Polar (H/V)	Frequency	Meter Reading	Antenna Factor	Cable loss	Preamp factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
802.11n(HT20) -2412MHz									
V	2390	59.21	27.49	3.32	36.22	53.8	74	20.2	PK
V	2390	45.83	27.49	3.32	36.22	40.42	54	13.58	AV
H	2390	55.45	27.49	3.32	36.22	50.04	74	23.96	PK
H	2390	44.44	27.49	3.32	36.22	39.03	54	14.97	AV
V	2400	57.64	27.55	3.41	36.22	52.38	74	21.62	PK
V	2400	44.02	27.55	3.41	36.22	38.76	54	15.24	AV
H	2400	59.57	27.55	3.41	36.22	54.31	74	19.69	PK
H	2400	44.57	27.55	3.41	36.22	39.31	54	14.69	AV
802.11n(HT20) -2462MHz									
V	2483.5	56.36	27.45	3.38	36.34	50.85	74	23.15	PK
V	2483.5	45.77	27.45	3.38	36.34	40.26	54	13.74	AV
H	2483.5	55.26	27.45	3.38	36.34	49.75	74	24.25	PK
H	2483.5	47.07	27.45	3.38	36.34	41.56	54	12.44	AV
V	2500	57.46	27.41	3.47	36.35	51.99	74	22.01	PK
V	2500	45.74	27.41	3.47	36.35	40.27	54	13.73	AV
H	2500	58.14	27.41	3.47	36.35	52.67	74	21.33	PK
H	2500	46.24	27.41	3.47	36.35	40.77	54	13.23	AV

Note：
1) Emission level (dBuV/m) = Meter Reading+ antenna Factor+ cable loss- preamp factor.
2) Margin value = Limits-Emission level.
3) -- Mean the PK detector measured value is below average limit.
4) The other emission levels were very low against the limit.
5) RBW1MHz VBW3MHz Peak detector is for PK value; RBW 1MHz VBW10Hz Peak detector is for AV value.

5.3 Maximum Conducted Output Power

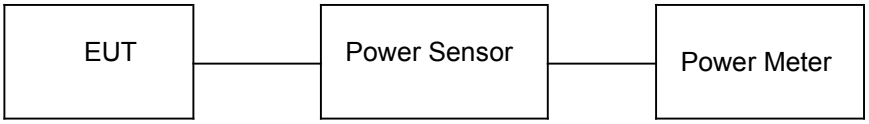
Limit

The Maximum Peak Output Power Measurement is 30dBm.

Test Procedure

Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power sensor.

Test Configuration



Test Results

See Appendix I

5.4 Power Spectral Density

Limit

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.

Test Procedure

1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
2. Set the RBW ≥ 3 kHz.
3. Set the VBW ≥ 3× RBW.
4. Set the span to 1.5 times the DTS channel bandwidth.
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 power level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
11. The resulting peak PSD level must be 8dBm.

Test Configuration

Test Results

See Appendix VI

5.5 6dB Bandwidth

Limit

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

Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 KHz RBW and 300 KHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

Test Configuration

Test Results

See Appendix III

5.6 Out-of-band Emissions

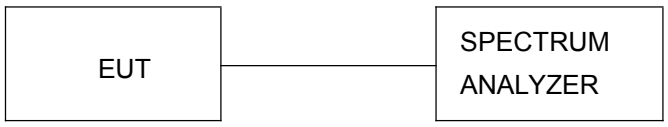
Limit

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 con-ducted or a radiated measurement, pro-vided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter com-plies 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. Attenuation below the general limits specified in §15.209(a) is not required.

Test Procedure

Connect the transmitter output to spectrum analyzer using a low loss RF cable, and set the spectrum analyzer to RBW=100 kHz, VBW= 300 kHz, peak detector , and max hold. Measurements utilizing these setting are made of the in-band reference level, bandedge and out-of-band emissions.

