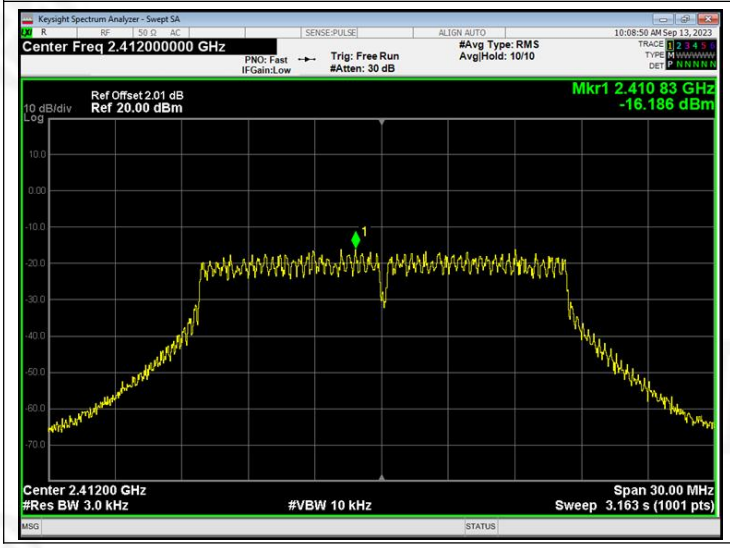
Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	DC 3.3V
Test Mode ：	TX g Mode		

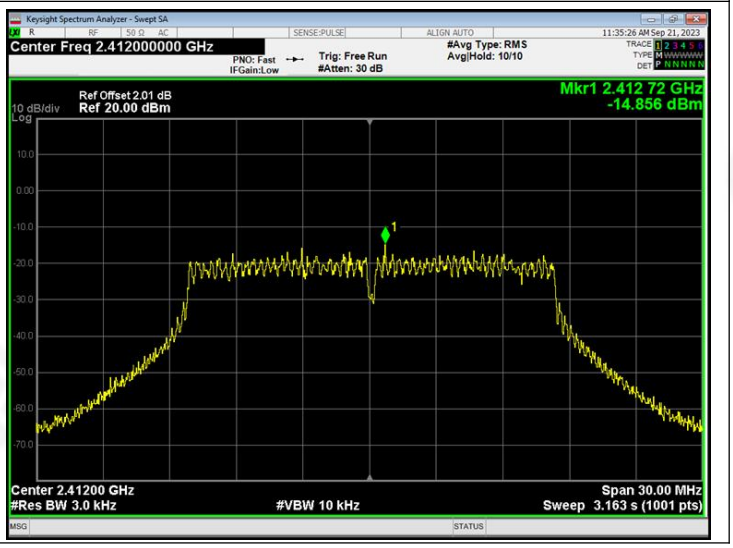
Frequency	Power Spectral Density ANT1 (dBm/3kHz)	Power Spectral Density ANT2 (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-16.186	-14.856	8	PASS
2437 MHz	-15.650	-15.971	8	PASS
2462 MHz	-15.482	-15.675	8	PASS

