FCC Part 15
EMI TEST REPORT

of

E.U.T. : Yardian Pro
Model No. : PRO1900
Serial Model : PRO1902, PRO1904, PRO1906
FCC ID : 2AS9BYP1

for

APPLICANT : Aeon Matrix Inc.

ADDRESS : 4F., No. 75, Zhouzi St. Neihu District.
Taipei City, 114680, Taiwan

Test Performed by

ELECTRONICS TESTING CENTER, TAIWAN
NO. 34. LIN 5. DINGFU VIL., LINKOU DIST.,
NEW TAIPEI CITY, TAIWAN, 24442, R.O.C.
Tel : (02)26023052 Fax : (02)26010910
http://www.etc.org.tw ; e-mail: emc@etc.org.tw

Report Number : 20-04-RBF-004

TEST REPORT CERTIFICATION

Applicant : Aeon Matrix Inc.

4F., No. 75, Zhouzi St. Neihu District. Taipei City, 114680, Taiwan

Manufacturer : Aeon Matrix Inc.

4F., No. 75, Zhouzi St. Neihu District. Taipei City, 114680, Taiwan

Description of EUT

a) Type of EUT : Yardian Pro
b) Trade Name : Yardian
c) Model No. : PRO1900
d) Serial Model : PRO1902, PRO1904, PRO1906
e) Power Supply : AC/ DC Adapter (Model :EA10681Q)
I/P:100~240Vac 50-60Hz
O/P:36V
f) Frequency Range : 2412-2462 MHz

Regulation Applied : FCC Rules and Regulations Part 15 Subpart C

I HEREBY CERTIFY THAT: The data shown in this report were made in accordance with the procedures given in ANSI C63.10-2013, and the energy emitted by the device was founded to be within the limits applicable. I assume full responsibility for accuracy and completeness of these data.

Note: 1. The result of the testing report relate only to the item tested.
2. The testing report shall not be reproduced expect in full, without the written approval of ETC

Summary of Tests

Test	Results
Radiated Emission	**Pass**
Conducted Emission	**Pass**
Emission Bandwidth	**Pass**
Output Power	**Pass**
100 kHz Bandwidth of Band Edges	**Pass**
Power Density	**Pass**
Out-of-Band Conducted Emission	**Pass**
Duty Cycle	**NA**

Date Test Item Received : Apr. 06, 2020
Date Test Campaign Completed : Mar. 25, 2020
Date of Issue : Jul. 08, 2020

Test Engineer : Kazuma Ho
(Kazuma Ho, Engineer)

Approve & Authorized Signer : Vincent Chang
Vincent Chang, Section Manager
EMC Dept. II of ELECTRONICS
TESTING CENTER, TAIWAN

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1 GENERAL INFORMATION

1.1 Product Description

a)	Type of EUT	:	Yardian Pro
b)	Trade Name	:	Yardian
c)	Model No.	:	PRO1900
d)	Serial Model	:	PRO1902, PRO1904, PRO1906
e)	Power Supply	:	AC/ DC Adapter (Model :EA10681Q) I/P:100~240Vac 50-60Hz O/P:36V
f)	Frequency Range	:	2412-2462 MHz

1.2 Characteristics of Device

Yardian Pro is a Wi-Fi smart sprinkler controller with access to local weather forecasts and a unique Local Municipal Water Restrictions database.

- 100Vac -240Vac full-range power supply with Level VI energy efficiency
- Built-in 2.4G Wi-Fi
- RJ45 port for Ethernet cable, which can be used instead of Wi-Fi
- On-device buttons for "Auto Zone Scan" to show valve connection and status, and "Instant Watering Control" to run a zone for a specified duration
- Two sensor ports for rain sensor and/or flow sensor
- Dedicated master/pump and 24VAC output port

1.3 Test Methodology

Both conducted and radiated emissions were performed according to the procedures illustrated in ANSI C63.10-2013. Other required measurements were illustrated in separate sections of this test report for details. For RF test the measurement procedure was refered to FCC 558074 D01 15.247 Meas Guidance v05r02.

Measurement Software

Software	Version	Note
e3	Version 6.100618f	Radiated Emission Test
e3	Version 6.100421	Conducted Emission Test

1.4 Test Facility

Location of the Test site: No.34, Lin 5, Dingfu Vil., Linkou Dist., New Taipei City, Taiwan 24442, R.O.C.
Designation Number: TW2628.

2 PROVISIONS APPLICABLE

2.1 Definition

Unintentional radiator:
A device that intentionally generates and radio frequency energy for use within the device, or that sends radio frequency signals by conduction to associated equipment via connecting wiring, but which is not intended to emit RF energy by radiation or induction.

Class A Digital Device:
A digital device which is marketed for use in commercial or business environment; exclusive of a device which is market for use by the general public, or which is intended to be used in the home.

Class B Digital Device :
A digital device which is marketed for use in a residential environment notwithstanding use in a commercial, business of industrial environment. Example of such devices that are marketed for the general public.

Note : A manufacturer may also qualify a device intended to be marketed in a commercial, business, or industrial environment as a Class B digital device, and in fact is encouraged to do so, provided the device complies with the technical specifications for a Class B Digital Device. In the event that a particular type of device has been found to repeatedly cause harmful interference to radio communications, the Commission may classify such a digital device as a Class B Digital Device, Regardless of its intended use.

Intentional radiator:
A device that intentionally generates and emits radio frequency energy by radiation or induction.

2.2 Requirement for Compliance

(1) Conducted Emission Requirement

Except for Class A digital devices, for equpment 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 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/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 band edges.

Frequency MHz	Quasi Peak dBμV	Average dBμV
0.15 - 0.5	66-56*	56-46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

* Decreases with the logarithm of the frequency

(2) Radiated Emission Requirement

For unintentional device, according to §15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency MHz	Distance Meters	Radiated dBμV/m	Radiated μV/m
30 - 88	3	40.0	100
88 - 216	3	43.5	150
216 - 960	3	46.0	200
Above 960	3	54.0	500

For intentional device, according to §15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

(3) Antenna Requirement

For intentional device, according to §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.

(4) Bandwidth Requirement

For direct sequence system, according to 15.247(a)(2), the minimum 6dB bandwidth shall be at least 500 kHz.

(5) Output Power Requirement

For direct sequence system, according to 15.247(b), the maximum peak output power of the transmitter shall not exceed 1 Watt. If transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(6) 100 kHz Bandwidth of Frequency Band Edges Requirement

According to 15.247(c), if any 100 kHz bandwidth outside these frequency bands, the radio frequency power that is produced by the modulation products of the spreading sequence, the information sequence and the carrier frequency shall be either at least 20 dB below that in any 100 kHz bandwidth within the band that contains the highest level of the desired power or shall not exceed the general levels specified in §15.209(a), whichever results in the lesser attenuation.

(7) Power Density Requirement

According to 15.247(d), for direct sequence systems, the transmitted power density averaged over any 1 second interval shall not be greater than 8 dBm in any 3 kHz bandwidth within these bands.

2.3 Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below :

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42-16.423	399.9-410	4.5-5.15
0.495 - 0.505 **	16.69475 - 16.69525	608-614	5.35-5.46
2.1735 - 2.1905	16.80425 - 16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475 - 156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2655-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3360-4400	Above 38.6
13.36-13.41			

** : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

2.4 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device :

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

2.5 User Information

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual.

The Federal Communications Commission Radio Frequency Interference Statement includes the following paragraph.

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio / TV technician for help.

3. SYSTEM TEST CONFIGURATION

3.1 Justification

For both radiated and conducted emissions, the system was configured for testing in a typical fashion as a customer would normally use it. The peripherals other than EUT were connected in normally standing by situation.

All measurement were intentional to maximum the emissions from EUT by varying the connection cables(if applicable), therefore, the test result is sure to meet the applicable requirement.

For portable device, the EUT was pretested in three orthogonal plans: put on table horizontally, stands vertically and side up vertically. The worst case was chosen for final test.

3.2 Devices for Tested System

EUT & accessories.

Device	Manufacture	Model	Description
Yardian Pro*	Aeon Matrix Inc.	PRO1900	--
Adapter	EDAC Power Electronics Co., Ltd	EA10681Q(T03)	1.5m UL1185 #18 shielded DC cable
AC Power Cord	Shee Line Co., Ltd	SL-6＋SL-3_H05VV-F 0.75mm-3G- BK 0.9M	0.9m Unshielded AC Power Cord

Remark "*" means equipment under test.

The EUT connected with the following peripheral devices.

Device	Manufacture	Model	Description
Notebook	Acer	N16Q2	1.8m Unshielded AC Adapter
USB	SanDisk	16GB	--
AP	BUFFALO	WHR-HP-G300N	1.8m Unshielded AC Adapter
DC Cable x 21	--	--	1.5m Unshielded DC Cable
RJ45 Cable	fujiei	ST6001	2.0m Unshielded RJ45 Cable

3.3 Configuration of Tested System

Please Refer to test setup photos.

3.4 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated fortests performed on the EUT as specified in ETSI TR 100 028 & CISPR 16-4-2:

Parameter	**Uncertainty**
All emissions , radiated	±2.28dB(30MHz≦f≦300MHz)
	±2.28dB(300MHz＜f≦1GHz)
	±2.04dB(1GHz≦f≦40GHz)
Conducted Emission	±3.34dB(9kHz≦f≦30MHz)
Emission Bandwidth / Occupied Channel Bandwidth	$\pm 2.7\times10^{-6}$ %
Radio Frequencies / Frequencies Tolerance	$\pm 2.7\times10^{-8}$
RF Output Power / Power Spectral Density / Band Edges/Out-of-Band / Unwanted Emissions , conducted	±0.78dB(9kHz≦f≦30MHz)
	±0.78dB(30MHz＜f≦1GHz)
	±0.86dB(1GHz≦f≦18GHz)
	±0.74dB(18GHz≦f≦40GHz)

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

The test result(s) does not consider the uncertainty of measurement when the test standard(s) and/or test method which refer by the labs has the limit or judgments for the test result(s).

3.5 Deviation Statement

(If any deviation from additions to or exclusions from test method must be stated)

4 RADIATED EMISSION MEASUREMENT

4.1 Applicable Standard

For unintentional radiator, the radiated emission shall comply with §15.109(a).

For intentional radiators, according to §15.247 (a), operation under this provision is limited to frequency hopping and direct sequence spread spectrum, and the out band emission shall be comply with §15.247 (d)

4.2 Measurement Procedure

A. Preliminary Measurement For Portable Devices

For portable devices, the following procedure was performed to determine the maximum emission axis of EUT:

1. With the receiving antenna is H polarization, rotate the EUT in turns with three orthogonal axes to determine the axis of maximum emission.
2. With the receiving antenna is V polarization, rotate the EUT in turns with three orthogonal axes to determine the axis of maximum emission.
3. Compare the results derived from above two steps. So, the axis of maximum emission from EUT was determined and the configuration was used to perform the final measurement.

B. Final Measurement

1. Setup the configuration per figure 1(a), 1(b) and 2 for frequencies measured below and above 1 GHz respectively. Turn on EUT and make sure that it is in normal function.
2. For emission frequencies measured below 1 GHz, a pre-scan is performed in a shielded chamber to determine the accurate frequencies of higher emissions will be checked on a open test site. As the same purpose, for emission frequencies measured above 1 GHz, a pre-scan also be performed with a 1 meter measuring distance before final test.
3. For emission frequencies measured below and above 1 GHz, set the spectrum analyzer on a 100 kHz and 1 MHz resolution bandwidth respectively for each frequency measured in step 2.
4. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0 ◦ to 360 ◦ with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again and record the highest value as a final reading. A RF test receiver is also used to confirm emissions measured.

5. Repeat step 4 until all frequencies need to be measured were complete.
6. Repeat step 5 with search antenna in vertical polarized orientations.
7. Check the three frequencies of highest emission with varying the placement of cables (if any) associated with EUT to obtain the worse case and record the result.

Figure 1 : Frequencies measured below 1 GHz configuration

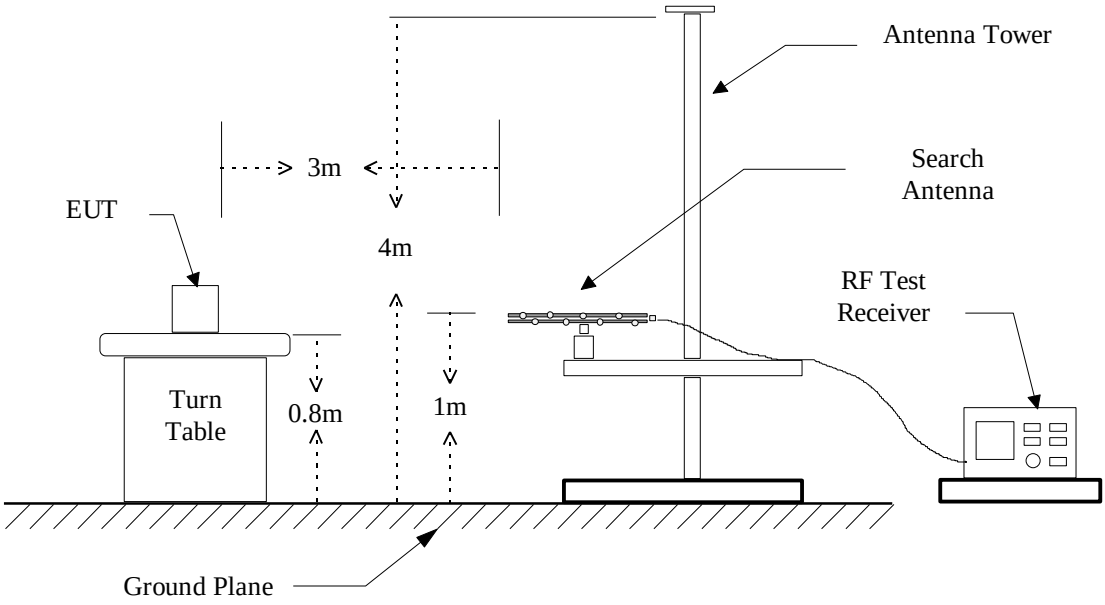
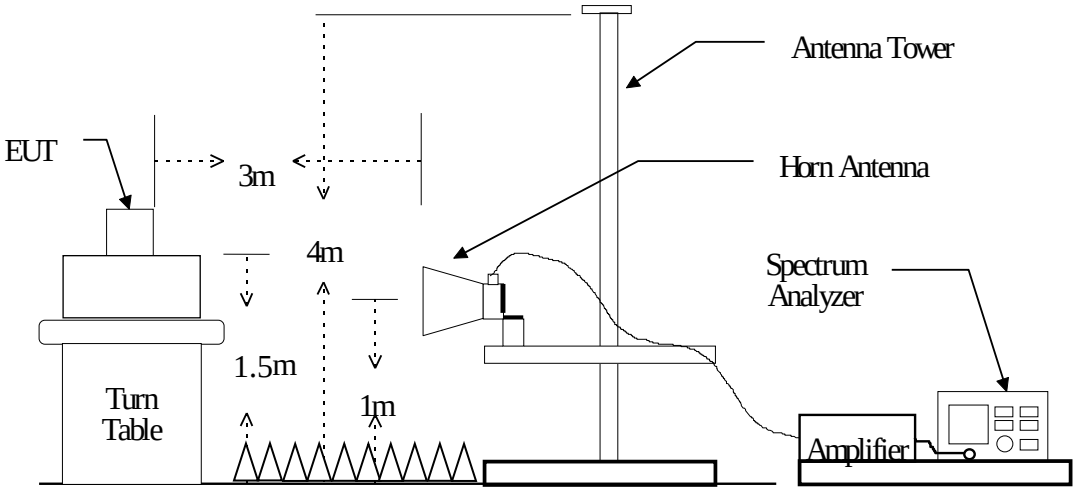


Figure 2 : Frequencies measured above 1 GHz configuration



4.3 Measuring Instrument

The following instrument are used for radiated emissions measurement:

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Test Receiver	Keysight	N9038A	2019/11/21	2020/11/20
Amplifier	HP	8447D	2019/10/04	2020/10/03
Amplifier	HP	8449B	2019/10/04	2020/10/03
Bi-Log Antenna	ETC & JYEBAO	MCTD 2786 & FAT-NM5NF5T3G 2W6	2019/08/20	2020/08/19
Horn Antenna	ETS-Lindgren	3117	2020/03/04	2021/03/03
Horn Antenna	EMCO	3116	2019/12/27	2020/12/26
Amplifier	Keysight	83051A	2019/09/02	2020/09/01

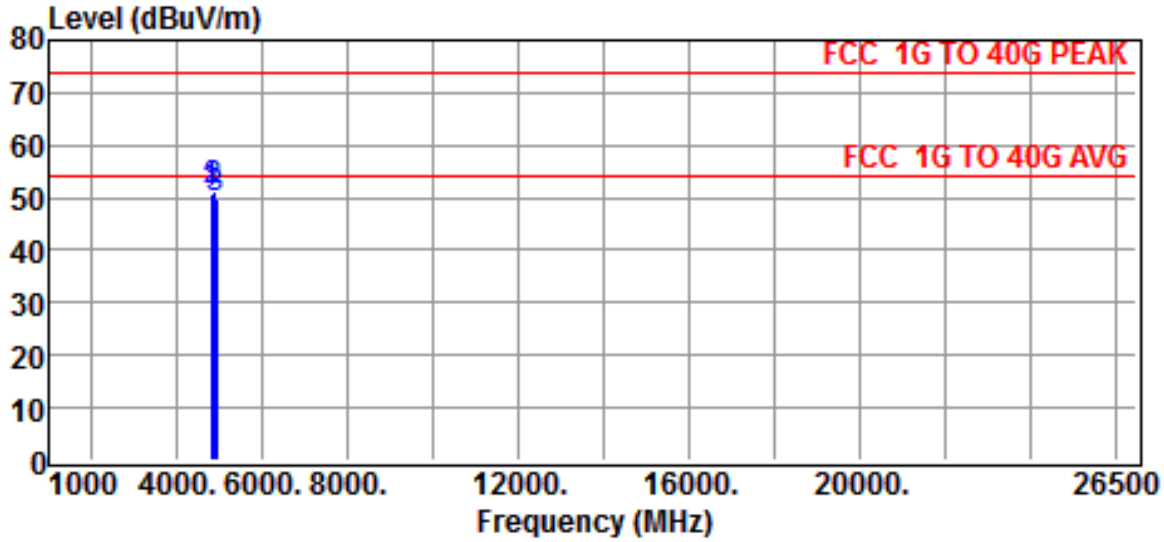
Measuring instrument setup in measured frequency band when specified detector function is used :

Frequency Band (MHz)	Instrument	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	RF Test Receiver	Quasi-Peak	120 kHz	N/A
	Spectrum Analyzer	Peak	100 kHz	100 kHz
Above 1000	Spectrum Analyzer	Peak	1 MHz	1 MHz
	Spectrum Analyzer	Average	1 MHz	10 Hz or ≥ 1/T (Note 1)

Note 1:
VBW = 10 Hz, when the duty cycle is no less than 98%.
VBW ≥ 1/T, when duty cycle is less than 98% where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

4.4 Radiated Emission Data

4.4.1 RF Portion

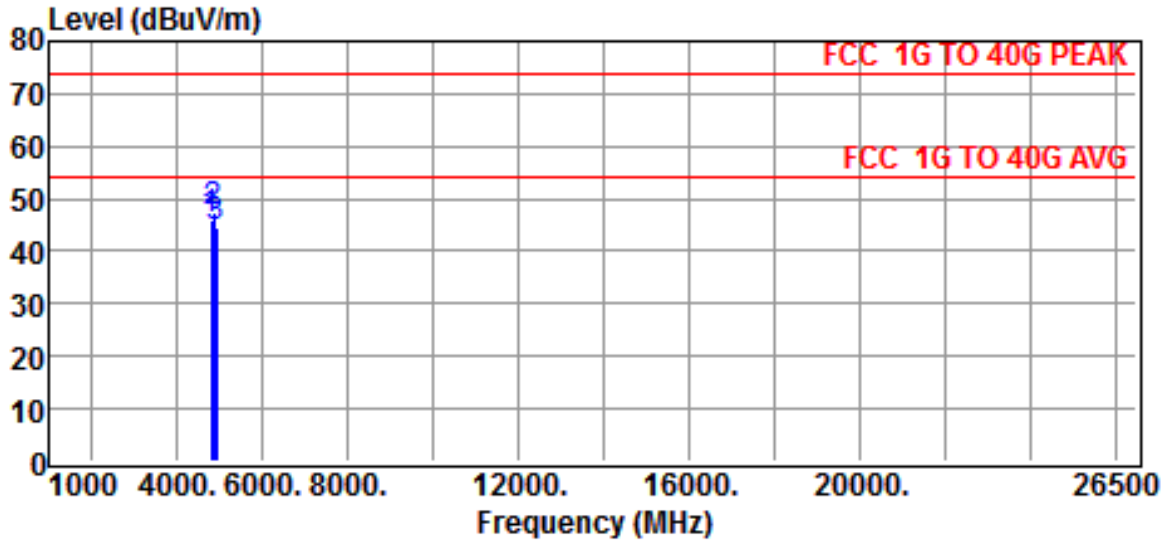


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-B		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
4824.0000	46.69	4.12	50.81	74.00	-23.19	Peak
4884.0000	47.14	4.15	51.29	74.00	-22.71	Peak
4924.0000	45.44	4.20	49.64	74.00	-24.36	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

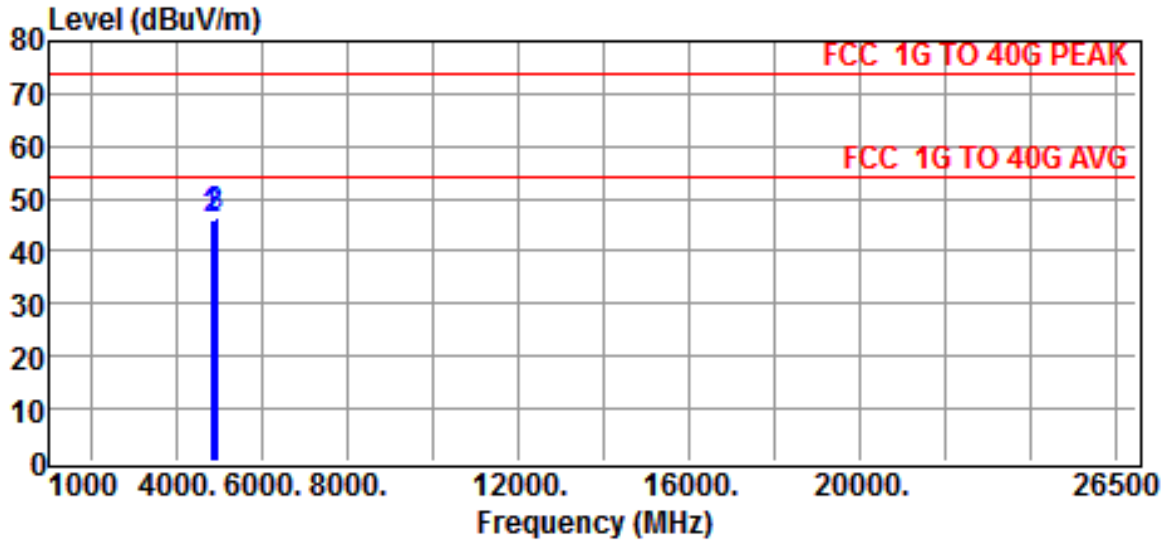


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-B		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
4824.0000	42.03	4.12	46.15	74.00	-27.85	Peak
4884.0000	43.15	4.15	47.30	74.00	-26.70	Peak
4924.0000	40.37	4.20	44.57	74.00	-29.43	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

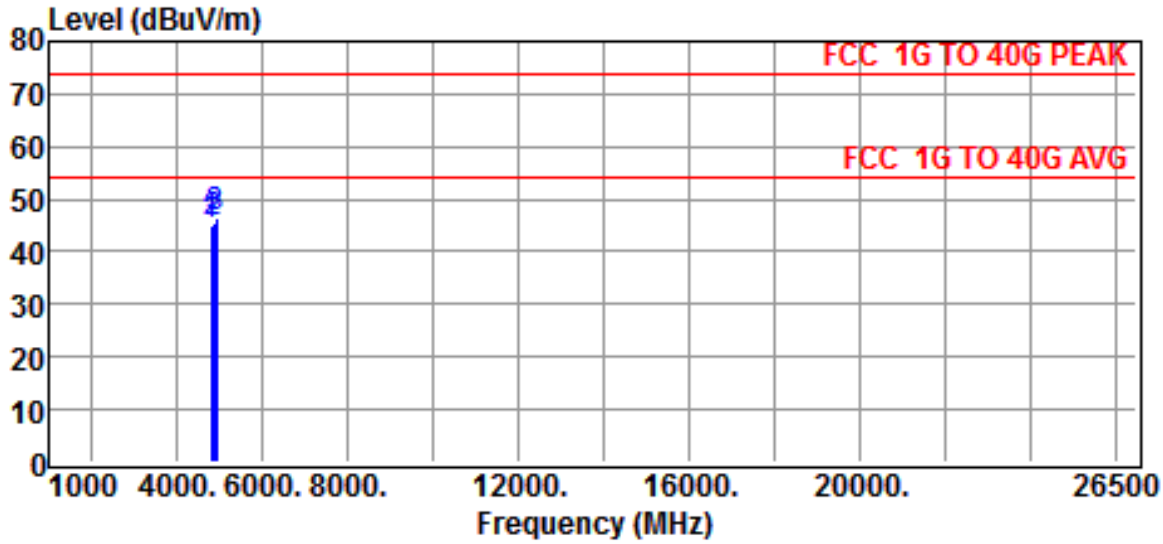


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-G		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
4824.0000	42.07	4.12	46.19	74.00	-27.81	Peak
4884.0000	41.98	4.15	46.13	74.00	-27.87	Peak
4924.0000	42.35	4.20	46.55	74.00	-27.45	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

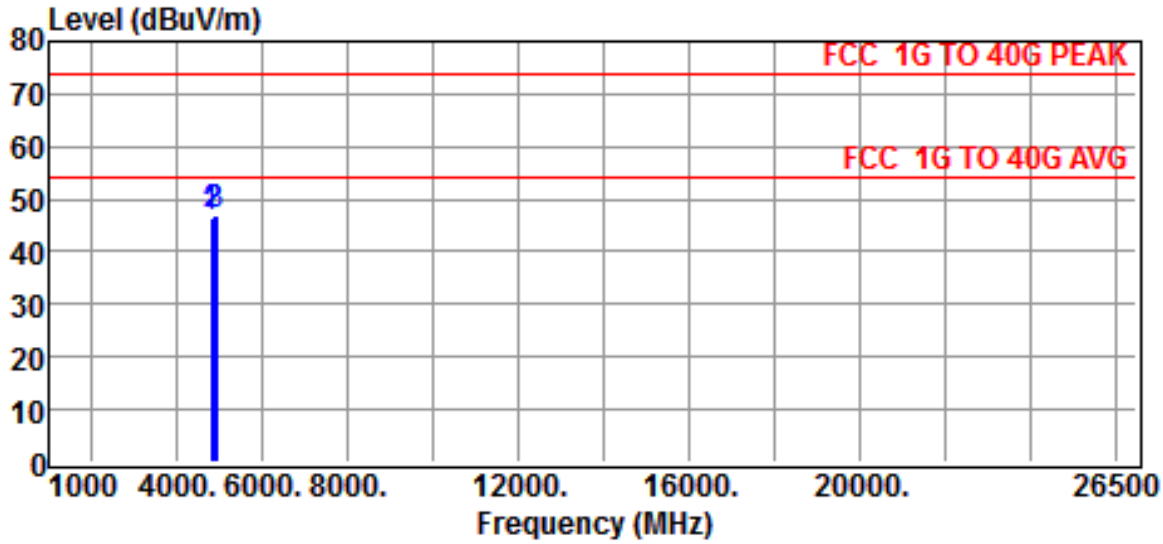


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-G		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
4824.0000	41.09	4.12	45.21	74.00	-28.79	Peak
4884.0000	41.57	4.15	45.72	74.00	-28.28	Peak
4924.0000	42.19	4.20	46.39	74.00	-27.61	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

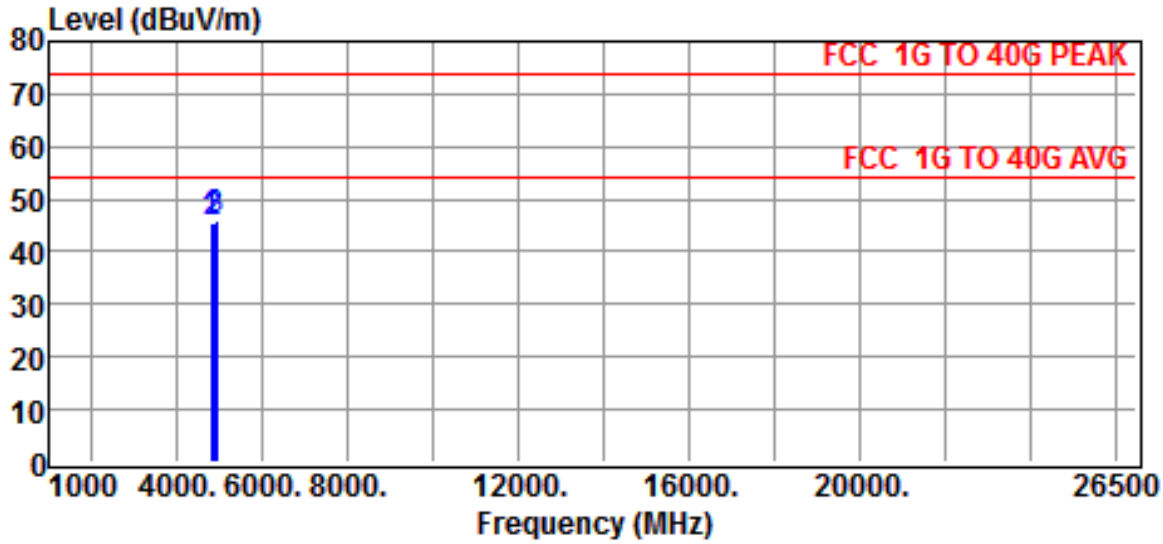


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-N20		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
4824.0000	42.15	4.12	46.27	74.00	-27.73	Peak
4884.0000	42.65	4.15	46.80	74.00	-27.20	Peak
4924.0000	42.96	4.20	47.16	74.00	-26.84	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

