



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

CERTIFICATION TEST REPORT

For

Smart Cordless Vacuum & Washer

MODEL NUMBER: FW007600US

ADDITIONAL MODEL NUMBER: FW007700US

PROJECT NUMBER: 4790446988

REPORT NUMBER: 4790446988-2

FCC ID: 2AV7A-FL3

IC: 26039-FL3

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Prepared for

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	07/23/2022	Initial Issue	



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1. ATTESTATION OF TEST RESULTS

Company Name:	Tineco Intelligent Technology Co., Ltd.
Address:	NO 108 SHI HU RD (W) WU ZHONG ZONE SUZHOU JIANGSU 215128, CHINA.
Factory Information	
Company Name:	Tineco Intelligent Technology Co., Ltd.
Address:	NO 108 SHI HU RD (W) WU ZHONG ZONE SUZHOU JIANGSU 215128, CHINA.
EUT Description	
Product Name:	Smart Cordless Vacuum & Washer
Model Number:	FW007600US
Additional Model Number:	FW007700US
Model Difference	Model FW007700US is the same as Model FW007600US except for an extra brush roller and a bottle of cleaning solution(all of them are plastic material), no difference about electromagnetic part.
Sample Number:	5054235
Data of Receipt Sample:	Jun.15, 2022
Date Tested:	Jun.15, 2022 – Jul. 22, 2022

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



Summary of Test Results			
Clause	Test Items	FCC Rules	Test Results
1	6db DTS Bandwidth and 99% Bandwidth	FCC 15.247 (a) (2) RSS-247 Clause 5.2 (a) RSS-Gen Clause 6.7	Complied
2	Conducted Power	FCC 15.247 (b) (3) RSS-247 Clause 5.4 (d) RSS-Gen Clause 6.12	Complied
3	Power Spectral Density	FCC 15.247 (e) RSS-247 Clause 5.2 (b)	Complied
4	Conducted Band edge And Spurious emission	FCC 15.247 (d) RSS-247 Clause 5.5 RSS-GEN Clause 6.13	Complied
5	Radiated Band edges and Spurious emission	FCC 15.247 (d) FCC 15.209 FCC 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9 RSS-GEN Clause 6.13	Complied
6	Conducted Emission Test For AC Power Port	FCC 15.207 RSS-GEN Clause 8.8	Complied
7	Antenna Requirement	FCC 15.203 RSS-GEN Clause 6.8	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, ISSED RSS-GEN, ISSED RSS-247> when <Accuracy Method> decision rule is applied.			

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Chris Zhong
Laboratory Leader



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, ISED RSS-GEN ISSUE5, ISED RSS-247 ISSUE2.

3. FACILITIES AND ACCREDITATION

Test Location	UL-CCIC Company Limited, EMC&RF Lab
Address	No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122 ,China
Accreditation Certificate	A2LA (Certificate No.: 4829.01) UL-CCIC COMPANY LIMITED has been assessed and proved to be in compliance with A2LA. FCC (FCC Designation No.: CN1247) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules. IC (IC Designation No.: 25056; CAB No.:CN0073) UL-CCIC COMPANY LIMITED has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules.

Note 1: All tests measurement facilities use to collect the measurement data are located at No. 2, Chengwan Road, Suzhou Industrial Park, Suzhou 215122, People's Republic of China

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

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



4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. MEASUREMENT UNCERTAINTY

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

Test Item	Uncertainty
Conduction emission	3.1dB
Radiation Emission test(include Fundamental emission) (9KHz-30MHz)	3.4dB
Radiation Emission test(include Fundamental emission) (30MHz-1GHz)	3.4dB
Radiation Emission test (1GHz to 26GHz)(include Fundamental emission)	3.7dB (1GHz-18Gz)
	4.0dB (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:	Smart Cordless Vacuum & Washer
Model No.:	FW007600US
Operating Frequency:	IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz
Type of Modulation:	IEEE for 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE for 802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE for 802.11n HT20: OFDM (64QAM, 16QAM, QPSK, BPSK)
Channels Step:	Channels with 5MHz step
Test software of EUT:	EspRFtestTool_2.0 (manufacturer declare)
Antenna Type:	PCB antenna
Antenna Gain:	2dBi Remark: This data is provided by customer and our lab isn't responsible for this data
Test Voltage	AC120V



5.2. MAXIMUM OUTPUT POWER

Number of Transmit Chains (NTX)	IEE Std. 802.11	Channel Number	Max AV Conducted Power (dBm)
1	IEEE 802.11B SISO	1-11[11]	8.06
1	IEEE 802.11G SISO	1-11[11]	7.60
1	IEEE 802.11nHT20	1-11[11]	7.56

5.3. CHANNEL LIST

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



5.4. TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
WiFi TX(802.11b)	CH 1, CH 6, CH 11	2412MHz, 2437MHz, 2462MHz
WiFi TX(802.11g)	CH 1, CH 6, CH 11	2412MHz, 2437MHz, 2462MHz
WiFi TX(802.11n HT20)	CH 1, CH 6, CH 11	2412MHz, 2437MHz, 2462MHz

5.5. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		EspRFtestTool					
Modulation Mode	Transmit Antenna Number	Test Channel					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11b	1	28	28	28	/		
802.11g	1	28	28	28			
802.11n HT20	1	28	28	28			

Remark: The value list above is the setting of att in the software.



5.6. DESCRIPTION OF AVAILABLE ANTENNAS

Ant.	Frequency (MHz)	Antenna Type	Antenna Gain (dBi)
1	2400-2483.5	PCB antenna	2

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	<input checked="" type="checkbox"/> 1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.
IEEE 802.11g	<input checked="" type="checkbox"/> 1TX, 1RX	Antenna1 can be used as transmitting/receiving antenna independently.
IEEE 802.11N (HT20)	<input checked="" type="checkbox"/> 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



5.8. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Description
1	Laptop	ThinkPad	E590	N/A
2	Fixed Frequency Board	N/A	N/A	Supply by Customer
3	USB Cable	N/A	N/A	Supply by UL Lab(100cm length)

I/O PORT

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	N/A	N/A	N/A	N/A	N/A

ACCESSORY

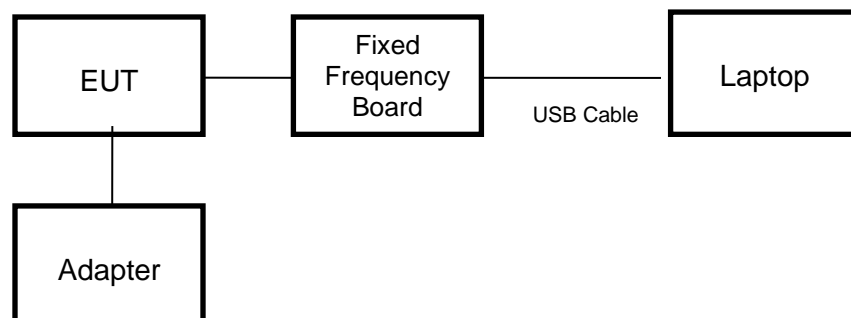
Item	Accessory	Brand Name	Model Name	Description
1	AC/DC ADAPTOR	TINECO	YLS0241A-T260080	INPUT:AC100-240V, 50/60Hz, 0.8A OUTPUT: DC26.0V, 0.8A
2	AC/DC ADAPTOR	TINECO	KL-WA260080-A3	INPUT:AC100-240V, 50/60Hz, 1.2A OUTPUT: DC26.0V, 0.8A

Remark: Pre-testing both models of the adapters, and find the model: KL-WA260080-A3 which is worse, so only the data of worse model: KL-WA260080-A3 is included in this report.

TEST SETUP

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

SETUP DIAGRAM FOR TESTS



**5.9. MEASURING INSTRUMENT AND SOFTWARE USED**

Conducted Emissions (Instrument)							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	EMI Test Receiver	R&S	ESR3	126700	2020-12-05	2021-12-04	2022-12-03
<input checked="" type="checkbox"/>	Two-Line V- Network	R&S	ENV216	126701	2020-12-05	2021-12-04	2022-12-03
Software							
Used	Description		Manufacturer		Name	Version	
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9010B	155727	2021-05-09	2022-04-09	2023-04-08
<input checked="" type="checkbox"/>	EMI test receiver	R&S	ESR26	126703	2020-12-05	2021-12-04	2022-12-03
<input checked="" type="checkbox"/>	Receiver Antenna (9kHz-30MHz)	Schwarzbeck	FMZB 1513	155456	2018-06-15	2021-06-03	2024-06-02
<input checked="" type="checkbox"/>	Receiver Antenna (30MHz-1GHz)	SunAR RF Motion	JB1	177821	2019-01-28	2022-01-18	2025-01-17
<input checked="" type="checkbox"/>	Receiver Antenna (1GHz-18GHz)	R&S	HF907	126705	2018-01-29	2022-02-28	2025-02-27
<input checked="" type="checkbox"/>	Receiver Antenna (18GHz-26.5GHz)	ETS	3160-10	155565	2019-01-05	2021-07-15	2024-07-14
<input checked="" type="checkbox"/>	Pre-amplification (To 18GHz)	Compliance Direction System Inc.	PAP-1G18- 50	177825	2021-03-18	2022-03-01	2023-02-28
<input checked="" type="checkbox"/>	Pre-amplification (To 26.5GHz)	R&S	SCU-26D	135391	2021-12-05	2022-12-04	2022-12-03
<input checked="" type="checkbox"/>	Band Reject Filter	Wainwright	WRCJV8- 2350-2400- 2483.5- 2533.5-40SS	1	2021-05-09	2022-04-09	2023-04-08
<input checked="" type="checkbox"/>	Highpass Filter	Wainwright	WHKX10- 2700-3000- 18000-40SS	2	2021-05-09	2022-04-09	2023-04-08
Software							
Used	Description		Manufacturer	Name		Version	
<input checked="" type="checkbox"/>	Test Software for Radiated disturbance		Tonscend	JS36-RSE		4.0.0.1	
Other instruments							
Used	Equipment	Manufacturer	Model No.	Serial No.	Upper Last Cal.	Last Cal.	Next Cal.
<input checked="" type="checkbox"/>	Spectrum Analyzer	Keysight	N9010B	155368	2021-05-09	2022-04-09	2023-04-08
<input checked="" type="checkbox"/>	Power Meter	Keysight	U2021XA	155370	2021-05-09	2022-04-09	2023-04-08



6. MEASUREMENT METHODS

No.	Test Item	KDB Name	Section
1	6dB Bandwidth and 99% Bandwidth	KDB 558074 D01 15.247 Meas Guidance v05r02	8.2
2	Conducted Output Power	KDB 558074 D01 15.247 Meas Guidance v05r02	8.3.2.3 (Method AVGPM)
3	Power Spectral Density	KDB 558074 D01 15.247 Meas Guidance v05r02	8.4 (Method PKPSD)
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. TEST ENVIRONMENT

Environment Parameter	Selected Values During Tests
Relative Humidity	55.3%
Atmospheric Pressure:	100.5kPa
Temperature	24.0°C



7.2. ON TIME AND DUTY CYCLE

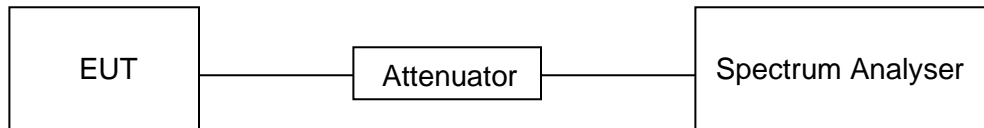
LIMITS

None; for reporting purposes only

PROCEDURE

FCC KDB 558074 Zero-Span Spectrum Analyzer Method

TEST SETUP



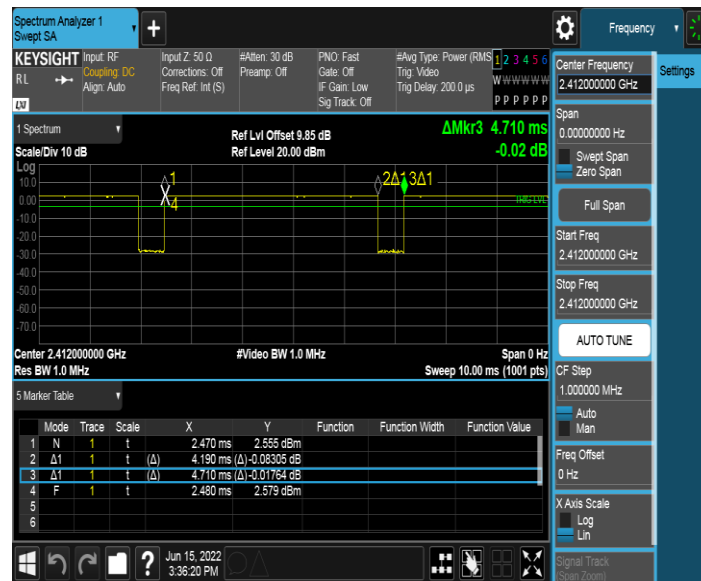
RESULTS

Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (db)	1/T Minimum VBW (KHz)	Final Minimum VBW (KHz)
11B	4.19	4.71	0.890	89.0	0.51	0.24	1
11G	0.69	0.79	0.873	87.3	0.59	1.45	2
11N HT20	0.65	0.76	0.855	85.5	0.68	1.54	2

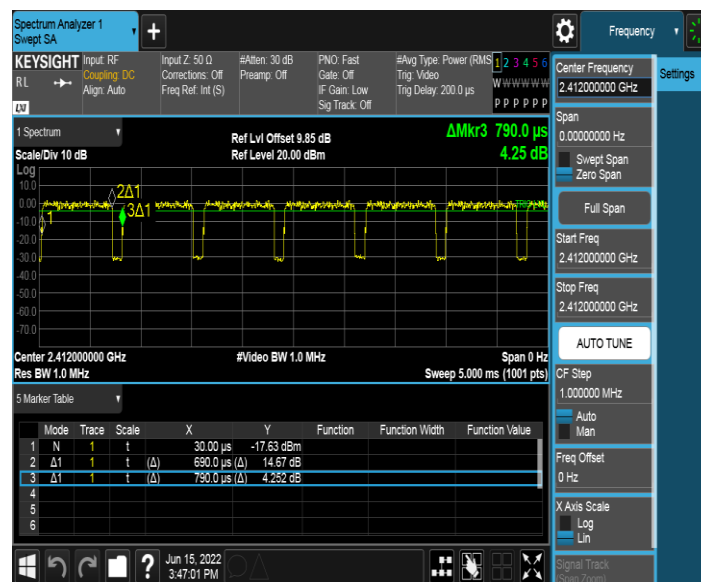
Note: 1) Duty Cycle Correction Factor= $10\log(1/x)$.
2) Where: x is Duty Cycle(Linear)
3) Where: T is On Time (transmit duration)



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

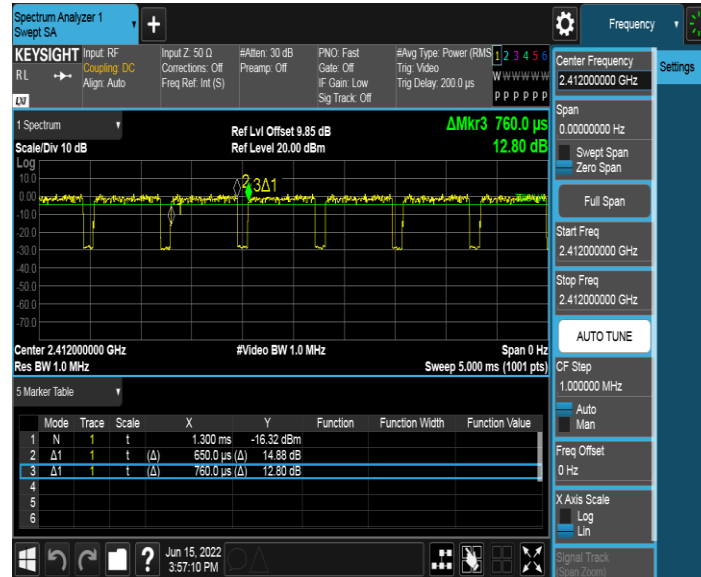


11G ON TIME AND DUTY CYCLE MID CH (WORSE CASE)





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





7.3. 6 dB BANDWIDTH AND 99% BANDWIDTH

LIMITS

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

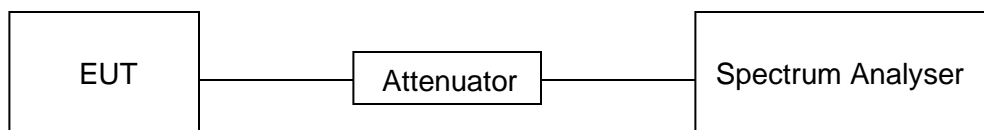
TEST PROCEDURE

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

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	For 6dB Bandwidth :100K For 99% Occupied Bandwidth :1% to 5% of the occupied bandwidth
VBW	For 6dB Bandwidth : $\geq 3 \times \text{RBW}$ For 99% Occupied Bandwidth : approximately $3 \times \text{RBW}$
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.

