Spot Check Evaluation

FCC ID	:	**UZ7EM45B1**
EQUIPMENT	:	**Enterprise Mobile**
BRAND NAME	:	**Zebra**
MODEL NAME	:	**EM45B1**
APPLICANT	:	**Zebra Technologies Corporation** **3 Overlook Point, Lincolnshire, IL 60069 USA**
MANUFACTURER	:	**Zebra Technologies Corporation** **3 Overlook Point, Lincolnshire, IL 60069 USA**
STANDARD	:	**47 CFR Part 22(H), 24(E), 27(L), 27(H), 27(F), 27(M), 27(N), 27(O), 27(Q), 90(S)** **47 CFR Part 15 Subpart C §15.247** **47 CFR Part 15 Subpart C §15.225** **47 CFR Part 15 Subpart E §15.407**

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

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG460508-02C	Rev. 01	Initial issue of report	Feb. 13, 2025

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Enterprise Mobile
Brand Name	Zebra
Model Name	EM45B1
FCC ID	UZ7EM45B1
IMEI Code	Conducted: 350332150060484 Conduction: 350332150060096/350332150064049 Radiation: 350332150060260/350332150063959 CBP/DFS: 350332150060575
HW Version	DV
SW Version	14-24-09.00-UG-U00-PRD-ATH-04
MFD	09DEC24
EUT Stage	Identical Prototype

Specification of Accessory				
Battery	**Brand Name**	Zebra	**Model**	BT-000501
			Part Number	BT-000501-2000

Supported Unit used in test configuration and system				
AC Adapter 1 (Type C Wall Charger 1)	**Brand Name**	Zebra	**Model**	SAWA-102-22520A
			Part Number	PWR-WUA5V45W1US
AC Adapter 2 (Type A Wall Charger 2)	**Brand Name**	Zebra	**Model**	SAWA-65-20005A
			Part Number	PWR-WUA5V12W0US
Earphone 1 (Wired headset USB-C)	**Brand Name**	Zebra	**Part Number**	HDST-USBC-PTT1-01
Earphone 2 (Rugged Bluetooth Headset)	**Brand Name**	Zebra	**Part Number**	HS3100-OTH
Earphone 3 (3.5mm PTT Headset)	**Brand Name**	Zebra	**Part Number**	HDST-35MM-PTT1-02
Earphone 4 (Rugged Headset)	**Brand Name**	Zebra	**Part Number**	HS2100-OTH
3.5mm to 3.5mm audio connector	**Brand Name**	Zebra	**Part Number**	CBL-HS2100-3MS1-01
Type C-Audio Cable (Type C to 3.5mm)	**Brand Name**	Zebra	**Part Number**	ADP-USBC-35MM1-01
USB Cable 1 (USB-C to C Cable)	**Brand Name**	Zebra	**Part Number**	CBL-EC5X-USBC3A-01
USB Cable 2 (USB-A to C Cable)	**Brand Name**	Zebra	**Part Number**	CBL-TC5X-USBC2A-01
EM45 Protective Case	**Brand Name**	Zebra	**Part Number**	SG-EM45EXO2-01

1.2 Modification of EUT

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

1.3 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.**
	TH01-KS CO01-KS DFS01-KS 03CH02-KS 03CH04-KS 03CH06-KS	CN1257	314309

1.4 Test Software

Item	Site	Manufacturer	Name	Version
1.	TH01-KS	Tonscend	JS1120-3 test system China_210602	3.3.10
2.	03CH02-KS	AUDIX	E3	6.2009-8-24al
3.	03CH04-KS	AUDIX	E3	210616
4.	03CH06-KS	AUDIX	E3	210616
5.	DFS01-KS	Sporton	Test Tools	1.0
6.	CO01-KS	AUDIX	E3	6.2009-8-24

1.5 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 22(H), 24(E), 27(L), 27(H), 27(F), 27(M), 27(N), 27(O), 27(Q), 90(S)
- ANSI C63.10-2013
- ANSI C63.26-2015
- 47 CFR Part 15 Subpart C §15.225
- 47 CFR Part 15 Subpart C §15.247
- 47 CFR Part 15 Subpart E §15.407

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: EM45B1, FCC ID: UZ7EM45B1) is electrically identical to the reference device (Model: EM45B2, FCC ID: UZ7EM45B2) 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, and for SAR Reference detail, please refer to FCC SAR report FA460508-02.

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 transmission conditions.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: UZ7EM45B1.

2.2 Model Difference Information

The **main** difference between FCC ID: UZ7EM45B2 and FCC ID: UZ7EM45B1 is as below:

- Removed RFID function.
- Antenna 1 removed WWAN TX function，keep supported Low bands and Middle bands RX function.

Other differences and all the details of similarity and difference can be found in the confidential documents (UZ7EM45B1 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	UZ7EM45B2	Full test	FR460508A	UZ7EM45B1	Spot check	Y, All test items
	DTS (BLE)	2400~2483.5	UZ7EM45B2	Full test	FR460508B	UZ7EM45B1	Spot check	Y, All test items
	DTS (WLAN)	2400~2483.5	UZ7EM45B2	Full test	FR460508C	UZ7EM45B1	Spot check	Y, All test items
	DXX (NFC)	13.56	UZ7EM45B2	Full test	FR460508D	UZ7EM45B1	Spot check	Y, All test items
15E	U-NII	5180~5240	UZ7EM45B2	Full test	FR460508E	UZ7EM45B1	Spot check	Y, All test items
		5260~5320	UZ7EM45B2	Full test	FR460508E	UZ7EM45B1	Spot check	Y, All test items
		5500~5720	UZ7EM45B2	Full test	FR460508E	UZ7EM45B1	Spot check	Y, All test items
		5745~5825	UZ7EM45B2	Full test	FR460508E	UZ7EM45B1	Spot check	Y, All test items
		5260~5320 5500~5720	UZ7EM45B2	Full test	FZ460508	UZ7EM45B1	Spot check	Y, All test items
	6CD	5925~7125	UZ7EM45B2	Full test	FR460508G FR460508H	UZ7EM45B1	Spot check	Y, All test items
22, 24, 27, 90	PCE (GSM)	GSM 850/1900	UZ7EM45B2	Full test	FG460508A	UZ7EM45B1	Spot check	Y, All test items
	PCE (WCDMA)	Band II, IV, V	UZ7EM45B2	Full test	FG460508A	UZ7EM45B1	Spot check	Y, All test items
	PCE (LTE)	B2/4/5/7/13/17/26/38/41/42/66/71 ULCA 5B/7C/38C 41C/66B/66C	UZ7EM45B2	Full test	FG460508B FG460508C FG460508D FG460508F	UZ7EM45B1	Spot check	Y, All test items
	PCE (LTE)	B26 (90S)	UZ7EM45B2	Full test	FG460508E	UZ7EM45B1	Spot check	Y, All test items
	PCE (NR)	n2/n5/n7/n26/n38/n41/n66/n71/n77/n78	UZ7EM45B2	Full test	FG460508G FG460508H FG460508J FG460508K	UZ7EM45B1	Spot check	Y, All test items
	PCE (NR)	n26 (90S)	UZ7EM45B2	Full test	FG460508I	UZ7EM45B1	Spot check	Y, All test items

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:

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

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

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	UZ7EM45B2 Parent Worst mode Test Result	UZ7EM45B1 Variant Check Test Result	Deviation (dB)	Deviation Limit (dB)
BT 1Mbps (CH00)	Number of Channels	79	79	0	3
	Hopping Channel Separation	1.135	0.996	0.139	3
	Dwell Time of Each Channel	0.31	0.31	0	3
	20dB Bandwidth	0.94	0.95	0.01	3
	99% Bandwidth	0.851	0.89	0.039	3
	Conducted Band Edges	-41.78	-43.72	1.94	3
	Conducted Spurious Emission	-44.27	-46.4	2.13	3
BT 1Mbps (CH00)	Radiated Band Edges and Radiated Spurious Emission	56.93	55.71	1.22	3
BT	AC Conducted Emission	14.81	13.96	0.85	3
BLE 1Mbps (CH39)	6dB Bandwidth	0.68	0.69	0.01	3
	99% Bandwidth	1.027	1.035	0.008	3
	Power Spectral Density	-5.44	-6.6	1.16	3
	Conducted Band Edges	-57.54	-58.86	1.32	3
	Conducted Spurious Emission	-44.23	-45.77	1.54	3
BLE 2Mbps (CH39)	Radiated Band Edges and Spurious Emission	46.49	48.90	2.41	3
BLE	AC Conducted Emission	14.81	13.96	0.85	3
WIFI 2.4G (802.11b CH11)	6dB Bandwidth	8.56	8.56	0	3
	99% Bandwidth	13.187	13.307	0.12	3
	Power Spectral Density	-1.37	-1.5	0.13	3
	Conducted Band Edges	-47.92	-48.21	0.29	3
	Conducted Spurious Emission	-43.71	-46.01	2.3	3
WIFI 2.4G (802.11g CH01)	Radiated Band Edges and Spurious Emission	51.90	52.85	1.95	3
WIFI 2.4G	AC Conducted Emission	14.81	13.96	0.85	3
WIFI 5G (802.11a CH149)	26dB Bandwidth	19.15	19.29	0.14	3
	99% Bandwidth	16.705	16.705	0	3
	Power Spectral Density	6.94	6.92	0.02	3
	Unwanted Emissions	16.31	16.33	0.02	3
WIFI 5G (11ax HE160 Ch50)	Radiated Band Edges and Spurious Emission	50.75	52.88	2.13	3
WIFI 5G	AC Conducted Emission	11.52	14.22	2.70	3
WIFI 5G (802.11a CH116)	DFS	0.862829	0.935231	0.073	3
WIFI 6G UNII-5 (802.11ax HE160 CH15 6025MHz)-6CD Indoor Client	26dB Emission Bandwidth	165.79	166.17	0.38	3
	99% Occupied Bandwidth	156.8	156.495	0.305	3
	Fundamental Maximum EIRP	17.64	17.39	0.25	3
	Fundamental Power Spectral Density	-2.95	-3.42	0.47	3
	In-Band Emissions	-12.59	-11.73	0.86	3
WIFI 6G UNII-5 (802.11ax HE20 CH1 5955MHz)-6CD Standard Client	26dB Emission Bandwidth	21.15	21.25	0.1	3
	99% Occupied Bandwidth	19.048	19.086	0.038	3
	Fundamental Maximum EIRP	17.68	17.58	0.10	3
	Fundamental Power Spectral Density	5.13	4.38	0.75	3
	In-Band Emissions	-19.18	-18.83	0.35	3
WIFI 6G UNII-5 (802.11ax HE160 CH47 6185MHz)	Contention Based Protocol	-64.77	-66.92	2.15	3