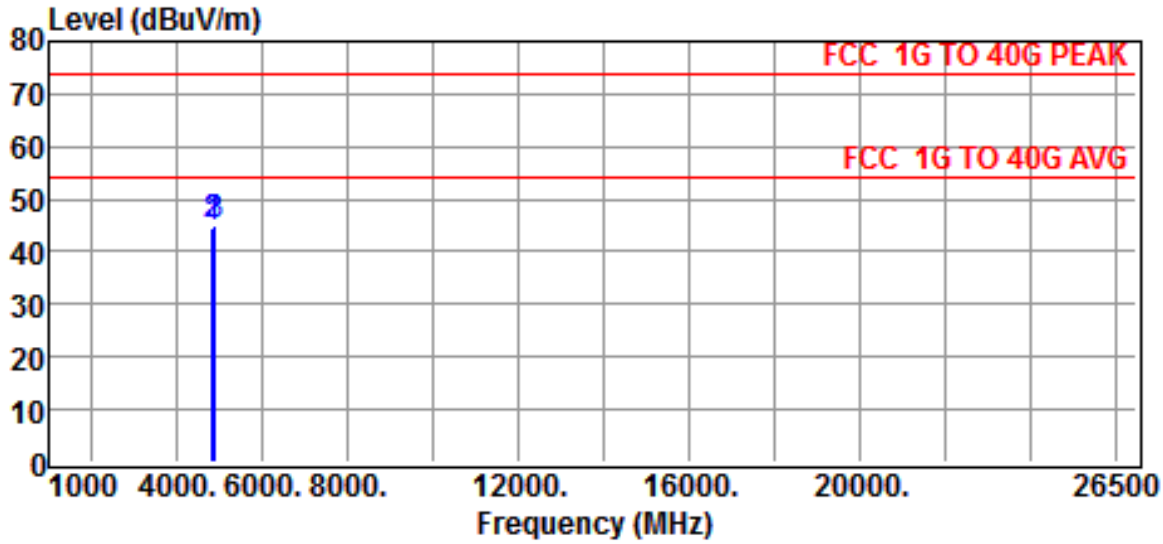


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-N20		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
4824.0000	41.33	4.12	45.45	74.00	-28.55	Peak
4884.0000	41.58	4.15	45.73	74.00	-28.27	Peak
4924.0000	41.74	4.20	45.94	74.00	-28.06	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

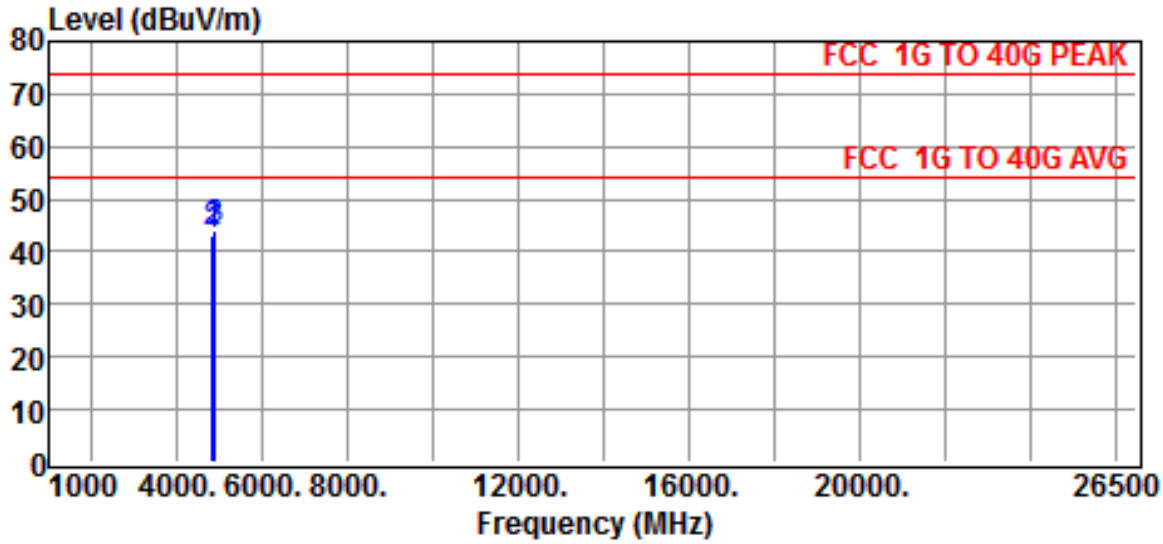


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-N40		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
4844.0000	40.50	4.19	44.69	74.00	-29.31	Peak
4884.0000	40.69	4.15	44.84	74.00	-29.16	Peak
4904.0000	40.84	4.14	44.98	74.00	-29.02	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.



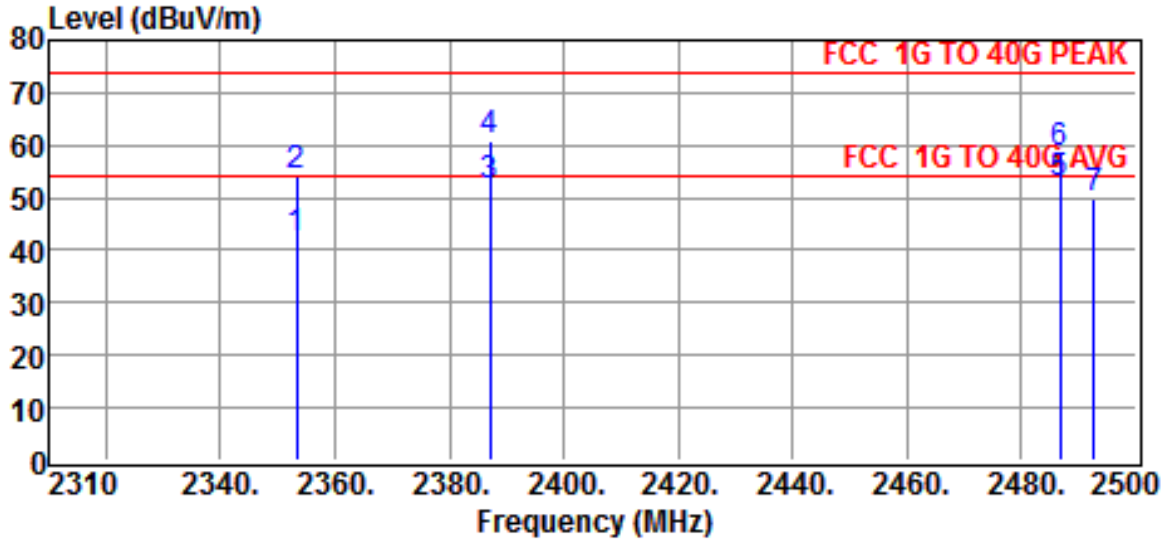
Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-N40		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
4844.0000	39.06	4.19	43.25	74.00	-30.75	Peak
4884.0000	39.58	4.15	43.73	74.00	-30.27	Peak
4904.0000	39.78	4.14	43.92	74.00	-30.08	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

4.4.2 Radiated Eimssion of Restricted bands

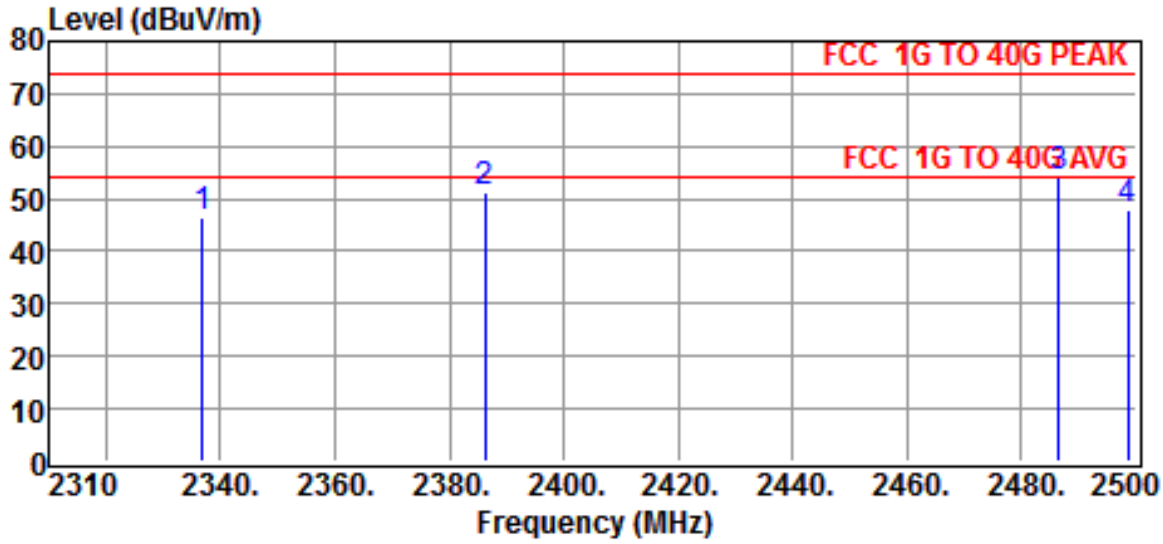


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-B		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
2353.2800	43.10	-0.96	42.14	54.00	-11.86	Average
2353.2800	55.14	-0.96	54.18	74.00	-19.82	Peak
2387.2000	52.88	-0.76	52.12	54.00	-1.88	Average
2387.2000	61.44	-0.76	60.68	74.00	-13.32	Peak
2486.8320	53.30	-0.54	52.76	54.00	-1.24	Average
2486.8320	59.20	-0.54	58.66	74.00	-15.34	Peak
2492.6630	50.24	-0.55	49.69	74.00	-24.31	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

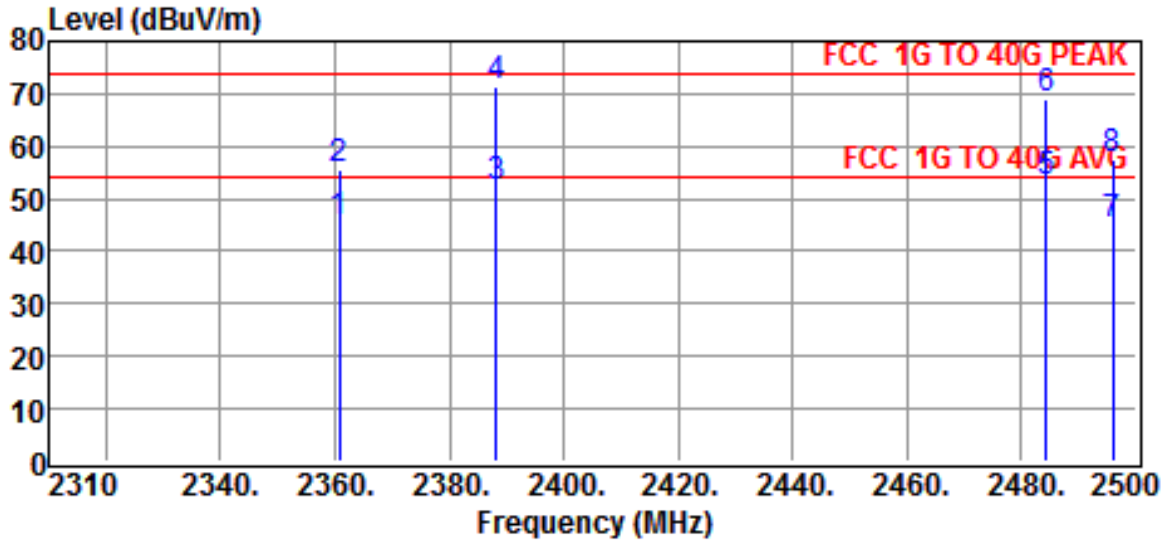


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-B		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
2336.8000	47.65	-1.05	46.60	74.00	-27.40	Peak
2386.3200	52.15	-0.76	51.39	74.00	-22.61	Peak
2486.4160	54.49	-0.54	53.95	74.00	-20.05	Peak
2498.4940	48.22	-0.55	47.67	74.00	-26.33	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

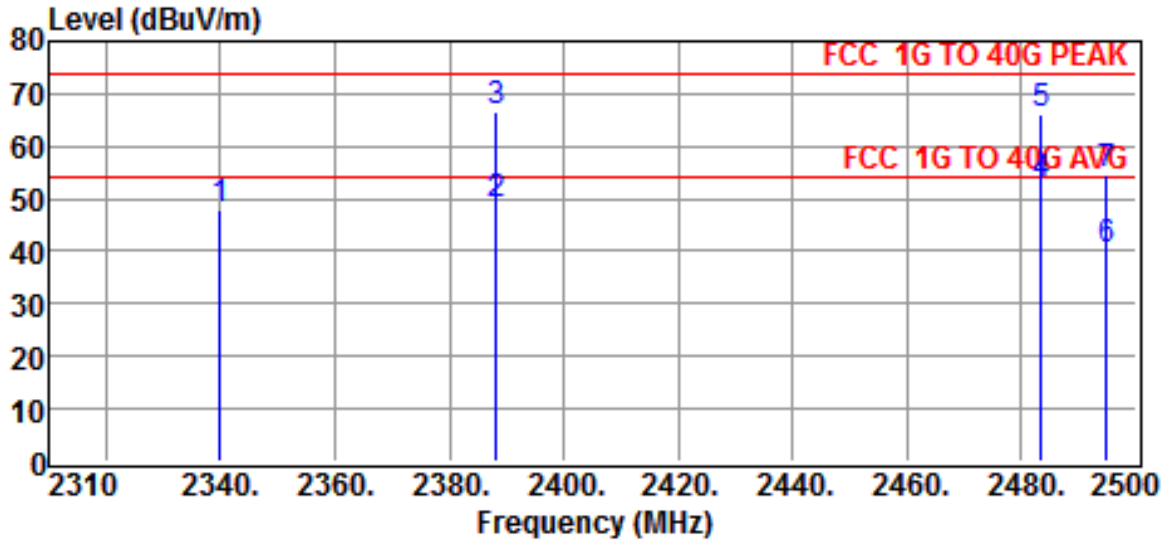


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-G		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
2360.8800	46.46	-0.92	45.54	54.00	-8.46	Average
2360.8800	56.41	-0.92	55.49	74.00	-18.51	Peak
2388.2400	53.16	-0.76	52.40	54.00	-1.60	Average
2388.2400	72.22	-0.76	71.46	74.00	-2.54	Peak
2484.3330	53.49	-0.54	52.95	54.00	-1.05	Average
2484.3330	69.57	-0.54	69.03	74.00	-4.97	Peak
2495.9950	45.66	-0.55	45.11	54.00	-8.89	Average
2495.9950	57.97	-0.55	57.42	74.00	-16.58	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

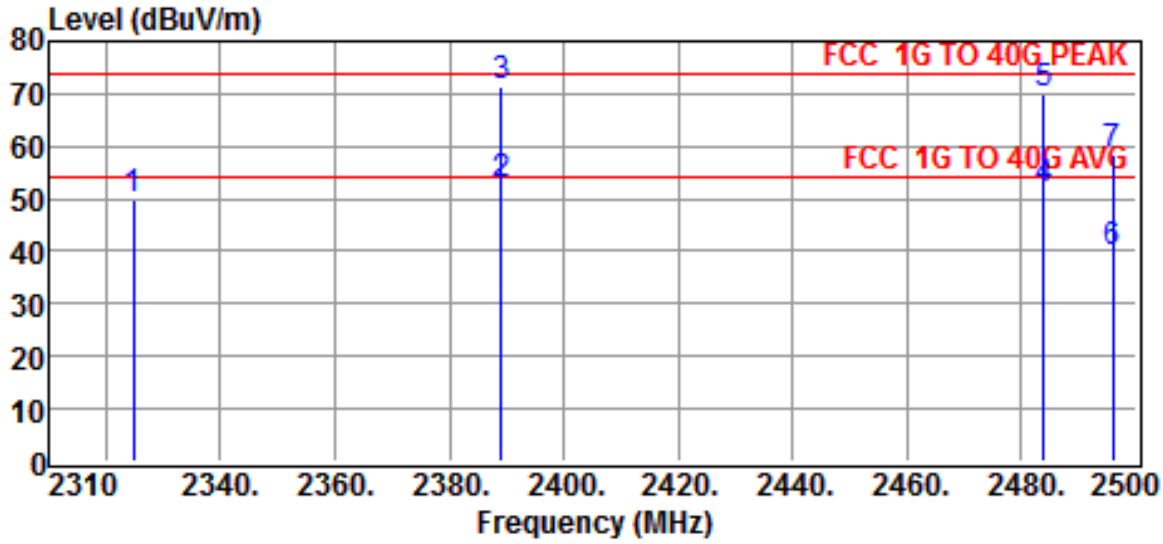


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-G		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
2339.8400	48.85	-1.03	47.82	74.00	-26.18	Peak
2388.1600	49.43	-0.76	48.67	54.00	-5.33	Average
2388.1600	67.53	-0.76	66.77	74.00	-7.23	Peak
2483.5000	53.11	-0.54	52.57	54.00	-1.43	Average
2483.5000	66.50	-0.54	65.96	74.00	-8.04	Peak
2494.7460	40.56	-0.55	40.01	54.00	-13.99	Average
2494.7460	55.15	-0.55	54.60	74.00	-19.40	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

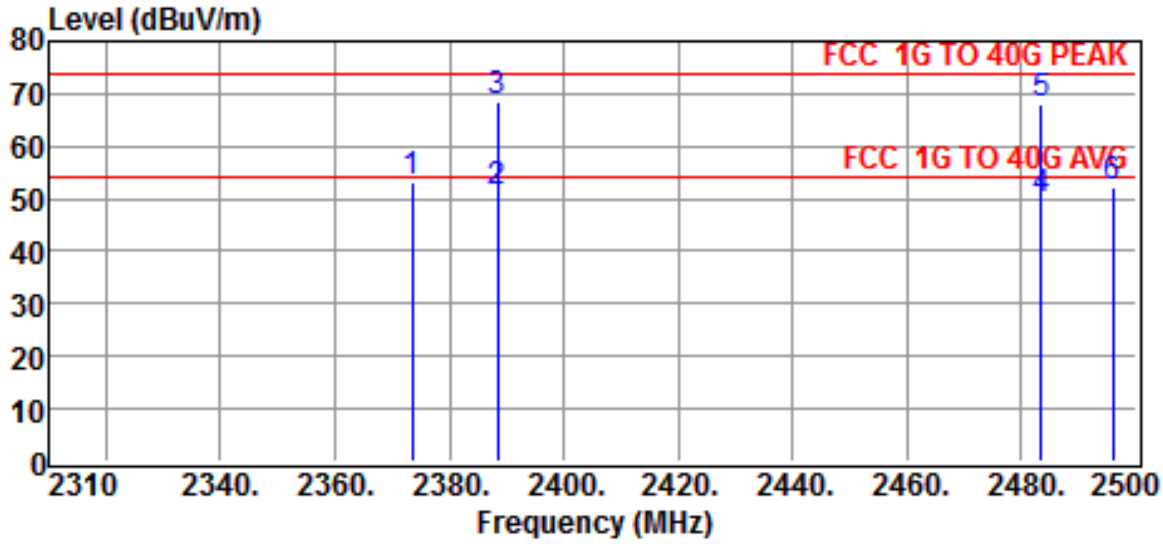


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-N20		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
2324.8800	50.89	-1.11	49.78	74.00	-24.22	Peak
2389.2000	53.28	-0.75	52.53	54.00	-1.47	Average
2389.2000	71.97	-0.75	71.22	74.00	-2.78	Peak
2483.9170	52.33	-0.54	51.79	54.00	-2.21	Average
2483.9170	70.58	-0.54	70.04	74.00	-3.96	Peak
2495.9950	40.12	-0.55	39.57	54.00	-14.43	Average
2495.9950	58.81	-0.55	58.26	74.00	-15.74	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

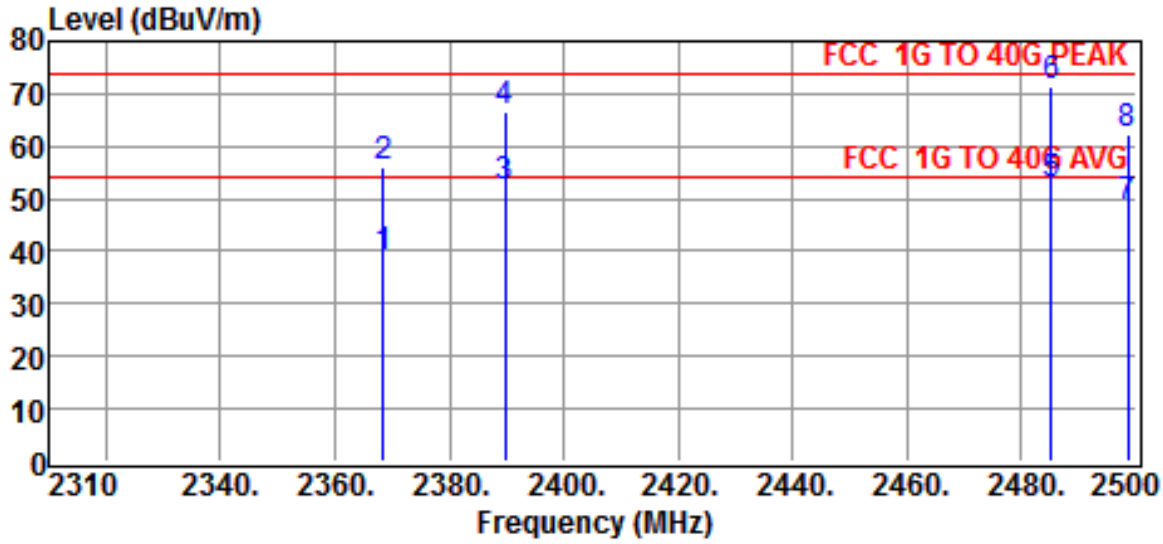


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-N20		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
2373.4400	54.11	-0.85	53.26	74.00	-20.74	Peak
2388.4800	51.79	-0.76	51.03	54.00	-2.97	Average
2388.4800	69.30	-0.76	68.54	74.00	-5.46	Peak
2483.5000	50.24	-0.54	49.70	54.00	-4.30	Average
2483.5000	68.51	-0.54	67.97	74.00	-6.03	Peak
2495.9950	52.90	-0.55	52.35	74.00	-21.65	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

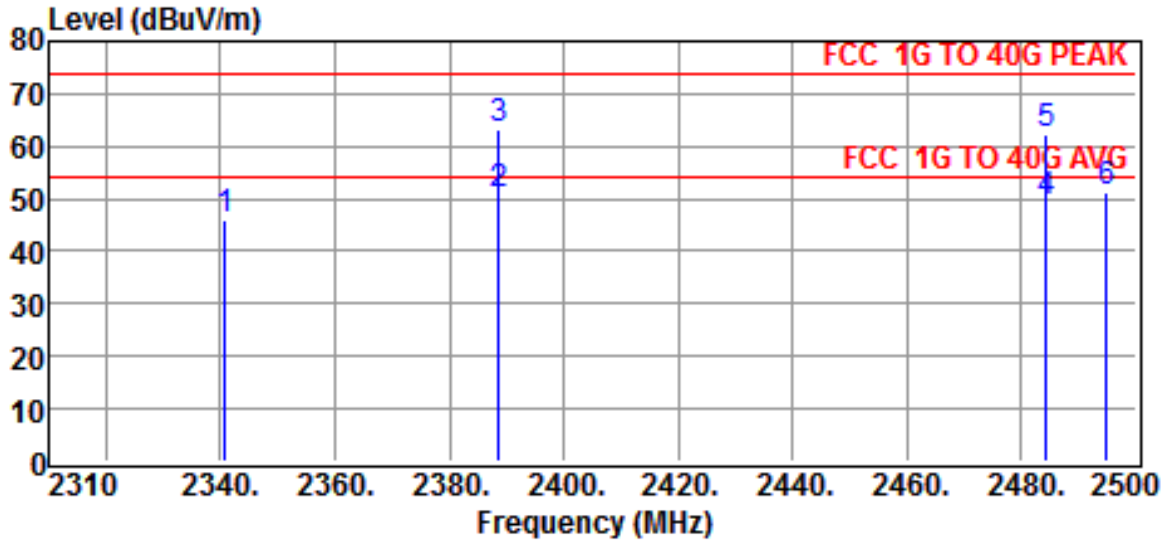


Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-N40		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
2368.4800	39.61	-0.88	38.73	54.00	-15.27	Average
2368.4800	56.95	-0.88	56.07	74.00	-17.93	Peak
2389.8400	53.06	-0.75	52.31	54.00	-1.69	Average
2389.8400	67.34	-0.75	66.59	74.00	-7.41	Peak
2485.1660	53.11	-0.54	52.57	54.00	-1.43	Average
2485.1660	71.72	-0.54	71.18	74.00	-2.82	Peak
2498.4940	49.14	-0.55	48.59	54.00	-5.41	Average
2498.4940	63.03	-0.55	62.48	74.00	-11.52	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.



