FCC 47 CFR PART 15 SUBPART C

CERTIFICATION TEST REPORT

For

IP Indoor Monitor

MODEL NUMBER: VTH5421E-H

ADDITIONAL MODEL NUMBER:
DH-VTH5421E-H, DHI-VTH5421E-H,
DH-VTH5421EW-H, DHI-VTH5421EW-H, VTH5421EW-H

PROJECT NUMBER: 4789285906

REPORT NUMBER: 4789285906-3

FCC ID: SVNVTH5421E-H

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Prepared for

Zhejiang Dahua Vision Technology Co., Ltd.

Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	03/09/2020	Initial Issue	

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Zhejiang Dahua Vision Technology Co., Ltd.
Address:	No.1199, Bin'an road, Binjiang District, Hangzhou, P.R.China.

Manufacturer Information

Company Name:	Zhejiang Dahua Vision Technology Co., Ltd.
Address:	No.1199, Bin'an road, Binjiang District, Hangzhou, P.R.China.

Factory Information

Company Name:	ZHEJIANG DAHUA VISION TECHNOLOGY CO.,LTD
Address:	No.1199, Bin'an road, Binjiang District, Hangzhou, P.R.China.
Company Name:	ZHEJIANG DAHUA ZHILIAN CO.,LTD.
Address:	No.28, Dongqiao Road, Dongzhou Street, Fuyang District, Hangzhou,P.R.China.

EUT Description

Product Name	IP Indoor Monitor
Model Name	VTH5421E-H
Additional No.	DH-VTH5421E-H, DHI-VTH5421E-H, DH-VTH5421EW-H, DHI-VTH5421EW-H, VTH5421EW-H
Sample Number	2743371
Data of Receipt Sample	Dec 09, 2019
Date Tested	Dec 10, 2019 ~ May. 06, 2020

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	PASS

Summary of Test Results			
Clause	Test Items	FCC/IC Rules	Test Results
1	6db DTS Bandwidth	FCC 15.247 (a) (2)	Complied
2	Conducted Power	FCC 15.247 (b) (3)	Complied
3	Power Spectral Density	FCC 15.247 (e)	Complied
4	Conducted Band edge And Spurious emission	FCC 15.247 (d)	Complied
5	Radiated Band edges and Spurious emission	FCC 15.247 (d) FCC 15.209 FCC 15.205	Complied
6	Conducted Emission Test For AC Power Port	FCC 15.207	Complied
7	Antenna Requirement	FCC 15.203	Complied
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 FCC KDB 558074 D01 15.247 Meas Guidance v05r02, KDB 414788 D01 Radiated Test Site v01r01, ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15.

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)** **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.**

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	3.00dB
Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	3.31dB
Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	3.31dB
Radiation Emission test (1GHz to 26GHz)(include Fundamental emission)	3.83dB (1GHz-18Gz)
	4.13dB (18GHz-26.5Gz)
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:	IP Indoor Monitor
Model No.:	VTH5421E-H
Operating Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz IEEE 802.11n(HT40): 2422MHz to 2452MHz
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 and HT40): 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:	Internal Antenna
Antenna Gain:	2.0 dBi

Remark:
Model No.:

Number:	Name:	Number:	Name:	Number:	Name:
1	VTH5421E-H	2	DH-VTH5421E-H	3	DHI-VTH5421E-H
4	DH-VTH5421EW-H	5	DHI-VTH5421EW-H	6	VTH5421EW-H

Only the main model VTH5421E-H was tested and only the data of this model is shown in this test report. Since Their electrical circuit design, layout, components used and internal wiring are identical, only the model name and selling area are different.

5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	IEE Std. 802.11	Channel Number	Max AVG Conducted Power-Antenna1 (dBm)
1	IEEE 802.11B	1-11[11]	15.51
1	IEEE 802.11G	1-11[11]	13.33
1	IEEE 802.11nHT20	1-11[11]	12.60
1	IEEE 802.11nHT40	3-9[7]	11.79

5.3. CHANNEL LIST

Channel List for 802.11b/g/n (20 MHz)							
Channel	Frequency (MHz)	Channel	Frequenc y(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		

Channel List for 802.11n (40 MHz)							
Channel	Frequency (MHz)	Channel	Frequenc y(MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	5	2432	7	2442	9	2452
4	2427	6	2437	8	2447		

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
IEEE 802.11n HT40	LCH :CH03 2422
	MCH: CH06 2437
	HCH: CH09 2452

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		SecureCRT					
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	N/A	N/A	N/A	/		
802.11g	1	N/A	N/A	N/A			
802.11n HT20	1	N/A	N/A	N/A			
802.11n HT40	1	/			N/A	N/A	N/A

5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2400-2483.5	Meander Antenna	2.0

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.
IEEE 802.11N (HT40)	☒1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.

5.7. THE WORSE CASE CONFIGURATIONS

For the product, there two transmission antennas, and pre-testing both of them, only the worse data for the antenna is recorded in the report.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps
802.11b mode: 6 Mbps
802.11n HT20 mode: MCS0
802.11n HT40 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	DC 12V
	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	E550c	N/A

I/O PORT

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	USB to TTL	USB to TTL	USB to TTL	100cm Length (Supply by UL Lab)	N/A

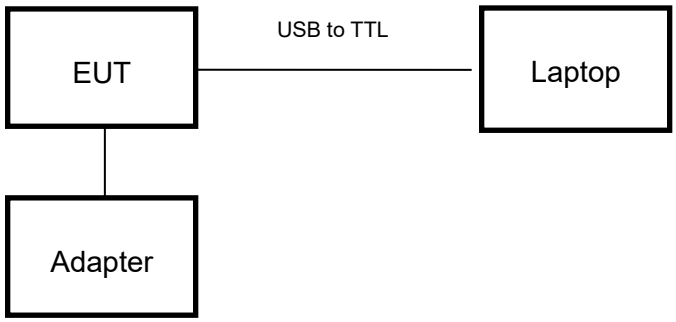
ACCESSORY

Item	Accessory	Brand Name	Model Name	Description
1	SD Card	Kingston	32GB	Supply by UL Lab
2	DC Adapter	HOIOTO	ADS-26SGP-12	Supply by UL Lab

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	2018-12-13	2019-12-12	2020-12-11
☑	Two-Line V-Network	R&S	ENV216	126701	2018-12-13	2019-12-12	2020-12-11
☑	Artificial Mains Networks	R&S	ENY81	126711	2018-12-13	2019-12-12	2020-12-11

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	MY57110128	2018-05-30	2019-05-29	2020-05-28
☑	EMI test receiver	R&S	ESR26	1267603	2018-12-13	2019-12-22	2020-12-21
☑	Receiver Antenna (9kHz-30MHz)	Schwarzbeck	FMZB 1513	513-265	2018-06-17	2019-06-16	2020-06-15
☑	Receiver Antenna (30MHz-1GHz)	SunAR RF Motion	JB1	126704	N/A	2019-01-28	2022-01-27
☑	Receiver Antenna (1GHz-18GHz)	R&S	HF907	126705	2019-01-26	2020-01-26	2021-01-25
☑	Receiver Antenna (18GHz-26.5GHz)	Schwarzbeck	BBHA9170	126706	2019-02-06	2020-02-05	2021-02-04
☑	Receiver Antenna (26.5GHz-40GHz)	TOYO	HAP 26-40W	00000012	2018-07-25	2019-07-23	2020-07-22
☑	Pre-amplification (To 1GHz)	R&S	SCU-03D	134666	2019-02-06	2020-02-05	2021-02-04
☑	Pre-amplification (To 18GHz)	Compliance Direction System Inc.	PAP-1G18-50	14140-13467	2019-03-18	2020-03-17	2021-03-16
☑	Pre-amplification (To 26.5GHz)	R&S	SCU-26D	134668	2019-02-06	2020-02-05	2021-02-04
☑	Band Reject Filter	Wainwright	WRCJV8-2350-2400-2483.5-2533.5-40SS	1	2018-05-30	2019-05-29	2020-05-28
☑	Highpass Filter	Wainwright	WHKX10-2700-3000-18000-40SS	2	2018-05-30	2019-05-29	2020-05-28

Software					
Used	Description	Manufacturer	Name	Version	
☑	Test Software for Radiated disturbance	Tonscend	JS32	V1.0	

Other instruments							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
☑	Spectrum Analyzer	Keysight	N9010B	MY57110128	2018-05-30	2019-05-29	2020-05-28
☑	Power Meter	Keysight	U2021XA	MY57110002	2018-06-13	2019-06-12	2020-06-11

6. MEASUREMENT METHODS

No.	Test Item	KDB Name	Section
1	6dB 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

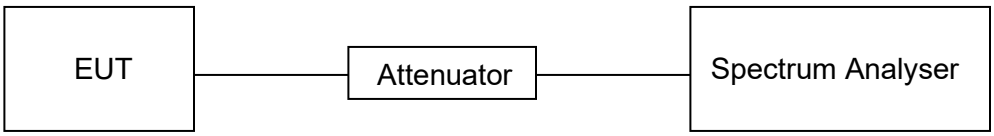
LIMITS

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	DC 12V

RESULTS

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	12.41	12.48	0.9944	99.44%	0.02	0.08	0.1
11G	2.063	2.127	0.9699	96.99%	0.13	0.48	0.5
802.11n HT20	1.919	2.074	0.9253	92.53%	0.34	0.52	1
802.11n HT40	0.9435	1.098	0.8593	85.93%	0.66	1.06	2

Note: 1) Duty Cycle Correction Factor=10log(1/x).
2) Where: x is Duty Cycle(Linear)
3) Where: T is On Time (transmit duration)

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)

11N (HT40) ON TIME AND DUTY CYCLE MID CH (WORSE CASE)

7.2. 6 dB BANDWIDTH

LIMITS

FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(a)(2)	6dB Bandwidth	>= 500KHz	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	For 6 dB Bandwidth :100K
VBW	For 6dB Bandwidth : ≥3 × RBW
Trace	Max hold
Sweep	Auto couple

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.

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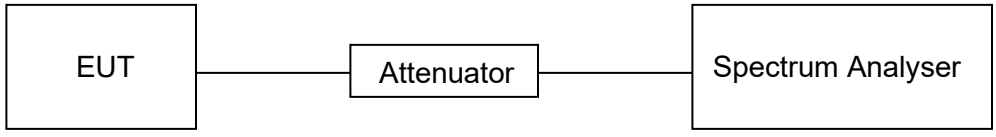
TEST SETUP



RESULTS

Test Mode	Test Channel	6dB bandwidth (MHz)	Result
11B	LCH	10.03	Pass
	MCH	10.07	Pass
	HCH	10.06	Pass
11G	LCH	16.33	Pass
	MCH	16.35	Pass
	HCH	16.33	Pass
11N HT20	LCH	17.31	Pass
	MCH	17.55	Pass
	HCH	17.56	Pass
11N HT40	LCH	35.09	Pass
	MCH	35.13	Pass
	HCH	35.10	Pass

Test Graphs

Test Mode	Test Channel	Verdict
11B	LCH	PASS

Test Mode	Test Channel	Verdict
11B	MCH	PASS

Test Mode	Test Channel	Verdict
11B	HCH	PASS

Test Mode	Test Channel	Verdict
11G	LCH	PASS

Test Mode	Test Channel	Verdict
11G	MCH	PASS

Test Mode	Test Channel	Verdict
11G	HCH	PASS

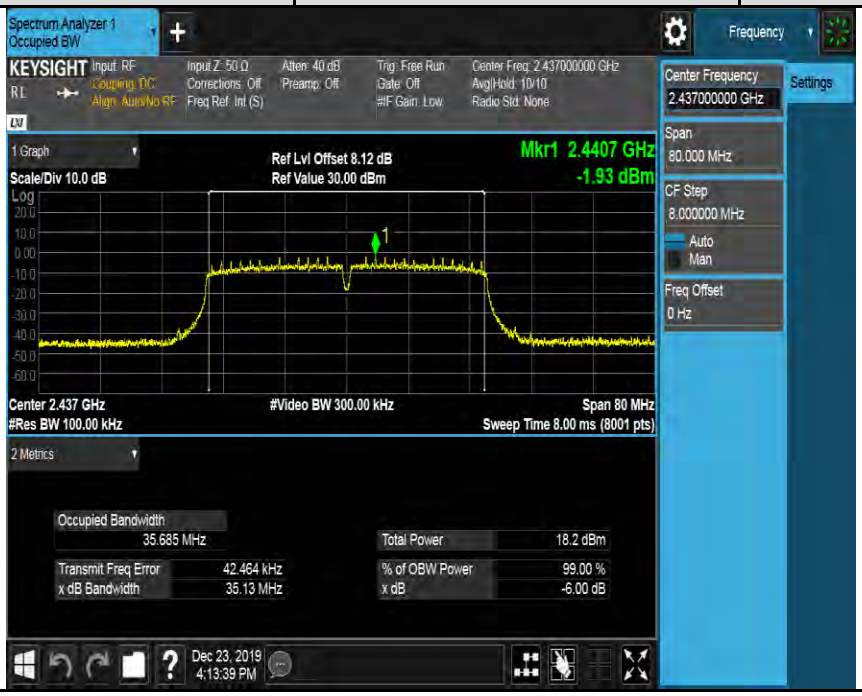
Test Mode	Test Channel	Verdict
11N HT20	LCH	PASS

Test Mode	Test Channel	Verdict
11N HT20	MCH	PASS

Test Mode	Test Channel	Verdict
11N HT20	HCH	PASS

Test Mode	Test Channel	Verdict
11N HT40	LCH	PASS

Test Mode	Test Channel	Verdict
11N HT40	MCH	PASS



Test Mode	Test Channel	Verdict
11N HT40	HCH	PASS

7.3. CONDUCTED OUTPUT POWER

LIMITS

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5

Note: For b/g/n HT20 mode the average data is for reference only.

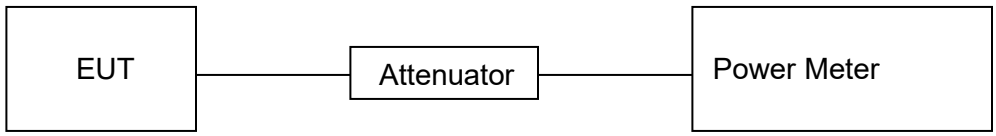
TEST PROCEDURE

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.
Peak Detector use for Peak result.
AVG Detector use for AVG result.

TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 12V

TEST SETUP



RESULTS

Test Mode	Test Channel	Maximum Conducted Output Power (PK)	Maximum Conducted Output Power (AV)	LIMIT
		dBm	dBm	dBm
11B	LCH	18.27	15.51	30
	MCH	18.08	15.50	30
	HCH	18.00	15.44	30
11G	LCH	21.13	13.33	30
	MCH	21.12	13.21	30
	HCH	21.03	13.21	30
11n HT20	LCH	20.00	12.27	30
	MCH	20.04	12.60	30
	HCH	19.84	12.05	30
11n HT40	LCH	N/A	11.77	30
	MCH	N/A	11.79	30
	HCH	N/A	11.77	30

7.4. POWER SPECTRAL DENSITY

LIMITS

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
FCC §15.247 (e)	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:

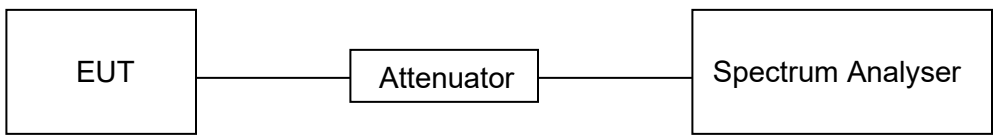
Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	3 kHz ≤ RBW ≤100 kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

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 ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 12V

TEST SETUP



RESULTS

Test Mode	Test Channel	Maximum Peak power spectral density (dBm/30kHz)	Result
11B	LCH	2.21	Pass
	MCH	2.13	Pass
	HCH	1.63	Pass
11G	LCH	-2.38	Pass
	MCH	-2.55	Pass
	HCH	-2.56	Pass
11n HT20	LCH	-3.76	Pass
	MCH	-3.84	Pass
	HCH	-4.65	Pass
11n HT40	LCH	-6.74	Pass
	MCH	-6.60	Pass
	HCH	-6.53	Pass

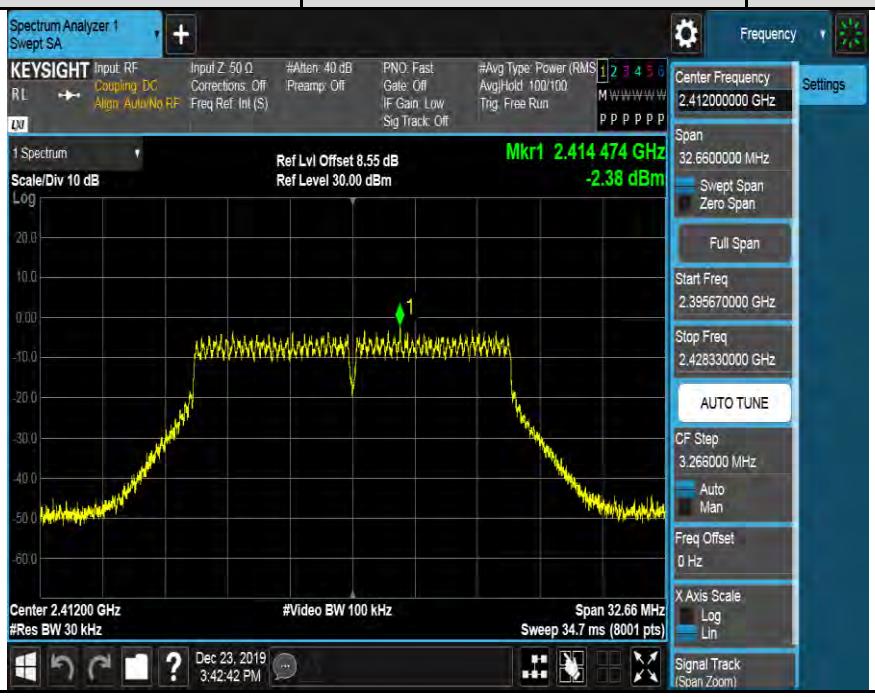
Test Graphs:

Test Mode	Test Channel	Verdict
11B SISO	LCH	PASS

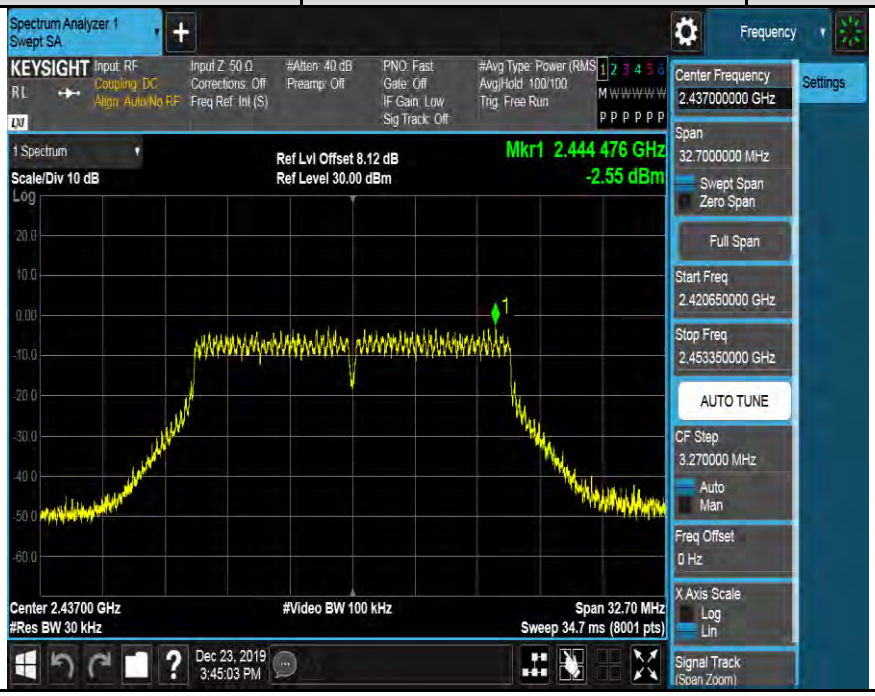
Test Mode	Test Channel	Verdict
11B SISO	MCH	PASS

Test Mode	Test Channel	Verdict
11B SISO	HCH	PASS

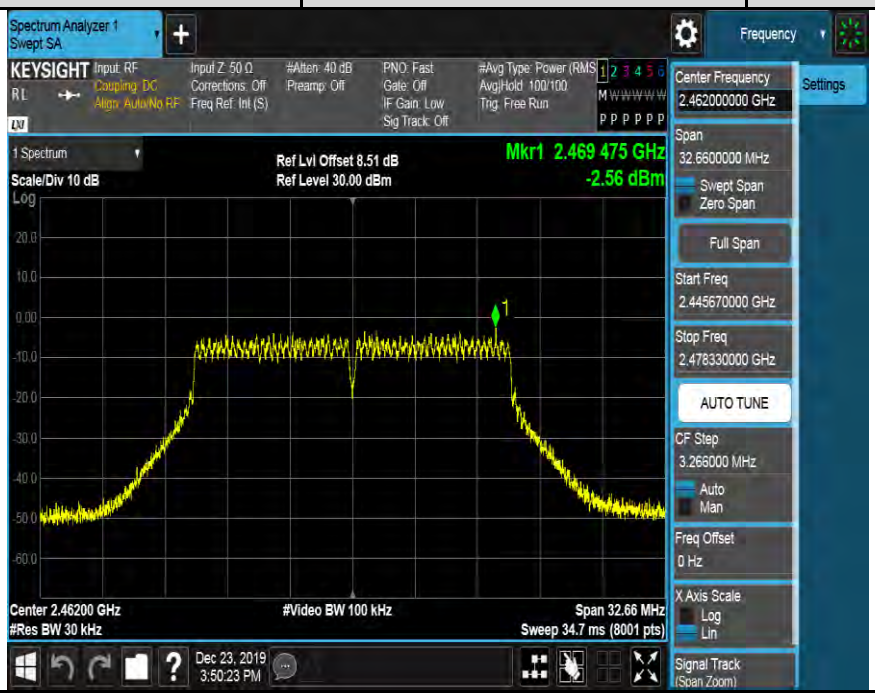
Test Mode	Test Channel	Verdict
11G SISO	LCH	PASS



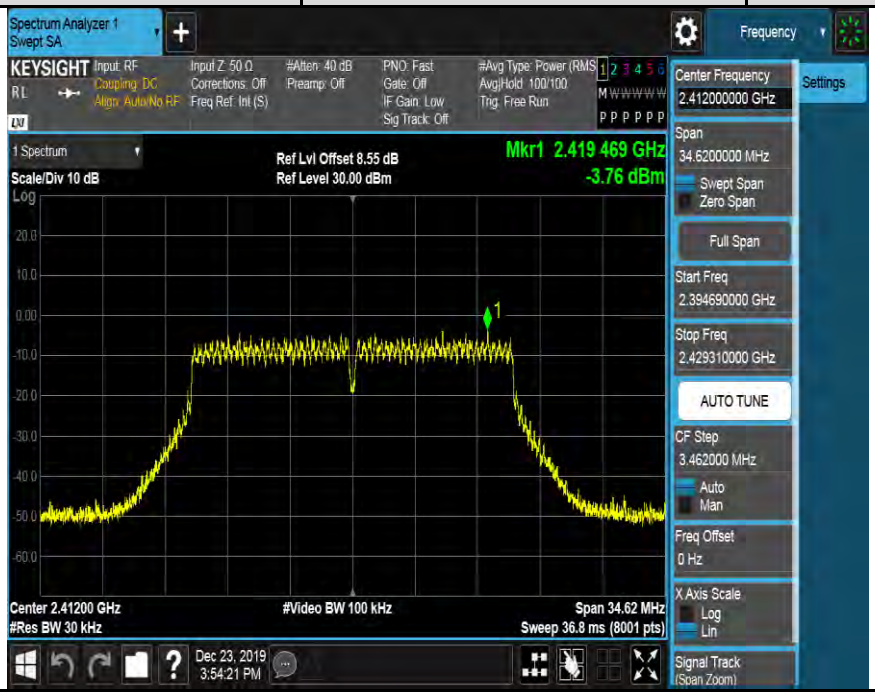
Test Mode	Test Channel	Verdict
11G SISO	MCH	PASS



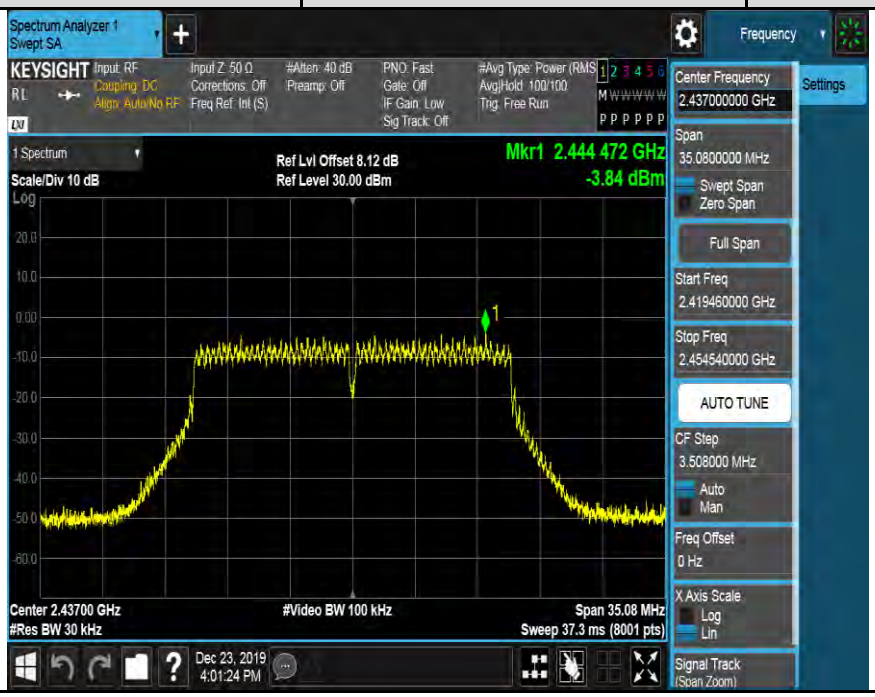
Test Mode	Test Channel	Verdict
11G SISO	HCH	PASS



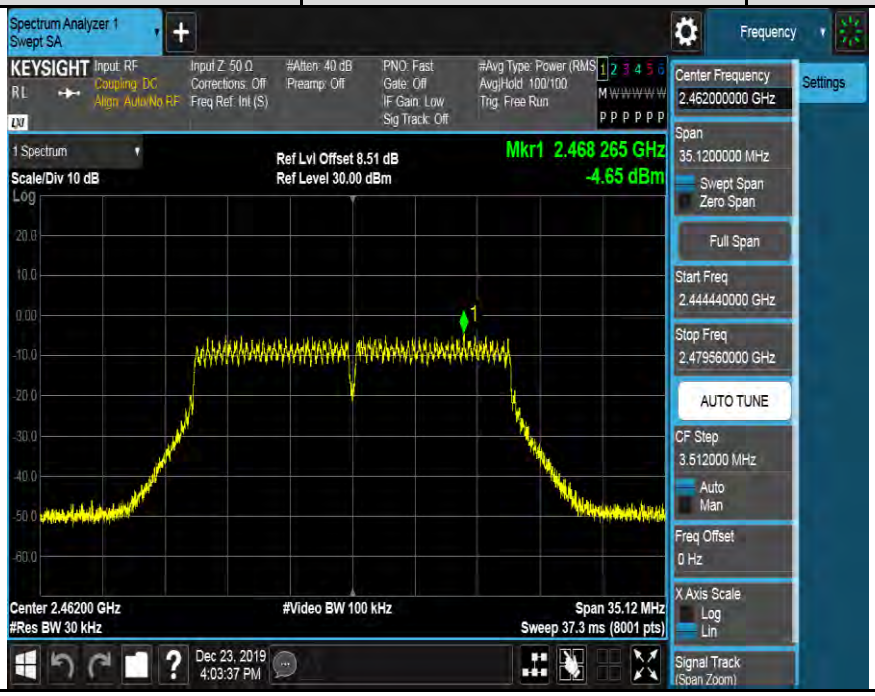
Test Mode	Test Channel	Verdict
11N HT20	LCH	PASS



