



FCC Test Report

Report No.: SXP-ESH-P21040309B-2

FCC ID: 2AMEH-POCKETWIFIG3

Product: Pocket WiFi

Model: Pocket WiFi V3.0, Pocket WiFi V3.0-P, Pocket WiFi V3.0-E

Received Date: Apr.06, 2021

Test Date: Apr.26 to May.17, 2021

Issued Date: May.26, 2021

Applicant: SolaX Power Network Technology (Zhejiang) Co., Ltd.

Address: No. 288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province, 310000, P. R. CHINA

Manufacturer: SolaX Power Network Technology (Zhejiang) Co., Ltd.

Address: No. 288, Shizhu Road, Tonglu Economic Development Zone, Tonglu City, Zhejiang Province, 310000, P. R. CHINA

Issued By: BUREAU VERITAS ADT (Shanghai) Corporation

Lab Address: No. 829, Xinzhuan Road, Shanghai, P.R.China (201612)



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Release Control Record

Issue No.	Description	Date Issued
SXP-ESH-P21040309B-2	Original release	May.26, 2021



1 Certificate of Conformity

Product: Pocket WiFi

Brand: SolaX Power

Model: Pocket WiFi V3.0, Pocket WiFi V3.0-P, Pocket WiFi V3.0-E

Applicant: SolaX Power Network Technology (Zhejiang) Co., Ltd.

Test Date: Apr.26 to May.17, 2021

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10:2013

The above equipment has been tested by **BUREAU VERITAS ADT (Shanghai) Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by :

, Date:

May.26, 2021

Yuan ZHANG

Project Engineer

Approved by :

, Date:

May.26, 2021

Daniel SUN

EMC Lab Manager





2 Summary of Test Results

The EUT has been tested according to the following specifications:

47 CFR FCC Part 15, Subpart C (SECTION 15.247)			
FCC Clause	Test Item	Result	Remarks
15.203	Antenna Requirement	PASS	No antenna connector is used.
15.207	AC Power Conducted Emission	NA	Note
15.247(a)(2)	Minimum 6dB Bandwidth	PASS	Meet the requirement of limit.
15.247(b)	Conducted Output Power	PASS	Meet the requirement of limit.
15.247(e)	Power Spectral Density	PASS	Meet the requirement of limit.
15.247(d)	Conducted Band Edges Measurement	PASS	Meet the requirement of limit.
15.247(d)	Conducted Spurious Emissions	PASS	Meet the requirement of limit.
15.247(d)	Emissions in restricted frequency bands	PASS	Meet the requirement of limit.
15.205 / 15.209 / 15.247(d)	Radiated Emissions Measurement	PASS	Meet the requirement of limit.

Note: The wireless function will not work while the EUT is charging.

Special comments: Refer to the following table.

Model name	Remark
Pocket WiFi V3.0	Internal antenna type
Pocket WiFi V3.0-P	External antenna type without extended line
Pocket WiFi V3.0-E	External antenna type with extended line



2.1 Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Hybrid Antenna(25MHz-1.5GHz)	Schwarzbeck	VULB9168	E1A1012	Jul.29, 20	Jul.28, 21
Horn Antenna(1GHz -18GHz)	Schwarzbeck	BBHA9120D	E1A1017	Mar.17, 20	Mar.16, 22
Double Ridge Horn Antenna(18G-40G)	COM-POWER	AH-840	E1A1040	Aug.06, 20	Aug.05, 22
Pre-Amplifier(100kHz-1.3GHz)	Agilent	8447D	E1A2001	Apr.19, 21	Apr.18, 22
Pre-Amplifier(0.5GHz-18GHz)	EMCI	EMC184045SE	E1A2009	Jul.21, 21	Jul.20, 22
Pre-Amplifier(18GHz-40GHz)	EMCI	EMC051845SE	E1A2008	Jul.09, 21	Jul.08, 22
EMI test receiver	R&S	ESR7	E1R1005	May.10, 21	May.09, 22
Spectrum Analyzer	Keysight	N9030B	E1S1003	Sep.09, 20	Sep.08, 21
Spectrum Analyzer	Keysight	N9020A	E1S1004	Mar.02, 21	Mar.01, 22
EMI test receiver	R&S	ESCS30	E1R1002	May.10, 21	May.09, 22
LISN	R&S	ENV216	E1L1011	May.10 21	May.09, 22
Humidity&Temp Tester	Baolima	WS508	E1H1011	Apr. 02, 21	Apr. 01, 22
RF Control Unit	Toscend	JS0806-2	E1C5003	N/A	N/A
Test Software	ADT	ADT_COND_V7 .3.1	N/A	N/A	N/A
Test Software	Toscend	TS+_Ver 2.1	N/A	N/A	N/A
Test Software	Toscend	JS1120-3_Ver 2.6.87.0615	N/A	N/A	N/A



2.2 Measurement Uncertainty

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

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Measurement	Frequency	Expanded Uncertainty ($k=2$) (\pm)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.83 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.36 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.47 dB
	6GHz ~ 18GHz	3.75 dB
	18GHz ~ 40GHz	3.30 dB

2.3 Modification Record

There were no modifications required for compliance.



3 General Information

3.1 General Description of EUT

Product	Pocket WiFi
Brand	SolaX Power
Test Model	Pocket WiFi V3.0, Pocket WiFi V3.0-P, Pocket WiFi V3.0-E
Model Difference	The three models have same PCB. Model Pocket WiFi V3.0 is internal antenna type, model Pocket WiFi V3.0-P is external antenna type without extended line, model Pocket WiFi V3.0-E is external antenna type with extended line.
Power Rating	Powered by USB (DC 5V)
Modulation Type	DSSS, OFDM
Modulation Technology	802.11b/g/n20/n40
Operating Frequency	802.11b, 802.11g and 802.11n (HT20):2412MHz~2462MHz, 802.11n (HT40):2422MHz~2452MHz
Number of Channel	802.11b, 802.11g and 802.11n (HT20):11, 802.11n (HT40):7
Antenna Type	Chip Antenna, External Antenna
Antenna Connector	--
Antenna Gain	Chip Antenna:3dBi External Antenna:3dBi

Note:

1. For more details, please refer to the User's manual of the EUT.

Modulation Mode	TX /RX Function
802.11b	1TX / 1RX
802.11g	1TX / 1RX
802.11n (HT20)	1TX / 1RX
802.11n (HT40)	1TX / 1RX



3.2 Description of Test Modes

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20).

Channel	Frequency	Channel	Frequency
1	2412MHz	7	2442MHz
2	2417MHz	8	2447MHz
3	2422MHz	9	2452MHz
4	2427MHz	10	2457MHz
5	2432MHz	11	2462MHz
6	2437MHz	-	-

7 channels are provided for 802.11n (HT40).

Channel	Frequency	Channel	Frequency
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz	-	-



3.2.1 Test Mode Applicability:

EUT Configure Mode	Applicable to				Description
	RE ≥ 1G	RE < 1G	PLC	APCM	
-	√	√	--	√	-

Where **RE≥1G**: Radiated Emission above 1GHz **RE≤1G**: Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM**: Antenna Port Conducted Measurement

Radiated Emission Test (Above 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.
- For different antenna gain, select high gain antenna for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
-	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
-	802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
-	802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	6.5

Radiated Emission Test (Below 1 GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.
- For different antenna gain, select high gain antenna for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1	DSSS	DBPSK	1.0



Power Line Conducted Emission Test:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1	DSSS	DBPSK	1.0

Antenna Port Conducted Measurement

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
-	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
-	802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
-	802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	6.5

3.2.2 Test Condition:

Applicable to	Normal Environmental Conditions	Normal Input Power
RE ≥ 1G	25deg. C, 60%RH	Powered by USB
RE < 1G	25deg. C, 60%RH	Powered by USB
PLC	25deg. C, 60%RH	NA
APCM	25deg. C, 60%RH	Powered by USB

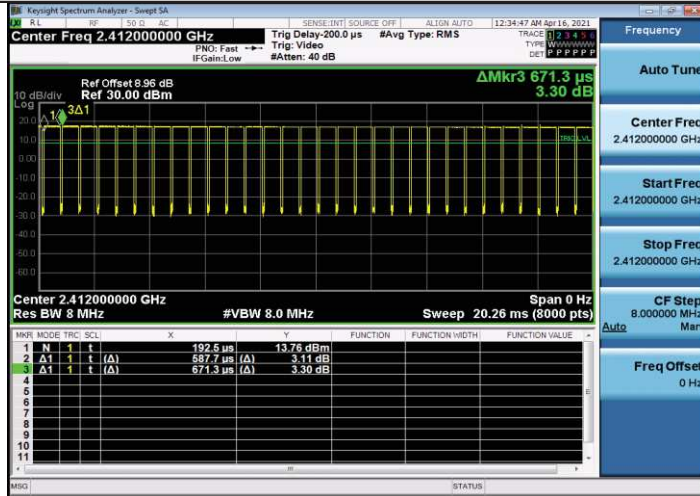


3.3 Duty Cycle of Test Signal

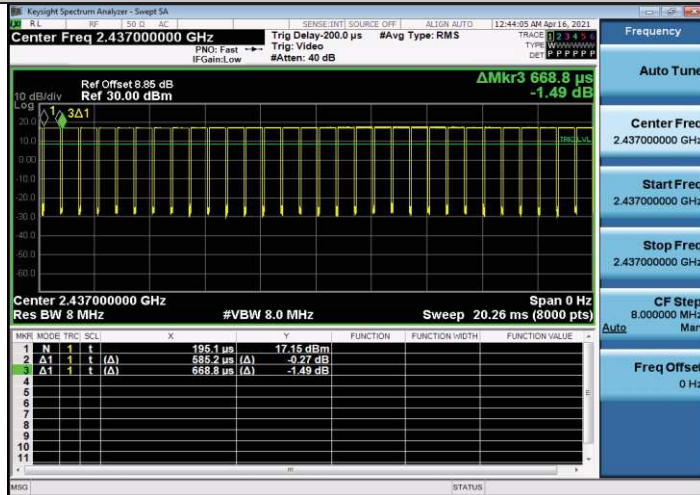
Test Mode	Antenna	Channel [MHz]	Duty Cycle [%]	10log(1/x) Factor[dB]
11B	Ant1	2412	88.06	0.55
		2437	88.06	0.55
		2462	88.06	0.55
11G	Ant1	2412	87.88	0.56
		2437	86.57	0.63
		2462	87.88	0.56
11N20SISO	Ant1	2412	87.50	0.58
		2437	87.50	0.58
		2462	87.50	0.58
11N40SISO	Ant1	2422	87.88	0.56
		2437	87.88	0.56
		2452	87.88	0.56



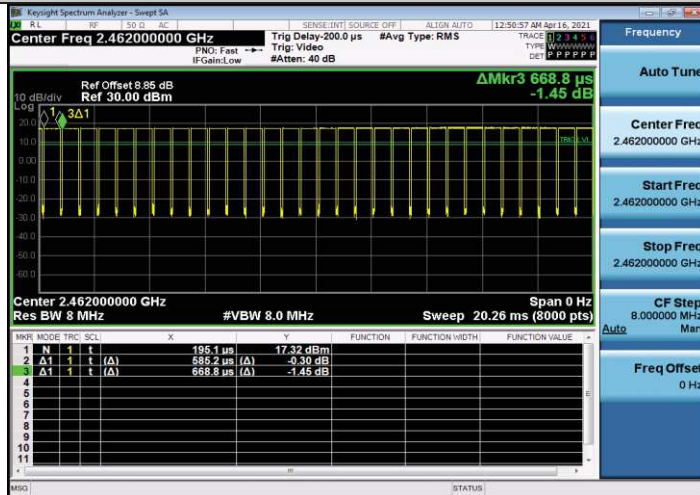
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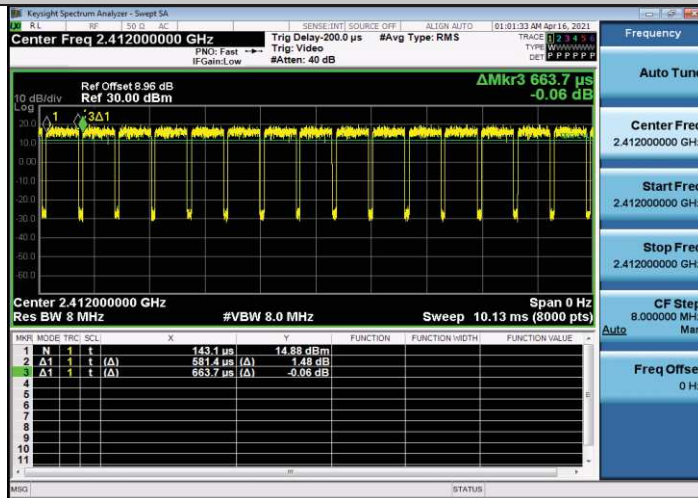
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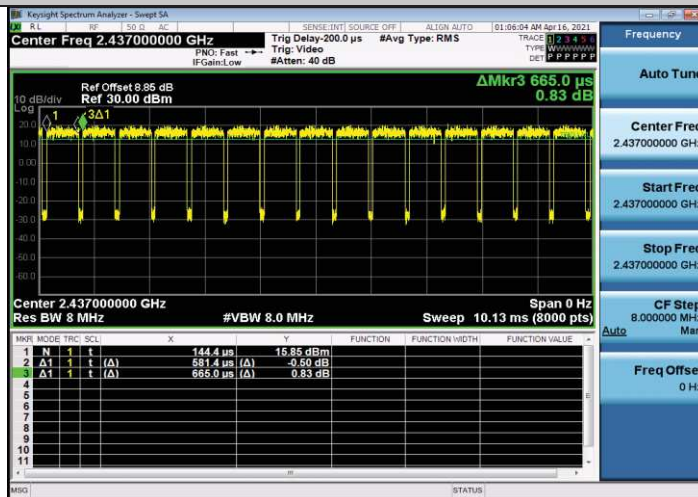
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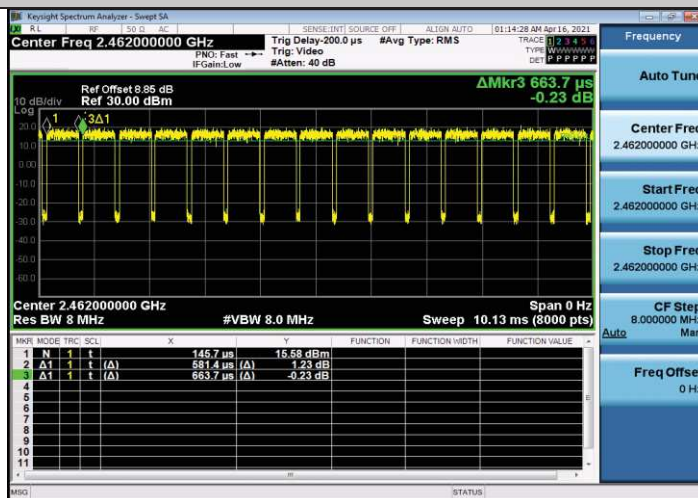
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11G_Ant1_2437

