



FCC RADIO TEST REPORT

FCC ID : 2AUQI-7436
Equipment : HDMI Digital Media Receiver
Model Name : S3L46N
Applicant : PROJECT 710 L.L.C.
101 Merritt 7 Corporate Park, 3rd floor
Norwalk, CT 06851
United States
Standard : FCC Part 15 Subpart C §15.247

The product was received on Mar. 30, 2020 and testing was started from Apr. 06, 2020 and completed on Jun. 01, 2020. We, SPORTON INTERNATIONAL INC., EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Product Specification of Equipment Under Test.....	5
1.3 Modification of EUT	5
1.4 Testing Location	6
1.5 Applicable Standards.....	6
2 Test Configuration of Equipment Under Test	7
2.1 Carrier Frequency and Channel	7
2.2 Test Mode.....	8
2.3 Connection Diagram of Test System.....	9
2.4 Support Unit used in test configuration and system	11
2.5 EUT Operation Test Setup	11
2.6 Measurement Results Explanation Example.....	11
3 Test Result	12
3.1 6dB and 99% Bandwidth Measurement	12
3.2 Output Power Measurement.....	14
3.3 Power Spectral Density Measurement	15
3.4 Conducted Band Edges and Spurious Emission Measurement	17
3.5 Radiated Band Edges and Spurious Emission Measurement	63
3.6 AC Conducted Emission Measurement.....	67
3.7 Antenna Requirements.....	69
4 List of Measuring Equipment.....	70
5 Uncertainty of Evaluation	72
Appendix A. Conducted Test Results	
Appendix B. AC Conducted Emission Test Result	
Appendix C. Radiated Spurious Emission	
Appendix D. Radiated Spurious Emission Plots	
Appendix E. Duty Cycle Plots	



History of this test report

Report No.	Version	Description	Issued Date
FR020402-01C	01	Initial issue of report	Jun. 23, 2020
FR020402-01C	02	Revise 99% Occupied Bandwidth in section 1.2	Jul. 02, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)
3.1	15.247(a)(2)	6dB Bandwidth	Pass
3.1	2.1049	99% Occupied Bandwidth	Reporting only
3.2	15.247(b)	Power Output Measurement	Pass
3.3	15.247(e)	Power Spectral Density	Pass
3.4	15.247(d)	Conducted Band Edges	Pass
		Conducted Spurious Emission	Pass
3.5	15.247(d)	Radiated Band Edges and Radiated Spurious Emission	Pass
3.6	15.207	AC Conducted Emission	Pass
3.7	15.203 & 15.247(b)	Antenna Requirement	Pass

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Vivian Hsu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	HDMI Digital Media Receiver
Model Name	S3L46N
FCC ID	2AUQI-7436
EUT supports Radios application	WLAN b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx/Rx Channel Frequency Range	2412 MHz ~ 2472 MHz
Maximum Output Power to Antenna	<Ant. 1> 802.11b : 17.60 dBm (0.0575 W) 802.11g : 17.70 dBm (0.0589 W) 802.11n HT20 : 17.60 dBm (0.0575 W) MIMO < Ant. 0+1> 802.11b : 20.77 dBm (0.1194 W) 802.11g : 20.77 dBm (0.1194 W) 802.11n HT20 : 20.66 dBm (0.1164 W)
99% Occupied Bandwidth	<Ant. 1> 802.11b : 13.50 MHz 802.11g : 16.75 MHz 802.11n HT20 : 17.75 MHz MIMO < Ant. 0+1> 802.11b : 13.55 MHz 802.11g : 16.70 MHz 802.11n HT20 : 17.75 MHz
Antenna Type / Gain	Ant. 0: PCB Inv F type Antenna with gain 3.85 dBi Ant. 1: PCB Inv F type Antenna with gain 4.53 dBi
Type of Modulation	802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

Note: MIMO Ant. 0+1 is a calculated result from sum of the power MIMO Ant. 0 and MIMO Ant. 1.

1.3 Modification of EUT

No modifications are made to the EUT during all test items.



1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory		
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978		
Test Site No.	Sporton Site No.		
	TH05-HY	CO05-HY	03CH07-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW1190

1.5 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01.
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.10-2013

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z and HDMI Extender Cable. The worst cases (EUT with HDMI Extender Cable, EUT without HDMI Extender Cable and X Plane) were recorded in this report.
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		

2.2 Test Mode

Final test modes are considering the modulation and worse data rates as below table.

Modulation	Data Rate
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0

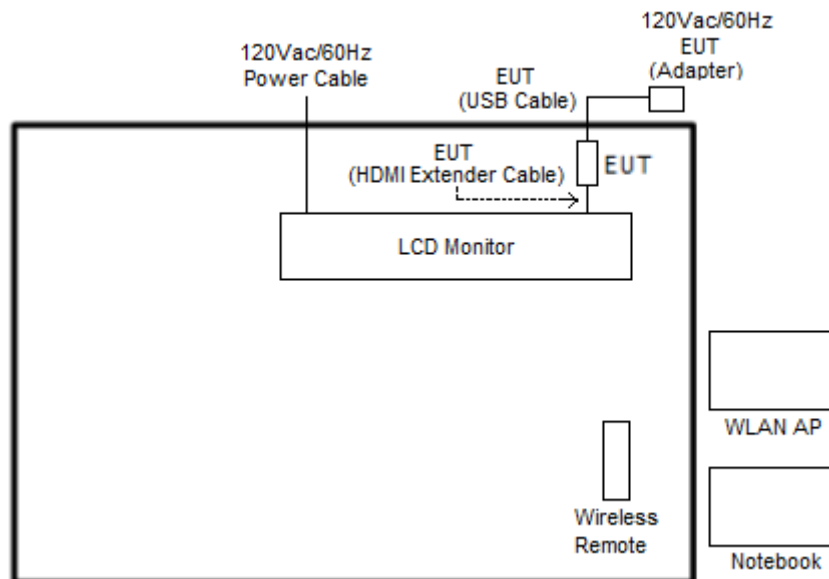
Test Cases	
AC Conducted Emission	Mode 1 :WLAN (2.4GHz) Link + Bluetooth Link + MPEG4 + USB Cable (Charging from AC Adapter) + HDMI Extender Cable + TV: Sharp LC-50UA6800T (TV Resolution 720p_60Hz_10b_HDR10)
Remark: For Radiated Test Cases, the tests were performed with USB Cable 1.	

Ch. #	2400-2483.5 MHz		
	802.11b	802.11g	802.11n HT20
Low	01	01	01
Middle	06	06	06
High	11	11	11
	12	12	12
	13	13	13

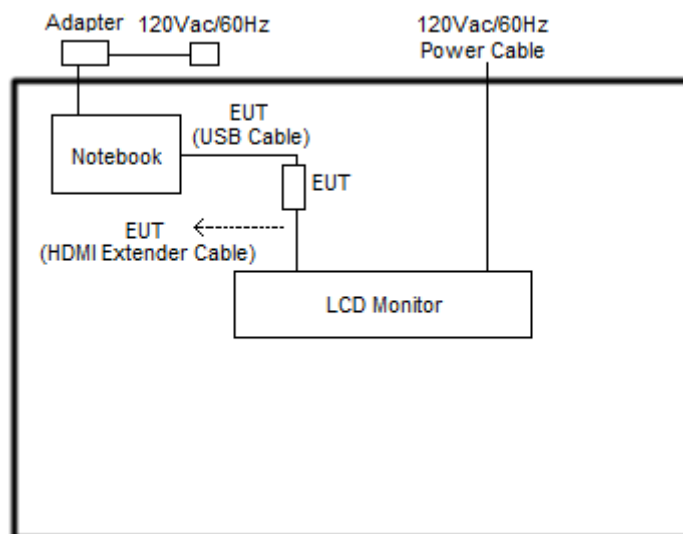
Remark: For radiation spurious emission, the final modulation and the worst data rate was reference the max RF conducted power.

2.3 Connection Diagram of Test System

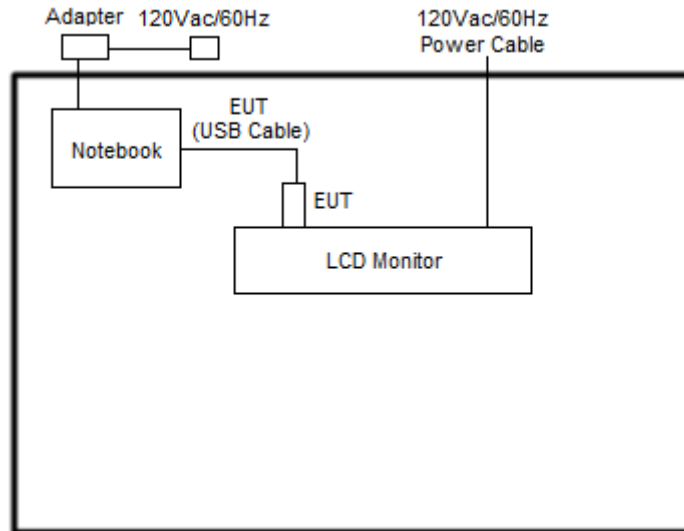
<AC Conducted Emission Mode>



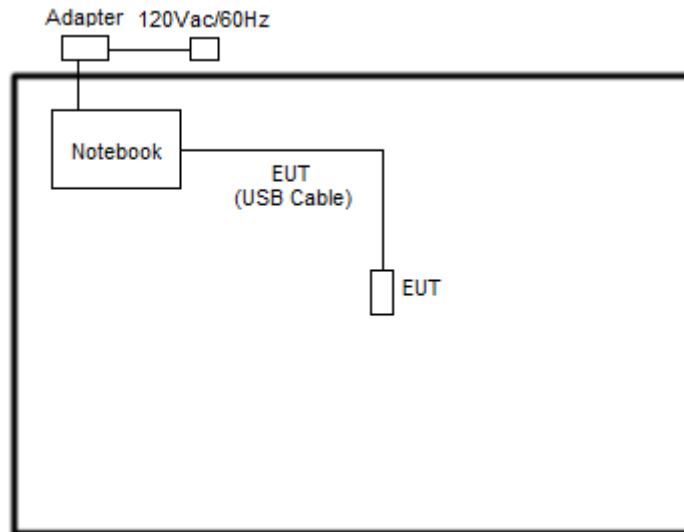
<WLAN Tx for EUT with HDMI Extender Cable>



<WLAN Tx for EUT without HDMI Extender Cable>



<WLAN Tx for X Plane>



2.4 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	Latitude 3400	FCC DOC	N/A	AC I/P : Unshielded, 1.2m DC O/P : Shielded, 1.8m
3.	LCD Monitor	Sharp	LC-50UA6800T	FCC DoC	Shielded, 1.6m	Unshielded,1.8m
4.	Wireless Remote	N/A	L5B83H	2AN7U-5463	N/A	N/A
5.	Notebook	DELL	P79G	NA	NA	NA
6.	LCD Monitor	DELL	P2715Qt	N/A	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility “Compliance v1.0.0.71” was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB and 99% Bandwidth

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

3.1.2 Measuring Instruments

See list of measuring equipment of this test report.

3.1.3 Test Procedures

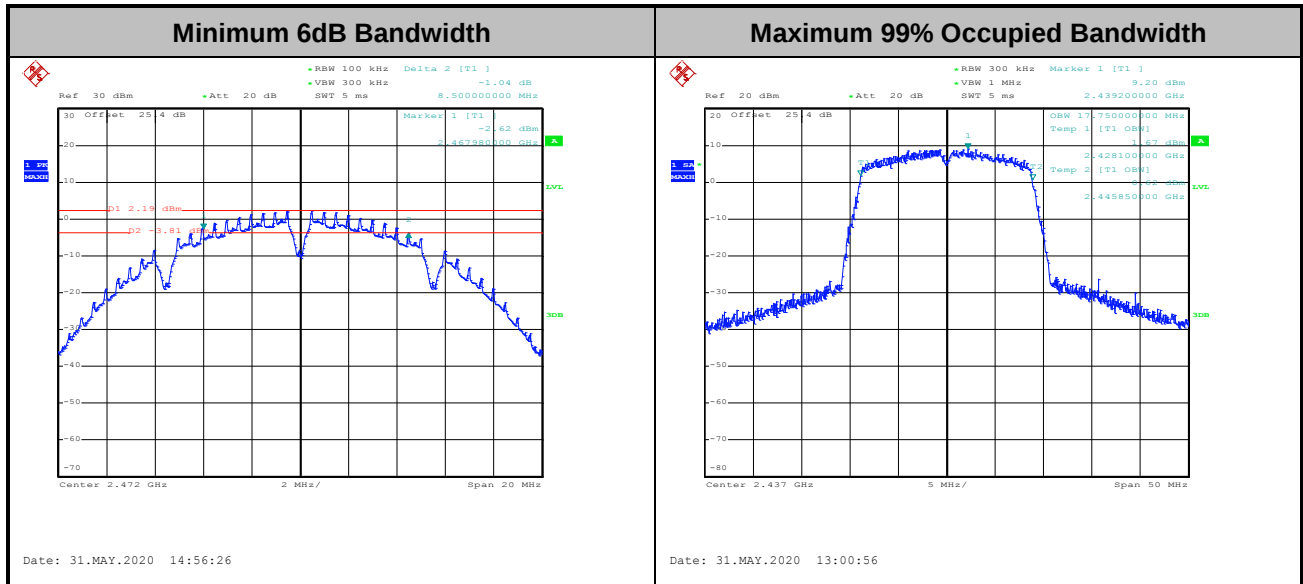
1. The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
5. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 * RBW$.
6. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 6dB and 99% Occupied Bandwidth

Please refer to Appendix A.



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

3.2 Output Power Measurement

3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz, the limit for output power is 30dBm. If transmitting antenna with directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

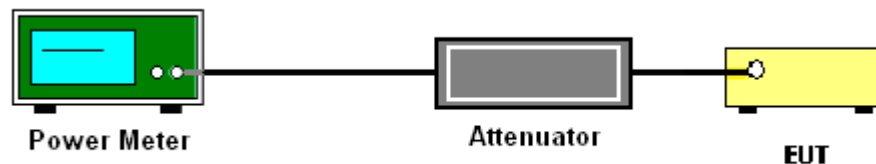
3.2.2 Measuring Instruments

See list of measuring equipment of this test report.

3.2.3 Test Procedures

1. For Average Power, the testing follows ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Average Output Power

Please refer to Appendix A.

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

3.3.2 Measuring Instruments

See list of measuring equipment of this test report.

3.3.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.10.2 Method PKPSD.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.
7. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

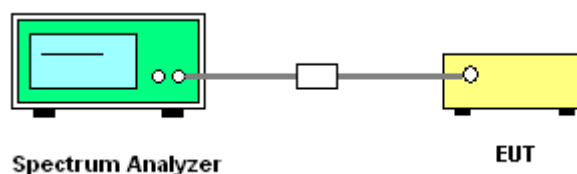
If measurements performed using method (2) plus $10 \log(N)$ exceeds the emission limit, the test should choose method (1) before declaring that the device fails the emission limit.

Method (1): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points, the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

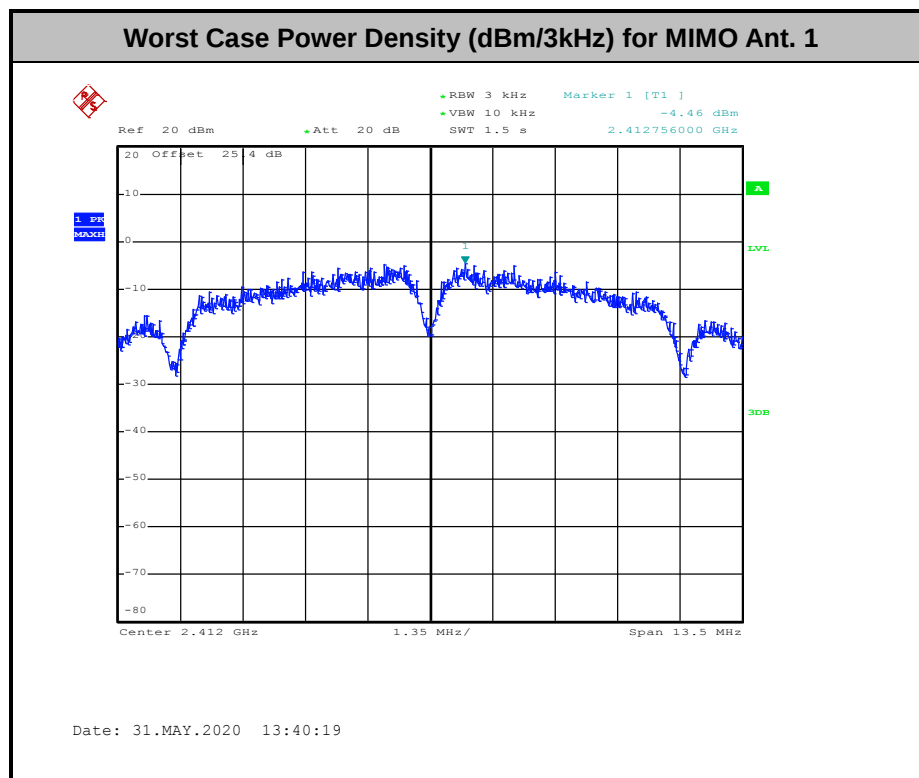
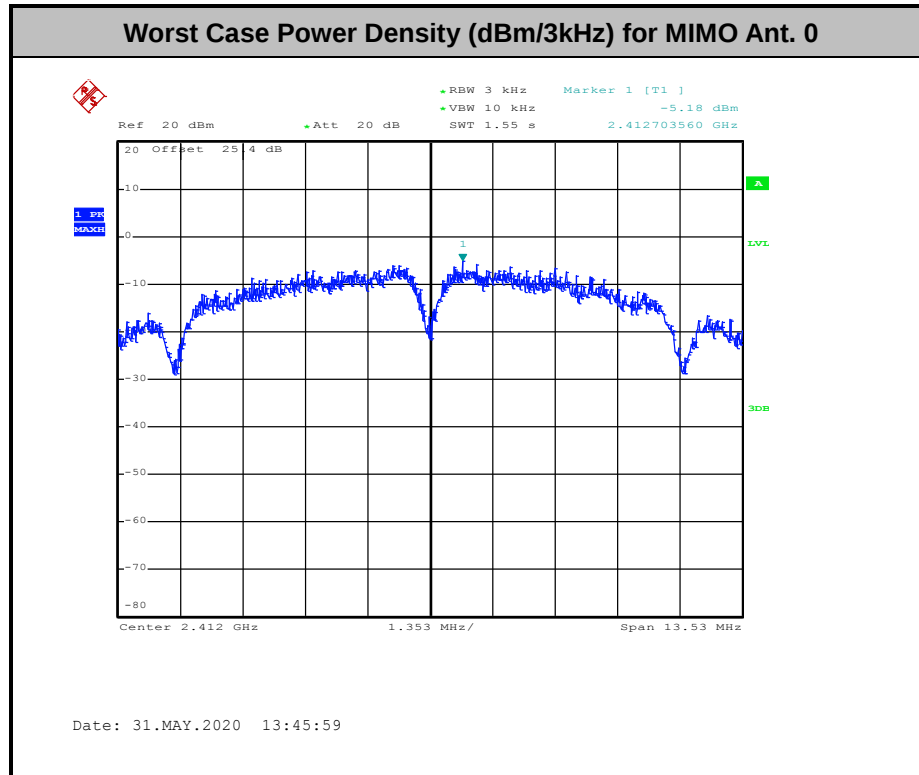
Method (2): Measure and add $10 \log(N)$ dB, where N is the number of outputs. (N=2)

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement.

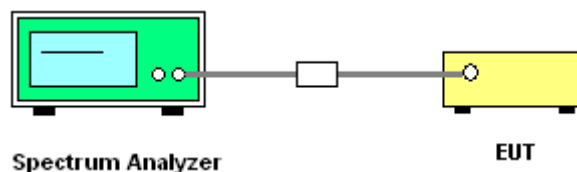
3.4.2 Measuring Instruments

See list of measuring equipment of this test report.

3.4.3 Test Procedures

1. The testing follows the ANSI C63.10 Section 11.11.3 Emission level measurement.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.4.4 Test Setup



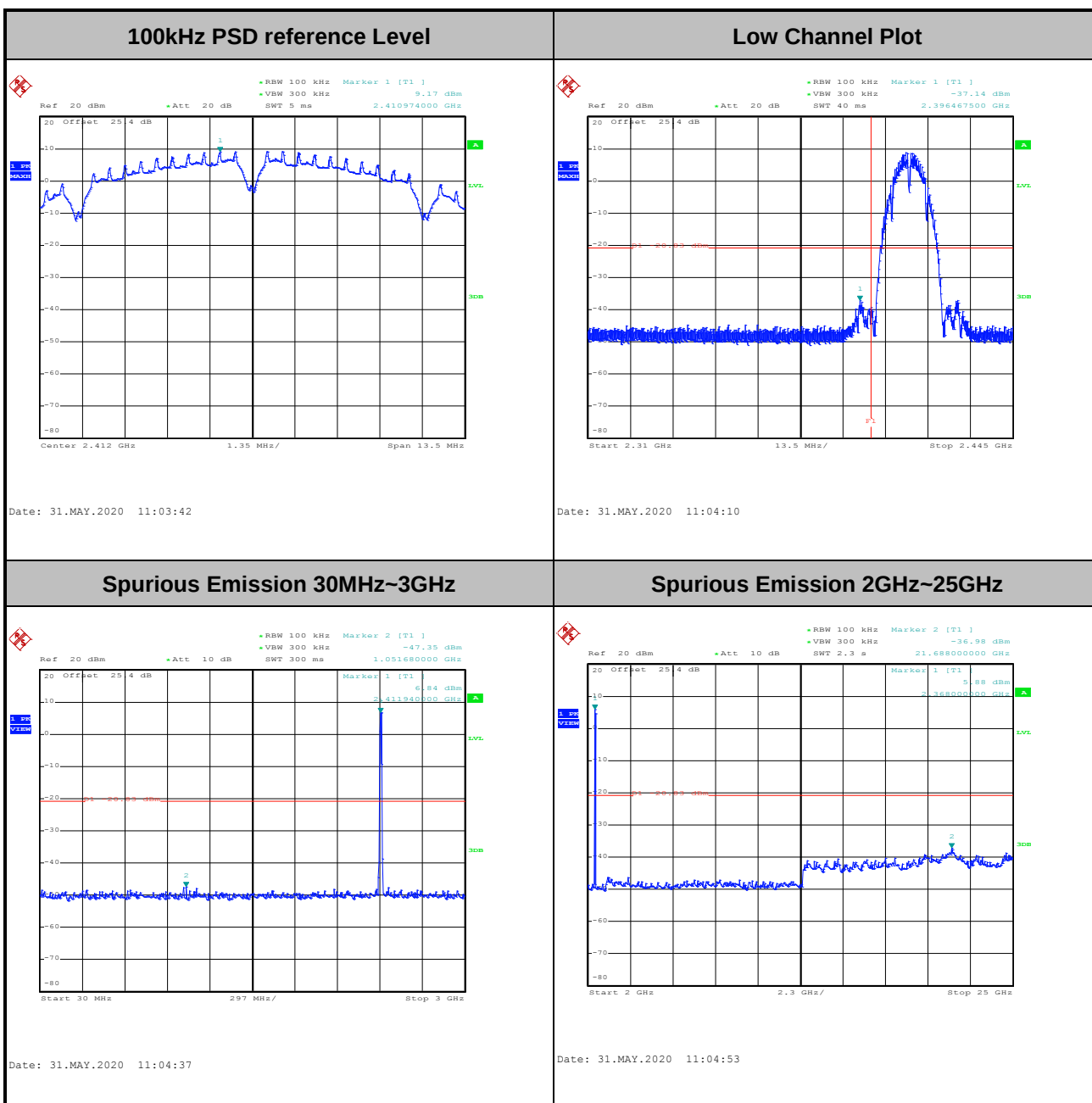


3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Test Engineer :	Eason Huang and Rebecca LI	Temperature :	20.1~24.9°C
		Relative Humidity :	45.7~58.8%

Number of TX = 1, Ant. 1 (Measured)

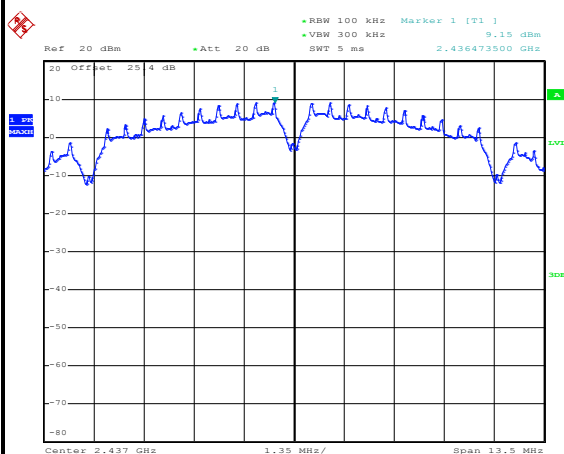
Test Mode :	802.11b	Test Channel :	01
-------------	---------	----------------	----





Test Mode :	802.11b	Test Channel :	06
-------------	---------	----------------	----

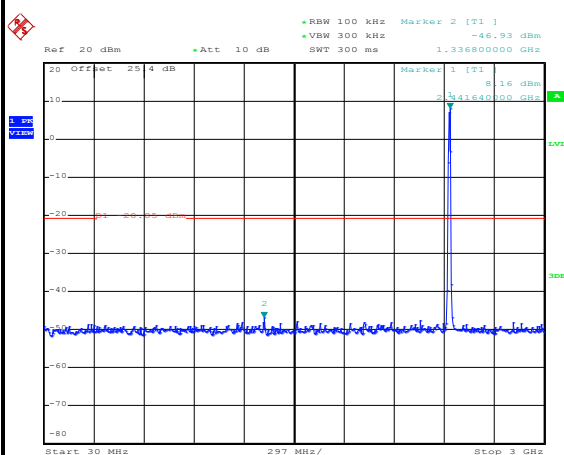
100kHz PSD reference Level



Date: 31.MAY.2020 11:11:33

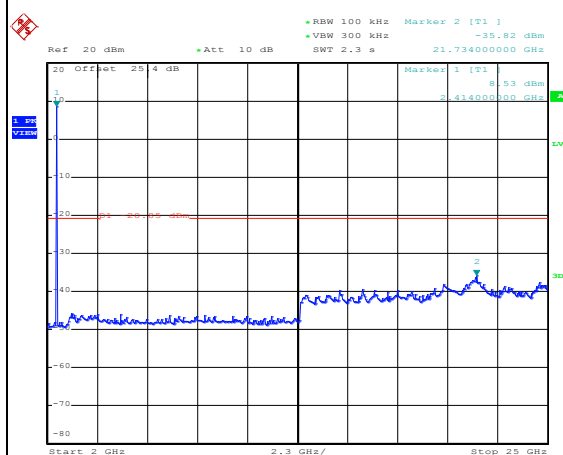
Mid Channel Plot

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 11:12:20

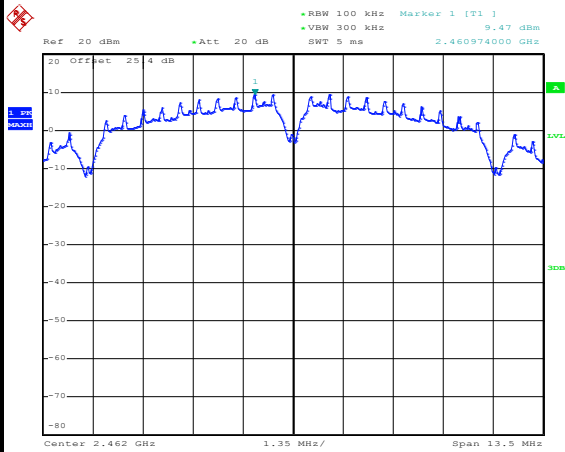
Spurious Emission 2GHz~25GHz



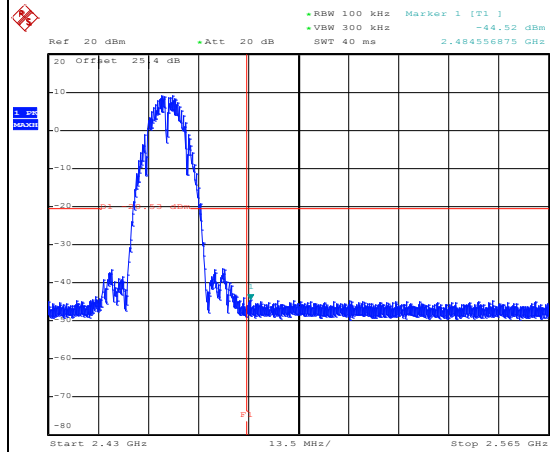
Date: 31.MAY.2020 11:14:36



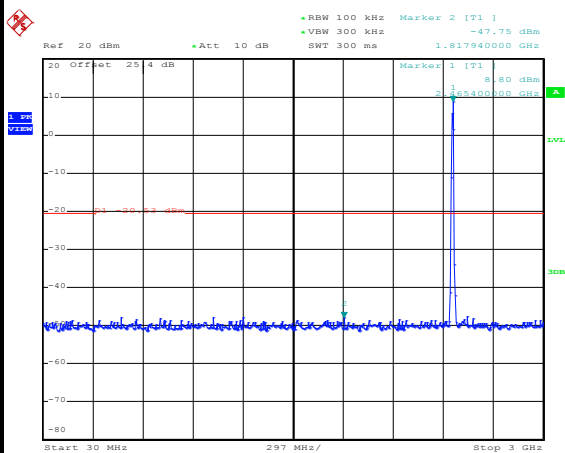
Test Mode :	802.11b	Test Channel :	11
--------------------	---------	-----------------------	----

100kHz PSD reference Level

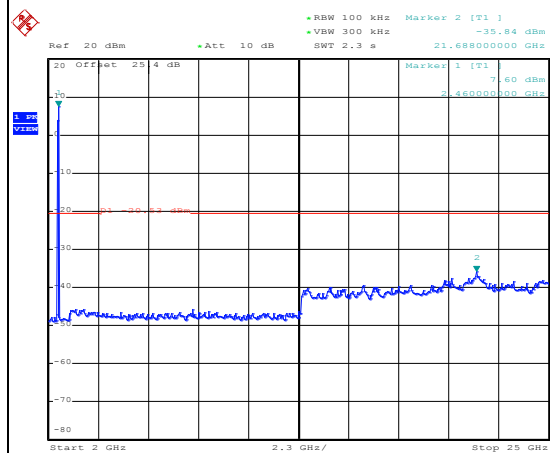
Date: 31.MAY.2020 11:20:07

High Channel Plot

Date: 31.MAY.2020 11:21:10

Spurious Emission 30MHz~3GHz

Date: 31.MAY.2020 11:21:37

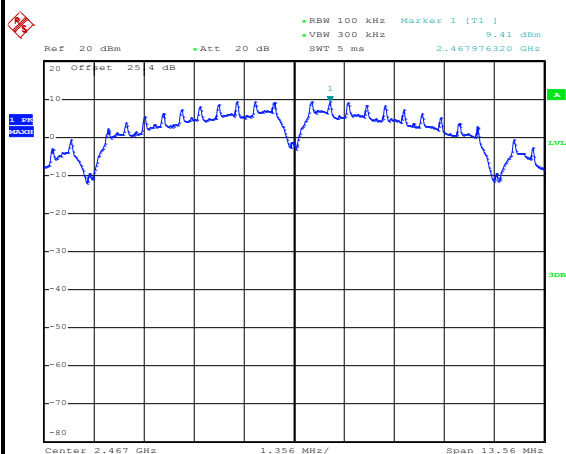
Spurious Emission 2GHz~25GHz

Date: 31.MAY.2020 11:23:47



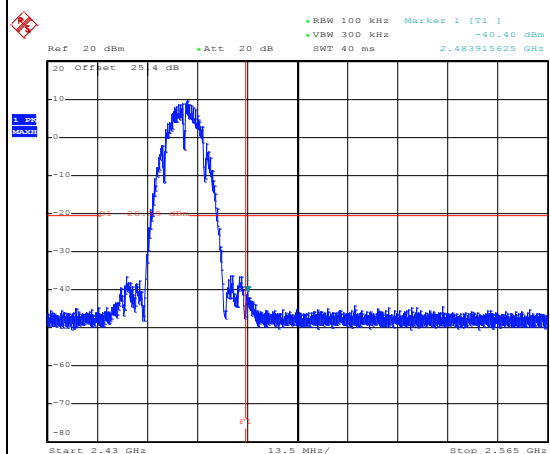
Test Mode :	802.11b	Test Channel :	12
-------------	---------	----------------	----

100kHz PSD reference Level



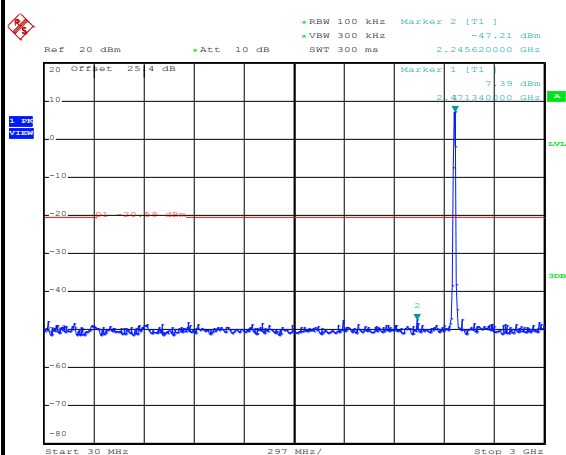
Date: 31.MAY.2020 11:30:47

High Channel Plot



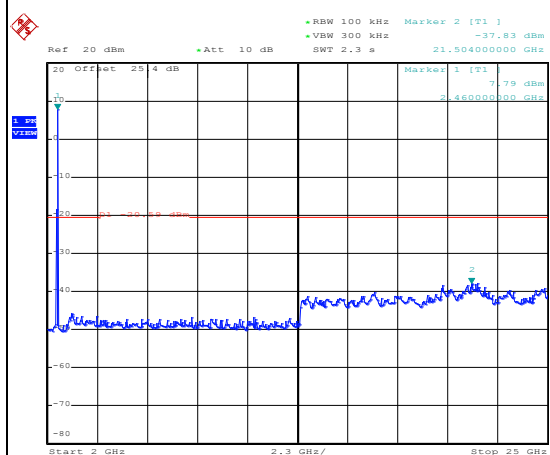
Date: 31.MAY.2020 11:31:59

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 11:32:36

Spurious Emission 2GHz~25GHz

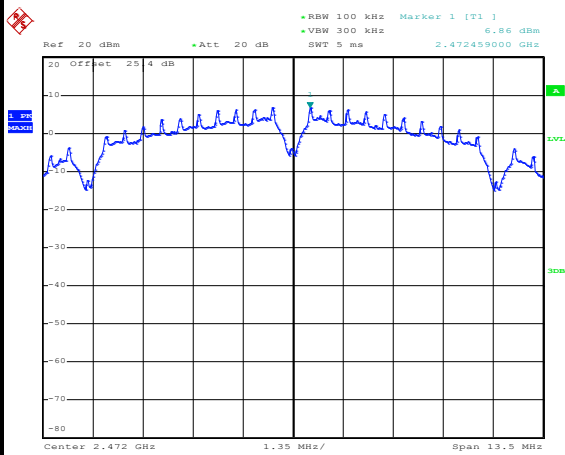


Date: 31.MAY.2020 11:33:20



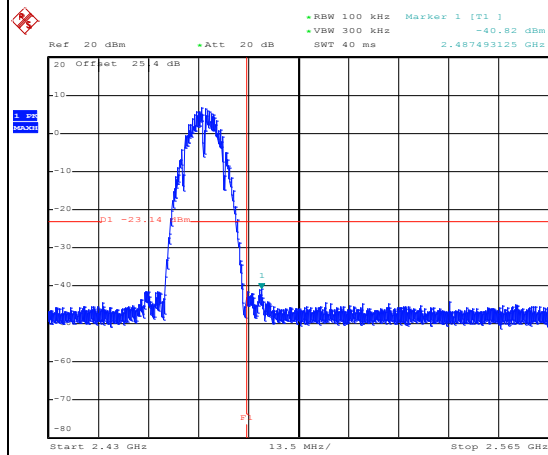
Test Mode :	802.11b	Test Channel :	13
-------------	---------	----------------	----

