



FCC RADIO TEST REPORT

FCC ID : 2ABOF-GXRN8356910
Equipment : RN system (Multiband)
Brand Name : Tarana
Model Name : GXRN8356910
Applicant : Tarana Wireless, Inc.
630 Alder Drive Milpitas, CA 95035
Manufacturer : Tarana Wireless, Inc.
630 Alder Drive Milpitas, CA 95035
Standard : FCC Part 15 Subpart E §15.407

The product was received on Jun. 17, 2026 and testing was performed from Jul. 02, 2026 to Aug. 08, 2026. We, Sporton International Inc. Wensan Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory

No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)



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History of this test report

Report No.	Version	Description	Issue Date
FR651806C	01	Initial issue of report	Aug. 24, 2026



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(a)(11)	26dB Emission Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Pass	-
3.2	15.407(a) (4)	Fundamental Maximum EIRP	Pass	-
3.3	15.407(a) (4)	Fundamental Power Spectral Density	Pass	-
3.4	15.407(b)	In-Band Emissions (Channel Mask)	Pass	-
3.5	15.407(b)	Unwanted Emissions	Pass	-
3.6	15.207	AC Conducted Emission	Pass	-
3.7	15.203	Antenna Requirement	Pass	-

Note: CBP testing can be exempted since the equipment is categorized as Fixed Client device.

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturee who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Steve Chen

Report Producer: Dara Chiu



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature		
General Specs WLAN 2.4G, Proprietary radio 5G / 6G, CBRS and GNSS.		
Antenna Type Proprietary radio 6G: Array antenna		
Antenna information		
5925 MHz ~ 6425 MHz	Peak Gain (dBi)	15.52
6525 MHz ~ 6875 MHz	Peak Gain (dBi)	15.48

Remark:

- The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna
- Minimum number of spatial stream (Nss) is 2
- The EUT is a fixed client device operating in UNII-5.
In X1 mode, Directional Gain (4H/4V) = $15.52\text{dBi} + 10\log(\text{Ntx} = 4 / \text{Nss} = 2) = 18.53\text{dBi}$
In X2 mode, Directional Gain (4H/4V) = $15.52\text{dBi} + 10\log(\text{Ntx} = 2 / \text{Nss} = 2) = 15.52\text{dBi}$
The EUT is a fixed client device operating in UNII-7.
In X1 mode, Directional Gain (4H/4V) = $15.48\text{dBi} + 10\log(\text{Ntx} = 4 / \text{Nss} = 2) = 18.49\text{dBi}$
In X2 mode, Directional Gain (4H/4V) = $15.48\text{dBi} + 10\log(\text{Ntx} = 2 / \text{Nss} = 2) = 15.48\text{dBi}$
- The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Modification of EUT

No modifications made to the EUT during the testing.



1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
	CO05-HY (TAF Code: 1190)
Remark	The AC Conducted Emission test item subcontracted to Sporton International Inc. EMC & Wireless Communications Laboratory.

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
	TH05-HY, 03CH20-HY

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW1190 and TW3786

1.4 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
- ♦FCC KDB 987594 D02 U-NII 6 GHz EMC Measurement v03
- ♦FCC KDB 414788 D01 Radiated Test Site v01r01
- ♦FCC KDB 662911 D01 Multiple Transmitter Output v02r01
- ♦ FCC Part 15 Subpart E
- ♦ ANSI C63.10-2020 + Cor.1-2023

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



2 Test Configuration of Equipment Under Test

- a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).
- b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

Frequency Band	Channel	Freq. (MHz)
5925-6425 MHz (U-NII-5) 40MHz	3	5965
	7	5985
	11	6005
	15	6025
	19	6045
	23	6065
	27	6085
	31	6105
	35	6125
	39	6145
	43	6165
	47	6185
	51	6205
	55	6225
	59	6245
	63	6265
	67	6285
	71	6305
	75	6325
	79	6345
	83	6365
	87	6385
	91	6405
5925-6425 MHz (U-NII-5) 40+40MHz	3 + 11	5965 + 6005
	43 + 51	6165 + 6205
	83 + 91	6365 + 6405
	3 + 91	5965 + 6405
5925-6425 MHz (U-NII-5) 40+40+40MHz	3 + 11 + 19	5965 + 6005 + 6045
	43 + 51 + 59	6165 + 6205 + 6245
	75 + 83 + 91	6325 + 6365 + 6405
	3 + 43 + 91	5965 + 6165 + 6405



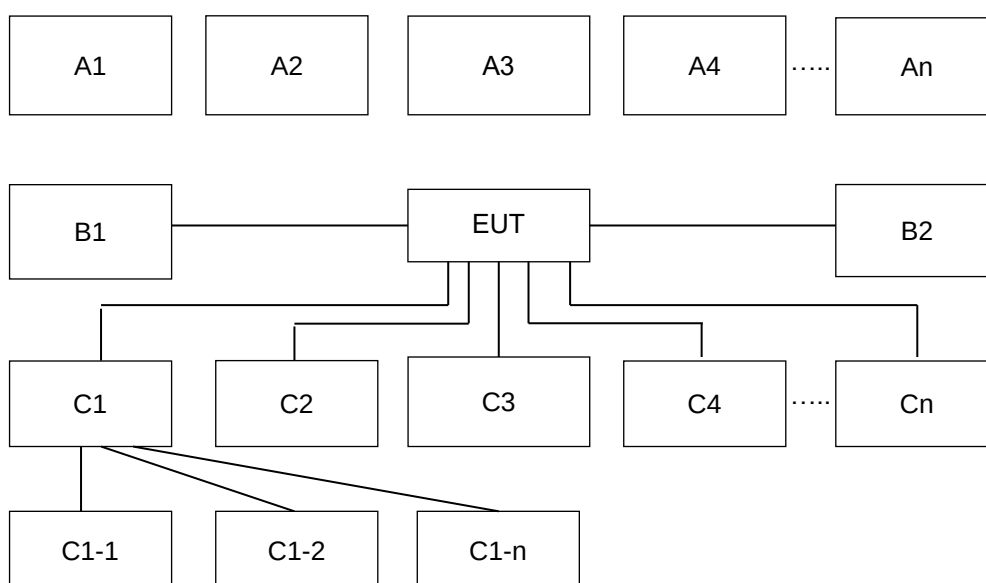
Frequency Band	Channel	Freq. (MHz)
5925-6425 MHz (U-NII-5) 40+40+40+40 MHz	3+11+19+27	5965+6005+6045+6085
	35+43+51+59	6125+6165+6205+6245
	67+75+83+91	6285+6325+6365+6405
	3+27+51+91	5965+6085+6205+6405
6525-685 MHz (U-NII-7) 40MHz	119	6545
	123	6565
	127	6585
	131	6605
	135	6625
	139	6645
	143	6665
	147	6685
	151	6705
	155	6725
	159	6745
	163	6765
	167	6785
	171	6805
	173	6815
	175	6825
	179	6845
	181	6855
6525-6875 MHz (U-NII-7) 40+40MHz	119 + 127	6545 + 6585
	147 + 155	6685 + 6725
	173 + 181	6815 + 6855
	119 + 181	6545 + 6855
6525-6875 MHz (U-NII-7) 40+40+40MHz	119 + 127 + 135	6545 + 6585 + 6625
	139 + 147 + 155	6645 + 6685 + 6725
	165 + 173 + 181	6775 + 6815 + 6855
	119 + 147 + 181	6545 + 6685 + 6855
6525-6875 MHz (U-NII-7) 40+40+40+40 MHz	119+127+135+143	6545+6585+6625+6665
	139+147+155+163	6645+6685+6725+6765
	157+165+173+181	6735+6775+6815+6855
	119+139+159+181	6545+6645+6745+6855



2.2 Test Mode

Test Cases	
AC Conducted Emission	Mode 1 : 6GHz TX + POE Adapter
Remark: 1. The detailed Radiated test modes are shown in Appendix C. 2. Based on ANSI C63.10 clause 5.6.2.2, b) Spurious emissions, measure the mode with the highest output power and the mode with highest output power spectral density for each modulation family.	

2.3 Connection Diagram of Test System



Conduction Test Setup									
No.	Power Source	Connection Type	Test Mode						
			1	2	-	-	-	-	-
B1	AC: 120V/60Hz (POE Adapter)	RJ 45 Cable	X	X	-	-	-	-	-
No.	Setup Peripherals	Connection Type	1	2	-	-	-	-	-
C1	PC	RJ-45 Cable to B1	X	X	-	-	-	-	-
C1-1	LCD Monitor	DP Cable to C1	X	X	-	-	-	-	-
C1-2	Mouse	USB Cable to C1	X	X	-	-	-	-	-
C1-3	Keyboard	USB Cable to C1	X	X	-	-	-	-	-



RSE Test Setup			
No.	Power Source	Connection Type	Test Mode
			Tx
B1	AC: 120V/60Hz (POE Adapter)	RJ45 Cable	X
No.	Setup Peripherals	Connection Type	Tx
C1	PC	RJ45 Cable	X
C1-1	Mouse	USB Cable	X
C1-2	Keyboard	USB Cable	X
C1-3	Monitor	HDMI Cable	X

2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	LCD Monitor	ViewSonic	VS17425	FCC DoC	Shielded 2.0m	Unshielded 1.8m
2.	Mouse	Logitech	B100	FCC DoC	Unshielded 1.5m	N/A
3.	Keyboard	DELL	SK-8120	FCC DoC	Unshielded 1.8m	N/A
4.	PC	DELL	D13M	FCC DoC	N/A	Unshielded 1.8m
5.	PoE Adapter	GOSPELL	G0566-500-120	N/A	Shielded 1.0m	Unshielded 1.8m

2.5 EUT Operation Test Setup

The RF test items, utility “Terminal” was used on the Linux-based support desktop. Command-line scripts were executed to place the EUT into engineering modes to provide channel frequency and bandwidth selection, power level and continuous transmitting mode.



2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example :

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 4.2 + 10 = 14.2 \text{ (dB)} \end{aligned}$$

For EIRP output power:

The EIRP output power result is derived from RF conducted power plus directional antenna gain.

EIRP = RF conducted power + directional antenna gain.

Following shows an offset computation example with conducted power 20.2 dBm and directional antenna gain 3dBi.

$$\begin{aligned} \text{EIRP(dBm)} &= \text{RF conducted power(dBm)} + \text{directional antenna gain(dBi)}. \\ &= 20.2 + 3 = 23.2 \text{ (dBm)} \end{aligned}$$

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Limit of 26dB & 99% Occupied Bandwidth

<FCC CFR 15.407>

(a)(11) The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

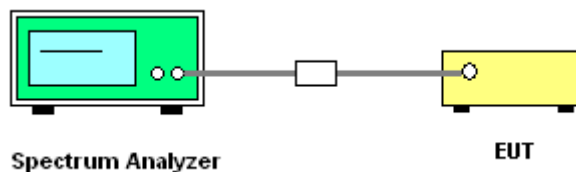
3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) $\geq 3 * RBW$.
8. Measure and record the results in the test report.

3.1.4 Test Setup



3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

Note: The EBW spectrum setting is as following table for different nominal bandwidth.

setting	20MHz	40MHz	80MHz	160MHz
RBW	300kHz	1MHz	1MHz	2MHz
VBW	1MHz	3MHz	3MHz	10MHz

3.2 Fundamental Maximum EIRP Measurement

3.2.1 Limit of Fundamental Maximum EIRP

<FCC CFR 15.407>

(a)(4) For a standard power access point and fixed client device operating in the 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 36 dBm. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

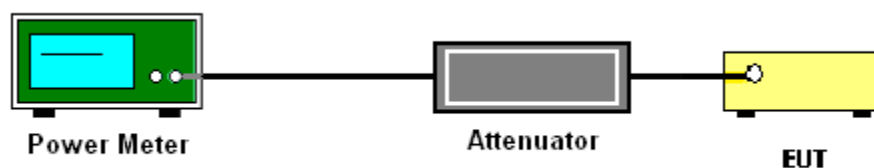
3.2.3 Test Procedures

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Fundamental Maximum EIRP

Please refer to Appendix A.



3.3 Fundamental Power Spectral Density Measurement

3.3.1 Limit of Fundamental Power Spectral Density

<FCC CFR 15.407>

(a)(4) For a standard power access point and fixed client device operating in the 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 23 dBm e.i.r.p in any 1-megahertz band. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

3.3.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Section F) Maximum power spectral density.

Method SA-2

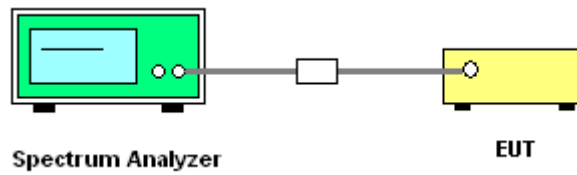
(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW $\geq$ 3 MHz.
 - Number of points in sweep $\geq$ 2 Span / RBW.
 - Sweep time = auto.
 - Detector = RMS
 - Trace average at least 100 traces in power averaging mode.
 - Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add $10 \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.
1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
 3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (a): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.



3.4 In-Band Emissions (Channel Mask)

3.4.1 Limit of Unwanted Emissions

<FCC CFR 15.407>

(b)(7) For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

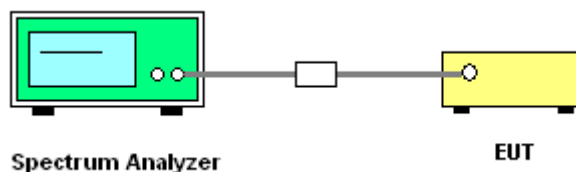
3.4.3 Test Procedures

The testing follows FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v03.

Section J) In-Band Emissions.

1. Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth
2. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
3. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - a. Suppressed by 20 dB at 1 MHz outside of the channel edge.
 - b. Suppressed by 28 dB at one channel bandwidth from the channel center.
 - c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
4. Adjust the span to encompass the entire mask as necessary.
5. Clear trace.
6. Trace average at least 100 traces in power averaging (rms) mode.
7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

3.4.4 Test Setup



3.4.5 Test Result

Please refer to Appendix A.



3.5 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.5.2 Limit of Unwanted Emissions

- (1) For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27 (RMS)	68.3
- 7 (Peak)	88.3

According 987594 D02 U-NII 6GHz EMC Measurement v03 section G:

Unwanted emissions outside of restricted bands are measured with a RMS detector.

In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit

- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

3.5.3 Measuring Instruments

Please refer to the measuring equipment list in this test report.

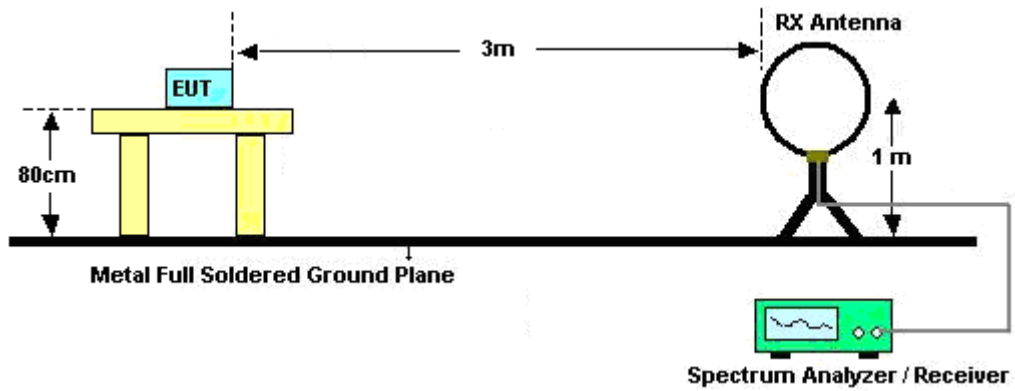


3.5.4 Test Procedures

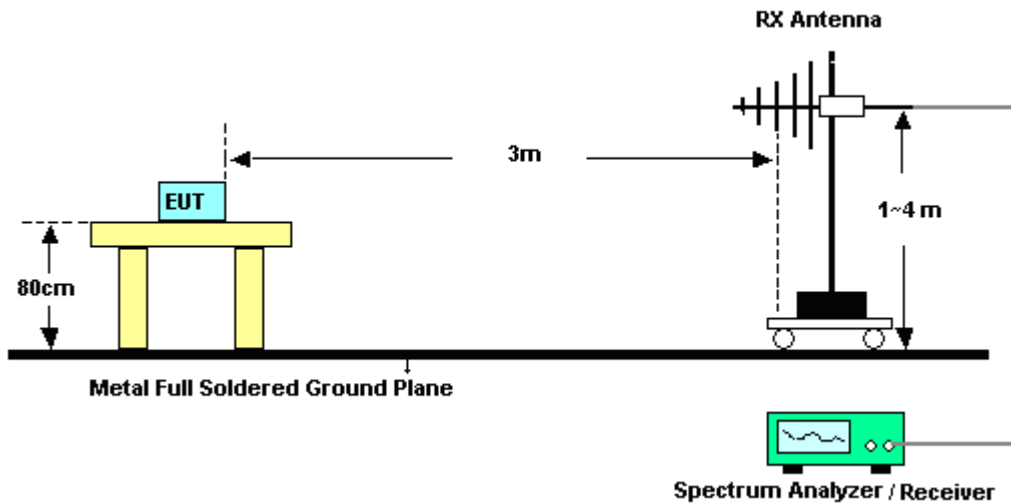
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Section G) Unwanted emissions measurement.
(1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold(2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW $\geq$ 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold(3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading. When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-”.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-”.