TX CH01

ANT1

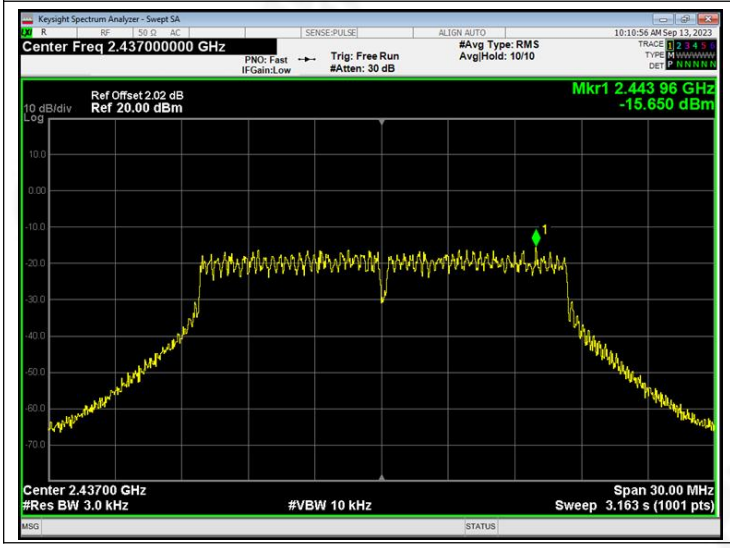


ANT2

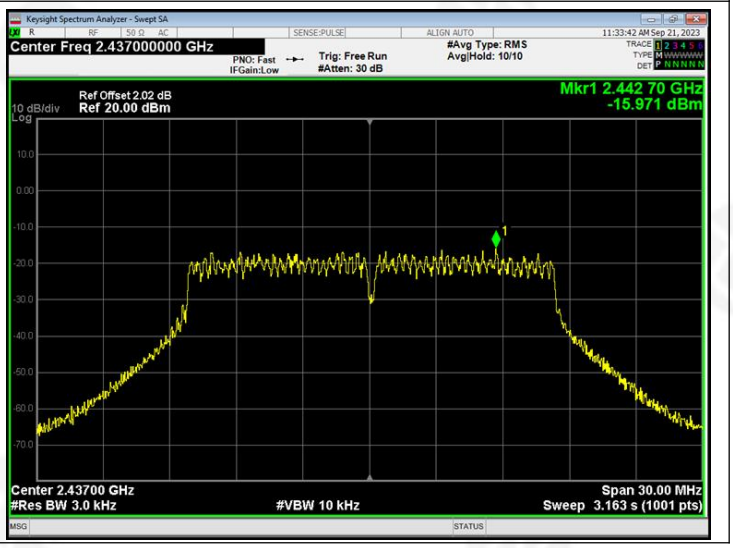


TX CH06

ANT1

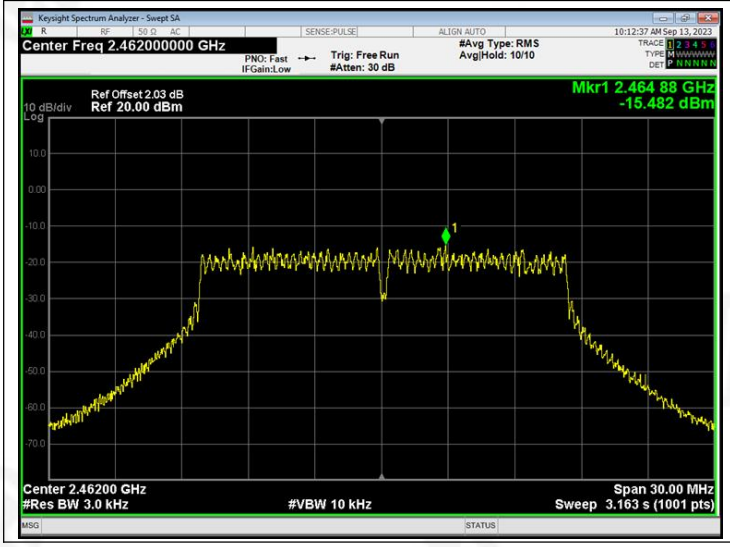


ANT2

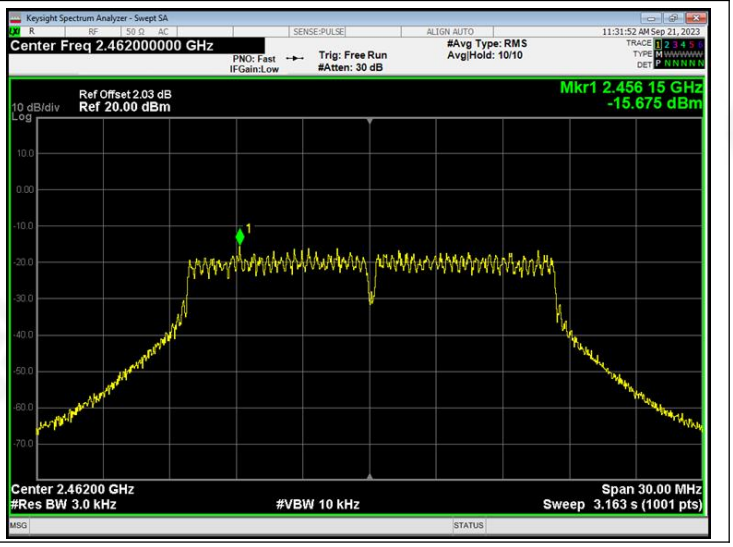


TX CH11

ANT1



ANT2

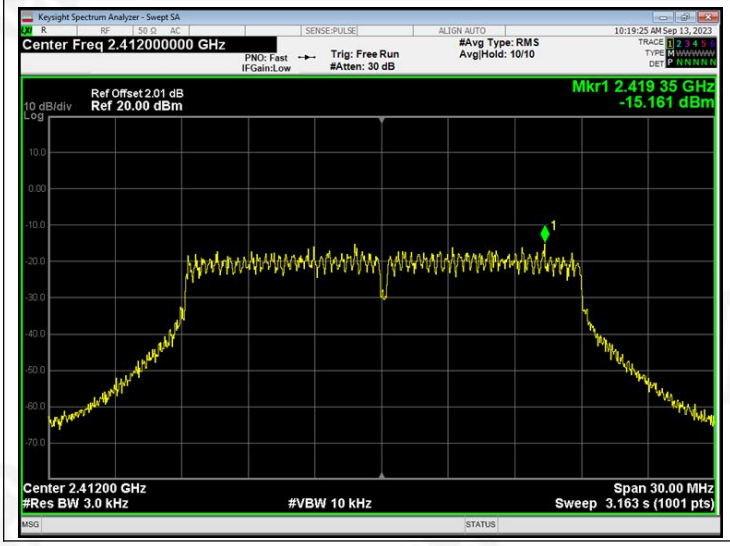


Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	DC 3.3V
Test Mode ：	TX n Mode(20M)		

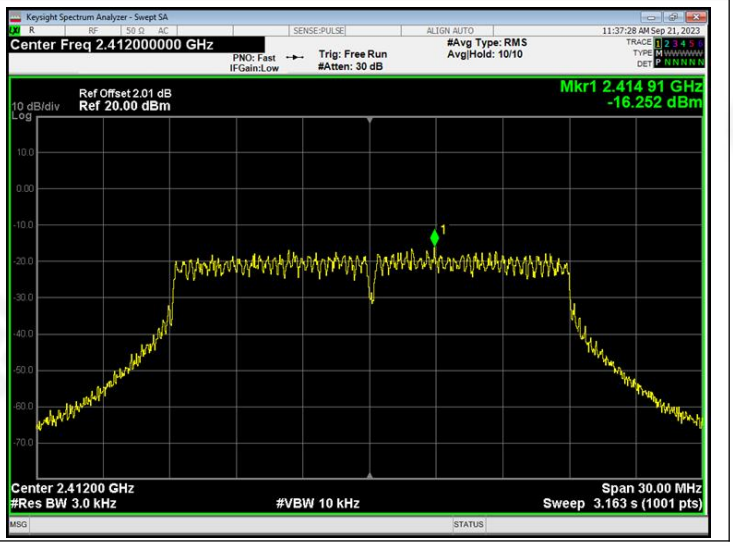
Frequency	Power Spectral Density ANT1 (dBm/3kHz)	Power Spectral Density ANT2 (dBm/3kHz)	Power Spectral Density (dBm/3kHz) MIMO	Limit (dBm/3kHz)	Result
2412 MHz	-15.161	-16.252	-13.23	8	PASS
2437 MHz	-15.555	-15.512	-12.64	8	PASS
2462 MHz	-15.515	-16.495	-13.27	8	PASS

