



## RF MEASUREMENT REPORT

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**FCC ID:** HD5-EDA10A1  
**Applicant:** Honeywell International Inc  
**Product:** Tablet Computer  
**Model No.:** EDA10A-1  
**Brand Name:** Honeywell  
**FCC Rule(s):** Part 2, 22 (H), 24 (E), 27  
**Result:** Complies  
**Received Date:** 2025-04-09  
**Test Date:** 2025-04-17 ~ 2025-06-04

**Reviewed By:**

\_\_\_\_\_  
Ada Zhang

**Approved By:**

\_\_\_\_\_  
Robin Wu



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.26-2015. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

### Revision History

Report No.	Version	Description	Issue Date	Note
R25S1020041-U303	V01	Initial Report	2025-05-29	Invalid
R25S1020041-U303	V02	Update the specification information for EN-DC and the test data for n77(3450-3550 & 3700-3980MHz)	2025-06-05	Valid

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## 1. General Information

### 1.1. Applicant

Honeywell International Inc  
9680 Old Bailes Rd. Fort Mill, SC 29707 United States

## 1.2. Manufacturer

Honeywell International Inc  
9680 Old Bailes Rd. Fort Mill, SC 29707 United States

### 1.3. Testing Facility

<input checked="" type="checkbox"/>	<b>Test Site – MRT Suzhou Laboratory</b>
	<b>Laboratory Location (Suzhou - Wuzhong)</b> D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China
	<b>Laboratory Location (Suzhou - SIP)</b> 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China
	<b>Laboratory Location (Suzhou - Wujiang)</b> Building 1, No.1 Xingdong Road, Wujiang, Suzhou, Jiangsu, People's Republic of China
	<b>Laboratory Accreditations</b>
	A2LA: 3628.01 FCC: CN1166 VCCI: <input type="checkbox"/> R-20025 <input type="checkbox"/> G-20034 <input type="checkbox"/> C-20020 <input type="checkbox"/> T-20020 <input type="checkbox"/> R-20141 <input type="checkbox"/> G-20134 <input type="checkbox"/> C-20103 <input type="checkbox"/> T-20104
	CNAS: L10551 ISED: CN0001
<input type="checkbox"/>	<b>Test Site – MRT Shenzhen Laboratory</b>
	<b>Laboratory Location (Shenzhen)</b> 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China
	<b>Laboratory Accreditations</b>
	A2LA: 3628.02 FCC: CN1284
CNAS: L10551 ISED: CN0105	
<input type="checkbox"/>	<b>Test Site – MRT Taiwan Laboratory</b>
	<b>Laboratory Location (Taiwan)</b> No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)
	<b>Laboratory Accreditations</b>
	TAF: 3261 FCC: 291082, TW3261
ISED: TW3261	

#### 1.4. Product Information

Product Name	Tablet Computer
Model No.	EDA10A-1
Brand Name	Honeywell
IMEI	Conducted: 016393000871559 Conducted: 016393000871484 Radiated: 016393000793548
Bluetooth Specification	Dual mode v5.1
Wi-Fi Specification	802.11a/b/g/n/ac/ax/VHT
NFC Specification	13.56MHz
GNSS Specification	GPS, Beidou, Glonass, Galileo
3GPP Specification	GSM 850/PCS 1900 WCDMA Band: II/IV/V LTE Band: 2/4/5/7/12/13/17/25/26/66/38/41/42/43 NR SA Band: n2/5/7/25/26/38/41/66/77/78 NR NSA Band: EN_DC_2A_n77A/ EN_DC_5A_n77A/ EN_DC_7A_n77A/ EN_DC_41A_n77A/ EN_DC_66A_n77A EN_DC_2A_n78A/ EN_DC_5A_n78A/ EN_DC_7A_n78A/ EN_DC_26A_n78A / EN_DC_38A_n78A / EN_DC_41A_n78A/ EN_DC_66A_n78A
Antenna Specification	Refer to clause 1.6
Operating Temp.	-20 ~ 50°C
Power Type	By Rechargeable Li-ion Battery
Accessory	
Rechargeable Li-ion Battery	Model: BAT-EDA10A Nominal Voltage: 3.85Vdc Rated Capacity: 8000mAh Limited Charging Voltage: 4.4Vdc Rated Energy: 30.80Wh
Note: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer.	

### 1.5. Radio Specification under Testing

Single Band	n2, n5, n7, n25, n26, n38, n41, n66, n77, n78
EN-DC Band	DC_7A-n77A, DC_7A-n78A
Support Power Class	PC3: n2, n5, n7, n25, n26, n38, n41, n66, n77, n78 (SA) PC2: n41, n78 (SA)
FDD TX Frequency Range	n2: 1850 ~ 1910 MHz; n5: 824 ~ 849 MHz; n7: 2500 ~ 2570 MHz n25: 1850 ~ 1915 MHz; n26: 824-849 MHz; n66: 1710 ~ 1780 MHz
FDD RX Frequency Range	n2: 1930 ~ 1990 MHz; n5: 869 ~ 894 MHz; n7: 2620 ~ 2690 MHz n25: 1930 ~ 1995 MHz; n26: 869-894 MHz; n66: 2110 ~ 2180 MHz
TDD Frequency Range	n38: 2570 ~ 2620 MHz; n41: 2496 ~ 2690 MHz n77: 3450 ~ 3550MHz & 3700 ~ 3980MHz n78: 3450 ~ 3550MHz & 3700 ~ 3800MHz
Support Bandwidth	n2, n5, n7, n25, n26, n66: 5, 10, 15, 20MHz n38: 20, 30, 40MHz n41: 20, 30, 40, 50, 60, 80, 90, 100MHz n77: 20, 30, 40, 60, 80, 100MHz n78: 20, 30, 40, 50, 60, 70, 80, 90, 100MHz
SCS for NR cell	FDD Band: 15kHz; TDD Band: 30kHz
Modulation	UL & DL up to 256QAM

### 1.6. Description of Available Antennas

Technology	Frequency Range (MHz)	Antenna Type	Max Peak Gain (dBi)
n2	1850 ~ 1910	PIFA Antenna	-1.30
n5	824 ~ 849		-1.50
n7	2500 ~ 2570		4.80
n25	1850 ~ 1915		-1.30
n26	824 ~ 849		-1.50
n38	2570 ~ 2620		5.50
n41	2496 ~ 2690		6.00
n66	1710 ~ 1780		-2.70
n77	3450 ~ 3550		4.30
n77	3700 ~ 3800		6.10
n77	3800 ~ 3980		6.10
n78	3450 ~ 3550		4.30
n78	3700 ~ 3800		6.10
Note: All antenna information (Antenna type and Peak Gain) is provided by the manufacturer.			

### **1.7. Test Methodology**

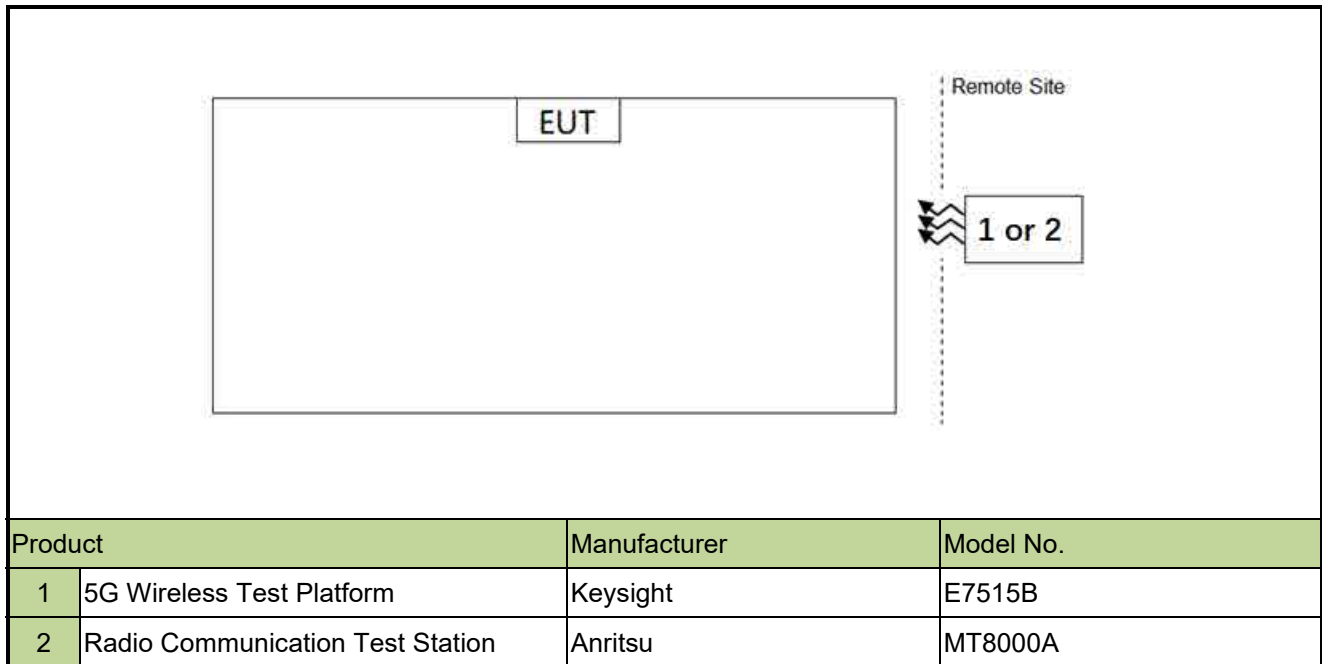
According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 22, Part 24, Part 27
- FCC KDB 971168 D01 v03r01: Power Meas License Digital Systems
- FCC KDB 971168 D02 v02r02: Misc Rev Approv License Devices
- FCC KDB 412172 D01 v01r01: Determining ERP and EIRP
- FCC KDB 662911 D01 v02r01: Multiple Transmitter Output



## 2. Test Configuration

### 2.1. Test System Connection Diagram



### 2.2. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20% ~ 75%RH

### 3. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
5G Wireless Test Platform	Keysight	E7515B	MRTSUE06956	1 year	2026-03-18	SIP-SR1
Low-Profile Modular Power System Mainframe	Keysight	N6700C	MRTSUE06907	N/A	N/A	SIP-SR1
FR1 Switching Unit	Keysight	C8880A	MRTSUE06908	N/A	N/A	SIP-SR1
Signal Analyzer	Keysight	N9021B	MRTSUE06915	1 year	2025-05-08	SIP-SR1
				1 year	2026-04-26	SIP-SR1
Temperature Chamber	BAOYT	BYG-80CL	MRTSUE06932	1 year	2026-01-21	SIP-SR1
Shielding Room	MIX-BEP	SIP-SR1	MRTSUE06948	N/A	N/A	SIP-SR1
Attenuator	MVE	MVE2213	MRTSUE11056	1 year	2025-06-06	SIP-SR1
Directional Coupler	MVE	MVE4816-10	MRTSUE11120	1 year	2025-08-23	SIP-SR1
5G Wireless Test Platform	Keysight	E7515B	MRTSUE06942	1 year	2026-01-21	WZ-TR3
Radio Communication Test Station	Anritsu	MT8000A	MRTSUE06961	1 year	2025-06-03	WZ-TR3
Temperature Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2025-09-02	WZ-TR3
Directional Coupler	MVE	MVE4912-10	MRTSUE07051	1 year	2025-08-22	WZ-TR3
Attenuator	MVE	MVE2213	MRTSUE11093	1 year	2025-06-05	WZ-TR3
5G Wireless Test Platform	Keysight	E7515B	MRTSUE06942	1 year	2026-01-21	WJ-SR11
Signal Analyzer	Keysight	N9020B	MRTSUE06583	1 year	2025-12-23	WJ-SR11
Radio Communication Test Station	Anritsu	MT8000A	MRTSUE06961	1 year	2025-06-03	WJ-SR11
Shielding Room	TDK	WJ-SR11	MRTSUE07133	N/A	N/A	WJ-SR11
Thermohygrometer	testo	608-H1	MRTSUE11314	1 year	2026-03-26	WJ-SR11
Directional Coupler	MVE	MVE4912-10	MRTSUE07051	1 year	2025-08-22	WJ-SR11
Attenuator	MVE	MVE2213	MRTSUE11093	1 year	2025-06-05	WJ-SR11
Active Loop Antenna	Schwarzbeck	FMZB 1519-60 D	MRTSUE07076	1 year	2025-11-19	WJ-AC2
TRILOG Broad Band Antenna	Schwarzbeck	VULB 9163	MRTSUE07097	1 year	2025-04-24	WJ-AC2
				1 year	2026-04-20	WJ-AC2
Broadband Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE07100	1 year	2025-04-24	WJ-AC2
				1 year	2026-04-10	WJ-AC2
Preamplifier	EMCI	EMC118A45SE	MRTSUE07102	1 year	2026-04-09	WJ-AC2
Preamplifier	EMCI	EMC184045SE	MRTSUE07103	1 year	2026-04-09	WJ-AC2
Horn Antenna	RFSPIN	DRH18-E	MRTSUE07105	1 year	2025-05-12	WJ-AC2
				1 year	2026-05-12	WJ-AC2

