15	33.36	65.51	101.70	36.19	Peak
4	5934.731	31.76	33.47	65.23	68.20	2.97	Peak

802.11n ht40 Low Channel

Test Channel: 5755MHz Ant. Polar. : Horizontal

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:

Date: 2023-10-19



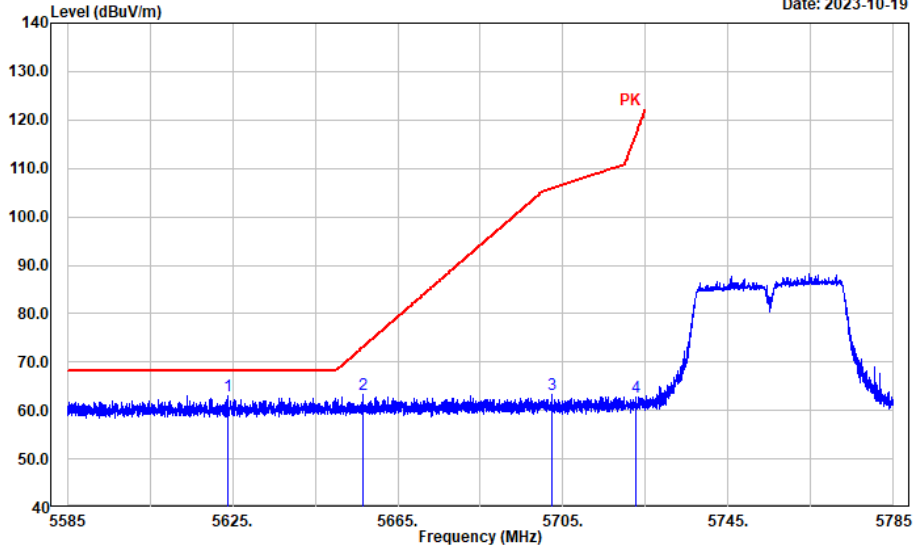
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5640.691	30.44	32.93	63.37	68.20	4.83	Peak
2	5661.295	30.51	32.97	63.48	76.59	13.11	Peak
3	5715.666	30.46	33.03	63.49	109.59	46.10	Peak
4	5723.067	30.52	33.03	63.55	117.79	54.24	Peak

802.11n ht40 Low Channel

Test Channel: 5755MHz Ant. Polar.: Vertical

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: vertical  
 Note:

Date: 2023-10-19



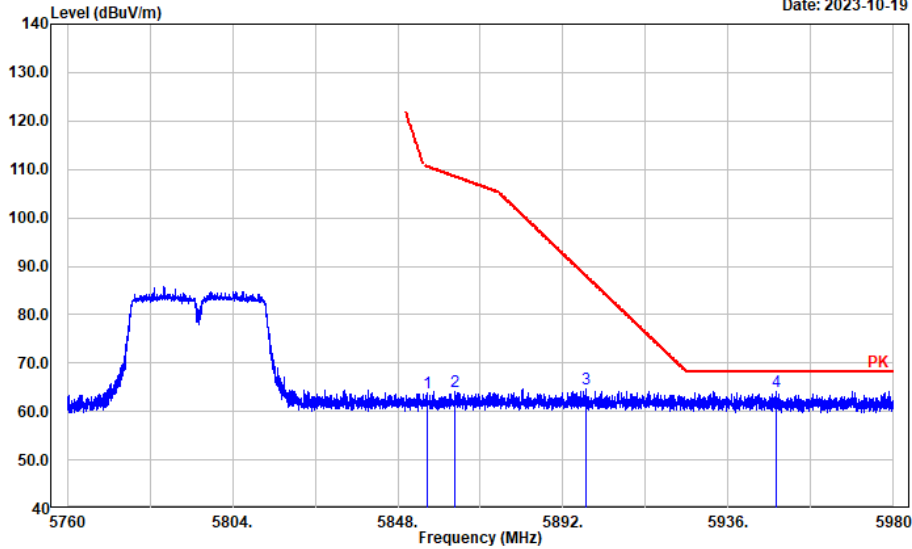
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5623.928	30.28	32.88	63.16	68.20	5.04	Peak
2	5656.614	30.32	32.96	63.28	73.11	9.83	Peak
3	5702.224	30.20	33.03	63.23	105.82	42.59	Peak
4	5722.748	29.65	33.03	62.68	117.07	54.39	Peak

**802.11n ht40 High Channel**

**Test Channel: 5795MHz Ant. Polar. : Horizontal**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:

Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5855.851	30.58	33.22	63.80	110.56	46.76	Peak
2	5863.069	30.73	33.26	63.99	108.54	44.55	Peak
3	5898.100	31.12	33.46	64.58	88.07	23.49	Peak
4	5948.930	30.79	33.46	64.25	68.20	3.95	Peak