Test Configuration



Test Results

See Appendix IV

5.7 Duty Cycle Information

See Appendix V

5.8 Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203:

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

FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1) (I):

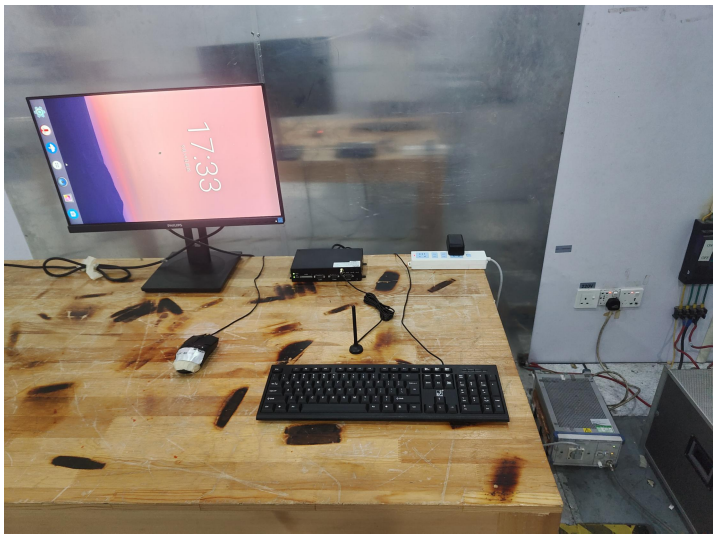
(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

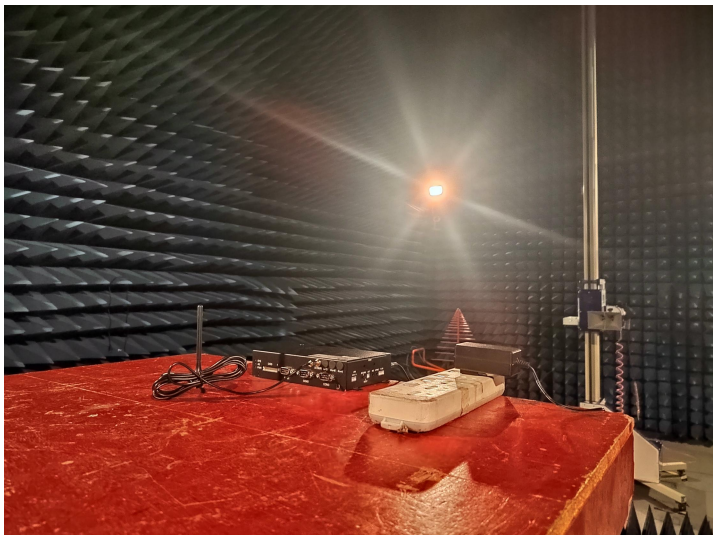
Test Result:

The directional gains of antenna used for transmitting is 1.91dBi, and the antenna is and Sucker Antenna and no consideration of replacement. Please see EUT photo for details.

Results: Compliance.

6 Test Setup Photos of the EUT





7 Photos of the EUT

See related photo report.