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
EMI Test Receiver	R&S	ESR3	MRTSUE07111	1 year	2026-03-24	WJ-AC2
Anechoic Chamber	TDK	WJ-AC2	MRTSUE07117	1 year	2025-05-14	WJ-AC2
				1 year	2026-05-12	WJ-AC2
EXA Signal Analyzer	Keysight	N9010B	MRTSUE07147	1 year	2025-11-06	WJ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11315	1 year	2025-06-24	WJ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11332	1 year	2025-06-24	WJ-AC2

Software	Version	Function
UCTS	V 6.24.0705.0	license 3G & 4G & 5G
e3	230711	RE & CE
CONTROLLER CO3000	v 1.03.02	RE Antenna & Turntable

## 4. Decision Rules and Measurement Uncertainty

### 4.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2.  
(Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

### 4.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k = 2$ .

Radiated Spurious Emissions	
Measurement Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ):	
Coaxial:	9kHz~30MHz: 2.35dB
Coplanar:	9kHz~30MHz: 2.37dB
Horizontal:	30MHz~200MHz: 3.46dB
	200MHz~1GHz: 3.78dB
	1GHz~40GHz: 4.97dB
Vertical:	30MHz~200MHz: 4.07dB
	200MHz~1GHz: 5.28dB
	1GHz~40GHz: 4.78dB
Conducted Spurious Emissions	
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ):	
1.47dB	
Output Power	
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ):	
0.66dB	
Occupied Bandwidth	
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ):	
69.28kHz	
Frequency Stability	
Measuring Uncertainty for a Level of Confidence of 95% ( $U=2U_c(y)$ ):	
8.04Hz	

## 5. Test Result

### 5.1. Summary

FCC Part Section(s)	Test Description	Test Condition	Test Result
2.1049	Occupied Bandwidth	Conducted	Pass
2.1055, 22.355, 24.235, 27.54	Frequency Stability		Pass
22.913(a)(5), 24.232(c) 27.50 (d)(4) (h)(2) (j)(3)(k)(3)	Equivalent (Isotropic) Radiated Power		Pass
22.913(d), 24.232(d) 27.50(d)(5) (j)(4)(k)(4)	Peak-to-Average Ratio		Pass
2.1051, 22.917(a), 24.238(a) 27.53(h) (l)(2) (m)(4) (n)(2)	Transmitter unwanted emissions (band-edge)		Pass
2.1051, 22.917(a), 24.238(a) 27.53(h) (l)(2) (m)(4) (n)(2)	Transmitter unwanted emissions (spurious)		
2.1053, 2.1051, 22.917(a), 24.238(a) 27.53(h) (l)(2) (m)(4) (n)(2)	Transmitter Spurious Emissions	Radiated	Pass

#### Notes:

- 1) The analyzer plots shown in this section were captured using a correction table to account for cable and attenuator losses in the system connecting the EUT to the analyzer across relevant frequencies.
- 2) All supported modulation types were evaluated, and the worst-case emission from modulation types was selected. Therefore, the worst-case results for Frequency Stability, Channel Band Edge, Conducted Spurious Emission, and Radiated Spurious Emission were presented in the test report.
- 3) For the radiated emission tests, each axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.
- 4) n25 (1850 ~ 1915 MHz) overlaps the entire frequency range of n2 (1850 ~ 1910 MHz). Therefore, the test data provided in this report covers n2 as well as n25.
- 5) n26 (824 ~ 849 MHz) overlaps the entire frequency range of n5 (824 ~ 849 MHz). Therefore, the test data provided in this report covers n5 as well as n26.
- 6) n41 (2496 ~ 2690 MHz) overlaps the entire frequency range of n38 (2570 ~ 2620 MHz). Therefore, the test data provided in this report covers n38 as well as n41.
- 7) n78 (3450 ~ 3550 MHz & 3700 ~ 3800 MHz) overlaps the entire frequency range of n77 (3450 ~ 3550 MHz & 3700 ~ 3800 MHz). Therefore, test data provided in this report covers n77 as well as n78.
- 8) The worst-case scenario for all measurements is based on an engineering evaluation, with QPSK observed as the worst modulation and applied to both conducted and radiated tests. Output power measurements were taken for PI/2 BPSK, QPSK, 16QAM, 64QAM, and 256QAM modulations.
- 9) The power of SA mode and EN-DC mode was investigated, and SA mode was identified as the worst case. This report only provides coexistence spurious emissions for EN-DC mode. For each NR band,

only one inter-band EN-DC configuration was selected for evaluation.

- 10) For n77 (3700-3800), only power and OBW were evaluated; all other test items shared the test data from n78 (3700-3800) \_PC2

## 5.2. Occupied Bandwidth Measurement

### 5.2.1. Test Limit

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured.

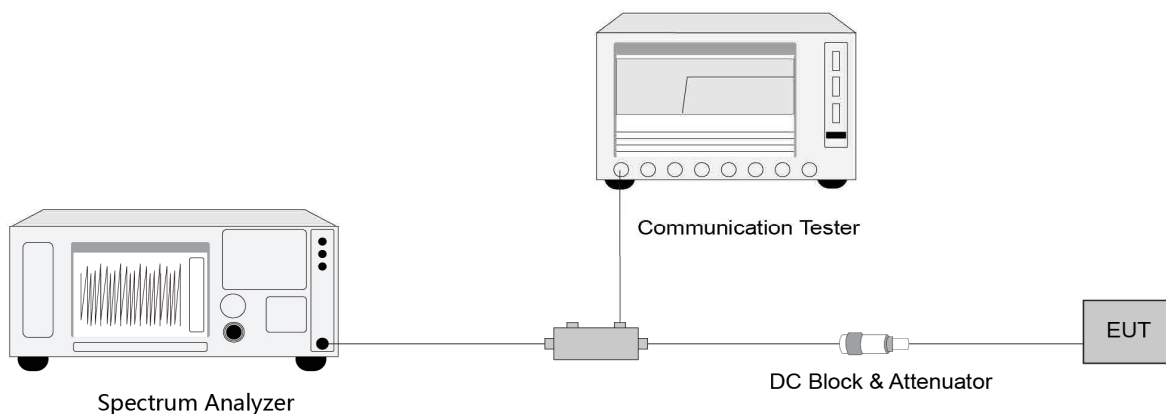
### 5.2.2. Test Procedure

ANSI C63.26-2015 - Section 5.4.4

### 5.2.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency
2. RBW = The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW
3. VBW  $\geq 3 \times$  RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. Allow the trace to stabilize
8. Use the 99% power bandwidth function of the instrument and report the measured bandwidth.

### 5.2.4. Test Setup



### 5.2.5. Test Result

Refer to Appendix A.1.

### **5.3. Frequency Stability Measurement**

#### **5.3.1. Test Limit**

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5\text{ppm}$ ) of the center frequency.

#### **5.3.2. Test Procedure**

ANSI C63.26-2015 - Section 5.6

#### **5.3.3. Test Setting**

1. A reference point shall be established at the applicable unwanted emissions limit using a RBW equal to the RBW required by the unwanted emissions specification of the applicable regulatory standard. These reference points measured using the lowest and highest channel of operation shall be identified as  $f_L$  and  $f_H$  respectively.
2. Use the frequency error function of the instrument and record the frequency error.
3. Change the temperature of equipment and repeat Steps 2.
4. Change the Voltage of equipment and repeat Steps 2.
5. The frequency error offset determined in the above methods shall be added or subtracted from the values of  $f_L$  and  $f_H$  and the resulting frequencies must remain within the band

#### **Frequency Stability Under Temperature Variations:**

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

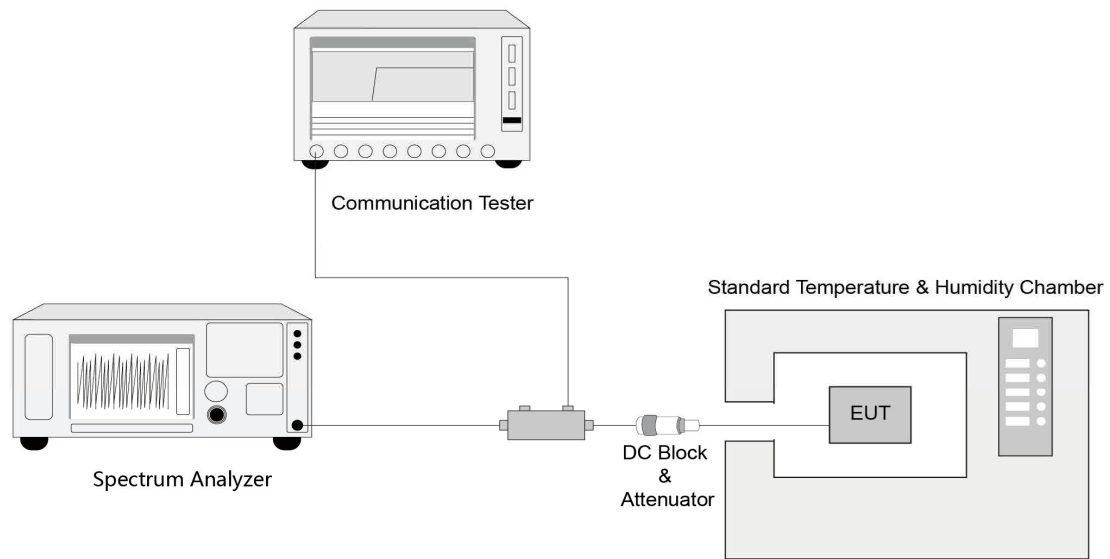
#### **Frequency Stability Under Voltage Variations:**

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ( $\pm 15\%$ ) and endpoint, record the maximum frequency change.



#### 5.3.4. Test Setup



#### 5.3.5. Test Result

Refer to Appendix A.2.

#### **5.4. Equivalent Isotropically Radiated Power Measurement**

##### **5.4.1. Test Limit**

###### n2/25:

Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

###### n66:

Fixed, mobile stations operating in the 1710-1755 MHz band and mobile in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

###### n5/26:

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

###### Band 12, 13, 17:

Control stations and mobile stations transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 30 watts ERP.

Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP.

###### n7/38/41:

Mobile stations are limited to 2.0 watts EIRP.

###### n77/78 (3450~3550MHz):

Mobile and portable stations are limited to 1 Watt EIRP.

###### n77/78 (3700~3980MHz):

Mobile devices are limited to 1 Watt (30 dBm) EIRP.