TX CH01

ANT1

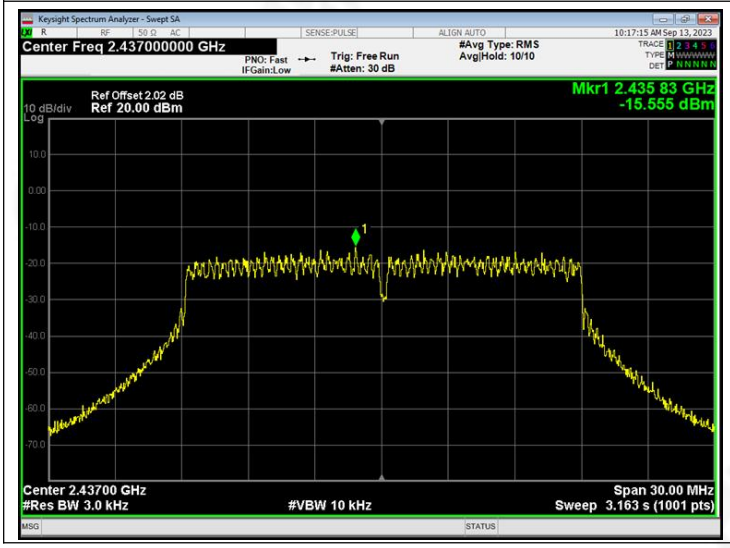


ANT2

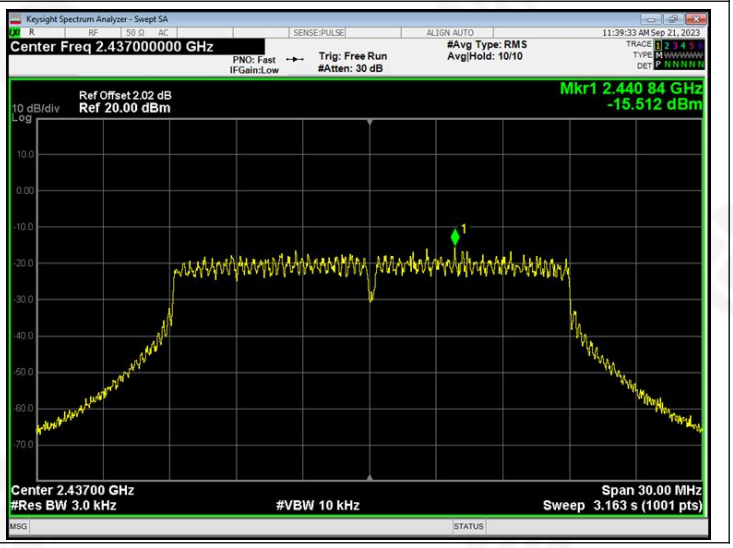


TX CH06

ANT1

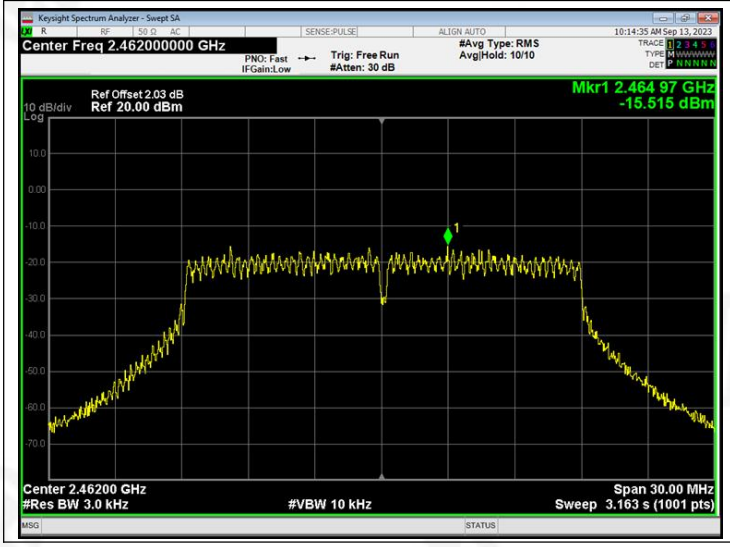


ANT2

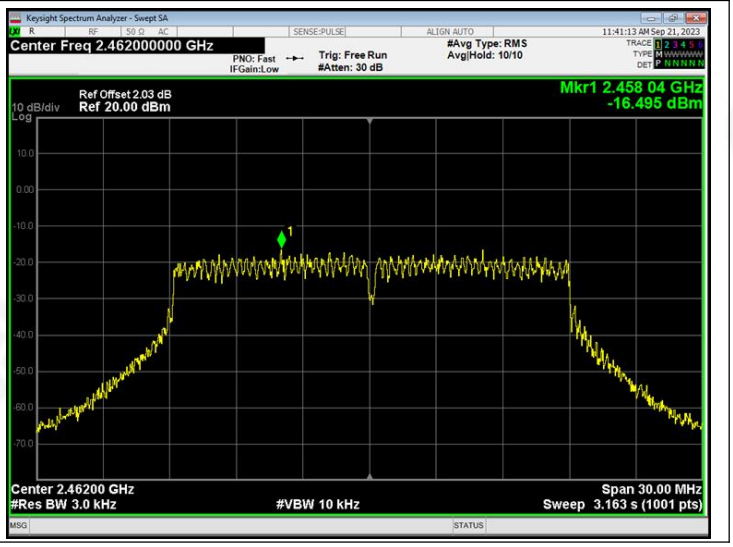


TX CH11

ANT1



ANT2

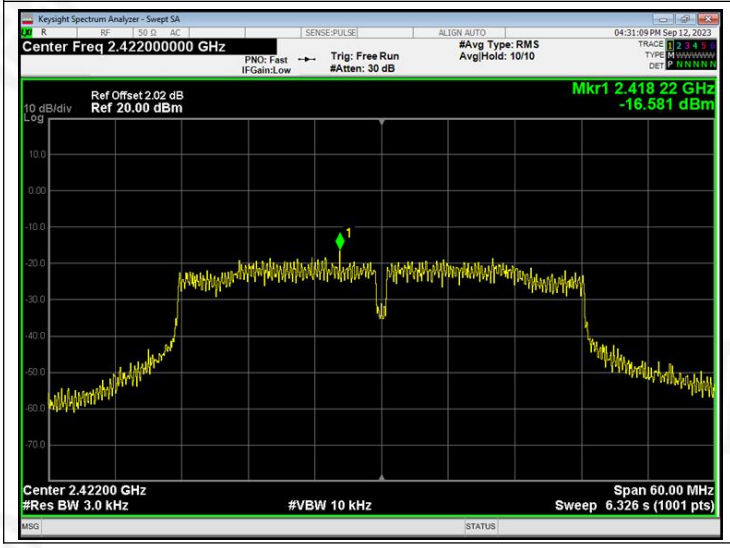


Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	DC 3.3V
Test Mode ：	TX n Mode(40M)		

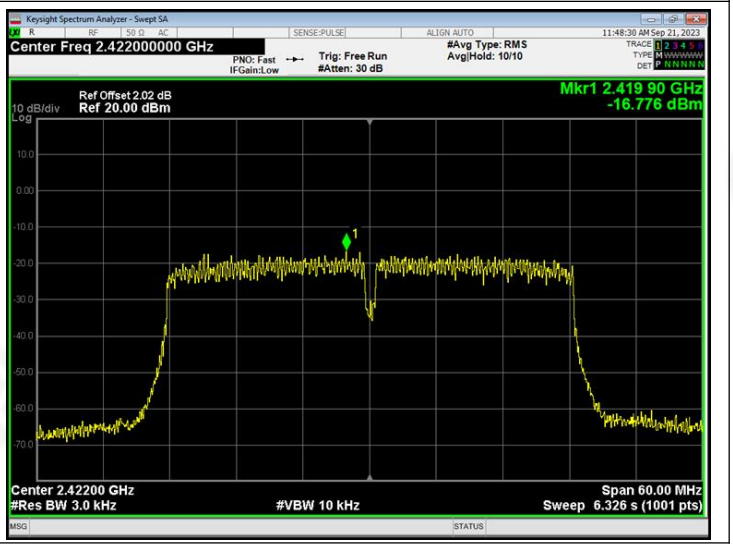
Frequency	Power Spectral Density ANT1 (dBm/3kHz)	Power Spectral Density ANT2 (dBm/3kHz)	Power Spectral Density (dBm/3kHz) MIMO	Limit (dBm/3kHz)	Result
2412 MHz	-16.581	-16.776	-13.67	8	PASS
2437 MHz	-13.666	-16.785	-11.94	8	PASS
2462 MHz	-17.644	-15.575	-13.48	8	PASS