Site	:Chamber #2	Date	:2020-05-25
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz(Power from Adapter)	Temp.	:25°C
Engineer	: Kazuma Ho	Humi.	:44 %
Test Mode	:WiFi-N40		
Test Mode	:		

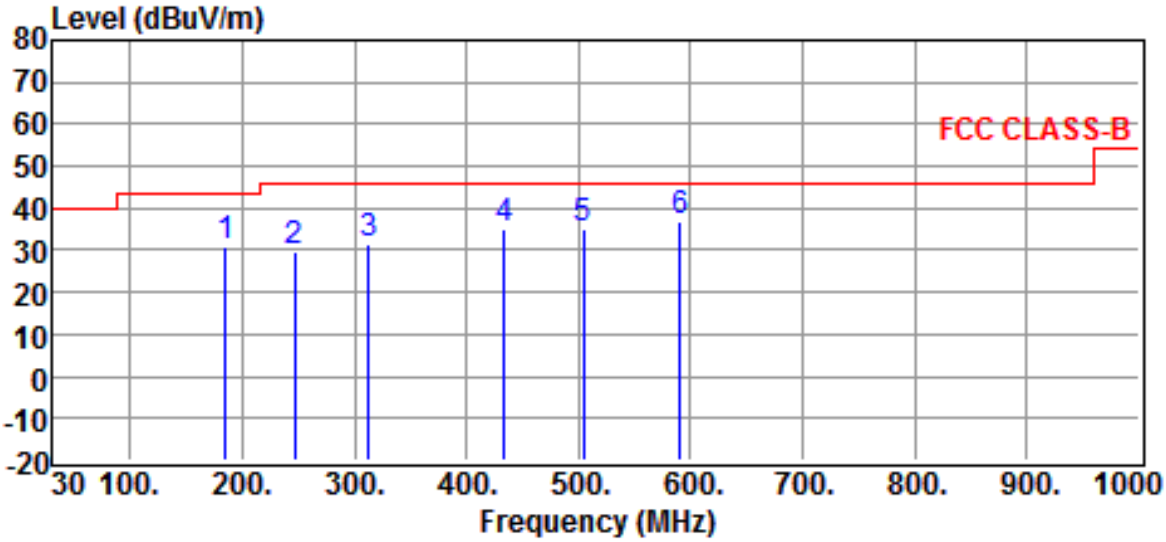
Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
2340.8800	47.18	-1.03	46.15	74.00	-27.85	Peak
2388.6400	51.30	-0.76	50.54	54.00	-3.46	Average
2388.6400	64.06	-0.76	63.30	74.00	-10.70	Peak
2484.3330	49.79	-0.54	49.25	54.00	-4.75	Average
2484.3330	62.89	-0.54	62.35	74.00	-11.65	Peak
2494.7460	51.76	-0.55	51.21	74.00	-22.79	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

4.4.3 Other Emission

a) Emission frequencies below 1 GHz

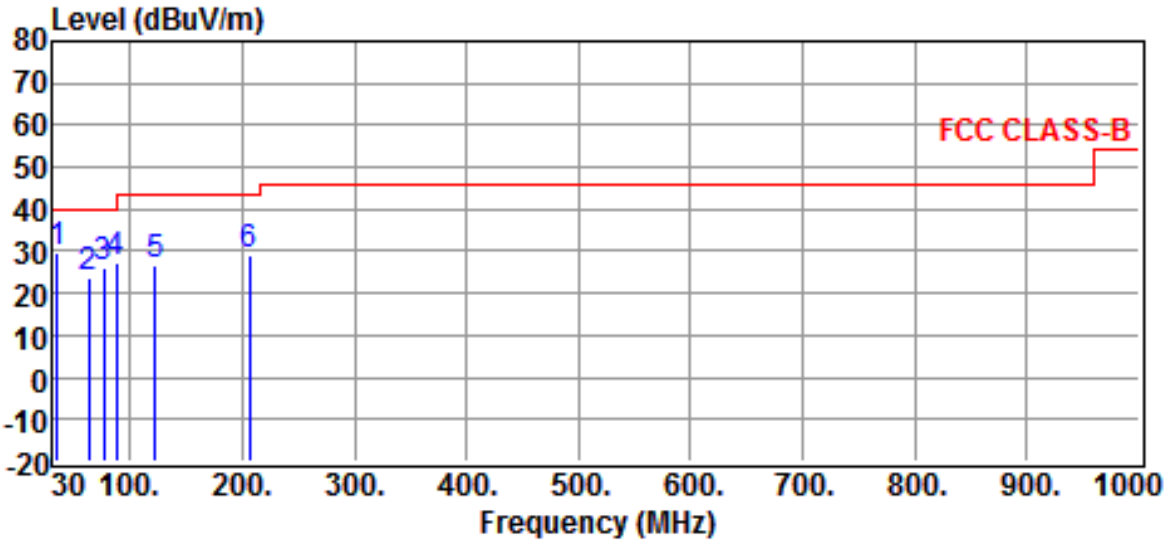


Site	:Chamber #2	Date	:2020-04-21
Limit	:FCC CLASS-B	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz	Temp.	:22°C
Engineer	: Kazuma Ho	Humi.	:69 %
Test Mode	:Mode 1-WiFi		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
185.2000	40.01	-9.40	30.61	43.50	-12.89	QP
247.2800	35.16	-5.60	29.56	46.00	-16.44	QP
312.2700	34.58	-2.82	31.76	46.00	-14.24	QP
433.5200	35.52	-0.56	34.96	46.00	-11.04	QP
504.3300	34.83	0.24	35.07	46.00	-10.93	QP
590.6600	35.31	1.62	36.93	46.00	-9.07	QP

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

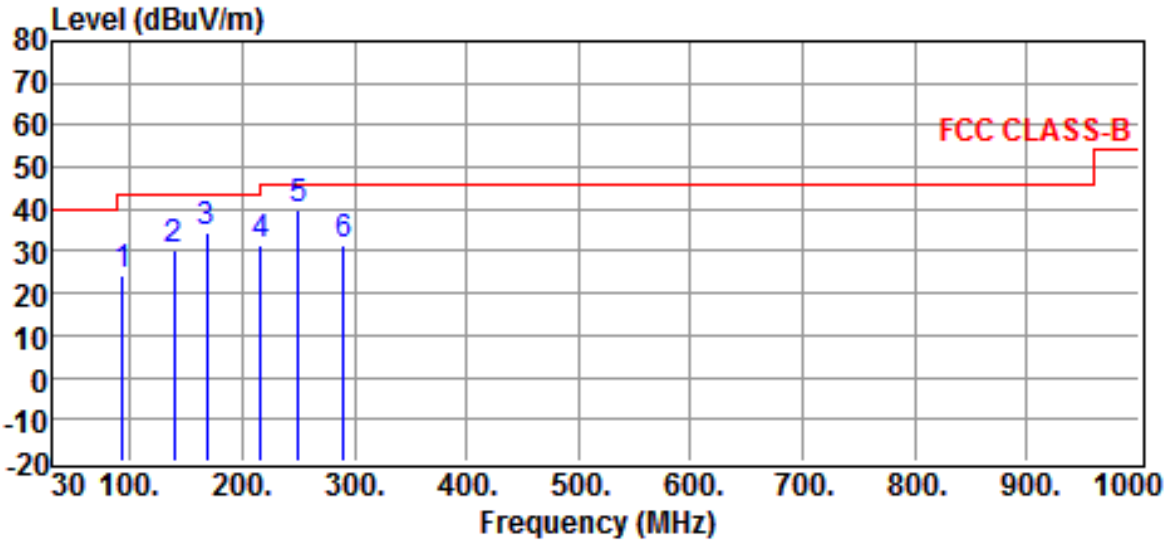


Site	:Chamber #2	Date	:2020-04-21
Limit	:FCC CLASS-B	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz	Temp.	:22°C
Engineer	: Kazuma Ho	Humi.	:69 %
Test Mode	:Mode 1-WiFi		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
34.8500	33.09	-3.26	29.83	40.00	-10.17	QP
62.9800	38.33	-14.35	23.98	40.00	-16.02	QP
76.5600	39.24	-13.13	26.11	40.00	-13.89	QP
87.2300	38.66	-11.47	27.19	40.00	-12.81	QP
122.1500	34.90	-8.00	26.90	43.50	-16.60	QP
206.5400	36.03	-6.81	29.22	43.50	-14.28	QP

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

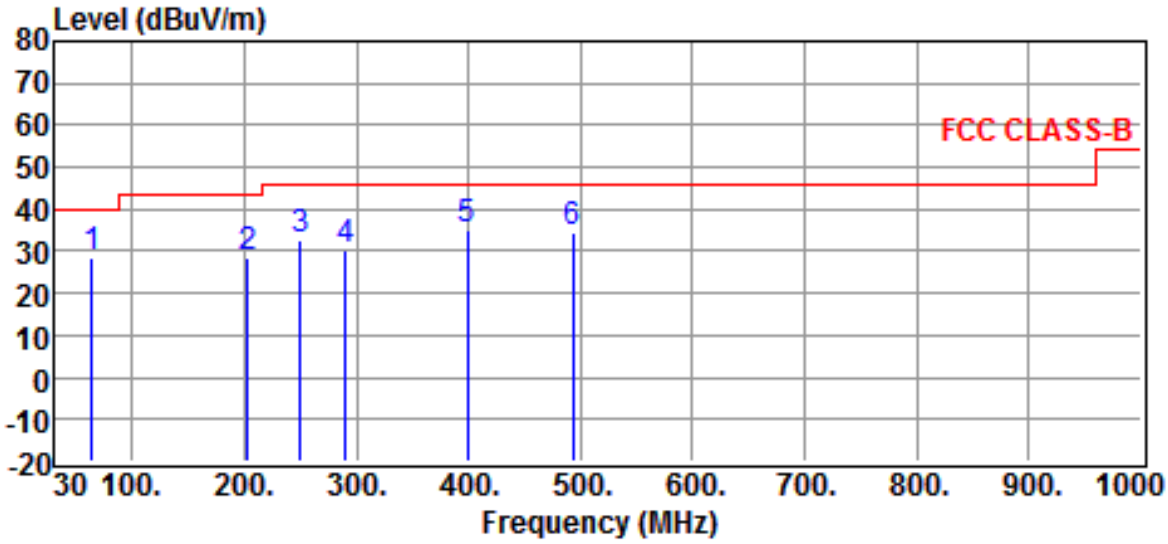


Site	:Chamber #2	Date	:2020-04-21
Limit	:FCC CLASS-B	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz	Temp.	:22°C
Engineer	: Kazuma Ho	Humi.	:69 %
Test Mode	:Mode 2-RJ45		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
93.0500	35.12	-10.70	24.42	43.50	-19.08	QP
139.6100	37.69	-7.46	30.23	43.50	-13.27	QP
168.7100	43.04	-8.29	34.75	43.50	-8.75	QP
216.2400	38.70	-7.03	31.67	46.00	-14.33	QP
250.1900	44.88	-5.02	39.86	46.00	-6.14	QP
289.9600	35.00	-3.43	31.57	46.00	-14.43	QP

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.



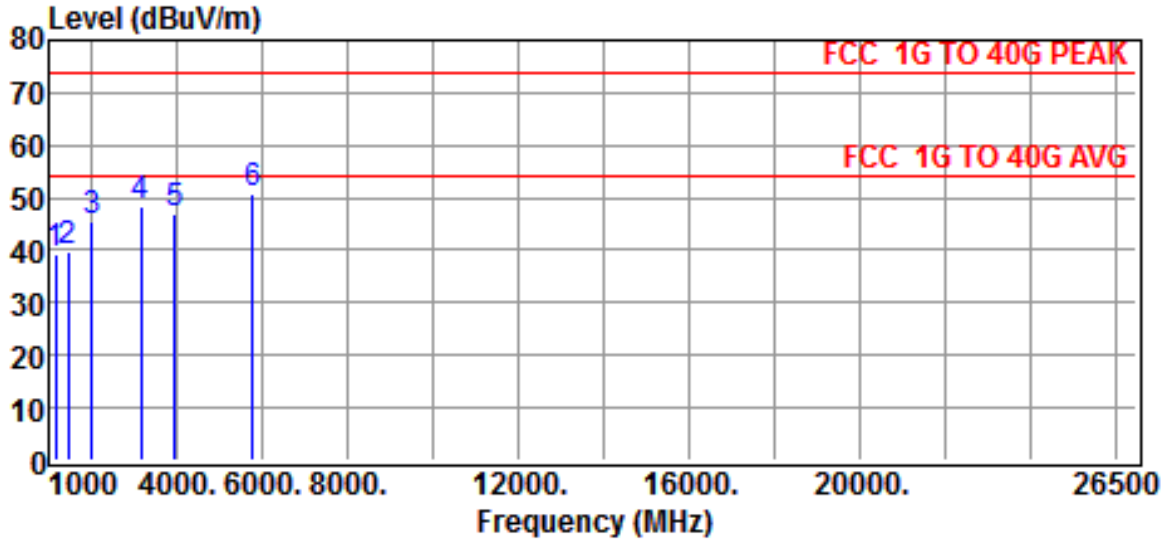
Site	:Chamber #2	Date	:2020-04-21
Limit	:FCC CLASS-B	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz	Temp.	:22°C
Engineer	: Kazuma Ho	Humi.	:69 %
Test Mode	:Mode 2-RJ45		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
63.9500	42.73	-14.12	28.61	40.00	-11.39	QP
202.6600	36.25	-7.64	28.61	43.50	-14.89	QP
250.1900	37.45	-5.02	32.43	46.00	-13.57	QP
290.9300	33.89	-3.37	30.52	46.00	-15.48	QP
399.5700	35.88	-0.98	34.90	46.00	-11.10	QP
493.6600	34.62	0.13	34.75	46.00	-11.25	QP

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

b) Emission frequencies above 1 GHz

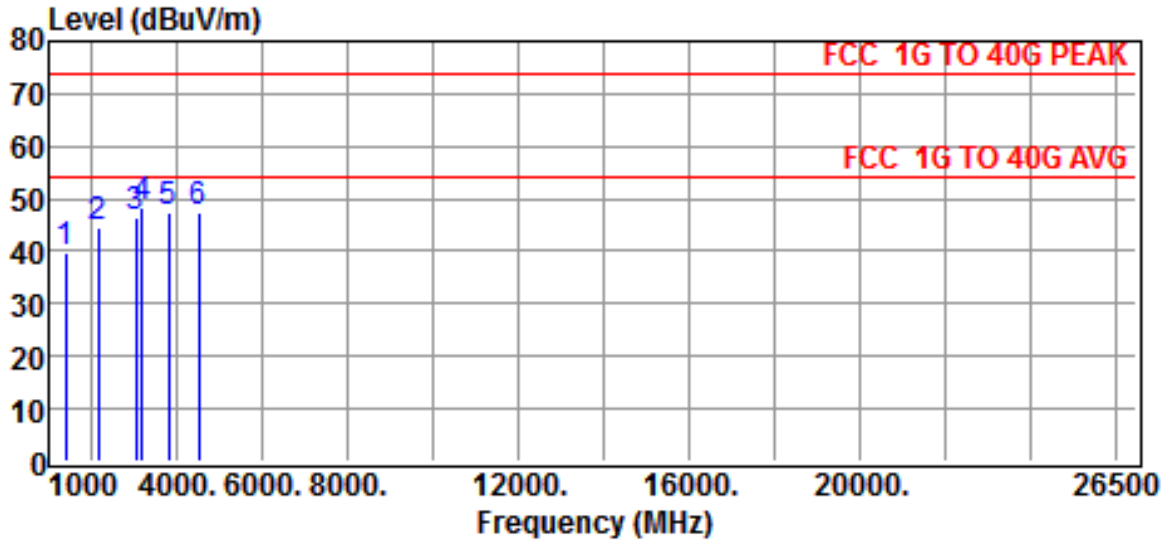


Site	:RF CHAMBER #2	Date	:2020-04-29
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:HORIZONTAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz	Temp.	:18°C
Engineer	: Kazuma Ho	Humi.	:74 %
Test Mode	:Mode 1-WiFi		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
1151.4740	46.71	-7.57	39.14	74.00	-34.86	Peak
1454.4210	46.34	-6.46	39.88	74.00	-34.12	Peak
2009.8250	47.48	-1.86	45.62	74.00	-28.38	Peak
3171.1250	45.78	2.49	48.27	74.00	-25.73	Peak
3953.7400	44.52	2.45	46.97	74.00	-27.03	Peak
5771.4250	45.15	5.52	50.67	74.00	-23.33	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.



Site	:RF CHAMBER #2	Date	:2020-04-29
Limit	:FCC 1G TO 40G PEAK	Ant. Pol.	:VERTICAL
EUT	:Yardian Pro	Model	:PRO1900
Power Rating	:120Vac/60Hz	Temp.	:18°C
Engineer	: Kazuma Ho	Humi.	:74 %
Test Mode	:Mode 1-WiFi		
Test Mode	:		

Freq MHz	Reading dBuV	Correction Factor dB	Result dBuV/m	Limits dBuV/m	Over limit dB	Detector
1405.9600	46.40	-6.53	39.87	74.00	-34.13	Peak
2167.1350	46.21	-1.51	44.70	74.00	-29.30	Peak
3055.1720	45.53	1.13	46.66	74.00	-27.34	Peak
3207.4070	44.86	3.54	48.40	74.00	-25.60	Peak
3816.3470	44.64	2.63	47.27	74.00	-26.73	Peak
4526.7770	43.44	3.87	47.31	74.00	-26.69	Peak

Note :

1. Result = Reading + Corrected Factor
2. Average Result = Peak Result + Duty Factor ( )
3. Corrected Factor = Antenna Factor + Cable Loss - Amplifier Gain (if any)
4. The margin value=Limit - Result
5. Above 1Ghz : Peak measurements are compared to the average limit - as peak measurements are below the average limit, they also comply with the peak limit.

c) Emission frequencies below 30MHz (9kHz - 30MHz)

According to exploratory test no any obvious emissions were detected from 9 kHz to 30MHz. All emissions were greater than 20 dB below the limit. Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 m open are 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.

4.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor, High Pass Filter Loss(if used) and Cable Loss, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

where

Corrected Factor = Antenna FACTOR + Cable Loss + High Pass Filter Loss - Amplifier Gain

5 CONDUCTED EMISSION MEASUREMENT

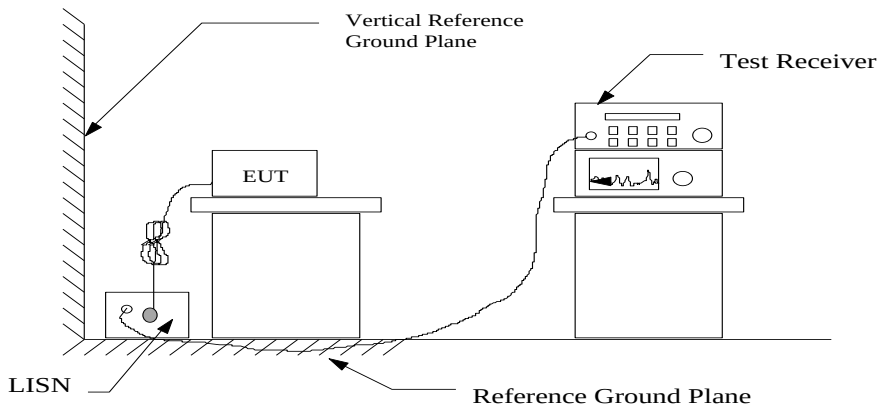
5.1 Description

For unintentional and intentional device, Line Conducted Emission Limits are in accordance to §15.107(a) and §15.207(a) respectively. Both Limits are identical specification.

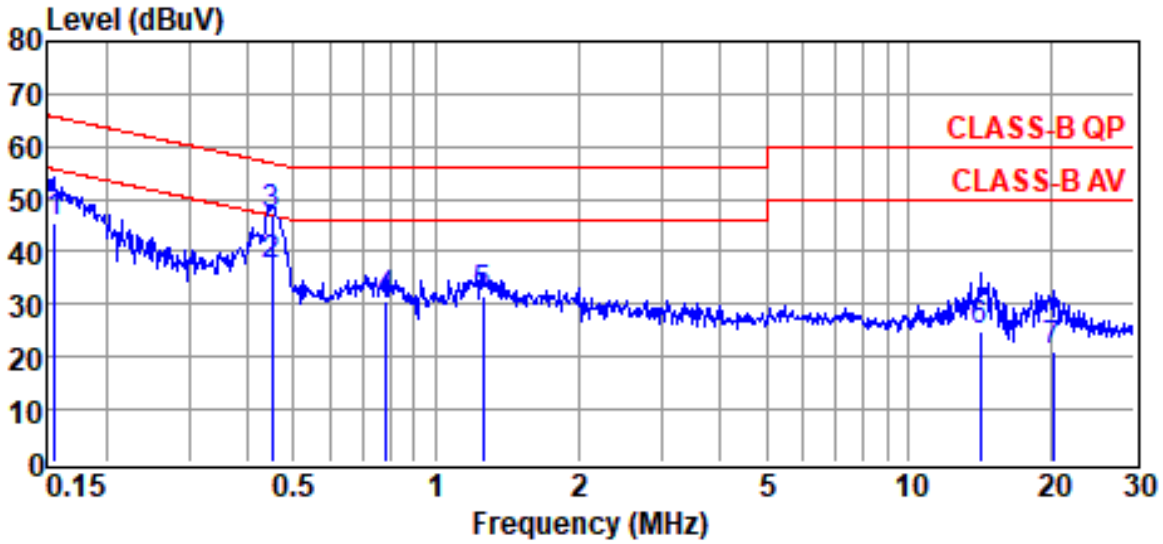
5.2 Measurement Procedure

1. Setup the configuration per figure 3.
2. A preliminary scan with a spectrum monitor is performed to identify the frequency of emission that has the highest amplitude relative to the limit by operating the EUT in selected modes of operation, typical cable positions, and with a typical system configuration.
3. Record the 6 or 8 highest emissions relative to the limit.
4. Measure each frequency obtained from step 3 by a test receiver set on quasi peak detector function, and then record the accuracy frequency and emission level. If all emissions measured in the specified band are attenuated more than 20 dB from the limit, this step would be ignored, and the peak detector function would be used.
5. Confirm the highest three emissions with variation of the EUT cable configuration and record the final data.
6. Repeat all above procedures on measuring each operation mode of EUT.

Figure 3 : Conducted emissions measurement configuration



5.3 Conducted Emission Data

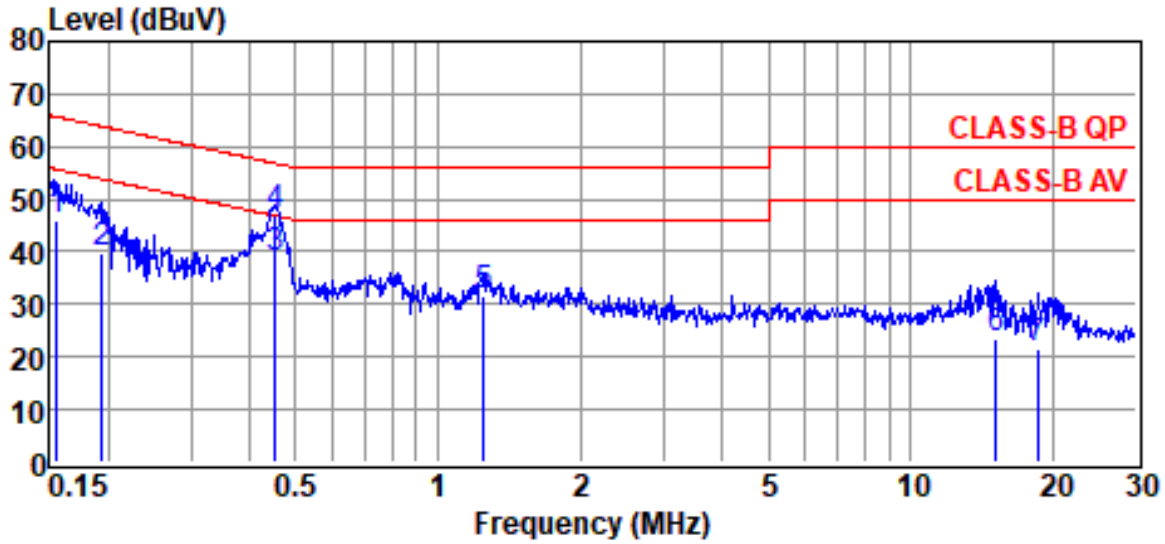


Site	: conducted #1	Date	: 2020-04-16
Condition	: CLASS-B QP	LISN	: NEUTRAL
Tem / Hum	: 24 ℃ / 62%	Test Mode	: Mode 1-WiFi
EUT	: Yardian Pro		
Power Rating	: 120Vac/60Hz(Power from Adapter)		
Engineer	: Kazuma Ho	Model	: PRO1900

Freq (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBuV)	Limit Line (dBuV)	Over Limit (dB)	Remark
0.1557	35.70	9.98	45.68	65.69	-20.01	QP
0.4492	27.53	9.97	37.50	46.89	-9.39	Average
0.4492	36.78	9.97	46.75	56.89	-10.14	QP
0.7835	20.89	10.00	30.89	56.00	-25.11	QP
1.2550	21.48	10.02	31.50	56.00	-24.50	QP
14.1380	14.75	10.24	24.99	60.00	-35.01	QP
20.2700	10.52	10.36	20.88	60.00	-39.12	QP

Note :

1. Result = Reading + Factor
2. Factor = LISN Factor + Cable Loss+ Pulse Limiter Factor

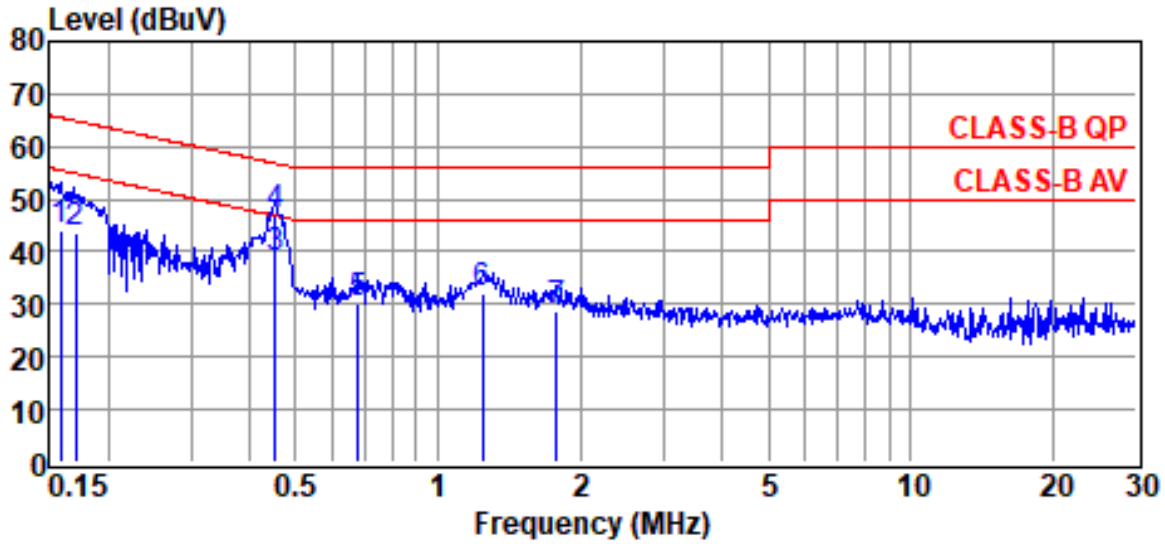


Site	: conducted #1	Date	: 2020-04-16
Condition	: CLASS-B QP	LISN	: LINE
Tem / Hum	: 24 ℃ / 62%	Test Mode	: Mode 1-WiFi
EUT	: Yardian Pro		
Power Rating	: 120Vac/60Hz(Power from Adapter)		
Engineer	: Kazuma Ho	Model	: PRO1900

Freq (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBuV)	Limit Line (dBuV)	Over Limit (dB)	Remark
0.1565	35.80	9.97	45.77	65.65	-19.88	QP
0.1945	29.97	9.95	39.92	63.84	-23.92	QP
0.4516	28.97	9.95	38.92	46.85	-7.93	Average
0.4516	37.02	9.95	46.97	56.85	-9.88	QP
1.2490	21.71	9.99	31.70	56.00	-24.30	QP
15.1460	13.06	10.17	23.23	60.00	-36.77	QP
18.5240	11.46	10.20	21.66	60.00	-38.34	QP

Note :

1. Result = Reading + Factor
2. Factor = LISN Factor + Cable Loss+ Pulse Limiter Factor

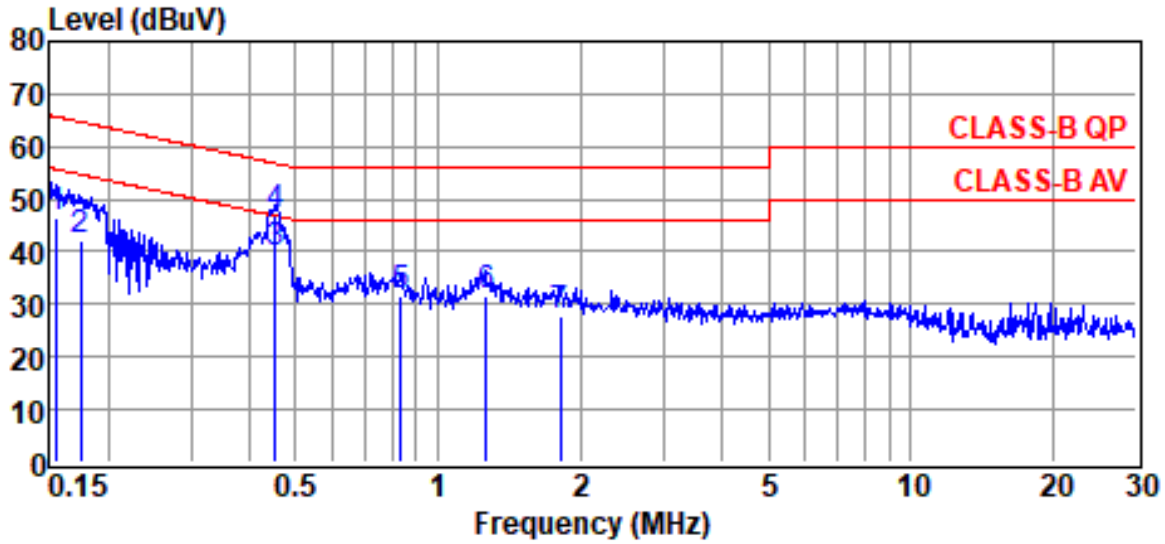


Site	: conducted #1	Date	: 2020-04-16
Condition	: CLASS-B QP	LISN	: NEUTRAL
Tem / Hum	: 24 ℃ / 62%	Test Mode	: Mode 2-RJ45
EUT	: Yardian Pro		
Power Rating	: 120Vac/60Hz(Power from Adapter)		
Engineer	: Kazuma Ho	Model	: PRO1900

Freq (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBuV)	Limit Line (dBuV)	Over Limit (dB)	Remark
0.1590	34.06	9.98	44.04	65.52	-21.48	QP
0.1712	33.51	9.98	43.49	64.90	-21.41	QP
0.4516	28.79	9.97	38.76	46.85	-8.09	Average
0.4516	37.12	9.97	47.09	56.85	-9.76	QP
0.6790	20.04	9.99	30.03	56.00	-25.97	QP
1.2420	21.86	10.02	31.88	56.00	-24.12	QP
1.7810	18.72	10.05	28.77	56.00	-27.23	QP

Note :

1. Result = Reading + Factor
2. Factor = LISN Factor + Cable Loss+ Pulse Limiter Factor



Site	: conducted #1	Date	: 2020-04-16
Condition	: CLASS-B QP	LISN	: LINE
Tem / Hum	: 24 ℃ / 62%	Test Mode	: Mode 2-RJ45
EUT	: Yardian Pro		
Power Rating	: 120Vac/60Hz(Power from Adapter)		
Engineer	: Kazuma Ho	Model	: PRO1900

Freq (MHz)	Reading (dBuV)	Factor (dB)	Emission Level (dBuV)	Limit Line (dBuV)	Over Limit (dB)	Remark
0.1565	36.44	9.97	46.41	65.65	-19.24	QP
0.1749	32.04	9.96	42.00	64.72	-22.72	QP
0.4540	29.65	9.95	39.60	46.80	-7.20	Average
0.4540	37.19	9.95	47.14	56.80	-9.66	QP
0.8349	21.42	9.98	31.40	56.00	-24.60	QP
1.2620	21.43	9.99	31.42	56.00	-24.58	QP
1.8190	17.86	10.02	27.88	56.00	-28.12	QP

Note :

1. Result = Reading + Factor
2. Factor = LISN Factor + Cable Loss+ Pulse Limiter Factor

5.4 Result Data Calculation

The result data is calculated by adding the LISN Factor to the measured reading. The basic equation with a sample calculation is as follows:

RESULT = READING + LISN FACTOR

Assume a receiver reading of 22.5 dBμV is obtained, and LISN Factor is 0.1 dB, then the total of disturbance voltage is 22.6 dBμV.