100kHz PSD reference Level



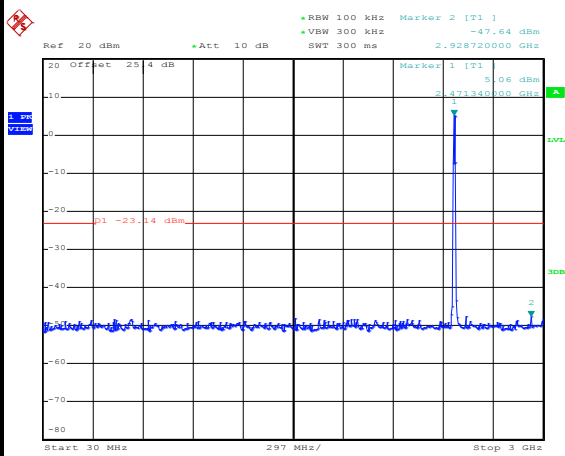
Date: 31.MAY.2020 11:39:57

High Channel Plot



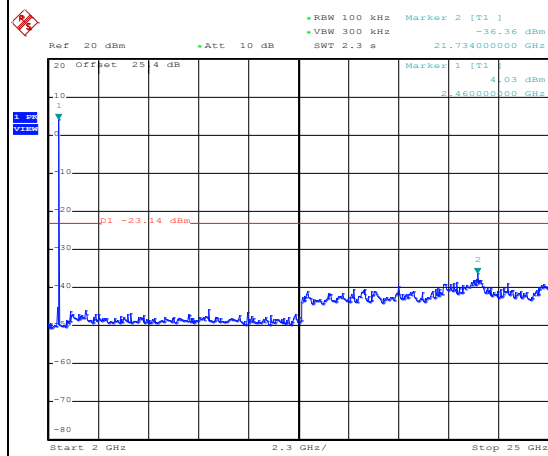
Date: 31.MAY.2020 11:40:43

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 11:41:08

Spurious Emission 2GHz~25GHz

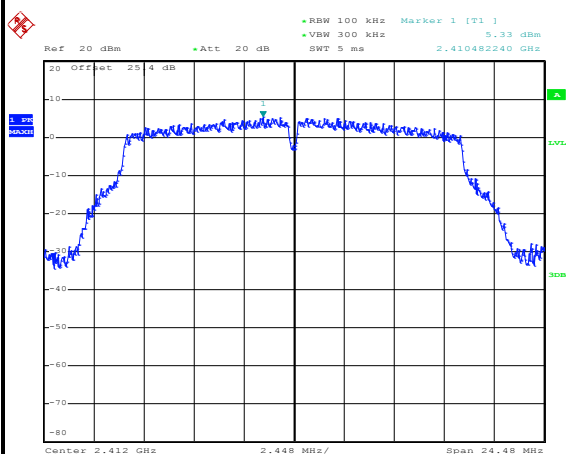


Date: 31.MAY.2020 11:41:27



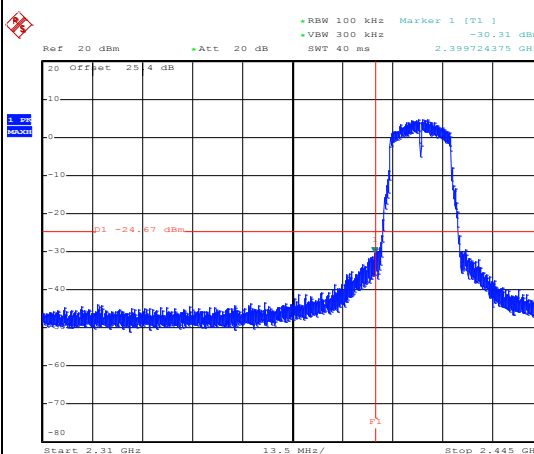
Test Mode :	802.11g	Test Channel :	01
-------------	---------	----------------	----

100kHz PSD reference Level



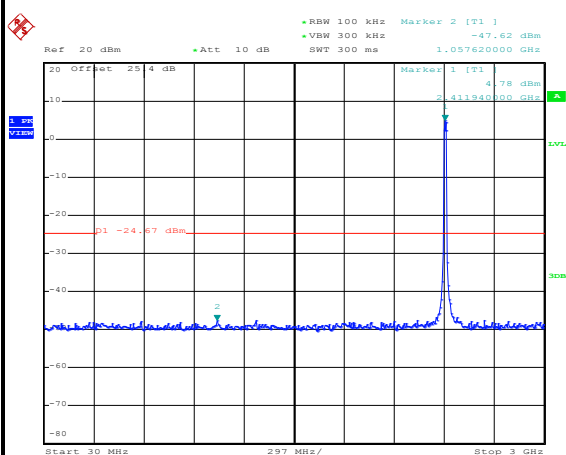
Date: 31.MAY.2020 11:49:14

Low Channel Plot



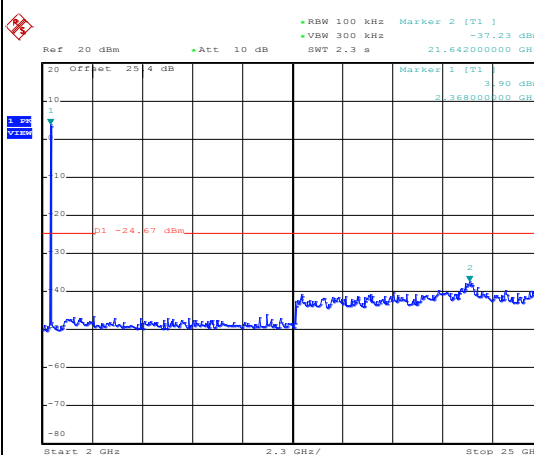
Date: 31.MAY.2020 11:49:58

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 11:51:30

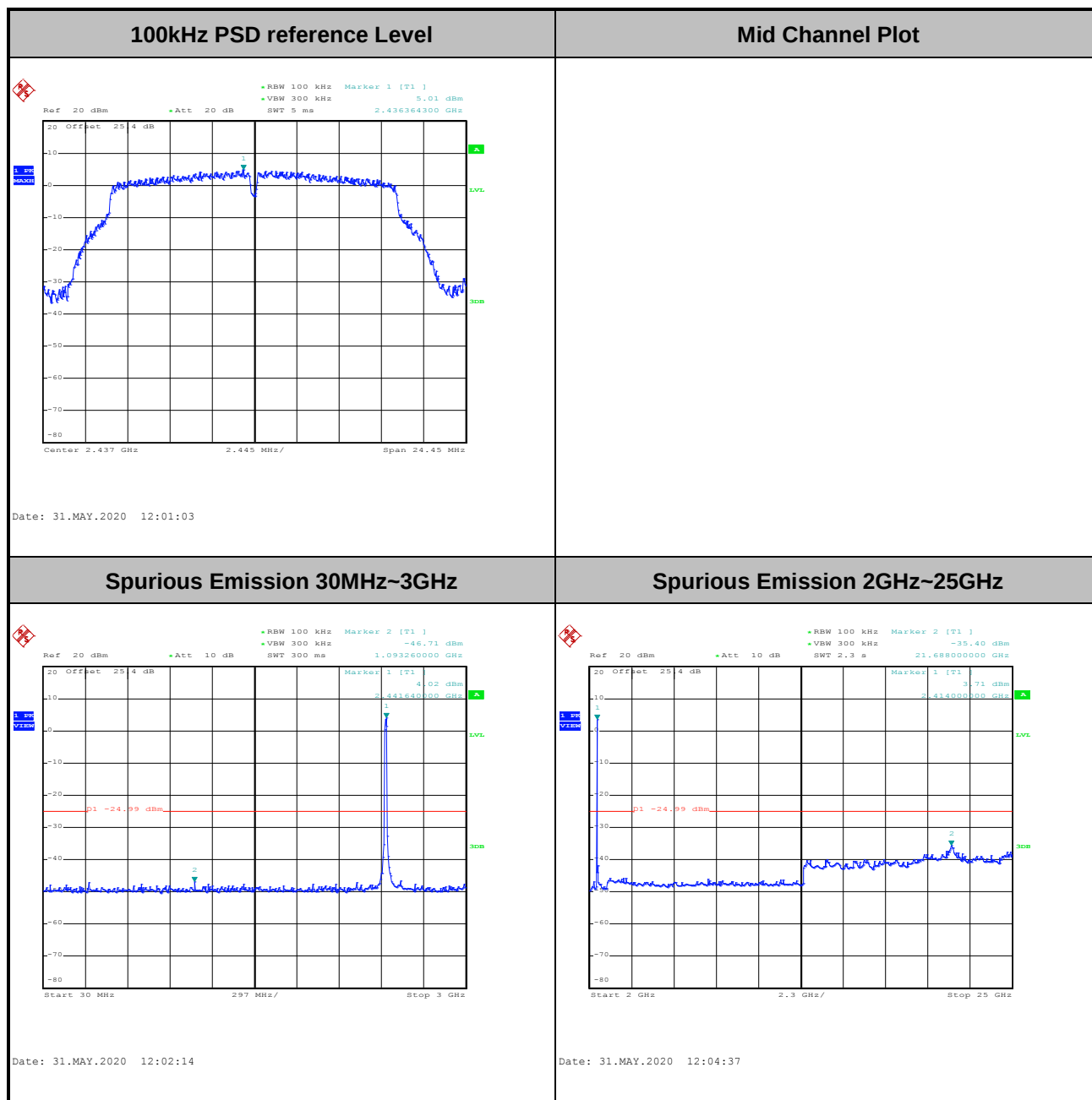
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 11:51:50



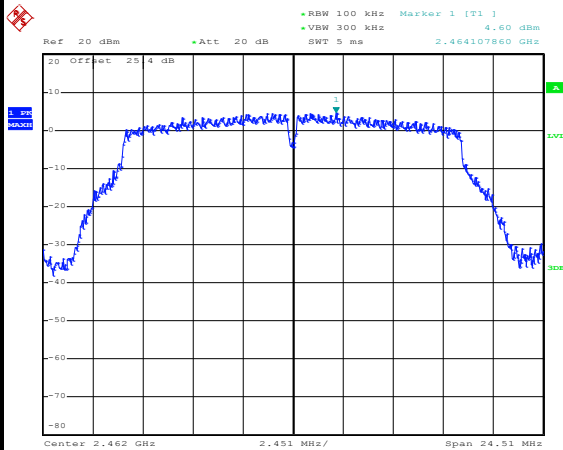
Test Mode :	802.11g	Test Channel :	06
-------------	---------	----------------	----





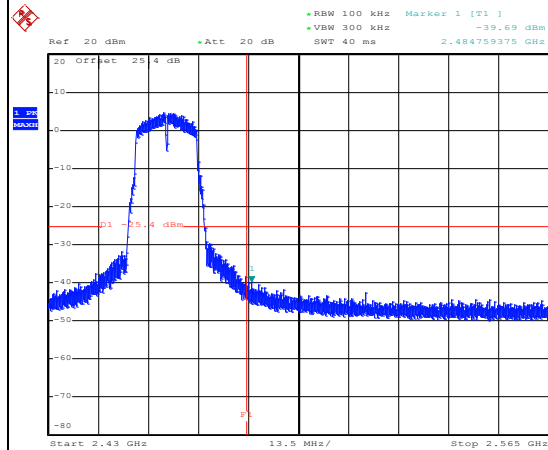
Test Mode :	802.11g	Test Channel :	11
-------------	---------	----------------	----

100kHz PSD reference Level



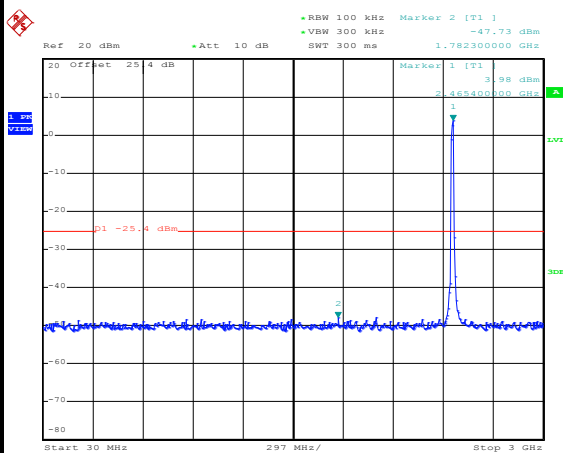
Date: 31.MAY.2020 12:10:10

High Channel Plot



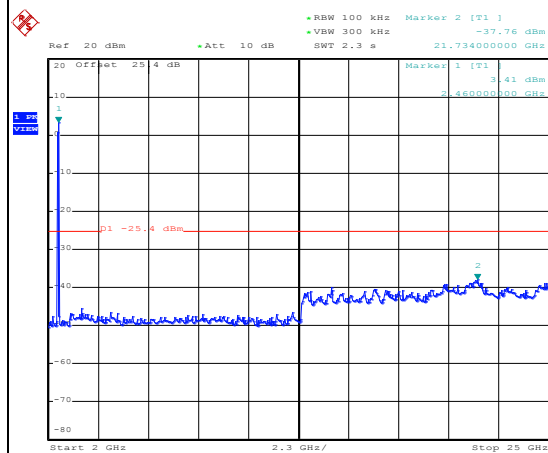
Date: 31.MAY.2020 12:25:40

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 12:11:17

Spurious Emission 2GHz~25GHz

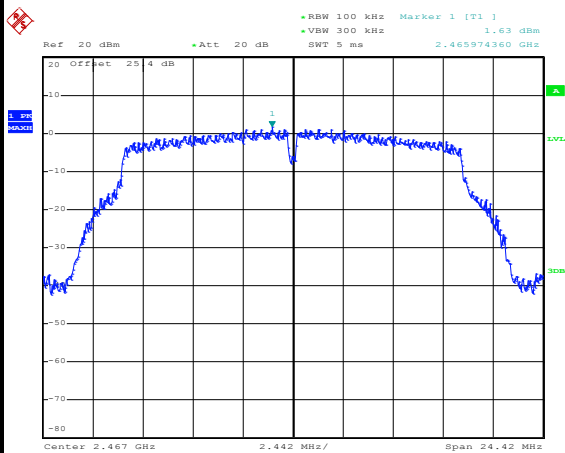


Date: 31.MAY.2020 12:11:33



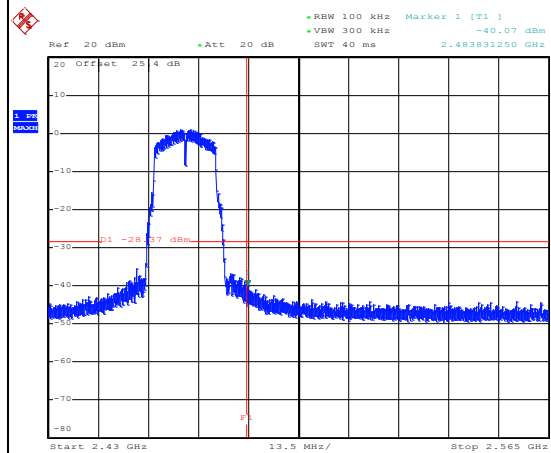
Test Mode :	802.11g	Test Channel :	12
-------------	---------	----------------	----

100kHz PSD reference Level



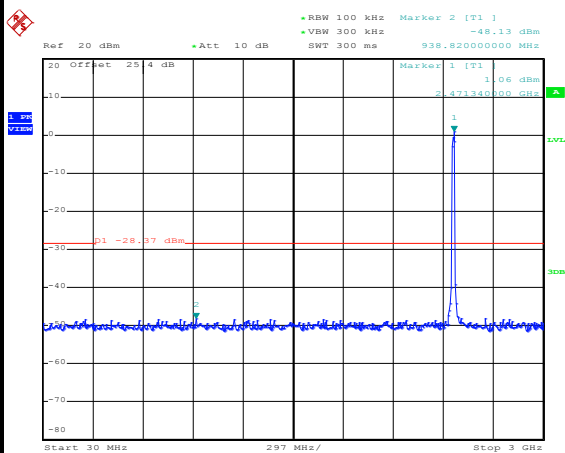
Date: 31.MAY.2020 12:19:08

High Channel Plot



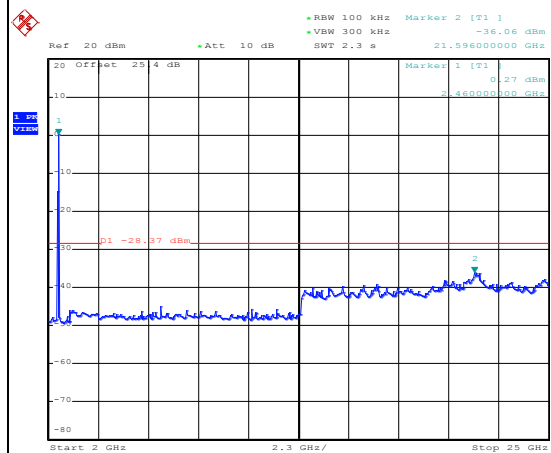
Date: 31.MAY.2020 12:19:58

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 12:21:06

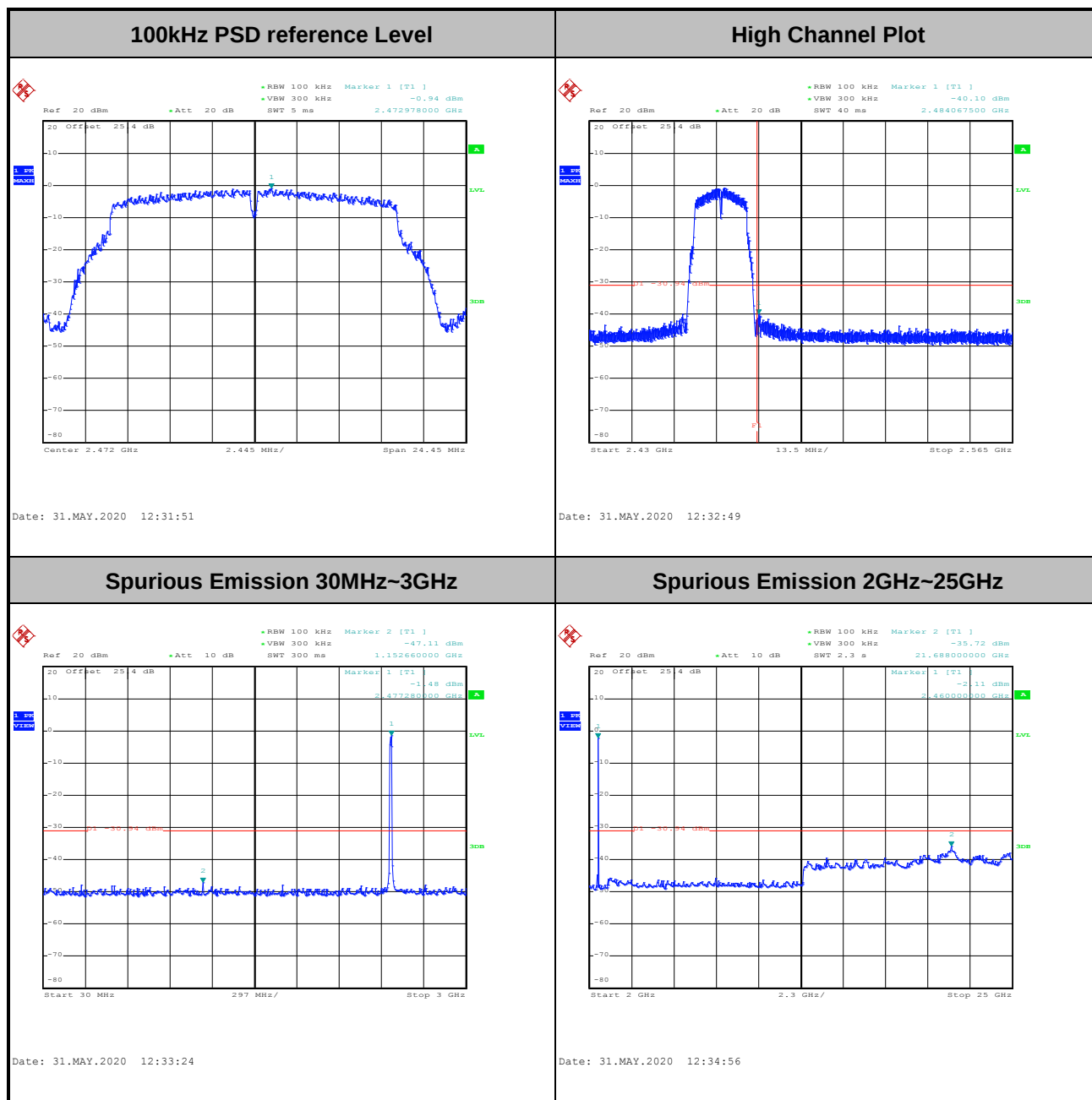
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 12:22:57



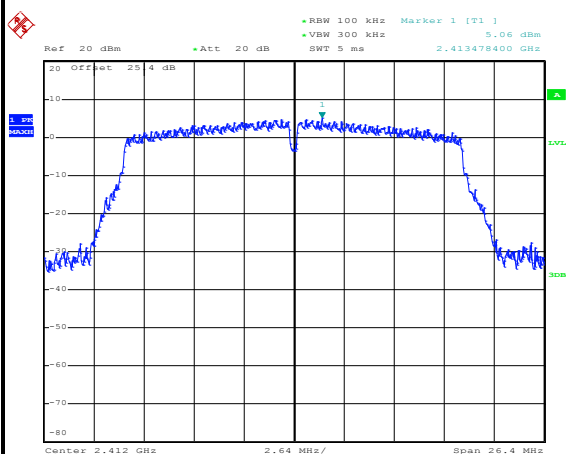
Test Mode :	802.11g	Test Channel :	13
-------------	---------	----------------	----





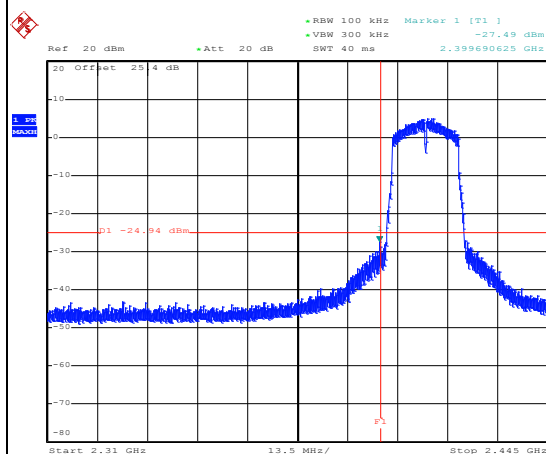
Test Mode :	802.11n HT20	Test Channel :	01
-------------	--------------	----------------	----

100kHz PSD reference Level



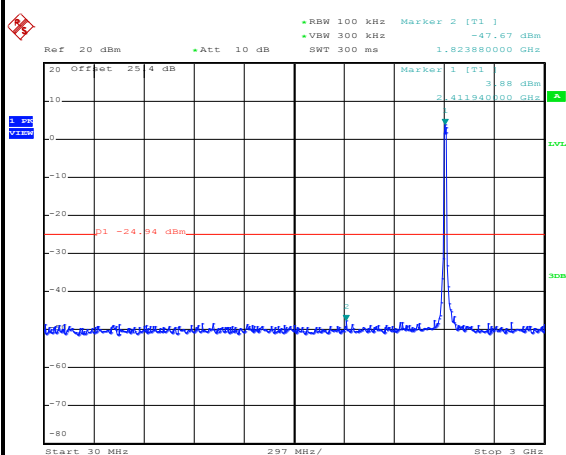
Date: 31.MAY.2020 12:49:17

Low Channel Plot



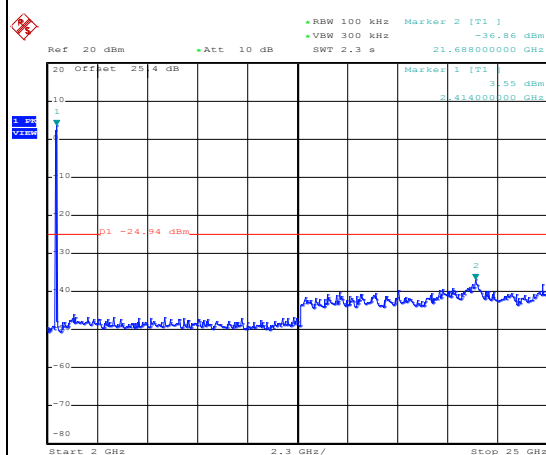
Date: 31.MAY.2020 12:50:26

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 12:50:54

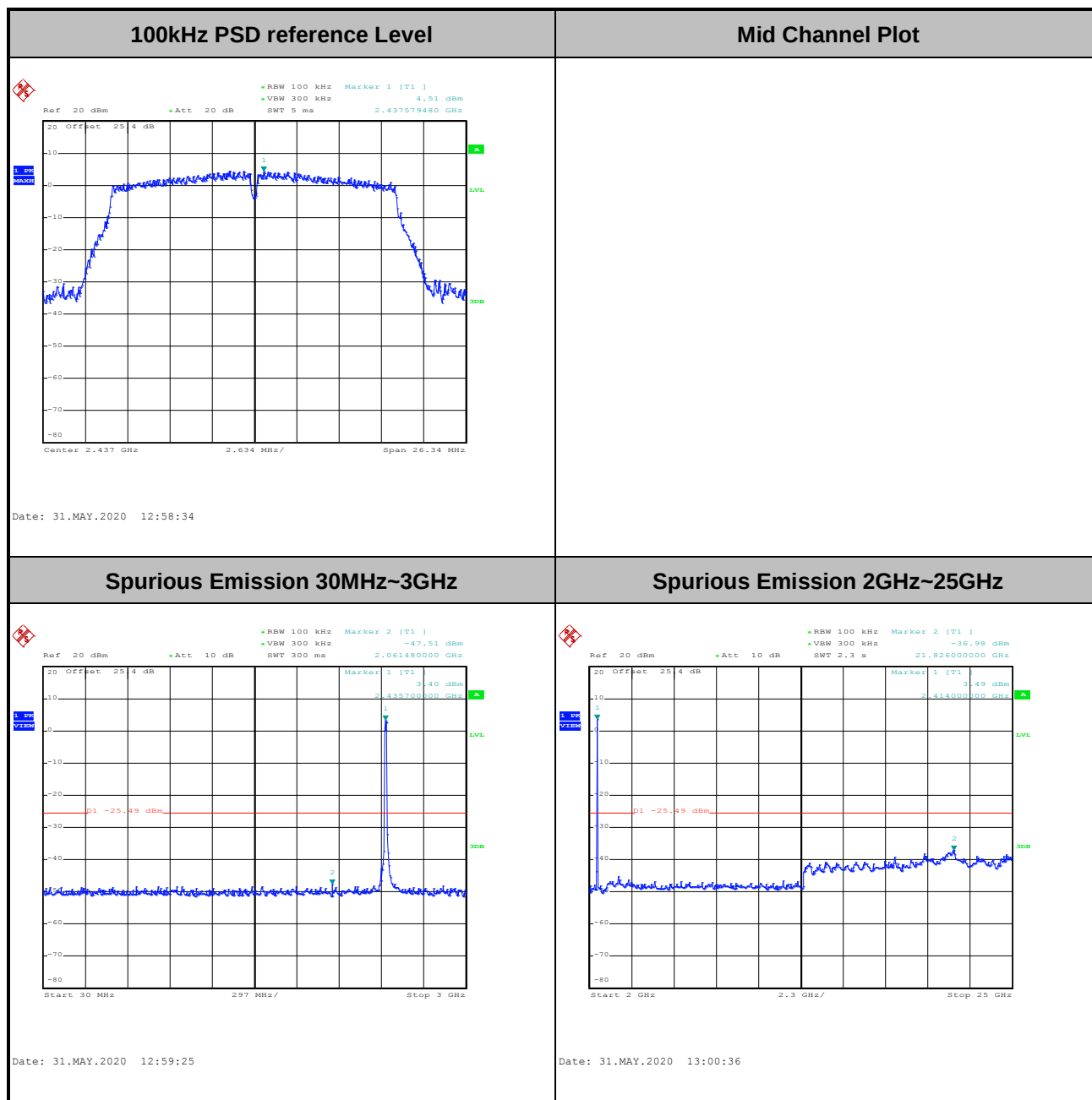
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 12:51:12



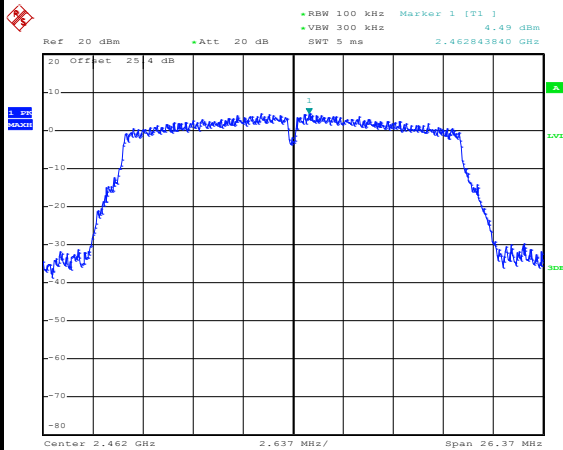
Test Mode :	802.11n HT20	Test Channel :	06
-------------	--------------	----------------	----





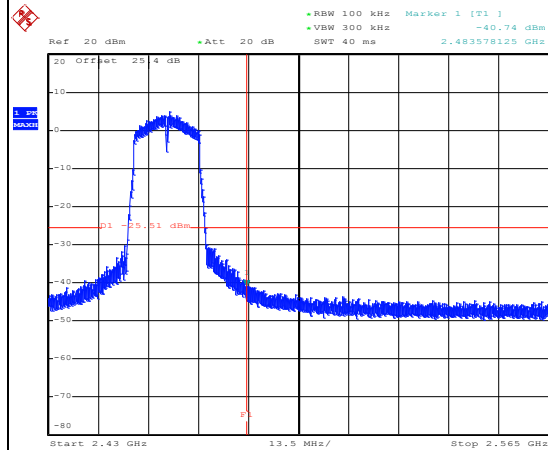
Test Mode :	802.11n HT20	Test Channel :	11
-------------	--------------	----------------	----

100kHz PSD reference Level



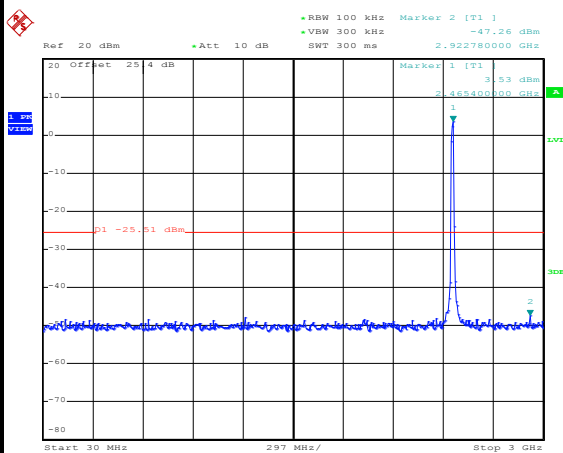
Date: 31.MAY.2020 13:10:00

High Channel Plot



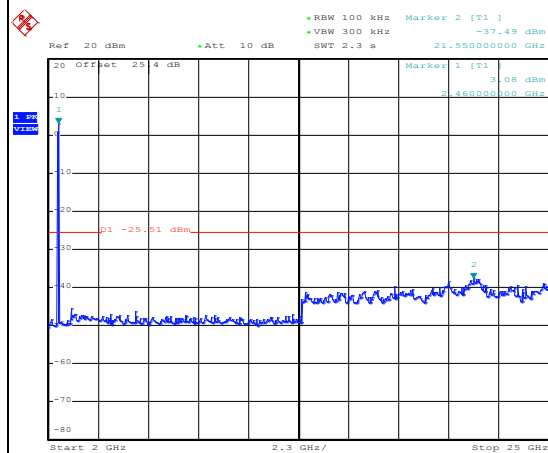
Date: 31.MAY.2020 13:11:08

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 13:11:57

Spurious Emission 2GHz~25GHz

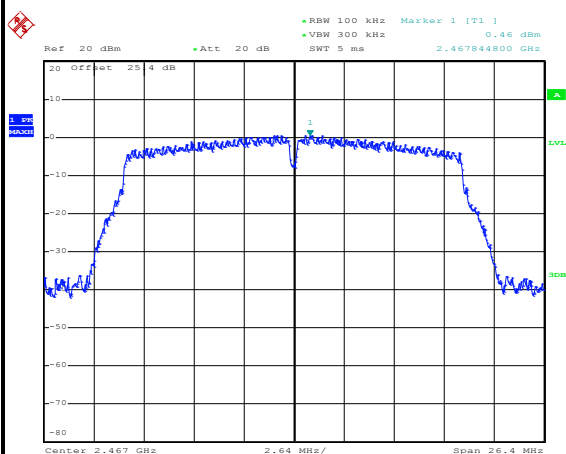


Date: 31.MAY.2020 13:12:16



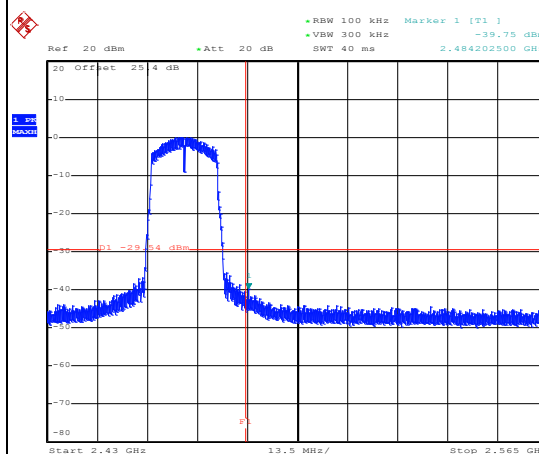
Test Mode :	802.11n HT20	Test Channel :	12
-------------	--------------	----------------	----

100kHz PSD reference Level



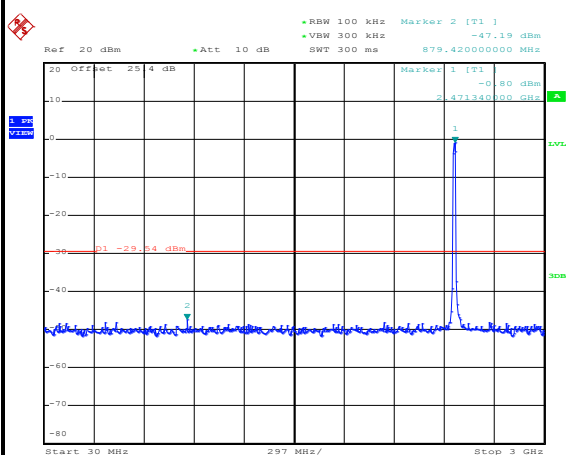
Date: 31.MAY.2020 13:17:35

High Channel Plot



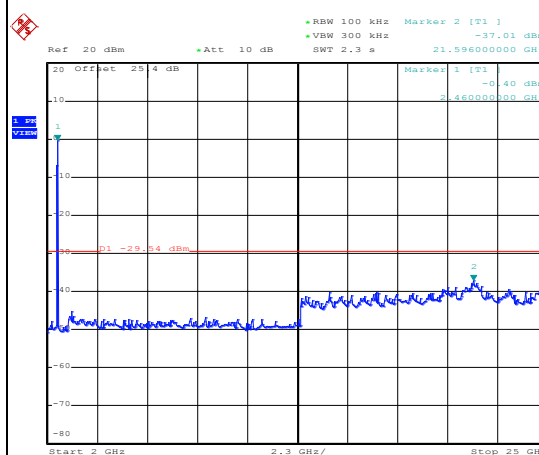
Date: 31.MAY.2020 13:18:22

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 13:19:07

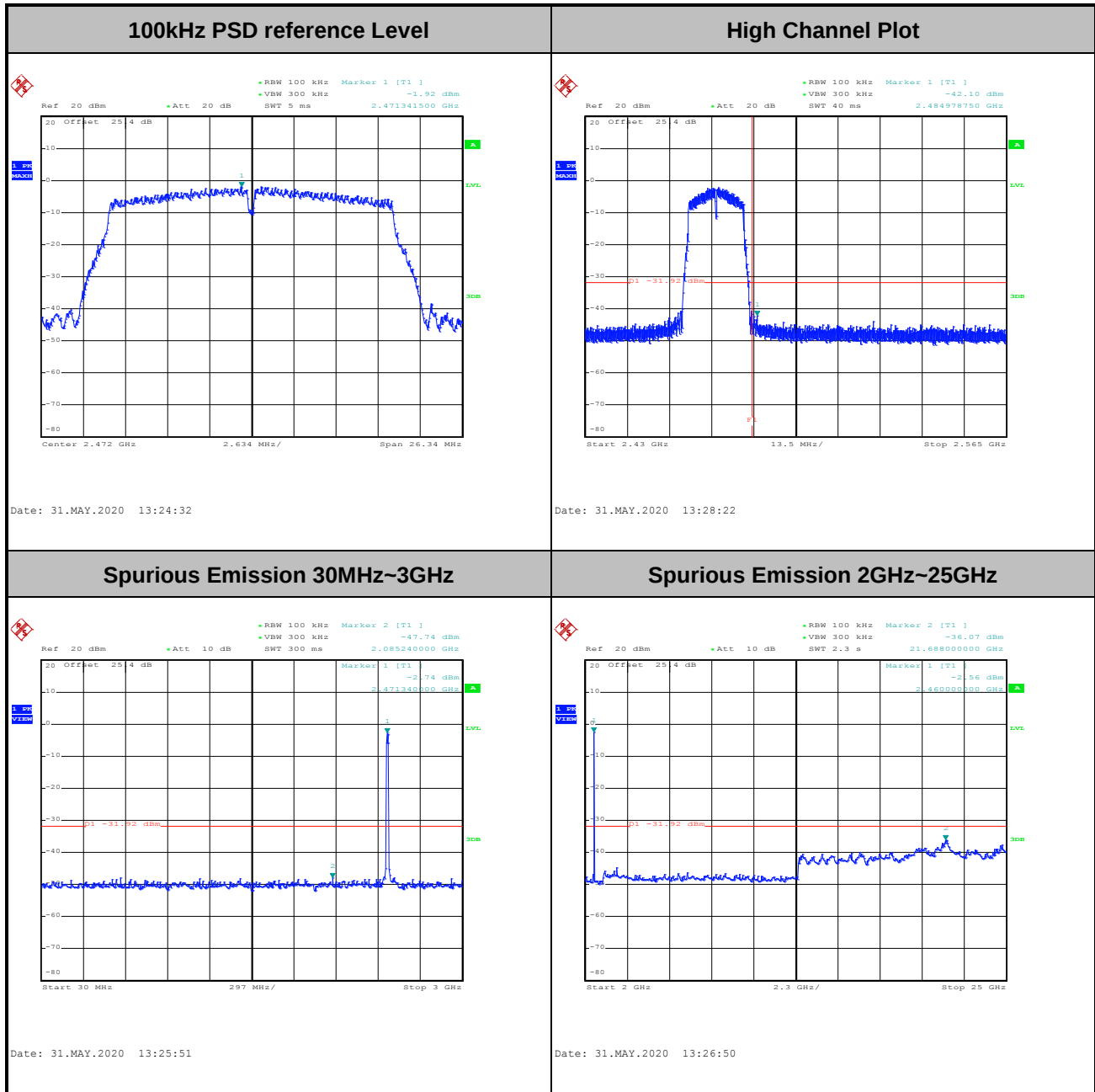
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 13:19:25