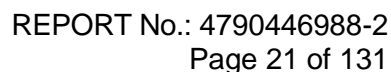
TEST SETUP





RESULTS

Test Mode	Test Channel	6dB bandwidth (MHz)	99% bandwidth (MHz)	Result
11B	LCH	8.560	11.054	Pass
	MCH	8.080	10.957	Pass
	HCH	8.560	11.039	Pass
11G	LCH	16.320	16.752	Pass
	MCH	16.280	16.735	Pass
	HCH	16.280	16.713	Pass
11N HT20	LCH	16.960	17.654	Pass
	MCH	16.600	17.584	Pass
	HCH	16.680	17.659	Pass



Test Mode	Test Channel	Verdict
11B	LCH	PASS

The screenshot displays a Spectrum Analyzer interface with the following details:

- Top Panel:**
 - Buttons: Spectrum Analyzer 1, Sweep SA, +
 - Settings: Frequency, Settings
- Input/Settings Panel:**
 - Input: RF, Coupling: DC, Align: Auto
 - Input Z: 50 Ω , Corrections: Off, Freq Ref: Int (S)
 - #Atten: 30 dB, Preamp: Off
 - PN0: Fast, Gate: Off, IF Gain: Low, Sig Track: Off
 - #Avg Type: Power (RMS), Avg/Hold: 200/200, Trig: Free Run
 - Center Frequency: 2.41200000 GHz
- Marker Table:**

Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	f	2.407 48 GHz	-6.019 dBm			
2	N	f	2.413 48 GHz	-0.5604 dBm			
3	Δ 1	f	8.56 MHz (Δ)				0.1435 dB
4							
5							
6							
- Bottom Panel:**
 - Center: 2.41200 GHz, #Video BW: 300 kHz, Span: 40.00 MHz, #Res BW: 100 kHz, Sweep: 3.87 ms (1001 pts)
 - 6 Marker Table
 - Windows and navigation icons at the bottom.

Test Mode	Test Channel	Verdict
11B	MCH	PASS

Spectrum Analyzer 1
Sweep SA

KEYSIGHT Input: RF
Coupling: DC
Align: Auto

Input Z: 50 Ω
Corrections: Off
Freq Ref: Int (S)

#Atten: 30 dB
Preamp: Off

PNO: Fast
Gate: Off
IF Gain: Low
Sig Track: Off

#Avg Type: Power (RMS)
Avg/Hold: 200/200
Trig: Free Run

Center Frequency: 2.437000000 GHz

Span: 40.000000 MHz

Start Freq: 2.417000000 GHz

Stop Freq: 2.457000000 GHz

AUTO TUNE

CF Step: 4.000000 MHz

Auto Man

Freq Offset: 0 Hz

X Axis Scale: Log Lin

Signal Track (Span Zoom)

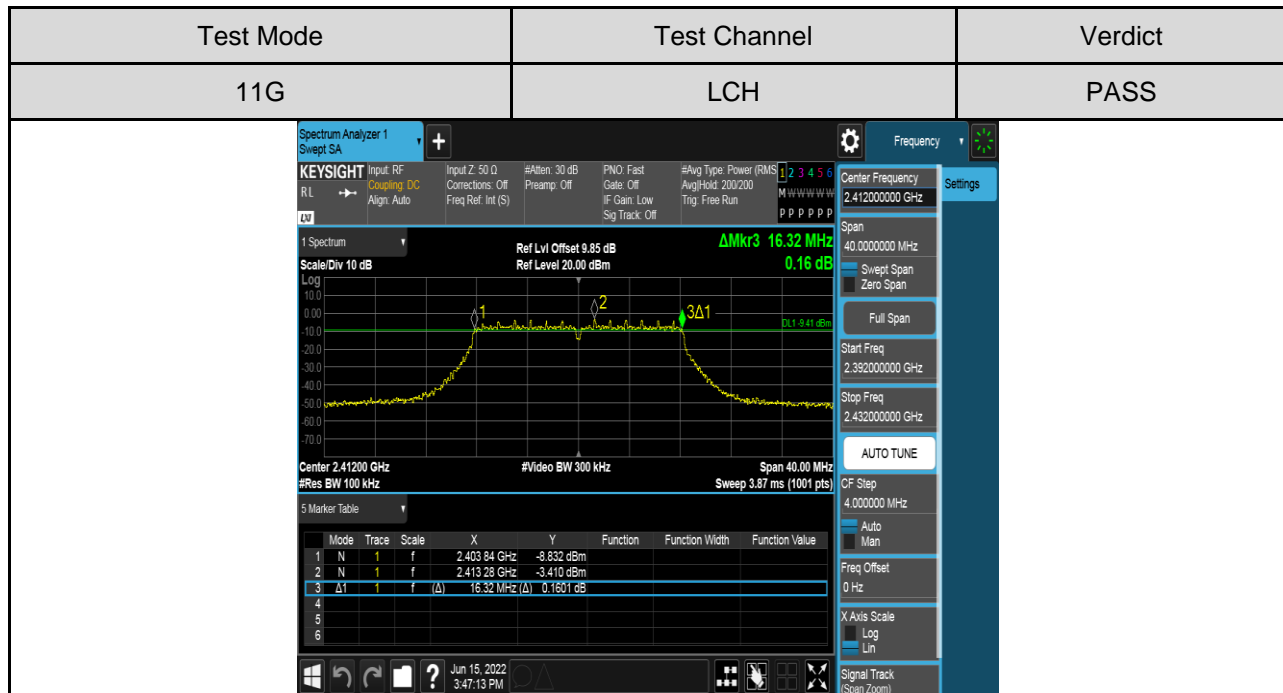
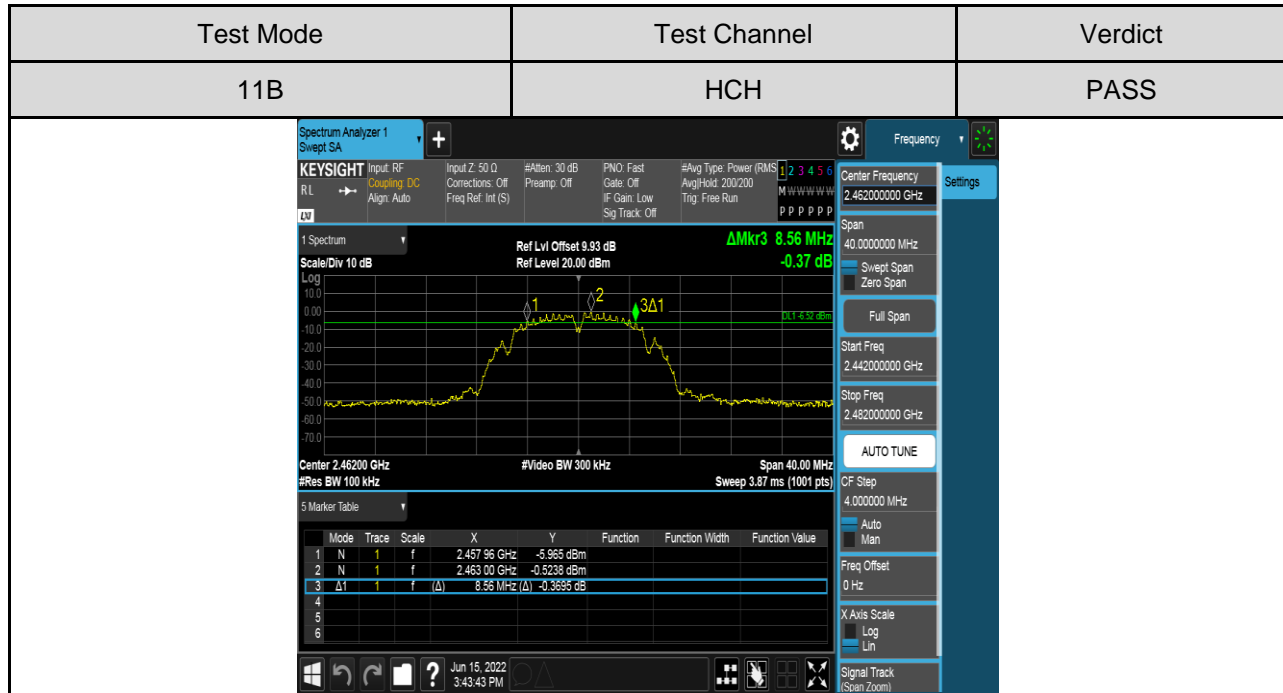
1 Spectrum
Scale/Div 10 dB
Log
Ref Lvl Offset 9.93 dB
Ref Level 20.00 dBm
ΔMkr3 8.08 MHz
0.26 dB

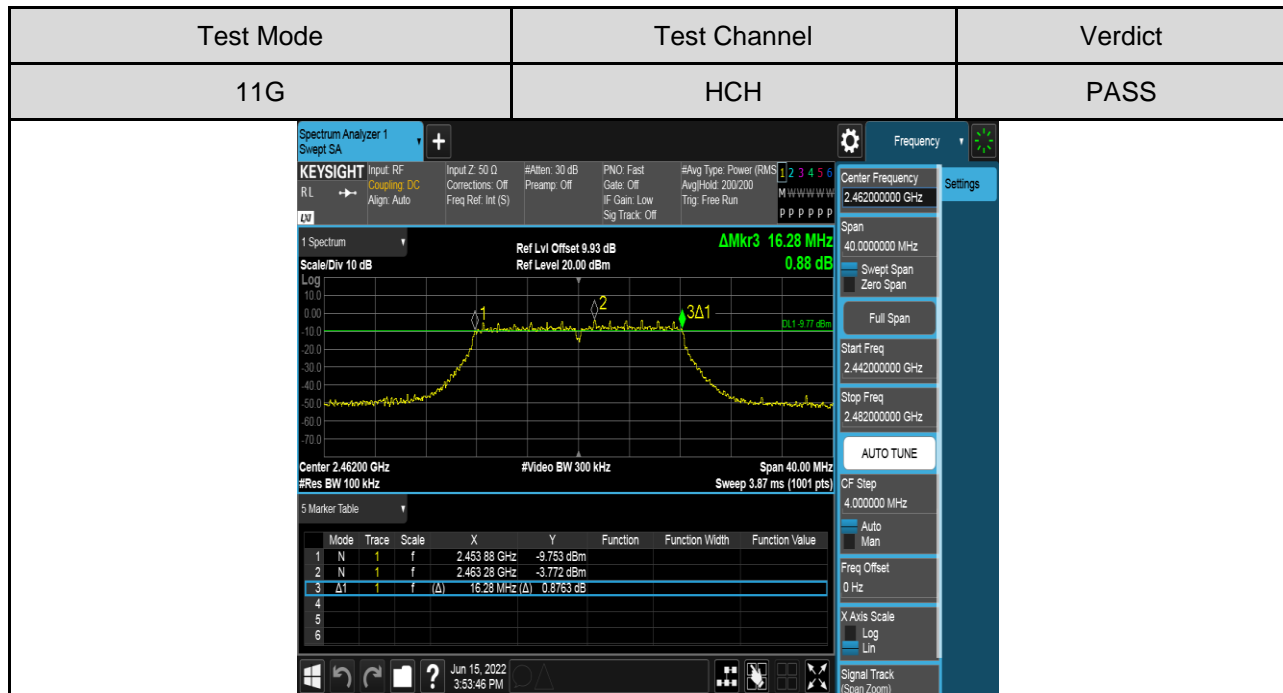
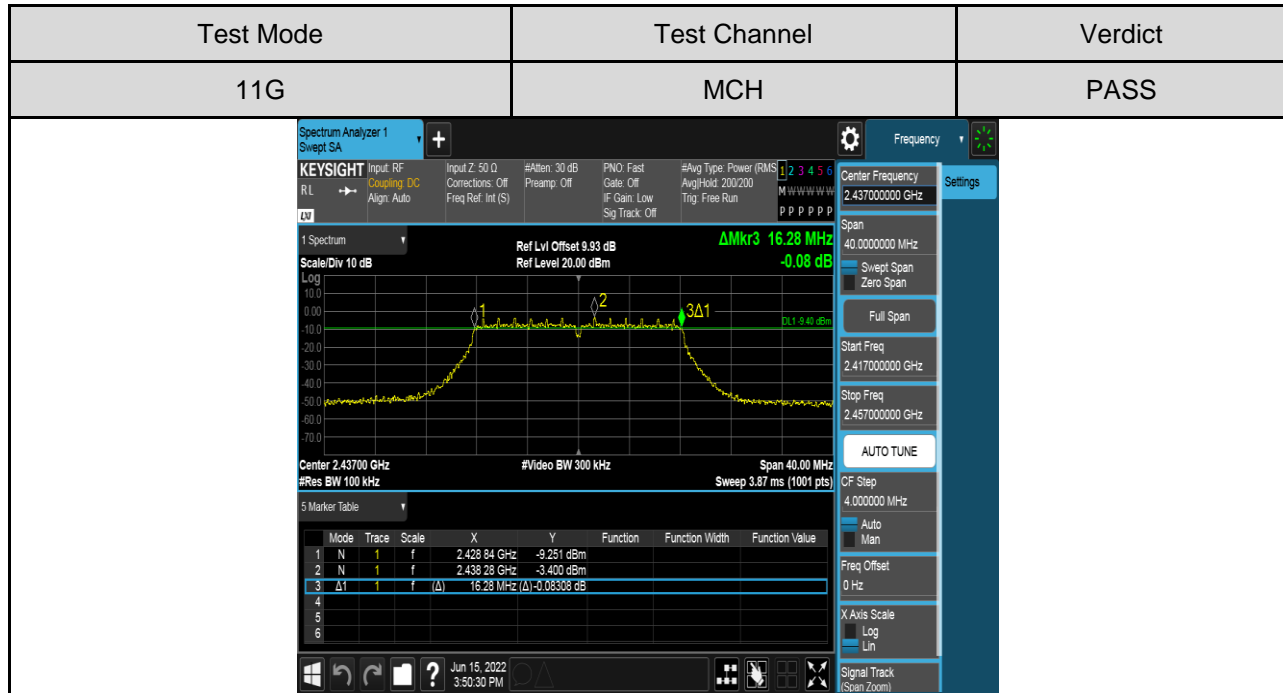
Center 2.43700 GHz
#Res BW 100 kHz
#Video BW 300 kHz
Span 40.00 MHz
Sweep 3.87 ms (1001 pts)

