



RF TEST REPORT

Applicant NOKIA Shanghai Bell CO., Ltd.
FCC ID 2ADZRXS2426XA
Product ONT
Brand NOKIA
Model XS-2426X-A
Report No. R2112A1145-R1
Issue Date April 2, 2022

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15C (2021)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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Summary of measurement results

Number	Test Case	Clause in FCC rules	Verdict
1	Maximum output power	15.247(b)(3)	PASS
2	6 dB bandwidth	15.247(a)(2)	PASS
3	Power spectral density	15.247(e)	PASS
4	Band Edge	15.247(d)	PASS
5	Spurious RF Conducted Emissions	15.247(d)	PASS
6	Unwanted Emissions	15.247(d),15.205,15.209	PASS
7	Conducted Emissions	15.207	PASS
Date of Testing: January 21, 2022 ~ March 17, 2022			
Date of Sample Received: December 16, 2021			
Note: All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			



1. Test Laboratory

1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
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City: Shanghai
Post code: 201201
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2. General Description of Equipment under Test

2.1. Applicant and Manufacturer Information

Applicant	Nokia ShangHai Bell Co., Ltd.
Applicant address	No. 388, Ningqiao Rd. Pilot Free Trade Zone Shanghai 201206 P.R.China
Manufacturer	Nokia ShangHai Bell Co., Ltd.
Manufacturer address	No. 388, Ningqiao Rd. Pilot Free Trade Zone Shanghai 201206 P.R.China

2.2. General information

EUT Description					
Model	XS-2426X-A				
SN	ALCL00861234				
Hardware Version	PEM2.0				
Software Version	3FE49864T48612				
Power Supply	AC Adapter				
Antenna Type	Internal Antenna				
Antenna Gain	Manufacturer	Antenna 1 (dBi)	Antenna 2 (dBi)	Antenna 3 (dBi)	Antenna 4 (dBi)
	INPAQ	3.18	3.13	3.06	3.25
	Signal Plus	3.50	3.50	3.40	3.50
Directional Gain	Manufacturer	Antenna	Frequency(MHz)		Gain (dBi)
	INPAQ	MIMO (For Power)	2400		2.92
			2450		3.25
			2500		3.07
		MIMO (For PSD)	2400		5.16
			2450		5.27
			2500		5.38
		Beamforming	2400		5.16
			2450		5.27
			2500		5.38



	Signal Plus	MIMO (For Power)	2400	3.50
			2450	3.40
			2500	3.50
		MIMO (For PSD)	2400	5.00
			2450	5.30
			2500	5.50
		Beamforming	2400	5.00
			2450	5.30
			2500	5.50
Operating Frequency Range(s)	802.11b/g/n(HT20)/ax(HE20): 2412 ~ 2462 MHz 802.11n(HT40)/ax(HE40): 2422 ~ 2452 MHz			
Modulation Type	802.11b: DSSS 802.11g/n(HT20/HT40):OFDM 802.11ax(HE20/HE40): OFDM, OFDMA			
Max. Conducted Power	29.98 dBm			
EUT Accessory				
Internal Antenna 1	Manufacturer: INPAQ			
Internal Antenna 2	Manufacturer: Signal plus			
Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.				

**Information of Configuration:**

No.	Name	Model/Code No.	Edition	Serial No. or Quantity
1	EMA-XS-2426X-A	3FE 49691 AAAA	PEM2.0	PEM2.0
2	Power adapter	HONOR: ADS-40FKJ-12N 12036EPCU	A/0	1PCS
3	Power adapter	FUHUA: UES36WU-120300SPA	A/0	1PCS
4	UPS	Cyber Power: DTC36U12V3-G	A/0	1PCS
5	UPS	PSI: PS36L-P7 and PS36L-EX-2	A/0	1PCS

ONT Mnemonic	Kit Code	EMA Code	Part Description	Power Adapter/UPS	
XS-2426X-A	3FE49691AA	3FE 49691 AAAA	Wi-Fi GPON RGW, 2xPOTS, 3xGE, 1x10GE, 1x USB, WiFi-6 4x4 + 4x4, Nokia logo	ONT only	ONT only
XS-2426X-A	3FE49690AA	3FE 49691 AAAA	Wi-Fi GPON RGW, 2xPOTS, 3xGE, 1x10GE, 1x USB, WiFi-6 4x4 + 4x4, Kit with US plug PS	HONOR: ADS-40FKJ-12N 12036EPCU	FUHUA: UES36WU-1 20300SPA
XS-2426X-A	3FE49690AA	3FE 49691 AAAA	Wi-Fi GPON RGW, 2xPOTS, 3xGE, 1x10GE, 1x USB, WiFi-6 4x4 + 4x4, Kit with US plug PS	Cyber Power: DTC36U12V3-G	PSI: PS36L-P7 and PS36L-EX-2
XS-2426X-A	3FE49690AB	3FE 49691 AAAA	Wi-Fi GPON RGW, 2xPOTS, 3xGE, 1x10GE, 1x USB, WiFi-6 4x4 + 4x4, Canada, US plug	HONOR: ADS-40FKJ-12N 12036EPCU	FUHUA: UES36WU-1 20300SPA
XS-2426X-A	3FE49690AB	3FE 49691 AAAA	Wi-Fi GPON RGW, 2xPOTS, 3xGE, 1x10GE, 1x USB, WiFi-6 4x4 + 4x4, Canada, US plug	Cyber Power: DTC36U12V3-G	PSI: PS36L-P7 and PS36L-EX-2

NOTE: For KIT code 3FE49229AAAA, UPS equipment customers buy their own.

Auxiliary equipment details

No.	Name	Brand name	Model	ASB code	Valid Until
1	Test Center	Spirent	C1	DE48D0	No Cal. Required
2	OLT	Nokia	7360 ISAM FX-4	7661MC4L3KW965	No Cal. Required
3	PC	DELL	N/A	-	No Cal. Required

Information of Ports

No.	Port name	Number	Shielded or unshielded	Cable type (optic, twisted pair, etc.)	Max. Cable length
1	AC port	1	Unshielded	N/A	N/A
2	POTS	2	Unshielded	Twisted pair	2M
3	GE	3	Unshielded	CAT-5E or above	1.5M
4	10GE	1	shielded	CAT-7 or above	1.5M
5	USB	1	Unshielded	N/A	N/A

Description: The XS-2426X-A is a ONT which has one 10 GE LAN port, three GE LAN ports, one XGS-PON BOB, two POTS. The basic functional test in normal room conditions consists of the data traffic test. XS-2426X-A runs one data traffics on each line with Test Center, the each upstream is 8Gbps, and downstream is 8Gbps. Frame loss ratio less than 10e-7.



3. Applied Standards

According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

Test standards:

FCC CFR47 Part 15C (2021) Radio Frequency Devices

ANSI C63.10 (2013)

Reference standard:

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

4. Test Configuration

Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the loop antenna is vertical, the others are vertical and horizontal. and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

Test Mode	Data Rate	
	Beamforming	MIMO
802.11b	1 Mbps	1 Mbps
802.11g	6 Mbps	6 Mbps
802.11n HT20	MCS24	MCS24
802.11n HT40	MCS24	MCS24
802.11ax HE20	MCS0	MCS0
802.11ax HE40	MCS0	MCS0



The worst case Antenna mode for each of the following tests for Wi-Fi:

Test Cases	Internal Antenna	Beamforming	MIMO
Maximum conducted output power	INPAQ/ Signal Plus	O	O
6dB Bandwidth	INPAQ/ Signal Plus	--	O
Band Edge	INPAQ/ Signal Plus	--	O
Power Spectral Density	INPAQ/ Signal Plus	O	O
Spurious RF Conducted Emissions	INPAQ/ Signal Plus	--	O
Unwanted Emissions	INPAQ/ Signal Plus	--	O
Conducted Emission	INPAQ/ Signal Plus	--	O
Note: "O": test all bands			

According to RF Output power results in chapter 5.1, MIMO was selected as the worst antenna.

5. Test Case Results

5.1. Maximum output power

Ambient condition

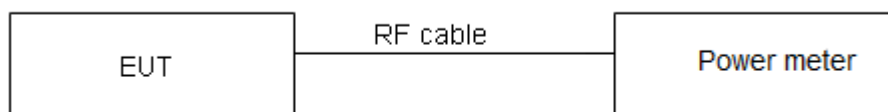
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to Power meter with a known loss. The EUT is max power transmission with proper modulation.

The conducted Power is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

Test Setup



Limits

Rule Part 15.247 (b) (3) specifies that " For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz: 1 Watt."

Average Output Power	$\leq 1\text{W}$ (30dBm)
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.44$ dB.

**Test Results**

Test Mode	Ton (ms)	T(on+off) (ms)	Duty cycle	Duty cycle correction Factor(dB)
802.11b	0.69	1.26	0.55	2.61
802.11g	1.98	2.06	0.96	0.19
802.11n HT20	5.42	6.40	0.85	0.72
802.11n HT40	5.42	6.35	0.85	0.72
802.11ax HE20	5.44	6.35	0.86	0.67
802.11ax HE40	5.42	6.32	0.86	0.67
Note: when Duty cycle $\geq$ 0.98, Duty cycle correction Factor not required.				

INPAQ**With Beamforming**

Test Mode	Carrier frequency (MHz)	Antenna 1		Antenna 2		Antenna 3		Antenna 4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11b	2412	21.18	23.79	21.28	23.89	21.46	24.07	21.17	23.78	29.91	30	PASS
	2437	21.00	23.61	21.08	23.69	21.54	24.15	21.26	23.87	29.86	30	PASS
	2462	20.98	23.59	21.15	23.76	21.42	24.03	20.97	23.58	29.77	30	PASS
802.11g	2412	19.46	19.65	19.26	19.45	20.32	20.51	19.40	19.59	25.84	30	PASS
	2417	21.22	21.41	20.92	21.11	22.03	22.22	21.01	21.20	27.53	30	PASS
	2422	22.21	22.40	21.53	21.72	22.99	23.18	22.35	22.54	28.51	30	PASS
	2437	22.98	23.17	22.67	22.86	23.02	23.21	22.97	23.69	29.26	30	PASS
	2457	22.19	22.38	21.39	21.58	22.89	23.08	22.54	23.26	28.64	30	PASS
	2462	19.59	19.78	19.76	19.95	20.58	20.77	19.82	20.54	26.30	30	PASS
802.11n HT20	2412	19.64	20.36	19.22	19.94	20.31	21.03	19.39	20.11	26.40	30	PASS
	2417	22.04	22.76	21.36	22.08	22.64	23.36	21.99	22.71	28.77	30	PASS
	2437	22.38	23.10	22.10	22.82	22.47	23.19	22.35	23.07	29.07	30	PASS
	2457	21.30	22.02	20.89	21.61	21.97	22.69	21.15	21.87	28.09	30	PASS
	2462	19.45	20.17	19.62	20.34	20.40	21.12	19.42	20.14	26.48	30	PASS
802.11n HT40	2422	18.49	19.21	18.45	19.17	19.52	20.24	18.51	19.23	25.51	30	PASS
	2427	18.12	18.84	17.79	18.51	18.71	19.43	17.82	18.54	24.87	30	PASS
	2432	18.04	18.76	17.60	18.32	18.68	19.40	18.07	18.79	24.86	30	PASS
	2437	19.68	20.40	19.62	20.34	20.49	21.21	19.76	20.48	26.64	30	PASS
	2442	19.32	20.04	18.72	19.44	19.97	20.69	19.04	19.76	26.03	30	PASS
	2447	19.29	20.01	18.89	19.61	19.97	20.69	19.21	19.93	26.10	30	PASS
	2452	18.66	19.38	18.89	19.61	19.53	20.25	18.66	19.38	25.69	30	PASS
802.11ax	2412	17.63	18.30	17.77	18.44	18.52	19.19	17.70	18.37	24.61	30	PASS



HE20	2417	21.24	21.91	20.69	21.36	22.12	22.79	21.35	22.02	28.07	30	PASS
	2437	22.80	23.47	22.76	23.43	23.12	23.79	23.00	23.67	29.62	30	PASS
	2457	20.59	21.26	19.97	20.64	20.87	21.54	20.46	21.13	27.18	30	PASS
	2462	18.72	19.39	18.68	19.35	19.66	20.33	19.04	19.71	25.74	30	PASS
802.11ax HE40	2422	19.05	19.72	19.00	19.67	19.86	20.53	18.66	19.33	25.85	30	PASS
	2427	18.29	18.96	17.92	18.59	19.10	19.77	18.45	19.12	25.15	30	PASS
	2432	19.38	20.05	18.79	19.46	19.89	20.56	19.38	20.05	26.07	30	PASS
	2437	19.93	20.60	19.90	20.57	20.91	21.58	19.95	20.62	26.88	30	PASS
	2442	19.36	20.03	18.72	19.39	19.87	20.54	19.55	20.22	26.08	30	PASS
	2447	19.31	19.98	19.08	19.75	19.37	20.04	19.42	20.09	25.98	30	PASS
	2452	19.00	19.67	18.88	19.55	19.94	20.61	19.13	19.80	25.95	30	PASS

Note: 1.Average Power with duty factor = Average Power Measured +Duty cycle correction factor

2. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)} + 10^{(\text{Power antenna3 in dBm}/10)} + 10^{(\text{Power antenna4 in dBm}/10)})$.

3. For 2400MHz, the manufacturer declared that the directional gain = 5.16dBi<6dBi. So the power limit is 30dBm.

For 2450MHz, the manufacturer declared that the directional gain = 5.27dBi<6dBi. So the power limit is 30dBm.

For 2500MHz, the manufacturer declared that the directional gain = 5.38dBi<6dBi. So the power limit is 30dBm.

MIMO

Test Mode	Carrier frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna 3		MIMO Antenna 4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11b	2412	21.09	23.70	21.17	23.78	21.35	23.96	21.28	23.89	29.86	30	PASS
	2437	20.91	23.52	20.97	23.58	21.43	24.04	21.37	23.98	29.81	30	PASS
	2462	20.89	23.50	21.04	23.65	21.31	23.92	21.08	23.69	29.72	30	PASS
802.11g	2412	19.71	19.90	19.55	19.74	20.50	20.69	19.68	19.87	26.09	30	PASS
	2417	21.34	21.53	20.90	21.09	21.91	22.10	21.17	21.36	27.56	30	PASS
	2422	23.15	23.34	22.90	23.09	23.83	24.02	23.33	23.52	29.53	30	PASS
	2437	22.89	23.08	22.56	22.75	22.91	23.10	23.08	23.80	29.22	30	PASS
	2457	22.92	23.11	22.89	23.08	23.78	23.97	23.45	24.17	29.63	30	PASS
	2462	19.53	19.72	19.81	20.00	20.61	20.80	19.88	20.60	26.32	30	PASS
802.11n HT20	2412	19.57	20.29	19.40	20.12	20.26	20.98	19.38	20.10	26.41	30	PASS
	2417	22.23	22.95	22.58	23.30	23.61	24.33	23.28	24.00	29.70	30	PASS
	2437	22.29	23.01	21.99	22.71	22.36	23.08	22.46	23.18	29.02	30	PASS
	2457	22.97	23.69	22.56	23.28	23.67	24.39	23.30	24.02	29.88	30	PASS
	2462	19.35	20.07	19.57	20.29	20.39	21.11	19.65	20.37	26.50	30	PASS
802.11n HT40	2422	18.69	19.41	18.77	19.49	19.48	20.20	18.39	19.11	25.59	30	PASS
	2427	19.05	19.77	18.89	19.61	19.83	20.55	19.12	19.84	25.98	30	PASS



	2432	18.91	19.63	18.64	19.36	19.73	20.45	19.03	19.75	25.84	30	PASS
	2437	19.53	20.25	19.53	20.25	20.49	21.21	19.80	20.52	26.60	30	PASS
	2442	23.19	23.91	22.62	23.34	23.31	24.03	23.47	24.19	29.90	30	PASS
	2447	21.38	22.10	20.89	21.61	21.79	22.51	21.34	22.06	28.10	30	PASS
	2452	18.55	19.27	18.71	19.43	19.54	20.26	19.01	19.73	25.71	30	PASS
802.11ax HE20	2412	17.68	18.35	17.76	18.43	18.44	19.11	17.71	18.38	24.60	30	PASS
	2417	22.99	23.66	23.04	23.71	23.69	24.36	23.25	23.92	29.95	30	PASS
	2437	22.71	23.38	22.65	23.32	23.01	23.68	23.11	23.78	29.57	30	PASS
	2457	23.30	23.97	22.91	23.58	23.50	24.17	23.43	24.10	29.98	30	PASS
	2462	18.69	19.36	18.67	19.34	19.86	20.53	19.11	19.78	25.80	30	PASS
802.11ax HE40	2422	18.97	19.64	18.89	19.56	19.66	20.33	18.87	19.54	25.80	30	PASS
	2427	19.36	20.03	19.86	20.53	19.87	20.54	19.31	19.98	26.30	30	PASS
	2432	21.53	22.20	21.15	21.82	22.28	22.95	21.99	22.66	28.45	30	PASS
	2437	19.97	20.64	19.81	20.48	20.90	21.57	19.90	20.57	26.86	30	PASS
	2442	23.12	23.79	23.08	23.75	23.34	24.01	23.43	24.10	29.93	30	PASS
	2447	21.80	22.47	21.30	21.97	22.25	22.92	21.45	22.12	28.40	30	PASS
	2452	19.01	19.68	18.92	19.59	19.89	20.56	19.21	19.88	25.96	30	PASS

Note: 1.Average Power with duty factor = Average Power Measured +Duty cycle correction factor

2. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)} + 10^{(\text{Power antenna3 in dBm}/10)} + 10^{(\text{Power antenna4 in dBm}/10)})$.

3. For 2400MHz, the manufacturer declared that the directional gain = 2.92dBi<6dBi. So the power limit is 30dBm.

For 2450MHz, the manufacturer declared that the directional gain = 3.25dBi<6dBi. So the power limit is 30dBm.

For 2500MHz, the manufacturer declared that the directional gain = 3.07dBi<6dBi. So the power limit is 30dBm.



Signal Plus

With Beamforming

Test Mode	Carrier frequency (MHz)	Antenna 1		Antenna 2		Antenna 3		Antenna 4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11b	2412	21.18	23.79	21.28	23.89	21.46	24.07	21.17	23.78	29.91	30	PASS
	2437	16.21	18.82	16.69	19.30	17.74	20.35	16.88	19.49	25.55	30	PASS
	2462	18.40	21.01	19.02	21.63	19.64	22.25	19.33	21.94	27.76	30	PASS
802.11g	2412	20.68	20.87	20.64	20.83	21.29	21.48	20.53	20.72	27.01	30	PASS
	2417	21.13	21.32	21.03	21.22	21.59	21.78	21.07	21.26	26.23	30	PASS
	2422	22.30	22.49	21.54	21.73	22.99	23.18	22.36	22.55	27.52	30	PASS
	2427	23.17	23.36	22.79	22.98	23.84	24.03	23.46	23.65	28.46	30	PASS
	2437	22.98	23.17	22.67	22.86	23.02	23.21	22.97	23.69	29.26	30	PASS
	2452	23.16	23.35	22.72	22.91	24.01	24.20	23.54	24.26	28.73	30	PASS
	2457	22.29	22.48	21.77	21.96	23.21	23.40	22.47	23.19	27.81	30	PASS
	2462	20.67	20.86	20.59	20.78	21.45	21.64	20.94	21.66	27.27	30	PASS
802.11n HT20	2412	20.38	21.10	20.46	21.18	21.22	21.94	20.21	20.93	27.32	30	PASS
	2417	21.97	22.69	21.80	22.52	22.68	23.40	22.26	22.98	27.80	30	PASS
	2422	22.33	23.05	21.99	22.71	22.80	23.52	22.30	23.02	27.97	30	PASS
	2427	23.00	23.72	22.69	23.41	23.22	23.94	23.22	23.94	28.64	30	PASS
	2437	22.38	23.10	22.10	22.82	22.47	23.19	22.35	23.07	29.07	30	PASS
	2452	23.03	23.75	22.35	23.07	23.81	24.53	23.28	24.00	28.88	30	PASS
	2457	21.28	22.00	20.74	21.46	22.09	22.81	21.16	21.88	27.02	30	PASS
	2462	20.58	21.30	20.54	21.26	21.25	21.97	20.78	21.50	27.54	30	PASS
802.11n HT40	2422	17.56	18.28	17.57	18.29	18.26	18.98	17.53	18.25	24.48	30	PASS
	2427	18.02	18.74	17.63	18.35	18.73	19.45	17.89	18.61	23.72	30	PASS
	2432	18.20	18.92	17.83	18.55	18.87	19.59	17.99	18.71	23.86	30	PASS
	2437	18.70	19.42	18.60	19.32	19.45	20.17	18.49	19.21	25.57	30	PASS
	2442	19.16	19.88	18.72	19.44	19.92	20.64	19.13	19.85	24.91	30	PASS
	2447	19.25	19.97	18.65	19.37	19.86	20.58	19.08	19.80	24.90	30	PASS
	2452	18.88	19.60	18.43	19.15	19.47	20.19	18.56	19.28	25.59	30	PASS
802.11ax HE20	2412	18.63	19.30	18.70	19.37	19.67	20.34	18.77	19.44	25.66	30	PASS
	2417	21.58	22.25	20.99	21.66	22.20	22.87	21.32	21.99	27.16	30	PASS
	2422	22.31	22.98	21.92	22.59	22.65	23.32	22.51	23.18	27.94	30	PASS
	2427	23.24	23.91	23.15	23.82	23.20	23.87	23.21	23.88	28.66	30	PASS
	2437	22.80	23.47	22.76	23.43	23.12	23.79	23.00	23.67	29.62	30	PASS
	2447	23.20	23.87	23.11	23.78	23.60	24.27	23.21	23.88	28.79	30	PASS
	2452	22.56	23.23	22.01	22.68	22.98	23.65	22.57	23.24	28.15	30	PASS



	2457	20.50	21.17	20.01	20.68	21.37	22.04	20.52	21.19	26.26	30	PASS
	2462	18.68	19.35	18.66	19.33	19.84	20.51	19.09	19.76	25.79	30	PASS
802.11ax HE40	2422	17.91	18.58	17.87	18.54	18.53	19.20	17.70	18.37	24.70	30	PASS
	2427	18.34	19.01	18.03	18.70	19.14	19.81	18.33	19.00	24.06	30	PASS
	2432	19.34	20.01	18.92	19.59	20.18	20.85	19.41	20.08	25.10	30	PASS
	2437	18.87	19.54	18.76	19.43	19.81	20.48	18.81	19.48	25.77	30	PASS
	2442	19.52	20.19	18.99	19.66	20.38	21.05	19.49	20.16	25.26	30	PASS
	2447	19.48	20.15	19.03	19.70	20.60	21.27	19.88	20.55	25.45	30	PASS
	2452	17.91	18.58	18.05	18.72	18.69	19.36	18.00	18.67	24.86	30	PASS

Note: 1. Average Power with duty factor = Average Power Measured + Duty cycle correction factor

2. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)} + 10^{(\text{Power antenna3 in dBm}/10)} + 10^{(\text{Power antenna4 in dBm}/10)})$.

3. For 2400MHz, the manufacturer declared that the directional gain = 5.00dBi<6dBi. So the power limit is 30dBm.

For 2450MHz, the manufacturer declared that the directional gain = 5.30dBi<6dBi. So the power limit is 30dBm.

For 2500MHz, the manufacturer declared that the directional gain = 5.50dBi<6dBi. So the power limit is 30dBm.

MIMO

Test Mode	Carrier frequency (MHz)	MIMO Antenna 1		MIMO Antenna 2		MIMO Antenna 3		MIMO Antenna 4		Total Power (dBm)	Limit (dBm)	Conclusion
		Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)	Average Power Measured (dBm)	Average Power with duty factor (dBm)			
802.11b	2412	21.09	23.70	21.17	23.78	21.35	23.96	21.28	23.89	29.86	30	PASS
	2437	16.71	19.32	17.07	19.68	17.88	20.49	16.59	19.20	25.73	30	PASS
	2462	18.55	21.16	18.90	21.51	20.04	22.65	19.33	21.94	27.88	30	PASS
802.11g	2412	20.68	20.87	20.71	20.90	21.31	21.50	20.59	20.78	27.04	30	PASS
	2417	21.34	21.53	20.89	21.08	21.98	22.17	21.15	21.34	27.57	30	PASS
	2422	22.26	22.45	21.93	22.12	22.95	23.14	22.32	22.51	28.59	30	PASS
	2427	23.14	23.33	22.98	23.17	23.40	23.59	23.42	23.61	29.45	30	PASS
	2437	22.89	23.08	22.56	22.75	22.91	23.10	23.08	23.80	29.22	30	PASS
	2452	23.13	23.32	22.85	23.04	23.91	24.10	23.42	24.14	29.70	30	PASS
	2457	22.33	22.52	21.85	22.04	23.10	23.29	22.45	23.17	28.80	30	PASS
	2462	20.58	20.77	20.71	20.90	21.42	21.61	20.95	21.67	27.28	30	PASS
802.11n HT20	2412	20.51	21.23	20.29	21.01	21.31	22.03	20.31	21.03	27.36	30	PASS
	2417	22.08	22.80	21.69	22.41	22.59	23.31	22.18	22.90	28.89	30	PASS
	2422	22.19	22.91	21.74	22.46	22.81	23.53	22.07	22.79	28.96	30	PASS
	2427	23.17	23.89	22.76	23.48	23.56	24.28	23.28	24.00	29.94	30	PASS
	2437	22.29	23.01	21.99	22.71	22.36	23.08	22.46	23.18	29.02	30	PASS
	2452	23.16	23.88	22.73	23.45	23.77	24.49	23.10	23.82	29.95	30	PASS
	2457	21.32	22.04	20.53	21.25	22.11	22.83	21.34	22.06	28.10	30	PASS



	2462	20.41	21.13	20.44	21.16	21.18	21.90	20.72	21.44	27.44	30	PASS
802.11n HT40	2422	17.55	18.27	17.59	18.31	18.20	18.92	17.47	18.19	24.45	30	PASS
	2427	18.05	18.77	17.98	18.70	18.77	19.49	17.89	18.61	24.93	30	PASS
	2432	18.23	18.95	17.84	18.56	18.59	19.31	17.98	18.70	24.91	30	PASS
	2437	18.53	19.25	18.37	19.09	19.61	20.33	18.56	19.28	25.54	30	PASS
	2442	19.16	19.88	18.62	19.34	19.89	20.61	19.13	19.85	25.96	30	PASS
	2447	18.99	19.71	18.79	19.51	20.43	21.15	19.15	19.87	26.13	30	PASS
	2452	18.65	19.37	18.65	19.37	19.61	20.33	18.84	19.56	25.70	30	PASS
802.11ax HE20	2412	18.61	19.28	18.53	19.20	19.80	20.47	18.76	19.43	25.65	30	PASS
	2417	21.47	22.14	20.99	21.66	22.12	22.79	21.34	22.01	28.19	30	PASS
	2422	22.55	23.22	21.99	22.66	22.97	23.64	22.50	23.17	29.21	30	PASS
	2427	23.35	24.02	22.95	23.62	23.21	23.88	23.45	24.12	29.94	30	PASS
	2437	22.71	23.38	22.65	23.32	23.01	23.68	23.11	23.78	29.57	30	PASS
	2447	23.20	23.87	22.99	23.66	23.69	24.36	23.20	23.87	29.97	30	PASS
	2452	22.52	23.19	22.12	22.79	23.18	23.85	22.69	23.36	29.34	30	PASS
	2457	20.53	21.20	20.05	20.72	21.22	21.89	20.45	21.12	27.28	30	PASS
	2462	18.64	19.31	18.60	19.27	19.83	20.50	18.95	19.62	25.73	30	PASS
802.11ax HE40	2422	17.96	18.63	17.83	18.50	18.63	19.30	17.78	18.45	24.75	30	PASS
	2427	18.57	19.24	18.06	18.73	19.12	19.79	18.39	19.06	25.24	30	PASS
	2432	19.52	20.19	18.88	19.55	19.78	20.45	19.03	19.70	26.01	30	PASS
	2437	18.86	19.53	18.72	19.39	19.78	20.45	19.02	19.69	25.80	30	PASS
	2442	19.54	20.21	18.99	19.66	19.95	20.62	19.36	20.03	26.16	30	PASS
	2447	19.65	20.32	19.03	19.70	20.01	20.68	19.62	20.29	26.28	30	PASS
	2452	17.87	18.54	18.05	18.72	18.73	19.40	18.02	18.69	24.87	30	PASS

Note: 1.Average Power with duty factor = Average Power Measured +Duty cycle correction factor

2. For Total Power, according to KDB 662911 D01 Multiple Transmitter Output v02r01 1),

The Total Power = $10\log(10^{(\text{Power antenna1 in dBm}/10)} + 10^{(\text{Power antenna2 in dBm}/10)} + 10^{(\text{Power antenna3 in dBm}/10)} + 10^{(\text{Power antenna4 in dBm}/10)})$.

3. For 2400MHz, the manufacturer declared that the directional gain = 3.50dBi<6dBi. So the power limit is 30dBm.

For 2450MHz, the manufacturer declared that the directional gain =3.40dBi<6dBi. So the power limit is 30dBm.

For 2500MHz, the manufacturer declared that the directional gain = 3.50dBi<6dBi. So the power limit is 30dBm.

5.2. 99% Bandwidth and 6dB Bandwidth

Ambient condition

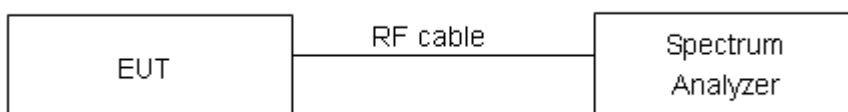
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. RBW is set to 100 kHz; VBW is set to 300 kHz on spectrum analyzer.
Detector=Peak, Trace mode=max hold.

The EUT was connected to the spectrum analyzer through a known loss cable. The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value.

