802.11ax40

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel:2412MHz									
V	4824.00	54.24	30.55	5.77	24.66	54.12	74.00	-19.88	PK
V	4824.00	43.08	30.55	5.77	24.66	42.96	54.00	-11.04	AV
V	7236.00	50.62	30.33	6.32	24.55	51.16	74.00	-22.84	PK
V	7236.00	43.89	30.33	6.32	24.55	44.43	54.00	-9.57	AV
V	9648.00	50.45	30.85	7.45	24.69	51.74	74.00	-22.26	PK
V	9648.00	43.81	30.85	7.45	24.69	45.10	54.00	-8.90	AV
V	12060.00	52.96	31.02	8.99	25.57	56.50	74.00	-17.50	PK
V	12060.00	43.07	31.02	8.99	25.57	46.61	54.00	-7.39	AV
H	4824.00	50.61	30.55	5.77	24.66	50.49	74.00	-23.51	PK
H	4824.00	43.59	30.55	5.77	24.66	43.47	54.00	-10.53	AV
H	7236.00	53.67	30.33	6.32	24.55	54.21	74.00	-19.79	PK
H	7236.00	43.89	30.33	6.32	24.55	44.43	54.00	-9.57	AV
H	9648.00	51.78	30.85	7.45	24.69	53.07	74.00	-20.93	PK
H	9648.00	43.15	30.85	7.45	24.69	44.44	54.00	-9.56	AV
H	12060.00	53.29	31.02	8.99	25.57	56.83	74.00	-17.17	PK
H	12060.00	43.94	31.02	8.99	25.57	47.48	54.00	-6.52	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Middle Channel:2437MHz									
V	4874.00	51.06	30.55	5.77	24.66	50.94	74.00	-23.06	PK
V	4874.00	43.51	30.55	5.77	24.66	43.39	54.00	-10.61	AV
V	7311.00	51.77	30.33	6.32	24.55	52.31	74.00	-21.69	PK
V	7311.00	43.96	30.33	6.32	24.55	44.50	54.00	-9.50	AV
V	9748.00	51.50	30.85	7.45	24.69	52.79	74.00	-21.21	PK
V	9748.00	43.11	30.85	7.45	24.69	44.40	54.00	-9.60	AV
V	12185.00	53.11	31.02	8.99	25.57	56.65	74.00	-17.35	PK
V	12185.00	43.10	31.02	8.99	25.57	46.64	54.00	-7.36	AV
H	4874.00	52.05	30.55	5.77	24.66	51.93	74.00	-22.07	PK
H	4874.00	43.43	30.55	5.77	24.66	43.31	54.00	-10.69	AV
H	7311.00	54.75	30.33	6.32	24.55	55.29	74.00	-18.71	PK
H	7311.00	43.61	30.33	6.32	24.55	44.15	54.00	-9.85	AV
H	9748.00	50.60	30.85	7.45	24.69	51.89	74.00	-22.11	PK
H	9748.00	43.88	30.85	7.45	24.69	45.17	54.00	-8.83	AV
H	12185.00	53.88	31.02	8.99	25.57	57.42	74.00	-16.58	PK
H	12185.00	43.49	31.02	8.99	25.57	47.03	54.00	-6.97	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
High Channel:2462MHz									
V	4924.00	51.92	30.55	5.77	24.66	51.80	74.00	-22.20	PK
V	4924.00	43.15	30.55	5.77	24.66	43.03	54.00	-10.97	AV
V	7386.00	52.12	30.33	6.32	24.55	52.66	74.00	-21.34	PK
V	7386.00	43.94	30.33	6.32	24.55	44.48	54.00	-9.52	AV
V	9848.00	54.63	30.85	7.45	24.69	55.92	74.00	-18.08	PK
V	9848.00	43.83	30.85	7.45	24.69	45.12	54.00	-8.88	AV
V	12310.00	51.03	31.02	8.99	25.57	54.57	74.00	-19.43	PK
V	12310.00	43.24	31.02	8.99	25.57	46.78	54.00	-7.22	AV
H	4924.00	53.30	30.55	5.77	24.66	53.18	74.00	-20.82	PK
H	4924.00	43.60	30.55	5.77	24.66	43.48	54.00	-10.52	AV
H	7386.00	50.04	30.33	6.32	24.55	50.58	74.00	-23.42	PK
H	7386.00	43.48	30.33	6.32	24.55	44.02	54.00	-9.98	AV
H	9848.00	52.74	30.85	7.45	24.69	54.03	74.00	-19.97	PK
H	9848.00	43.49	30.85	7.45	24.69	44.78	54.00	-9.22	AV
H	12310.00	53.93	31.02	8.99	25.57	57.47	74.00	-16.53	PK
H	12310.00	43.00	31.02	8.99	25.57	46.54	54.00	-7.46	AV

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
4. The test data shows only the worst case.

5.RADIATED BAND EMISSIONMEASUREMENT

5.1 TEST REQUIREMENT:

Test Requirement:	FCC Part15 C Section 15.209 and 15.205
Test Method:	ANSI C63.10: 2013
Test Frequency Range:	All of the restrict bands were tested, only the worst band's (2310MHz to 2500MHz) data was showed.
Test site:	Measurement Distance: 3m
Receiver setup:	See below

Frequency	Detector	RBW	VBW	Value
Above 1GHz	Peak	1MHz	3MHz	Peak
	Average	1MHz	3MHz	Average

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class B (dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

5.2 TEST PROCEDURE

Above 1GHz test procedure as below:

a. 1. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could bestopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dBmargin would be re-tested one by one using peak, quasi-peak or average method as specified and then reportedin a data sheet.

g. Test the EUT in the lowest channel,the Highest channel

Note:

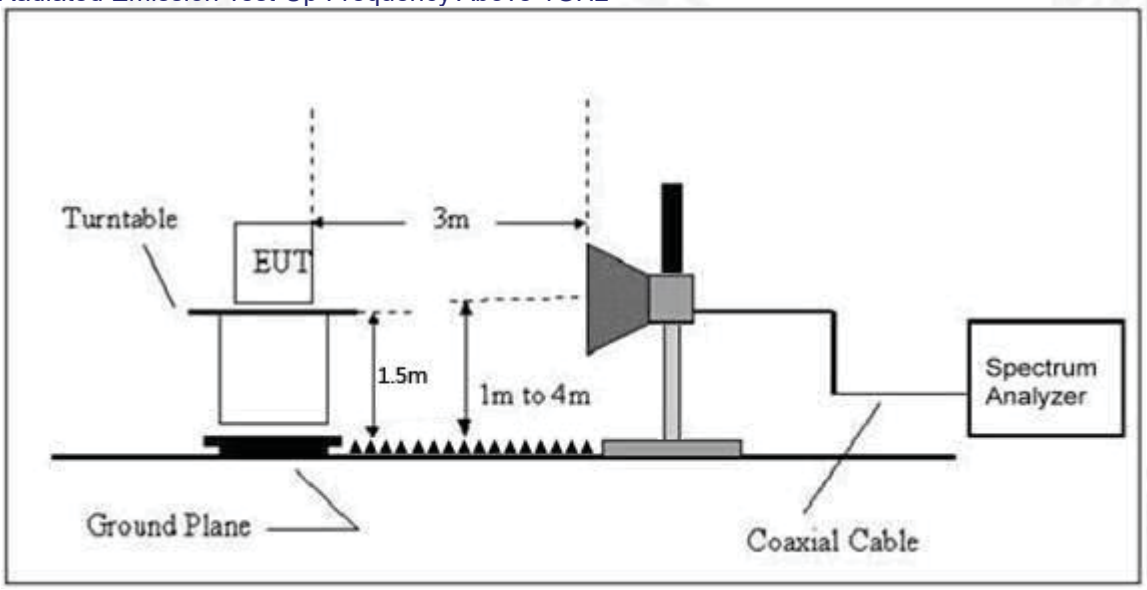
Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

