

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	$\geq 3 \times$ RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

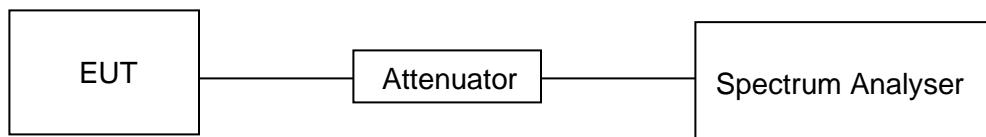
settings:

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	$\geq 3 \times$ RBW
measurement points	\geq 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****Ant 1:**

Test Mode	Test Channel	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	5.709	-35.13	-14.29	PASS
	HCH	5.116	-35.17	-14.88	PASS
11G	LCH	3.166	-35.79	-16.83	PASS
	HCH	2.798	-34.86	-17.20	PASS
11N HT20	LCH	3.491	-35.80	-16.51	PASS
	HCH	2.952	-35.22	-17.05	PASS
11N HT40	LCH	1.254	-35.77	-28.75	PASS
	HCH	1.572	-35.39	-28.43	PASS

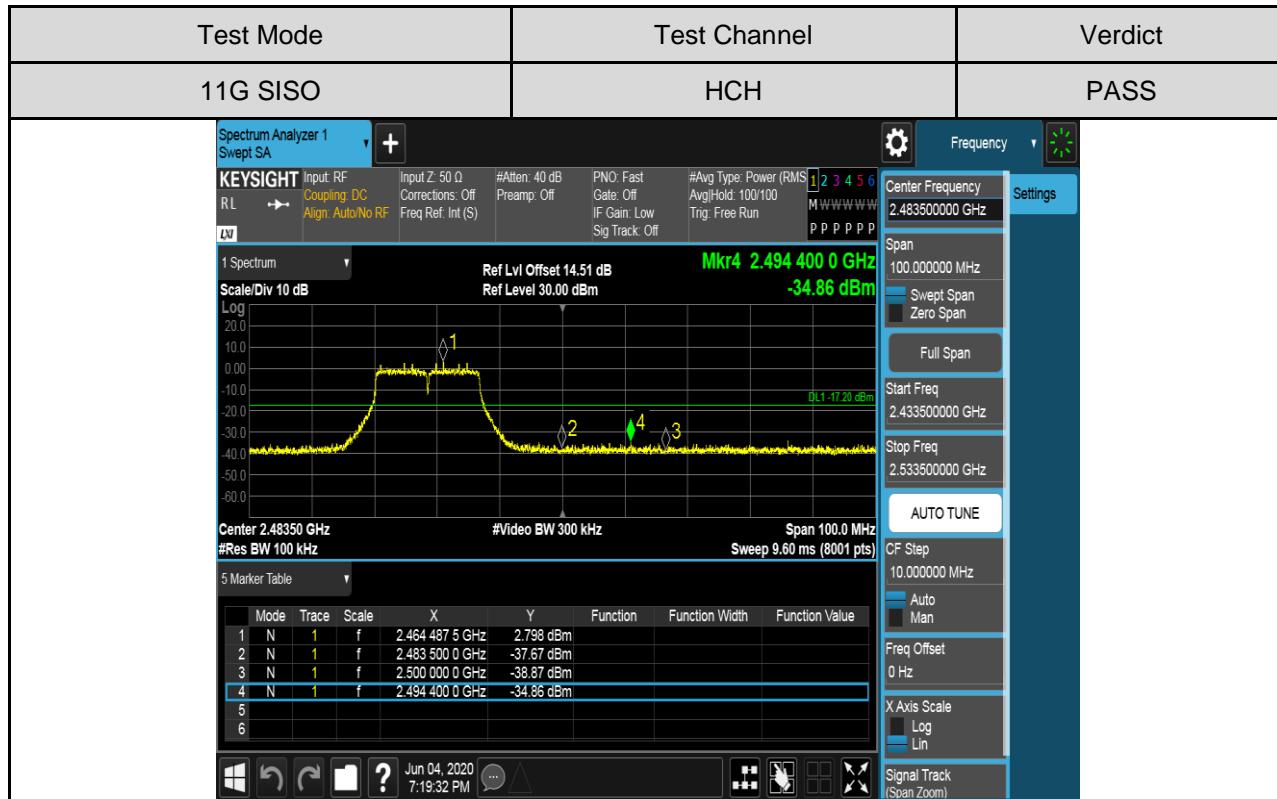
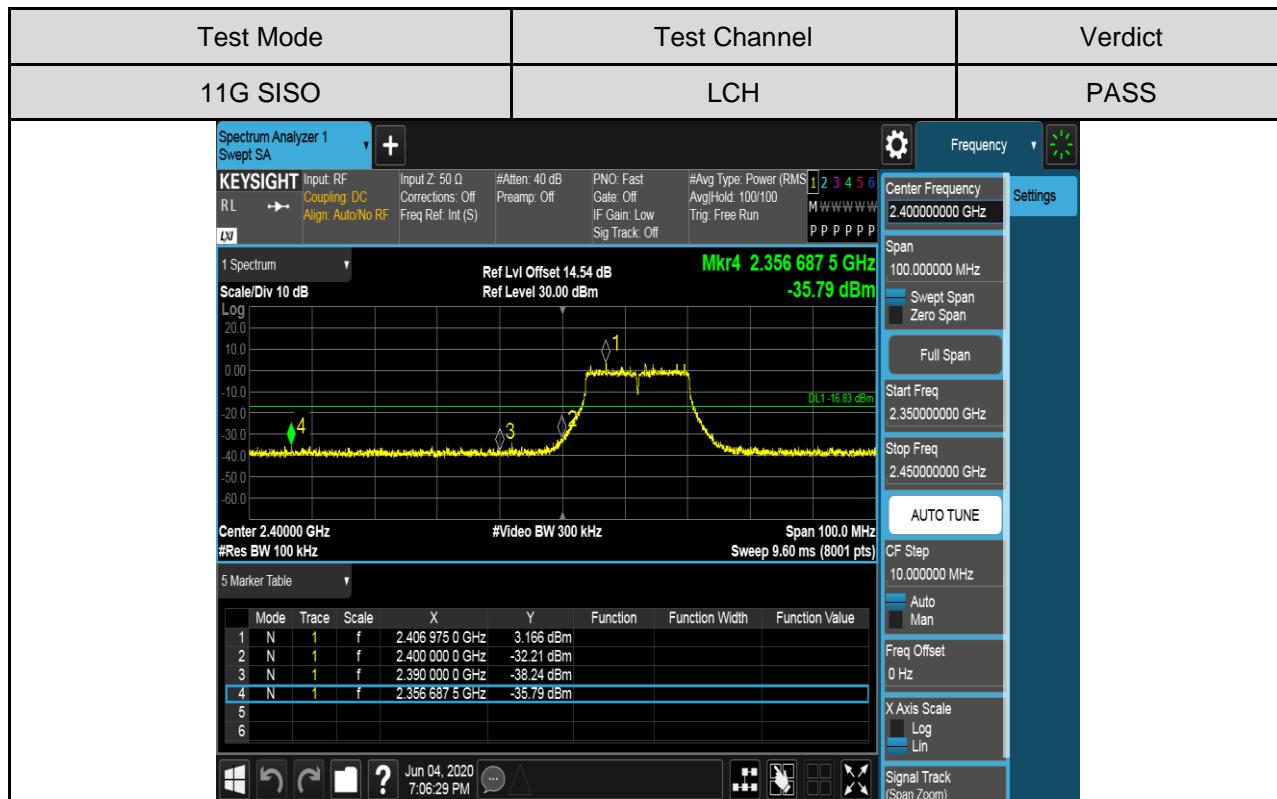
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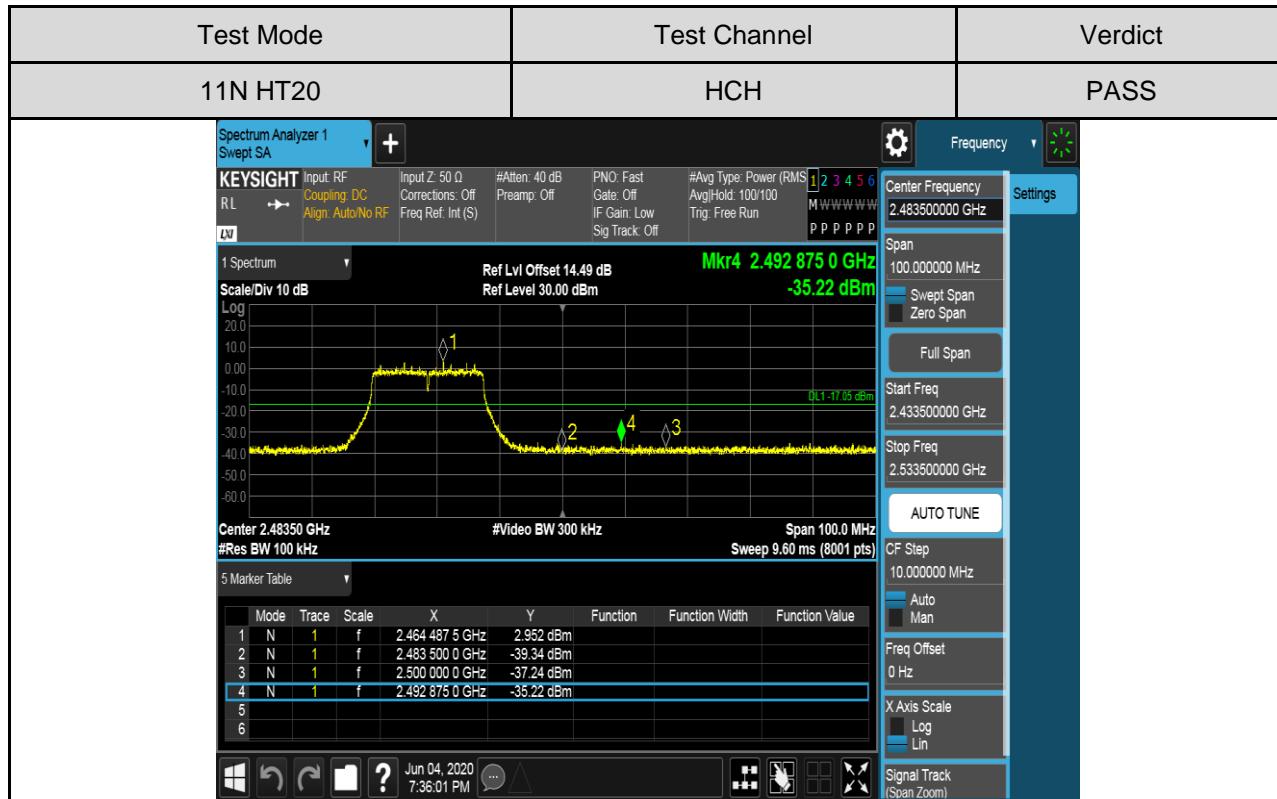
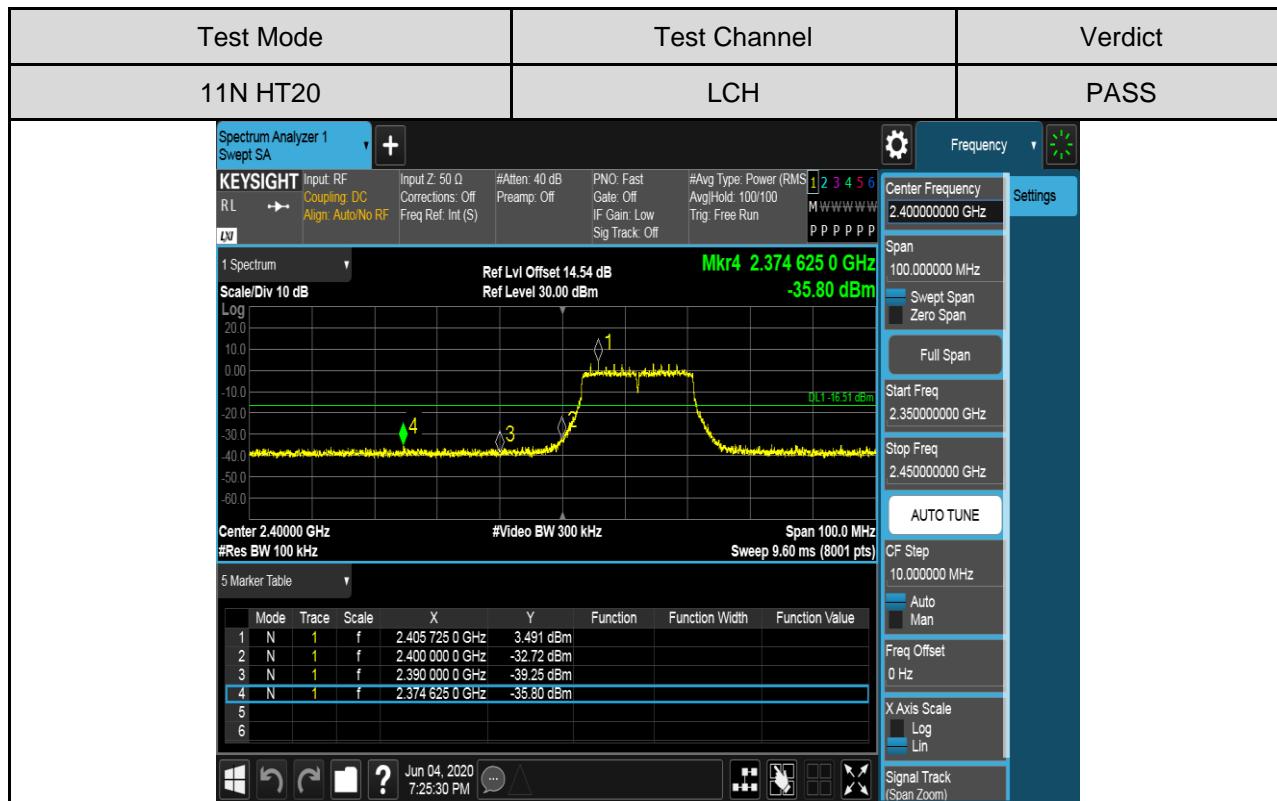
Test Mode	Test Channel	Carrier Power[dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	4.513	-35.69	-15.49	PASS
	HCH	2.659	-34.87	-17.34	PASS
11G	LCH	2.251	-35.36	-17.75	PASS
	HCH	0.8930	-35.90	-19.11	PASS
11N HT20	LCH	2.360	-35.43	-17.64	PASS
	HCH	1.042	-35.28	-18.96	PASS
11N HT40	LCH	-0.1004	-34.93	-30.10	PASS
	HCH	-0.4585	-34.86	-30.64	PASS