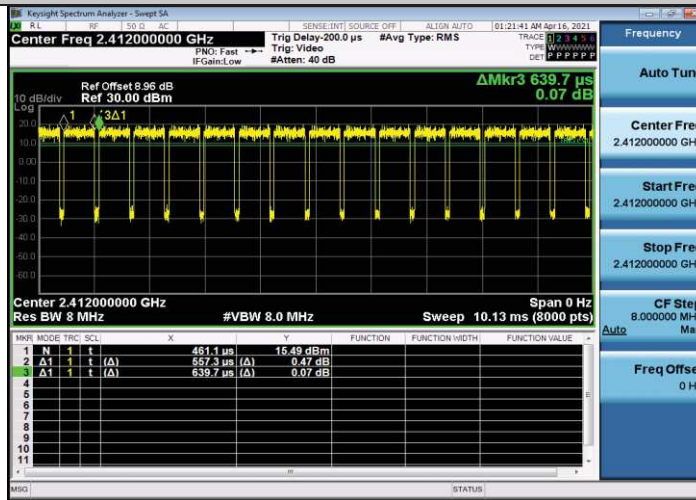


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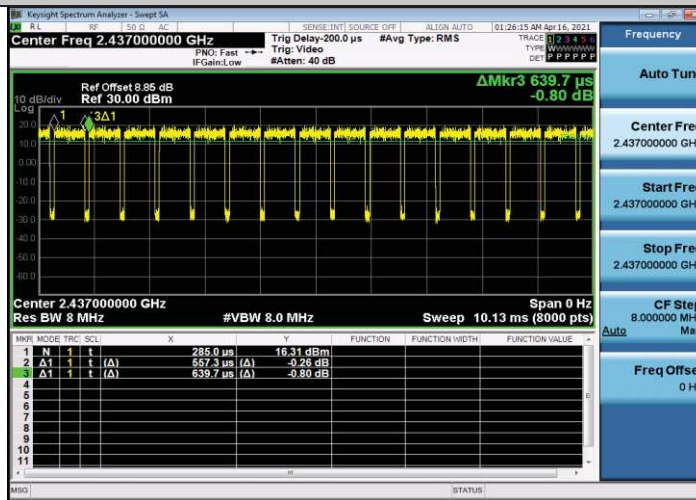




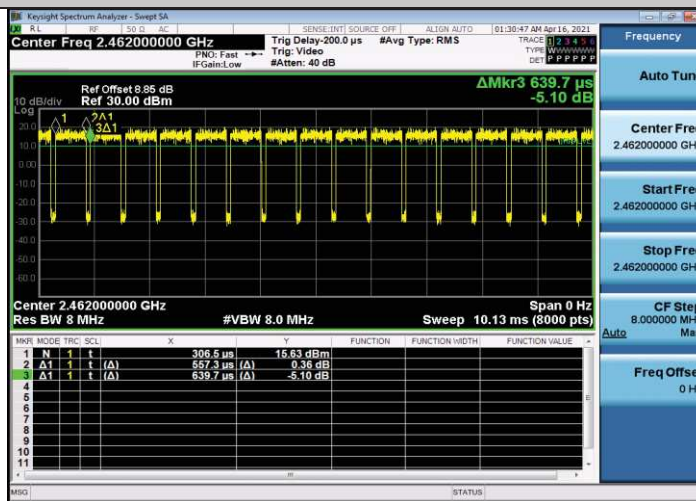
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11N20SISO_Ant1_2437

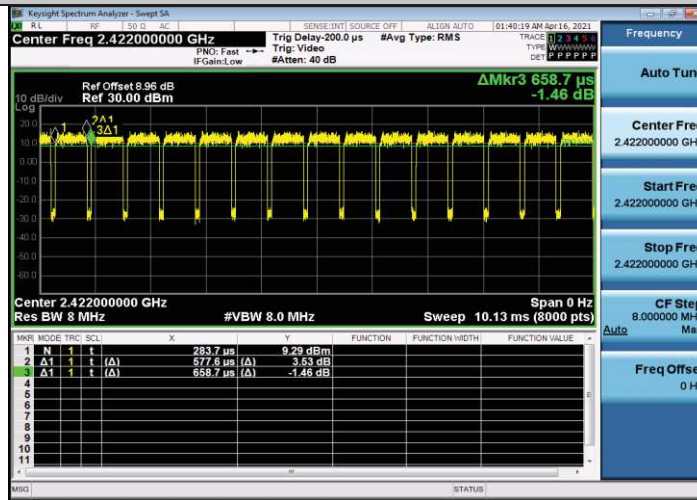


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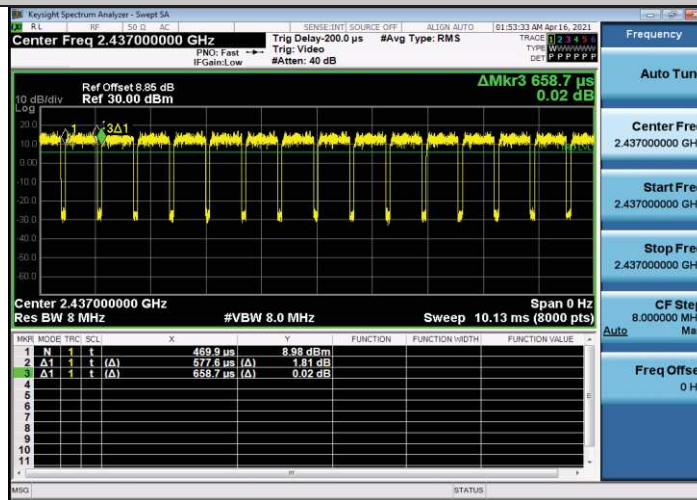




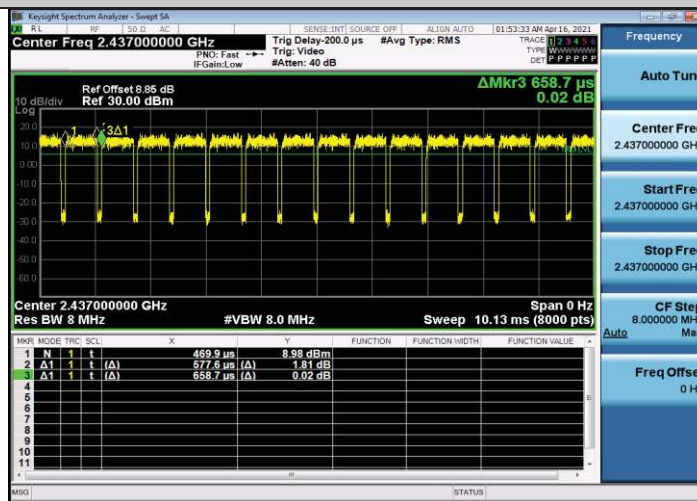
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11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





3.4 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units.

3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standard:

FCC Part 15, Subpart C (15.247)

KDB 558074 D01 DTS Meas Guidance v05r02

ANSI C63.10:2013

All relaxed test items have been performed and recorded as per the above standard.



4 Test Procedure and Results

4.1 AC Power Conducted Emission

4.1.1 Limits

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 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.

4.1.2 Test Procedures

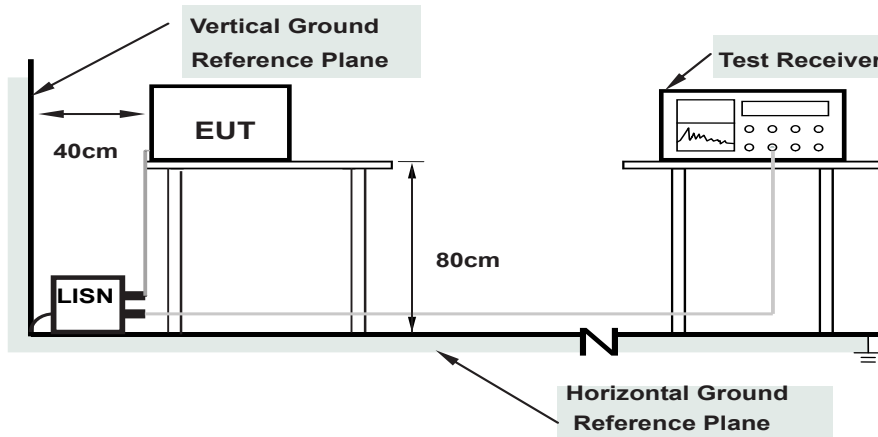
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.1.3 Deviation from Test Standard

No deviation.

4.1.4 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.5 EUT Operating Conditions

Same as 4.1.6.



4.1.6 Test Results

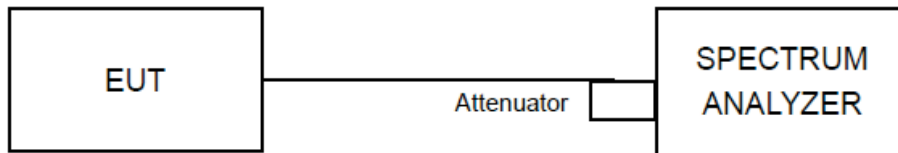
Not applicable. The wireless function will not work while the EUT is charging.

4.2 Minimum 6dB Bandwidth

4.2.1 Limit

For digital modulation systems, the minimum 6dB bandwidth shall be at least 500 kHz

4.2.2 Test Setup



4.2.3 Test Procedures

The EUT was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance” for compliance to FCC 47CFR 15.247 requirements (clause 8.2).

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 100 kHz, VBW ≥ 3 · RBW, peak detector with maximum hold) is implemented by the instrumentation function.

4.2.4 Deviation of Test Standard

No deviation.

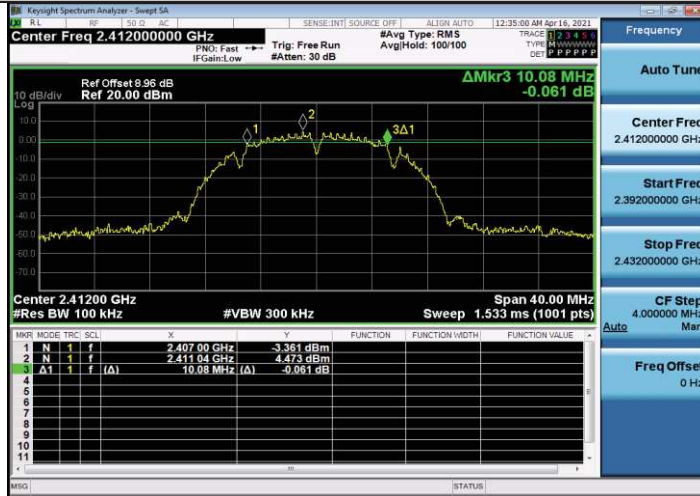


4.2.5 Test Results

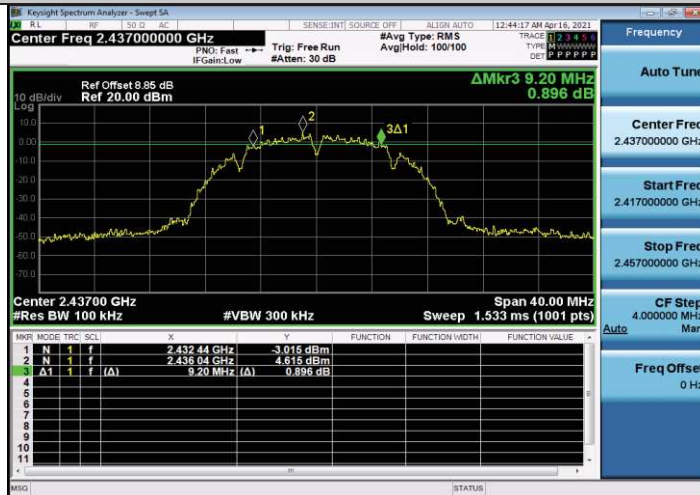
Test Mode	Antenna	Channel [MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.080	2407.000	2417.080	>=0.5	PASS
		2437	9.200	2432.440	2441.640	>=0.5	PASS
		2462	10.120	2457.000	2467.120	>=0.5	PASS
11G	Ant1	2412	16.400	2403.840	2420.240	>=0.5	PASS
		2437	16.400	2428.840	2445.240	>=0.5	PASS
		2462	16.400	2453.840	2470.240	>=0.5	PASS
11N20SISO	Ant1	2412	17.640	2403.200	2420.840	>=0.5	PASS
		2437	17.280	2428.600	2445.880	>=0.5	PASS
		2462	17.680	2453.200	2470.880	>=0.5	PASS
11N40SISO	Ant1	2422	36.640	2403.760	2440.400	>=0.5	PASS
		2437	36.480	2418.840	2455.320	>=0.5	PASS
		2452	36.480	2443.760	2480.240	>=0.5	PASS



