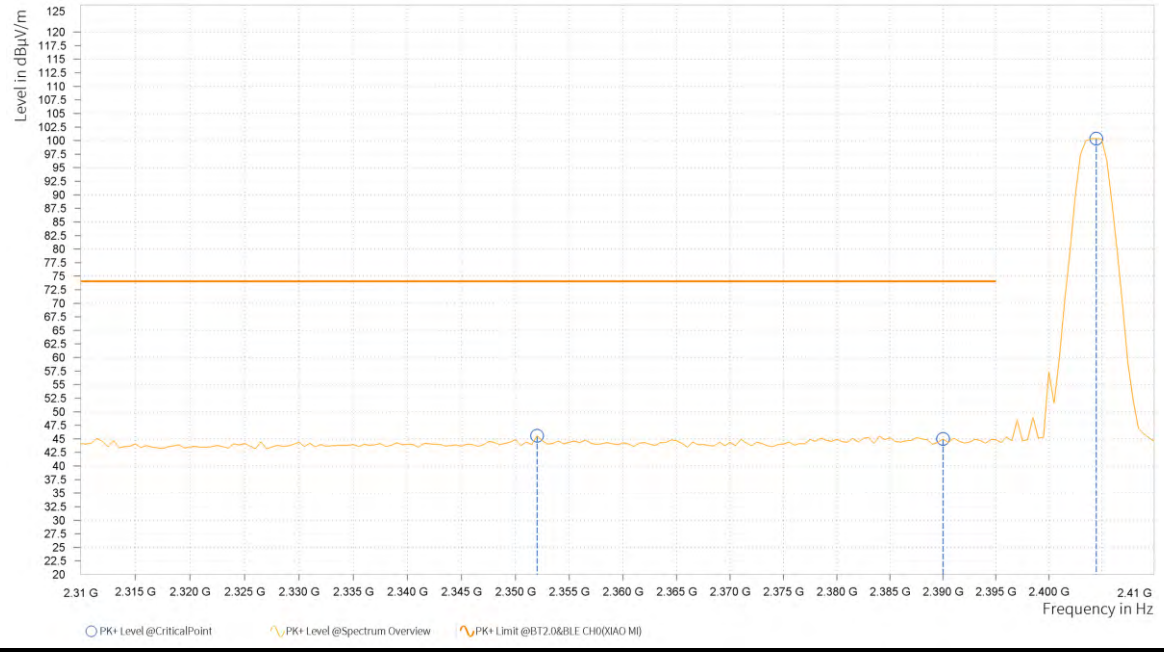
BT-LE _2M			
CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,352.000	45.57	74.00	28.43	5.59	H	1	1.00
5	2,390.000	44.99	74.00	29.01	5.77	H	224.5	2.00
5	2,404.500	100.35			5.87	H	355.1	2.00

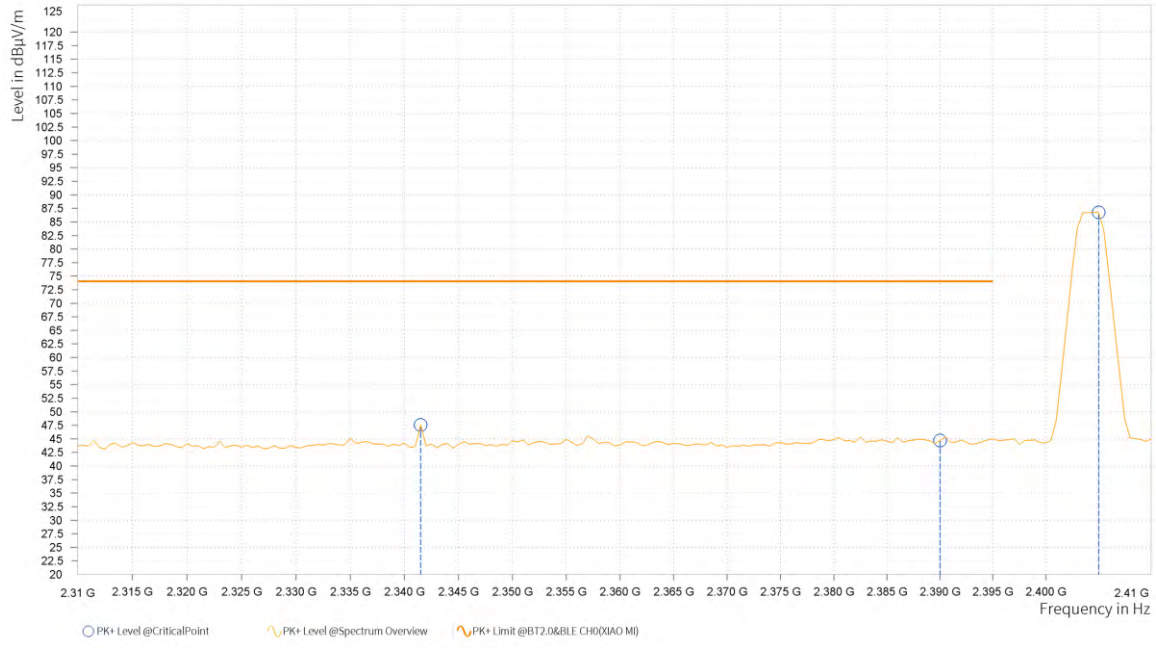


ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,384.000	30.71	54.00	23.29	5.73	H	359	2.00
5	2,390.000	30.57	54.00	23.43	5.77	H	0.9	2.00
5	2,404.000	87.93			5.87	H	34.3	2.00

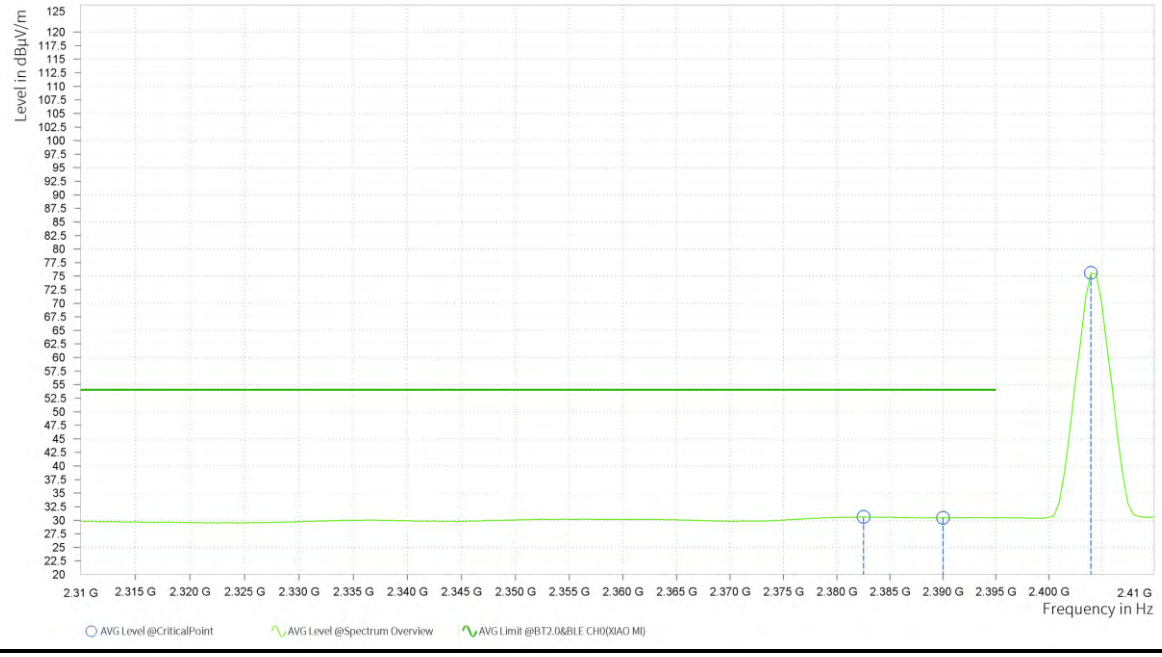
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,341.500	47.58	74.00	26.42	5.57	V	127.6	2.00
5	2,390.000	44.67	74.00	29.33	5.77	V	231.2	1.00
5	2,405.000	86.73			5.87	V	269.8	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,382.500	30.60	54.00	23.40	5.72	V	81	2.00
5	2,390.000	30.44	54.00	23.56	5.77	V	3.8	2.00
5	2,404.000	75.59			5.87	V	271	2.00



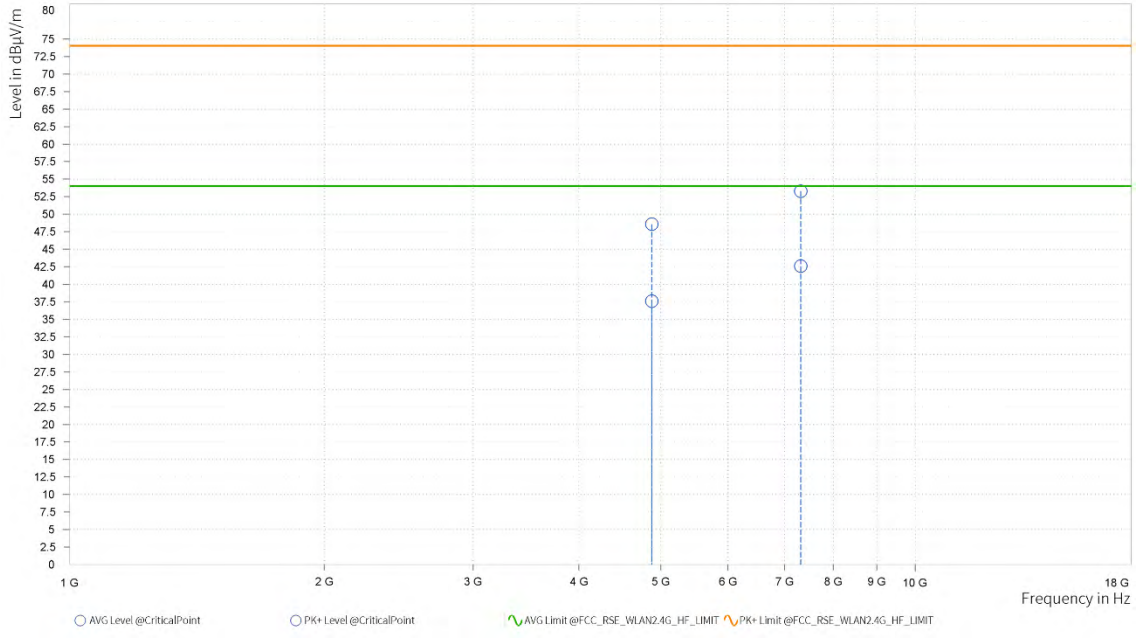
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2404MHz: Fundamental frequency.

CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

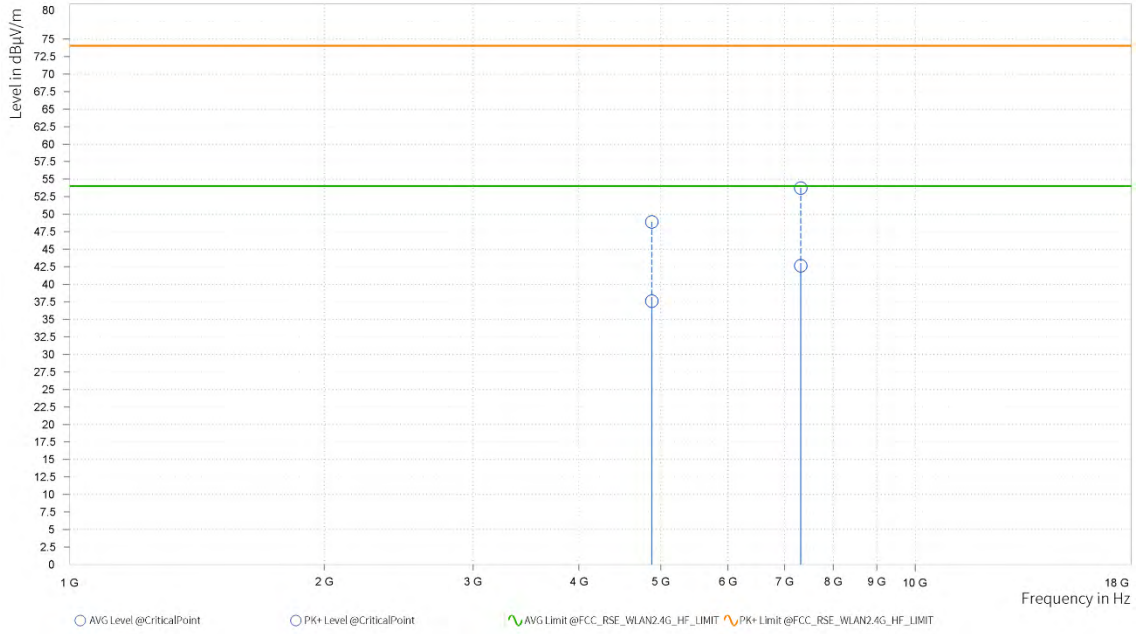
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	48.57	74.00	25.43	37.60	54.00	16.40	13.54	H	358	1.00
2	7,320.000	53.29	74.00	20.71	42.58	54.00	11.42	18.90	H	269.8	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	48.92	74.00	25.08	37.59	54.00	16.41	13.54	V	358.1	1.00
2	7,320.000	53.73	74.00	20.27	42.66	54.00	11.34	18.90	V	2	2.00



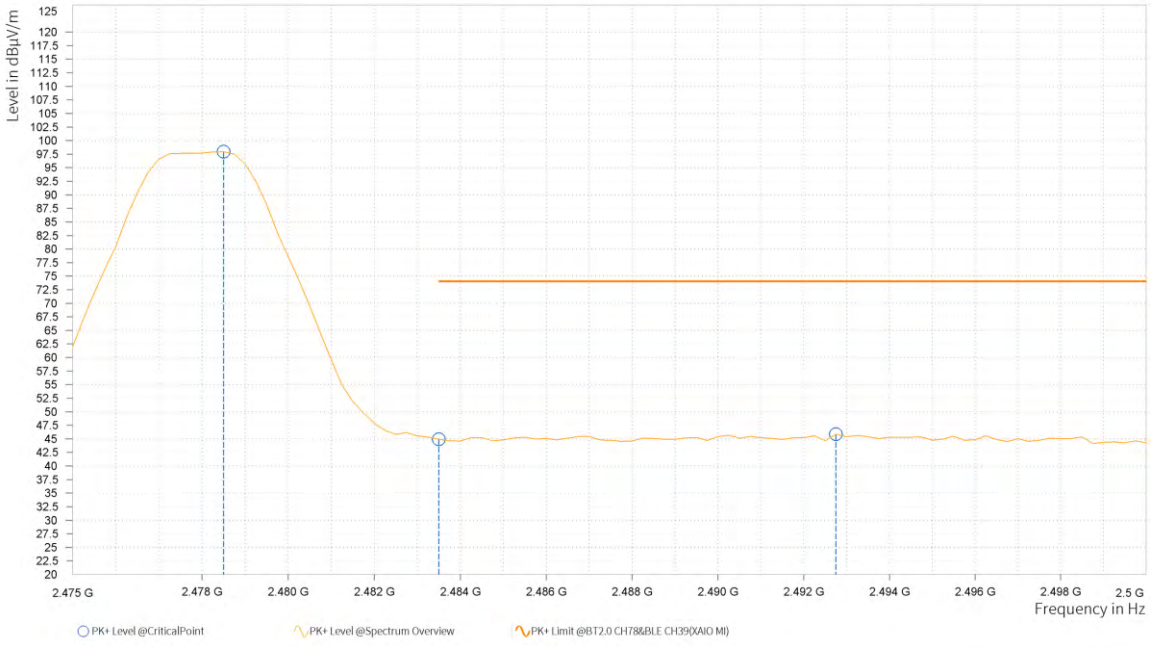
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor.
2. Margin value = Limit value–Emission level.
3. 2440MHz: Fundamental frequency.

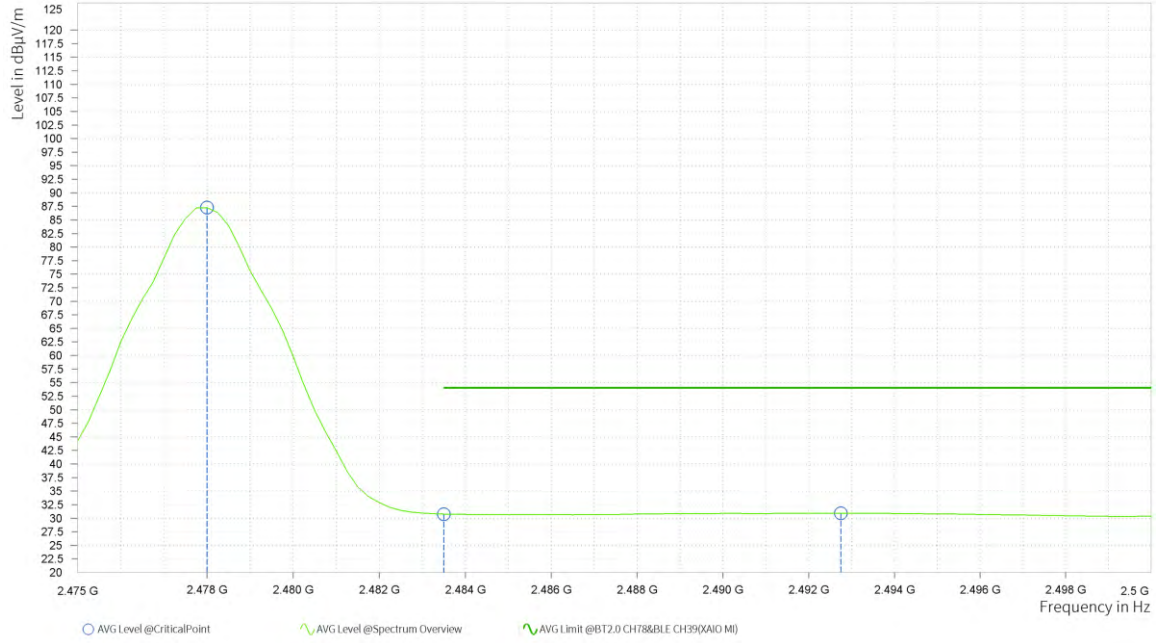
CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

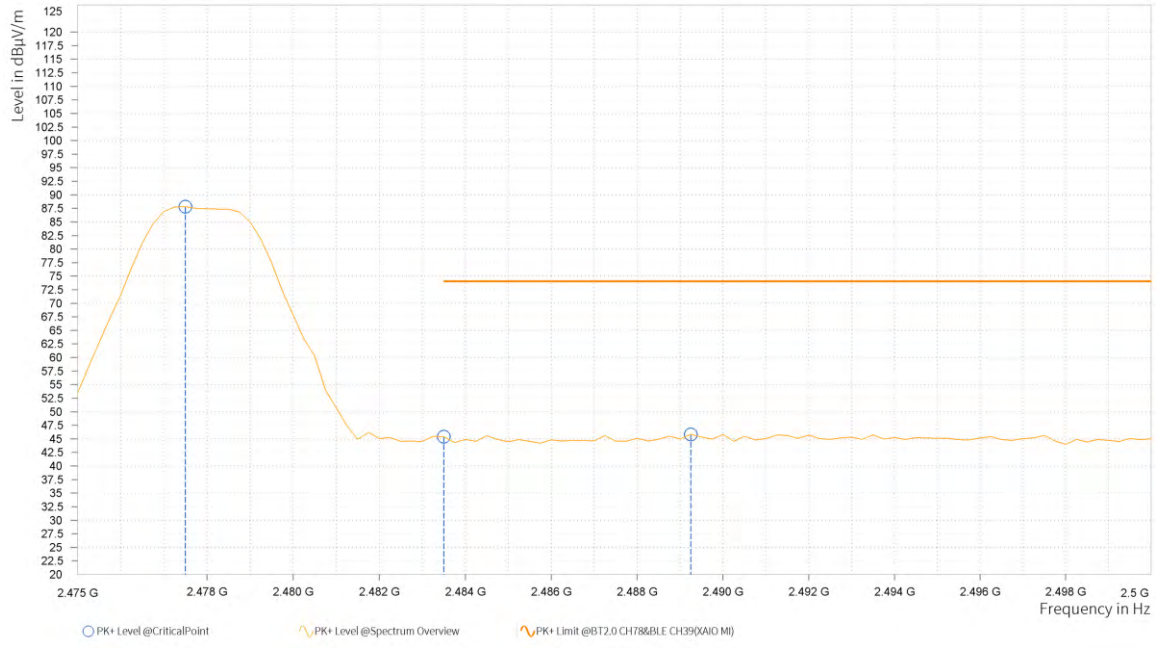
Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,478.500	97.94			5.88	H	5	1.00
6	2,483.500	44.93	74.00	29.07	5.91	H	355	2.00
6	2,492.750	45.85	74.00	28.15	5.97	H	287.4	1.00



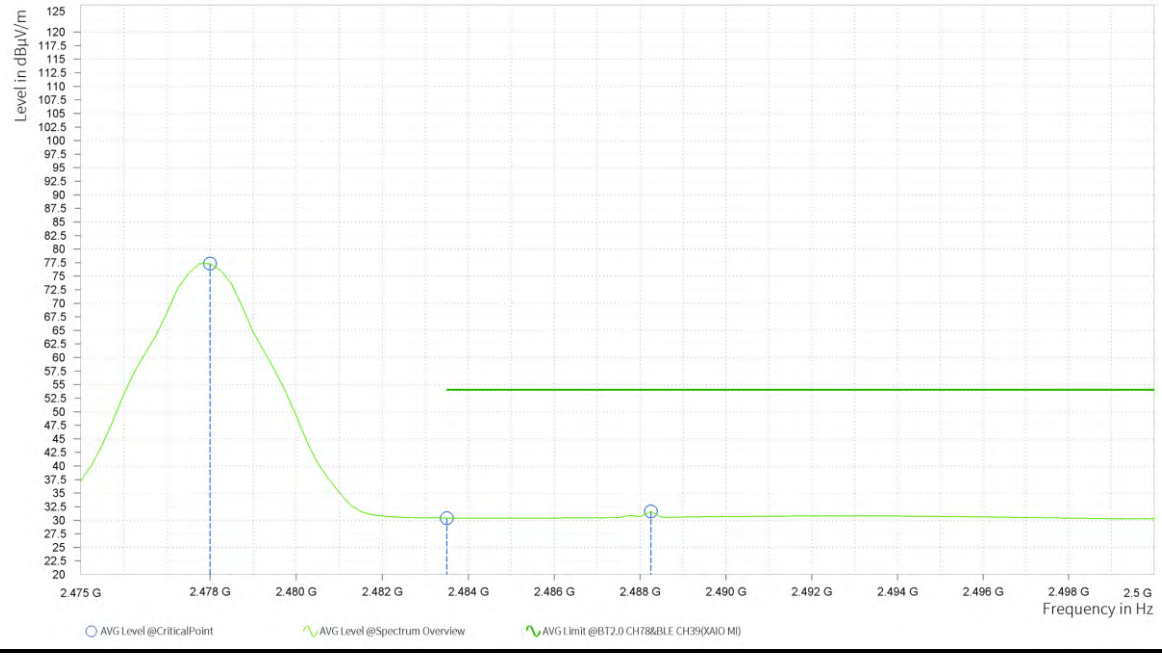
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,478.000	87.26			5.88	H	4.9	1.00
6	2,483.500	30.76	54.00	23.24	5.91	H	359	1.00
6	2,492.750	30.92	54.00	23.08	5.97	H	70.2	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,477.500	87.81			5.88	V	214.5	1.00
6	2,483.500	45.40	74.00	28.60	5.91	V	355.1	2.00
6	2,489.250	45.83	74.00	28.17	5.95	V	359.1	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,478.000	77.31			5.88	V	219.2	1.00
6	2,483.500	30.39	54.00	23.61	5.91	V	219.2	1.00
6	2,488.250	31.60	54.00	22.40	5.95	V	213.7	2.00



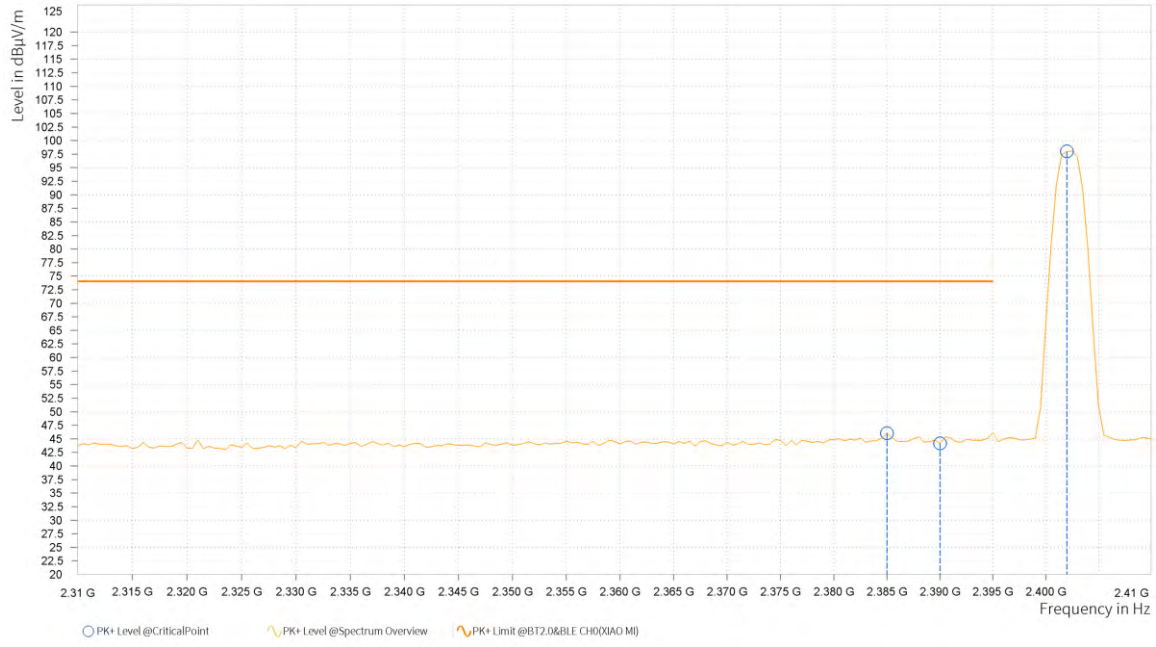
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2478MHz: Fundamental frequency.

