



**FCC 47 CFR PART 15 SUBPART C
ISED RSS-247 Issue 2**

CERTIFICATION TEST REPORT

For

Smart Cordless Vacuum & Washer

MODEL NUMBER for ISED: FW200300US

MODEL NUMBER for FCC: FW200300US

**ADDITIONAL MODEL NUMBER Only for FCC: FW20xxyyzz
(xx could be 00-99 or AA-ZZ, indicate for different accessories;
yy could be 00-99, indicate for different sales channels;
zz could be AA-ZZ, indicate for different countries)**

PROJECT NUMBER: 4790494534

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IC: 26039-FS20

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Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	08/06/2022	Initial Issue	



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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Tineco Intelligent Technology Co., Ltd.
Address: No. 108 Shihu Road West, Wuzhong Zone, Suzhou, 215128
P.R.China

Manufacturer Information

Company Name: Tineco Intelligent Technology Co., Ltd.
Address: No. 108 Shihu Road West, Wuzhong Zone, Suzhou, 215128
P.R.China

Factory Information

Company Name: Tineco Intelligent Technology Co., Ltd.
Address: No. 108 Shihu Road West, Wuzhong Zone, Suzhou, 215128
P.R.China

EUT Description

Product Name: Smart Cordless Vacuum & Washer
Model Name for ISED: FW200300US
Model Name for FCC: FW200300US
Additional No. only for FCC: FW20xyyyzz
(xx could be 00-99 or AA-ZZ, indicate for different accessories;
yy could be 00-99, indicate for different sales channels;
zz could be AA-ZZ, indicate for different countries)
Model Difference: Their electrical circuit design, layout, components used and
internal wiring are identical, only the color and model name is
different. The model FW200300US was selected as the
representative model for compliance test.
Sample Number: 5293124, 5293124
Data of Receipt Sample: Aug. 30, 2022
Test Date: Aug. 30, 2022 ~ Sep. 20, 2022

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	PASS
ISED RSS-247 Issue 2	PASS
ISED RSS-GEN Issue 5	PASS



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6dB Bandwidth and 99% Occupied Bandwidth	FCC 15.247 (a) (2) RSS-247 Clause 5.2 (a) RSS-Gen Clause 6.7	PASS
2	Conducted Power	FCC 15.247 (b) (3) RSS-247 Clause 5.4 (d) RSS-Gen Clause 6.12	PASS
3	Power Spectral Density	FCC 15.247 (e) RSS-247 Clause 5.2 (b)	PASS
4	Conducted Band edge And Spurious emission	FCC 15.247 (d) RSS-247 Clause 5.5 RSS-GEN Clause 6.13	PASS
5	Radiated Band edges and Spurious emission	FCC 15.247 (d) FCC 15.209 FCC 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9 RSS-GEN Clause 6.13	PASS
6	Conducted Emission Test for AC Power Port	FCC 15.207 RSS-GEN Clause 8.8	PASS
7	Antenna Requirement	FCC 15.203 RSS-GEN Clause 6.8	PASS
Remark: 1) The measurement result for the sample received is <Pass> according to < ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15C> when <Accuracy Method> decision rule is applied.			

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 558074 D01 15.247 Meas Guidance v05r02, 414788 D01 Radiated Test Site v01r01, CFR 47 FCC Part 2, CFR 47 FCC Part 15, ANSI C63.10-2013, ISED RSS-247 Issue 2 and ISED RSS-GEN Issue 5.

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1247) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules. IC (IC Designation No.: 25056; CAB No.: CN0073) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.
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Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, People's Republic of China

Note 2: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. These measurements below 30MHz had been correlated to measurements performed on an OFS.

Note 3: The test anechoic chamber in UL-CCIC COMPANY LIMITED had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.



4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Uncertainty
Conduction emission	3.1dB
Radiation Emission test (include Fundamental emission) (9kHz-30MHz)	3.3dB
Radiation Emission test (include Fundamental emission) (30MHz-1GHz)	3.3dB
Radiation Emission test (1GHz to 26GHz) (include Fundamental emission)	3.9dB (1GHz-18GHz)
	4.2dB (18GHz-26.5GHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	



5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Product Name:	Smart Cordless Vacuum & Washer
Model No.:	FW200300US
Operating Frequency:	IEEE 802.11B/G/N(HT20): 2412MHz to 2462MHz
Type of Modulation:	IEEE for 802.11B: DSSS (CCK, DQPSK, DBPSK) IEEE for 802.11G: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11N HT20: OFDM (64QAM, 16QAM, QPSK, BPSK)
Channels Step:	Channels with 5MHz step
Sample Type:	Fixed production
Test power grade:	N/A
Test software of EUT:	Secure CRT (manufacturer declare)
Antenna Type:	PCB Antenna
Antenna Gain:	2.87 dBi
	Note: This data is provided by customer and our lab isn't responsible for this data.



5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	IEE Std. 802.11	Channel Number	Max AVG Conducted Power (dBm)
1	IEEE 802.11B	1-11[11]	16.55
1	IEEE 802.11G	1-11[11]	15.05
1	IEEE 802.11N HT20	1-11[11]	14.83

5.3. CHANNEL LIST

Channel List for 802.11B/G/N(20 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	4	2427	7	2442	10	2457
2	2417	5	2432	8	2447	11	2462
3	2422	6	2437	9	2452		



5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel (MHz)
IEEE 802.11B	LCH: CH01 2412
	MCH: CH06 2437
	HCH: CH11 2462
IEEE 802.11G	LCH: CH01 2412
	MCH: CH06 2437
	HCH: CH11 2462
IEEE 802.11N HT20	LCH: CH01 2412
	MCH: CH06 2437
	HCH: CH11 2462

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		EspRFtestTool					
Modulation Mode	Transmit Antenna Number	Test Channel					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11B	1	default	default	default	/		
802.11G	1	default	default	default			
802.11N HT20	1	default	default	default			



5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2400-2483.5	Patch Antenna	2.87

Note: This data is provided by customer and our lab isn't responsible for this data.

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11B	☒1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.
IEEE 802.11G	☒1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.
IEEE 802.11N HT20	☒1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.

5.7. THE WORSE CASE CONFIGURATIONS

For WIFI module, the worst-case data rates as provided by the client were:

802.11B mode: 1 Mbps

802.11G mode: 6 Mbps

802.11N HT20 mode: MCS0

5.8. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests	
Relative Humidity	55 ~ 65%	
Atmospheric Pressure:	1025Pa	
Temperature	TN	23 ~ 28°C
Voltage:	VL	N/A
	VN	AC 120V
	VH	N/A

Note: VL= Lower Extreme Test Voltage

VN= Nominal Voltage

VH= Upper Extreme Test Voltage

TN= Normal Temperature



5.9. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Description
1	Laptop	ThinkPad	E590	/

I/O PORT

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB	USB	USB	100cm Length	/

ACCESSORY

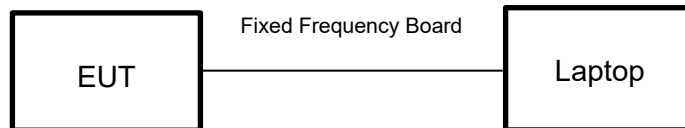
Item	Accessory	Brand Name	Model Name	Description
1	Fixed Frequency Board	/	/	Supplied by customer
2	AC/DC Adaptor	Tineco	KL-WA300100-X	INPUT:100-240V~ 50/60Hz 1.2A OUTPU: 30.0V-1.0A



TEST SETUP

The EUT can work in an engineer mode with a software through a table PC.

SETUP DIAGRAM FOR TESTS





5.10. MEASURING INSTRUMENT AND SOFTWARE USED

Conducted Emissions (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
☒	EMI Test Receiver	R&S	ESR3	126700	2020-12-05	2021-12-04	2022-12-03
☒	Two-Line V-Network	R&S	ENV216	126701	2020-12-05	2021-12-04	2022-12-03
☒	Artificial Mains Networks	R&S	ENY81	126711	2020-10-13	2021-10-12	2022-10-11
Software							
Used	Description		Manufacturer		Name	Version	
☒	Test Software for Conducted disturbance		R&S		EMC32	Ver. 9.25	
Radiated Emissions (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
☒	Spectrum Analyzer	Keysight	N9010B	155727	2021-05-09	2022-04-09	2023-04-08
☒	EMI test receiver	R&S	ESR26	126703	2020-12-05	2021-12-04	2022-12-03
☒	Receiver Antenna (9kHz-30MHz)	Schwarzbeck	FMZB 1513	155456	2018-06-15	2021-06-03	2024-06-02
☒	Receiver Antenna (30MHz-1GHz)	SunAR RF Motion	JB1	177821	2019-01-19	2022-01-18	2025-01-17
☒	Receiver Antenna (1GHz-18GHz)	R&S	HF907	126705	2019-01-27	2022-02-28	2025-02-27
☒	Receiver Antenna (18GHz-26.5GHz)	Schwarzbeck	BBHA9170	126706	2019-02-29	2022-02-28	2025-02-27
☒	Pre-amplification (To 18GHz)	Compliance Direction System Inc.	PAP-1G18-50	178825	2021-03-26	2022-03-01	2023-02-28
☒	Pre-amplification (To 26.5GHz)	R&S	SCU-26D	135391	2020-12-05	2021-12-04	2022-12-03
☒	Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	1	2021-05-09	2022-05-08	2023-05-07
☒	Highpass Filter	Wainwright	WHKX10-2700-3000-18000-40SS	2	2021-05-09	2022-05-08	2023-05-07
Software							
Used	Description		Manufacturer		Name	Version	
☒	Test Software for Radiated disturbance		Tonscend		TS+	Ver. 2.5	
Other instruments							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
☒	Spectrum Analyzer	Keysight	N9010B	155368	2021-05-09	2022-05-08	2023-05-07
☒	Power Meter	MWT	MW100-RFCB	221694	/	2022-05-23	2023-05-22
☒	Attenuator	PASTERNAK	PE7087-6	1624	2021-05-24	2022-05-23	2023-05-22



6. MEASUREMENT METHODS

No.	Test Item	KDB Name	Section
1	6dB Bandwidth and 99% Occupied Bandwidth	KDB 558074 D01 15.247 Meas Guidance v05r02	8.2
2	Output Power	KDB 558074 D01 15.247 Meas Guidance v05r02	8.3.1.3/8.3.2.3
3	Power Spectral Density	KDB 558074 D01 15.247 Meas Guidance v05r02	8.4
4	Out-of-band emissions in non-restricted bands	KDB 558074 D01 15.247 Meas Guidance v05r02	8.5
5	Out-of-band emissions in restricted bands	KDB 558074 D01 15.247 Meas Guidance v05r02	8.6
6	Band-edge	KDB 558074 D01 15.247 Meas Guidance v05r02	8.7
7	Conducted Emission Test for AC Power Port	ANSI C63.10-2013	6.2



7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

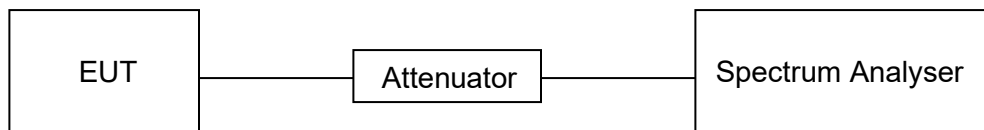
LIMITS

None; for reporting purposes only

PROCEDURE

FCC KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

TEST RESULTS TABLE

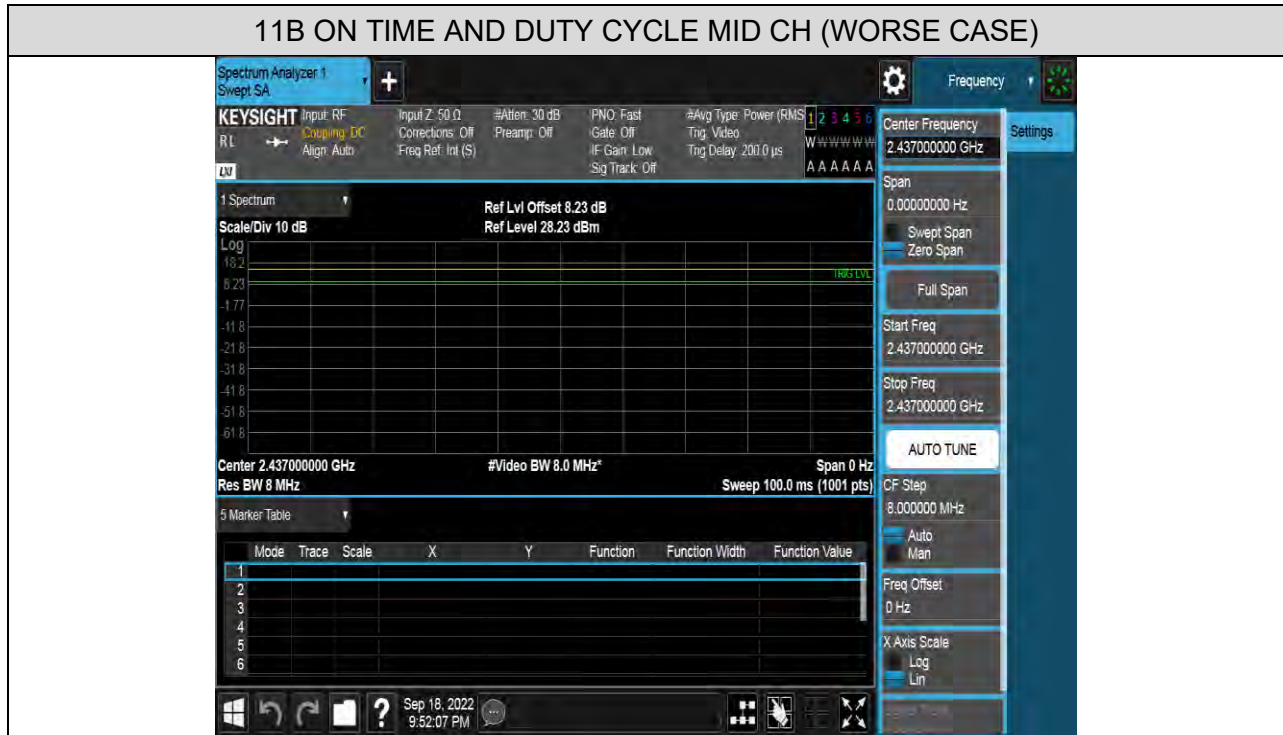
Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)	1/T Minimum VBW (kHz)	Final VBW (kHz)
11B	100	100	1	100	0	0.01	0.01
11G	100	100	1	100	0	0.01	0.01
802.11N HT20	100	100	1	100	0	0.01	0.01

- Note: 1) Duty Cycle Correction Factor= $10\log(1/x)$.
2) Where: x is Duty Cycle (Linear)
3) Where: T is On Time (transmit duration)
4) If the duty cycle is above 98%, the Final VBW is 10Hz.

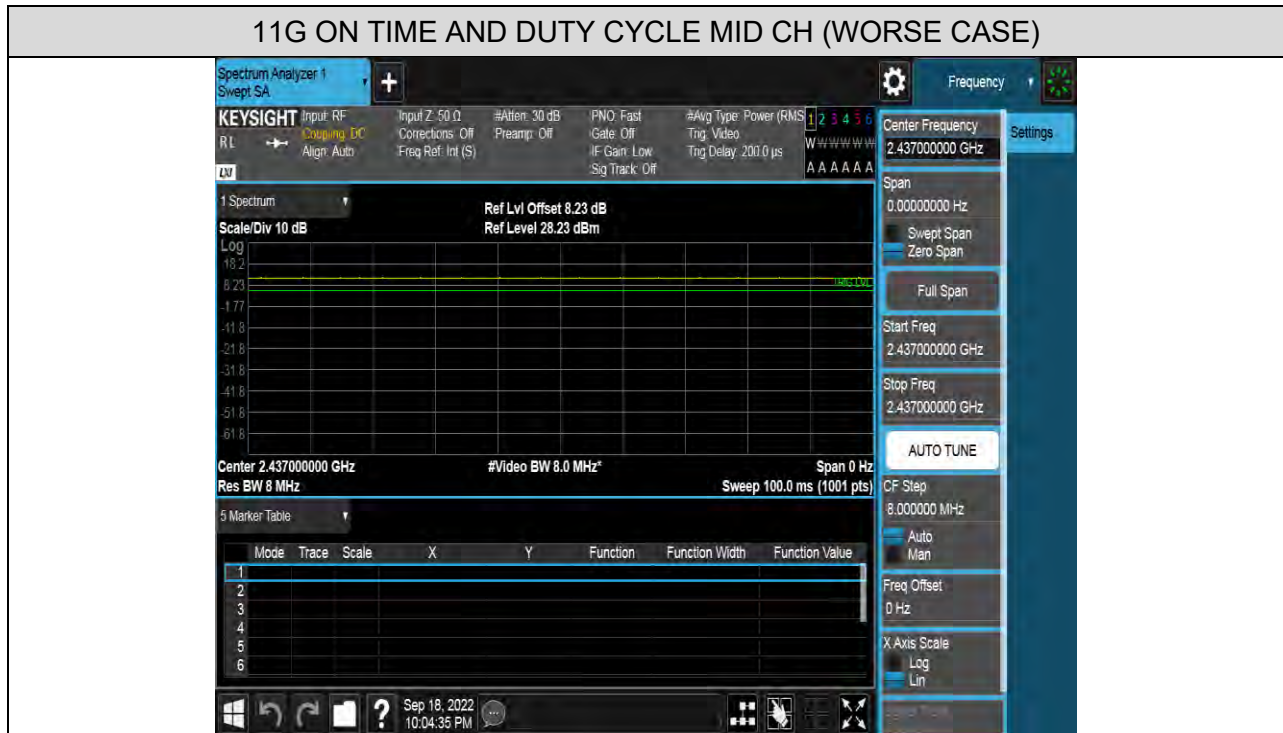


TEST GRAPHS

11B ON TIME AND DUTY CYCLE MID CH (WORSE CASE)

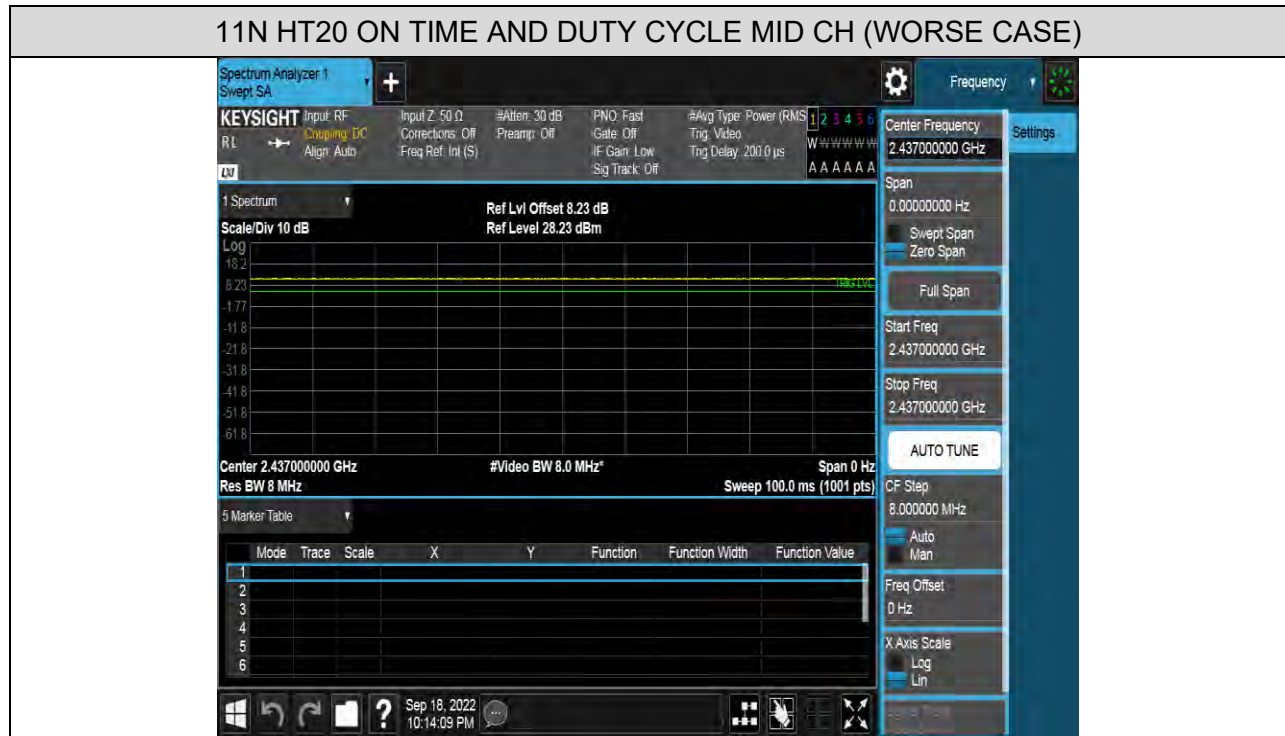


11G ON TIME AND DUTY CYCLE MID CH (WORSE CASE)





11N HT20 ON TIME AND DUTY CYCLE MID CH (WORSE CASE)





7.2. 6 dB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

LIMITS

FCC Part15 (15.247), Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2) ISED RSS-247 5.2 (a)	6dB Bandwidth	$\geq 500\text{kHz}$	2400-2483.5
ISED RSS-Gen Clause 6.7	99 % Occupied Bandwidth	For reporting purposes only	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

Connect the EUT to the spectrum analyser and use the following settings:

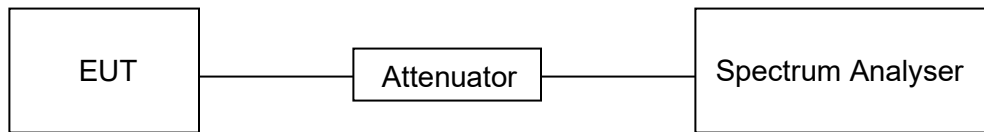
Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth: 100 kHz For 99 % Occupied Bandwidth: 1 % to 5 % of the occupied bandwidth
VBW	For 6 dB Bandwidth: $\geq 3 \times \text{RBW}$ For 99 % Occupied Bandwidth: $\geq 3 \times \text{RBW}$
Trace	Max hold
Sweep	Auto couple

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) Allow the trace to stabilize and 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 SETUP



TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

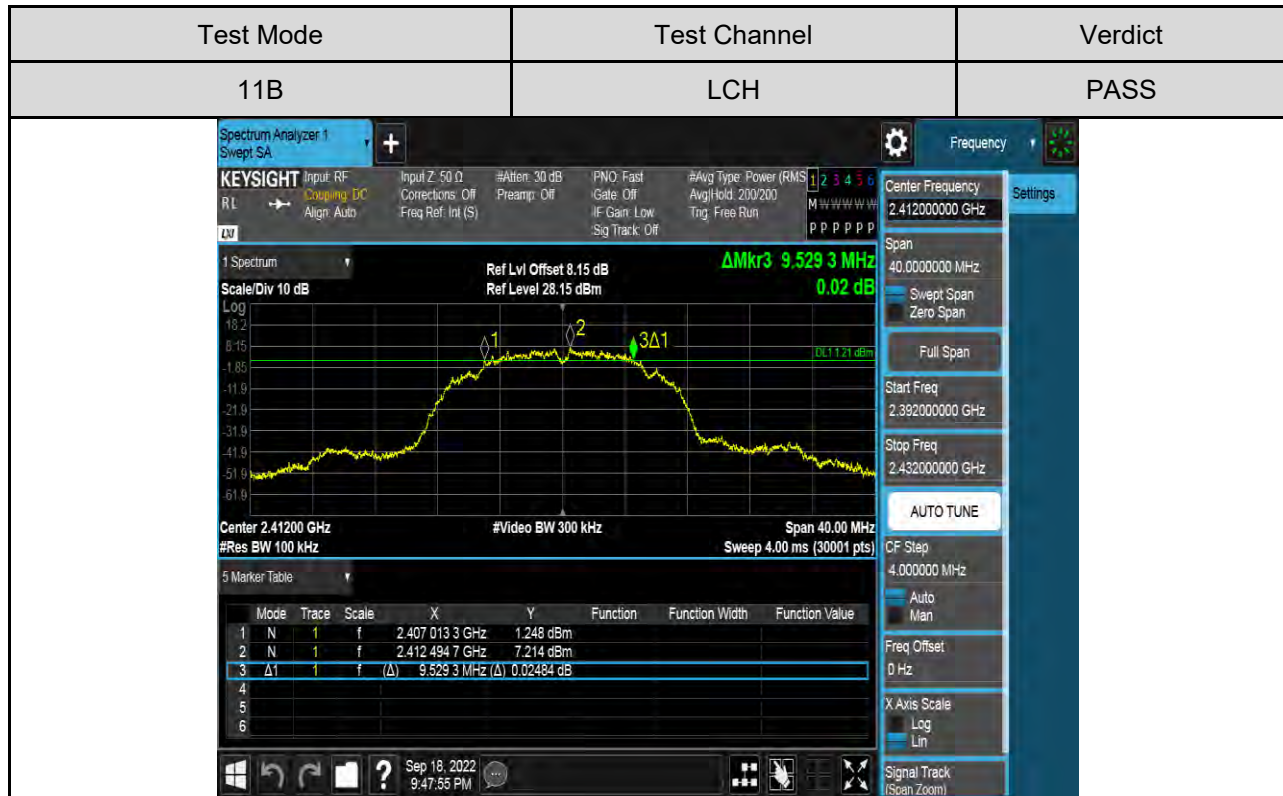
TEST RESULTS TABLE

Test Mode	Test Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Result
11B	LCH	9.5293	13.090	Pass
	MCH	8.6693	13.068	Pass
	HCH	9.1027	13.090	Pass
11G	LCH	16.3160	16.353	Pass
	MCH	16.3240	16.346	Pass
	HCH	16.3130	16.362	Pass
11N HT20	LCH	16.8960	17.119	Pass
	MCH	16.8000	17.106	Pass
	HCH	16.8107	17.114	Pass



TEST GRAPHS

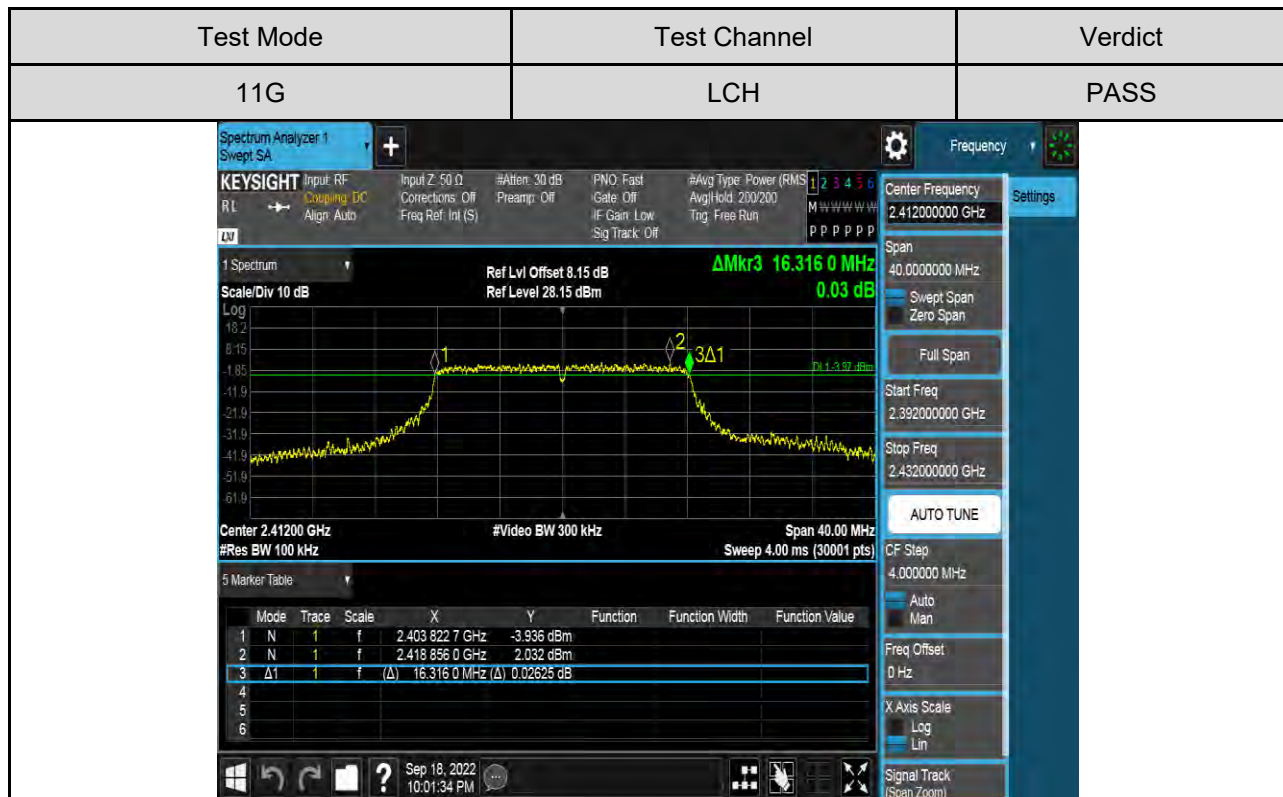
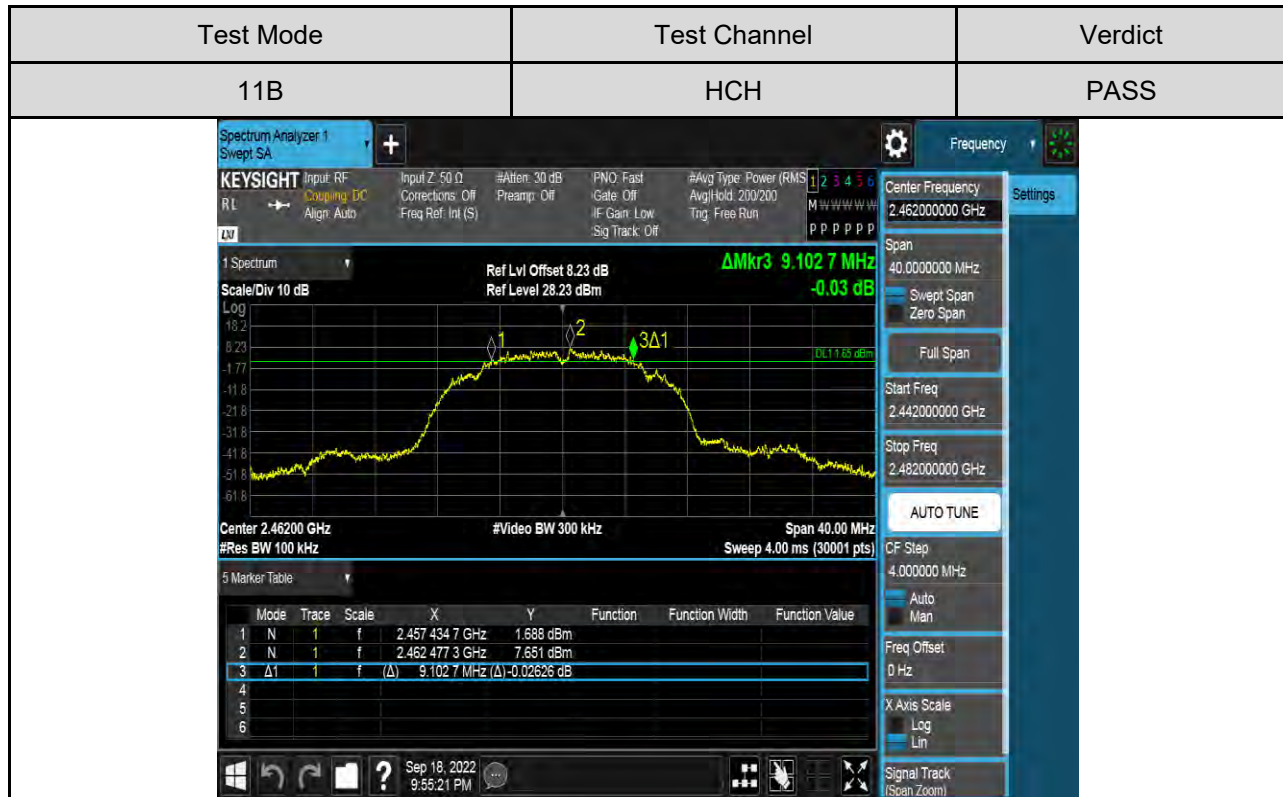
6dB Bandwidth

