Spot Check Evaluation

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2437-3
FCC ID	:	IHDT56AS9
STANDARD	:	47 CFR Part 2, 22, 24, 27, 90S 47 CFR Part 15 Subpart C §15.225 47 CFR Part 15 Subpart C §15.247 47 CFR Part 15 Subpart E §15.407
TEST DATE(S)	:	Aug. 05, 2024 ~ Aug. 21, 2024

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

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

Jason Jia

Approved by: Jason Jia

ACCREDITED
Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG471919-01D	Rev. 01	Initial issue of report	Sep. 03, 2024

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2437-3
FCC ID	IHDT56AS9
IMEI Code	Conducted/DFS/CBP: 359867620008119/359867620008127 Radiation: 359867620006634 Conduction: 359867620006899/359867620006907
HW Version	DVT2
SW Version	U4UQ34.39
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Modification of EUT

No modifications are made to the EUT during all test items.

1.5 Specification of Accessory

Accessories Information				
AC Adapter 1(US)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-331L
AC Adapter 1(EU)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-332L
AC Adapter 1(UK)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-333L
AC Adapter 1(AU)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-335L
AC Adapter 1(AR)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-336L
AC Adapter 1(BR)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-337L
AC Adapter 1((CHILE))	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-339L
AC Adapter 1(KR)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-330L
AC Adapter 2(US)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-331L
AC Adapter 2(EU)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-332L
AC Adapter 2(UK)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-333L
AC Adapter 2(AR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-336L
AC Adapter 2(BR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-337L
Battery 1	**Brand Name**	Motorola(ATL)	**Model Name**	RW50
Earphone 1	**Brand Name**	Motorola(Lyand)	**Model Name**	SH38D62338
Earphone 2	**Brand Name**	Motorola(Juwei)	**Model Name**	S928E43096
USB Cable 1	**Brand Name**	Motorola(Washin)	**Model Name**	S928D92375
USB Cable 2	**Brand Name**	Motorola(Saibao)	**Model Name**	S928D95755
Wireless Earphones	**Brand Name**	Motorola	**Model Name**	XT2443-1

1.6 Testing Site

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	CO01-KS 03CH03-KS 03CH02-KS 03CH06-KS TH01-KS DFS01-KS	CN1257	314309

1.7 Test Software

Item	Site	Manufacturer	Name	Version
1.	TH01-KS	Tonscend	JS1120-3 test system China_210602	3.3.10
2.	03CH03-KS	AUDIX	E3	210616
3.	03CH02-KS	AUDIX	E3	6.2009-8-24al
4.	03CH06-KS	AUDIX	E3	210616
5.	DFS01-KS	Sporton	Test Tools	1.0
6.	CO01-KS	AUDIX	E3	6.2009-8-24

1.8 Applicable Standards

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

- FCC KDB 484596 D01 Referencing Test Data v02r03
- 47 CFR Part 2, 22, 24, 27, 90S, 90S
- 47 CFR Part 15 Subpart C §15.225
- 47 CFR Part 15 Subpart C §15.247
- 47 CFR Part 15 Subpart E §15.407
- ANSI C63.10-2013
- ANSI C63.26-2015

2 Re-use of Measured Data

2.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: XT2437-3, FCC ID: IHDT56AS9) is electrically identical to the reference device (Model: XT2437-1, XT2437-2, FCC ID: IHDT56AS8) for the portions of the circuitry corresponding to the data being re-used, following the FCC KDB 484596 D01 Referencing Test Data v02r03.

ECR Data Referencing Inquiry has been approved by FCC, and the data referencing and spot check test plan includes RF/EMC, the details are presented in section 2.3 of this report.
For Conducted items of 5G NR bands please refer to report number: TR-24ADRTCC7017.
For SAR Reference detail, please refer to FCC SAR report FA471919-01.

The criteria set in section 3 of KDB 484596 D01 v02r03 is followed to determine whether the data referencing is justified. For SAR, the higher between the referenced value and the spot check value is used to determine compliance in both standalone and simultaneous transimission conditions

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: IHDT56AS9 .

2.2 Model Difference Information

The **main** difference between FCC ID: IHDT56AS8 and FCC ID: IHDT56AS9 is as below:

- Remove WCDMA IV and LTE B4/12/13/17/25/66 and 5G NR n2/n66.
- Add LTE B20/32 and 5G NR n8/n20/n38/n41/n77.

Other differences and all the details of similarity and difference can be found in the confidential documents (IHDT56AS9 Operational Description of Product Equality Declaration).

2.3 Reference detail Section:

Rule Part	Equipment Class	Frequency Band (MHz)	Reference FCC ID (Parent)	Reference on test	Reference Title	FCC ID Filling (Variant)	Test on the variant	Data Referencing (Y/N)
15C	DSS (BR/EDR)	2400~2483.5	IHDT56AS8	Full test	FR471919A	IHDT56AS9	Spot check	Y, All test items
	DTS (BLE)	2400~2483.5	IHDT56AS8	Full test	FR471919B	IHDT56AS9	Spot check	Y, All test items
	DTS (WLAN)	2400~2483.5	IHDT56AS8	Full test	FR471919C	IHDT56AS9	Spot check	Y, All test items
	DXX (NFC)	13.56	IHDT56AS8	Full test	FR471919D	IHDT56AS9	Spot check	Y, All test items
15E	U-NII	5180~5240	IHDT56AS8	Full test	FR471919E	IHDT56AS9	Spot check	Y, All test items
		5260~5320	IHDT56AS8	Full test	FR471919E	IHDT56AS9	Spot check	Y, All test items
		5500~5720	IHDT56AS8	Full test	FR471919E	IHDT56AS9	Spot check	Y, All test items
		5745~5825	IHDT56AS8	Full test	FR471919E	IHDT56AS9	Spot check	Y, All test items
		5260~5320 5500~5720	IHDT56AS8	Full test	FZ471919	IHDT56AS9	Spot check	Y, All test items
	6XD	5925~7125	IHDT56AS8	Full test	FR471919F	IHDT56AS9	Spot check	Y, All test items
22 24	PCE (GSM, WCDMA)	GSM 850/1900 WCDMA B2/B5	IHDT56AS8	Full test	FG471919A	IHDT56AS9	Spot check	Y, All test items
22 24 27 90	PCE (LTE)	LTE B2/B5/B7/B7C/ B26/B38/B38C/ B42/B42C	IHDT56AS8	Full test	FG471919B FG471919C FG471919D FG471919E FG471919F	IHDT56AS9	Spot check	Y, All test items
22 27	PCE (NR)	5G NR n5/n7/n26	IHDT56AS8	Full test	FG471919G	IHDT56AS9	Spot check	Y, RSE item.

Y: Pointer to spot-check exhibit; N: Pointer to full test exhibit.

2.4 Spot Check Verification Data Section

All test items test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.
All test procedures follow the related section of parent report.

Spot-check measurements, while being always compliant with the applicable rule part(s) for the test under consideration, show a deviation d_{dB} from the reference data no larger than 3 dB:

$$d_{dB} = | V_{dB} – R_{dB} | \leq 3 \text{ dB} \quad (1)$$

V_{dB}, the variant spot-check level
R_{dB}, the corresponding measurement level for the reference model

An alternative to the limit of eq. (1) is available, and is based on considering how far the reference data R_{dB} is from the compliance threshold C_{dB} (also expressed in dB), for the particular test under consideration. In this case, if $M_{dB} =|C_{dB} – R_{dB}|$ is the margin in dB from the compliance limit, a spot check may be considered acceptable when the deviation ddB from the reference data satisfies the following condition:

$$d_{dB} = | V_{dB} – R_{dB} | \leq (3 + M_{dB} /20) \text{ dB} \text{ , for } 0 \leq M_{dB} \leq 60 \text{ dB}$$

$$d_{dB} = | V_{dB} – R_{dB} | = 6 \text{ dB} \text{ , for } M_{dB} > 60 \text{ dB} \quad (2)$$

where “| |” is the absolute value of the measured quantity.
When using the option in eq. (2), d_{dB} increases linearly from 3 dB to 6 dB.

Summary for spot check for each rule entry and technology is listed as below:

Mode	Test Item	IHDT56AS8 Parent Worst mode Test Result	IHDT56AS9 Variant Check Test Result	Deviation	Deviation Limit
BT 1Mbps (CH78)	Number of Channels (N)	79	79	0.00	3
	Hopping Channel Separation (MHz)	1.009	1.003	0.01	3
	Dwell Time of Each Channel(s)	0.31	0.31	0.00	3
	20dB Bandwidth(MHz)	0.95	0.94	0.01	3
	99% Bandwidth(MHz)	0.836	0.836	0.00	3
	Conducted Band Edges(dBm)	-52.28	-51.03	1.25	3
	Conducted Spurious Emission(dBm)	-43.36	-45.96	2.60	3
BT 1Mbps (CH78)	Radiated Band Edges and Radiated Spurious Emission (dBuV/m)	56.36	57.48	-1.12	3
BT	AC Conducted Emission (dBuV)	46.04	44.68	1.36	3
BLE 1Mbps (CH39)	6dB Bandwidth (MHz)	0.67	0.67	0.00	3
	99% Bandwidth (MHz)	1.02	1.02	0.00	3
	Power Spectral Density (dBm/3KHz)	-9.35	-9.50	0.15	3
	Conducted Band Edges and Spurious Emission (dBm)	-55.57	-52.79	2.78	3
	Conducted Spurious Emission (dBm)	-50.79	-49.64	1.15	3
BLE 2Mbps (CH39)	Radiated Band Edges and Spurious Emission (dBuV/m)	45.97	46.01	-0.04	3
BLE	AC Conducted Emission (dBuV)	46.04	44.68	1.36	3
WIFI 2.4G (802.11b CH11)	6dB Bandwidth (MHz)	8.06	8.02	0.04	3
	99% Bandwidth (MHz)	12.895	13.287	0.39	3
	Power Spectral Density (dBm/3KHz)	-0.08	-0.15	0.07	3
	Conducted Band Edges and Spurious Emission (dBm)	-34.75	-36.73	1.98	3
	Conducted Spurious Emission (dBm)	-50.78	-49.45	1.33	3
WIFI 2.4G (802.11ax HE40 CH03)	Radiated Band Edges and Spurious Emission (dBuV/m)	50.69	48.16	2.53	3
WIFI 2.4G	AC Conducted Emission (dBuV)	46.04	44.68	1.36	3
WIFI 5G (802.11a CH149)	26dB Emission Bandwidth (MHz)	20.91	20.45	0.46	3
	99% Occupied Bandwidth (MHz)	16.69	16.38	0.31	3
	Power Spectral Density (dBm/MHz)	8.39	7.80	0.59	3
	DFS (s)	0.763225	0.972832	0.209607	3
WIFI 5G (11ax HE40_Ch62)	Radiated Band Edges and Spurious Emission (dBuV/m)	50.80	50.41	0.39	3

WIFI 5G	AC Conducted Emission (dBuV)	36.87	36.45	0.42	3
WIFI 6G UNII-8 (802.11ax HE80 CH199)	26dB Emission Bandwidth (MHz)	81.18	80.99	0.19	3
	99% Occupied Bandwidth (MHz)	76.952	76.876	0.08	3
	Fundamental Maximum EIRP (dBm)	11.34	11.06	0.28	3
	Fundamental Power Spectral Density (dBm/MHz)	-2.05	-2.56	0.51	3
	In-Band Emissions (Channel Mask) (dB)	-37.39	-37.15	0.24	3
WIFI 6G UNII-7 (802.11ax HE160 CH199)	Contention Based Protocol (dBm)	-69.05	-68.09	0.96	3
WIFI 6G (11ax HE160_Ch15)	Radiated Band Edges and Spurious Emission (dBuV/m)	50.62	50.46	0.16	3
WLAN 6G	AC Conducted Emission (dBuV)	43.18	45.05	1.87	3
Part 15C NFC	20dB Emission Bandwidth (KHz)	2.49	2.49	0	3
	99% Occupied Bandwidth (KHz)	2.11	2.10	0.01	3
	Field Strength of Fundamental (dBuV/m @ 30m)	9.36	11.95	2.59	3
	Radiated Spurious Emissions (dBuV/m)	29.5	30.68	1.18	3
	AC Power Line Conducted Emissions(dBuV)	45.12	43.97	1.15	3
Part 22/24/27/90 (Worst LTE Band 7C)	Conducted Power(dBm)	23.01	22.85	0.16	3
	Equivalent Isotropic Radiated Power(dBm)	20.84	20.68	0.16	3
	Peak-to-Average Ratio (dB)	6.46	6.34	0.12	3
	Occupied Bandwidth(MHz)	37.80	38.12	0.32	3
	Conducted Band Edge (dBm)	-26.52	-28.49	1.97	3
	Conducted Spurious Emission(dBm)	-50.27	-51.26	0.99	3
	Frequency Stability (ppm)	0.0029	0.0026	0.00	3

Test Item	Mode	IHDT56AS8 Parent Worst mode Test Result	IHDT56AS9 Variant Check Test Result	Deviation (dB)	Deviation Limit (dB)
Conducted Power (dBm)	BT BR/EDR	14.05	13.76	0.29	3
	BLE 1Mbps	5.69	5.39	0.3	3
	BLE 2Mbps	5.94	5.49	0.45	3
	11b, 2.4GHz	24.78	24.42	0.36	3
	11g, 2.4GHz	27.79	27.65	0.14	3
	11n HT20, 2.4GHz	27.88	27.25	0.63	3
	11n HT40, 2.4GHz	26.14	25.2	0.94	3
	11ax 20, 2.4GHz	28.03	27.41	0.62	3
	11ax 40, 2.4GHz	26.19	25.29	0.9	3
	11a, 5.2GHz	19.36	19.01	0.35	3
	11a, 5.3GHz	20.05	19.86	0.19	3
	11a, 5.5GHz	19.69	19.12	0.57	3
	11a, 5.8GHz	21.09	20.81	0.28	3
	11n HT20, 5.2GHz	19.54	19.12	0.42	3
	11n HT20, 5.3GHz	19.66	19.25	0.41	3
	11n HT20, 5.5GHz	19.92	19.34	0.58	3
	11n HT20, 5.8GHz	20.91	20.53	0.38	3
	11ac VHT20, 5.2GHz	19.59	19.24	0.35	3
	11ac VHT20, 5.3GHz	19.72	19.34	0.38	3
	11ac VHT20, 5.5GHz	19.74	19.62	0.12	3
	11ac VHT20, 5.8GHz	20.92	20.63	0.29	3
	11ax HE20, 5.2GHz	19.67	19.08	0.59	3
	11ax HE20, 5.3GHz	19.80	19.71	0.09	3
	11ax HE20, 5.5GHz	20.02	19.27	0.75	3
	11ax HE20, 5.8GHz	21.05	20.75	0.3	3
	11n HT40, 5.2GHz	19.82	19.33	0.49	3
	11n HT40, 5.3GHz	19.60	19.17	0.43	3
	11n HT40, 5.5GHz	19.99	19.27	0.72	3
	11n HT40, 5.8GHz	19.74	19.31	0.43	3
	11ac VHT40, 5.2GHz	19.96	19.56	0.4	3
	11ac VHT40, 5.3GHz	19.71	19.22	0.49	3
	11ac VHT40, 5.5GHz	19.99	19.54	0.45	3
	11ac VHT40, 5.8GHz	19.83	19.32	0.51	3
	11ax HE40, 5.2GHz	20.37	20.02	0.35	3
	11ax HE40, 5.3GHz	20.06	19.54	0.52	3
	11ax HE40, 5.5GHz	20.39	19.98	0.41	3
	11ax HE40, 5.8GHz	20.31	19.98	0.33	3
	11ac VHT80, 5.2GHz	17.13	16.88	0.25	3
	11ac VHT80, 5.3GHz	17.56	17.11	0.45	3
	11ac VHT80, 5.5GHz	18.95	18.45	0.5	3
	11ac VHT80, 5.8GHz	18.69	18.19	0.5	3
	11ax HE80, 5.2GHz	17.19	16.84	0.35	3
	11ax HE80, 5.3GHz	17.63	17.38	0.25	3
	11ax HE80, 5.5GHz	19.63	19.31	0.32	3
	11ax HE80, 5.8GHz	19.21	18.96	0.25	3
	11ac VHT160, 5.2GHz	15.34	14.98	0.36	3
	11ac VHT160, 5.5GHz	14.75	14.32	0.43	3
	11ax HE160, 5.2GHz	15.36	15.13	0.23	3
	11ax HE160, 5.5GHz	14.76	14.35	0.41	3
	11ax HE20, U-NII-5	10.00	9.23	0.77	3

	11ax HE20, U-NII-6	9.31	8.7	0.61	3
	11ax HE20, U-NII-7	9.42	9.03	0.39	3
	11ax HE20, U-NII-8	10.04	9.82	0.22	3
	11ax HE40, U-NII-5	13.09	12.62	0.47	3
	11ax HE40, U-NII-6	12.27	12.04	0.23	3
	11ax HE40, U-NII-7	12.49	11.89	0.60	3
	11ax HE40, U-NII-8	13.39	13.13	0.26	3
	11ax HE80, U-NII-5	15.01	14.24	0.77	3
	11ax HE80, U-NII-6	14.70	14.22	0.48	3
	11ax HE80, U-NII-7	14.44	13.66	0.78	3
	11ax HE80, U-NII-8	15.64	15.36	0.28	3
	11ax HE160, U-NII-5	16.44	15.68	0.76	3
	11ax HE160, U-NII-6	16.22	15.78	0.44	3
	11ax HE160, U-NII-7	16.31	15.75	0.56	3
	11ax HE160, U-NII-8	15.37	15.17	0.2	3
	GSM 850	32.84	32.82	0.02	3
	GSM 1900	29.16	28.93	0.23	3
	WCDMA 850	23.03	22.93	0.1	3
	WCDMA1900	22.81	22.79	0.02	3
	LTE B2	22.92	22.61	0.31	3
	LTE B5	22.94	22.92	0.02	3
	LTE B26 (Part 22H)	23.06	23.05	0.01	3
	LTE B26 (Part 90S)	22.82	22.71	0.11	3
	LTE B7	23.03	23.01	0.02	3
	LTE B7C	23.01	22.85	0.16	3
	LTE B38	23.16	23.12	0.04	3
	LTE B38C	23.11	22.81	0.30	3
	LTE B42	23.15	23.02	0.13	3
	LTE B42C	23.04	22.96	0.08	3

Conclusion:
All test items test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result, the test data from the original model is representative for the variant model. All spot check test data are shown within expected level compliant to limit line.

We are using power and ERP/EIRP measurements from the original parent model reports to list on the grant.

The same detection mechanism/software/antenna gain is used in the variant of DFS/CBP. Hence, all test cases refer to parent report.

We confirm that the test data referencing policy of FCC KDB 484596 D01 Referencing Test Data v02r03 has been followed and the test data as referenced from the parent model report represents compliance with new FCC ID.

3 List of Measuring Equipment

For BT/WIFI:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 11, 2023	Aug. 16, 2024~ Aug. 18, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 02, 2024	Aug. 16, 2024~ Aug. 18, 2024	Jan. 01, 2025	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 02, 2024	Aug. 16, 2024~ Aug. 18, 2024	Jan. 01, 2025	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400023	3Hz~8.5GHz;Max 30dBm	Jan. 02, 2024	Aug. 15, 2024	Jan. 01, 2025	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY60242126	10Hz-44GHz	Oct. 11, 2023	Aug. 15, 2024	Oct. 10, 2024	Radiation (03CH06-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11, 2023	Aug. 15, 2024	Sep. 10, 2024	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	59915	30MHz-1GHz	Aug. 19, 2023	Aug. 15, 2024	Aug. 18, 2024	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 11, 2024	Aug. 15, 2024	Apr. 10, 2025	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101093	18GHz~40GHz	Jan. 06, 2024	Aug. 15, 2024	Jan. 05, 2025	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	372171	9KHz ~1GHZ	Jan. 02, 2024	Aug. 15, 2024	Jan. 01, 2025	Radiation (03CH06-KS)
Amplifier	EM	EM18G40GA	060728	18~40GHz	Jan. 02, 2024	Aug. 15, 2024	Jan. 01, 2025	Radiation (03CH06-KS)
high gain Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	2082395	1Ghz-18Ghz	Jan. 02, 2024	Aug. 15, 2024	Jan. 01, 2025	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY53270319	500MHz~26.5GHz	Oct. 11, 2023	Aug. 15, 2024	Oct. 10, 2024	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Aug. 15, 2024	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Aug. 15, 2024	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Aug. 15, 2024	NCR	Radiation (03CH06-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 18, 2024	Aug. 08, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Apr. 18, 2024	Aug. 08, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Conduction (CO01-KS)
Spectrum Analyzer	R&S	FSV7	101632	10Hz~7GHz	Jan. 03, 2024	Aug. 05, 2024	Jan. 02, 2025	DFS (DFS01-KS)
Signal Generator	KEYSIGHT	N5182B	MY53050604	9KHz~6GHz	Apr. 17, 2024	Aug. 05, 2024	Apr. 16, 2025	DFS (DFS01-KS)
Combiner	MTJ Cooperation	MTJ7112	N/A	0.4-6GHz	NCR	Aug. 05, 2024	NCR	DFS (DFS01-KS)
Signal Analyzer	R&S	FSV7	101472	10Hz~7GHz	Jan. 02, 2024	Aug. 21, 2024	Jan. 01, 2025	CBP (DFS01-KS)
MXG-B RF Vector Signal Genertor	Keysight	5182B /5182BX07	MY56200417 /MY59360210	9kHz~7.2GHz	Apr. 17, 2024	Aug. 21, 2024	Apr. 16, 2025	CBP (DFS01-KS)

NCR: No Calibration Required.

