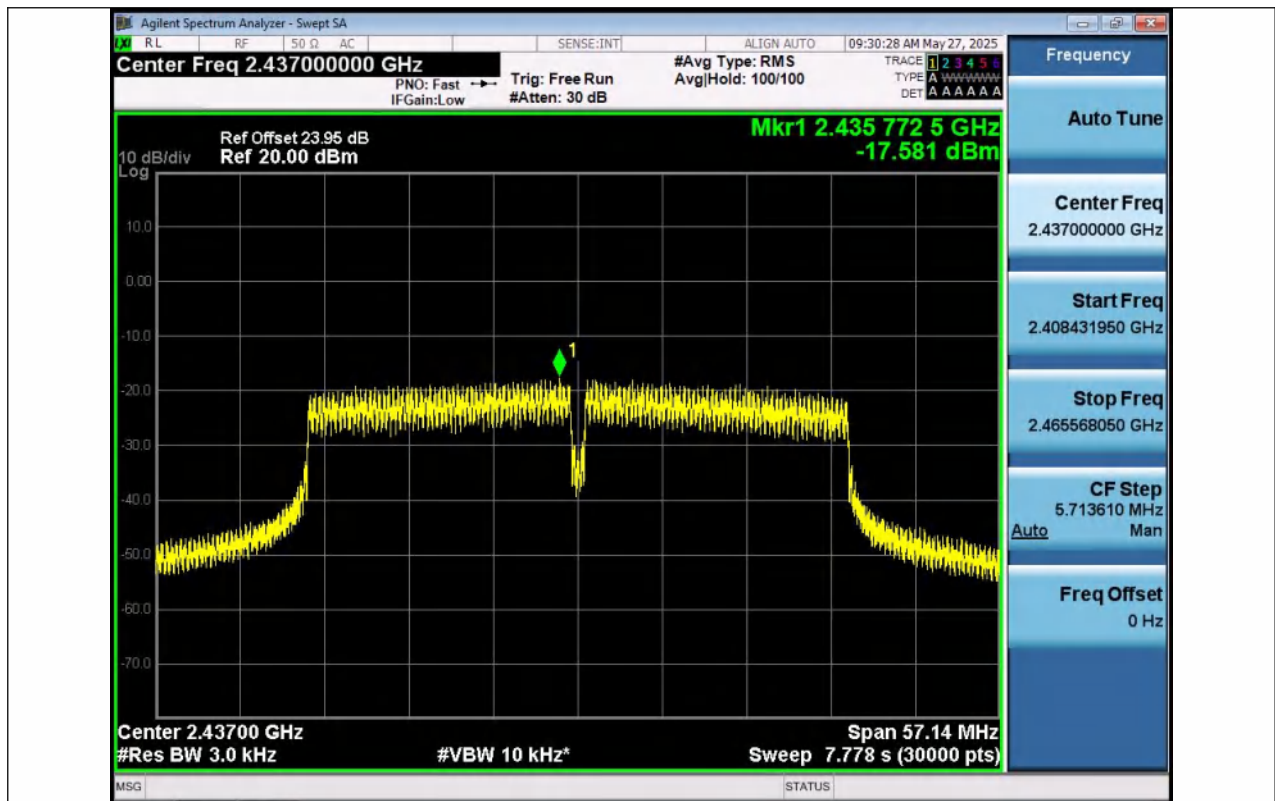
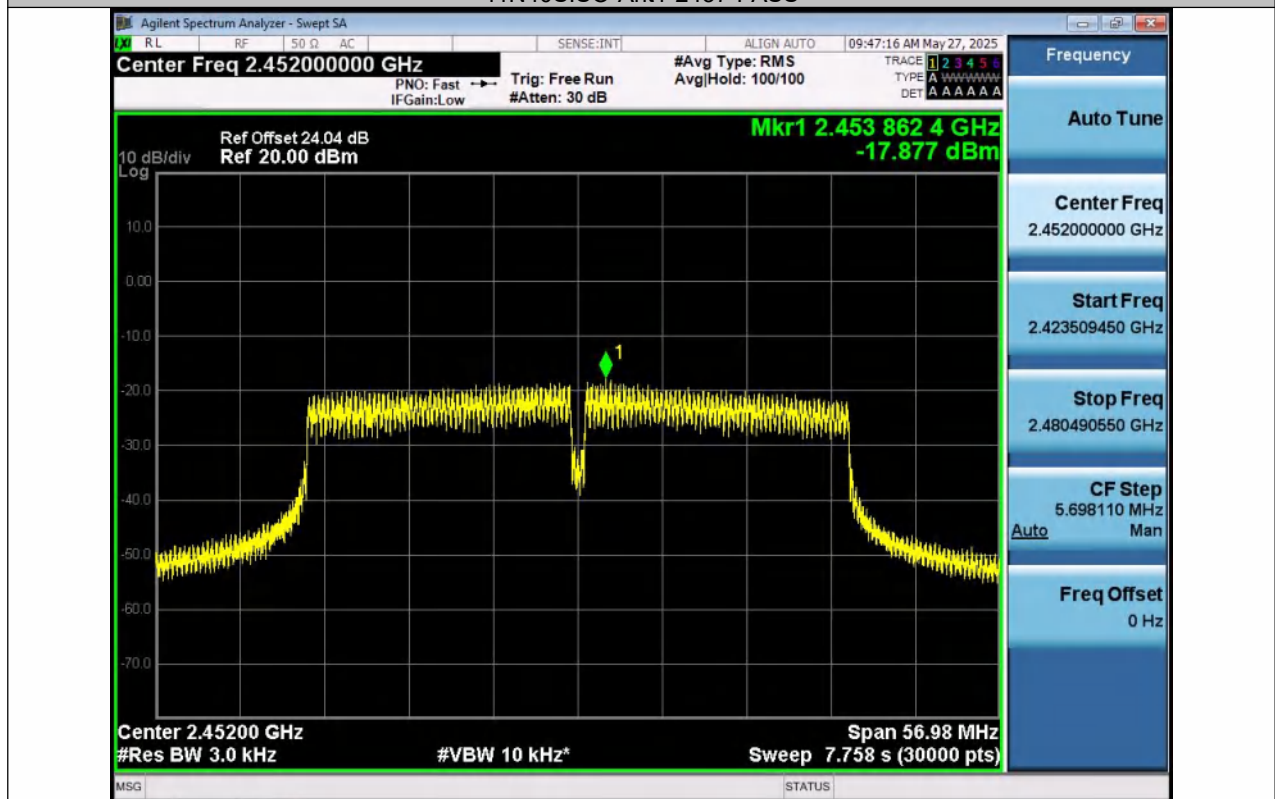
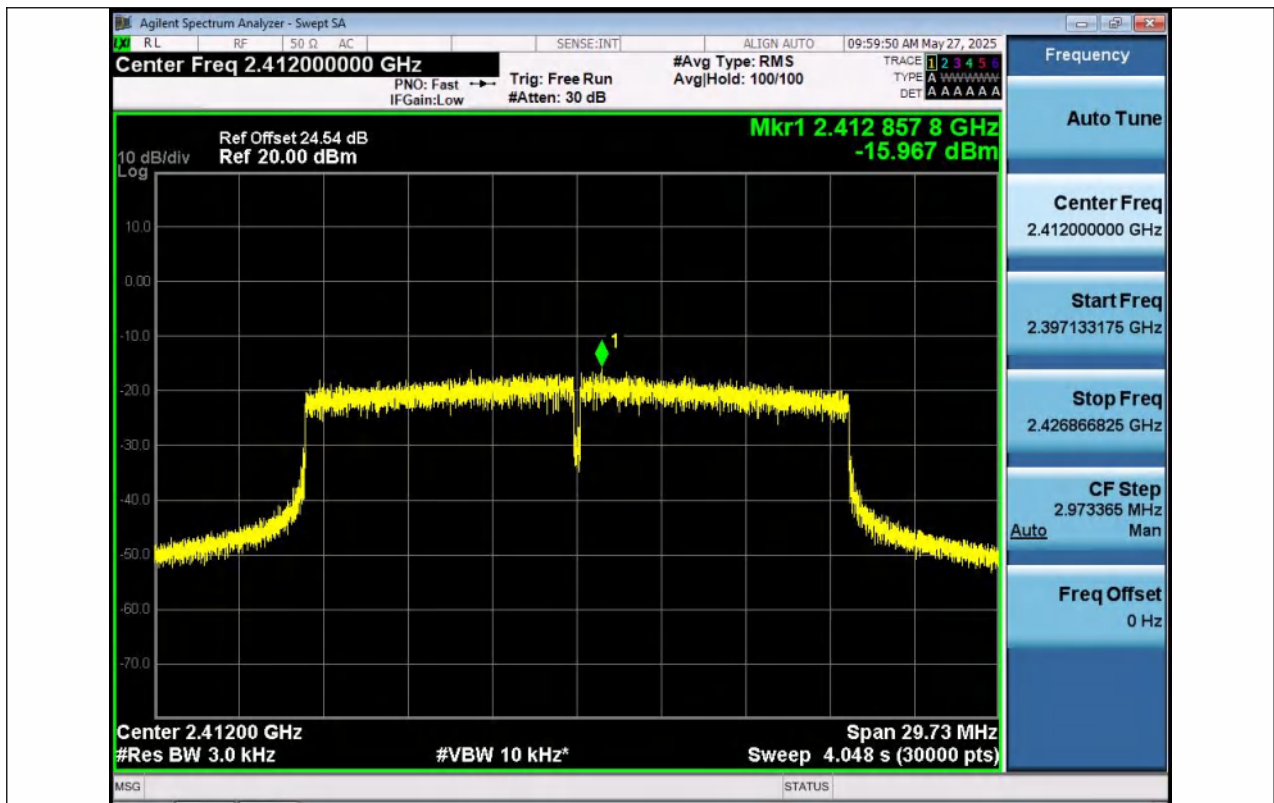




