



RF MEASUREMENT REPORT

FCC ID: WIYS1U2M4001
Applicant: CASTLES TECHNOLOGY CO., LTD.
Product: POS Terminal
Model No.: S1U2-M4
Trademark: 
FCC Rule(s): Part90 Subpart S
Result: Complies
Received Date: 2025-02-12
Test Date: 2025-02-13 ~ 2025-03-13

Reviewed By:

Yuri Li

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
R25S1009034-U303	V01	Initial Report	2025-03-26	Valid

Note: This report is supplement to the FCC ID “WIYS1U2M4001” adding additional bands and related data.

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1. General Information

1.1. Applicant

CASTLES TECHNOLOGY CO., LTD.

6F, NO. 207-5, SEC. 3, BEIXIN RD., XINDIAN DISTRICT, NEW TAIPEI CITY 231030, TAIWAN (R.O.C.)

1.2. Manufacturer

CASTLES TECHNOLOGY CO., LTD.

6F, NO. 207-5, SEC. 3, BEIXIN RD., XINDIAN DISTRICT, NEW TAIPEI CITY 231030, TAIWAN (R.O.C.)

1.3. Testing Facility

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

1.4. Product Information

Product Name	POS Terminal
Model No.	S1U2-M4
Trademark	
Serial Number	115244802968 (Radiated) 115244802974 (Conducted)
NFC Specification	13.56MHz
Wi-Fi Specification	802.11a/b/g/n/ac
Bluetooth Specification	BT5.0
GNSS Specification	GPS, GLONASS, GALILEO, BEIDOU
3GPP Specification	WCDMA Band II/IV/V LTE Band 2/4/5/7/12/13/14/17/25/26/66/38/41
Operating Temperature Range	-20 ~ 70 °C
Supply Voltage Rating	9 ~ 48Vdc, Normal 9Vdc
Antenna Specification	Refer to Section 1.6
Remark: 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

E-UTRA Specification	
FDD TX Frequency Range	Band 26: 814 ~ 824MHz
FDD RX Frequency Range	Band 26: 859 ~ 869MHz
Support Bandwidth	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz
Support Power Class	PC3
Modulation	UL up to 64QAM
Note: LTE band 26 transmit frequency for part 90 rule is 814 ~ 824MHz and part 22 rule is 824 ~ 849MHz. ERP over 15MHz bandwidth complies the ERP limit line of part 22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complies.	

1.6. Description of Available Antennas

Technology	Frequency Range (MHz)	Antenna Type	MaxPeak Gain (dBi)
LTE Band 26	814 ~ 824	Monopole Antenna	3.89
Note: All antenna information (Antenna type and Peak Gain) is provided by the manufacturer.			

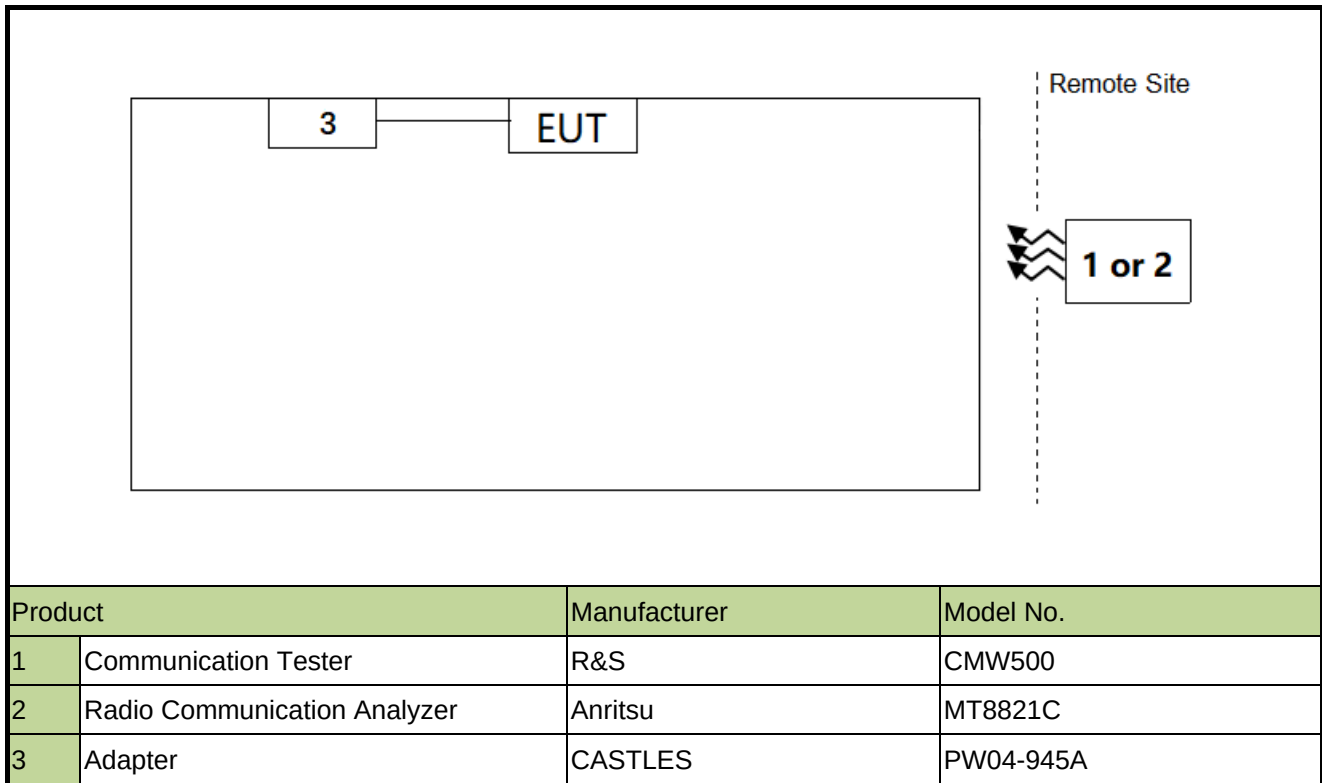
1.7. Test Methodology

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 90
- 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

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
Temperature Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2025-09-02	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE11268	1 year	2025-12-10	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE06362	1 year	2026-01-23	WZ-SR6
Shielding Room	HUAMING	WZ-SR6	MRTSUE06443	N/A	N/A	WZ-SR6
Signal Analyzer	Keysight	N9020B	MRTSUE06583	1 year	2025-12-23	WZ-SR6
Radio Communication Analyzer	Anritsu	MT8821C	MRTSUE06960	1 year	2025-06-18	WZ-SR6
Communication Tester	R&S	CMW500	MRTSUE06108	1 year	2025-10-13	WZ-SR6
USB Power Sensor	Keysight	U2021XA	MRTSUE06446	1 year	2025-05-08	WZ-SR6
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2025-12-05	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2025-07-26	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06024	1 year	2025-09-23	WZ-AC1
Preamplifier	Agilent	83017A	MRTSUE06076	1 year	2025-11-08	WZ-AC1
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2025-05-15	WZ-AC1
Anechoic Chamber	TDK	WZ-AC1	MRTSUE06212	1 year	2025-04-19	WZ-AC1
Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2025-10-13	WZ-AC1
Loop Antenna	Schwarzbeck	FMZB 1519 B	MRTSUE06937	1 year	2026-01-04	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE11039	1 year	2025-10-16	WZ-AC1

Software	Version	Function
e3	230711	EMI Test Software
Controller_MF 7802	2.03C	RE Antenna & Turntable
UCTS	V 6.23.217.99	license 3G & 4G & 5G
Agilent Power Analyzer/Agilent Power Panel	V R03.09.00	Power

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, 90.213	Frequency Stability		Pass
90.635	Conducted Output Power		Pass
2.1051, 90.691(a)	Transmitter unwanted emissions (band-edge)		Pass
2.1051, 90.691(a)	Transmitter unwanted emissions (spurious)		
2.1053, 90.691(a)	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.

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.

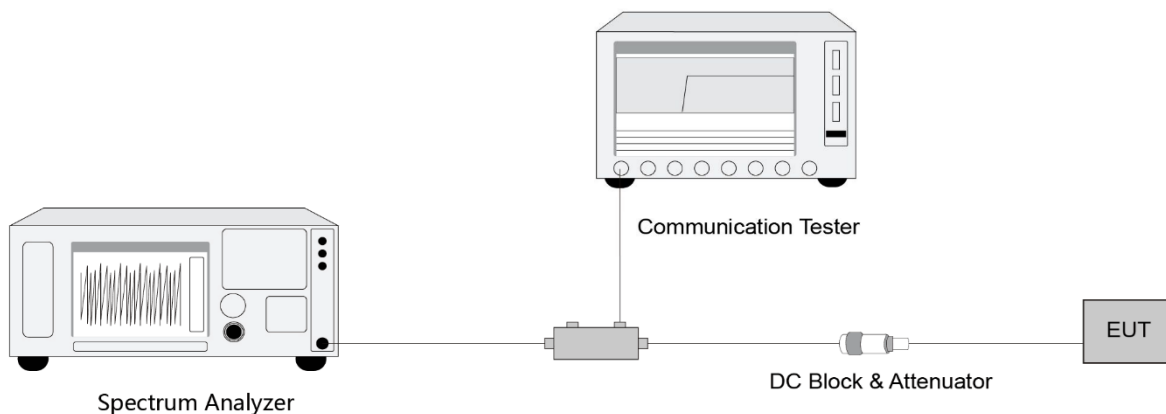
5.2.2. Test Procedure

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:

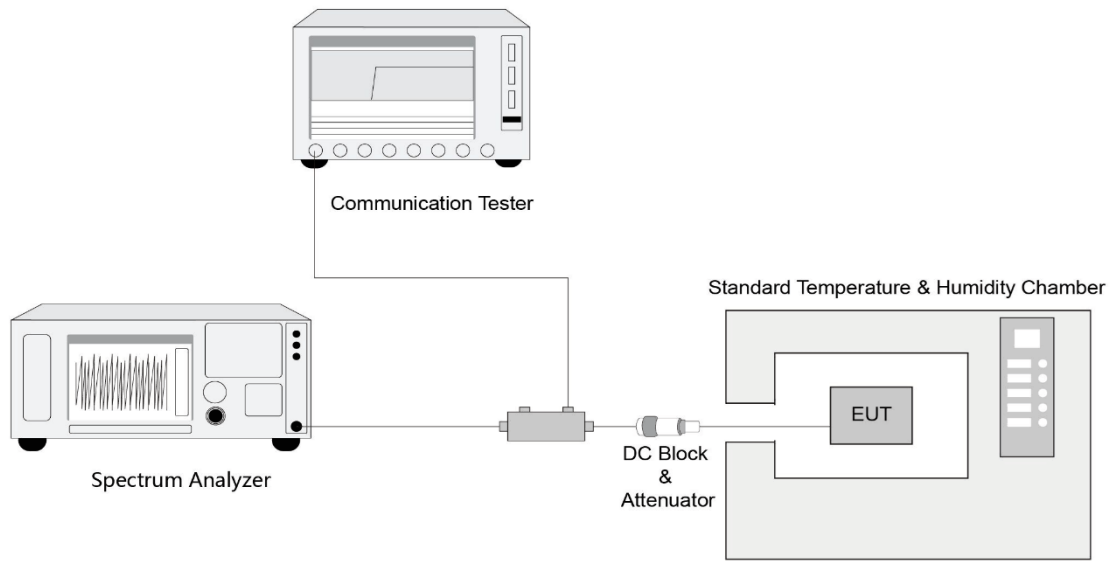
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain 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 end point, record the maximum frequency change.

