CERTIFICATION TEST REPORT

Report Number. : 4791196575-E6V2

Applicant	:	SAMSUNG ELECTRONICS CO., LTD. 129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO, 16677, KOREA
Model	:	SM-F956U, SM-F956U1
FCC ID	:	A3LSMF956U
EUT Description	:	GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC, WPT and UWB
Test Standard	:	FCC 47 CFR PART 30 Mobile Transmitter(5GM)

Date Of Issue:
2024-05-07

Prepared by:
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IAS ACCREDITED Testing Laboratory TL-637

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2024-04-22	Initial issue	Myeongjun Kwon
V2	2024-05-07	Updated to address TCB's question	Myeongjun Kwon

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	SAMSUNG ELECTRONICS CO., LTD.
EUT DESCRIPTION:	GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC, WPT and UWB.
MODEL NUMBER:	SM-F956U, SM-F956U1
SERIAL NUMBER:	R3CX20PP64W, R3CX20PP69T, R3CX20PPBCX, R3CX20PPC0L (Radiated);
DATE TESTED:	2024-02-19 - 2024-04-22;

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 30 Mobile Transmitter (5GM)	Complies

UL KOREA LTD. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL KOREA LTD. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL KOREA LTD. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL KOREA LTD. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL KOREA LTD. By:

Seokhwan Hong
Suwon Lab Engineer
UL KOREA LTD.

Tested By:

Myeongjun Kwon
Suwon Lab Engineer
UL KOREA LTD.

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with following methods.

1. FCC 47 CFR Part 2.
2. FCC 47 CFR Part 30.
3. ANSI C63.26-2015
4. KDB 842590 D01 Upper Microwave Flexible Use Service v01r02
5. KDB 971168 D01 Power Meas License Digital Systems v03r01

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do,16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro
☐ Chamber 1(3m semi-anechoic chamber)
☒ Chamber 2(3m semi-anechoic chamber)
☐ Chamber 3(3m semi-anechoic chamber)
☐ Chamber 4(3m Full-anechoic chamber)
☒ Chamber 5(3m Full-anechoic chamber)

UL KOREA LTD. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength[dBuV/m] = PXA reading with EUT worst orientation (dBm) + Antenna Factor(dBuV/m) + cable loss(dB) + 107

EIRP[dBm] = PXA reading with EUT worst orientation (dBm) + Path loss (dB) – cable loss(between the SG and substitution antenna) + Substitution Antenna Gain (dBi)

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radiated Disturbance, 30 MHz to 1 GHz	4.07 dB
Radiated Disturbance, 1 GHz to 18 GHz	4.99 dB
Radiated Disturbance, Above 18 GHz	5.96 dB

Uncertainty figures are valid to a confidence level of 95%.

4.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Clause 4.4.3 in IEC Guide 115:2023.

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC, WPT and UWB. This test report addresses the 5G NR operational mode.

Representative Model	Difference	Derivative Model
		SM-F956U1
SM-F956U	Hardware	Same as SM-F956U
	Software	Different UI

The model SM-S956U was used for final testing and is representative of the test results in this report.

This test report addresses the 5G RF2 NR operational mode on following frequency bands:

n258(denoted as n258 SB1 in this report): 24.25 – 24.45 GHz (TDD)
n258(denoted as n258 SB2 in this report): 24.75 – 25.25 GHz (TDD)
n261: 27.5 – 28.35 GHz (TDD)
n260: 37 – 40 GHz (TDD)

The EUT has an array antenna configuration.
1 patch, placed on the EUT(denoted as J patch).
The patch antenna is comprised of two separate antenna feeds - one for horizontal and one for vertical polarization and 1 × 5 dual-polarized patch arrays.

Antenna	Name
Antenna 1	J Patch

# CC's	BW (MHz)	Total CC BW (MHz)	antenna	24.25~24.45GHz (n258-R1)	24.75~25.25GHz (n258-R2)	27.5~28.35GHz (n261)	37~40GHz (n260)
1CC	50	50	J Patch	O	O	O	O
	100	100	J Patch	O	O	O	O
2CC	50	100	J Patch	-	-	-	-
	100	200	J Patch	O	O	O	O
3CC	50	150	J Patch	-	-	-	-
	100	300	J Patch	-	O	O	O
4CC	50	200	J Patch	-	-	-	-
	100	400	J Patch	-	O	O	O

The EUT supports up to 4CC for UL. For each CC, the EUT supports 100MHz bandwidth.

For modulation, the EUT supports a subcarrier spacing (SCS) of 120kHz with two transmission schemes, CP-OFDM and DFT-s-OFDM, with QPSK, pi/2-BPSK, 16-QAM, and 64-QAM modulations.

Different Beam IDs are supported, each corresponding to a different position in space for antenna. During testing, FTM (Factory Test Mode) was used to operate the transmitter.
MIMO operation was achieved by enabling two Beam IDs at the same time: one is from the list of H Beam IDs and other is from the list of V Beam IDs.

The manufacturer provided the beam ID setting that produced the highest EIRP for each antenna via the EIRP simulation tool. Based on the provided beam ID, the highest beam ID was selected through actual measurement. These beam ID settings were used for all tests. All tests were performed in stand-alone mode of operation without signals.

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5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum average radiated EIRP output powers as follows:

Antenna 1 / Ant J, n258 SB1

FCC Part 30								
Band	Frequency Range [GHz]	Antenna	BandWidth [MHz]	CCs Active	Mode	Modulation	Radiated	
							Avg [dBm]	Avg [mW]
n258 SB1	24.25 - 24.45	Ant J	50	1CC	SISO	QPSK	29.41	872.97
					SISO-Dual	QPSK	**30.74**	**1185.77**
					SISO-Dual	pi/2-BPSK	30.08	1018.59
					SISO-Dual	16QAM	30.22	1051.96
					SISO-Dual	64QAM	26.97	497.74
					MIMO	QPSK	29.19	829.85
			100	1CC	SISO	QPSK	29.45	881.05
					SISO-Dual	QPSK	**30.45**	**1109.17**
					SISO-Dual	pi/2-BPSK	29.99	997.70
					SISO-Dual	16QAM	29.24	839.46
					SISO-Dual	64QAM	25.93	391.74
					MIMO	QPSK	28.07	641.21
				2CC	SISO-Dual	QPSK	28.72	744.73
					SISO-Dual	pi/2-BPSK	**28.77**	**753.36**
					SISO-Dual	16QAM	28.15	653.13
					SISO-Dual	64QAM	24.45	278.61

Antenna 1 / Ant J, n258 SB2

FCC Part 30								
Band	Frequency Range [GHz]	Antenna	BandWidth [MHz]	CCs Active	Mode	Modulation	Radiated	
							Avg [dBm]	Avg [mW]
n258 SB2	24.75 - 25.25	Ant J	50	1CC	SISO	QPSK	30.23	1054.39
					SISO-Dual	QPSK	**30.71**	**1177.61**
					SISO-Dual	pi/2-BPSK	30.45	1109.17
					SISO-Dual	16QAM	30.29	1069.05
					SISO-Dual	64QAM	27.21	526.02
					MIMO	QPSK	29.13	818.46
			100	1CC	SISO	QPSK	30.31	1073.99
					SISO-Dual	QPSK	**30.68**	**1169.50**
					SISO-Dual	pi/2-BPSK	30.28	1066.60
					SISO-Dual	16QAM	30.27	1064.14
					SISO-Dual	64QAM	27.26	532.11
					MIMO	QPSK	28.91	778.04
				2CC	SISO-Dual	QPSK	**29.07**	**807.24**
					SISO-Dual	pi/2-BPSK	28.92	779.83
					SISO-Dual	16QAM	28.61	726.11
					SISO-Dual	64QAM	25.01	316.96
				3CC	SISO-Dual	QPSK	26.68	465.59
					SISO-Dual	pi/2-BPSK	**26.69**	**466.66**
					SISO-Dual	16QAM	25.66	368.13
					SISO-Dual	64QAM	23.63	230.67
				4CC	SISO-Dual	QPSK	26.79	477.53
					SISO-Dual	pi/2-BPSK	**26.81**	**479.73**
					SISO-Dual	16QAM	25.78	378.44
					SISO-Dual	64QAM	23.66	232.27

Antenna 1 / Ant J, n261

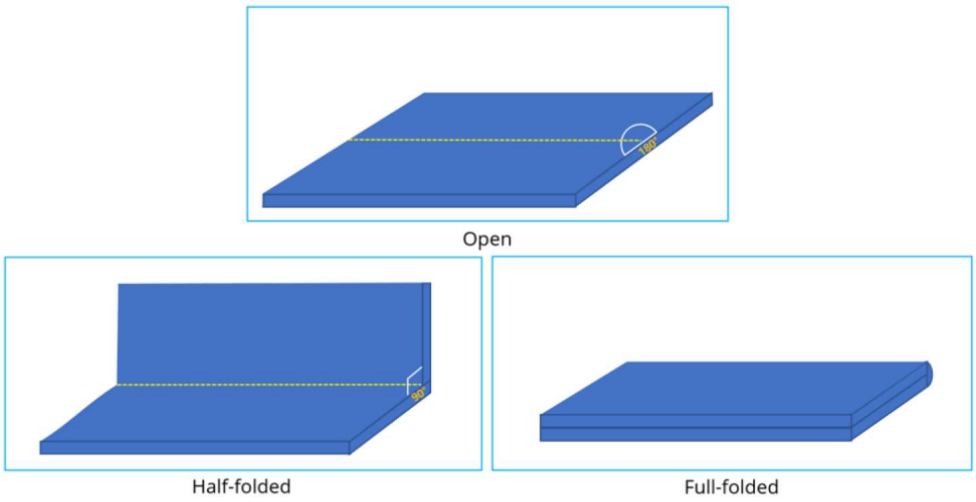
FCC Part 30								
Band	Frequency Range [GHz]	Antenna	BandWidth [MHz]	CCs Active	Mode	Modulation	Radiated	
							Avg [dBm]	Avg [mW]
n261	27.5 - 28.35	Ant J	50	1CC	SISO	QPSK	30.84	1213.39
					SISO-Dual	QPSK	**32.92**	**1958.84**
					SISO-Dual	pi/2-BPSK	32.39	1733.80
					SISO-Dual	16QAM	31.88	1541.70
					SISO-Dual	64QAM	28.87	770.90
					MIMO	QPSK	30.79	1199.50
			100	1CC	SISO	QPSK	31.00	1258.93
					SISO-Dual	QPSK	**32.73**	**1874.99**
					SISO	pi/2-BPSK	32.25	1678.80
					SISO-Dual	16QAM	31.85	1531.09
					SISO-Dual	64QAM	28.86	769.13
					MIMO	QPSK	29.69	931.11
				2CC	SISO-Dual	QPSK	**29.73**	**939.72**
					SISO-Dual	pi/2-BPSK	29.72	937.56
					SISO-Dual	16QAM	29.25	841.40
					SISO-Dual	64QAM	25.80	380.19
				3CC	SISO-Dual	QPSK	**27.56**	**570.16**
					SISO-Dual	pi/2-BPSK	**27.56**	**570.16**
					SISO-Dual	16QAM	26.54	450.82
					SISO-Dual	64QAM	24.59	287.74
				4CC	SISO-Dual	QPSK	27.66	583.45
					SISO-Dual	pi/2-BPSK	**27.69**	**587.49**
					SISO-Dual	16QAM	26.71	468.81
					SISO-Dual	64QAM	25.01	316.96

Antenna 1 / Ant J, n260

FCC Part 30								
Band	Frequency Range [GHz]	Antenna	BandWidth [MHz]	CCs Active	Mode	Modulation	Radiated	
							Avg [dBm]	Avg [mW]
n260	37 - 40	Ant J	50	1CC	SISO	QPSK	31.88	1541.70
					SISO-Dual	QPSK	33.31	2142.89
					SISO-Dual	pi/2-BPSK	**33.43**	**2202.93**
					SISO-Dual	16QAM	32.81	1909.85
					SISO-Dual	64QAM	29.51	893.31
					MIMO	QPSK	32.13	1633.05
			100	1CC	SISO	QPSK	32.20	1659.59
					SISO-Dual	QPSK	32.55	1798.87
					SISO-Dual	pi/2-BPSK	**33.06**	**2023.02**
					SISO-Dual	16QAM	32.69	1857.80
					SISO-Dual	64QAM	29.85	966.05
					MIMO	QPSK	32.10	1621.81
				2CC	SISO-Dual	QPSK	**31.69**	**1475.71**
					SISO-Dual	pi/2-BPSK	31.58	1438.80
					SISO-Dual	16QAM	31.11	1291.22
					SISO-Dual	64QAM	27.60	575.44
				3CC	SISO-Dual	QPSK	**29.50**	**891.25**
					SISO-Dual	pi/2-BPSK	29.47	885.12
					SISO-Dual	16QAM	28.48	704.69
					SISO-Dual	64QAM	26.51	447.71
				4CC	SISO-Dual	QPSK	**29.70**	**933.25**
					SISO-Dual	pi/2-BPSK	29.63	918.33
					SISO-Dual	16QAM	28.64	731.14
					SISO-Dual	64QAM	26.70	467.74

5.3. WORST-CASE ORIENTATION

For all 5G NR FR2 Bands, the worst-case scenario for all measurements is based on the EIRP measurement investigation results. EIRP were measured on QPSK, pi/2-BPSK, 16QAM and 64QAM modulations. It was found that QPSK results were worst case. 16QAM and 64QAM EIRP testing were performed using based on QPSK worst channel modulations to represent the worst case. However, the out of band emissions and spurious radiation were only performed on bandwidth and RB offset(with RB size 1) with the highest EIRP in QPSK.