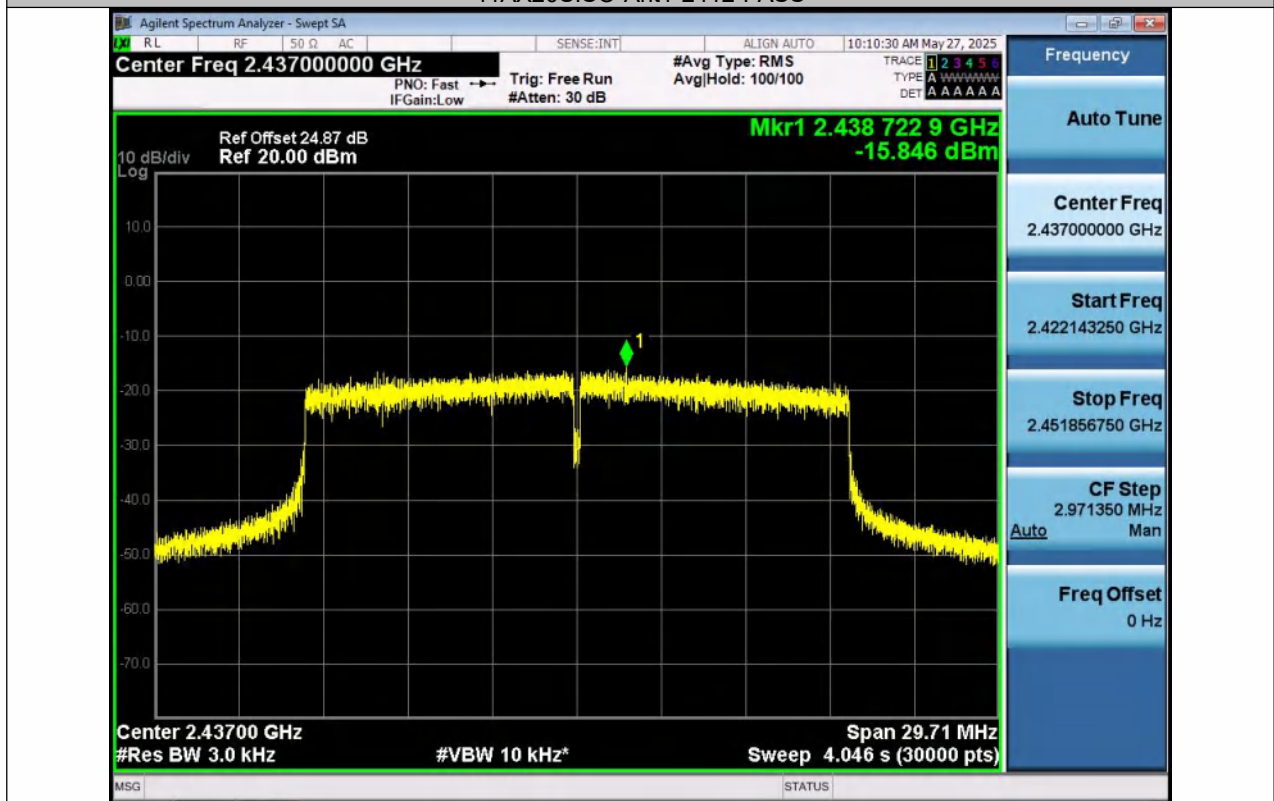
11N40SISO-Ant1-2437-PASS



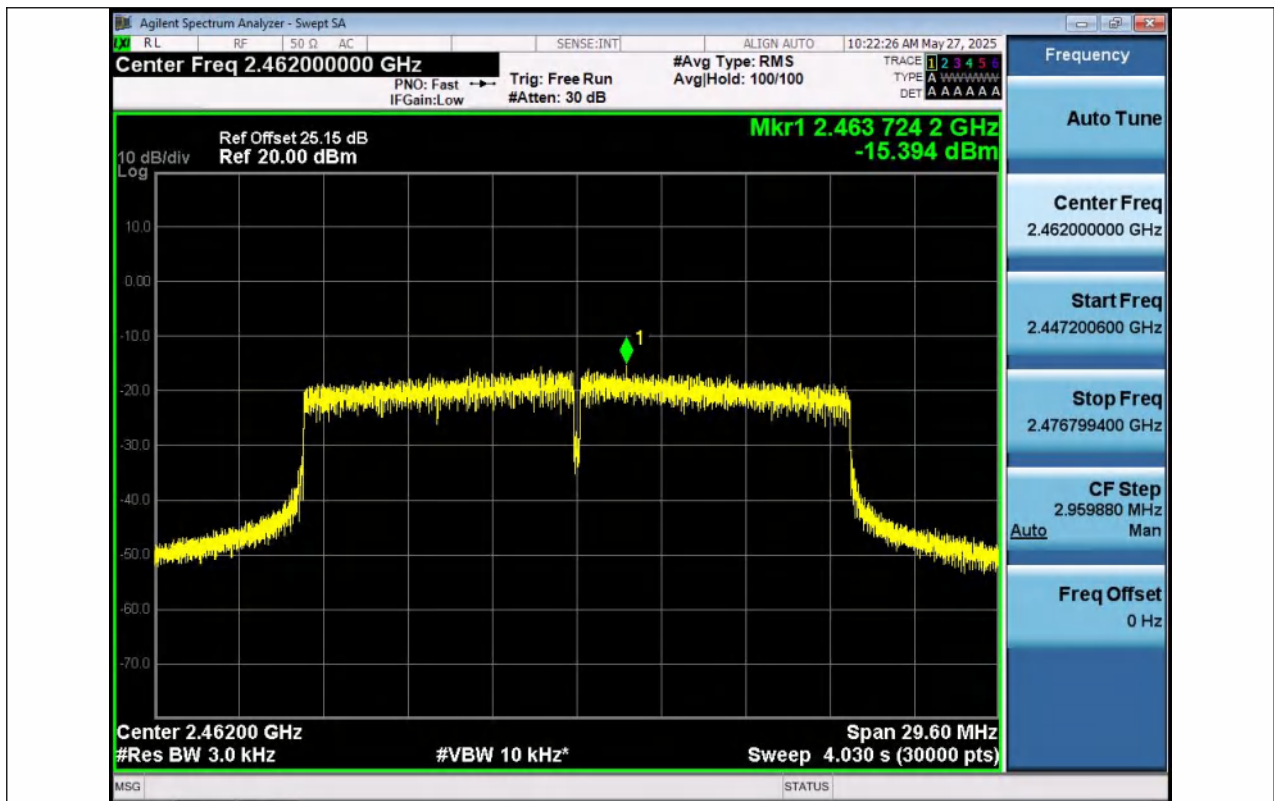
11N40SISO-Ant1-2452-PASS



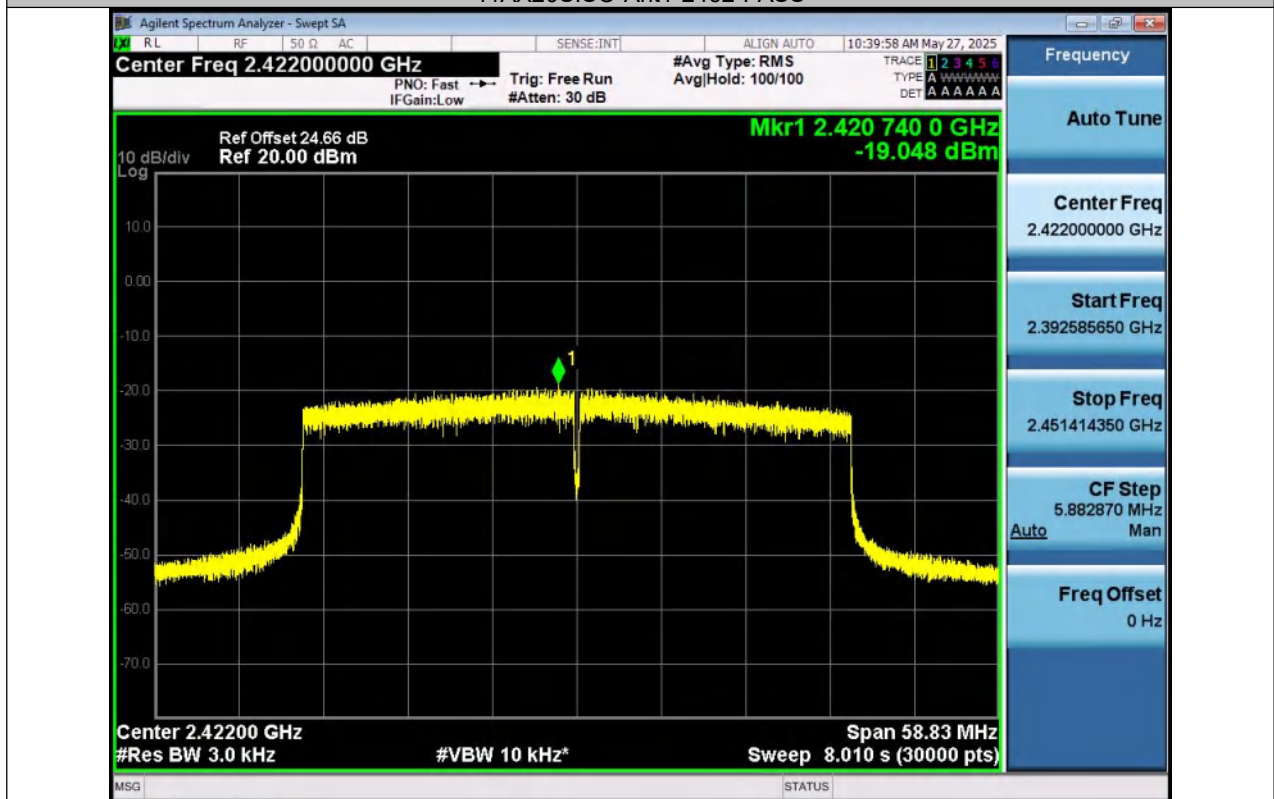
11AX20SISO-Ant1-2412-PASS



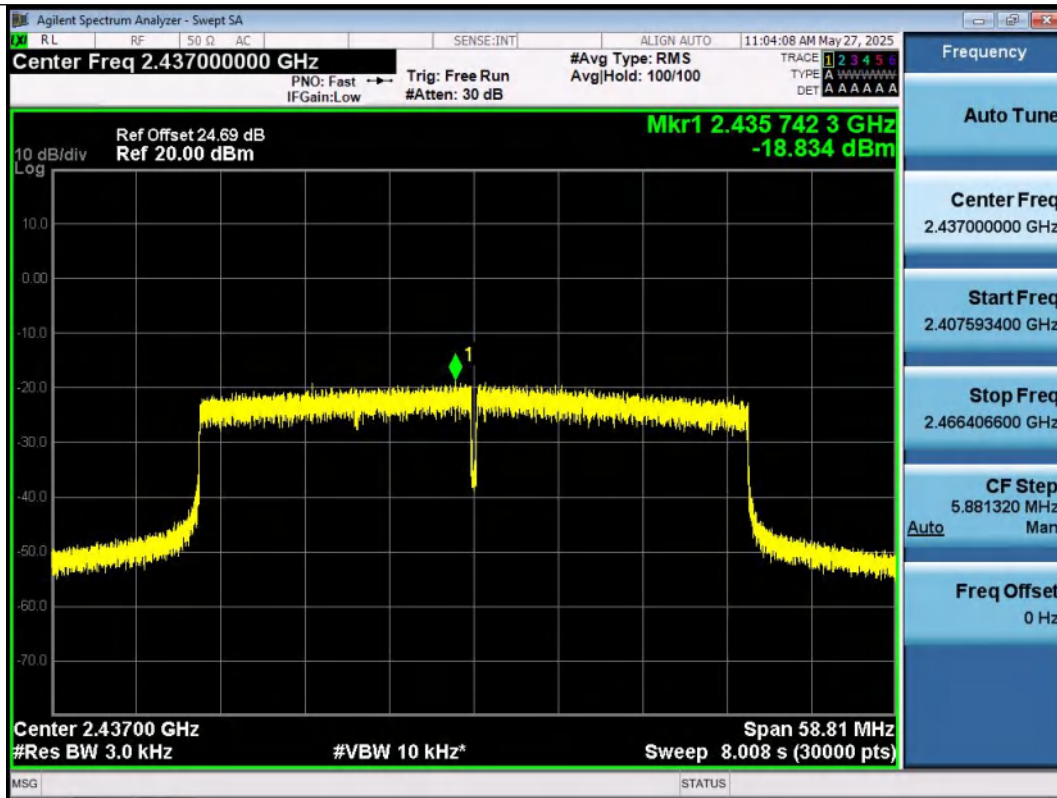
11AX20SISO-Ant1-2437-PASS



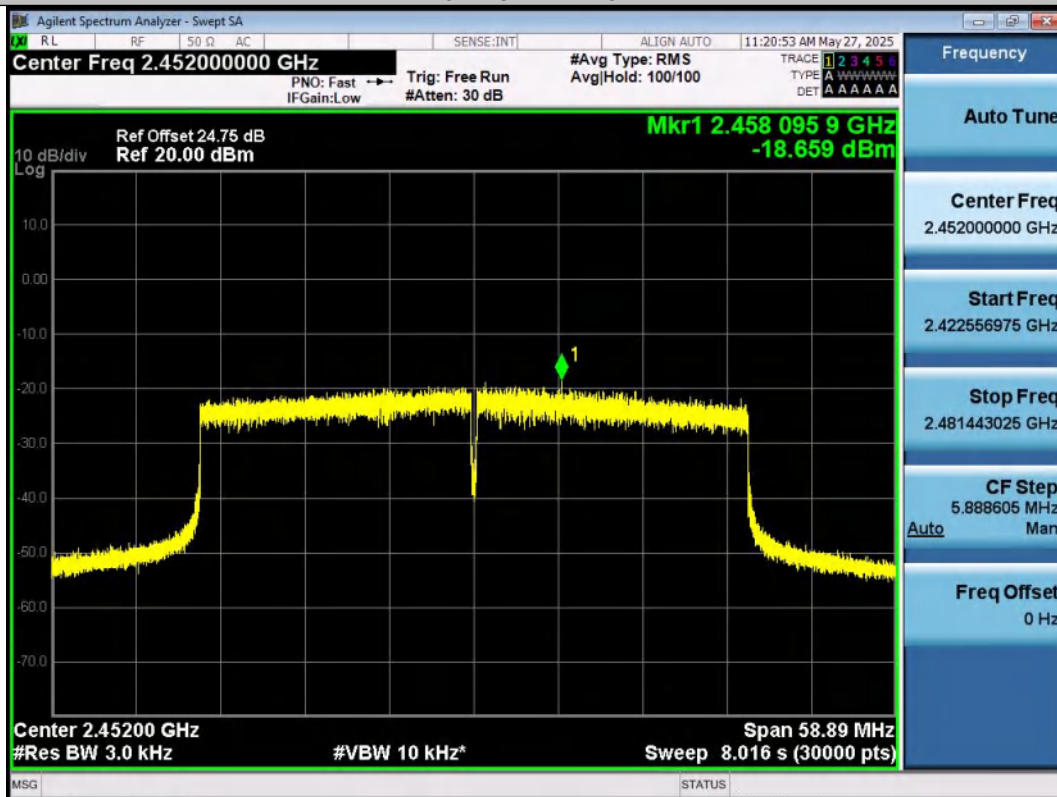
11AX20SISO-Ant1-2462-PASS



11AX40SISO-Ant1-2422-PASS



11AX40SISO-Ant1-2437-PASS



11AX40SISO-Ant1-2452-PASS

8.5 UNWANTED EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

8.5.1 Applicable Standard

According to FCC Part15.247(d) and KDB 558074 D01 15.247 Meas Guidance v05r02
According to RSS-247, 5.5

8.5.2 Conformance Limit

According to FCC Part 15.247(d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

8.5.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.5.4 Test Procedure

The transmitter output (antenna port) was connected to the spectrum analyzer

■ Reference level measurement

Establish a reference level by using the following procedure:

Set instrument center frequency to DTS channel center frequency.

Set the span to ≥ 1.5 times the DTS bandwidth.

Set the RBW = 100 kHz.

Set the VBW $\geq 3 \times$ RBW.

Set Detector = peak.

Set Sweep time = auto couple.

Set Trace mode = max hold.

Allow trace to fully stabilize.

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

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

■ Band-edge measurement

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the emission operating on the channel closest to the band-edge, as well as any modulation products which fall outside of the authorized band of operation

Set RBW $\geq 1\%$ of the span=100kHz Set VBW $\geq 3 \times$ RBW

Set Sweep = auto Set Detector function = peak Set Trace = max hold

Allow the trace to stabilize. Set the marker on the emission at the bandedge, or on the highest modulation product outside of the band, if this level is greater than that at the bandedge. Enable the marker-delta function, then use the marker-to-peak function to move the marker to the peak of the in-band emission. The marker-delta value now displayed must comply with the limit specified in this Section.

■ Emission level measurement

Set the center frequency and span to encompass frequency range to be measured.

Set the RBW = 100 kHz.

Set the VBW = 300 kHz.

Set Detector = peak

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

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

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements. Report the three highest emissions relative to the limit.

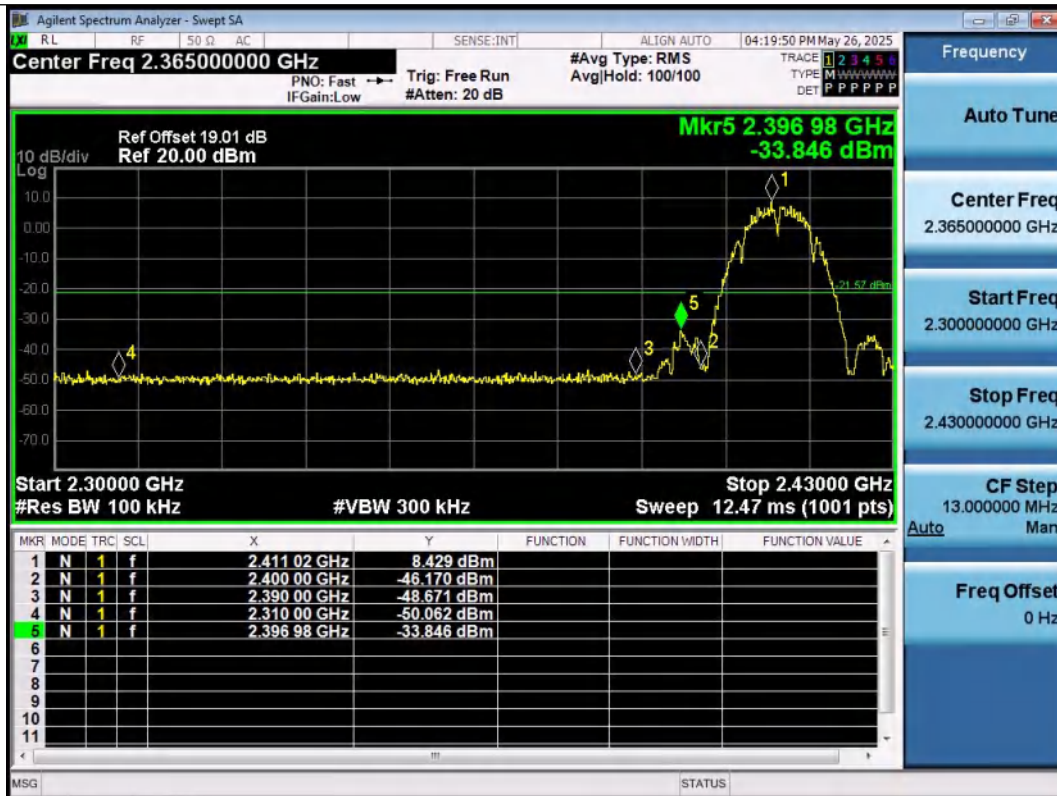
8.5.5 Test Results

Temperature:	25 °C
Relative Humidity:	45%
ATM Pressure:	1011 mbar

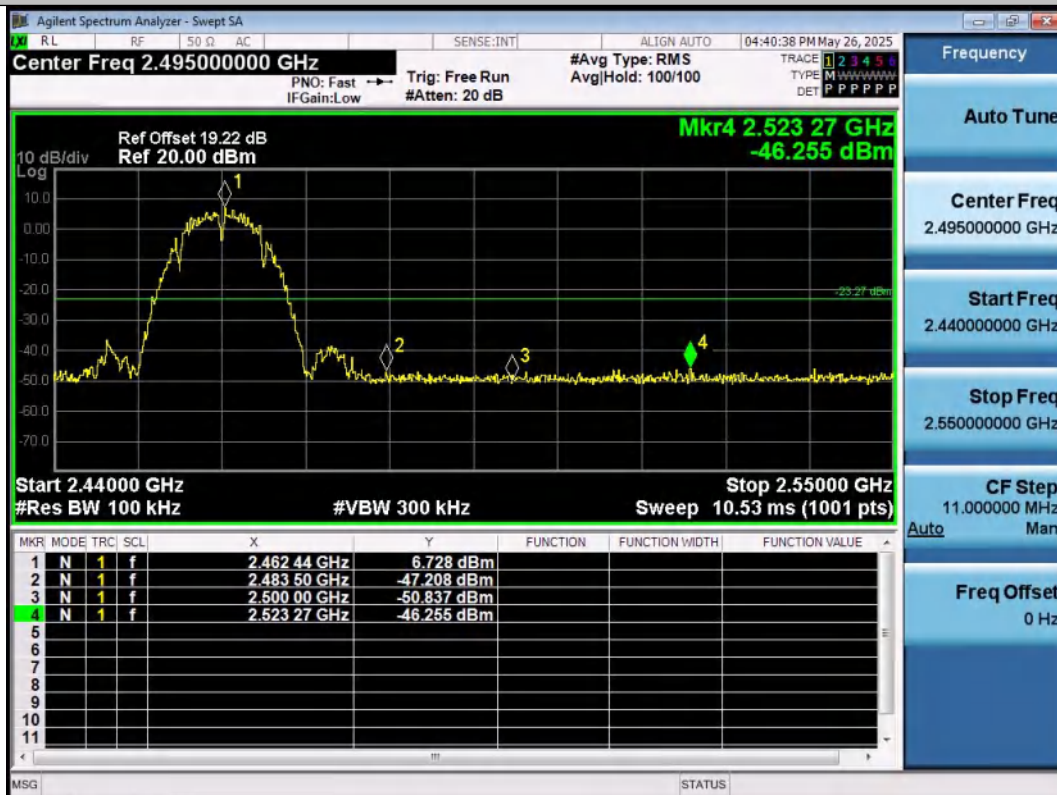
Note: N/A

Band edge measurements

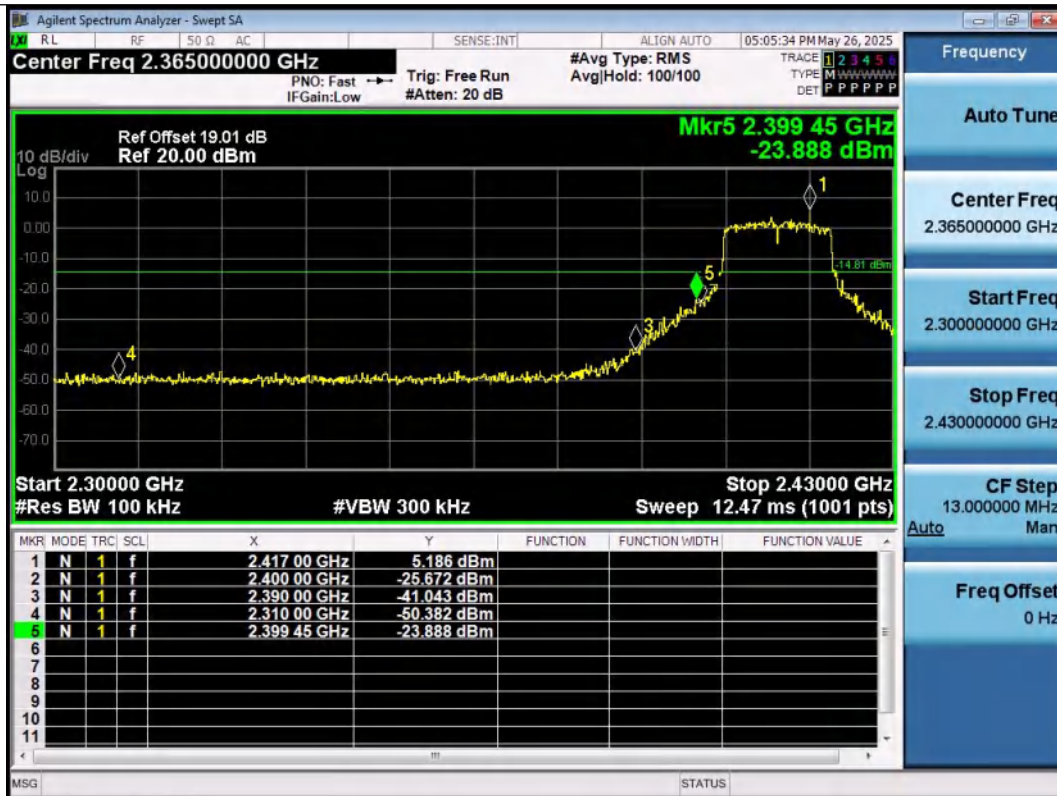
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.43	-33.85	≤-21.57	PASS
11B	Ant1	High	2462	6.73	-46.26	≤-23.27	PASS
11G	Ant1	Low	2412	5.19	-23.89	≤-14.81	PASS
11G	Ant1	High	2462	5.14	-39.32	≤-14.86	PASS
11N20SISO	Ant1	Low	2412	4.50	-21.56	≤-15.5	PASS
11N20SISO	Ant1	High	2462	5.57	-36.61	≤-14.43	PASS
11N40SISO	Ant1	Low	2422	2.05	-24.55	≤-17.95	PASS
11N40SISO	Ant1	High	2452	3.00	-30.89	≤-17	PASS
11AX20SISO	Ant1	Low	2412	5.92	-22.66	≤-14.09	PASS
11AX20SISO	Ant1	High	2462	4.25	-36.54	≤-15.75	PASS
11AX40SISO	Ant1	Low	2422	1.59	-24.36	≤-18.41	PASS
11AX40SISO	Ant1	High	2452	3.58	-30.73	≤-16.42	PASS