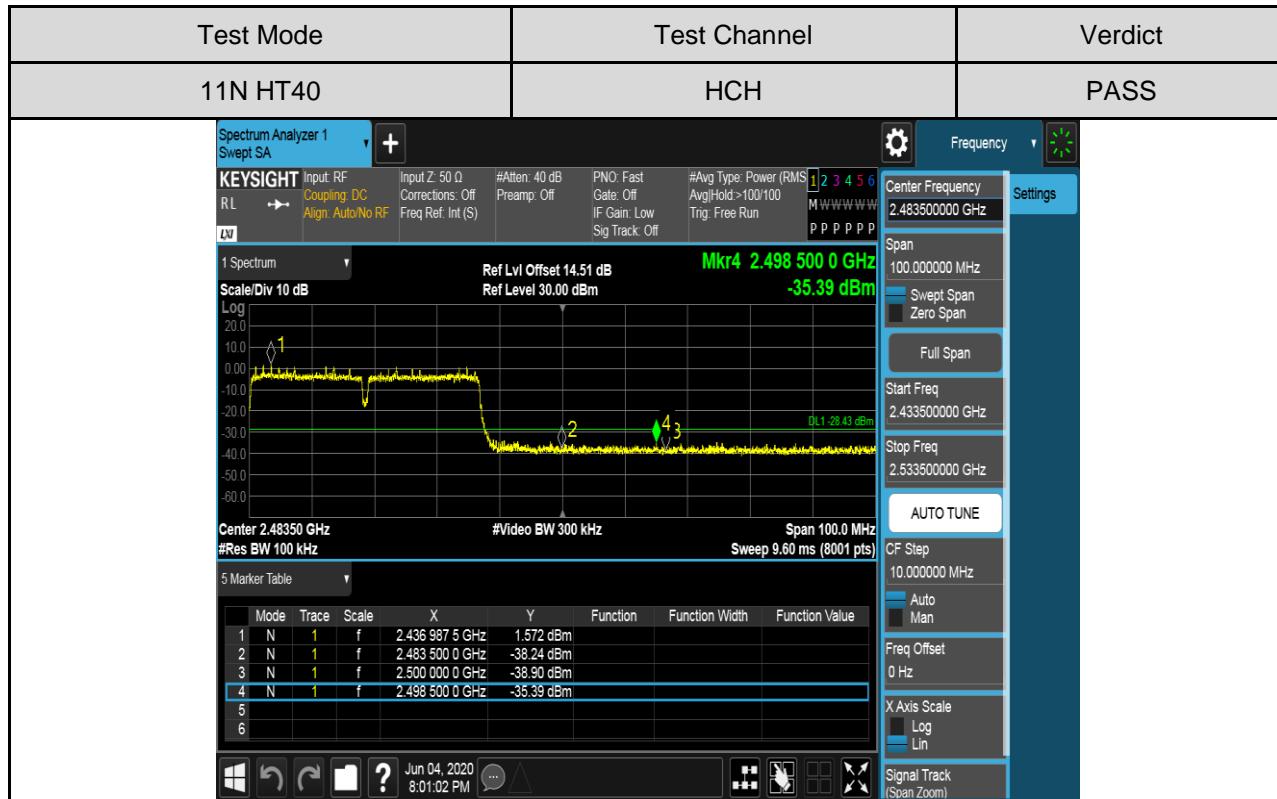
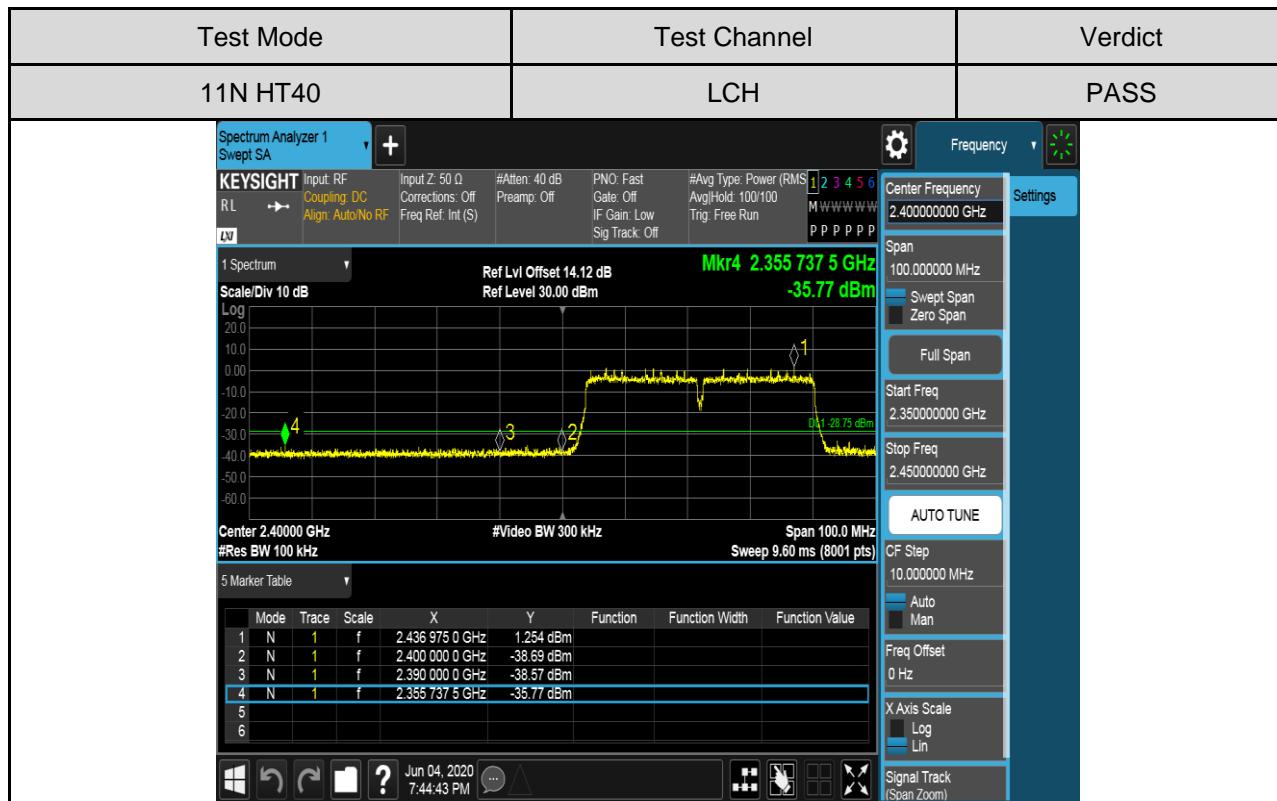
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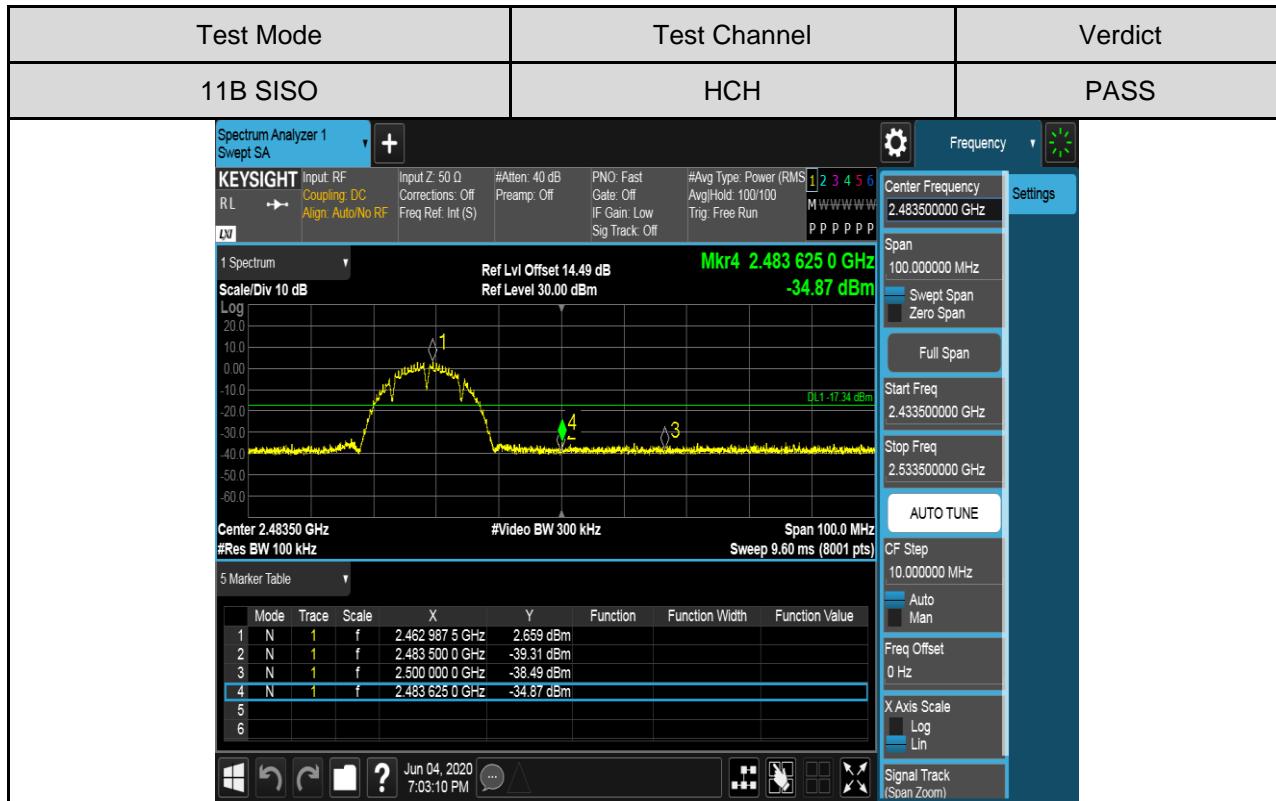
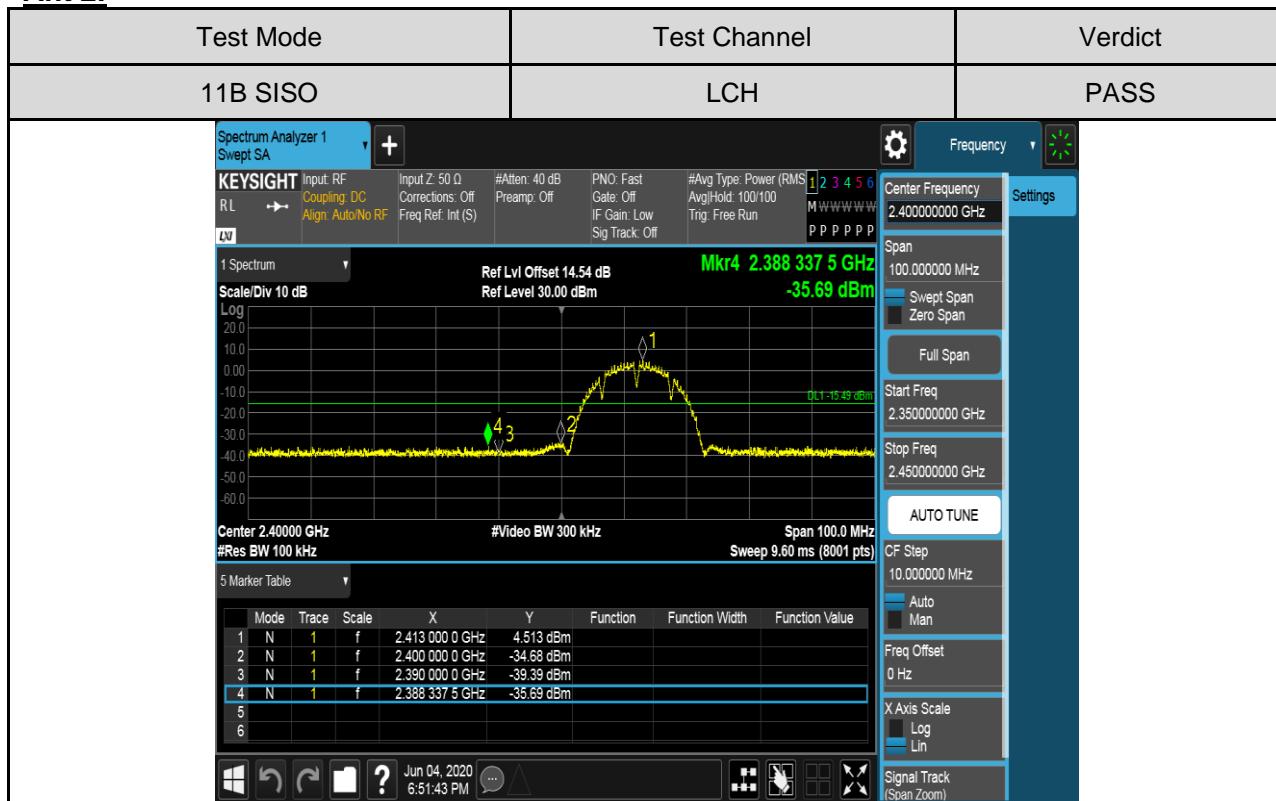
Test Mode	Test Channel	Verdict
11B SISO	LCH	PASS