This device supports three configurations: open, close and half open. All cases were tested, and the worst results were reported.

The fundamental and radiated spurious emission were investigated in EUT through several positions in space by rotating about the roll axis, where is applicable. The final optimum position resulting in the highest EIRP for the frequency or band under investigation is placed on an open-air fixture allowing no blockage of the signal as measured by the receiving antenna.

Note : By consulting the EIRP simulation data for all beam IDs and performing spot checks on the IDs with the highest EIRPs, we determined the worst case Beam ID pair for SISO operation and Beam ID pair for MIMO operation. This beam ID was used for final measurements.

5.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacture**	**Model**	**Serial Number**	**FCC ID**
Charger	SAMSUNG	EP-TA800	R37MC7X35P7DK3	N/A
Data Cable	SAMSUNG	WBR0062M	GH39-02112A	N/A

I/O CABLE

I/O Cable List						
Cable No.	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	DC Power	1	Type-C	Shielded	1.0 m	N/A

TEST SETUP

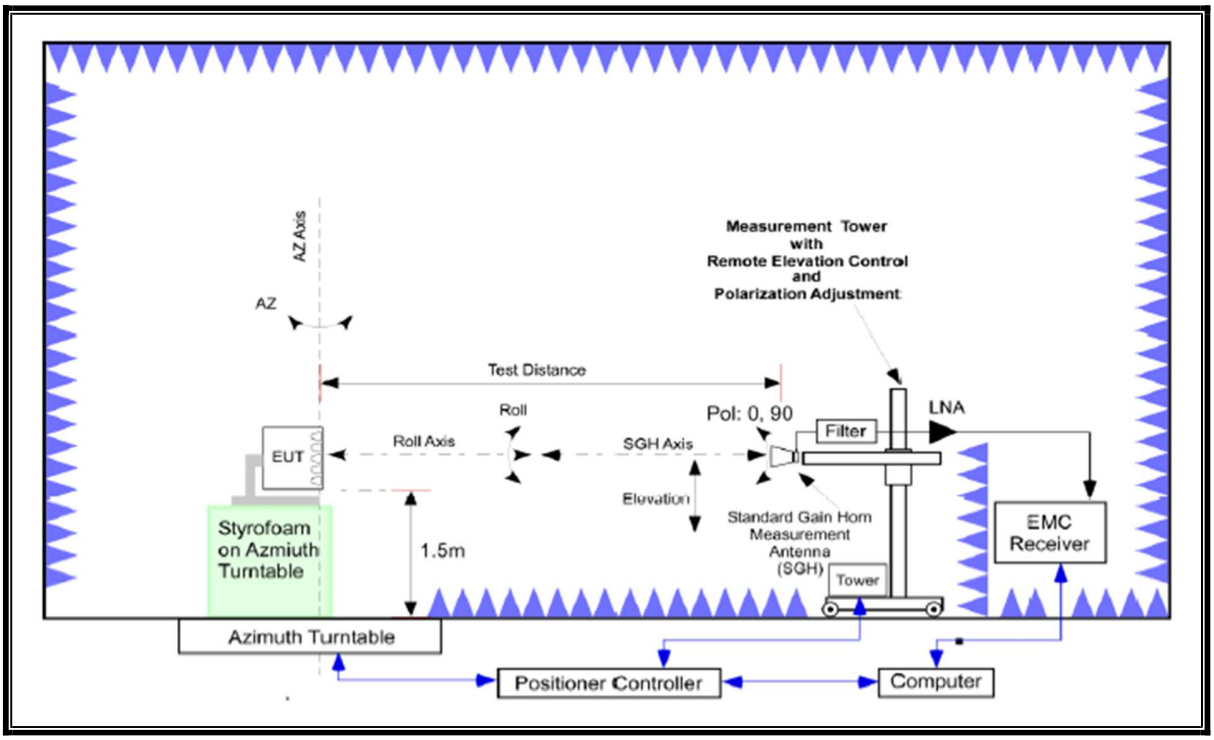
All testing was performed using FTM (Factory Test Mode) software at continuous Tx operation. When implemented out in the field, the EUT will operate with a maximum uplink configuration (i.e., a maximum uplink duty cycle of 100%). The FTM software was also used for the EUT operation in the ENDC mode.

SETUP DIAGRAM FOR TESTS (RADIATED TEST SETUP)

Radiated spurious emission measurements from 30MHz - 18GHz were performed in a semi anechoic chamber (SAC) conforming to the normalized site attenuation requirements specified in ANSI C63.4 for below 1 GHz and the site validation criteria called out in CISPR 16-1-4:2019 over the frequency range 1GHz to 18 GHz.

Radiated power (EIRP) measurements of the fundamental signal and radiated spurious emissions measurements above 18 GHz were performed in a full anechoic chamber (FAC). In accordance with ANSI C63.26 and KDB publication 842590 the site meets the sVSWR validation requirements called out in CISPR 16-1-4:2019 over the frequency range 1GHz to 18 GHz. As required by ANSI C63.26 reflection contributions are reduced to the extent possible to allow for measurements to be made up to 200GHz in accordance with KDB publication 842590 V01R02.

A positioner was used to manipulate the EUT through several positions in space by rotating about the roll axis as shown in the figure below. The positioner was mounted on top of a turntable bringing the total EUT height to 1.5m.



FAR-FIELD DISTANCE AND MEASUREMENT DISTANCE

The equipment under test was transmitting while connected to its integral antenna and is placed on a turntable.

The measurement antenna is in the far field of the EUT per formula $2D^2/\lambda$ where D is the larger between the dimension of the measurement antenna and the transmitting antenna of the EUT. In this case, "D" is the largest dimension of the measurement antenna. The EUT is manipulated through all orthogonal planes representative of its typical use to achieve the highest reading on the receive spectrum analyzer.

For fundamental and out-of-band emissions the largest far-field distance of either the EUT antenna or measurement antenna shall be used. For spurious emissions the far-field distance is based only on the measurement antenna.

Frequency Range(GHz)	Wavelength(m)	Far Field Distance(m)	Measurement Distance(m)
18-40	0.008	0.54	1.00 (EIRP and Band Edge = 3.00)
40-50	0.006	1.05	1.50
50-75	0.004	0.69	1.00
75-110	0.003	0.46	1.00
110-175	0.002	0.34	1.00
175-200	0.002	0.16	1.00

Radiated power levels are investigated while the receive antenna was rotated through all angles to determine the worst-case polarization/positioning. It was determined that H=0 degree and V=90 degree is the worst-case positions when the EUT was transmitting horizontally and vertically polarized beams, respectively.
The maximized power level is recorded using the spectrum analyzer “Channel Power” function with the integration bandwidth set to the emissions’ occupied bandwidth. The EIRP is calculated from the raw power level measured with the spectrum analyzer using the formulas shown below.

The field strength E is calculated E (dBμV/m) = Spectrum Analyzer Channel Power Level (dBm) + Antenna Factor (dB/m) + Cable Loss (dB) + 107.

EIRP (dBm) = E (dBμV/m) + 20log(D) − 104.8; where D is the measurement distance (in the far field region) in meter.

6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List				
Description	**Manufacturer**	**Model**	**S/N**	**Cal Due**
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2024-08-15
Antenna, Horn, 18 GHz	ETS	3117	00168724	2024-08-04
Antenna, Horn, 40 GHz	ETS	3116C	00227907	2025-01-17
Preamplifier, 1000 MHz	Sonoma	310N	351741	2024-07-24
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2024-07-25
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2024-07-24
High Pass Filter 3GHz	Micro-Tronics	HPM17543	015	2024-07-24
Signal Analyzer, 44 GHz	R&S	FSW50	101538	2025-01-02
Signal Analyzer, 50 GHz	KEYSIGHT	N9040B	MY60080268	2025-01-02
SA Extension Module	VDI	N9029AV15	SAX693	2025-01-09
SA Extension Module	VDI	N9029AV10	SAX597	2025-01-09
SA Extension Module	VDI	N9029AV06	SAX789	2025-01-09
SA Extension Module	VDI	N9029AV04	SAX791	2025-01-09
Antenna	CMI, Inc.	HO22R	UL22002	2025-02-22
Antenna	CMI, Inc.	HO15R	UL15002	2025-02-22
Antenna	CMI, Inc.	HO10R	UL10002	2025-02-22
Antenna	CMI, Inc.	HO06R	UL06002	2025-02-22
Antenna	CMI, Inc.	HO04R	UL04002	2025-02-22
Temperature Chamber	ESPEC	SH-642	93001109	2024-07-24
UL Software				
Description	**Manufacturer**	**Model**	**Version**	
Radiated software	UL	UL EMC	Ver 9.5	

7. SUMMARY TABLE

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result
2.1049	Occupied Bandwidth	N/A	Radiated	Complies
2.1046, 30.202	Equivalent Isotropic Radiated Power	43 dBm		Complies
2.1051, 30.203	Out-of-Band Emissions at the Band Edge	-13 dBm/MHz for all out-of-band emissions, -5 dBm/MHz from the band edge up to 10% of the channel BW		Complies
2.1051, 30.203	Spurious Emission	-13 dBm/MHz for all out-of-band emissions		Complies
2.1055	Frequency Stabillity	Fundamental emissions stay within authorized frequency block		Complies

8. APPLICABLE LIMITS AND TEST RESULTS

8.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only

TEST PROCEDURE

Automatic bandwidth measurement function of the signal analyzer was used to measure 99% occupied.

a) RBW = 1 – 5% of OBW
b) VBW ≥ 3 x RBW
c) Detector = Peak
d) Trace mode = max hold
e) Sweep = auto couple
f) The trace was allowed to stabilize

(KDB 842590 D01 Upper Microwave Flexible Use Service v01r02 Section 4.3)
(ANSI C63.26-2015 Section 5.4.3)

Note

5G NR: All Waveforms (CP-OFDM vs DFT-s OFDM) 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.

RESULTS

See the following pages.

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8.1.1. OCCUPIED BANDWIDTH RESULTS

OBW Result

Antenna	Band	BandWidth [MHz]	CCs Active	OFDM	Modulation	OBW [MHz]
Antenna J	n258 SB1	50	1CC	DFT-s	pi/2-BPSK	45.96
				CP	QPSK	**46.42**
				CP	16QAM	46.12
				CP	64QAM	46.10
		100	1CC	DFT-s	pi/2-BPSK	92.58
				CP	QPSK	**96.40**
				CP	16QAM	95.90
				CP	64QAM	95.50
			2CC	DFT-s	pi/2-BPSK	193.86
				CP	QPSK	196.48
				CP	16QAM	**196.52**
				CP	64QAM	196.01

Antenna	Band	BandWidth [MHz]	CCs Active	OFDM	Modulation	OBW [MHz]
Antenna J	n258 SB2	50	1CC	DFT-s	pi/2-BPSK	46.17
				CP	QPSK	**46.30**
				CP	16QAM	46.25
				CP	64QAM	46.11
		100	1CC	DFT-s	pi/2-BPSK	92.86
				CP	QPSK	**96.12**
				CP	16QAM	96.08
				CP	64QAM	95.25
			2CC	DFT-s	pi/2-BPSK	195.29
				CP	QPSK	**196.70**
				CP	16QAM	196.23
				CP	64QAM	196.13
			3CC	DFT-s	pi/2-BPSK	291.48
				CP	QPSK	**293.31**
				CP	16QAM	293.00
				CP	64QAM	293.07
			4CC	DFT-s	pi/2-BPSK	389.73
				CP	QPSK	391.52
				CP	16QAM	**391.70**
				CP	64QAM	391.51

Antenna	Band	BandWidth [MHz]	CCs Active	OFDM	Modulation	OBW [MHz]
Antenna J	n261	50	1CC	DFT-s	pi/2-BPSK	**46.85**
				CP	QPSK	46.12
				CP	16QAM	46.64
				CP	64QAM	46.32
		100	1CC	DFT-s	pi/2-BPSK	91.98
				CP	QPSK	**96.39**
				CP	16QAM	96.35
				CP	64QAM	95.26
			2CC	DFT-s	pi/2-BPSK	193.53
				CP	QPSK	**196.45**
				CP	16QAM	195.94
				CP	64QAM	195.54
			3CC	DFT-s	pi/2-BPSK	291.31
				CP	QPSK	292.82
				CP	16QAM	292.81
				CP	64QAM	**293.08**
			4CC	DFT-s	pi/2-BPSK	389.55
				CP	QPSK	390.71
				CP	16QAM	390.55
				CP	64QAM	**390.89**

Antenna	Band	BandWidth [MHz]	CCs Active	OFDM	Modulation	OBW [MHz]
Antenna J	n260	50	1CC	DFT-s	pi/2-BPSK	46.09
				CP	QPSK	46.25
				CP	16QAM	**46.34**
				CP	64QAM	46.15
		100	1CC	DFT-s	pi/2-BPSK	92.74
				CP	QPSK	**96.34**
				CP	16QAM	95.98
				CP	64QAM	95.66
			2CC	DFT-s	pi/2-BPSK	193.85
				CP	QPSK	196.23
				CP	16QAM	**196.25**
				CP	64QAM	195.83
			3CC	DFT-s	pi/2-BPSK	291.29
				CP	QPSK	293.63
				CP	16QAM	293.72
				CP	64QAM	**293.88**
			4CC	DFT-s	pi/2-BPSK	390.75
				CP	QPSK	392.58
				CP	16QAM	392.50
				CP	64QAM	**392.80**