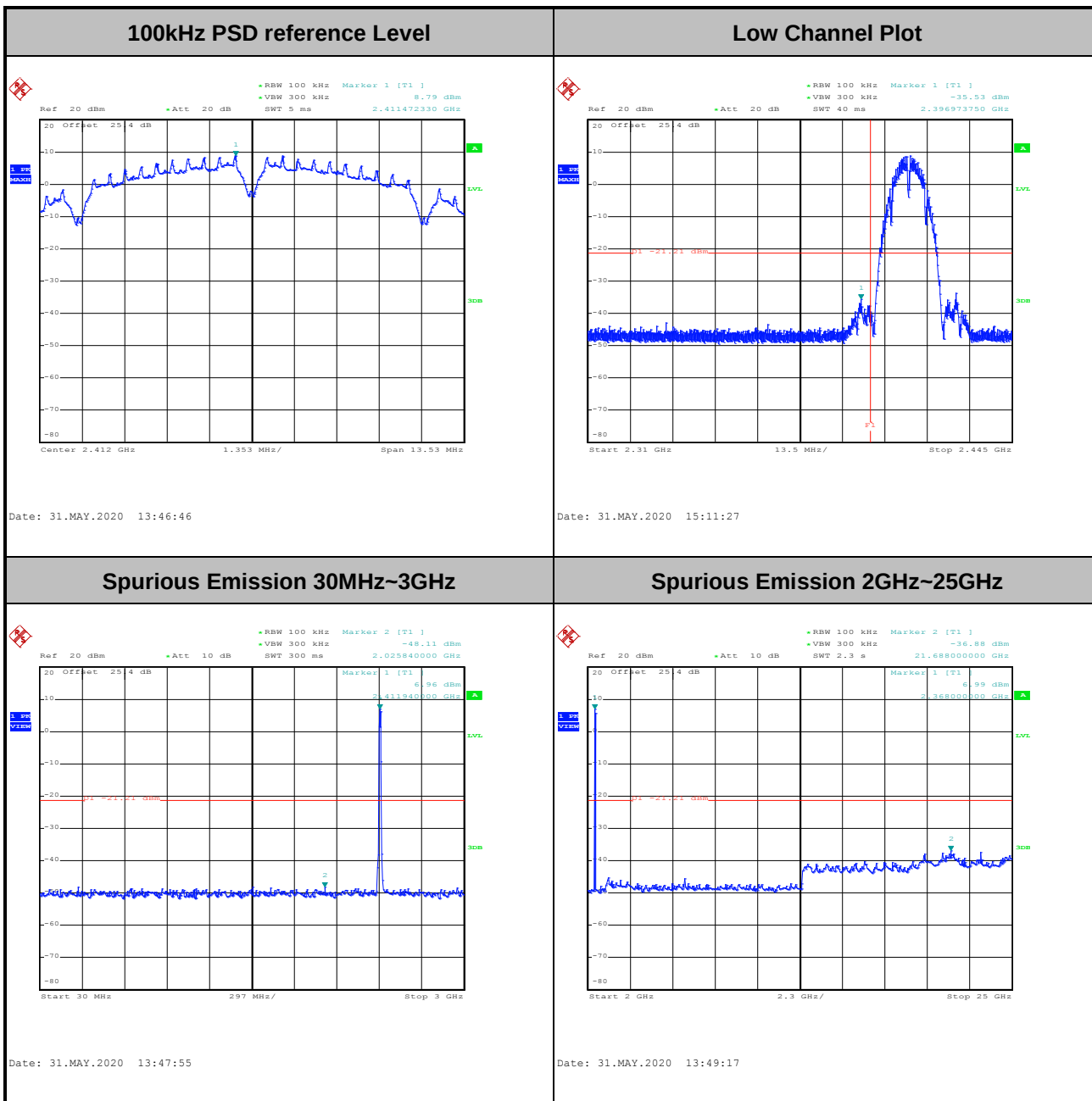
Test Mode :	802.11n HT20	Test Channel :	13
-------------	--------------	----------------	----





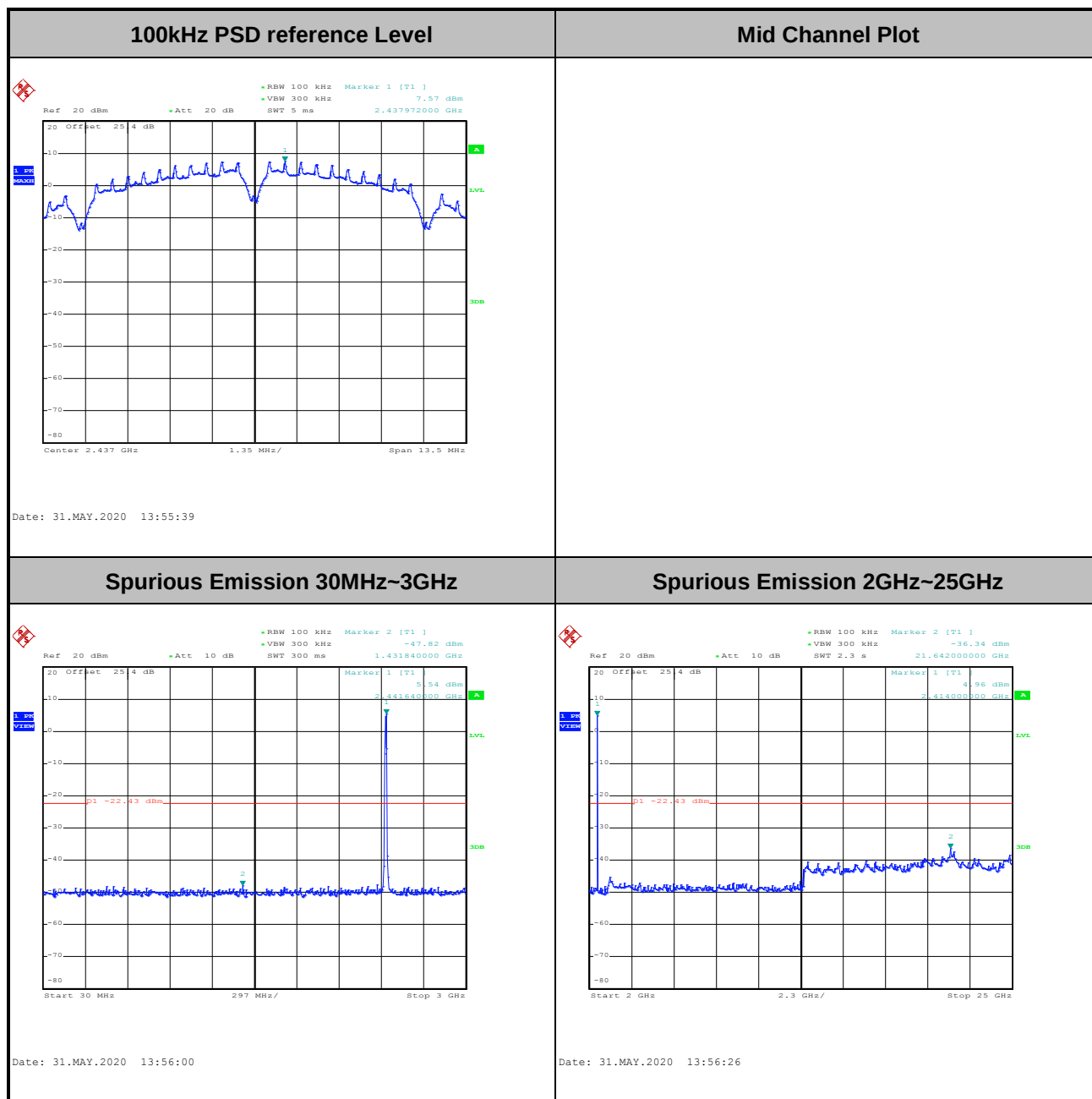
Number of TX = 2, Ant. 0 (Measured)

Test Mode :	802.11b	Test Channel :	01
-------------	---------	----------------	----



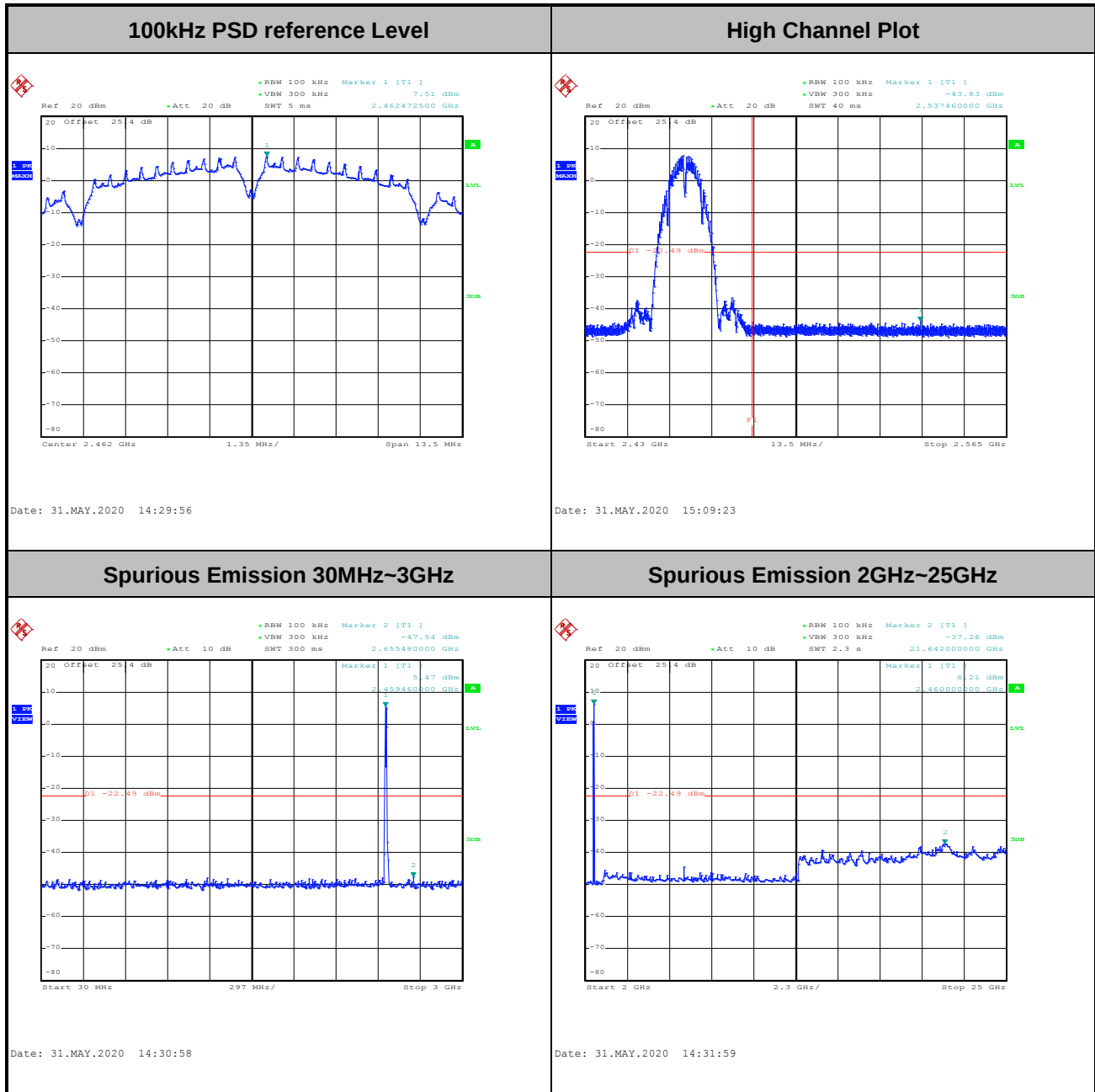


Test Mode :	802.11b	Test Channel :	06
-------------	---------	----------------	----





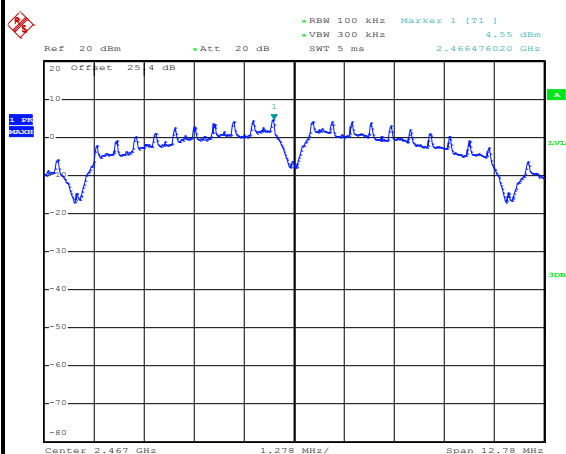
Test Mode :	802.11b	Test Channel :	11
--------------------	---------	-----------------------	----





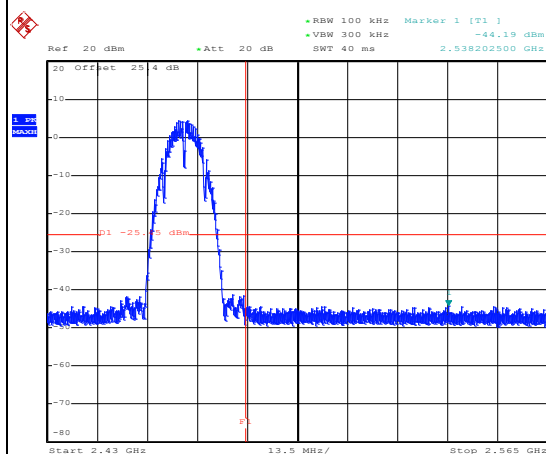
Test Mode :	802.11b	Test Channel :	12
-------------	---------	----------------	----

100kHz PSD reference Level



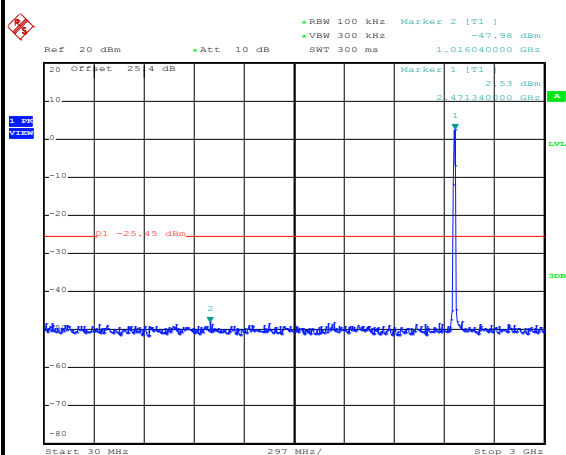
Date: 31.MAY.2020 14:37:39

High Channel Plot



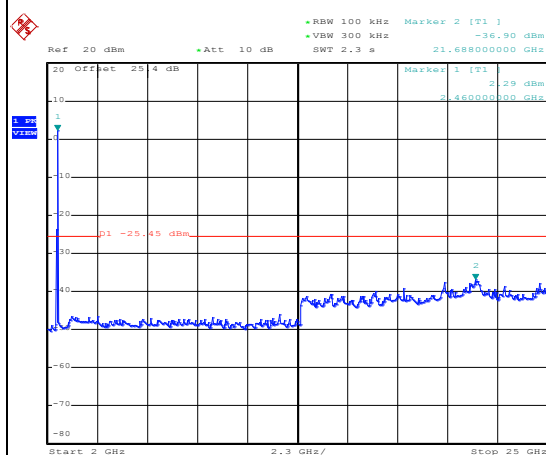
Date: 31.MAY.2020 14:38:49

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 14:39:34

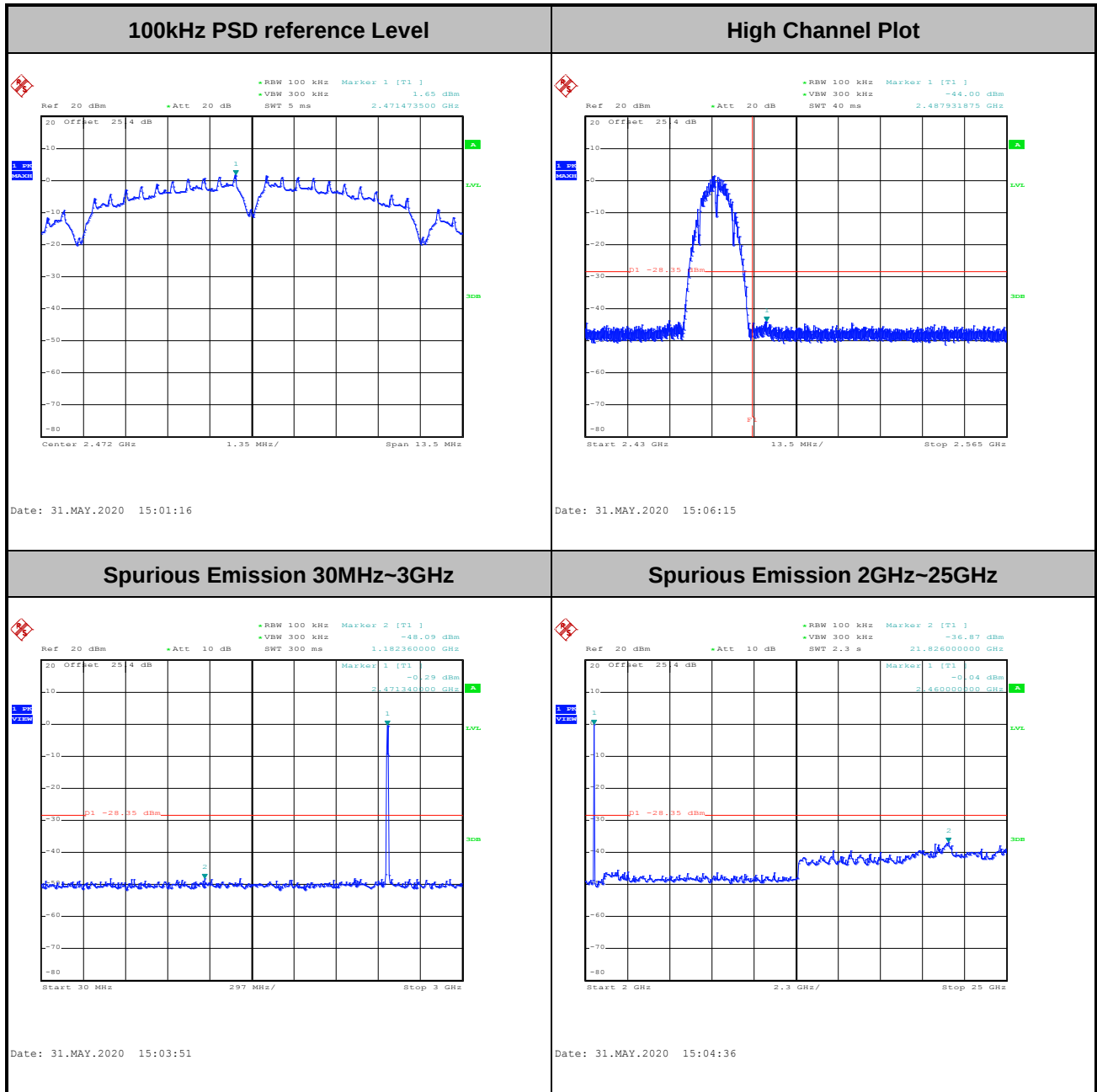
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 14:40:18



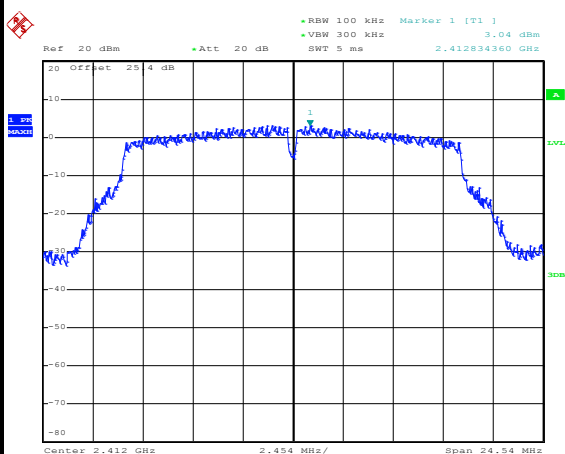
Test Mode :	802.11b	Test Channel :	13
-------------	---------	----------------	----





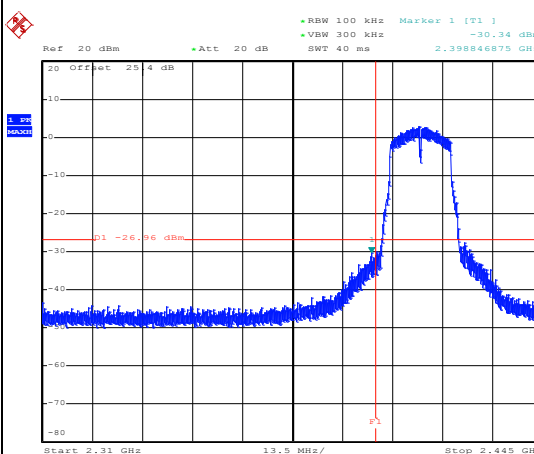
Test Mode :	802.11g	Test Channel :	01
-------------	---------	----------------	----

100kHz PSD reference Level



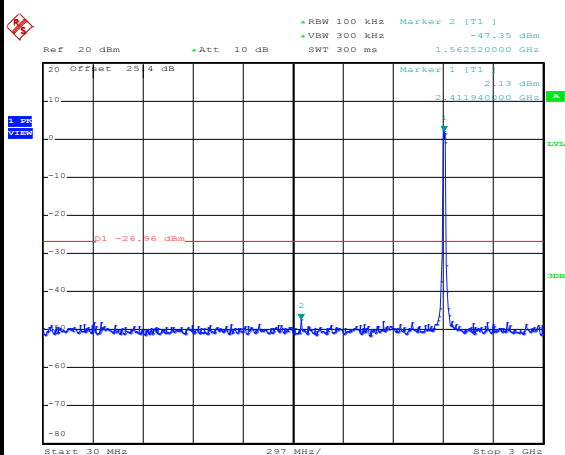
Date: 31.MAY.2020 15:19:02

Low Channel Plot



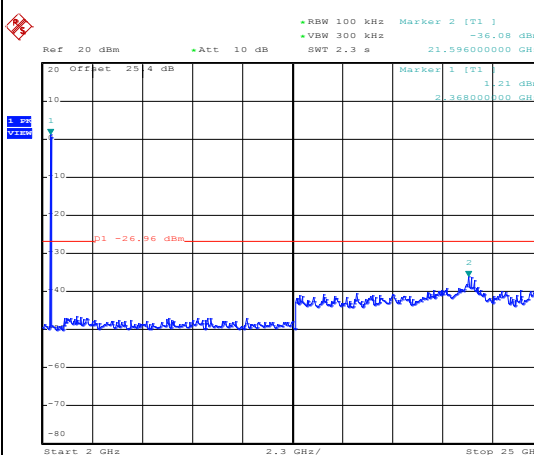
Date: 31.MAY.2020 15:19:41

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 15:20:19

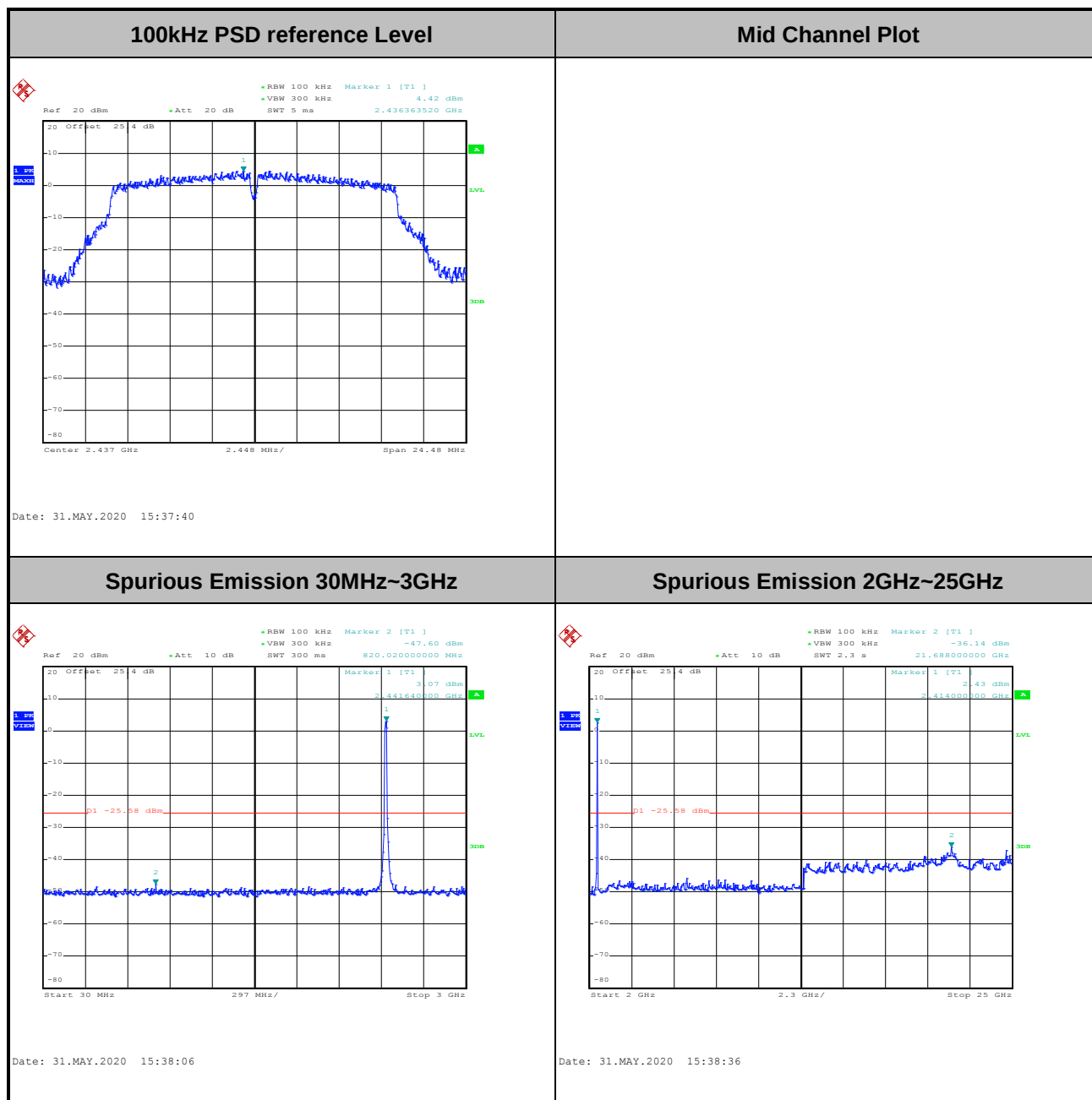
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 15:20:43



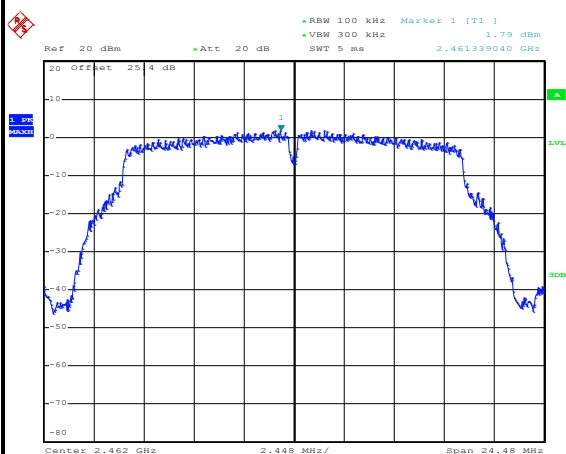
Test Mode :	802.11g	Test Channel :	06
-------------	---------	----------------	----





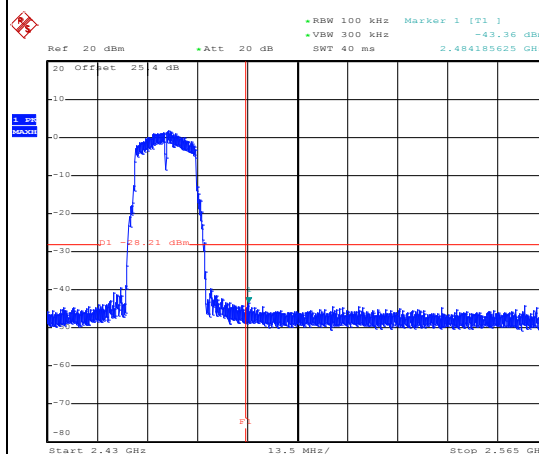
Test Mode :	802.11g	Test Channel :	11
-------------	---------	----------------	----

100kHz PSD reference Level



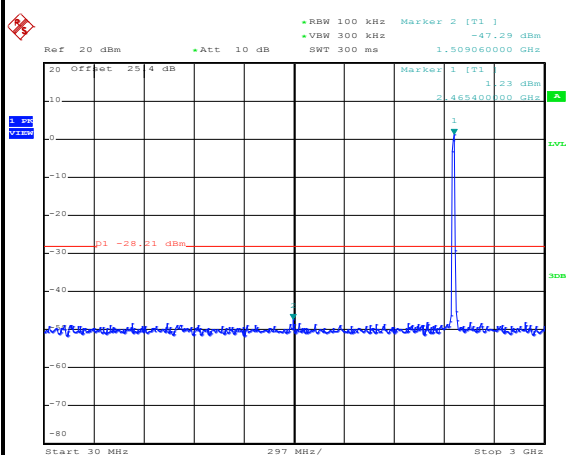
Date: 31.MAY.2020 15:47:36

High Channel Plot



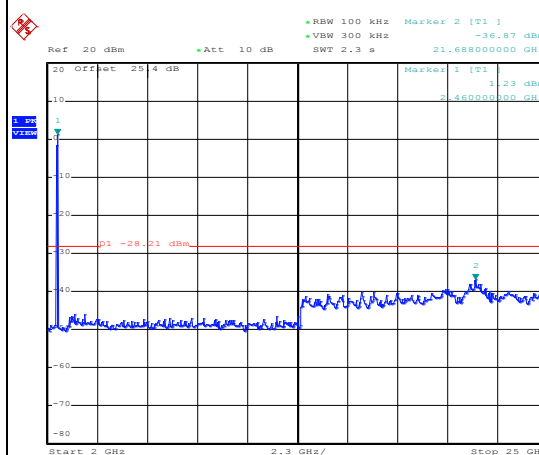
Date: 31.MAY.2020 15:48:11

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 15:48:43

Spurious Emission 2GHz~25GHz

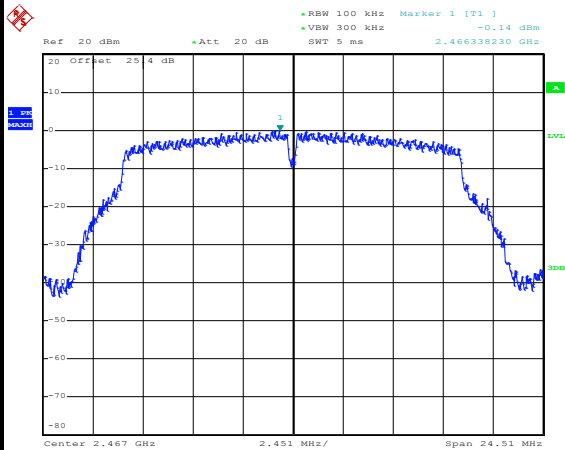


Date: 31.MAY.2020 15:49:26



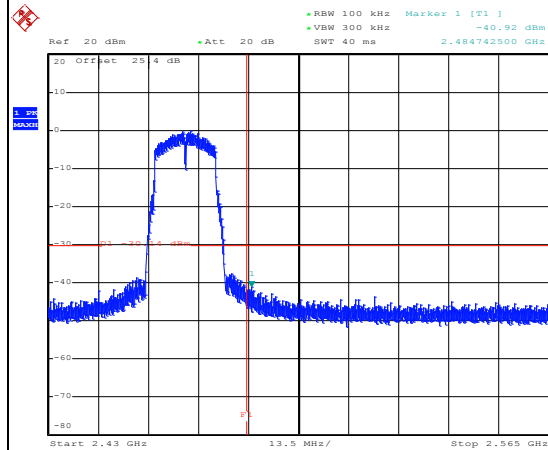
Test Mode :	802.11g	Test Channel :	12
-------------	---------	----------------	----

100kHz PSD reference Level



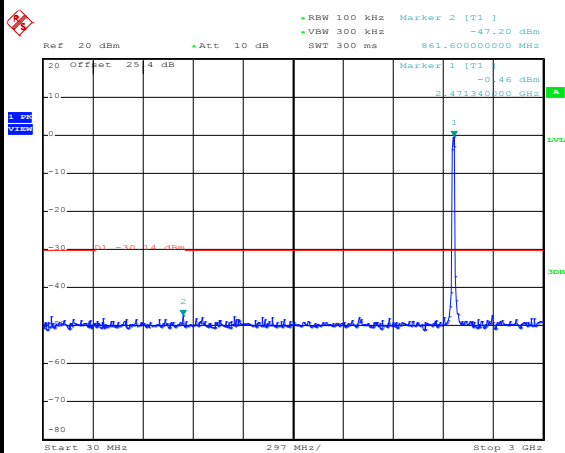
Date: 31.MAY.2020 16:02:46

High Channel Plot



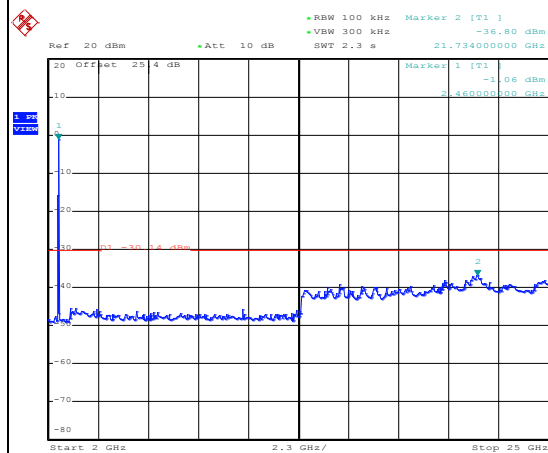
Date: 31.MAY.2020 16:06:42

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 16:04:35

Spurious Emission 2GHz~25GHz

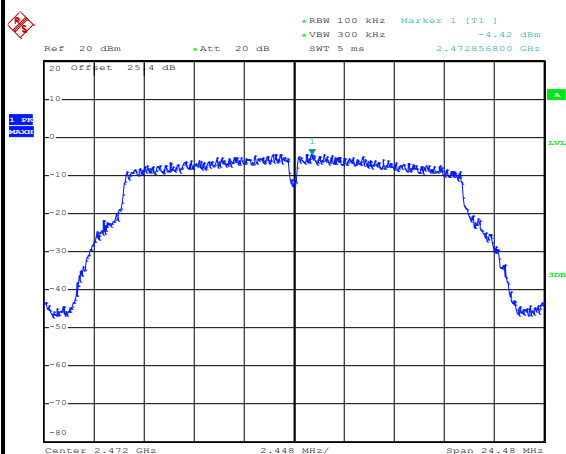


Date: 31.MAY.2020 16:06:05



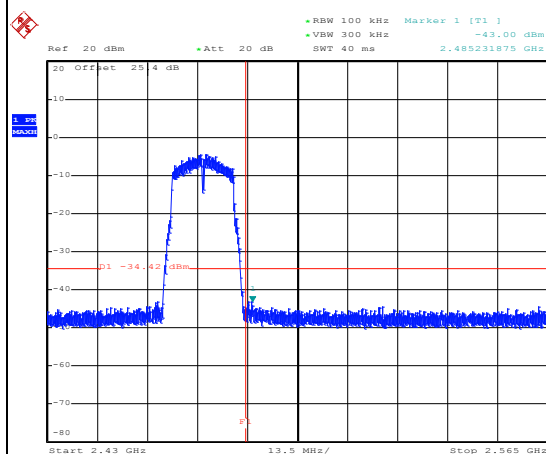
Test Mode :	802.11g	Test Channel :	13
-------------	---------	----------------	----

