TESTING LABORATORY
CERTIFICATE#4323.01

FCC PART 15.247

TEST REPORT

For

Hangzhou Meari Technology Co., Ltd.

Room 604-605, Building 1, No.768 Jianghong Road, Changhe street, Binjiang District, Hangzhou, Zhejiang, China

FCC ID: 2AG7C-BELL5

Report Type:	**Product Type:**
Original Report	Wireless DoorBell

Project Engineer:	Stone Zhang
Report Number:	RSHA210513002-00B
Report Date:	2021-08-06
Reviewed By:	Chris Wang
Prepared By:	Bay Area Compliance Laboratories Corp. (Kunshan) No.248 Chenghu Road, Kunshan, Jiangsu province, China Tel: +86-0512-86175000 Fax: +86-0512-88934268 www.baclcorp.com.cn

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Applicant:	Hangzhou Meari Technology Co., Ltd.
Tested Model:	Bell 5S
Series Model:	Bell 5X, Bell 5T, Bell 8S, Bell 8X, Bell 8T, Bell 9S, Bell 9T, Bell 12S, Bell 12T
Model Difference:	See Declaration letter
Product Type:	Wireless DoorBell
Power Supply:	DC 5V from adapter or AC/DC 12-24V
Maximum Conducted Output Power:	802.11b: 19.68dBm 802.11g: 24.88dBm 802.11n20: 25.51dBm 802.11n40:23.97dBm
RF Function:	2.4G Wi-Fi
Operating Band/Frequency:	2412~2462 MHz (802.11b/g/n20), 2422~2452 MHz (802.11n40)
Channel Number:	11 (802.11b/g/n20), 7(802.11n40)
Channel Separation:	5MHz
Modulation Type:	OFDM, DSSS
Antenna Type:	FPC Antenna
*Maximum Antenna Gain:	3dBi

Adapter-1 Information:
Model: GTA92-0501000US
Input: AC100-240V~50/60Hz,0.3A
Output: 5.0V, 1.0A,5.0W

Adapter-2 Information:
Model: TPA-46B050100UU
Input: AC100-240V~50/60Hz,0.2A
Output: 5.0V, 1000mA

**Note: The antenna gain was provided by the applicant.*

**All measurement and test data in this report was gathered from production sample serial number: RSHA210513002-1. (Assigned by the BACL. The EUT supplied by the applicant was received on 2021-05-13)*

Objective

This report is prepared on behalf of *Hangzhou Meari Technology Co., Ltd.* in accordance with Part 2-Subpart J, Part 15-Subparts A and C of the Federal Communication Commissions' rules.

The tests were performed in order to determine Compliant with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209 and 15.247 rules.

Related Submittal(s)/Grant(s)

FCC Part 15.249 DXX submissions with FCC ID:2AG7C-BELL5.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliant Testing of Unlicensed Wireless Devices and FCC 558074 D01 15.247 Meas Guidance v05r02.

All emissions measurement was performed at Bay Area Compliant Laboratories Corp. (Kunshan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0℃
Humidity		6%

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) Lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4323.01) and the FCC designation No. CN1185 under the FCC KDB 974614 D01 and CAB identifier CN0004 under the ISED requirement. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

Test channel list is as below:

For 802.11b, 802.11g and 802.11n-HT20 mode, EUT was tested with Channel 1, 6 and 11;

For 802.11n-HT40 mode, EUT was tested with Channel 3, 6 and 9.

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

Equipment Modifications

No modification was made to the EUT tested.

EUT Exercise Software

RF test tool: Secure CRT

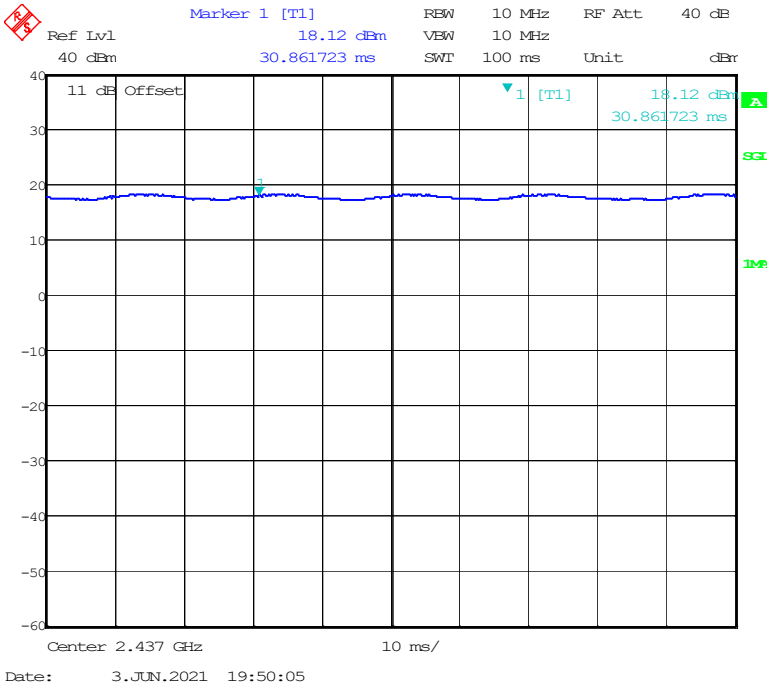
Pre-scan with all the data rates, and the worst case was performed as below:

Mode	Data Rate	*Power Level Setting
802.11b	1 Mbps	Default
802.11g	6 Mbps	Default
802.11n-HT20	MCS0	Default
802.11n-HT40	MCS0	Default

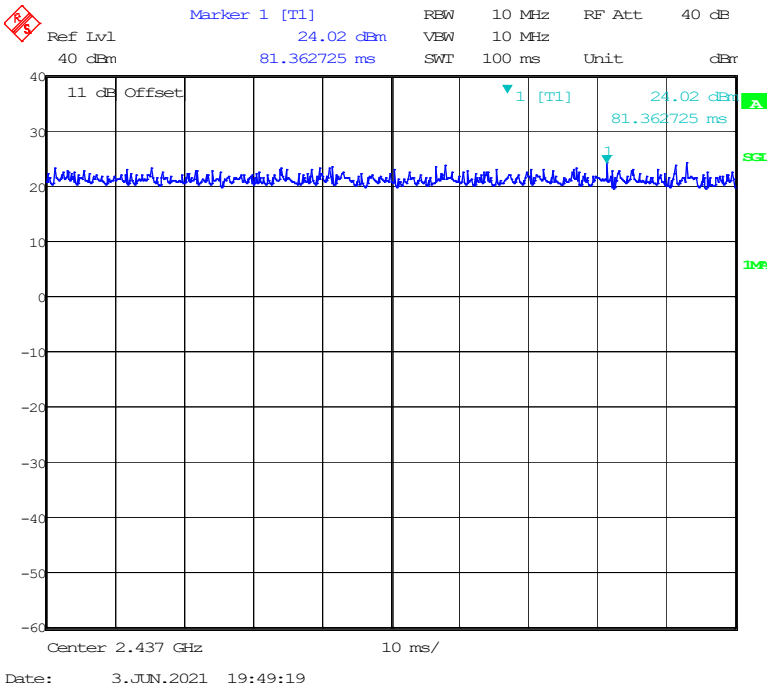
*Note: The power level setting was declared by the applicant.

Duty Cycle:

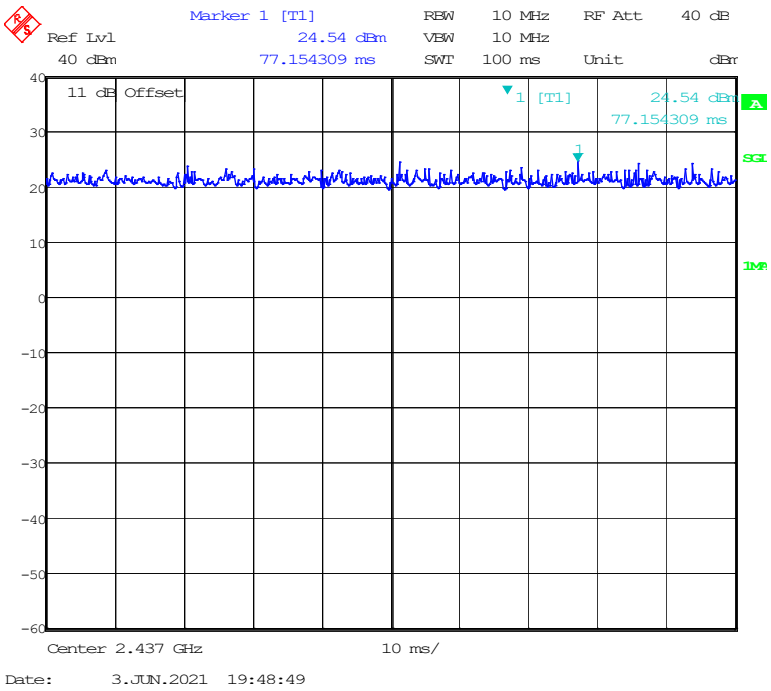
802.11b Mode Middle Channel



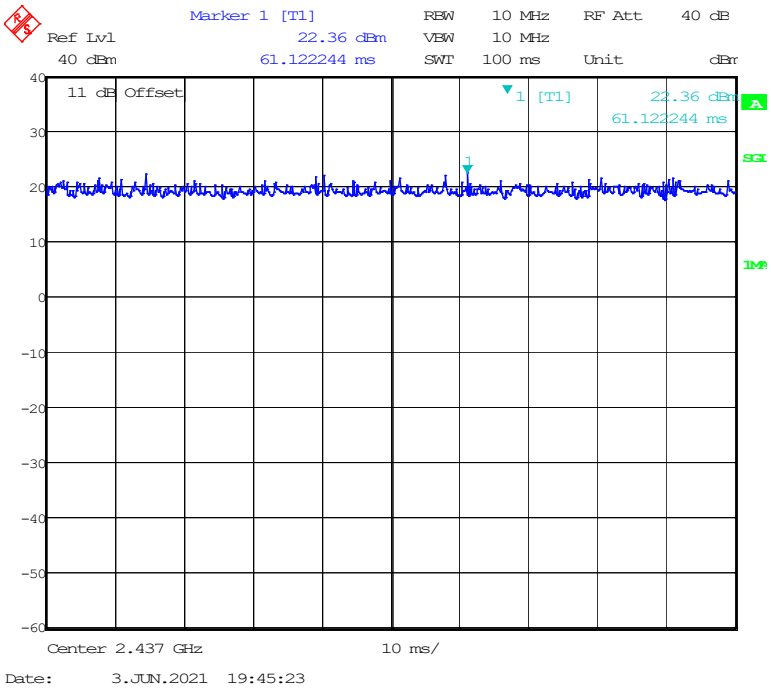
802.11g Mode Middle Channel



802.11n-HT20 Mode Middle Channel



802.11n-HT40 Mode Middle Channel



Mode	Duty Cycle (%)	T_{on}(ms)	T_{on+off}(ms)	10log(1/x)
802.11b	100	100	100	0
802.11g	100	100	100	0
802.11n-HT20	100	100	100	0
802.11n-HT40	100	100	100	0

Note: "x" means the Duty Cycle.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
ZHAOXIN	DC Power Supply	RXN-605D	DC002
SanDisk	SD Card	32G	72810VCP912S

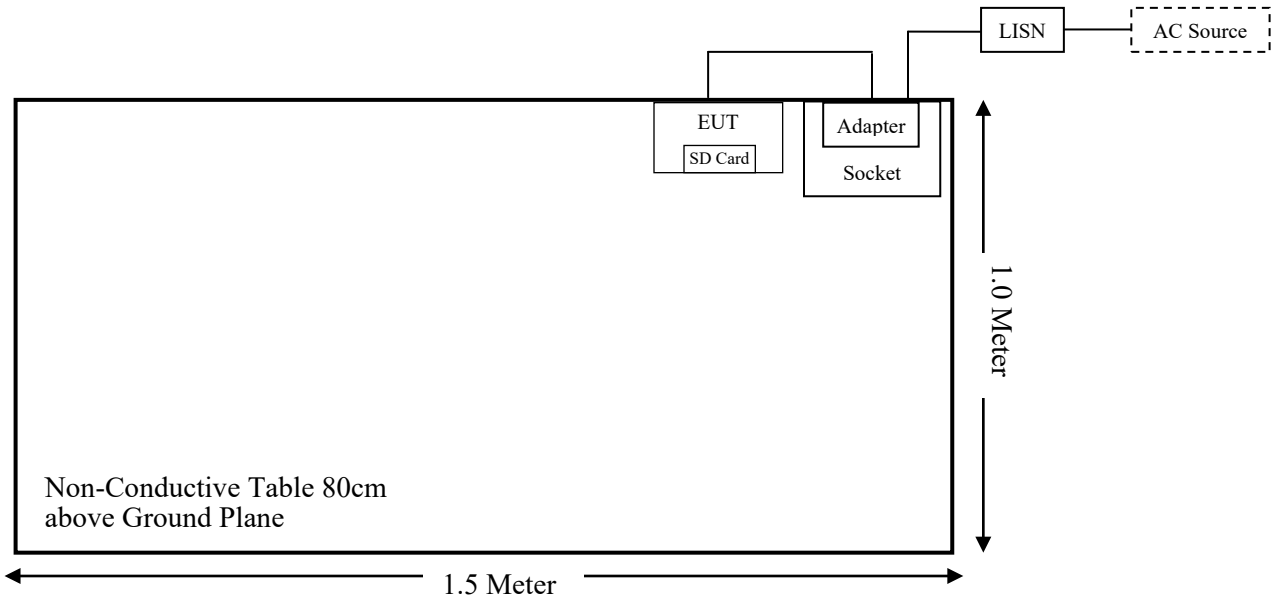
External I/O Cable

Cable Description	Length(m)	From Port	To Port
Power Cable 1	2.0	EUT	Adapter
Power Cable 2	1.0	Socket	LISN/AC Source
Power Cable 3	1.0	EUT	DC Source

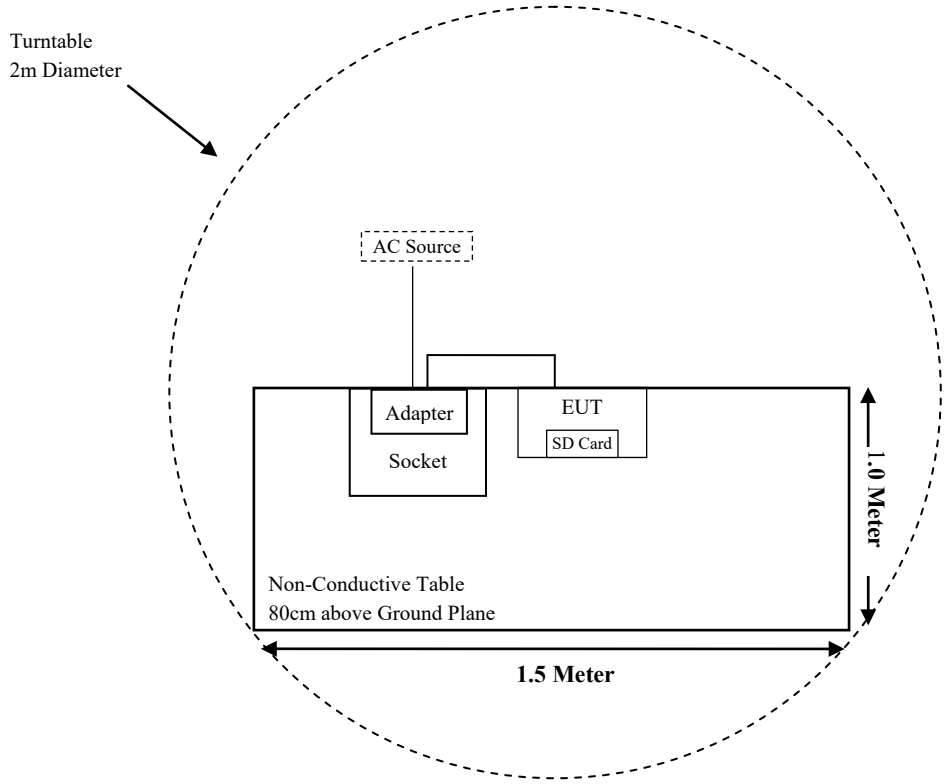
Block Diagram of Test Setup

Powered by adapter

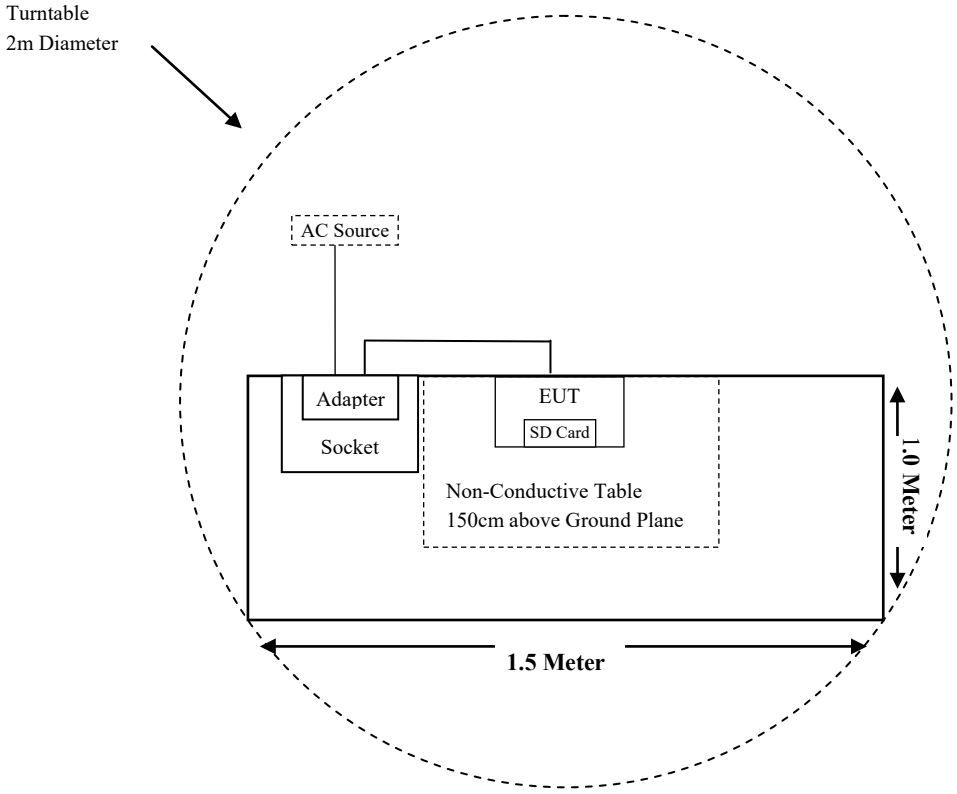
For Conducted Emissions:



For Radiated Emissions(Below 1GHz):

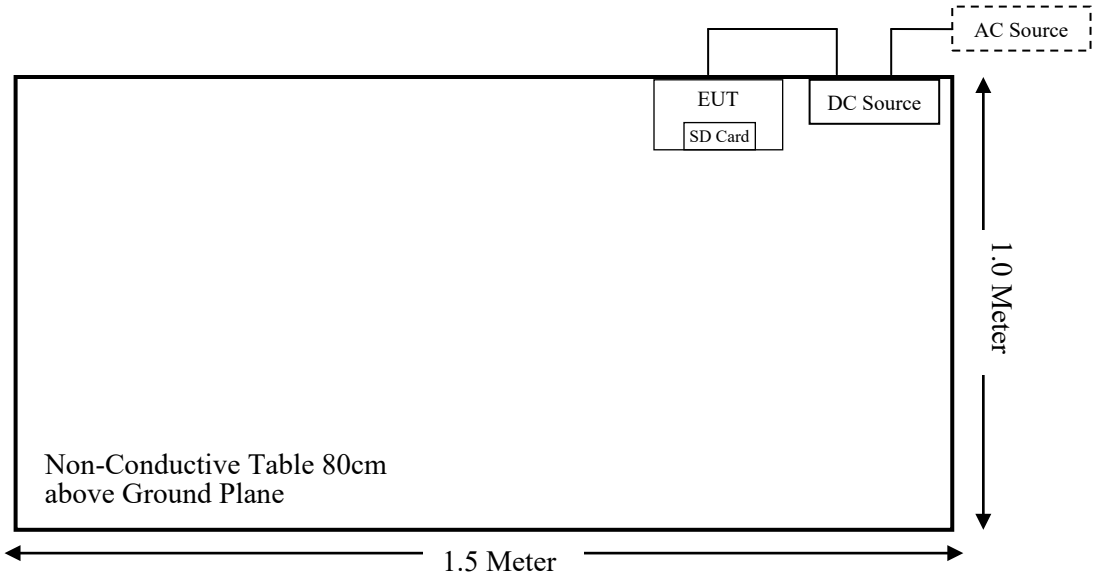


For Radiated Emissions(Above 1GHz):

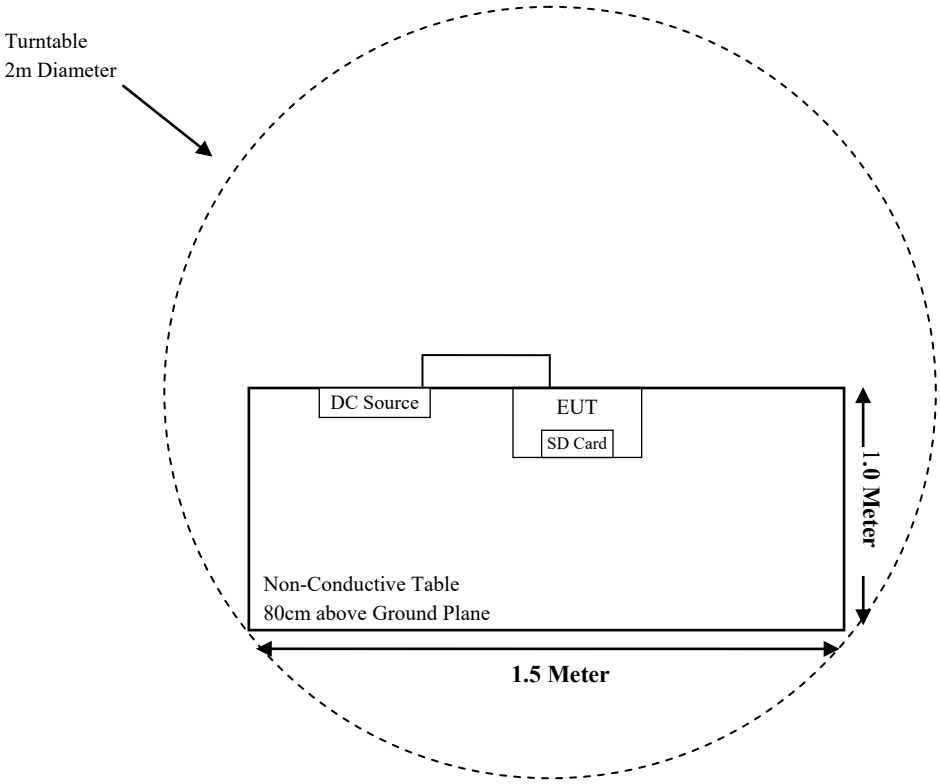


Powered by DC source

For Conducted Emissions:



For Radiated Emissions(Below 1GHz):



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§15.247 (I), §1.1310 & §2.1091	Maximum Permissible Exposure (MPE)	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Compliant
§15.247(d)	Spurious Emissions at Antenna Port	Compliant
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliant
§15.247(b)(3)	Maximum Conducted Output Power	Compliant
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
§15.247(e)	Power Spectral Density	Compliant

Test Equipment List

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test（Chamber 1#）					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2020-11-27	2021-11-26
Sunol Sciences	Broadband Antenna	JB3	A090314-2	2020-01-07	2023-01-06
Sonoma Instrument	Pre-amplifier	310N	171205	2020-08-14	2021-08-13
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-8	008	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-9	009	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-10	010	2020-08-15	2021-08-14
Radiated Emission Test（Chamber 2#）					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207	2021-04-01	2022-03-31
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2020-07-15	2023-07-14
ETS-LINDGREN	Horn Antenna	3116	2516	2020-01-07	2023-01-06
A.H.Systems,inc	Amplifier	PAM-0118P	512	2020-08-14	2021-08-13
EM Electronics Corporation	Amplifier	EM18G40G	060726	2020-08-05	2021-08-04
MICRO-TRONICS	Band Reject Filter	BRM50702	G024	2020-08-05	2021-08-04
Narda	Attenuator	10dB	010	2020-08-15	2021-08-14
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-11	011	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-12	012	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-13	013	2020-08-15	2021-08-14
RF Conducted Test					
Rohde & Schwarz	Signal Analyzer	FSIQ26	100048	2020-11-27	2021-11-26
Agilent	Power Meter	N1912A	MY5000492	2020-11-18	2021-11-17
Agilent	Power Sensor	N1921A	MY54210024	2020-11-18	2021-11-17
Narda	Attenuator	10dB	010	2020-08-15	2021-08-14
Hangzhou Meari	RF Cable	Hangzhou Meari C01	C01	Each Time	N/A
Conducted Emission Test					
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03 -101746-zn	2020-08-05	2021-08-04
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03 -101746-zn	2021-08-05	2022-08-04
Rohde & Schwarz	LISN	ENV216	101115	2020-11-27	2021-11-26
Audix	Test Software	e3	V9	N/A	N/A
Rohde & Schwarz	Pulse limiter	ESH3-Z2	357.8810.52	2020-08-10	2021-08-09
MICRO-COAX	Coaxial Cable	Cable-15	015	2020-08-15	2021-08-14

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1310 & §2.1091 –MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §2.1091 and subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mW/cm^2)**	**Averaging Time (minutes)**
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f^2)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculated Formulary:

Predication of MPE limit at a given distance
$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm^2);
P = power input to the antenna (in appropriate units, e.g., mW);
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Calculated Data:

Mode	Frequency Range (MHz)	Antenna Gain		Tune-up Output Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
802.11b	2412~2462	3.00	2.00	20.0	100.00	20	0.0398	1.0
802.11g		3.00	2.00	25.0	316.23	20	0.1258	1.0
802.11n-HT20		3.00	2.00	26.0	398.11	20	0.1584	1.0
802.11n-HT40	2422~2452	3.00	2.00	24.0	251.19	20	0.0999	1.0

Note: The tune-up output power was declared by the manufacturer.

Conclusion: The device meets MPE at distance 20cm.

FCC §15.203 - ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine Compliant with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

a. Antenna must be permanently attached to the unit.
b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.
And according to FCC 47 CFR section 15.247 (b), if the transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has a FPC antenna for Wi-Fi and the antenna gain is 3dBi, the antenna was permanently attached, fulfill the requirement of this section. Please refer to the EUT photos.

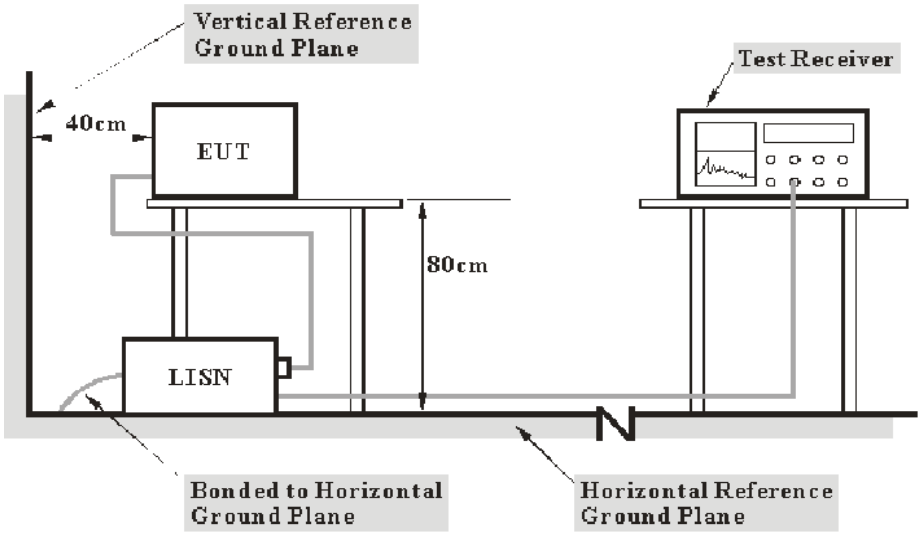
Result: Compliant.

FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207(a)

EUT Setup



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

The measurement procedure of EUT setup is according with ANSI C63.10-2013. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

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

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

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

Test Procedure

ANSI C63.10-2013 clause 6.2

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the peak and average detection mode.

Factor & Over Limit Calculation

The Factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

The "**Over Limit**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit of 7 dB means the emission is 7 dB above the limit. The equation for Over Limit calculation is as follows:

Over Limit (dB) = Read level (dBμV) + Factor (dB) - Limit (dBμV)

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

Test Data

Environmental Conditions

Temperature:	23.2 ~24.2 ℃
Relative Humidity:	48~50 %
ATM Pressure:	101.5~102.3 kPa

The testing was performed by Stone Zhang from 2021-05-31 to 2021-08-06.

Test Result: Compliant.