WIFI 6G (802.11ax HE20 Ch233)	Radiated Band Edges and Spurious Emission	66.90	67.00	0.1	3
WIFI 6G	AC Conducted Emission	14.72	16.18	1.46	3
NFC	20dB Spectrum Bandwidth	2.48	2.49	0.01	3
	99% OBW Spectrum Bandwidth	2.11	2.11	0	3
	Frequency Stability	-21.3496	-22.382	1.0324	3
	Field Strength of Fundamental Emissions	60.61	60.41	0.2	3
	Radiated Spurious Emissions	36.17	36.86	0.69	3
	AC Conducted Emission	14.22	16.01	1.79	3

Mode	Test Item	UZ7EM45B2 Parent Worst mode Test Result	UZ7EM45B1 Variant Check Test Result	Deviation (dB)	Deviation Limit (dB)
Part 27F LTE Band 13	Radiated Spurious Emission	-62.22	-61.76	0.46	3
Part27O_N77	Equivalent Isotropic Radiated Power	26.23	25.90	0.33	3
	Peak-to-Average Ratio	5.24	5.04	0.2	3
	Occupied Bandwidth	57.948	57.853	0.095	3
	Conducted Band Edge	-14.04	-15.20	1.16	3
	Conducted Spurious Emission	-33.15	-33.32	0.17	3
	Frequency Stability	0.0039	0.0027	0.0012	3

Conducted power for Unlicensed bands

Test Item	Mode	UZ7EM45B2 Parent Worst mode Test Result	UZ7EM45B1 Variant Check Test Result	Deviation (dB)	Deviation Limit (dB)
Conducted Power(dBm) BT & BLE	BT BR/EDR	9.57	9.11	0.46	3
	BLE 1Mbps	9.57	9.10	0.47	3
	BLE 2Mbps	9.58	9.24	0.34	3
Conducted Power(dBm) WIFI 2.4G	11b, 2.4GHz	25.04	24.97	0.07	3
	11g, 2.4GHz	28.45	28.36	0.09	3
	11n HT20, 2.4GHz	28.38	28.34	0.04	3
	11ac VHT20, 2.4GHz	28.30	28.25	0.05	3
	11ax HE20, 2.4GHz	28.56	28.51	0.05	3
Conducted Power(dBm) WIFI 5G	11a, 5.2GHz	22.53	22.38	0.15	3
	11a, 5.3GHz	22.62	22.15	0.47	3
	11a, 5.5GHz	22.19	21.74	0.45	3
	11a, 5.8GHz	21.69	21.47	0.22	3
	11n HT20, 5.2GHz	21.34	21.26	0.08	3
	11n HT20, 5.3GHz	20.98	20.62	0.36	3
	11n HT20, 5.5GHz	21.32	21.26	0.06	3
	11n HT20, 5.8GHz	21.37	21.33	0.04	3
	11ac VHT20, 5.2GHz	21.41	21.29	0.12	3
	11ac VHT20, 5.3GHz	21.04	20.69	0.35	3
	11ac VHT20, 5.5GHz	21.36	21.33	0.03	3
	11ac VHT20, 5.8GHz	21.41	21.36	0.05	3
	11ax HE20, 5.2GHz	21.47	21.34	0.13	3
	11ax HE20, 5.3GHz	21.09	20.72	0.37	3
	11ax HE20, 5.5GHz	21.39	21.37	0.02	3
	11ax HE20, 5.8GHz	21.45	21.39	0.06	3
	11n HT40, 5.2GHz	20.76	20.71	0.05	3
	11n HT40, 5.3GHz	20.71	20.53	0.18	3
	11n HT40, 5.5GHz	20.62	20.58	0.04	3

	11n HT40, 5.8GHz	20.36	20.28	0.08	3
	11ac VHT40, 5.2GHz	20.82	20.76	0.06	3
	11ac VHT40, 5.3GHz	20.77	20.56	0.21	3
	11ac VHT40, 5.5GHz	20.67	20.62	0.05	3
	11ac VHT40, 5.8GHz	20.42	20.32	0.10	3
	11ax HE40, 5.2GHz	20.86	20.81	0.05	3
	11ax HE40, 5.3GHz	20.83	20.61	0.22	3
	11ax HE40, 5.5GHz	20.73	20.68	0.05	3
	11ax HE40, 5.8GHz	20.48	20.36	0.12	3
	11ac VHT80, 5.2GHz	20.07	19.99	0.08	3
	11ac VHT80, 5.3GHz	20.14	19.91	0.23	3
	11ac VHT80, 5.5GHz	20.32	20.08	0.24	3
	11ac VHT80, 5.8GHz	20.17	20.10	0.07	3
	11ax HE80, 5.2GHz	20.12	20.05	0.07	3
	11ax HE80, 5.3GHz	20.22	19.96	0.26	3
	11ax HE80, 5.5GHz	20.38	20.12	0.26	3
	11ax HE80, 5.8GHz	20.24	20.15	0.09	3
	11ac VHT160, 5.3GHz	19.81	19.66	0.15	3
	11ac VHT160, 5.5GHz	19.79	19.63	0.16	3
	11ax HE160, 5.3GHz	19.92	19.70	0.22	3
	11ax HE160, 5.5GHz	19.88	19.69	0.19	3
Conducted Power(dBm) WIFI 6G Indoor Client	6CD 11a, U-NII-5	7.05	6.75	0.30	3
	6CD 11a, U-NII-6	7.97	7.86	0.11	3
	6CD 11a, U-NII-7	6.64	6.58	0.06	3
	6CD 11a, U-NII-8	5.82	5.78	0.04	3
	6CD 11ax HE20, U-NII-5	10.85	10.84	0.01	3
	6CD 11ax HE20, U-NII-6	11.28	11.21	0.07	3
	6CD 11ax HE20, U-NII-7	10.12	10.07	0.05	3
	6CD 11ax HE20, U-NII-8	9.61	9.57	0.04	3
	6CD 11ax HE40, U-NII-5	13.76	13.74	0.02	3
	6CD 11ax HE40, U-NII-6	13.74	13.59	0.15	3
	6CD 11ax HE40, U-NII-7	13.04	12.79	0.25	3
	6CD 11ax HE40, U-NII-8	12.65	12.60	0.05	3
	6CD 11ax HE80, U-NII-5	16.97	16.93	0.04	3
	6CD 11ax HE80, U-NII-6	16.82	16.77	0.05	3
	6CD 11ax HE80, U-NII-7	16.36	16.30	0.06	3
	6CD 11ax HE80, U-NII-8	15.76	15.71	0.05	3
	6CD 11ax HE160, U-NII-5	17.29	17.04	0.25	3
	6CD 11ax HE160, U-NII-6	17.01	16.95	0.06	3
	6CD 11ax HE160, U-NII-7	17.06	17.01	0.05	3
	6CD 11ax HE160, U-NII-8	16.89	16.83	0.06	3
Conducted Power(dBm) WIFI 6G Standard Client	6CD 11a, U-NII-5	17.29	17.21	0.08	3
	6CD 11a, U-NII-7	17.11	17.07	0.04	3
	6CD 11ax HE20, U-NII-5	17.33	17.23	0.10	3
	6CD 11ax HE20, U-NII-7	17.08	17.04	0.04	3
	6CD 11ax HE40, U-NII-5	17.23	17.16	0.07	3
	6CD 11ax HE40, U-NII-7	16.97	16.93	0.04	3
	6CD 11ax HE80, U-NII-5	17.26	17.14	0.12	3
	6CD 11ax HE80, U-NII-7	16.96	16.92	0.04	3
	6CD 11ax HE160, U-NII-5	17.34	17.10	0.24	3
	6CD 11ax HE160, U-NII-7	17.12	17.07	0.05	3