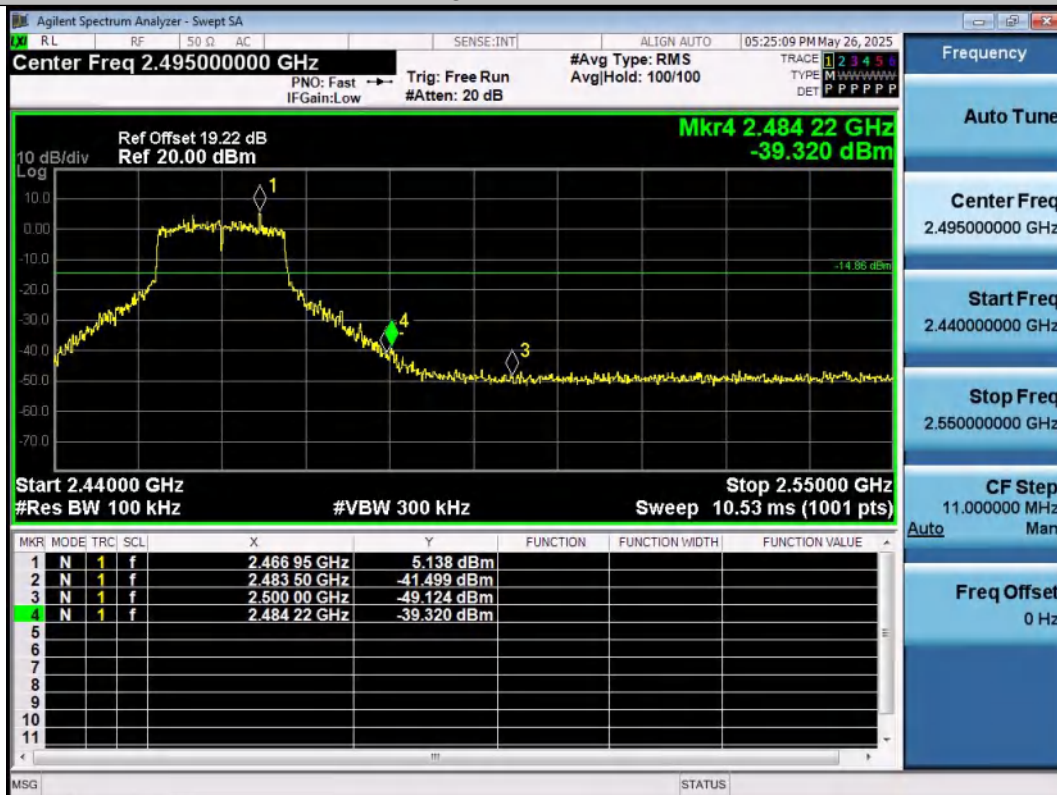
11B-Ant1-2412-PASS



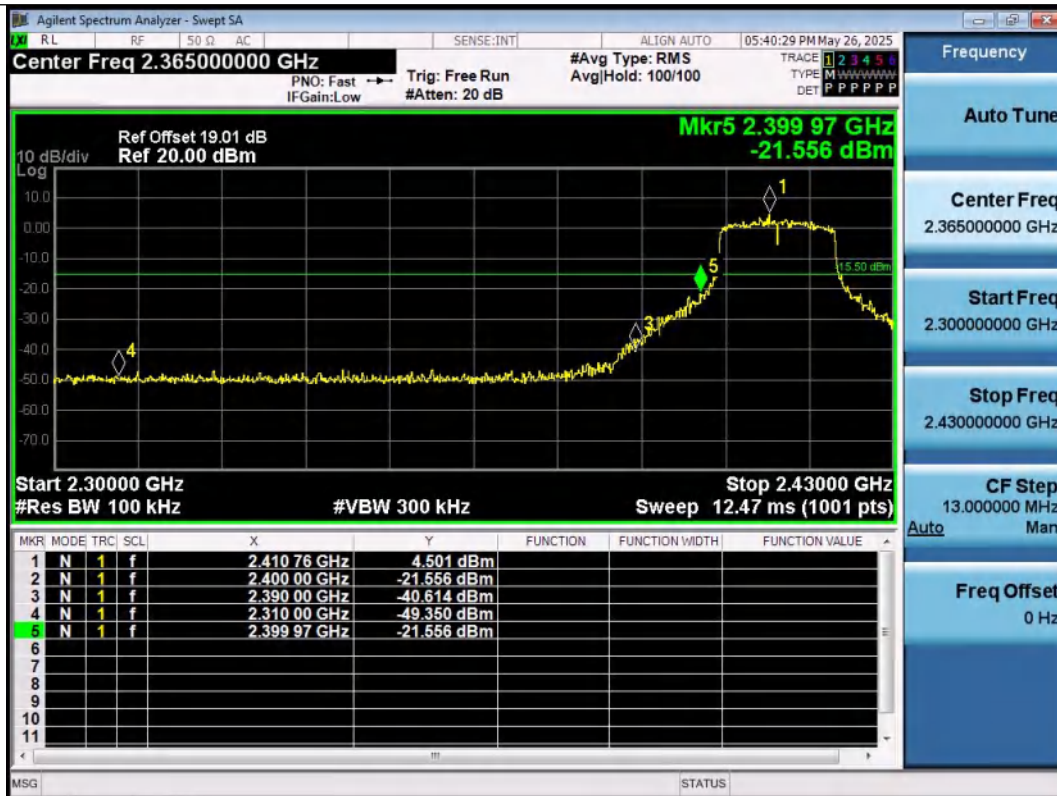
11B-Ant1-2462-PASS



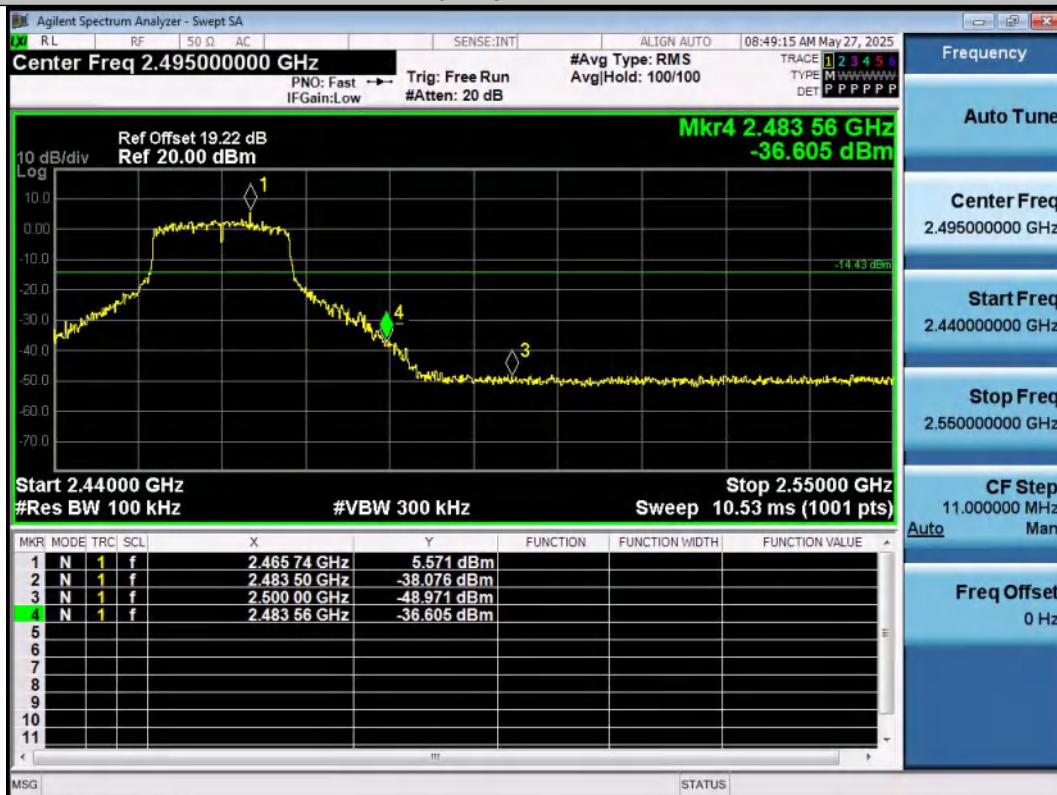
11G-Ant1-2412-PASS



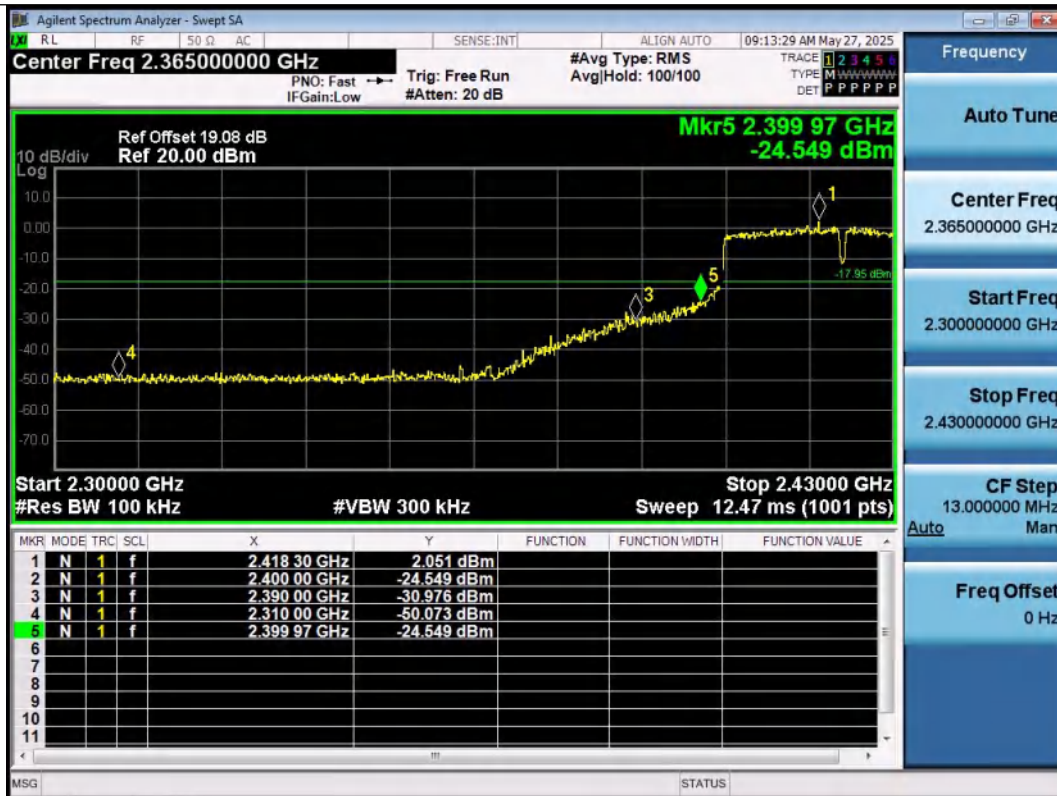
11G-Ant1-2462-PASS



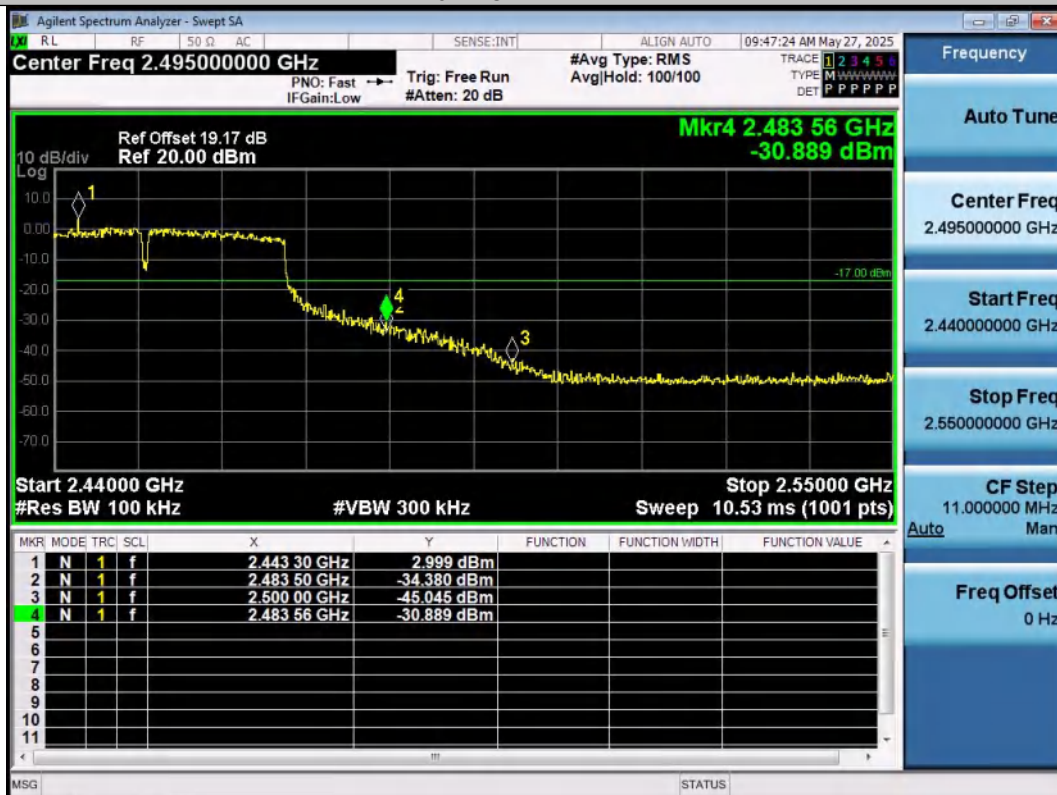
11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2462-PASS