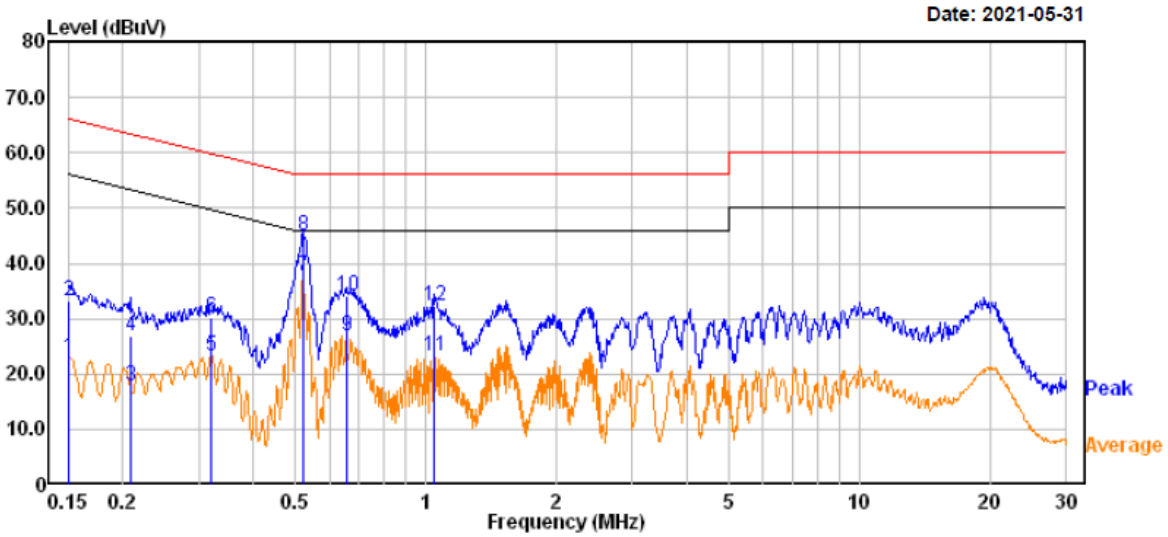
Powered by adapter:

Model: Bell 5S

EUT operation mode: Transmitting in 802.11bMode low channel (worst case)

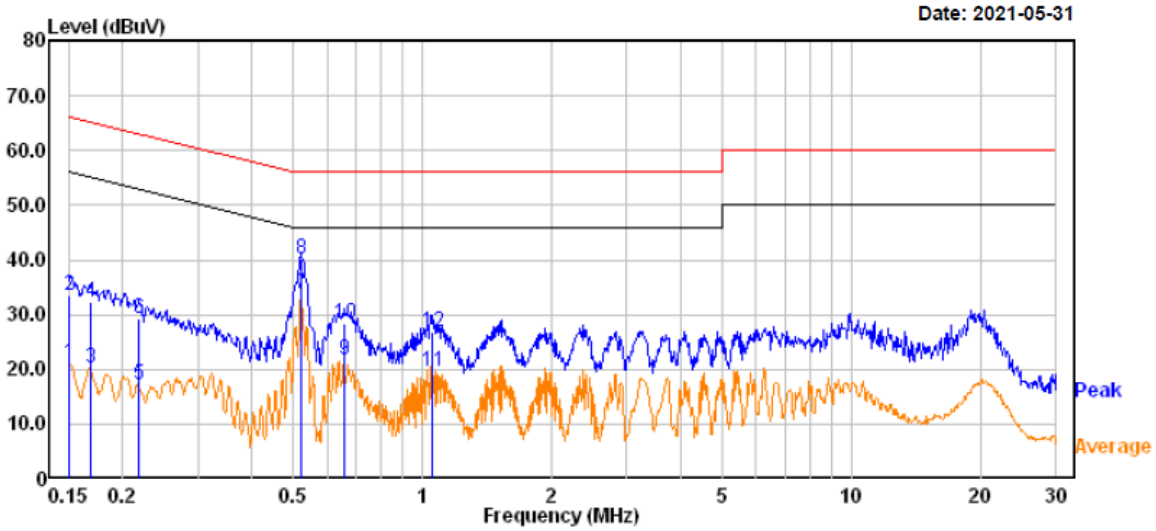
For adapter-1:

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	3.10	19.82	22.92	55.96	-33.04	Average
2	0.151	13.30	19.82	33.12	65.96	-32.84	QP
3	0.208	-1.90	19.82	17.92	53.27	-35.35	Average
4	0.208	6.90	19.82	26.72	63.27	-36.55	QP
5	0.320	3.30	19.82	23.12	49.71	-26.59	Average
6	0.320	10.40	19.82	30.22	59.71	-29.49	QP
7	0.522	18.00	19.76	37.76	46.00	-8.24	Average
8	0.522	25.20	19.76	44.96	56.00	-11.04	QP
9	0.656	7.10	19.75	26.85	46.00	-19.15	Average
10	0.656	14.30	19.75	34.05	56.00	-21.95	QP
11	1.043	3.50	19.82	23.32	46.00	-22.68	Average
12	1.043	12.50	19.82	32.32	56.00	-23.68	QP

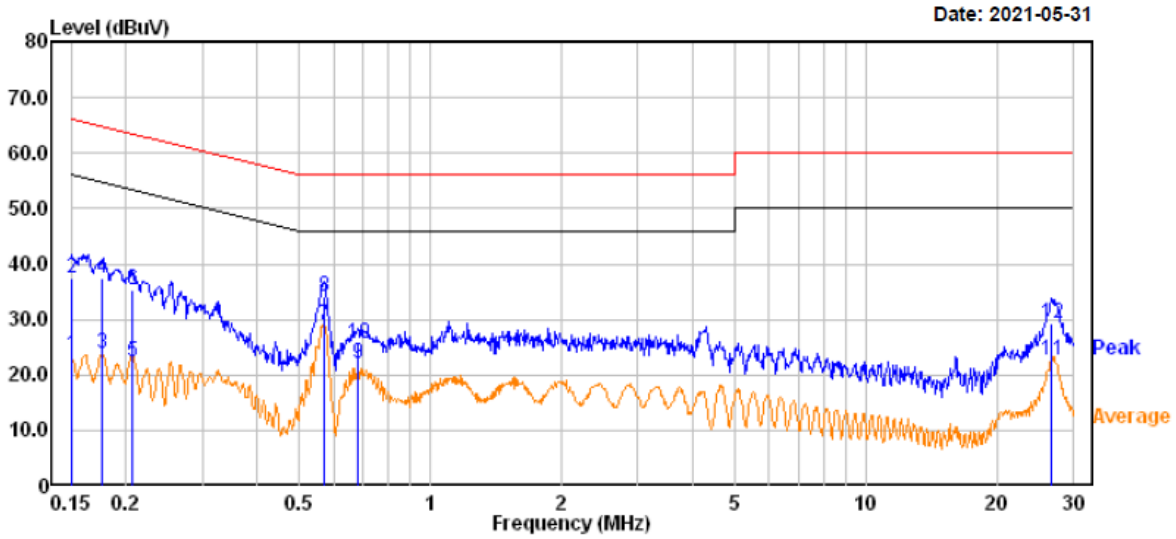
AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	1.40	19.82	21.22	55.96	-34.74	Average
2	0.151	13.80	19.82	33.62	65.96	-32.34	QP
3	0.169	0.40	19.83	20.23	55.01	-34.78	Average
4	0.169	12.60	19.83	32.43	65.01	-32.58	QP
5	0.219	-2.50	19.82	17.32	52.85	-35.53	Average
6	0.219	9.40	19.82	29.22	62.85	-33.63	QP
7	0.522	14.00	19.76	33.76	46.00	-12.24	Average
8	0.522	20.40	19.76	40.16	56.00	-15.84	QP
9	0.656	2.00	19.75	21.75	46.00	-24.25	Average
10	0.656	8.70	19.75	28.45	56.00	-27.55	QP
11	1.058	-0.20	19.82	19.62	46.00	-26.38	Average
12	1.058	7.10	19.82	26.92	56.00	-29.08	QP

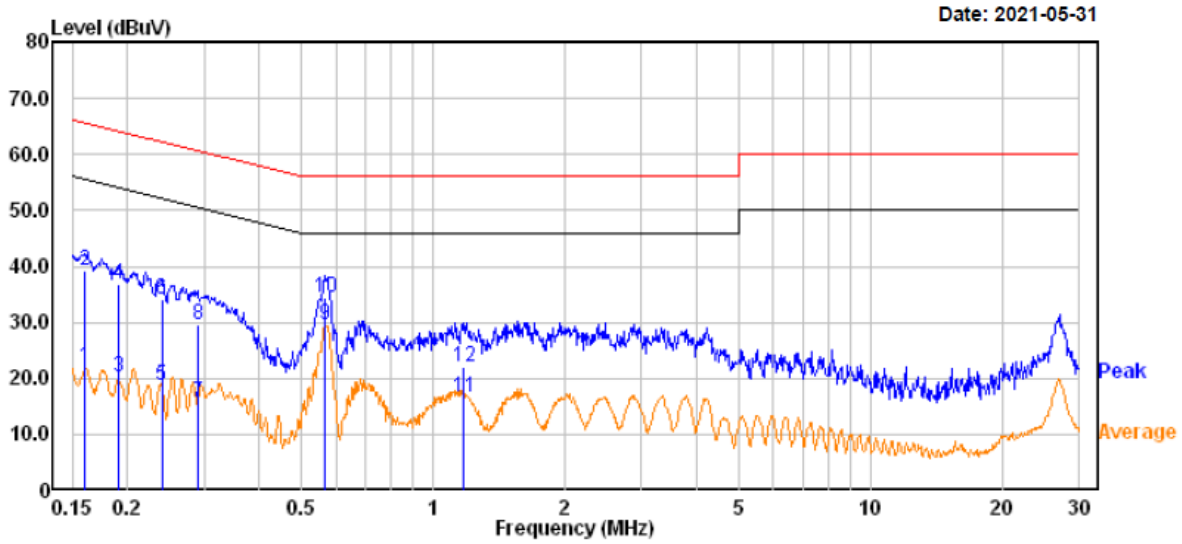
For adapter-2:

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	3.70	19.82	23.52	55.96	-32.44	Average
2	0.151	17.70	19.82	37.52	65.96	-28.44	QP
3	0.177	4.10	19.83	23.93	54.63	-30.70	Average
4	0.177	17.70	19.83	37.53	64.63	-27.10	QP
5	0.206	2.50	19.82	22.32	53.35	-31.03	Average
6	0.206	15.50	19.82	35.32	63.35	-28.03	QP
7	0.570	9.30	19.75	29.05	46.00	-16.95	Average
8	0.570	14.30	19.75	34.05	56.00	-21.95	QP
9	0.683	2.20	19.75	21.95	46.00	-24.05	Average
10	0.683	5.80	19.75	25.55	56.00	-30.45	QP
11	26.618	2.90	19.72	22.62	50.00	-27.38	Average
12	26.618	9.70	19.72	29.42	60.00	-30.58	QP

AC 120V/60 Hz, Neutral



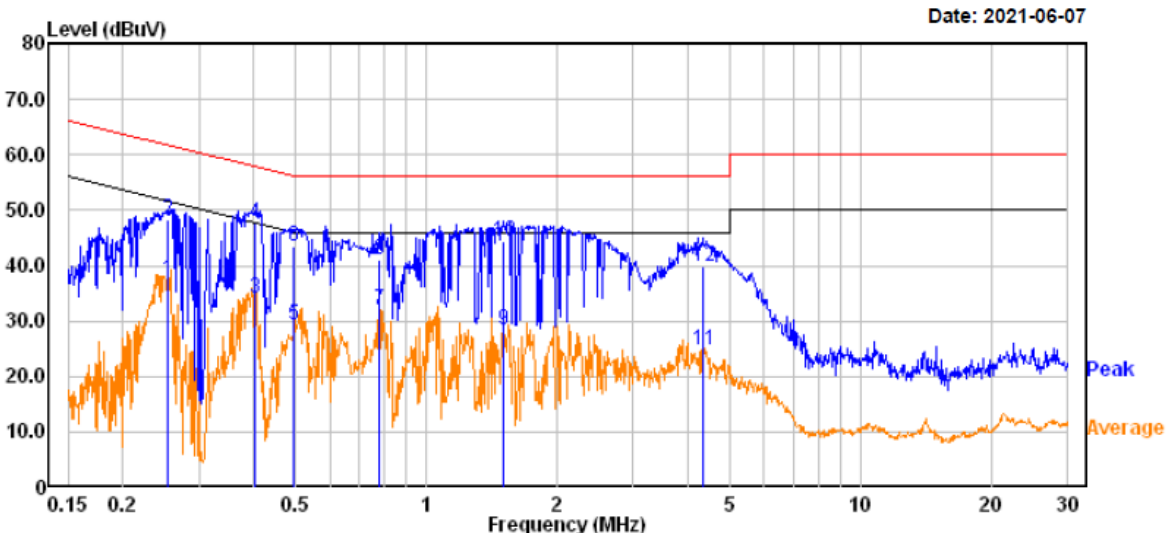
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.160	2.30	19.83	22.13	55.46	-33.33	Average
2	0.160	19.40	19.83	39.23	65.46	-26.23	QP
3	0.191	0.30	19.82	20.12	54.01	-33.89	Average
4	0.191	16.90	19.82	36.72	64.01	-27.29	QP
5	0.240	-1.00	19.82	18.82	52.11	-33.29	Average
6	0.240	14.40	19.82	34.22	62.11	-27.89	QP
7	0.290	-4.00	19.82	15.82	50.54	-34.72	Average
8	0.290	9.70	19.82	29.52	60.54	-31.02	QP
9	0.565	9.70	19.75	29.45	46.00	-16.55	Average
10	0.565	14.70	19.75	34.45	56.00	-21.55	QP
11	1.169	-3.30	19.81	16.51	46.00	-29.49	Average
12	1.169	2.30	19.81	22.11	56.00	-33.89	QP

Transmitting simultaneously test:

For adapter-1:

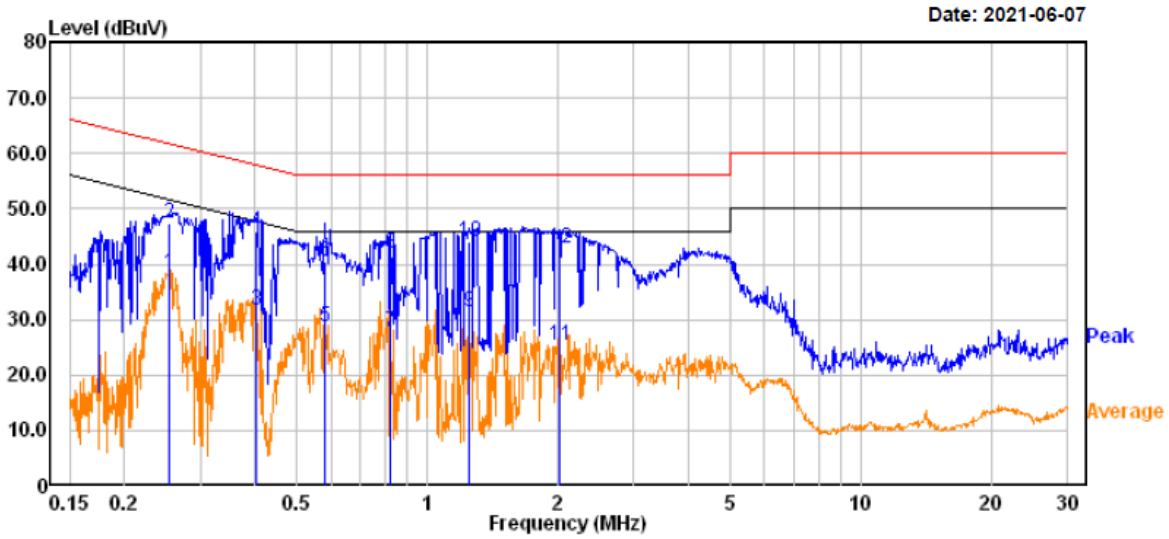
***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*

AC 120V/60 Hz, Line:



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.253	17.60	19.82	37.42	51.65	-14.23	Average
2	0.253	28.50	19.82	48.32	61.65	-13.33	QP
3	0.404	14.30	19.74	34.04	47.76	-13.72	Average
4	0.404	27.90	19.74	47.64	57.76	-10.12	QP
5	0.496	9.50	19.76	29.26	46.06	-16.80	Average
6	0.496	23.70	19.76	43.46	56.06	-12.60	QP
7	0.777	12.20	19.71	31.91	46.00	-14.09	Average
8	0.777	21.30	19.71	41.01	56.00	-14.99	QP
9	1.508	8.59	19.85	28.44	46.00	-17.56	Average
10	1.508	24.59	19.85	44.44	56.00	-11.56	QP
11	4.337	5.21	19.47	24.68	46.00	-21.32	Average
12	4.337	20.51	19.47	39.98	56.00	-16.02	QP

AC 120V/60 Hz, Neutral



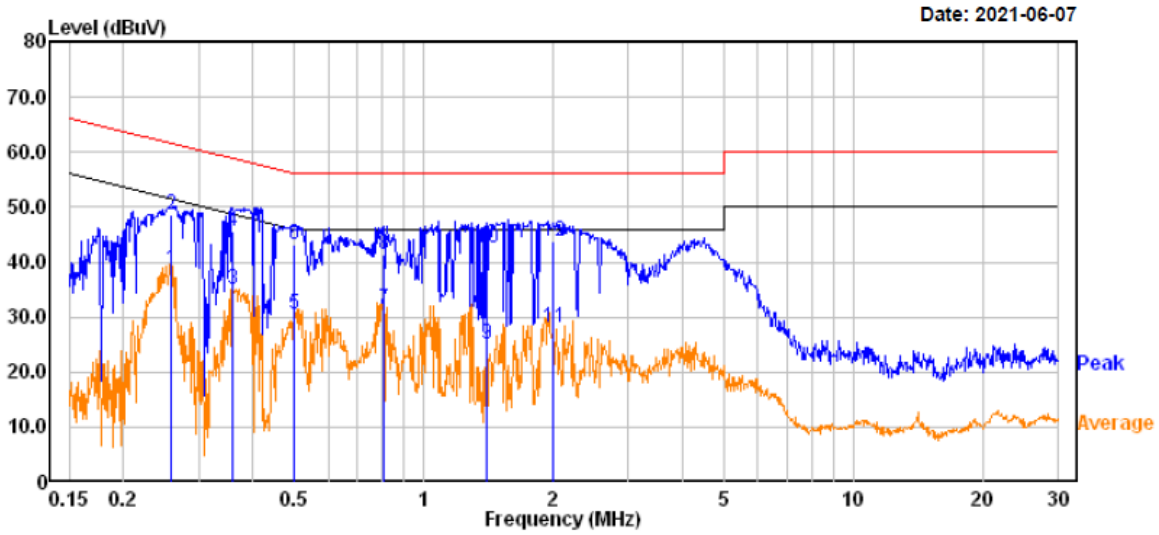
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.253	18.60	19.82	38.42	51.65	-13.23	Average
2	0.253	27.60	19.82	47.42	61.65	-14.23	QP
3	0.404	12.00	19.74	31.74	47.76	-16.02	Average
4	0.404	26.10	19.74	45.84	57.76	-11.92	QP
5	0.582	8.80	19.75	28.55	46.00	-17.45	Average
6	0.582	20.60	19.75	40.35	56.00	-15.65	QP
7	0.821	8.21	19.70	27.91	46.00	-18.09	Average
8	0.821	22.31	19.70	42.01	56.00	-13.99	QP
9	1.254	11.60	19.82	31.42	46.00	-14.58	Average
10	1.254	24.30	19.82	44.12	56.00	-11.88	QP
11	2.013	5.60	19.82	25.42	46.00	-20.58	Average
12	2.013	22.90	19.82	42.72	56.00	-13.28	QP

Transmitting simultaneously test:

For adapter-2:

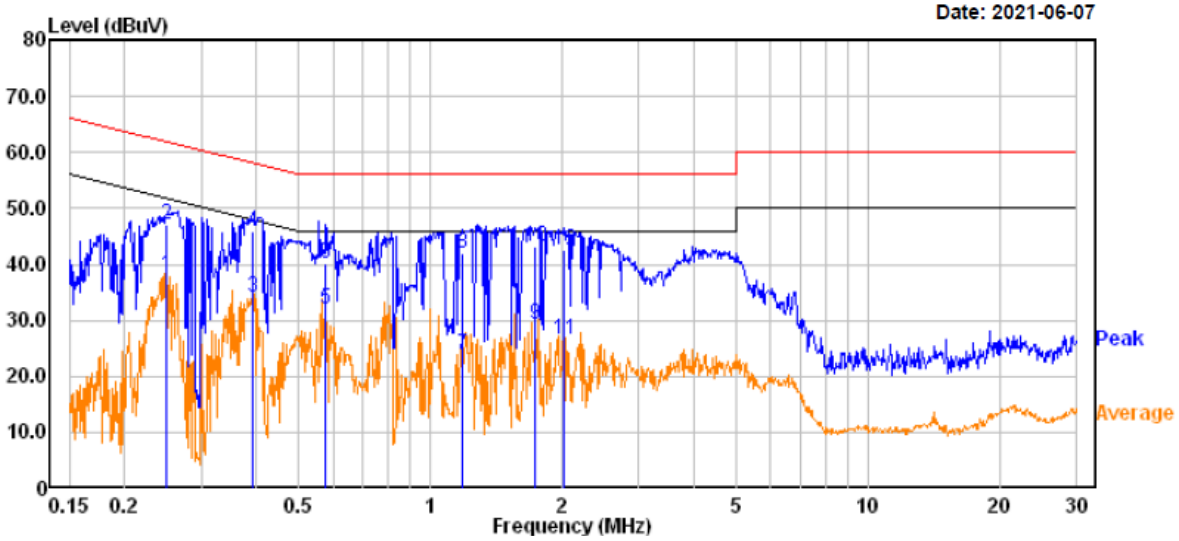
***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*

AC 120V/60 Hz, Line:



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.258	18.90	19.82	38.72	51.49	-12.77	Average
2	0.258	28.80	19.82	48.62	61.49	-12.87	QP
3	0.361	15.20	19.79	34.99	48.71	-13.72	Average
4	0.361	25.80	19.79	45.59	58.71	-13.12	QP
5	0.499	10.60	19.76	30.36	46.02	-15.66	Average
6	0.499	23.50	19.76	43.26	56.02	-12.76	QP
7	0.809	11.81	19.70	31.51	46.00	-14.49	Average
8	0.809	21.81	19.70	41.51	56.00	-14.49	QP
9	1.399	5.20	19.83	25.03	46.00	-20.97	Average
10	1.399	22.60	19.83	42.43	56.00	-13.57	QP
11	2.003	8.20	19.83	28.03	46.00	-17.97	Average
12	2.003	24.00	19.83	43.83	56.00	-12.17	QP

AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.249	18.10	19.82	37.92	51.78	-13.86	Average
2	0.249	27.30	19.82	47.12	61.78	-14.66	QP
3	0.393	14.40	19.75	34.15	48.01	-13.86	Average
4	0.393	26.20	19.75	45.95	58.01	-12.06	QP
5	0.576	12.40	19.75	32.15	46.00	-13.85	Average
6	0.576	20.50	19.75	40.25	56.00	-15.75	QP
7	1.181	4.10	19.81	23.91	46.00	-22.09	Average
8	1.181	22.00	19.81	41.81	56.00	-14.19	QP
9	1.742	9.30	19.84	29.14	46.00	-16.86	Average
10	1.742	23.40	19.84	43.24	56.00	-12.76	QP
11	2.023	6.90	19.81	26.71	46.00	-19.29	Average
12	2.023	22.80	19.81	42.61	56.00	-13.39	QP

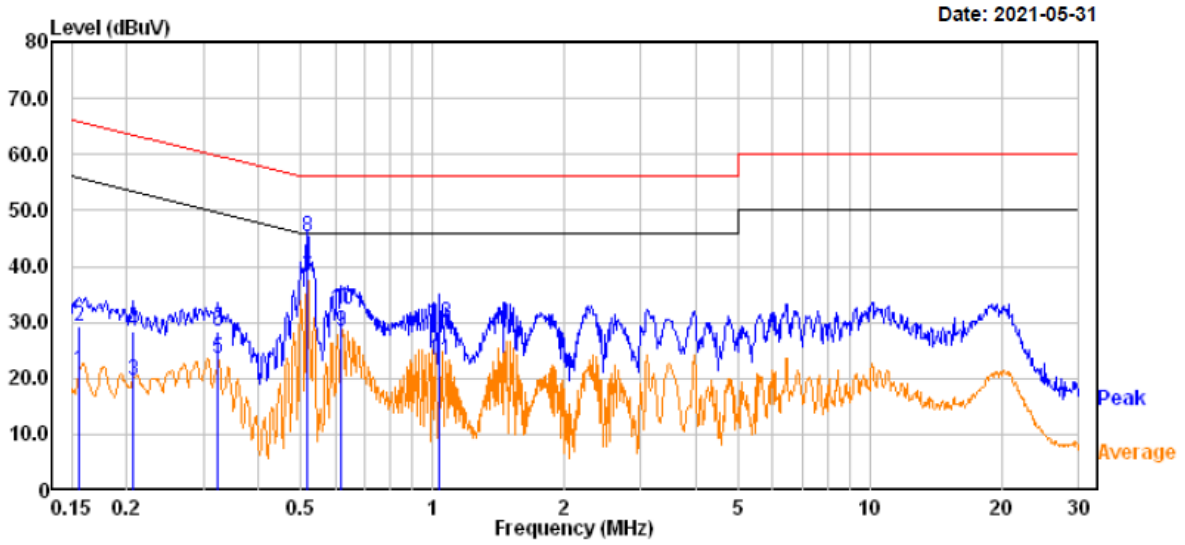
Note:
1) Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)
2) Over Limit (dB) = Read level (dBµV) + Factor (dB) - Limit (dBµV)

Model: Bell 9S

EUT operation mode: Transmitting in 802.11b Mode low channel (worst case)

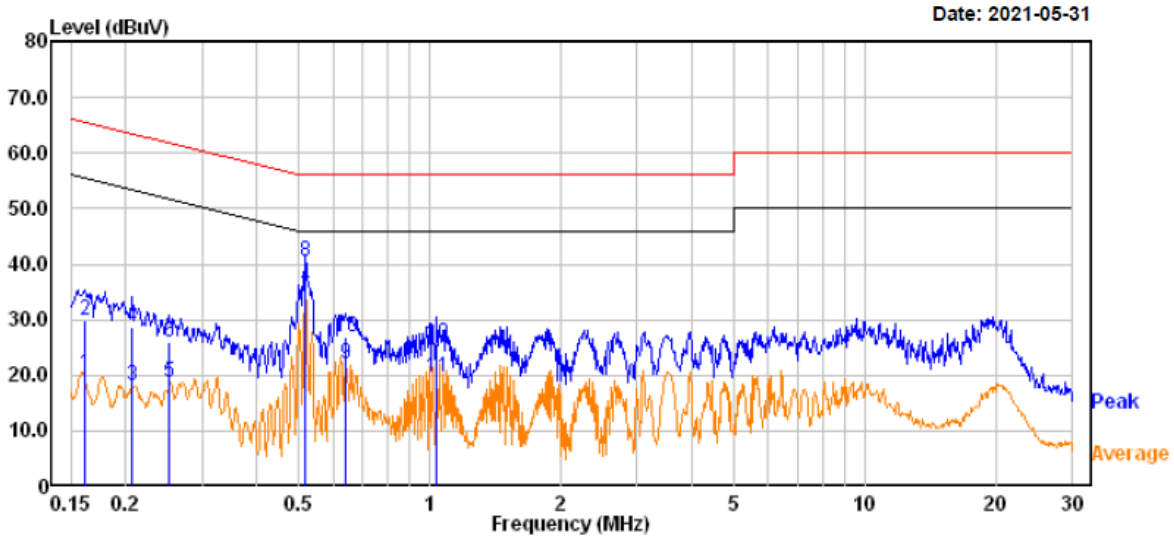
For adapter-1:

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.156	1.70	19.82	21.52	55.67	-34.15	Average
2	0.156	9.50	19.82	29.32	65.67	-36.35	QP
3	0.207	-0.10	19.82	19.72	53.31	-33.59	Average
4	0.207	8.70	19.82	28.52	63.31	-34.79	QP
5	0.323	3.72	19.82	23.54	49.62	-26.08	Average
6	0.323	8.60	19.82	28.42	59.62	-31.20	QP
7	0.519	18.40	19.76	38.16	46.00	-7.84	Average
8	0.519	25.50	19.76	45.26	56.00	-10.74	QP
9	0.621	8.69	19.75	28.44	46.00	-17.56	Average
10	0.621	12.50	19.75	32.25	56.00	-23.75	QP
11	1.037	3.32	19.82	23.14	46.00	-22.86	Average
12	1.037	10.20	19.82	30.02	56.00	-25.98	QP

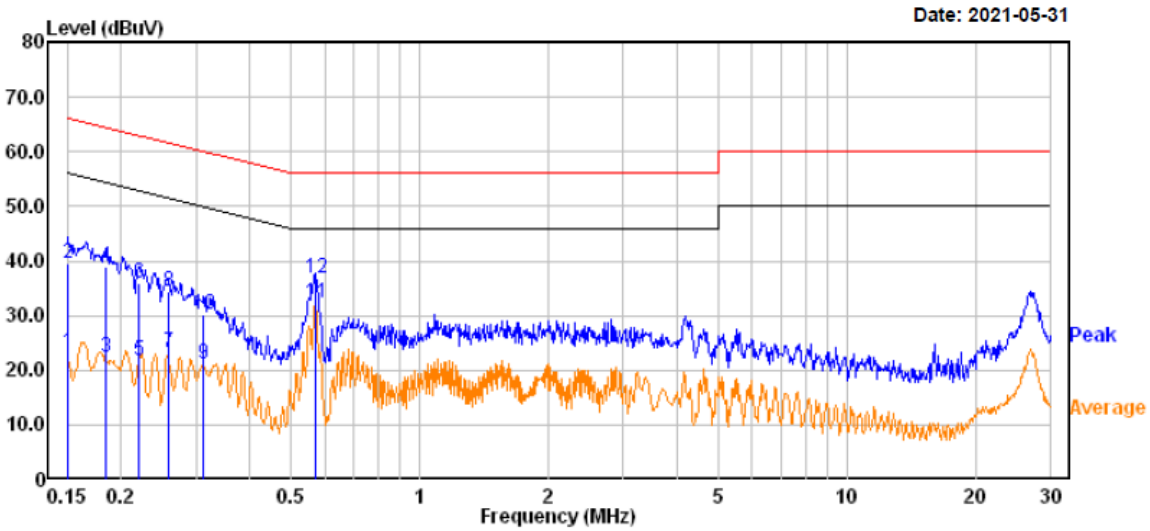
AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.162	0.44	19.83	20.27	55.38	-35.11	Average
2	0.162	10.20	19.83	30.03	65.38	-35.35	QP
3	0.206	-1.79	19.82	18.03	53.35	-35.32	Average
4	0.206	9.00	19.82	28.82	63.35	-34.53	QP
5	0.251	-0.99	19.82	18.83	51.74	-32.91	Average
6	0.251	6.20	19.82	26.02	61.74	-35.72	QP
7	0.519	14.30	19.76	34.06	46.00	-11.94	Average
8	0.519	20.60	19.76	40.36	56.00	-15.64	QP
9	0.643	2.28	19.75	22.03	46.00	-23.97	Average
10	0.643	7.10	19.75	26.85	56.00	-29.15	QP
11	1.037	-0.18	19.82	19.64	46.00	-26.36	Average
12	1.037	5.70	19.82	25.52	56.00	-30.48	QP

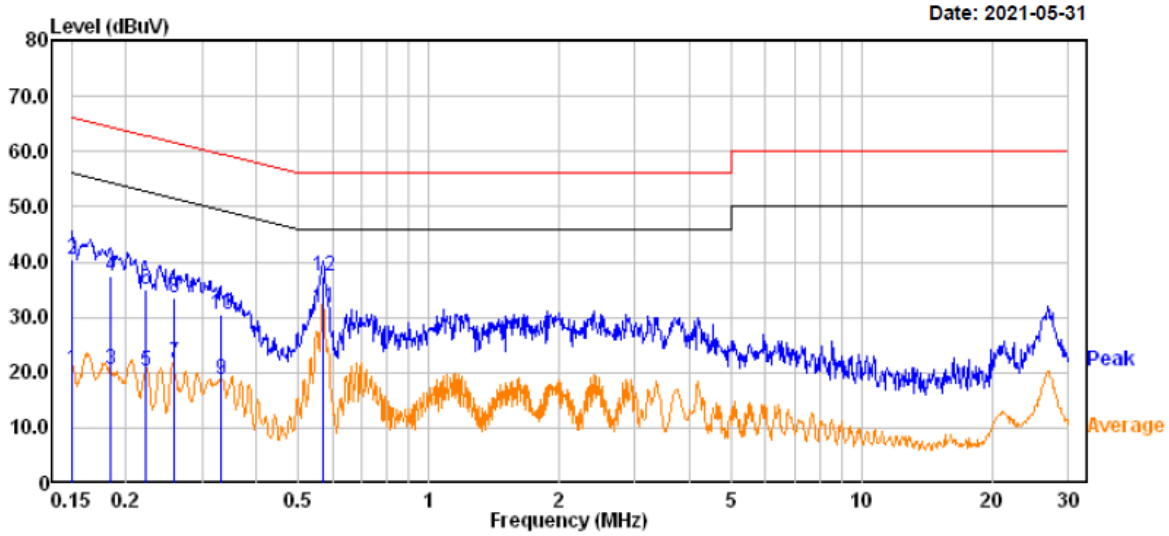
For adapter-2:

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	3.50	19.82	23.32	56.00	-32.68	Average
2	0.150	19.60	19.82	39.42	66.00	-26.58	QP
3	0.184	2.40	19.83	22.23	54.30	-32.07	Average
4	0.184	19.00	19.83	38.83	64.30	-25.47	QP
5	0.220	1.80	19.82	21.62	52.81	-31.19	Average
6	0.220	16.20	19.82	36.02	62.81	-26.79	QP
7	0.258	3.40	19.82	23.22	51.49	-28.27	Average
8	0.258	14.70	19.82	34.52	61.49	-26.97	QP
9	0.312	1.40	19.82	21.22	49.91	-28.69	Average
10	0.312	10.40	19.82	30.22	59.91	-29.69	QP
11	0.570	12.50	19.75	32.25	46.00	-13.75	Average
12	0.570	17.10	19.75	36.85	56.00	-19.15	QP

AC 120V/60 Hz, Neutral



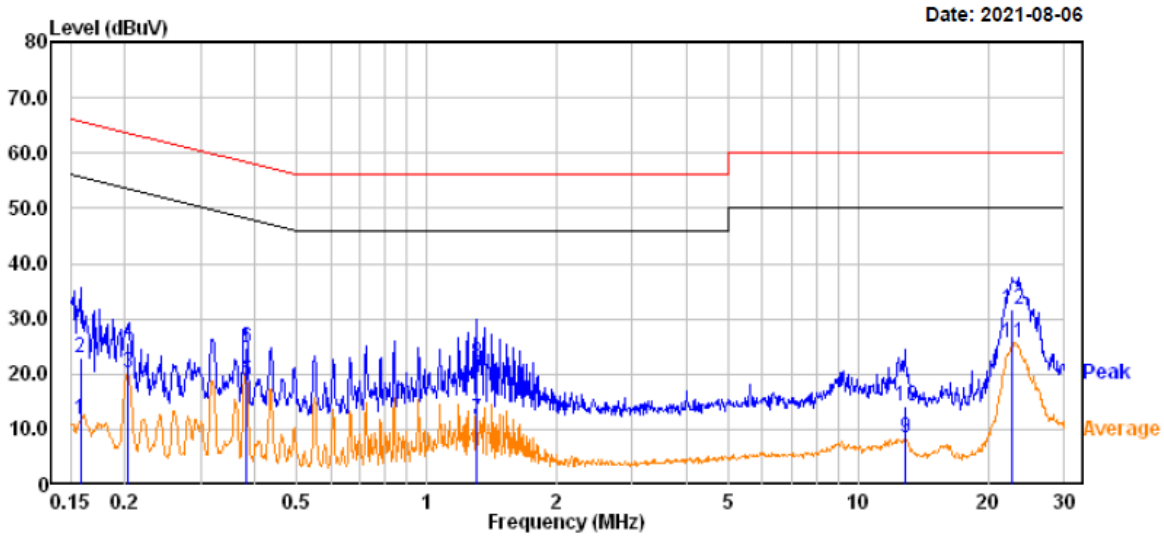
	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	0.77	19.82	20.59	55.96	-35.37	Average
2	0.151	20.50	19.82	40.32	65.96	-25.64	QP
3	0.184	0.78	19.83	20.61	54.30	-33.69	Average
4	0.184	17.60	19.83	37.43	64.30	-26.87	QP
5	0.221	0.42	19.82	20.24	52.77	-32.53	Average
6	0.221	15.20	19.82	35.02	62.77	-27.75	QP
7	0.258	1.89	19.82	21.71	51.49	-29.78	Average
8	0.258	13.60	19.82	33.42	61.49	-28.07	QP
9	0.331	-1.07	19.82	18.75	49.42	-30.67	Average
10	0.331	10.69	19.82	30.51	59.42	-28.91	QP
11	0.570	12.00	19.75	31.75	46.00	-14.25	Average
12	0.570	17.80	19.75	37.55	56.00	-18.45	QP

Powered by DC source:

Model: Bell 5S

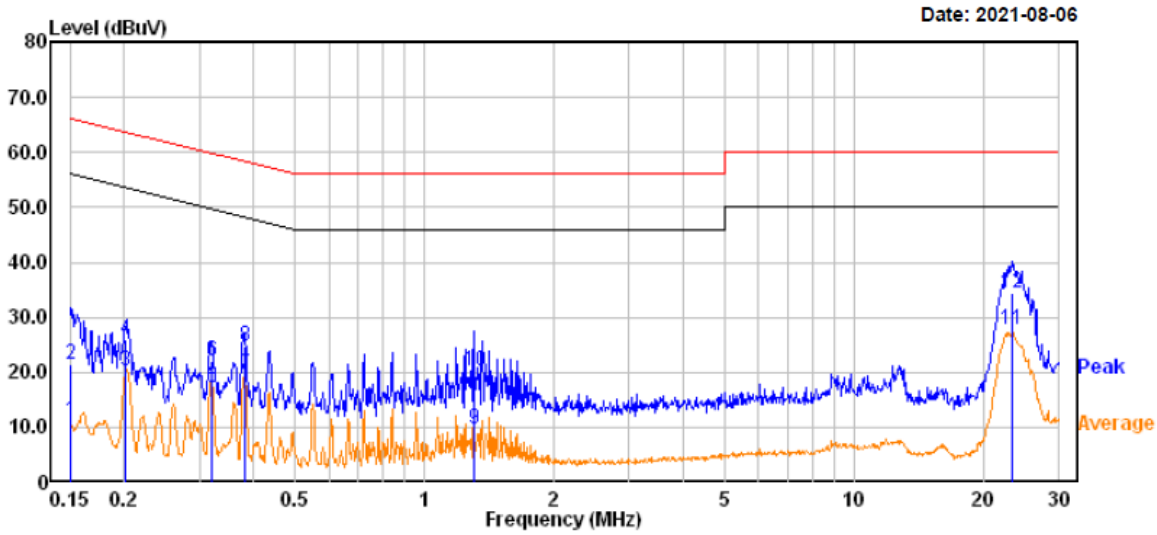
EUT operation mode: Transmitting in 802.11b mode low channel (worst case)

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.158	-8.00	19.82	11.82	55.59	-43.77	Average
2	0.158	3.00	19.82	22.82	65.59	-42.77	QP
3	0.203	0.30	19.82	20.12	53.47	-33.35	Average
4	0.203	5.70	19.82	25.52	63.47	-37.95	QP
5	0.381	-1.01	19.77	18.76	48.26	-29.50	Average
6	0.381	4.99	19.77	24.76	58.26	-33.50	QP
7	1.305	-8.20	19.82	11.62	46.00	-34.38	Average
8	1.305	2.10	19.82	21.92	56.00	-34.08	QP
9	12.857	-11.20	19.60	8.40	50.00	-41.60	Average
10	12.857	-5.50	19.60	14.10	60.00	-45.90	QP
11	22.807	5.90	19.80	25.70	50.00	-24.30	Average
12	22.807	11.90	19.80	31.70	60.00	-28.30	QP

AC 120V/60 Hz, Neutral

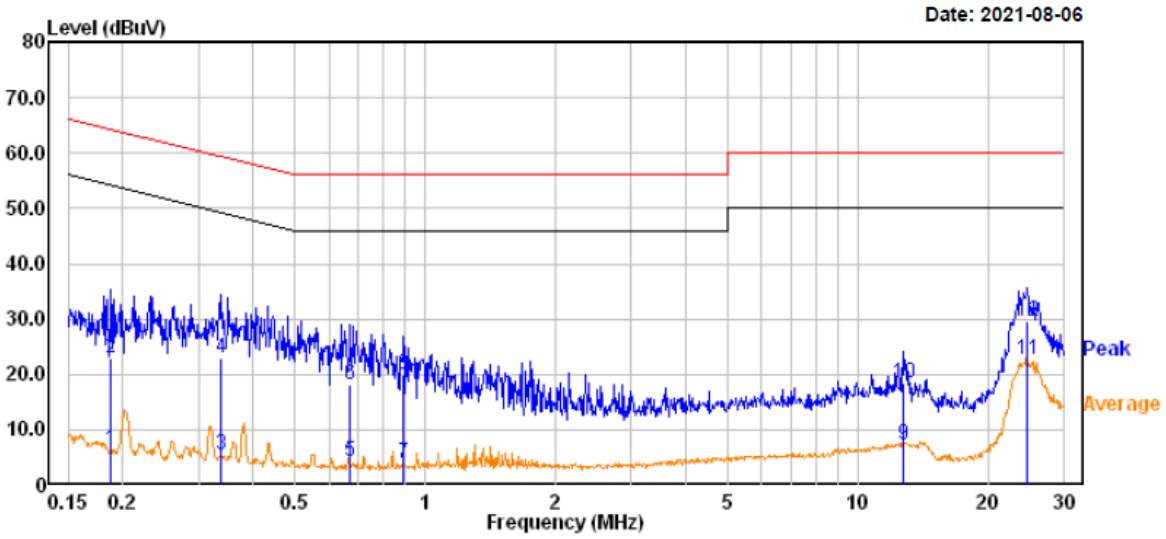


	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	-8.80	19.82	11.02	55.96	-44.94	Average
2	0.151	1.60	19.82	21.42	65.96	-44.54	QP
3	0.202	0.40	19.82	20.22	53.52	-33.30	Average
4	0.202	6.00	19.82	25.82	63.52	-37.70	QP
5	0.320	-2.70	19.82	17.12	49.71	-32.59	Average
6	0.320	2.10	19.82	21.92	59.71	-37.79	QP
7	0.381	-0.01	19.77	19.76	48.26	-28.50	Average
8	0.381	4.89	19.77	24.66	58.26	-33.60	QP
9	1.305	-10.10	19.82	9.72	46.00	-36.28	Average
10	1.305	0.40	19.82	20.22	56.00	-35.78	QP
11	23.266	7.90	19.78	27.68	50.00	-22.32	Average
12	23.266	14.50	19.78	34.28	60.00	-25.72	QP

Model: Bell 9S

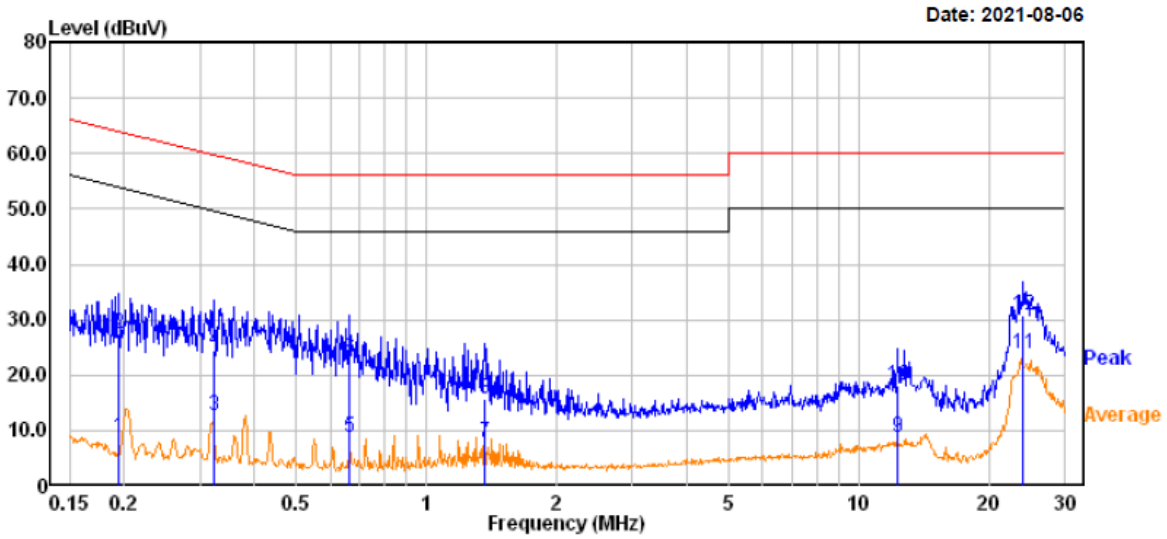
EUT operation mode: Transmitting in 802.11b mode low channel (worst case)

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.188	-13.57	19.82	6.25	54.14	-47.89	Average
2	0.188	3.21	19.82	23.03	64.14	-41.11	QP
3	0.338	-14.51	19.81	5.30	49.25	-43.95	Average
4	0.338	3.10	19.81	22.91	59.25	-36.34	QP
5	0.672	-15.66	19.75	4.09	46.00	-41.91	Average
6	0.672	-1.50	19.75	18.25	56.00	-37.75	QP
7	0.893	-15.74	19.73	3.99	46.00	-42.01	Average
8	0.893	0.29	19.73	20.02	56.00	-35.98	QP
9	12.729	-12.41	19.60	7.19	50.00	-42.81	Average
10	12.729	-1.20	19.60	18.40	60.00	-41.60	QP
11	24.700	3.01	19.71	22.72	50.00	-27.28	Average
12	24.700	10.00	19.71	29.71	60.00	-30.29	QP

AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.194	-11.21	19.82	8.61	53.85	-45.24	Average
2	0.194	7.60	19.82	27.42	63.85	-36.43	QP
3	0.322	-7.25	19.82	12.57	49.67	-37.10	Average
4	0.322	4.60	19.82	24.42	59.67	-35.25	QP
5	0.666	-10.94	19.75	8.81	46.00	-37.19	Average
6	0.666	3.10	19.75	22.85	56.00	-33.15	QP
7	1.365	-12.13	19.83	7.70	46.00	-38.30	Average
8	1.365	-4.00	19.83	15.83	56.00	-40.17	QP
9	12.354	-10.71	19.60	8.89	50.00	-41.11	Average
10	12.354	-1.61	19.60	17.99	60.00	-42.01	QP
11	24.092	3.97	19.73	23.70	50.00	-26.30	Average
12	24.092	11.11	19.73	30.84	60.00	-29.16	QP

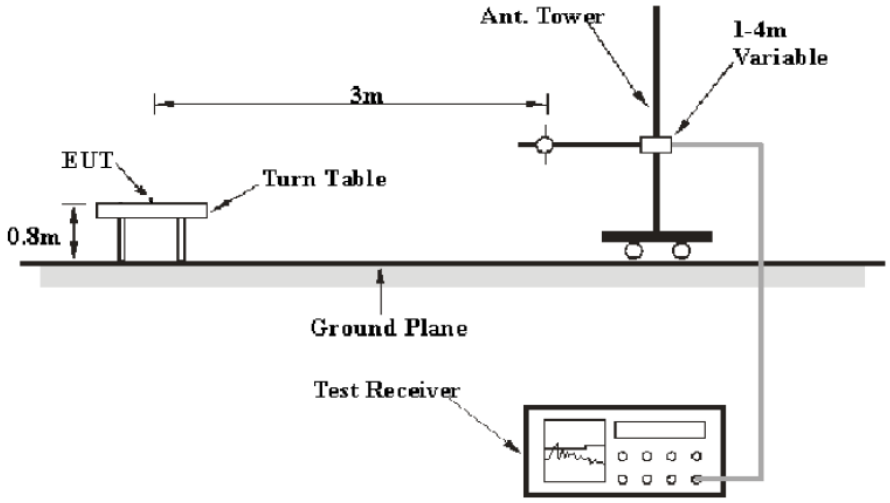
FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSION

Applicable Standard

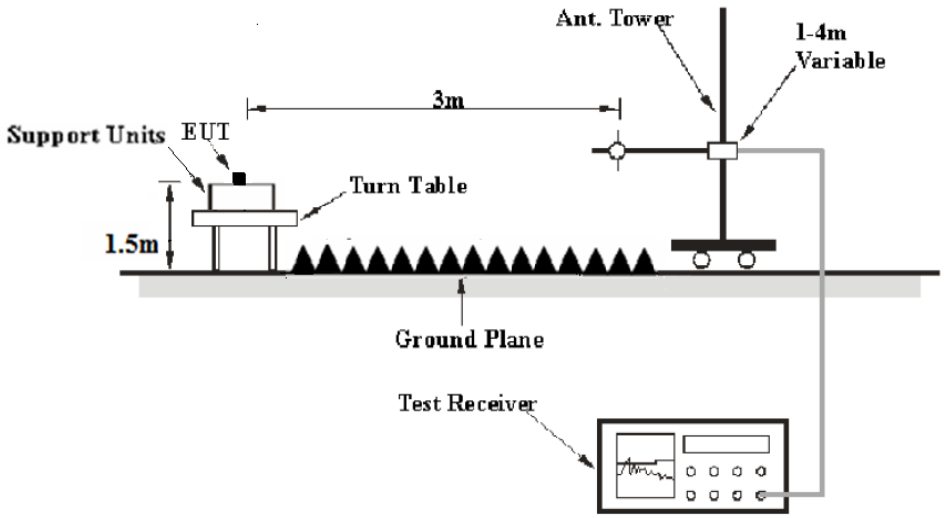
FCC §15.247 (d); §15.209; §15.205;

EUT Setup

Below 1 GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 25 GHz.

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

Frequency Range	RBW	Video B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	QP
Above 1GHz	1MHz	3 MHz	PK
	1MHz	3 MHz	AVG.

Test Procedure

According to ANSI C63.10-2013 clause 6.5, 6.6 and 6.7.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

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

Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude (dBμV/m) = Meter Reading (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

The "**Margin**" column of the following data tables indicates the degree of Compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 and 15.247.

Test Data

Environmental Conditions

Temperature:	25.2~26.5 ℃
Relative Humidity:	49-50 %
ATM Pressure:	100.7-101.5 kPa

The testing was performed by Stone Zhang from 2021-05-24 to 2021-06-03.

Powered by adapter:

Model: Bell 5S

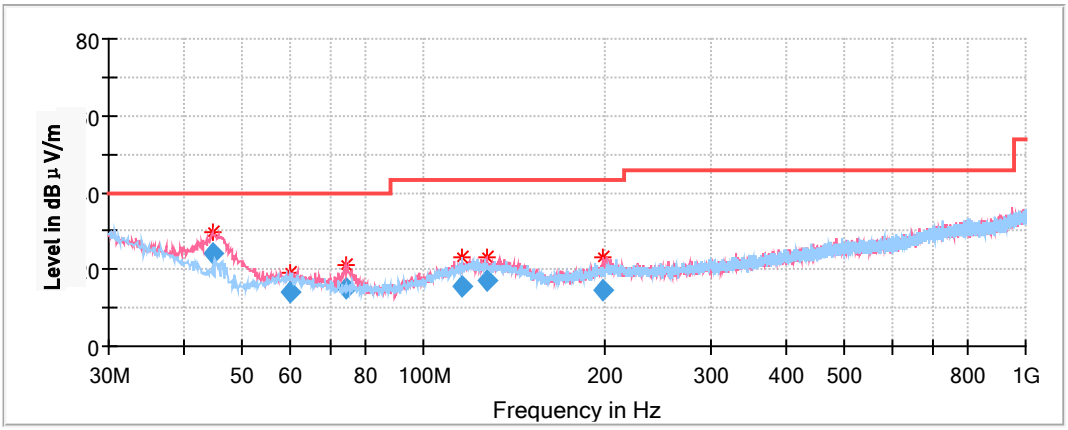
EUT operation mode: Transmitting

Spurious Emission Test:

For adapter1:

30MHz-1GHz:

Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case ***low channel of 802.11b mode in Y-axis of orientation*** *was recorded.*

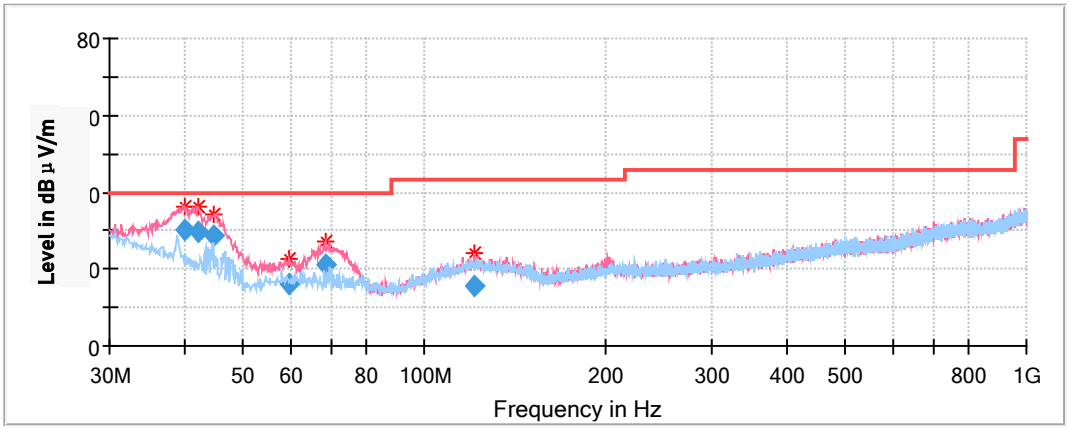


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	Quasi Peak (dBµV/m)	Height (cm)	Polar (H/V)				
44.556000	23.96	100.0	V	100.0	-14.2	40.00	16.04
60.190615	13.85	100.0	V	100.0	-14.7	40.00	26.15
74.138500	15.14	100.0	V	165.0	-17.0	40.00	24.86
115.961650	15.62	199.0	H	249.0	-11.6	43.50	27.88
127.126650	17.12	100.0	V	318.0	-11.1	43.50	26.38
199.261000	14.76	100.0	V	0.0	-12.1	43.50	28.74

For adapter2:

30MHz-1GHz:

Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case ***low channel of 802.11b mode in Y-axis of orientation*** *was recorded.*



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	Quasi Peak (dBµV/m)	Height (cm)	Polar (H/V)				
40.061850	29.97	100.0	V	186.0	-10.3	40.00	10.03
42.008750	29.53	100.0	V	124.0	-11.1	40.00	10.47
44.793600	28.64	100.0	V	108.0	-13.9	40.00	11.36
59.708450	16.05	100.0	V	141.0	-14.6	40.00	23.95
68.433350	21.15	100.0	V	80.0	-16.4	40.00	18.85
121.053250	15.48	100.0	V	158.0	-10.9	43.50	28.02

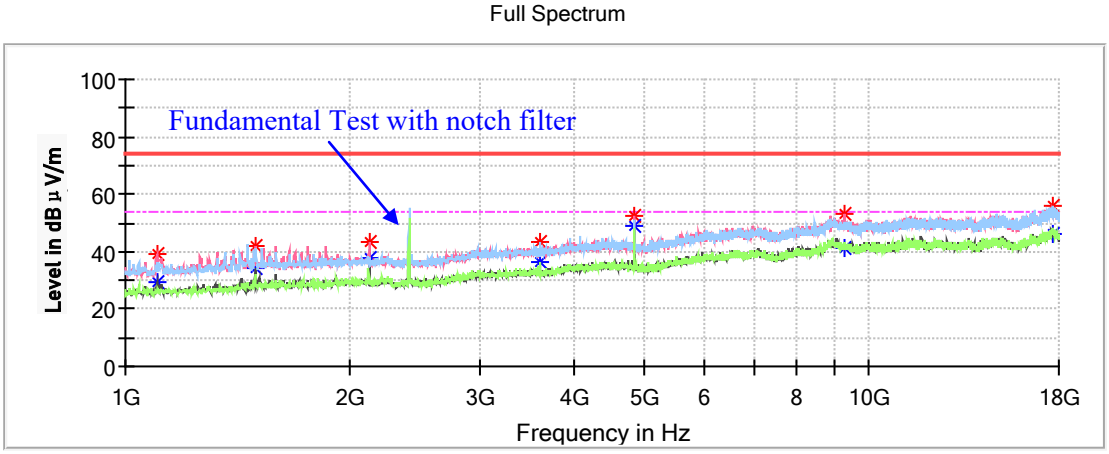
For adapter2 (worse case):

1GHz-18GHz:

802.11b Mode:
*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded)*

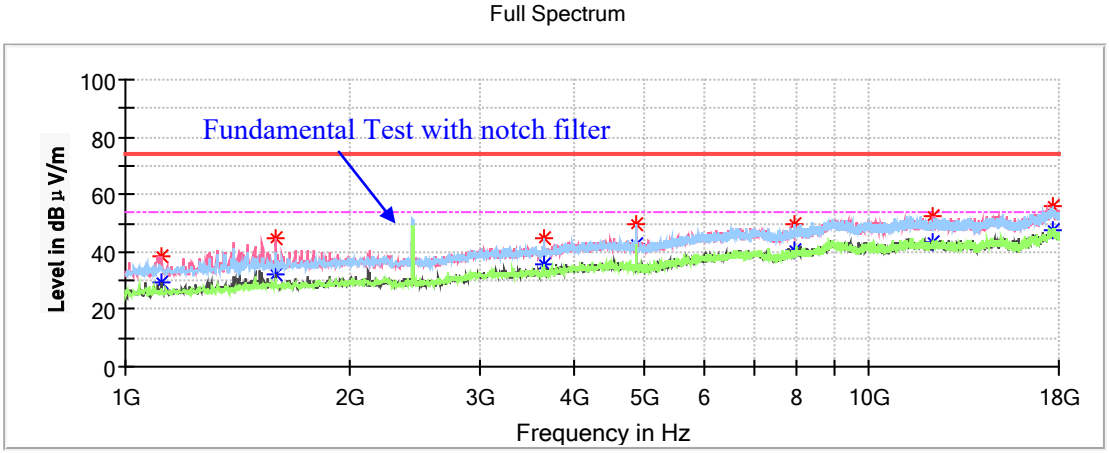
Note:
1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
   Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Low Channel: 2412MHz



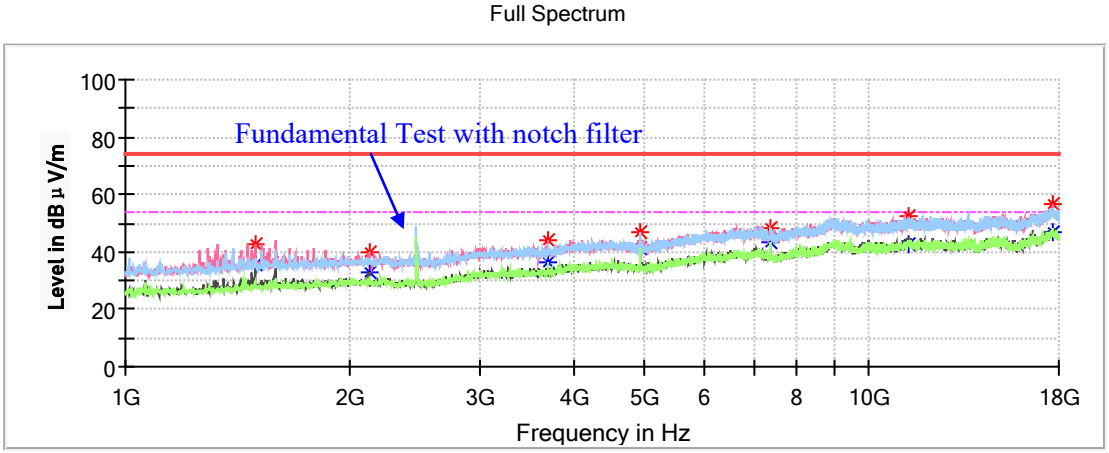
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1102.000000	---	29.21	200.0	V	0.0	-8.5	54.00	24.79
1102.000000	38.97	---	200.0	V	0.0	-8.5	74.00	35.03
1494.700000	---	34.36	200.0	V	22.0	-6.5	54.00	19.64
1494.700000	42.05	---	200.0	V	22.0	-6.5	74.00	31.95
2127.100000	---	37.66	150.0	V	78.0	-4.7	54.00	16.34
2127.100000	43.37	---	150.0	V	78.0	-4.7	74.00	30.63
3616.300000	---	36.46	200.0	V	98.0	-1.2	54.00	17.54
3616.300000	43.49	---	200.0	V	98.0	-1.2	74.00	30.51
4824.000000	---	49.08	150.0	V	37.0	0.6	54.00	4.92
4824.000000	52.48	---	150.0	V	37.0	0.6	74.00	21.52
9277.300000	---	41.05	150.0	V	299.0	9.3	54.00	12.95
9277.300000	52.99	---	150.0	V	299.0	9.3	74.00	21.01

Middle Channel: 2437MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1119.000000	38.41	---	200.0	V	4.0	-8.4	74.00	35.59
1119.000000	---	29.04	200.0	V	4.0	-8.4	54.00	24.96
1591.600000	---	32.24	150.0	V	277.0	-6.2	54.00	21.76
1591.600000	45.09	---	150.0	V	277.0	-6.2	74.00	28.91
3653.700000	---	35.54	200.0	H	244.0	-1.0	54.00	18.46
3653.700000	44.59	---	200.0	H	244.0	-1.0	74.00	29.41
4874.000000	---	42.94	150.0	H	161.0	0.5	54.00	11.06
4874.000000	49.74	---	150.0	H	161.0	0.5	74.00	24.26
7915.600000	---	40.43	150.0	H	123.0	5.9	54.00	13.57
7915.600000	49.91	---	150.0	H	123.0	5.9	74.00	24.09
12162.200000	---	43.59	150.0	V	251.0	10.2	54.00	10.41
12162.200000	52.40	---	150.0	V	251.0	10.2	74.00	21.60

High Channel: 2462MHz

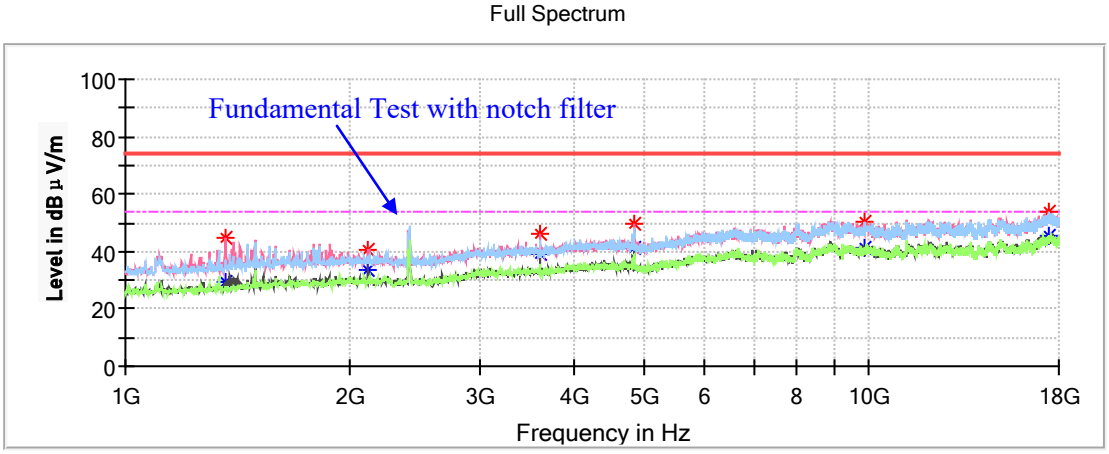


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV /m)	Average (dBµV /m)	Height (cm)	Polar (H/V)				
1494.700000	---	35.51	150.0	V	53.0	-6.5	54.00	18.49
1494.700000	42.72	---	150.0	V	53.0	-6.5	74.00	31.28
2127.100000	39.99	---	150.0	V	218.0	-4.7	74.00	34.01
2127.100000	---	32.92	150.0	V	218.0	-4.7	54.00	21.08
3692.800000	---	36.28	200.0	H	97.0	-0.9	54.00	17.72
3692.800000	43.73	---	200.0	H	97.0	-0.9	74.00	30.27
4924.000000	---	41.27	150.0	H	143.0	0.4	54.00	12.73
4924.000000	46.93	---	150.0	H	143.0	0.4	74.00	27.07
7386.000000	---	43.32	150.0	H	181.0	5.0	54.00	10.68
7386.000000	48.47	---	150.0	H	181.0	5.0	74.00	25.53
11327.500000	---	42.77	200.0	V	350.0	10.3	54.00	11.23
11327.500000	52.56	---	200.0	V	350.0	10.3	74.00	21.44

802.11g Mode:
*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded)*

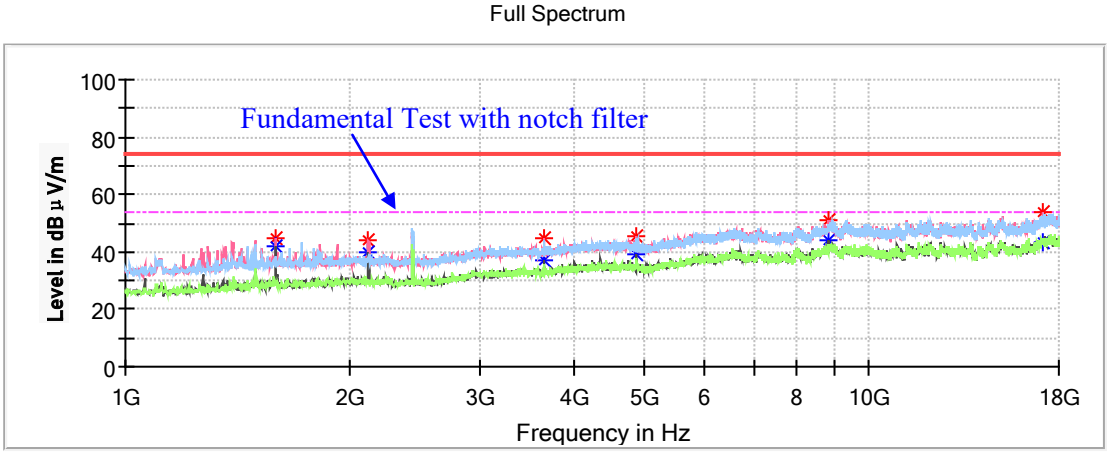
Note:
1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
   Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

Low Channel: 2412MHz



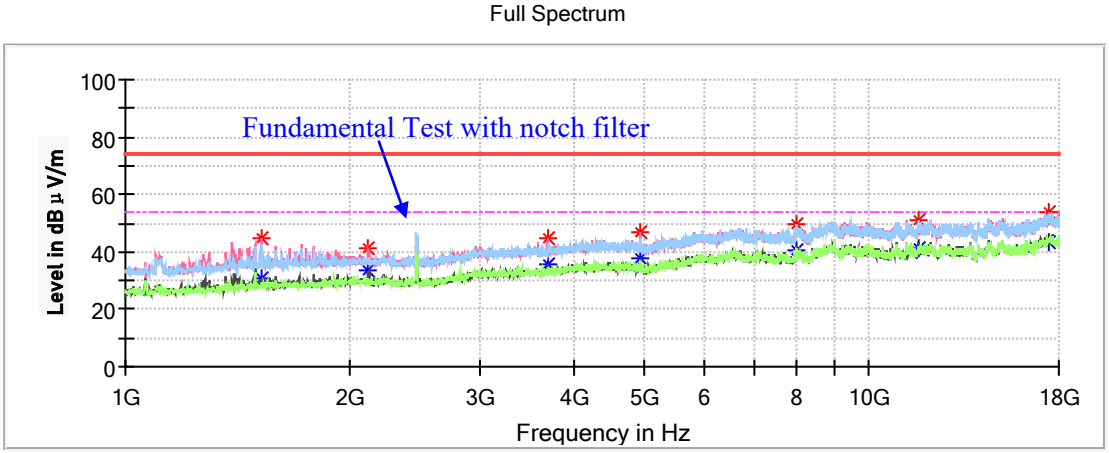
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1365.500000	---	29.47	150.0	V	282.0	-7.2	54.00	24.53
1365.500000	44.48	---	150.0	V	282.0	-7.2	74.00	29.52
2123.700000	---	33.77	150.0	V	204.0	-4.7	54.00	20.23
2123.700000	40.86	---	150.0	V	204.0	-4.7	74.00	33.14
3616.300000	---	38.82	150.0	V	256.0	-1.2	54.00	15.18
3616.300000	46.06	---	150.0	V	256.0	-1.2	74.00	27.94
4824.000000	---	41.25	150.0	V	256.0	0.6	54.00	12.75
4824.000000	49.47	---	150.0	V	256.0	0.6	74.00	24.53
9857.000000	---	41.50	150.0	H	295.0	8.8	54.00	12.50
9857.000000	50.29	---	150.0	H	295.0	8.8	74.00	23.71
17479.800000	---	45.28	200.0	H	123.0	14.4	54.00	8.72
17479.800000	53.69	---	200.0	H	123.0	14.4	74.00	20.31

Middle Channel: 2437MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1595.000000	---	41.69	200.0	V	288.0	-6.2	54.00	12.31
1595.000000	44.94	---	200.0	V	288.0	-6.2	74.00	29.06
2123.700000	---	40.04	150.0	V	77.0	-4.7	54.00	13.96
2123.700000	44.25	---	150.0	V	77.0	-4.7	74.00	29.75
3653.700000	---	37.17	150.0	V	257.0	-1.0	54.00	16.83
3653.700000	44.74	---	150.0	V	257.0	-1.0	74.00	29.26
4874.000000	45.69	---	150.0	V	257.0	0.5	74.00	28.31
4874.000000	---	39.21	150.0	V	257.0	0.5	54.00	14.79
8840.400000	50.96	---	150.0	V	65.0	8.9	74.00	23.04
8840.400000	---	43.96	150.0	V	65.0	8.9	54.00	10.04
17153.400000	---	43.44	150.0	V	128.0	13.4	54.00	10.56
17153.400000	53.55	---	150.0	V	128.0	13.4	74.00	20.45