100kHz PSD reference Level



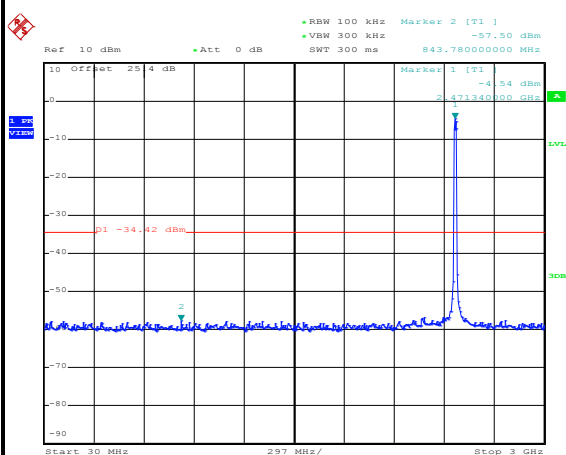
Date: 31.MAY.2020 16:15:39

High Channel Plot



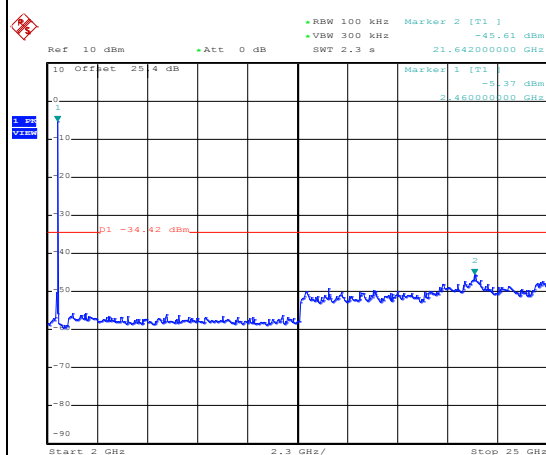
Date: 31.MAY.2020 16:16:13

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 16:19:28

Spurious Emission 2GHz~25GHz

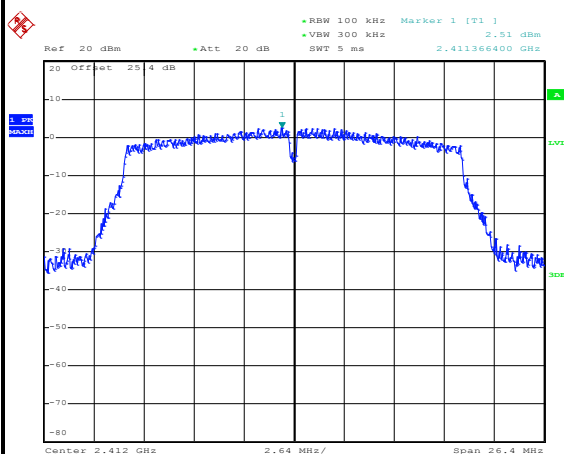


Date: 31.MAY.2020 16:20:58



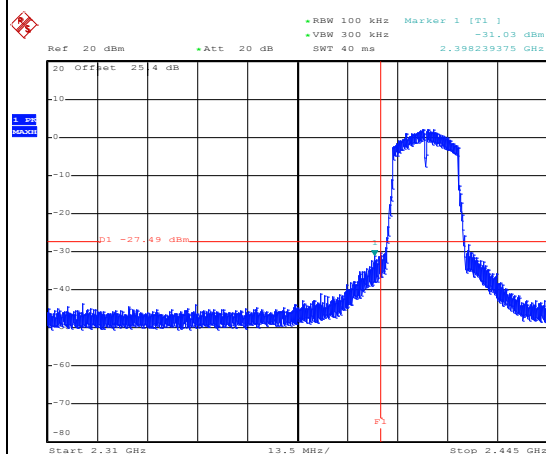
Test Mode :	802.11n HT20	Test Channel :	01
-------------	--------------	----------------	----

100kHz PSD reference Level



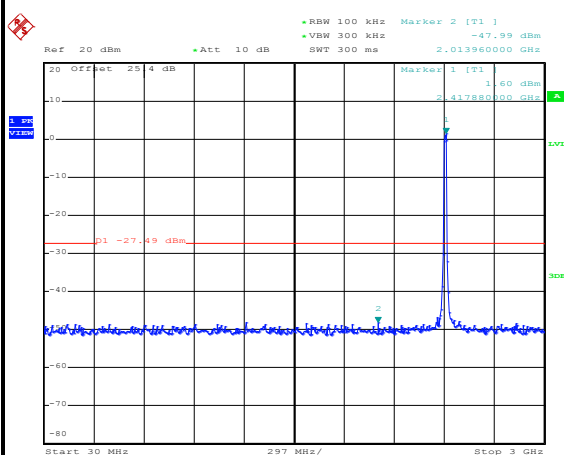
Date: 31.MAY.2020 16:40:24

Low Channel Plot



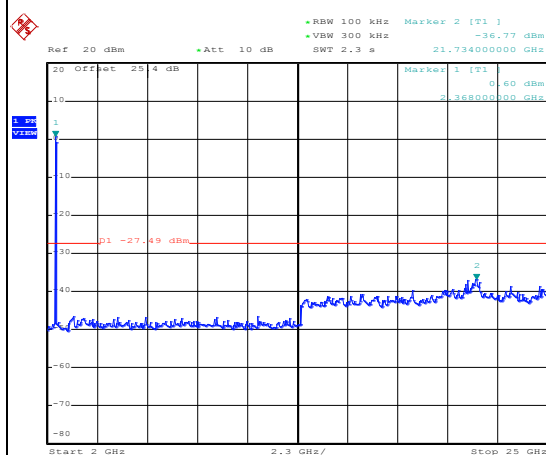
Date: 31.MAY.2020 16:40:51

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 16:41:12

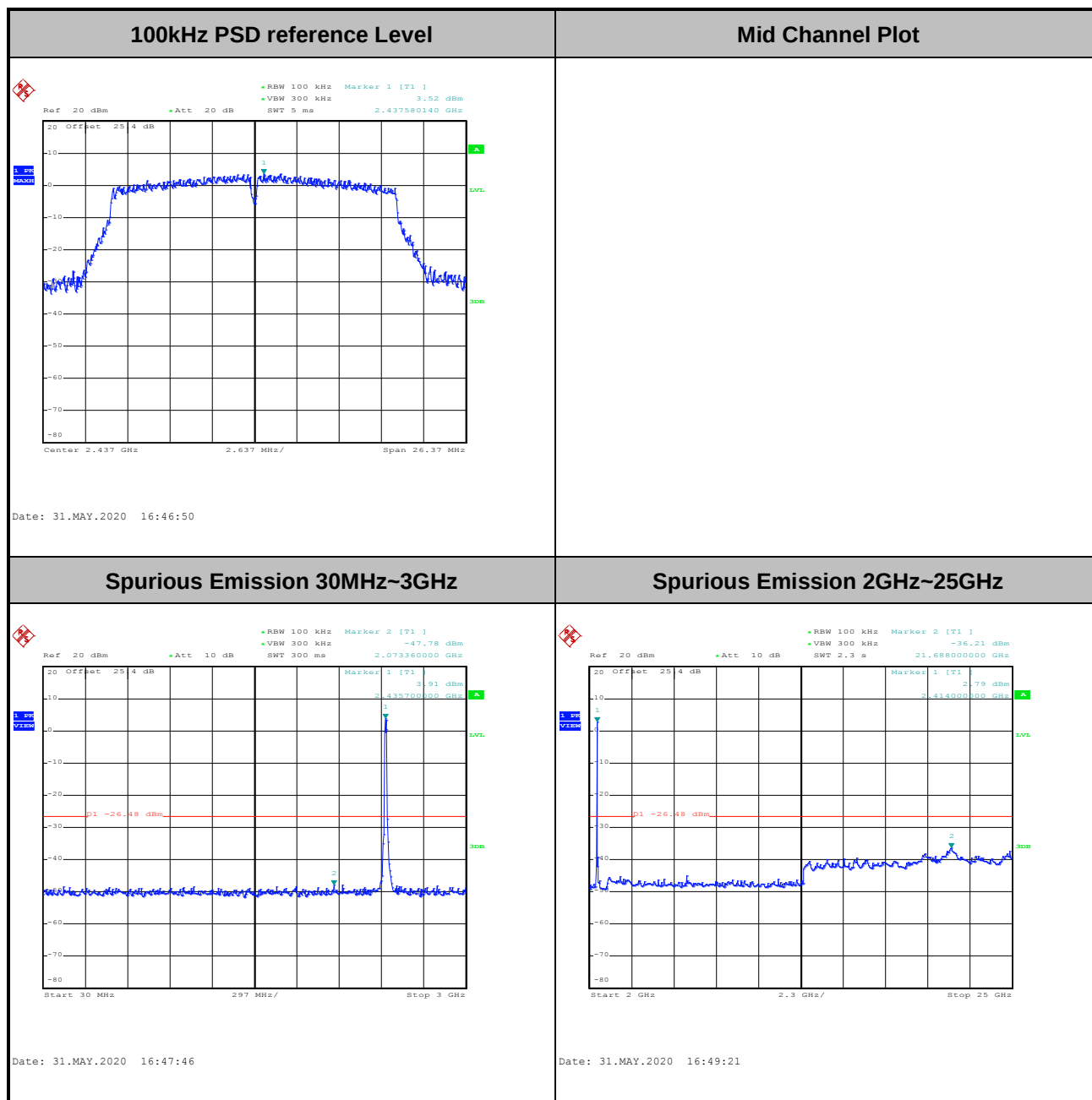
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 16:41:30



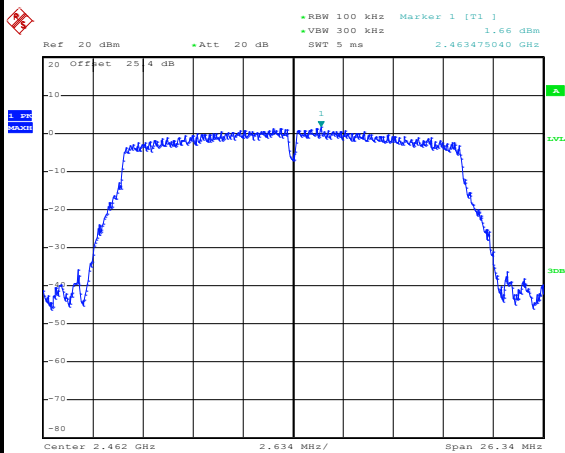
Test Mode :	802.11n HT20	Test Channel :	06
-------------	--------------	----------------	----





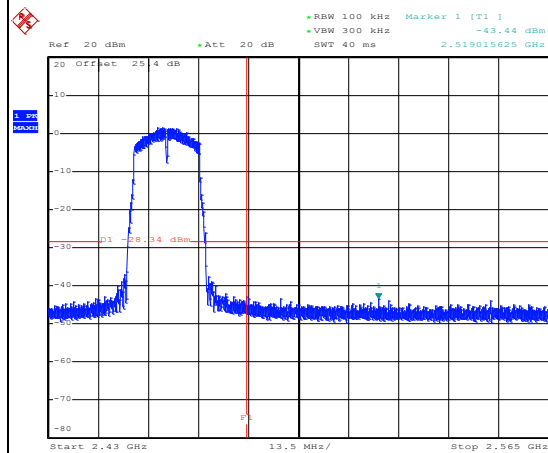
Test Mode :	802.11n HT20	Test Channel :	11
-------------	--------------	----------------	----

100kHz PSD reference Level



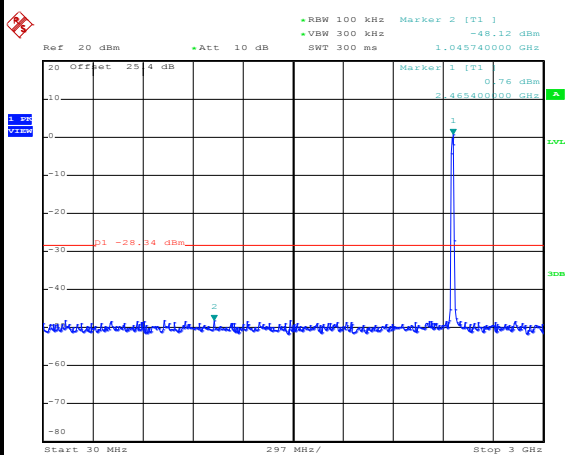
Date: 31.MAY.2020 17:03:58

High Channel Plot



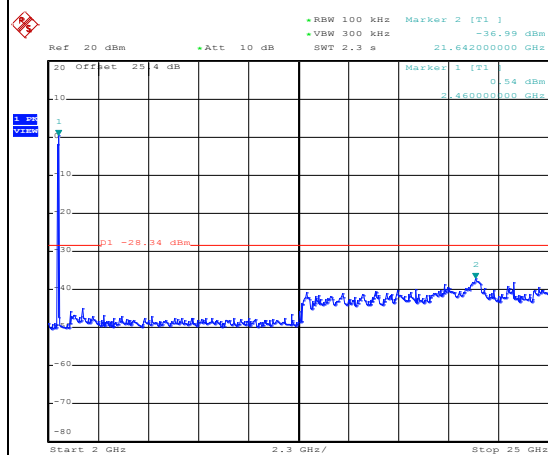
Date: 31.MAY.2020 17:04:46

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 17:05:28

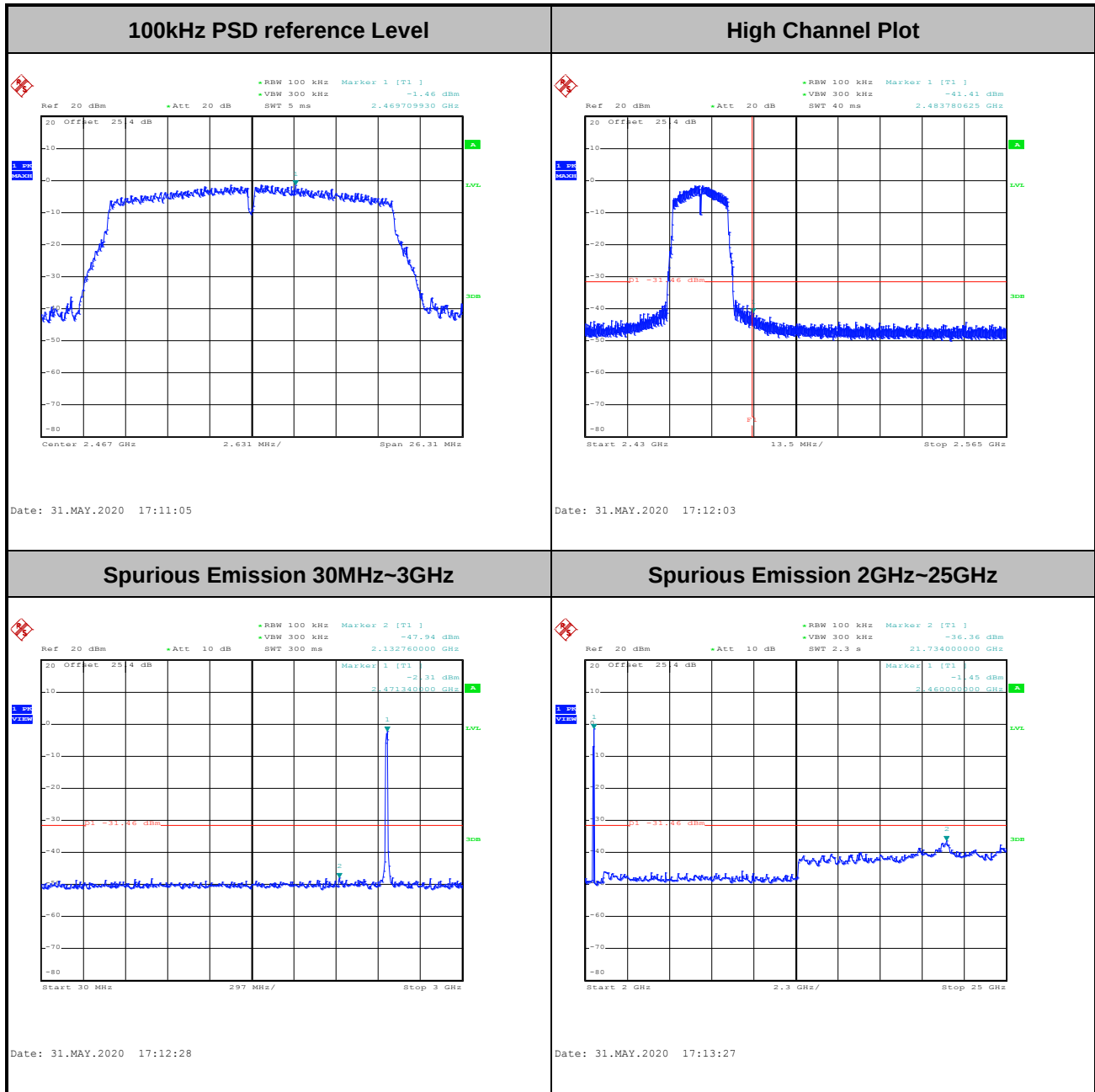
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 17:05:43



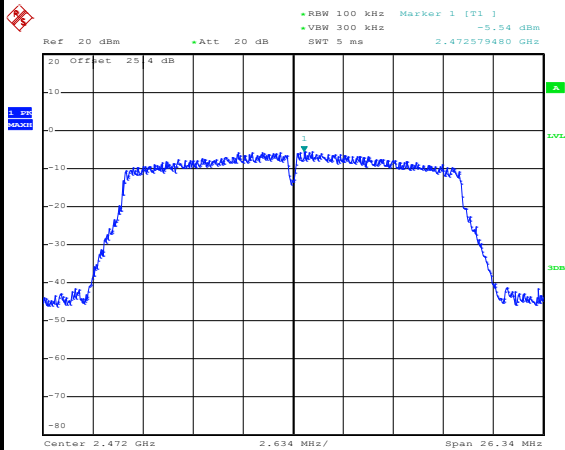
Test Mode :	802.11n HT20	Test Channel :	12
-------------	--------------	----------------	----





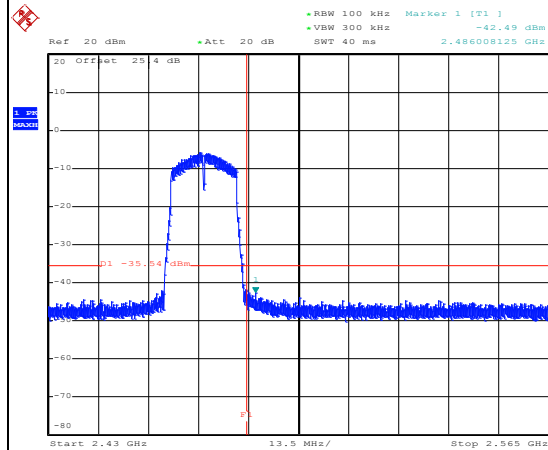
Test Mode :	802.11n HT20	Test Channel :	13
-------------	--------------	----------------	----

100kHz PSD reference Level



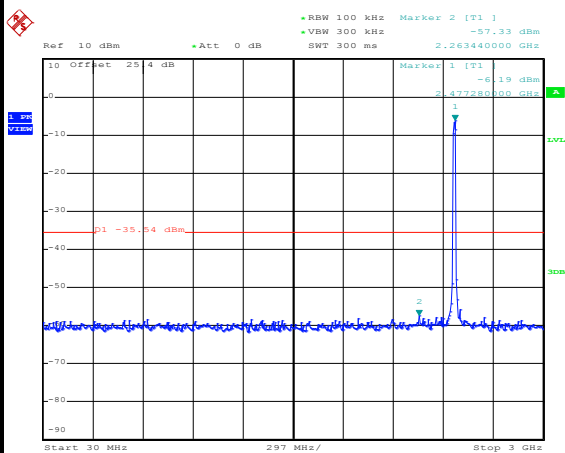
Date: 31.MAY.2020 17:31:52

High Channel Plot



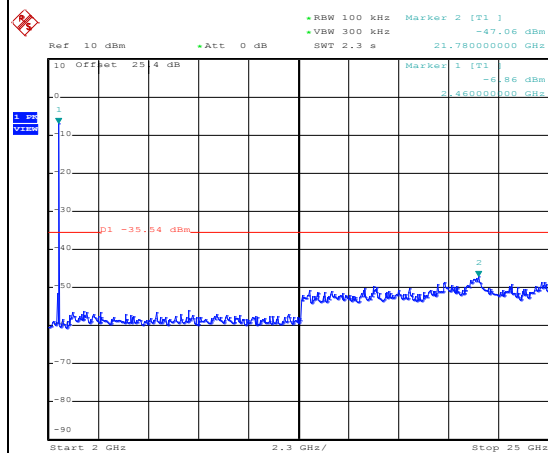
Date: 31.MAY.2020 17:32:55

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 17:36:05

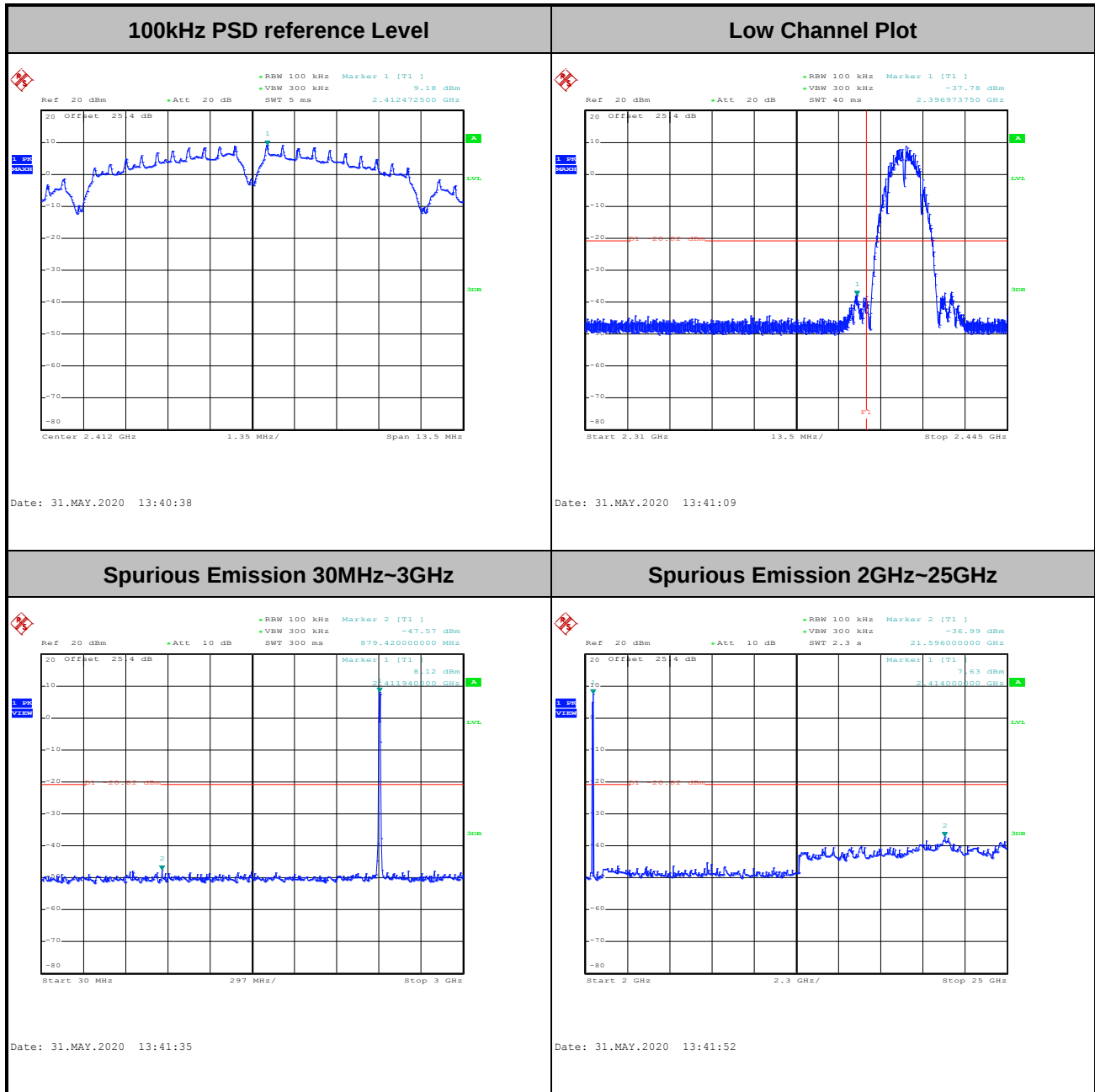
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 17:36:22

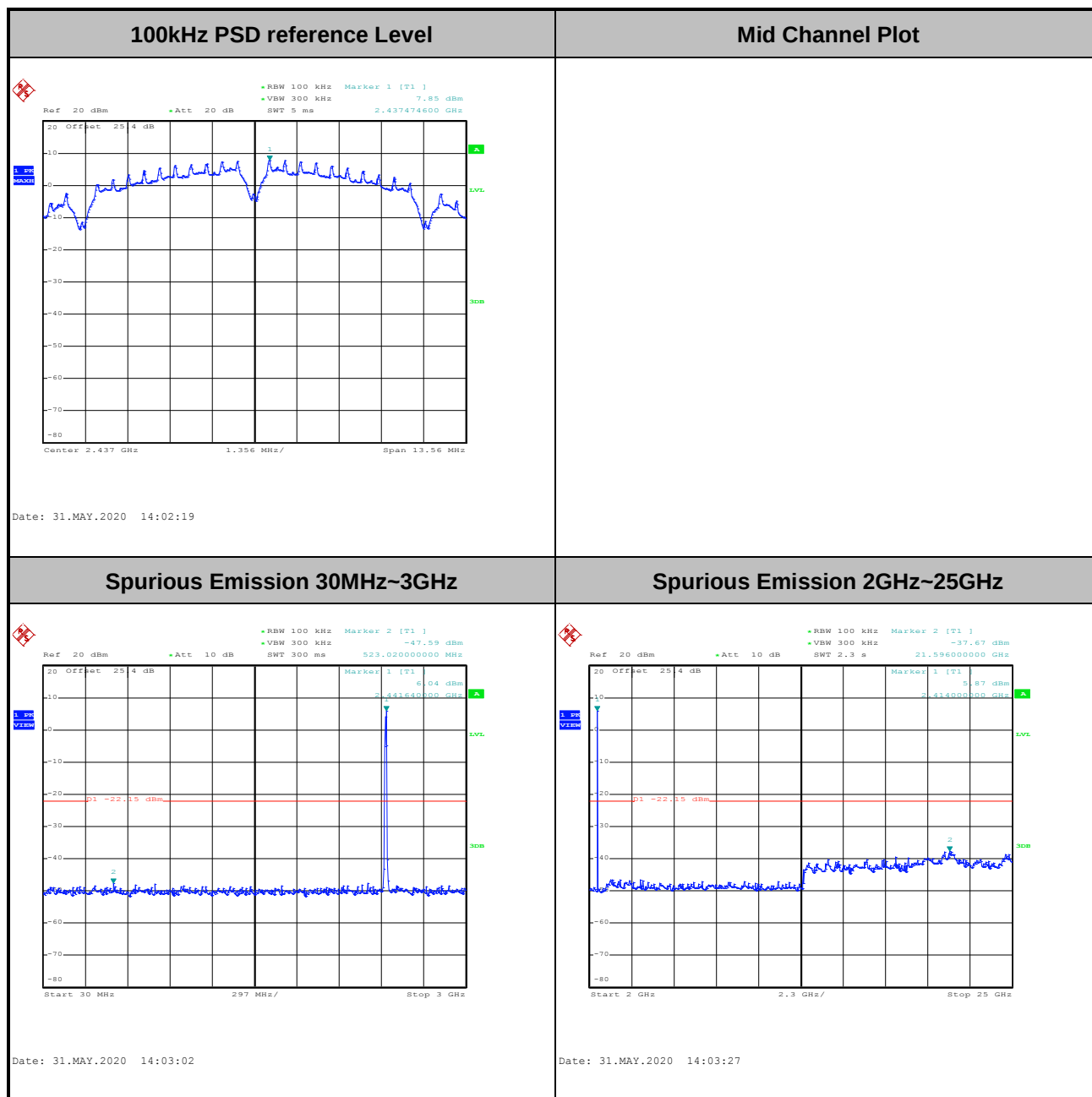
**Number of TX = 2, Ant. 1 (Measured)**

Test Mode :	802.11b	Test Channel :	01
--------------------	---------	-----------------------	----



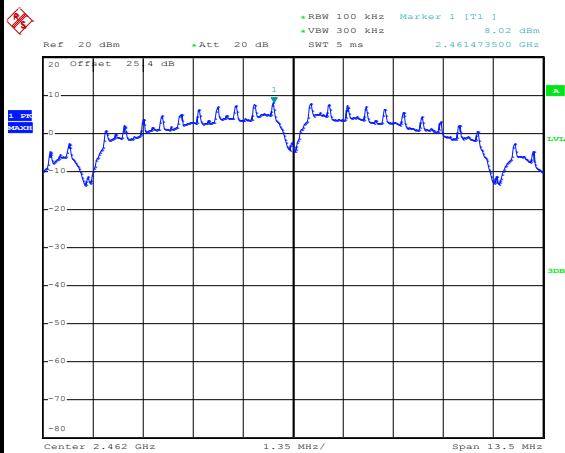


Test Mode :	802.11b	Test Channel :	06
-------------	---------	----------------	----

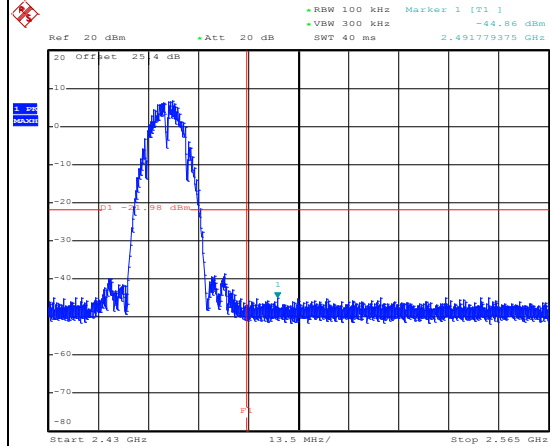




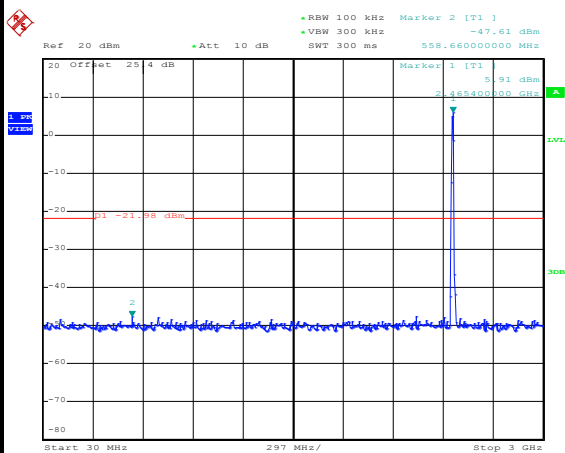
Test Mode :	802.11b	Test Channel :	11
--------------------	---------	-----------------------	----

100kHz PSD reference Level

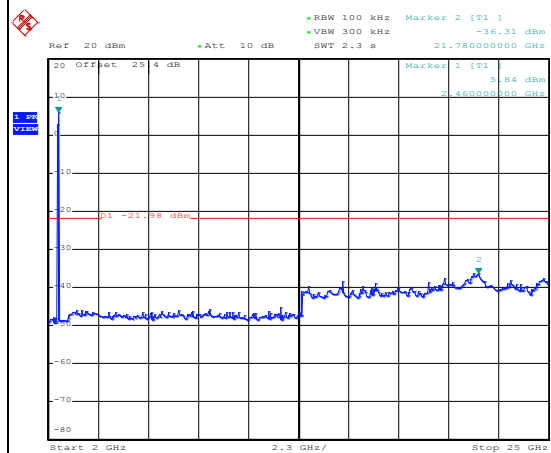
Date: 31.MAY.2020 14:11:58

High Channel Plot

Date: 31.MAY.2020 14:12:19

Spurious Emission 30MHz~3GHz

Date: 31.MAY.2020 14:15:27

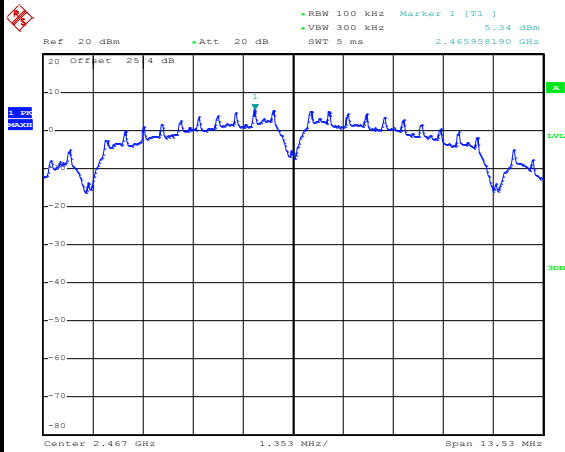
Spurious Emission 2GHz~25GHz

Date: 31.MAY.2020 14:15:01



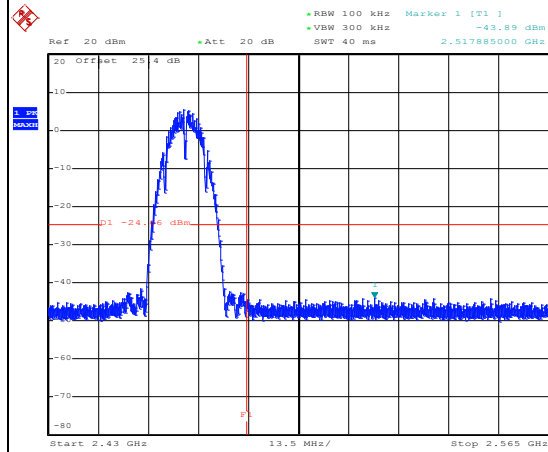
Test Mode :	802.11b	Test Channel :	12
-------------	---------	----------------	----

100kHz PSD reference Level



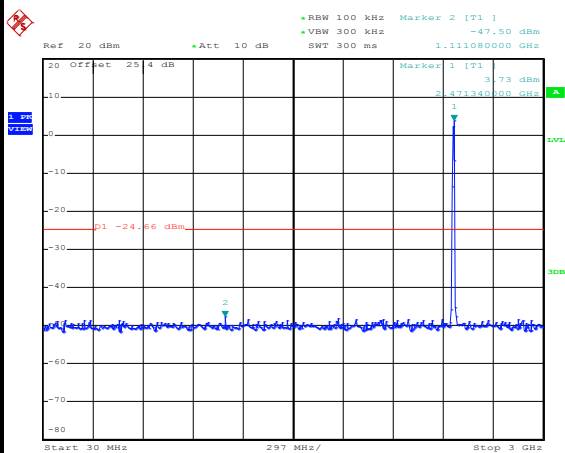
Date: 31.MAY.2020 14:46:23

High Channel Plot



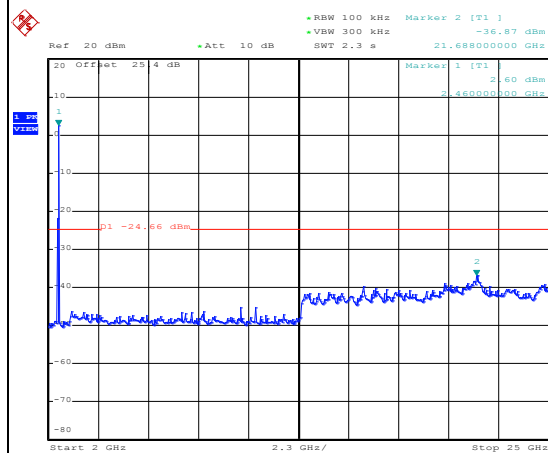
Date: 31.MAY.2020 14:47:04

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 14:47:41

Spurious Emission 2GHz~25GHz

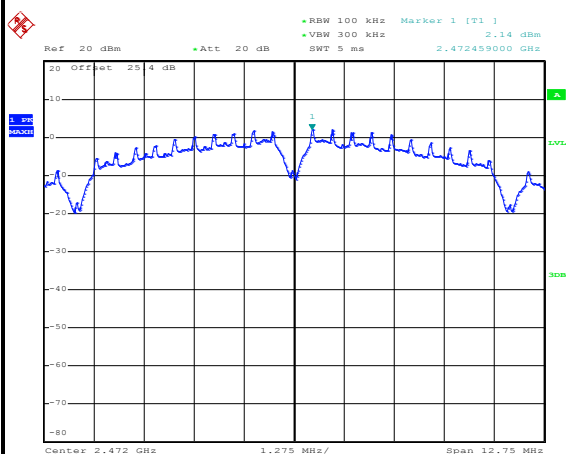


Date: 31.MAY.2020 14:47:57



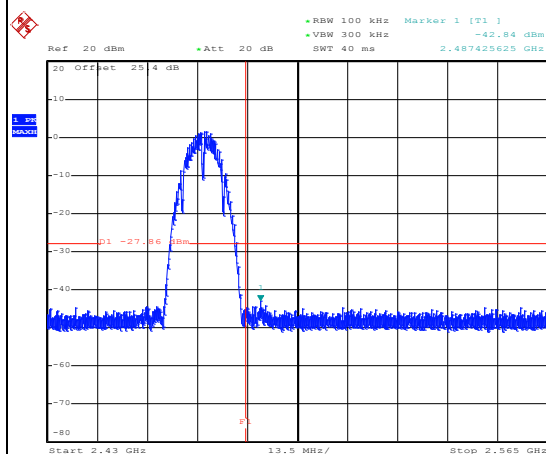
Test Mode :	802.11b	Test Channel :	13
-------------	---------	----------------	----

