

Prüfbericht-Nr.: Test report no.:	CN224AD0 002	Auftrags-Nr.: Order no.:	168367617	Seite 1 von 19 Page 1 of 19
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2022-04-20	
Auftraggeber: Client:	Vestel Elektronik Sanayi ve Ticaret A.S. Organize Sanayi Bolgesi, 45030 Manisa TURKEY			
Prüfgegenstand: Test item:	17WFM26 WI-FI + BT combo module			
Bezeichnung / Typ-Nr.: Identification / Type no.:	V1.0			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 2 February 2017			
Wareneingangsdatum: Date of sample receipt:	2022-04-20	Please refer to Photo Document		
Prüfmuster-Nr.: Test sample no:	A003240432-001~008 A003234567-001			
Prüfzeitraum: Testing period:	2022-04-20 - 2022-05-23			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	genehmigt von: authorized by:			
Datum: Date: 2022-07-04	Ausstellungsdatum: Issue date: 2022-07-04			
Stellung / Position: Project Manager	Stellung / Position: Reviewer			
Sonstiges / Other:	FCC ID: 2AVQS-17WFM26, IC: 25888-17WFM26, HVIN: V1.0, PMN: 17WFM26 WI-FI + BT combo module This report is for 2.4GHz Wi-Fi.			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende: 1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n) * Legend: 1 = very good P(ass) = passed a.m. test specification(s)	2 = gut 2 = good	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n) 3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = ausreichend N/A = nicht anwendbar 4 = sufficient N/A = not applicable	5 = mangelhaft N/T = nicht getestet 5 = poor N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.				

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Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Pass

5.1.4 6dB BANDWIDTH

RESULT: Pass

5.1.5 99% BANDWIDTH

RESULT: Pass

5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH

RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.8 AC CONDUCTED EMISSION

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

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

Appendix A: Photographs of Test Set-up

Appendix B: Test Results of Wi-Fi 802.11 b/g/n

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China

FCC Registration No.: 694916

ISED wireless device testing laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (TS8997)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
Signal Analyzer	R&S	FSV 40	101441	09.08.2022
OSP	R&S	OSP 150	101017	02.12.2022
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	R&S	WMS32 (V11.00.00)	N/A	N/A
Power Meter	R&S	NRP2	107105	02.12.2022
Wideband Power Sensor	R&S	NRP-Z81	105677	09.08.2022
Shielding Room 8#	Albatross	SR8	APC17151-SR8	22.06.2024
Unwanted Emission Testing (TS9975)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	10.08.2022
Signal Analyzer	R&S	FSV 40	101439	09.08.2022
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	09.08.2022
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	09.08.2022
Amplifier	R&S	SCU-18F	180070	09.08.2022
Amplifier	R&S	SCU40A	100475	09.08.2022
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	08.08.2022
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	08.08.2022
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	08.08.2022
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	13.09.2022
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	22.06.2024

2.3 Traceability

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

2.4 Calibration

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

2.5 Measurement Uncertainty

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

Parameter	Uncertainty
Radio Frequency	$\pm 1 \times 10^{-7}$
RF Power (conducted)	± 2.5 dB
Radiated Emission of Transmitter, valid up to 26.5 GHz	± 6 dB
Radiated Emission of Receiver, valid up to 26.5 GHz	± 6 dB
Temperature	± 1 °C
Humidity	± 5 %
Voltage (DC)	± 1 %
Voltage (AC, <10kHz)	± 2 %

2.6 Location of Original Data

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

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The Product is WI-FI + BT combo module, which supports Bluetooth, 2.4GHz Wi-Fi 802.11 b/g/n and 5GHz Wi-Fi 802.11a/b/g/n/ac wireless technology.

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

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	17WFM26 WI-FI + BT combo module
Type Designation:	V1.0
FCC ID:	2AVQS-17WFM26
IC:	25888-17WFM26
Operating Voltage:	DC 5V
Antenna Type:	Integral Antennas
Antenna Gain:	Wi-Fi Antenna 1#: Max gain 3.4dBi for 2.4GHz Wi-Fi Max gain 3.69dBi for 5GHz Wi-Fi Wi-Fi Antenna 2#: Max gain 2.14dBi for 2.4GHz Wi-Fi Max gain 3.68dBi for 5GHz Wi-Fi BT Antenna 3#: Max gain 0.29dBi for Bluetooth As for MIMO mode for Antenna 0# and Antenna 1#, Cyclic Delay Diversity mode Employed.
Technical Specification of Bluetooth (Dual Mode)	
Operating Frequency:	2402 MHz to 2480 MHz
Type of Modulation:	GFSK, $\pi/4$ -DQPSK, 8DPSK
Channel Number:	79 channels, BDR & EDR 40 channels, BLE
Channel Separation:	1MHz (for EDR & BDR), 2MHz (for BLE)
Technical Specification of Wi-Fi 802.11 b/g/n	
Operating Frequency:	2412 - 2462 MHz for 802.11b/g/n(HT20) 2422 - 2452 MHz for 802.11n(HT40)
Type of Modulation:	DSSS(DBPSK/DQPSK/CCK) OFDM(BPSK/QPSK/16QAM/64QAM)
Data Rate:	1/2/5.5/11 Mbps for 802.11b 6/9/12/18/24/36/48/54 Mbps for 802.11g MCS0 ~ MCS7 for 802.11n
Channel Number:	11 channels for 802.11b/g/n(HT20) 7 channels for 802.11n(HT40)

Channel Separation:	5 MHz
MIMO and SISO mode:	SISO for 802.11b/g, MIMO and SISO for 802.11n.
Technical Specification of Wi-Fi 802.11 a/n/ac	
Operating Frequency:	5180-5320MHz, 5500-5720MHz
Type of Modulation:	OFDM(BPSK/QPSK/16QAM/64QAM/256QAM)
Channels:	5180-5320MHz, 802.11 a/n20/n40/ac20/ac40/ac80 5500-5720MHz, 802.11 a/n20/n40/ac20/ac40/ac80
Channel Separation	5 MHz
MIMO and SISO mode:	SISO for 802.11a, MIMO and SISO for 802.11n/ac, no beamforming.
DFS:	Slave without DFS Detection

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wi-Fi 802.11 b/g/n wireless transmitting mode
 - 1) Low Channel
 - 2) Middle Channel
 - 3) High Channel
- B. On, Wi-Fi 802.11 b/g/n connecting mode
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- User Manual
- Block Diagram
- Operation Description

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

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

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

4.2 Test Operation and Test Software

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

According to clause 3.1, all tests were performed on model 17WFM26 in this report.