Test Setup



Limits

Rule Part 15.247 (a) (2) specifies that “Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.”

minimum 6 dB bandwidth	≥ 500 kHz
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results:
INPAQ

Test Mode	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11b	2412	13.03	7.56	500	PASS
	2437	13.03	8.05	500	PASS
	2462	13.01	7.56	500	PASS
802.11g	2412	16.48	16.36	500	PASS
	2417	16.52	16.32	500	PASS
	2422	16.53	16.35	500	PASS
	2437	16.51	16.35	500	PASS
	2457	16.53	16.36	500	PASS
	2462	16.51	16.34	500	PASS
802.11n HT20	2412	17.67	17.60	500	PASS
	2417	17.70	17.63	500	PASS
	2437	17.72	17.59	500	PASS
	2457	17.68	17.60	500	PASS
	2462	17.70	17.63	500	PASS
802.11n HT40	2422	36.27	36.34	500	PASS
	2427	36.31	36.35	500	PASS
	2432	36.35	36.33	500	PASS
	2437	36.31	36.35	500	PASS
	2442	36.32	36.33	500	PASS
	2447	36.29	36.34	500	PASS
	2452	36.34	36.41	500	PASS
802.11ax HE20	2412	18.97	18.89	500	PASS
	2417	19.01	19.06	500	PASS
	2437	18.96	18.93	500	PASS
	2457	18.99	18.90	500	PASS
	2462	19.00	19.04	500	PASS



802.11ax HE40	2422	37.87	37.83	500	PASS
	2427	37.86	38.08	500	PASS
	2432	37.85	38.00	500	PASS
	2437	37.83	38.05	500	PASS
	2442	37.90	38.18	500	PASS
	2447	37.84	37.96	500	PASS
	2452	37.89	38.15	500	PASS

**Signal Plus**

Test Mode	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit (kHz)	Conclusion
802.11b	2412	13.03	7.56	500	PASS
	2437	13.03	8.05	500	PASS
	2462	13.01	7.56	500	PASS
802.11g	2412	16.48	16.36	500	PASS
	2417	16.52	16.34	500	PASS
	2422	16.53	16.36	500	PASS
	2427	16.52	16.34	500	PASS
	2437	16.51	16.35	500	PASS
	2452	16.51	16.35	500	PASS
	2457	16.53	16.36	500	PASS
	2462	16.51	16.34	500	PASS
802.11n HT20	2412	17.67	17.60	500	PASS
	2417	17.70	17.73	500	PASS
	2422	17.69	17.63	500	PASS
	2427	17.68	17.60	500	PASS
	2437	17.72	17.59	500	PASS
	2452	17.67	17.60	500	PASS
	2457	17.68	17.60	500	PASS
	2462	17.70	17.63	500	PASS
802.11n HT40	2422	36.27	36.34	500	PASS
	2427	36.31	36.33	500	PASS
	2432	36.35	36.33	500	PASS
	2437	36.31	36.35	500	PASS
	2442	36.32	36.33	500	PASS
	2447	36.29	36.32	500	PASS
	2452	36.34	36.41	500	PASS
802.11ax	2412	18.97	18.89	500	PASS



HE20	2417	19.01	18.97	500	PASS
	2422	19.02	19.06	500	PASS
	2427	19.01	18.82	500	PASS
	2437	18.96	18.93	500	PASS
	2447	19.02	18.92	500	PASS
	2452	18.97	18.91	500	PASS
	2457	18.99	19.04	500	PASS
	2462	19.00	19.04	500	PASS
802.11ax HE40	2422	37.87	37.83	500	PASS
	2427	37.86	37.90	500	PASS
	2432	37.85	37.81	500	PASS
	2437	37.83	38.05	500	PASS
	2442	37.90	38.19	500	PASS
	2447	37.84	37.81	500	PASS
	2452	37.89	38.15	500	PASS



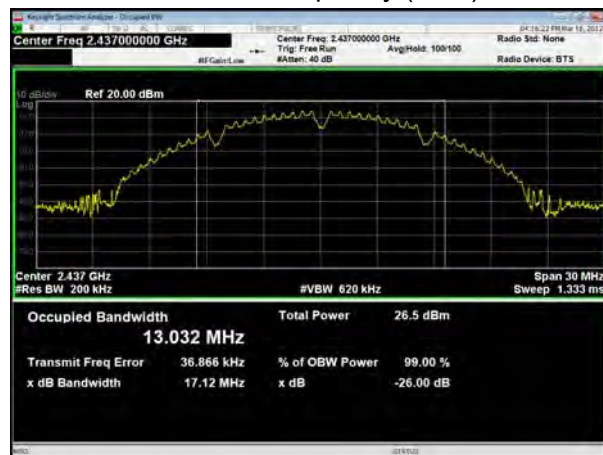
99%bandwidth

INPAQ

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz): 2462



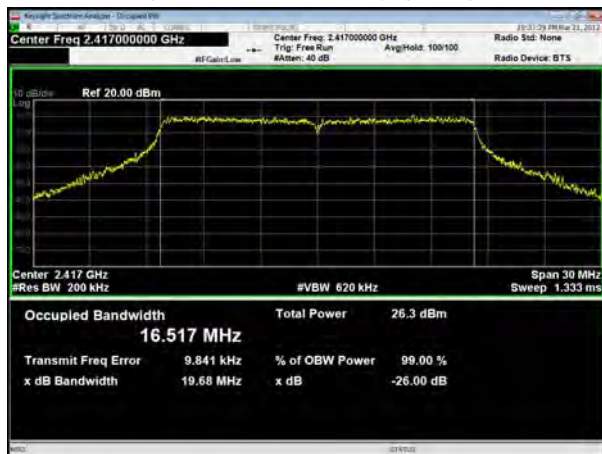
802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2417



802.11g, Carrier frequency (MHz): 2457



802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2462



802.11n(HT20), Carrier frequency (MHz): 2412



802.11n(HT20), Carrier frequency (MHz): 2457



802.11n(HT20), Carrier frequency (MHz): 2417



802.11n(HT20), Carrier frequency (MHz): 2462



802.11n(HT20), Carrier frequency (MHz): 2437



802.11n(HT40), Carrier frequency (MHz): 2422



802.11n(HT40), Carrier frequency (MHz): 2427



802.11n(HT40), Carrier frequency (MHz): 2442



802.11n(HT40), Carrier frequency (MHz):2432



802.11n(HT40), Carrier frequency (MHz):2447



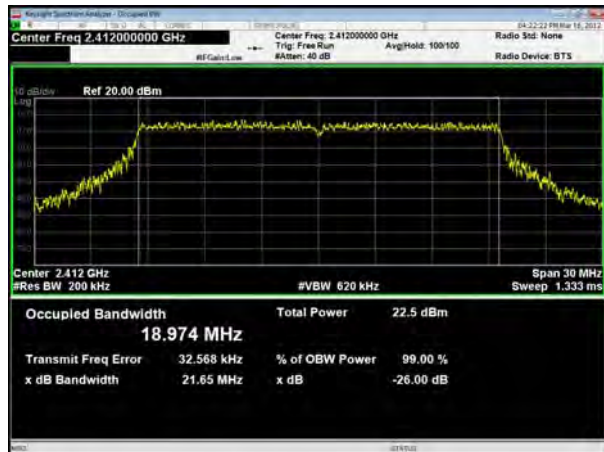
802.11n(HT40), Carrier frequency (MHz): 2437



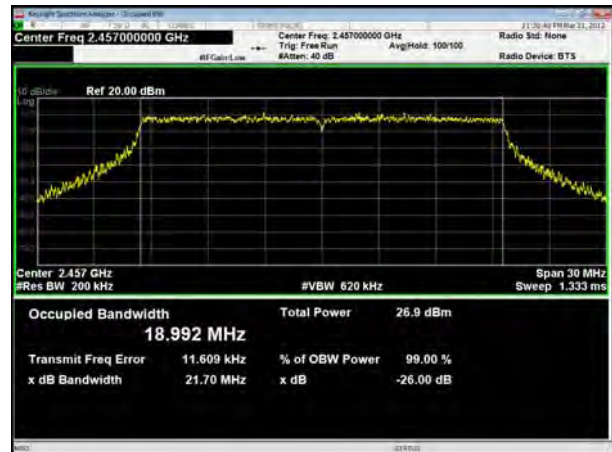
802.11n(HT40), Carrier frequency (MHz):2452



802.11ax(HE20), Carrier frequency (MHz): 2412



802.11ax(HE20), Carrier frequency (MHz): 2457



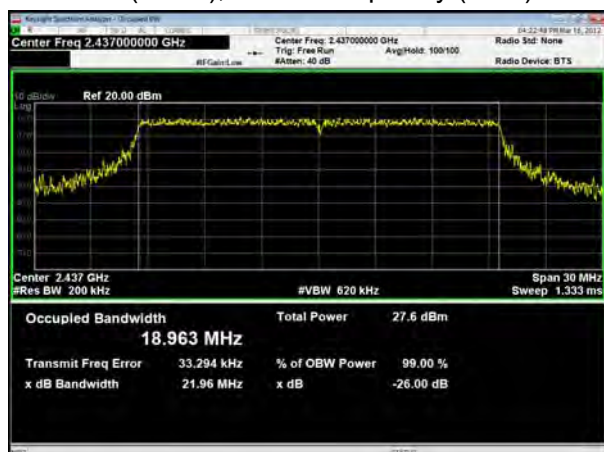
802.11ax(HE20), Carrier frequency (MHz): 2417



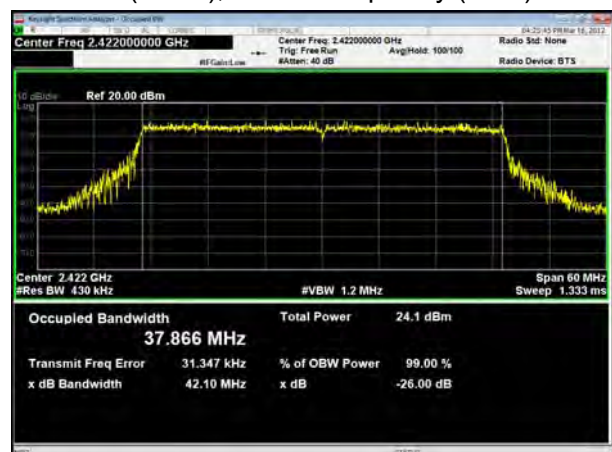
802.11ax(HE20), Carrier frequency (MHz): 2462



802.11ax(HE20), Carrier frequency (MHz): 2437



802.11ax(HE40), Carrier frequency (MHz): 2422



802.11ax(HE40),Carrier frequency (MHz): 2427



802.11ax(HE40), Carrier frequency (MHz): 2442



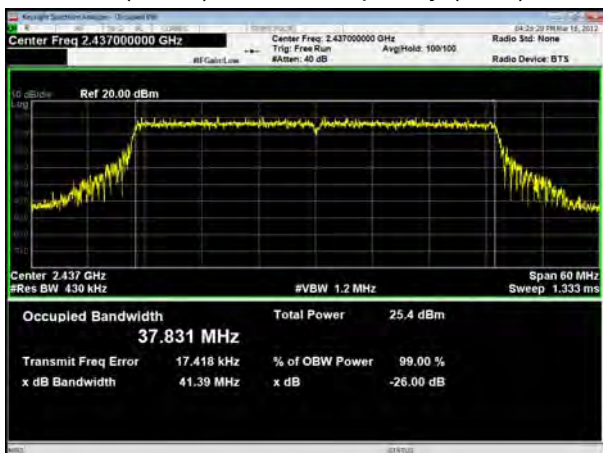
802.11ax(HE40),Carrier frequency (MHz):2432



802.11ax(HE40), Carrier frequency (MHz):2447



802.11ax(HE40), Carrier frequency (MHz): 2437



802.11n(HT40), Carrier frequency (MHz):2452



Signal Plus

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz): 2462



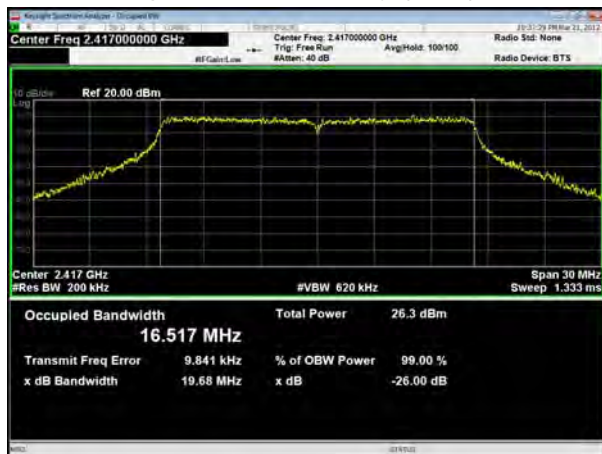
802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2427



802.11g, Carrier frequency (MHz): 2417



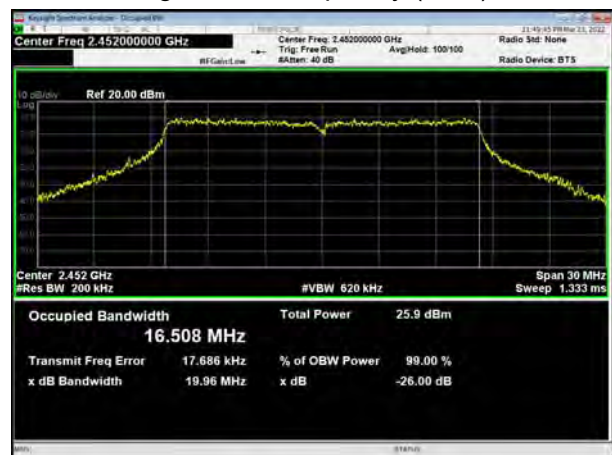
802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2452



802.11g, Carrier frequency (MHz):2457



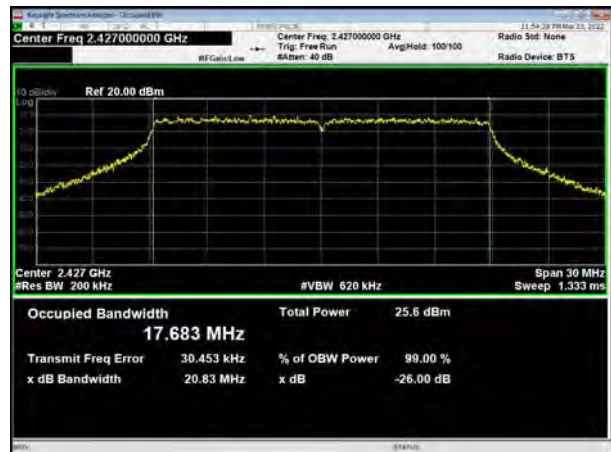
802.11g, Carrier frequency (MHz):2462



802.11n(HT20), Carrier frequency (MHz): 2412



802.11n(HT20), Carrier frequency (MHz): 2427



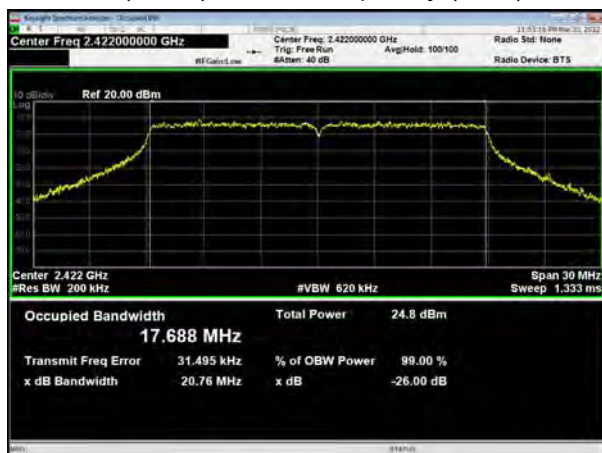
802.11n(HT20), Carrier frequency (MHz): 2417



802.11n(HT20), Carrier frequency (MHz): 2437



802.11n(HT20), Carrier frequency (MHz): 2422



802.11n(HT20), Carrier frequency (MHz): 2452



802.11n(HT20), Carrier frequency (MHz): 2457



802.11n(HT40), Carrier frequency (MHz): 2427



802.11n(HT20), Carrier frequency (MHz): 2462



802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT40), Carrier frequency (MHz): 2422



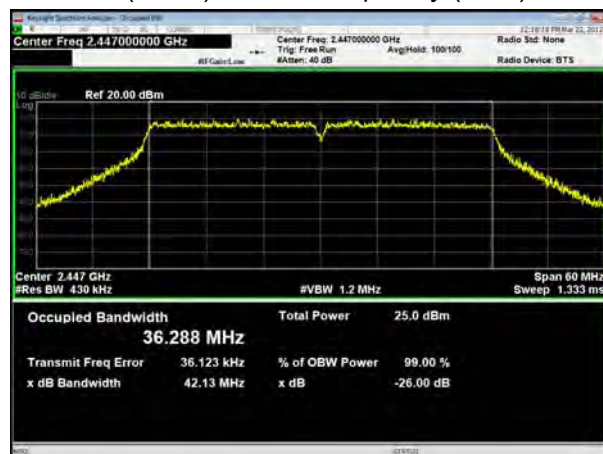
802.11n(HT40), Carrier frequency (MHz): 2437



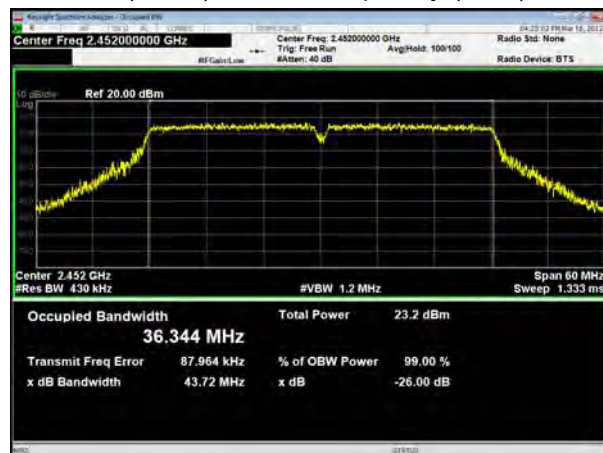
802.11n(HT40), Carrier frequency (MHz): 2442



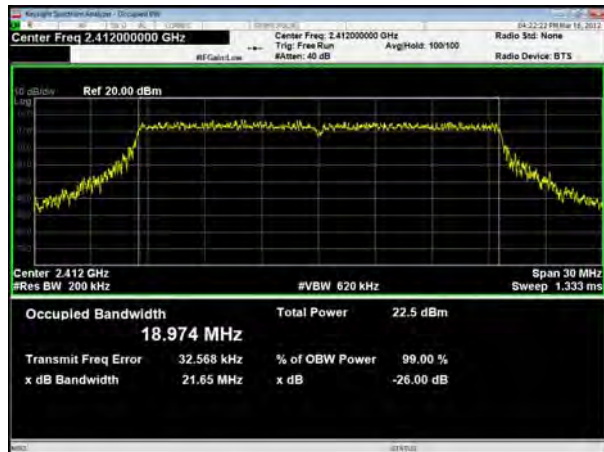
802.11n(HT40), Carrier frequency (MHz): 2447



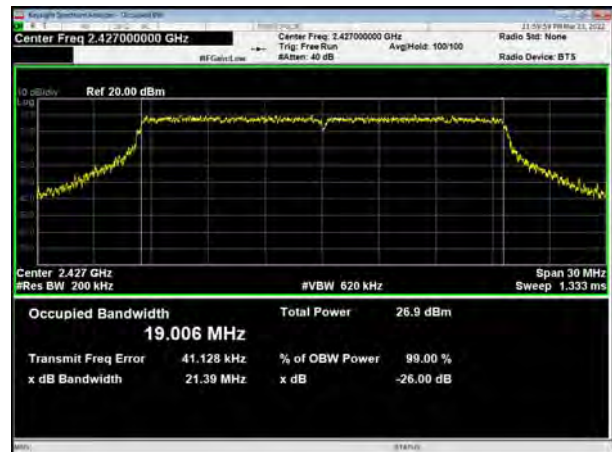
802.11n(HT40), Carrier frequency (MHz): 2452



802.11ax(HE20), Carrier frequency (MHz): 2412



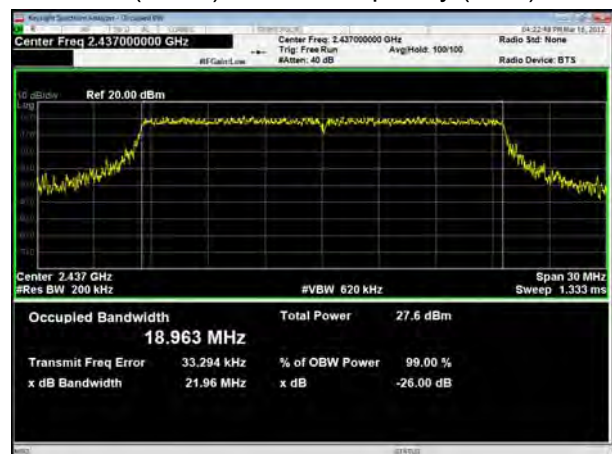
802.11ax(HE20), Carrier frequency (MHz): 2427



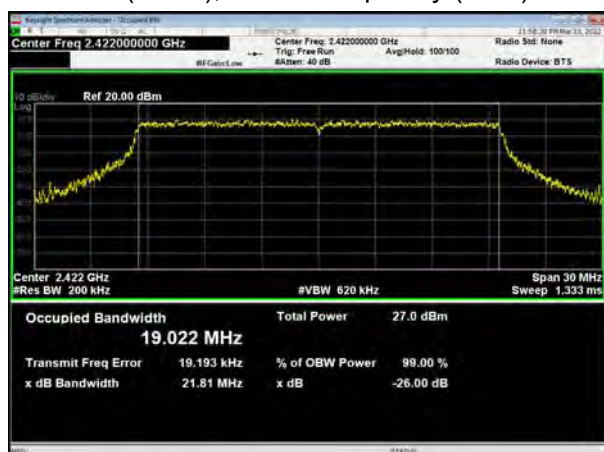
802.11ax(HE20), Carrier frequency (MHz): 2417



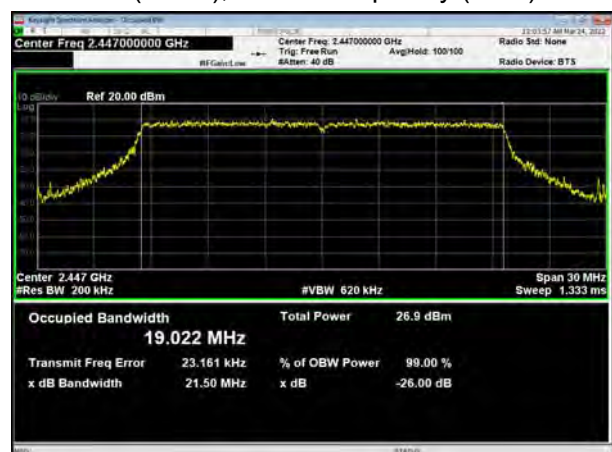
802.11ax(HE20), Carrier frequency (MHz):2437



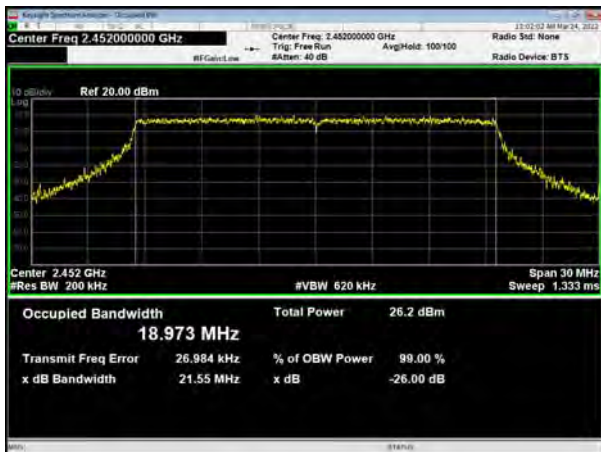
802.11ax(HE20), Carrier frequency (MHz): 2422



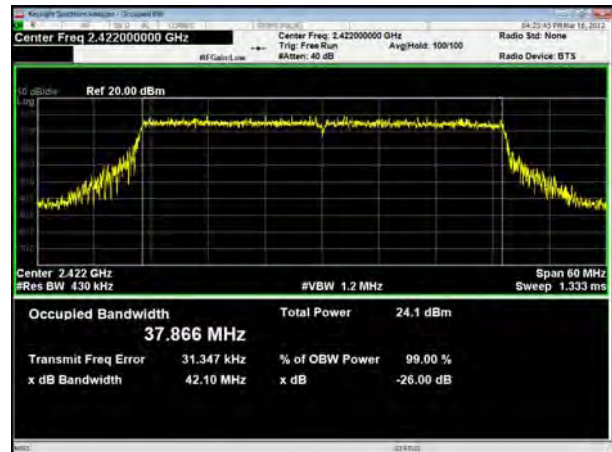
802.11ax(HE20), Carrier frequency (MHz):2447



802.11ax(HE20), Carrier frequency (MHz):2452



802.11ax(HE40), Carrier frequency (MHz): 2422



802.11ax(HE20), Carrier frequency (MHz): 2457



802.11ax(HE40),Carrier frequency (MHz): 2427



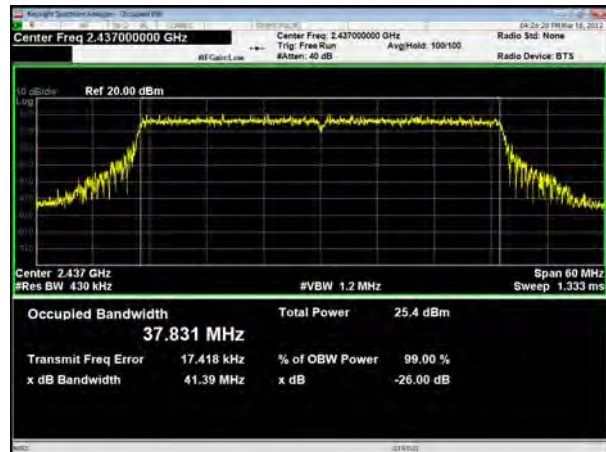
802.11ax(HE20),Carrier frequency (MHz): 2462



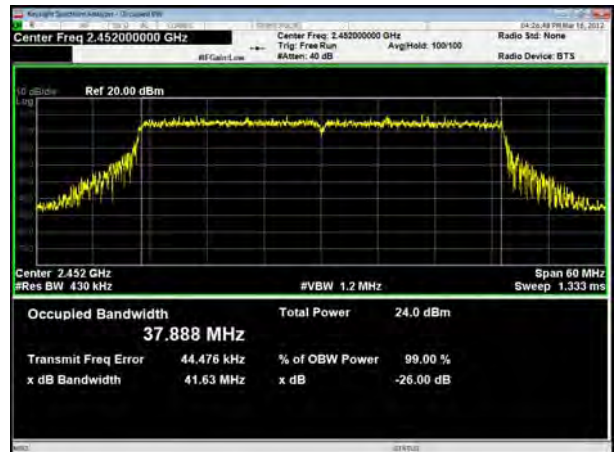
802.11ax(HE40),Carrier frequency (MHz):2432



802.11ax(HE40), Carrier frequency (MHz): 2437



802.11n(HT40), Carrier frequency (MHz): 2452



802.11ax(HE40), Carrier frequency (MHz): 2442



802.11ax(HE40), Carrier frequency (MHz): 2447





6 dB bandwidth

INPAQ

802.11b, Carrier frequency (MHz): 2412



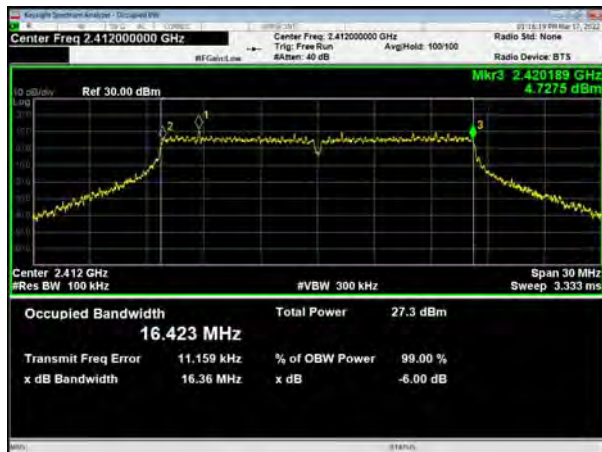
802.11b, Carrier frequency (MHz): 2437



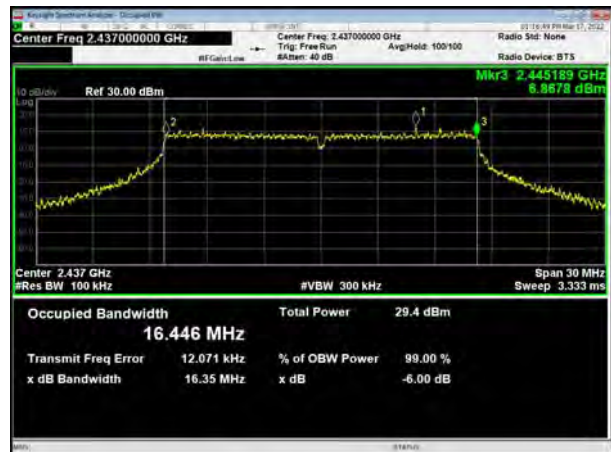
802.11b, Carrier frequency (MHz): 2462



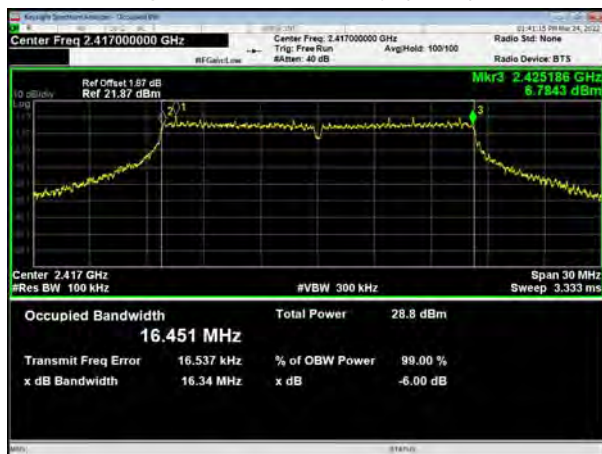
802.11g, Carrier frequency (MHz): 2412



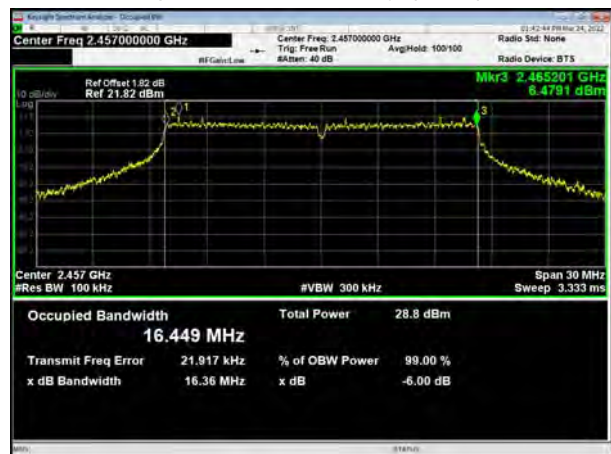
802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2417



802.11g, Carrier frequency (MHz): 2457



802.11g, Carrier frequency (MHz): 2422



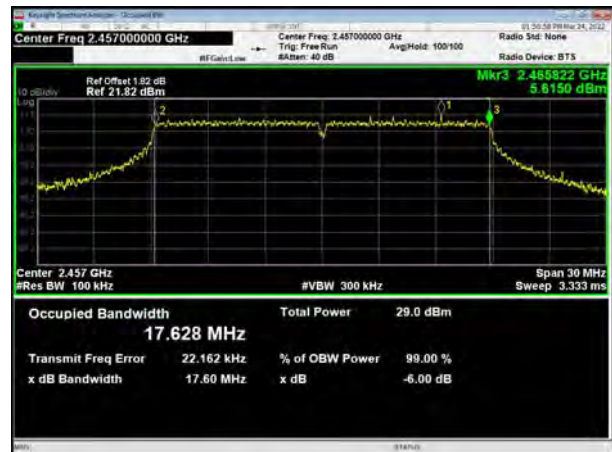
802.11g, Carrier frequency (MHz): 2462



802.11n(HT20), Carrier frequency (MHz): 2412



802.11n(HT20), Carrier frequency (MHz): 2457



802.11n(HT20), Carrier frequency (MHz): 2417



802.11n(HT20), Carrier frequency (MHz): 2462



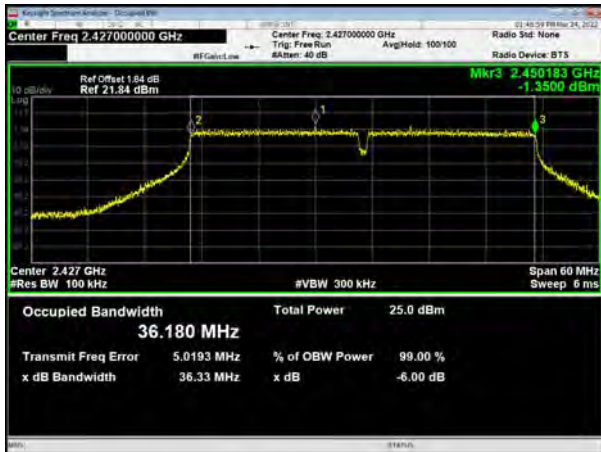
802.11n(HT20), Carrier frequency (MHz): 2437



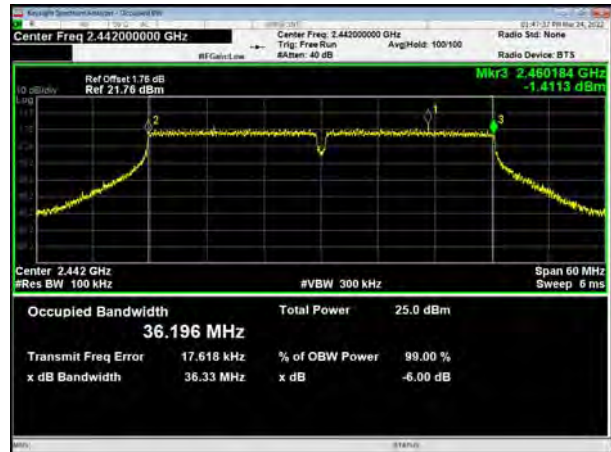
802.11n(HT40), Carrier frequency (MHz): 2422