5.3.4. Test Setup



5.3.5. Test Result

Refer to Appendix A.2.

5.4. Conducted Output Power Measurement

5.4.1. Test Limit

The maximum output power of the transmitter for mobile stations is 100 watts (20dBw).

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

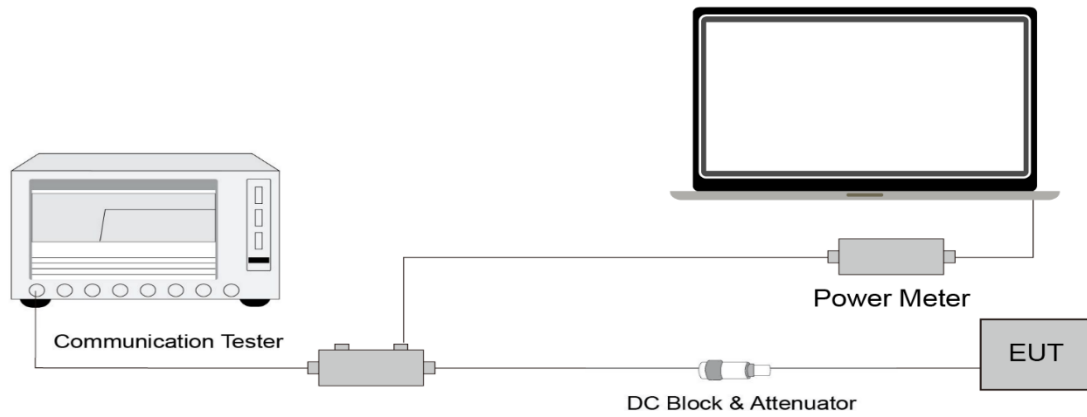
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas} , e.g., dBm or dBW)

P_{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. Conducted Band-Edge Measurement

5.5.1. Test Limit

Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

- (1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log(f/6.1)$ decibels or $50 + 10 \log(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.
- (2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

5.5.2. Test Procedure

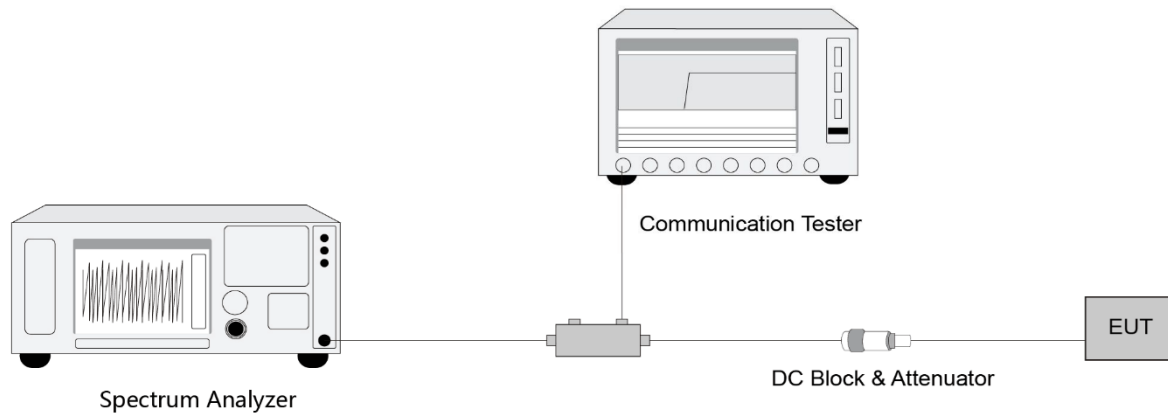
ANSI C63.26-2015 – Section 5.7

5.5.3. 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.

5.5.4. Test Setup



5.5.5. Test Result

Refer to Appendix A.4.

5.6. Conducted Spurious Emissions Measurement

5.6.1. 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 10th 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.

For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10\log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

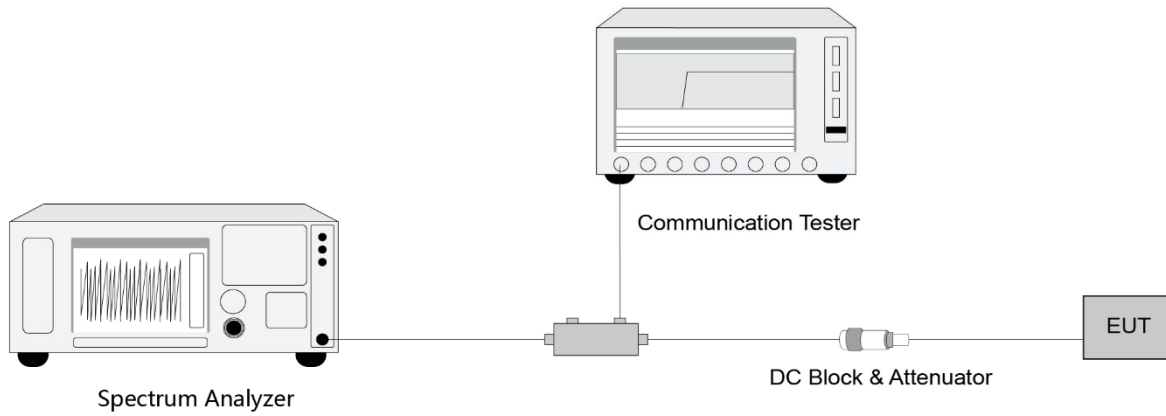
5.6.2. Test Procedure

ANSI C63.26-2015 - Section 5.7

5.6.3. 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.

5.6.4. Test Setup



5.6.5. Test Result

Refer to Appendix A.5.

5.7. Radiated Spurious Emissions Measurement

5.7.1. Test Limit

Out of band emissions: 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.

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

5.7.2. Test Procedure

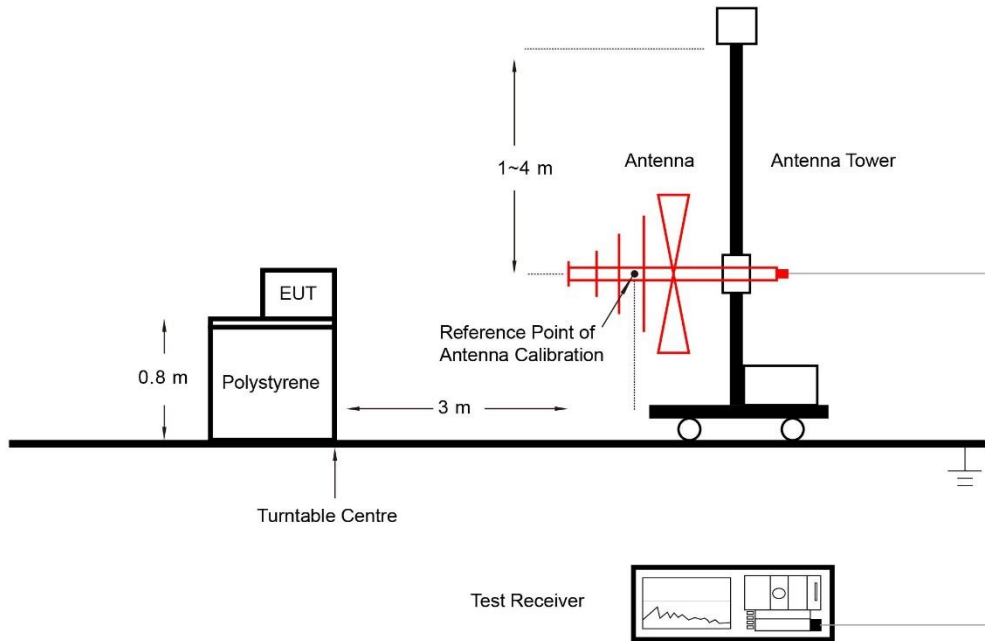
ANSI C63.26-2015 - Section 5.2.7 & 5.5

5.7.3. Test Setting

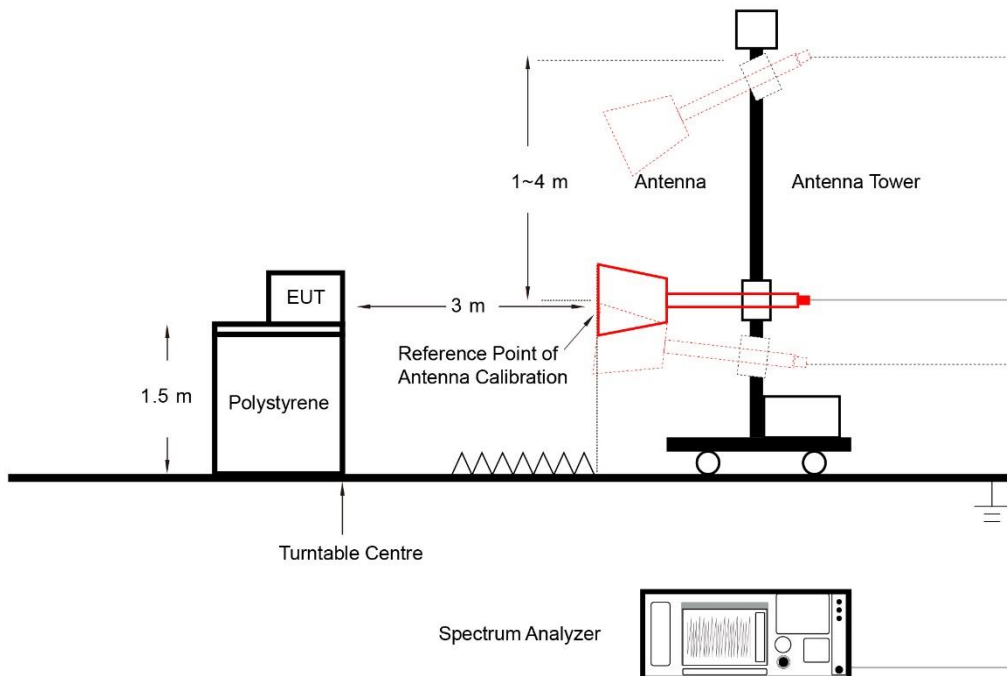
1. RBW = 120kHz or 1MHz
2. VBW $\geq 3 \times$ RBW
3. Sweep time $\geq 10 \times$ (number of points in sweep) $\times$ (transmission symbol period)
4. Detector = CISPR quasi-peak/average detector (Below 1 GHz, compliance with the limits shall be demonstrated using a CISPR quasi-peak detector and the 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

5.7.4. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.7.5. Test Result

Refer to Appendix A.6.