Table 3: Test environments

Environment Parameter	Selected Values During Tests		
	Temperature	Voltage	Relative Humidity
NTNV	24.6°C	DC 5.0V	Ambient

Table 4: Test channel and frequency

Mode	Test Channels
802.11b/g/n(HT20)	L: CH01, 2412MHz; M: CH06, 2437MHz; H: CH11, 2462MHz
802.11b/g/n(HT40)	L: CH03, 2422MHz; M: CH06, 2437MHz; H: CH09, 2452MHz

4.3 Special Accessories and Auxiliary Equipment

Table 5: Auxiliary Equipment Used during Test

Description	Manufacturer	Model	S/N	Rating
Laptop	Lenovo	T480	PF-16A6N8	N/A
Test jig	Vestel Elektronik Sanayi ve Ticaret A.S.	17WFM26	N/A	DC 5V

4.4 Countermeasures to Achieve EMC Compliance

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

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

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

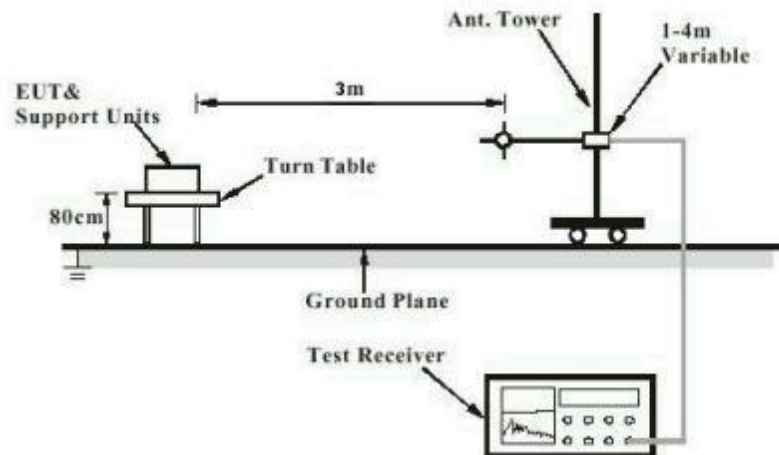


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

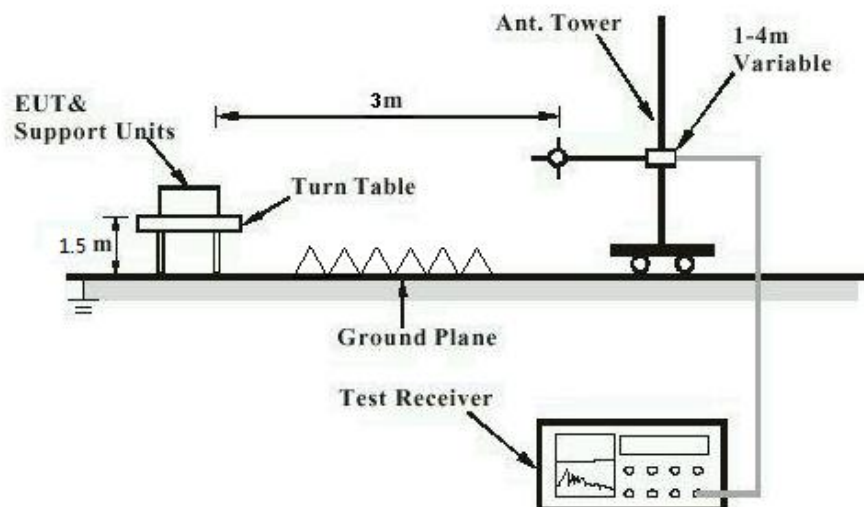
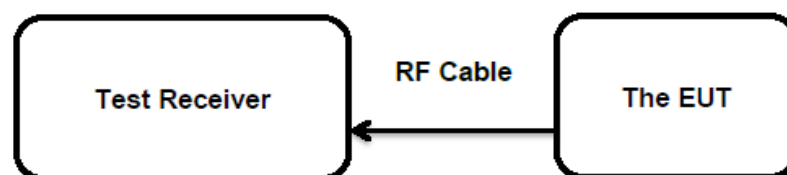


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(b)(4) and Part 15.203
RSS-Gen Clause 6.8

According to the manufacturer declared, the EUT has integral antennas with a unique connector, which is designed with permanent attachment and no consideration of replacement. The maximum antenna gain is 3.4 dBi.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Conducted Output Power

RESULT:
Pass
Test Specification

Test standard : FCC Part 15.247(b)(3)
 : RSS-247 Clause 5.4(d)
 Basic standard : ANSI C63.10: 2013
 Limits : 1.0 Watts
 Kind of test site : Shielded Room

Test Setup

Date of testing : 2022-04-25
 Input voltage : DC 5.0V
 Operation mode : A
 Test channel : Low / Middle / High
 Ambient temperature : 24.6 °C
 Relative humidity : 55 %
 Atmospheric pressure : 101 kPa

Table 6: Test Result of Maximum Peak Output Power, Wi-Fi 802.11 b/g/n

Test Mode	Data Rate	Test Channel (MHz)	Maximum Peak output power				Limit (W)
			SISO Ant 1# (dBm)	SISO Ant 2# (dBm)	MIMO Sum (Ant1#+ Ant 2#)		
					(dBm)	(W)	
802.11b	1 Mbps	2412	14.38	14.24	/	/	< 1.0
		2437	16.22	15.60	/	/	
		2462	15.87	15.18	/	/	
802.11g	6 Mbps	2412	22.09	22.97	/	/	
		2437	22.72	22.27	/	/	
		2462	22.53	22.40	/	/	
802.11n (HT20)	MCS0	2412	21.55	20.99	24.29	0.2685	
		2437	20.36	20.34	23.36	0.2168	
		2462	20.85	20.84	23.86	0.2432	
802.11n (HT40)	MCS0	2422	19.77	17.64	21.84	0.1528	
		2437	21.62	21.31	24.48	0.2805	
		2452	19.69	19.65	22.68	0.1854	
Maximum Measured Value			0.2805 W				

Note:

- 1) The cable loss is taken into account in results.
- 2) e.i.r.p.=P_(Peak power)+ G, which is far below the 4 W

5.1.3 Conducted Power Spectral Density

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(e) RSS-247 Clause 5.2(b)
Basic standard	: ANSI C63.10: 2013
Limits	: < 8 dBm / 3kHz
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2022-04-28
Input voltage	: DC 5.0V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.6 °C
Relative humidity	: 55 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B.