BT-LE _S2			
CHANNEL	TX Channel 0	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

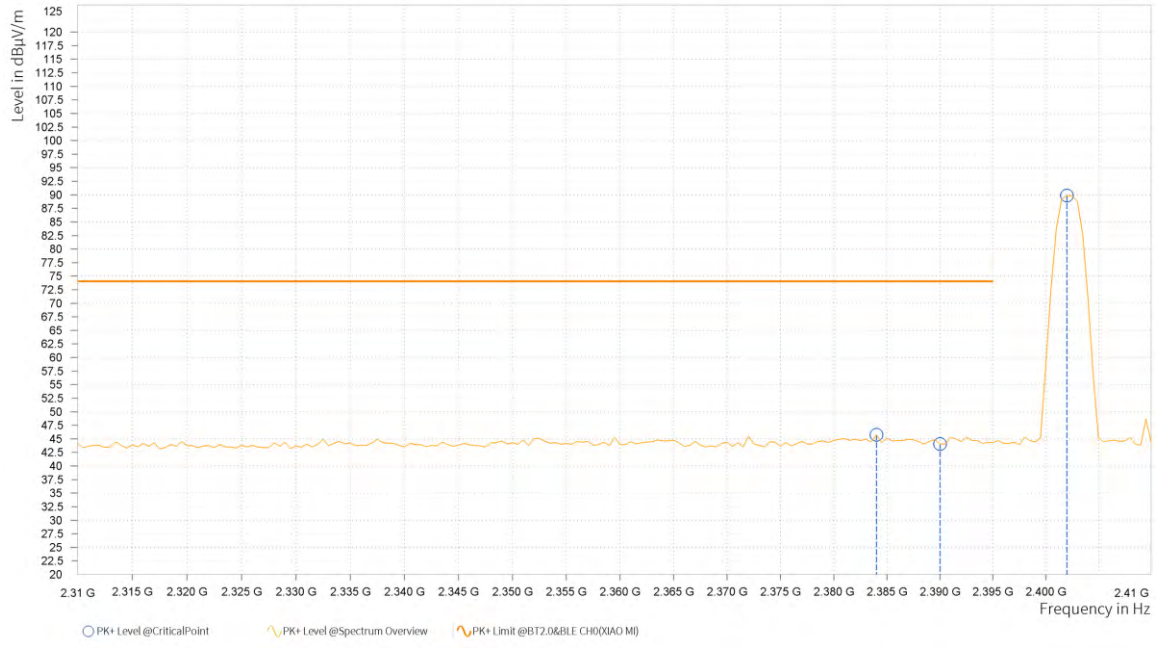
Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,385.000	46.05	74.00	27.95	5.74	H	355.7	2.00
5	2,390.000	44.17	74.00	29.83	5.77	H	1.8	2.00
5	2,402.000	98.01			5.85	H	65.4	2.00



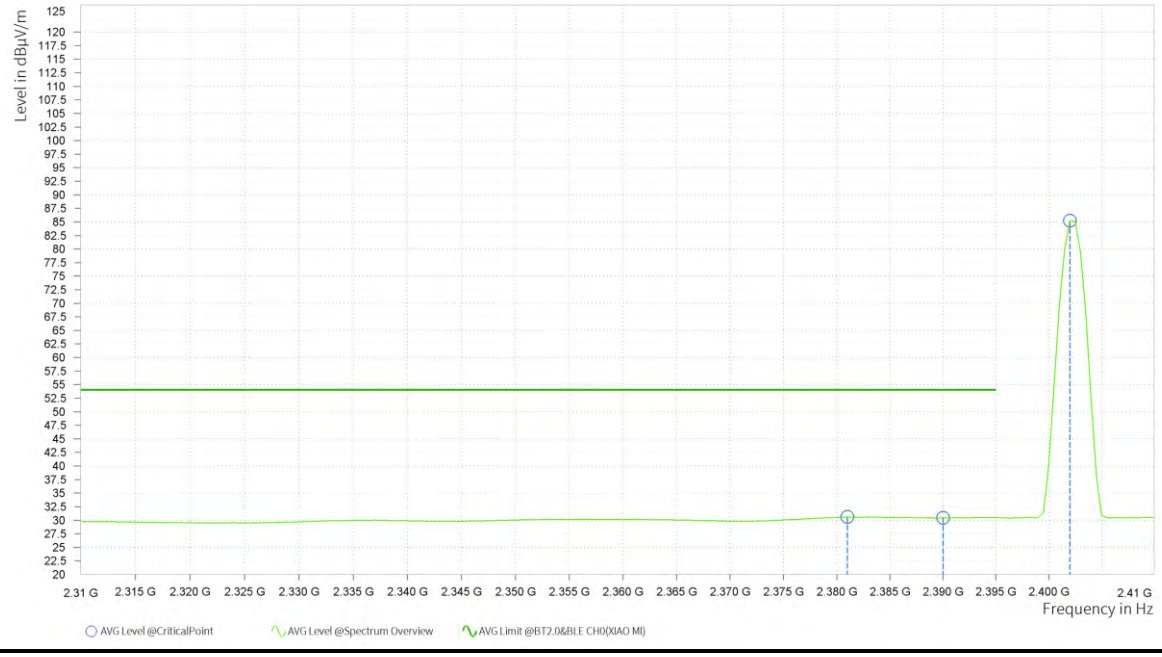
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,382.500	31.19	54.00	22.81	5.72	H	355.1	2.00
5	2,390.000	31.13	54.00	22.87	5.77	H	355.1	2.00
5	2,402.000	93.45			5.85	H	19.6	2.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,384.000	45.78	74.00	28.22	5.73	V	359	1.00
5	2,390.000	44.07	74.00	29.93	5.77	V	315.2	2.00
5	2,402.000	89.86			5.85	V	192.9	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,381.000	30.60	54.00	23.40	5.71	V	45.8	1.00
5	2,390.000	30.46	54.00	23.54	5.77	V	2	2.00
5	2,402.000	85.23			5.85	V	194.1	1.00



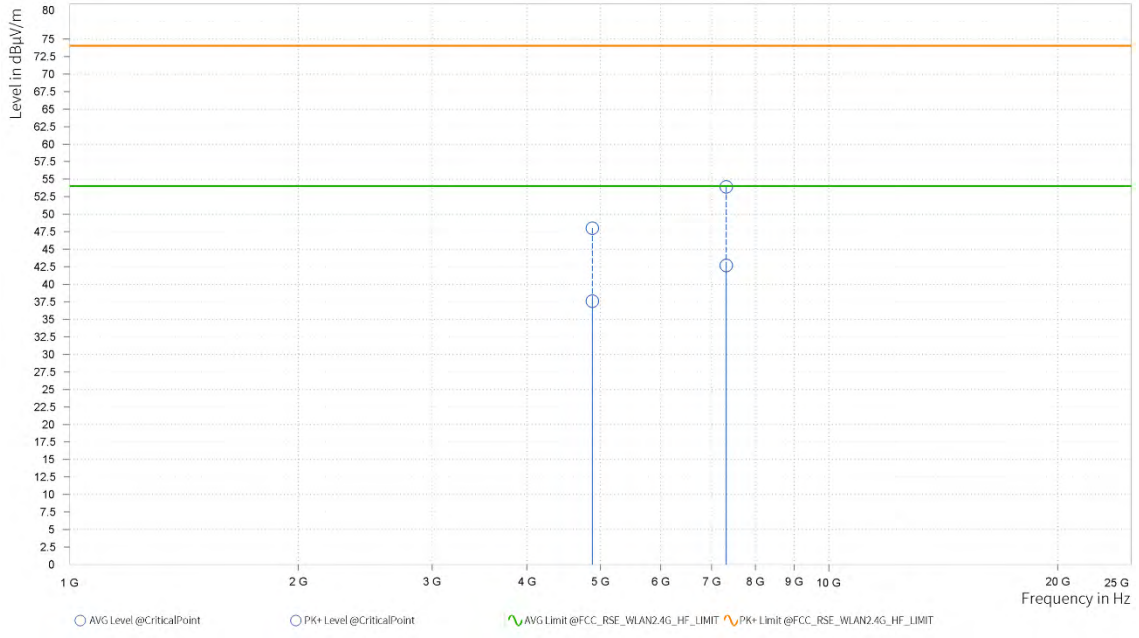
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2402MHz: Fundamental frequency.

CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

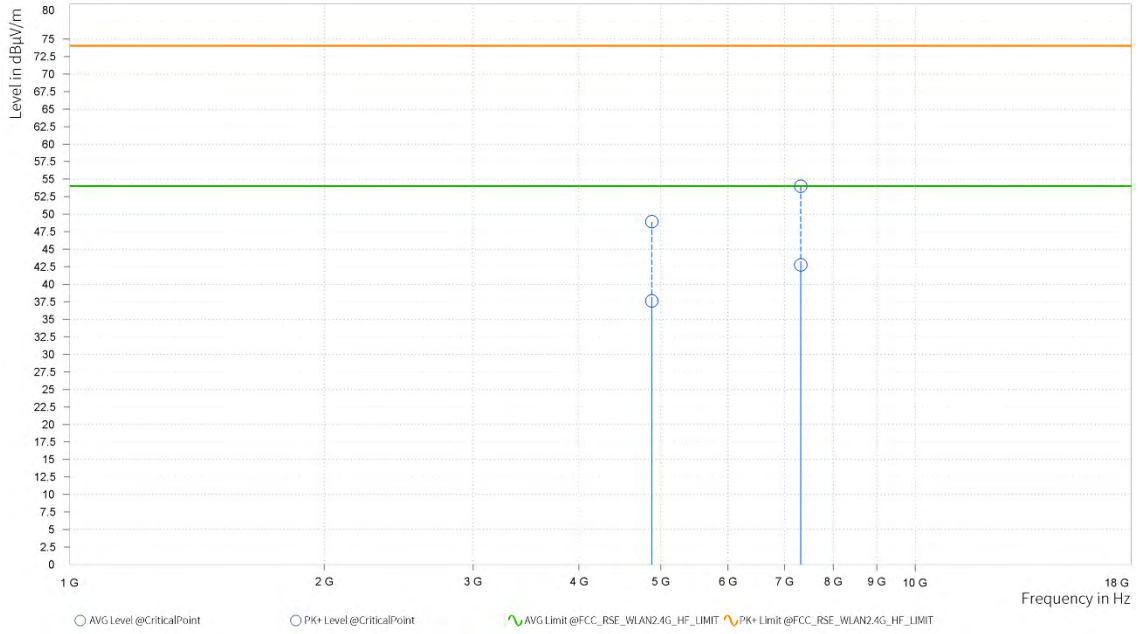
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	48.00	74.00	26.00	37.60	54.00	16.40	13.54	H	359	2.00
2	7,320.000	53.91	74.00	20.09	42.70	54.00	11.30	18.90	H	271.1	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	48.92	74.00	25.08	37.65	54.00	16.35	13.54	V	359	2.00
2	7,320.000	54.00	74.00	20.00	42.79	54.00	11.21	18.90	V	2	2.00



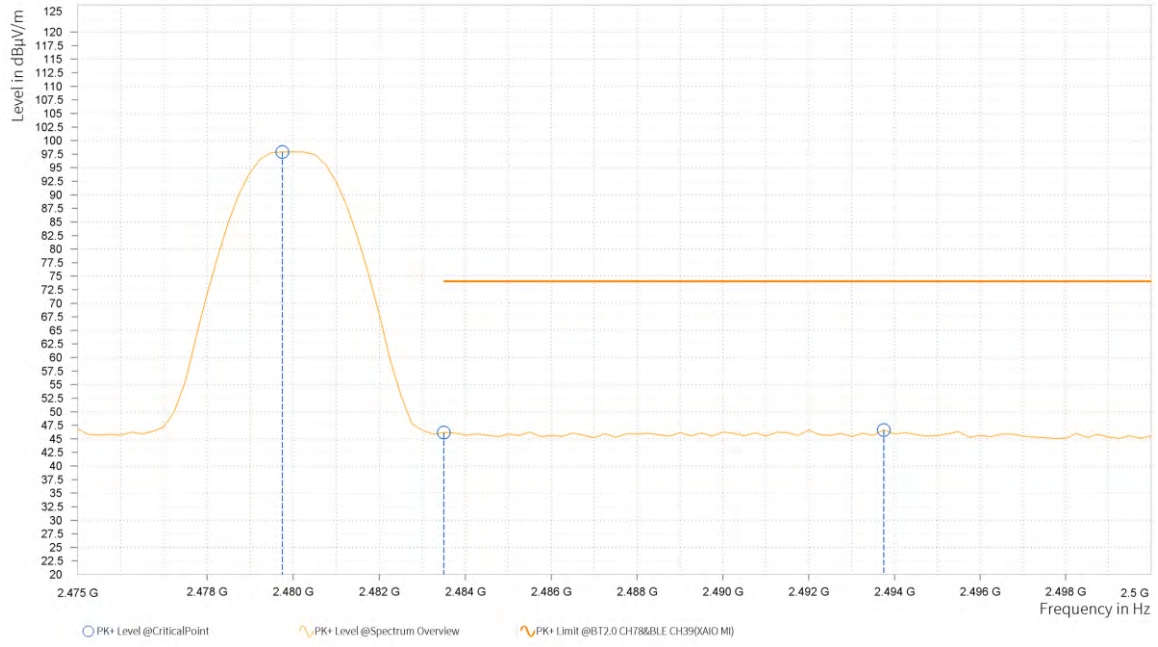
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2440MHz: Fundamental frequency.

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

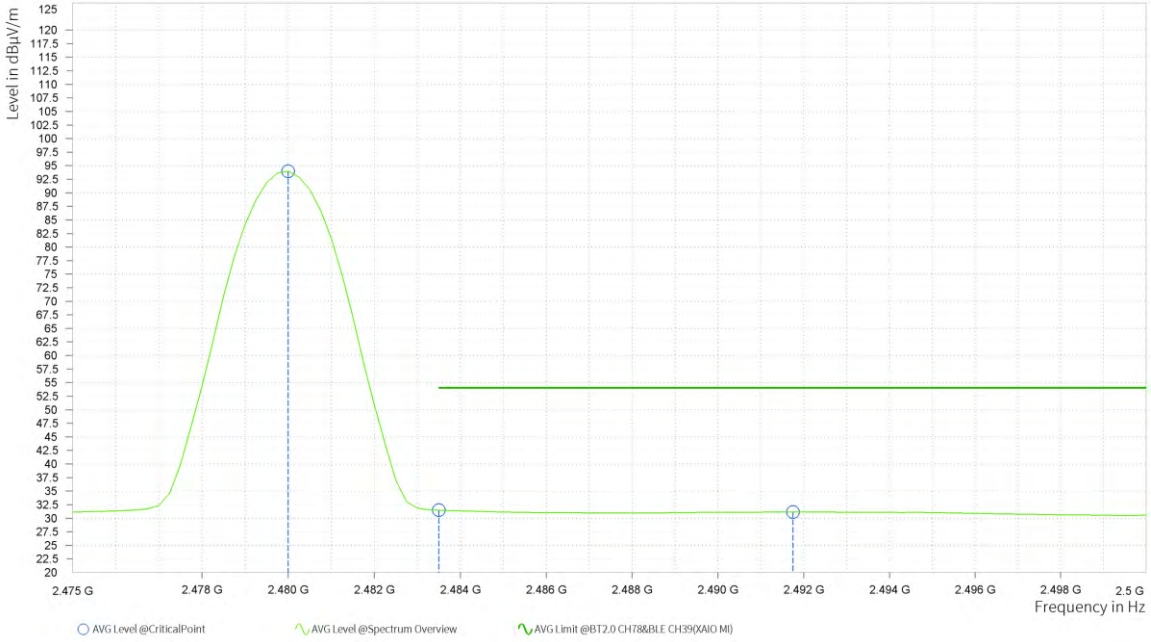
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,479.750	97.90			5.89	H	344.5	1.00
6	2,483.500	46.16	74.00	27.84	5.91	H	359	1.00
6	2,493.750	46.66	74.00	27.34	5.98	H	5.4	2.00



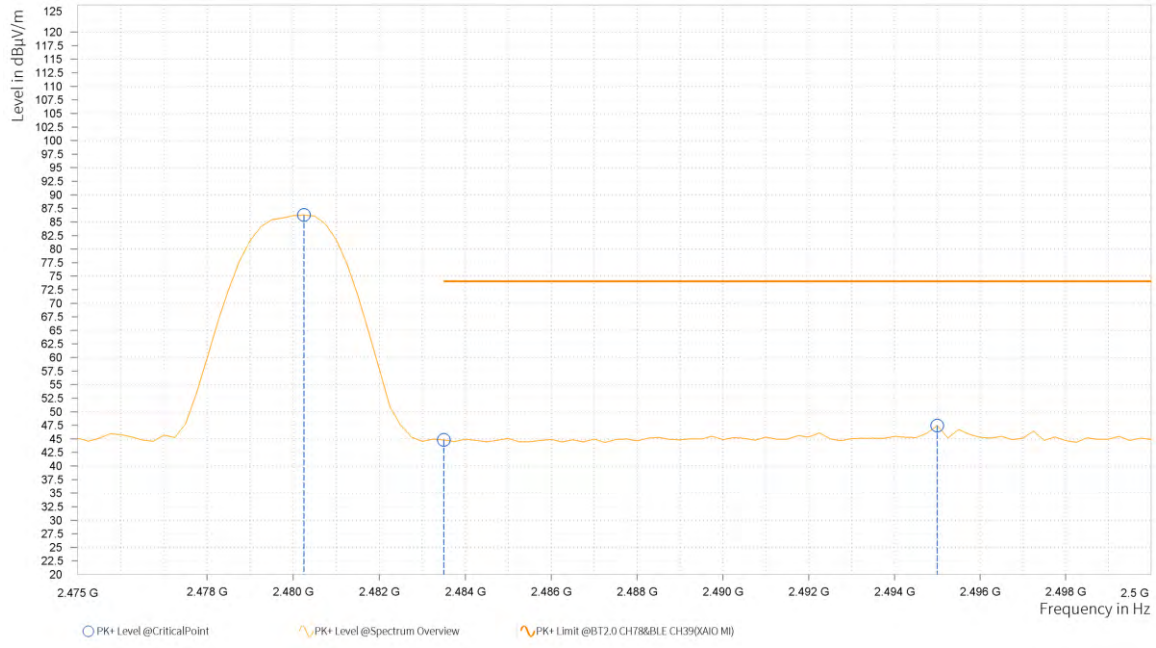
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	93.98			5.89	H	4.9	1.00
6	2,483.500	31.47	54.00	22.53	5.91	H	0.9	2.00
6	2,491.750	31.16	54.00	22.84	5.97	H	0.9	2.00

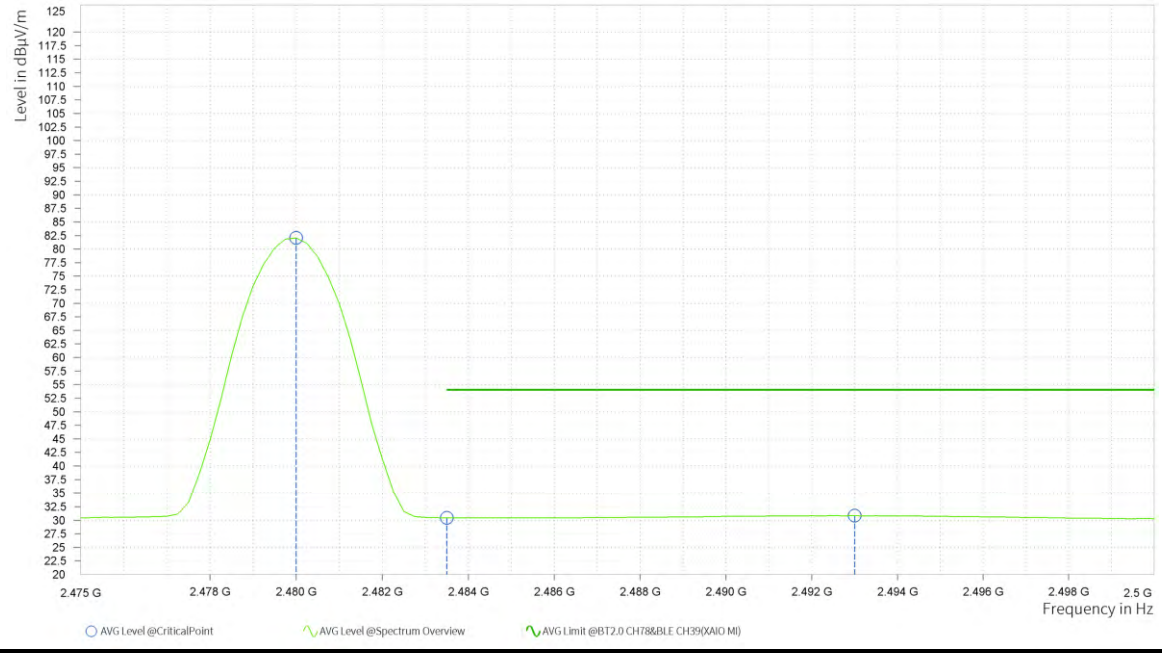


ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.250	86.28			5.89	V	220.4	1.00
6	2,483.500	44.80	74.00	29.20	5.91	V	290.2	2.00
6	2,495.000	47.44	74.00	26.56	5.99	V	216.2	2.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	82.05			5.89	V	355.8	2.00
6	2,483.500	30.45	54.00	23.55	5.91	V	359	2.00
6	2,493.000	30.84	54.00	23.16	5.98	V	233.5	1.00



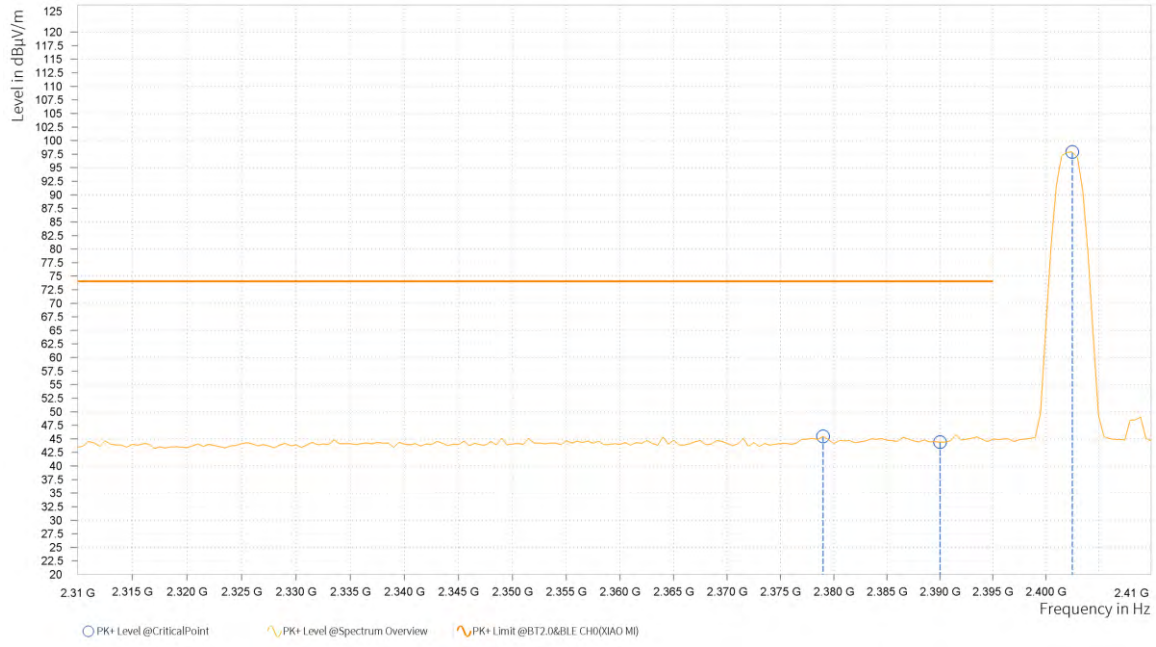
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2480MHz: Fundamental frequency.

BT-LE _S8			
CHANNEL	TX Channel 0	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

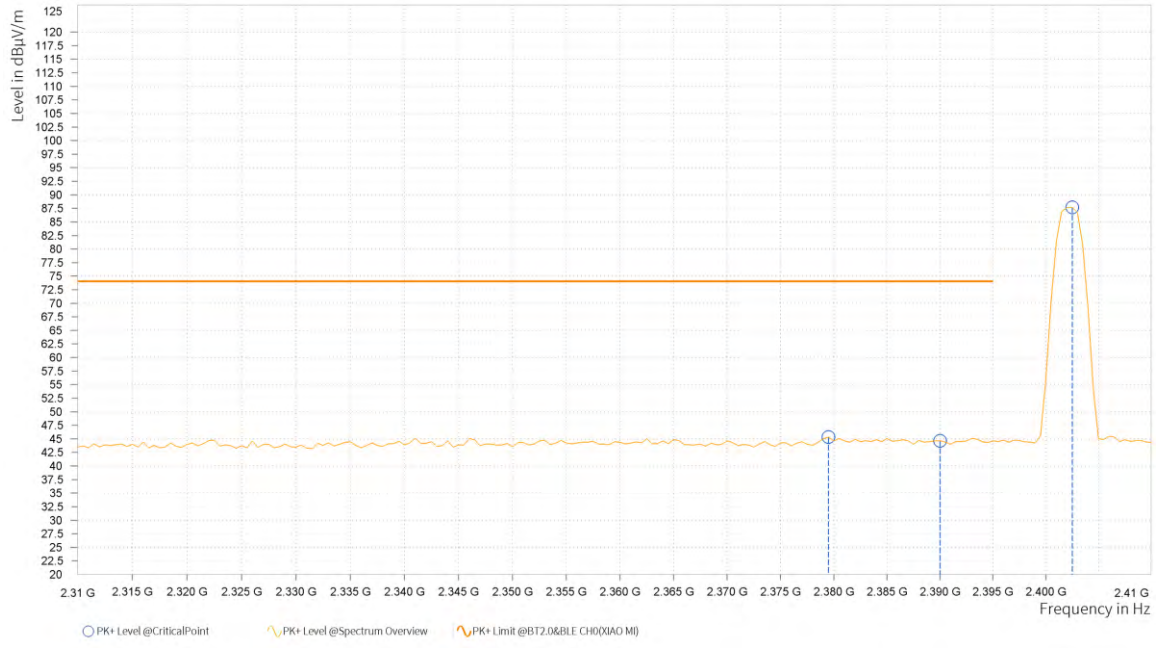
Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,379.000	45.46	74.00	28.54	5.69	H	97.4	1.00
5	2,390.000	44.38	74.00	29.62	5.77	H	212.6	2.00
5	2,402.500	97.88			5.86	H	301.8	1.00



