



Test report No. : 4790055264-US-R0-V0  
Page : 1 of 66  
Issued date : 2021/8/18  
FCC ID : 2APLE18300416

## RADIO TEST REPORT

**Product** : Arlo Go 2 Wireless Security Camera  
**Model Name** : VML2030  
**FCC ID** : 2APLE18300416  
**Test Regulation** : FCC 47 CFR Part 15 Subpart C (Section 15.247)  
**Received Date** : 2021/8/3  
**Test Date** : 2021/8/3 ~ 2021/8/10  
**Issued Date** : 2021/8/18

**Applicant** : Arlo Technologies Inc  
2200 Faraday Avenue, Suite 150, Carlsbad, CA 92008, USA

**Issued By** : Underwriters Laboratories Taiwan Co., Ltd.  
Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd.,  
Zhudong Township, Hsinchu County, Taiwan



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Doc No: 17-EM-F0876 / 6.0





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## 1. Attestation of Test Results

**APPLICANT:** Arlo Technologies Inc  
 2200 Faraday Avenue, Suite 150, Carlsbad, CA 92008, USA

**MANUFACTURER:** Funing Precision Component Co., Ltd.  
 Lot B, Que Vo Industrial Zone, Van Duong Ward, Bac Ninh City,  
 Bac Ninh Province, Vietnam

**EUT DESCRIPTION:** Arlo Go 2 Wireless Security Camera

**BRAND:** Arlo

**MODEL:** VML2030

**SAMPLE STAGE:** Engineering Verification Test sample

**DATE of TESTED:** 2021/8/3 ~ 2021/8/10

<b>APPLICABLE STANDARDS</b>	
<b>STANDARD</b>	<b>Test Results</b>
FCC 47 CFR PART 15 Subpart C (Section 15.247)	PASS

Underwriters Laboratories Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Taiwan Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Taiwan Co., Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Prepared By:

Sally Lu  
 Project Handler

Date : 2021/8/18

Approved and Authorized By:

Mike Cai  
 Engineer Project Associate

Date : 2021/8/18

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## 2. Summary of Test Results

Summary of Test Results		
FCC Clause	Test Items	Result
15.247(a)(2)	6dB Bandwidth	PASS
15.247(b)	Conducted Output Power	PASS
15.247(e)	Power Spectral Density	PASS
15.247(d)	Antenna Port Emission	PASS
15.205 / 15.209 / 15.247(d)	Radiated Emissions and Band Edge Measurement	PASS
15.207	AC Power Conducted Emission	PASS
15.203	Antenna Requirement	PASS

Note:

1. For the Radiated Band Edge test plots were recorded in Appendix I, the Radiated Emissions test plots were recorded in Appendix II.

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### 3. Test Methodology and Reference Procedures

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2, KDB558074 D01 Meas Guidance v05r02, KDB414788 D01 Radiated Test Site v01r01, ANSI C63.10-2013.

### 4. Facilities and Accreditation

<b>Test Location</b>	Underwriters Laboratories Taiwan Co., Ltd.
<b>Address</b>	Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan
<b>Accreditation Certificate</b>	Underwriters Laboratories Taiwan Co., Ltd. is accredited by TAF, Laboratory Code 3398. The full scope of accreditation can be viewed at <a href="http://accreditation.taftw.org.tw/taf/public/basic/viewApplyItems.action?unitNo=3398">http://accreditation.taftw.org.tw/taf/public/basic/viewApplyItems.action?unitNo=3398</a>

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## 5. Measurement Uncertainty

For statement of conformity, accuracy method (Section 8.2.4 and 8.2.5 of ISO Guide 98-4) was applied as decision rule for measurement in this test report.

The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor  $k=2$ .

Measurement	Frequency	Uncertainty
Conducted disturbance at mains terminals ports	150kHz ~ 30MHz	$\pm 3.1$ dB
RF Conducted	9 kHz - 40GHz	$\pm 1.9$ dB
Radiated disturbance below 30MHz	9 kHz - 30 MHz	$\pm 1.9$ dB
Radiated disturbance below 1 GHz	30MHz ~ 1GHz	$\pm 5.4$ dB
Radiated disturbance above 1 GHz	1GHz ~ 40GHz	$\pm 4.7$ dB

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## 6. Equipment under Test

### 6.1. Description of EUT

<b>Product</b>	Arlo Go 2 Wireless Security Camera
<b>Brand Name</b>	Arlo
<b>Model Name</b>	VML2030
<b>Operating Frequency</b>	2412MHz ~ 2462MHz
<b>Modulation</b>	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
<b>Transfer Rate</b>	802.11b: up to 11 Mbps 802.11g: up to 54 Mbps 802.11n: up to MCS7
<b>Number of Channel</b>	11 for 802.11b, 802.11g, 802.11n (HT20)
<b>Maximum Output Power</b>	802.11b: 23.57 dBm 802.11g: 24.92 dBm 802.11n (HT20): 24.7 dBm
<b>Normal Voltage</b>	3.6Vdc from battery 5Vdc from Host
<b>S/N</b>	N/A
<b>Sample ID</b>	4125444
<b>Software Version</b>	N/A

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Note:

1. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

Modulation Mode	Tx,Rx Function
802.11b	1TX,1RX
802.11g	1TX,1RX
802.11n (HT20)	1TX,1RX

2. The EUT could be supplied with rechargeable battery as the following table:

Product	Manufacturer / Trademark	Model	Description
Rechargeable Li-ion Battery	Arlo	A-14	Rating:3.6Vdc

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual.

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## 6.2. Channel List

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20):

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

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### 6.3. Test Condition

Test Item	Test Site No.	Environmental Condition	Input Power	Test Date	Tested by
Antenna Port Conducted Measurement	SR4	24~27°C/ 59~66%RH	120Vac / 60 Hz	2021/08/03~ 2021/08/10	WaterNil Guan
Radiated Spurious Emission	966-2	24~27°C/ 59~66%RH	120Vac / 60 Hz	2021/08/03~ 2021/08/10	WaterNil Guan
AC power Line Conducted Emission	SR1	24~27°C/ 59~66%RH	120Vac / 60 Hz	2021/08/03~ 2021/08/10	WaterNil Guan

FCC Test Firm Registration Number: 498077

### 6.4. Description of Available Antennas

Ant. No.	Transmitter Circuit	Brand Name	Model Name	Ant. Type	Maximum Gain (dBi)
1	Chain (0)	INPAQ	WAG-M-LA-00-062	PIFA	1.3

Note: The above antenna information was provided from customer and for more detailed features description, please refer the manufacturer's specification or user's manual.

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## 6.5. Test Mode Applicability and Tested Channel Detail

- The EUT has three power source types: 3.6Vdc from battery, 5Vdc from Laptop and 5Vdc from Adapter, above three types were pre-tested, the AC power line conducted emission worst case was found in the 5Vdc from Laptop, the others worst case was found in the 5Vdc from Adapter. Therefore, only the test data of the 5Vdc was recorded in this report.
- For Antenna Port Conducted Measurement, this item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.
- For below 1 GHz radiated emission and AC power line conducted emission have performed all modes of operation were investigated and the worst-case emissions are reported.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

Test item	Mode	Modulation Technology	Modulation Type	Available Channel	Test Channel	Data Rate
Radiated Emissions (Above 1GHz)	802.11b	DSSS	DBPSK	1 to 11	1,6,11	1 Mbps
	802.11g	OFDM	BPSK	1 to 11	1,6,11	6 Mbps
	802.11n (HT20)	OFDM	BPSK	1 to 11	1,6,11	MCS0
Radiated Emissions (Below 1GHz)	802.11b	DSSS	DBPSK	1 to 11	6	1 Mbps
AC Power Line Conducted Emission	802.11b	DSSS	DBPSK	1 to 11	6	1 Mbps
Antenna Port Conducted Measurement	802.11b	DSSS	DBPSK	1 to 11	1,6,11	1 Mbps
	802.11g	OFDM	BPSK	1 to 11	1,6,11	6 Mbps
	802.11n (HT20)	OFDM	BPSK	1 to 11	1,6,11	MCS0

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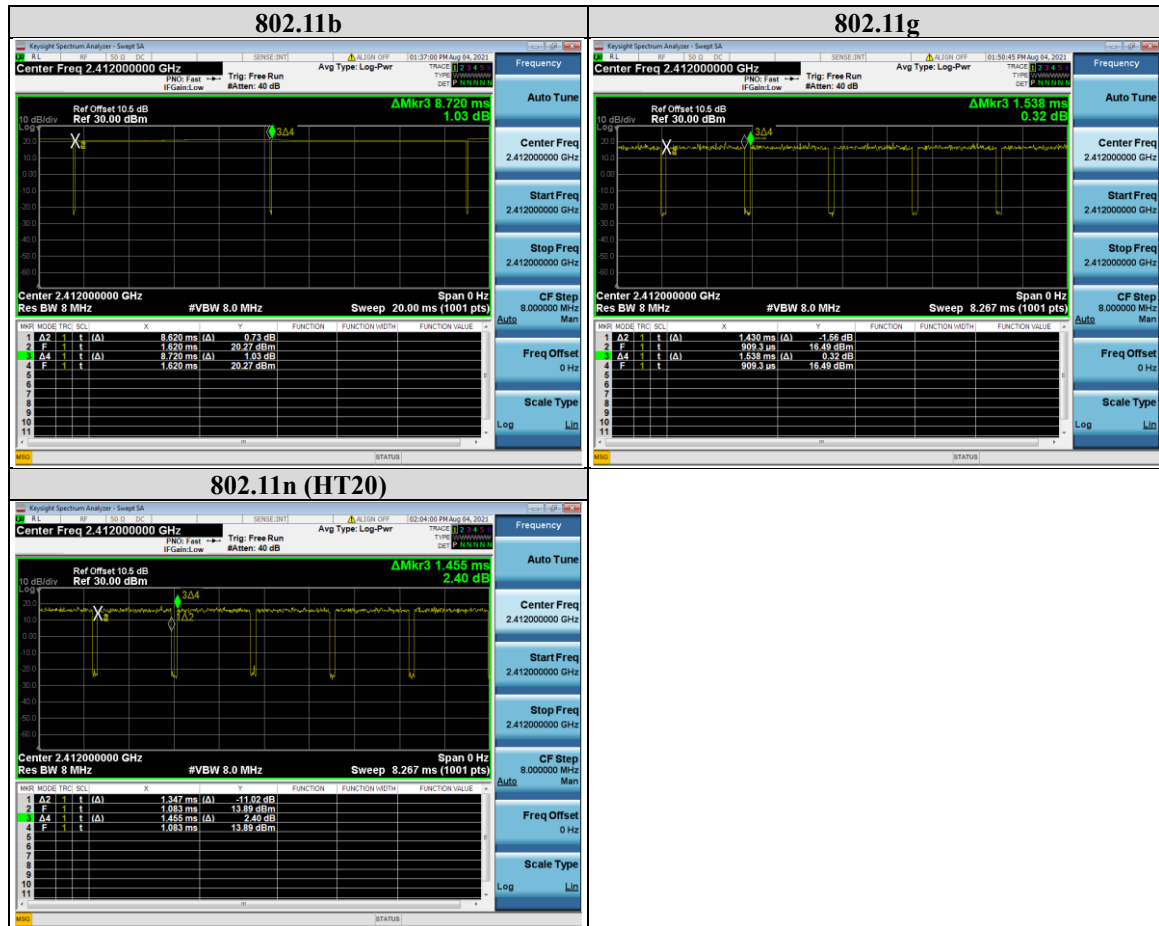


## 6.6. Duty cycle

802.11b: Duty cycle =  $8.62/8.72 = 0.989$ , duty cycle of test signal is  $\geq 98\%$ , duty factor is not required.