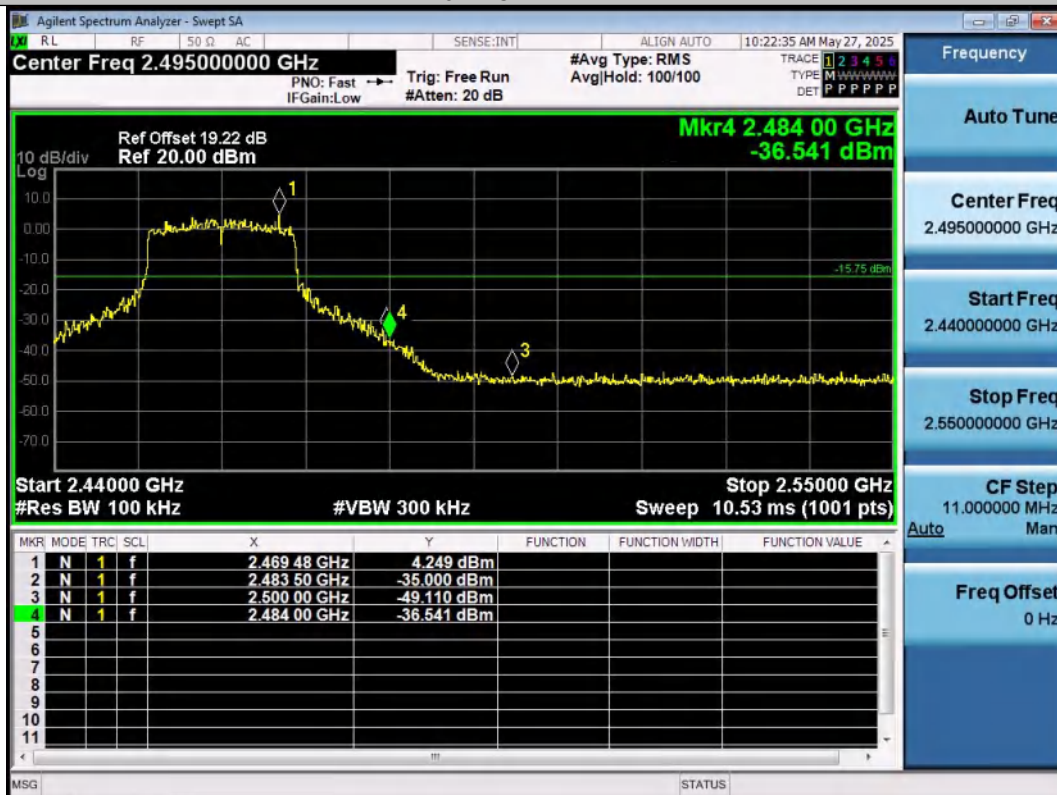
11N40SISO-Ant1-2422-PASS



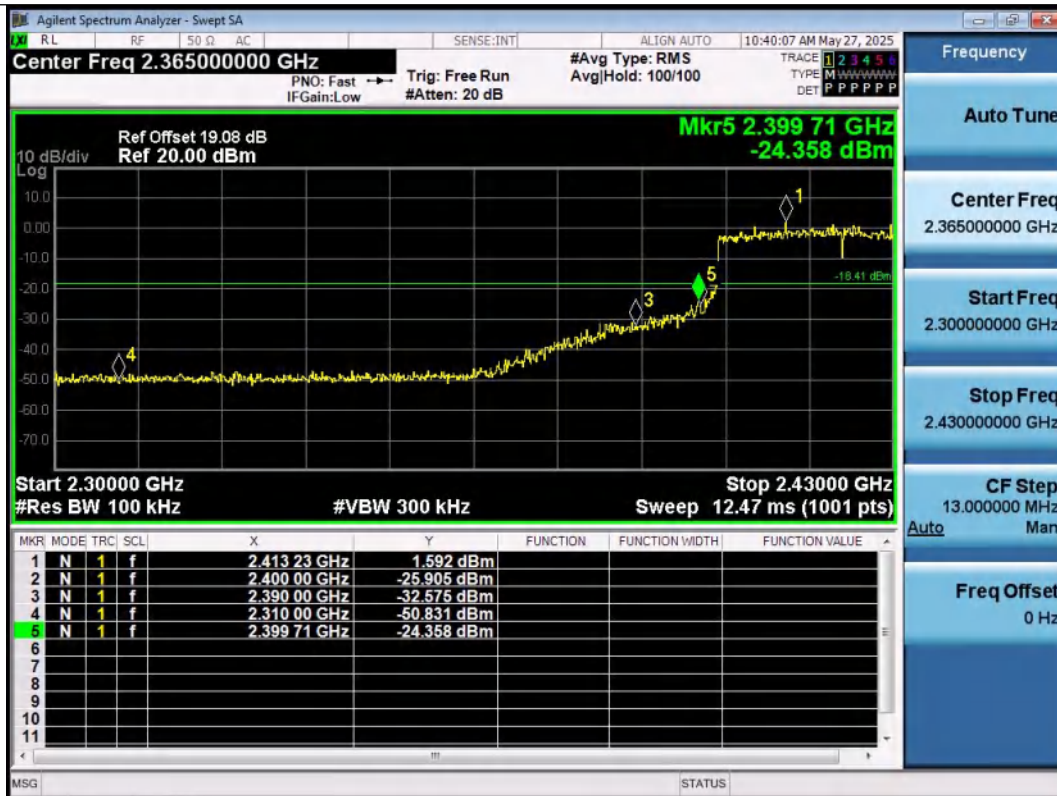
11N40SISO-Ant1-2452-PASS



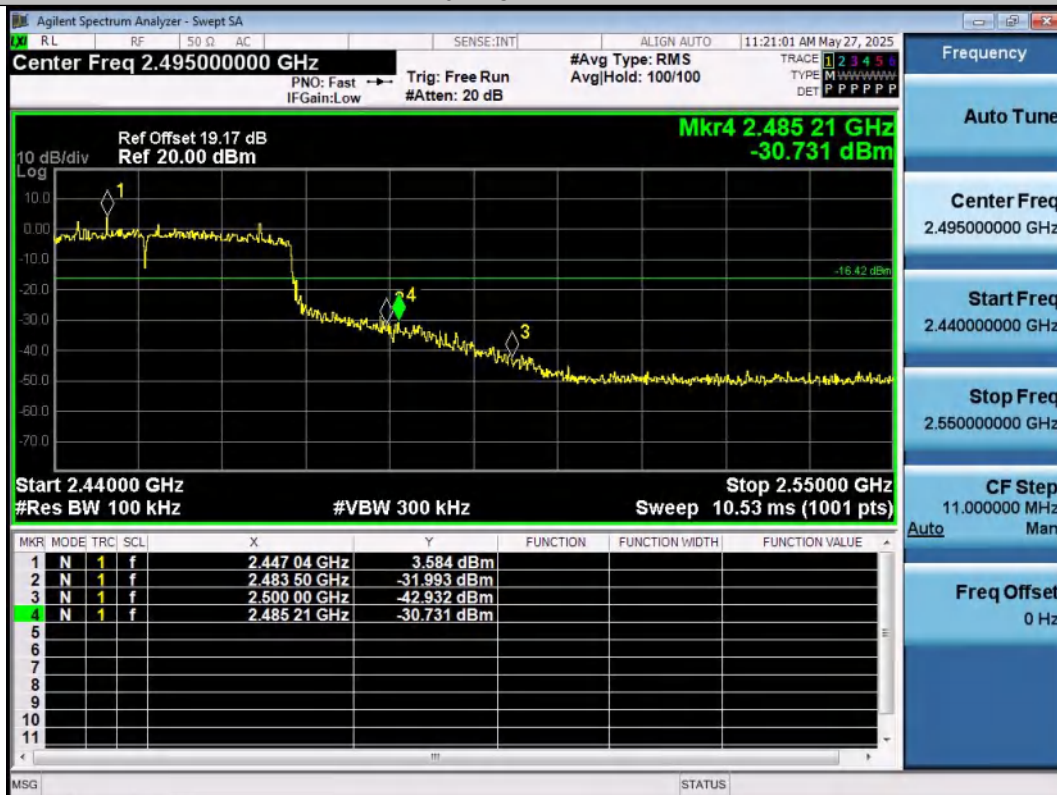
11AX20SISO-Ant1-2412-PASS



11AX20SISO-Ant1-2462-PASS



11AX40SISO-Ant1-2422-PASS



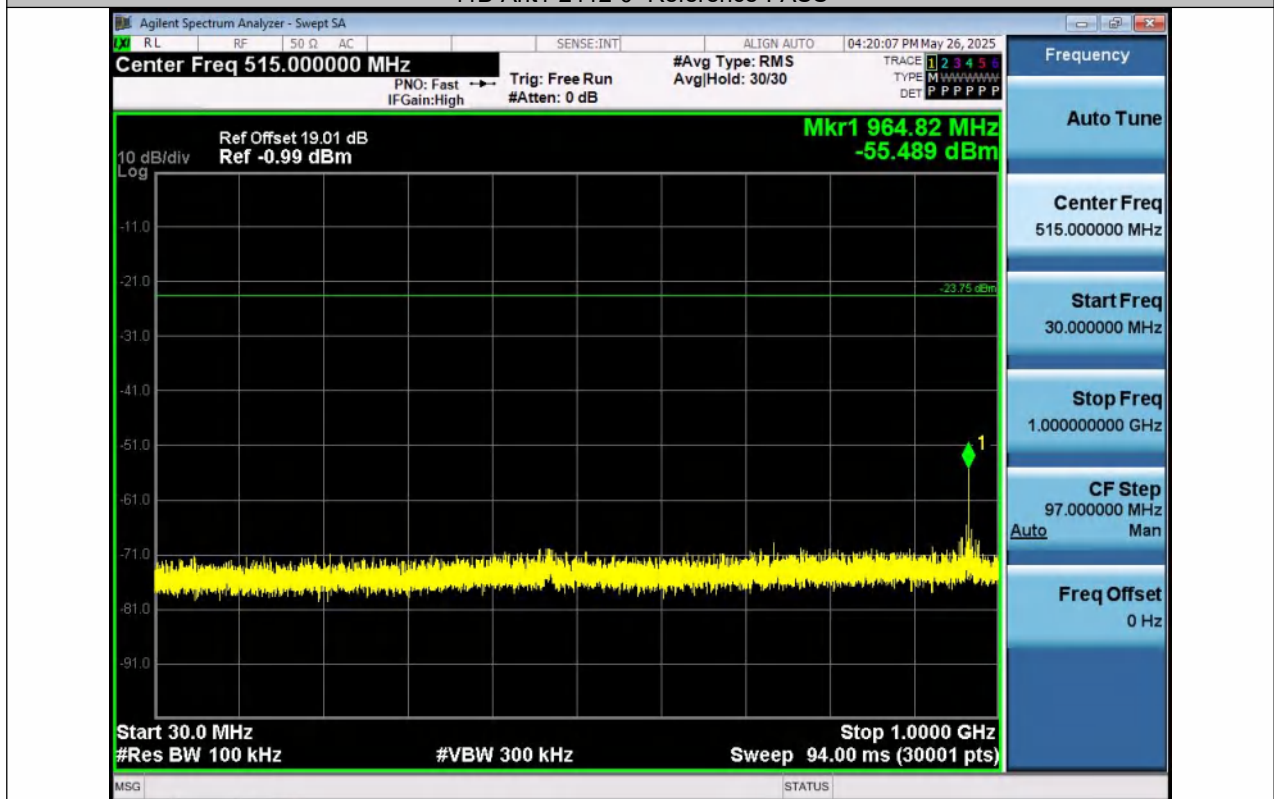
11AX40SISO-Ant1-2452-PASS

Conducted Spurious Emission

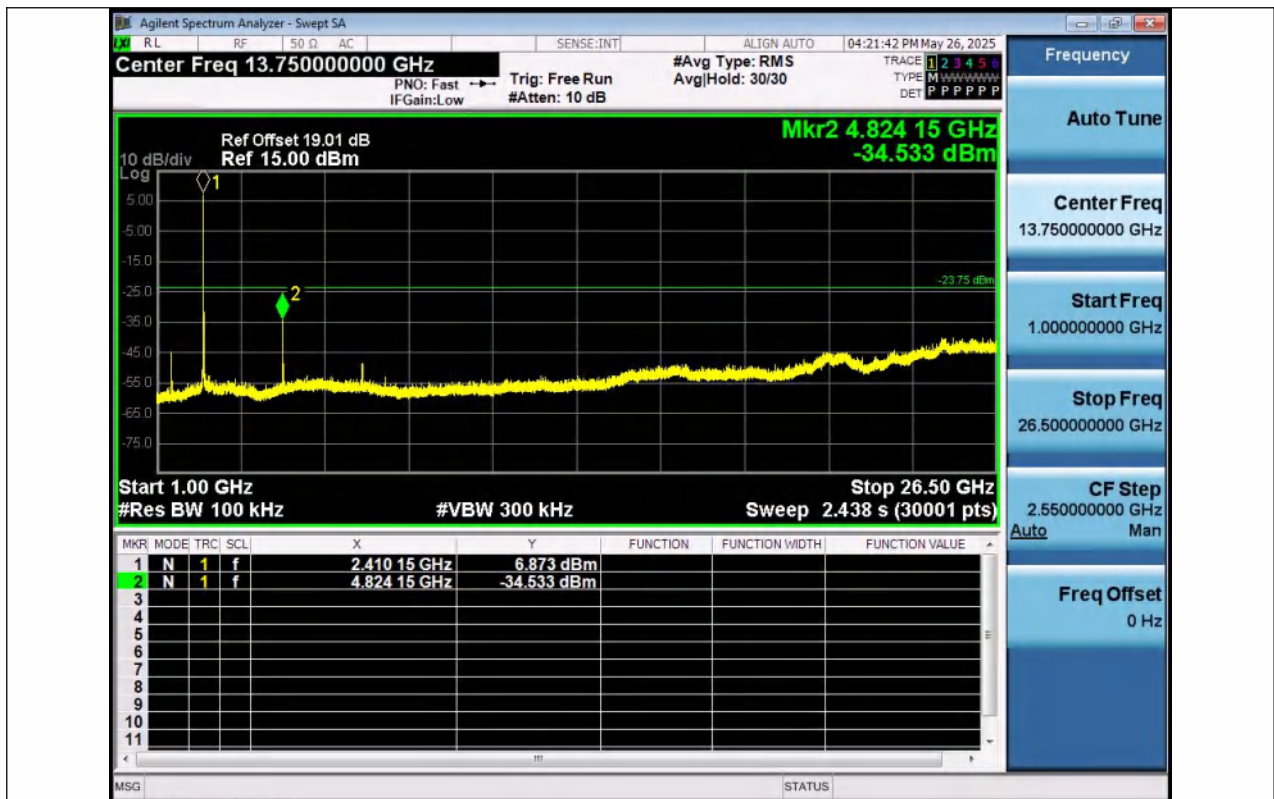
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	0~Reference	6.25	6.25	---	PASS
11B	Ant1	2412	30~1000	6.25	-55.49	≤-23.75	PASS
11B	Ant1	2412	1000~26500	6.25	-34.53	≤-23.75	PASS
11B	Ant1	2437	0~Reference	6.12	6.12	---	PASS
11B	Ant1	2437	30~1000	6.12	-56.36	≤-23.88	PASS
11B	Ant1	2437	1000~26500	6.12	-34.41	≤-23.88	PASS
11B	Ant1	2462	0~Reference	4.31	4.31	---	PASS
11B	Ant1	2462	30~1000	4.31	-56.98	≤-25.69	PASS
11B	Ant1	2462	1000~26500	4.31	-34.24	≤-25.69	PASS
11G	Ant1	2412	0~Reference	4.25	4.25	---	PASS
11G	Ant1	2412	30~1000	4.25	-65.71	≤-25.75	PASS
11G	Ant1	2412	1000~26500	4.25	-40.48	≤-25.75	PASS
11G	Ant1	2437	0~Reference	4.95	4.95	---	PASS
11G	Ant1	2437	30~1000	4.95	-63.8	≤-25.05	PASS
11G	Ant1	2437	1000~26500	4.95	-40.56	≤-25.05	PASS
11G	Ant1	2462	0~Reference	2.59	2.59	---	PASS
11G	Ant1	2462	30~1000	2.59	-65.28	≤-27.41	PASS
11G	Ant1	2462	1000~26500	2.59	-40.18	≤-27.41	PASS
11N20SISO	Ant1	2412	0~Reference	2.89	2.89	---	PASS
11N20SISO	Ant1	2412	30~1000	2.89	-65.52	≤-27.11	PASS
11N20SISO	Ant1	2412	1000~26500	2.89	-39.59	≤-27.11	PASS
11N20SISO	Ant1	2437	0~Reference	6.01	6.01	---	PASS
11N20SISO	Ant1	2437	30~1000	6.01	-64.95	≤-23.99	PASS
11N20SISO	Ant1	2437	1000~26500	6.01	-39.81	≤-23.99	PASS
11N20SISO	Ant1	2462	0~Reference	3.26	3.26	---	PASS
11N20SISO	Ant1	2462	30~1000	3.26	-64.6	≤-26.74	PASS
11N20SISO	Ant1	2462	1000~26500	3.26	-40.43	≤-26.74	PASS
11N40SISO	Ant1	2422	0~Reference	3.21	3.21	---	PASS
11N40SISO	Ant1	2422	30~1000	3.21	-65.7	≤-26.79	PASS
11N40SISO	Ant1	2422	1000~26500	3.21	-39.75	≤-26.79	PASS
11N40SISO	Ant1	2437	0~Reference	1.38	1.38	---	PASS
11N40SISO	Ant1	2437	30~1000	1.38	-67.07	≤-28.62	PASS
11N40SISO	Ant1	2437	1000~26500	1.38	-40.26	≤-28.62	PASS
11N40SISO	Ant1	2452	0~Reference	3.92	3.92	---	PASS
11N40SISO	Ant1	2452	30~1000	3.92	-67.27	≤-26.08	PASS
11N40SISO	Ant1	2452	1000~26500	3.92	-39.65	≤-26.08	PASS
11AX20SISO	Ant1	2412	0~Reference	4.17	4.17	---	PASS
11AX20SISO	Ant1	2412	30~1000	4.17	-66.19	≤-25.83	PASS
11AX20SISO	Ant1	2412	1000~26500	4.17	-39.84	≤-25.83	PASS
11AX20SISO	Ant1	2437	0~Reference	6.54	6.54	---	PASS
11AX20SISO	Ant1	2437	30~1000	6.54	-64.41	≤-23.46	PASS
11AX20SISO	Ant1	2437	1000~26500	6.54	-39.06	≤-23.46	PASS
11AX20SISO	Ant1	2462	0~Reference	5.98	5.98	---	PASS
11AX20SISO	Ant1	2462	30~1000	5.98	-64.71	≤-24.02	PASS
11AX20SISO	Ant1	2462	1000~26500	5.98	-39.38	≤-24.02	PASS
11AX40SISO	Ant1	2422	0~Reference	1.58	1.58	---	PASS
11AX40SISO	Ant1	2422	30~1000	1.58	-67.78	≤-28.42	PASS
11AX40SISO	Ant1	2422	1000~26500	1.58	-39.61	≤-28.42	PASS
11AX40SISO	Ant1	2437	0~Reference	1.84	1.84	---	PASS
11AX40SISO	Ant1	2437	30~1000	1.84	-66.43	≤-28.16	PASS
11AX40SISO	Ant1	2437	1000~26500	1.84	-39.49	≤-28.16	PASS
11AX40SISO	Ant1	2452	0~Reference	3.57	3.57	---	PASS
11AX40SISO	Ant1	2452	30~1000	3.57	-66.35	≤-26.43	PASS
11AX40SISO	Ant1	2452	1000~26500	3.57	-40.24	≤-26.43	PASS