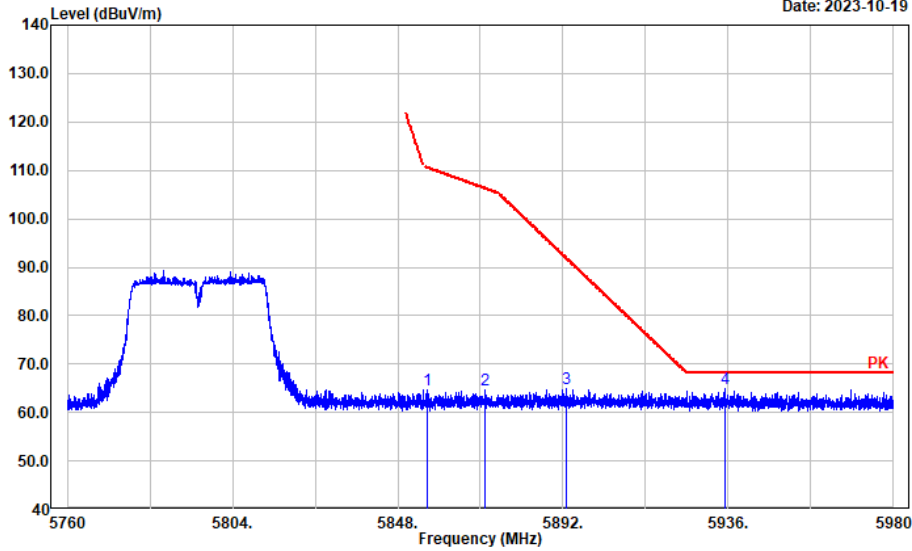


**802.11n ht40 High Channel**

**Test Channel: 5795MHz Ant. Polar. : Vertical**

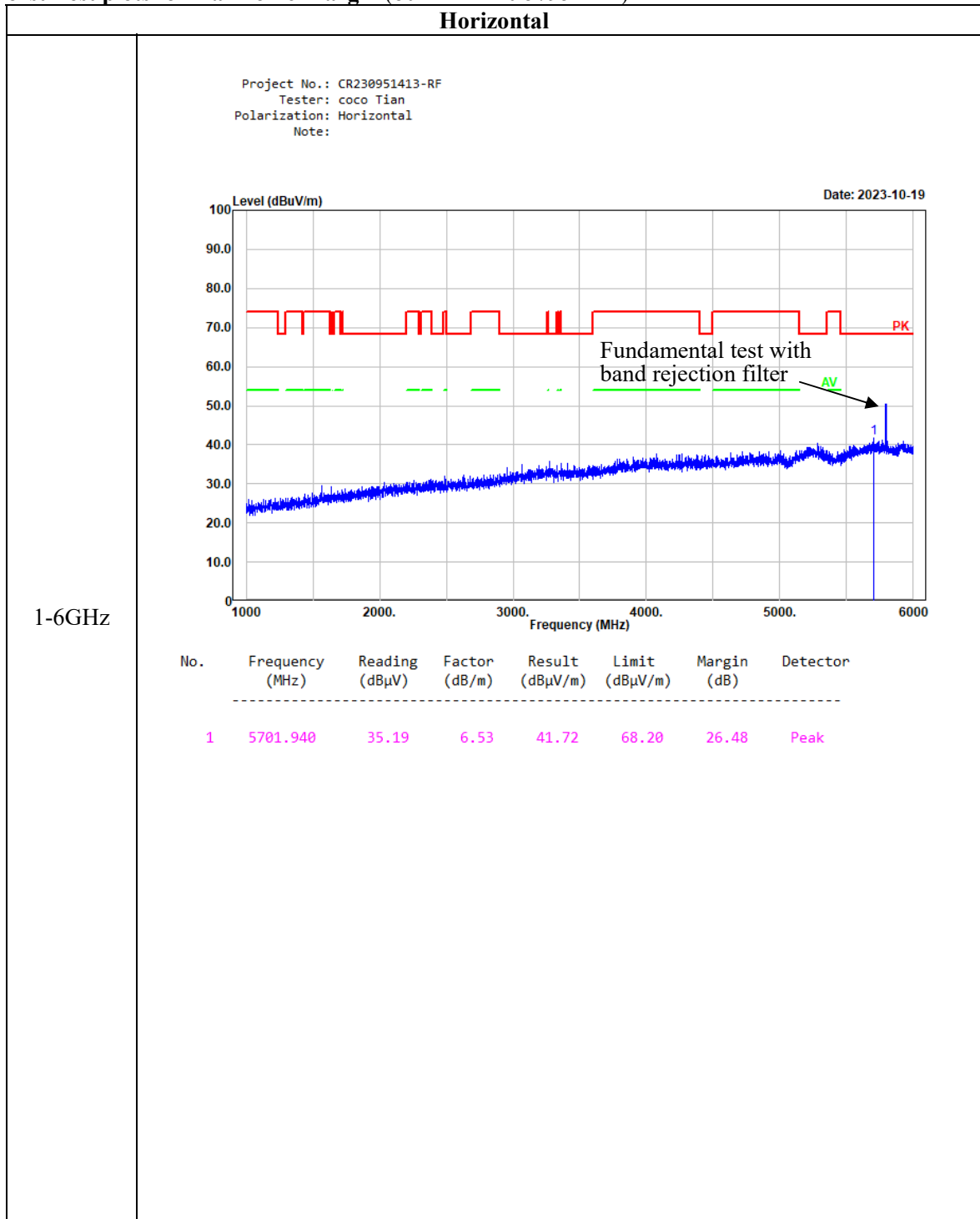
Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: vertical  
 Note:

Date: 2023-10-19



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5855.983	31.35	33.22	64.57	110.52	45.95	Peak
2	5871.254	31.29	33.31	64.60	106.25	41.65	Peak
3	5892.907	31.39	33.43	64.82	91.91	27.09	Peak
4	5935.023	31.53	33.47	65.00	68.20	3.20	Peak

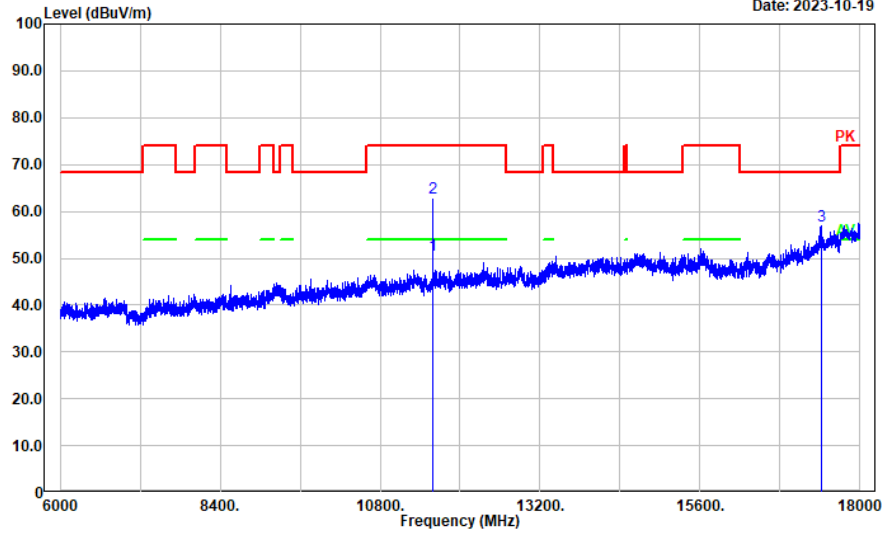
**Worst Test plots for Harmonic Margin (802.11n ht40 5795MHz)**



**Horizontal**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:

Date: 2023-10-19



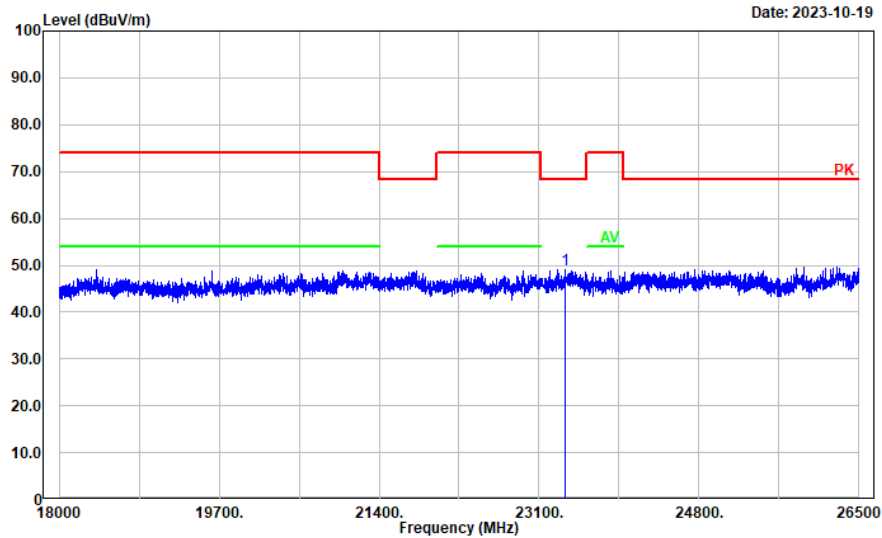
6-18GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11590.000	34.86	15.77	50.63	54.00	3.37	Average
2	11590.000	47.11	15.77	62.88	74.00	11.12	Peak
3	17423.880	33.28	23.75	57.03	68.20	11.17	Peak