Conducted power for Licensed bands

Test Item	Mode	UZ7EM45B2 Parent Worst mode Test Result	UZ7EM45B1 Variant Check Test Result	Deviation (dB)	Deviation Limit (dB)
Conducted Power (dBm)	GSM 850	32.32	32.3	0.02	3
	GSM 1900	29.07	28.82	0.25	3
	WCDMA 850	23.02	22.87	0.15	3
	WCDMA1900	22.91	22.64	0.27	3
	WCDMA1700	22.79	22.75	0.04	3
	LTE B2	22.84	22.78	0.06	3
	LTE B4	22.89	22.45	0.44	3
	LTE B5	22.84	22.71	0.13	3
	LTE B5B	22.84	22.77	0.07	3
	LTE B13	22.78	22.63	0.15	3
	LTE B17	22.75	22.56	0.19	3
	LTE B26H	23.04	22.72	0.32	3
	LTE B26L	22.80	22.75	0.05	3
	LTE B66	22.89	22.74	0.15	3
	LTE B71	22.98	22.51	0.47	3
	LTE B7	23.83	23.48	0.35	3
	LTE B7C	23.70	23.59	0.11	3
	LTE B38	22.84	22.7	0.14	3
	LTE B41	22.89	22.66	0.23	3
	LTE B38C	22.84	22.71	0.13	3
	LTE B41C	22.88	22.78	0.1	3
	LTE B42	22.64	22.6	0.04	3
	LTE B66B	22.73	22.54	0.19	3
	LTE B66C	22.72	22.55	0.17	3
	N2	23.69	23.19	0.5	3
	N5	23.19	22.85	0.34	3
	N26H	23.22	22.93	0.29	3
	N26L	22.91	22.73	0.18	3
	N7	24.85	24.37	0.48	3
	N38	23.31	22.85	0.46	3
	N41	23.01	22.67	0.34	3
	N66	23.28	23.12	0.16	3
	N71	23.60	23.22	0.38	3
	N77 27O	26.28	25.95	0.33	3
	N78 27O	26.24	26.02	0.22	3
	N77 27Q	26.29	25.97	0.32	3
	N78 27Q	26.25	25.93	0.32	3
	N77 27O MIMIO	24.32	23.89	0.43	3
	N78 27O MIMO	23.94	23.87	0.07	3
	N77 27Q MIMO	24.38	23.92	0.46	3
	N78 27Q MIMO	24.31	23.95	0.36	3

6CD- < indoor client>

<SISO mode>

U-NII-5 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
11a	6Mbps	1	093	6415	0.03	0.04	4.16	3.22	0.35	-0.85	4.51	2.37	24.00	Pass	6	6

U-NII-5 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
HE20	MCS0	1	093	6415	Full	0.00	0.00	8.03	7.42	0.35	-0.85	8.38	6.57	24.00	Pass	8	8
HE40	MCS0	1	091	6405	Full	0.00	0.00	10.87	10.38	0.35	-0.85	11.22	9.53	24.00	Pass	11	11
HE80	MCS0	1	087	6385	Full	0.00	0.00	14.22	13.48	0.35	-0.85	14.57	12.63	24.00	Pass	14	14
HE160	MCS0	1	015	6025	Full	0.00	0.00	13.83	14.15	0.35	-0.85	14.18	13.30	24.00	Pass	14	14

U-NII-6 SISO															
Mod.	Data Rate	NTX	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
				Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
11a	6Mbps	1	6475	0.03	0.04	5.45	4.09	0.75	-2.44	6.20	1.65	24.00	Pass	5	5

U-NII-6 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
HE20	MCS0	1	105	6475	Full	0.00	0.00	8.42	7.86	0.75	-2.44	9.17	5.42	24.00	Pass	8.5	8.5
HE40	MCS0	1	107	6485	Full	0.00	0.00	11.05	9.97	0.75	-2.44	11.80	7.53	24.00	Pass	11	11
HE80	MCS0	1	103	6465	Full	0.00	0.00	14.09	13.15	0.75	-2.44	14.84	10.71	24.00	Pass	14	14
HE160	MCS0	1	111	6505	Full	0.00	0.00	14.21	13.31	0.75	-2.44	14.96	10.87	24.00	Pass	14	14

U-NII-7 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
11a	6Mbps	1	117	6535	0.03	0.04	4.25	2.69	1.02	0.16	5.27	2.85	24.00	Pass	3.5	3.5

U-NII-7 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
HE20	MCS0	1	181	6855	Full	0.00	0.00	7.03	6.95	1.02	0.16	8.05	7.11	24.00	Pass	7.5	7.5
HE40	MCS0	1	147	6685	Full	0.00	0.00	10.01	9.45	1.02	0.16	11.03	9.61	24.00	Pass	10	10
HE80	MCS0	1	135	6625	Full	0.00	0.00	13.55	12.93	1.02	0.16	14.57	13.09	24.00	Pass	13.5	13.5
HE160	MCS0	1	143	6665	Full	0.00	0.00	14.25	13.54	1.02	0.16	15.27	13.70	24.00	Pass	14	14

U-NII-8 SISO															
Mod.	Data Rate	NTX	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
				Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
11a	6Mbps	1	6895	0.03	0.04	3.27	2.12	0.70	1.66	3.97	3.78	24.00	Pass	3	3

U-NII-8 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
HE20	MCS0	2	185	6875	Full	0.00	0.00	6.68	6.29	0.70	1.66	7.38	7.95	24.00	Pass	7	7
HE40	MCS0	2	195	6925	Full	0.00	0.00	9.78	9.32	0.70	1.66	10.48	10.98	24.00	Pass	10	10
HE80	MCS0	2	199	6945	Full	0.00	0.00	12.75	12.58	0.70	1.66	13.45	14.24	24.00	Pass	13	13
HE160	MCS0	2	207	6985	Full	0.00	0.00	13.97	13.60	0.70	1.66	14.67	15.26	24.00	Pass	14	14

<CDD mode>

U-NII-5 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
11a	6Mbps	2	093	6415	0.03	0.04	4.18	3.25	6.75	0.35		7.10	24.00	Pass	6	

U-NII-6 MIMO														
Mod.	Data Rate	NTX	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
				Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
11a	6Mbps	2	6475	0.03	0.04	5.49	4.11	7.86	0.75		8.61	24.00	Pass	5	

U-NII-7 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
11a	6Mbps	2	117	6535	0.03	0.04	4.29	2.71	6.58	1.02		7.60	24.00	Pass	3.5	

U-NII-8 MIMO														
Mod.	Data Rate	NTX	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
				Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
11a	6Mbps	2	6895	0.03	0.04	3.30	2.17	5.78	1.66		7.44	24.00	Pass	3	

<SDM mode>

U-NII-5 MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
HE20	MCS0	2	093	6415	Full	0.00	0.00	8.18	7.45	10.84	0.35		11.19	24.00	Pass	8	
HE40	MCS0	2	091	6405	Full	0.00	0.00	11.01	10.43	13.74	0.35		14.09	24.00	Pass	11	
HE80	MCS0	2	087	6385	Full	0.00	0.00	14.29	13.52	16.93	0.35		17.28	24.00	Pass	14	
HE160	MCS0	2	015	6025	Full	0.00	0.00	13.88	14.18	17.04	0.35		17.39	24.00	Pass	14	

U-NII-6 MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
HE20	MCS0	2	105	6475	Full	0.00	0.00	8.47	7.91	11.21	0.75		11.96	24.00	Pass	8.5	
HE40	MCS0	2	107	6485	Full	0.00	0.00	11.09	10.01	13.59	0.75		14.34	24.00	Pass	11	
HE80	MCS0	2	103	6465	Full	0.00	0.00	14.24	13.22	16.77	0.75		17.52	24.00	Pass	14	
HE160	MCS0	2	111	6505	Full	0.00	0.00	14.42	13.39	16.95	0.75		17.70	24.00	Pass	14	

U-NII-7 MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
HE20	MCS0	2	181	6855	Full	0.00	0.00	7.09	7.02	10.07	1.02		11.09	24.00	Pass	7.5	
HE40	MCS0	2	147	6685	Full	0.00	0.00	10.06	9.48	12.79	1.02		13.81	24.00	Pass	10	
HE80	MCS0	2	135	6625	Full	0.00	0.00	13.59	12.97	16.30	1.02		17.32	24.00	Pass	13.5	
HE160	MCS0	2	143	6665	Full	0.00	0.00	14.35	13.61	17.01	1.02		18.03	24.00	Pass	14	

U-NII-8 MIMO																	
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
HE20	MCS0	2	185	6875	Full	0.00	0.00	6.77	6.34	9.57	1.66		11.23	24.00	Pass	7	
HE40	MCS0	2	195	6925	Full	0.00	0.00	9.81	9.35	12.60	1.66		14.26	24.00	Pass	10	
HE80	MCS0	2	199	6945	Full	0.00	0.00	12.78	12.62	15.71	1.66		17.37	24.00	Pass	13	
HE160	MCS0	2	207	6985	Full	0.00	0.00	14.01	13.63	16.83	1.66		18.49	24.00	Pass	14	