##### **5.4.2. Test Procedure**

ANSI C63.26-2015 - Section 5.2.4.2

### 5.4.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T$$

where

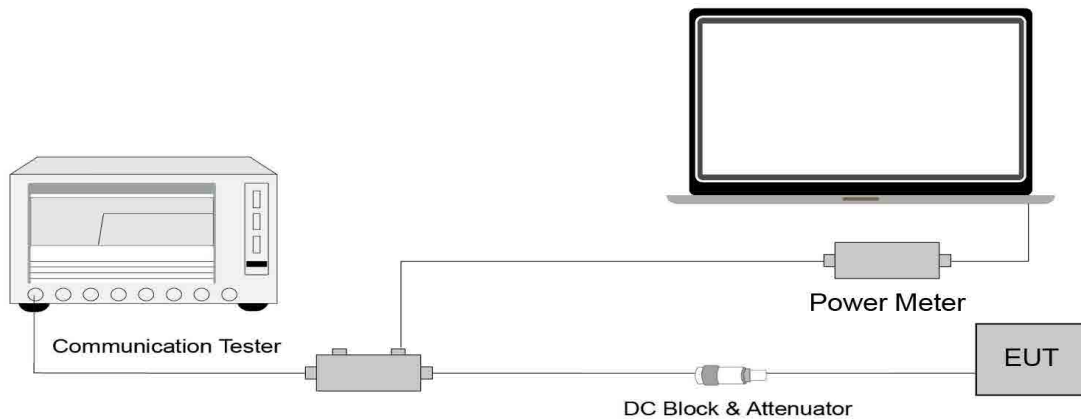
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as  $P_{\text{Meas}}$ , e.g., dBm or dBW)

$P_{\text{Meas}}$  measured transmitter output power or PSD, in dBm or dBW

$G_T$  gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

$$\text{ERP} = \text{EIRP} - 2.15$$

### 5.4.4. Test Setup



### 5.4.5. Test Result

Refer to Appendix A.3.

## 5.5. Peak-to-Average Ratio Measurement

### 5.5.1. Test Limit

The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB.

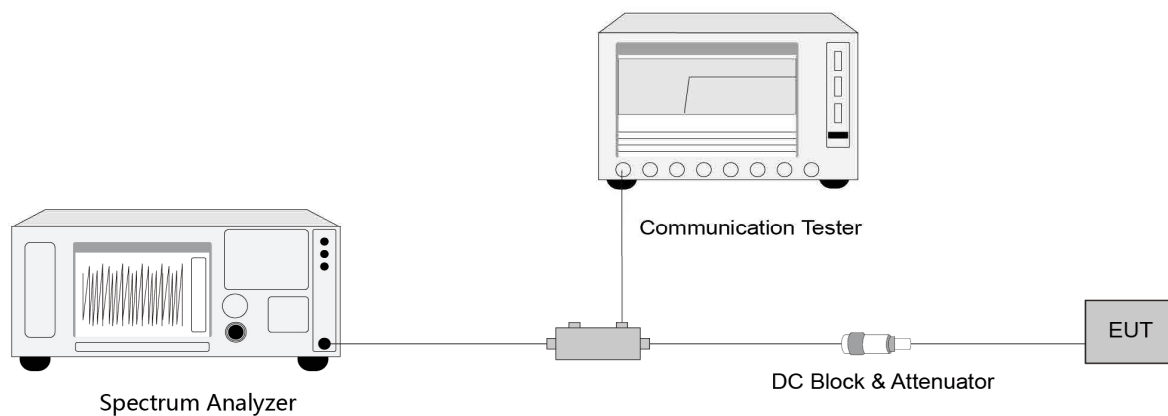
### 5.5.2. Test Procedure

ANSI C63.26-2015 - Section 5.2.3.4 (CCDF).

### 5.5.3. Test Setting

1. Set the resolution / measurement bandwidth  $\geq$  signal's occupied bandwidth
2. Set the number of counts to a value that stabilizes the measured CCDF curve
3. Record the maximum PARR level associated with a probability of 0.1%

### 5.5.4. Test Setup



### 5.5.5. Test Result

Refer to Appendix A.4

## **5.6. Conducted Band-Edge Measurement**

### **5.6.1. Test Limit**

22.917(a), 24.238 (a), 27.53 (h)(n)(2)(l)(2)

For operations in the 824 ~ 849 MHz, 1850 ~ 1910 MHz, 1930 ~ 1990 MHz, 600MHz & 698 ~ 746 MHz and 1710 ~ 1755 MHz, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than  $40 + 10 \log(P)$  dB on all frequencies between the channel edge and 5 megahertz from the channel edge,  $43 + 10 \log(P)$  dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and  $55 + 10 \log(P)$  dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than  $43 + 10 \log(P)$  dB on all frequencies between 2490.5 MHz and 2496 MHz and  $55 + 10 \log(P)$  dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

### **5.6.2. Test Procedure**

ANSI C63.26-2015 - Section 5.7

### **5.6.3. Test Setting**

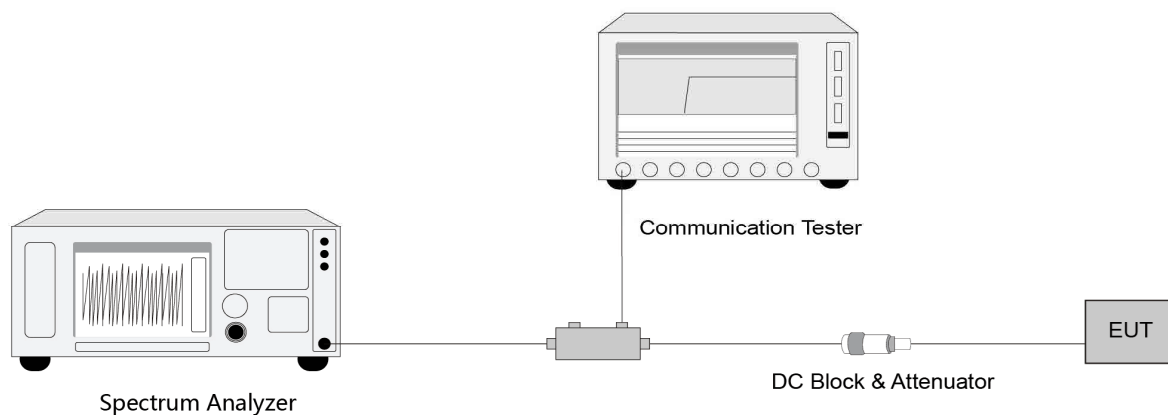
1. Set the analyzer frequency to Low or High channel
2. RBW = specified resolution bandwidth, for improvement of the accuracy in the measurement of the average power of a noise-like emission, a RBW narrower than the specified reference bandwidth can be used (generally limited to no less than 1% of the frequency block group, provided that a subsequent integration is performed over the full required measurement bandwidth. This integration should be performed using the spectrum analyzer's band power functions.
3.  $VBW \geq 3 \cdot RBW$
4. Sweep time = auto
5. Detector = power averaging (rms)
6. If the EUT can be configured to transmit continuously, then set the trigger to free run
7. If the EUT cannot be configured to transmit continuously, then use a sweep trigger with the level set to

enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Verify that the sweep time is less than or equal to the transmission burst duration.

Time gating can also be used under similar constraints

8. Compute the power by integrating the spectrum across the specified resolution bandwidth using the instrument's band or channel power measurement function, with the band/channel limits set equal to the specified resolution bandwidth, when using a measurement bandwidth smaller than the specified bandwidth. Otherwise, Use the peak marker function to determine the maximum amplitude level.

#### 5.6.4. Test Setup



#### 5.6.5. Test Result

Refer to Appendix A.5.

## **5.7. Conducted Spurious Emissions Measurement**

### **5.7.1. Test Limit**

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10<sup>th</sup> harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

For n7, n38, n41 the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $55 + 10 \log(P)$  dB.

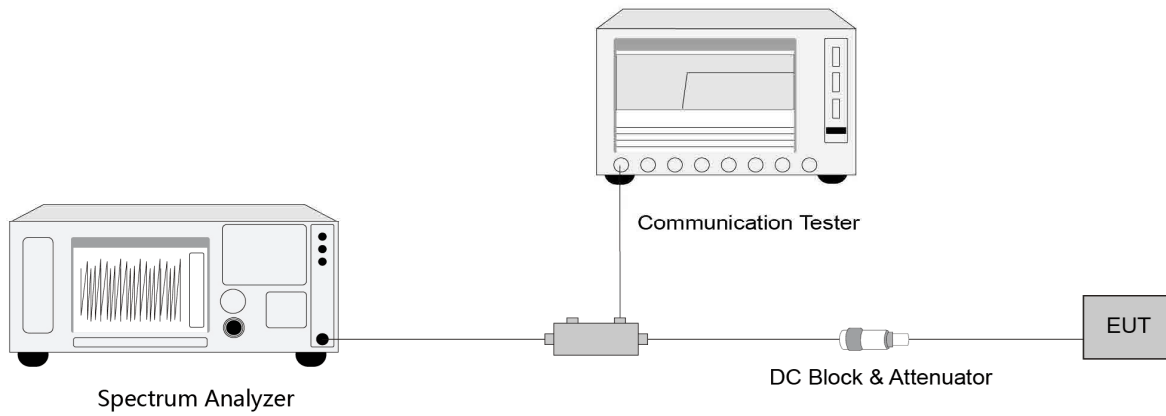
### **5.7.2. Test Procedure**

ANSI C63.26-2015 - Section 5.7

### **5.7.3. Test Setting**

1. Set the analyzer frequency to low, Mid or high channel.
2. RBW = specified resolution bandwidth
3. VBW  $\geq 3 \times$  RBW
4. Sweep time = auto
5. Detector = power averaging (rms)
6. If the EUT can be configured to transmit continuously, then set the trigger to free run
7. If the EUT cannot be configured to transmit continuously, then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Verify that the sweep time is less than or equal to the transmission burst duration.  
  
Time gating can also be used under similar constraints
8. Use the peak marker function to determine the maximum amplitude level.

#### 5.7.4. Test Setup



#### 5.7.5. Test Result

Refer to Appendix A.6



## **5.8. Radiated Spurious Emissions Measurement**

### **5.8.1. Test Limit**

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB. The emission limit equal to -13dBm.

For n7, n38, n41 the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $55 + 10 \log(P)$  dB. The emission limit equal to -25dBm.

$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20 \log D + 104.8$ ; where D is the measurement distance in meters. The emission limit equal to 82.3dB $\mu$ V/m or 70.3dB $\mu$ V/m.