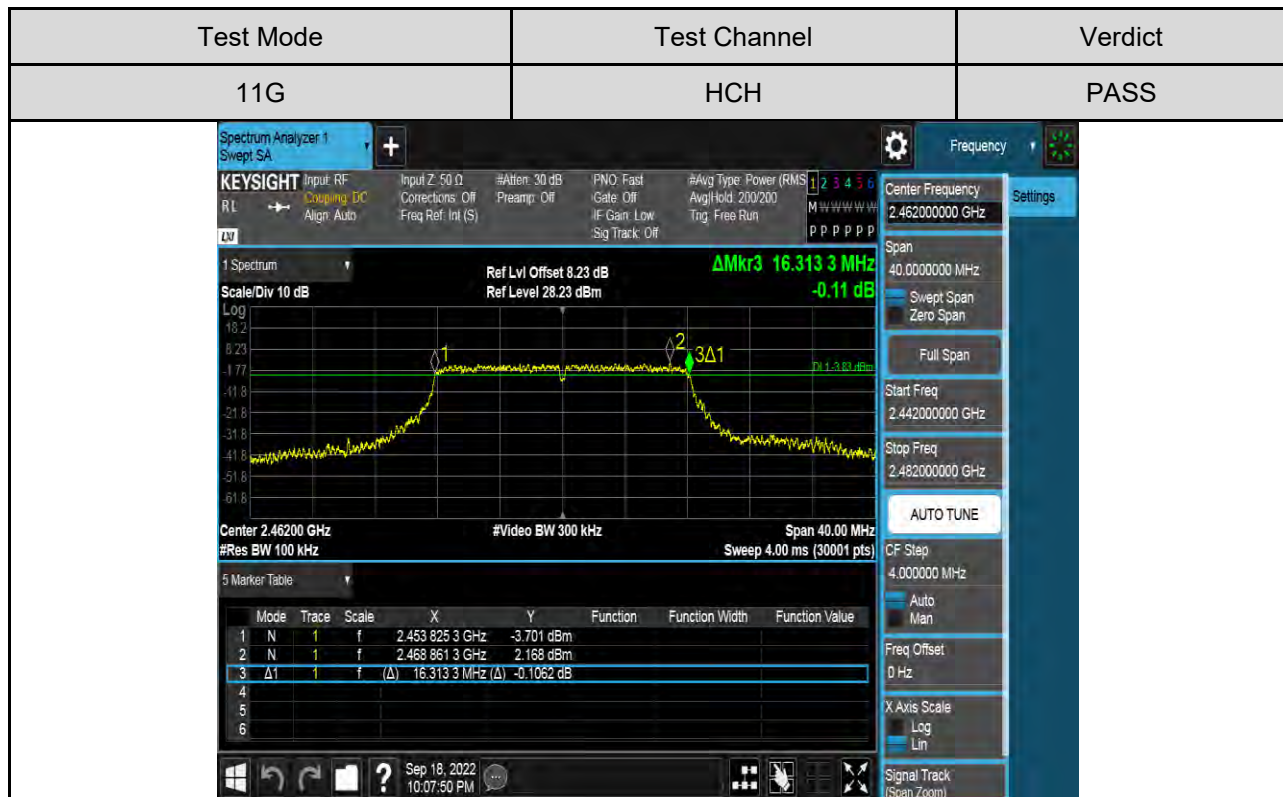
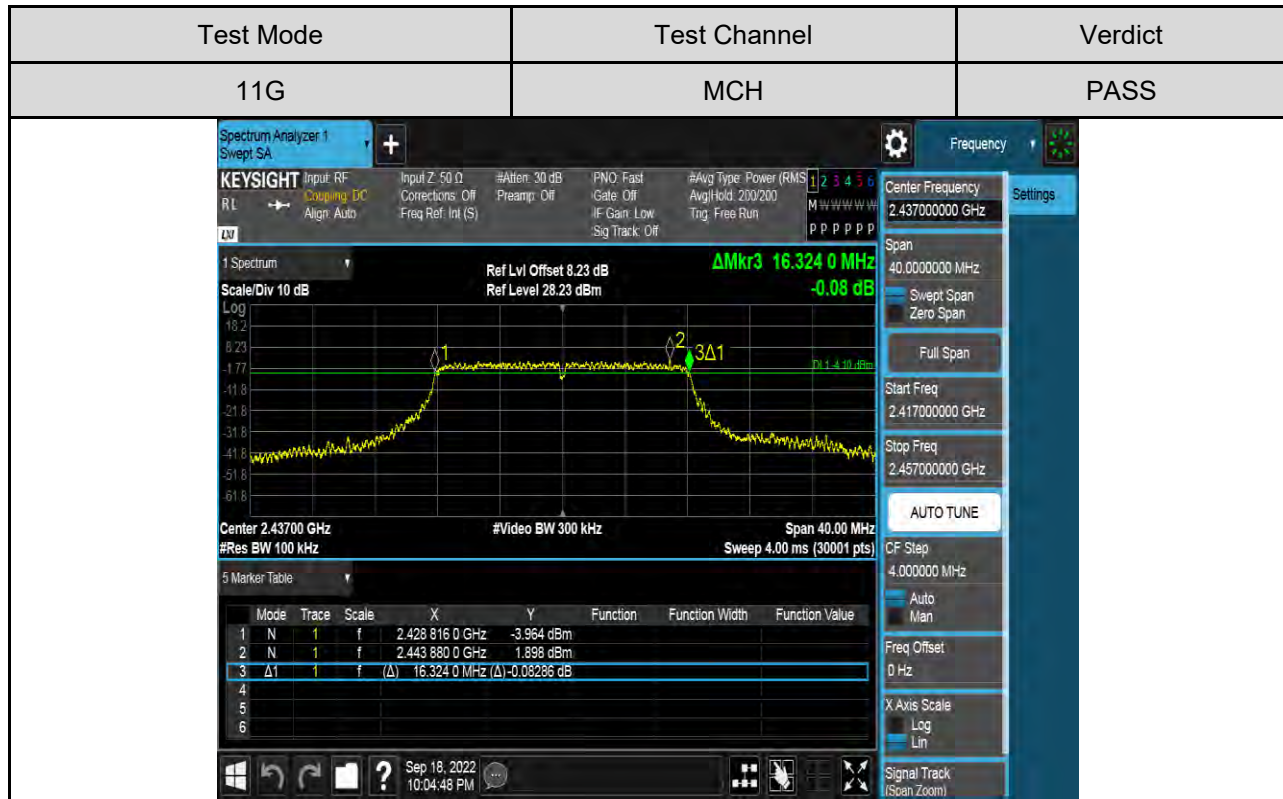


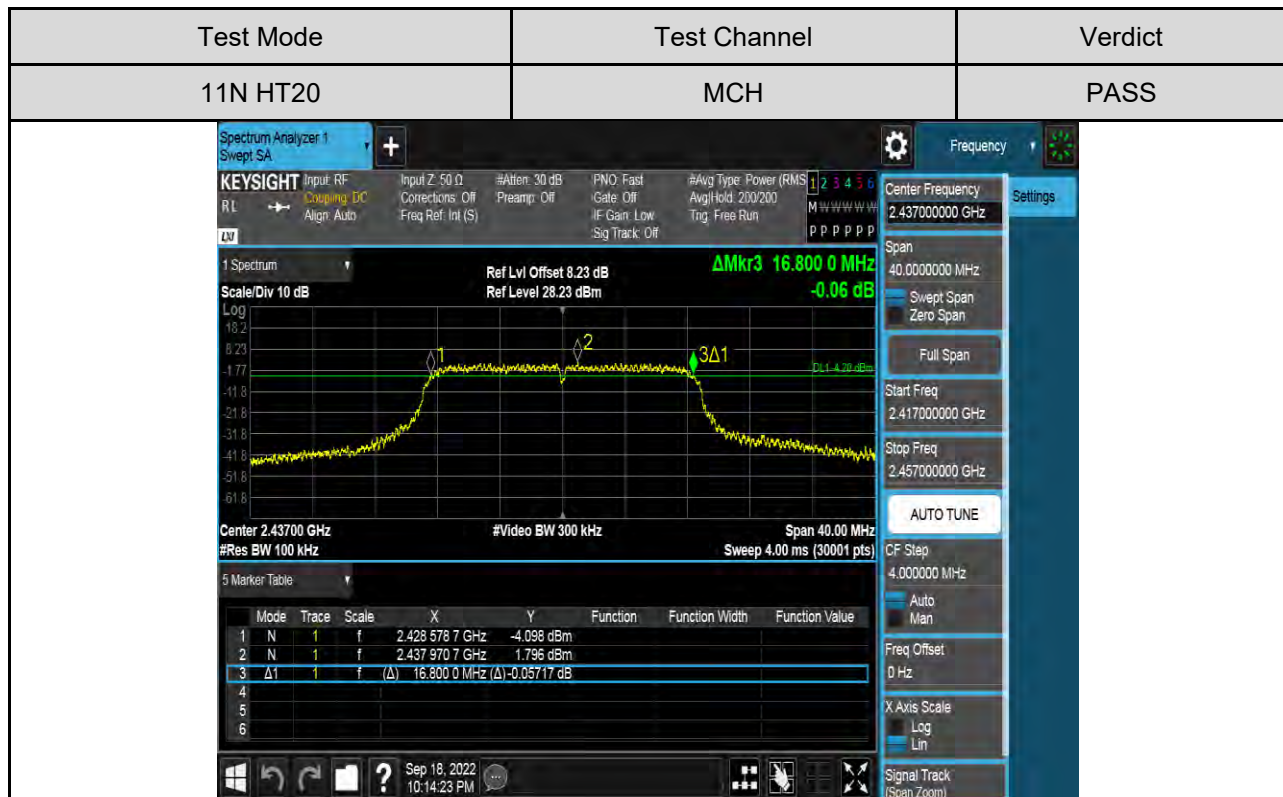
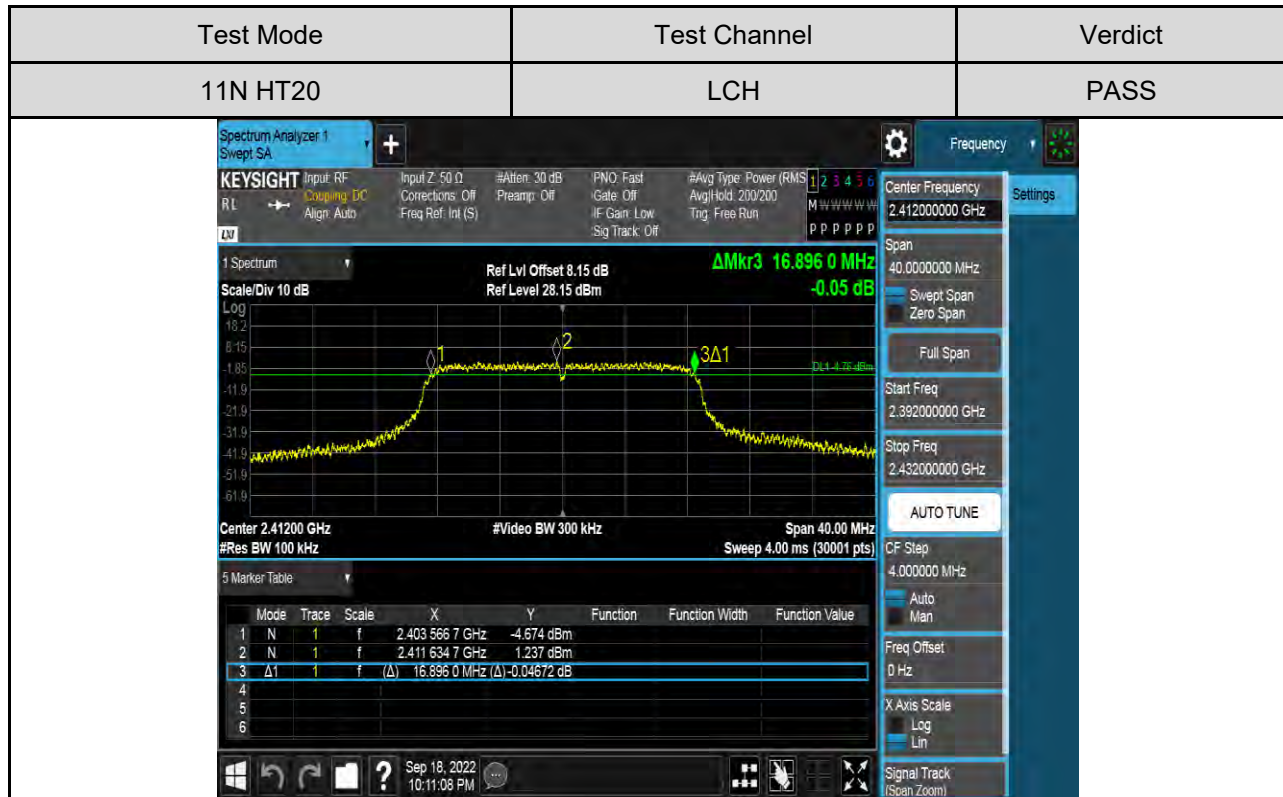
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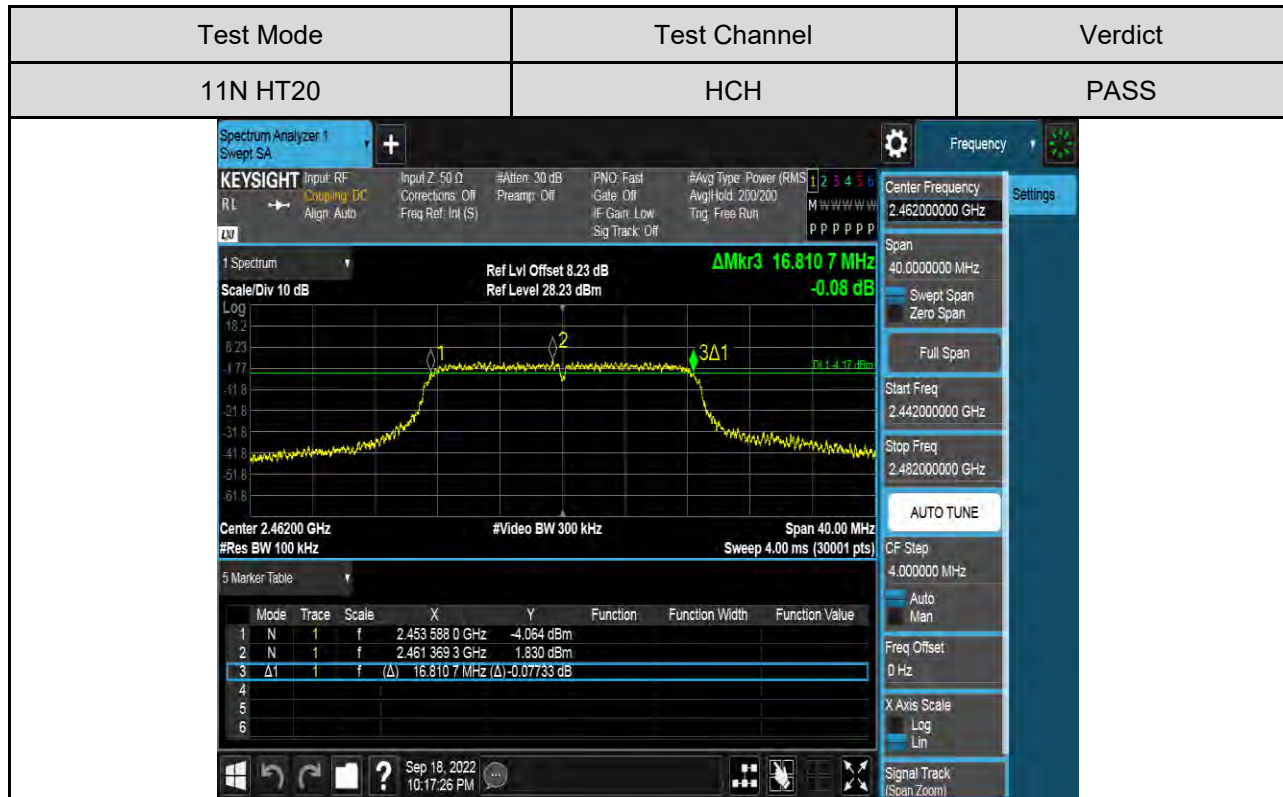
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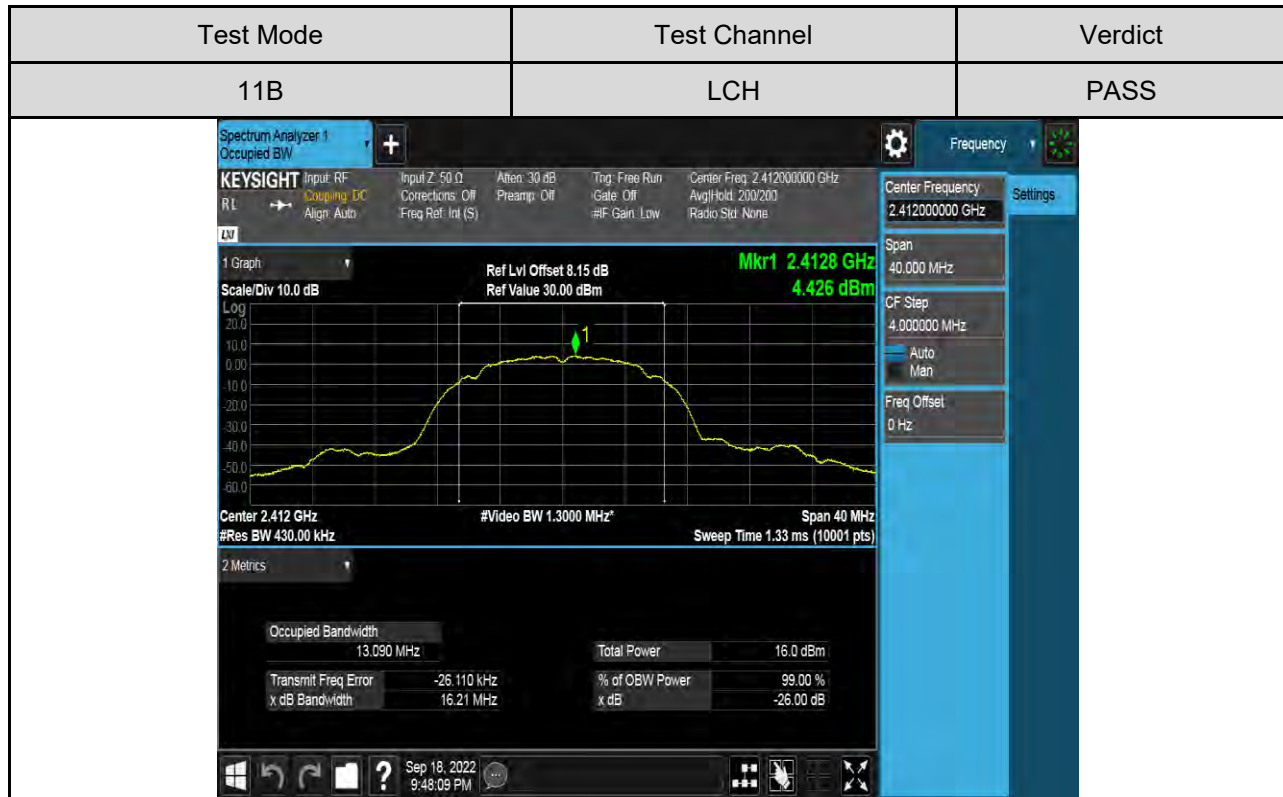


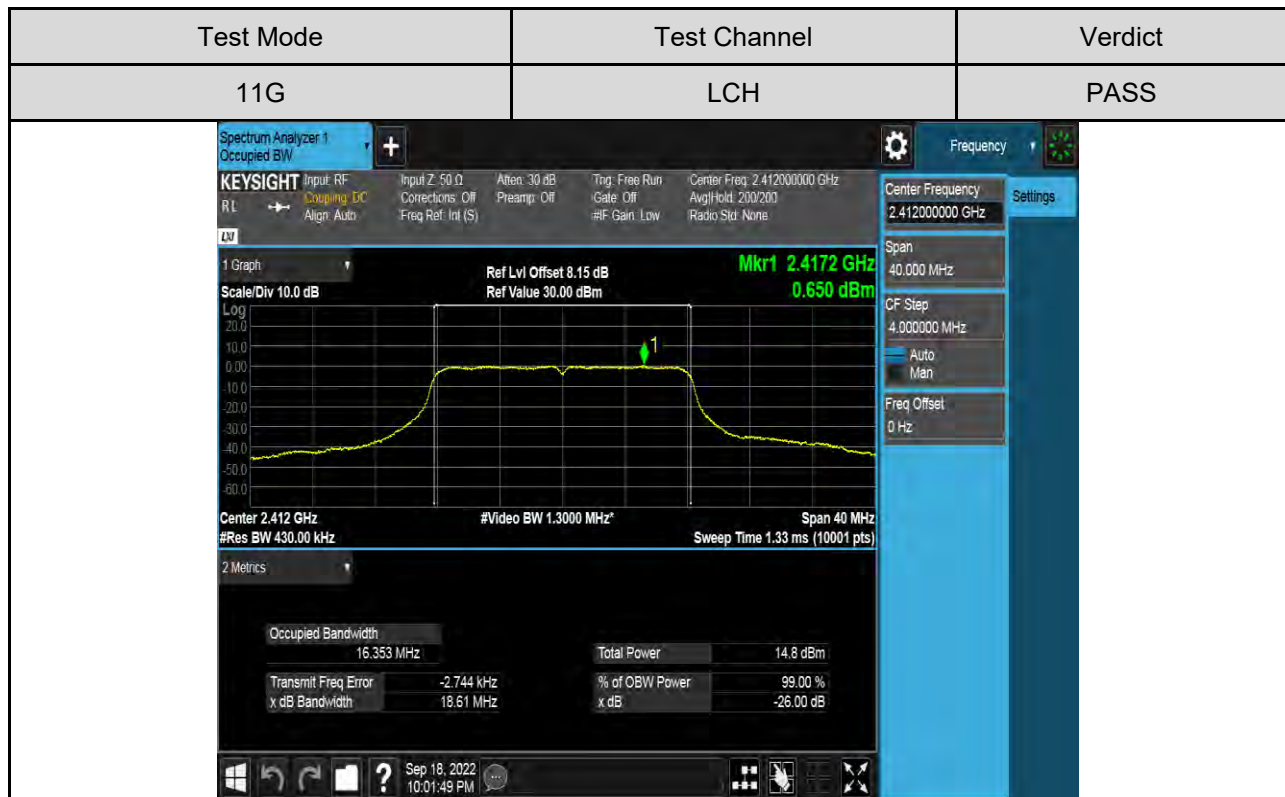
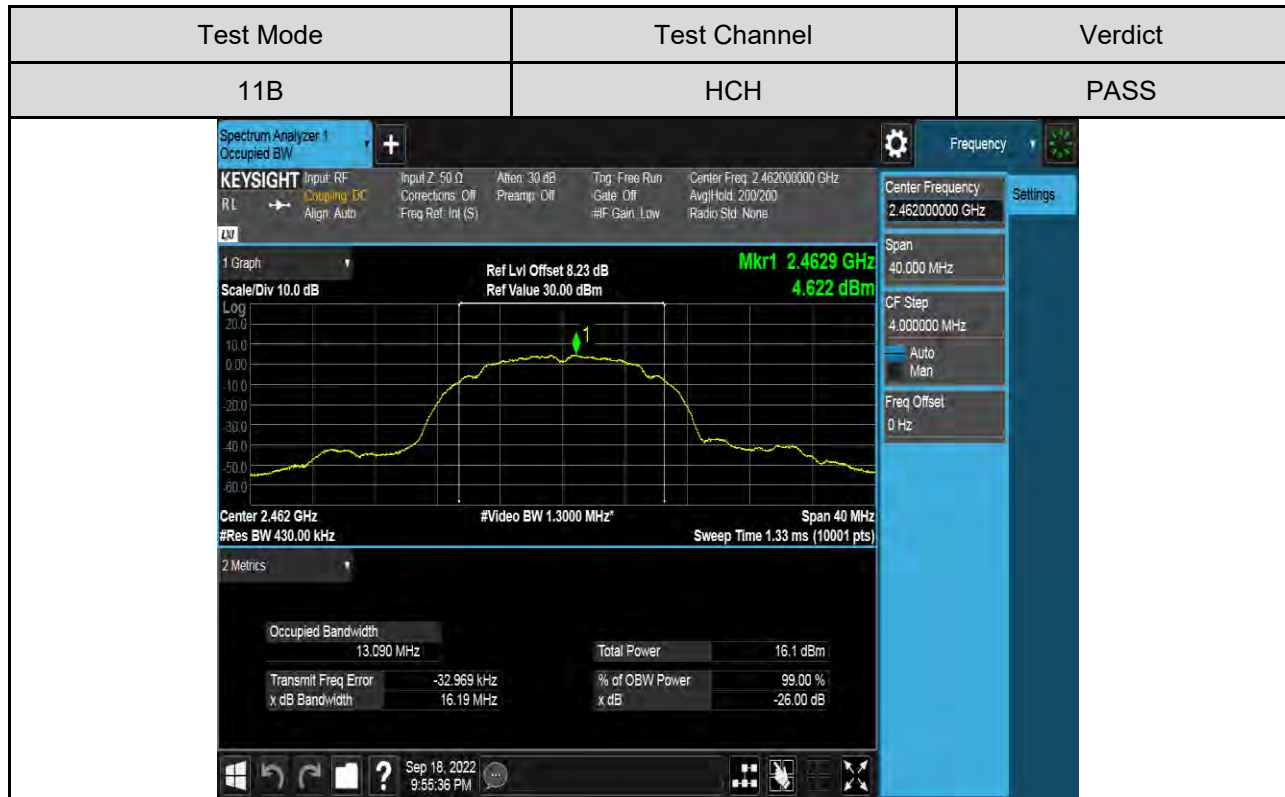


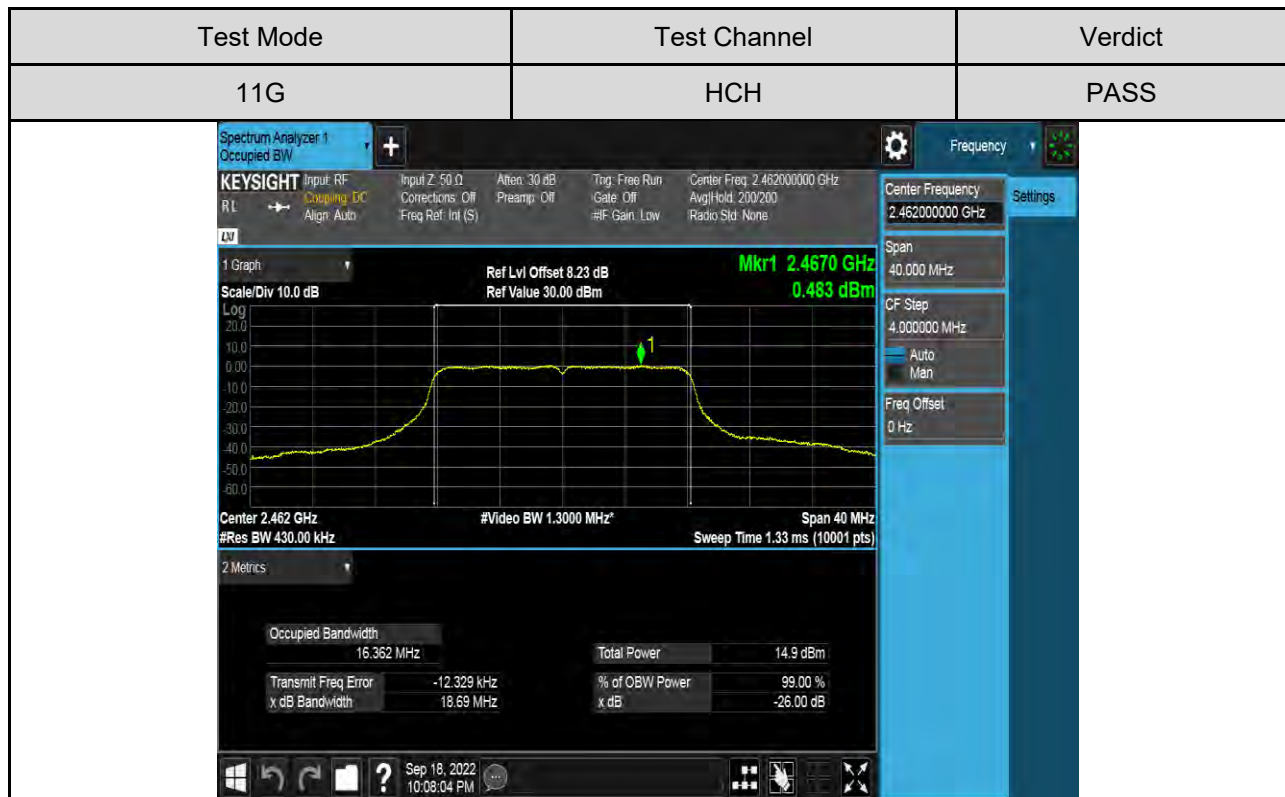
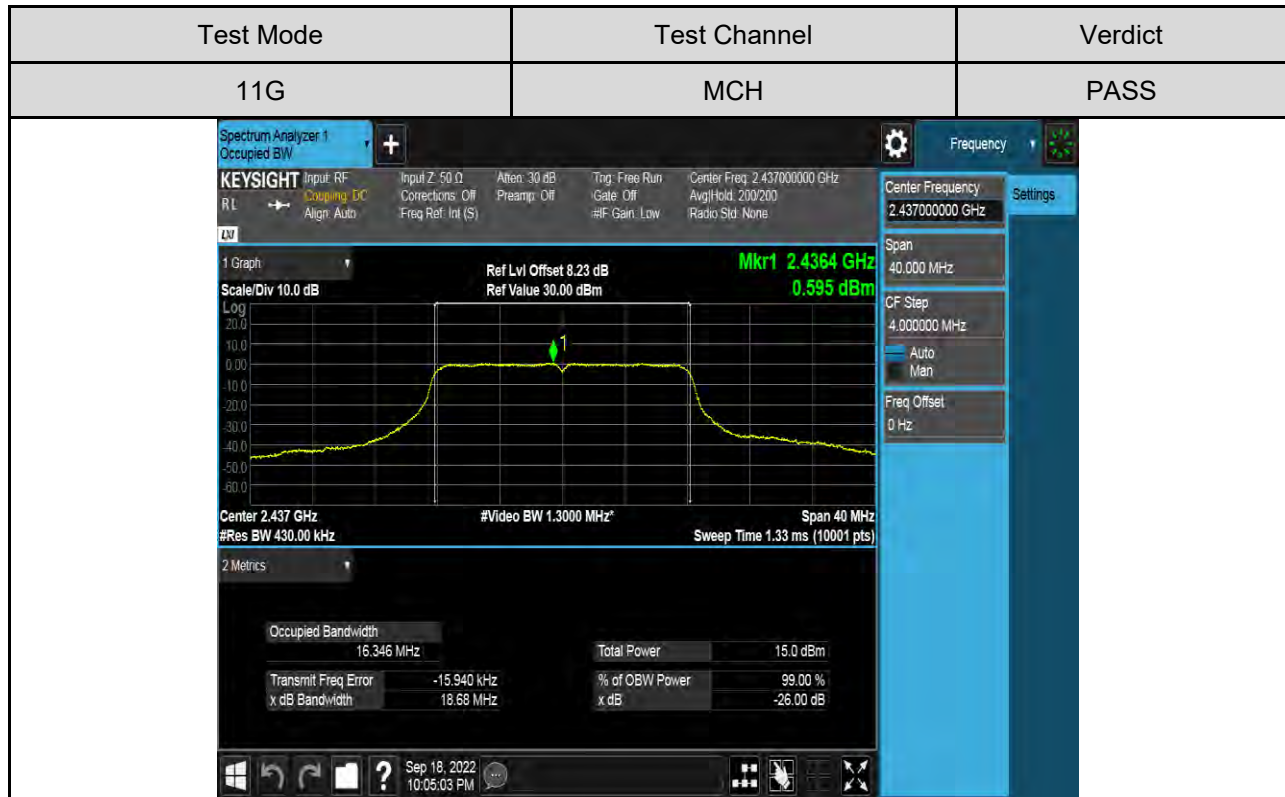


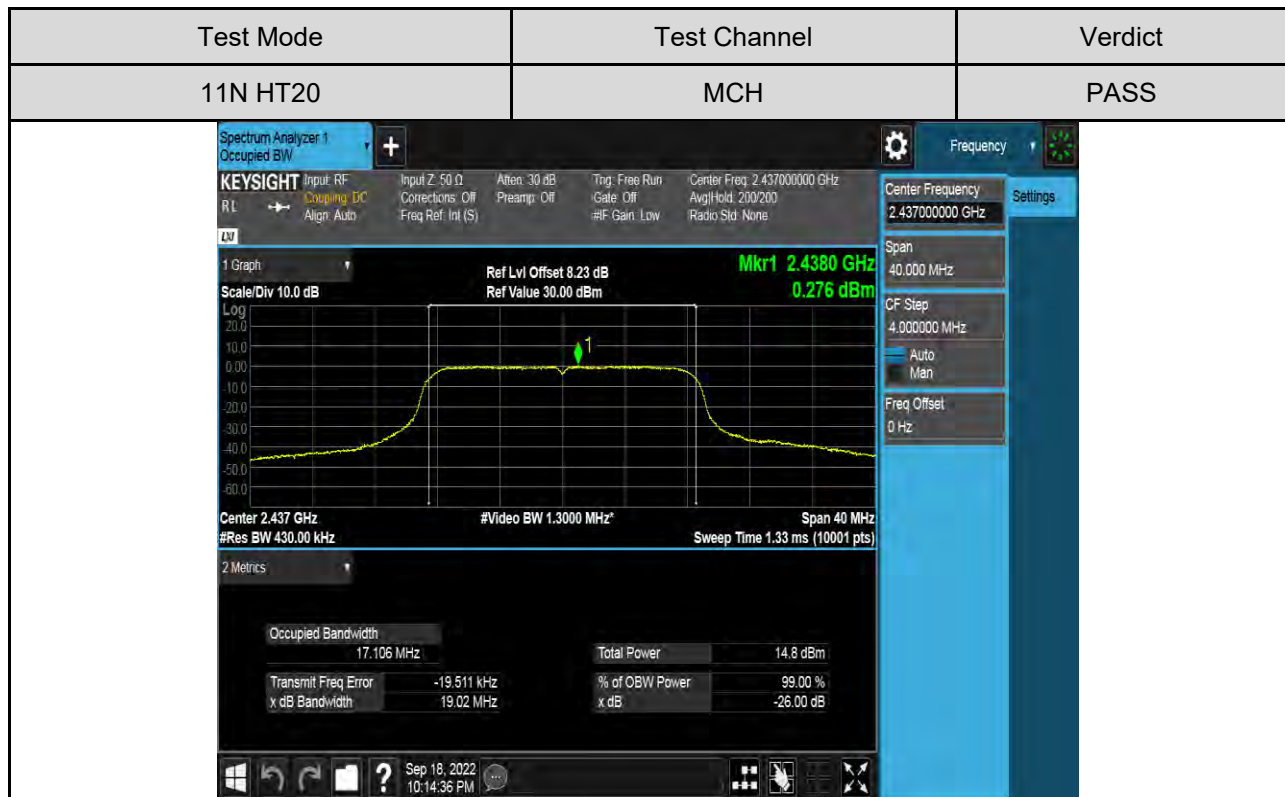
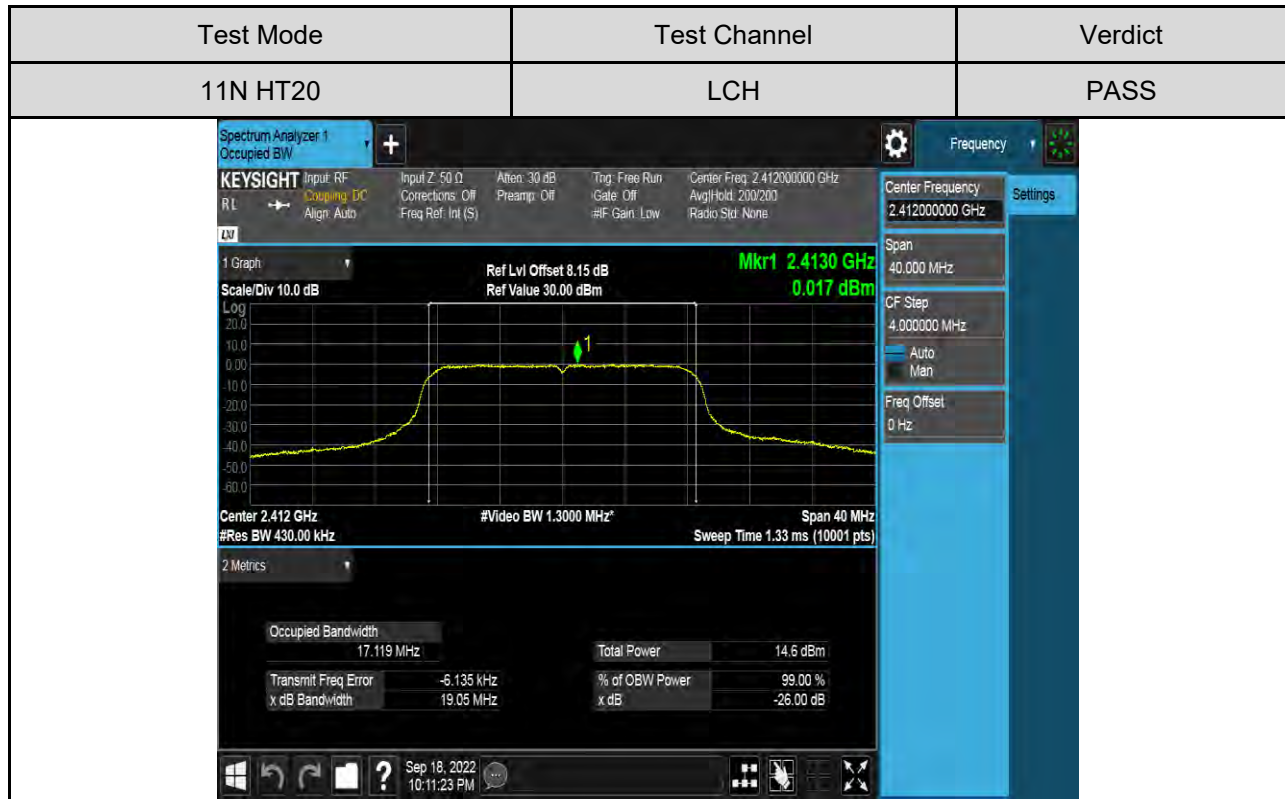