Appendix A - Test Result

A.1 Occupied Bandwidth Test Result

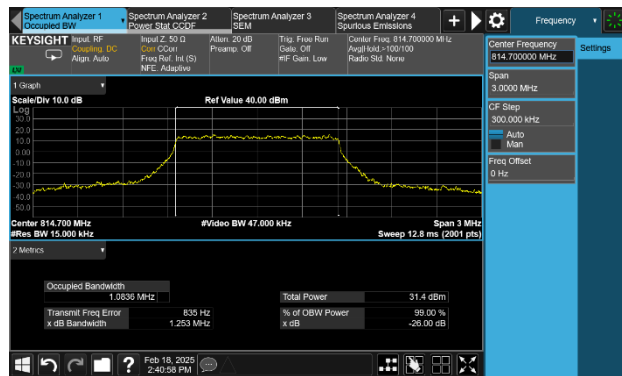
Test Site	WZ-SR6	Test Engineer	Jone Zhang
Test Date	2025-02-18 ~ 2025-02-20	Test Band	LTE Band 26

Modulation	Bandwidth (MHz)	Frequency (MHz)	99% Bandwidth (MHz)
QPSK	1.4	814.7	1.0836
		819.0	1.0779
		823.3	1.0783
	3	815.5	2.6842
		819.0	2.6877
		822.5	2.6845
	5	816.5	4.4707
		819.0	4.4772
		821.5	4.4598
	10	819.0	8.9311
	15	821.5	13.380
16QAM	1.4	814.7	1.0807
		819.0	1.0823
		823.3	1.0781
	3	815.5	2.6818
		819.0	2.6835
		822.5	2.6782
	5	816.5	4.4648
		819.0	4.4783
		821.5	4.4702
	10	819.0	8.9269
	15	821.5	13.364
64QAM	1.4	814.7	1.0778
		819.0	1.0783
		823.3	1.0782
	3	815.5	2.6764
		819.0	2.6801
		822.5	2.6774
	5	816.5	4.4708
		819.0	4.4577
		821.5	4.4808

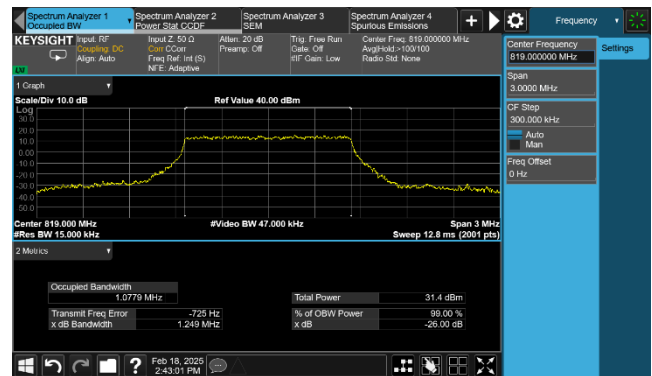
Modulation	Bandwidth (MHz)	Frequency (MHz)	99% Bandwidth (MHz)
	10	819.0	8.9136
	15	821.5	13.363