TX CH01

ANT1

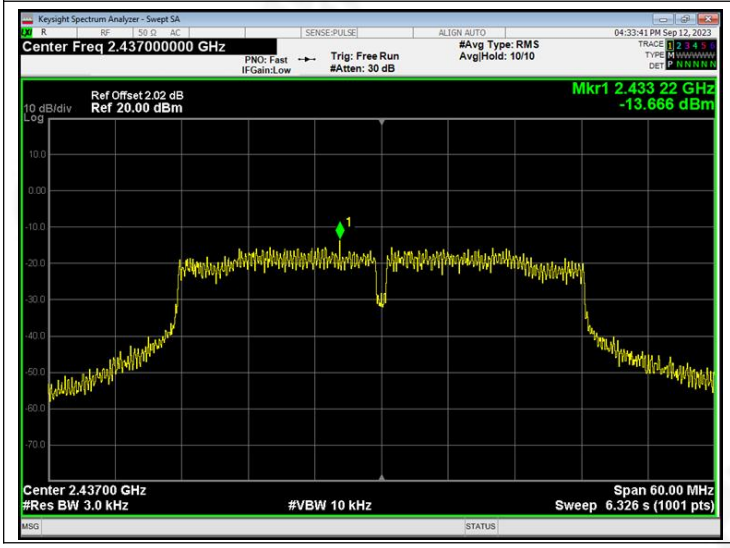


ANT2

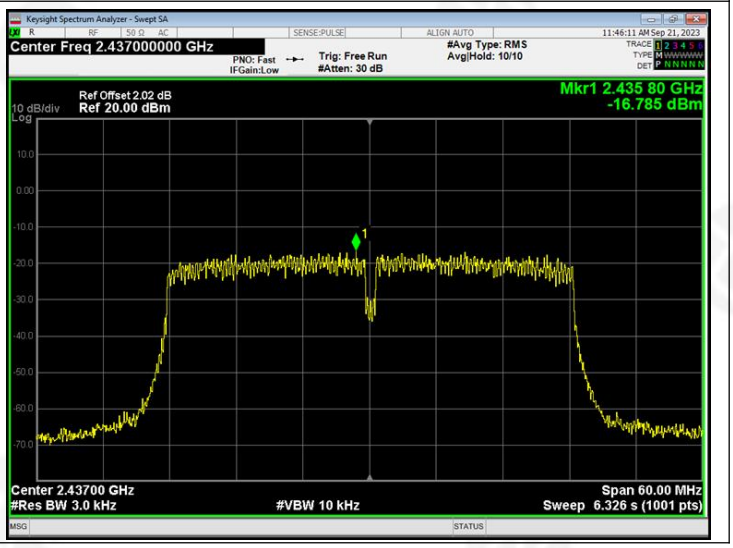


TX CH06

ANT1

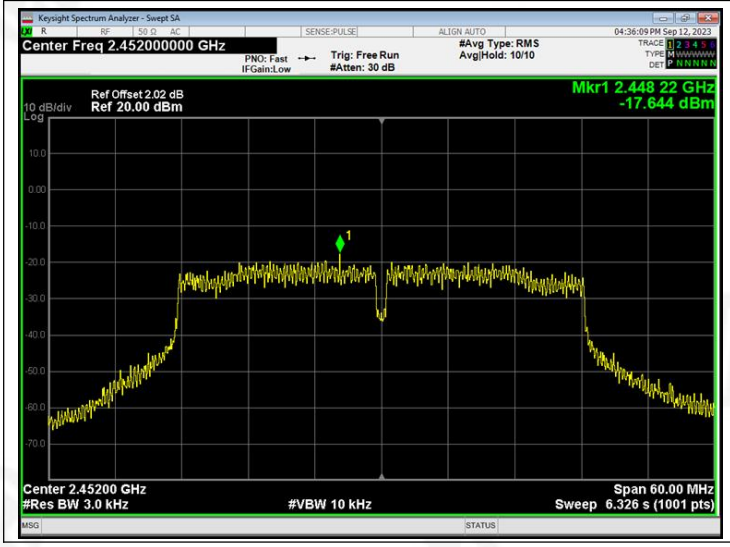


ANT2

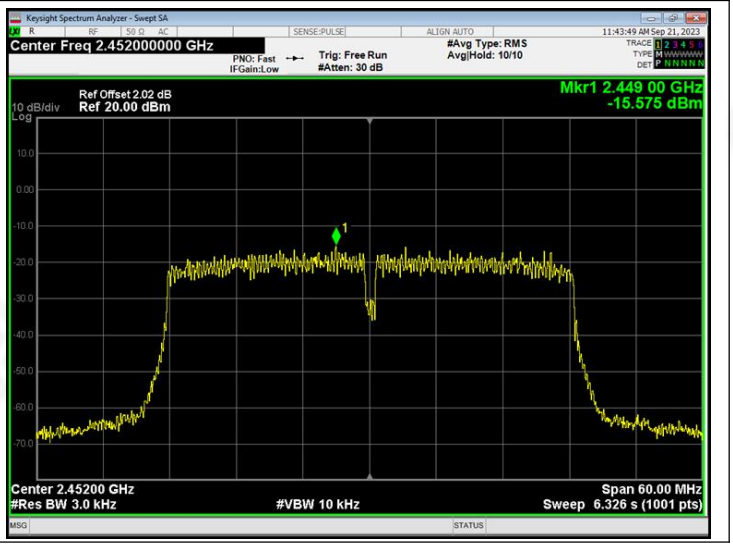


TX CH11

ANT1



ANT2

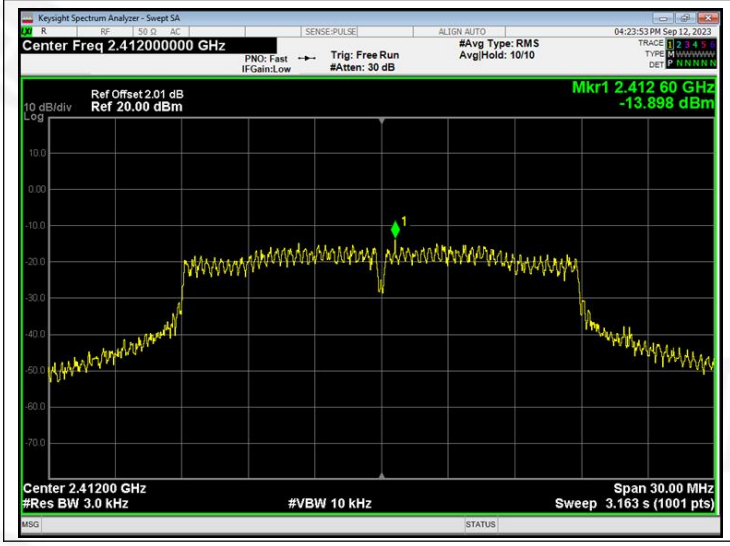


Temperature:	26℃	Relative Humidity:	54%
Pressure:	101kPa	Test Voltage:	DC 3.3V
Test Mode :	TX ax Mode(HE 20M)		

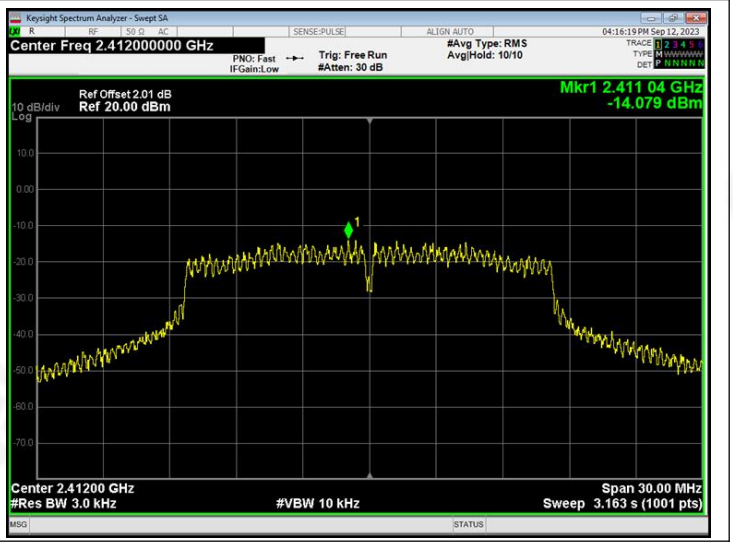
Frequency	Power Spectral Density ANT1 (dBm/3kHz)	Power Spectral Density ANT2 (dBm/3kHz)	Power Spectral Density (dBm/3kHz) MIMO	Limit (dBm/3kHz)	Result
2412 MHz	-16.581	-14.079	-12.14	8	PASS
2437 MHz	-13.666	-11.686	-9.55	8	PASS
2462 MHz	-17.644	-15.926	-13.69	8	PASS