For NFC:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV30	101338	10Hz~30GHz	Jan. 05, 2024	Aug. 18, 2024	Jan. 04, 2025	Conducted (TH01-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 11, 2023	Aug. 18, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Temperature &humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Aug. 18, 2024	Jul. 03, 2025	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Max 30dBm	Oct. 11, 2023	Aug. 15, 2024	Oct. 10, 2024	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11, 2023	Aug. 15, 2024	Sep. 10, 2024	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 06, 2023	Aug. 15, 2024	Dec. 05, 2024	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	413740	9KHz-1GHz	Jan. 03, 2024	Aug. 15, 2024	Jan. 02, 2025	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Aug. 15, 2024	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Aug. 15, 2024	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Aug. 15, 2024	NCR	Radiation (03CH02-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 18, 2024	Aug. 08, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Apr. 18, 2024	Aug. 08, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Conduction (CO01-KS)

NCR: No Calibration Required

For WWAN Bands:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 11, 2023	Aug. 16, 2024~ Aug. 18, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Aug. 16, 2024~ Aug. 18, 2024	NCR	Conducted (TH01-KS)
Temperature &humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Aug. 16, 2024~ Aug. 18, 2024	Jul. 03, 2025	Conducted (TH01-KS)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44GHz	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11, 2023	Aug. 08, 2024	Sep. 10, 2024	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz-1GHz	Dec. 06, 2023	Aug. 08, 2024	Dec. 05, 2024	Radiation (03CH03-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 23, 2023	Aug. 08, 2024	Oct. 22, 2024	Radiation (03CH03-KS)
SHF-EHF Horn	com-power	AH-840	101115	18GHz~40GHz	Oct. 15, 2023	Aug. 08, 2024	Oct. 14, 2024	Radiation (03CH03-KS)
Amplifier	SONOMA	310N	413740	30MHz ~1000MHz	Jan. 03, 2024	Aug. 08, 2024	Jan. 02, 2025	Radiation (03CH03-KS)
Amplifier	EM	EM18G40GA	060851	18~40GHz	Jan. 03, 2024	Aug. 08, 2024	Jan. 02, 2025	Radiation (03CH03-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2082394	1Ghz-18Ghz	Jan. 03, 2024	Aug. 08, 2024	Jan. 02, 2025	Radiation (03CH03-KS)
Amplifier	Keysight	83017A	MY53270319	1GHz~26.5GHz	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Aug. 08, 2024	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Aug. 08, 2024	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Aug. 08, 2024	NCR	Radiation (03CH03-KS)

NCR: No Calibration Required.

4 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement (BT/WIFI2.4G/5G)

Conducted Spurious Emission & Bandedge	**±2.22 dB**
Occupied Channel Bandwidth	**±0.1%**
Conducted Power	**±0.50 dB**
Conducted Power Spectral Density	**±0.90 dB**
Frequency	**±0.4 Hz**

Uncertainty of Conducted Measurement (WIFI 6G)

Conducted Spurious Emission & Bandedge	**±2.22 dB**
Occupied Channel Bandwidth	**±0.1%**
Conducted Power	**±0.50 dB**
Conducted Power Spectral Density	**±0.90 dB**
Frequency	**±0.4 Hz**
Conducted Generated signal Levels	**±0.56 dB**
Conducted Time	**0.54%**

Uncertainty of Conducted Measurement (NFC)

Test Item	Uncertainty
Occupied Channel Bandwidth	**±0.1%**
Frequency	**±0.4 Hz**

Uncertainty of Conducted Measurement (DFS)

Conducted Generated signal Levels	±0.56 dB
Conducted Time	0.38%

Uncertainty of Conducted Measurement (WWAN)

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±2.22 dB
Occupied Channel Bandwidth	±0.1%
Conducted Power	±0.50 dB
Peak to Average Ratio	±0.46 dB
Frequency Stability	±0.4 Hz

Uncertainty of AC Conducted Emission Measurement (0.15 MHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.84 dB

03CH06-KS(BT/WIF):

Uncertainty of Radiated Emission Measurement (9 KHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.30 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.06 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.18 dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.38 dB

03CH02-KS(NFC):

Uncertainty of Radiated Emission Measurement (9 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.30dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.04dB

03CH03-KS(WWAN):

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.84dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.84dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.83dB

-THE END-

Appendix A. Radiated Spurious Emission Test Data

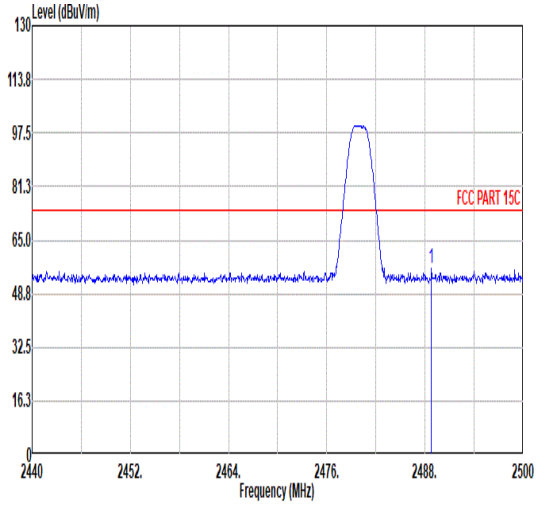
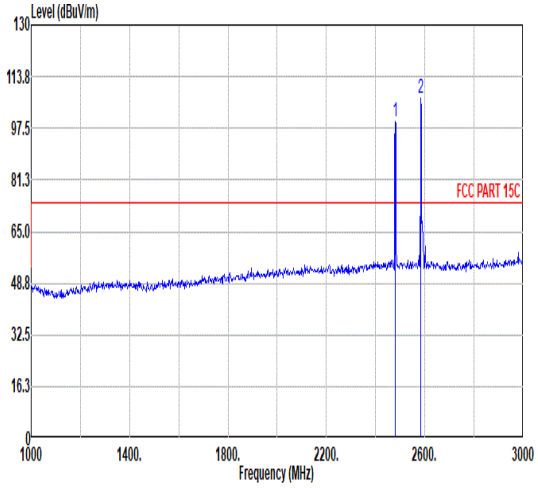
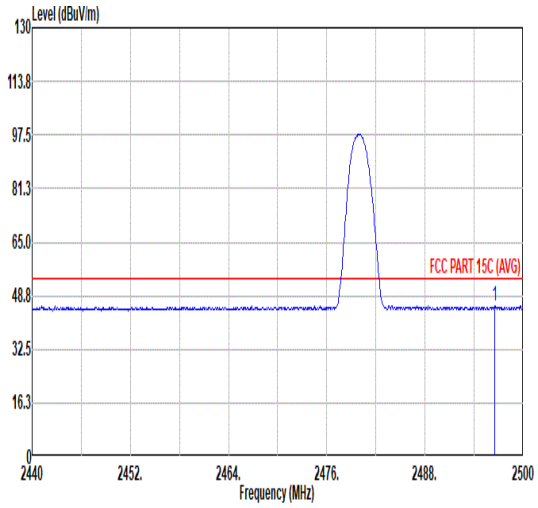
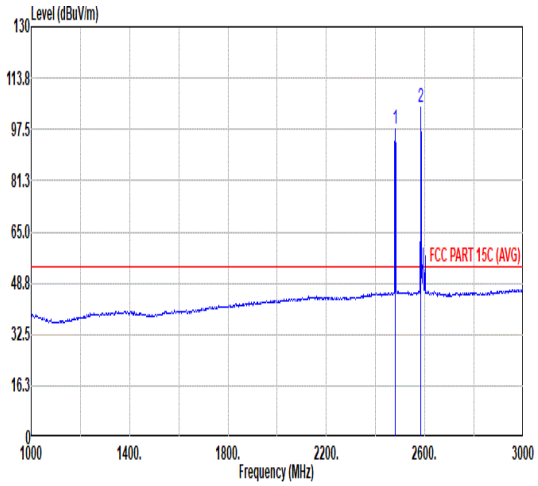
Test Engineer :	levi zhao	**Relative Humidity :**	22 ~ 23 ℃
		Temperature :	41 ~ 42 %

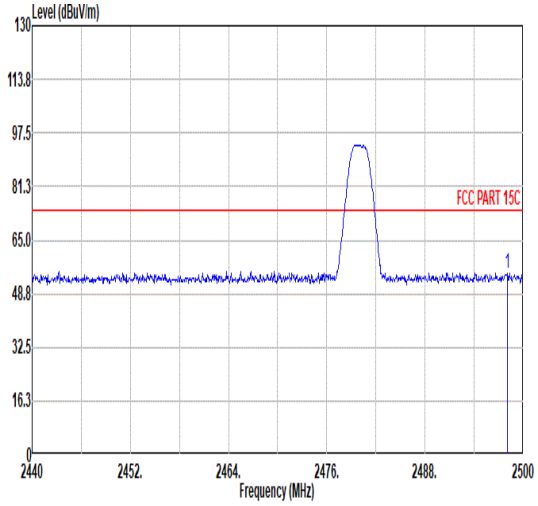
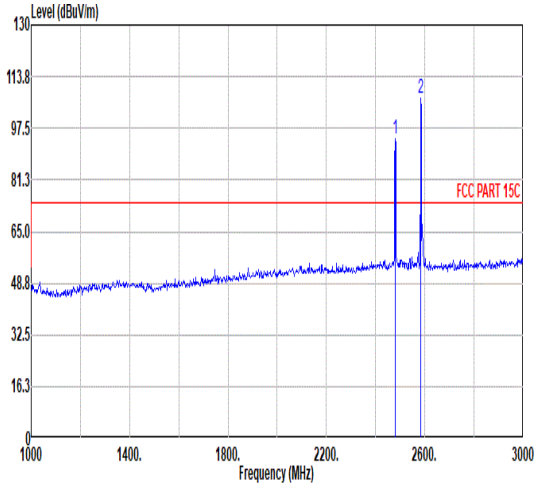
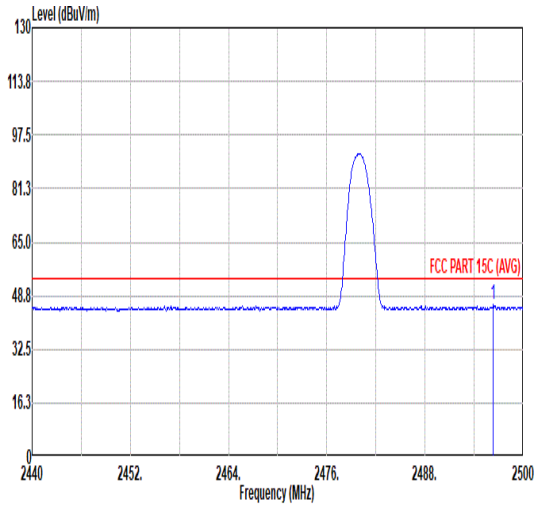
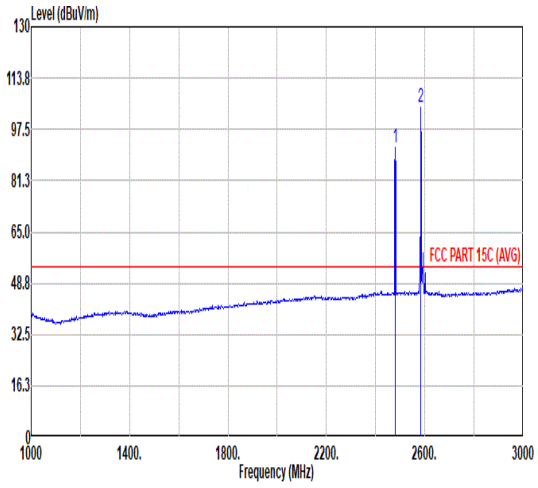
Radiated Spurious Emission Test Modes

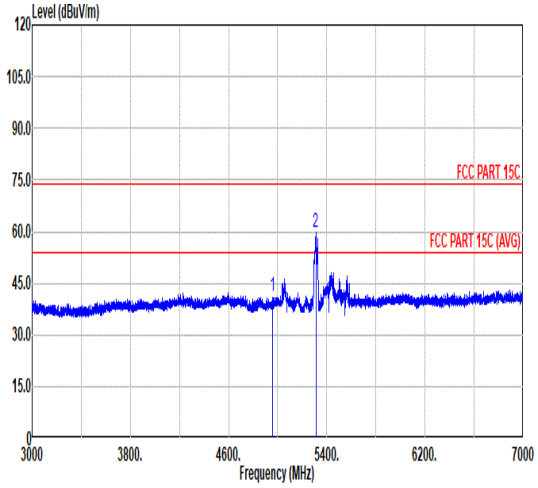
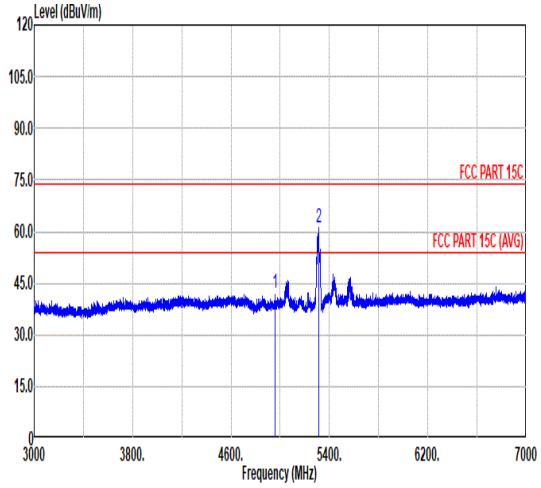
Mode	Band	Band (GHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	2400-2483.5	2400-2483.5	6	Bluetooth-LE_GSFK	39	2480	2Mbps	Full	-
	U-NII-2A	5.25-5.35	CDD 6+8	802.11ax HE40	62	5310	MCS0	Full	-
	Part 27M B41 BW=20M								
	NFC on								

Summary of each worse mode

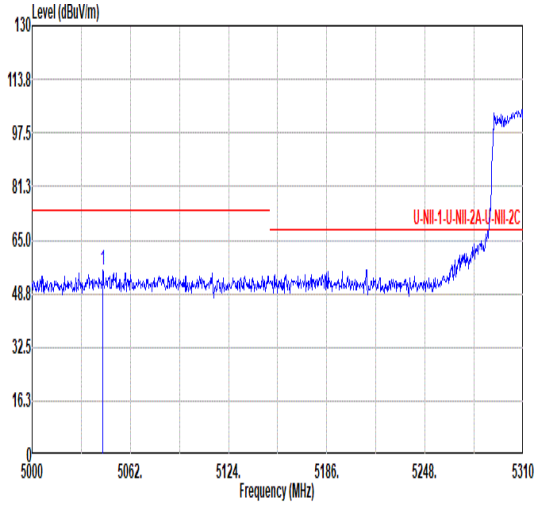
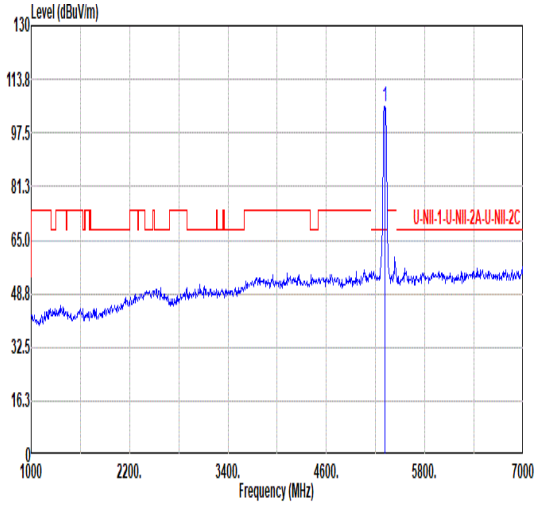
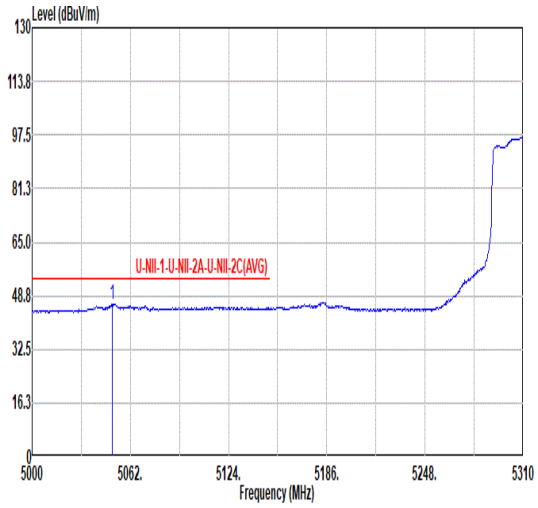
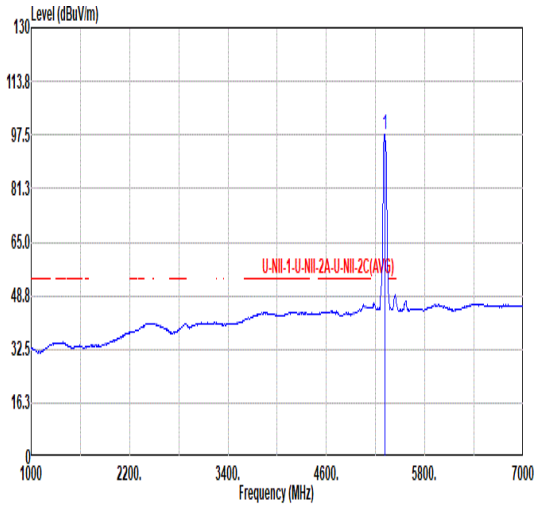
Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	Remark
1	Bluetooth-LE_GSFK	39	2496.34	46.04	54.00	-7.96	V	AVERAGE	Pass	Band Edge
	Bluetooth-LE_GSFK	39	4960.00	41.94	74.00	-32.06	V	PEAK	Pass	Harmonic
	802.11ax HE40	62	5350.20	50.85	54.00	-3.15	H	Average	Pass	Band Edge
	802.11ax HE40	62	7752.40	62.37	70.20	-7.83	V	Peak	Pass	Harmonic

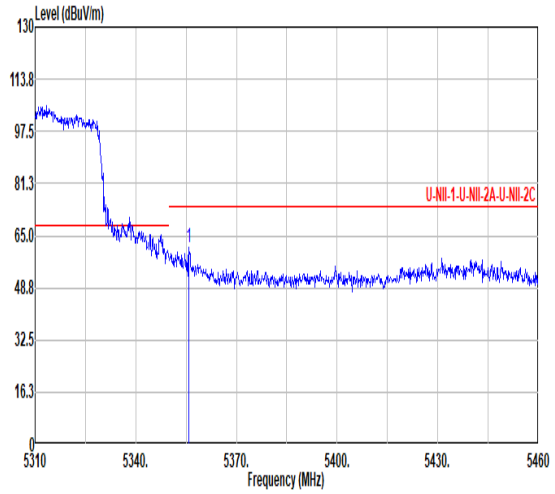
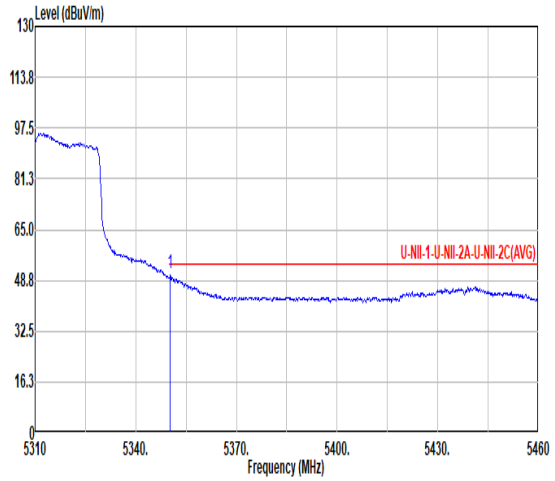
Mode	1	
	Co-location Band Edge	
	Bluetooth-LE_GSFK_CH39_2480MHz_Full	
ANT	6	
Pol.	Horizontal	Fundamental
Peak	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2488.78 56.44 74.00 -17.56 43.31 32.63 6.74 32.24 6.00 307 309 PEAK	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2480.00 99.82 ------ ------ 86.74 32.58 6.73 32.23 6.00 307 309 Peak 2 2584.00 106.92 ------ ------ 93.93 32.36 6.87 32.24 6.00 307 309 Peak
Avg	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2496.52 45.66 54.00 -8.34 32.47 32.68 6.75 32.24 6.00 307 309 AVERAGE	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2480.00 97.66 ------ ------ 84.58 32.58 6.73 32.23 6.00 307 309 Average 2 2584.00 104.57 ------ ------ 91.58 32.36 6.87 32.24 6.00 307 309 Average