APPENDIX I.Conducted Peak Output Power

Test Result

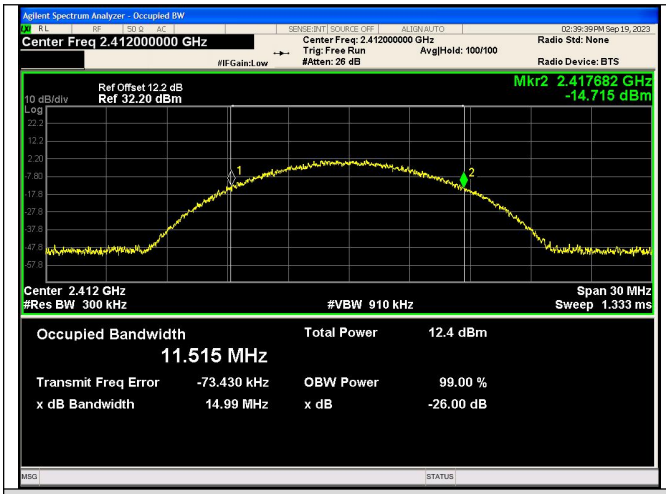
Mode	Channel	Ant. 0 (dBm)	Ant. 1 (dBm)	Ant. 2 (dBm)	Ant. 3 (dBm)	Total (dBm)	Limit (dBm)	Result
IEEE 802.11b	1	11.47				N/A	30	PASS
	6	11.47				N/A	30	PASS
	11	11.80				N/A	30	PASS
IEEE 802.11g	1	11.76				N/A	30	PASS
	6	11.83				N/A	30	PASS
	11	12.04				N/A	30	PASS
IEEE 802.11n_20	1	12.10				N/A	30	PASS
	6	10.98				N/A	30	PASS
	11	11.84				N/A	30	PASS

APPENDIX II.99% Bandwidth

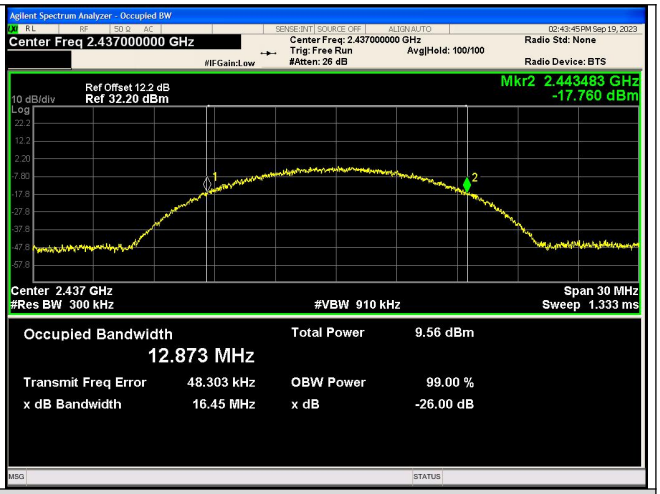
Test Result

Mode	Channel	Ant.	99% BW (MHz)
IEEE 802.11b	1	0	11.515
	6		12.873
	11		12.257
IEEE 802.11g	1		16.104
	6		16.596
	11		17.909
IEEE 802.11n_20	1		17.263
	6		17.713
	11		18.372