100kHz PSD reference Level



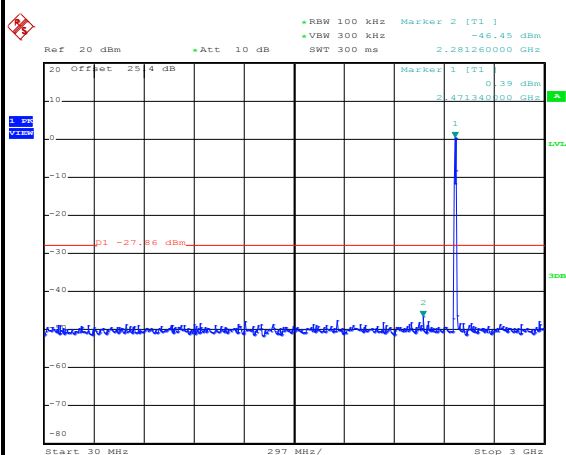
Date: 31.MAY.2020 14:57:36

High Channel Plot



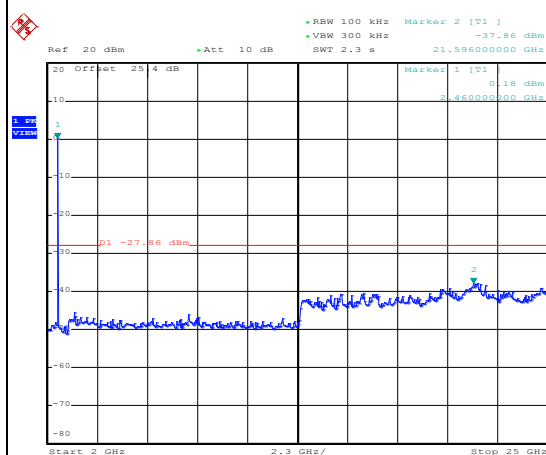
Date: 31.MAY.2020 14:57:57

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 14:58:49

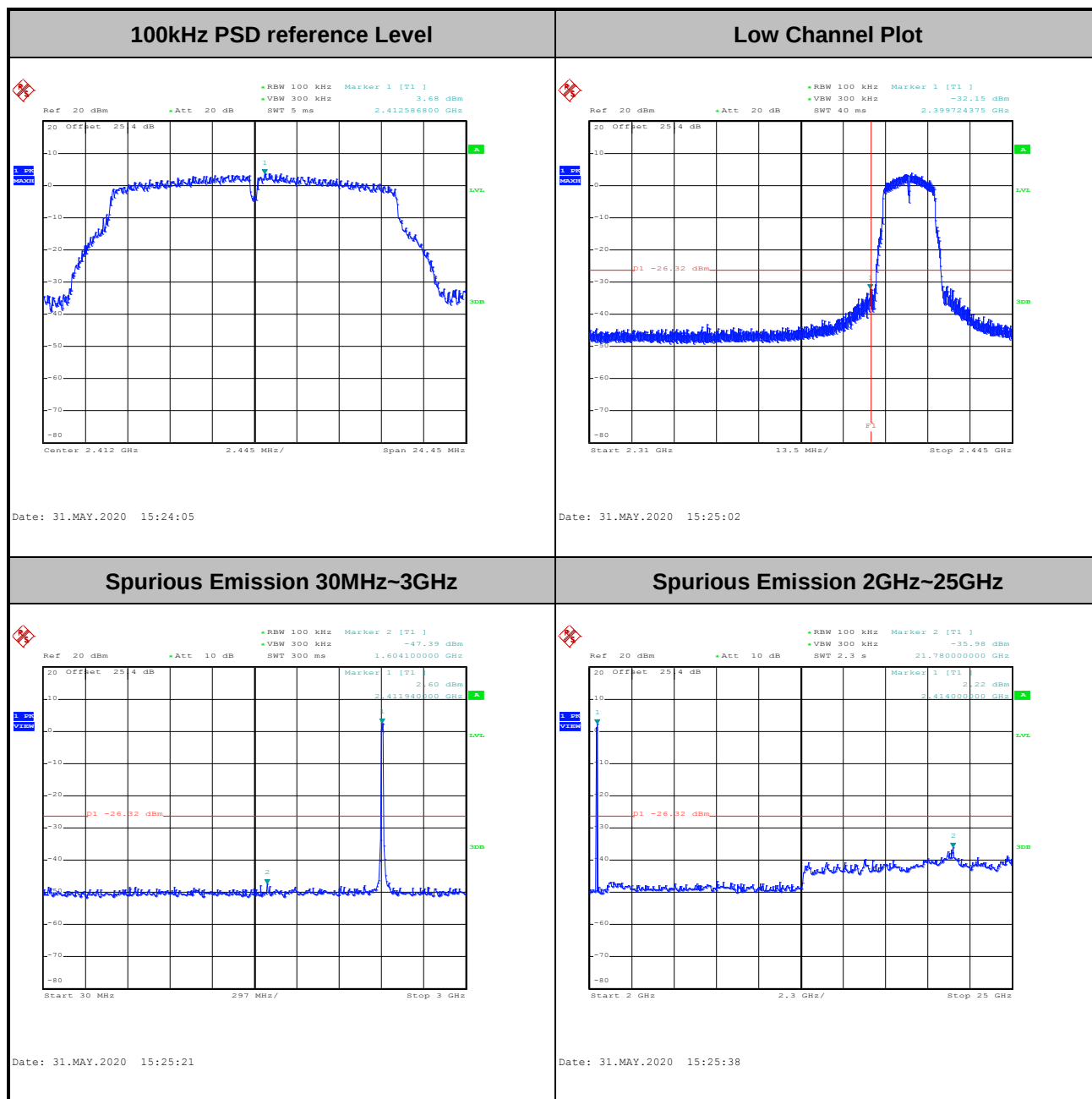
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 14:59:05

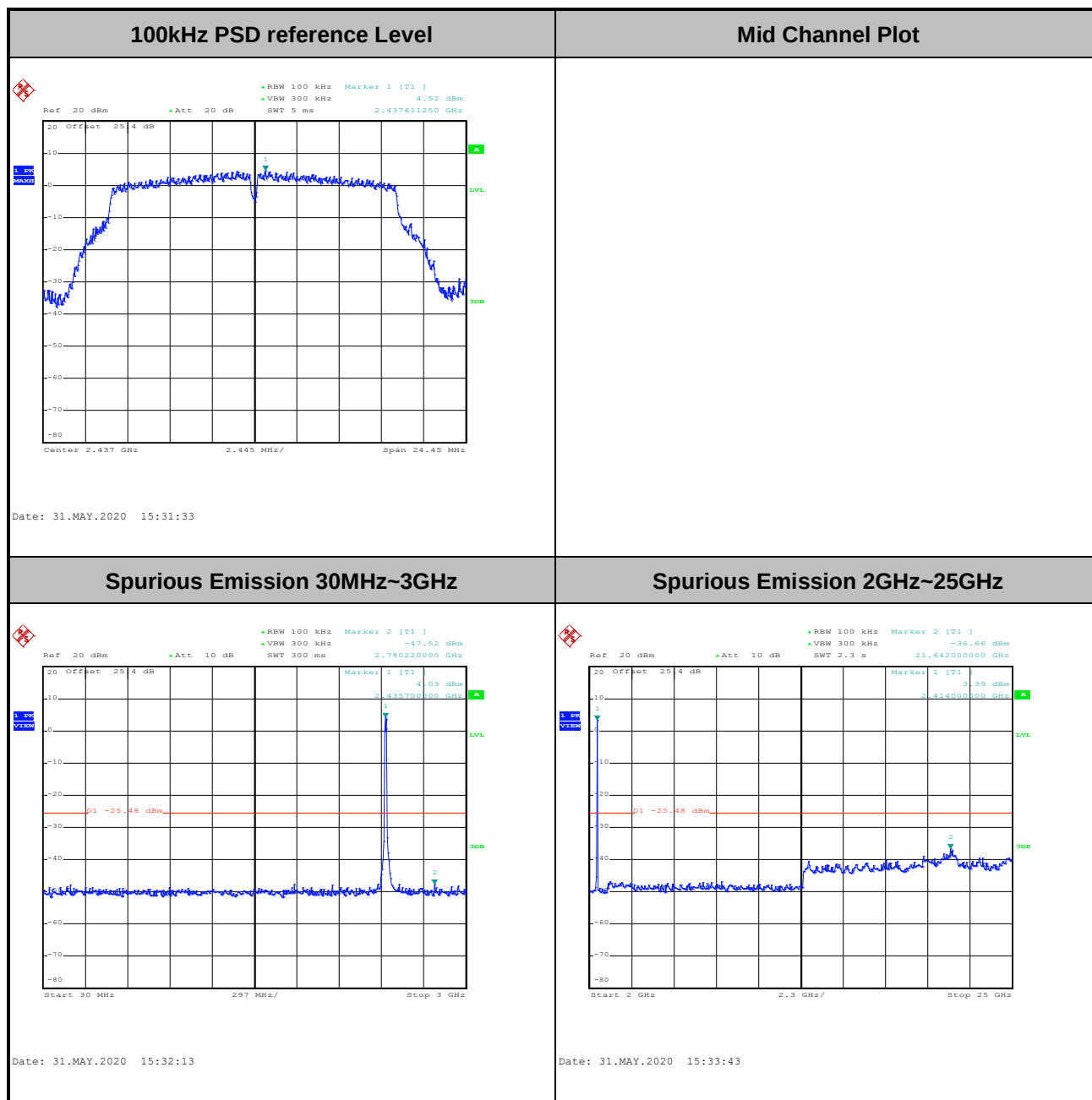


Test Mode :	802.11g	Test Channel :	01
-------------	---------	----------------	----





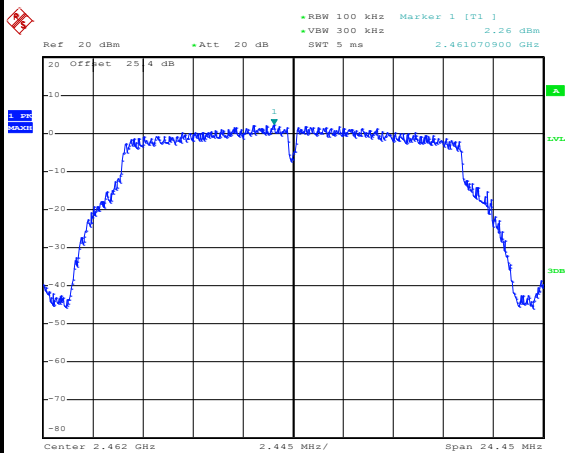
Test Mode :	802.11g	Test Channel :	06
-------------	---------	----------------	----





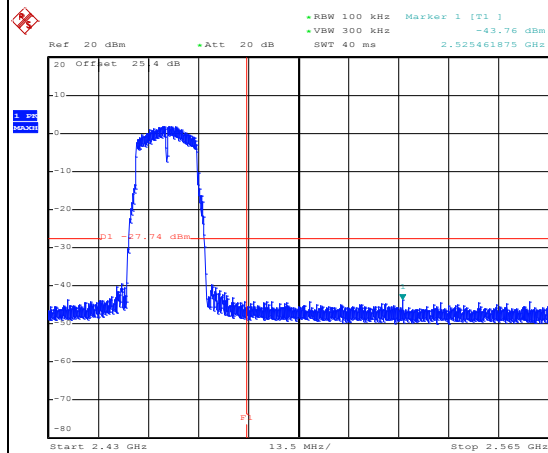
Test Mode :	802.11g	Test Channel :	11
-------------	---------	----------------	----

100kHz PSD reference Level



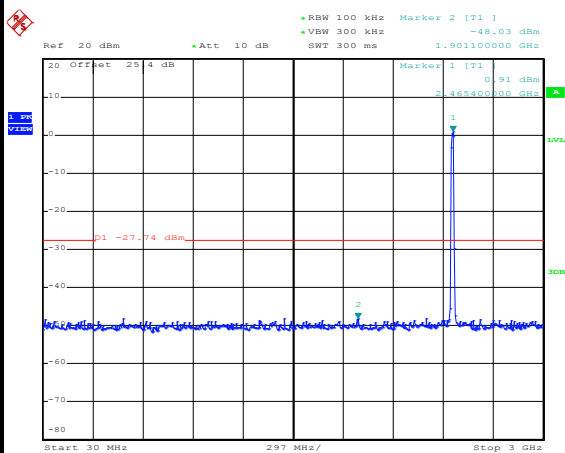
Date: 31.MAY.2020 15:52:52

High Channel Plot



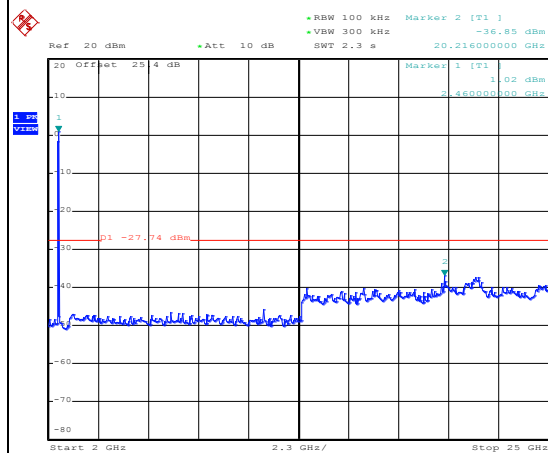
Date: 31.MAY.2020 15:53:29

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 15:54:12

Spurious Emission 2GHz~25GHz

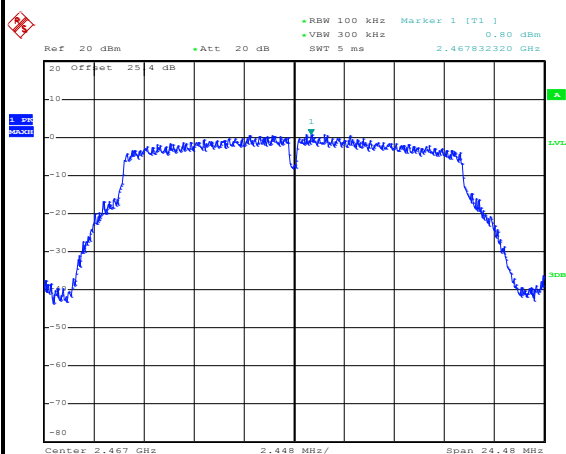


Date: 31.MAY.2020 15:54:34



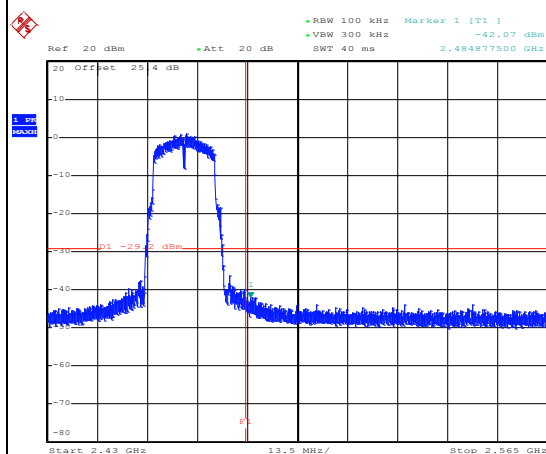
Test Mode :	802.11g	Test Channel :	12
-------------	---------	----------------	----

100kHz PSD reference Level



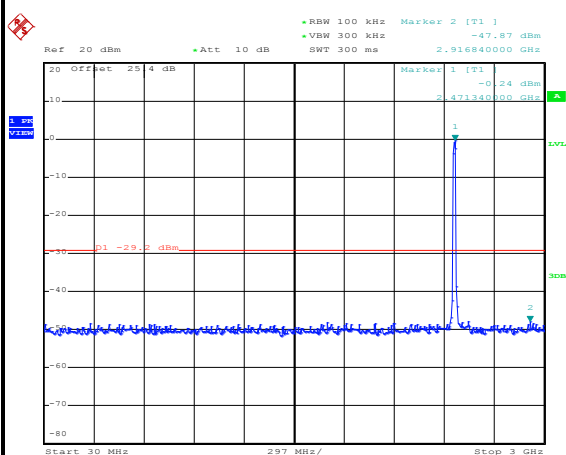
Date: 31.MAY.2020 15:58:52

High Channel Plot



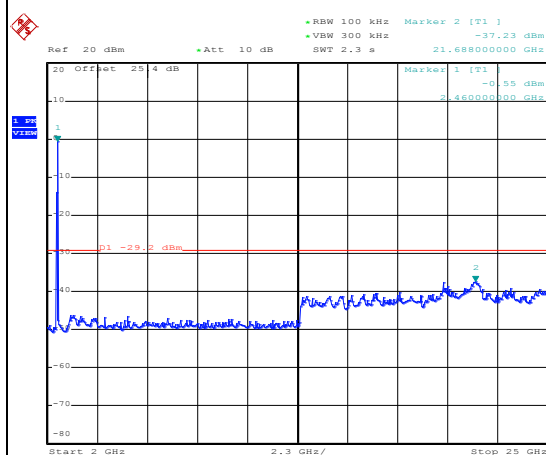
Date: 31.MAY.2020 15:59:38

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 15:59:59

Spurious Emission 2GHz~25GHz

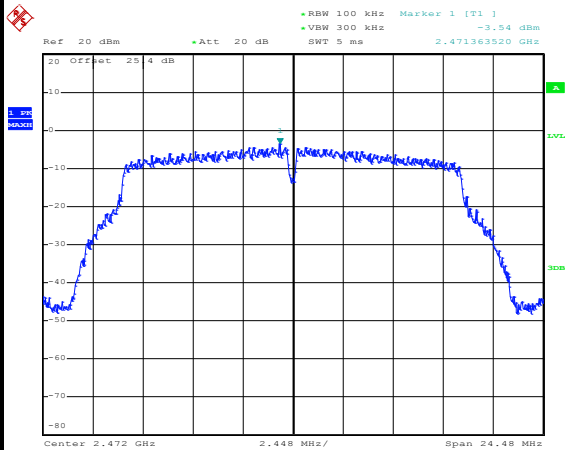


Date: 31.MAY.2020 16:00:14



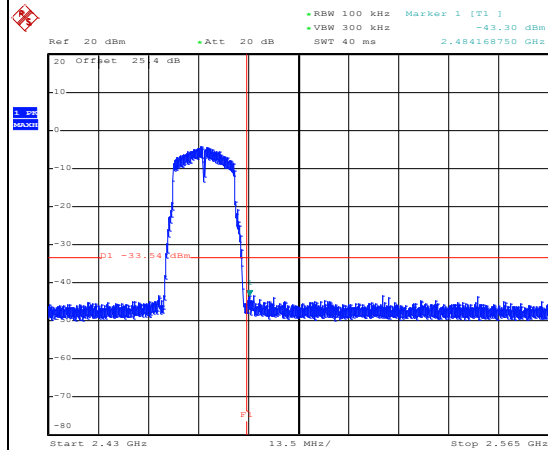
Test Mode :	802.11g	Test Channel :	13
-------------	---------	----------------	----

100kHz PSD reference Level



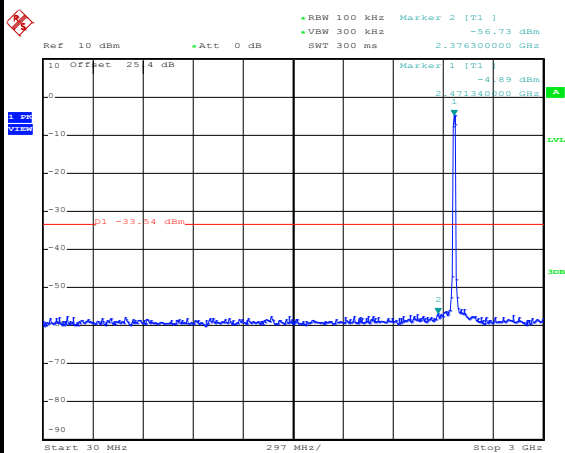
Date: 31.MAY.2020 16:23:59

High Channel Plot



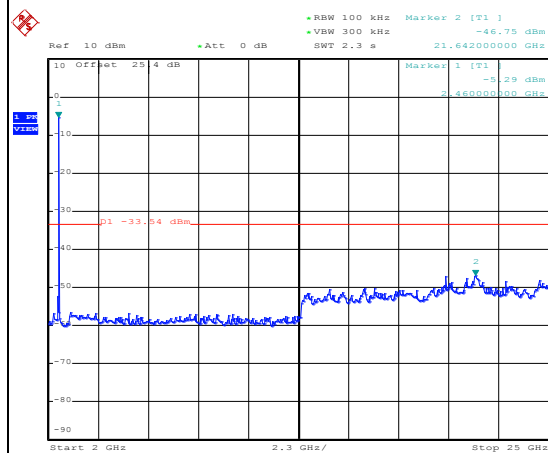
Date: 31.MAY.2020 16:24:39

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 16:26:52

Spurious Emission 2GHz~25GHz

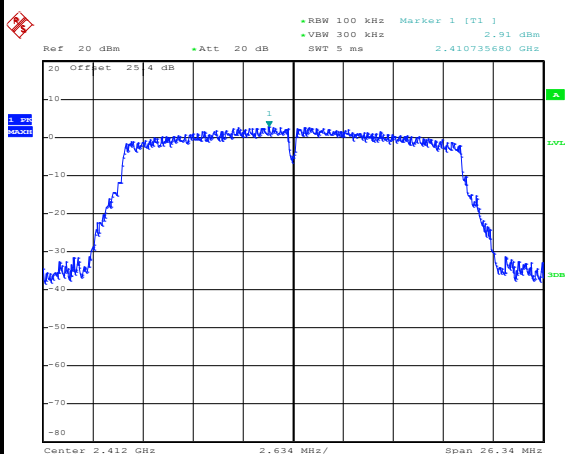


Date: 31.MAY.2020 16:29:25



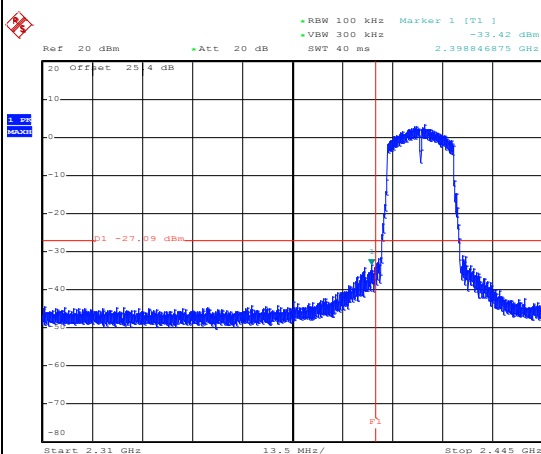
Test Mode :	802.11n HT20	Test Channel :	01
-------------	--------------	----------------	----

100kHz PSD reference Level



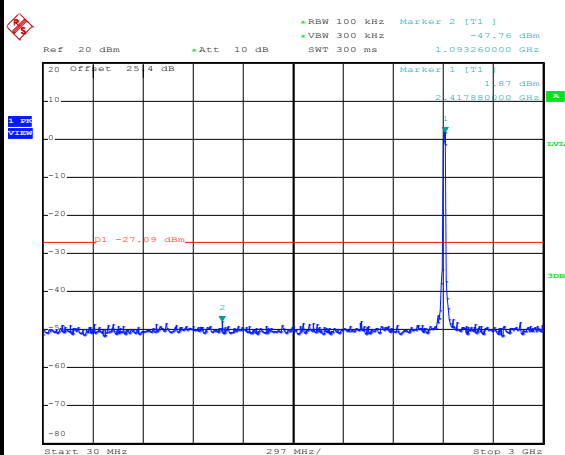
Date: 31.MAY.2020 16:35:55

Low Channel Plot



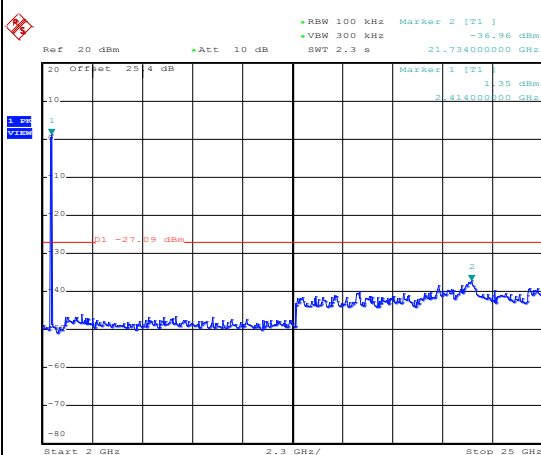
Date: 31.MAY.2020 16:36:39

Spurious Emission 30MHz~3GHz



Date: 31.MAY.2020 16:37:01

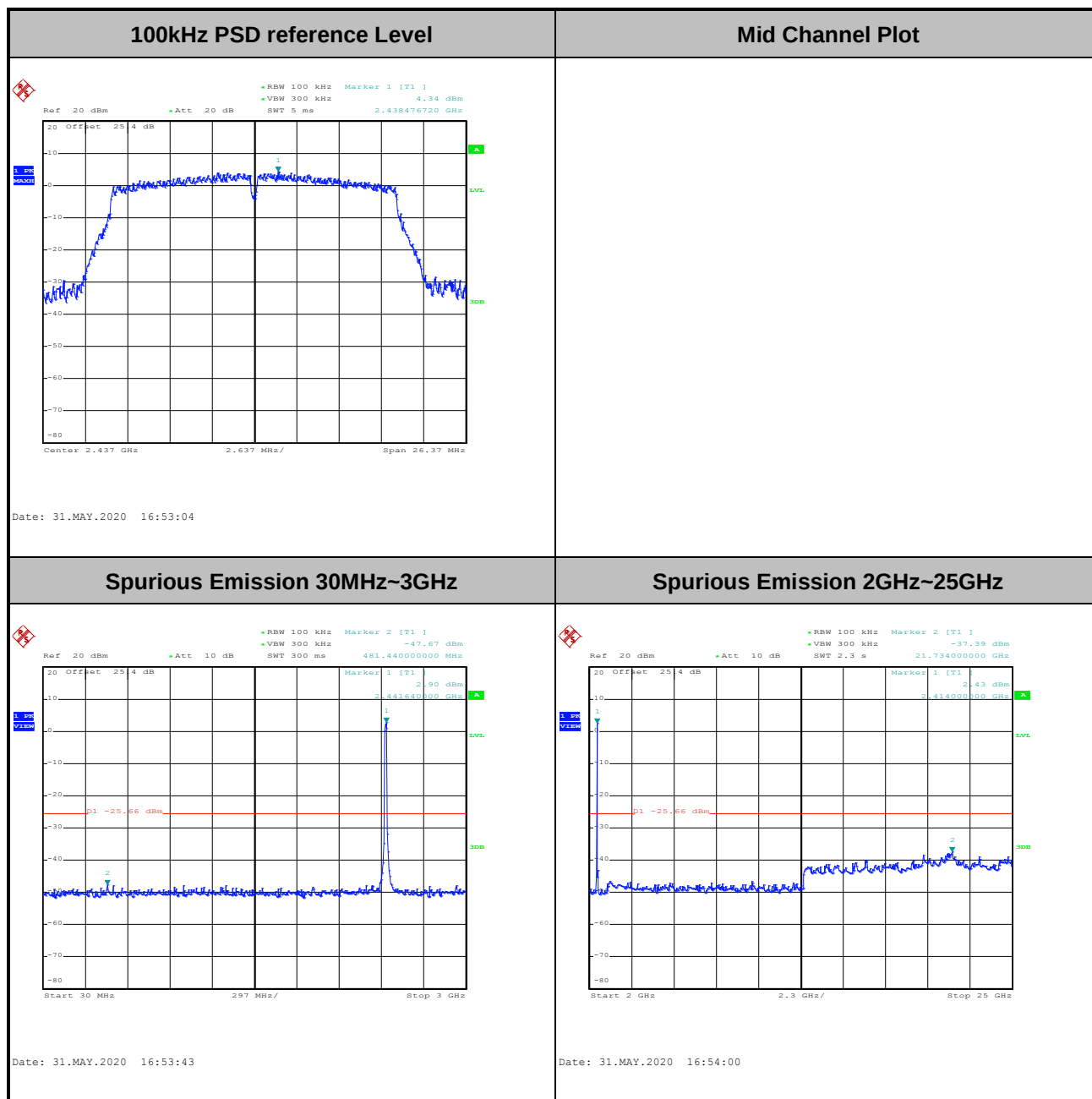
Spurious Emission 2GHz~25GHz



Date: 31.MAY.2020 16:37:18

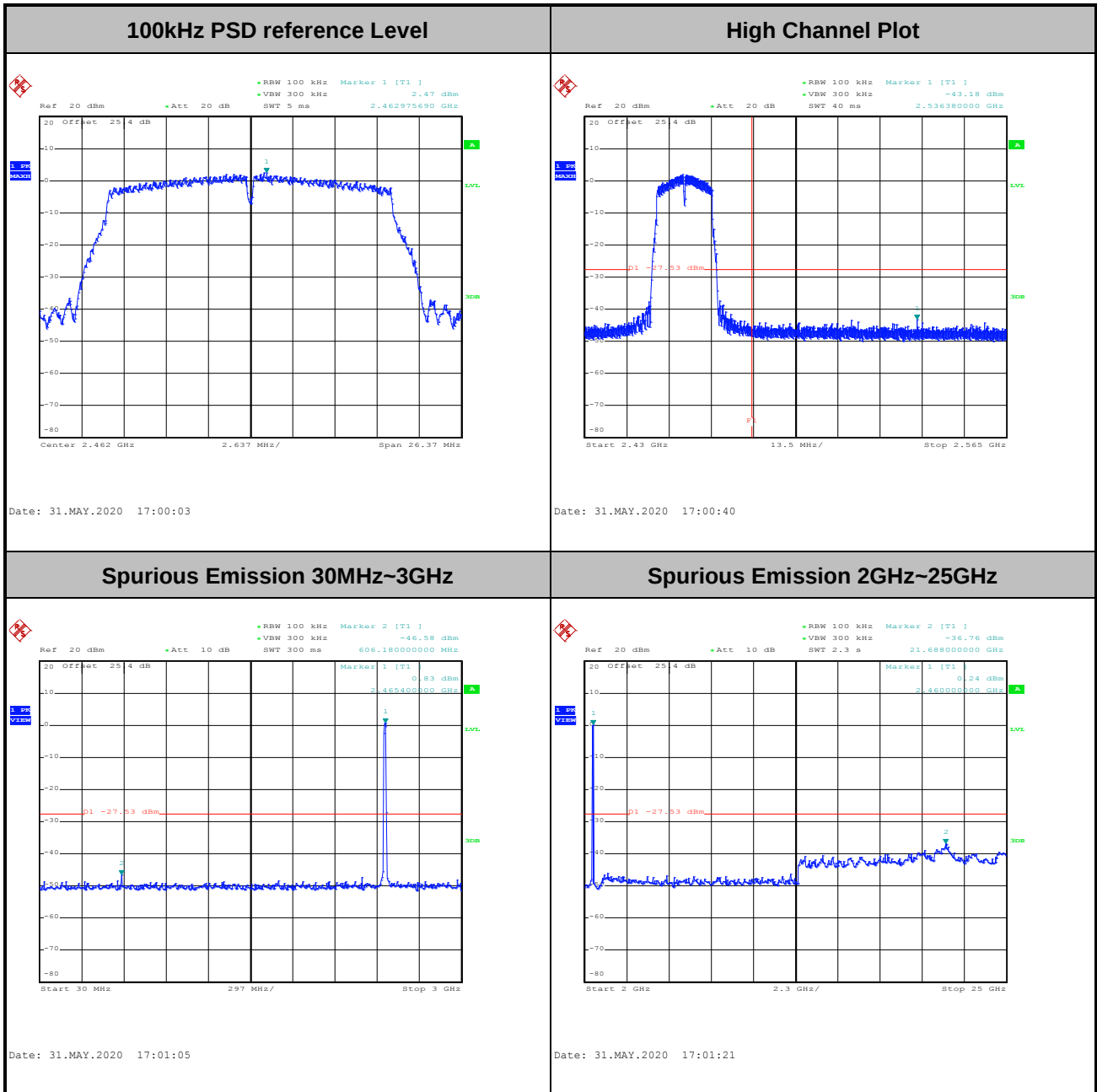


Test Mode :	802.11n HT20	Test Channel :	06
-------------	--------------	----------------	----



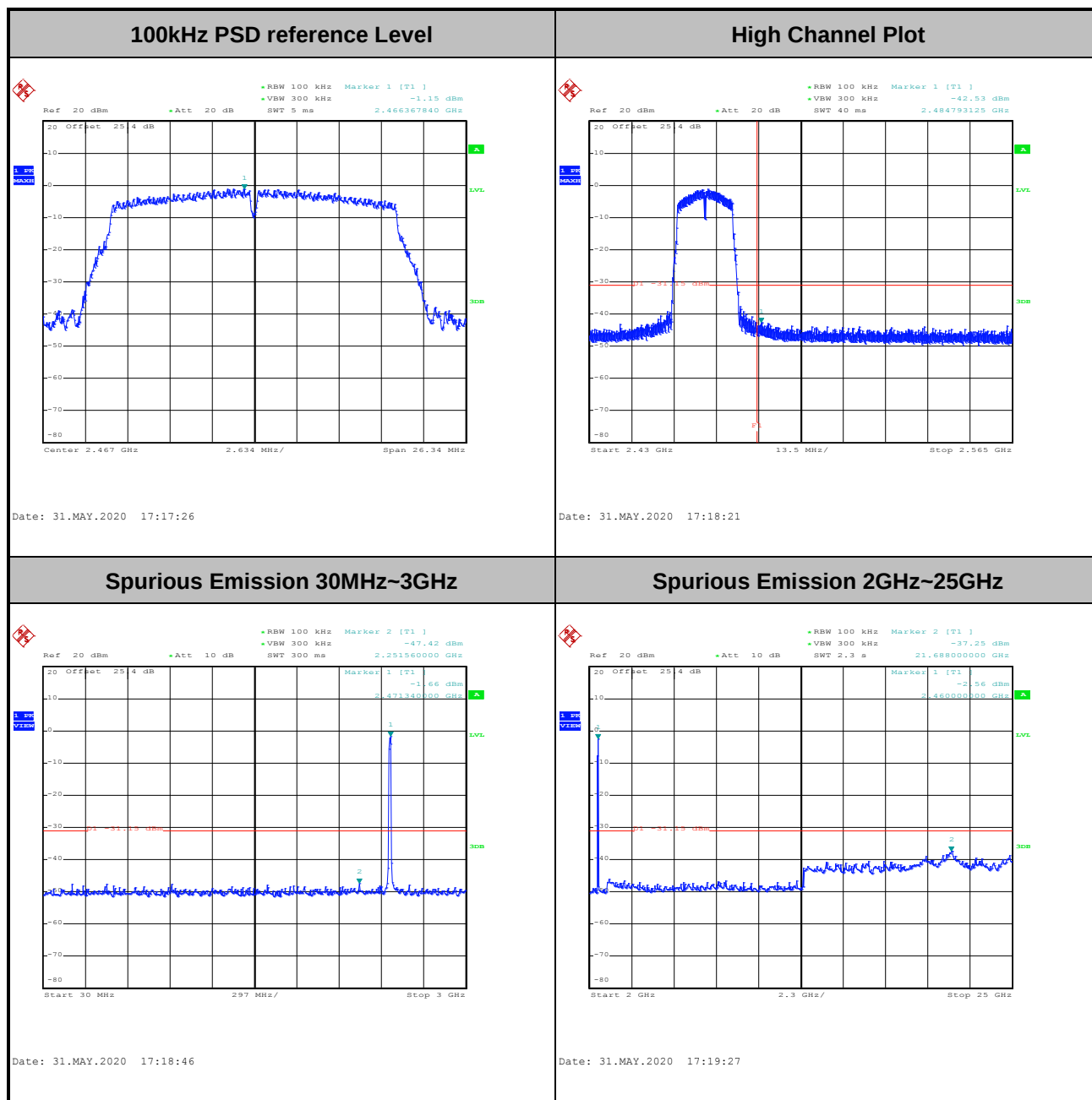


Test Mode :	802.11n HT20	Test Channel :	11
--------------------	--------------	-----------------------	----



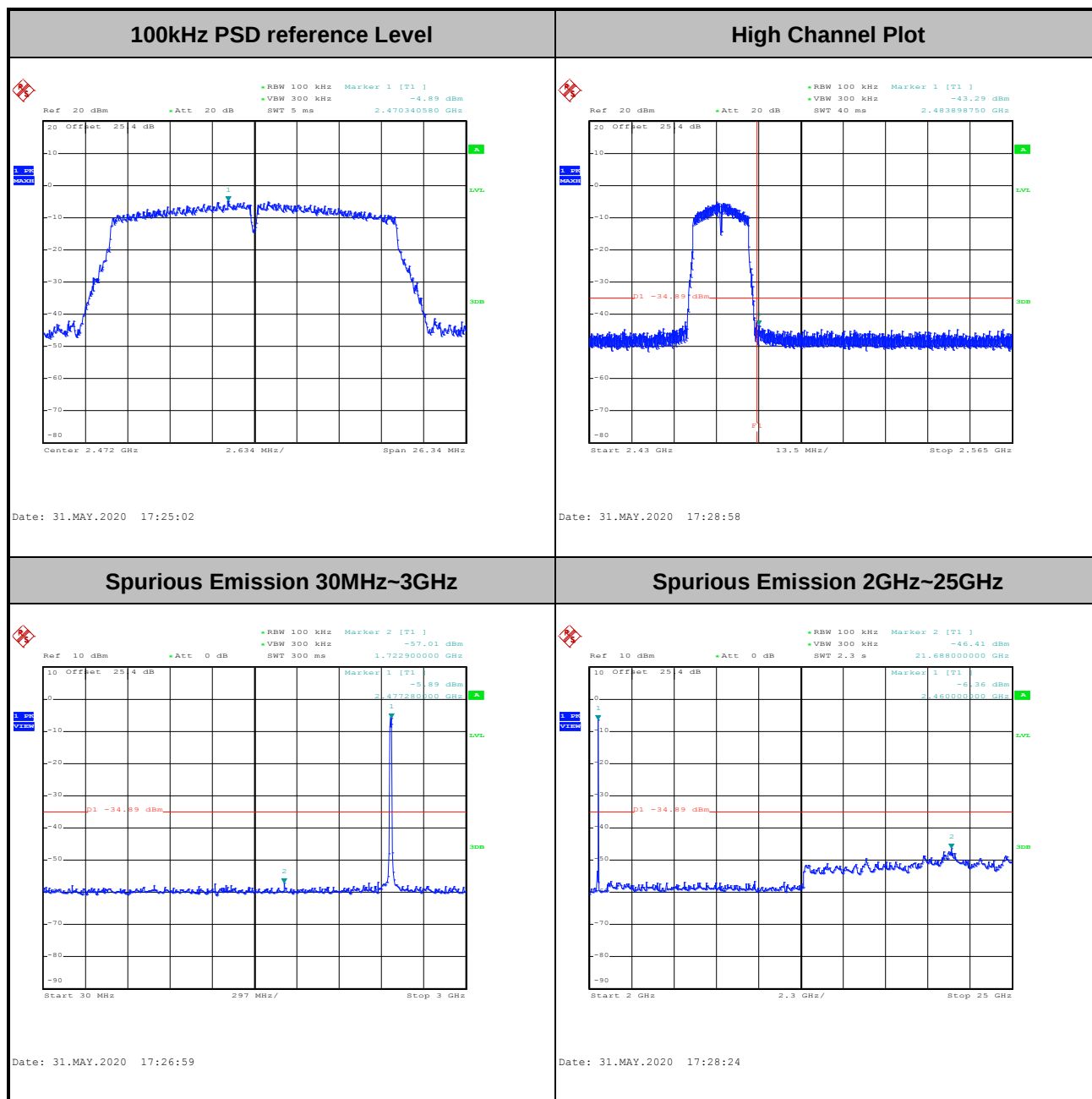


Test Mode :	802.11n HT20	Test Channel :	12
-------------	--------------	----------------	----





Test Mode :	802.11n HT20	Test Channel :	13
-------------	--------------	----------------	----



3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

3.5.2 Measuring Instruments

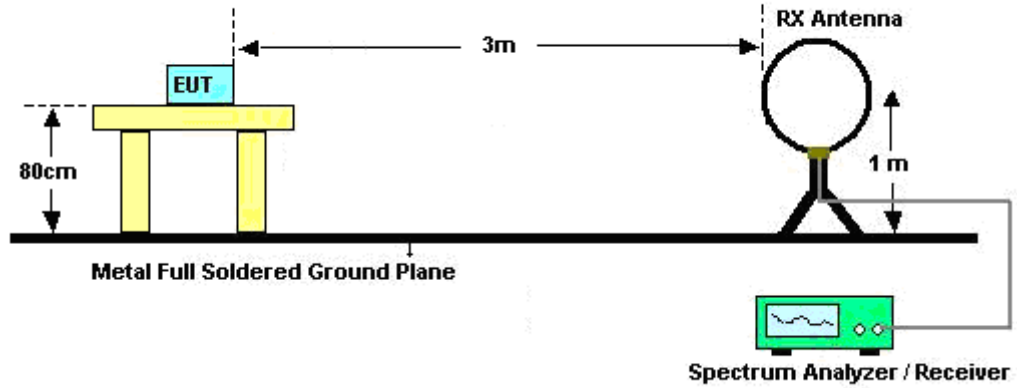
See list of measuring equipment of this test report.