### **5.8.2. Test Procedure**

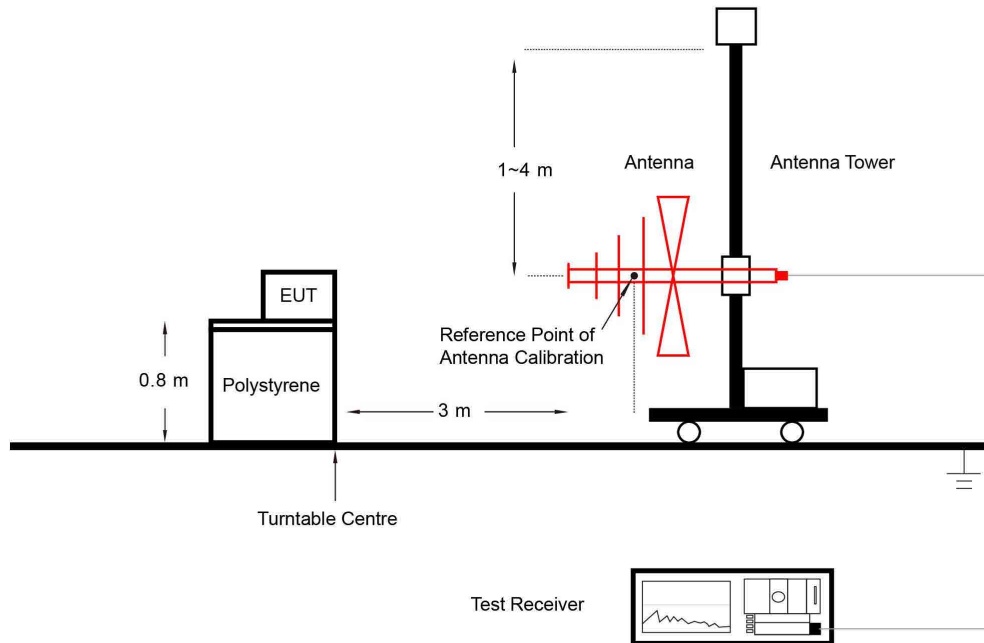
ANSI C63.26-2015 - Section 5.2.7 & 5.5

### **5.8.3. Test Setting**

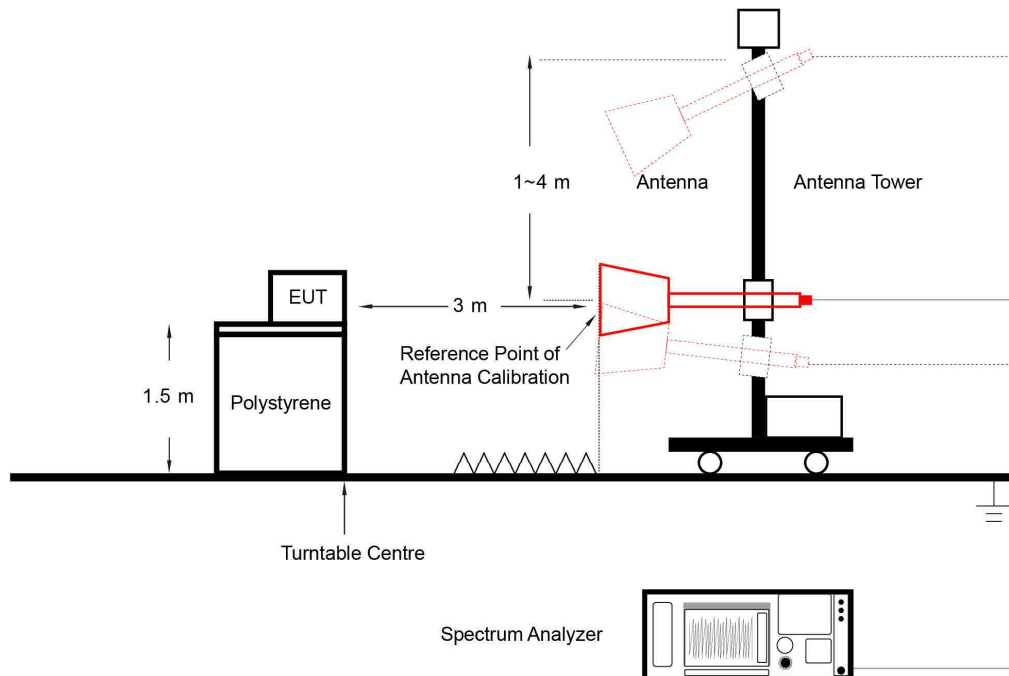
1. RBW = 120kHz or 1MHz
2. VBW  $\geq 3 \times$  RBW
3. Sweep time  $\geq 10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})$
4. Detector = CISPR quasi-peak / average detector (Below 1 GHz, compliance with the limits shall be demonstrated using a CISPR quasi-peak detector and the related measurement bandwidth. Above 1 GHz, compliance with the limits shall be demonstrated using a linear average detector with a minimum resolution bandwidth of 1 MHz.)
5. The trace was allowed to stabilize

#### 5.8.4. Test Setup

##### Below 1GHz Test Setup:



##### Above 1GHz Test Setup:



#### 5.8.5. Test Result

Refer to Appendix A.7.

## Appendix A - Test Result

### A.1 Occupied Bandwidth Test Result

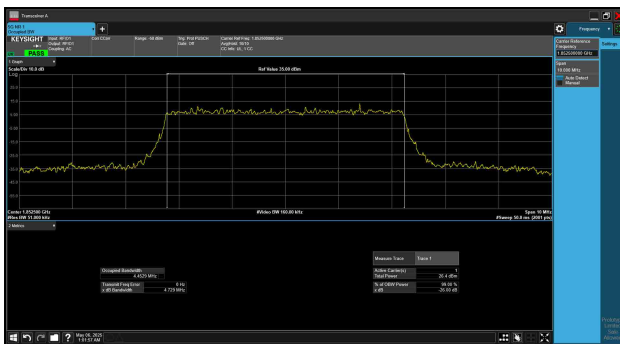
Test Site	WJ-SR11 & SIP-SR1	Test Engineer	Lucas Wang & Yoniter Yang
Test Date	2025-05-06 ~ 2025-05-14	Test Band	n2/25

Bandwidth (MHz)	RB Size	RB Offset	Frequency (MHz)	99% Bandwidth (MHz)
QPSK				
5	Full RB	0	1852.5	4.4529
	Full RB	0	1882.5	4.4745
	Full RB	0	1912.5	4.4610
10	Full RB	0	1855	9.2664
	Full RB	0	1882.5	9.3015
	Full RB	0	1910	9.2698
15	Full RB	0	1857.5	14.076
	Full RB	0	1882.5	14.081
	Full RB	0	1907.5	14.053
20	Full RB	0	1860	18.895
	Full RB	0	1882.5	18.929
	Full RB	0	1905	18.889
20	1 RB	0	1860	0.25173
	1 RB	0	1882.5	0.27340
	1 RB	105	1905	0.22762
16QAM				
5	Full RB	0	1852.5	4.4848
	Full RB	0	1882.5	4.4809
	Full RB	0	1912.5	4.4823
10	Full RB	0	1855	9.2645
	Full RB	0	1882.5	9.2801
	Full RB	0	1910	9.2498
15	Full RB	0	1857.5	14.050
	Full RB	0	1882.5	14.053
	Full RB	0	1907.5	14.048
20	Full RB	0	1860	18.845
	Full RB	0	1882.5	18.887
	Full RB	0	1905	18.891

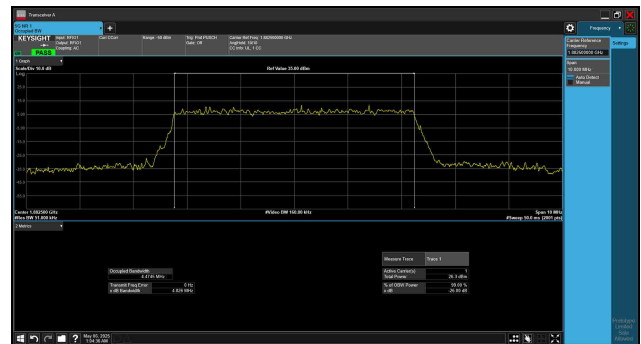
64QAM				
5	Full RB	0	1852.5	4.4634
	Full RB	0	1882.5	4.4820
	Full RB	0	1912.5	4.4527
10	Full RB	0	1855	9.2421
	Full RB	0	1882.5	9.2410
	Full RB	0	1910	9.2287
15	Full RB	0	1857.5	14.081
	Full RB	0	1882.5	14.100
	Full RB	0	1907.5	14.079
20	Full RB	0	1860	18.894
	Full RB	0	1882.5	18.888
	Full RB	0	1905	18.898
256QAM				
5	Full RB	0	1852.5	4.4730
	Full RB	0	1882.5	4.4737
	Full RB	0	1912.5	4.4629
10	Full RB	0	1855	9.2638
	Full RB	0	1882.5	9.3018
	Full RB	0	1910	9.2673
15	Full RB	0	1857.5	14.110
	Full RB	0	1882.5	14.134
	Full RB	0	1907.5	14.103
20	Full RB	0	1860	18.858
	Full RB	0	1882.5	18.884
	Full RB	0	1905	18.925