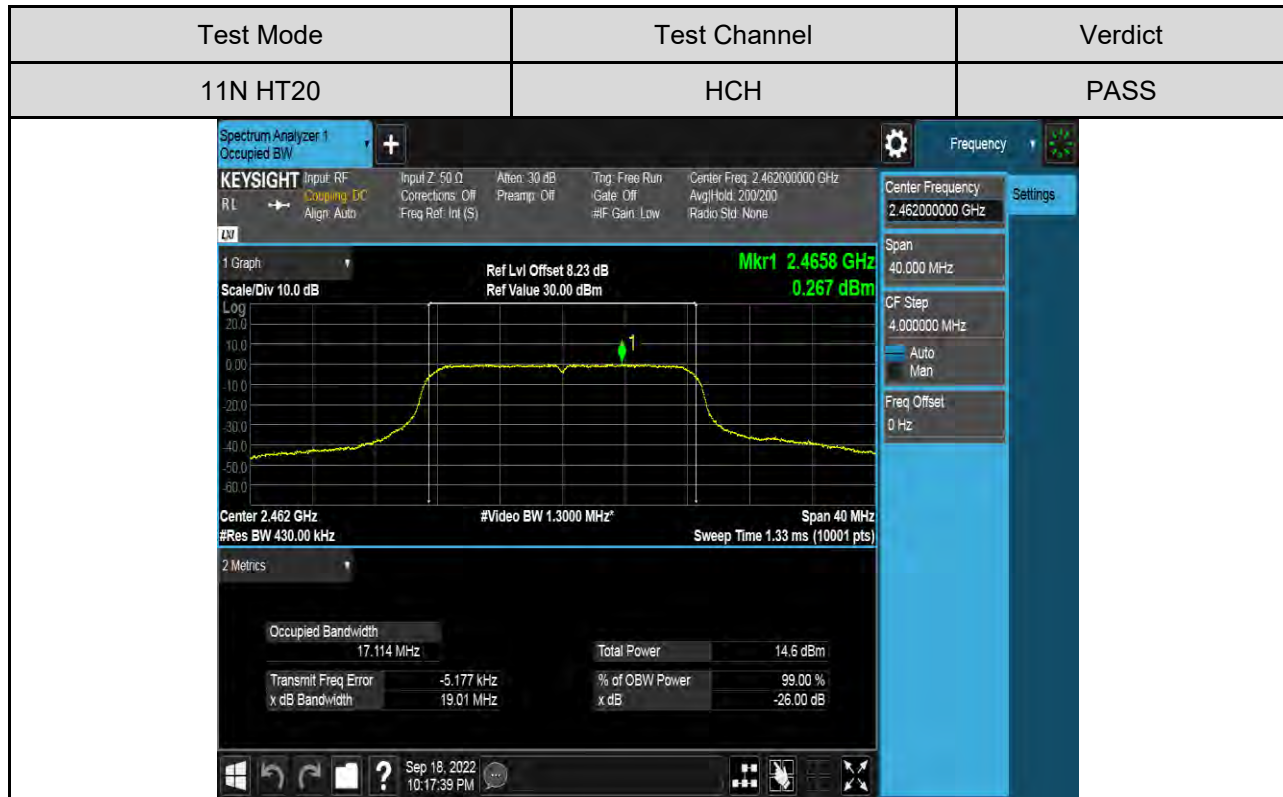
99% Bandwidth













7.3. CONDUCTED OUTPUT POWER

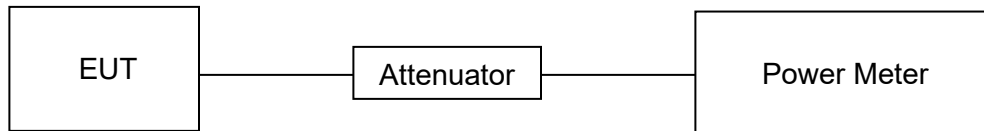
LIMITS

FCC Part15 (15.247), Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(b)(3) ISED RSS-247 5.4 (d) RSS-Gen Clause 6.12	Output Power	1 watt or 30dBm	2400-2483.5

TEST PROCEDURE

Place the EUT on the table and set it in the transmitting mode.
Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the Power sensor.
Measure the power of each channel.
AVG Detector used for AVG result.

TEST SETUP





TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

TEST RESULTS TABLE

Test Mode	Test Channel	Measurement Output Power (AV)	10log(1/x) Factor	Maximum Conducted Output Power (AV)	LIMIT
		dBm	dBm	dBm	dBm
11B	LCH	15.96	0	15.96	30
	MCH	16.55	0	16.55	30
	HCH	16.11	0	16.11	30
11G	LCH	14.74	0	14.74	30
	MCH	15.05	0	15.05	30
	HCH	14.88	0	14.88	30
11N HT20	LCH	14.56	0	14.56	30
	MCH	14.83	0	14.83	30
	HCH	14.64	0	14.64	30



7.4. POWER SPECTRAL DENSITY

LIMITS

FCC Part15 (15.247), Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC §15.247 (e) ISED RSS-247 5.2 (b)	Power Spectral Density	8 dBm/3 kHz	2400-2483.5

TEST PROCEDURE

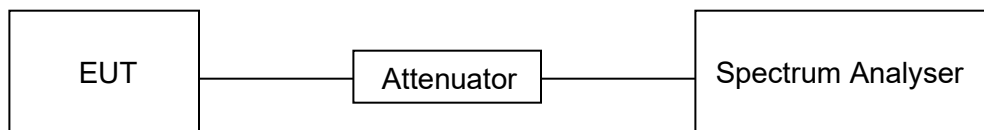
Refer to FCC KDB 558074, connect the UUT to the spectrum analyser and use the following settings:

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW	$\geq 3 \times \text{RBW}$
Span	$1.5 \times \text{DTS bandwidth}$
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP



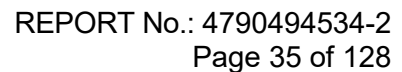


TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

TEST RESULTS TABLE

Test Mode	Test Channel	Maximum Peak power spectral density (dBm/30kHz)	Result
11B	LCH	1.51	Pass
	MCH	2.42	Pass
	HCH	1.77	Pass
11G	LCH	-1.68	Pass
	MCH	-1.37	Pass
	HCH	-1.55	Pass
11N HT20	LCH	-2.08	Pass
	MCH	-1.76	Pass
	HCH	-1.90	Pass



Test Mode	Test Channel	Verdict
11B	LCH	PASS

The screenshot displays the Keysight Spectrum Analyzer 1 interface. The main display shows a spectrum plot with a yellow signal trace. A marker is placed at 2.412486 GHz, indicating a power level of 1.51 dBm. The plot is scaled by 10 dB. The center frequency is 2.412000 GHz, and the span is 14.293500 MHz. The resolution bandwidth (RBW) is 30 kHz, and the video bandwidth (VBW) is 100 kHz. The sweep rate is 15.3 ms (10001 pts). The interface includes various control panels for input, settings, and measurement parameters.

Keysight Spectrum Analyzer 1
Swept SA

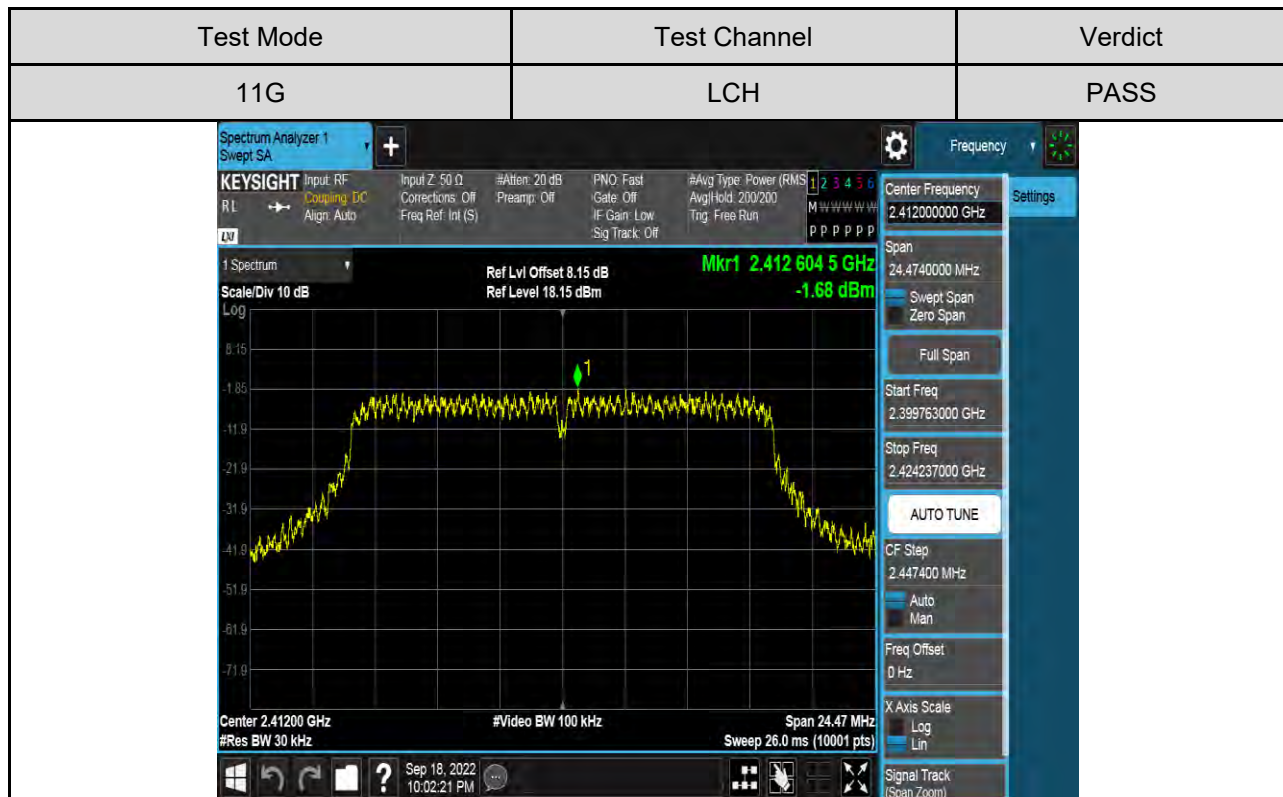
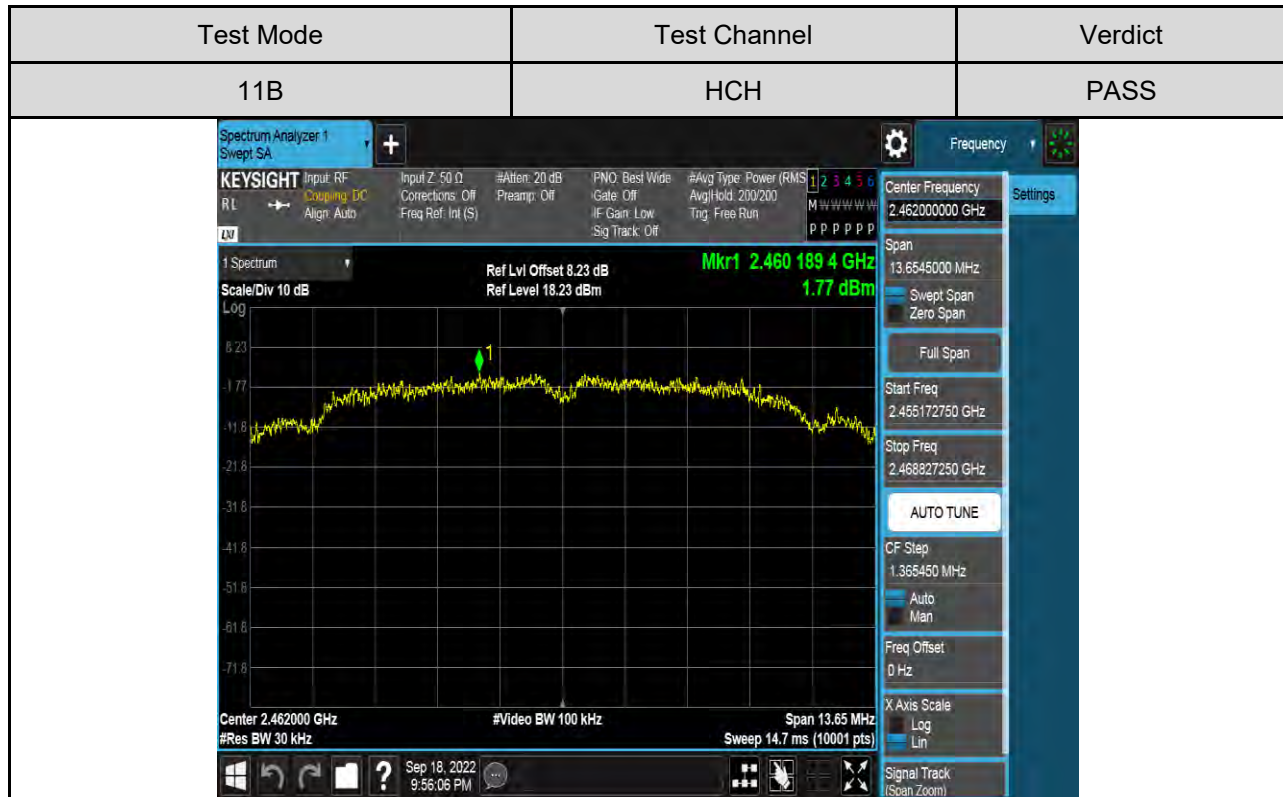
KEYSIGHT Input: RF Input Z: 50 Ω #Att: 20 dB PNO: Best Wide #Avg Type: Power (RMS) 1 2 3 4 5 6
Coupling: DC Corrections: Off Gate: Off Avg/Hold: 200/200 M W W W W W W W
RL Align: Auto Freq Ref: Int (S) IF Gain: Low Trg: Free Run P P P P P P

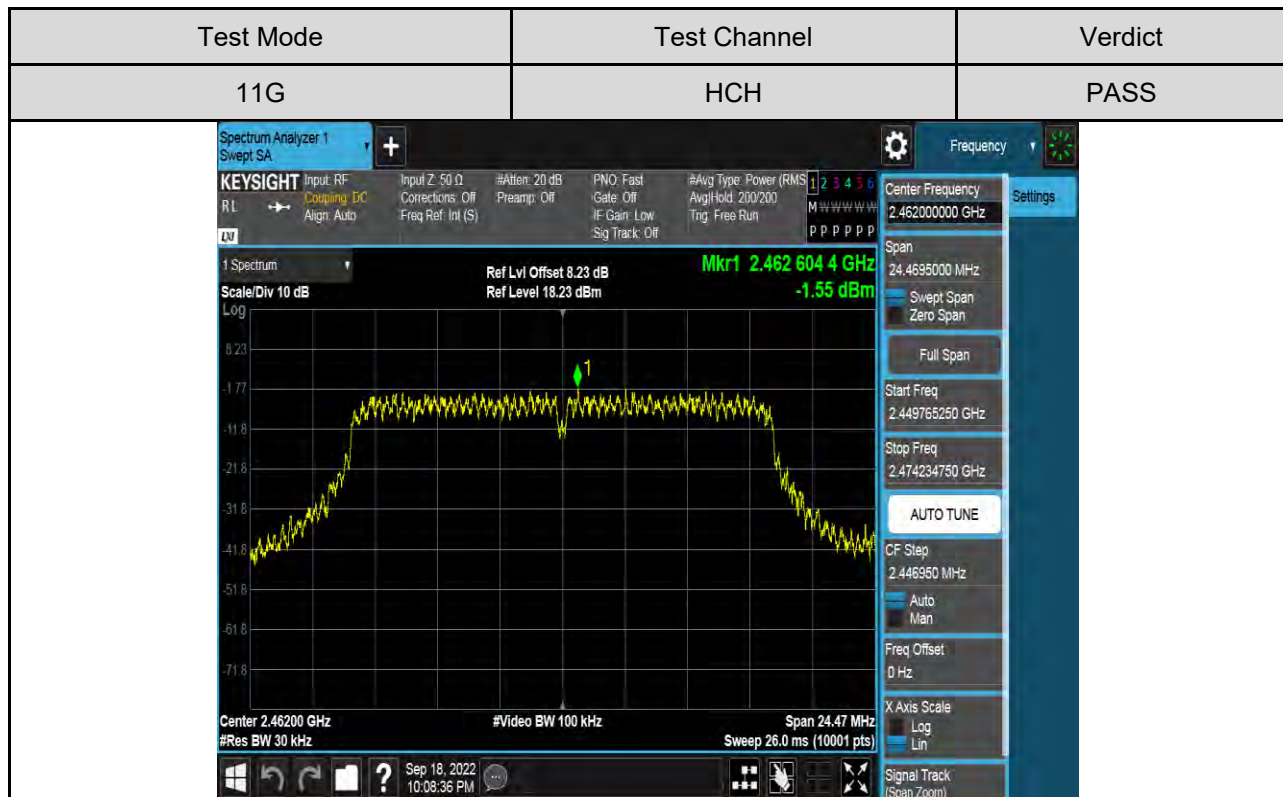
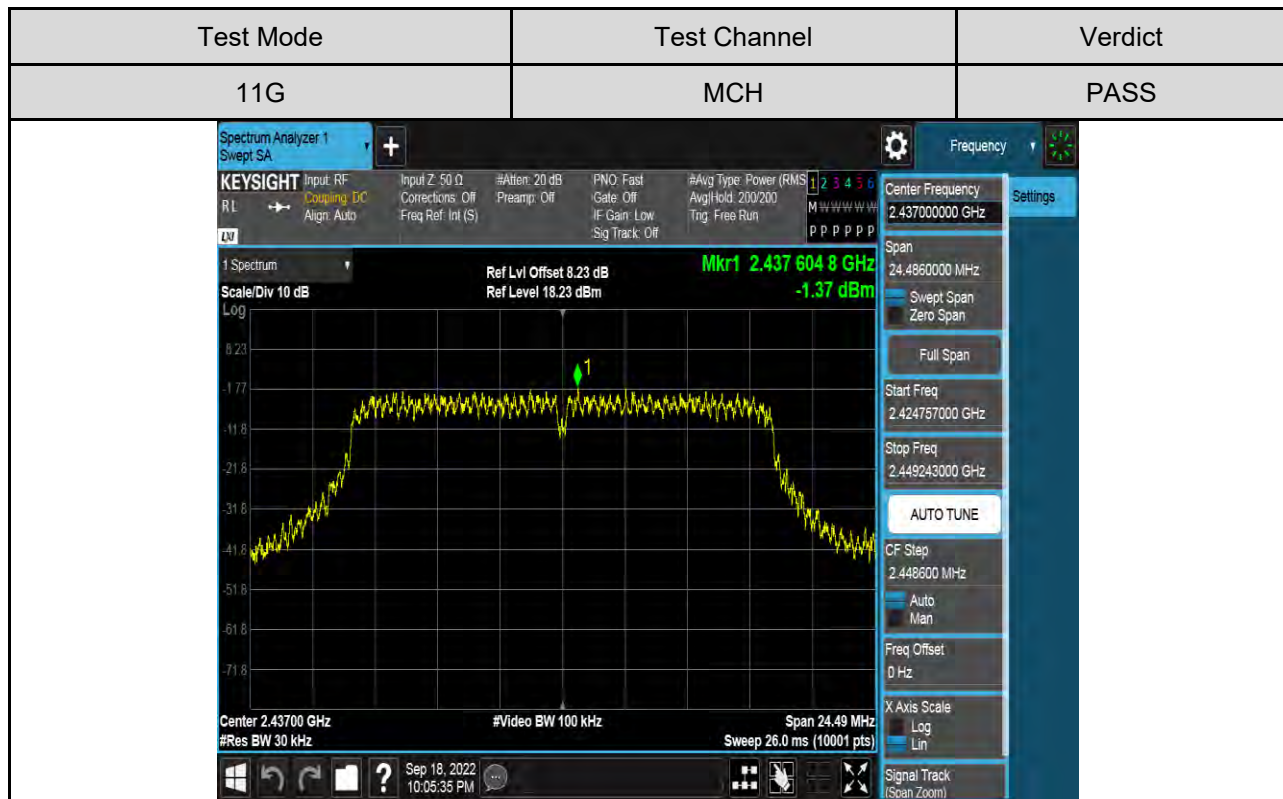
Center Frequency: 2.41200000 GHz
Span: 14.2935000 MHz
Swept Span
Zero Span
Full Span
Start Freq: 2.404853250 GHz
Stop Freq: 2.419146750 GHz
AUTO TUNE
CF Step: 1.429350 MHz
Auto
Man
Freq Offset: 0 Hz
X Axis Scale: Log
Lin
Signal Track (Scan Zoom)

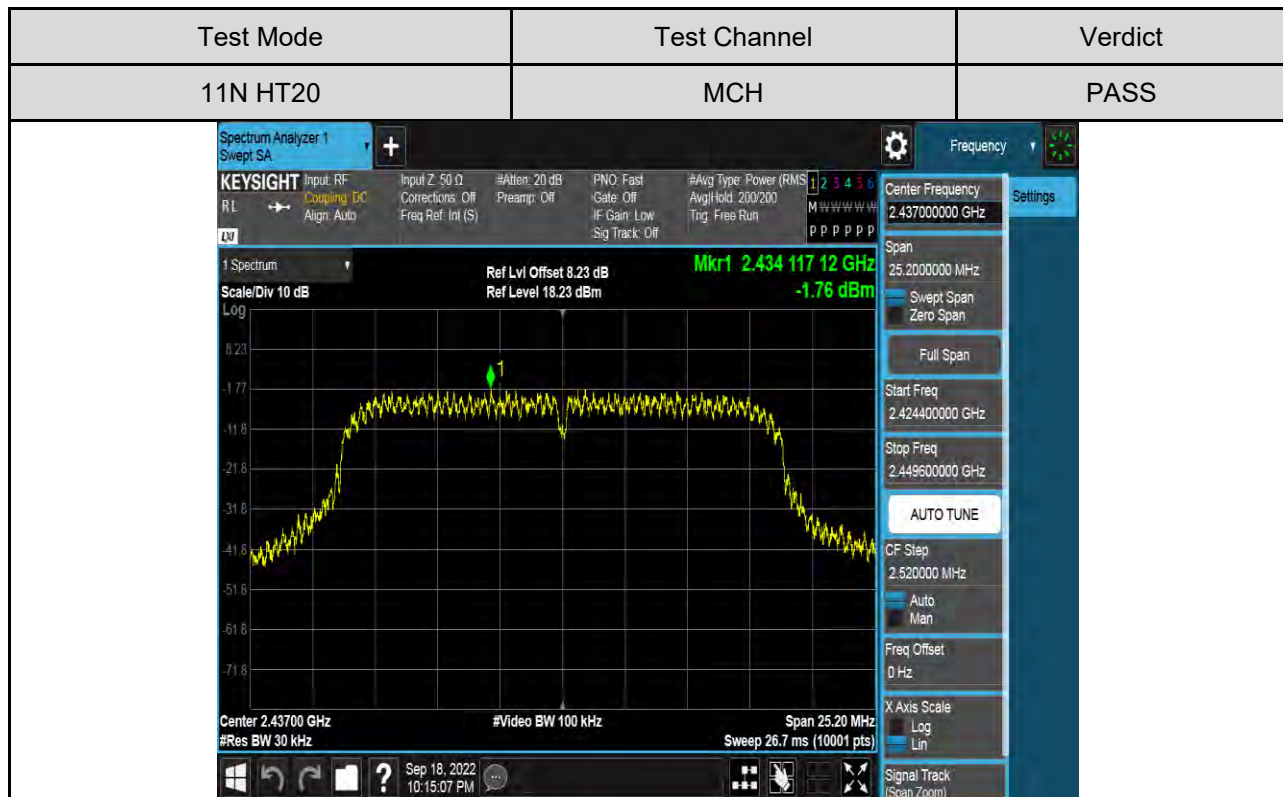
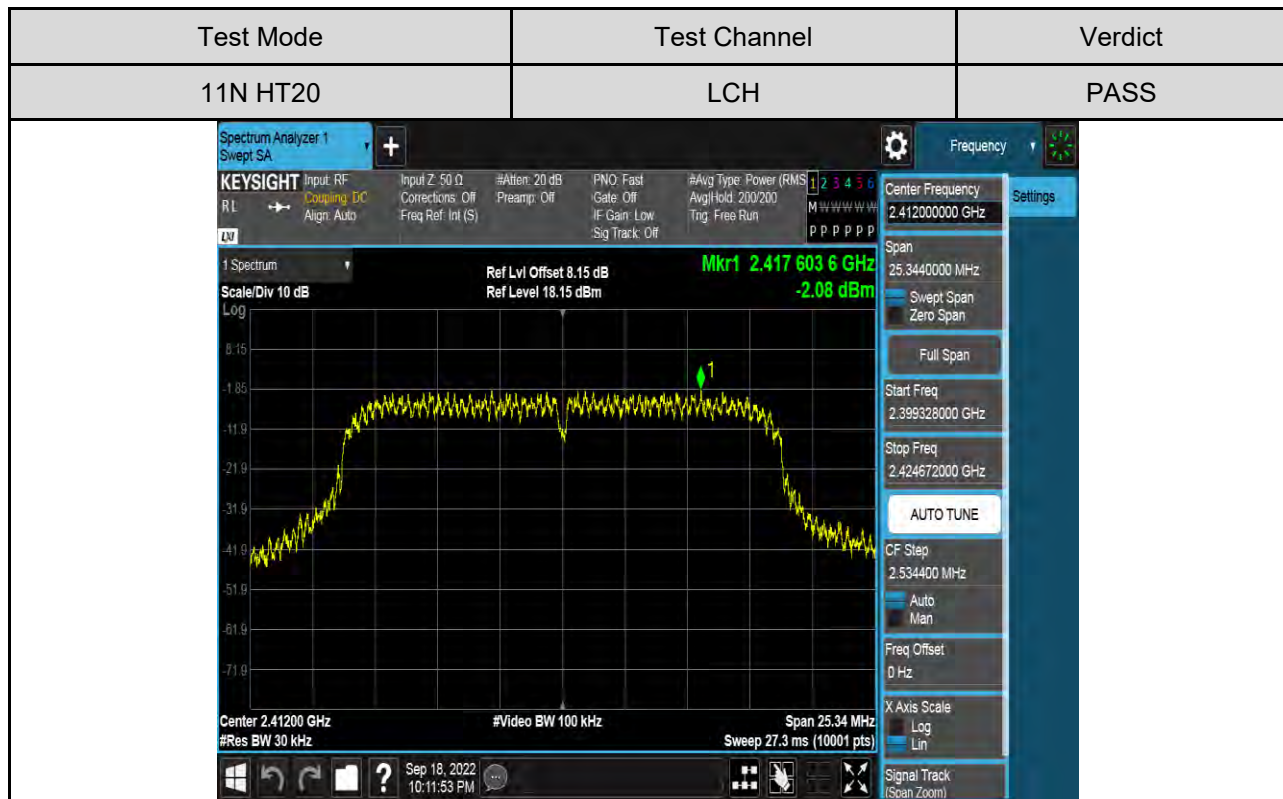
Ref Lvl Offset 8.15 dB
Ref Level 18.15 dBm
Mkr1 2.412486 GHz
1.51 dBm

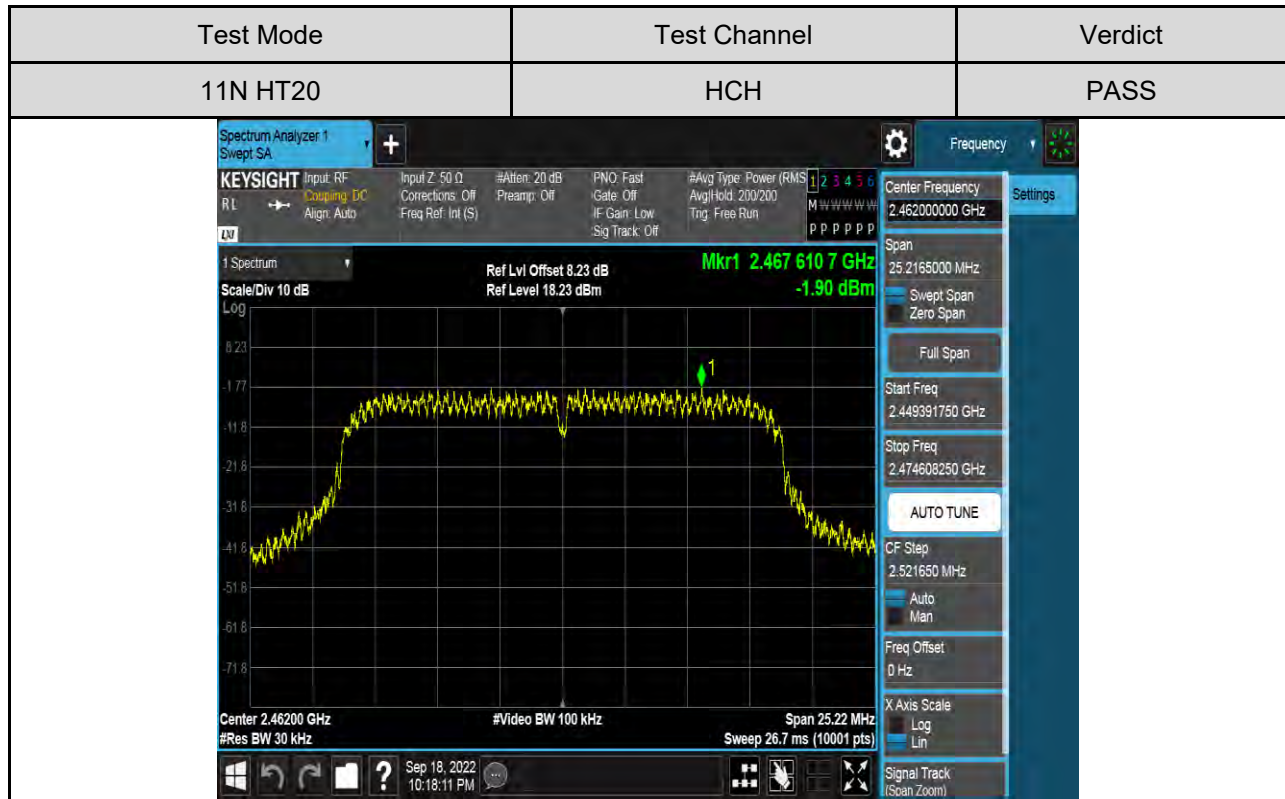
1 Spectrum
Scale/Div 10 dB
Log
Center 2.412000 GHz
#Res BW 30 kHz
#Video BW 100 kHz
Span 14.29 MHz
Sweep 15.3 ms (10001 pts)

Form-ULID-008536-9 V2.0











7.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

FCC Part15 (15.247), Subpart C		
Section	Test Item	Limit
FCC §15.247 (d) RSS-247 Clause 5.5 RSS-GEN Clause 6.13	Conducted Bandedge and Spurious Emissions	30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Refer to FCC KDB 558074, connect the UUT to the spectrum analyser and use the following settings:

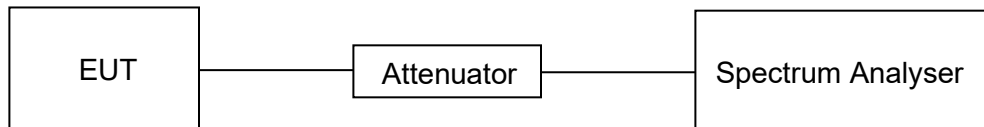
Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	100K
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum PSD level.

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100K
VBW	$\geq 3 \times \text{RBW}$
measurement points	$\geq \text{span}/\text{RBW}$
Trace	Max hold
Sweep time	Auto couple.

Use the peak marker function to determine the maximum amplitude level.