RESULT = 22.5 + 0.1 = 22.6 dBμV
Level in μV = Common Antilogarithm[(22.6 dBμV)/20]
= 13.48 μV

5.5 Conducted Measurement Equipment

The following test equipment are used during the conducted test .

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
EMI Test Receiver	Rohde & Schwarz	ESCI	2020/01/08	2021/01/07
LISN	Schwarzbeck	NSLK 8127 PLC	2019/12/17	2020/12/16
PLUSE LIMITER (10dB)	Schwarzbeck	VTSD 9561 F-N	2020/05/04	2021/05/03

6 ANTENNA REQUIREMENT

6.1 Standard Applicable

For intentional device, according to §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.

And according to §15.247 (b)(4), if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.2 Antenna Construction and Directional Gain

The antenna is conected to the main PCB and installed inside the houseing, no consideration of replacement.

Please refer to the construction Photo for details.

7 EMISSION BANDWIDTH MEASUREMENT

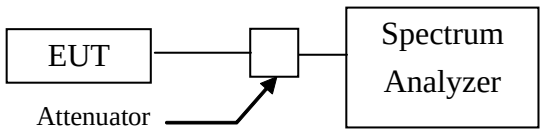
7.1 Standard Applicable

According to 15.247(a)(2), for direct sequence system, the minimum 6dB bandwidth shall be at least 500 kHz.

7.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 4 without connection to measurement instrument. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value. The settings of spectrum analyzer is as followings.
   1) Set RBW = 100 kHz.
   2) Set the video bandwidth (VBW) ≥ 3 x RBW.
   3) Detector = Peak.
   4) Trace mode = max hold.
   5) Sweep = auto couple.
   6) Allow the trace to stabilize.
   7) 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.
3. Repeat above procedures until all frequencies measured were complete.

Figure 4: Measurement configuration.



7.3 Measurement Equipment

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Test Receiver	Rohde & Schwarz	ESU 40	2020/04/09	2021/04/08

7.4 Measurement Data

Test Date : May 07 , 2020 Temperature : 26 °C Humidity : 56 %

A. 802.11B @1Mbps

a) Channel Low: 6 dB Emission Bandwidth is 10.090 MHz
b) Channel LMid: 6 dB Emission Bandwidth is 10.040 MHz
c) Channel High: 6 dB Emission Bandwidth is 10.090 MHz

B. 802.11G @6Mbps

a) Channel Low: 6 dB Emission Bandwidth is 15.140 MHz
b) Channel LMid: 6 dB Emission Bandwidth is 15.090 MHz
c) Channel High: 6 dB Emission Bandwidth is 15.000 MHz

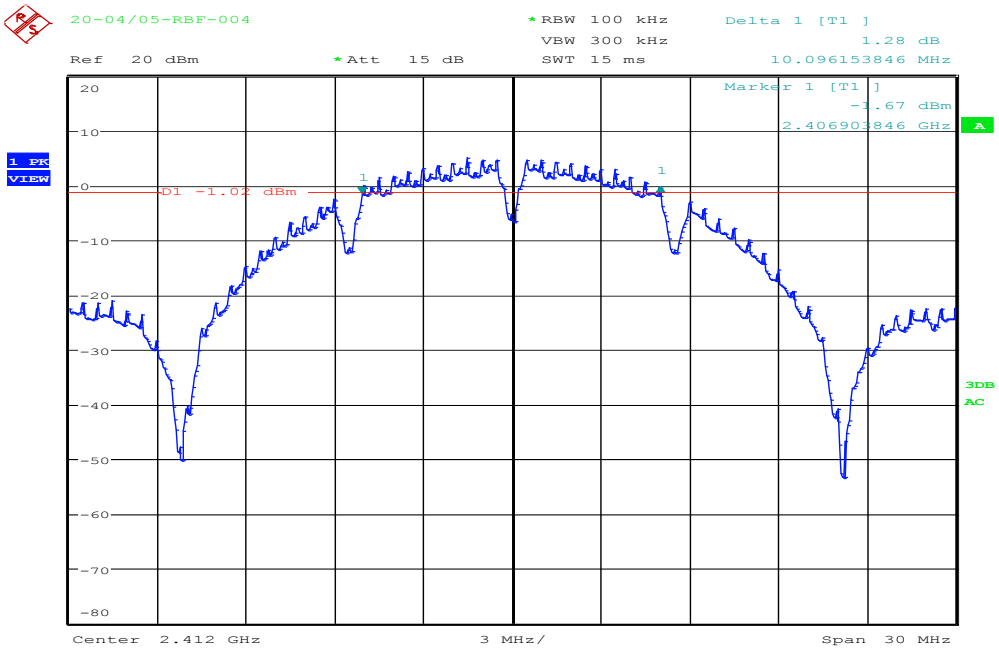
C. 802.11n HT-20 @6.5Mbps

a) Channel Low: 6 dB Emission Bandwidth is 15.090 MHz
b) Channel LMid: 6 dB Emission Bandwidth is 15.090 MHz
c) Channel High: 6 dB Emission Bandwidth is 15.040 MHz

D. 802.11n HT-40 @13.5Mbps

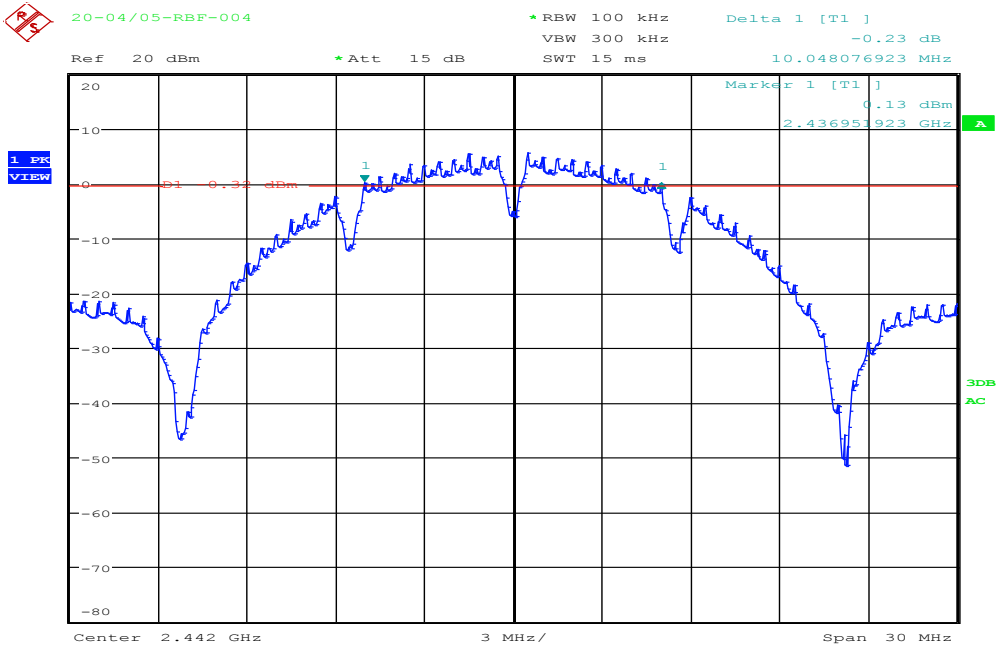
a) Channel Low: 6 dB Emission Bandwidth is 33.890 MHz
b) Channel LMid: 6 dB Emission Bandwidth is 35.010 MHz
c) Channel High: 6 dB Emission Bandwidth is 35.010 MHz

802.11 b/ Channel Low



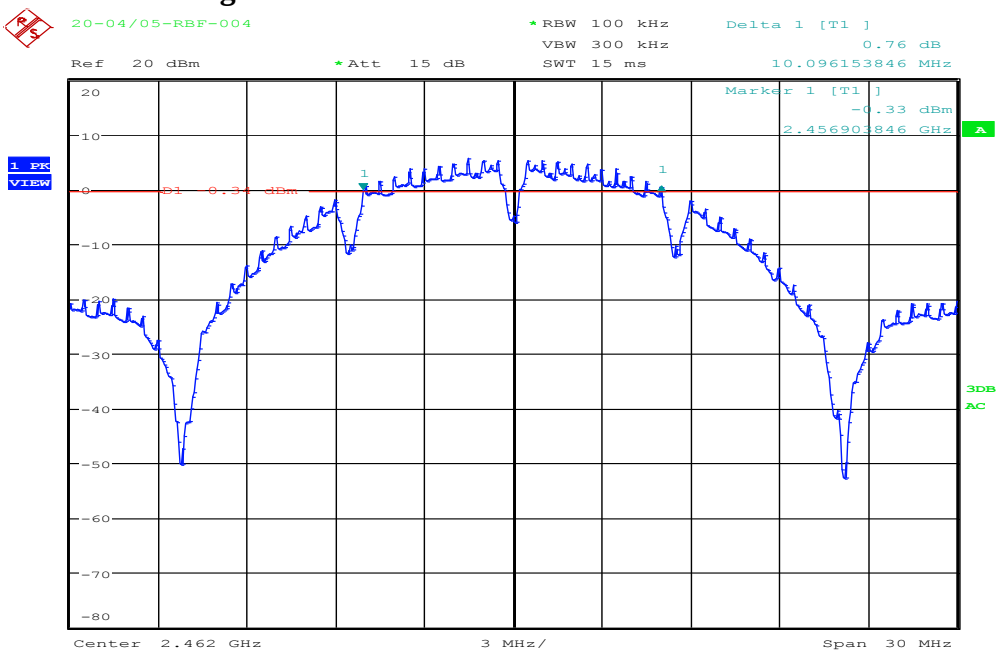
Date: 7.MAY.2020 14:35:52

802.11 b / Channel Mid



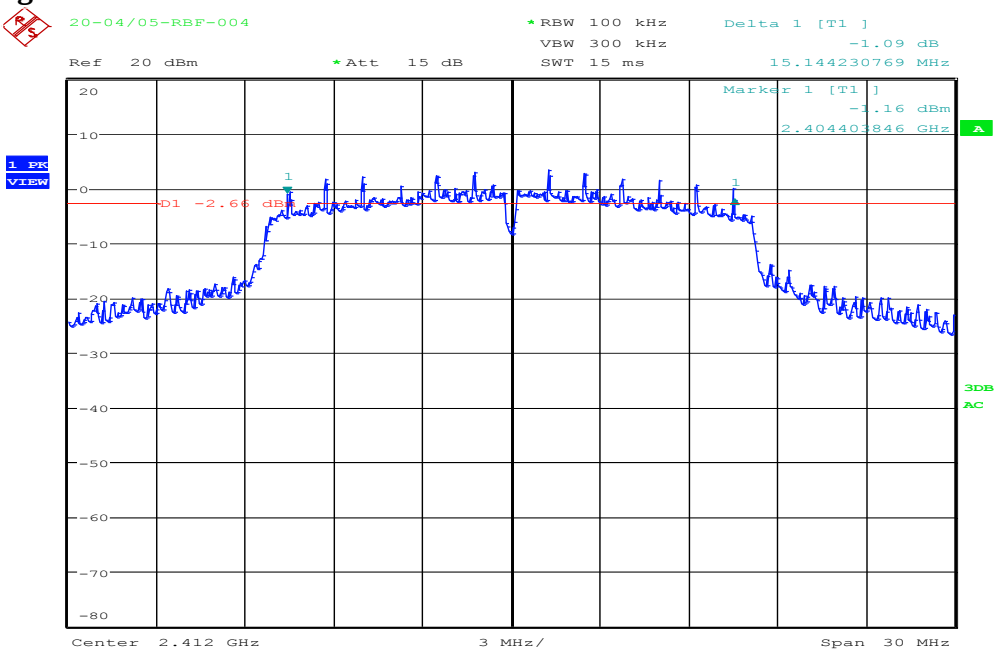
Date: 7.MAY.2020 15:38:17

802.11 b / Channel High



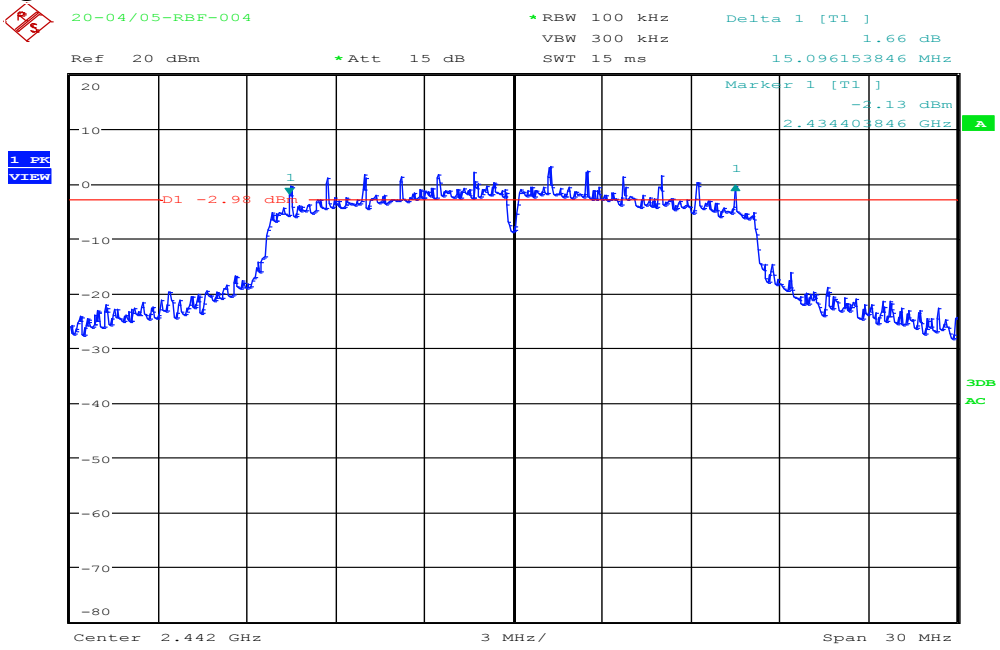
Date: 7.MAY.2020 15:49:03

802.11 g/ Channel Low



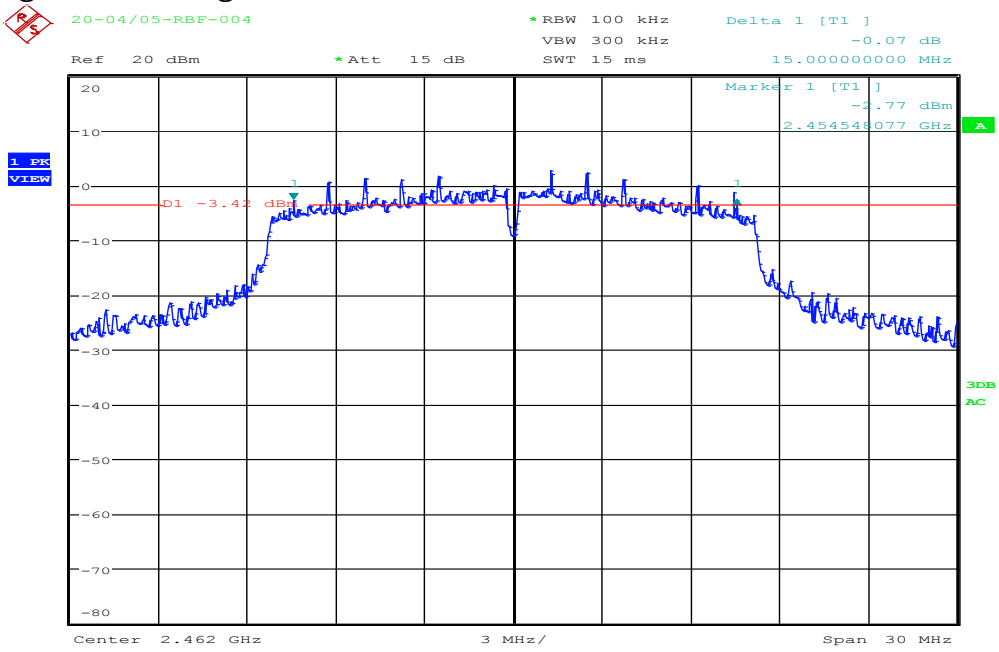
Date: 7.MAY.2020 16:20:43

802.11 g / Channel Mid



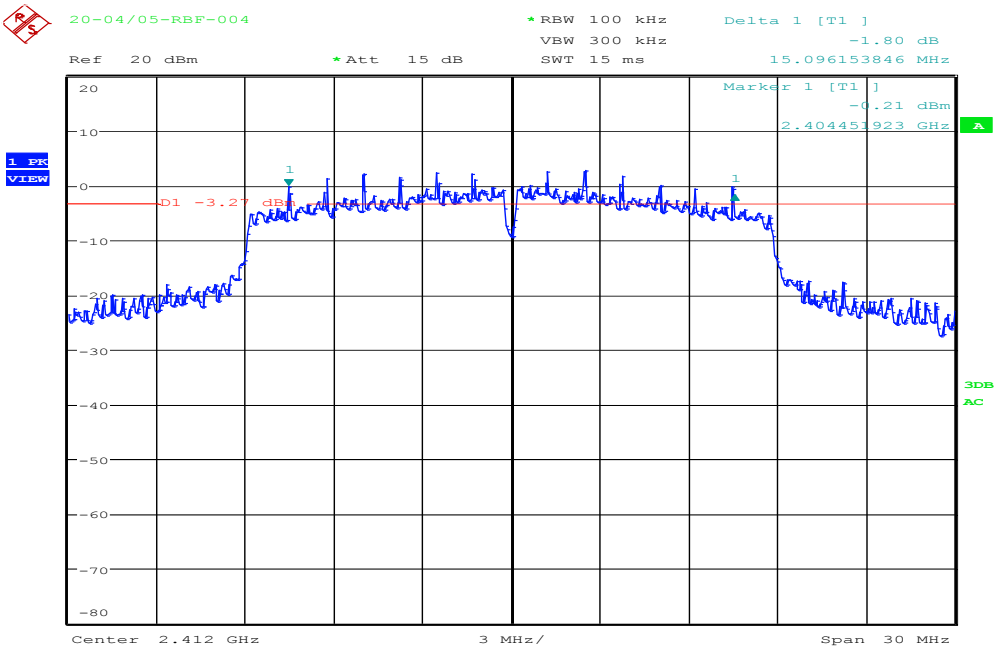
Date: 7.MAY.2020 16:28:13

802.11 g / Channel High



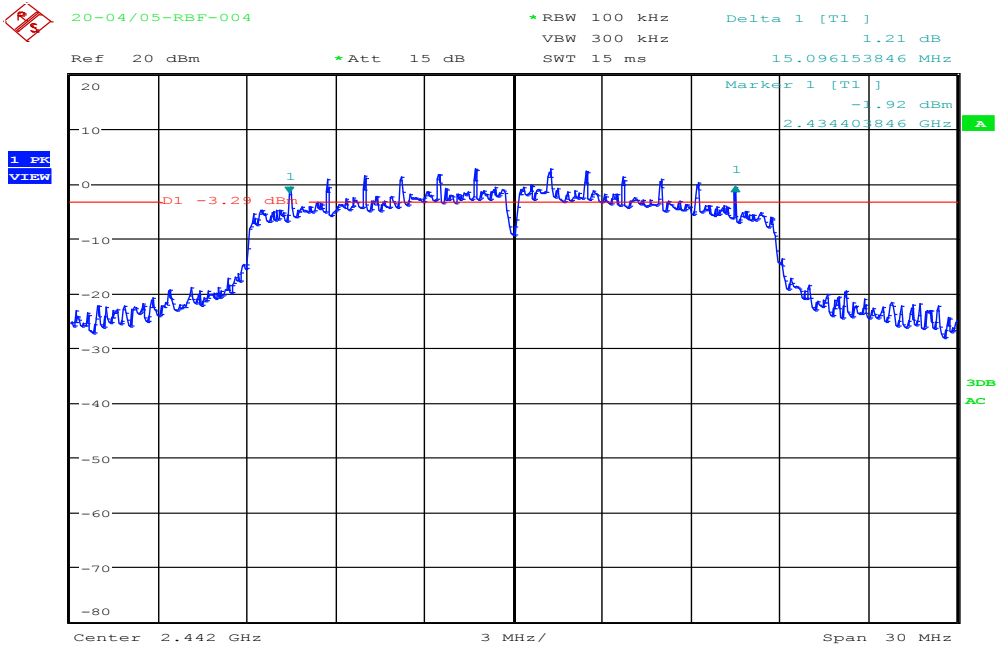
Date: 7.MAY.2020 16:36:45

802.11 n20/ Channel Low



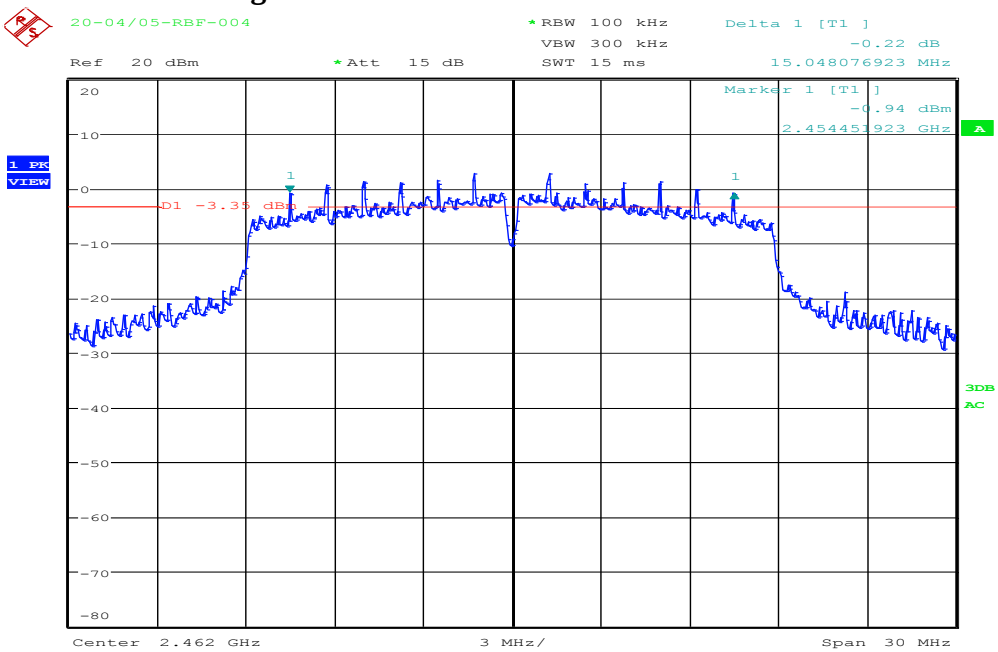
Date: 7.MAY.2020 17:06:43

802.11 n20/ Channel Mid



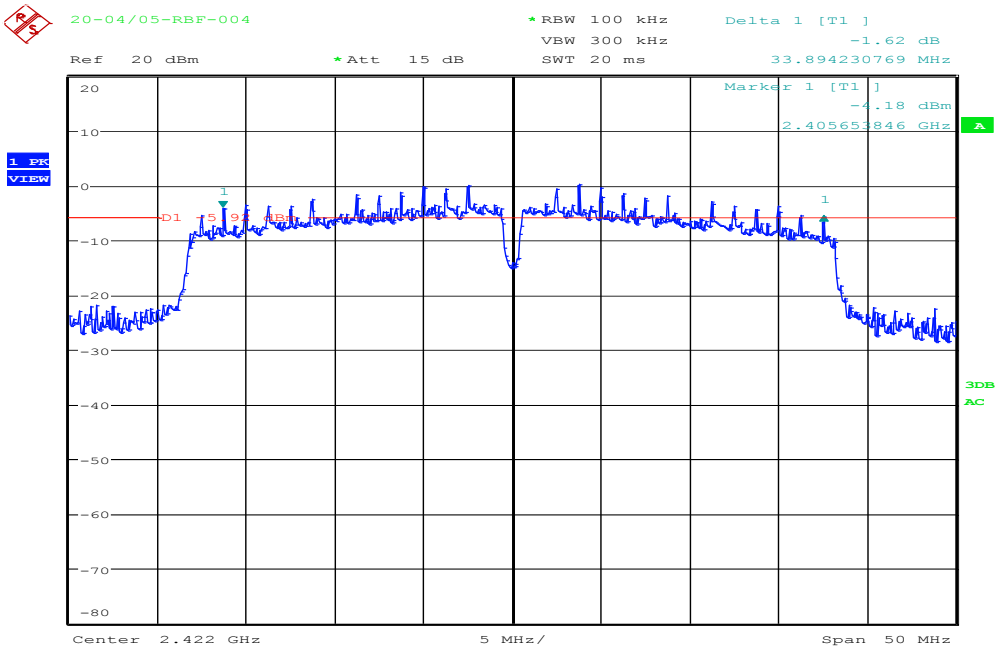
Date: 7.MAY.2020 17:12:20

802.11 n20 / Channel High



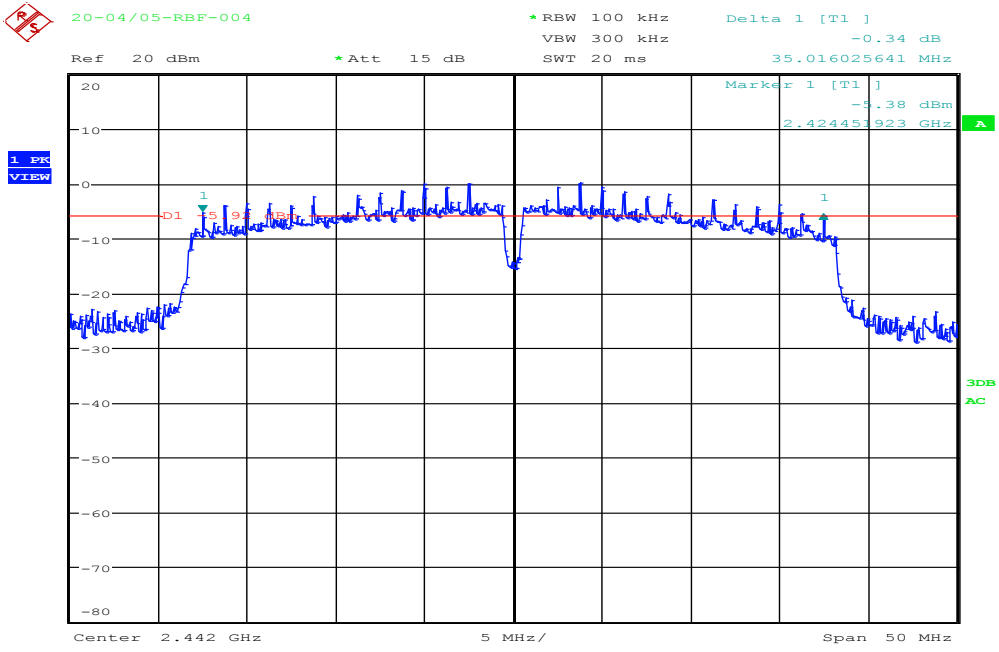
Date: 7.MAY.2020 17:22:37

802.11 n40/ Channel Low



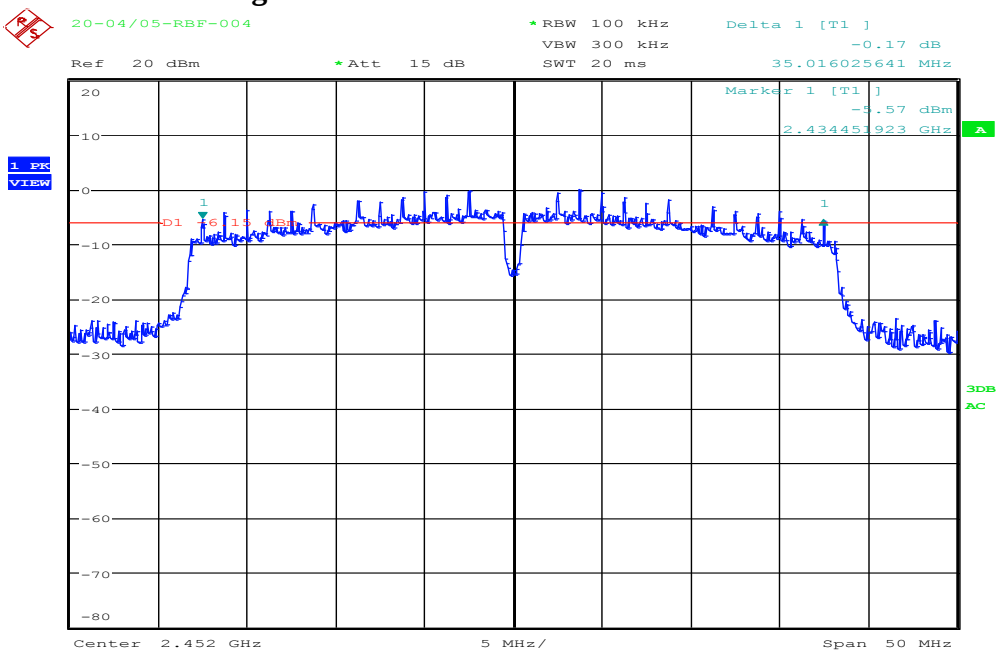
Date: 7.MAY.2020 17:37:31

802.11 n40 / Channel Mid



Date: 7.MAY.2020 17:44:54

802.11 n40 / Channel High



Date: 7.MAY.2020 17:54:57

8 OUTPUT POWER MEASUREMENT

8.1 Standard Applicable

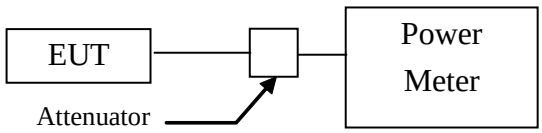
For direct sequence system, according to 15.247(b), the maximum peak output power of the transmitter shall not exceed 1 Watt. If transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.2 Measurement Procedure

Measurement Procedure:
9.1.2 PKPM1 Peak power meter method

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 5 without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable.
3. Record the readings on the instrument and add a compensat factor of the attenuator.
4. Repeat above procedures until all frequencies measured were complete.