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5.1.4 6dB Bandwidth

RESULT:

Pass

Test Specification

Test standard	:	FCC Part 15.247(a)(2)
	:	RSS-247 Clause 5.2(a)
Basic standard	:	ANSI C63.10: 2013
Limits	:	> 500 KHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-04-28
Input voltage	:	DC 5.0V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.6 °C
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B.

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5.1.5 99% Bandwidth

RESULT:

Pass

Test Specification

Test standard	:	FCC Part 15.247(a)
	:	RSS-Gen Clause 6.7
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-04-28
Input voltage	:	DC 5.0V
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.6 °C
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B.

5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

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

Test standard	: FCC Part 15.247(d) RSS-247 Clause 5.1(b)
Basic standard	: ANSI C63.10: 2013
Limits	: If the tested output power based on peak test: At least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. If the tested output power based on RMS averaging over a time interval: At least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2022-04-28
Input voltage	: DC 5.0V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.6 °C
Relative humidity	: 55 %
Atmospheric pressure	: 101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix B.

5.1.7 Radiated Spurious Emission

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

Test standard	: FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Table 5
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2022-04-25
Input voltage	: DC 5.0V
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

Remark:

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

As for Co-location with Bluetooth, it verified that there was no additional emission found and no need to report it.

For the measurement records, refer to the appendix B.

5.1.8 AC Conducted Emission

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

Test standard	: FCC Part 15.207(a) RSS-GEN clause 8.8
Basic standard	: ANSI C63.10: 2013
Frequency range	: 0.15 – 30MHz
Limits	: FCC Part 15.207(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2022-04-30
Input voltage	: 120V AC/60Hz Via PC
Operation mode	: B
Earthing	: Not connected
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B .
All modes tested, only the worst-case reported.

6 Photographs of the Test Set-Up

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

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Appendix B: Test Results of Wi-Fi 802.11 b/g/n

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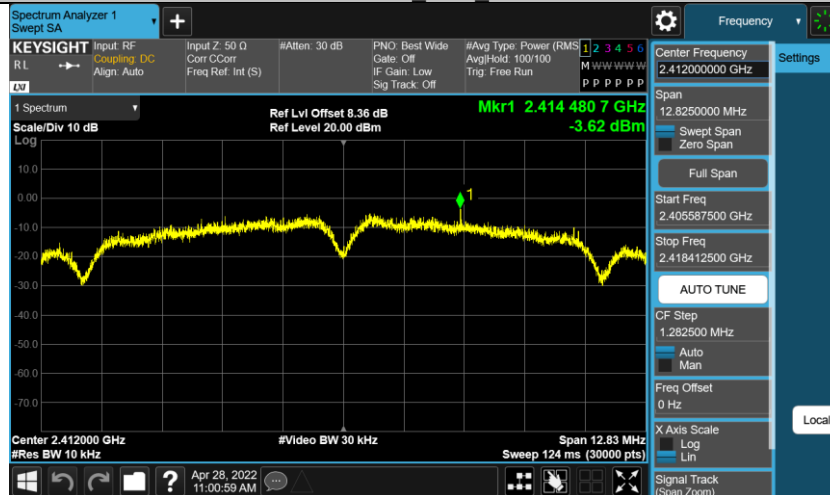
Appendix B.1: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11B-CDD	Ant1	2412	-3.62	≤8.00	PASS
	Ant2	2412	-4.53	≤8.00	PASS
	Ant1	2437	-3.08	≤8.00	PASS
	Ant2	2437	-2.95	≤8.00	PASS
	Ant1	2462	-2.90	≤8.00	PASS
	Ant2	2462	-4.57	≤8.00	PASS
11G-CDD	Ant1	2412	-3.17	≤8.00	PASS
	Ant2	2412	-1.61	≤8.00	PASS
	Ant1	2437	-3.03	≤8.00	PASS
	Ant2	2437	-2.88	≤8.00	PASS
	Ant1	2462	-2.89	≤8.00	PASS
	Ant2	2462	-2.5	≤8.00	PASS
11N20	Ant1	2412	-3.08	≤8.00	PASS
	Ant2	2412	-4.15	≤8.00	PASS
	total	2412	-0.57	≤7.60	PASS
	Ant1	2437	-4.03	≤8.00	PASS
	Ant2	2437	-4.74	≤8.00	PASS
	total	2437	-1.36	≤7.60	PASS
	Ant1	2462	-4.41	≤8.00	PASS
	Ant2	2462	-4.83	≤8.00	PASS
	total	2462	-1.60	≤7.60	PASS
11N40	Ant1	2422	-8.4	≤8.00	PASS
	Ant2	2422	-9.2	≤8.00	PASS
	total	2422	-5.05	≤7.60	PASS
	Ant1	2437	-5.77	≤8.00	PASS
	Ant2	2437	-6.56	≤8.00	PASS
	total	2437	-2.73	≤7.60	PASS
	Ant1	2452	-8.38	≤8.00	PASS
	Ant2	2452	-8.67	≤8.00	PASS
	total	2452	-5.51	≤7.60	PASS

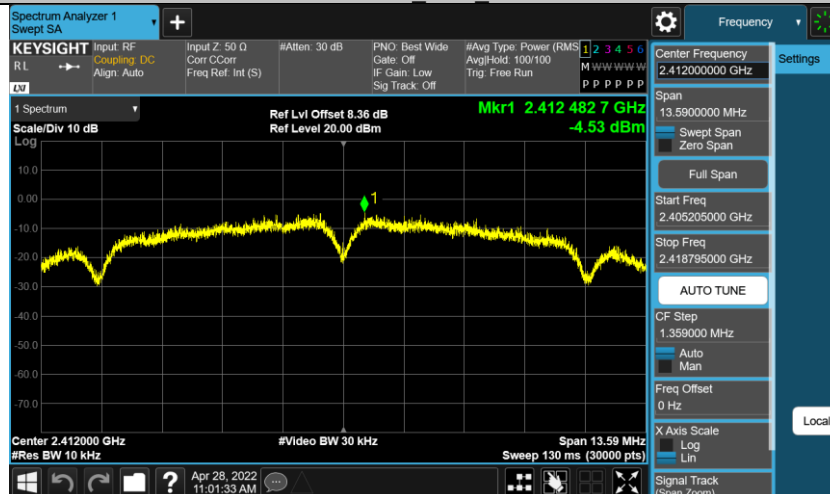
As per KDB662911D01 section F) f) (ii), the direction gain for power spectral density (PSD) MIMO mode is 6.4dBi*, thus PSD limit should be 7.6dBm based on it.