TEST SETUP





TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

PART 1: REFERENCE LEVEL MEASUREMENT

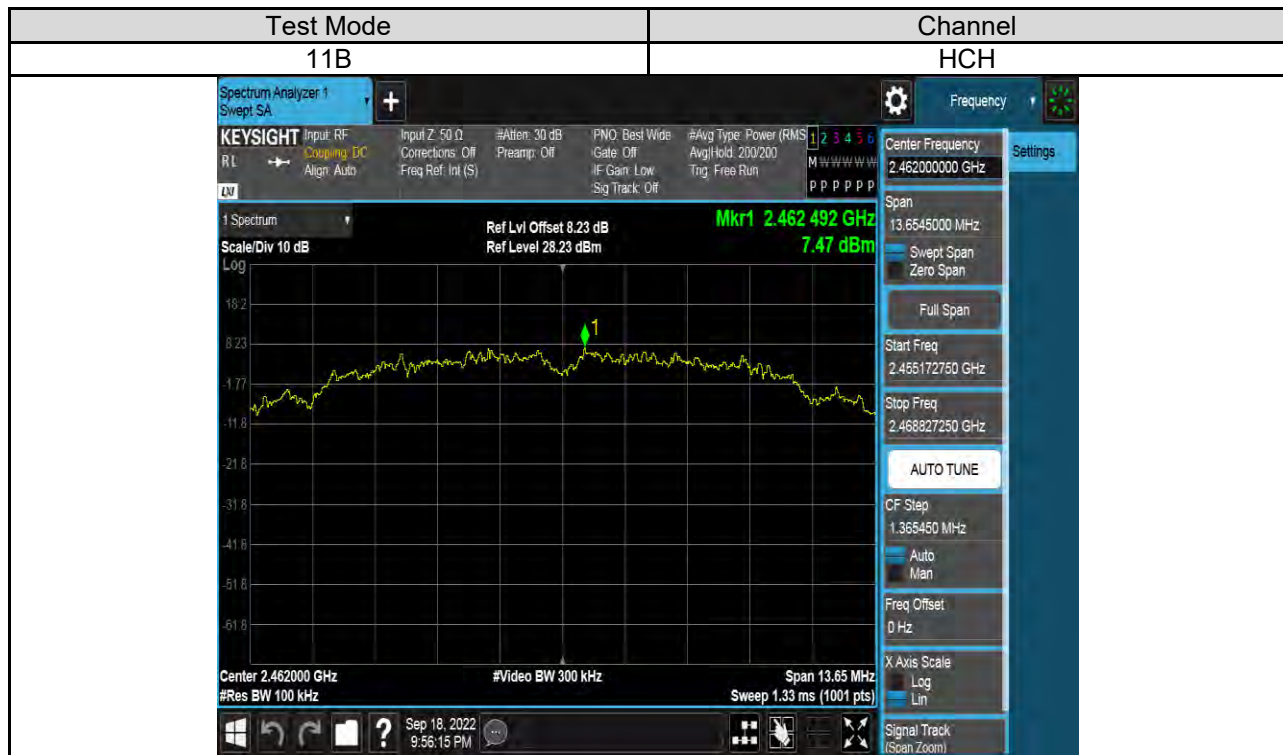
TEST RESULTS TABLE

Test Mode	Test Channel	Result[dBm]
11B	LCH	7.69
	MCH	8.17
	HCH	7.47
11G	LCH	1.94
	MCH	2.13
	HCH	1.45
11N HT20	LCH	1.30
	MCH	2.33
	HCH	1.56



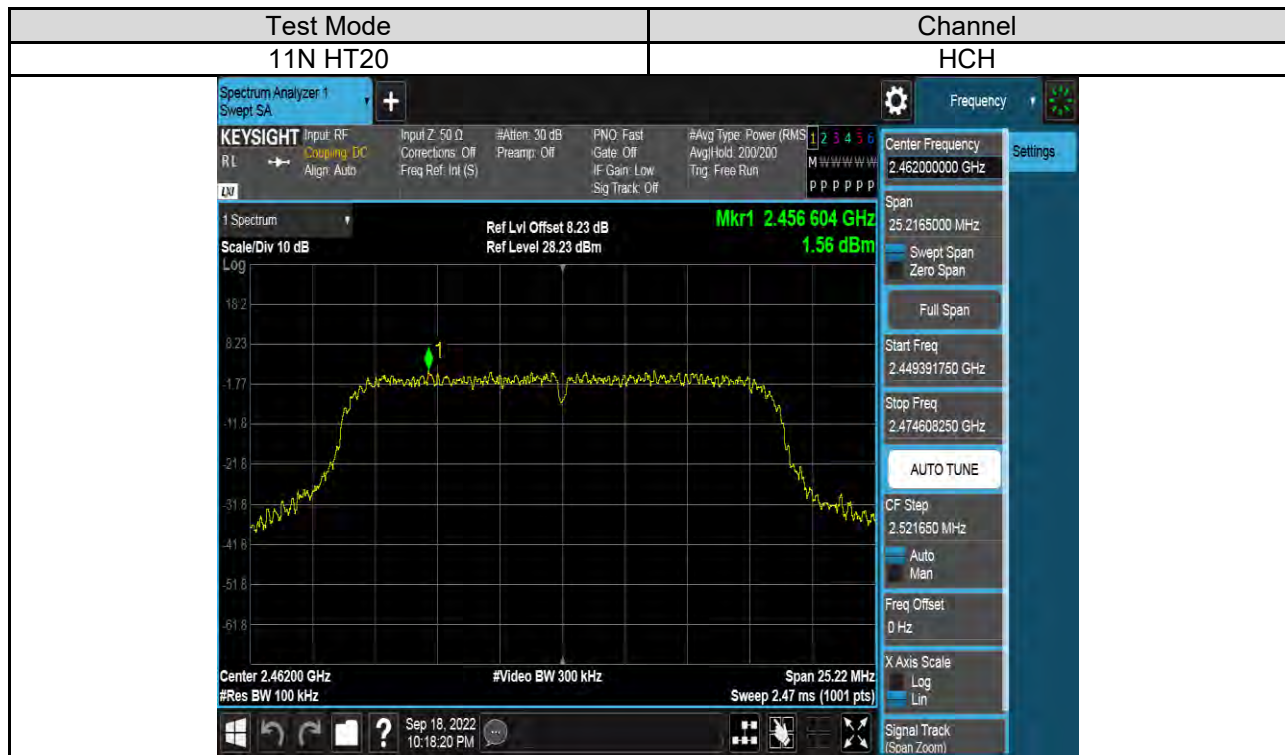
TEST GRAPHS













PART 2: CONDUCTED BANDEDGE

TEST RESULTS TABLE

Test Mode	Test Channel	Result	Verdict
11B	LCH	Refer to the Test Graph	PASS
	HCH	Refer to the Test Graph	PASS
11G	LCH	Refer to the Test Graph	PASS
	HCH	Refer to the Test Graph	PASS
11N HT20	LCH	Refer to the Test Graph	PASS
	HCH	Refer to the Test Graph	PASS



TEST GRAPHS









PART 3: CONDUCTED SPURIOUS EMISSION

TEST RESULTS TABLE

Test Mode	Test Channel	Result	Verdict
11B	LCH	Refer to the Test Graph	PASS
	MCH	Refer to the Test Graph	PASS
	HCH	Refer to the Test Graph	PASS
11G	LCH	Refer to the Test Graph	PASS
	MCH	Refer to the Test Graph	PASS
	HCH	Refer to the Test Graph	PASS
11N HT20	LCH	Refer to the Test Graph	PASS
	MCH	Refer to the Test Graph	PASS
	HCH	Refer to the Test Graph	PASS



TEST GRAPHS

Test Mode	Channel	Verdict
11B	LCH	PASS

LCH SPURIOUS EMISSION 30MHz~1GHz



LCH SPURIOUS EMISSION 1GHz~26.5GHz





Test Mode	Channel	Verdict
11B	MCH	PASS

MCH SPURIOUS EMISSION 30MHz~1GHz

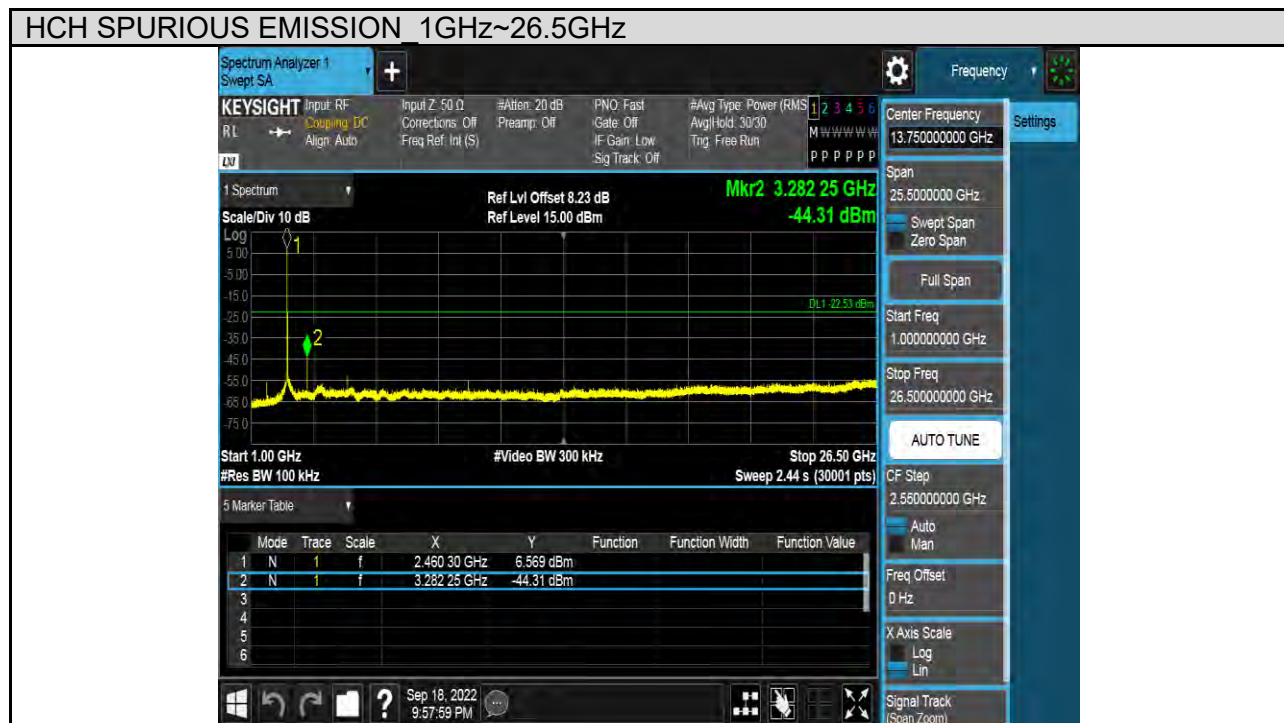
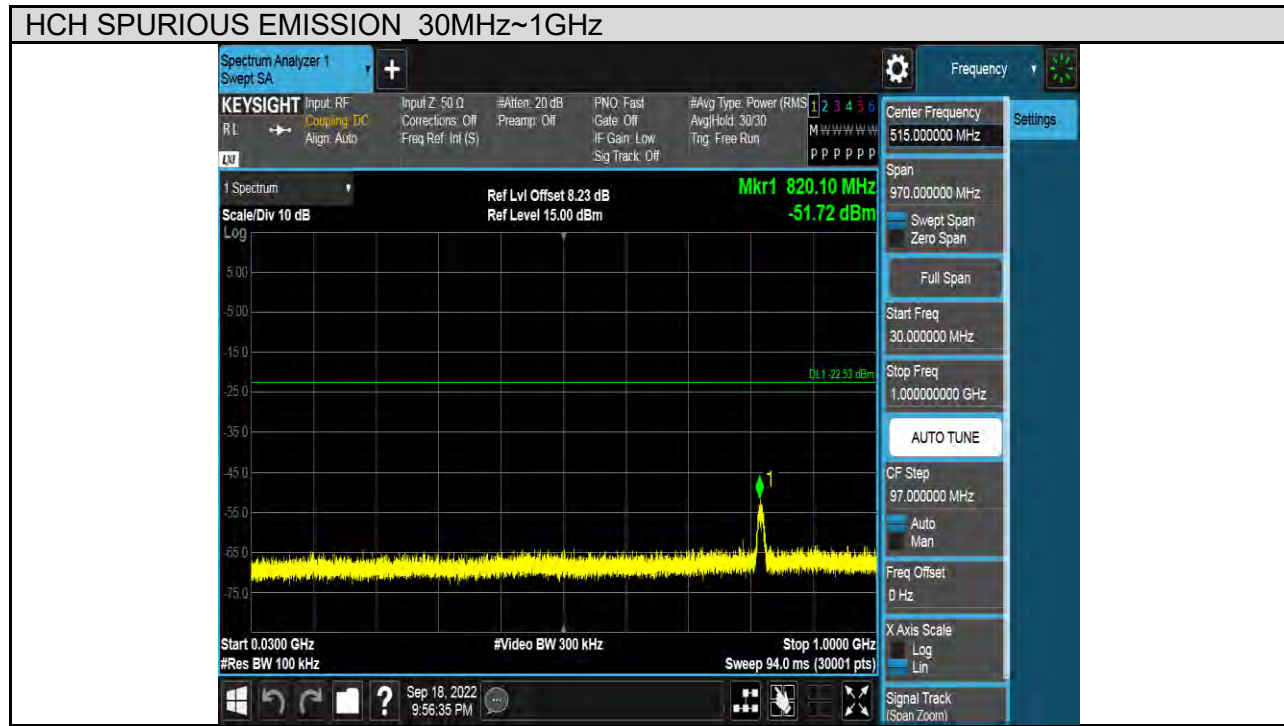


MCH SPURIOUS EMISSION 1GHz~26.5GHz



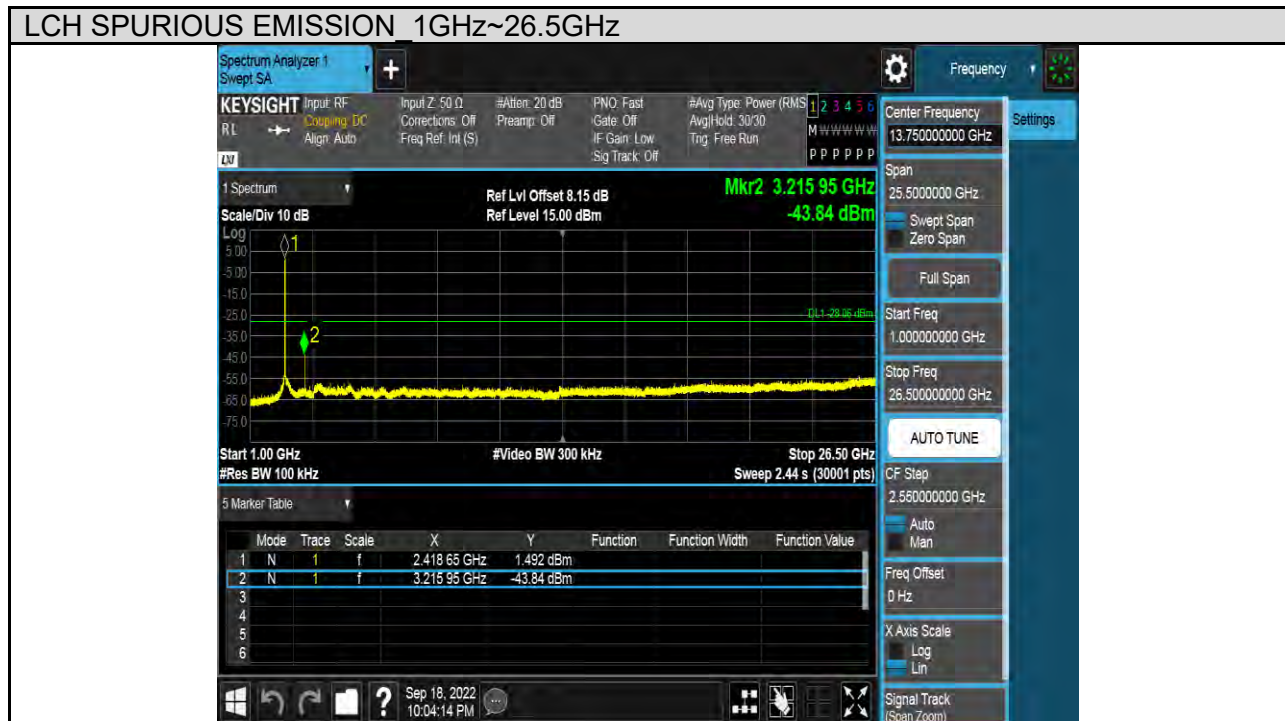
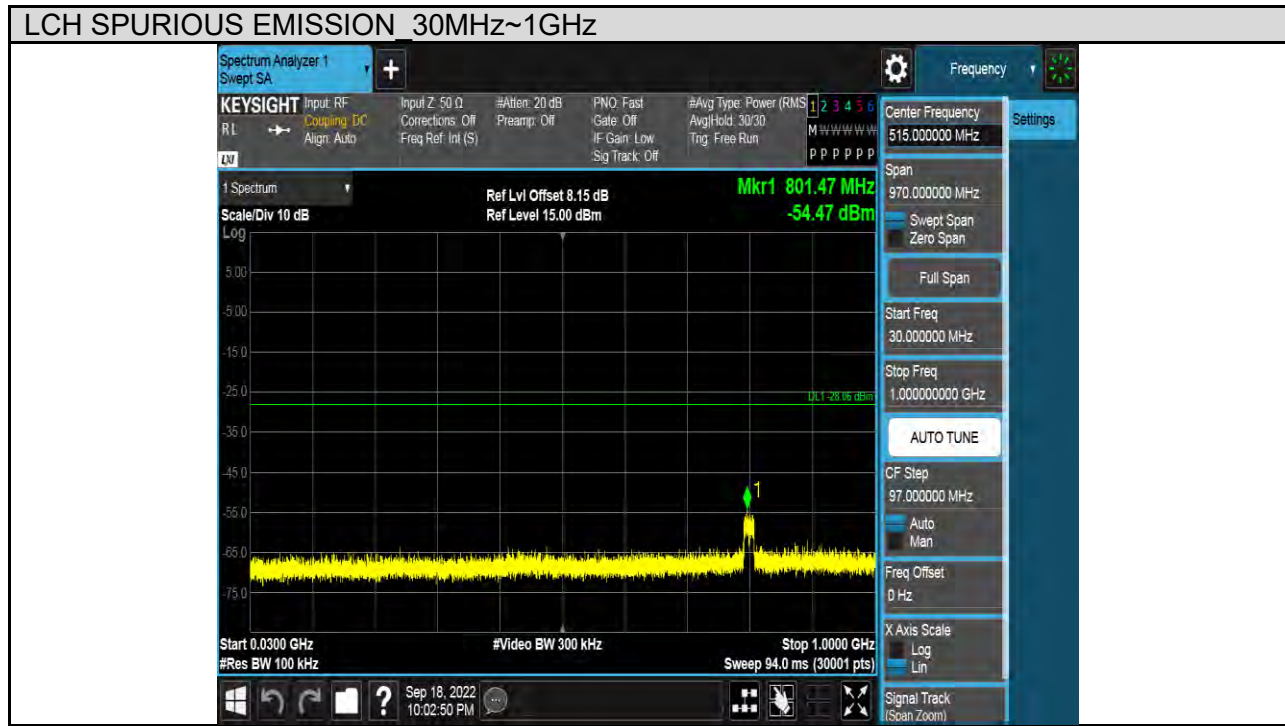


Test Mode	Channel	Verdict
11B	HCH	PASS





Test Mode	Channel	Verdict
11G	LCH	PASS





Test Mode	Channel	Verdict
11G	MCH	PASS

MCH SPURIOUS EMISSION 30MHz~1GHz



MCH SPURIOUS EMISSION 1GHz~26.5GHz





Test Mode	Channel	Verdict
11G	HCH	PASS

HCH SPURIOUS EMISSION 30MHz~1GHz

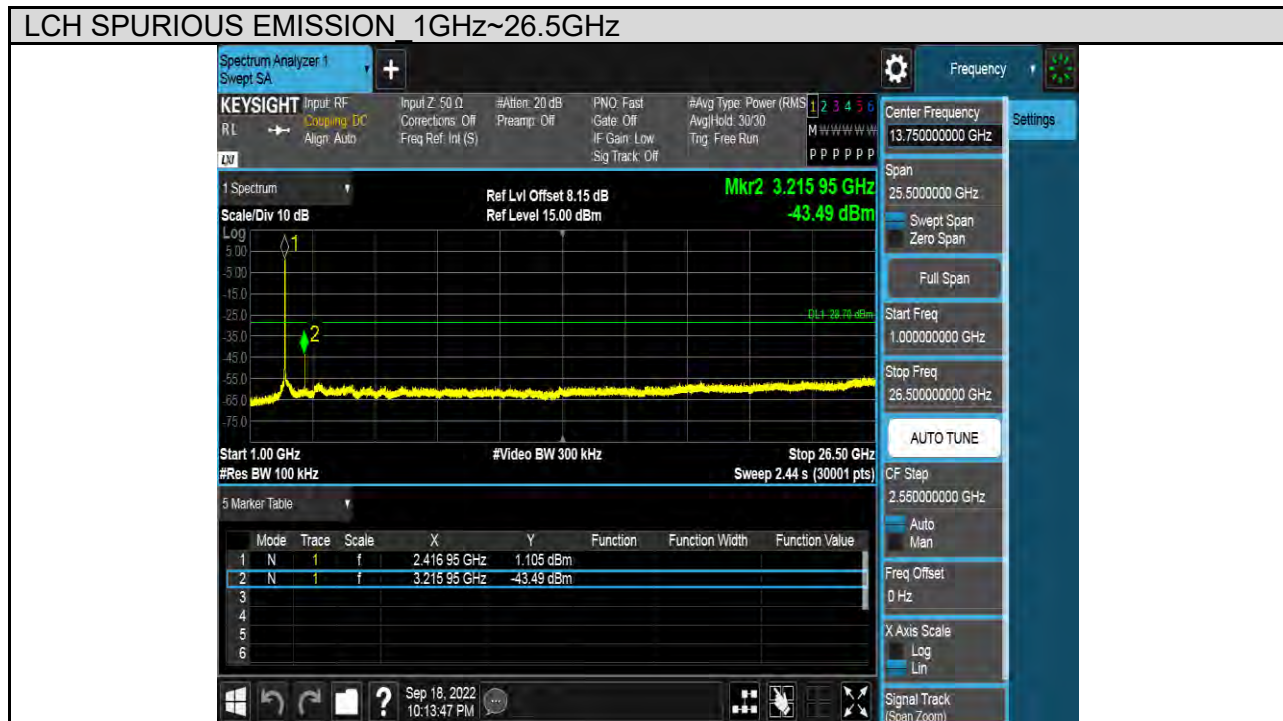
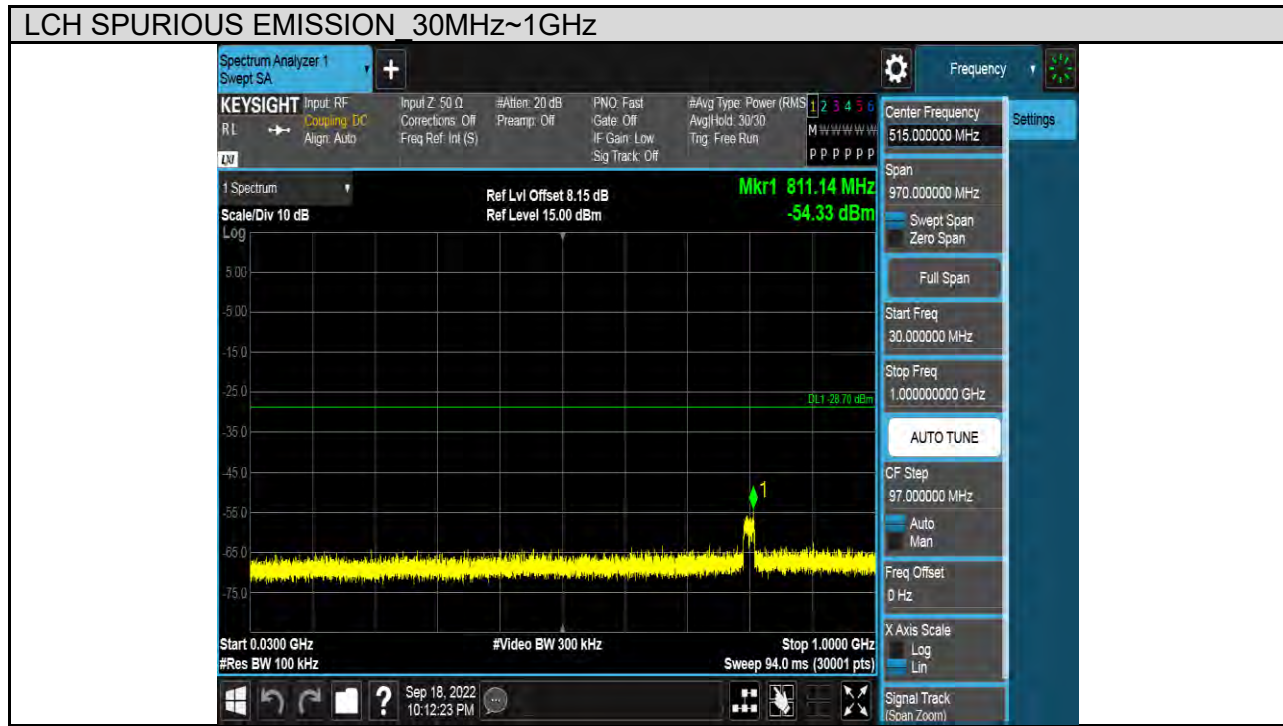


HCH SPURIOUS EMISSION 1GHz~26.5GHz





Test Mode	Channel	Verdict
11N HT20	LCH	PASS





Test Mode	Channel	Verdict
11N HT20	MCH	PASS

MCH SPURIOUS EMISSION 30MHz~1GHz



MCH SPURIOUS EMISSION 1GHz~26.5GHz





Test Mode	Channel	Verdict
11N HT20	HCH	PASS

HCH SPURIOUS EMISSION 30MHz~1GHz



HCH SPURIOUS EMISSION 1GHz~26.5GHz





8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

Please refer to FCC §15.205 and §15.209, ISED RSS-247 Clause 5.5, ISED RSS-GEN Clause 8.9&6.13 (Transmitter)

Radiation Disturbance Test Limit for ISED (9kHz-1GHz)

Except where otherwise indicated in the applicable RSS, radiated emissions shall comply with the field strength limits shown in table 5 and table 6. Additionally, the level of any transmitter unwanted emission shall not exceed the level of the transmitter's fundamental emission.

Table 5 – General field strength limits at frequencies above 30 MHz

Frequency (MHz)	Field strength ($\mu\text{V}/\text{m}$ at 3 m)
30 – 88	100
88 – 216	150
216 – 960	200
Above 960	500

Table 6 – General field strength limits at frequencies below 30 MHz

Frequency	Magnetic field strength (H-Field) ($\mu\text{A}/\text{m}$)	Measurement distance (m)
9 - 490 kHz ^{Note 1}	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.



Please refer to FCC KDB 558074

Radiation Disturbance Test Limit for FCC (Class B) (9kHz-1GHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

Note: 1) At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements).

(2) At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). This paragraph (f) shall not apply to Access BPL devices operating below 30 MHz.



Radiation Disturbance Test Limit for FCC (Above 1G)

Frequency (MHz)	dB(uV/m) (at 3 meters)	
	Peak	Average
Above 1000	74	54

Restricted bands of operation

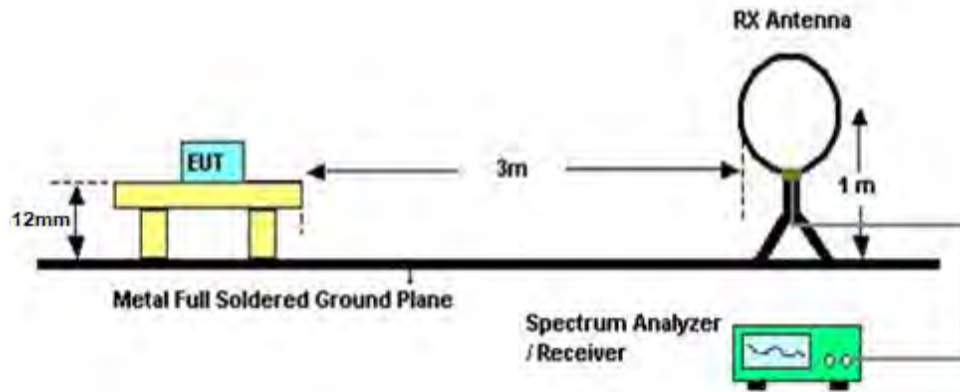
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

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

²Above 38.6c

TEST SETUP AND PROCEDURE

Below 30MHz



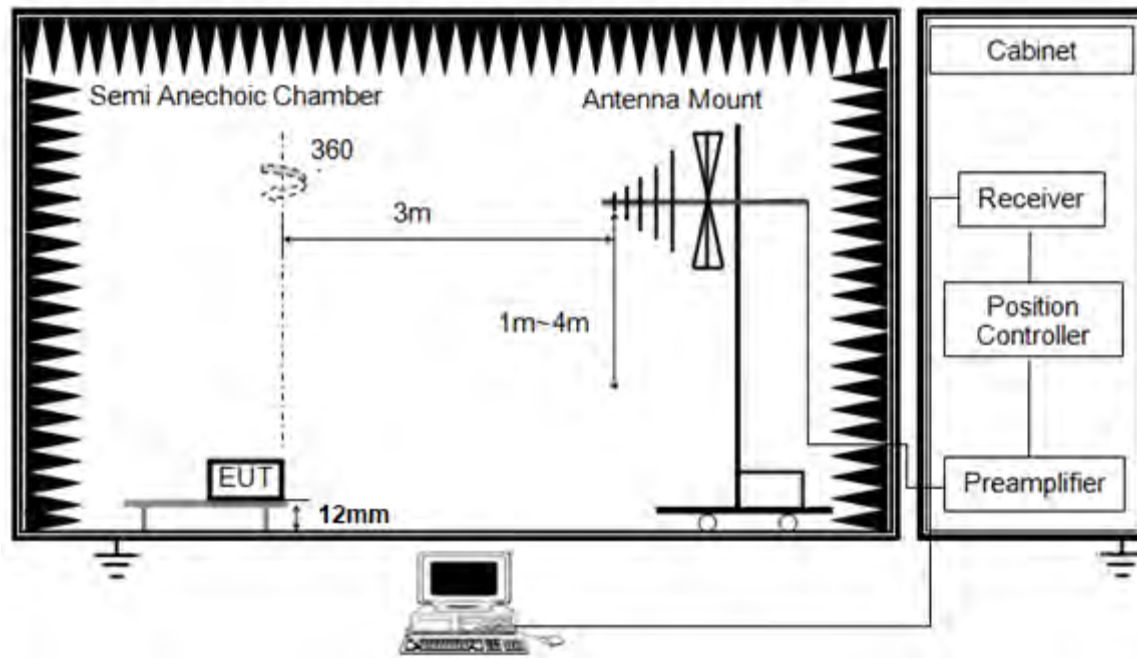
The setting of the spectrum analyser

RBW	200 Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
VBW	200 Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
Sweep	Auto
Detector	Peak/QP/Average
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013
2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 12 millimeter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector
6. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)
8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377 Ω . For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y-51.5 = Z$ dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

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Below 1G



The setting of the spectrum analyser

RBW	120K
VBW	300K
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

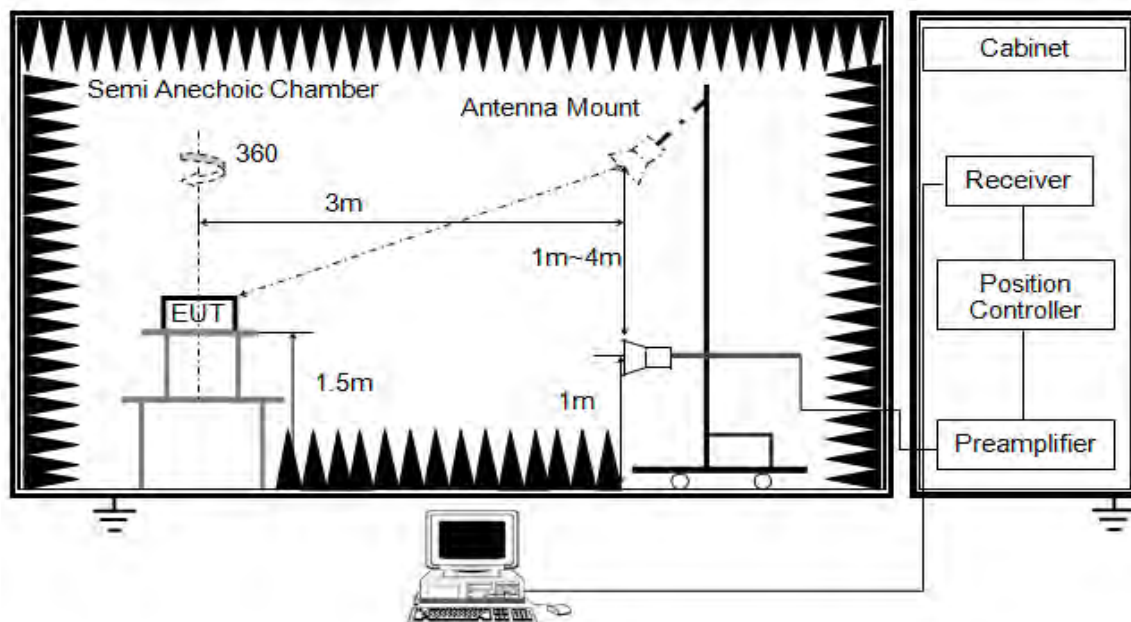
1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 12 millimeter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz, the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements; and 1 MHz resolution bandwidth with video bandwidth $\geq 1/T$ but not less than the setting list in section 7.1 when use peak detector, max hold to be run for at least $[50 \times (1/\text{Duty Cycle})]$ traces for average measurements. For the Duty Cycle need to refer the results in section 7.1.
7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

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Above 1G



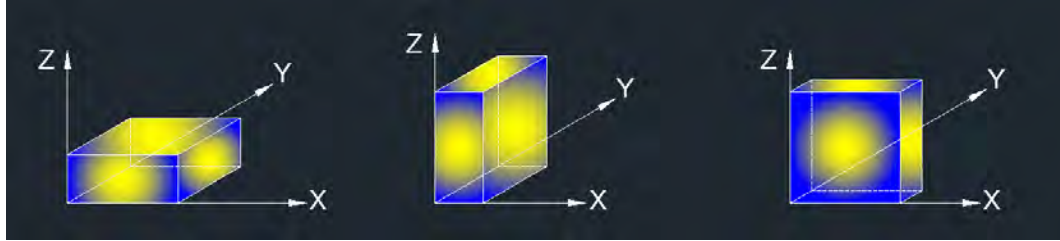
The setting of the spectrum analyser

RBW	1M
VBW	PEAK:3M AVG: See note6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable with 1.5m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. For measurement above 1GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.
6. For measurements above 1 GHz, the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements; and 1 MHz resolution bandwidth with video bandwidth $\geq 1/T$ but not less than the setting list in section 7.1 when use peak detector, max hold to be run for at least $[50 \cdot (1/\text{Duty Cycle})]$ traces for average measurements. For the Duty Cycle need to refer the results in section 7.1.
7. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)



X axis, Y axis, Z axis positions:



Note: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worse case (X axis) data recorded in the report.