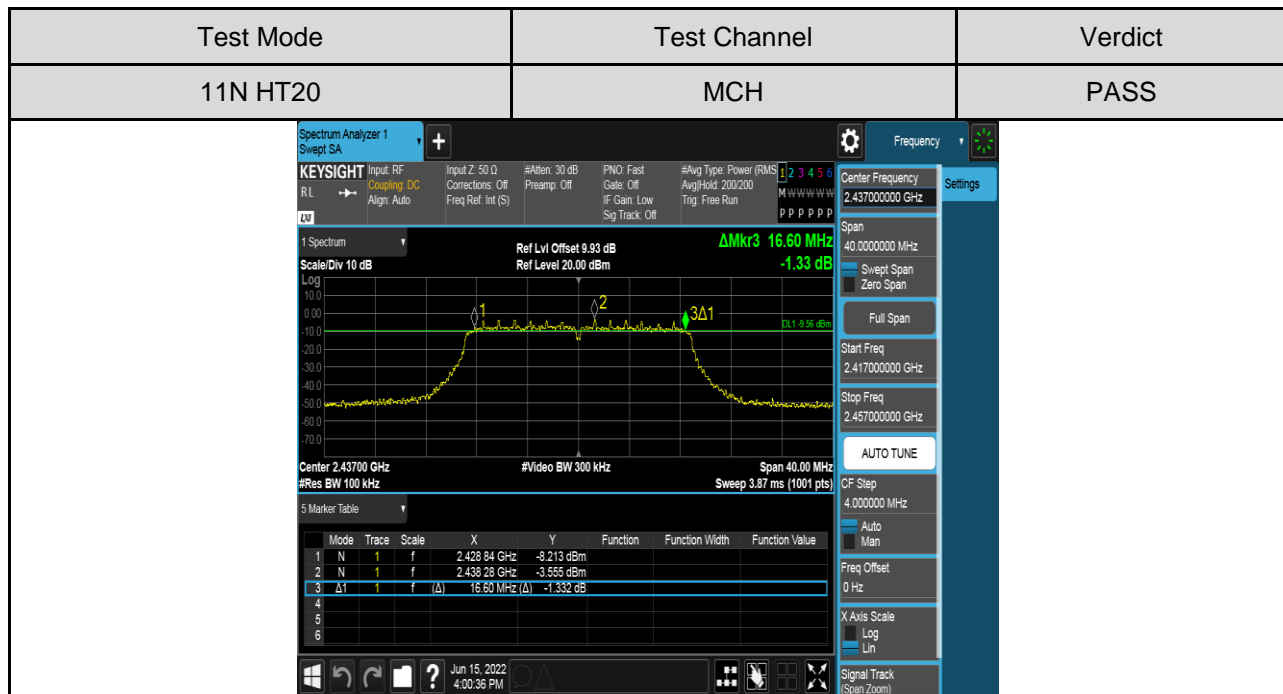
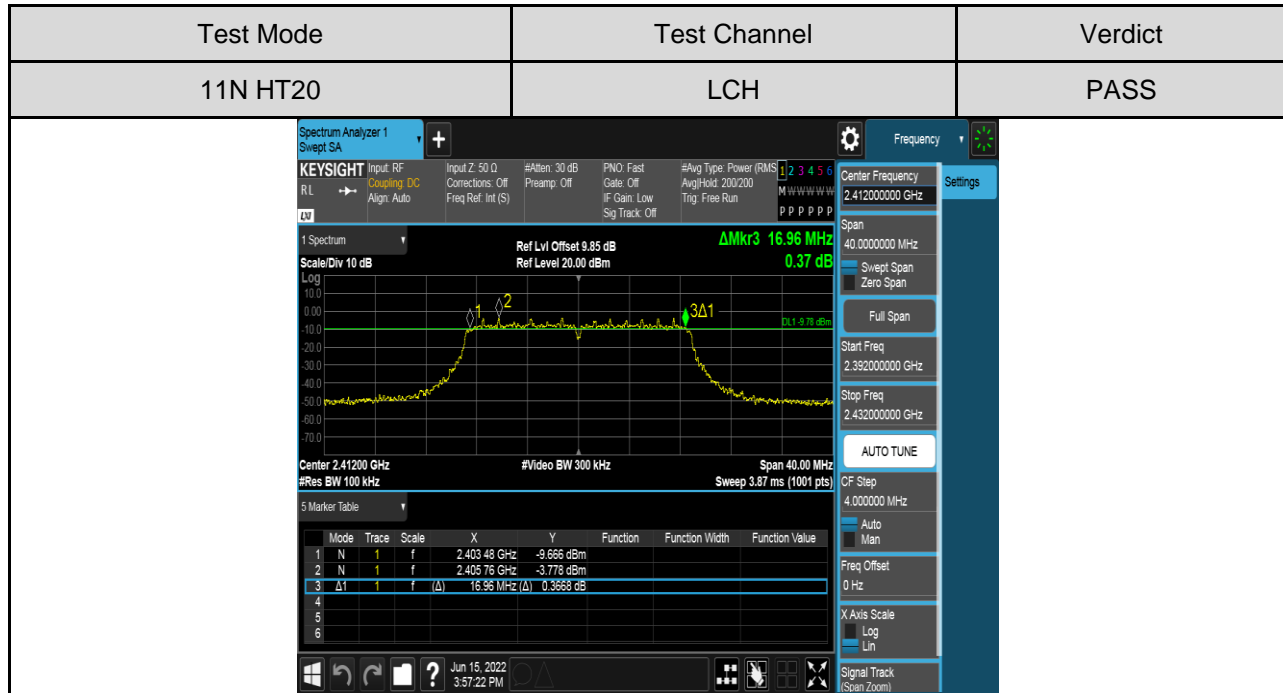
5 Marker Table

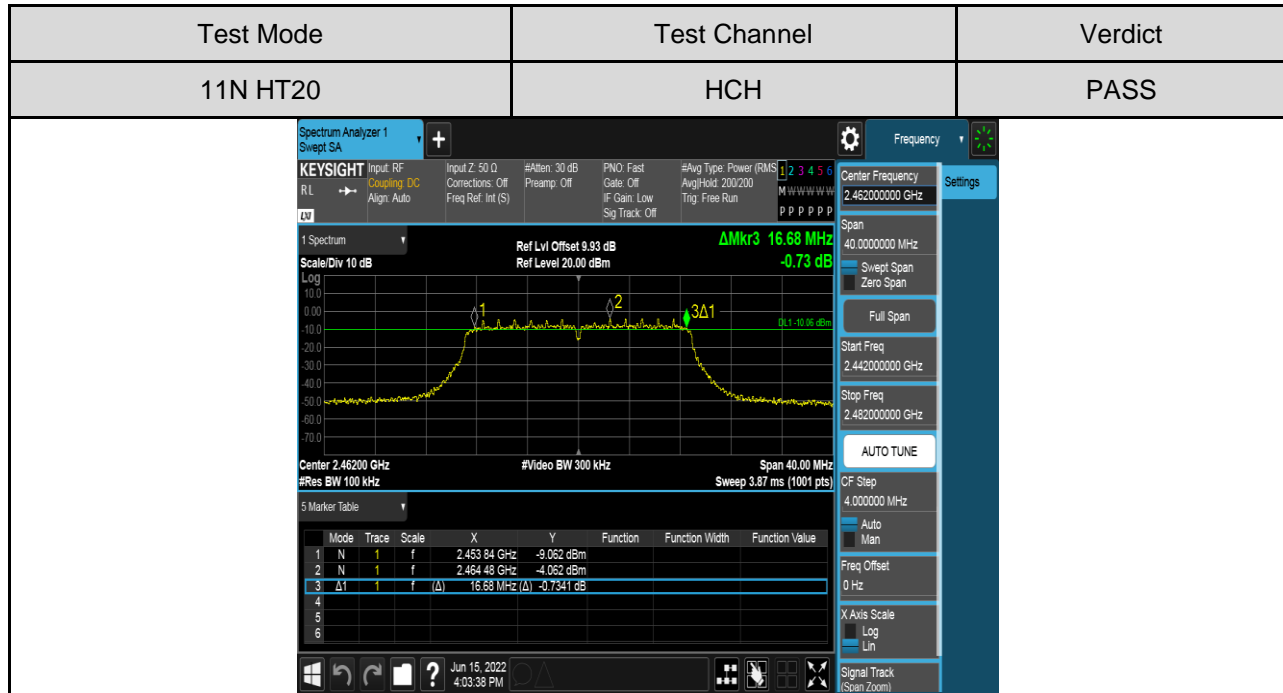
	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.43286 GHz	-5.069 dBm			
2	N	1	f	2.43582 GHz	-0.3403 dBm			
3	Δ1	1	f (Δ)	8.08 MHz (Δ)	0.2594 dB			
4								
5								
6								

Jun 15, 2022
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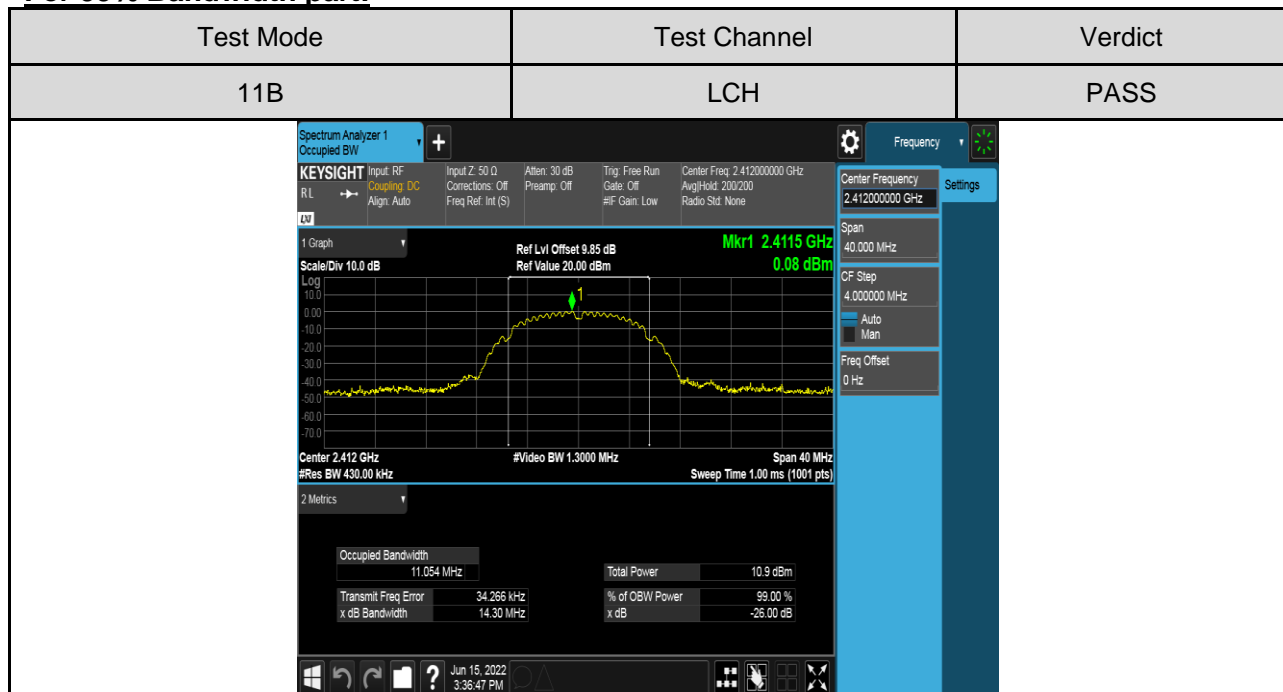