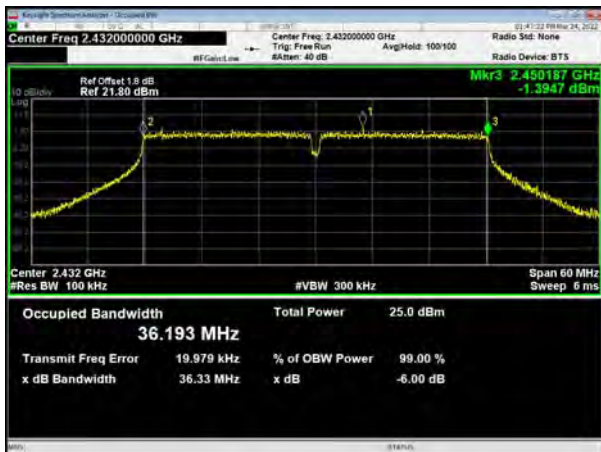
802.11n(HT40), Carrier frequency (MHz): 2427



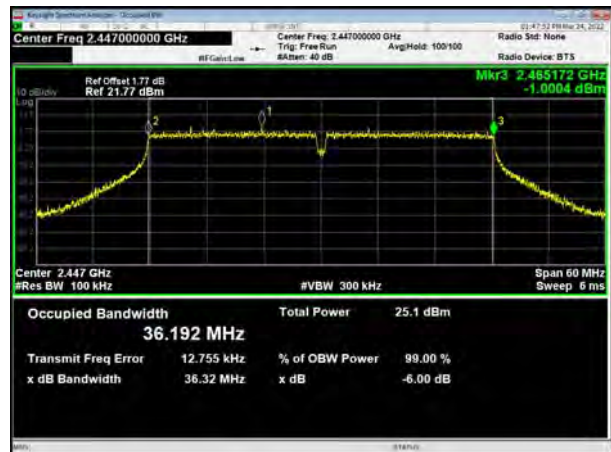
802.11n(HT40), Carrier frequency (MHz): 2442



802.11n(HT40), Carrier frequency (MHz):2432



802.11n(HT40), Carrier frequency (MHz):2447



802.11n(HT40), Carrier frequency (MHz): 2437



802.11n(HT40), Carrier frequency (MHz):2452



802.11ax(HE20), Carrier frequency (MHz): 2412



802.11ax(HE20), Carrier frequency (MHz): 2457



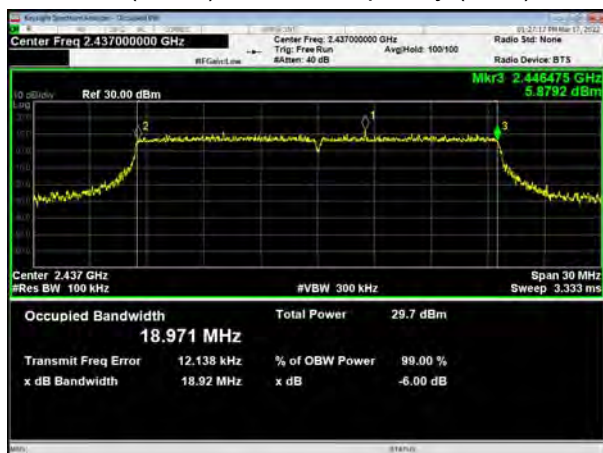
802.11ax(HE20), Carrier frequency (MHz): 2417



802.11ax(HE20), Carrier frequency (MHz): 2462



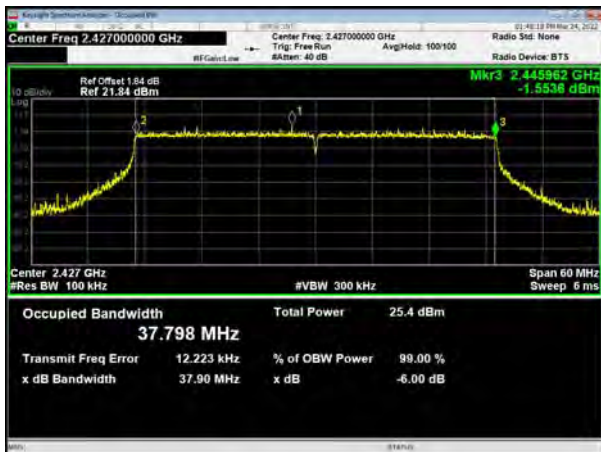
802.11ax(HE20), Carrier frequency (MHz): 2437



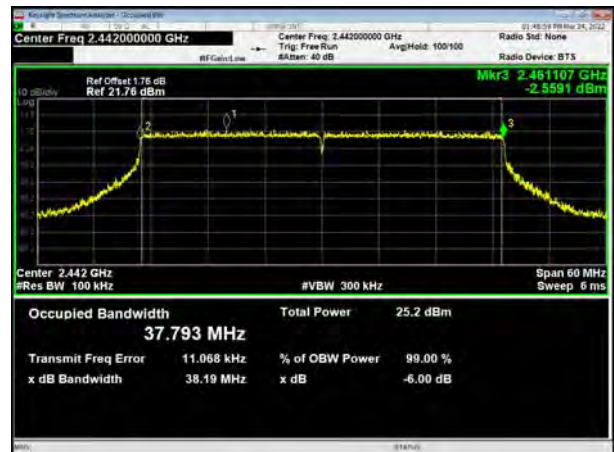
802.11ax(HE40), Carrier frequency (MHz): 2422



802.11ax(HE40),Carrier frequency (MHz): 2427



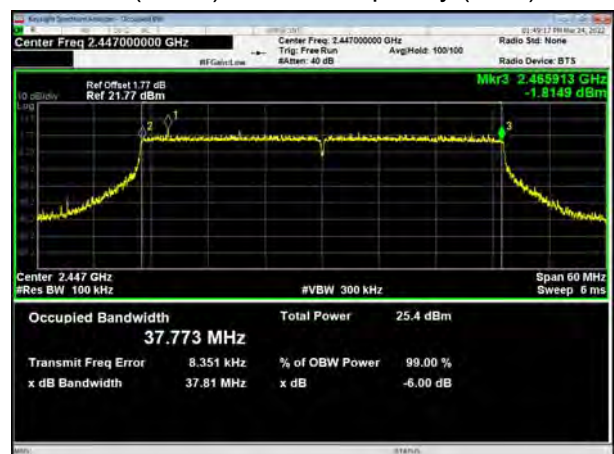
802.11ax(HE40), Carrier frequency (MHz): 2442



802.11ax(HE40),Carrier frequency (MHz):2432



802.11ax(HE40), Carrier frequency (MHz):2447



802.11ax(HE40), Carrier frequency (MHz): 2437



802.11n(HT40), Carrier frequency (MHz):2452

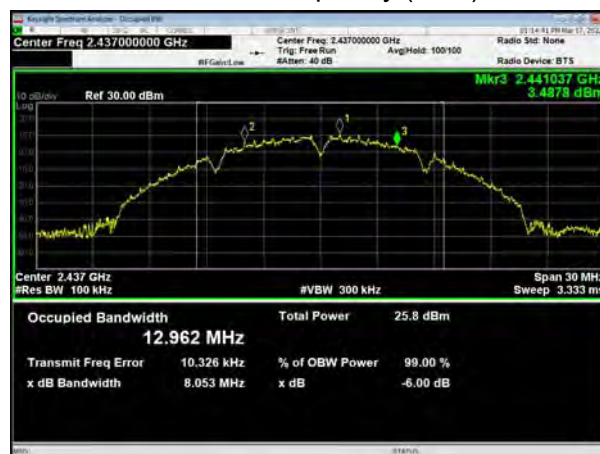


Signal Plus

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437

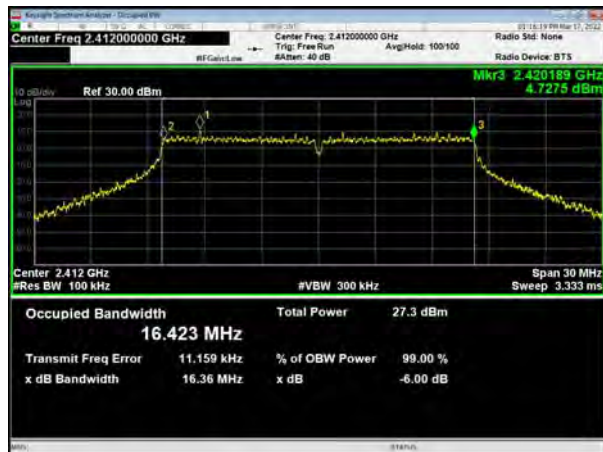


802.11b, Carrier frequency (MHz): 2462

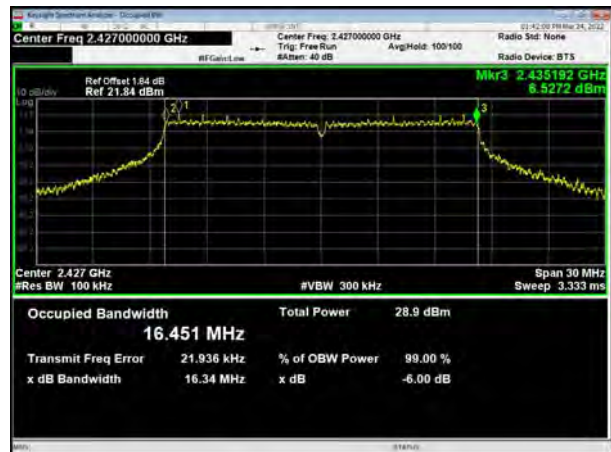




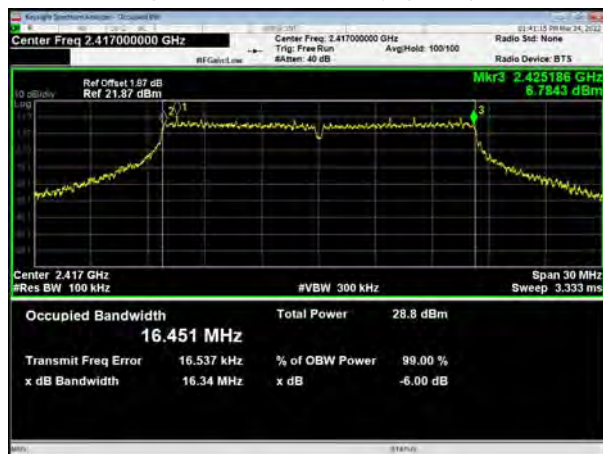
802.11g, Carrier frequency (MHz): 2412



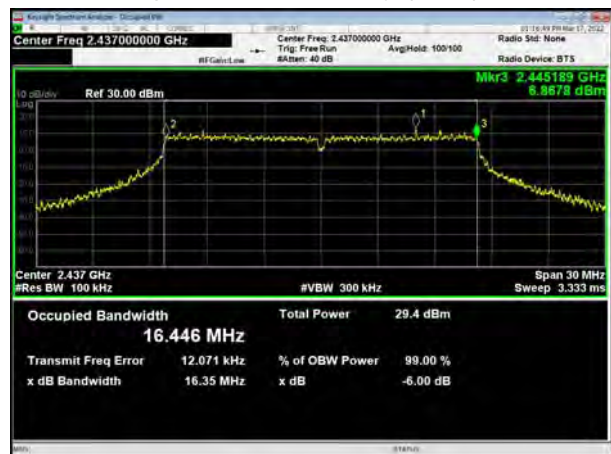
802.11g, Carrier frequency (MHz): 2427



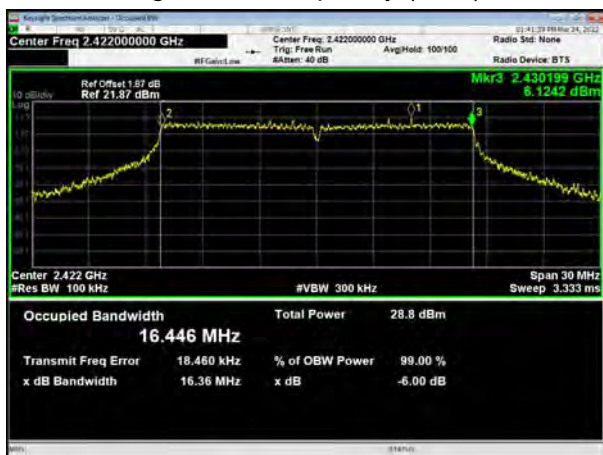
802.11g, Carrier frequency (MHz): 2417



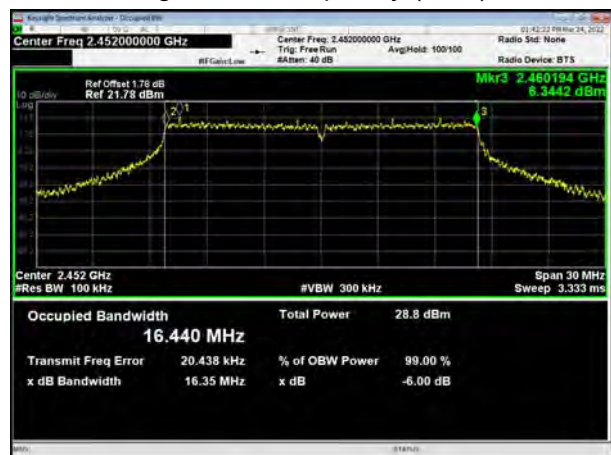
802.11g, Carrier frequency (MHz): 2437



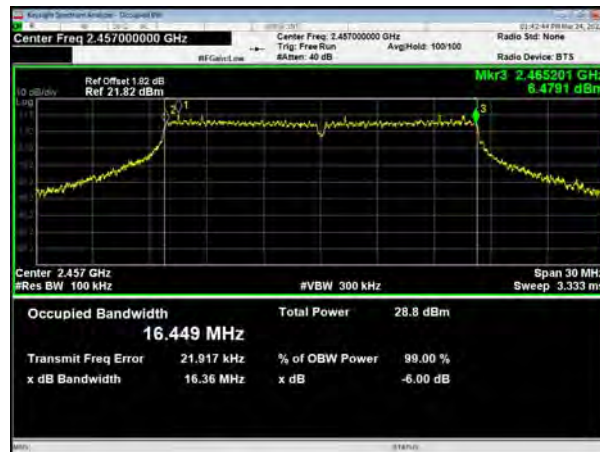
802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2452



802.11g, Carrier frequency (MHz):2457

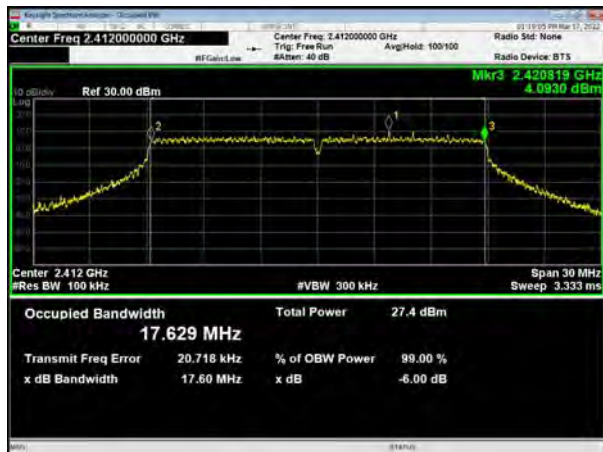


802.11g, Carrier frequency (MHz):2462





802.11n(HT20), Carrier frequency (MHz): 2412



802.11n(HT20), Carrier frequency (MHz): 2427



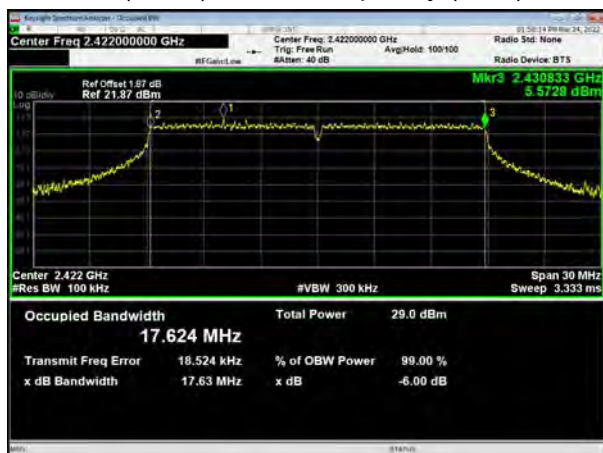
802.11n(HT20), Carrier frequency (MHz): 2417



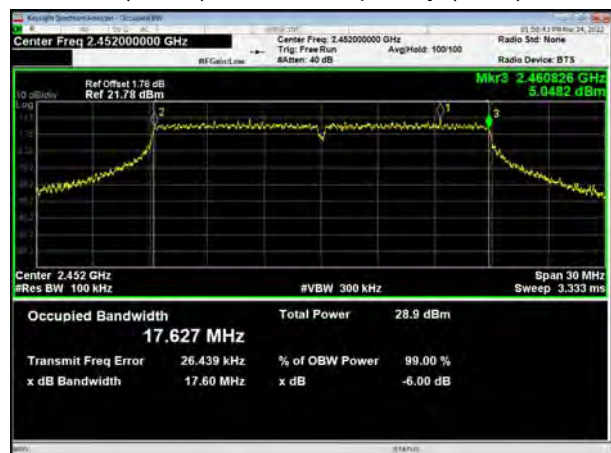
802.11n(HT20), Carrier frequency (MHz): 2437



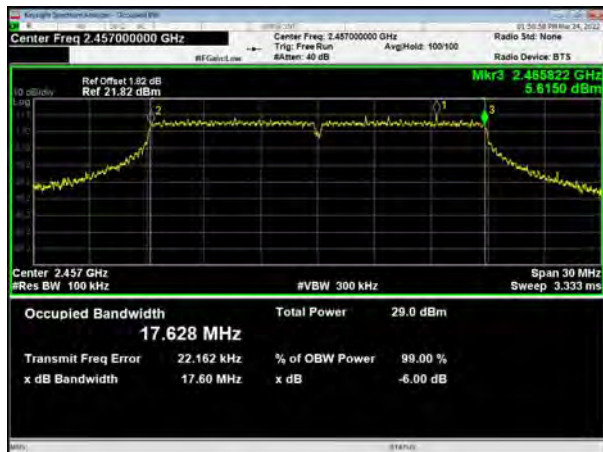
802.11n(HT20), Carrier frequency (MHz): 2422



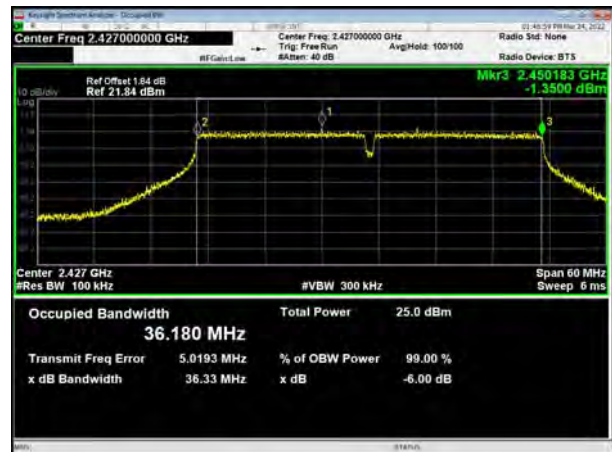
802.11n(HT20), Carrier frequency (MHz): 2452



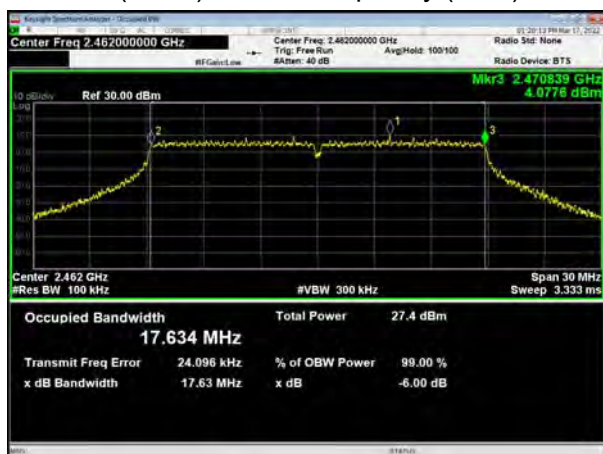
802.11n(HT20), Carrier frequency (MHz): 2457



802.11n(HT40), Carrier frequency (MHz): 2427



802.11n(HT20), Carrier frequency (MHz): 2462



802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT40), Carrier frequency (MHz): 2422



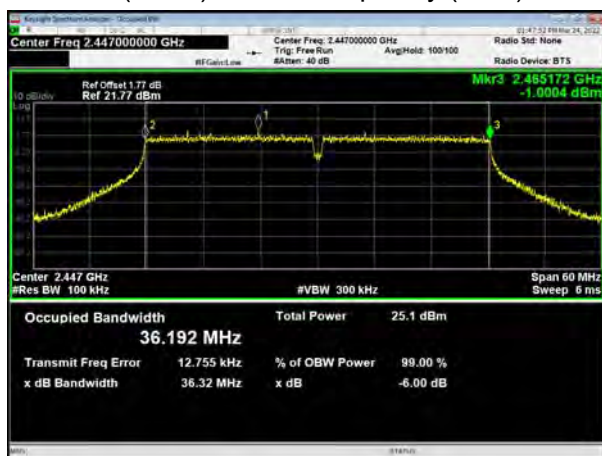
802.11n(HT40), Carrier frequency (MHz): 2437



802.11n(HT40), Carrier frequency (MHz): 2442



802.11n(HT40), Carrier frequency (MHz):2447



802.11n(HT40), Carrier frequency (MHz):2452



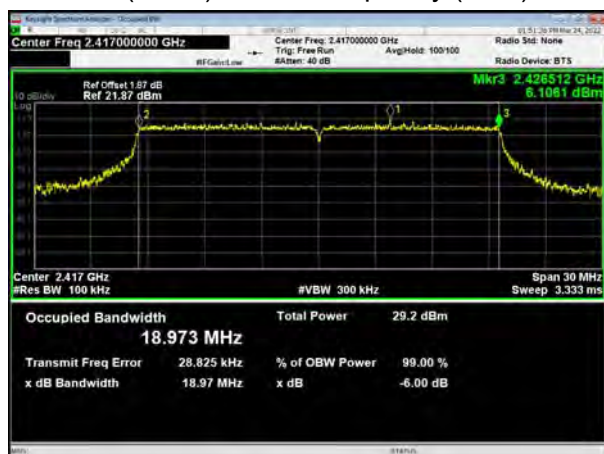
802.11ax(HE20), Carrier frequency (MHz): 2412



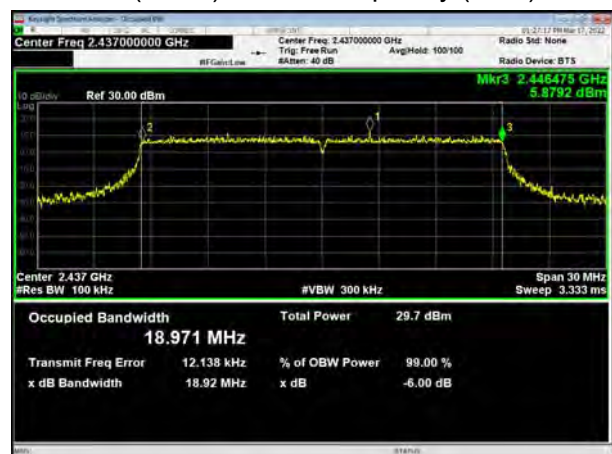
802.11ax(HE20), Carrier frequency (MHz): 2427



802.11ax(HE20), Carrier frequency (MHz): 2417



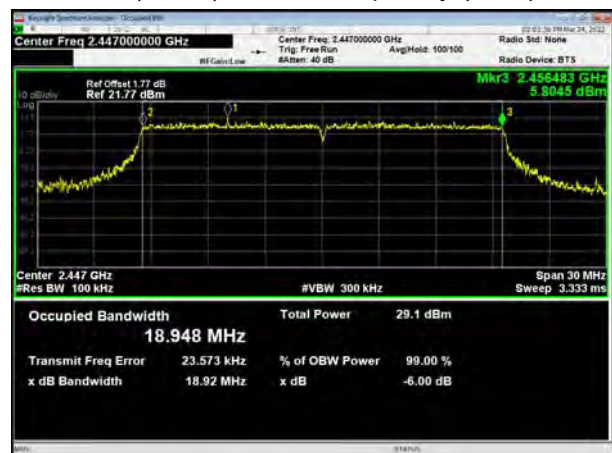
802.11ax(HE20), Carrier frequency (MHz): 2437



802.11ax(HE20), Carrier frequency (MHz): 2422



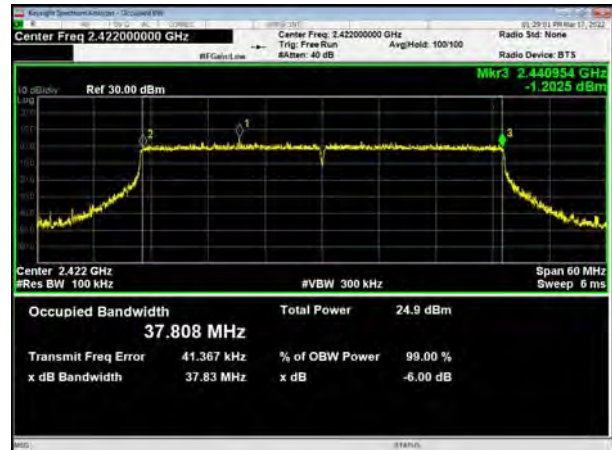
802.11ax(HE20), Carrier frequency (MHz): 2447



802.11ax(HE20), Carrier frequency (MHz):2452



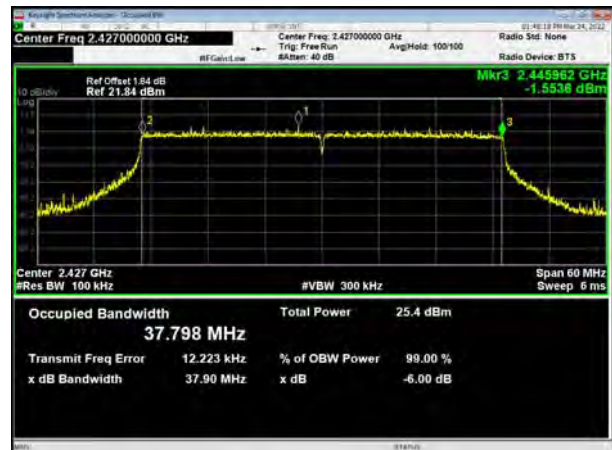
802.11ax(HE40), Carrier frequency (MHz): 2422



802.11ax(HE20), Carrier frequency (MHz): 2457



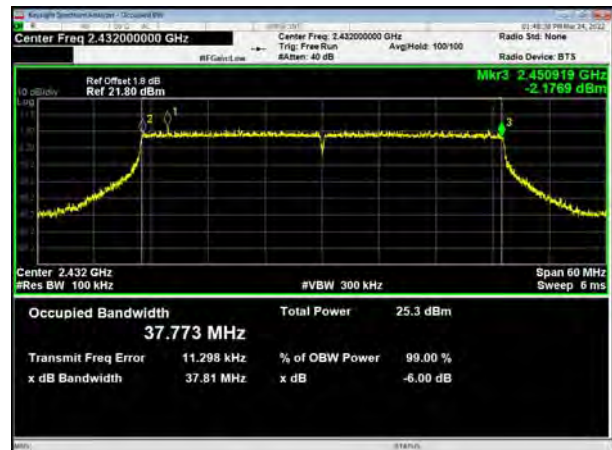
802.11ax(HE40),Carrier frequency (MHz): 2427



802.11ax(HE20),Carrier frequency (MHz): 2462



802.11ax(HE40),Carrier frequency (MHz):2432





802.11ax(HE40), Carrier frequency (MHz): 2437



802.11n(HT40), Carrier frequency (MHz): 2452



802.11ax(HE40), Carrier frequency (MHz): 2442



802.11ax(HE40), Carrier frequency (MHz): 2447



5.3. Band Edge

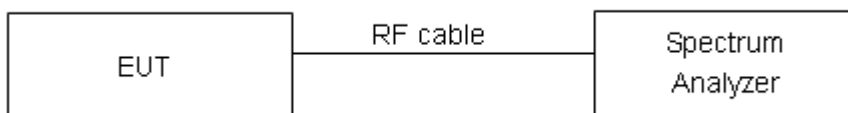
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable the band edge of the lowest and highest channels were measured. The peak detector is used and RBW is set to 100 kHz and VBW is set to 300 kHz on spectrum analyzer. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule Part 15.247(d) specifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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 the transmitter demonstrates compliance with the peak conducted power limits.” If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.”