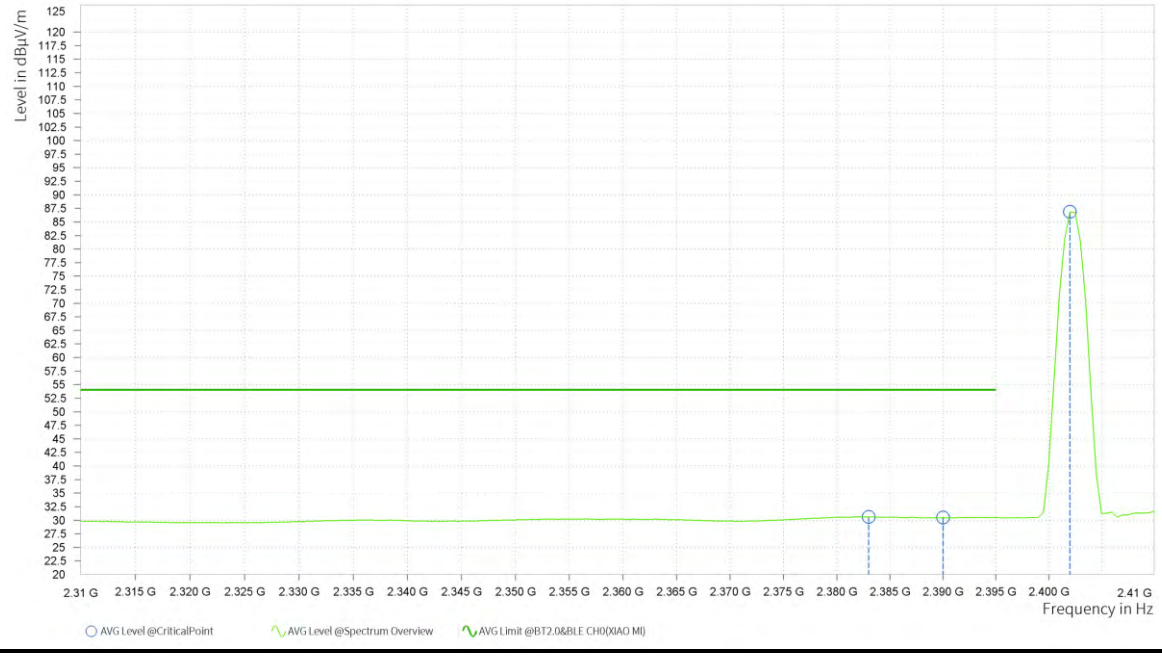
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,384.500	31.17	54.00	22.83	5.73	H	1	2.00
5	2,390.000	31.08	54.00	22.92	5.77	H	1	2.00
5	2,402.500	95.24			5.86	H	304.2	1.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,379.500	45.33	74.00	28.67	5.70	V	140.7	2.00
5	2,390.000	44.66	74.00	29.34	5.77	V	140.7	2.00
5	2,402.500	87.72			5.86	V	182.2	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
5	2,383.000	30.63	54.00	23.37	5.72	V	1	2.00
5	2,390.000	30.47	54.00	23.53	5.77	V	261.5	2.00
5	2,402.000	86.85			5.85	V	261.5	2.00



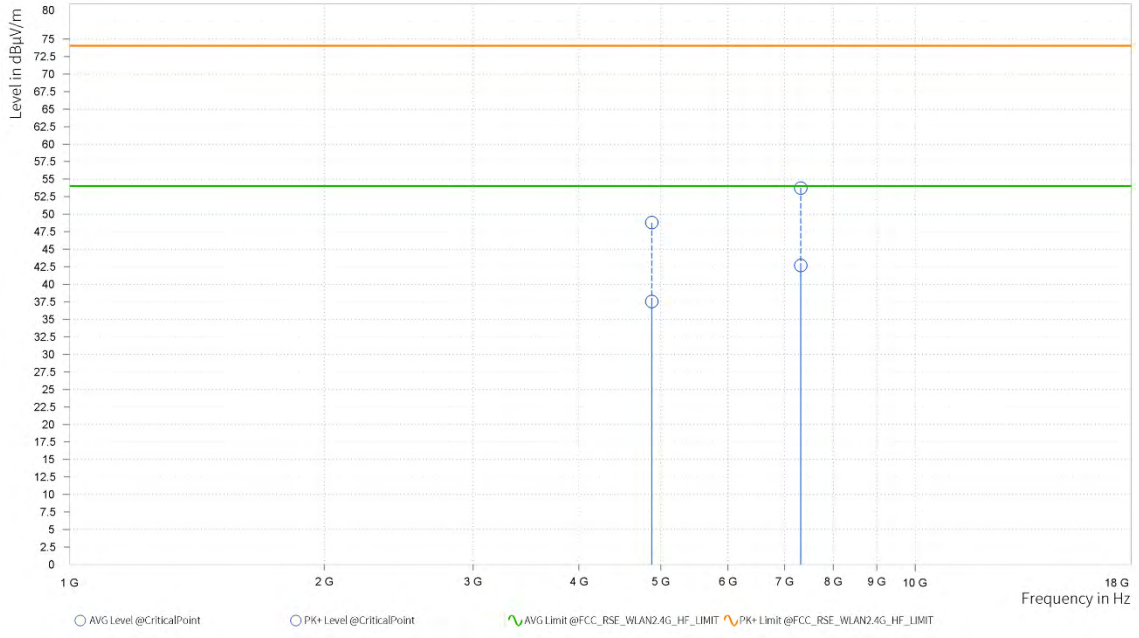
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor.
2. Margin value = Limit value–Emission level.
3. 2402MHz: Fundamental frequency.

CHANNEL	TX Channel 19	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

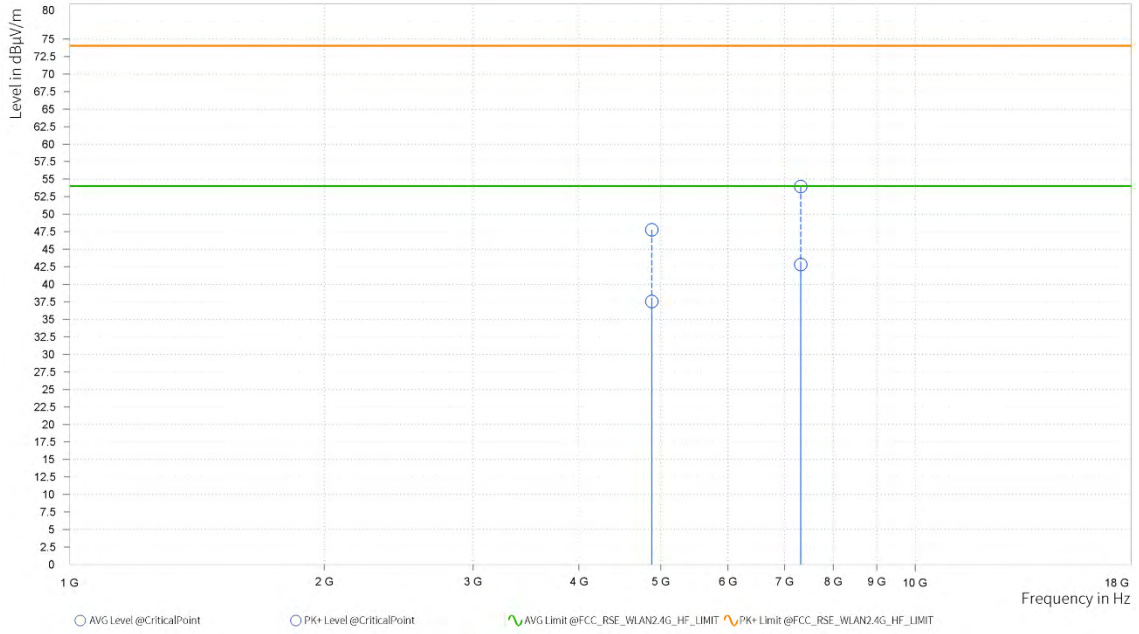
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	48.78	74.00	25.22	37.54	54.00	16.46	13.54	H	1	2.00
2	7,320.000	53.74	74.00	20.26	42.68	54.00	11.32	18.90	H	359.1	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	4,880.000	47.76	74.00	26.24	37.55	54.00	16.45	13.54	V	1	2.00
2	7,320.000	53.96	74.00	20.04	42.80	54.00	11.20	18.90	V	1.9	2.00



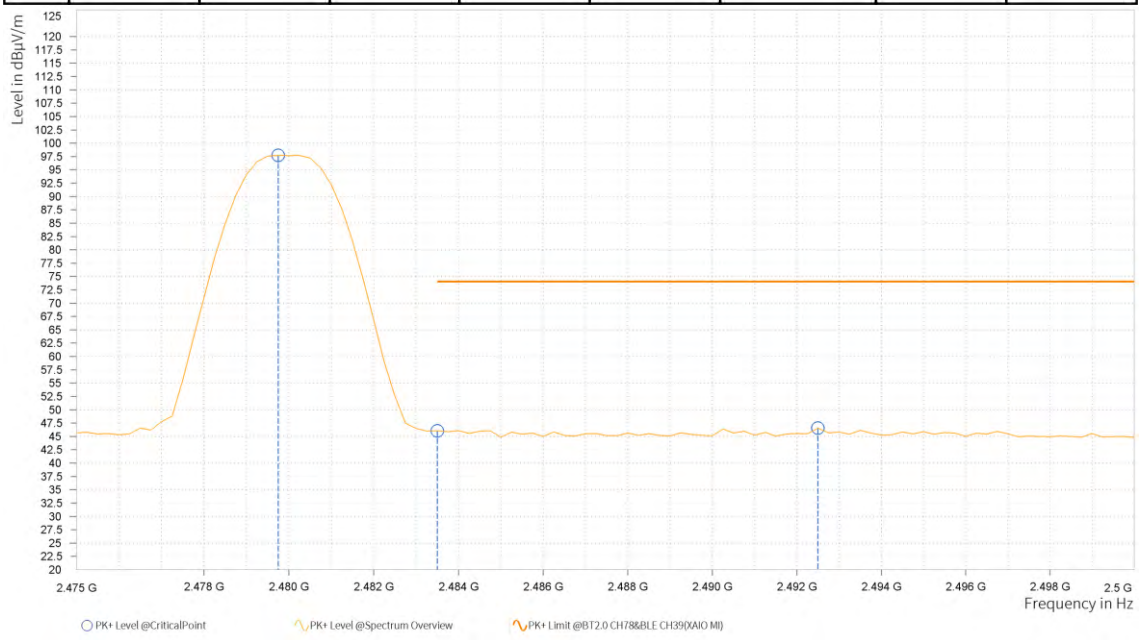
REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2440MHz: Fundamental frequency.

CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

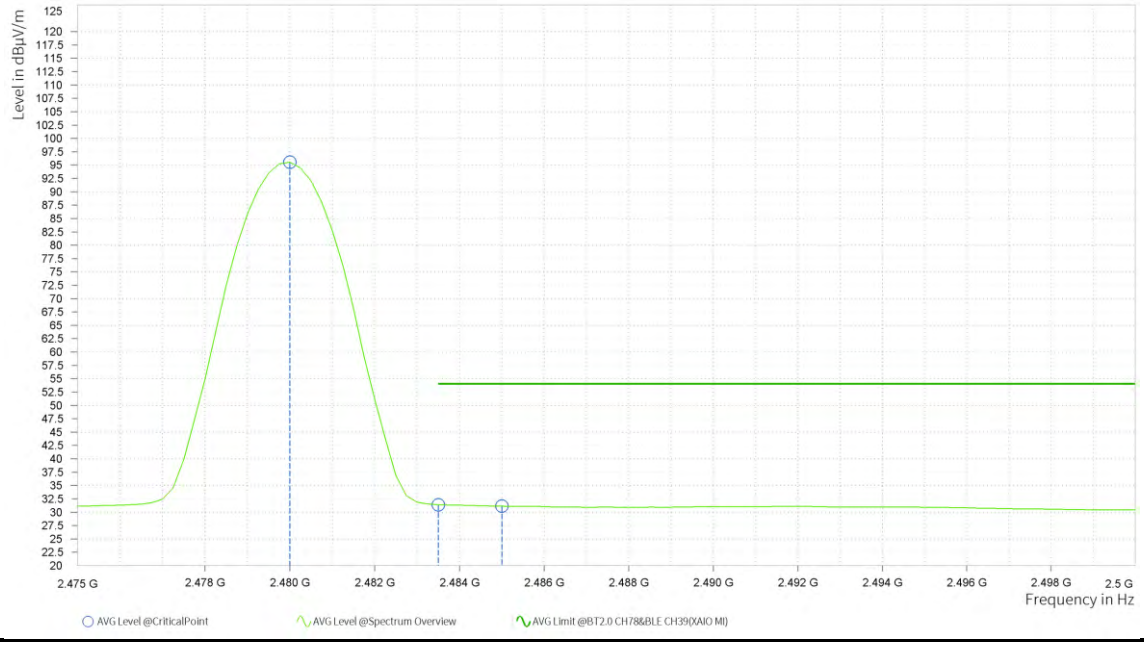
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,479.750	97.71			5.89	H	308.9	1.00
6	2,483.500	46.06	74.00	27.94	5.91	H	359	2.00
6	2,492.500	46.56	74.00	27.44	5.97	H	10.7	2.00



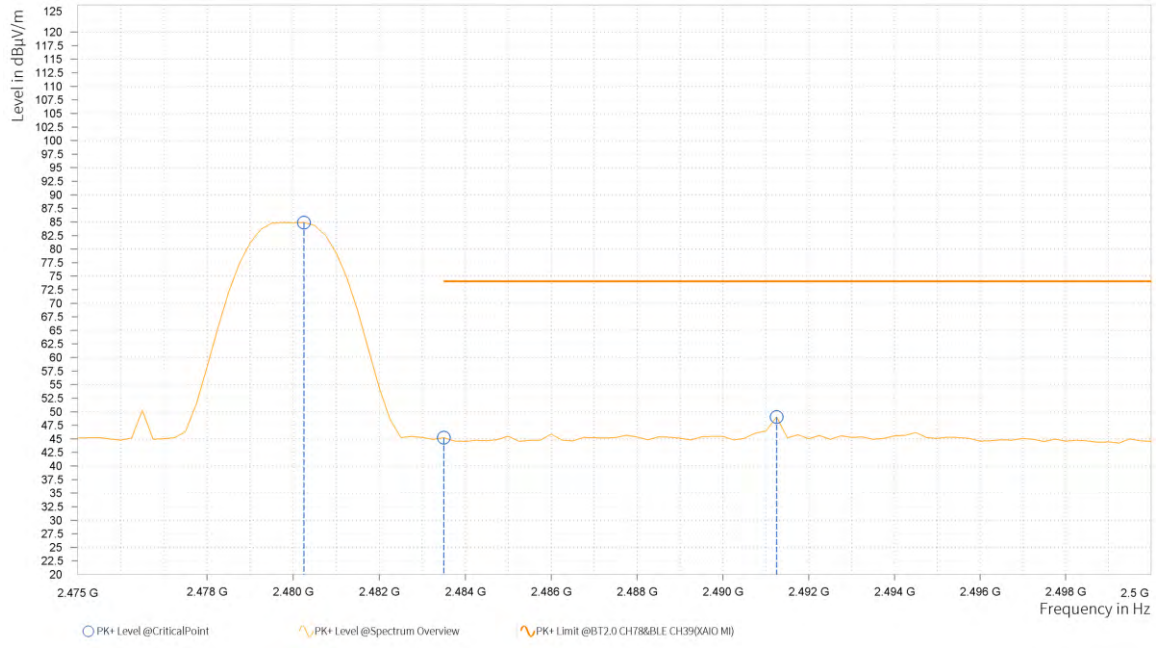
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	95.55			5.89	H	4.9	1.00
6	2,483.500	31.40	54.00	22.60	5.91	H	359	1.00
6	2,485.000	31.12	54.00	22.88	5.92	H	301.7	1.00

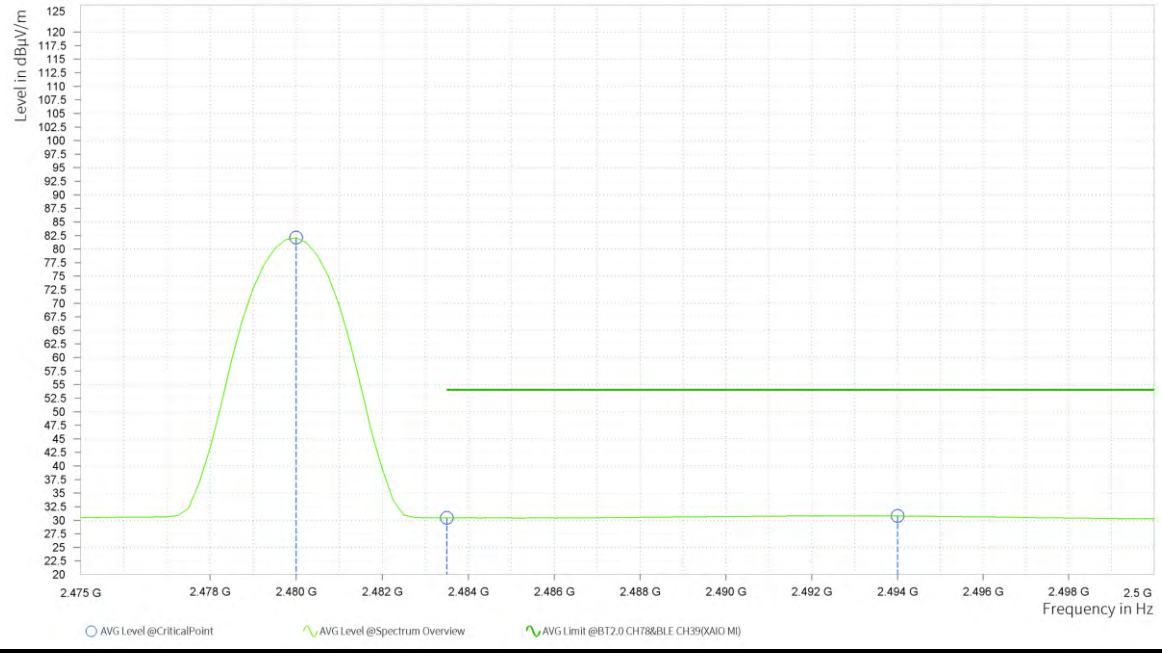


ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

Rg	Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.250	84.90			5.89	V	227.6	1.00
6	2,483.500	45.21	74.00	28.79	5.91	V	289	2.00
6	2,491.250	49.04	74.00	24.96	5.96	V	359	1.00



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
Rg	Frequency [MHz]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
6	2,480.000	82.10			5.89	V	226.4	1.00
6	2,483.500	30.44	54.00	23.56	5.91	V	134.7	2.00
6	2,494.000	30.79	54.00	23.21	5.98	V	149.8	1.00



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
2. Margin value = Limit value–Emission level.
3. 2480MHz: Fundamental frequency.

3.3 6 dB BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum 6dB Bandwidth Measurement is 0.5 MHz.

3.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	R&S	ESW 44	101973	Mar.28,24	Mar.27,26
Open Switch and Control Unit	R&S	OSP-B157W8	100836	N/A	N/A
Vector Signal Generator	R&S	SMBV100B	102176	Mar.29,24	Mar.28,26
Signal Generator	R&S	SMB100A03	182185	Mar.29,24	Mar.28,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.19,24	Jun.18,26
Hygrothermograph	DELI	20210528	SZ015	Sep.05,24	Sep.04,26
PC	LENOVO	E14	HRSW0024	N/A	N/A
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.27,24	Apr.26,25
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.27,24	Apr.26,25
Test Software	EMC32	EMC32	N/A	N/A	N/A
Temperature Chamber	votsch	VT4002	58566078100050	May.30,24	May.29,26
Power Meter	R&S	NRX	102380	Mar.28,24	Mar.27,26
Power Meter probe	R&S	NRP6A	102942	Mar.28,24	Mar.27,26

NOTE:

1. The calibration interval of the above test instruments is 12/ 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

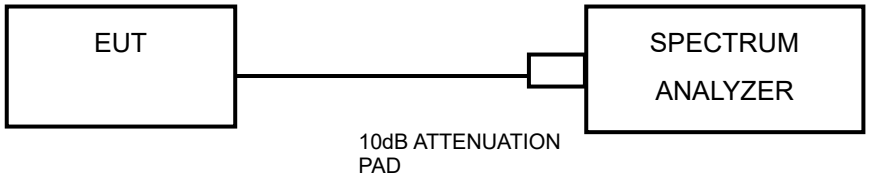
3.3.3 TEST PROCEDURE

1. Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
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.

3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

3.3.5 TEST SETUP



3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest CHannel frequencies individually.

3.3.7 TEST RESULTS

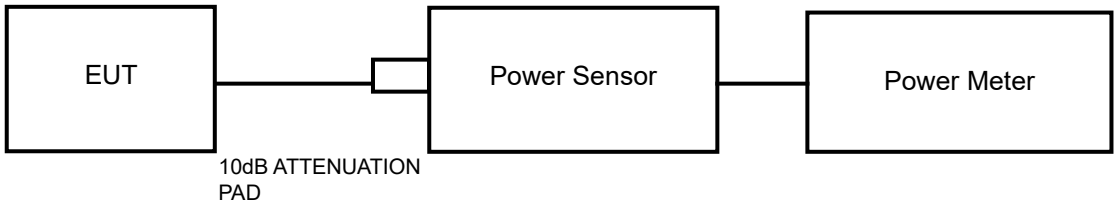
Please Refer to Appendix B Of this test report..

3.4 CONDUCTED OUTPUT POWER

3.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

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

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.4.4 TEST PROCEDURES

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest CHannel frequencies individually.

3.4.7 TEST RESULTS

3.4.7.1 MAXIMUM PEAK OUTPUT POWER

Please Refer to Appendix B Of this test report..

3.4.7.2 AVERAGE OUTPUT POWER (FOR REFERENCE)

The average power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.

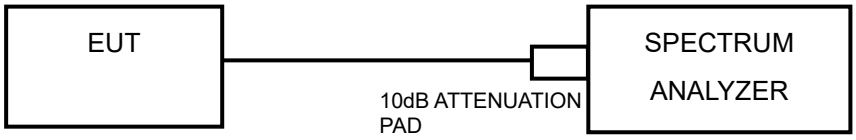
Please Refer to Appendix B Of this test report..

3.5 POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.5.4 TEST PROCEDURE

1. Set the span to 1.5 times the DTS bandwidth
2. Set the RBW = 3 kHz, VBW ≥ 3 x RBW, Detector = peak.
3. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest CHannel frequencies individually.

3.5.7 TEST RESULTS

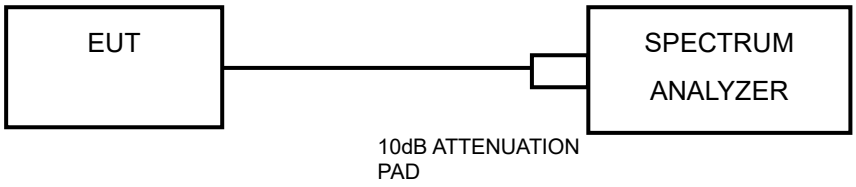
Please Refer to Appendix B Of this test report..

3.6 OUT OF BAND EMISSION MEASUREMENT

3.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

3.6.2 TEST SETUP



3.6.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

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

MEASUREMENT PROCEDURE OOBE

1. Set RBW = 100 kHz.
2. Set VBW ≥ 300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

3.6.5 DEVIATION FROM TEST STANDARD

No deviation.

3.6.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest CHannel frequencies individually.

3.6.7 TEST RESULTS

The spectrum plots are attaCHed on the following images. D1 line indicates the highest level. D2 line indicates the 20dB offset below D1. It shows compliance to the requirement.

Please Refer to Appendix B Of this test report..

3.7 ANTENNA REQUIREMENTS

3.7.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.7.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

3.7.3 ANTENNA GAIN

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit and PSD limit

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attaCHed file (Test Setup Photo).

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

6 APPENDIX A:2.4GWIFI

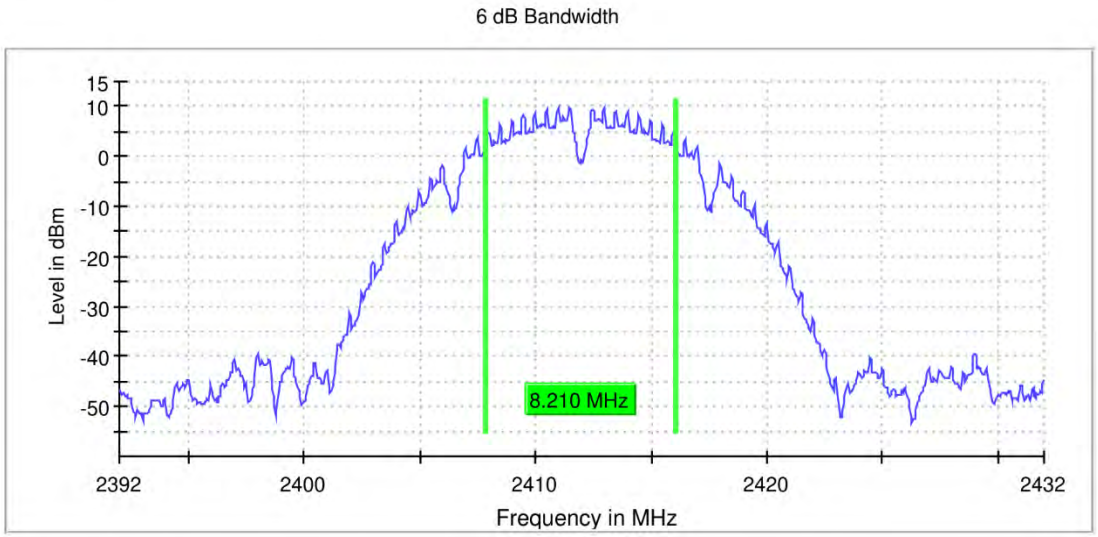
DTS BANDWIDTH

TEST RESULT

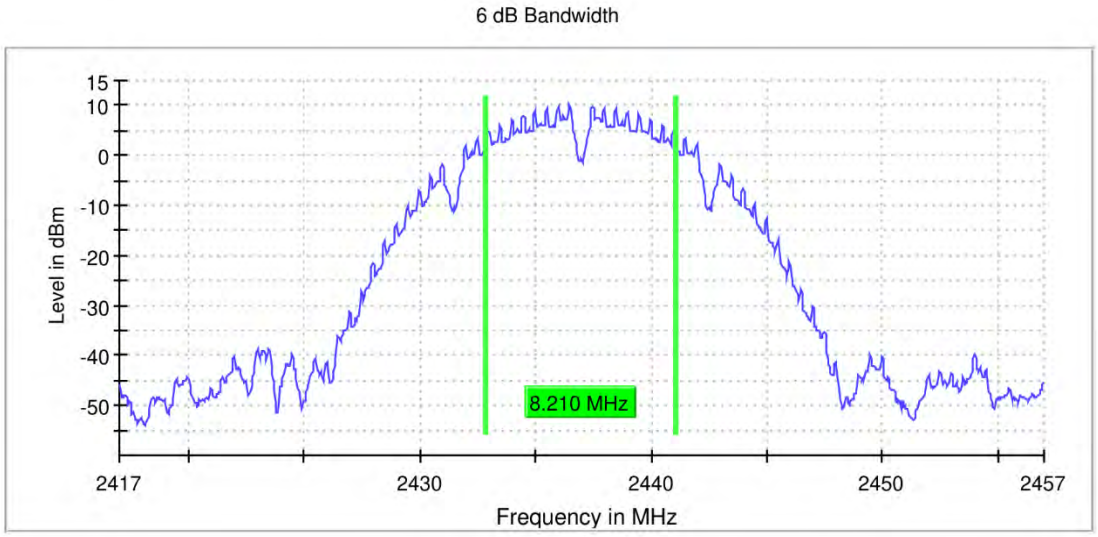
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	ANT6	2412	8.210	2407.870	2416.080	0.5	PASS
	ANT6	2437	8.210	2432.870	2441.080	0.5	PASS
	ANT6	2462	8.160	2457.870	2466.030	0.5	PASS
11G	ANT6	2412	16.421	2403.765	2420.185	0.5	PASS
	ANT6	2437	15.219	2429.365	2444.584	0.5	PASS
	ANT6	2462	15.569	2454.365	2469.935	0.5	PASS
11N20	ANT6	2412	17.722	2403.114	2420.836	0.5	PASS
	ANT6	2437	15.419	2429.365	2444.785	0.5	PASS
	ANT6	2462	15.820	2454.365	2470.185	0.5	PASS
11N40	ANT6	2422	35.222	2404.414	2439.636	0.5	PASS
	ANT6	2437	35.222	2419.414	2454.636	0.5	PASS
	ANT6	2452	35.222	2434.414	2469.636	0.5	PASS