802.11g: Duty cycle =  $1.43/1.538 = 0.93$ , Duty factor(dB) =  $10 * \log(1/0.93) = 0.32$

802.11n HT20: Duty cycle =  $1.347/1.455 = 0.926$ , Duty factor(dB) =  $10 * \log(1/0.926) = 0.34$





## 7. Test Equipment

Test Equipment List					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Expired date
<b>Radiated Spurious Emission</b>					
Spectrum Analyzer	Keysight	N9010A	MY56070827	2020/11/11	2021/11/10
EMI Test Receiver	Rohde & Schwarz	ESR7	101754	2020/12/11	2021/12/10
Loop Antenna	ETS lindgren	6502	00213440	2020/12/25	2021/12/24
Trilog-Broadband Antenna with 5dB Attenuator	Schwarzbeck & EMCI	VULB 9168 & N-6-05	774 & AT-N0538	2021/1/13	2022/1/12
Horn Antenna (1-18 GHz)	Schwarzbeck	BBHA 9120 D	01690	2020/12/30	2021/12/29
Horn Antenna (18-40 GHz)	Schwarzbeck	BBHA 9170	781	2020/12/30	2021/12/29
Preamplifier (30-1000 MHz)	EMCI	EMC330E	980405	2021/6/8	2022/6/7
Preamplifier (1-18 GHz)	EMCI	EMC051835BE	980406	2021/2/3	2022/2/2
Preamplifier (18-40GHz)	EMCI	EMC184040SEE	980426	2021/5/19	2022/5/18
Cables	Hanyitek	K1K50-UP0264-K1K50-2500	170214-4 & 170425-2	2021/1/22	2022/1/21
Cables	Hanyitek	K1K50-UP0264-K1K50-2500	170214-1 & 170214-2	2021/1/22	2022/1/21

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Test Equipment List					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Expired date
Antenna Port Conducted Measurement					
Spectrum Analyzer	Keysight	N9010A	MY56070834	2020/11/6	2021/11/5
Pulse Power Sensor	Anritsu	MA2411B	1531202	2020/12/21	2021/12/20
Power Meter	Anritsu	ML2495A	1645002	2020/12/21	2021/12/20
AC power Line Conducted Emission					
EMI Test Receiver	Rohde & Schwarz	ESR7	101753	2020/11/17	2021/11/16
Two-Line V-Network	Rohde & Schwarz	ENV216	102136	2020/8/19	2021/8/18
Cables	TITAN	CFD200	T0732ACFD20 020A300-1	2021/3/2	2022/3/1

UL Software		
Description	Name	Version
Radiated measurement	e3	6.191211 (V6)
Conducted measurement	RF Conducted Test Tools	ver 2.4.0.620b
AC power Line Conducted Emission	EZ_EMCC	UL-3A1.2

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## 8. Description of Test Setup

### For Radiated Emissions

#### Support Equipment

ID	Equipment	Brand Name	Model Name	S/N	Remark
A	Laptop	DELL	Latitude E5470	5M2MWF2	Provide by lab

#### I/O Cables

ID	Equipment	Brand Name	Model Name	Length (m)	Remark
1	Micro USB console cable	N/A	N/A	1	Provide by Client

### For AC power Line Conducted Emission

#### Support Equipment

ID	Equipment	Brand Name	Model Name	S/N	Remark
A	Adapter	Arlo	2ADB010B	332-50094-02	Provide by Client

#### I/O Cables

ID	Equipment	Brand Name	Model Name	Length (m)	Remark
1	Micro USB Cable	WONDER	WA-W07UA	2	Provide by Client

#### Test Setup

Controlled using a bespoke application (Tera Term tool to paste wl command) on a test Notebook. The application was used to enable a continuous transmission mode and to select the test channels, data rates, modulation schemes and power setting as required.

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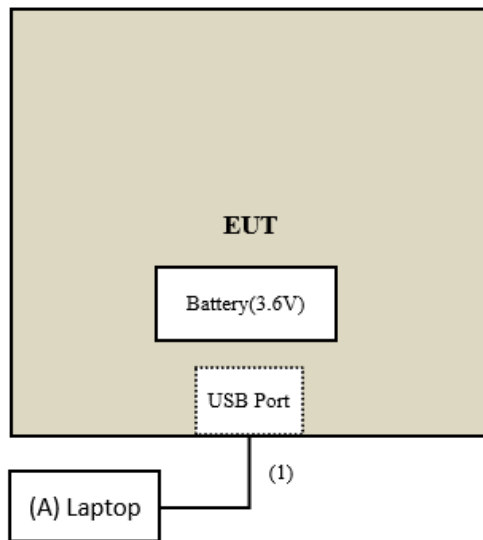
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**Setup Diagram for Test**

**For Radiated Emissions**



**Under Table**

**Remote Site**

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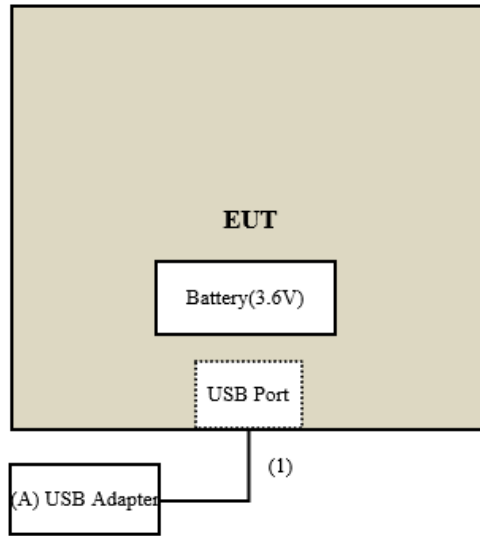
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**For AC power Line Conducted Emission**



-----  
**Under Table**

-----  
**Remote Site**

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## 9. Test Results

### 9.1. 6dB Bandwidth

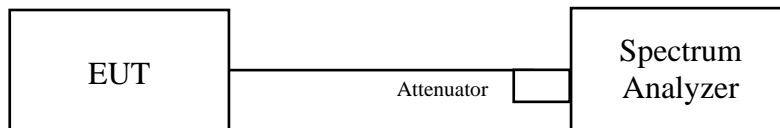
#### Requirements

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

#### Test procedure

- Set resolution bandwidth (RBW) = 100kHz.
- Set the video bandwidth (VBW)  $\geq 3 \times$  RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### Test Setup



The loss between RF output port of the EUT and the input port of the Spectrum Analyzer has been taken into consideration.

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## Test Data

### 802.11b

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	9.053	0.5	PASS
6	2437	9.570	0.5	PASS
11	2462	9.064	0.5	PASS

### 802.11g

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.391	0.5	PASS
6	2437	16.373	0.5	PASS
11	2462	16.433	0.5	PASS

### 802.11n (HT20)

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	17.640	0.5	PASS
6	2437	17.629	0.5	PASS
11	2462	17.625	0.5	PASS

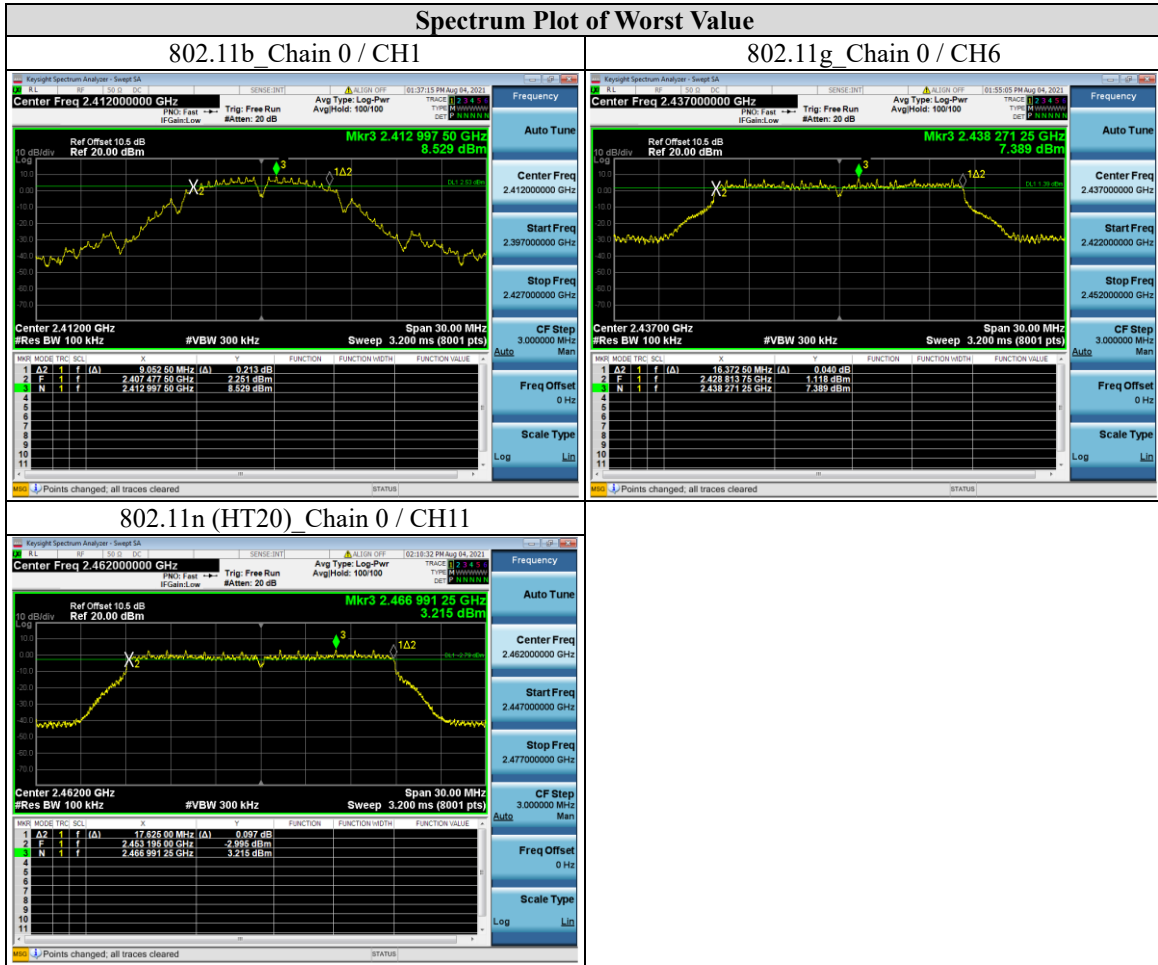
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## 9.2. Conducted Output Power

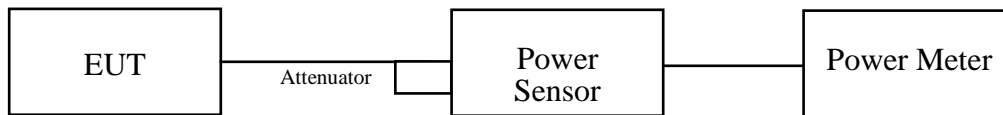
### Requirements

For systems using digital modulation in the 2400-2483.5 MHz bands: 1 Watt.

### Test Procedure

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

### Test Setup



The loss between RF output port of the EUT and the input port of the Power Meter has been taken into consideration.



## Test Data

### Peak Power

#### 802.11b

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	116.681	20.67	30	PASS
6	2437	227.51	23.57	30	PASS
11	2462	148.594	21.38	30	PASS

#### 802.11g

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	192.309	22.84	30	PASS
6	2437	310.456	24.92	30	PASS
11	2462	230.675	23.63	30	PASS

#### 802.11n (HT20)

Channel	Frequency (MHz)	Peak Power (mW)	Peak Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	190.546	22.80	30	PASS
6	2437	295.121	24.70	30	PASS
11	2462	190.108	22.79	30	PASS

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### Average Power (Reference Only)

#### 802.11b

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	59.841	17.77
6	2437	140.281	21.47
11	2462	74.645	18.73

#### 802.11g

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	30.761	14.88
6	2437	74.989	18.75
11	2462	35.975	15.56

#### 802.11n (HT20)

Channel	Frequency (MHz)	Average Power (mW)	Average Power (dBm)
1	2412	30.409	14.83
6	2437	64.714	18.11
11	2462	30.339	14.82

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### 9.3. Power Spectral Density

#### Requirements

The Maximum of Power Spectral Density Measurement is 8dBm in any 3 kHz (If  $G_{TX} > 6$  dBi, then  $PSD = 8 - (G_{TX} - 6)$ ).

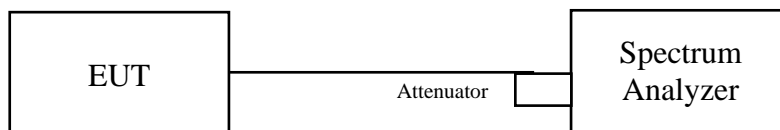
Note:

1. PSD = power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz.
2.  $G_{TX}$  = the maximum transmitting antenna directional gain in dBi.

#### Test procedure

- a. Set analyzer center frequency to DTS channel center frequency.
- b. Set the span to 1.5 times the DTS bandwidth.
- c. Set the RBW to:  $3 \text{ kHz} \leq RBW \leq 100 \text{ kHz}$ .
- d. Set the VBW  $\geq 3 \times RBW$ .
- e. Detector = peak.
- f. Sweep time = auto couple.
- g. Trace mode = max hold.
- h. Allow trace to fully stabilize.
- i. Use the peak marker function to determine the maximum amplitude level within the RBW.

#### Test Setup



The loss between RF output port of the EUT and the input port of the Spectrum Analyzer has been taken into consideration.