**Horizontal**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:

Date: 2023-10-19



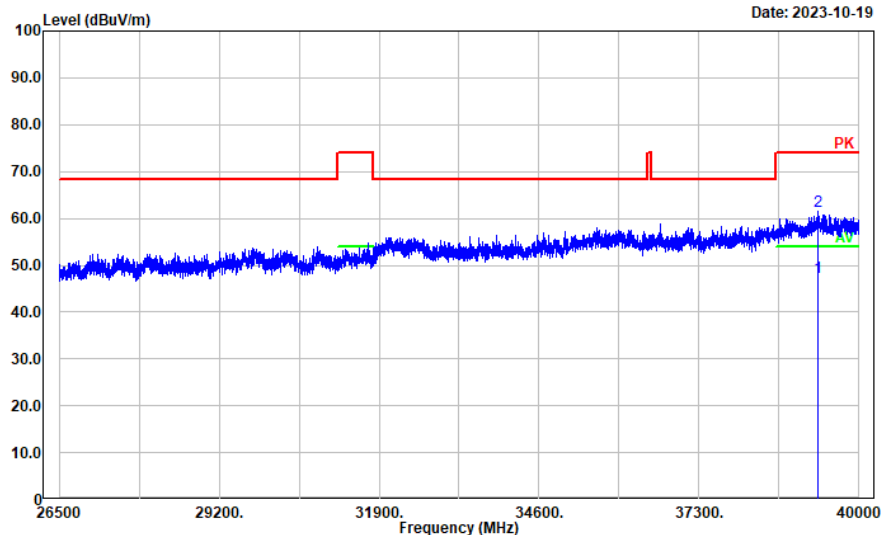
18-26.5GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	23376.470	49.64	-0.60	49.04	68.20	19.16	Peak

**Horizontal**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Horizontal  
 Note:

Date: 2023-10-19



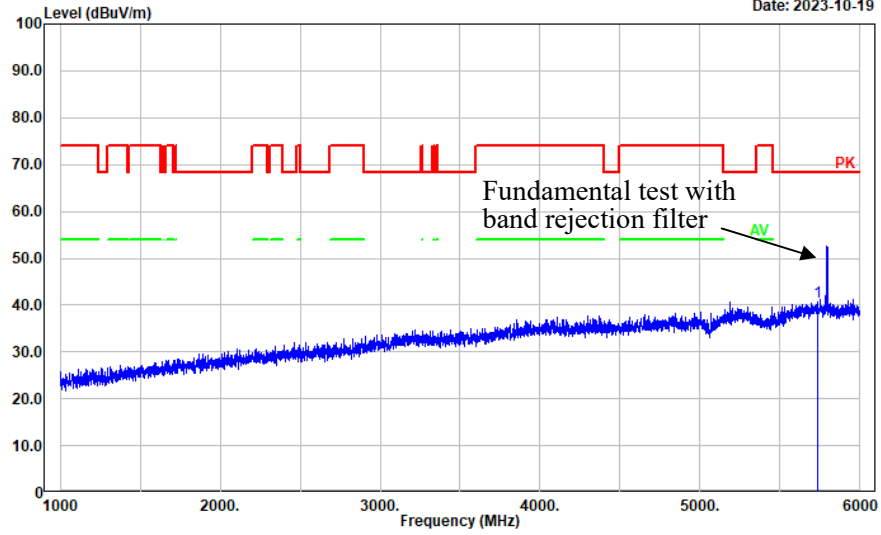
26.5-40GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39314.060	37.34	10.20	47.54	54.00	6.46	Average
2	39314.060	51.26	10.20	61.46	74.00	12.54	Peak

**Vertical**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Vertical  
 Note:

Date: 2023-10-19



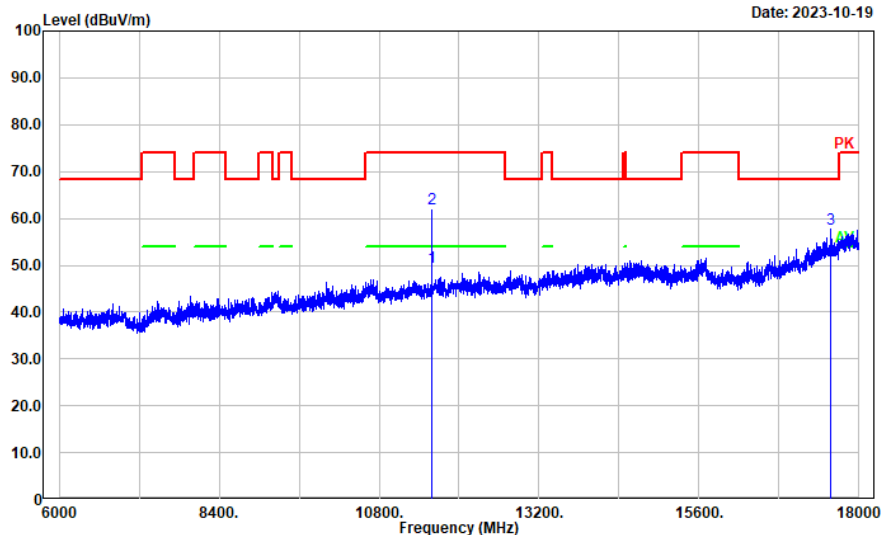
1-6GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	5731.946	34.20	6.56	40.76	68.20	27.44	Peak

**Vertical**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: Vertical  
 Note:

Date: 2023-10-19



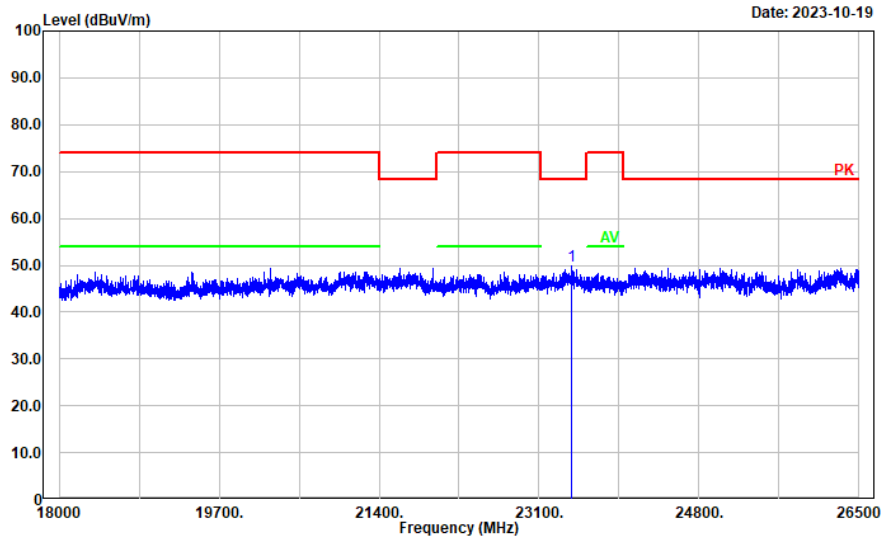
6-18GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11590.000	33.78	15.77	49.55	54.00	4.45	Average
2	11590.000	46.39	15.77	62.16	74.00	11.84	Peak
3	17582.320	33.17	24.47	57.64	68.20	10.56	Peak