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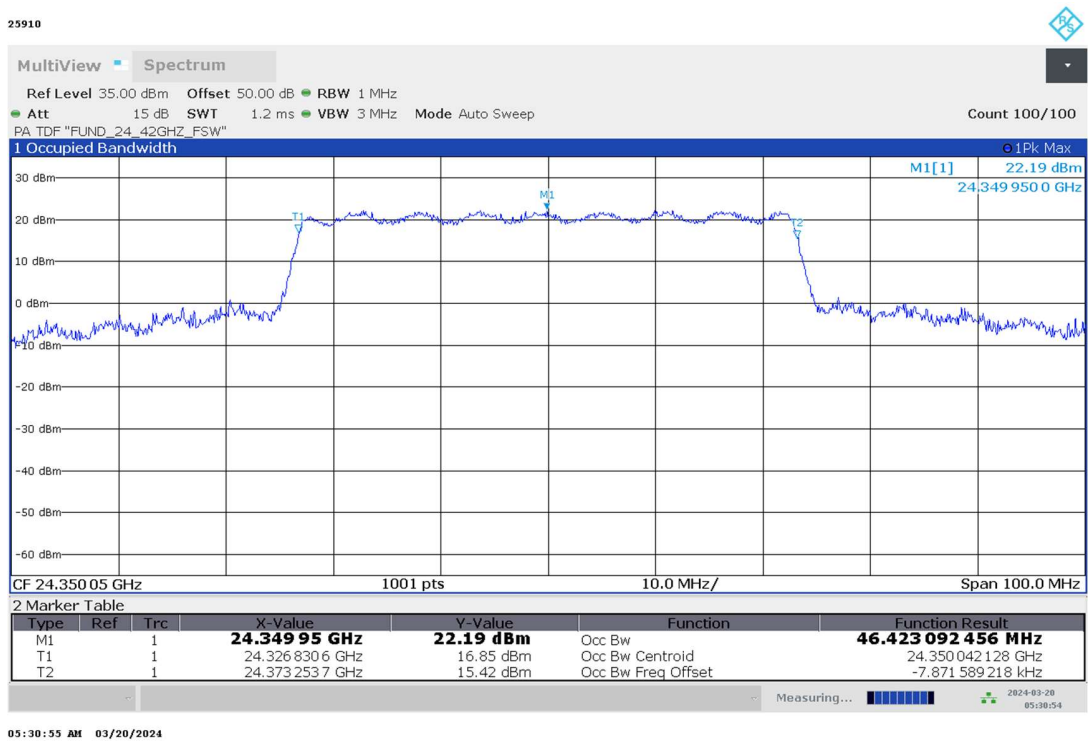
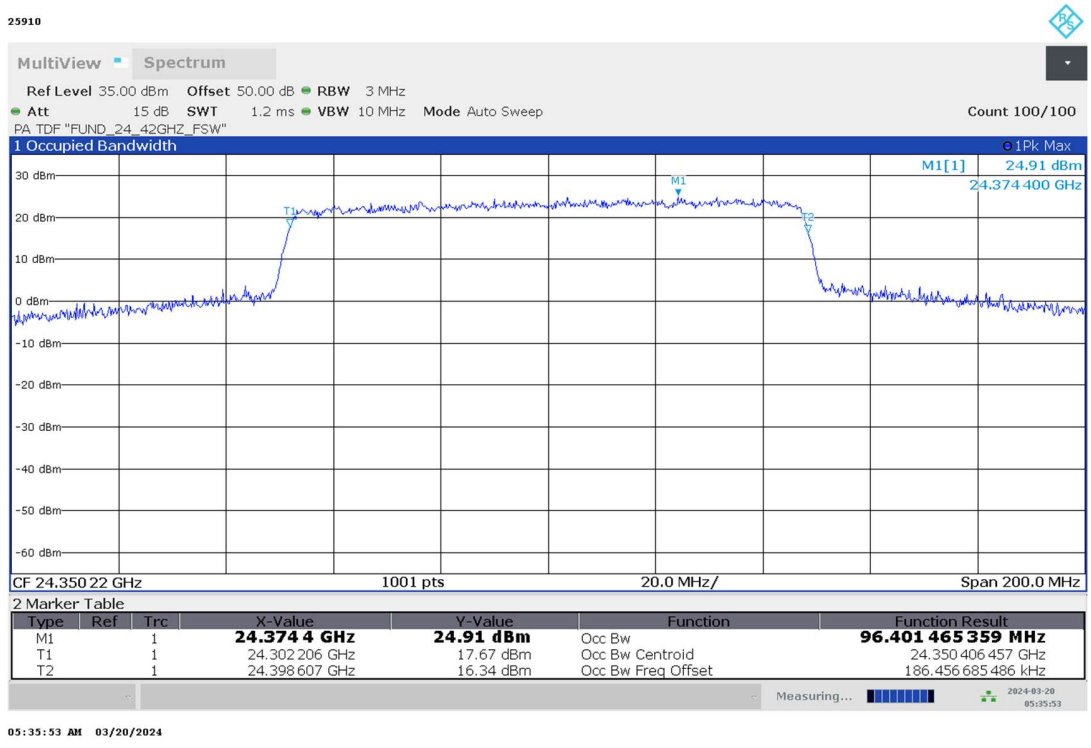
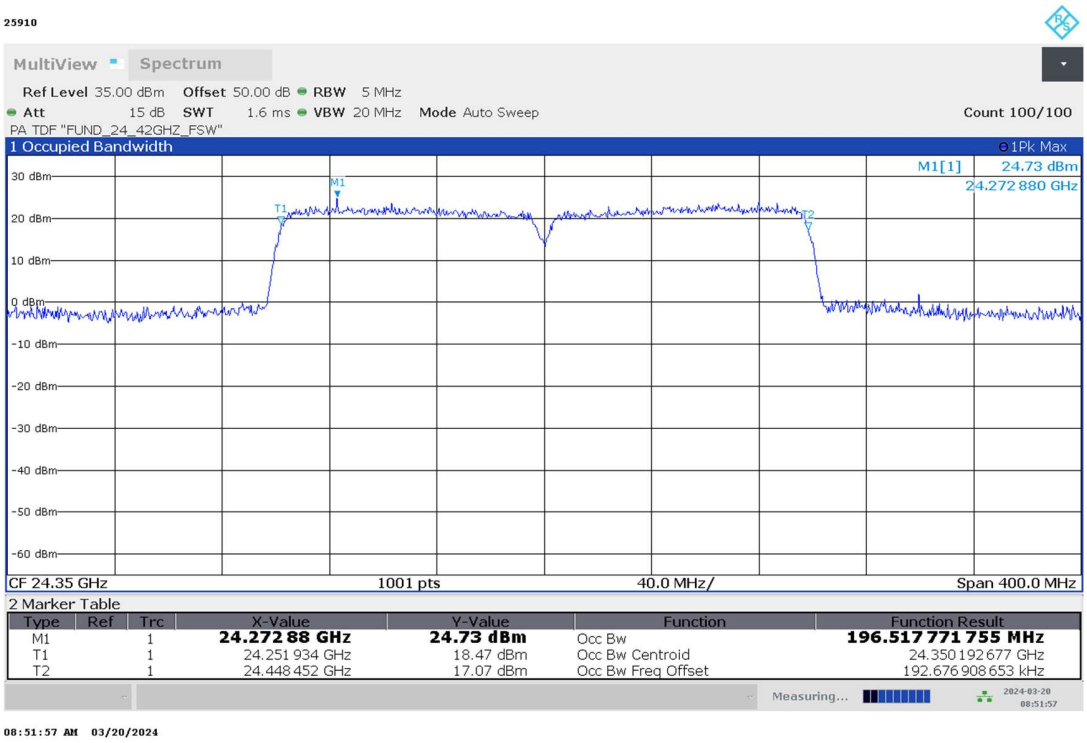
Antnena 1 / Ant J / Band n258 SB1

Ant J n258 SB1 BW 50MHz	 1CC / CP-OFDM QPSK / Mid channel
Ant J n258 SB1 BW 100MHz	 1CC / CP-OFDM QPSK / Mid channel

Ant J

n258
SB1

BW
100MHz



2CC / CP-OFDM 16QAM / Mid channel

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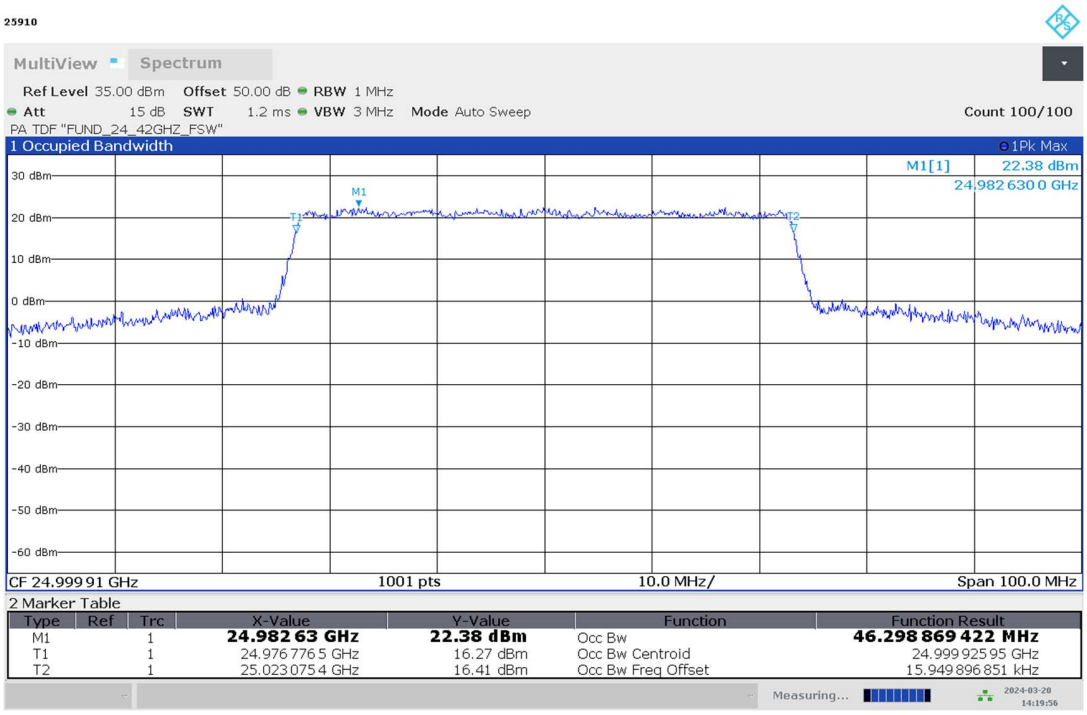
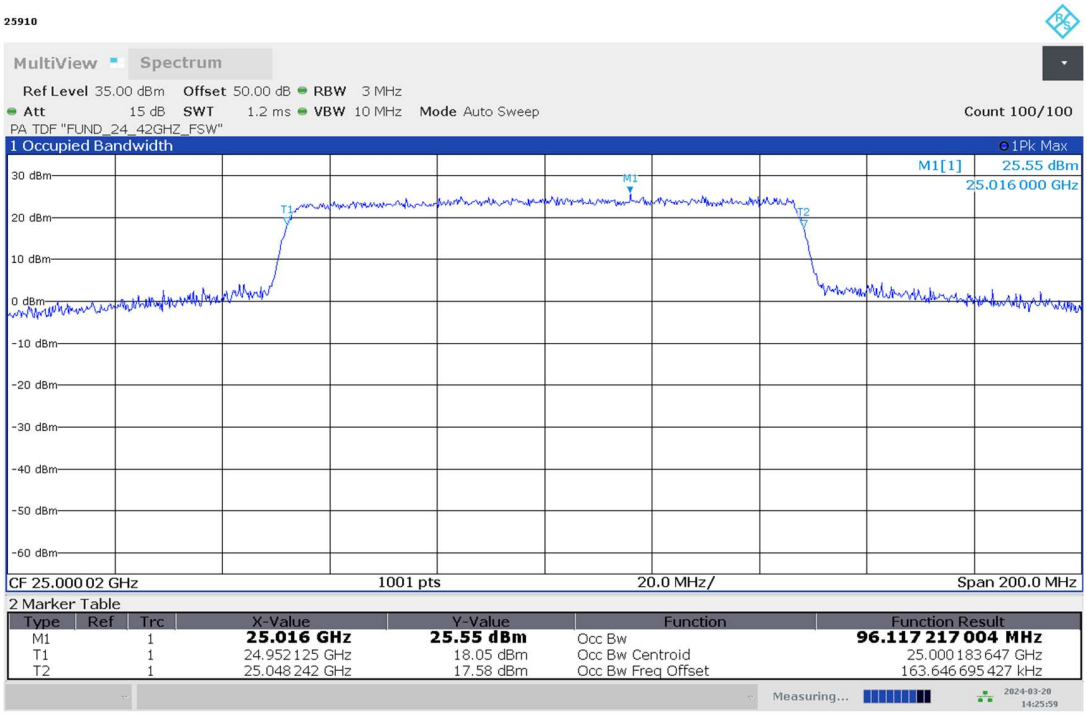
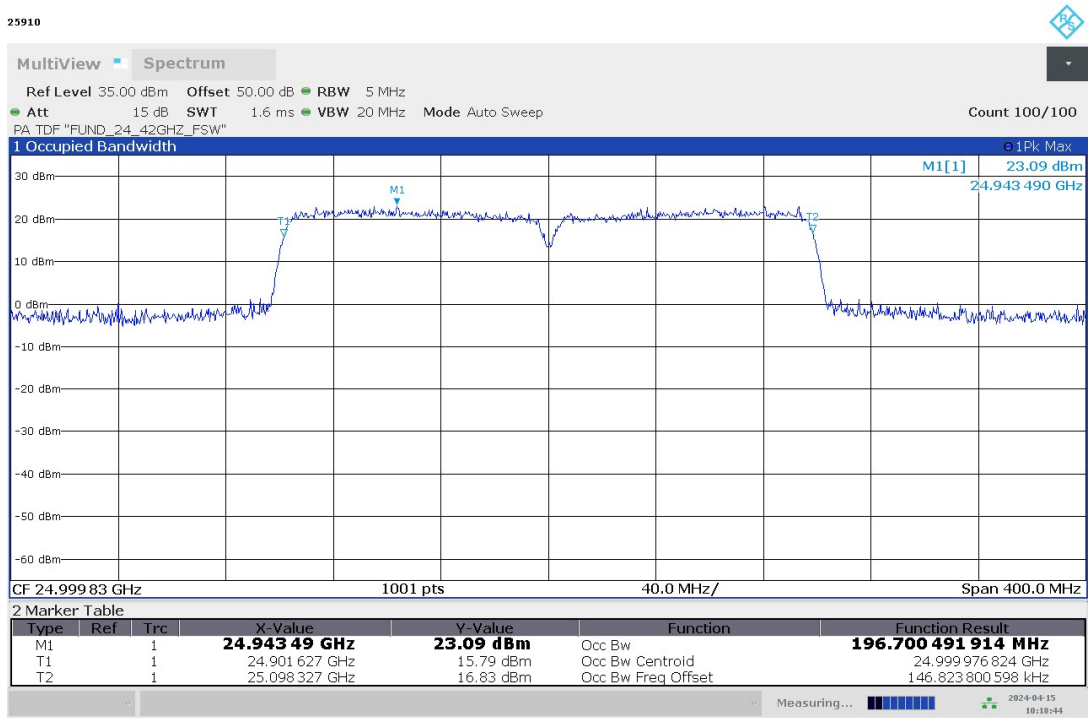
Antnena 1 / Ant J / Band n258 SB2