<standard client >

<SISO mode>

U-NII-5 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
11a	6Mbps	1	001	5955	0.03	0.04	14.19	14.13	0.35	-0.85	14.54	13.28	30.00	Pass	14	

U-NII-5 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
HE20	MCS0	1	001	5955	Full	0.00	0.00	14.21	14.22	0.35	-0.85	14.56	13.37	30.00	Pass	14	14
HE40	MCS0	1	003	5965	Full	0.00	0.00	14.17	14.05	0.35	-0.85	14.52	13.20	30.00	Pass	14	14
HE80	MCS0	1	007	5985	Full	0.00	0.00	14.16	14.06	0.35	-0.85	14.51	13.21	30.00	Pass	14	14
HE160	MCS0	1	015	6025	Full	0.00	0.00	13.83	14.15	0.35	-0.85	14.18	13.30	30.00	Pass	14	14

U-NII-7 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
11a	6Mbps	1	149	6695	0.03	0.04	14.27	13.78	1.02	0.16	15.29	13.94	30.00	Pass	14	14

U-NII-7 SISO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10	Ant 8	Ant 10			Ant 8	Ant 10
HE20	MCS0	1	149	6695	Full	0.00	0.00	14.22	13.78	1.02	0.16	15.24	13.94	30.00	Pass	14	14
HE40	MCS0	1	147	6685	Full	0.00	0.00	14.29	13.43	1.02	0.16	15.31	13.59	30.00	Pass	14	14
HE80	MCS0	1	135	6625	Full	0.00	0.00	14.27	13.47	1.02	0.16	15.29	13.63	30.00	Pass	14	14
HE160	MCS0	1	143	6665	Full	0.00	0.00	14.25	13.54	1.02	0.16	15.27	13.70	30.00	Pass	14	14

<CDD mode>

U-NII-5 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
11a	6Mbps	2	001	5955	0.03	0.04	14.22	14.17	17.21	0.35		17.56	30.00	Pass	14	

U-NII-5 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
HE20	MCS0	2	001	5955	Full	0.00	0.00	14.24	14.19	17.23	0.35		17.58	30.00	Pass	14	
HE40	MCS0	2	003	5965	Full	0.00	0.00	14.22	14.07	17.16	0.35		17.51	30.00	Pass	14	
HE80	MCS0	2	007	5985	Full	0.00	0.00	14.17	14.09	17.14	0.35		17.49	30.00	Pass	14	
HE160	MCS0	2	015	6025	Full	0.00	0.00	13.95	14.23	17.10	0.35		17.45	30.00	Pass	14	

U-NII-7 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
					Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
11a	6Mbps	2	149	6695	0.03	0.04	14.31	13.80	17.07	1.02		18.09	30.00	Pass	14	

U-NII-7 MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power with duty factor (dBm)			DG (dBi)		EIRP Power (dBm)	EIRP Power Limit (dBm)	Pass /Fail	Power Setting	
						Ant 8	Ant 10	Ant 8	Ant 10	SUM	Ant 8	Ant 10	SUM			Ant 8	Ant 10
HE20	MCS0	2	149	6695	Full	0.00	0.00	14.24	13.81	17.04	1.02		18.06	30.00	Pass	14	
HE40	MCS0	2	147	6685	Full	0.00	0.00	14.32	13.48	16.93	1.02		17.95	30.00	Pass	14	
HE80	MCS0	2	135	6625	Full	0.00	0.00	14.29	13.49	16.92	1.02		17.94	30.00	Pass	14	
HE160	MCS0	2	143	6665	Full	0.00	0.00	14.39	13.71	17.07	1.02		18.09	30.00	Pass	14	

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. 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
EMI Test Receiver	Keysight	N9038A	MY56400023	3Hz~8.5GHz;Max 30dBm	Jan. 02, 2024	Nov. 06, 2024	Jan. 01, 2025	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471084	10Hz-44GHz	Jul. 04, 2024	Nov. 06, 2024	Jul. 03, 2025	Radiation (03CH06-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Nov. 06, 2024	Sep. 07, 2025	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	59913	30MHz-1GHz	Sep. 03, 2024	Nov. 06, 2024	Sep. 02, 2025	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 11, 2024	Nov. 06, 2024	Apr. 10, 2025	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101093	18GHz~40GHz	Jan. 06, 2024	Nov. 06, 2024	Jan. 05, 2025	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	372171	9KHz ~1GHZ	Jan. 02, 2024	Nov. 06, 2024	Jan. 01, 2025	Radiation (03CH06-KS)
Amplifier	EM	EM18G40GA	060728	18~40GHz	Jan. 02, 2024	Nov. 06, 2024	Jan. 01, 2025	Radiation (03CH06-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2082395	1Ghz-18Ghz	Jan. 02, 2024	Nov. 06, 2024	Jan. 01, 2025	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY57280119	500MHz~26.5GHz	Oct. 09, 2024	Nov. 06, 2024	Oct. 08, 2025	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Nov. 06, 2024	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Nov. 06, 2024	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Nov. 06, 2024	NCR	Radiation (03CH06-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 18, 2024	Oct. 27, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Aug. 20, 2024	Oct. 27, 2024	Aug. 19, 2025	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Apr. 18, 2024	Oct. 27, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 09, 2024	Oct. 27, 2024	Oct. 08, 2025	Conduction (CO01-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Nov. 07, 2024~ Feb. 11, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 02, 2024	Nov. 07, 2024~ Feb. 11, 2025	Jan. 01, 2025	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 02, 2025		Jan. 01, 2026	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 02, 2024	Nov. 07, 2024~ Feb. 11, 2025	Jan. 01, 2025	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 02, 2025		Jan. 01, 2026	Conducted (TH01-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Nov. 05, 2024	Oct. 09, 2025	CBP (DFS01-KS)
MXG-B RF Vector Signal Genertor	Keysight	5182B /5182BX07	MY56200417/MY59360210	9kHz~7.2GHz	Apr. 17, 2024	Nov. 05, 2024	Apr. 16, 2025	CBP (DFS01-KS)
Vector Signal Generator	R&S	SMBV100A	258305	9kHz~6GHz	Jan. 02, 2024	Nov. 05, 2024	Jan. 01, 2025	CBP (DFS01-KS)
Combiner	MTJ Cooperation	MTJ7112	N/A	0.4-6GHz	NCR	Nov. 05, 2024	NCR	CBP (DFS01-KS)
Signal Analyzer	R&S	FSV7	101632	10Hz~7GHz	Jan. 02, 2024	Nov. 05, 2024	Jan. 01, 2025	DFS (DFS01-KS)
Vector Signal Generator	R&S	SMJ100A	101908	100kHz~6GHz	Jan. 02, 2024	Nov. 05, 2024	Jan. 01, 2025	DFS (DFS01-KS)
MXG-B RF Vector Signal Genertor	Keysight	5182B /5182BX07	MY56200417/MY59360210	9kHz~7.2GHz	Apr. 17, 2024	Nov. 05, 2024	Apr. 16, 2025	DFS (DFS01-KS)

Combiner	MTJ Cooperation	MTJ7114-M	N/A	0.5GHz~18GHz	NCR	Nov. 05, 2024	NCR	DFS (DFS01-KS)

NCR: No Calibration Required

For NFC:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Max 30dBm	Oct. 11, 2024	Oct. 24, 2024	Oct. 10, 2025	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Oct. 24, 2024	Sep. 07, 2025	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6111D	59915	30MHz-1GHz	Aug. 18, 2024	Oct. 24, 2024	Aug. 17, 2025	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Oct. 24, 2024	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Oct. 24, 2024	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Oct. 24, 2024	NCR	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	413740	9KHz-1GHz	Jan. 03, 2024	Oct. 24, 2024	Jan. 02, 2025	Radiation (03CH02-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 18, 2024	Oct. 26, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Aug. 20, 2024	Oct. 26, 2024	Aug. 19, 2025	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Apr. 18, 2024	Oct. 26, 2024	Apr. 17, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 09, 2024	Oct. 26, 2024	Oct. 08, 2025	Conduction (CO01-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Nov. 07, 2024	Oct. 09, 2025	Conducted (TH01-KS)
Pulse Power Senor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 02, 2024	Nov. 07, 2024	Jan. 01, 2025	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 02, 2024	Nov. 07, 2024	Jan. 01, 2025	Conducted (TH01-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. 10, 2024	Nov. 04, 2024	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Nov. 04, 2024	NCR	Conducted (TH01-KS)
Temperature &humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 05, 2023	Nov. 04, 2024	Jul. 04, 2024	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY553705 28	10Hz-44G,MAX 30dB	Oct. 11, 2024	Oct. 20, 2024	Oct. 10, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 06, 2023	Oct. 20, 2024	Dec. 05, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 16, 2024	Oct. 20, 2024	Aug. 15, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 27, 2024	Oct. 20, 2024	Jan. 26, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	413740	9KHz-1GHz	Jan. 03, 2024	Oct. 20, 2024	Jan. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40GA	060728	18~40GHz	Jan. 02, 2024	Oct. 20, 2024	Jan. 01, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 09, 2024	Oct. 20, 2024	Oct. 08, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18GA	060892	1Ghz-18Ghz	Oct. 09, 2024	Oct. 20, 2024	Oct. 08, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 20, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 20, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 20, 2024	NCR	Radiation (03CH04-KS)
Signal Analyzer	R&S	FSV7	101472	10Hz~7GHz	Jan. 05, 2024	Nov. 12, 2024	Jan. 04, 2025	Conducted (DFS01-KS)
Combiner	MTJ Cooperation	MTJ7112	N/A	0.4-6GHz	NCR	Nov. 12, 2024	NCR	Conducted (DFS01-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)