## 99% Bandwidth – 5MHz – QPSK Full RB

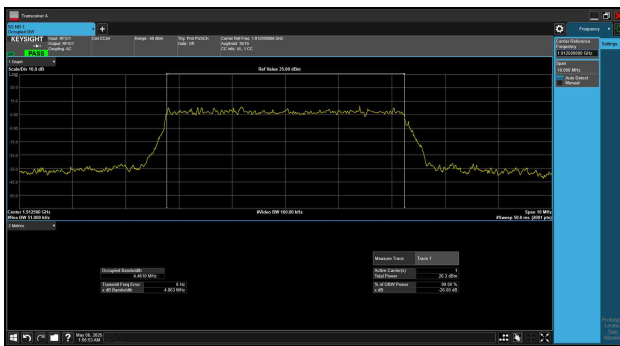
## Low Channel



## Middle Channel

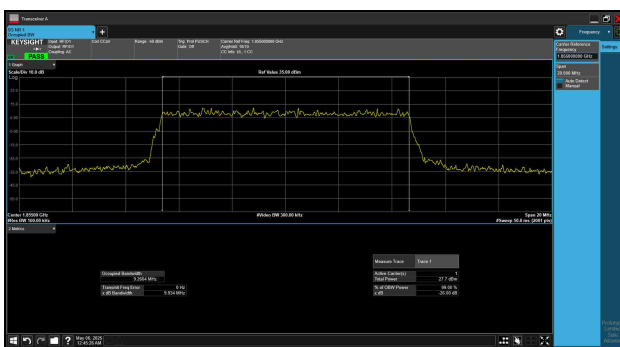


## High Channel

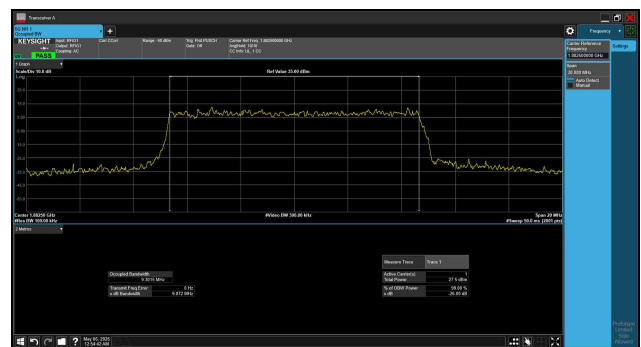


## 99% Bandwidth – 10MHz – QPSK Full RB

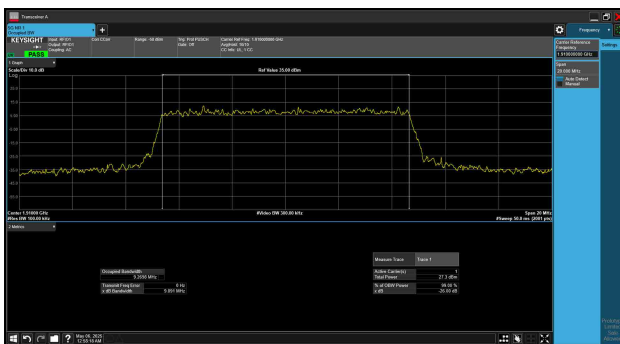
## Low Channel



## Middle Channel

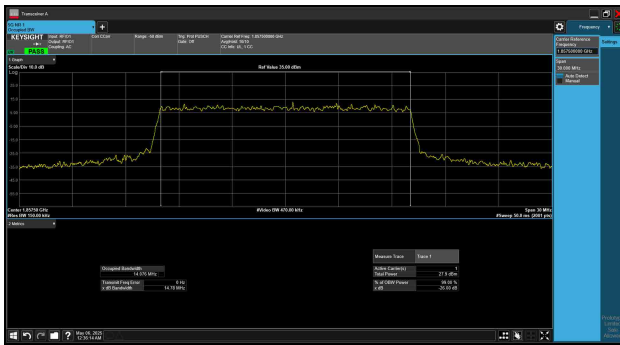


## High Channel

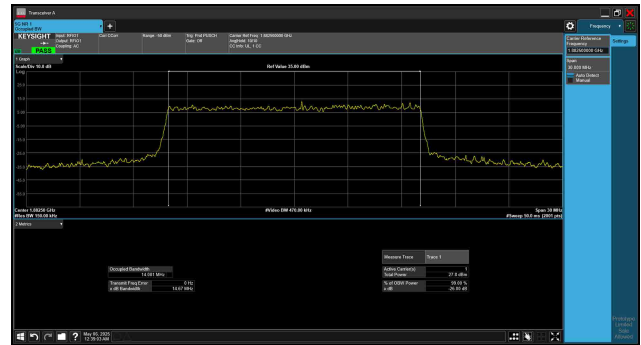


## 99% Bandwidth – 15MHz – QPSK Full RB

## Low Channel



## Middle Channel

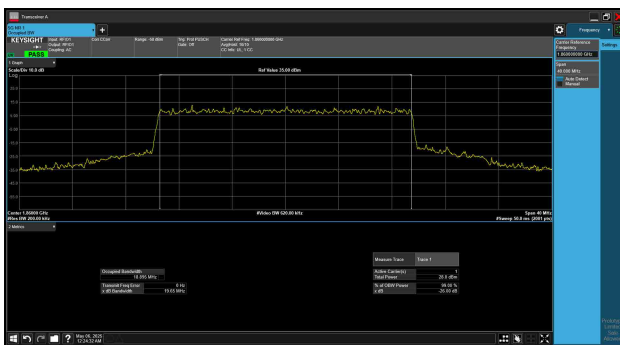


## High Channel

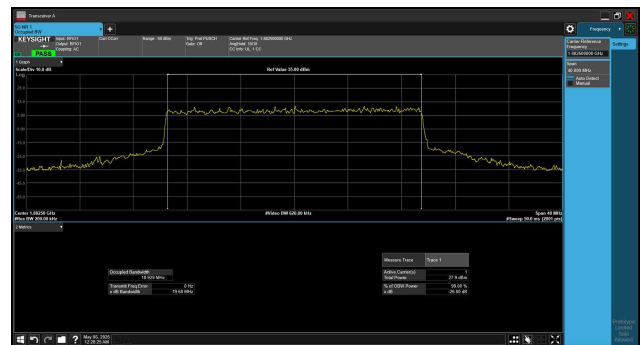


## 99% Bandwidth – 20MHz – QPSK Full RB

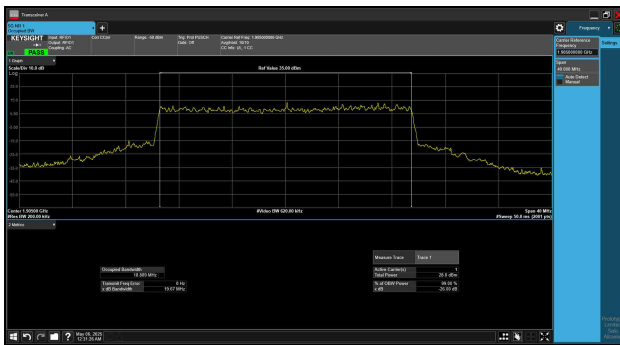
## Low Channel



## Middle Channel

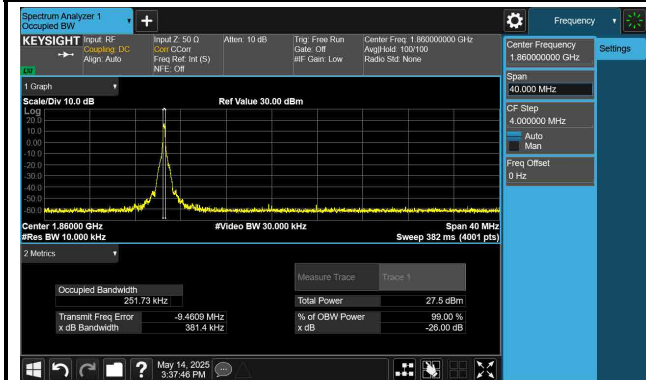


## High Channel

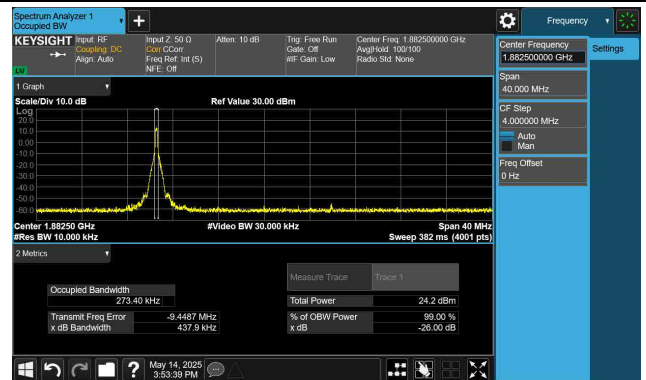


# 99% Bandwidth – 20MHz – QPSK 1 RB

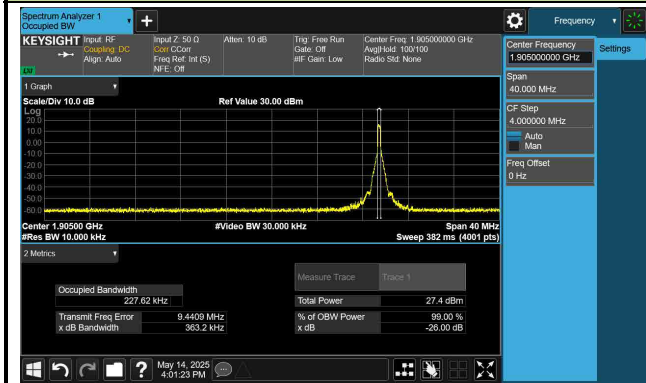
## Low Channel



## Middle Channel

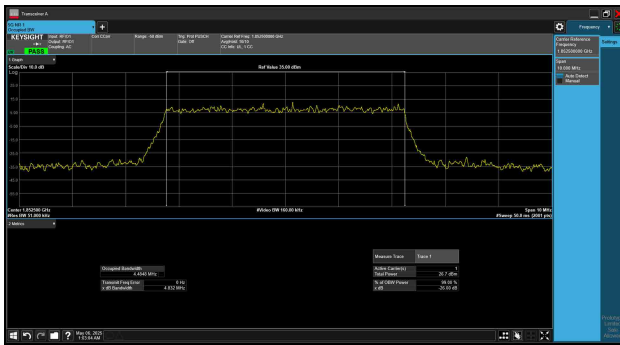


## High Channel

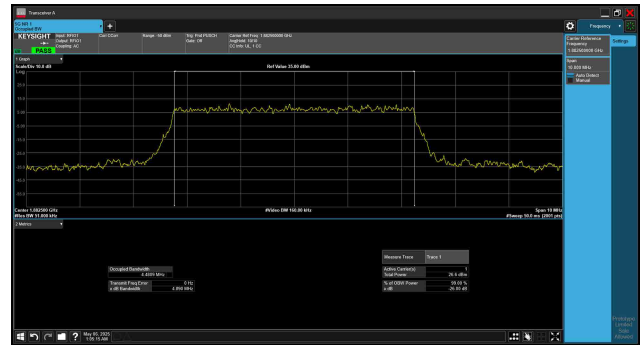


## 99% Bandwidth – 5MHz – 16QAM Full RB

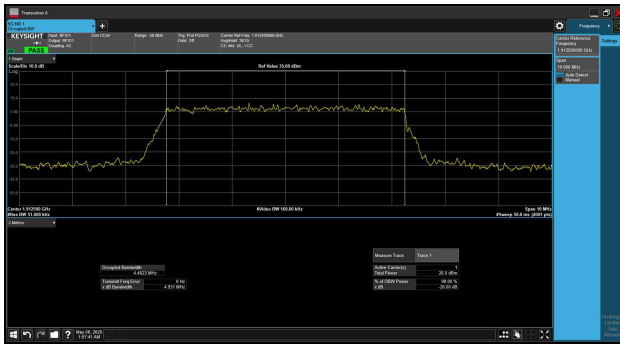
Low Channel



Middle Channel

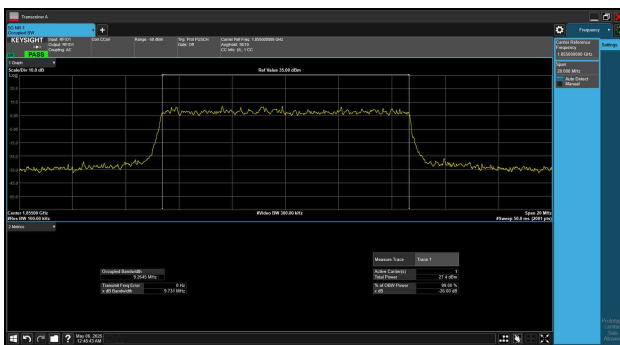


High Channel

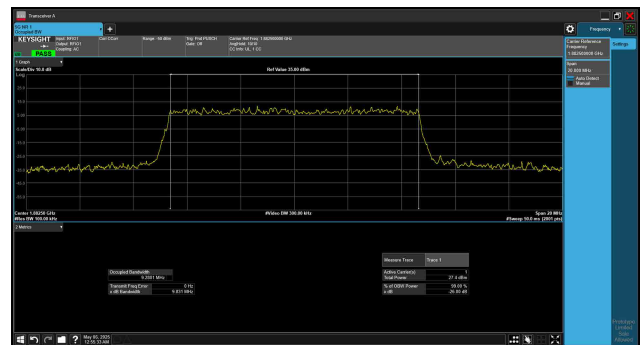


## 99% Bandwidth – 10MHz – 16QAM Full RB

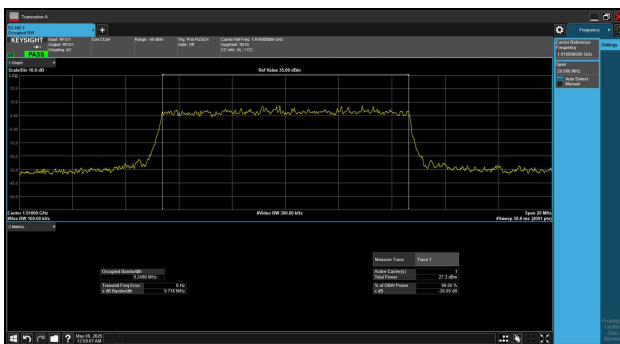
Low Channel



Middle Channel



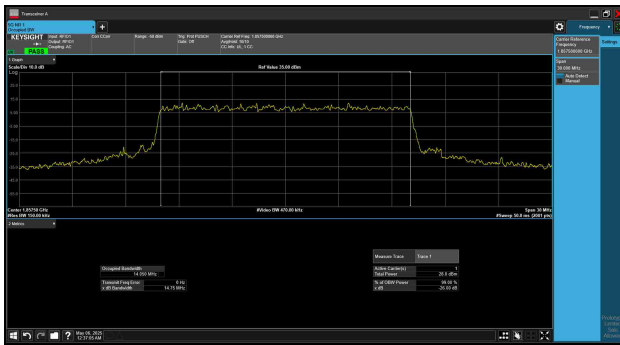
High Channel



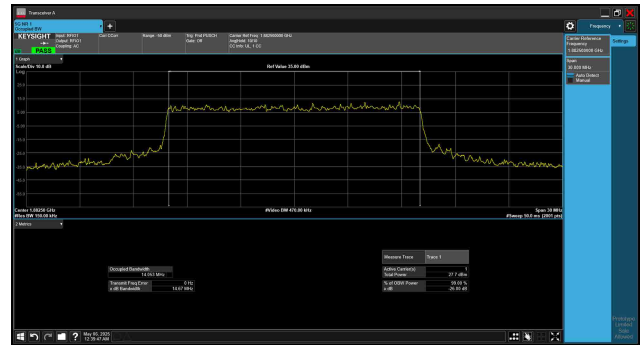