Ant J n258 SB2 BW 50MHz	 1CC / CP-OFDM QPSK / Mid channel
Ant J n258 SB2 BW 100MHz	 1CC / CP-OFDM QPSK / Mid channel

Ant J

n258
SB2

BW
100MHz

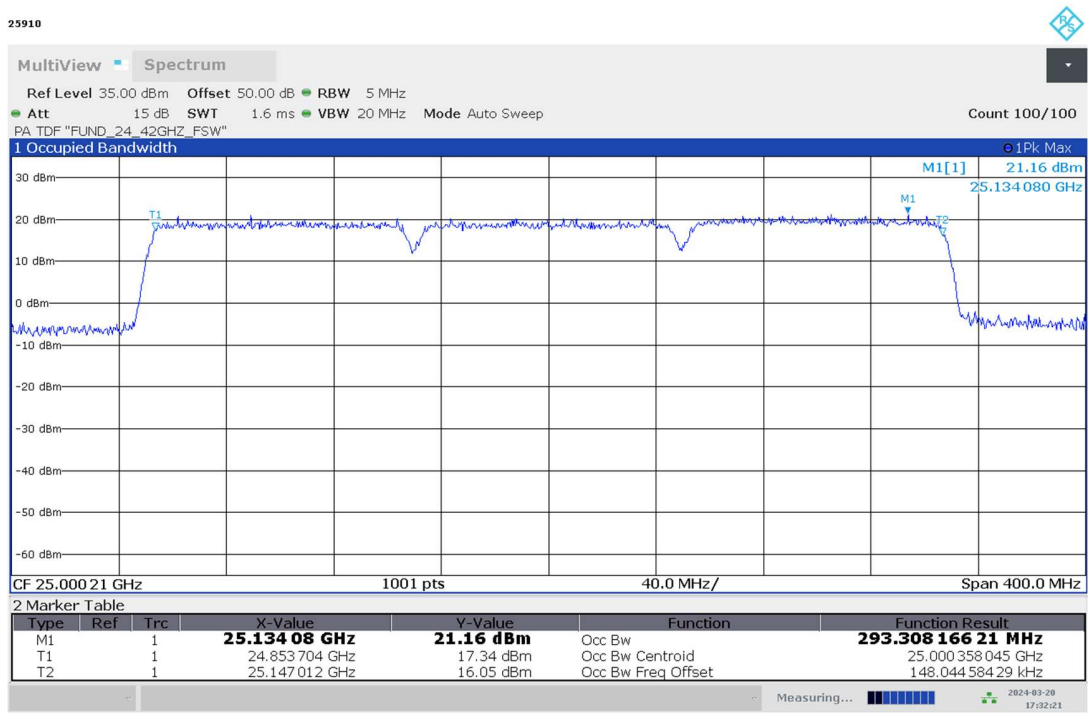


2CC / CP-OFDM QPSK / Mid channel

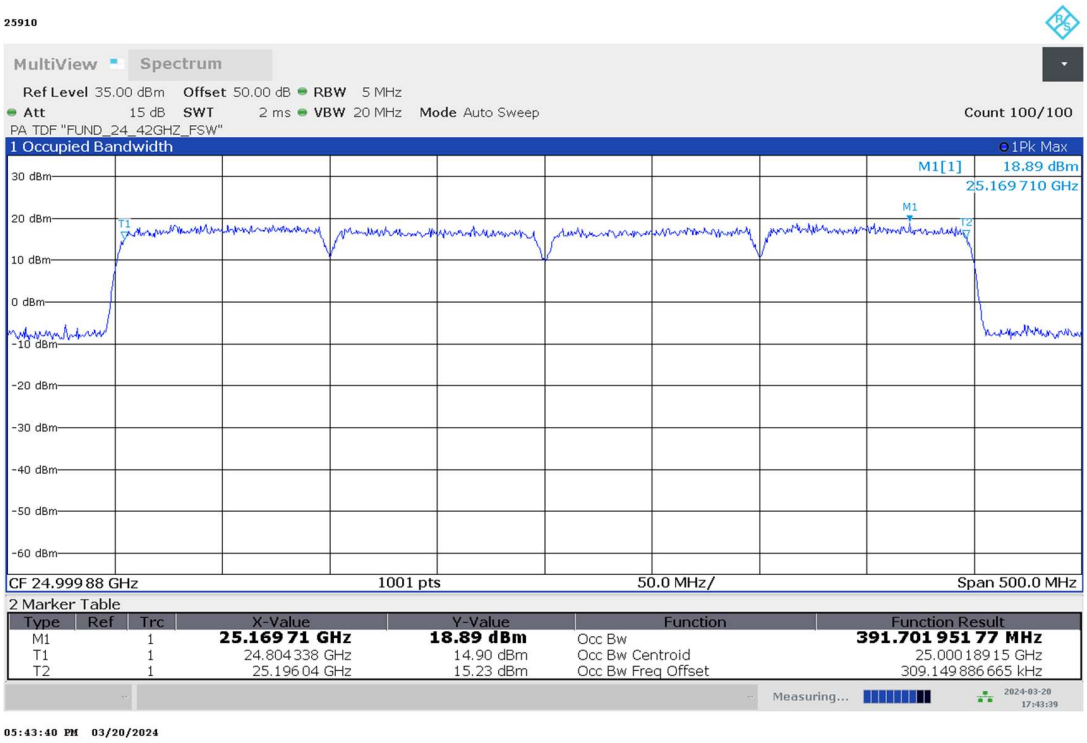
Ant J

n258
SB2

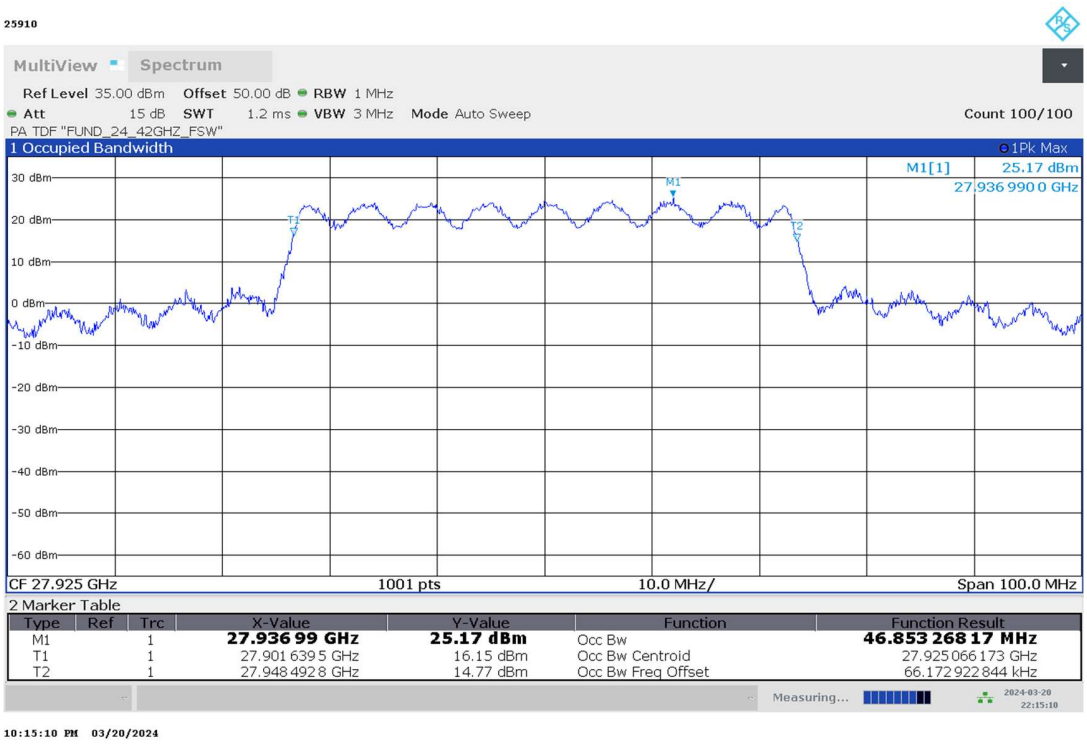
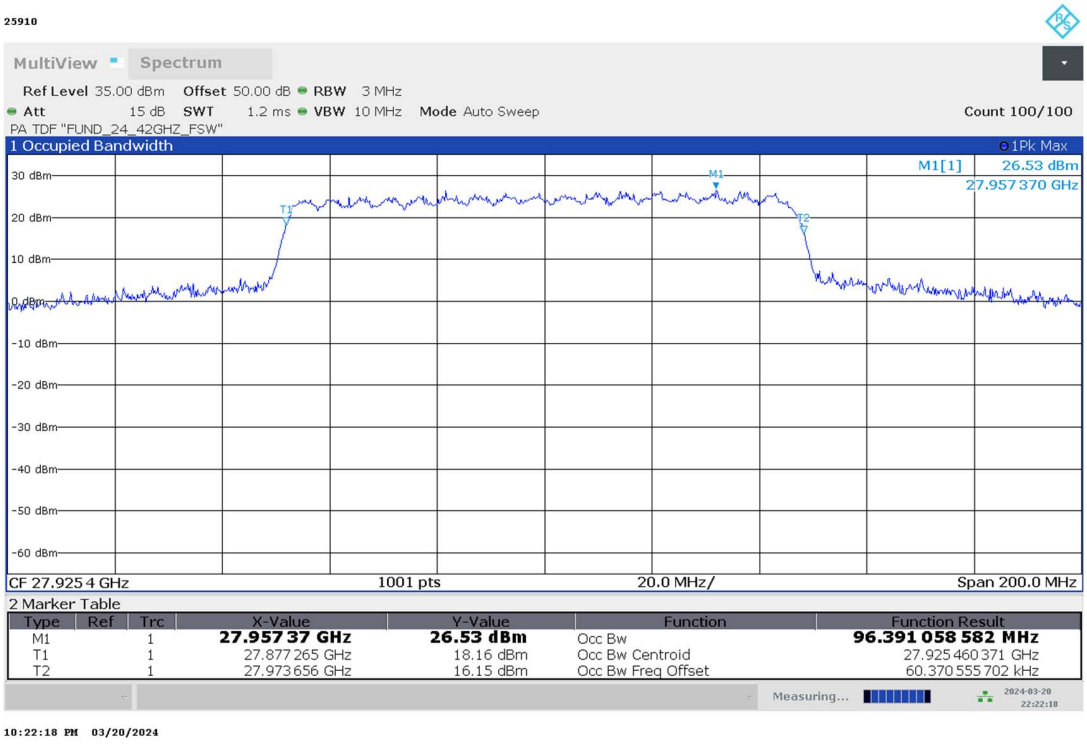
BW
100MHz