* The directional gain is calculated by using the formulas applicable to equal gain antennas with GANT set equal to the gain of the antenna having the highest gain*.

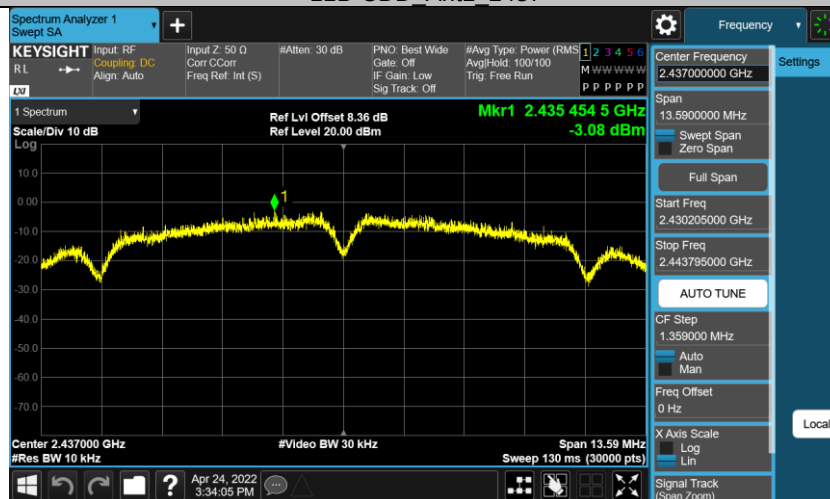
11B-CDD Ant1 2412



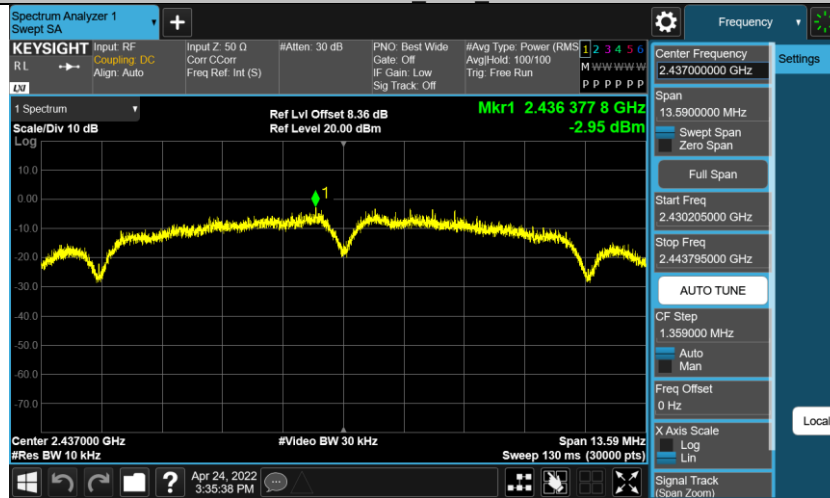
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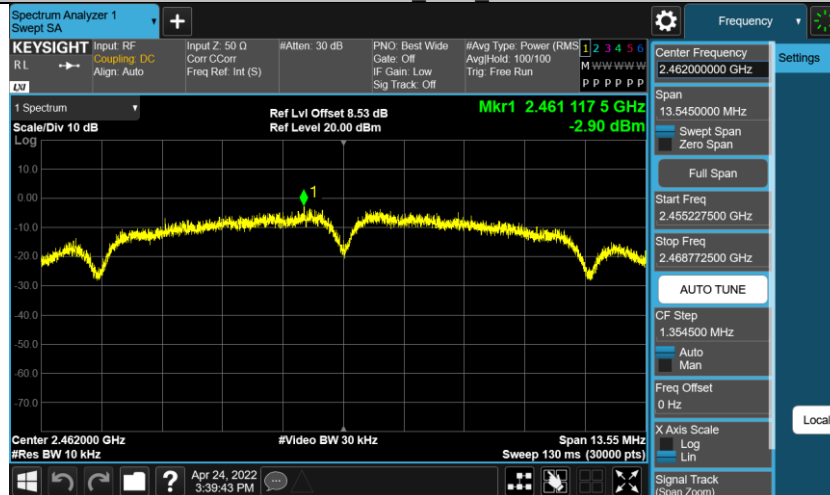
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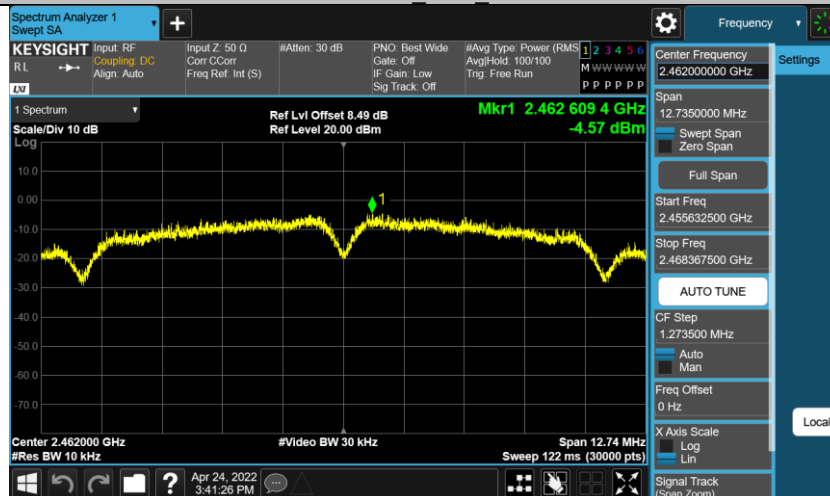
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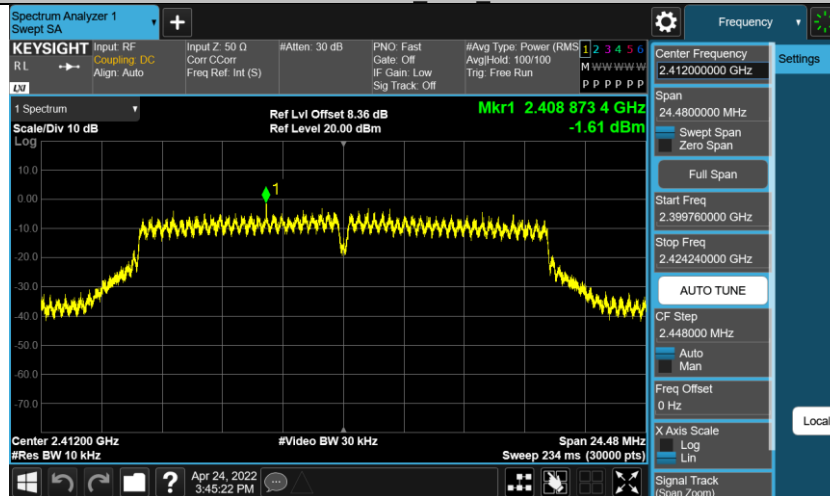
11B-CDD Ant1 2462