3.5.5 Test Setup

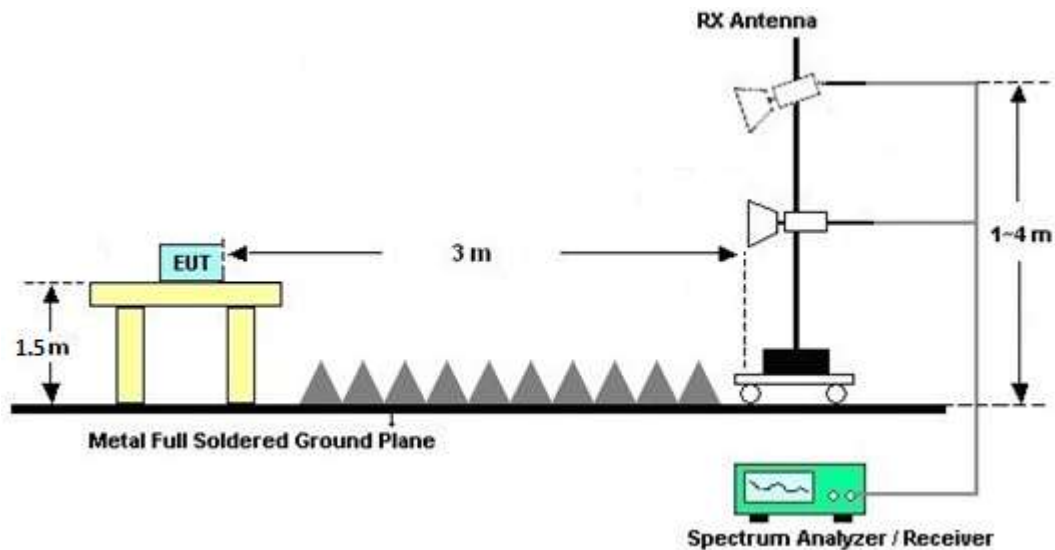
For radiated emissions below 30MHz



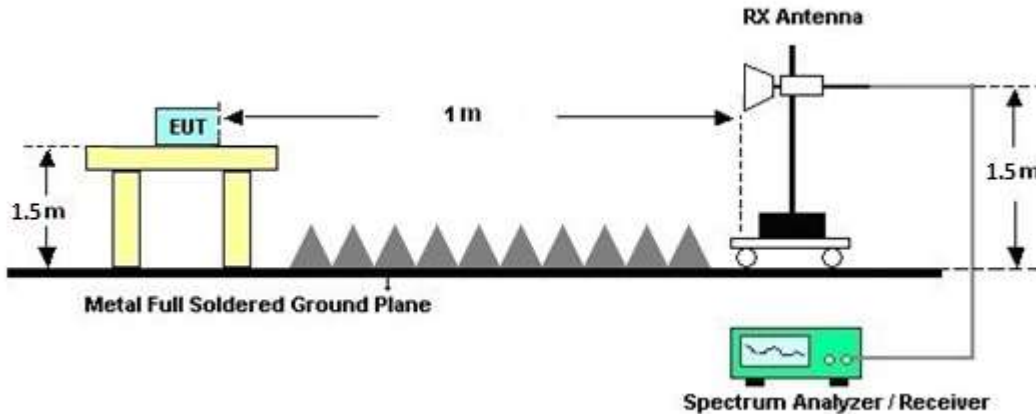
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.5.6 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.5.7 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.5.8 Duty Cycle

Please refer to Appendix D.

3.5.9 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix C.



3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

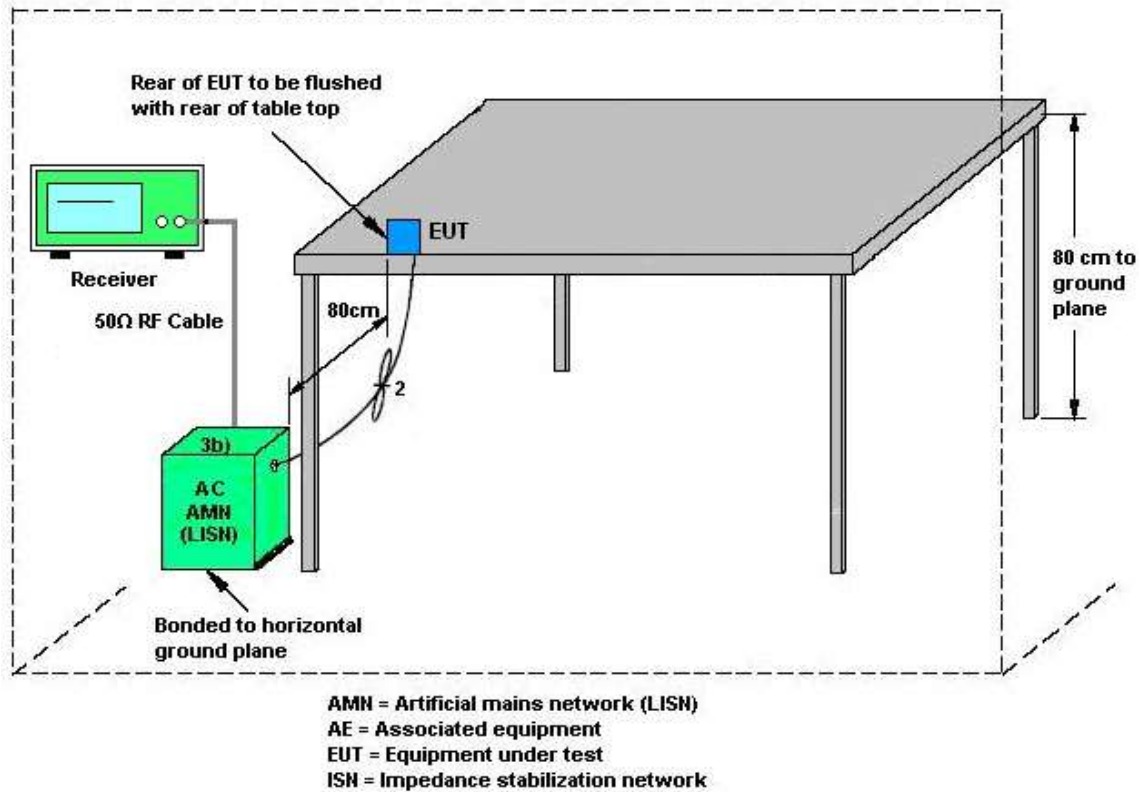
3.6.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.6.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.



3.7 Antenna Requirements

3.7.1 Standard Applicable

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 shall be considered sufficient to comply with the provisions of this section. 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. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§ 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.7.2 Antenna Anti-Replacement Construction

Antenna permanently attached.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECEPEL	DTM-303A	TP201996	N/A	Nov. 04, 2025	Jul. 02, 2026 ~ Jul. 16, 2026	Nov. 03, 2026	Conducted (TH05-HY)
USB RF Power Sensor	DARE	RPR3008W	RPR8W-2301017 (NO:20)	10MHz~8GHz	Jun. 25, 2026	Jul. 02, 2026 ~ Jul. 16, 2026	Jun. 24, 2027	Conducted (TH05-HY)
Signal & Spectrum Analyzer	Rohde & Schwarz	FSV3044	101466	10HZ~44GHZ	Nov. 12, 2025	Jul. 02, 2026 ~ Jul. 16, 2026	Nov. 11, 2026	Conducted (TH05-HY)
Switch Control Mainframe	EM Electronics	EMSW18SE	SW191204 (BOX8)	N/A	Dec. 29, 2025	Jul. 02, 2026 ~ Jul. 16, 2026	Dec. 28, 2026	Conducted (TH05-HY)
Software	Sporton	BTWIFI_Final_version_240513	N/A	Conducted Other Test Item	N/A	Jul. 02, 2026 ~ Jul. 16, 2026	N/A	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Jul. 06, 2026	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	N/A	Dec. 16, 2025	Jul. 06, 2026	Dec. 15, 2026	Conduction (CO05-HY)
Hygrometer	TECEPEL	DTM-303A	TP210031	N/A	Jun. 15, 2026	Jul. 06, 2026	Jun. 14, 2027	Conduction (CO05-HY)
Two-Line V-Network	Rohde & Schwarz	ENV 216 +EMCI-EXP-US- SS	100080+N-021	N/A	Apr. 22, 2026	Jul. 06, 2026	Apr. 21, 2027	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Jul. 06, 2026	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Jul. 29, 2025	Jul. 06, 2026	Jul. 28, 2026	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	MQT24082501	N/A	Oct. 14, 2025	Jul. 06, 2026	Oct. 13, 2026	Conduction (CO05-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY54130085	N/A	Oct. 16, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Oct. 15, 2026	Radiation (03CH20-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2E	101108	9 kHz~30 MHz	Dec. 11, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Dec. 10, 2026	Radiation (03CH20-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 08, 2026	Jul. 07, 2026 ~ Aug. 08, 2026	Jun. 07, 2027	Radiation (03CH20-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jul. 07, 2026 ~ Aug. 08, 2026	N/A	Radiation (03CH20-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jul. 07, 2026 ~ Aug. 08, 2026	N/A	Radiation (03CH20-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jul. 07, 2026 ~ Aug. 08, 2026	N/A	Radiation (03CH20-HY)
Signal Analyzer	Keysight	N9010B	MY60240520	10Hz~44GHz	Dec. 10, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Dec. 09, 2026	Radiation (03CH20-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N-06	47020 & 06	30MHz~1GHz	Oct. 04, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Oct. 03, 2026	Radiation (03CH20-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	02360	1GHz-18GHz	Nov. 05, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Nov. 04, 2026	Radiation (03CH20-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1230	18GHz-40GHz	Nov. 05, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Nov. 04, 2026	Radiation (03CH20-HY)
Preamplifier	COM-POWER	PAM-103	18020201	1MHz-1000MHz	Dec. 30, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Dec. 29, 2026	Radiation (03CH20-HY)
Preamplifier	Keysight	80317A	MY53270420	1GHz~26.5GHz	May 08, 2026	Jul. 07, 2026 ~ Aug. 08, 2026	May 07, 2027	Radiation (03CH20-HY)
Amplifier	EMCI	EMC118A45SE	980792	N/A	Nov. 11, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Nov. 10, 2026	Radiation (03CH20-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	519229/2,80401 5/2,25104239	N/A	Apr. 13, 2026	Jul. 07, 2026 ~ Aug. 08, 2026	Apr. 12, 2027	Radiation (03CH20-HY)
Hygrometer	TECEPEL	DTM-303A	TP211568	N/A	Oct. 21, 2025	Jul. 07, 2026 ~ Aug. 08, 2026	Oct. 20, 2026	Radiation (03CH20-HY)
Software	Audix	N/A	RK-002156	N/A	N/A	Jul. 07, 2026 ~ Aug. 08, 2026	N/A	Radiation (03CH20-HY)



5 Measurement Uncertainty

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.7 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.50 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 6000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.70 dB
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Uncertainty of Radiated Emission Measurement (6000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.70 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.20 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Eason Huang	Temperature:	24.0 ~ 26.0	°C
Test Date:	2026/07/02~2026/07/16	Relative Humidity:	45.00 ~ 49.00	%

<X1 Mode>

Conducted Power on Port 0H

BW	Freq (MHz)	Conducted Power Carrier 0 (dBm)	Conducted Power Carrier 1 (dBm)	Conducted Power (dBm)	MIMO Factor (dB)	Antenna Gain (dBi)	DG (dBi)	Total Conducted Power (dBm)	Total EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
40MHz	5965	-	-	8.40	9.03	15.52	18.53	17.43	35.96	36	Pass
	6165	-	-	8.40	9.03	15.52	18.53	17.43	35.96	36	Pass
	6405	-	-	8.40	9.03	15.52	18.53	17.43	35.96	36	Pass
40+40MHz Contiguous	5965+6005	-	-	8.40	9.03	15.52	18.53	17.43	35.96	36	Pass
	6165+6205	-	-	8.30	9.03	15.52	18.53	17.33	35.86	36	Pass
	6365+6405	-	-	8.30	9.03	15.52	18.53	17.33	35.86	36	Pass
40+40MHz Non-Contiguous	5965+6405	5.30	5.29	8.31	9.03	15.52	18.53	17.34	35.87	36	Pass

PSD on Port 0H

BW	Freq (MHz)	Conducted PSD Carrier 0 (dBm/MHz)	Conducted PSD Carrier 1 (dBm/MHz)	Conducted PSD (dBm/MHz)	MIMO Factor (dB)	Antenna Gain (dBi)	DG (dBi)	Total Conducted PSD (dBm/MHz)	Total EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass/Fail
40MHz	5965	-	-	-6.98	9.03	15.52	18.53	2.05	20.58	23	Pass
	6165	-	-	-7.27	9.03	15.52	18.53	1.76	20.29	23	Pass
	6405	-	-	-7.05	9.03	15.52	18.53	1.98	20.51	23	Pass
40 + 40MHz Contiguous	5965+6005	-	-	-8.88	9.03	15.52	18.53	-0.85	17.68	23	Pass
	6165+6205	-	-	-9.59	9.03	15.52	18.53	-0.56	17.97	23	Pass
	6365+6405	-	-	-9.98	9.03	15.52	18.53	-0.95	17.58	23	Pass
40+40MHz Non-Contiguous	5965+6405	-9.62	-9.92	-9.62	9.03	15.52	18.53	-0.59	17.94	23	Pass

BW	Freq (MHz)	26dB BW Carrier 0 (MHz)	26dB BW Carrier 1 (MHz)	OBW Carrier 0 (MHz)	OBW Carrier 1 (MHz)	26dB BW (MHz)	OBW (MHz)
40MHz	5965	-	-	-	-	39.73	37.49
	6165	-	-	-	-	39.76	37.50
	6405	-	-	-	-	39.79	37.51
40 + 40MHz Contiguous	5965+6005	-	-	-	-	82.14	77.42
	6165+6205	-	-	-	-	82.21	77.49
	6365+6405	-	-	-	-	82.14	77.46
40+40MHz Non-contiguous	5965+6405	39.81	39.79	37.54	37.59	79.60	75.13

Conducted Output Power

Antenna Gain = 15.52dBi

The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna

Directional Gain (4H/4V) = 15.52dBi + 10log(Nx = 4 / Nss = 2) = 18.53dBi

Power Spectral Density

Antenna Gain = 15.52dBi

The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna

Directional Gain (4H/4V) = 15.52dBi + 10log(Nx = 4 / Nss = 2) = 18.53dBi

Power Setting

Atten	ADAK
27	-0.2
27	0.9
27	2.7
30	0.8_-0.1
27	-1.2_-2
27	0.8_-0.3
30_27	0.6_0.2

MIMO Calculation

Number of Ant	Number of SS	SS Correction
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01

<X2 Mode>

BW	Freq (MHz)	Carrier	Frequency (MHz)	Ant #	Conducted Power (dBm)	Antenna Gain (dBi)	MIMO factor (dB)	DG (dB)	Total Conducted power (dBm)	Total EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
40+40MHz Contiguous	5965+6005	C2	5965	Ant 0 of 0-3	14.41	15.52	6.02	15.52	20.43	35.95	36	Pass
		C3	6005	Ant 4 of 4-7								
		C2	6165	Ant 0 of 0-3								
	6165+6205	C3	6205	Ant 4 of 4-7	14.41	15.52	6.02	15.52	20.43	35.95	36	Pass
		C2	6365	Ant 0 of 0-3								
		C3	6405	Ant 4 of 4-7								
40+40+40MHz Contiguous	5965+6005+6045	C1	5965	Ant 4 of 4-7	14.36	15.52	6.02	15.52	20.38	35.90	36	Pass
		C3	6005	Ant 0 of 0-3								
		C2	6045	Ant 0 of 0-3								
		C1	5965	Ant 4 of 4-7								
		C3	6005	Ant 0 of 0-3								
		C2	6245	Ant 0 of 0-3								
	6165+6205+6245	C1	5965	Ant 4 of 4-7	14.40	15.52	6.02	15.52	20.42	35.94	36	Pass
		C3	6005	Ant 0 of 0-3								
		C2	6245	Ant 0 of 0-3								
		C1	5965	Ant 4 of 4-7								
		C3	6005	Ant 0 of 0-3								
		C2	6405	Ant 0 of 0-3								
40+40+40+40MHz Contiguous	5965+6005+6045+6085	C0	5965	Ant 0 of 0-3	14.43	15.52	6.02	15.52	20.45	35.97	36	Pass
		C2	6005	Ant 0 of 0-3								
		C1	6045	Ant 4 of 4-7								
		C3	6085	Ant 4 of 4-7								
		C0	6125	Ant 0 of 0-3								
		C2	6165	Ant 4 of 4-7								
	6125+6165+6205+6245	C1	6205	Ant 4 of 4-7	14.44	15.52	6.02	15.52	20.46	35.98	36	Pass
		C3	6245	Ant 4 of 4-7								
		C0	6285	Ant 0 of 0-3								
		C2	6325	Ant 0 of 0-3								
		C1	6365	Ant 4 of 4-7								
		C3	6405	Ant 4 of 4-7								
40+40MHz Non-Contiguous	5965+6405	C2	5965	Ant 0 of 0-3	14.36	15.52	6.02	15.52	20.38	35.90	36	Pass
		C3	6405	Ant 4 of 4-7								
		C1	5965	Ant 4 of 4-7								
		C3	6165	Ant 0 of 0-3								
		C2	6405	Ant 0 of 0-3								
		C0	5965	Ant 0 of 0-3								
40 + 40 + 40MHz Non-Contiguous	5965+6165+6405	C2	6085	Ant 0 of 0-3	14.40	15.52	6.02	15.52	20.42	35.94	36	Pass
		C1	6205	Ant 4 of 4-7								
		C3	6405	Ant 4 of 4-7								
		C2	6085	Ant 0 of 0-3								
		C1	6205	Ant 4 of 4-7								
		C3	6405	Ant 4 of 4-7								
40 + 40 + 40 + 40MHz Non-Contiguous	5965+6085+6205+6405	C2	6085	Ant 0 of 0-3	14.44	15.52	6.02	15.52	20.46	35.98	36	Pass
		C1	6205	Ant 4 of 4-7								
		C3	6405	Ant 4 of 4-7								
		C2	6085	Ant 0 of 0-3								
		C1	6205	Ant 4 of 4-7								
		C3	6405	Ant 4 of 4-7								