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## Test Data

### 802.11b

Channel	Frequency (MHz)	PSD (dBm/3 kHz)	Limit (dBm/3 kHz)	Pass / Fail
1	2412	-5.843	8	PASS
6	2437	-0.948	8	PASS
11	2462	-3.363	8	PASS

### 802.11g

Channel	Frequency (MHz)	PSD (dBm/3 kHz)	Limit (dBm/3 kHz)	Pass / Fail
1	2412	-9.388	8	PASS
6	2437	-5.442	8	PASS
11	2462	-10.588	8	PASS

### 802.11n (HT20)

Channel	Frequency (MHz)	PSD (dBm/3 kHz)	Limit (dBm/3 kHz)	Pass / Fail
1	2412	-9.915	8	PASS
6	2437	-7.146	8	PASS
11	2462	-10.303	8	PASS

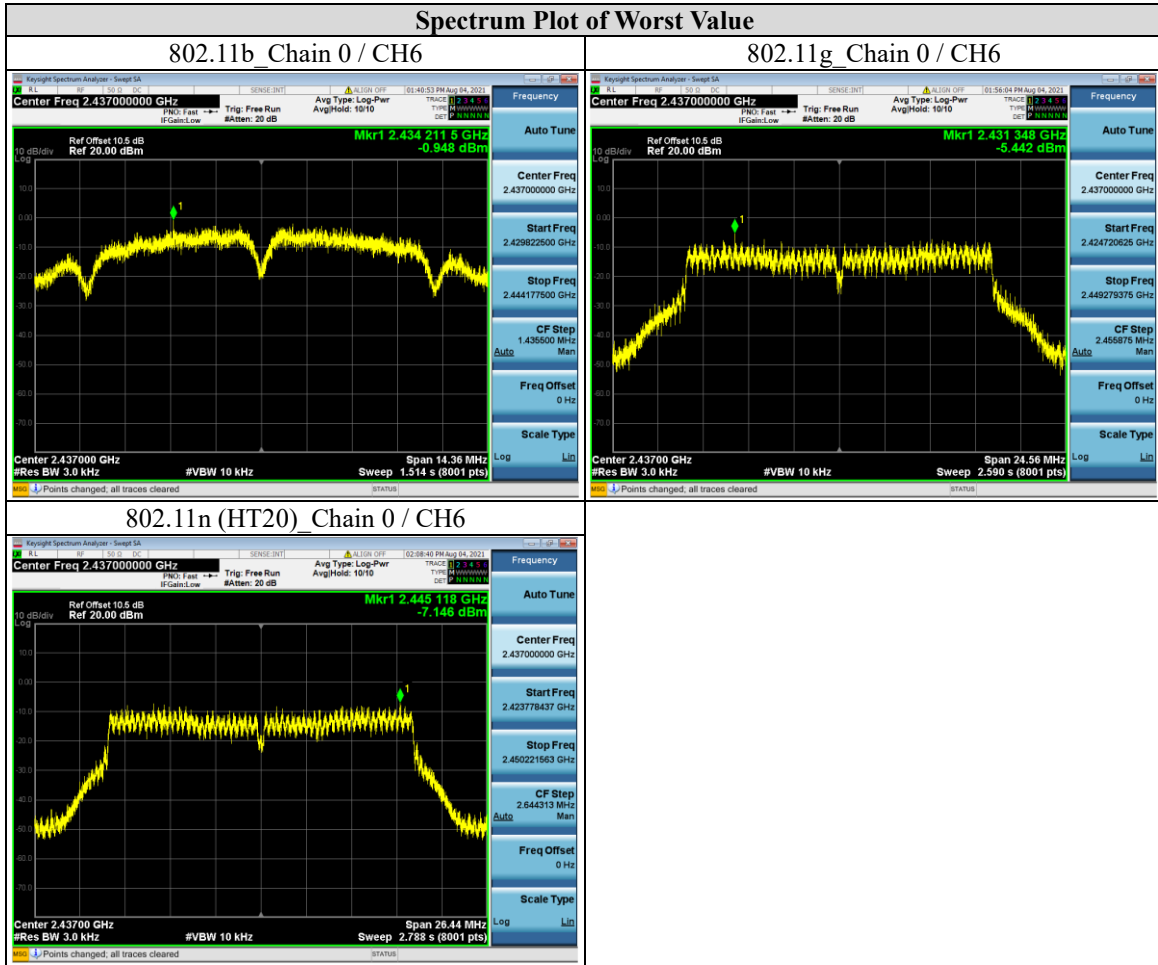
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## 9.4. Conducted Out of Band Emission

### Requirements

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b) (3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209 (a) is not required.

### Test procedure

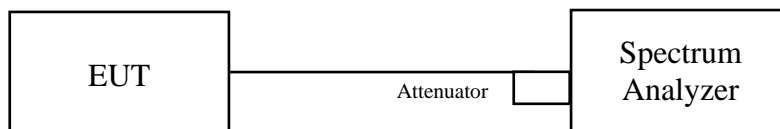
Measurement Procedure REF

1. Set the RBW = 100 kHz.
2. Set the VBW  $\geq$  300 kHz.
3. Set the span to 1.5 times the DTS bandwidth.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

Measurement Procedure OOBE

1. Set RBW = 100 kHz.
2. Set VBW  $\geq$  300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

### Test Setup



The loss between RF output port of the EUT and the input port of the Spectrum Analyzer has been taken into consideration.

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## Test Data

802.11b



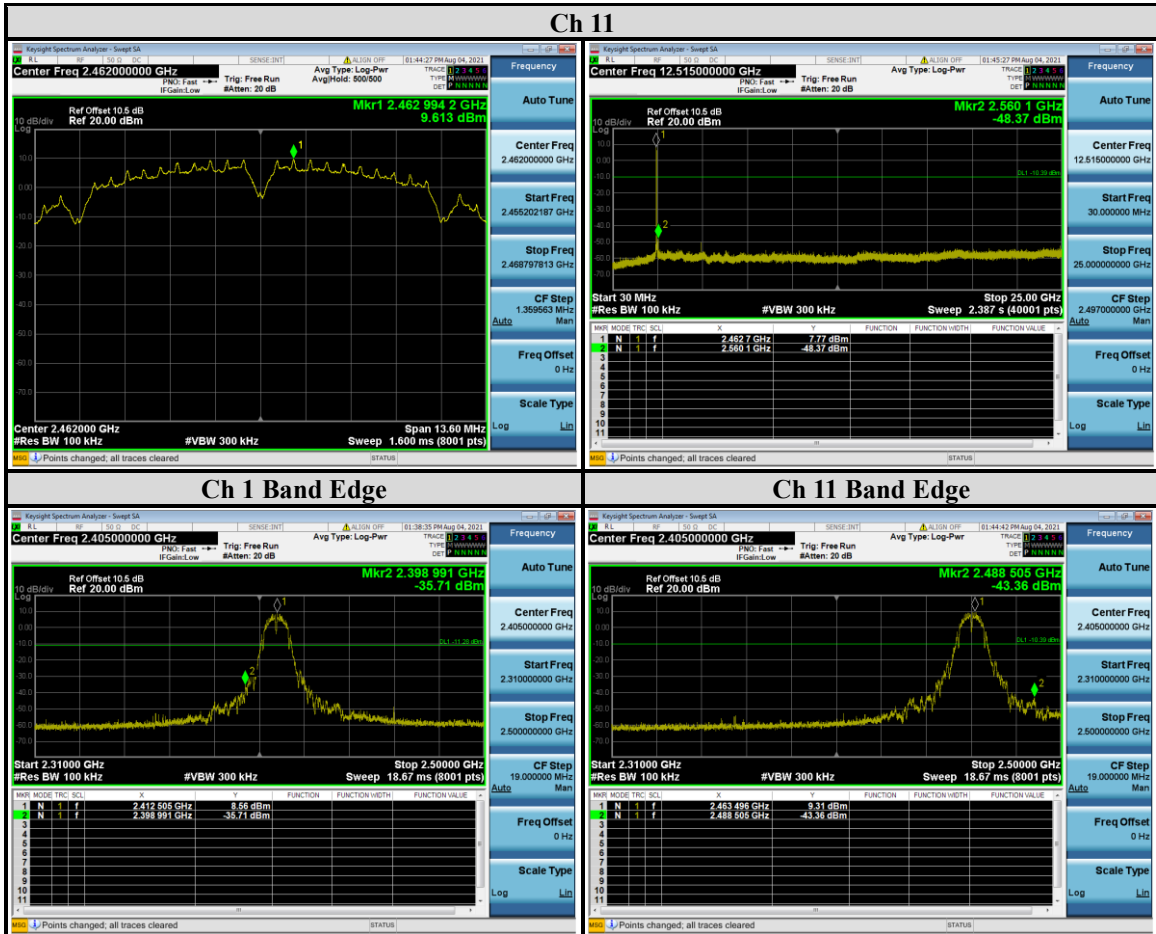
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802.11g



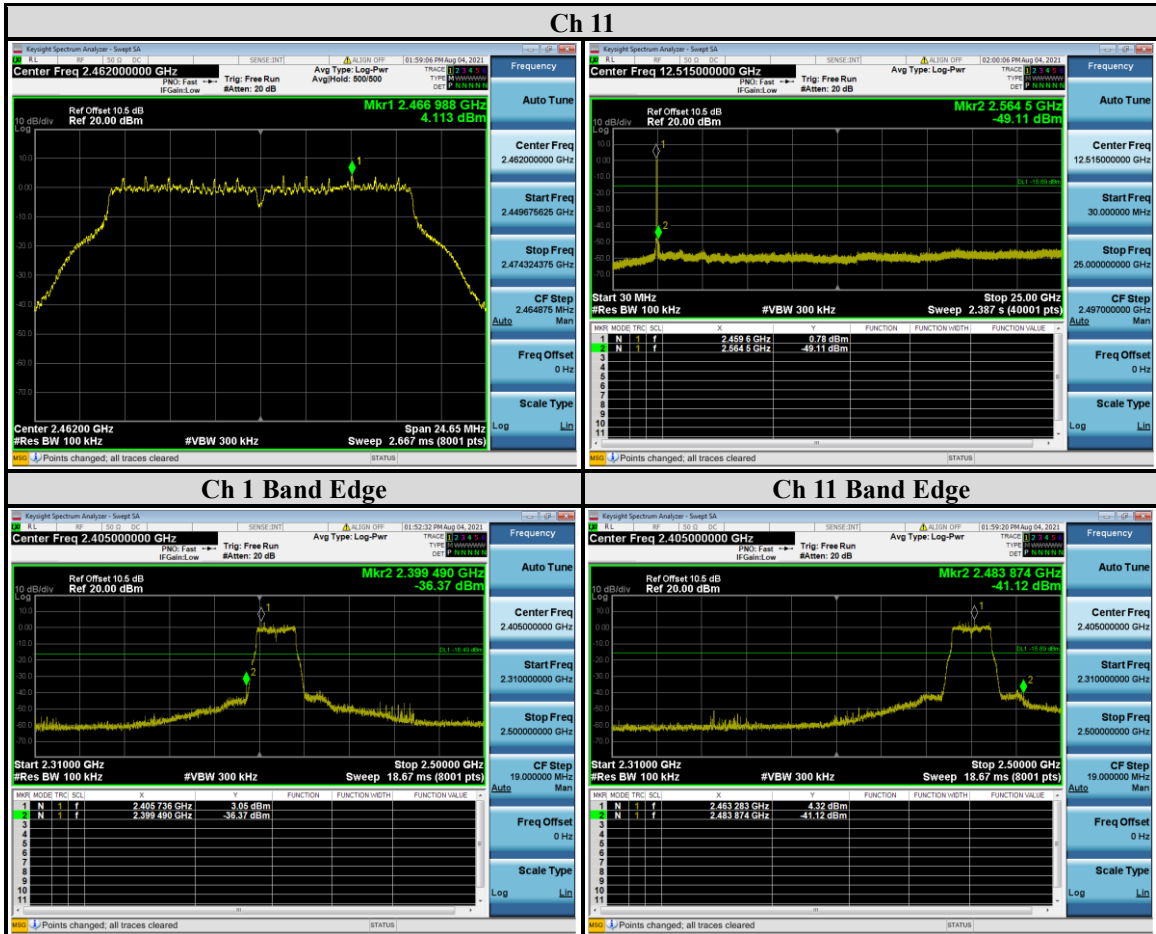
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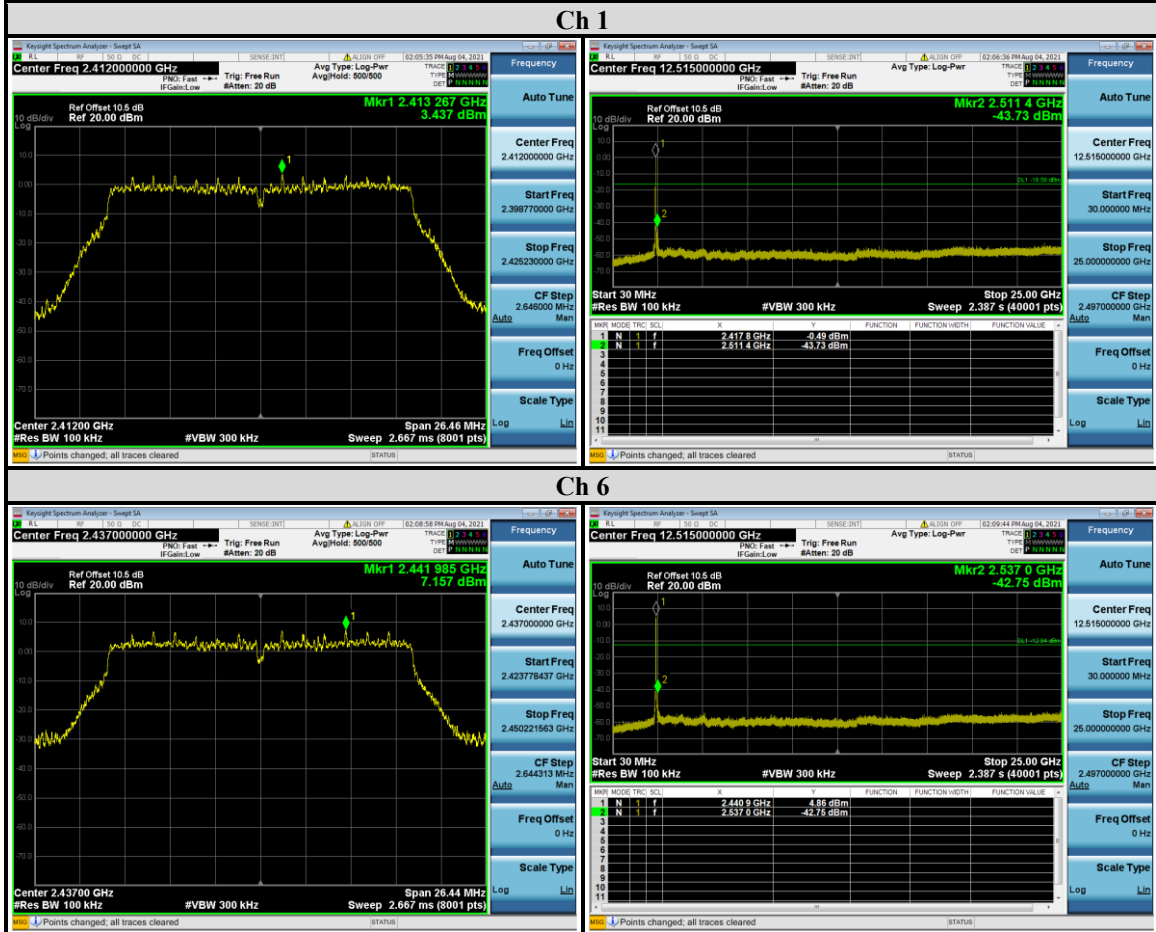
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802.11n (HT20)