3.5.3 Test Procedures

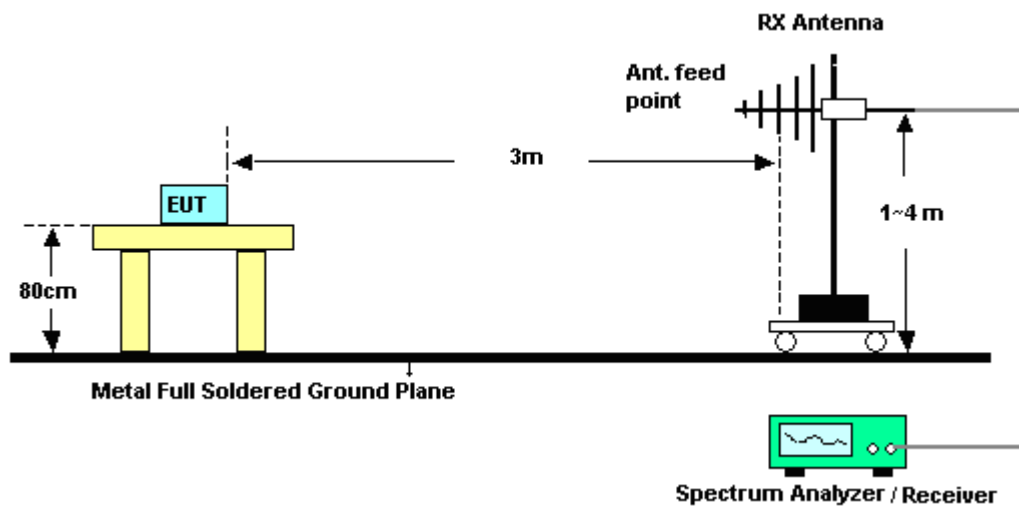
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
8. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 kHz for $f < 1$ GHz; $VBW \geq RBW$; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement.
For average measurement:
 - $VBW = 10$ Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent 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.

3.5.4 Test Setup

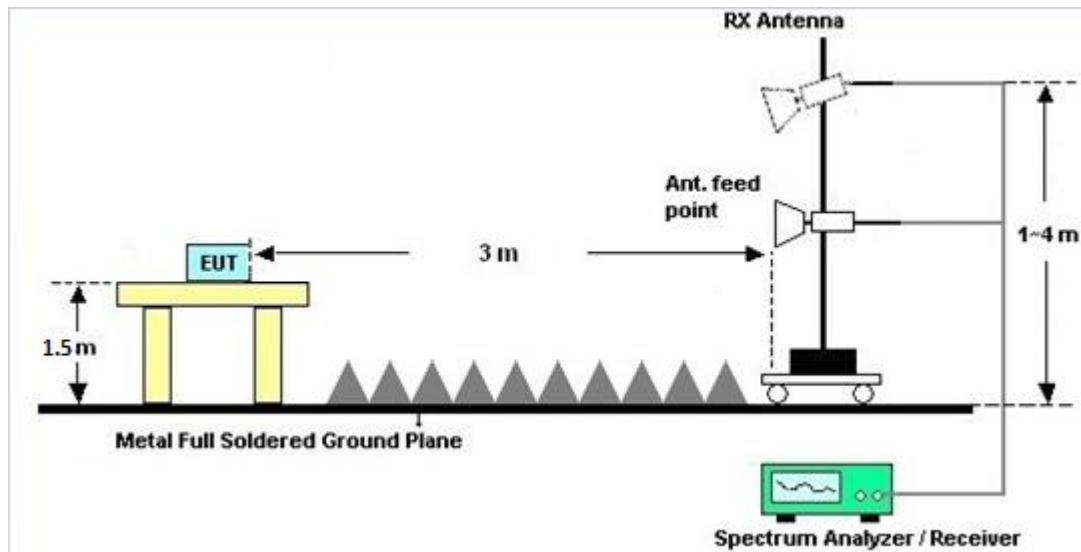
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 Test Results of Radiated Spurious Emissions (9kHz ~ 30MHz)

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.5.7 Duty Cycle

Please refer to Appendix E.

3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

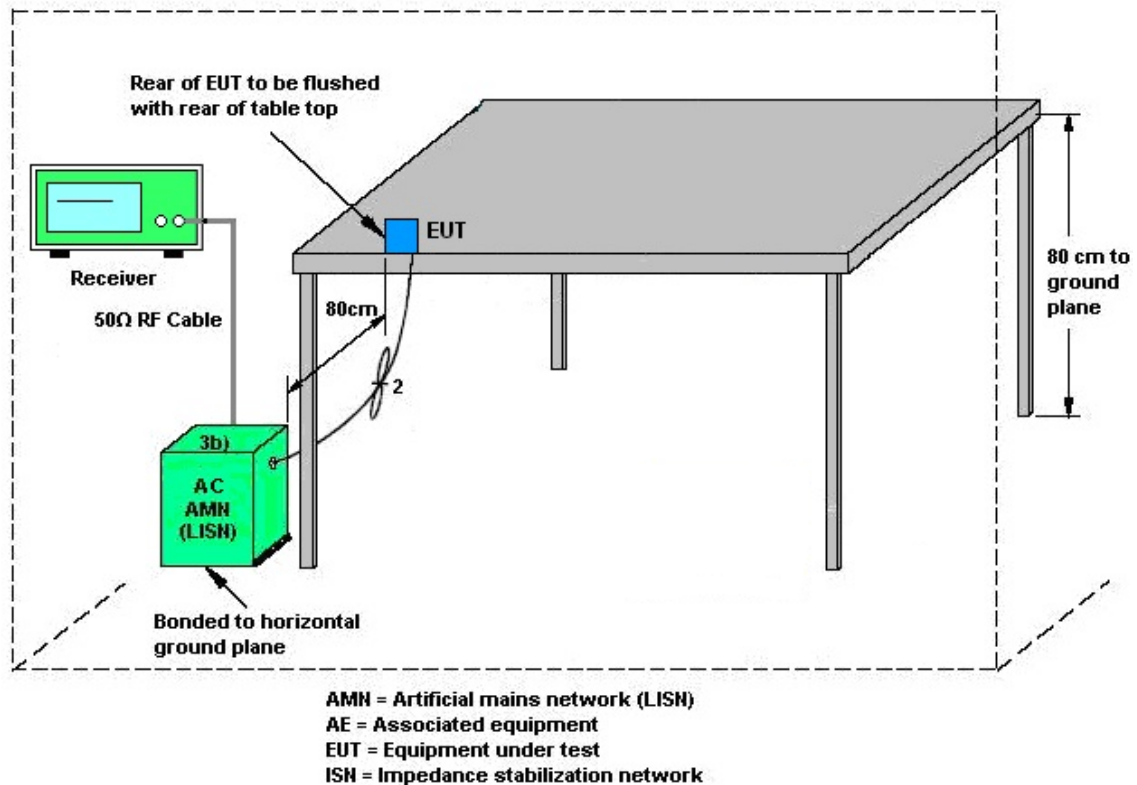
3.6.2 Measuring Instruments

See list of measuring equipment of this test report.

3.6.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF bandwidth = 9kHz) with Maximum Hold Mode.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. The use of a permanently attached Antenna or of an Antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

For PSD, the directional gain calculation is following F)2)f)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

			DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
	Ant. 1 (dBi)	Ant. 2 (dBi)				
2.4 GHz	3.85	4.53	4.53	7.21	0.00	1.21

Power Limit Reduction = $DG(\text{Power}) - 6\text{dBi}$, (min = 0)

PSD Limit Reduction = $DG(\text{PSD}) - 6\text{dBi}$, (min = 0)



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	Testo	608-H2	41410069	N/A	Jun. 17, 2019	Apr. 10, 2020~ May 31, 2020	Jun. 16, 2020	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054S NO10	10MHz~6GHz	Dec. 23, 2019	Apr. 10, 2020~ May 31, 2020	Dec. 22, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSP40	100055	9kHz-40GHz	Aug. 14, 2019	Apr. 10, 2020~ May 31, 2020	Aug. 13, 2020	Conducted (TH05-HY)
Switch Control Manframe	Burgeon	ETF-058	EC1300484	N/A	Aug. 22, 2019	Apr. 10, 2020~ May 31, 2020	Aug. 21, 2020	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Apr. 06, 2020	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Nov. 15, 2019	Apr. 06, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 07, 2019	Apr. 06, 2020	Nov. 06, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 20, 2019	Apr. 06, 2020	Nov. 19, 2020	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Nov. 15, 2019	Apr. 06, 2020	Nov. 14, 2020	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Apr. 06, 2020	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2020	Apr. 06, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 02, 2020	Apr. 06, 2020	Jan. 01, 2021	Conduction (CO05-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	35419 & 03	30MHz~1GHz	Apr. 30, 2019	Apr. 12, 2020~ Apr. 28, 2020	Apr. 29, 2020	Radiation (03CH07-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	35419 & 03	30MHz~1GHz	Apr. 29, 2020	Apr. 29, 2020~ Jun. 01, 2020	Apr. 28, 2021	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 06, 2019	Apr. 12, 2020~ Jun. 01, 2020	Dec. 05, 2020	Radiation (03CH07-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY532900 53	20Hz~26.5GHz	Jan. 18, 2020	Apr. 12, 2020~ Jun. 01, 2020	Jan. 17, 2021	Radiation (03CH07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Dec. 26, 2019	Apr. 12, 2020~ Jun. 01, 2020	Dec. 25, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 24, 2019	Apr. 12, 2020~ Apr. 22, 2020	Apr. 23, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 23, 2020	Apr. 23, 2020~ Jun. 01, 2020	Apr. 22, 2021	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 20, 2019	Apr. 12, 2020~ May 18, 2020	May 19, 2020	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 19, 2020	May 19, 2020~ Jun. 01, 2020	May 18, 2021	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A0236 2	1GHz~26.5GHz	Nov. 01, 2019	Apr. 12, 2020~ Jun. 01, 2020	Oct. 31, 2020	Radiation (03CH07-HY)



Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2, 801606/2	18GHz~40GHz	Feb. 25, 2020	Apr. 12, 2020~Jun. 01, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24971/4, MY28655/4	9kHz~30MHz	Feb. 25, 2020	Apr. 12, 2020~Jun. 01, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 25, 2020	Apr. 12, 2020~Jun. 01, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 25, 2020	Apr. 12, 2020~Jun. 01, 2020	Feb. 24, 2021	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	801606/2	9KHz ~ 40GHz	N/A	Apr. 12, 2020~Jun. 01, 2020	N/A	Radiation (03CH07-HY)
Controller	ChainTek	Chaintek 3000	N/A	Control Turn table	N/A	Apr. 12, 2020~Jun. 01, 2020	N/A	Radiation (03CH07-HY)
Controller	Max-Full	MF7802	MF780208368	Control Ant Mast	N/A	Apr. 12, 2020~Jun. 01, 2020	N/A	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Apr. 12, 2020~Jun. 01, 2020	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Apr. 12, 2020~Jun. 01, 2020	N/A	Radiation (03CH07-HY)
USB Data Logger	TECPEL	TR-32	HE17XB2495	N/A	N/A	Apr. 12, 2020~Jun. 01, 2020	N/A	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 28, 2019	Apr. 12, 2020~Jun. 01, 2020	Oct. 27, 2020	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz~40GHz	Dec. 10, 2019	Apr. 12, 2020~Jun. 01, 2020	Dec. 09, 2020	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	N/A	N/A	N/A	Apr. 12, 2020~Jun. 01, 2020	N/A	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 13, 2019	Apr. 12, 2020~Jun. 01, 2020	Dec. 12, 2020	Radiation (03CH07-HY)

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.3
---	-----

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.6
---	-----

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2
---	-----

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.3
---	-----

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Eason Huang / Rebecca LI	Temperature:	20.1~24.9	°C
Test Date:	2020/4/10 ~ 2020/5/31	Relative Humidity:	45.7~58.8	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band Single Antenna										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant0	Ant1	Ant0	Ant1		
11b	1Mbps	1	1	2412	-	13.45	-	9.00	0.50	Pass
11b	1Mbps	1	6	2437	-	13.50	-	9.00	0.50	Pass
11b	1Mbps	1	11	2462	-	13.45	-	9.00	0.50	Pass
11b	1Mbps	1	12	2467	-	13.45	-	9.04	0.50	Pass
11b	1Mbps	1	13	2472	-	13.40	-	9.00	0.50	Pass
11g	6Mbps	1	1	2412	-	16.75	-	16.32	0.50	Pass
11g	6Mbps	1	6	2437	-	16.70	-	16.30	0.50	Pass
11g	6Mbps	1	11	2462	-	16.65	-	16.34	0.50	Pass
11g	6Mbps	1	12	2467	-	16.70	-	16.28	0.50	Pass
11g	6Mbps	1	13	2472	-	16.70	-	16.30	0.50	Pass
HT20	MCS0	1	1	2412	-	17.70	-	17.60	0.50	Pass
HT20	MCS0	1	6	2437	-	17.75	-	17.56	0.50	Pass
HT20	MCS0	1	11	2462	-	17.70	-	17.58	0.50	Pass
HT20	MCS0	1	12	2467	-	17.70	-	17.60	0.50	Pass
HT20	MCS0	1	13	2472	-	17.65	-	17.56	0.50	Pass

2.4GHz Band MIMO										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant0	Ant1	Ant0	Ant1		
11b	1Mbps	2	1	2412	13.50	13.40	9.02	9.00	0.50	Pass
11b	1Mbps	2	6	2437	13.55	13.45	9.00	9.04	0.50	Pass
11b	1Mbps	2	11	2462	13.50	13.45	9.00	9.00	0.50	Pass
11b	1Mbps	2	12	2467	13.40	13.40	8.52	9.02	0.50	Pass
11b	1Mbps	2	13	2472	13.35	13.35	9.00	8.50	0.50	Pass
11g	6Mbps	2	1	2412	16.65	16.70	16.36	16.30	0.50	Pass
11g	6Mbps	2	6	2437	16.65	16.70	16.32	16.30	0.50	Pass
11g	6Mbps	2	11	2462	16.70	16.70	16.32	16.30	0.50	Pass
11g	6Mbps	2	12	2467	16.70	16.70	16.34	16.32	0.50	Pass
11g	6Mbps	2	13	2472	16.60	16.65	16.32	16.32	0.50	Pass
HT20	MCS0	2	1	2412	17.75	17.70	17.60	17.56	0.50	Pass
HT20	MCS0	2	6	2437	17.75	17.70	17.58	17.58	0.50	Pass
HT20	MCS0	2	11	2462	17.70	17.70	17.56	17.58	0.50	Pass
HT20	MCS0	2	12	2467	17.75	17.70	17.54	17.56	0.50	Pass
HT20	MCS0	2	13	2472	17.70	17.65	17.56	17.56	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band Single Antenna																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
11b	1Mbps	1	1	2412	-	17.40		-	30.00	3.85	4.53	-	21.93	-	36.00	Pass
11b	1Mbps	1	6	2437	-	17.20		-	30.00	3.85	4.53	-	21.73	-	36.00	Pass
11b	1Mbps	1	11	2462	-	17.60		-	30.00	3.85	4.53	-	22.13	-	36.00	Pass
11b	1Mbps	1	12	2467	-	17.60		-	30.00	3.85	4.53	-	22.13	-	36.00	Pass
11b	1Mbps	1	13	2472	-	15.30		-	30.00	3.85	4.53	-	19.83	-	36.00	Pass
11g	6Mbps	1	1	2412	-	17.70		-	30.00	3.85	4.53	-	22.23	-	36.00	Pass
11g	6Mbps	1	6	2437	-	17.50		-	30.00	3.85	4.53	-	22.03	-	36.00	Pass
11g	6Mbps	1	11	2462	-	17.70		-	30.00	3.85	4.53	-	22.23	-	36.00	Pass
11g	6Mbps	1	12	2467	-	14.20		-	30.00	3.85	4.53	-	18.73	-	36.00	Pass
11g	6Mbps	1	13	2472	-	12.30		-	30.00	3.85	4.53	-	16.83	-	36.00	Pass
HT20	MCS0	1	1	2412	-	17.60		-	30.00	3.85	4.53	-	22.13	-	36.00	Pass
HT20	MCS0	1	6	2437	-	17.30		-	30.00	3.85	4.53	-	21.83	-	36.00	Pass
HT20	MCS0	1	11	2462	-	17.40		-	30.00	3.85	4.53	-	21.93	-	36.00	Pass
HT20	MCS0	1	12	2467	-	13.80		-	30.00	3.85	4.53	-	18.33	-	36.00	Pass
HT20	MCS0	1	13	2472	-	11.40		-	30.00	3.85	4.53	-	15.93	-	36.00	Pass

2.4GHz Band MIMO																
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant0	Ant1	SUM	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	Ant0	Ant1	
11b	1Mbps	2	1	2412	17.50	18.00	20.77	30.00		4.53		25.30		36.00		Pass
11b	1Mbps	2	6	2437	16.30	16.60	19.46	30.00		4.53		23.99		36.00		Pass
11b	1Mbps	2	11	2462	16.40	16.70	19.56	30.00		4.53		24.09		36.00		Pass
11b	1Mbps	2	12	2467	16.40	16.80	19.61	30.00		4.53		24.14		36.00		Pass
11b	1Mbps	2	13	2472	16.70	17.00	19.86	30.00		4.53		24.39		36.00		Pass
11g	6Mbps	2	1	2412	16.30	16.60	19.46	30.00		4.53		23.99		36.00		Pass
11g	6Mbps	2	6	2437	17.50	18.00	20.77	30.00		4.53		25.30		36.00		Pass
11g	6Mbps	2	11	2462	15.10	15.60	18.37	30.00		4.53		22.90		36.00		Pass
11g	6Mbps	2	12	2467	12.60	12.90	15.76	30.00		4.53		20.29		36.00		Pass
11g	6Mbps	2	13	2472	9.00	9.40	12.21	30.00		4.53		16.74		36.00		Pass
HT20	MCS0	2	1	2412	16.00	16.40	19.21	30.00		4.53		23.74		36.00		Pass
HT20	MCS0	2	6	2437	17.50	17.80	20.66	30.00		4.53		25.19		36.00		Pass
HT20	MCS0	2	11	2462	15.30	15.50	18.41	30.00		4.53		22.94		36.00		Pass
HT20	MCS0	2	12	2467	12.30	12.50	15.41	30.00		4.53		19.94		36.00		Pass
HT20	MCS0	2	13	2472	7.90	8.40	11.17	30.00		4.53		15.70		36.00		Pass

Note: Measured power (dBm) has offset with cable loss.

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band Single Antenna												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant0	Ant1	Worse + 3.01	Ant0	Ant1	Ant0	Ant1	
11b	1Mbps	1	1	2412	-	-5.00		3.85	4.53	8.00	8.00	Pass
11b	1Mbps	1	6	2437	-	-5.04		3.85	4.53	8.00	8.00	Pass
11b	1Mbps	1	11	2462	-	-4.57		3.85	4.53	8.00	8.00	Pass
11b	1Mbps	1	12	2467	-	-4.63		3.85	4.53	8.00	8.00	Pass
11b	1Mbps	1	13	2472	-	-7.29		3.85	4.53	8.00	8.00	Pass
11g	6Mbps	1	1	2412	-	-6.97		3.85	4.53	8.00	8.00	Pass
11g	6Mbps	1	6	2437	-	-6.03		3.85	4.53	8.00	8.00	Pass
11g	6Mbps	1	11	2462	-	-6.73		3.85	4.53	8.00	8.00	Pass
11g	6Mbps	1	12	2467	-	-10.03		3.85	4.53	8.00	8.00	Pass
11g	6Mbps	1	13	2472	-	-11.60		3.85	4.53	8.00	8.00	Pass
HT20	MCS0	1	1	2412	-	-6.95		3.85	4.53	8.00	8.00	Pass
HT20	MCS0	1	6	2437	-	-6.76		3.85	4.53	8.00	8.00	Pass
HT20	MCS0	1	11	2462	-	-7.04		3.85	4.53	8.00	8.00	Pass
HT20	MCS0	1	12	2467	-	-10.46		3.85	4.53	8.00	8.00	Pass
HT20	MCS0	1	13	2472	-	-13.30		3.85	4.53	8.00	8.00	Pass

2.4GHz Band MIMO												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant0	Ant1	Worse + 3.01	Ant0	Ant1	Ant0	Ant1	
11b	1Mbps	2	1	2412	-5.18	-4.46	-1.45	7.21		6.79		Pass
11b	1Mbps	2	6	2437	-6.72	-6.21	-3.20	7.21		6.79		Pass
11b	1Mbps	2	11	2462	-6.03	-6.39	-3.02	7.21		6.79		Pass
11b	1Mbps	2	12	2467	-10.05	-8.65	-5.64	7.21		6.79		Pass
11b	1Mbps	2	13	2472	-12.78	-11.36	-8.35	7.21		6.79		Pass
11g	6Mbps	2	1	2412	-8.53	-7.84	-4.83	7.21		6.79		Pass
11g	6Mbps	2	6	2437	-6.97	-6.97	-3.96	7.21		6.79		Pass
11g	6Mbps	2	11	2462	-9.14	-8.51	-5.50	7.21		6.79		Pass
11g	6Mbps	2	12	2467	-11.37	-10.74	-7.73	7.21		6.79		Pass
11g	6Mbps	2	13	2472	-15.60	-14.71	-11.70	7.21		6.79		Pass
HT20	MCS0	2	1	2412	-9.52	-8.74	-5.73	7.21		6.79		Pass
HT20	MCS0	2	6	2437	-7.91	-6.60	-3.59	7.21		6.79		Pass
HT20	MCS0	2	11	2462	-9.91	-9.20	-6.19	7.21		6.79		Pass
HT20	MCS0	2	12	2467	-13.24	-12.60	-9.59	7.21		6.79		Pass
HT20	MCS0	2	13	2472	-17.73	-16.37	-13.36	7.21		6.79		Pass

Measured power density (dBm) has offset with cable loss.



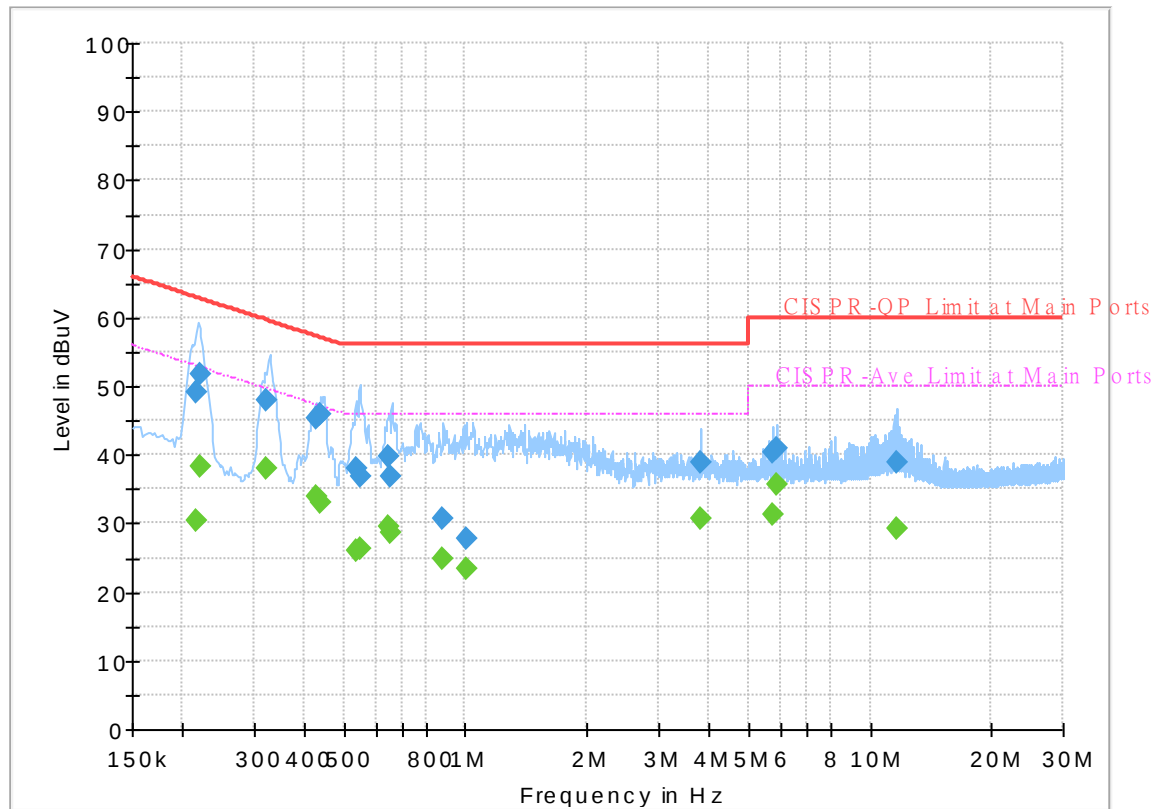
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Tom Lee	Temperature :	22~25℃
		Relative Humidity :	42~50%

EUT Information

Report NO : 020402-01
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Line

Full Spectrum



Final_Result

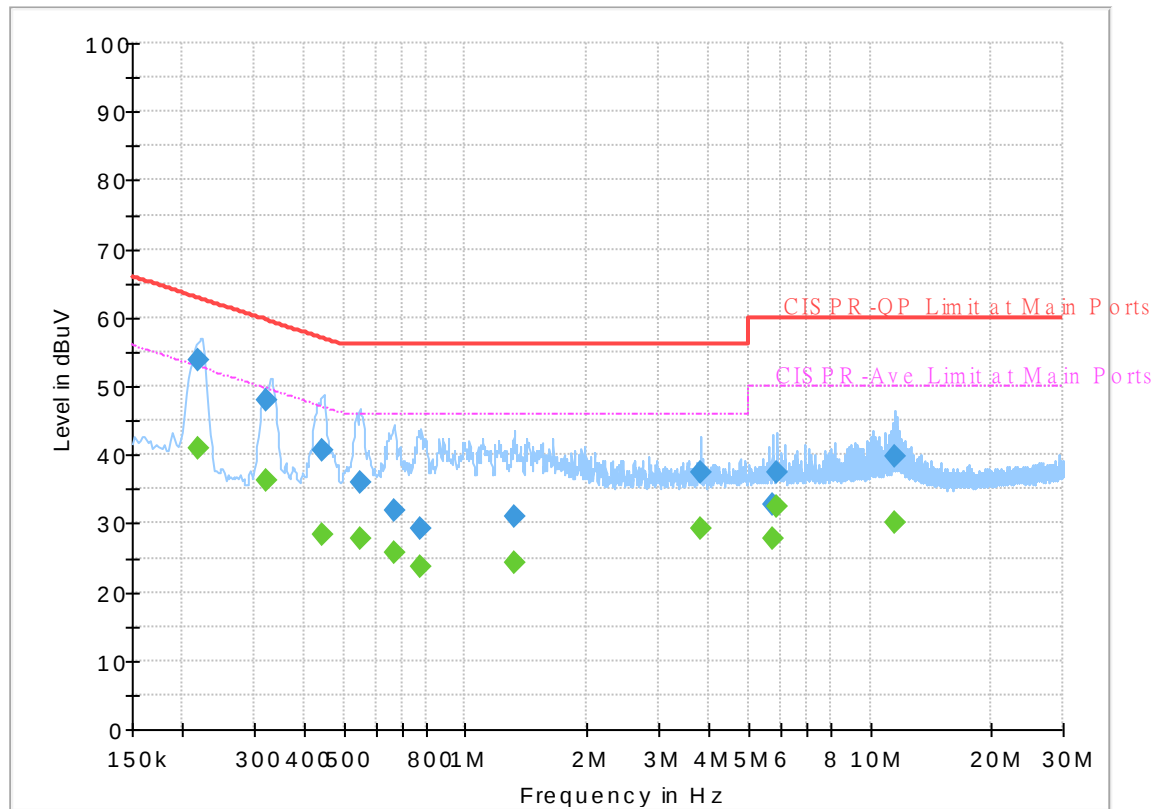
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.215250	---	30.41	53.00	22.59	L1	OFF	19.6
0.215250	49.19	---	63.00	13.81	L1	OFF	19.6
0.222000	---	38.31	52.74	14.43	L1	OFF	19.6
0.222000	51.76	---	62.74	10.98	L1	OFF	19.6
0.323250	---	37.96	49.62	11.66	L1	OFF	19.6
0.323250	47.84	---	59.62	11.78	L1	OFF	19.6
0.430350	---	33.91	47.25	13.34	L1	OFF	19.6
0.430350	45.30	---	57.25	11.95	L1	OFF	19.6
0.435750	---	33.09	47.14	14.05	L1	OFF	19.6
0.435750	45.98	---	57.14	11.16	L1	OFF	19.6
0.538710	---	26.08	46.00	19.92	L1	OFF	19.6
0.538710	38.02	---	56.00	17.98	L1	OFF	19.6
0.550050	---	26.31	46.00	19.69	L1	OFF	19.6
0.550050	36.86	---	56.00	19.14	L1	OFF	19.6
0.642750	---	29.42	46.00	16.58	L1	OFF	19.6
0.642750	39.69	---	56.00	16.31	L1	OFF	19.6
0.654720	---	28.71	46.00	17.29	L1	OFF	19.6
0.654720	36.94	---	56.00	19.06	L1	OFF	19.6
0.872250	---	24.82	46.00	21.18	L1	OFF	19.6
0.872250	30.83	---	56.00	25.17	L1	OFF	19.6
1.003110	---	23.41	46.00	22.59	L1	OFF	19.6

1.003110	27.81	---	56.00	28.19	L1	OFF	19.6
3.818580	---	30.57	46.00	15.43	L1	OFF	19.7
3.818580	38.76	---	56.00	17.24	L1	OFF	19.7
5.741430	---	31.19	50.00	18.81	L1	OFF	19.9
5.741430	40.41	---	60.00	19.59	L1	OFF	19.9
5.885700	---	35.80	50.00	14.20	L1	OFF	19.9
5.885700	40.85	---	60.00	19.15	L1	OFF	19.9
11.603850	---	29.30	50.00	20.70	L1	OFF	20.1
11.603850	38.75	---	60.00	21.25	L1	OFF	20.1

EUT Information

Report NO : 020402-01
 Test Mode : Mode 1
 Test Voltage : 120Vac/60Hz
 Phase : Neutral

Full Spectrum



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.219480	---	40.89	52.84	11.95	N	OFF	19.6
0.219480	53.73	---	62.84	9.11	N	OFF	19.6
0.323250	---	36.34	49.62	13.28	N	OFF	19.6
0.323250	48.08	---	59.62	11.54	N	OFF	19.6
0.442500	---	28.48	47.02	18.54	N	OFF	19.6
0.442500	40.51	---	57.02	16.51	N	OFF	19.6
0.548880	---	27.66	46.00	18.34	N	OFF	19.6
0.548880	36.09	---	56.00	19.91	N	OFF	19.6
0.668580	---	25.82	46.00	20.18	N	OFF	19.6
0.668580	31.81	---	56.00	24.19	N	OFF	19.6
0.773250	---	23.63	46.00	22.37	N	OFF	19.6
0.773250	29.11	---	56.00	26.89	N	OFF	19.6
1.319190	---	24.33	46.00	21.67	N	OFF	19.6
1.319190	31.07	---	56.00	24.93	N	OFF	19.6
3.819210	---	29.21	46.00	16.79	N	OFF	19.7
3.819210	37.44	---	56.00	18.56	N	OFF	19.7
5.745750	---	27.90	50.00	22.10	N	OFF	19.9
5.745750	32.81	---	60.00	27.19	N	OFF	19.9
5.885160	---	32.55	50.00	17.45	N	OFF	19.9
5.885160	37.44	---	60.00	22.56	N	OFF	19.9
11.459310	---	30.11	50.00	19.89	N	OFF	20.1