TX CH01

ANT1

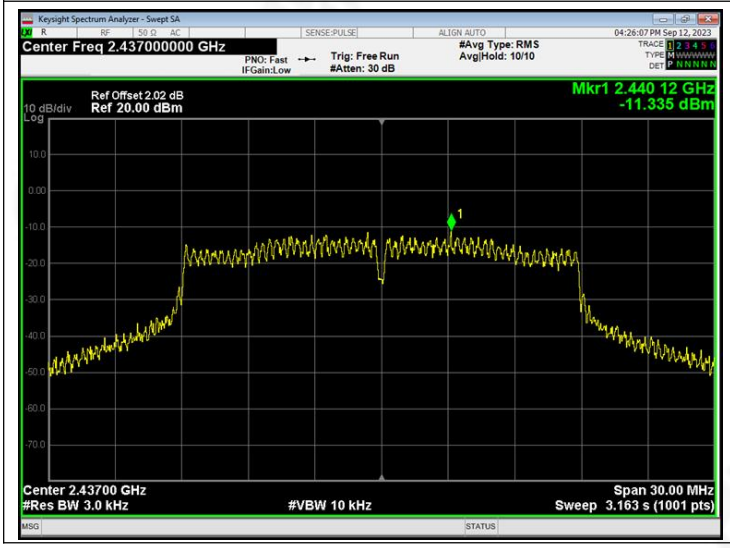


ANT2

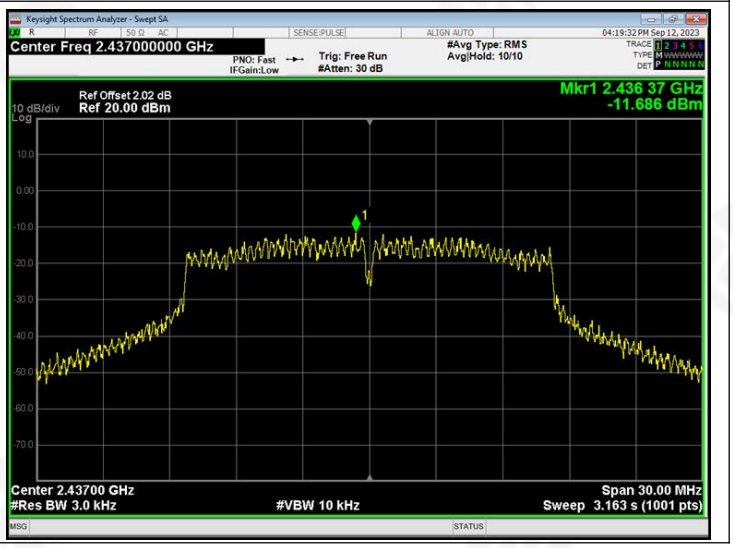


TX CH06

ANT1

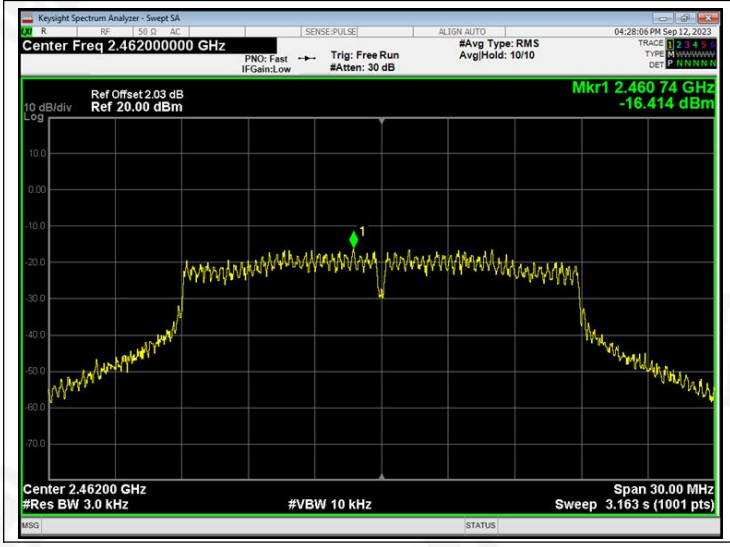


ANT2

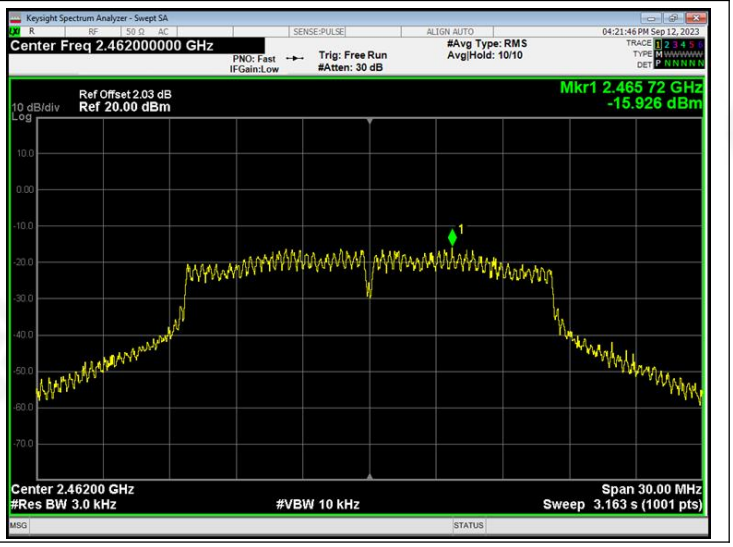


TX CH11

ANT1

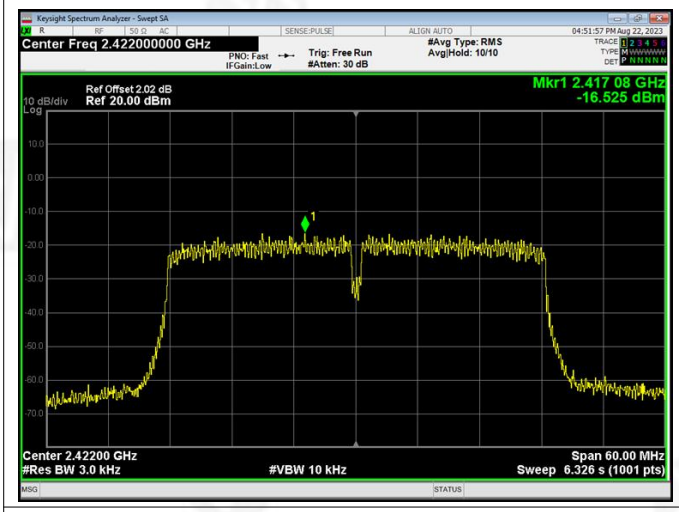
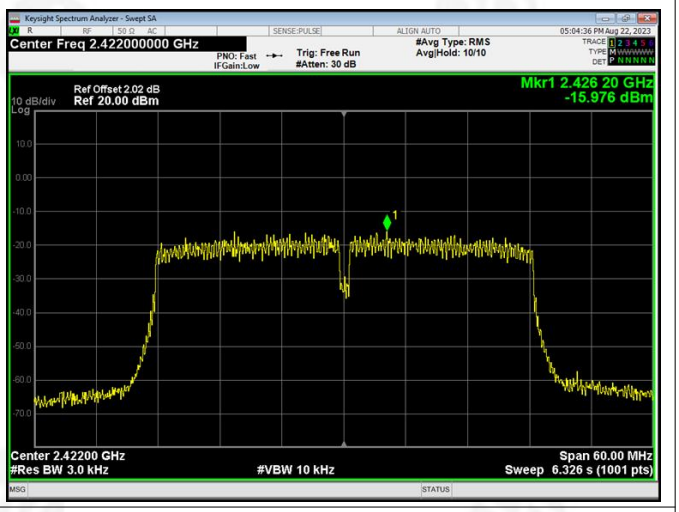
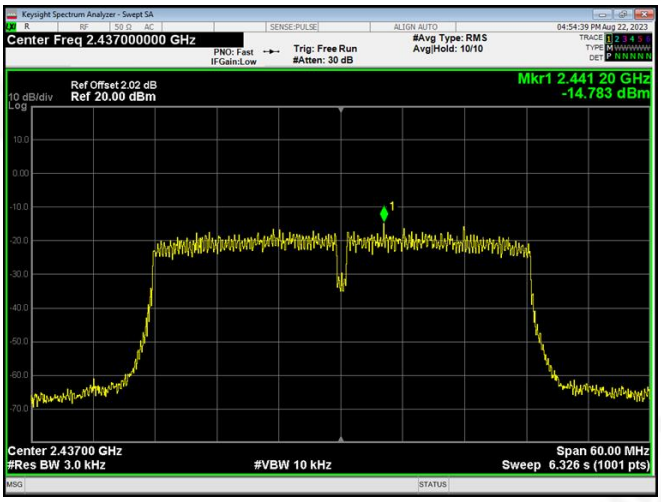
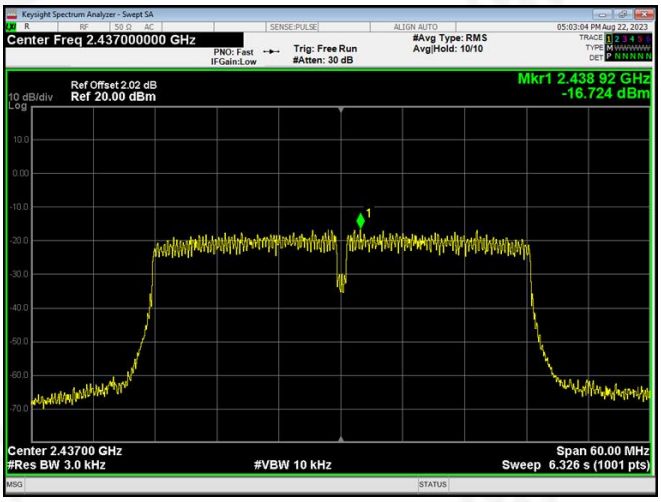
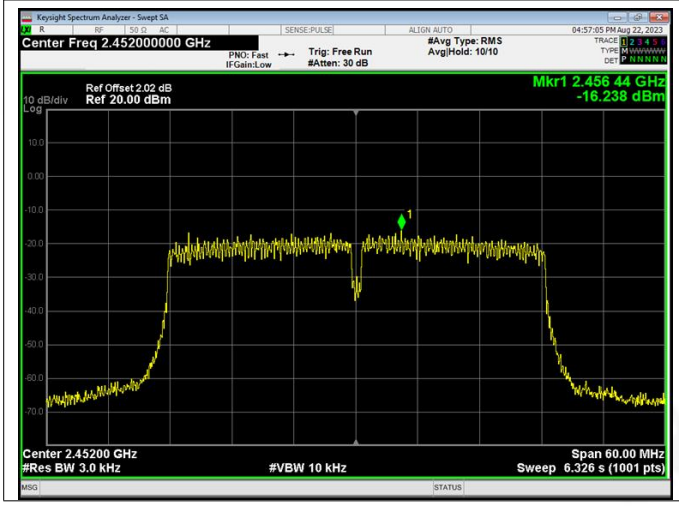
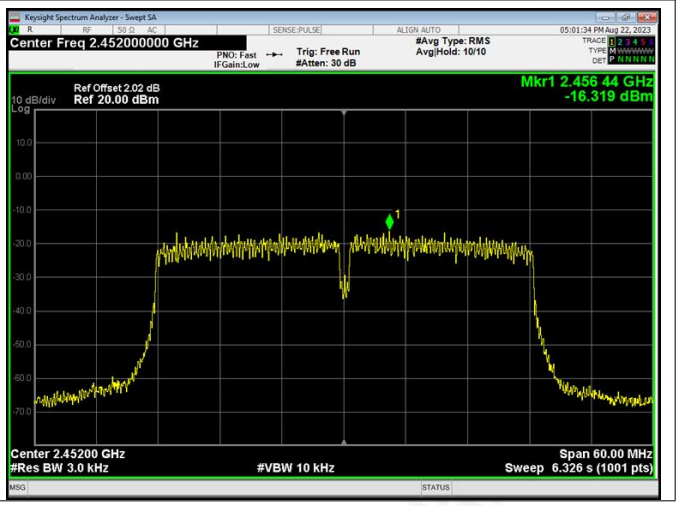