Atten	ADAM
27	1.2_1.7
24	-0.7_0.3
24	1.3_2.1
27	0.2_0.6_0.8
24	-0.9_-0.9_-0.6
24	1_0.3_1.2
27	-0.4_-1.2_-0.1_-0.5
27	0.4_0_1.4_1.2
24	-1.1_-1.4_0.2_-0.4
27_24	1.2_2.1
27_24_27	1.4_0.3_0.7
27_27_27_24	-0.4_-0.7_1.3_0

BW	Freq (MHz)	Carrier	Frequency (MHz)	Ant #	Conducted PSD (dBm/MHz)	Antenna Gain (dBi)	MIMO Factor (dB)	DG (dBi)	Total Conducted PSD (dBm/MHz)	Total EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass/Fail
40+40MHz Contiguous	5965+6005	C2	5965	Ant 0 of 0-3	-4.05	15.52	6.02	15.52	1.97	17.49	23	Pass
		C3	6005	Ant 4 of 4-7	-4.55							
		C2	6165	Ant 0 of 0-3	-4.59							
	6165+6205	C2	6205	Ant 4 of 4-7	-4.07	15.52	6.02	15.52	1.97	17.47	23	Pass
		C3	6365	Ant 0 of 0-3	-4.08							
		C2	6405	Ant 4 of 4-7	-4.08							
40+40+40MHz Contiguous	5965	C1	5965	Ant 0 of 0-3	-5.05	15.52	6.02	15.52	1.94	17.46	23	Pass
		C3	6005	Ant 4 of 4-7	-5.5							
		C2	6045	Ant 0 of 0-3	-5.37							
	5965+6005+6045	C1	6165	Ant 4 of 4-7	-5.33	15.52	6.02	15.52	0.89	16.21	23	Pass
		C3	6205	Ant 0 of 0-3	-5.34							
		C2	6245	Ant 0 of 0-3	-5.34							
40+40+40MHz Contiguous	6165+6205+6245	C1	6325	Ant 4 of 4-7	-5.66	15.52	6.02	15.52	0.56	16.08	23	Pass
		C3	6365	Ant 0 of 0-3	-5.46							
		C2	6405	Ant 0 of 0-3	-5.46							
	5965+6005+6045+6085	C0	5965	Ant 0 of 0-3	-6.62	15.52	6.02	15.52	-0.47	15.05	23	Pass
		C2	6005	Ant 0 of 0-3	-6.62							
		C3	6045	Ant 4 of 4-7	-6.49							
40+40+40MHz Contiguous	6125+6165+6205+6245	C0	6125	Ant 0 of 0-3	-6.85	15.52	6.02	15.52	-0.55	14.97	23	Pass
		C2	6165	Ant 0 of 0-3	-6.85							
		C1	6205	Ant 4 of 4-7	-6.57							
	6285+6325+6365+6405	C3	6245	Ant 0 of 0-3	-6.58	15.52	6.02	15.52	-0.55	14.97	23	Pass
		C0	6285	Ant 0 of 0-3	-6.58							
		C2	6325	Ant 4 of 4-7	-6.57							
40+40MHz Non-Contiguous	5965+6405	C2	5965	Ant 0 of 0-3	-3.93	15.52	6.02	15.52	2.09	17.61	23	Pass
		C3	6405	Ant 4 of 4-7	-3.93							
		C1	5965	Ant 4 of 4-7	-5.23							
40 + 40 + 40MHz Non-Contiguous	5965+6165+6405	C3	6165	Ant 0 of 0-3	-4.48	15.52	6.02	15.52	0.79	16.31	23	Pass
		C2	6405	Ant 0 of 0-3	-5.35							
		C0	5965	Ant 0 of 0-3	-7.06							
40 + 40 + 40 + 40MHz Non-Contiguous	5965+6085+6205+6405	C2	6085	Ant 0 of 0-3	-6.69	15.52	6.02	15.52	-0.56	14.96	23	Pass
		C1	6205	Ant 4 of 4-7	-6.58							
		C3	6405	Ant 4 of 4-7	-6.55							

[illegible]

BW	Freq (MHz)	26dB BW Carrier 0 (MHz)	26dB BW Carrier 2 (MHz)	26dB BW Carrier 1 (MHz)	26dB BW Carrier 3 (MHz)	OBW Carrier 0 (MHz)	OBW Carrier 2 (MHz)	OBW Carrier 1 (MHz)	OBW Carrier 3 (MHz)	26dB BW (MHz)	OBW (MHz)	
40 + 40MHz Contiguous	5965+6005	-	-	-	-	-	-	-	-	79.57	74.92	
	6165+6205	-	-	39.81	-	39.78	-	37.47	-	37.46	79.58	74.93
	6365+6405	-	-	39.84	-	-	-	-	-	-	-	-
	5965+6005+6045	-	-	39.76	-	82.18	-	37.47	77.37	121.94	114.83	
40 + 40 + 40MHz Contiguous	6165+6205+6245	-	-	39.78	82.30	-	37.50	77.42	-	122.08	114.92	
	6325+6365+6405	-	-	39.79	82.18	-	37.49	77.44	-	121.97	114.93	
	5965+6005+6045+6085	-	82.11	-	82.11	-	77.39	-	77.40	164.22	154.79	
	6125+6165+6205+6245	-	82.21	-	82.18	-	77.44	-	77.47	164.38	154.91	
40 + 40 + 40 + 40MHz Non-Contiguous	6285+6325+6365+6405	-	82.18	-	82.14	-	77.48	-	77.44	164.32	154.92	
40+40MHz Non-Contiguous	5965+6405	-	-	39.76	-	39.74	-	37.46	-	37.47	79.50	74.93
40 + 40 + 40MHz Non-Contiguous	5965+6165+6405	-	-	39.81	39.78	-	37.49	37.46	37.49	119.36	112.44	
40 + 40 + 40 + 40MHz Non-Contiguous	5965+6085+6205+6405	39.74	39.76	39.74	39.74	37.48	37.49	37.49	37.51	158.99	149.97	

Conducted Output Power
Antenna Gain = 15.52dBi
The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna, X2 mode sets 8 antennas into 2 groups, each group has 4 antennas
Directional Gain (4H/4V) = $15.52\text{dBi} + 10\log(\text{Ntx} = 2 / \text{Nss} = 2) = 15.52\text{dBi}$

Power Spectral Density
Antenna Gain = 15.52dBi
The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna, X2 mode sets 8 antennas into 2 groups, each group has 4 antennas
Directional Gain (4H/4V) = 15.52dBi + 10log(Ntx = 2 / Nss = 2) = 15.52dBi

<X1 Mode>

Conducted Power on Port 0H

BW	Freq (MHz)	Conducted Power Carrier 0 (dBm)	Conducted Power Carrier 1 (dBm)	Conducted Power (dBm)	MIMO Factor (dB)	Antenna Gain (dBi)	DG (dBi)	Total Conducted Power (dBm)	Total EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
40MHz	6545	-	-	8.30	9.03	15.48	18.49	17.33	35.82	36	Pass
	6685	-	-	8.40	9.03	15.48	18.49	17.43	35.92	36	Pass
	6855	-	-	8.40	9.03	15.48	18.49	17.43	35.92	36	Pass
40+40MHz Contiguous	6545+6885	-	-	8.40	9.03	15.48	18.49	17.43	35.92	36	Pass
	6685+6725	-	-	8.40	9.03	15.48	18.49	17.43	35.92	36	Pass
	6815+6855	-	-	8.40	9.03	15.48	18.49	17.43	35.92	36	Pass
40+40MHz Non-Contiguous	6545+6855	5.45	5.37	8.42	9.03	15.48	18.49	17.45	35.94	36	Pass

PSD on Port 0H

BW	Freq (MHz)	Conducted PSD Carrier 0 (dBm/MHz)	Conducted PSD Carrier 1 (dBm/MHz)	Conducted PSD (dBm/MHz)	MIMO Factor (dB)	Antenna Gain (dBi)	DG (dBi)	Total Conducted PSD (dBm/MHz)	Total EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass/Fail
40MHz	6545	-	-	-6.89	9.03	15.48	18.49	-2.14	20.63	23	Pass
	6685	-	-	-6.75	9.03	15.48	18.49	2.28	20.77	23	Pass
	6855	-	-	-6.76	9.03	15.48	18.49	2.27	20.76	23	Pass
40 + 40MHz Contiguous	6545+6885	-	-	-9.59	9.03	15.48	18.49	-0.56	17.93	23	Pass
	6685+6725	-	-	-9.43	9.03	15.48	18.49	-0.40	18.09	23	Pass
	6815+6855	-	-	-9.49	9.03	15.48	18.49	-0.46	18.03	23	Pass
40+40MHz Non-Contiguous	6545+6855	-9.60	-9.63	-9.60	9.03	15.48	18.49	-0.57	17.92	23	Pass

BW	Freq (MHz)	26dB BW Carrier 0 (MHz)	26dB BW Carrier 1 (MHz)	OBW Carrier 0 (MHz)	OBW Carrier 1 (MHz)	26dB BW (MHz)	OBW (MHz)
40MHz	6545	-	-	-	-	39.73	37.51
	6685	-	-	-	-	39.78	37.51
	6855	-	-	-	-	39.78	37.54
40 + 40MHz Contiguous	6545+6885	-	-	-	-	82.11	77.42
	6685+6725	-	-	-	-	82.14	77.53
	6815+6855	-	-	-	-	82.14	77.51
40+40MHz Non-contiguous	6545+6855	39.73	39.78	37.53	37.59	79.50	75.12

Conducted Output Power

Antenna Gain = 15.48dBi

The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna

Directional Gain (4H/4V) = 15.48dBi + 10log(Nx = 4 / Nss = 2) = 18.49dBi

Power Spectral Density

Antenna Gain = 15.48dBi

The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna

Directional Gain (4H/4V) = 15.48dBi + 10log(Nx = 4 / Nss = 2) = 18.49dBi

Power Setting

Atten	ADAK
24	1.2
24	1.3
21	-1
24	-0.6, -1.2
24	-0.4, -1
24	1, 0.5
27	1.4, 1.8

MIMO Calculation

Number of Ant	Number of SS	SS Correction
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01
8	2	3.01

<X2 Mode>

BW	Freq (MHz)	Carrier	Frequency (MHz)	Ant #	Conducted Power (dBm)	Antenna Gain	MIMO factor (dB)	DG (dBi)	Total Conducted power (dBm)	Total EIRP (dBm)	EIRP Limit (dBm)	Pass/Fail
40+40MHz Contiguous	6545+6585	C2	6545	Ant 0 of 0-3	14.41	15.48	6.02	15.48	20.43	35.91	36	Pass
		C3	6585	Ant 4 of 4-7								
		C2	6685	Ant 0 of 0-3								
	6685+6725	C3	6725	Ant 4 of 4-7	14.36	15.48	6.02	15.48	20.38	35.86	36	Pass
		C2	6815	Ant 0 of 0-3								
		C3	6855	Ant 4 of 4-7								
40+40+40MHz Contiguous	6545+6585+6625	C2	6545	Ant 0 of 0-3	14.44	15.48	6.02	15.48	20.46	35.94	36	Pass
		C1	6585	Ant 4 of 4-7								
		C3	6625	Ant 0 of 0-3								
	6645+6685+6725	C2	6645	Ant 0 of 0-3	14.46	15.48	6.02	15.48	20.48	35.96	36	Pass
		C1	6685	Ant 4 of 4-7								
		C3	6725	Ant 0 of 0-3								
	6775+6815+6855	C2	6775	Ant 0 of 0-3	14.41	15.48	6.02	15.48	20.43	35.91	36	Pass
		G1	6815	Ant 4 of 4-7								
		C3	6855	Ant 0 of 0-3								
40+40+40+40MHz Contiguous	6545+6585+6625+6665	C0	6545	Ant 0 of 0-3	14.46	15.48	6.02	15.48	20.48	35.96	36	Pass
		C2	6585	Ant 0 of 0-3								
		C1	6625	Ant 4 of 4-7								
	6645+6685+6725+6765	C3	6665	Ant 0 of 0-3	14.42	15.48	6.02	15.48	20.44	35.92	36	Pass
		C0	6645	Ant 0 of 0-3								
		C2	6685	Ant 0 of 0-3								
		C1	6725	Ant 4 of 4-7								
		C3	6765	Ant 0 of 0-3								
		C0	6735	Ant 0 of 0-3								
	6735+6775+6815+6855	C2	6775	Ant 0 of 0-3	14.42	15.48	6.02	15.48	20.44	35.92	36	Pass
		C1	6815	Ant 0 of 0-3								
		C3	6855	Ant 4 of 4-7								
40+40MHz Non-Contiguous	6545+6855	C2	6545	Ant 0 of 0-3	14.36	15.48	6.02	15.48	20.38	35.86	36	Pass
C3		6855	Ant 4 of 4-7									
C2		6545	Ant 0 of 0-3									
40 + 40 + 40MHz Non-Contiguous	6545+6685+6855	C1	6685	Ant 0 of 0-3	14.47	15.48	6.02	15.48	20.49	35.97	36	Pass
		C3	6855	Ant 4 of 4-7								
		C0	6545	Ant 0 of 0-3								
40 + 40 + 40 + 40MHz Non-Contiguous	6545+6645+6745+6855	C2	6645	Ant 0 of 0-3	14.46	15.48	6.02	15.48	20.48	35.96	36	Pass
		C1	6745	Ant 4 of 4-7								
		C3	6855	Ant 0 of 0-3								

Atten	ADAK
21	-0.3_0.6
21	0.1_1.3
18	-0.2_0
21	-1.1_0.5_-0.3
21	-1.4_0.5_0.4
21_18_18	0_0.2_0.9
21	-1.1_1.9_-0.6_-1.4
21	-1.4_-1.9_0.1_-0.1
21	-0.8_-1.1_1.3_0.2
21_18	-0.1_0
21_21_18	-1.2_0.8_-0.7
21	-1.2_-2.4_0.2_0.2

BW	Freq (MHz)	Carrier	Frequency (MHz)	Ant #	Conducted PSD (dBm/MHz)	Antenna Gain (dBi)	MIMO Factor (dB)	DG (dBi)	Total Conducted PSD (dBm/MHz)	Total EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass/Fail
40+40MHz Contiguous	6545+6585	C2	6545	Ant 0 of 0-3	-4.18	15.48	6.02	15.48	1.93	17.41	23	Pass
		C3	6585	Ant 4 of 4-7	-4.09							
		C2	6585	Ant 0 of 0-3	-3.92							
	6685+6725	C3	6725	Ant 4 of 4-7	-3.80	15.48	6.02	15.48	2.12	17.60	23	Pass
		C2	6815	Ant 0 of 0-3	-4.16							
		C3	6855	Ant 4 of 4-7	-3.21							
40+40+40MHz Contiguous	6545+6585+6625	C2	6545	Ant 0 of 0-3	-5.24	15.48	6.02	15.48	0.78	16.26	23	Pass
		C1	6585	Ant 4 of 4-7	-5.34							
		C3	6625	Ant 0 of 0-3	-5.24							
	6645+6685+6725	C1	6685	Ant 4 of 4-7	-5.34	15.48	6.02	15.48	0.78	16.26	23	Pass
		C3	6725	Ant 0 of 0-3	-5.24							
		C2	6775	Ant 4 of 4-7	-5.20							
	6775+6815+6855	C1	6815	Ant 0 of 0-3	-5.24	15.48	6.02	15.48	0.82	16.30	23	Pass
		C2	6855	Ant 4 of 4-7	-5.20							
		C0	6545	Ant 0 of 0-3	-6.41							
40+40+40+40MHz Contiguous	6545+6585+6625+6665	C2	6585	Ant 0 of 0-3	-6.41	15.48	6.02	15.48	-0.39	15.09	23	Pass
		C1	6625	Ant 4 of 4-7	-6.52							
		C3	6665	Ant 0 of 0-3	-6.62							
	6645+6685+6725+6765	C0	6645	Ant 0 of 0-3	-6.62	15.48	6.02	15.48	-0.43	15.05	23	Pass
		C2	6685	Ant 4 of 4-7	-6.45							
		C1	6725	Ant 0 of 0-3	-6.45							
	6735+6775+6815+6855	C0	6735	Ant 0 of 0-3	-6.49	15.48	6.02	15.48	-0.42	15.06	23	Pass
		C2	6775	Ant 4 of 4-7	-6.44							
		C1	6815	Ant 0 of 0-3	-6.44							
40+40MHz Non-Contiguous	6545+6855	C2	6545	Ant 0 of 0-3	-4.16	15.48	6.02	15.48	1.93	17.41	23	Pass
		C3	6855	Ant 4 of 4-7	-4.09							
40 + 40 + 40MHz Non-Contiguous	6545+6685+6855	C2	6545	Ant 0 of 0-3	-5.29	15.48	6.02	15.48	0.93	16.41	23	Pass
		C1	6685	Ant 4 of 4-7	-5.29							
40 + 40 + 40 + 40MHz Non-Contiguous	6545+6645+6745+6855	C3	6855	Ant 0 of 0-3	-5.09	15.48	6.02	15.48	-0.47	15.51	23	Pass
		C0	6545	Ant 0 of 0-3	-6.55							
		C2	6645	Ant 4 of 4-7	-6.59							
		C1	6745	Ant 0 of 0-3	-6.51							
		C3	6855	Ant 4 of 4-7	-6.45							