11.459310	39.76	---	60.00	20.24	N	OFF	20.1
-----------	-------	-----	-------	-------	---	-----	------



Appendix C. Radiated Spurious Emission

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	21~23°C
		Relative Humidity :	55~57%

<EUT with HDMI Extender Cable>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2350.845	55.62	-18.38	74	41.03	31.9	17.9	35.21	252	146	P	H
		2386.125	44.45	-9.55	54	29.9	31.8	17.98	35.23	252	146	A	H
	*	2412	109.32	-	-	94.68	31.87	18.02	35.25	252	146	P	H
	*	2412	106.32	-	-	91.68	31.87	18.02	35.25	252	146	A	H
		2369.115	55.3	-18.7	74	40.74	31.83	17.95	35.22	303	319	P	V
		2386.125	44.96	-9.04	54	30.41	31.8	17.98	35.23	303	319	A	V
	*	2412	109.92	-	-	95.28	31.87	18.02	35.25	303	319	P	V
	*	2412	106.93	-	-	92.29	31.87	18.02	35.25	303	319	A	V
802.11b CH 06 2437MHz		2338.56	55.08	-18.92	74	40.5	31.9	17.88	35.2	280	144	P	H
		2389.94	44.43	-9.57	54	29.88	31.8	17.98	35.23	280	144	A	H
	*	2437	110.8	-	-	96.01	32	18.05	35.26	280	144	P	H
	*	2437	107.68	-	-	92.89	32	18.05	35.26	280	144	P	H
		2495.03	55.08	-18.92	74	40.14	32.1	18.14	35.3	280	144	P	H
		2488.24	44.9	-9.1	54	29.96	32.1	18.13	35.29	280	144	A	H
		2330.58	55.09	-18.91	74	40.55	31.87	17.87	35.2	291	321	P	V
		2389.94	44.48	-9.52	54	29.93	31.8	17.98	35.23	291	321	A	V
	*	2437	108.96	-	-	94.17	32	18.05	35.26	291	321	P	V
	*	2437	106.02	-	-	91.23	32	18.05	35.26	291	321	A	V
		2489.71	55.29	-18.71	74	40.35	32.1	18.13	35.29	291	321	P	V
		2484.67	44.68	-9.32	54	29.78	32.07	18.12	35.29	291	321	A	V



802.11b CH 11 2462MHz	*	2462	110.69	-	-	95.85	32.03	18.09	35.28	298	166	P	H
	*	2462	107.72	-	-	92.88	32.03	18.09	35.28	298	166	A	H
		2484.04	55.74	-18.26	74	40.84	32.07	18.12	35.29	298	166	P	H
		2487	45.52	-8.48	54	30.61	32.07	18.13	35.29	298	166	A	H
	*	2462	110.13	-	-	95.29	32.03	18.09	35.28	302	311	P	V
	*	2462	106.96	-	-	92.12	32.03	18.09	35.28	302	311	A	V
		2488.96	55.54	-18.46	74	40.6	32.1	18.13	35.29	302	311	P	V
		2487.08	44.94	-9.06	54	30.03	32.07	18.13	35.29	302	311	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz	*	2467	110.85	-	-	96	32.03	18.1	35.28	288	145	P	H
	*	2467	107.68	-	-	92.83	32.03	18.1	35.28	288	145	A	H
		2483.64	59.55	-14.45	74	44.65	32.07	18.12	35.29	288	145	P	H
		2484	53.34	-0.66	54	38.44	32.07	18.12	35.29	288	145	A	H
	*	2467	110.03	-	-	95.18	32.03	18.1	35.28	300	313	P	V
	*	2467	106.87	-	-	92.02	32.03	18.1	35.28	300	313	A	V
		2484	59.26	-14.74	74	44.36	32.07	18.12	35.29	300	313	P	V
		2483.96	52.22	-1.78	54	37.32	32.07	18.12	35.29	300	313	A	V
802.11b CH 13 2472MHz	*	2472	107.58	-	-	92.69	32.07	18.1	35.28	302	165	P	H
	*	2472	104.42	-	-	89.53	32.07	18.1	35.28	302	165	A	H
		2484	59.65	-14.35	74	44.75	32.07	18.12	35.29	302	165	P	H
		2484.04	53.48	-0.52	54	38.58	32.07	18.12	35.29	302	165	A	H
	*	2472	106.89	-	-	92	32.07	18.1	35.28	295	313	P	V
	*	2472	103.75	-	-	88.86	32.07	18.1	35.28	295	313	A	V
		2483.92	59.35	-14.65	74	44.45	32.07	18.12	35.29	295	313	P	V
		2483.96	51.94	-2.06	54	37.04	32.07	18.12	35.29	295	313	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	47.96	-26.04	74	60.81	34.05	11.99	58.89	100	0	P	H
		4824	49.45	-24.55	74	62.3	34.05	11.99	58.89	100	0	P	V
802.11b CH 06 2437MHz		4874	47.2	-26.8	74	59.8	34.1	12.06	58.76	100	0	P	H
		7311	54.76	-19.24	74	62.05	35.6	14.58	57.47	224	164	P	H
		7311	49.85	-4.15	54	57.14	35.6	14.58	57.47	224	164	A	H
		4874	48.06	-25.94	74	60.66	34.1	12.06	58.76	100	0	P	V
		7311	52.76	-21.24	74	60.05	35.6	14.58	57.47	375	184	P	V
		7311	47.49	-6.51	54	54.78	35.6	14.58	57.47	375	184	A	V
802.11b CH 11 2462MHz		4924	45.44	-28.56	74	57.72	34.23	12.13	58.64	100	0	P	H
		7386	47.61	-26.39	74	54.91	35.6	14.64	57.54	100	0	P	H
		4924	45.25	-28.75	74	57.53	34.23	12.13	58.64	100	0	P	V
		7386	48.48	-25.52	74	55.78	35.6	14.64	57.54	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz		4934	45.87	-28.13	74	58.11	34.23	12.15	58.62	100	0	P	H
		7401	47.63	-26.37	74	54.97	35.57	14.64	57.55	100	0	P	H
		4934	47.01	-26.99	74	59.25	34.23	12.15	58.62	100	0	P	V
		7401	48.4	-25.6	74	55.74	35.57	14.64	57.55	100	0	P	V
802.11b CH 13 2472MHz		4944	42.62	-31.38	74	54.75	34.3	12.16	58.59	100	0	P	H
		7416	42.92	-31.08	74	50.26	35.57	14.66	57.57	100	0	P	H
		4944	42.15	-31.85	74	54.28	34.3	12.16	58.59	100	0	P	V
		7416	43.72	-30.28	74	51.06	35.57	14.66	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2384.235	61.07	-12.93	74	46.5	31.83	17.97	35.23	253	145	P	H
		2390	49.6	-4.4	54	35.05	31.8	17.98	35.23	253	145	A	H
	*	2412	111.41	-	-	96.77	31.87	18.02	35.25	253	145	P	H
	*	2412	104	-	-	89.36	31.87	18.02	35.25	253	145	A	H
		2389.905	62.55	-11.45	74	48	31.8	17.98	35.23	305	319	P	V
		2390	51.53	-2.47	54	36.98	31.8	17.98	35.23	305	319	A	V
	*	2412	112.11	-	-	97.47	31.87	18.02	35.25	305	319	P	V
	*	2412	104.52	-	-	89.88	31.87	18.02	35.25	305	319	A	V
802.11g CH 06 2437MHz		2335.48	55.17	-18.83	74	40.59	31.9	17.88	35.2	280	145	P	H
		2389.8	45.18	-8.82	54	30.63	31.8	17.98	35.23	280	145	A	H
	*	2437	111.63	-	-	96.84	32	18.05	35.26	280	145	P	H
	*	2437	104.15	-	-	89.36	32	18.05	35.26	280	145	A	H
		2488.52	56.89	-17.11	74	41.95	32.1	18.13	35.29	280	145	P	H
		2483.5	46.48	-7.52	54	31.58	32.07	18.12	35.29	280	145	A	H
		2331.84	55.98	-18.02	74	41.44	31.87	17.87	35.2	289	320	P	V
		2389.94	45.4	-8.6	54	30.85	31.8	17.98	35.23	289	320	A	V
	*	2437	110.98	-	-	96.19	32	18.05	35.26	289	320	P	V
	*	2437	103.46	-	-	88.67	32	18.05	35.26	289	320	A	V
		2484.25	56.07	-17.93	74	41.17	32.07	18.12	35.29	289	320	P	V
		2483.55	45.6	-8.4	54	30.7	32.07	18.12	35.29	289	320	A	V



802.11g CH 11 2462MHz	*	2462	111.89	-	-	97.05	32.03	18.09	35.28	300	163	P	H
	*	2462	103.99	-	-	89.15	32.03	18.09	35.28	300	163	A	H
		2483.6	65.05	-8.95	74	50.15	32.07	18.12	35.29	300	163	P	H
		2483.52	52.96	-1.04	54	38.06	32.07	18.12	35.29	300	163	A	H
	*	2462	110.99	-	-	96.15	32.03	18.09	35.28	300	312	P	V
	*	2462	103.35	-	-	88.51	32.03	18.09	35.28	300	312	A	V
		2483.64	63.64	-10.36	74	48.74	32.07	18.12	35.29	300	312	P	V
		2483.52	50.7	-3.3	54	35.8	32.07	18.12	35.29	300	312	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz	*	2467	108.52	-	-	93.67	32.03	18.1	35.28	300	165	P	H
	*	2467	100.89	-	-	86.04	32.03	18.1	35.28	300	165	A	H
		2483.84	66.14	-7.86	74	51.24	32.07	18.12	35.29	300	165	P	H
		2483.52	53.11	-0.89	54	38.21	32.07	18.12	35.29	300	165	A	H
	*	2467	107.4	-	-	92.55	32.03	18.1	35.28	300	314	P	V
	*	2467	99.81	-	-	84.96	32.03	18.1	35.28	300	314	A	V
		2484.32	63.52	-10.48	74	48.62	32.07	18.12	35.29	300	314	P	V
		2483.52	50.94	-3.06	54	36.04	32.07	18.12	35.29	300	314	A	V
802.11g CH 13 2472MHz	*	2472	106.28	-	-	91.39	32.07	18.1	35.28	300	164	P	H
	*	2472	98.77	-	-	83.88	32.07	18.1	35.28	300	164	A	H
		2484.12	65.35	-8.65	74	50.45	32.07	18.12	35.29	300	164	P	H
		2484.16	52.67	-1.33	54	37.77	32.07	18.12	35.29	300	164	A	H
	*	2472	105.48	-	-	90.59	32.07	18.1	35.28	298	315	P	V
	*	2472	97.75	-	-	82.86	32.07	18.1	35.28	298	315	A	V
		2484.16	63.6	-10.4	74	48.7	32.07	18.12	35.29	298	315	P	V
		2484.2	51.22	-2.78	54	36.32	32.07	18.12	35.29	298	315	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	44.91	-29.09	74	57.76	34.05	11.99	58.89	100	0	P	H
		4824	47.17	-26.83	74	60.02	34.05	11.99	58.89	100	0	P	V
802.11g CH 06 2437MHz		4874	45.99	-28.01	74	58.59	34.1	12.06	58.76	100	0	P	H
		7311	56.21	-17.79	74	63.5	35.6	14.58	57.47	208	138	P	H
		7311	44.33	-9.67	54	51.62	35.6	14.58	57.47	208	138	A	H
		4874	45.02	-28.98	74	57.62	34.1	12.06	58.76	100	0	P	V
		7311	52.76	-21.24	74	60.05	35.6	14.58	57.47	348	165	P	V
		7311	41.01	-12.99	54	48.3	35.6	14.58	57.47	348	165	A	V
802.11g CH 11 2462MHz		4924	43.61	-30.39	74	55.89	34.23	12.13	58.64	100	0	P	H
		7386	48.79	-25.21	74	56.09	35.6	14.64	57.54	100	0	P	H
		4924	44.03	-29.97	74	56.31	34.23	12.13	58.64	100	0	P	V
		7386	49.21	-24.79	74	56.51	35.6	14.64	57.54	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz		4934	40.99	-33.01	74	53.23	34.23	12.15	58.62	100	0	P	H
		7401	41.71	-32.29	74	49.05	35.57	14.64	57.55	100	0	P	H
		4934	41.24	-32.76	74	53.48	34.23	12.15	58.62	100	0	P	V
		7401	42.82	-31.18	74	50.16	35.57	14.64	57.55	100	0	P	V
802.11g CH 13 2472MHz		4944	40.86	-33.14	74	52.99	34.3	12.16	58.59	100	0	P	H
		7416	40.85	-33.15	74	48.19	35.57	14.66	57.57	100	0	P	H
		4944	40.56	-33.44	74	52.69	34.3	12.16	58.59	100	0	P	V
		7416	40.52	-33.48	74	47.86	35.57	14.66	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2390	60.31	-13.69	74	45.76	31.8	17.98	35.23	252	145	P	H
		2390	49.47	-4.53	54	34.92	31.8	17.98	35.23	252	145	A	H
	*	2412	111.08	-	-	96.44	31.87	18.02	35.25	252	145	P	H
	*	2412	103.69	-	-	89.05	31.87	18.02	35.25	252	145	A	H
		2389.59	64.25	-9.75	74	49.7	31.8	17.98	35.23	305	319	P	V
		2390	51.75	-2.25	54	37.2	31.8	17.98	35.23	305	319	A	V
	*	2412	111.53	-	-	96.89	31.87	18.02	35.25	305	319	P	V
	*	2412	104.01	-	-	89.37	31.87	18.02	35.25	305	319	A	V
802.11n HT20 CH 06 2437MHz		2388.12	55.74	-18.26	74	41.19	31.8	17.98	35.23	280	145	P	H
		2389.94	45.18	-8.82	54	30.63	31.8	17.98	35.23	280	145	A	H
	*	2437	111.6	-	-	96.81	32	18.05	35.26	280	145	P	H
	*	2437	103.72	-	-	88.93	32	18.05	35.26	280	145	A	H
		2493.21	56.27	-17.73	74	41.33	32.1	18.14	35.3	280	145	P	H
		2483.62	46.32	-7.68	54	31.42	32.07	18.12	35.29	280	145	A	H
		2373.28	55.47	-18.53	74	40.91	31.83	17.95	35.22	289	320	P	V
		2389.94	45.28	-8.72	54	30.73	31.8	17.98	35.23	289	320	A	V
	*	2437	110.73	-	-	95.94	32	18.05	35.26	289	320	P	V
	*	2437	103.04	-	-	88.25	32	18.05	35.26	289	320	A	V
		2492.37	55.9	-18.1	74	40.97	32.1	18.13	35.3	289	320	P	V
		2483.5	45.54	-8.46	54	30.64	32.07	18.12	35.29	289	320	A	V



802.11n HT20 CH 11 2462MHz	*	2462	110.88	-	-	96.04	32.03	18.09	35.28	300	162	P	H
	*	2462	103.27	-	-	88.43	32.03	18.09	35.28	300	162	A	H
		2484.24	65.54	-8.46	74	50.64	32.07	18.12	35.29	300	162	P	H
		2483.52	53.43	-0.57	54	38.53	32.07	18.12	35.29	300	162	A	H
	*	2462	110.28	-	-	95.44	32.03	18.09	35.28	300	312	P	V
	*	2462	102.89	-	-	88.05	32.03	18.09	35.28	300	312	A	V
		2484.48	63.94	-10.06	74	49.04	32.07	18.12	35.29	300	312	P	V
		2483.52	51.09	-2.91	54	36.19	32.07	18.12	35.29	300	312	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 12 2467MHz	*	2467	107.89	-	-	93.04	32.03	18.1	35.28	300	165	P	H
	*	2467	100.2	-	-	85.35	32.03	18.1	35.28	300	165	A	H
		2485.32	64.84	-9.16	74	49.94	32.07	18.12	35.29	300	165	P	H
		2483.52	52.32	-1.68	54	37.42	32.07	18.12	35.29	300	165	A	H
	*	2467	106.83	-	-	91.98	32.03	18.1	35.28	300	314	P	V
	*	2467	99.18	-	-	84.33	32.03	18.1	35.28	300	314	A	V
		2483.68	62.53	-11.47	74	47.63	32.07	18.12	35.29	300	314	P	V
		2483.52	50.24	-3.76	54	35.34	32.07	18.12	35.29	300	314	A	V
802.11n HT20 CH 13 2472MHz	*	2472	105.29	-	-	90.4	32.07	18.1	35.28	300	165	P	H
	*	2472	97.38	-	-	82.49	32.07	18.1	35.28	300	165	A	H
		2483.64	62.03	-11.97	74	47.13	32.07	18.12	35.29	300	165	P	H
		2483.52	53.05	-0.95	54	38.15	32.07	18.12	35.29	300	165	A	H
	*	2472	104.29	-	-	89.4	32.07	18.1	35.28	298	315	P	V
	*	2472	96.44	-	-	81.55	32.07	18.1	35.28	298	315	A	V
		2484.56	60.55	-13.45	74	45.65	32.07	18.12	35.29	298	315	P	V
		2483.52	51.63	-2.37	54	36.73	32.07	18.12	35.29	298	315	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	44.21	-29.79	74	57.06	34.05	11.99	58.89	100	0	P	H
		4824	46.47	-27.53	74	59.32	34.05	11.99	58.89	100	0	P	V
802.11n HT20 CH 06 2437MHz		4874	43.78	-30.22	74	56.38	34.1	12.06	58.76	100	0	P	H
		7311	55.34	-18.66	74	62.63	35.6	14.58	57.47	214	138	P	H
		7311	44.3	-9.7	54	51.59	35.6	14.58	57.47	214	138	A	H
		4874	41.69	-32.31	74	54.29	34.1	12.06	58.76	100	0	P	V
		7311	51.79	-22.21	74	59.08	35.6	14.58	57.47	352	167	P	V
		7311	41.21	-12.79	54	48.5	35.6	14.58	57.47	352	167	A	V
802.11n HT20 CH 11 2462MHz		4924	44.15	-29.85	74	56.43	34.23	12.13	58.64	100	0	P	H
		7386	48.16	-25.84	74	55.46	35.6	14.64	57.54	100	0	P	H
		4924	42.81	-31.19	74	55.09	34.23	12.13	58.64	100	0	P	V
		7386	48.49	-25.51	74	55.79	35.6	14.64	57.54	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		4934	40.78	-33.22	74	53.02	34.23	12.15	58.62	100	0	P	H
HT20		7401	42.53	-31.47	74	49.87	35.57	14.64	57.55	100	0	P	H
CH 12		4934	40.82	-33.18	74	53.06	34.23	12.15	58.62	100	0	P	V
2467MHz		7401	41.78	-32.22	74	49.12	35.57	14.64	57.55	100	0	P	V
802.11n		4944	40.79	-33.21	74	52.92	34.3	12.16	58.59	100	0	P	H
HT20		7416	41.15	-32.85	74	48.49	35.57	14.66	57.57	100	0	P	H
CH 13		4944	40.49	-33.51	74	52.62	34.3	12.16	58.59	100	0	P	V
2472MHz		7416	40.46	-33.54	74	47.8	35.57	14.66	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Emission above 18GHz****2.4GHz WIFI 802.11b (SHF)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11b SHF		24650	36.26	-37.74	74	43.09	39.84	6.83	53.5	150	0	P	H
		23803	36.82	-37.18	74	44.12	39.54	6.46	53.3	150	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11b (LF)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
2.4GHz 802.11b LF		47.01	24.83	-15.17	40	38.02	15.63	1.17	29.99	-	-	P	H
		158.79	31.41	-12.09	43.5	42.53	16.56	2.27	29.95	-	-	P	H
		238.17	35.26	-10.74	46	45.48	17	2.7	29.92	100	0	P	H
		862.8	32.87	-13.13	46	27.9	28.88	5.25	29.16	-	-	P	H
		936.3	33.91	-12.09	46	27.72	29.44	5.53	28.78	-	-	P	H
		951.7	34.55	-11.45	46	27.35	30.31	5.58	28.69	-	-	P	H
		30.27	33.17	-6.83	40	37.92	24.32	0.94	30.01	100	0	P	V
		55.38	31.91	-8.09	40	48.36	12.27	1.27	29.99	-	-	P	V
		237.9	27.79	-18.21	46	38.1	16.91	2.7	29.92	-	-	P	V
		871.2	32.3	-13.7	46	27.25	28.88	5.29	29.12	-	-	P	V
		928.6	33.08	-12.92	46	27.14	29.25	5.51	28.82	-	-	P	V
		948.9	34.06	-11.94	46	27.07	30.12	5.58	28.71	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



< EUT without HDMI Extender Cable >

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2374.05	54.57	-19.43	74	40.01	31.83	17.95	35.22	395	335	P	H
		2390	44.1	-9.9	54	29.55	31.8	17.98	35.23	395	335	A	H
	*	2412	108.24	-	-	93.6	31.87	18.02	35.25	395	335	P	H
	*	2412	105.81	-	-	91.17	31.87	18.02	35.25	395	335	A	H
		2386.125	55.17	-18.83	74	40.62	31.8	17.98	35.23	252	314	P	V
		2368.065	44.62	-9.38	54	30.03	31.87	17.94	35.22	252	314	A	V
	*	2412	112.52	-	-	97.88	31.87	18.02	35.25	252	314	P	V
	*	2412	110.14	-	-	95.5	31.87	18.02	35.25	252	314	A	V
802.11b CH 06 2437MHz		2388.68	53.68	-20.32	74	39.13	31.8	17.98	35.23	387	323	P	H
		2389.8	42.6	-11.4	54	28.05	31.8	17.98	35.23	387	323	A	H
	*	2437	106.18	-	-	91.39	32	18.05	35.26	387	323	P	H
	*	2437	103.46	-	-	88.67	32	18.05	35.26	387	323	A	H
		2496.29	53.91	-20.09	74	38.97	32.1	18.14	35.3	387	323	P	H
		2484.32	43.34	-10.66	54	28.44	32.07	18.12	35.29	387	323	A	H
		2387.14	53.78	-20.22	74	39.23	31.8	17.98	35.23	201	302	P	V
		2388.68	42.58	-11.42	54	28.03	31.8	17.98	35.23	201	302	A	V
	*	2437	110.36	-	-	95.57	32	18.05	35.26	201	302	P	V
	*	2437	107.29	-	-	92.5	32	18.05	35.26	201	302	A	V
		2491.32	53.72	-20.28	74	38.78	32.1	18.13	35.29	201	302	P	V
		2489.64	43.63	-10.37	54	28.69	32.1	18.13	35.29	201	302	A	V



802.11b CH 11 2462MHz	*	2462	108.37	-	-	93.53	32.03	18.09	35.28	351	323	P	H
	*	2462	105.39	-	-	90.55	32.03	18.09	35.28	351	323	A	H
		2488.44	53.6	-20.4	74	38.66	32.1	18.13	35.29	351	323	P	H
		2488	43.69	-10.31	54	28.75	32.1	18.13	35.29	351	323	A	H
	*	2462	111.59	-	-	96.75	32.03	18.09	35.28	228	302	P	V
	*	2462	108.4	-	-	93.56	32.03	18.09	35.28	228	302	A	V
		2498.04	54.49	-19.51	74	39.55	32.1	18.14	35.3	228	302	P	V
		2488.04	44.4	-9.6	54	29.46	32.1	18.13	35.29	228	302	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz	*	2467	106.14	-	-	91.29	32.03	18.1	35.28	400	294	P	H
	*	2467	103.73	-	-	88.88	32.03	18.1	35.28	400	294	A	H
		2484.04	56.66	-17.34	74	41.76	32.07	18.12	35.29	400	294	P	H
		2484	48.66	-5.34	54	33.76	32.07	18.12	35.29	400	294	A	H
	*	2467	110.04	-	-	95.19	32.03	18.1	35.28	200	307	P	V
	*	2467	107.6	-	-	92.75	32.03	18.1	35.28	200	307	A	V
		2483.92	59.35	-14.65	74	44.45	32.07	18.12	35.29	200	307	P	V
		2484.04	53.18	-0.82	54	38.28	32.07	18.12	35.29	200	307	A	V
802.11b CH 13 2472MHz	*	2472	102.51	-	-	87.62	32.07	18.1	35.28	400	293	P	H
	*	2472	100.13	-	-	85.24	32.07	18.1	35.28	400	293	A	H
		2487.96	55.23	-18.77	74	40.29	32.1	18.13	35.29	400	293	P	H
		2487.48	46.87	-7.13	54	31.96	32.07	18.13	35.29	400	293	A	H
	*	2472	106.75	-	-	91.86	32.07	18.1	35.28	193	306	P	V
	*	2472	104.34	-	-	89.45	32.07	18.1	35.28	193	306	A	V
		2487.48	58.89	-15.11	74	43.98	32.07	18.13	35.29	193	306	P	V
		2487.48	53.46	-0.54	54	38.55	32.07	18.13	35.29	193	306	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11b (Harmonic @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	49.74	-24.26	74	62.59	34.05	11.99	58.89	100	0	P	H
		4824	49.43	-24.57	74	62.28	34.05	11.99	58.89	100	0	P	V
802.11b CH 06 2437MHz		4874	45.3	-28.7	74	57.9	34.1	12.06	58.76	100	0	P	H
		7311	49.36	-24.64	74	56.65	35.6	14.58	57.47	100	0	P	H
		4874	46.29	-27.71	74	58.89	34.1	11.25	58.76	100	0	P	V
		7311	58.17	-15.83	74	65.46	35.6	13.68	57.47	249	336	P	V
		7311	53.3	-0.7	54	60.59	35.6	13.68	57.47	249	336	A	V
802.11b CH 11 2462MHz		4924	46.91	-27.09	74	59.19	34.23	12.13	58.64	100	0	P	H
		7386	49.88	-24.12	74	57.18	35.6	14.64	57.54	100	0	P	H
		4924	44.01	-29.99	74	56.29	34.23	11.32	58.64	100	0	P	V
		7380	57.73	-16.27	74	65.08	35.55	13.75	57.53	246	332	P	V
		7380	53.12	-0.88	54	60.47	35.55	13.75	57.53	246	332	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 12 2467MHz		4934	43.35	-30.65	74	55.59	34.23	12.15	58.62	100	0	P	H
		7401	44.97	-29.03	74	52.31	35.57	14.64	57.55	100	0	P	H
	*	4934	43.9	-30.1	74	56.14	34.23	12.15	58.62	100	0	P	V
		7401	44.69	-29.31	74	52.03	35.57	14.64	57.55	100	0	P	V
802.11b CH 13 2472MHz		4944	45.58	-28.42	74	57.71	34.3	12.16	58.59	100	0	P	H
		7416	46.79	-27.21	74	54.13	35.57	14.66	57.57	100	0	P	H
		4944	45.85	-28.15	74	57.98	34.3	12.16	58.59	100	0	P	V
		7416	46.04	-27.96	74	53.38	35.57	14.66	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.695	65.39	-8.61	74	50.84	31.8	17.98	35.23	100	3	P	H
		2390	53.18	-0.82	54	38.63	31.8	17.98	35.23	100	3	A	H
	*	2412	112.57	-	-	97.93	31.87	18.02	35.25	100	3	P	H
	*	2412	105.84	-	-	91.2	31.87	18.02	35.25	100	3	A	H
		2389.905	62.47	-11.53	74	47.92	31.8	17.98	35.23	210	305	P	V
		2390	51.62	-2.38	54	37.07	31.8	17.98	35.23	210	305	A	V
	*	2412	112.52	-	-	97.88	31.87	18.02	35.25	210	305	P	V
	*	2412	105.23	-	-	90.59	31.87	18.02	35.25	210	305	A	V
802.11g CH 06 2437MHz		2375.8	55.3	-18.7	74	40.74	31.83	17.96	35.23	100	5	P	H
		2389.8	45.61	-8.39	54	31.06	31.8	17.98	35.23	100	5	A	H
	*	2437	113.05	-	-	98.26	32	18.05	35.26	100	5	P	H
	*	2437	106.39	-	-	91.6	32	18.05	35.26	100	5	A	H
		2483.55	55.07	-18.93	74	40.17	32.07	18.12	35.29	100	5	P	H
		2483.55	44.84	-9.16	54	29.94	32.07	18.12	35.29	100	5	A	H
		2387.84	55.22	-18.78	74	40.67	31.8	17.98	35.23	194	305	P	V
		2389.52	44.94	-9.06	54	30.39	31.8	17.98	35.23	194	305	A	V
	*	2437	115.19	-	-	100.4	32	18.05	35.26	194	305	P	V
	*	2437	107.43	-	-	92.64	32	18.05	35.26	194	305	A	V
		2487.33	56.95	-17.05	74	42.04	32.07	18.13	35.29	194	305	P	V
		2486.21	46.76	-7.24	54	31.85	32.07	18.13	35.29	194	305	A	V



802.11g CH 11 2462MHz	*	2462	111.69	-	-	96.85	32.03	18.09	35.28	100	325	P	H
	*	2462	104.37	-	-	89.53	32.03	18.09	35.28	100	325	A	H
		2483.84	63.3	-10.7	74	48.4	32.07	18.12	35.29	100	325	P	H
		2483.52	49.99	-4.01	54	35.09	32.07	18.12	35.29	100	325	A	H
	*	2462	112.67	-	-	97.83	32.03	18.09	35.28	200	305	P	V
	*	2462	105.3	-	-	90.46	32.03	18.09	35.28	200	305	A	V
		2483.56	65.61	-8.39	74	50.71	32.07	18.12	35.29	200	305	P	V
		2483.52	52.72	-1.28	54	37.82	32.07	18.12	35.29	200	305	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz	*	2467	107.55	-	-	92.7	32.03	18.1	35.28	122	326	P	H
	*	2467	100.18	-	-	85.33	32.03	18.1	35.28	122	326	A	H
		2486.72	60.52	-13.48	74	45.61	32.07	18.13	35.29	122	326	P	H
		2483.52	47.86	-6.14	54	32.96	32.07	18.12	35.29	122	326	A	H
	*	2467	109.65	-	-	94.8	32.03	18.1	35.28	200	307	P	V
	*	2467	102.06	-	-	87.21	32.03	18.1	35.28	200	307	A	V
		2483.52	63.93	-10.07	74	49.03	32.07	18.12	35.29	200	307	P	V
		2483.52	52.94	-1.06	54	38.04	32.07	18.12	35.29	200	307	A	V
802.11g CH 13 2472MHz	*	2472	104.55	-	-	89.66	32.07	18.1	35.28	100	324	P	H
	*	2472	97.41	-	-	82.52	32.07	18.1	35.28	100	324	A	H
		2483.64	60.58	-13.42	74	45.68	32.07	18.12	35.29	100	324	P	H
		2484.2	50.95	-3.05	54	36.05	32.07	18.12	35.29	100	324	A	H
	*	2472	106.23	-	-	91.34	32.07	18.1	35.28	200	308	P	V
	*	2472	98.87	-	-	83.98	32.07	18.1	35.28	200	308	A	V
		2484.04	63.32	-10.68	74	48.42	32.07	18.12	35.29	200	308	P	V
		2484	52.3	-1.7	54	37.4	32.07	18.12	35.29	200	308	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	46.7	-27.3	74	59.55	34.05	11.99	58.89	100	0	P	H
		4824	47.37	-26.63	74	60.22	34.05	11.99	58.89	100	0	P	V
802.11g CH 06 2437MHz		4874	43.13	-30.87	74	55.73	34.1	12.06	58.76	100	0	P	H
		7311	54.91	-19.09	74	62.2	35.6	14.58	57.47	200	122	P	H
		7311	47.59	-6.41	54	54.88	35.6	14.58	57.47	200	122	A	H
		4874	43.79	-30.21	74	56.39	34.1	12.06	58.76	100	0	P	V
		7311	57.61	-16.39	74	64.9	35.6	14.58	57.47	223	104	P	V
		7311	49.39	-4.61	54	56.68	35.6	14.58	57.47	223	104	A	V
802.11g CH 11 2462MHz		4924	42.8	-31.2	74	55.08	34.23	12.13	58.64	100	0	P	H
		7386	51.18	-22.82	74	58.48	35.6	14.64	57.54	200	54	P	H
		7386	42.59	-11.41	54	49.89	35.6	14.64	57.54	200	54	A	H
		4924	44.05	-29.95	74	56.33	34.23	12.13	58.64	100	0	P	V
		7386	52.59	-21.41	74	59.89	35.6	14.64	57.54	248	338	P	V
		7386	44.34	-9.66	54	51.64	35.6	14.64	57.54	248	338	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 12 2467MHz		4934	40.8	-33.2	74	53.04	34.23	12.15	58.62	100	0	P	H
		7401	42.66	-31.34	74	50	35.57	14.64	57.55	100	0	P	H
		4934	41.11	-32.89	74	53.35	34.23	12.15	58.62	100	0	P	V
		7401	43.65	-30.35	74	50.99	35.57	14.64	57.55	100	0	P	V
802.11g CH 13 2472MHz		4944	40.83	-33.17	74	52.96	34.3	12.16	58.59	100	0	P	H
		7416	41.27	-32.73	74	48.61	35.57	14.66	57.57	100	0	P	H
		4944	41.74	-32.26	74	53.87	34.3	12.16	58.59	100	0	P	V
		7416	40.98	-33.02	74	48.32	35.57	14.66	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.8	62.76	-11.24	74	48.21	31.8	17.98	35.23	100	3	P	H
		2390	52.29	-1.71	54	37.74	31.8	17.98	35.23	100	3	A	H
	*	2412	112.07	-	-	97.43	31.87	18.02	35.25	100	3	P	H
	*	2412	104.9	-	-	90.26	31.87	18.02	35.25	100	3	A	H
		2389.695	63.08	-10.92	74	48.53	31.8	17.98	35.23	210	305	P	V
		2390	51.46	-2.54	54	36.91	31.8	17.98	35.23	210	305	A	V
	*	2412	111.96	-	-	97.32	31.87	18.02	35.25	210	305	P	V
	*	2412	104.54	-	-	89.9	31.87	18.02	35.25	210	305	A	V
802.11n HT20 CH 06 2437MHz		2387.7	55.08	-18.92	74	40.53	31.8	17.98	35.23	100	5	P	H
		2389.94	44.9	-9.1	54	30.35	31.8	17.98	35.23	100	5	A	H
	*	2437	112.82	-	-	98.03	32	18.05	35.26	100	5	P	H
	*	2437	105.7	-	-	90.91	32	18.05	35.26	100	5	A	H
		2484.32	54.59	-19.41	74	39.69	32.07	18.12	35.29	100	5	P	H
		2484.11	44.32	-9.68	54	29.42	32.07	18.12	35.29	100	5	A	H
		2385.18	54.85	-19.15	74	40.28	31.83	17.97	35.23	194	305	P	V
		2389.94	45.01	-8.99	54	30.46	31.8	17.98	35.23	194	305	A	V
	*	2437	114.45	-	-	99.66	32	18.05	35.26	194	305	P	V
	*	2437	107.08	-	-	92.29	32	18.05	35.26	194	305	A	V
		2484.53	57.13	-16.87	74	42.23	32.07	18.12	35.29	194	305	P	V
		2483.55	46.83	-7.17	54	31.93	32.07	18.12	35.29	194	305	A	V