Figure 5: Output power and measurement configuration.



8.3 Measurement Equipment

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
POWER METER +SENSOR	ANRITSU	ML2487A +MA2491A	2019/06/10	2020/06/09

8.4 Measurement Data

Test Date : May 07, 2020 ~ Jun. 22 ,2020 Temperature : 26 ~ 27 °C Humidity : 41 ~ 56 %

Measurement Procedure:

9.1.2 PKPM1 Peak power meter method

Test Data: May 07, 2020 Temp: 26 °C Hum: 56 %

A. 802.11B @1Mbps

Output Peak Power		dBm	mW
Operation	Channel Low:2412MHz	16.74	47.206
	Channel Mid:2442MHz	17.06	50.816
	Channel High:2462MHz	17.24	52.966

B. 802.11G @6Mbps

Output Peak Power		dBm	mW
Operation	Channel Low:2412MHz*	15.75	37.584
	Channel Mid:2442MHz	17.69	58.749
	Channel High:2462MHz*	16.21	41.783

C. 802.11n HT-20 @6.5Mbps

Output Peak Power		dBm	mW
Operation	Channel Low:2412MHz*	15.76	37.670
	Channel Mid:2442MHz	17.69	58.749
	Channel High:2462MHz*	16.27	42.364

D. 802.11n HT-40 @13.5Mbps

Output Peak Power		dBm	mW
Operation	Channel Low:2422MHz*	14.79	30.130
	Channel Mid:2442MHz	17.43	55.335
	Channel High:2452MHz*	15.06	32.063

9 100 kHz BANDWIDTH OF BAND EDGES MEASUREMENT

9.1 Standard Applicable

According to 15.247(c), if any 100 kHz bandwidth outside these frequency bands, the radio frequency power that is produced by the modulation products of the spreading sequence, the information sequence and the carrier frequency shall be either at least 20 dB below that in any 100 kHz bandwidth within the band that contains the highest level of the desired power or shall not exceed the general levels specified in §15.209(a), whichever results in the lesser attenuation.

9.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 4 without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Set both RBW of spectrum analyzer to 100kHz and VBW to 1 MHz with a convenient frequency span including 100kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

9.3 Measurement Equipment

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Test Receiver	Rohde & Schwarz	ESU 40	2020/04/09	2021/04/08

9.4 Measurement Data

Test Date : May 07. 2020 Temperature : 26 °C Humidity : 56 %

A. 802.11b @1 Mbps

a) Lower Band Edge : All emissions in this 100kHz bandwidth are attenuated more than 20dB from the carrier.
b) Upper Band Edge : All emissions in this 100kHz bandwidth are attenuated more than 20dB from the carrier.

B. 802.11g @6 Mbps

a) Lower Band Edge : All emissions in this 100kHz bandwidth are attenuated more than 20dB from the carrier.
b) Upper Band Edge : All emissions in this 100kHz bandwidth are attenuated more than 20dB from the carrier.

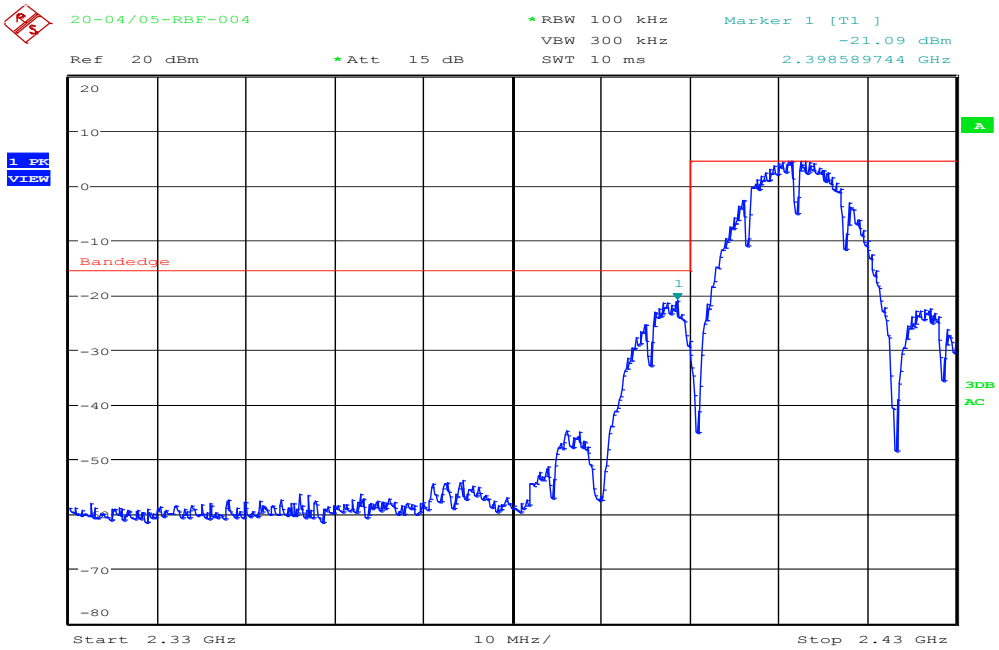
C. 802.11n HT-20 @6.5 Mbps

a) Lower Band Edge : All emissions in this 100kHz bandwidth are attenuated more than 20dB from the carrier.
b) Upper Band Edge : All emissions in this 100kHz bandwidth are attenuated more than 20dB from the carrier.

D. 802.11n HT-40 @13.5 Mbps

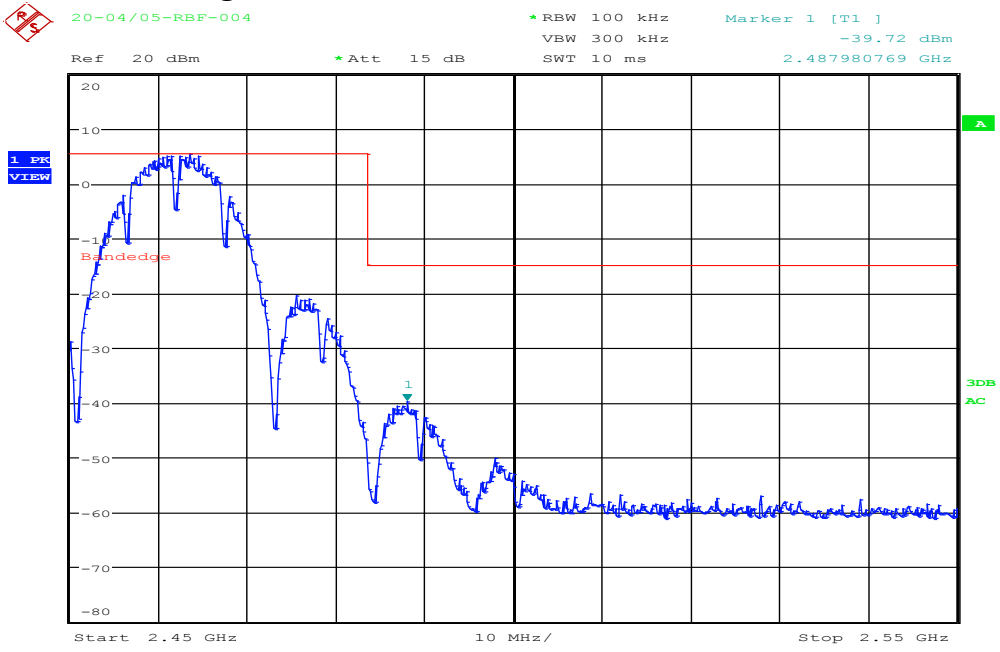
a) Lower Band Edge : All emissions in this 100kHz bandwidth are attenuated more than 20dB from the carrier.
b) Upper Band Edge : All emissions in this 100kHz bandwidth are attenuated more than 20dB from the carrier.

802.11 b / Channel Low



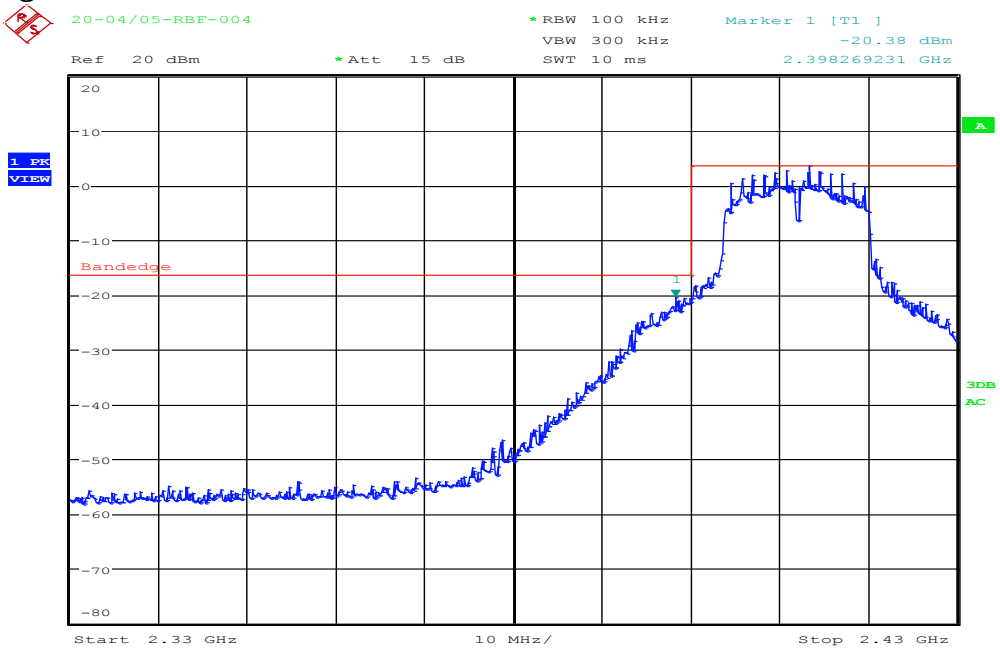
Date: 7.MAY.2020 14:46:16

802.11 b / Channel High



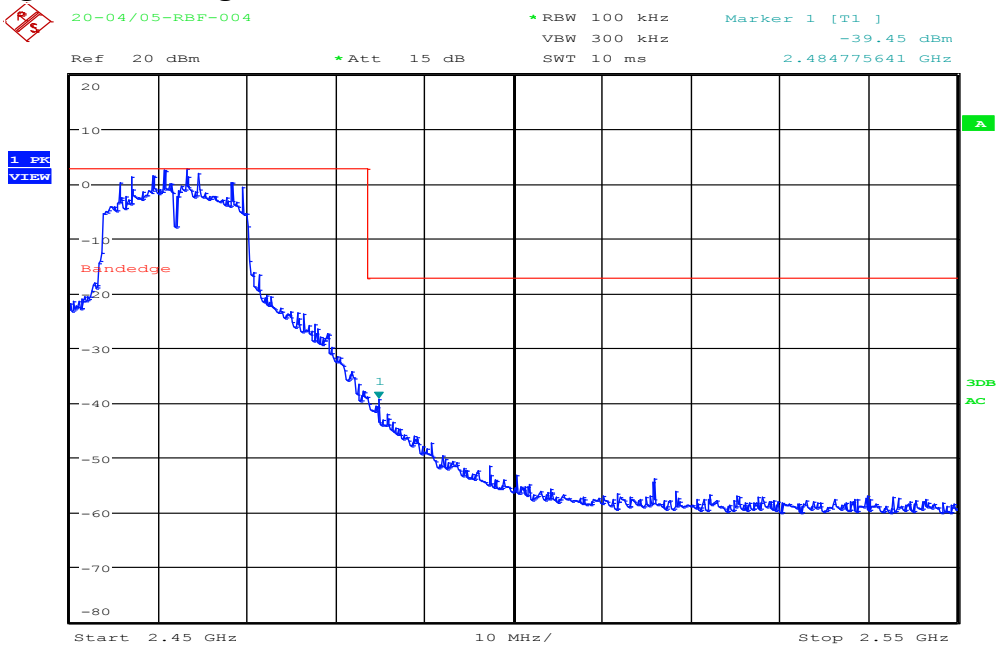
Date: 7.MAY.2020 15:47:57

802.11 g / Channel Low



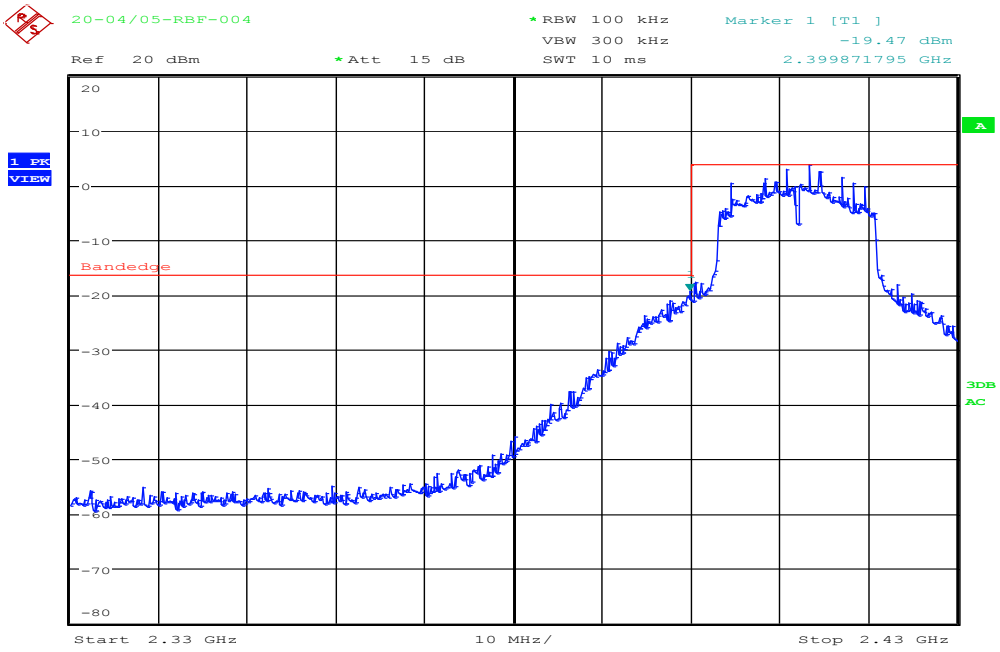
Date: 7.MAY.2020 16:18:57

802.11 g / Channel High



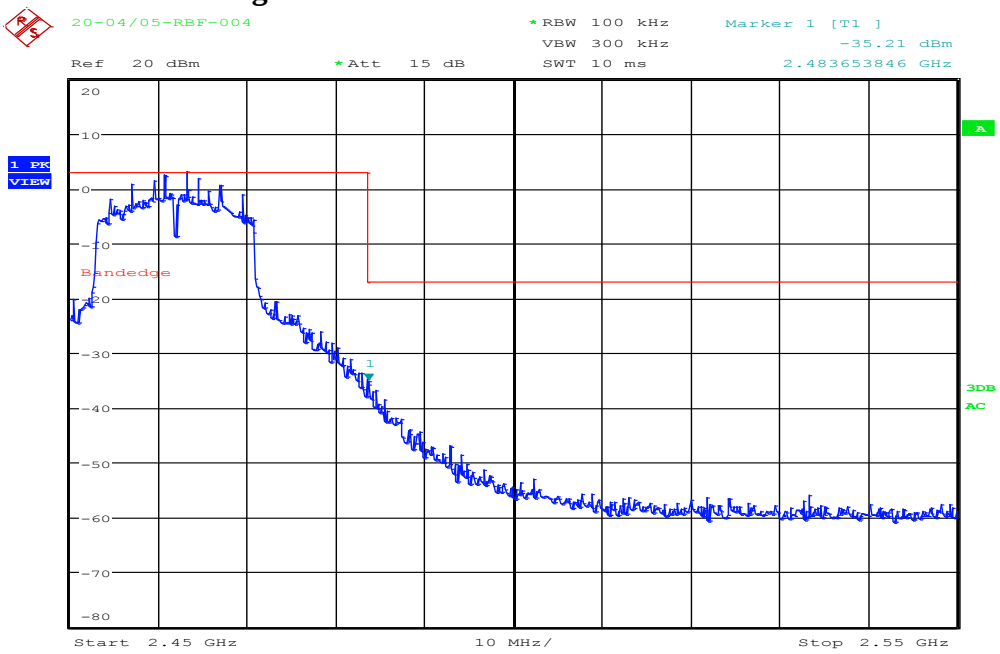
Date: 7.MAY.2020 16:35:53

802.11 n20 / Channel Low



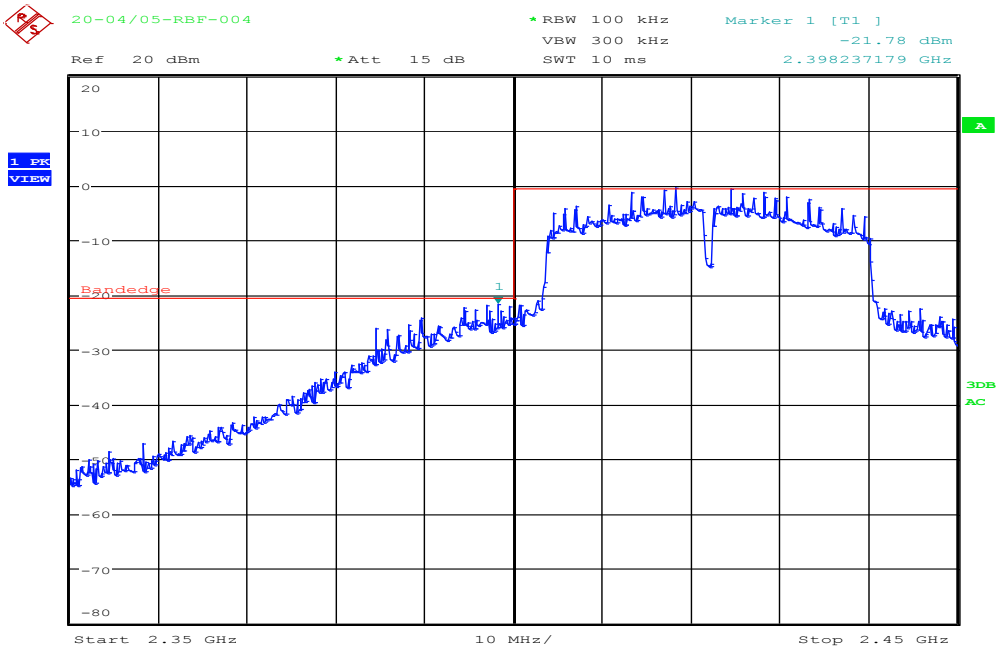
Date: 7.MAY.2020 17:04:20

802.11 n20 / Channel High



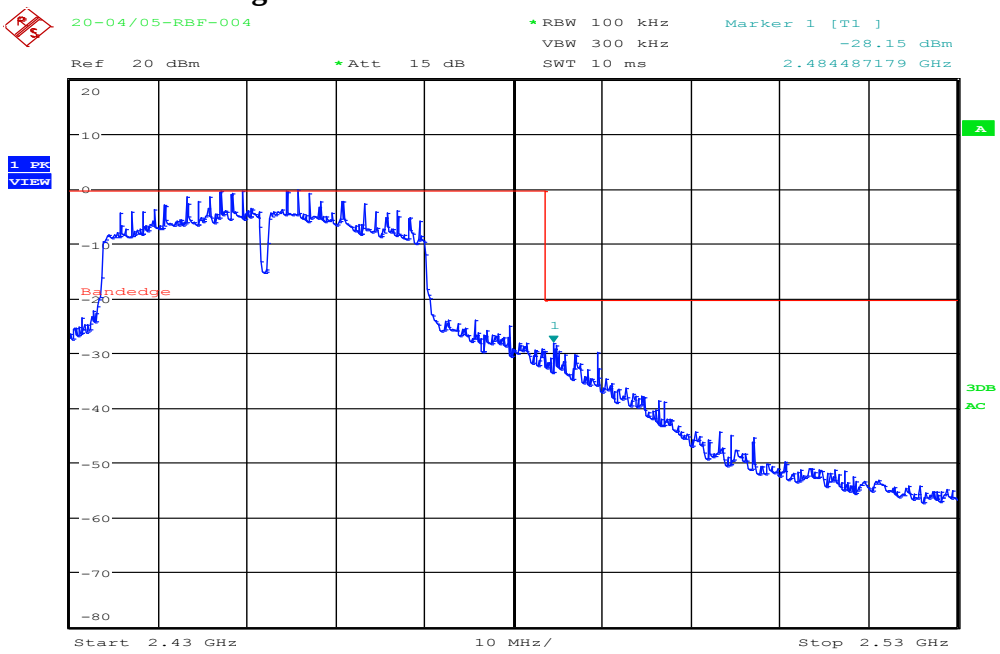
Date: 7.MAY.2020 17:21:29

802.11 n40 / Channel Low



Date: 7.MAY.2020 17:35:05

802.11 n40 / Channel High



Date: 7.MAY.2020 17:54:11

10 POWER DENSITY MEASUREMENT

10.1 Standard Applicable

According to 15.247(d), for direct sequence systems, the transmitted power density averaged over any 1 second interval shall not be greater than 8 dBm in any 3 kHz bandwidth within these bands.

10.2 Measurement Procedure

Measurement Method: PKPSD

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 5 without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set EUT to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Set analyzer center frequency to DTS channel center frequency.
4. Set the span to 1.5 times the DTS bandwidth.
5. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
6. Set the VBW ≥ 3 x RBW.
7. Detector = peak.
8. Sweep time = auto couple.
9. Trace mode = max hold.
10. Allow trace to fully stabilize.
11. Use the peak marker function to determine the maximum amplitude level within the RBW.
12. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
13. Repeat above procedures until all measured frequencies were complete.

10.3 Measurement Equipment

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Test Receiver	Rohde & Schwarz	ESU 40	2020/04/09	2021/04/08

10.4 Measurement Data

Test Date : May 07, 2020 Temperature : 26 °C Humidity : 56 %

A. 802.11B @1Mbps

a) Channel Low:	Maximun PSD is	1.78	dBm
b) Channel Mid:	Maximun PSD is	4.25	dBm
c) Channel High:	Maximun PSD is	-0.34	dBm

B. 802.11G @6Mbps

a) Channel Low:	Maximun PSD is	-13.61	dBm
b) Channel Mid:	Maximun PSD is	-14.76	dBm
c) Channel High:	Maximun PSD is	-14.48	dBm

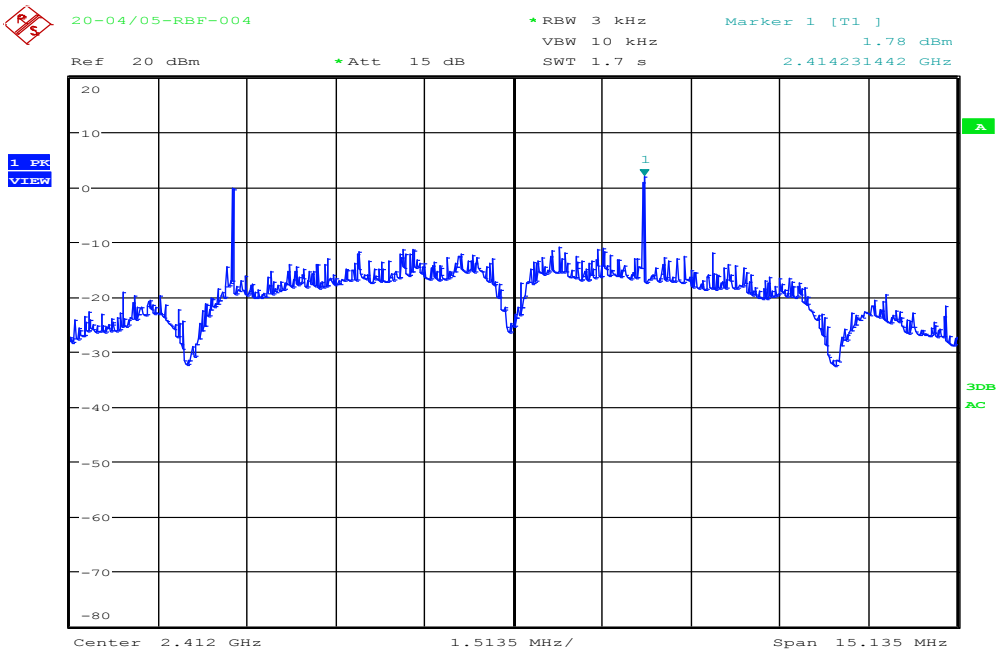
C. 802.11n HT-20 @6.5Mbps

a) Channel Low:	Maximun PSD is	-14.05	dBm
b) Channel Mid:	Maximun PSD is	-13.02	dBm
c) Channel High:	Maximun PSD is	-13.45	dBm

D. 802.11n HT-40 @13.5Mbps

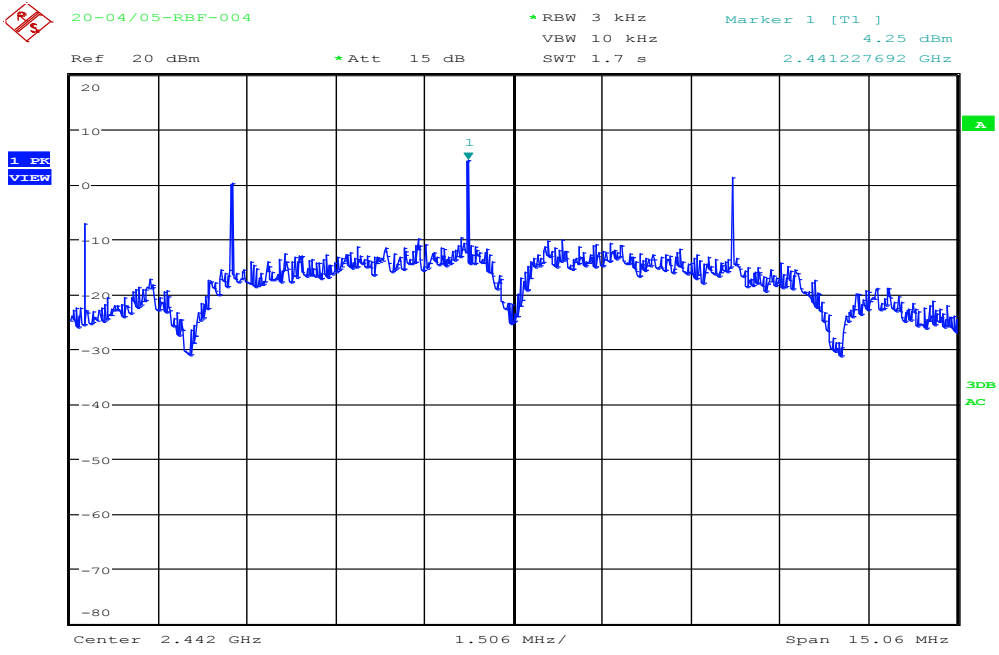
a) Channel Low:	Maximun PSD is	-17.44	dBm
b) Channel Mid:	Maximun PSD is	-17.43	dBm
c) Channel High:	Maximun PSD is	-17.66	dBm