99% Bandwidth – 1.4MHz – QPSK

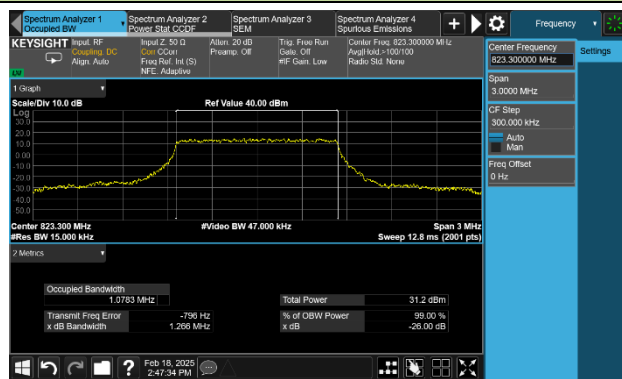
Low Channel



Middle Channel

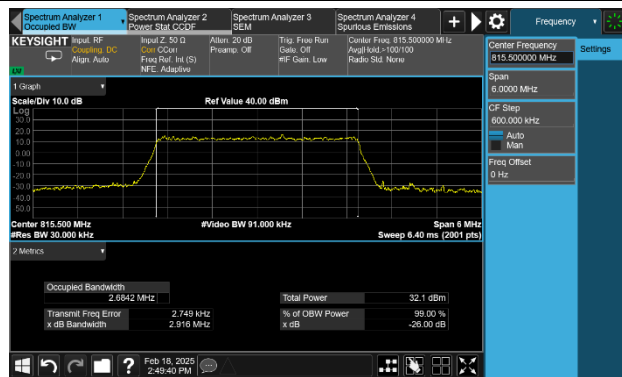


High Channel

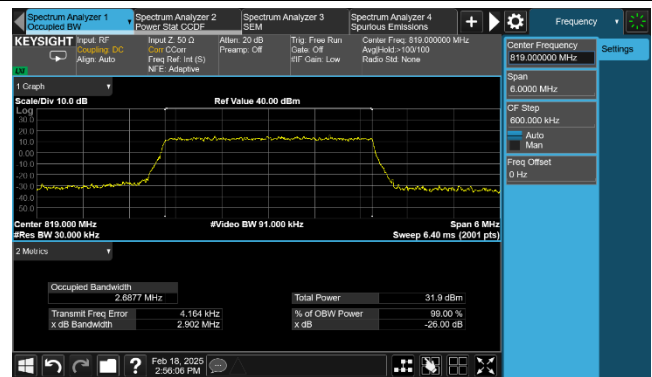


99% Bandwidth – 3MHz – QPSK

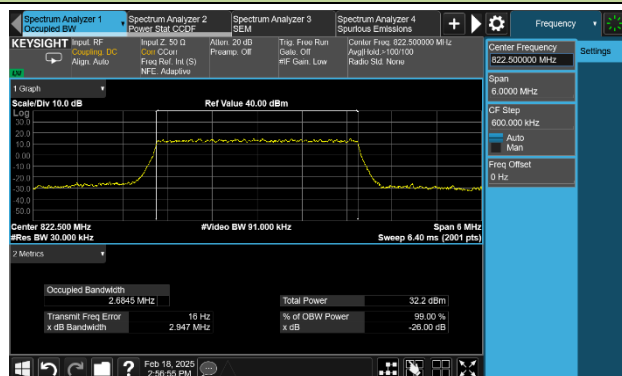
Low Channel



Middle Channel

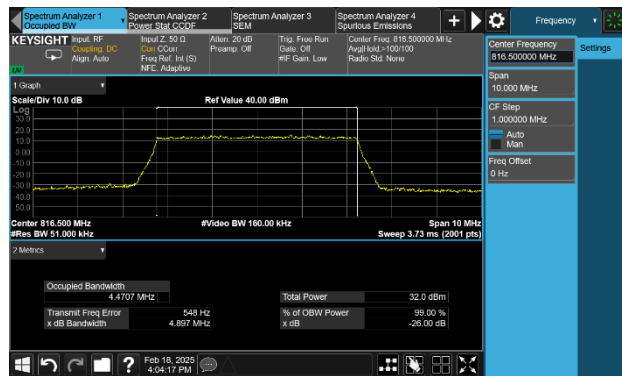


High Channel

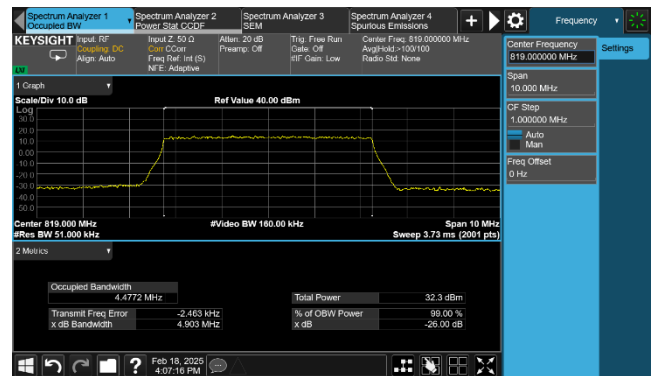


99% Bandwidth – 5MHz – QPSK

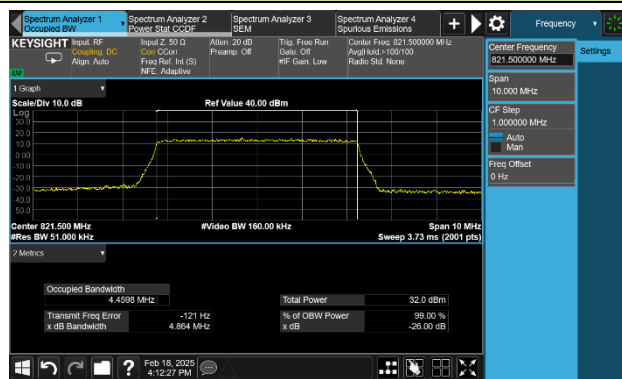
Low Channel



Middle Channel

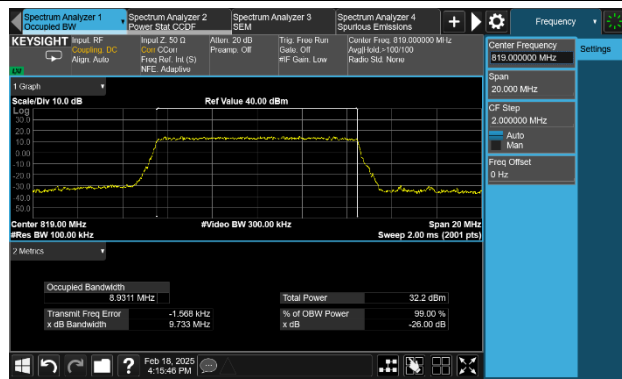


High Channel



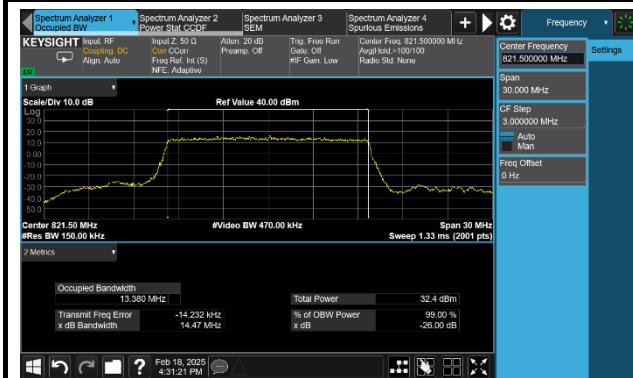
99% Bandwidth – 10MHz – QPSK

Middle Channel



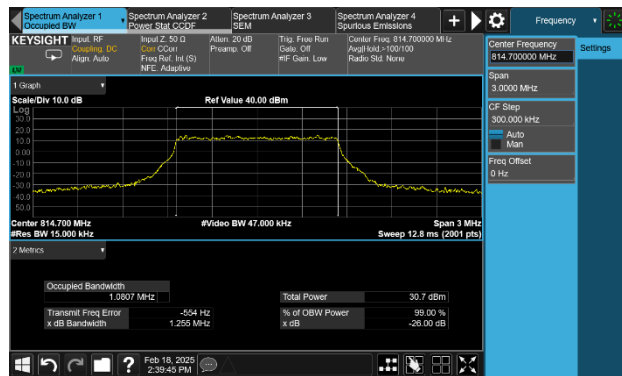
99% Bandwidth – 15MHz – QPSK

Middle Channel

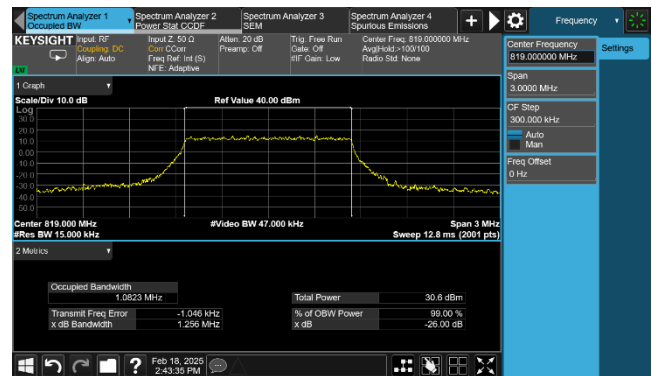


99% Bandwidth – 1.4MHz – 16QAM

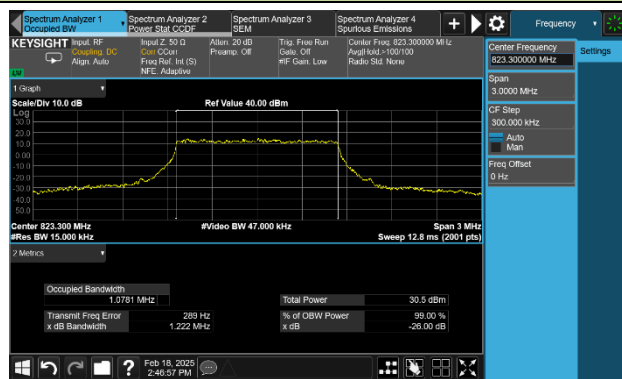
Low Channel



Middle Channel

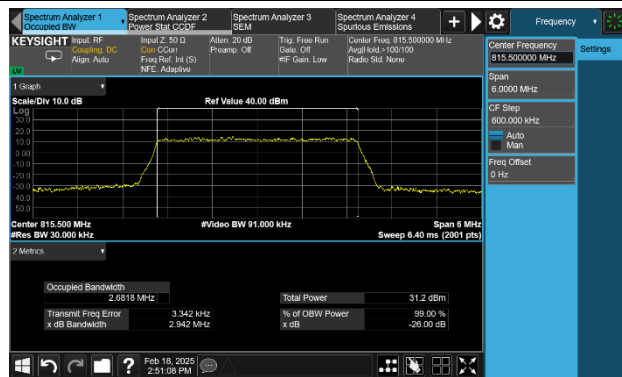


High Channel

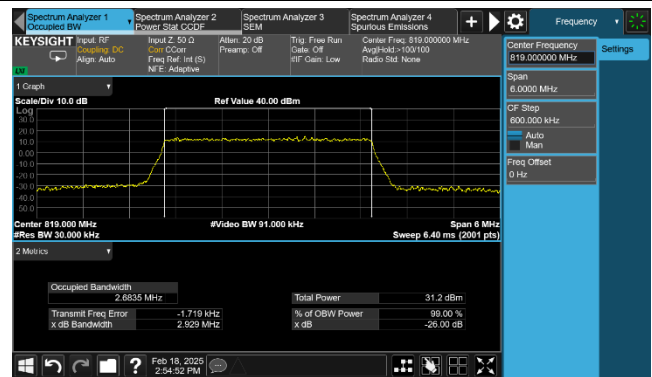


99% Bandwidth – 3MHz – 16QAM

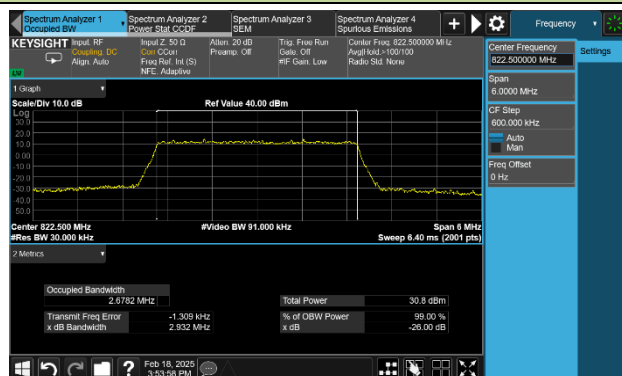
Low Channel



Middle Channel

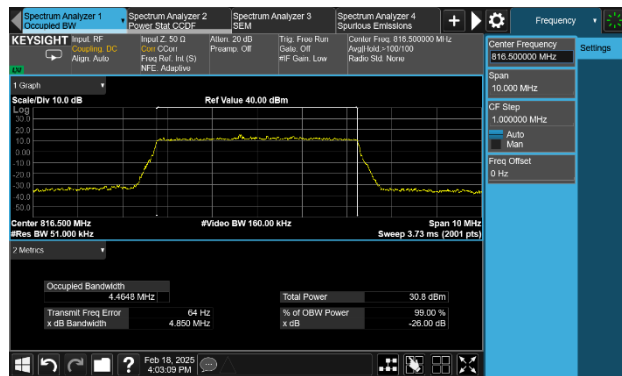


High Channel

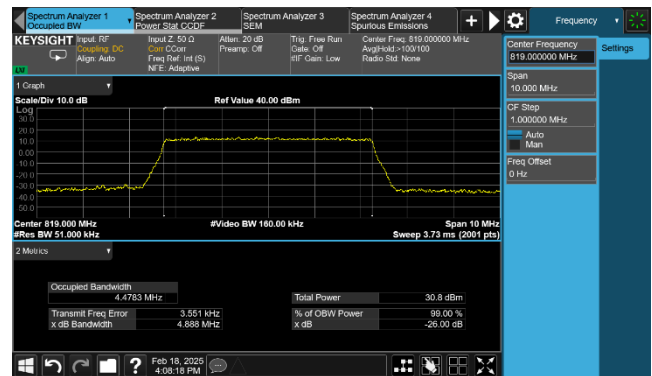


99% Bandwidth – 5MHz – 16QAM

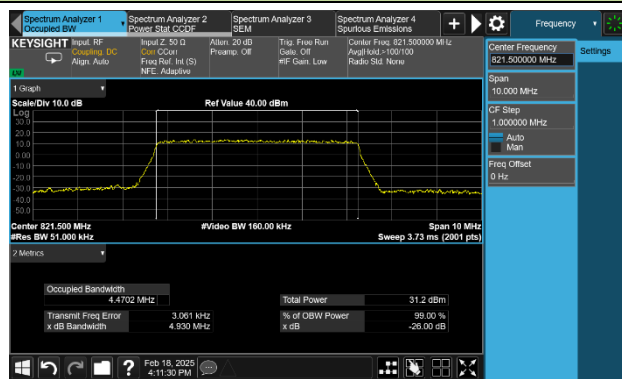
Low Channel



Middle Channel

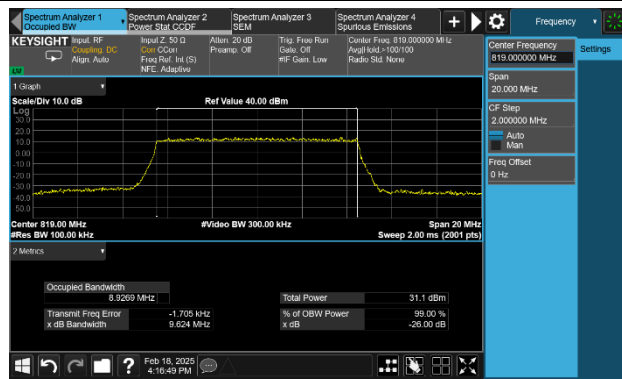


High Channel



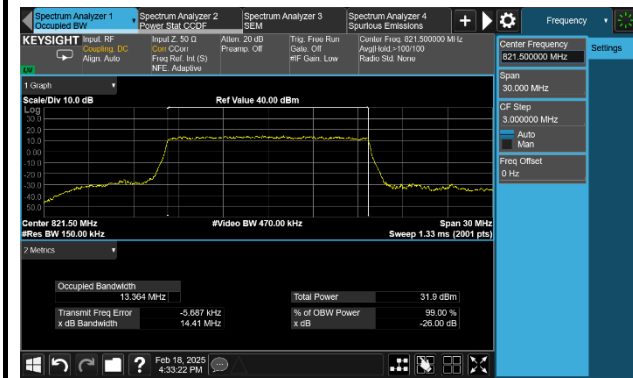
99% Bandwidth – 10MHz – 16QAM

Middle Channel



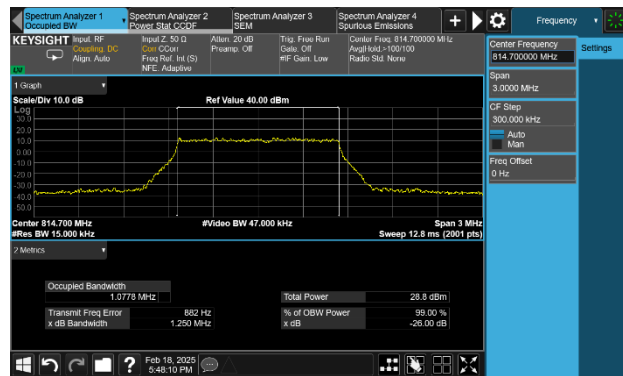
99% Bandwidth – 15MHz – 16QAM

Middle Channel

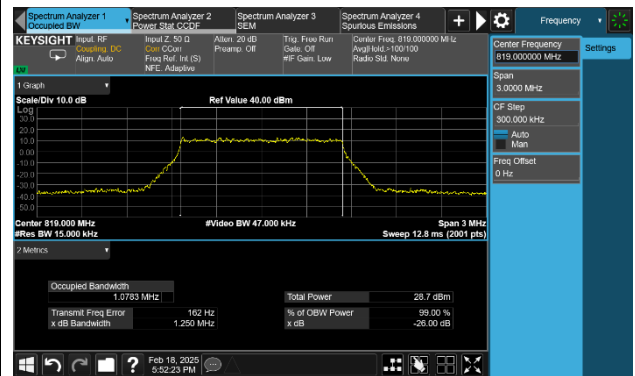


99% Bandwidth – 1.4MHz – 64QAM

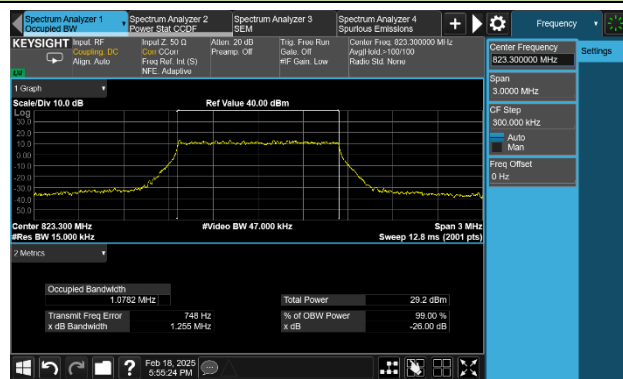
Low Channel



Middle Channel

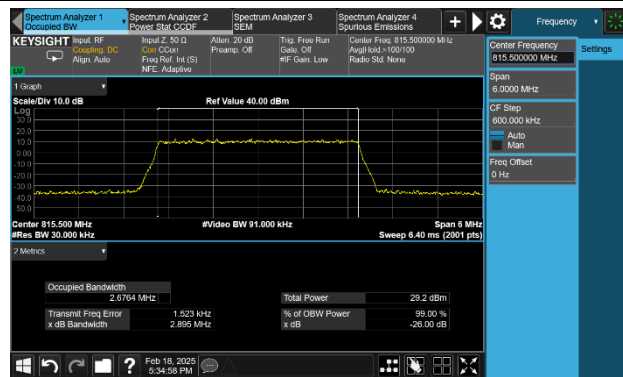


High Channel

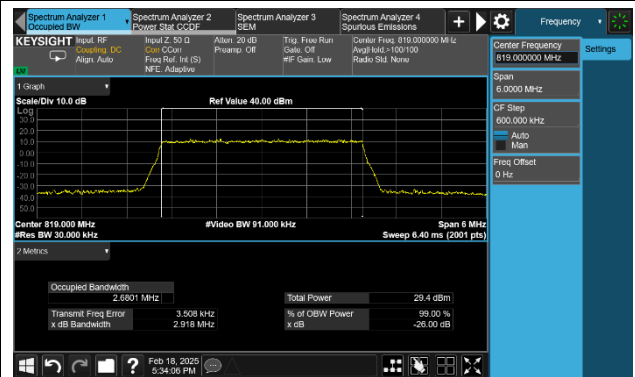


99% Bandwidth – 3MHz – 64QAM

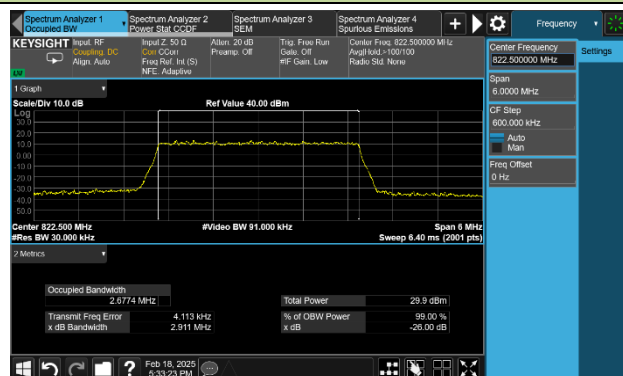
Low Channel



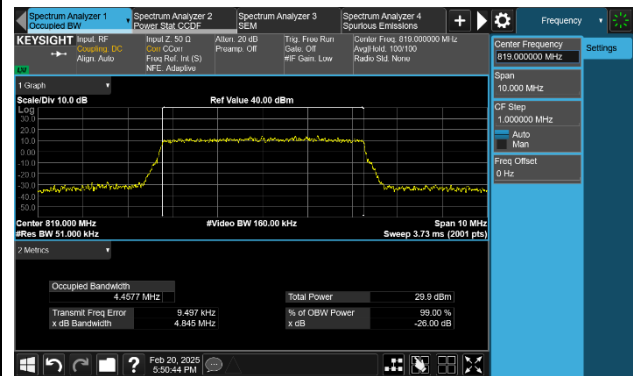
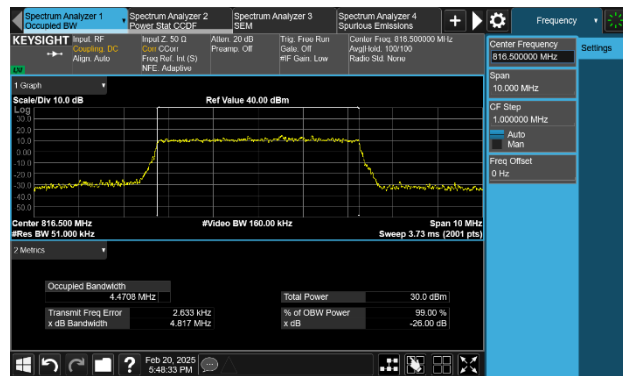
Middle Channel



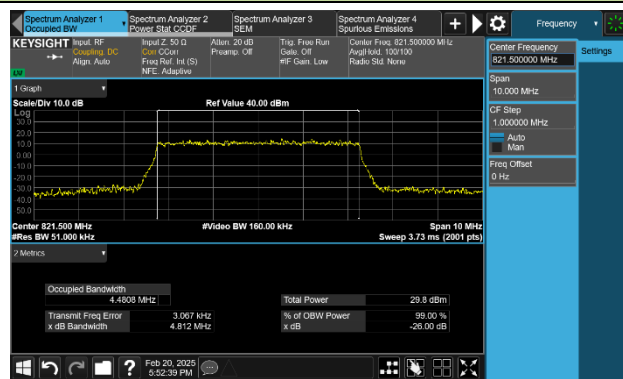
High Channel



Middle Channel

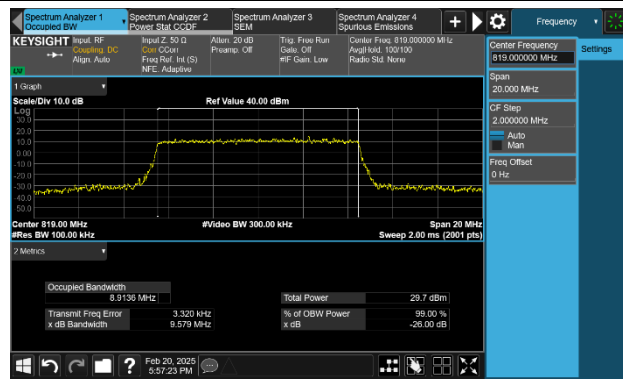


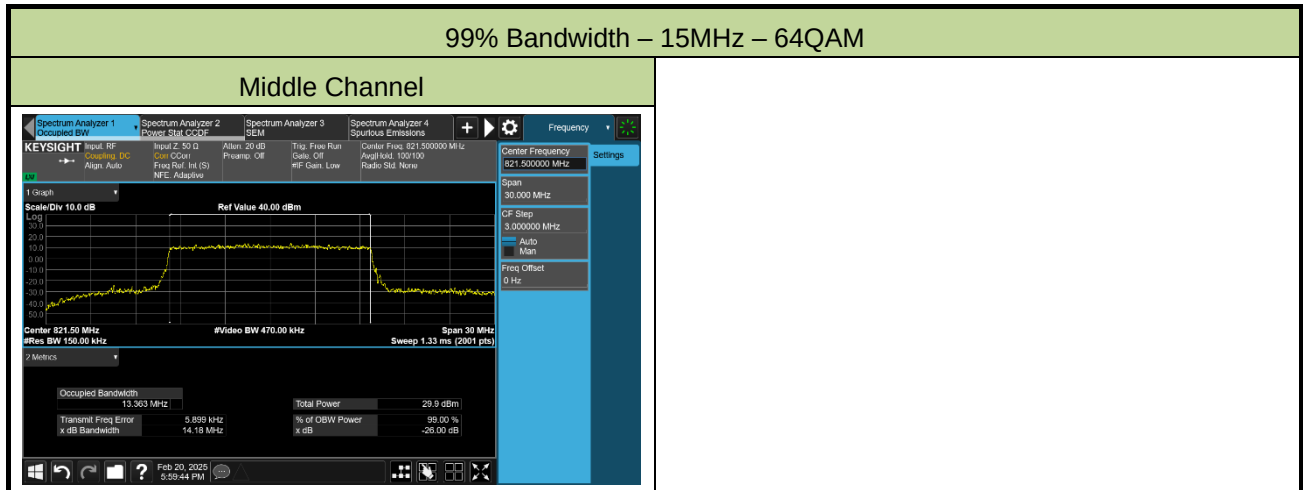
High Channel



99% Bandwidth – 10MHz – 64QAM

Middle Channel





A.2 Frequency Stability Test Result

Test Site	WZ-TR3	Test Engineer	Edith Yu