## 99% Bandwidth – 15MHz – 16QAM Full RB

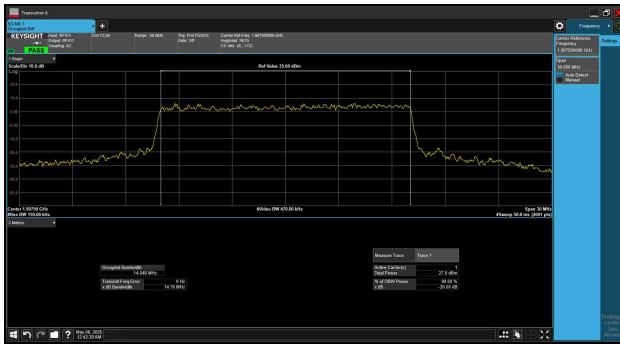
## Low Channel



## Middle Channel

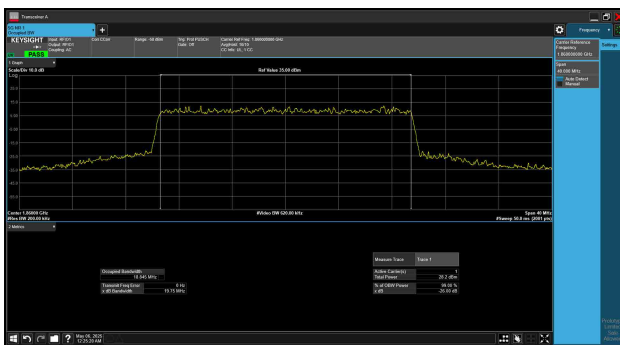


## High Channel

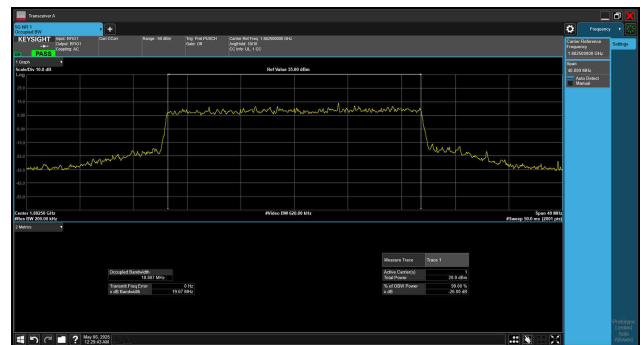


## 99% Bandwidth – 20MHz – 16QAM Full RB

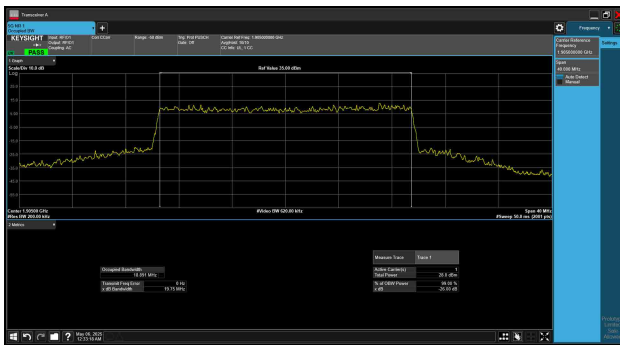
## Low Channel



## Middle Channel

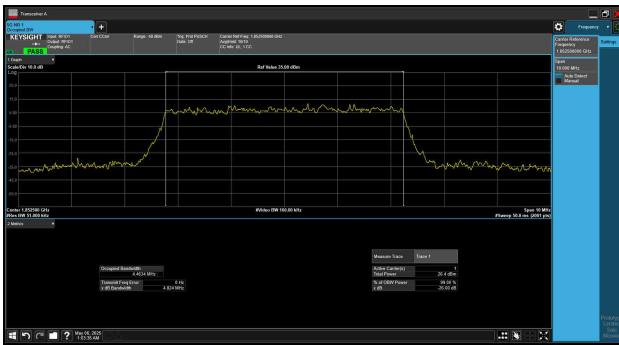


## High Channel

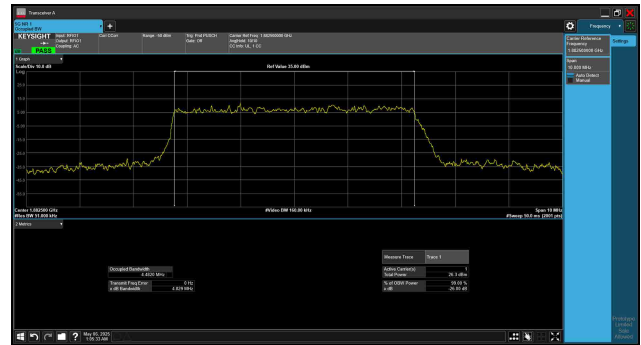


## 99% Bandwidth – 5MHz – 64QAM Full RB

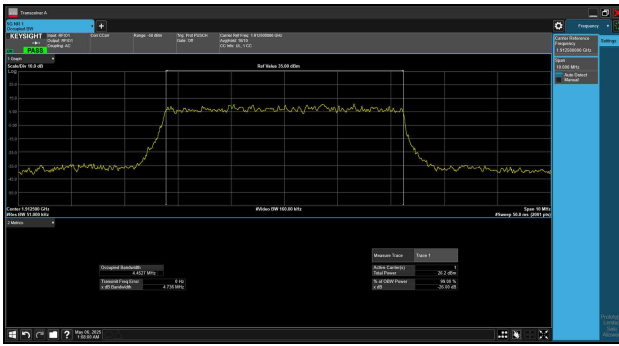
## Low Channel



## Middle Channel

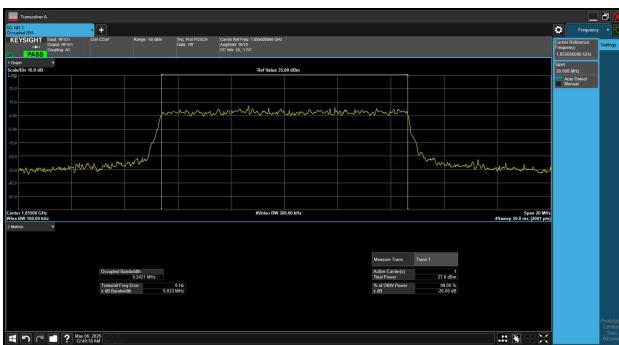


## High Channel

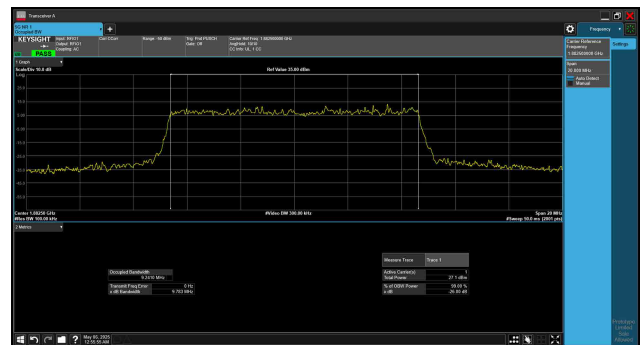


## 99% Bandwidth – 10MHz – 64QAM Full RB

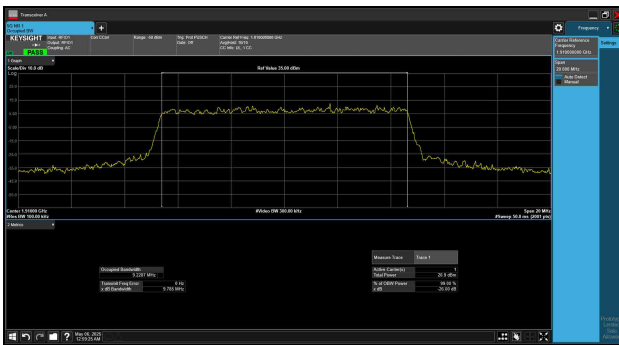
## Low Channel



## Middle Channel

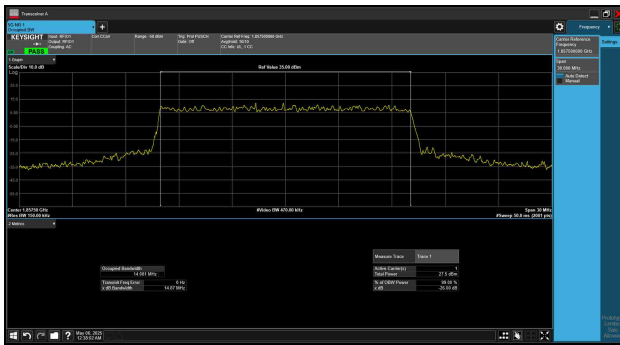


## High Channel

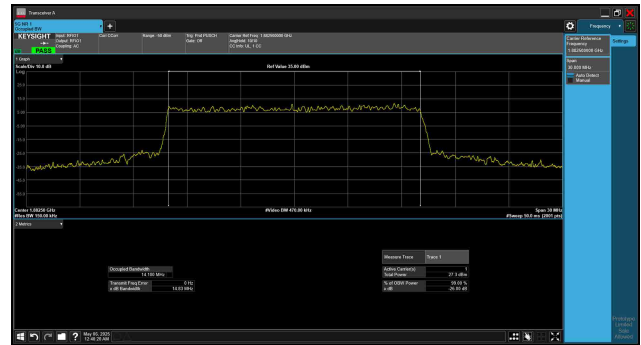


## 99% Bandwidth – 15MHz – 64QAM Full RB

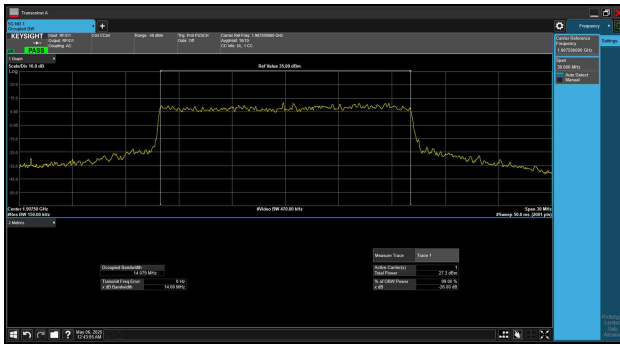
## Low Channel



## Middle Channel

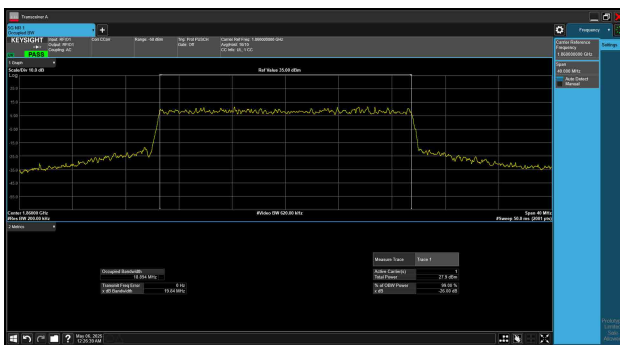


## High Channel

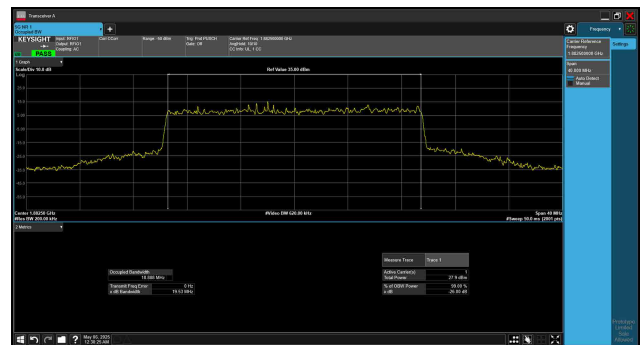


## 99% Bandwidth – 20MHz – 64QAM Full RB

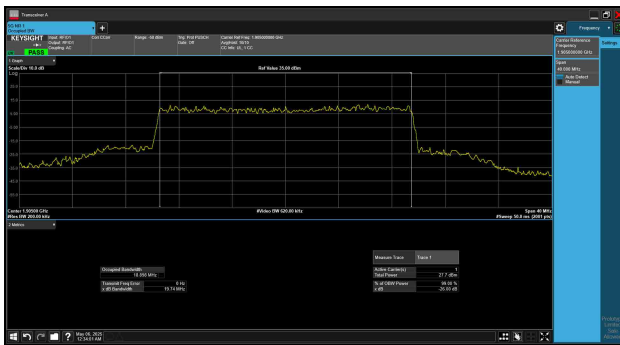
## Low Channel



## Middle Channel

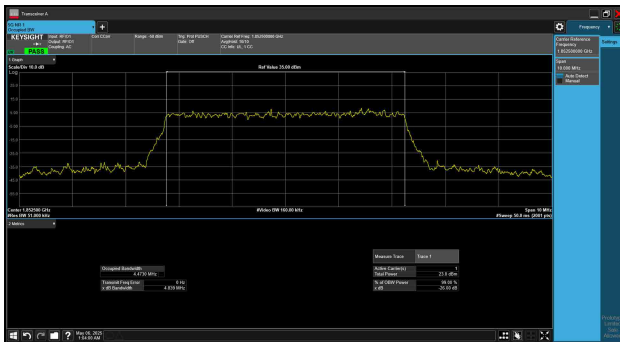


## High Channel

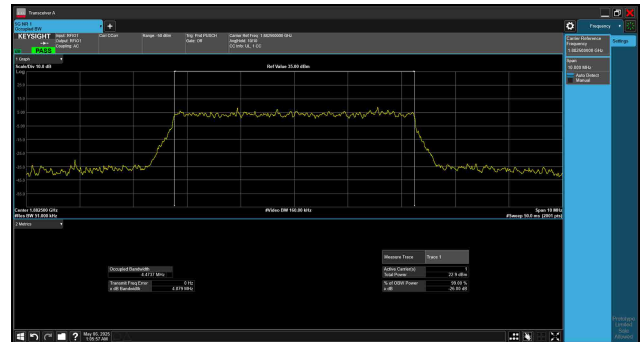


## 99% Bandwidth – 5MHz – 256QAM Full RB

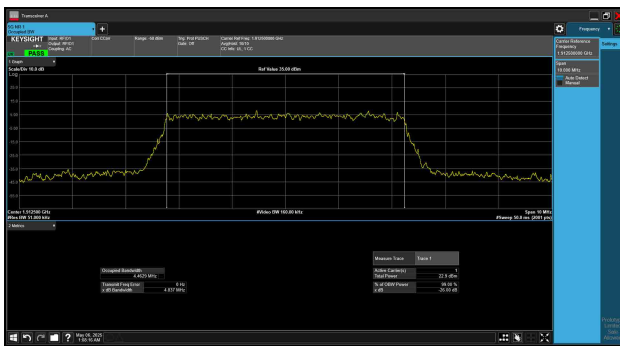
## Low Channel



## Middle Channel

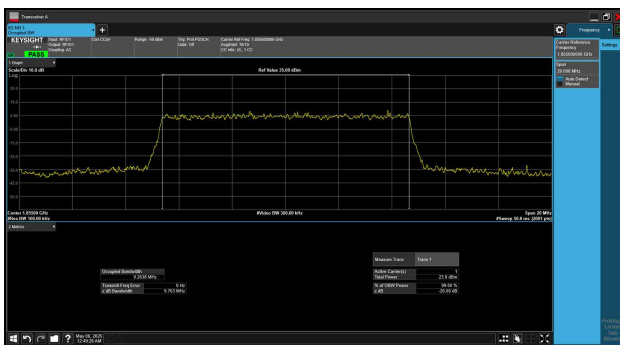


## High Channel

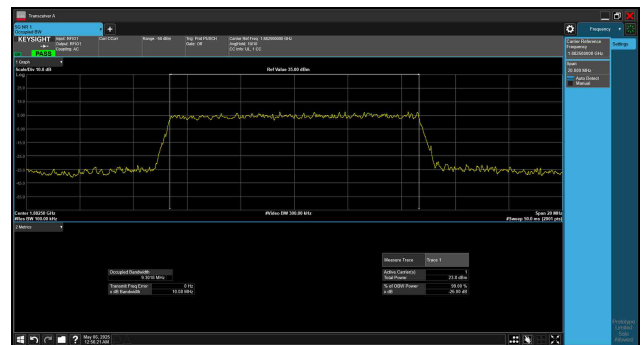