High Channel: 2462MHz

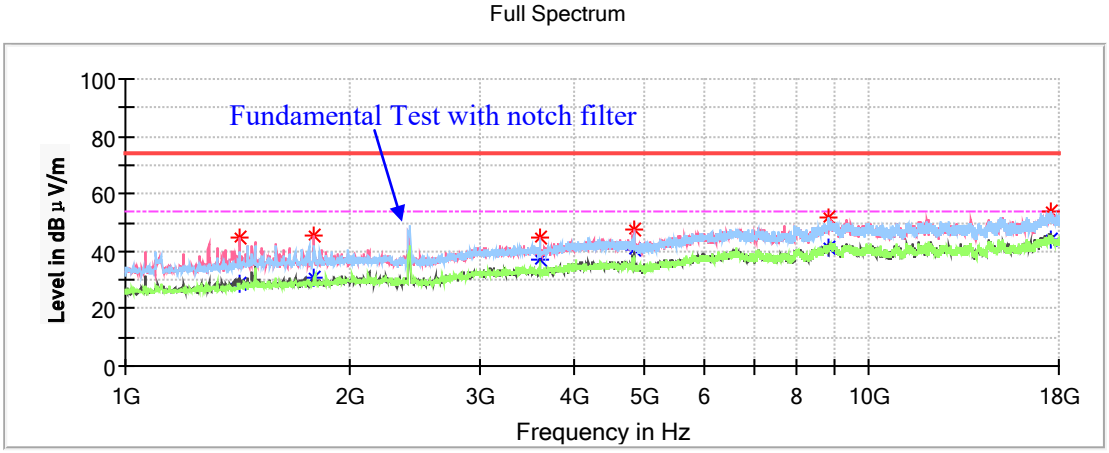


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1527.000000	---	30.85	150.0	V	282.0	-6.4	54.00	23.15
1527.000000	45.07	---	150.0	V	282.0	-6.4	74.00	28.93
2123.700000	---	33.71	150.0	V	282.0	-4.7	54.00	20.29
2123.700000	41.25	---	150.0	V	282.0	-4.7	74.00	32.75
3691.100000	45.06	---	200.0	V	295.0	-0.9	74.00	28.94
3691.100000	---	35.78	200.0	V	295.0	-0.9	54.00	18.22
4924.000000	---	37.86	200.0	V	244.0	0.4	54.00	16.14
4924.000000	46.54	---	200.0	V	244.0	0.4	74.00	27.46
8000.600000	---	40.45	150.0	H	249.0	6.1	54.00	13.55
8000.600000	49.97	---	150.0	H	249.0	6.1	74.00	24.03
11672.600000	---	41.19	200.0	V	244.0	10.4	54.00	12.81
11672.600000	51.33	---	200.0	V	244.0	10.4	74.00	22.67

802.11n-HT20 Mode:
*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded)*

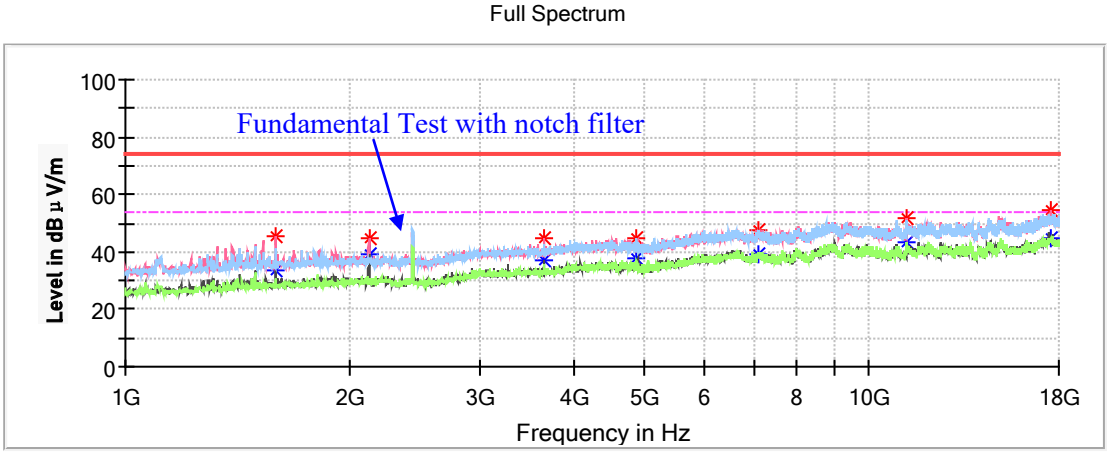
Note:
1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
   Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Low Channel: 2412MHz



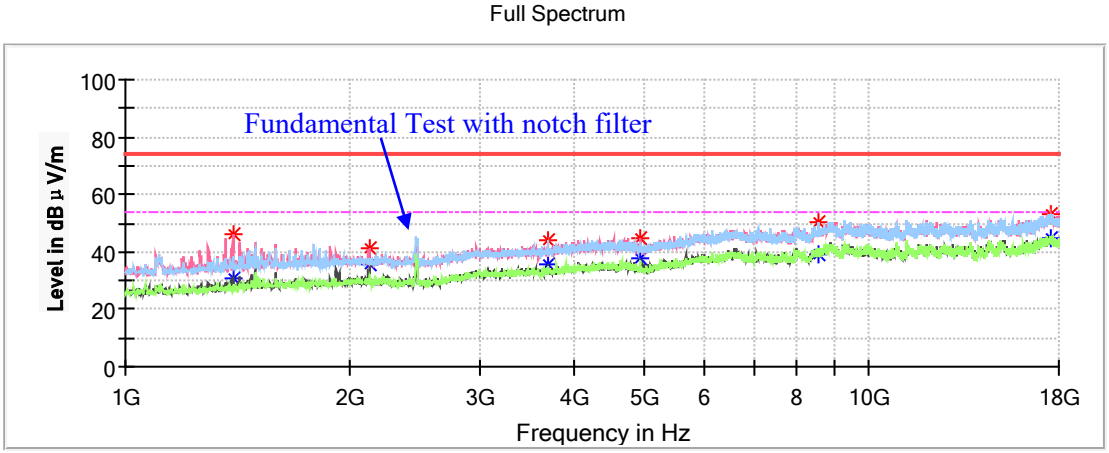
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1425.000000	---	28.49	200.0	V	289.0	-6.9	54.00	25.51
1425.000000	44.43	---	200.0	V	289.0	-6.9	74.00	29.57
1788.800000	---	30.58	150.0	V	283.0	-5.6	54.00	23.42
1788.800000	45.48	---	150.0	V	283.0	-5.6	74.00	28.52
3616.300000	---	37.24	150.0	V	38.0	-1.2	54.00	16.76
3616.300000	44.46	---	150.0	V	38.0	-1.2	74.00	29.54
4824.000000	47.82	---	150.0	V	89.0	0.6	74.00	26.18
4824.000000	---	40.45	150.0	V	89.0	0.6	54.00	13.55
8801.300000	---	41.03	200.0	V	357.0	8.7	54.00	12.97
8801.300000	51.72	---	200.0	V	357.0	8.7	74.00	22.28
17607.300000	---	44.27	200.0	H	46.0	14.2	54.00	9.73
17607.300000	54.10	---	200.0	H	46.0	14.2	74.00	19.90

Middle Channel: 2437MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1595.000000	---	33.24	200.0	V	309.0	-6.2	54.00	20.76
1595.000000	45.33	---	200.0	V	309.0	-6.2	74.00	28.67
2127.100000	44.63	---	150.0	V	292.0	-4.7	74.00	29.37
2127.100000	---	38.85	150.0	V	292.0	-4.7	54.00	15.15
3655.400000	---	36.88	150.0	V	292.0	-1.0	54.00	17.12
3655.400000	44.51	---	150.0	V	292.0	-1.0	74.00	29.49
4874.000000	44.76	---	150.0	V	0.0	0.5	74.00	29.24
4874.000000	---	37.48	150.0	V	0.0	0.5	54.00	16.52
7099.600000	---	39.39	150.0	H	200.0	5.5	54.00	14.61
7099.600000	47.78	---	150.0	H	200.0	5.5	74.00	26.22
11203.400000	52.01	---	200.0	V	0.0	10.0	74.00	21.99
11203.400000	---	43.09	200.0	V	0.0	10.0	54.00	10.91

High Channel: 2462MHz

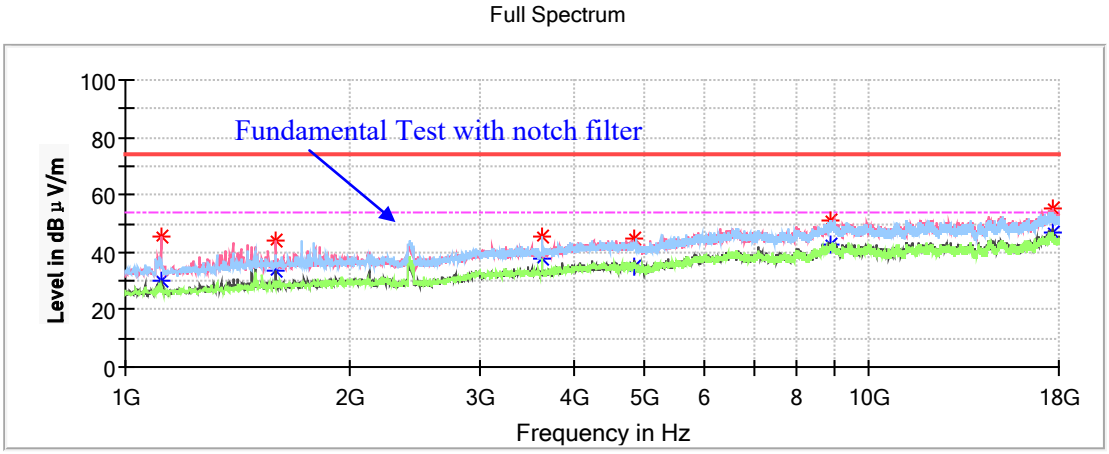


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1394.400000	---	30.49	150.0	V	306.0	-7.0	54.00	23.51
1394.400000	46.08	---	150.0	V	306.0	-7.0	74.00	27.92
2127.100000	---	35.45	200.0	V	284.0	-4.7	54.00	18.55
2127.100000	40.97	---	200.0	V	284.0	-4.7	74.00	33.03
3692.800000	---	35.44	200.0	V	271.0	-0.9	54.00	18.56
3692.800000	44.00	---	200.0	V	271.0	-0.9	74.00	30.00
4924.000000	---	37.42	200.0	V	258.0	0.4	54.00	16.58
4924.000000	44.45	---	200.0	V	258.0	0.4	74.00	29.55
8541.200000	---	39.44	200.0	V	143.0	7.6	54.00	14.56
8541.200000	50.09	---	200.0	V	143.0	7.6	74.00	23.91
17534.200000	---	44.56	200.0	H	134.0	14.4	54.00	9.44
17534.200000	53.45	---	200.0	H	134.0	14.4	74.00	20.55

802.11n-HT40 Mode:
*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded)*

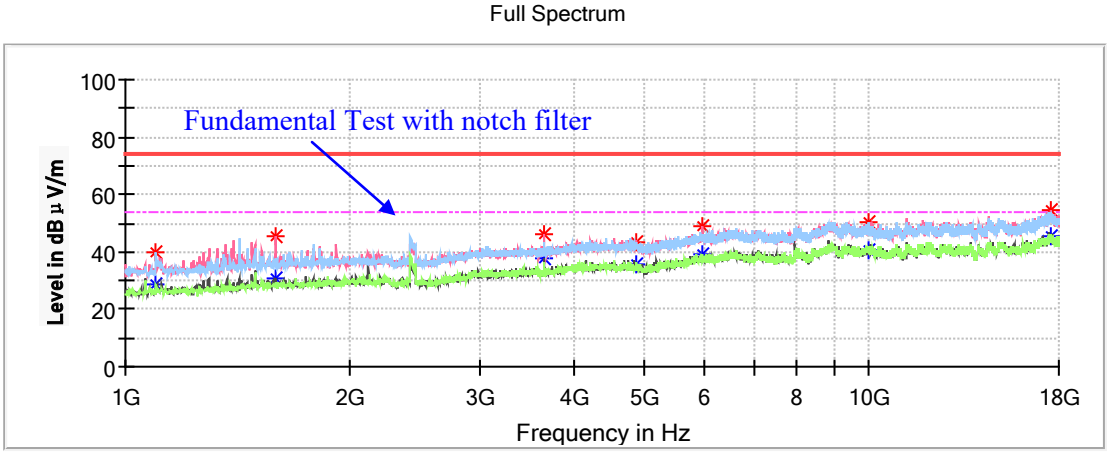
Note:
1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
   Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Low Channel: 2422MHz



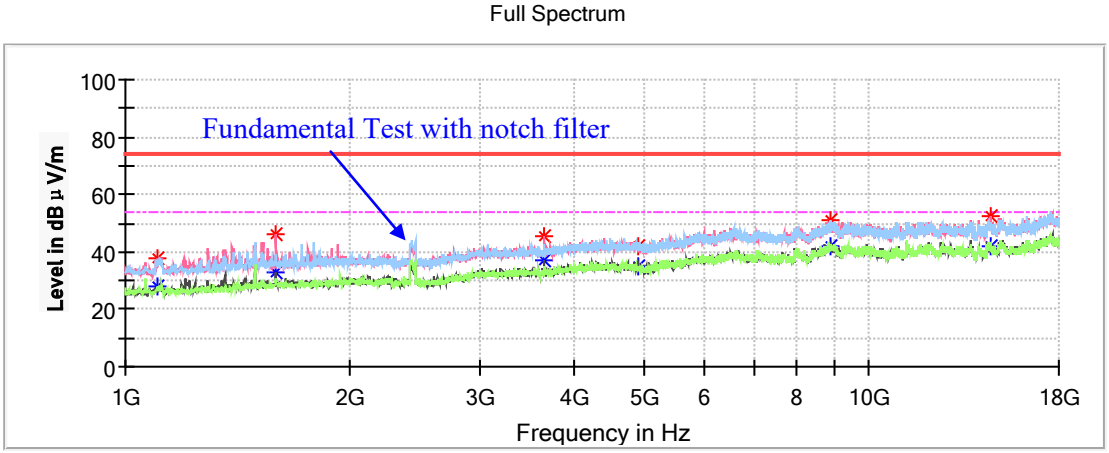
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1117.300000	45.53	---	200.0	V	15.0	-8.4	74.00	28.47
1117.300000	---	30.42	200.0	V	15.0	-8.4	54.00	23.58
1595.000000	---	33.32	150.0	V	282.0	-6.2	54.00	20.68
1595.000000	44.33	---	150.0	V	282.0	-6.2	74.00	29.67
3631.600000	---	38.01	150.0	V	32.0	-1.1	54.00	15.99
3631.600000	45.54	---	150.0	V	32.0	-1.1	74.00	28.46
4844.000000	---	35.15	150.0	H	236.0	0.5	54.00	18.85
4844.000000	44.51	---	150.0	H	236.0	0.5	74.00	29.49
8865.900000	---	43.00	150.0	H	193.0	9.0	54.00	11.00
8865.900000	51.06	---	150.0	H	193.0	9.0	74.00	22.94
17675.300000	---	46.60	150.0	V	242.0	14.0	54.00	7.40
17675.300000	55.55	---	150.0	V	242.0	14.0	74.00	18.45

Middle Channel: 2437MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1100.300000	39.62	---	150.0	H	0.0	-8.5	74.00	34.38
1100.300000	---	28.75	150.0	H	0.0	-8.5	54.00	25.25
1593.300000	---	30.87	200.0	V	36.0	-6.2	54.00	23.13
1593.300000	45.18	---	200.0	V	36.0	-6.2	74.00	28.82
3655.400000	---	37.84	150.0	V	255.0	-1.0	54.00	16.16
3655.400000	46.07	---	150.0	V	255.0	-1.0	74.00	27.93
4874.000000	---	35.74	200.0	H	135.0	0.5	54.00	18.26
4874.000000	43.35	---	200.0	H	135.0	0.5	74.00	30.65
5970.800000	---	39.39	150.0	H	104.0	4.1	54.00	14.61
5970.800000	49.02	---	150.0	H	104.0	4.1	74.00	24.98
9994.700000	---	40.81	200.0	H	3.0	8.7	54.00	13.19
9994.700000	50.03	---	200.0	H	3.0	8.7	74.00	23.97

High Channel: 2452MHz



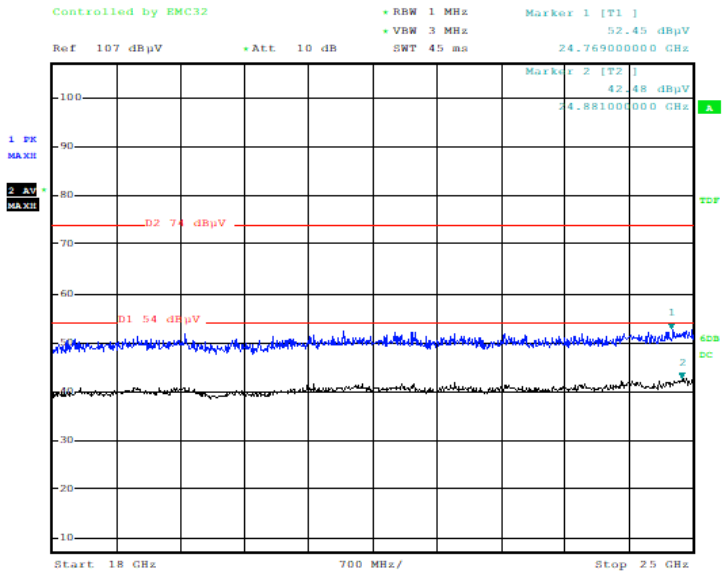
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1105.400000	---	27.78	150.0	H	356.0	-8.5	54.00	26.22
1105.400000	37.74	---	150.0	H	356.0	-8.5	74.00	36.26
1595.000000	46.23	---	200.0	V	276.0	-6.2	74.00	27.77
1595.000000	---	32.62	200.0	V	276.0	-6.2	54.00	21.38
3655.400000	---	37.16	150.0	V	244.0	-1.0	54.00	16.84
3655.400000	45.59	---	150.0	V	244.0	-1.0	74.00	28.41
4904.000000	---	35.09	150.0	H	275.0	0.4	54.00	18.91
4904.000000	42.14	---	150.0	H	275.0	0.4	74.00	31.86
8882.900000	---	41.79	200.0	V	226.0	9.0	54.00	12.21
8882.900000	51.02	---	200.0	V	226.0	9.0	74.00	22.98
14545.600000	---	41.79	150.0	V	283.0	10.9	54.00	12.21
14545.600000	52.51	---	150.0	V	283.0	10.9	74.00	21.49

For Adapter-2(worst case)

18GHz-25GHz:

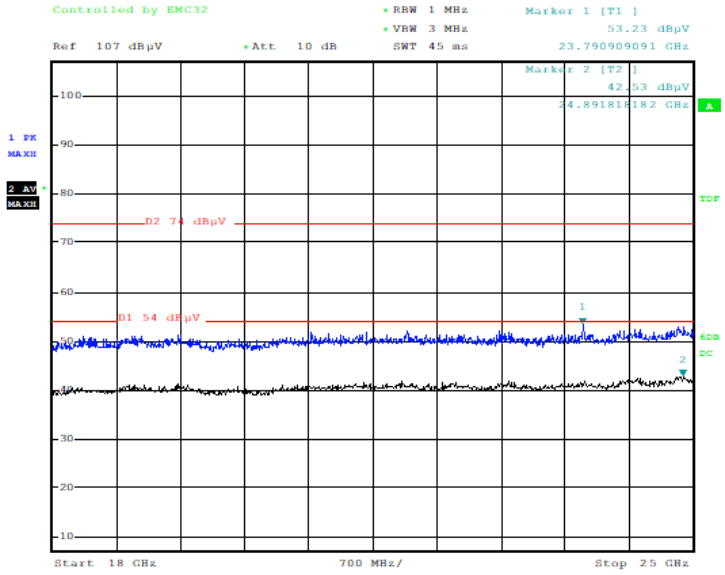
Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case ***low channel of 802.11b mode in Y-axis of orientation*** *was recorded.*

Vertical



Date: 24.MAY.2021 05:18:41

Horizontal



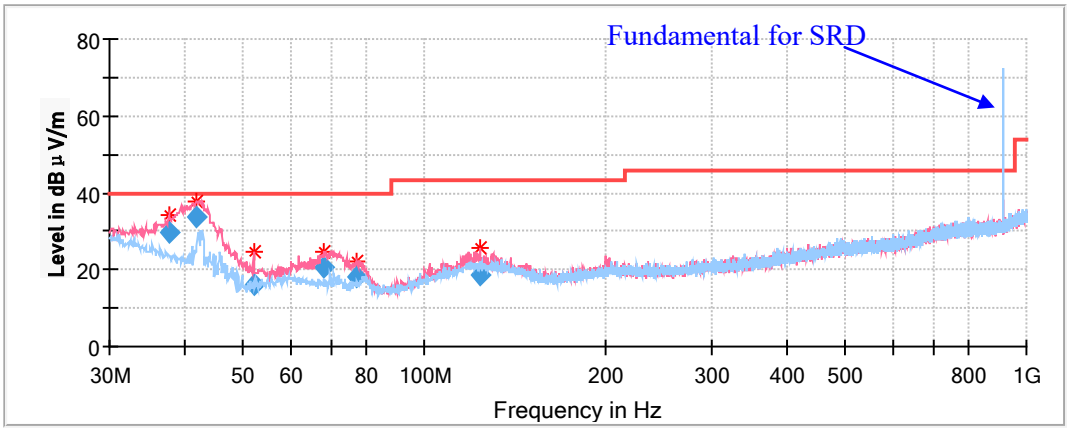
Date: 24.MAY.2021 05:26:07

Transmitting simultaneously test:

For adapter1:

30MHz-1GHz

***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*

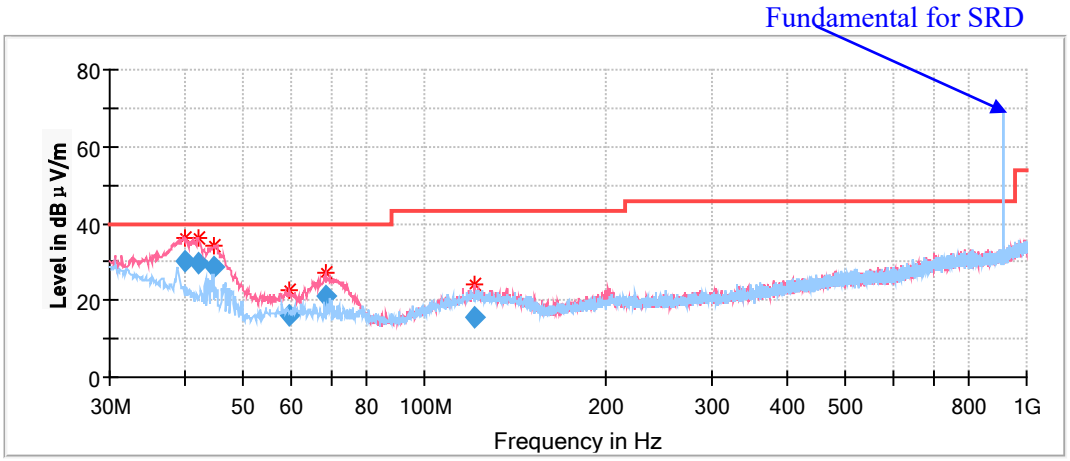


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
37.638750	30.11	100.0	V	63.0	-8.8	40.00	9.89
41.761250	34.98	100.0	V	96.0	-11.6	40.00	5.02
52.067500	17.84	100.0	V	117.0	-16.7	40.00	22.16
68.315000	20.70	100.0	V	0.0	-16.4	40.00	19.30
77.408750	18.01	100.0	V	358.0	-17.1	40.00	21.99
123.605000	18.51	100.0	V	199.0	-11.0	43.50	24.99

For adapter2:

30MHz-1GHz

***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*

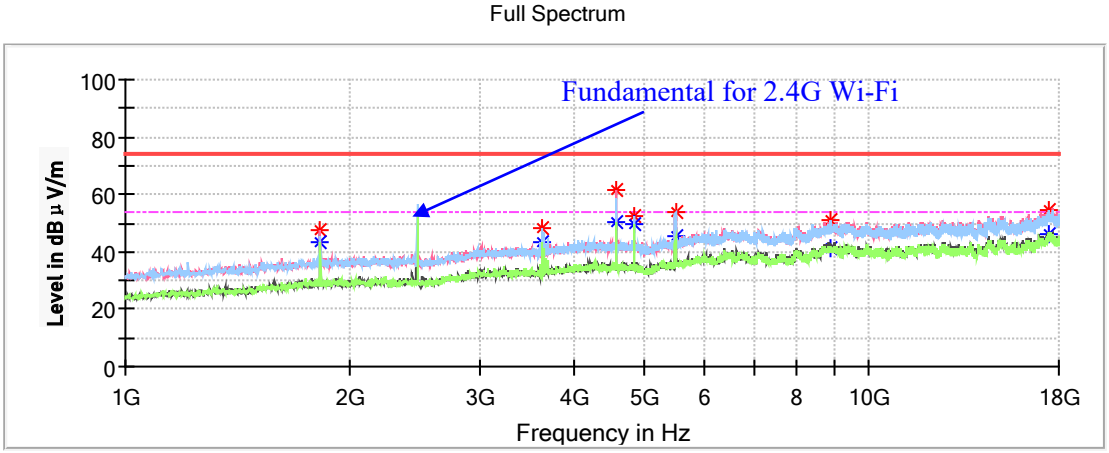


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
40.061850	29.97	100.0	V	186.0	-10.3	40.00	10.03
42.008750	29.53	100.0	V	124.0	-11.1	40.00	10.47
44.793600	28.64	100.0	V	108.0	-13.9	40.00	11.36
59.708450	16.05	100.0	V	141.0	-14.6	40.00	23.95
68.433350	21.15	100.0	V	80.0	-16.4	40.00	18.85
121.053250	15.48	100.0	V	158.0	-10.9	43.50	28.02

For adapter2 (worse case):

1GHz-18GHz:

***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1829.600000	---	43.18	150.0	H	293.0	-5.4	54.00	10.82
1829.600000	47.24	---	150.0	H	293.0	-5.4	74.00	26.76
3631.600000	48.39	---	150.0	H	201.0	-1.1	74.00	25.61
3631.600000	---	43.57	150.0	H	201.0	-1.1	54.00	10.43
4573.400000	---	50.58	200.0	V	14.0	1.1	54.00	3.42
4573.400000	61.57	---	200.0	V	14.0	1.1	74.00	12.43
4823.300000	---	49.45	150.0	H	253.0	0.6	54.00	4.55
4823.300000	52.48	---	150.0	H	253.0	0.6	74.00	21.52
5489.700000	---	45.11	150.0	H	320.0	2.6	54.00	8.89
5489.700000	53.65	---	150.0	H	320.0	2.6	74.00	20.35
8857.400000	---	41.01	150.0	V	305.0	8.9	54.00	12.99
8857.400000	50.79	---	150.0	V	305.0	8.9	74.00	23.21
17490.000000	---	46.41	150.0	V	305.0	14.4	54.00	7.59
17490.000000	54.60	---	150.0	V	305.0	14.4	74.00	19.40

Restricted Bands Emissions Test:

Note:
1. This test was performed with the 10dB attenuator.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
   Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

802.11b Mode: *(Pre-scan in the X, Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	60.72	---	200.0	H	170.0	3.8	74.00	13.28
2390.00	---	49.74	200.0	H	170.0	3.8	54.00	4.26
High Channel: 2462MHz								
2483.50	52.81	---	150.0	H	0.0	4.1	74.00	21.19
2483.50	---	49.08	150.0	H	0.0	4.1	54.00	4.92

802.11g Mode: *(Pre-scan in the X, Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	49.86	---	200.0	H	208.0	3.8	74.00	24.14
2390.00	---	46.77	200.0	H	208.0	3.8	54.00	7.23
High Channel: 2462MHz								
2483.50	53.85	---	150.0	H	49.0	4.1	74.00	20.15
2483.50	---	48.49	150.0	H	49.0	4.1	54.00	5.51

802.11n-HT20 Mode: *(Pre-scan in the X,Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	50.35	---	200.0	H	272.0	3.8	74.00	23.65
2390.00	---	47.69	200.0	H	272.0	3.8	54.00	6.31
High Channel: 2462MHz								
2483.50	60.75	---	150.0	H	200.0	4.1	74.00	13.25
2483.50	---	52.34	150.0	H	200.0	4.1	54.00	1.66

802.11n-HT40 Mode: *(Pre-scan in the X,Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2422MHz								
2390.00	58.88	---	200.0	H	183.0	3.8	74.00	15.12
2390.00	---	51.15	200.0	H	183.0	3.8	54.00	2.85
High Channel: 2452MHz								
2483.50	58.98	---	150.0	H	194.0	4.1	74.00	15.02
2483.50	---	52.59	150.0	H	194.0	4.1	54.00	1.41

Model: Bell 9S

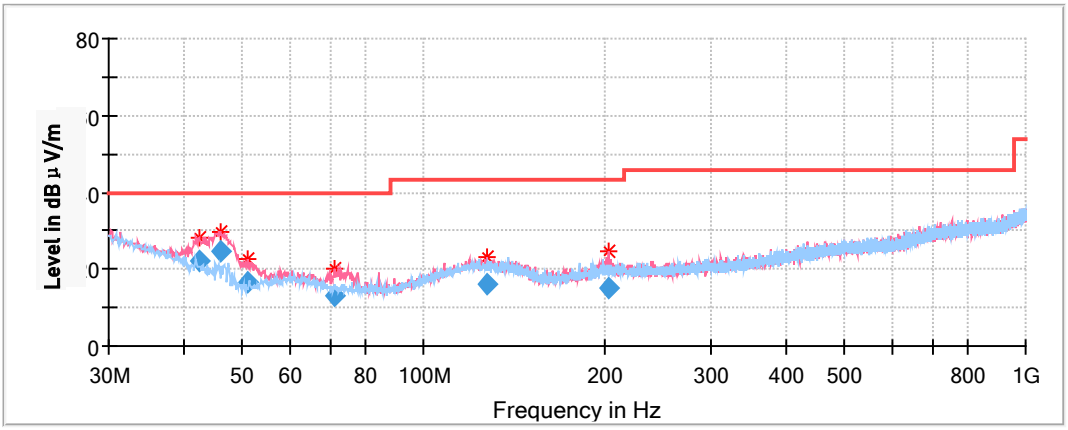
EUT operation mode: Transmitting

Spurious Emission Test:

For adapter1:

30MHz-1GHz:

*Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case **low channel of 802.11b mode in Y-axis of orientation** was recorded.*

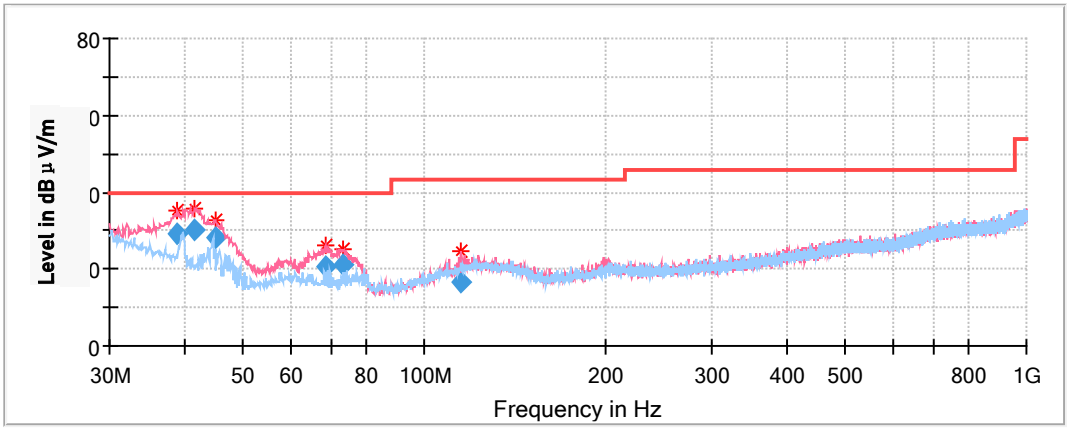


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	Quasi Peak (dBµV/m)	Height (cm)	Polar (H/V)				
42.366100	22.23	100.0	V	158.0	-12.7	40.00	17.77
45.885550	24.89	100.0	V	115.0	-14.3	40.00	15.11
51.093300	16.77	100.0	V	346.0	-17.0	40.00	23.23
71.108150	13.01	100.0	V	136.0	-16.9	40.00	26.99
127.608950	16.20	200.0	V	68.0	-11.1	43.50	27.30
202.667100	15.29	100.0	V	0.0	-12.0	43.50	28.21

For adapter2:

30MHz-1GHz:

Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case ***low channel of 802.11b mode in Y-axis of orientation*** *was recorded.*



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	Quasi Peak (dBµV/m)	Height (cm)	Polar (H/V)				
38.978000	29.33	100.0	V	290.0	-10.5	40.00	10.67
41.514645	30.15	100.0	V	179.0	-11.2	40.00	9.85
44.912050	28.07	100.0	V	158.0	-13.2	40.00	11.93
68.435450	20.84	100.0	V	23.0	-16.5	40.00	19.16
73.280000	21.00	100.0	V	213.0	-16.9	40.00	19.00
115.368200	16.46	100.0	V	147.0	-11.6	43.50	27.04