Test Date	2025-03-07	Test Band	Band 26

Voltage	Temp (°C)	Frequency Range (MHz)		Delta (Hz)	Frequency stability (ppm)	Within Authorized Frequency Block
		814	824			
		f _L	f _H			
Normal	+ 20 (Ref)	814.071	823.921	0.0	0.0000	Pass
	+ 50	814.071	823.921	-2.7	-0.0033	Pass
	+ 40	814.071	823.921	-2.3	-0.0028	Pass
	+ 30	814.071	823.921	-1.3	-0.0016	Pass
	+ 10	814.071	823.921	-4.8	-0.0059	Pass
	0	814.071	823.921	-3.5	-0.0043	Pass
	- 10	814.071	823.921	-3.2	-0.0039	Pass
	- 20	814.071	823.921	-2.9	-0.0035	Pass
	- 30	814.071	823.921	-3.2	-0.0039	Pass
10.35Vdc	+ 20	814.071	823.921	-1.7	-0.0021	Pass
9Vdc	+ 20	814.071	823.921	0.0	0.0000	Pass

Note: The operating voltage is provided by the manufacturer.

A.3 Conducted Output Power Test Result

Test Site	WZ-SR6	Test Engineer	Edith Yu
Test Date	2025-02-13 ~ 2025-02-19	Test Band	LTE Band 26

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	Output Power (W)	Limit (W)
QPSK						
1.4	814.7	1	0	24.02	0.25	< 100
1.4	819.0			23.99	0.25	< 100
1.4	823.3			23.97	0.25	< 100
1.4	814.7	1	2	24.13	0.26	< 100
1.4	819.0			24.07	0.26	< 100
1.4	823.3			24.04	0.25	< 100
1.4	814.7	1	6	24.07	0.26	< 100
1.4	819.0			23.94	0.25	< 100
1.4	823.3			24.00	0.25	< 100
1.4	814.7	6	0	23.04	0.20	< 100
1.4	819.0			23.01	0.20	< 100
1.4	823.3			22.97	0.20	< 100
3	815.5	1	0	24.04	0.25	< 100
3	819.0			24.09	0.26	< 100
3	822.5			24.01	0.25	< 100
3	815.5	1	7	24.21	0.26	< 100
3	819.0			24.30	0.27	< 100
3	822.5			24.02	0.25	< 100
3	815.5	1	14	24.08	0.26	< 100
3	819.0			24.07	0.26	< 100
3	822.5			24.02	0.25	< 100
3	815.5	15	0	23.04	0.20	< 100
3	819.0			23.06	0.20	< 100
3	822.5			23.01	0.20	< 100

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	Output Power (W)	Limit (W)
QPSK						
5	816.5	1	0	23.91	0.25	< 100
5	819.0			23.91	0.25	< 100
5	821.5			23.84	0.24	< 100
5	816.5	1	12	24.35	0.27	< 100
5	819.0			24.26	0.27	< 100
5	821.5			24.05	0.25	< 100
5	816.5	1	24	23.93	0.25	< 100
5	819.0			23.87	0.24	< 100
5	821.5			23.75	0.24	< 100
5	816.5	25	0	23.07	0.20	< 100
5	819.0			23.07	0.20	< 100
5	821.5			23.03	0.20	< 100
10	819.0	1	0	24.16	0.26	< 100
		1	24	24.07	0.26	< 100
		1	49	23.85	0.24	< 100
		50	0	23.05	0.20	< 100
15	821.5	1	0	24.03	0.25	< 100
		1	36	24.29	0.27	< 100
		1	74	24.32	0.27	< 100
		75	0	23.00	0.20	< 100