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
2GHz-3GHz	1.407 dB



Test Results: PASS

INPAQ

802.11b, Channel No.: 1



802.11b, Channel No.: 11

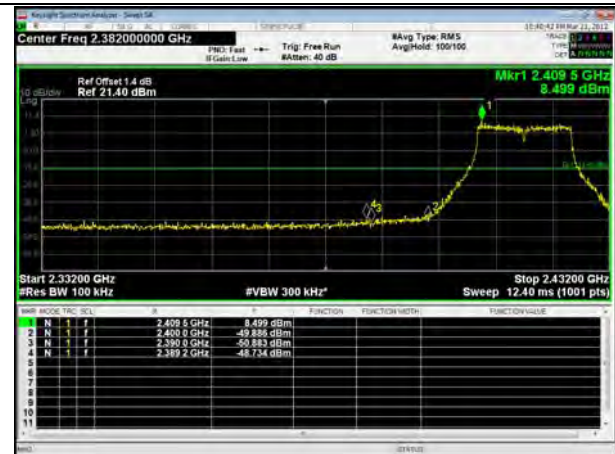


802.11g, Channel No.: 1





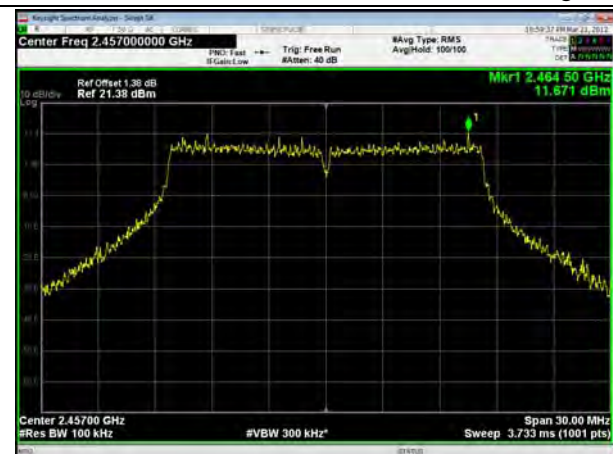
802.11g, Channel No.: 2



802.11g, Channel No.: 3

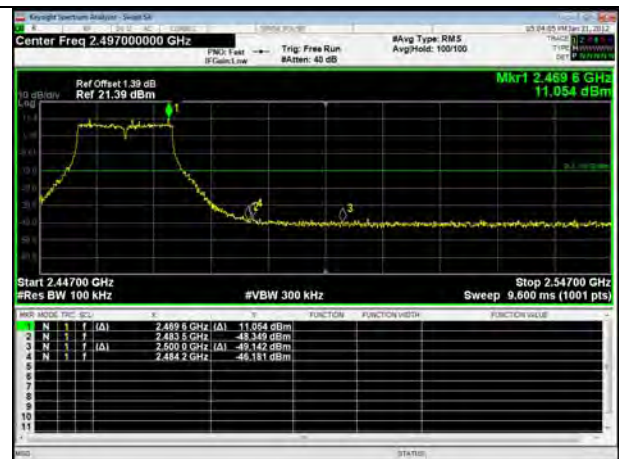


802.11g, Channel No.: 10

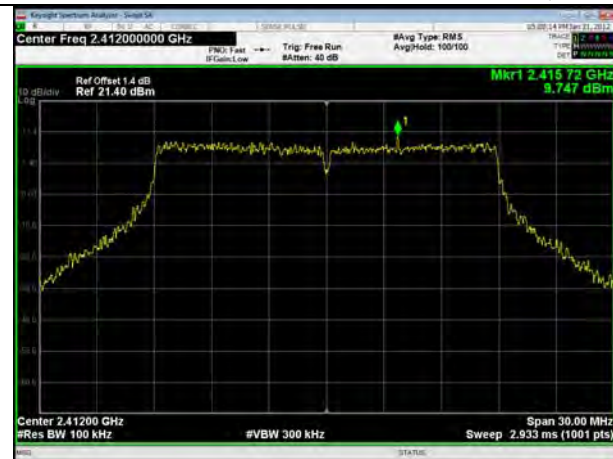




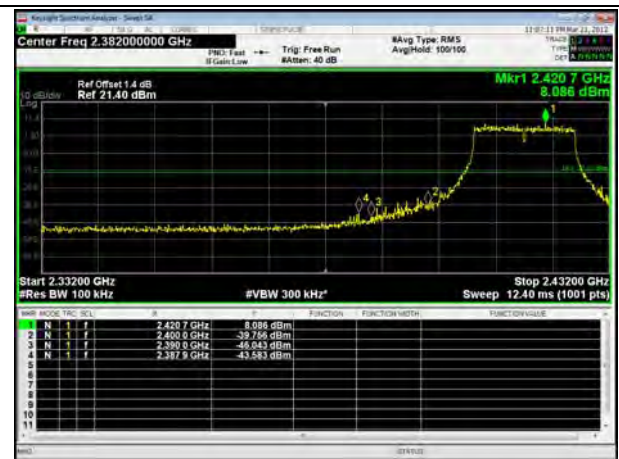
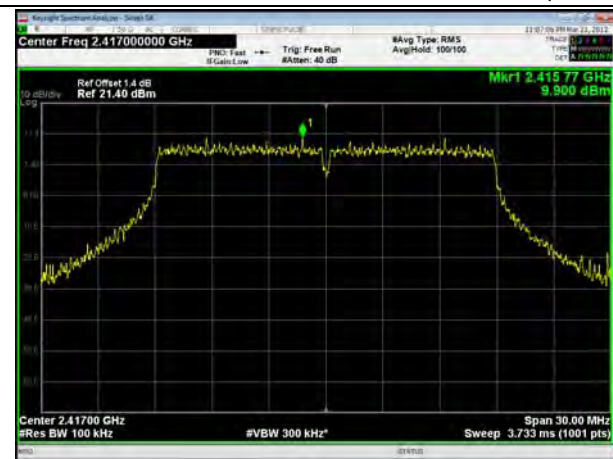
802.11g, Channel No.: 11



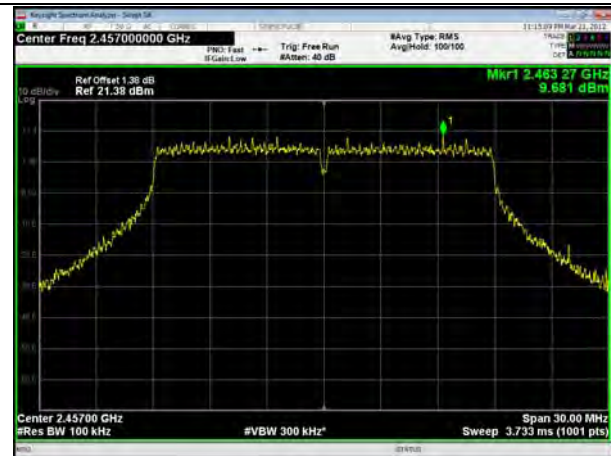
802.11n(HT20), Channel No. 1



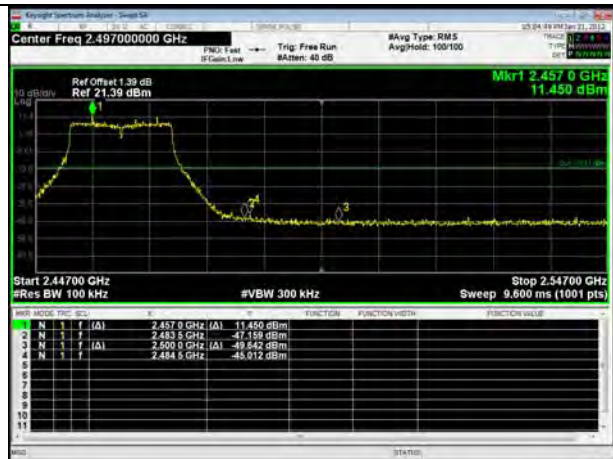
802.11n(HT20), Channel No. 2



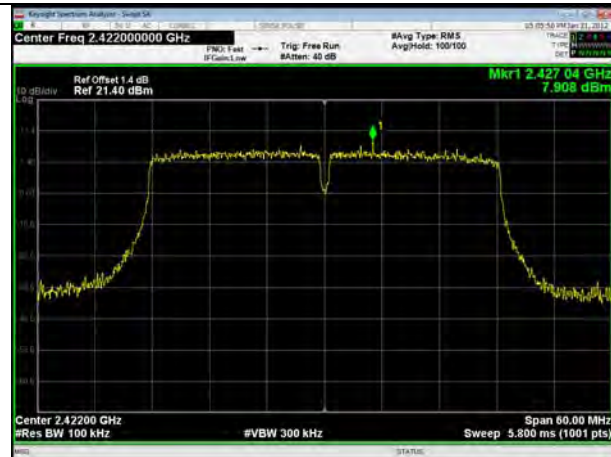
802.11n(HT20), Channel No. 10



802.11n(HT20), Channel No. 11

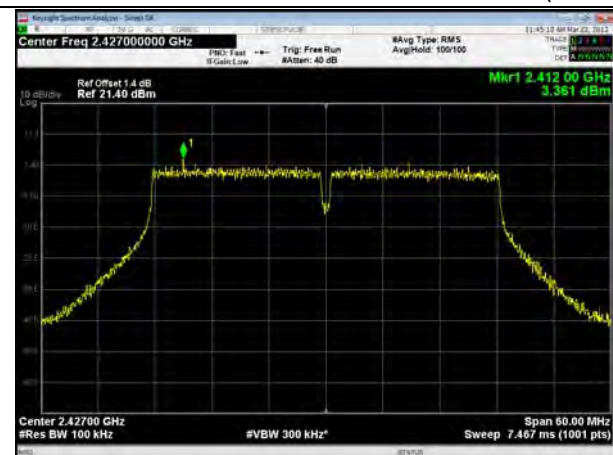


802.11n(HT40), Channel No. 3





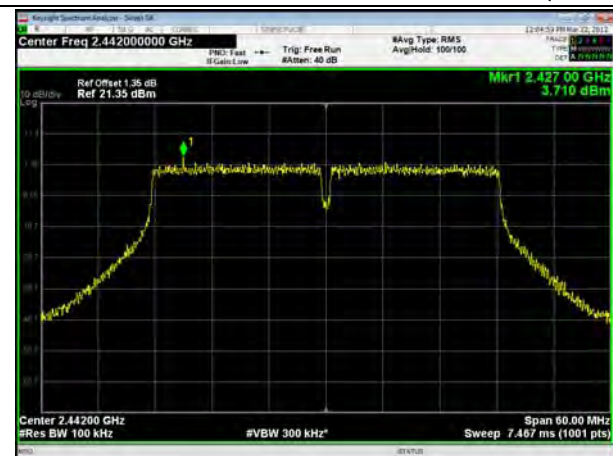
802.11n(HT40), Channel No. 4



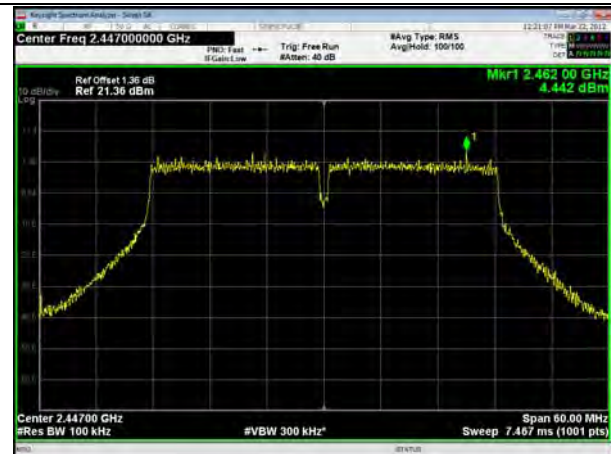
802.11n(HT40), Channel No. 5



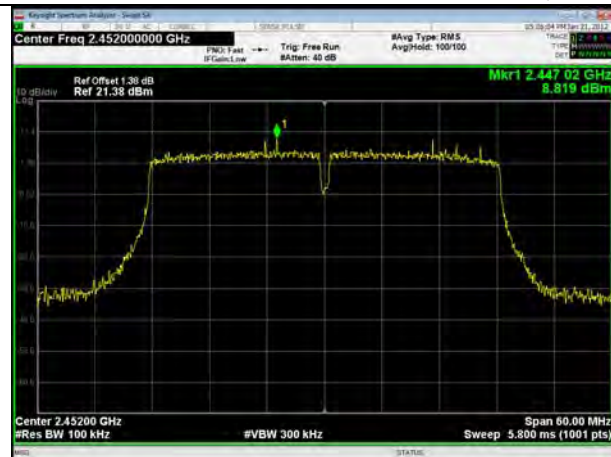
802.11n(HT40), Channel No. 7



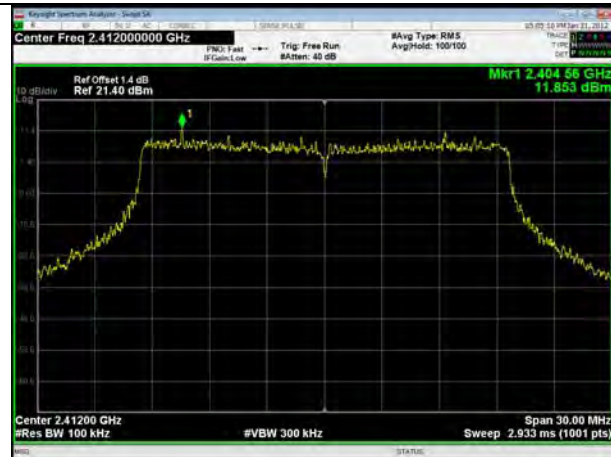
802.11n(HT40), Channel No. 8



802.11n(HT40), Channel No. 9



802.11ax(HE20), Channel No. 1





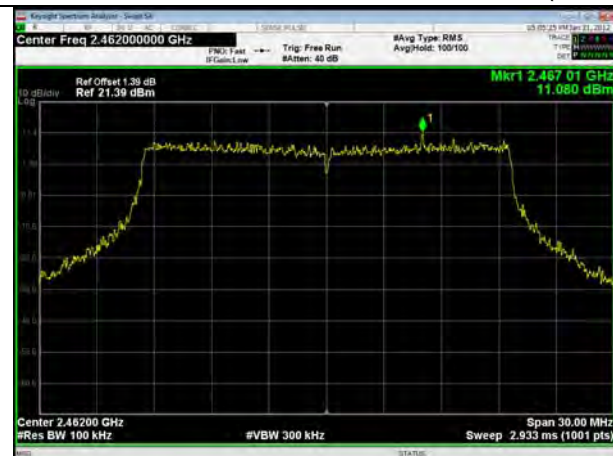
802.11ax(HE20), Channel No. 2



802.11ax(HE20), Channel No. 10



802.11ax(HE20), Channel No. 11





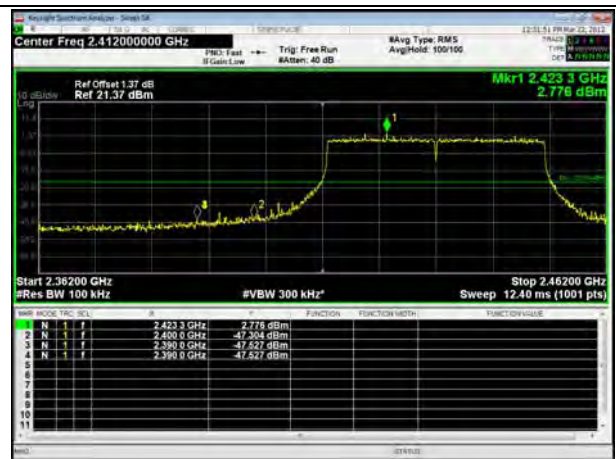
802. 11ax(HE40), Channel No. 3



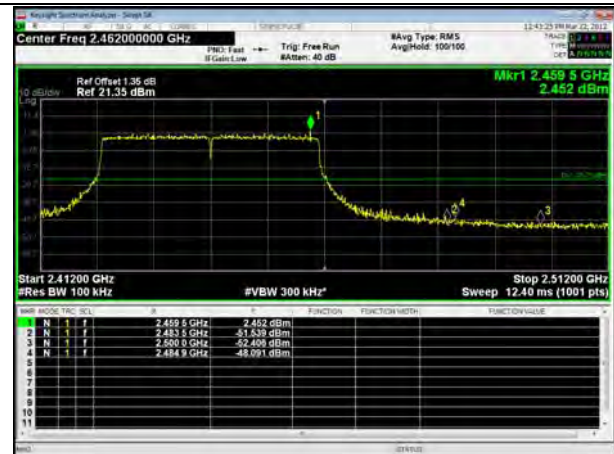
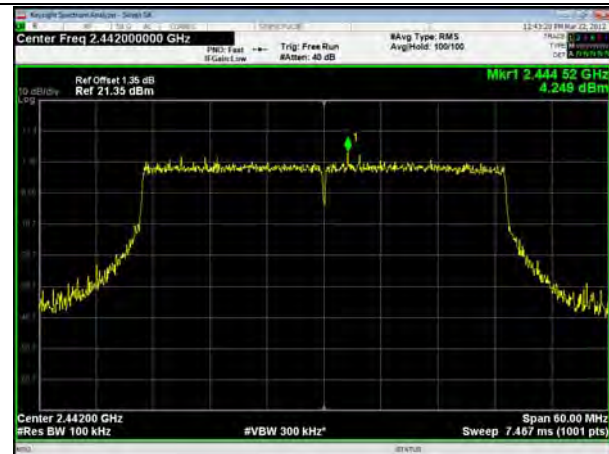
802. 11ax(HE40), Channel No. 4



802. 11ax(HE40), Channel No. 5



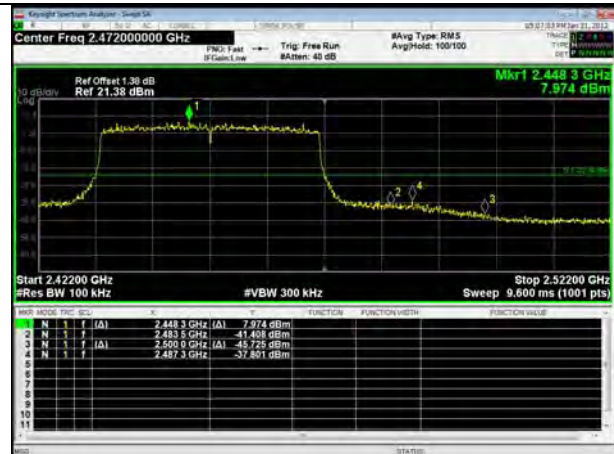
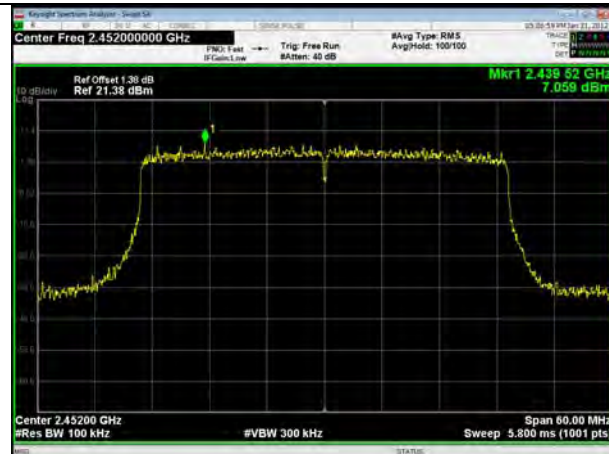
802. 11ax(HE40), Channel No. 7



802. 11ax(HE40), Channel No. 8



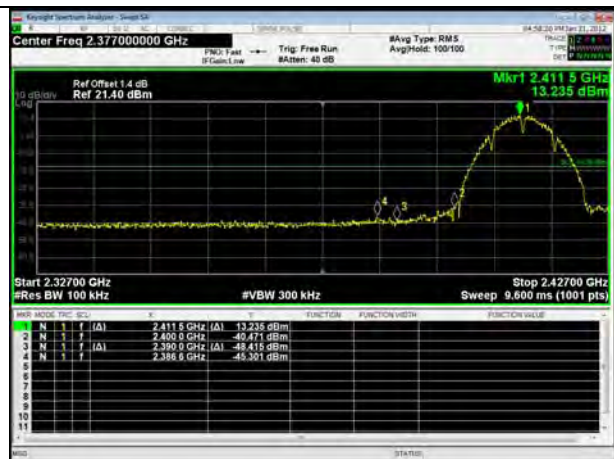
802. 11ax(HE40), Channel No. 9





Signal Plus

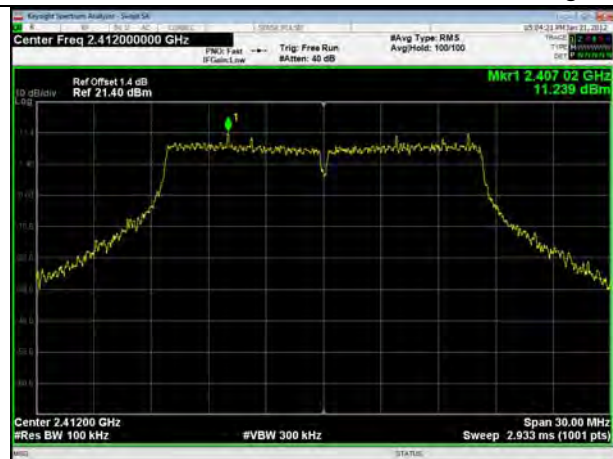
802.11b, Channel No.: 1



802.11b, Channel No.: 11

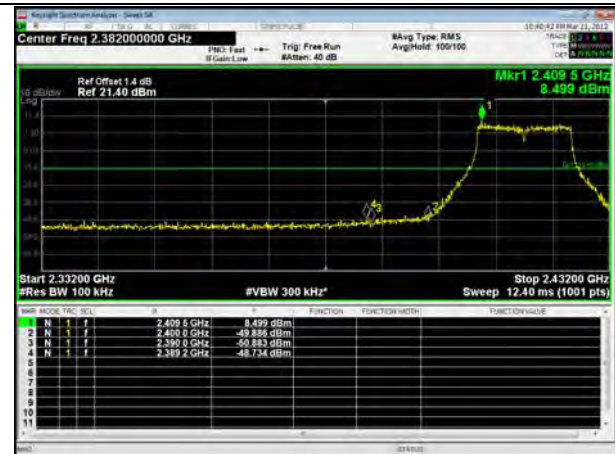


802.11g, Channel No.: 1





802.11g, Channel No.: 2



802.11g, Channel No.: 3



802.11g, Channel No.: 4

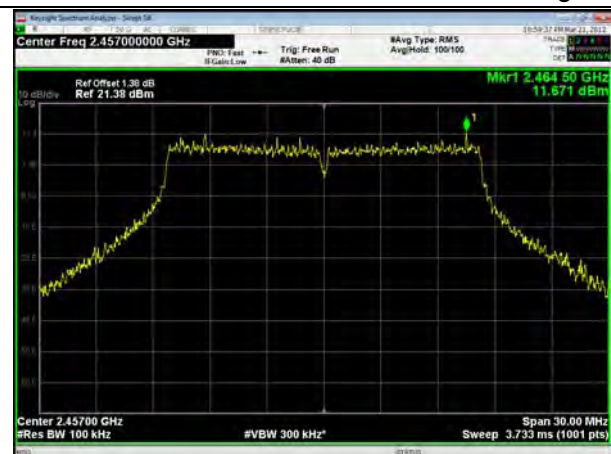




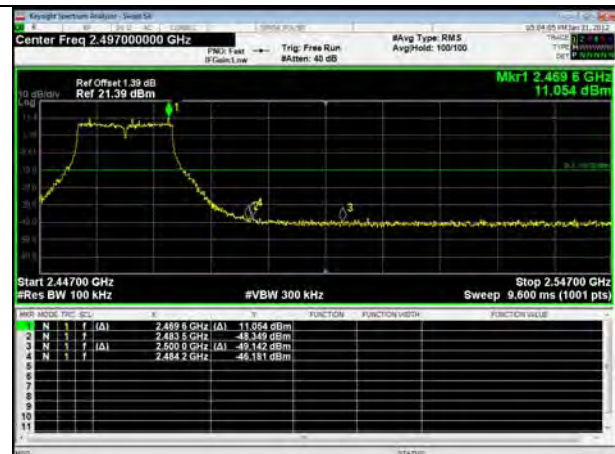
802.11g, Channel No.: 9



802.11g, Channel No.: 10

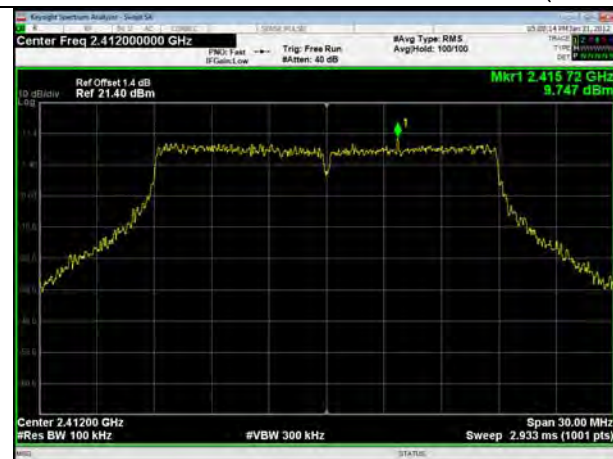


802.11g, Channel No.: 11

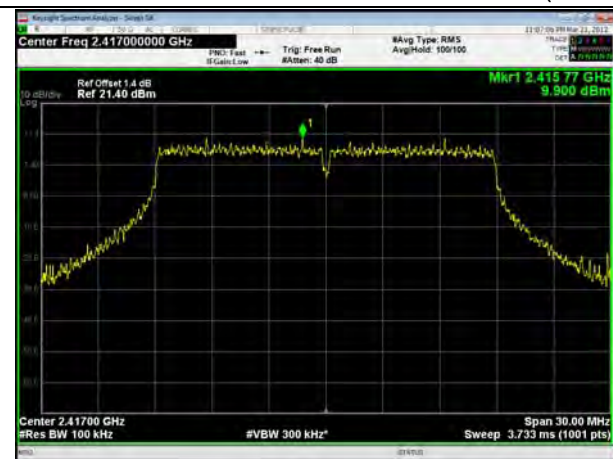




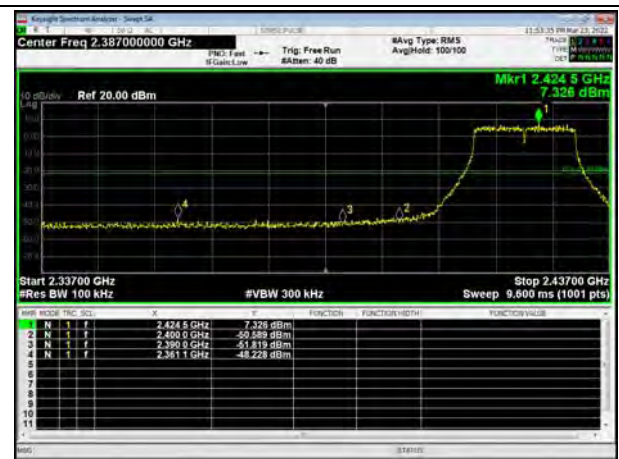
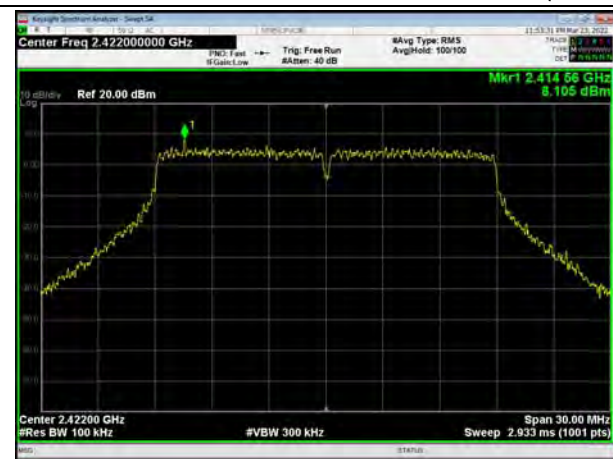
802.11n(HT20), Channel No. 1



802.11n(HT20), Channel No. 2

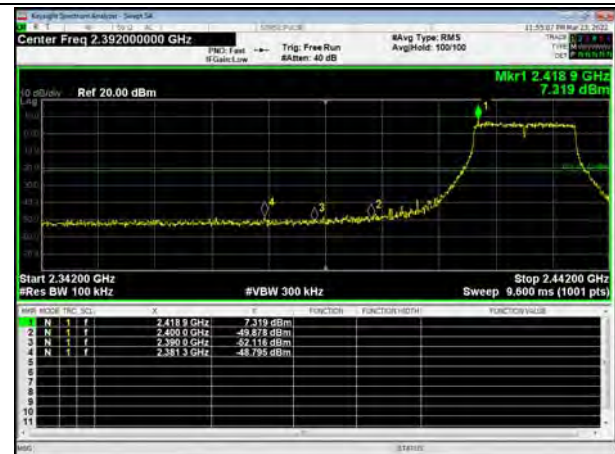
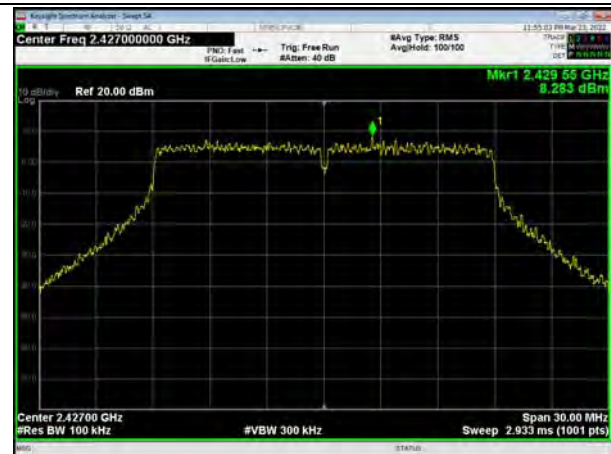