Test Item	Uncertainty
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	±0.04 ppm

Uncertainty of Conducted Measurement(WIFI 6G)

Test Item	Uncertainty
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	0.04ppm
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	0.04ppm

Uncertainty of Conducted Measurement (DFS)

Test Item	Uncertainty
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	±0.04 ppm

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))	3.30dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.08dB

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.22dB

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

03CH04-KS(WWAN):

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

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

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.82 dB**

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

Appendix B. Reference Report

FCC RF Test Report

FCC ID	:	UZ7EM45B2
EQUIPMENT	:	Enterprise Mobile
BRAND NAME	:	Zebra
MODEL NAME	:	EM45B2
APPLICANT	:	Zebra Technologies Corporation 3 Overlook Point, Lincolnshire, IL 60069 USA
MANUFACTURER	:	Zebra Technologies Corporation 3 Overlook Point, Lincolnshire, IL 60069 USA
STANDARD	:	47 CFR Part 27
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Jul. 06, 2024 ~ Aug. 12, 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

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG460508C	Rev. 01	Initial issue of report	Sep. 11, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 7) (Band 38) (Band 41)	EIRP < 2Watt	PASS	-
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	-	Report Only	-
3.7	§27.53(m)(4)	Conducted Band Edge Measurement (Band 7) (Band 38) (Band 41)	§27.53(m)(4)	PASS	-
3.8	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7) (Band 38) (Band 41)	< $55+10\log_{10}$(P[Watts])	PASS	-
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)	< $55+10\log_{10}$(P[Watts])	PASS	Under limit 27.83 dB at 7584.00 MHz

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 Product Feature of Equipment Under Test

Product Feature	
Equipment	Enterprise Mobile
Brand Name	Zebra
Model Name	EM45B2
FCC ID	UZ7EM45B2
IMEI Code	Conducted: 350854420028793/350854420029353 Radiation: 350854420030211/350854420030229
HW Version	EV2.5
SW Version	13-32-02.00-TG-U06-STD-ATH-04
MFD	02AUG24
EUT Stage	Identical Prototype

Specification of Accessory				
Battery	**Brand Name**	Zebra	**Model**	BT-000501
			Part Number	BT-000501-2000

Supported Unit used in test configuration and system				
AC Adapter 1 **(Type C Wall Charger 1)**	**Brand Name**	Zebra	**Model**	SAWA-102-22520A
			Part Number	PWR-WUA5V45W1US
AC Adapter 2 **(Type A Wall Charger 2)**	**Brand Name**	Zebra	**Model**	SAWA-65-20005A
			Part Number	PWR-WUA5V12W0US
Earphone 1 **(Wired headset USB-C)**	**Brand Name**	Zebra	**Part Number**	HDST-USBC-PTT1-01
Earphone 2 **(Rugged Bluetooth Headset)**	**Brand Name**	Zebra	**Part Number**	HS3100-OTH
Earphone 3 **(3.5mm PTT Headset)**	**Brand Name**	Zebra	**Part Number**	HDST-35MM-PTT1-02
Earphone 4 **(Rugged Headset)**	**Brand Name**	Zebra	**Part Number**	HS2100-OTH
3.5mm to 3.5mm audio connector	**Brand Name**	Zebra	**Part Number**	CBL-HS2100-3MS1-01
Type C-Audio Cable **(Type C to 3.5mm)**	**Brand Name**	Zebra	**Part Number**	ADP-USBC-35MM1-01
USB Cable 1 **(USB-C to C Cable)**	**Brand Name**	Zebra	**Part Number**	CBL-EC5X-USBC3A-01
USB Cable 2 **(USB-A to C Cable)**	**Brand Name**	Zebra	**Part Number**	CBL-TC5X-USBC2A-01
EM45 Protective Case	**Brand Name**	Zebra	Part Number	SG-EM45EXO1-01

1.2 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 7 : 2500 MHz ~ 2570 MHz LTE Band 38 : 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
Rx Frequency	LTE Band 7 : 2620 MHz ~ 2690 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41 : 2496 MHz ~ 2690 MHz
Bandwidth	LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 38 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<ANT3> LTE Band 7 : 23.83 dBm LTE CA_7C : 23.70 dBm LTE Band 38 : 22.84 dBm LTE CA_38C : 22.84 dBm LTE Band 41 : 22.89 dBm LTE CA_41C : 22.88 dBm
Antenna Gain	<ANT3> LTE Band 7 : 0.05 dBi LTE Band 38 : 0.02 dBi LTE Band 41 : 0.05 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note: The device supports two PAs for LTE Band 7: main PA and other PA. The maximum power of main PA is higher than the other PA, however, the two PA had evaluated to test, we chose higher EIRP to show in the report.

1.3 Modification of EUT

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

1.4 Maximum EIRP Power and Emission Designator

LTE Band 7		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**
5	2502.5 ~ 2567.5	0.2393	4M50G7D	0.1875	4M48W7D
10	2505.0 ~ 2565.0	0.2399	9M07G7D	0.1854	9M05W7D
15	2507.5 ~ 2562.5	0.2366	13M5G7D	0.1837	13M5W7D
20	2510.0 ~ 2560.0	0.2443	17M9G7D	0.1892	17M9W7D

LTE Band 38		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2572.5 ~ 2617.5	0.1862	4M49G7D	0.1503	4M49W7D
10	2575.0 ~ 2615.0	0.1875	9M07G7D	0.1510	9M01W7D
15	2577.5 ~ 2612.5	0.1879	13M5G7D	0.1489	13M5W7D
20	2580.0 ~ 2610.0	0.1932	17M9G7D	0.1535	17M9W7D
LTE Band 41		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	2498.5 ~ 2687.5	0.1901	4M49G7D	0.1496	4M49W7D
10	2501.0 ~ 2685.0	0.1888	9M07G7D	0.1514	9M01W7D
15	2503.5 ~ 2682.5	0.1879	13M5G7D	0.1514	13M5W7D
20	2506.0 ~ 2680.0	0.1968	17M9G7D	0.1552	17M9W7D

LTE Band 7 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
10MHz+20MHz	0.2265	28M1G7D	0.1807	28M0W7D
15MHz+15MHz	0.2265	28M6G7D	0.1803	28M7W7D
15MHz+20MHz	0.2339	32M8G7D	0.1824	32M9W7D
15MHz+10MHz	0.2350	23M6G7D	0.1892	23M4W7D
20MHz+10MHz	0.2339	28M2G7D	0.1795	28M0W7D
20MHz+15MHz	0.2301	32M9G7D	0.1816	32M9W7D
20MHz+20MHz	0.2371	37M8G7D	0.1905	37M8W7D
LTE Band 38 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
15MHz+15MHz	0.1841	28M7G7D	0.1377	28M7W7D
20MHz+20MHz	0.1932	37M7G7D	0.1549	37M6W7D

LTE Band 41 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5MHz+20MHz	0.1837	23M4G7D	0.1371	23M4W7D
10MHz+20MHz	0.1820	28M2G7D	0.1377	27M9W7D
10MHz+15MHz	0.1837	23M6G7D	0.1387	23M4W7D
15MHz+15MHz	0.1845	28M7G7D	0.1368	28M7W7D
15MHz+20MHz	0.1774	32M7G7D	0.1377	32M6W7D
15MHz+10MHz	0.1832	23M5G7D	0.1368	23M2W7D
20MHz+5MHz	0.1824	23M2G7D	0.1387	23M4W7D
20MHz+10MHz	0.1858	28M2G7D	0.1361	28M2W7D
20MHz+15MHz	0.1837	32M6G7D	0.1371	33M3W7D
20MHz+20MHz	0.1963	37M7G7D	0.1560	37M6W7D

Note:

1. LTE Band 41 overlaps the entire frequency range of LTE Band 38. Therefore, the test results provided in this report covers Band 41 as well as Band 38.