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	Output Power (W)	Limit (W)
16QAM						
1.4	814.7	1	0	22.81	0.19	< 100
1.4	819.0			22.54	0.18	< 100
1.4	823.3			22.71	0.19	< 100
1.4	814.7	1	2	22.92	0.20	< 100
1.4	819.0			22.26	0.17	< 100
1.4	823.3			22.59	0.18	< 100
1.4	814.7	1	6	22.83	0.19	< 100
1.4	819.0			22.33	0.17	< 100
1.4	823.3			23.05	0.20	< 100
1.4	814.7	6	0	22.18	0.17	< 100
1.4	819.0			22.08	0.16	< 100
1.4	823.3			22.08	0.16	< 100
3	815.5	1	0	22.63	0.18	< 100
3	819.0			22.72	0.19	< 100
3	822.5			22.79	0.19	< 100
3	815.5	1	7	22.91	0.20	< 100
3	819.0			23.44	0.22	< 100
3	822.5			23.11	0.20	< 100
3	815.5	1	14	22.83	0.19	< 100
3	819.0			22.64	0.18	< 100
3	822.5			22.74	0.19	< 100
3	815.5	15	0	22.04	0.16	< 100
3	819.0			21.98	0.16	< 100
3	822.5			22.06	0.16	< 100

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	Output Power (W)	Limit (W)
16QAM						
5	816.5	1	0	22.38	0.17	< 100
5	819.0			22.53	0.18	< 100
5	821.5			22.48	0.18	< 100
5	816.5	1	12	23.08	0.20	< 100
5	819.0			23.11	0.20	< 100
5	821.5			22.86	0.19	< 100
5	816.5	1	24	22.45	0.18	< 100
5	819.0			22.45	0.18	< 100
5	821.5			22.43	0.17	< 100
5	816.5	25	0	21.99	0.16	< 100
5	819.0			22.18	0.17	< 100
5	821.5			21.87	0.15	< 100
10	819.0	1	0	22.84	0.19	< 100
		1	24	22.52	0.18	< 100
		1	49	22.33	0.17	< 100
		50	0	22.02	0.16	< 100
15	821.5	1	0	22.70	0.19	< 100
		1	36	22.61	0.18	< 100
		1	74	22.91	0.20	< 100
		75	0	21.98	0.16	< 100

Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	Output Power (W)	Limit (W)
64QAM						
1.4	814.7	1	0	22.19	0.17	< 100
1.4	819.0			22.32	0.17	< 100
1.4	823.3			22.30	0.17	< 100
1.4	814.7	1	2	22.16	0.16	< 100
1.4	819.0			22.40	0.17	< 100
1.4	823.3			22.17	0.16	< 100
1.4	814.7	1	6	22.03	0.16	< 100
1.4	819.0			21.87	0.15	< 100
1.4	823.3			21.86	0.15	< 100
1.4	814.7	6	0	20.92	0.12	< 100
1.4	819.0			20.91	0.12	< 100
1.4	823.3			20.85	0.12	< 100
3	815.5	1	0	22.61	0.18	< 100
3	819.0			22.22	0.17	< 100
3	822.5			22.23	0.17	< 100
3	815.5	1	7	22.45	0.18	< 100
3	819.0			22.48	0.18	< 100
3	822.5			22.41	0.17	< 100
3	815.5	1	14	22.10	0.16	< 100
3	819.0			22.21	0.17	< 100
3	822.5			22.22	0.17	< 100
3	815.5	15	0	21.31	0.14	< 100
3	819.0			20.93	0.12	< 100
3	822.5			21.05	0.13	< 100

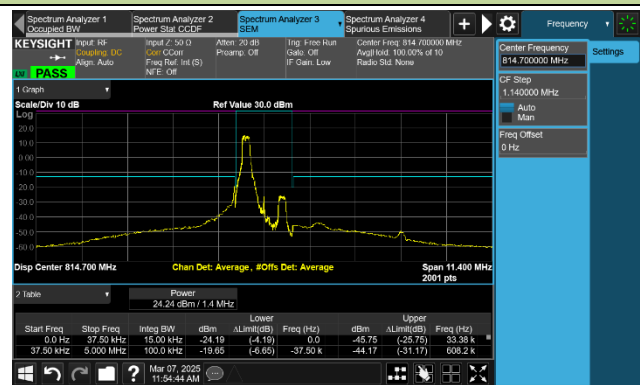
Channel Bandwidth (MHz)	Frequency (MHz)	RB Size	RB Offset	Output Power (dBm)	Output Power (W)	Limit (W)
64QAM						
5	816.5	1	0	22.15	0.16	< 100
5	819.0			22.06	0.16	< 100
5	821.5			21.95	0.16	< 100
5	816.5	1	12	22.38	0.17	< 100
5	819.0			22.48	0.18	< 100
5	821.5			22.35	0.17	< 100
5	816.5	1	24	21.98	0.16	< 100
5	819.0			22.08	0.16	< 100
5	821.5			22.08	0.16	< 100
5	816.5	25	0	20.93	0.12	< 100
5	819.0			21.08	0.13	< 100
5	821.5			21.06	0.13	< 100
10	819.0	1	0	21.84	0.15	< 100
		1	24	22.39	0.17	< 100
		1	49	22.18	0.17	< 100
		50	0	21.01	0.13	< 100
15	821.5	1	0	22.09	0.16	< 100
		1	37	22.49	0.18	< 100
		1	74	22.22	0.17	< 100
		75	0	20.90	0.12	< 100

A.4 Conducted Band-Edge Test Result

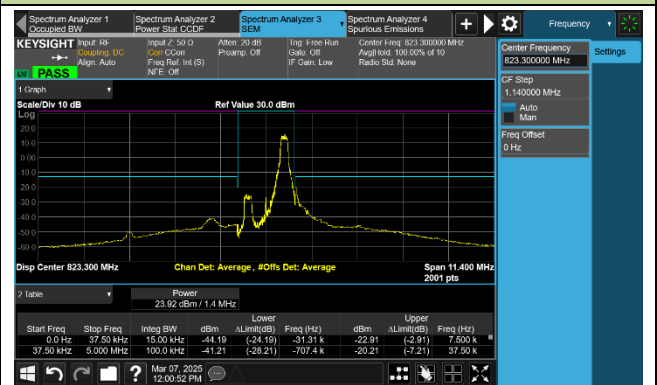
Test Site	WZ-SR6	Test Engineer	Jone Zhang
Test Date	2025-03-07	Test Band	Band 26