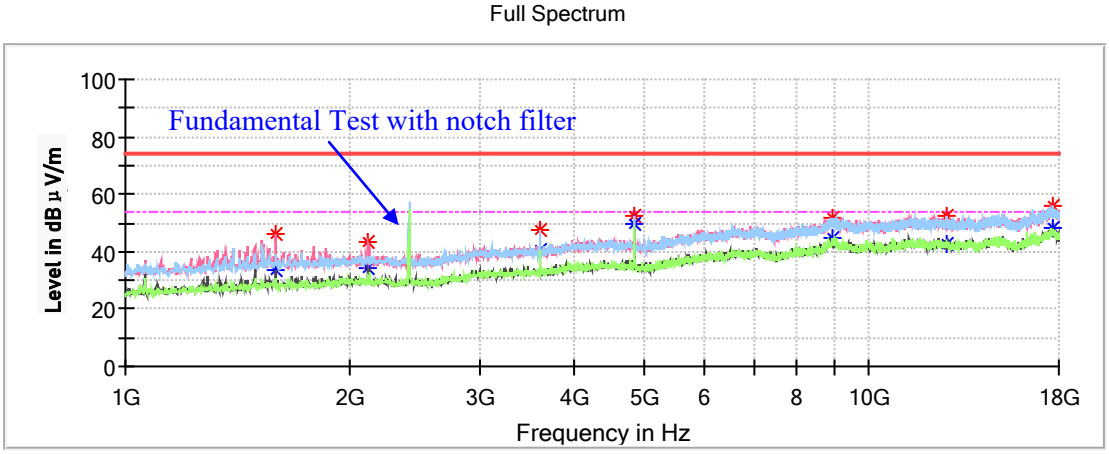
For adapter2 (worse case):

1GHz-18GHz:

802.11b Mode:
*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded)*

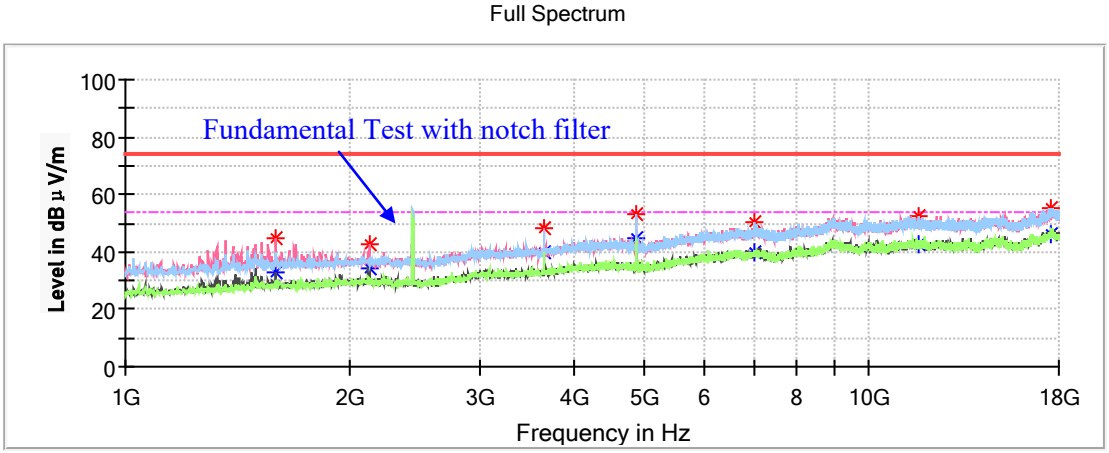
Note:
1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBµV/m) = Corrected Factor (dB/m) + Reading (dBµV)
   Margin (dB) = Limit (dBµV/m) – Corrected Amplitude (dBµV/m)

Low Channel: 2412MHz



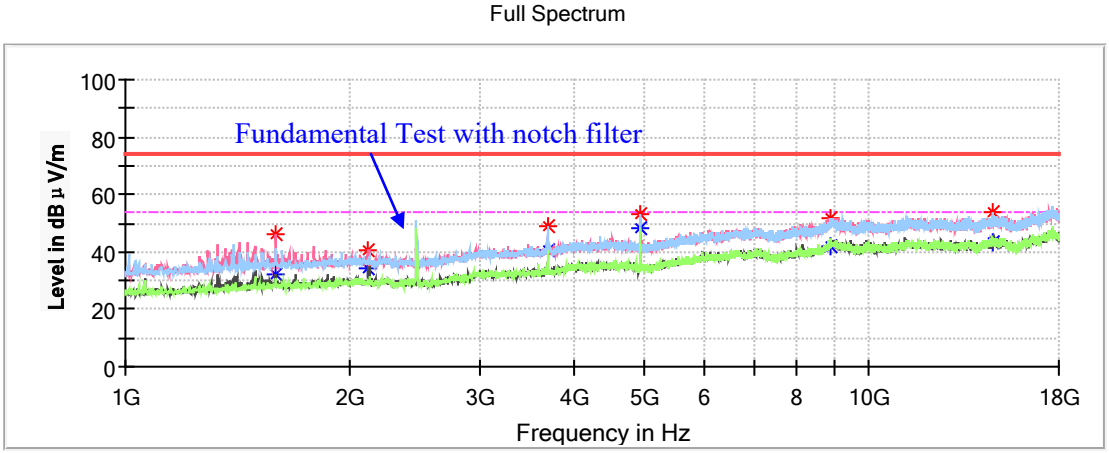
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1595.000000	45.99	---	150.0	V	270.0	-6.2	74.00	28.01
1595.000000	---	33.78	150.0	V	270.0	-6.2	54.00	20.22
2123.700000	---	34.42	200.0	V	282.0	-4.7	54.00	19.58
2123.700000	43.41	---	200.0	V	282.0	-4.7	74.00	30.59
3616.300000	---	40.23	150.0	H	284.0	-1.2	54.00	13.77
3616.300000	47.63	---	150.0	H	284.0	-1.2	74.00	26.37
4824.000000	---	49.58	200.0	V	230.0	0.6	54.00	4.42
4824.000000	52.49	---	200.0	V	230.0	0.6	74.00	21.51
8947.500000	---	44.80	200.0	H	263.0	9.3	54.00	9.20
8947.500000	52.10	---	200.0	H	263.0	9.3	74.00	21.90
12679.000000	---	42.63	150.0	H	0.0	10.3	54.00	11.37
12679.000000	52.79	---	150.0	H	0.0	10.3	74.00	21.21

Middle Channel: 2437MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1593.300000	44.97	---	200.0	V	283.0	-6.2	74.00	29.03
1593.300000	---	33.08	200.0	V	283.0	-6.2	54.00	20.92
2127.100000	---	34.20	200.0	V	39.0	-4.7	54.00	19.80
2127.100000	42.40	---	200.0	V	39.0	-4.7	74.00	31.60
3653.700000	---	39.75	150.0	H	278.0	-1.0	54.00	14.25
3653.700000	48.03	---	150.0	H	278.0	-1.0	74.00	25.97
4874.000000	52.83	---	150.0	H	148.0	0.5	74.00	21.17
4874.000000	---	45.05	150.0	H	148.0	0.5	54.00	8.95
7016.300000	---	39.97	150.0	H	0.0	5.7	54.00	14.03
7016.300000	50.06	---	150.0	H	0.0	5.7	74.00	23.94
11665.800000	---	42.58	200.0	V	26.0	10.4	54.00	11.42
11665.800000	52.71	---	200.0	V	26.0	10.4	74.00	21.29

High Channel: 2462MHz

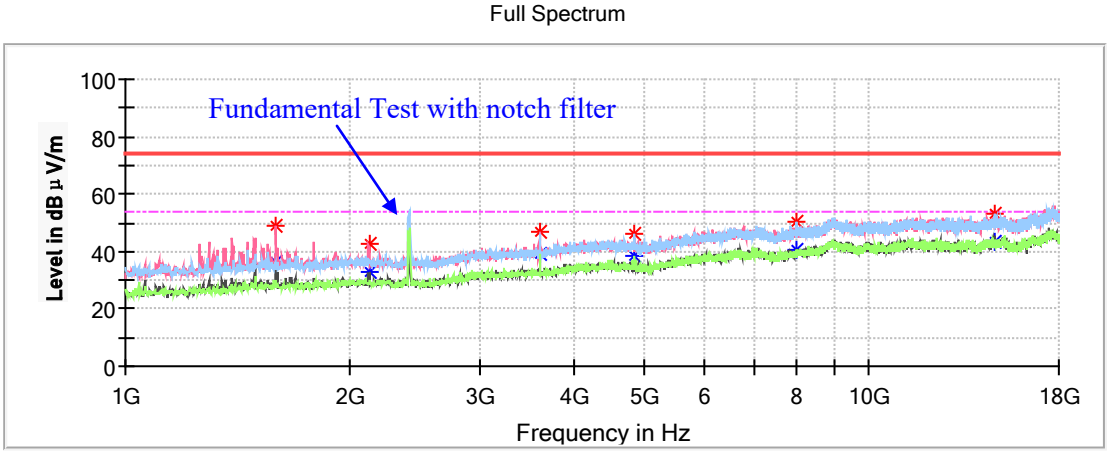


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV /m)	Average (dBµV /m)	Height (cm)	Polar (H/V)				
1591.600000	---	32.33	200.0	V	256.0	-6.2	54.00	21.67
1591.600000	45.93	---	200.0	V	256.0	-6.2	74.00	28.07
2123.700000	---	33.94	200.0	V	38.0	-4.7	54.00	20.06
2123.700000	40.47	---	200.0	V	38.0	-4.7	74.00	33.53
3692.800000	---	40.55	150.0	H	279.0	-0.9	54.00	13.45
3692.800000	48.85	---	150.0	H	279.0	-0.9	74.00	25.15
4924.000000	---	48.32	150.0	H	149.0	0.4	54.00	5.68
4924.000000	53.05	---	150.0	H	149.0	0.4	74.00	20.95
8872.700000	---	42.07	200.0	H	2.0	9.0	54.00	11.93
8872.700000	51.70	---	200.0	H	2.0	9.0	74.00	22.30
14693.500000	---	43.37	150.0	H	252.0	11.2	54.00	10.63
14693.500000	53.95	---	150.0	H	252.0	11.2	74.00	20.05

802.11g Mode:
*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded)*

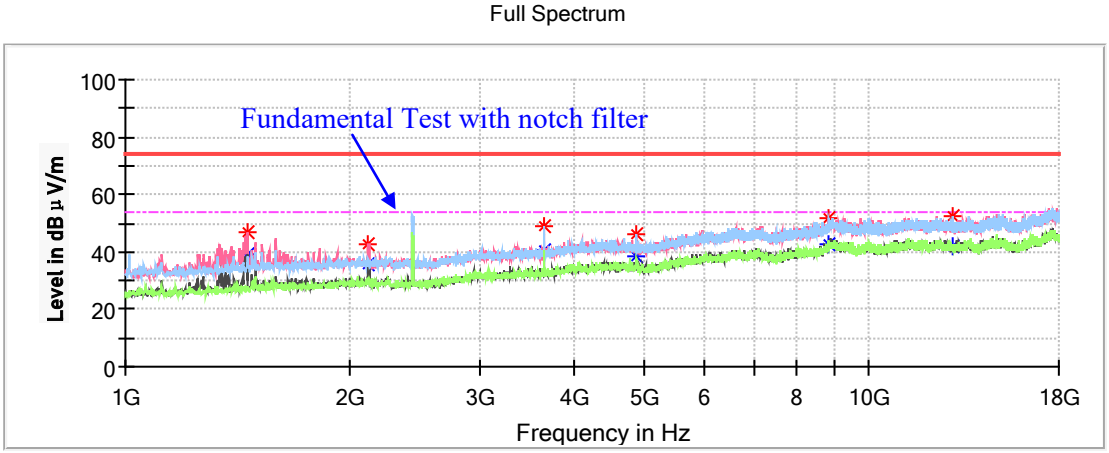
Note:
1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
   Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Low Channel: 2412MHz



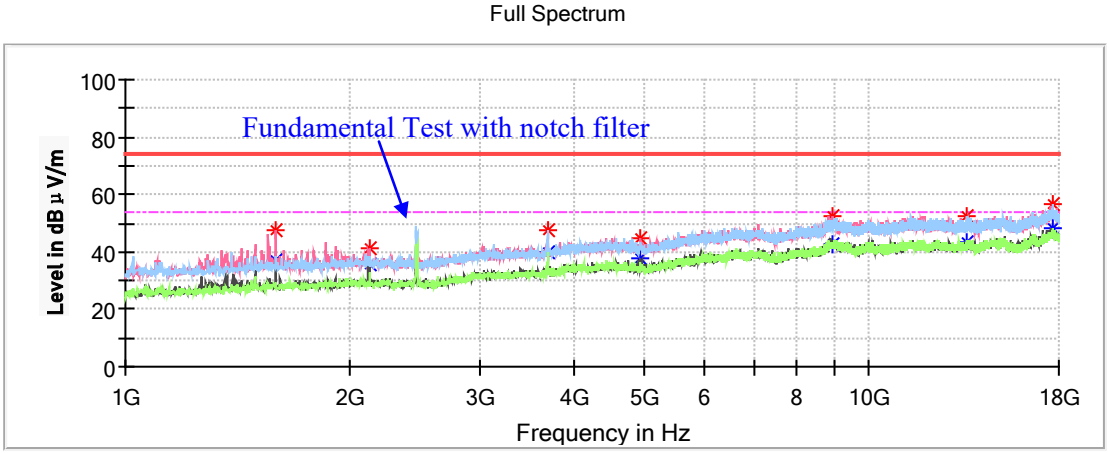
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1595.000000	---	36.07	200.0	V	282.0	-6.2	54.00	17.93
1595.000000	48.63	---	200.0	V	282.0	-6.2	74.00	25.37
2127.100000	42.36	---	150.0	V	282.0	-4.7	74.00	31.64
2127.100000	---	33.21	150.0	V	282.0	-4.7	54.00	20.79
3616.300000	---	39.31	150.0	V	282.0	-1.2	54.00	14.69
3616.300000	47.06	---	150.0	V	282.0	-1.2	74.00	26.94
4824.000000	---	38.18	150.0	H	153.0	0.6	54.00	15.82
4824.000000	46.44	---	150.0	H	153.0	0.6	74.00	27.56
7992.100000	---	40.87	150.0	V	307.0	6.0	54.00	13.13
7992.100000	50.40	---	150.0	V	307.0	6.0	74.00	23.60
14732.600000	---	43.17	200.0	H	6.0	11.2	54.00	10.83
14732.600000	53.39	---	200.0	H	6.0	11.2	74.00	20.61

Middle Channel: 2437MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1455.600000	---	39.04	150.0	V	262.0	-6.7	54.00	14.96
1455.600000	46.64	---	150.0	V	262.0	-6.7	74.00	27.36
2123.700000	---	35.54	200.0	V	287.0	-4.7	54.00	18.46
2123.700000	42.67	---	200.0	V	287.0	-4.7	74.00	31.33
3653.700000	---	40.69	200.0	H	283.0	-1.0	54.00	13.31
3653.700000	49.02	---	200.0	H	283.0	-1.0	74.00	24.98
4874.000000	---	38.41	200.0	V	224.0	0.5	54.00	15.59
4874.000000	46.31	---	200.0	V	224.0	0.5	74.00	27.69
8847.200000	---	43.00	150.0	H	0.0	8.9	54.00	11.00
8847.200000	51.64	---	150.0	H	0.0	8.9	74.00	22.36
12962.900000	---	41.90	200.0	H	10.0	9.8	54.00	12.10
12962.900000	52.45	---	200.0	H	10.0	9.8	74.00	21.55

High Channel: 2462MHz

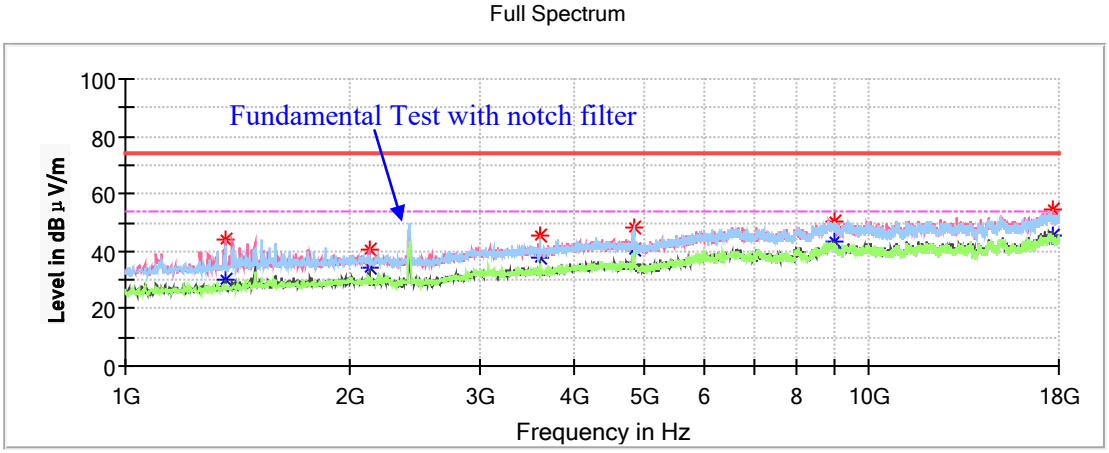


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1593.300000	---	37.17	150.0	V	296.0	-6.2	54.00	16.83
1593.300000	47.44	---	150.0	V	296.0	-6.2	74.00	26.56
2127.100000	---	35.78	200.0	V	284.0	-4.7	54.00	18.22
2127.100000	41.55	---	200.0	V	284.0	-4.7	74.00	32.45
3692.800000	47.42	---	150.0	H	279.0	-0.9	74.00	26.58
3692.800000	---	40.01	150.0	H	279.0	-0.9	54.00	13.99
4924.0000000	45.00	---	200.0	V	258.0	0.3	74.00	29.00
4924.000000	---	37.89	200.0	V	258.0	0.3	54.00	16.11
8956.000000	---	42.72	150.0	H	253.0	9.3	54.00	11.28
8956.000000	52.64	---	150.0	H	253.0	9.3	74.00	21.36
13539.200000	---	43.40	200.0	V	271.0	10.1	54.00	10.60
13539.200000	52.17	---	200.0	V	271.0	10.1	74.00	21.83

802.11n-HT20 Mode:
*(Pre-scan in the X,Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded)*

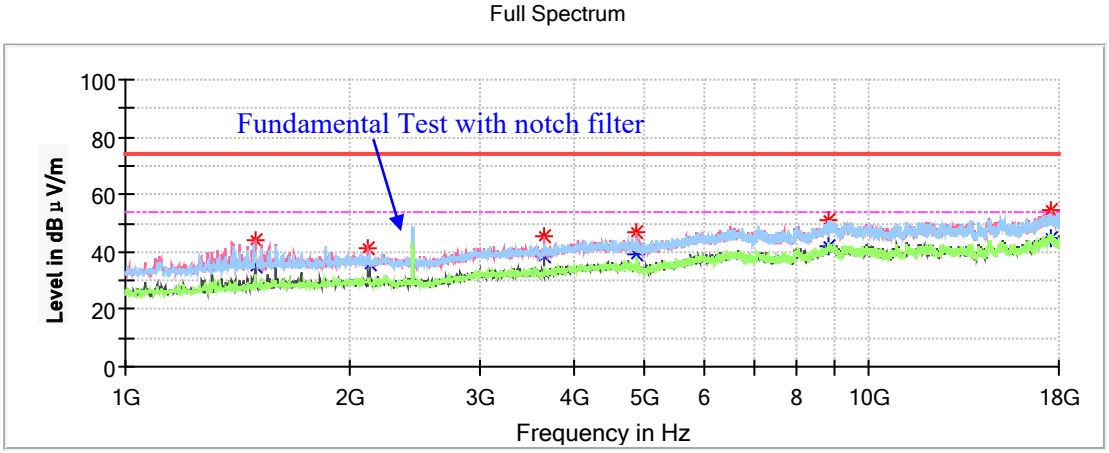
Note:
1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
   Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Low Channel: 2412MHz



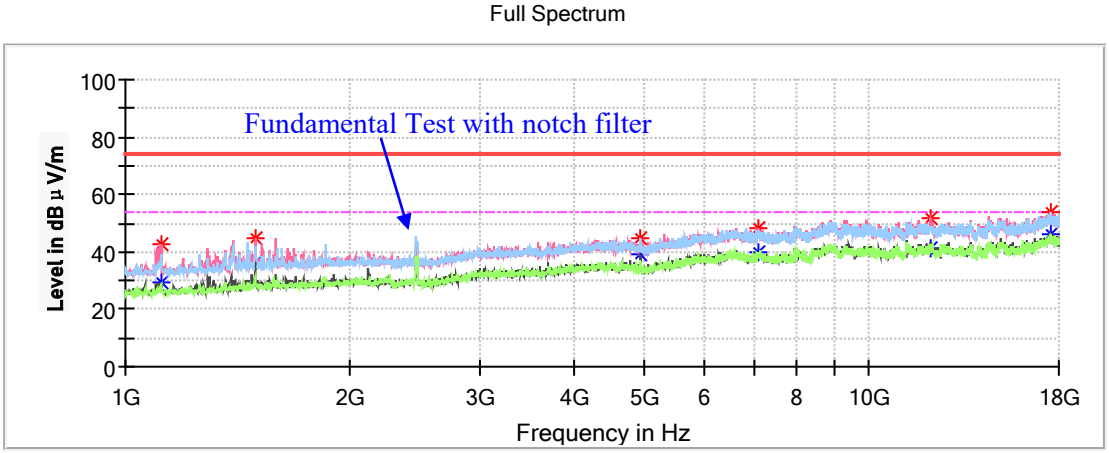
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1360.400000	44.10	---	150.0	V	290.0	-7.2	74.00	29.90
1360.400000	---	30.39	150.0	V	290.0	-7.2	54.00	23.61
2127.100000	40.59	---	150.0	V	277.0	-4.7	74.00	33.41
2127.100000	---	34.05	150.0	V	277.0	-4.7	54.00	19.95
3616.300000	45.49	---	200.0	V	191.0	-1.2	74.00	28.51
3616.300000	---	37.91	200.0	V	191.0	-1.2	54.00	16.09
4824.000000	47.91	---	150.0	H	297.0	0.6	74.00	26.09
4824.000000	---	40.72	150.0	H	297.0	0.6	54.00	13.28
8971.300000	50.55	---	200.0	H	238.0	9.4	74.00	23.45
8971.300000	---	43.22	200.0	H	238.0	9.4	54.00	10.78
17651.500000	54.79	---	150.0	V	15.0	14.1	74.00	19.21
17651.500000	---	45.68	150.0	V	15.0	14.1	54.00	8.32

Middle Channel: 2437MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1494.700000	---	34.77	150.0	V	305.0	-6.5	54.00	19.23
1494.700000	44.00	---	150.0	V	305.0	-6.5	74.00	30.00
2125.700000	41.42	---	150.0	V	305.0	-4.7	74.00	32.58
2125.700000	---	35.63	150.0	V	305.0	-4.7	54.00	18.37
3653.700000	---	38.28	150.0	V	318.0	-1.0	54.00	15.72
3653.700000	45.58	---	150.0	V	318.0	-1.0	74.00	28.42
4874.000000	---	39.19	150.0	V	229.0	0.5	54.00	14.81
4874.000000	46.89	---	150.0	V	229.0	0.5	74.00	27.11
8801.300000	---	41.71	150.0	V	161.0	8.7	54.00	12.29
8801.300000	50.87	---	150.0	V	161.0	8.7	74.00	23.13
17563.100000	---	44.66	200.0	V	38.0	14.3	54.00	9.34
17563.100000	54.37	---	200.0	V	38.0	14.3	74.00	19.63

High Channel: 2462MHz

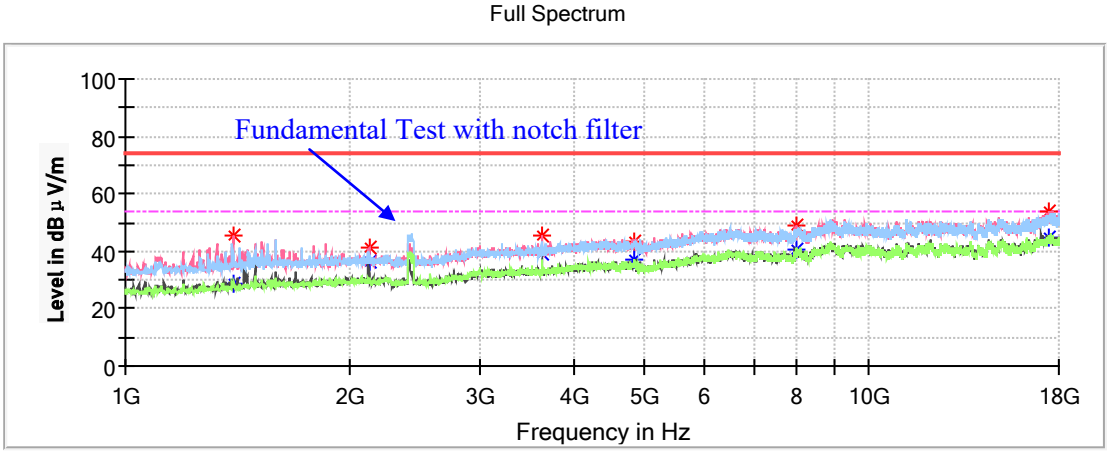


Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1117.300000	42.52	---	150.0	V	37.0	-8.4	74.00	31.48
1117.300000	---	29.03	150.0	V	37.0	-8.4	54.00	24.97
1494.700000	44.41	---	150.0	V	257.0	-6.5	74.00	29.59
1494.700000	---	36.20	150.0	V	257.0	-6.5	54.00	17.80
4924.000000	---	38.95	150.0	V	194.0	0.4	54.00	15.05
4924.000000	44.96	---	150.0	V	194.0	0.4	74.00	29.04
7080.900000	---	40.04	200.0	V	231.0	5.6	54.00	13.96
7080.900000	48.37	---	200.0	V	231.0	5.6	74.00	25.63
12138.400000	---	41.47	150.0	V	117.0	10.2	54.00	12.53
12138.400000	51.59	---	150.0	V	117.0	10.2	74.00	22.41
17564.800000	---	46.05	200.0	H	160.0	14.3	54.00	7.95
17564.800000	54.10	---	200.0	H	160.0	14.3	74.00	19.90

802.11n-HT40 Mode:
*(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded)*

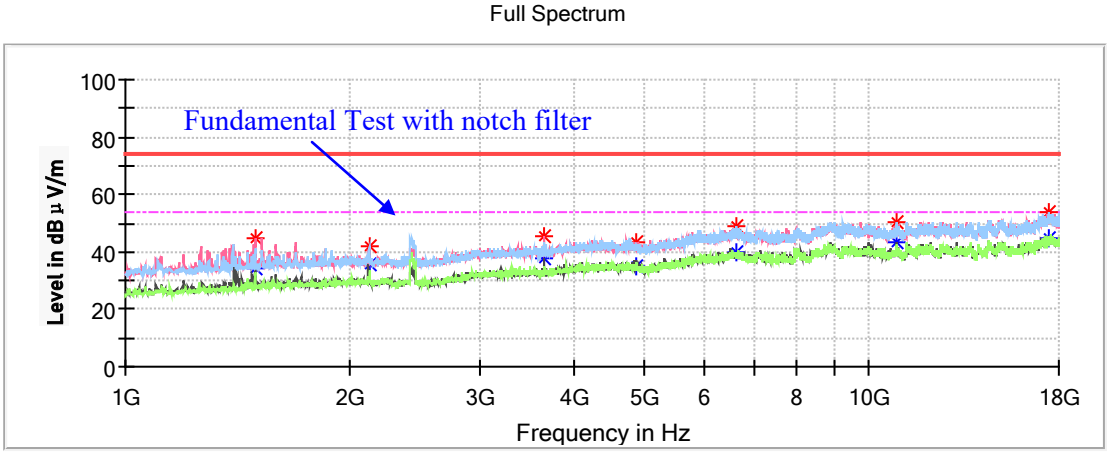
Note:
1. This test was performed with the 2.4-2.5GHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
   Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

Low Channel: 2422MHz



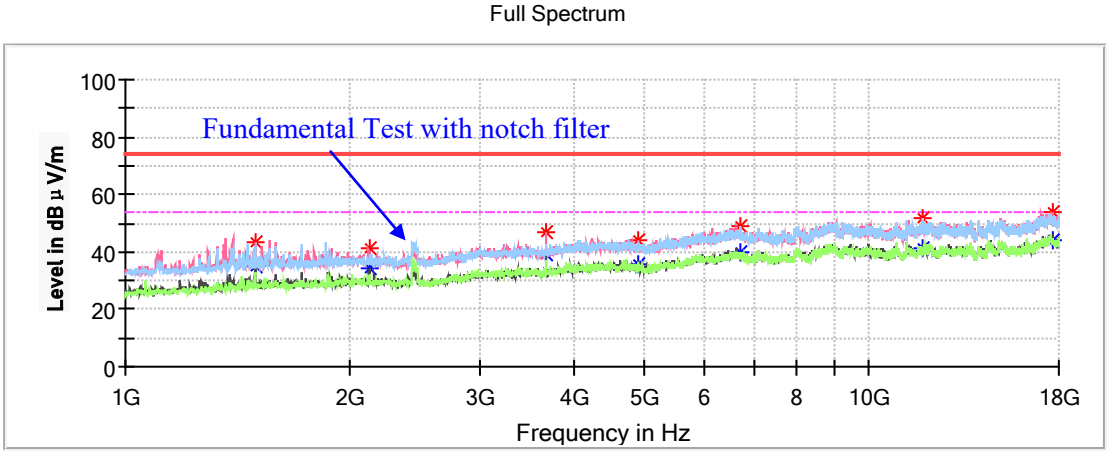
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1396.100000	---	29.00	150.0	V	236.0	-7.0	54.00	25.00
1396.100000	45.20	---	150.0	V	236.0	-7.0	74.00	28.80
2125.400000	---	36.22	150.0	V	299.0	-4.7	54.00	17.78
2125.400000	41.36	---	150.0	V	299.0	-4.7	74.00	32.64
3631.600000	---	38.99	200.0	V	166.0	-1.1	54.00	15.01
3631.600000	45.58	---	200.0	V	166.0	-1.1	74.00	28.42
4844.000000	---	37.03	150.0	V	287.0	0.5	54.00	16.97
4844.000000	43.48	---	150.0	V	287.0	0.5	74.00	30.52
8007.400000	---	40.32	200.0	V	217.0	6.1	54.00	13.68
8007.400000	48.95	---	200.0	V	217.0	6.1	74.00	25.05
17411.800000	---	44.55	150.0	V	299.0	14.2	54.00	9.45
17411.800000	53.88	---	150.0	V	299.0	14.2	74.00	20.12

Middle Channel: 2437MHz



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1494.700000	---	34.58	200.0	V	27.0	-6.5	54.00	19.42
1494.700000	45.01	---	200.0	V	27.0	-6.5	74.00	28.99
2125.400000	---	35.79	150.0	V	300.0	-4.7	54.00	18.21
2125.400000	41.62	---	150.0	V	300.0	-4.7	74.00	32.38
3653.700000	---	37.71	150.0	V	325.0	-1.0	54.00	16.29
3653.700000	45.13	---	150.0	V	325.0	-1.0	74.00	28.87
4874.000000	---	35.15	200.0	V	53.0	0.5	54.00	18.85
4874.000000	43.35	---	200.0	V	53.0	0.5	74.00	30.65
6635.500000	---	40.00	150.0	H	266.0	5.5	54.00	14.00
6635.500000	48.63	---	150.0	H	266.0	5.5	74.00	25.37
10861.700000	---	43.28	150.0	V	236.0	9.3	54.00	10.72
10861.700000	50.39	---	150.0	V	236.0	9.3	74.00	23.61

High Channel: 2452MHz



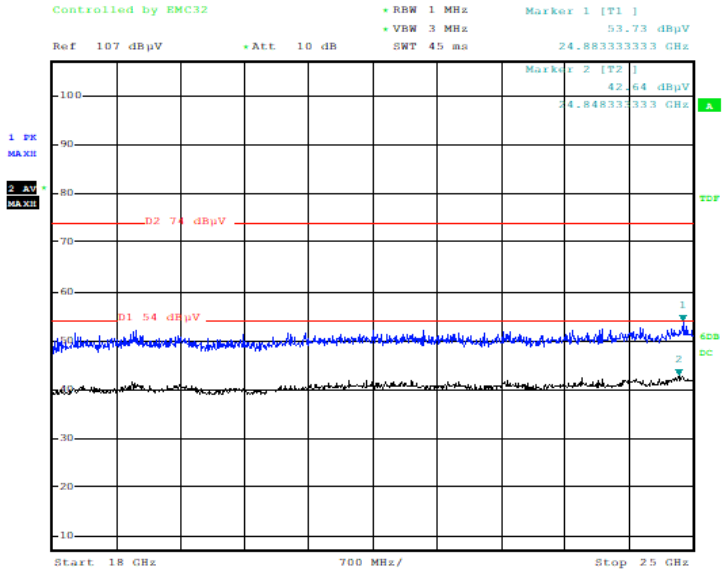
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1493.000000	---	35.19	150.0	V	50.0	-6.5	54.00	18.81
1493.000000	43.25	---	150.0	V	50.0	-6.5	74.00	30.75
2125.100000	41.59	---	150.0	V	77.0	-4.7	74.00	32.41
2125.100000	---	33.94	150.0	V	77.0	-4.7	54.00	20.06
3677.500000	46.73	---	150.0	V	156.0	-0.9	74.00	27.27
3677.500000	---	39.21	150.0	V	156.0	-0.9	54.00	14.79
4904.000000	---	35.45	200.0	V	98.0	0.4	54.00	18.55
4904.000000	43.97	---	200.0	V	98.0	0.4	74.00	30.03
6712.000000	---	40.05	150.0	H	0.0	5.5	54.00	13.95
6712.000000	48.82	---	150.0	H	0.0	5.5	74.00	25.18
11801.800000	---	40.99	150.0	H	257.0	10.2	54.00	13.01
11801.800000	51.54	---	150.0	H	257.0	10.2	74.00	22.46