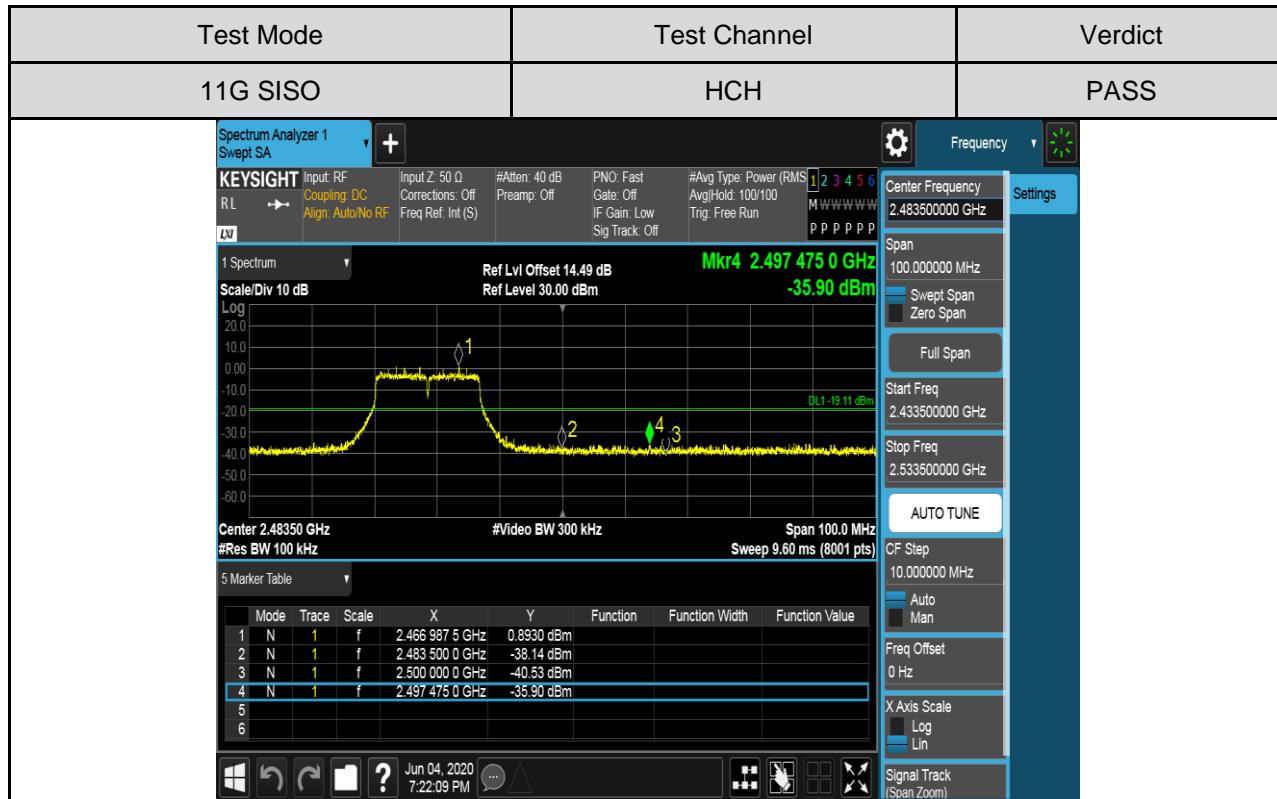
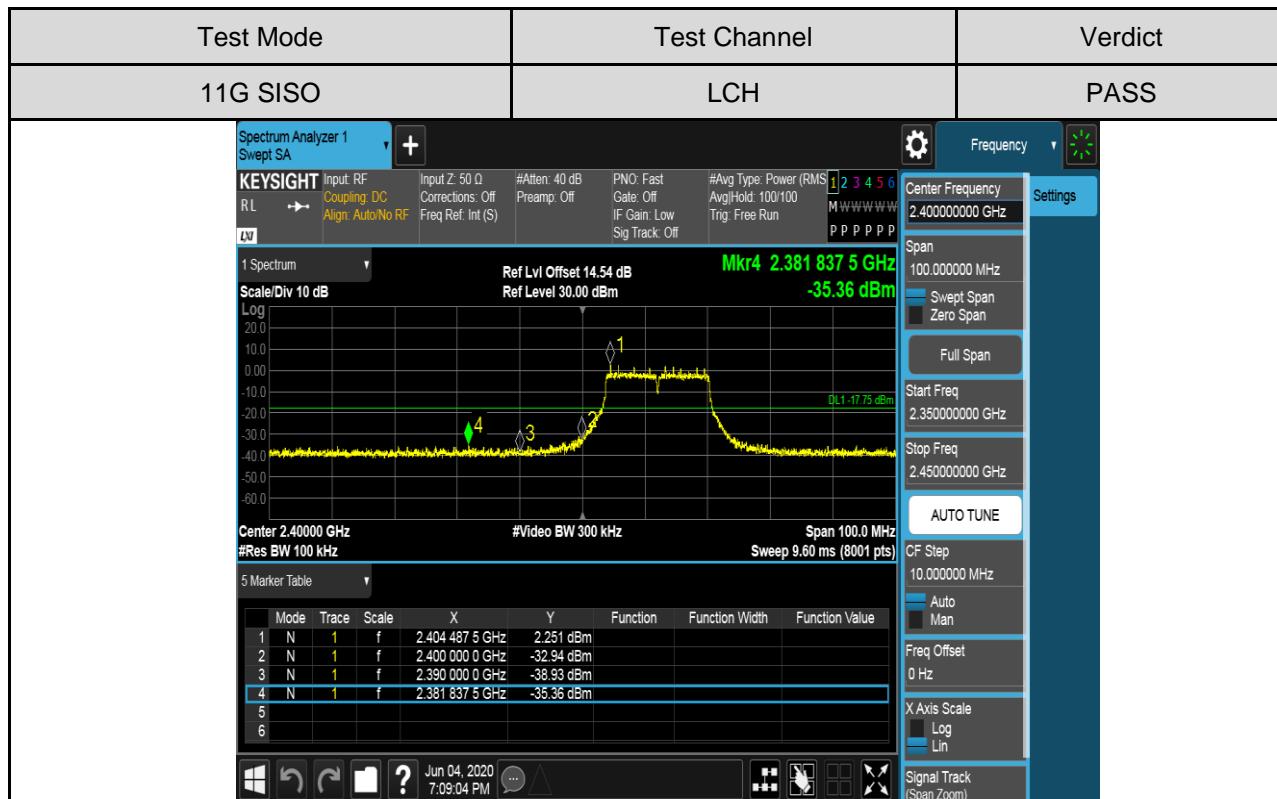
Test Mode	Test Channel	Verdict
11B SISO	HCH	PASS

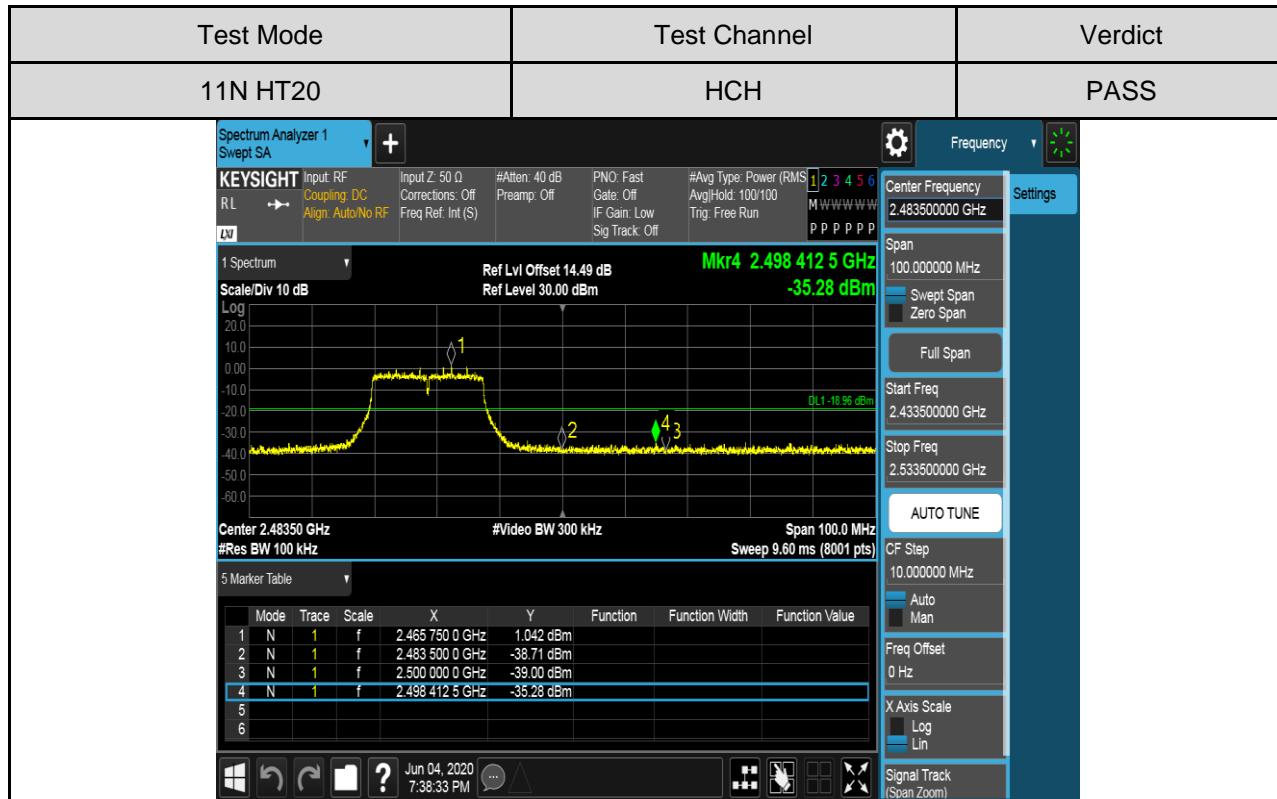
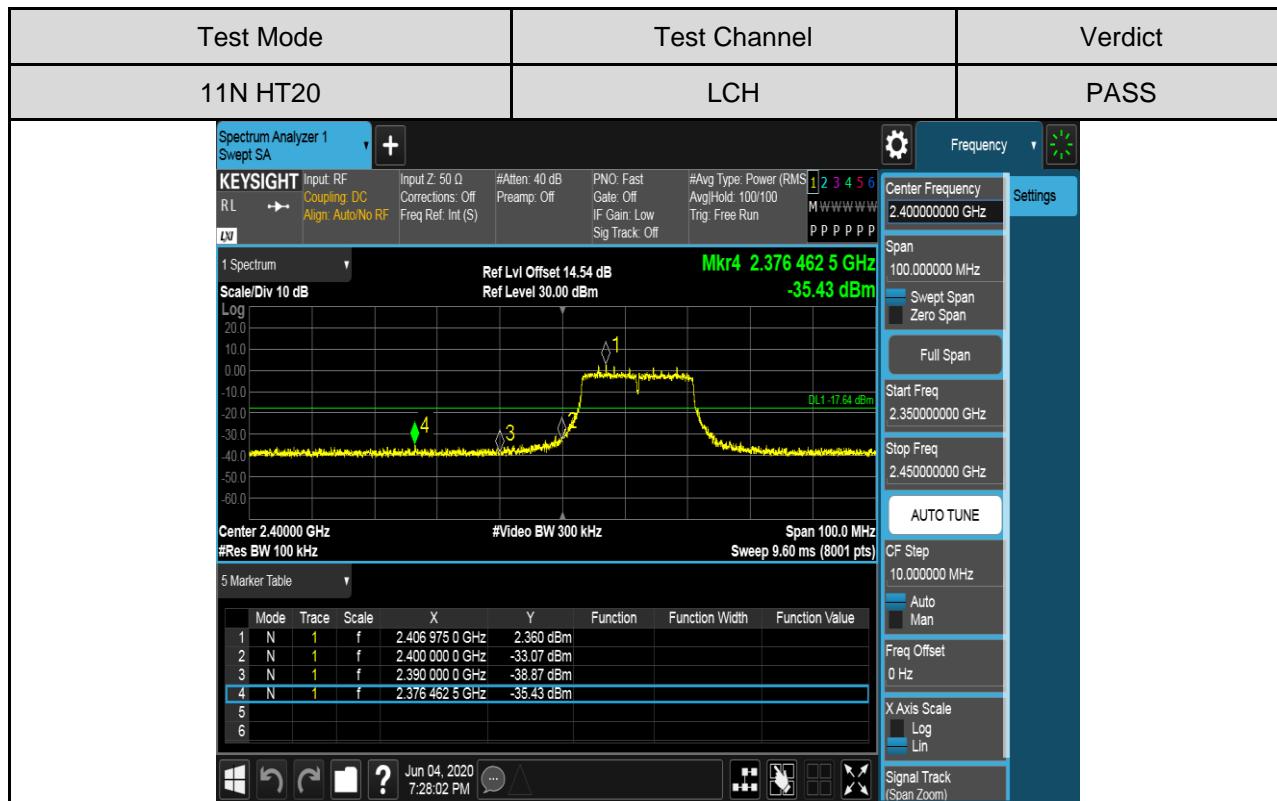