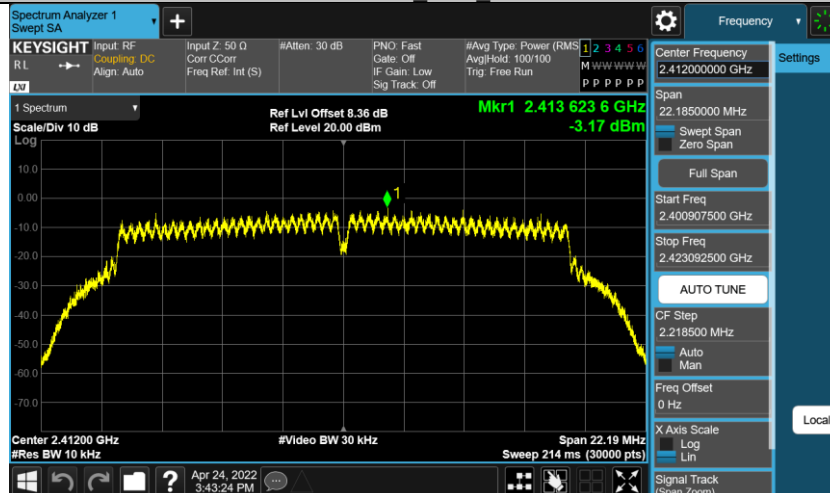
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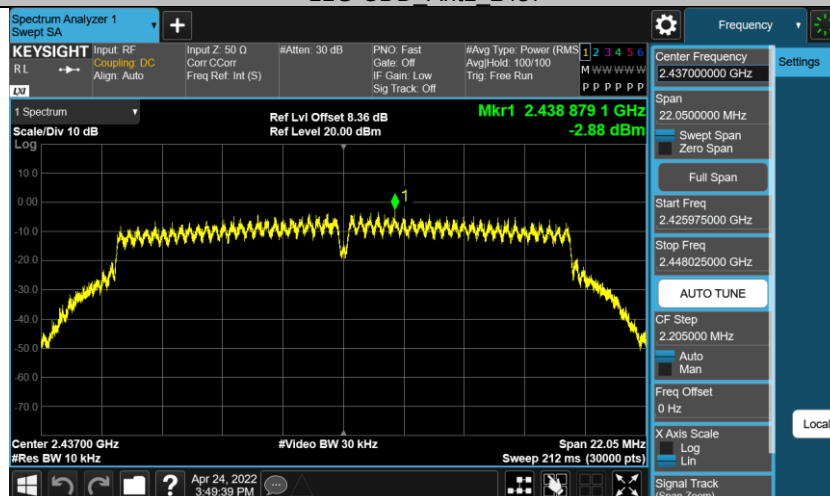
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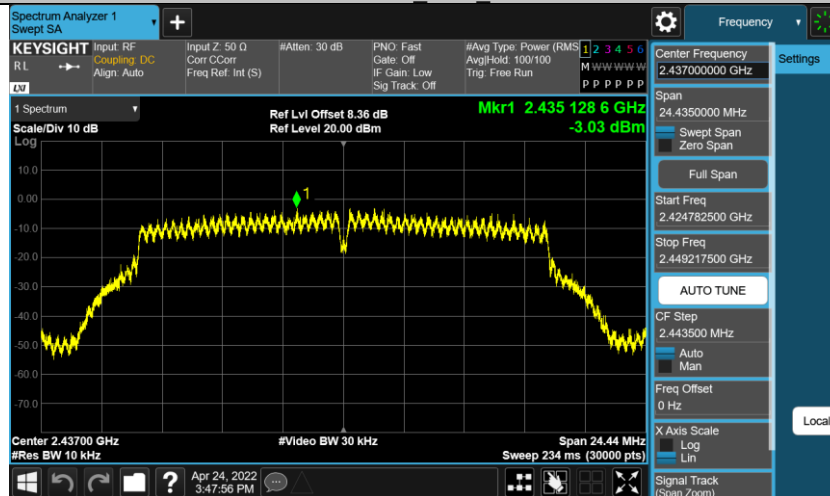
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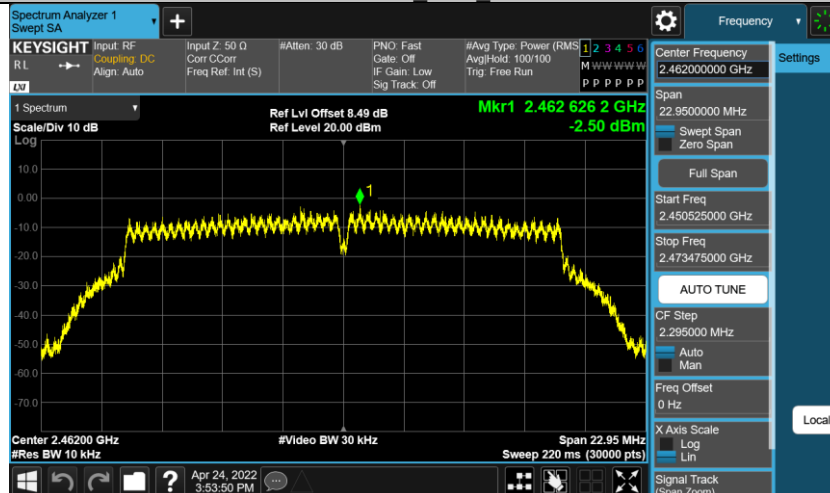
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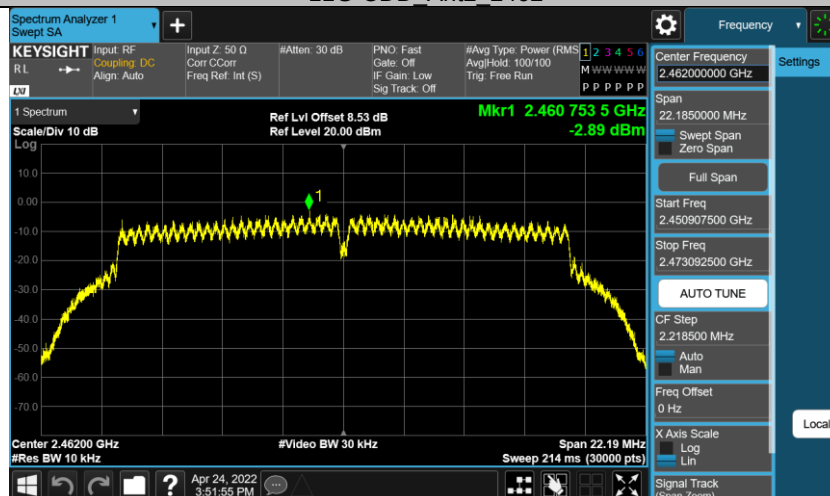