802.11n(HT20), Channel No. 3





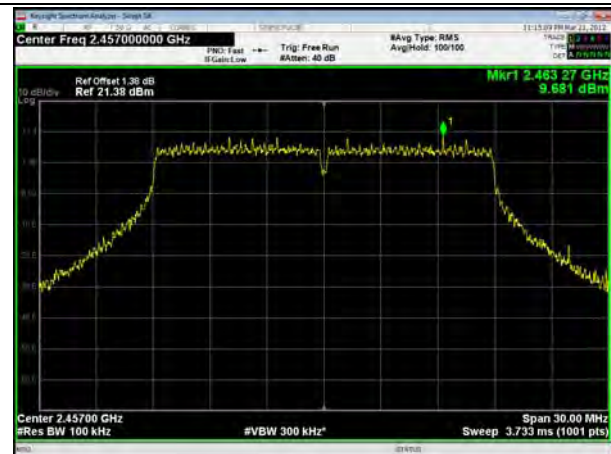
802.11n(HT20), Channel No. 4



802.11n(HT20), Channel No. 9



802.11n(HT20), Channel No. 10





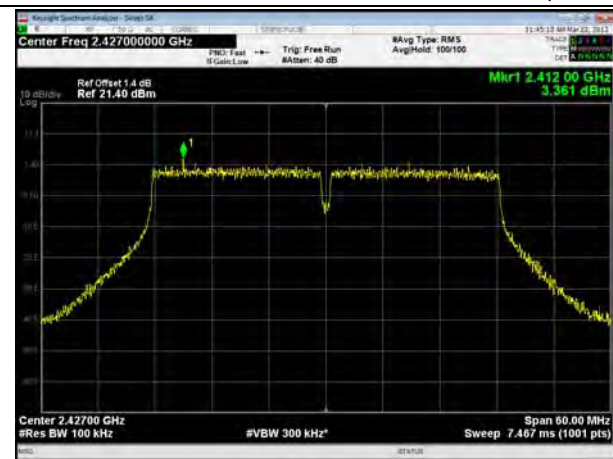
802.11n(HT20), Channel No. 11



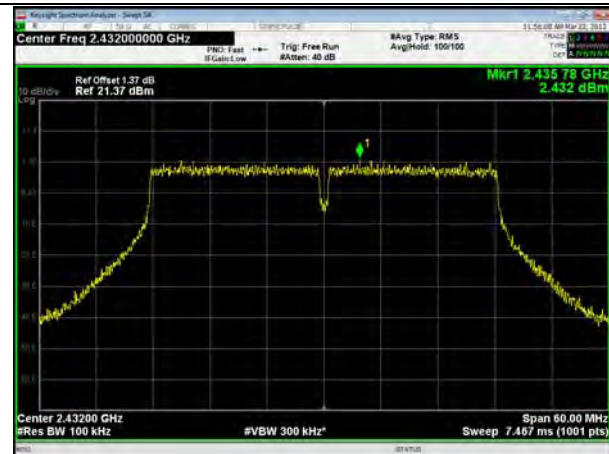
802.11n(HT40), Channel No. 3



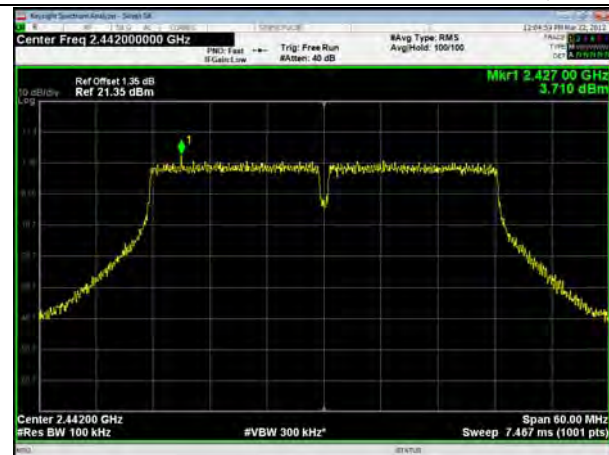
802.11n(HT40), Channel No. 4



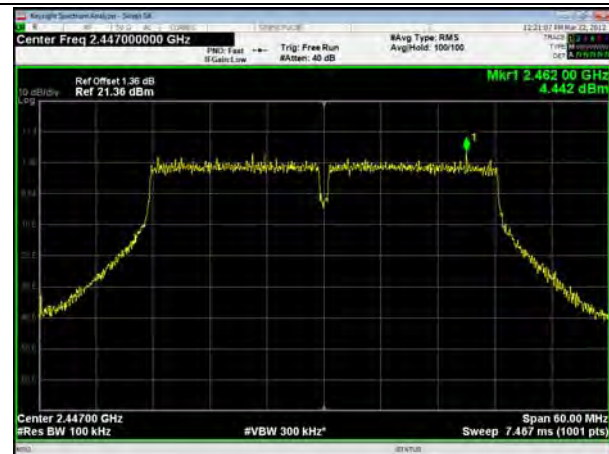
802.11n(HT40), Channel No. 5



802.11n(HT40), Channel No. 7



802.11n(HT40), Channel No. 8

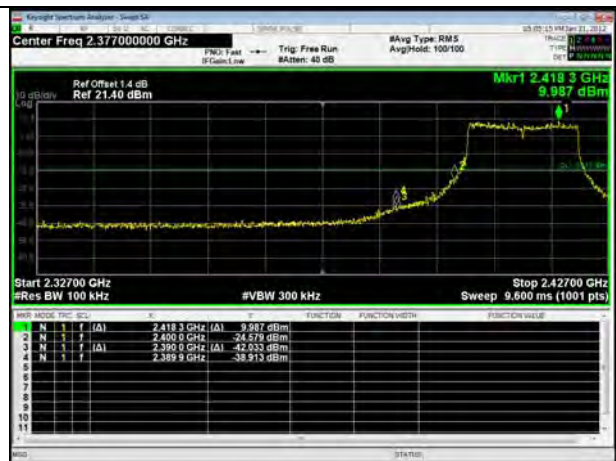




802.11n(HT40), Channel No. 9



802.11ax(HE20), Channel No. 1



802.11ax(HE20), Channel No. 2

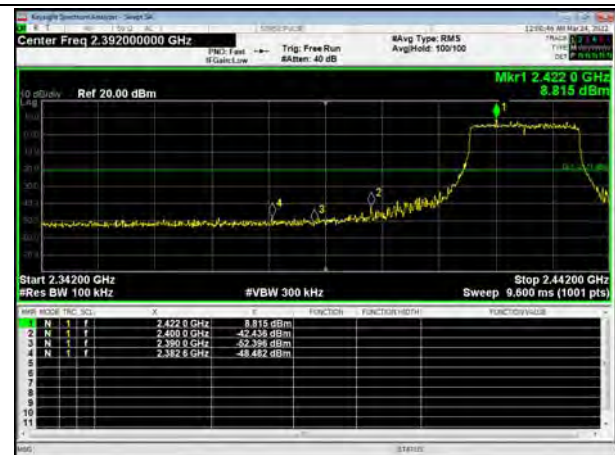




802.11ax(HE20), Channel No. 3



802.11ax(HE20), Channel No. 4

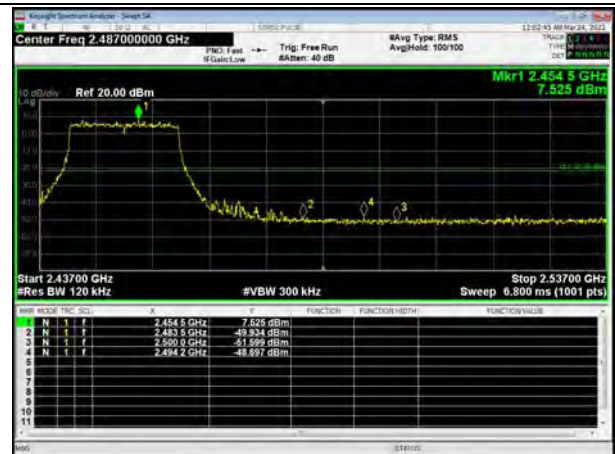


802.11ax(HE20), Channel No. 8





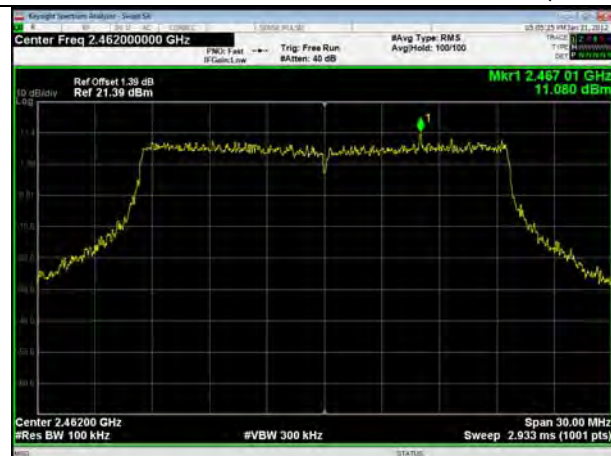
802.11ax(HE20), Channel No. 9



802.11ax(HE20), Channel No. 10



802.11ax(HE20), Channel No. 11





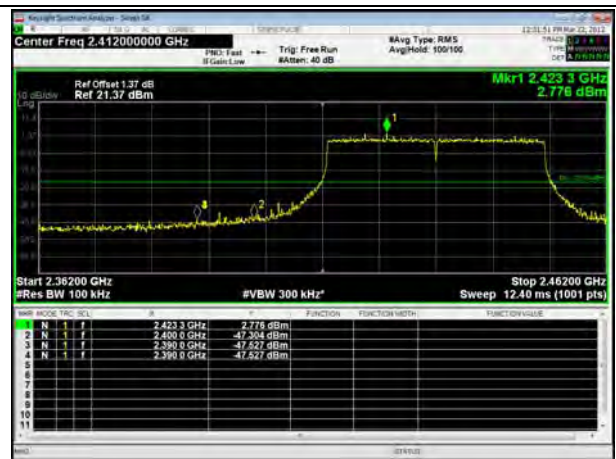
802. 11ax(HE40), Channel No. 3



802. 11ax(HE40), Channel No. 4

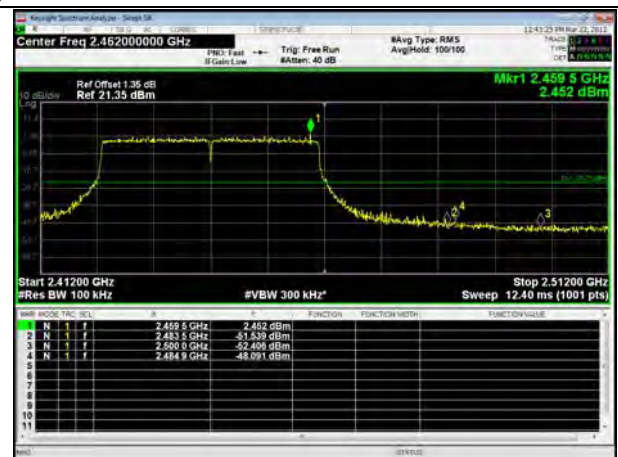


802. 11ax(HE40), Channel No. 5





802. 11ax(HE40), Channel No. 7



802. 11ax(HE40), Channel No. 8



802. 11ax(HE40), Channel No. 9



5.4. Power Spectral Density

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

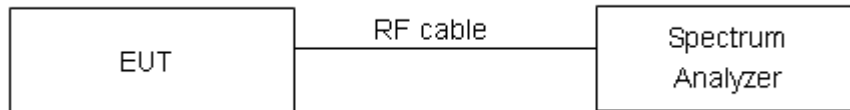
During the process of the testing, The EUT was connected to Spectrum Analyzer with a known loss. The EUT is max power transmission with proper modulation.

- Set instrument center frequency to DTS channel center frequency
 - Set span to at least 1.5 times the OBW
 - Set RBW to: $3\text{kHz} \leq \text{RBW} \leq 100\text{kHz}$
 - Set VBW $\geq [3 \times \text{RBW}]$
 - Detector=power averaging (rms) or sample detector (when rms not available)
 - Ensure that the number of measurement points in the sweep $2[2 \times \text{span}/\text{RBW}]$
 - Sweep time auto couple
 - Employ trace averaging (rms) mode over a minimum of 100 traces
 - Use the peak marker function to determine the maximum amplitude level.
 - If the measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced)
-
- Measure the duty cycle (D) of the transmitter output signal as described in 11.6
 - Set instrument center frequency to DTS channel center frequency
 - Set span to at least 1.5 times the OBW
 - Set RBW to: $3\text{kHz} \leq \text{RBW} \leq 100\text{Kh}$
 - Set VBW $\geq [3 \times \text{RBW}]$
 - Detector= power averaging (rms) or sample detector (when rms not available)
 - Ensure that the number of measurement points in the sweep $2[2 \times \text{span}/\text{RBW}]$
 - Sweep time =auto couple
 - Do not use sweep triggering; allow sweep to "free run"
 - Employ trace averaging (rms) mode over a minimum of 100 traces
 - Use the peak marker function to determine the maximum amplitude level
 - Add $[10 \log(1/ D)]$, where D is the duty cycle measured in step a), to the measured PSD to compute the average PSD during the actual transmission time

m) If measured value exceeds requirement specified by regulatory agency then reduce RBW (but no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced)

The conducted Power is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

Test setup



Limits

Rule Part 15.247(e) specifies that” For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. ”

Limits	$\leq 8 \text{ dBm} / 3\text{kHz}$
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Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

**Test Results:****INPAQ****With Beamforming**

Test Mode	Channel Number	Power Spectral Density								Total PSD	Limit (dBm / 3kHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4				
		Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	(dBm / 3kHz)		
802.11b	2412	0.51	-6.88	-0.78	-8.17	1.30	-6.09	0.97	-6.42	-0.80	8.00	PASS
	2437	0.84	-6.55	0.02	-7.37	1.39	-6.00	0.73	-6.66	-0.59	8.00	PASS
	2462	0.86	-6.53	-0.66	-8.05	1.62	-5.77	0.75	-6.64	-0.65	8.00	PASS
802.11g	2412	-4.38	-14.19	-4.46	-14.27	-3.64	-13.45	-4.71	-14.52	-8.07	8.00	PASS
	2417	-2.99	-12.80	-3.13	-12.94	-2.19	-11.47	-2.84	-12.12	-6.27	8.00	PASS
	2422	-1.74	-11.55	-2.56	-12.37	-1.15	-10.43	-1.83	-11.11	-5.29	8.00	PASS
	2437	-1.22	-11.03	-2.03	-11.84	-0.75	-10.56	-1.26	-11.07	-5.08	8.00	PASS
	2457	-1.75	-11.56	-2.64	-12.45	-0.97	-10.78	-1.75	-11.56	-5.53	8.00	PASS
	2462	-4.70	-14.51	-4.39	-14.20	-3.47	-13.28	-4.50	-14.31	-8.03	8.00	PASS
802.11n HT20	2412	-4.89	-14.17	-5.03	-14.31	-4.48	-13.76	-5.44	-14.72	-8.21	8.00	PASS
	2417	-2.70	-11.98	-3.04	-12.32	-2.00	-11.28	-2.88	-12.16	-5.90	8.00	PASS
	2437	-1.74	-11.02	-2.88	-12.16	-1.43	-10.71	-1.64	-10.92	-5.15	8.00	PASS
	2457	-3.65	-12.93	-3.77	-13.05	-2.77	-12.05	-3.81	-13.09	-6.74	8.00	PASS
	2462	-5.43	-14.71	-4.98	-14.26	-4.32	-13.60	-5.04	-14.32	-8.18	8.00	PASS
802.11n HT40	2422	-8.83	-18.11	-8.93	-18.21	-7.91	-17.19	-9.12	-18.40	-11.93	8.00	PASS
	2427	-9.09	-18.37	-9.60	-18.88	-8.82	-18.10	-9.42	-18.70	-12.48	8.00	PASS
	2432	-9.62	-18.90	-10.18	-19.46	-8.50	-17.78	-9.39	-18.67	-12.64	8.00	PASS
	2437	-7.82	-17.10	-7.99	-17.27	-7.01	-16.29	-7.28	-16.56	-10.77	8.00	PASS
	2442	-8.55	-17.83	-8.73	-18.01	-7.34	-16.62	-8.49	-17.77	-11.50	8.00	PASS
	2447	-8.07	-17.35	-8.97	-18.25	-7.67	-16.95	-8.23	-17.51	-11.47	8.00	PASS
	2452	-8.15	-17.43	-8.62	-17.90	-7.77	-17.05	-8.57	-17.85	-11.52	8.00	PASS
802.11ax HE20	2412	-8.32	-17.60	-8.50	-17.83	-7.63	-16.96	-8.22	-17.55	-11.45	8.00	PASS
	2417	-4.89	-14.17	-5.59	-14.92	-4.02	-13.35	-5.07	-14.40	-8.15	8.00	PASS
	2437	-3.36	-12.69	-4.14	-13.47	-2.95	-12.28	-3.04	-12.37	-6.65	8.00	PASS
	2457	-5.63	-14.96	-6.38	-15.71	-4.70	-14.03	-5.58	-14.91	-8.84	8.00	PASS
	2462	-7.66	-16.99	-7.67	-17.00	-6.61	-15.94	-7.36	-16.69	-10.61	8.00	PASS
802.11ax HE40	2422	-10.17	-19.50	-10.30	-19.63	-9.27	-18.60	-10.39	-19.72	-13.32	8.00	PASS
	2427	-10.76	-20.09	-11.46	-20.79	-10.09	-19.42	-10.97	-20.30	-14.10	8.00	PASS
	2432	-9.37	-18.70	-10.45	-19.78	-9.22	-18.55	-9.94	-19.27	-13.03	8.00	PASS
	2437	-9.16	-18.49	-9.36	-18.69	-8.43	-17.76	-9.53	-18.86	-12.41	8.00	PASS



	2442	-9.81	-19.14	-10.38	-19.71	-9.05	-18.38	-9.93	-19.26	-13.08	8.00	PASS
	2447	-9.47	-18.80	-10.06	-19.39	-9.08	-18.41	-9.88	-19.21	-12.92	8.00	PASS
	2452	-10.03	-19.36	-10.27	-19.60	-9.30	-18.63	-10.35	-19.68	-13.28	8.00	PASS

Note: 1. Note: PSD = Read Value + Duty cycle correction factor + $10 \cdot \log_{10}(3/30)$

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a), the power spectral density = $10 \log(10^{(\text{PSD antenna1 in dBm}/10)} + 10^{(\text{PSD antenna2 in dBm}/10)} + 10^{(\text{PSD antenna3 in dBm}/10)} + 10^{(\text{PSD antenna4 in dBm}/10)})$

3. For 2400MHz, the manufacturer declared that the directional gain = 5.16dBi < 6dBi. So the PSD limit is 8dBm.

For 2400MHz, the manufacturer declared that the directional gain = 5.27dBi < 6dBi. So the PSD limit is 8dBm.

For 2400MHz, the manufacturer declared that the directional gain = 5.38dBi < 6dBi. So the PSD limit is 8dBm.



MIMO

Test Mode	Channel Number	Power Spectral Density								Total PSD	Limit (dBm / 3kHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4				
		Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	(dBm / 3kHz)		
802.11b	2412	-1.33	-8.72	-0.93	-8.32	-0.23	-7.62	-0.42	-7.81	-2.07	8.00	PASS
	2437	-1.59	-8.98	-0.65	-8.04	-0.57	-7.96	-0.85	-8.24	-2.26	8.00	PASS
	2462	-0.90	-8.29	-1.11	-8.50	-0.79	-8.18	-0.52	-7.91	-2.19	8.00	PASS
802.11g	2412	-4.29	-14.10	-4.76	-14.57	-3.43	-13.24	-4.29	-14.10	-7.96	8.00	PASS
	2417	-2.64	-12.45	-3.22	-13.03	-1.87	-11.68	-3.05	-12.86	-6.45	8.00	PASS
	2422	-1.20	-11.01	-1.02	-10.83	-0.28	-10.09	-1.11	-10.92	-4.68	8.00	PASS
	2437	-1.99	-11.80	-1.28	-11.09	-1.89	-11.70	-1.77	-11.58	-5.51	8.00	PASS
	2457	-1.47	-10.75	-1.33	-11.14	0.16	-9.65	-0.67	-10.48	-4.45	8.00	PASS
	2462	-4.54	-14.35	-4.59	-14.40	-3.44	-13.25	-4.33	-14.14	-7.99	8.00	PASS
802.11n HT20	2412	-5.41	-14.69	-5.41	-14.69	-4.35	-13.63	-5.12	-14.40	-8.31	8.00	PASS
	2417	-2.64	-11.92	-2.14	-11.42	-1.09	-10.37	-1.61	-10.89	-5.09	8.00	PASS
	2437	-2.62	-11.90	-2.10	-11.38	-2.24	-11.52	-2.38	-11.66	-5.59	8.00	PASS
	2457	-1.80	-11.08	-1.54	-10.82	-0.89	-10.17	-1.00	-10.28	-4.55	8.00	PASS
	2462	-5.26	-14.54	-5.50	-14.78	-3.81	-13.09	-5.07	-14.35	-8.12	8.00	PASS
802.11n HT40	2422	-9.24	-18.52	-8.62	-17.90	-7.93	-17.21	-9.26	-18.54	-11.99	8.00	PASS
	2427	-7.82	-17.10	-8.85	-18.13	-6.92	-16.20	-8.63	-17.91	-11.25	8.00	PASS
	2432	-8.51	-17.79	-8.75	-18.03	-7.75	-17.03	-8.47	-17.75	-11.61	8.00	PASS
	2437	-7.55	-16.83	-7.98	-17.26	-6.86	-16.14	-7.80	-17.08	-10.79	8.00	PASS
	2442	-4.48	-13.76	-4.67	-13.95	-4.35	-13.63	-3.96	-13.24	-7.62	8.00	PASS
	2447	-6.21	-15.49	-6.04	-15.32	-5.77	-15.05	-6.52	-15.80	-9.39	8.00	PASS
	2452	-8.56	-17.84	-8.77	-18.05	-7.09	-16.37	-8.55	-17.83	-11.45	8.00	PASS
802.11ax HE20	2412	-8.31	-17.59	-8.48	-17.81	-7.70	-17.03	-8.61	-17.94	-11.56	8.00	PASS
	2417	-3.08	-12.36	-3.37	-12.70	-2.43	-11.76	-2.78	-12.11	-6.20	8.00	PASS
	2437	-3.39	-12.72	-3.17	-12.50	-3.34	-12.67	-3.27	-12.60	-6.60	8.00	PASS
	2457	-2.95	-12.28	-3.28	-12.61	-2.09	-11.42	-2.69	-12.02	-6.04	8.00	PASS
	2462	-7.57	-16.90	-7.71	-17.04	-6.44	-15.77	-7.20	-16.53	-10.51	8.00	PASS
802.11ax HE40	2422	-10.56	-19.89	-10.29	-19.62	-9.37	-18.70	-10.43	-19.76	-13.45	8.00	PASS
	2427	-9.81	-19.14	-10.27	-19.60	-9.25	-18.58	-9.84	-19.17	-13.09	8.00	PASS
	2432	-7.71	-17.04	-7.92	-17.25	-7.12	-16.45	-7.87	-17.20	-10.96	8.00	PASS
	2437	-9.27	-18.60	-9.39	-18.72	-8.21	-17.54	-9.16	-18.49	-12.29	8.00	PASS
	2442	-5.78	-15.11	-6.20	-15.53	-5.62	-14.95	-5.66	-14.99	-9.12	8.00	PASS
	2447	-7.78	-17.11	-8.02	-17.35	-7.03	-16.36	-7.81	-17.14	-10.96	8.00	PASS



	2452	-10.44	-19.77	-10.40	-19.73	-9.27	-18.60	-10.40	-19.73	-13.41	8.00	PASS
Note: 1. Note:PSD=Read Value+Duty cycle correction factor+10*LOG10(3/30) 2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a),the power spectral density=$10\log(10^{(\text{PSD antenna1 in dBm}/10)}+10^{(\text{PSD antenna2 in dBm}/10)}+10^{(\text{PSD antenna3 in dBm}/10)}+10^{(\text{PSD antenna4 in dBm}/10)})$ 3. For 2400MHz, the manufacturer declared that the directional gain = 5.16dBi<6dBi. So the PSD limit is 8dBm. For 2400MHz, the manufacturer declared that the directional gain = 5.27dBi<6dBi. So the PSD limit is 8dBm. For 2400MHz, the manufacturer declared that the directional gain = 5.38dBi<6dBi. So the PSD limit is 8dBm.												

**Signal Plus****With Beamforming**

Test Mode	Channel Number	Power Spectral Density								Total PSD	Limit (dBm / 3kHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4				
		Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	(dBm / 3kHz)		
802.11b	2412	0.51	-6.88	-0.78	-8.17	1.30	-6.09	0.97	-6.42	-0.80	8.00	PASS
	2437	-4.34	-11.73	-4.21	-11.60	-2.75	-10.14	-3.10	-10.49	-4.91	8.00	PASS
	2462	-2.36	-9.75	-1.94	-9.33	-1.56	-8.95	-1.43	-8.82	-3.17	8.00	PASS
802.11g	2412	-3.23	-13.04	-3.70	-13.51	-2.23	-12.04	-4.04	-13.85	-7.04	8.00	PASS
	2417	-2.96	-12.77	-3.08	-12.89	-2.07	-11.88	-3.19	-13.00	-7.75	8.00	PASS
	2422	-1.50	-11.31	-2.44	-12.25	-1.07	-10.88	-2.13	-11.94	-6.58	8.00	PASS
	2427	-0.90	-10.71	-1.29	-11.10	-0.24	-10.05	-0.27	-10.08	-5.50	8.00	PASS
	2437	-1.22	-11.03	-2.03	-11.84	-0.75	-10.56	-1.26	-11.07	-5.08	8.00	PASS
	2452	-1.06	-10.87	-1.38	-11.19	-0.14	-9.95	-0.72	-10.53	-5.66	8.00	PASS
	2457	-1.89	-11.70	-1.99	-11.80	-1.16	-10.97	-1.76	-11.57	-6.63	8.00	PASS
	2462	-3.15	-12.96	-3.40	-13.21	-2.53	-12.34	-3.47	-13.28	-6.91	8.00	PASS
802.11n HT20	2412	-4.28	-13.56	-4.35	-13.63	-3.59	-12.87	-4.23	-13.51	-7.36	8.00	PASS
	2417	-2.66	-11.94	-3.23	-12.51	-1.88	-11.16	-2.75	-12.03	-6.92	8.00	PASS
	2422	-2.95	-12.23	-3.24	-12.52	-1.74	-11.02	-2.76	-12.04	-6.96	8.00	PASS
	2427	-1.65	-10.93	-2.20	-11.48	-1.16	-10.44	-1.54	-10.82	-5.96	8.00	PASS
	2437	-1.74	-11.02	-2.88	-12.16	-1.43	-10.71	-1.64	-10.92	-5.15	8.00	PASS
	2452	-1.49	-10.77	-2.00	-11.28	-0.97	-10.25	-1.46	-10.74	-5.81	8.00	PASS
	2457	-3.80	-13.08	-3.66	-12.94	-2.82	-12.10	-3.96	-13.24	-8.01	8.00	PASS
	2462	-4.64	-13.92	-4.16	-13.44	-3.23	-12.51	-4.18	-13.46	-7.28	8.00	PASS
802.11n HT40	2422	-9.97	-19.25	-9.87	-19.15	-9.50	-18.78	-9.97	-19.25	-13.08	8.00	PASS
	2427	-9.00	-18.28	-9.50	-18.78	-8.53	-17.81	-9.64	-18.92	-13.54	8.00	PASS
	2432	-9.74	-19.02	-9.63	-18.91	-8.85	-18.13	-9.57	-18.85	-13.88	8.00	PASS
	2437	-8.65	-17.93	-8.99	-18.27	-8.07	-17.35	-8.85	-18.13	-11.88	8.00	PASS
	2442	-8.34	-17.62	-9.17	-18.45	-7.69	-16.97	-8.70	-17.98	-12.73	8.00	PASS
	2447	-7.88	-17.16	-8.72	-18.00	-7.42	-16.70	-8.54	-17.82	-12.43	8.00	PASS
	2452	-8.68	-17.96	-9.08	-18.36	-7.58	-16.86	-9.05	-18.33	-11.81	8.00	PASS
802.11ax HE20	2412	-7.55	-16.83	-7.84	-17.17	-6.62	-15.95	-7.47	-16.80	-10.64	8.00	PASS
	2417	-4.85	-14.13	-5.21	-14.54	-4.11	-13.44	-5.51	-14.84	-9.33	8.00	PASS
	2422	-3.76	-13.04	-3.72	-13.05	-2.90	-12.23	-3.85	-13.18	-8.02	8.00	PASS
	2427	-2.73	-12.01	-3.20	-12.53	-2.25	-11.58	-2.88	-12.21	-7.15	8.00	PASS
	2437	-3.36	-12.69	-4.14	-13.47	-2.95	-12.28	-3.04	-12.37	-6.65	8.00	PASS



	2447	-2.74	-12.07	-3.25	-12.58	-2.19	-11.52	-2.78	-12.11	-7.12	8.00	PASS
	2452	-3.91	-13.24	-4.01	-13.34	-2.88	-12.21	-3.82	-13.15	-8.07	8.00	PASS
	2457	-5.88	-15.21	-6.32	-15.65	-4.83	-14.16	-5.94	-15.27	-10.07	8.00	PASS
	2462	-7.52	-16.85	-7.80	-17.13	-6.58	-15.91	-7.34	-16.67	-10.59	8.00	PASS
802.11ax HE40	2422	-11.65	-20.98	-11.55	-20.88	-10.71	-20.04	-11.65	-20.98	-14.68	8.00	PASS
	2427	-10.65	-19.98	-11.08	-20.41	-10.14	-19.47	-10.84	-20.17	-15.09	8.00	PASS
	2432	-9.91	-19.24	-10.33	-19.66	-9.01	-18.34	-10.06	-19.39	-14.20	8.00	PASS
	2437	-10.28	-19.61	-10.44	-19.77	-9.24	-18.57	-10.53	-19.86	-13.40	8.00	PASS
	2442	-9.86	-19.19	-10.01	-19.34	-9.06	-18.39	-9.85	-19.18	-14.13	8.00	PASS
	2447	-9.92	-19.25	-10.09	-19.42	-8.93	-18.26	-10.01	-19.34	-14.15	8.00	PASS
	2452	-11.32	-20.65	-11.37	-20.70	-10.77	-20.10	-11.29	-20.62	-14.49	8.00	PASS

Note: 1. Note: PSD = Read Value + Duty cycle correction factor + $10 \cdot \log_{10}(3/30)$

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a), the power spectral density = $10 \log_{10}(10^{(\text{PSD antenna1 in dBm/10})} + 10^{(\text{PSD antenna2 in dBm/10})} + 10^{(\text{PSD antenna3 in dBm/10})} + 10^{(\text{PSD antenna4 in dBm/10})})$

3. For 2400MHz, the manufacturer declared that the directional gain = 5.00dBi < 6dBi. So the PSD limit is 8dBm.

For 2400MHz, the manufacturer declared that the directional gain = 5.30dBi < 6dBi. So the PSD limit is 8dBm.

For 2400MHz, the manufacturer declared that the directional gain = 5.50dBi < 6dBi. So the PSD limit is 8dBm.



MIMO

Test Mode	Channel Number	Power Spectral Density								Total PSD	Limit (dBm / 3kHz)	Conclusion
		Antenna 1		Antenna 2		Antenna 3		Antenna 4				
		Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	Read Value (dBm / 30kHz)	Power Spectral Density (dBm / 3kHz)	(dBm / 3kHz)		
802.11b	2412	-1.33	-8.72	-0.93	-8.32	-0.23	-7.62	-0.42	-7.81	-2.07	8.00	PASS
	2437	-4.34	-11.73	-4.49	-11.88	-3.15	-10.54	-3.83	-11.22	-5.29	8.00	PASS
	2462	-1.94	-9.33	-1.22	-8.61	-0.71	-8.10	-1.79	-9.18	-2.75	8.00	PASS
802.11g	2412	-3.49	-13.30	-3.41	-13.22	-2.65	-12.46	-3.85	-13.66	-7.12	8.00	PASS
	2417	-2.92	-12.73	-3.14	-12.95	-2.24	-12.05	-2.95	-12.76	-6.59	8.00	PASS
	2422	-1.85	-11.66	-2.40	-12.21	-1.12	-10.93	-2.04	-11.85	-5.62	8.00	PASS
	2427	-1.13	-10.94	-1.57	-11.38	-0.23	-10.04	-0.80	-10.61	-4.69	8.00	PASS
	2437	-1.99	-11.80	-1.28	-11.09	-1.89	-11.70	-1.77	-11.58	-5.51	8.00	PASS
	2452	-1.08	-10.89	-1.12	-10.93	-0.44	-9.72	-0.82	-10.63	-4.49	8.00	PASS
	2457	-1.73	-11.54	-2.21	-12.02	-1.16	-10.44	-1.87	-11.68	-5.36	8.00	PASS
	2462	-2.94	-12.75	-3.59	-13.40	-2.83	-12.64	-3.32	-13.13	-6.95	8.00	PASS
802.11n HT20	2412	-3.94	-13.22	-4.09	-13.37	-3.49	-12.77	-4.51	-13.79	-7.25	8.00	PASS
	2417	-2.54	-11.82	-2.86	-12.14	-1.93	-11.21	-2.80	-12.08	-5.78	8.00	PASS
	2422	-2.12	-11.40	-3.02	-12.30	-2.07	-11.35	-2.48	-11.76	-5.67	8.00	PASS
	2427	-1.63	-10.91	-2.16	-11.44	-0.92	-10.20	-1.78	-11.06	-4.86	8.00	PASS
	2437	-2.62	-11.90	-2.10	-11.38	-2.24	-11.52	-2.38	-11.66	-5.59	8.00	PASS
	2452	-1.88	-11.16	-2.23	-11.51	-1.07	-10.35	-1.67	-10.95	-4.95	8.00	PASS
	2457	-3.33	-12.61	-3.78	-13.06	-2.88	-12.16	-3.72	-13.00	-6.67	8.00	PASS
	2462	-4.38	-13.66	-4.34	-13.62	-3.49	-12.77	-4.18	-13.46	-7.34	8.00	PASS
802.11n HT40	2422	-10.59	-19.87	-10.19	-19.47	-9.46	-18.74	-10.26	-19.54	-13.36	8.00	PASS
	2427	-9.38	-18.66	-9.68	-18.96	-8.85	-18.13	-9.42	-18.70	-12.58	8.00	PASS
	2432	-9.45	-18.73	-9.53	-18.81	-8.64	-17.92	-9.29	-18.57	-12.47	8.00	PASS
	2437	-8.72	-18.00	-8.91	-18.19	-7.85	-17.13	-8.65	-17.93	-11.77	8.00	PASS
	2442	-7.79	-17.07	-8.44	-17.72	-7.41	-16.69	-8.47	-17.75	-11.26	8.00	PASS
	2447	-8.51	-17.79	-8.62	-17.90	-6.94	-16.22	-8.25	-17.53	-11.28	8.00	PASS
	2452	-8.44	-17.72	-8.79	-18.07	-7.90	-17.18	-9.03	-18.31	-11.78	8.00	PASS
802.11ax HE20	2412	-7.57	-16.90	-7.52	-16.85	-6.47	-15.80	-7.51	-16.84	-10.55	8.00	PASS
	2417	-4.87	-14.20	-5.23	-14.56	-3.86	-13.19	-4.74	-14.07	-7.95	8.00	PASS
	2422	-3.84	-13.17	-4.42	-13.75	-3.17	-12.50	-3.86	-13.19	-7.11	8.00	PASS
	2427	-2.87	-12.20	-3.40	-12.73	-2.33	-11.66	-2.77	-12.10	-6.13	8.00	PASS
	2437	-3.39	-12.72	-3.17	-12.50	-3.34	-12.67	-3.27	-12.60	-6.60	8.00	PASS
	2447	-2.90	-12.23	-3.23	-12.56	-2.13	-11.46	-2.70	-12.03	-6.03	8.00	PASS



	2452	-3.65	-12.98	-4.06	-13.39	-2.85	-12.18	-3.49	-12.82	-6.80	8.00	PASS
	2457	-5.78	-15.11	-6.37	-15.70	-4.93	-14.26	-5.79	-15.12	-8.99	8.00	PASS
	2462	-7.67	-17.00	-7.45	-16.78	-6.44	-15.77	-7.43	-16.76	-10.53	8.00	PASS
802.11ax HE40	2422	-11.07	-20.40	-11.32	-20.65	-10.38	-19.71	-11.43	-20.76	-14.34	8.00	PASS
	2427	-10.54	-19.87	-11.09	-20.42	-10.18	-19.51	-11.05	-20.38	-14.01	8.00	PASS
	2432	-9.77	-19.10	-9.71	-19.04	-9.29	-18.62	-10.14	-19.47	-13.03	8.00	PASS
	2437	-10.59	-19.92	-10.28	-19.61	-9.45	-18.78	-10.27	-19.60	-13.44	8.00	PASS
	2442	-9.87	-19.20	-10.23	-19.56	-9.06	-18.39	-10.07	-19.40	-13.10	8.00	PASS
	2447	-9.82	-19.15	-10.05	-19.38	-8.83	-18.16	-9.82	-19.15	-12.92	8.00	PASS
	2452	-11.39	-20.72	-11.38	-20.71	-10.57	-19.90	-11.46	-20.79	-14.50	8.00	PASS

Note: 1. Note: PSD = Read Value + Duty cycle correction factor + $10 \cdot \log_{10}(3/30)$

2. For Total PSD, according to KDB 662911 D01 Multiple Transmitter Output v02r01 2)a), the power spectral density = $10 \log_{10}(10^{(\text{PSD antenna1 in dBm/10})} + 10^{(\text{PSD antenna2 in dBm/10})} + 10^{(\text{PSD antenna3 in dBm/10})} + 10^{(\text{PSD antenna4 in dBm/10})})$

3. For 2400MHz, the manufacturer declared that the directional gain = 5.00dBi < 6dBi. So the PSD limit is 8dBm.

For 2400MHz, the manufacturer declared that the directional gain = 5.30dBi < 6dBi. So the PSD limit is 8dBm.

For 2400MHz, the manufacturer declared that the directional gain = 5.50dBi < 6dBi. So the PSD limit is 8dBm.