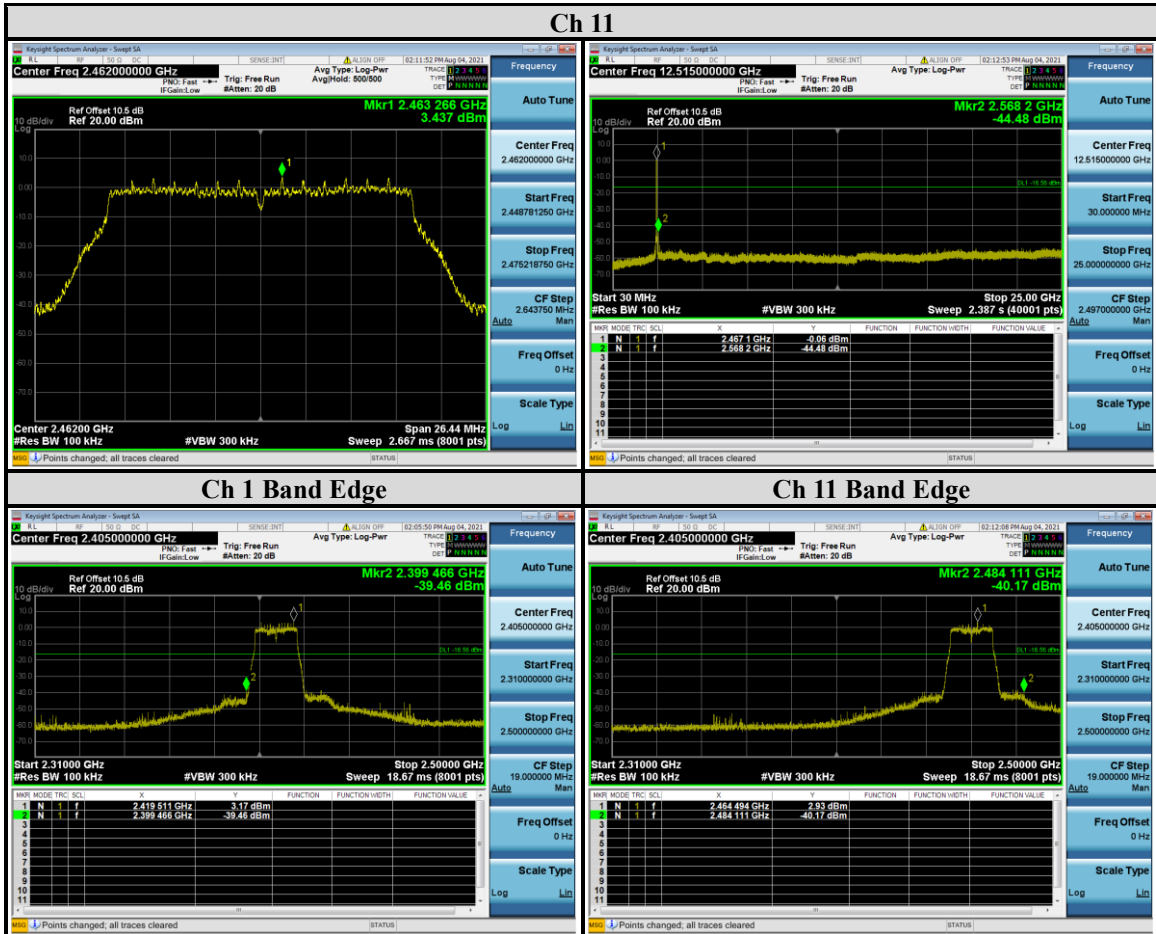


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## 9.5. Radiated Spurious Emission

### Requirements

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequency(MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

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## **Test Procedures**

[For 9 kHz ~ 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 30MHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

[For above 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
- f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

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Note:

- a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle  $< 98\%$ ) or 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.

Configuration	Average	
	RBW	VBW
802.11b	1MHz	10Hz
802.11g		1kHz
802.11n (HT20)		1kHz

Note: Refer to section 6.6 for duty cycle.

- d. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported.

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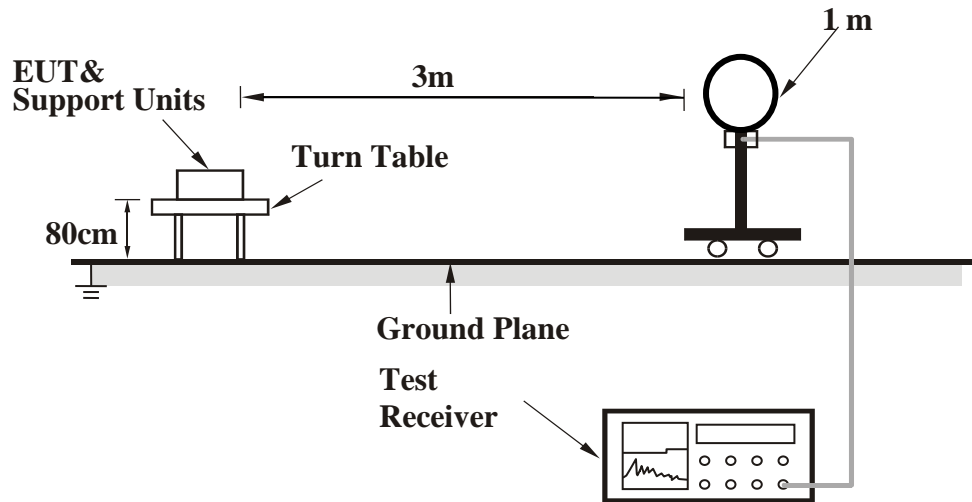
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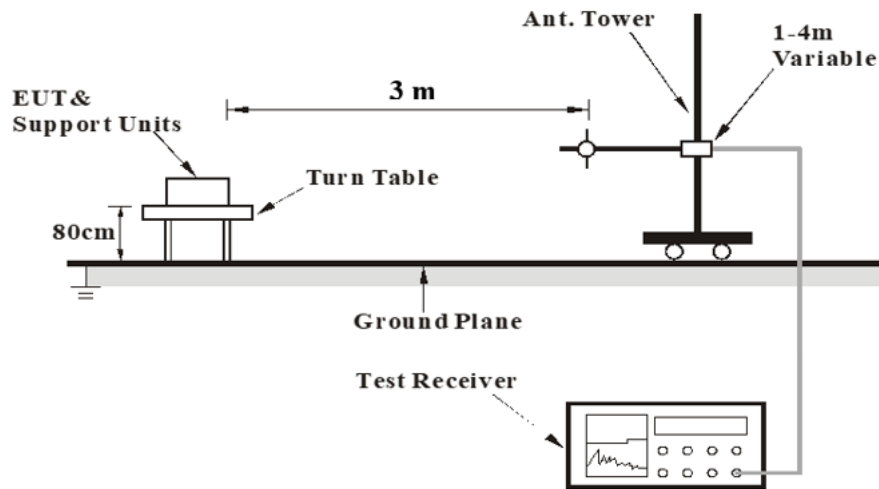
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### Test Setup

<Frequency Range 9 kHz ~ 30 MHz>

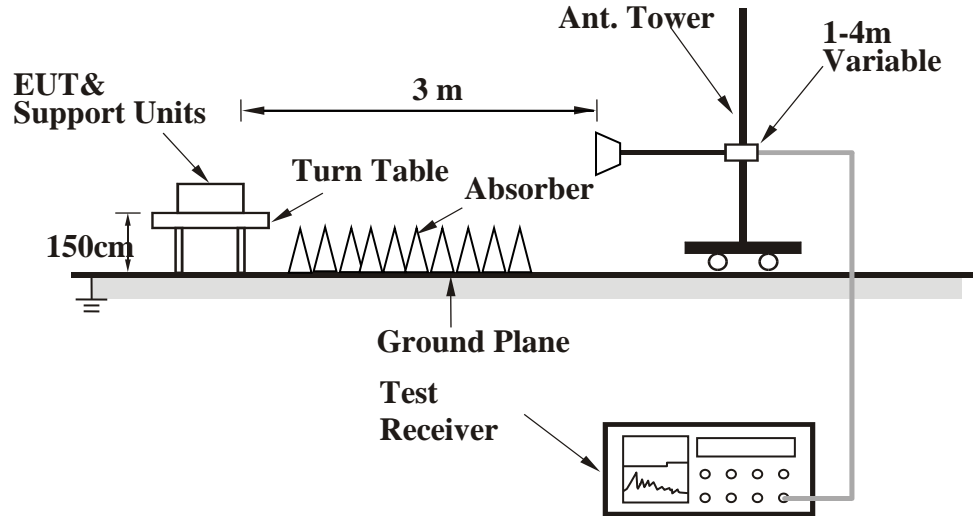


<Frequency Range 30 MHz ~ 1 GHz >





<Frequency Range above 1 GHz>



For the actual test configuration, please refer to the Setup Configurations.



## Test Data

### Above 1GHz Data

#### 802.11b

EUT Test Condition		Measurement Detail	
Channel	Channel 1	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4824	48.33	2.55	50.88	74	-23.12	Peak
-	2386	35.59	16.09	51.68	54	-2.32	Average
@	2412	86.91	16.13	103.04	-	-	Average
-	2386	42.43	16.09	58.52	74	-15.48	Peak
@	2412	90.56	16.13	106.69	-	-	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	4824	49.92	2.55	52.47	54	-1.53	Average
-	4824	51.52	2.55	54.07	74	-19.93	Peak
-	2387.14	37.68	16.1	53.78	54	-0.22	Average
@	2412	91.17	16.13	107.3	-	-	Average
-	2386.95	42.64	16.1	58.74	74	-15.26	Peak
@	2412	93.52	16.13	109.65	-	-	Peak

#### Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 6	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4874	48.51	2.66	51.17	74	-22.83	Peak
*	7311	41.18	10.62	51.8	74	-22.2	Peak
-	2389.99	34.6	16.1	50.7	54	-3.3	Average
@	2437	88.48	16.12	104.6	-	-	Average
-	2484.99	31.96	16.1	48.06	54	-5.94	Average
-	2389.99	41.1	16.1	57.2	74	-16.8	Peak
@	2437	92.08	16.12	108.2	-	-	Peak
-	2485.18	40.27	16.1	56.37	74	-17.63	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	4874	51.02	2.66	53.68	54	-0.32	Average
-	4874	52.5	2.66	55.16	74	-18.84	Peak
-	7311	39.3	10.62	49.92	54	-4.08	Average
-	7311	42.82	10.62	53.44	74	-20.56	Peak
-	2389.99	37.6	16.1	53.7	54	-0.3	Average
@	2437	94.31	16.12	110.43	-	-	Average
-	2485.37	34.69	16.1	50.79	54	-3.21	Average
-	2389.61	43.57	16.1	59.67	74	-14.33	Peak
@	2437	96.81	16.12	112.93	-	-	Peak
-	2484.99	46.98	16.1	63.08	74	-10.92	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 11	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4924	47.05	2.61	49.66	74	-24.34	Peak
@	2462	85.03	16.12	101.15	-	-	Average
-	2487.65	33.49	16.1	49.59	54	-4.41	Average
@	2462	88.88	16.12	105	-	-	Peak
-	2487.65	41.78	16.1	57.88	74	-16.12	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	4924	50.52	2.61	53.13	54	-0.87	Average
-	4924	51.65	2.61	54.26	74	-19.74	Peak
@	2462	90.61	16.12	106.73	-	-	Average
-	2487.84	36.87	16.1	52.97	54	-1.03	Average
@	2462	93.65	16.12	109.77	-	-	Peak
-	2488.03	45.49	16.1	61.59	74	-12.41	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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802.11g