For Adapter-2(worst case)

18GHz-25GHz:

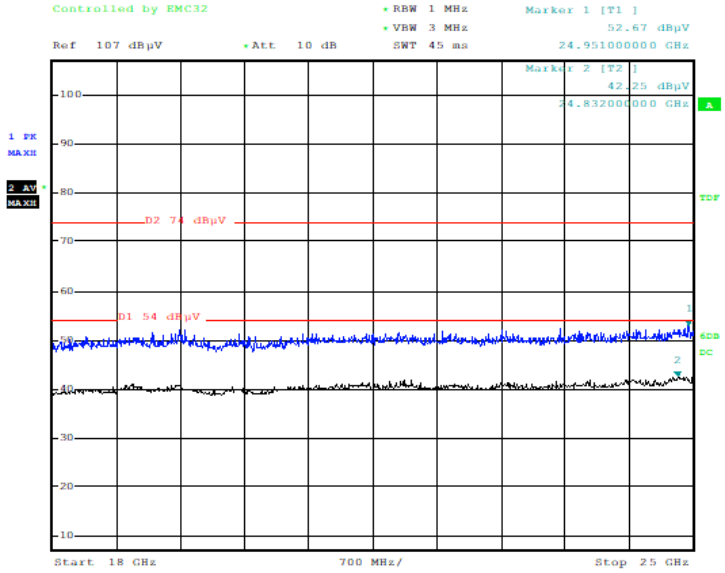
*Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case **low channel of 802.11b mode in Y-axis of orientation** was recorded.*

Vertical



Date: 24.MAY.2021 05:31:17

Horizontal



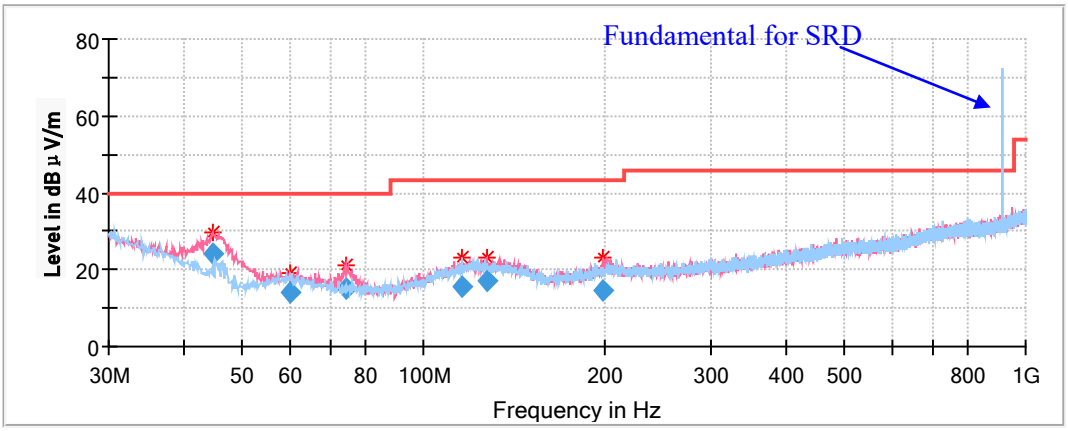
Date: 24.MAY.2021 05:36:18

Transmitting simultaneously test:

For adapter1:

30MHz-1GHz

***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*

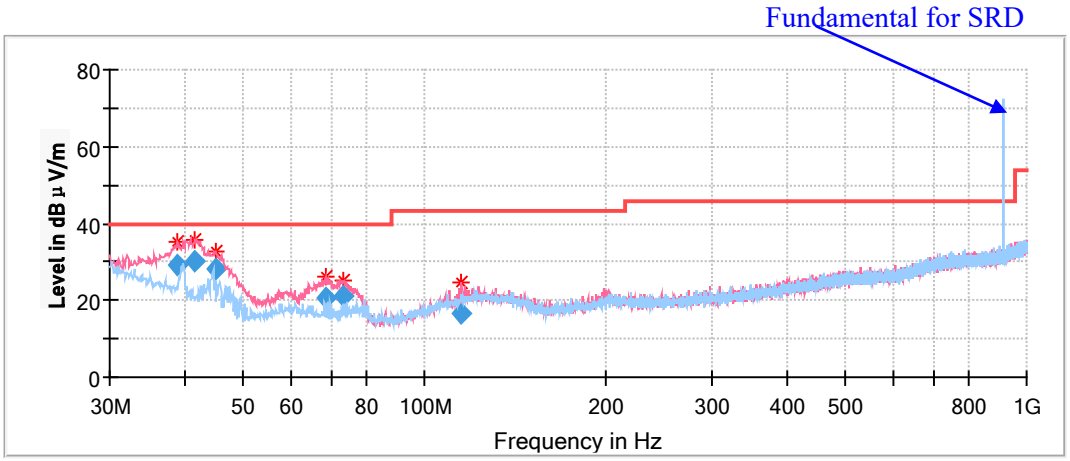


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
44.556000	23.96	100.0	V	100.0	-14.2	40.00	16.04
60.190615	13.85	100.0	V	100.0	-14.7	40.00	26.15
74.138500	15.14	100.0	V	165.0	-17.0	40.00	24.86
115.961650	15.62	199.0	H	249.0	-11.6	43.50	27.88
127.126650	17.12	100.0	V	318.0	-11.1	43.50	26.38
199.261000	14.76	100.0	V	0.0	-12.1	43.50	28.74

For adapter2:

30MHz-1GHz

***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*

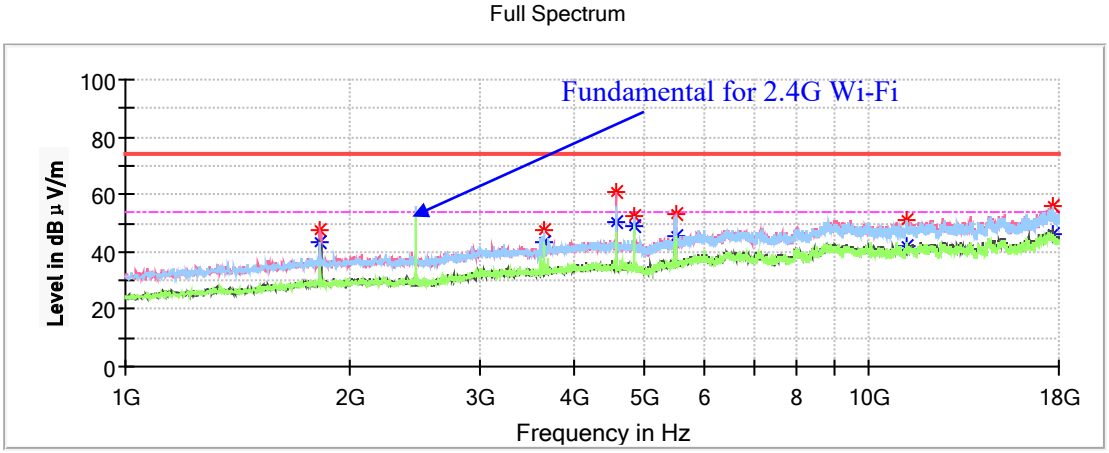


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
38.978000	29.33	100.0	V	290.0	-10.5	40.00	10.67
41.514645	30.15	100.0	V	179.0	-11.2	40.00	9.85
44.912050	28.07	100.0	V	158.0	-13.2	40.00	11.93
68.435450	20.84	100.0	V	23.0	-16.5	40.00	19.16
73.280000	21.00	100.0	V	213.0	-16.9	40.00	19.00
115.368200	16.46	100.0	V	147.0	-11.6	43.50	27.04

For adapter2 (worse case):

1GHz-18GHz:

***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
1829.600000	---	43.21	150.0	V	237.0	-5.4	54.00	10.79
1829.600000	47.82	---	150.0	V	237.0	-5.4	74.00	26.18
3658.800000	---	43.21	150.0	H	270.0	-1.0	54.00	10.79
3658.800000	47.25	---	150.0	H	270.0	-1.0	74.00	26.75
4573.400000	---	50.09	200.0	V	0.0	1.1	54.00	3.91
4573.400000	60.79	---	200.0	V	0.0	1.1	74.00	13.21
4823.300000	---	49.28	150.0	H	60.0	0.6	54.00	4.72
4823.300000	52.28	---	150.0	H	60.0	0.6	74.00	21.72
5489.700000	53.07	---	150.0	V	25.0	2.6	74.00	20.93
5489.700000	---	45.58	150.0	V	25.0	2.6	54.00	8.42
11203.400000	---	42.21	200.0	H	322.0	10.0	54.00	11.79
11203.400000	50.73	---	200.0	H	322.0	10.0	74.00	23.27
17658.300000	---	45.84	150.0	V	237.0	14.1	54.00	8.16
17658.300000	55.82	---	150.0	V	237.0	14.1	74.00	18.18

Restricted Bands Emissions Test:

Note:
1. This test was performed with the 10dB attenuator.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)
   Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)
   Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

802.11b Mode: *(Pre-scan in the X, Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	55.87	---	150.0	H	138.0	3.8	74.00	18.13
2390.00	---	50.04	150.0	H	138.0	3.8	54.00	3.96
High Channel: 2462MHz								
2483.50	54.67	---	150.0	H	124.0	4.1	74.00	19.33
2483.50	---	50.41	150.0	H	124.0	4.1	54.00	3.59

802.11g Mode: *(Pre-scan in the X, Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	60.32	---	200.0	H	140.0	3.8	74.00	13.68
2390.00	---	51.96	200.0	H	140.0	3.8	54.00	2.04
High Channel: 2462MHz								
2483.50	54.59	---	150.0	H	141.0	4.1	74.00	19.41
2483.50	---	50.19	150.0	H	141.0	4.1	54.00	3.81

802.11n-HT20 Mode: *(Pre-scan in the X,Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2412MHz								
2390.00	53.75	---	200.0	H	78.0	3.8	74.00	20.25
2390.00	---	47.45	200.0	H	78.0	3.8	54.00	6.55
High Channel: 2462MHz								
2483.50	50.71	---	150.0	H	277.0	4.1	74.00	23.29
2483.50	---	48.53	150.0	H	277.0	4.1	54.00	5.47

802.11n-HT40 Mode: *(Pre-scan in the X,Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)*

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	MaxPeak (dBµV/m)	Average (dBµV/m)	Height (cm)	Polar (H/V)				
Low Channel: 2422MHz								
2390.00	53.43	---	200.0	H	104.0	3.8	74.00	20.57
2390.00	---	49.07	200.0	H	104.0	3.8	54.00	4.93
High Channel: 2452MHz								
2483.50	---	49.16	200.0	H	306.0	4.1	54.00	4.84
2483.50	54.79	---	200.0	H	306.0	4.1	74.00	19.21

Powered by DC source:

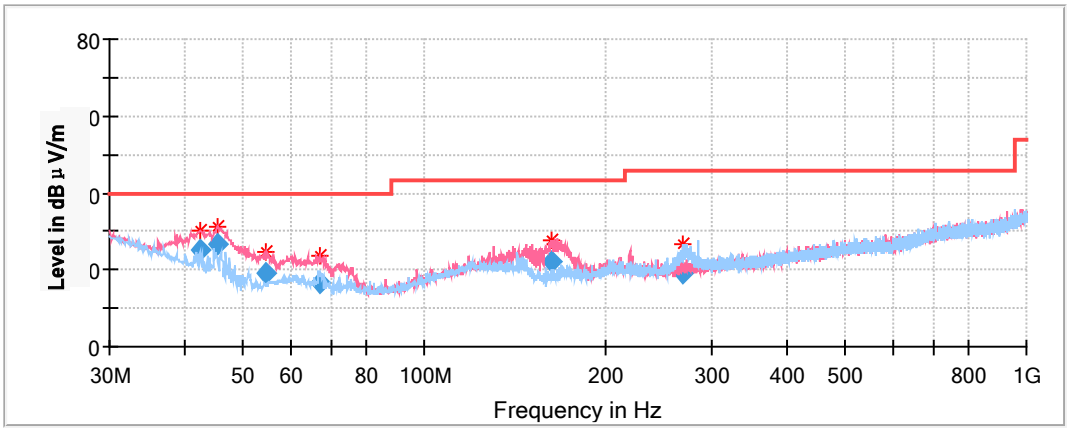
Model: Bell 5S

EUT operation mode: Transmitting

Spurious Emission Test:

30MHz-1GHz:

Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case ***low channel of 802.11b mode in Y-axis of orientation*** *was recorded.*

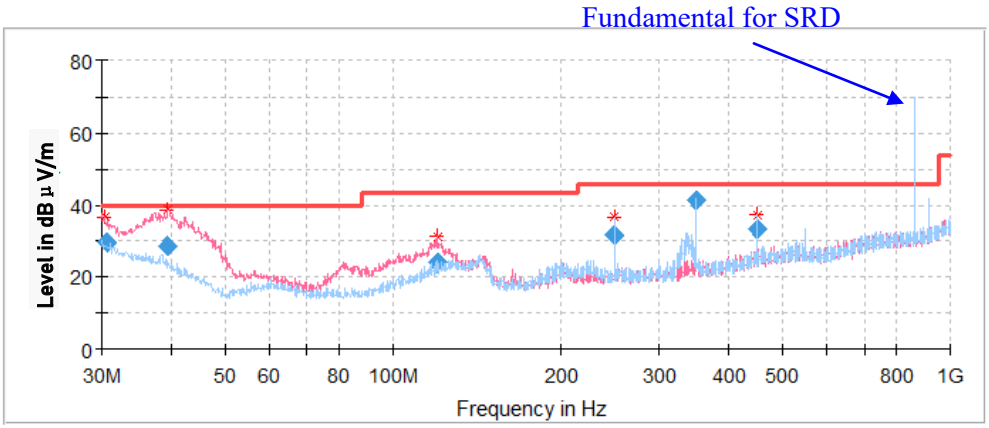


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	Quasi Peak (dBµV/m)	Height (cm)	Polar (H/V)				
42.362500	25.22	100.0	V	331.0	-12.1	40.00	14.78
45.274200	26.42	100.0	V	49.0	-14.0	40.00	13.58
54.370750	19.11	100.0	V	309.0	-15.9	40.00	20.89
66.866400	16.68	100.0	V	60.0	-16.2	40.00	23.32
163.015200	22.05	100.0	V	171.0	-13.9	43.50	21.45
268.868400	19.18	100.0	H	103.0	-11.5	46.00	26.82

Transmitting simultaneously test:

30MHz-1GHz

***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
30.729077	29.74	100.0	V	292.0	-4.1	40.00	10.26
39.368900	28.76	100.0	V	156.0	-10.7	40.00	11.24
120.072450	24.20	100.0	V	287.0	-10.8	43.50	19.30
250.005750	31.83	100.0	H	109.0	-11.9	46.00	14.17
350.021350	41.25	100.0	H	316.0	-9.4	46.00	4.75
450.017800	33.40	200.0	V	44.0	-6.9	46.00	12.60

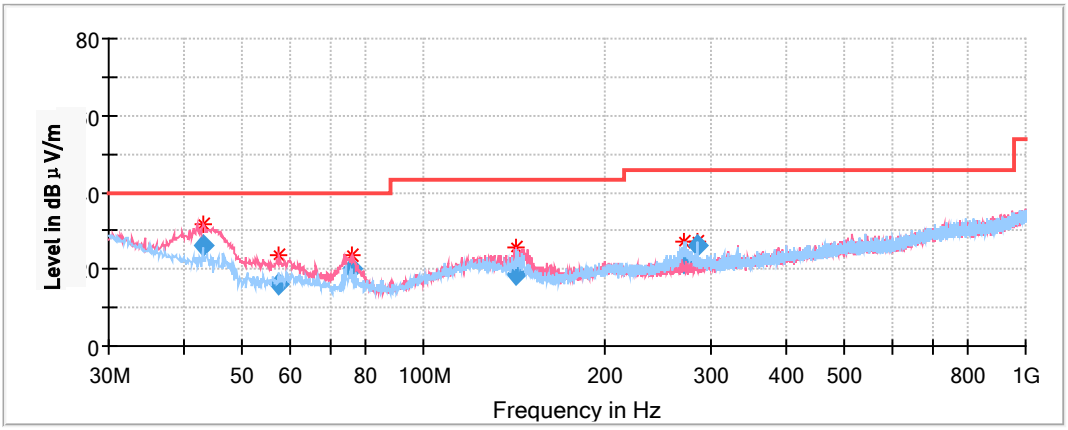
Model: Bell 9S

EUT operation mode: Transmitting

Spurious Emission Test:

30MHz-1GHz:

*Pre-scan with 802.11b, 802.11g, 802.11n-HT20 and 802.11n-HT40 modes of operation in the X,Y and Z axes of orientation, the worst case **low channel of 802.11b mode in Y-axis of orientation** was recorded.*

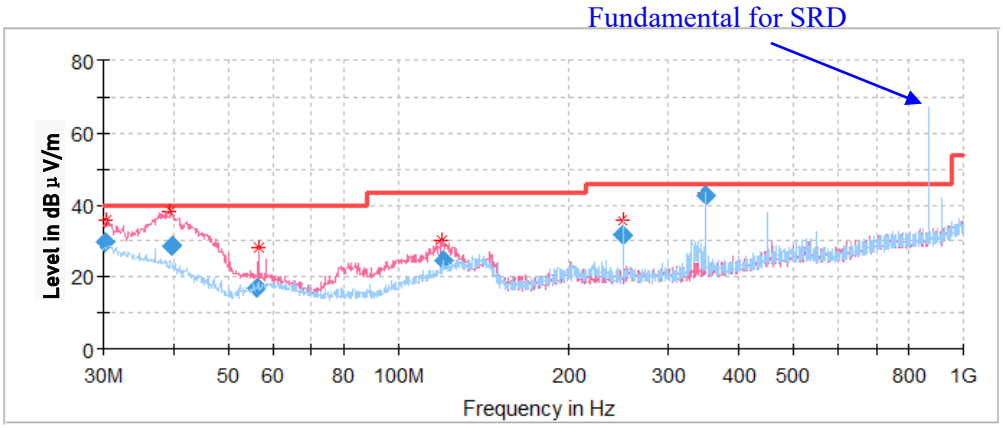


Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	Quasi Peak (dBµV/m)	Height (cm)	Polar (H/V)				
43.056300	26.24	100.0	V	301.0	-12.5	40.00	13.76
57.641700	15.98	100.0	V	296.0	-15.3	40.00	24.02
75.930900	20.08	100.0	V	268.0	-17.1	40.00	19.92
142.522850	18.69	100.0	V	168.0	-11.9	43.50	24.81
270.569450	21.58	100.0	H	59.0	-11.5	46.00	24.42
285.736650	26.06	100.0	H	261.0	-11.1	46.00	19.94

Transmitting simultaneously test:

30MHz-1GHz

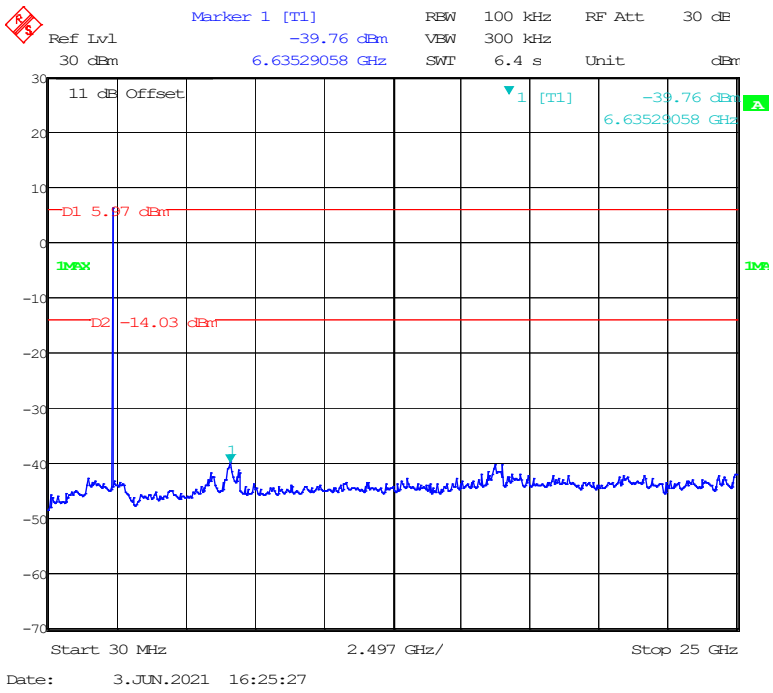
***(The worst case 802.11b Mode low channel and SRD mode transmitting simultaneously** was recorded)*



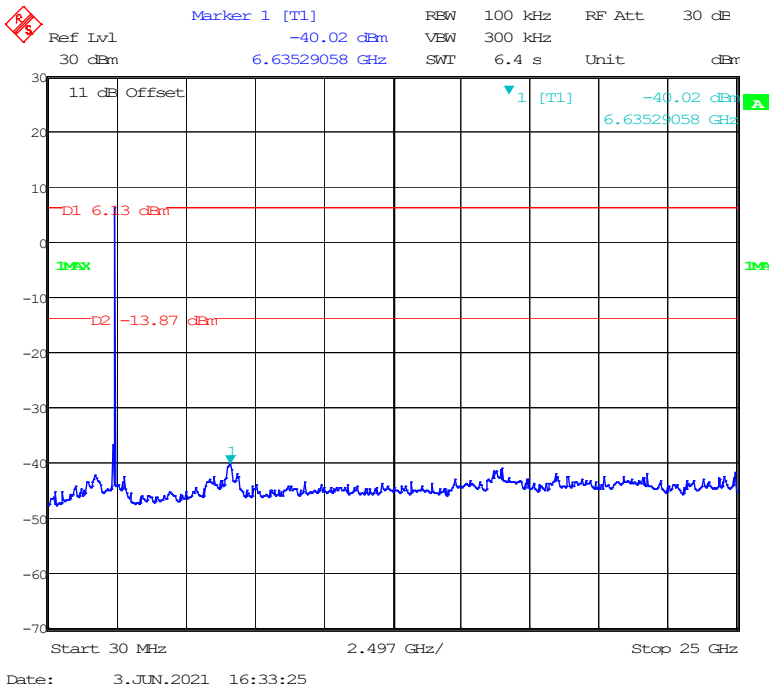
Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBµV/m)	Margin (dB)
	QuasiPeak (dBµV/m)	Height (cm)	Polar (H/V)				
30.301022	29.90	100.0	V	16.0	-3.9	40.00	10.10
39.810300	28.74	100.0	V	118.0	-10.3	40.00	11.26
56.292300	16.89	100.0	V	202.0	-15.2	40.00	23.11
119.856650	24.49	100.0	V	313.0	-10.9	43.50	19.01
249.999450	31.65	100.0	H	105.0	-11.9	46.00	14.35
350.014150	42.55	100.0	H	302.0	-9.4	46.00	3.45