[illegible]

BW	Freq (MHz)	26dB BW Carrier 0 (MHz)	26dB BW Carrier 2 (MHz)	26dB BW Carrier 1 (MHz)	26dB BW Carrier 3 (MHz)	OBW Carrier 0 (MHz)	OBW Carrier 2 (MHz)	OBW Carrier 1 (MHz)	OBW Carrier 3 (MHz)	26dB BW (MHz)	OBW (MHz)
40 + 40MHz Contiguous	6545+6585	-	39.76	-	39.76	-	37.47	-	-	79.54	74.94
	6685+6725	-	39.79	-	39.78	-	37.49	-	-	79.57	74.96
	6815+6855	-	39.82	-	39.76	-	37.52	-	-	79.58	74.97
	6545+6585+6625	-	39.79	82.18	-	37.50	77.51	-	-	122.97	115.00
40 + 40 + 40MHz Contiguous	6645+6685+6725	-	39.81	82.27	-	37.47	77.42	-	-	122.08	114.90
	6775+6815+6855	-	39.81	82.18	-	37.50	77.48	-	-	121.98	114.98
	6545+6585+6625+6665	82.08	-	82.08	-	77.37	-	77.37	-	164.16	154.74
	6645+6685+6725+6765	82.08	-	82.18	-	77.37	-	77.49	-	164.26	154.87
40 + 40 + 40 + 40MHz Non-Contiguous	6545+6685+6725+6765	82.14	-	82.14	-	77.43	77.50	-	-	164.29	154.93
	6735+6775+6815+6855	-	-	-	-	-	-	-	-	-	-
40+40MHz Non-Contiguous	6545+6855	-	39.76	-	39.78	-	37.48	-	37.47	79.54	74.95
40 + 40 + 40MHz Non-Contiguous	6545+6685+6855	-	39.78	39.82	39.74	-	37.50	37.49	37.48	119.01	112.47
40 + 40 + 40 + 40MHz Non-Contiguous	6545+6645+6745+6855	39.73	39.76	39.78	39.74	37.51	37.50	37.52	37.48	159.54	150.02

Conducted Output Power
Antenna Gain = 15.48dBi

The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna, X2 mode sets 8 antennas into 2 groups, each group has 4 antennas

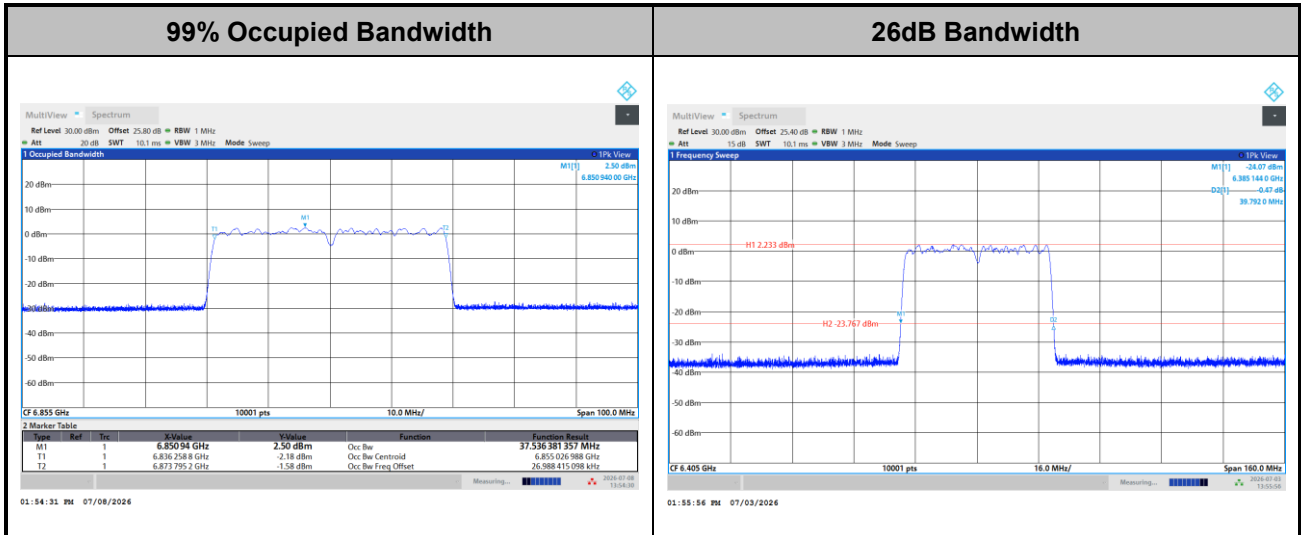
Directional Gain (4H/4V) = $15.48\text{dBi} + 10\log(\text{Ntx} = 2 / \text{Nss} = 2) = 15.48\text{dBi}$

Power Spectral Density
Antenna Gain = 15.48dBi
The device is driving cross-polarized antenna, which has 4 horizontal polarization antenna and 4 vertical polarization antenna, X2 mode sets 8 antennas into 2 groups, each group has 4 antennas
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**Test Result of 26dB & 99% Occupied Bandwidth**

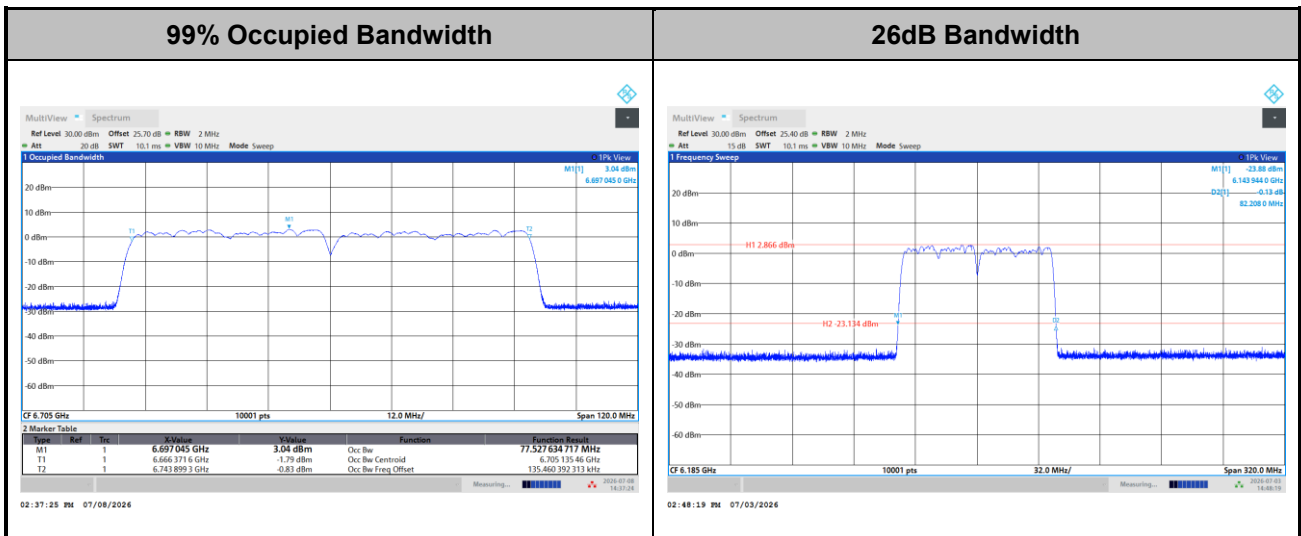
<Single Carrier, X1 mode>

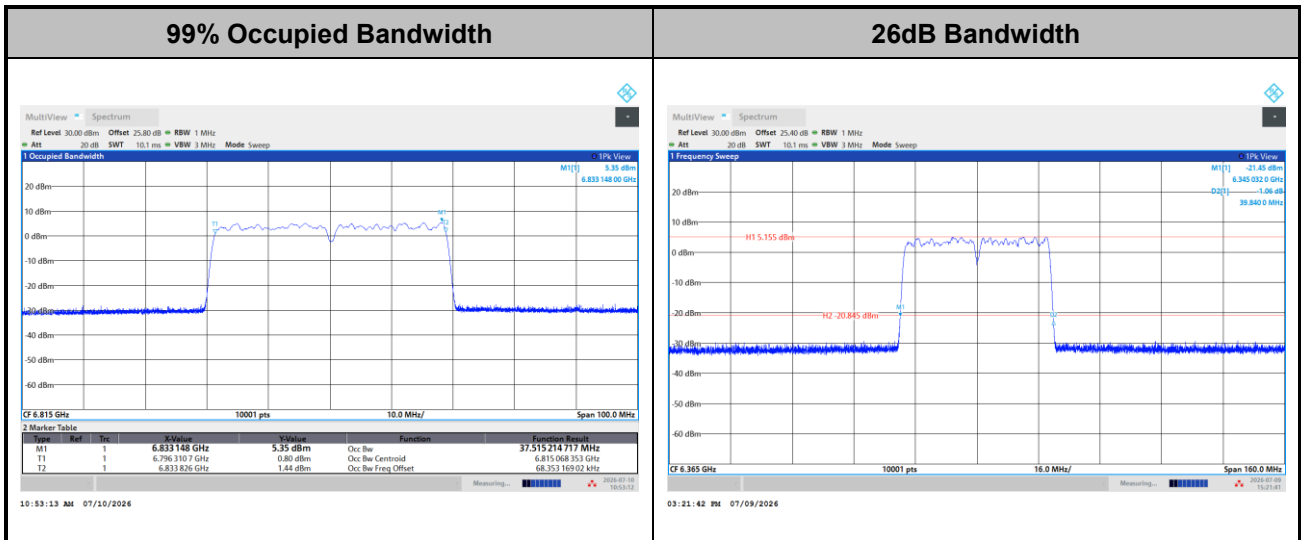
<40MHz>



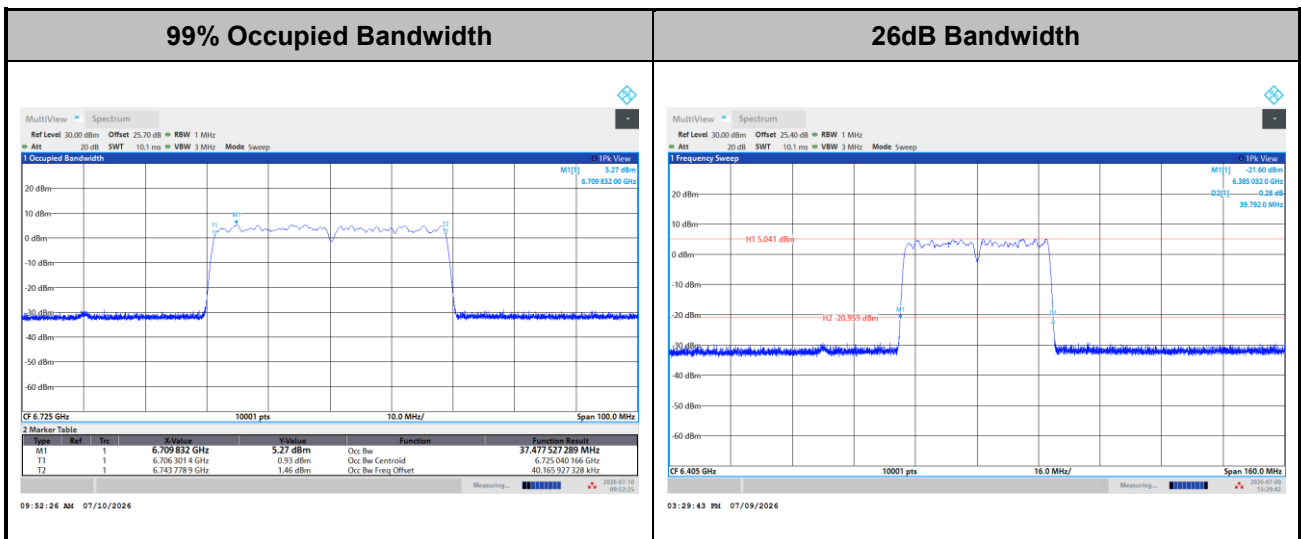
<Multiple Carrier (X1 mode, Contiguous)>

<40MHz + 40MHz>



**<Multiple Carrier (X2 mode, Contiguous)>****<40MHz + 40MHz, Carrier 2>**

Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

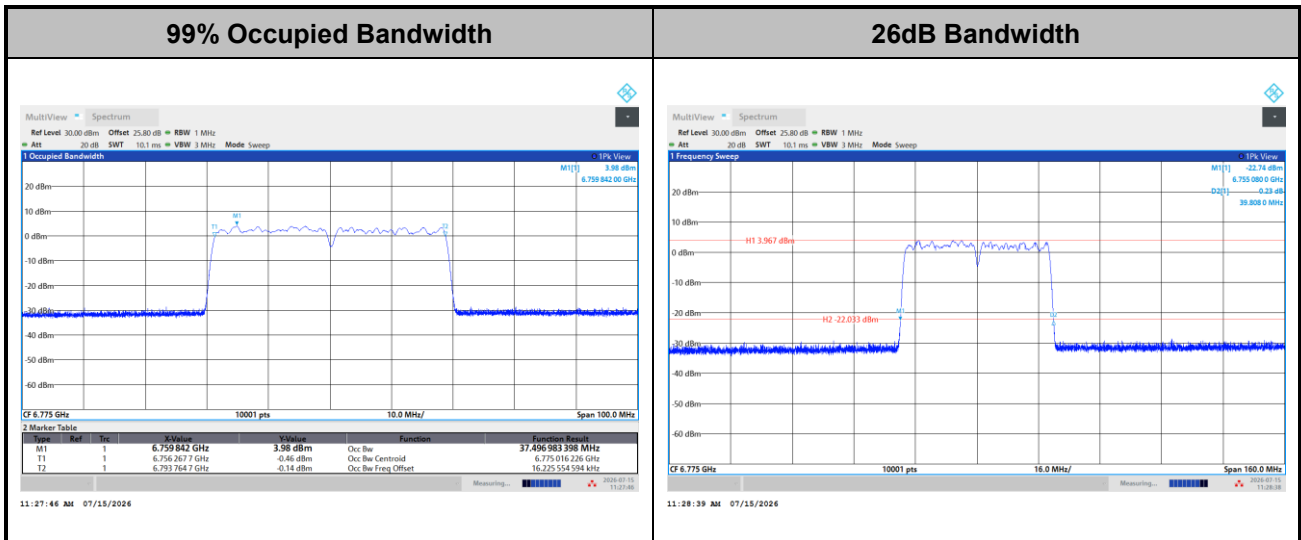
<40MHz + 40MHz, Carrier 3>

Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



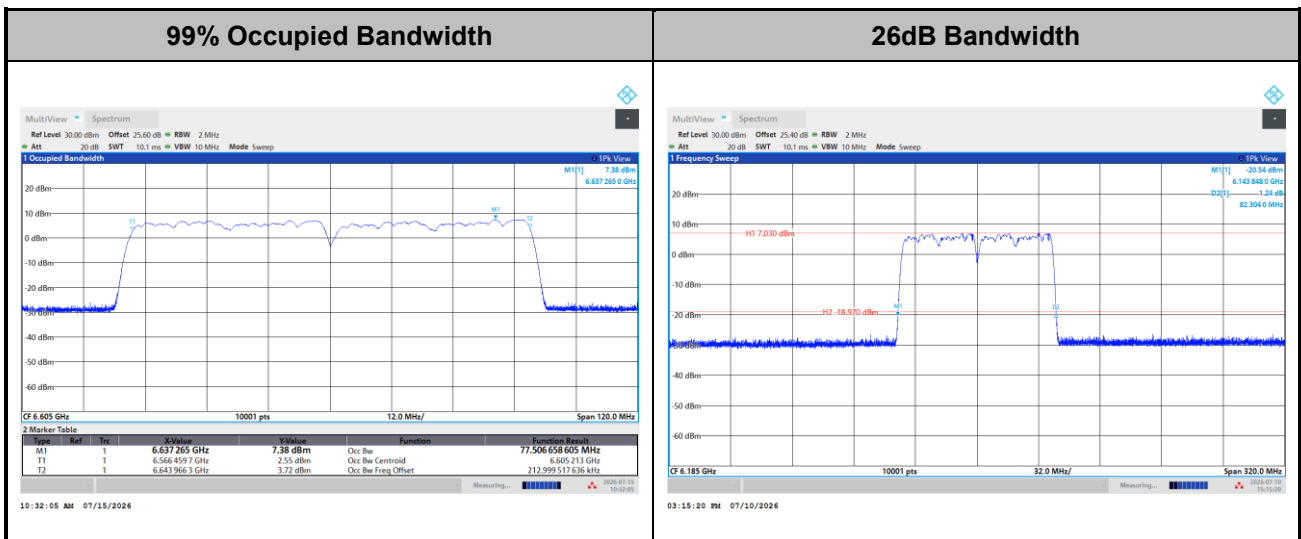
<Multiple Carrier (X2 mode, Contiguous)>