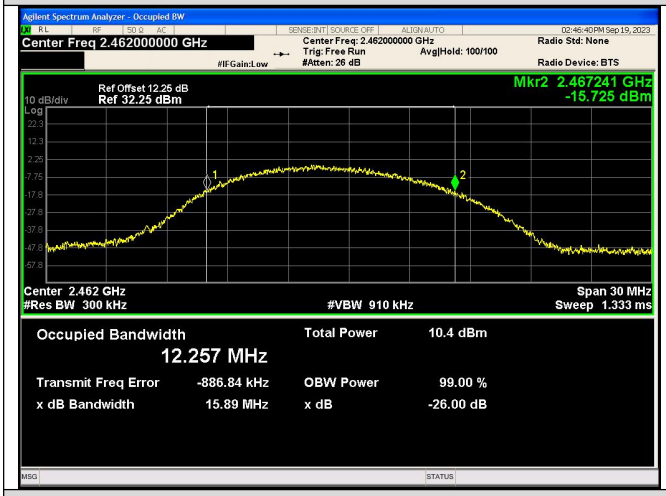
Test Graphs



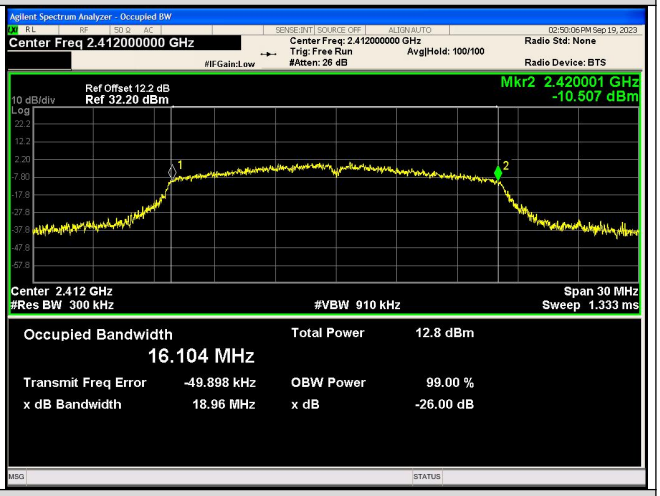
IEEE 802.11b_Channel 1_20MHz_Antenna 0



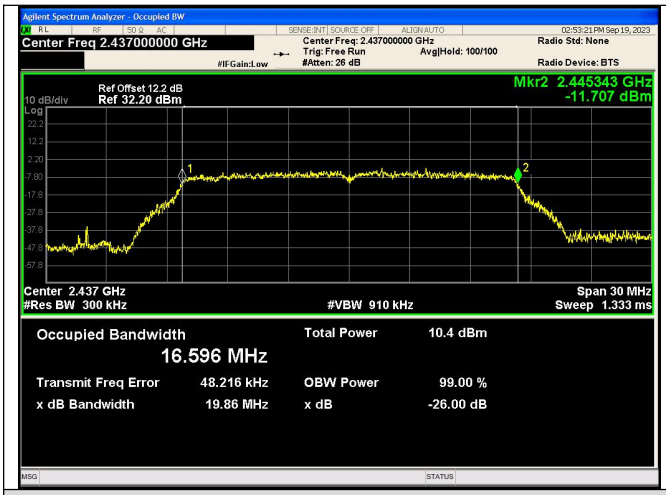
IEEE 802.11b_Channel 6_20MHz_Antenna 0



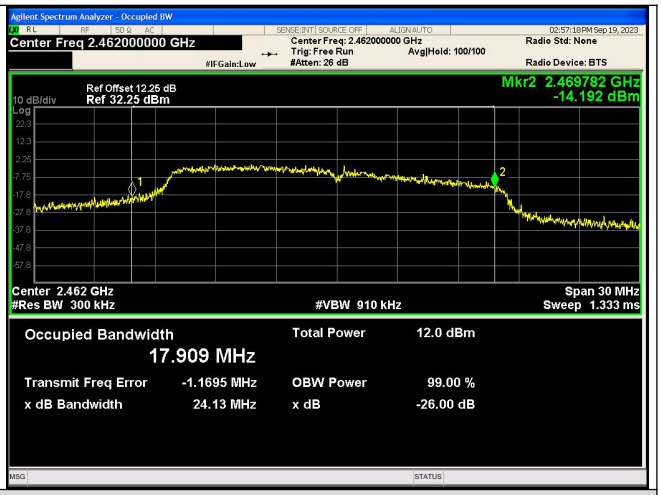
IEEE 802.11b_Channel 11_20MHz_Antenna 0