5.3 DEVIATION FROM TEST STANDARD

No deviation

5.4 TEST SETUP

Radiated Emission Test-Up Frequency Above 1GHz



5.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULT

	Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre-amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV/m)	Detector Type	Result
802.11b	LowChannel 2412MHz									
	H	2390.00	54.09	30.22	4.85	23.98	52.70	74.00	PK	PASS
	H	2390.00	44.80	30.22	4.85	23.98	43.41	54.00	AV	PASS
	H	2400.00	54.61	30.22	4.85	23.98	53.22	74.00	PK	PASS
	H	2400.00	44.05	30.22	4.85	23.98	42.66	54.00	AV	PASS
	V	2390.00	54.21	30.22	4.85	23.98	52.82	74.00	PK	PASS
	V	2390.00	44.24	30.22	4.85	23.98	42.85	54.00	AV	PASS
	V	2400.00	53.09	30.22	4.85	23.98	51.70	74.00	PK	PASS
	V	2400.00	44.12	30.22	4.85	23.98	42.73	54.00	AV	PASS
	HighChannel 2462MHz									
	H	2483.50	54.96	30.22	4.85	23.98	53.57	74.00	PK	PASS
	H	2483.50	44.11	30.22	4.85	23.98	42.72	54.00	AV	PASS
	H	2500.00	54.03	30.22	4.85	23.98	52.64	74.00	PK	PASS
	H	2500.00	44.18	30.22	4.85	23.98	42.79	54.00	AV	PASS
	V	2483.50	53.39	30.22	4.85	23.98	52.00	74.00	PK	PASS
	V	2483.50	44.51	30.22	4.85	23.98	43.12	54.00	AV	PASS
	V	2500.00	54.99	30.22	4.85	23.98	53.60	74.00	PK	PASS
	V	2500.00	44.42	30.22	4.85	23.98	43.03	54.00	AV	PASS
802.11g	LowChannel 2412MHz									
	H	2390.00	53.64	30.22	4.85	23.98	52.25	74.00	PK	PASS
	H	2390.00	44.53	30.22	4.85	23.98	43.14	54.00	AV	PASS
	H	2400.00	54.24	30.22	4.85	23.98	52.85	74.00	PK	PASS
	H	2400.00	44.88	30.22	4.85	23.98	43.49	54.00	AV	PASS
	V	2390.00	53.40	30.22	4.85	23.98	52.01	74.00	PK	PASS
	V	2390.00	44.62	30.22	4.85	23.98	43.23	54.00	AV	PASS
	V	2400.00	54.26	30.22	4.85	23.98	52.87	74.00	PK	PASS
	V	2400.00	44.83	30.22	4.85	23.98	43.44	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	53.62	30.22	4.85	23.98	52.23	74.00	PK	PASS
	H	2483.50	44.48	30.22	4.85	23.98	43.09	54.00	AV	PASS
	H	2500.00	53.89	30.22	4.85	23.98	52.50	74.00	PK	PASS
	H	2500.00	44.48	30.22	4.85	23.98	43.09	54.00	AV	PASS
	V	2483.50	54.36	30.22	4.85	23.98	52.97	74.00	PK	PASS
	V	2483.50	44.06	30.22	4.85	23.98	42.67	54.00	AV	PASS
	V	2500.00	53.33	30.22	4.85	23.98	51.94	74.00	PK	PASS
	V	2500.00	44.55	30.22	4.85	23.98	43.16	54.00	AV	PASS

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limi

802.11n20	LowChannel 2412MHz									
	H	2390.00	53.54	30.22	4.85	23.98	52.15	74.00	PK	PASS
	H	2390.00	44.99	30.22	4.85	23.98	43.60	54.00	AV	PASS
	H	2400.00	54.34	30.22	4.85	23.98	52.95	74.00	PK	PASS
	H	2400.00	44.49	30.22	4.85	23.98	43.10	54.00	AV	PASS
	V	2390.00	54.16	30.22	4.85	23.98	52.77	74.00	PK	PASS
	V	2390.00	44.92	30.22	4.85	23.98	43.53	54.00	AV	PASS
	V	2400.00	54.67	30.22	4.85	23.98	53.28	74.00	PK	PASS
	V	2400.00	44.02	30.22	4.85	23.98	42.63	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	53.16	30.22	4.85	23.98	51.77	74.00	PK	PASS
	H	2483.50	44.64	30.22	4.85	23.98	43.25	54.00	AV	PASS
	H	2500.00	53.44	30.22	4.85	23.98	52.05	74.00	PK	PASS
	H	2500.00	44.59	30.22	4.85	23.98	43.20	54.00	AV	PASS
	V	2483.50	53.28	30.22	4.85	23.98	51.89	74.00	PK	PASS
	V	2483.50	44.57	30.22	4.85	23.98	43.18	54.00	AV	PASS
	V	2500.00	53.55	30.22	4.85	23.98	52.16	74.00	PK	PASS
	V	2500.00	44.06	30.22	4.85	23.98	42.67	54.00	AV	PASS

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11n40	LowChannel 2412MHz									
	H	2390.00	53.54	30.22	4.85	23.98	52.15	74.00	PK	PASS
	H	2390.00	44.99	30.22	4.85	23.98	43.60	54.00	AV	PASS
	H	2400.00	54.34	30.22	4.85	23.98	52.95	74.00	PK	PASS
	H	2400.00	44.49	30.22	4.85	23.98	43.10	54.00	AV	PASS
	V	2390.00	54.16	30.22	4.85	23.98	52.77	74.00	PK	PASS
	V	2390.00	44.92	30.22	4.85	23.98	43.53	54.00	AV	PASS
	V	2400.00	54.67	30.22	4.85	23.98	53.28	74.00	PK	PASS
	V	2400.00	44.02	30.22	4.85	23.98	42.63	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	53.16	30.22	4.85	23.98	51.77	74.00	PK	PASS
	H	2483.50	44.64	30.22	4.85	23.98	43.25	54.00	AV	PASS
	H	2500.00	53.44	30.22	4.85	23.98	52.05	74.00	PK	PASS
	H	2500.00	44.59	30.22	4.85	23.98	43.20	54.00	AV	PASS
	V	2483.50	53.28	30.22	4.85	23.98	51.89	74.00	PK	PASS
	V	2483.50	44.57	30.22	4.85	23.98	43.18	54.00	AV	PASS
	V	2500.00	53.55	30.22	4.85	23.98	52.16	74.00	PK	PASS
	V	2500.00	44.06	30.22	4.85	23.98	42.67	54.00	AV	PASS

Remark:
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit

802.11ax20	LowChannel 2412MHz									
	H	2390.00	53.54	30.22	4.85	23.98	52.15	74.00	PK	PASS
	H	2390.00	44.99	30.22	4.85	23.98	43.60	54.00	AV	PASS
	H	2400.00	54.34	30.22	4.85	23.98	52.95	74.00	PK	PASS
	H	2400.00	44.49	30.22	4.85	23.98	43.10	54.00	AV	PASS
	V	2390.00	54.16	30.22	4.85	23.98	52.77	74.00	PK	PASS
	V	2390.00	44.92	30.22	4.85	23.98	43.53	54.00	AV	PASS
	V	2400.00	54.67	30.22	4.85	23.98	53.28	74.00	PK	PASS
	V	2400.00	44.02	30.22	4.85	23.98	42.63	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	53.16	30.22	4.85	23.98	51.77	74.00	PK	PASS
	H	2483.50	44.64	30.22	4.85	23.98	43.25	54.00	AV	PASS
	H	2500.00	53.44	30.22	4.85	23.98	52.05	74.00	PK	PASS
	H	2500.00	44.59	30.22	4.85	23.98	43.20	54.00	AV	PASS
	V	2483.50	53.28	30.22	4.85	23.98	51.89	74.00	PK	PASS
	V	2483.50	44.57	30.22	4.85	23.98	43.18	54.00	AV	PASS

	V	2500.00	53.55	30.22	4.85	23.98	52.16	74.00	PK	PASS
	V	2500.00	44.06	30.22	4.85	23.98	42.67	54.00	AV	PASS
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit										
802.11ax40	LowChannel 2412MHz									
	H	2390.00	53.54	30.22	4.85	23.98	52.15	74.00	PK	PASS
	H	2390.00	44.99	30.22	4.85	23.98	43.60	54.00	AV	PASS
	H	2400.00	54.34	30.22	4.85	23.98	52.95	74.00	PK	PASS
	H	2400.00	44.49	30.22	4.85	23.98	43.10	54.00	AV	PASS
	V	2390.00	54.16	30.22	4.85	23.98	52.77	74.00	PK	PASS
	V	2390.00	44.92	30.22	4.85	23.98	43.53	54.00	AV	PASS
	V	2400.00	54.67	30.22	4.85	23.98	53.28	74.00	PK	PASS
	V	2400.00	44.02	30.22	4.85	23.98	42.63	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	53.16	30.22	4.85	23.98	51.77	74.00	PK	PASS
	H	2483.50	44.64	30.22	4.85	23.98	43.25	54.00	AV	PASS
	H	2500.00	53.44	30.22	4.85	23.98	52.05	74.00	PK	PASS
	H	2500.00	44.59	30.22	4.85	23.98	43.20	54.00	AV	PASS
	V	2483.50	53.28	30.22	4.85	23.98	51.89	74.00	PK	PASS
	V	2483.50	44.57	30.22	4.85	23.98	43.18	54.00	AV	PASS
	V	2500.00	53.55	30.22	4.85	23.98	52.16	74.00	PK	PASS
	V	2500.00	44.06	30.22	4.85	23.98	42.67	54.00	AV	PASS
Remark: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit										

6.POWER SPECTRAL DENSITY TEST

Test Requirement:	FCC Part15 C Section 15.247 (e)
Test Method:	ANSI C63.10:2013 and KDB558074 D01DTS Meas Guidancev05r02

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8dBm/3kHz	2400-2483.5	PASS

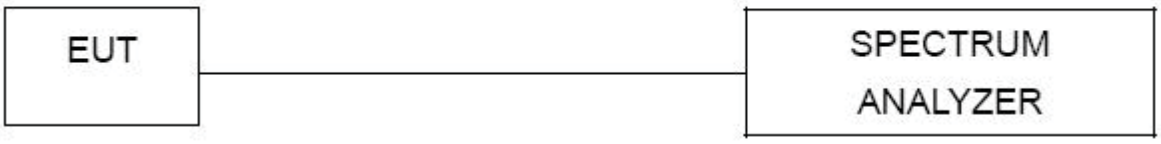
6.2 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4. Set the VBW ≥ 3 x RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

6.6 TEST RESULT

Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX b Mode		

Frequency	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-7.547	8	PASS
2437 MHz	-8.561	8	PASS
2462 MHz	-5.516	8	PASS