<40MHz + 40MHz + 40MHz, Carrier 2>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

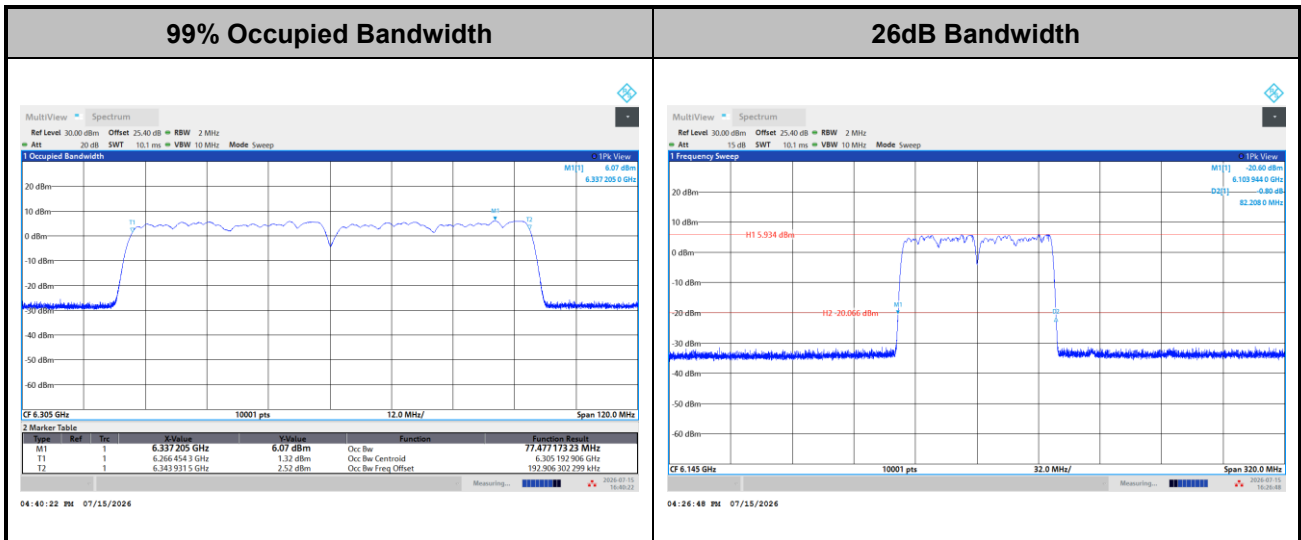
<40MHz + 40MHz + 40MHz, Carrier 1+3>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

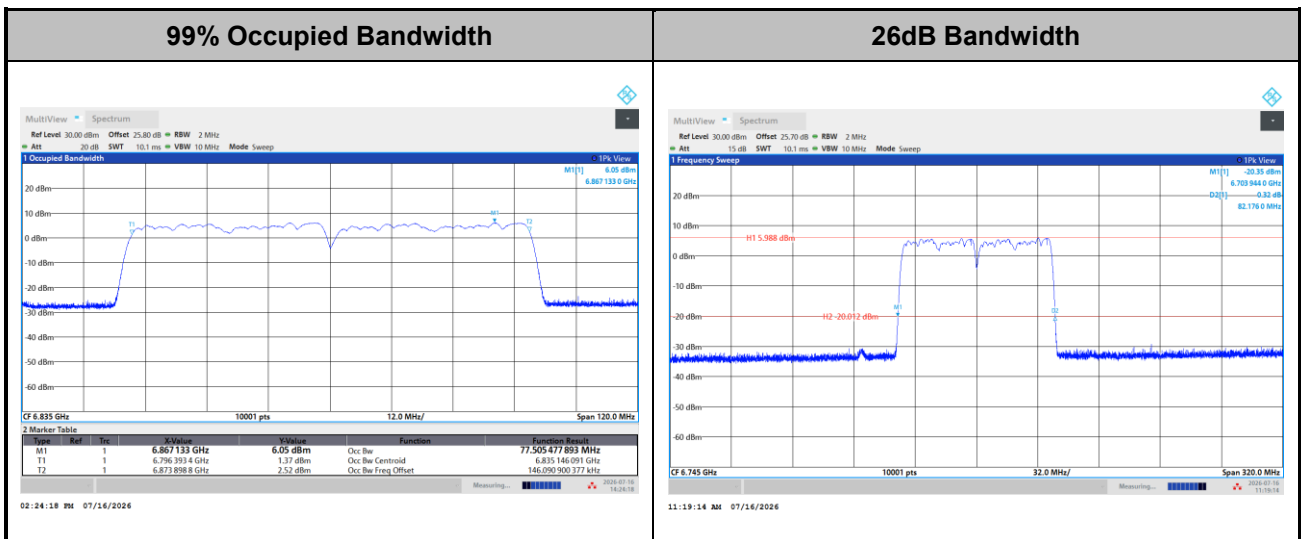
<Multiple Carrier (X2 mode, Contiguous)>

<40MHz + 40MHz + 40MHz + 40MHz, Carrier 0+2>



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<40MHz + 40MHz + 40MHz + 40MHz, Carrier 1+3>



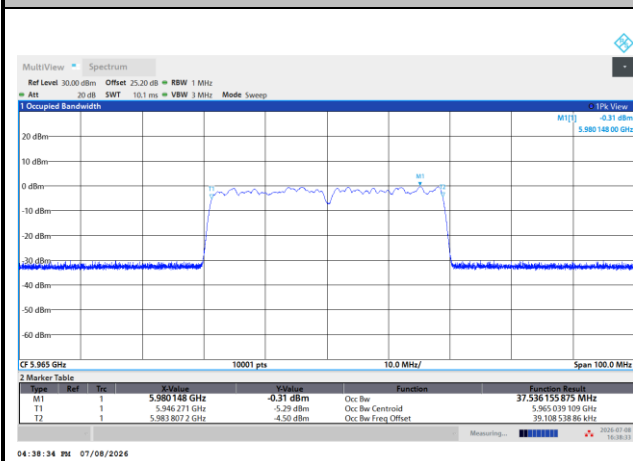
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



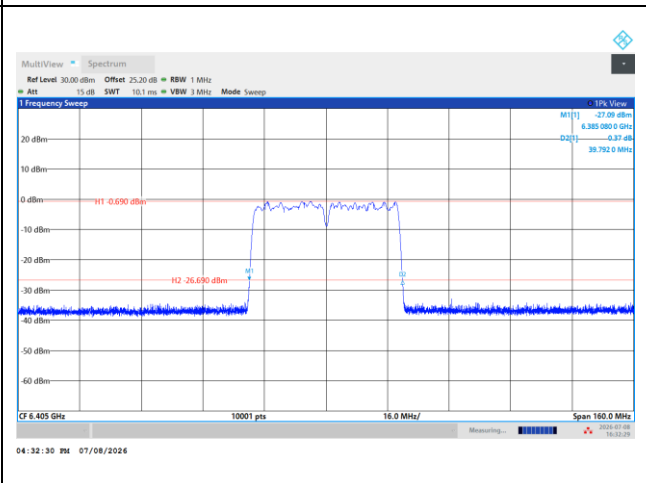
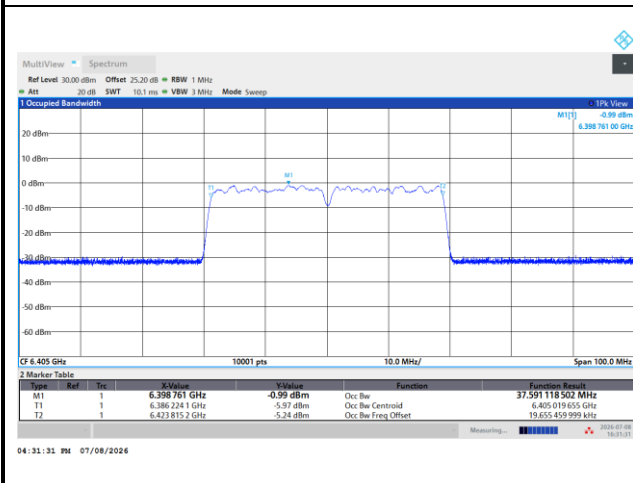
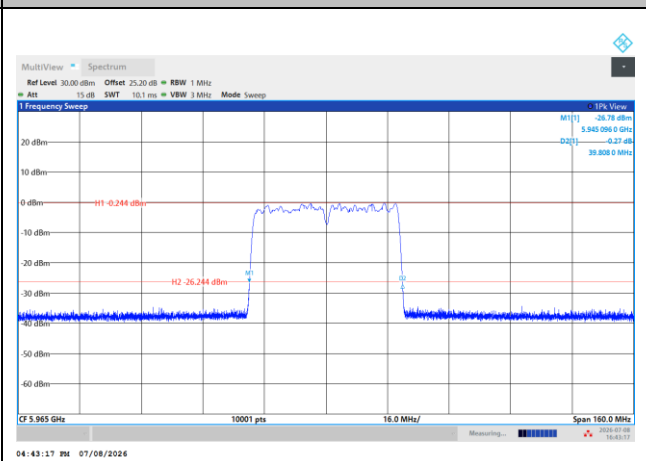
<Multiple Carrier (X1 mode, Non-Contiguous)>

<40MHz + 40MHz>

99% Occupied Bandwidth



26dB Bandwidth

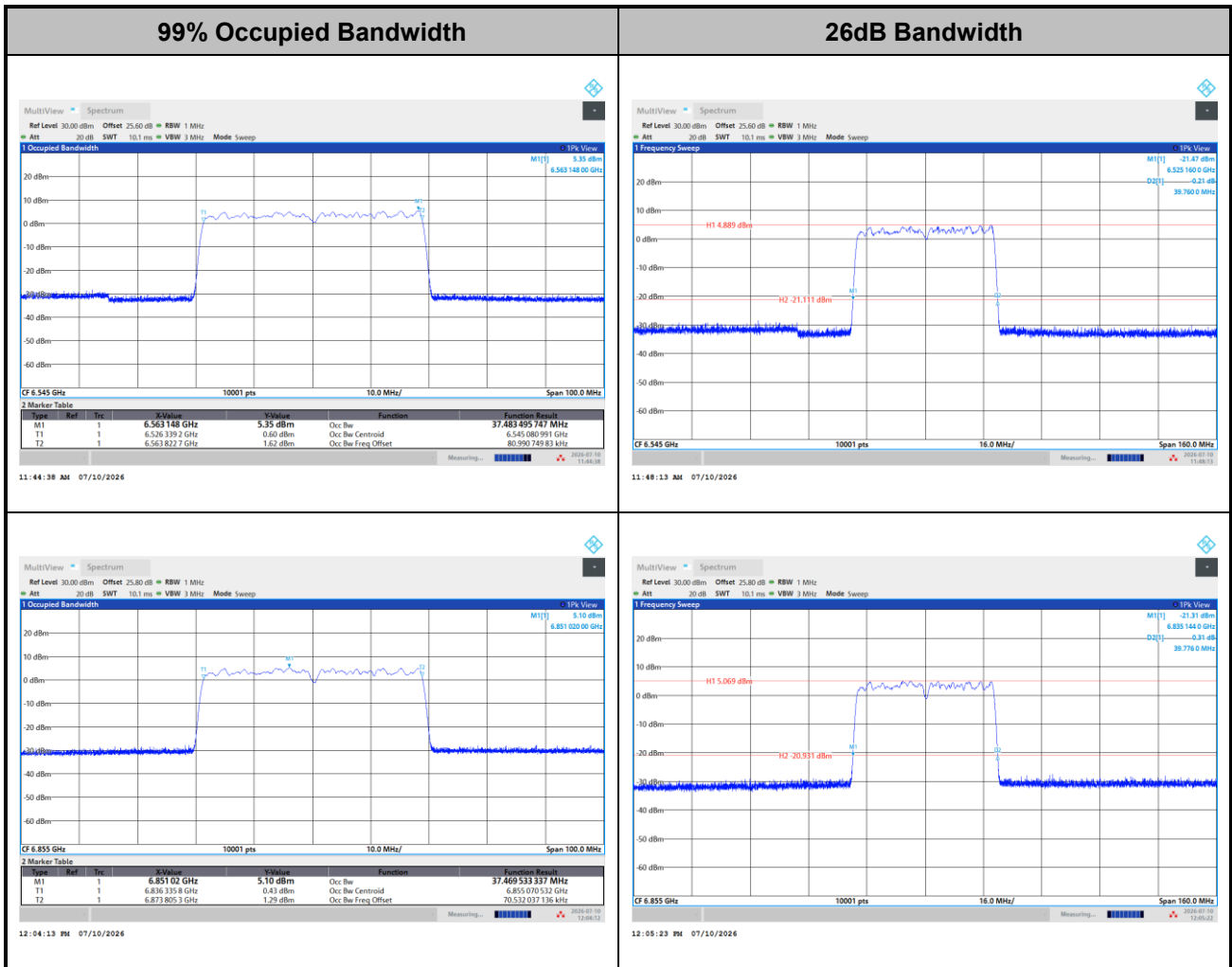


Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



<Multiple Carrier (X2 mode, Non-Contiguous)>

<40MHz + 40MHz, Carrier 2 and 3>



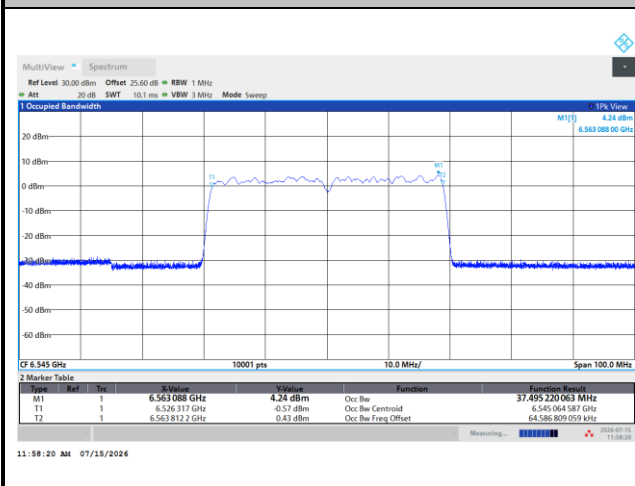
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