## 99% Bandwidth – 10MHz – 256QAM Full RB

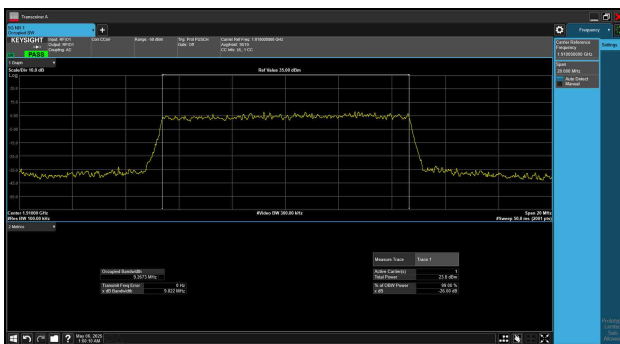
## Low Channel



## Middle Channel

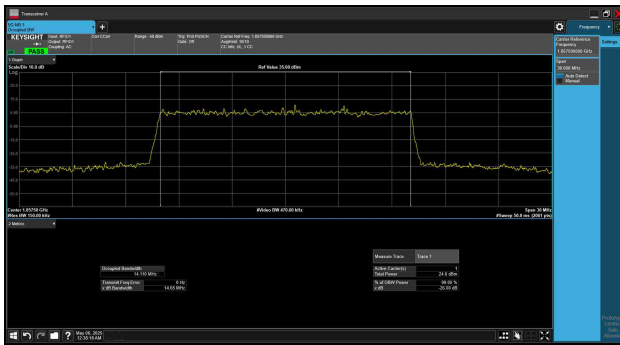


## High Channel

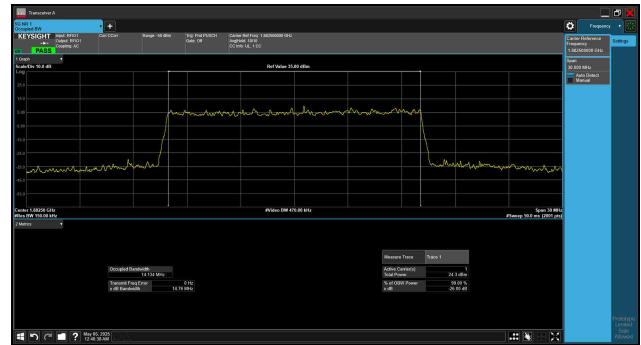


### 99% Bandwidth – 15MHz – 256QAM Full RB

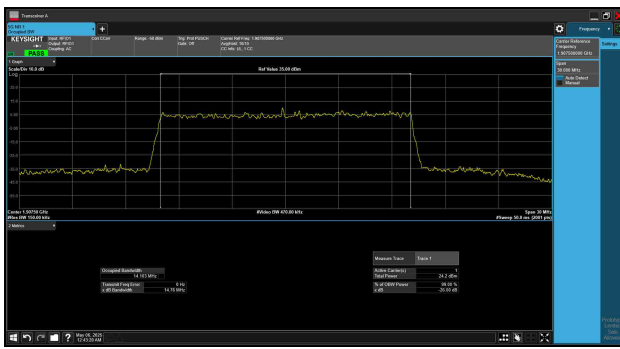
#### Low Channel



#### Middle Channel

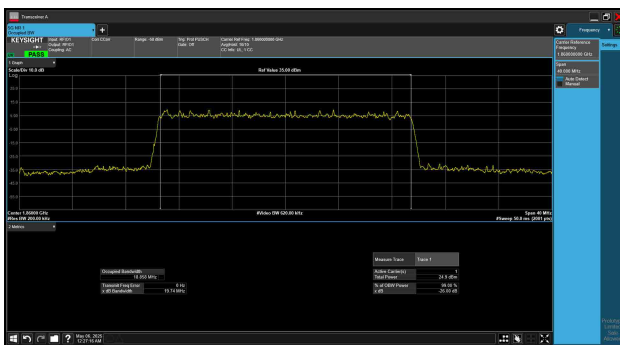


#### High Channel

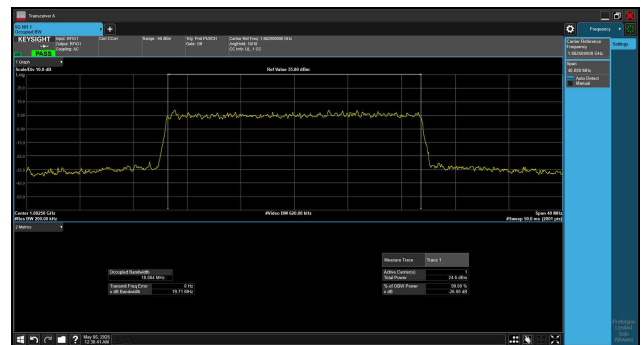


### 99% Bandwidth – 20MHz – 256QAM Full RB

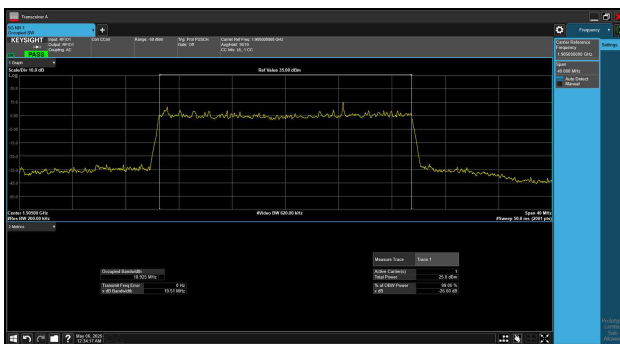
#### Low Channel



#### Middle Channel



#### High Channel



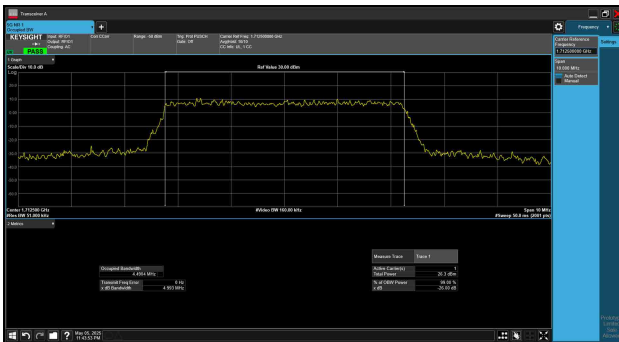
Test Site	WJ-SR11 & SIP-SR1	Test Engineer	Lucas Wang & Yoniter Yang
Test Date	2025-05-05 ~ 2025-05-14	Test Band	n66

Bandwidth (MHz)	RB Size	RB Offset	Frequency (MHz)	99% Bandwidth (MHz)
QPSK				
5	Full RB	0	1712.5	4.4904
	Full RB	0	1745	4.4733
	Full RB	0	1777.5	4.4708
10	Full RB	0	1715	9.2852
	Full RB	0	1745	9.2891
	Full RB	0	1775	9.2879
15	Full RB	0	1717.5	14.103
	Full RB	0	1745	14.083
	Full RB	0	1772.5	14.085
20	Full RB	0	1720	18.923
	Full RB	0	1745	18.967
	Full RB	0	1770	18.890
20	1 RB	0	1720	0.24188
	1 RB	0	1745	0.26473
	1 RB	105	1770	0.24795
16QAM				
5	Full RB	0	1712.5	4.4845
	Full RB	0	1745	4.4803
	Full RB	0	1777.5	4.4810
10	Full RB	0	1715	9.2693
	Full RB	0	1745	9.2841
	Full RB	0	1775	9.2659
15	Full RB	0	1717.5	14.076
	Full RB	0	1745	14.083
	Full RB	0	1772.5	14.053
20	Full RB	0	1720	18.848
	Full RB	0	1745	18.889
	Full RB	0	1770	18.883