11B-Ant1-2412-0~Reference-PASS



11B-Ant1-2412-30~1000-PASS



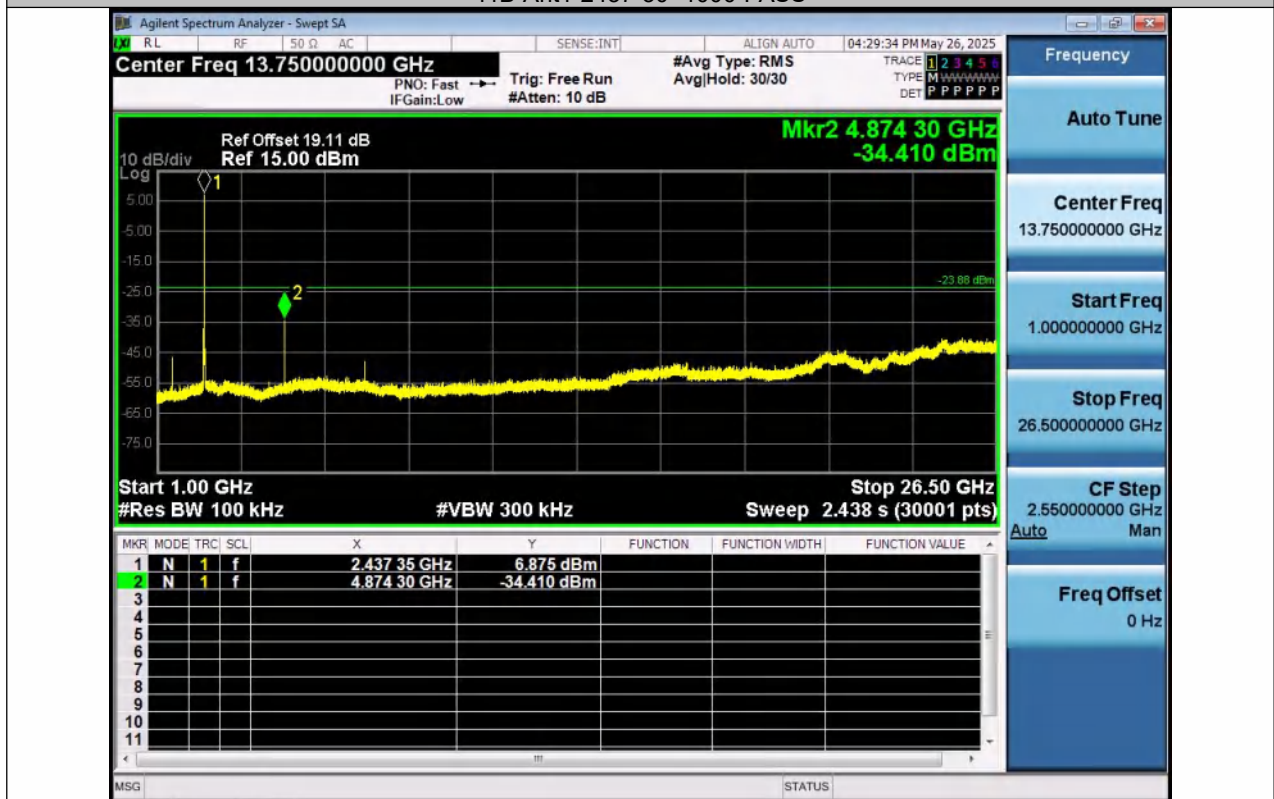
11B-Ant1-2412-1000~26500-PASS



11B-Ant1-2437-0~Reference-PASS



11B-Ant1-2437-30~1000-PASS



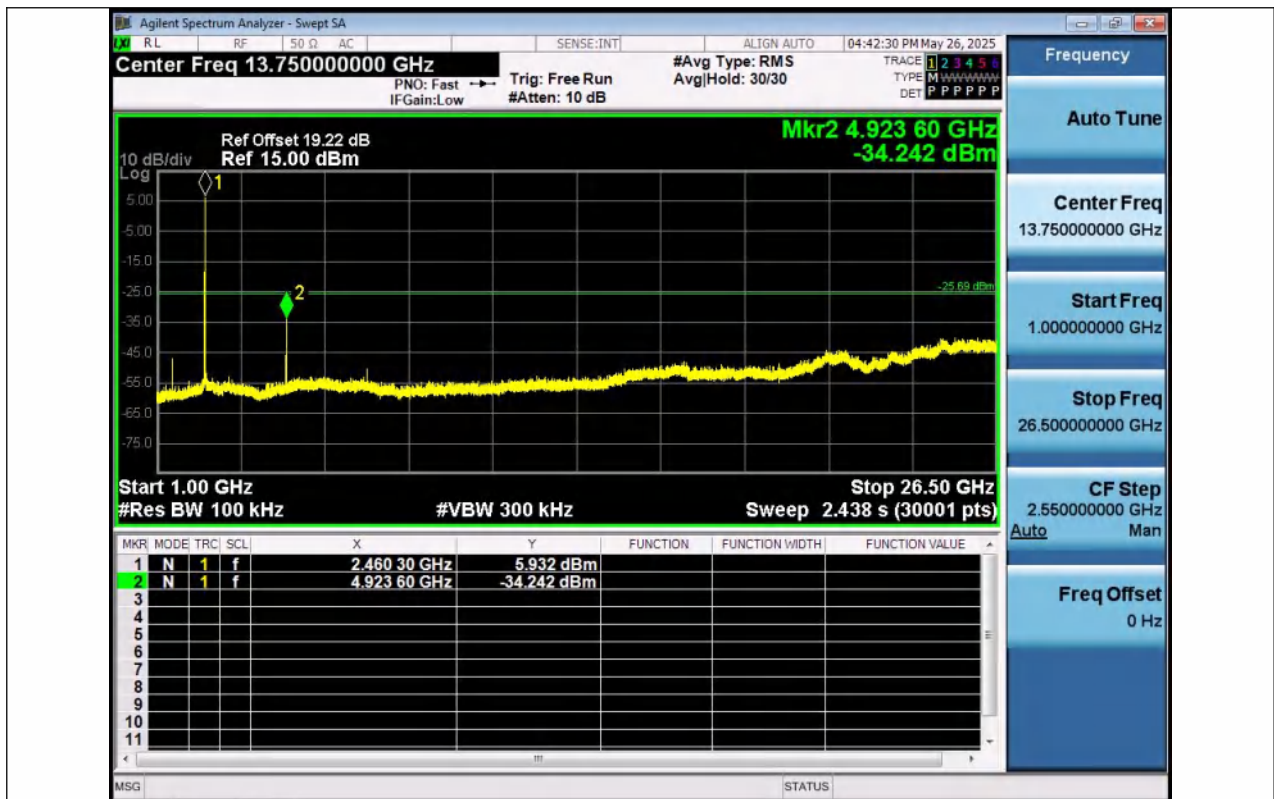
11B-Ant1-2437-1000~26500-PASS



11B-Ant1-2462-0~Reference-PASS



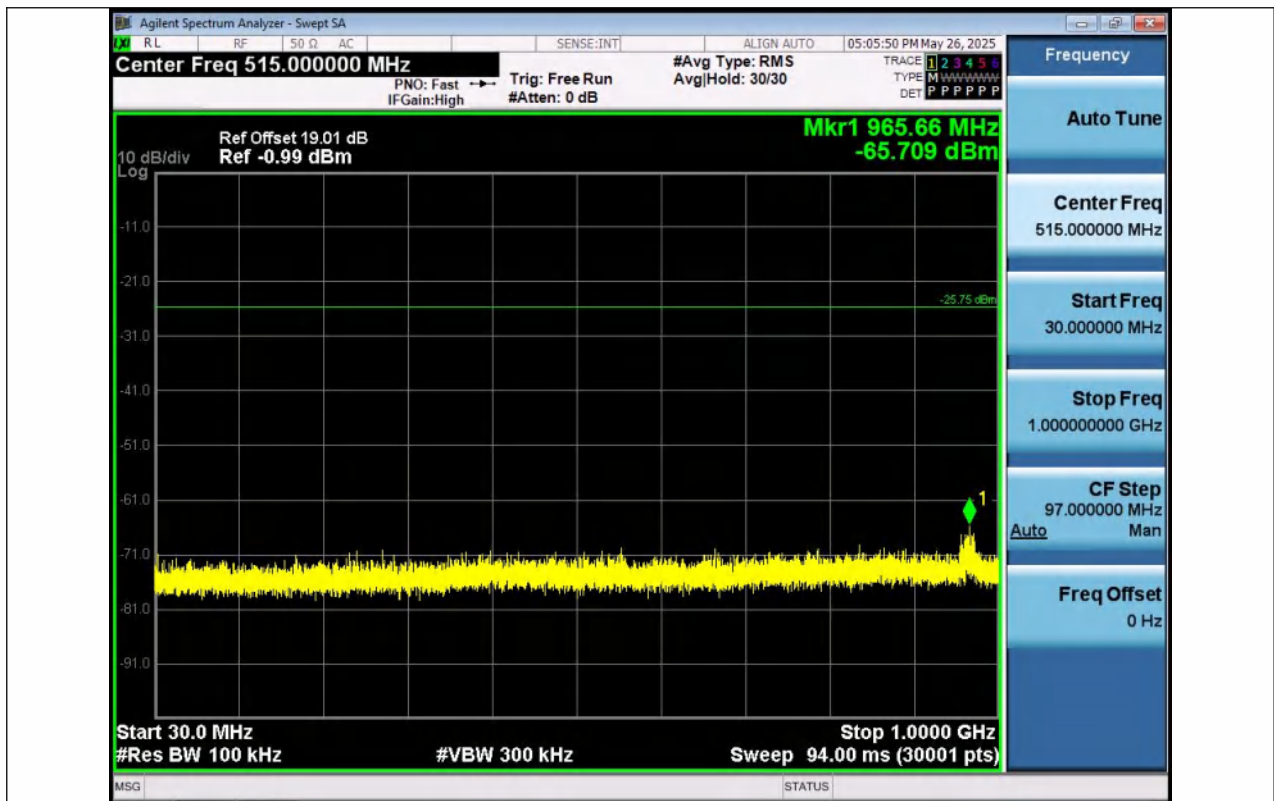
11B-Ant1-2462-30~1000-PASS



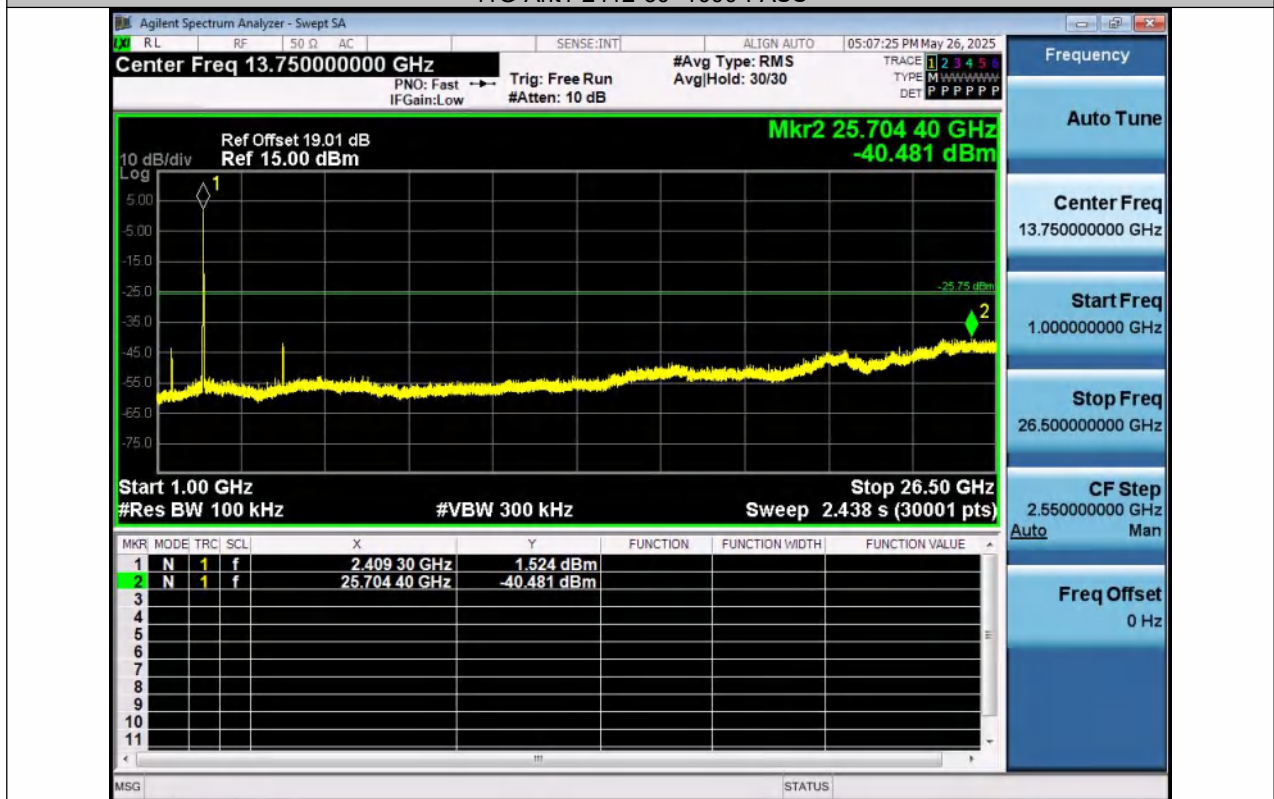
11B-Ant1-2462-1000~26500-PASS



11G-Ant1-2412-0~Reference-PASS



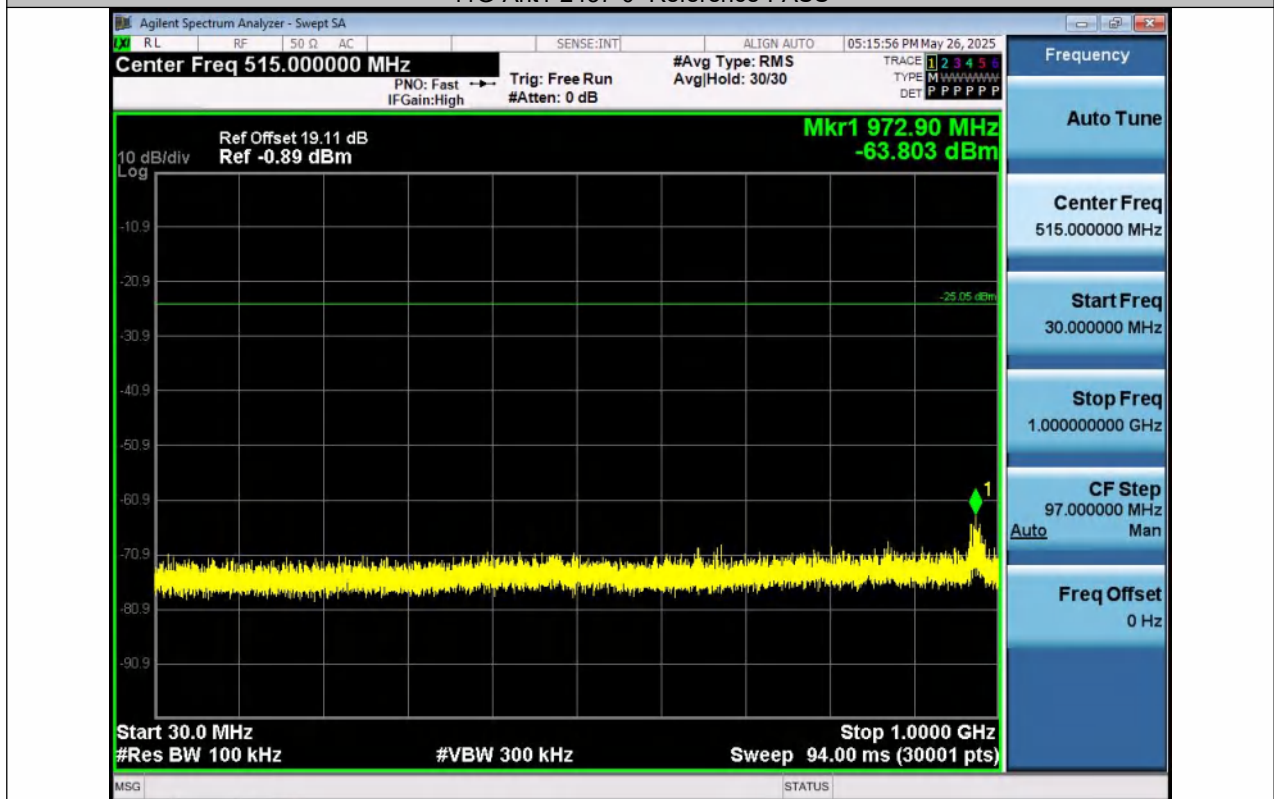
11G-Ant1-2412-30~1000-PASS



11G-Ant1-2412-1000~26500-PASS



11G-Ant1-2437-0~Reference-PASS



11G-Ant1-2437-30~1000-PASS



11G-Ant1-2437-1000~26500-PASS



11G-Ant1-2462-0~Reference-PASS



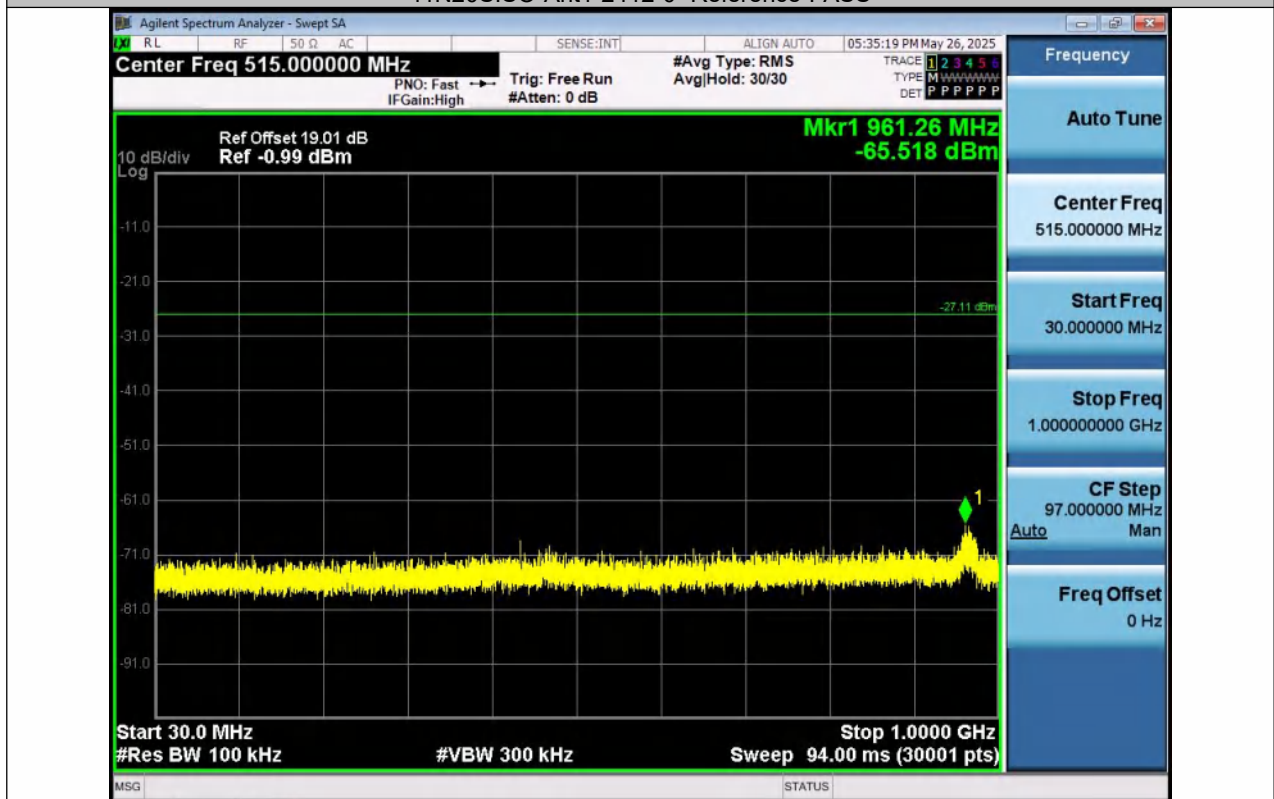
11G-Ant1-2462-30~1000-PASS



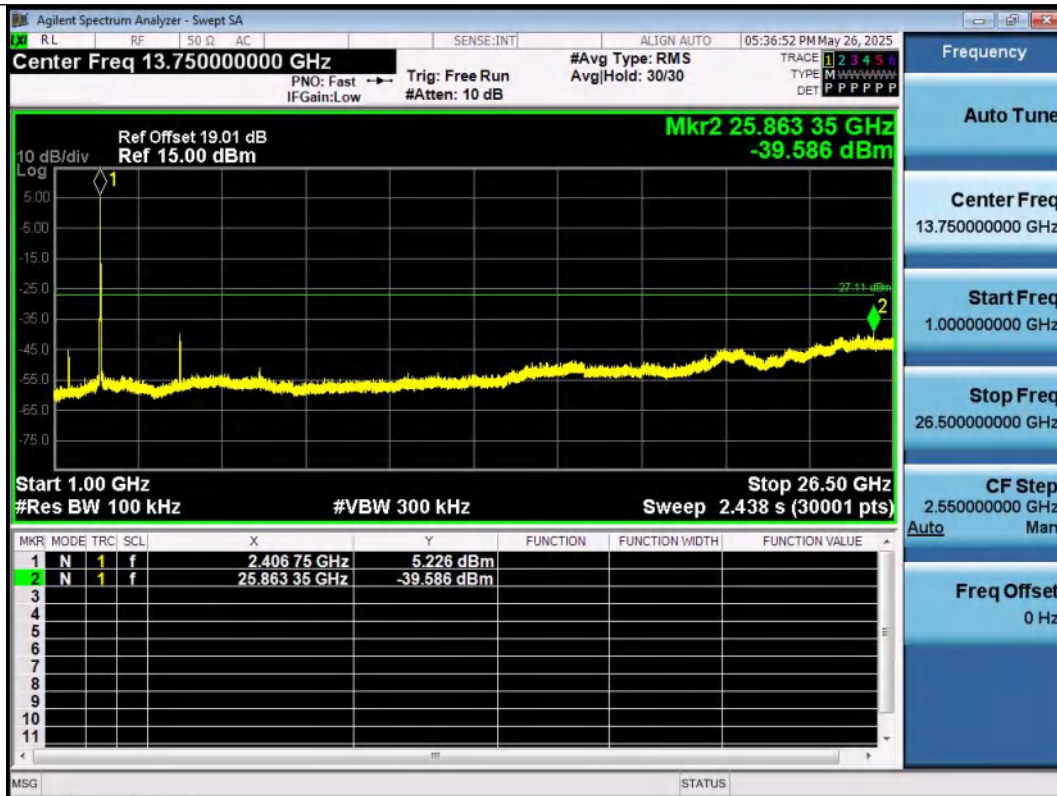
11G-Ant1-2462-1000~26500-PASS



11N20SISO-Ant1-2412-0~Reference-PASS



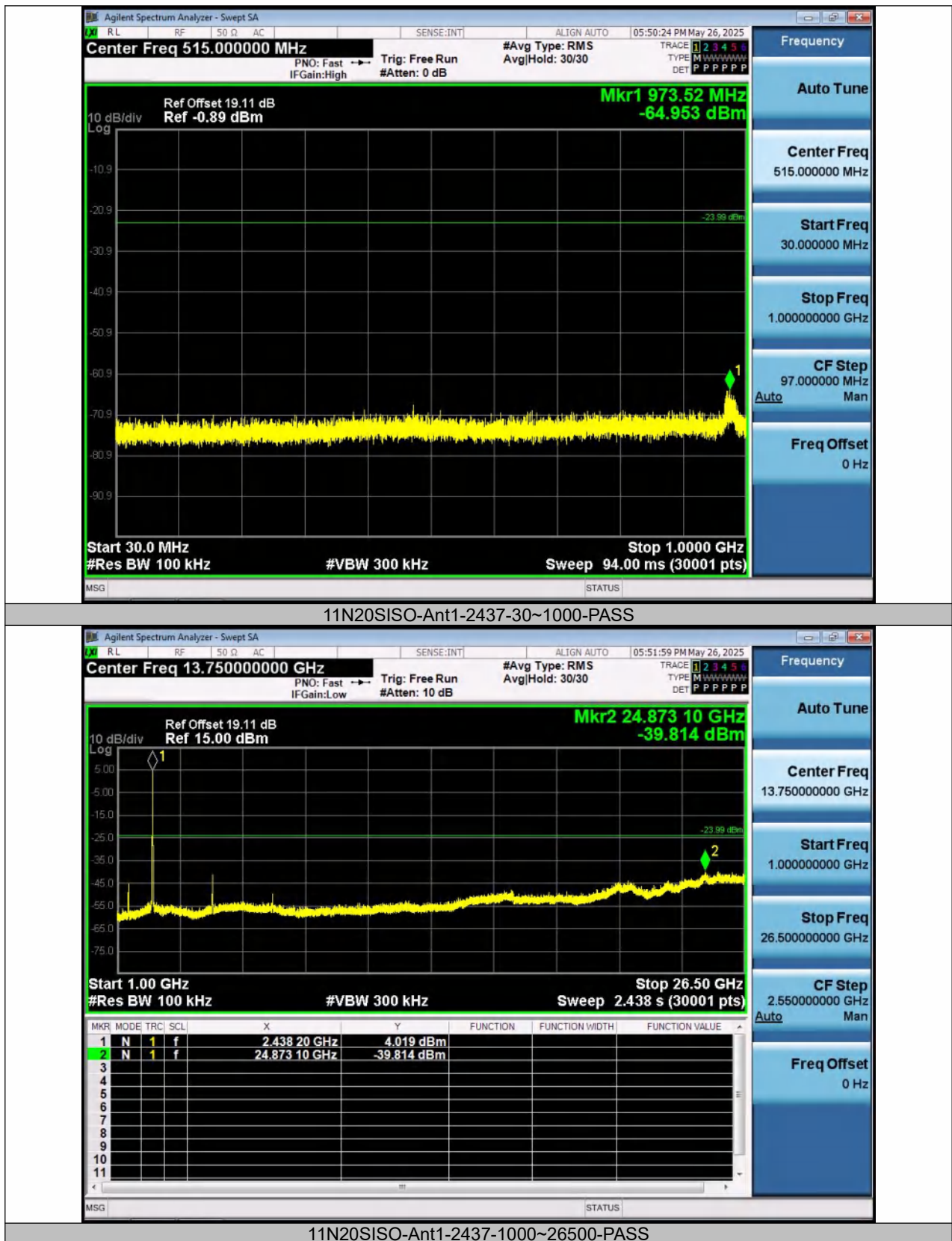
11N20SISO-Ant1-2412-30~1000-PASS



11N20SISO-Ant1-2412-1000~26500-PASS



11N20SISO-Ant1-2437-0~Reference-PASS





11N20SISO-Ant1-2462-0~Reference-PASS



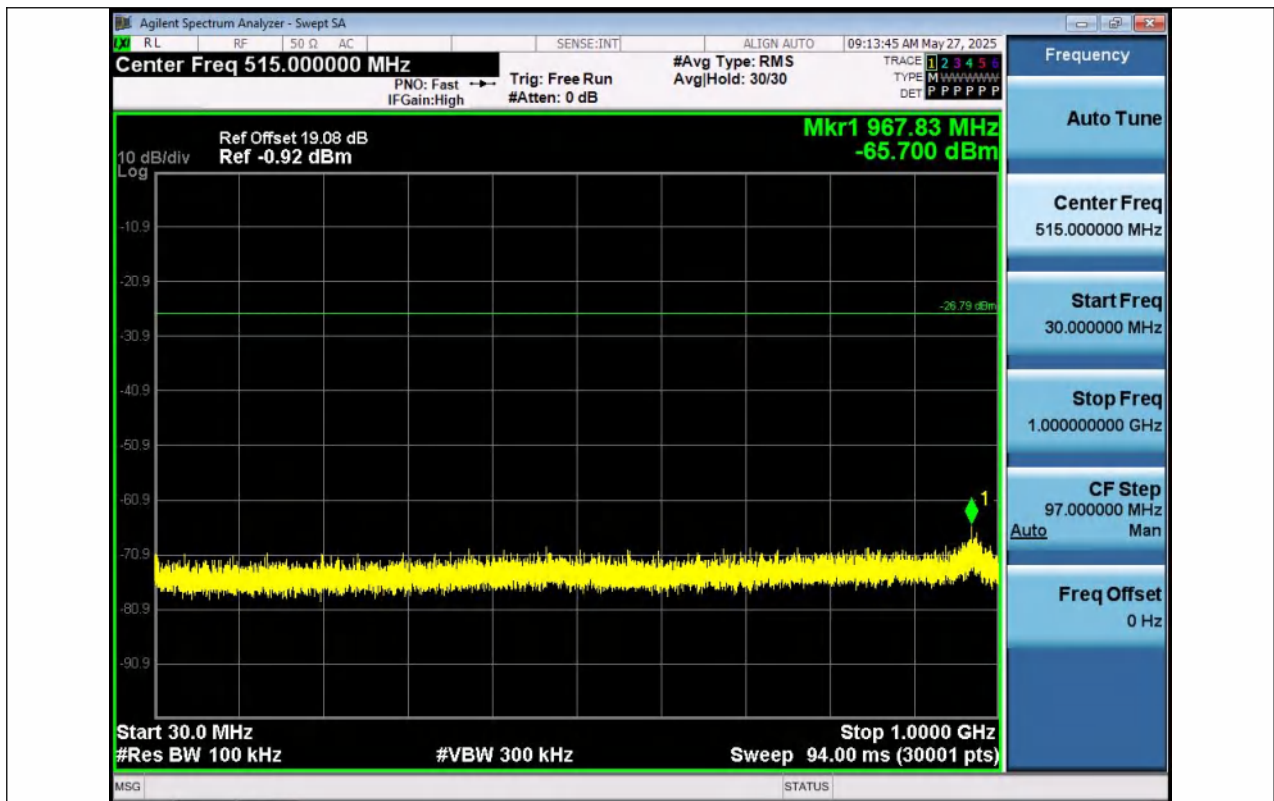
11N20SISO-Ant1-2462-30~1000-PASS



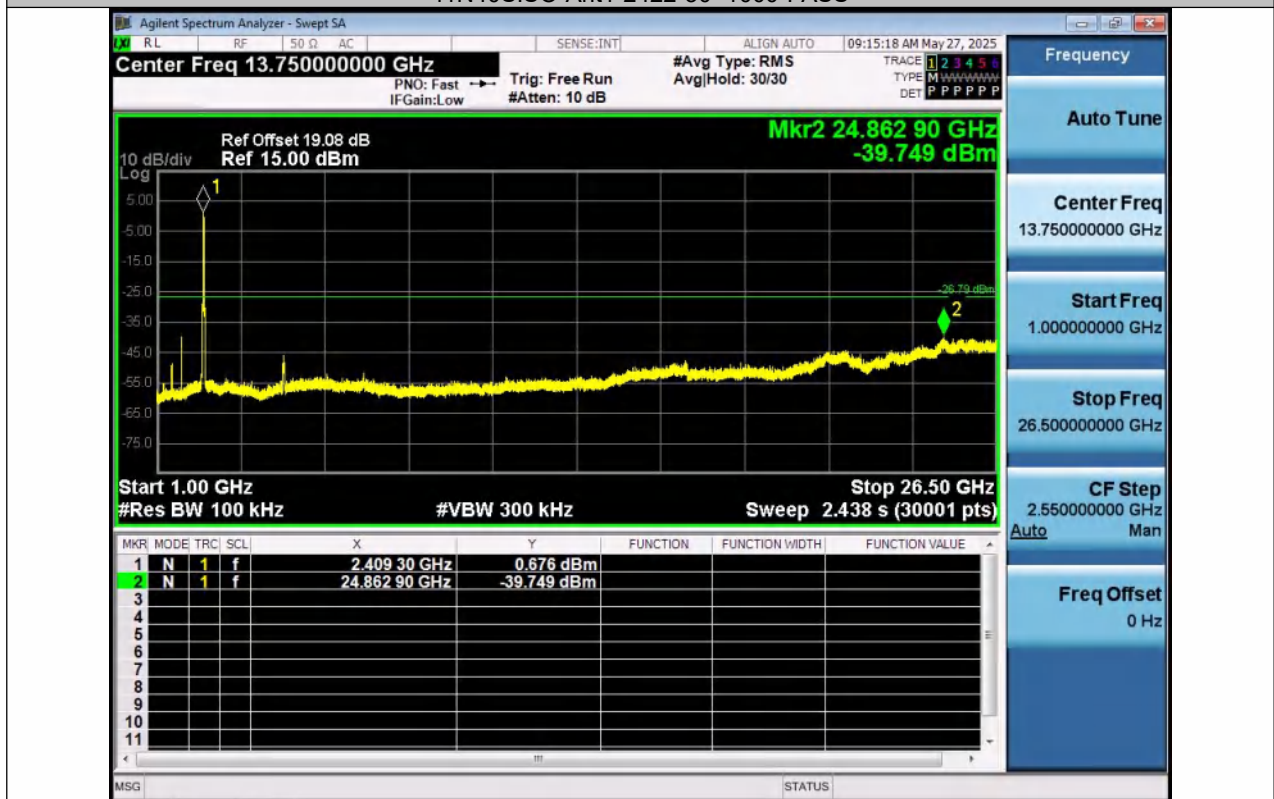
11N20SISO-Ant1-2462-1000~26500-PASS



11N40SISO-Ant1-2422-0~Reference-PASS



11N40SISO-Ant1-2422-30~1000-PASS



11N40SISO-Ant1-2422-1000~26500-PASS



11N40SISO-Ant1-2437-0~Reference-PASS



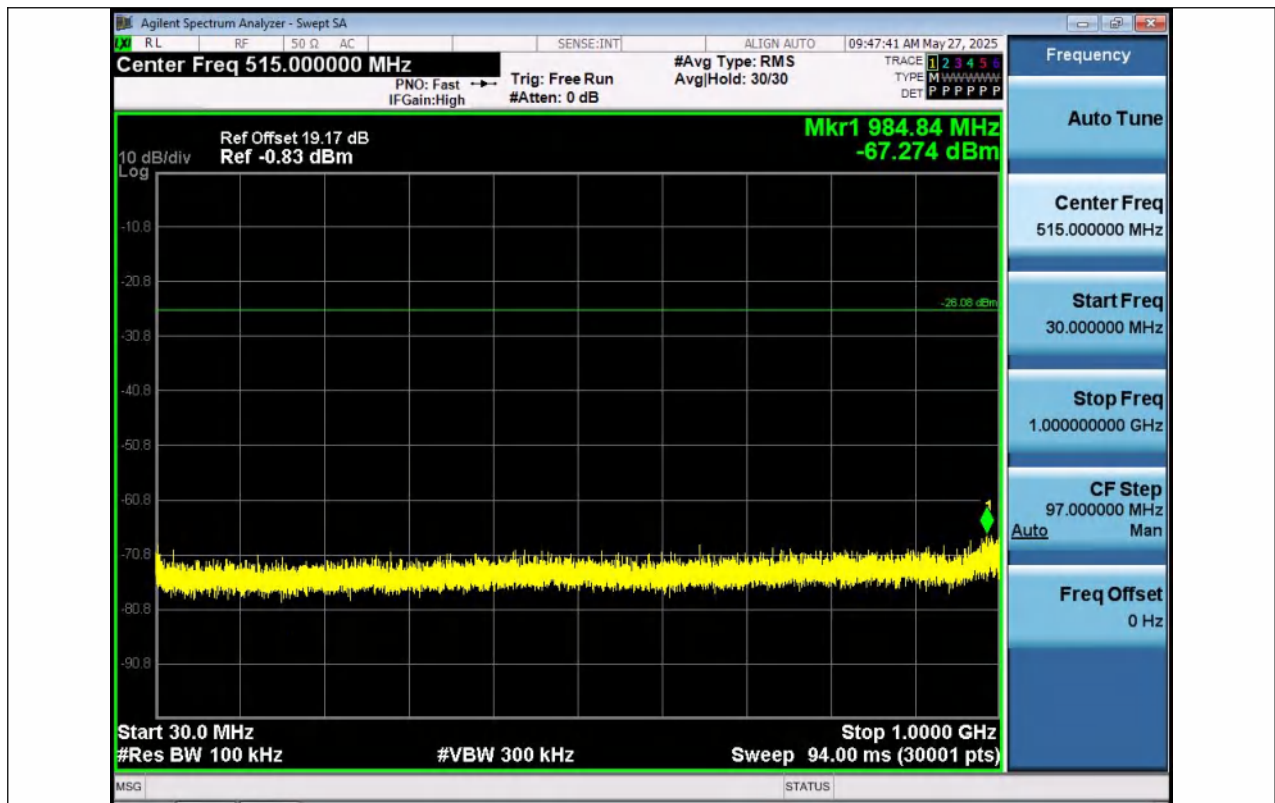
11N40SISO-Ant1-2437-30~1000-PASS



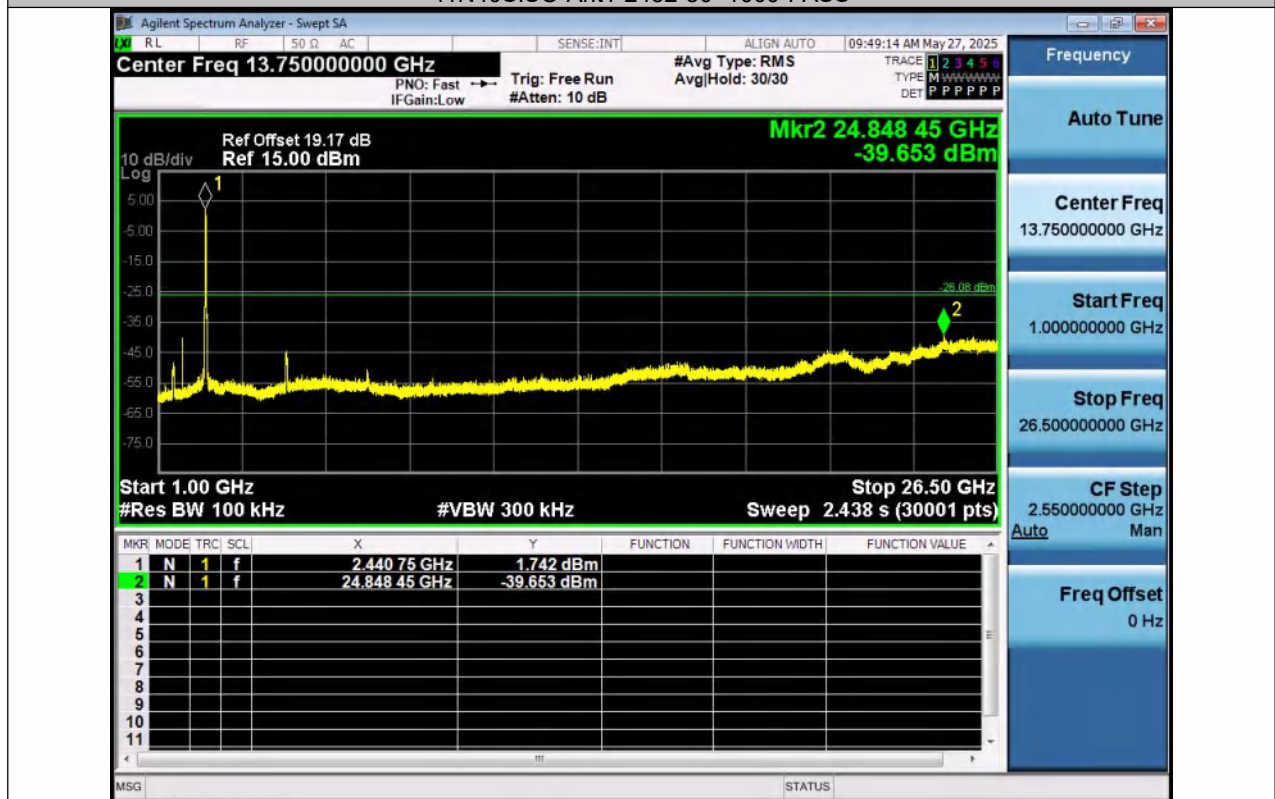
11N40SISO-Ant1-2437-1000~26500-PASS



11N40SISO-Ant1-2452-0~Reference-PASS



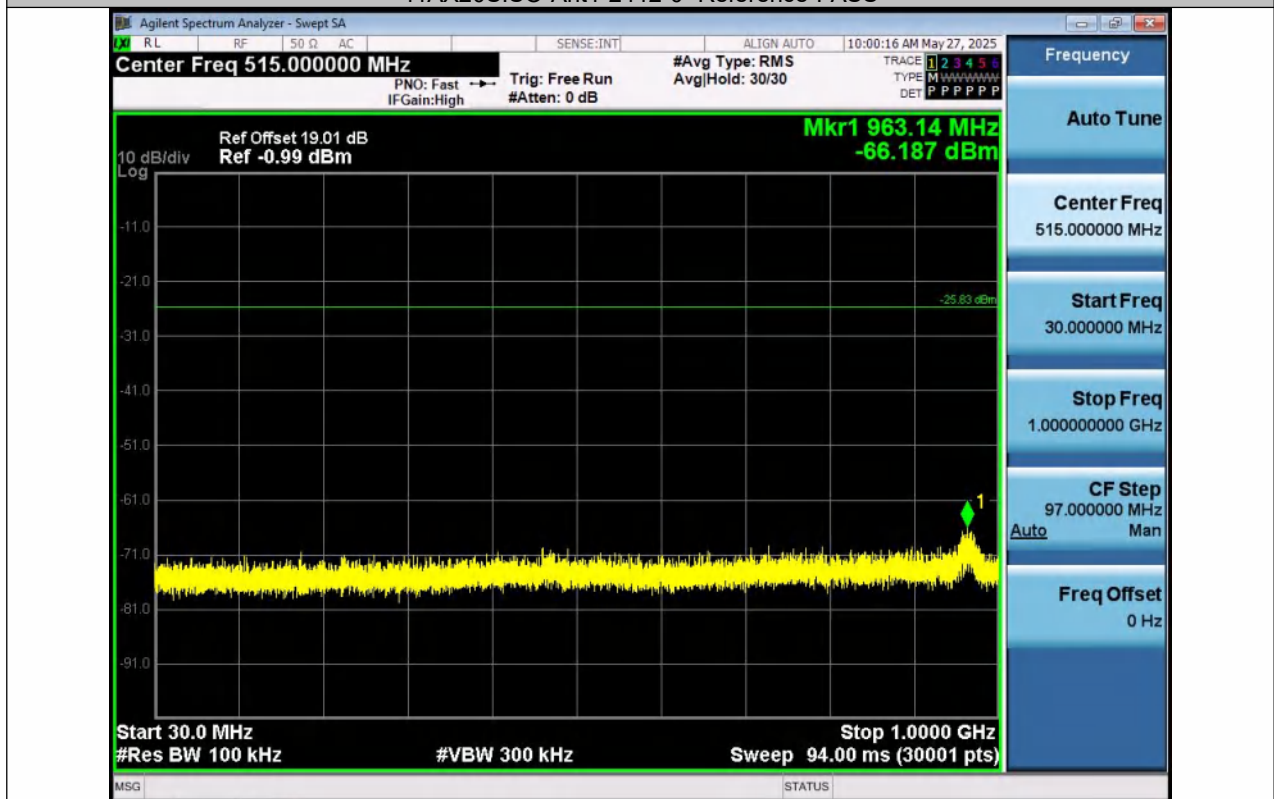
11N40SISO-Ant1-2452-30~1000-PASS



11N40SISO-Ant1-2452-1000~26500-PASS



11AX20SISO-Ant1-2412-0~Reference-PASS



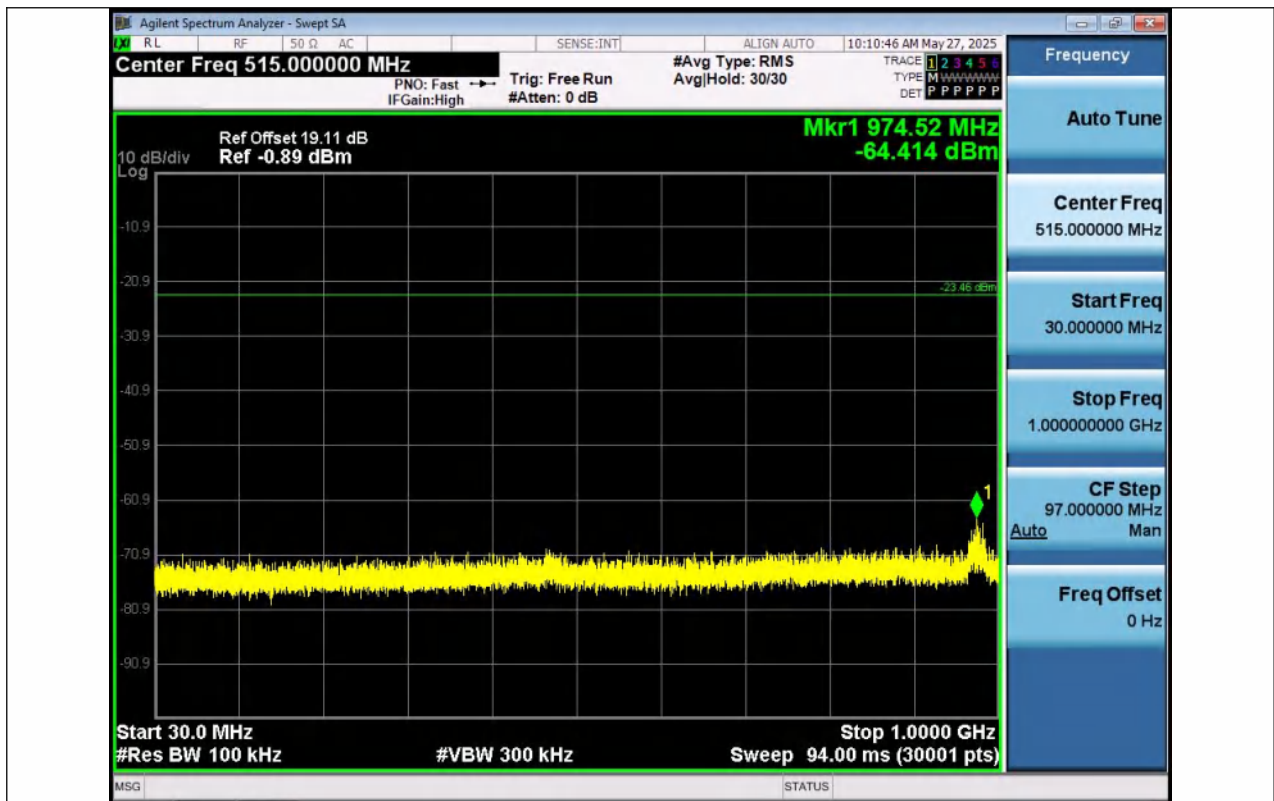
11AX20SISO-Ant1-2412-30~1000-PASS



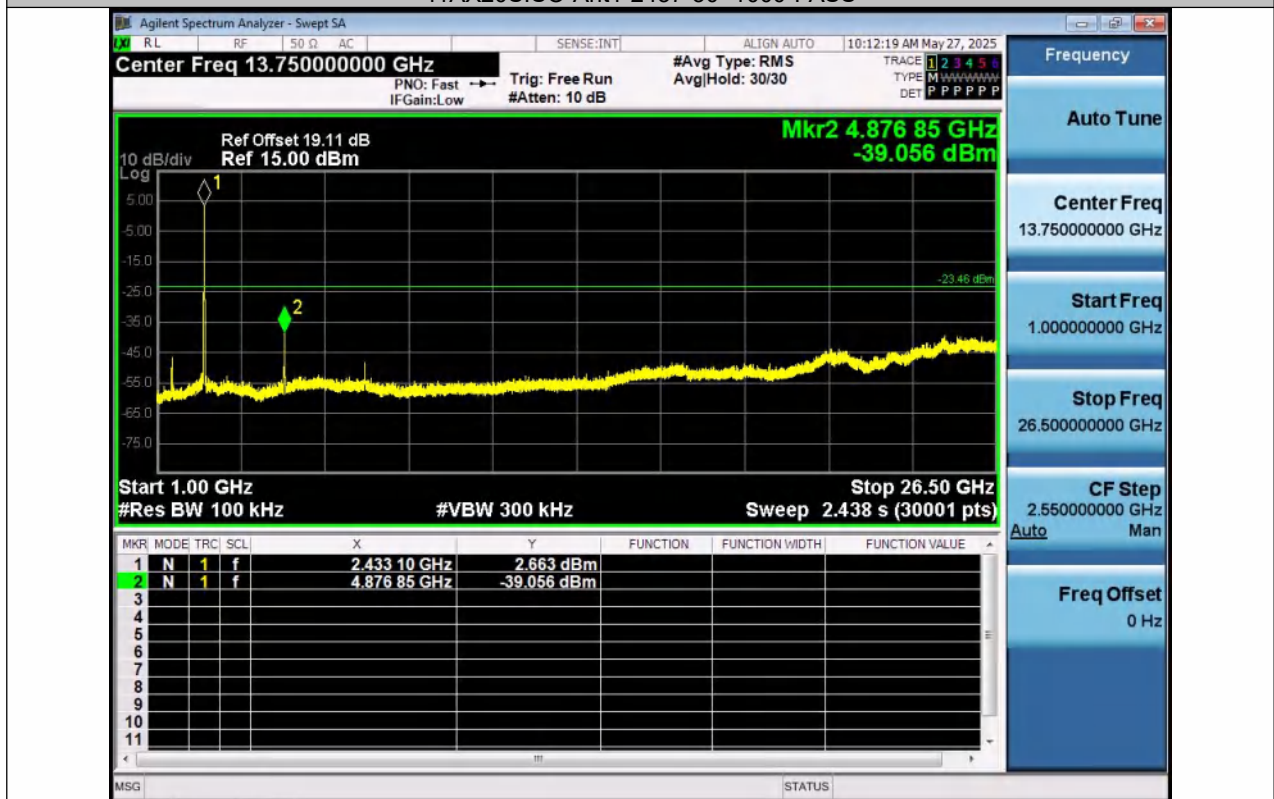
11AX20SISO-Ant1-2412-1000~26500-PASS



11AX20SISO-Ant1-2437-0~Reference-PASS



11AX20SISO-Ant1-2437-30~1000-PASS



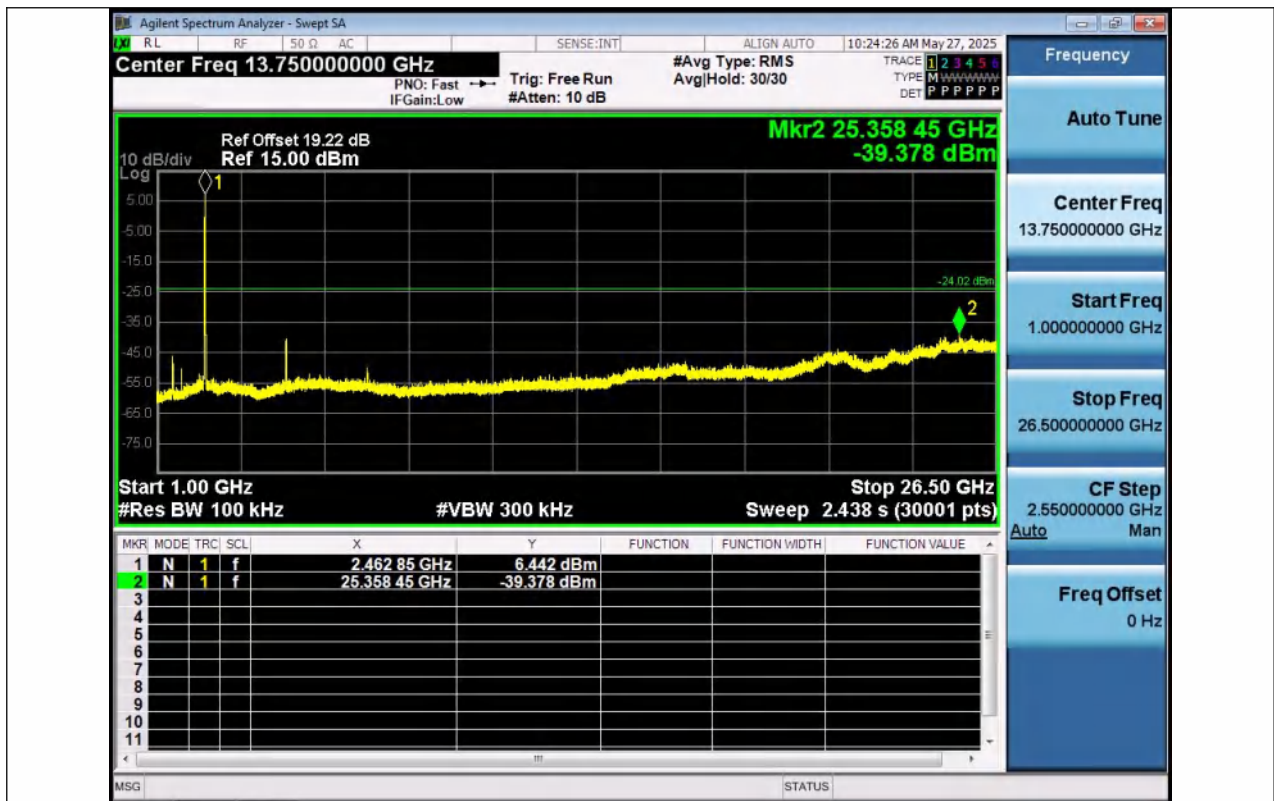
11AX20SISO-Ant1-2437-1000~26500-PASS



11AX20SISO-Ant1-2462-0~Reference-PASS



11AX20SISO-Ant1-2462-30~1000-PASS



11AX20SISO-Ant1-2462-1000~26500-PASS



11AX40SISO-Ant1-2422-0~Reference-PASS



11AX40SISO-Ant1-2422-30~1000-PASS



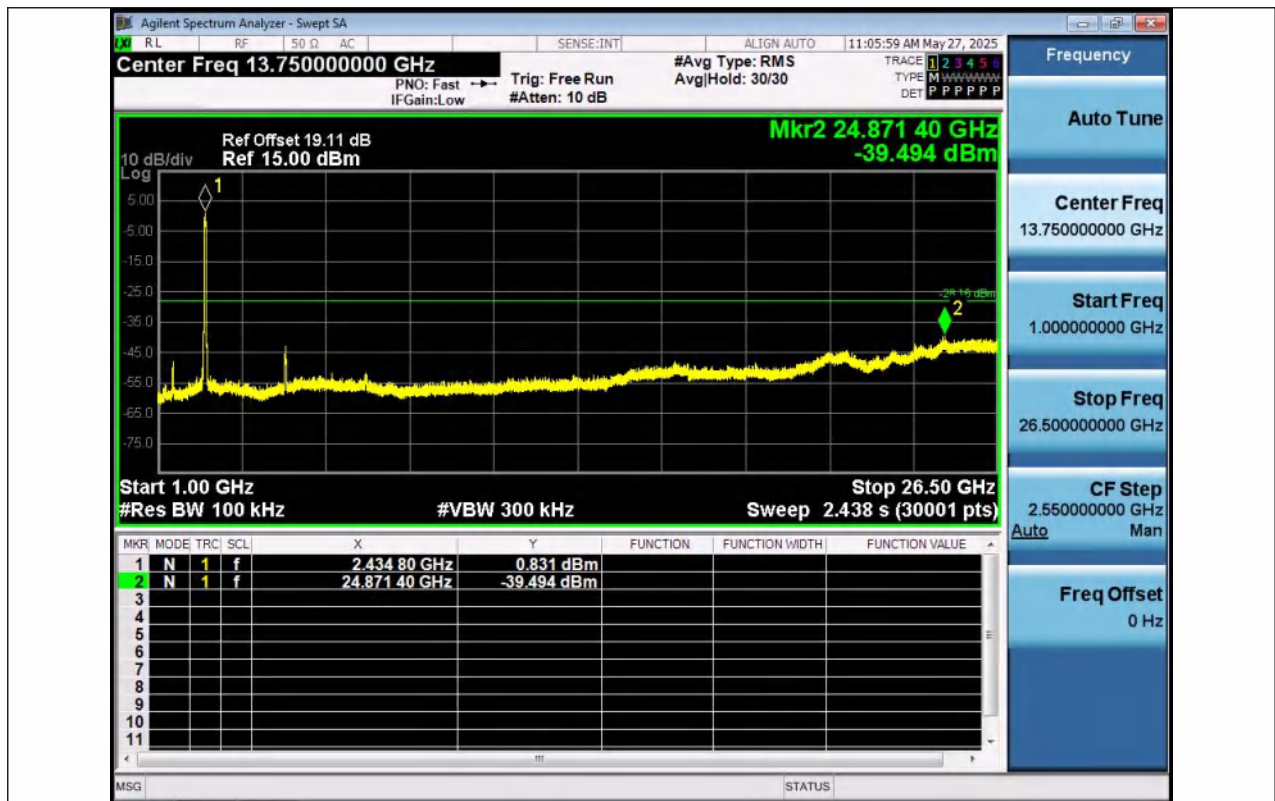
11AX40SISO-Ant1-2422-1000~26500-PASS



11AX40SISO-Ant1-2437-0~Reference-PASS



11AX40SISO-Ant1-2437-30~1000-PASS



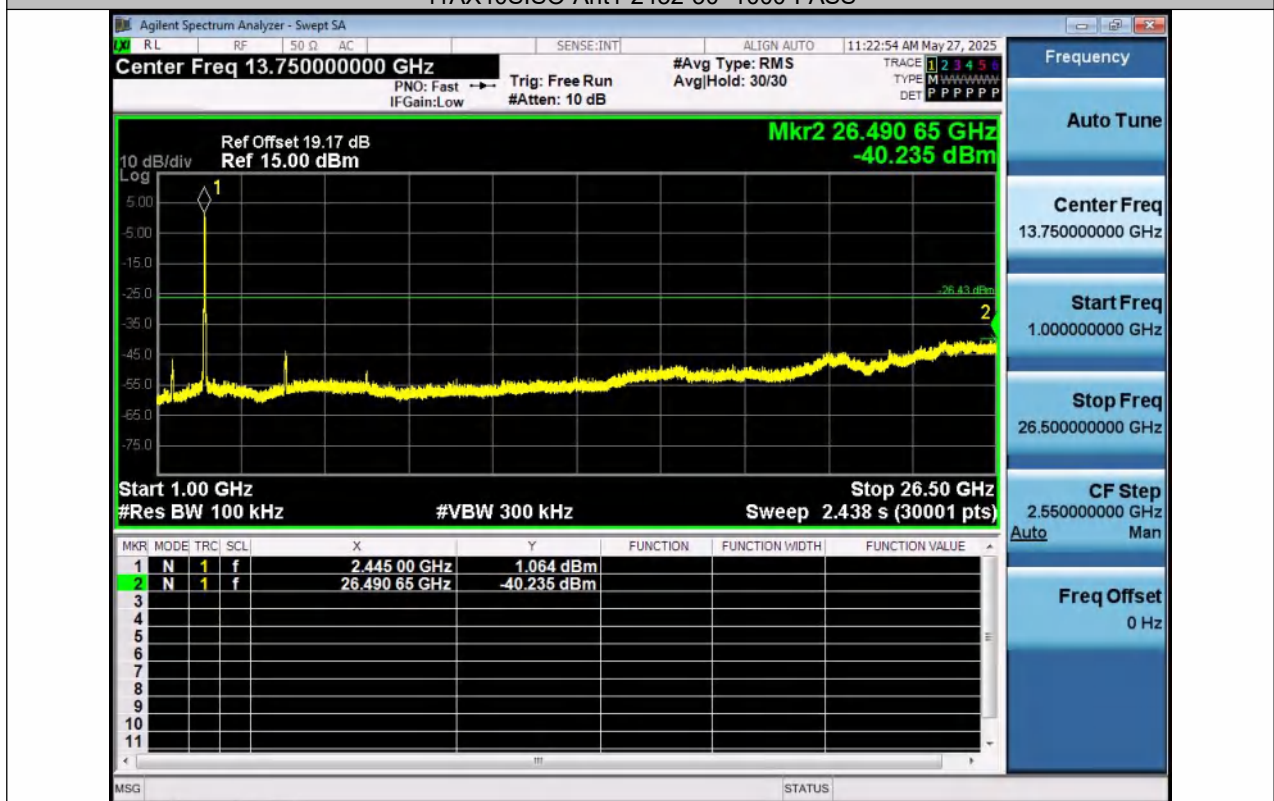
11AX40SISO-Ant1-2437-1000~26500-PASS



11AX40SISO-Ant1-2452-0~Reference-PASS



11AX40SISO-Ant1-2452-30~1000-PASS



11AX40SISO-Ant1-2452-1000~26500-PASS

8.6 RADIATED SPURIOUS EMISSION

8.6.1 Applicable Standard

According to FCC Part 15.247(d), 15.205, 15.209 and KDB 558074 D01 15.247 Meas Guidancev05r02
According to IC RSS-Gen and RSS-247

8.6.2 Conformance Limit

According to FCC Part 15.247(d): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).
According to FCC Part 15.205, Restricted bands