802.11n HT20 CH 11 2462MHz	*	2462	111.1	-	-	96.26	32.03	18.09	35.28	100	325	P	H
	*	2462	104.21	-	-	89.37	32.03	18.09	35.28	100	325	A	H
		2484.88	60.23	-13.77	74	45.33	32.07	18.12	35.29	100	325	P	H
		2483.52	48.66	-5.34	54	33.76	32.07	18.12	35.29	100	325	A	H
	*	2462	112.81	-	-	97.97	32.03	18.09	35.28	200	305	P	V
	*	2462	105.19	-	-	90.35	32.03	18.09	35.28	200	305	A	V
		2483.8	63.71	-10.29	74	48.81	32.07	18.12	35.29	200	305	P	V
		2483.88	52.57	-1.43	54	37.67	32.07	18.12	35.29	200	305	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 12 2467MHz	*	2467	107.37	-	-	92.52	32.03	18.1	35.28	100	325	P	H
	*	2467	100.68	-	-	85.83	32.03	18.1	35.28	100	325	A	H
		2486.24	60.1	-13.9	74	45.19	32.07	18.13	35.29	100	325	P	H
		2483.52	48.44	-5.56	54	33.54	32.07	18.12	35.29	100	325	A	H
	*	2467	110.24	-	-	95.39	32.03	18.1	35.28	200	307	P	V
	*	2467	102.53	-	-	87.68	32.03	18.1	35.28	200	307	A	V
		2485	64	-10	74	49.1	32.07	18.12	35.29	200	307	P	V
		2484.76	52.61	-1.39	54	37.71	32.07	18.12	35.29	200	307	A	V
802.11n HT20 CH 13 2472MHz	*	2472	102.85	-	-	87.96	32.07	18.1	35.28	100	324	P	H
	*	2472	96.1	-	-	81.21	32.07	18.1	35.28	100	324	A	H
		2483.64	58.1	-15.9	74	43.2	32.07	18.12	35.29	100	324	P	H
		2483.52	50.57	-3.43	54	35.67	32.07	18.12	35.29	100	324	A	H
	*	2472	104.78	-	-	89.89	32.07	18.1	35.28	200	308	P	V
	*	2472	97.55	-	-	82.66	32.07	18.1	35.28	200	308	A	V
		2483.68	62.3	-11.7	74	47.4	32.07	18.12	35.29	200	308	P	V
		2484.16	53.07	-0.93	54	38.17	32.07	18.12	35.29	200	308	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	44.99	-29.01	74	57.84	34.05	11.99	58.89	100	0	P	H
		4824	44.97	-29.03	74	57.82	34.05	11.99	58.89	100	0	P	V
802.11n HT20 CH 06 2437MHz		4874	45.62	-28.38	74	58.22	34.1	12.06	58.76	100	0	P	H
		7311	56.61	-17.39	74	63.9	35.6	14.58	57.47	200	55	P	H
		7311	48.56	-5.44	54	55.85	35.6	14.58	57.47	200	55	A	H
		4874	43.7	-30.3	74	56.3	34.1	12.06	58.76	100	0	P	V
		7311	55.31	-18.69	74	62.6	35.6	14.58	57.47	203	341	P	V
		7311	46.91	-7.09	54	54.2	35.6	14.58	57.47	203	341	A	V
802.11n HT20 CH 11 2462MHz		4924	45.82	-28.18	74	58.1	34.23	12.13	58.64	100	0	P	H
		7386	51.78	-22.22	74	59.08	35.6	14.64	57.54	200	54	P	H
		7386	44.29	-9.71	54	51.59	35.6	14.64	57.54	200	54	A	H
		4924	43.24	-30.76	74	55.52	34.23	12.13	58.64	100	0	P	V
		7386	53.09	-20.91	74	60.39	35.6	14.64	57.54	238	331	P	V
		7386	45.39	-8.61	54	52.69	35.6	14.64	57.54	238	331	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		4934	41.3	-32.7	74	53.54	34.23	12.15	58.62	100	0	P	H
HT20		7401	43.95	-30.05	74	51.29	35.57	14.64	57.55	100	0	P	H
CH 12		4934	40.72	-33.28	74	52.96	34.23	12.15	58.62	100	0	P	V
2467MHz		7401	42.86	-31.14	74	50.2	35.57	14.64	57.55	100	0	P	V
802.11n		4944	40.89	-33.11	74	53.02	34.3	12.16	58.59	100	0	P	H
HT20		7416	41.68	-32.32	74	49.02	35.57	14.66	57.57	100	0	P	H
CH 13		4944	41.03	-32.97	74	53.16	34.3	12.16	58.59	100	0	P	V
2472MHz		7416	40.83	-33.17	74	48.17	35.57	14.66	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**Emission above 18GHz****2.4GHz WIFI 802.11b (SHF)**

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11b SHF		19484	36.12	-37.88	74	47.12	37.97	5.14	54.11	150	0	P	H
		23670	37.12	-36.88	74	44.56	39.44	6.42	53.3	150	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



Emission below 1GHz

2.4GHz WIFI 802.11b (LF)

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
2.4GHz 802.11b LF		47.01	26.25	-13.75	40	39.44	15.63	1.17	29.99	-	-	P	H
		161.76	30.06	-13.44	43.5	41.28	16.44	2.29	29.95	-	-	P	H
		203.88	34.17	-9.33	43.5	46.53	15.07	2.5	29.93	100	0	P	H
		717.9	32.42	-13.58	46	30.67	26.67	4.71	29.63	-	-	P	H
		937	33.24	-12.76	46	26.98	29.51	5.53	28.78	-	-	P	H
		958.7	33.89	-12.11	46	26.5	30.44	5.6	28.65	-	-	P	H
		32.43	33.33	-6.67	40	39.21	23.16	0.97	30.01	100	0	P	V
		55.38	32.9	-7.1	40	49.35	12.27	1.27	29.99	-	-	P	V
		191.19	29.98	-13.52	43.5	42.73	14.74	2.44	29.93	-	-	P	V
		332.2	29.66	-16.34	46	36.54	19.76	3.25	29.89	-	-	P	V
		716.5	31.43	-14.57	46	29.72	26.63	4.71	29.63	-	-	P	V
		949.6	33.54	-12.46	46	26.46	30.2	5.58	28.7	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



< X plane >

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
0+1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 13 2472MHz	*	2472	102.82	-	-	87.93	32.07	8.1	35.28	200	125	P	H
	*	2472	99.87	-	-	84.98	32.07	8.1	35.28	200	125	A	H
		2487.4	55.4	-18.6	74	40.49	32.07	8.13	35.29	200	125	P	H
		2483.84	46.49	-7.51	54	31.59	32.07	8.12	35.29	200	125	A	H
	*	2472	99.03	-	-	84.14	32.07	8.1	35.28	305	0	P	V
	*	2472	96.08	-	-	81.19	32.07	8.1	35.28	305	0	A	V
		2487	54.85	-19.15	74	39.94	32.07	8.13	35.29	305	0	P	V
		2483.8	45.52	-8.48	54	30.62	32.07	8.12	35.29	305	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**2.4GHz 2400~2483.5MHz****WIFI 802.11b (Harmonic @ 3m)**

WIFI Ant. 0+1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 13 2472MHz		4944	42.8	-31.2	74	54.93	34.3	11.35	58.59	100	0	P	H
		7416	48.56	-25.44	74	55.9	35.57	13.79	57.57	100	0	P	H
		4944	40.6	-33.4	74	52.73	34.3	11.35	58.59	100	0	P	V
		7416	43.45	-30.55	74	50.79	35.57	13.79	57.57	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Note symbol

*	Fundamental Frequency which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is over limit line.
P/A	P eak or A verage
H/V	H orizontal or V ertical



A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =
Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)
= 55.45 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 55.45(dBμV/m) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Jesse Wang, Stan Hsieh and Ken Wu	Temperature :	21~23°C
		Relative Humidity :	55~57%

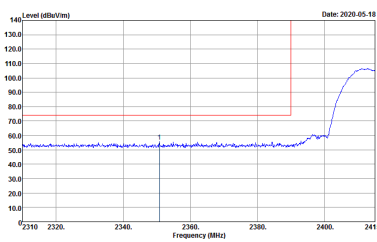
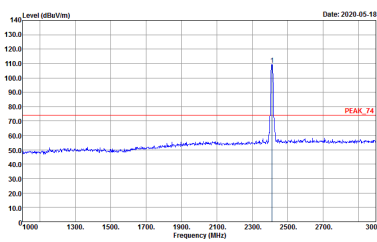
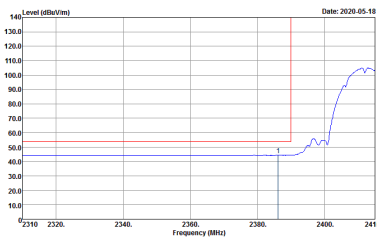
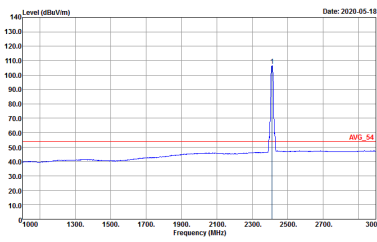
Note symbol

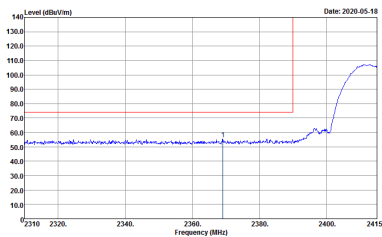
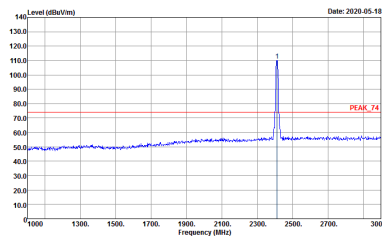
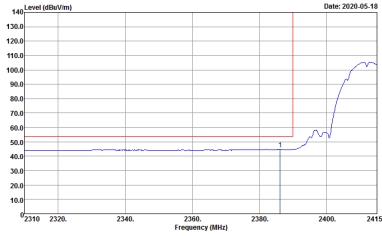
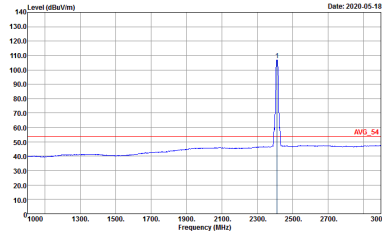
-L	Low channel location
-R	High channel location

< EUT with HDMI Extender Cable >

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

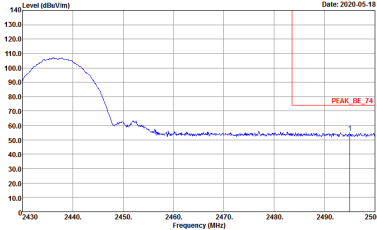
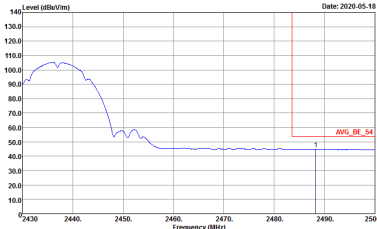
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01 Mode : 10	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01 Mode : 10
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01 Mode : 10	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01 Mode : 10

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site Condition : 03CH07-HY : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01 Mode : 10	 Site Condition : 03CH07-HY : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01 Mode : 10
	 Site Condition : 03CH07-HY : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01 Mode : 10	 Site Condition : 03CH07-HY : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01 Mode : 10

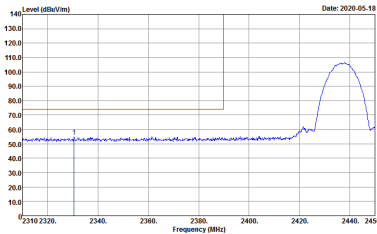
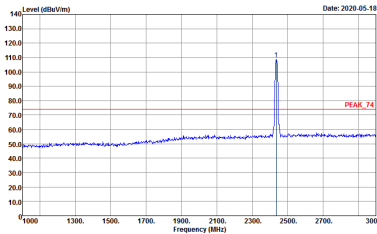
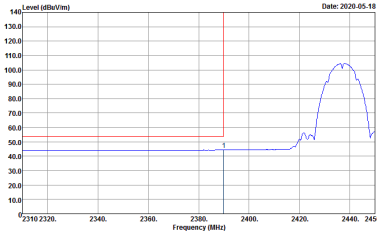
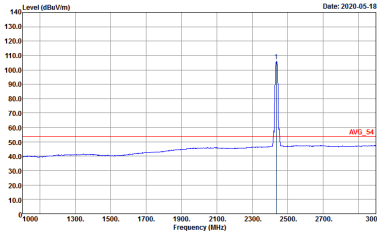


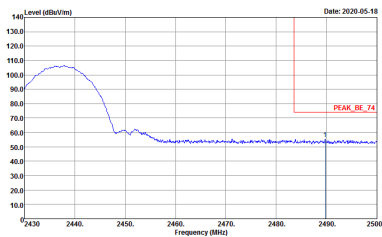
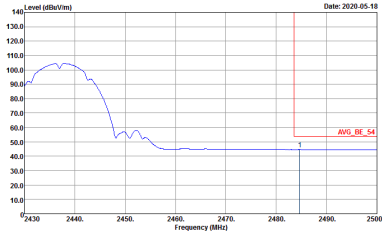
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 : 11	Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 : 11
Avg.	Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 : 11	Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 : 11



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 11	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 11	Left blank



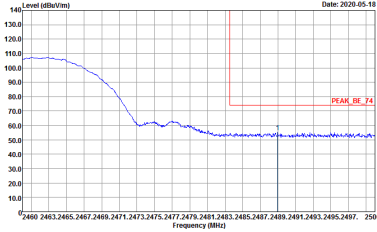
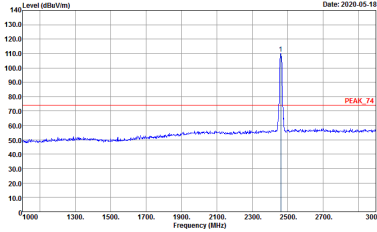
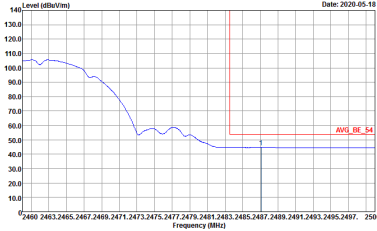
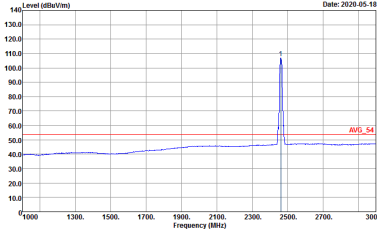
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Level (dBuV/m) Date: 2020-05-18 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 : 11	 Level (dBuV/m) Date: 2020-05-18 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 : 11
	 Level (dBuV/m) Date: 2020-05-18 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 : 11	 Level (dBuV/m) Date: 2020-05-18 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 : 11

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 11	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 11	Left blank

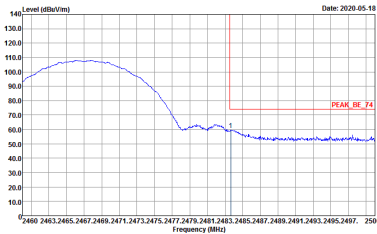
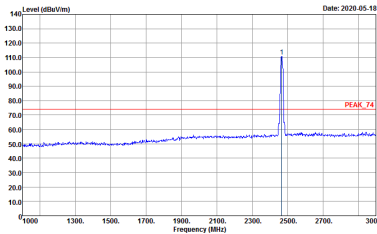
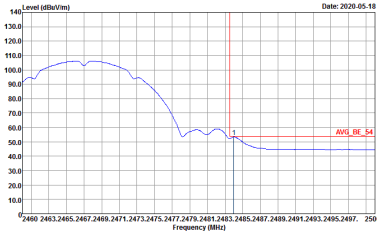
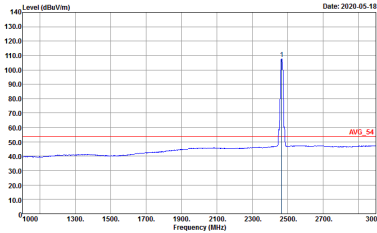


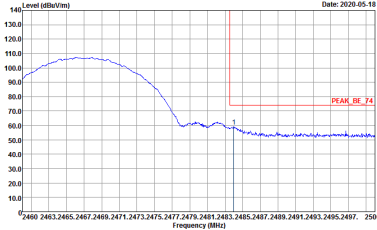
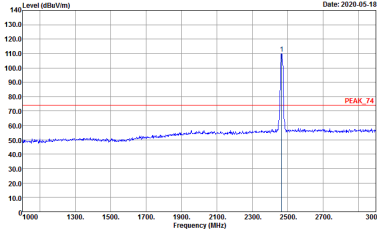
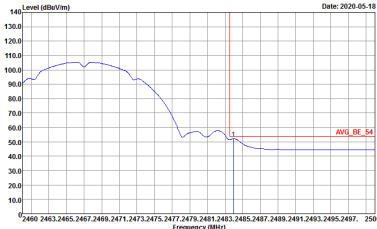
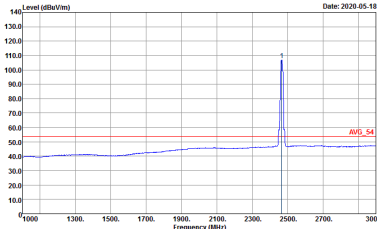
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Horizontal	Fundamental
Peak	Level (dBm/100kHz) vs Frequency (MHz) plot showing a peak at 2462 MHz. The y-axis ranges from 10.0 to 140.0 dBm/100kHz, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the peak level at approximately 74 dBm/100kHz. Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 12	Level (dBm/100kHz) vs Frequency (MHz) plot showing a sharp peak at 2462 MHz. The y-axis ranges from 10.0 to 140.0 dBm/100kHz, and the x-axis ranges from 2400 to 3000 MHz. A red line indicates the peak level at approximately 74 dBm/100kHz. Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 12
	Level (dBm/100kHz) vs Frequency (MHz) plot showing the average spectrum. The y-axis ranges from 10.0 to 140.0 dBm/100kHz, and the x-axis ranges from 2460 to 2500 MHz. A red line indicates the average level at approximately 54 dBm/100kHz. Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 12	Level (dBm/100kHz) vs Frequency (MHz) plot showing the average spectrum. The y-axis ranges from 10.0 to 140.0 dBm/100kHz, and the x-axis ranges from 2400 to 3000 MHz. A red line indicates the average level at approximately 54 dBm/100kHz. Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 12



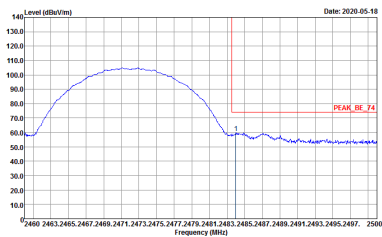
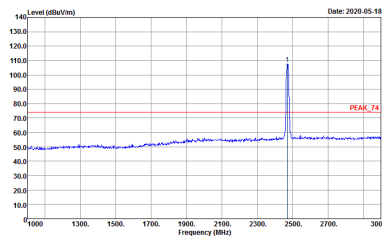
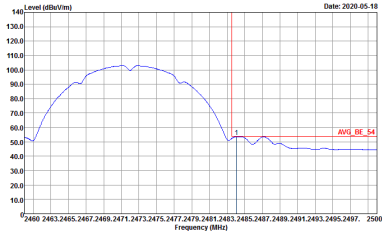
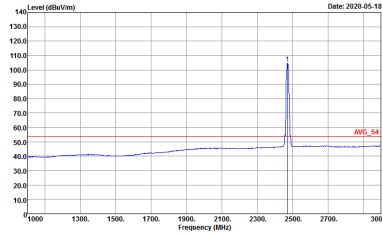
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18

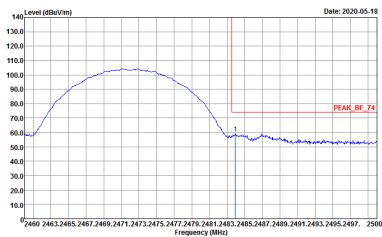
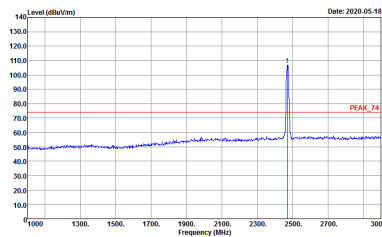
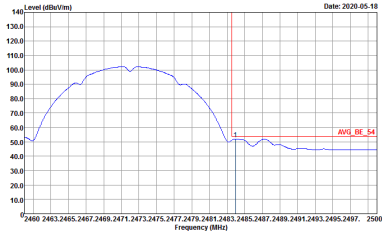
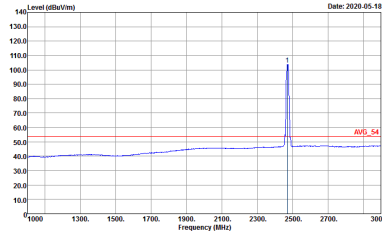


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 13	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 13
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 13	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 13

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 13	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 13
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 13	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 13



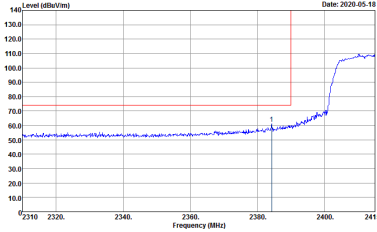
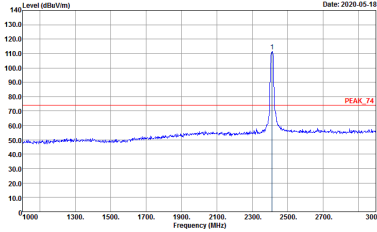
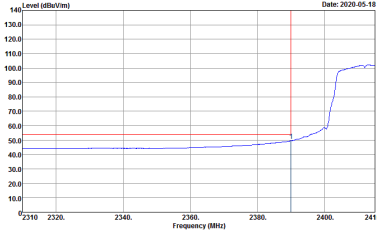
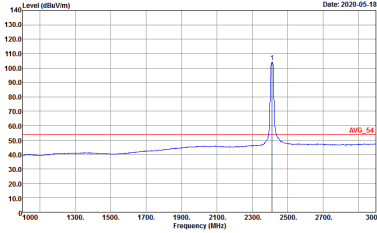
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 14	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 14
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 14	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 14

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH13 2472MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : 14	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : 14
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : 14	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : 14

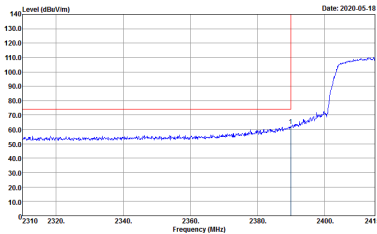
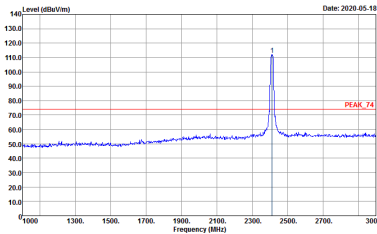
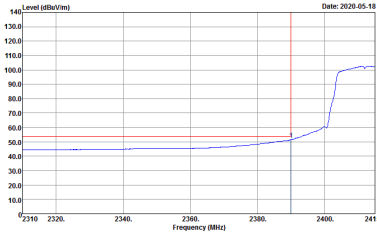
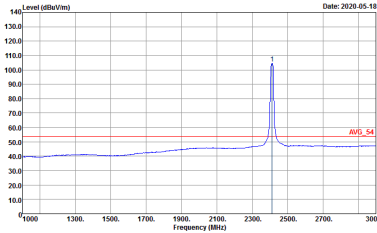


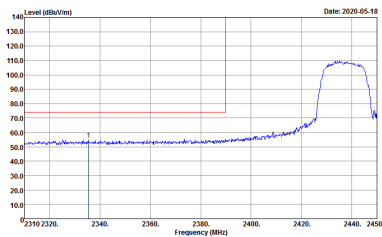
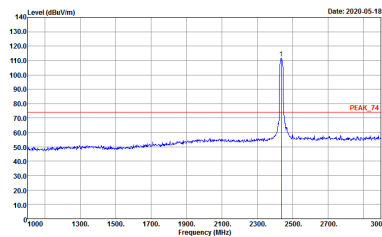
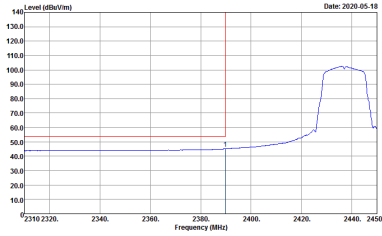
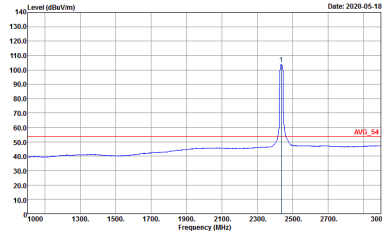
2.4GHz 2400~2483.5MHz

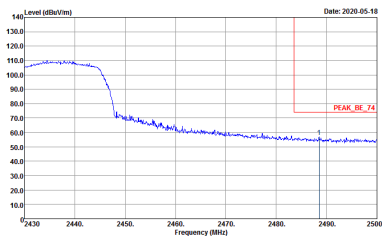
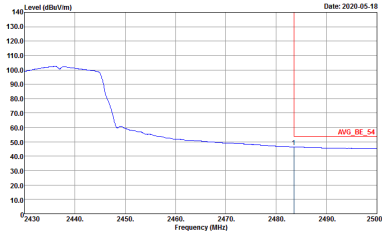
WIFI 802.11g (Band Edge @ 3m)

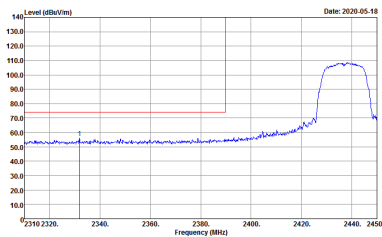
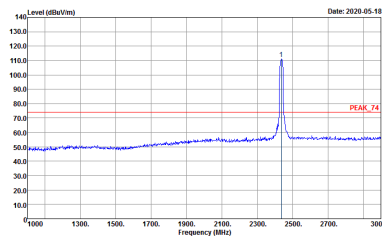
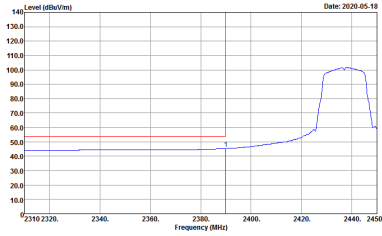
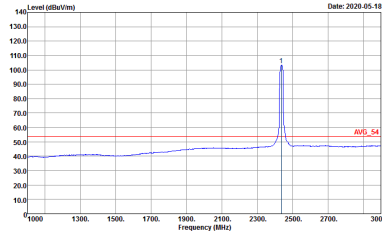
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : Peak Date: 2020-05-18	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : Peak Date: 2020-05-18
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Project : 020402-01 Mode : Avg. Date: 2020-05-18	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:0.010kHz SWT:Auto Project : 020402-01 Mode : Avg. Date: 2020-05-18



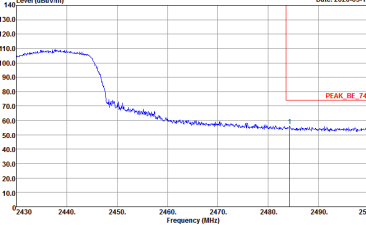
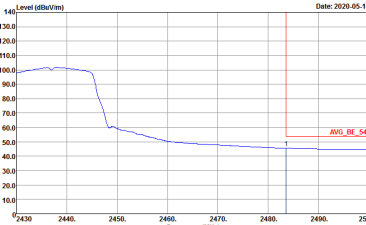
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18

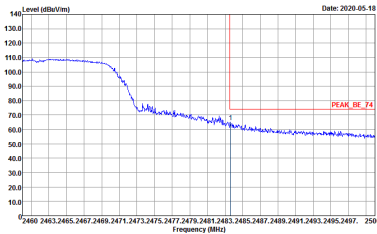
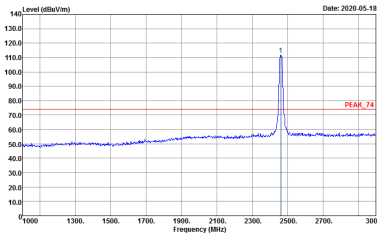
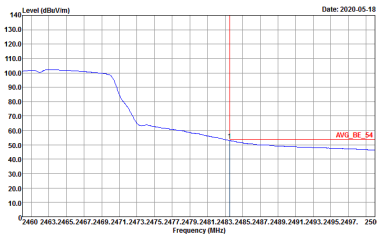
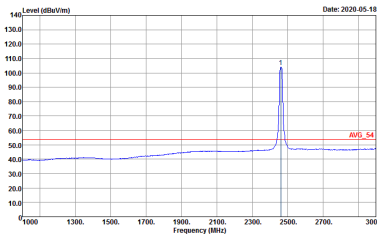
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 16	Left blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 16	Left blank

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - L	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 16	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 16
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 16	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 16

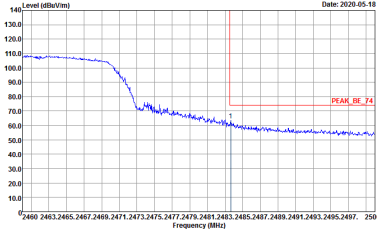
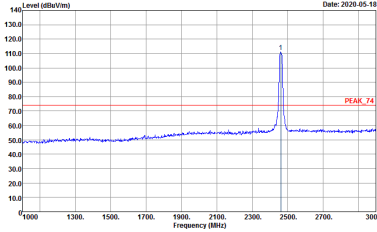
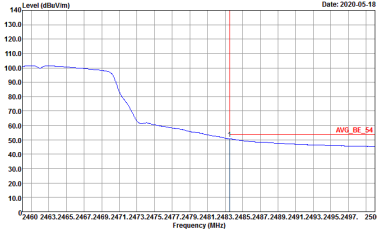
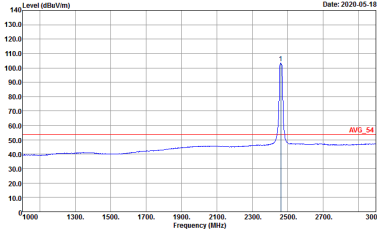


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH06 2437MHz - R	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 16	Left Blank
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 16	Left Blank

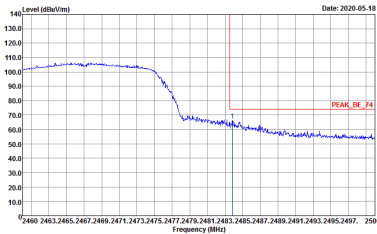
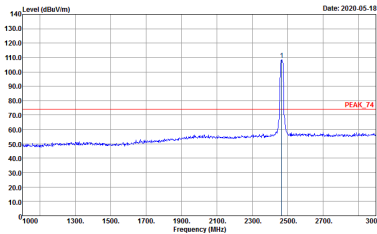
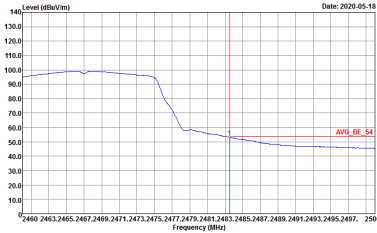
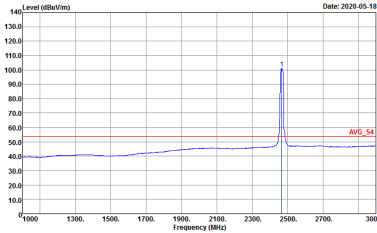


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : 17	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : 17
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : 17	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : 17

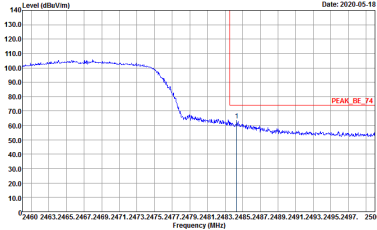
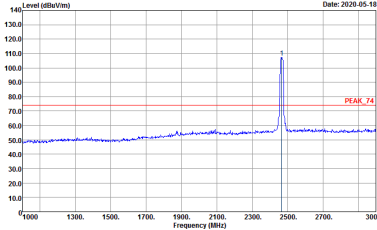
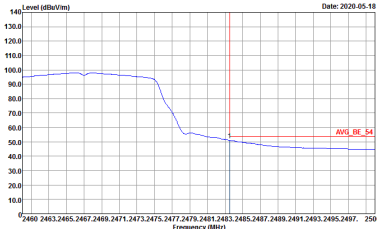
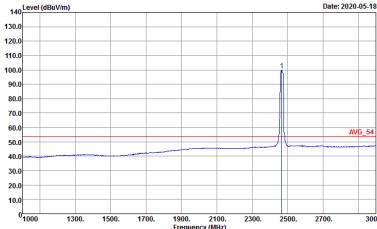


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 17	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 17
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 17	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : 020402-01 Mode : 17

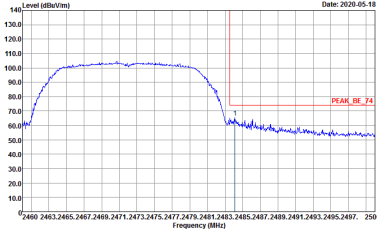
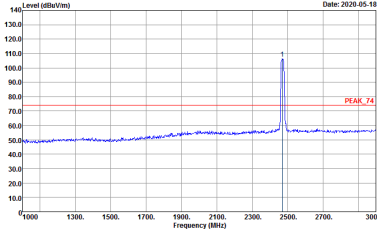
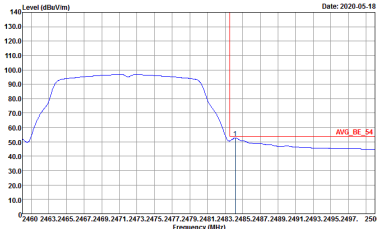
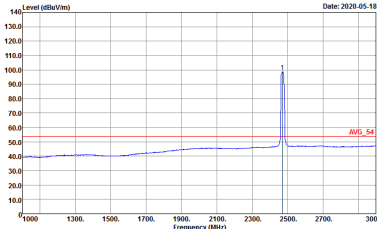


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH12 2467MHz	
1	Vertical	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 : 18	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 : 18
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 : 18	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 : 18

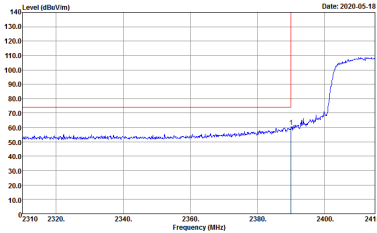
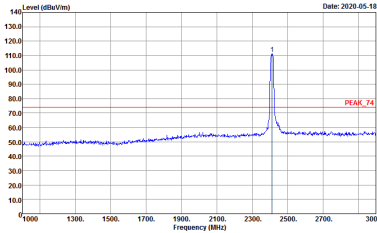
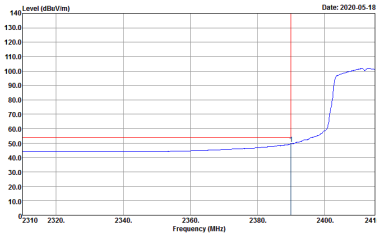
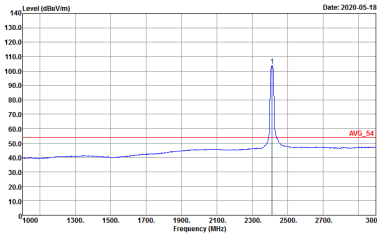


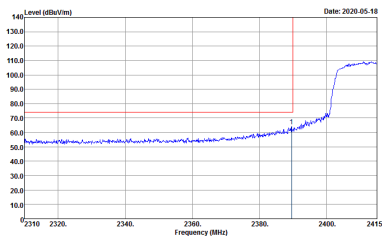
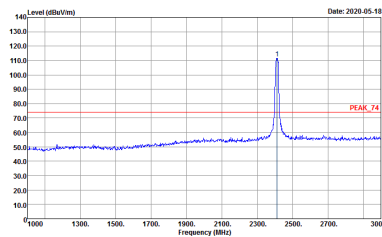
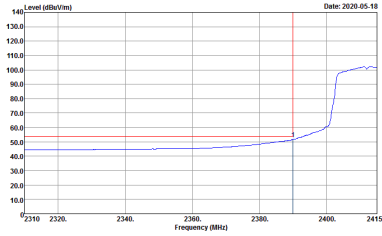
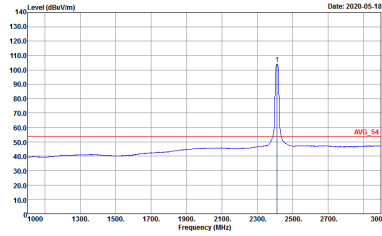
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18
Avg.	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18

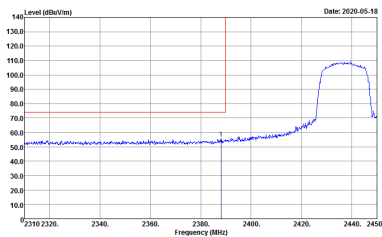
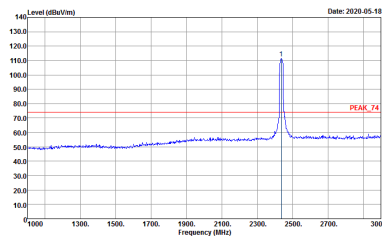
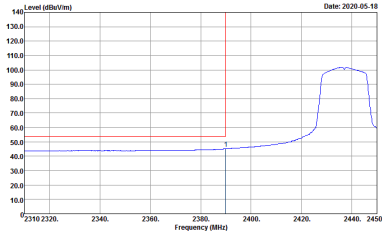
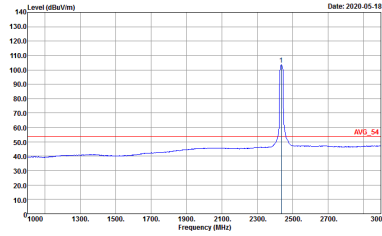


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH13 2472MHz	
1	Vertical	Fundamental
Peak	Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18
	Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18	Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 VERTICAL Detector : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto Project : Peak Mode : 020402-01 Date: 2020-05-18

2.4GHz 2400~2483.5MHz
WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01 Mode : 20	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01 Mode : 20
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01 Mode : 20	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : Peak Project : 020402-01 Mode : 20

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH01 2412MHz	
1	Vertical	Fundamental
Peak	 Site Condition : 03CH07-HY : PEAK_BE_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01 Mode : 20	 Site Condition : 03CH07-HY : PEAK_74 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01 Mode : 20
	 Site Condition : 03CH07-HY : AVG_BE_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01 Mode : 20	 Site Condition : 03CH07-HY : AVG_54 3m HF_ANT_00075962 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Detector : Peak Project : 020402-01 Mode : 20

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11n HT20 CH06 2437MHz - L	
1	Horizontal	Fundamental
Peak	 Site : 03CH07-HY Condition : PEAK_BE_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : Z1	 Site : 03CH07-HY Condition : PEAK_74 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : Z1
	 Site : 03CH07-HY Condition : AVG_BE_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : Z1	 Site : 03CH07-HY Condition : AVG_54 3m HF_ANT_00075962 HORIZONTAL Detector : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto Project : 020402-01 Mode : Z1