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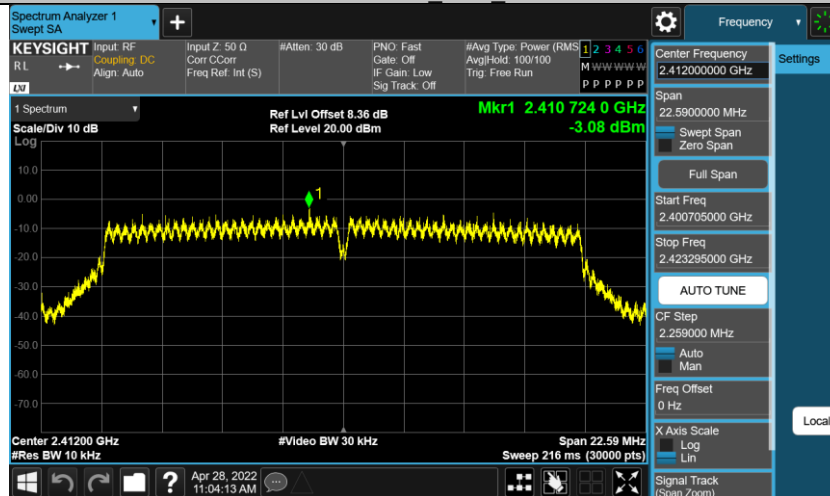
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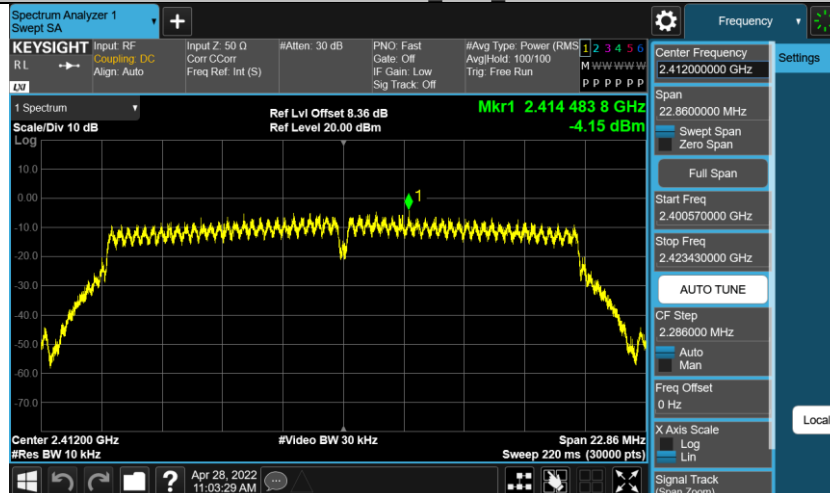
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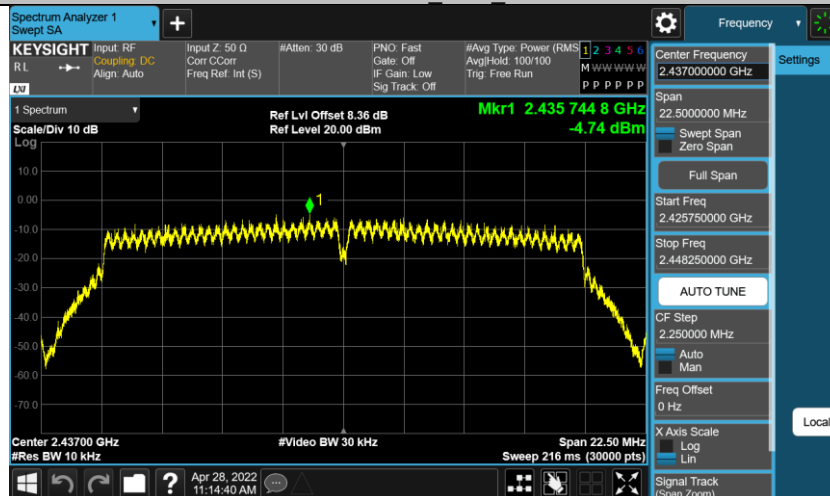
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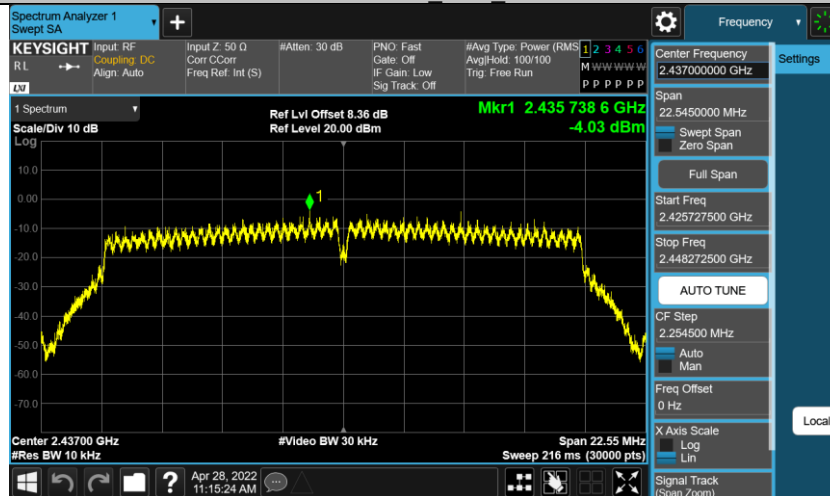
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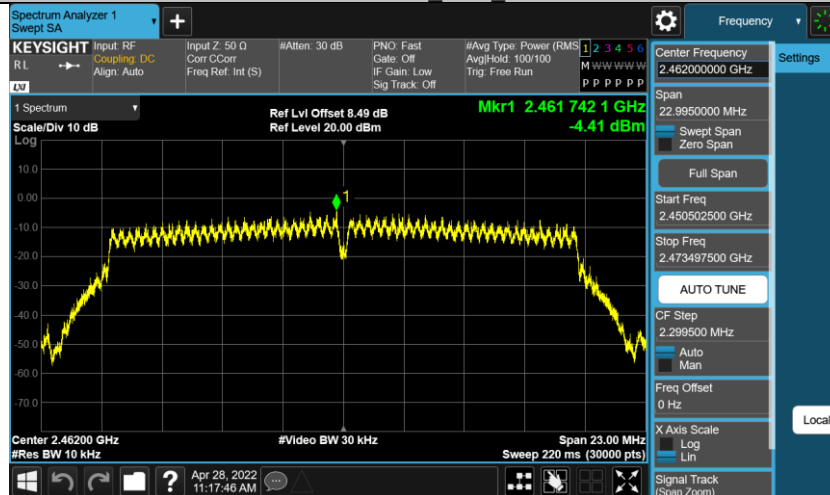