1.4MHz Channel Bandwidth 1RB

Lower Band Edge

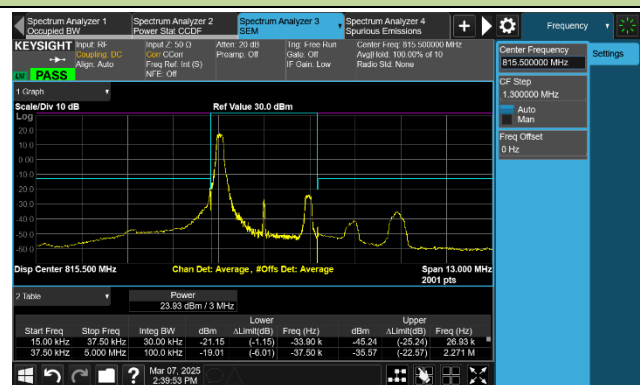


Upper Band Edge

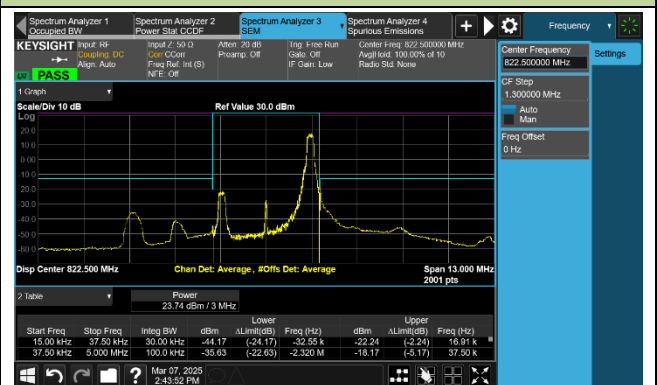


3MHz Channel Bandwidth 1RB

Lower Band Edge

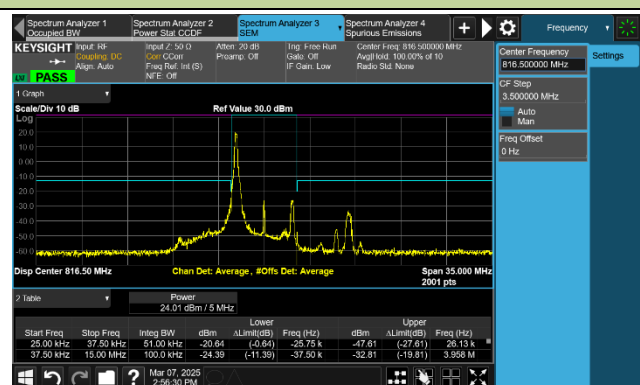


Upper Band Edge

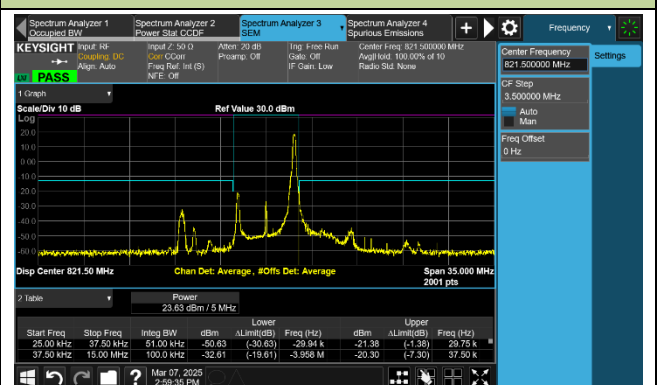


5MHz Channel Bandwidth 1RB

Lower Band Edge

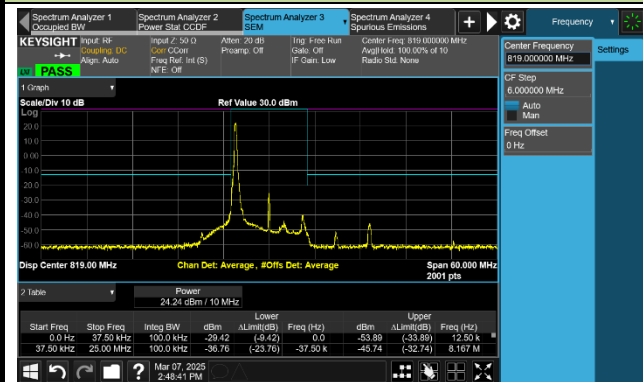


Upper Band Edge

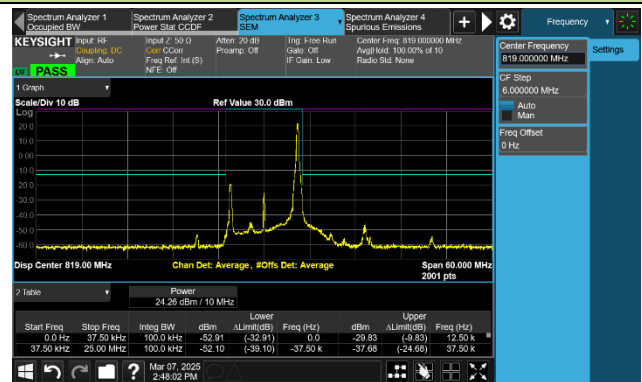


10MHz Channel Bandwidth 1RB

Lower Band Edge

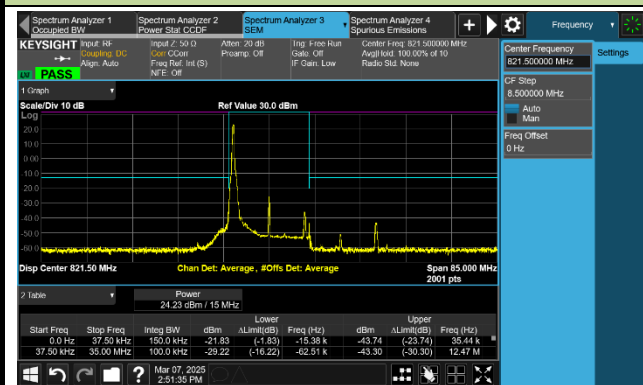


Upper Band Edge

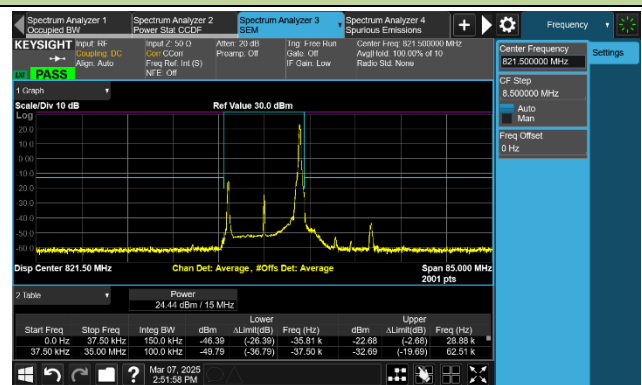


15MHz Channel Bandwidth 1RB

Lower Band Edge

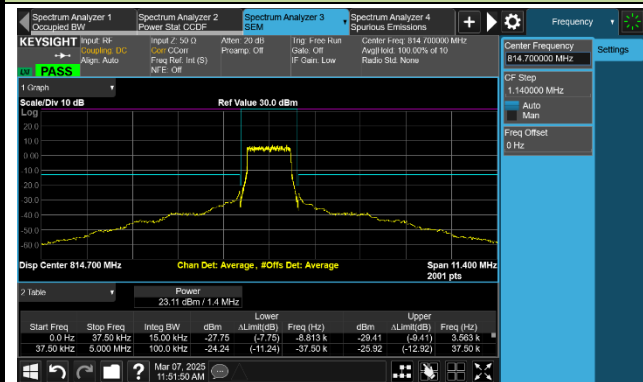


Upper Band Edge

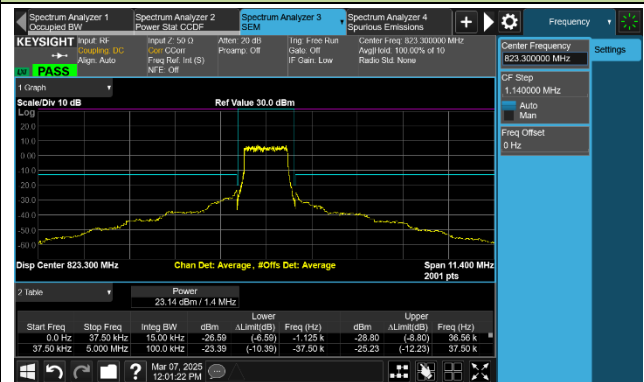


1.4MHz Channel Bandwidth Full RB

Lower Band Edge

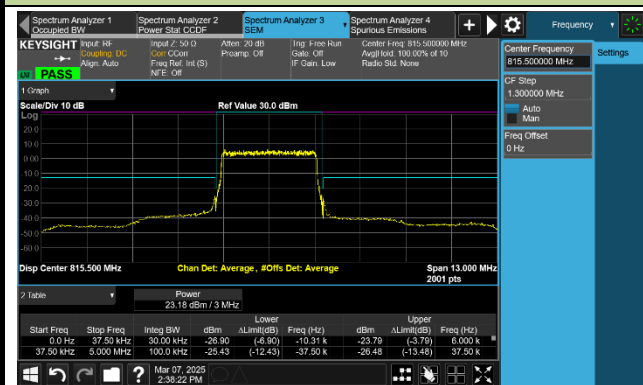


Upper Band Edge

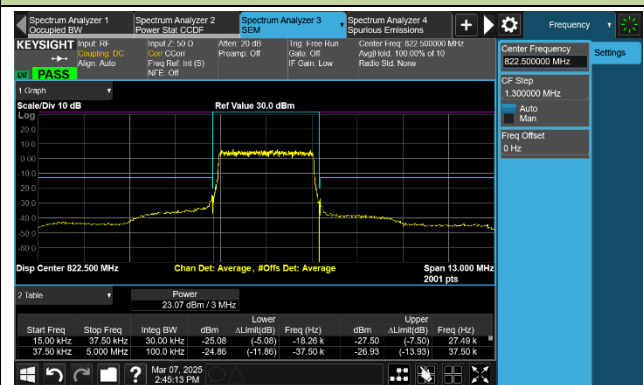


3MHz Channel Bandwidth Full RB

Lower Band Edge

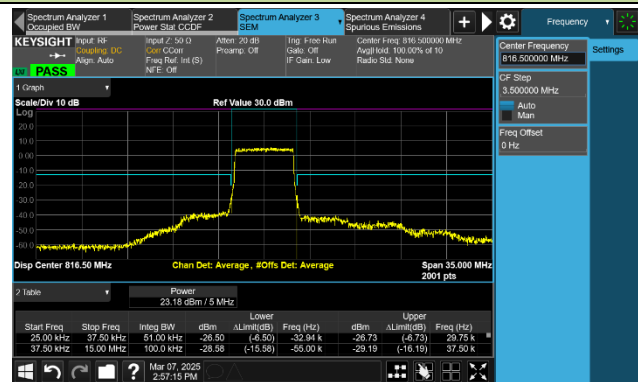


Upper Band Edge

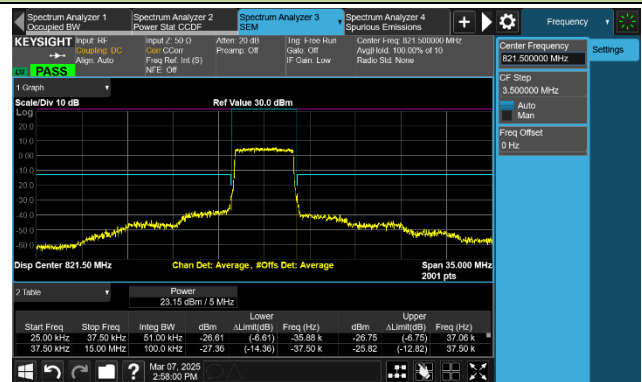


5MHz Channel Bandwidth Full RB

Lower Band Edge

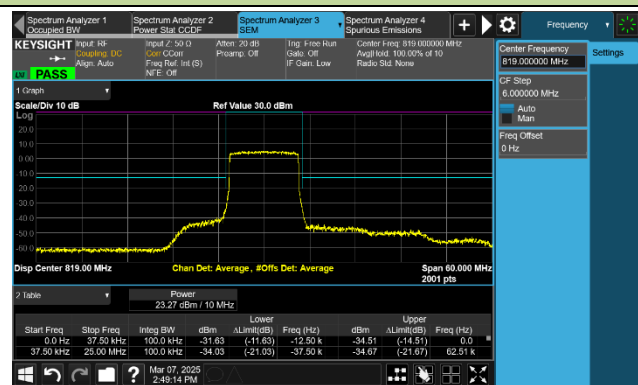


Upper Band Edge



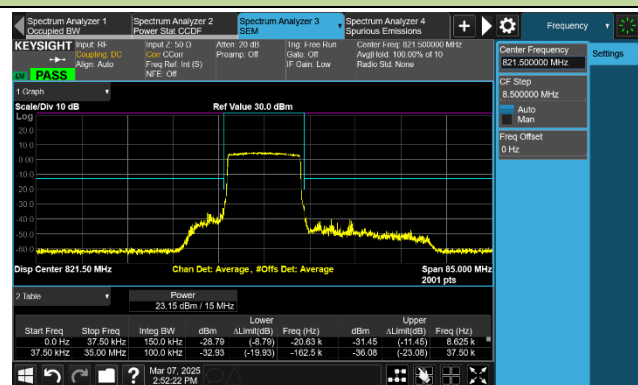
10MHz Channel Bandwidth Full RB

Lower Band Edge & Upper Band Edge



15MHz Channel Bandwidth Full RB

Lower Band Edge & Upper Band Edge



A.5 Conducted Supurious Emissions Test Result

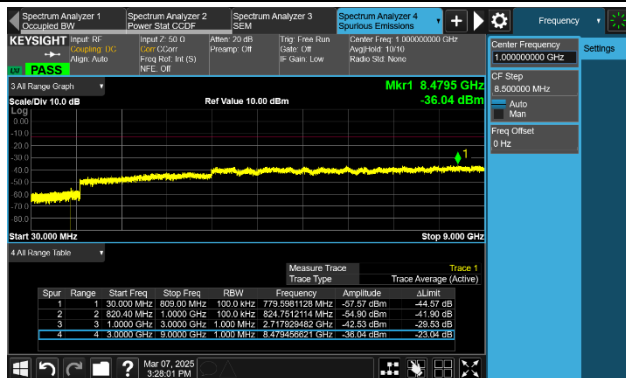
Test Site	WZ-SR6	Test Engineer	Edith Yu
Test Date	2025-03-07	Test Band	Band 26

Channel Bandwidth (MHz)	Frequency (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
1.4	814.7	30 ~ 9000	-36.04	≤ -13.00	Pass
1.4	819.0	30 ~ 9000	-35.78	≤ -13.00	Pass
1.4	823.3	30 ~ 9000	-36.46	≤ -13.00	Pass
3	815.5	30 ~ 9000	-35.98	≤ -13.00	Pass
3	819.0	30 ~ 9000	-36.00	≤ -13.00	Pass
3	822.5	30 ~ 9000	-36.37	≤ -13.00	Pass
5	816.5	30 ~ 9000	-36.37	≤ -13.00	Pass
5	819.0	30 ~ 9000	-36.15	≤ -13.00	Pass
5	821.5	30 ~ 9000	-36.42	≤ -13.00	Pass
10	819.0	30 ~ 9000	-36.29	≤ -13.00	Pass
15	821.5	30 ~ 9000	-35.26	≤ -13.00	Pass