1.5 Testing Location

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.**
	03CH04-KS TH01-KS	CN1257	314309

1.6 Test Software

Item	Site	Manufacture	Name	Version
1.	TH01-KS	SPORTON	FCC LTE_Ver2.0 Auto_china_210503	2.0
2.	03CH04-KS	AUDIX	E3	210616

1.7 Applicable Standards

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

- 47 CFR Part 27(M)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

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

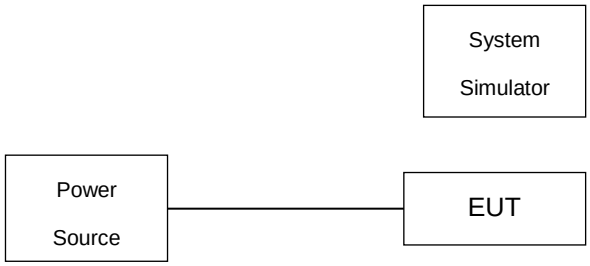
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission. (Y Plane)

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	7	-	-	v	v	v	v	v	v	v	v	v		v	v	v	v
	38	-	-	v	v	v	v	v	v	v	v	v		v	v	v	v
	41	-	-	v	v	v	v	v	v	v	v	v		v	v	v	v
Peak-to-Average Ratio	7	-	-				v	v	v	v				v		v	
	41	-	-				v	v	v	v				v		v	
26dB and 99% Bandwidth	7	-	-	v	v	v	v	v	v					v		v	
	41	-	-	v	v	v	v	v	v					v		v	
Conducted Band Edge	7	-	-	v	v	v	v	v	v	v	v	v		v	v		v
	41	-	-	v	v	v	v	v	v	v	v	v		v	v		v
Conducted Spurious Emission	7	-	-	v	v	v	v	v				v			v	v	v
	41	-	-	v	v	v	v	v				v			v	v	v
Frequency Stability	7	-	-		v			v						v		v	
	41	-	-		v			v						v		v	
E.I.R.P	7	-	-	v	v	v	v	v	v	v	v	v		v	v	v	v
	38	-	-	v	v	v	v	v	v	v	v	v		v	v	v	v
	41	-	-	v	v	v	v	v	v	v	v	v		v	v	v	v
Radiated Spurious Emission	7	Worst Case													v	v	v
	41	Worst Case													v	v	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. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.																

Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v			v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v	v	v			v	v	v
	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
26dB and 99% Bandwidth	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v					v		v	
	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v					v		v	
Conducted Band Edge	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v		v	v		v
	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v		v	v		v
Conducted Spurious Emission	7C_CA	v	v	v	v	v	-	-	v	v	-	v				v			v	v	v
	41C_CA	v	v	v	v	v	v	v	v	v	v	v				v			v	v	v
E.I.R.P.	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v			v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v	v	v	v			v	v	v
	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	7C_CA	Worst Case																	v	v	v
	38C_CA	Worst Case																	v	v	v
	41C_CA	Worst Case																	v	v	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. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.																				

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	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 6.5 dB.

Example :

Offset(dB) = RF cable loss(dB).

= 6.5 (dB)

2.5 Frequency List of Low/Middle/High Channels

LTE Band 7 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

LTE Band 38 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	37850	38000	38150
	Frequency	2580	2595	2610
15	Channel	37825	38000	38175
	Frequency	2577.5	2595	2612.5
10	Channel	37800	38000	38200
	Frequency	2575	2595	2615
5	Channel	37775	38000	38225
	Frequency	2572.5	2595	2617.5

LTE Band 41 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	39750	40620	41490
	Frequency	2506	2593	2680
15	Channel	39725	40620	41515
	Frequency	2503.5	2593	2682.5
10	Channel	39700	40620	41540
	Frequency	2501	2593	2685
5	Channel	39675	40620	41565
	Frequency	2498.5	2593	2687.5

LTE Band 7C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	20850	21001	21152
		Frequency	2510.0	2525.1	2540.2
	SCC	Channel	21048	21199	21350
		Frequency	2529.8	2544.9	2560.0
20 + 15	PCC	Channel	20850	21026	21201
		Frequency	2510.0	2527.6	2545.1
	SCC	Channel	21021	21197	21372
		Frequency	2527.1	2544.7	2562.2
15 + 20	PCC	Channel	20828	21003	21179
		Frequency	2507.8	2525.3	2542.9
	SCC	Channel	20999	21174	21350
		Frequency	2524.9	2542.4	2560.0
20 + 10	PCC	Channel	20850	21051	21251
		Frequency	2510.0	2530.1	2550.1
	SCC	Channel	20994	21195	21395
		Frequency	2524.4	2544.5	2564.5
10 + 20	PCC	Channel	20805	21006	21206
		Frequency	2505.5	2525.6	2545.6
	SCC	Channel	20949	21150	21350
		Frequency	2519.9	2540.0	2560.0
15 + 15	PCC	Channel	20825	21025	21225
		Frequency	2507.5	2527.5	2547.5
	SCC	Channel	20975	21175	21375
		Frequency	2522.5	2542.5	2562.5
15 + 10	PCC	Channel	20825	21051	21277
		Frequency	2507.5	2530.1	2552.7
	SCC	Channel	20945	21171	21397
		Frequency	2519.5	2542.1	2564.7

LTE Band 38C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	37850	37901	37952
		Frequency	2580.0	2585.1	2590.2
	SCC	Channel	38048	38099	38150
		Frequency	2599.8	2604.9	2610.0
15+ 15	PCC	Channel	37825	37925	38025
		Frequency	2577.5	2587.5	2597.5
	SCC	Channel	37975	38075	38175
		Frequency	2592.5	2602.5	2612.5

LTE Band 41C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	39750	40521	41292
		Frequency	2506.0	2583.1	2660.2
	SCC	Channel	39948	40719	41490
		Frequency	2525.8	2602.9	2680.0
20 + 15	PCC	Channel	39750	40546	41341
		Frequency	2506.0	2585.6	2665.1
	SCC	Channel	39921	40717	41512
		Frequency	2523.1	2602.7	2682.2
15 + 20	PCC	Channel	39728	40523	41319
		Frequency	2503.8	2593.3	2662.9
	SCC	Channel	39899	40694	41490
		Frequency	2520.9	2600.4	2680.0
20 + 10	PCC	Channel	39750	40571	41391
		Frequency	2506.0	2588.1	2670.1
	SCC	Channel	39894	40715	41535
		Frequency	2520.4	2602.5	2684.5
10 + 20	PCC	Channel	39705	40526	41346
		Frequency	2501.5	2583.6	2665.6
	SCC	Channel	39849	40670	41490
		Frequency	2515.9	2598.0	2680.0

LTE Band 41C_CA Channel and Frequency List					
20 + 5	PCC	Channel	39750	40595	41440
		Frequency	2506.0	2590.5	2675.0
	SCC	Channel	39867	40712	41557
		Frequency	2517.7	2602.2	2686.7
5 + 20	PCC	Channel	39683	40528	41373
		Frequency	2499.3	2583.8	2668.3
	SCC	Channel	39800	40645	41490
		Frequency	2511.0	2595.5	2680.0
15 + 15	PCC	Channel	39725	40545	41365
		Frequency	2503.5	2585.5	2667.5
	SCC	Channel	39875	40695	41515
		Frequency	2518.5	2600.5	2682.5
10 + 15	PCC	Channel	39703	40549	41395
		Frequency	2501.3	2585.9	2670.5
	SCC	Channel	39823	40669	41515
		Frequency	2513.3	2597.9	2682.5
15 + 10	PCC	Channel	39725	40571	41417
		Frequency	2503.5	2588.1	2672.7
	SCC	Channel	39845	40691	41537
		Frequency	2515.5	2600.1	2684.7

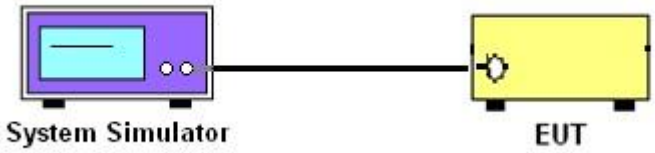
3 Conducted Test Items

3.1 Measuring Instruments

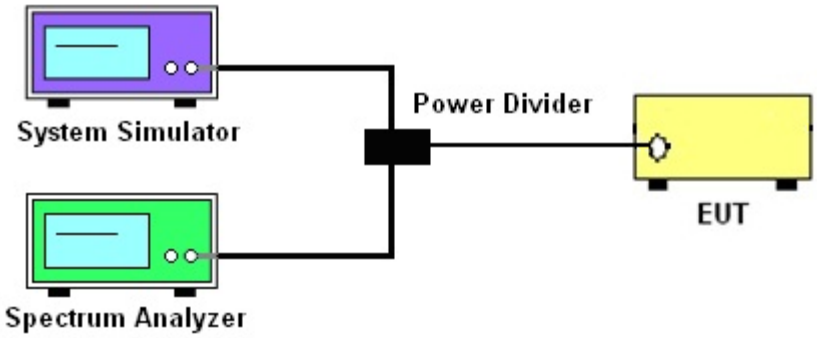
See list of measuring instruments of this test report.