802.11 b / Channel Low



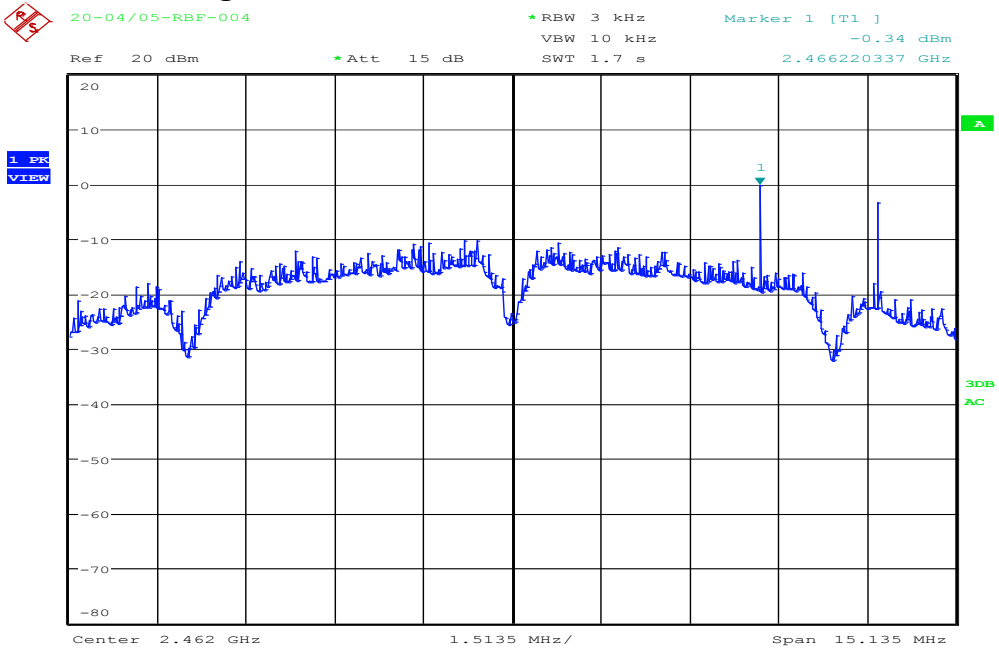
Date: 7.MAY.2020 14:37:51

802.11 b / Channel Mid



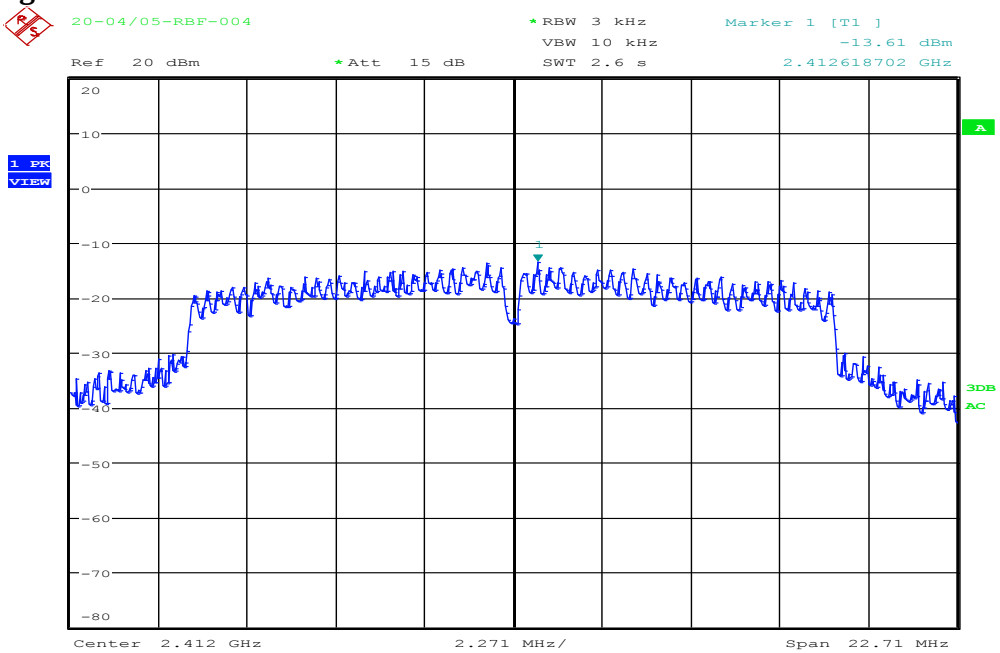
Date: 7.MAY.2020 15:40:34

802.11 b / Channel High



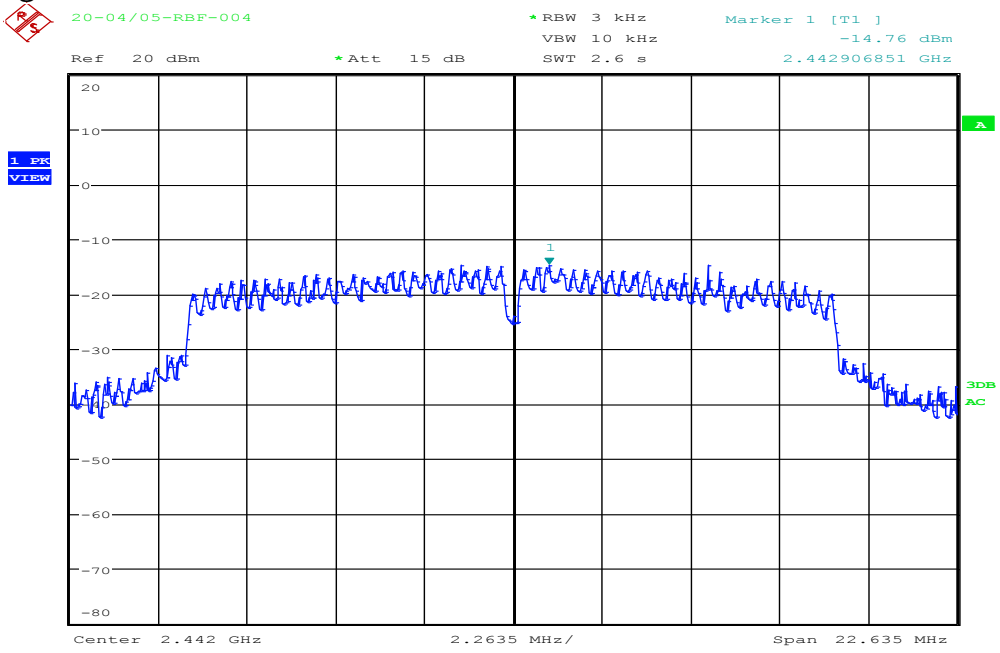
Date: 7.MAY.2020 15:50:14

802.11 g / Channel Low



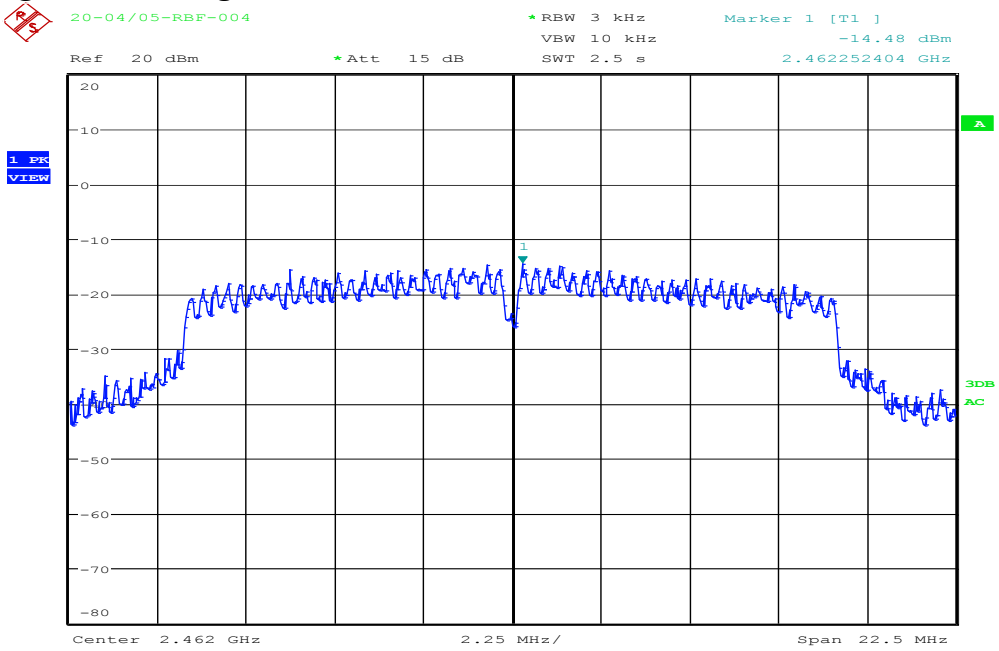
Date: 7.MAY.2020 16:23:10

802.11 g / Channel Mid



Date: 7.MAY.2020 16:29:28

802.11 g / Channel High



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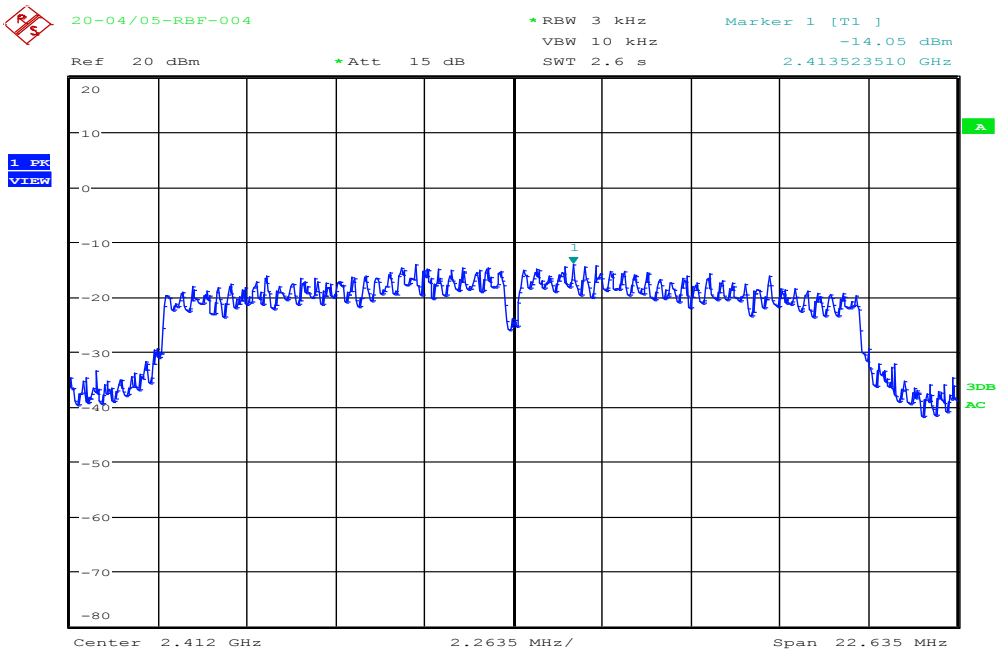
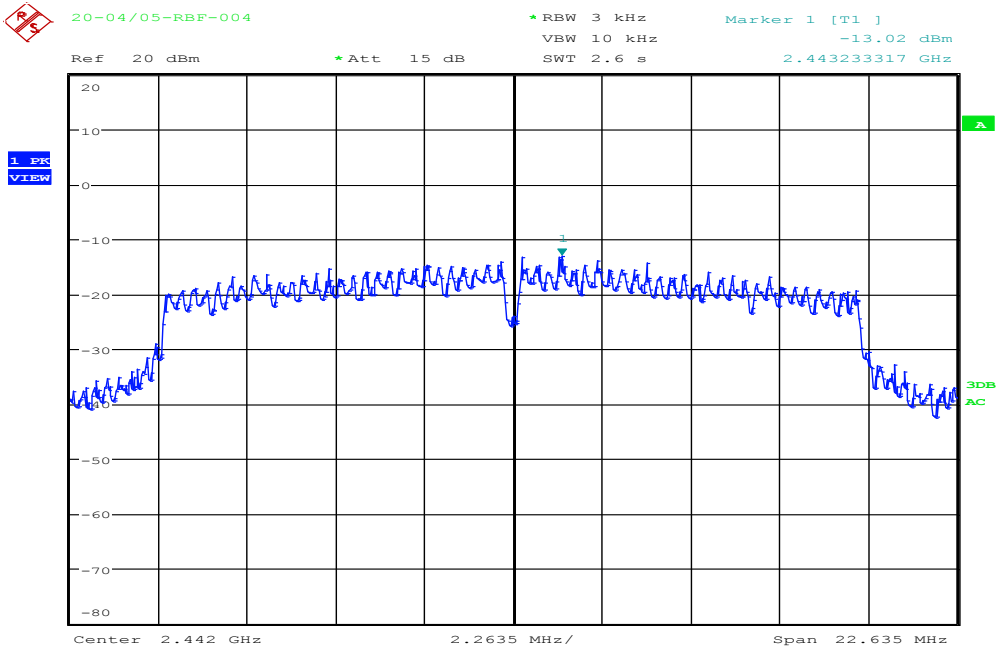
802.11 n20 / Channel Low



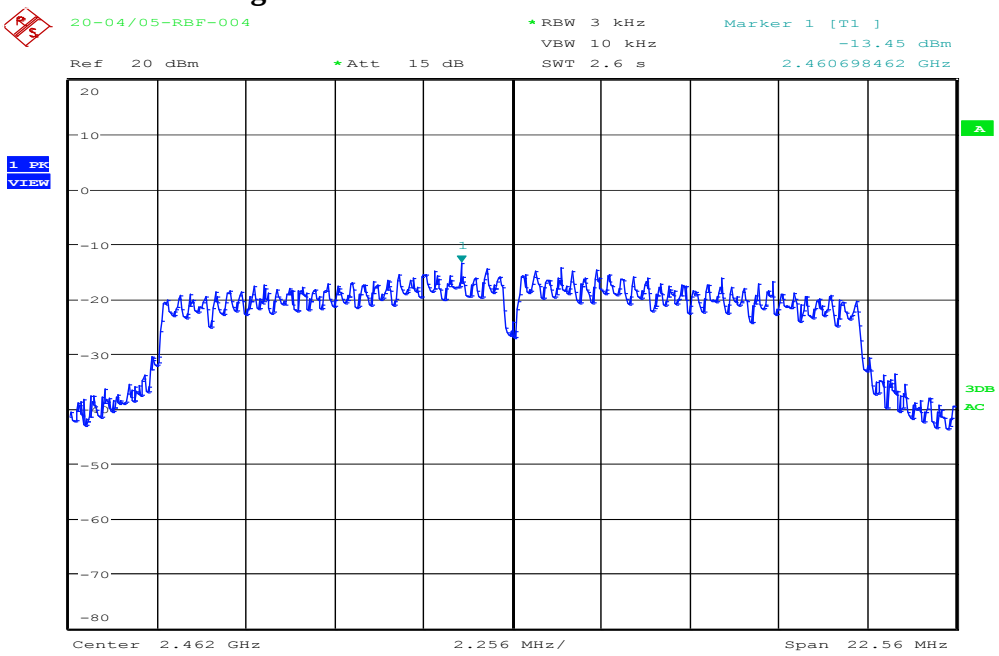
Date: 7.MAY.2020 17:08:04

802.11 n20 / Channel Mid



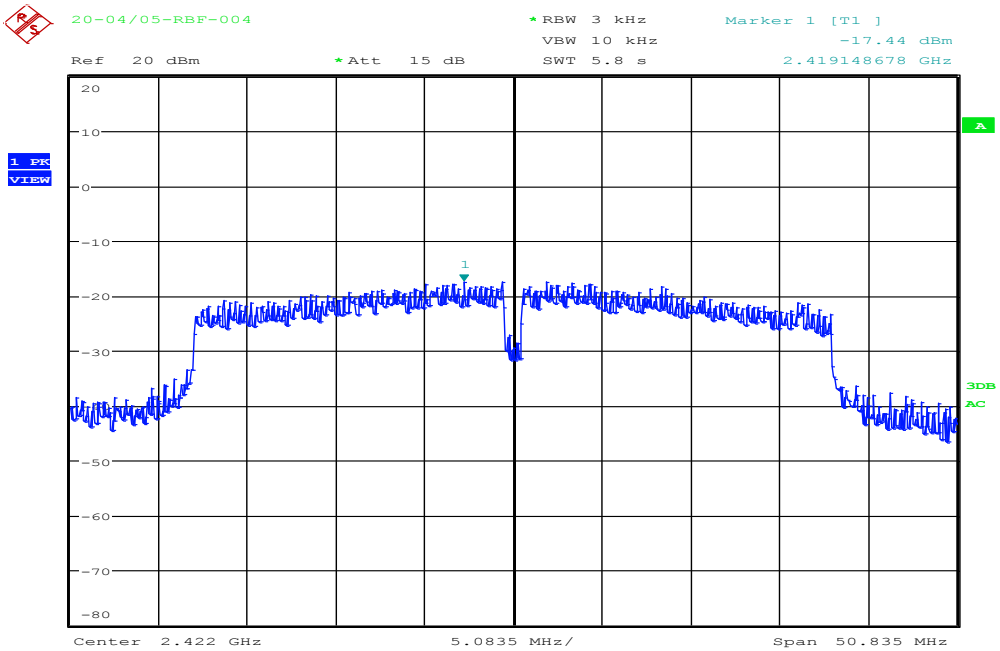
Date: 7.MAY.2020 17:14:10

802.11 n20 / Channel High



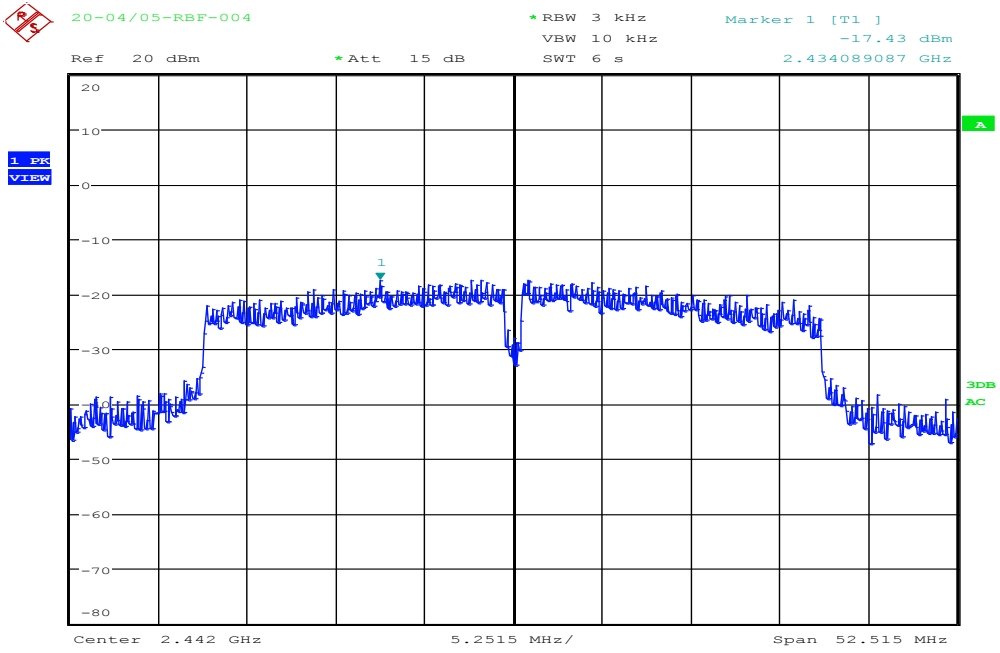
Date: 7.MAY.2020 17:23:29

802.11 n40 / Channel Low



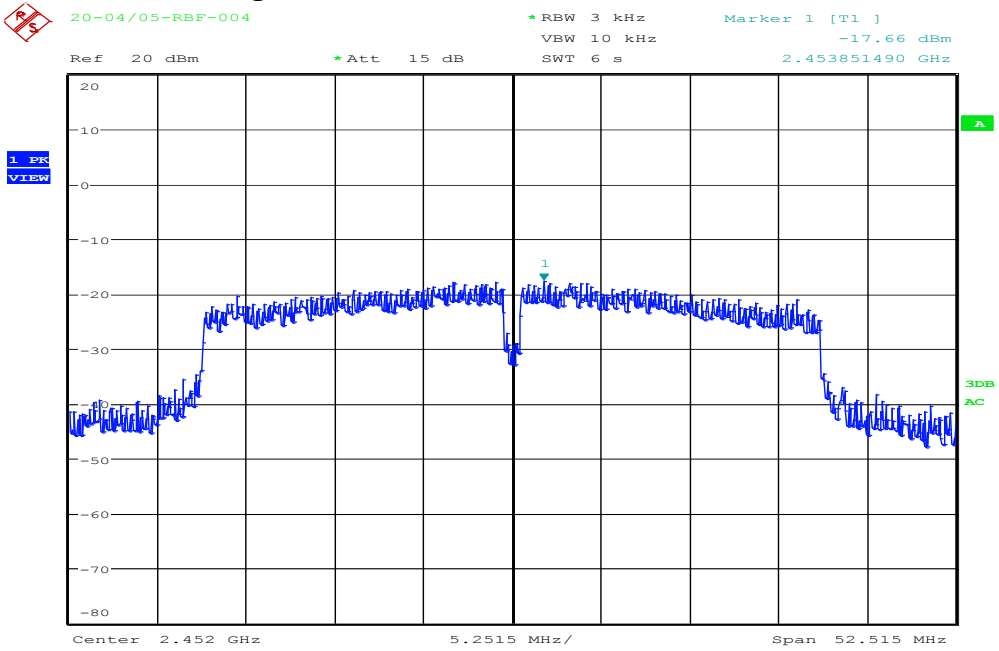
Date: 7.MAY.2020 17:40:16

802.11 n40 / Channel Mid



Date: 7.MAY.2020 17:48:16

802.11 n40 / Channel High



Date: 7.MAY.2020 17:55:42

11. OUT-OF-BAND CONDUCTED EMISSION MEASUREMENT

11.1 Standard Applicable

According to 15.247(c), 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. Attenuation below the general limits specified in Section 15.209(a) is not required.

11.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 4 without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Use the following spectrum analyzer settings:
   Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
   RBW = 100 kHz
   VBW ≥ RBW
   Sweep = auto
   Detector function = peak
   Trace = max hold.
4. Allow the trace to stabilize. Set the marker on the peak of any spurious emission recorded. Plot the result on the screen of spectrum analyzer.
5. Repeat above procedures until all measured frequencies were complete.

11.3 Measurement Equipment

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Test Receiver	Rohde & Schwarz	ESU 40	2020/04/09	2021/04/08

11.4 Measurement Data

Test Date : May 07, 2020 Temperature : 26 °C Humidity : 56 %

A. 802.11b @1 Mbps

Mode: Channel Low, Mid, High

(a) 30 MHz to 1 GHz frequency band: All emissions are attenuated more than 20dB from the carrier.

(b) 1 GHz to 26.5 GHz frequency band: All emissions are attenuated more than 20dB from the carrier.

B. 802.11g @6 Mbps

Mode: Channel Low, Mid, High

(a) 30 MHz to 1 GHz frequency band: All emissions are attenuated more than 20dB from the carrier.

(b) 1 GHz to 26.5 GHz frequency band: All emissions are attenuated more than 20dB from the carrier.

C. 802.11n HT-20 @6.5 Mbps

Mode: Channel Low, Mid, High

(a) 30 MHz to 1 GHz frequency band: All emissions are attenuated more than 20dB from the carrier.

(b) 1 GHz to 26.5 GHz frequency band: All emissions are attenuated more than 20dB from the carrier.

D. 802.11n HT-40 @13.5 Mbps

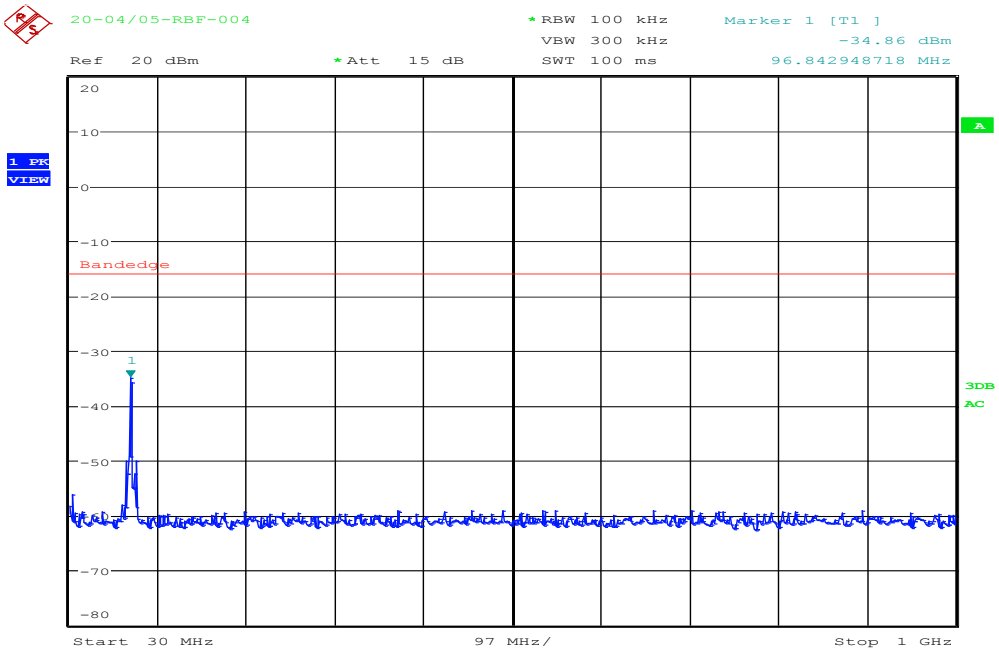
Mode: Channel Low, Mid, High

(a) 30 MHz to 1 GHz frequency band: All emissions are attenuated more than 20dB from the carrier.

(b) 1 GHz to 26.5 GHz frequency band: All emissions are attenuated more than 20dB from the carrier.

802.11 b

Channel Low



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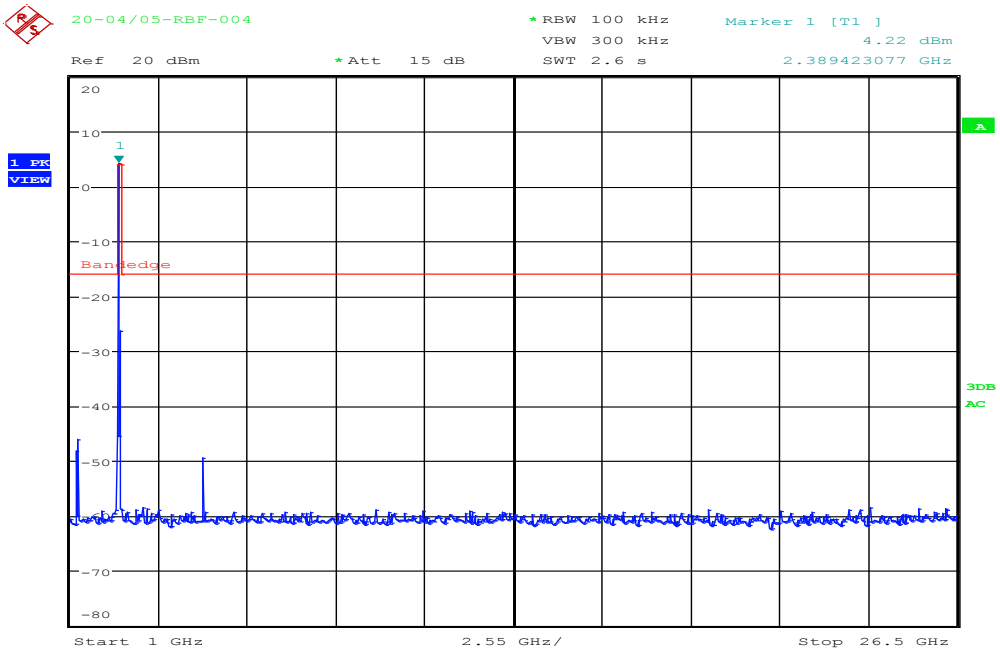
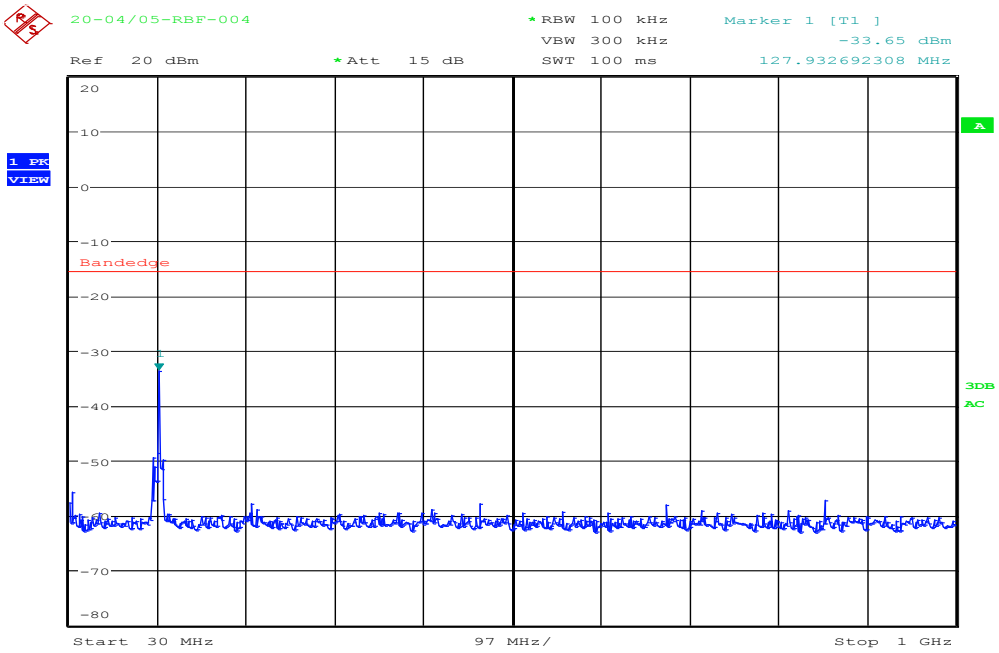