INPAQ

With Beamforming Antenna 1

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437

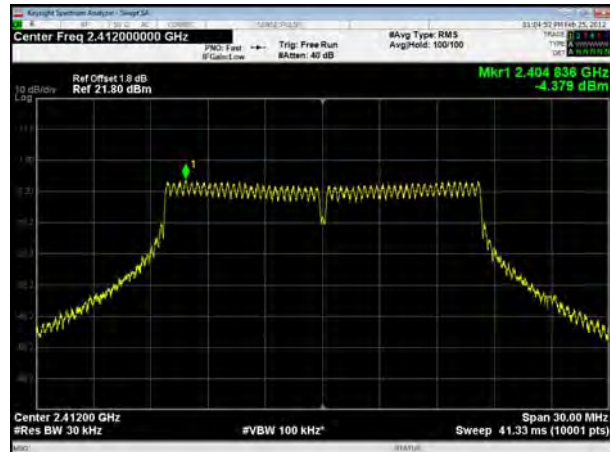


802.11b, Carrier frequency (MHz):2462

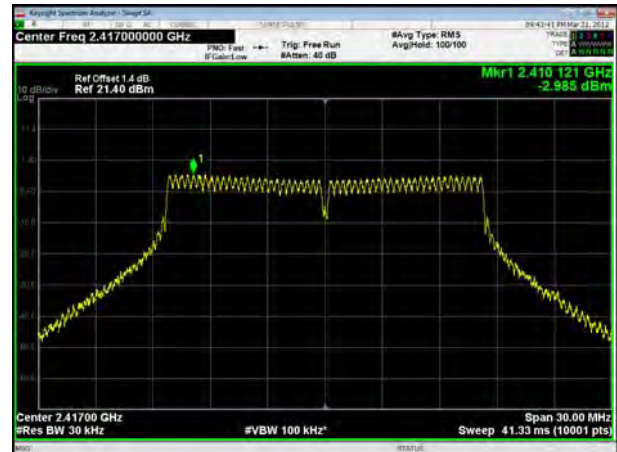




802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2417



802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2457



802.11g, Carrier frequency (MHz): 2462





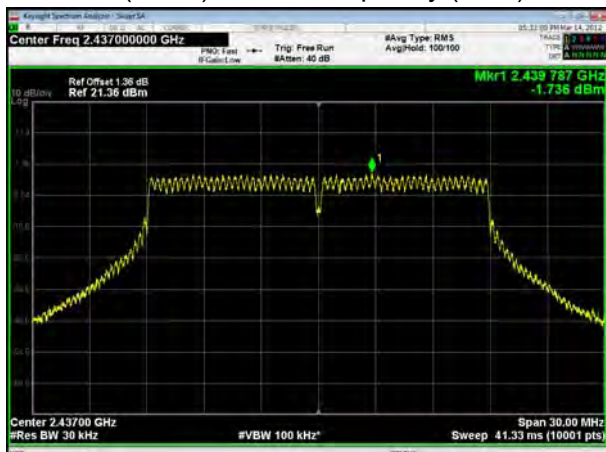
802.11n(HT20), Carrier frequency (MHz): 2412



802.11n(HT20), Carrier frequency (MHz): 2417



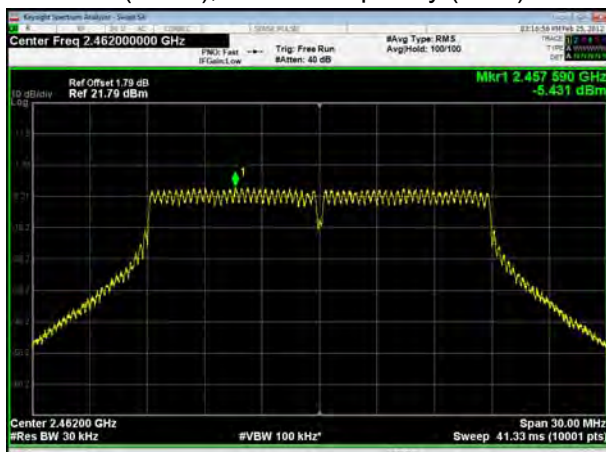
802.11n(HT20), Carrier frequency (MHz):2437



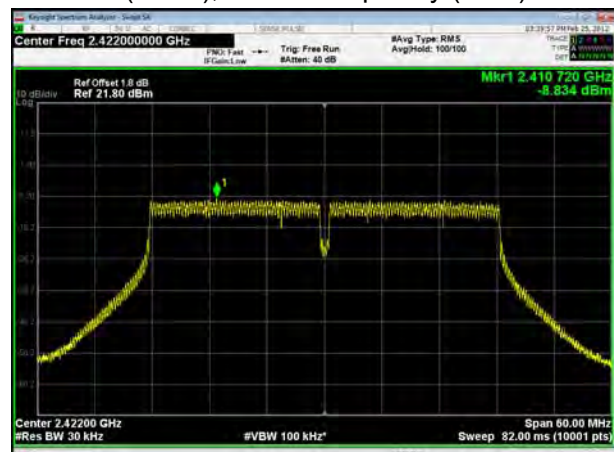
802.11n(HT20), Carrier frequency (MHz):2457



802.11n(HT20), Carrier frequency (MHz):2462



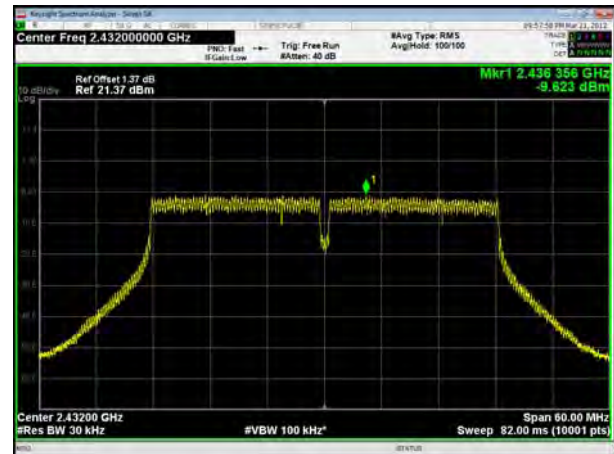
802.11n(HT40), Carrier frequency (MHz): 2422



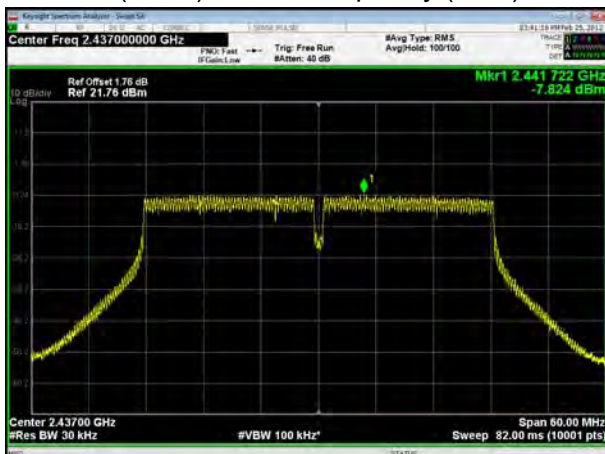
802.11n(HT40), Carrier frequency (MHz): 2427



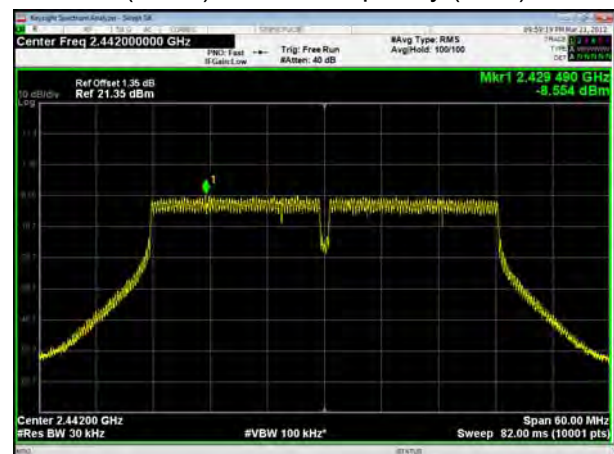
802.11n(HT40), Carrier frequency (MHz): 2432



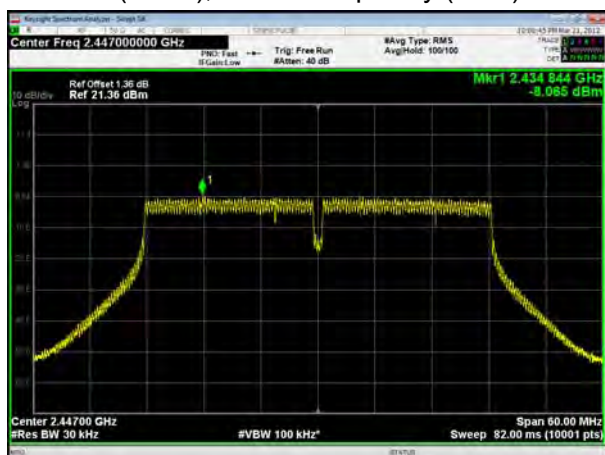
802.11n(HT40), Carrier frequency (MHz): 2437



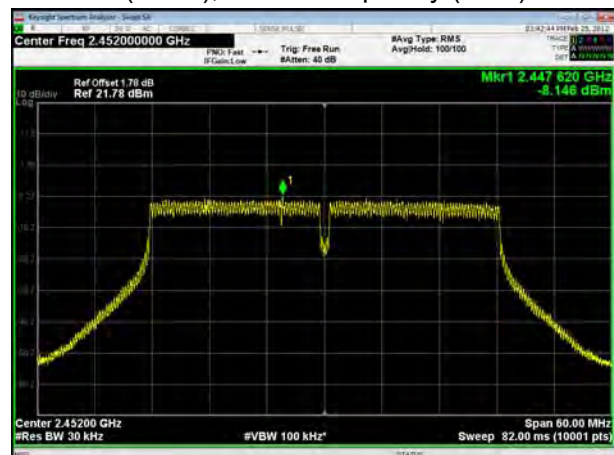
802.11n(HT40), Carrier frequency (MHz): 2442



802.11n(HT40), Carrier frequency (MHz): 2447



802.11n(HT40), Carrier frequency (MHz): 2452

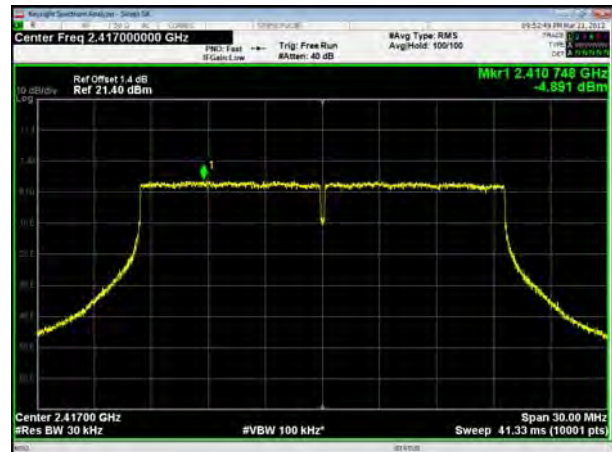




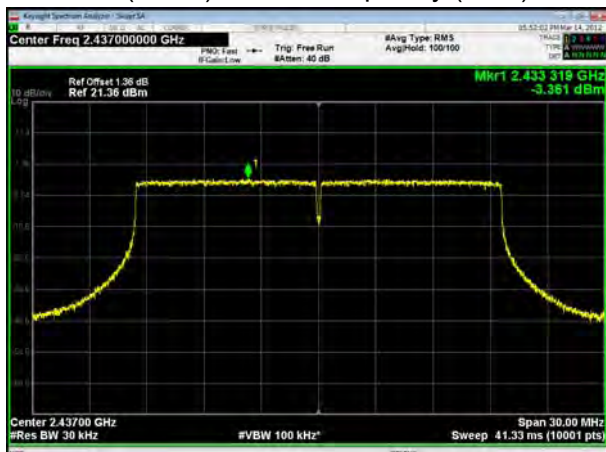
802.11ax(HE20), Carrier frequency (MHz): 2412



802.11ax(HE20), Carrier frequency (MHz): 2417



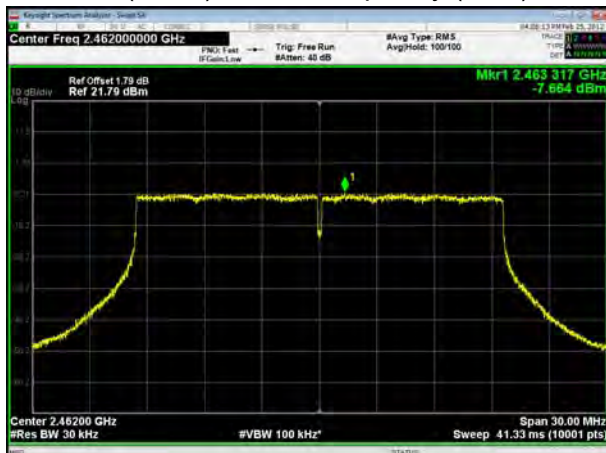
802.11ax(HE20), Carrier frequency (MHz): 2437



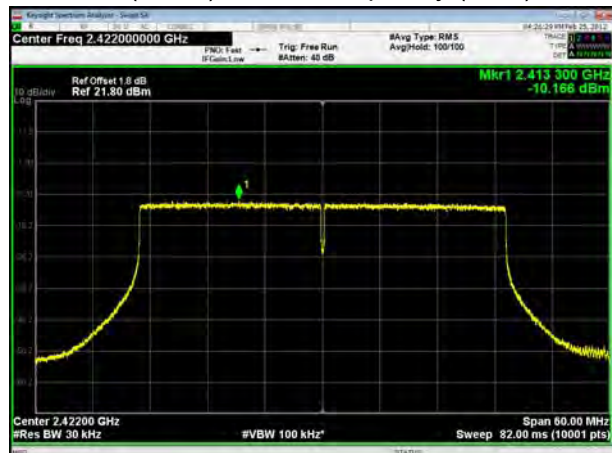
802.11ax(HE20), Carrier frequency (MHz): 2457



802.11ax(HE20), Carrier frequency (MHz): 2462

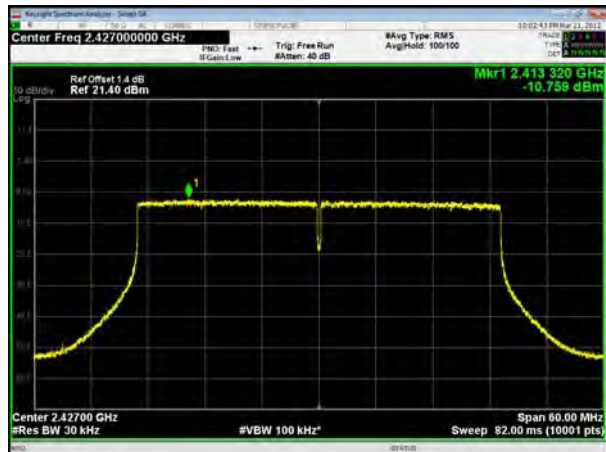


802.11ax(HE40), Carrier frequency (MHz): 2422

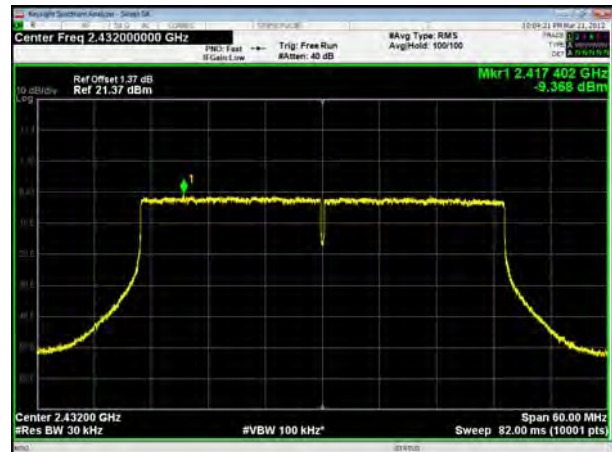




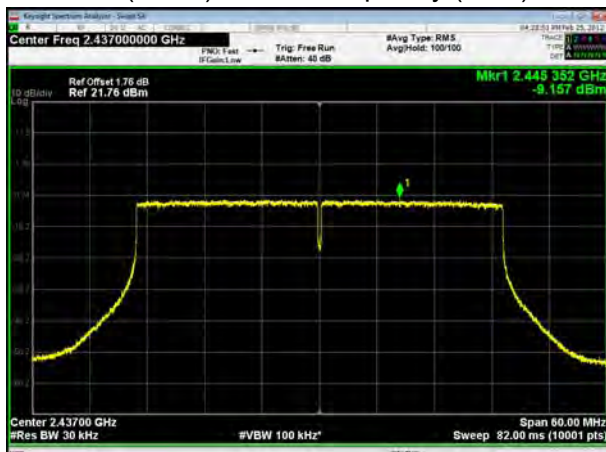
802.11ax(HE40), Carrier frequency (MHz): 2427



802.11ax(HE40), Carrier frequency (MHz): 2432



802.11ax(HE40), Carrier frequency (MHz): 2437



802.11ax(HE40), Carrier frequency (MHz): 2442



802.11ax(HE40), Carrier frequency (MHz): 2447



802.11ax(HE40), Carrier frequency (MHz): 2452



With Beamforming Antenna 2

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437

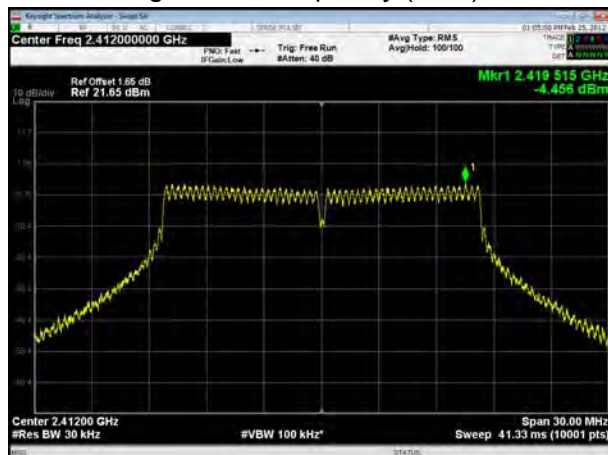


802.11b, Carrier frequency (MHz):2462





802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2417



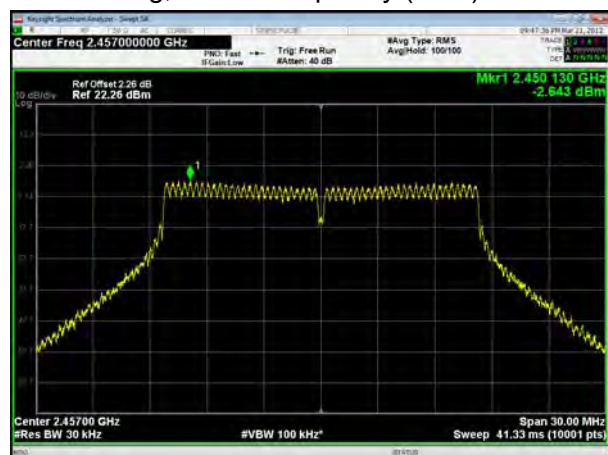
802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2457



802.11g, Carrier frequency (MHz): 2462





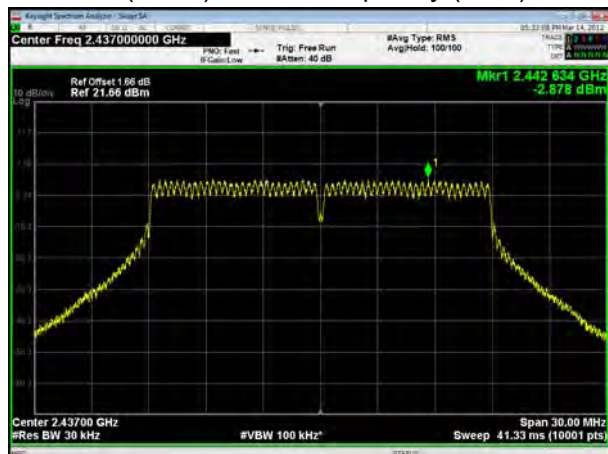
802.11n(HT20), Carrier frequency (MHz): 2412



802.11n(HT20), Carrier frequency (MHz): 2417



802.11n(HT20), Carrier frequency (MHz):2437



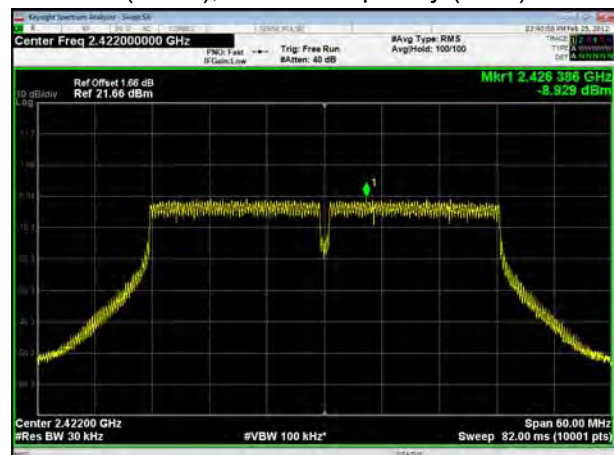
802.11n(HT20), Carrier frequency (MHz):2457



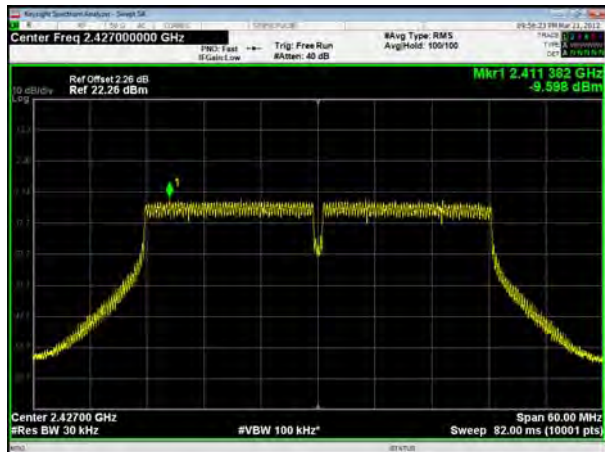
802.11n(HT20), Carrier frequency (MHz):2462



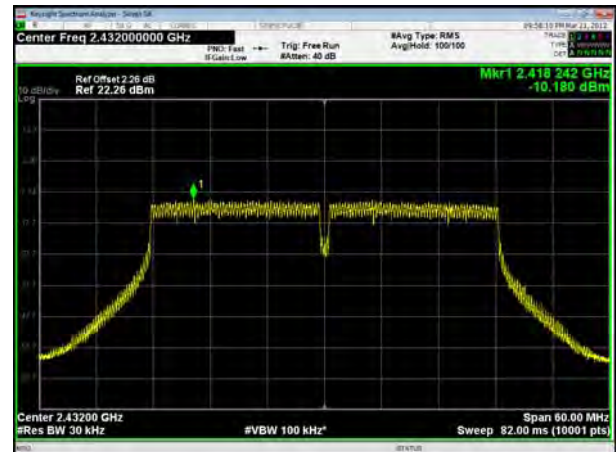
802.11n(HT40), Carrier frequency (MHz): 2422



802.11n(HT40), Carrier frequency (MHz): 2427



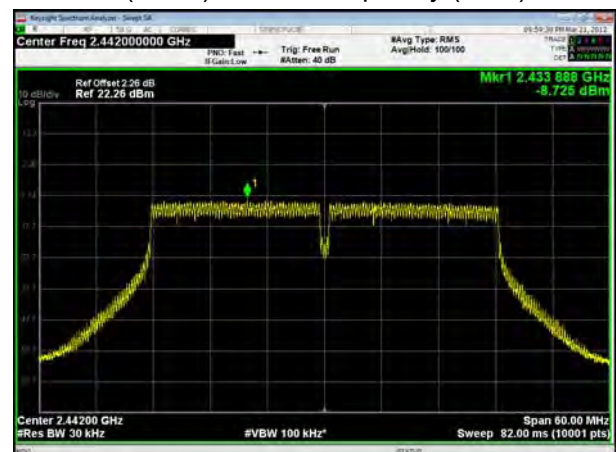
802.11n(HT40), Carrier frequency (MHz): 2432



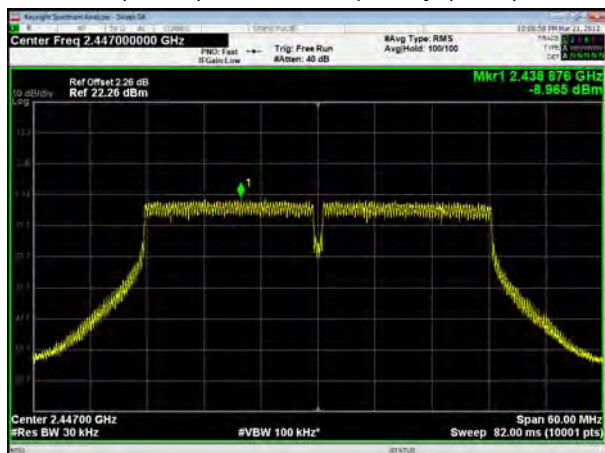
802.11n(HT40), Carrier frequency (MHz): 2437



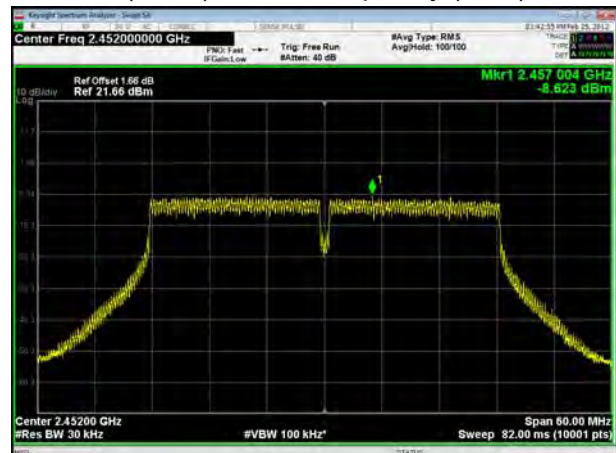
802.11n(HT40), Carrier frequency (MHz): 2442



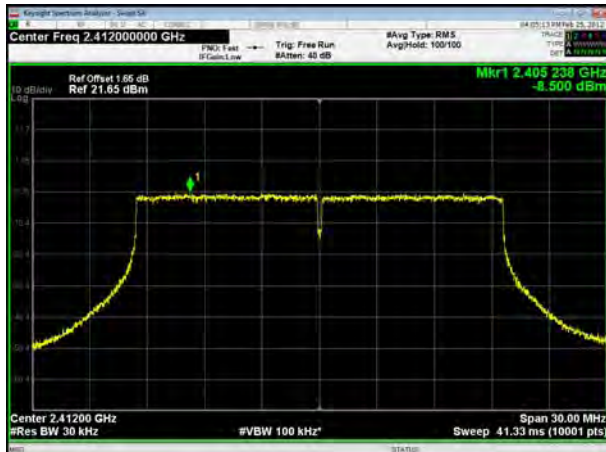
802.11n(HT40), Carrier frequency (MHz): 2447



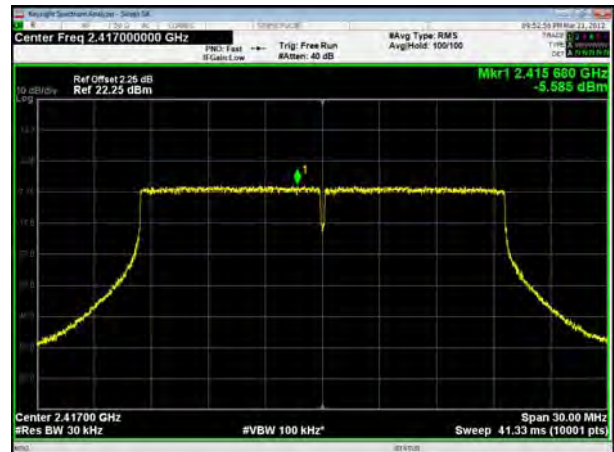
802.11n(HT40), Carrier frequency (MHz): 2452



802.11ax(HE20), Carrier frequency (MHz): 2412



802.11ax(HE20), Carrier frequency (MHz): 2417



802.11ax(HE20), Carrier frequency (MHz): 2437



802.11ax(HE20), Carrier frequency (MHz): 2457



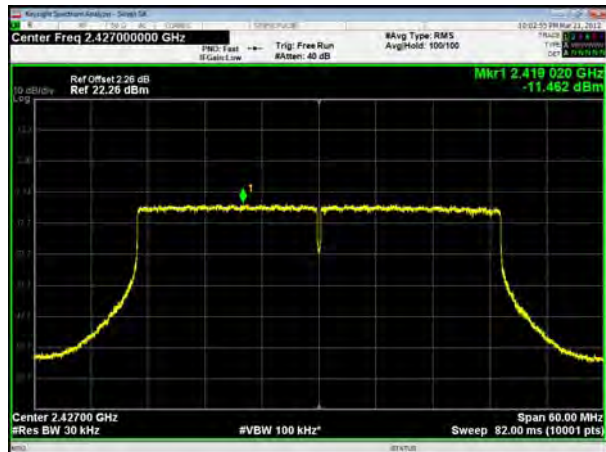
802.11ax(HE20), Carrier frequency (MHz): 2462



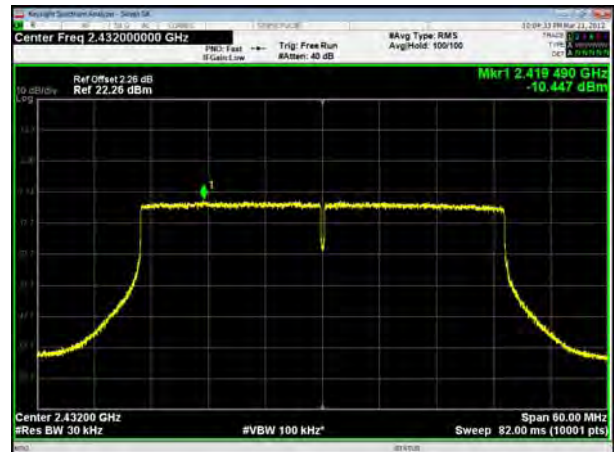
802.11ax(HE40), Carrier frequency (MHz): 2422



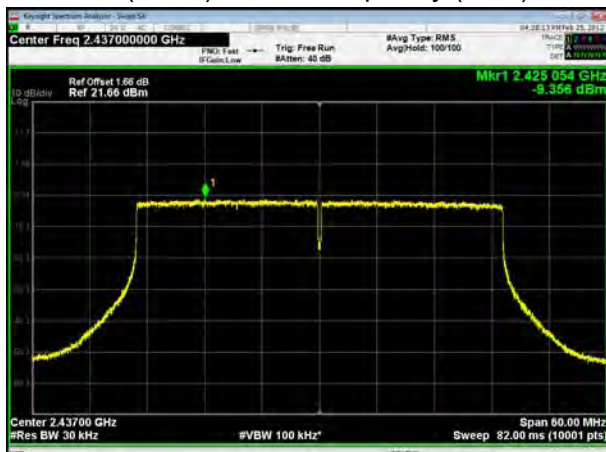
802.11ax(HE40), Carrier frequency (MHz): 2427



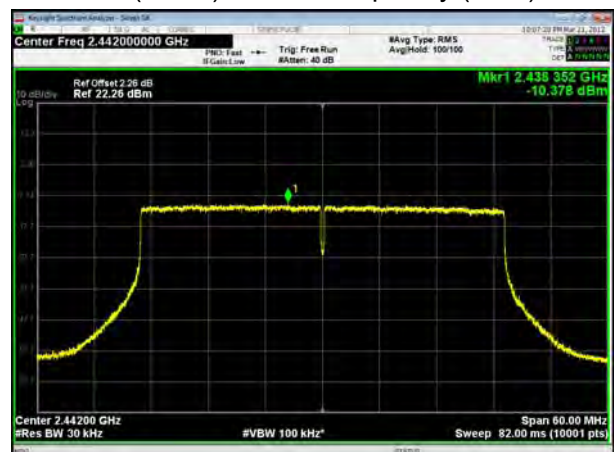
802.11ax(HE40), Carrier frequency (MHz): 2432



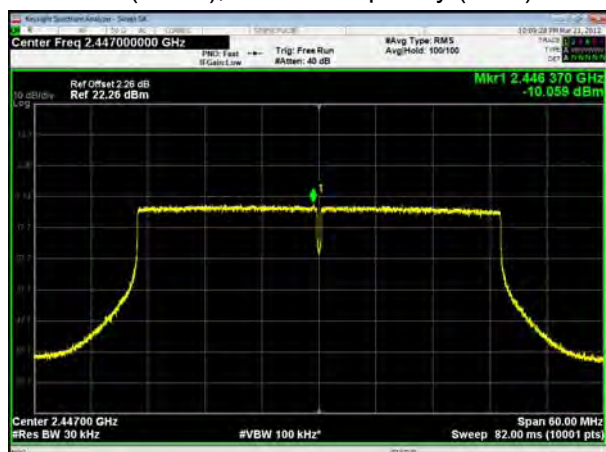
802.11ax(HE40), Carrier frequency (MHz): 2437