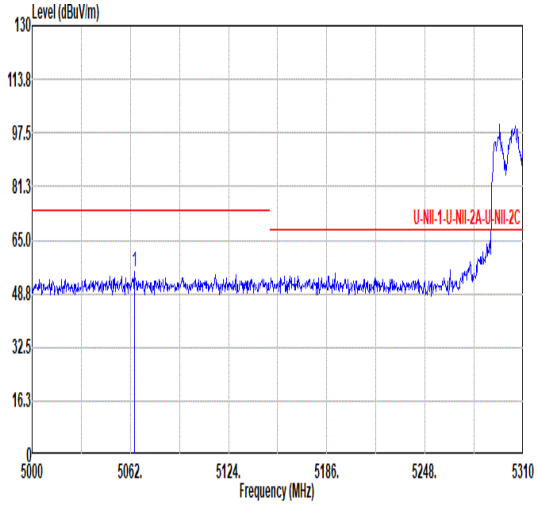
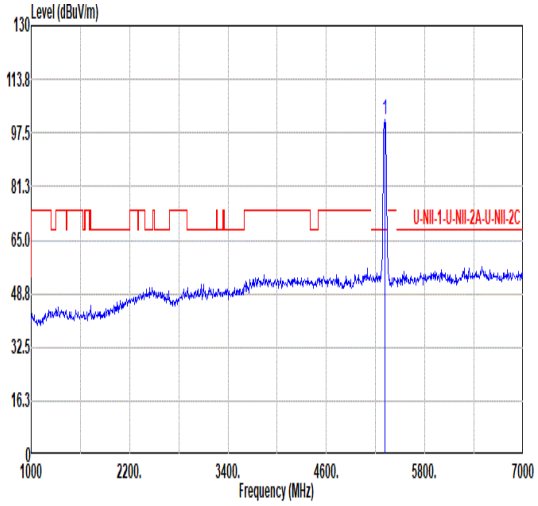
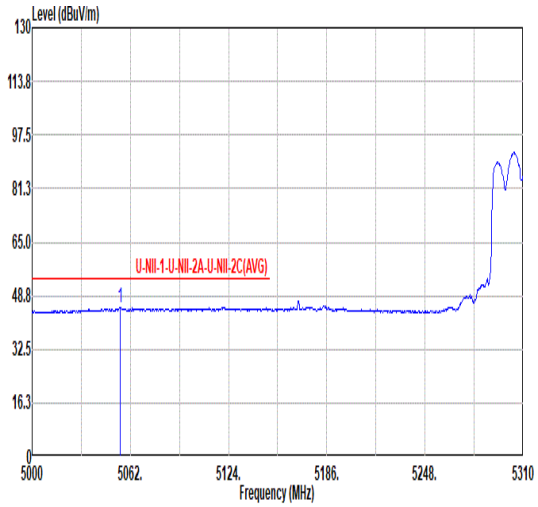
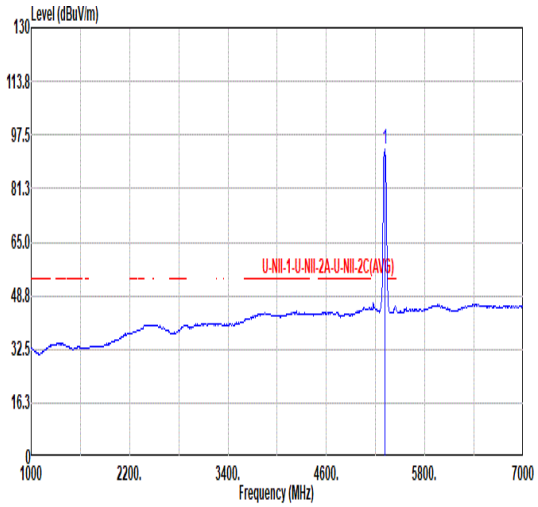
Mode	1	
	Co-location Band Edge	
	Bluetooth-LE_GSFK_CH39_2480MHz_Full	
ANT	6	
Pol.	Vertical	Fundamental
Peak	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2498.02 55.14 74.00 -18.86 41.94 32.69 6.75 32.24 6.00 245 0 PEAK	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2480.00 94.01 ------ ------ 80.93 32.58 6.73 32.23 6.00 245 0 Peak 2 2584.00 106.81 ------ ------ 93.82 32.36 6.87 32.24 6.00 245 0 Peak
Avg	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2496.34 46.04 54.00 -7.96 32.85 32.68 6.75 32.24 6.00 245 0 AVERAGE	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 2480.00 91.80 ------ ------ 78.72 32.58 6.73 32.23 6.00 245 0 Average 2 2584.00 104.50 ------ ------ 91.51 32.36 6.87 32.24 6.00 245 0 Average

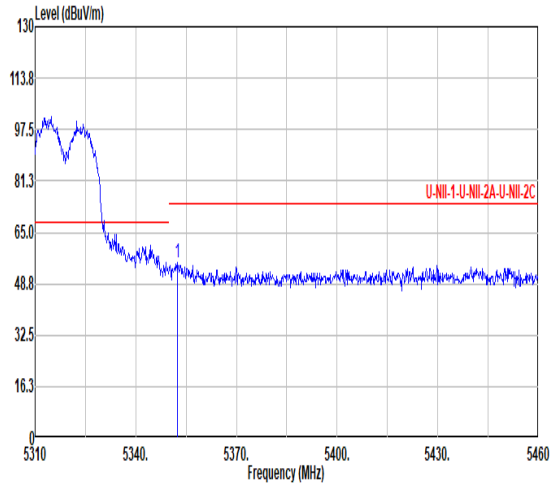
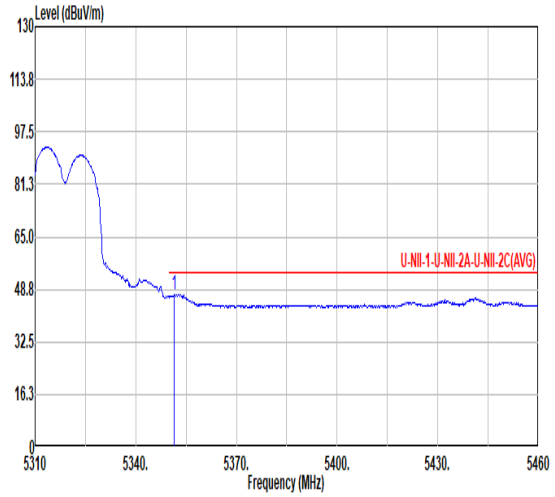
Mode	1	
	Co-location Harmonic	
	Bluetooth-LE_GSFK_CH39_2480MHz_Full	
ANT	6	
Pol.	Horizontal	Vertical
Peak Avg	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4960.00 41.34 74.00 -32.66 58.89 34.00 9.61 61.16 0.00 --- --- PEAK 2 5310.40 59.83 74.00 -14.17 76.23 34.52 9.89 60.81 0.00 --- --- Peak	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 4960.00 41.94 74.00 -32.06 59.49 34.00 9.61 61.16 0.00 --- --- PEAK 2 5313.20 60.97 74.00 -13.03 77.36 34.53 9.89 60.81 0.00 --- --- Peak

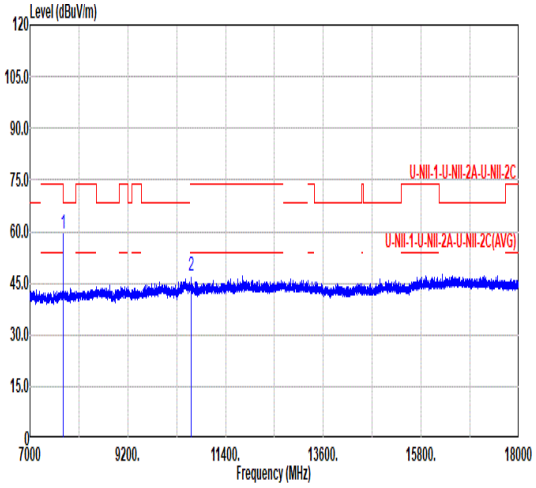
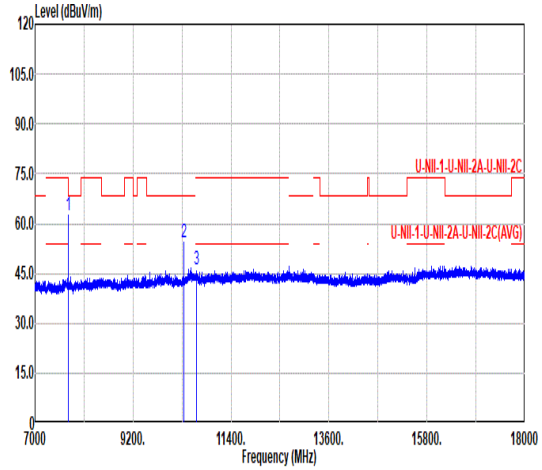
Note: #2 is co-location of WLAN 5G_CH62 TX fundamental signal.

Mode	1	
	Co-location Band Edge	
	802.11ax HE40_CH62_5310MHz_Full	
ANT	CDD 6+8	
Pol.	Horizontal	Fundamental
Peak	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5044.64 55.88 74.00 -18.12 44.14 34.00 9.69 31.95 0.00 100 334 PEAK	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5310.00 105.68 ------ ------ 93.06 34.53 9.89 31.80 0.00 100 334 PEAK
Avg	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5050.53 46.27 54.00 -7.73 34.51 34.00 9.70 31.94 0.00 100 334 AVERAGE	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5310.00 97.53 ------ ------ 84.93 34.52 9.89 31.81 0.00 100 334 AVERAGE

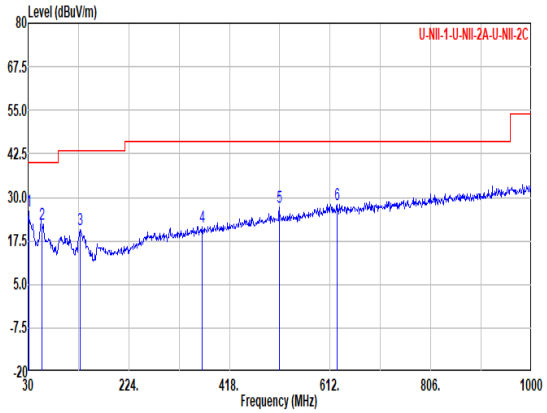
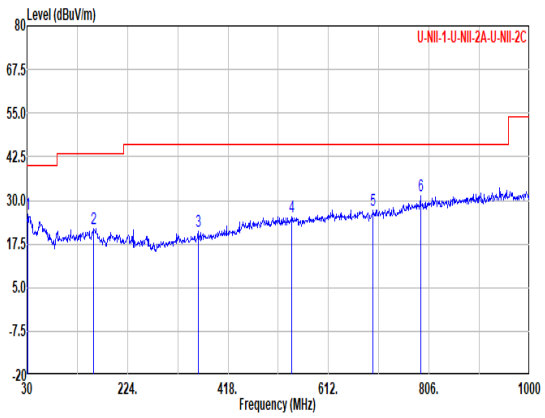
Mode	1	
	Co-location Band Edge	
	802.11ax HE40_CH62_5310MHz_Full	
ANT	CDD 6+8	
Pol.	Horizontal	Fundamental
Peak	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5355.90 61.36 74.00 -12.64 48.62 34.61 9.91 31.78 0.00 100 334 PEAK	Blank
Avg	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5350.20 50.85 54.00 -3.15 38.12 34.60 9.91 31.78 0.00 100 334 Average	Blank

Mode	1	
	Co-location Band Edge	
	802.11ax HE40_CH62_5310MHz_Full	
ANT	CDD 6+8	
Pol.	Vertical	Fundamental
Peak	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5064.48 55.25 74.00 -18.75 43.45 34.03 9.71 31.94 0.00 300 311 PEAK	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5310.00 101.35 ------ ------ 88.73 34.53 9.89 31.80 0.00 300 311 PEAK
Avg	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5055.49 45.23 54.00 -8.77 33.46 34.01 9.70 31.94 0.00 300 311 AVERAGE	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5310.00 93.01 ------ ------ 80.39 34.53 9.89 31.80 0.00 300 311 AVERAGE

Mode	1	
	Co-location Band Edge	
	802.11ax HE40_CH62_5310MHz_Full	
ANT	CDD 6+8	
Pol.	Vertical	Fundamental
Peak	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5352.45 55.61 74.00 -18.39 42.88 34.60 9.91 31.78 0.00 300 311 PEAK	Blank
Avg	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 5351.55 47.26 54.00 -6.74 34.53 34.60 9.91 31.78 0.00 300 311 AVERAGE	Blank

Mode	1	
	Co-location Harmonic	
	802.11ax HE40_CH62_5310MHz_Full	
ANT	CDD 6+8	
Pol.	Horizontal	Vertical
Peak Avg	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 7752.40 59.18 70.20 -11.02 71.84 35.90 12.10 60.66 0.00 100 262 Peak 2 10620.00 46.88 74.00 -27.12 55.95 37.88 14.31 61.26 0.00 --- --- PEAK	 Freq Level Limit Line Over Limit Read Level Ant Factor Cable Loss Preamp Factor Aux Factor APos TPos Remark MHz dBuV/m dBuV/m dB dBuV dB/m dB dB dB cm deg 1 7752.40 62.37 70.20 -7.83 75.03 35.90 12.10 60.66 0.00 100 265 Peak 2 10336.30 54.56 68.20 -13.64 64.36 37.37 14.11 61.28 0.00 100 91 Peak 3 10620.00 46.28 74.00 -27.72 55.35 37.88 14.31 61.26 0.00 --- --- PEAK

Note: #1 is the 3rd harmonic from LTE B41, the limit should be -25dBm and converted to field strength limit 70.2dBµV/m @3m distance, the test results is Pass.

Mode	1	
	30-1G	
	802.11ax HE40_CH62_5310MHz_Full	
ANT	CDD 6+8	
Pol.	Horizontal	Vertical
Peak		

	Freq	Level	Limit Line	Over Limit	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	30.97	25.90	40.00	-14.10	33.01	25.09	0.76	32.96	0.00	---	---	Peak
2	57.16	22.33	40.00	-17.67	41.19	12.85	1.04	32.75	0.00	---	---	Peak
3	130.88	20.91	43.50	-22.59	34.37	17.56	1.69	32.71	0.00	---	---	Peak
4	364.65	21.59	46.00	-24.41	30.88	20.98	2.83	33.10	0.00	---	---	Peak
5	514.03	27.10	46.00	-18.90	33.04	24.33	3.15	33.42	0.00	---	---	Peak
6	625.58	27.94	46.00	-18.06	31.46	26.32	3.69	33.53	0.00	---	---	Peak

	Freq	Level	Limit Line	Over Limit	Read Level	Ant Factor	Cable Loss	Preamp Factor	Aux Factor	APos	TPos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	
1	31.94	25.95	40.00	-14.05	33.76	24.39	0.76	32.96	0.00	---	---	Peak
2	159.01	21.96	43.50	-21.54	36.23	16.57	1.84	32.68	0.00	---	---	Peak
3	360.77	20.98	46.00	-25.02	30.36	20.88	2.81	33.07	0.00	---	---	Peak
4	540.22	25.32	46.00	-20.68	30.76	24.90	3.18	33.52	0.00	---	---	Peak
5	698.33	27.11	46.00	-18.89	30.02	26.71	3.95	33.57	0.00	---	---	Peak
6	789.51	31.24	46.00	-14.76	32.30	28.04	4.19	33.29	0.00	---	---	Peak

Appendix C. Reference Report

FCC RF Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2437-1, XT2437-2
FCC ID	:	IHDT56AS8
STANDARD	:	47 CFR Part 90(S)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Jul. 29, 2024 ~ Aug. 08, 2024

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

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

Jason Jia

Approved by: Jason Jia

ACCREDITED
Cert #5145.02

Sporton International Inc. (Kunshan)
No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China

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APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

APPENDIX C. TEST SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG471919D	Rev. 01	Initial issue of report	Aug. 21, 2024
FG471919D	Rev. 02	Revise section 1.4, about the note; This report is an update version, replacing the report issued on Aug. 21, 2024.	Aug. 23, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	§2.1046	Conducted Output Power	—	Report only	-
3.2	§2.1049 §90.209	Occupied Bandwidth and 26dB Bandwidth	—	Report only	-
3.3	§2.1051 §90.691	Emission masks – In-band emissions	< 50+10log$_{10}$(P[Watts])	PASS	-
3.4	§2.1051 §90.691	Emission masks – Out of band emissions	< 43+10log$_{10}$(P[Watts])	PASS	-
3.5	§2.1053 §90.691	Field Strength of Spurious Radiation	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 44.41 dB at 2440.00 MHz
3.6	§2.1055 §90.213	Frequency Stability for Temperature & Voltage	< 2.5 ppm	PASS	-

Conformity Assessment Condition:

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

Disclaimer:

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

1 General Description

1.1 Applicant

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2437-1, XT2437-2
FCC ID	IHDT56AS8
IMEI Code	Conducted: 355709740017816/355709740017824 Radiation: 355709740016735
HW Version	DVT2
SW Version	U4UQ34.39
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The two model names are only for market segment, no other difference.

1.4 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx Frequency	814 ~ 824 MHz
Rx Frequency	859 ~ 869 MHz
Bandwidth	1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz
Maximum Output Power to Antenna	Ant0: 22.97 dBm Ant4: 22.95 dBm
Antenna Gain	Ant0: -5.16 dBi Ant4: -4.3 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note:

1. Only maximum conducted Power of Ant.0 is shown in the report.
2. LTE Band 26 supports two paths which are with the same RF components, thus RF only verify the power for two paths, and full test the path with maximum power.

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Specification of Accessory

Accessories Information				
AC Adapter 1(US)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-331L
AC Adapter 1(EU)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-332L
AC Adapter 1(UK)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-333L
AC Adapter 1(AU)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-335L
AC Adapter 1(AR)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-336L
AC Adapter 1(BR)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-337L
AC Adapter 1(CHILE)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-339L
AC Adapter 1(KR)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-330L
AC Adapter 2(US)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-331L
AC Adapter 2(EU)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-332L
AC Adapter 2(UK)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-333L
AC Adapter 2(AR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-336L
AC Adapter 2(BR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-337L
Battery	**Brand Name**	Motorola(ATL)	**Model Name**	RW50
USB Cable 1	**Brand Name**	Motorola(Washin)	**Model Name**	S928D92375
USB Cable 2	**Brand Name**	Motorola(Saibao)	**Model Name**	S928D95755
Wireless Earphones	**Brand Name**	Motorola	**Model Name**	XT2443-1

1.7 Maximum Conducted Power and Emission Designator

LTE Band 26		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	**Frequency Range (MHz)**	**Maximum Conducted power (W)**	**Emission Designator (99%OBW)**	**Maximum Conducted power (W)**	**Emission Designator (99%OBW)**
1.4	814.7 ~ 823.3	0.1914	1M09G7D	0.1476	1M10W7D
3	815.5 ~ 822.5	0.1905	2M72G7D	0.1435	2M73W7D
5	816.5 ~ 821.5	0.1897	4M51G7D	0.1469	4M50W7D
10	819.0	0.1866	9M03G7D	0.1479	9M03W7D
15	824	0.1982	13M5G7D	0.1500	13M5W7D

Note: All modulations have been tested, and only the worst test results of PSK & QAM are shown in the report.