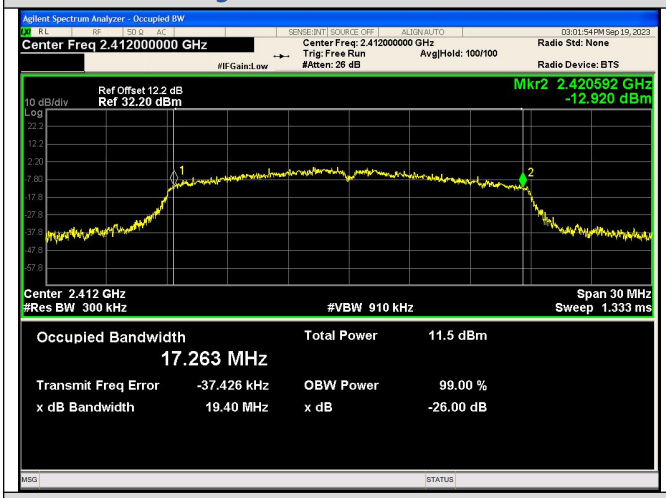
IEEE 802.11g_Channel 1_20MHz_Antenna 0



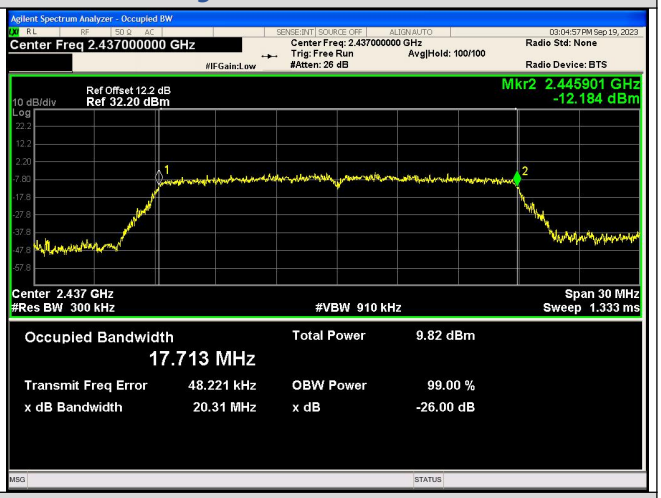
IEEE 802.11g_Channel 6_20MHz_Antenna 0



IEEE 802.11g_Channel 11_20MHz_Antenna 0



IEEE 802.11n_Channel 1_20MHz_Antenna 0



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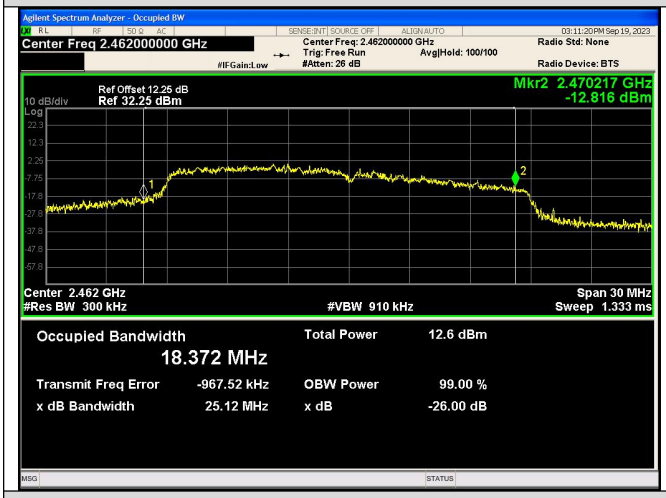