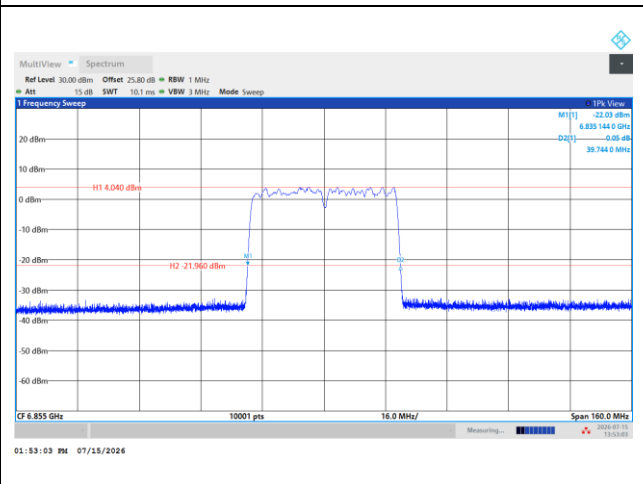
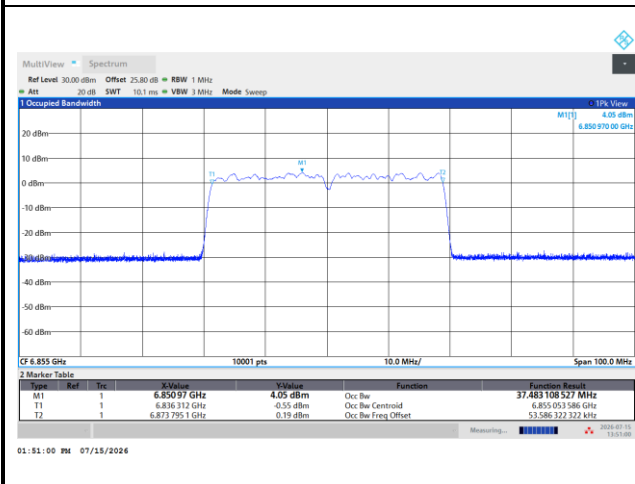
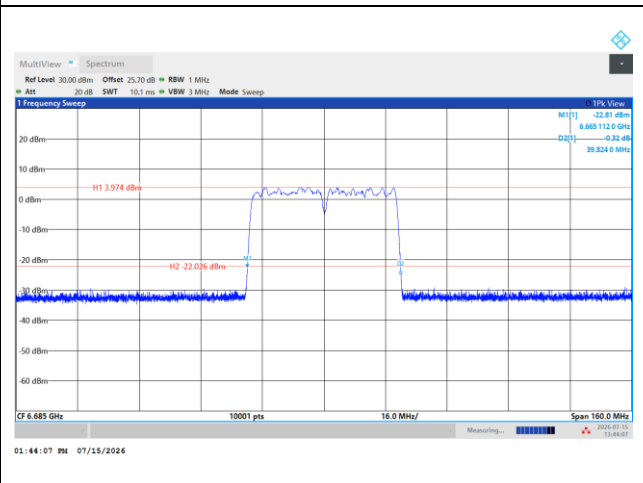
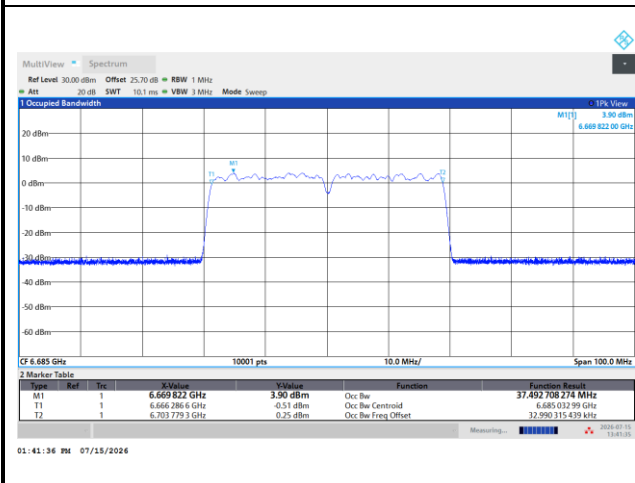
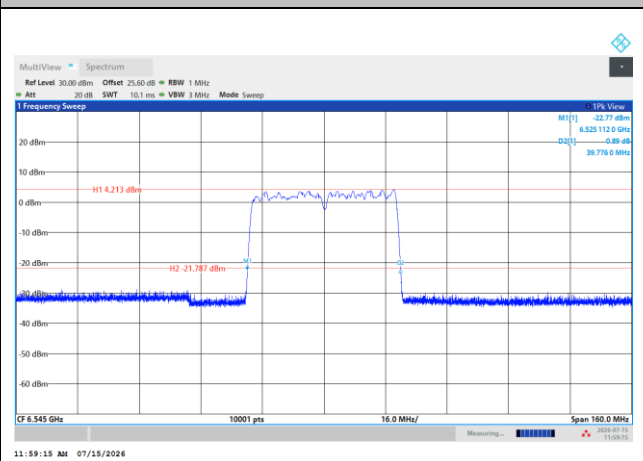
<Multiple Carrier (X2 mode, Non-Contiguous)>

<40MHz + 40MHz + 40MHz, Carrier 2 and 1+3>

99% Occupied Bandwidth



26dB Bandwidth



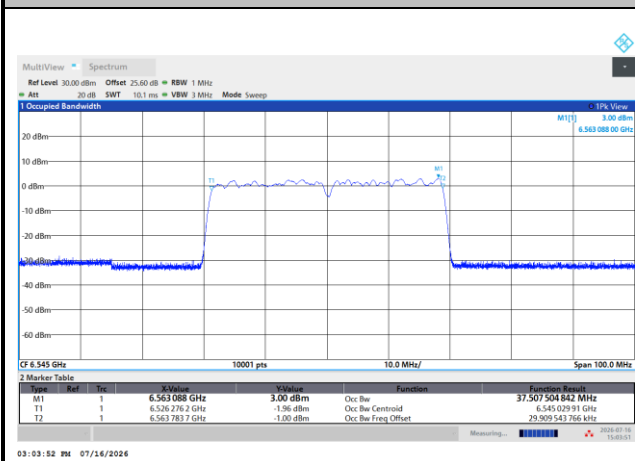
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.



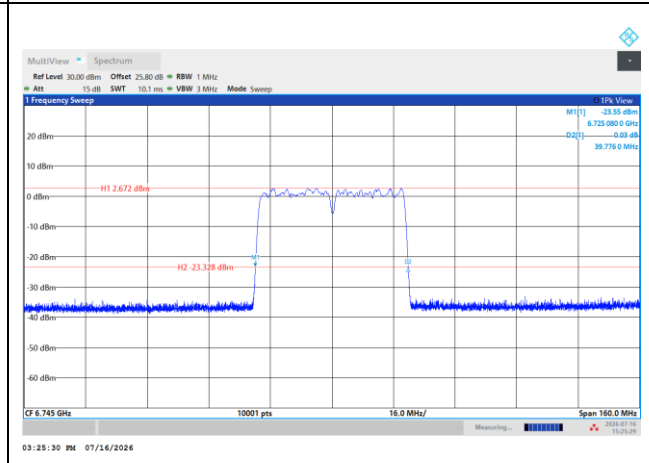
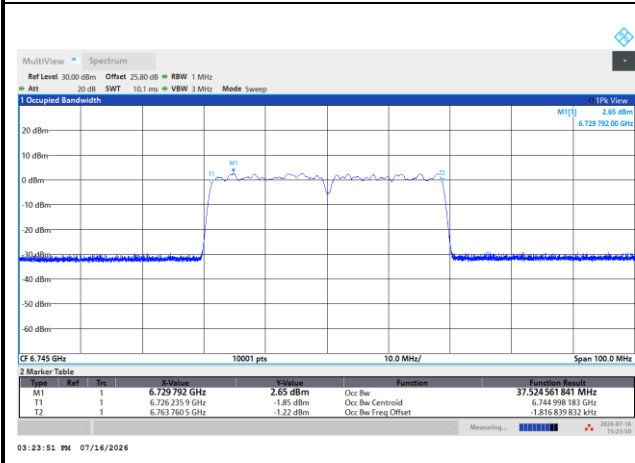
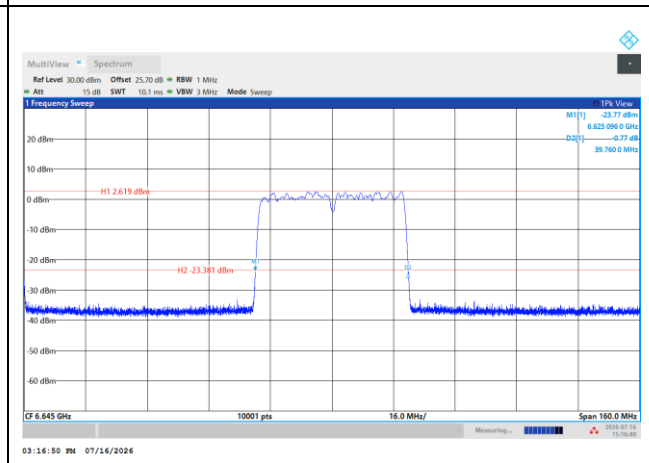
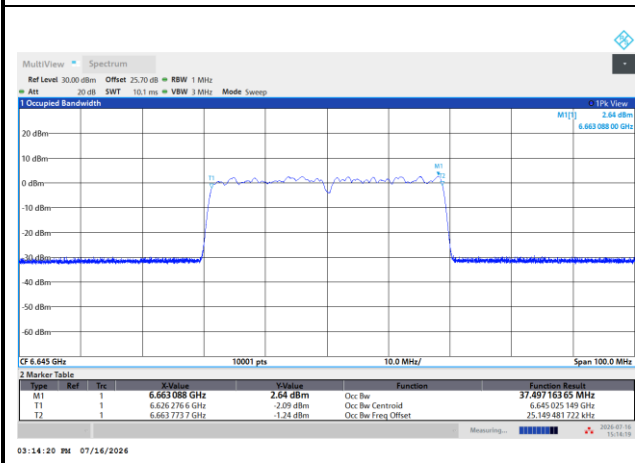
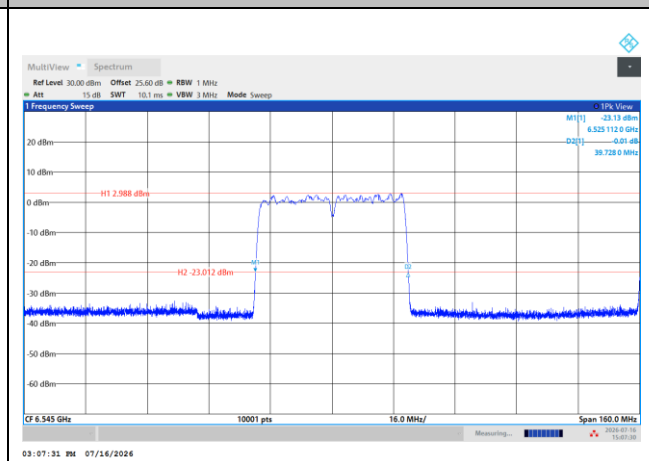
<Multiple Carrier (X2 mode, Non-Contiguous)>

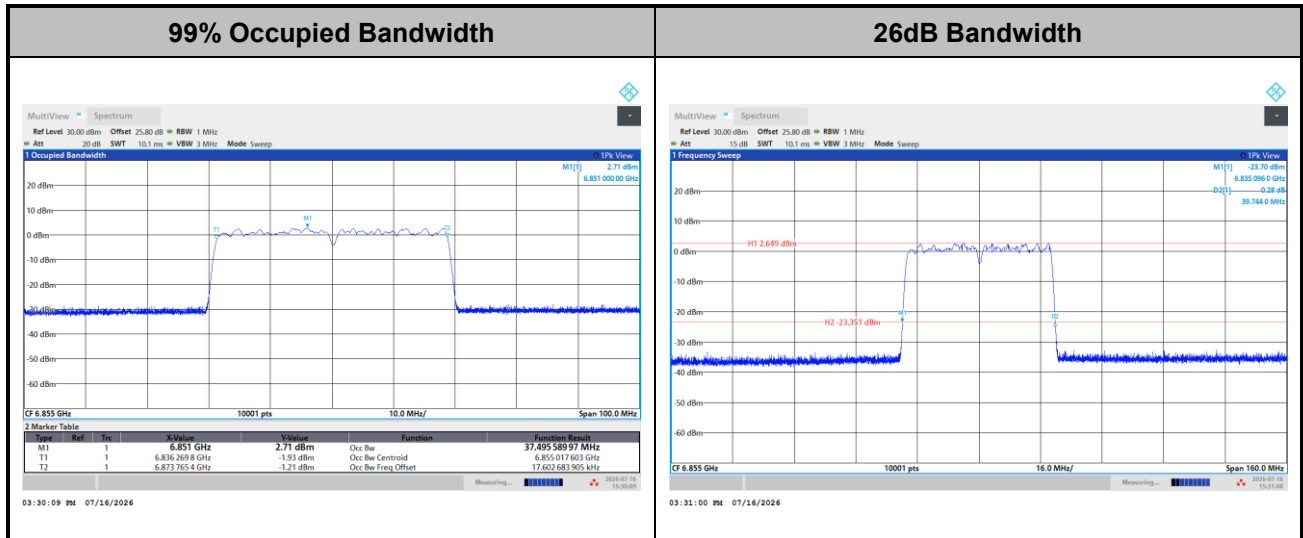
<40MHz + 40MHz + 40MHz + 40MHz, Carrier 0+2 and 1+3>

99% Occupied Bandwidth



26dB Bandwidth





Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

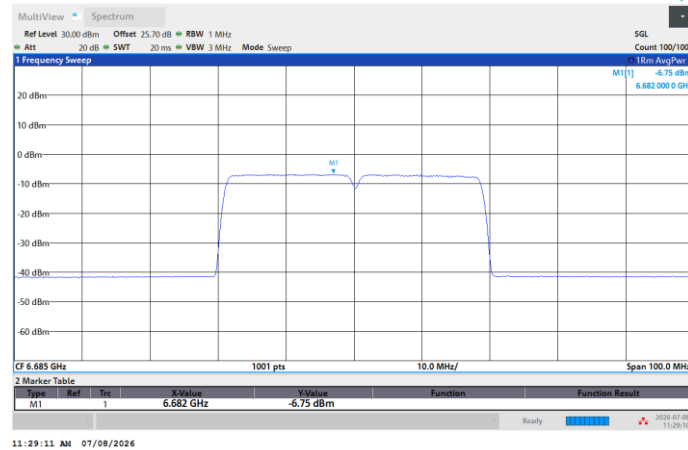


Test Result of Power Spectral Density

<Single Carrier, X1 mode>

<40MHz>

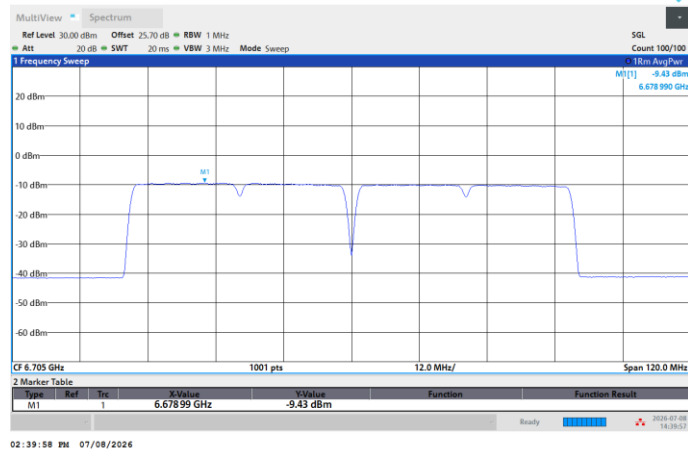
Maximum Power Density Plot (dBm/MHz)



<Multiple Carrier (X1 mode, Contiguous)>

<40MHz + 40MHz>

Maximum Power Density Plot (dBm/MHz)

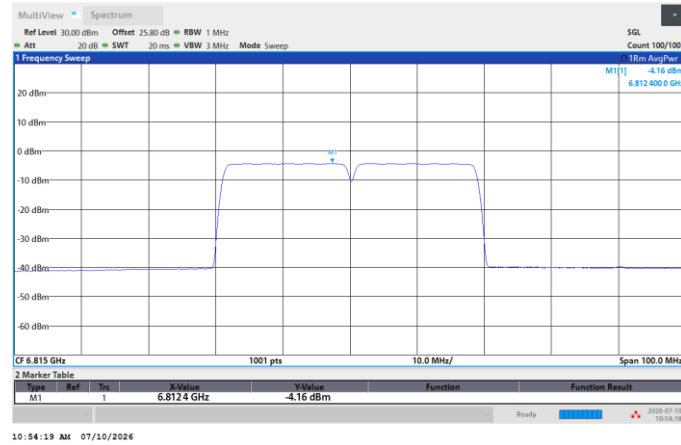




<Multiple Carrier (X2 mode, Contiguous)>

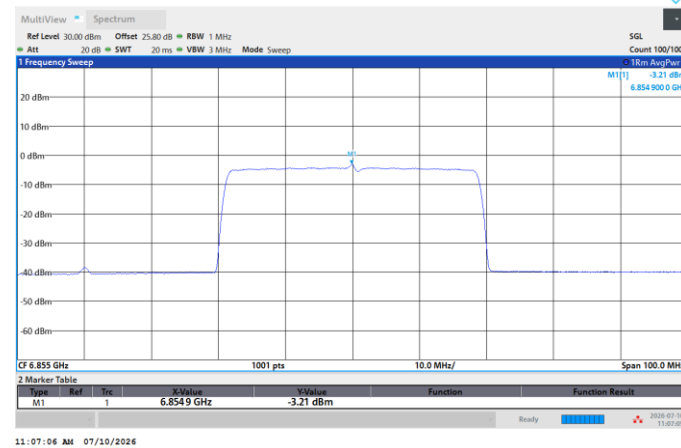
<40MHz + 40MHz, Carrier 2>

Maximum Power Density Plot (dBm/MHz)



<40MHz + 40MHz, Carrier 3>

Maximum Power Density Plot (dBm/MHz)

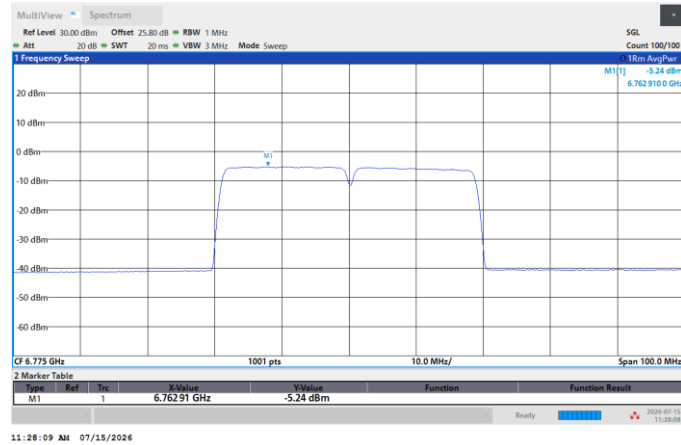




<Multiple Carrier (X2 mode, Contiguous)>

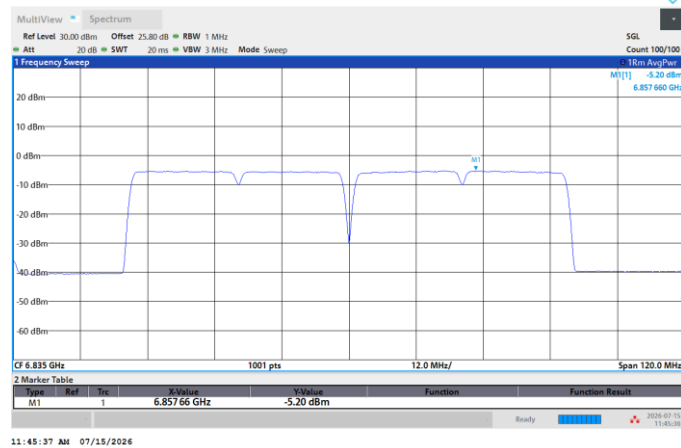
<40MHz + 40MHz + 40MHz, Carrier 2>

Maximum Power Density Plot (dBm/MHz)