1.8 Testing Site

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH03-KS TH01-KS	CN1257	314309

1.9 Test Software

Item	Site	Manufacture	Name	Version
1.	TH01-KS	SPORTON	FCC LTE_Ver2.0 Auto_china_210503	2.0
2.	03CH03-KS	AUDIX	E3	210616

1.10 Applied Standards

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

- 47 CFR 90(S)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 971168 D02 Misc Rev Approv License Devices v02r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

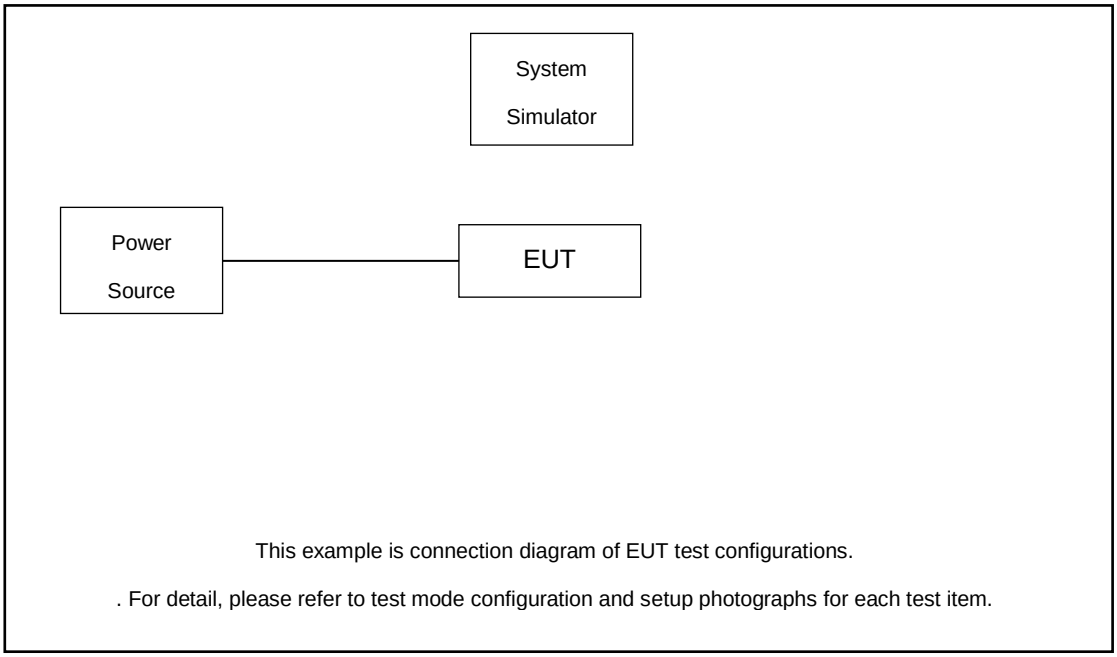
2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Frequency range investigated for radiated emission is 30 MHz to 9000 MHz.

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	26	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v
26dB and 99% Bandwidth	26	v	v	v	v	v	-	v	v					v		v	
Emission masks In-band emissions	26	v	v	v	v	v	-	v	v	v	v	v		v	v		v
Emission masks – Out of band emissions	26	v	v	v	v	v	-	v				v			v	v	v
Frequency Stability	26				v		-	v						v		v	
Radiated Spurious Emission	26	Worst Case														v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. LTE Band26 transmit frequency for part22 rule is 824MHz-849MHz, for part90 rule is 814MHz-824MHz. ERP over 15MHz bandwidth complies the ERP limit line of part22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complies.																

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

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

The spectrum analyzer offset is derived from RF cable loss

Offset = RF cable loss

Following shows an offset computation example with cable loss 5.2 dB

Example :

Offset(dB) = RF cable loss(dB)

=5.2 (dB)

2.5 Frequency List of Low/Middle/High Channels

LTE Band 26 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	-	26740	-
	Frequency	-	819	-
5	Channel	26715	26740	26765
	Frequency	816.5	819	821.5
3	Channel	26705	26740	26775
	Frequency	815.5	819	822.5
1.4	Channel	26697	26740	26783
	Frequency	814.7	819	823.3

LTE Band 26 Cross-rule Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**-**	**Middle**	**-**
15	Channel	-	26790	-
	Frequency	-	824	-
10	Channel	-	26790	-
	Frequency	-	824	-
5	Channel	-	26790	-
	Frequency	-	824	-
3	Channel	-	26790	-
	Frequency	-	824	-
1.4	Channel	-	26790	-
	Frequency	-	824	-

3 Test Result

3.1 Conducted Output Power Measurement

3.1.1 Description of the Conducted Output Power Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

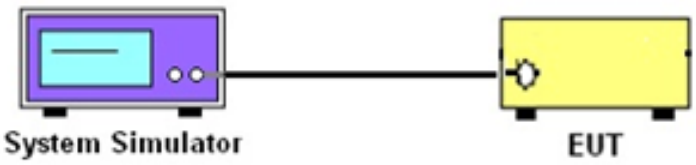
3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

3.1.4 Test Setup



3.1.5 Test Result of Conducted Output Power

Please refer to Appendix A.

3.2 99% Occupied Bandwidth and 26dB Bandwidth Measurement

3.2.1 Description of (Occupied) Bandwidth Limitations Measurement

The 99% occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

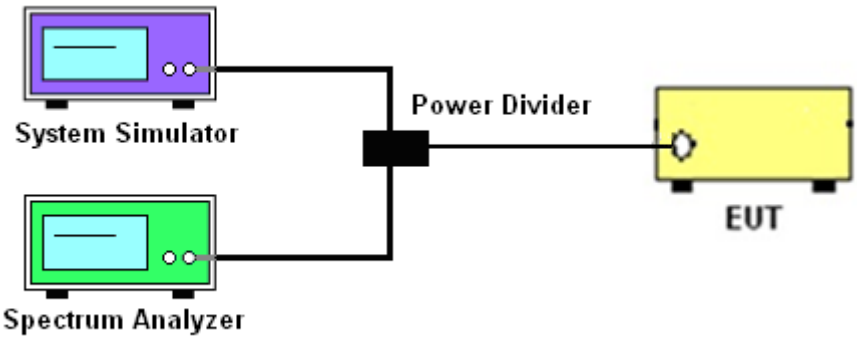
3.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The 26dB and 99% occupied bandwidth (BW) of the middle channel for the highest RF power with full RB sizes were measured.

3.2.4 Test Setup



3.2.5 Test Result of 99% Occupied Bandwidth and 26dB Bandwidth

Please refer to Appendix A.

3.3 Emissions Mask Measurement

3.3.1 Description of Emissions Mask Measurement

Equipment used in this licensed to EA or non-EA systems shall comply with the emission mask provisions of FCC Part 90.691.(a):

(a) 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 $Log_{10}(f/6.1)$ decibels or 50 + 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 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 + $10Log_{10}(P)$ 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.

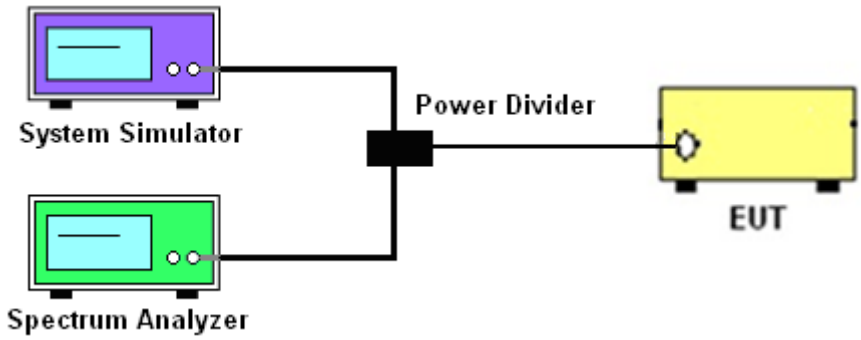
3.3.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.3.3 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The emissions mask of low and high channels for the highest RF powers were measured.
3. The measured RBW and the VBW set 3 times of RBW are then set in spectrum analyzer, and the RBW correction factor 10log (1% of OBW/measured RBW)(dB) was compensated, if required.
4. The test results were shown below plots with a correction offset factor including cable loss, insertion loss of power divider.

3.3.4 Test Setup



3.3.5 Test Result (Plots) of Conducted Emissions Mask

Please refer to Appendix A.

3.4 Emissions Mask – Out Of Band Emissions Measurement

3.4.1 Description of Conducted Emissions Out of band emissions measurement

The power of any emission FCC Part 90.691 (a)(2) on any frequency removed from the assigned frequency by out of the authorized bandwidth at least 43 + 10 log (P) dB. It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

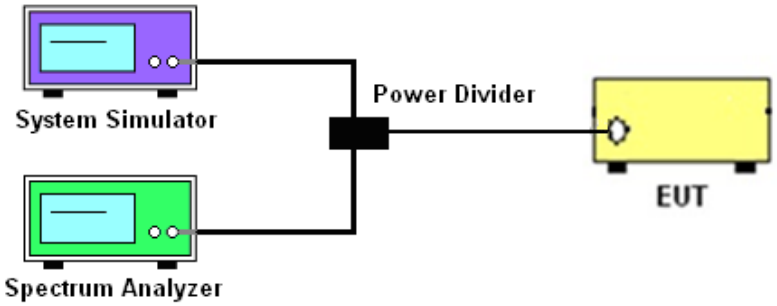
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

3.4.4 Test Setup



3.4.5 Test Result (Plots) of Conducted Emission

Please refer to Appendix A.

3.5 Field Strength of Spurious Radiation Measurement

3.5.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission FCC Part 90.691 on any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43+10\log_{10}(P[Watts])$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.5.2 Measuring Instruments

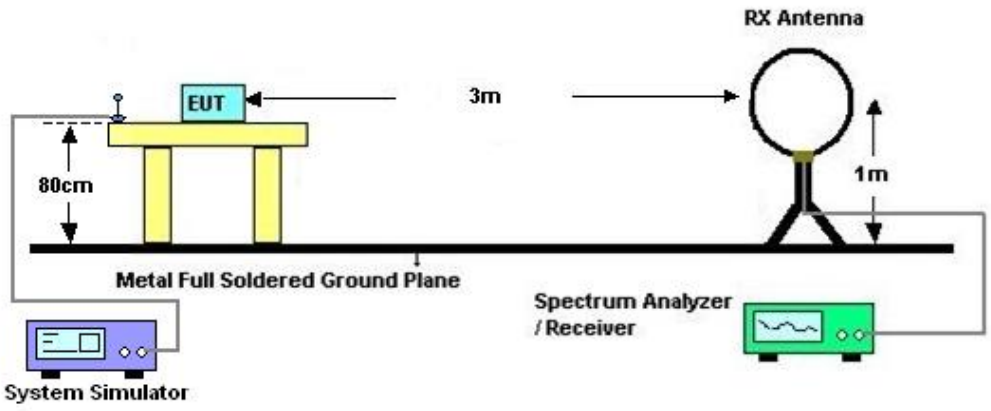
The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

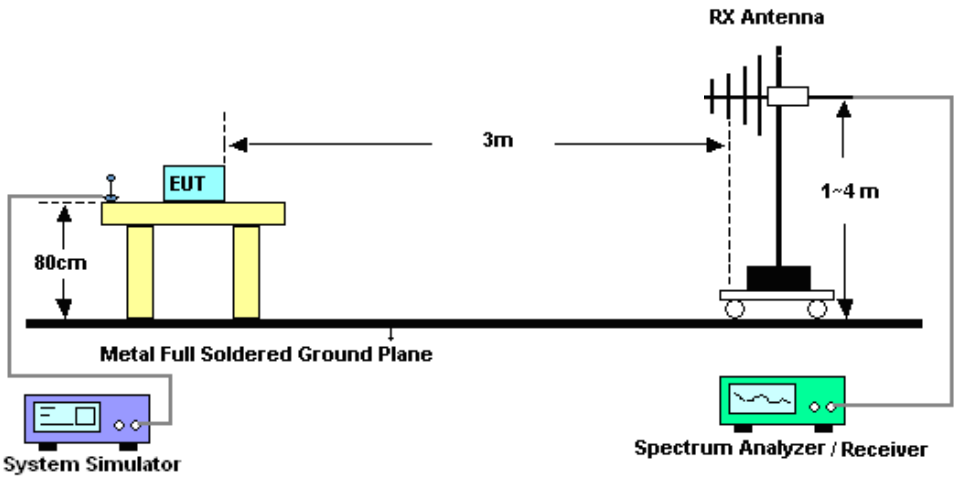
1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
13. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

3.5.4 Test Setup

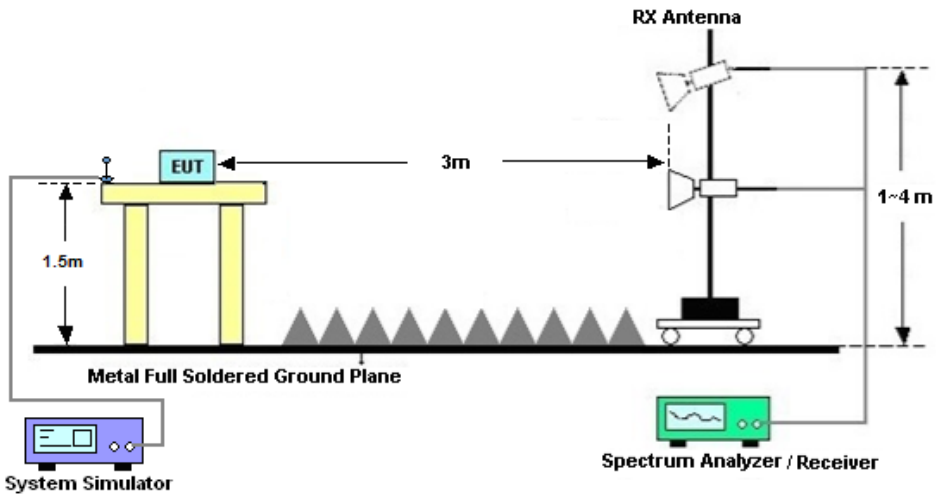
For radiated test from 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



3.5.5 Test Result of Field Strength of Spurious Radiated

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

Please refer to Appendix B.

3.6 Frequency Stability Measurement

3.6.1 Description of Frequency Stability Measurement

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 ±0.00025% (±2.5ppm) of the center frequency according to FCC Part 90.213.

3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

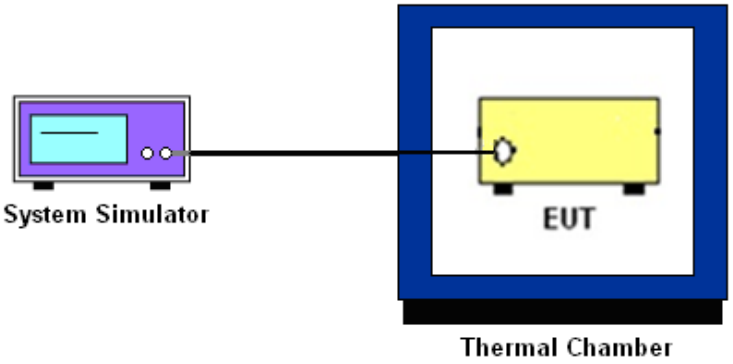
3.6.3 Test Procedures for Temperature Variation

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.6.4 Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
3. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the
4. battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

3.6.5 Test Setup



3.6.6 Test Result of Temperature Variation

Please refer to Appendix A.

4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 11, 2023	Jul. 29, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Jul. 29, 2024	NCR	Conducted (TH01-KS)
Temperature &humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Jul. 29, 2024	Jul. 03, 2025	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44GHz	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Radiation (03CH03-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11, 2023	Aug. 08, 2024	Sep. 10, 2024	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	30MHz-1GHz	Dec. 06, 2023	Aug. 08, 2024	Dec. 05, 2024	Radiation (03CH03-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 23, 2023	Aug. 08, 2024	Oct. 22, 2024	Radiation (03CH03-KS)
Amplifier	SONOMA	310N	413740	30MHz ~1000MHz	Jan. 03, 2024	Aug. 08, 2024	Jan. 02, 2025	Radiation (03CH03-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2082394	1Ghz-18Ghz	Jan. 03, 2024	Aug. 08, 2024	Jan. 02, 2025	Radiation (03CH03-KS)
Amplifier	Keysight	83017A	MY53270319	1GHz~26.5GHz	Oct. 11, 2023	Aug. 08, 2024	Oct. 10, 2024	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Aug. 08, 2024	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Aug. 08, 2024	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Aug. 08, 2024	NCR	Radiation (03CH03-KS)

NCR: No Calibration Required

5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±2.22 dB
Occupied Channel Bandwidth	±0.1%
Conducted Power	±0.50 dB
Peak to Average Ratio	±0.50 dB
Frequency Stability	±0.04 ppm

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.84dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.84dB

---------- THE END ----------

Appendix A. Test Results of Conducted Test

Test Engineer :	Smile Wang	Temperature :	22~23℃
		Relative Humidity :	40~42%

Conducted Output Power (Average power)

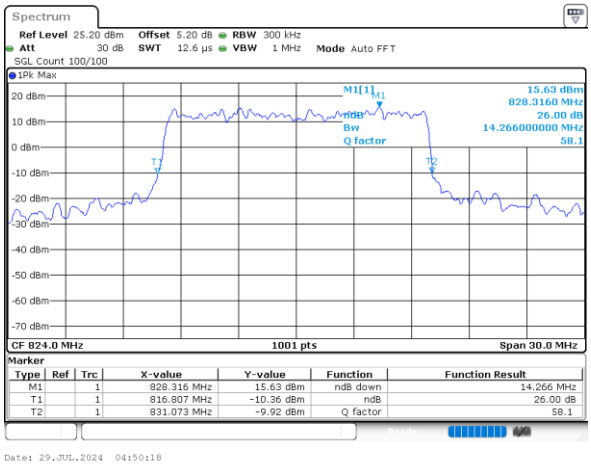
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel					26790	
Frequency (MHz)					824	
15	QPSK	1	0		22.97	
15	QPSK	1	74		22.95	
15	QPSK	75	0		21.84	
15	16QAM	1	0		21.76	
15	64QAM	1	0		20.89	
15	256QAM	1	0		17.76	
Channel					26740	
Frequency (MHz)					819	
10	QPSK	1	0		22.71	
10	QPSK	1	49		22.62	
10	QPSK	50	0		21.68	
10	16QAM	1	0		21.70	
10	64QAM	1	0		20.86	
10	256QAM	1	0		17.58	
Channel				26715	26740	26765
Frequency (MHz)				816.5	819	821.5
5	QPSK	1	0	22.78	22.73	22.75
5	16QAM	1	0	21.64	21.67	21.59
Channel				26705	26740	26775
Frequency (MHz)				815.5	819	822.5
3	QPSK	1	0	22.80	22.79	22.73
3	16QAM	1	0	21.57	21.56	21.54
Channel				26697	26740	26783
Frequency (MHz)				814.7	819	823.3
1.4	QPSK	1	0	22.67	22.82	22.80
1.4	16QAM	1	0	21.64	21.69	21.54

26dB Bandwidth

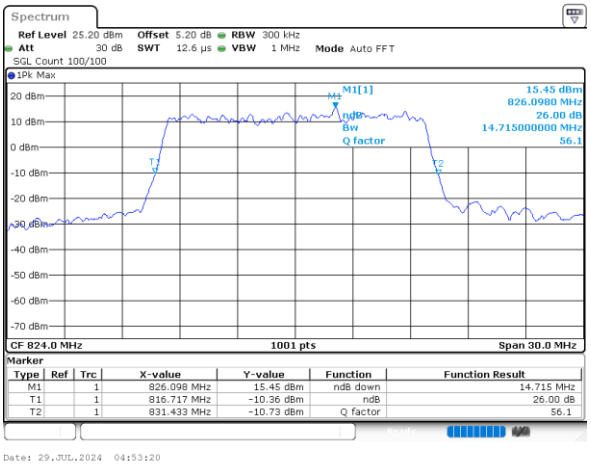
Mode	LTE Band 26 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Mid CH	14.27	14.72
BW	10MHz	
Mod.	QPSK	16QAM
Mid CH	9.93	9.77
BW	5MHz	
Mod.	QPSK	16QAM
Mid CH	4.95	5.04
BW	3MHz	
Mod.	QPSK	16QAM
Mid CH	3.10	3.09
BW	1.4MHz	
Mod.	QPSK	16QAM
Mid CH	1.34	1.34