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	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	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			

According to FCC Part 15.205 the level of any transmitter spurious emission in Restricted bands shall not exceed the level of the emission specified in the following table

Restricted Frequency (MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log (μV/m)	300
0.490-1.705	24000/F(KHz)	20 log (μV/m)	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

8.6.3 Test Configuration

Test according to clause 6.2 radio frequency test setup

8.6.4 Test Procedure

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

For Above 1GHz:

The EUT was placed on a turn table which is 1.5m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz

VBW ≥ RBW

Sweep = auto

Detector function = peak

Trace = max hold

For Below 1GHz:

The EUT was placed on a turn table which is 0.8m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Span = wide enough to fully capture the emission being measured

RBW = 100 kHz for

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

For Below 30MHz:

The EUT was placed on a turn table which is 0.8m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Span = wide enough to fully capture the emission being measured

RBW = 9kHz

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

For Below 150KHz:

The EUT was placed on a turn table which is 0.8m above ground plane.

Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Span = wide enough to fully capture the emission being measured

RBW = 200Hz

VBW $\geq$ RBW

Sweep = auto

Detector function = peak

Trace = max hold

Follow the guidelines in ANSI C63.10 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit. Submit this data.

Now set the VBW to 10 Hz, while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit. If the dwell time per channel of the hopping signal is less than 100 ms, then the reading obtained with the 10 Hz VBW may be further adjusted by a "duty cycle correction factor", derived from $20\log(\text{dwell time}/100 \text{ ms})$, in an effort to demonstrate compliance with the limit. Submit this data.

Repeat above procedures until all frequency measured was complete.

8.6.5 Test Results

Temperature:	25° C
Relative Humidity:	60%
ATM Pressure:	1011 mbar

■ Spurious Emission below 30MHz(9KHz to 30MHz)

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
--	--	--	--	--	--	--	--

Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.

Distance extrapolation factor = $40\log(\text{Specific distance}/ \text{test distance})$ (dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor

■ Spurious Emission Above 1GHz(1GHz to 25GHz)

All the antenna(Antenna 1)and modes(802.11b/g/n/ax)have been tested and the worst(Antenna 1,802.11b) result recorded was report as below:

Test mode: 802.11b Frequency: Channel 1: 2412MHz

Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
	H/V	PK	AV	PK	AV	PK	AV