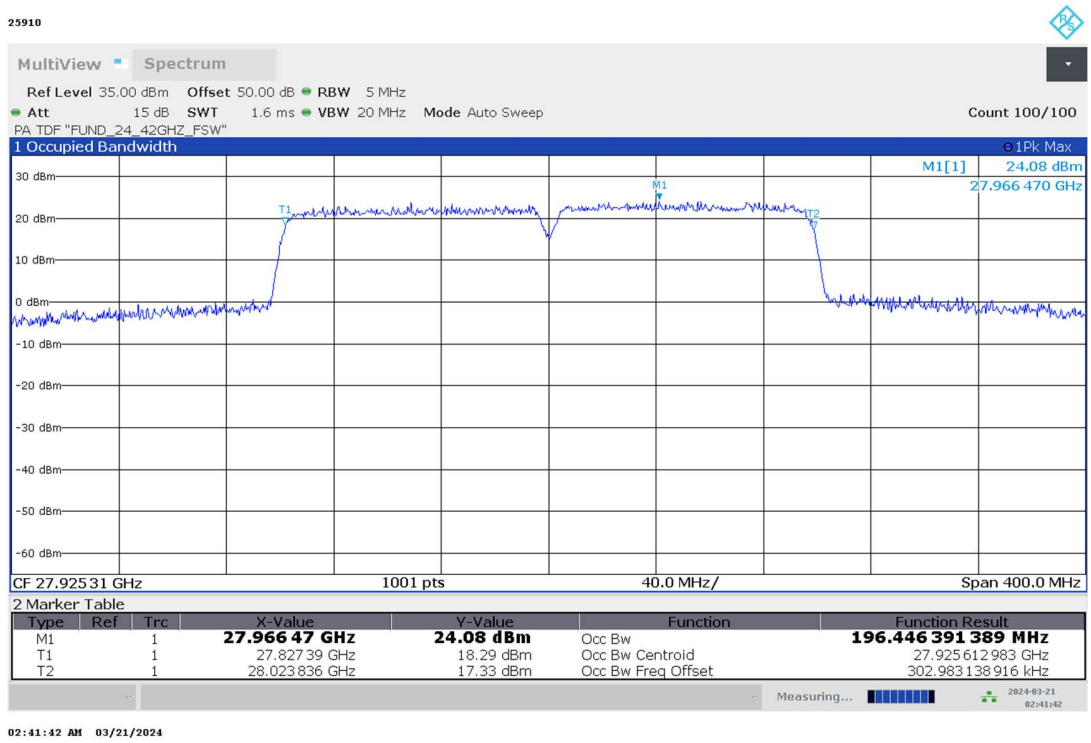
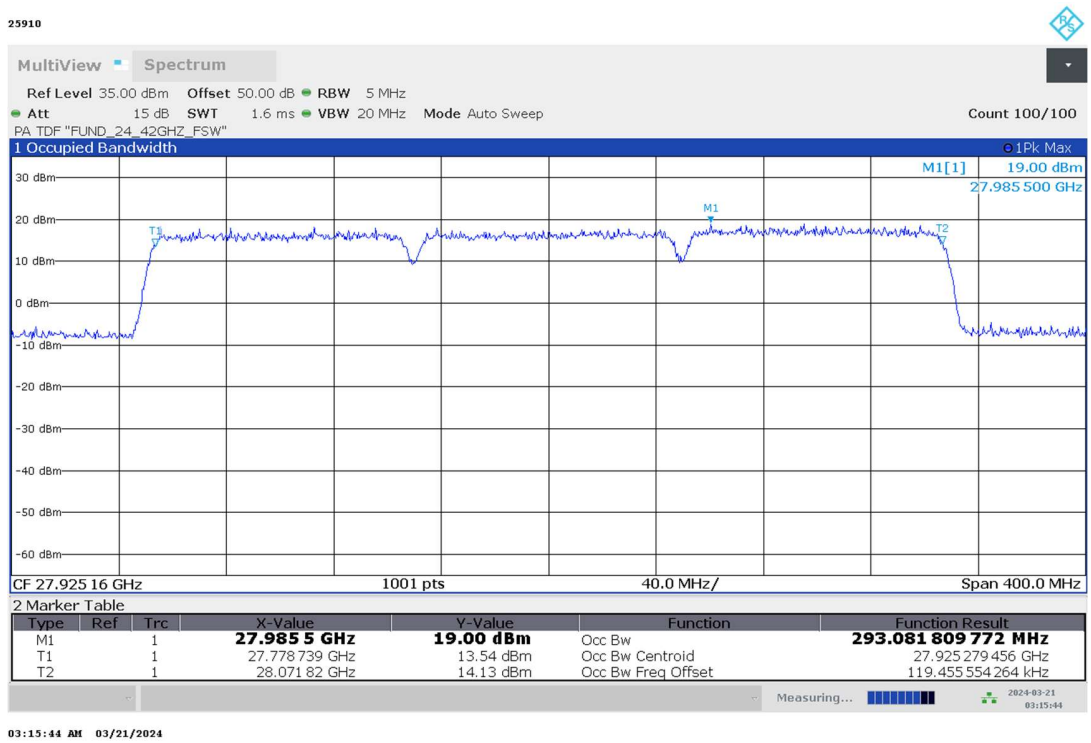


3CC / CP-OFDM QPSK / Mid channel

Ant J n258 SB2 BW 100MHz	 4CC / CP-OFDM 16QAM / Mid channel

Antnena 1 / Ant J / Band n261

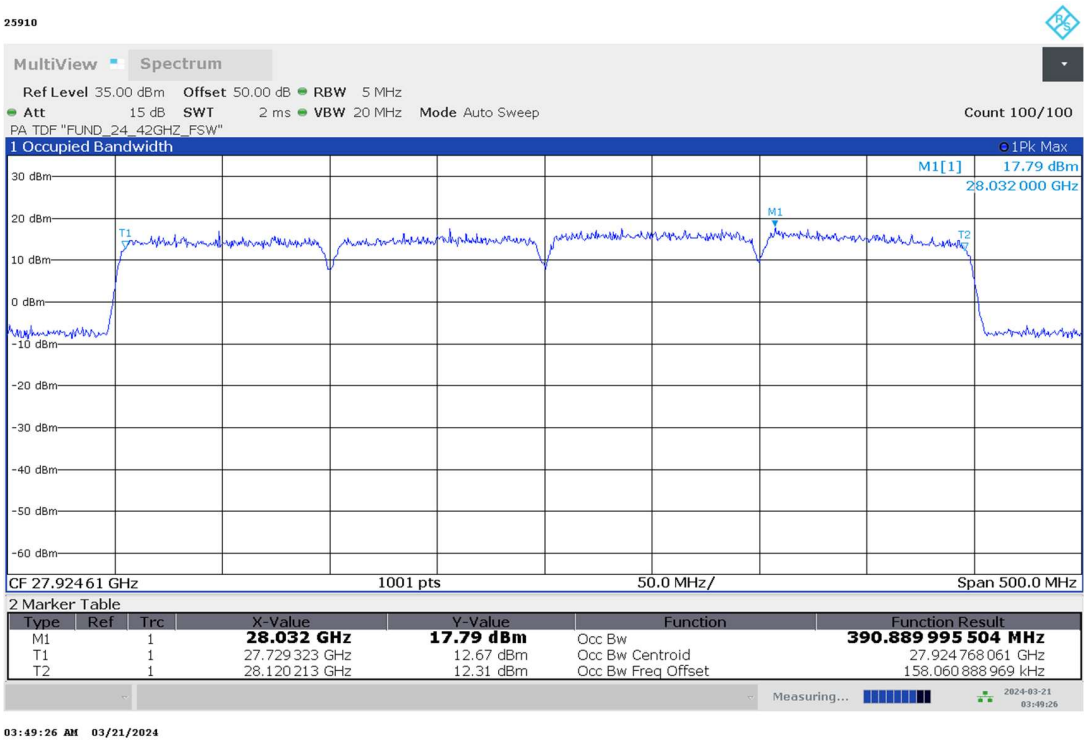
Ant J n261 BW 50MHz	 1CC / DFT-s OFDM BPSK / Mid channel
Ant J n261 BW 100MHz	 1CC / CP-OFDM QPSK / Mid channel

Ant J n261 BW 100MHz	 2CC / CP-OFDM QPSK / Mid channel
Ant J n261 BW 100MHz	 3CC / CP-OFDM 64QAM / Mid channel

Ant J

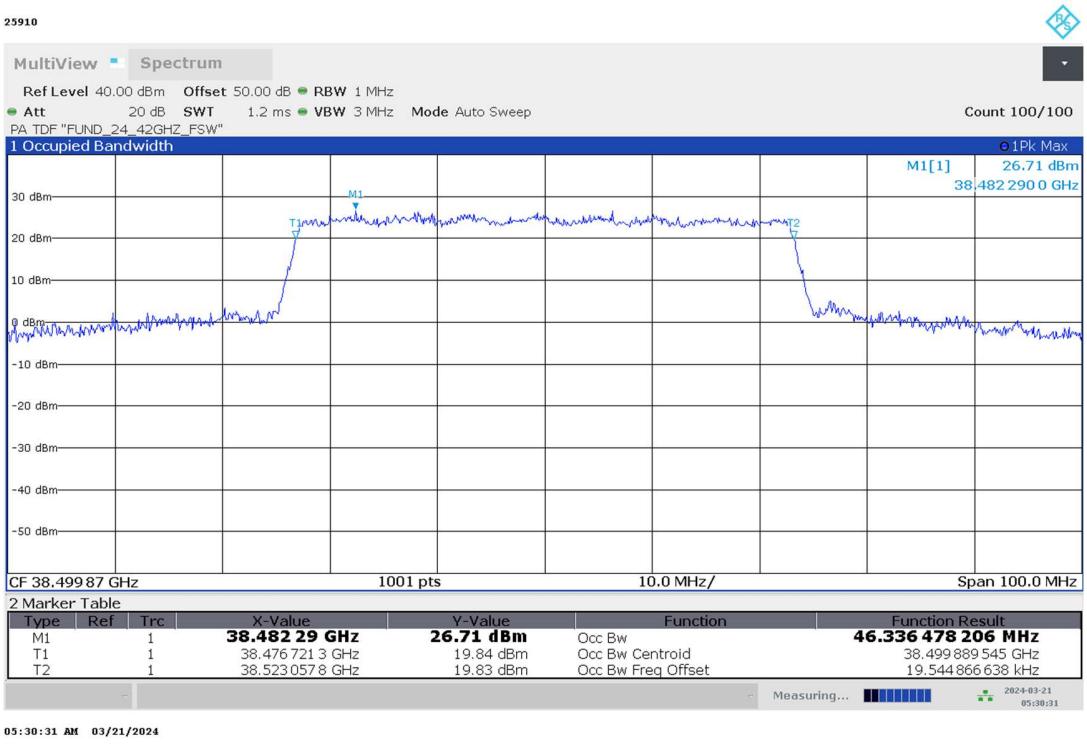
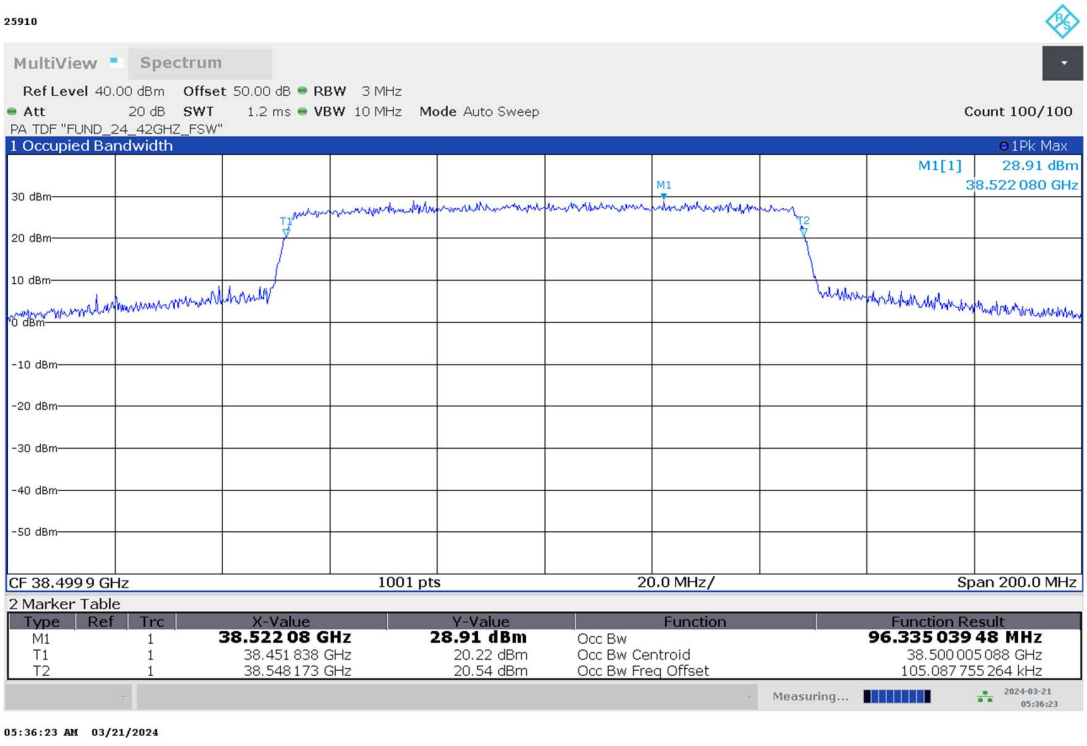
n261