LTE Band 26

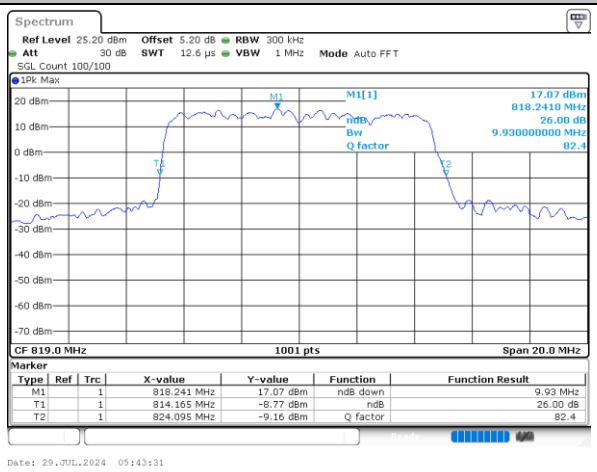
Middle Channel / 15MHz / QPSK



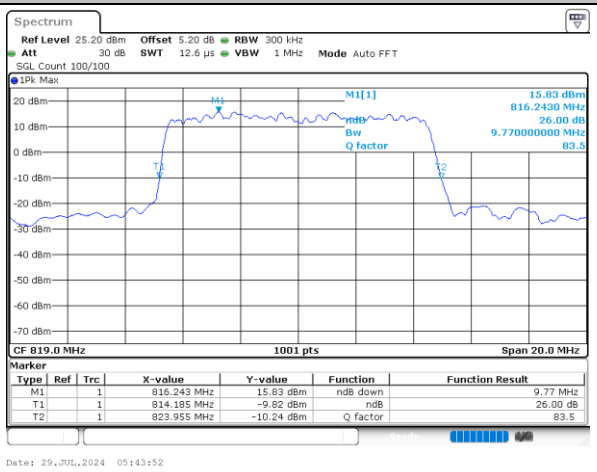
Middle Channel / 15MHz / 16QAM



Middle Channel / 10MHz / QPSK

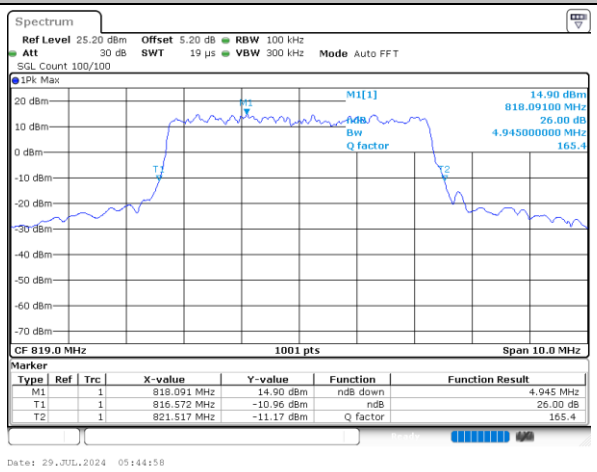


Middle Channel / 10MHz / 16QAM

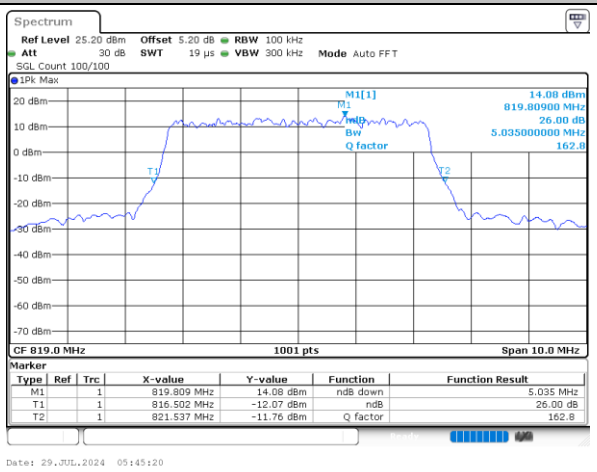


LTE Band 26

Middle Channel / 5MHz / QPSK

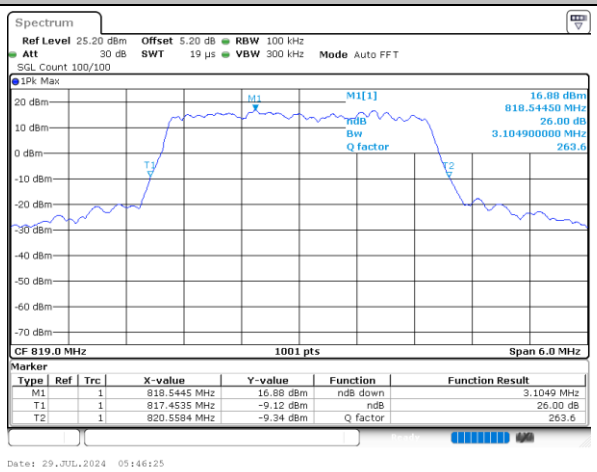


Middle Channel / 5MHz / 16QAM

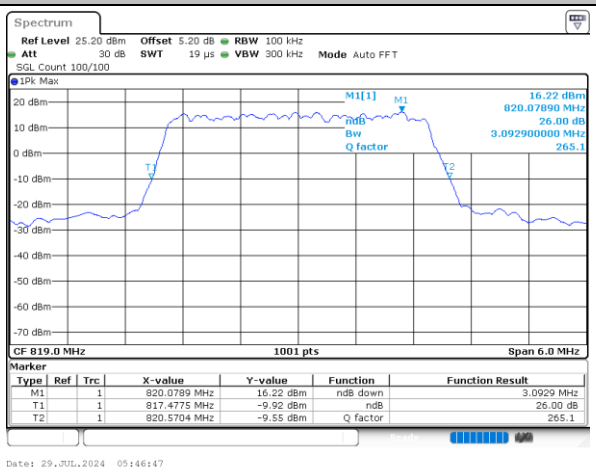


LTE Band 26

Middle Channel / 3MHz / QPSK

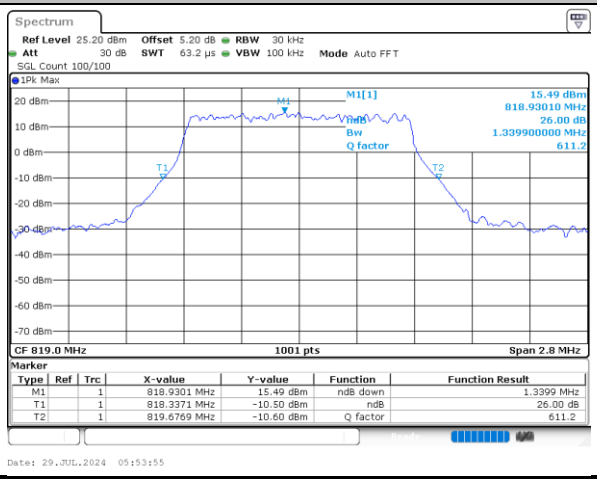


Middle Channel / 3MHz / 16QAM

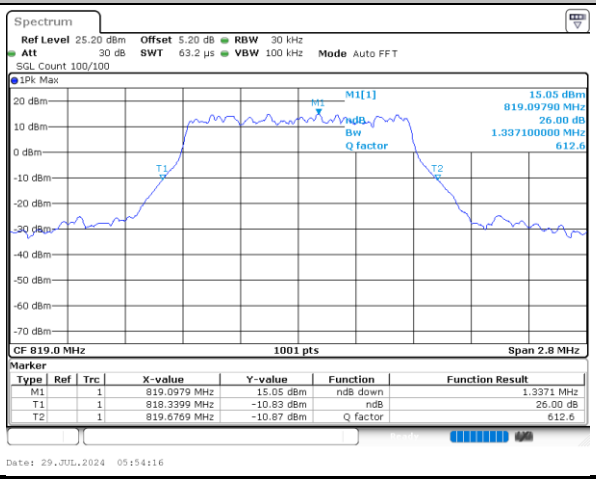


LTE Band 26

Middle Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / 16QAM

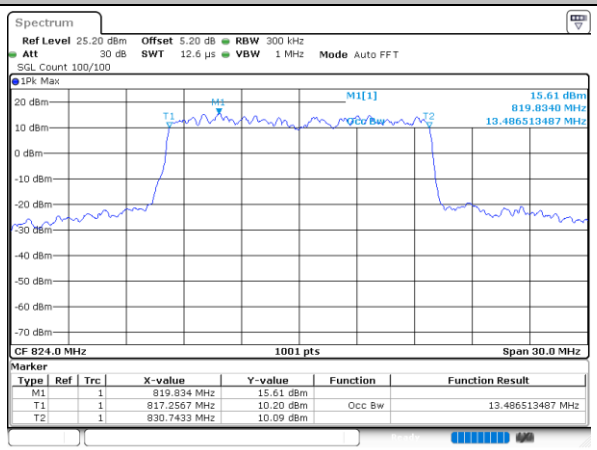


Occupied Bandwidth

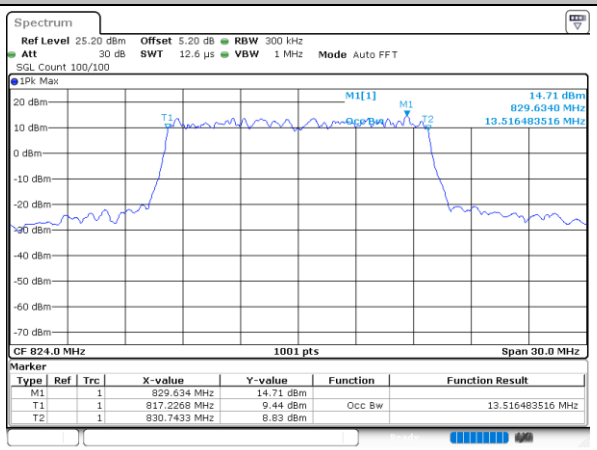
Mode	LTE Band 26 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Mid CH	13.49	13.52
BW	10MHz	
Mod.	QPSK	16QAM
Mid CH	9.03	9.03
BW	5MHz	
Mod.	QPSK	16QAM
Mid CH	4.51	4.50
BW	3MHz	
Mod.	QPSK	16QAM
Mid CH	2.72	2.73
BW	1.4MHz	
Mod.	QPSK	16QAM
Mid CH	1.09	1.10

LTE Band 26

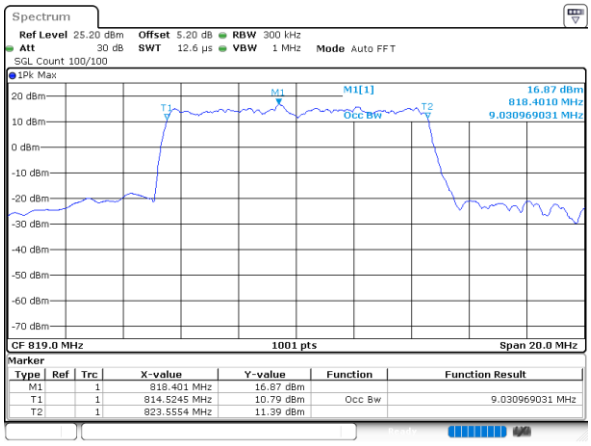
Middle Channel / 15MHz / QPSK



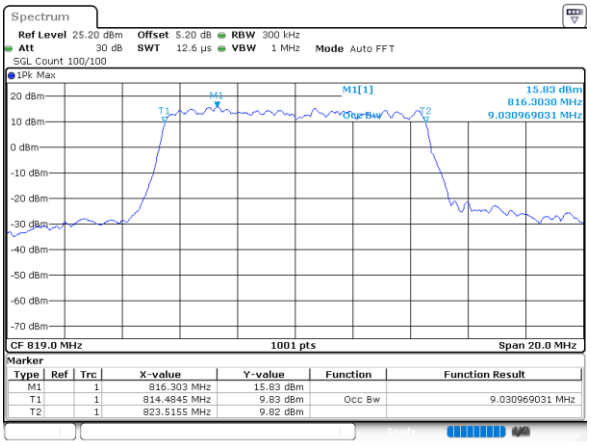
Middle Channel / 15MHz / 16QAM



Middle Channel / 10MHz / QPSK

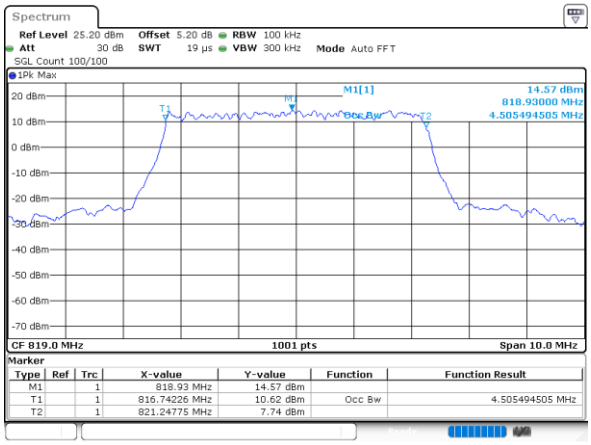


Middle Channel / 10MHz / 16QAM

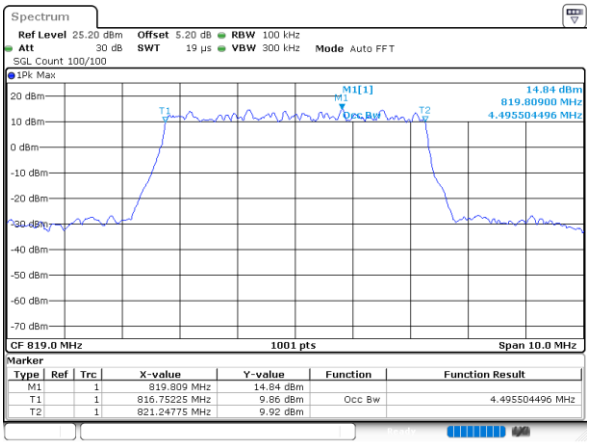


LTE Band 26

Middle Channel / 5MHz / QPSK

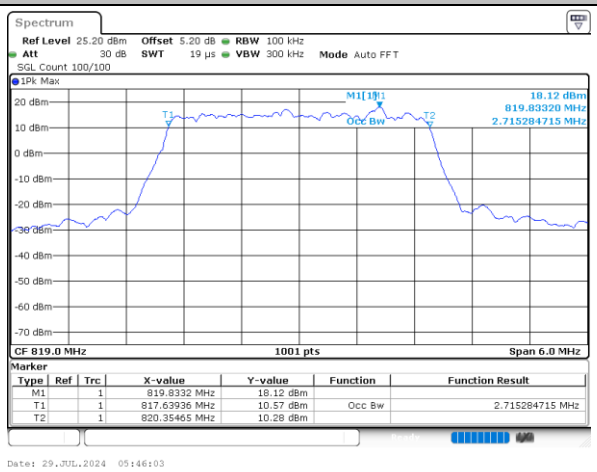


Middle Channel / 5MHz / 16QAM

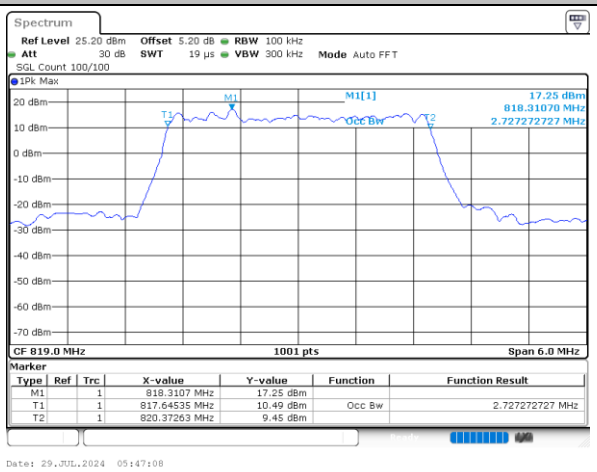


LTE Band 26

Middle Channel / 3MHz / QPSK

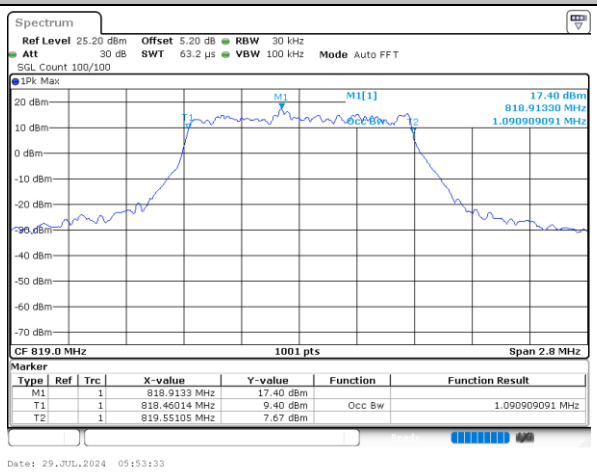


Middle Channel / 3MHz / 16QAM

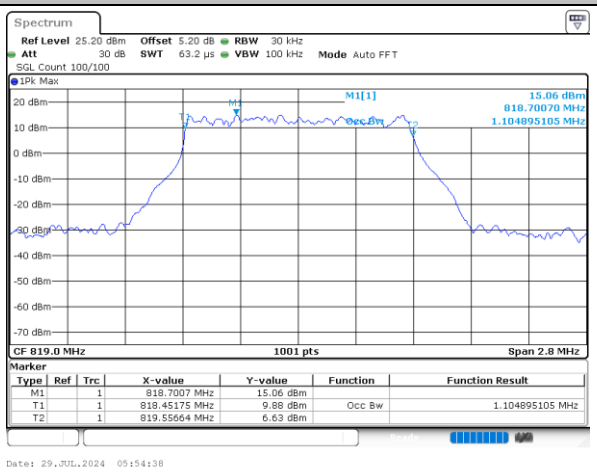


LTE Band 26

Middle Channel / 1.4MHz / QPSK



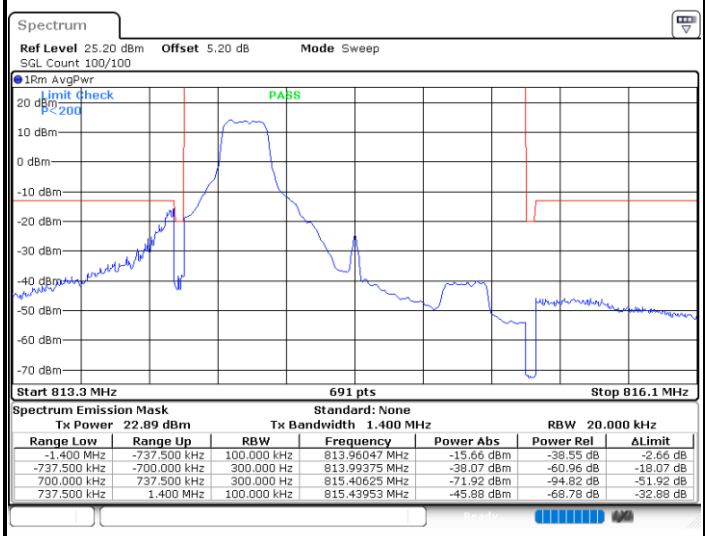
Middle Channel / 1.4MHz / 16QAM



Conducted Band Edge

LTE Band 26 / 1.4MHz / QPSK

Lowest Band Edge / 1RB

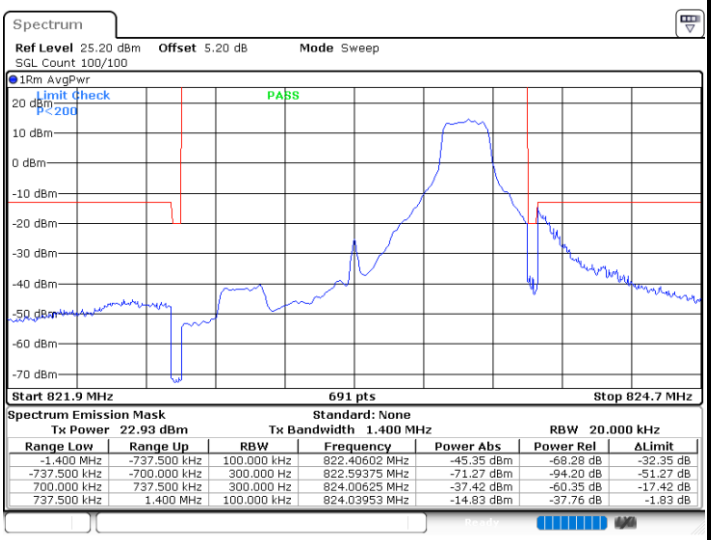


Spectrum Emission Mask Standard: None
Tx Power 22.89 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	813.96047 MHz	-15.66 dBm	-38.55 dB	-2.66 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99375 MHz	-38.07 dBm	-60.96 dB	-18.07 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.40625 MHz	-71.92 dBm	-94.82 dB	-51.92 dB
737.500 kHz	1.400 MHz	100.000 kHz	815.43953 MHz	-45.88 dBm	-68.78 dB	-32.88 dB