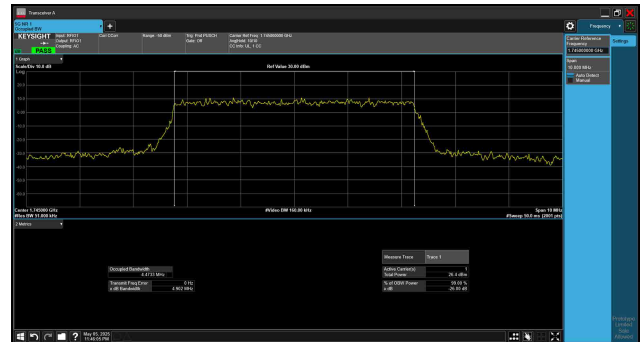
64QAM				
5	Full RB	0	1712.5	4.4713
	Full RB	0	1745	4.4628
	Full RB	0	1777.5	4.4706
10	Full RB	0	1715	9.2603
	Full RB	0	1745	9.2432
	Full RB	0	1775	9.2484
15	Full RB	0	1717.5	14.105
	Full RB	0	1745	14.101
	Full RB	0	1772.5	14.102
20	Full RB	0	1720	18.899
	Full RB	0	1745	18.923
	Full RB	0	1770	18.896
256QAM				
5	Full RB	0	1712.5	4.4728
	Full RB	0	1745	4.4723
	Full RB	0	1777.5	4.4702
10	Full RB	0	1715	9.2890
	Full RB	0	1745	9.2844
	Full RB	0	1775	9.2690
15	Full RB	0	1717.5	14.133
	Full RB	0	1745	14.140
	Full RB	0	1772.5	14.108
20	Full RB	0	1720	18.891
	Full RB	0	1745	18.921
	Full RB	0	1770	18.922

## 99% Bandwidth – 5MHz – QPSK Full RB

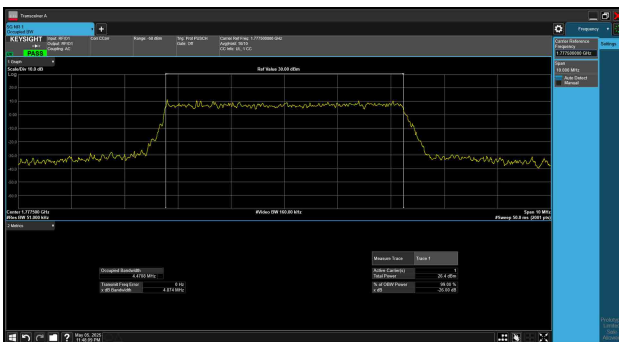
## Low Channel



## Middle Channel

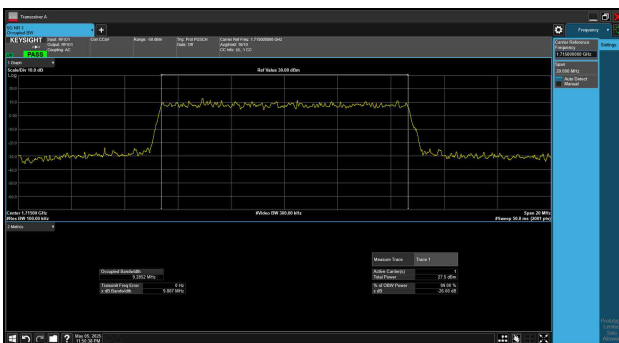


## High Channel

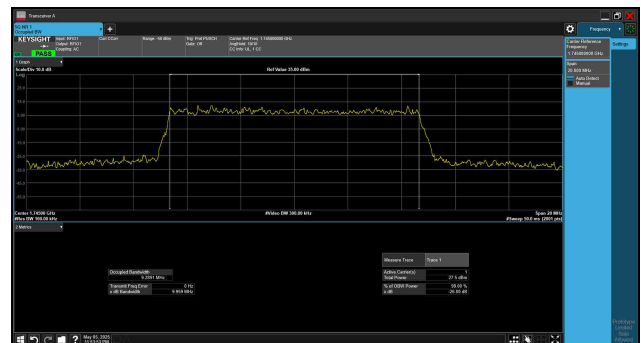


## 99% Bandwidth – 10MHz – QPSK Full RB

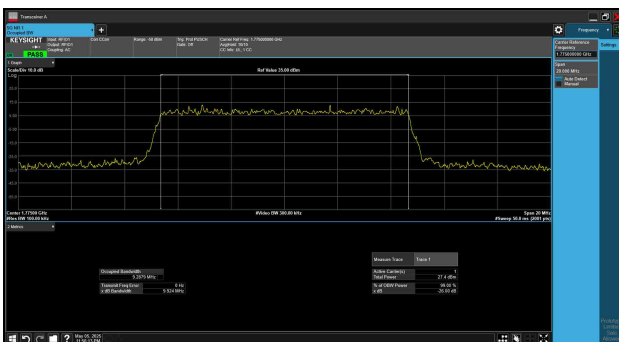
## Low Channel



## Middle Channel



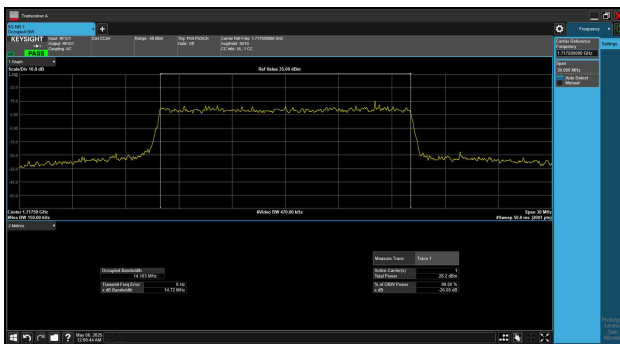
## High Channel



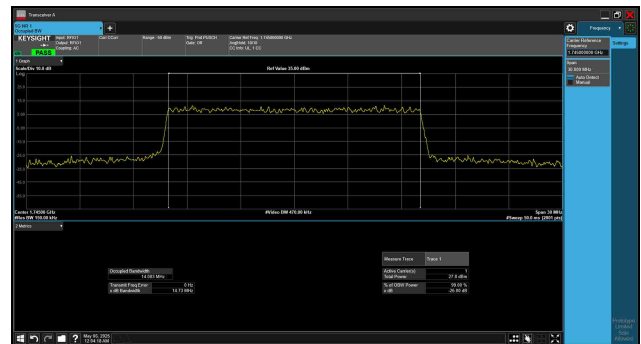


## 99% Bandwidth – 15MHz – QPSK Full RB

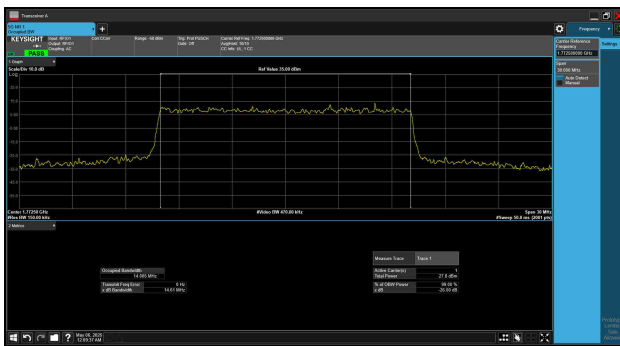
## Low Channel



## Middle Channel

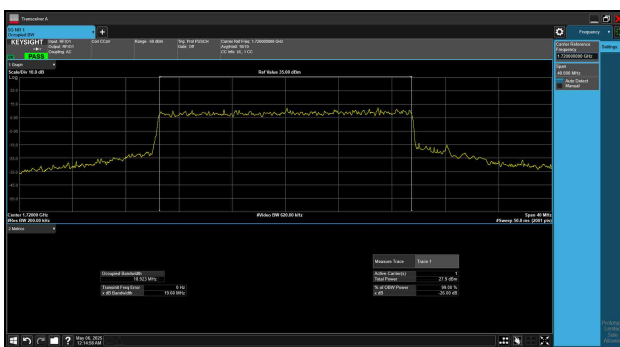


## High Channel

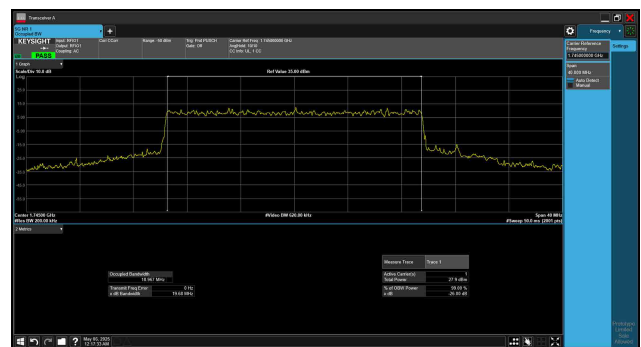


## 99% Bandwidth – 20MHz – QPSK Full RB

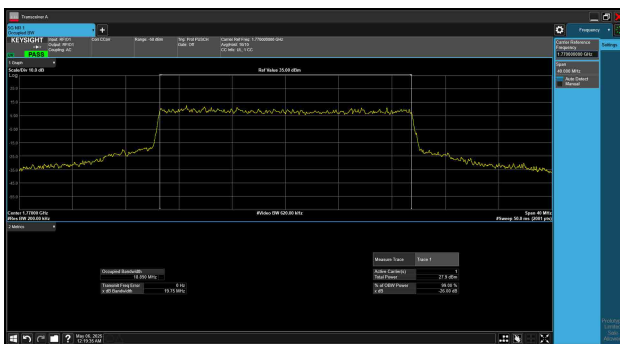
## Low Channel



## Middle Channel

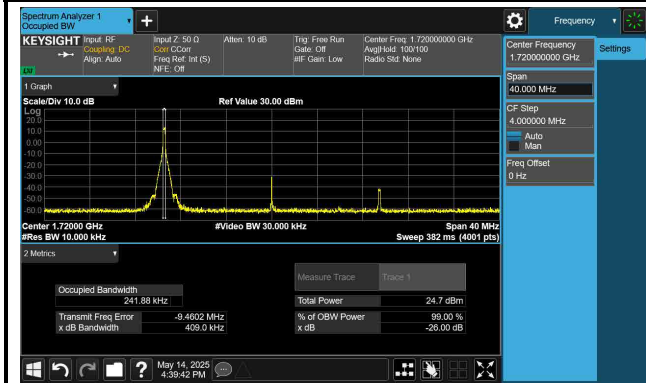


## High Channel

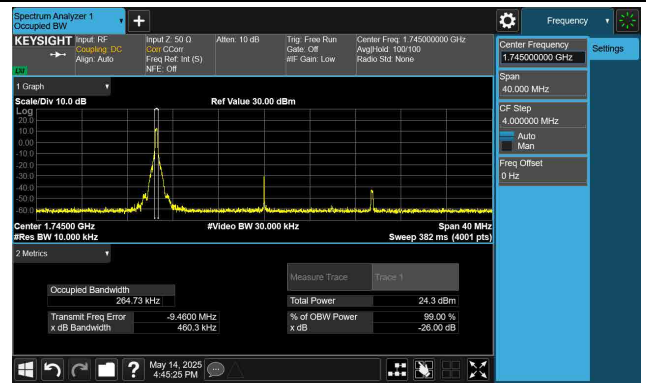


# 99% Bandwidth – 20MHz – QPSK 1 RB

## Low Channel



## Middle Channel



## High Channel