EUT Test Condition		Measurement Detail	
Channel	Channel 1	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4824	42.9	2.55	45.45	74	-28.55	Peak
-	2389.99	35.1	16.1	51.2	54	-2.8	Average
@	2412	80.98	16.13	97.11	-	-	Average
-	2387.14	43.62	16.1	59.72	74	-14.28	Peak
@	2412	89.34	16.13	105.47	-	-	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4824	44.56	2.55	47.11	74	-26.89	Peak
-	2389.99	37.07	16.1	53.17	54	-0.83	Average
@	2412	85.18	16.13	101.31	-	-	Average
-	2389.99	45.21	16.1	61.31	74	-12.69	Peak
@	2412	91.75	16.13	107.88	-	-	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 6	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4874	43.19	2.66	45.85	74	-28.15	Peak
-	2387.71	34.74	16.1	50.84	54	-3.16	Average
@	2437	83.24	16.12	99.36	-	-	Average
-	2484.23	32.45	16.1	48.55	54	-5.45	Average
-	2387.9	44.23	16.1	60.33	74	-13.67	Peak
@	2437	90.94	16.12	107.06	-	-	Peak
-	2484.8	40.65	16.1	56.75	74	-17.25	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4874	48.17	2.66	50.83	74	-23.17	Peak
-	2389.61	37.66	16.1	53.76	54	-0.24	Average
@	2437	88.08	16.12	104.2	-	-	Average
-	2483.85	35.26	16.1	51.36	54	-2.64	Average
-	2389.61	49.68	16.1	65.78	74	-8.22	Peak
@	2437	95.97	16.12	112.09	-	-	Peak
-	2483.66	45.02	16.1	61.12	74	-12.88	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 11	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4924	39.98	2.61	42.59	74	-31.41	Peak
@	2462	77.7	16.12	93.82	-	-	Average
-	2483.66	32.93	16.1	49.03	54	-4.97	Average
@	2462	86.36	16.12	102.48	-	-	Peak
-	2487.08	41.23	16.1	57.33	74	-16.67	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4924	43.98	2.61	46.59	74	-27.41	Peak
@	2462	84.48	16.12	100.6	-	-	Average
-	2484.04	37.01	16.1	53.11	54	-0.89	Average
@	2462	91.86	16.12	107.98	-	-	Peak
-	2484.61	48.81	16.1	64.91	74	-9.09	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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**802.11n (HT20)**

EUT Test Condition		Measurement Detail	
Channel	Channel 1	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4824	40.03	2.55	42.58	74	-31.42	Peak
-	2388.85	34.9	16.1	51	54	-3	Average
@	2412	80.81	16.13	96.94	-	-	Average
-	2389.99	44.35	16.1	60.45	74	-13.55	Peak
@	2412	88.7	16.13	104.83	-	-	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4824	44.81	2.55	47.36	74	-26.64	Peak
-	2389.99	37.62	16.1	53.72	54	-0.28	Average
@	2412	84.9	16.13	101.03	-	-	Average
-	2386.95	44.87	16.1	60.97	74	-13.03	Peak
@	2412	91.89	16.13	108.02	-	-	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 6	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4874	43.45	2.66	46.11	74	-27.89	Peak
-	2389.61	35.55	16.1	51.65	54	-2.35	Average
@	2437	82.22	16.12	98.34	-	-	Average
-	2484.04	31.44	16.1	47.54	54	-6.46	Average
-	2386.76	47.23	16.1	63.33	74	-10.67	Peak
@	2437	90.67	16.12	106.79	-	-	Peak
-	2484.8	44.24	16.1	60.34	74	-13.66	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4874	47.42	2.66	50.08	74	-23.92	Peak
-	2387.71	37.32	16.1	53.42	54	-0.58	Average
@	2437	87.63	16.12	103.75	-	-	Average
-	2485.37	35.32	16.1	51.42	54	-2.58	Average
-	2387.33	46.76	16.1	62.86	74	-11.14	Peak
@	2437	94.74	16.12	110.86	-	-	Peak
-	2485.18	46.85	16.1	62.95	74	-11.05	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 11	Frequency Range	1 GHz ~ 26.5 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4924	39.72	2.61	42.33	74	-31.67	Peak
@	2462	76.96	16.12	93.08	-	-	Average
-	2483.66	33.73	16.1	49.83	54	-4.17	Average
@	2462	85.2	16.12	101.32	-	-	Peak
-	2483.66	41.81	16.1	57.91	74	-16.09	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	4924	43.08	2.61	45.69	74	-28.31	Peak
@	2462	83.62	16.12	99.74	-	-	Average
-	2484.61	37.31	16.1	53.41	54	-0.59	Average
@	2462	90.99	16.12	107.11	-	-	Peak
-	2485.18	48.58	16.1	64.68	74	-9.32	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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### 9 kHz ~ 30 MHz Data:

For 9 kHz to 30 MHz radiated emission have performed all modes of operation were investigated. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

No non-compliance noted:

### **KDB 414788 D01 OATS and Chamber Correlation Justification**

- Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

- OATs and chamber correlation testing had been performed and chamber measured test results is the worst case test result.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

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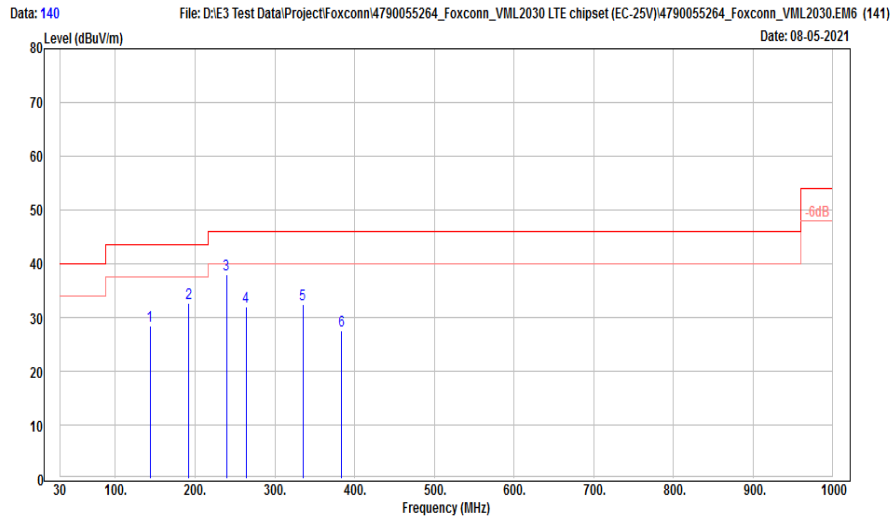


### 30 MHz ~ 1 GHz Data

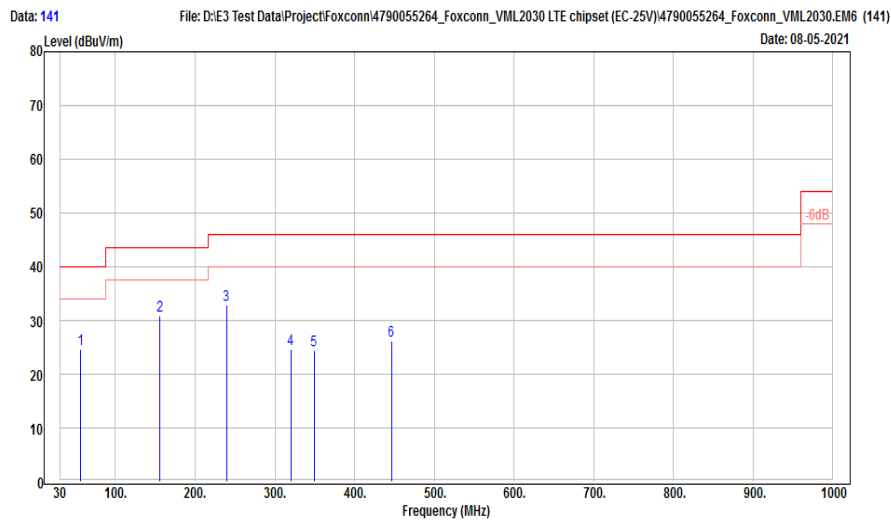
#### 802.11b

EUT Test Condition		Measurement Detail	
Channel	Channel 6	Frequency Range	30 MHz ~ 1 GHz

#### Horizontal



#### Vertical



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Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	143.49	40.34	-11.81	28.53	43.5	-14.97	Peak
-	191.99	45.86	-13.26	32.6	43.5	-10.9	Peak
-	239.52	50.13	-12.12	38.01	46	-7.99	Peak
-	263.77	43.27	-11.22	32.05	46	-13.95	Peak
-	335.55	41.34	-8.79	32.55	46	-13.45	Peak
-	384.05	34.98	-7.42	27.56	46	-18.44	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	56.19	36.03	-11.29	24.74	40	-15.26	Peak
-	156.1	42.1	-11.21	30.89	43.5	-12.61	Peak
-	239.52	44.98	-12.12	32.86	46	-13.14	Peak
-	320.03	34	-9.29	24.71	46	-21.29	Peak
-	349.13	32.99	-8.6	24.39	46	-21.61	Peak
-	446.13	31.96	-5.74	26.22	46	-19.78	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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## 9.6. AC Power Line Conducted Emission

### Requirements

Frequency (MHz)	Conducted limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### Test Procedures

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

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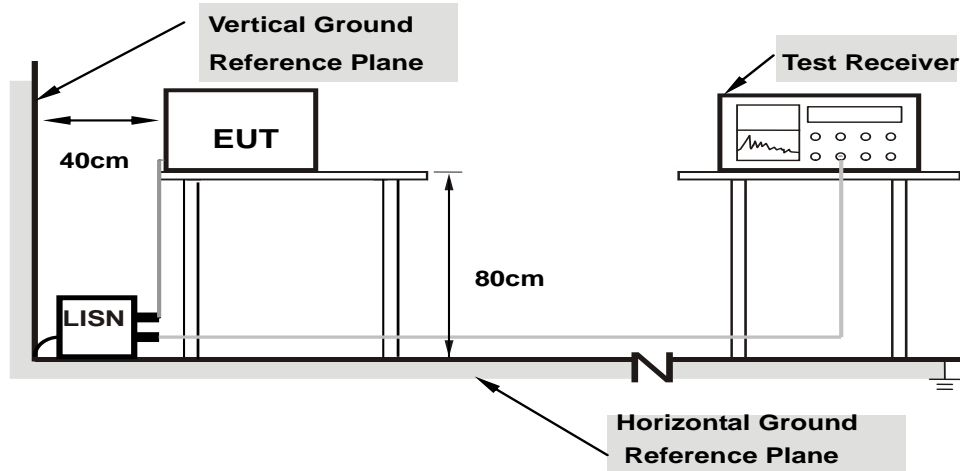
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## Test Setup



**Note: 1.Support units were connected to second LISN.**

For the actual test configuration, please refer to the Setup Configurations.

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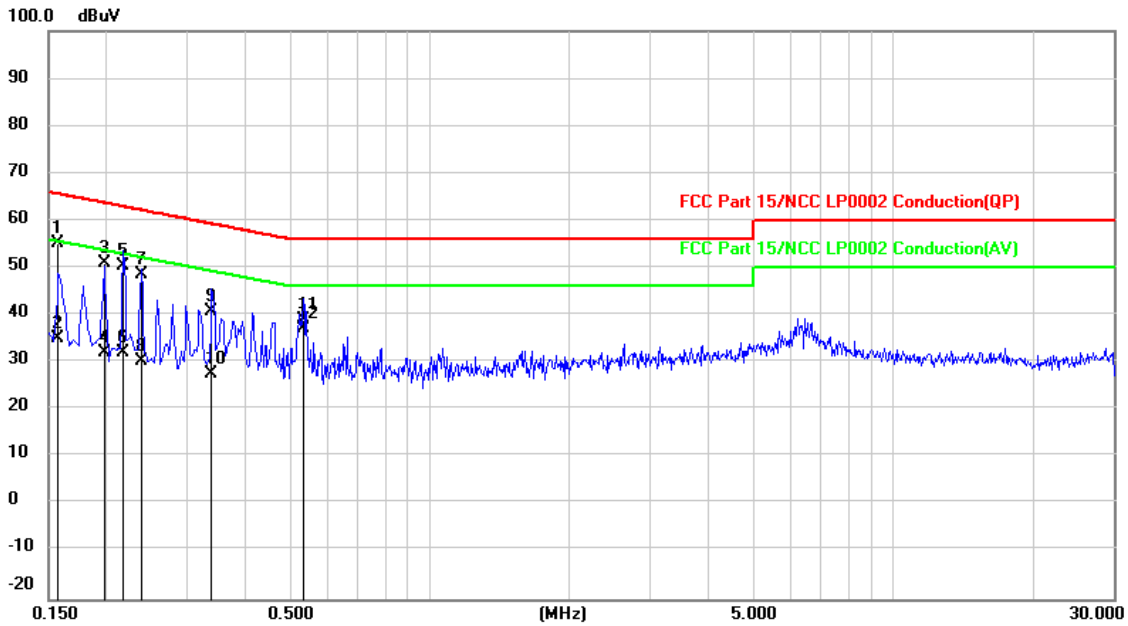