Date: 29.JUL.2024 02:15:39

Highest Band Edge / 1RB

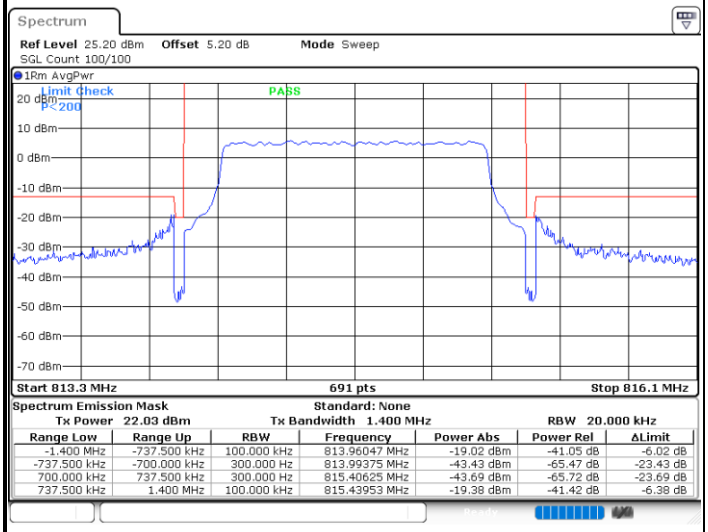


Spectrum Emission Mask Standard: None
Tx Power 22.93 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	822.40602 MHz	-45.35 dBm	-68.28 dB	-32.35 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.59375 MHz	-71.27 dBm	-94.20 dB	-51.27 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00625 MHz	-37.42 dBm	-60.35 dB	-17.42 dB
737.500 kHz	1.400 MHz	100.000 kHz	824.03953 MHz	-14.83 dBm	-37.76 dB	-1.83 dB

Date: 29.JUL.2024 02:31:55

Lowest Band Edge / Full RB

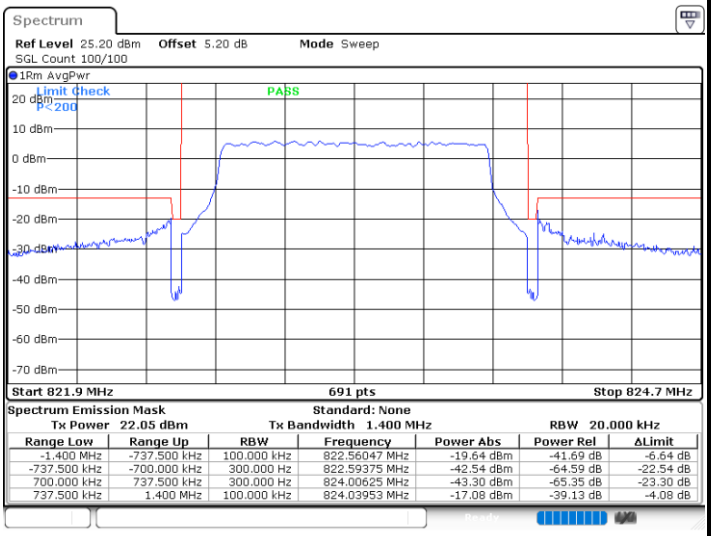


Spectrum Emission Mask Standard: None
Tx Power 22.03 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	813.96047 MHz	-19.02 dBm	-41.05 dB	-6.02 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99375 MHz	-43.43 dBm	-65.47 dB	-23.43 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.40625 MHz	-43.69 dBm	-65.72 dB	-23.69 dB
737.500 kHz	1.400 MHz	100.000 kHz	815.43953 MHz	-19.38 dBm	-41.42 dB	-6.38 dB

Date: 29.JUL.2024 02:22:21

Highest Band Edge / Full RB



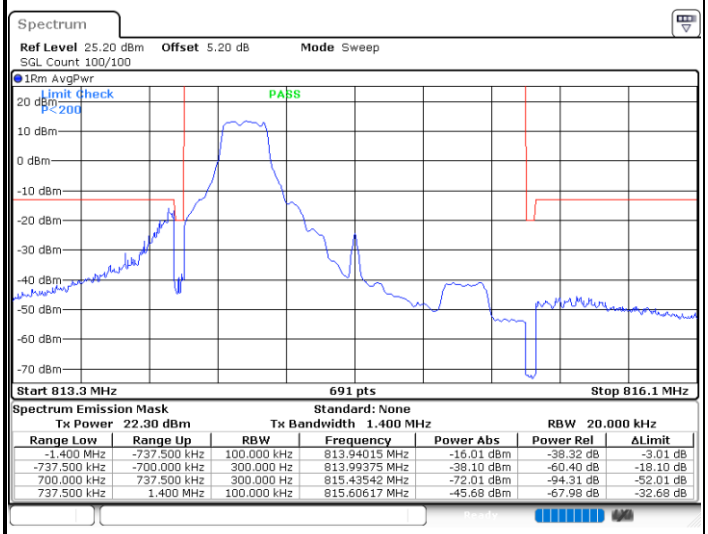
Spectrum Emission Mask Standard: None
Tx Power 22.05 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	822.56047 MHz	-19.64 dBm	-41.69 dB	-6.64 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.59375 MHz	-42.54 dBm	-64.59 dB	-22.54 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00625 MHz	-43.30 dBm	-65.35 dB	-23.30 dB
737.500 kHz	1.400 MHz	100.000 kHz	824.03953 MHz	-17.08 dBm	-39.13 dB	-4.08 dB

Date: 29.JUL.2024 02:38:35

LTE Band 26 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB

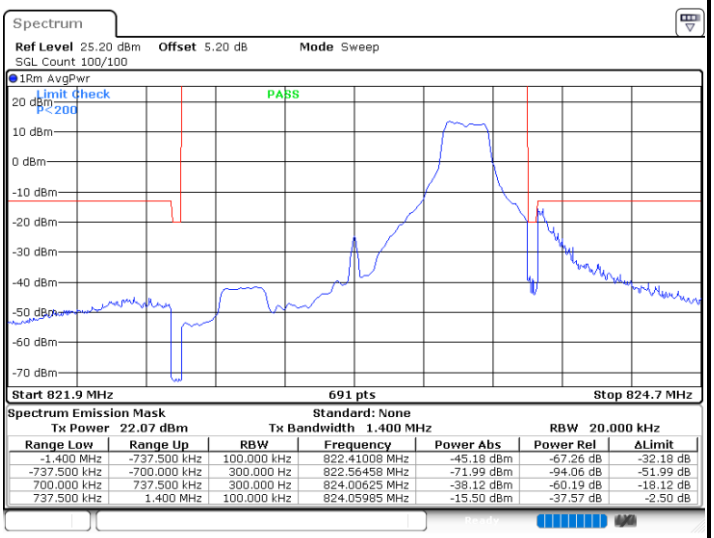


Spectrum Emission Mask Standard: None
Tx Power 22.30 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	813.94015 MHz	-16.01 dBm	-38.32 dB	-3.01 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99375 MHz	-38.10 dBm	-60.40 dB	-18.10 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.43542 MHz	-72.01 dBm	-94.31 dB	-52.01 dB
737.500 kHz	1.400 MHz	100.000 kHz	815.60617 MHz	-45.68 dBm	-67.98 dB	-32.68 dB

Date: 29.JUL.2024 02:17:19

Highest Band Edge / 1 RB

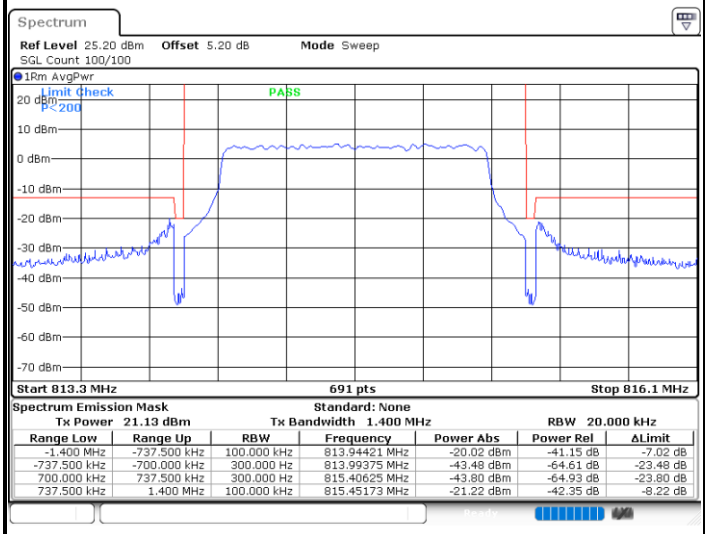


Spectrum Emission Mask Standard: None
Tx Power 22.07 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	822.41008 MHz	-45.18 dBm	-67.26 dB	-32.18 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.56458 MHz	-71.99 dBm	-94.06 dB	-51.99 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00625 MHz	-38.12 dBm	-60.19 dB	-18.12 dB
737.500 kHz	1.400 MHz	100.000 kHz	824.05985 MHz	-15.50 dBm	-37.57 dB	-2.50 dB

Date: 29.JUL.2024 02:33:35

Lowest Band Edge / Full RB

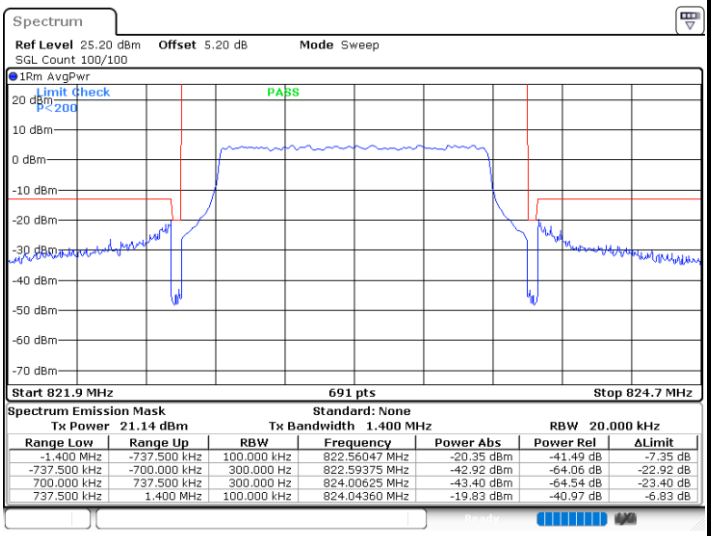


Spectrum Emission Mask Standard: None
Tx Power 21.13 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	813.94421 MHz	-20.02 dBm	-41.15 dB	-7.02 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99375 MHz	-43.48 dBm	-64.61 dB	-23.48 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.40625 MHz	-43.80 dBm	-64.93 dB	-23.80 dB
737.500 kHz	1.400 MHz	100.000 kHz	815.45173 MHz	-21.22 dBm	-42.35 dB	-8.22 dB

Date: 29.JUL.2024 02:24:00

Highest Band Edge / Full RB



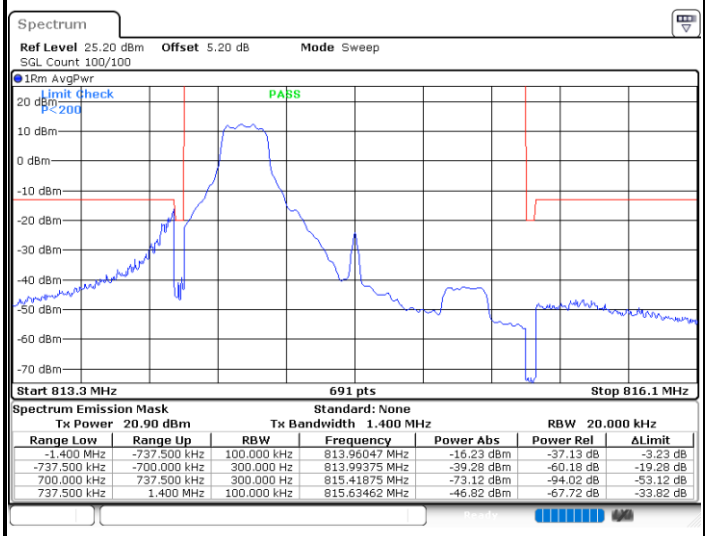
Spectrum Emission Mask Standard: None
Tx Power 21.14 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	822.56047 MHz	-20.35 dBm	-41.49 dB	-7.35 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.59375 MHz	-42.92 dBm	-64.06 dB	-22.92 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00625 MHz	-43.40 dBm	-64.54 dB	-23.40 dB
737.500 kHz	1.400 MHz	100.000 kHz	824.04360 MHz	-19.83 dBm	-40.97 dB	-6.83 dB

Date: 29.JUL.2024 02:40:14

LTE Band 26 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB

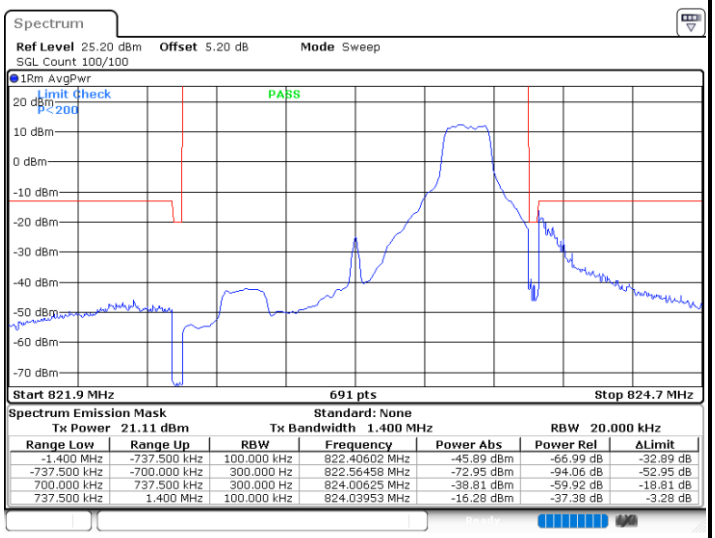


Spectrum Emission Mask Standard: None
Tx Power 20.90 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	813.96047 MHz	-16.23 dBm	-37.13 dB	-3.23 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99375 MHz	-39.28 dBm	-60.18 dB	-19.28 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.41875 MHz	-73.12 dBm	-94.02 dB	-53.12 dB
737.500 kHz	1.400 MHz	100.000 kHz	815.63462 MHz	-46.82 dBm	-67.72 dB	-33.82 dB

Date: 29.JUL.2024 02:18:58

Highest Band Edge / 1 RB

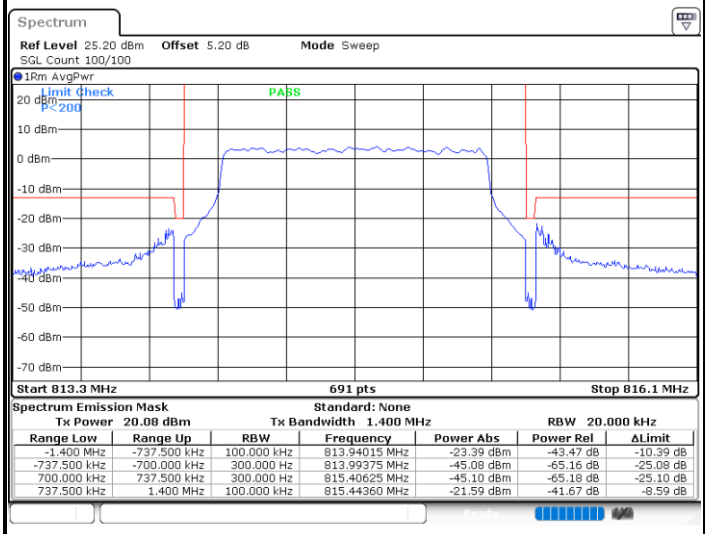


Spectrum Emission Mask Standard: None
Tx Power 21.11 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	822.40602 MHz	-45.89 dBm	-66.99 dB	-32.89 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.56458 MHz	-72.95 dBm	-94.06 dB	-52.95 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00625 MHz	-38.81 dBm	-59.92 dB	-18.81 dB
737.500 kHz	1.400 MHz	100.000 kHz	824.03953 MHz	-16.28 dBm	-37.38 dB	-3.28 dB

Date: 29.JUL.2024 02:35:15

Lowest Band Edge / Full RB

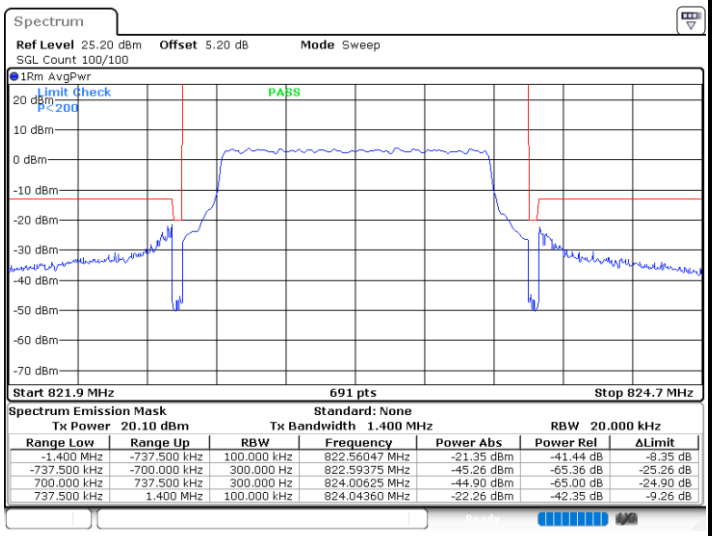


Spectrum Emission Mask Standard: None
Tx Power 20.08 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	813.94015 MHz	-23.39 dBm	-43.47 dB	-10.39 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99375 MHz	-45.08 dBm	-65.16 dB	-25.08 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.40625 MHz	-45.10 dBm	-65.18 dB	-25.10 dB
737.500 kHz	1.400 MHz	100.000 kHz	815.44360 MHz	-21.59 dBm	-41.67 dB	-8.59 dB

Date: 29.JUL.2024 02:25:40

Highest Band Edge / Full RB



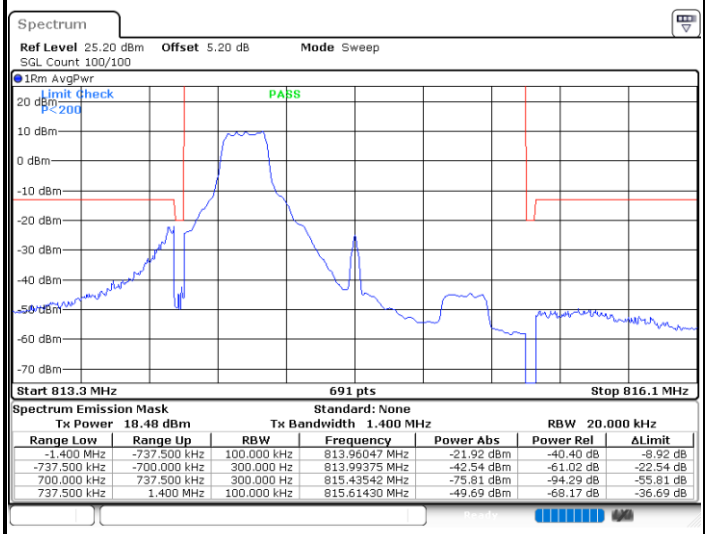
Spectrum Emission Mask Standard: None
Tx Power 20.10 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	822.56047 MHz	-21.35 dBm	-41.44 dB	-8.35 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.59375 MHz	-45.26 dBm	-65.36 dB	-25.26 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00625 MHz	-44.90 dBm	-65.00 dB	-24.90 dB
737.500 kHz	1.400 MHz	100.000 kHz	824.04360 MHz	-22.26 dBm	-42.35 dB	-9.26 dB