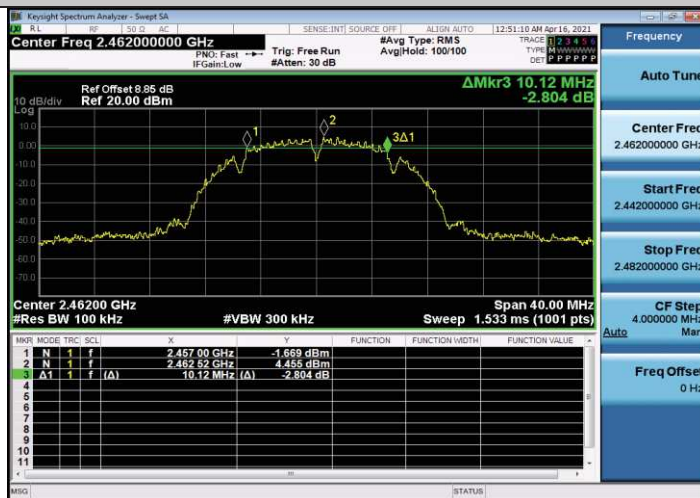
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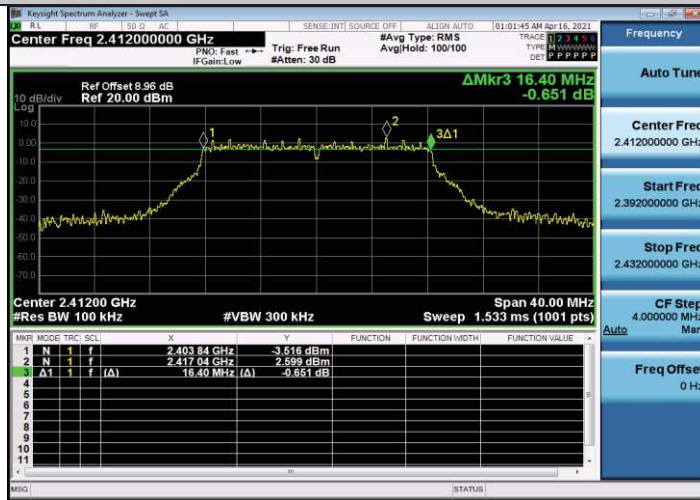
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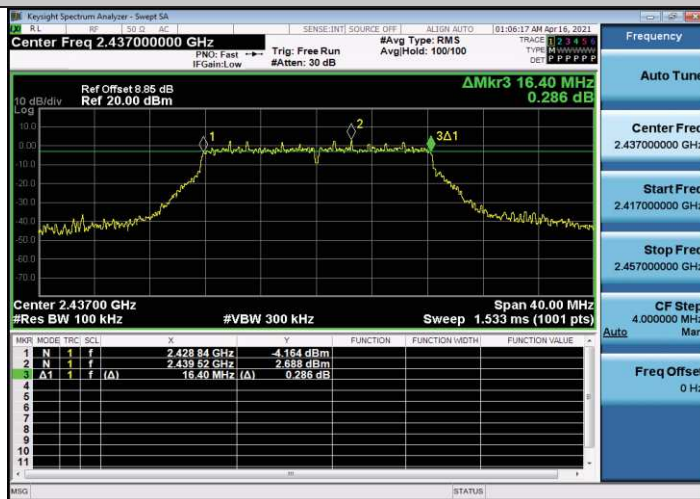
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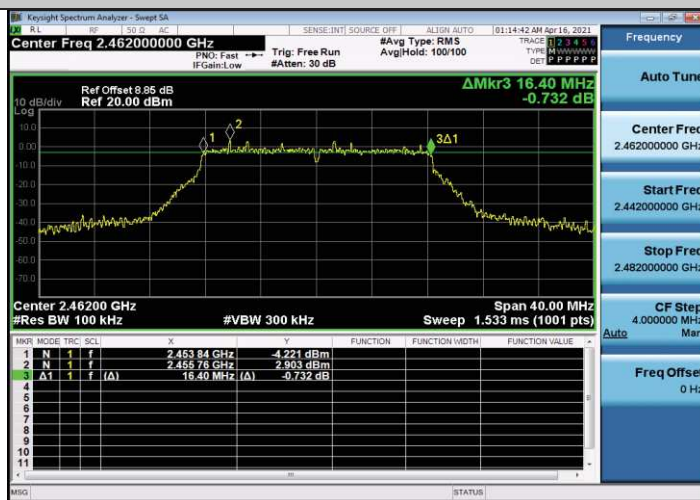
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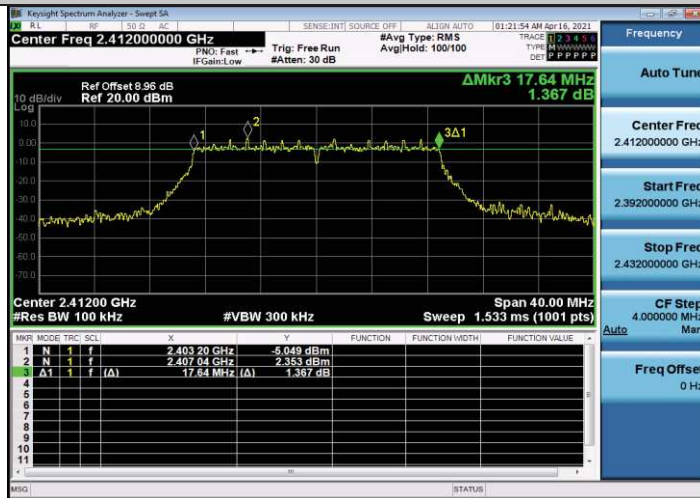
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11G_Ant1_2462



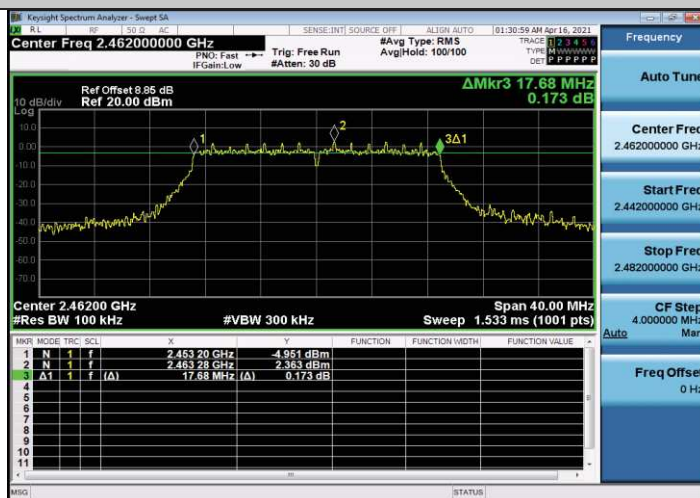
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11N20SISO_Ant1_2437

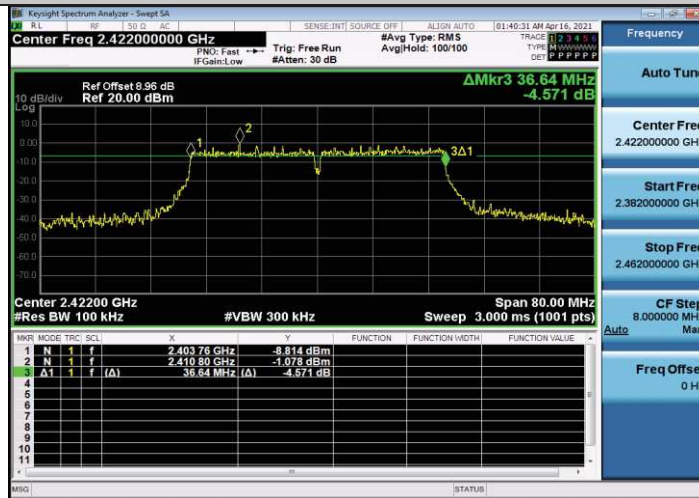


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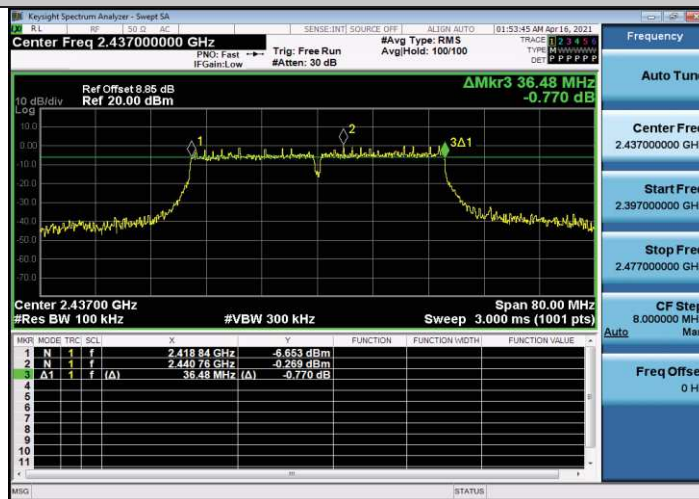




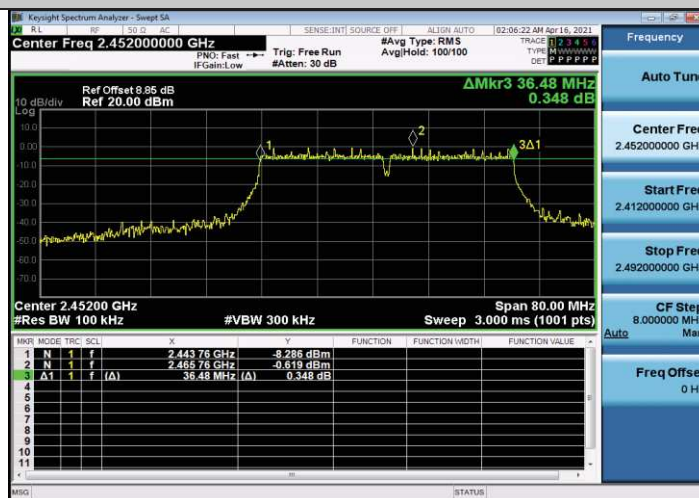
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11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

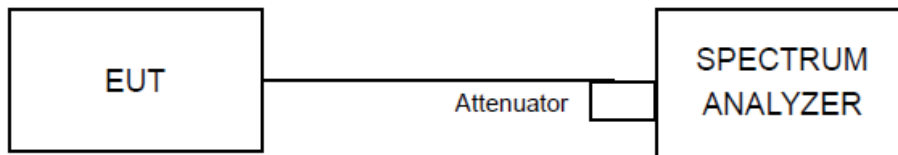


4.3 Conducted Output Power

4.3.1 Limit

For systems using digital modulation in the 2400 – 2483.5 MHz bands: 1 Watt (30 dBm)

4.3.2 Test Setup



4.3.3 Test Procedures

The EUT was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance” for compliance to FCC 47CFR 15.247 requirements (clause 9.2.2.4).

- a) Measure the duty cycle, x , of the transmitter output signal as described in Section 6.0.
- b) Set span to at least 1.5 OBW.
- c) Set RBW = 1 % to 5 % of the OBW, not to exceed 1 MHz.
- d) Set VBW \geq 3 RBW.
- e) Number of points in sweep \geq 2 span / RBW. (This gives bin-to-bin spacing \leq RBW/2, so that narrowband signals are not lost between frequency bins.)
- f) Sweep time = auto.
- g) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- h) Do not use sweep triggering. Allow the sweep to “free run”.
- i) Trace average at least 100 traces in power averaging (i.e., RMS) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the on and off periods of the transmitter.
- j) Compute power by integrating the spectrum across the OBW of the signal using the instrument’s band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
- k) Add $10 \log (1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on- and off-times of the transmission). For example, add $10 \log (1/0.25) = 6$ dB if the duty cycle is 25 %.

4.3.4 Deviation of Test Standard

No deviation.