ANT2



Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	DC 3.3V
Test Mode ：	TX ax Mode(HE 40M)		

Frequency	Power Spectral Density (dBm/3kHz) Ant1	Power Spectral Density (dBm/3kHz) Ant2	Power Spectral Density (dBm/3kHz) MIMO	Power Spectral Density (dBm/3kHz) MIMO	Limit (dBm/3kHz)	Result
2422 MHz	-16.525	-15.976	-13.23	-12.66	8	PASS
2437 MHz	-14.783	-16.724	-12.64	-12.52	8	PASS
2452 MHz	-16.238	-16.319	-13.27	-12.97	8	PASS

ANT1	ANT2
CH03	CH03
	
CH06	CH06
	
CH09	CH09
	

7. 6DB CHANNEL BANDWIDTH

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	KDB558074 D0115.247 Meas Guidancev05r02

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

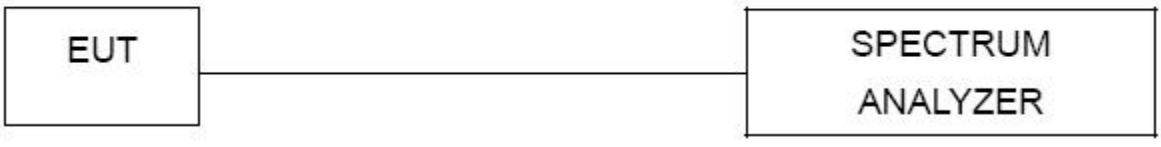
7.2 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 xRBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

7.6 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC 3.3V
Test Mode ：	TX		

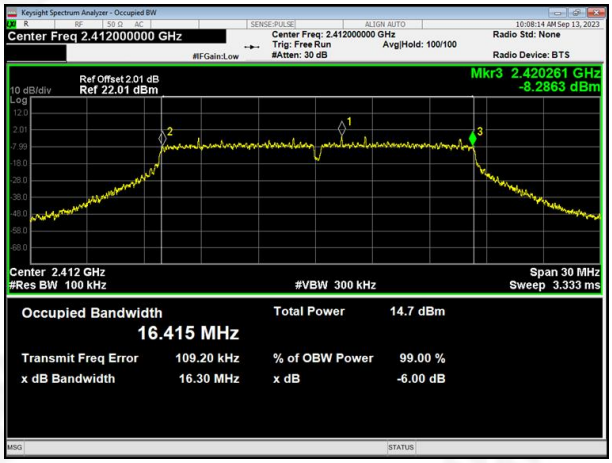
ANT1								
Test CH	6dB Occupy Bandwidth (MHz)							
	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	802.11ax(HE20)	802.11ax(HE40	Limit(KHz)	Result
Lowest	9.553	16.30	17.10	35.07	17.03	35.09	>500	Pass
Middle	9.086	16.30	17.57	34.70	17.58	35.07		
Highest	9.083	16.32	17.01	33.47	16.54	34.40		

ANT2								
Test CH	6dB Occupy Bandwidth (MHz)							
	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	802.11ax(HE20)	802.11ax(HE40	Limit(KHz)	Result
Lowest	9.09	13.97	15.08	35.04	16.31	35.13	>500	Pass
Middle	9.98	15.69	14.97	35.08	16.29	35.05		
Highest	10.06	15.41	15.14	35.08	16.32	34.06		