Date: 29.JUL.2024 02:41:54

LTE Band 26 / 1.4MHz / 256QAM

Lowest Band Edge / 1 RB

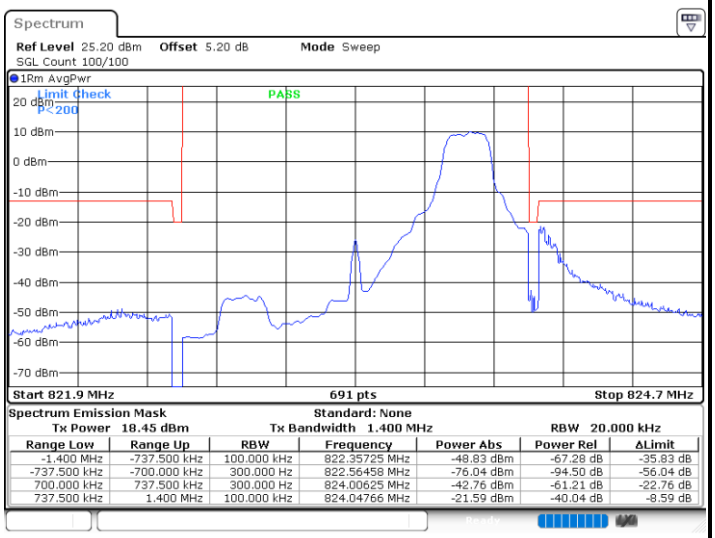


Spectrum Emission Mask Standard: None
Tx Power 18.48 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	813.96047 MHz	-21.92 dBm	-40.40 dB	-8.92 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99375 MHz	-42.54 dBm	-61.02 dB	-22.54 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.43542 MHz	-75.81 dBm	-94.29 dB	-55.81 dB
737.500 kHz	1.400 MHz	100.000 kHz	815.61430 MHz	-49.69 dBm	-68.17 dB	-36.69 dB

Date: 29.JUL.2024 02:20:38

Highest Band Edge / 1 RB

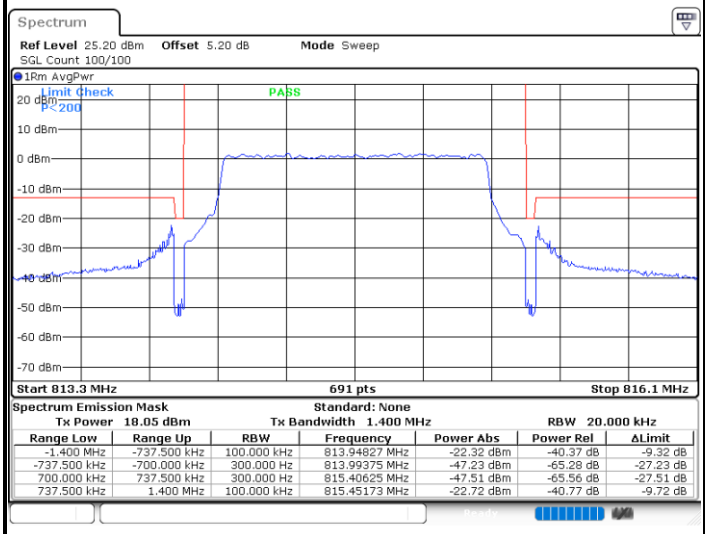


Spectrum Emission Mask Standard: None
Tx Power 18.45 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	822.35725 MHz	-48.83 dBm	-67.28 dB	-35.83 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.56458 MHz	-76.04 dBm	-94.50 dB	-56.04 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00625 MHz	-42.76 dBm	-61.21 dB	-22.76 dB
737.500 kHz	1.400 MHz	100.000 kHz	824.04766 MHz	-21.59 dBm	-40.04 dB	-8.59 dB

Date: 29.JUL.2024 02:36:55

Lowest Band Edge / Full RB

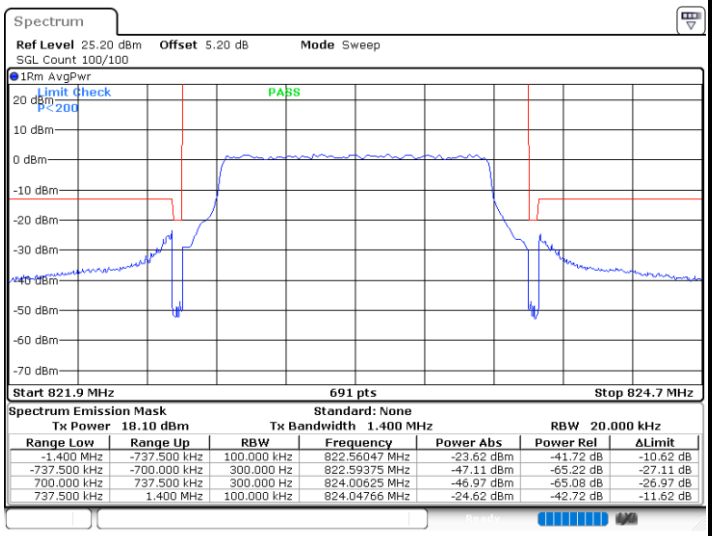


Spectrum Emission Mask Standard: None
Tx Power 18.05 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	813.94827 MHz	-22.32 dBm	-40.37 dB	-9.32 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	813.99375 MHz	-47.23 dBm	-65.28 dB	-27.23 dB
700.000 kHz	737.500 kHz	300.000 Hz	815.40625 MHz	-47.51 dBm	-65.56 dB	-27.51 dB
737.500 kHz	1.400 MHz	100.000 kHz	815.45173 MHz	-22.72 dBm	-40.77 dB	-9.72 dB

Date: 29.JUL.2024 02:27:20

Highest Band Edge / Full RB



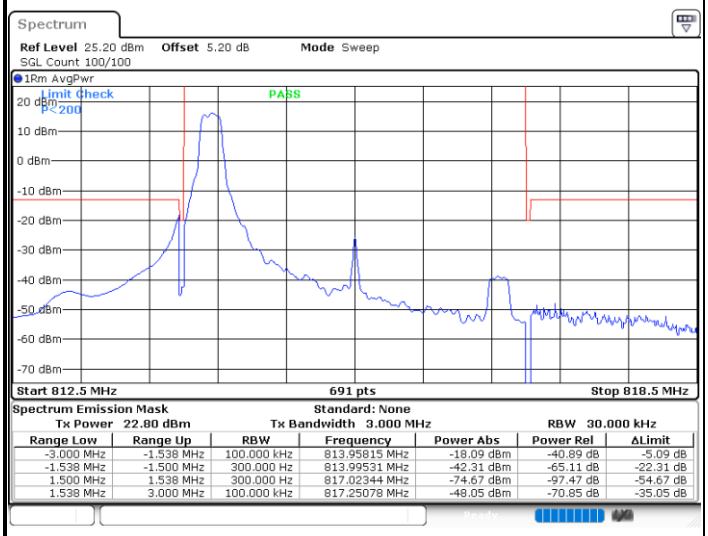
Spectrum Emission Mask Standard: None
Tx Power 18.10 dBm Tx Bandwidth 1.400 MHz RBW 20.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-1.400 MHz	-737.500 kHz	100.000 kHz	822.56047 MHz	-23.62 dBm	-41.72 dB	-10.62 dB
-737.500 kHz	-700.000 kHz	300.000 Hz	822.59375 MHz	-47.11 dBm	-65.22 dB	-27.11 dB
700.000 kHz	737.500 kHz	300.000 Hz	824.00625 MHz	-46.97 dBm	-65.08 dB	-26.97 dB
737.500 kHz	1.400 MHz	100.000 kHz	824.04766 MHz	-24.62 dBm	-42.72 dB	-11.62 dB

Date: 29.JUL.2024 02:43:34

LTE Band 26 / 3MHz / QPSK

Lowest Band Edge / 1RB

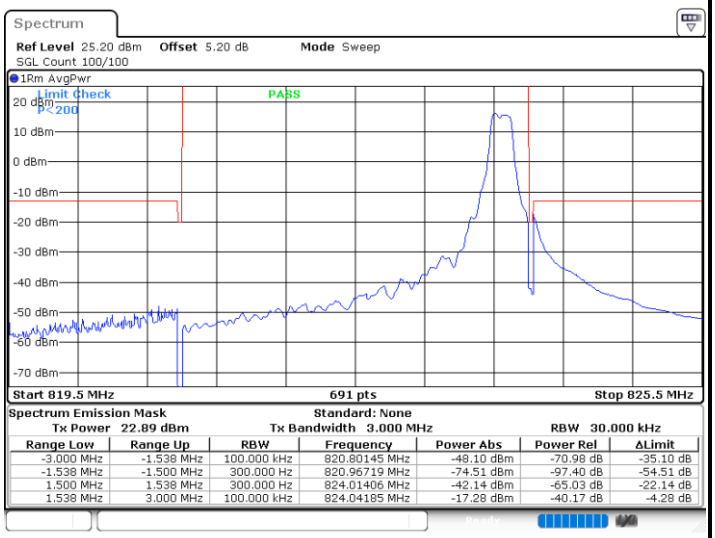


Spectrum Emission Mask Standard: None
Tx Power 22.80 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	813.95815 MHz	-18.09 dBm	-40.89 dB	-5.09 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99531 MHz	-42.31 dBm	-65.11 dB	-22.31 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.02344 MHz	-74.67 dBm	-97.47 dB	-54.67 dB
1.538 MHz	3.000 MHz	100.000 kHz	817.25078 MHz	-48.05 dBm	-70.85 dB	-35.05 dB

Date: 29.JUL.2024 03:06:33

Highest Band Edge / 1 RB

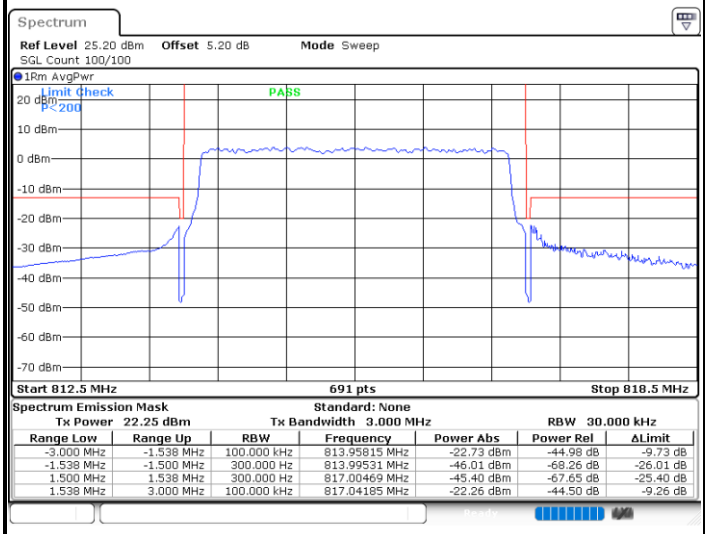


Spectrum Emission Mask Standard: None
Tx Power 22.89 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	820.80145 MHz	-48.10 dBm	-70.98 dB	-35.10 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.96719 MHz	-74.51 dBm	-97.40 dB	-54.51 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.01406 MHz	-42.14 dBm	-65.03 dB	-22.14 dB
1.538 MHz	3.000 MHz	100.000 kHz	824.04185 MHz	-17.28 dBm	-40.17 dB	-4.28 dB

Date: 29.JUL.2024 03:22:53

Lowest Band Edge / Full RB

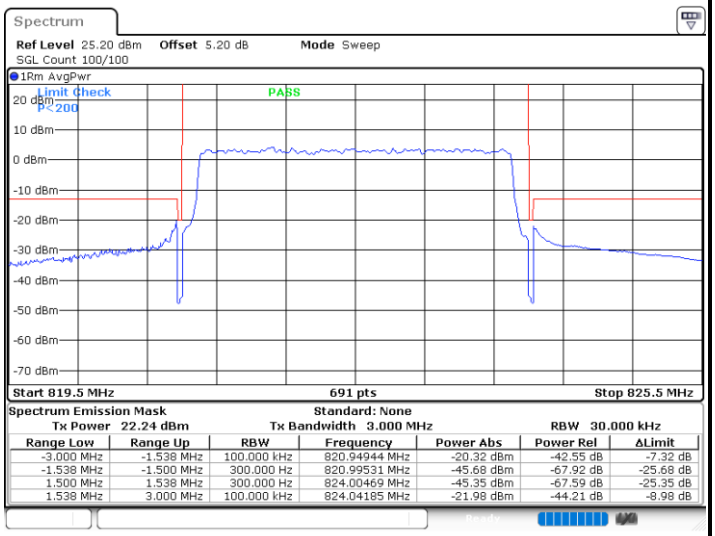


Spectrum Emission Mask Standard: None
Tx Power 22.25 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	813.95815 MHz	-22.73 dBm	-44.98 dB	-9.73 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99531 MHz	-46.01 dBm	-68.26 dB	-26.01 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00469 MHz	-45.40 dBm	-67.65 dB	-25.40 dB
1.538 MHz	3.000 MHz	100.000 kHz	817.04185 MHz	-22.26 dBm	-44.50 dB	-9.26 dB

Date: 29.JUL.2024 03:13:17

Highest Band Edge / Full RB



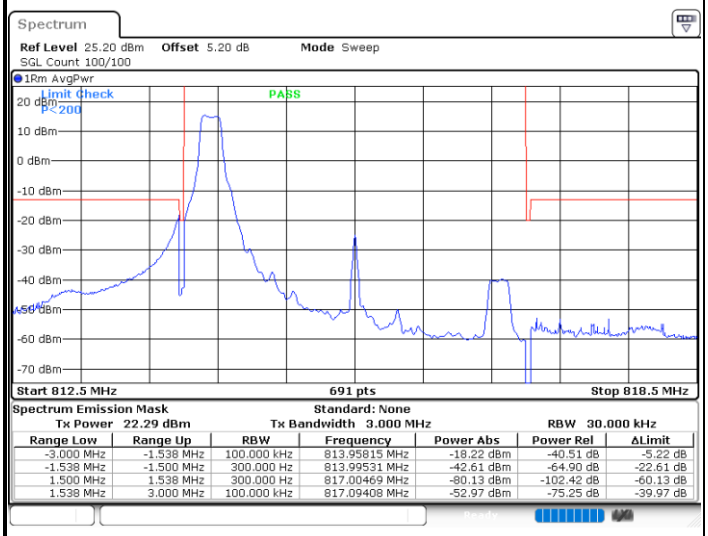
Spectrum Emission Mask Standard: None
Tx Power 22.24 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	820.94944 MHz	-20.32 dBm	-42.55 dB	-7.32 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99531 MHz	-45.68 dBm	-67.92 dB	-25.68 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00469 MHz	-45.35 dBm	-67.59 dB	-25.35 dB
1.538 MHz	3.000 MHz	100.000 kHz	824.04185 MHz	-21.98 dBm	-44.21 dB	-8.98 dB

Date: 29.JUL.2024 03:28:36

LTE Band 26 / 3MHz / 16QAM

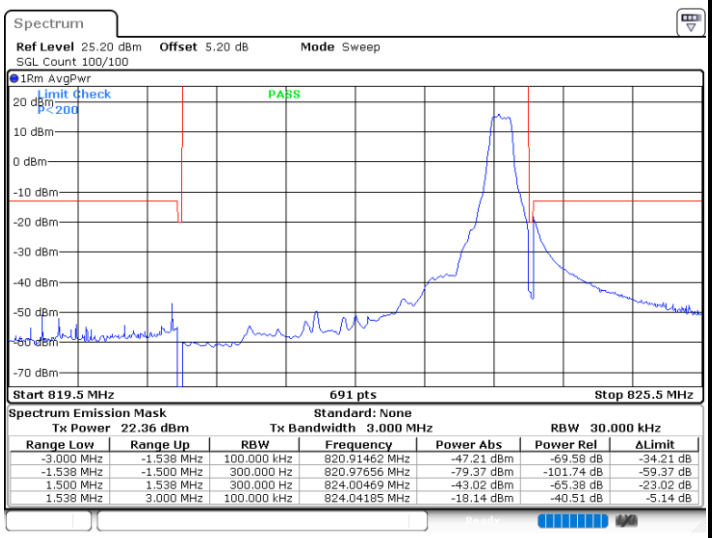
Lowest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	813.95815 MHz	-18.22 dBm	-40.51 dB	-5.22 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99531 MHz	-42.61 dBm	-64.90 dB	-22.61 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00469 MHz	-80.13 dBm	-102.42 dB	-60.13 dB
1.538 MHz	3.000 MHz	100.000 kHz	817.09408 MHz	-52.97 dBm	-75.25 dB	-39.97 dB

Date: 29.JUL.2024 03:08:13

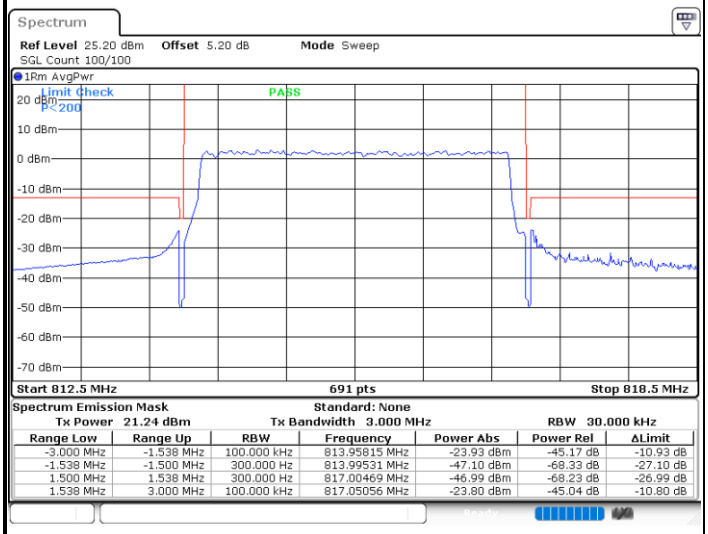
Highest Band Edge /1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	820.91462 MHz	-47.21 dBm	-69.58 dB	-34.21 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.97656 MHz	-79.37 dBm	-101.74 dB	-59.37 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00469 MHz	-43.02 dBm	-65.38 dB	-23.02 dB
1.538 MHz	3.000 MHz	100.000 kHz	824.04185 MHz	-18.14 dBm	-40.51 dB	-5.14 dB

Date: 29.JUL.2024 03:24:18

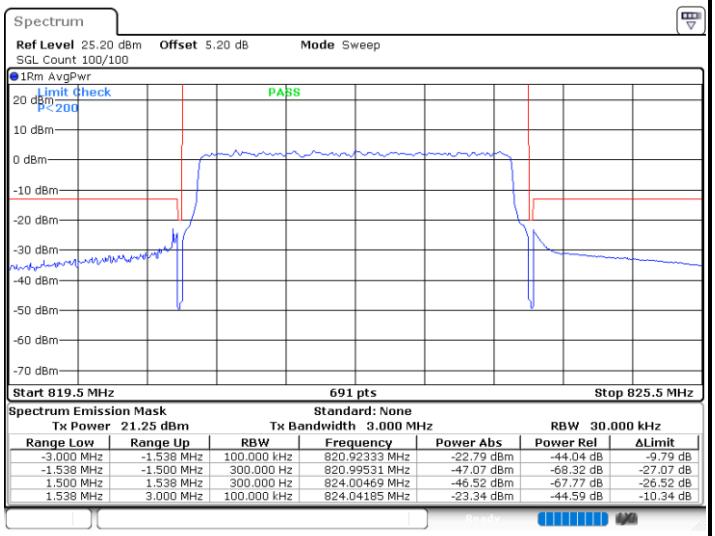
Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	813.95815 MHz	-23.93 dBm	-45.17 dB	-10.93 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99531 MHz	-47.10 dBm	-68.33 dB	-27.10 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00469 MHz	-46.99 dBm	-68.23 dB	-26.99 dB
1.538 MHz	3.000 MHz	100.000 kHz	817.05056 MHz	-23.80 dBm	-45.04 dB	-10.80 dB

Date: 29.JUL.2024 03:14:57

Highest Band Edge / Full RB

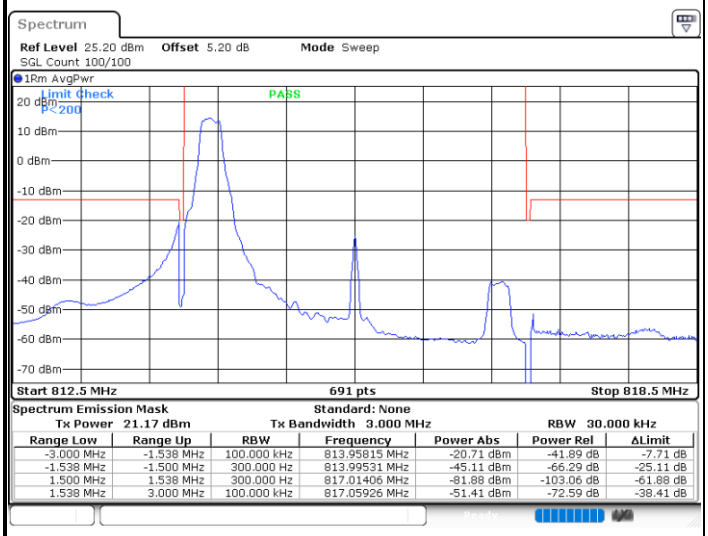


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	820.92333 MHz	-22.79 dBm	-44.04 dB	-9.79 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99531 MHz	-47.07 dBm	-68.32 dB	-27.07 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00469 MHz	-46.52 dBm	-67.77 dB	-26.52 dB
1.538 MHz	3.000 MHz	100.000 kHz	824.04185 MHz	-23.34 dBm	-44.59 dB	-10.34 dB