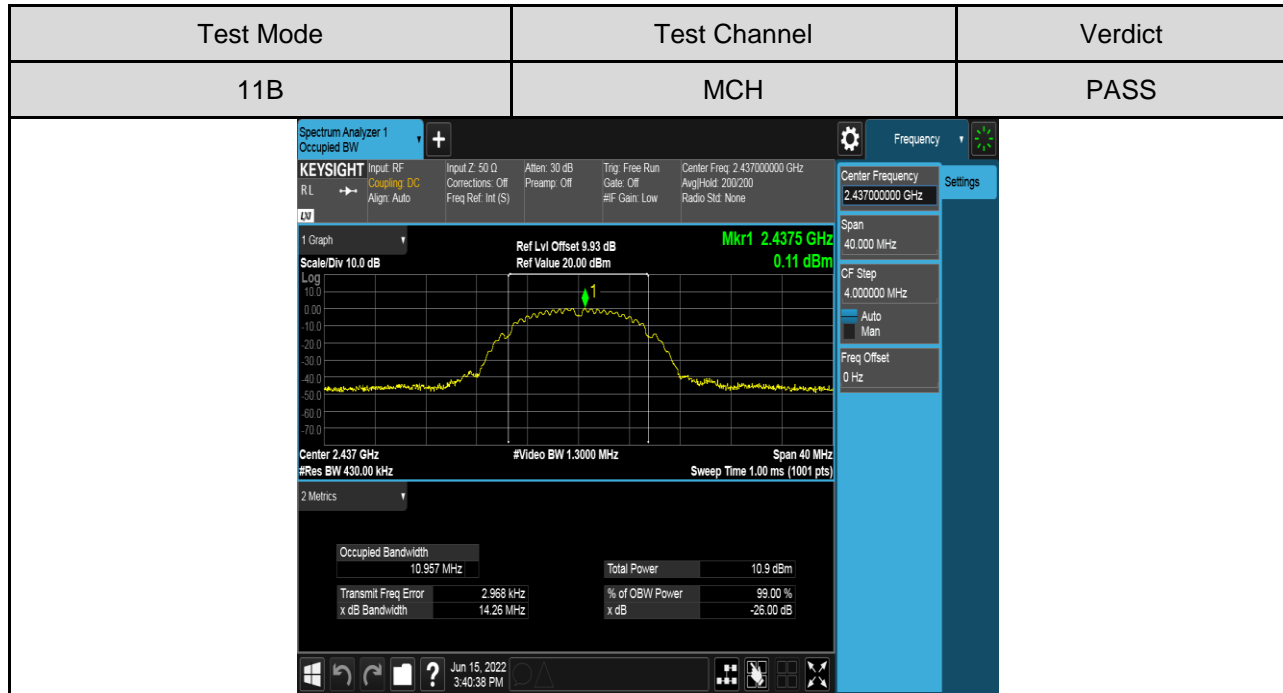


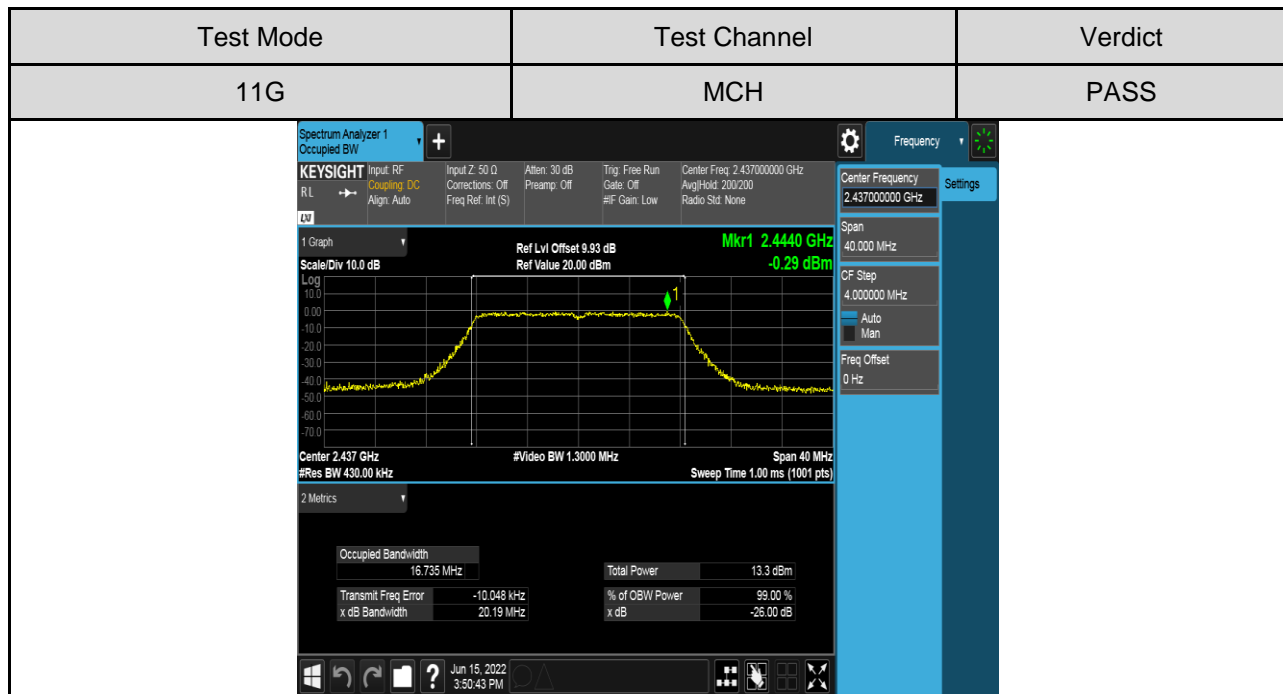
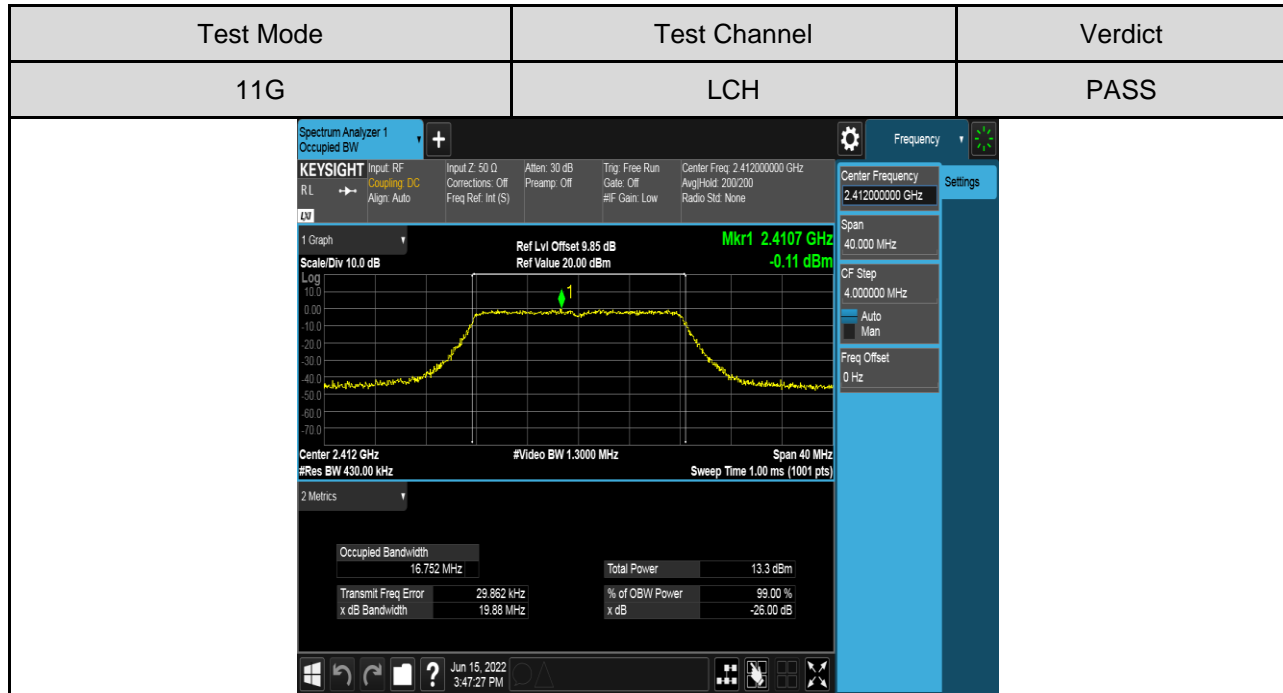


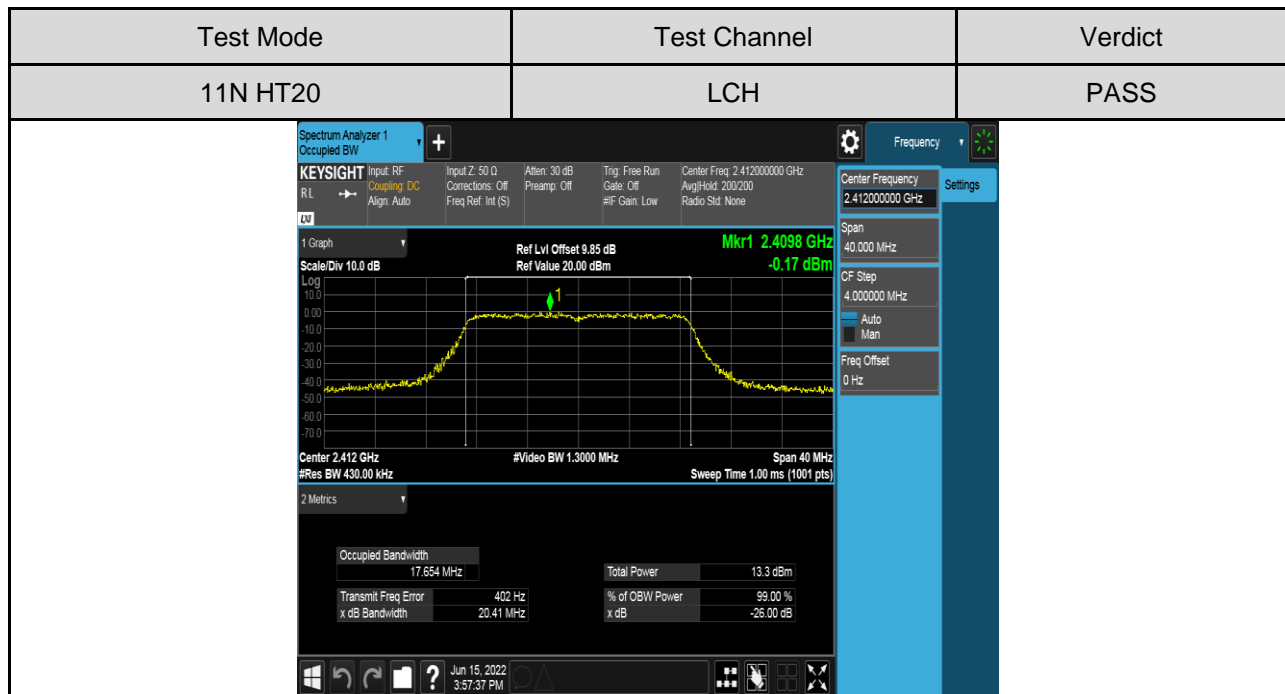
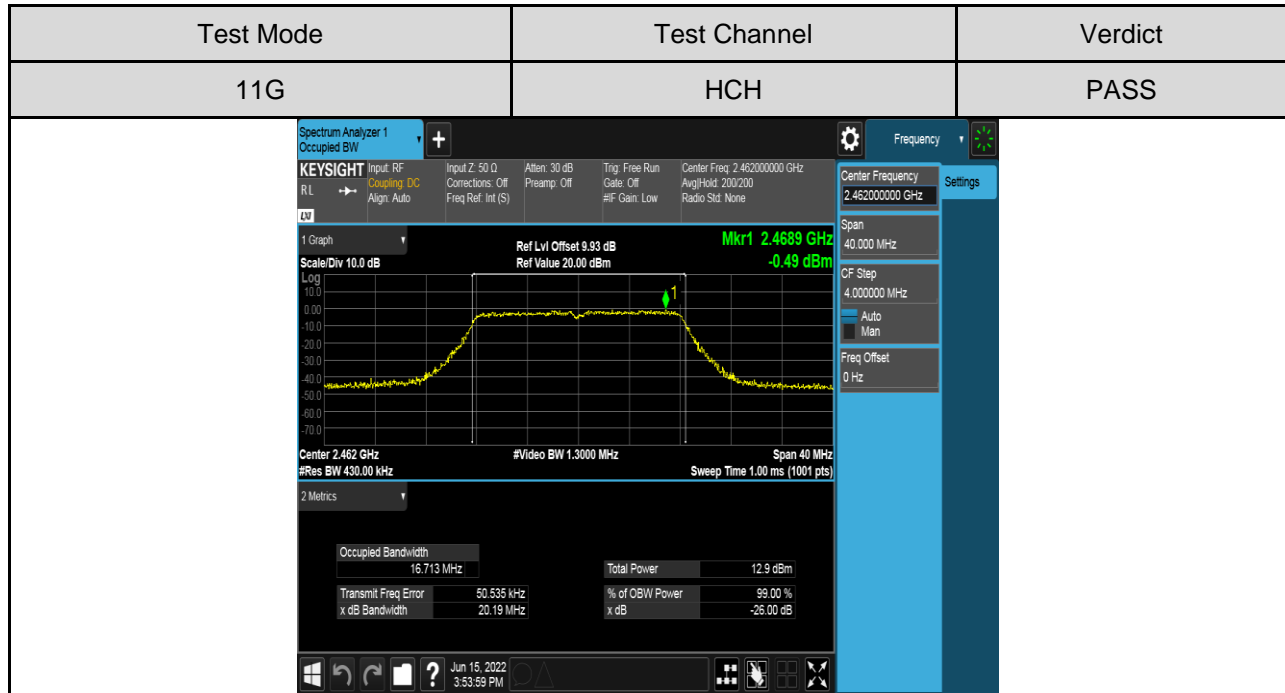


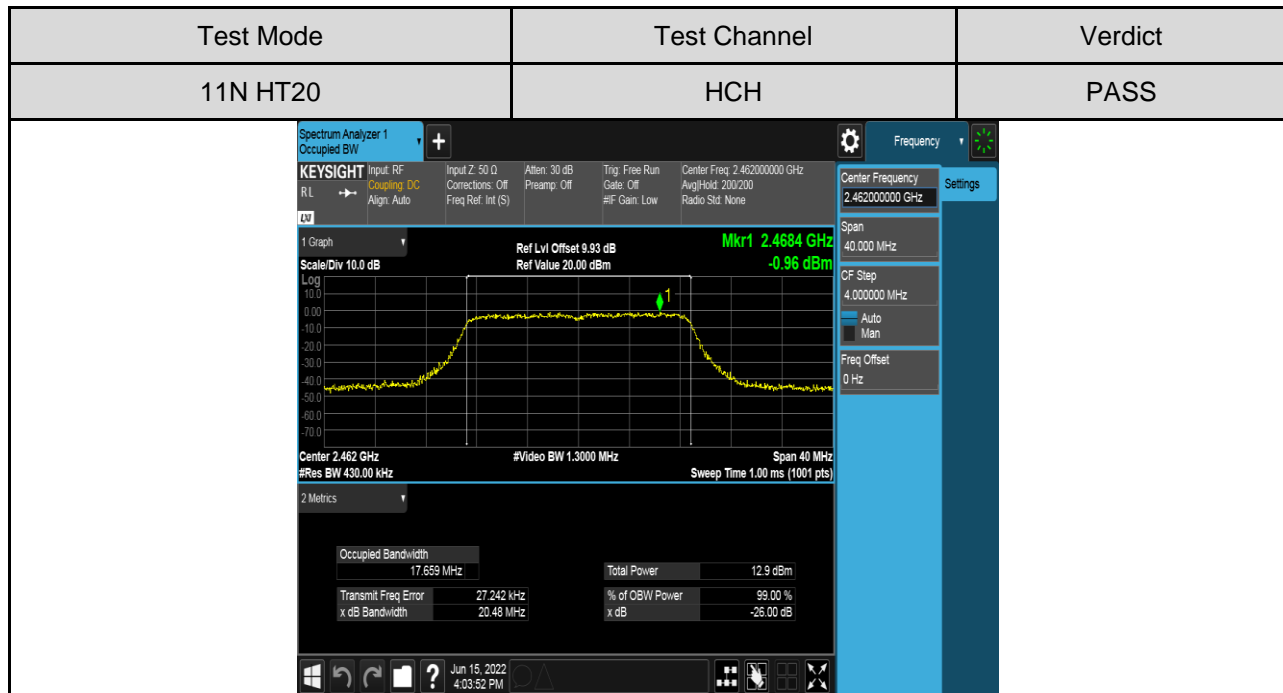
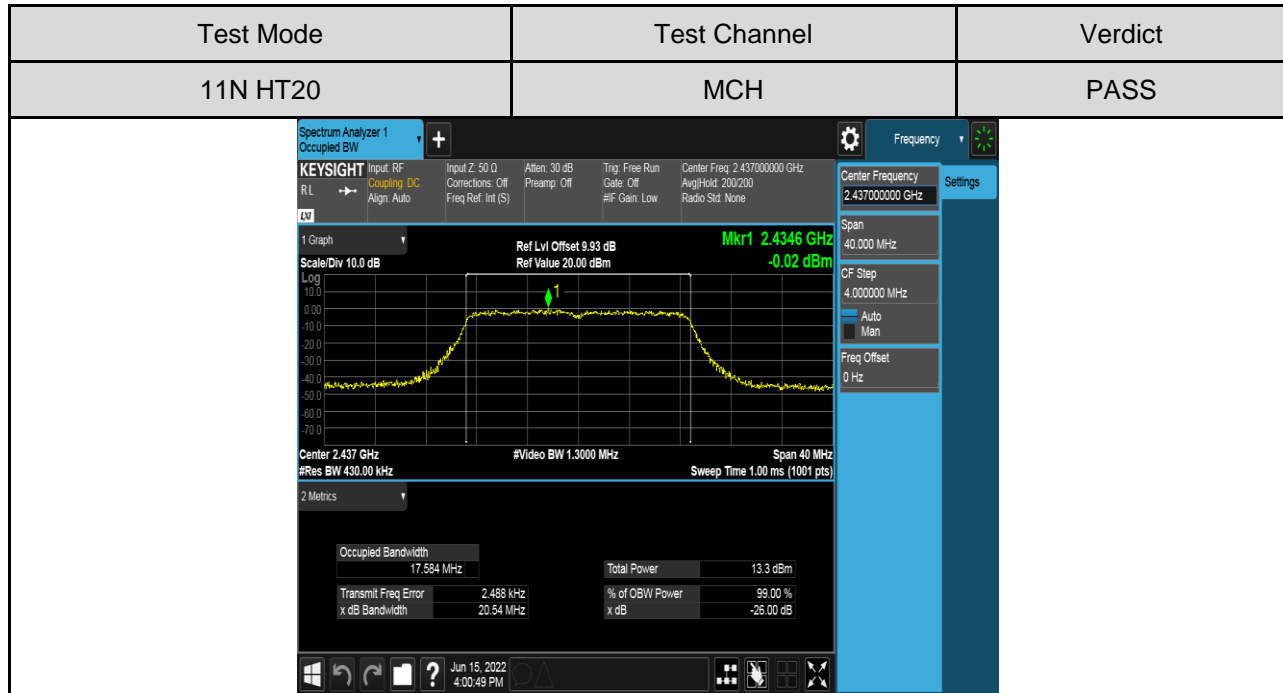
For 99% Bandwidth part:













7.4. CONDUCTED POWER

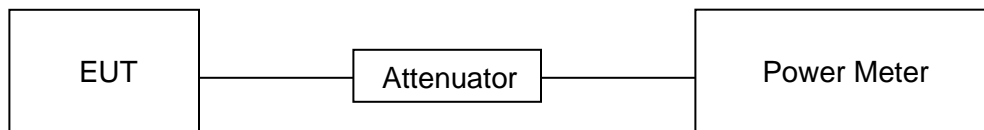
LIMITS

FCC Part15 (15.247) Subpart C, , ISSED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.247(b)(3) ISSED RSS-247 5.4 (d) RSS-Gen Clause 6.12	Output Power	1 watt or 30dBm	2400-2483.5

TEST PROCEDURE

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

TEST SETUP





RESULTS

For Normal Testing Part:

Test Mode	Test Channel	Measurement Output Power (AV)	10log(1/x) Factor	Maximum Conducted Output Power (AV)	Result
		dBm	dB	dBm	
11B	LCH	7.55	0.51	8.06	Pass
	MCH	7.55	0.51	8.06	Pass
	HCH	7.14	0.51	7.65	Pass
11G	LCH	6.99	0.59	7.58	Pass
	MCH	7.01	0.59	7.60	Pass
	HCH	6.66	0.59	7.25	Pass
11N HT20	LCH	6.88	0.68	7.56	Pass
	MCH	6.87	0.68	7.55	Pass
	HCH	6.42	0.68	7.10	Pass

Remark:

- 1) For all the test results has been adjusted the duty cycle factor.
- 2) For Correction Factor is refer to the result in section 7.2



7.5. POWER SPECTRAL DENSITY

LIMITS

FCC Part15 (15.247) Subpart C, ISSED RSS-247 ISSUE 2			
Section	Test Item	Limit	Frequency Range (MHz)
FCC §15.247 (e) ISED RSS-247 5.2 (b)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5

TEST PROCEDURE

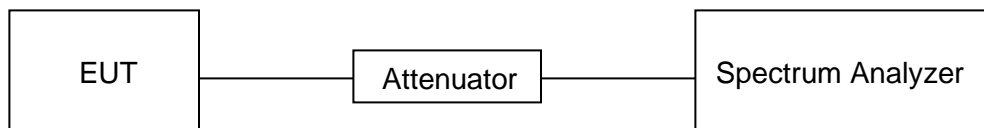
Refer to FCC KDB 558074, connect the UUT to the spectrum analyser and use the following settings:

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

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

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

TEST SETUP





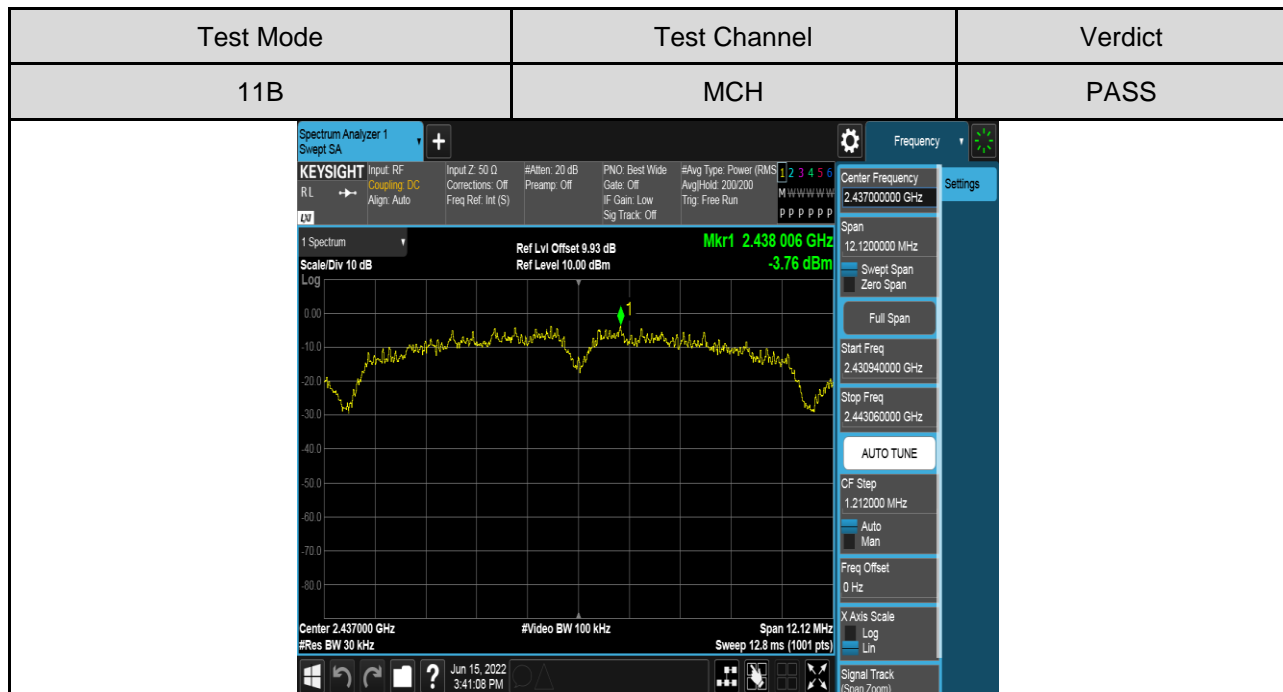
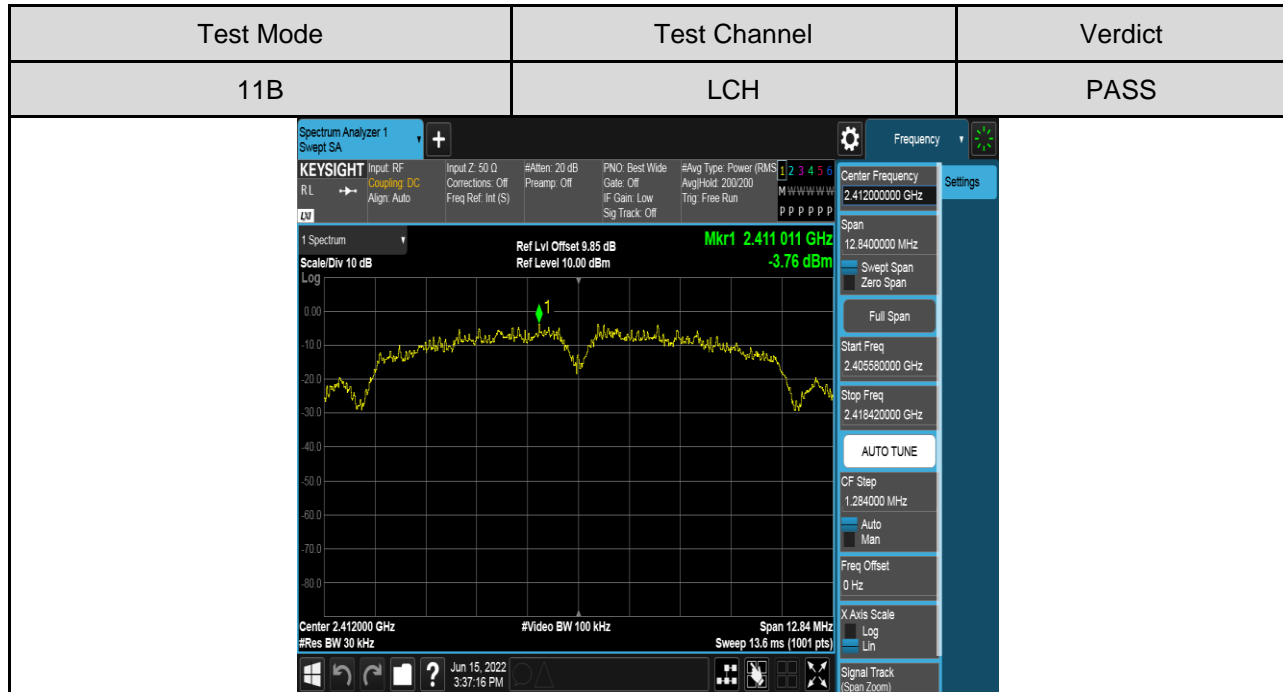
RESULTS

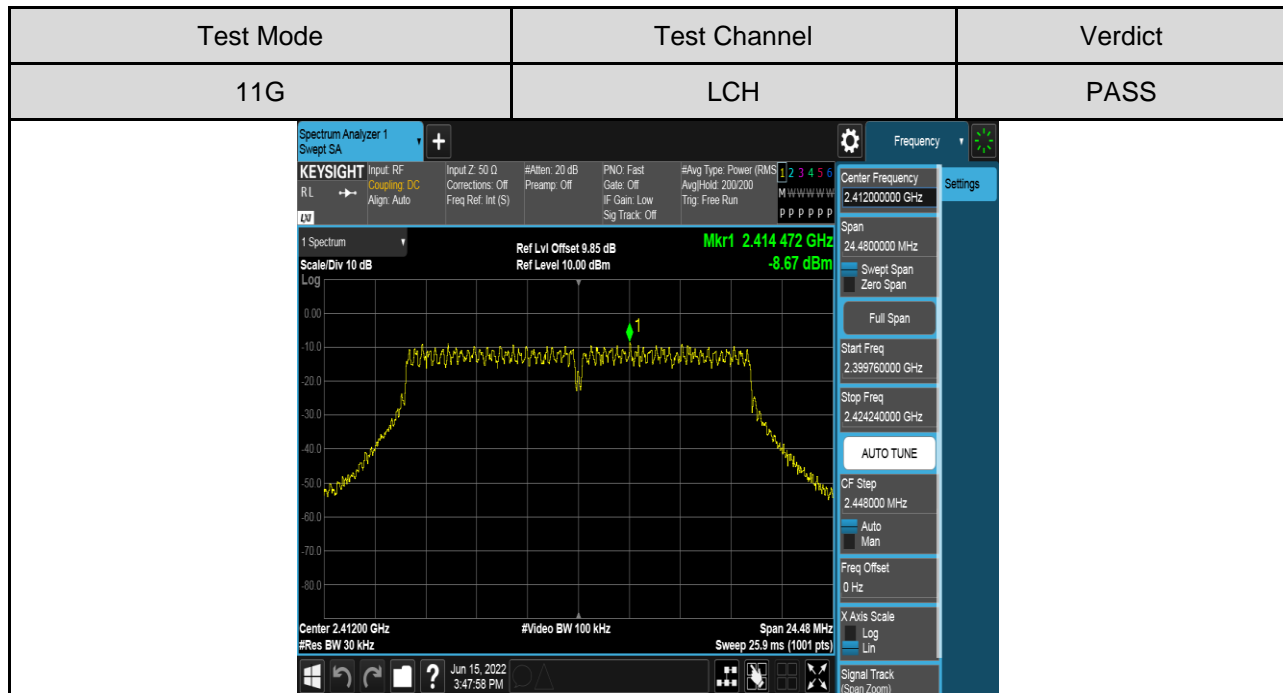
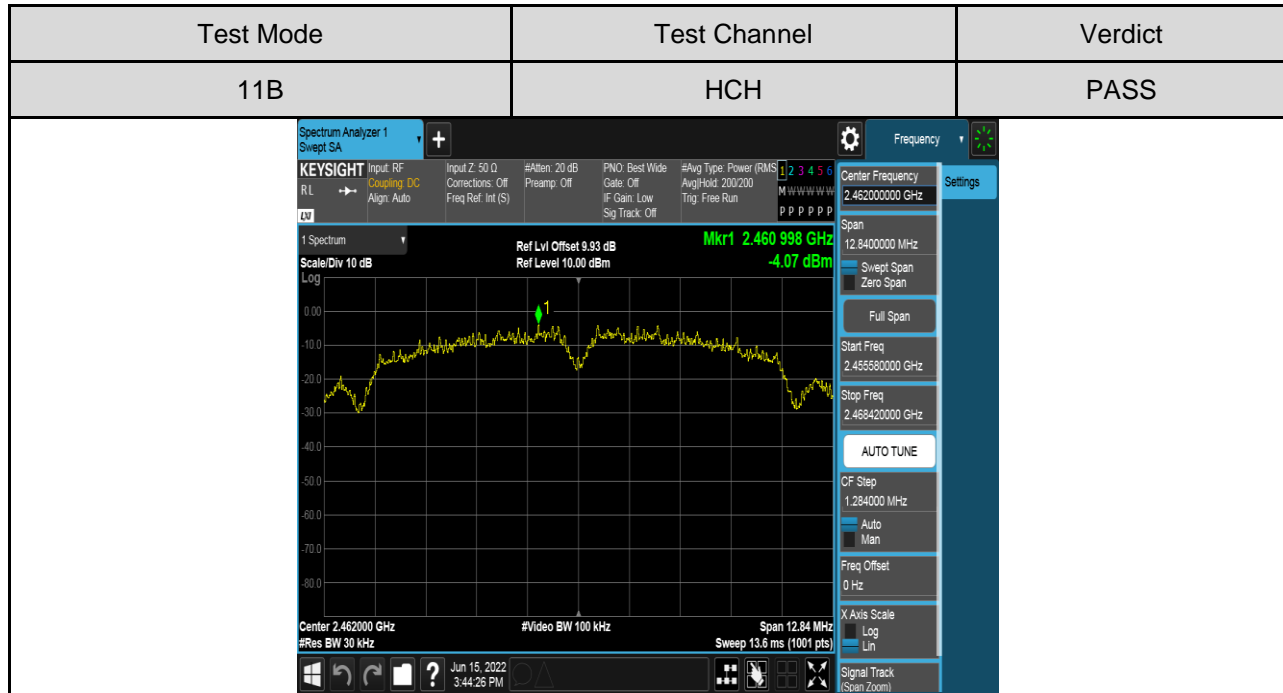
For Normal Testing Part:

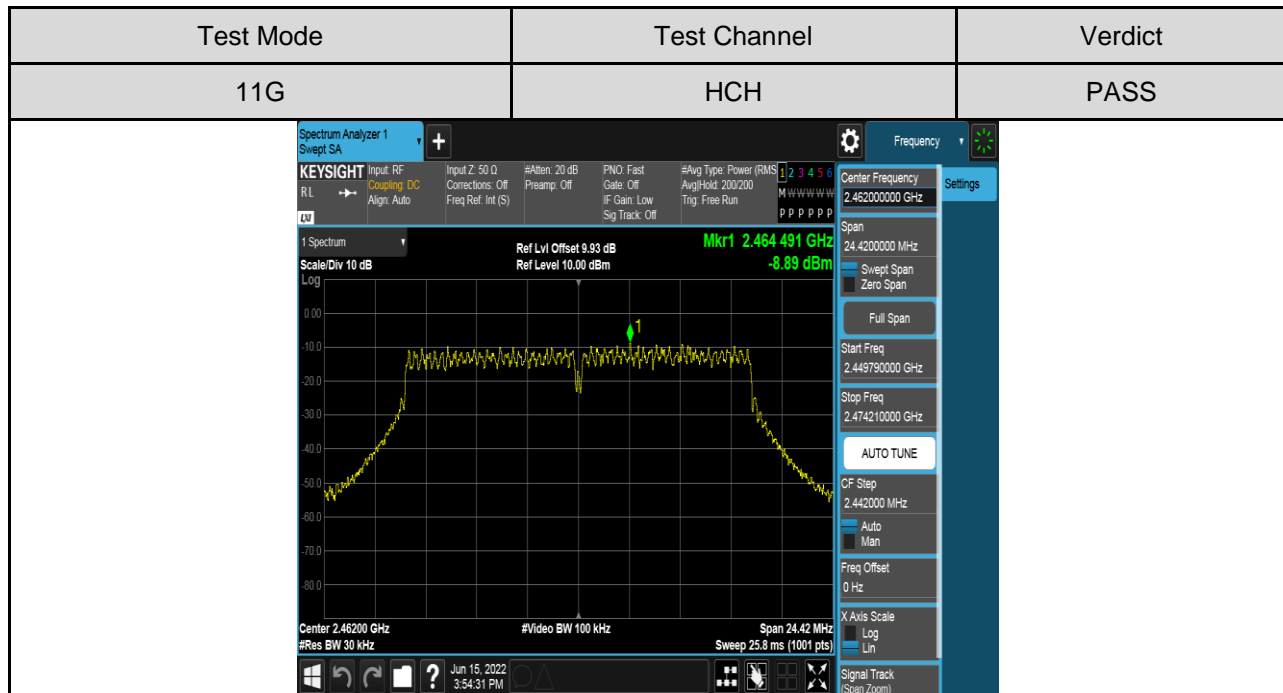
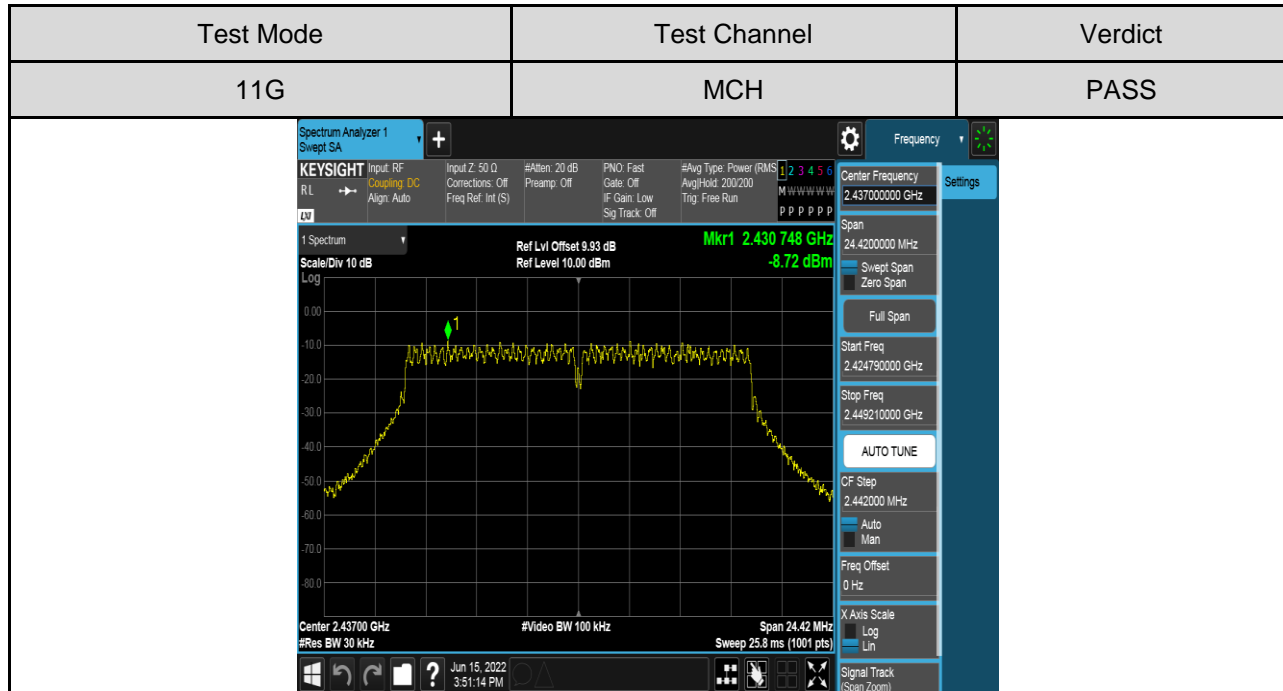
Test Mode	Test Channel	Maximum Peak power spectral density (dBm/30kHz)	Result
11B	LCH	-3.76	Pass
	MCH	-3.76	Pass
	HCH	-4.07	Pass
11G	LCH	-8.67	Pass
	MCH	-8.72	Pass
	HCH	-8.89	Pass
11N HT20	LCH	-8.04	Pass
	MCH	-8.24	Pass
	HCH	-8.07	Pass

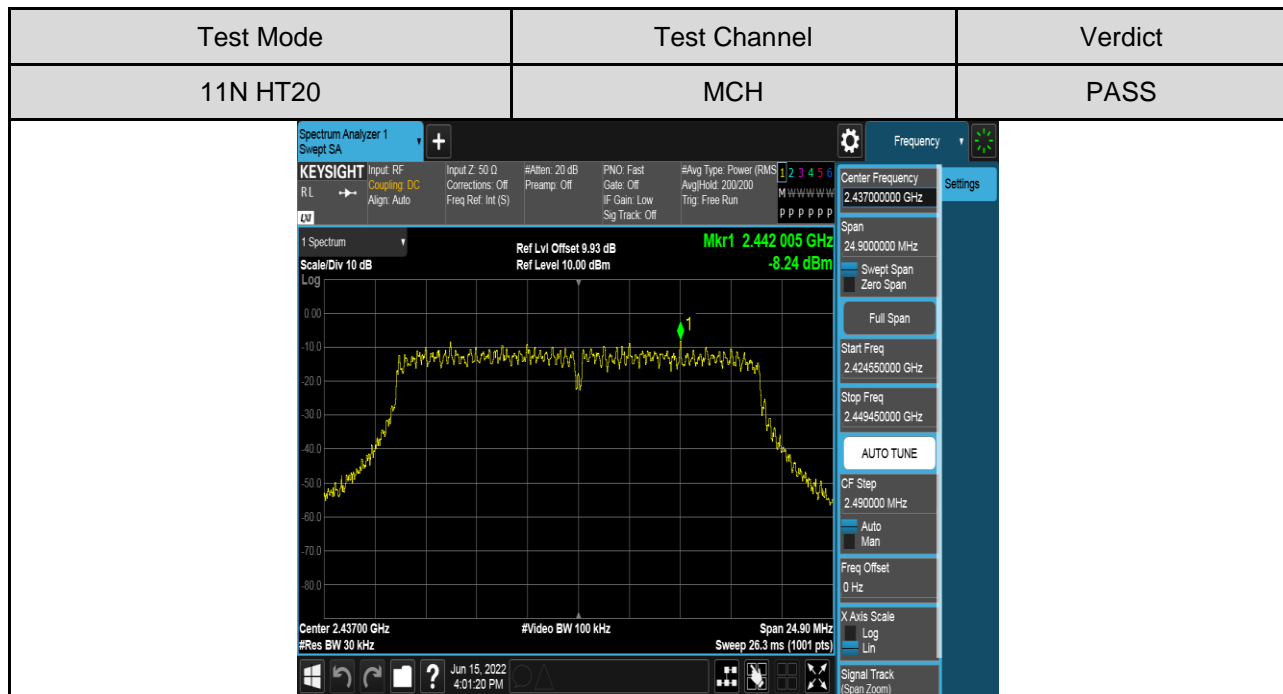
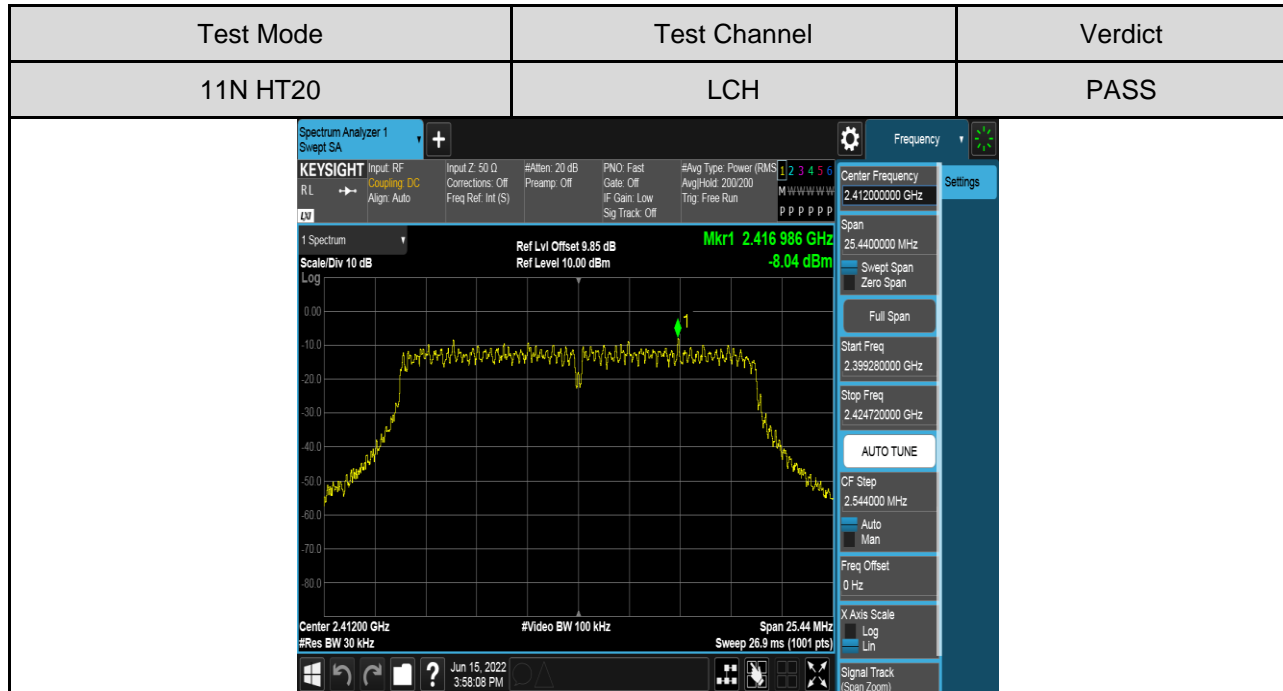


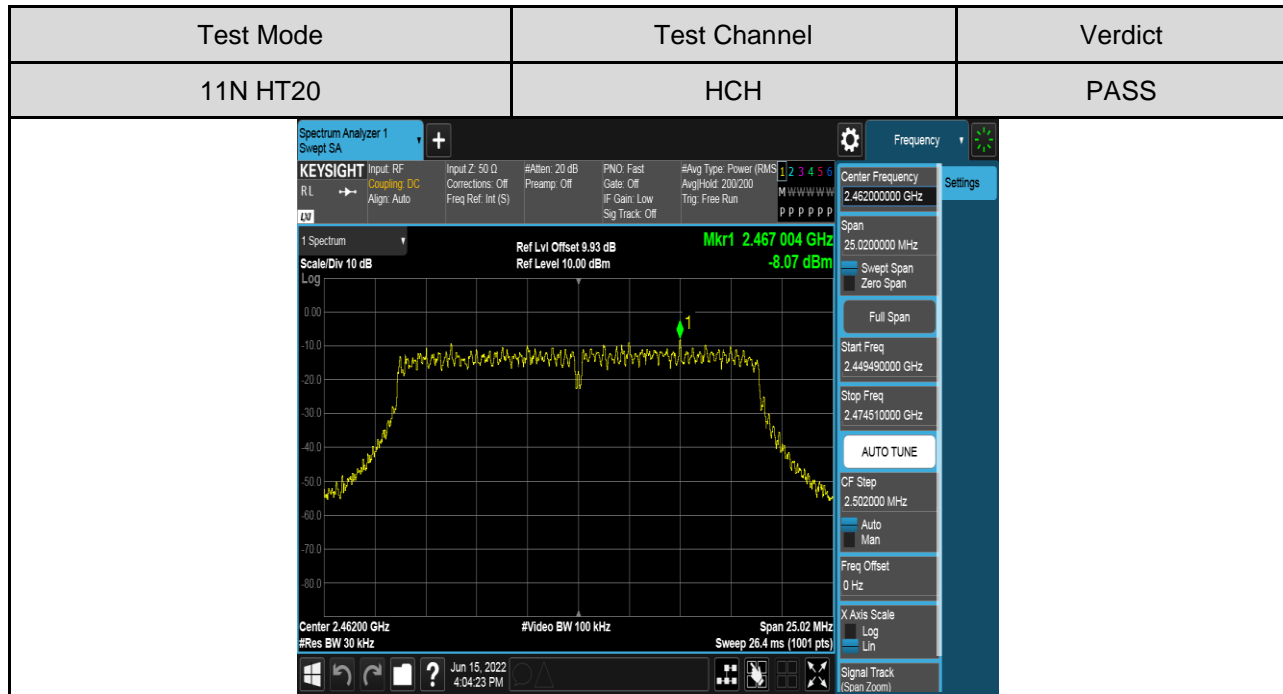
Test Graphs:













7.6. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

FCC Part15 (15.247) Subpart C, ISSED RSS-247 ISSUE 2		
Section	Test Item	Limit
FCC §15.247 (d) RSS-247 Clause 5.5 RSS-GEN Clause 6.13	Conducted Bandedge and Spurious Emissions	At least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

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

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

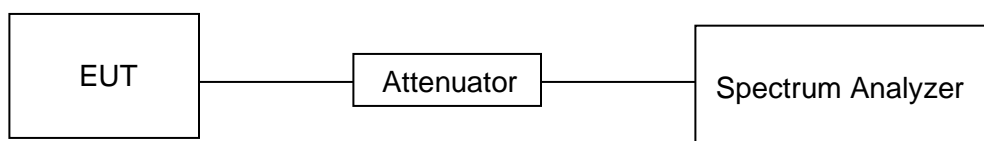
settings:

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	$\geq 3 \times \text{RBW}$
measurement points	$\geq \text{span}/\text{RBW}$
Trace	Max hold
Sweep time	Auto couple.