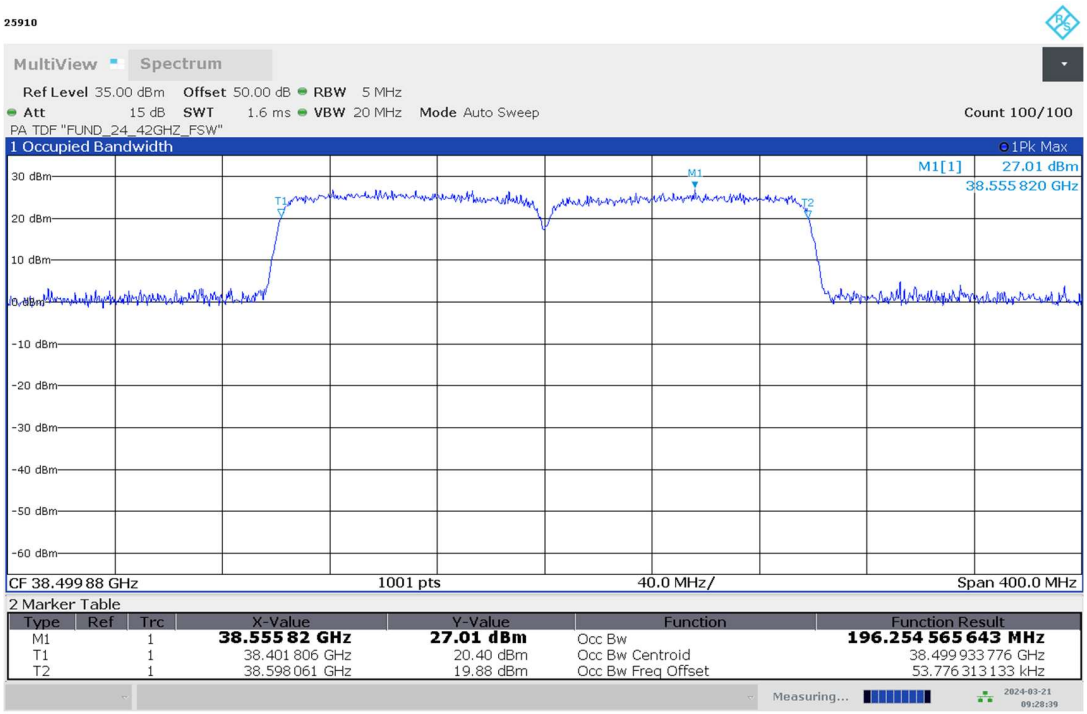
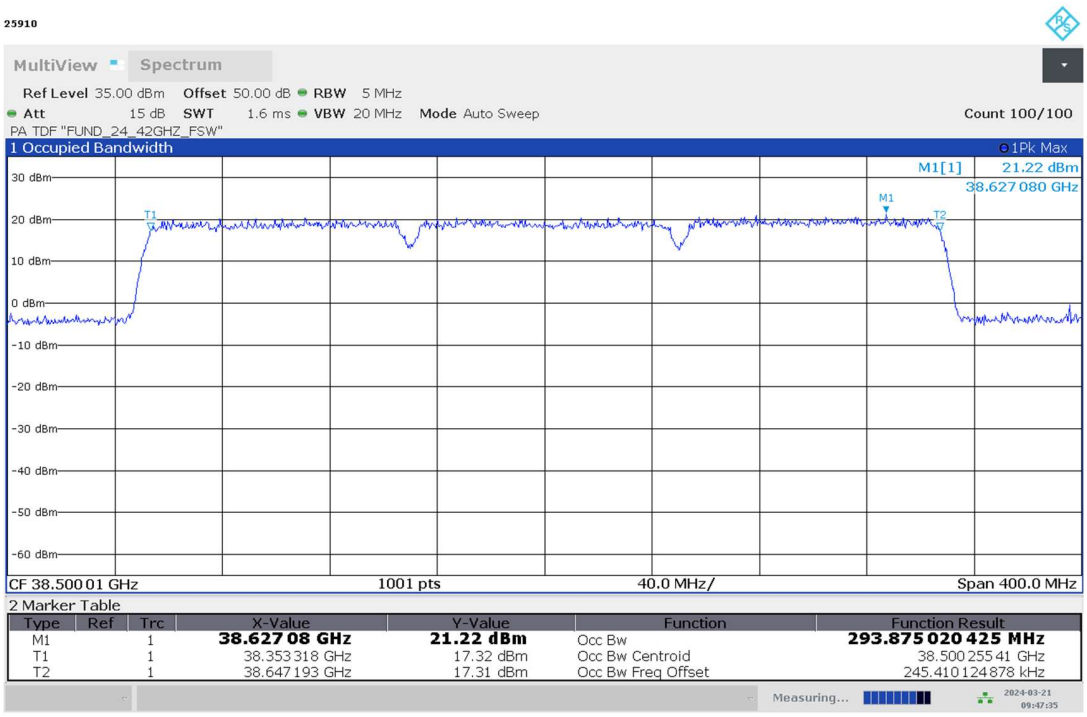
BW 100MHz



4CC / CP-OFDM 64QAM / Mid channel

Antnena 1 / Ant J / Band n260

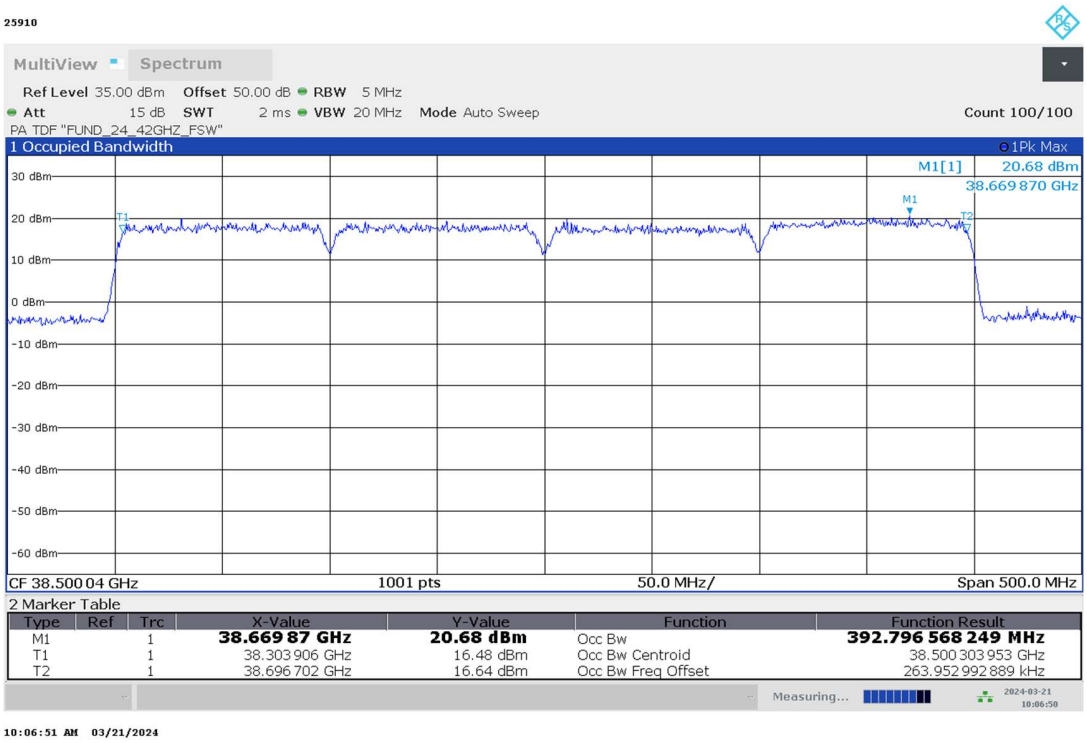
Ant J n260 BW 50MHz	 1CC / CP-OFDM 16QAM / Mid channel
Ant J n260 BW 100MHz	 1CC / CP-OFDM QPSK / Mid channel

Ant J n260 BW 100MHz	 2CC / CP-OFDM 16QAM / Mid channel
Ant J n260 BW 100MHz	 3CC / CP-OFDM 64QAM / Mid channel

Ant J

n260

BW 100MHz



4CC / CP-OFDM 64QAM / Mid channel

8.2. EQUIVALENT ISOTROPIC RADIATED POWER

RULE PART(S)

FCC: §2.1046, §30.202

LIMITS

30.202 (b) - For mobile stations, the average power of the sum of all antenna elements is limited to a maximum EIRP of +43 dBm.

TEST PROCEDURE

Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.

a) RBW = 1 – 5% of the OBW, not to exceed 1MHz
b) VBW ≥ 3 x RBW
c) Span = 2x to 3x the OBW
d) number of measurement points in sweep > 2 x span / RBW
e) Sweep time = auto-couple
f) Detector = RMS
g) Trace mode = average over 100 sweeps

(KDB 842590 D01 Upper Microwave Flexible Use Service v01r02 Section 4.2)
(ANSI C63.26-2015 Section 5.2.4.4.1)

Note

EIRP measurements were taken at 3m test distance.

Elements within the same antenna array are correlated to produce beamforming array gain. During testing, only one antenna array was active.

The average EIRP reported below is calculated per section 5.2.7 of ANSI C63.26-2015 which states:
EIRP (dBm) = E (dBμV/m) + 20log(D) − 104.8; where D is the measurement distance (in the far field region) in meter.
The field strength E is calculated E (dBμV/m) = Spectrum Analyzer Channel Power Level (dBm) + Antenna Factor (dB/m) + Cable Loss (dB) + 107.

Radiated power levels are investigated while the receive antenna was rotated through all angles to determine the worst case polarization/positioning.

In order properly display of signal level on the plots, the pre-loaded correction factors were intentional lowered by 50 dB and an offset factor of 50 dB was applied on spectrum analyzer to compensate the true correction factors across frequency range of measurement.

For J patch antenna was pi/2-BPSK, QPSK, 16QAM and 64QAM modulations were all investigated in SISO, SISO-Dual and MIMO configurations. Full data is provided for those combinations. Single RB (highest power) and full RB allocations were measured, but worst RB allocation was reported.

5G NR: All Waveforms (CP-OFDM vs DFT-s OFDM) 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.