IEEE 802.11n_Channel 11_20MHz_Antenna 0

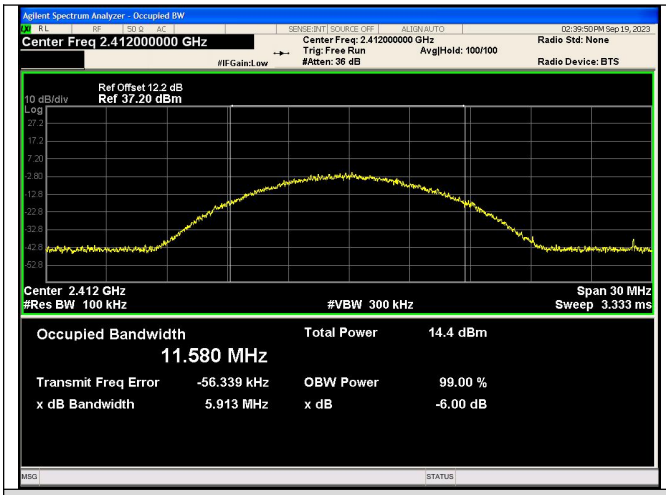
Void

APPENDIX III.6dB Bandwidth

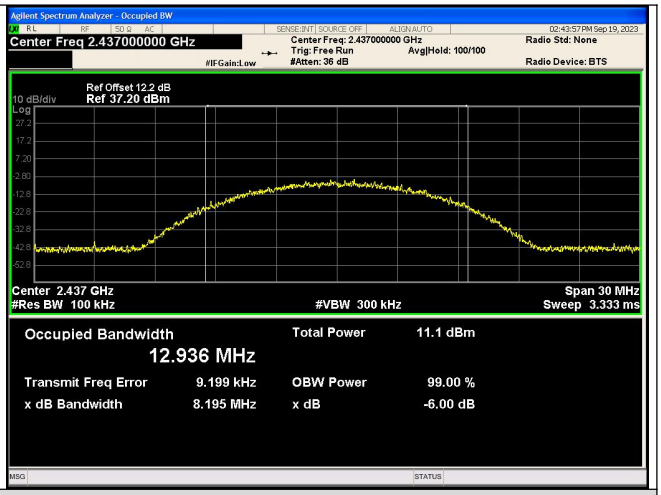
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	0	2412	5.913	0.5	PASS
	6		2437	8.195		PASS
	11		2462	7.477		PASS
IEEE 802.11g	1		2412	11.34		PASS
	6		2437	16.42		PASS
	11		2462	10.73		PASS
IEEE 802.11n_20	1		2412	11.34		PASS
	6		2437	17.63		PASS
	11		2462	11.28		PASS

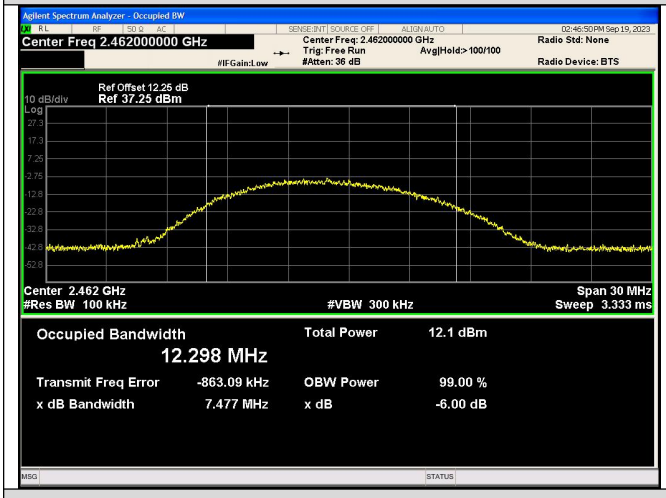
Test Graphs



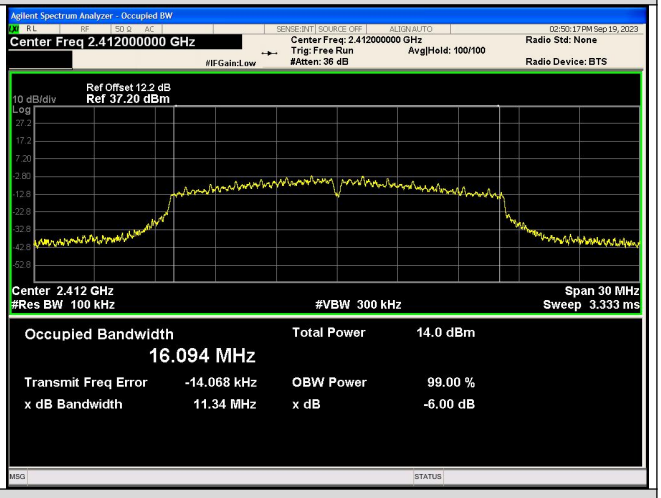
IEEE 802.11b_Channel 1_20MHz_Antenna 0



IEEE 802.11b_Channel 6_20MHz_Antenna 0



IEEE 802.11b_Channel 11_20MHz_Antenna 0



IEEE 802.11g_Channel 1_20MHz_Antenna 0