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

TEST SETUP





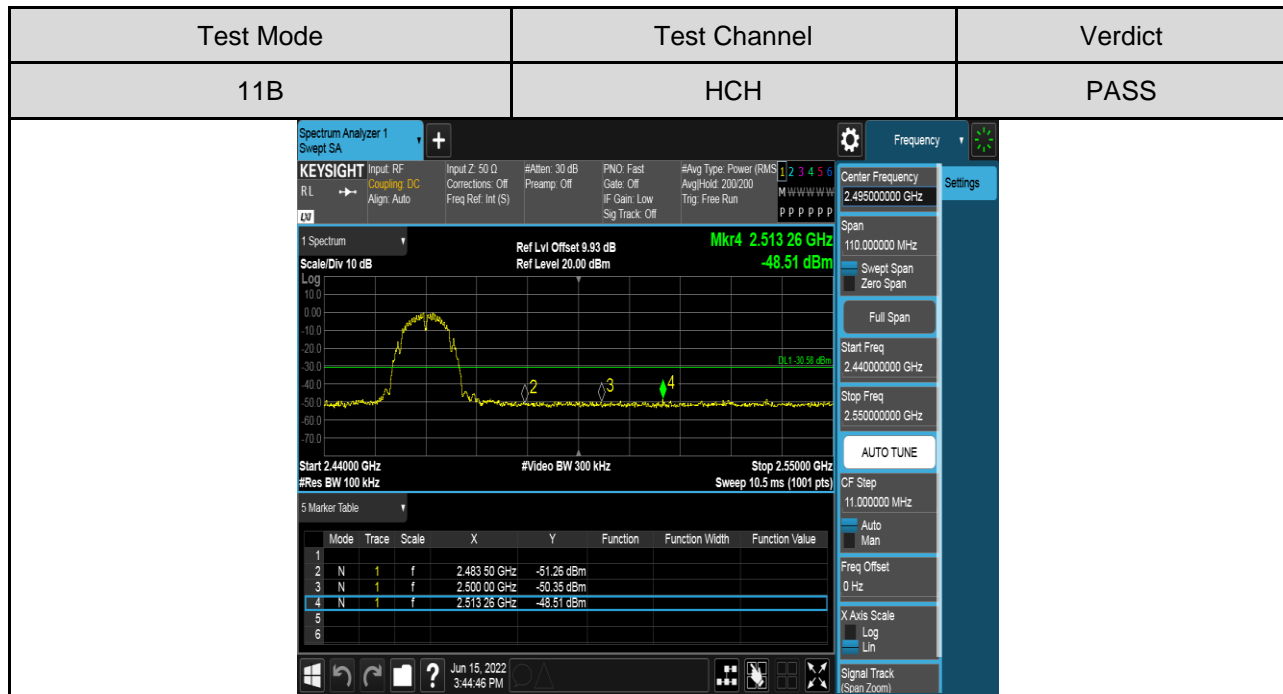
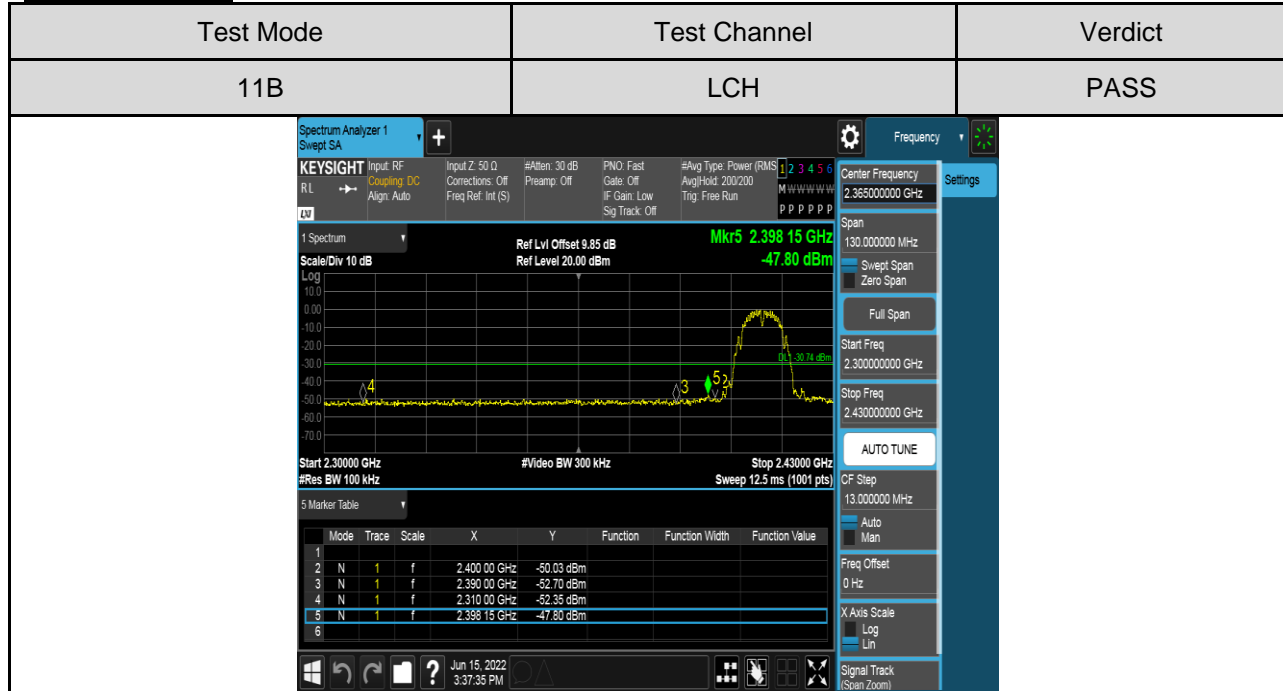
Part I :Conducted Bandedge

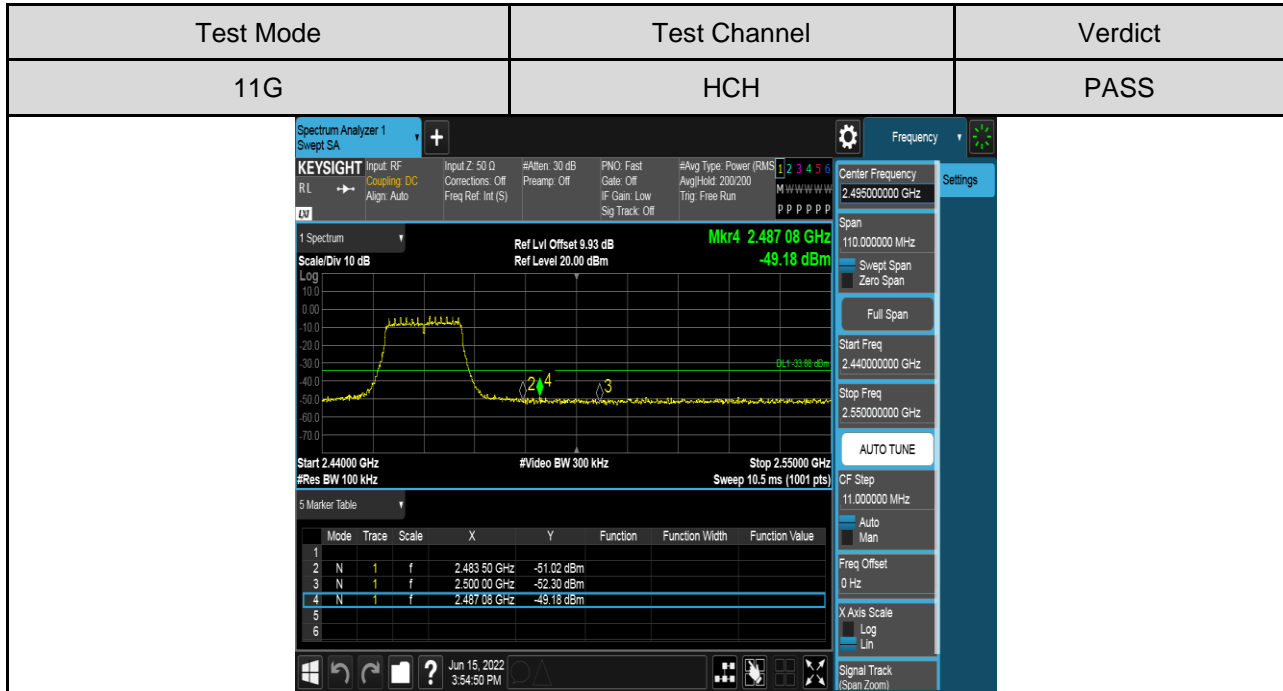
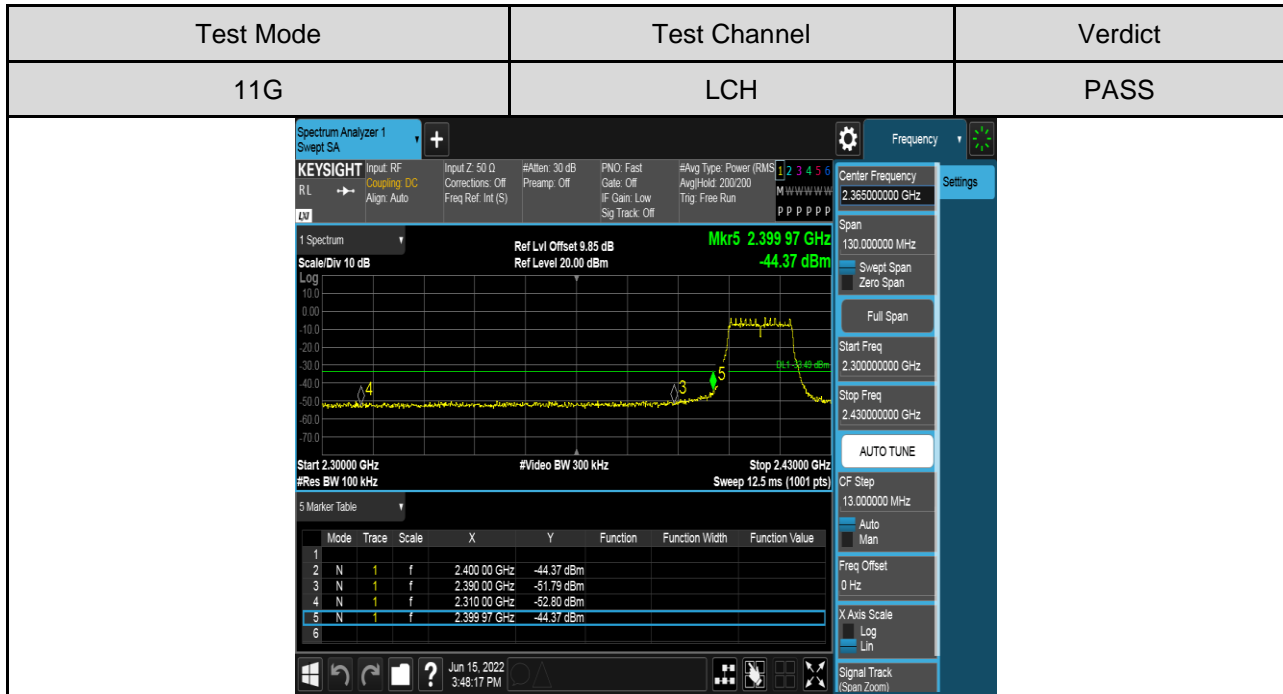
RESULTS TABLE

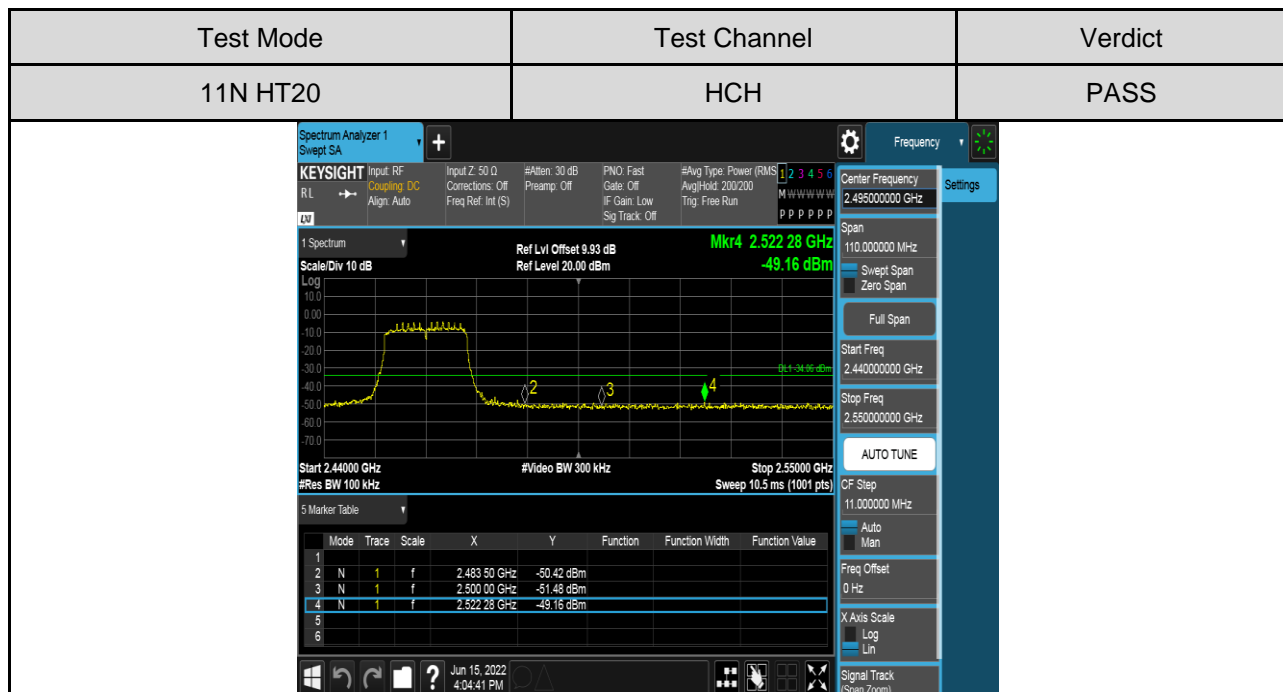
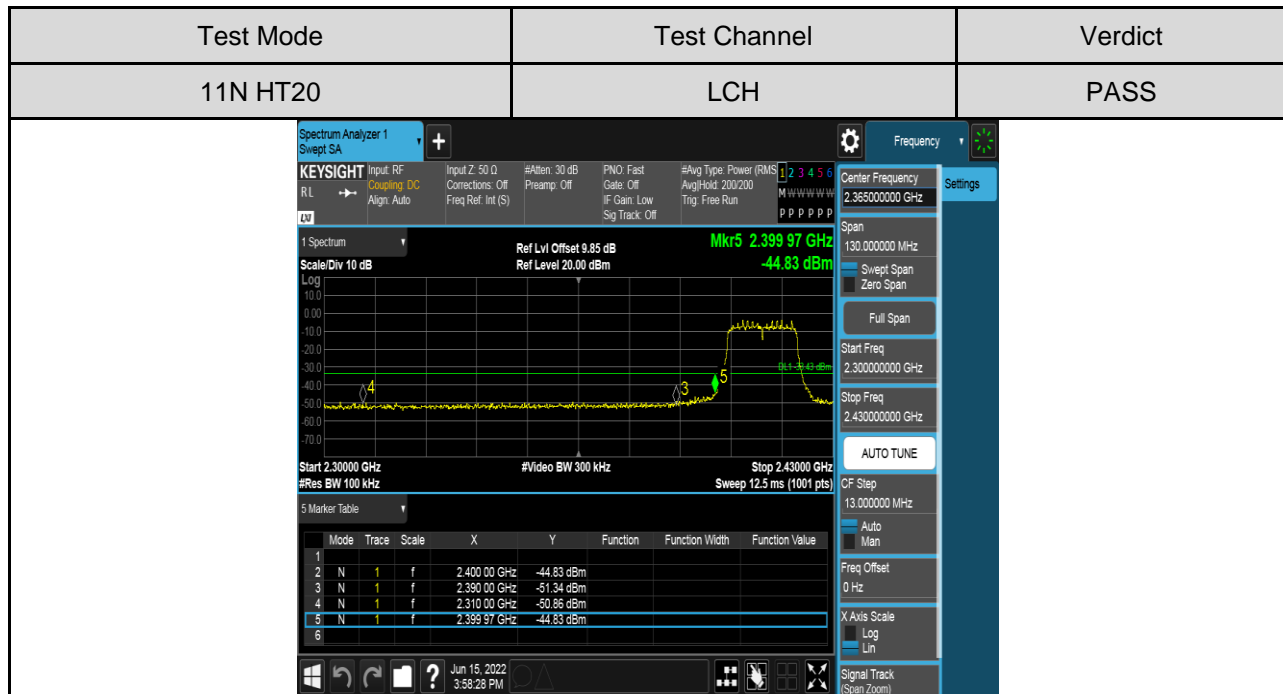
Test Mode	Test Antenna	Test Channel	Test Result	Verdict
11B	Antenna 1	LCH	See the test graphs	PASS
		HCH	See the test graphs	PASS
11G	Antenna 1	LCH	See the test graphs	PASS
		HCH	See the test graphs	PASS
11N HT20	Antenna 1	LCH	See the test graphs	PASS
		HCH	See the test graphs	PASS