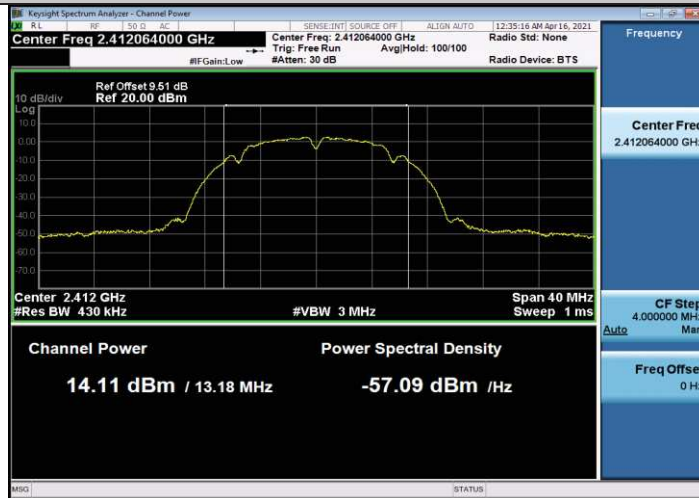


4.3.5 Test Results

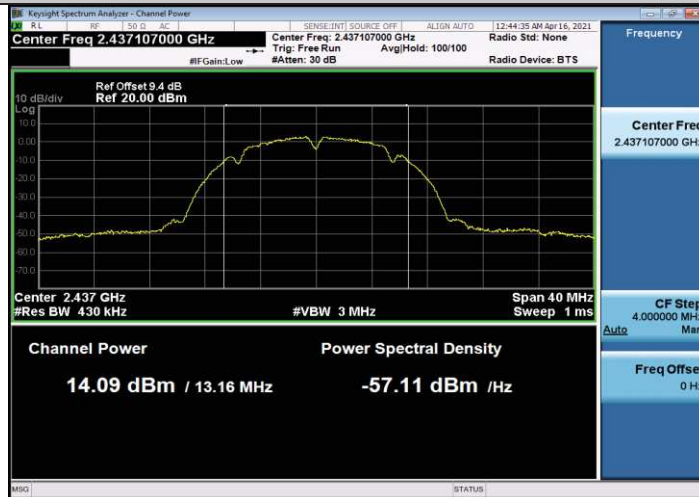
Test Mode	Antenna	Channel [MHz]	Level [dBm]	10log(1/x) Factor[dB]	Power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.11	0.55	14.66	<=30	PASS
		2437	14.09	0.55	14.64	<=30	PASS
		2462	14.22	0.55	14.77	<=30	PASS
11G	Ant1	2412	13.97	0.56	14.53	<=30	PASS
		2437	14.14	0.63	14.77	<=30	PASS
		2462	14.15	0.56	14.71	<=30	PASS
11N20SISO	Ant1	2412	13.82	0.58	14.40	<=30	PASS
		2437	13.71	0.58	14.29	<=30	PASS
		2462	13.89	0.58	14.47	<=30	PASS
11N40SISO	Ant1	2422	14.01	0.56	14.57	<=30	PASS
		2437	14.01	0.56	14.57	<=30	PASS
		2452	13.87	0.56	14.43	<=30	PASS



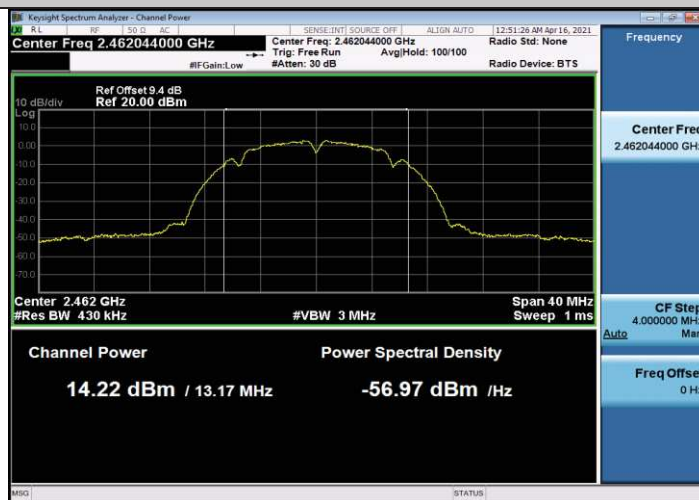
11B_Ant1_2412



11B_Ant1_2437

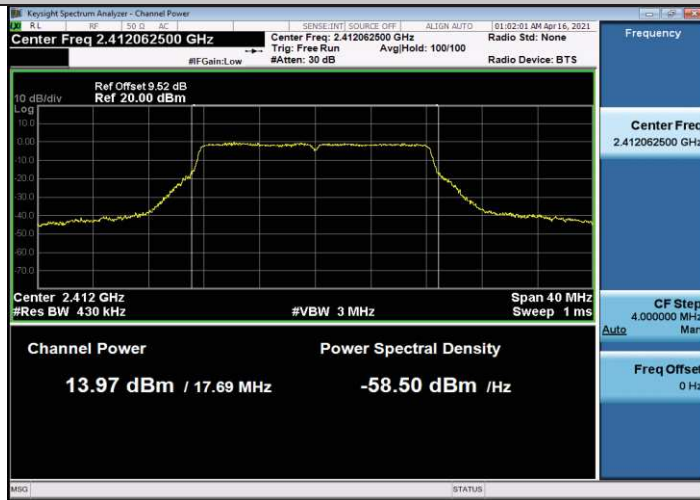


11B_Ant1_2462

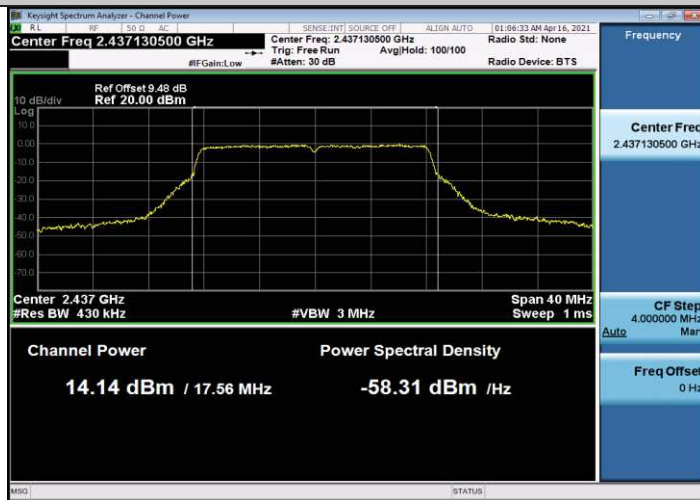




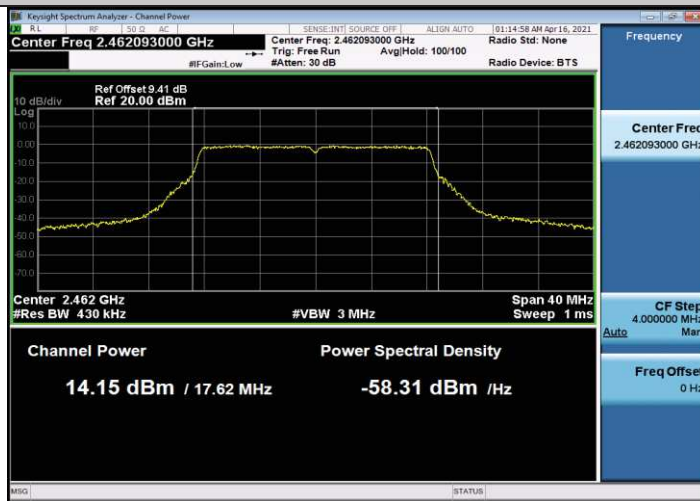
11G_Ant1_2412



11G_Ant1_2437

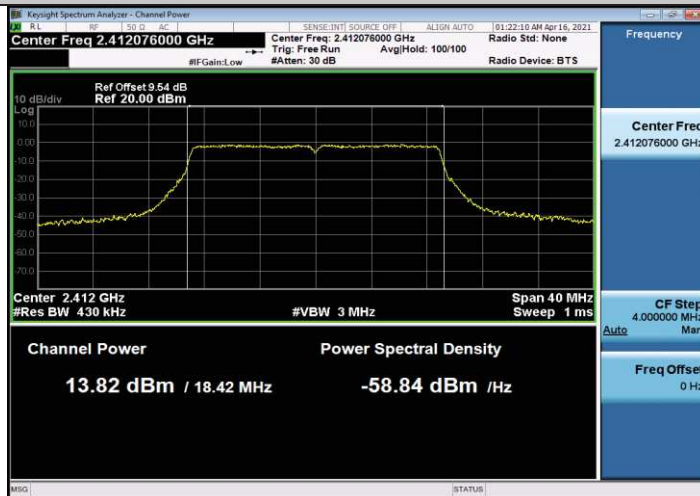


11G_Ant1_2462





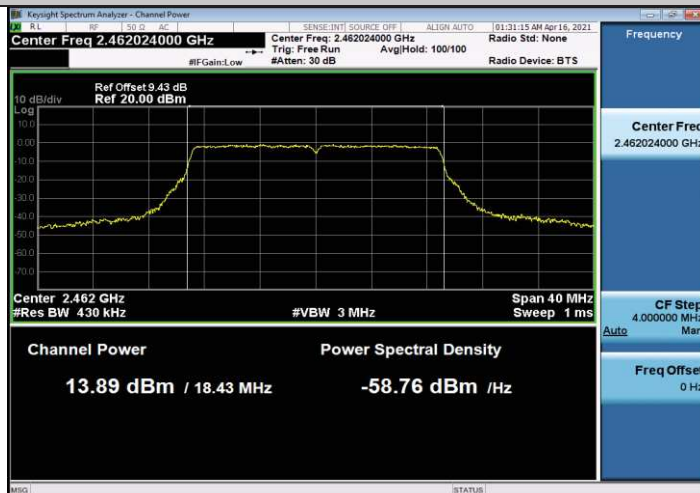
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437

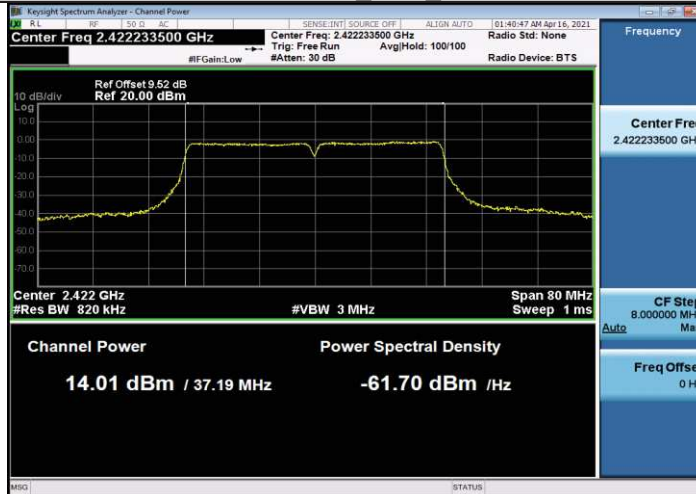


11N20SISO_Ant1_2462

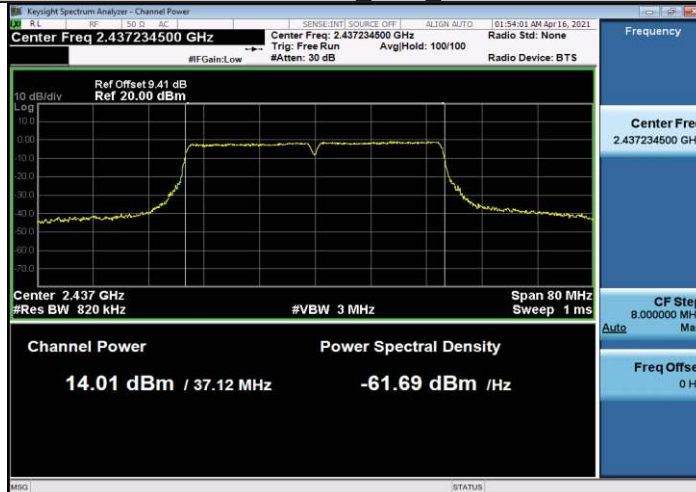




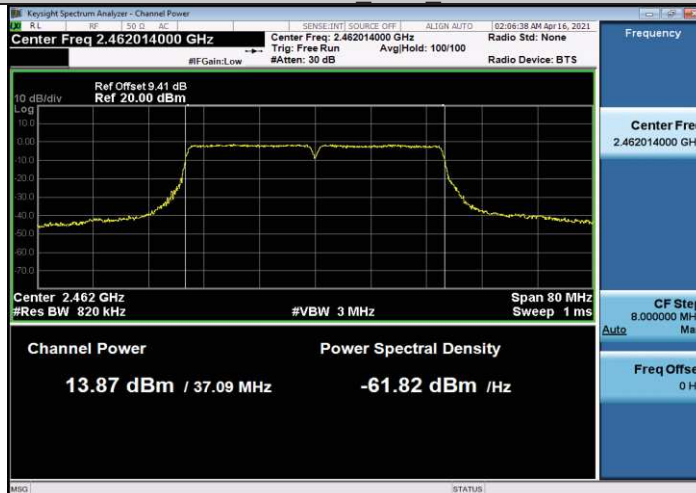
11N40SISO Ant1 2422



11N40SISO Ant1 2437



11N40SISO Ant1 2452

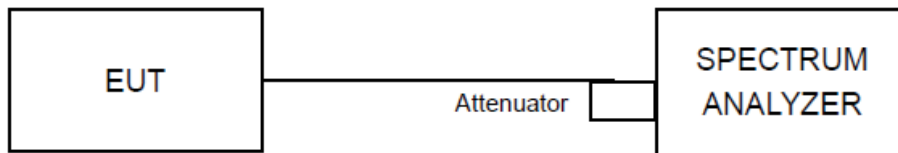


4.4 Power Spectral Density

4.4.1 Limit

The Maximum of Power Spectral Density Measurement is 8 dBm in any 3 kHz band.

4.4.2 Test Setup



4.4.3 Test Procedures

The power output per FCC § 15.247(e) was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance” (clause 10.5) for compliance to FCC 47CFR 15.247 requirements.