Conducted Spurious Emissions at Antenna Port

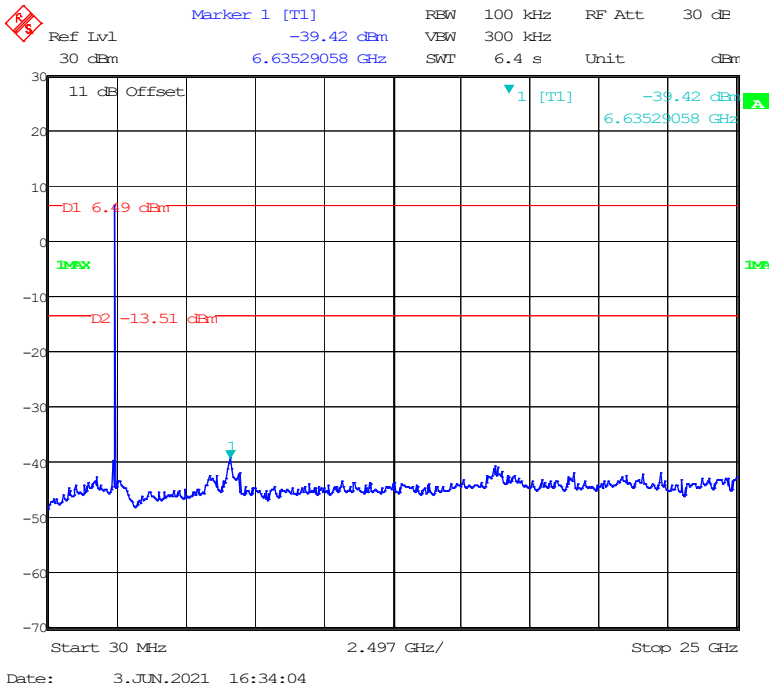
802.11b Mode Low Channel



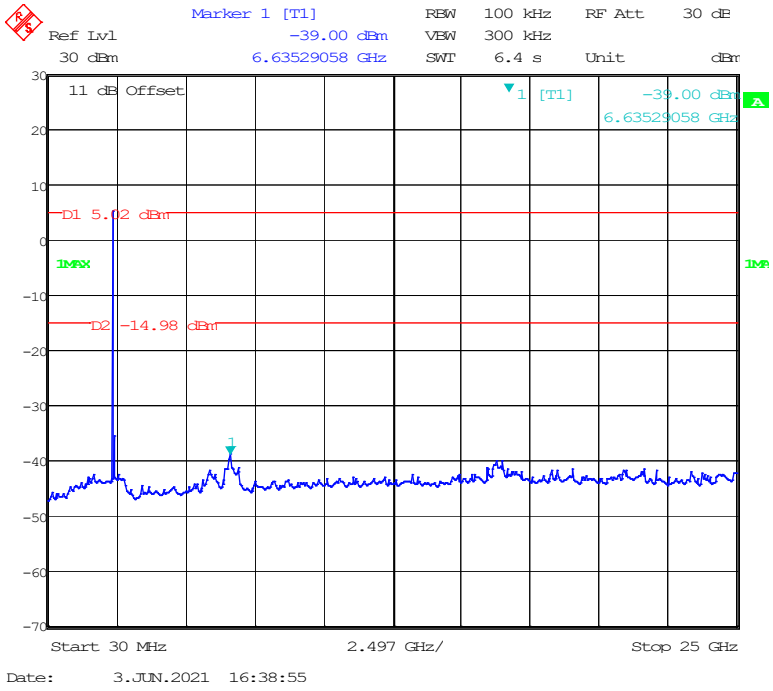
802.11b Mode Middle Channel



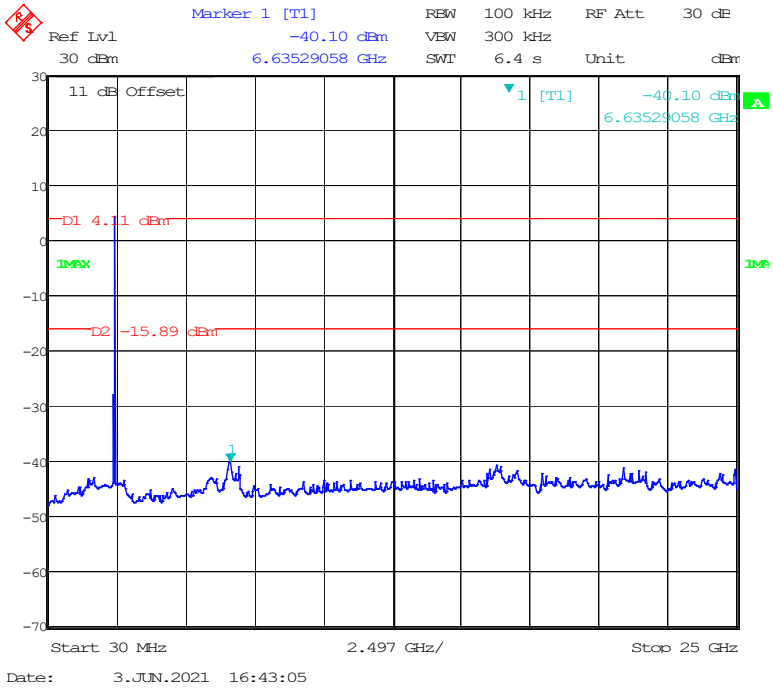
802.11b Mode High Channel



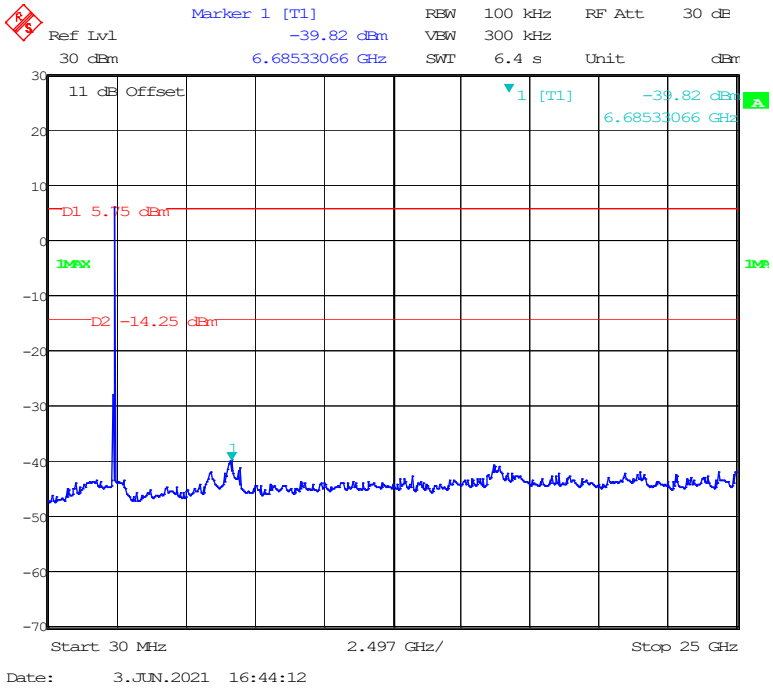
802.11g Mode Low Channel



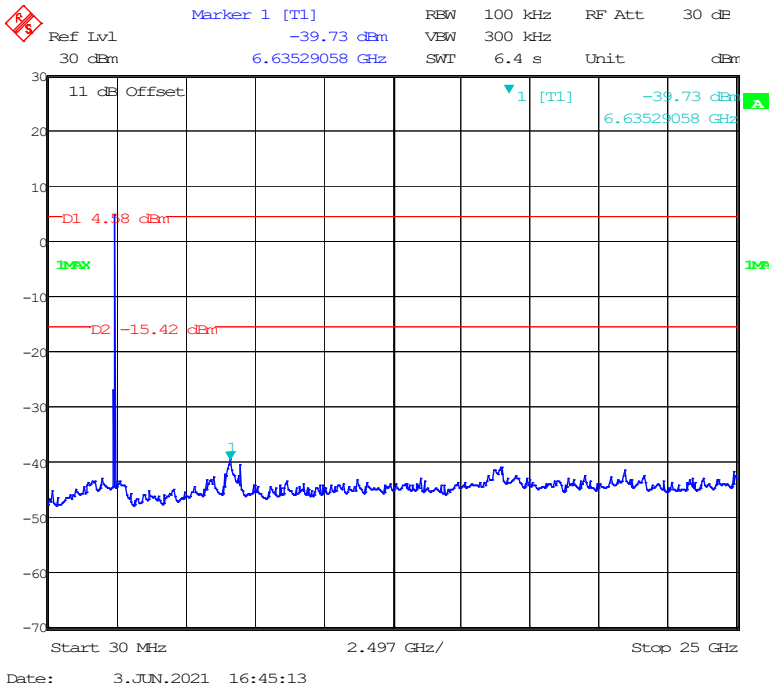
802.11g Mode Middle Channel



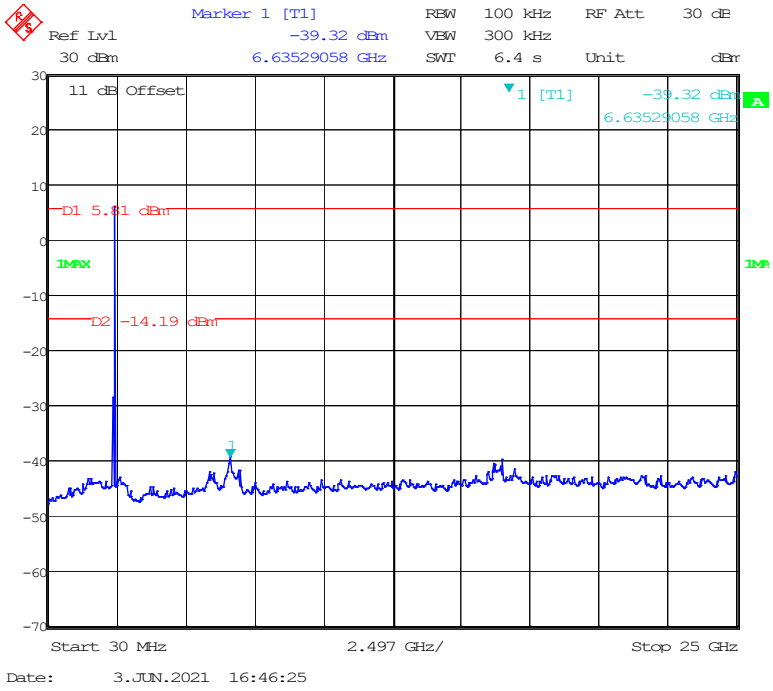
802.11g Mode High Channel



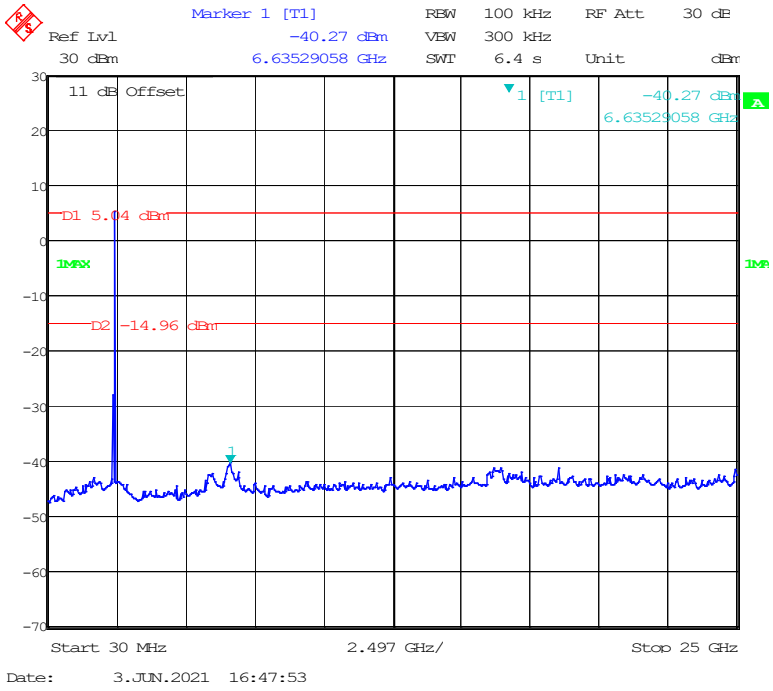
802.11n-HT20 Mode Low Channel



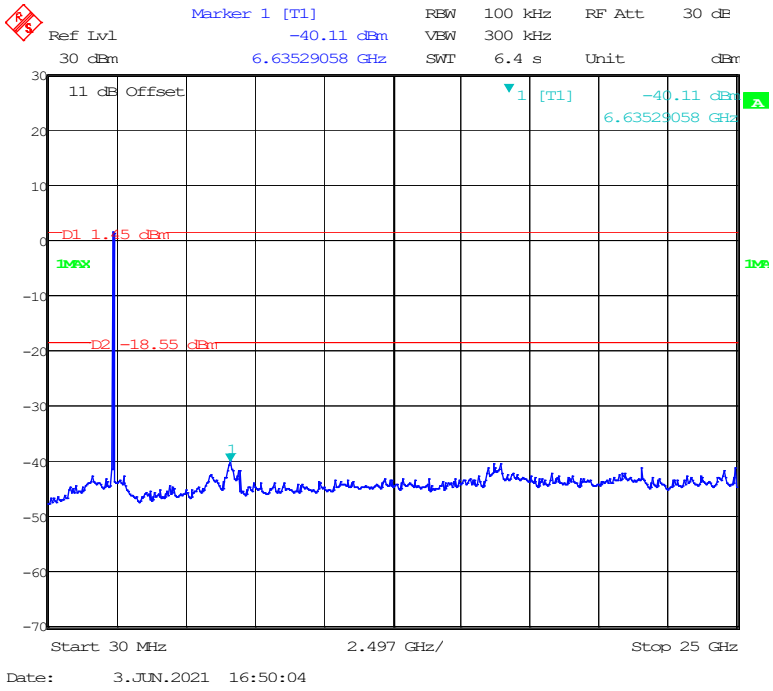
802.11n-HT20 Mode Middle Channel



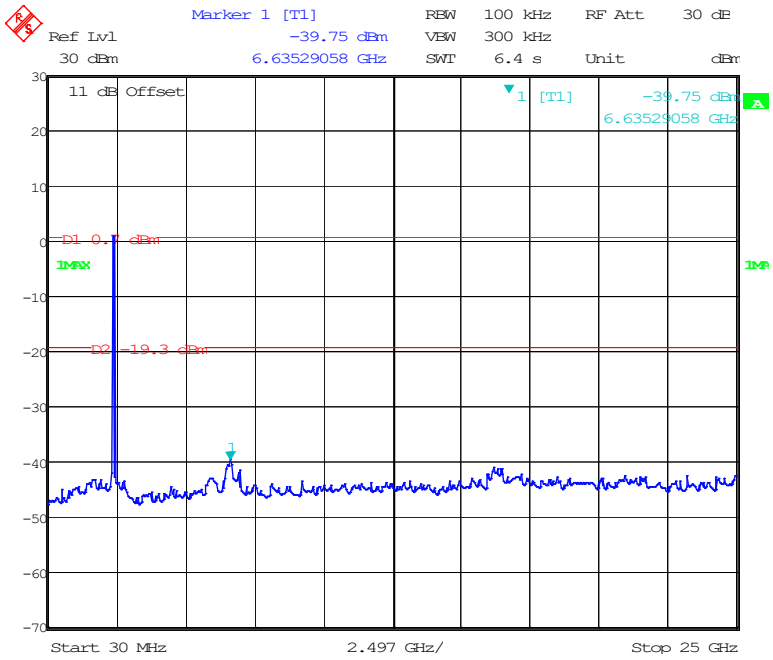
802.11n-HT20 Mode High Channel



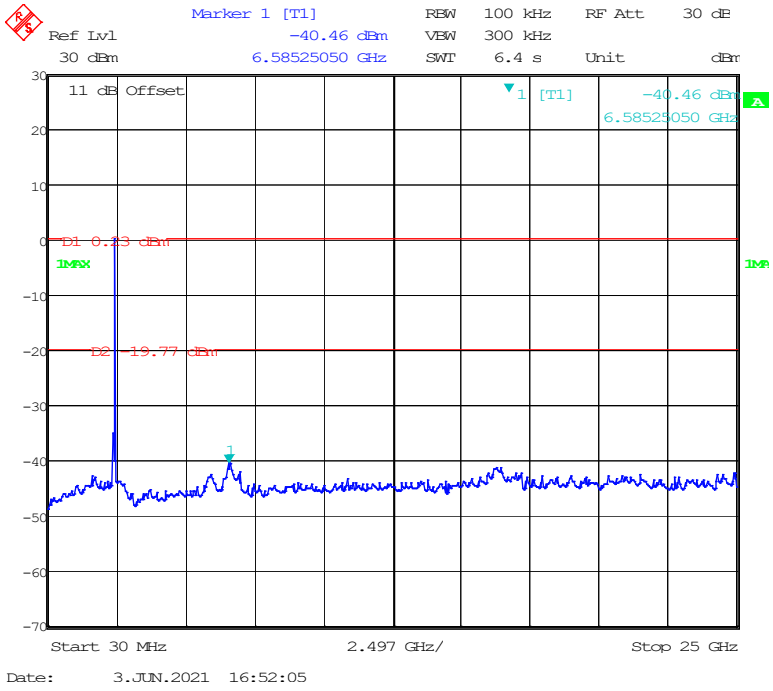
802.11n-HT40 Mode Low Channel



802.11n-HT40 Mode Middle Channel



802.11n-HT40 Mode High Channel



FCC §15.247(a) (2) - 6 dB EMISSION BANDWIDTH

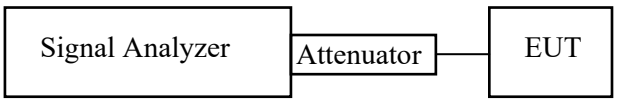
Applicable Standard

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Procedure

According to ANSI C63.10-2013 sub-clause 11.8.1

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 * RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Data

Environmental Conditions

Temperature:	25.7 °C
Relative Humidity:	49 %
ATM Pressure:	101.2 kPa

The testing was performed by Stone Zhang on 2021-06-03.

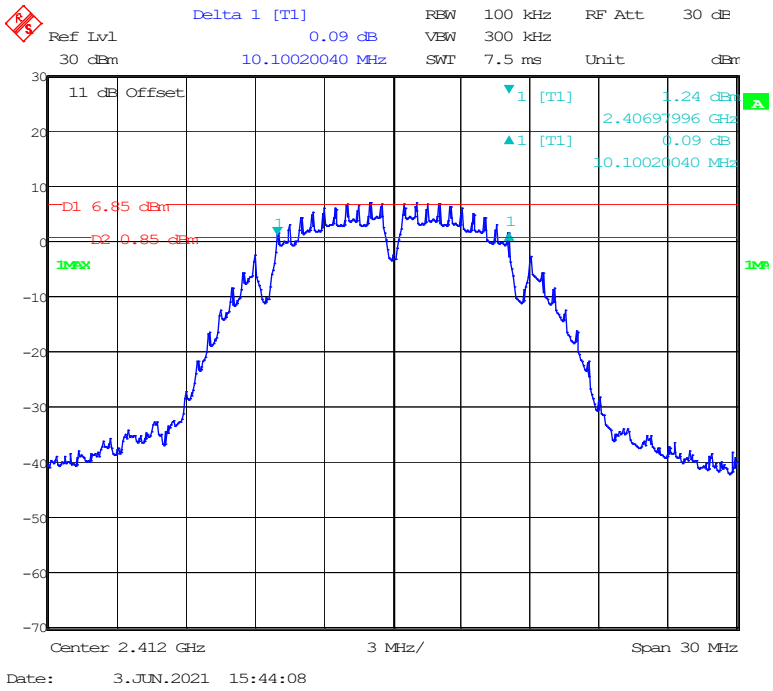
.

EUT operation mode: Transmitting

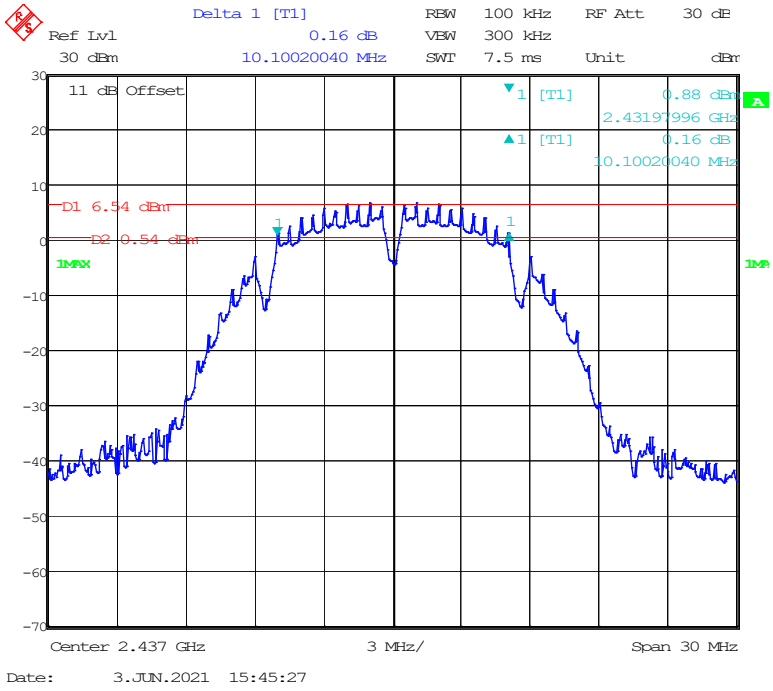
Test Result: Pass

Channel	Frequency (MHz)	6 dB Emission Bandwidth (MHz)	Limit (MHz)
802.11b Mode			
Low	2412	10.100	≥ 0.5
Middle	2437	10.100	≥ 0.5
High	2462	10.040	≥ 0.5
802.11g Mode			
Low	2412	16.112	≥ 0.5
Middle	2437	16.473	≥ 0.5
High	2462	16.473	≥ 0.5
802.11n-HT20 Mode			
Low	2412	17.315	≥ 0.5
Middle	2437	17.255	≥ 0.5
High	2462	17.255	≥ 0.5
802.11n-HT40 Mode			
Low	2422	35.862	≥0.5
Middle	2437	35.772	≥0.5
High	2452	35.681	≥0.5

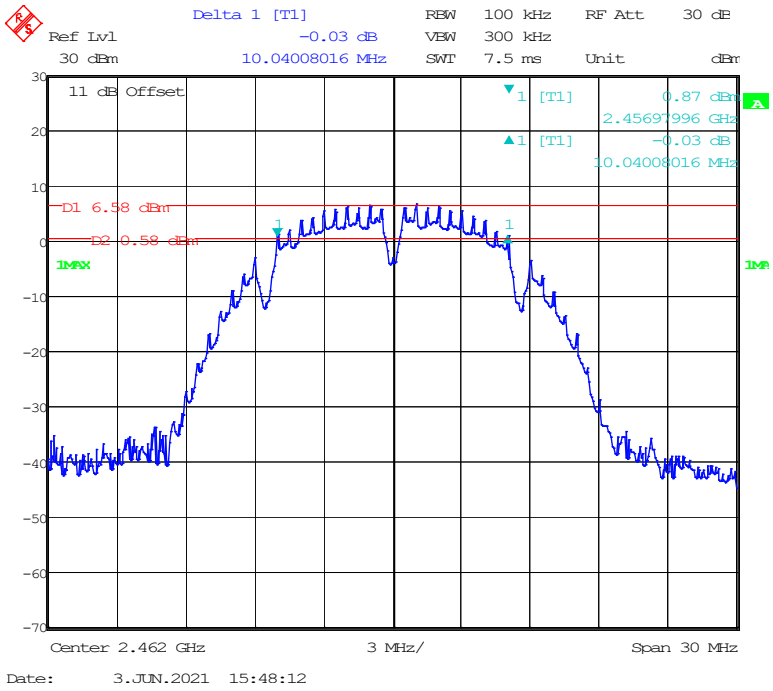
802.11b Mode Low Channel



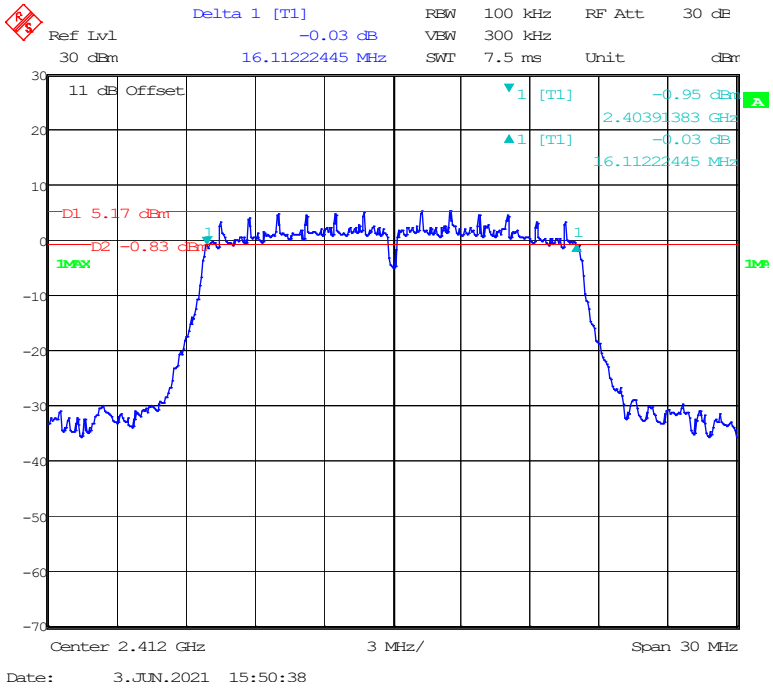
802.11b Mode Middle Channel



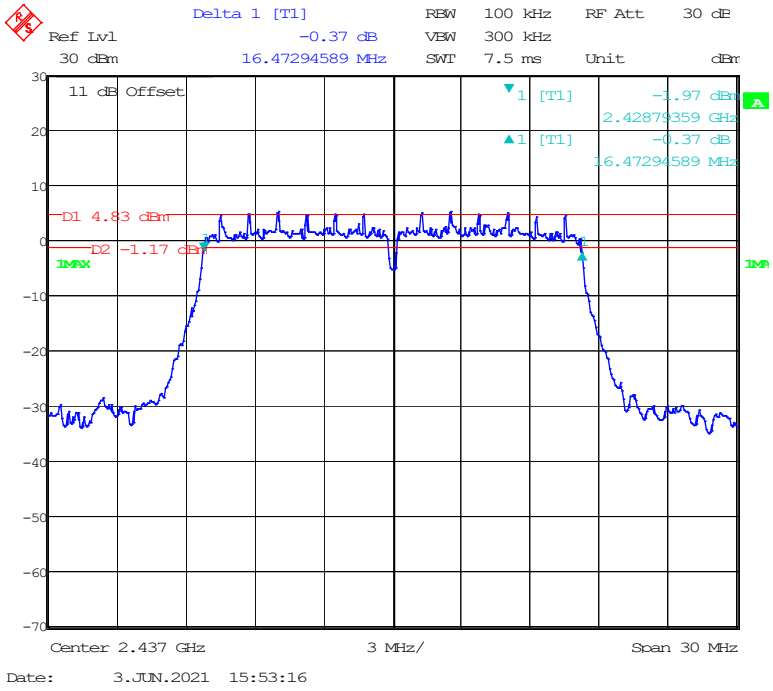
802.11b Mode High Channel



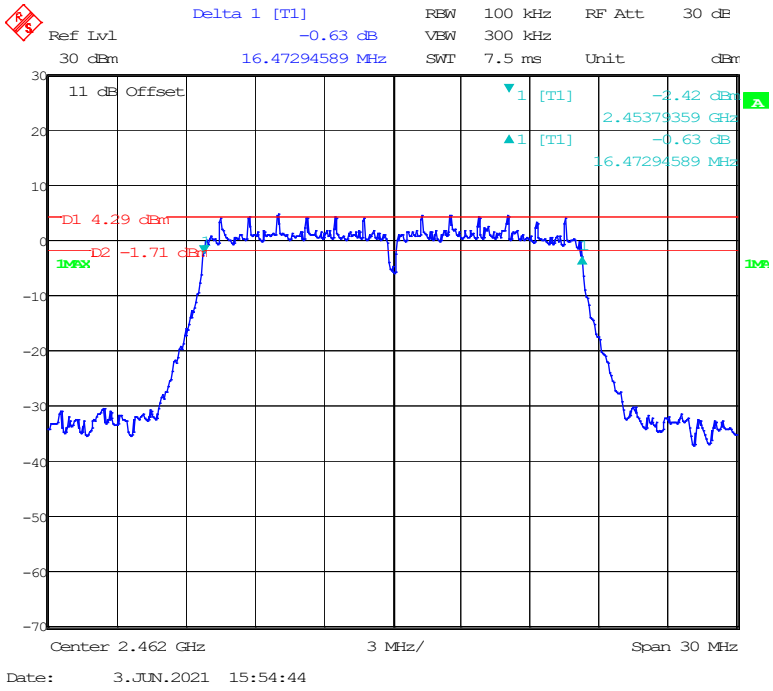
802.11g Mode Low Channel



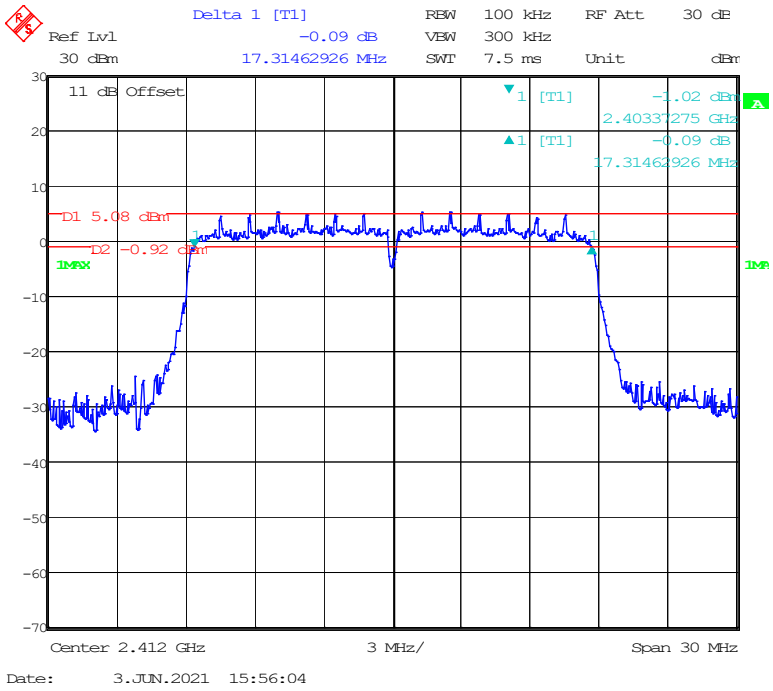
802.11g Mode Middle Channel



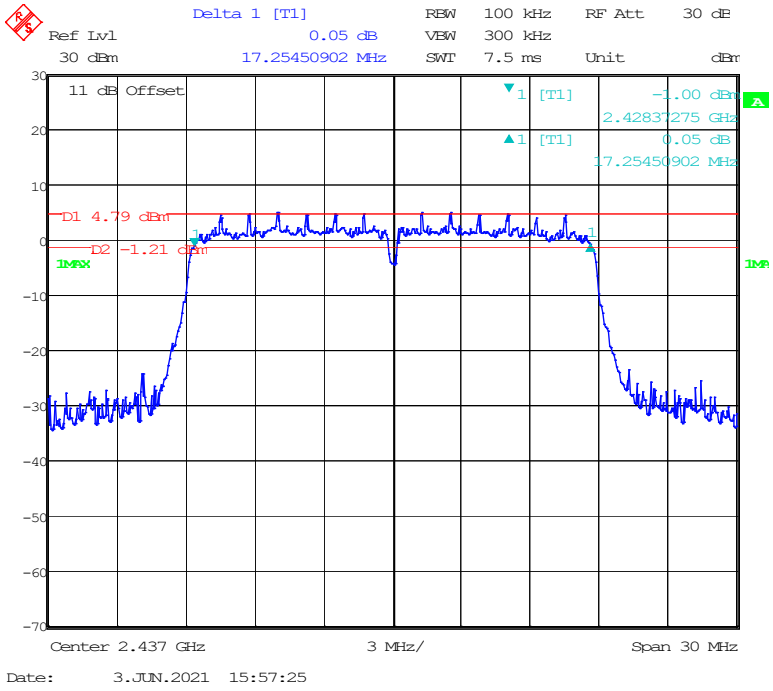
802.11g Mode High Channel



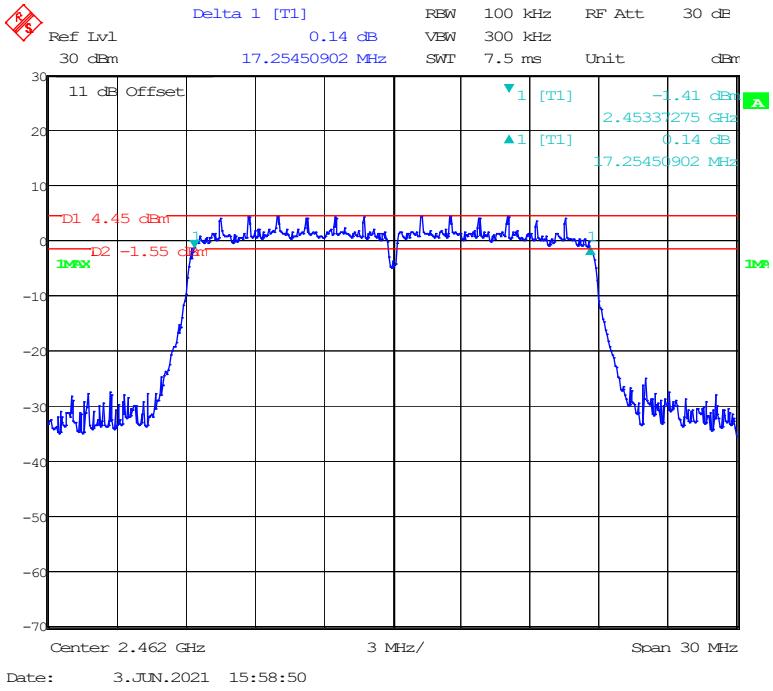
802.11n-HT20 Mode Low Channel



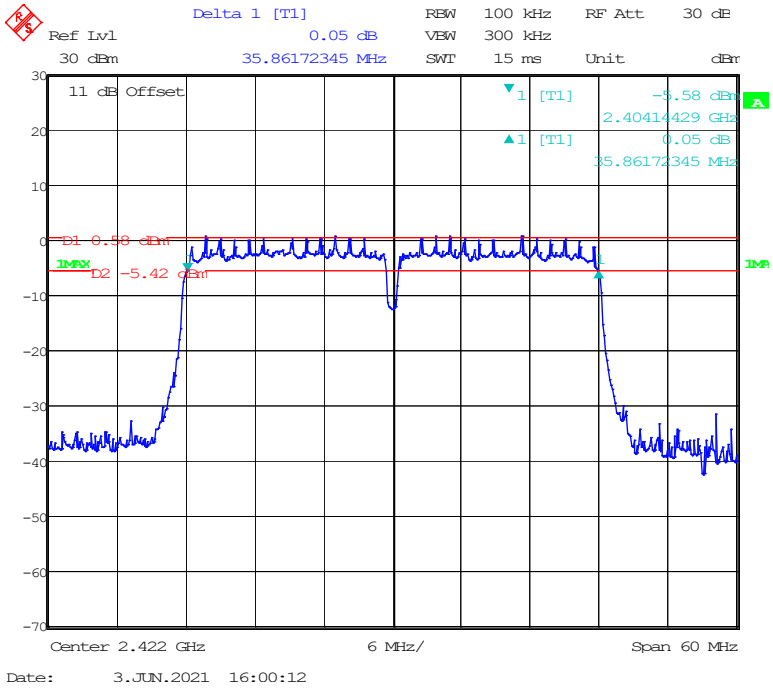
802.11n-HT20 Mode Middle Channel



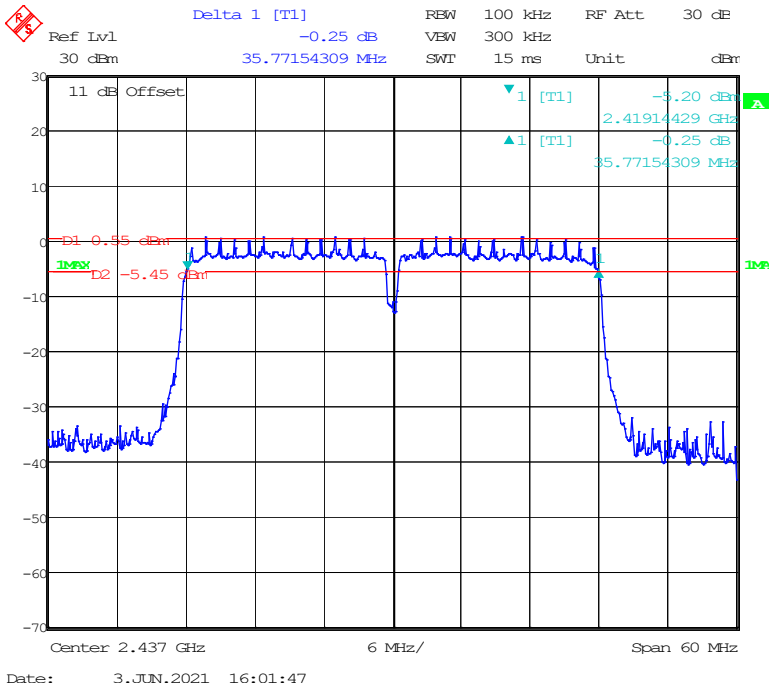
802.11n-HT20 Mode High Channel



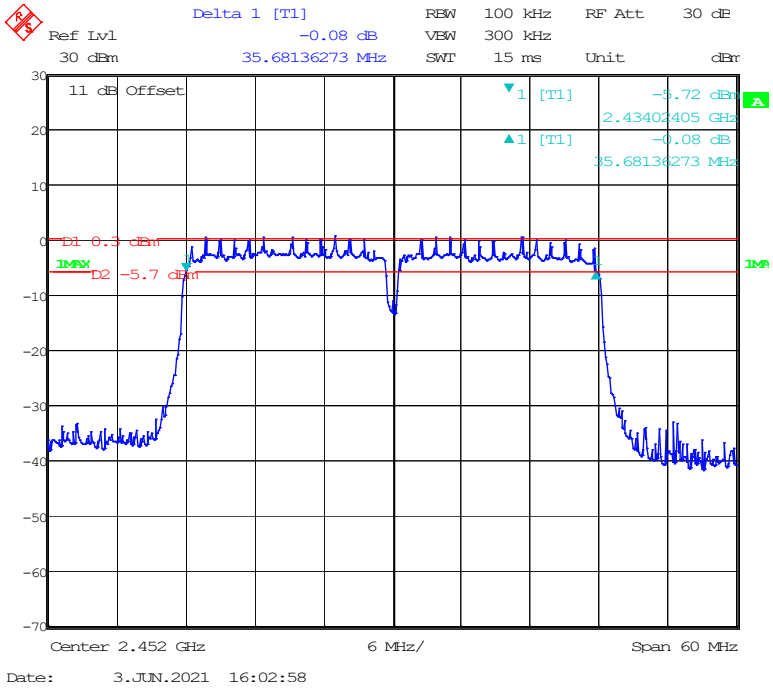
802.11n-HT40 Mode Low Channel



802.11n-HT40 Mode Middle Channel



802.11n-HT40 Mode High Channel



FCC §15.247(b) (3) - Maximum CONDUCTED OUTPUT POWER

Applicable Standard

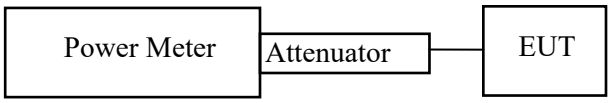
According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, Compliant with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

Test Procedure

According to ANSI C63.10-2013 sub-clause 11.9.1.3

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

1. Place the EUT on a bench and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
3. Add a correction factor to the display.



Test Data

Environmental Conditions

Temperature:	26.7 ℃
Relative Humidity:	50 %
ATM Pressure:	101.3 kPa

The testing was performed by Stone Zhang on 2021-06-03.

EUT operation mode: Transmitting

Channel	Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Limit (dBm)	Result
802.11b Mode				
Low	2412	19.68	30	Pass
Middle	2437	19.60	30	Pass
High	2462	19.02	30	Pass
802.11g Mode				
Low	2412	24.88	30	Pass
Middle	2437	24.38	30	Pass
High	2462	23.94	30	Pass
802.11n-HT20 Mode				
Low	2412	25.51	30	Pass
Middle	2437	25.43	30	Pass
High	2462	24.79	30	Pass
802.11n-HT40 Mode				
Low	2422	23.97	30	Pass
Middle	2437	23.75	30	Pass
High	2452	23.66	30	Pass

FCC §15.247(d) – 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

Applicable Standard

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates Compliant with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

Test Procedure

According to ANSI C63.10-2013 sub-clause 6.10.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

Test Data

Environmental Conditions

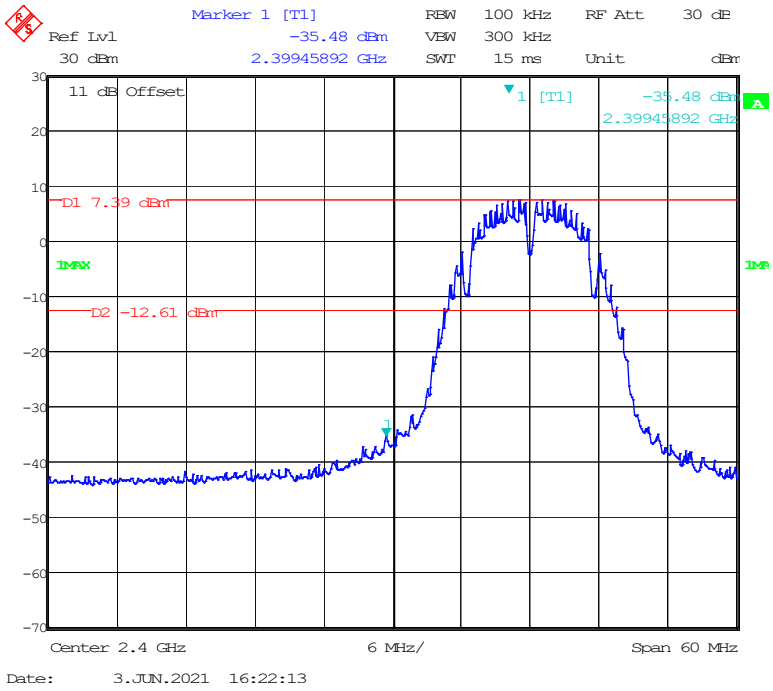
Temperature:	26.7 °C
Relative Humidity:	51 %
ATM Pressure:	101.3 kPa

The testing was performed by Stone Zhang on 2021-06-03.