3.2 Test Setup

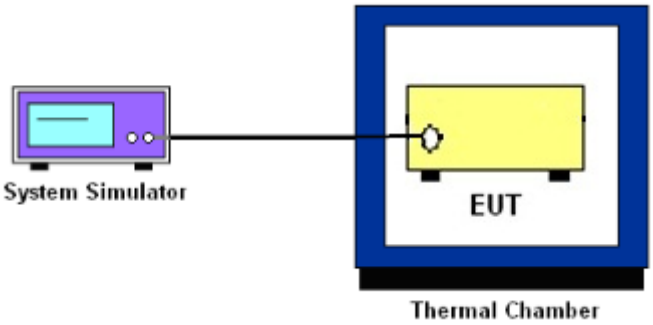
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

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

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 7 and Band 38 and Band 41.

According to KDB 412172 D01 Power Approach,

EIRP = $P_T + G_T – L_C$, ERP = EIRP -2.15, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

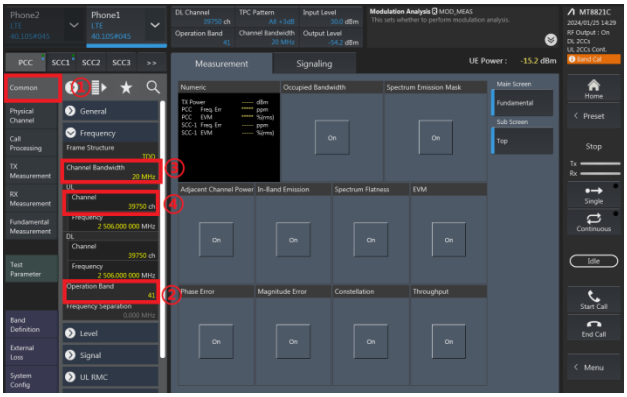
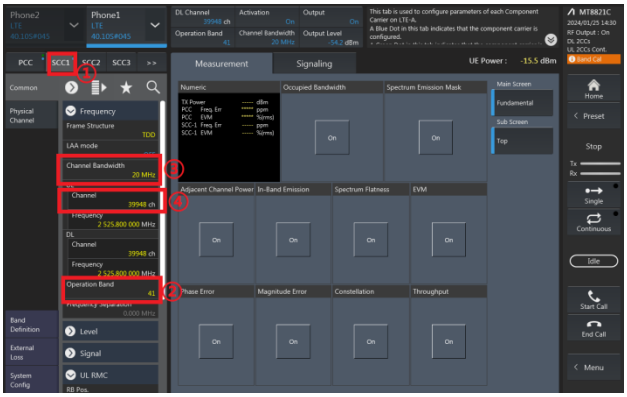
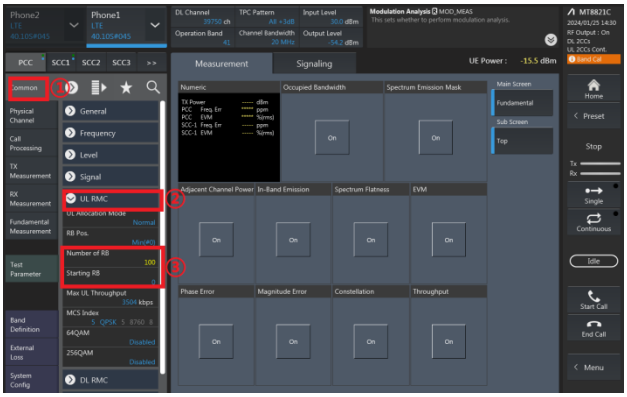
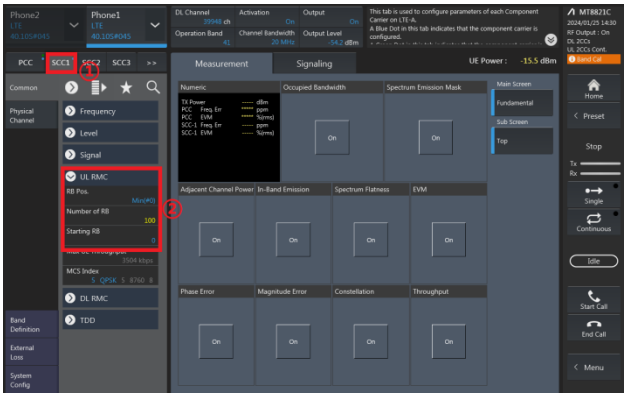
L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.4.2 Test Procedures

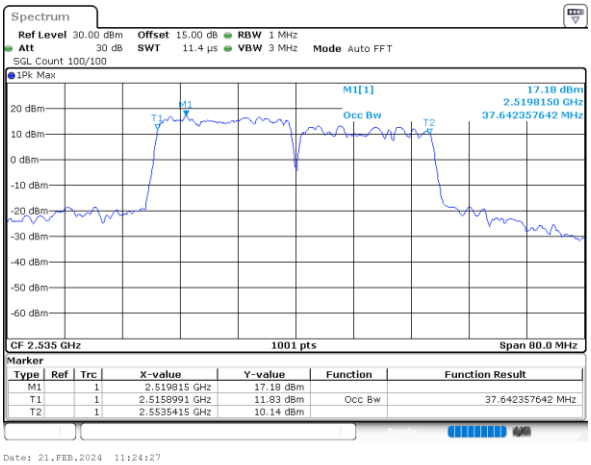
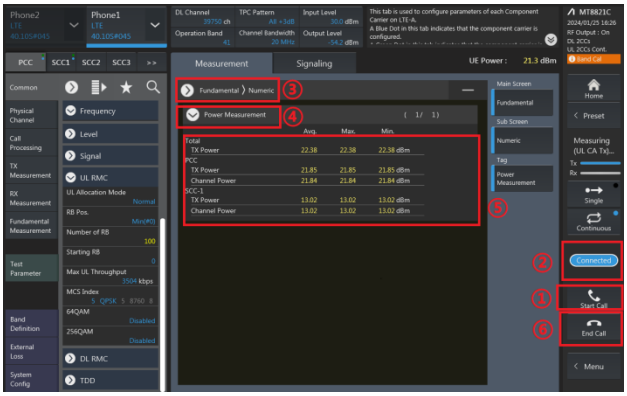
1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

3.4.3 Test Procedures for LTE ULCA

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter PCC & SCC output ports were connected to the system simulator.
3. Set EUT at maximum power, set the PCC/SCC CA band, channel, bandwidth and RB config.

PCC config_(Channel Bandwidth / Channel / Band)	SCC config_(Channel Bandwidth / Channel / Band)
	
PCC config_(Number of RB / Starting RB)	**SCC config_(Number of RB / Starting RB)**
	

4. Select lowest, middle, and highest channels for each ULCA band and different modulation.
5. Check the ULCA spectrum and record the total power from the system simulator.

Check the ULCA spectrum (eg. 20M+20M)	Read the Total UL CA output power (PCC+SCC)
	

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The 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 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “–X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

27.53(m)(4)

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

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW >= 1%/2% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used or a narrower RBW was used and the measured power was integrated over the full required measurement bandwidth of 1 MHz.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.
   Example:
   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.
9. For LTE Band 7, 38, 41, the other 40 dB, and 55 dB have additionally applied same calculation above.
10. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

For Band 7,38,41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 55 + 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.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
11. For Band 7, 38, 41
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [55+ 10log(P)] (dB)
    = [30+ 10log(P)] (dBm) - [55+ 10log(P)] (dB)
    = -25dBm.

3.9 Frequency Stability

3.9.1 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.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. 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.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