- a) Measure the duty cycle (x) of the transmitter output signal.
- b) Set instrument center frequency to DTS channel center frequency.
- c) Set span to at least 1.5 OBW.
- d) Set RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- e) Set VBW $\geq 3 \text{ RBW}$.
- f) Detector = power averaging (RMS) or sample detector (when RMS not available).
- g) Ensure that the number of measurement points in the sweep $\geq 2 \text{ span/RBW}$.
- h) Sweep time = auto couple.
- i) Do not use sweep triggering. Allow sweep to “free run”.
- j) Employ trace averaging (RMS) mode over a minimum of 100 traces.
- k) Use the peak marker function to determine the maximum amplitude level.
- l) Add $10 \log(1/x)$, where x is the duty cycle measured in step (a), to the measured PSD to compute the average PSD during the actual transmission time.
- m) If resultant value exceeds the limit, then reduce RBW (no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span in order to meet the minimum measurement point requirement as the RBW is reduced).

4.4.4 Deviation of Test Standard

No deviation.



4.4.5 Test Results

Test Mode	Antenna	Channel [MHz]	Level [dBm]	10log(1/x) Factor[dB]	PSD [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-17.54	0.55	-16.99	<=8	PASS
		2437	-16.78	0.55	-16.23	<=8	PASS
		2462	-17.3	0.55	-16.75	<=8	PASS
11G	Ant1	2412	-20.05	0.56	-19.49	<=8	PASS
		2437	-19.54	0.63	-18.91	<=8	PASS
		2462	-19.51	0.56	-18.95	<=8	PASS
11N20SI SO	Ant1	2412	-20.29	0.58	-19.71	<=8	PASS
		2437	-20.03	0.58	-19.45	<=8	PASS
		2462	-20.69	0.58	-20.11	<=8	PASS
11N40SI SO	Ant1	2422	-22.97	0.56	-22.41	<=8	PASS
		2437	-22.75	0.56	-22.19	<=8	PASS
		2452	-23.38	0.56	-22.82	<=8	PASS



11B_Ant1_2412



11B_Ant1_2437

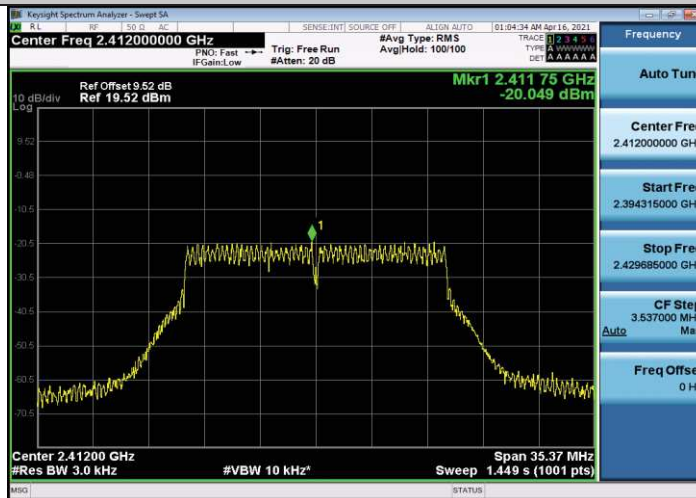


11B_Ant1_2462

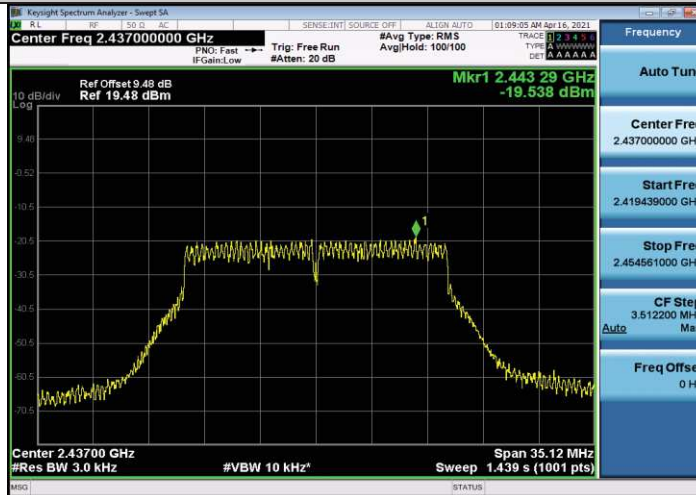




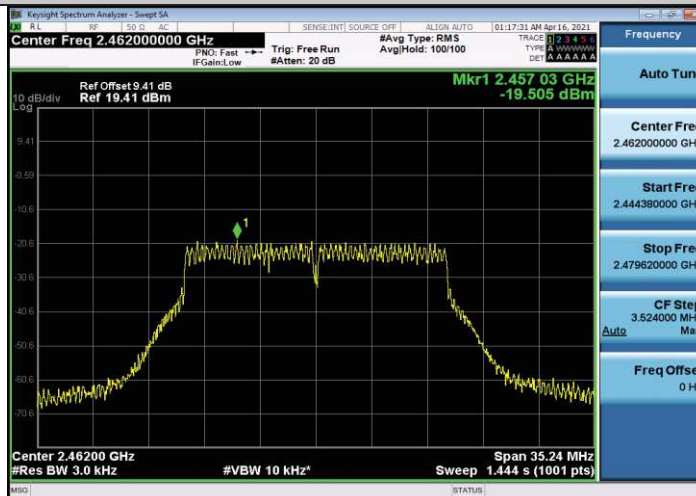
11G_Ant1_2412



11G_Ant1_2437

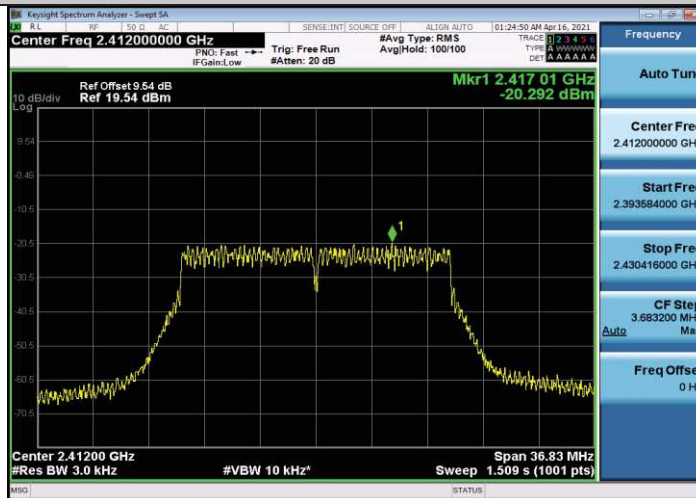


11G_Ant1_2462

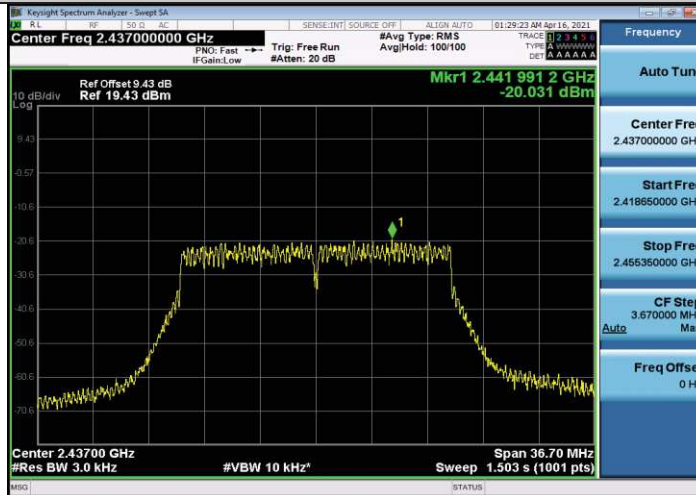




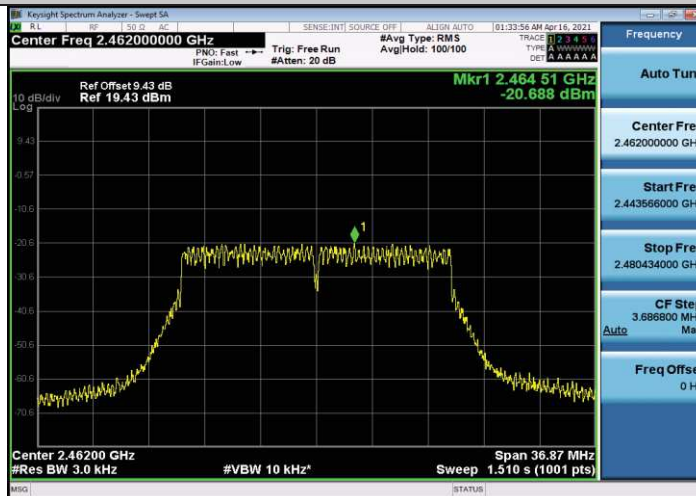
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437

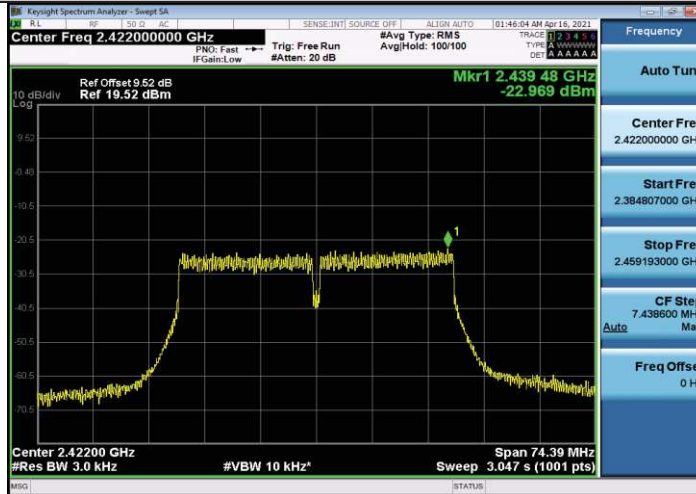


11N20SISO_Ant1_2462

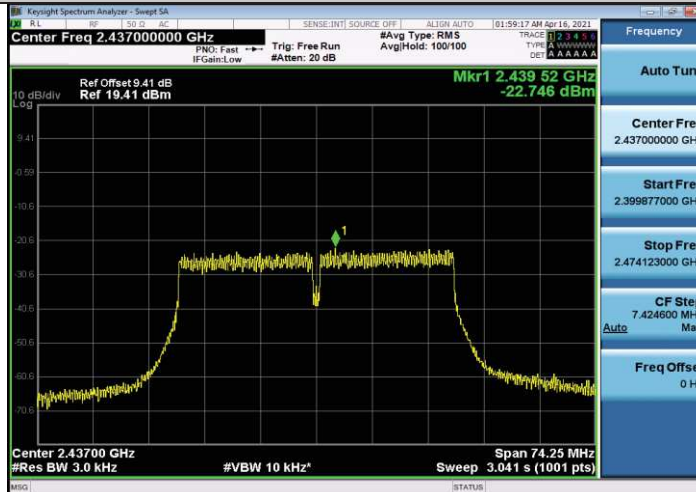




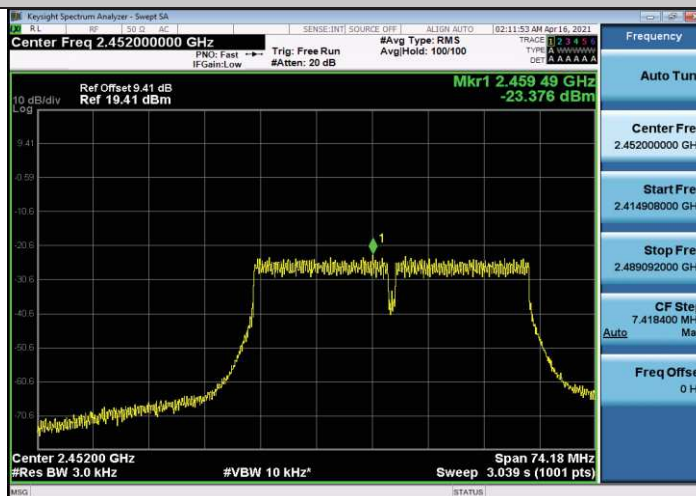
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

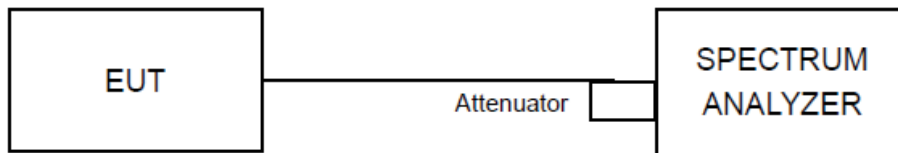


4.5 Conducted Band Edges Measurement

4.5.1 Limit

Below 30 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

4.5.2 Test Setup



4.5.3 Test Procedures

The EUT was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance” (clause 11.0) for compliance to FCC 47CFR 15.247 requirements.

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

4.5.4 Deviation of Test Standard

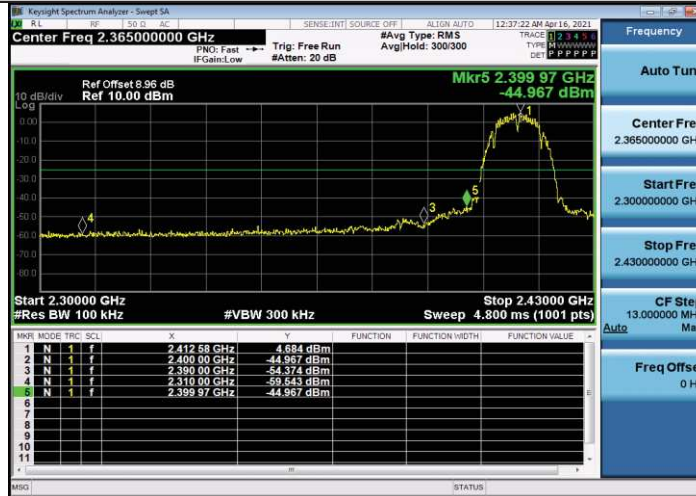
No deviation.