TEST GRAPHS









Part II :Conducted Emission

Test Result Table

Test Mode	Test Antenna	Channel	Pref(dBm)	Puw(dBm)	Verdict
11B SISO	Antenna 1	LCH	See the test graphs	<Limit	PASS
		MCH	See the test graphs	<Limit	PASS
		HCH	See the test graphs	<Limit	PASS
11G SISO	Antenna 1	LCH	See the test graphs	<Limit	PASS
		MCH	See the test graphs	<Limit	PASS
		HCH	See the test graphs	<Limit	PASS
11N HT20	Antenna 1	LCH	See the test graphs	<Limit	PASS
		MCH	See the test graphs	<Limit	PASS
		HCH	See the test graphs	<Limit	PASS



Test Plots

Test Mode	Channel	Verdict
11B	LCH	PASS

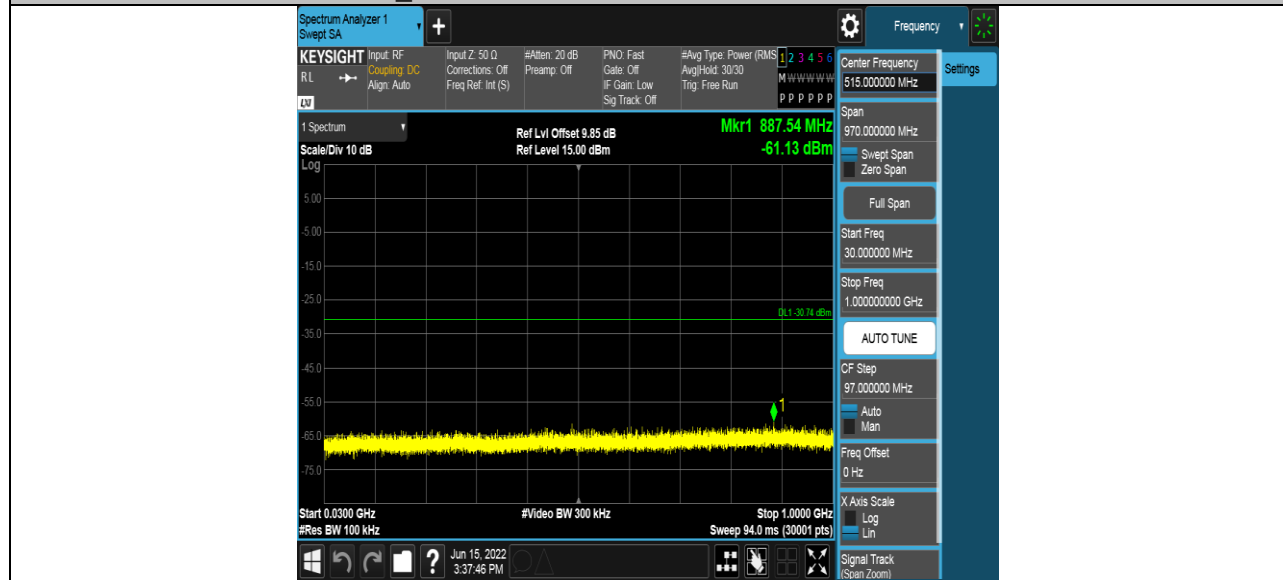
Pref test Plot





Puw test Plot

LCH SPURIOUS EMISSION_30MHz~1GHz



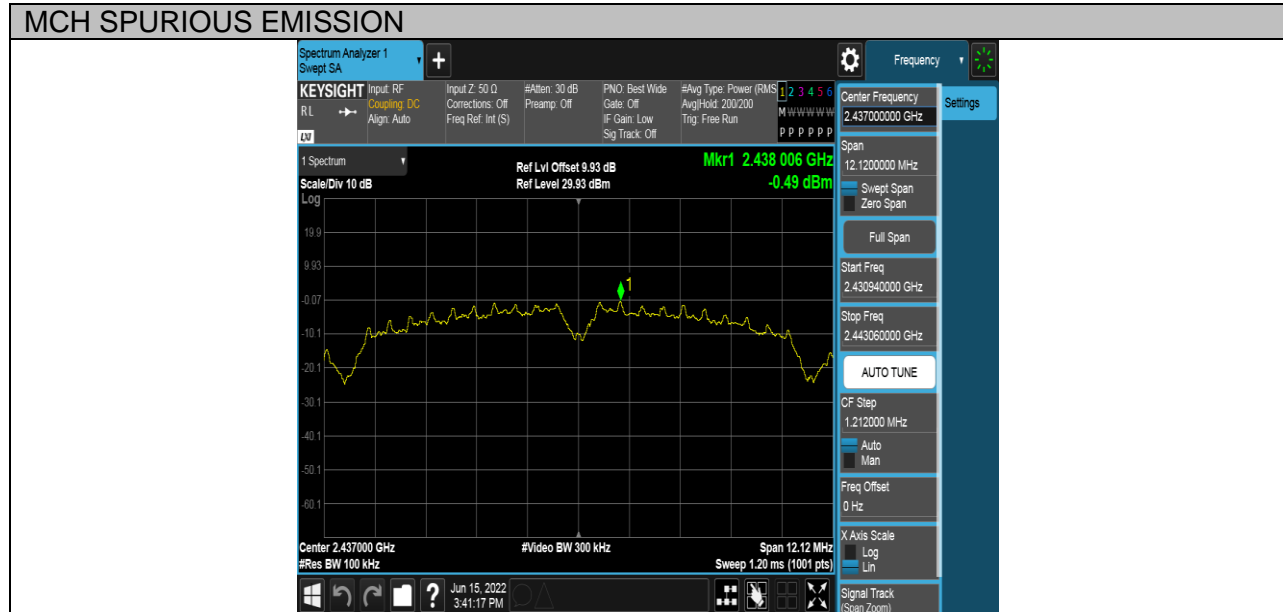
LCH SPURIOUS EMISSION_1GHz~26GHz





Test Mode	Channel	Verdict
11B	MCH	PASS

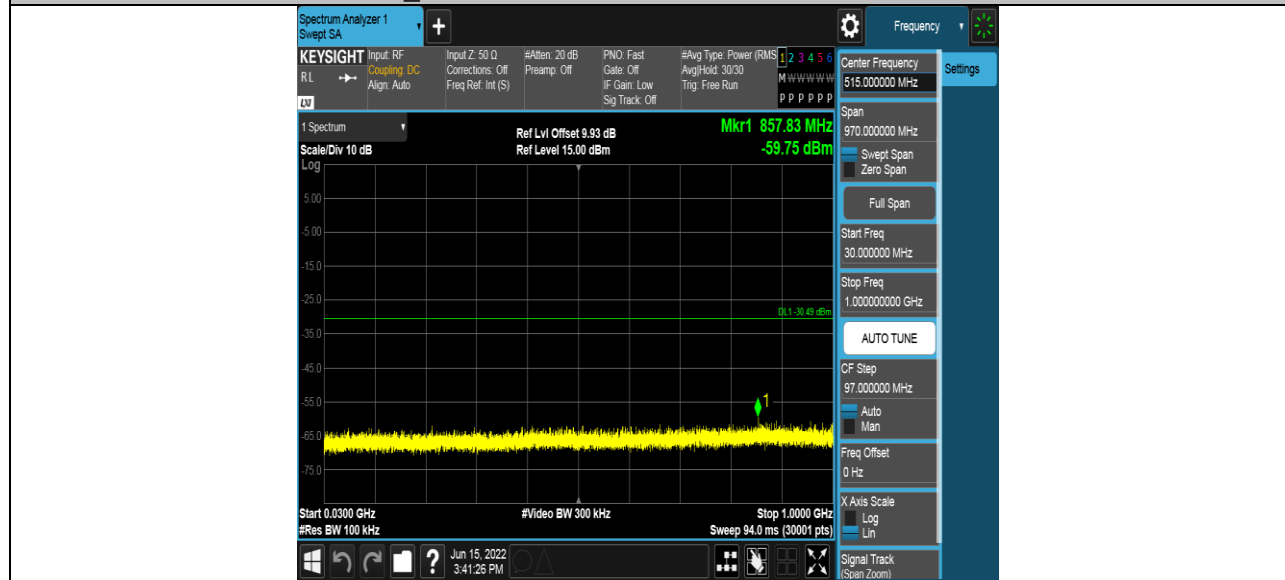
Pref test Plot



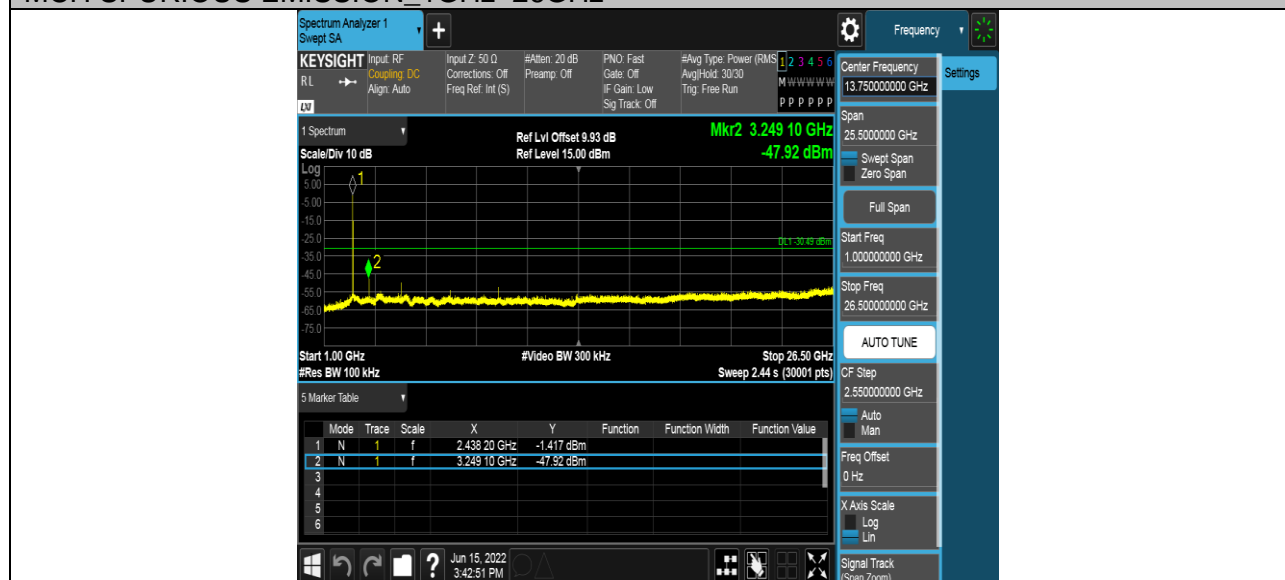


Puw test Plot

MCH SPURIOUS EMISSION_30MHz~1GHz



MCH SPURIOUS EMISSION_1GHz~26GHz





Test Mode	Channel	Verdict
11B	HCH	PASS

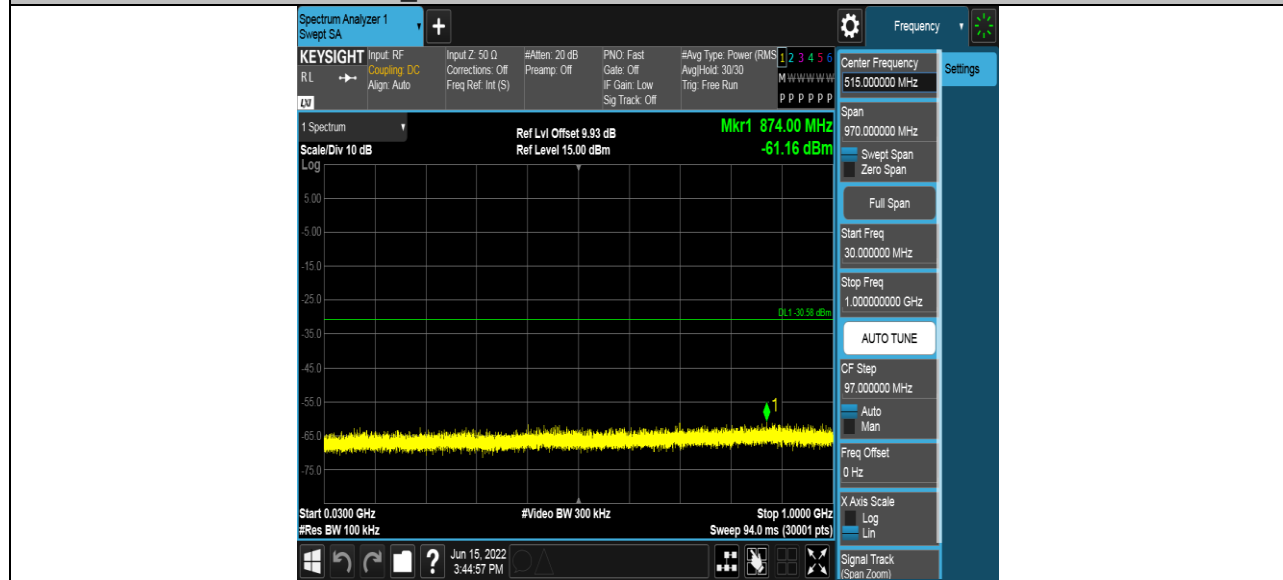
Pref test Plot





Puw test Plot

HCH SPURIOUS EMISSION_30MHz~1GHz



HCH SPURIOUS EMISSION_1GHz~26GHz





Test Mode	Channel	Verdict
11G	LCH	PASS

Pref test Plot