8.2. TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

8.3. RESTRICTED BANDEDGE

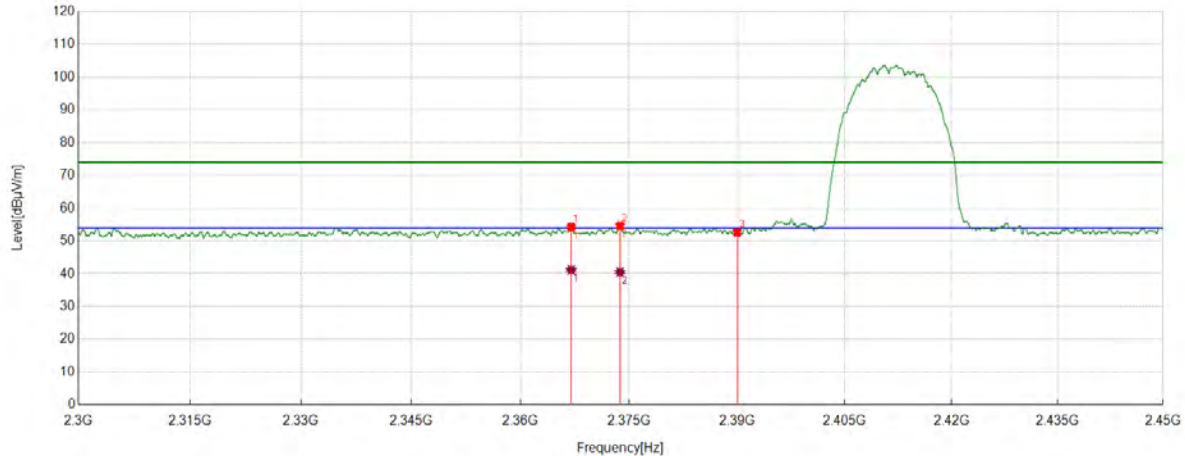
TEST RESULT TABLE

Test Mode	Channel	Puw(dBm)	Verdict
11B	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
11G	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
11N HT20	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS



TEST GRAPHS

Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2367.0021	43.03	11.24	54.27	74.00	-19.73	Horizontal
2	2373.7342	43.26	11.29	54.55	74.00	-19.45	Horizontal
3	2390.0000	41.40	11.25	52.65	74.00	-21.35	Horizontal

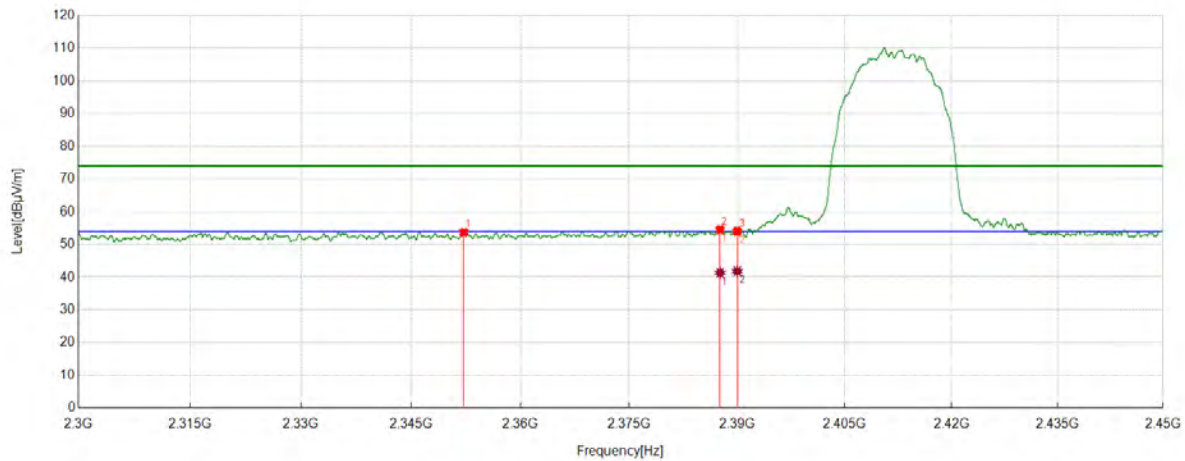
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2367.0021	29.90	11.24	41.14	54.00	-12.86	Horizontal
2	2373.7342	29.19	11.29	40.48	54.00	-13.52	Horizontal

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2352.244	42.54	11.15	53.69	74.00	-20.31	Vertical
2	2387.611	43.29	11.26	54.55	74.00	-19.45	Vertical
3	2390.0000	42.81	11.25	54.06	74.00	-19.94	Vertical

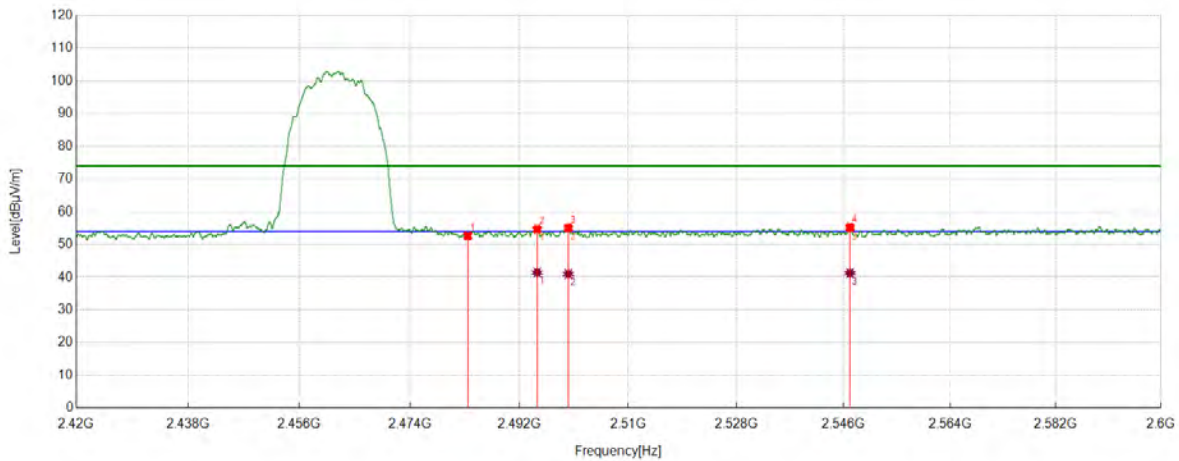
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2387.611	30.06	11.26	41.32	54.00	-12.68	Vertical
2	2390.0000	30.55	11.25	41.80	54.00	-12.20	Vertical

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	41.35	11.28	52.63	74.00	-21.37	Horizontal
2	2494.9119	43.22	11.43	54.65	74.00	-19.35	Horizontal
3	2500.065	43.56	11.47	55.03	74.00	-18.97	Horizontal
4	2547.0734	43.42	11.81	55.23	74.00	-18.77	Horizontal

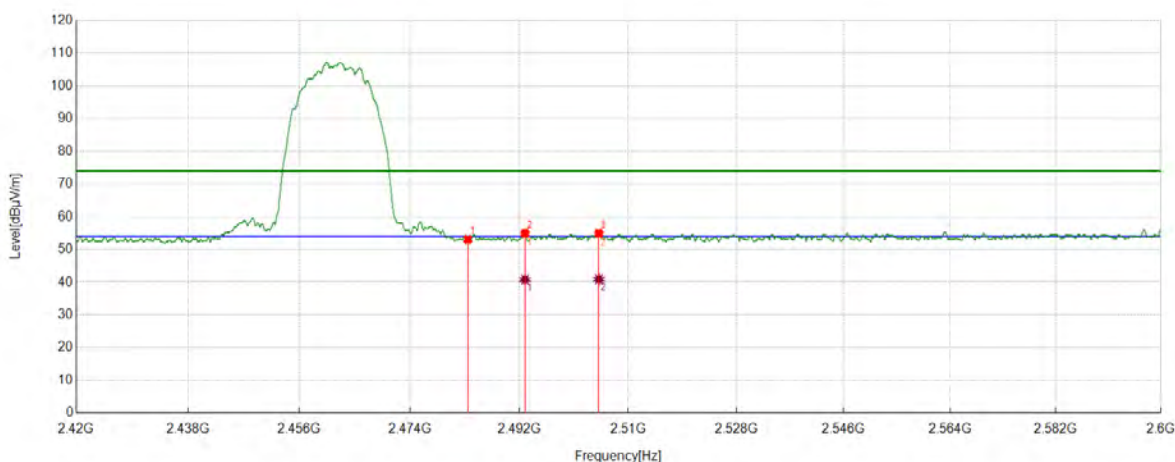
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2494.9119	30.01	11.43	41.44	54.00	-12.56	Horizontal
2	2500.065	29.50	11.47	40.97	54.00	-13.03	Horizontal
3	2547.0734	29.41	11.81	41.22	54.00	-12.78	Horizontal

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	41.81	11.28	53.09	74.00	-20.91	Vertical
2	2492.9091	43.50	11.42	54.92	74.00	-19.08	Vertical
3	2505.1281	43.41	11.48	54.89	74.00	-19.11	Vertical

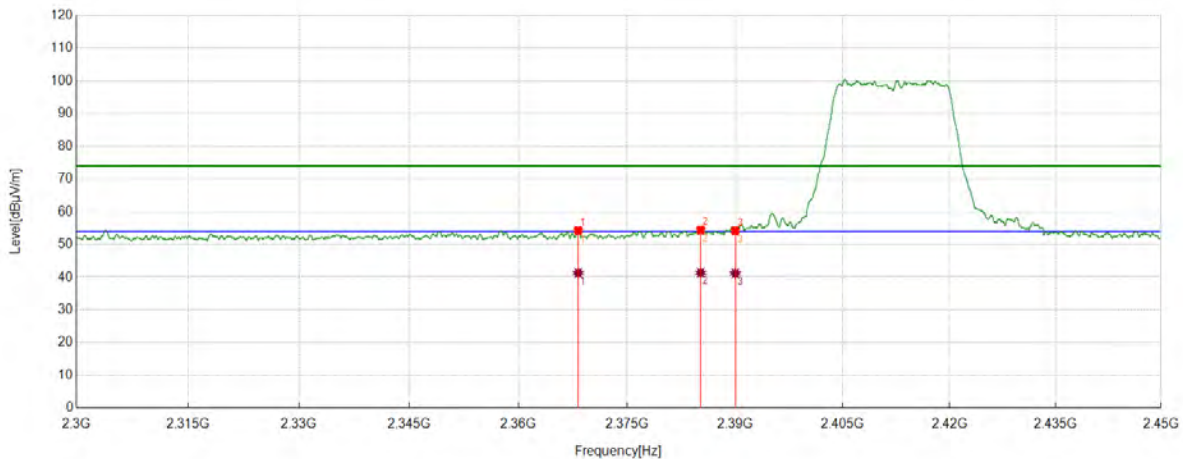
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2492.9091	29.36	11.42	40.78	54.00	-13.22	Vertical
2	2505.1281	29.41	11.48	40.89	54.00	-13.11	Vertical

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	LCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2368.2398	43.03	11.25	54.28	74.00	-19.72	Horizontal
2	2385.1919	43.11	11.28	54.39	74.00	-19.61	Horizontal
3	2390.0000	42.96	11.25	54.21	74.00	-19.79	Horizontal

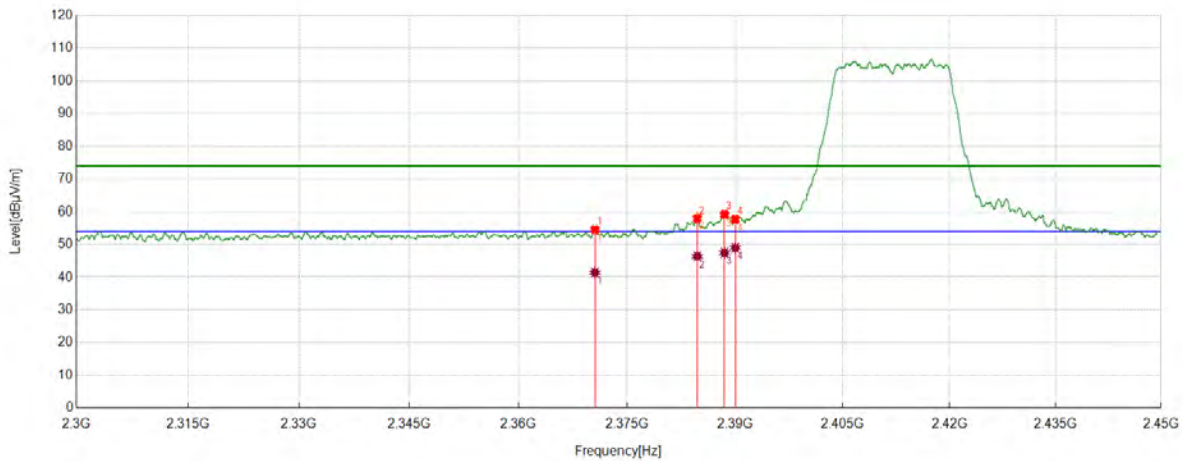
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2368.2398	30.01	11.25	41.26	54.00	-12.74	Horizontal
2	2385.1919	30.06	11.28	41.34	54.00	-12.66	Horizontal
3	2390.0000	29.88	11.25	41.13	54.00	-12.87	Horizontal

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	LCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2370.5463	43.25	11.27	54.52	74.00	-19.48	Vertical
2	2384.7231	46.55	11.29	57.84	74.00	-16.16	Vertical
3	2388.5111	47.92	11.26	59.18	74.00	-14.82	Vertical
4	2390.0000	46.44	11.25	57.69	74.00	-16.31	Vertical

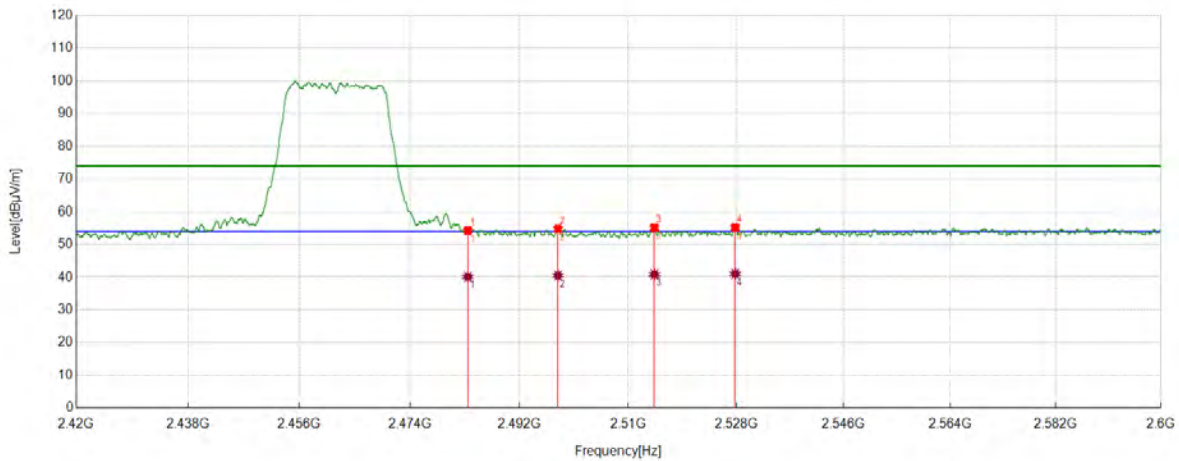
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2370.5463	30.13	11.27	41.40	54.00	-12.60	Vertical
2	2384.7231	35.09	11.29	46.38	54.00	-7.62	Vertical
3	2388.5111	36.18	11.26	47.44	54.00	-6.56	Vertical
4	2390	37.72	11.25	48.97	54.00	-5.03	Vertical

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	HCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	42.99	11.28	54.27	74.00	-19.73	Horizontal
2	2498.3548	43.29	11.46	54.75	74.00	-19.25	Horizontal
3	2514.3318	43.58	11.53	55.11	74.00	-18.89	Horizontal
4	2527.811	43.40	11.81	55.21	74.00	-18.79	Horizontal

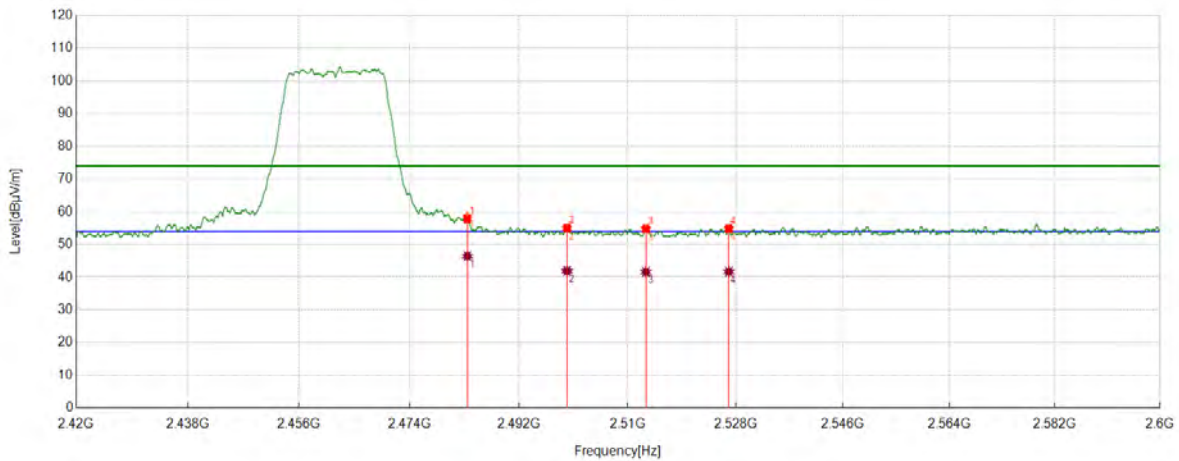
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	28.83	11.28	40.11	54.00	-13.89	Horizontal
2	2498.3548	29.06	11.46	40.52	54.00	-13.48	Horizontal
3	2514.3318	29.31	11.53	40.84	54.00	-13.16	Horizontal
4	2527.811	29.20	11.81	41.01	54.00	-12.99	Horizontal

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	HCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	46.51	11.28	57.79	74.00	-16.21	Vertical
2	2499.93	43.48	11.47	54.95	74.00	-19.05	Vertical
3	2513.0041	43.23	11.52	54.75	74.00	-19.25	Vertical
4	2526.8434	43.01	11.78	54.79	74.00	-19.21	Vertical

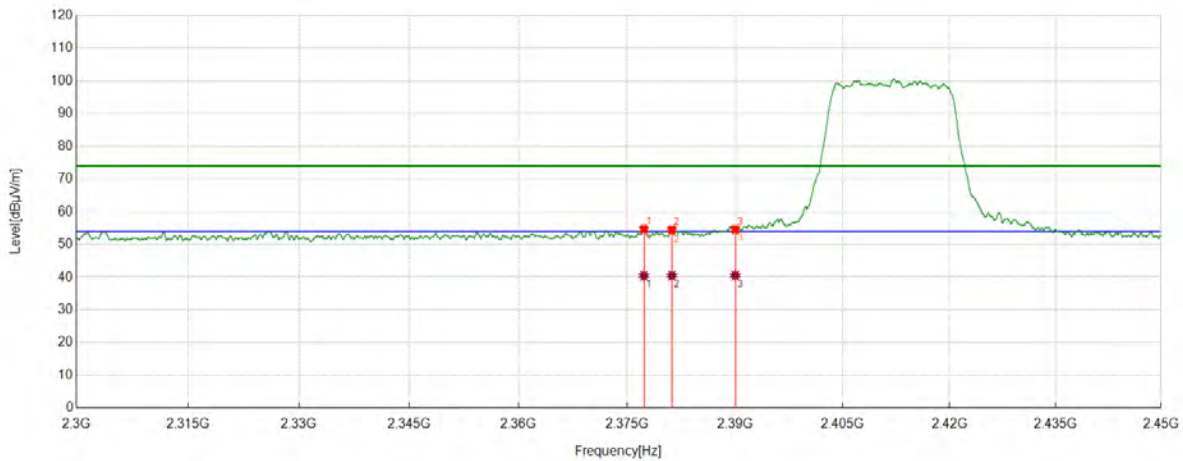
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5	35.15	11.28	46.43	54.00	-7.57	Vertical
2	2499.93	30.42	11.47	41.89	54.00	-12.11	Vertical
3	2513.0041	30.07	11.52	41.59	54.00	-12.41	Vertical
4	2526.8434	29.88	11.78	41.66	54.00	-12.34	Vertical

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2377.3159	43.33	11.31	54.64	74.00	-19.36	Horizontal
2	2381.1976	43.18	11.31	54.49	74.00	-19.51	Horizontal
3	2390.0000	43.31	11.25	54.56	74.00	-19.44	Horizontal

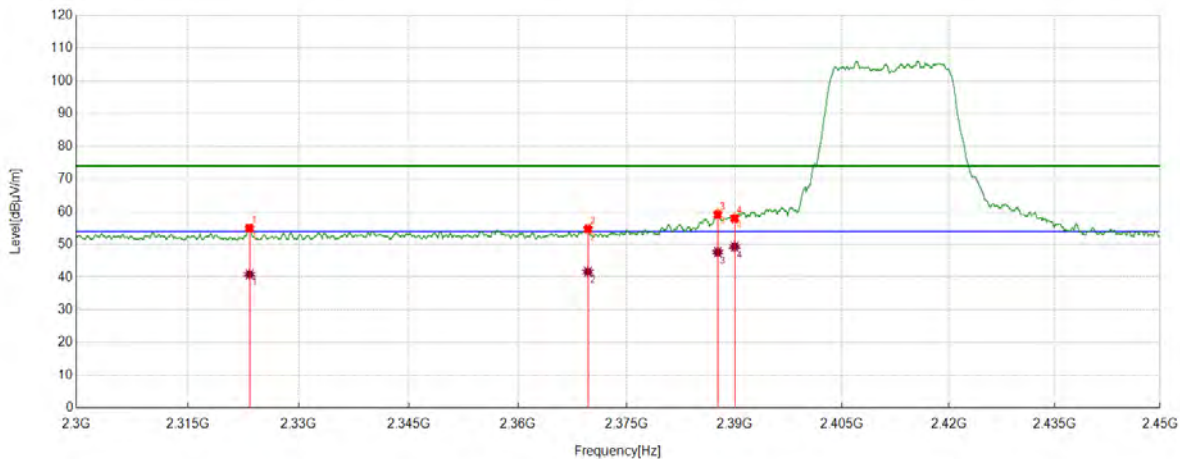
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2377.3159	29.12	11.31	40.43	54.00	-13.57	Horizontal
2	2381.1976	29.17	11.31	40.48	54.00	-13.52	Horizontal
3	2390.0000	29.27	11.25	40.52	54.00	-13.48	Horizontal

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2323.3654	44.07	10.89	54.96	74.00	-19.04	Vertical
2	2369.6462	43.45	11.27	54.72	74.00	-19.28	Vertical
3	2387.6485	47.80	11.26	59.06	74.00	-14.94	Vertical
4	2390.0000	46.68	11.25	57.93	74.00	-16.07	Vertical

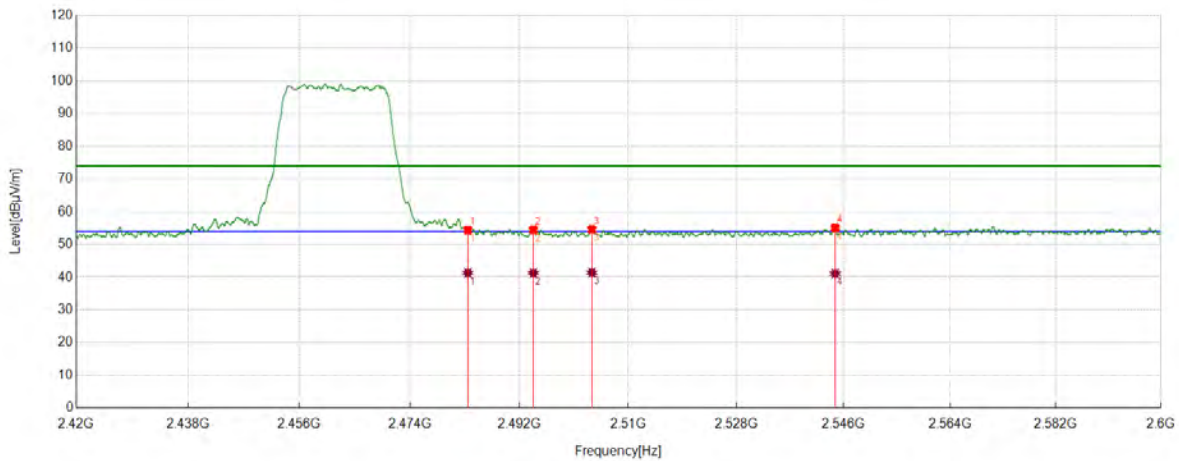
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2323.3654	29.95	10.89	40.84	54.00	-13.16	Vertical
2	2369.6462	30.37	11.27	41.64	54.00	-12.36	Vertical
3	2387.6485	36.38	11.26	47.64	54.00	-6.36	Vertical
4	2390	38.08	11.25	49.33	54.00	-4.67	Vertical

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	43.10	11.28	54.38	74.00	-19.62	Horizontal
2	2494.2818	43.06	11.43	54.49	74.00	-19.51	Horizontal
3	2503.958	43.10	11.48	54.58	74.00	-19.42	Horizontal
4	2544.5756	43.26	11.83	55.09	74.00	-18.91	Horizontal

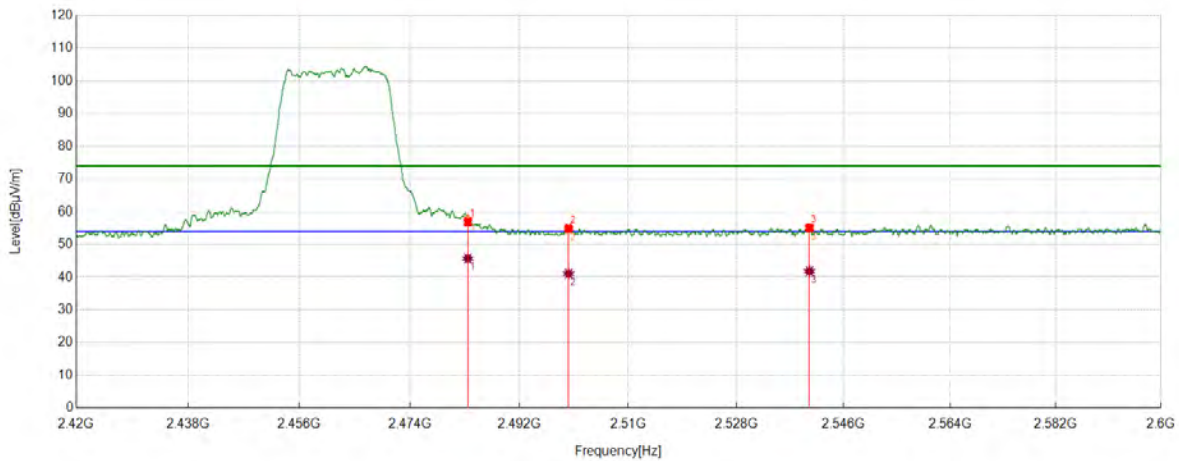
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	30.02	11.28	41.30	54.00	-12.70	Horizontal
2	2494.2818	29.82	11.43	41.25	54.00	-12.75	Horizontal
3	2503.958	29.92	11.48	41.40	54.00	-12.60	Horizontal
4	2544.5756	29.25	11.83	41.08	54.00	-12.92	Horizontal

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5000	45.58	11.28	56.86	74.00	-17.14	Vertical
2	2500.11	43.43	11.47	54.90	74.00	-19.10	Vertical
3	2540.255	43.23	11.86	55.09	74.00	-18.91	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	2483.5	34.44	11.28	45.72	54.00	-8.28	Vertical
2	2500.11	29.59	11.47	41.06	54.00	-12.94	Vertical
3	2540.255	29.96	11.86	41.82	54.00	-12.18	Vertical

- Note: 1. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
2. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Attenuator) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



8.4. SPURIOUS EMISSIONS

TEST RESULTS TABLE

1) For 1GHz~18GHz

Test Mode	Channel	Puw(dBm)	Verdict
11B	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
11G	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS
11N HT20	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS

2) For 9kHz~30MHz

Test Mode	Channel	Puw(dBm)	Verdict
11B	MCH	<Limit	PASS

Remark:

1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.

3) For 30MHz~1GHz

Test Mode	Channel	Puw(dBm)	Verdict
11B	MCH	<Limit	PASS

Remark:

1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.

4) For 18GHz~26.5GHz

Test Mode	Channel	Puw(dBm)	Verdict
11B	MCH	<Limit	PASS

Remark:

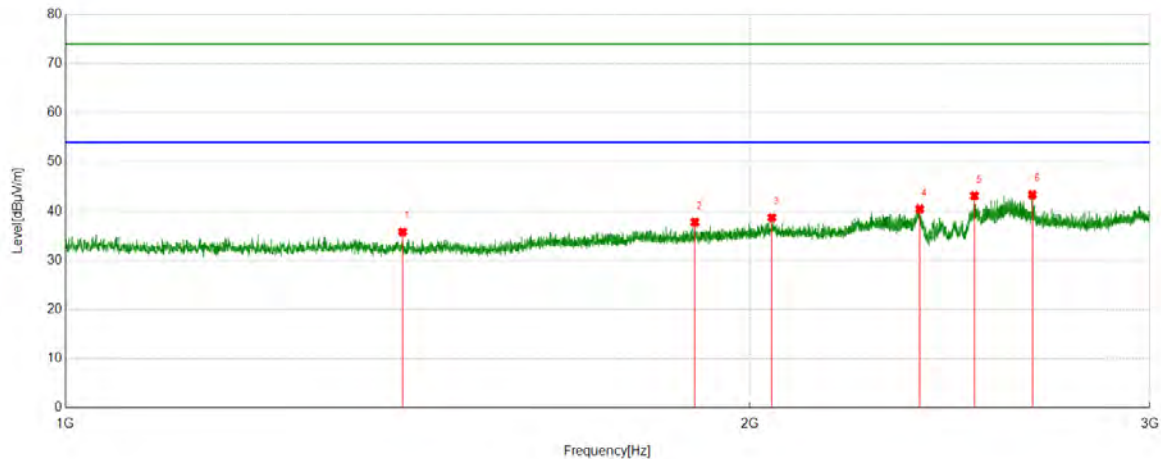
1) Through pre-testing all the test modes and test channels, but only the data of the worst case is included in this test report.



Part 1: 1GHz~3GHz

HARMONICS AND SPURIOUS EMISSIONS

Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS

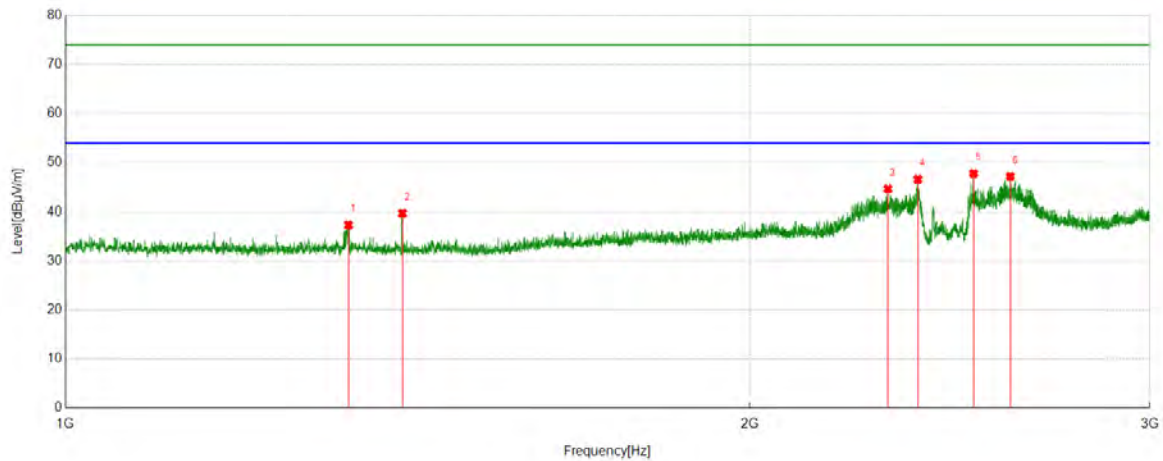


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1407.3009	42.35	-6.58	35.77	74.00	-38.23	Horizontal
2	1892.1115	41.56	-3.83	37.73	74.00	-36.27	Horizontal
3	2045.6307	41.21	-2.51	38.70	74.00	-35.30	Horizontal
4	2376.172	42.93	-2.49	40.44	74.00	-33.56	Horizontal
5	2511.4389	45.08	-1.94	43.14	74.00	-30.86	Horizontal
6	2662.9579	45.18	-1.84	43.34	74.00	-30.66	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS

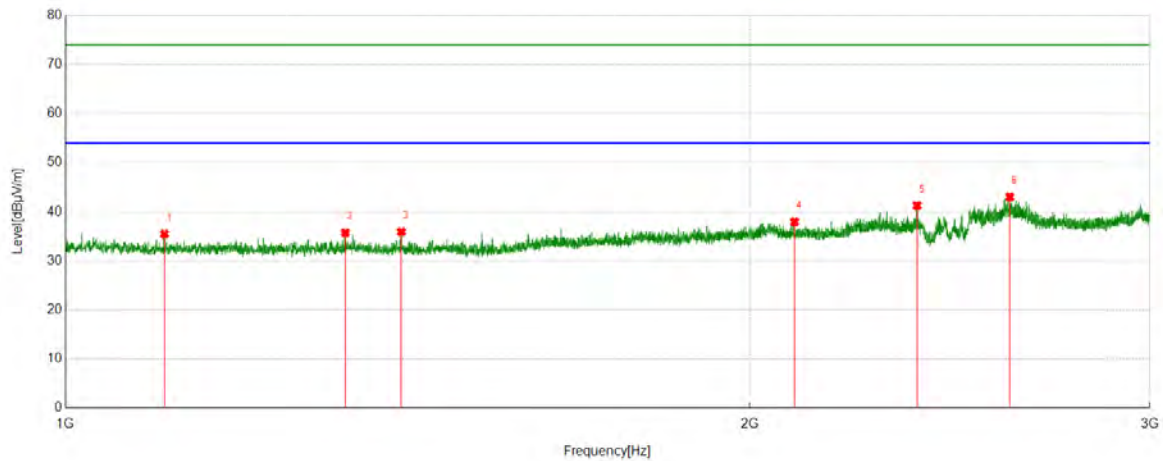


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1332.2915	43.74	-6.43	37.31	74.00	-36.69	Vertical
2	1407.0509	46.29	-6.59	39.70	74.00	-34.30	Vertical
3	2300.6626	47.75	-3.09	44.66	74.00	-29.34	Vertical
4	2371.4214	49.08	-2.48	46.60	74.00	-27.40	Vertical
5	2509.1886	49.74	-1.97	47.77	74.00	-26.23	Vertical
6	2604.2005	48.85	-1.65	47.20	74.00	-26.80	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS

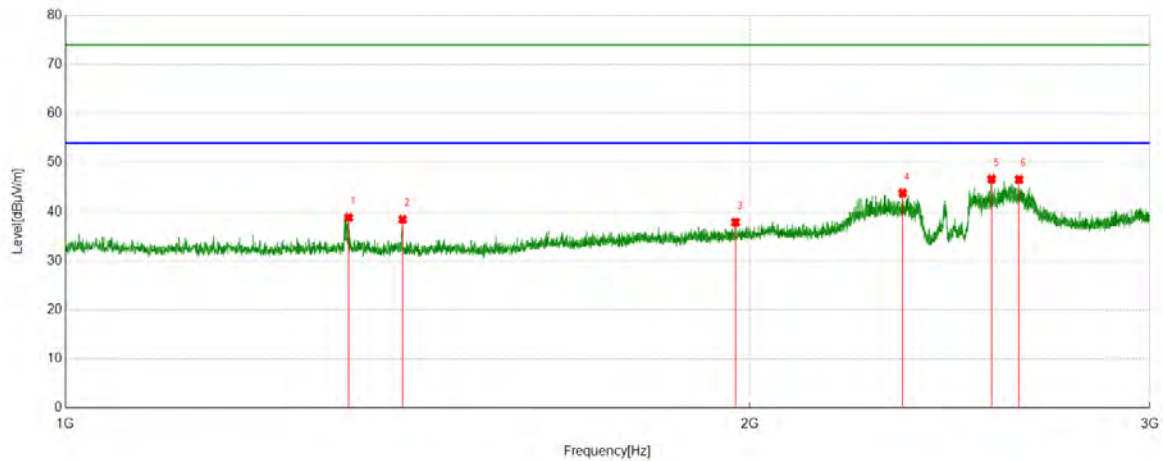


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1105.7632	41.62	-6.14	35.48	74.00	-38.52	Horizontal
2	1328.041	42.13	-6.40	35.73	74.00	-38.27	Horizontal
3	1405.5507	42.46	-6.53	35.93	74.00	-38.07	Horizontal
4	2093.1366	40.92	-2.97	37.95	74.00	-36.05	Horizontal
5	2369.6712	43.71	-2.48	41.23	74.00	-32.77	Horizontal
6	2602.9504	44.68	-1.69	42.99	74.00	-31.01	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS

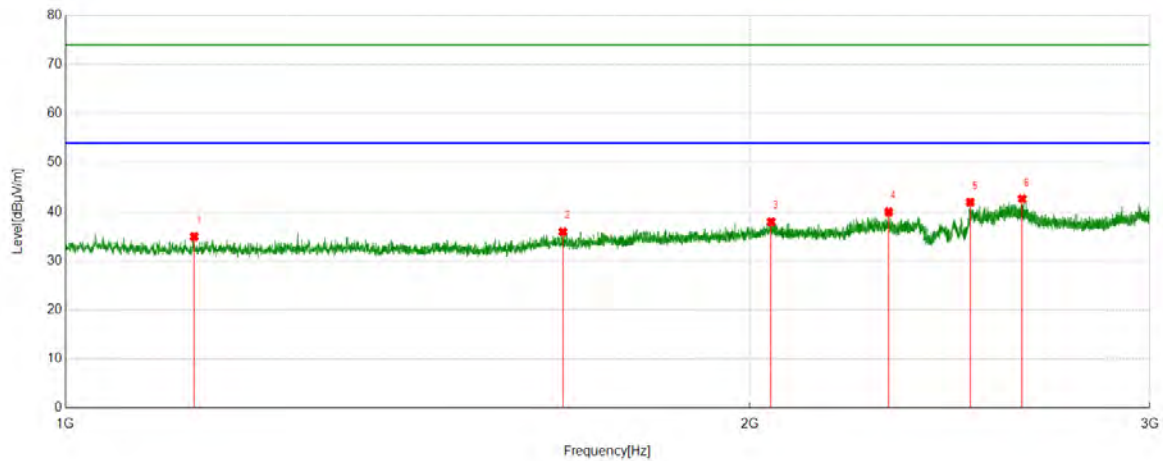


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1332.5416	45.25	-6.42	38.83	74.00	-35.17	Vertical
2	1407.3009	45.01	-6.58	38.43	74.00	-35.57	Vertical
3	1971.6215	41.27	-3.42	37.85	74.00	-36.15	Vertical
4	2335.4169	46.92	-3.13	43.79	74.00	-30.21	Vertical
5	2555.4444	48.99	-2.34	46.65	74.00	-27.35	Vertical
6	2627.4534	48.23	-1.67	46.56	74.00	-27.44	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS

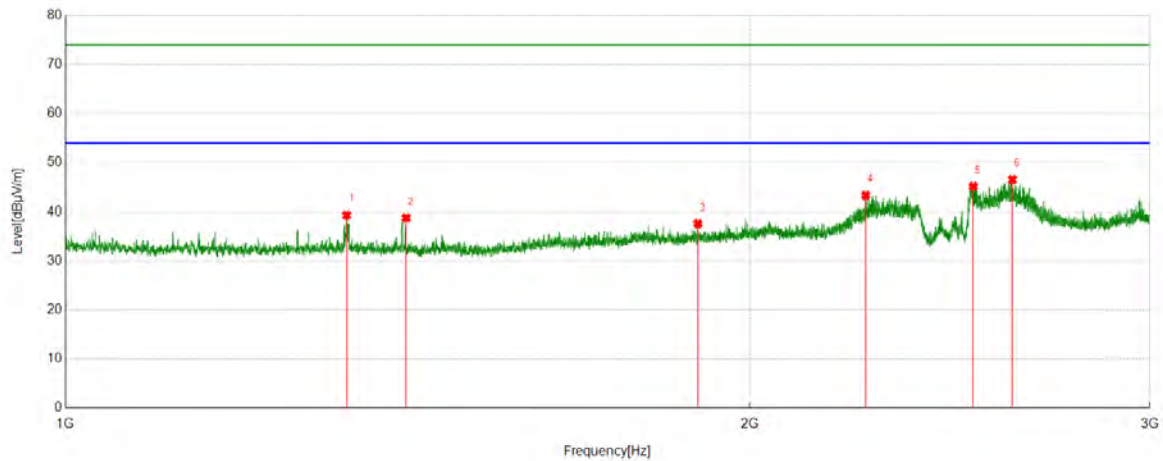


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1139.5174	40.96	-6.06	34.90	74.00	-39.10	Horizontal
2	1655.3319	41.01	-5.09	35.92	74.00	-38.08	Horizontal
3	2044.1305	40.45	-2.49	37.96	74.00	-36.04	Horizontal
4	2302.6628	43.03	-3.06	39.97	74.00	-34.03	Horizontal
5	2500.6876	43.97	-2.02	41.95	74.00	-32.05	Horizontal
6	2635.7045	44.46	-1.82	42.64	74.00	-31.36	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS

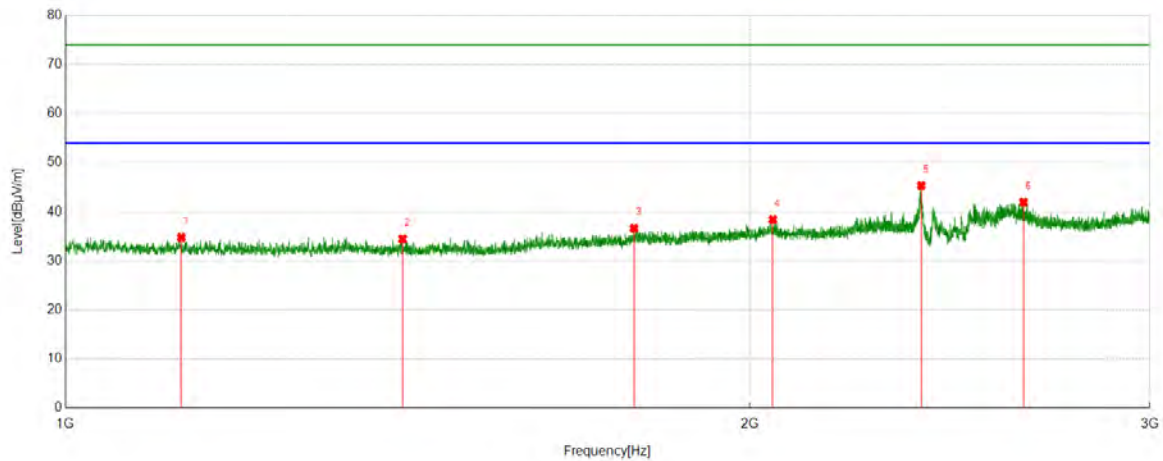


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1329.7912	45.70	-6.42	39.28	74.00	-34.72	Vertical
2	1412.3015	45.34	-6.59	38.75	74.00	-35.25	Vertical
3	1897.8622	41.35	-3.79	37.56	74.00	-36.44	Vertical
4	2249.6562	46.58	-3.25	43.33	74.00	-30.67	Vertical
5	2508.4386	47.13	-1.97	45.16	74.00	-28.84	Vertical
6	2609.9512	48.05	-1.51	46.54	74.00	-27.46	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	LCH	Horizontal	PASS

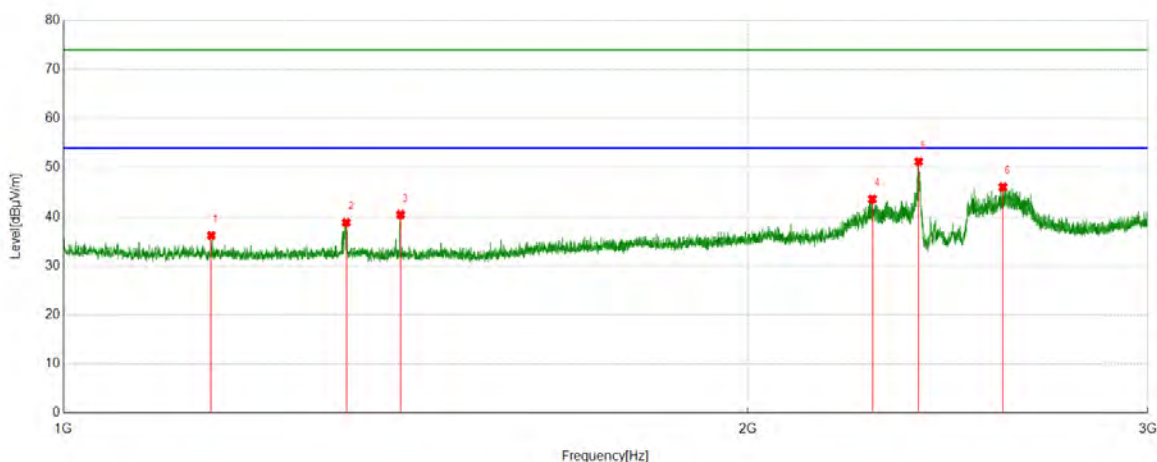


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1124.7656	40.80	-6.05	34.75	74.00	-39.25	Horizontal
2	1407.3009	41.03	-6.58	34.45	74.00	-39.55	Horizontal
3	1779.0974	41.02	-4.41	36.61	74.00	-37.39	Horizontal
4	2047.631	40.92	-2.51	38.41	74.00	-35.59	Horizontal
5	2379.6725	47.83	-2.51	45.32	74.00	-28.68	Horizontal
6	2639.2049	43.82	-1.88	41.94	74.00	-32.06	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	LCH	Vertical	PASS

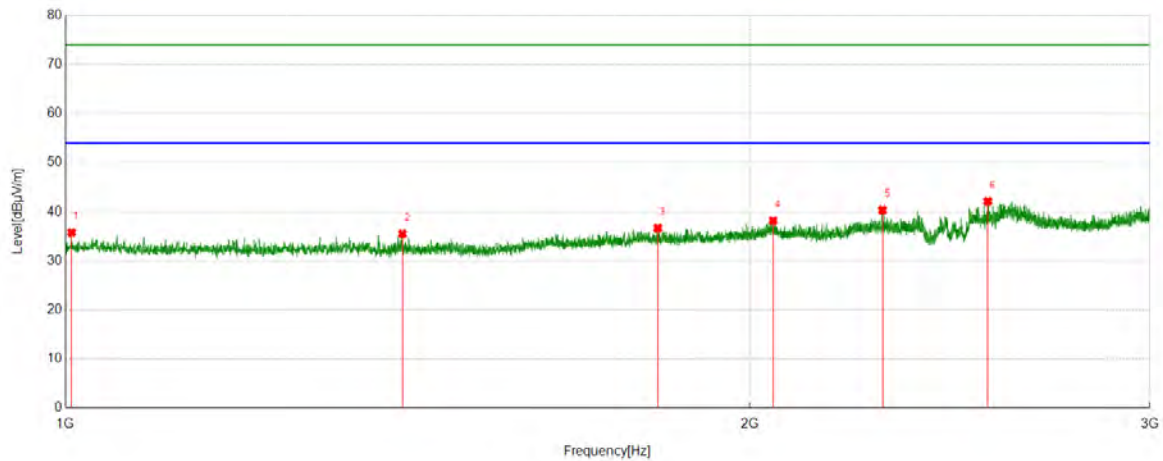


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1161.7702	42.34	-6.17	36.17	74.00	-37.83	Vertical
2	1332.0415	45.25	-6.42	38.83	74.00	-35.17	Vertical
3	1407.3009	47.00	-6.58	40.42	74.00	-33.58	Vertical
4	2269.4087	46.82	-3.24	43.58	74.00	-30.42	Vertical
5	2378.4223	53.72	-2.50	51.22	74.00	-22.78	Vertical
6	2590.1988	48.07	-2.01	46.06	74.00	-27.94	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	MCH	Horizontal	PASS

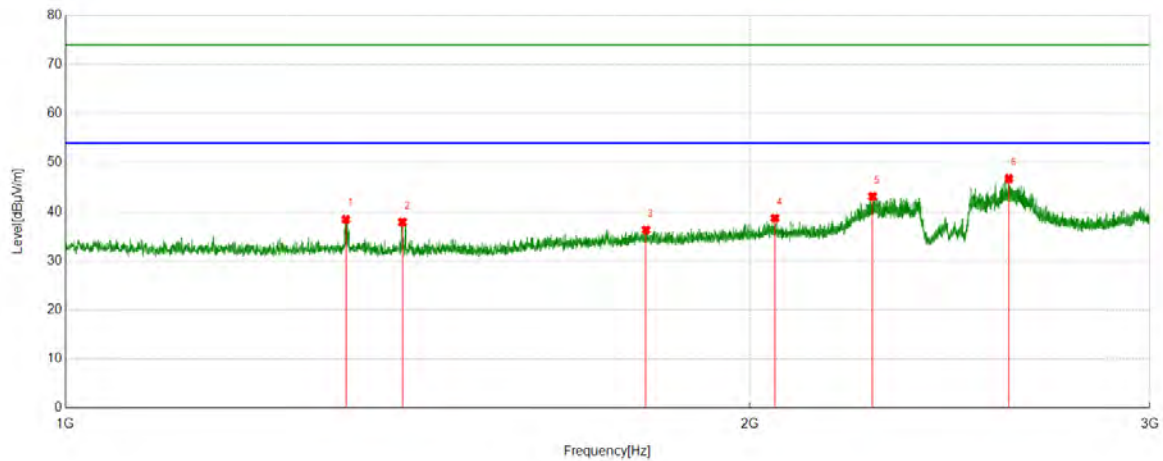


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1006.5008	41.17	-5.41	35.76	74.00	-38.24	Horizontal
2	1407.0509	42.10	-6.59	35.51	74.00	-38.49	Horizontal
3	1822.3528	40.82	-4.20	36.62	74.00	-37.38	Horizontal
4	2048.131	40.71	-2.52	38.19	74.00	-35.81	Horizontal
5	2288.161	43.49	-3.16	40.33	74.00	-33.67	Horizontal
6	2545.6932	44.47	-2.36	42.11	74.00	-31.89	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	MCH	Vertical	PASS

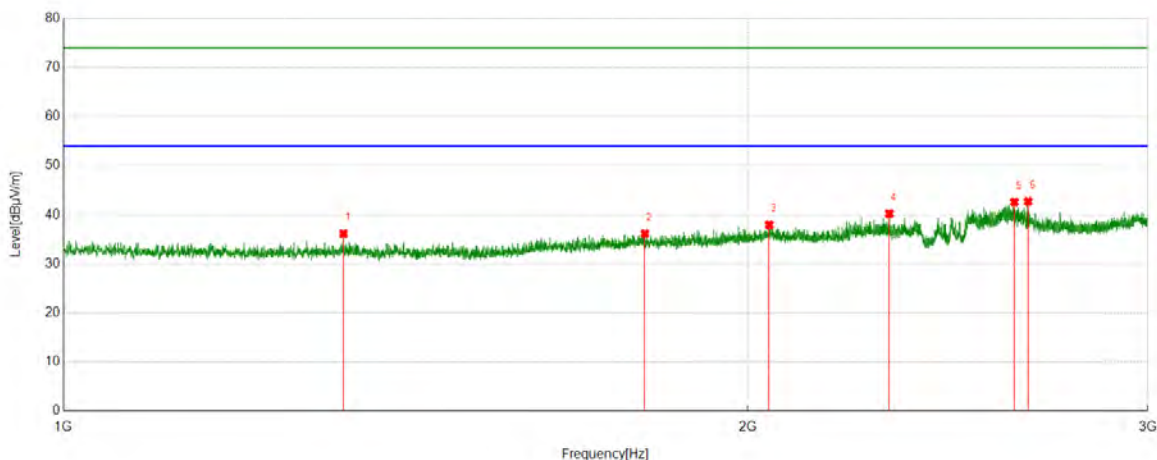


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1328.7911	44.87	-6.41	38.46	74.00	-35.54	Vertical
2	1407.0509	44.48	-6.59	37.89	74.00	-36.11	Vertical
3	1800.8501	40.53	-4.23	36.30	74.00	-37.70	Vertical
4	2051.8815	41.27	-2.58	38.69	74.00	-35.31	Vertical
5	2265.1581	46.36	-3.23	43.13	74.00	-30.87	Vertical
6	2600.4501	48.48	-1.74	46.74	74.00	-27.26	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	HCH	Horizontal	PASS

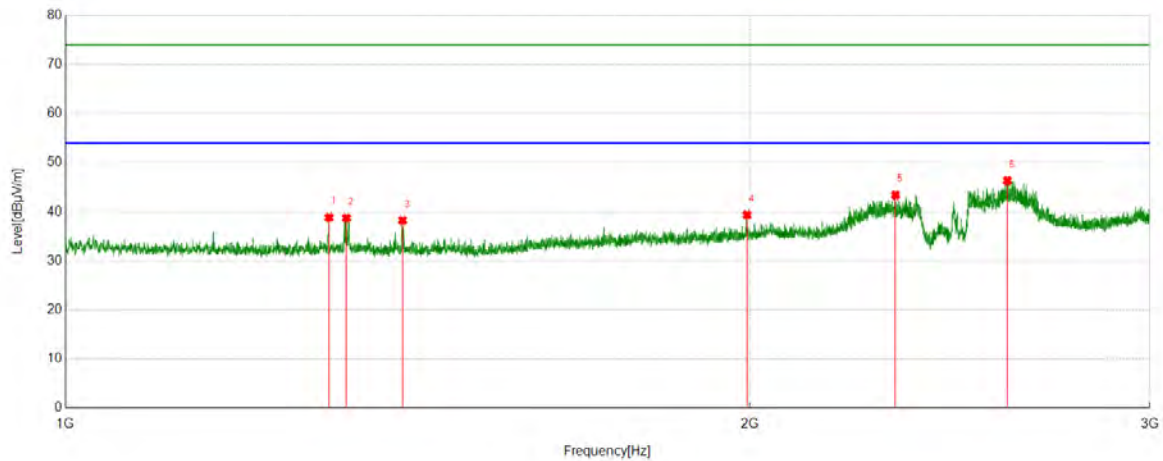


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1328.291	42.55	-6.41	36.14	74.00	-37.86	Horizontal
2	1802.3503	40.42	-4.26	36.16	74.00	-37.84	Horizontal
3	2044.1305	40.44	-2.49	37.95	74.00	-36.05	Horizontal
4	2308.6636	43.22	-3.01	40.21	74.00	-33.79	Horizontal
5	2620.4526	44.10	-1.53	42.57	74.00	-31.43	Horizontal
6	2656.9571	44.55	-1.85	42.70	74.00	-31.30	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	HCH	Vertical	PASS

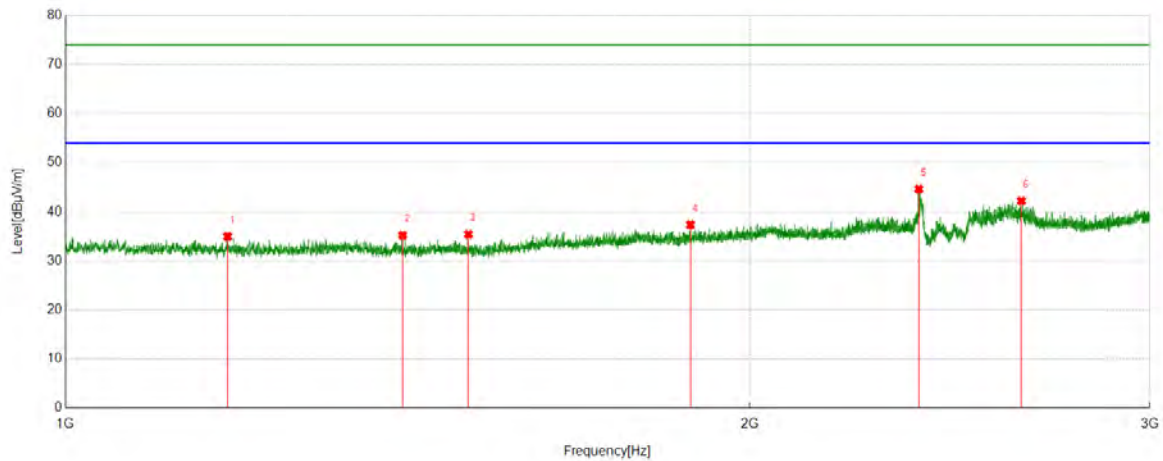


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1306.2883	45.16	-6.33	38.83	74.00	-35.17	Vertical
2	1329.5412	45.14	-6.42	38.72	74.00	-35.28	Vertical
3	1407.3009	44.81	-6.58	38.23	74.00	-35.77	Vertical
4	1994.6243	42.49	-3.12	39.37	74.00	-34.63	Vertical
5	2318.4148	46.35	-2.98	43.37	74.00	-30.63	Vertical
6	2596.4496	48.16	-1.84	46.32	74.00	-27.68	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Horizontal	PASS

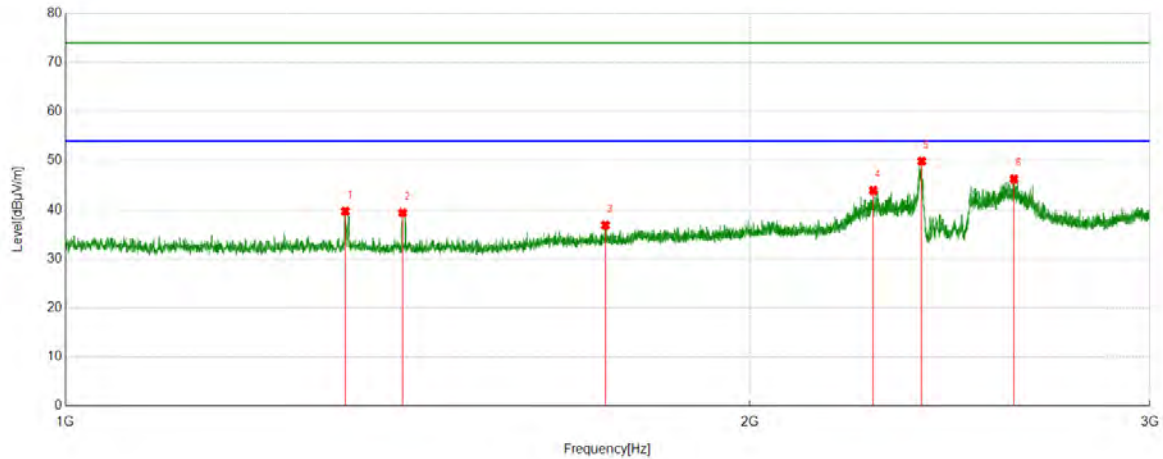


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1178.7723	41.10	-6.16	34.94	74.00	-39.06	Horizontal
2	1407.3009	41.80	-6.58	35.22	74.00	-38.78	Horizontal
3	1504.313	42.02	-6.62	35.40	74.00	-38.60	Horizontal
4	1883.6105	41.35	-3.98	37.37	74.00	-36.63	Horizontal
5	2373.9217	47.10	-2.49	44.61	74.00	-29.39	Horizontal
6	2633.7042	43.99	-1.79	42.20	74.00	-31.80	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Vertical	PASS

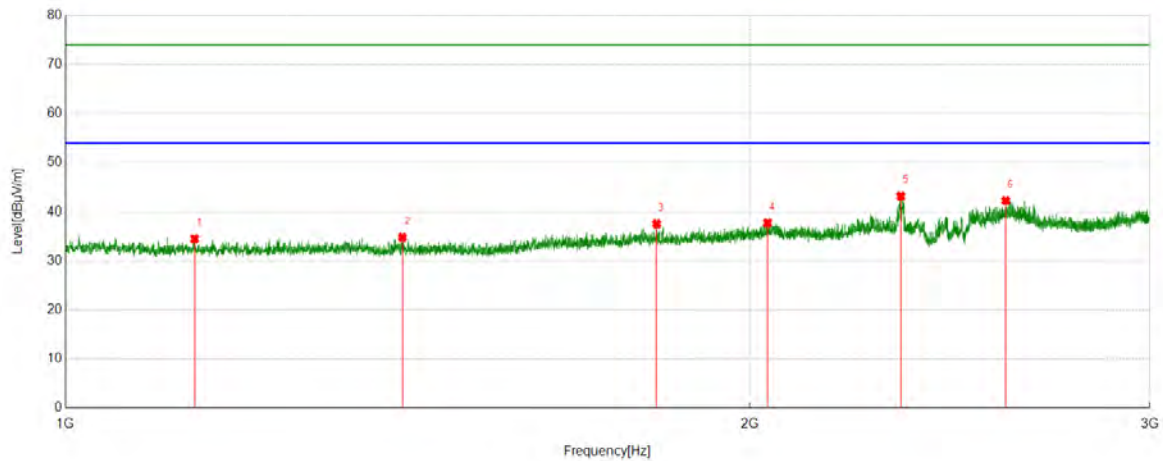


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1328.041	46.12	-6.40	39.72	74.00	-34.28	Vertical
2	1407.3009	45.96	-6.58	39.38	74.00	-34.62	Vertical
3	1728.341	41.58	-4.71	36.87	74.00	-37.13	Vertical
4	2266.9084	47.13	-3.24	43.89	74.00	-30.11	Vertical
5	2380.9226	52.40	-2.51	49.89	74.00	-24.11	Vertical
6	2613.9517	47.77	-1.51	46.26	74.00	-27.74	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	MCH	Horizontal	PASS

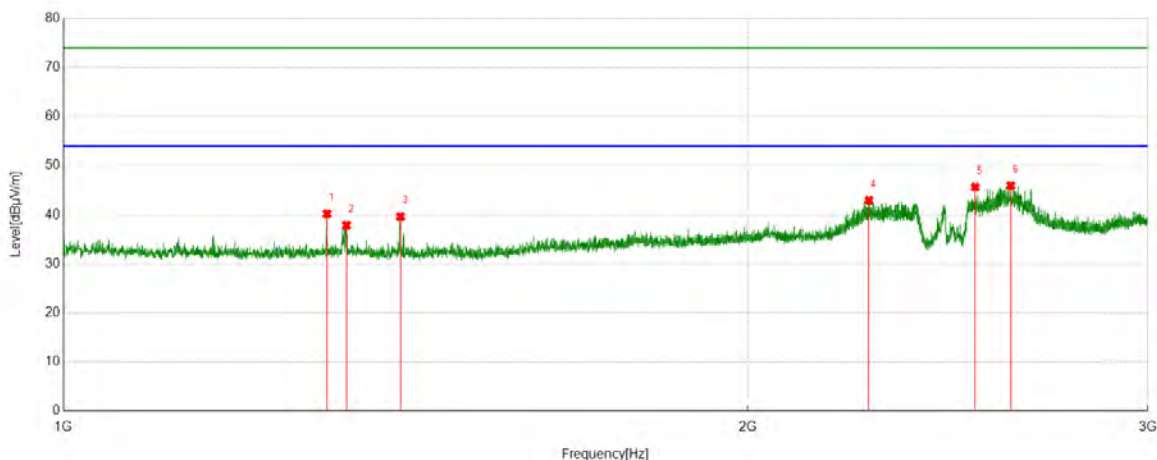


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1140.0175	40.53	-6.06	34.47	74.00	-39.53	Horizontal
2	1407.0509	41.36	-6.59	34.77	74.00	-39.23	Horizontal
3	1820.3525	41.69	-4.15	37.54	74.00	-36.46	Horizontal
4	2036.3795	40.29	-2.60	37.69	74.00	-36.31	Horizontal
5	2330.9164	46.32	-3.14	43.18	74.00	-30.82	Horizontal
6	2592.4491	44.22	-1.96	42.26	74.00	-31.74	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	MCH	Vertical	PASS

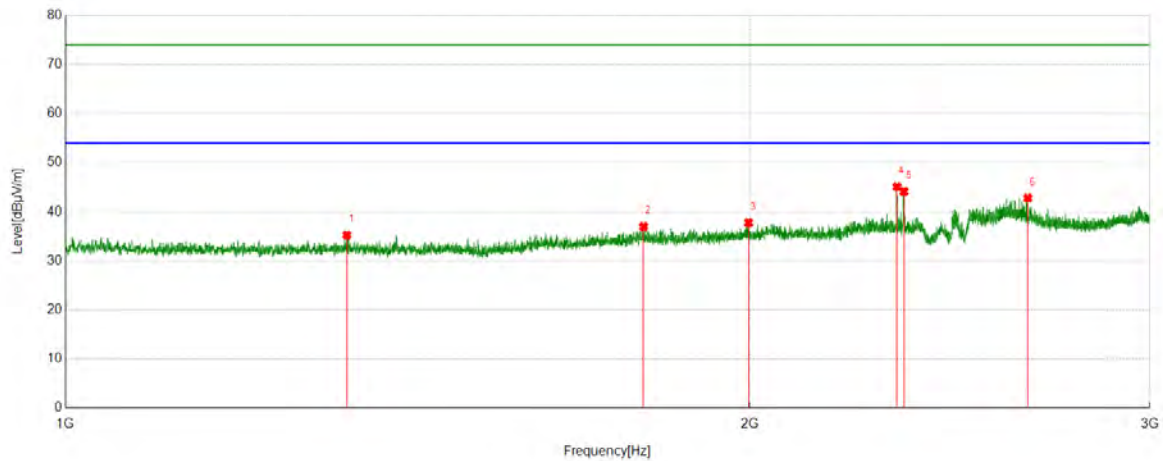


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1306.2883	46.52	-6.33	40.19	74.00	-33.81	Vertical
2	1332.2915	44.28	-6.43	37.85	74.00	-36.15	Vertical
3	1407.0509	46.21	-6.59	39.62	74.00	-34.38	Vertical
4	2261.6577	46.14	-3.23	42.91	74.00	-31.09	Vertical
5	2518.4398	47.41	-1.78	45.63	74.00	-28.37	Vertical
6	2610.7013	47.44	-1.51	45.93	74.00	-28.07	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Horizontal	PASS

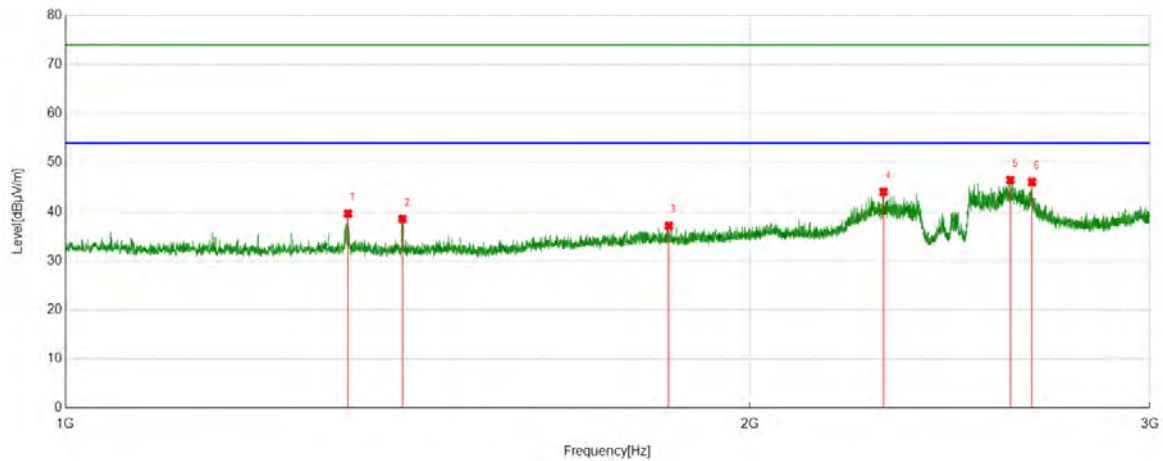


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1330.0413	41.66	-6.42	35.24	74.00	-38.76	Horizontal
2	1796.0995	41.26	-4.27	36.99	74.00	-37.01	Horizontal
3	1997.8747	40.81	-3.07	37.74	74.00	-36.26	Horizontal
4	2322.1653	48.09	-3.01	45.08	74.00	-28.92	Horizontal
5	2338.1673	47.22	-3.12	44.10	74.00	-29.90	Horizontal
6	2650.7063	44.70	-1.91	42.79	74.00	-31.21	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	1331.5414	46.05	-6.42	39.63	74.00	-34.37	Vertical
2	1407.0509	45.14	-6.59	38.55	74.00	-35.45	Vertical
3	1842.8554	41.26	-4.14	37.12	74.00	-36.88	Vertical
4	2290.4113	47.19	-3.15	44.04	74.00	-29.96	Vertical
5	2604.2005	48.10	-1.65	46.45	74.00	-27.55	Vertical
6	2662.2078	47.92	-1.83	46.09	74.00	-27.91	Vertical

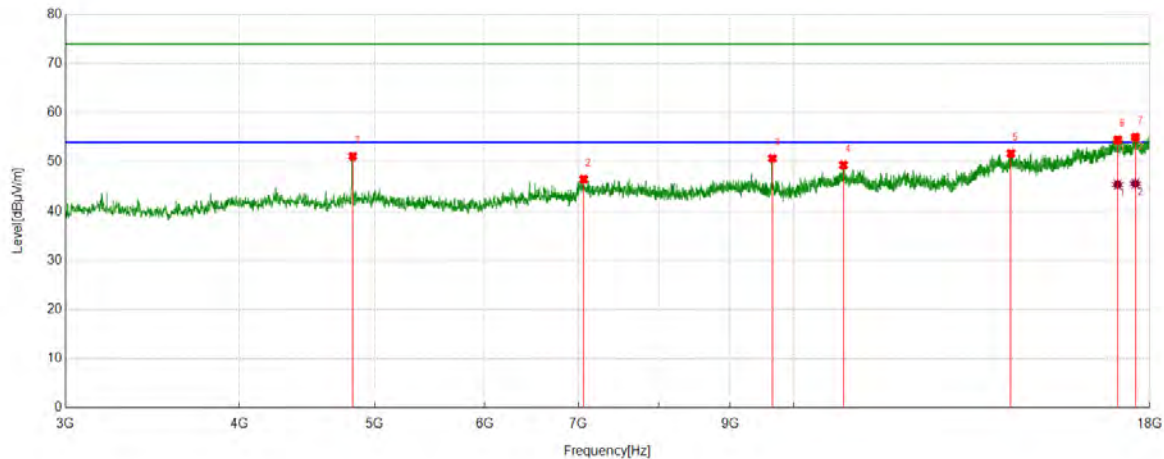
- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
4. Peak: Peak detector.
5. For below 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for Band Reject Filter losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Part 2: 3GHz~18GHz