**Vertical**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: vertical  
 Note:

Date: 2023-10-19



18-26.5GHz

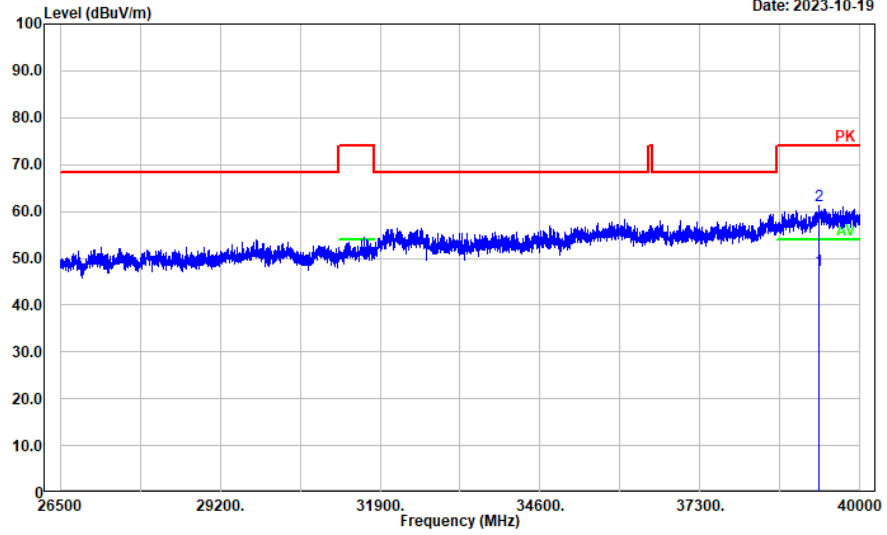
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	23442.790	50.42	-0.60	49.82	68.20	18.38	Peak



**Vertical**

Project No.: CR230951413-RF  
 Tester: coco Tian  
 Polarization: vertical  
 Note:

Date: 2023-10-19



26.5-40GHz

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	39308.660	37.15	10.20	47.35	54.00	6.65	Average
2	39308.660	51.04	10.20	61.24	74.00	12.76	Peak

**4.3 Emission Bandwidth:**

Serial Number:	2ATU-2	Test Date:	2023/9/21
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	24.5	Relative Humidity: (%)	54	ATM Pressure: (kPa)	101
----------------------	------	------------------------------	----	------------------------	-----

**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40-N	102259	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Data:**

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	26 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5180	20.44	16.424
	5200	20.08	16.344
	5240	20.48	16.464
802.11n ht20	5180	21.20	17.463
	5200	20.76	17.423
	5240	21.00	17.463
802.11n ht40	5190	38.56	35.325
	5230	38.64	35.325

Note: the 99% Occupied Bandwidth have not fall into the band 5250-5350MHz, please refer to the test plots of 99% Occupied Bandwidth

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
802.11a	5745	15.16	16.384
	5785	15.16	16.503
	5825	15.16	16.384
802.11n ht20	5745	15.16	17.423
	5785	15.16	17.463
	5825	15.16	17.502
802.11n ht40	5755	32.72	35.245
	5795	31.52	35.325
Note:6dB Emission Bandwidth Limit: $\geq 0.5$ MHz the 99% Occupied Bandwidth have not fall into the band 5470-5725MHz, please refer to the test plots of 99% Occupied Bandwidth.			

5150-5250MHz:

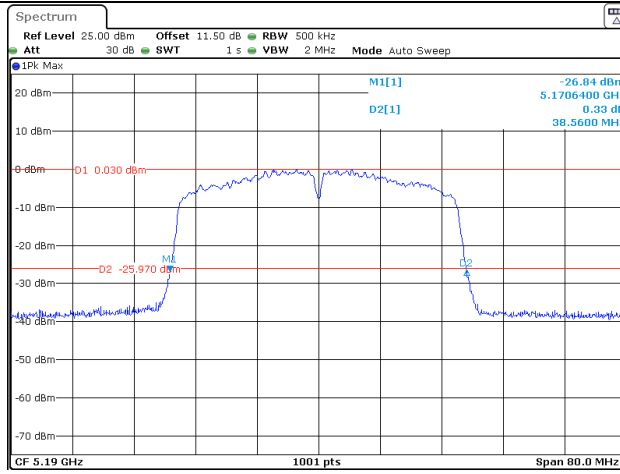
<b>26dB Emission Bandwidth</b>	
802.11a Lowest Channel	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:20:41</p>
802.11a Middle Channel	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:22:55</p>
802.11a Highest Channel	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:27:29</p>

### 26dB Emission Bandwidth

<p>802.11n ht20 Lowest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:45:53</p>
<p>802.11n ht20 Middle Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:48:18</p>
<p>802.11n ht20 Highest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:51:20</p>

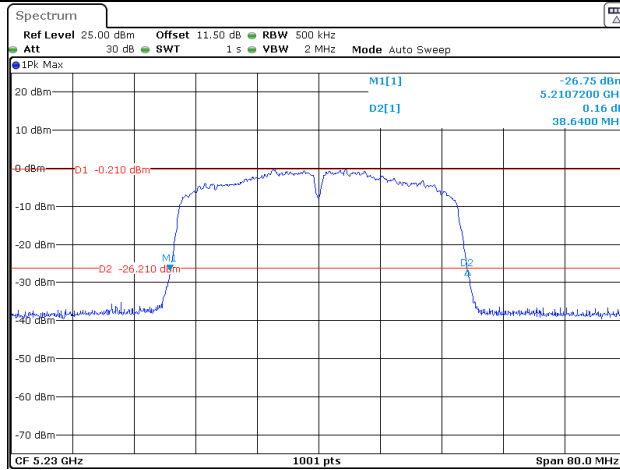
### 26dB Emission Bandwidth

802.11n ht40  
Lowest Channel



ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 14:19:56

802.11n ht40  
Highest Channel



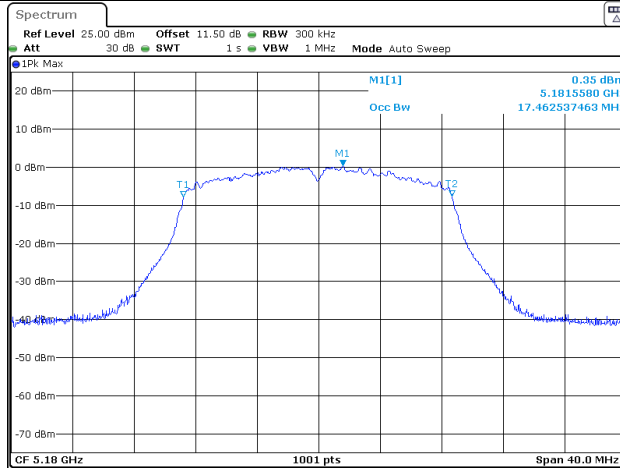
ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 14:23:13

**99% Emission Bandwidth**

<p>802.11a Lowest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:20:18</p>
<p>802.11a Middle Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:22:32</p>
<p>802.11a Highest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:27:06</p>

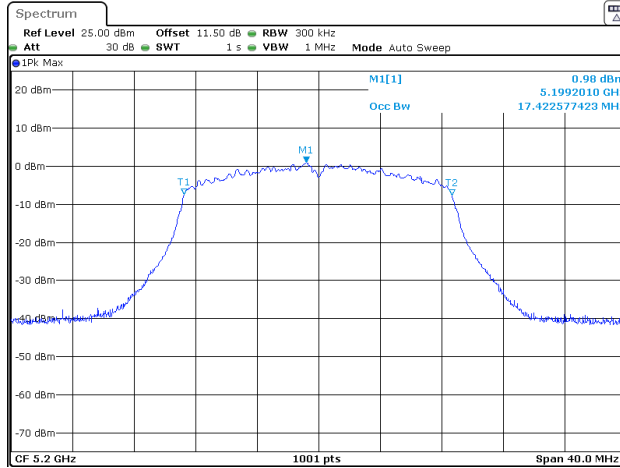
### 99% Emission Bandwidth

802.11n ht20  
Lowest Channel



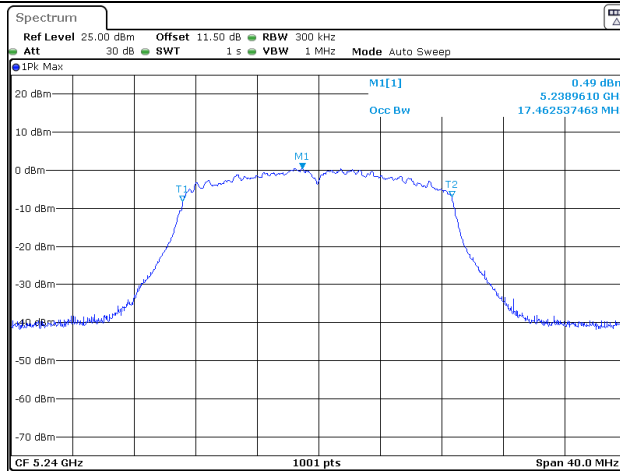
ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 13:45:26