Date: 29.JUL.2024 03:30:01

LTE Band 26 / 3MHz / 64QAM

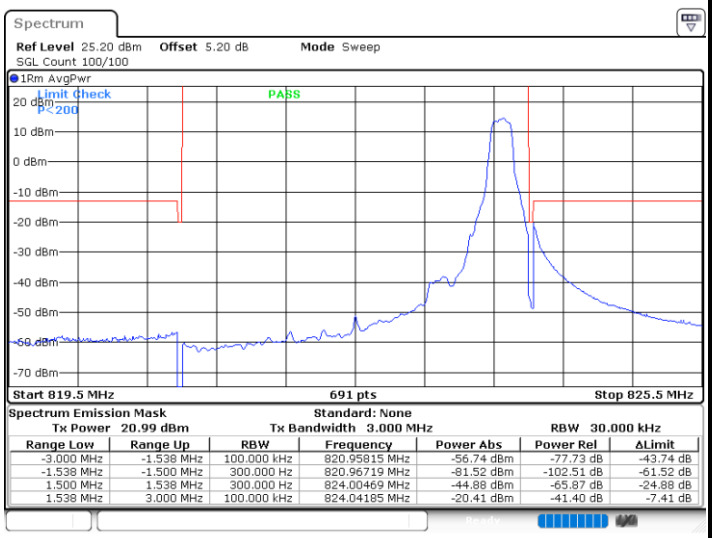
Lowest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	813.95815 MHz	-20.71 dBm	-41.89 dB	-7.71 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99531 MHz	-45.11 dBm	-66.29 dB	-25.11 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.01406 MHz	-81.88 dBm	-103.06 dB	-61.88 dB
1.538 MHz	3.000 MHz	100.000 kHz	817.05926 MHz	-51.41 dBm	-72.59 dB	-38.41 dB

Date: 29.JUL.2024 03:09:54

Highest Band Edge /1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	820.95815 MHz	-56.74 dBm	-77.73 dB	-43.74 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.96719 MHz	-81.52 dBm	-102.51 dB	-61.52 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00469 MHz	-44.88 dBm	-65.87 dB	-24.88 dB
1.538 MHz	3.000 MHz	100.000 kHz	824.04185 MHz	-20.41 dBm	-41.40 dB	-7.41 dB

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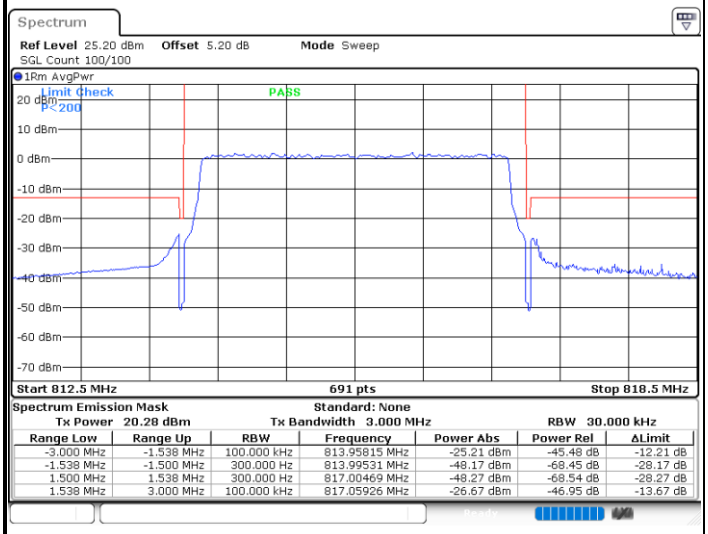
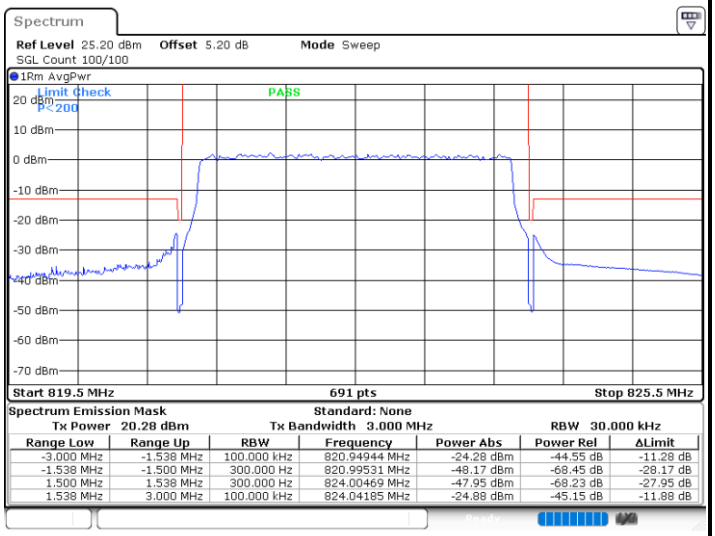
Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	813.95815 MHz	-25.21 dBm	-45.48 dB	-12.21 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99531 MHz	-48.17 dBm	-68.45 dB	-28.17 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00469 MHz	-48.27 dBm	-68.54 dB	-28.27 dB
1.538 MHz	3.000 MHz	100.000 kHz	817.05926 MHz	-26.67 dBm	-46.95 dB	-13.67 dB

Date: 29.JUL.2024 03:16:37

Highest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	820.94944 MHz	-24.28 dBm	-44.55 dB	-11.28 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99531 MHz	-48.17 dBm	-68.45 dB	-28.17 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00469 MHz	-47.95 dBm	-68.23 dB	-27.95 dB
1.538 MHz	3.000 MHz	100.000 kHz	824.04185 MHz	-24.88 dBm	-45.15 dB	-11.88 dB

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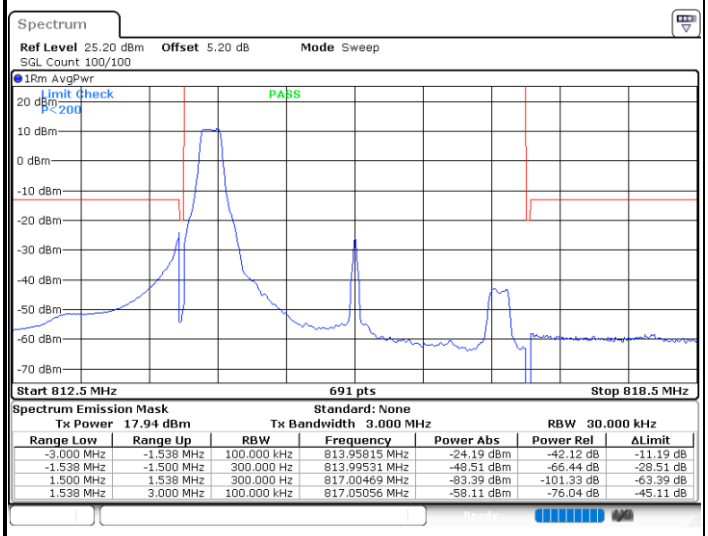
LTE Band 26 / 3MHz / 256QAM

Lowest Band Edge / 1 RB



Spectrum Emission Mask Standard: None
Tx Power 17.94 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	813.95815 MHz	-24.19 dBm	-42.12 dB	-11.19 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99531 MHz	-48.51 dBm	-66.44 dB	-28.51 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00469 MHz	-83.39 dBm	-101.33 dB	-63.39 dB
1.538 MHz	3.000 MHz	100.000 kHz	817.05056 MHz	-58.11 dBm	-76.04 dB	-45.11 dB

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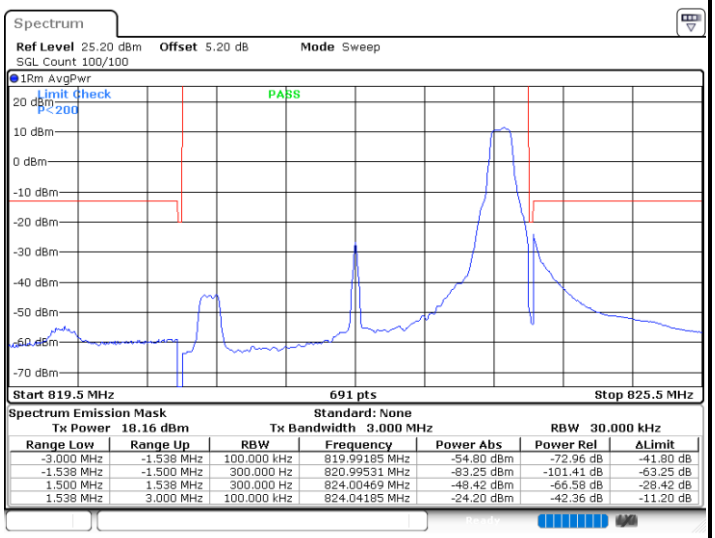
Highest Band Edge /1 RB



Spectrum Emission Mask Standard: None
Tx Power 18.16 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	819.99185 MHz	-54.80 dBm	-72.96 dB	-41.80 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99531 MHz	-83.25 dBm	-101.41 dB	-63.25 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00469 MHz	-48.42 dBm	-66.58 dB	-28.42 dB
1.538 MHz	3.000 MHz	100.000 kHz	824.04185 MHz	-24.20 dBm	-42.36 dB	-11.20 dB

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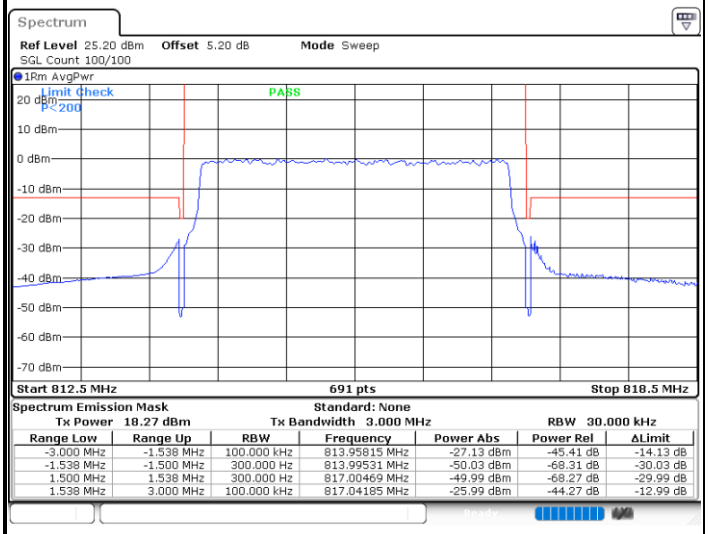
Lowest Band Edge / Full RB



Spectrum Emission Mask Standard: None
Tx Power 18.27 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	813.95815 MHz	-27.13 dBm	-45.41 dB	-14.13 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	813.99531 MHz	-50.03 dBm	-68.31 dB	-30.03 dB
1.500 MHz	1.538 MHz	300.000 Hz	817.00469 MHz	-49.99 dBm	-68.27 dB	-29.99 dB
1.538 MHz	3.000 MHz	100.000 kHz	817.04185 MHz	-25.99 dBm	-44.27 dB	-12.99 dB

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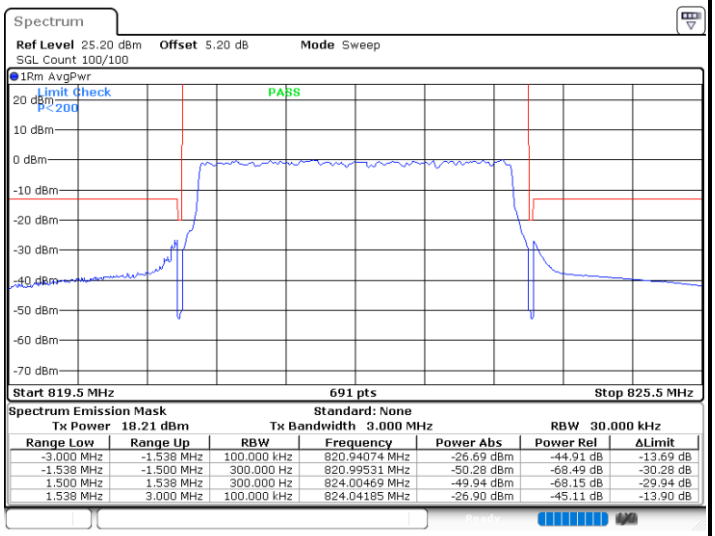
Highest Band Edge / Full RB



Spectrum Emission Mask Standard: None
Tx Power 18.21 dBm Tx Bandwidth 3.000 MHz RBW 30.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-3.000 MHz	-1.538 MHz	100.000 kHz	820.94074 MHz	-26.69 dBm	-44.91 dB	-13.69 dB
-1.538 MHz	-1.500 MHz	300.000 Hz	820.99531 MHz	-50.28 dBm	-68.49 dB	-30.28 dB
1.500 MHz	1.538 MHz	300.000 Hz	824.00469 MHz	-49.94 dBm	-68.15 dB	-29.94 dB
1.538 MHz	3.000 MHz	100.000 kHz	824.04185 MHz	-26.90 dBm	-45.11 dB	-13.90 dB

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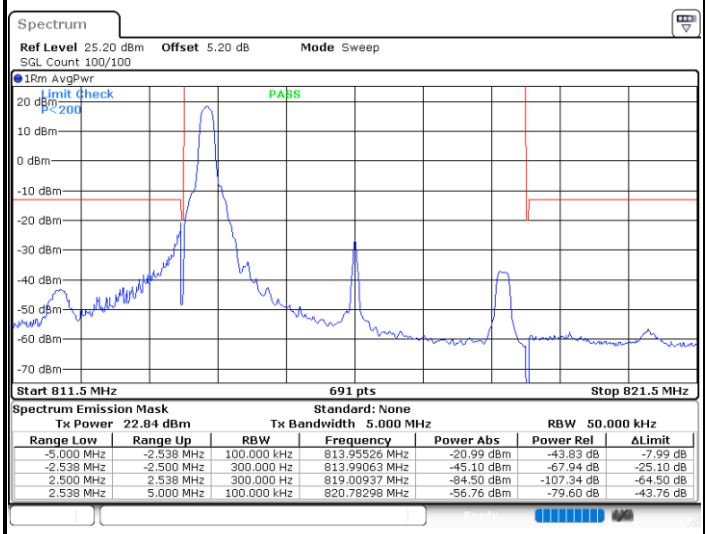
LTE Band 26 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Spectrum Emission Mask Standard: None
Tx Power 22.84 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-2.538 MHz	100.000 kHz	813.95526 MHz	-20.99 dBm	-43.83 dB	-7.99 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.99063 MHz	-45.10 dBm	-67.94 dB	-25.10 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.00937 MHz	-84.50 dBm	-107.34 dB	-64.50 dB
2.538 MHz	5.000 MHz	100.000 kHz	820.78298 MHz	-56.76 dBm	-79.60 dB	-43.76 dB

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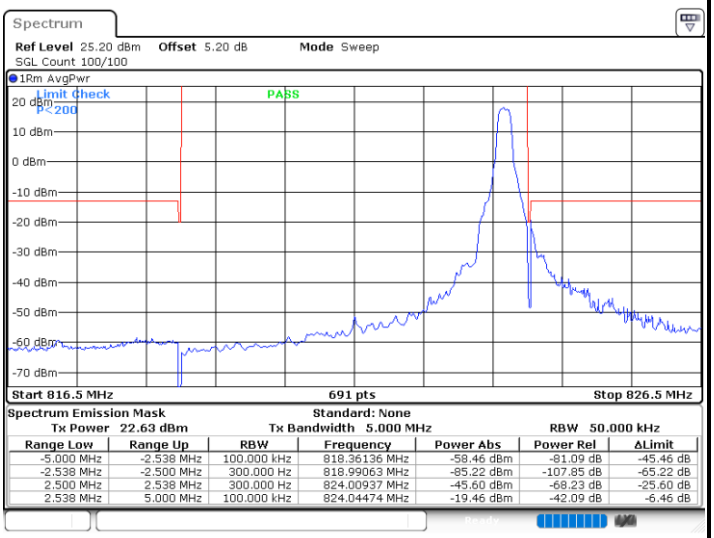
Highest Band Edge / 1 RB

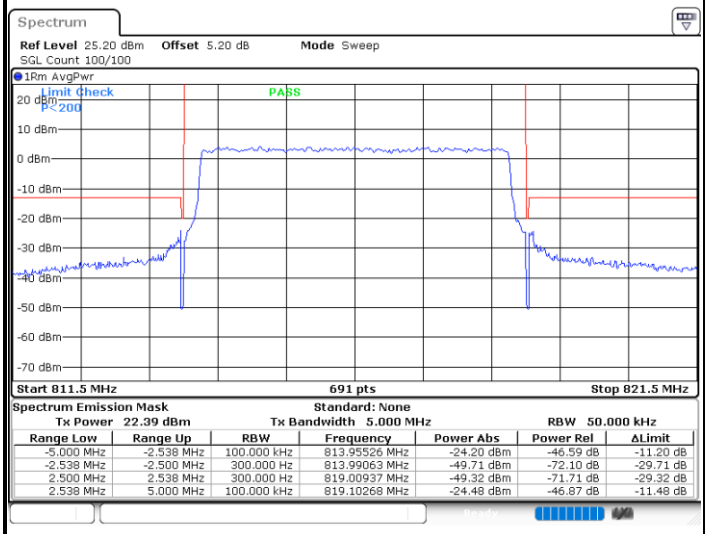


Spectrum Emission Mask Standard: None
Tx Power 22.63 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-2.538 MHz	100.000 kHz	818.36136 MHz	-58.46 dBm	-81.09 dB	-45.46 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.99063 MHz	-85.22 dBm	-107.85 dB	-65.22 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.00937 MHz	-45.60 dBm	-68.23 dB	-25.60 dB
2.538 MHz	5.000 MHz	100.000 kHz	824.04474 MHz	-19.46 dBm	-42.09 dB	-6.46 dB

Date: 29.JUL.2024 03:54:41

Lowest Band Edge / Full RB

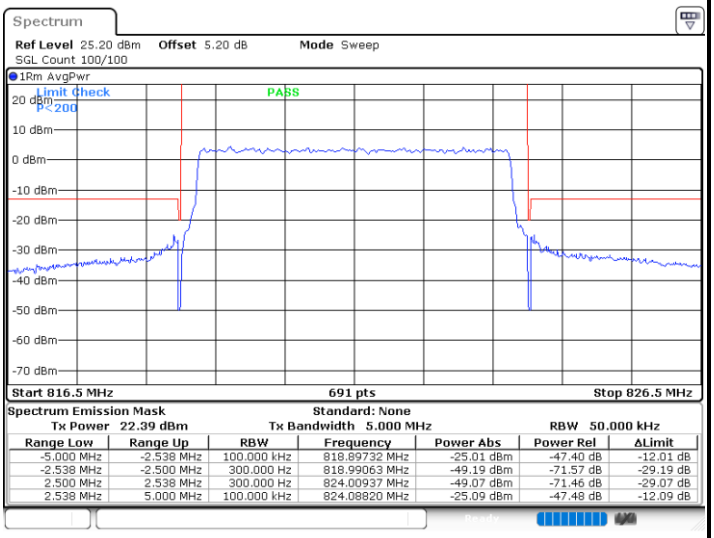


Spectrum Emission Mask Standard: None
Tx Power 22.39 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-2.538 MHz	100.000 kHz	813.95526 MHz	-24.20 dBm	-46.59 dB	-11.20 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.99063 MHz	-49.71 dBm	-72.10 dB	-29.71 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.00937 MHz	-49.32 dBm	-71.71 dB	-29.32 dB
2.538 MHz	5.000 MHz	100.000 kHz	819.10268 MHz	-24.48 dBm	-46.87 dB	-11.48 dB

Date: 29.JUL.2024 03:46:08

Highest Band Edge / Full RB



Spectrum Emission Mask Standard: None
Tx Power 22.39 dBm Tx Bandwidth 5.000 MHz RBW 50.000 kHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-5.000 MHz	-2.538 MHz	100.000 kHz	818.89732 MHz	-25.01 dBm	-47.40 dB	-12.01 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.99063 MHz	-49.19 dBm	-71.57 dB	-29.19 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.00937 MHz	-49.07 dBm	-71.46 dB	-29.07 dB
2.538 MHz	5.000 MHz	100.000 kHz	824.08820 MHz	-25.09 dBm	-47.48 dB	-12.09 dB

Date: 29.JUL.2024 04:00:20