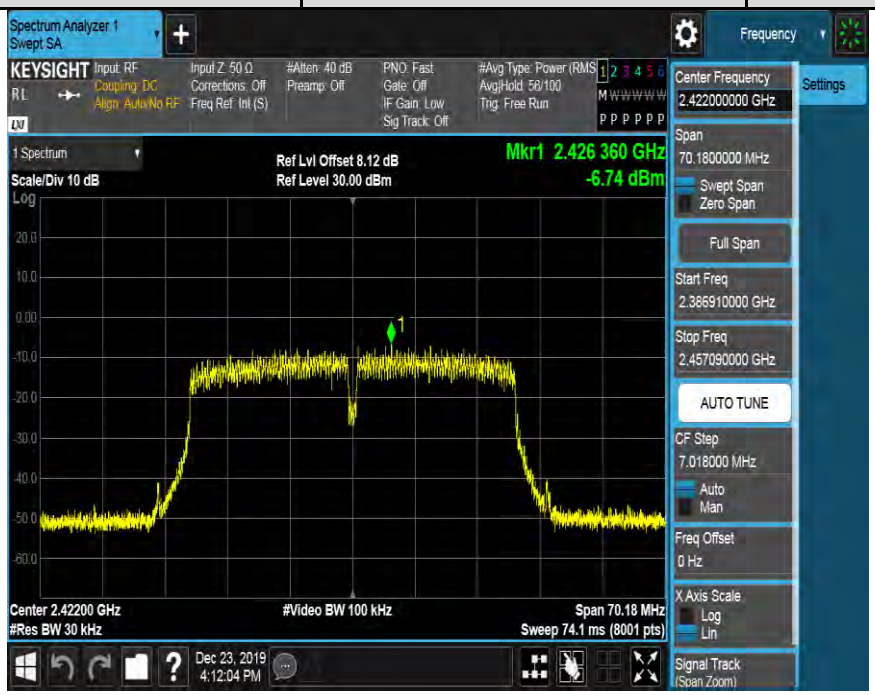
Test Mode	Test Channel	Verdict
11N HT20	MCH	PASS



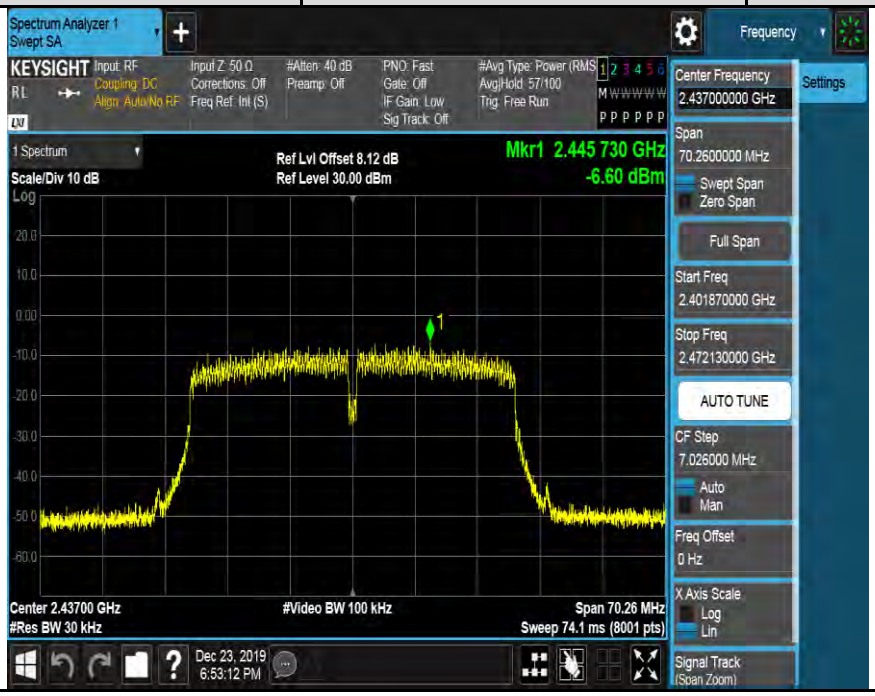
Test Mode	Test Channel	Verdict
11N HT20	HCH	PASS



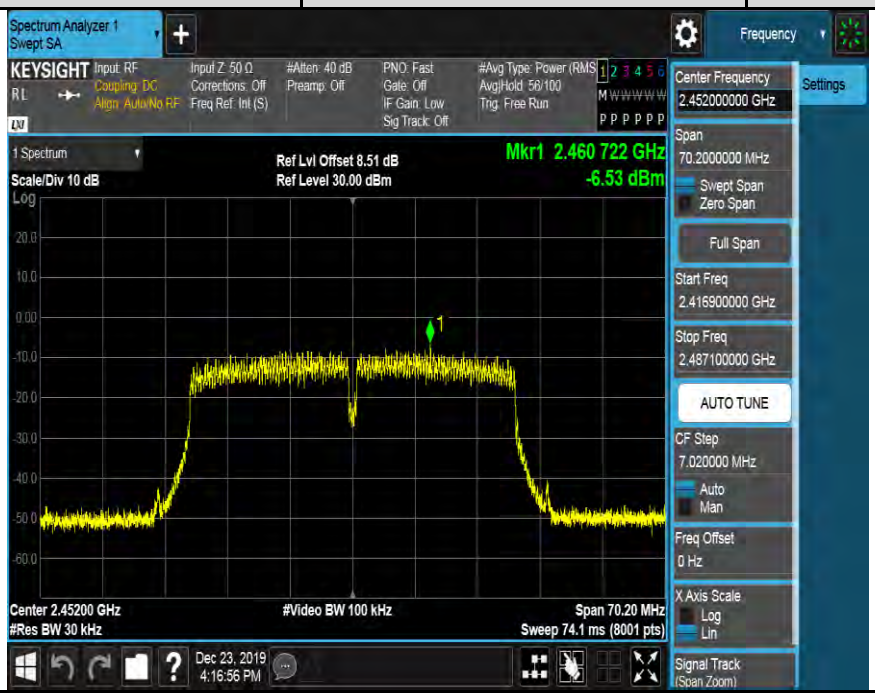
Test Mode	Test Channel	Verdict
11N HT40	LCH	PASS



Test Mode	Test Channel	Verdict
11N HT40	MCH	PASS



Test Mode	Test Channel	Verdict
11N HT40	HCH	PASS



7.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

FCC Part15 (15.247) , Subpart C		
Section	Test Item	Limit
FCC §15.247 (d)	Conducted Bandedge and Spurious Emissions	at least 20 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

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	100K
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

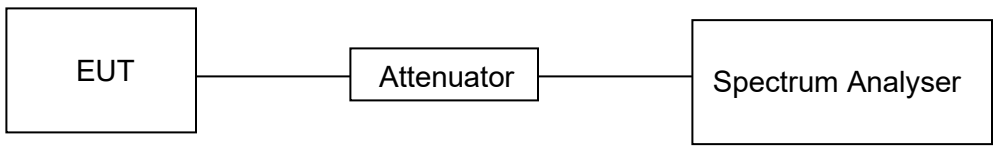
settings:

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	≥3 × RBW
measurement points	≥span/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	DC 12V

Part I :Conducted Bandedge

RESULTS TABLE

Test Mode	Test Channel	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	6.892	-40.63	-13.11	PASS
	HCH	6.601	-41.07	-13.40	PASS
11G	LCH	2.186	-41.45	-17.81	PASS
	HCH	1.660	-41.54	-18.34	PASS
11N HT20	LCH	0.9534	-40.69	-19.05	PASS
	HCH	1.021	-41.47	-18.98	PASS
11N HT40	LCH	-1.641	-42.24	-31.64	PASS
	HCH	-2.263	-41.30	-32.26	PASS

TEST GRAPHS

Test Mode	Test Channel	Verdict
11B SISO	LCH	PASS

Test Mode	Test Channel	Verdict
11B SISO	HCH	PASS

Test Mode	Test Channel	Verdict
11G SISO	LCH	PASS

Test Mode	Test Channel	Verdict
11G SISO	HCH	PASS

Test Mode	Test Channel	Verdict
11N HT20	LCH	PASS

Test Mode	Test Channel	Verdict
11N HT20	HCH	PASS

Test Mode	Test Channel	Verdict
11N HT40	LCH	PASS

Test Mode	Test Channel	Verdict
11N HT40	HCH	PASS

Part II :Conducted Emission

Test Result Table

Test Mode	Channel	Pref(dBm)	Puw(dBm)	Verdict
11B	LCH	6.74	<Limit	PASS
	MCH	6.63	<Limit	PASS
	HCH	6.39	<Limit	PASS
11G	LCH	2.23	<Limit	PASS
	MCH	2.04	<Limit	PASS
	HCH	2.08	<Limit	PASS
11N HT20	LCH	0.77	<Limit	PASS
	MCH	0.68	<Limit	PASS
	HCH	0.45	<Limit	PASS
11N HT40	LCH	-1.62	<Limit	PASS
	MCH	-1.66	<Limit	PASS
	HCH	-2.06	<Limit	PASS

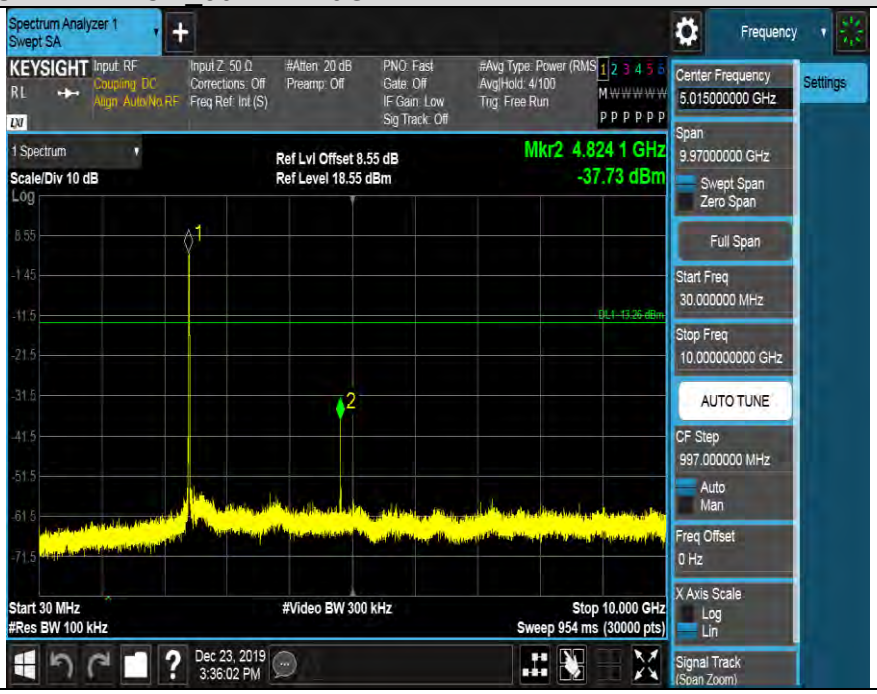
Test Plots

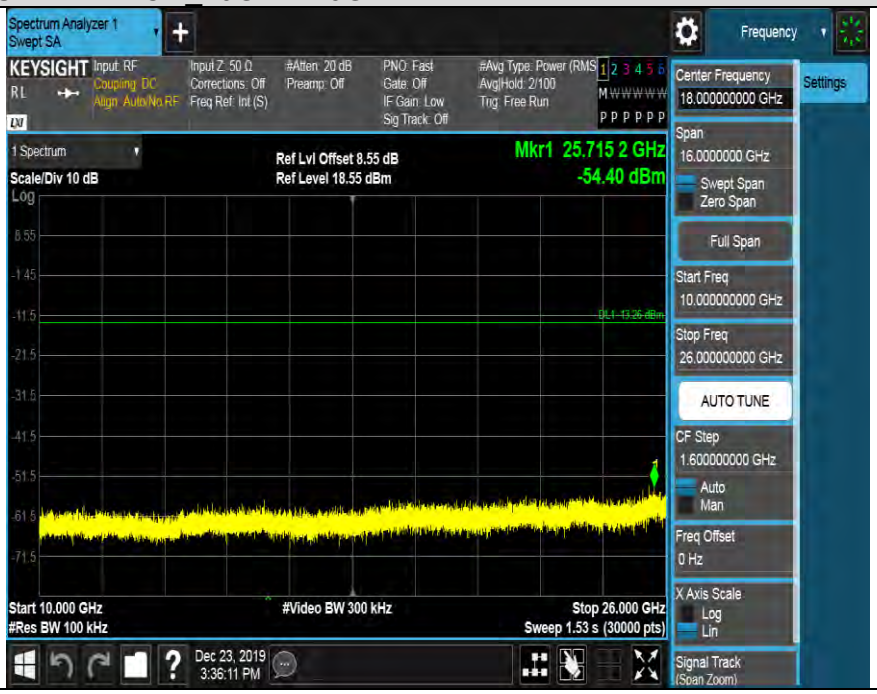
Test Mode	Channel	Verdict
11B	LCH	PASS

Pref test Plot

LCH SPURIOUS EMISSION

Puw test Plot

LCH SPURIOUS EMISSION_30MHz~10GHz


LCH SPURIOUS EMISSION_10GHz~26GHz


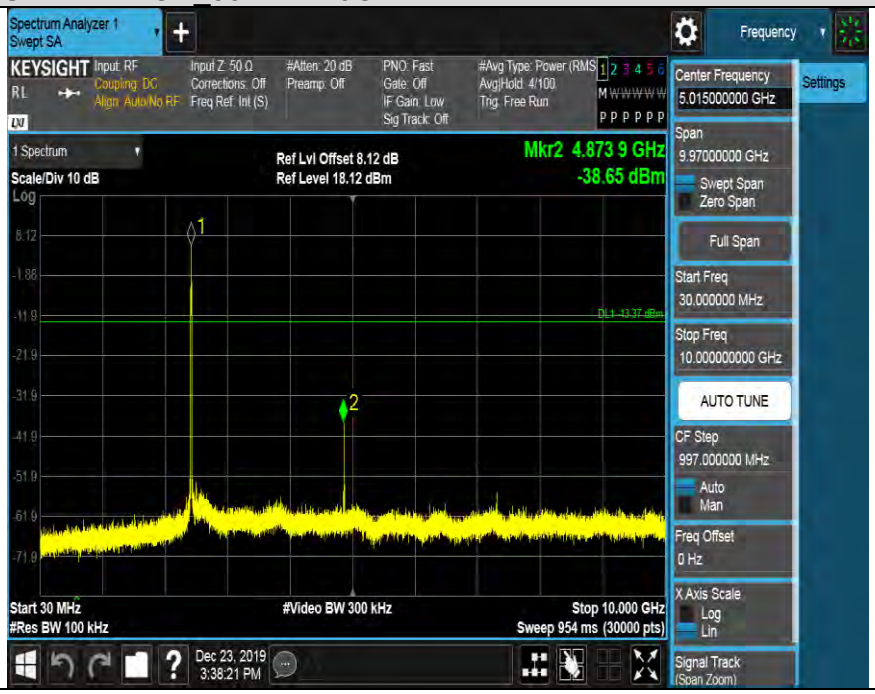
Test Mode	Channel	Verdict
11B	MCH	PASS

Pref test Plot

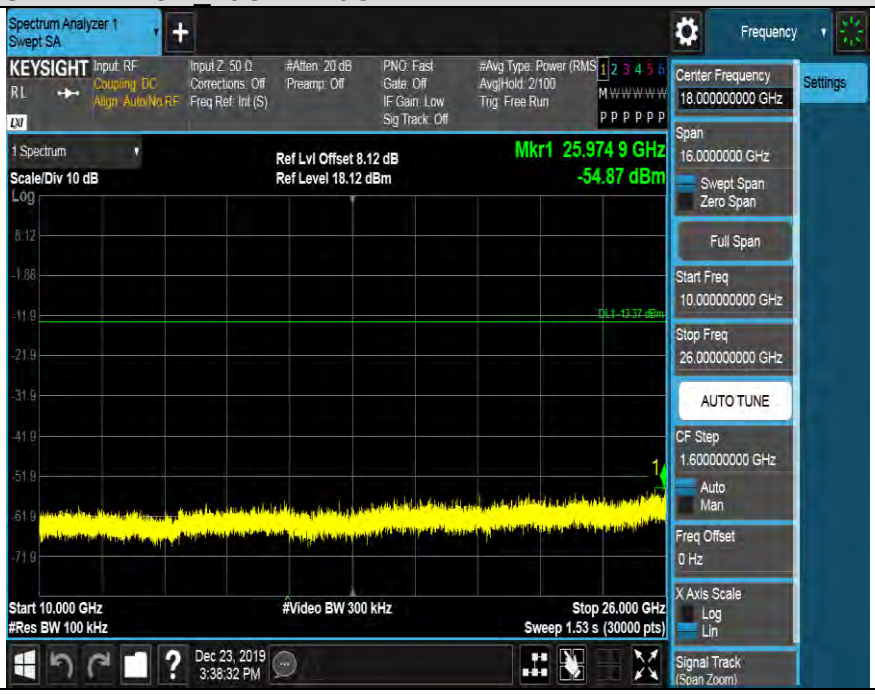
MCH SPURIOUS EMISSION

Puw test Plot

MCH SPURIOUS EMISSION_30MHz~10GHz



MCH SPURIOUS EMISSION_10GHz~26GHz



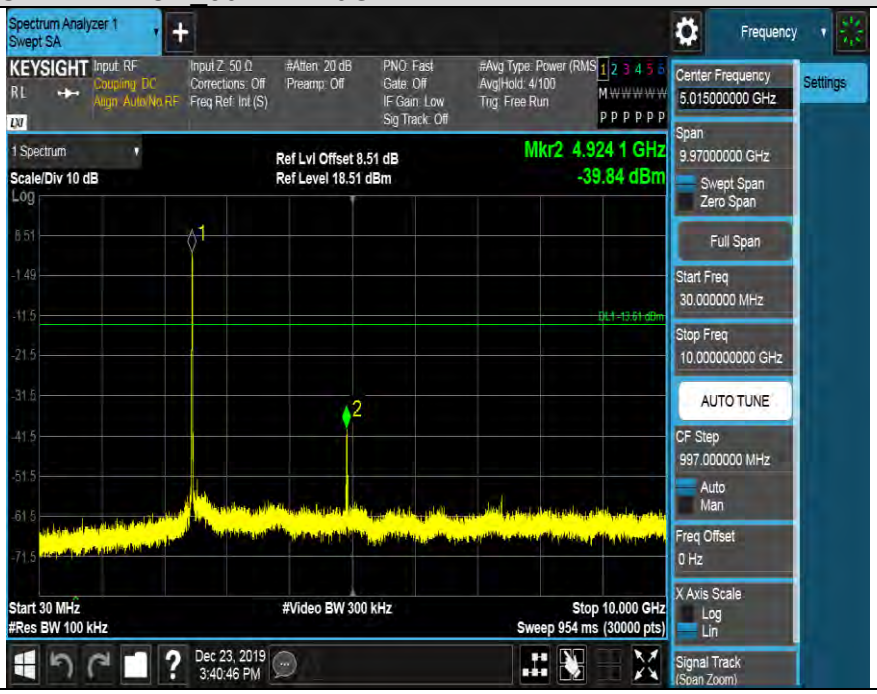
Test Mode	Channel	Verdict
11B	HCH	PASS

Pref test Plot

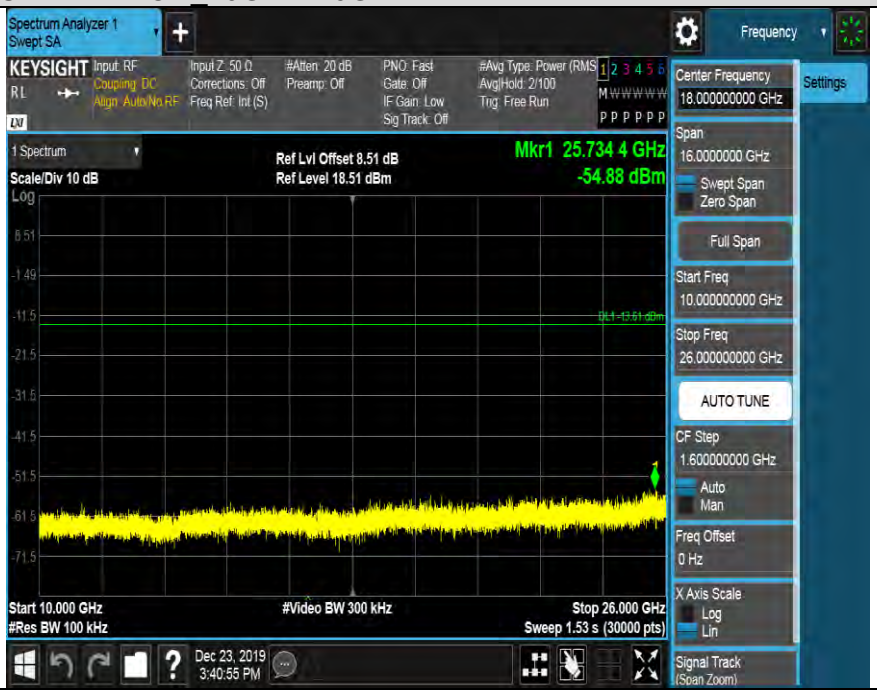
HCH SPURIOUS EMISSION

Puw test Plot

HCH SPURIOUS EMISSION_30MHz~10GHz



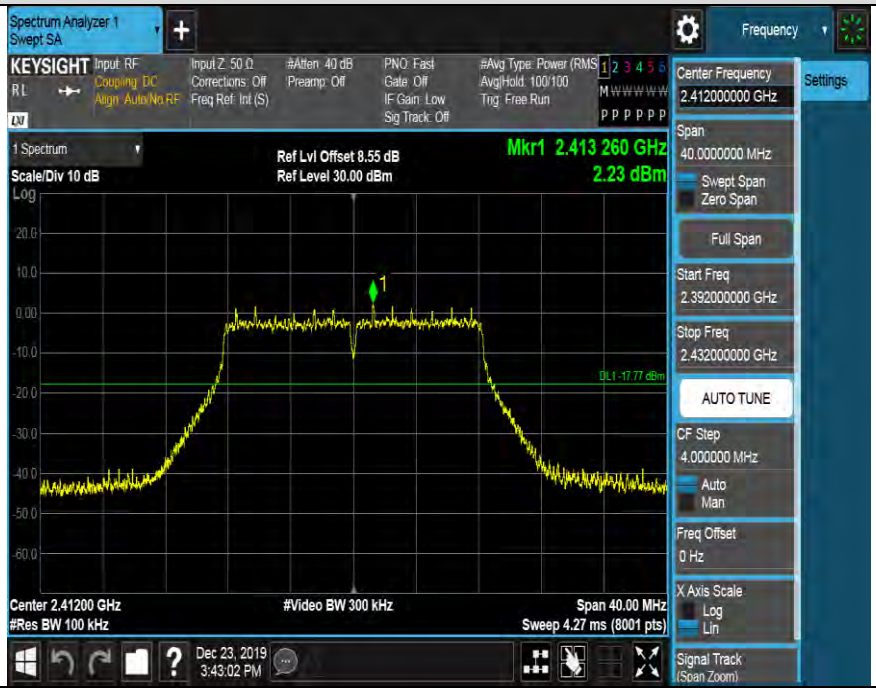
HCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11G	LCH	PASS