Test plot as follows: ANT1

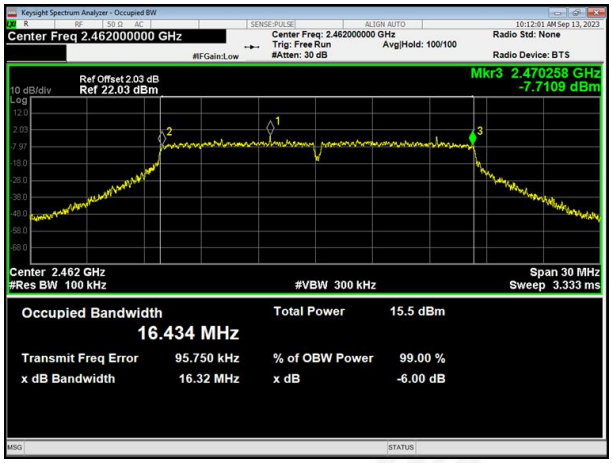
802.11b 802.11g

Lowest channel



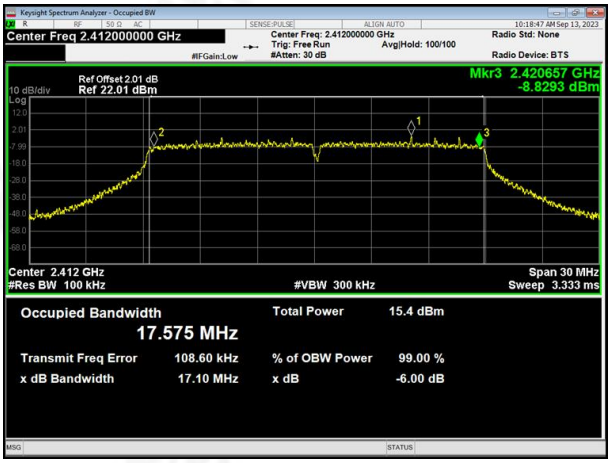
Middle channel

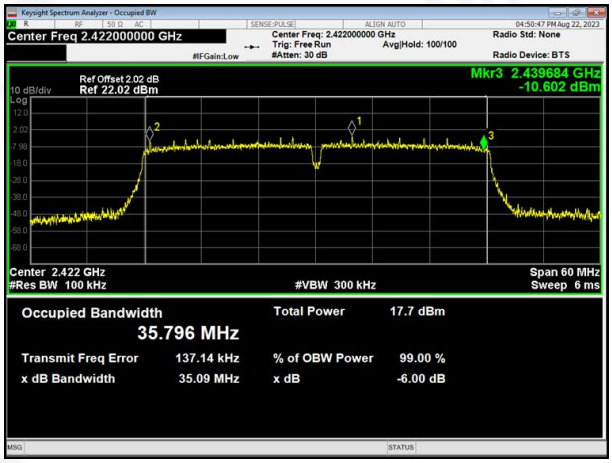
Highest channel



802.11n20 802.11n40

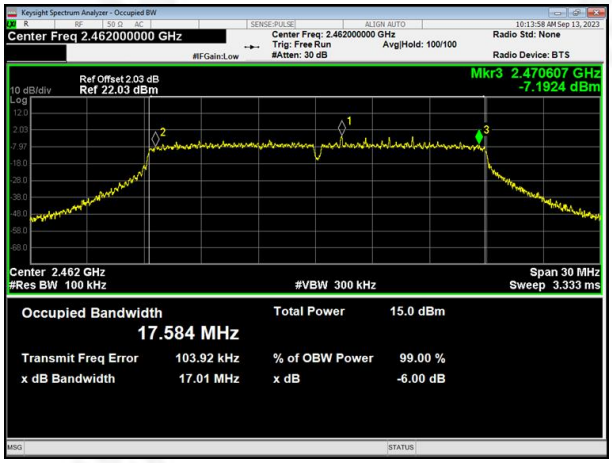
Lowest channel

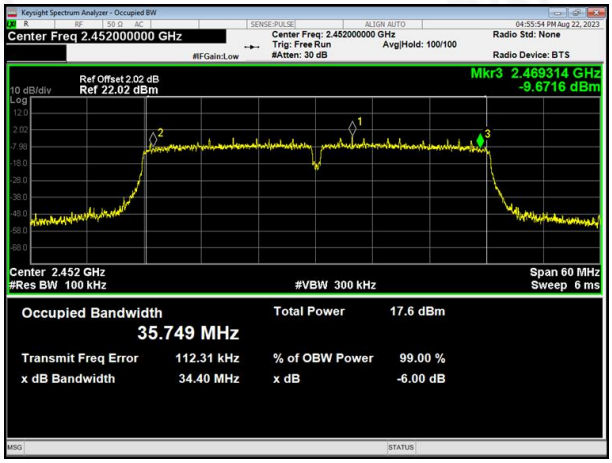




Middle channel

Highest channel

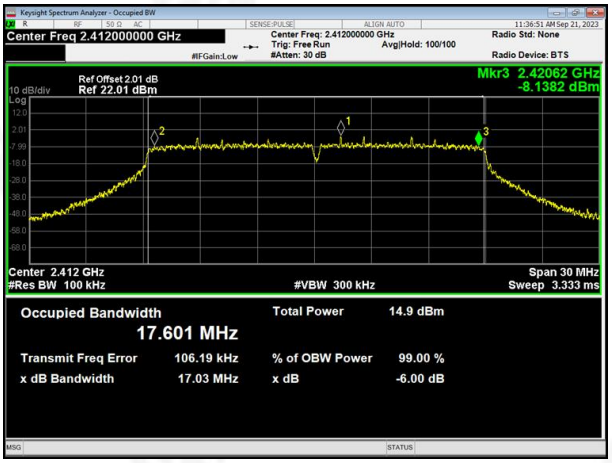


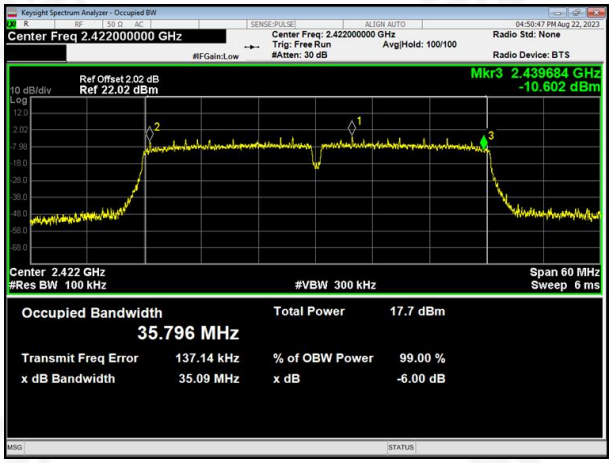


802.11ax(HE20)

802.11ax(HE40)