### Test Data

#### 802.11b

EUT Test Condition		Measurement Detail	
Channel	Channel 6	Frequency Range	150 kHz ~ 30 MHz

#### Phase of Power : Line (L)



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No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1580	35.56	19.50	55.06	65.57	-10.51	QP
2	0.1580	15.66	19.50	35.16	55.57	-20.41	AVG
3	0.1980	31.45	19.49	50.94	63.69	-12.75	QP
4	0.1980	12.65	19.49	32.14	53.69	-21.55	AVG
5	0.2180	30.95	19.49	50.44	62.89	-12.45	QP
6	0.2180	12.58	19.49	32.07	52.89	-20.82	AVG
7	0.2380	29.20	19.49	48.69	62.17	-13.48	QP
8	0.2380	10.70	19.49	30.19	52.17	-21.98	AVG
9	0.3379	21.14	19.48	40.62	59.25	-18.63	QP
10	0.3379	8.18	19.48	27.66	49.25	-21.59	AVG
11	0.5340	19.49	19.49	38.98	56.00	-17.02	QP
12	0.5340	17.62	19.49	37.11	46.00	-8.89	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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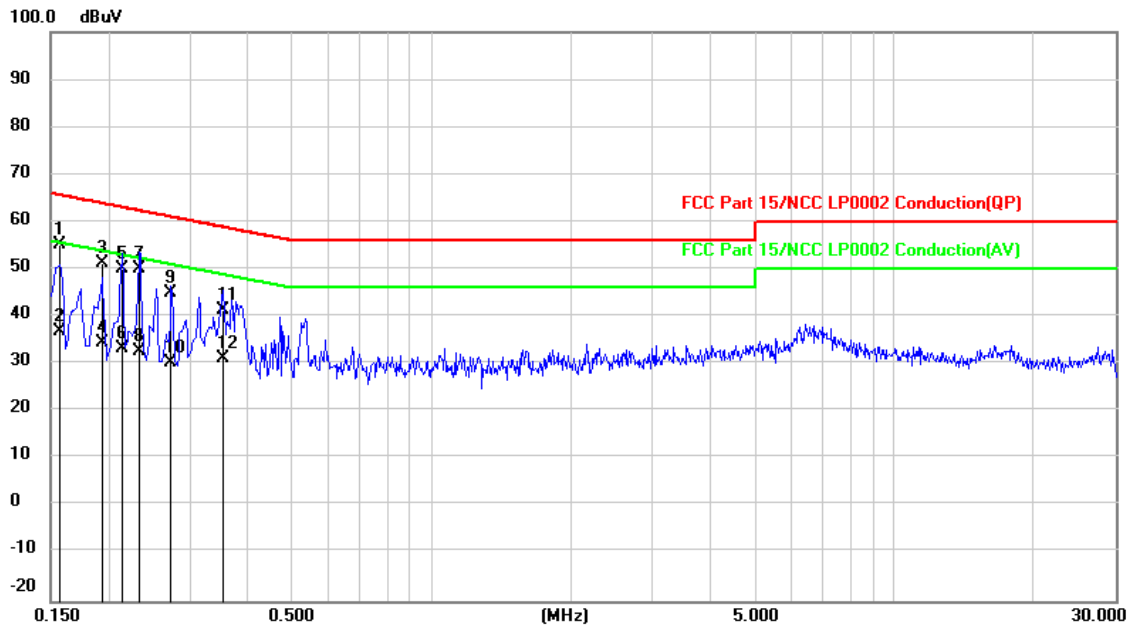
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### Phase of Power : Neutral (N)



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No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1580	35.55	19.50	55.05	65.57	-10.52	QP
2	0.1580	17.27	19.50	36.77	55.57	-18.80	AVG
3	0.1940	31.71	19.49	51.20	63.86	-12.66	QP
4	0.1940	15.03	19.49	34.52	53.86	-19.34	AVG
5	0.2140	30.47	19.49	49.96	63.05	-13.09	QP
6	0.2140	13.73	19.49	33.22	53.05	-19.83	AVG
7	0.2340	30.63	19.49	50.12	62.31	-12.19	QP
8	0.2340	13.13	19.49	32.62	52.31	-19.69	AVG
9	0.2740	25.40	19.49	44.89	61.00	-16.11	QP
10	0.2740	10.65	19.49	30.14	51.00	-20.86	AVG
11	0.3540	21.73	19.48	41.21	58.87	-17.66	QP
12	0.3540	11.77	19.48	31.25	48.87	-17.62	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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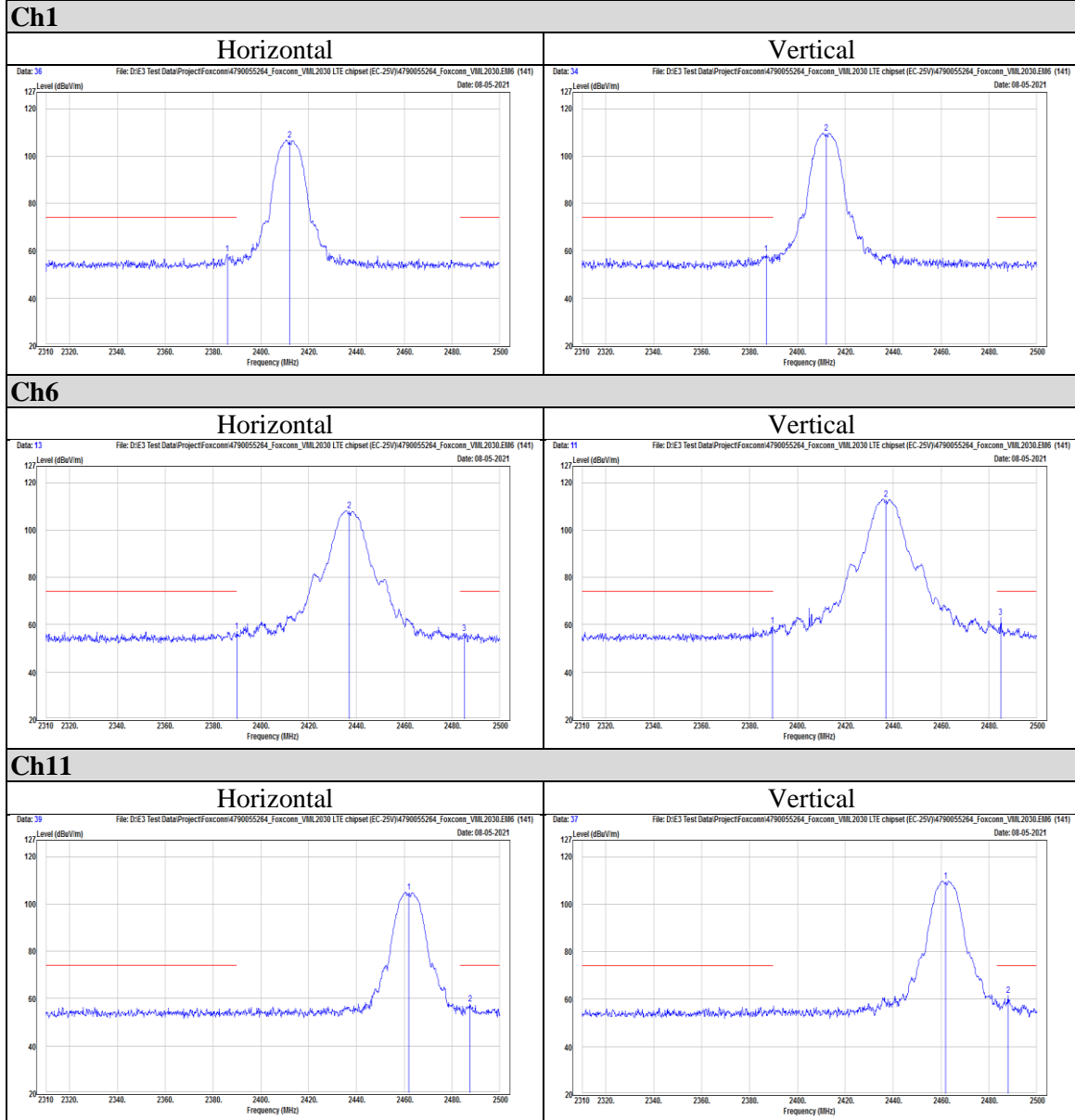
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## Appendix I Radiated Band Edge Measurement

### 802.11b

#### Peak



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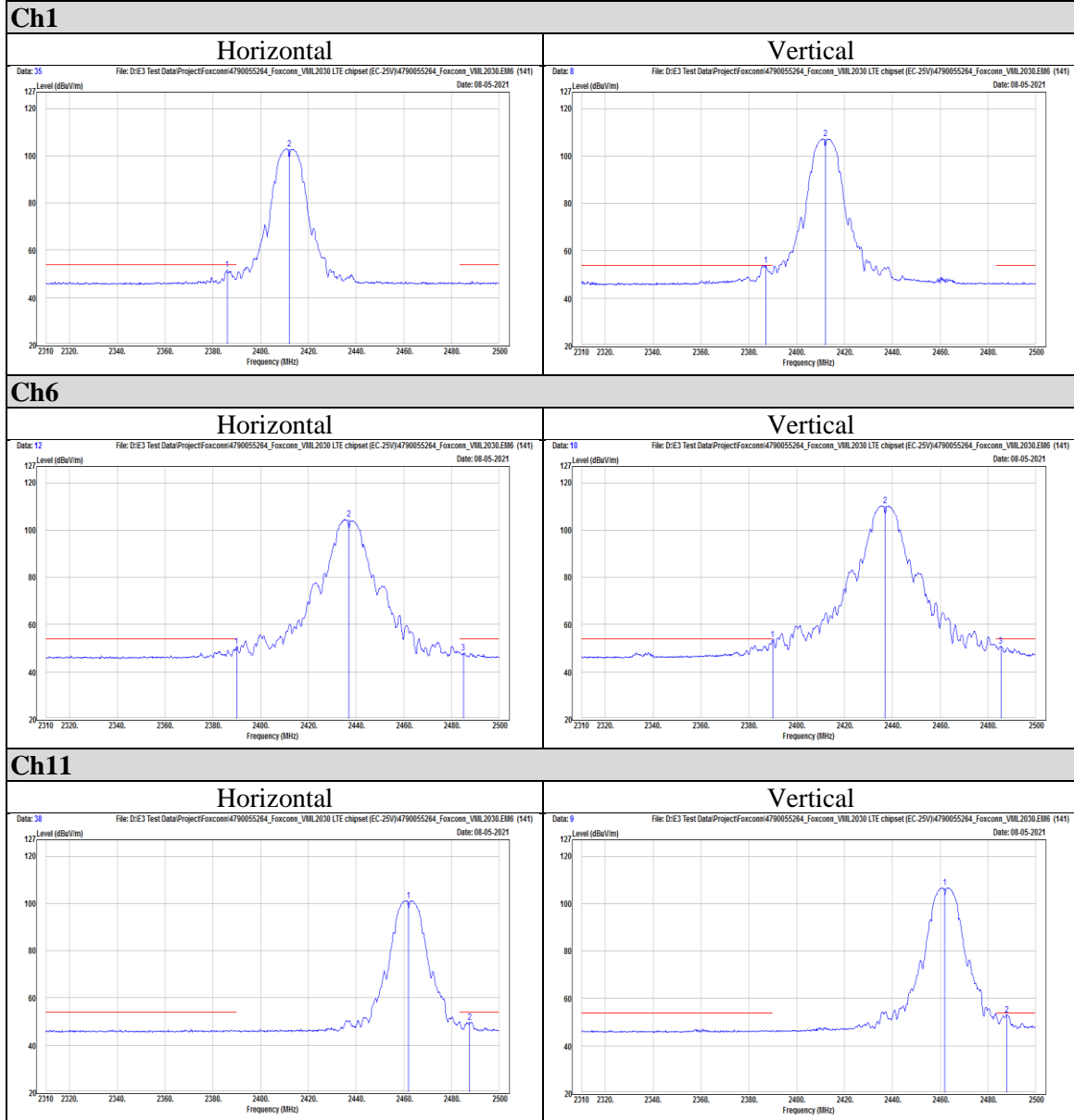
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### Average