TEST GRAPHS

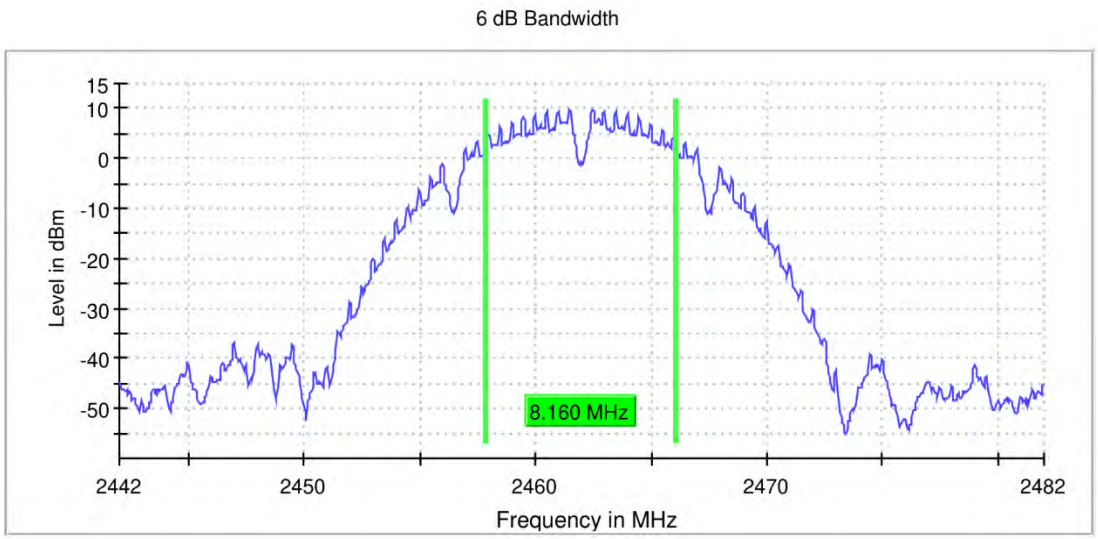
11B_ANT6_2412



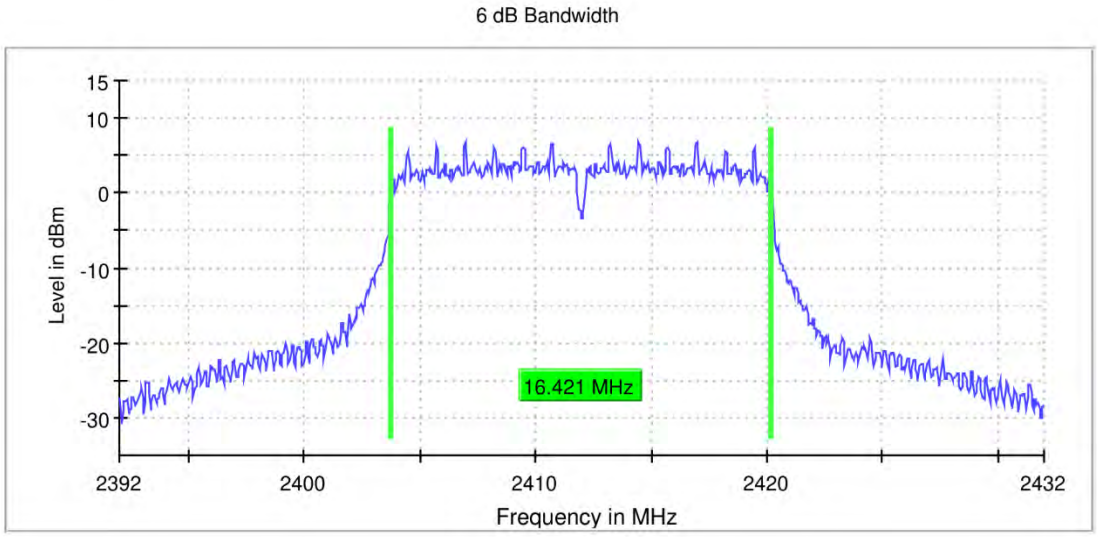
11B_ANT6_2437



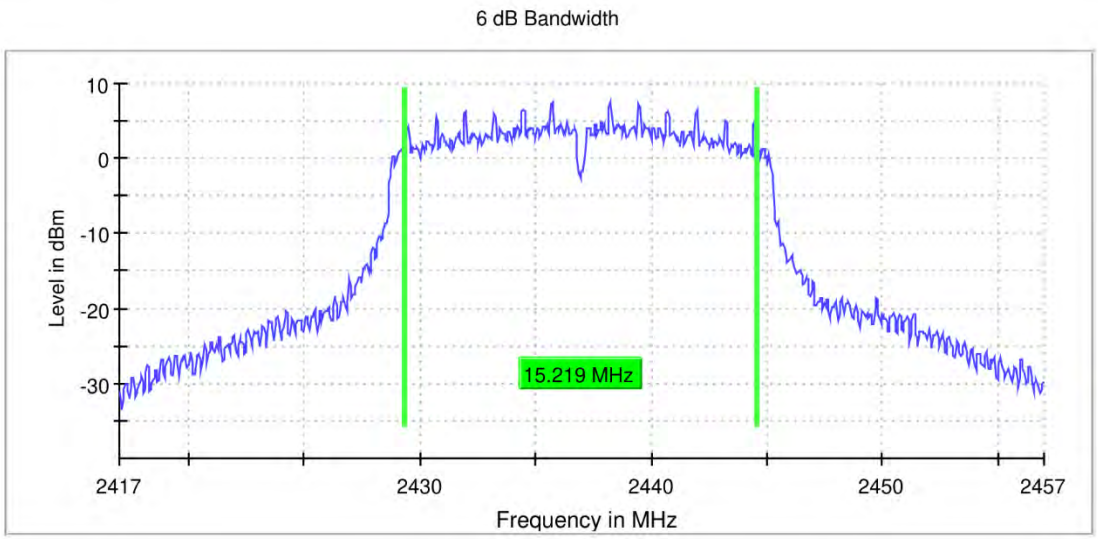
11B_ANT6_2462



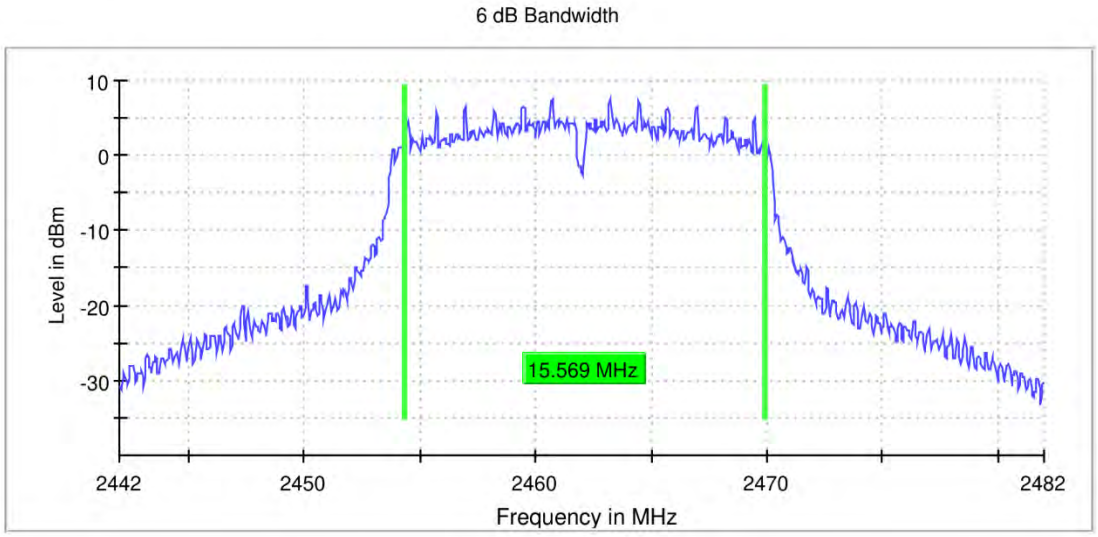
11G_ANT6_2412



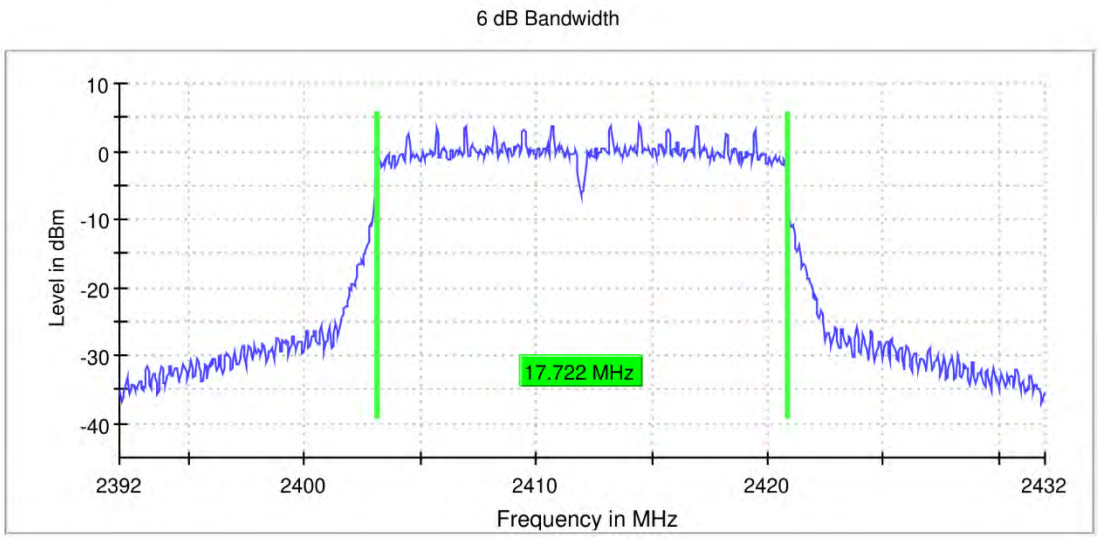
11G_ANT6_2437



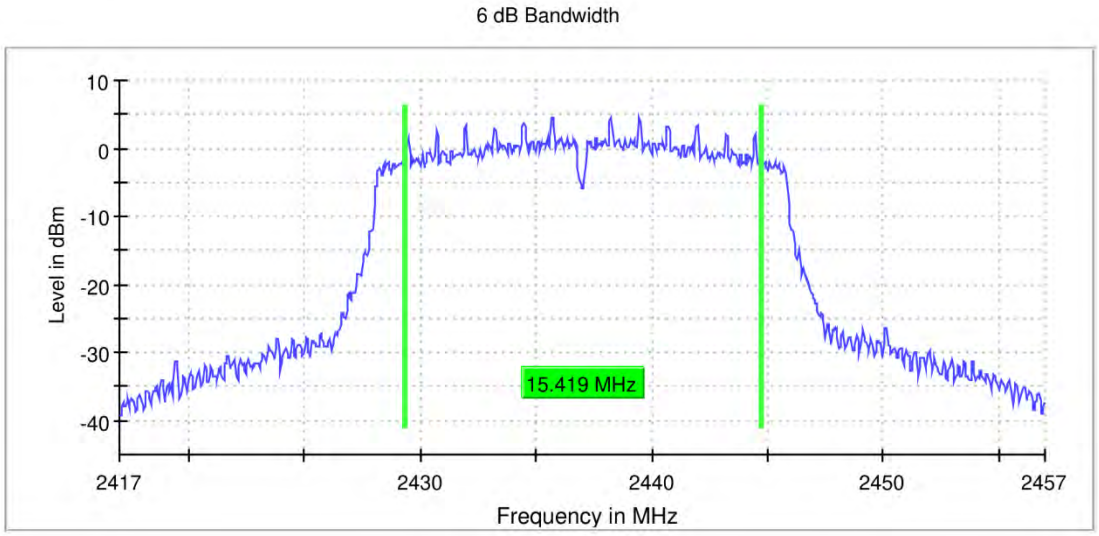
11G_ANT6_2462



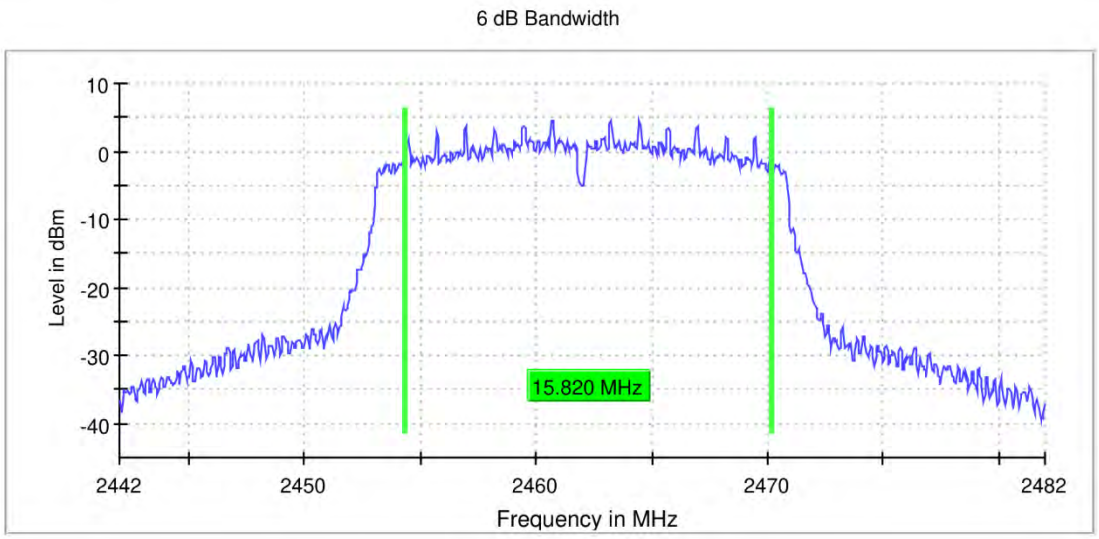
11N20_ANT6_2412



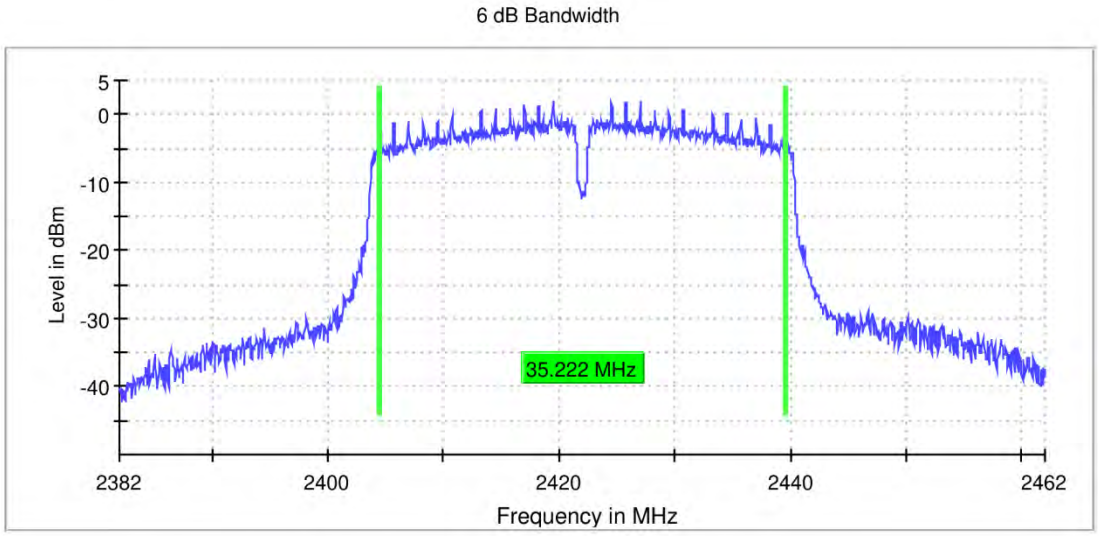
11N20_ANT6_2437



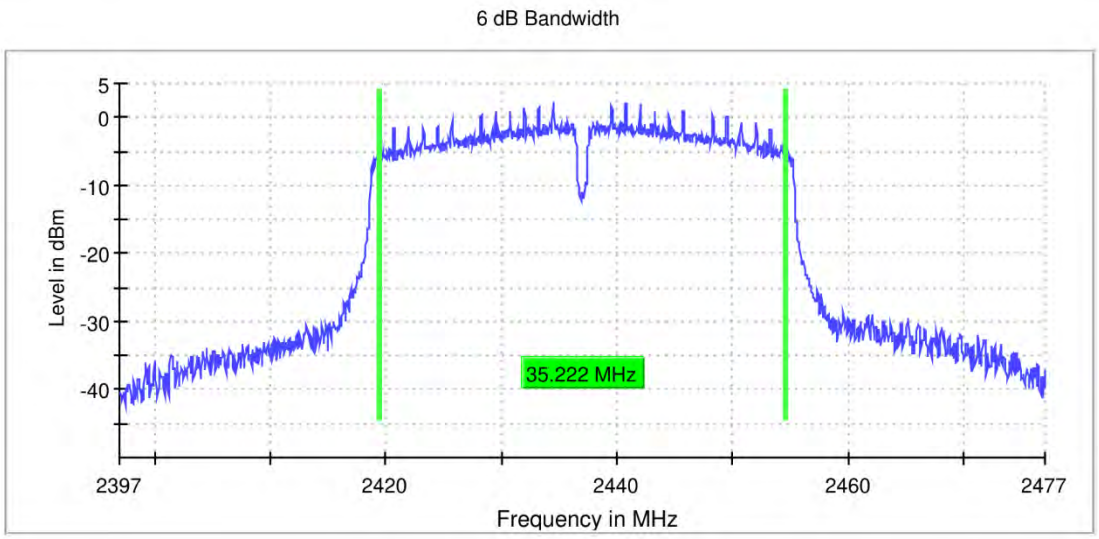
11N20_ANT6_2462



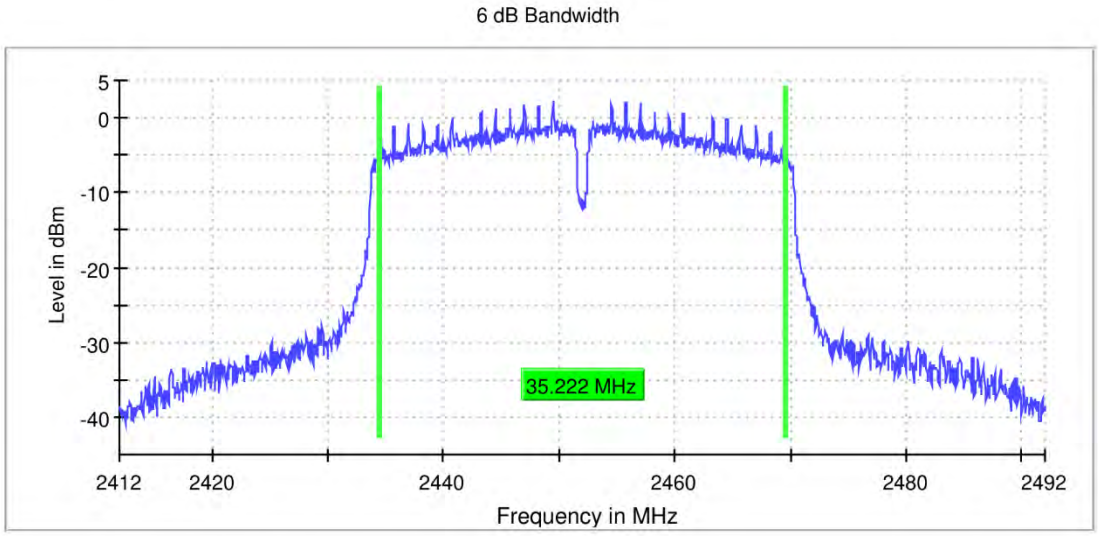
11N40_ANT6_2422



11N40_ANT6_2437



11N40_ANT6_2452



RBW 100.000 kHz

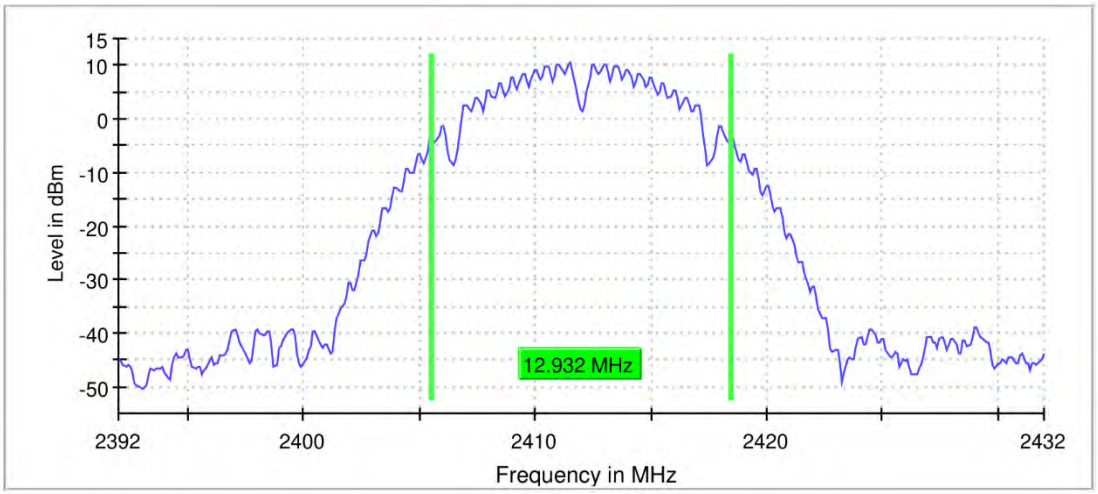
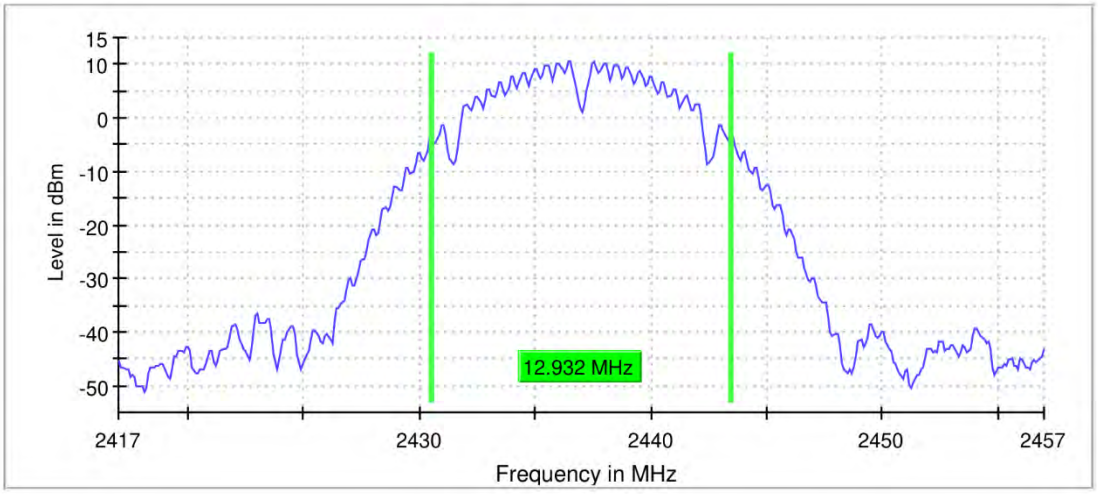
VBW 300.000 kHz

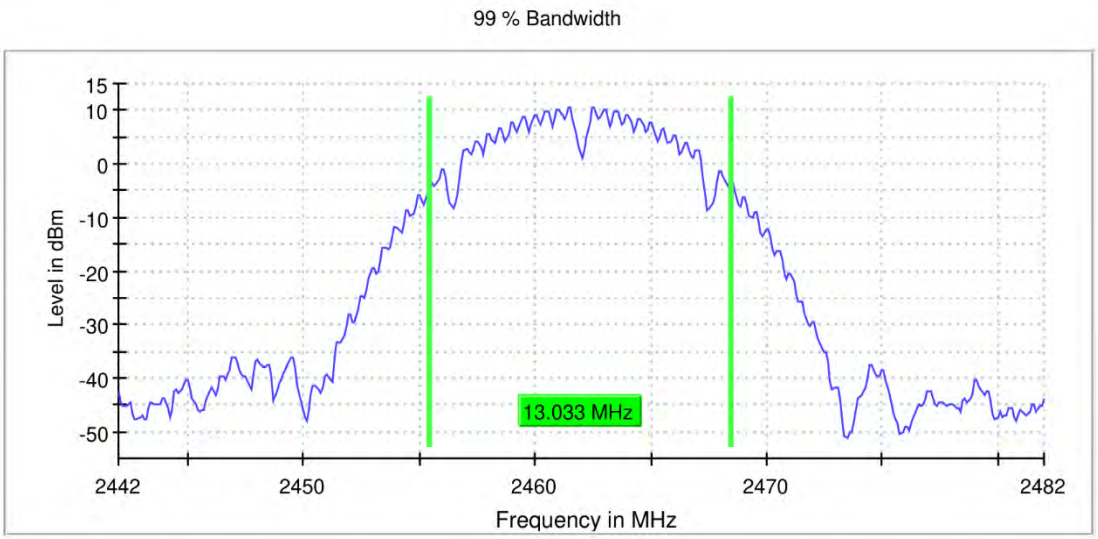
OBW BANDWIDTH

TEST RESULT

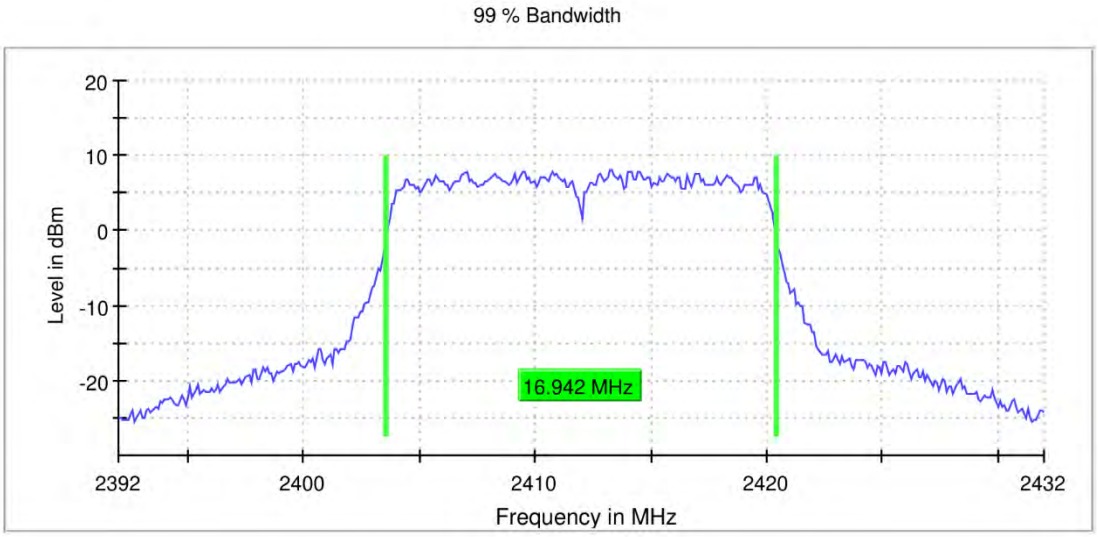
TestMode	Antenna	Frequency[MHz]	OBW BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	ANT6	2412	12.932	2405.534	2418.466	---	PASS
	ANT6	2437	12.932	2430.534	2443.466	---	PASS
	ANT6	2462	13.033	2455.434	2468.466	---	PASS
11G	ANT6	2412	16.942	2403.529	2420.471	---	PASS
	ANT6	2437	16.742	2428.629	2445.371	---	PASS
	ANT6	2462	16.742	2453.629	2470.371	---	PASS
11N20	ANT6	2412	17.945	2403.028	2420.972	---	PASS
	ANT6	2437	17.744	2428.128	2445.872	---	PASS
	ANT6	2462	17.744	2453.128	2470.872	---	PASS
11N40	ANT6	2422	36.614	2403.818	2440.433	---	PASS
	ANT6	2437	36.364	2418.818	2455.182	---	PASS
	ANT6	2452	36.364	2433.818	2470.182	---	PASS