802.11n ht20  
Middle Channel



ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 13:47:53

802.11n ht20  
Highest Channel

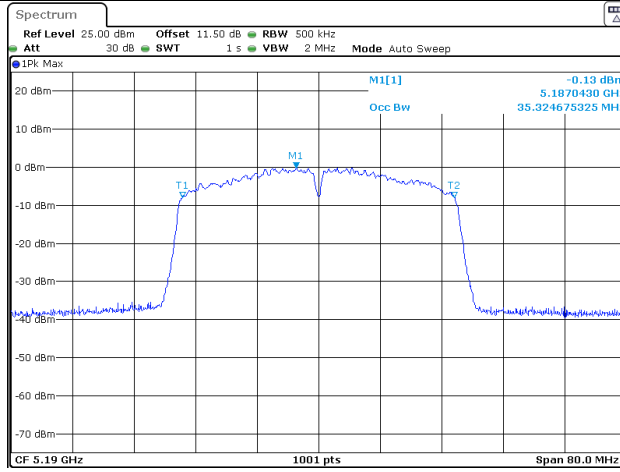


ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 13:50:54



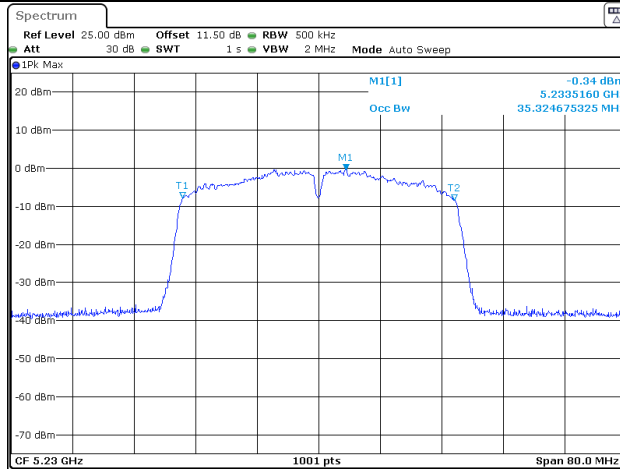
**99% Emission Bandwidth**

802.11n ht40  
Lowest Channel



ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 14:19:31

802.11n ht40  
Highest Channel



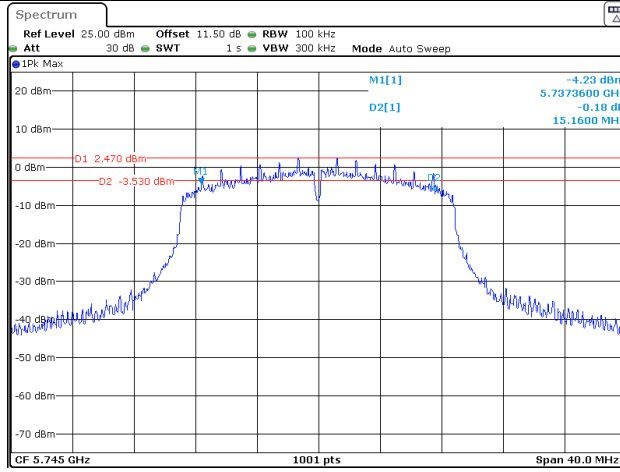
ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 14:22:48

5725-5850MHz:

<b>6dB Emission Bandwidth</b>	
802.11a Lowest Channel	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:32:36</p>
802.11a Middle Channel	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:35:12</p>
802.11a Highest Channel	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:38:21</p>

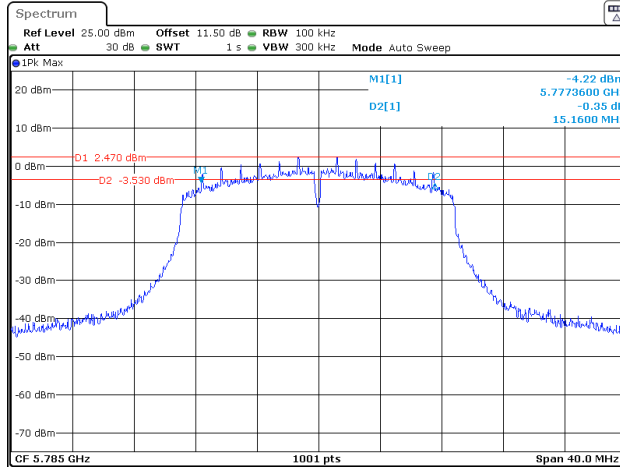
### 6dB Emission Bandwidth

802.11n ht20  
Lowest Channel



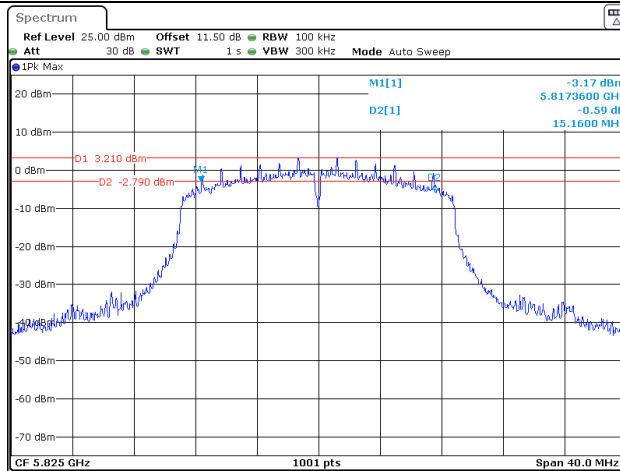
ProjectNo.:CR230951413 Tester:Len Huang  
 Date: 21.SEP.2023 13:58:50