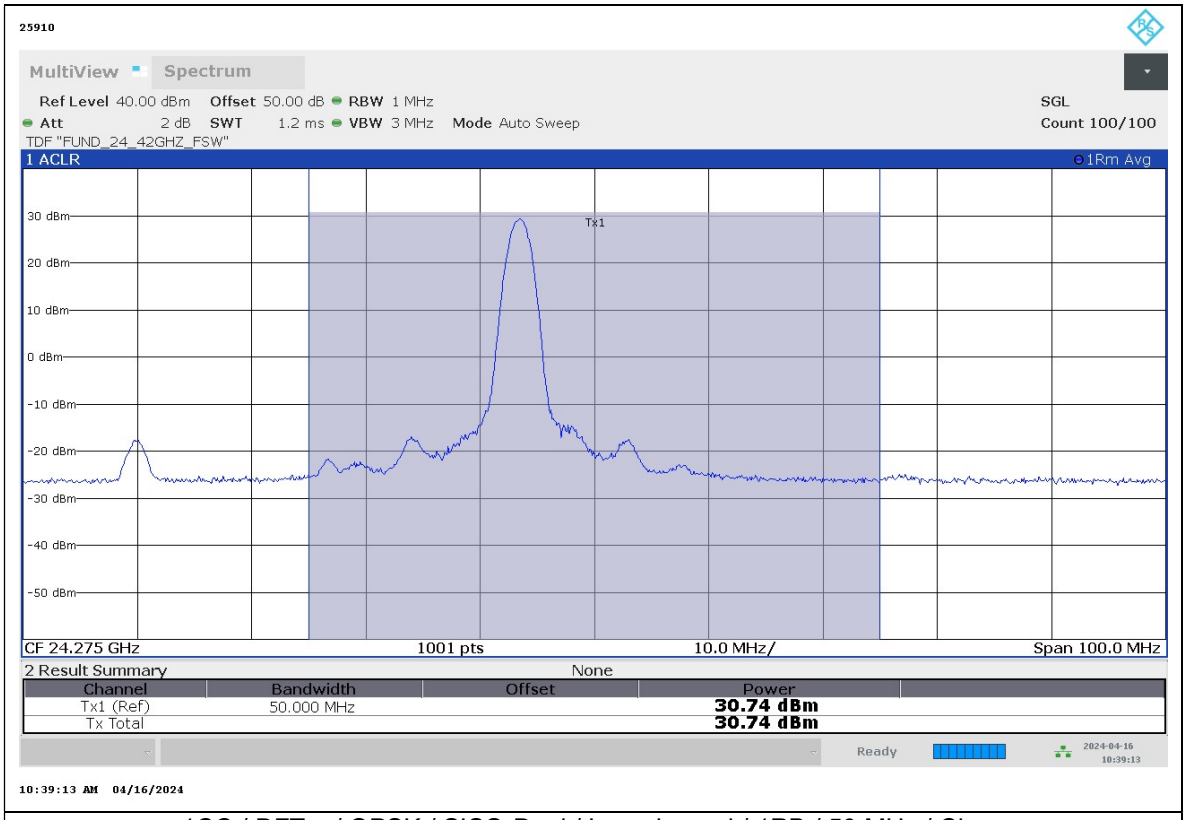
RESULTS

8.2.1. EIRP Results

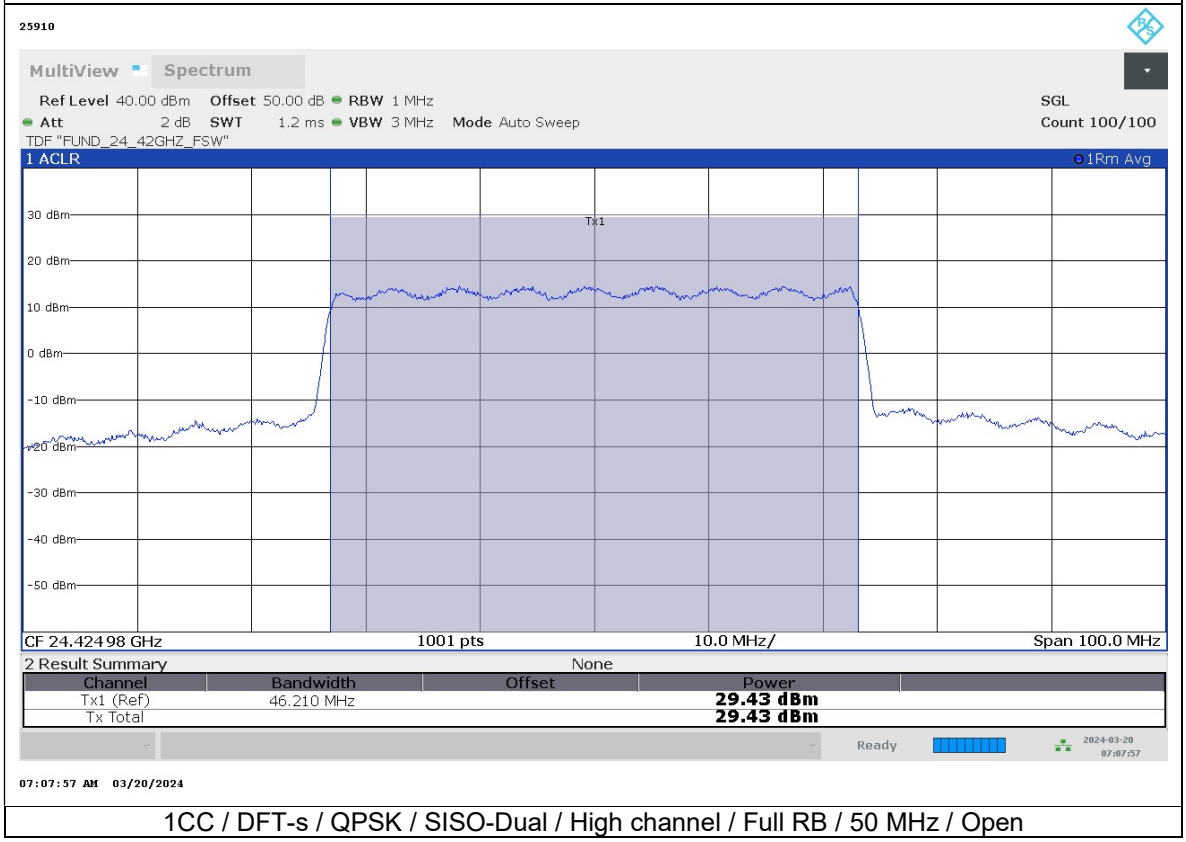
Antenna 1 / Ant J / Band n258 SB1

Test Case	EUT Config	OFDM	NR Band	Antenna	BW(MHz)	CCs	Mod	Tx Type	Freq(MHz)	Beam ID	Beam Pol	Ant Pol	RB	Result(dBm)
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO	24275	270	H	V	1_11	29.21
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO	24350	270	H	V	1_11	29.31
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO	24425	270	H	V	1_16	**29.41**
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	BPSK	SISO	24425	270	H	V	1_16	29.27
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	16QAM	SISO	24425	270	H	V	1_16	29.13
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	64QAM	SISO	24425	270	H	V	1_16	25.86
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO	24275	270	H	V	32_0	28.99
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO	24350	270	H	V	32_0	29.00
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO	24425	270	H	V	32_0	**29.16**
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO	24300	270	H	V	1_43	29.20
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO	24350	270	H	V	1_43	29.28
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO	24400	270	H	V	1_43	**29.45**
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	BPSK	SISO	24400	270	H	V	1_43	29.19
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	16QAM	SISO	24400	270	H	V	1_43	29.24
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	64QAM	SISO	24400	270	H	V	1_43	25.93
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO	24300	270	H	V	64_0	28.82
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO	24350	270	H	V	64_0	28.82
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO	24400	270	H	V	64_0	**28.93**

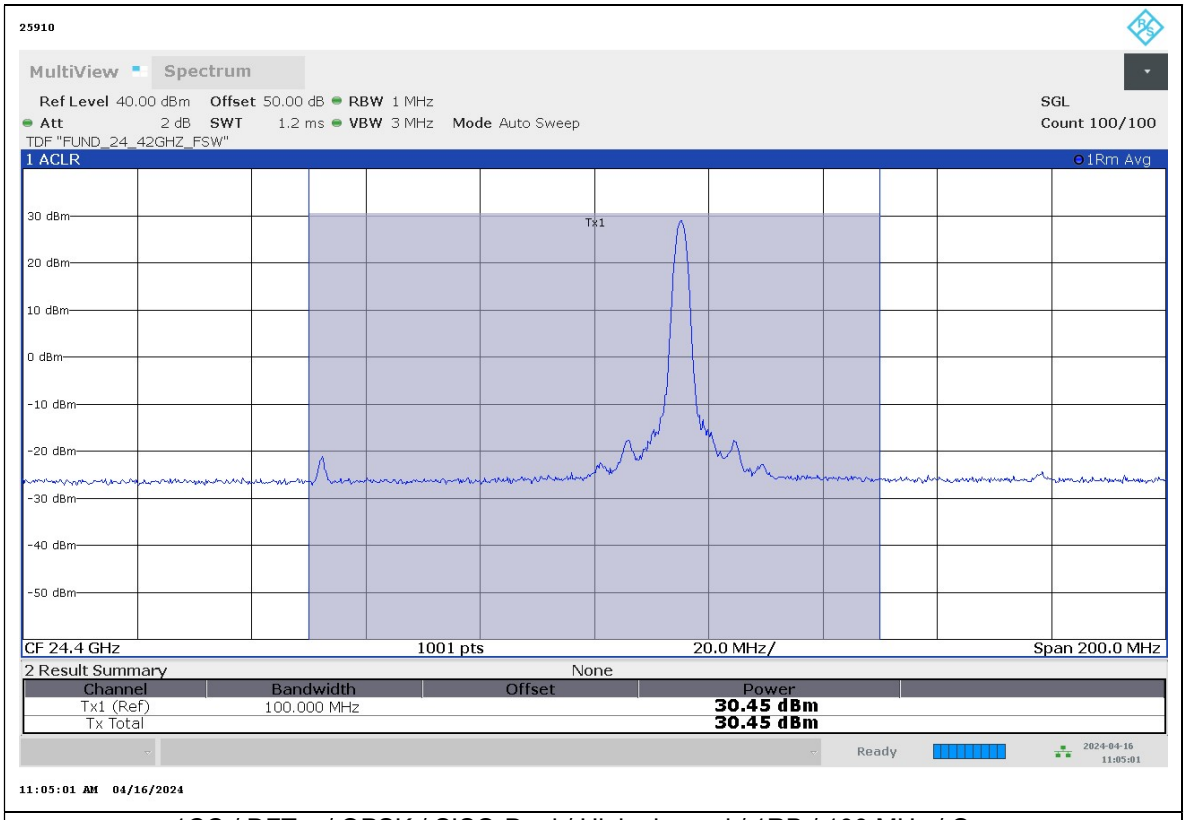
Test Case	EUT Config	OFDM	NR Band	Antenna	BW(MHz)	CCs	Mod	Tx Type	Freq(MHz)	Beam ID	Beam Pol	RB	Result(dBm)
EIRP	Close	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO-Dual	24275	14+270	H+V	1_11	**30.74**
EIRP	Close	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO-Dual	24350	14+270	H+V	1_11	30.62
EIRP	Close	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO-Dual	24425	14+270	H+V	1_11	30.59
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	BPSK	SISO-Dual	24425	14+270	H+V	1_11	30.08
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	16QAM	SISO-Dual	24425	14+270	H+V	1_11	30.22
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	64QAM	SISO-Dual	24425	14+270	H+V	1_11	26.97
EIRP	Open	CP	n258 SB1	Ant J	50	1CC	QPSK	MIMO	24425	14+270	H+V	1_11	29.19
EIRP	Open	CP	n258 SB1	Ant J	50	1CC	16QAM	MIMO	24425	14+270	H+V	1_11	28.04
EIRP	Open	CP	n258 SB1	Ant J	50	1CC	64QAM	MIMO	24425	14+270	H+V	1_11	23.73
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO-Dual	24275	14+270	H+V	32_0	29.21
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO-Dual	24350	14+270	H+V	32_0	29.25
EIRP	Open	DFT-s	n258 SB1	Ant J	50	1CC	QPSK	SISO-Dual	24425	14+270	H+V	32_0	**29.43**
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO-Dual	24300	14+270	H+V	1_33	29.47
EIRP	Close	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO-Dual	24350	14+270	H+V	1_33	30.15
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO-Dual	24400	14+270	H+V	1_43	**30.45**
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	BPSK	SISO-Dual	24400	14+270	H+V	1_43	29.99
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	16QAM	SISO-Dual	24400	14+270	H+V	1_43	29.10
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	64QAM	SISO-Dual	24400	14+270	H+V	1_43	25.73
EIRP	Half open	CP	n258 SB1	Ant J	100	1CC	QPSK	MIMO	24400	14+270	H+V	1_33	28.07
EIRP	Open	CP	n258 SB1	Ant J	100	1CC	16QAM	MIMO	24400	14+270	H+V	1_43	26.81
EIRP	Open	CP	n258 SB1	Ant J	100	1CC	64QAM	MIMO	24400	14+270	H+V	1_43	23.68
EIRP	Open	DFT-s	n258 SB1	Ant J	100+100	2CC	QPSK	SISO-Dual	24400	14+270	H+V	1_43	22.49
EIRP	Open	DFT-s	n258 SB1	Ant J	100+100	2CC	BPSK	SISO-Dual	24400	14+270	H+V	1_43	22.63
EIRP	Open	DFT-s	n258 SB1	Ant J	100+100	2CC	16QAM	SISO-Dual	24400	14+270	H+V	1_43	22.54
EIRP	Open	DFT-s	n258 SB1	Ant J	100+100	2CC	64QAM	SISO-Dual	24400	14+270	H+V	1_43	22.59
EIRP	Open	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO-Dual	24300	14+270	H+V	64_0	29.04
EIRP	Close	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO-Dual	24350	14+270	H+V	64_0	29.13
EIRP	Close	DFT-s	n258 SB1	Ant J	100	1CC	QPSK	SISO-Dual	24400	14+270	H+V	64_0	**29.33**
EIRP	Open	DFT-s	n258 SB1	Ant J	100+100	2CC	QPSK	SISO-Dual	24400	14+270	H+V	64_0	28.72
EIRP	Open	DFT-s	n258 SB1	Ant J	100+100	2CC	BPSK	SISO-Dual	24400	14+270	H+V	64_0	28.77
EIRP	Open	DFT-s	n258 SB1	Ant J	100+100	2CC	16QAM	SISO-Dual	24400	14+270	H+V	64_0	28.15
EIRP	Open	DFT-s	n258 SB1	Ant J	100+100	2CC	64QAM	SISO-Dual	24400	14+270	H+V	64_0	24.45



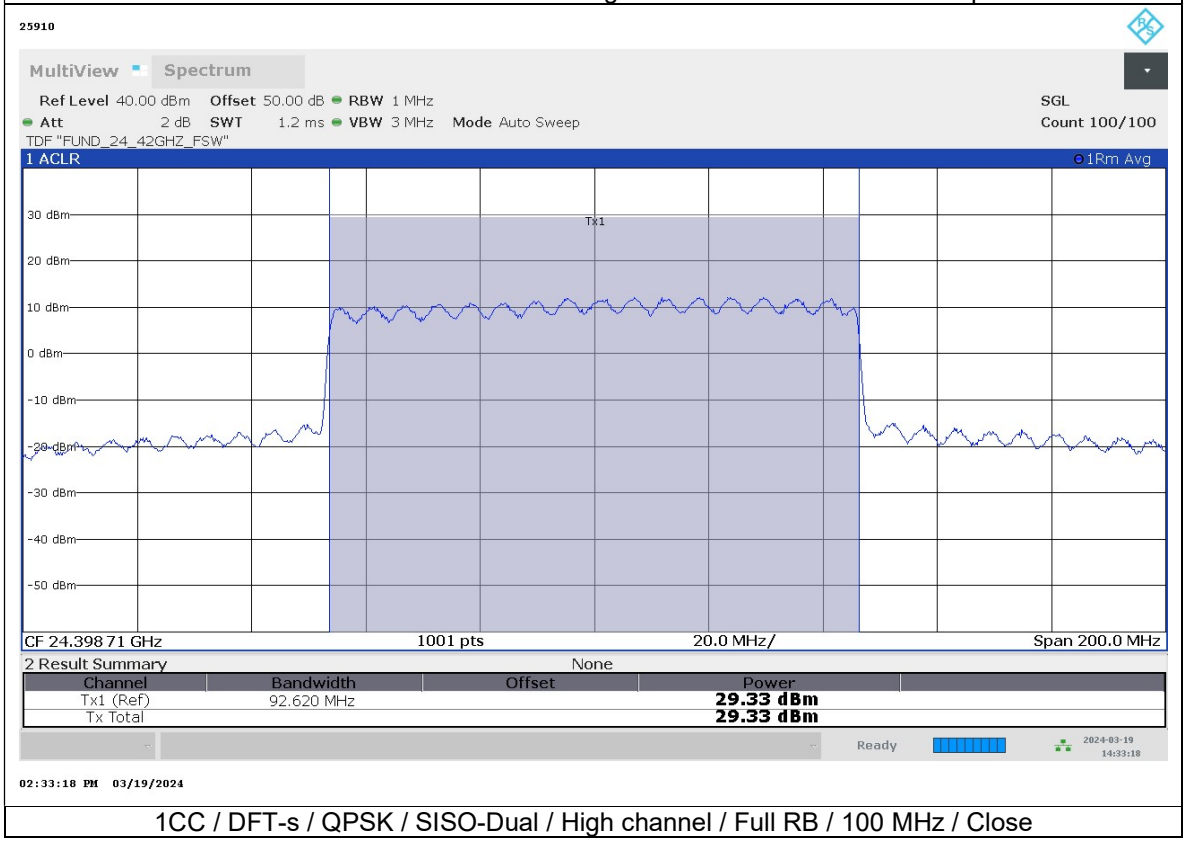
1CC / DFT-s / QPSK / SISO-Dual / Low channel / 1RB / 50 MHz / Close