TEST GRAPHS

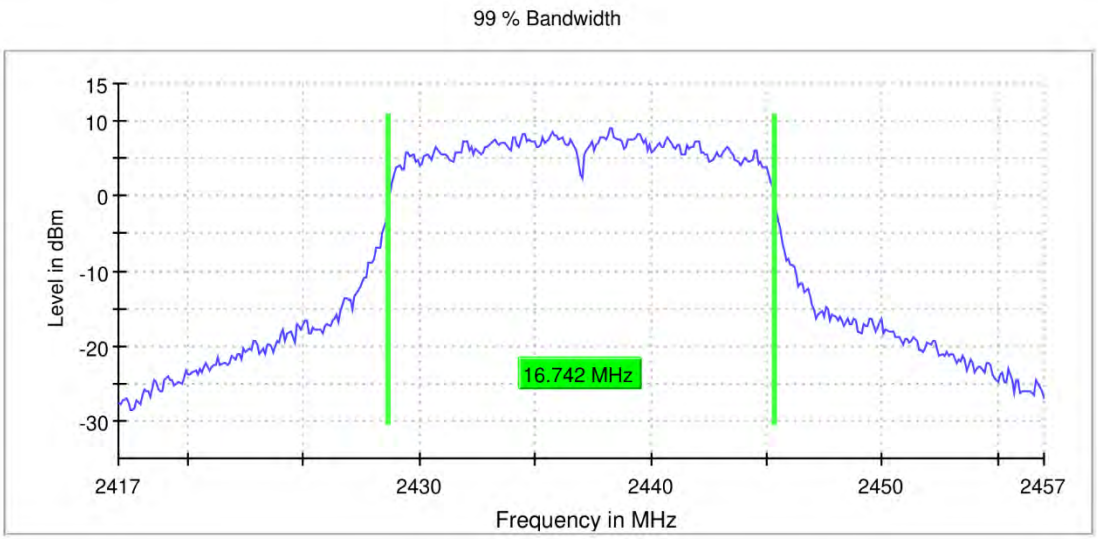
11B_ANT6_2412
99 % Bandwidth 
11B_ANT6_2437
99 % Bandwidth 
11B_ANT6_2462



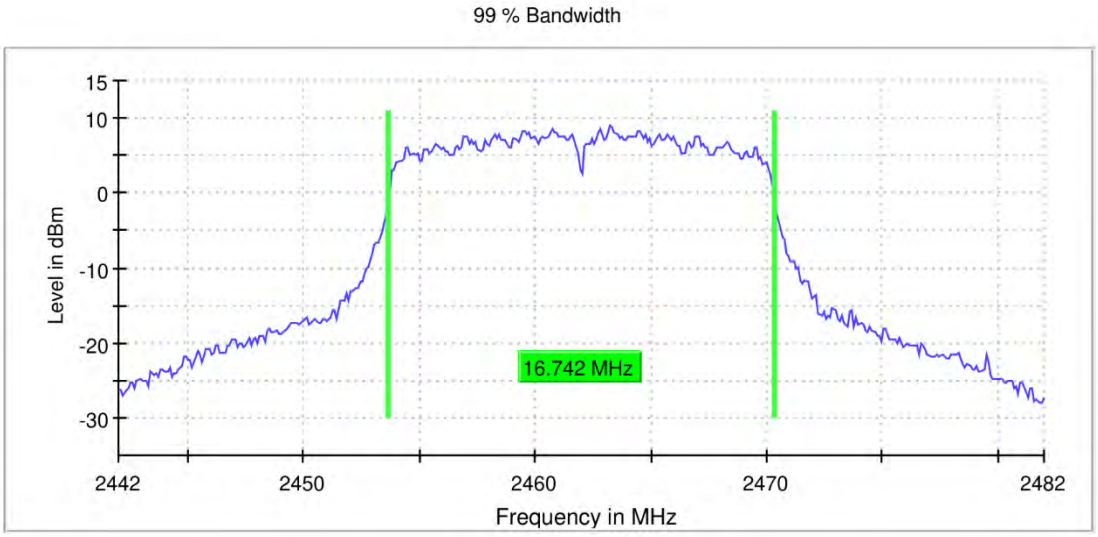
11G_ANT6_2412



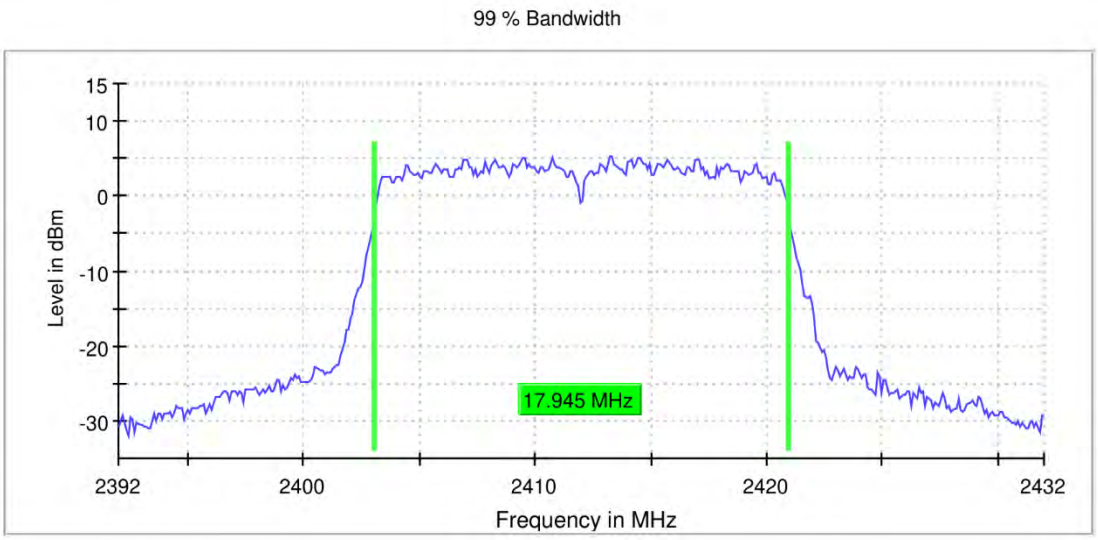
11G_ANT6_2437



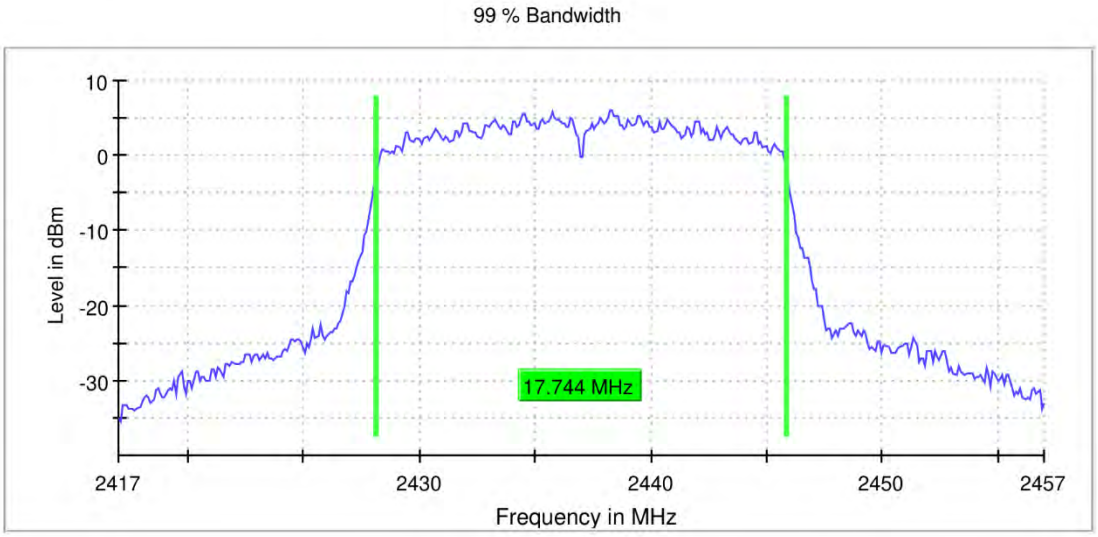
11G_ANT6_2462



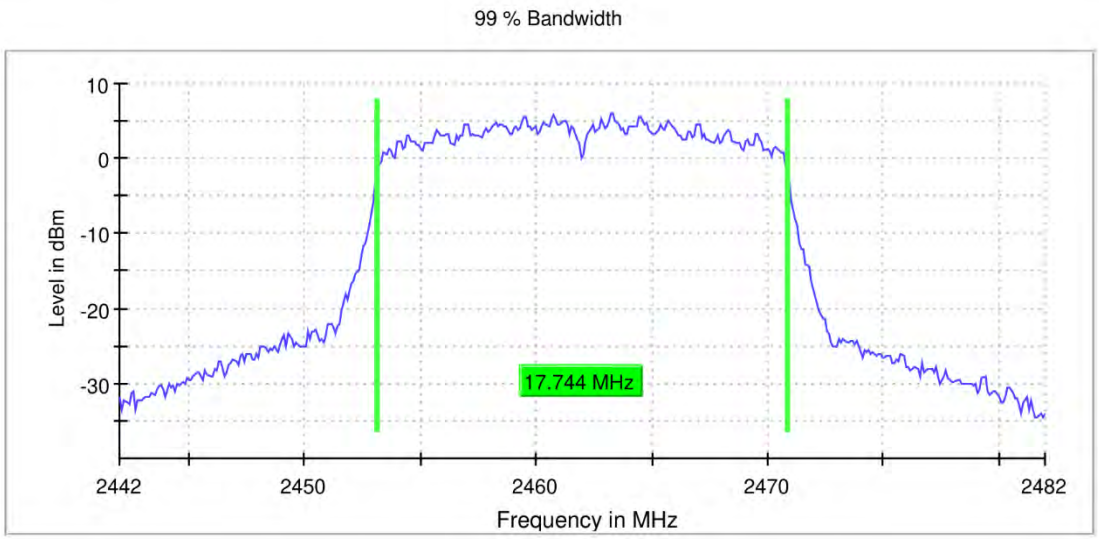
11N20_ANT6_2412



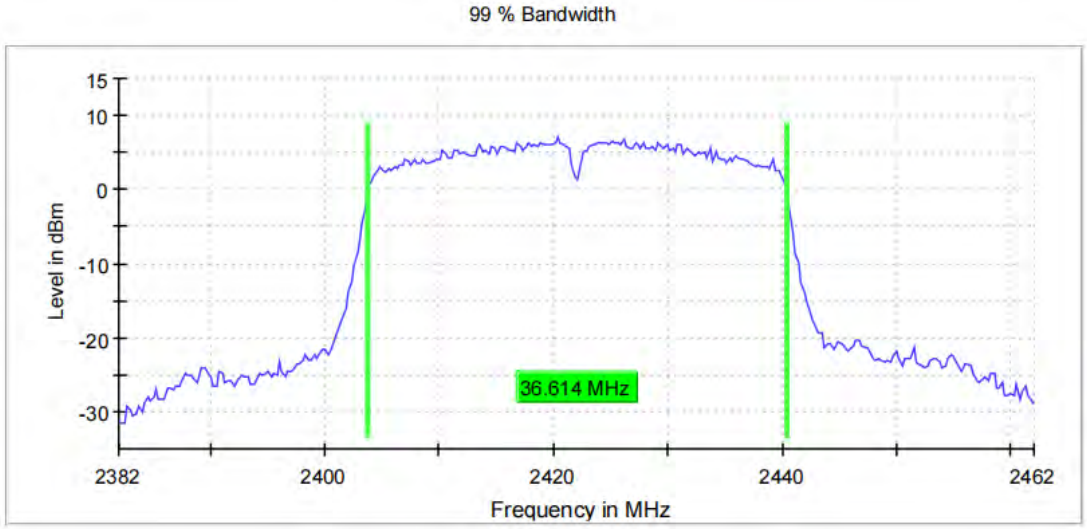
11N20_ANT6_2437



11N20_ANT6_2462

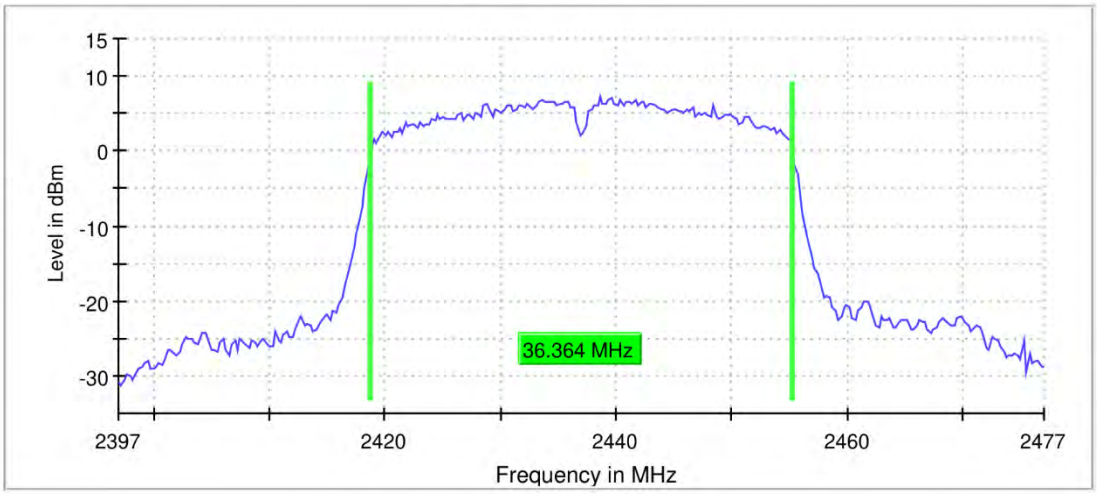


11N40_ANT6_2422



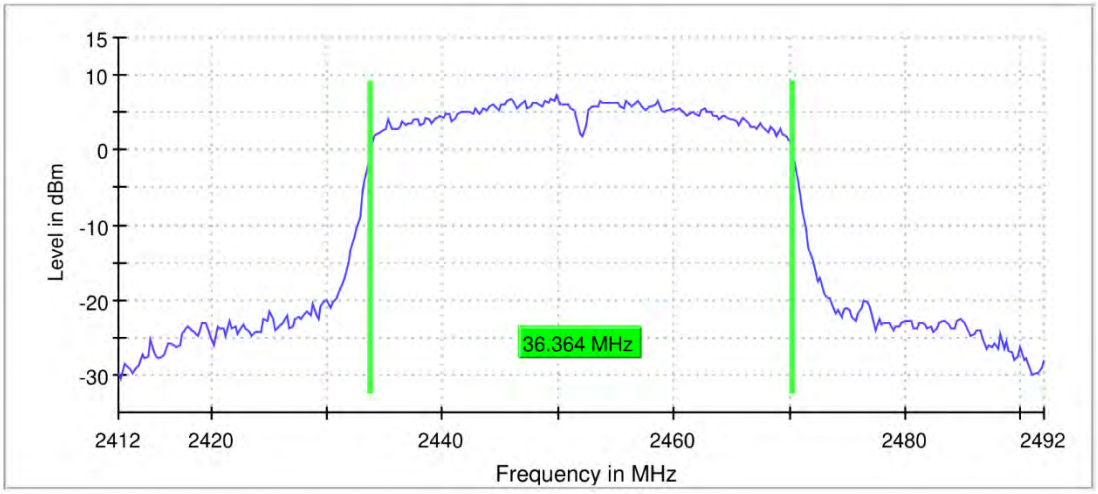
11N40_ANT6_2437

99 % Bandwidth



11N40_ANT6_2452

99 % Bandwidth



20M

RBW 200.000 kHz

VBW 1.000 MHz

40M

RBW 500.000 kHz

VBW 2.000 MHz

MAXIMUM CONDUCTED OUTPUT POWER

TEST RESULT

TestMode	TX Mod.	Frequency [MHz]	Peak power [dBm] ANT6	MAX Peak power [mw]	Limit [dBm]	Verdict	Power Setting
11B	SISO	2412	15.75	37.58	≤30.00	PASS	12
		2437	15.77	37.76	≤30.00	PASS	12
		2462	15.73	37.41	≤30.00	PASS	12
11g	SISO	2412	24.74	297.85	≤30.00	PASS	12
		2437	24.08	255.86	≤30.00	PASS	12
		2462	24.35	272.27	≤30.00	PASS	12
11N20	SISO	2412	24.32	270.40	≤30.00	PASS	12
		2437	24.25	266.07	≤30.00	PASS	12
		2462	24.09	256.45	≤30.00	PASS	12
11N40	SISO	2422	24.01	251.77	≤30.00	PASS	12
		2437	24.63	290.40	≤30.00	PASS	12
		2452	24.03	252.93	≤30.00	PASS	12

TestMode	TX Mod.	Freq. [MHz]	Avg.power [dBm]	Power Setting
			ANT6	
11B	SISO	2412	13.05	12
		2437	13.01	12
		2462	13.08	12
11g	SISO	2412	12.82	12
		2437	12.83	12
		2462	12.87	12
11N20	SISO	2412	12.83	12
		2437	12.78	12
		2462	12.78	12
11N40	SISO	2422	12.81	12
		2437	12.80	12
		2452	12.82	12

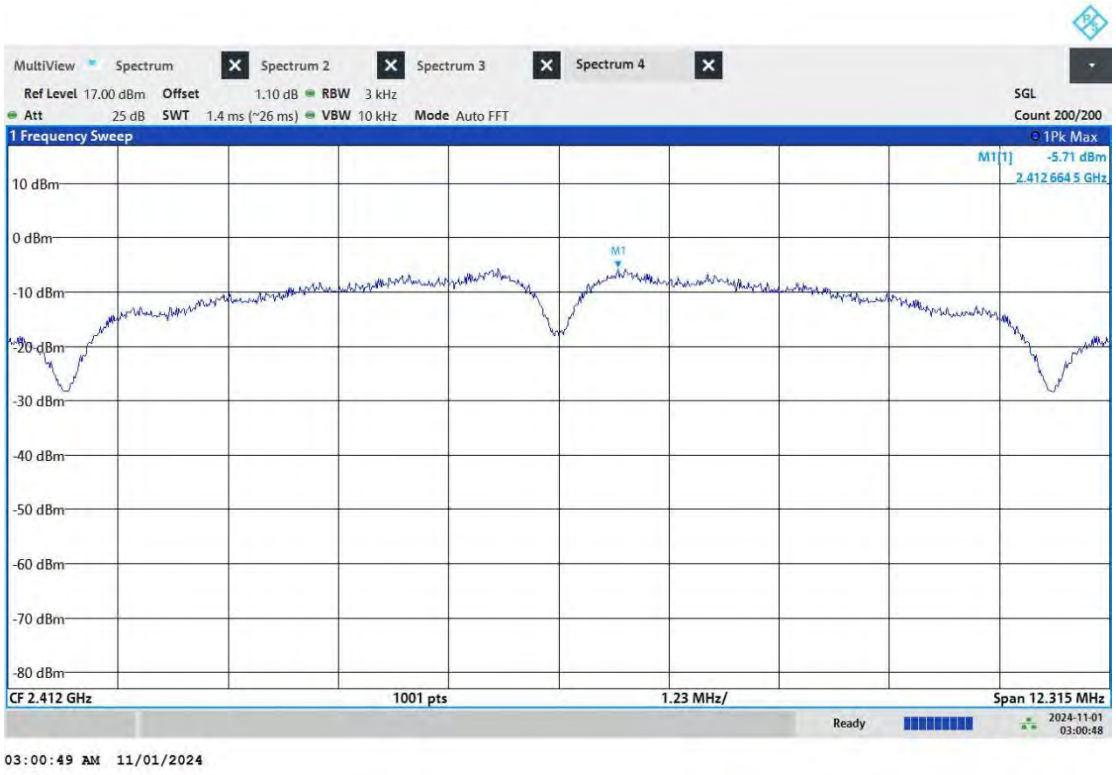
MAXIMUM POWER SPECTRAL DENSITY

TEST RESULT

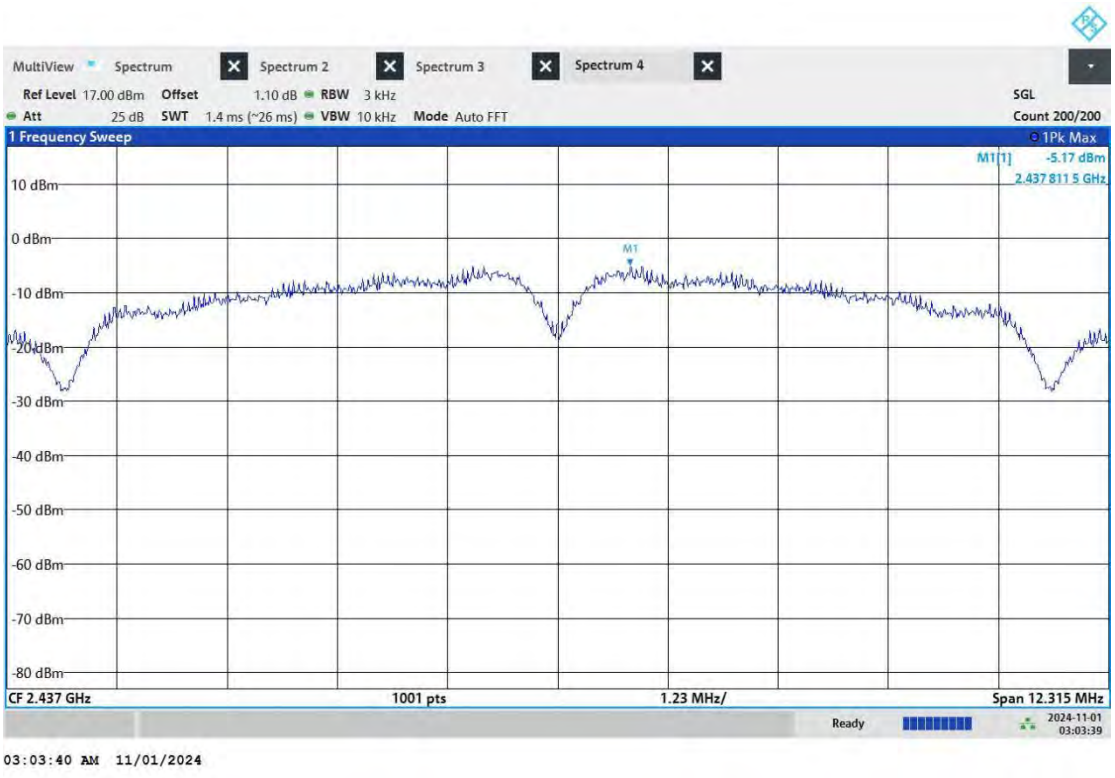
TestMode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	ANT6	2412	-5.71	≤8.00	PASS
	ANT6	2437	-5.17	≤8.00	PASS
	ANT6	2462	-5.70	≤8.00	PASS
11G	ANT6	2412	-7.52	≤8.00	PASS
	ANT6	2437	-7.54	≤8.00	PASS
	ANT6	2462	-6.62	≤8.00	PASS
11N20	ANT6	2412	-11.79	≤8.00	PASS
	ANT6	2437	-10.82	≤8.00	PASS
	ANT6	2462	-10.59	≤8.00	PASS
11N40	ANT6	2422	-13.36	≤8.00	PASS
	ANT6	2437	-13.13	≤8.00	PASS
	ANT6	2452	-13.73	≤8.00	PASS