<40MHz + 40MHz + 40MHz, Carrier 1+3>

Maximum Power Density Plot (dBm/MHz)

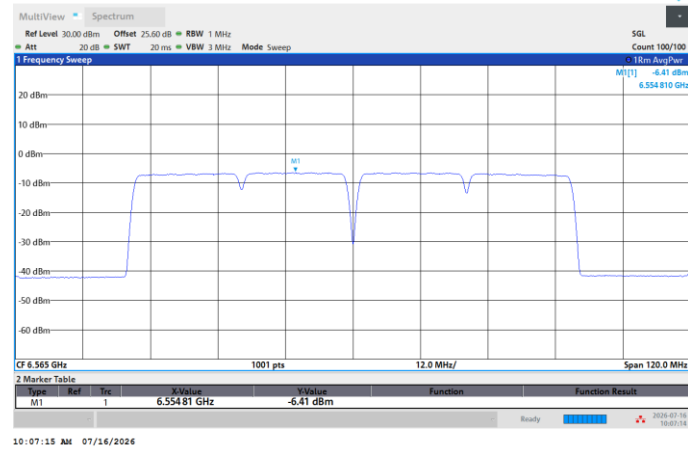




<Multiple Carrier (X2 mode, Contiguous)>

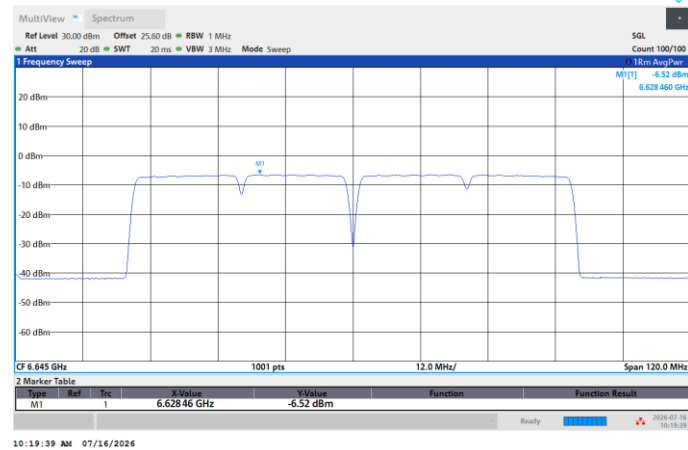
<40MHz + 40MHz + 40MHz + 40MHz, Carrier 0+2>

Maximum Power Density Plot (dBm/MHz)



<40MHz + 40MHz + 40MHz + 40MHz, Carrier 1+3>

Maximum Power Density Plot (dBm/MHz)



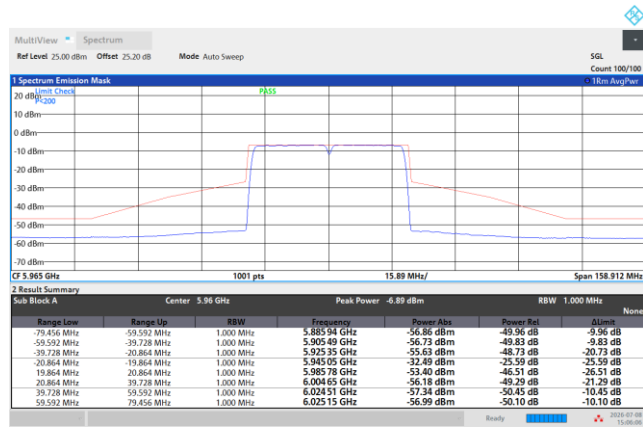


In-Band Emissions (Channel Mask)