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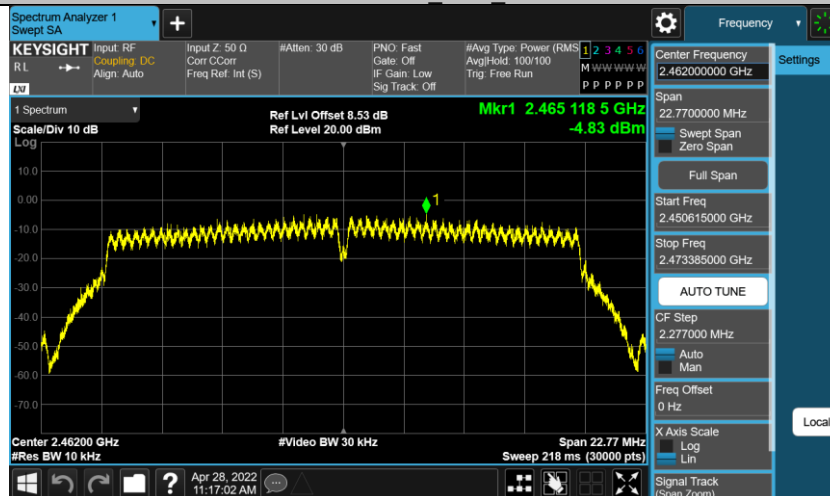
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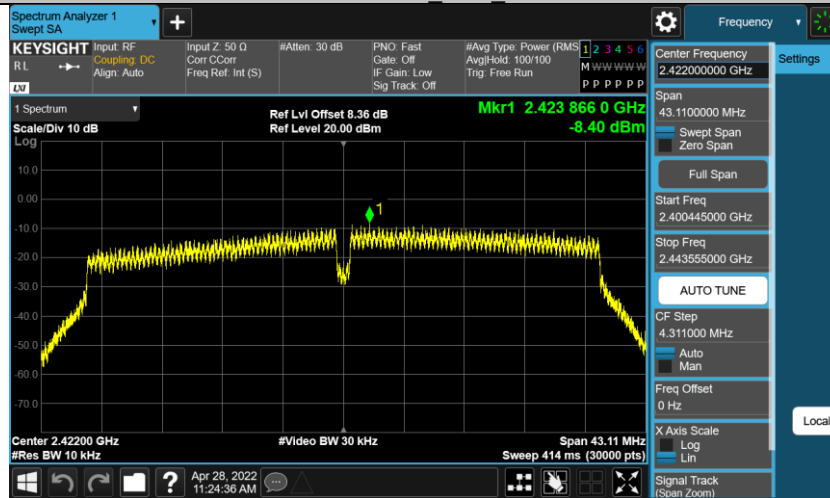
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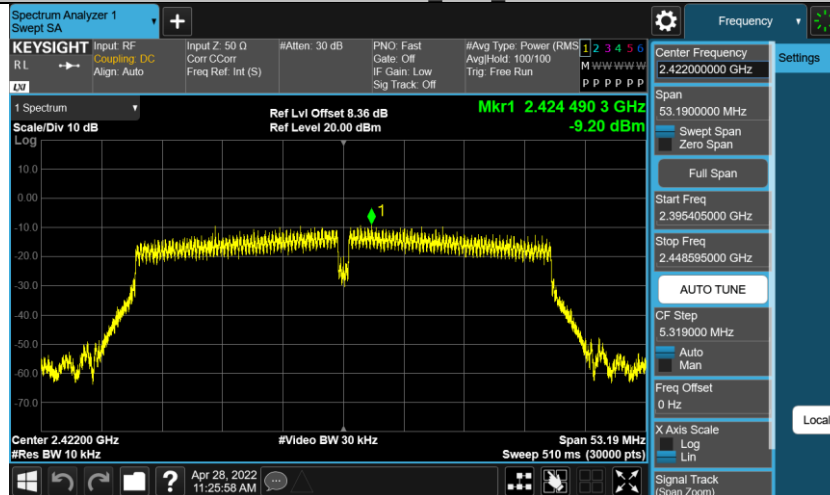
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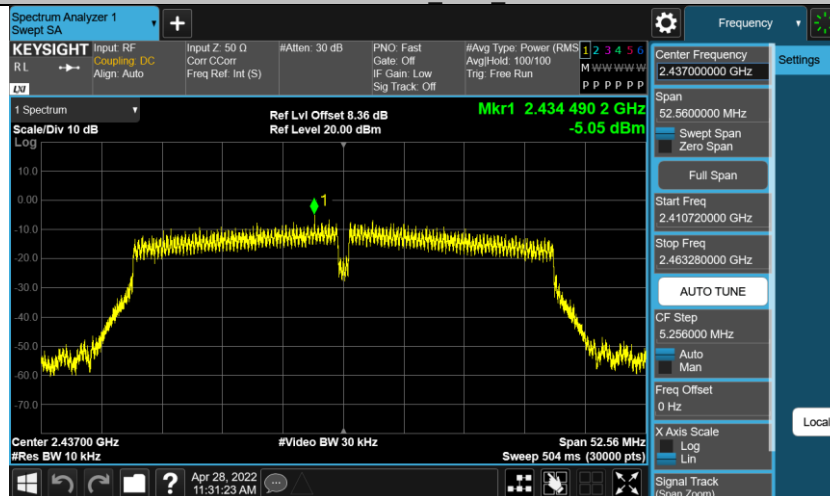
11N40MIMO Ant1 2422