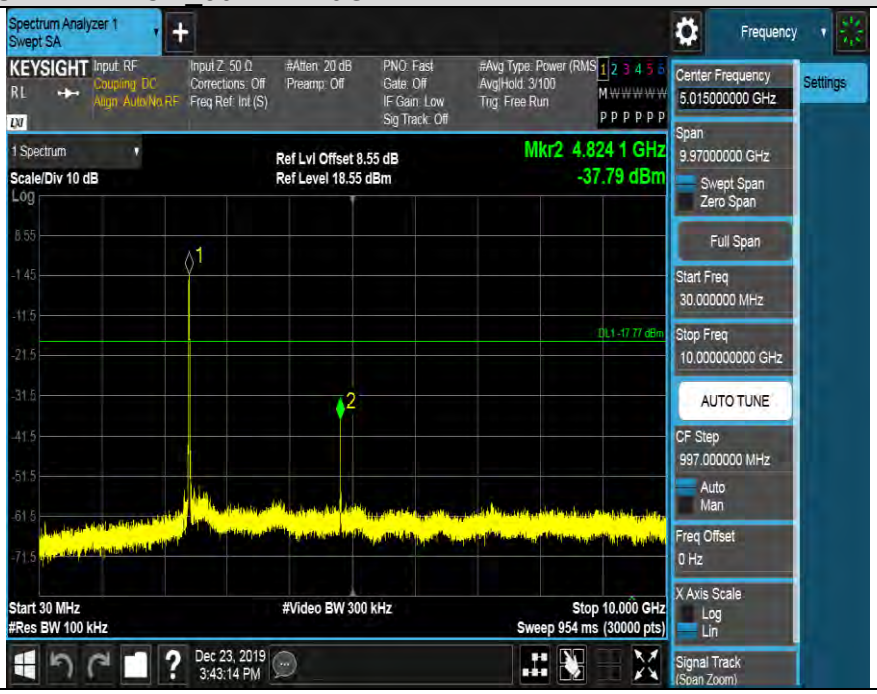
Pref test Plot

LCH SPURIOUS EMISSION



Puw test Plot

LCH SPURIOUS EMISSION_30MHz~10GHz

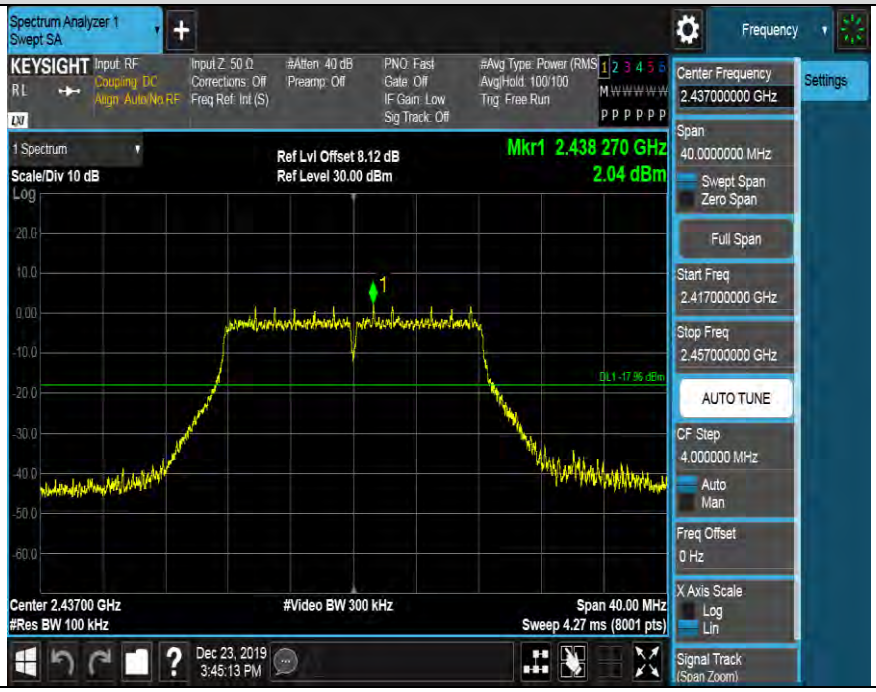


LCH SPURIOUS EMISSION_10GHz~26GHz

Test Mode	Channel	Verdict
11G	MCH	PASS

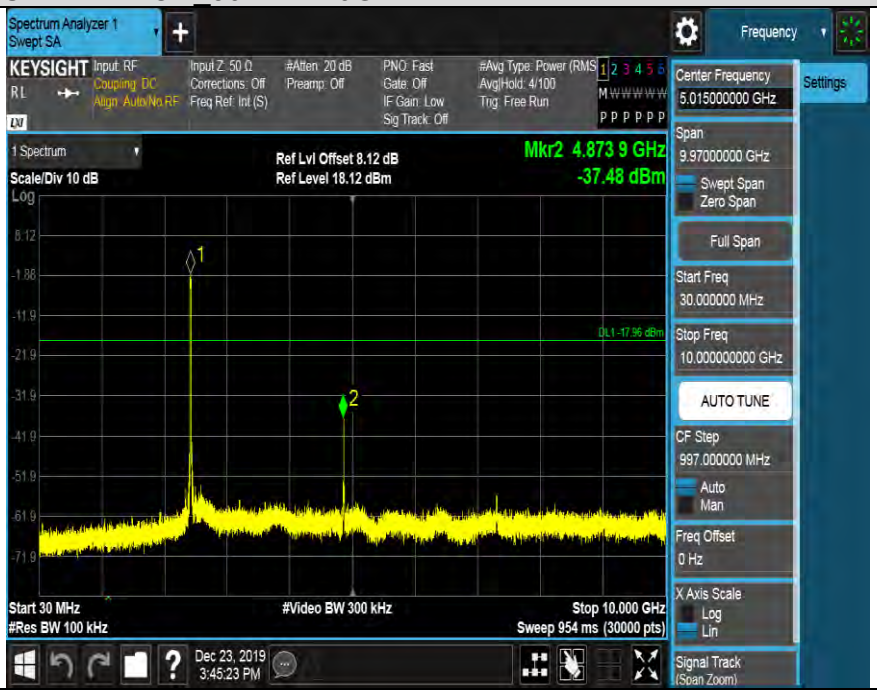
Pref test Plot

MCH SPURIOUS EMISSION



Puw test Plot

MCH SPURIOUS EMISSION_30MHz~10GHz

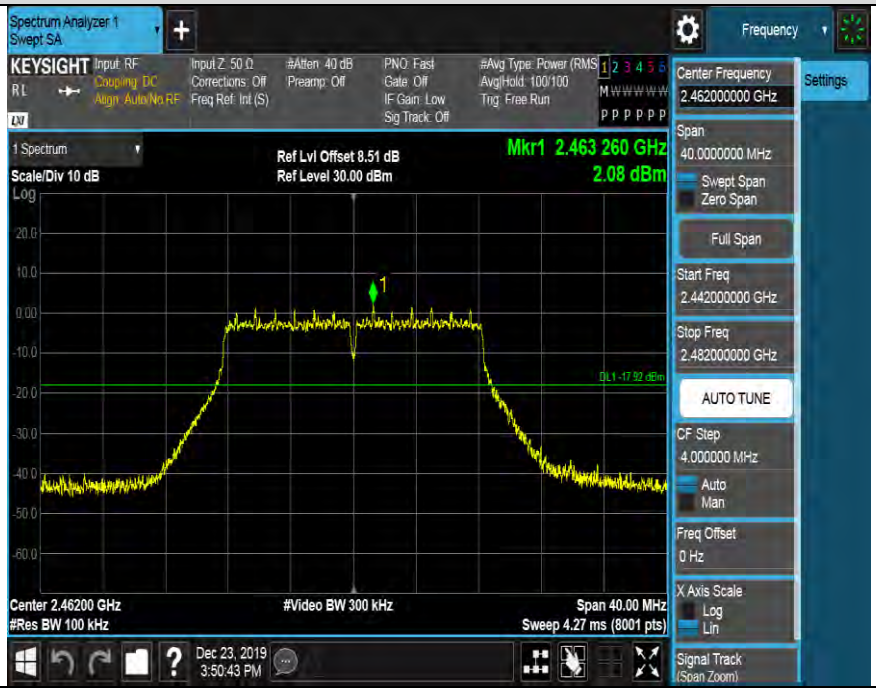


MCH SPURIOUS EMISSION_10GHz~26GHz

Test Mode	Channel	Verdict
11G	HCH	PASS

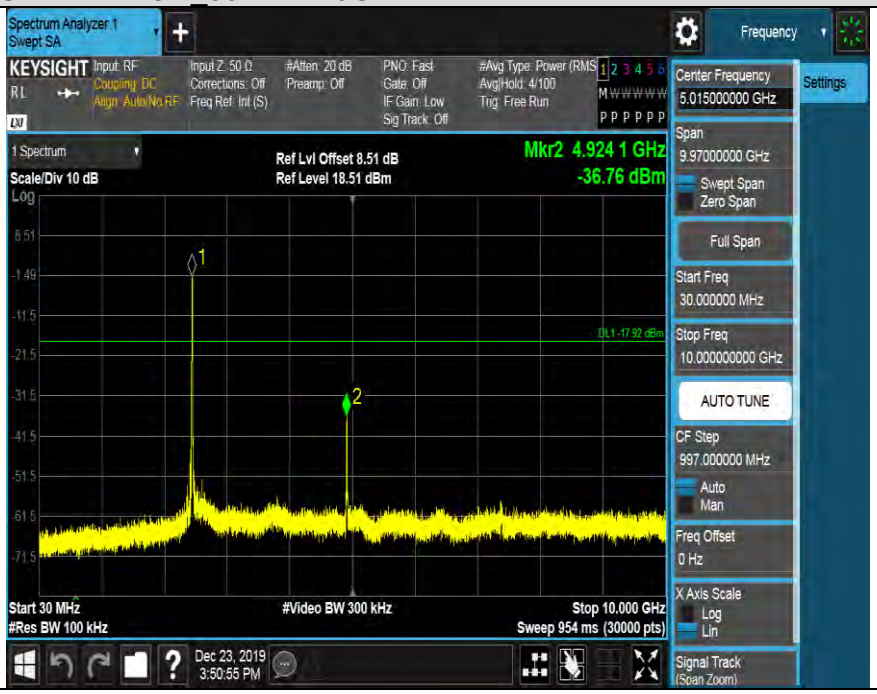
Pref test Plot

HCH SPURIOUS EMISSION



Puw test Plot

HCH SPURIOUS EMISSION_30MHz~10GHz



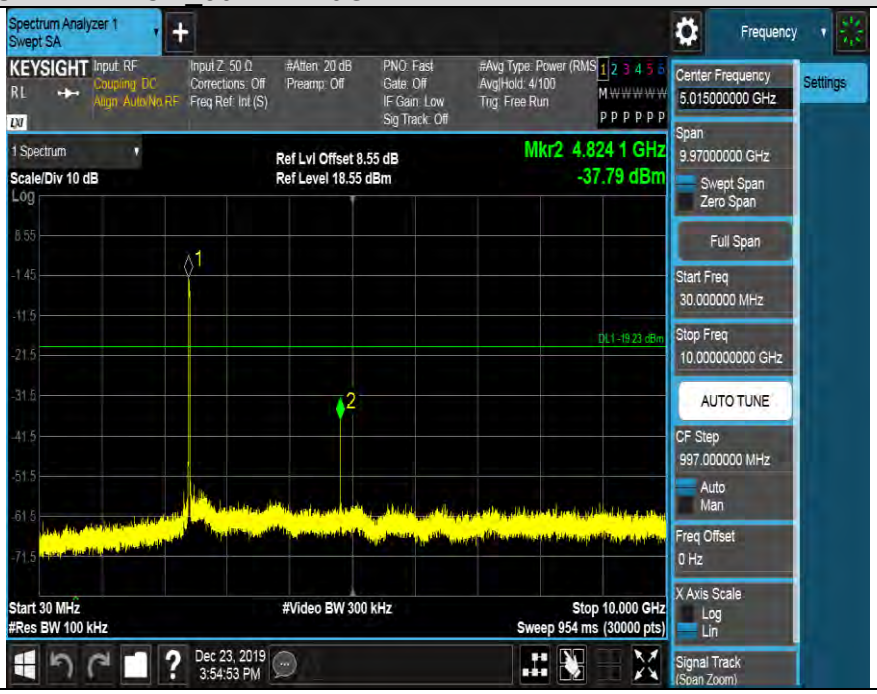
HCH SPURIOUS EMISSION_10GHz~26GHz

Test Mode	Channel	Verdict
11N HT20	LCH	PASS

Pref test Plot

LCH SPURIOUS EMISSION


Puw test Plot

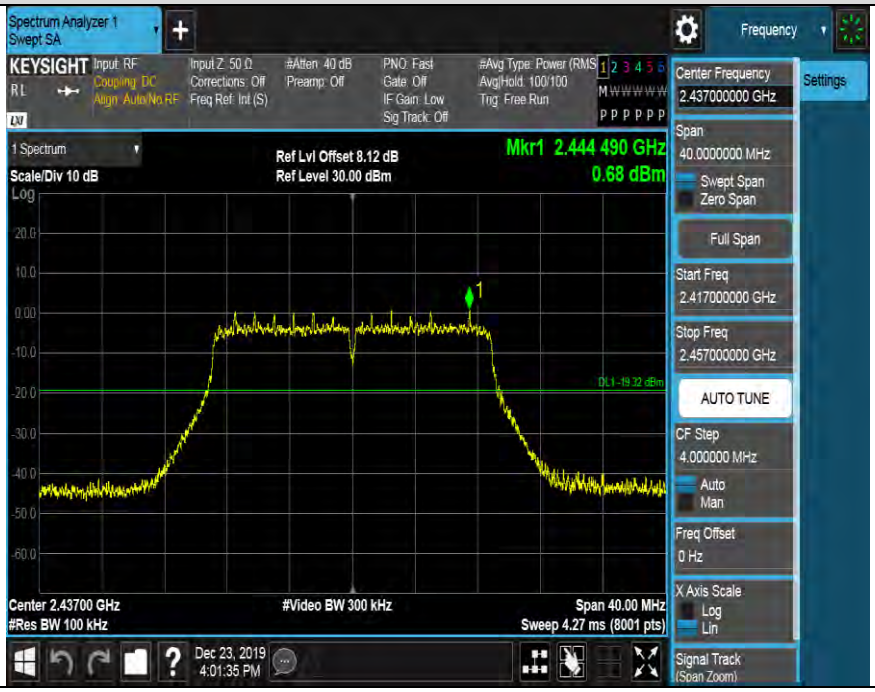
LCH SPURIOUS EMISSION_30MHz~10GHz


LCH SPURIOUS EMISSION_10GHz~26GHz


Test Mode	Channel	Verdict
11N HT20	MCH	PASS

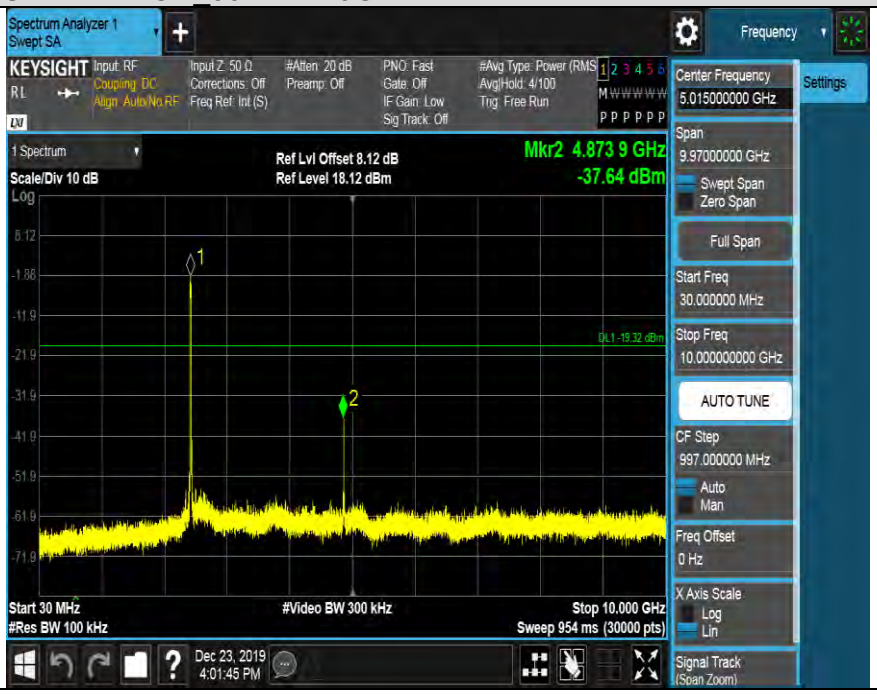
Pref test Plot

MCH SPURIOUS EMISSION



Puw test Plot

MCH SPURIOUS EMISSION_30MHz~10GHz

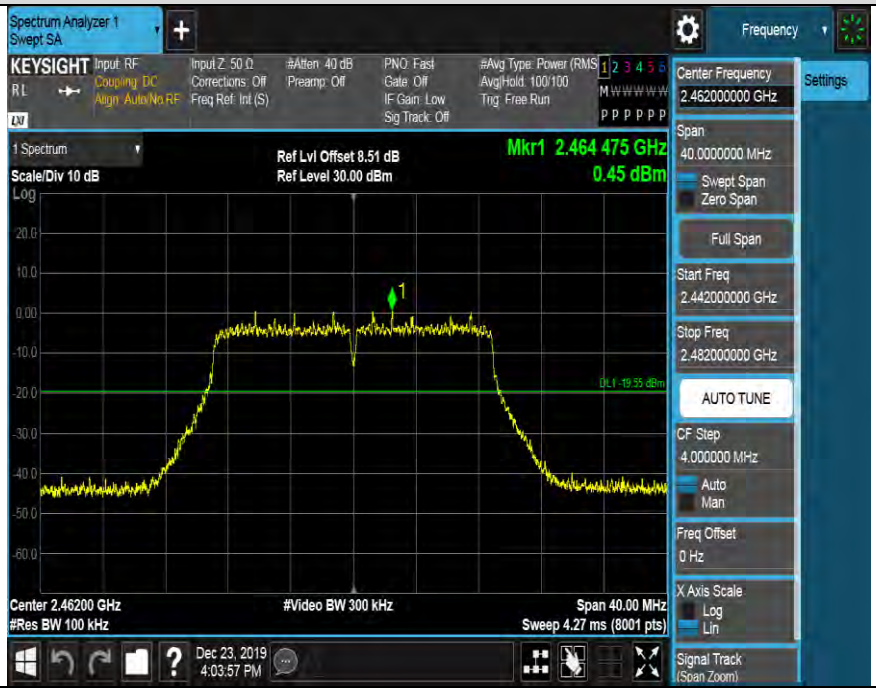


MCH SPURIOUS EMISSION_10GHz~26GHz

Test Mode	Channel	Verdict
11N HT20	HCH	PASS

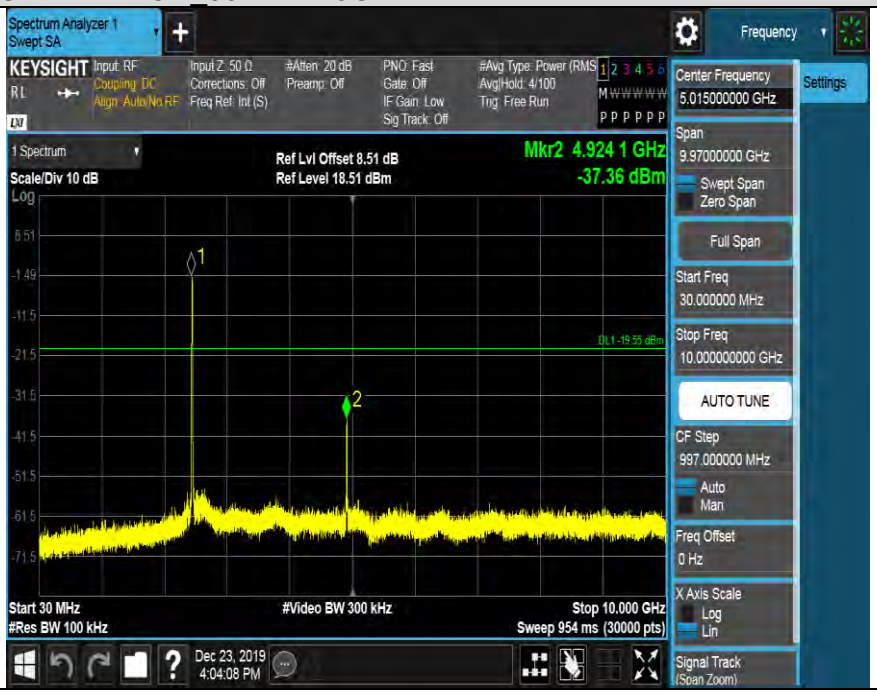
Pref test Plot

HCH SPURIOUS EMISSION

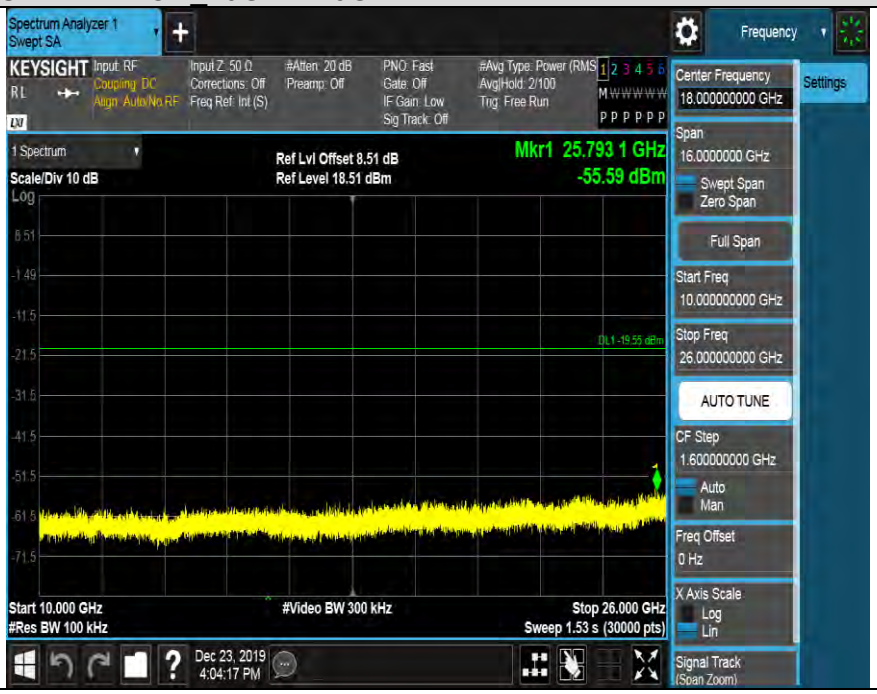


Puw test Plot

HCH SPURIOUS EMISSION_30MHz~10GHz

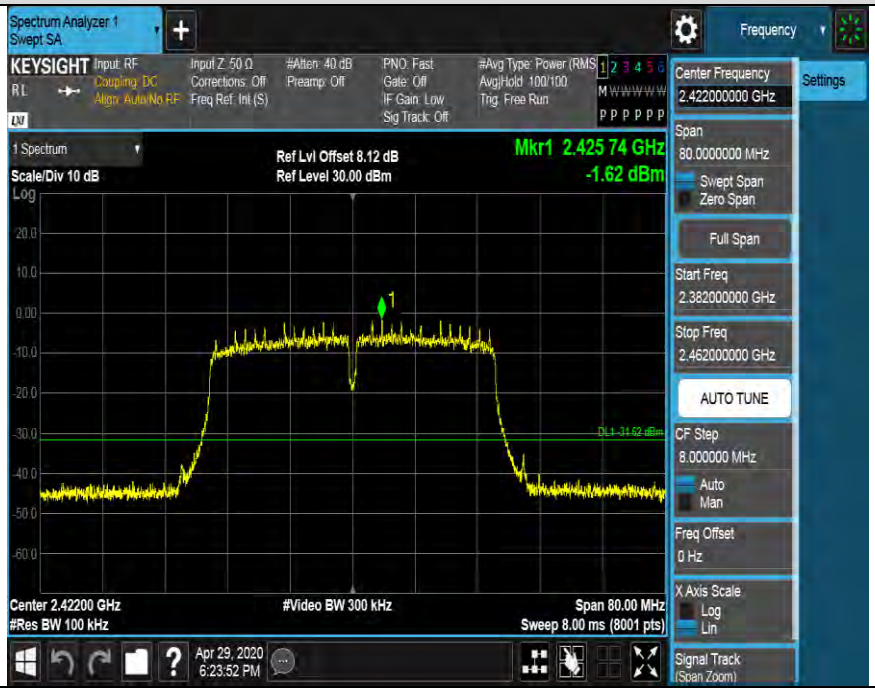


HCH SPURIOUS EMISSION_10GHz~26GHz



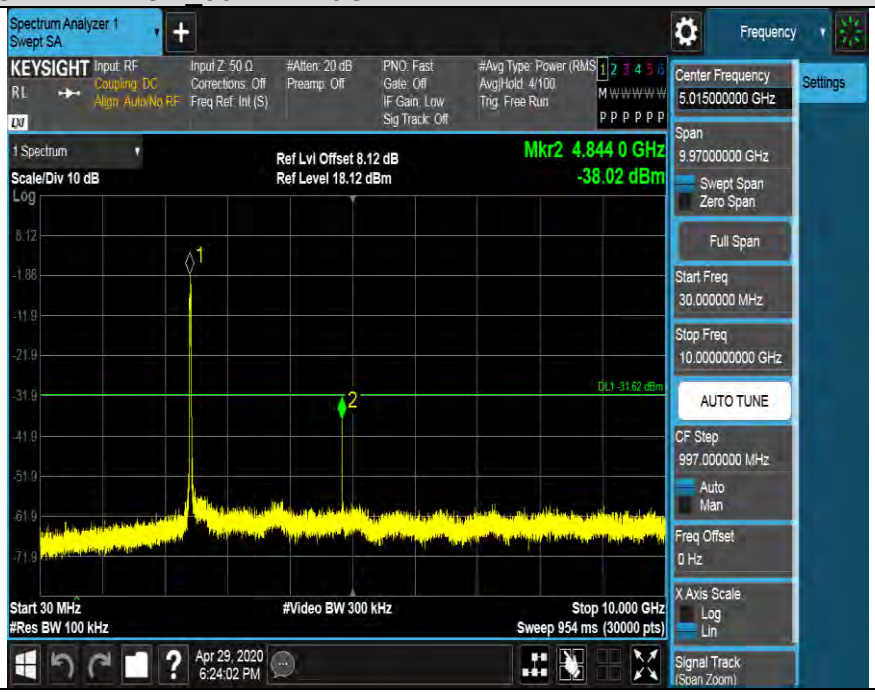
Test Mode	Channel	Verdict
11N HT40	LCH	PASS

Pref test Plot

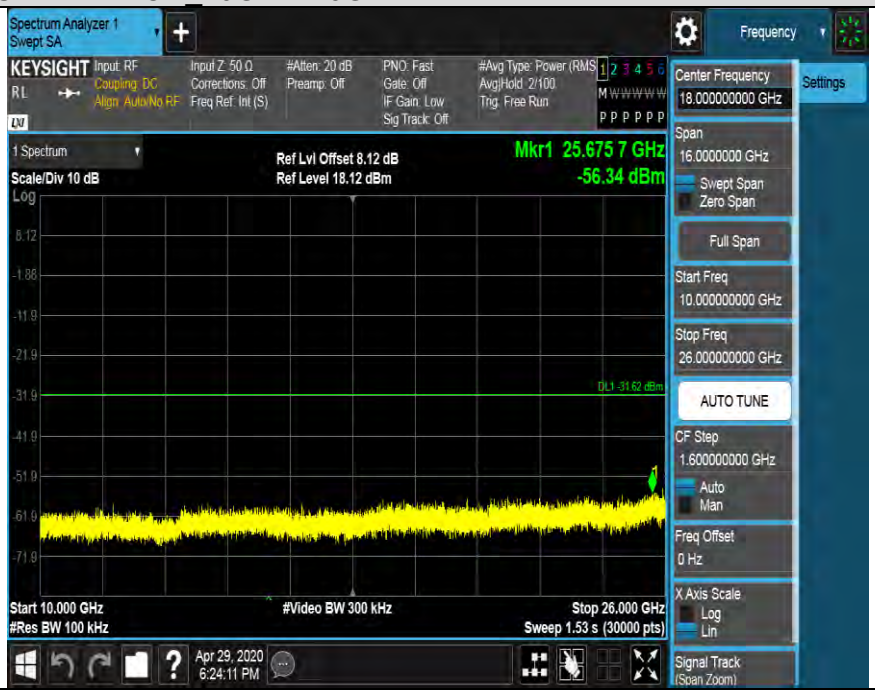
LCH SPURIOUS EMISSION


Puw test Plot

LCH SPURIOUS EMISSION_30MHz~10GHz



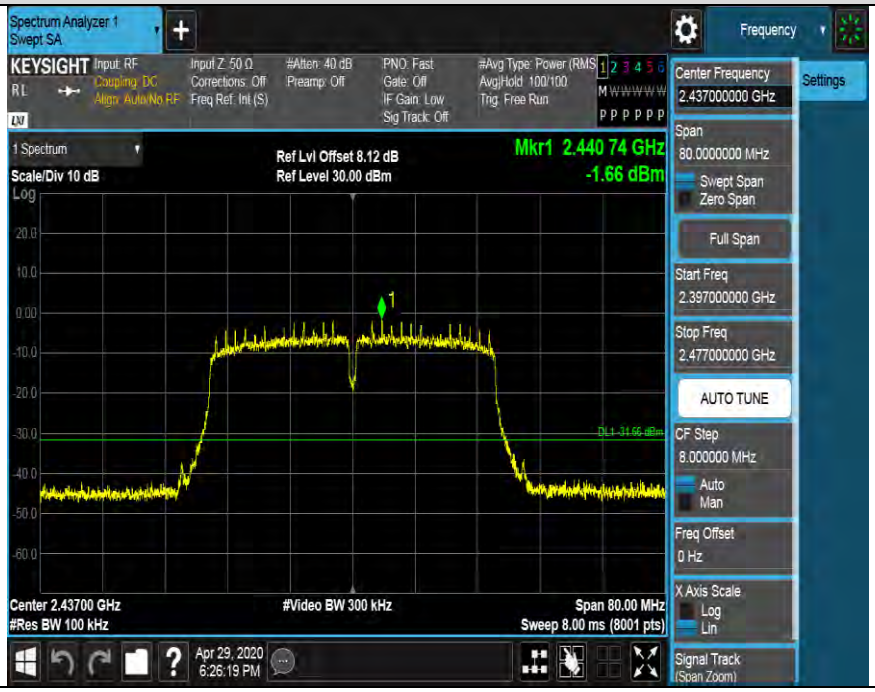
LCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11N HT40	MCH	PASS