TX CH01

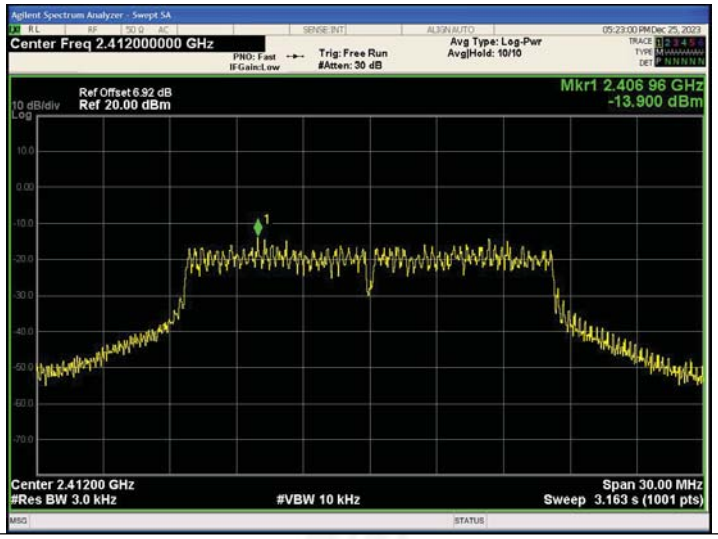
TX CH06

TX CH11

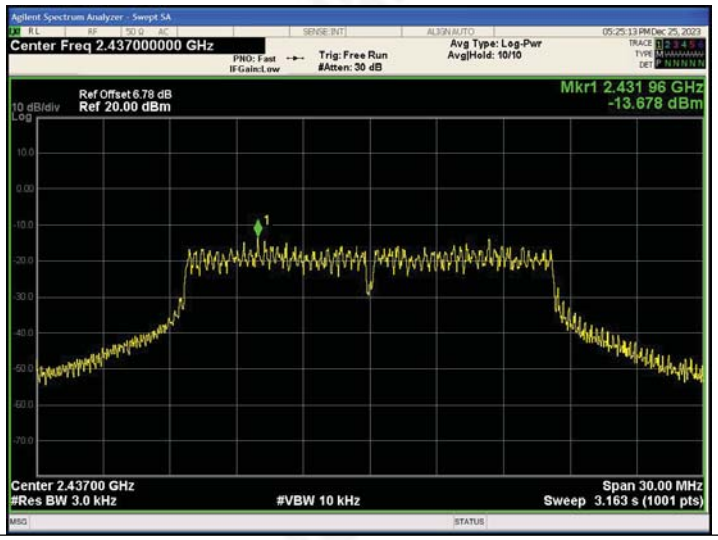
Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX g Mode		

Frequency	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-13.9	8	PASS
2437 MHz	-13.678	8	PASS
2462 MHz	-12.487	8	PASS

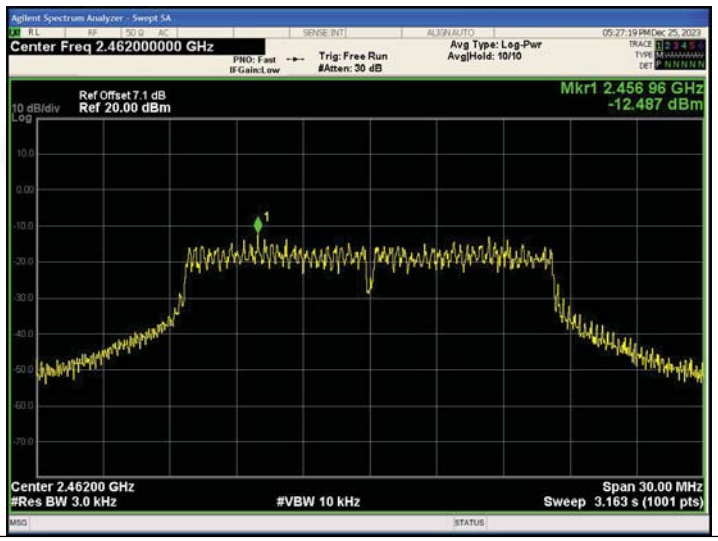
TX CH01



TX CH06



TX CH11

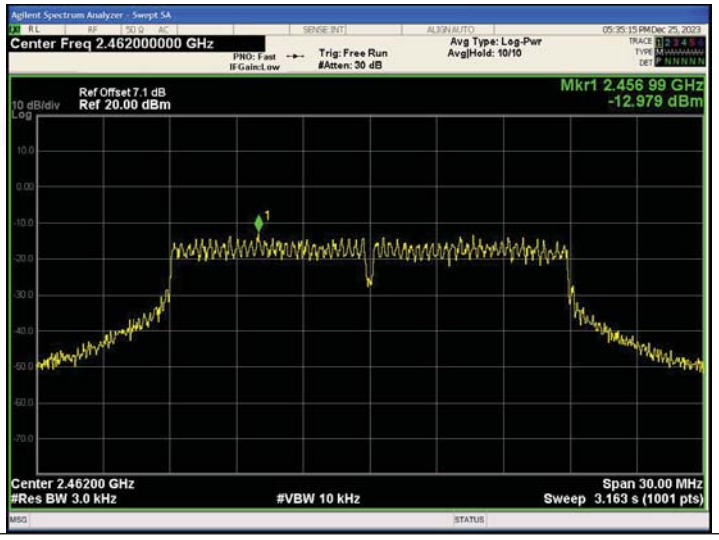


Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX n Mode(20M)		

Frequency	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-13.303	8	PASS
2437 MHz	-14.146	8	PASS
2462 MHz	-12.979	8	PASS

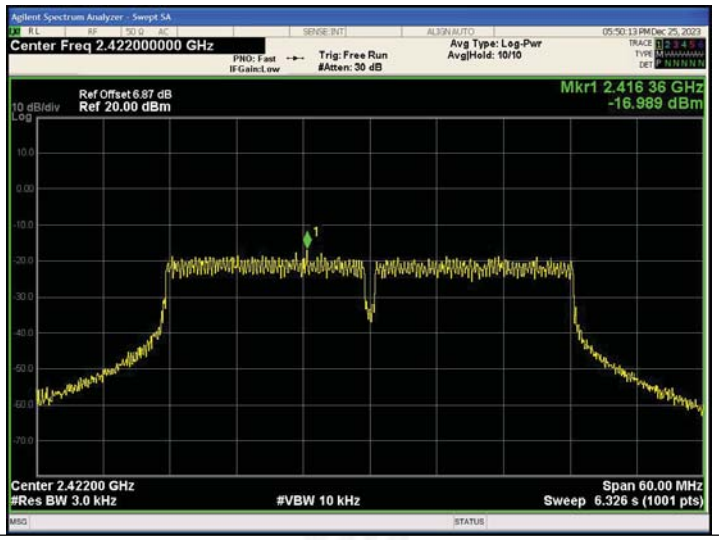
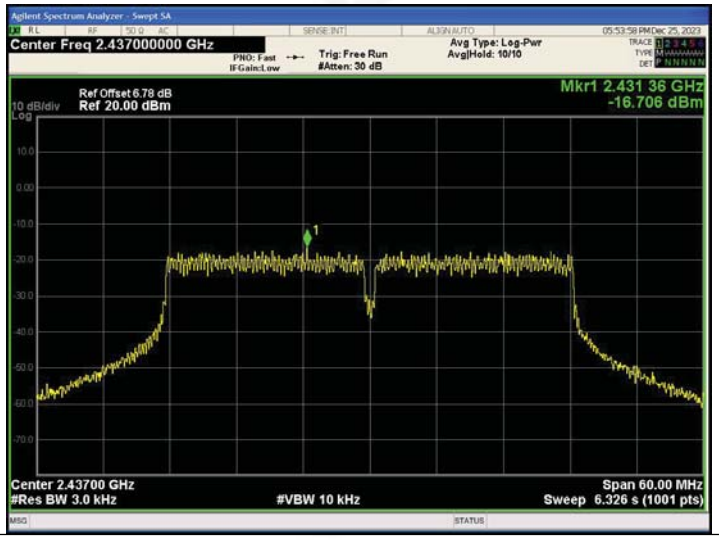
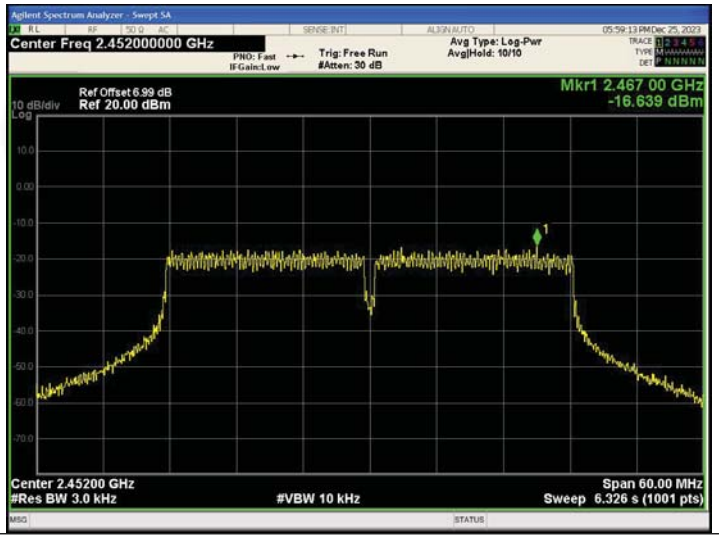
TX CH01

TX CH06

TX CH11


Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX n Mode(40M)		