TEST GRAPHS

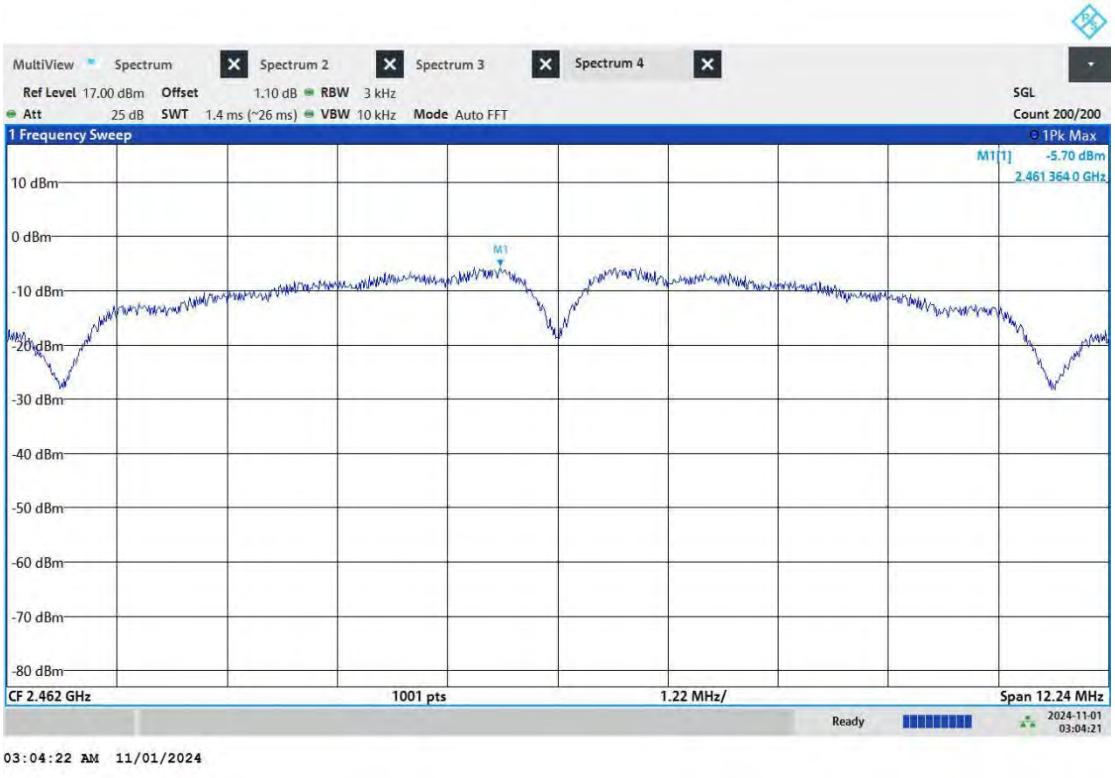
11B_ANT6_2412



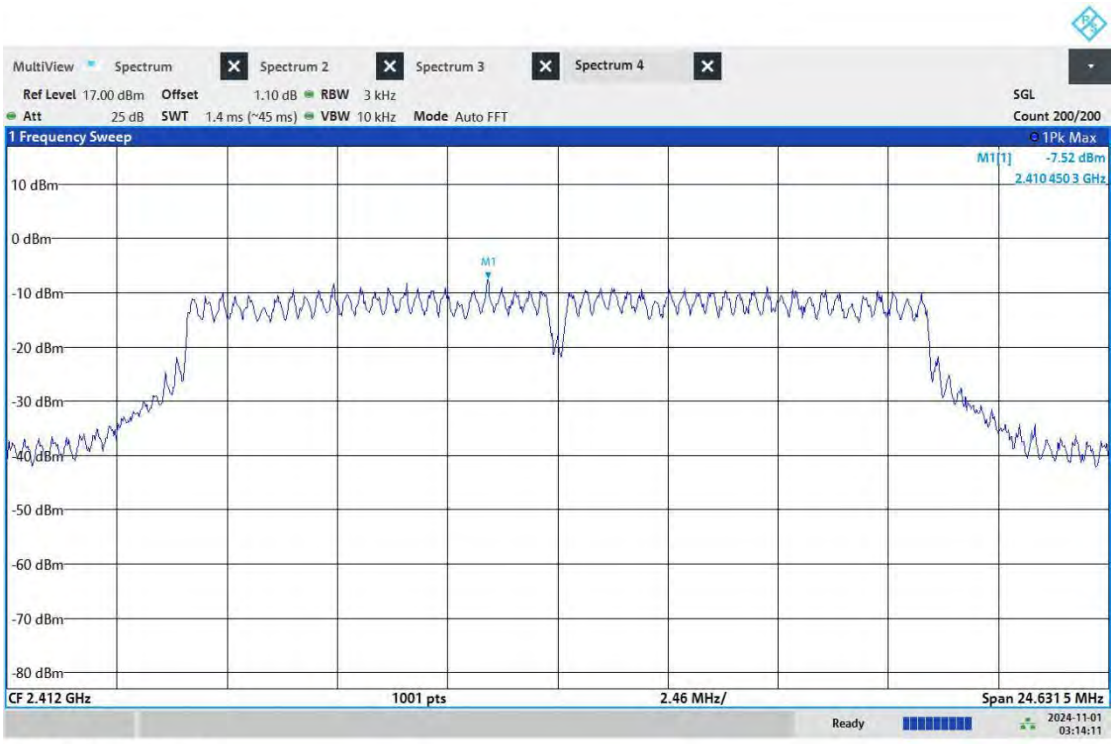
11B_ANT6_2437



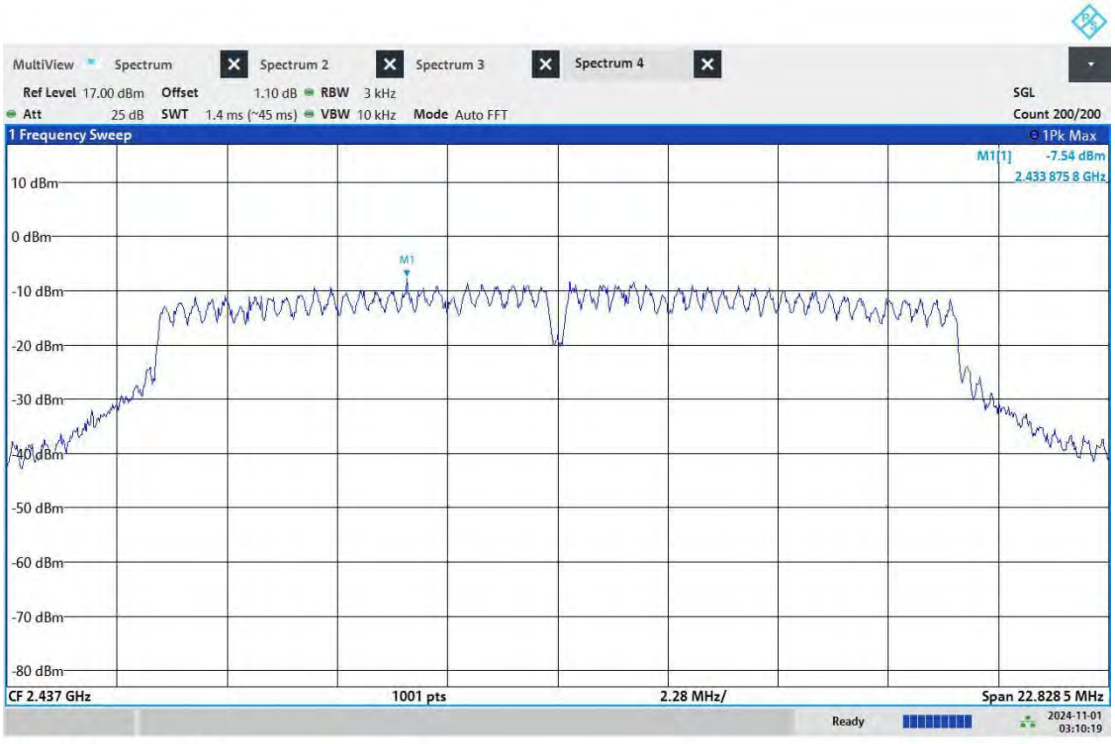
11B_ANT6_2462



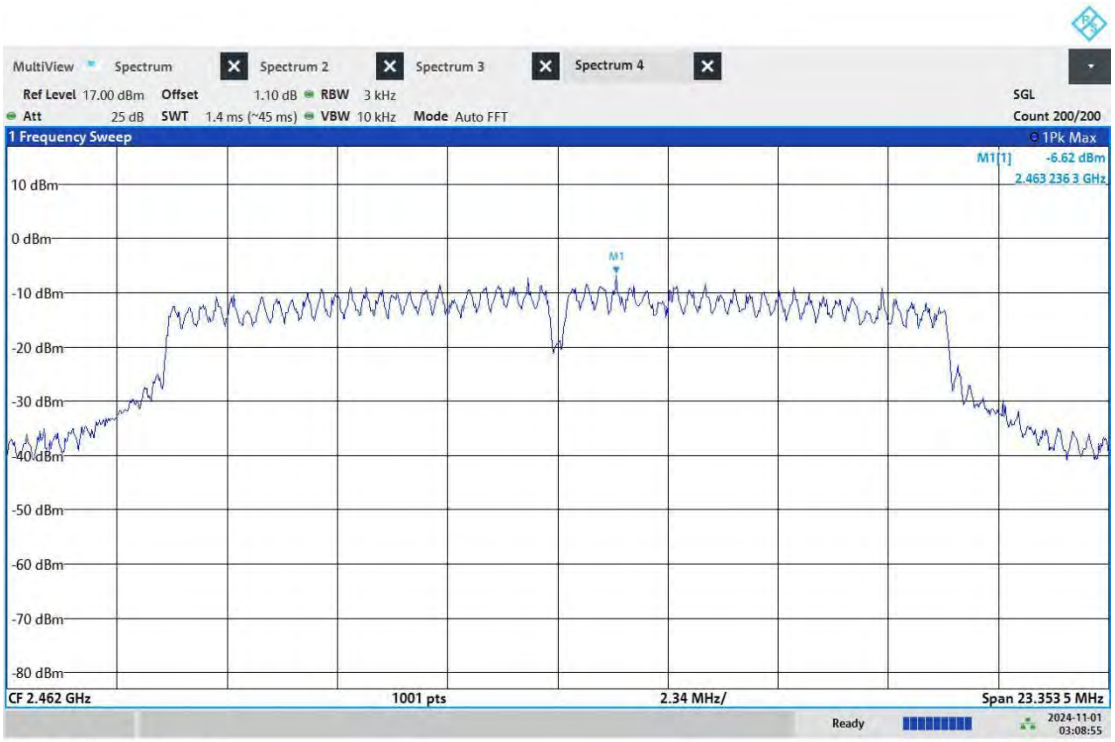
11G_ANT6_2412



11G_ANT6_2437

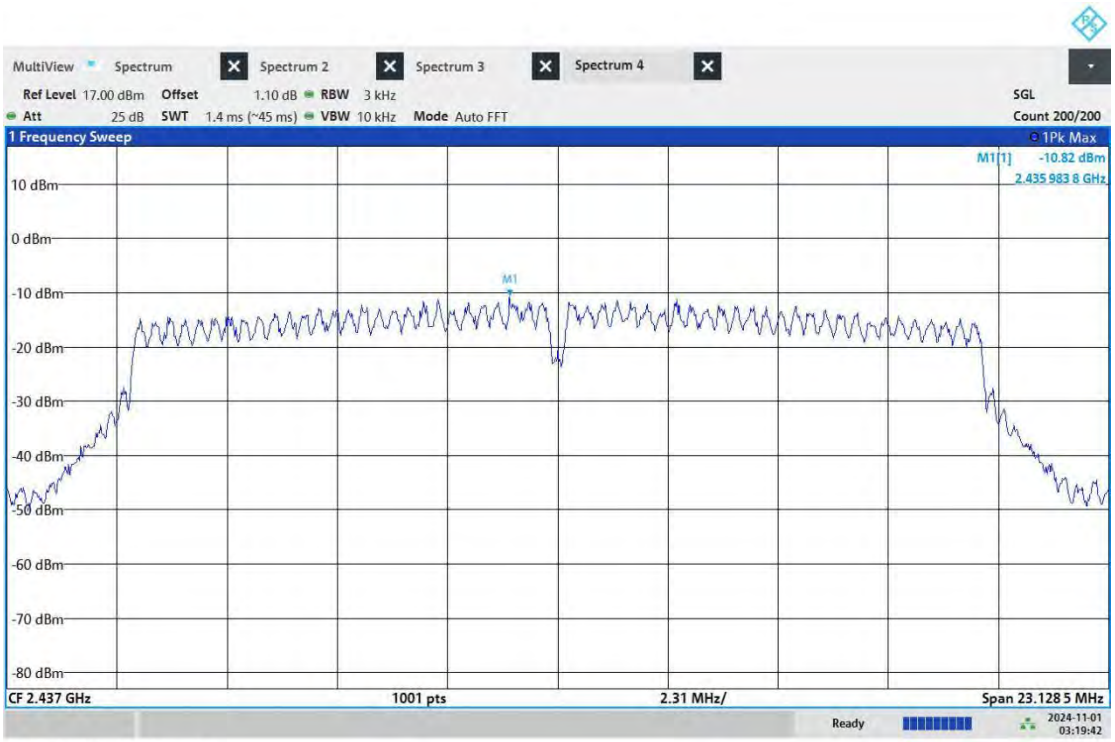


11G_ANT6_2462

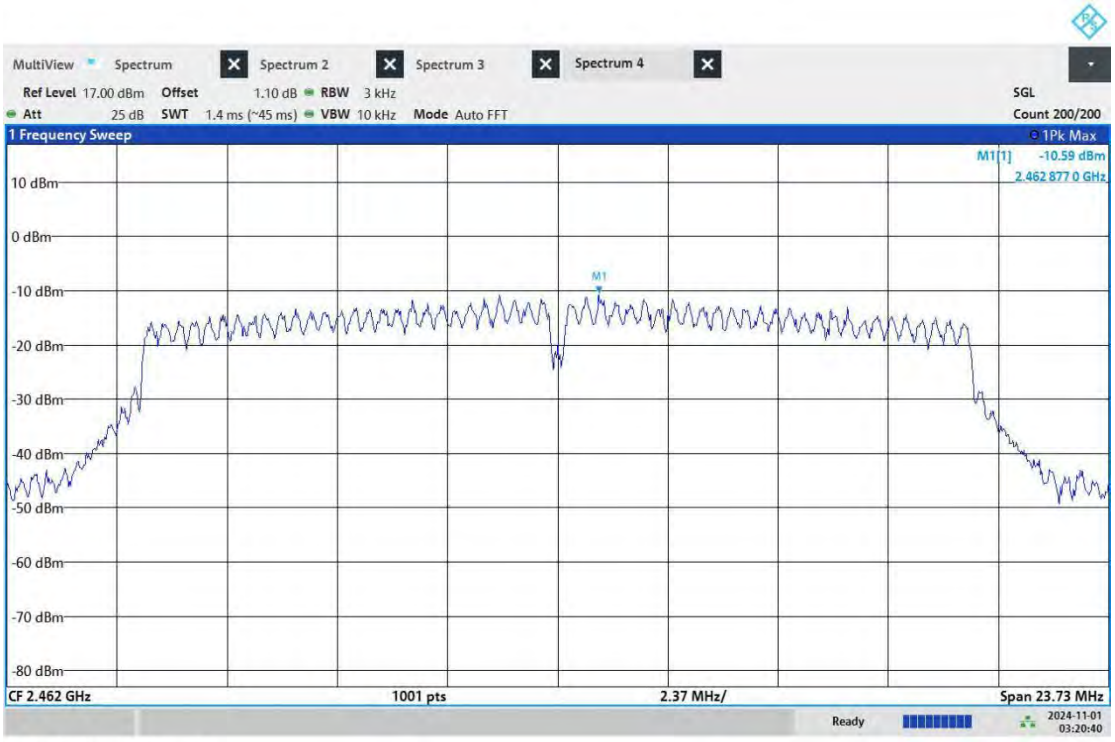


11N20_ANT6_2412

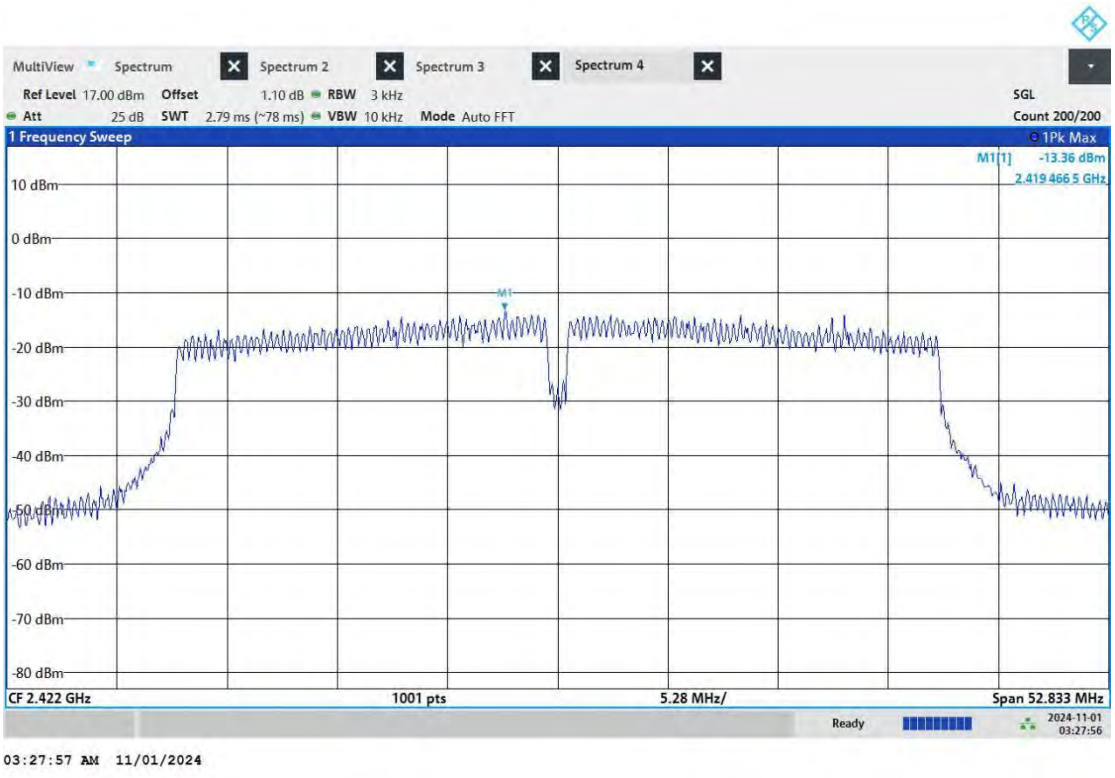
11N20_ANT6_2437



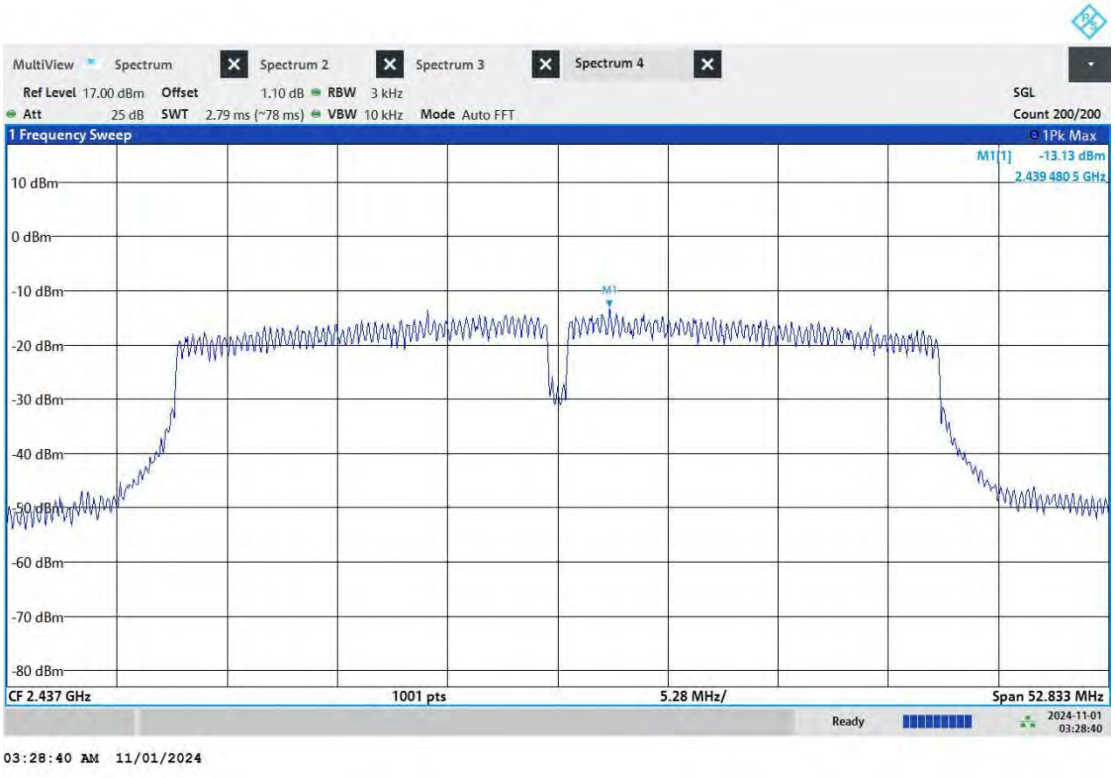
11N20_ANT6_2462



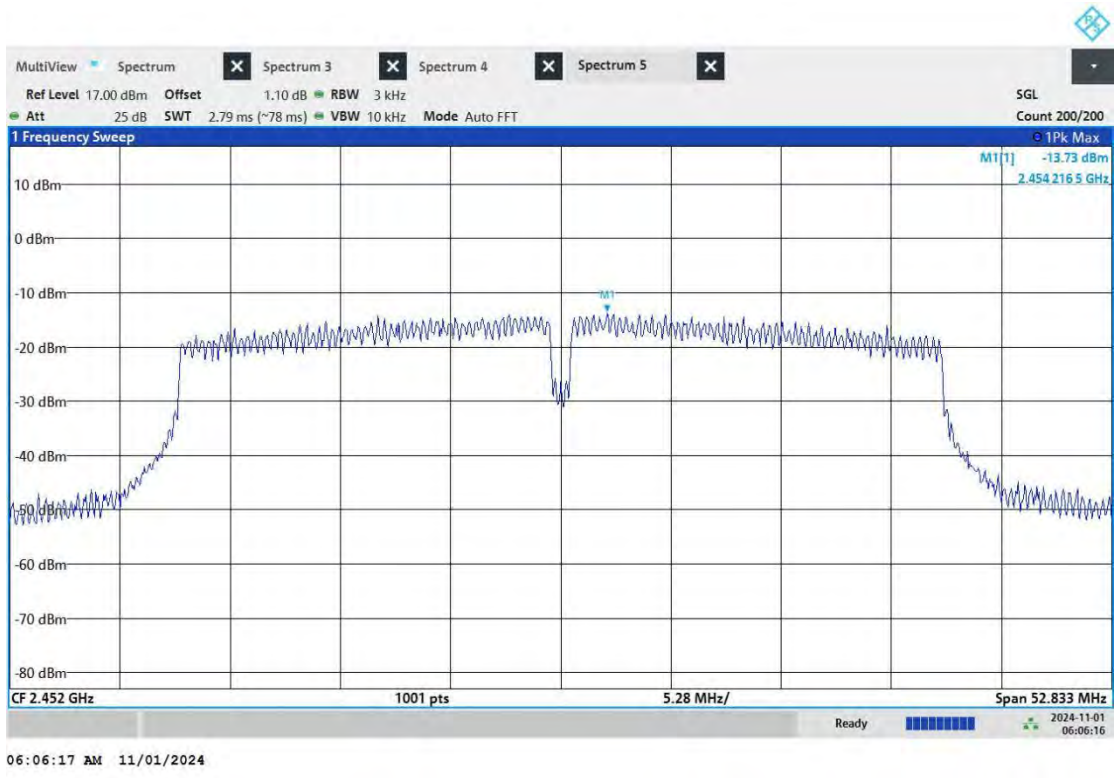
11N40_ANT6_2422



11N40_ANT6_2438



11N40_ANT6_2452


MultiView
Spectrum
Spectrum 3
Spectrum 4
Spectrum 5
Ref Level 17.00 dBm Offset 1.10 dB RBW 3 kHz
Att 25 dB SWT 2.79 ms (~78 ms) VBW 10 kHz Mode Auto FFT
SGL
Count 200/200
1 Frequency Sweep
1Pk Max
M1[1] -13.73 dBm
2.454 216 5 GHz
10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm
-80 dBm
CF 2.452 GHz
1001 pts
5.28 MHz/
Span 52.833 MHz
Ready
2024-11-01
06:06:16
06:06:17 AM 11/01/2024

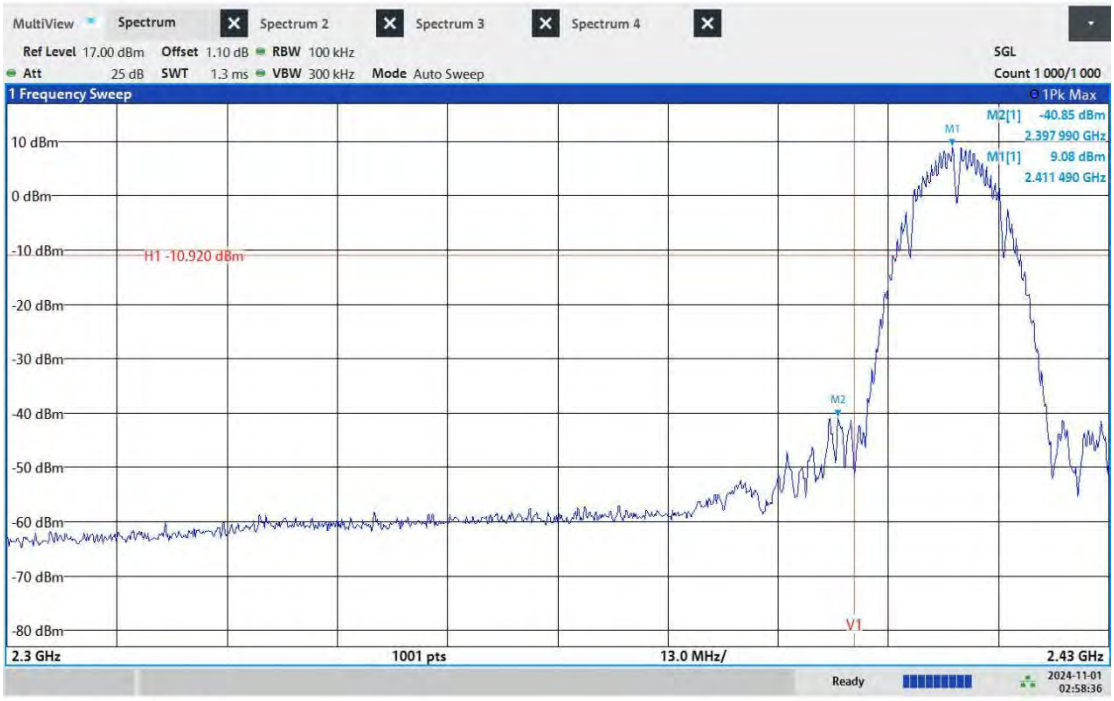
BAND EDGE MEASUREMENTS

TEST RESULT

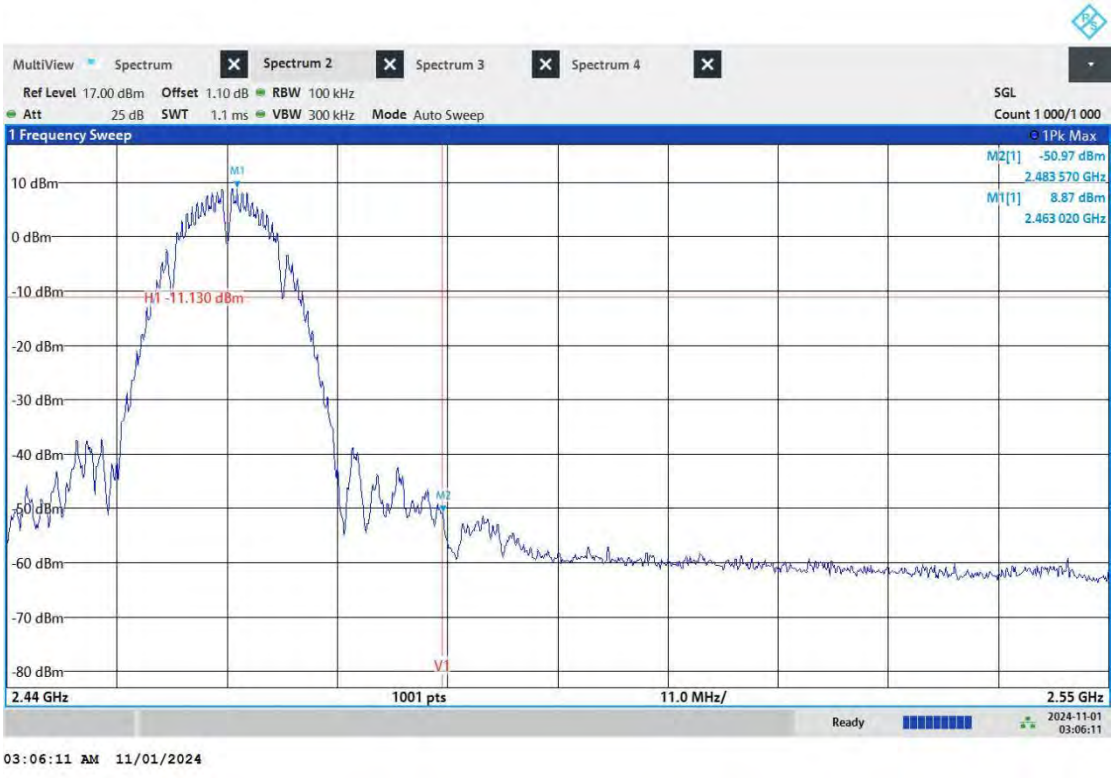
TestMode	Antenna	ChName	Frequency [MHz]	Result [dBm]	Limit [dBm]	Verdict
11B	ANT6	Low	2412	See test graph	See test graph	PASS
	ANT6	High	2462	See test graph	See test graph	PASS
11G	ANT6	Low	2412	See test graph	See test graph	PASS
	ANT6	High	2462	See test graph	See test graph	PASS
11N20	ANT6	Low	2412	See test graph	See test graph	PASS
	ANT6	High	2462	See test graph	See test graph	PASS
11N40	ANT6	Low	2422	See test graph	See test graph	PASS
	ANT6	High	2452	See test graph	See test graph	PASS