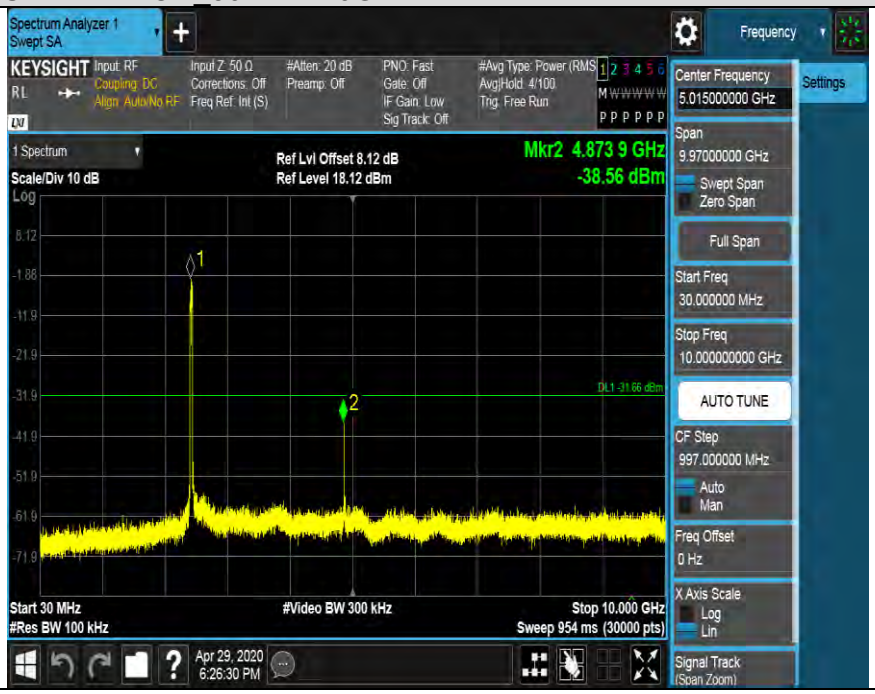
Pref test Plot

MCH SPURIOUS EMISSION

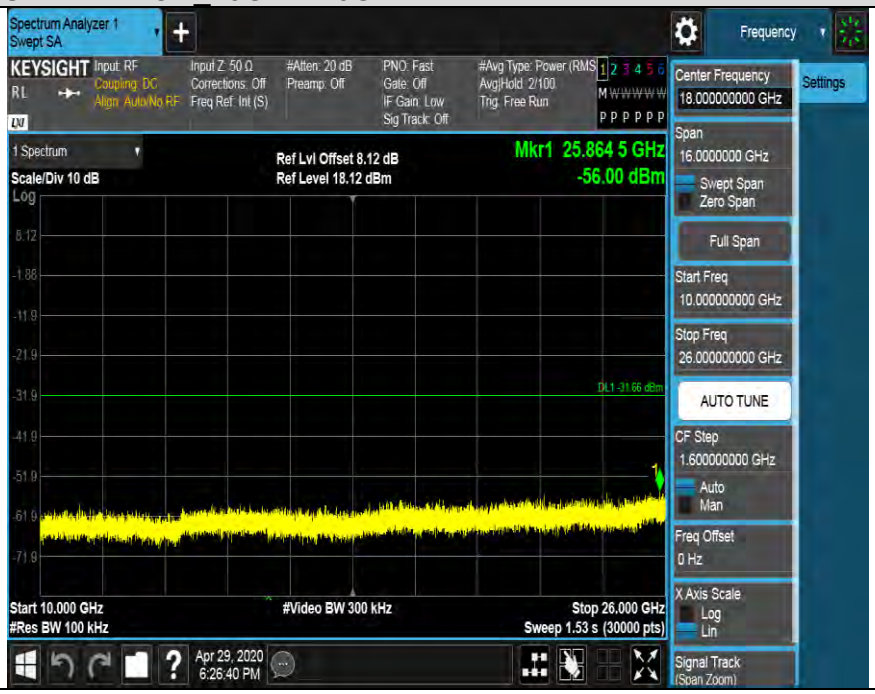


Puw test Plot

MCH SPURIOUS EMISSION_30MHz~10GHz



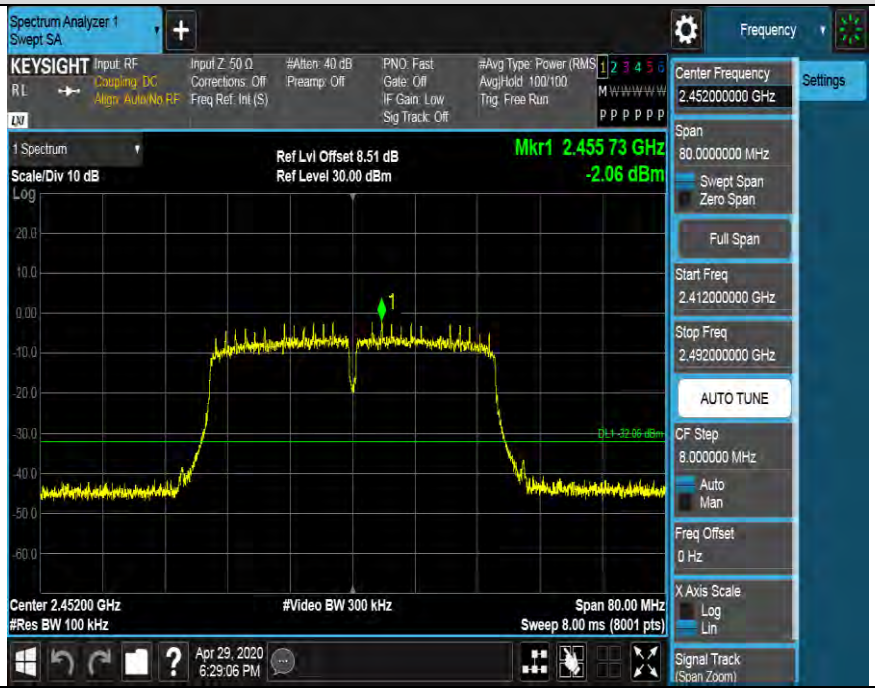
MCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11N HT40	HCH	PASS

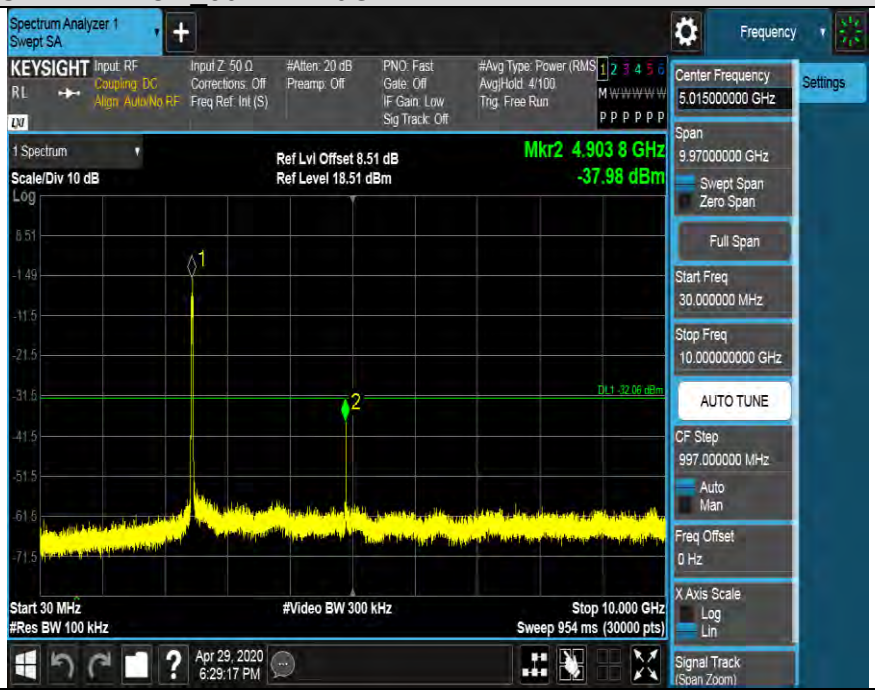
Pref test Plot

HCH SPURIOUS EMISSION



Puw test Plot

HCH SPURIOUS EMISSION_30MHz~10GHz



HCH SPURIOUS EMISSION_10GHz~26GHz

7.6. RADIATED TEST RESULTS

7.6.1. LIMITS AND PROCEDURE

LIMITS

Please refer to FCC §15.205 and §15.209

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

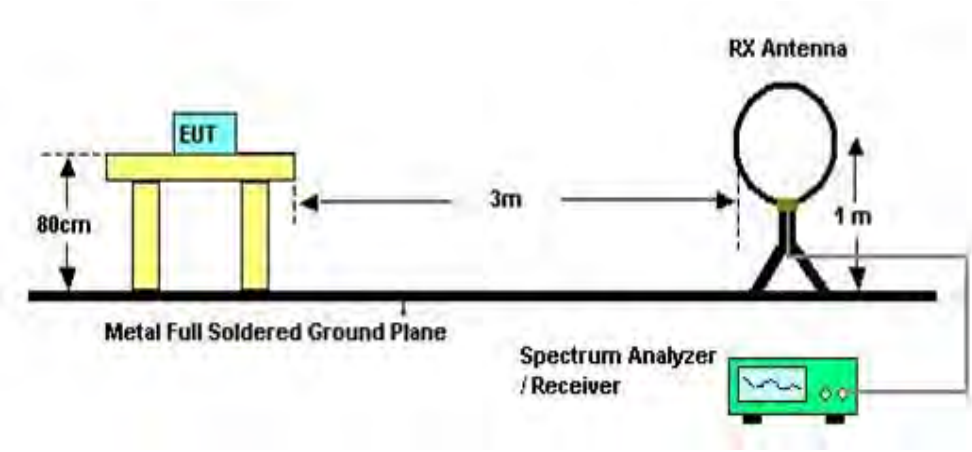
Restricted bands of operation

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: [1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6c

TEST SETUP AND PROCEDURE

Below 30MHz



The setting of the spectrum analyser

RBW	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)
VBW	200Hz (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 0.8 meter above ground.

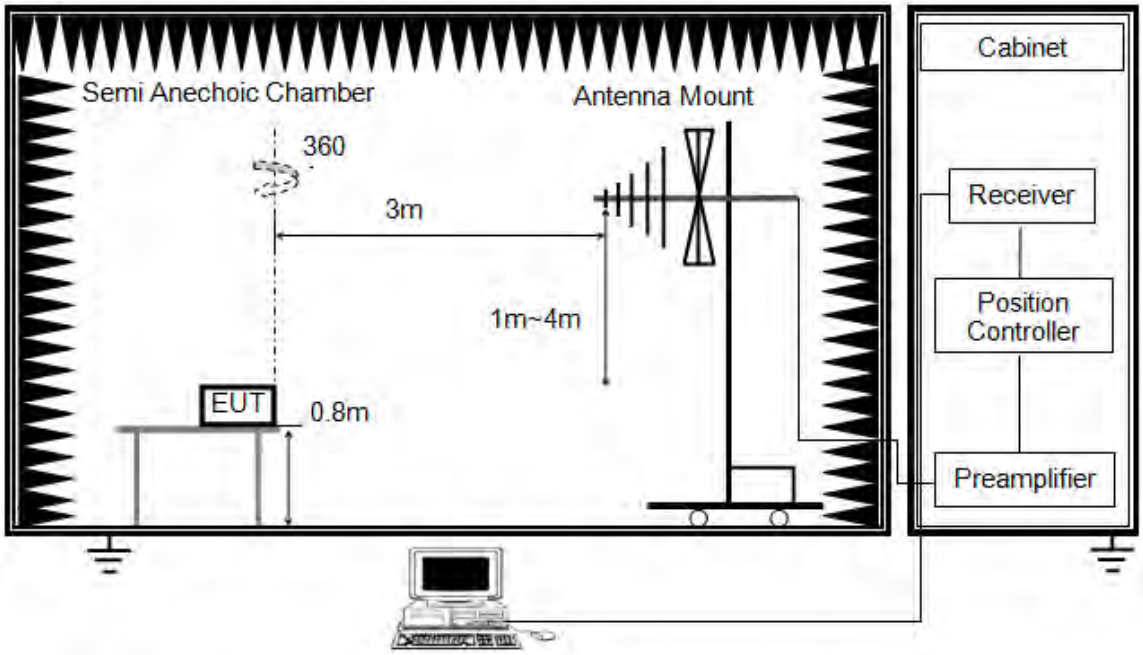
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1m height antenna tower.

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)

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.

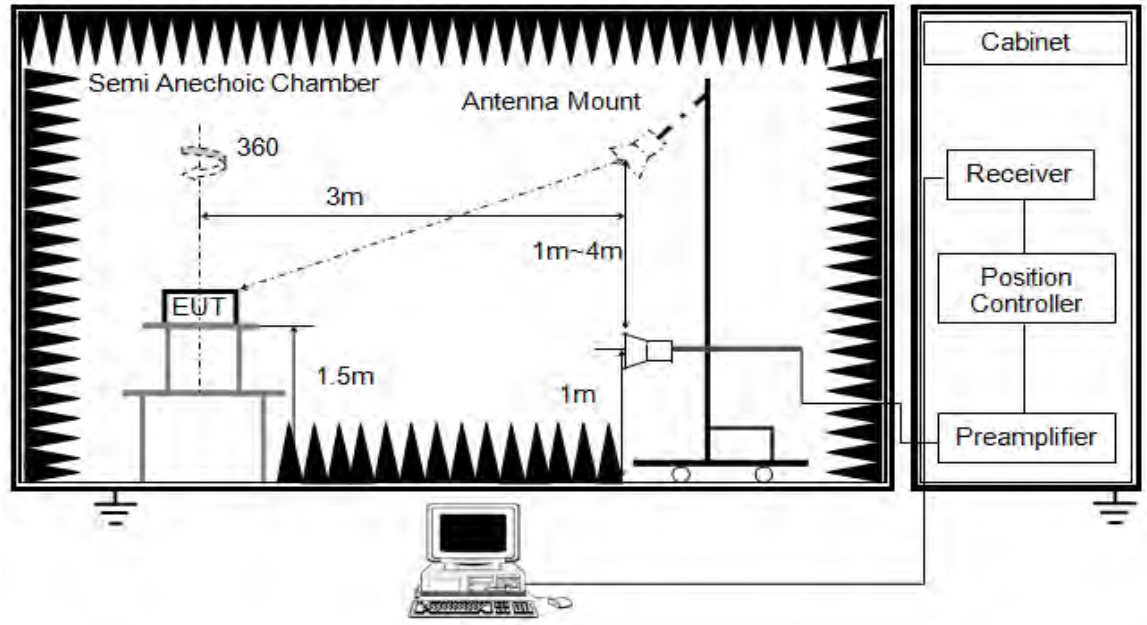
3. The EUT was placed on a turntable with 0.8 meter above ground.

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 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.

6. For the actual test configuration, please refer to the related Item in this test report (Photographs of the Test Configuration)

Above 1G



The setting of the spectrum analyser

RBW	1M
VBW	PEAK:3M AVG: See note6
Sweep	Auto
Detector	Peak/Average(10Hz)
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.

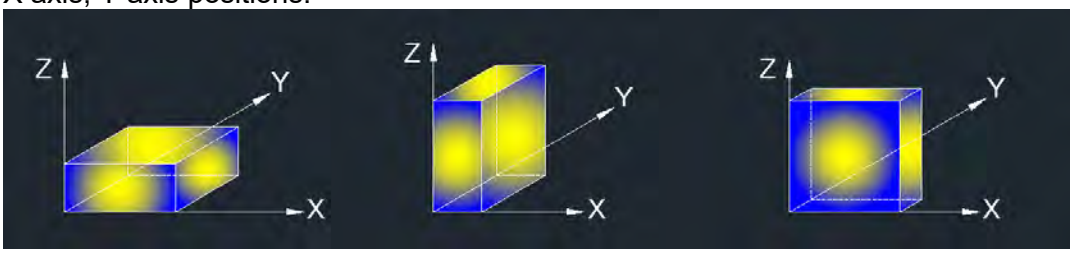
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

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 set VBW ≤RBW/100, but not less than 10Hz video bandwidth with peak detector， max hold to be run for at least 50 traces for average measurements.

8. For the actual test configuration, please refer to the related item in this test report (Photographs of the Test Configuration)

X axis, Y axis positions:



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

7.6.2. TEST ENVIRONMENT

Temperature	22°C	Relative Humidity	56%
Atmosphere Pressure	101kPa	Test Voltage	DC 12V

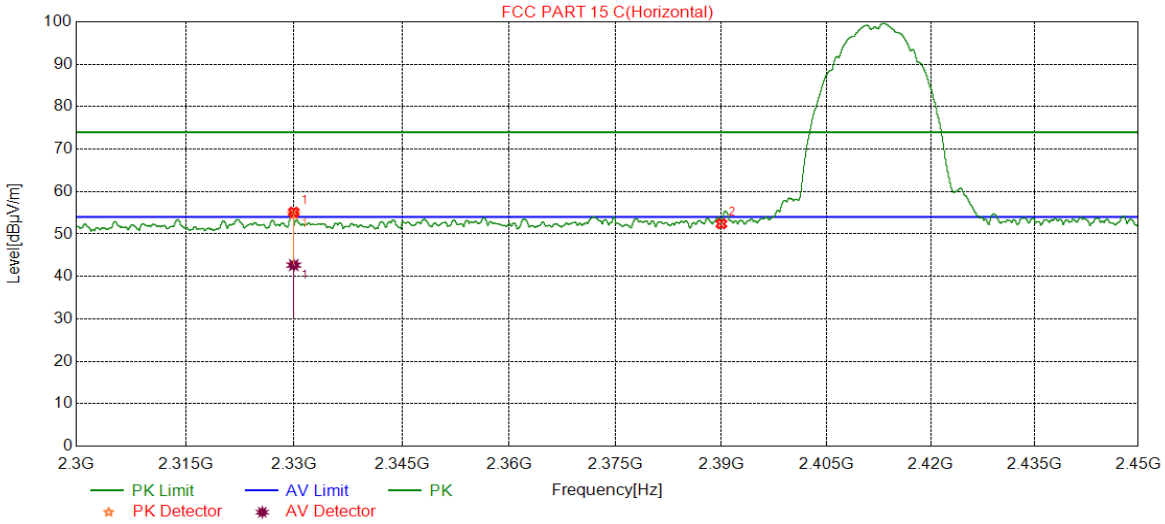
7.6.3. RESTRICTED BANDEDGE

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
11N HT40	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS

Test Graphs:

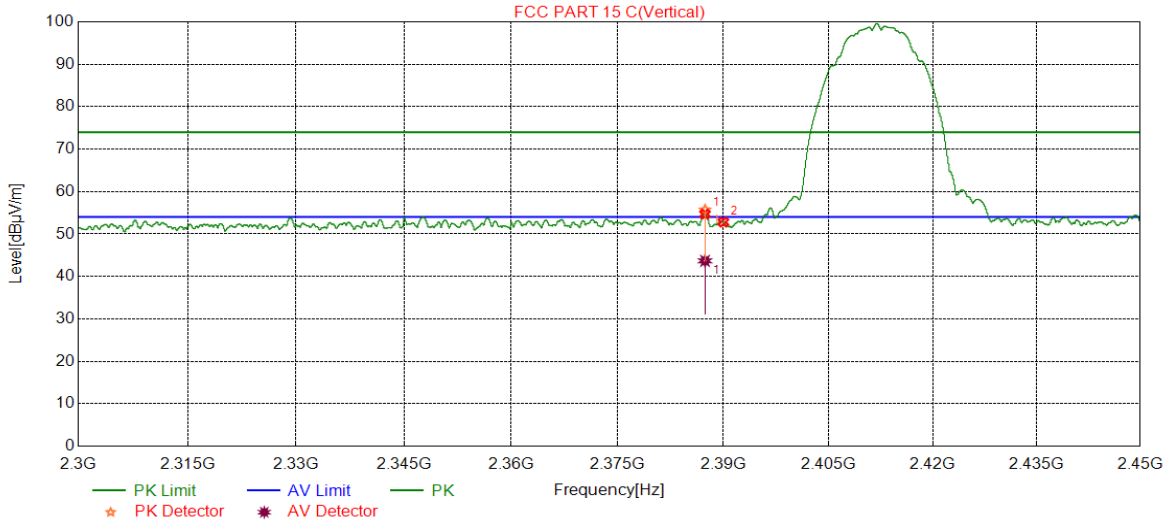
Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2329.9475	41.21	13.46	54.67	74.00	-19.33	peak
		29.21	13.46	42.67	54.00	-11.33	average
2	2390.0000	38.31	14.09	52.40	74.00	-21.60	peak

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

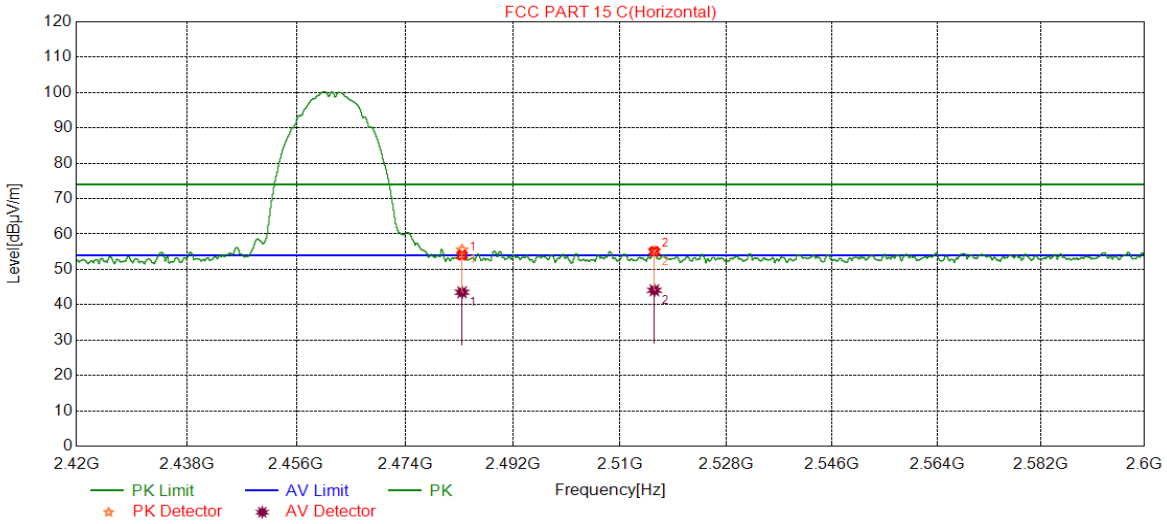
Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2387.3859	41.62	14.05	55.67	74.00	-18.33	peak
		29.62	14.05	43.67	54.00	-10.33	average
2	2390.0000	38.72	14.09	52.81	74.00	-21.19	peak

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

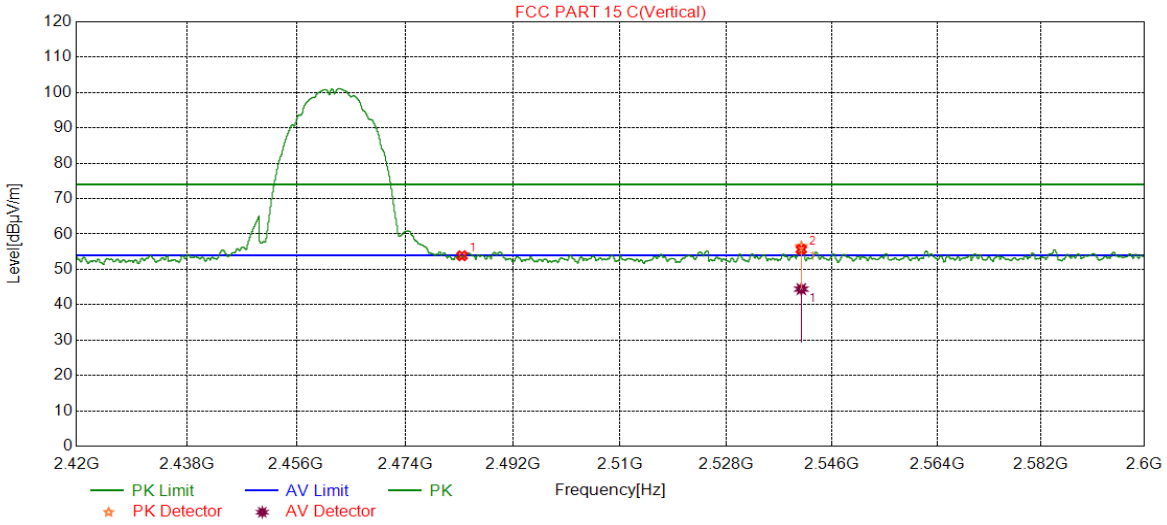
Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	41.63	13.88	55.51	74.00	-18.49	peak
		29.63	13.88	43.51	54.00	-10.49	average
2	2515.7876	40.84	14.24	55.08	74.00	-18.92	peak
		29.84	14.24	44.08	54.00	-9.92	average

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

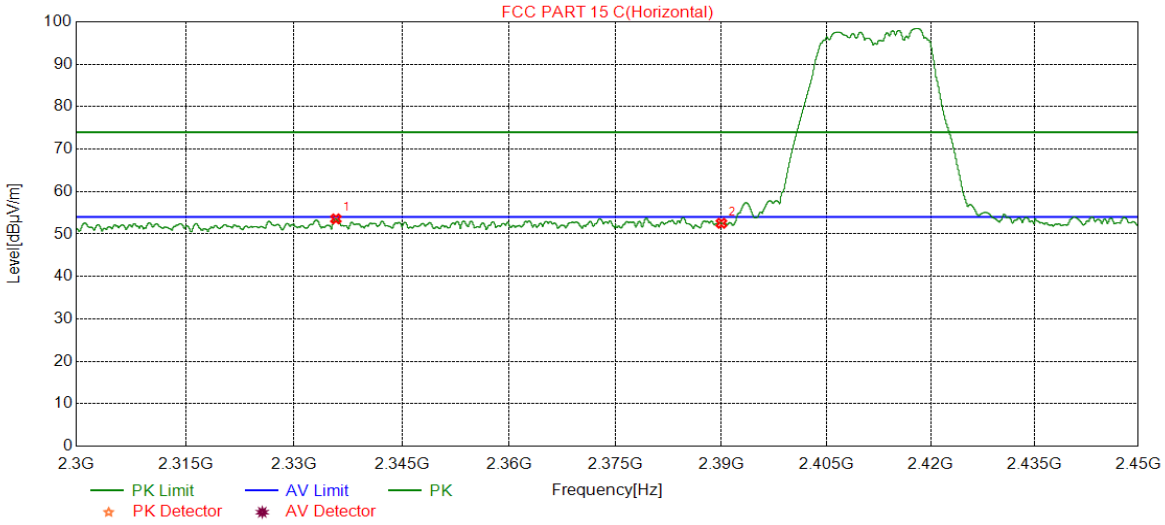
Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	39.97	13.88	53.85	74.00	-20.15	peak
2	2540.7381	42.12	14.30	56.42	74.00	-17.58	peak
		30.12	14.30	44.42	54.00	-9.58	average

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

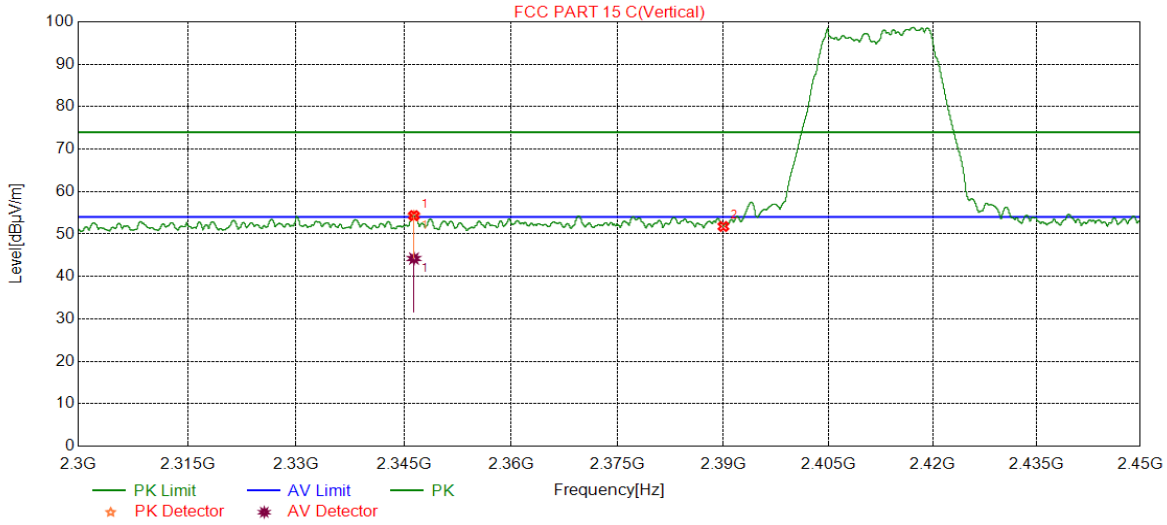
Test Mode	Channel	Polarization	Verdict
11G	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2335.7982	40.03	13.53	53.56	74.00	-20.44	peak
3	2390.0000	38.44	14.09	52.53	74.00	-21.47	peak