802.11n ht20  
Middle Channel

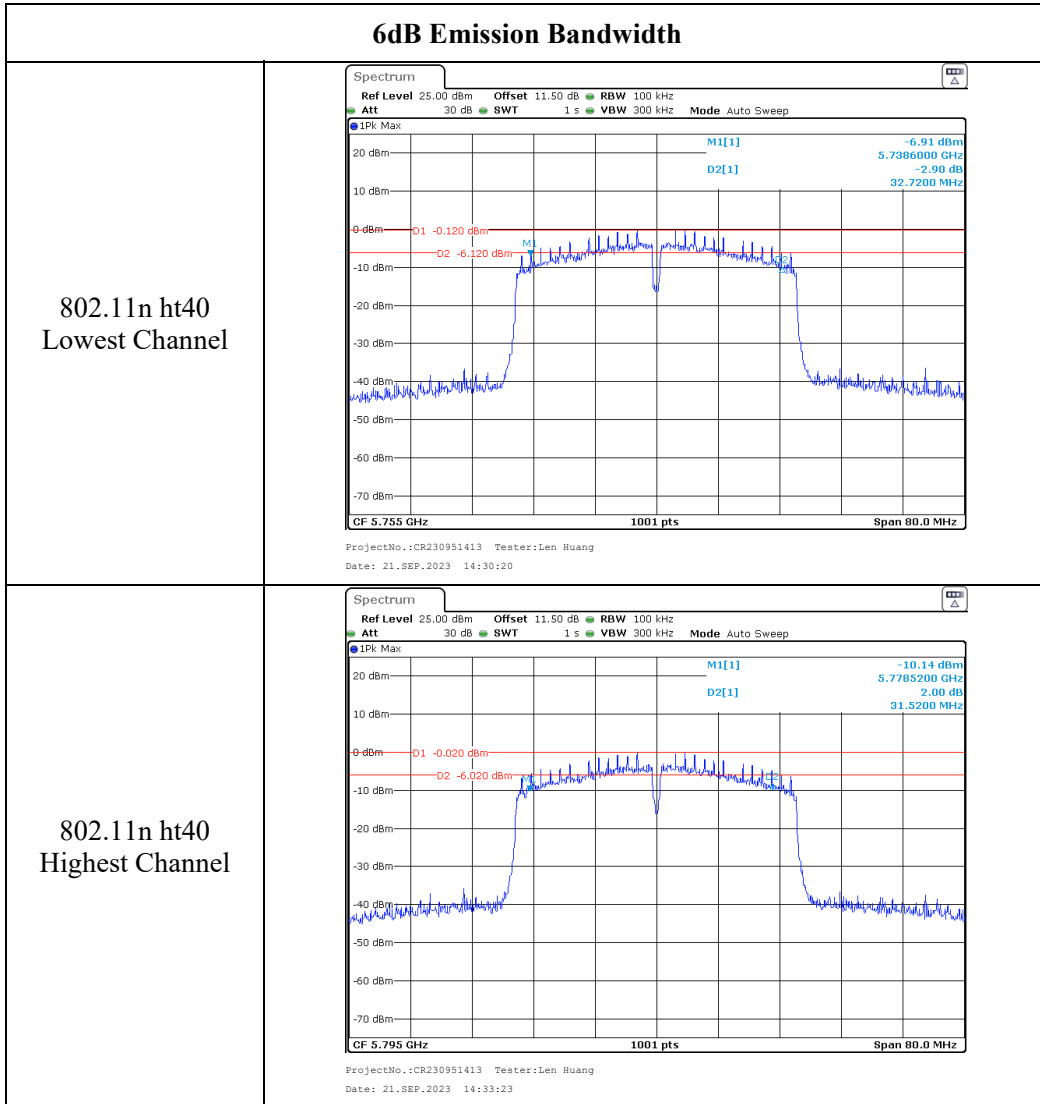


ProjectNo.:CR230951413 Tester:Len Huang  
 Date: 21.SEP.2023 14:03:55

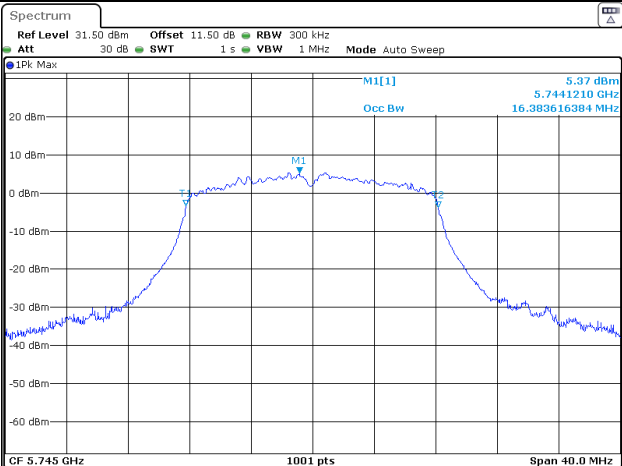
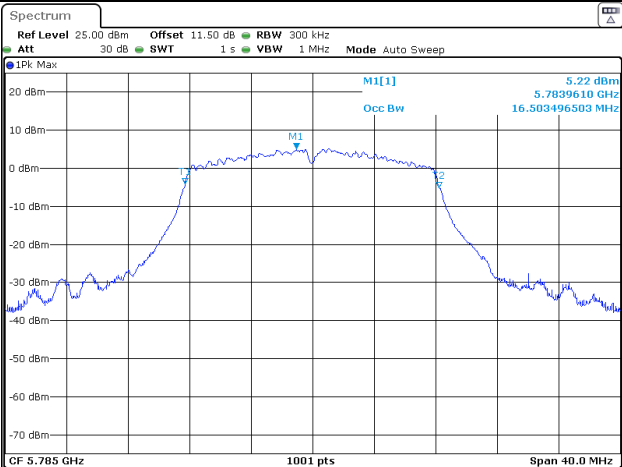
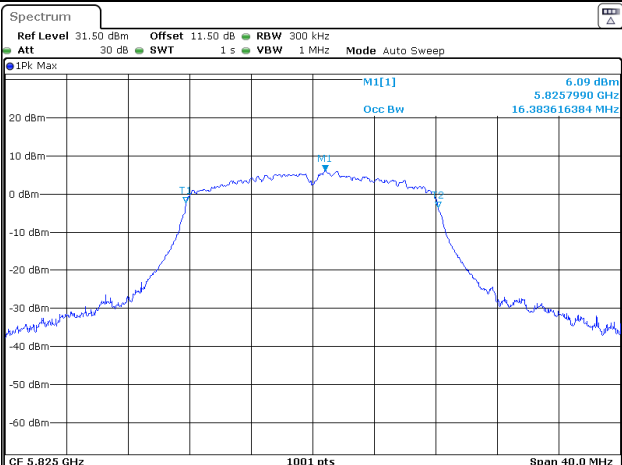
802.11n ht20  
Highest Channel



ProjectNo.:CR230951413 Tester:Len Huang  
 Date: 21.SEP.2023 14:10:05



**99% Emission Bandwidth**

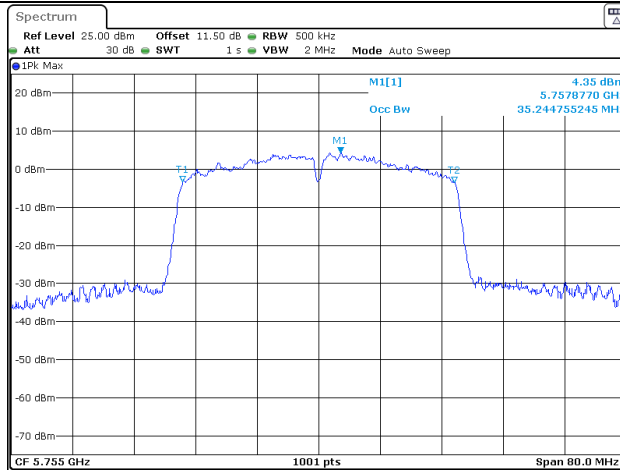
<p>802.11a Lowest Channel</p>	 <p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:32:13</p>
<p>802.11a Middle Channel</p>	 <p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:34:49</p>
<p>802.11a Highest Channel</p>	 <p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:37:45</p>