Date: 7.MAY.2020 14:47:08

Channel Mid



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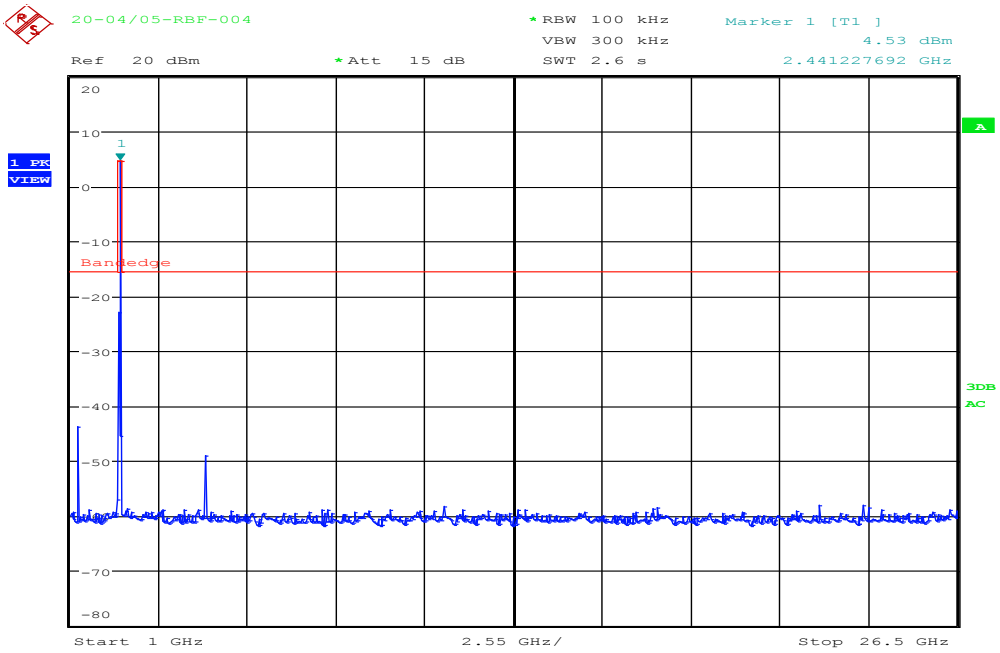
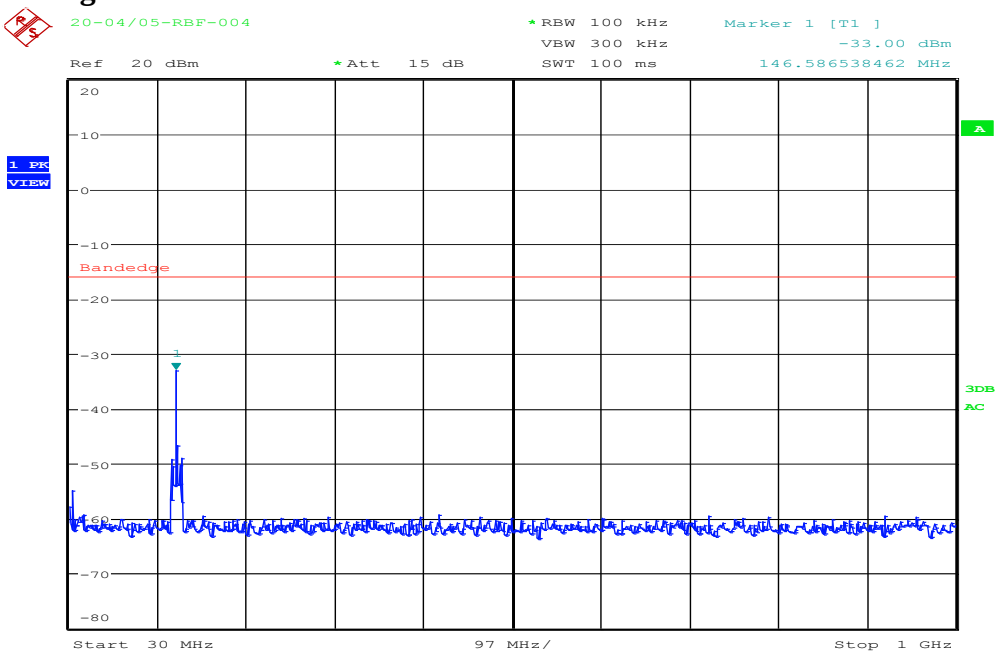


Date: 7.MAY.2020 15:43:31

Channel High



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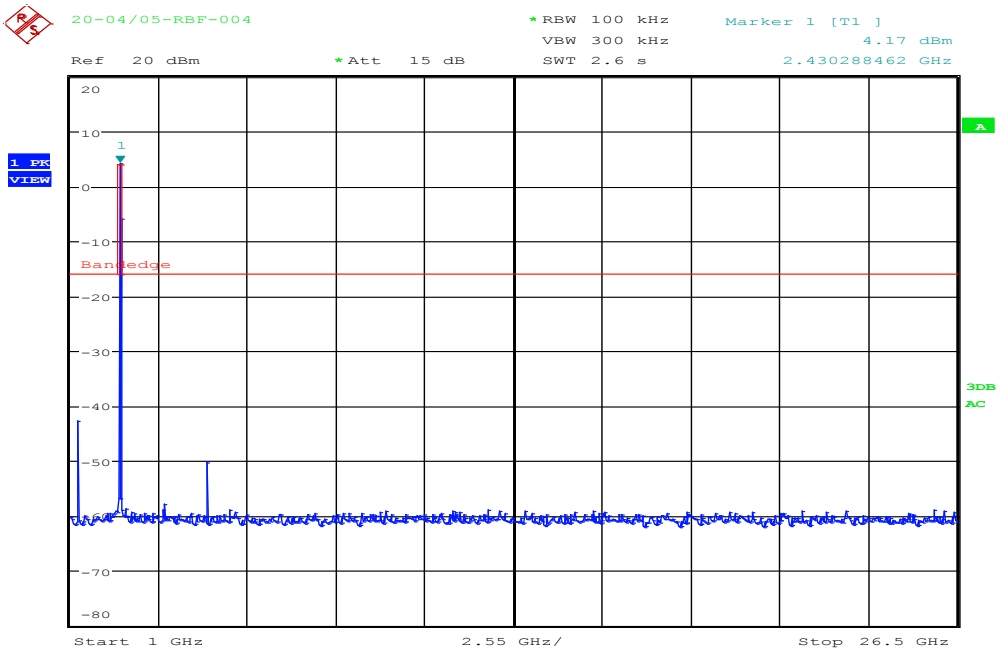
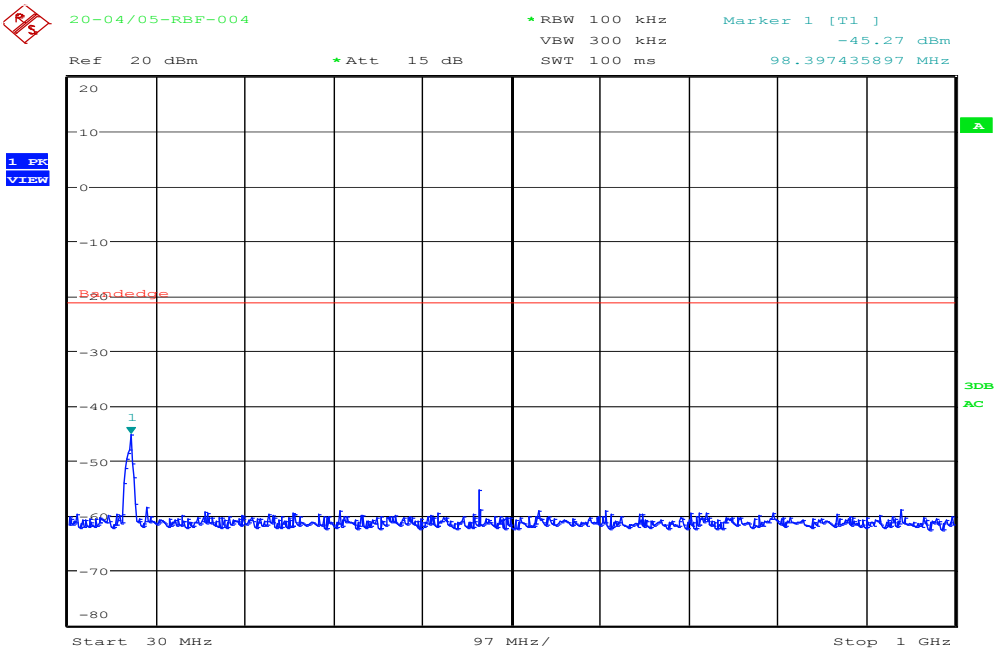


Date: 7.MAY.2020 15:46:42

802.11 g

Channel Low



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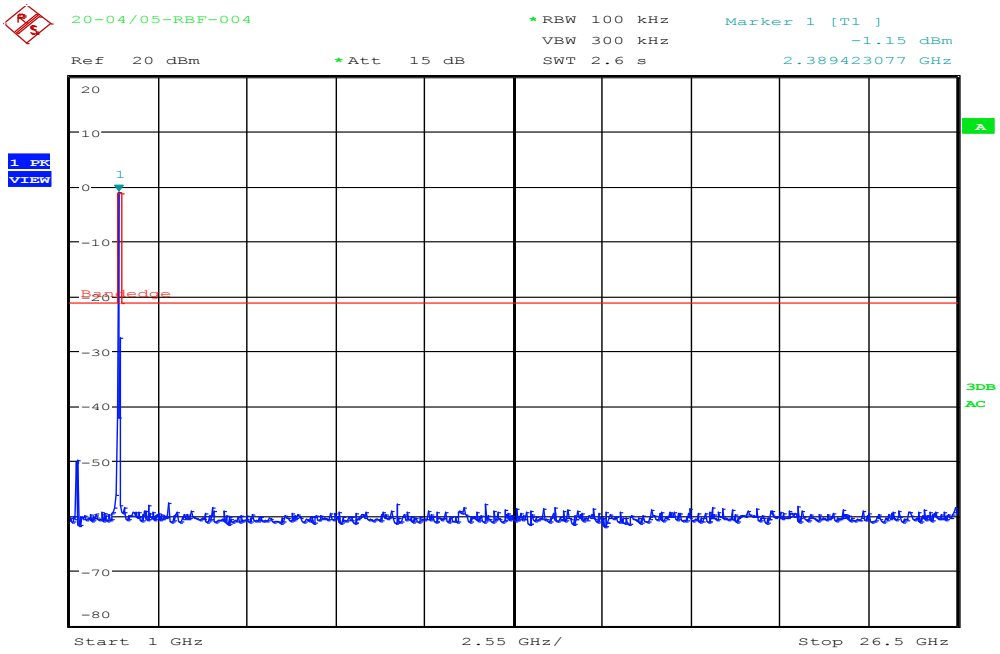
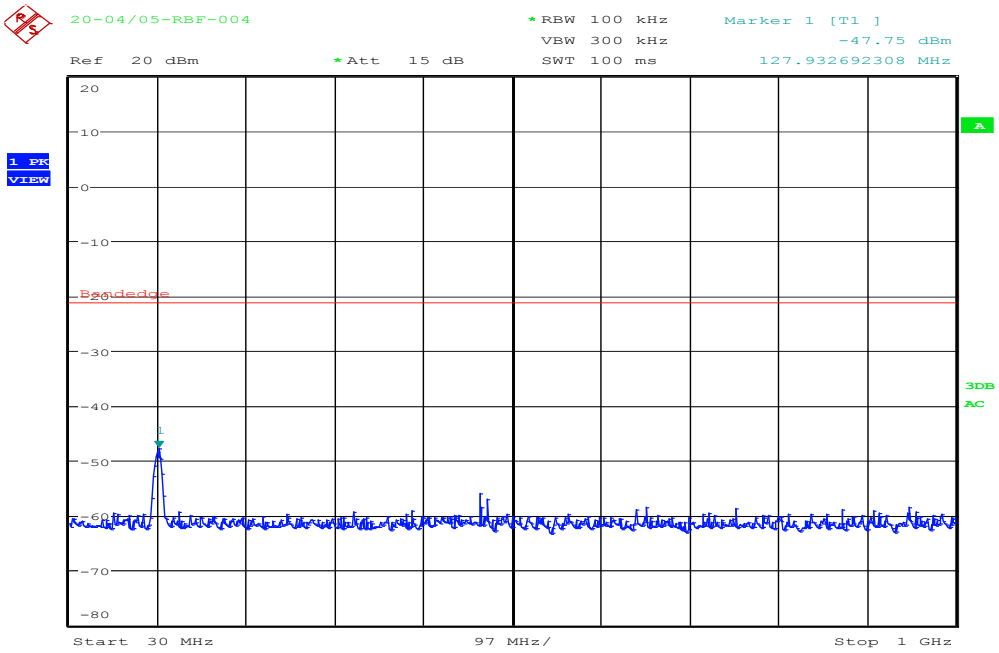


Date: 7.MAY.2020 16:17:06

Channel Mid



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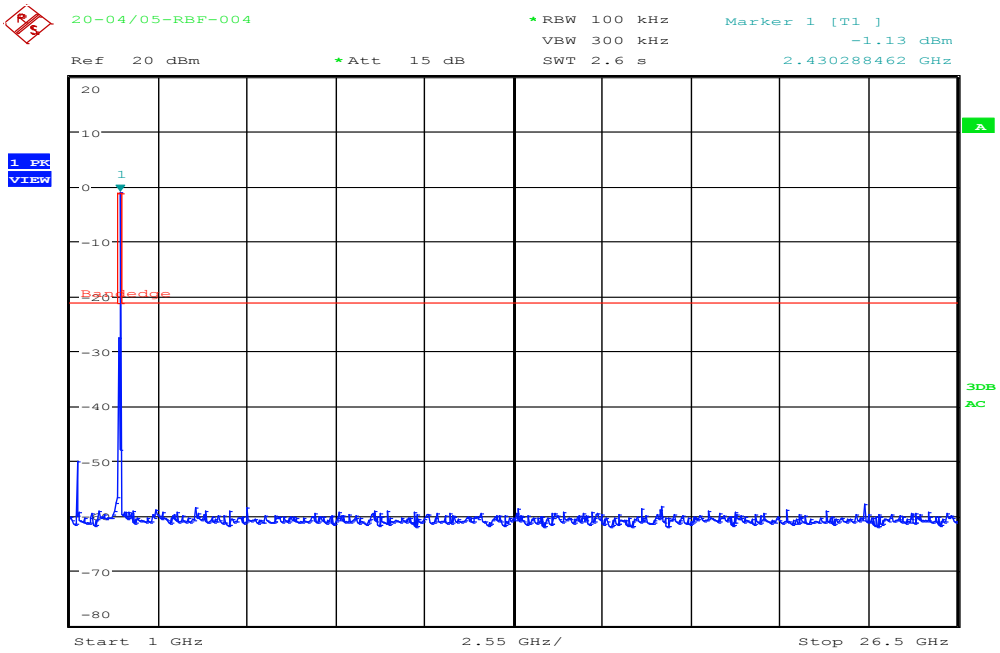

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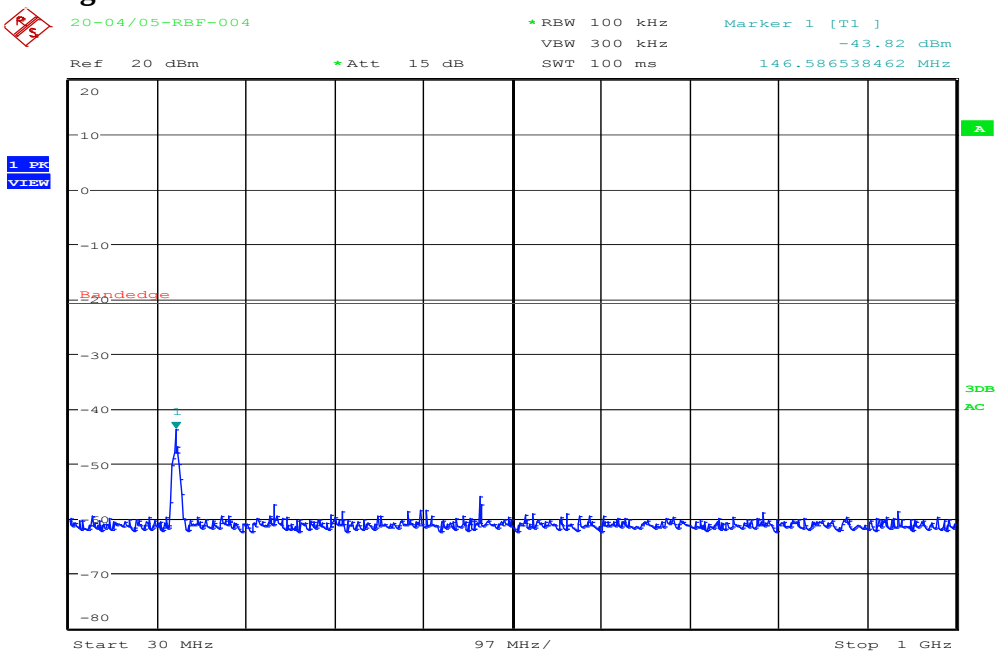
Channel High



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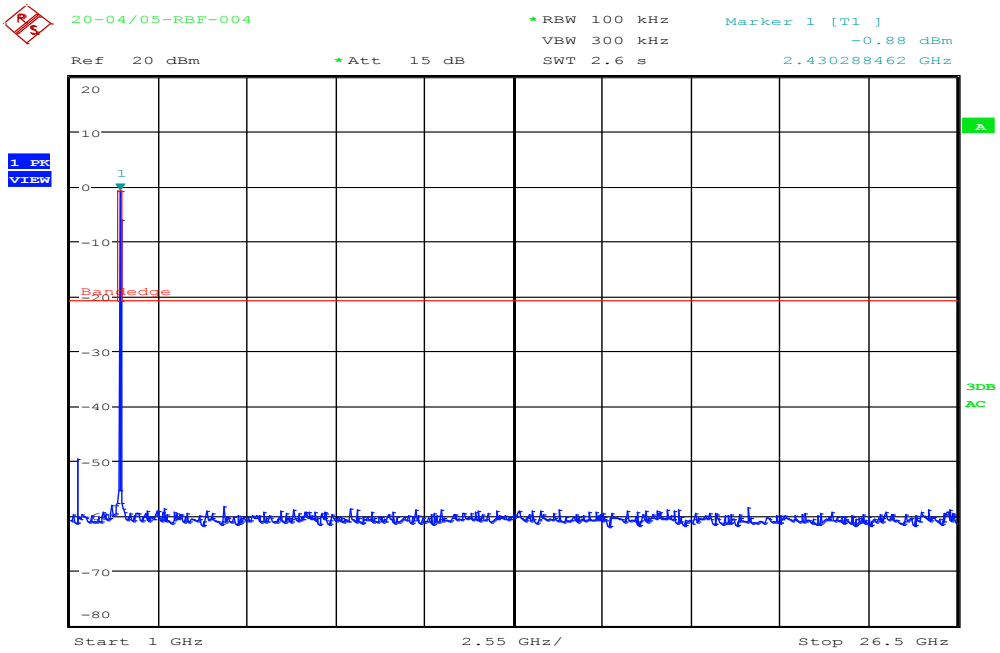
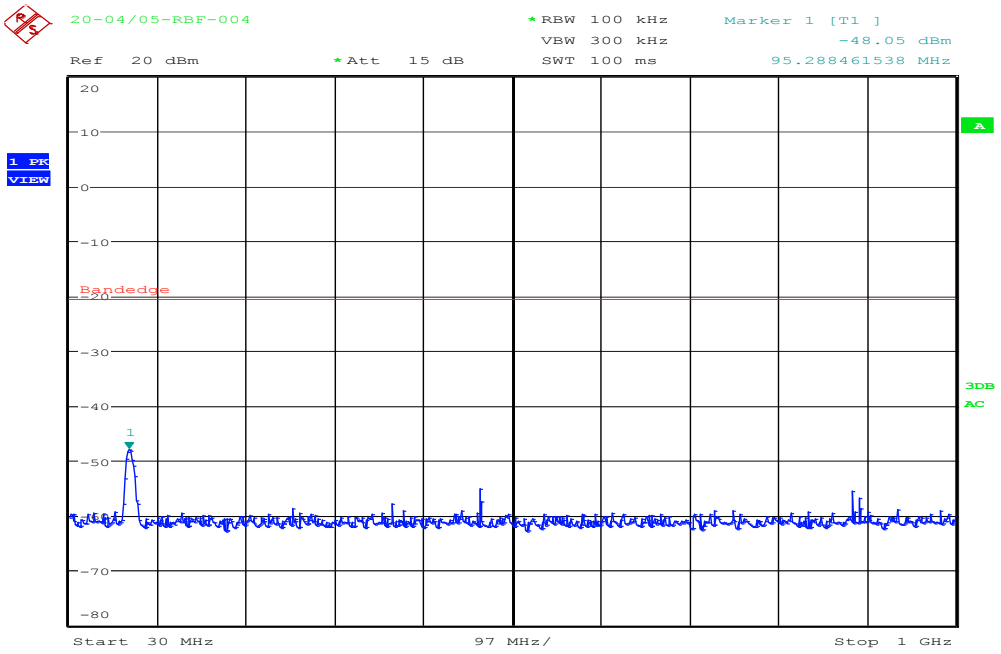


Date: 7.MAY.2020 16:34:01

802.11 n20

Channel Low



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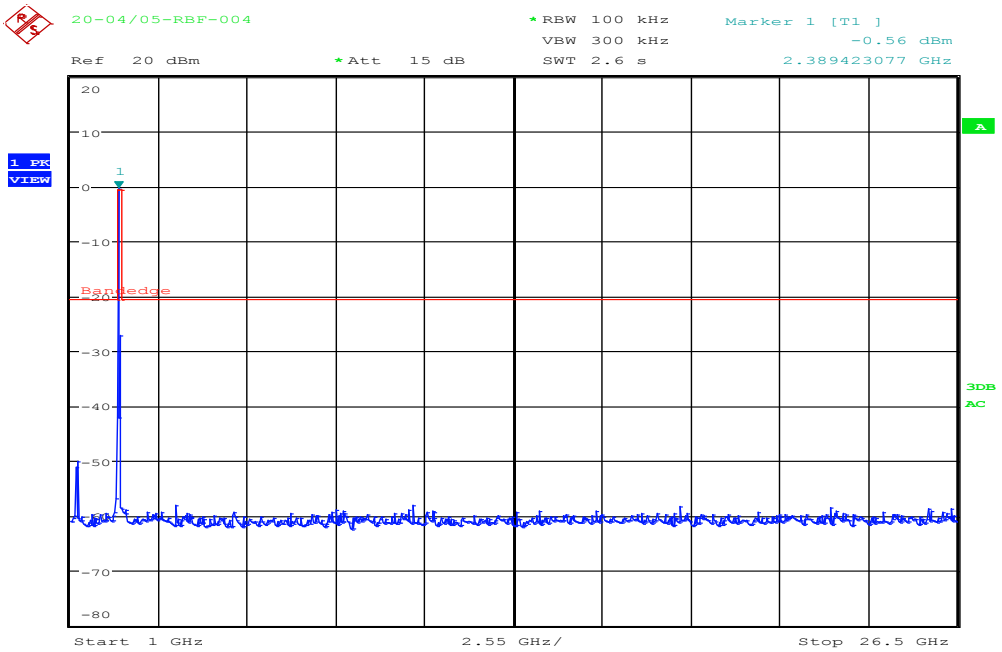
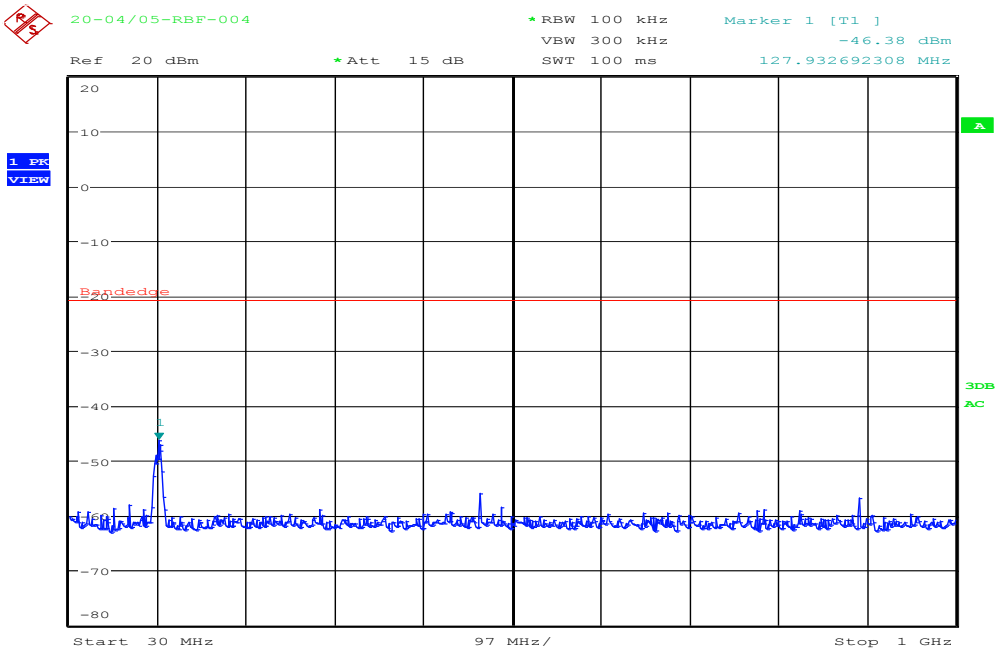
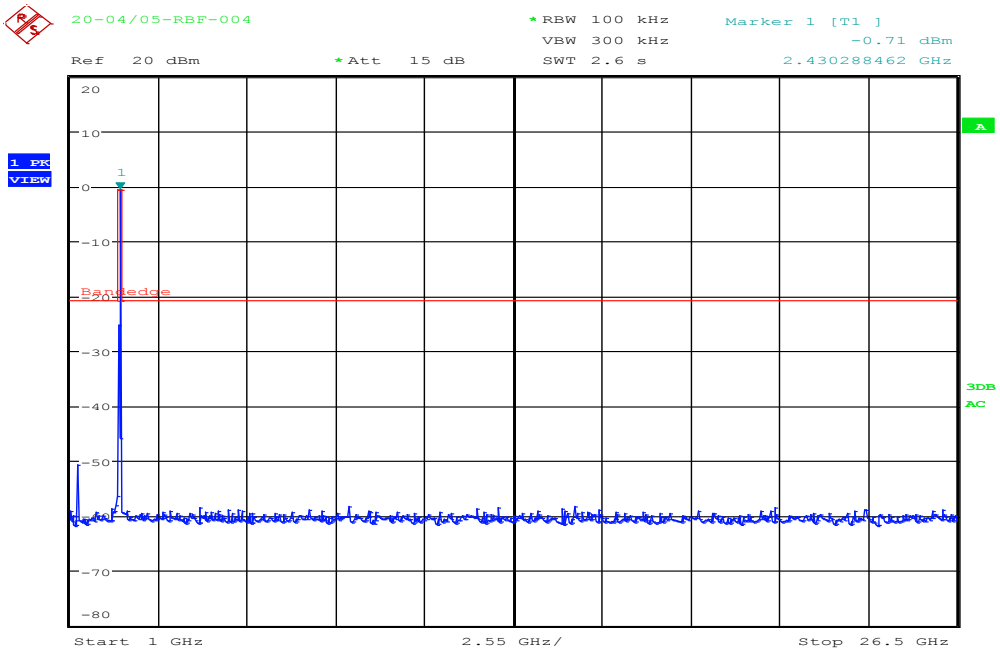