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

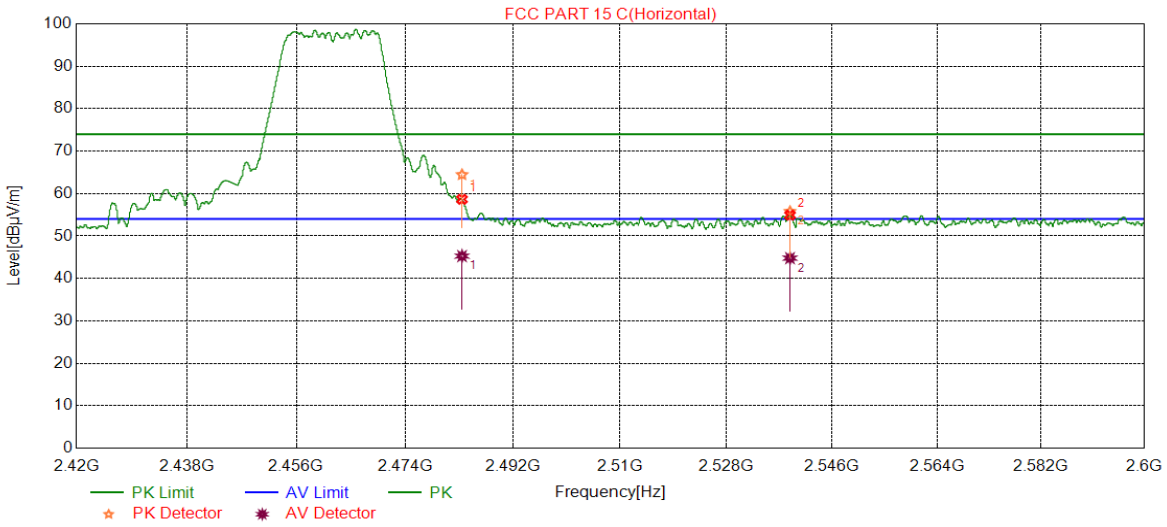
Test Mode	Channel	Polarization	Verdict
11G	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2346.3933	40.57	13.64	54.21	74.00	-19.79	peak
		30.57	13.64	44.21	54.00	-9.79	average
2	2390.0000	37.68	14.09	51.77	74.00	-22.23	peak

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

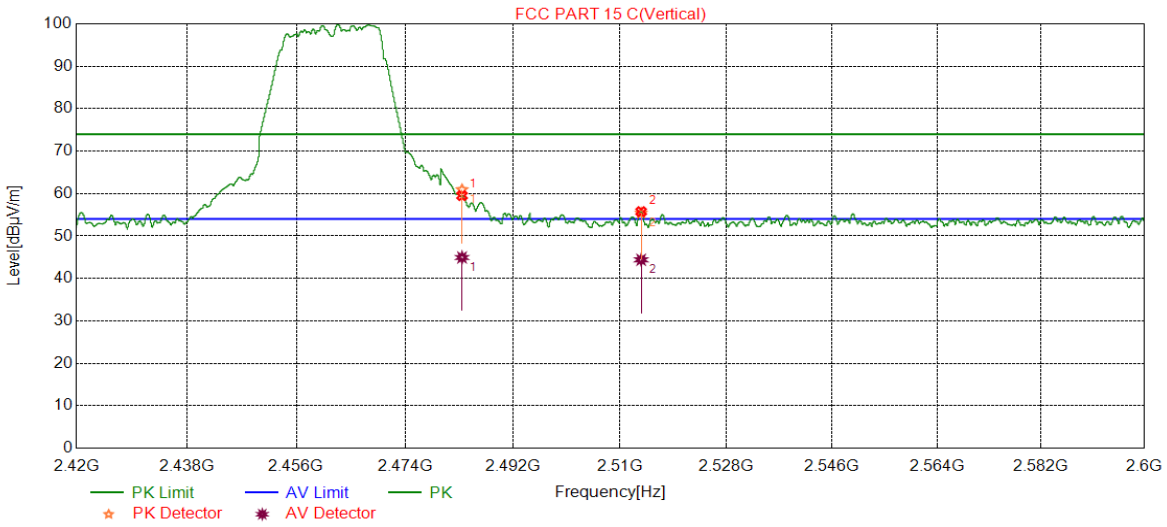
Test Mode	Channel	Polarization	Verdict
11G	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	50.56	13.88	64.44	74.00	-9.56	peak
		31.38	13.88	45.26	54.00	-8.74	average
2	2538.8119	41.5	14.28	55.78	74.00	-18.22	peak
		30.50	14.28	44.78	54.00	-9.22	average

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

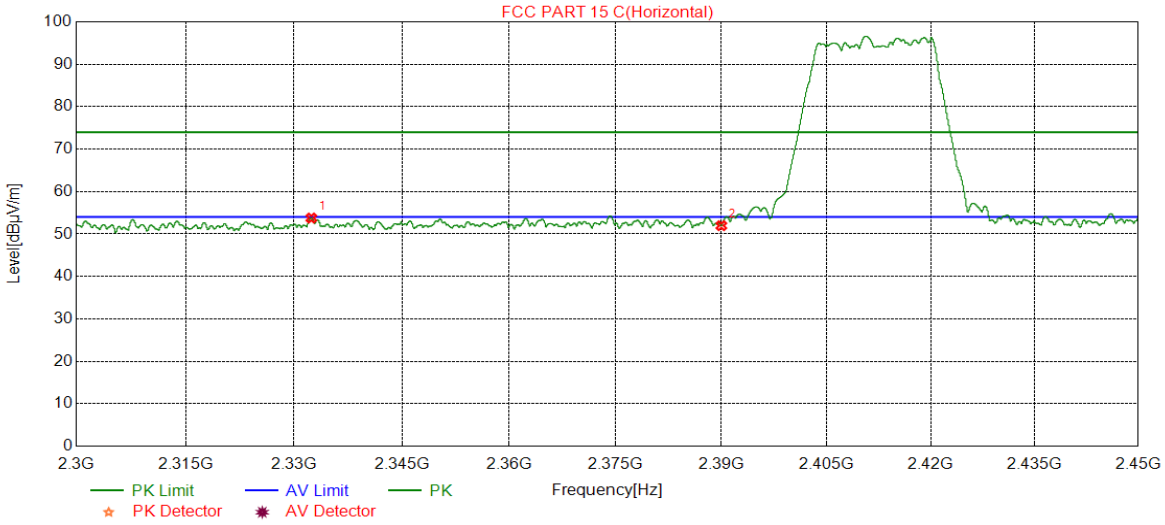
Test Mode	Channel	Polarization	Verdict
11G	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	47.05	13.88	60.93	74.00	-13.07	peak
		31.05	13.88	44.93	54.00	-9.07	average
2	2513.5554	41.17	14.22	55.39	74.00	-18.61	peak
		30.17	14.22	44.39	54.00	-9.61	average

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

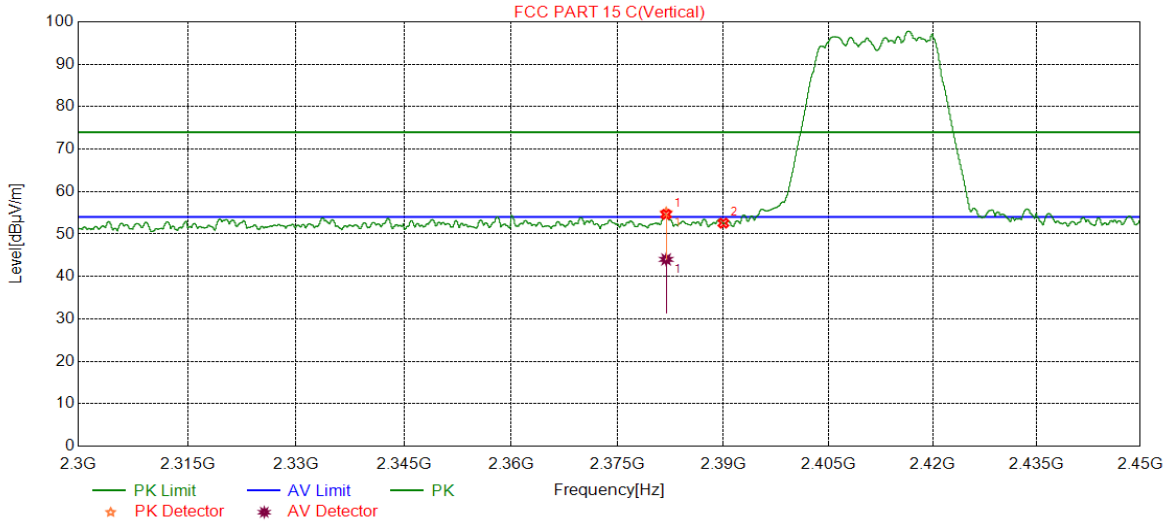
Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2332.3853	40.26	13.50	53.76	74.00	-20.24	peak
2	2390.0000	37.87	14.09	51.96	74.00	-22.04	peak

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

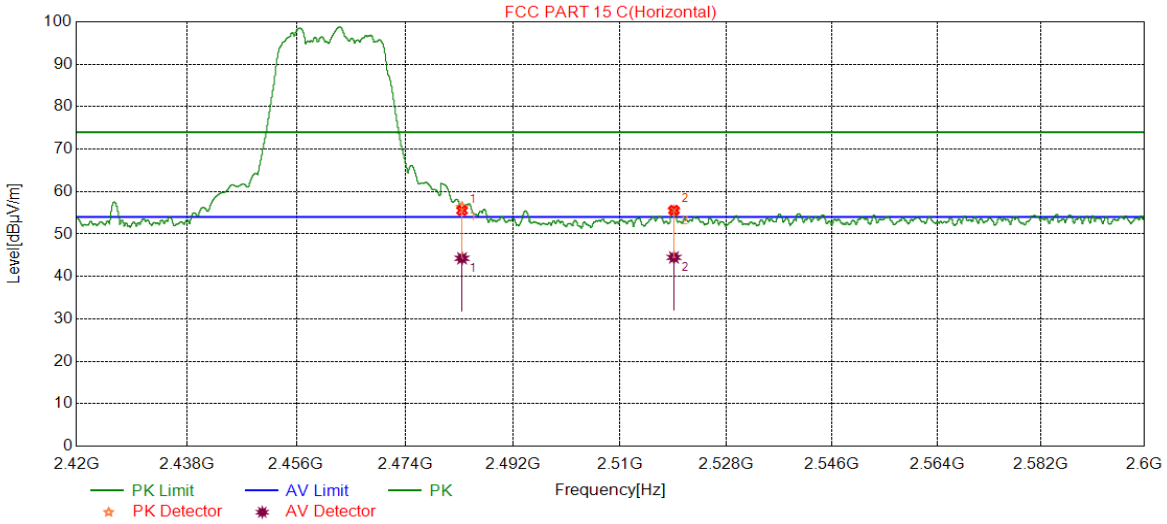
Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2381.8727	40.95	14.06	55.01	74.00	-18.99	peak
		29.95	14.06	44.01	54.00	-9.99	average
2	2390.0000	38.47	14.09	52.56	74.00	-21.44	peak

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

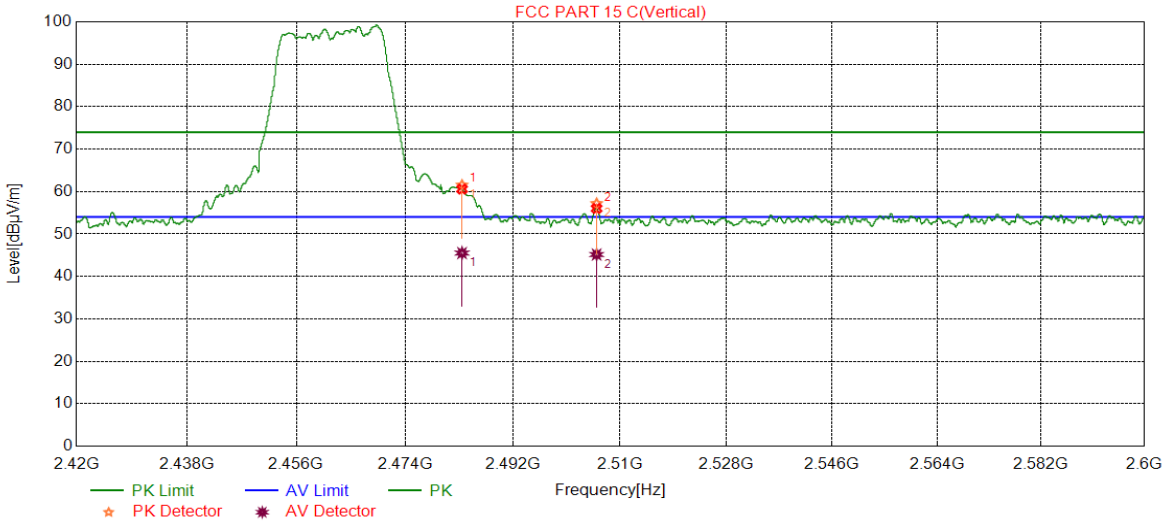
Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	42.39	13.88	56.27	74.00	-17.73	peak
		30.39	13.88	44.27	54.00	-9.73	average
2	2519.0999	41.2	14.28	55.48	74.00	-18.52	peak
		30.20	14.28	44.48	54.00	-9.52	average

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

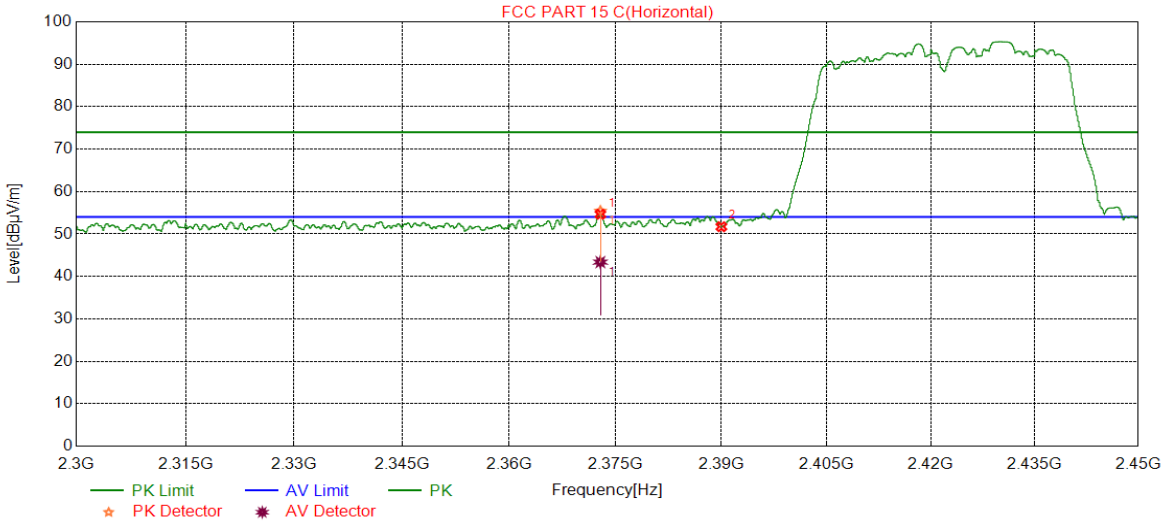
Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	47.63	13.88	61.51	74.00	-12.49	peak
		31.63	13.88	45.51	54.00	-8.49	average
2	2506.0486	43.01	14.15	57.16	74.00	-16.84	peak
		31.01	14.15	45.16	54.00	-8.84	average

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

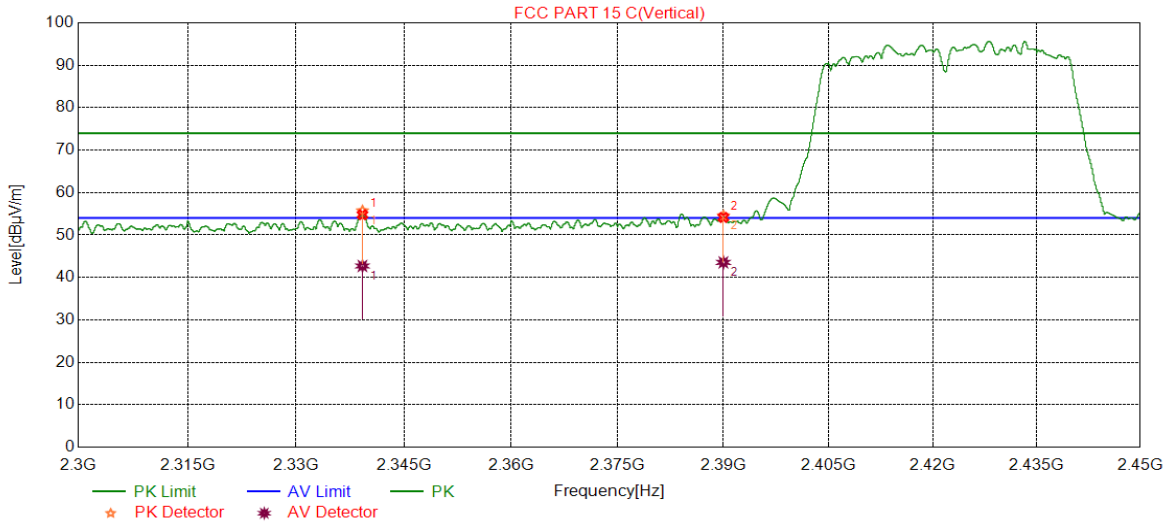
Test Mode	Channel	Polarization	Verdict
11N HT40	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2372.8529	41.5	13.88	55.38	74.00	-18.62	peak
2	2390.0000	29.50	13.88	43.38	54.00	-10.62	average
		37.62	14.09	51.71	74.00	-22.29	peak

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

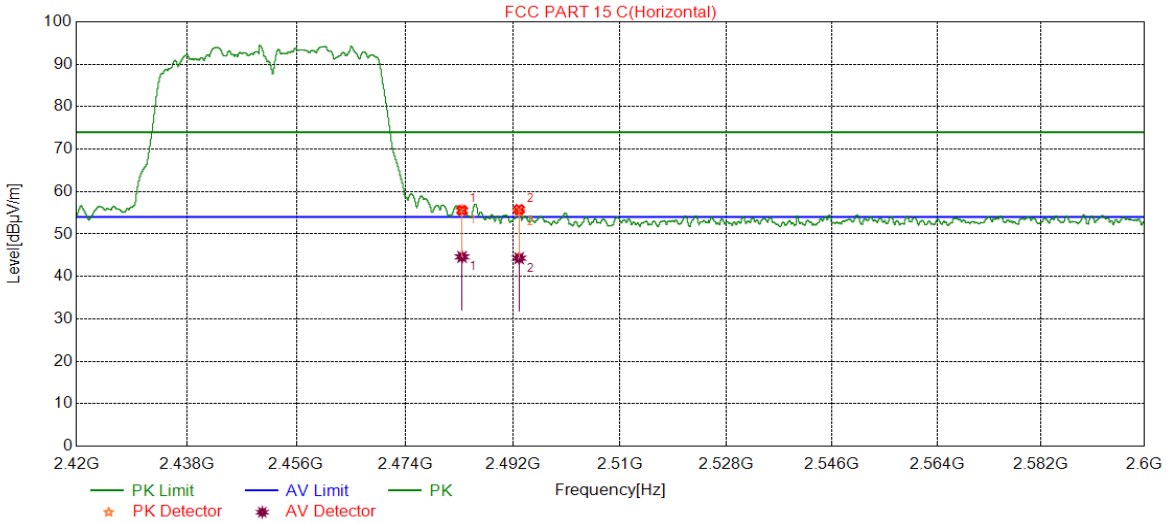
Test Mode	Channel	Polarization	Verdict
11N HT40	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2339.2112	42.13	13.57	55.70	74.00	-18.30	peak
		29.13	13.57	42.70	54.00	-11.30	average
2	2390.0000	40.45	14.09	54.54	74.00	-19.46	peak
		29.45	14.09	43.54	54.00	-10.46	average

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

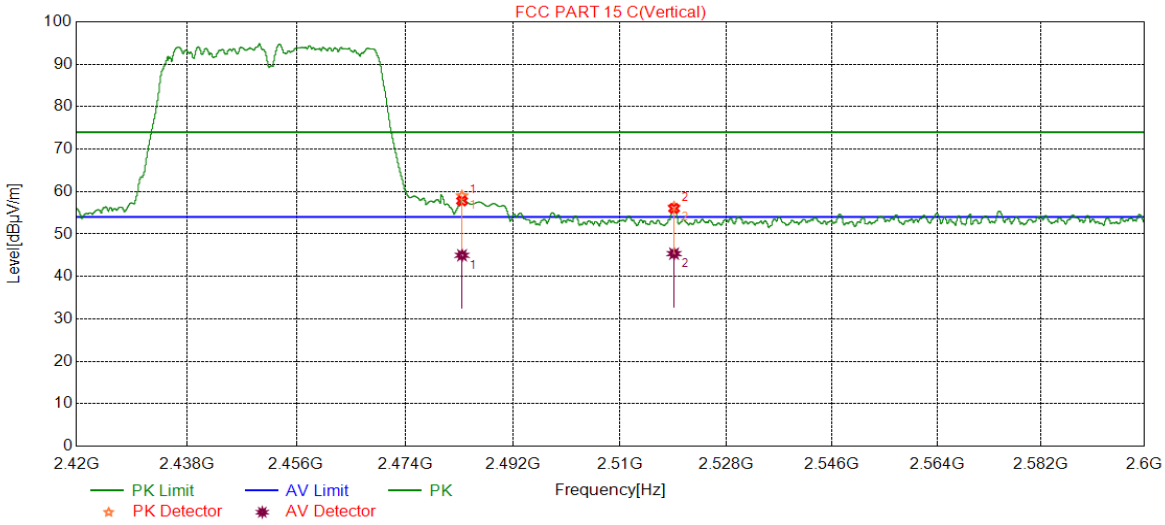
Test Mode	Channel	Polarization	Verdict
11N HT40	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	41.73	13.88	55.61	74.00	-18.39	peak
		30.73	13.88	44.61	54.00	-9.39	average
2	2493.0333	41.31	13.99	55.30	74.00	-18.70	peak
		30.31	13.99	44.30	54.00	-9.70	average

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.
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 HT40	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	2483.5000	45.10	13.88	58.98	74.00	-15.02	peak
		31.10	13.88	44.98	54.00	-9.02	average
2	2519.1179	42.09	14.28	56.37	74.00	-17.63	peak
		31.09	14.28	45.37	54.00	-8.63	average

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit

7.6.4. SPURIOUS EMISSIONS

Test Result 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
11N HT40	LCH	<Limit	PASS
	MCH	<Limit	PASS
	HCH	<Limit	PASS

2) For 9KHz~30MHz

Test Mode	Channel	Puw(dBm)	Verdict
11B	HCH	<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	HCH	<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

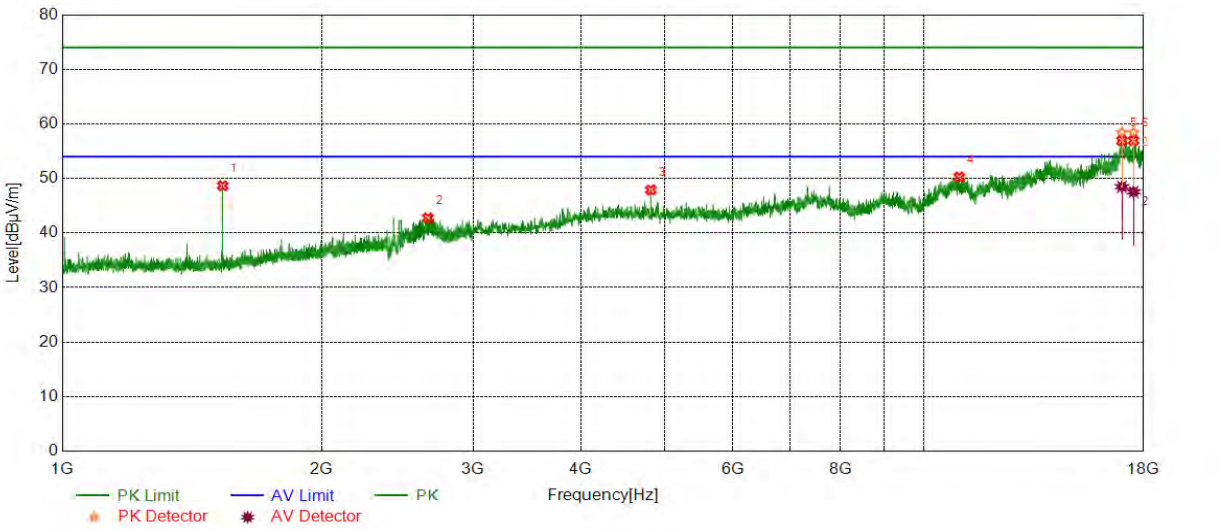
Test Mode	Channel	Puw(dBm)	Verdict
11B	HCH	<Limit	PASS

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 I: 1GHz~18GHz

HARMONICS AND SPURIOUS EMISSIONS

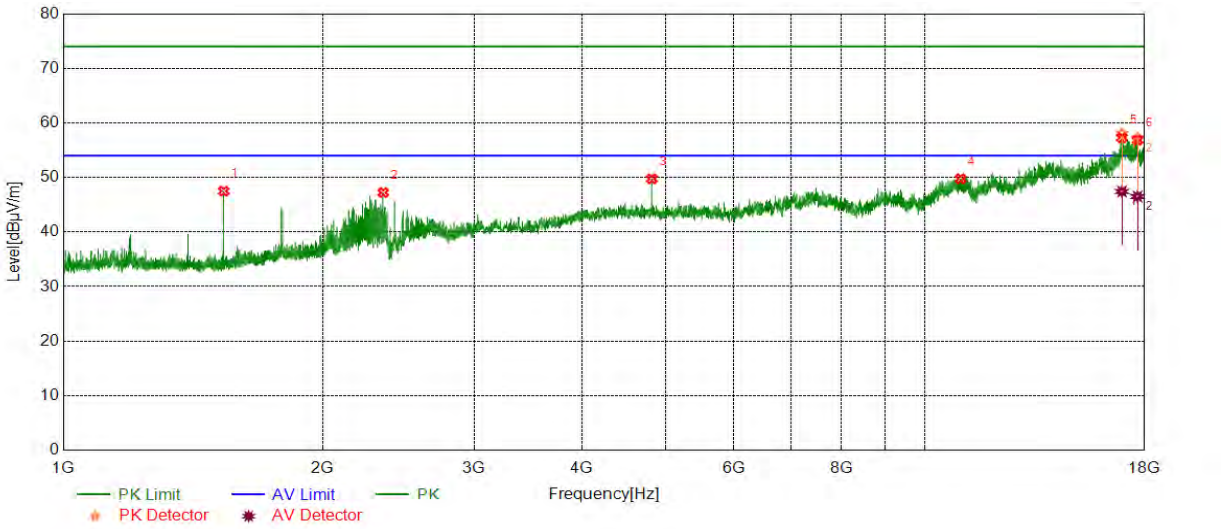
Test Mode	Channel	Polarization	Verdict
11B	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	54.34	-5.68	48.66	74.00	-25.34	peak
2	2657.9572	43.52	-0.77	42.75	74.00	-31.25	peak
3	4822.7278	42.96	4.94	47.90	74.00	-26.10	peak
4	10995.9995	37.32	12.94	50.26	74.00	-23.74	peak
5	16983.6230	38.25	20.19	58.44	74.00	-15.56	peak
		28.30	20.19	48.49	54.00	-5.51	average
6	17523.6905	39.04	19.40	58.44	74.00	-15.56	peak
		28.12	19.40	47.52	54.00	-6.48	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