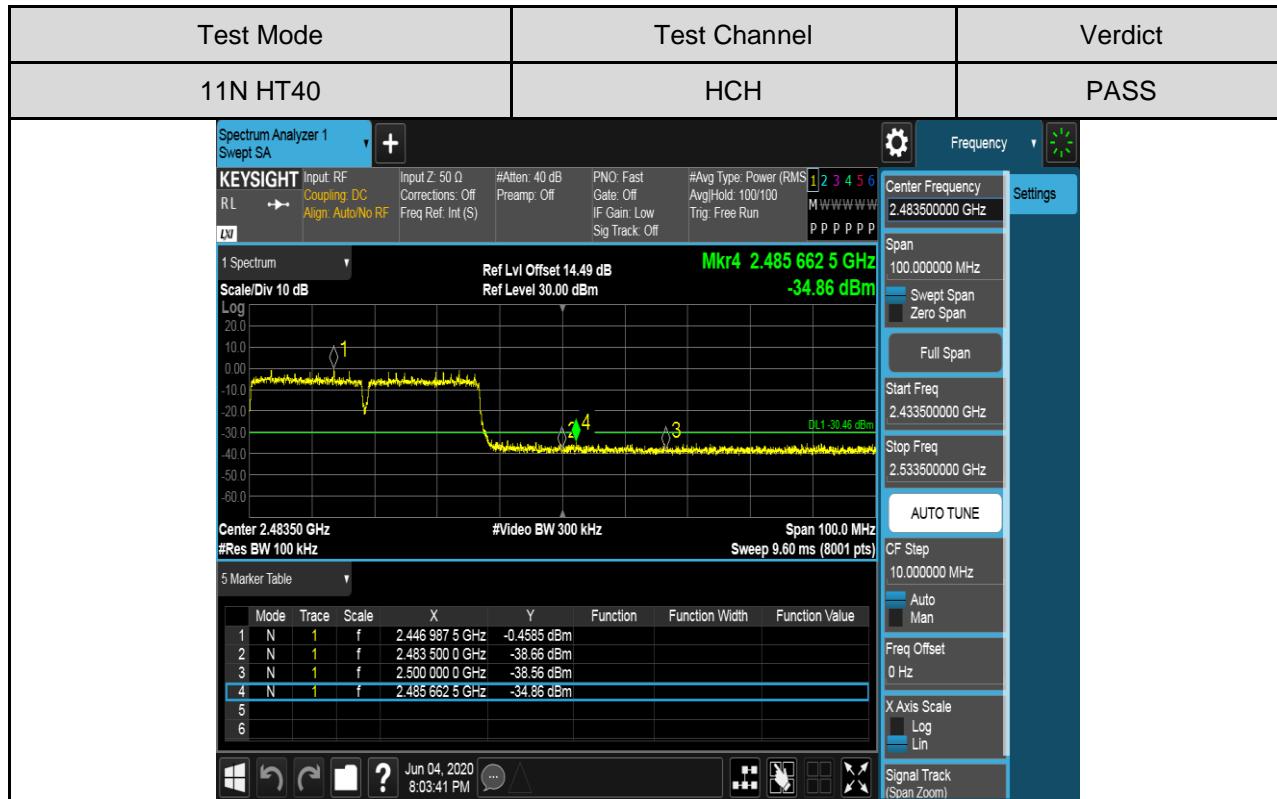
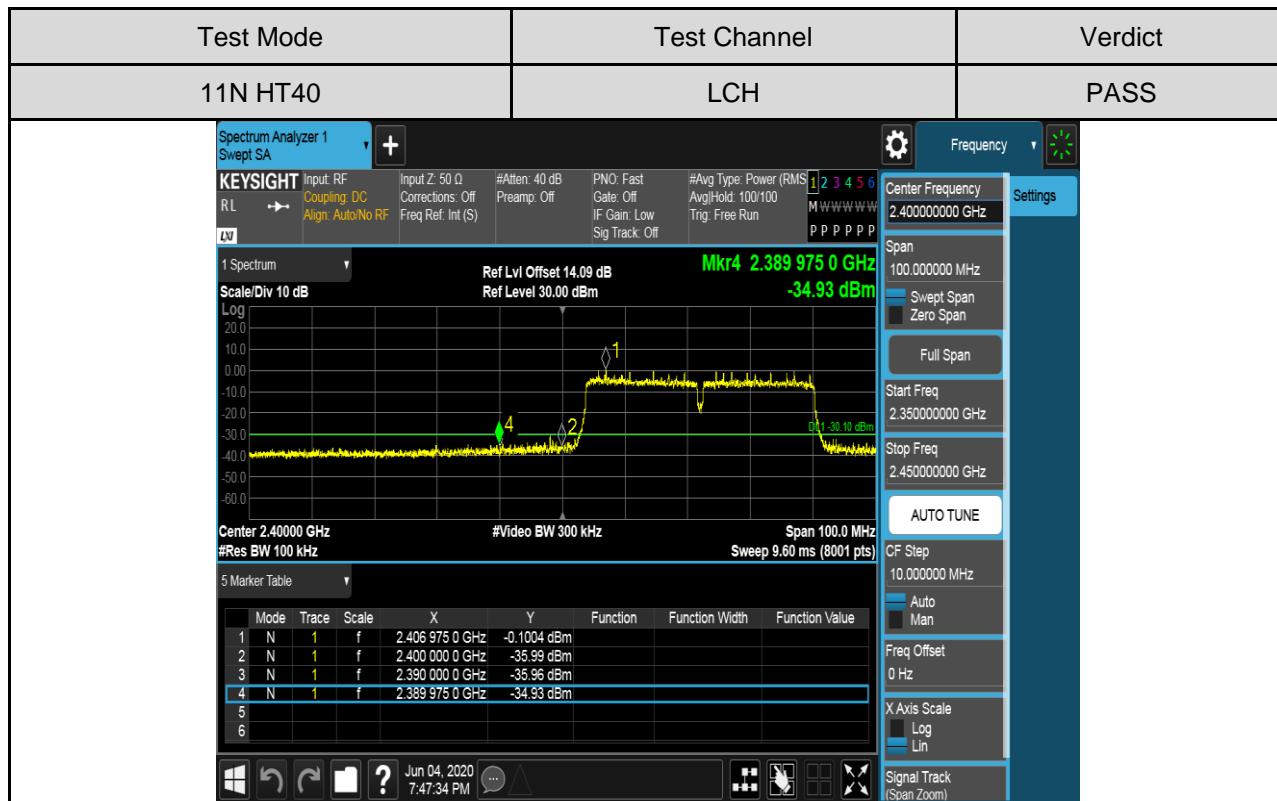




Ant 2:








Part II :Conducted Emission

Test Result Table

Test Mode	Channel	Pref(dBm)		Puw(dBm)	Verdict
		Ant 1	Ant 2		
11B	LCH	5.79	4.80	<Limit	PASS
	MCH	5.28	3.59	<Limit	PASS
	HCH	4.88	2.67	<Limit	PASS
11G	LCH	3.39	2.21	<Limit	PASS
	MCH	2.77	1.42	<Limit	PASS
	HCH	2.99	0.95	<Limit	PASS
11N HT20	LCH	3.40	2.28	<Limit	PASS
	MCH	3.23	1.50	<Limit	PASS
	HCH	3.10	1.23	<Limit	PASS
11N HT40	LCH	1.52	-0.50	<Limit	PASS
	MCH	1.15	-0.68	<Limit	PASS
	HCH	0.97	-0.70	<Limit	PASS

Test Plots

Ant 1:

Test Mode	Channel	Verdict
11B	LCH	PASS

Pref test Plot

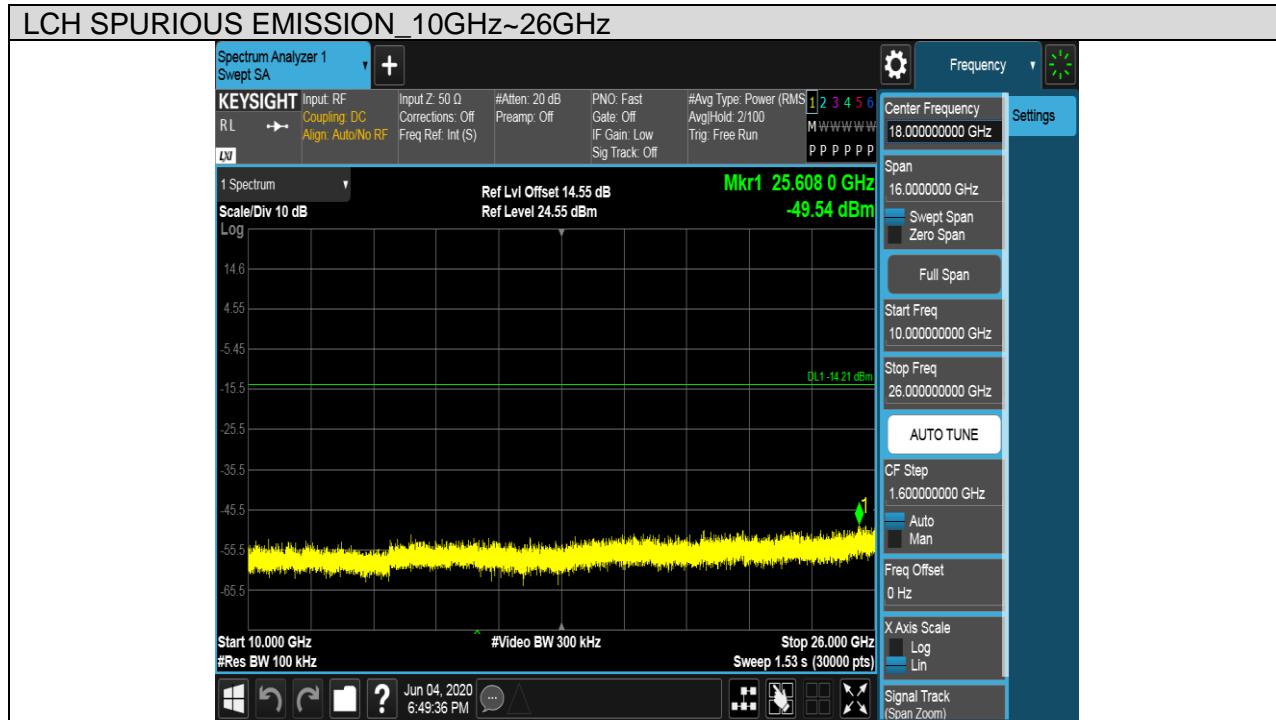


Puw test Plot

LCH SPURIOUS EMISSION_30MHz~10GHz



LCH SPURIOUS EMISSION_10GHz~26GHz



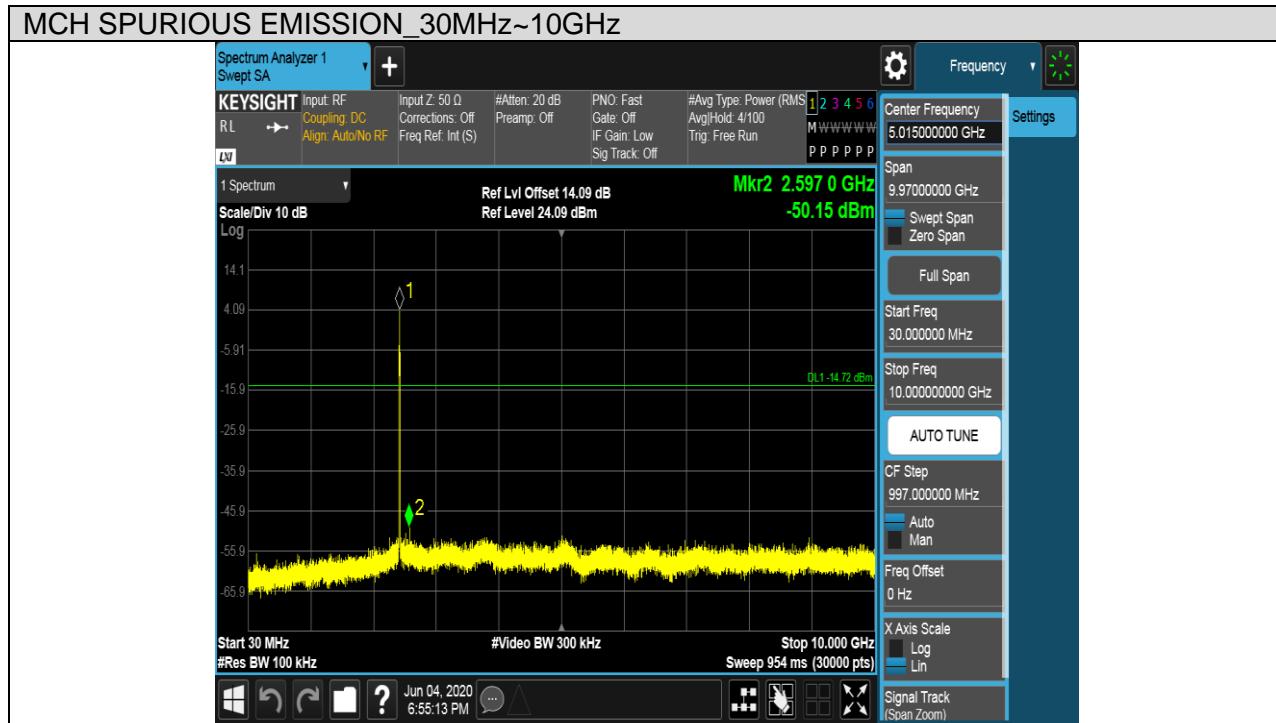
Test Mode	Channel	Verdict
11B	MCH	PASS

Pref test Plot

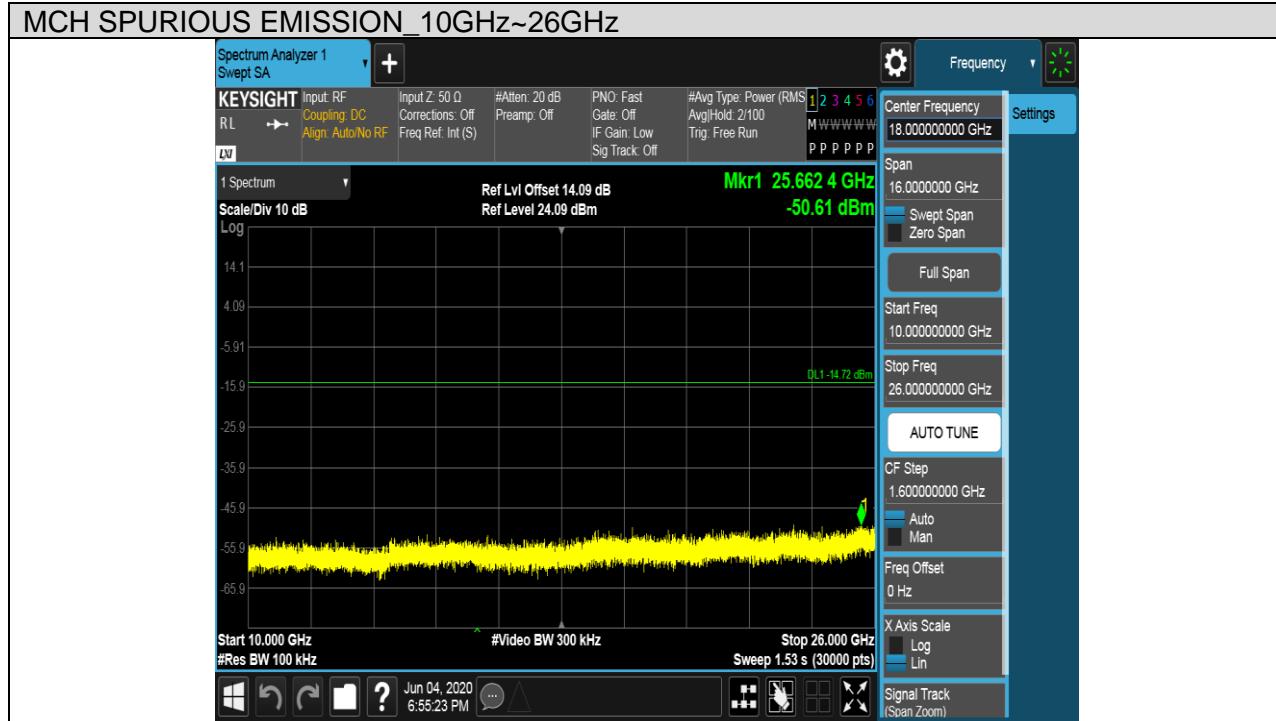


Puw test Plot

MCH SPURIOUS EMISSION 30MHz~10GHz



MCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11B	HCH	PASS

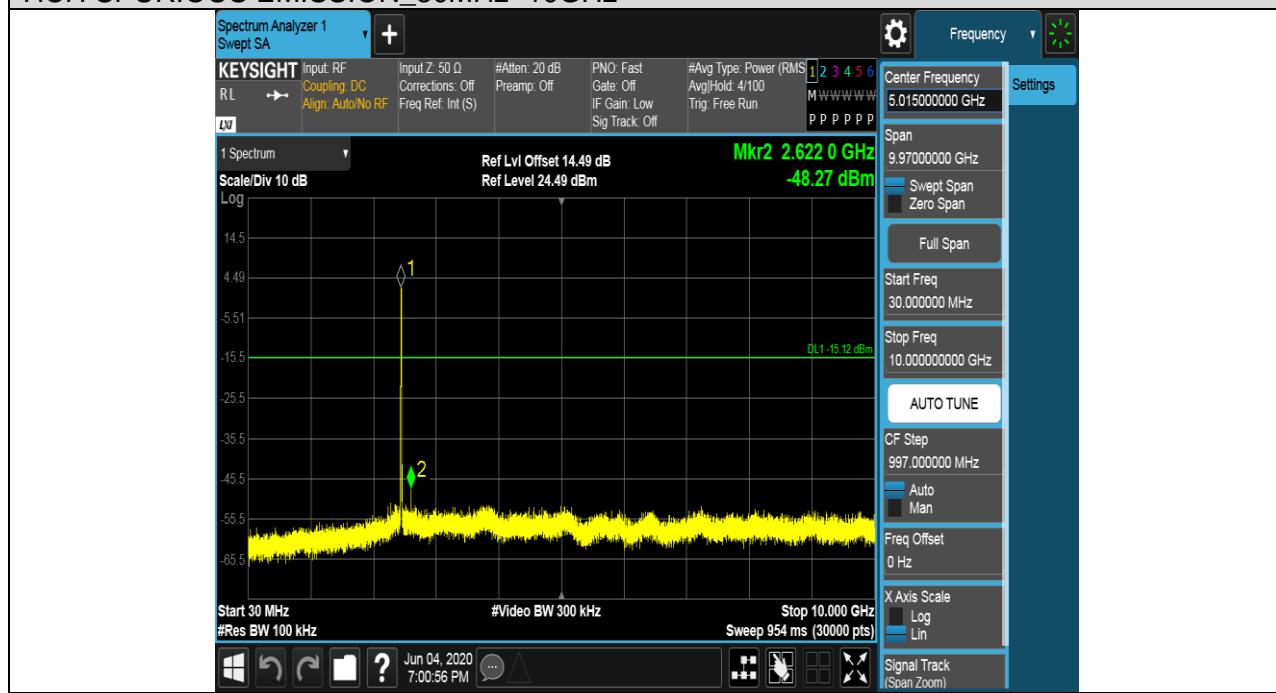
Pref test Plot

HCH SPURIOUS EMISSION

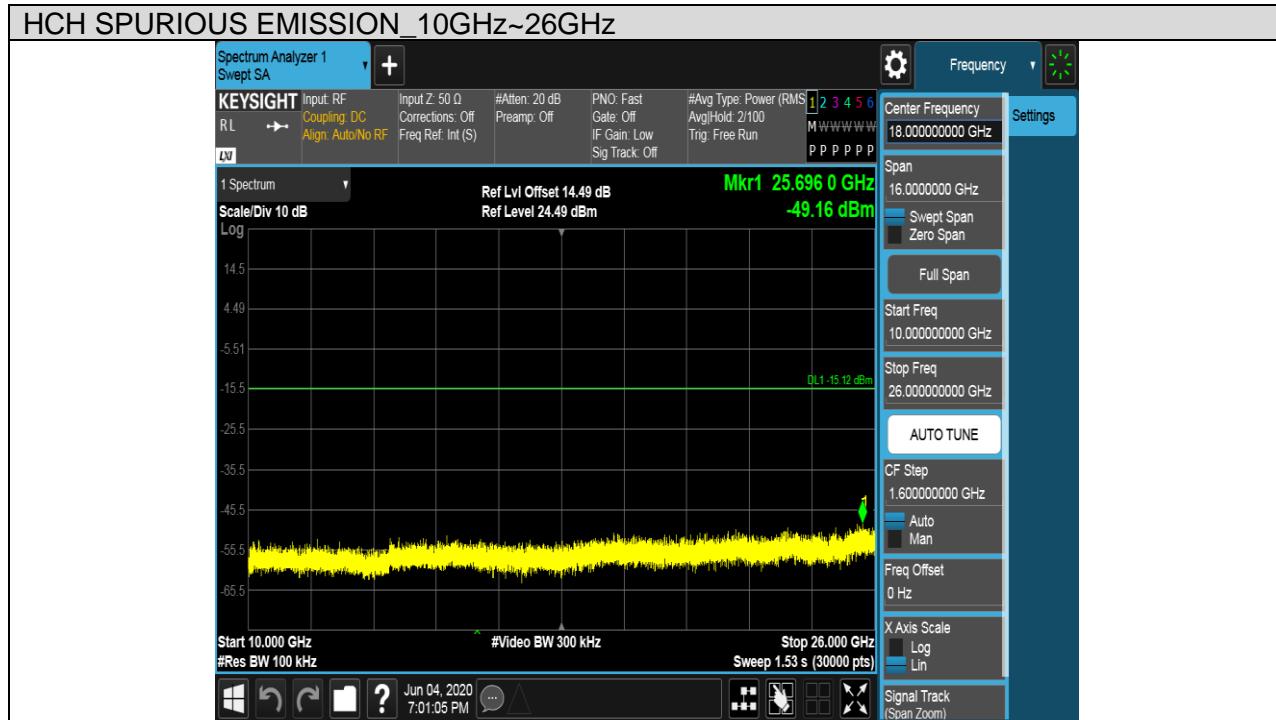


Puw test Plot

HCH SPURIOUS EMISSION_30MHz~10GHz

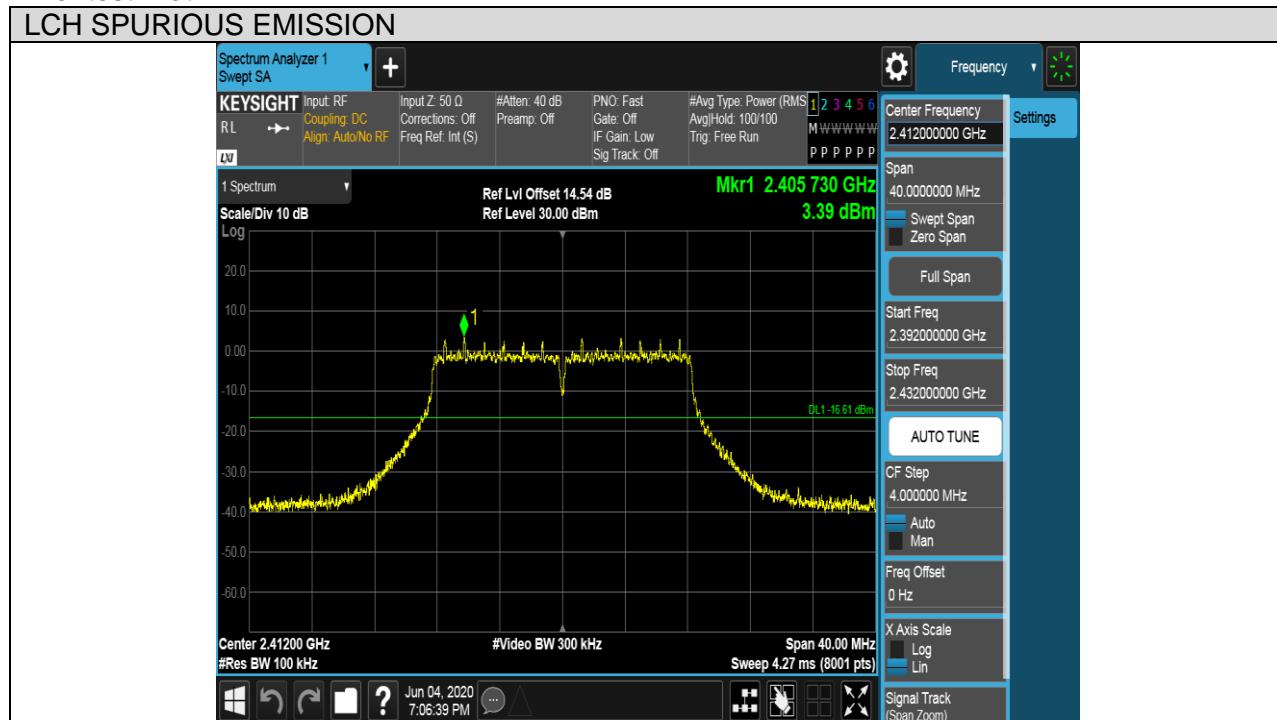


HCH SPURIOUS EMISSION_10GHz~26GHz

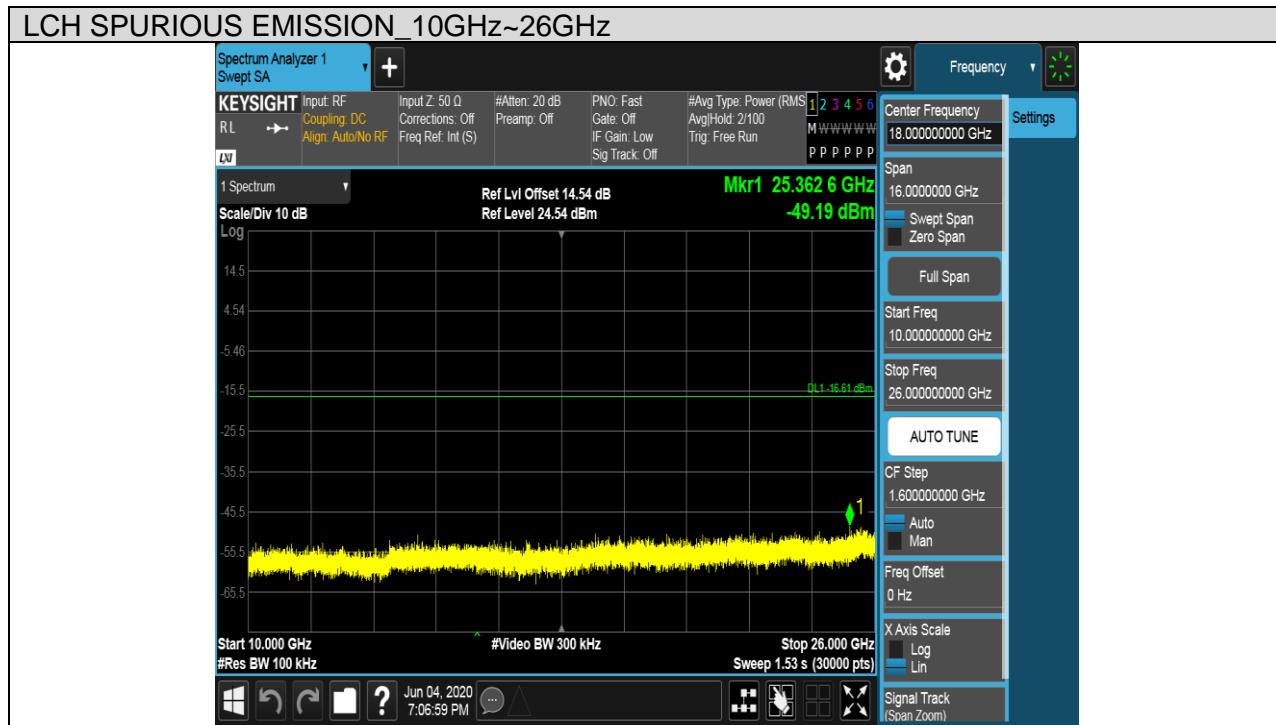
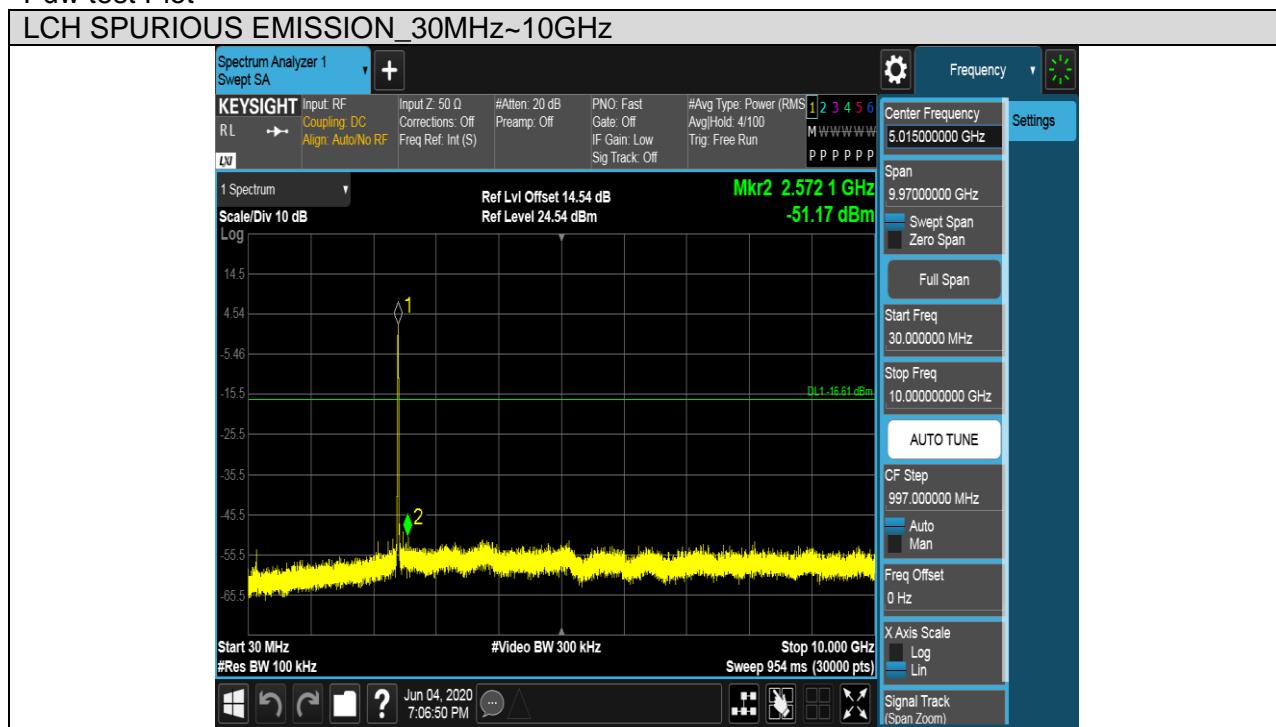