EUT operation mode: Transmitting

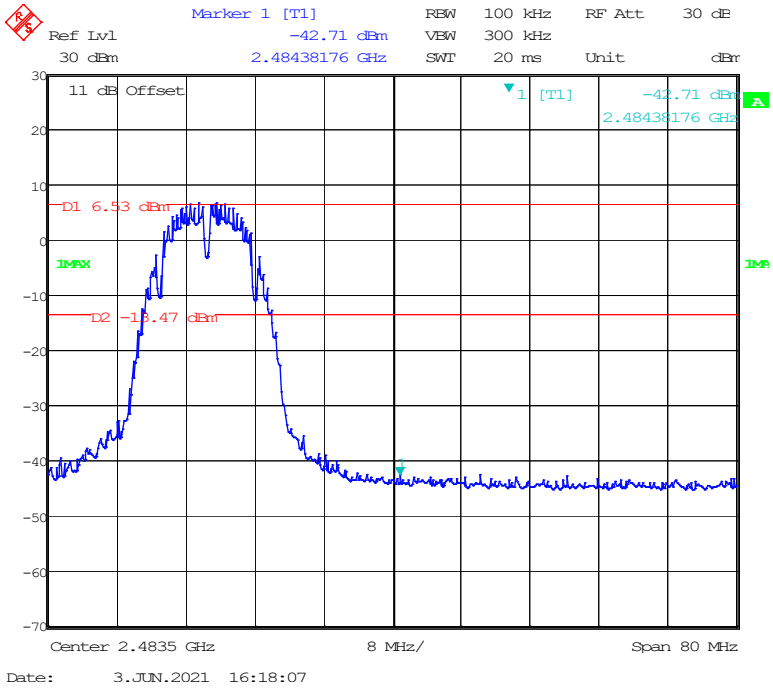
Test Result: Compliant

802.11b Mode Left Side



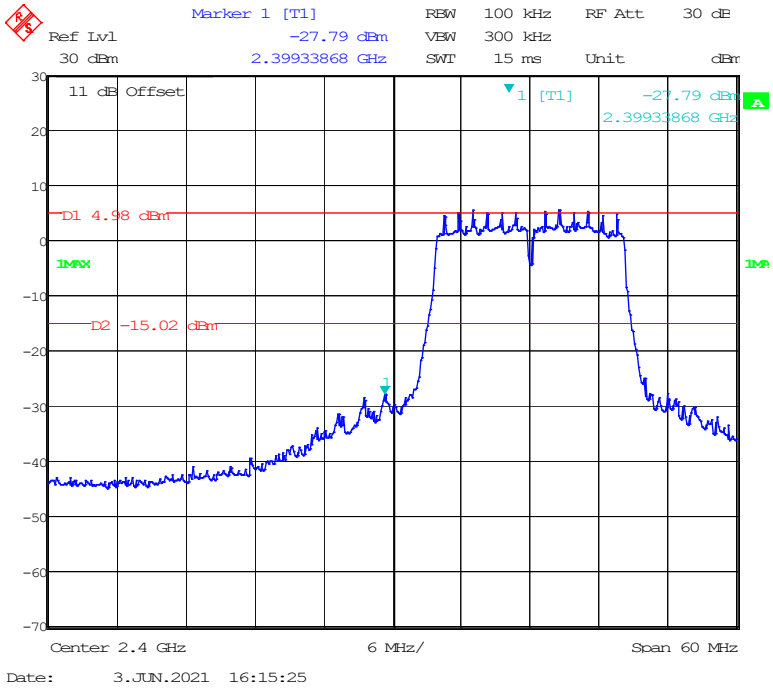
Date: 3.JUN.2021 16:22:13

802.11b Mode Right Side

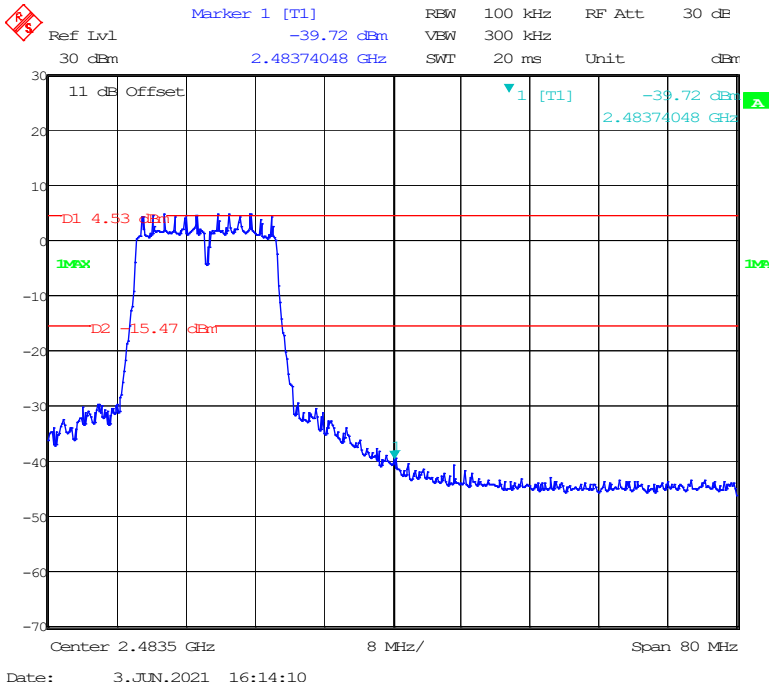


Date: 3.JUN.2021 16:18:07

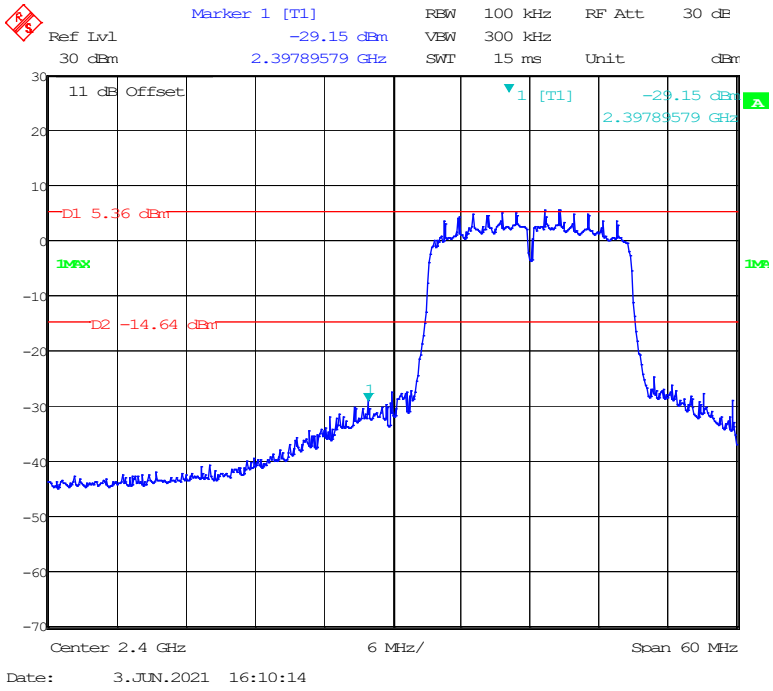
802.11g Mode Left Side



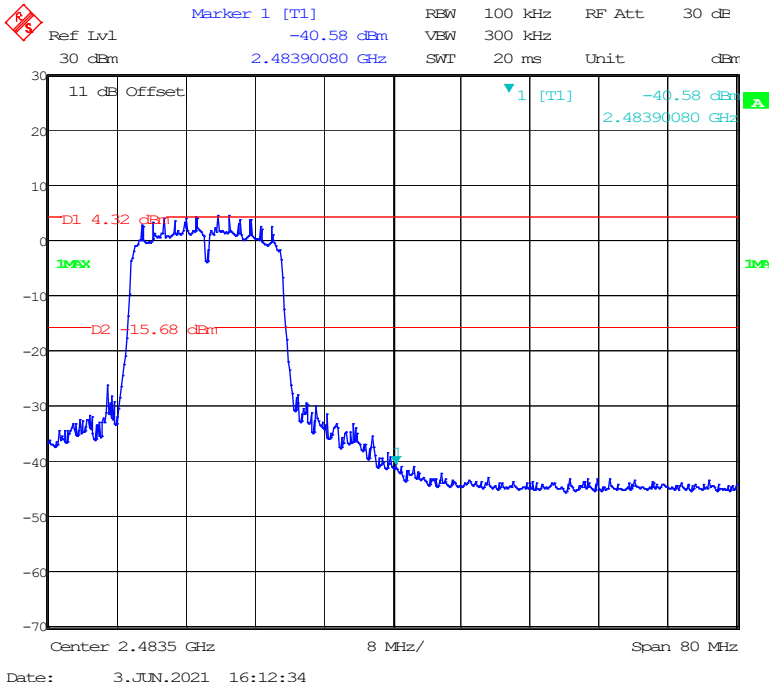
802.11g Mode Right Side



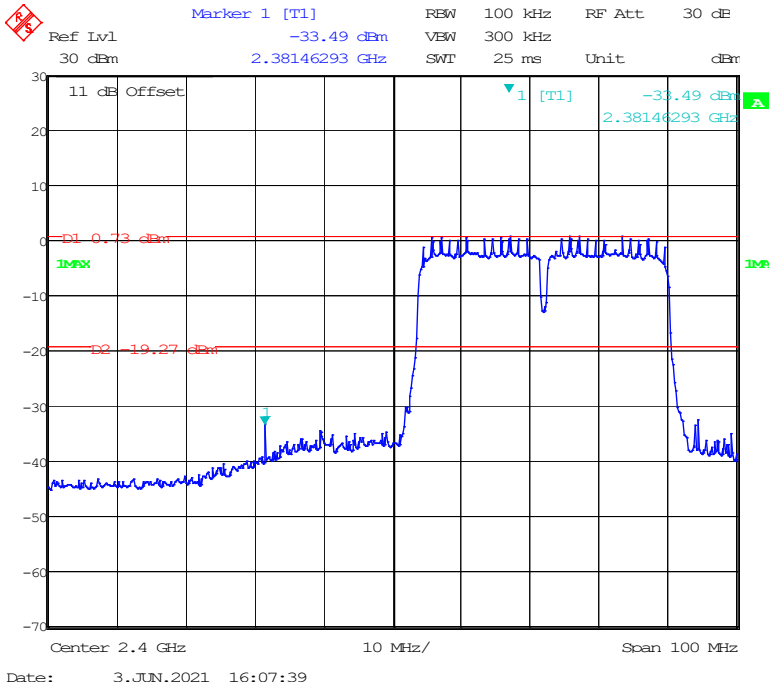
802.11n-HT20 Mode Left Side



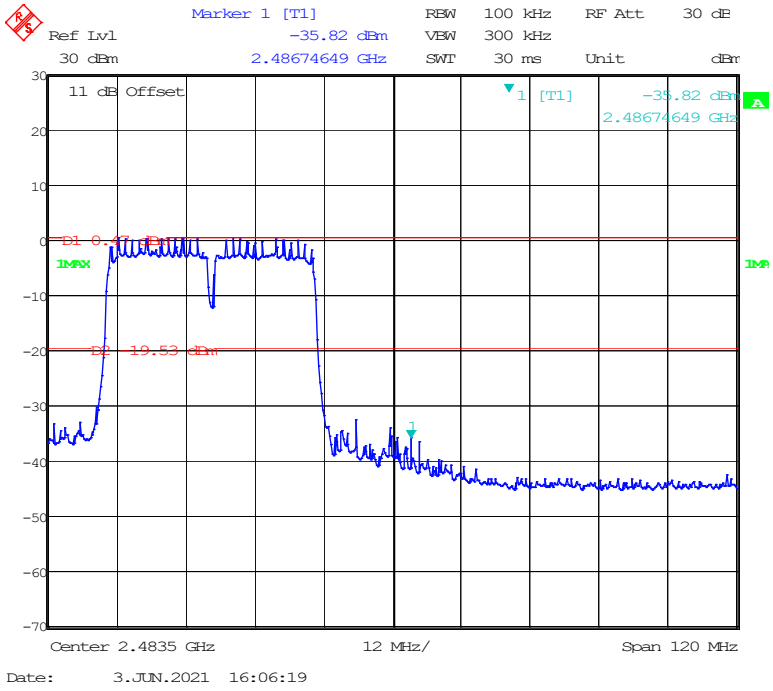
802.11n-HT20 Mode Right Side



802.11n-HT40 Mode Left Side



802.11n-HT40 Mode Right Side



FCC §15.247(e) - POWER SPECTRAL DENSITY

Applicable Standard

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

Test Procedure

According to ANSI C63.10-2013 sub-clause 11.10.2

The following procedure shall be used if maximum peak conducted output power was used to determine Compliant, and it is optional if the maximum conducted (average) output power was used to determine Compliant:

1. Set the RBW to: 3kHz≤ RBW≤100 kHz.
2. Set the VBW ≥ 3*RBW.
3. Set the span to 1.5 times the DTS bandwidth.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the peak marker function to determine the maximum amplitude level within the RBW.
9. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

Test Data

Environmental Conditions

Temperature:	26.7 ℃
Relative Humidity:	51 %
ATM Pressure:	101.3 kPa

The testing was performed by Stone Zhang on 2021-06-03.

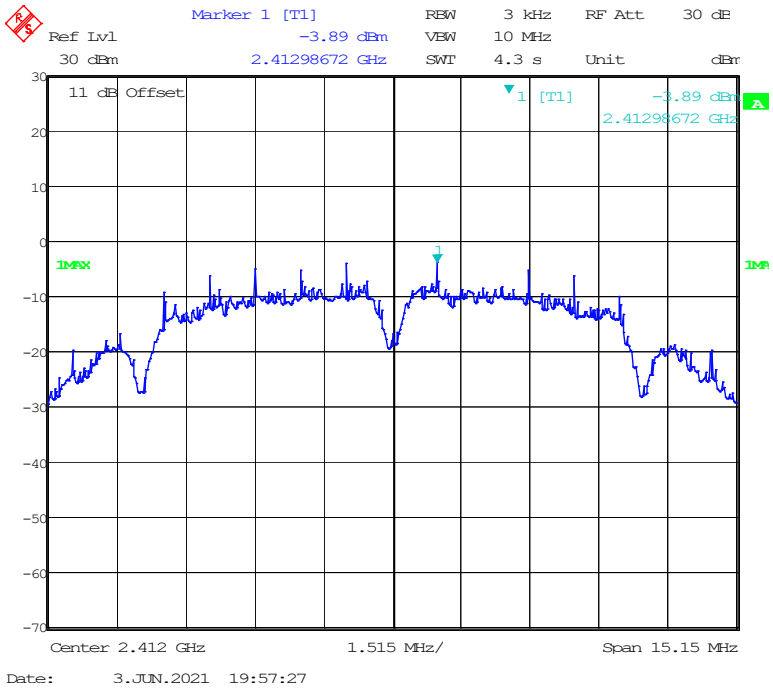
.

EUT operation mode: Transmitting

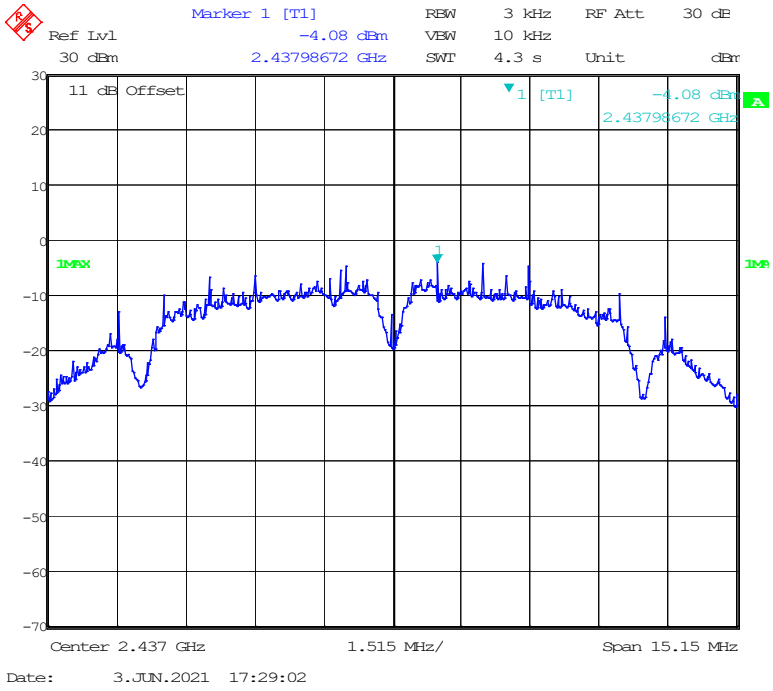
Test Result: Pass

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
802.11b Mode			
Low	2412	-3.89	≤ 8
Middle	2437	-4.08	≤ 8
High	2462	-4.85	≤ 8
802.11g Mode			
Low	2412	-7.82	≤ 8
Middle	2437	-8.00	≤ 8
High	2462	-8.31	≤ 8
802.11n-HT20 mode			
Low	2412	-8.65	≤ 8
Middle	2437	-8.78	≤ 8
High	2462	-9.33	≤ 8
802.11n-HT40 Mode			
Low	2422	-13.10	≤8
Middle	2437	-13.42	≤8
High	2452	-13.83	≤8

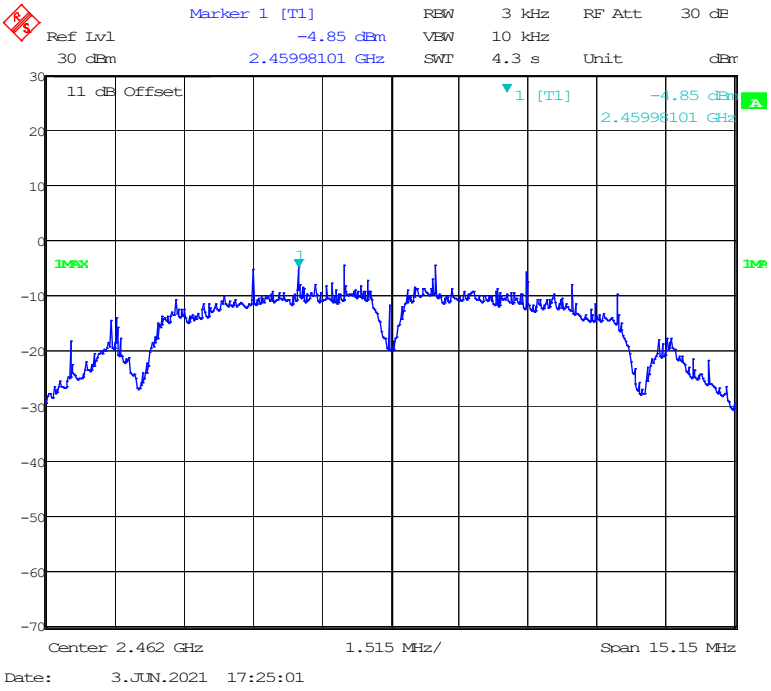
802.11b Mode Low Channel



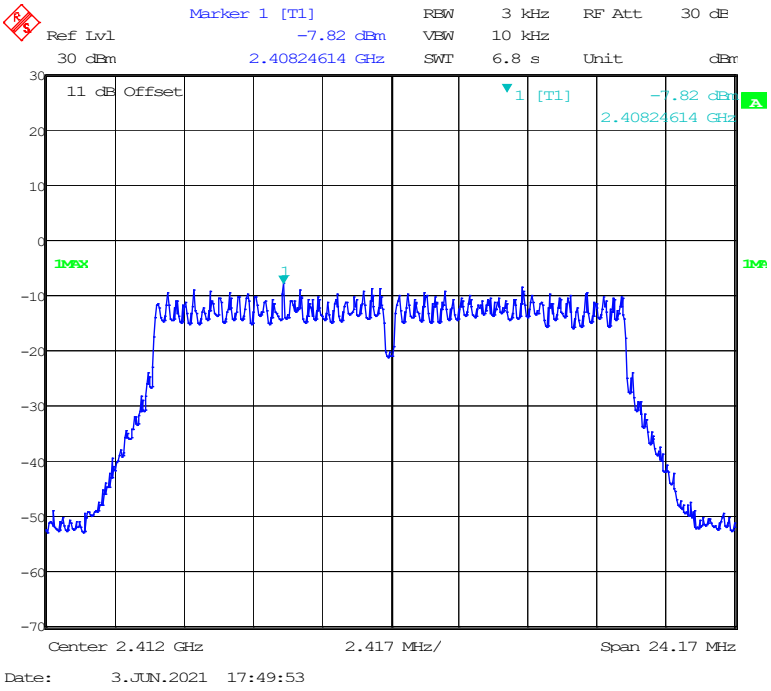
802.11b Mode Middle Channel



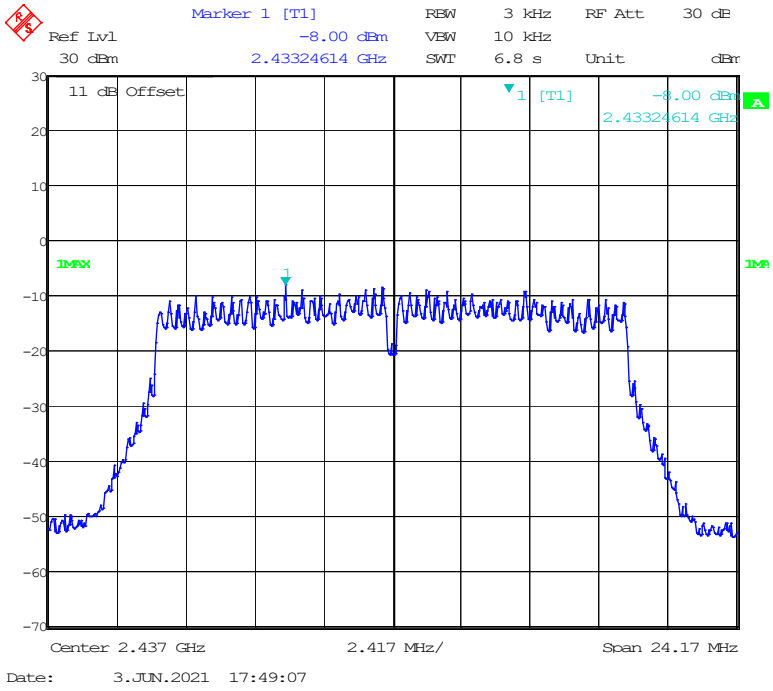
802.11b Mode High Channel



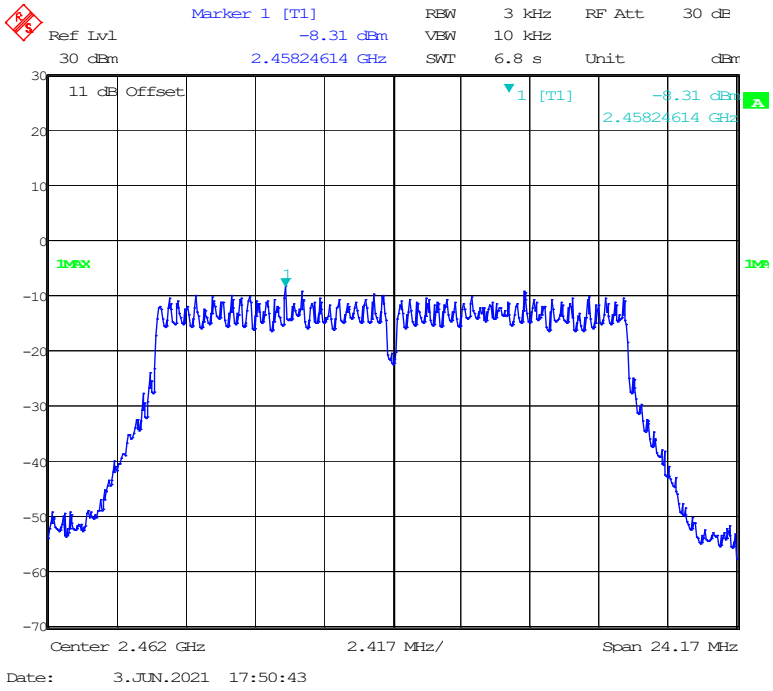
802.11g Mode Low Channel



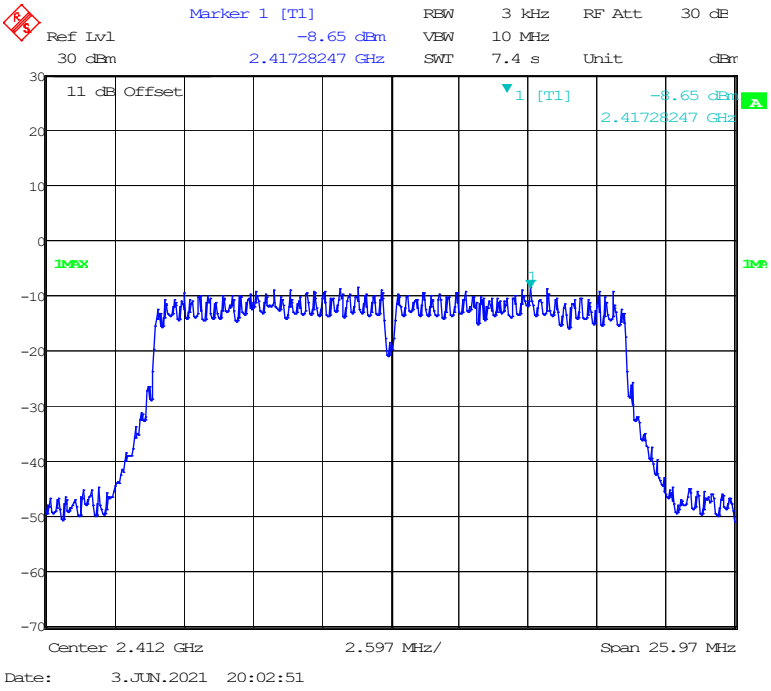
802.11g Mode Middle Channel



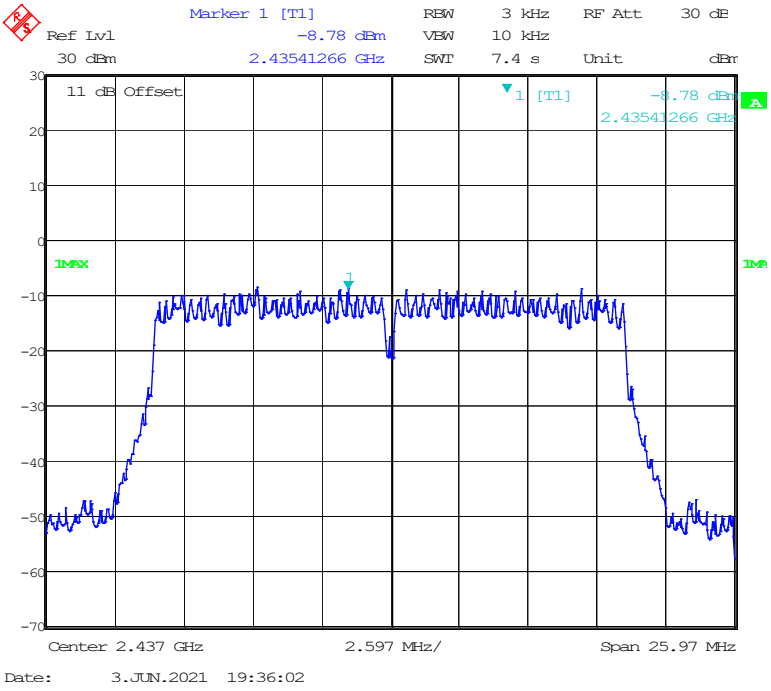
802.11g Mode High Channel



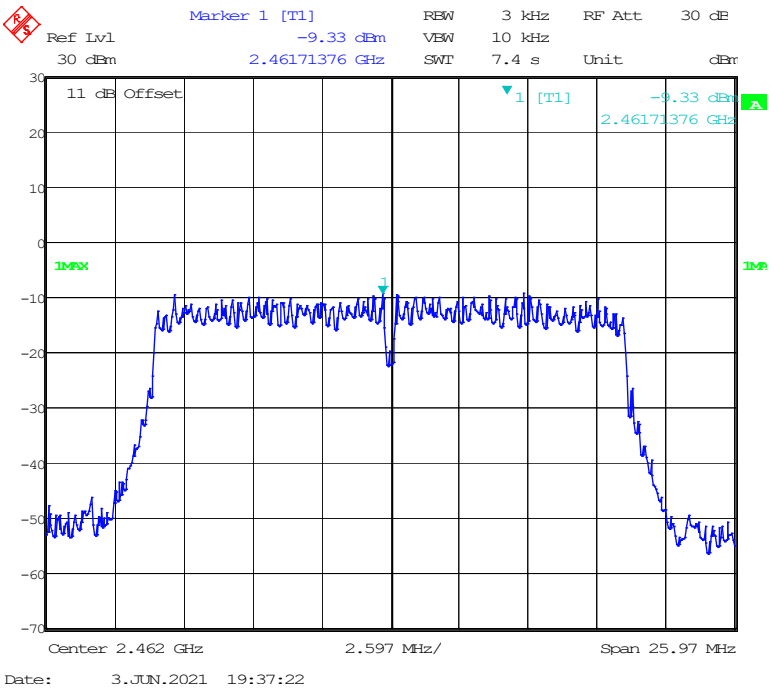
802.11n-HT20 Mode Low Channel



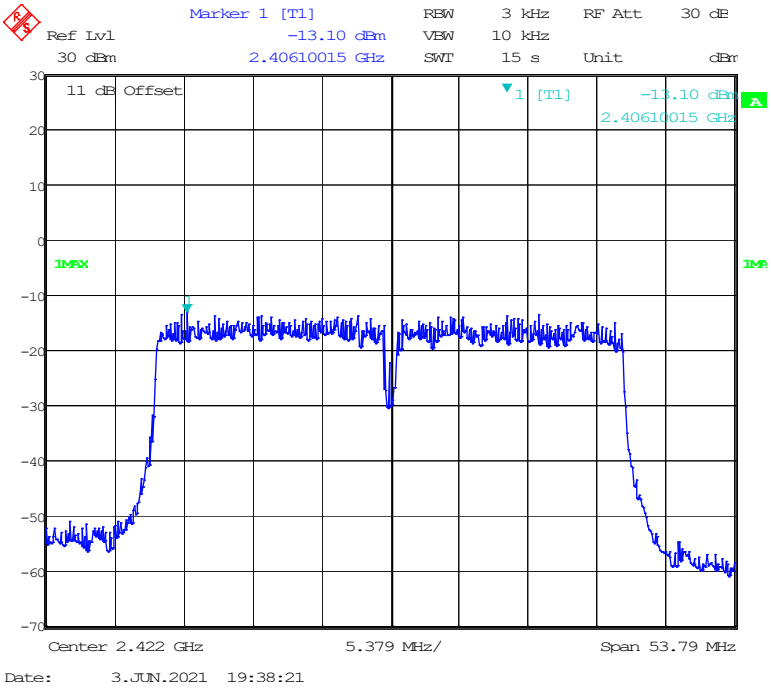
802.11n-HT20 Mode Middle Channel



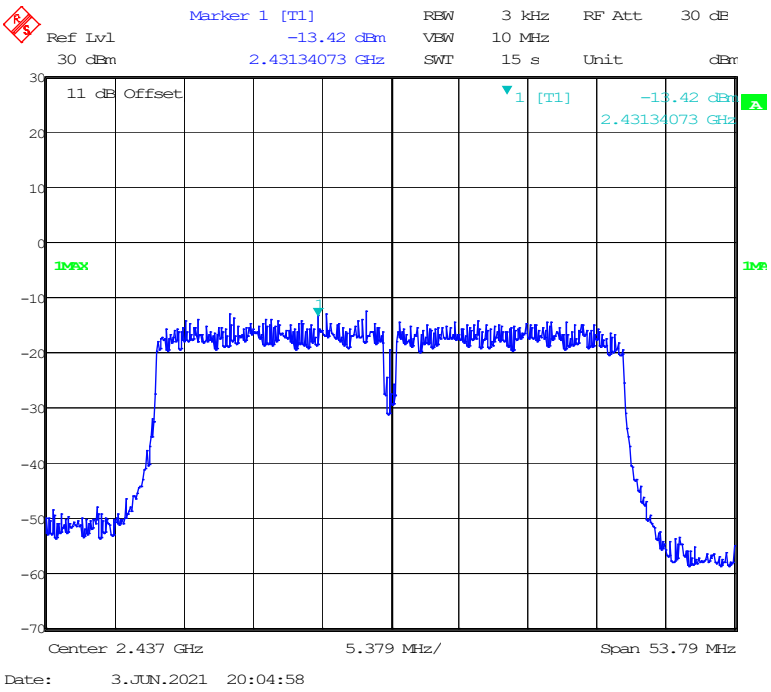
802.11n-HT20 Mode High Channel



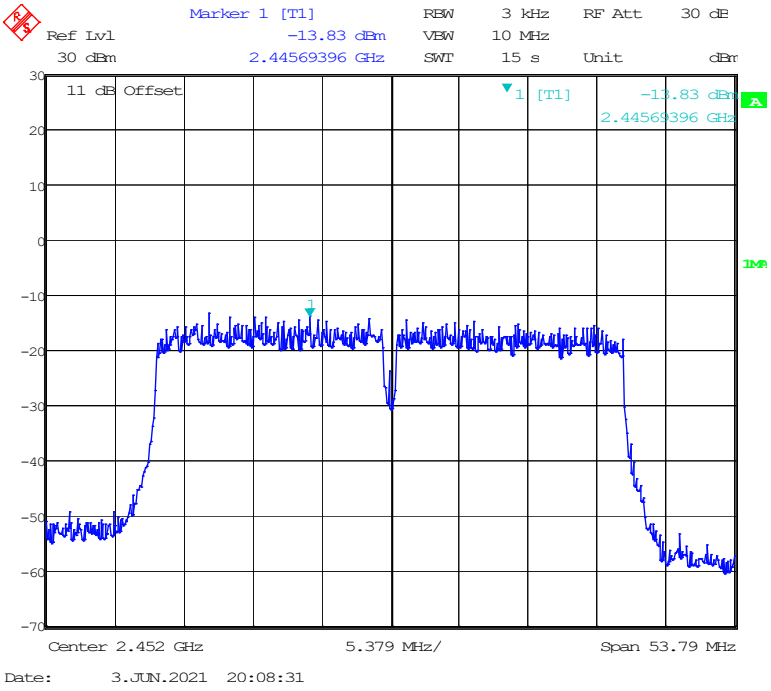
802.11n-HT40 Mode Low Channel



802.11n-HT40 Mode Middle Channel



802.11n-HT40 Mode High Channel



Declarations

1: BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk'*'. Customer model name, addresses, names, trademarks etc. are not considered data.

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

3: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

4: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

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

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