1CC / DFT-s / QPSK / SISO-Dual / High channel / Full RB / 50 MHz / Open



1CC / DFT-s / QPSK / SISO-Dual / High channel / 1RB / 100 MHz / Open

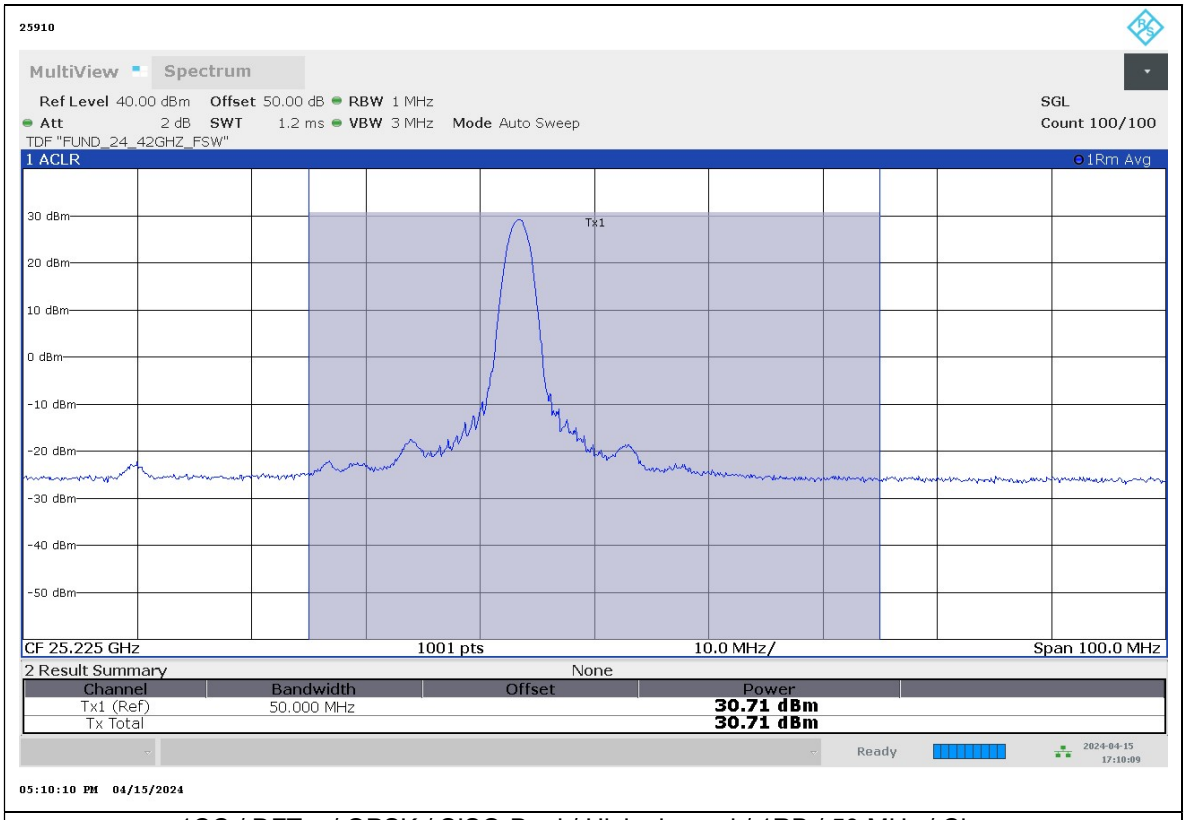


1CC / DFT-s / QPSK / SISO-Dual / High channel / Full RB / 100 MHz / Close

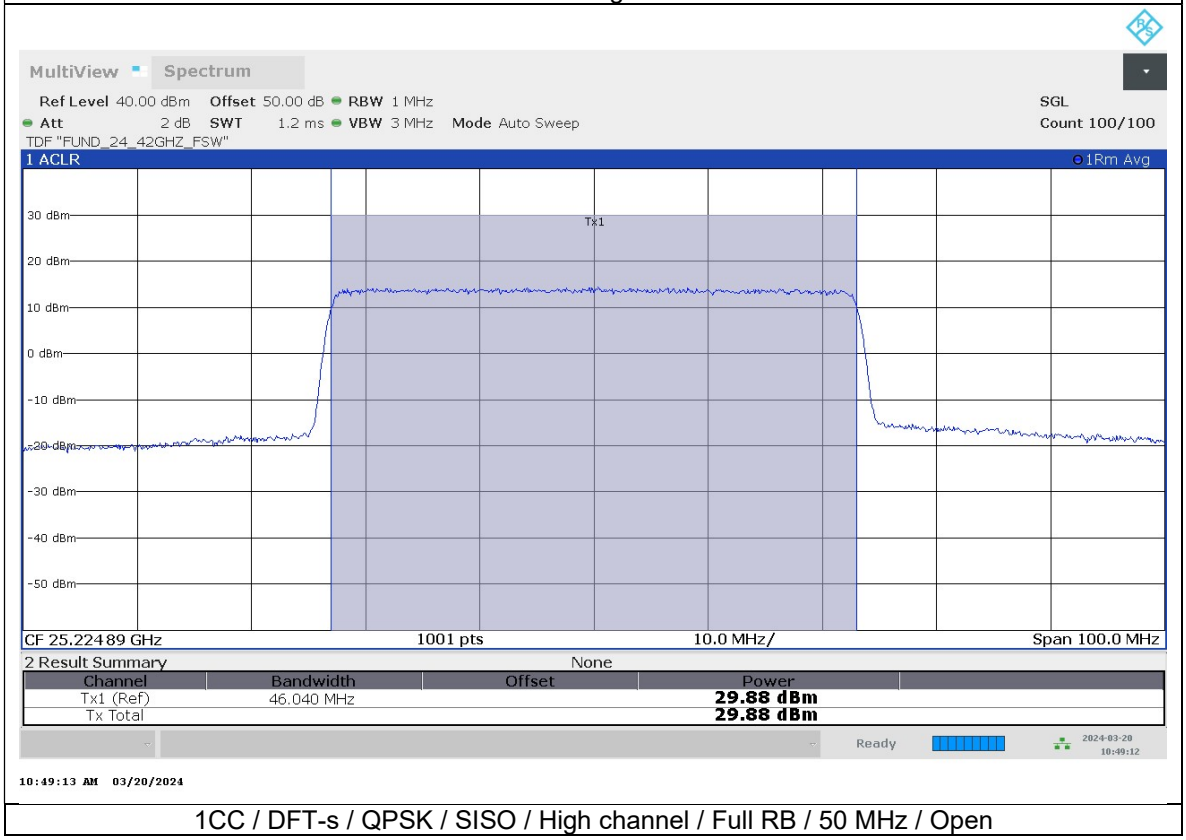
Antenna 1 / Ant J / Band n258 SB2

Test Case	EUT Config	OFDM	NR Band	Antenna	BW(MHz)	CCs	Mod	Tx Type	Freq(MHz)	Beam ID	Beam Pol	Ant Pol	RB	Result(dBm)
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO	24775	270	H	V	1_11	29.91
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO	25000	270	H	V	1_11	30.01
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO	25225	270	H	V	1_11	**30.23**
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	BPSK	SISO	25225	270	H	V	1_11	30.14
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	16QAM	SISO	25225	270	H	V	1_11	30.13
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	64QAM	SISO	25225	270	H	V	1_11	26.94
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO	24775	270	H	V	32_0	29.46
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO	25000	270	H	V	32_0	29.68
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO	25225	270	H	V	32_0	**29.88**
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO	24800	270	H	V	1_22	29.78
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO	25000	270	H	V	1_22	30.25
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO	25200	270	H	V	1_22	**30.31**
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	BPSK	SISO	25200	270	H	V	1_22	30.28
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	16QAM	SISO	25200	270	H	V	1_22	30.21
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	64QAM	SISO	25200	270	H	V	1_22	27.15
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO	24800	270	H	V	64_0	29.49
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO	25000	270	H	V	64_0	29.86
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO	25200	270	H	V	64_0	**30.15**

Test Case	EUT Config	OFDM	NR Band	Antenna	BW(MHz)	CCs	Mod	Tx Type	Freq(MHz)	Beam ID	Beam Pol	RB	Result(dBm)
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO-Dual	24775	14+270	H+V	1_11	30.45
EIRP	Close	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO-Dual	25000	14+270	H+V	1_11	30.57
EIRP	Close	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO-Dual	25225	14+270	H+V	1_11	**30.71**
EIRP	Close	DFT-s	n258 SB2	Ant J	50	1CC	BPSK	SISO-Dual	25225	14+270	H+V	1_11	30.45
EIRP	Close	DFT-s	n258 SB2	Ant J	50	1CC	16QAM	SISO-Dual	25225	14+270	H+V	1_11	30.29
EIRP	Close	DFT-s	n258 SB2	Ant J	50	1CC	64QAM	SISO-Dual	25225	14+270	H+V	1_11	27.21
EIRP	Open	CP	n258 SB2	Ant J	50	1CC	QPSK	MIMO	25225	14+270	H+V	1_11	29.13
EIRP	Close	CP	n258 SB2	Ant J	50	1CC	16QAM	MIMO	25225	14+270	H+V	1_11	28.11
EIRP	Close	CP	n258 SB2	Ant J	50	1CC	64QAM	MIMO	25225	14+270	H+V	1_11	24.06
EIRP	Open	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO-Dual	24775	14+270	H+V	32_0	29.48
EIRP	Close	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO-Dual	25000	14+270	H+V	32_0	29.63
EIRP	Close	DFT-s	n258 SB2	Ant J	50	1CC	QPSK	SISO-Dual	25225	14+270	H+V	32_0	**29.79**
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO-Dual	24800	14+270	H+V	1_43	30.16
EIRP	Close	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO-Dual	25000	14+270	H+V	1_43	30.52
EIRP	Close	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO-Dual	25200	14+270	H+V	1_33	**30.68**
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	BPSK	SISO-Dual	25200	14+270	H+V	1_33	30.22
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	16QAM	SISO-Dual	25200	14+270	H+V	1_33	30.27
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	64QAM	SISO-Dual	25200	14+270	H+V	1_33	27.26
EIRP	Close	CP	n258 SB2	Ant J	100	1CC	QPSK	MIMO	25200	14+270	H+V	1_33	28.91
EIRP	Close	CP	n258 SB2	Ant J	100	1CC	16QAM	MIMO	25200	14+270	H+V	1_33	27.98
EIRP	Close	CP	n258 SB2	Ant J	100	1CC	64QAM	MIMO	25200	14+270	H+V	1_33	23.80
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100	2CC	QPSK	SISO-Dual	25200	14+270	H+V	1_33	23.12
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100	2CC	BPSK	SISO-Dual	25200	14+270	H+V	1_33	22.77
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100	2CC	16QAM	SISO-Dual	25200	14+270	H+V	1_33	22.67
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100	2CC	64QAM	SISO-Dual	25200	14+270	H+V	1_33	22.52
EIRP	Close	DFT-s	n258 SB2	Ant J	100+100+100	3CC	QPSK	SISO-Dual	25200	14+270	H+V	1_33	22.94
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100	3CC	BPSK	SISO-Dual	25200	14+270	H+V	1_33	23.04
EIRP	Close	DFT-s	n258 SB2	Ant J	100+100+100	3CC	16QAM	SISO-Dual	25200	14+270	H+V	1_33	22.77
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100	3CC	64QAM	SISO-Dual	25200	14+270	H+V	1_33	23.02
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100+100	4CC	QPSK	SISO-Dual	25200	14+270	H+V	1_33	22.86
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100+100	4CC	BPSK	SISO-Dual	25200	14+270	H+V	1_33	22.95
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100+100	4CC	16QAM	SISO-Dual	25200	14+270	H+V	1_33	22.90
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100+100	4CC	64QAM	SISO-Dual	25200	14+270	H+V	1_33	23.01
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO-Dual	24800	14+270	H+V	64_0	29.52
EIRP	Close	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO-Dual	25000	14+270	H+V	64_0	29.75
EIRP	Open	DFT-s	n258 SB2	Ant J	100	1CC	QPSK	SISO-Dual	25200	14+270	H+V	64_0	**29.85**
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100	2CC	QPSK	SISO-Dual	25200	14+270	H+V	64_0	29.07
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100	2CC	BPSK	SISO-Dual	25200	14+270	H+V	64_0	28.92
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100	2CC	16QAM	SISO-Dual	25200	14+270	H+V	64_0	28.61
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100	2CC	64QAM	SISO-Dual	25200	14+270	H+V	64_0	25.01
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100	3CC	QPSK	SISO-Dual	25200	14+270	H+V	64_0	26.68
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100	3CC	BPSK	SISO-Dual	25200	14+270	H+V	64_0	26.69
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100	3CC	16QAM	SISO-Dual	25200	14+270	H+V	64_0	25.66
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100	3CC	64QAM	SISO-Dual	25200	14+270	H+V	64_0	23.63
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100+100	4CC	QPSK	SISO-Dual	25200	14+270	H+V	64_0	26.79
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100+100	4CC	BPSK	SISO-Dual	25200	14+270	H+V	64_0	26.81
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100+100	4CC	16QAM	SISO-Dual	25200	14+270	H+V	64_0	25.78
EIRP	Open	DFT-s	n258 SB2	Ant J	100+100+100+100	4CC	64QAM	SISO-Dual	25200	14+270	H+V	64_0	23.66



1CC / DFT-s / QPSK / SISO-Dual / High channel / 1RB / 50 MHz / Close



1CC / DFT-s / QPSK / SISO / High channel / Full RB / 50 MHz / Open