802.11ax(HE40), Carrier frequency (MHz):2442



802.11ax(HE40), Carrier frequency (MHz):2447



802.11ax(HE40), Carrier frequency (MHz):2452



With Beamforming Antenna 3

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437

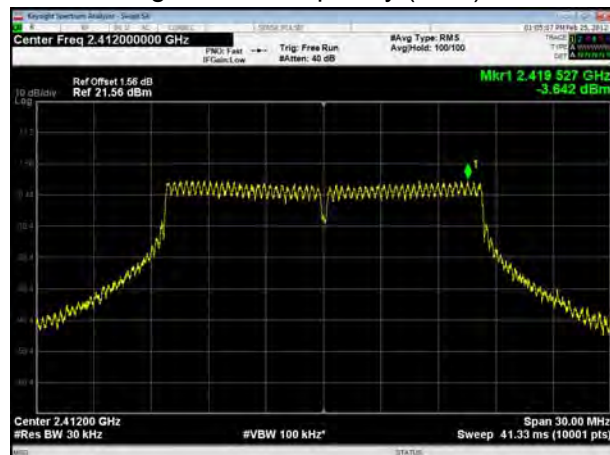


802.11b, Carrier frequency (MHz):2462





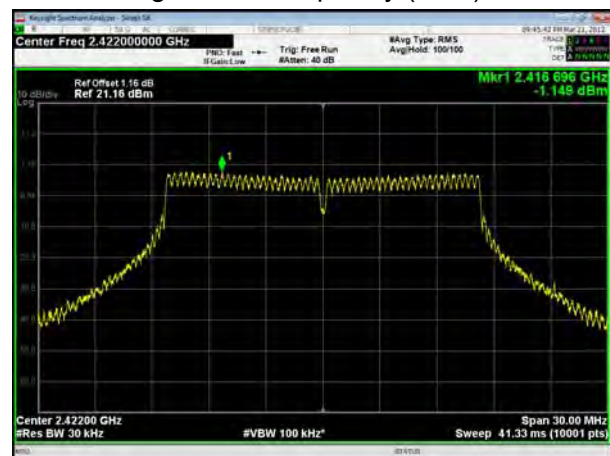
802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2417



802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2457



802.11g, Carrier frequency (MHz): 2462





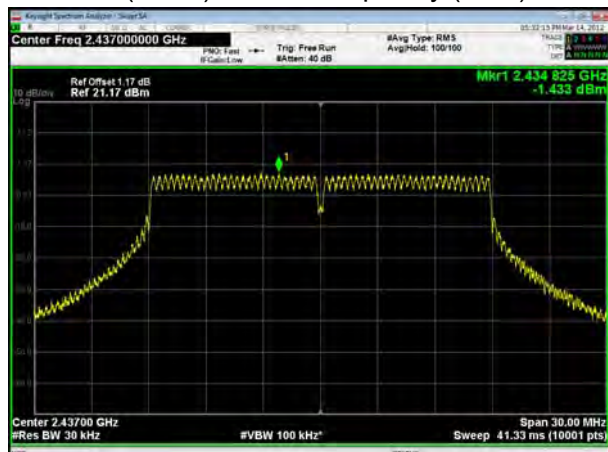
802.11n(HT20), Carrier frequency (MHz): 2412



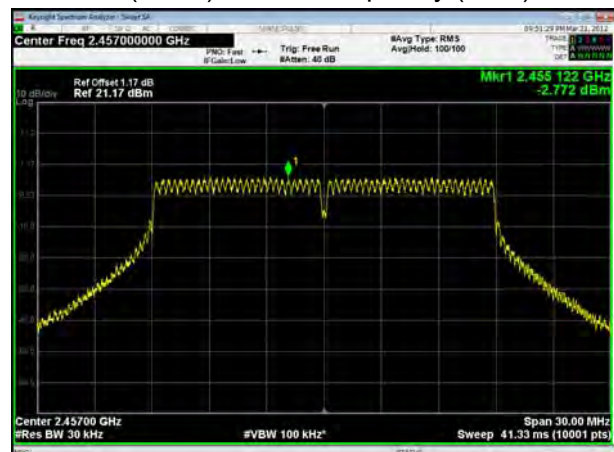
802.11n(HT20), Carrier frequency (MHz): 2417



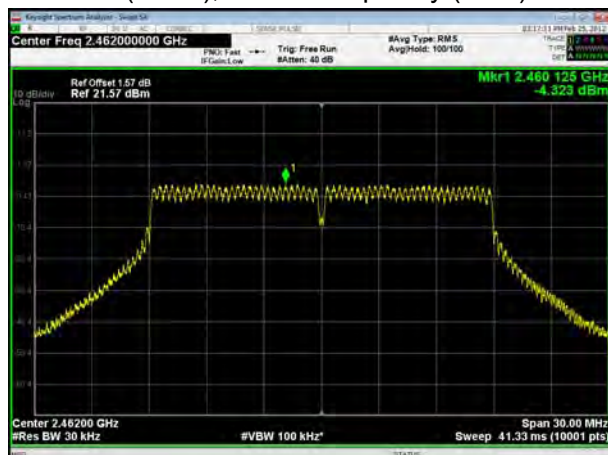
802.11n(HT20), Carrier frequency (MHz):2437



802.11n(HT20), Carrier frequency (MHz):2457



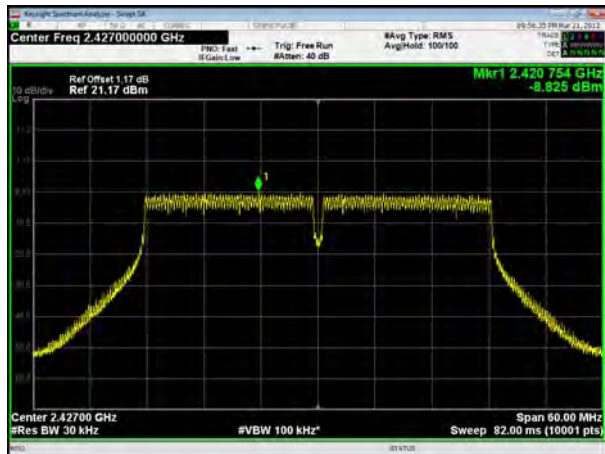
802.11n(HT20), Carrier frequency (MHz):2462



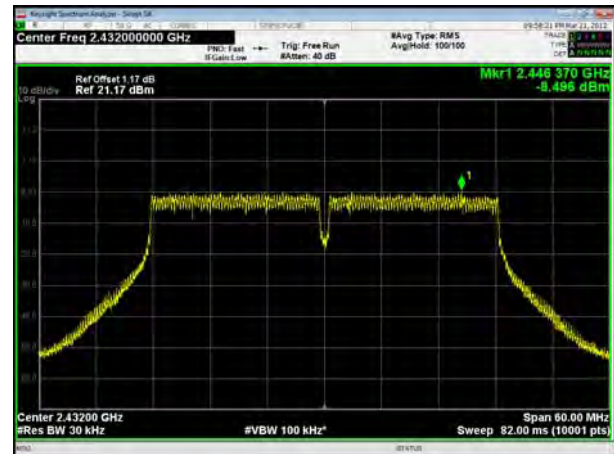
802.11n(HT40), Carrier frequency (MHz): 2422



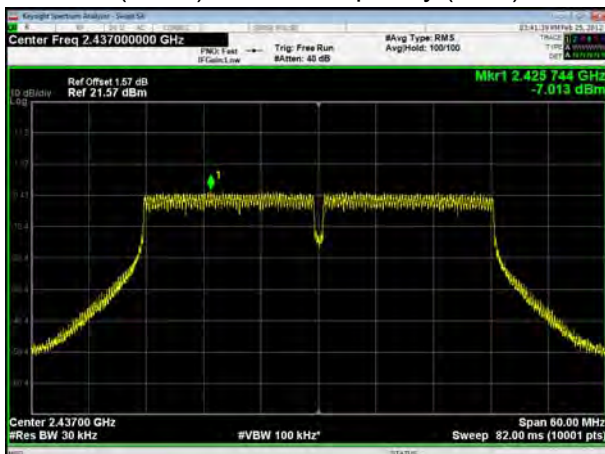
802.11n(HT40), Carrier frequency (MHz): 2427



802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT40), Carrier frequency (MHz): 2437



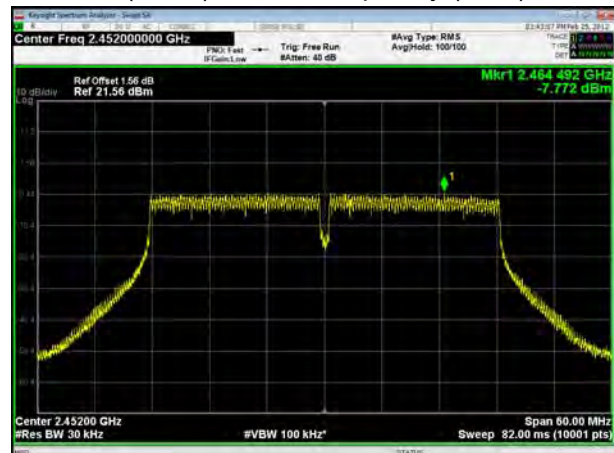
802.11n(HT40), Carrier frequency (MHz): 2442



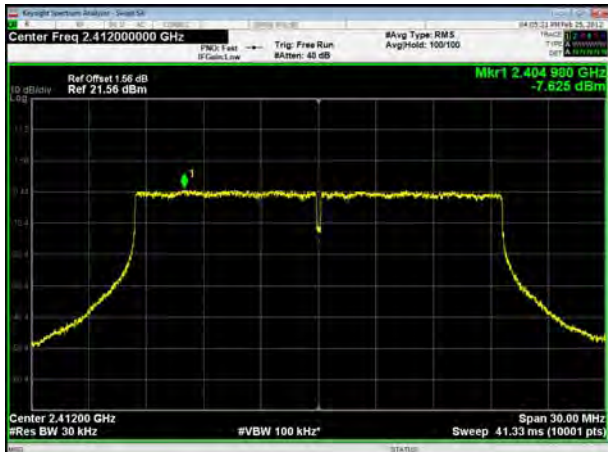
802.11n(HT40), Carrier frequency (MHz): 2447



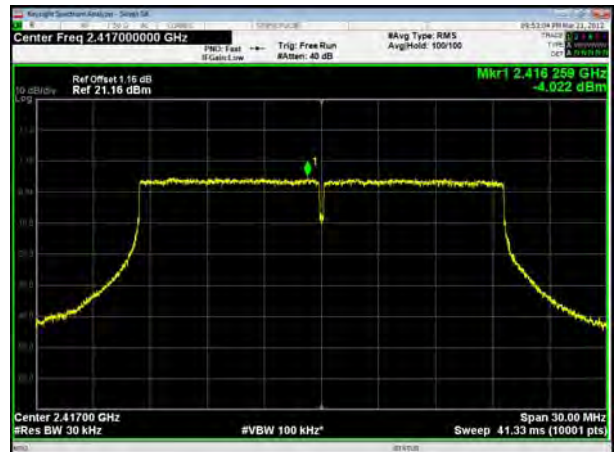
802.11n(HT40), Carrier frequency (MHz): 2452



802.11ax(HE20), Carrier frequency (MHz): 2412



802.11ax(HE20), Carrier frequency (MHz): 2417



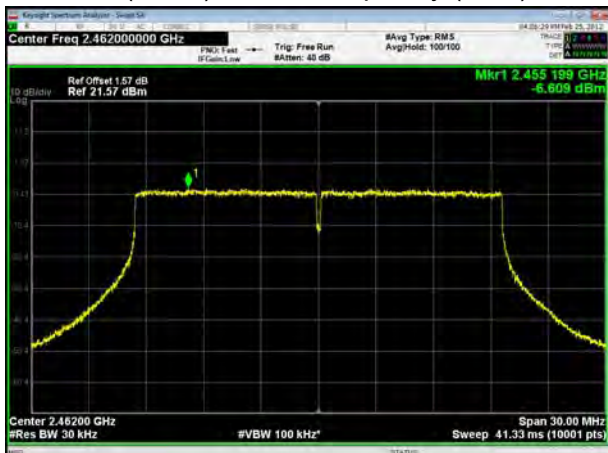
802.11ax(HE20), Carrier frequency (MHz): 2437



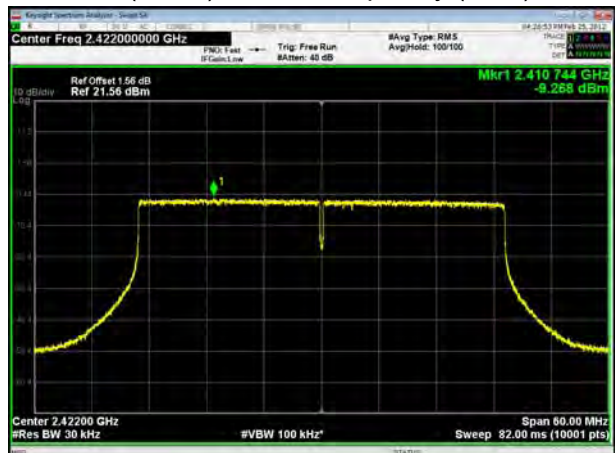
802.11ax(HE20), Carrier frequency (MHz): 2457



802.11ax(HE20), Carrier frequency (MHz): 2462



802.11ax(HE40), Carrier frequency (MHz): 2422

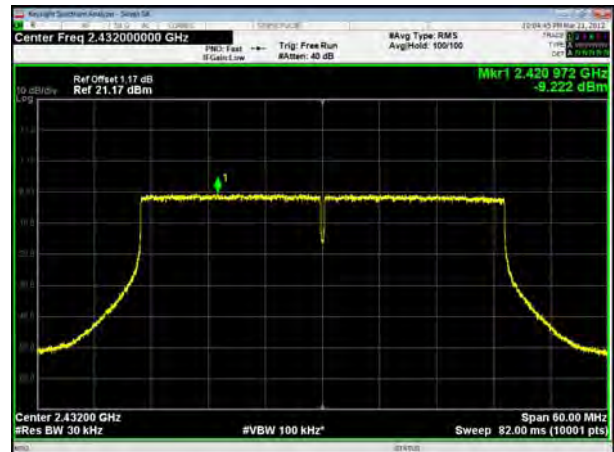




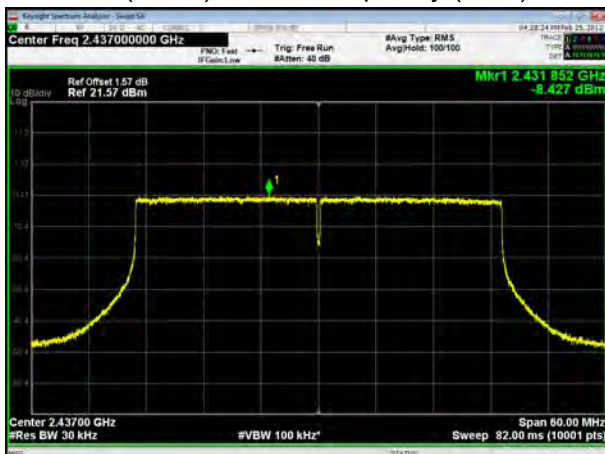
802.11ax(HE40), Carrier frequency (MHz): 2427



802.11ax(HE40), Carrier frequency (MHz): 2432



802.11ax(HE40), Carrier frequency (MHz): 2437



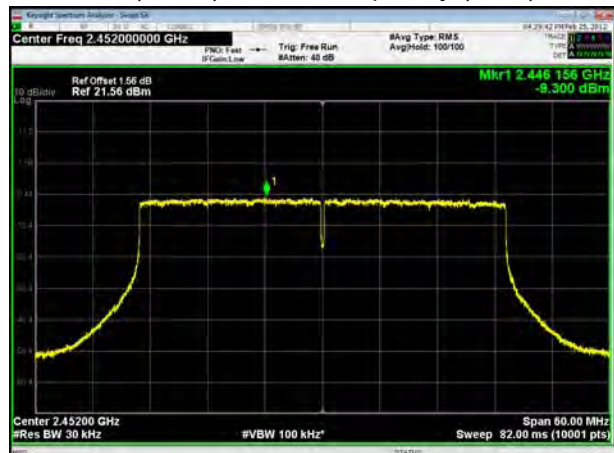
802.11ax(HE40), Carrier frequency (MHz): 2442



802.11ax(HE40), Carrier frequency (MHz): 2447



802.11ax(HE40), Carrier frequency (MHz): 2452



With Beamforming Antenna 4

802.11b, Carrier frequency (MHz): 2412



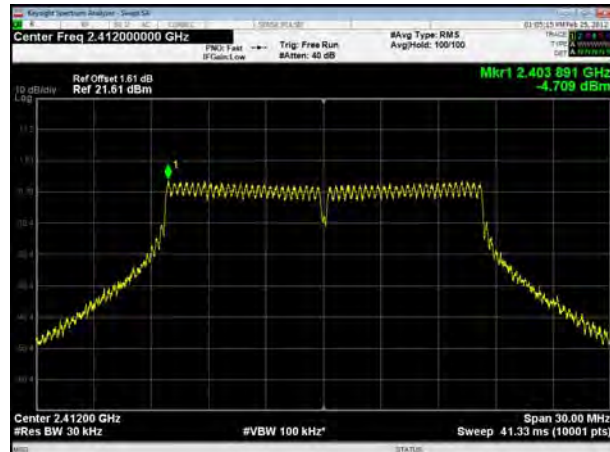
802.11b, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz):2462



802.11g, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2417



802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2437



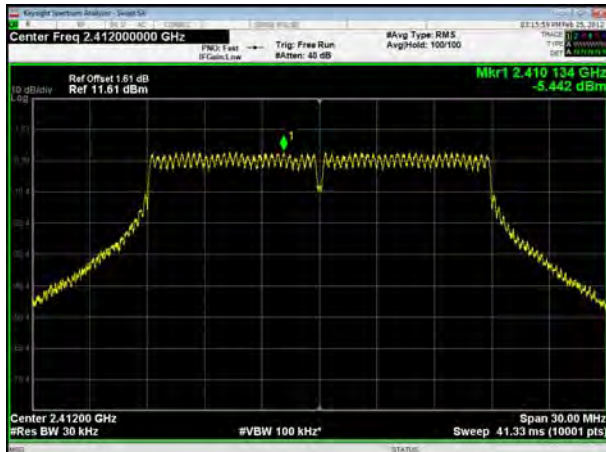
802.11g, Carrier frequency (MHz): 2457



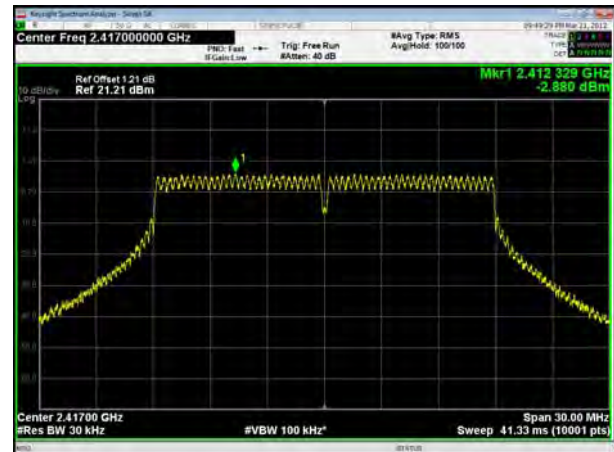
802.11g, Carrier frequency (MHz): 2462



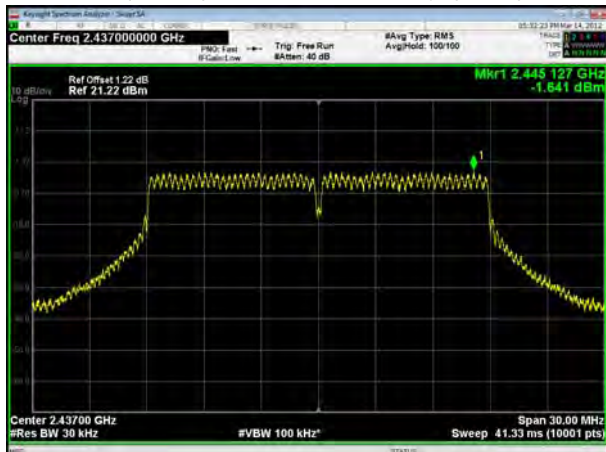
802.11n(HT20), Carrier frequency (MHz): 2412



802.11n(HT20), Carrier frequency (MHz): 2417



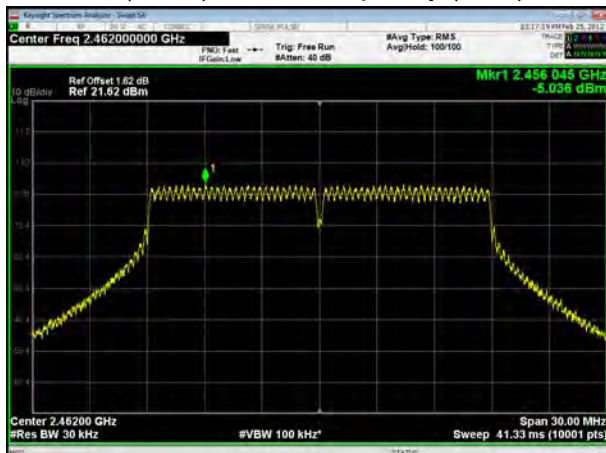
802.11n(HT20), Carrier frequency (MHz):2437



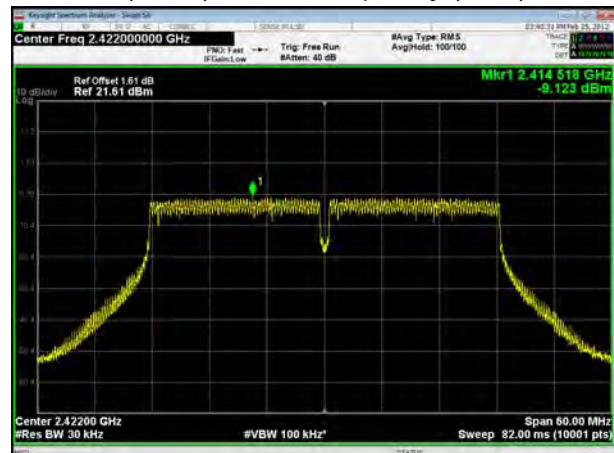
802.11n(HT20), Carrier frequency (MHz):2457



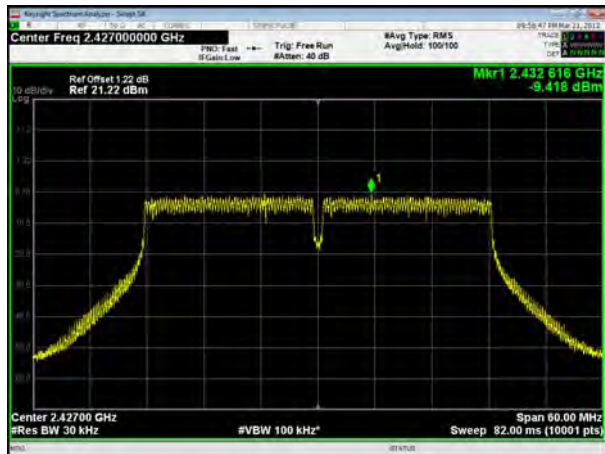
802.11n(HT20), Carrier frequency (MHz):2462



802.11n(HT40), Carrier frequency (MHz): 2422



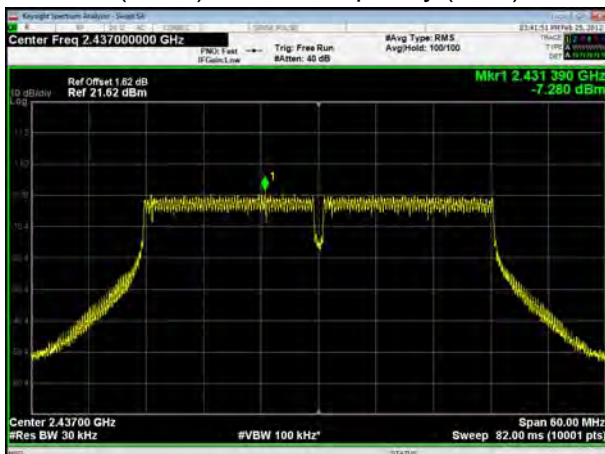
802.11n(HT40), Carrier frequency (MHz): 2427



802.11n(HT40), Carrier frequency (MHz): 2432



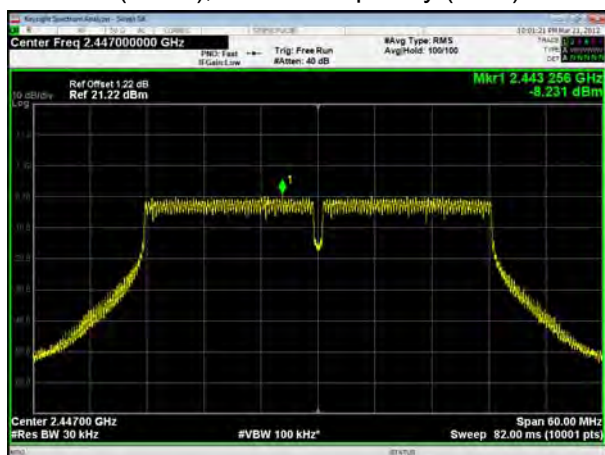
802.11n(HT40), Carrier frequency (MHz): 2437



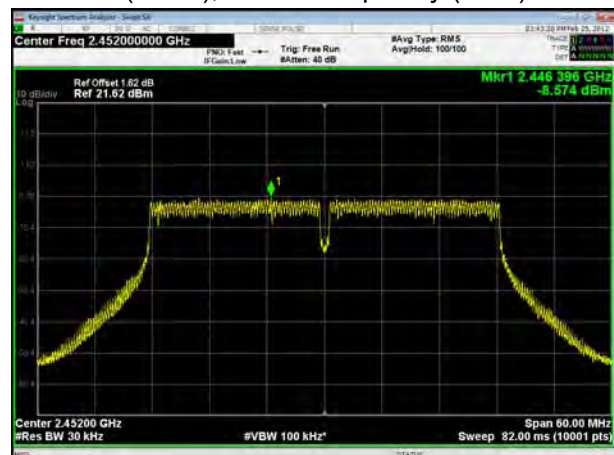
802.11n(HT40), Carrier frequency (MHz): 2442



802.11n(HT40), Carrier frequency (MHz): 2447



802.11n(HT40), Carrier frequency (MHz): 2452





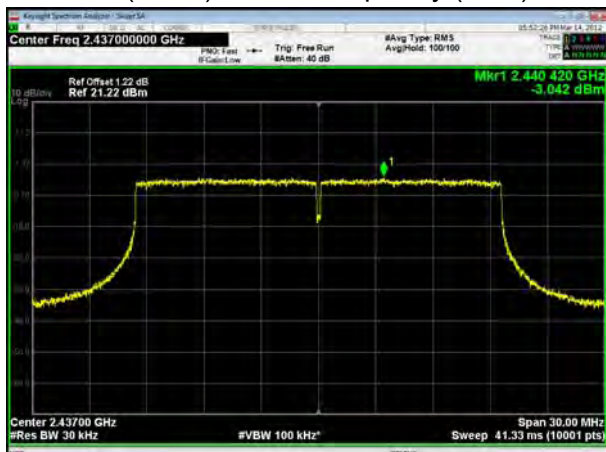
802.11ax(HE20), Carrier frequency (MHz): 2412



802.11ax(HE20), Carrier frequency (MHz): 2417



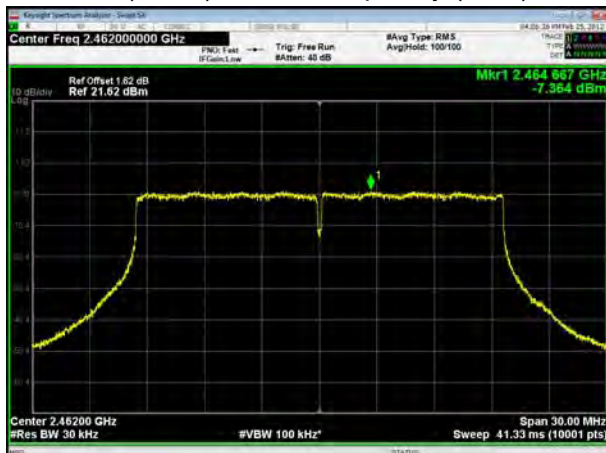
802.11ax(HE20), Carrier frequency (MHz): 2437



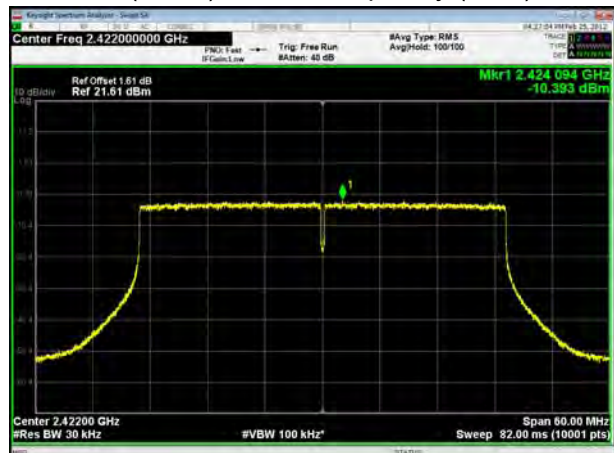
802.11ax(HE20), Carrier frequency (MHz): 2457



802.11ax(HE20), Carrier frequency (MHz): 2462



802.11ax(HE40), Carrier frequency (MHz): 2422

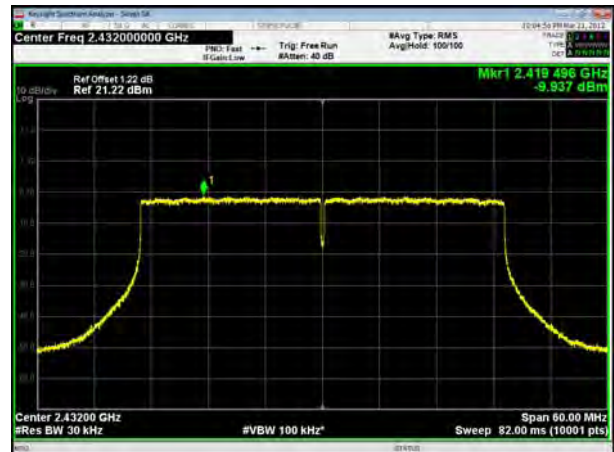




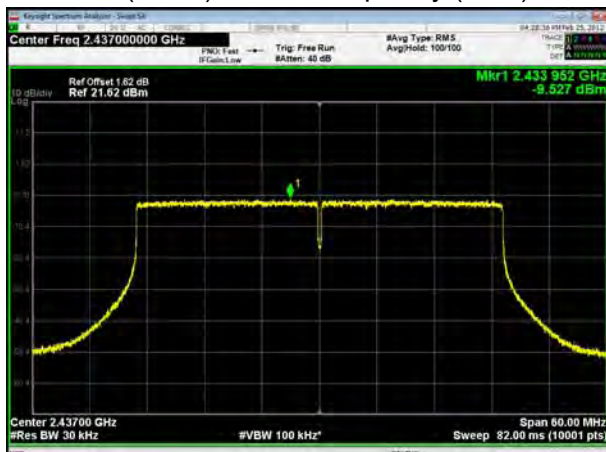
802.11ax(HE40), Carrier frequency (MHz): 2427