HARMONICS AND SPURIOUS EMISSIONS

Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	4822.7278	45.80	5.35	51.15	74.00	-22.85	Horizontal
2	7063.633	37.33	9.17	46.50	74.00	-27.50	Horizontal
3	9647.706	41.51	9.23	50.74	74.00	-23.26	Horizontal
4	10847.856	37.24	12.15	49.39	74.00	-24.61	Horizontal
5	14305.7882	35.77	15.97	51.74	74.00	-22.26	Horizontal
6	17064.258	34.58	19.93	54.51	74.00	-19.49	Horizontal
7	17570.5713	35.01	20.05	55.06	74.00	-18.94	Horizontal

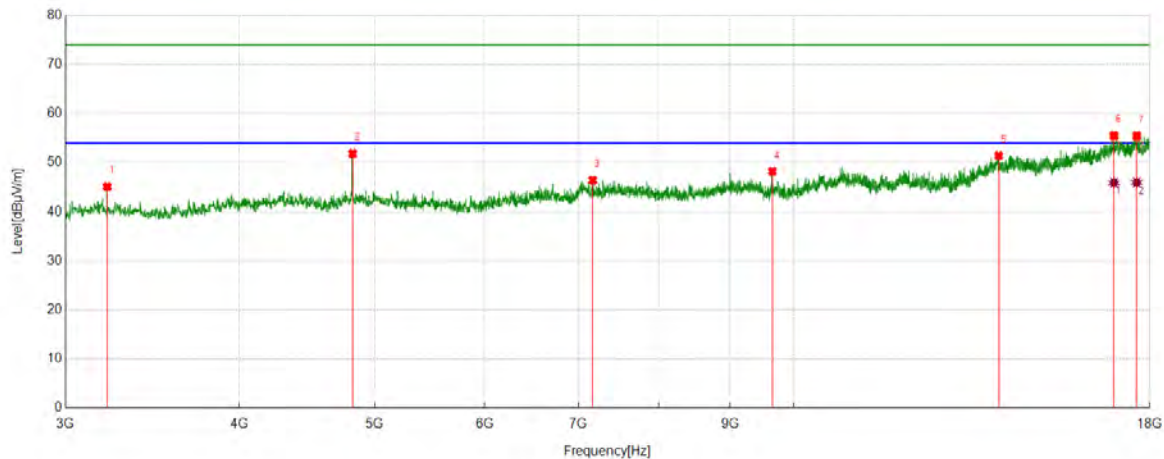
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17064.258	25.49	19.93	45.42	54.00	-8.58	Horizontal
2	17570.5713	25.51	20.05	45.56	54.00	-8.44	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3215.652	42.82	2.28	45.10	74.00	-28.90	Vertical
2	4822.7278	46.51	5.35	51.86	74.00	-22.14	Vertical
3	7170.5213	37.37	9.03	46.40	74.00	-27.60	Vertical
4	9647.706	38.99	9.23	48.22	74.00	-25.78	Vertical
5	14020.7526	35.54	15.88	51.42	74.00	-22.58	Vertical
6	16961.1201	35.71	19.78	55.49	74.00	-18.51	Vertical
7	17609.9512	35.79	19.65	55.44	74.00	-18.56	Vertical

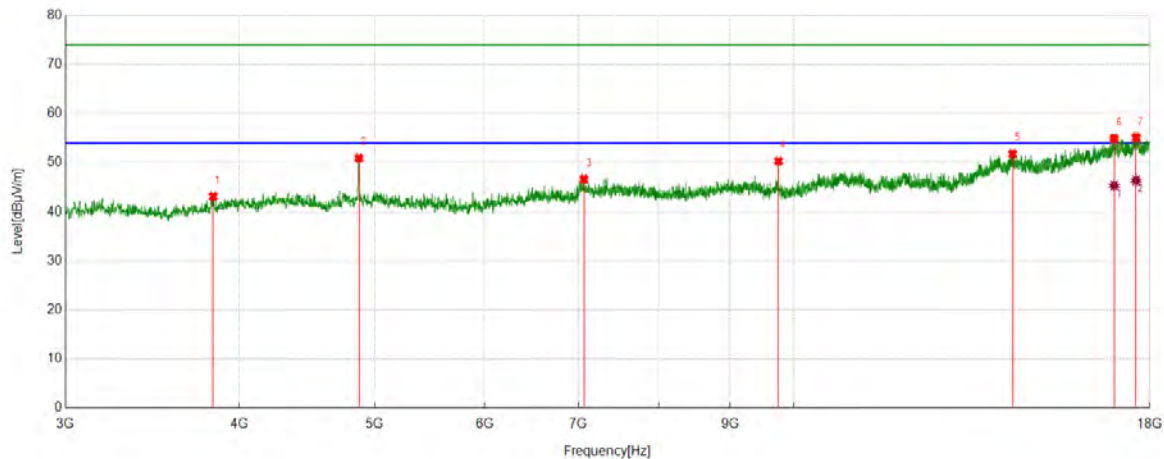
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16961.1201	26.12	19.78	45.90	54.00	-8.10	Vertical
2	17609.9512	26.31	19.65	45.96	54.00	-8.04	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3830.7288	39.04	4.09	43.13	74.00	-30.87	Horizontal
2	4873.3592	45.39	5.54	50.93	74.00	-23.07	Horizontal
3	7067.3834	37.44	9.20	46.64	74.00	-27.36	Horizontal
4	9747.0934	40.97	9.33	50.30	74.00	-23.70	Horizontal
5	14348.9186	35.87	15.94	51.81	74.00	-22.19	Horizontal
6	16966.7458	34.99	19.92	54.91	74.00	-19.09	Horizontal
7	17593.0741	35.45	19.69	55.14	74.00	-18.86	Horizontal

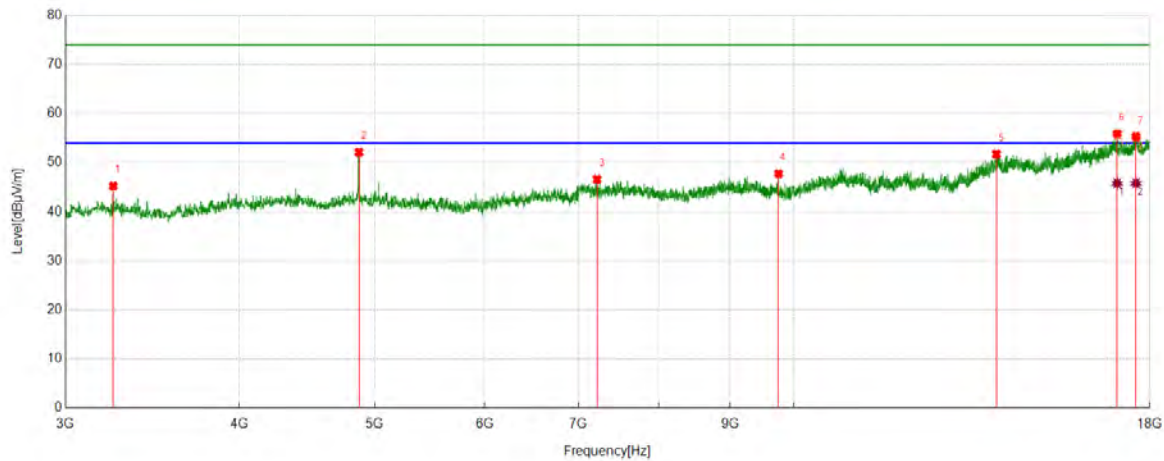
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16966.7458	25.38	19.92	45.30	54.00	-8.70	Horizontal
2	17593.0741	26.68	19.69	46.37	54.00	-7.63	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3247.5309	43.03	2.21	45.24	74.00	-28.76	Vertical
2	4873.3592	46.58	5.54	52.12	74.00	-21.88	Vertical
3	7221.1526	37.79	8.81	46.60	74.00	-27.40	Vertical
4	9747.0934	38.41	9.33	47.74	74.00	-26.26	Vertical
5	13968.246	36.04	15.71	51.75	74.00	-22.25	Vertical
6	17051.1314	35.98	19.91	55.89	74.00	-18.11	Vertical
7	17589.3237	35.56	19.75	55.31	74.00	-18.69	Vertical

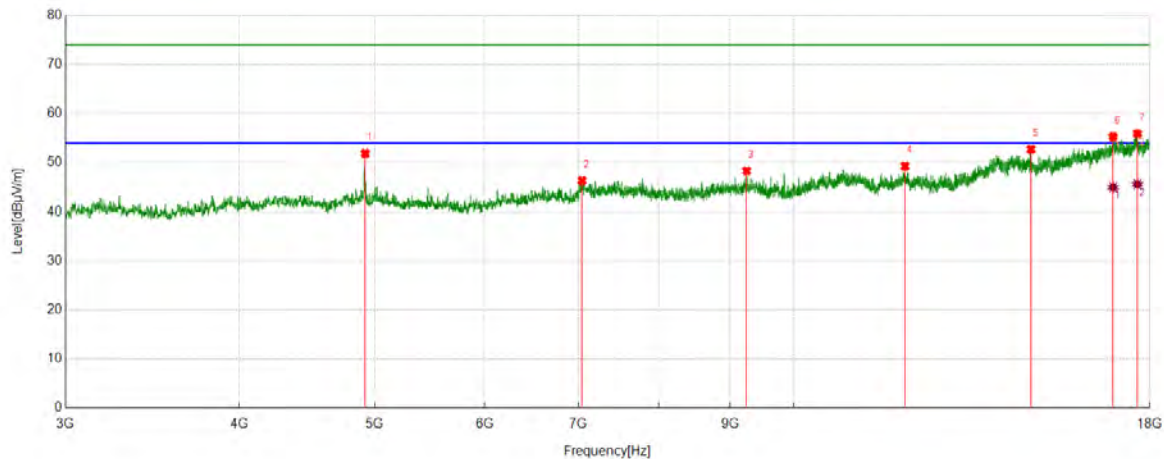
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17051.1314	25.87	19.91	45.78	54.00	-8.22	Vertical
2	17589.3237	26.04	19.75	45.79	54.00	-8.21	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	4923.9905	46.32	5.56	51.88	74.00	-22.12	Horizontal
2	7044.8806	37.08	9.24	46.32	74.00	-27.68	Horizontal
3	9246.4058	38.90	9.40	48.30	74.00	-25.70	Horizontal
4	12010.5013	36.42	12.84	49.26	74.00	-24.74	Horizontal
5	14789.5987	37.05	15.65	52.70	74.00	-21.30	Horizontal
6	16936.7421	36.03	19.25	55.28	74.00	-18.72	Horizontal
7	17630.5788	36.42	19.50	55.92	74.00	-18.08	Horizontal

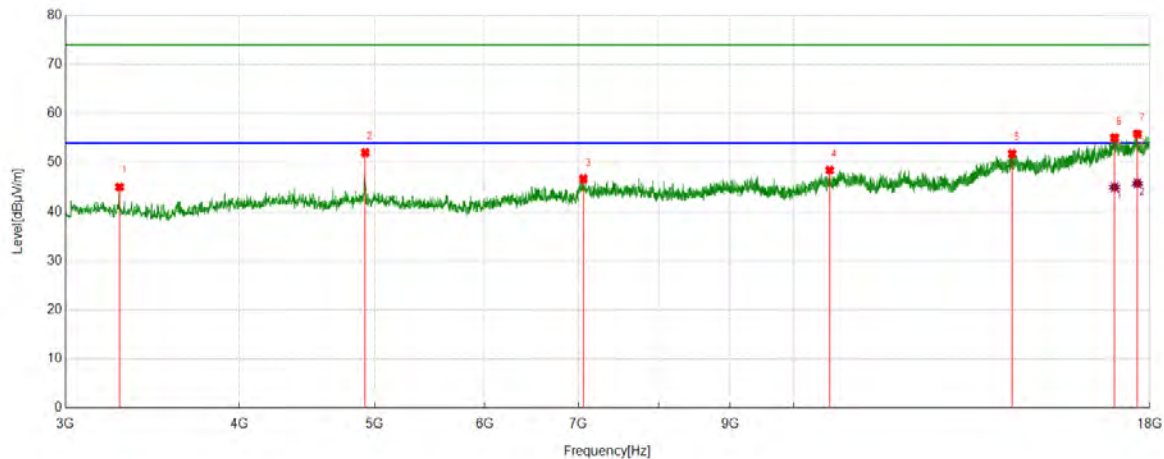
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16936.7421	25.71	19.25	44.96	54.00	-9.04	Horizontal
2	17630.5788	26.08	19.50	45.58	54.00	-8.42	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3281.2852	42.01	3.01	45.02	74.00	-28.98	Vertical
2	4923.9905	46.46	5.56	52.02	74.00	-21.98	Vertical
3	7059.8825	37.54	9.15	46.69	74.00	-27.31	Vertical
4	10605.9507	36.58	11.88	48.46	74.00	-25.54	Vertical
5	14335.792	35.68	16.15	51.83	74.00	-22.17	Vertical
6	16977.9972	35.15	19.93	55.08	74.00	-18.92	Vertical
7	17630.5788	36.39	19.50	55.89	74.00	-18.11	Vertical

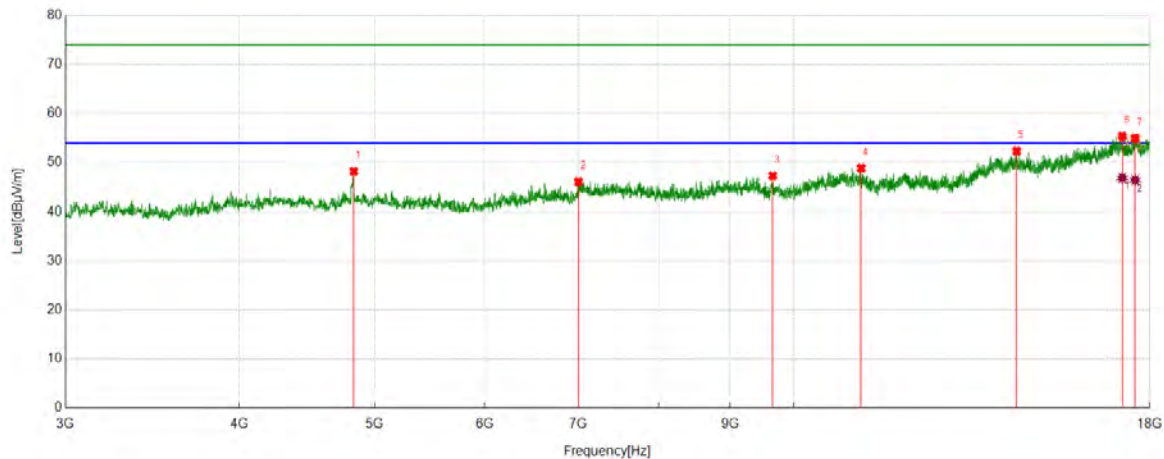
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16977.9972	25.06	19.93	44.99	54.00	-9.01	Vertical
2	17630.5788	26.26	19.50	45.76	54.00	-8.24	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	LCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	4832.104	42.82	5.40	48.22	74.00	-25.78	Horizontal
2	7003.6255	36.91	9.20	46.11	74.00	-27.89	Horizontal
3	9653.3317	38.06	9.26	47.32	74.00	-26.68	Horizontal
4	11172.2715	36.91	11.98	48.89	74.00	-25.11	Horizontal
5	14442.6803	36.31	16.05	52.36	74.00	-21.64	Horizontal
6	17195.5244	36.18	19.17	55.35	74.00	-18.65	Horizontal
7	17564.9456	35.20	19.77	54.97	74.00	-19.03	Horizontal

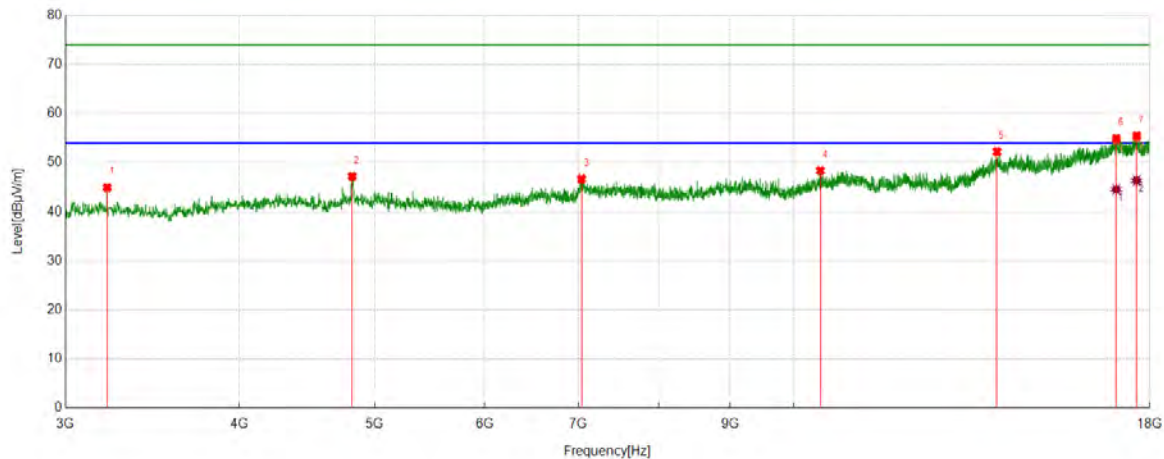
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17195.5244	27.70	19.17	46.87	54.00	-7.13	Horizontal
2	17564.9456	26.68	19.77	46.45	54.00	-7.55	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	LCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3215.652	42.63	2.28	44.91	74.00	-29.09	Vertical
2	4818.9774	41.89	5.32	47.21	74.00	-26.79	Vertical
3	7039.2549	37.51	9.16	46.67	74.00	-27.33	Vertical
4	10442.8054	36.97	11.40	48.37	74.00	-25.63	Vertical
5	13981.3727	36.24	15.99	52.23	74.00	-21.77	Vertical
6	17026.7533	35.64	19.24	54.88	74.00	-19.12	Vertical
7	17608.076	35.80	19.63	55.43	74.00	-18.57	Vertical

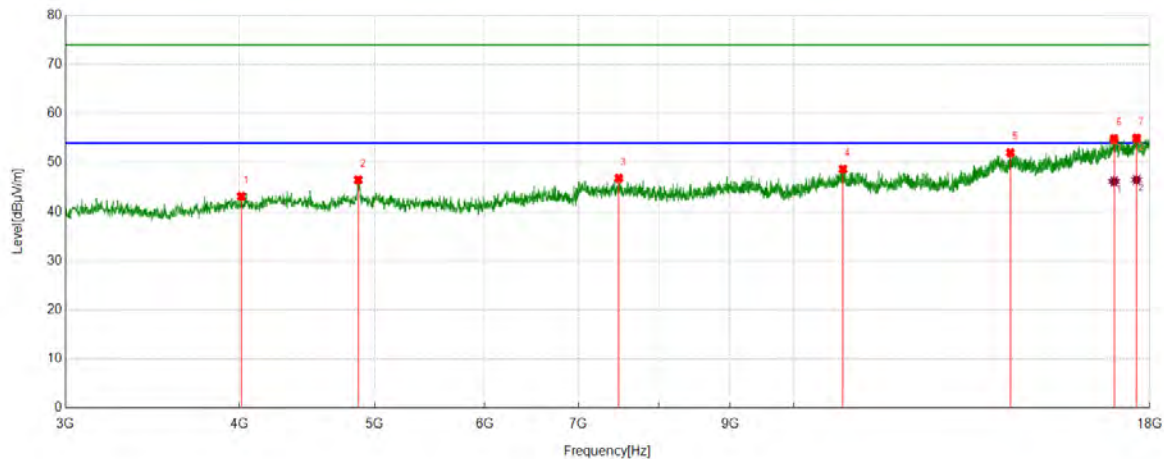
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17026.7533	25.30	19.24	44.54	54.00	-9.46	Vertical
2	17608.076	26.72	19.63	46.35	54.00	-7.65	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	MCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	4012.6266	39.01	4.14	43.15	74.00	-30.85	Horizontal
2	4867.7335	41.00	5.49	46.49	74.00	-27.51	Horizontal
3	7485.5607	38.45	8.35	46.80	74.00	-27.20	Horizontal
4	10840.355	36.58	12.10	48.68	74.00	-25.32	Horizontal
5	14294.5368	35.98	16.03	52.01	74.00	-21.99	Horizontal
6	16964.8706	34.99	19.87	54.86	74.00	-19.14	Horizontal
7	17606.2008	35.39	19.61	55.00	74.00	-19.00	Horizontal

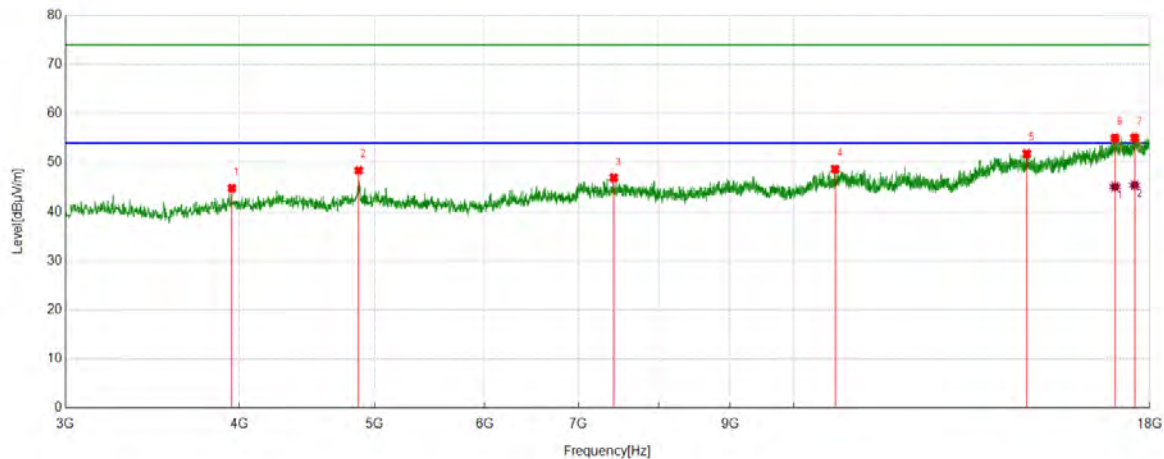
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16964.8706	26.30	19.87	46.17	54.00	-7.83	Horizontal
2	17606.2008	26.88	19.61	46.49	54.00	-7.51	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	MCH	Vertical	PASS



PK Result:

No.	Frequency [MHz]	Reading Level [dBuV]	Correct Factor [dB/m]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
1	3950.7438	40.42	4.37	44.79	74.00	-29.21	Vertical
2	4871.4839	42.87	5.54	48.41	74.00	-25.59	Vertical
3	7423.678	38.36	8.51	46.87	74.00	-27.13	Vertical
4	10699.7125	36.72	11.94	48.66	74.00	-25.34	Vertical
5	14684.5856	36.38	15.46	51.84	74.00	-22.16	Vertical
6	16991.1239	35.88	19.17	55.05	74.00	-18.95	Vertical
7	17549.9437	35.98	19.12	55.10	74.00	-18.90	Vertical

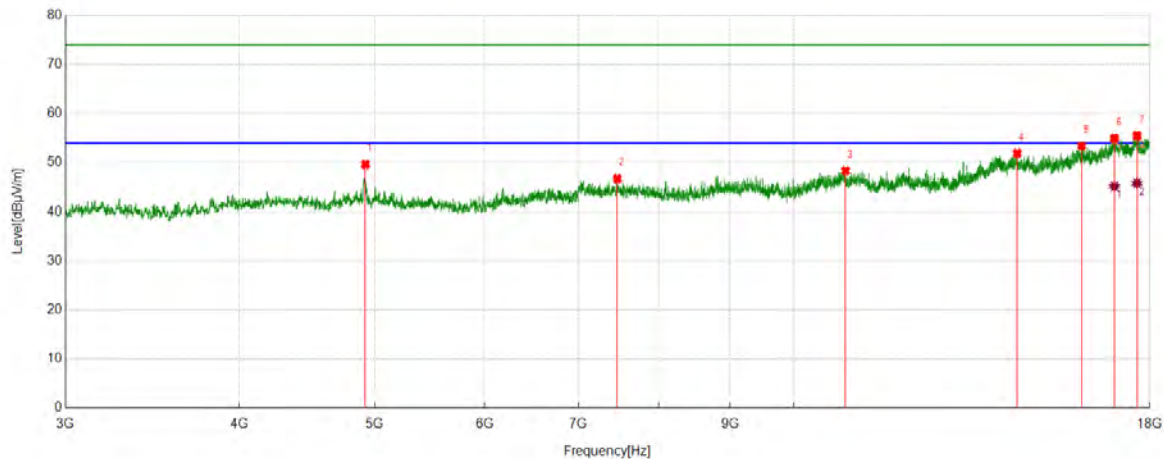
AV Result:

No.	Frequency [MHz]	Reading Level [dBuV]	Correct Factor [dB/m]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
1	16991.1239	25.91	19.17	45.08	54.00	-8.92	Vertical
2	17549.9437	26.29	19.12	45.41	54.00	-8.59	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	HCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	4925.8657	44.06	5.56	49.62	74.00	-24.38	Horizontal
2	7466.8084	38.01	8.71	46.72	74.00	-27.28	Horizontal
3	10887.2359	36.06	12.27	48.33	74.00	-25.67	Horizontal
4	14455.807	35.98	15.93	51.91	74.00	-22.09	Horizontal
5	16077.8847	36.72	16.69	53.41	74.00	-20.59	Horizontal
6	16974.2468	35.00	19.96	54.96	74.00	-19.04	Horizontal
7	17617.4522	36.12	19.35	55.47	74.00	-18.53	Horizontal

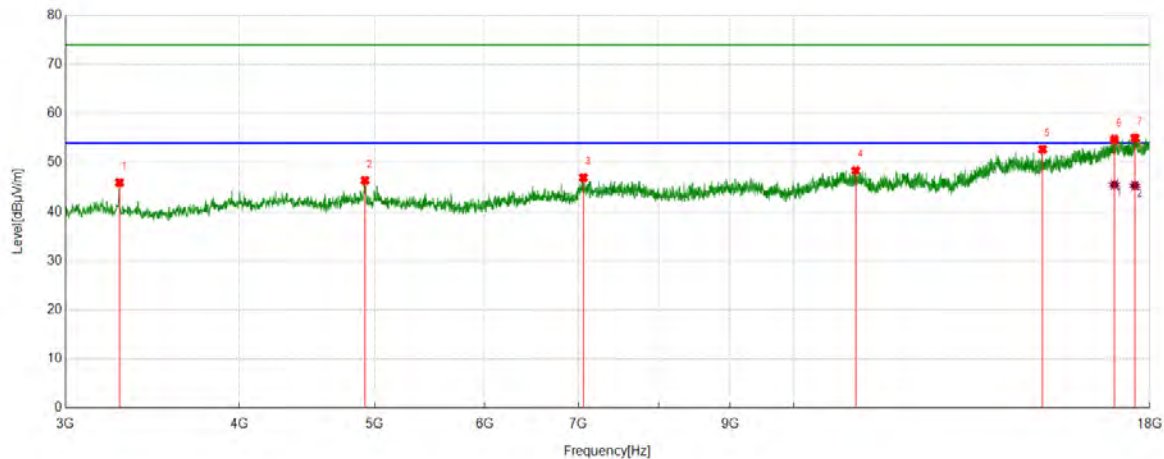
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16974.2468	25.20	19.96	45.16	54.00	-8.84	Horizontal
2	17617.4522	26.44	19.35	45.79	54.00	-8.21	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11G	HCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3281.2852	42.92	3.01	45.93	74.00	-28.07	Vertical
2	4922.1153	40.79	5.57	46.36	74.00	-27.64	Vertical
3	7059.8825	37.76	9.15	46.91	74.00	-27.09	Vertical
4	11069.1336	36.02	12.39	48.41	74.00	-25.59	Vertical
5	15076.5096	37.39	15.31	52.70	74.00	-21.30	Vertical
6	16972.3715	34.79	19.98	54.77	74.00	-19.23	Vertical
7	17557.4447	35.63	19.39	55.02	74.00	-18.98	Vertical

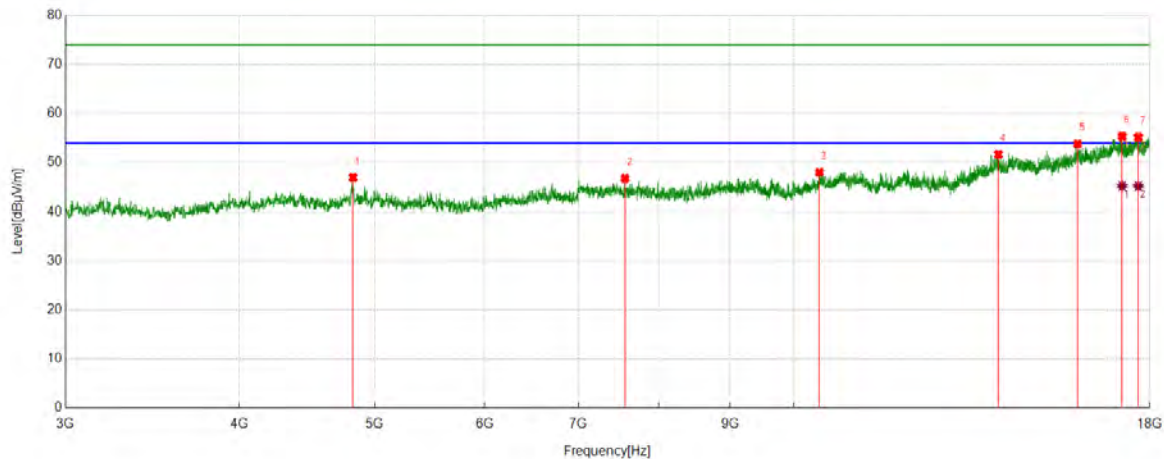
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16972.3715	25.51	19.98	45.49	54.00	-8.51	Vertical
2	17557.4447	25.92	19.39	45.31	54.00	-8.69	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	4826.4783	41.59	5.37	46.96	74.00	-27.04	Horizontal
2	7562.4453	38.39	8.38	46.77	74.00	-27.23	Horizontal
3	10427.8035	36.67	11.36	48.03	74.00	-25.97	Horizontal
4	14013.2517	35.83	15.86	51.69	74.00	-22.31	Horizontal
5	15969.1211	36.89	16.92	53.81	74.00	-20.19	Horizontal
6	17191.774	36.15	19.20	55.35	74.00	-18.65	Horizontal
7	17656.8321	35.61	19.57	55.18	74.00	-18.82	Horizontal

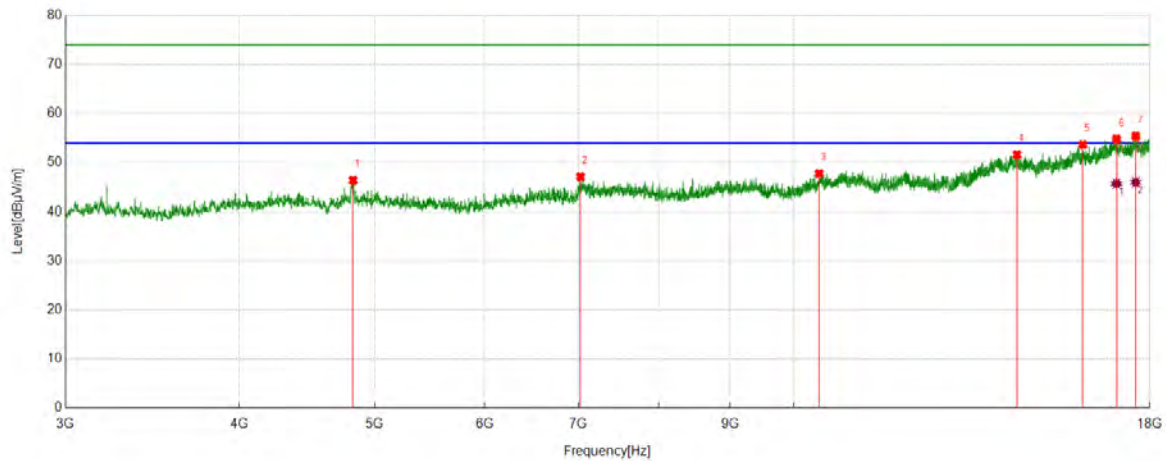
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17191.774	26.04	19.20	45.24	54.00	-8.76	Horizontal
2	17656.8321	25.63	19.57	45.20	54.00	-8.80	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	4826.4783	41.02	5.37	46.39	74.00	-27.61	Vertical
2	7026.1283	37.93	9.22	47.15	74.00	-26.85	Vertical
3	10422.1778	36.52	11.26	47.78	74.00	-26.22	Vertical
4	14450.1813	35.57	16.04	51.61	74.00	-22.39	Vertical
5	16109.7637	36.31	17.37	53.68	74.00	-20.32	Vertical
6	17032.379	35.45	19.36	54.81	74.00	-19.19	Vertical
7	17581.8227	35.67	19.71	55.38	74.00	-18.62	Vertical

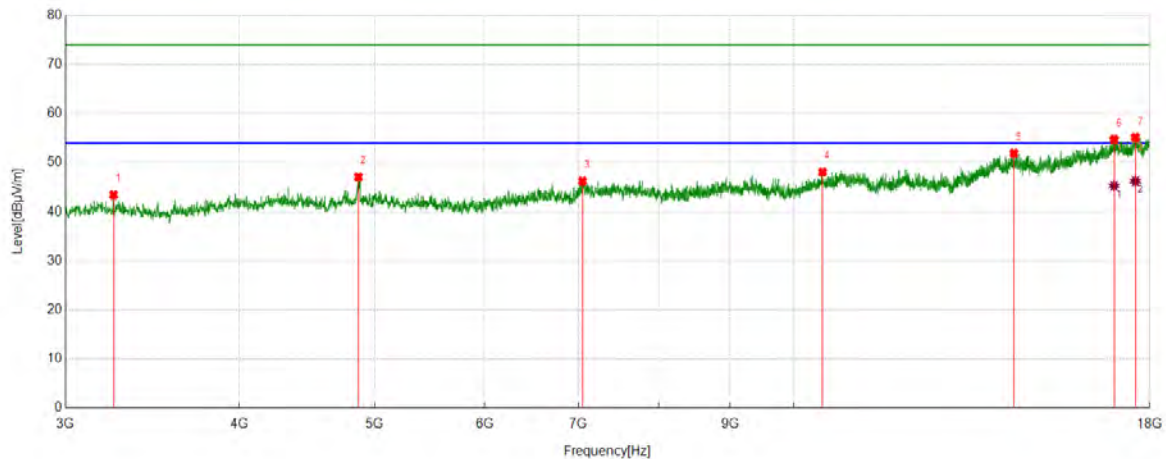
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17032.379	26.36	19.36	45.72	54.00	-8.28	Vertical
2	17581.8227	26.29	19.71	46.00	54.00	-8.00	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	MCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3249.4062	41.24	2.18	43.42	74.00	-30.58	Horizontal
2	4869.6087	41.54	5.53	47.07	74.00	-26.93	Horizontal
3	7050.5063	36.93	9.31	46.24	74.00	-27.76	Horizontal
4	10480.31	36.53	11.55	48.08	74.00	-25.92	Horizontal
5	14377.0471	36.25	15.67	51.92	74.00	-22.08	Horizontal
6	16962.9954	34.91	19.83	54.74	74.00	-19.26	Horizontal
7	17570.5713	35.10	20.05	55.15	74.00	-18.85	Horizontal