11N40MIMO Ant2 2422



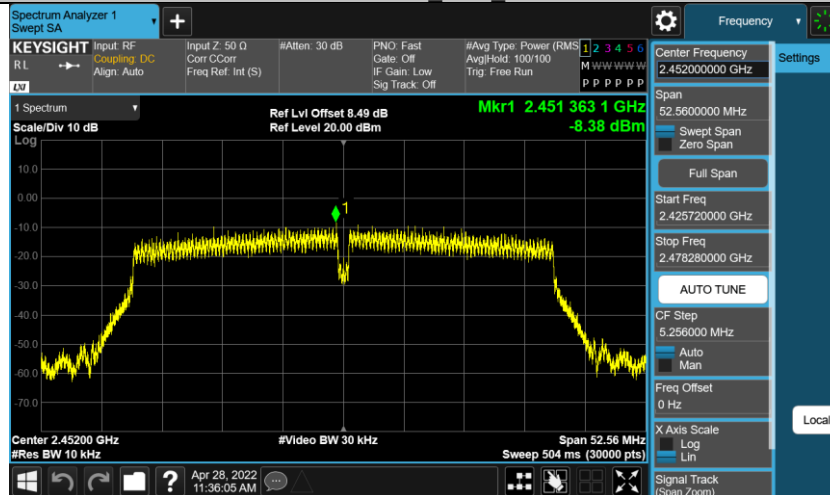
11N40MIMO Ant1 2437



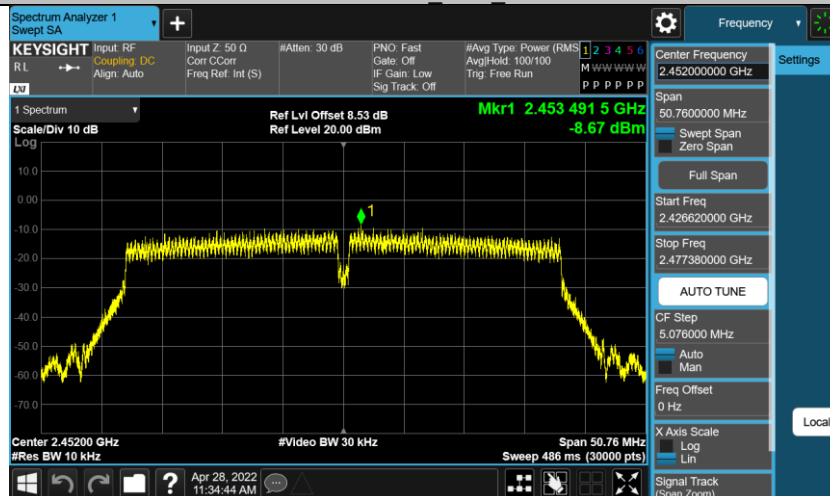
11N40MIMO Ant2 2437



11N40MIMO Ant1 2452



11N40MIMO Ant2 2452



Appendix B.2: Test Results of 6dB Bandwidth

DTS Bandwidth Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.550	2407.980	2416.530	0.5	PASS
	Ant2	2412	9.060	2407.470	2416.530	0.5	PASS
	Ant1	2437	9.060	2432.470	2441.530	0.5	PASS
	Ant2	2437	9.060	2432.470	2441.530	0.5	PASS
	Ant1	2462	9.030	2457.500	2466.530	0.5	PASS
	Ant2	2462	8.490	2458.040	2466.530	0.5	PASS
11G	Ant1	2412	15.630	2404.500	2420.130	0.5	PASS
	Ant2	2412	15.690	2403.840	2419.530	0.5	PASS
	Ant1	2437	15.000	2429.500	2444.500	0.5	PASS
	Ant2	2437	14.700	2429.470	2444.170	0.5	PASS
	Ant1	2462	14.790	2454.740	2469.530	0.5	PASS
	Ant2	2462	15.900	2454.260	2470.160	0.5	PASS
11N20	Ant1	2412	15.240	2404.500	2419.740	0.5	PASS
	Ant2	2412	15.060	2404.470	2419.530	0.5	PASS
	Ant1	2437	15.000	2429.530	2444.530	0.5	PASS
	Ant2	2437	15.030	2429.470	2444.500	0.5	PASS
	Ant1	2462	15.180	2454.560	2469.740	0.5	PASS
	Ant2	2462	15.330	2454.230	2469.560	0.5	PASS
11N40	Ant1	2422	28.740	2423.200	2451.940	0.5	PASS
	Ant2	2422	35.460	2404.420	2439.880	0.5	PASS
	Ant1	2437	35.040	2419.480	2454.520	0.5	PASS
	Ant2	2437	35.040	2419.480	2454.520	0.5	PASS
	Ant1	2452	33.840	2435.680	2469.520	0.5	PASS
	Ant2	2452	35.040	2434.480	2469.520	0.5	PASS

11B-CDD Ant1 2412



11B-CDD Ant2 2412



11B-CDD Ant1 2437



11B-CDD Ant2 2437



11B-CDD Ant1 2462



11B-CDD Ant2 2462



11G-CDD Ant1 2412



11G-CDD Ant2 2412



11G-CDD Ant1 2437