4822.5	V	51.82	49.22	74.00	54.00	22.18	4.78
9916.87	V	62.12	42.87	74.00	54.00	11.88	11.13
14745	V	66.33	45.88	74.00	54.00	7.67	8.12
4822.5	H	51.33	48.03	74.00	54.00	22.67	5.97
9896.25	H	62.38	42.68	74.00	54.00	11.62	11.32
13715.62	H	66.25	43.96	74.00	54.00	7.75	10.04

Test mode: 802.11b Frequency: Channel 6: 2437MHz

Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
	H/V	PK	AV	PK	AV	PK	AV
4873.125	V	53.97	50.98	74.00	54.00	20.03	3.02
9907.5	V	61.90	42.91	74.00	54.00	12.10	11.09
14216.25	V	66.69	44.99	74.00	54.00	7.31	9.01
4873.125	H	53.38	50.00	74.00	54.00	20.62	4.00
10044.37	H	62.88	42.19	74.00	54.00	11.12	11.81
13676.25	H	66.33	43.56	74.00	54.00	7.67	10.44

Test mode: 802.11b Frequency: Channel 11: 2462MHz

Freq. (MHz)	Ant.Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
	H/V	PK	AV	PK	AV	PK	AV
4923.75	V	54.88	50.95	74.00	54.00	19.12	3.05
9885	V	62.43	42.48	74.00	54.00	11.57	11.52
13680	V	66.69	43.25	74.00	54.00	7.31	10.75
4923.75	H	53.59	50.89	74.00	54.00	20.41	3.11
9885	H	62.86	42.45	74.00	54.00	11.14	11.55
14557.5	H	66.73	46.59	74.00	54.00	7.27	7.41

- Note:**
- (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
 - (2) Emission Level= Reading Level+Correct Factor.
 - (3) Correct Factor= Ant_F + Cab_L - Preamp
 - (4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

■ Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz

All the antenna(Antenna 1) and modes(802.11b/g/n/ax) have been tested and the worst(Antenna 1,802.11n(HT20)) result recorded was report as below:

Test mode: 802.11n(HT20) Frequency: Channel 1: 2412MHz

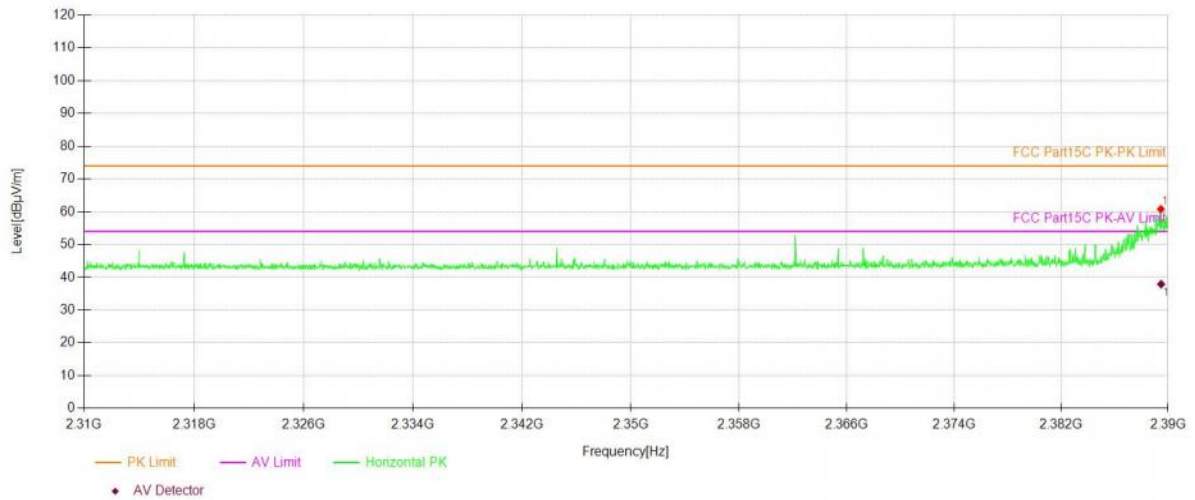
Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
2389.4665	H	60.80	74.00	37.92	54.00
2389.9733	V	63.28	74.00	38.56	54.00

Test mode: 802.11n(HT20) Frequency: Channel 11: 2462MHz

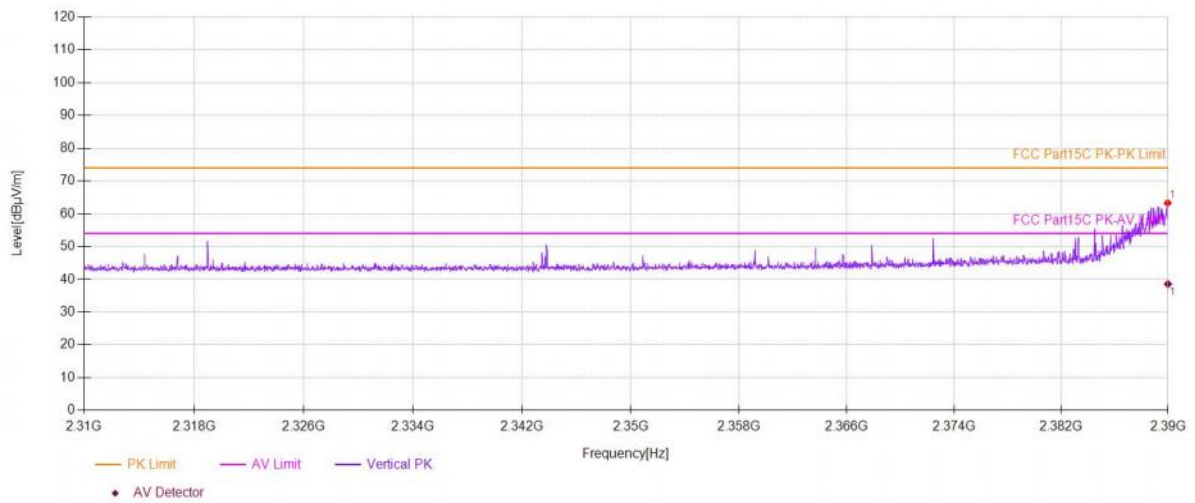
Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)
2483.7607	H	61.63	74.00	37.35	54.00
2484.1864	V	64.38	74.00	39.21	54.00

- Note:**
- (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
 - (2) Emission Level= Reading Level+Correct Factor.
 - (3) Correct Factor= Ant_F + Cab_L - Preamp
 - (4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

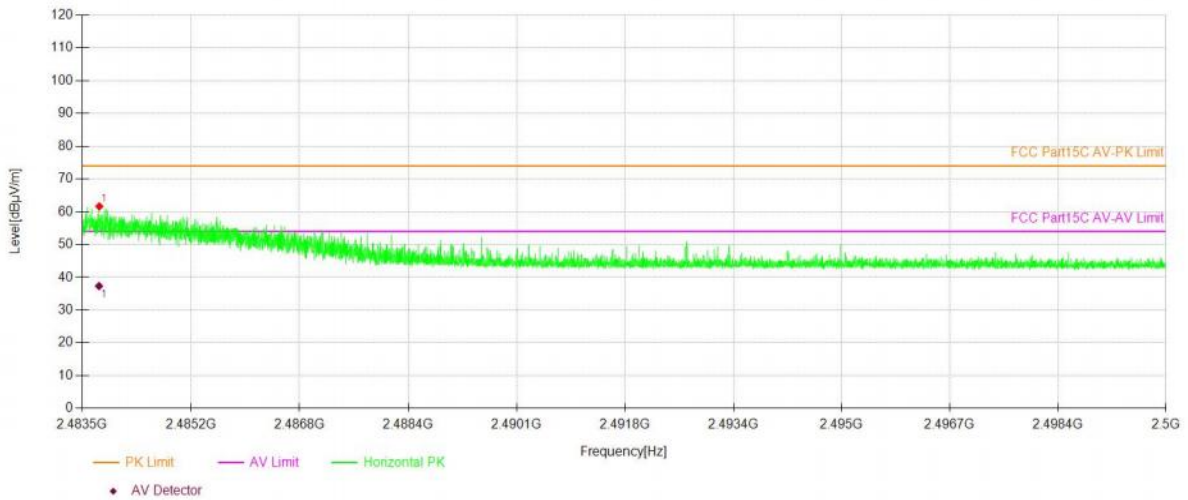
Test Model 802.11n(HT20) Spurious Emission in Restricted Band 2310-2390MHz
Channel 1: 2412MHz VBW=3MHz Polarity: H



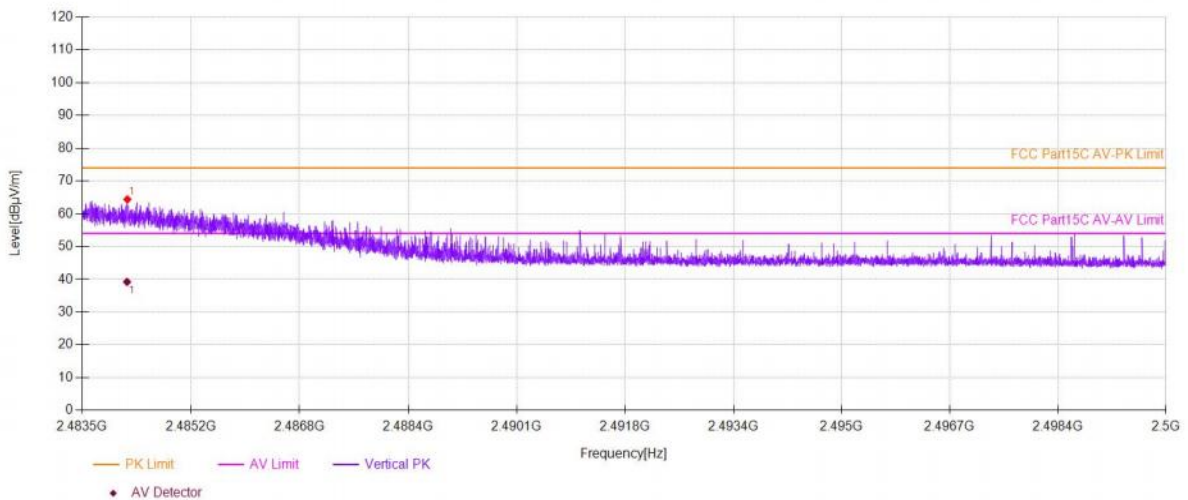
Test Model 802.11n(HT20) Spurious Emission in Restricted Band 2310-2390MHz
Channel 1: 2412MHz VBW=3MHz Polarity: V



Test Model 802.11n(HT20) Spurious Emission in Restricted Band 2483.5-2500MHz
Channel 11: 2462MHz VBW=3MHz Polarity: H



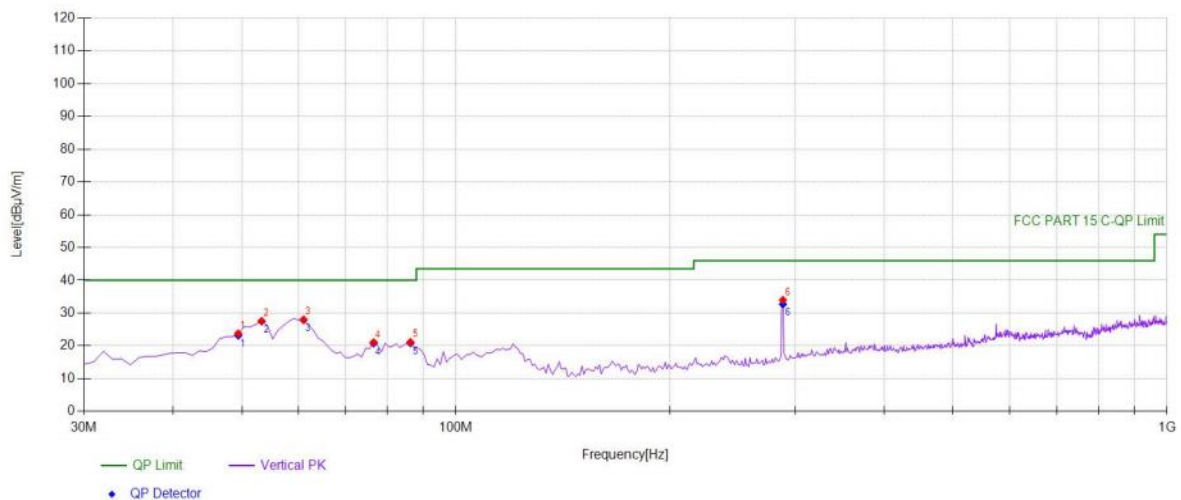
Test Model 802.11n(HT20) Spurious Emission in Restricted Band 2483.5-2500MHz
Channel 11: 2462MHz VBW=3MHz Polarity: V



■ Spurious Emission below 1GHz (30MHz to 1GHz)

All the antenna(Antenna 1) and modes(802.11b/g/n/ax) have been tested and the worst(Antenna 1,802.11b) result recorded was report as below:

Mode:	11B 2412
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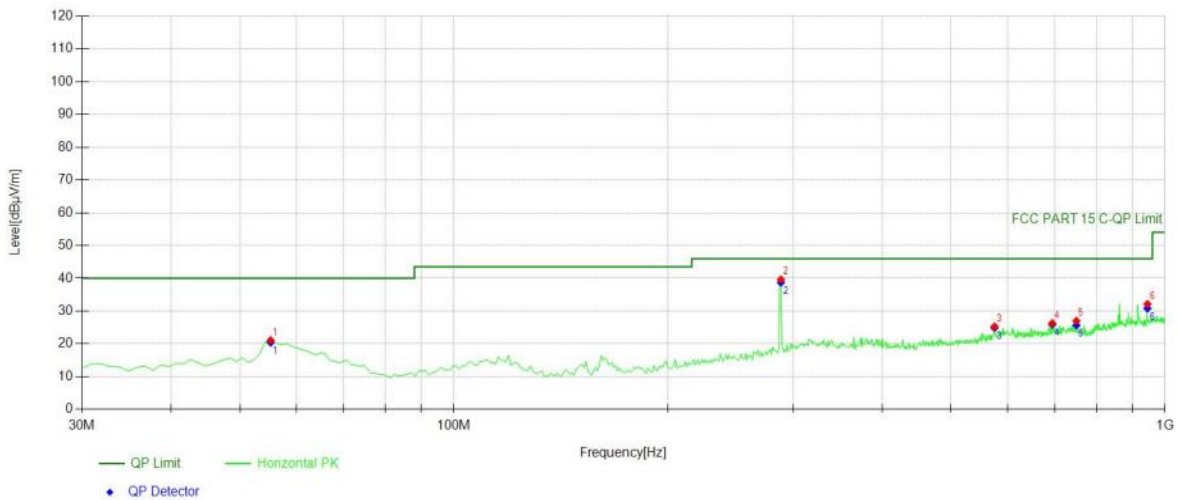
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	49.4194	39.85	-16.10	23.75	PK	40.00	16.25	Vertical
2	53.3033	44.02	-16.47	27.55	PK	40.00	12.45	Vertical
3	61.0711	45.51	-17.54	27.97	PK	40.00	12.03	Vertical
4	76.6066	40.85	-19.77	21.08	PK	40.00	18.92	Vertical
5	86.3163	40.48	-19.32	21.16	PK	40.00	18.84	Vertical
6	288.278	48.41	-14.44	33.97	PK	46.00	12.03	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	49.4194	-16.10	23.17	40.00	16.83
2	53.3033	-16.47	27.51	40.00	12.49
3	61.0711	-17.54	27.93	40.00	12.07
4	76.6066	-19.77	20.79	40.00	19.21
5	86.3163	-19.32	20.87	40.00	19.13
6	288.2783	-14.44	32.72	46.00	13.28

Mode:	11B 2412
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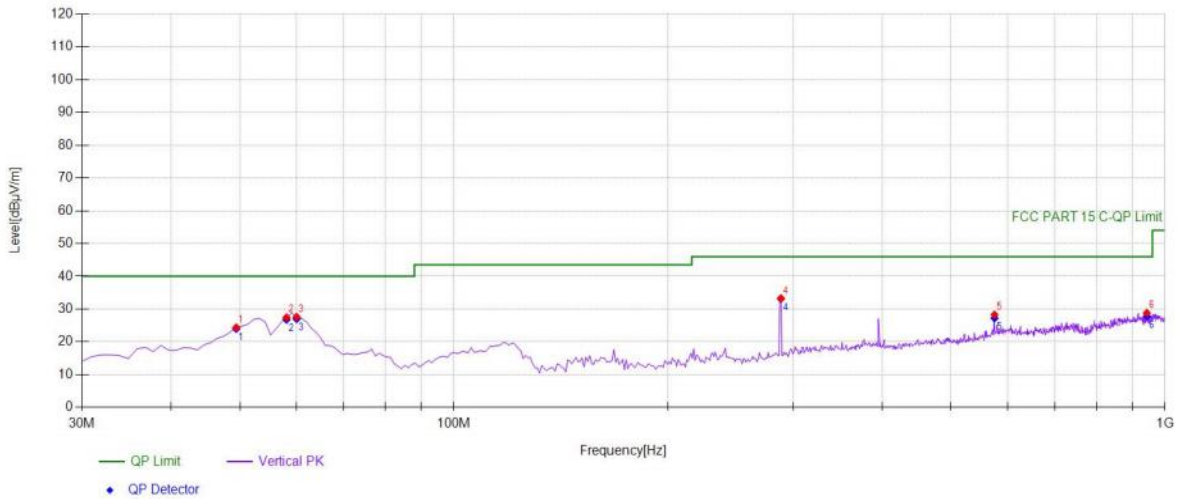
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	55.2452	37.83	-16.74	21.09	PK	40.00	18.91	Horizontal
2	288.278	54.06	-14.44	39.62	PK	46.00	6.38	Horizontal
3	575.685	32.68	-7.40	25.28	PK	46.00	20.72	Horizontal
4	694.144	32.44	-6.14	26.30	PK	46.00	19.70	Horizontal
5	750.460	32.85	-5.85	27.00	PK	46.00	19.00	Horizontal
6	944.654	35.08	-2.92	32.16	PK	46.00	13.84	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	55.2452	-16.74	20.42	40.00	19.58
2	288.2783	-14.44	38.70	46.00	7.30
3	575.6857	-7.40	24.90	46.00	21.10
4	694.1441	-6.14	25.92	46.00	20.08
5	750.4605	-5.85	25.66	46.00	20.34
6	944.6547	-2.92	30.82	46.00	15.18

Mode:	11B 2437
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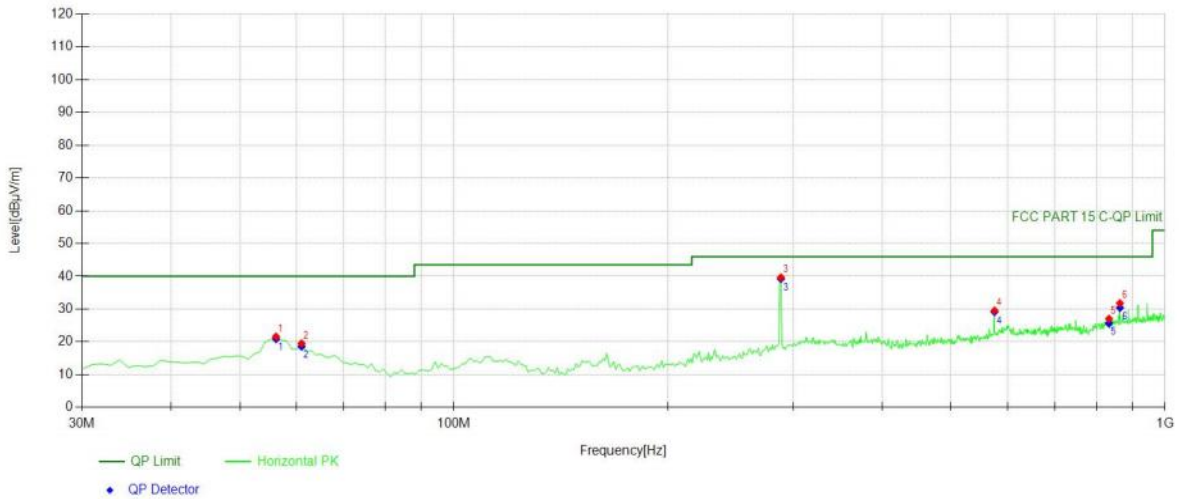
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	49.4194	40.50	-16.10	24.40	PK	40.00	15.60	Vertical
2	58.1582	44.60	-17.14	27.46	PK	40.00	12.54	Vertical
3	60.1001	45.04	-17.41	27.63	PK	40.00	12.37	Vertical
4	288.278	47.71	-14.44	33.27	PK	46.00	12.73	Vertical
5	575.685	35.70	-7.40	28.30	PK	46.00	17.70	Vertical
6	942.712	31.85	-3.04	28.81	PK	46.00	17.19	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	49.4194	-16.10	24.00	40.00	16.00
2	58.1582	-17.14	26.82	40.00	13.18
3	60.1001	-17.41	26.99	40.00	13.01
4	288.2783	-14.44	33.17	46.00	12.83
5	575.6857	-7.40	27.23	46.00	18.77
6	942.7127	-3.04	27.74	46.00	18.26

Mode:	11B 2437
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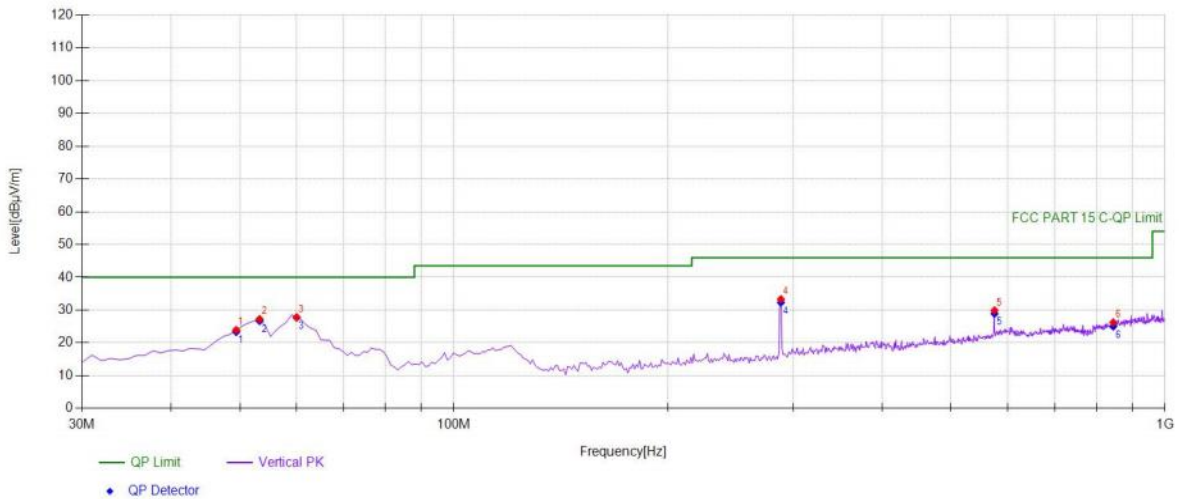
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	56.2162	38.46	-16.87	21.59	PK	40.00	18.41	Horizontal
2	61.0711	37.07	-17.54	19.53	PK	40.00	20.47	Horizontal
3	288.278	54.09	-14.44	39.65	PK	46.00	6.35	Horizontal
4	575.685	36.94	-7.40	29.54	PK	46.00	16.46	Horizontal
5	833.964	31.53	-4.50	27.03	PK	46.00	18.97	Horizontal
6	864.064	35.19	-3.40	31.79	PK	46.00	14.21	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	56.2162	-16.87	20.88	40.00	19.12
2	61.0711	-17.54	18.58	40.00	21.42
3	288.2783	-14.44	39.23	46.00	6.77
4	575.6857	-7.40	29.12	46.00	16.88
5	833.964	-4.50	25.65	46.00	20.35
6	864.0641	-3.40	30.41	46.00	15.59

Mode:	11B 2462
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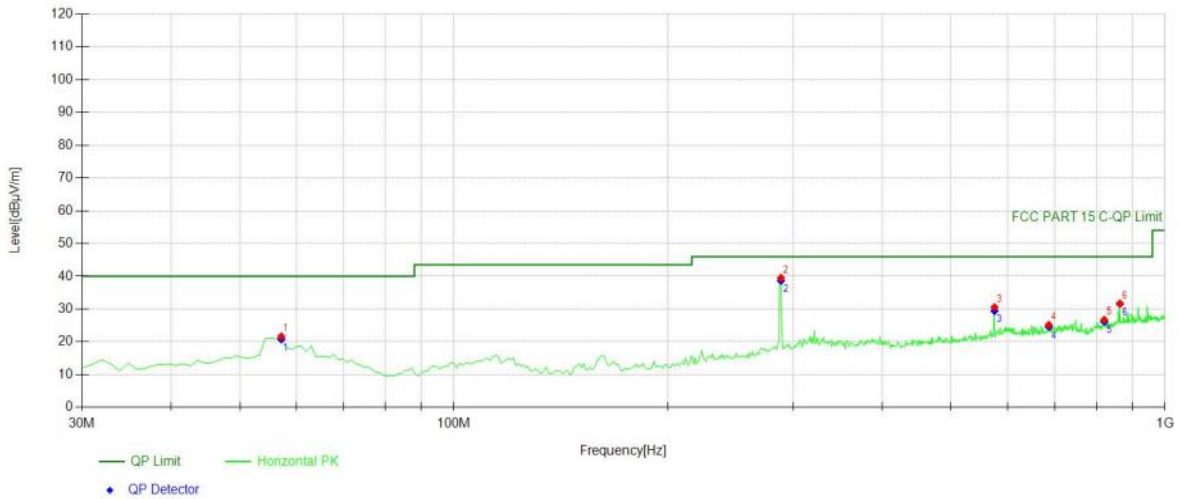
Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	49.4194	40.03	-16.10	23.93	PK	40.00	16.07	Vertical
2	53.3033	43.74	-16.47	27.27	PK	40.00	12.73	Vertical
3	60.1001	45.19	-17.41	27.78	PK	40.00	12.22	Vertical
4	288.278	47.76	-14.44	33.32	PK	46.00	12.68	Vertical
5	575.685	37.31	-7.40	29.91	PK	46.00	16.09	Vertical
6	845.615	30.33	-4.08	26.25	PK	46.00	19.75	Vertical

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	49.4194	-16.10	23.36	40.00	16.64
2	53.3033	-16.47	26.70	40.00	13.30
3	60.1001	-17.41	27.75	40.00	12.25
4	288.2783	-14.44	32.32	46.00	13.68
5	575.6857	-7.40	28.91	46.00	17.09
6	845.6156	-4.08	25.01	46.00	20.99

Mode:	11B 2462
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Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV]	Factor [dB/m]	Level [dBμV/m]	Detector	Limit [dBμV/m]	Margin [dB]	Polarity
1	57.1872	38.67	-17.00	21.67	PK	40.00	18.33	Horizontal
2	288.278	53.96	-14.44	39.52	PK	46.00	6.48	Horizontal
3	575.685	37.98	-7.40	30.58	PK	46.00	15.42	Horizontal
4	686.376	31.61	-6.43	25.18	PK	46.00	20.82	Horizontal
5	821.341	31.41	-4.69	26.72	PK	46.00	19.28	Horizontal
6	864.064	35.07	-3.40	31.67	PK	46.00	14.33	Horizontal

Final Data List

NO.	Freq. [MHz]	Factor [dB/m]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]
1	57.1872	-17.00	20.79	40.00	19.21
2	288.2783	-14.44	38.64	46.00	7.36
3	575.6857	-7.40	29.46	46.00	16.54
4	686.3764	-6.43	24.59	46.00	21.41
5	821.3413	-4.69	26.13	46.00	19.87
6	864.0641	-3.40	31.62	46.00	14.38

8.7 CONDUCTED EMISSION TEST

8.7.1 Applicable Standard

According to FCC Part 15.207(a)

According to IC RSS-Gen 8.8

8.7.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

8.7.3 Test Configuration

Test according to clause 6.3conducted emission test setup

8.7.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.

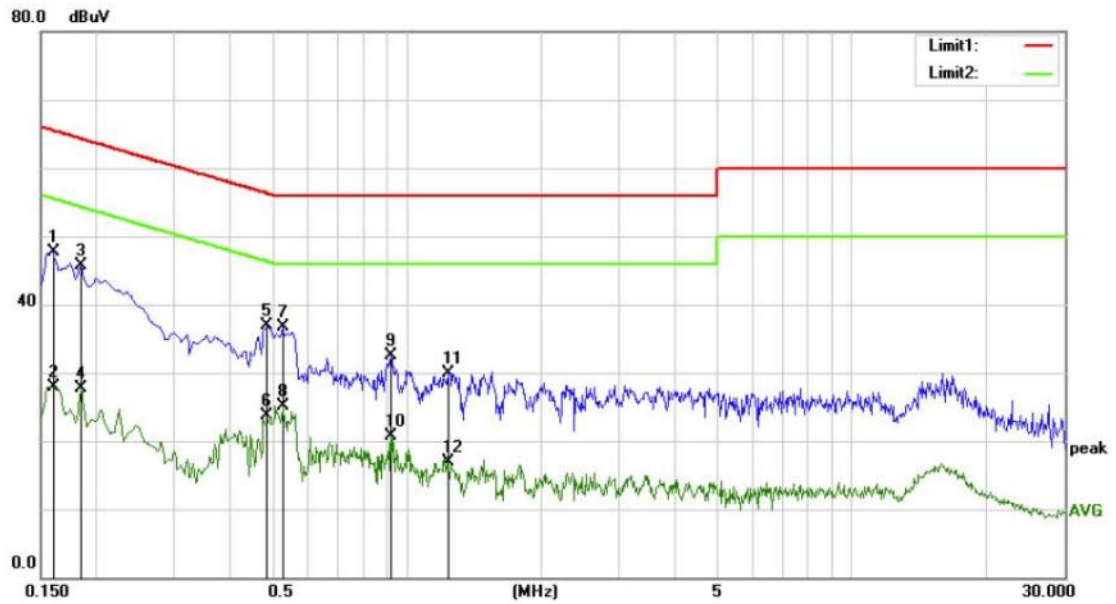
Maximum procedure was performed on the highest emissions to ensure EUT compliance.

Repeat above procedures until all frequency measured were complete.

8.7.5 Test Results

Pass

The AC120V &240V voltage have been tested, and the worst result recorded was report as below:



Site Conduction #1

Phase: **N**

Temperature: 21.2

Limit: (CE)FCC PART 15 class B_QP

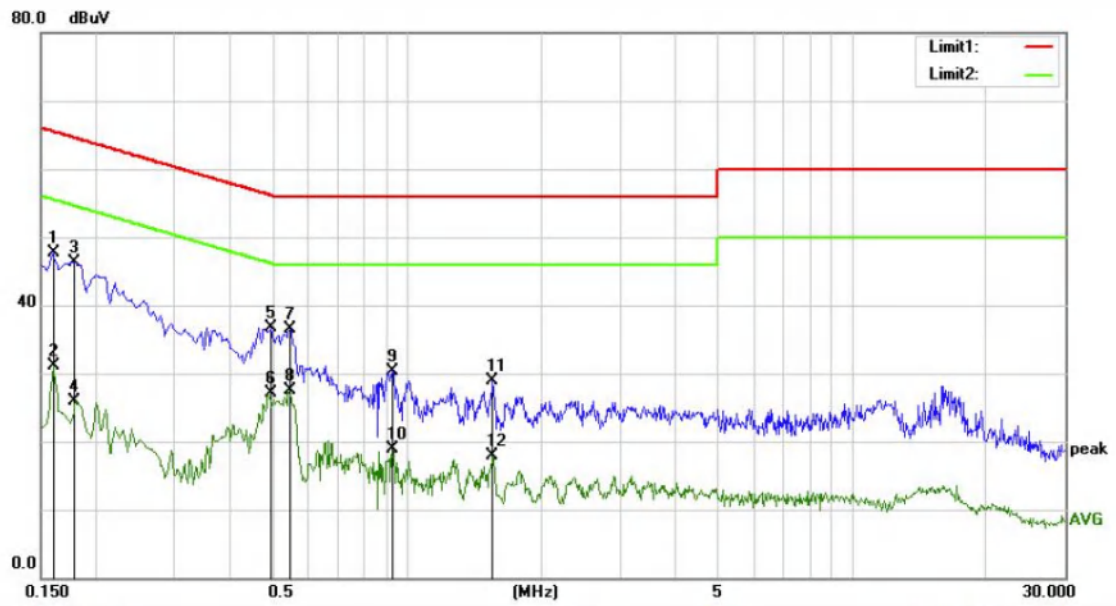
Power: AC 120V/60Hz

Humidity: 55 %

Mode: WiFi

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1600	37.78	9.93	47.71	65.46	-17.75	QP	
2		0.1600	17.97	9.93	27.90	55.46	-27.56	AVG	
3		0.1850	35.72	9.91	45.63	64.26	-18.63	QP	
4		0.1850	17.86	9.91	27.77	54.26	-26.49	AVG	
5		0.4850	27.06	9.92	36.98	56.25	-19.27	QP	
6		0.4850	13.76	9.92	23.68	46.25	-22.57	AVG	
7		0.5250	26.74	9.94	36.68	56.00	-19.32	QP	
8		0.5250	15.20	9.94	25.14	46.00	-20.86	AVG	
9		0.9200	22.53	10.00	32.53	56.00	-23.47	QP	
10		0.9200	10.65	10.00	20.65	46.00	-25.35	AVG	
11		1.2400	19.96	10.02	29.98	56.00	-26.02	QP	
12		1.2400	6.82	10.02	16.84	46.00	-29.16	AVG	



Site Conduction #1

Phase: **L1**

Temperature: 21.2

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

Humidity: 55 %

Mode: WiFi

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1600	37.66	10.02	47.68	65.46	-17.78	QP	
2		0.1600	21.09	10.02	31.11	55.46	-24.35	AVG	
3		0.1785	36.18	10.04	46.22	64.56	-18.34	QP	
4		0.1785	15.84	10.04	25.88	54.56	-28.68	AVG	
5		0.4950	26.67	9.96	36.63	56.08	-19.45	QP	
6		0.4950	17.10	9.96	27.06	46.08	-19.02	AVG	
7		0.5450	26.48	9.96	36.44	56.00	-19.56	QP	
8		0.5450	17.45	9.96	27.41	46.00	-18.59	AVG	
9		0.9250	20.30	9.99	30.29	56.00	-25.71	QP	
10		0.9250	8.98	9.99	18.97	46.00	-27.03	AVG	
11		1.5550	18.95	9.98	28.93	56.00	-27.07	QP	
12		1.5550	7.85	9.98	17.83	46.00	-28.17	AVG	