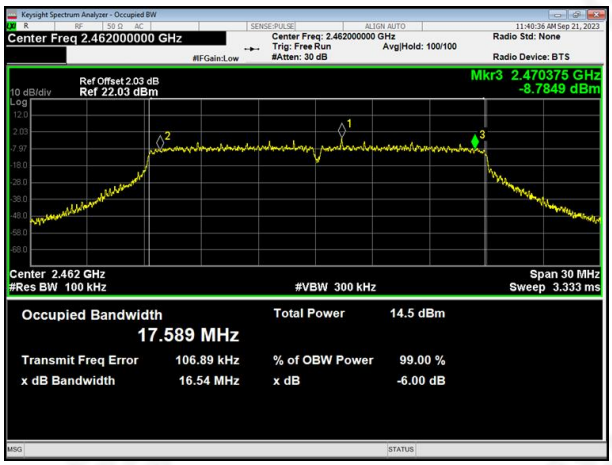
Lowest channel

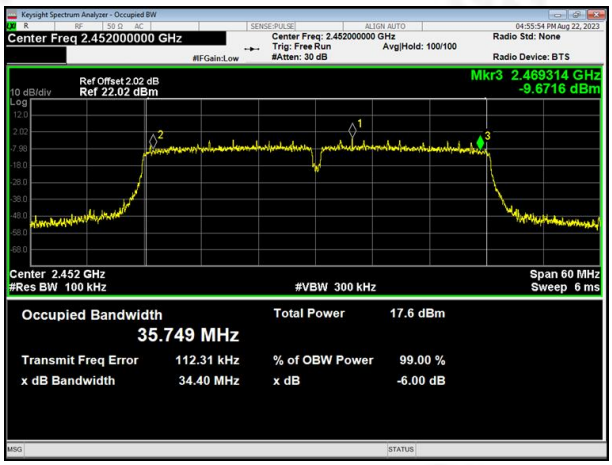




Middle channel

Highest channel





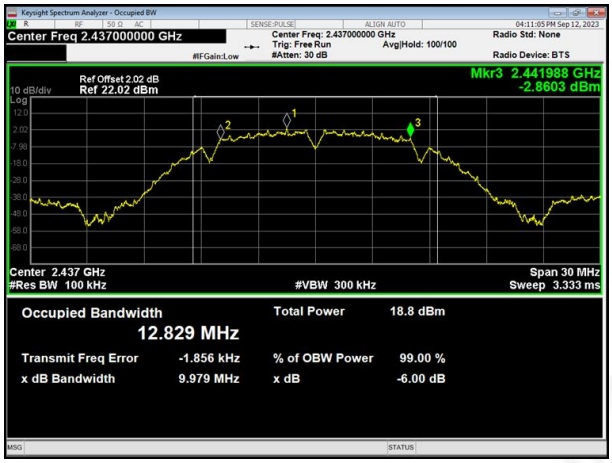
Test plot as follows: ANT2

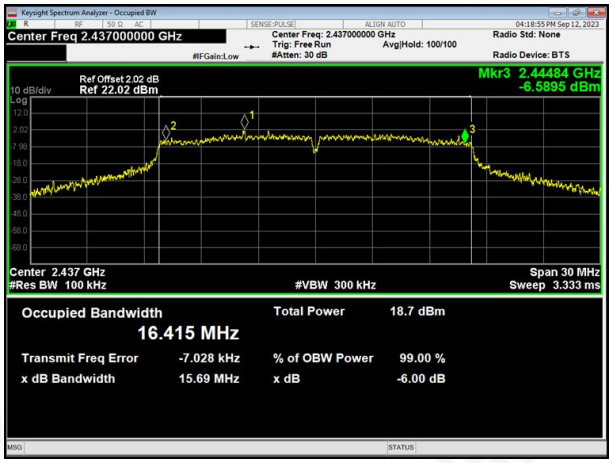
Lowest channel

802.11b

802.11g

Middle channel





Highest channel

Lowest channel

802.11n20

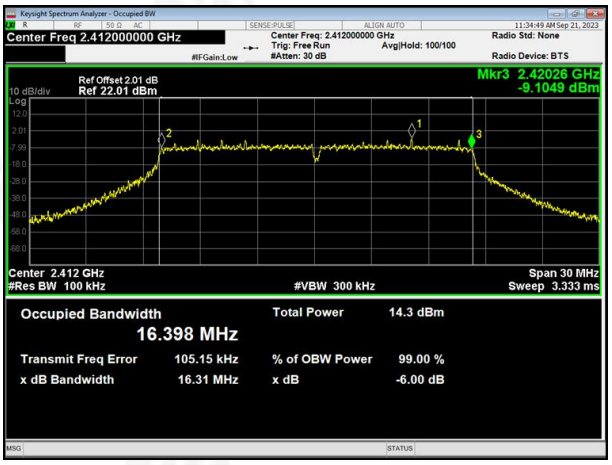
802.11n40

Middle channel

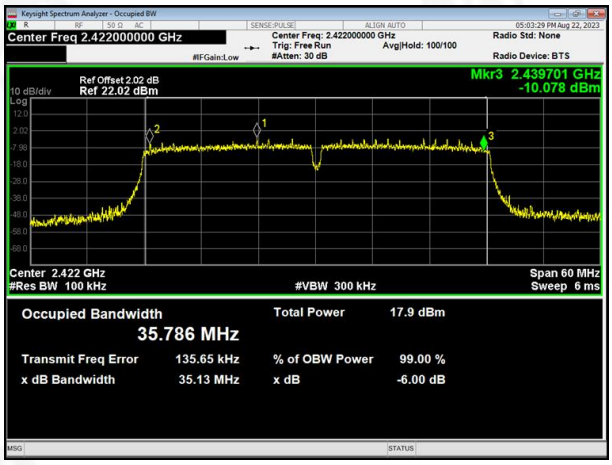
Highest channel

Lowest channel

802.11ax20

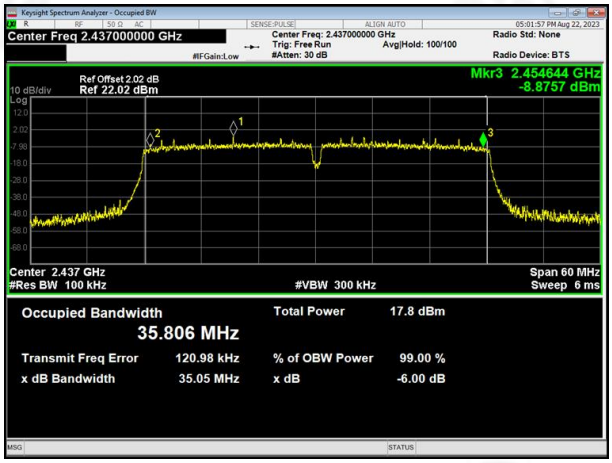


802.11n40

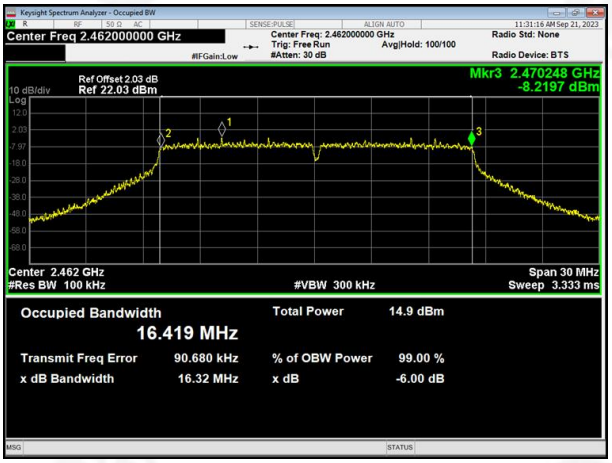


Middle channel

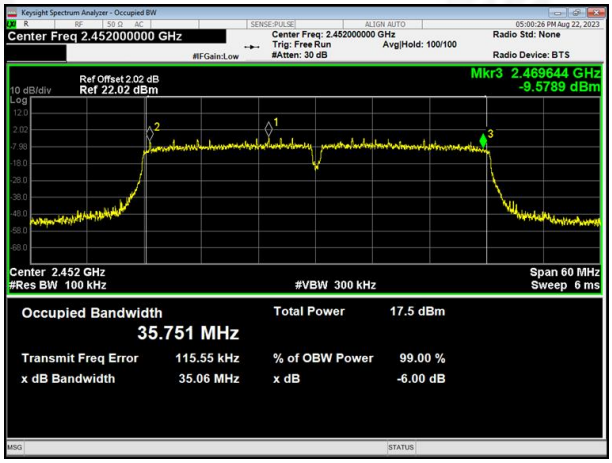
Middle channel



Highest channel



Highest channel



8.PEAK OUTPUT POWER TEST

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	KDB558074 D0115.247 Meas Guidancev05r02

8.1 APPLIED PROCEDURES/LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

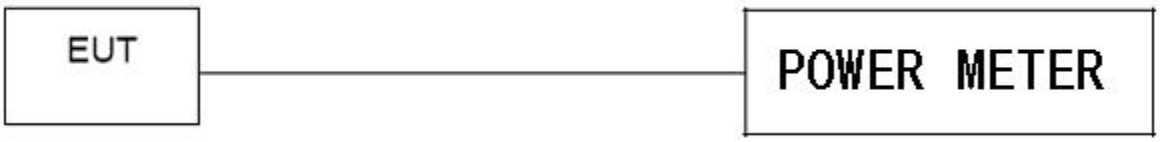
8.2 TEST PROCEDURE

a. The EUT was directly connected to the Power meter

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

8.6 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage ：	DC 3.3V

Test CH	Peak Output Power (dBm)				Limit(dBm)	Result
	802.11b Ant1	802.11b Ant2	802.11g Ant1	802.11g Ant2		
Lowest	14.12	14.19	13.40	13.47	30.00	Pass
Middle	14.73	14.89	13.21	13.42		
Highest	14.23	14.35	13.65	13.72		

Test CH	Peak Output Power (dBm)			Limit(dBm)	Result
	802.11n(HT20) Ant1	802.11n(HT20) Ant2	802.11n(HT20) MIMO		
Lowest	12.99	13.03	16.02	30.00	Pass
Middle	13.22	13.27	16.26		
Highest	13.60	13.69	16.66		

Test CH	Peak Output Power (dBm)			Limit(dBm)	Result
	802.11n(HT40) Ant1	802.11n(HT40) Ant2	802.11n(HT40) MIMO		
Lowest	12.03	12.00	15.03	30.00	Pass
Middle	12.18	12.09	15.15		
Highest	13.42	13.33	16.39		

Test CH	Peak Output Power (dBm)			Limit(dBm)	Result
	802.11ax(HE20) Ant1	802.11ax(HE20) Ant2	802.11ax(HE20) MIMO		
Lowest	11.169	10.841	14.02	30.00	Pass
Middle	11.449	10.856	14.17		
Highest	11.995	10.818	14.46		

Test CH	Peak Output Power (dBm)			Limit(dBm)	Result
	802.11ax(HE40) Ant1	802.11ax(HE40) Ant2	802.11ax(HE40) MIMO		
Lowest	12.03	12.00	15.03	30.00	Pass
Middle	12.18	12.09	15.15		
Highest	13.42	13.33	16.39		