TEST GRAPHS

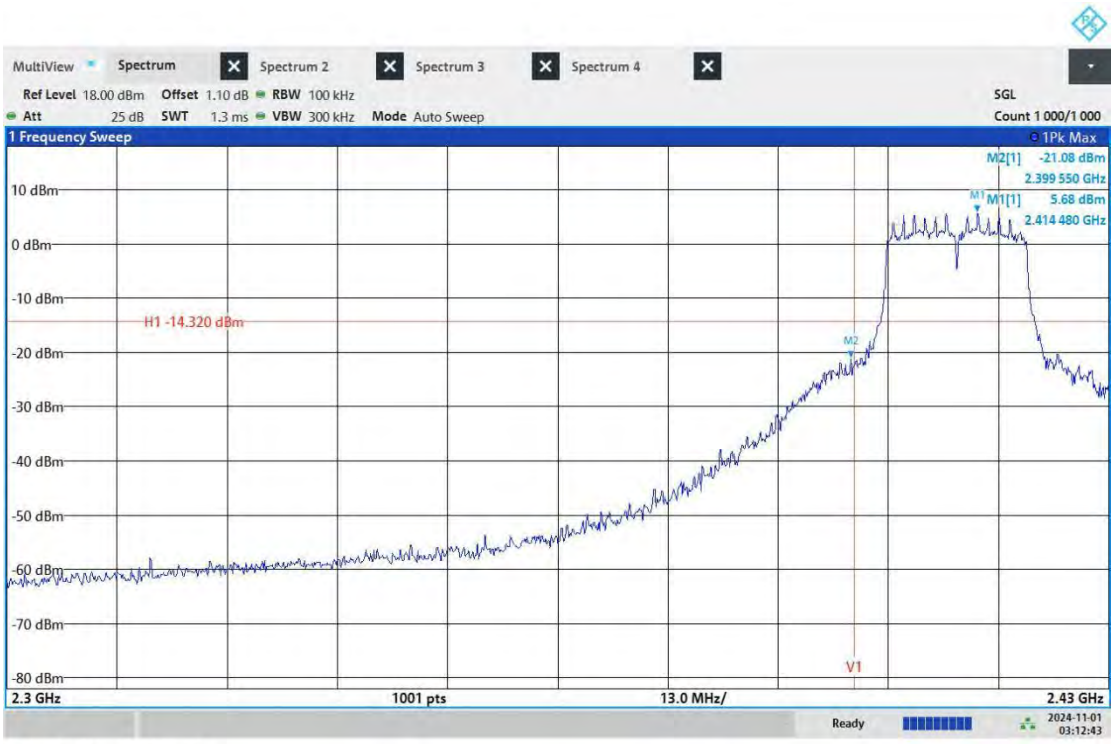
11B-CDD_ANT6_Low_2412



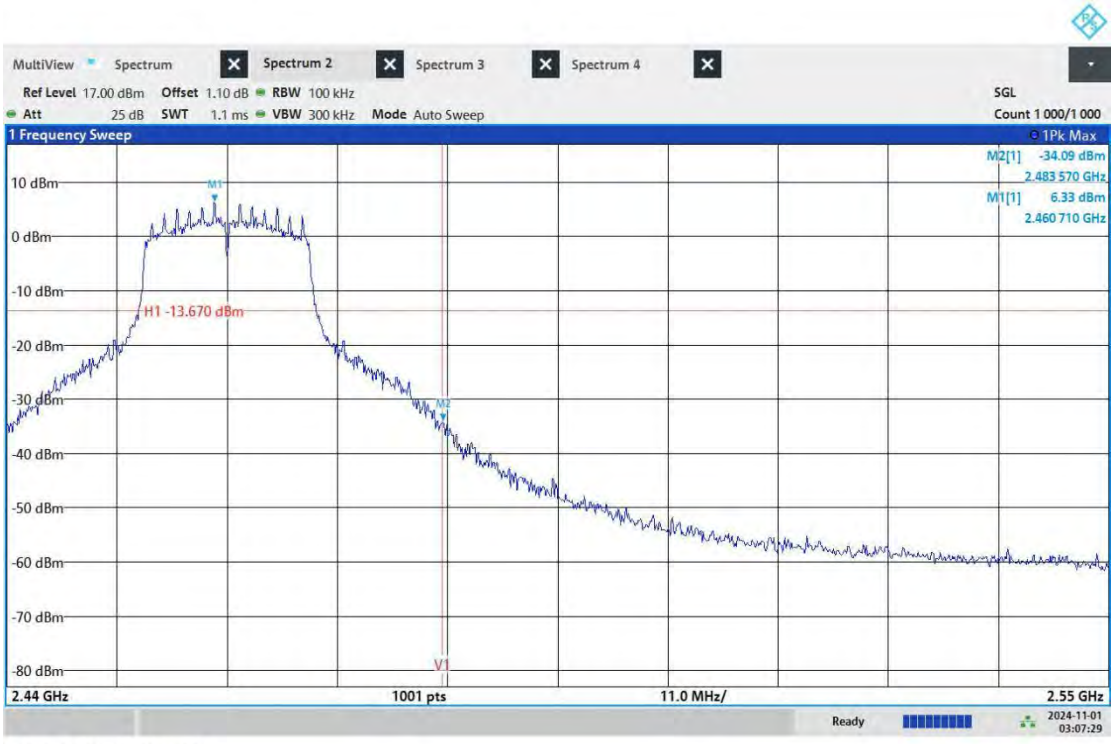
11B-CDD_ANT6_High_2462



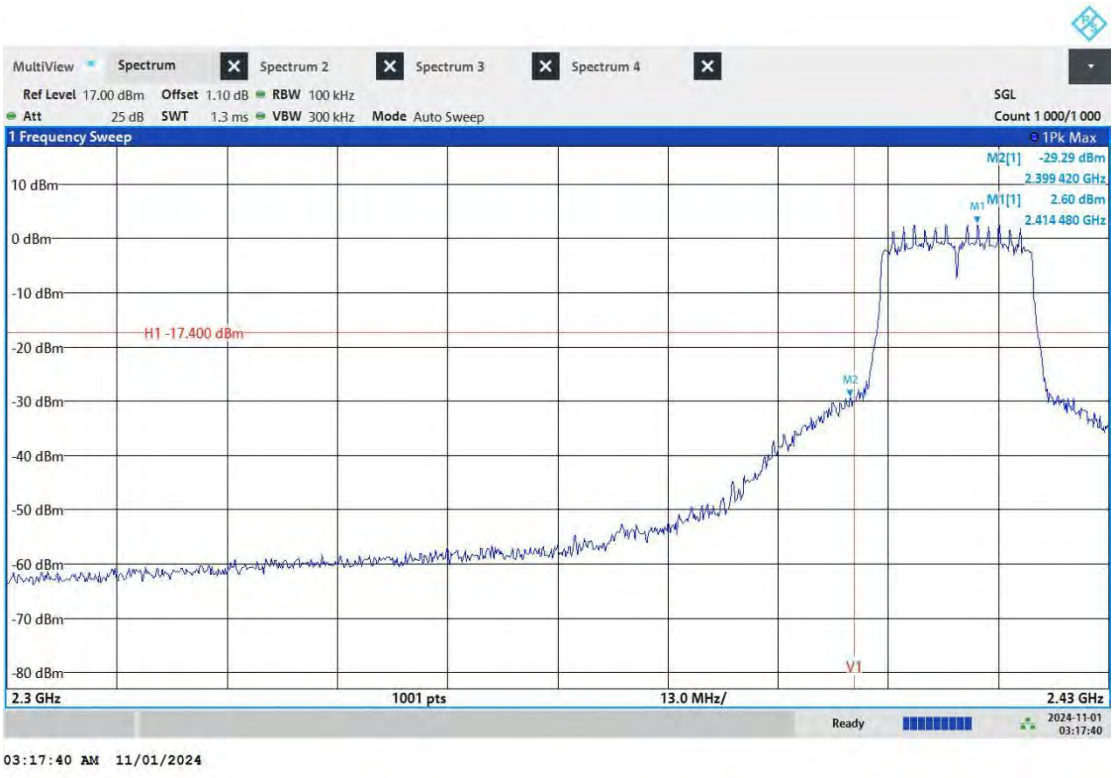
11G-CDD_ANT6_Low_2412



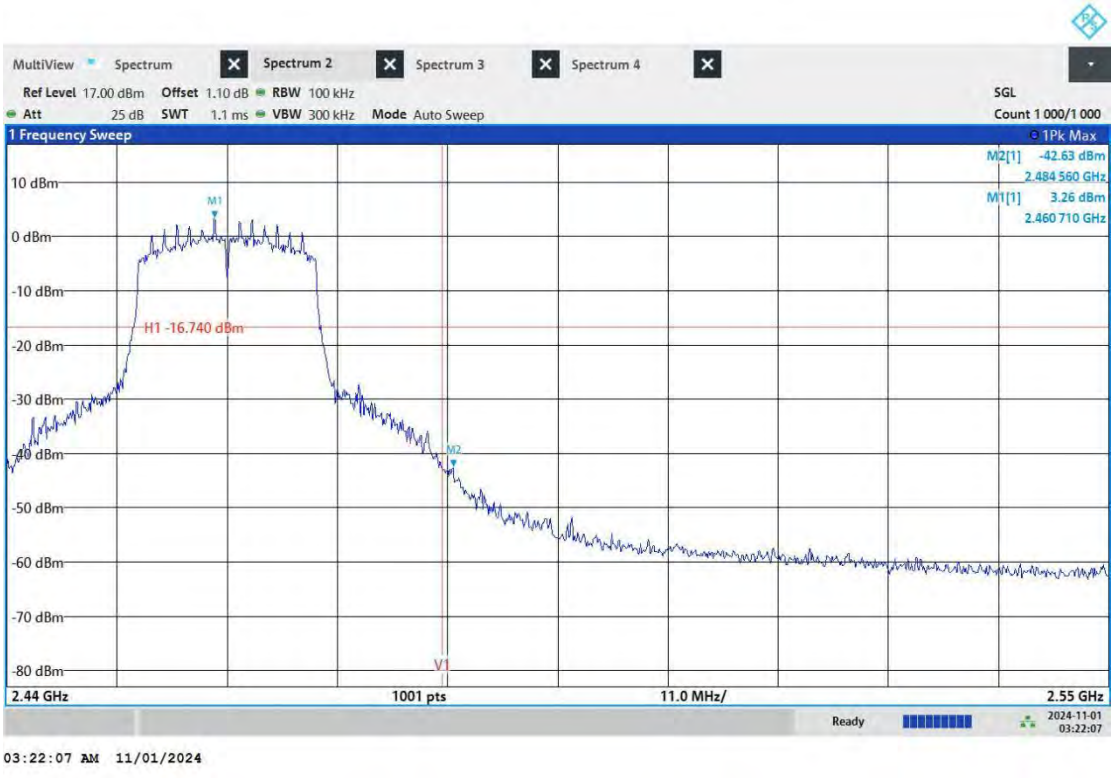
11G-CDD_ANT6_High_2462



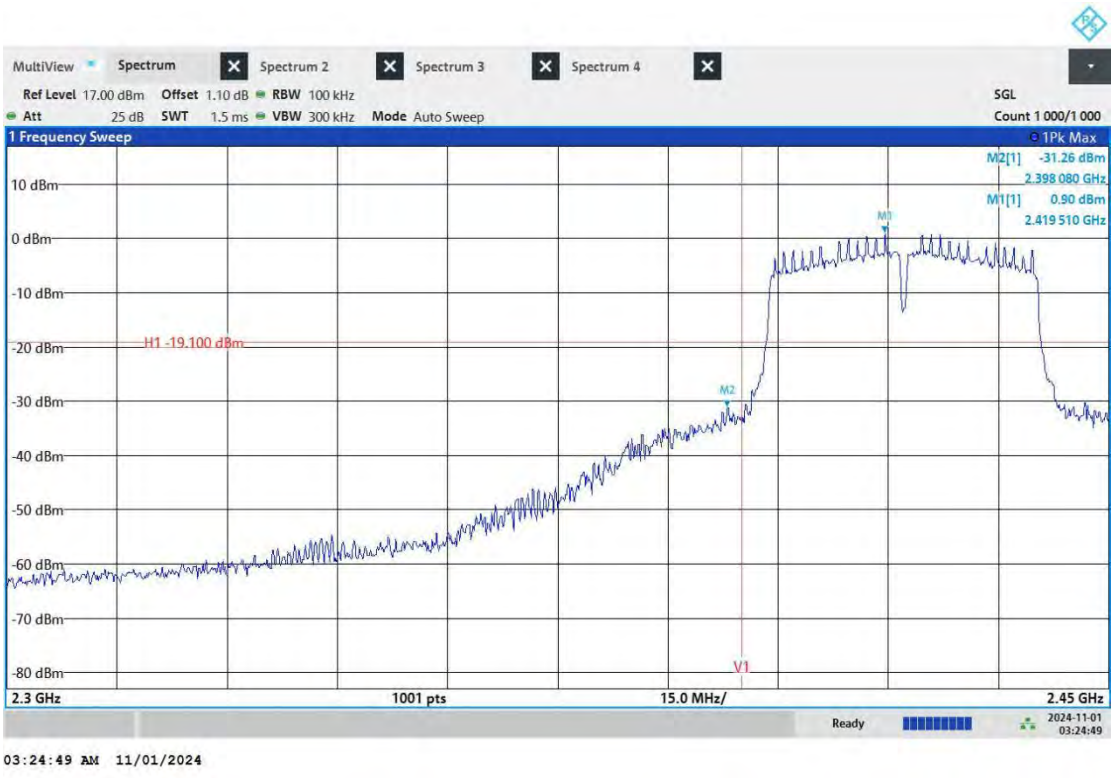
11N20SISO_ANT6_Low_2412



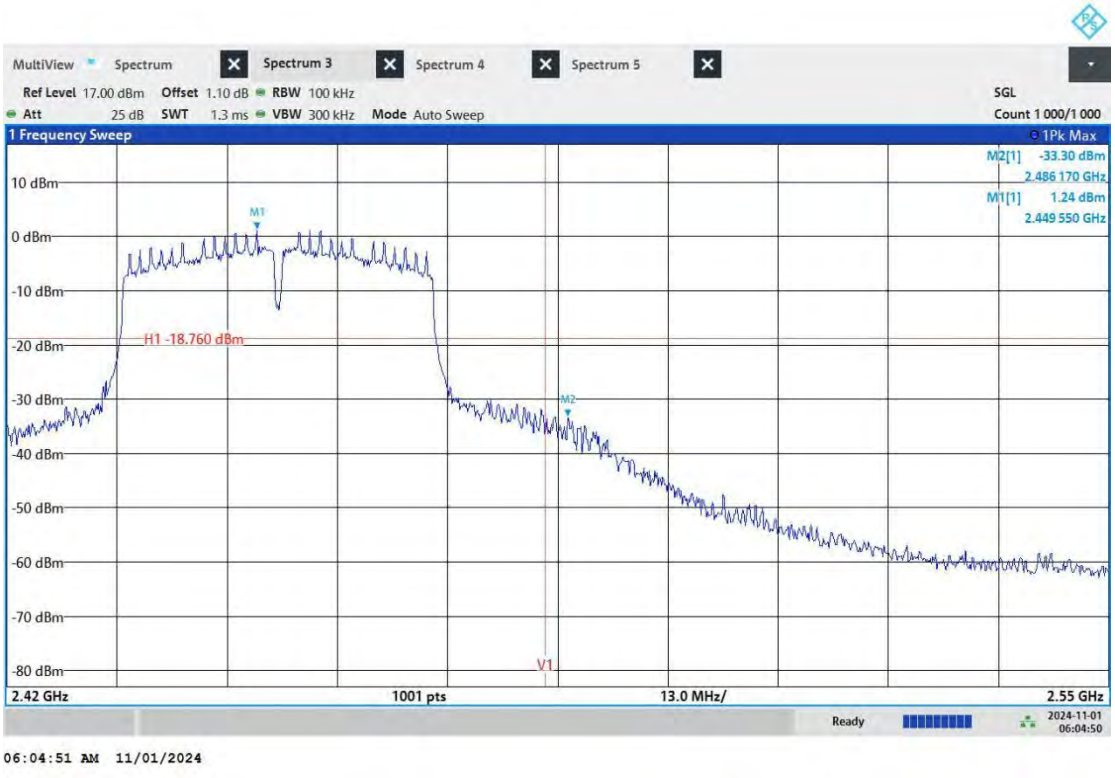
11N20SISO_ANT6_High_2462



11N40SISO_ANT6_Low_2422



11N40SISO_ANT6_High_2452



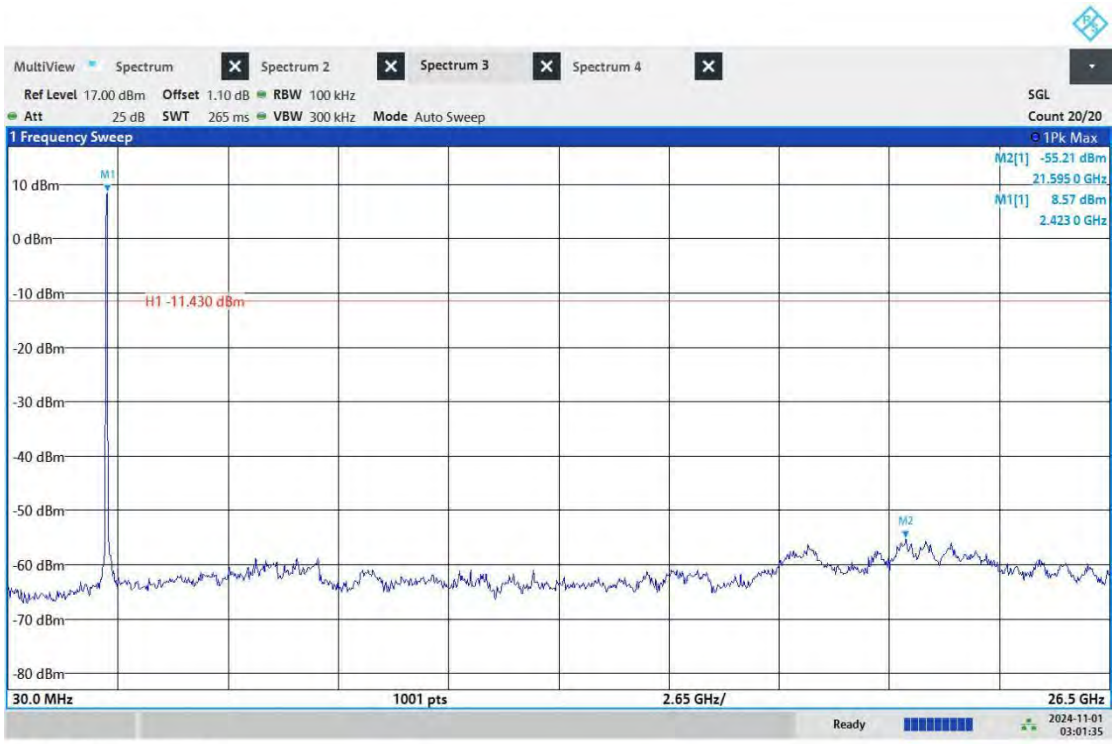
CONDUCTED SPURIOUS EMISSION

TEST RESULT

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	Result [dBm]	Limit [dBm]	Verdict
11B	ANT6	2412	30~260000	See test graph	See test graph	PASS
	ANT6	2437	30~260000	See test graph	See test graph	PASS
	ANT6	2462	30~260000	See test graph	See test graph	PASS
11G	ANT6	2412	30~260000	See test graph	See test graph	PASS
	ANT6	2437	30~260000	See test graph	See test graph	PASS
	ANT6	2462	30~260000	See test graph	See test graph	PASS
11N20	ANT6	2412	30~260000	See test graph	See test graph	PASS
	ANT6	2437	30~260000	See test graph	See test graph	PASS
	ANT6	2462	30~260000	See test graph	See test graph	PASS
11N40	ANT6	2422	30~260000	See test graph	See test graph	PASS
	ANT6	2437	30~260000	See test graph	See test graph	PASS
	ANT6	2452	30~260000	See test graph	See test graph	PASS