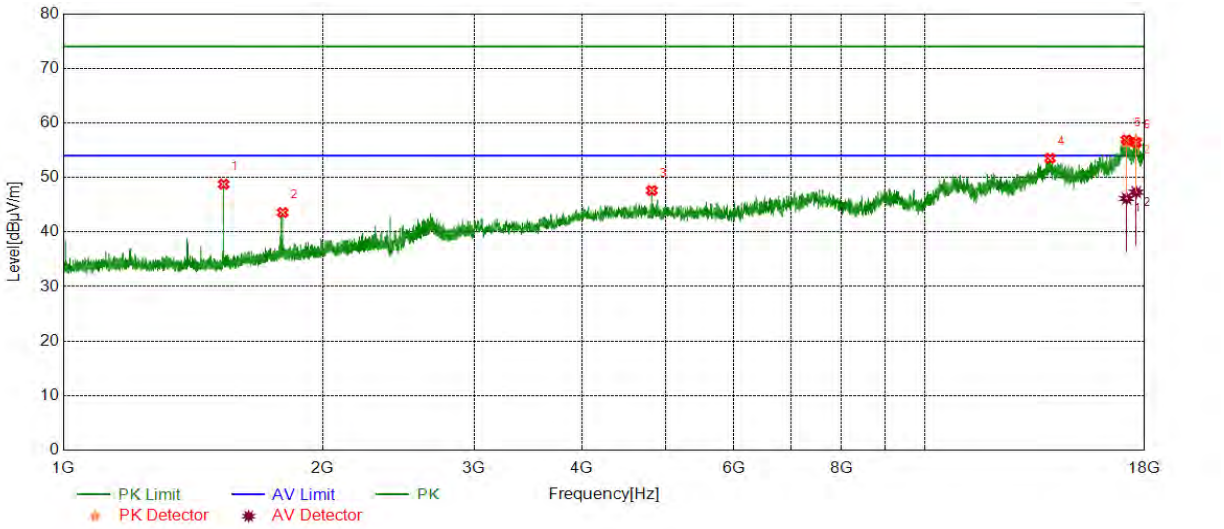
Test Mode	Channel	Polarization	Verdict
11B	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	53.16	-5.68	47.48	74.00	-26.52	peak
2	2352.4191	48.93	-1.70	47.23	74.00	-26.77	peak
3	4822.7278	44.80	4.94	49.74	74.00	-24.26	peak
4	11009.1261	36.73	13.03	49.76	74.00	-24.24	peak
5	16942.3678	38.06	20.03	58.09	74.00	-15.91	peak
		27.40	20.03	47.43	54.00	-6.57	average
6	17664.3330	37.77	19.49	57.26	74.00	-16.74	peak
		27.01	19.49	46.50	54.00	-7.50	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

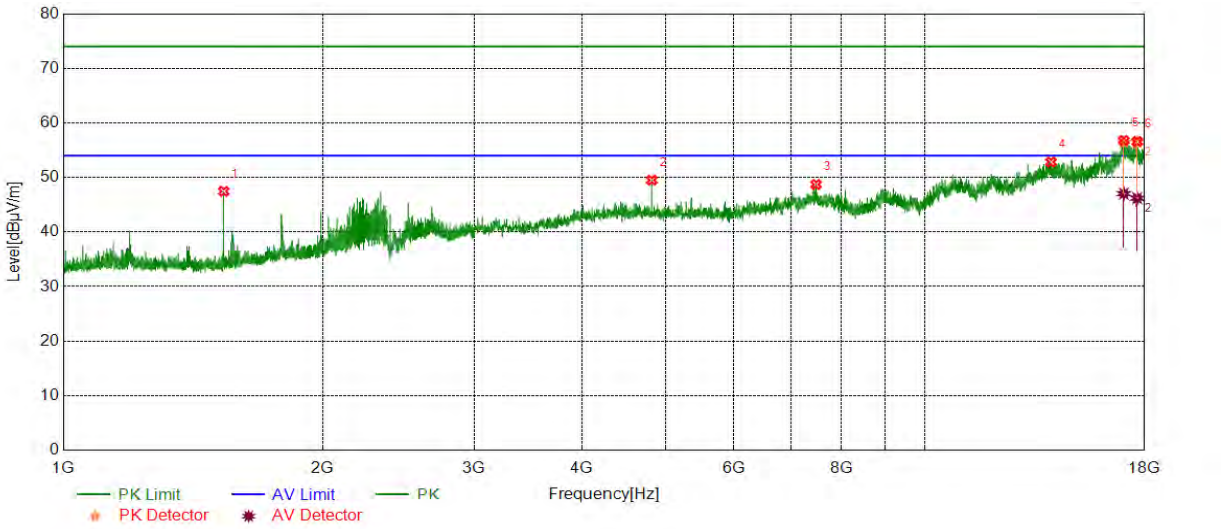
Test Mode	Channel	Polarization	Verdict
11B	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	54.45	-5.69	48.76	74.00	-25.24	peak
2	1797.8497	47.47	-3.90	43.57	74.00	-30.43	peak
3	4822.7278	42.67	4.94	47.61	74.00	-26.39	peak
4	13981.3727	37.00	16.50	53.50	74.00	-20.50	peak
5	17152.3940	36.71	19.74	56.45	74.00	-17.55	peak
		26.39	19.74	46.13	54.00	-7.87	average
6	17598.6998	37.32	19.51	56.83	74.00	-17.17	peak
		27.79	19.51	47.30	54.00	-6.70	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

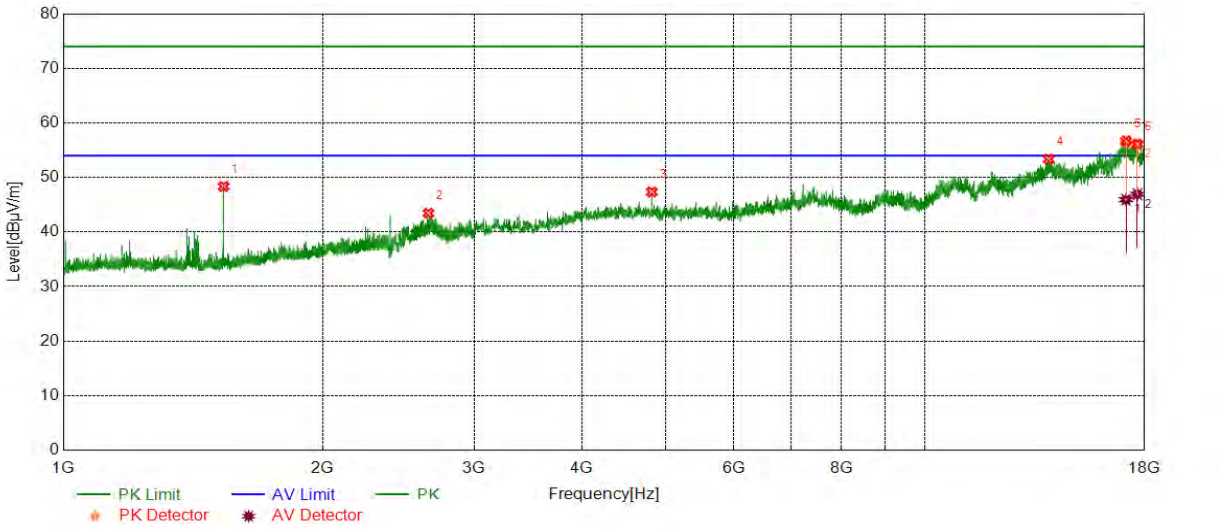
Test Mode	Channel	Polarization	Verdict
11B	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	53.13	-5.68	47.45	74.00	-26.55	peak
2	4822.7278	44.57	4.94	49.51	74.00	-24.49	peak
3	7479.9350	39.45	9.27	48.72	74.00	-25.28	peak
4	14015.1269	37.18	15.65	52.83	74.00	-21.17	peak
5	17028.6286	36.20	20.21	56.41	74.00	-17.59	peak
		26.82	20.21	47.03	54.00	-6.97	average
6	17647.4559	37.38	19.15	56.53	74.00	-17.47	peak
		27.05	19.15	46.20	54.00	-7.80	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

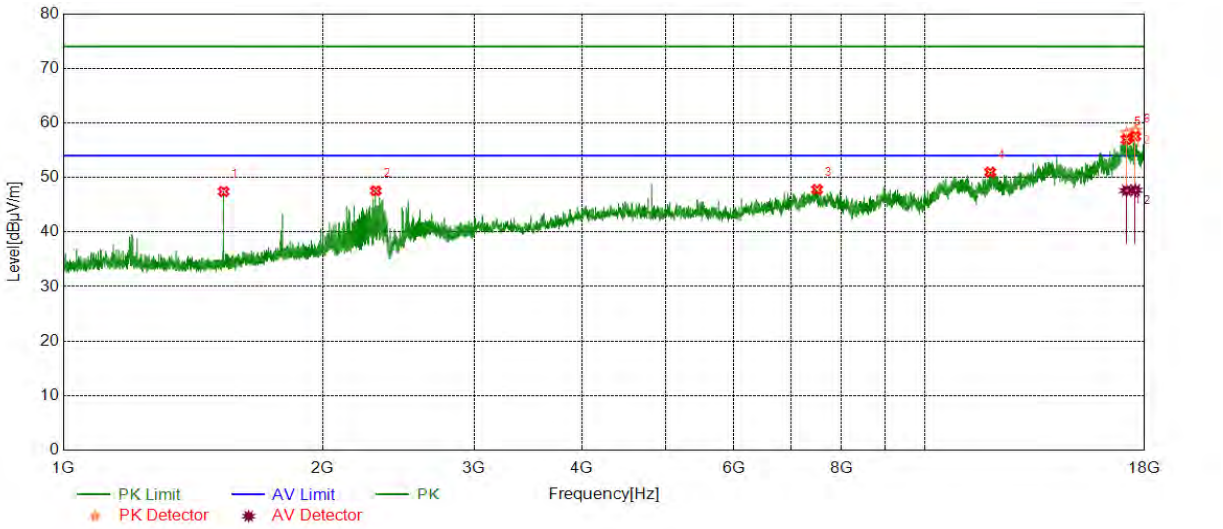
Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	54.04	-5.69	48.35	74.00	-25.65	peak
2	2654.4568	44.22	-0.79	43.43	74.00	-30.57	peak
3	4822.7278	42.41	4.94	47.35	74.00	-26.65	peak
4	13930.7413	37.30	16.05	53.35	74.00	-20.65	peak
5	17128.0160	37.14	19.23	56.37	74.00	-17.63	peak
		26.69	19.23	45.92	54.00	-8.08	average
6	17654.9569	36.93	19.19	56.12	74.00	-17.88	peak
		27.73	19.19	46.92	54.00	-7.08	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

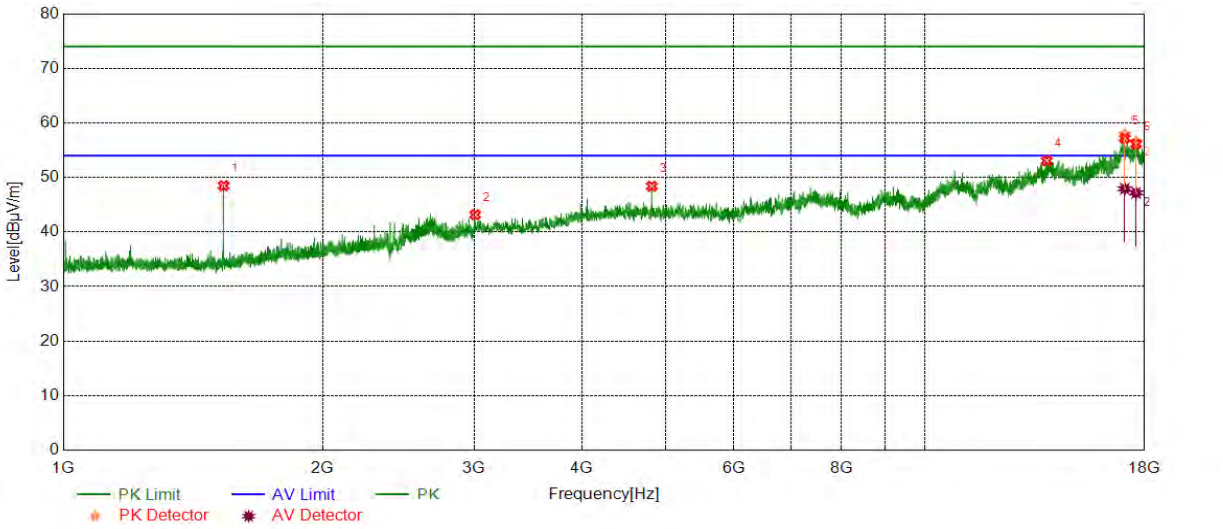
Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	53.10	-5.69	47.41	74.00	-26.59	peak
2	2306.1633	49.30	-1.76	47.54	74.00	-26.46	peak
3	7500.5626	38.63	9.16	47.79	74.00	-26.21	peak
4	11916.7396	37.59	13.37	50.96	74.00	-23.04	peak
5	17150.5188	38.41	19.74	58.15	74.00	-15.85	peak
		27.86	19.74	47.60	54.00	-6.40	average
6	17559.3199	39.22	19.42	58.64	74.00	-15.36	peak
		28.23	19.42	47.65	54.00	-6.35	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

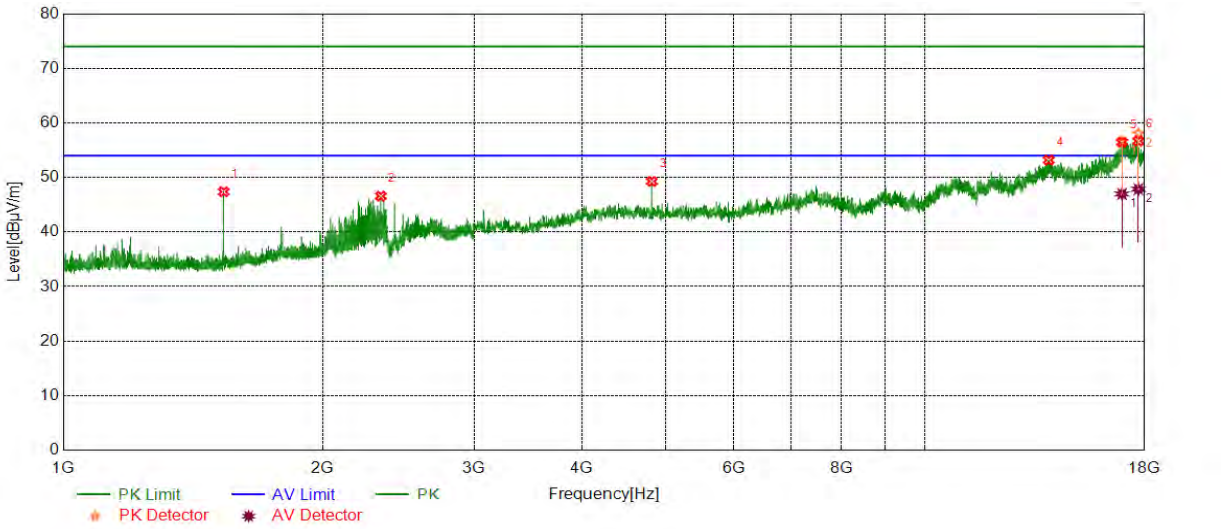
Test Mode	Channel	Polarization	Verdict
11G	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	54.17	-5.68	48.49	74.00	-25.51	peak
2	3007.5009	41.33	1.83	43.16	74.00	-30.84	peak
3	4822.7278	43.46	4.94	48.40	74.00	-25.60	peak
4	13855.7320	37.37	15.68	53.05	74.00	-20.95	peak
5	17069.8837	37.45	20.52	57.97	74.00	-16.03	peak
		27.41	20.52	47.93	54.00	-6.07	average
6	17593.0741	36.93	19.61	56.54	74.00	-17.46	peak
		27.56	19.61	47.17	54.00	-6.83	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

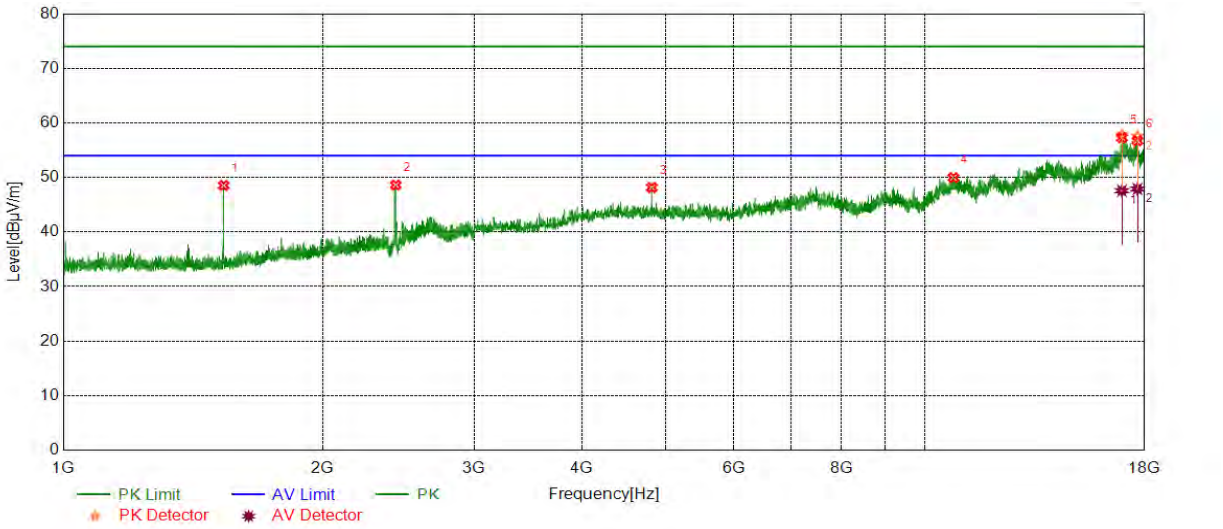
Test Mode	Channel	Polarization	Verdict
11G	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	53.06	-5.68	47.38	74.00	-26.62	peak
2	2336.9171	48.40	-1.82	46.58	74.00	-27.42	peak
3	4822.7278	44.33	4.94	49.27	74.00	-24.73	peak
4	13930.7413	37.12	16.05	53.17	74.00	-20.83	peak
5	16942.3678	36.61	20.03	56.64	74.00	-17.36	peak
		26.95	20.03	46.98	54.00	-7.02	average
6	17701.8377	39.4	18.67	58.07	74.00	-15.93	peak
		29.18	18.67	47.85	54.00	-6.15	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

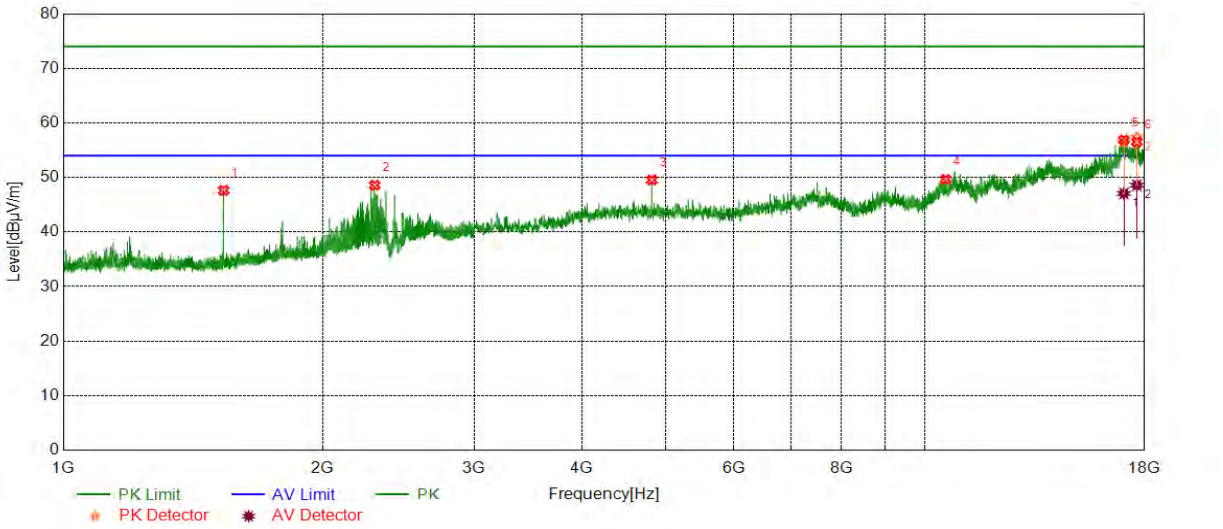
Test Mode	Channel	Polarization	Verdict
11G	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	54.21	-5.68	48.53	74.00	-25.47	peak
2	2432.4291	49.70	-1.10	48.60	74.00	-25.40	peak
3	4822.7278	43.20	4.94	48.14	74.00	-25.86	peak
4	10797.2247	37.04	12.92	49.96	74.00	-24.04	peak
5	16940.4926	37.72	20.08	57.80	74.00	-16.20	peak
		27.49	20.08	47.57	54.00	-6.43	average
6	17660.5826	38.20	19.35	57.55	74.00	-16.45	peak
		28.54	19.35	47.89	54.00	-6.11	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

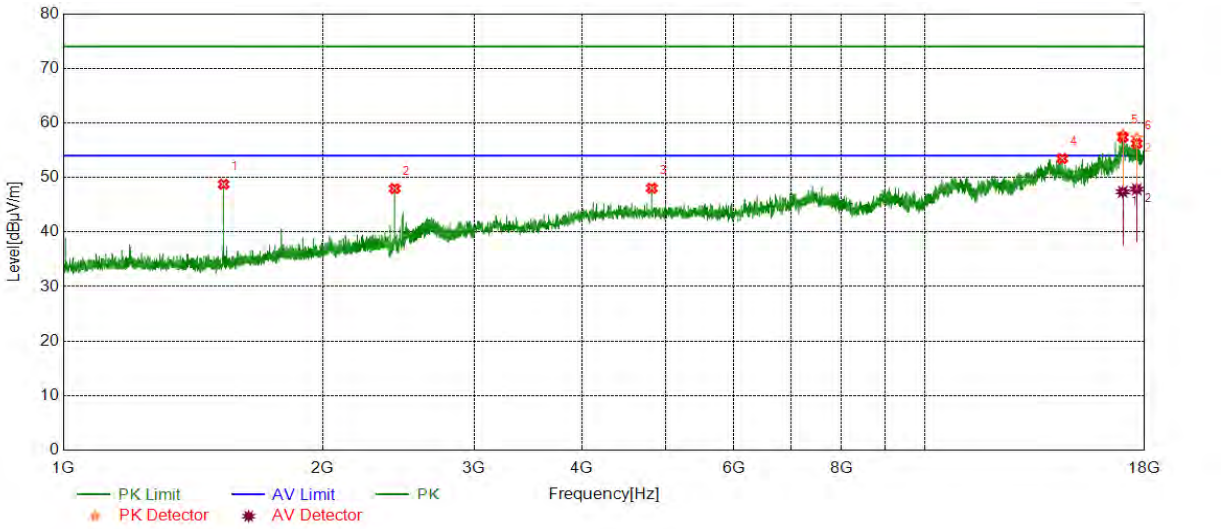
Test Mode	Channel	Polarization	Verdict
11G	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	53.31	-5.69	47.62	74.00	-26.38	peak
2	2298.9124	50.48	-1.91	48.57	74.00	-25.43	peak
3	4822.7278	44.60	4.94	49.54	74.00	-24.46	peak
4	10575.9470	37.15	12.49	49.64	74.00	-24.36	peak
5	17030.5038	36.29	20.18	56.47	74.00	-17.53	peak
		26.88	20.18	47.06	54.00	-6.94	average
6	17630.5788	38.11	19.30	57.41	74.00	-16.59	peak
		29.28	19.30	48.58	54.00	-5.42	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

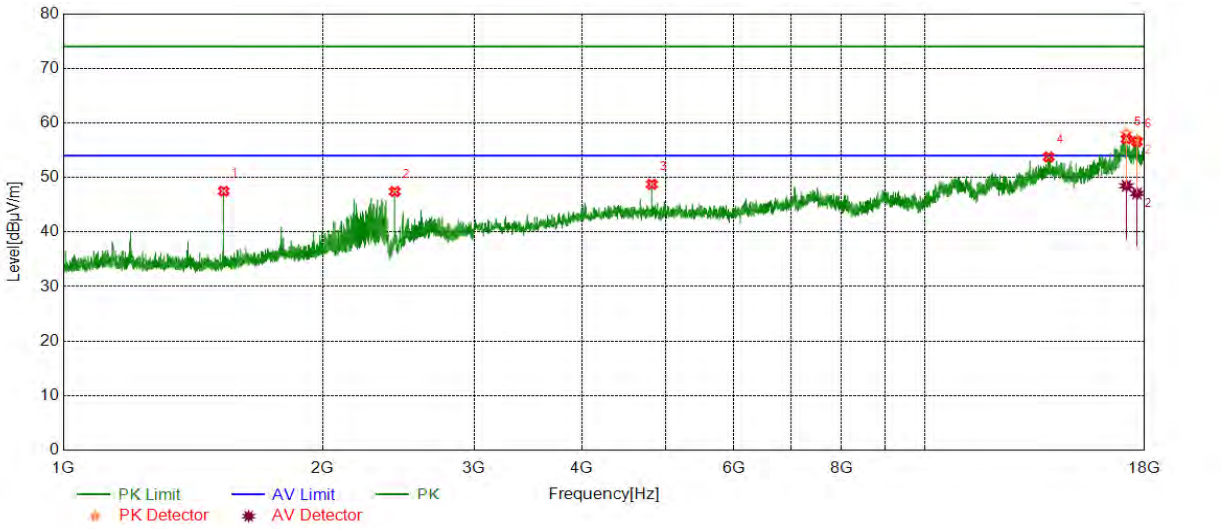
Test Mode	Channel	Polarization	Verdict
11G	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	54.19	-5.68	48.51	74.00	-25.49	peak
2	2426.1783	46.91	-1.15	45.76	74.00	-28.24	peak
3	4822.7278	43.42	4.94	48.36	74.00	-25.64	peak
4	13926.9909	36.97	16.06	53.03	74.00	-20.97	peak
5	17024.8781	36.92	20.19	57.11	74.00	-16.89	peak
		27.84	20.19	48.03	54.00	-5.97	average
6	17707.4634	39.35	18.39	57.74	74.00	-16.26	peak
		27.73	18.39	46.12	54.00	-7.88	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

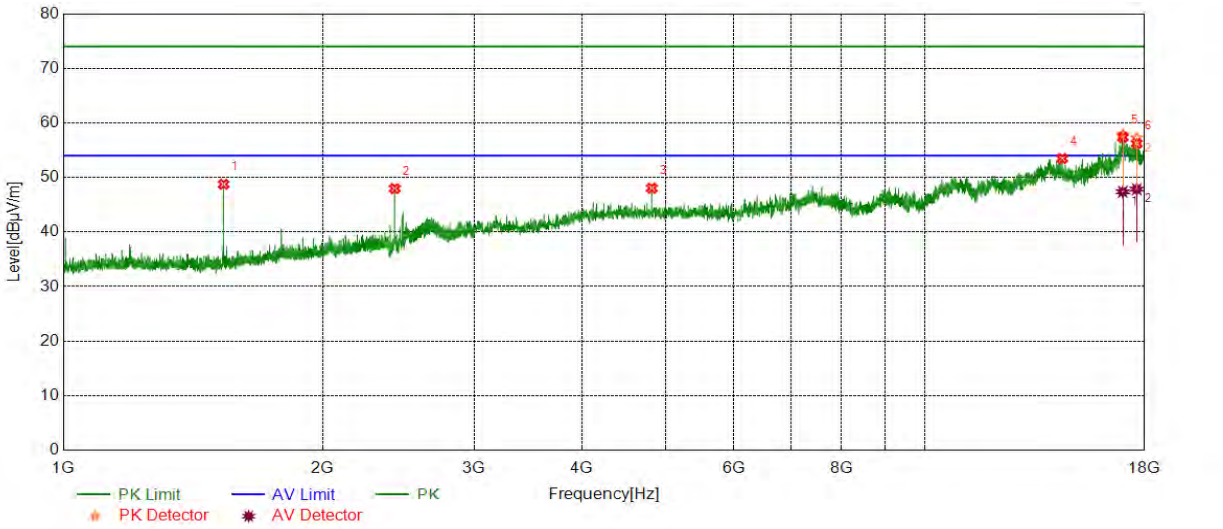
Test Mode	Channel	Polarization	Verdict
11G	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	53.15	-5.68	47.47	74.00	-26.53	peak
2	2426.1783	48.55	-1.15	47.40	74.00	-26.60	peak
3	4822.7278	43.80	4.94	48.74	74.00	-25.26	peak
4	13928.8661	37.69	16.05	53.74	74.00	-20.26	peak
5	17148.6436	38.40	19.68	58.08	74.00	-15.92	peak
		28.78	19.68	48.46	54.00	-5.54	average
6	17638.0798	37.45	19.40	56.85	74.00	-17.15	peak
		27.68	19.40	47.08	54.00	-6.92	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