**99% Emission Bandwidth**

<p>802.11n ht20 Lowest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:58:12</p>
<p>802.11n ht20 Middle Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 14:03:29</p>
<p>802.11n ht20 Highest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 14:09:27</p>

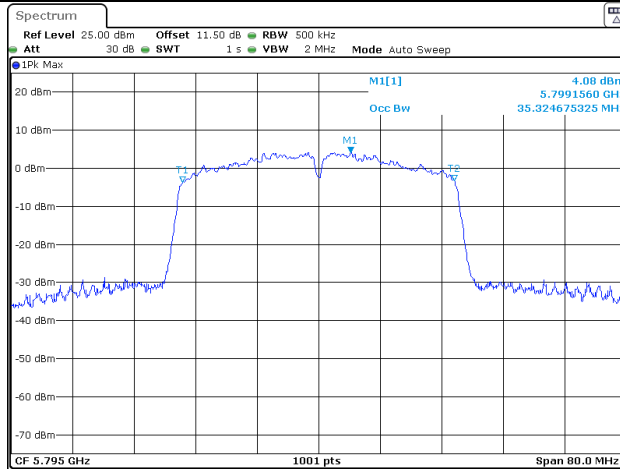
### 99% Emission Bandwidth

802.11n ht40  
Lowest Channel



ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 14:29:54

802.11n ht40  
Highest Channel



ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 14:32:45

**4.4 Maximum Conducted Output Power:**

Serial Number:	2ATU-2	Test Date:	2023/9/21
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	24.5	Relative Humidity: (%)	54	ATM Pressure: (kPa)	101
----------------------	------	------------------------------	----	------------------------	-----

**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Anritsu	Power Meter	ML2495A	1106009	2023/8/4	2024/8/3
Anritsu	Pulse Power Sensor	MA2411A	10780	2023/8/4	2024/8/3
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Data:**

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5180	8.58	24
	5200	8.62	24
	5240	8.66	24
802.11n ht20	5180	8.68	24
	5200	8.33	24
	5240	8.10	24
802.11n ht40	5190	8.39	24
	5230	8.25	24

Note: The device is a client device.



5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Max. Conducted Average Output Power(dBm)	
		Result	Limit
802.11a	5745	12.91	30
	5785	12.98	30
	5825	13.67	30
802.11n ht20	5745	12.66	30
	5785	12.64	30
	5825	13.35	30
802.11n ht40	5755	12.27	30
	5795	12.33	30

**4.5 Maximum power spectral density:**

Serial Number:	2ATU-2	Test Date:	2023/9/21
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	24.5	Relative Humidity: (%)	54	ATM Pressure: (kPa)	101
----------------------	------	---------------------------	----	------------------------	-----

**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40-N	102259	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Data:**

5150-5250 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/MHz)	Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/MHz)	Limit (dBm/MHz)
802.11a	5180	-1.54	0.31	-1.23	11
	5200	-2.36	0.31	-2.05	11
	5240	-1.22	0.31	-0.91	11
802.11n ht20	5180	-2.29	0.35	-1.94	11
	5200	-2.07	0.35	-1.72	11
	5240	-2.66	0.35	-2.31	11
802.11n ht40	5190	-4.62	0.61	-4.01	11
	5230	-5.24	0.61	-4.63	11

Note:

The device is a client device.

Duty cycle <98%, and duty cycle variations are less than  $\pm 2\%$ , method ANSI C63.10-2013 Section 12.3.2.4 was used.

5725-5850 MHz:

Test Modes	Test Frequency (MHz)	Reading (dBm/500kHz)	Duty Cycle Factor (dB)	Maximum Power Spectral Density (dBm/500kHz)	Limit (dBm/500kHz)
802.11a	5745	-0.47	0.31	-0.16	30
	5785	-0.41	0.31	-0.10	30
	5825	0.89	0.31	1.20	30
802.11n ht20	5745	-0.67	0.35	-0.32	30
	5785	-0.68	0.35	-0.33	30
	5825	0.26	0.35	0.61	30
802.11n ht40	5755	-3.46	0.61	-2.85	30
	5795	-3.40	0.61	-2.79	30

Note:

Duty cycle <98%, and duty cycle variations are less than  $\pm 2\%$ , method ANSI C63.10-2013 Section 12.3.2.4 was used.

5150-5250MHz:

Maximum power spectral density

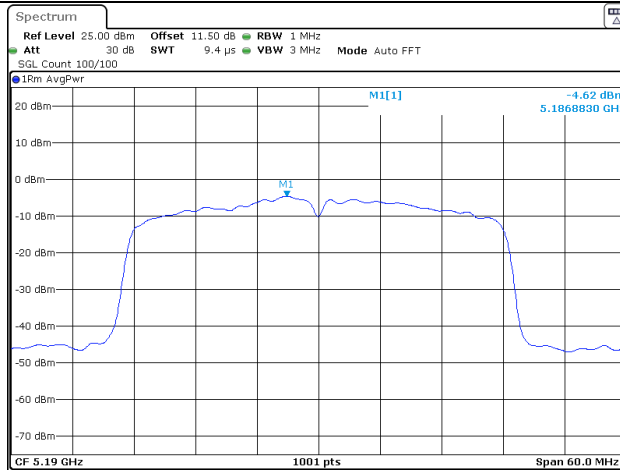
<p>802.11a Lowest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:20:58</p>
<p>802.11a Middle Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:23:12</p>
<p>802.11a Highest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:27:45</p>

### Maximum power spectral density

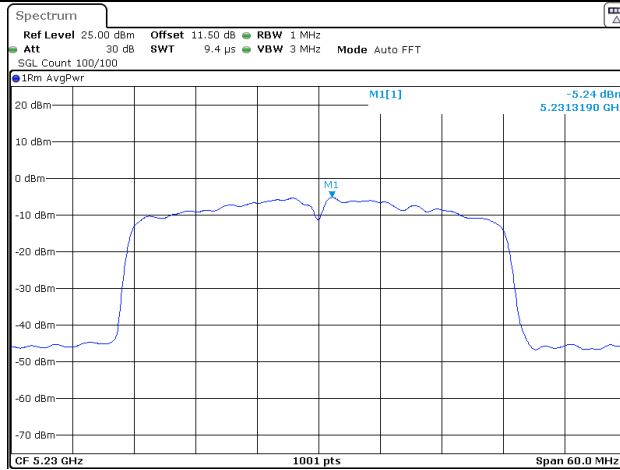
<p>802.11n ht20 Lowest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:46:11</p>
<p>802.11n ht20 Middle Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:48:38</p>
<p>802.11n ht20 Highest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:51:39</p>

### Maximum power spectral density

802.11n ht40  
Lowest Channel



802.11n ht40  
Highest Channel



5725-5850MHz

Maximum power spectral density

<p>802.11a Lowest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:32:52</p>
<p>802.11a Middle Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:35:28</p>
<p>802.11a Highest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:38:37</p>