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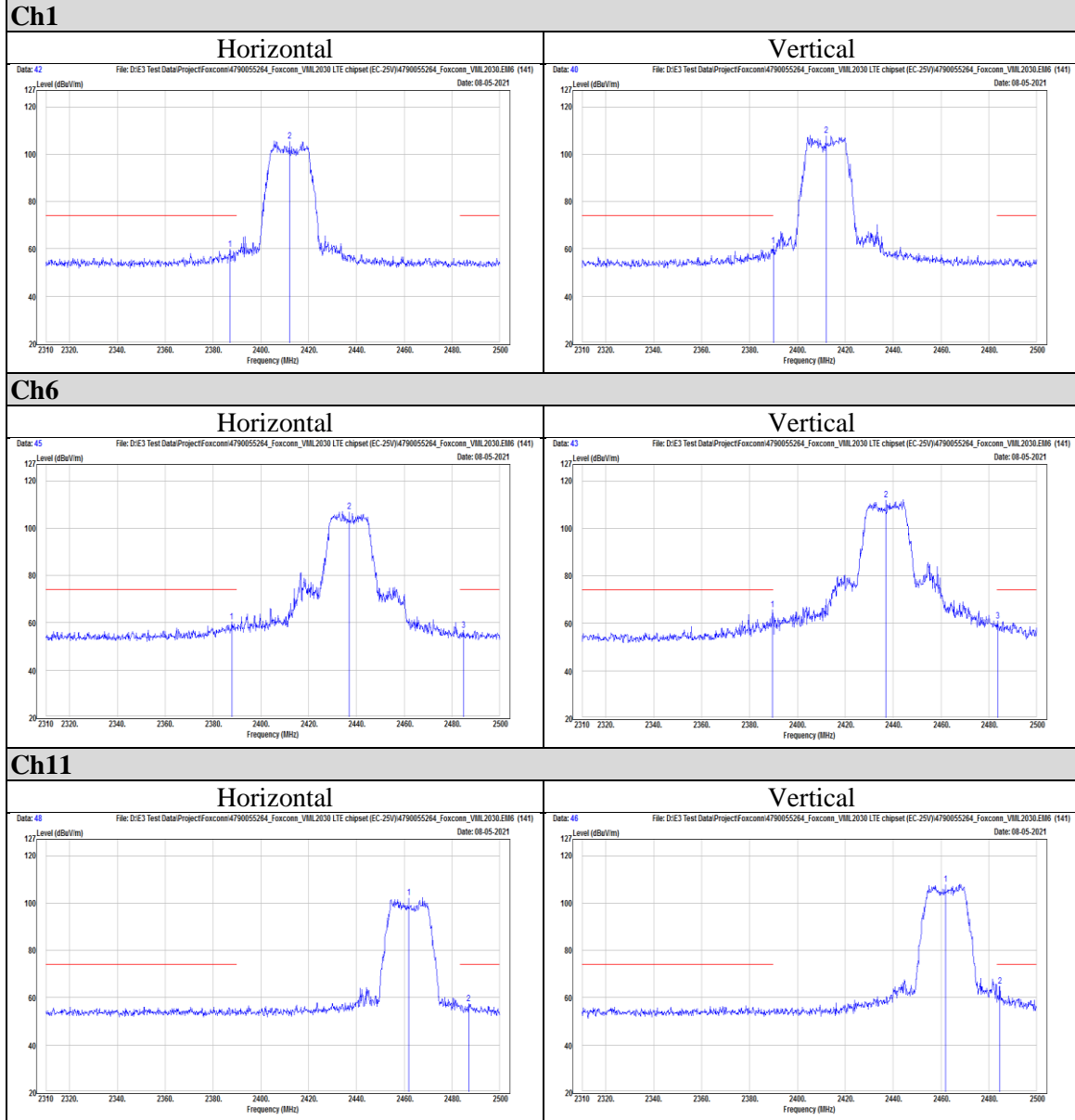
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### 802.11g

#### Peak



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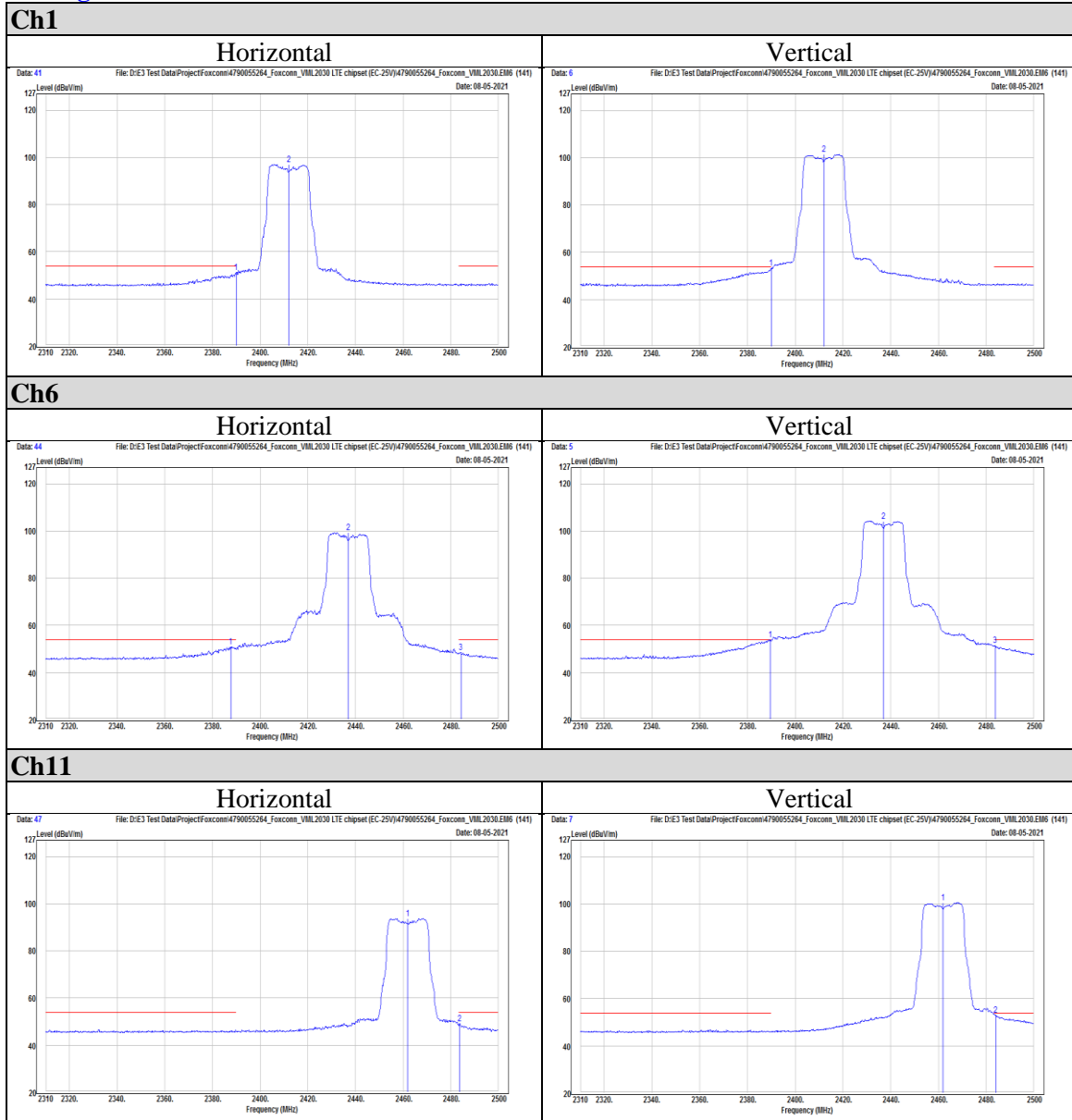
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### Average



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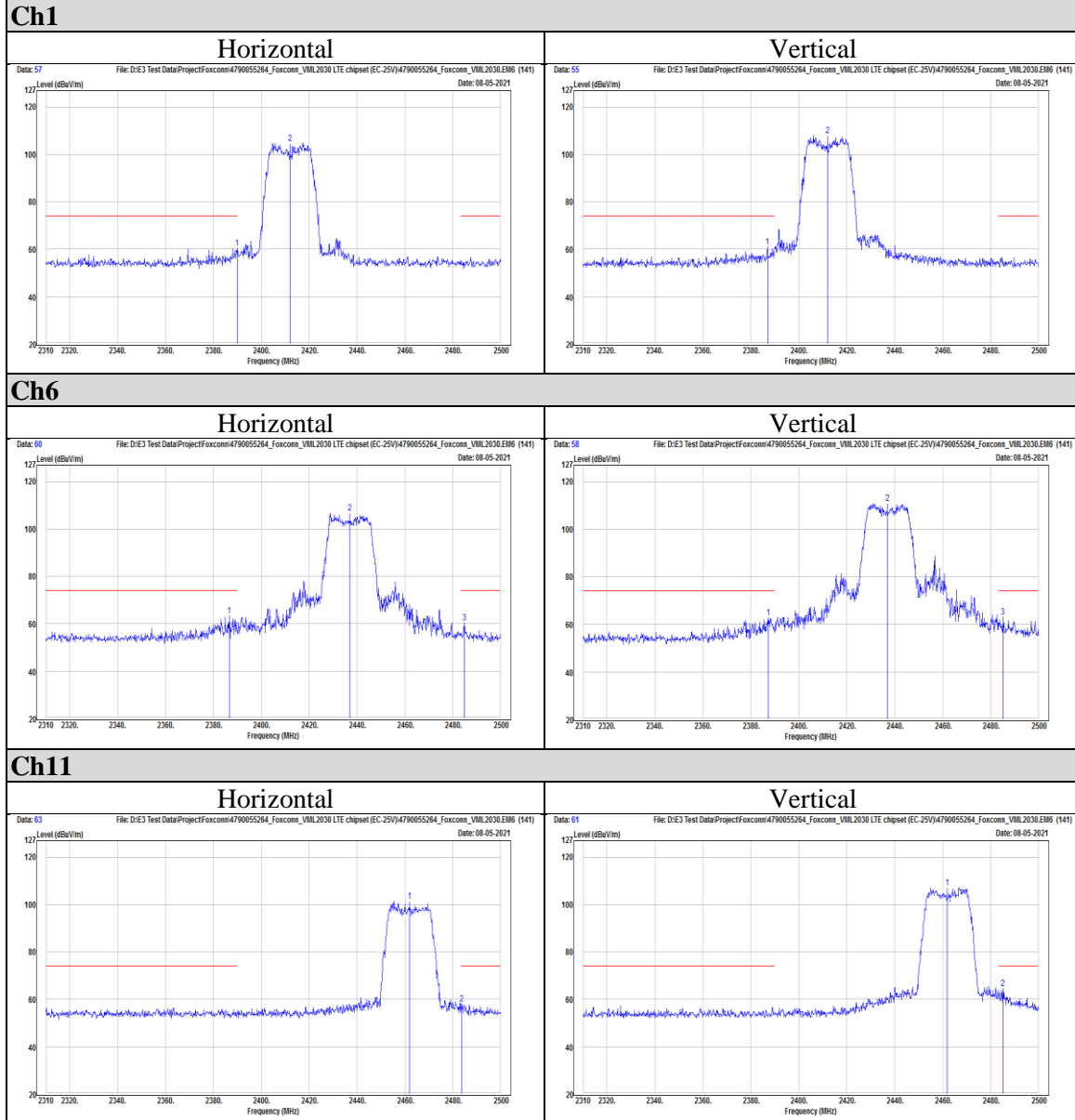
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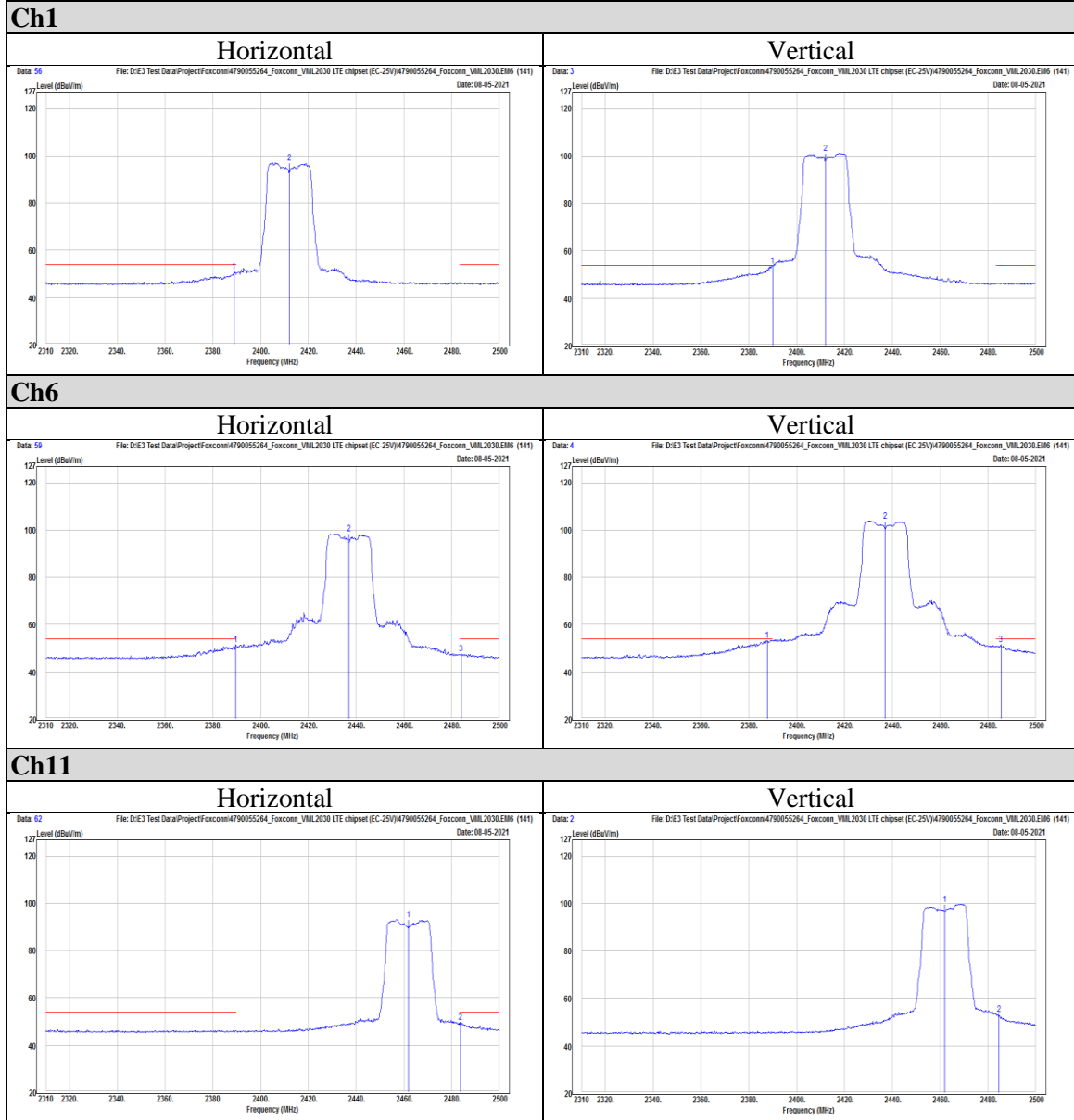
## 802.11n (HT20)