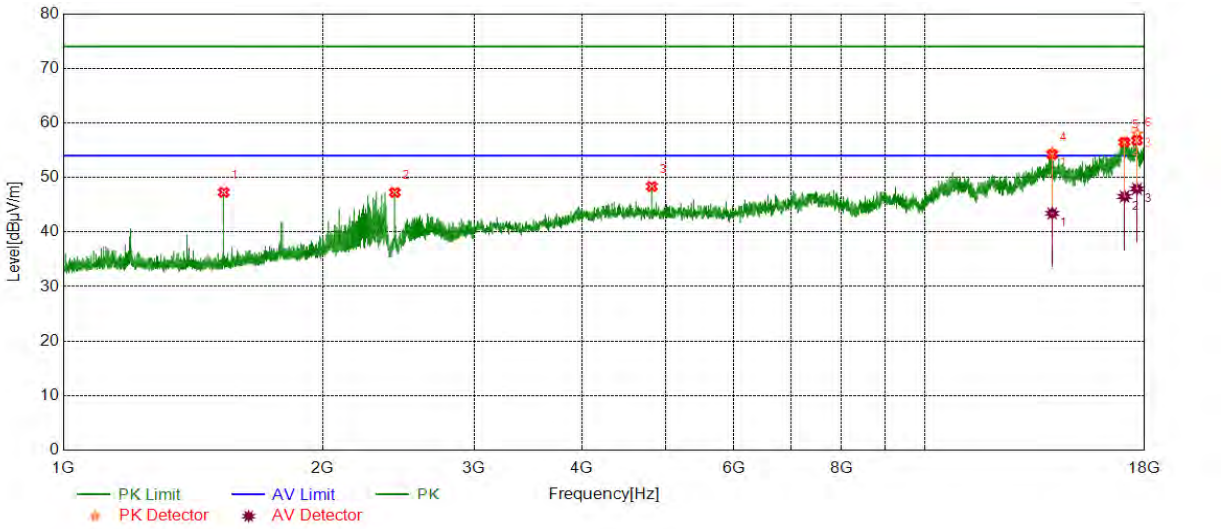
Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	54.44	-5.69	48.75	74.00	-25.25	peak
2	2425.9282	49.12	-1.16	47.96	74.00	-26.04	peak
3	4822.7278	43.09	4.94	48.03	74.00	-25.97	peak
4	14444.5556	37.91	15.55	53.46	74.00	-20.54	peak
5	16981.7477	37.41	20.43	57.84	74.00	-16.16	peak
		26.95	20.43	47.38	54.00	-6.62	average
6	17624.9531	38.30	18.97	57.27	74.00	-16.73	peak
		28.88	18.97	47.85	54.00	-6.15	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

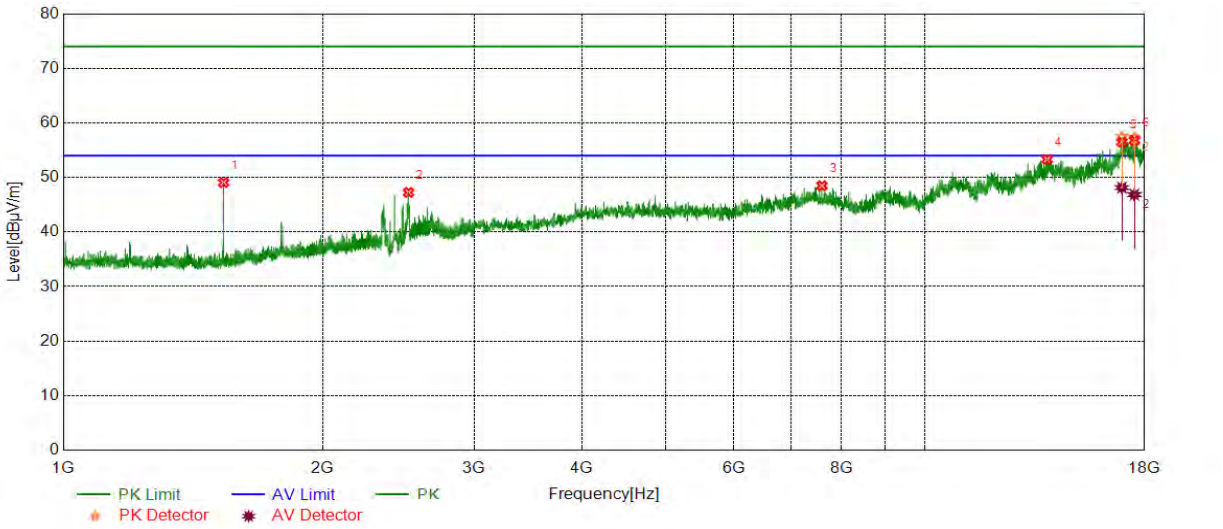
Test Mode	Channel	Polarization	Verdict
11N HT20	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	52.95	-5.68	47.27	74.00	-26.73	peak
2	2426.1783	48.40	-1.15	47.25	74.00	-26.75	peak
3	4822.7278	43.41	4.94	48.35	74.00	-25.65	peak
4	14060.1325	38.41	16.14	54.55	74.00	-19.45	peak
		27.27	16.14	43.41	54.00	-10.59	average
5	17058.6323	35.92	20.51	56.43	74.00	-17.57	peak
		26.00	20.51	46.51	54.00	-7.49	average
6	17639.9550	38.59	19.43	58.02	74.00	-15.98	peak
		28.48	19.43	47.91	54.00	-6.09	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

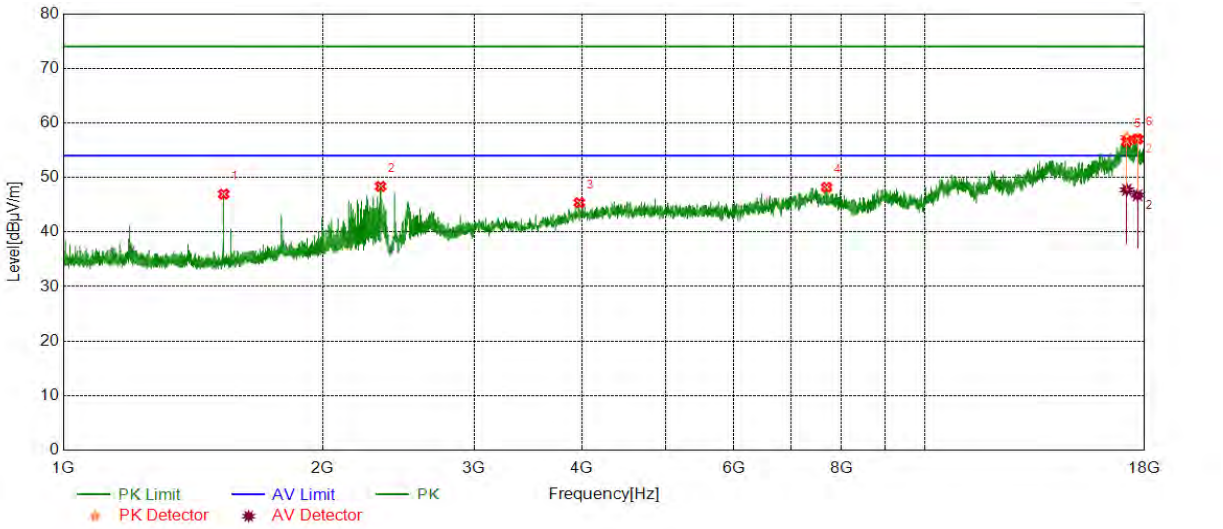
Test Mode	Channel	Polarization	Verdict
11N HT20	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	54.75	-5.69	49.06	74.00	-24.94	peak
2	2517.1896	47.95	-0.70	47.25	74.00	-26.75	peak
3	7598.0748	39.49	8.98	48.47	74.00	-25.53	peak
4	13870.7338	37.25	16.06	53.31	74.00	-20.69	peak
5	16938.6173	37.54	19.94	57.48	74.00	-16.52	peak
		28.19	19.94	48.13	54.00	-5.87	average
6	17516.1895	37.92	19.44	57.36	74.00	-16.64	peak
		27.41	19.44	46.85	54.00	-7.15	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

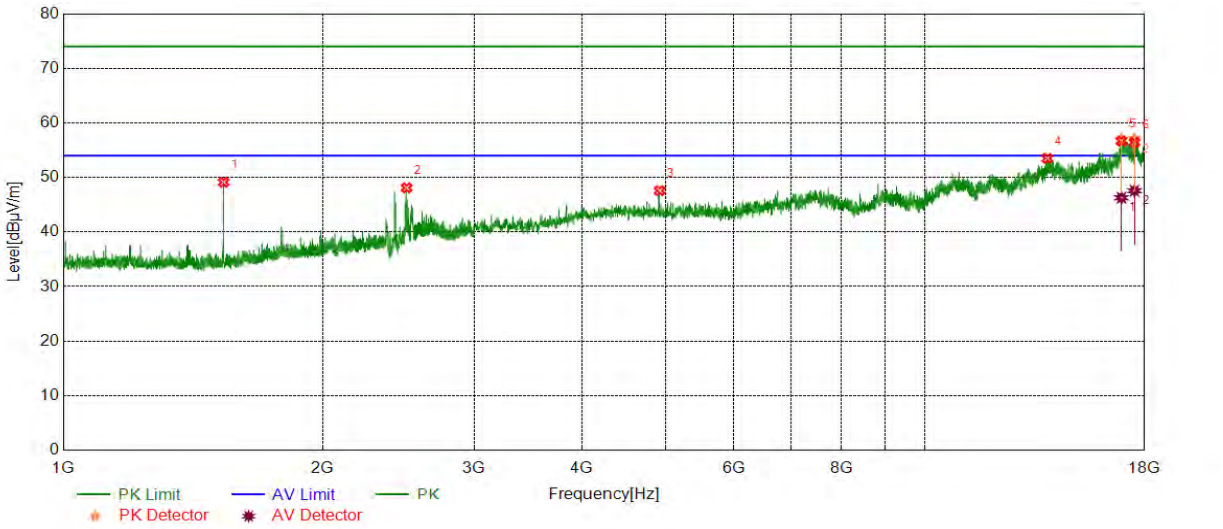
Test Mode	Channel	Polarization	Verdict
11N HT20	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	52.63	-5.68	46.95	74.00	-27.05	peak
2	2335.9170	50.19	-1.82	48.37	74.00	-25.63	peak
3	3973.2467	41.25	4.11	45.36	74.00	-28.64	peak
4	7693.7117	39.47	8.71	48.18	74.00	-25.82	peak
5	17161.7702	37.65	19.69	57.34	74.00	-16.66	peak
		28.04	19.69	47.73	54.00	-6.27	average
6	17666.2083	37.51	19.56	57.07	74.00	-16.93	peak
		27.19	19.56	46.75	54.00	-7.25	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

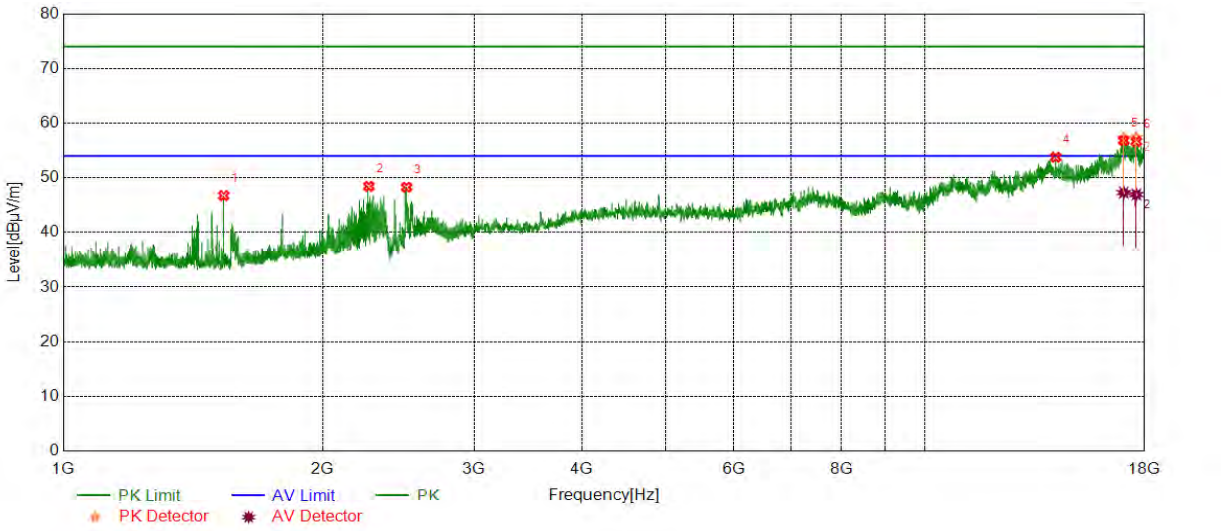
Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	54.81	-5.69	49.12	74.00	-24.88	peak
2	2504.1880	48.67	-0.57	48.10	74.00	-25.90	peak
3	4923.9905	42.36	5.22	47.58	74.00	-26.42	peak
4	13878.2348	37.42	16.08	53.50	74.00	-20.50	peak
5	16917.9897	37.97	19.05	57.02	74.00	-16.98	peak
		27.23	19.05	46.28	54.00	-7.72	average
6	17521.8152	37.44	19.65	57.09	74.00	-16.91	peak
		27.91	19.65	47.56	54.00	-6.44	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

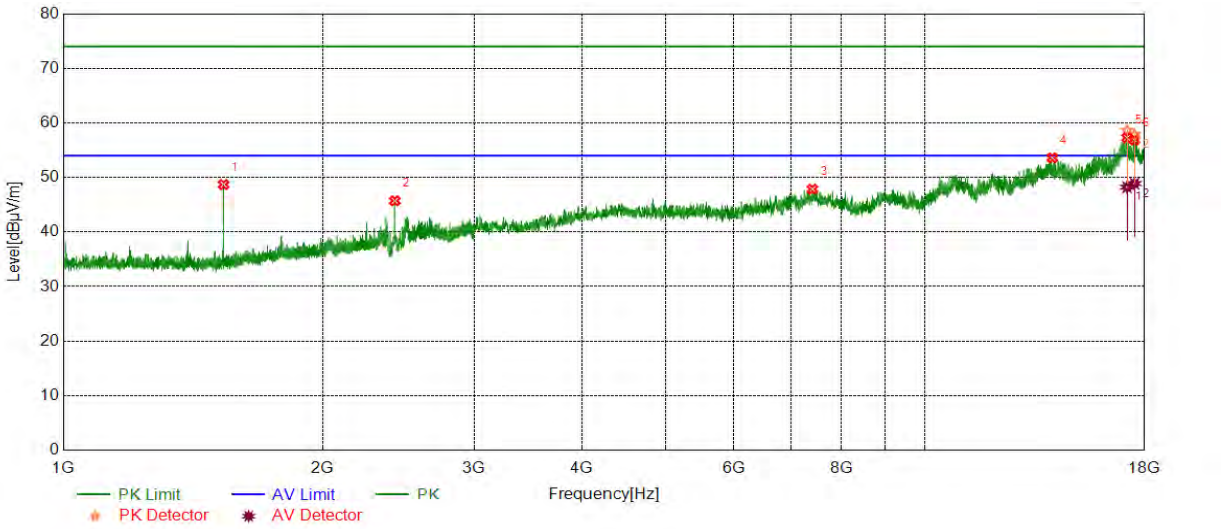
Test Mode	Channel	Polarization	Verdict
11N HT20	HCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	52.41	-5.68	46.73	74.00	-27.27	peak
2	2263.6580	50.63	-2.19	48.44	74.00	-25.56	peak
3	2503.9380	48.86	-0.58	48.28	74.00	-25.72	peak
4	14191.3989	37.68	16.08	53.76	74.00	-20.24	peak
5	17023.0029	37.06	20.18	57.24	74.00	-16.76	peak
		27.11	20.18	47.29	54.00	-6.71	average
6	17606.2008	38.47	18.92	57.39	74.00	-16.61	peak
		28.02	18.92	46.94	54.00	-7.06	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

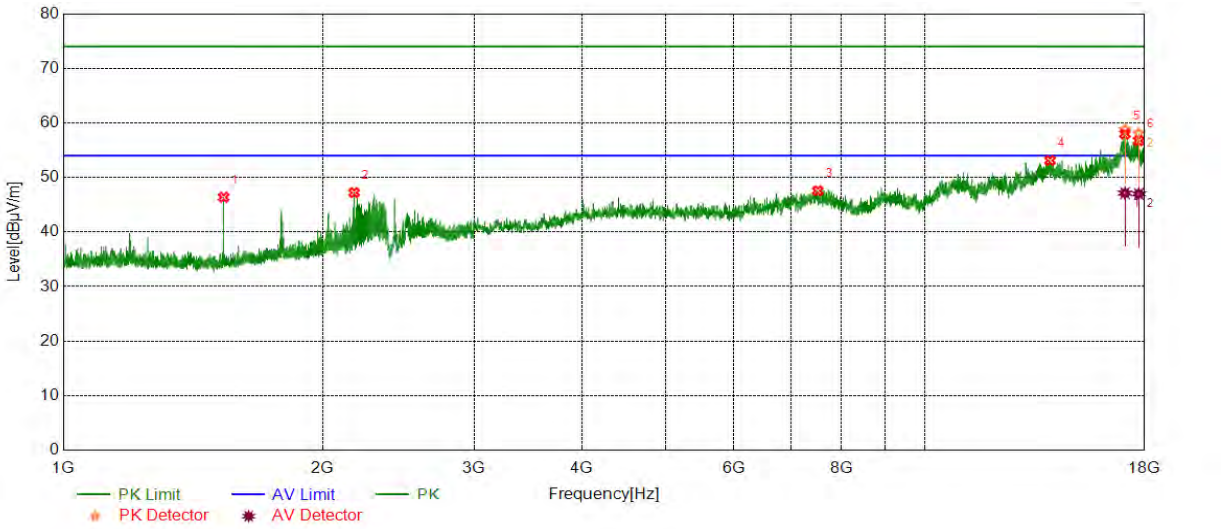
Test Mode	Channel	Polarization	Verdict
11N HT40	LCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	54.39	-5.69	48.70	74.00	-25.30	peak
2	2426.4283	46.87	-1.15	45.72	74.00	-28.28	peak
3	7408.6761	38.44	9.41	47.85	74.00	-26.15	peak
4	14063.8830	37.36	16.24	53.60	74.00	-20.40	peak
5	17173.0216	39.17	19.48	58.65	74.00	-15.35	peak
		28.73	19.48	48.21	54.00	-5.79	average
6	17518.0648	38.18	19.67	57.85	74.00	-16.15	peak
		29.21	19.67	48.88	54.00	-5.12	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

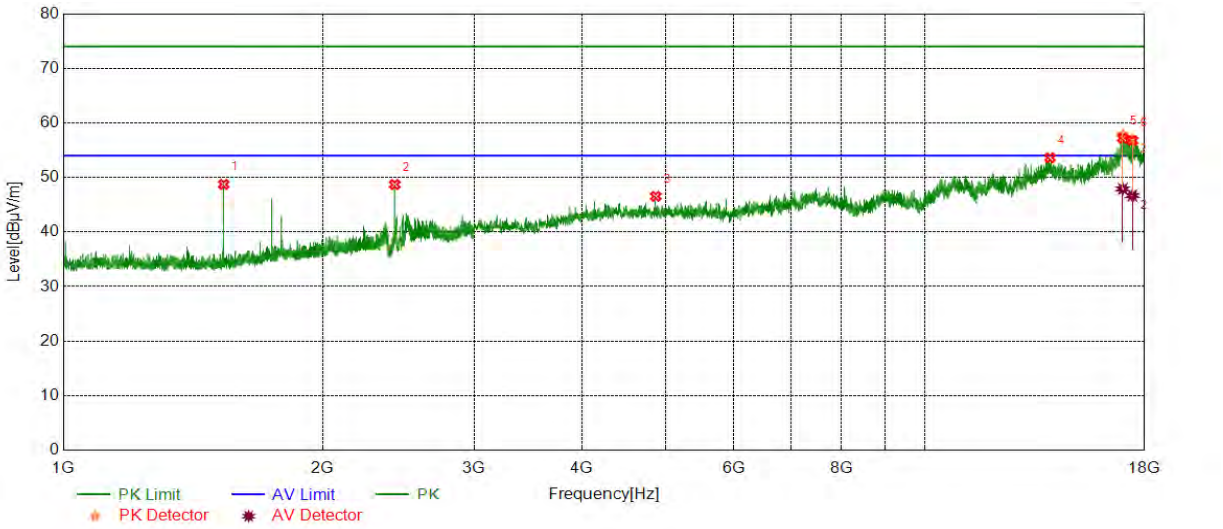
Test Mode	Channel	Polarization	Verdict
11N HT40	LCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	52.05	-5.69	46.36	74.00	-27.64	peak
2	2176.3971	49.58	-2.36	47.22	74.00	-26.78	peak
3	7513.6892	38.46	9.10	47.56	74.00	-26.44	peak
4	13979.4974	36.58	16.52	53.10	74.00	-20.90	peak
5	17077.3847	39.04	19.76	58.80	74.00	-15.20	peak
		27.36	19.76	47.12	54.00	-6.88	average
6	17720.5901	39.47	18.63	58.10	74.00	-15.90	peak
		28.35	18.63	46.98	54.00	-7.02	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

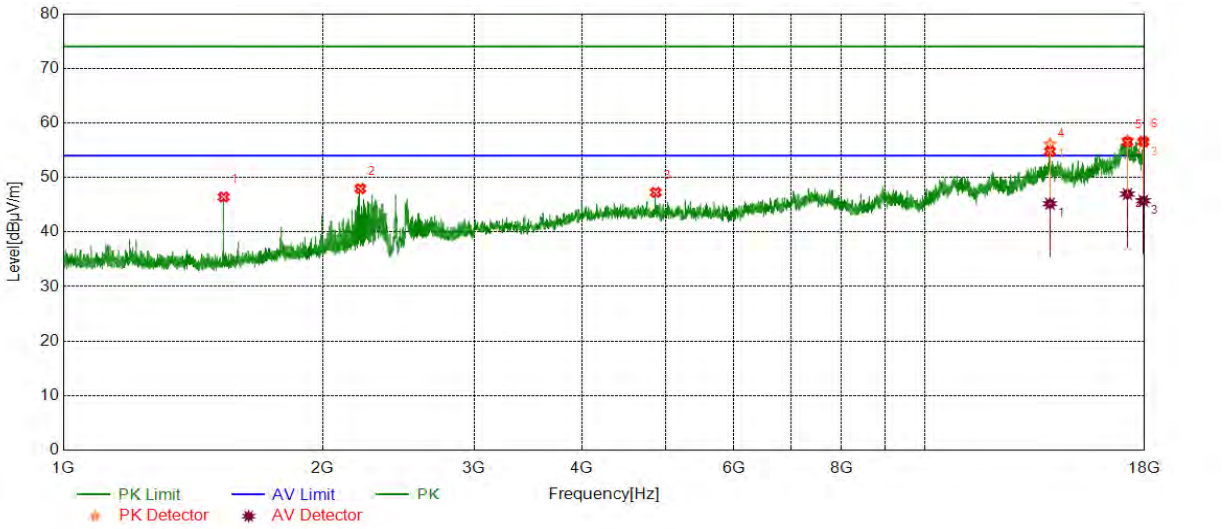
Test Mode	Channel	Polarization	Verdict
11N HT40	MCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	54.41	-5.68	48.73	74.00	-25.27	peak
2	2425.9282	49.86	-1.16	48.70	74.00	-25.30	peak
3	4873.3592	41.33	5.21	46.54	74.00	-27.46	peak
4	13977.6222	37.20	16.40	53.60	74.00	-20.40	peak
5	16977.9973	37.25	20.52	57.77	74.00	-16.23	peak
		27.38	20.52	47.90	54.00	-6.10	average
6	17420.5526	37.48	19.45	56.93	74.00	-17.07	peak
		27.24	19.45	46.69	54.00	-7.31	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

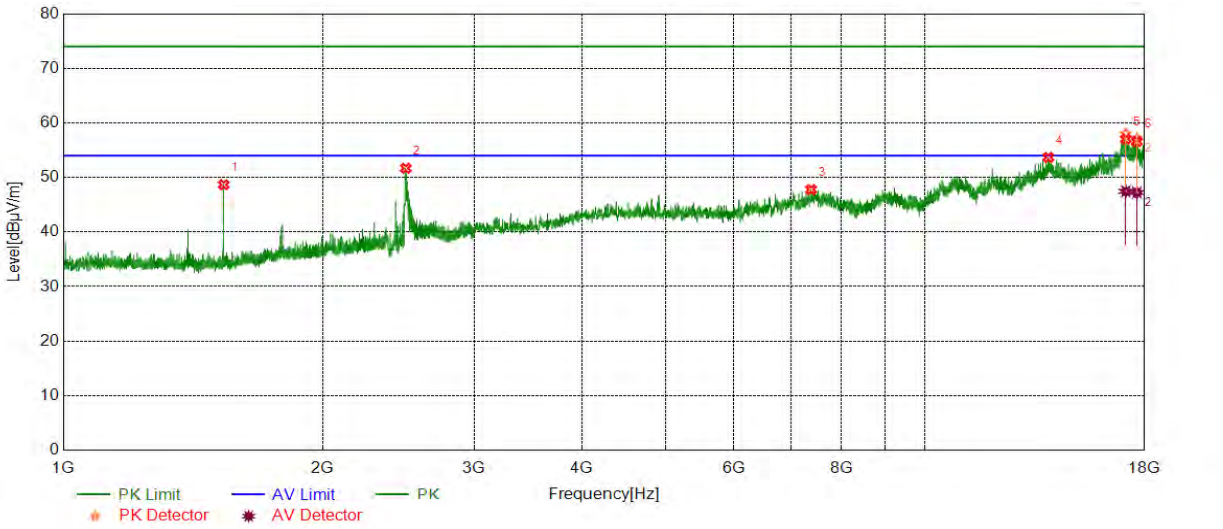
Test Mode	Channel	Polarization	Verdict
11N HT40	MCH	Vertical	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	52.10	-5.69	46.41	74.00	-27.59	peak
2	2212.4016	50.31	-2.37	47.94	74.00	-26.06	peak
3	4873.3592	42.05	5.21	47.26	74.00	-26.74	peak
4	13975.7470	39.88	16.28	56.16	74.00	-17.84	peak
		28.91	16.28	45.19	54.00	-8.81	average
5	17191.7740	37.34	19.43	56.77	74.00	-17.23	peak
		27.52	19.43	46.95	54.00	-7.05	average
6	17939.9925	37.27	19.19	56.46	74.00	-17.54	peak
		26.54	19.19	45.73	54.00	-8.27	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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.