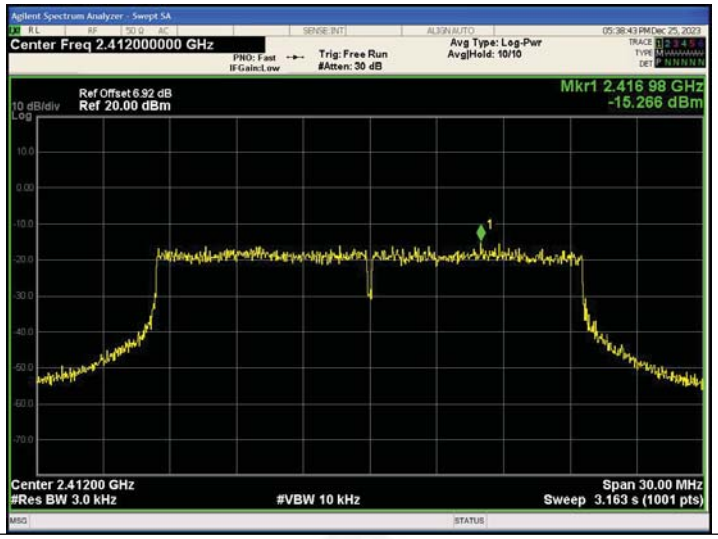
Frequency	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-16.989	8	PASS
2437 MHz	-16.706	8	PASS
2462 MHz	-16.639	8	PASS

TX CH01

TX CH06

TX CH11


Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX ax Mode(20M)		

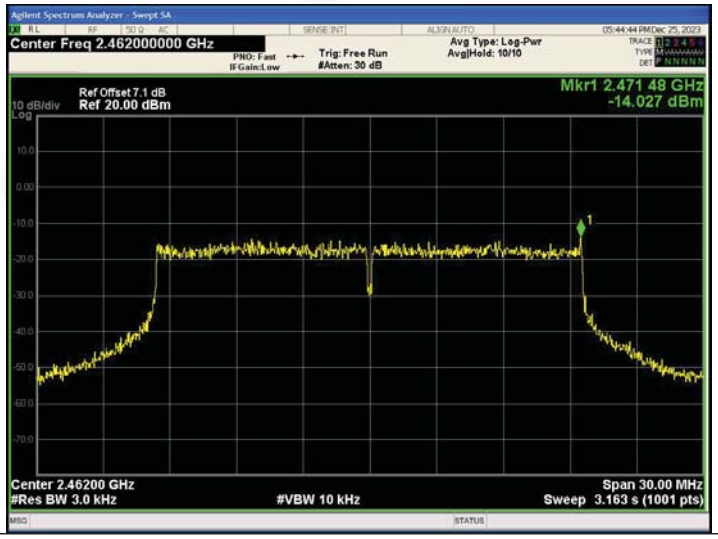
Frequency	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-15.266	8	PASS
2437 MHz	-15.165	8	PASS
2462 MHz	-14.027	8	PASS

TX CH01



TX CH06

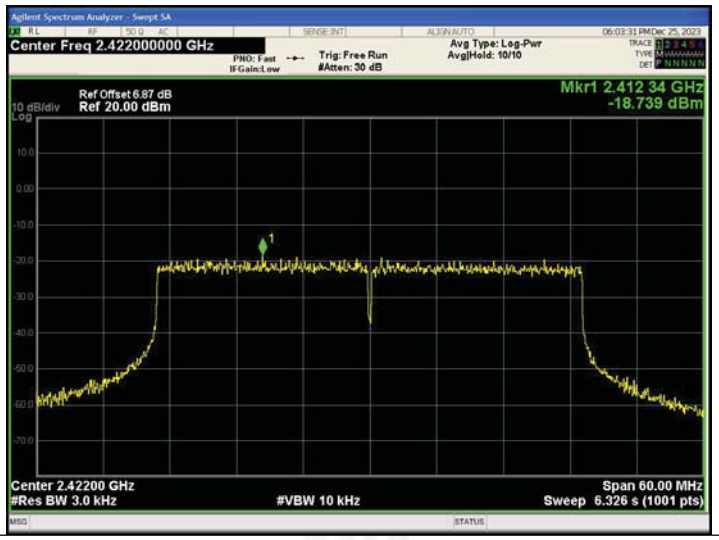
TX CH11



Temperature：	26℃	Relative Humidity：	54%
Pressure：	101kPa	Test Voltage：	AC 120V/60Hz
Test Mode ：	TX ax Mode(40M)		

Frequency	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412 MHz	-18.739	8	PASS
2437 MHz	-3.363	8	PASS
2462 MHz	-2.819	8	PASS

TX CH01



TX CH06

TX CH11

7. CHANNEL BANDWIDTH& 99% OCCUPY BANDWIDTH

Test Requirement:	FCC Part15 C Section 15.247 (a)(2)
Test Method:	ANSI C63.10:2013 and KDB558074 D01DTS 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

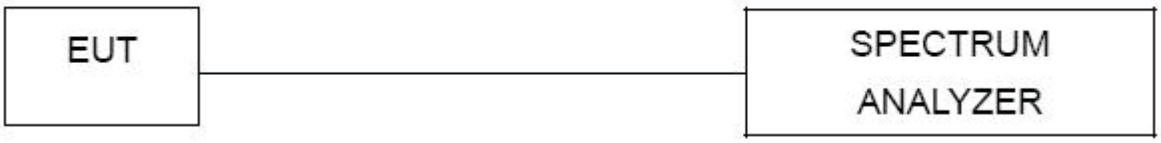
7.2 TEST PROCEDURE

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 :	AC 120V/60Hz
Test Mode :	TX b Mode		

Test CH	-6dB Occupy Bandwidth (MHz)							
	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)	802.11ax(HT20)	802.11ax(HT40)	Limit(KHz)	Result
Lowest	6.812	16.488	17.606	36.399	18.688	38.038	>500	Pass
Middle	6.996	16.458	17.615	36.38	19.037	37.964	>500	Pass
Highest	7.332	16.446	17.65	36.378	18.856	37.792	>500	Pass

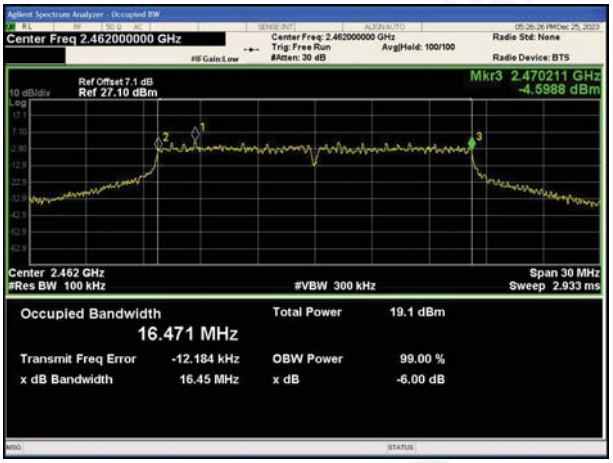
Test plot as follows:

802.11b 802.11g

Lowest channel

Middle channel

Highest channel

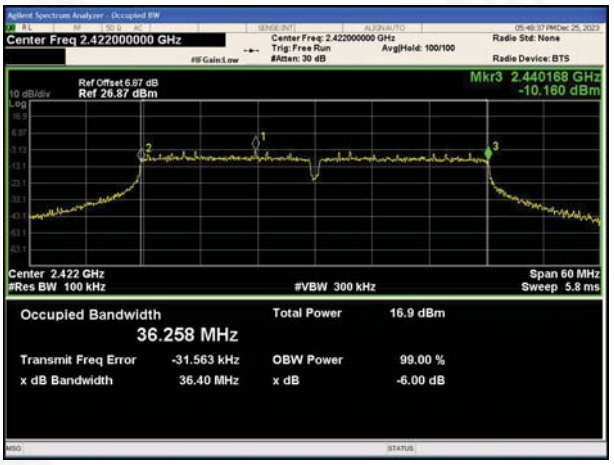


802.11n20

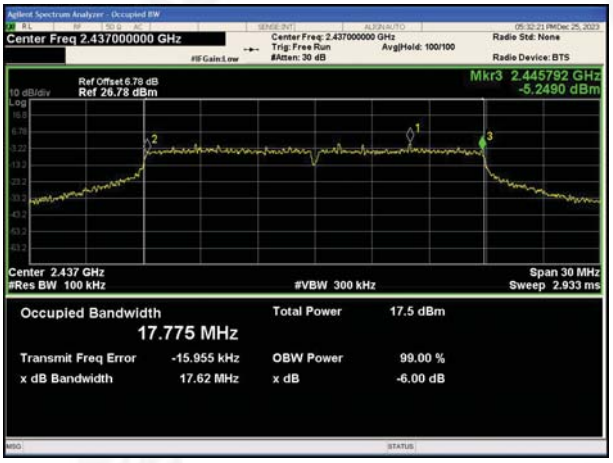
Lowest channel

802.11n40

Lowest channel

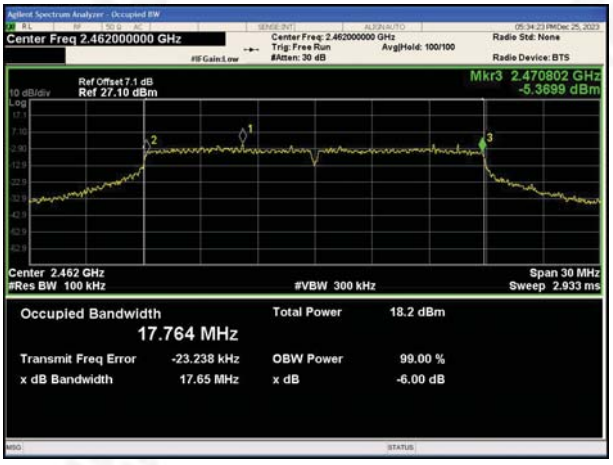


Middle channel

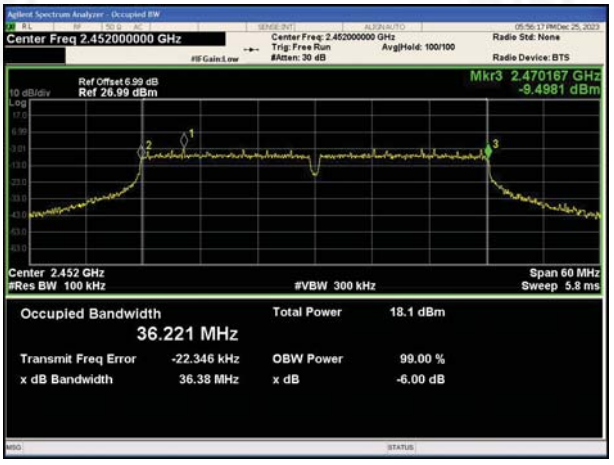


Middle channel

Highest channel



Highest channel

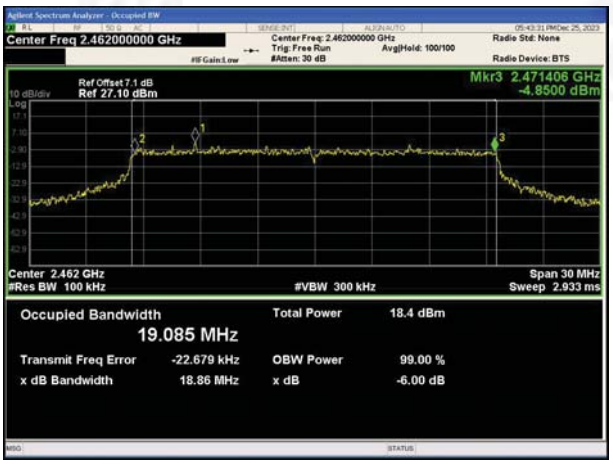


802.11ax20

Lowest channel

Middle channel

Highest channel



802.11ax40

Lowest channel

Middle channel

Highest channel

8.PEAK OUTPUT POWER TEST

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	ANSI C63.10:2013 and KDB558074 D01DTS 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

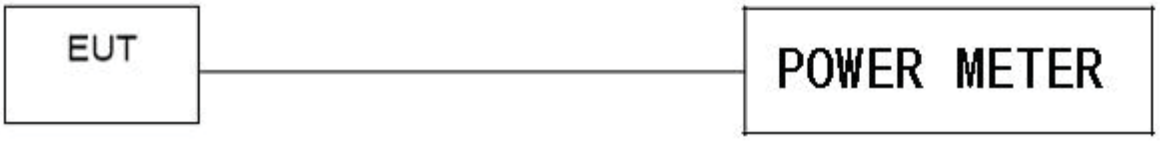
8.2 TEST PROCEDURE

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 ：	AC 120V/60Hz

Test CH	Peak Output Power (dBm)						Limit(dBm)	Result
	802.11b	802.11g	802.11 n(HT20)	802.11 n(HT40)	802.11 ax(HT20)	802.11 ax(HT40)		
Lowest	19.178	18.276	18.083	17.52	18.704	18.094	30.00	Pass
Middle	19.622	18.682	18.368	18.264	18.96	18.916		
Highest	20.58	19.479	19.21	18.743	19.877	19.477		

9. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	ANSI C63.10:2013 and KDB558074 D01DTS Meas Guidancev05r02

9.1 APPLICABLE STANDARD

in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in§15.205(a), must also comply with the radiated emission limits specified in15.209(a).

9.2 TEST PROCEDURE

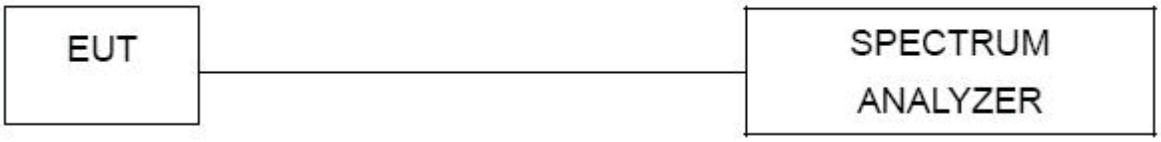
Using the following spectrum analyzer setting:

A) Set the RBW = 100KHz.
B) Set the VBW = 300KHz.
C) Sweep time = auto couple.
D) Detector function = peak.
E) Trace mode = max hold.
F) Allow trace to fully stabilize.

9.3 DEVIATION FROM STANDARD

No deviation.

9.4 TEST SETUP



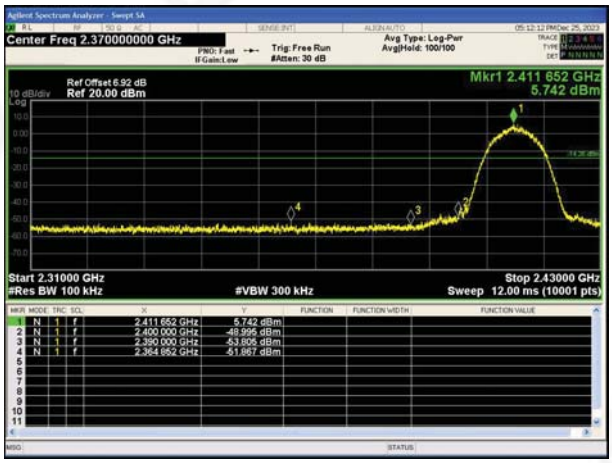
9.5 EUT OPERATION CONDITIONS

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.

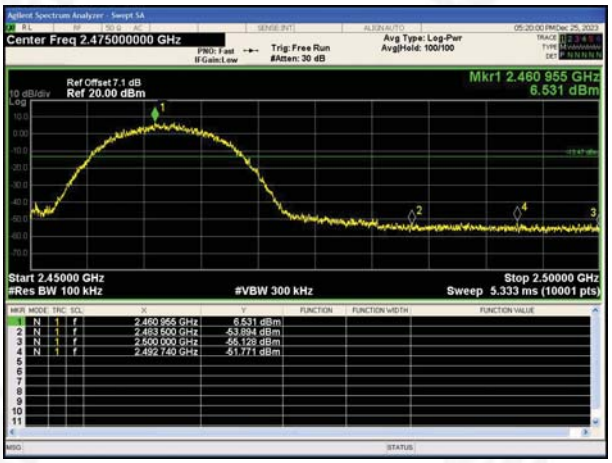
9.6 TEST RESULTS

Test plot as follows:

Test mode:	802.11b

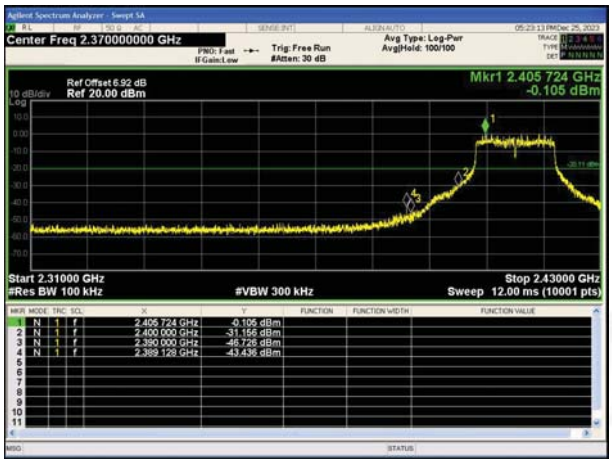


Lowest channel

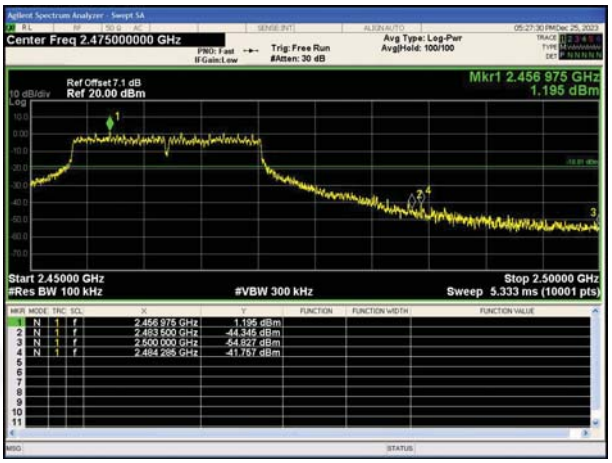


Highest channel

Test mode:	802.11g

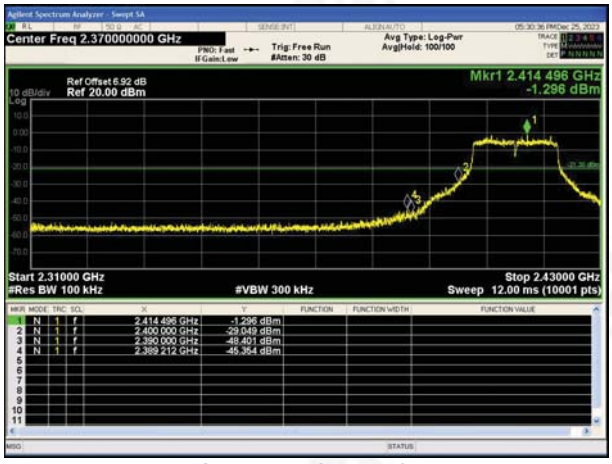


Lowest channel



Highest channel

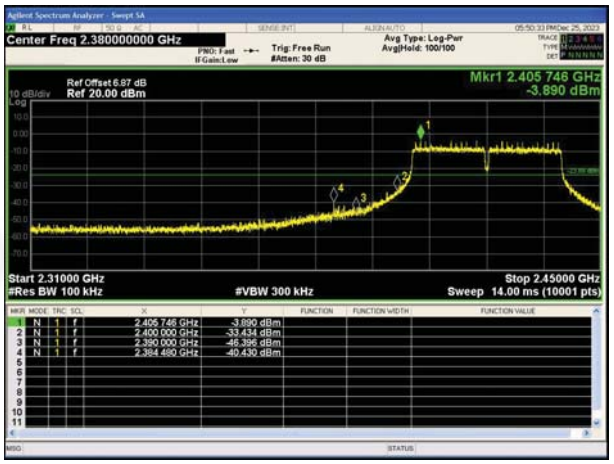
Test mode:	802.11n(HT20)