<Single Carrier, X1 mode>

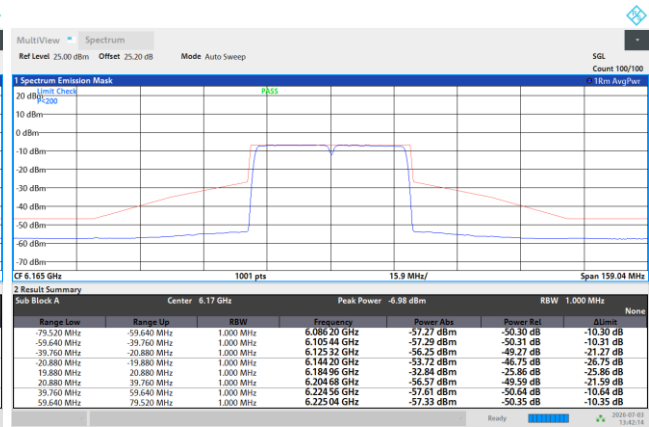
EUT Mode 40MHz

Plot on Channel 5965 MHz



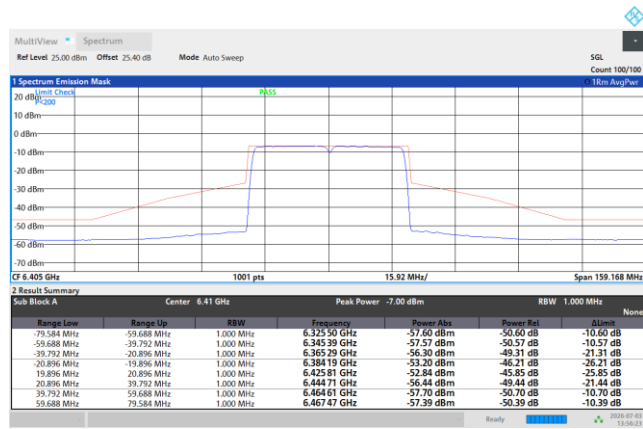
03:06:07 PM 07/08/2026

Plot on Channel 6165 MHz



01:42:14 PM 07/03/2026

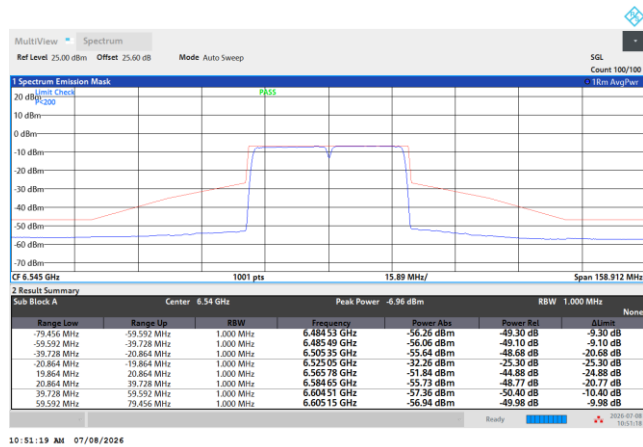
Plot on Channel 6405 MHz



01:56:24 PM 07/03/2026

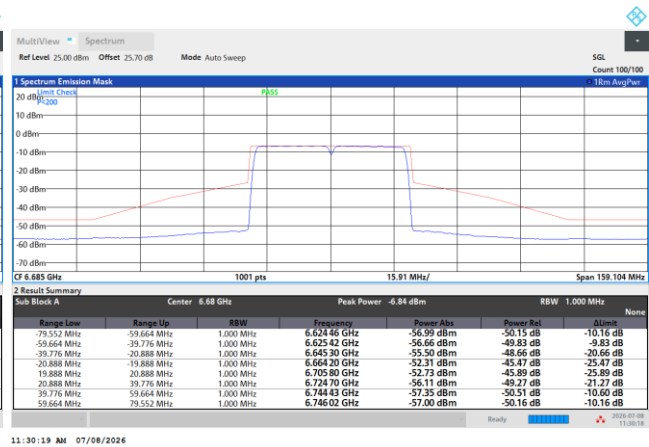


Plot on Channel 6545 MHz



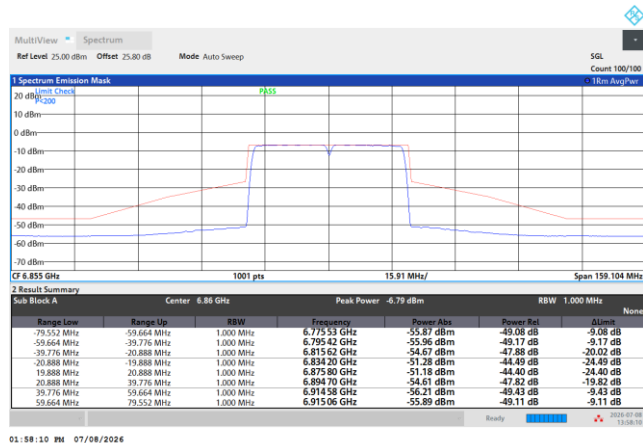
10:51:19 AM 07/08/2024

Plot on Channel 6685 MHz



11:30:19 AM 07/08/2024

Plot on Channel 6855 MHz



01:58:10 PM 07/08/2024



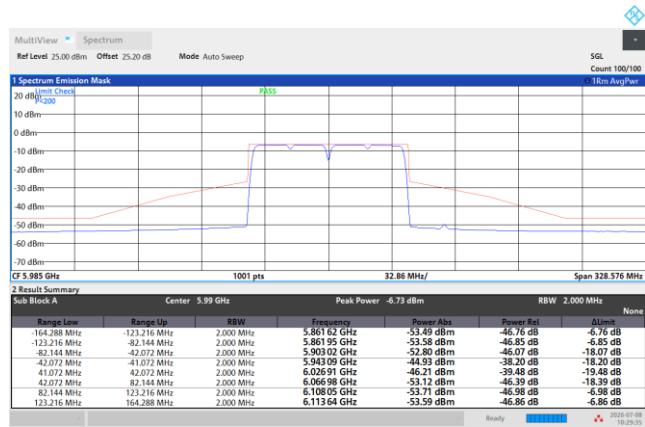
<Multiple Carrier, X1 mode>

EUT Mode

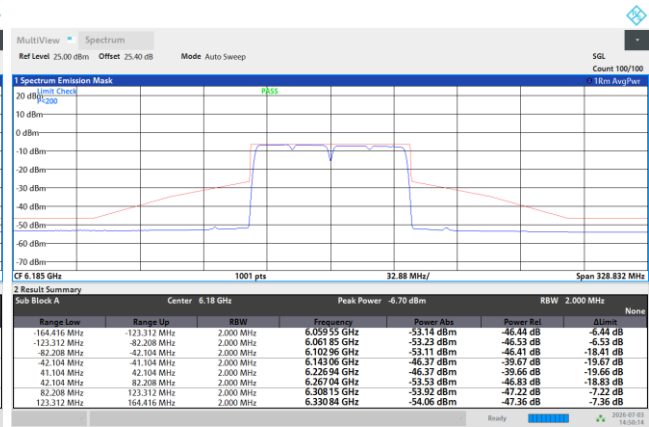
Contiguous 40MHz + 40MHz

Plot on Channel 5965 MHz + 6005 MHz

Plot on Channel 6165 MHz + 6205 MHz

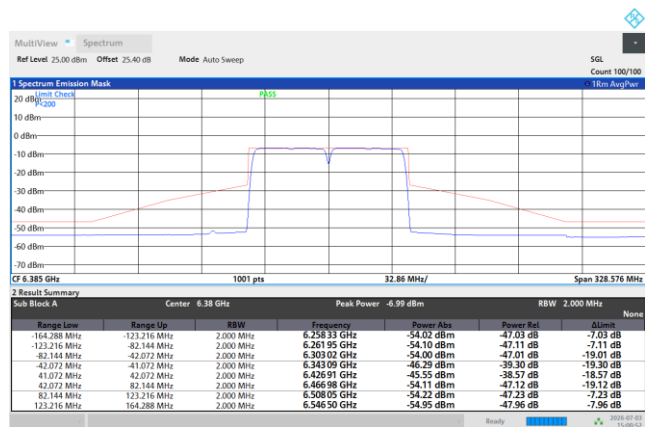


10:29:35 AM 07/08/2026



02:50:15 PM 07/03/2026

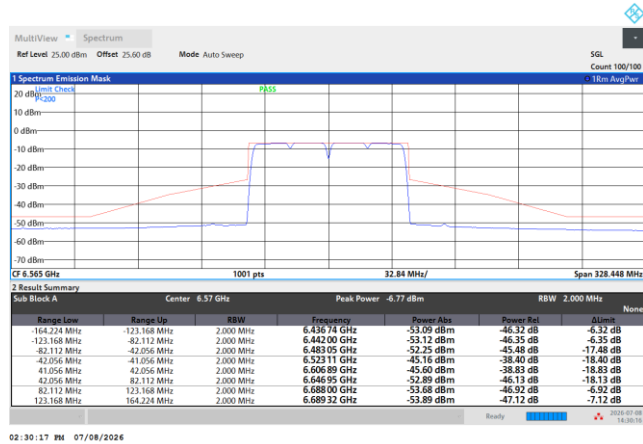
Plot on Channel 6365 MHz + 6405 MHz



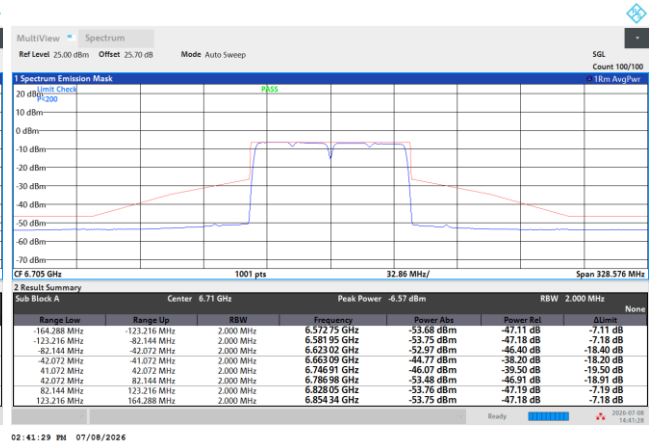
03:00:53 PM 07/03/2026



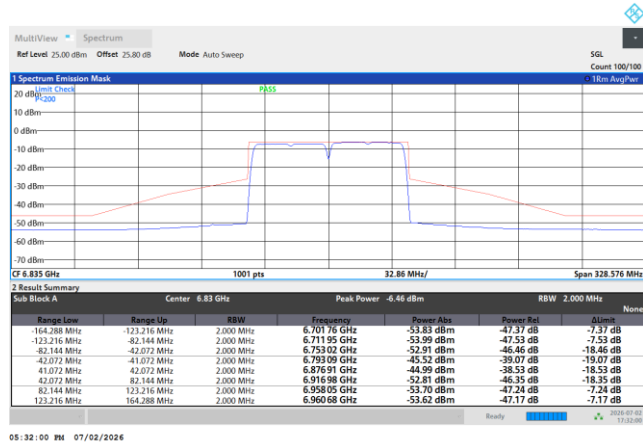
Plot on Channel 6545 MHz + 6585 MHz



Plot on Channel 6685 MHz + 6725 MHz



Plot on Channel 6815 MHz + 6855 MHz





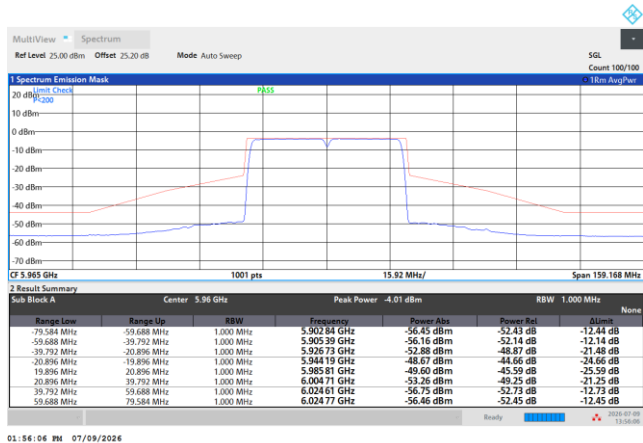
<Multiple Carrier, X2 mode>

EUT Mode

Contiguous 40MHz + 40MHz

<Carrier 2>

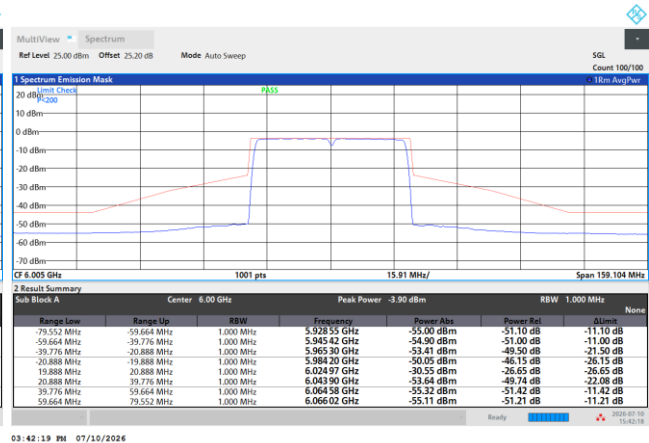
Plot on Channel 5965 MHz



01:56:06 PM 07/09/2026

<Carrier 3>

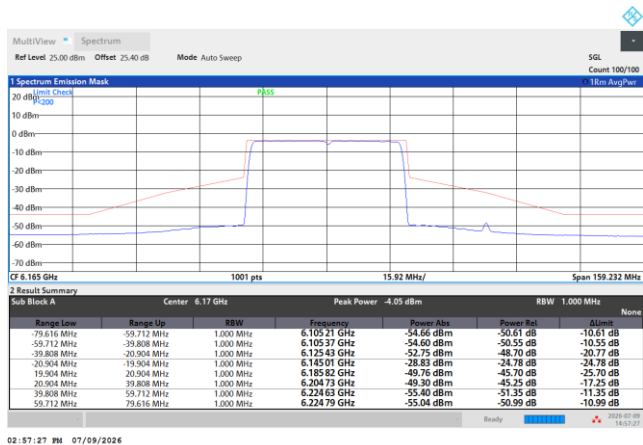
Plot on Channel 6005 MHz



03:42:19 PM 07/10/2026

<Carrier 2>

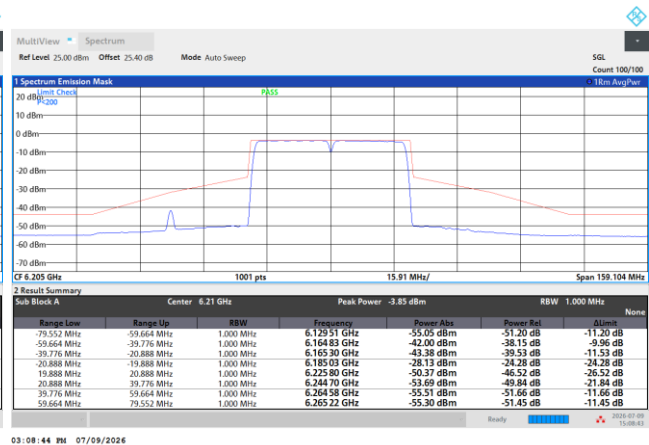
Plot on Channel 6165 MHz



02:57:27 PM 07/09/2026

<Carrier 3>

Plot on Channel 6205 MHz

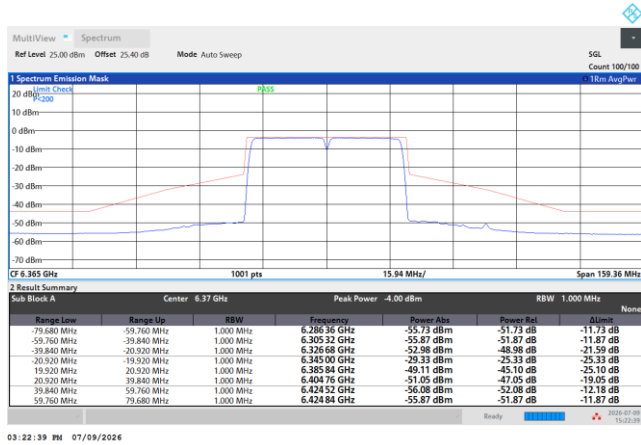


03:08:44 PM 07/09/2026



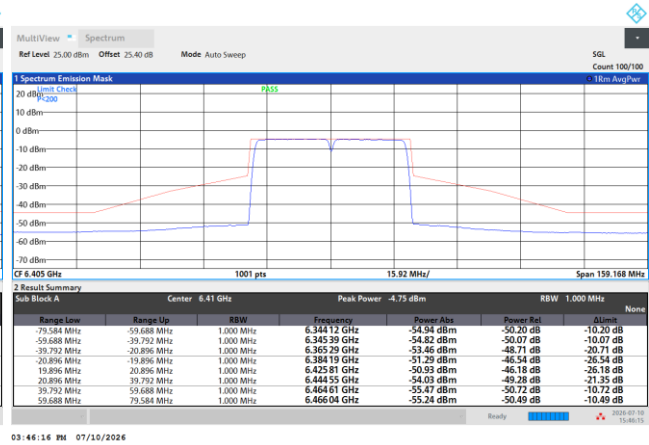
<Carrier 2>

Plot on Channel 6365 MHz



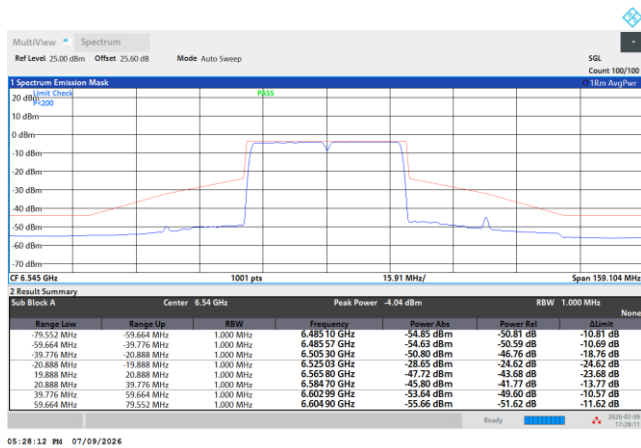
<Carrier 3>

Plot on Channel 6405 MHz



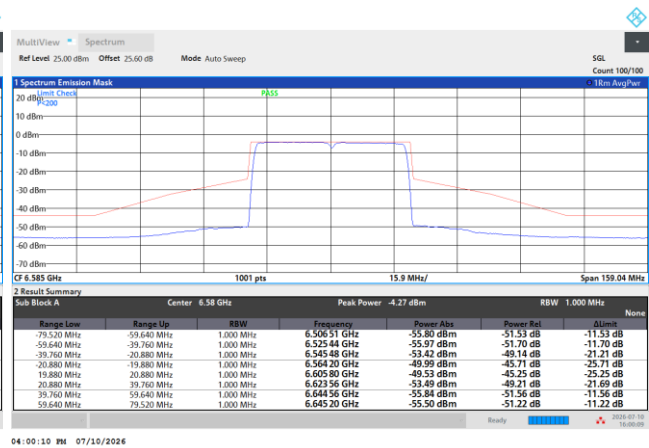
<Carrier 2>

Plot on Channel 6545 MHz



<Carrier 3>

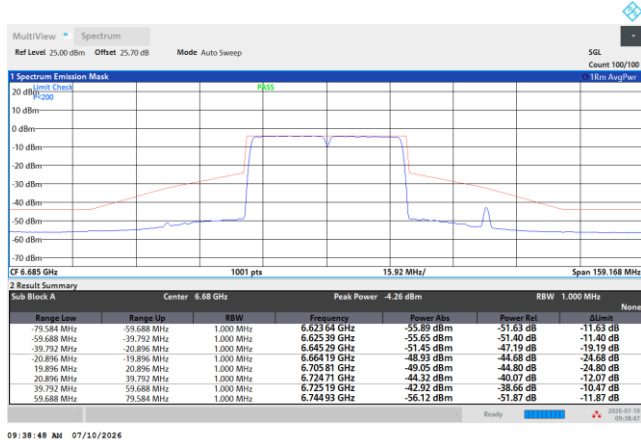
Plot on Channel 6585 MHz





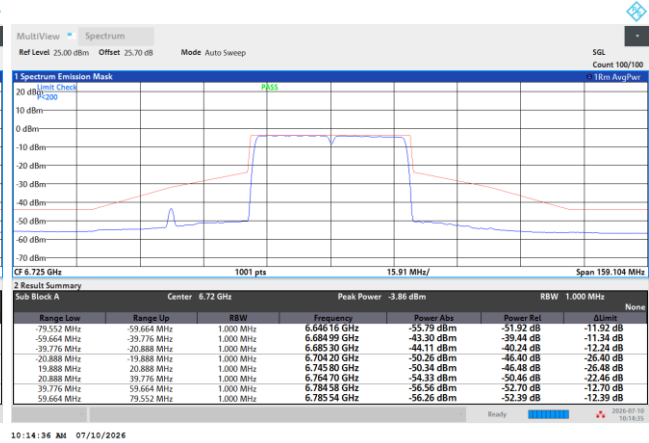
<Carrier 2>

Plot on Channel 6685 MHz



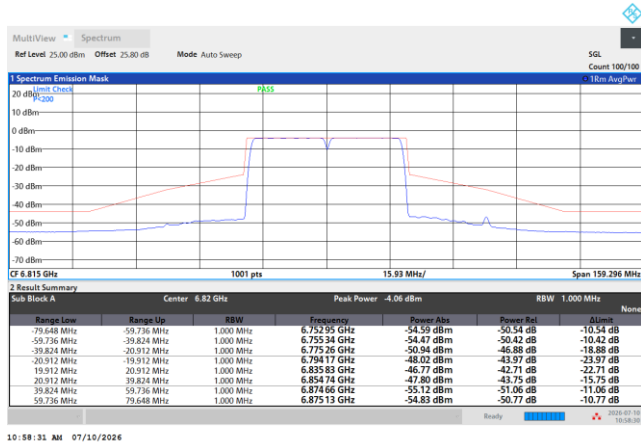
<Carrier 3>

Plot on Channel 6725 MHz



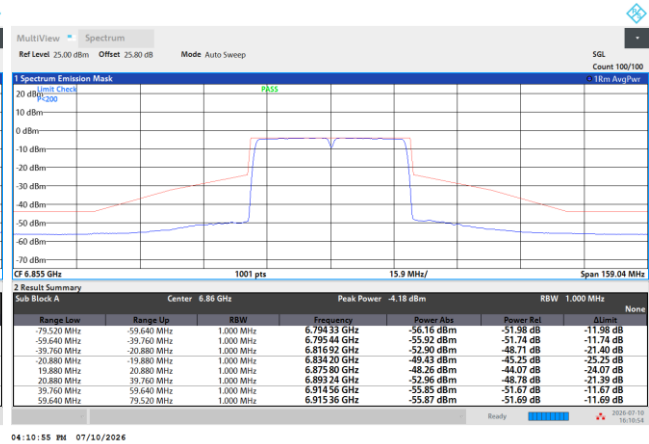
<Carrier 2>

Plot on Channel 6815 MHz



<Carrier 3>

Plot on Channel 6855 MHz





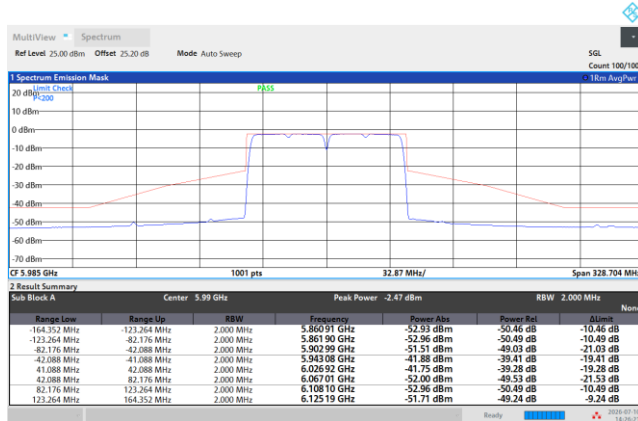
<Multiple Carrier, X2 mode>

EUT Mode

Contiguous 40MHz + 40MHz + 40MHz

<Carrier 1+3>

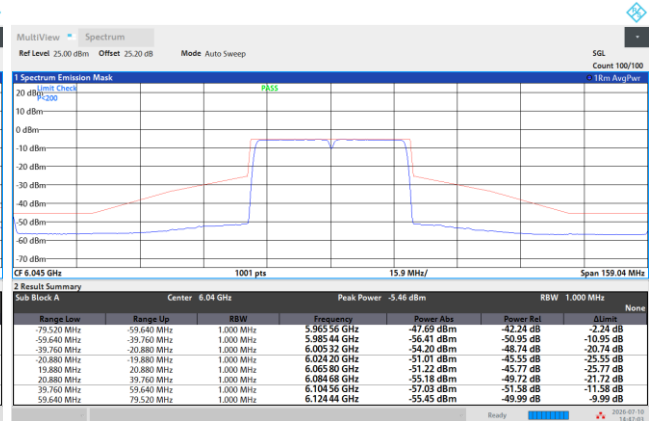
Plot on Channel 5965 MHz + 6005 MHz



02:26:22 PM 07/10/2026

<Carrier 2>

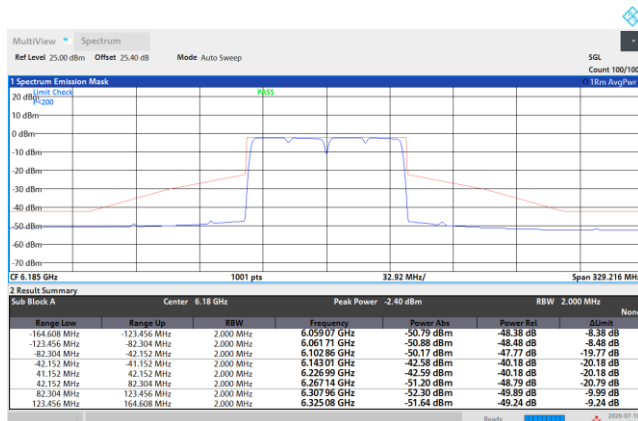
Plot on Channel 6045 MHz



02:47:04 PM 07/10/2026

<Carrier 1+3>

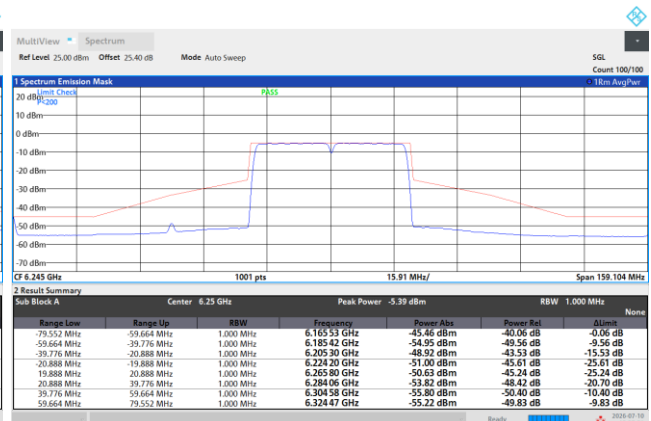
Plot on Channel 6165 MHz + 6205 MHz



03:17:24 PM 07/10/2026

<Carrier 2>

Plot on Channel 6245 MHz

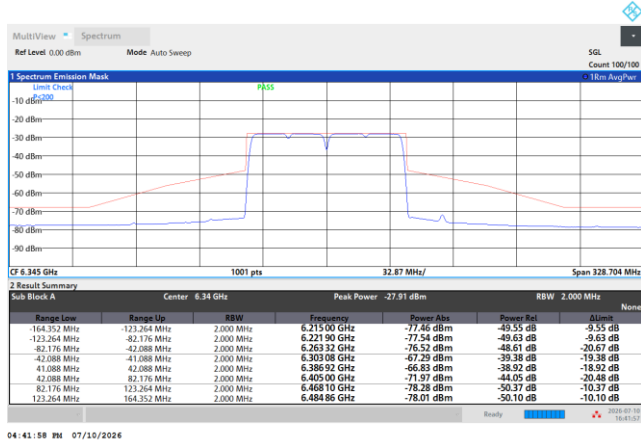


03:27:52 PM 07/10/2026



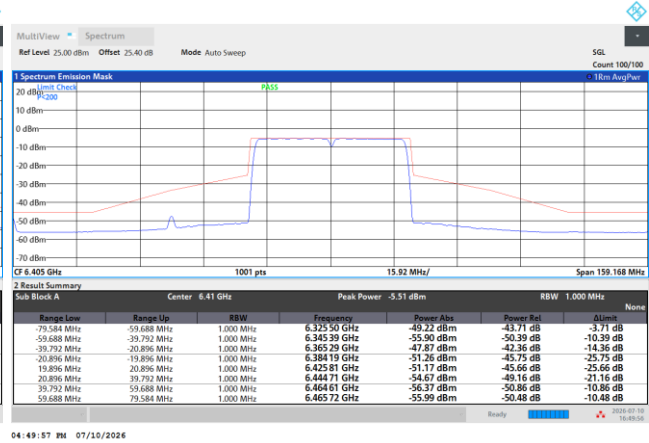
<Carrier 1+3>

Plot on Channel 6325 MHz + 6365 MHz



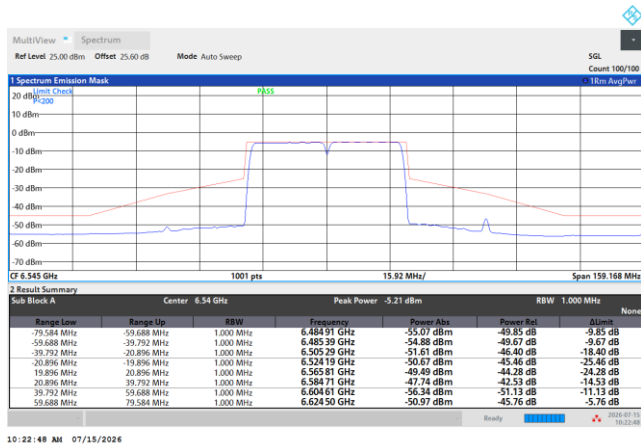
<Carrier 2>

Plot on Channel 6405 MHz



<Carrier 2>

Plot on Channel 6545 MHz



<Carrier 1+3>

Plot on Channel 6585 MHz + 6625 MHz