Test Mode	Channel	Verdict
11G	LCH	PASS

Pref test Plot



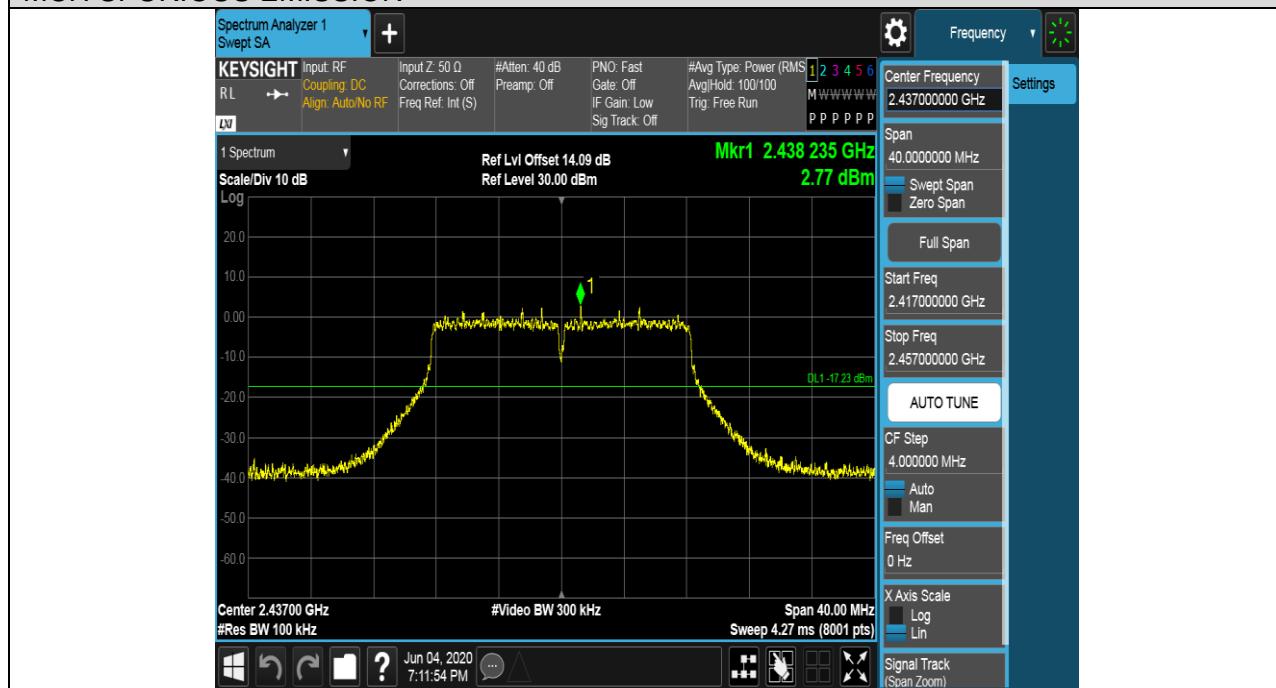
Puw test Plot



Test Mode	Channel	Verdict
11G	MCH	PASS

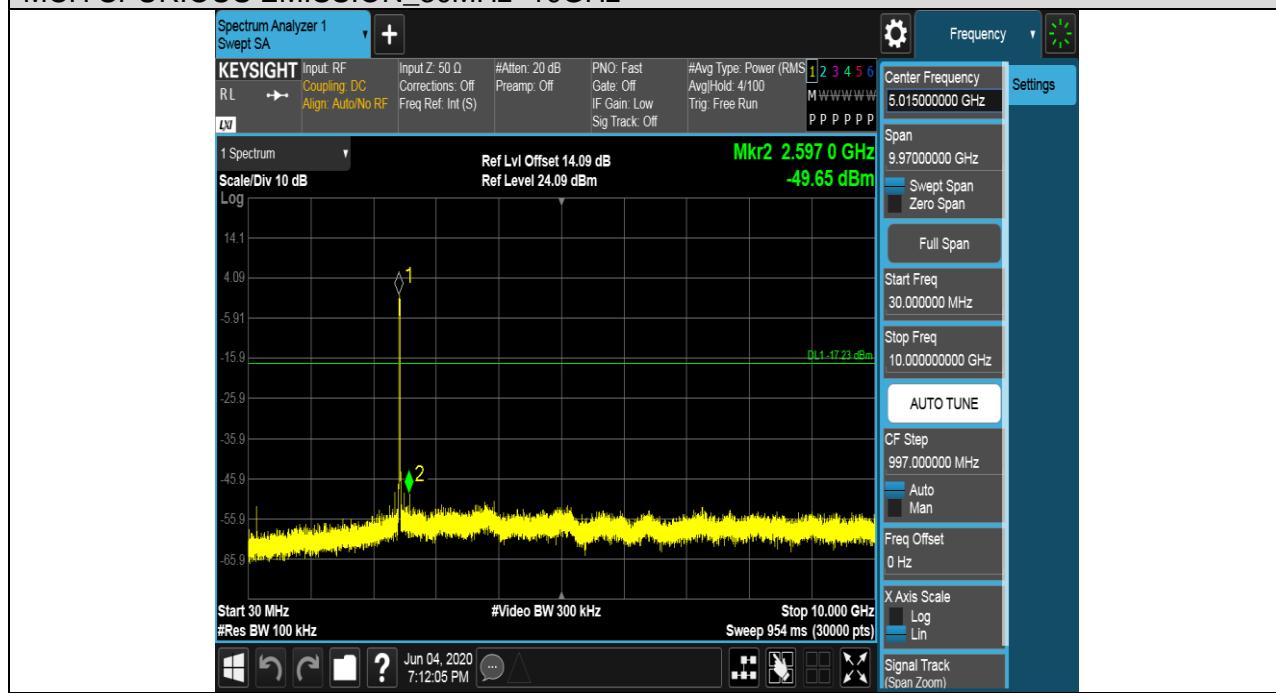
Pref test Plot

MCH SPURIOUS EMISSION

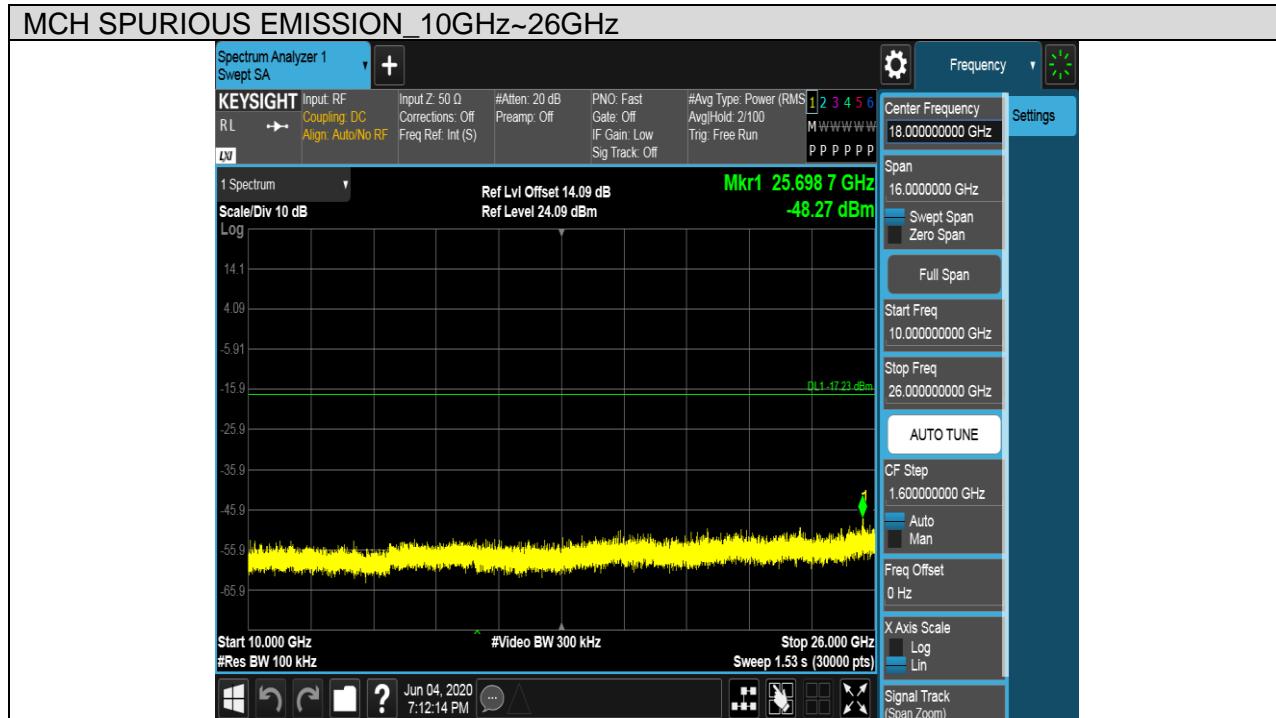


Puw test Plot

MCH SPURIOUS EMISSION_30MHz~10GHz



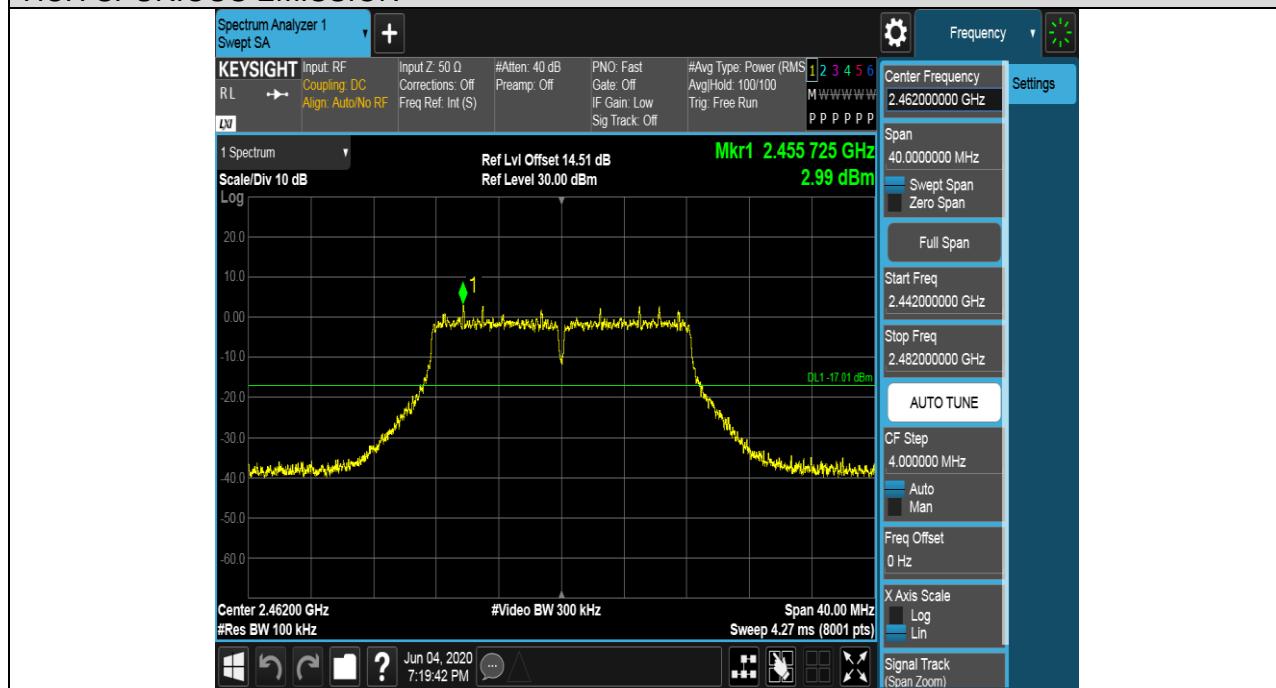
MCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11G	HCH	PASS