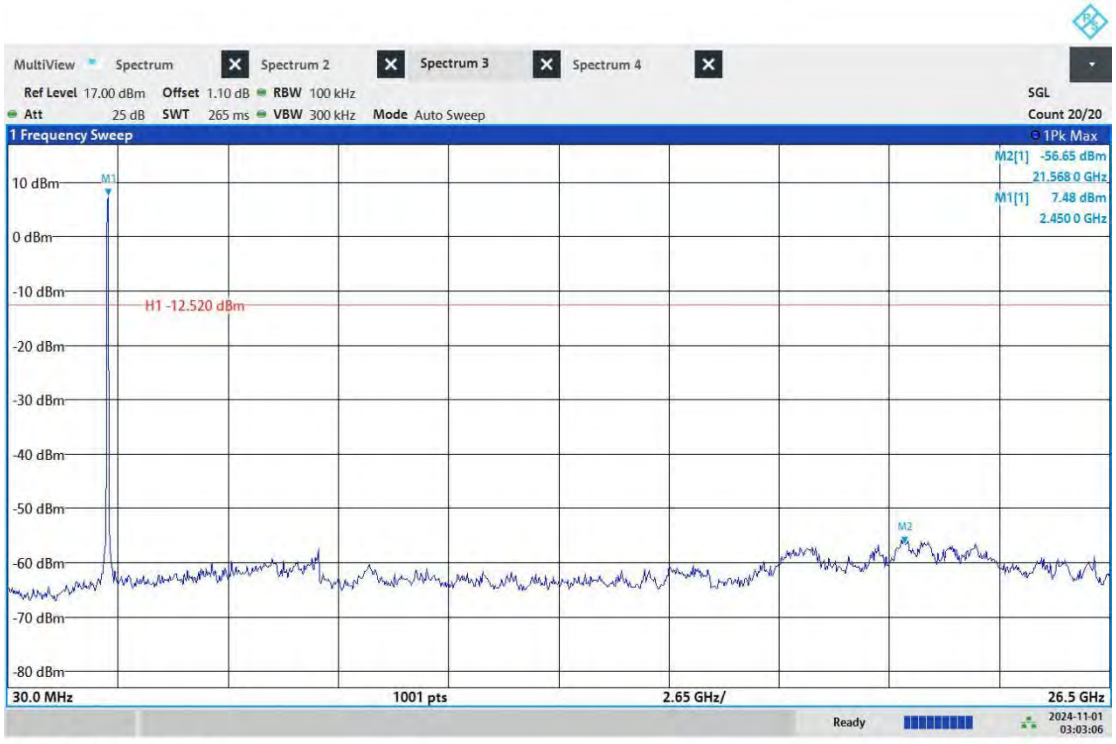
TEST GRAPHS

11B _ANT6_2412_30~260000



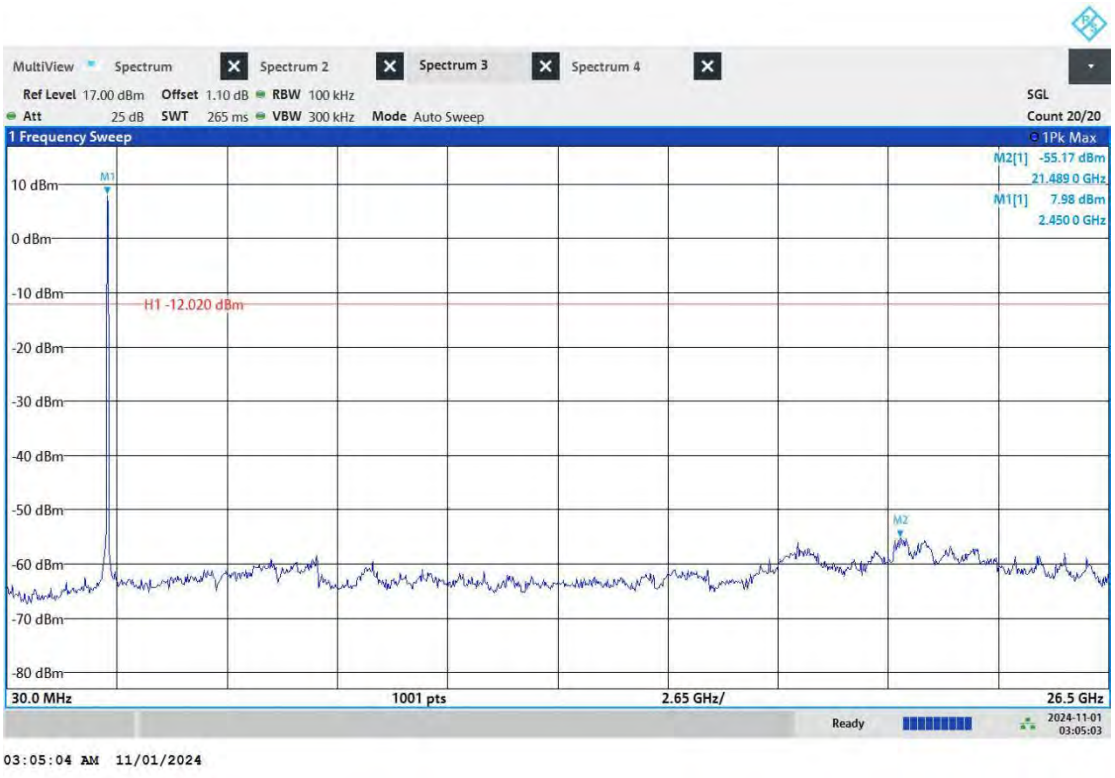
03:01:36 AM 11/01/2024

11B_ANT6_2437_30~260000

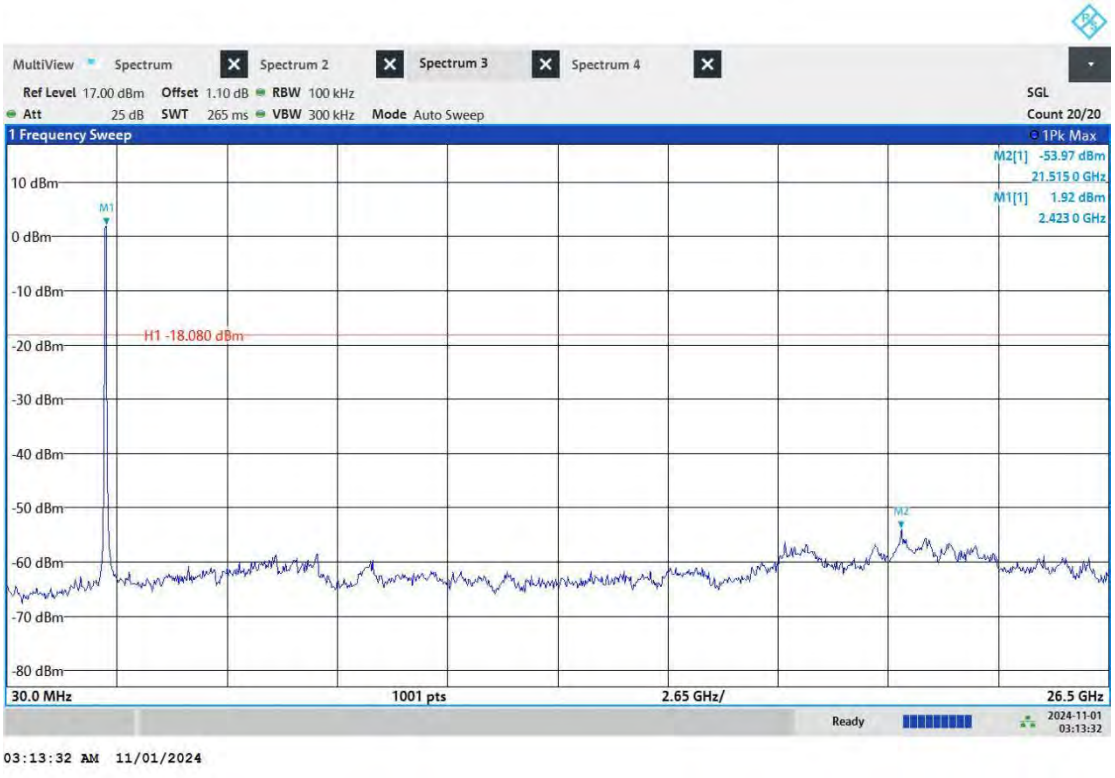


03:03:07 AM 11/01/2024

11B_ANT6_2462_30~260000

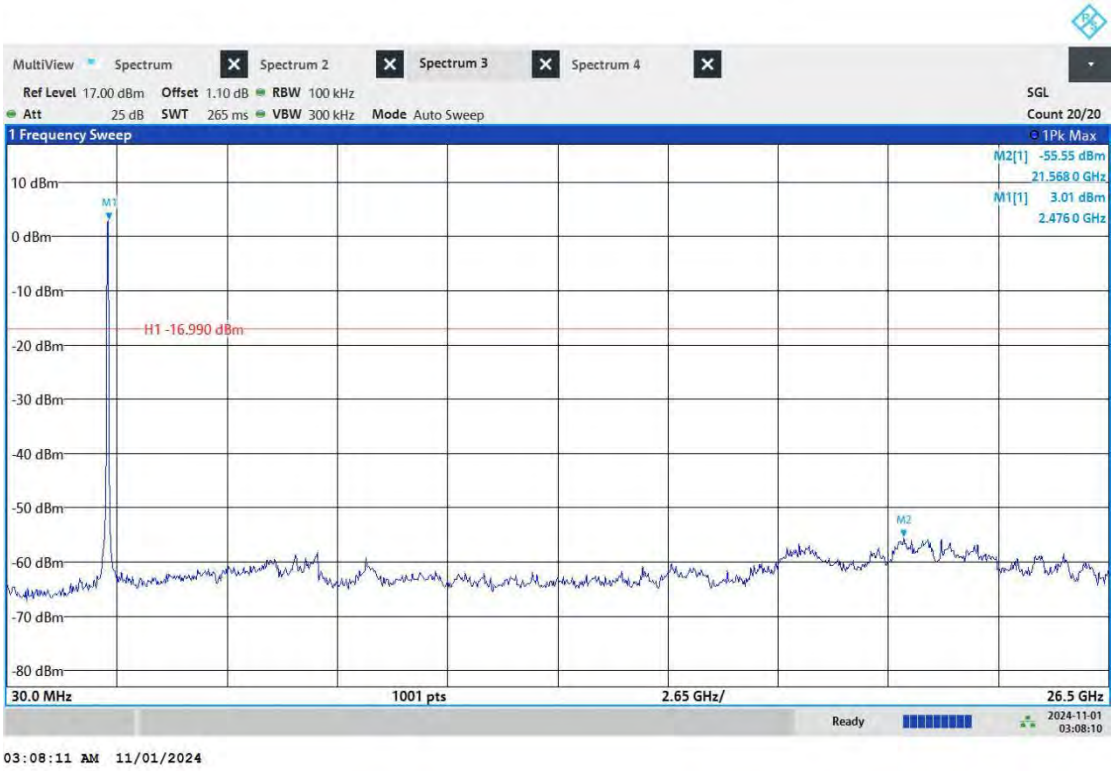


11G_ANT6_2412_30~260000

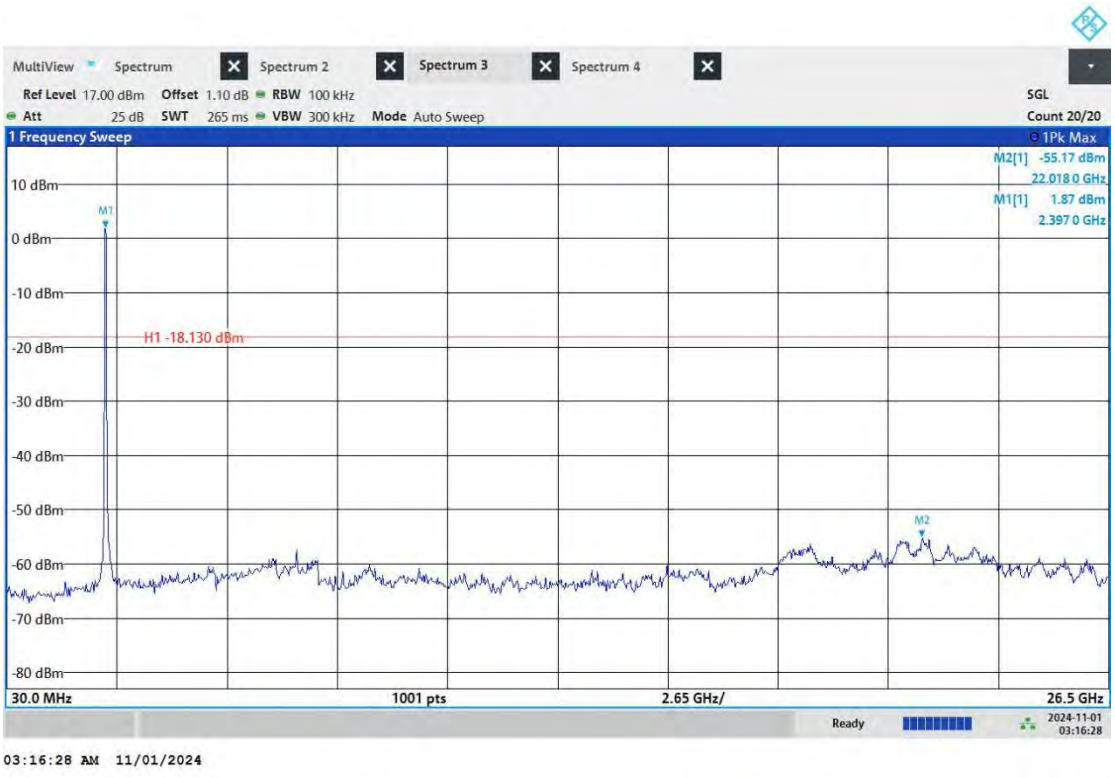


11G_ANT6_2437_30~260000

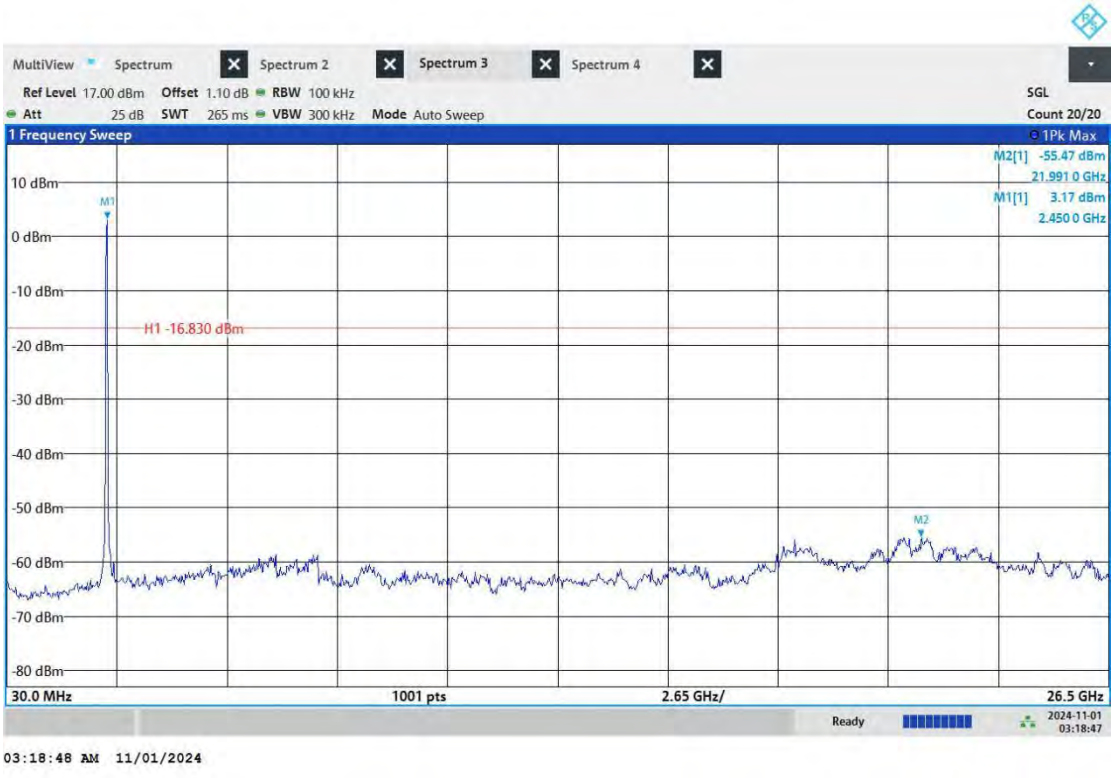
11G_ANT6_2462_30~260000



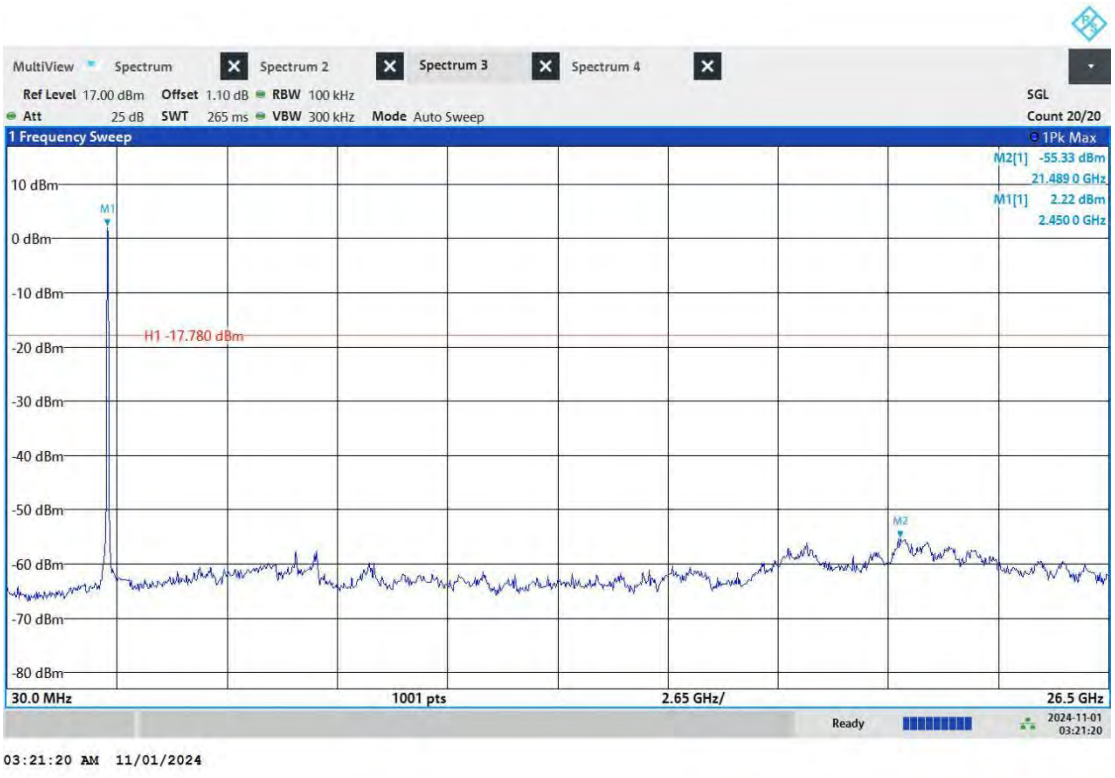
11N20_ANT6_2412_30~260000



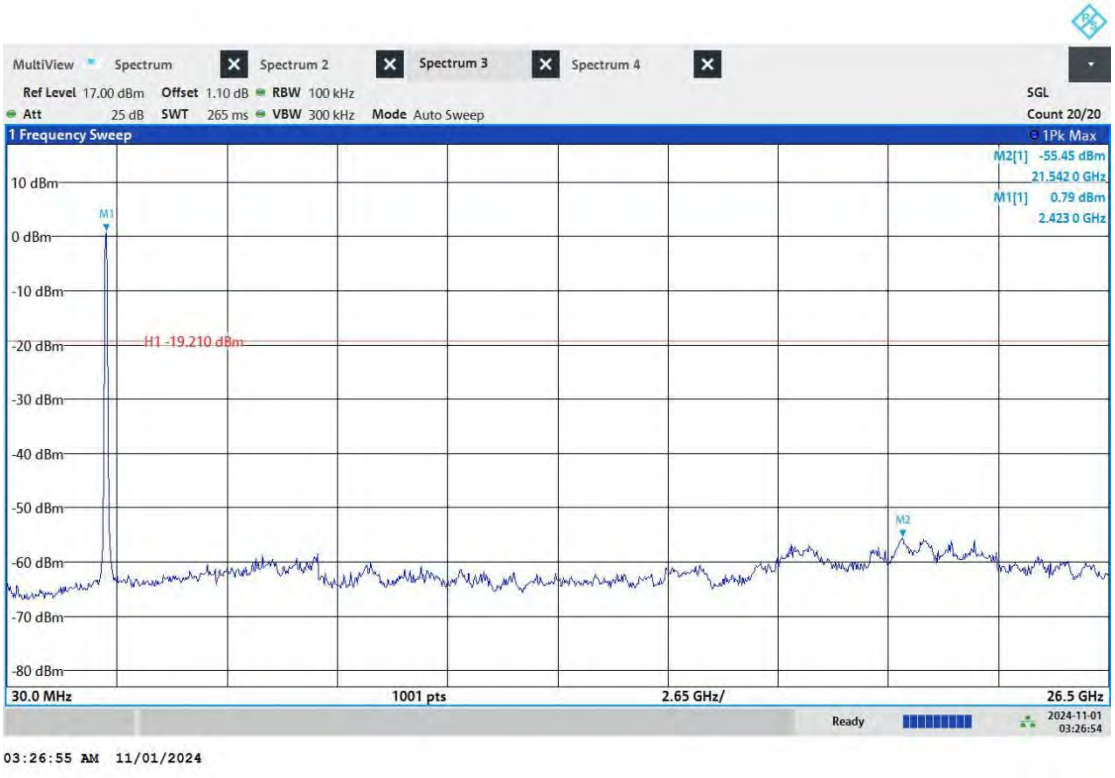
11N20_ANT6_2437_30~260000



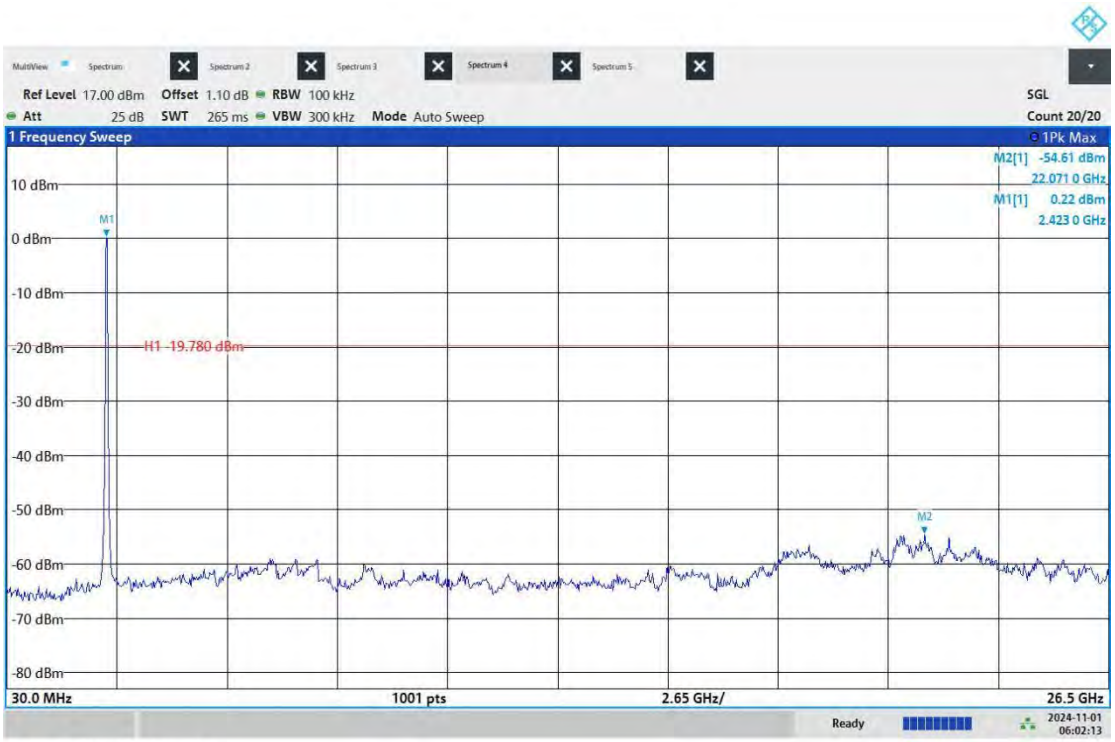
11N20_ANT6_2462_30~260000



11N40_ANT6_2422_30~260000

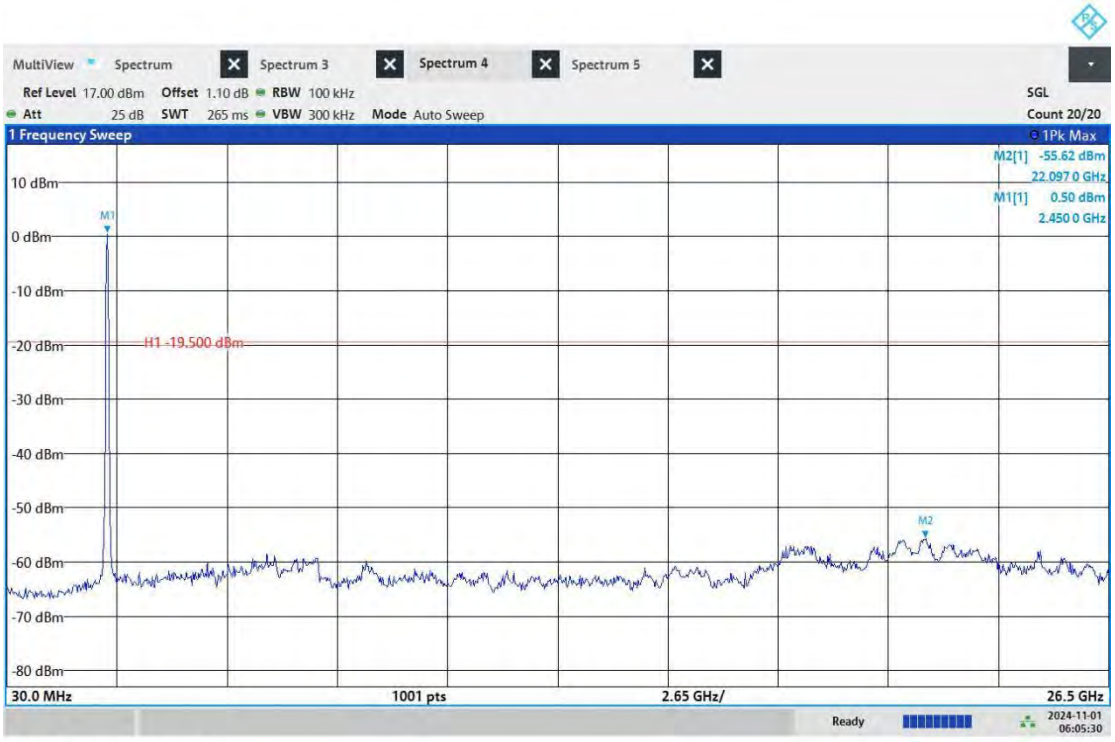


11N40_ANT6_2437_30~260000



06:02:14 AM 11/01/2024

11N40_ANT6_2452_30~260000



06:05:31 AM 11/01/2024

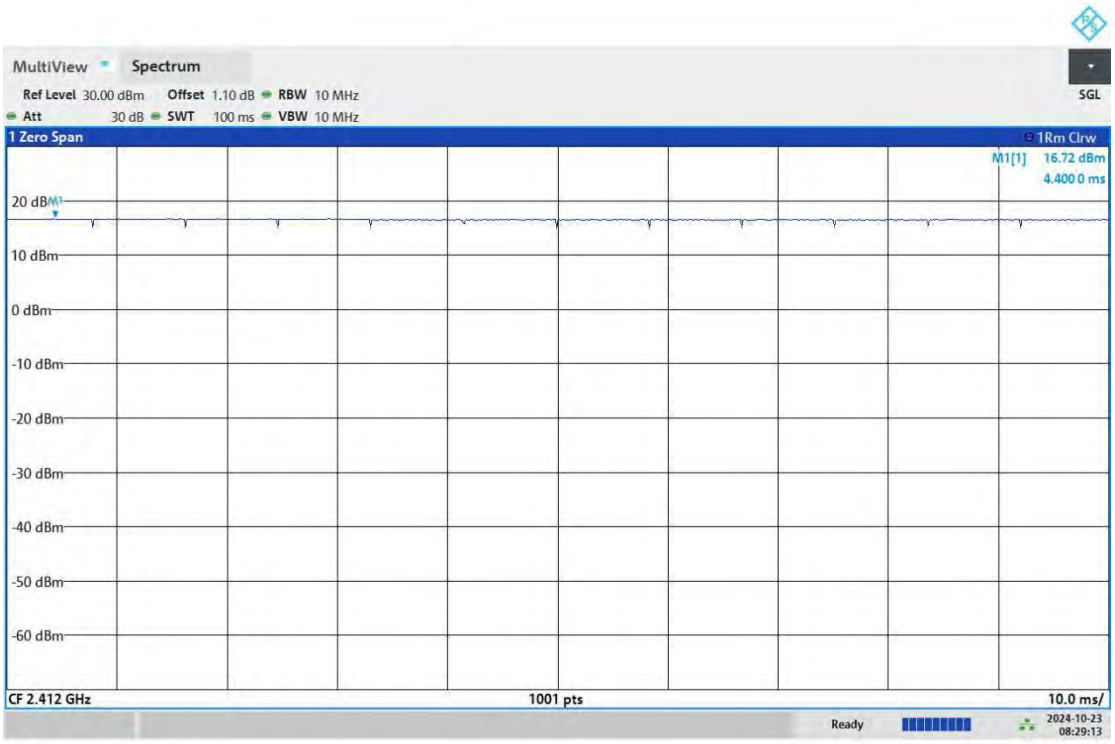
DUTY CYCLE

TEST RESULT

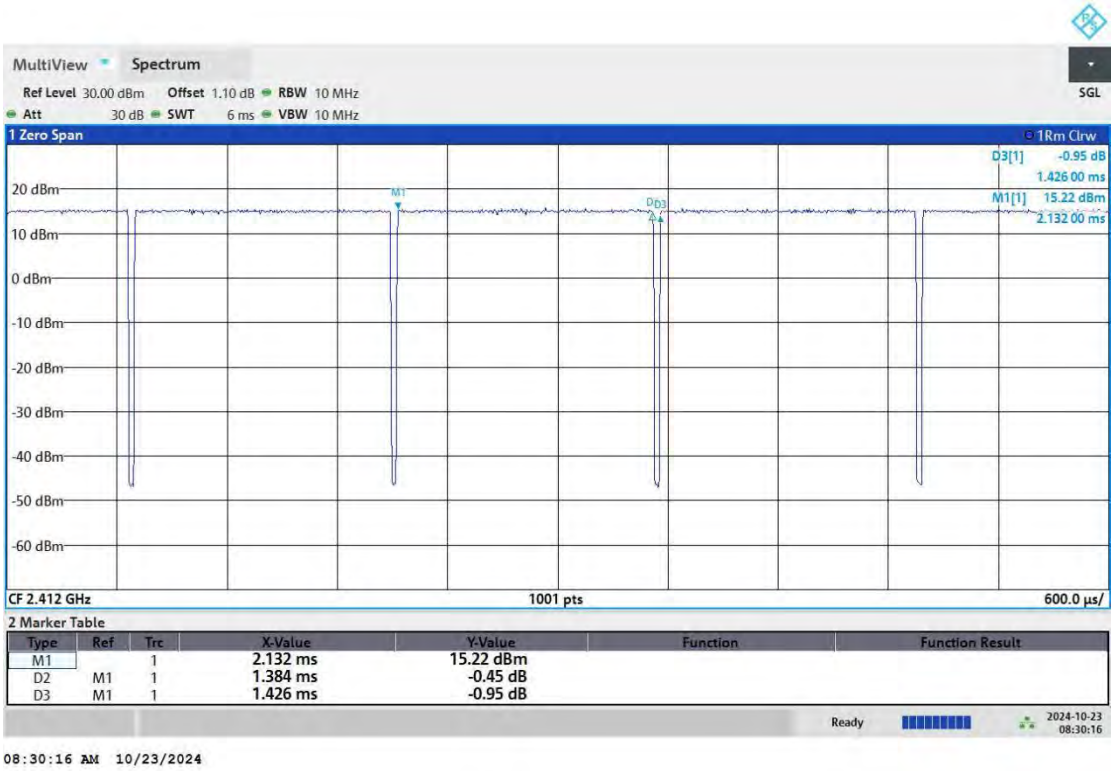
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	dutycycle factor
11B	ANT6	2412	100	100	100	0
11G	ANT6	2412	1.384	1.426	97.05	0.13
11N20	ANT6	2412	1.294	1.336	96.86	0.14
11N40	ANT6	2422	0.646	0.685	94.31	0.25

TEST GRAPHS

11B_ANT6_2412



11G_ANT6_2412



11N20_ANT6_2412