### Peak





### Average



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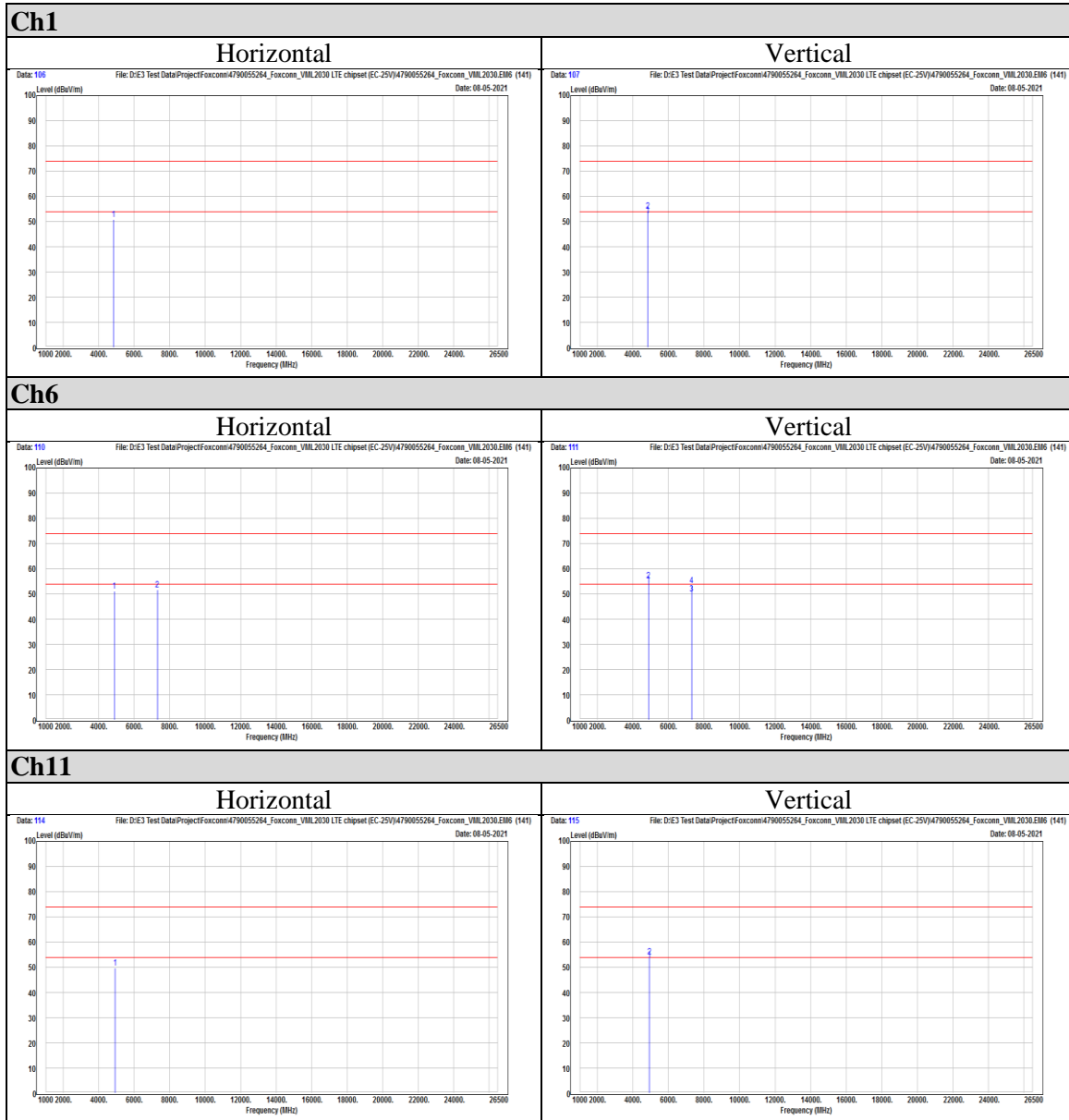
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## Appendix II Radiated Spurious Emission Measurement

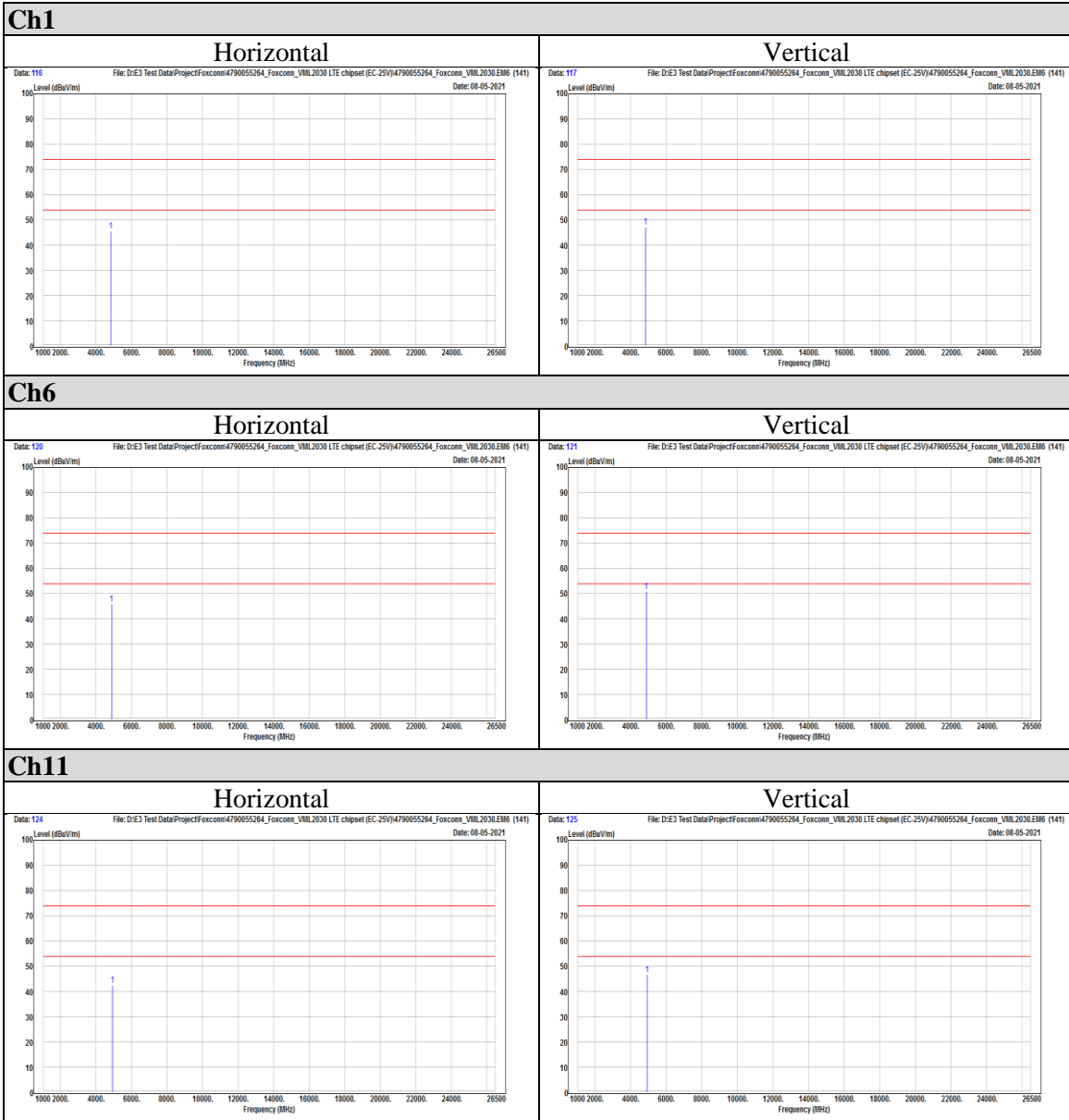
### 802.11b





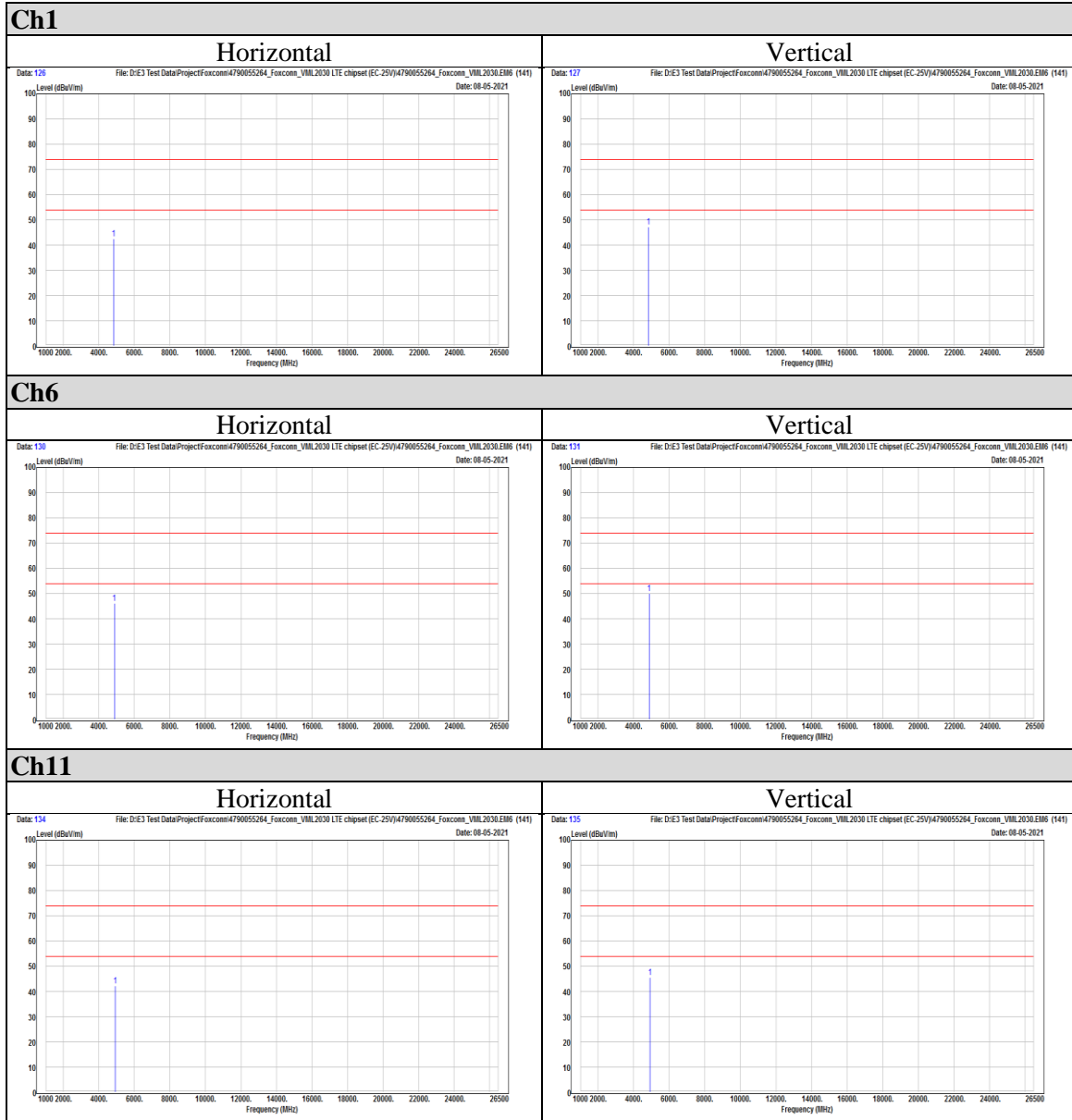


802.11g





802.11n (HT20)



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