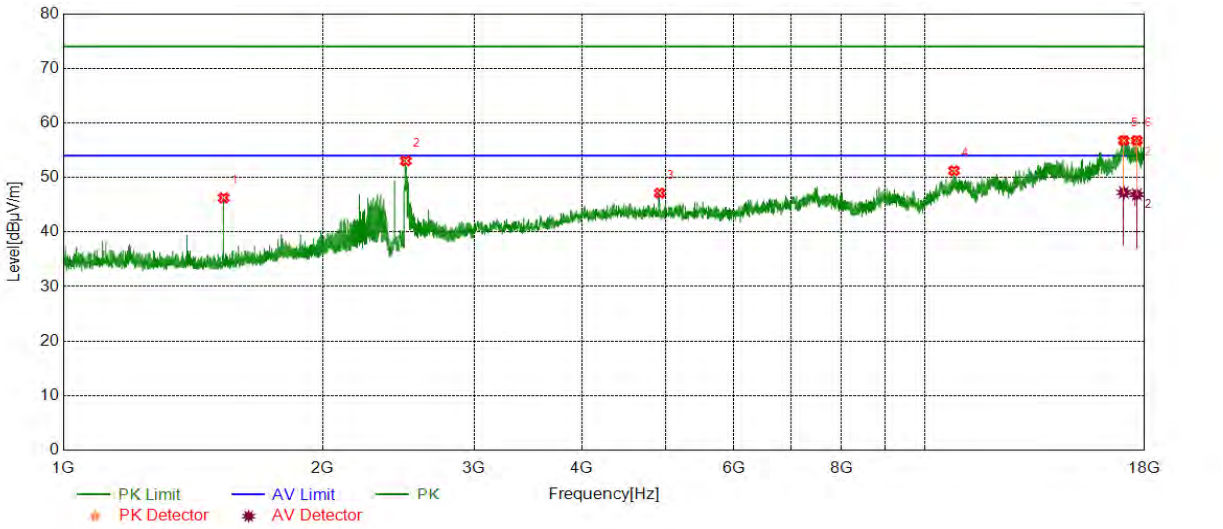
Test Mode	Channel	Polarization	Verdict
11N HT40	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.8170	54.35	-5.68	48.67	74.00	-25.33	peak
2	2498.4373	52.30	-0.62	51.68	74.00	-22.32	peak
3	7380.5476	38.50	9.27	47.77	74.00	-26.23	peak
4	13917.6147	37.67	15.99	53.66	74.00	-20.34	peak
5	17116.7646	38.85	19.18	58.03	74.00	-15.97	peak
		28.27	19.18	47.45	54.00	-6.55	average
6	17634.3293	37.84	19.35	57.19	74.00	-16.81	peak
		27.89	19.35	47.24	54.00	-6.76	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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 HT40	HCH	Vertical	PASS



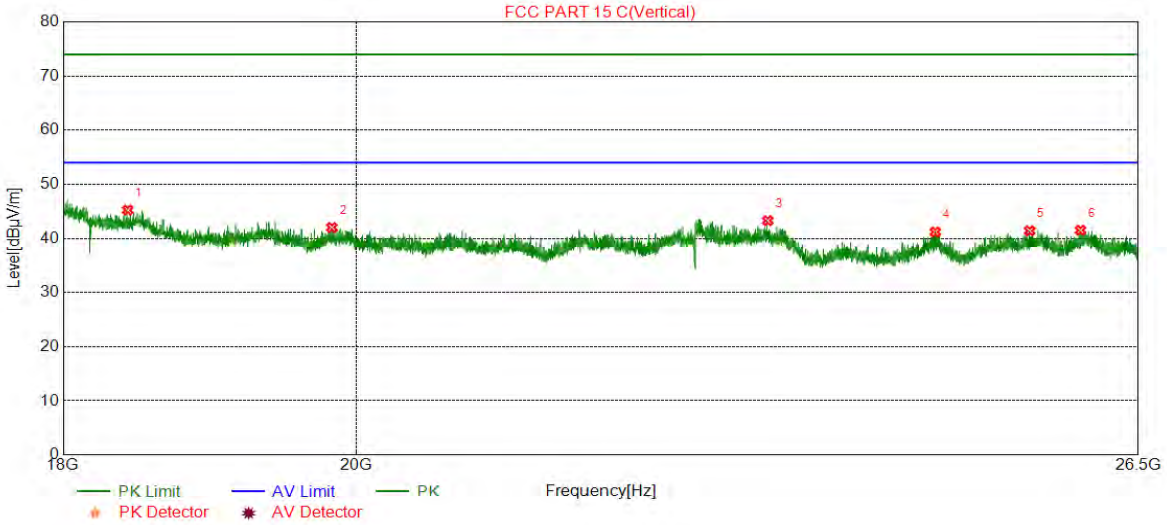
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1535.5669	51.95	-5.69	46.26	74.00	-27.74	peak
2	2498.9374	53.66	-0.62	53.04	74.00	-20.96	peak
3	4923.9905	41.91	5.22	47.13	74.00	-26.87	peak
4	10814.1018	38.44	12.80	51.24	74.00	-22.76	peak
5	17026.7533	36.66	20.20	56.86	74.00	-17.14	peak
		27.05	20.20	47.25	54.00	-6.75	average
6	17632.4541	37.16	19.33	56.49	74.00	-17.51	peak
		27.54	19.33	46.87	54.00	-7.13	average

Note: 1. Measurement = Reading Level + Correct Factor.
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. Confirm that the test have added the BRF losses during the testing. Proper operation of the transmitter prior to adding the filter to the measurement chain. 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 II: 18GHz~26.5GHz

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

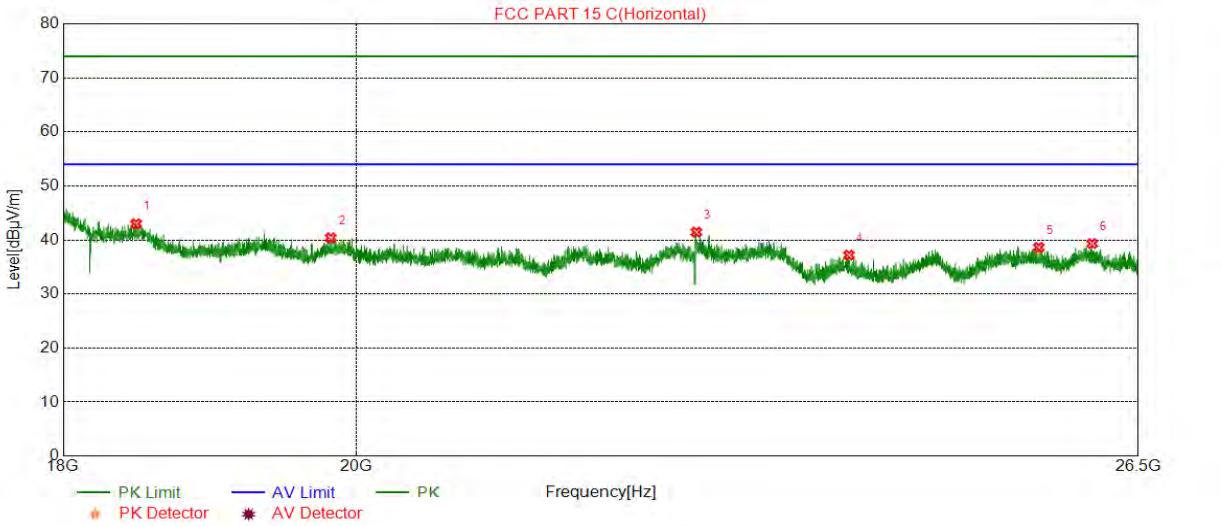
Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18422.4922	46.20	-0.96	45.24	74.00	-28.76	peak
2	19826.8327	42.63	-0.61	42.02	74.00	-31.98	peak
3	23194.0194	42.56	0.72	43.28	74.00	-30.72	peak
4	24635.7636	41.57	-0.39	41.18	74.00	-32.82	peak
5	25486.6987	40.57	0.83	41.40	74.00	-32.60	peak
6	25956.7957	39.92	1.59	41.51	74.00	-32.49	peak

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.
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



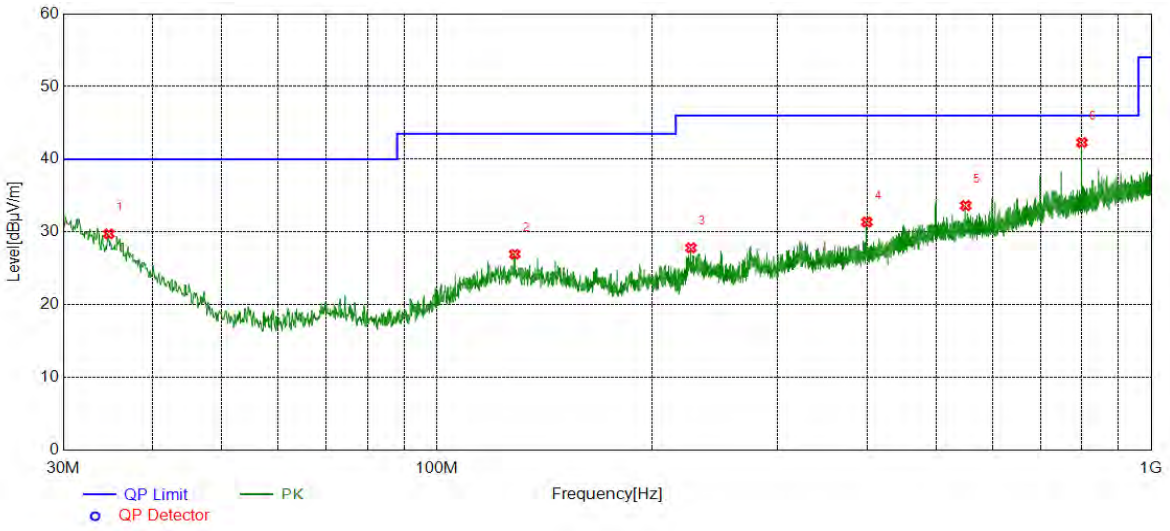
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	18478.5979	43.93	-0.94	42.99	74.00	-31.01	peak
2	19819.1819	40.98	-0.61	40.37	74.00	-33.63	peak
3	22605.7606	40.53	0.92	41.45	74.00	-32.55	peak
4	23881.7382	38.17	-0.98	37.19	74.00	-36.81	peak
5	25570.0070	37.67	0.96	38.63	74.00	-35.37	peak
6	26065.6066	37.77	1.54	39.31	74.00	-34.69	peak

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.
4. Only the worst case emission was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

Part III: 30MHz~1GHz

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

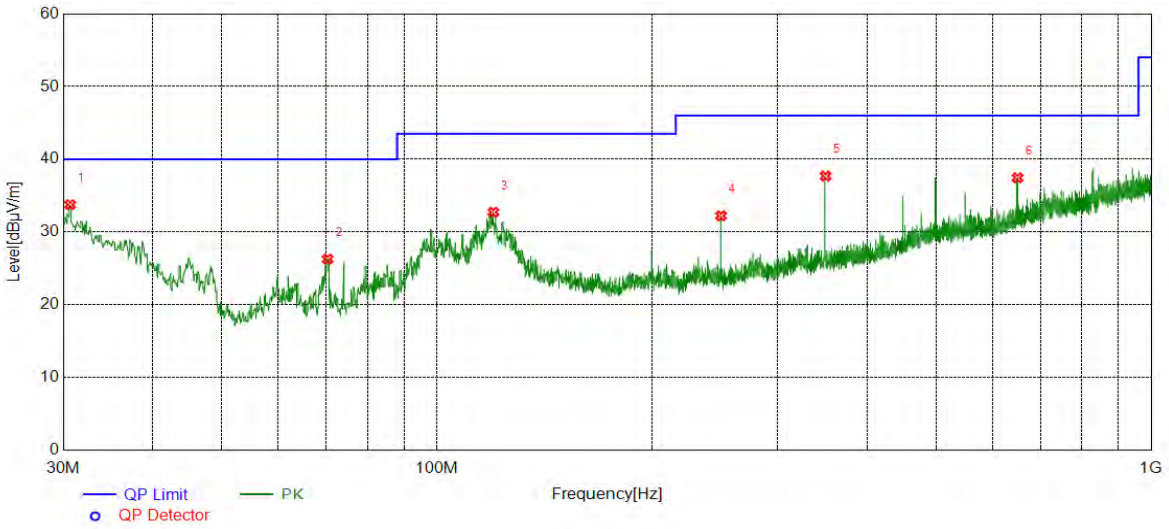
Test Mode	Channel	Polarization	Verdict
11B	HCH	Horizontal	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	34.7535	5.62	24.12	29.74	40.00	-10.26	peak
2	128.5619	6.79	20.17	26.96	43.50	-16.54	peak
3	226.9297	9.81	18.02	27.83	46.00	-18.17	peak
4	399.9950	8.48	22.89	31.37	46.00	-14.63	peak
5	550.0690	7.50	26.13	33.63	46.00	-12.37	peak
6	800.0630	12.52	29.78	42.30	46.00	-3.70	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.

Test Mode	Channel	Polarization	Verdict
11B	HCH	Vertical	PASS



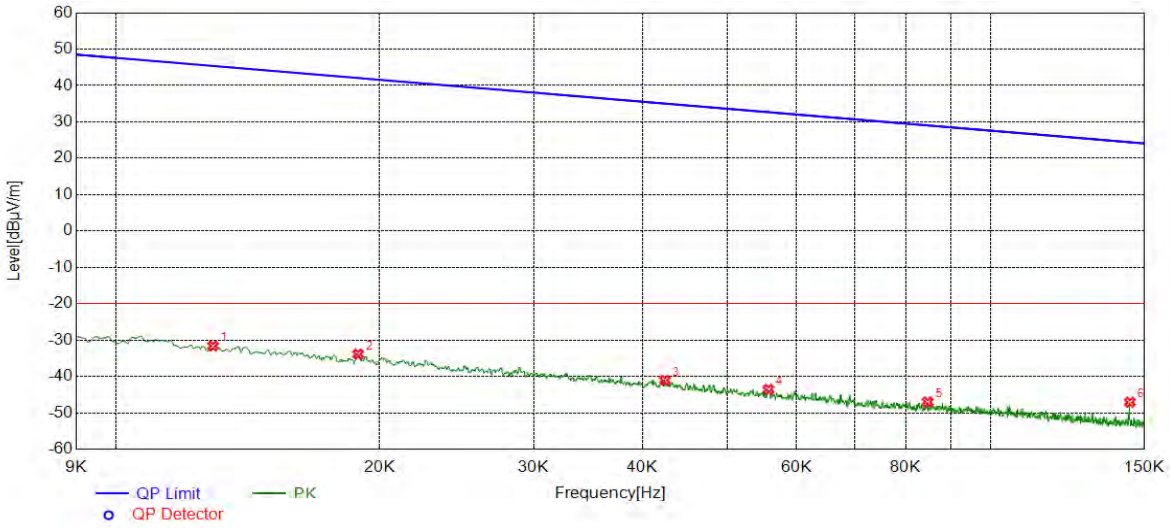
No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	30.6791	7.03	26.72	33.75	40.00	-6.25	peak
2	70.3560	11.54	14.73	26.27	40.00	-13.73	peak
3	120.0250	12.40	20.33	32.73	43.50	-10.77	peak
4	250.0180	13.31	18.92	32.23	46.00	-13.77	peak
5	350.0350	16.03	21.66	37.69	46.00	-8.31	peak
6	650.0860	9.94	27.51	37.45	46.00	-8.55	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.

Part IV: 9KHz~30MHz

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

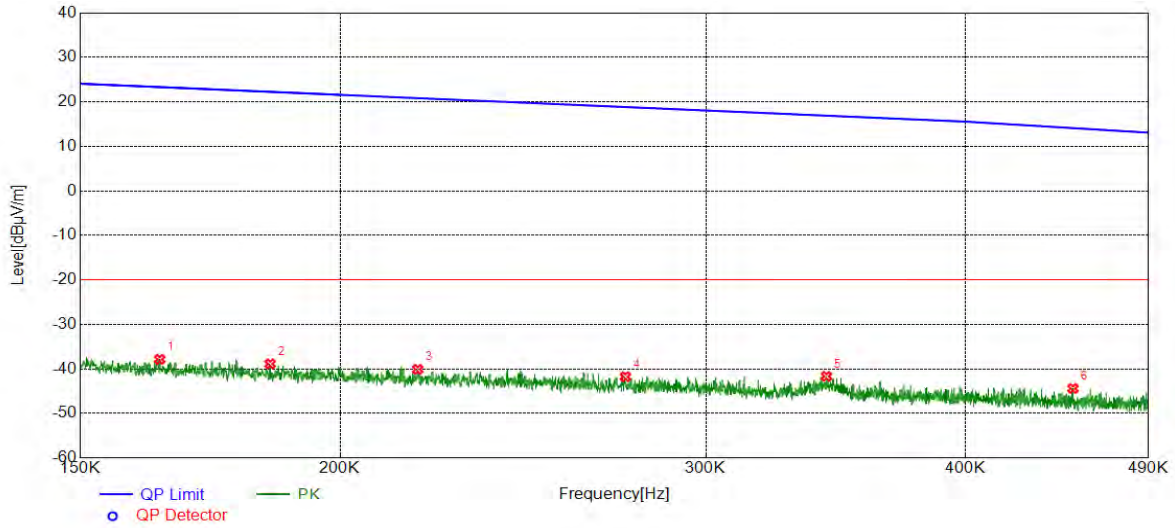
Test Mode	Channel	Frequency Range	Verdict
11B	HCH	9KHz~150KHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.0129	29.53	-61.17	-31.64	45.36	-77.00	peak
2	0.0189	27.12	-60.99	-33.87	42.08	-75.95	peak
3	0.0424	20.07	-61.11	-41.04	35.06	-76.10	peak
4	0.0557	17.68	-61.25	-43.57	32.69	-76.26	peak
5	0.0847	14.27	-61.28	-47.01	29.05	-76.06	peak
6	0.1443	14.29	-61.38	-47.09	24.42	-71.51	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. Result 300m= Result 3m-80 dBuV/m
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
4. 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

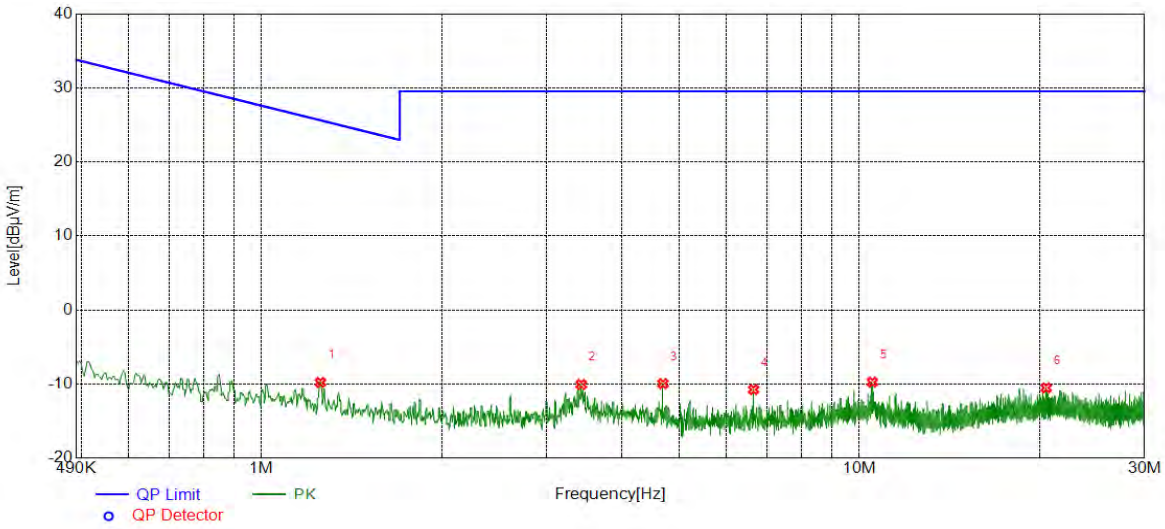
Test Mode	Channel	Frequency Range	Verdict
11B	HCH	150KHz~490KHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	0.1638	23.54	-61.38	-37.84	23.32	-61.16	peak
2	0.1851	22.41	-61.27	-38.86	22.26	-61.12	peak
3	0.2180	21.02	-61.11	-40.09	20.83	-60.92	peak
4	0.2744	19.17	-60.92	-41.75	18.83	-60.58	peak
5	0.3429	19.20	-60.86	-41.66	16.90	-58.56	peak
6	0.4506	16.39	-60.77	-44.38	14.10	-58.48	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. Result 300m= Result 3m-80 dBuV/m
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
4. 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	HCH	490KHz~30MHz	PASS



No.	Frequency	Reading Level	Correct Factor	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
1	1.2544	10.67	-20.45	-9.78	25.64	-35.42	peak
2	3.4265	10.35	-20.41	-10.06	29.54	-39.60	peak
3	4.6926	10.37	-20.31	-9.94	29.54	-39.48	peak
4	6.6523	9.16	-19.91	-10.75	29.54	-40.29	peak
5	10.5096	9.28	-19.02	-9.74	29.54	-39.28	peak
6	20.5381	7.00	-17.51	-10.51	29.54	-40.05	peak

Note: 1. Measurement = Reading Level + Correct Factor.
2. Result 30m= Result 3m-40 dBuV/m
3. If Peak Result complies with AV and QP limit, AV and QP Result are deemed to comply with AV limit.
4. 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

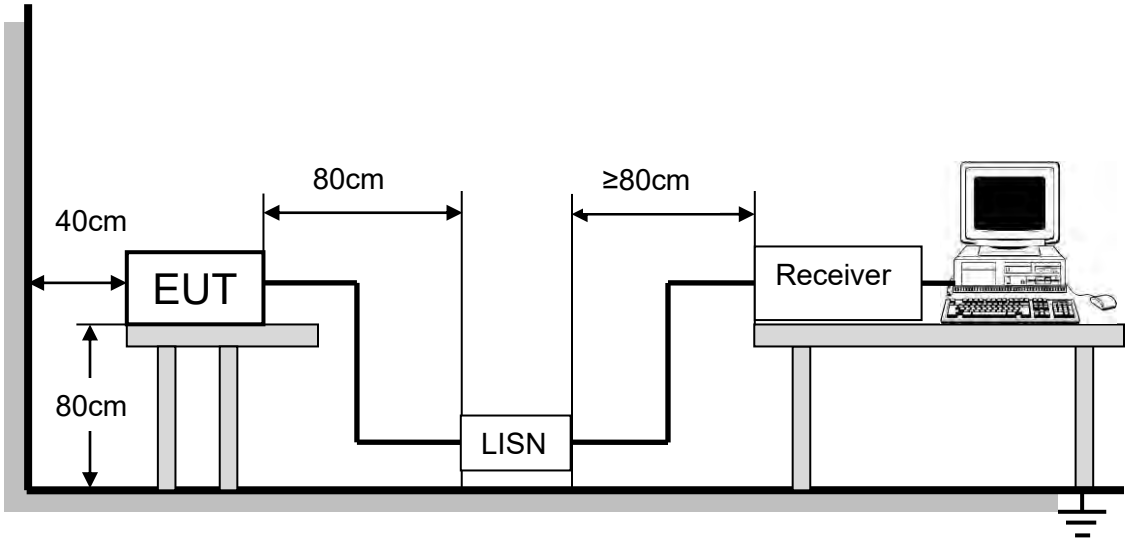
8. AC POWER LINE CONDUCTED EMISSIONS

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 SETUP AND PROCEDURE

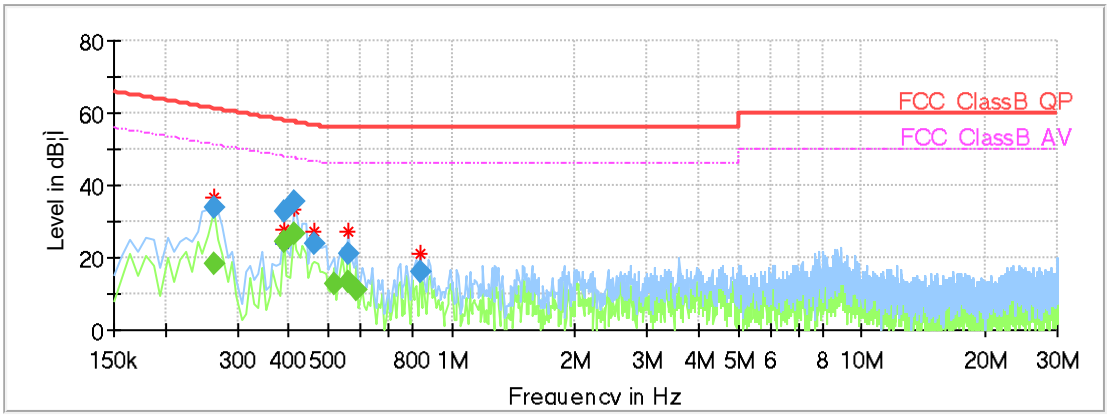


The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) 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.

TEST RESULTS (WORST CASE CONFIGURATION)

For L Line:

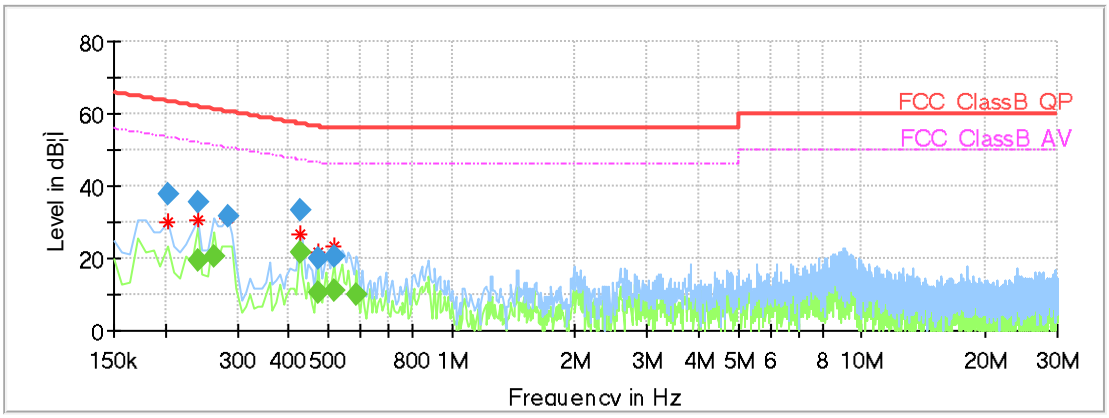


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.261938	---	18.41	51.37	32.96	1000.0	9.000	L1	OFF	9.5
0.261938	33.76	---	61.37	27.61	1000.0	9.000	L1	OFF	9.5
0.388800	---	24.18	48.09	23.91	1000.0	9.000	L1	OFF	9.7
0.388800	32.74	---	58.09	25.35	1000.0	9.000	L1	OFF	9.7
0.411188	---	26.91	47.62	20.72	1000.0	9.000	L1	OFF	9.7
0.411188	35.37	---	57.62	22.26	1000.0	9.000	L1	OFF	9.7
0.463425	23.69	---	56.63	32.95	1000.0	9.000	L1	OFF	9.7
0.515663	---	12.72	46.00	33.28	1000.0	9.000	L1	OFF	9.7
0.560438	21.35	---	56.00	34.65	1000.0	9.000	L1	OFF	9.7
0.560438	---	13.36	46.00	32.64	1000.0	9.000	L1	OFF	9.7
0.582825	---	10.92	46.00	35.08	1000.0	9.000	L1	OFF	9.7
0.836550	15.93	---	56.00	40.07	1000.0	9.000	L1	OFF	9.6

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 HCH of 11N40 MOMO which is the worst case, so only the worst case is included in this test report.

For N Line:



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.202238	37.67	---	63.52	25.85	1000.0	9.000	N	OFF	9.6
0.239550	---	19.52	52.11	32.59	1000.0	9.000	N	OFF	9.6
0.239550	35.46	---	62.11	26.65	1000.0	9.000	N	OFF	9.6
0.261938	---	20.35	51.37	31.02	1000.0	9.000	N	OFF	9.6
0.284325	31.41	---	60.69	29.28	1000.0	9.000	N	OFF	9.6
0.426113	---	21.74	47.33	25.59	1000.0	9.000	N	OFF	9.6
0.426113	33.47	---	57.33	23.86	1000.0	9.000	N	OFF	9.6
0.470888	---	10.29	46.50	36.21	1000.0	9.000	N	OFF	9.6
0.470888	19.85	---	56.50	36.65	1000.0	9.000	N	OFF	9.6
0.515663	---	11.30	46.00	34.71	1000.0	9.000	N	OFF	9.6
0.515663	20.35	---	56.00	35.65	1000.0	9.000	N	OFF	9.6
0.582825	---	10.19	46.00	35.81	1000.0	9.000	N	OFF	9.6

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 HCH of 11N40 MOMO which is the worst case, so only the worst case is included in this test report.

9. 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