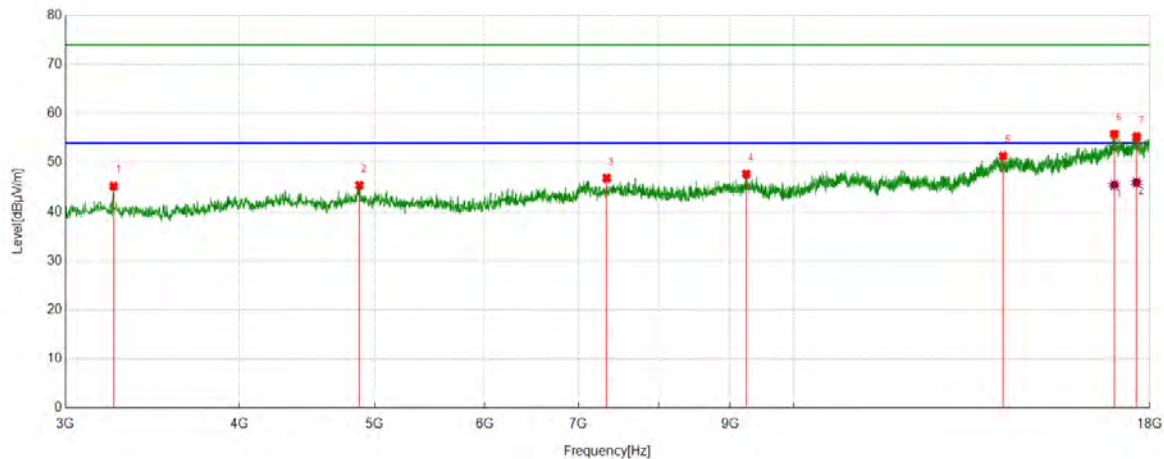
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16962.9954	25.43	19.83	45.26	54.00	-8.74	Horizontal
2	17570.5713	26.18	20.05	46.23	54.00	-7.77	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	MCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3249.4062	43.03	2.18	45.21	74.00	-28.79	Vertical
2	4877.1096	39.84	5.55	45.39	74.00	-28.61	Vertical
3	7337.4172	38.37	8.44	46.81	74.00	-27.19	Vertical
4	9240.7801	38.17	9.52	47.69	74.00	-26.31	Vertical
5	14120.14	35.75	15.61	51.36	74.00	-22.64	Vertical
6	16970.4963	35.85	20.00	55.85	74.00	-18.15	Vertical
7	17606.2008	35.65	19.61	55.26	74.00	-18.74	Vertical

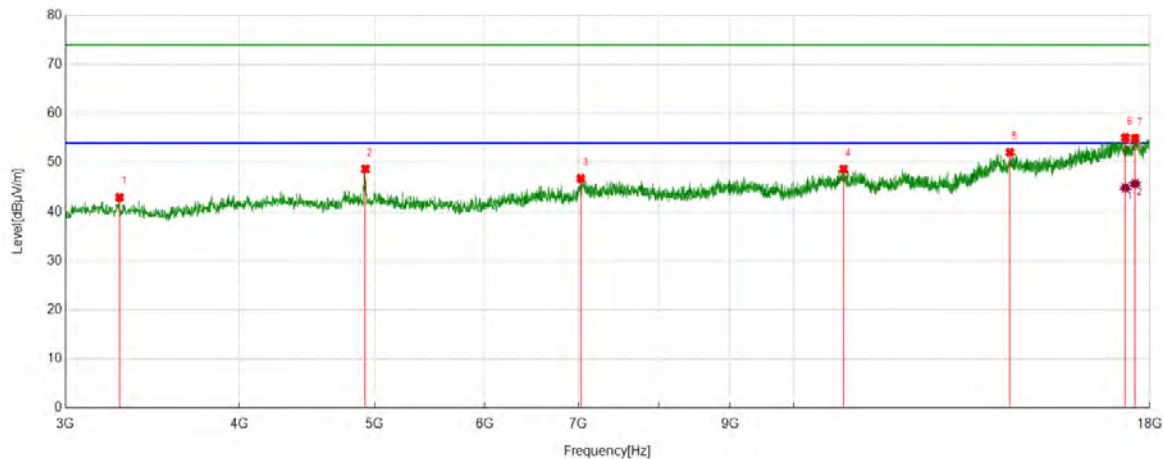
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16970.4963	25.45	20.00	45.45	54.00	-8.55	Vertical
2	17606.2008	26.33	19.61	45.94	54.00	-8.06	Vertical

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Horizontal	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3281.2852	39.87	3.01	42.88	74.00	-31.12	Horizontal
2	4925.8657	43.16	5.56	48.72	74.00	-25.28	Horizontal
3	7029.8787	37.58	9.17	46.75	74.00	-27.25	Horizontal
4	10851.6065	36.53	12.15	48.68	74.00	-25.32	Horizontal
5	14283.2854	36.15	15.93	52.08	74.00	-21.92	Horizontal
6	17283.6605	36.67	18.44	55.11	74.00	-18.89	Horizontal
7	17563.0704	35.30	19.66	54.96	74.00	-19.04	Horizontal

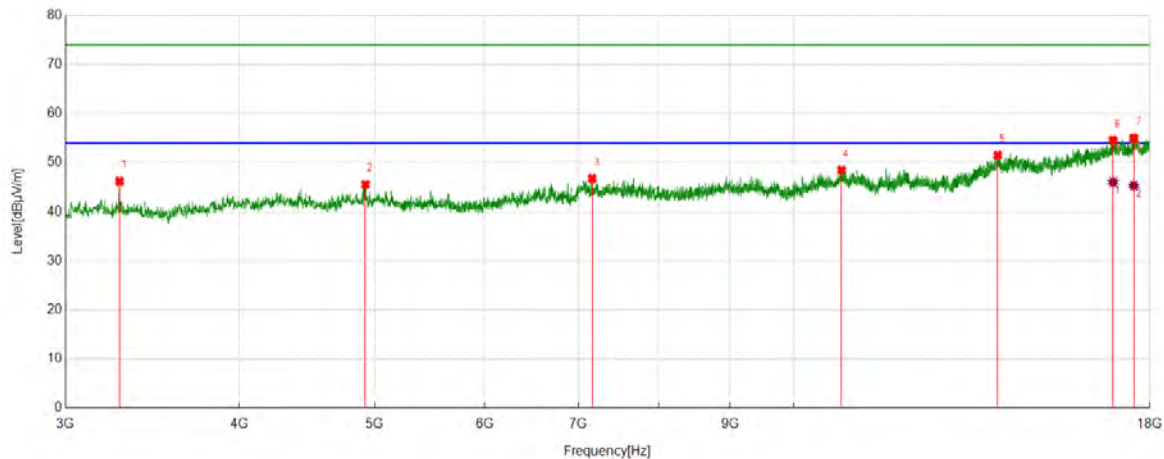
AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	17283.6605	26.43	18.44	44.87	54.00	-9.13	Horizontal
2	17563.0704	26.02	19.66	45.68	54.00	-8.32	Horizontal

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	3281.2852	43.21	3.01	46.22	74.00	-27.78	Vertical
2	4925.8657	39.99	5.56	45.55	74.00	-28.45	Vertical
3	7163.0204	37.57	9.18	46.75	74.00	-27.25	Vertical
4	10815.977	36.32	12.17	48.49	74.00	-25.51	Vertical
5	13998.2498	35.68	15.82	51.50	74.00	-22.50	Vertical
6	16938.6173	35.27	19.32	54.59	74.00	-19.41	Vertical
7	17523.6905	35.91	19.10	55.01	74.00	-18.99	Vertical

AV Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	16938.6173	26.69	19.32	46.01	54.00	-7.99	Vertical
2	17523.6905	26.20	19.10	45.30	54.00	-8.70	Vertical

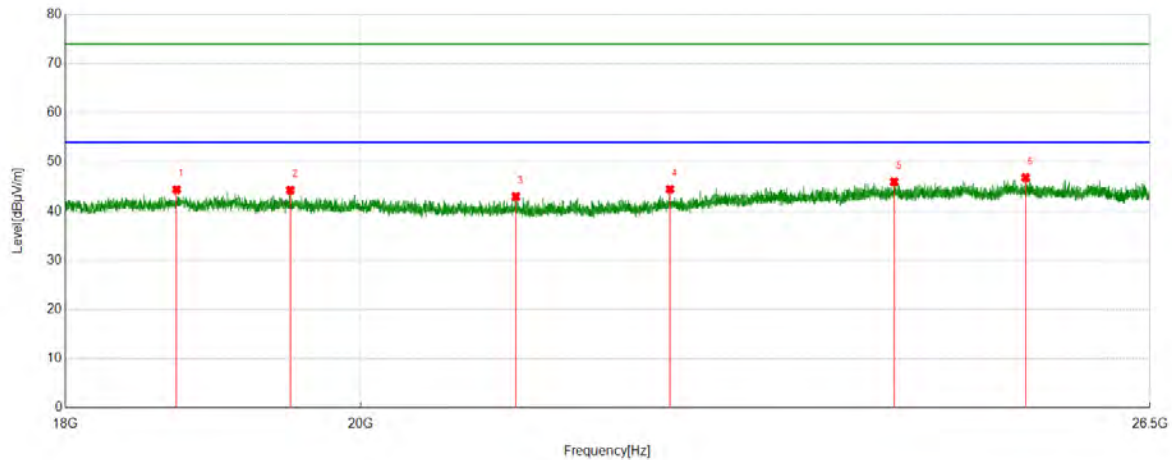
- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable + Filter) – Amplifier Gain.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak detector: RBW: 1 MHz, VBW: 3 MHz.
4. Average detector: RBW: 1 MHz, VBW: 1/T MHz(refer to clause 7.1.).
5. For above 3GHz part, filter losses were only considered in the spurious frequency bands and the authorized band was not corrected for HPF losses.
6. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Part 3: 18GHz~26.5GHz

SPURIOUS EMISSIONS 18GHz TO 26.5GHz (WORST-CASE CONFIGURATION)

Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS



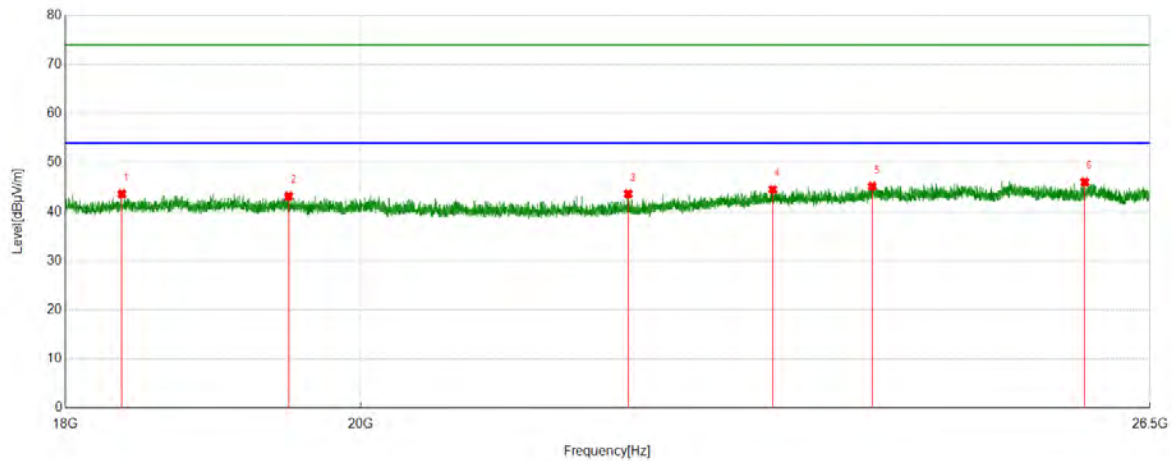
PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	18729.3729	50.63	-6.24	44.39	74.00	-29.61	Horizontal
2	19503.8004	49.74	-5.46	44.28	74.00	-29.72	Horizontal
3	21136.8137	48.94	-5.97	42.97	74.00	-31.03	Horizontal
4	22331.1831	49.54	-5.09	44.45	74.00	-29.55	Horizontal
5	24190.319	48.76	-2.78	45.98	74.00	-28.02	Horizontal
6	25350.6851	50.08	-3.29	46.79	74.00	-27.21	Horizontal

- Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS



PK Result:

No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	18367.2367	50.33	-6.70	43.63	74.00	-30.37	Vertical
2	19492.7493	48.65	-5.46	43.19	74.00	-30.81	Vertical
3	22001.3501	49.40	-5.76	43.64	74.00	-30.36	Vertical
4	23165.1165	47.95	-3.43	44.52	74.00	-29.48	Vertical
5	24001.6002	47.79	-2.61	45.18	74.00	-28.82	Vertical
6	25891.3391	48.86	-2.79	46.07	74.00	-27.93	Vertical

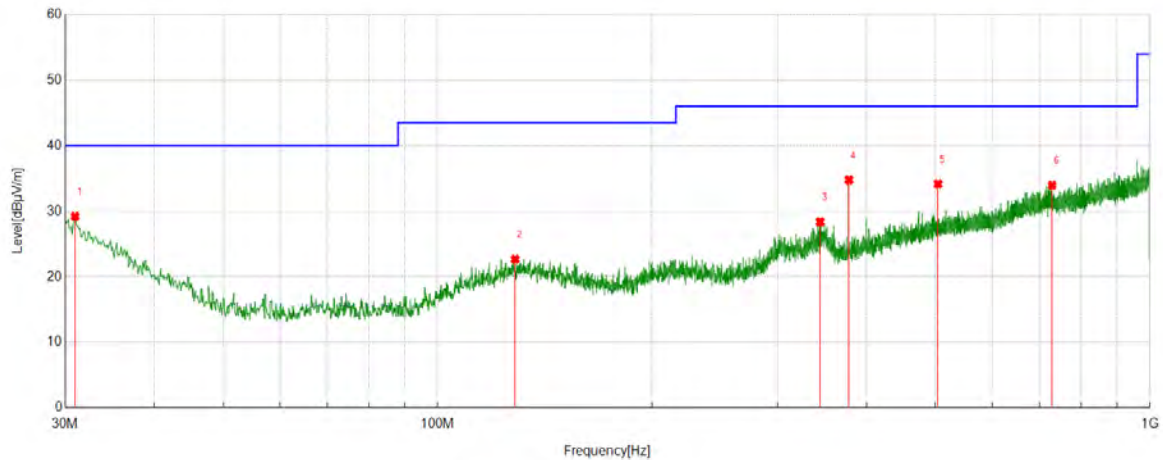
- Note: 1. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) – Amplifier Gain.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.



Part 4: 30MHz~1GHz

SPURIOUS EMISSIONS 30M TO 1GHz (WORST-CASE CONFIGURATION)

Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS

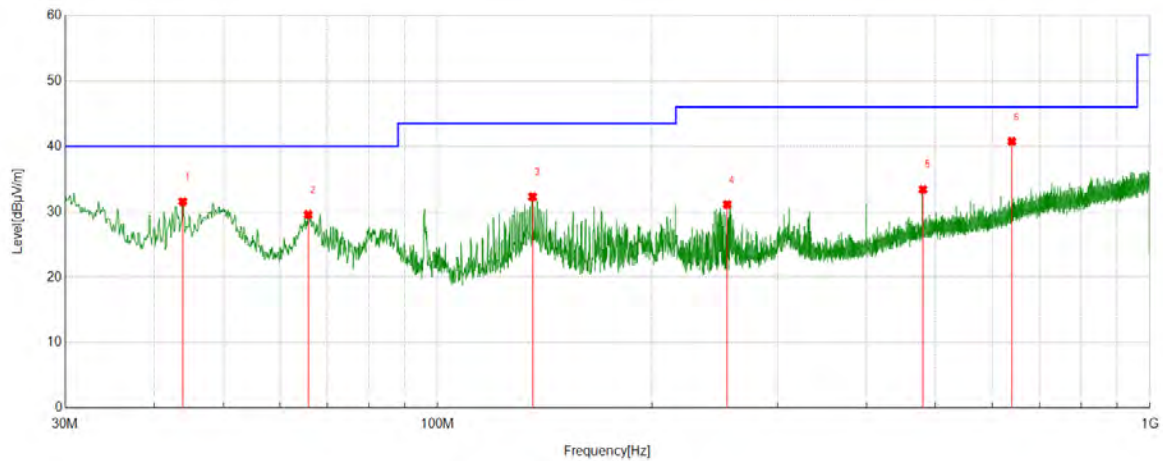


No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	30.9701	2.14	27.07	29.21	40.00	-10.79	Peak
2	128.4648	1.57	21.11	22.68	43.50	-20.82	Peak
3	344.3114	6.26	22.10	28.36	46.00	-17.64	Peak
4	377.9738	11.78	22.97	34.75	46.00	-11.25	Peak
5	503.9894	7.80	26.34	34.14	46.00	-11.86	Peak
6	728.8579	4.24	29.71	33.95	46.00	-12.05	Peak

Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable).



Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dB]	
1	43.8724	13.07	18.46	31.53	40.00	-8.47	Peak
2	65.7966	14.76	14.81	29.57	40.00	-10.43	Peak
3	135.9346	11.46	20.82	32.28	43.50	-11.22	Peak
4	254.9655	11.46	19.65	31.11	46.00	-14.89	Peak
5	480.028	7.52	25.88	33.40	46.00	-12.60	Peak
6	639.997	12.35	28.39	40.74	46.00	-5.26	Peak

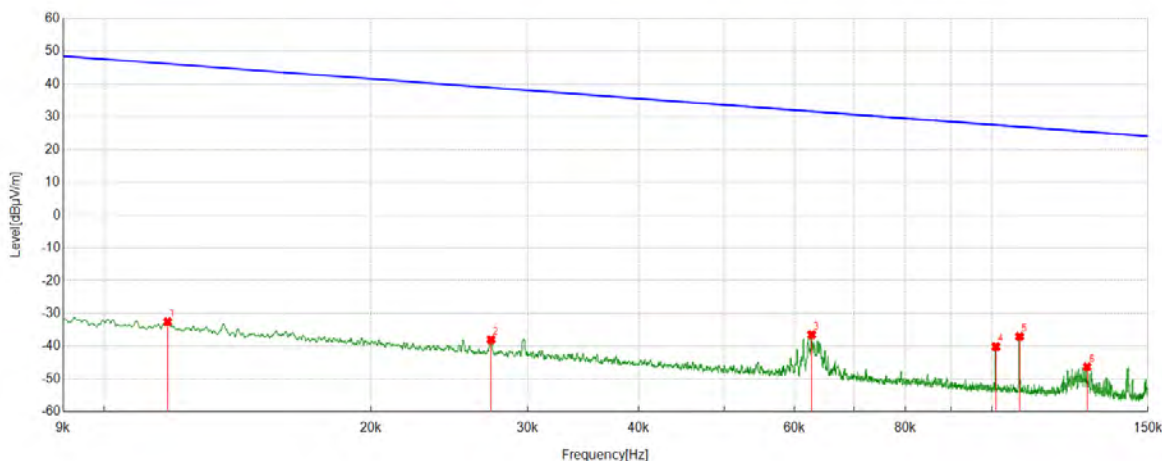
Note: 1. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
2. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.
3. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable).



Part 5: 9kHz~30MHz

SPURIOUS EMISSIONS Below 30MHz (WORST CASE CONFIGURATION-FACE ON)

Test Mode	Channel	Frequency Range	Verdict
11B	MCH	9kHz~150kHz	PASS

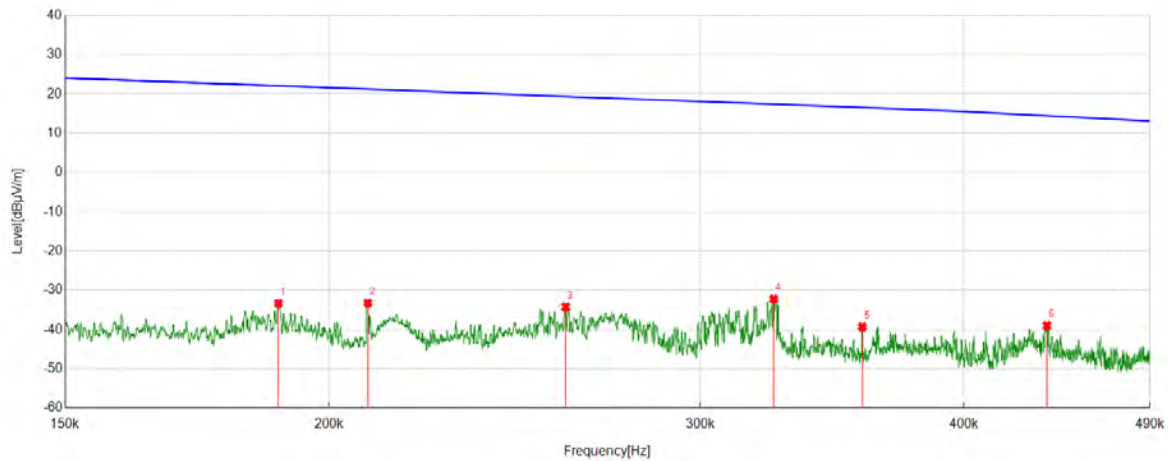


No.	Frequency	Reading Level	Correct Factor	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dBuA/m]	[dBuA/m]	[dB]	
1	0.0118	29.46	-61.97	-32.51	46.15	-84.01	-5.35	-78.66	Peak
2	0.0273	23.84	-61.82	-37.98	38.89	-89.48	-12.61	-76.87	Peak
3	0.0627	25.39	-61.83	-36.44	31.66	-87.94	-19.84	-68.10	Peak
4	0.1011	21.78	-61.89	-40.11	27.50	-91.61	-24.00	-67.61	Peak
5	0.1075	24.89	-61.89	-37.00	26.97	-88.50	-24.53	-63.97	Peak
6	0.1281	15.66	-61.90	-46.24	25.45	-97.74	-26.05	-71.69	Peak

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.



Test Mode	Channel	Frequency Range	Verdict
11B	MCH	150kHz~490kHz	PASS

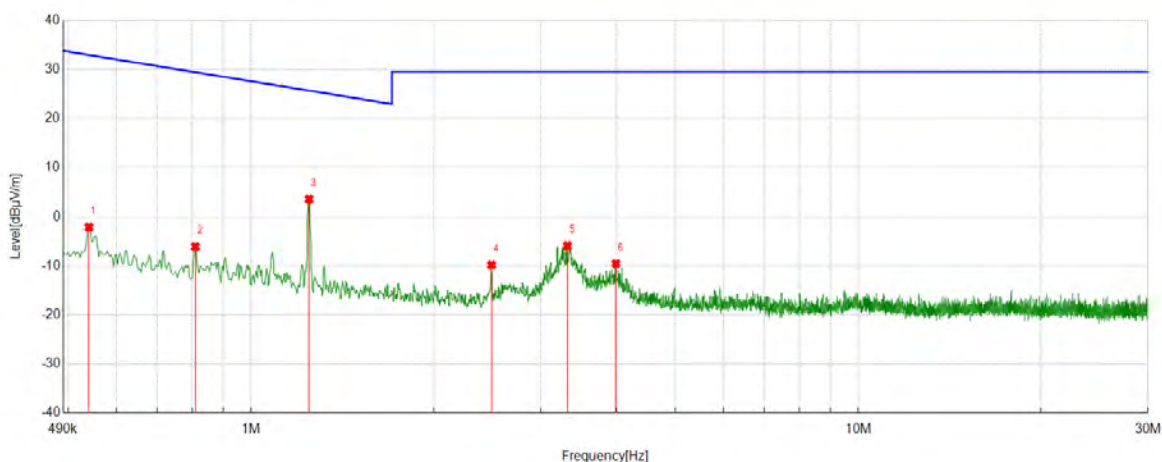


No.	Frequency	Reading Level	Correct Factor	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dBuA/m]	[dBuA/m]	[dB]	
1	0.1893	28.60	-61.92	-33.32	22.06	-84.82	-29.44	-55.38	Peak
2	0.2087	28.66	-61.92	-33.26	21.21	-84.76	-30.29	-54.47	Peak
3	0.259	27.66	-61.95	-34.29	19.34	-85.79	-32.16	-53.63	Peak
4	0.325	29.73	-61.97	-32.24	17.36	-83.74	-34.14	-49.60	Peak
5	0.358	22.63	-61.97	-39.34	16.52	-90.84	-34.98	-55.86	Peak
6	0.4379	22.97	-61.96	-38.99	14.45	-90.49	-37.05	-53.44	Peak

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.



Test Mode	Channel	Frequency Range	Verdict
11B	MCH	490kHz~30MHz	PASS



No.	Frequency	Reading Level	Correct Factor	FCC Result	FCC Limit	ISED Result	ISED Limit	Margin	Remark
	[MHz]	[dBuV]	[dB/m]	[dBuV/m]	[dBuV/m]	[dBuA/m]	[dBuA/m]	[dB]	
1	0.5402	19.83	-21.95	-2.12	32.95	-53.62	-18.55	-35.07	Peak
2	0.8087	15.83	-21.93	-6.10	29.45	-57.60	-22.05	-35.55	Peak
3	1.2455	25.50	-21.92	3.58	25.70	-47.92	-25.80	-22.12	Peak
4	2.488	12.04	-21.86	-9.82	29.54	-61.32	-21.96	-39.36	Peak
5	3.3173	15.93	-21.83	-5.90	29.54	-57.40	-21.96	-35.44	Peak
6	3.9873	12.25	-21.81	-9.56	29.54	-61.06	-21.96	-39.10	Peak

- Note: 1. Measurement = Reading Level + Correct Factor,
Correct Factor = Antenna Factor + Loss (Cable) + Distance Factor.
2. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
3. All 3 polarizations(Horizontal, Face-on and Face-off) of the loop antenna had been tested, but only the worst data recorded in the report.

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

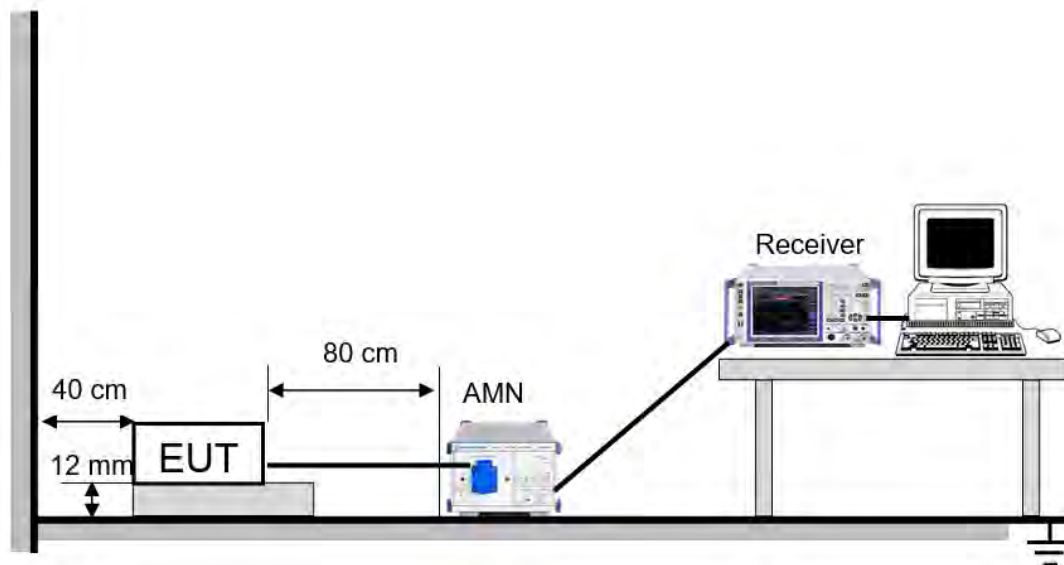
Please refer to FCC §15.207 (a)

FREQUENCY (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	AC 120V

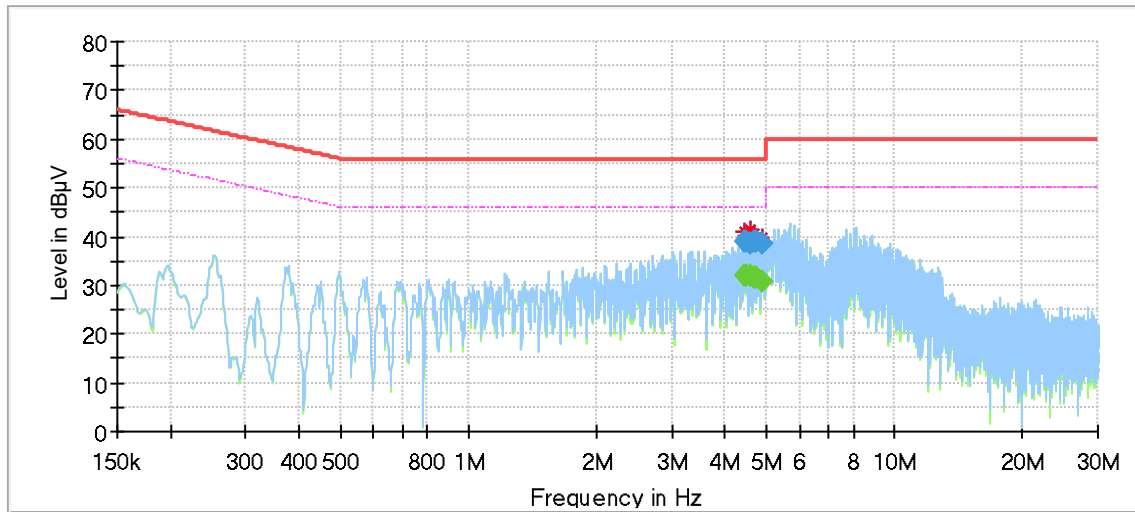
TEST SETUP AND PROCEDURE



The EUT is put on a table of non-conducting material that is 12 millimeter high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through an Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

LINE L RESULTS (WORST-CASE CONFIGURATION)

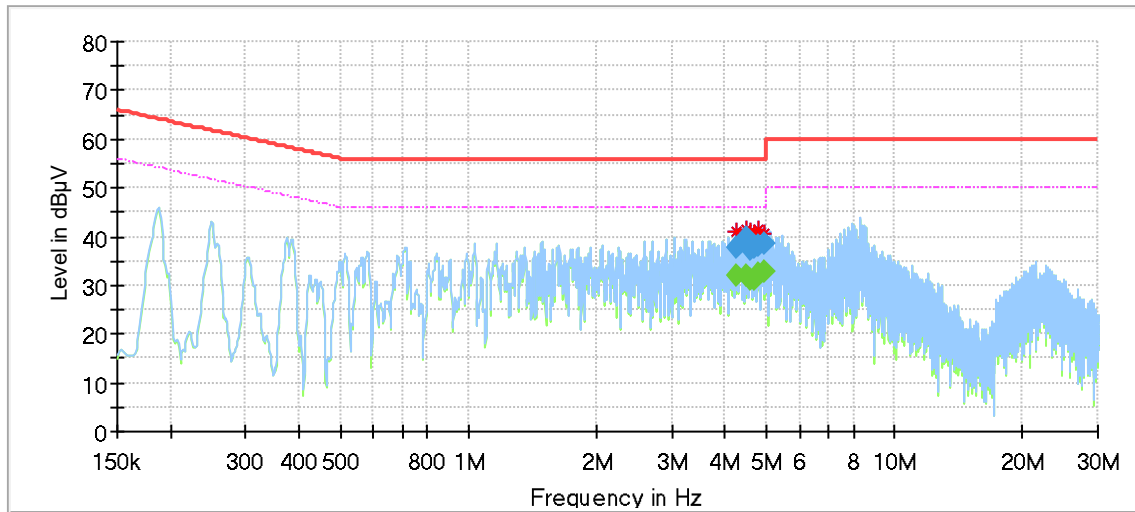


Final_Result

Frequency [MHz]	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
4.448400	---	32.05	46.00	13.95	1000.0	9.000	L1	OFF	9.8
4.448400	38.99	---	56.00	17.01	1000.0	9.000	L1	OFF	9.8
4.511085	---	32.06	46.00	13.94	1000.0	9.000	L1	OFF	9.8
4.511085	38.80	---	56.00	17.20	1000.0	9.000	L1	OFF	9.8
4.573770	---	31.95	46.00	14.05	1000.0	9.000	L1	OFF	9.8
4.573770	38.76	---	56.00	17.24	1000.0	9.000	L1	OFF	9.8
4.697648	39.07	---	56.00	16.93	1000.0	9.000	L1	OFF	9.8
4.697648	---	31.52	46.00	14.48	1000.0	9.000	L1	OFF	9.8
4.758840	39.08	---	56.00	16.92	1000.0	9.000	L1	OFF	9.8
4.758840	---	31.39	46.00	14.61	1000.0	9.000	L1	OFF	9.8
4.884210	---	30.76	46.00	15.24	1000.0	9.000	L1	OFF	9.8
4.884210	38.49	---	56.00	17.51	1000.0	9.000	L1	OFF	9.8

- Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the MCH of 11B which is the worst case, so only the worst case is included in this test report.

LINE N RESULTS (WORST-CASE CONFIGURATION)



Final_Result

Frequency [MHz]	QuasiPeak [dBμV]	Average [dBμV]	Limit [dBμV]	Margin [dB]	Meas. Time [ms]	Bandwidth [kHz]	Line	Filter	Corr. [dB]
4.246913	---	32.01	46.00	13.99	1000.0	9.000	N	OFF	9.6
4.246913	37.62	---	56.00	18.38	1000.0	9.000	N	OFF	9.6
4.479743	---	32.16	46.00	13.84	1000.0	9.000	N	OFF	9.6
4.479743	39.98	---	56.00	16.02	1000.0	9.000	N	OFF	9.6
4.609590	---	31.18	46.00	14.82	1000.0	9.000	N	OFF	9.6
4.609590	37.44	---	56.00	18.56	1000.0	9.000	N	OFF	9.6
4.673768	37.73	---	56.00	18.27	1000.0	9.000	N	OFF	9.6
4.673768	---	31.34	46.00	14.66	1000.0	9.000	N	OFF	9.6
4.802123	38.27	---	56.00	17.73	1000.0	9.000	N	OFF	9.7
4.802123	---	32.36	46.00	13.64	1000.0	9.000	N	OFF	9.7
4.931970	---	32.79	46.00	13.21	1000.0	9.000	N	OFF	9.7
4.931970	38.63	---	56.00	17.37	1000.0	9.000	N	OFF	9.7

- Note: 1. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
2. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
3. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.
4. The extension cord/outlet strip was calibrated with the LISN as required by ANSI C63.10:2013 Clause 6.2.2.
5. Pre-testing all test modes and channels, and find the MCH of 11B which is the worst case, so only the worst case is included in this test report.



10. ANTENNA REQUIREMENTS

APPLICABLE REQUIREMENTS

Please refer to FCC §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 use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC §15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

ANTENNA GAIN

The antenna gain of EUT is less than 6 dBi

END OF REPORT