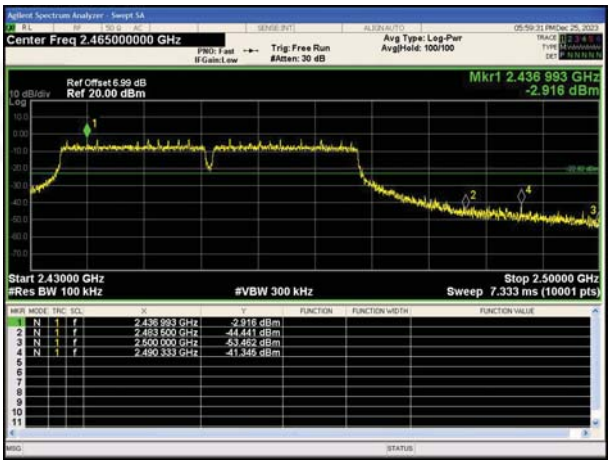
Lowest channel

Highest channel

Test mode:	802.11n(HT40)

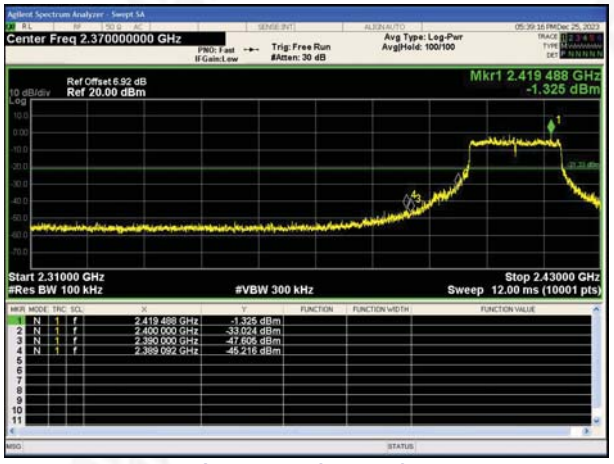


Lowest channel

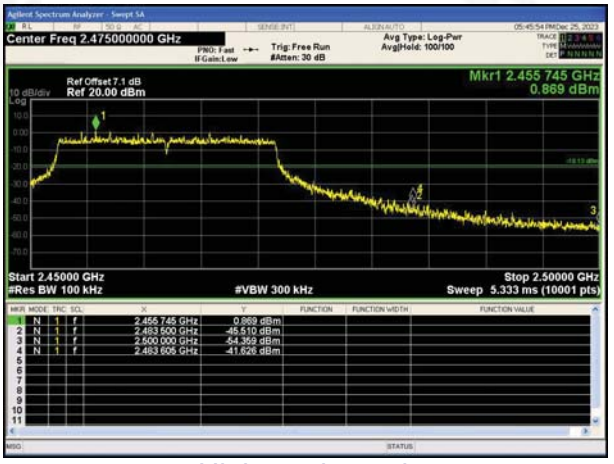


Highest channel

Test mode:	802.11ax(HT20)

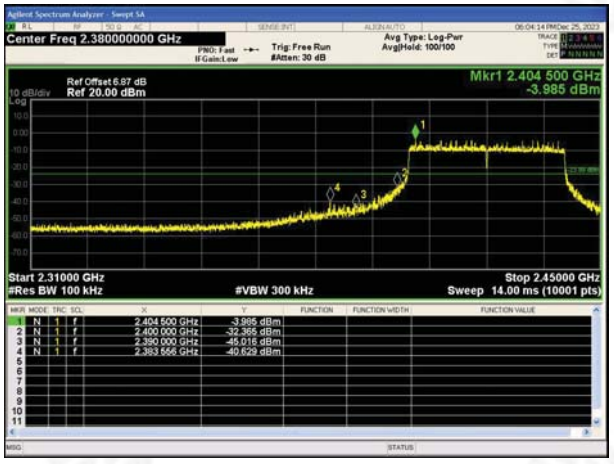


Lowest channel



Highest channel

Test mode:	802.11ax(HT40)



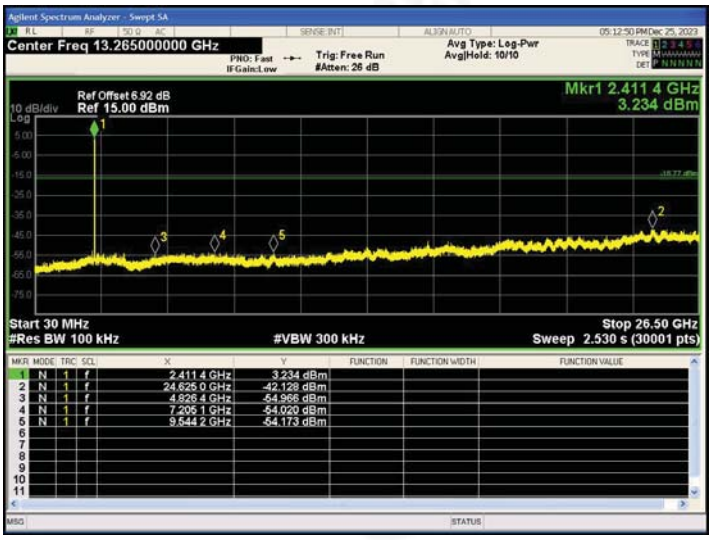
Lowest channel

Highest channel

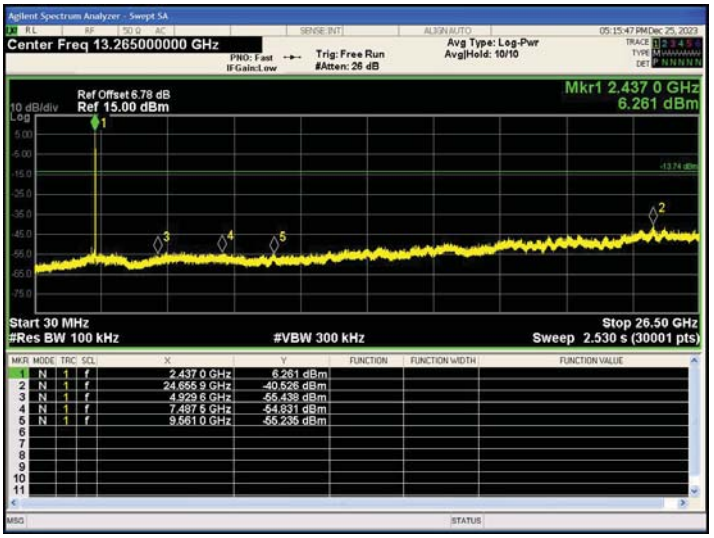
Test plot as follows:

802.11b

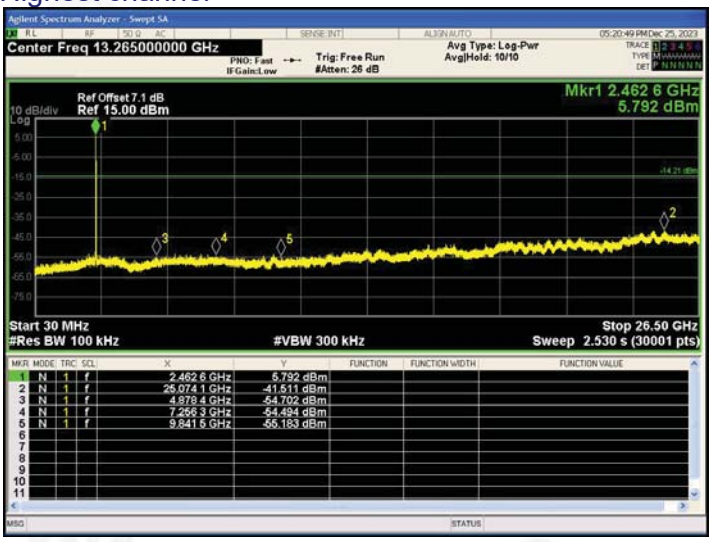
Lowest channel



Middle channel

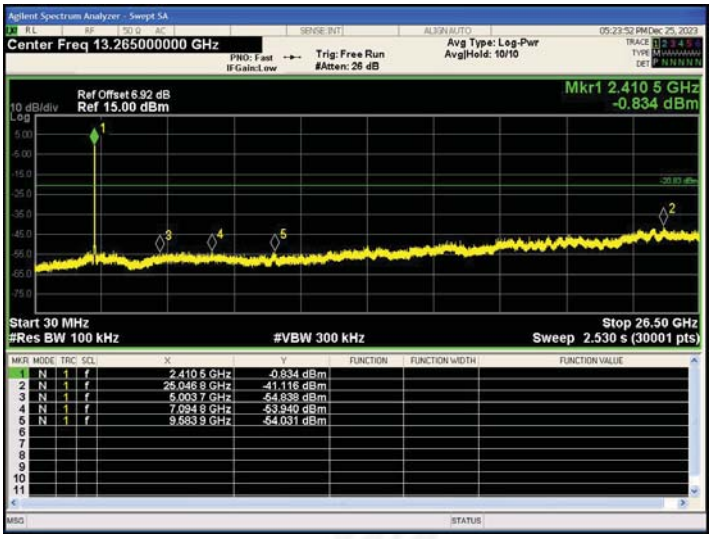


Highest channel

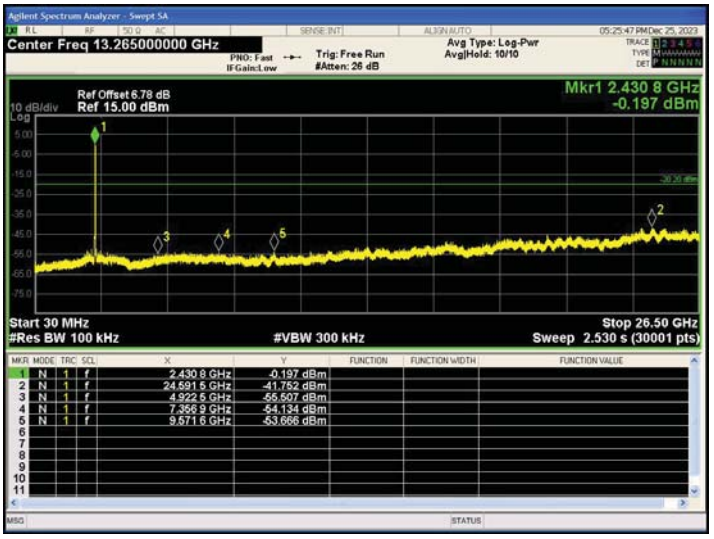


802.11g

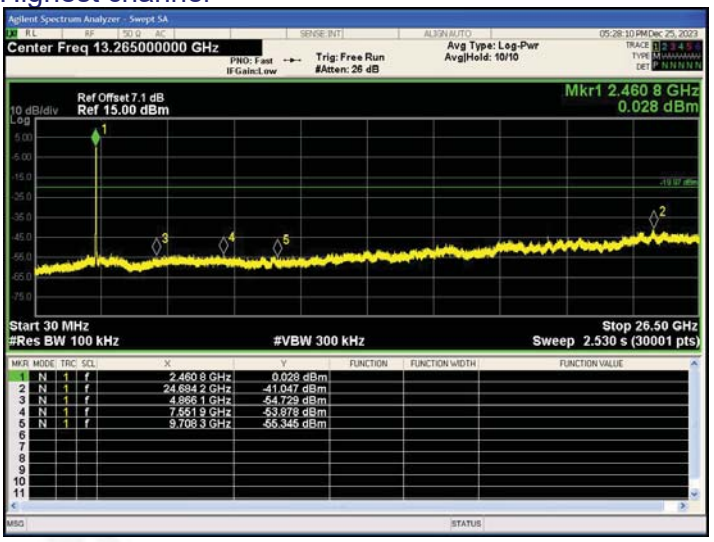
Lowest channel



Middle channel

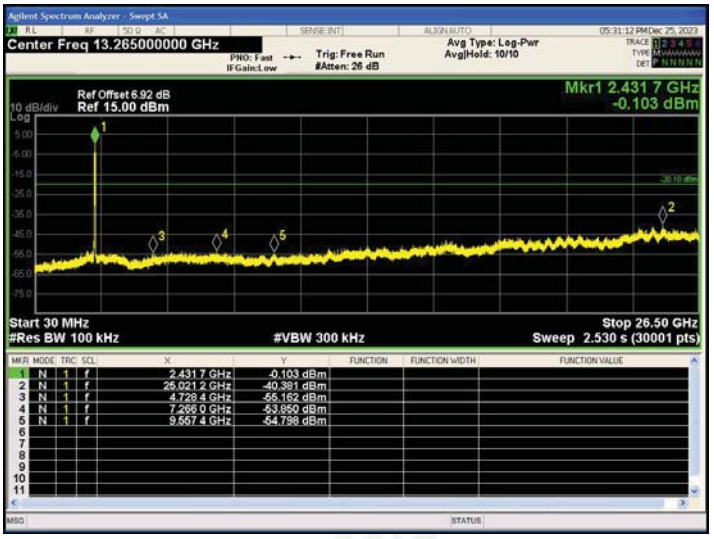


Highest channel

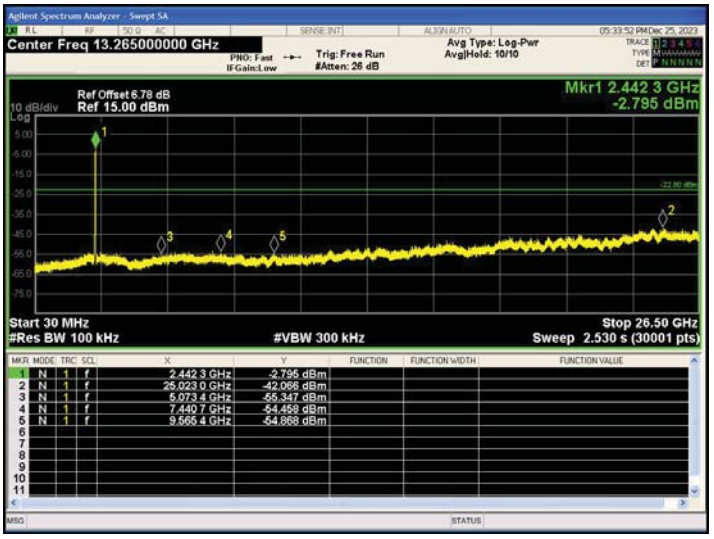


802.11n(HT20)

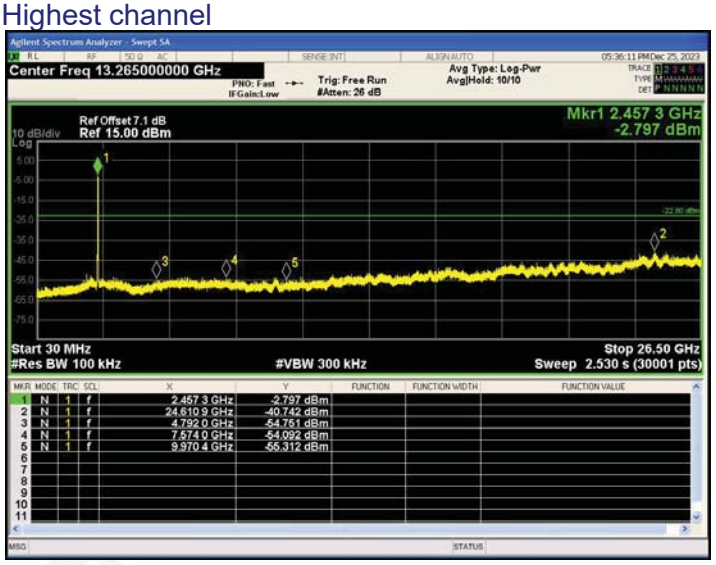
Lowest channel



Middle channel

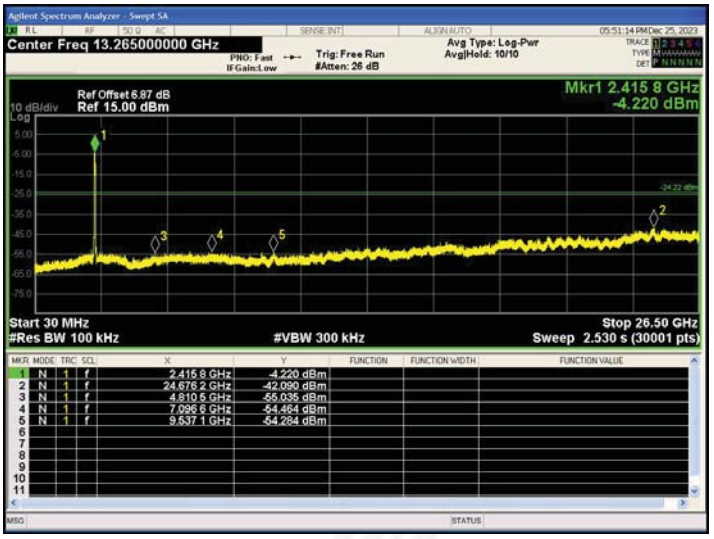


Highest channel

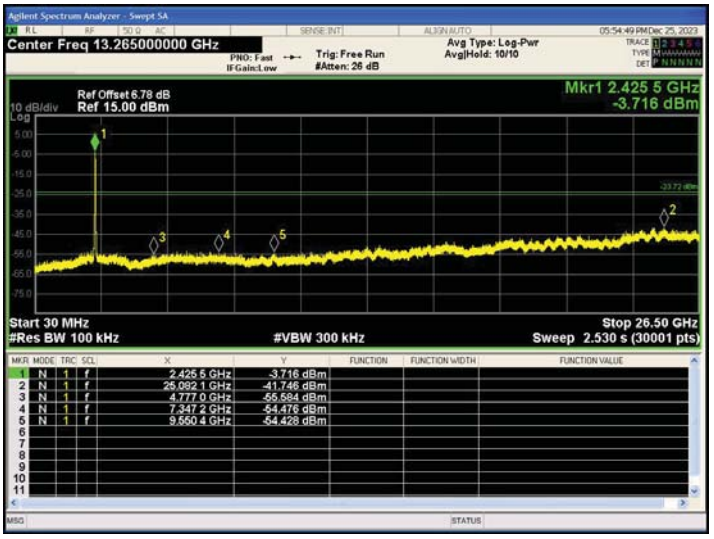


802.11n(HT40)