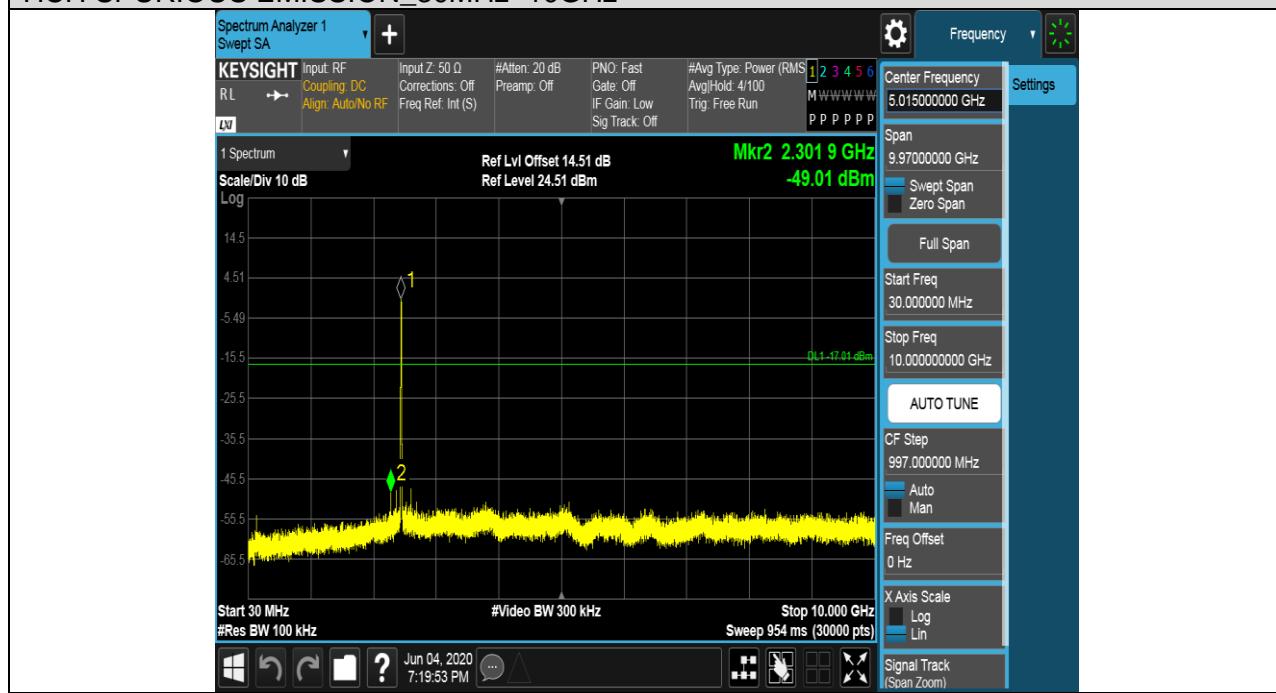
Pref test Plot

HCH SPURIOUS EMISSION

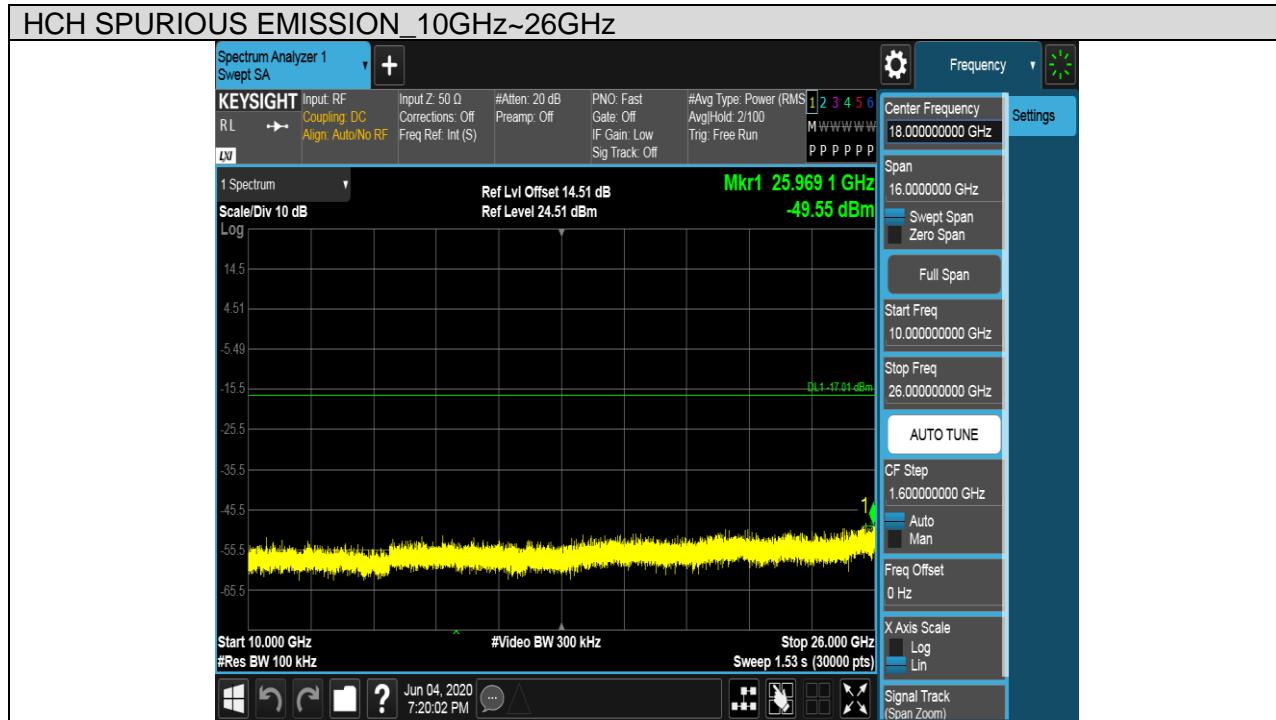


Puw test Plot

HCH SPURIOUS EMISSION_30MHz~10GHz

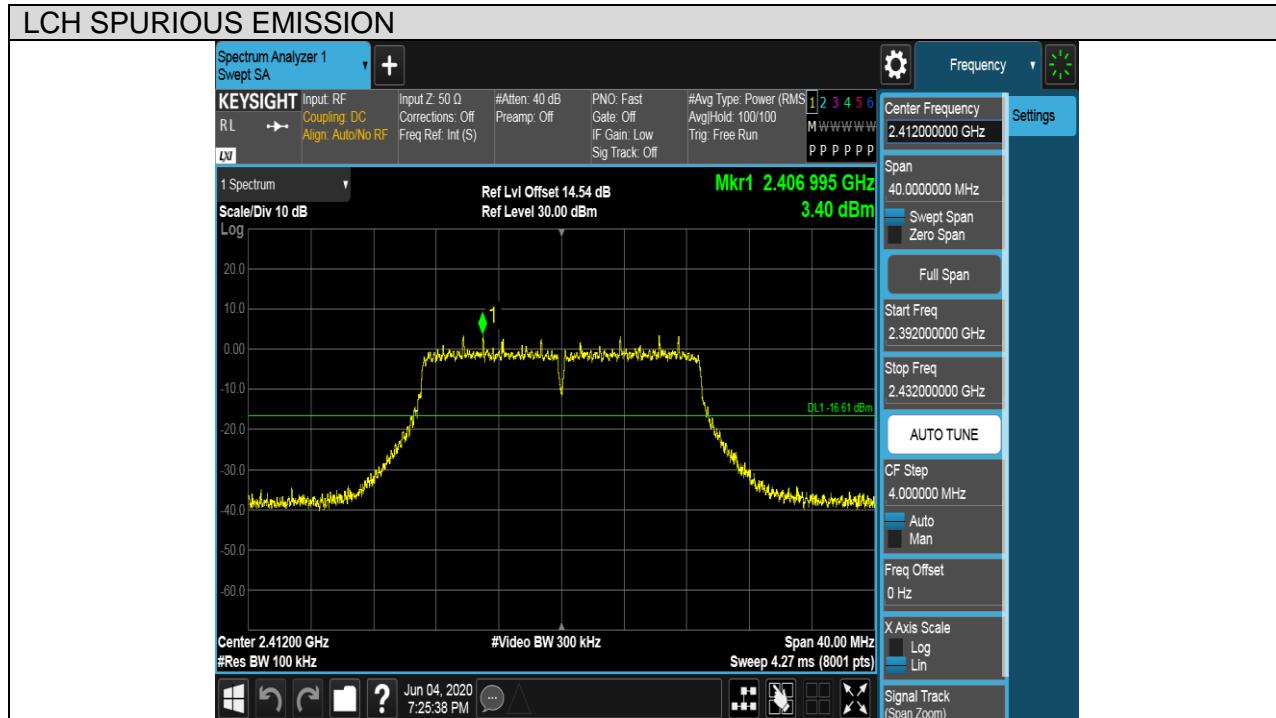


HCH SPURIOUS EMISSION_10GHz~26GHz



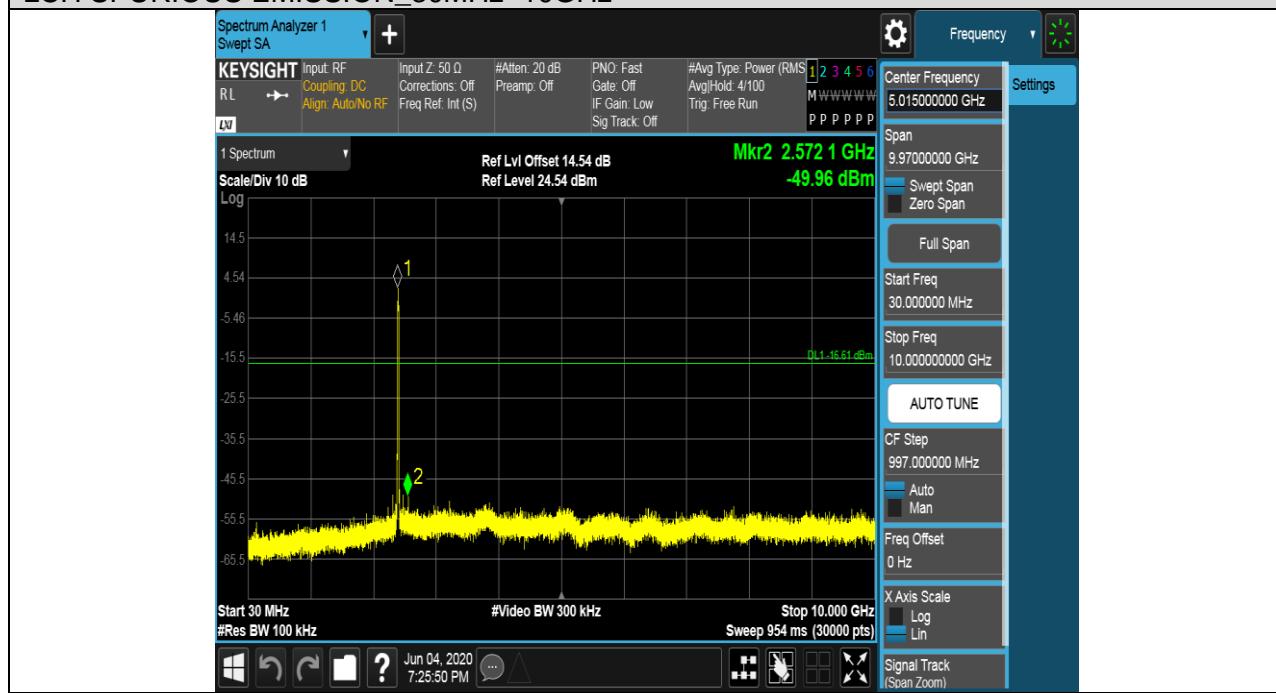
Test Mode	Channel	Verdict
11N HT20	LCH	PASS

Pref test Plot

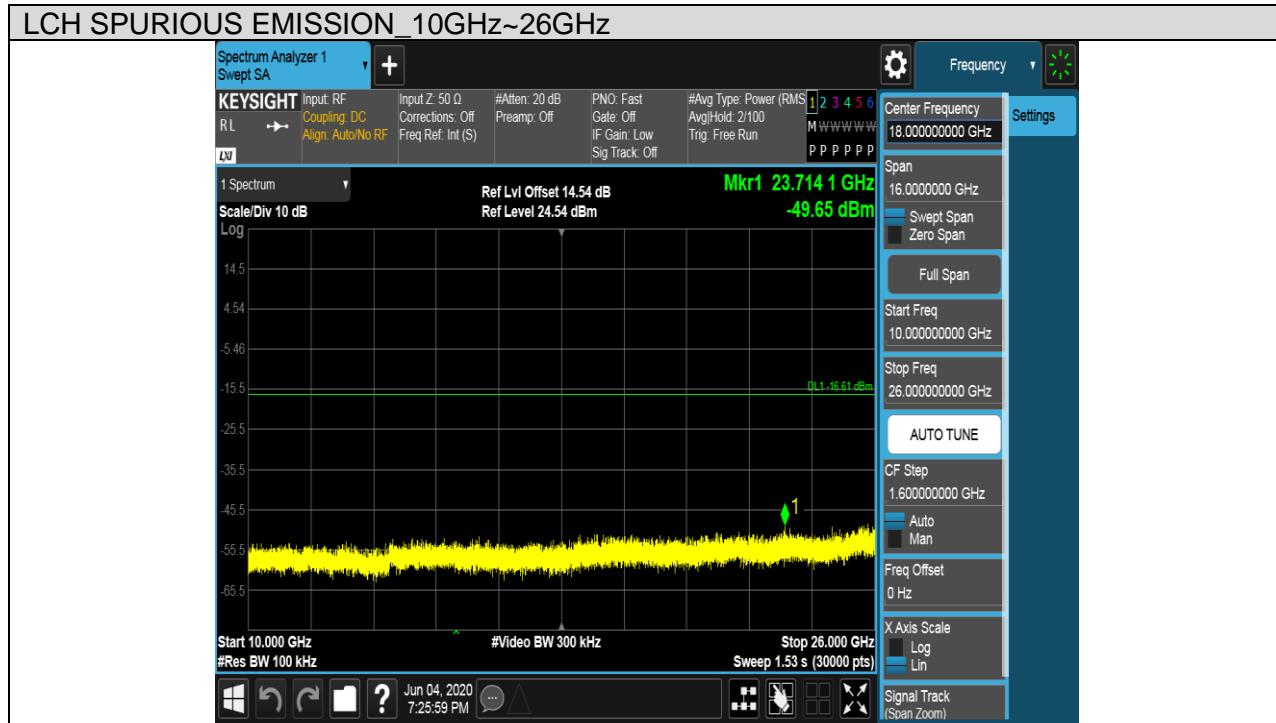


Puw test Plot

LCH SPURIOUS EMISSION_30MHz~10GHz



LCH SPURIOUS EMISSION_10GHz~26GHz



Test Mode	Channel	Verdict
11N HT20	MCH	PASS

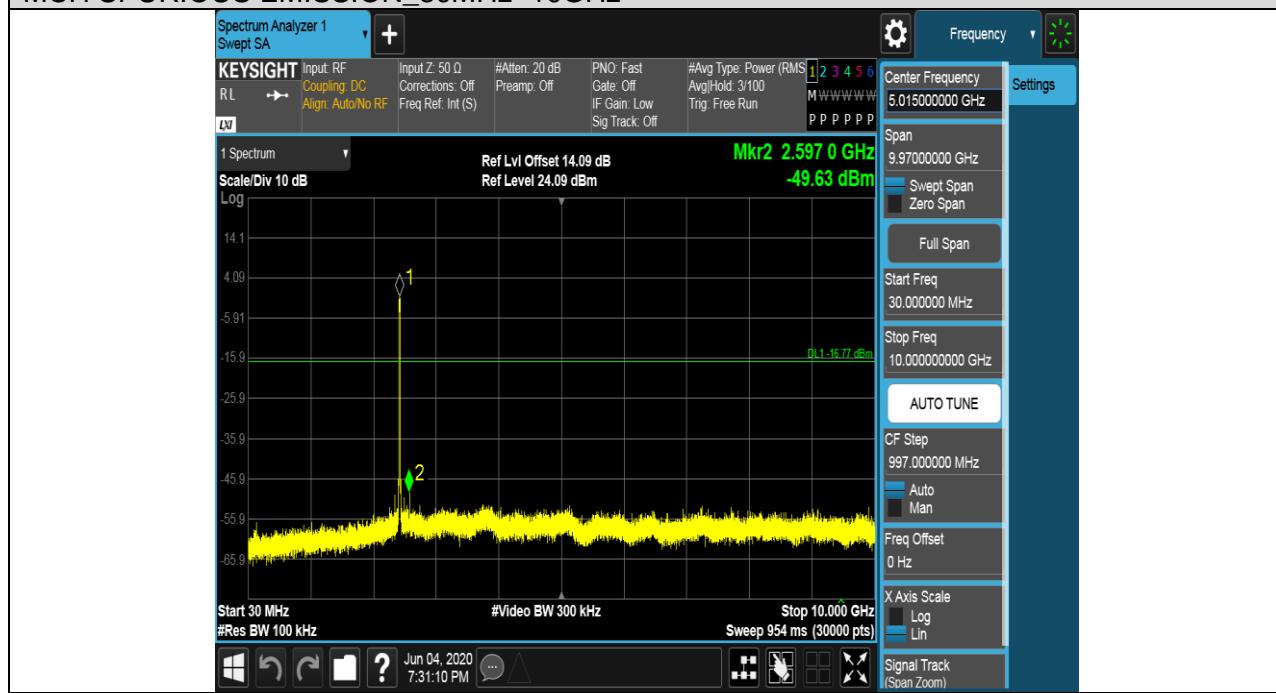
Pref test Plot

MCH SPURIOUS EMISSION



Puw test Plot

MCH SPURIOUS EMISSION_30MHz~10GHz



MCH SPURIOUS EMISSION_10GHz~26GHz