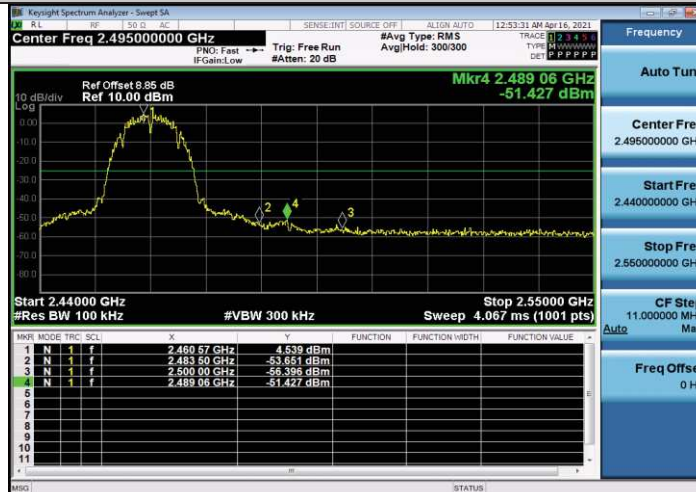
4.5.5 Test Results

Test Mode	Antenna	ChName	Channel [MHz]	RefLevel [dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
11B	Ant1	Low	2412	4.68	-44.97	<=-25.32	PASS
		High	2462	4.54	-51.43	<=-25.46	PASS
11G	Ant1	Low	2412	2.42	-34.95	<=-27.58	PASS
		High	2462	2.53	-45.5	<=-27.47	PASS
11N20SISO	Ant1	Low	2412	2.40	-34.91	<=-27.6	PASS
		High	2462	2.58	-41.45	<=-27.42	PASS
11N40SISO	Ant1	Low	2422	-0.58	-33.66	<=-30.58	PASS
		High	2452	-0.52	-31.99	<=-30.52	PASS

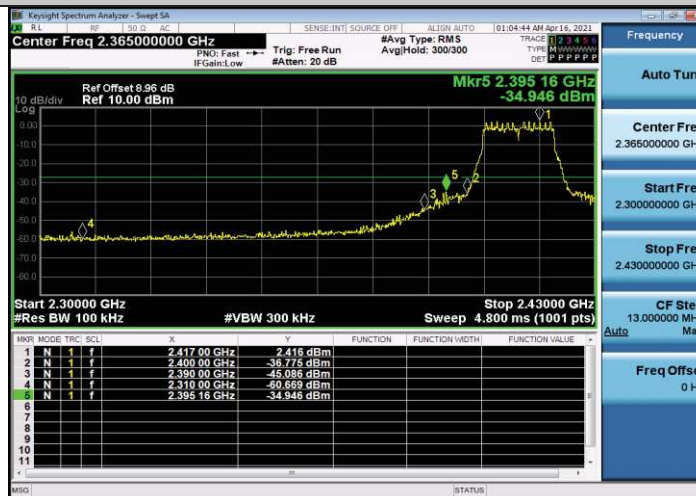
11B_Ant1_Low_2412



11B_Ant1_High_2462

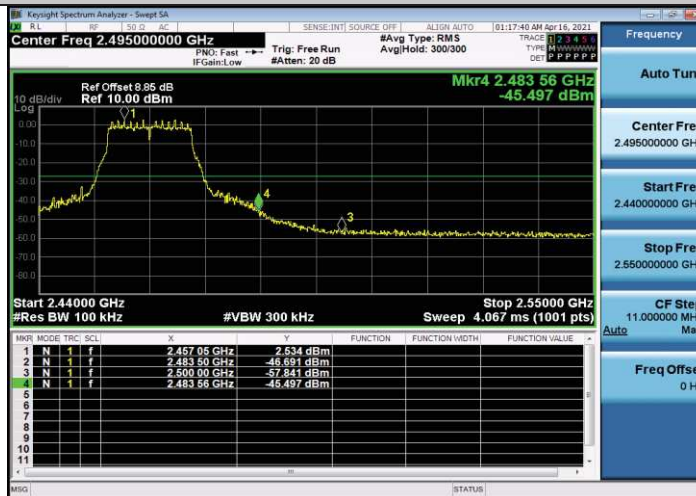


11G_Ant1_Low_2412





11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462





11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

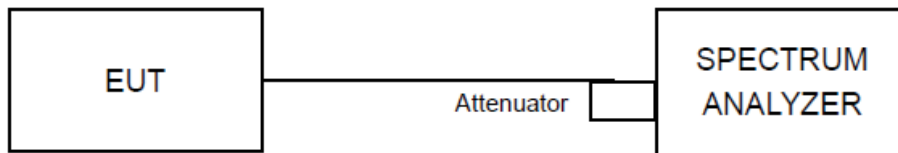


4.6 Conducted Spurious Emissions

4.6.1 Limit

Below 30 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

4.6.2 Test Setup



4.6.3 Test Procedures

The EUT was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance” (clause 11.0) for compliance to FCC 47CFR 15.247 requirements.

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

4.6.4 Deviation of Test Standard

No deviation.

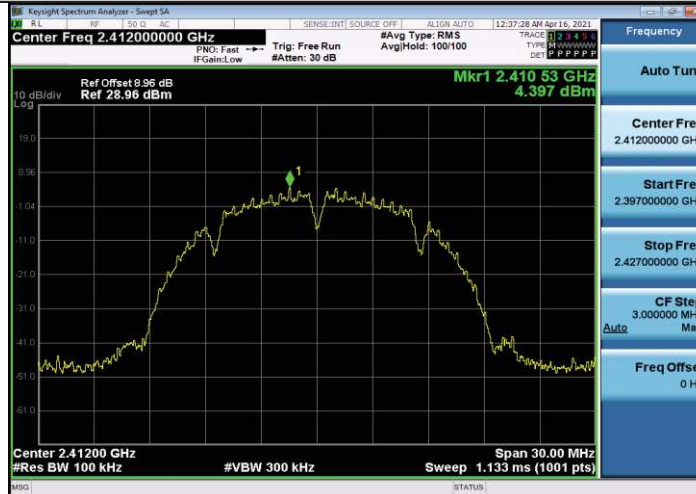


4.6.5 Test Results

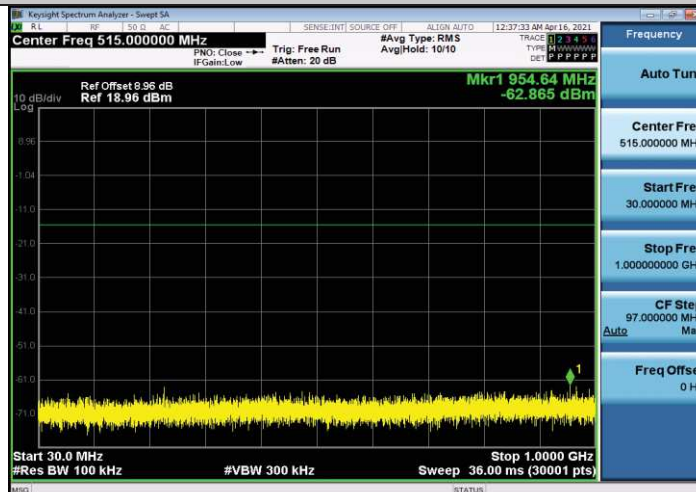
Test Mode	Antenna	Channel [MHz]	FreqRange [MHz]	RefLevel [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.40	4.40	---	PASS
			30~1000	4.40	-62.87	<=-15.6	PASS
			1000~26500	4.40	-46.38	<=-15.6	PASS
		2437	Reference	5.71	5.71	---	PASS
			30~1000	5.71	-63.48	<=-14.29	PASS
			1000~26500	5.71	-47.18	<=-14.29	PASS
		2462	Reference	5.33	5.33	---	PASS
			30~1000	5.33	-63.45	<=-14.67	PASS
			1000~26500	5.33	-47.08	<=-14.67	PASS
11G	Ant1	2412	Reference	2.63	2.63	---	PASS
			30~1000	2.63	-63.67	<=-17.37	PASS
			1000~26500	2.63	-46.92	<=-17.37	PASS
		2437	Reference	2.93	2.93	---	PASS
			30~1000	2.93	-63.95	<=-17.08	PASS
			1000~26500	2.93	-46.95	<=-17.08	PASS
		2462	Reference	2.37	2.37	---	PASS
			30~1000	2.37	-62.52	<=-17.63	PASS
			1000~26500	2.37	-46.44	<=-17.63	PASS
11N20SISO	Ant1	2412	Reference	2.34	2.34	---	PASS
			30~1000	2.34	-63.9	<=-17.66	PASS
			1000~26500	2.34	-46.1	<=-17.66	PASS
		2437	Reference	1.29	1.29	---	PASS
			30~1000	1.29	-63.56	<=-18.71	PASS
			1000~26500	1.29	-46.49	<=-18.71	PASS
		2462	Reference	1.67	1.67	---	PASS
			30~1000	1.67	-63.03	<=-18.33	PASS
			1000~26500	1.67	-46.26	<=-18.33	PASS
11N40SISO	Ant1	2422	Reference	-0.10	-0.10	---	PASS
			30~1000	-0.10	-49.81	<=-20.1	PASS
			1000~26500	-0.10	-46.65	<=-20.1	PASS
		2437	Reference	0.31	0.31	---	PASS
			30~1000	0.31	-49.28	<=-19.69	PASS
			1000~26500	0.31	-46.88	<=-19.69	PASS
		2452	Reference	-0.43	-0.43	---	PASS
			30~1000	-0.43	-49.38	<=-20.43	PASS
			1000~26500	-0.43	-47.47	<=-20.43	PASS



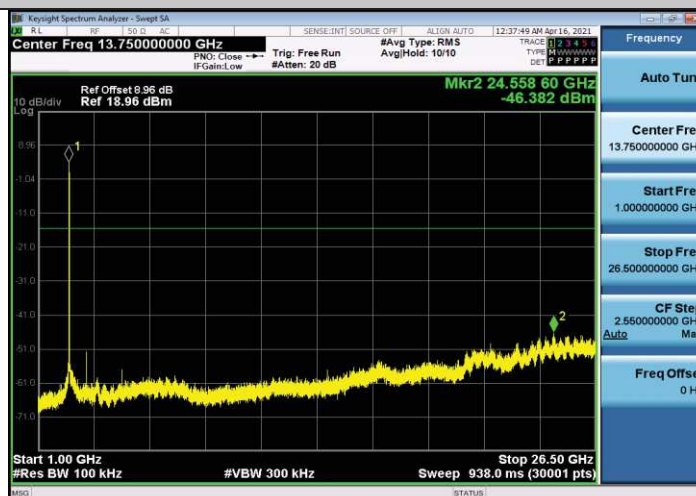
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