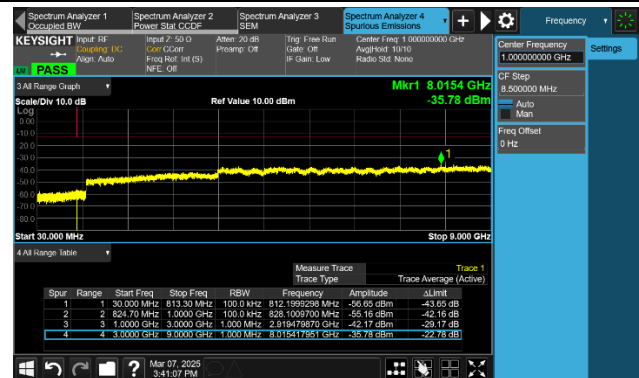
Note: The amplitude of Conducted Spurious emissions (frequency range from 9 kHz to 30 MHz) is that proximity to ambient noise, which is also attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

1.4MHz Channel Bandwidth

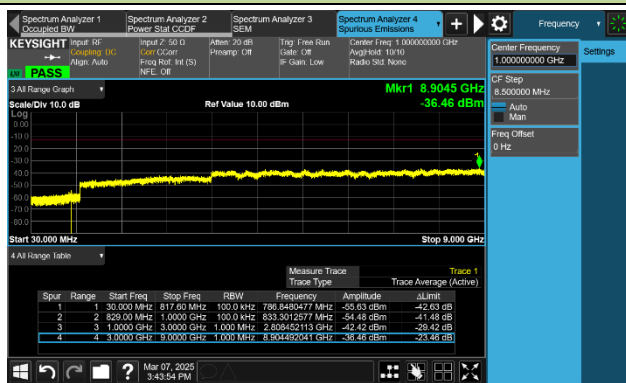
Low Channel



Middle Channel

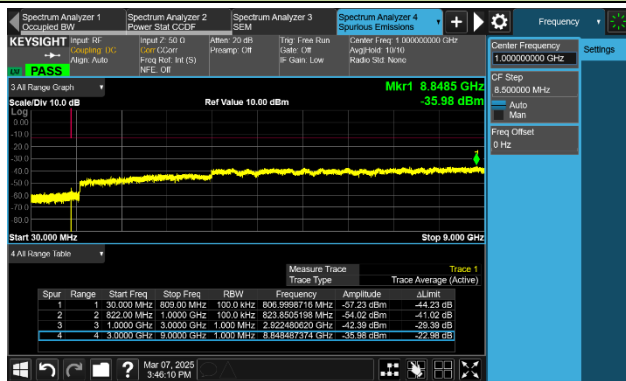


High Channel

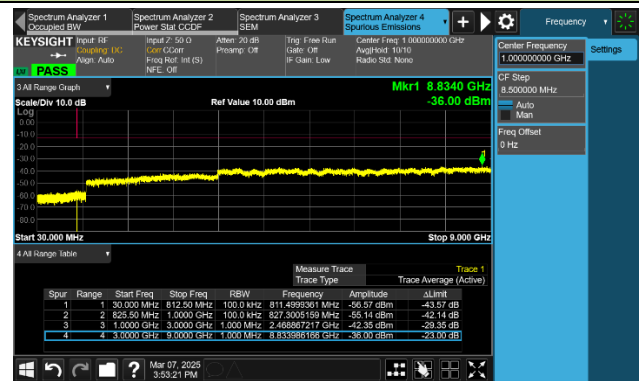


3MHz Channel Bandwidth

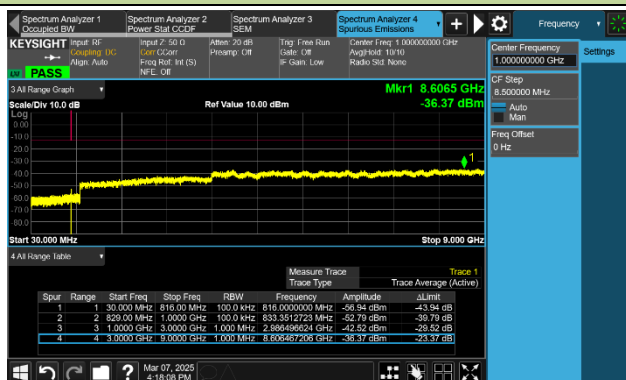
Low Channel



Middle Channel

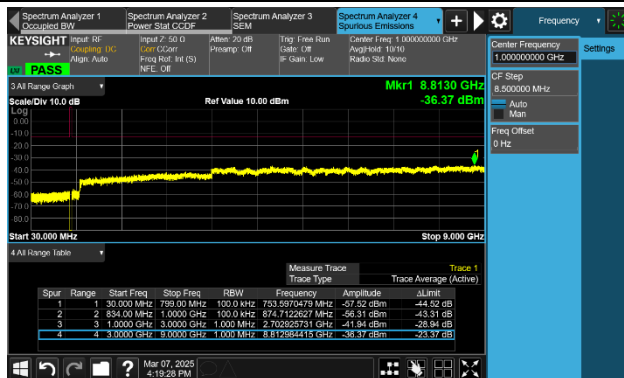


High Channel

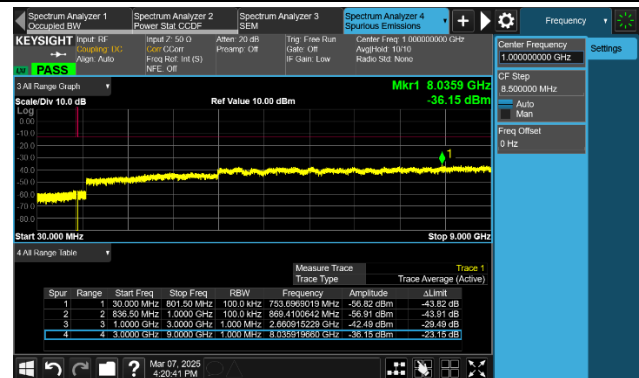


5MHz Channel Bandwidth

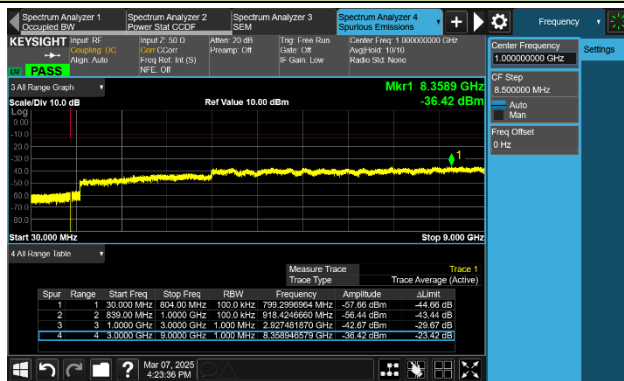
Low Channel



Middle Channel

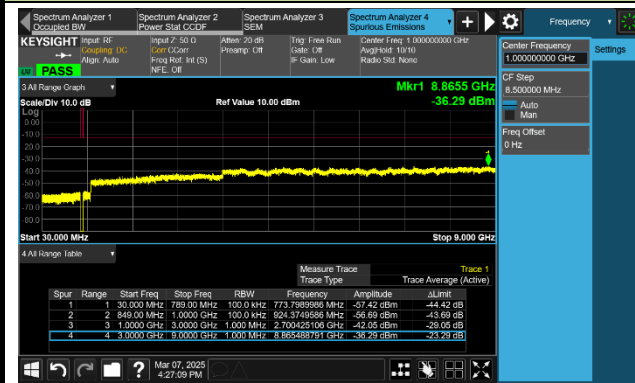


High Channel



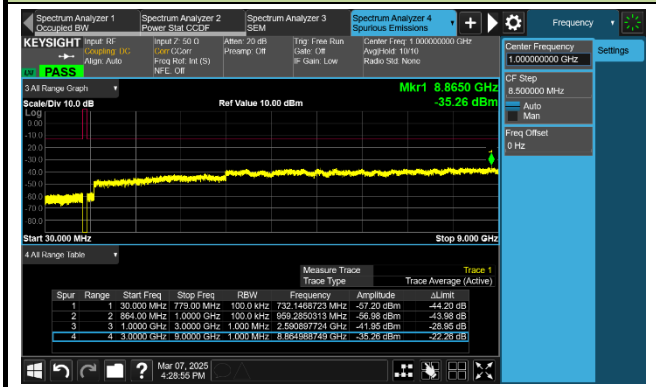
10MHz Channel Bandwidth

Middle Channel



15MHz Channel Bandwidth

Middle Channel



A.6 Radiated Spurious Emissions Test Result

Test Site	WZ-AC1	Test Engineer	Lucas Wang
Test Date	2025-02-13 ~ 2025-03-13	Test Band	Band 26

Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
171.814	3.5	18.1	21.6	82.3	-60.7	Quasi-peak	Horizontal
987.196	-3.9	31.4	27.5	82.3	-54.8	Quasi-peak	Horizontal
62.398	7.7	17.9	25.6	82.3	-56.7	Quasi-peak	Vertical
111.674	12.7	15.6	28.3	82.3	-54.0	Quasi-peak	Vertical
1630.400	46.7	-5.9	40.8	82.3	-41.5	Peak	Horizontal
4452.000	37.0	2.4	39.4	82.3	-42.9	Peak	Horizontal
1630.400	43.9	-5.9	38.0	82.3	-44.3	Peak	Vertical
4544.800	36.8	2.7	39.5	82.3	-42.8	Peak	Vertical
Middle Channel							
172.687	3.7	18.0	21.7	82.3	-60.6	Quasi-peak	Horizontal
942.479	-4.5	30.7	26.2	82.3	-56.1	Quasi-peak	Horizontal
62.883	9.0	17.8	26.8	82.3	-55.5	Quasi-peak	Vertical
921.915	-4.5	30.5	26.0	82.3	-56.3	Quasi-peak	Vertical
1637.600	48.9	-5.8	43.1	82.3	-39.2	Peak	Horizontal
8800.800	36.5	11.5	48.0	82.3	-34.3	Peak	Horizontal
1637.600	48.2	-5.8	42.4	82.3	-39.9	Peak	Vertical
8643.200	36.3	11.2	47.5	82.3	-34.8	Peak	Vertical
High Channel							
104.496	6.5	14.6	21.1	82.3	-61.2	Quasi-peak	Horizontal
930.548	-3.9	30.7	26.8	82.3	-55.5	Quasi-peak	Horizontal
62.204	8.2	17.9	26.1	82.3	-56.2	Quasi-peak	Vertical
983.510	-5.1	31.4	26.3	82.3	-56.0	Quasi-peak	Vertical
2468.800	44.4	-2.5	41.9	82.3	-40.4	Peak	Horizontal
8888.800	35.9	11.7	47.6	82.3	-34.7	Peak	Horizontal
2468.800	40.6	-2.5	38.1	82.3	-44.2	Peak	Vertical
8749.600	36.5	11.5	48.0	82.3	-34.3	Peak	Vertical

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 2: The peak-detection value will always be equal to or greater than the average-detection value. As a result, the peak-detection value measured by spectrum analyzer shall represent the worst-case result.

Note 3: The amplitude of Radiated transmitter spurious emissions (Frequency range from 9 kHz to 30 MHz and above 18 GHz) is that proximity to ambient noise, which is also attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Appendix B - Test Setup Photograph

Refer to "R25S1009034-UT" file.

Appendix C - EUT Photograph

Refer to "R25S1009034-UE" file.

The End