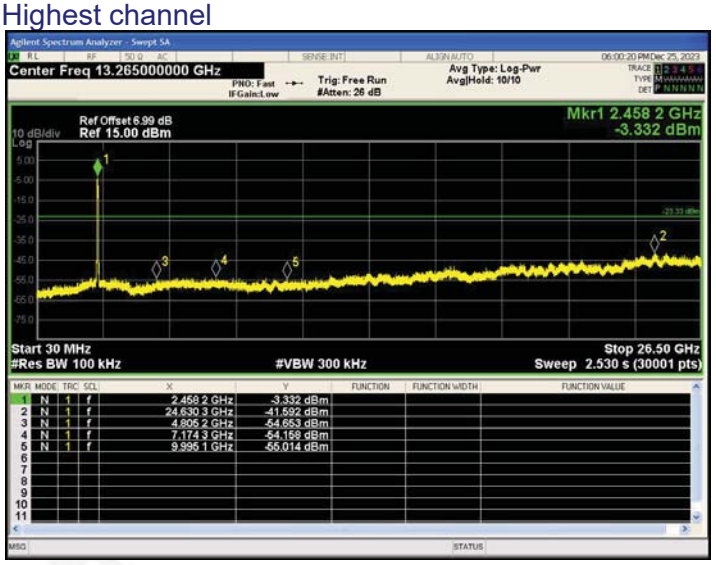
Lowest channel



Middle channel

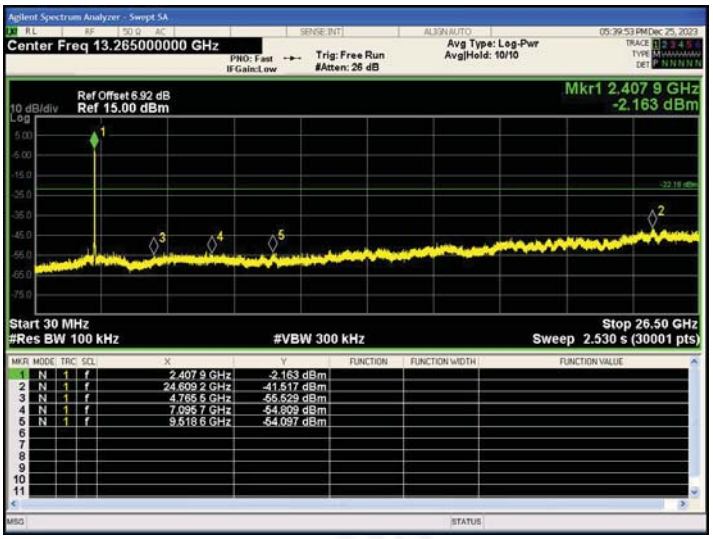


Highest channel

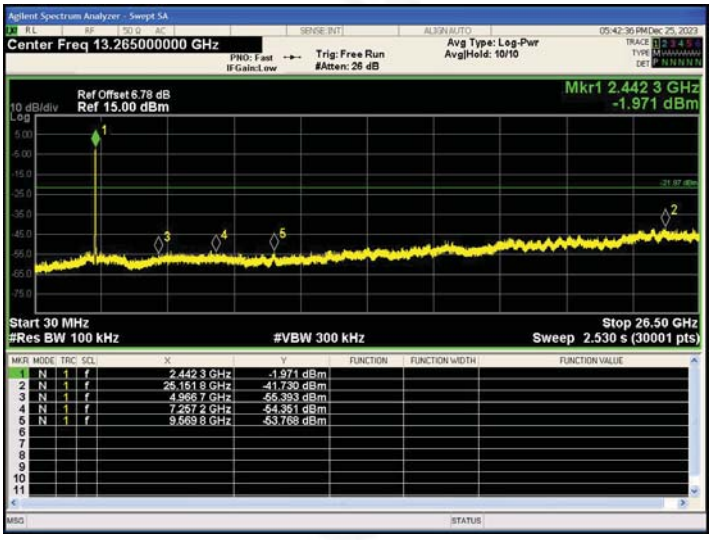


802.11ax(HT20)

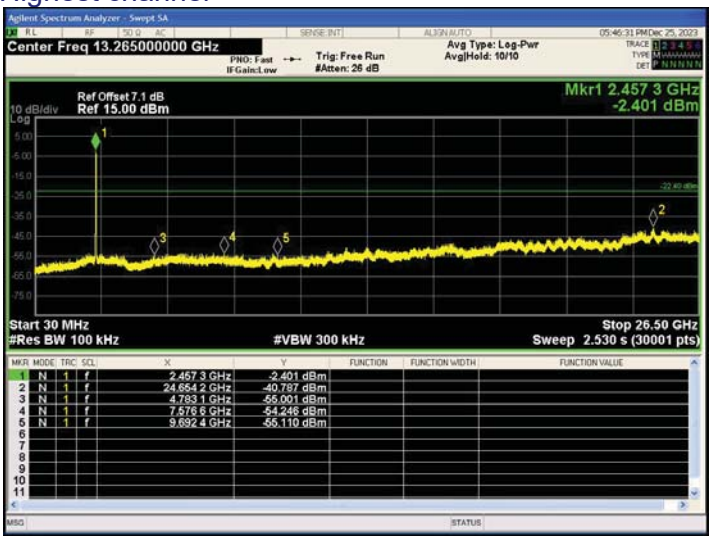
Lowest channel



Middle channel

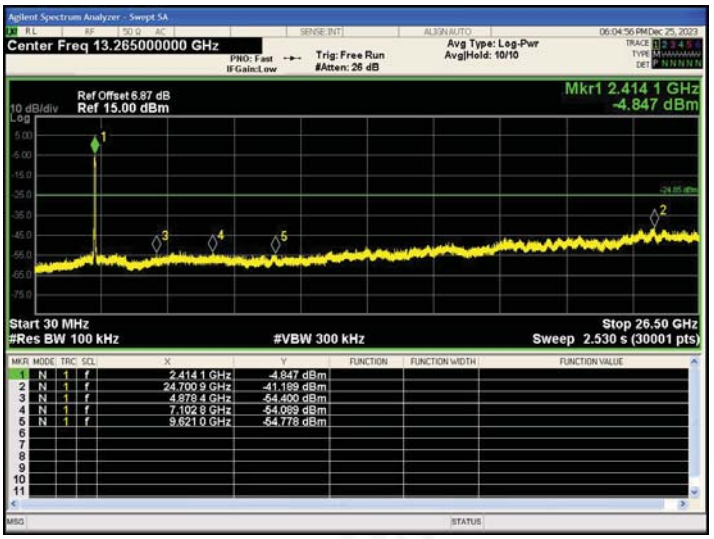


Highest channel

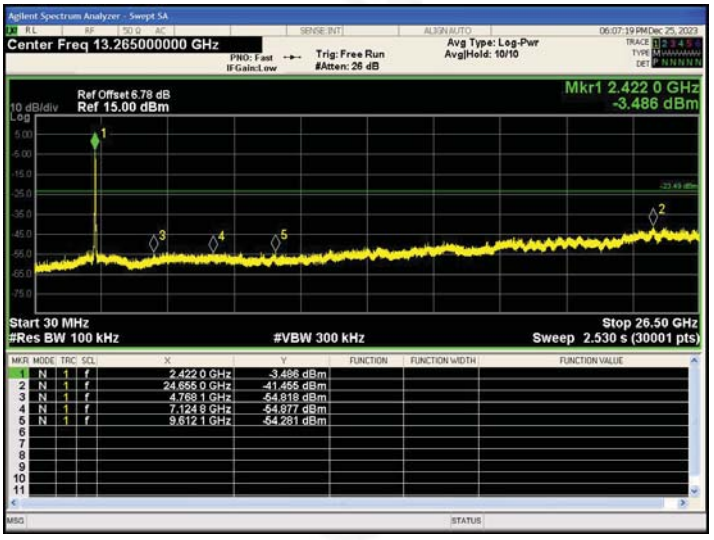


802.11ax(HT40)

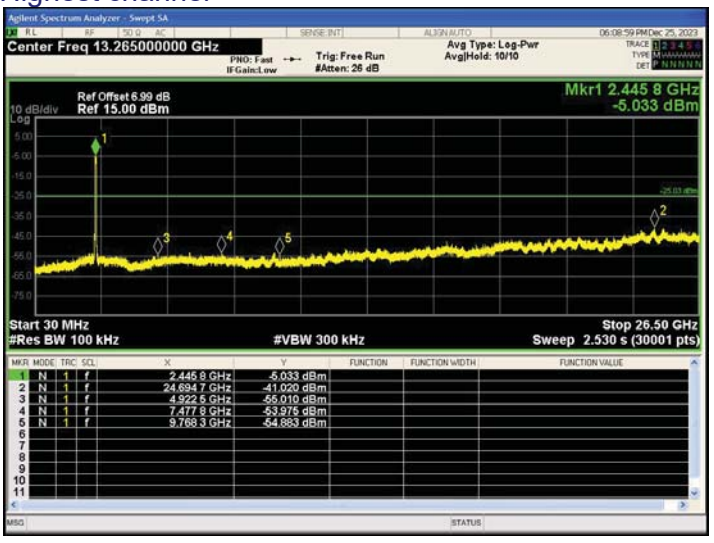
Lowest channel



Middle channel



Highest channel



10. ANTENNA REQUIREMENT

Standard requirement:	FCC Part15 C Section 15.203 /247(c)
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(c) (1)(i) requirement: (i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi. A transmitter can only be sold or operated with antennas with which it was approved.	
EUT Antenna:	
The antenna is internalAntenna, the best case gain of the antenna is 3.0dBi, reference to the appendix II for details	

11. TEST SETUP PHOTO

Reference to the appendix I for details.

12. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

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