11B_Ant1_2412_1000~26500

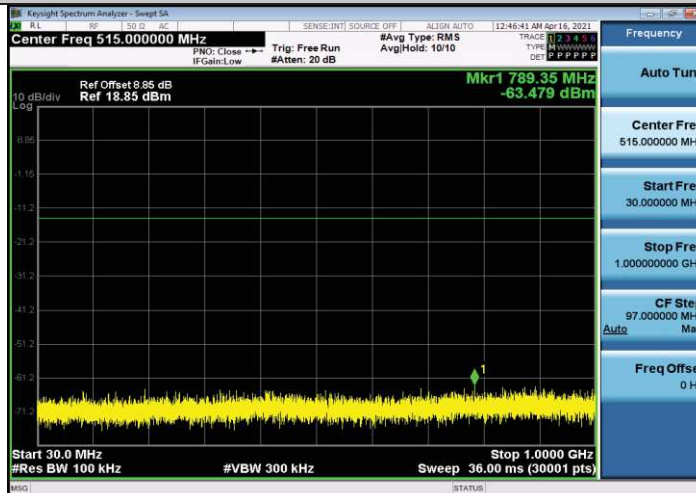




11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



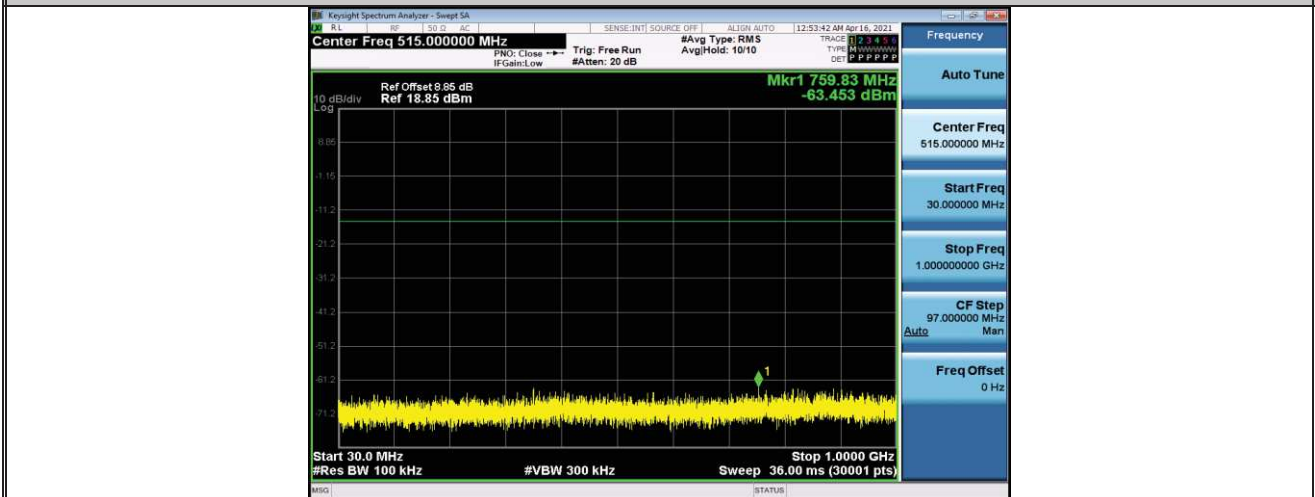
11B_Ant1_2437_1000~26500



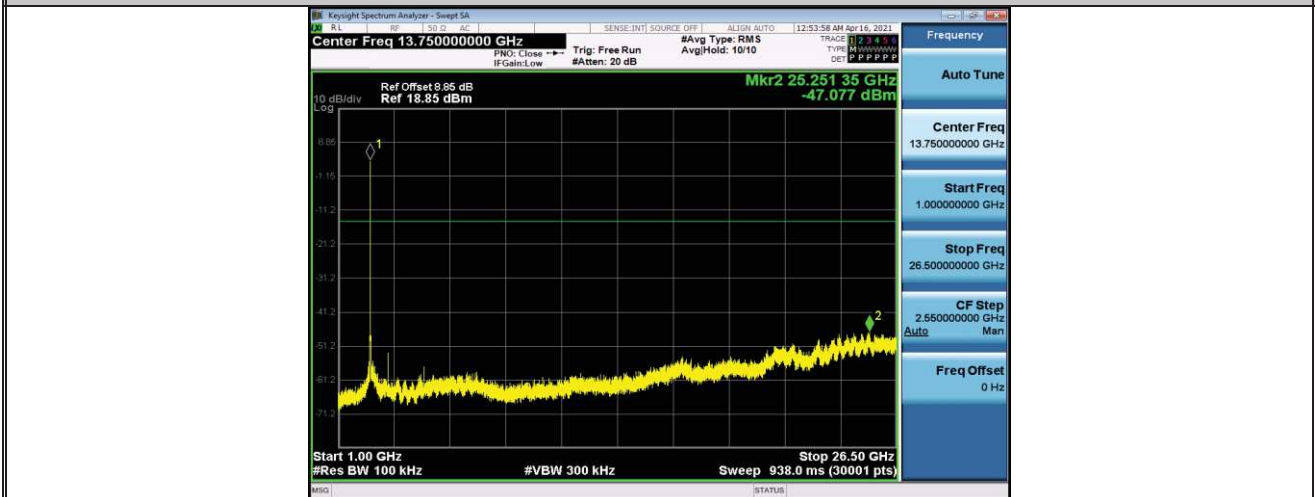
11B_Ant1_2462_0~Reference



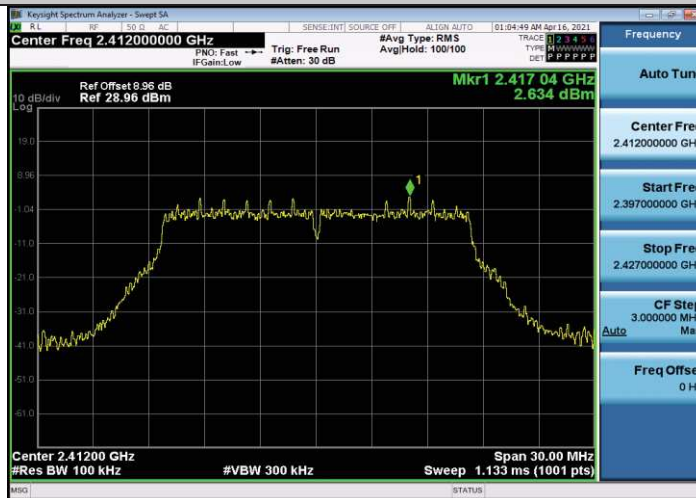
11B_Ant1_2462_30~1000



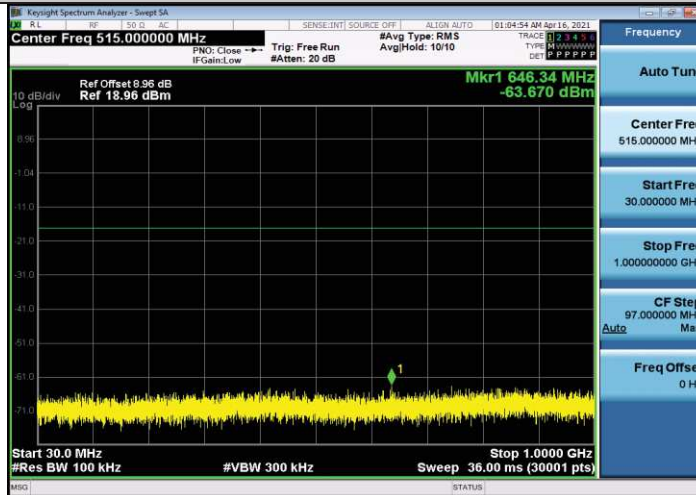
11B_Ant1_2462_1000~26500



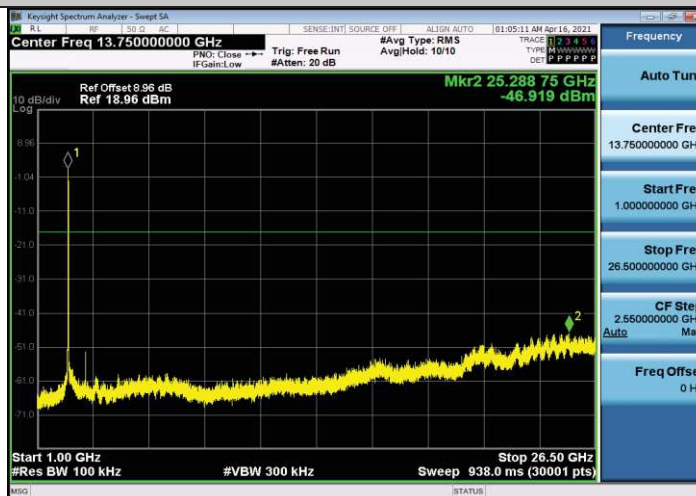
11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000