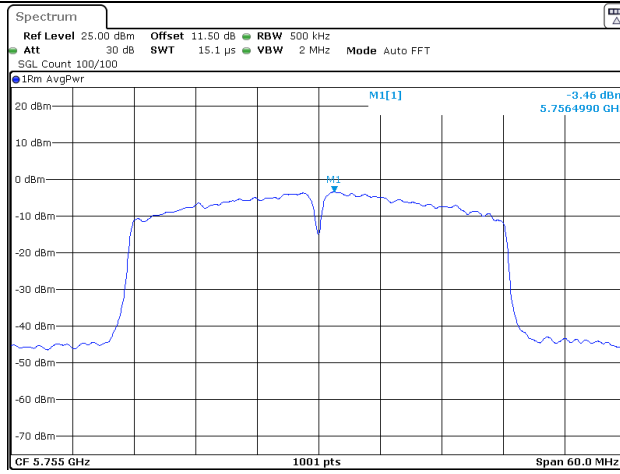
### Maximum power spectral density

<p>802.11n ht20 Lowest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 13:59:09</p>
<p>802.11n ht20 Middle Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 14:04:15</p>
<p>802.11n ht20 Highest Channel</p>	<p>ProjectNo.:CR230951413 Tester:Len Huang Date: 21.SEP.2023 14:10:24</p>

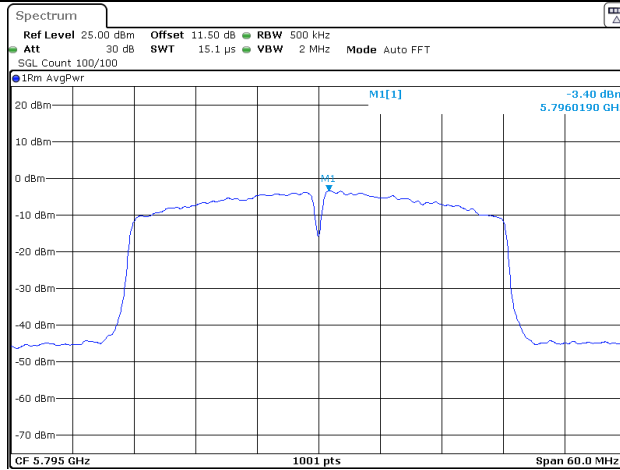


### Maximum power spectral density

802.11n ht40  
Lowest Channel



802.11n ht40  
Highest Channel



**4.6 Duty Cycle:**

Serial Number:	2ATU-2	Test Date:	2023/9/21
Test Site:	RF	Test Mode:	Transmitting
Tester:	Len Huang	Test Result:	N/A

**Environmental Conditions:**

Temperature: (°C)	24.5	Relative Humidity: (%)	54	ATM Pressure: (kPa)	101
----------------------	------	------------------------------	----	------------------------	-----

**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40-N	102259	2023/4/18	2024/4/17
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

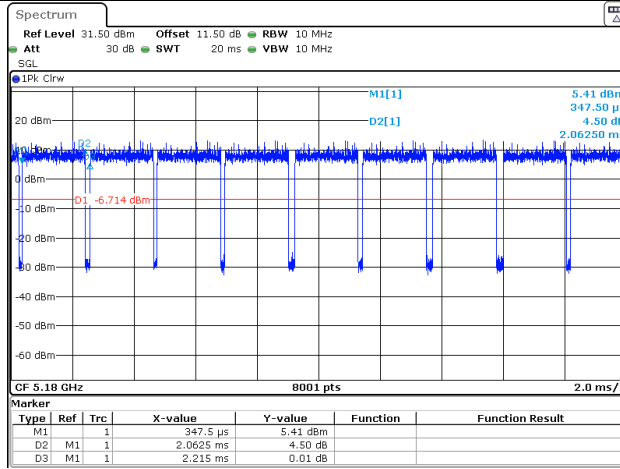
\* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

**Test Data:**

Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	Duty Cycle Factor (dB)	VBW Setting (kHz)
802.11a	2.063	2.215	93.12	485	0.31	0.5
802.11n ht20	1.916	2.079	92.18	522	0.35	1
802.11n ht40	0.943	1.085	86.91	1060	0.61	2

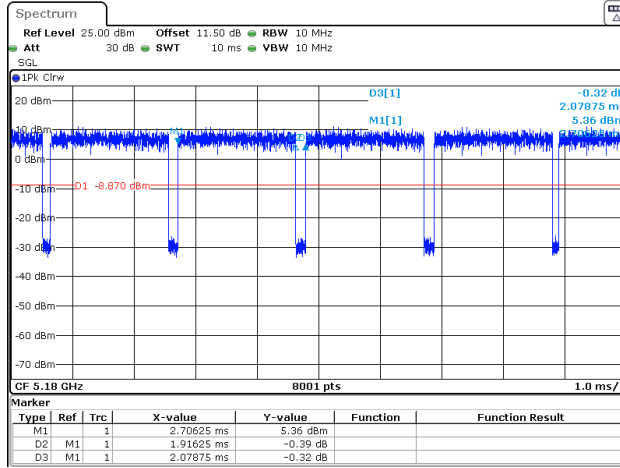
### Duty Cycle

802.11a



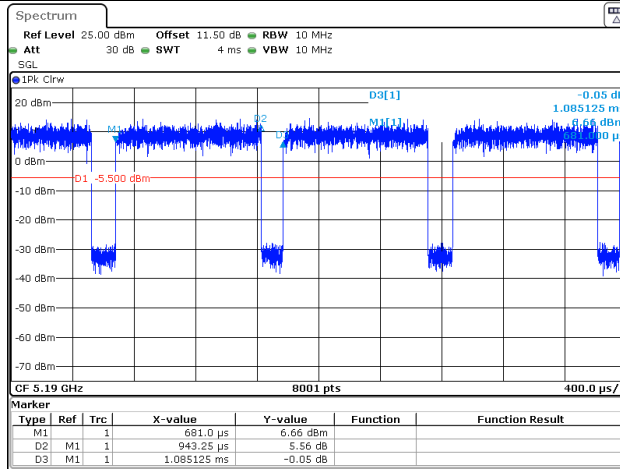
ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 13:18:13

802.11n ht20



ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 13:44:00

802.11n ht40



ProjectNo.:CR230951413 Tester:Len Huang  
Date: 21.SEP.2023 14:18:09

## 5. RF EXPOSURE EVALUATION

### 5.1 MPE-Based Exemption

#### 5.1.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least  $\lambda/2\pi$ , where  $\lambda$  is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of  $\lambda/4$  or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$ .
1.34-30	$3,450 R^2/f^2$ .
30-300	$3.83 R^2$ .
300-1,500	$0.0128 R^2f$ .
1,500-100,000	$19.2R^2$ .

#### 5.1.2 Measurement Result

Operation Modes	Frequency (MHz)	$\lambda/2\pi$ (mm)	Distance (mm)	Exemption ERP		Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP (dBm)	MPE-Based Exemption
				(mW)	(dBm)				
2.4G Wi-Fi	2412-2462	19.80	200	768	28.85	23.0	6.6	27.45	Compliant
5.2G Wi-Fi	5180-5240	9.22	200	768	28.85	9.0	4.6	11.45	Compliant
5.8G Wi-Fi	5745-5825	8.31	200	768	28.85	14.0	5.0	16.85	Compliant

Note:

The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

The 2.4G Wi-Fi and 5G Wi-Fi cannot transmit simultaneously.

**Result: The device compliant the MPE-Based Exemption at 20cm distances.**

## **6. EUT PHOTOGRAPHS**

---

Please refer to the attachment CR230951413-EXP EUT EXTERNAL PHOTOGRAPHS and CR230951413-INP EUT INTERNAL PHOTOGRAPHS

## **7. TEST SETUP PHOTOGRAPHS**

---

Please refer to the attachment CR230951413-00B-TSP TEST SETUP PHOTOGRAPHS.

**===== END OF REPORT =====**