802.11ax(HE40), Carrier frequency (MHz): 2432



802.11ax(HE40), Carrier frequency (MHz): 2437



802.11ax(HE40), Carrier frequency (MHz): 2442



802.11ax(HE40), Carrier frequency (MHz): 2447



802.11ax(HE40), Carrier frequency (MHz): 2452

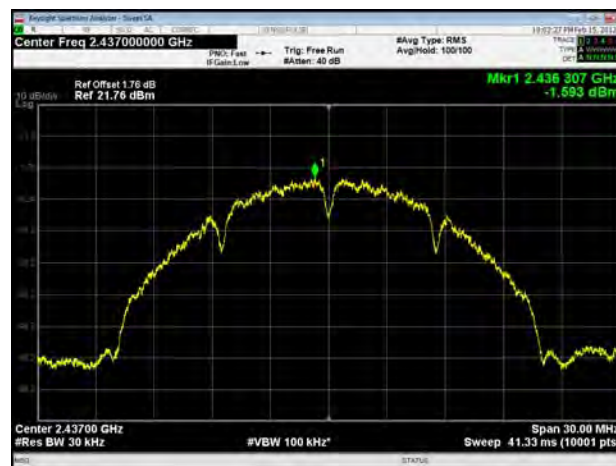


MIMO Antenna 1

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



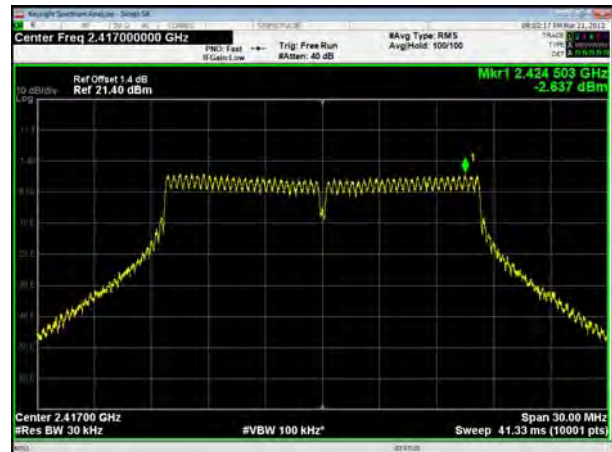
802.11b, Carrier frequency (MHz):2462



802.11g, Carrier frequency (MHz): 2412



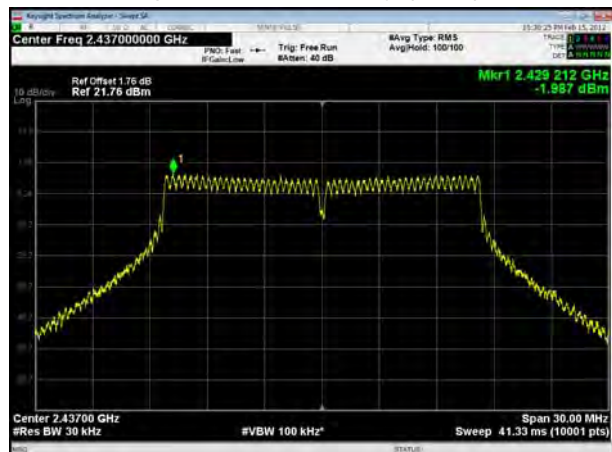
802.11g, Carrier frequency (MHz): 2417



802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2457



802.11g, Carrier frequency (MHz): 2462



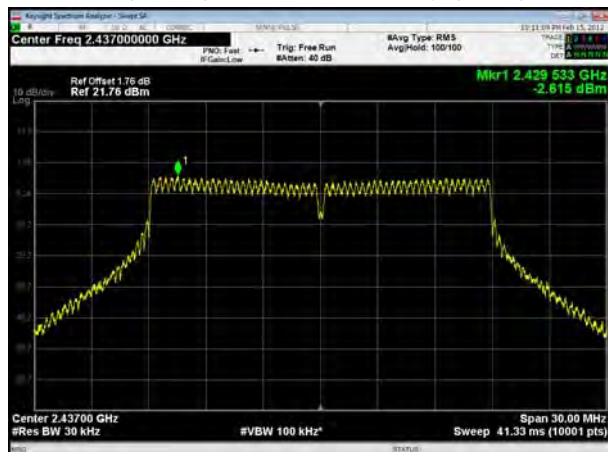
802.11n(HT20), Carrier frequency (MHz): 2412



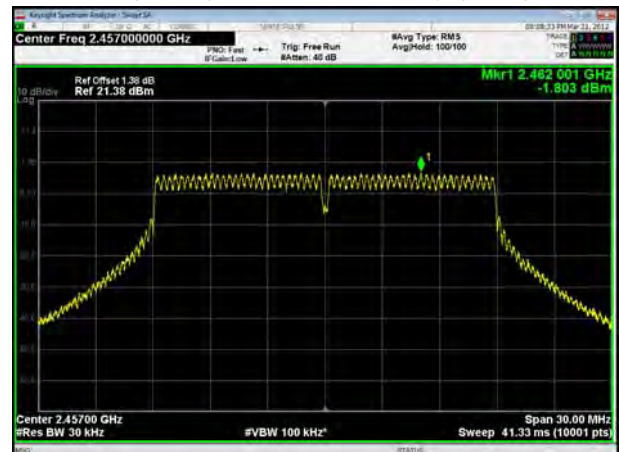
802.11n(HT20), Carrier frequency (MHz): 2417



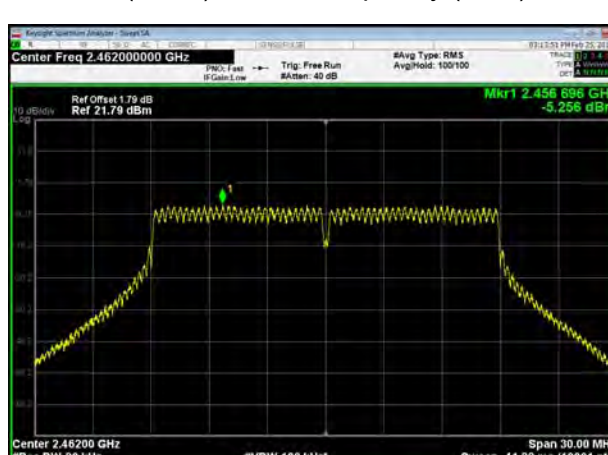
802.11n(HT20), Carrier frequency (MHz):2437



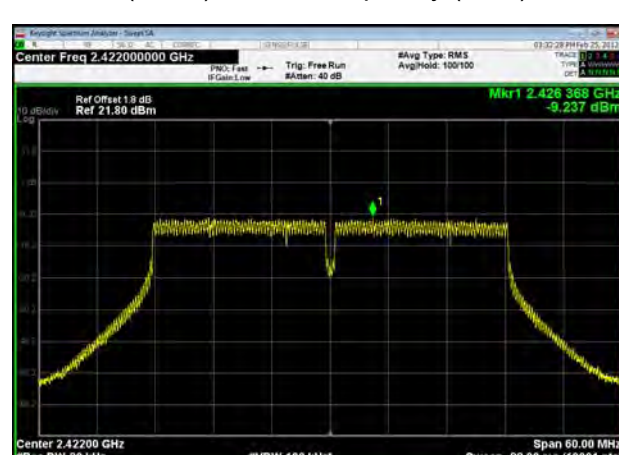
802.11n(HT20), Carrier frequency (MHz):2457



802.11n(HT20), Carrier frequency (MHz):2462



802.11n(HT40), Carrier frequency (MHz): 2422



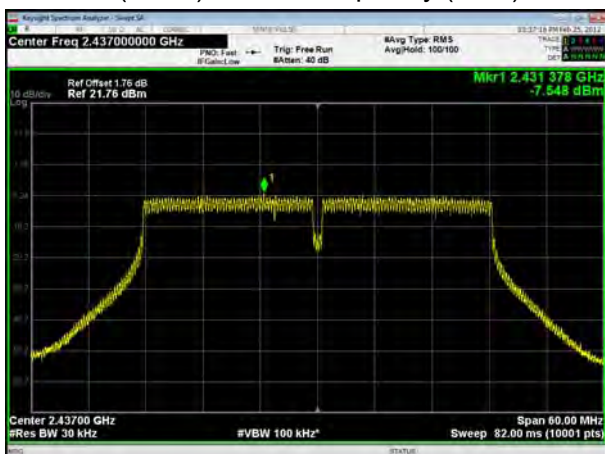
802.11n(HT40), Carrier frequency (MHz): 2427



802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT40), Carrier frequency (MHz): 2437



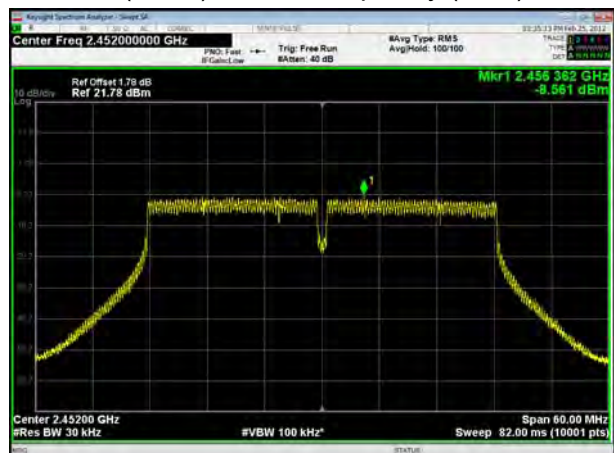
802.11n(HT40), Carrier frequency (MHz): 2442



802.11n(HT40), Carrier frequency (MHz): 2447



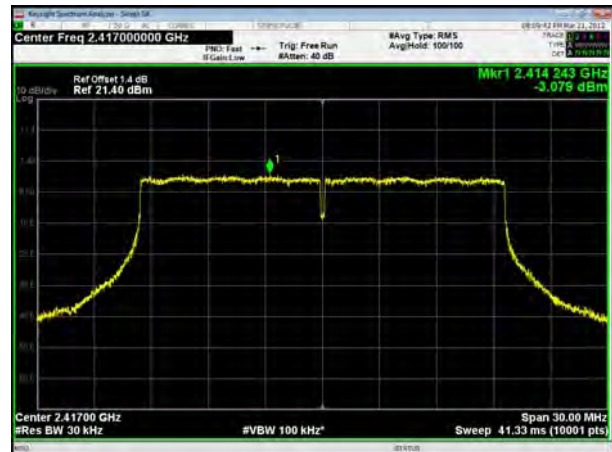
802.11n(HT40), Carrier frequency (MHz): 2452



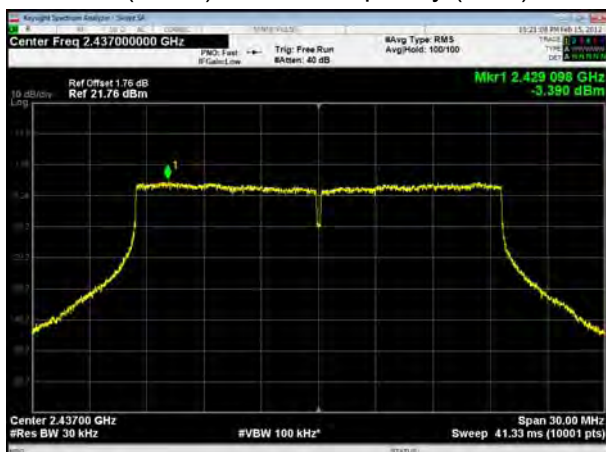
802.11ax(HE20), Carrier frequency (MHz): 2412



802.11ax(HE20), Carrier frequency (MHz): 2417



802.11ax(HE20), Carrier frequency (MHz): 2437



802.11ax(HE20), Carrier frequency (MHz): 2457



802.11ax(HE20), Carrier frequency (MHz): 2462



802.11ax(HE40), Carrier frequency (MHz): 2422



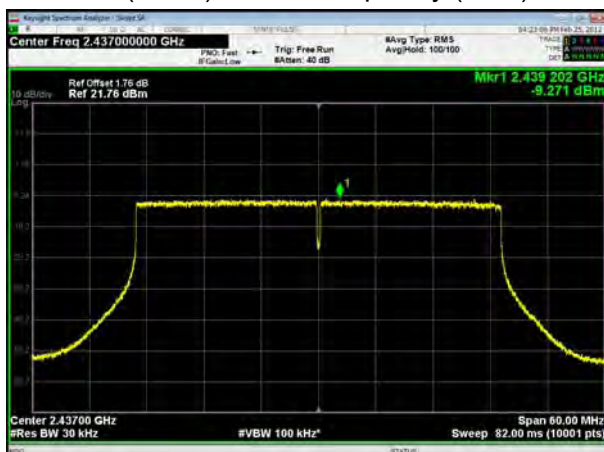
802.11ax(HE40), Carrier frequency (MHz): 2427



802.11ax(HE40), Carrier frequency (MHz): 2432



802.11ax(HE40), Carrier frequency (MHz): 2437



802.11ax(HE40), Carrier frequency (MHz): 2442



802.11ax(HE40), Carrier frequency (MHz): 2447



802.11ax(HE40), Carrier frequency (MHz): 2452

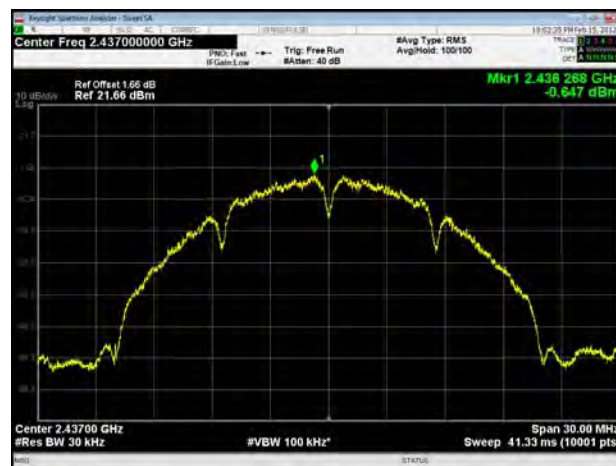


MIMO Antenna 2

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



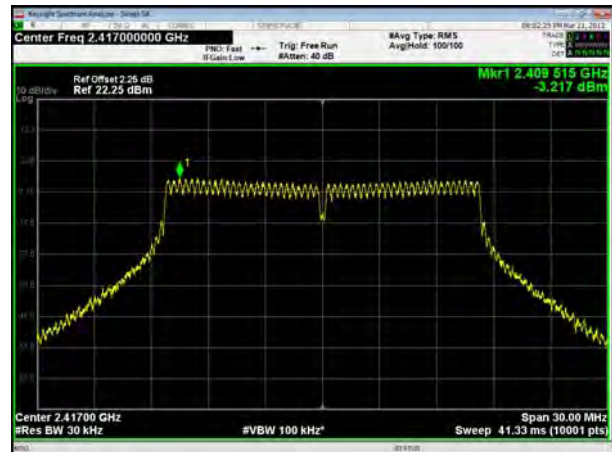
802.11b, Carrier frequency (MHz):2462



802.11g, Carrier frequency (MHz): 2412



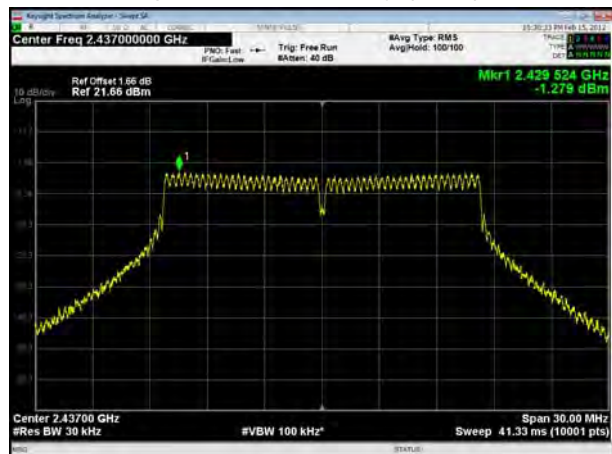
802.11g, Carrier frequency (MHz): 2417



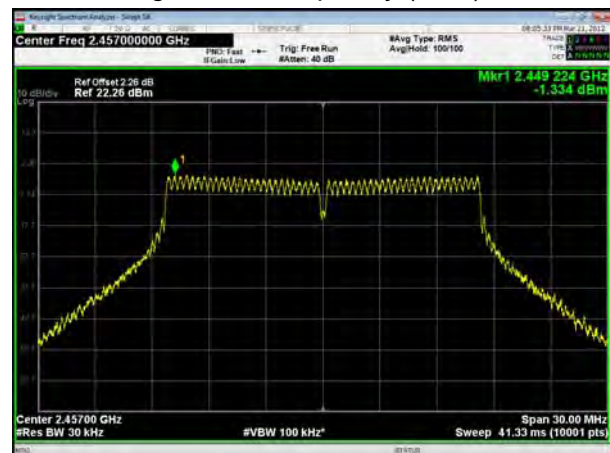
802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2457



802.11g, Carrier frequency (MHz): 2462

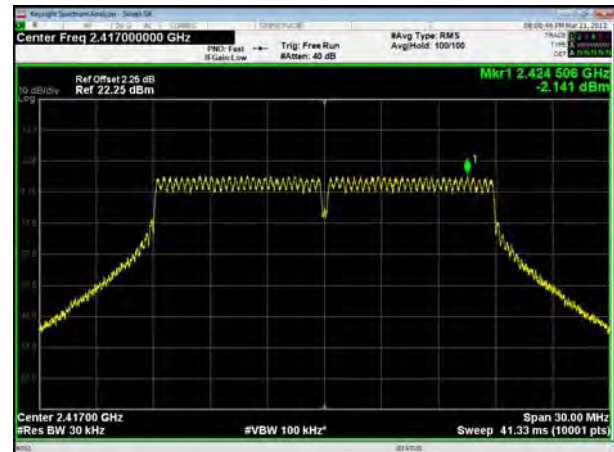




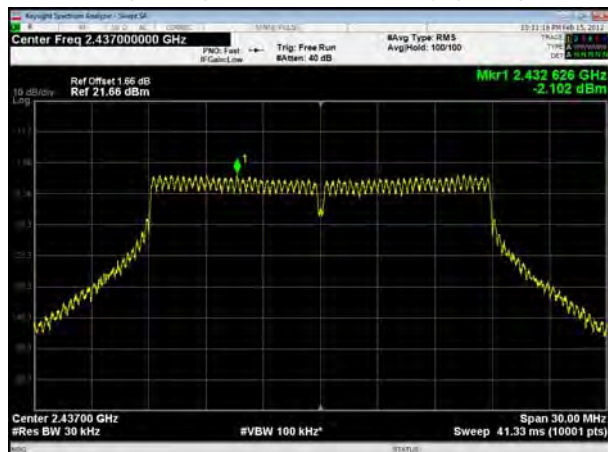
802.11n(HT20), Carrier frequency (MHz): 2412



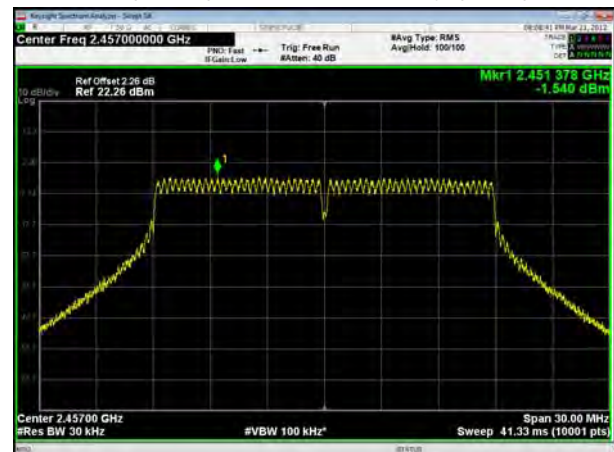
802.11n(HT20), Carrier frequency (MHz): 2417



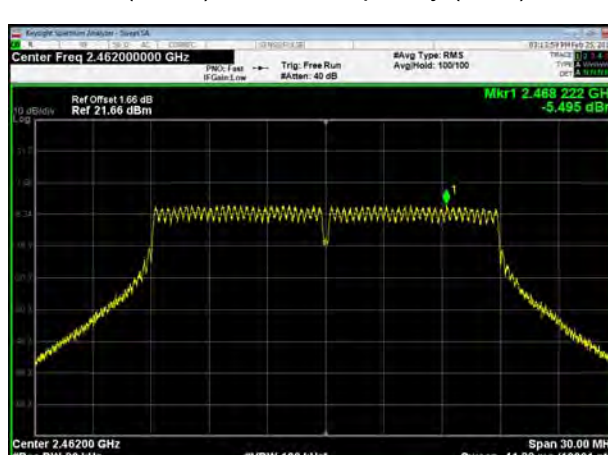
802.11n(HT20), Carrier frequency (MHz):2437



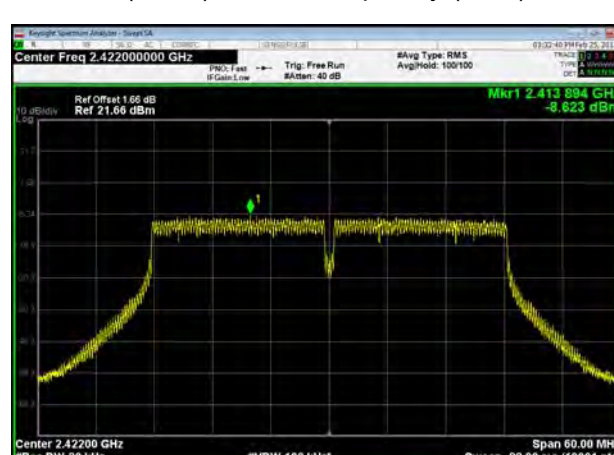
802.11n(HT20), Carrier frequency (MHz):2457



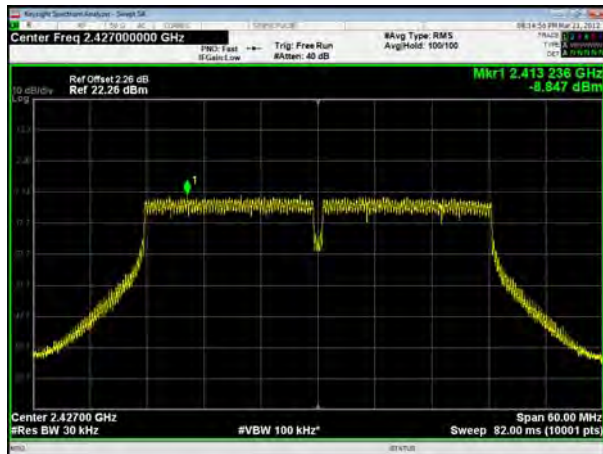
802.11n(HT20), Carrier frequency (MHz):2462



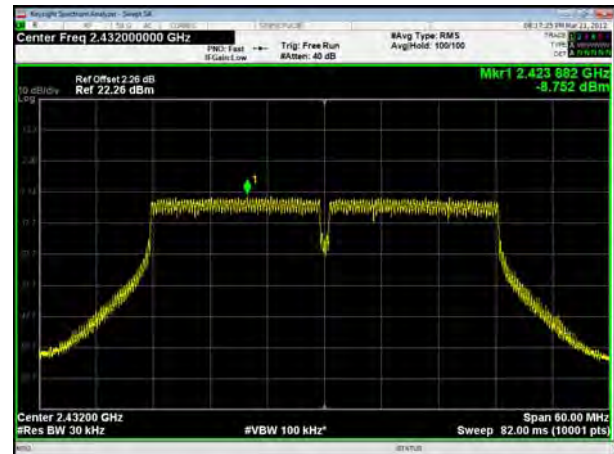
802.11n(HT40), Carrier frequency (MHz): 2422



802.11n(HT40), Carrier frequency (MHz): 2427



802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT40), Carrier frequency (MHz): 2437



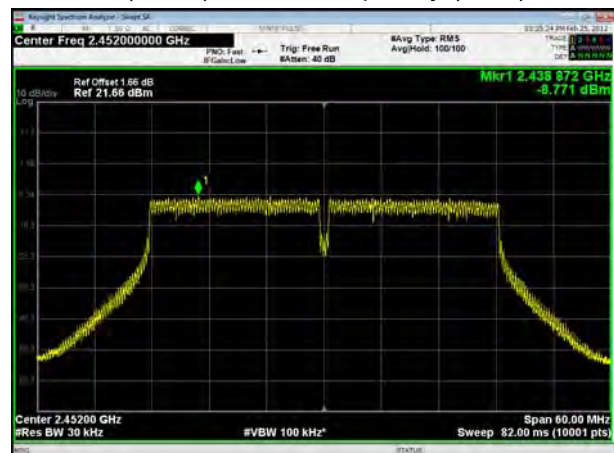
802.11n(HT40), Carrier frequency (MHz): 2442



802.11n(HT40), Carrier frequency (MHz): 2447



802.11n(HT40), Carrier frequency (MHz): 2452

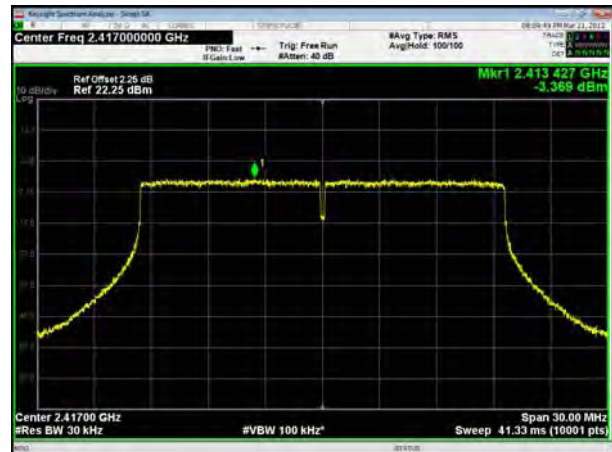




802.11ax(HE20), Carrier frequency (MHz): 2412



802.11ax(HE20), Carrier frequency (MHz): 2417



802.11ax(HE20), Carrier frequency (MHz): 2437



802.11ax(HE20), Carrier frequency (MHz): 2457



802.11ax(HE20), Carrier frequency (MHz): 2462



802.11ax(HE40), Carrier frequency (MHz): 2422



802.11ax(HE40), Carrier frequency (MHz): 2427



802.11ax(HE40), Carrier frequency (MHz): 2432



802.11ax(HE40), Carrier frequency (MHz): 2437



802.11ax(HE40), Carrier frequency (MHz): 2442



802.11ax(HE40), Carrier frequency (MHz): 2447



802.11ax(HE40), Carrier frequency (MHz): 2452



MIMO Antenna 3

802.11b, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz):2462



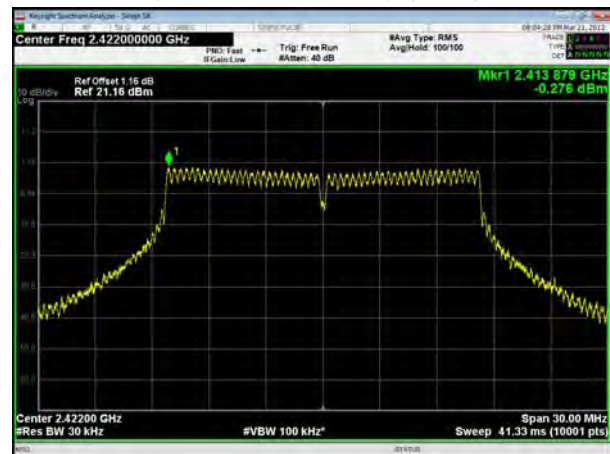
802.11g, Carrier frequency (MHz): 2412



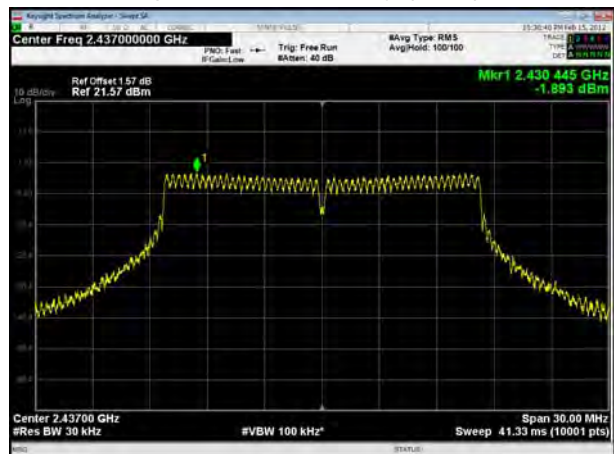
802.11g, Carrier frequency (MHz): 2417



802.11g, Carrier frequency (MHz): 2422



802.11g, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2457



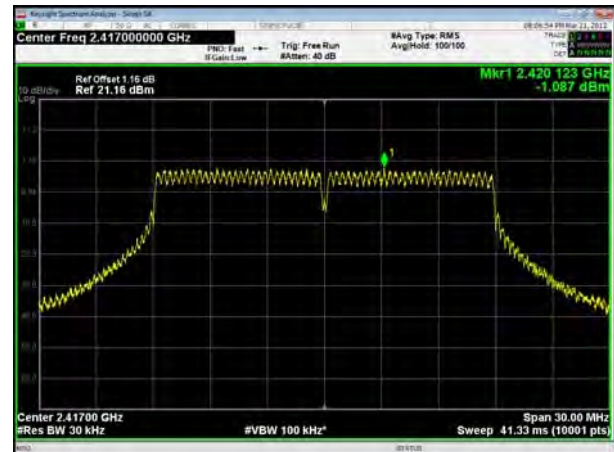
802.11g, Carrier frequency (MHz): 2462



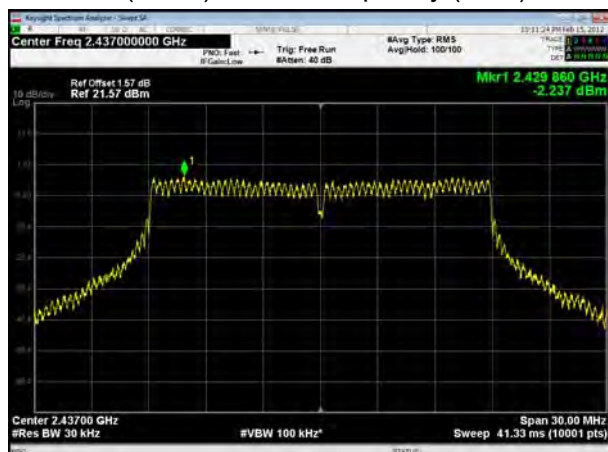
802.11n(HT20), Carrier frequency (MHz): 2412



802.11n(HT20), Carrier frequency (MHz): 2417



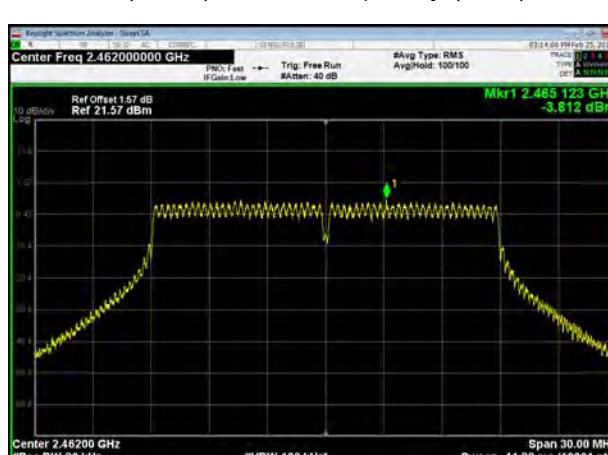
802.11n(HT20), Carrier frequency (MHz):2437



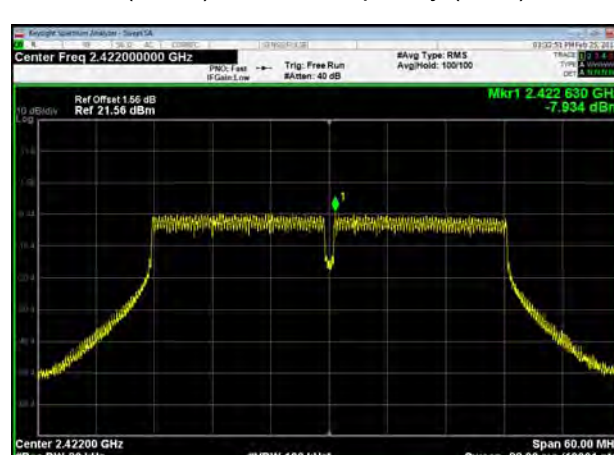
802.11n(HT20), Carrier frequency (MHz):2457



802.11n(HT20), Carrier frequency (MHz):2462



802.11n(HT40), Carrier frequency (MHz): 2422



802.11n(HT40), Carrier frequency (MHz): 2427



802.11n(HT40), Carrier frequency (MHz): 2432



802.11n(HT40), Carrier frequency (MHz): 2437



802.11n(HT40), Carrier frequency (MHz): 2442



802.11n(HT40), Carrier frequency (MHz): 2447



802.11n(HT40), Carrier frequency (MHz): 2452