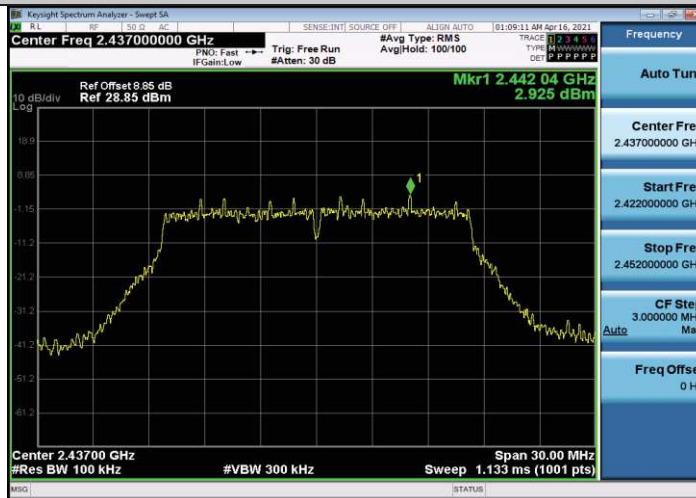


11G_Ant1_2412_1000~26500

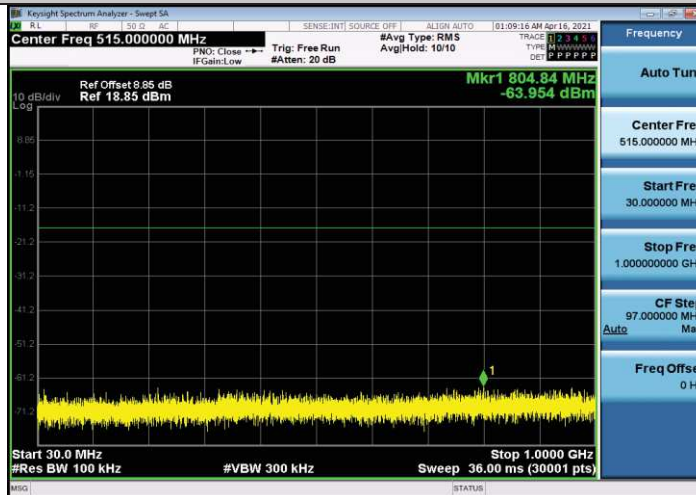




11G_Ant1_2437_0~Reference



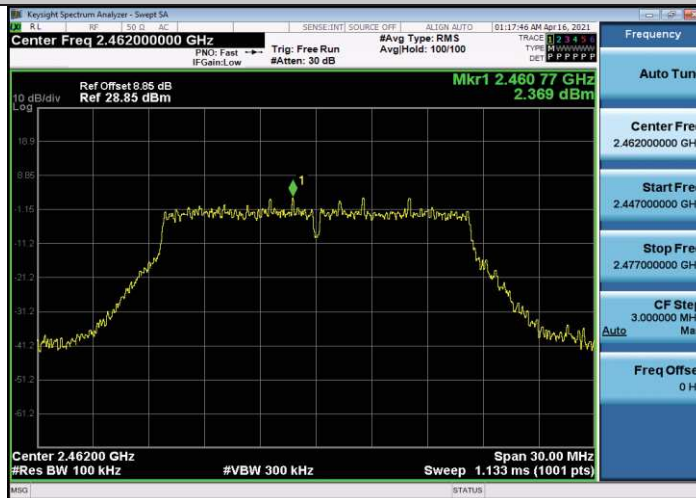
11G_Ant1_2437_30~1000



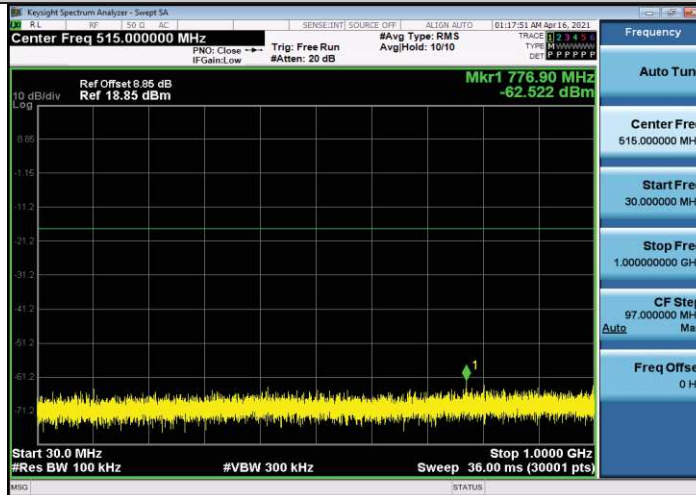
11G_Ant1_2437_1000~26500



11G_Ant1_2462_0~Reference



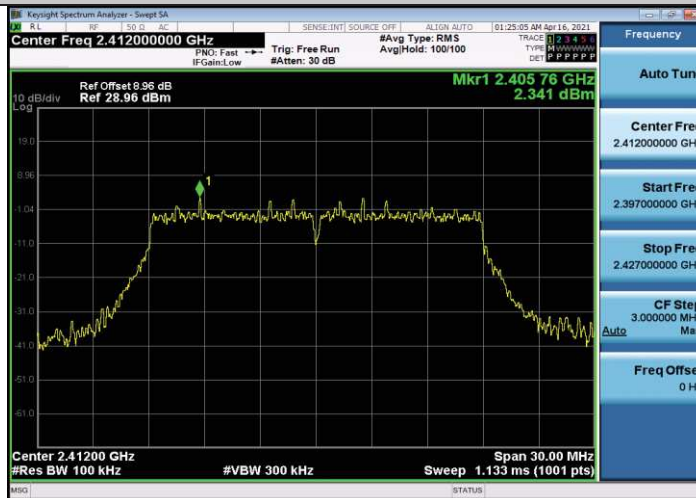
11G_Ant1_2462_30~1000



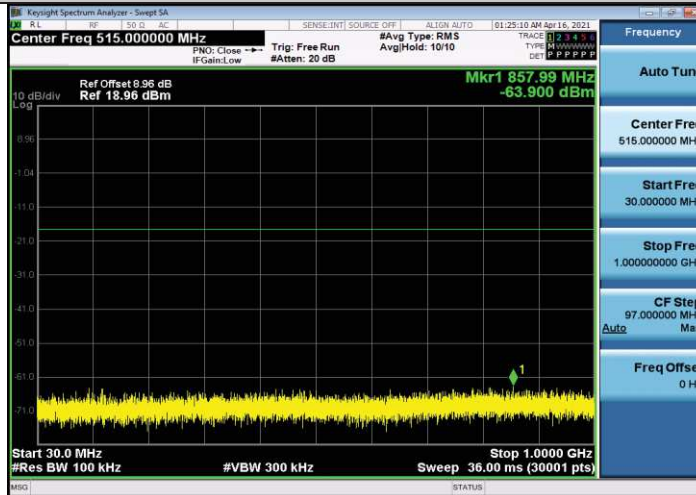
11G_Ant1_2462_1000~26500



11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000

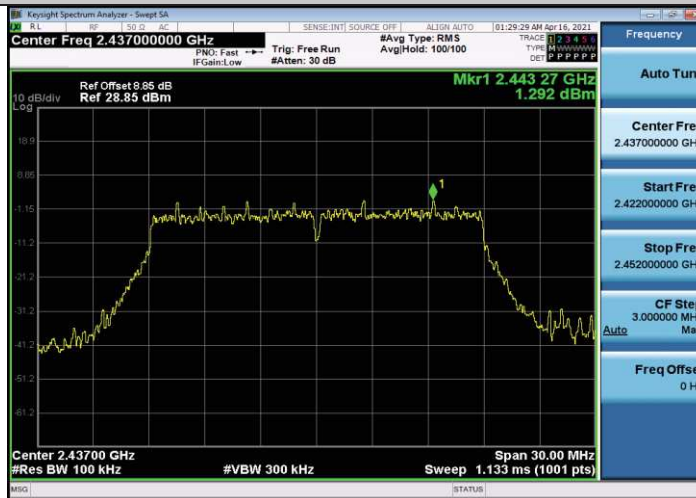


11N20SISO_Ant1_2412_1000~26500

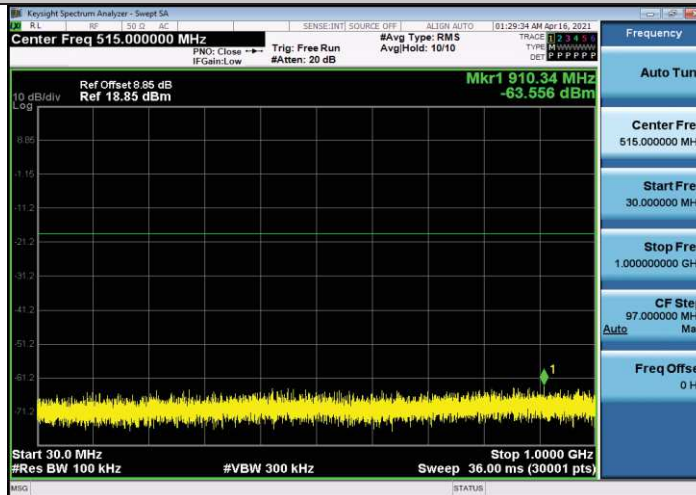




11N20SISO_Ant1_2437_0~Reference



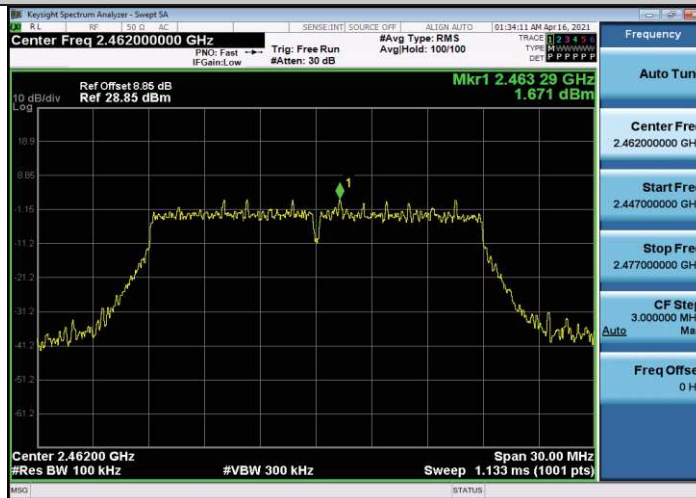
11N20SISO_Ant1_2437_30~1000



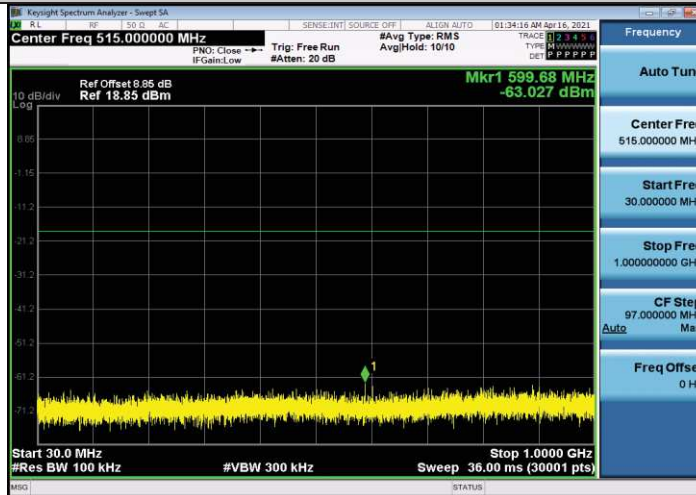
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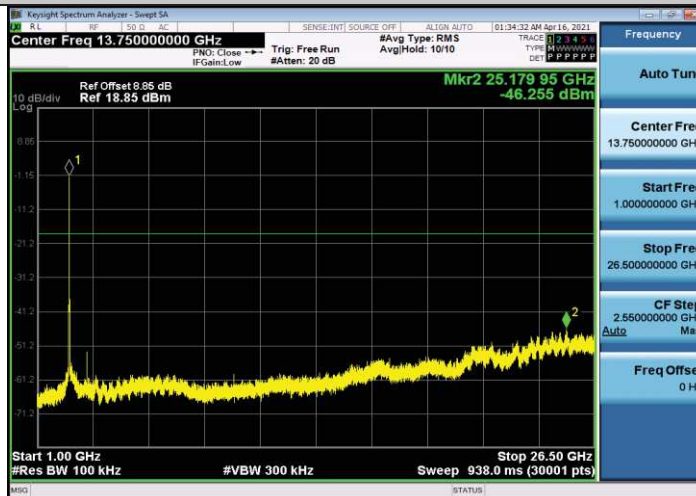
11N20SISO_Ant1_2462_0~Reference



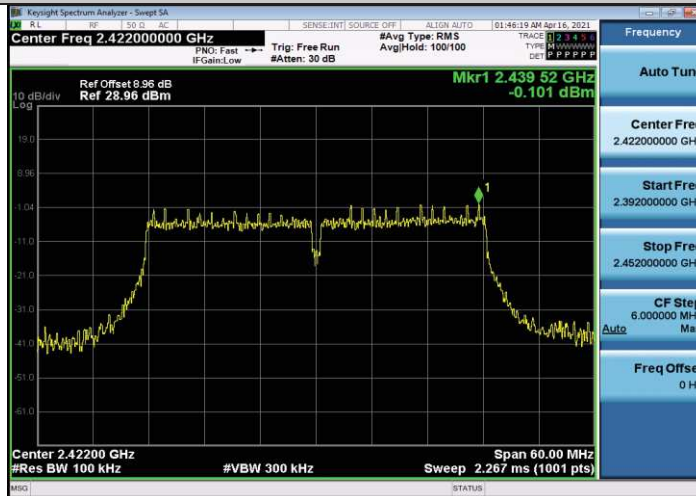
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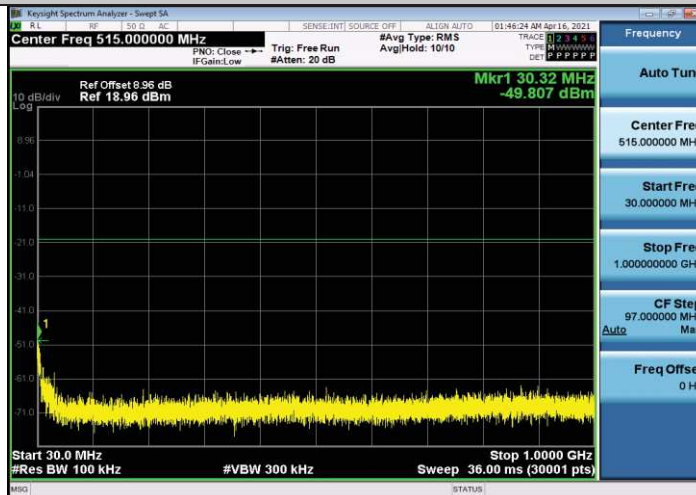
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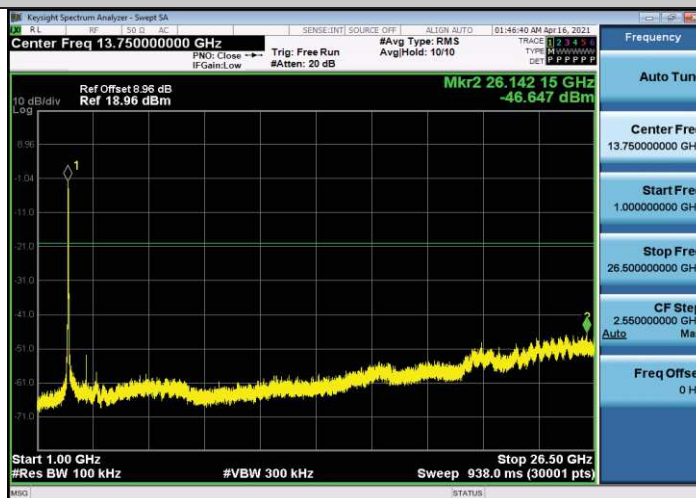
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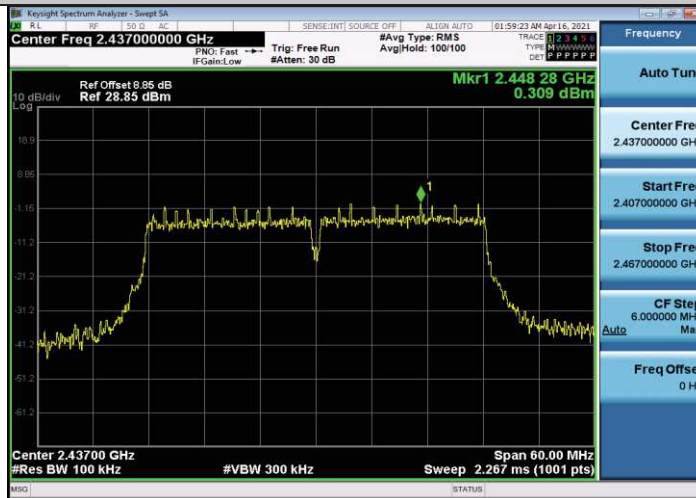
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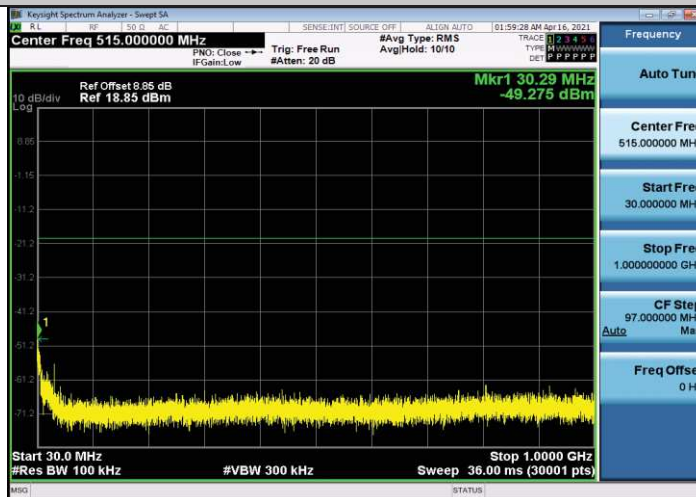
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11N40SISO_Ant1_2437_0~Reference



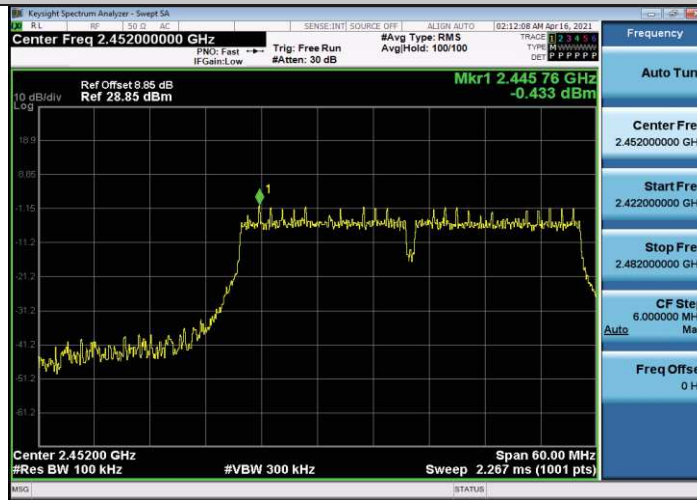
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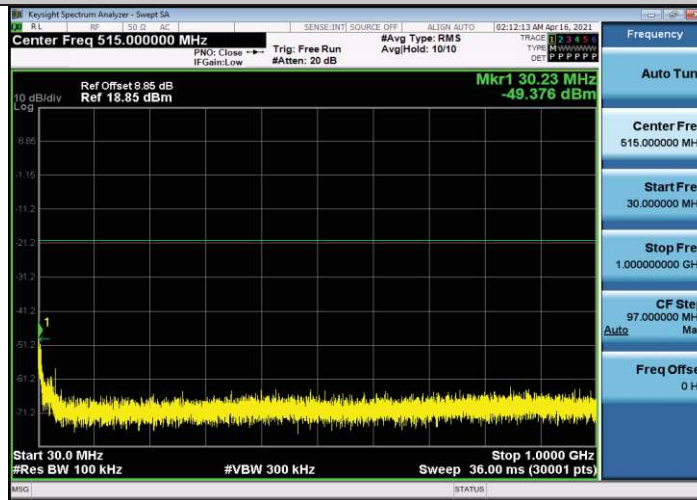
11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500