Date: 7.MAY.2020 17:03:09

Channel Mid

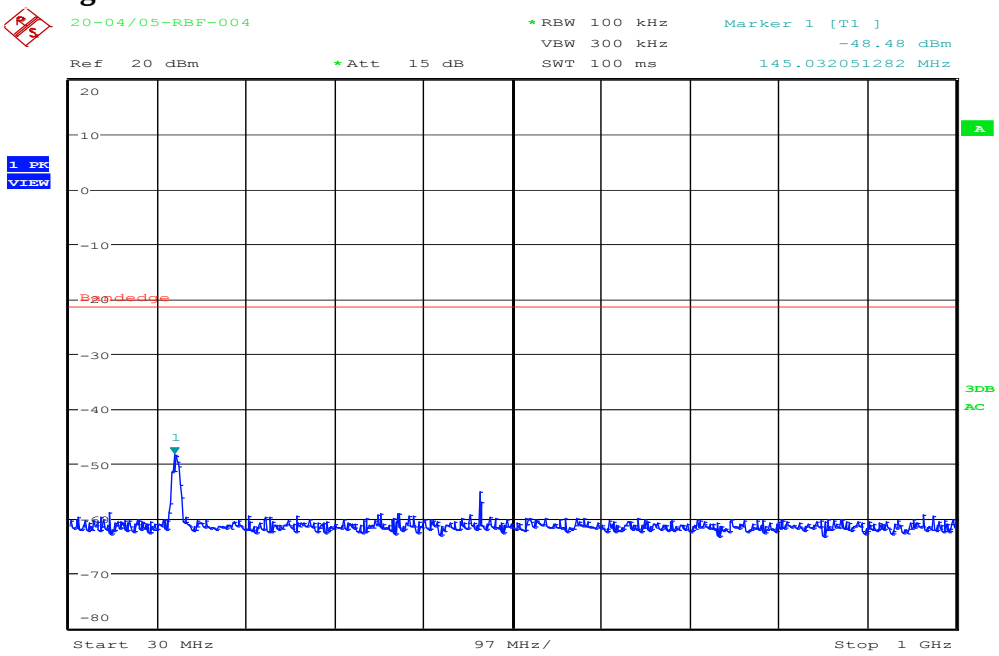


Date: 7.MAY.2020 17:15:44



Date: 7.MAY.2020 17:15:31

Channel High



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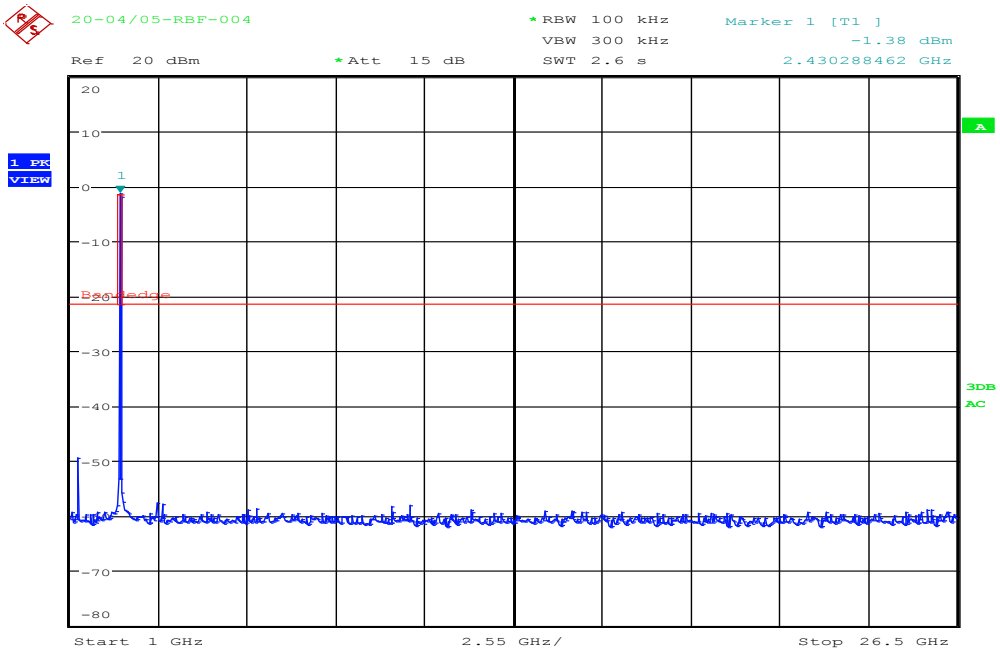
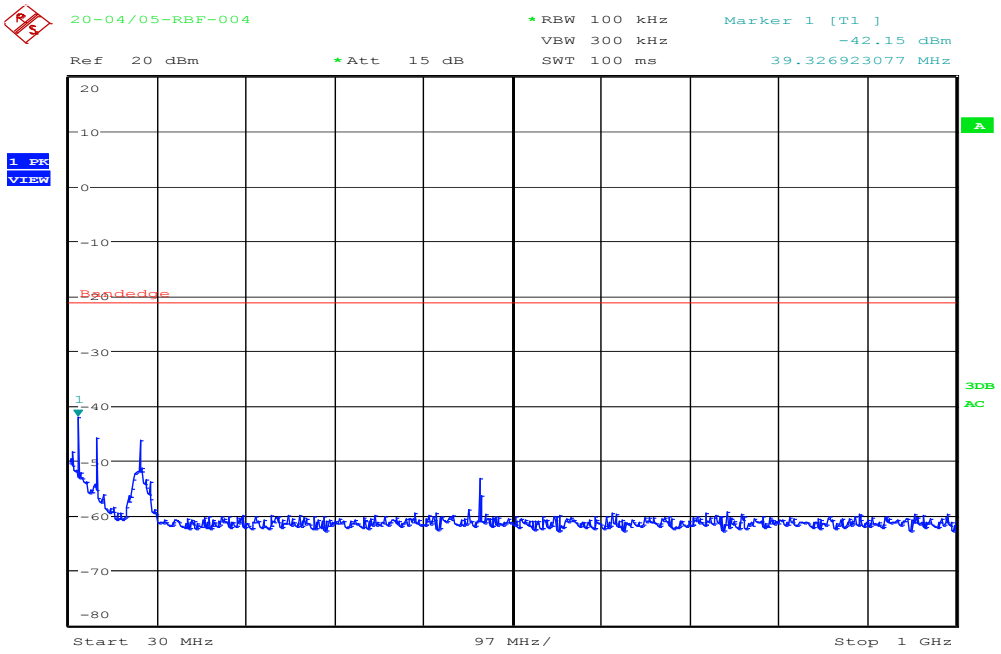


Date: 7.MAY.2020 17:20:30

802.11 n40

Channel Low



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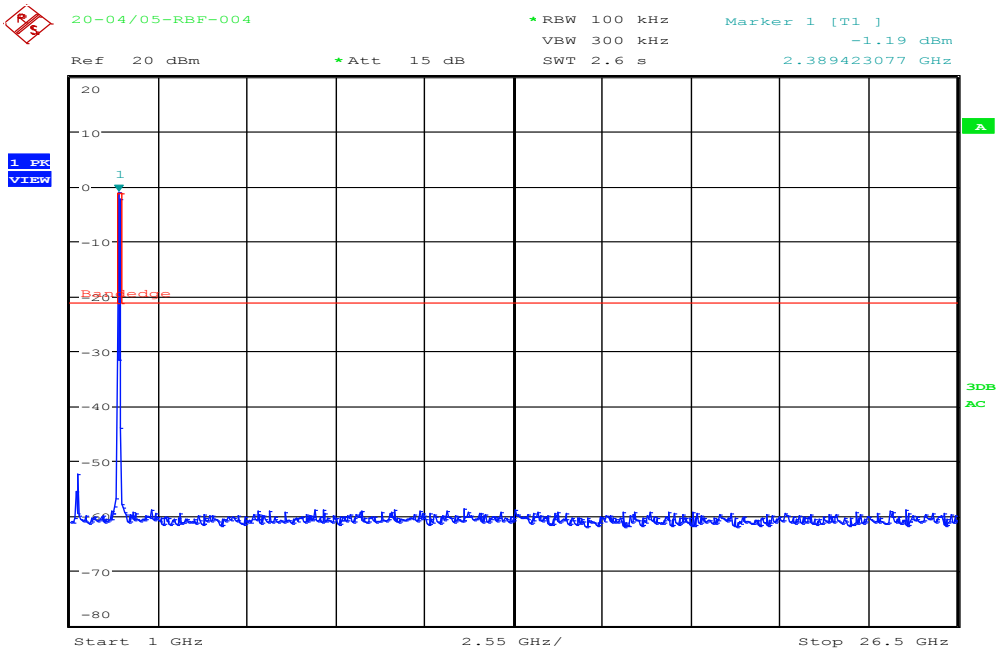
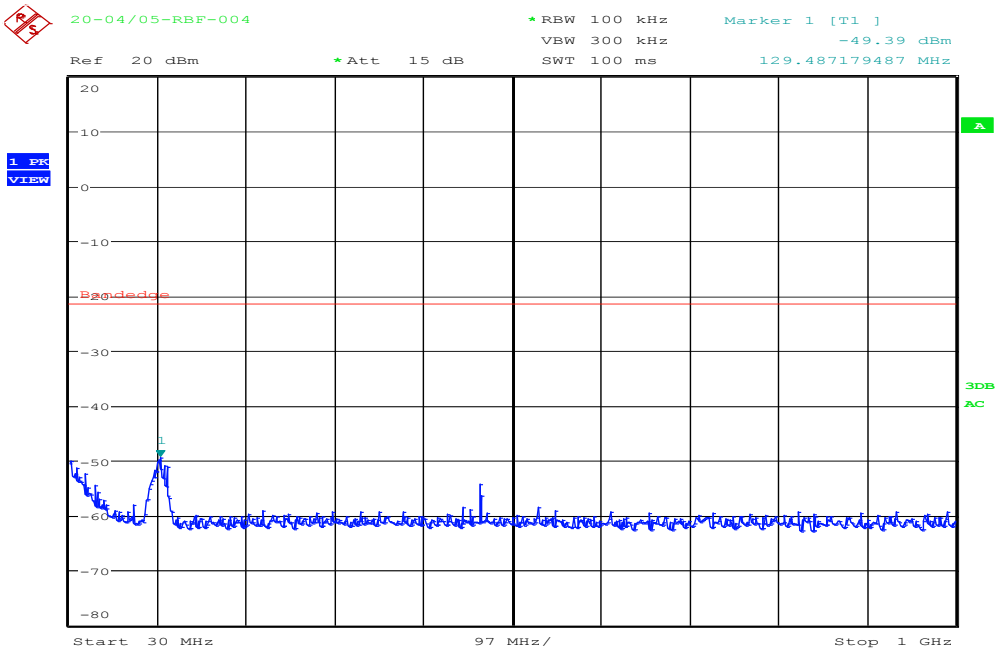


Date: 7.MAY.2020 17:34:03

Channel Mid



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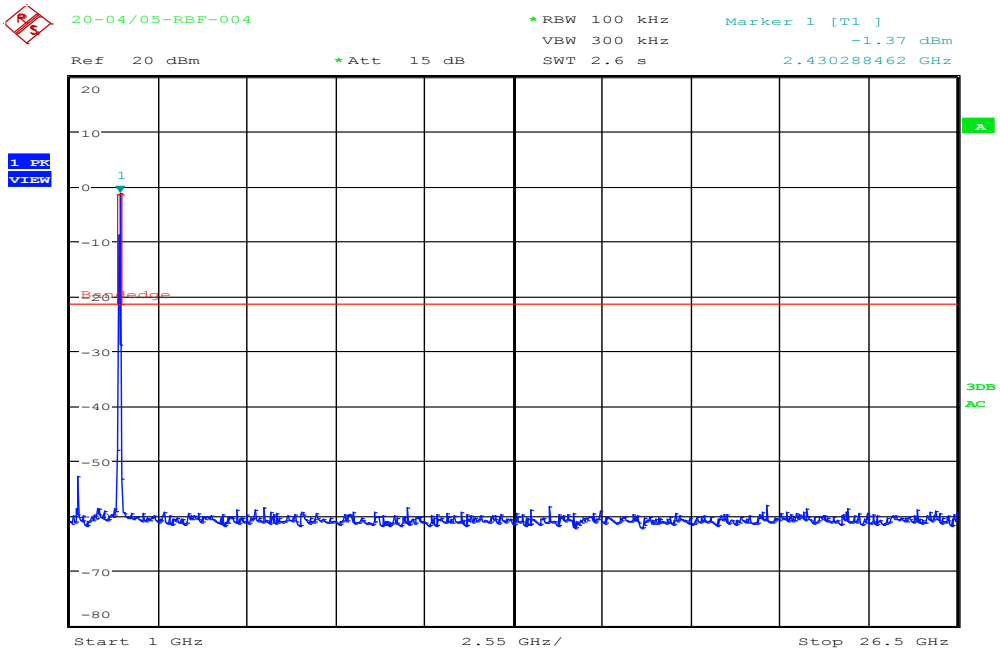

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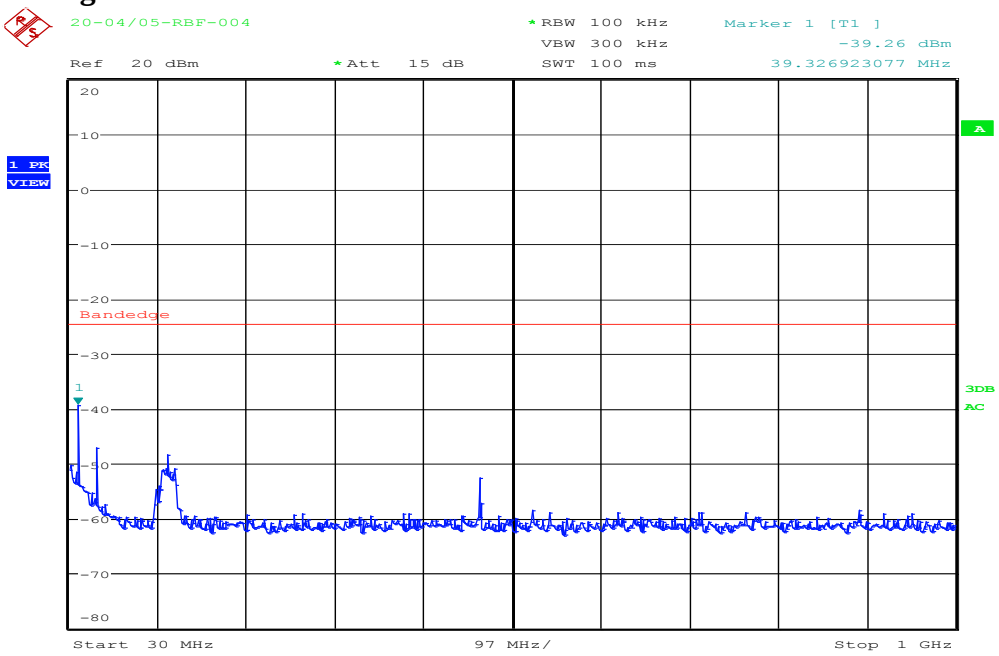
Channel High



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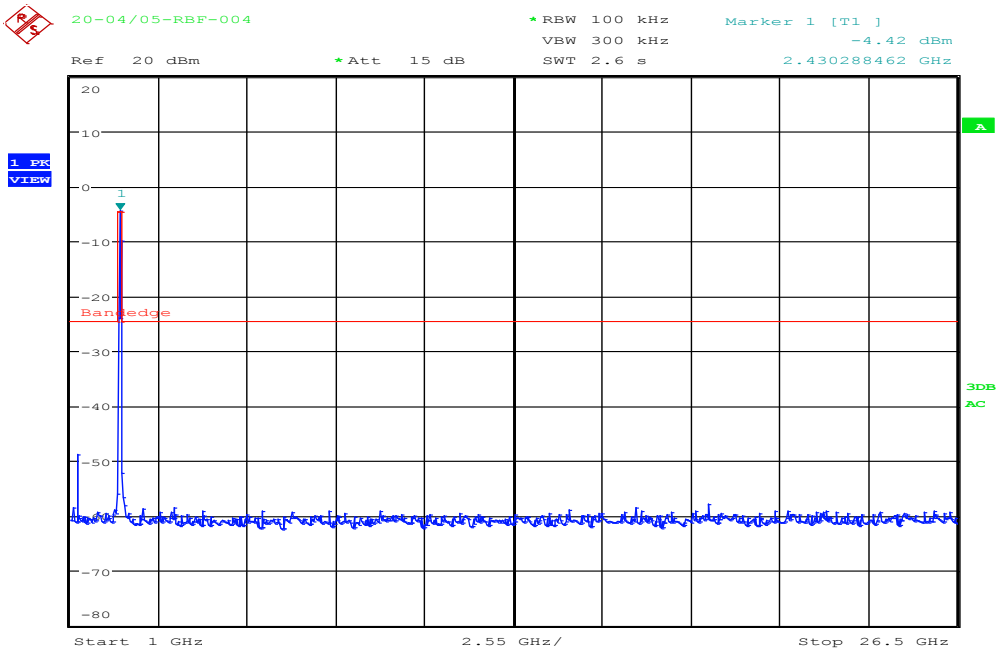


Date: 7.MAY.2020 17:52:46

12. DYTY CYCLE

12.1 Standard Applicable

None. Referency only.

12.2 Measurement Equipment

Equipment	Manufacturer	Model No.	Calibration Date	Next Cal. Date
Test Receiver	Rohde & Schwarz	ESU 40	2020/04/09	2021/04/08

12.3 Measurement Data

Test Date : May 07, 2020 Temperature : 26 °C Humidity : 56 %

Duty Cycle Calculation

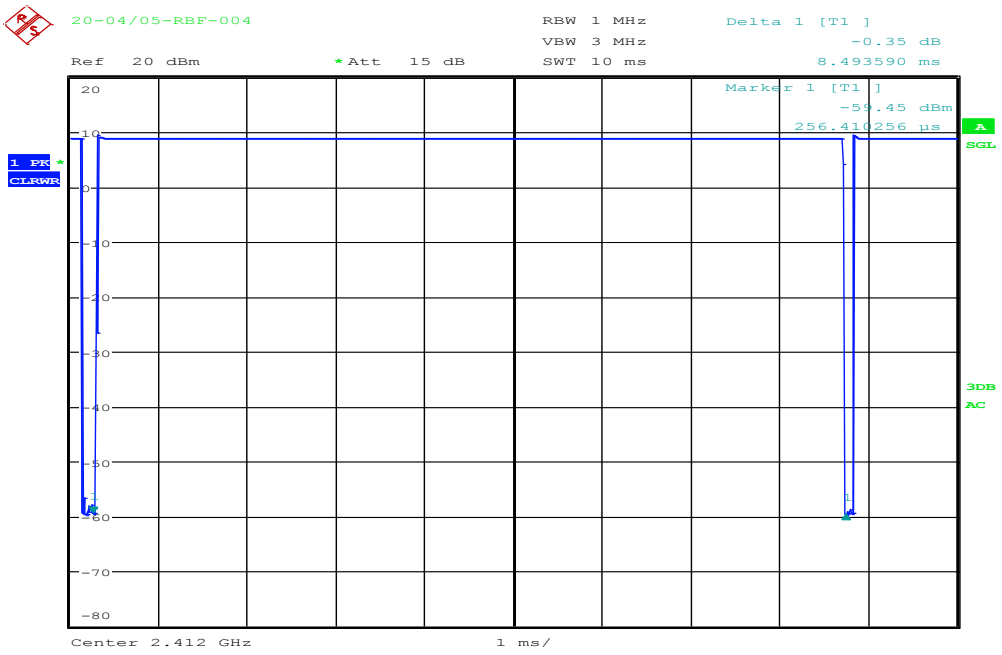
Mode	Period (ms)	Transmission duration (T) (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T (kHz)	VBW setting (kHz)
802.11b	8.55	8.49	99.30	0.03	0.118	1
802.11g	1.56	1.44	92.31	0.35	0.694	1
802.11n HT-20	1.49	1.33	89.26	0.49	0.752	1
802.11n HT-40	0.76	0.67	88.16	0.55	1.493	3

Note:

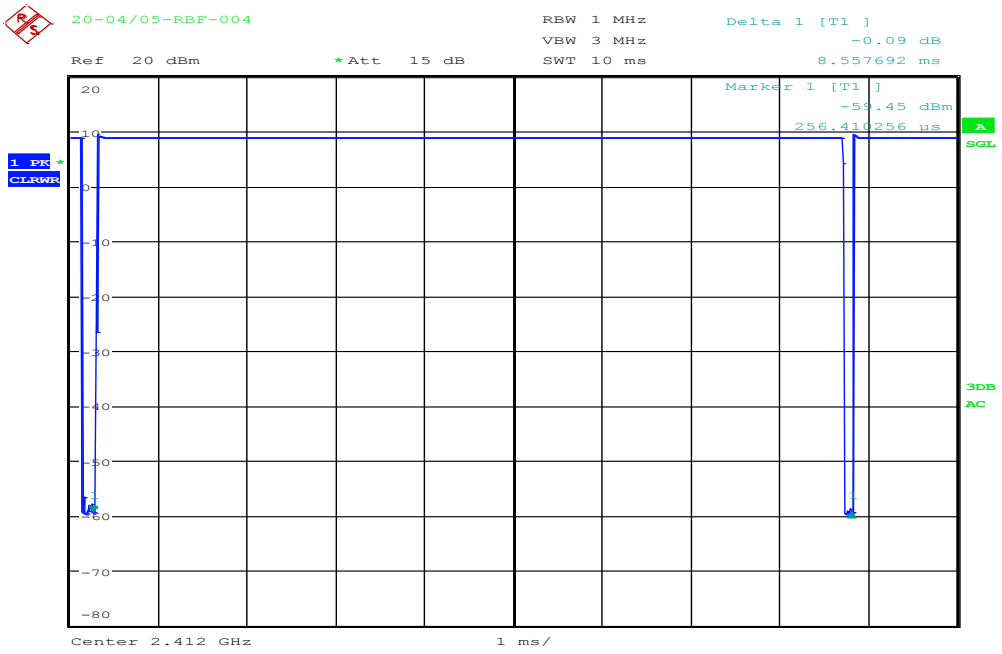
1. When the duty cycle is less than 98%, for the average measurement of the radiated emission test, the VBW setting is >1/T where the T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Refer to the following page for data plots.

802.11 b

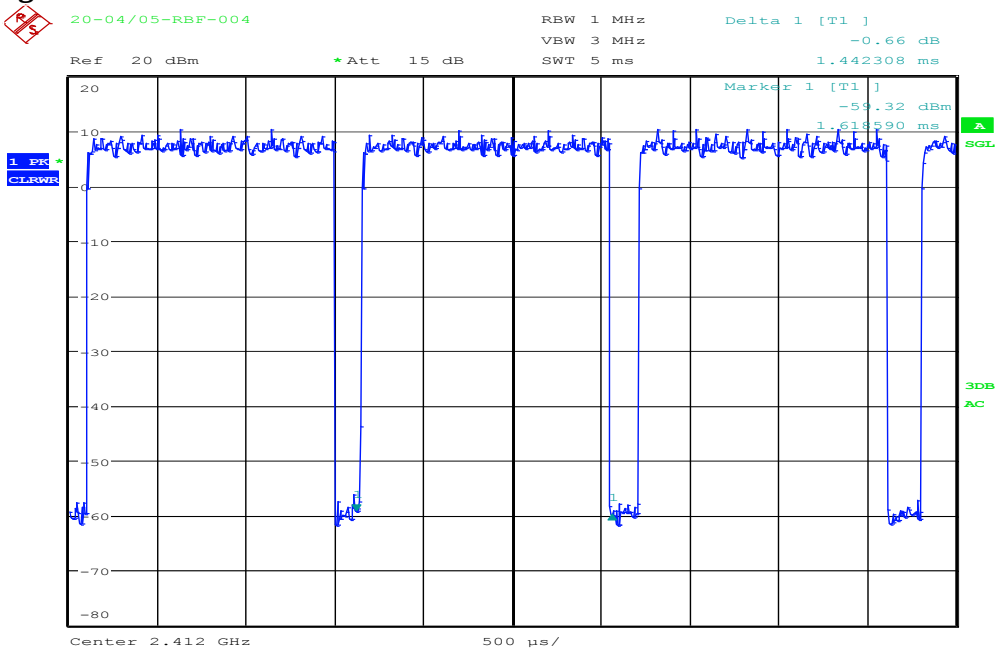


Date: 7.MAY.2020 14:29:24

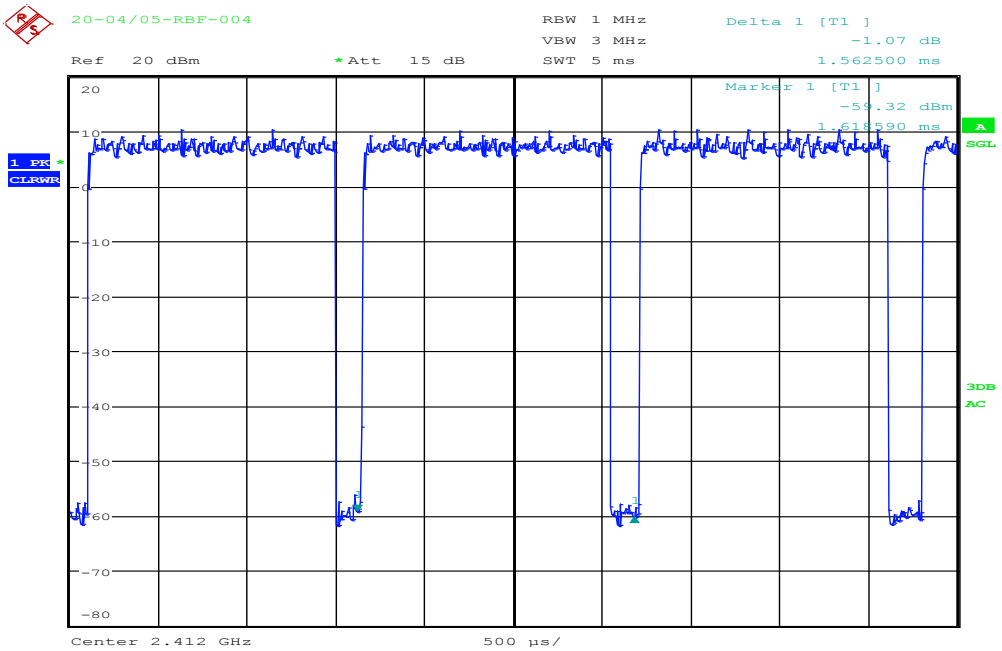


Date: 7.MAY.2020 14:29:36

802.11 g

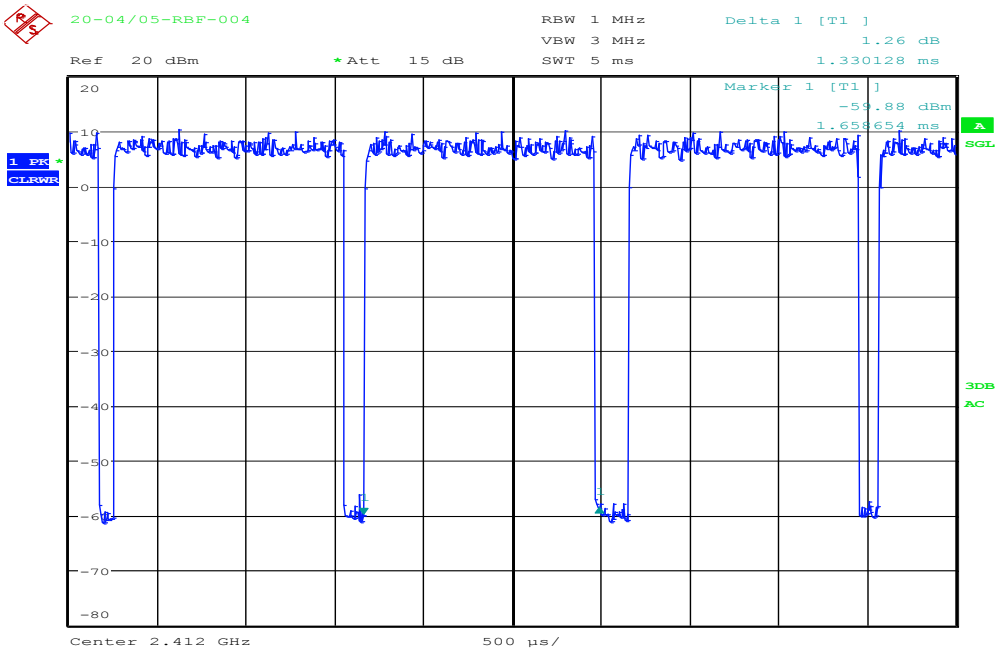


Date: 7.MAY.2020 16:19:48

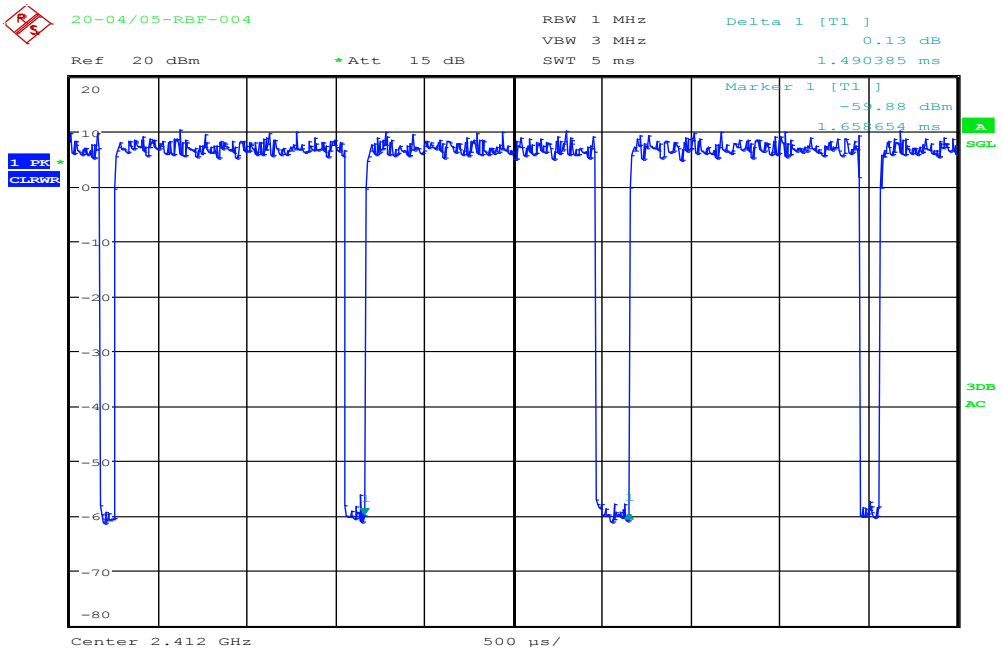


Date: 7.MAY.2020 16:19:59

802.11 n20



Date: 7.MAY.2020 17:05:05



Date: 7.MAY.2020 17:05:14

DIFFERENCE INFORMATIONS OF SERIES MODEL

1. Test Model : PRO1900
2. The Model without test (Series Model): PRO1902、PRO1904、PRO1906

The Difference Information:

Model No. / Difference Item	Test Model:	Series Model:	Series Model:	Series Model:
	PRO1900	PRO1902	PRO1904	PRO1906
PCB Layout and The Circuit Diagram	O	O	O	O
Components	X 21 terminal blocks (12 zones)	X 17 terminal blocks (8 zones)	X 13 terminal blocks (4 zones)	X 15 terminal blocks (6 zones)
Material	O	O	O	O
Function	O	O	O	O
Shape & Color	O	O	O	O
Other				
Notes: (1) " O " means the item is same with Main model. (2) " X "means the item is different with main model. And please explain it.				

Remark: 1. The multiple listing recognized without test basis is according to information supplied by manufacturer.
2. The manufacturer or supplier's quality system shall ensure that the tested model or apparatus is representative of the series-produced apparatus concerned.

Manufacturer / Supplier

Company Name : 翼詠科技股份有限公司 Aeon Matrix Inc.

Signature : 

Name : Tsai, Ming-Je Date : 3/31/2020