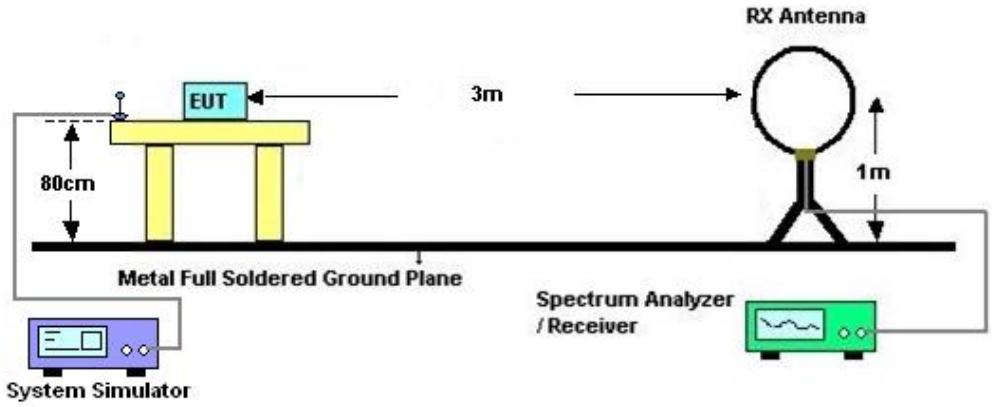
4 Radiated Test Items

4.1 Measuring Instruments

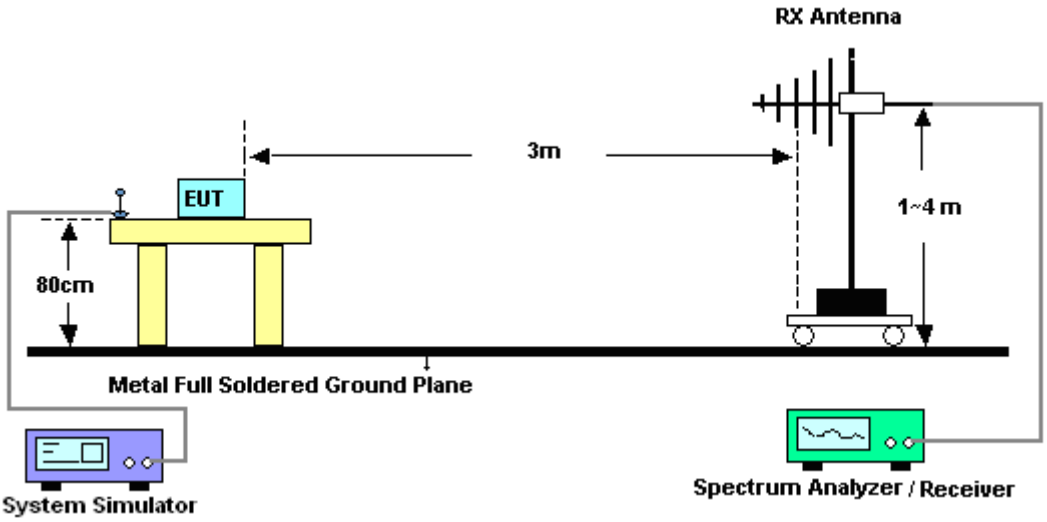
See list of measuring instruments of this test report.

4.2 Test Setup

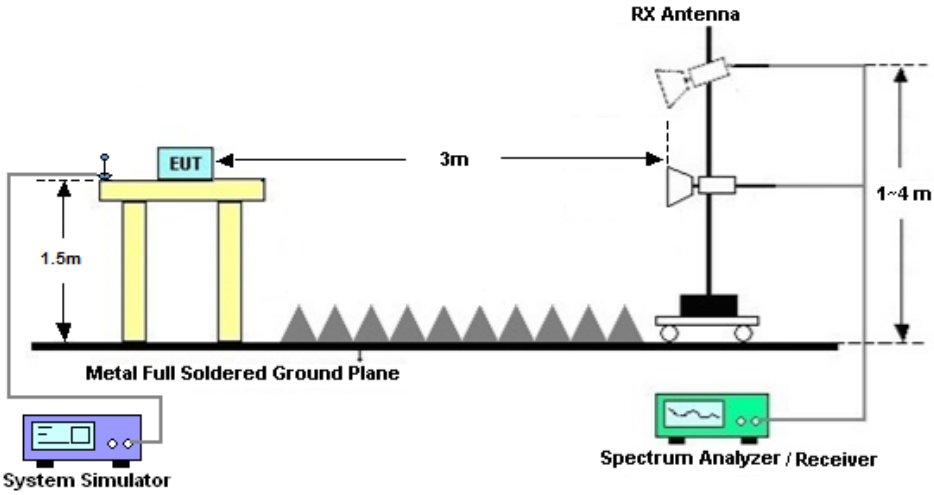
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26.

For Band 7, 38, 41

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 55 + 10 log (P) dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
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.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For Band 7, 38, 41:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

5 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. 06, 2024~ Jul. 18, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Jul. 06, 2024~ Jul. 18, 2024	NCR	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Jul. 06, 2024~ Jul. 18, 2024	Jul. 03, 2025	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 11, 2023	Aug. 12, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 11 2023	Aug. 12, 2024	Sep. 10, 2024	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	59913	30MHz-1GHz	Aug. 18, 2023	Aug. 12, 2024	Aug. 17, 2025	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 23, 2023	Aug. 12, 2024	Oct. 22, 2024	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 27, 2024	Aug. 12, 2024	Jan. 26, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	413740	9KHz-1GHz	Jan. 03, 2024	Aug. 12, 2024	Jan. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40GA	060728	18~40GHz	Jan. 02, 2024	Aug. 12, 2024	Jan. 01, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 11, 2023	Aug. 12, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
Amplifier	EM	EM01G18GA	060892	1Ghz-18Ghz	Oct. 11, 2023	Aug. 12, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Aug. 12, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Aug. 12, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Aug. 12, 2024	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

6 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	±2.26 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))	2.83 dB

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.82 dB

---------- 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) and EIRP

LTE Band 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				20850	21100	21350			
Frequency (MHz)				2510	2535	2560	L	M	H
20	QPSK	1	0	23.70	23.83	23.60	0.2371	0.2443	0.2317
20	QPSK	1	99	23.50	23.64	23.67	0.2265	0.2339	0.2355
20	QPSK	100	0	22.23	22.39	22.22	0.1690	0.1754	0.1687
20	16QAM	1	0	22.59	22.72	22.54	0.1837	0.1892	0.1816
20	64QAM	1	0	22.36	22.49	22.29	0.1742	0.1795	0.1714
20	256QAM	1	0	18.24	18.35	18.35	0.0675	0.0692	0.0692
Channel				20825	21100	21375	EIRP(W)		
Frequency (MHz)				2507.5	2535	2562.5	L	M	H
15	QPSK	1	0	23.56	23.69	23.48	0.2296	0.2366	0.2254
15	16QAM	1	0	22.52	22.59	22.47	0.1807	0.1837	0.1786
Channel				20800	21100	21400	EIRP(W)		
Frequency (MHz)				2505	2535	2565	L	M	H
10	QPSK	1	0	23.62	23.75	23.51	0.2328	0.2399	0.2270
10	16QAM	1	0	22.51	22.63	22.42	0.1803	0.1854	0.1766
Channel				20775	21100	21425	EIRP(W)		
Frequency (MHz)				2502.5	2535	2567.5	L	M	H
5	QPSK	1	0	23.57	23.74	23.47	0.2301	0.2393	0.2249
5	16QAM	1	0	22.48	22.68	22.44	0.1791	0.1875	0.1774

LTE Band 38

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				37850	38000	38150			
Frequency (MHz)				2580	2595	2610	L	M	H
20	QPSK	1	0	22.69	22.84	22.53	0.1866	0.1932	0.1799
20	QPSK	1	99	22.48	22.69	22.71	0.1778	0.1866	0.1875
20	QPSK	100	0	21.38	21.50	21.30	0.1380	0.1419	0.1355
20	16QAM	1	0	21.72	21.84	21.64	0.1493	0.1535	0.1466
20	64QAM	1	0	21.43	21.65	21.46	0.1396	0.1469	0.1406
20	256QAM	1	0	17.41	17.40	17.43	0.0553	0.0552	0.0556
Channel				37825	38000	38175	EIRP(W)		
Frequency (MHz)				2577.5	2595	2612.5	L	M	H
15	QPSK	1	0	22.61	22.72	22.44	0.1832	0.1879	0.1762
15	16QAM	1	0	21.64	21.71	21.59	0.1466	0.1489	0.1449
Channel				37800	38000	38200	EIRP(W)		
Frequency (MHz)				2575	2595	2615	L	M	H
10	QPSK	1	0	22.54	22.71	22.50	0.1803	0.1875	0.1786
10	16QAM	1	0	21.62	21.77	21.51	0.1459	0.1510	0.1422
Channel				37775	38000	38225	EIRP(W)		
Frequency (MHz)				2572.5	2595	2617.5	L	M	H
5	QPSK	1	0	22.56	22.68	22.48	0.1811	0.1862	0.1778
5	16QAM	1	0	21.67	21.75	21.60	0.1476	0.1503	0.1452

LTE Band 41

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				39750	40620	41490			
Frequency (MHz)				2506	2593	2680	L	M	H
20	QPSK	1	0	22.69	22.89	22.47	0.1879	0.1968	0.1786
20	QPSK	1	99	22.58	22.42	22.56	0.1832	0.1766	0.1824
20	QPSK	100	0	21.35	21.37	21.27	0.1380	0.1387	0.1355
20	16QAM	1	0	21.70	21.86	21.54	0.1496	0.1552	0.1442
20	64QAM	1	0	21.54	21.35	21.36	0.1442	0.1380	0.1384
20	256QAM	1	0	17.37	17.32	17.27	0.0552	0.0546	0.0540
Channel				39725	40620	41515	EIRP(W)		
Frequency (MHz)				2503.5	2593	2682.5	L	M	H
15	QPSK	1	0	22.69	22.62	22.46	0.1879	0.1849	0.1782
15	16QAM	1	0	21.75	21.60	21.56	0.1514	0.1462	0.1449
Channel				39700	40620	41540	EIRP(W)		
Frequency (MHz)				2501	2593	2685	L	M	H
10	QPSK	1	0	22.71	22.55	22.47	0.1888	0.1820	0.1786
10	16QAM	1	0	21.75	21.66	21.57	0.1514	0.1483	0.1452
Channel				39675	40620	41565	EIRP(W)		
Frequency (MHz)				2498.5	2593	2687.5	L	M	H

5	QPSK	1	0	22.74	22.54	22.42	0.1901	0.1816	0.1766
5	16QAM	1	0	21.70	21.60	21.54	0.1496	0.1462	0.1442

LTE CA_7C

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.70	0.2371
M	QPSK	1	Max	1	0	23.50	0.2265
H	QPSK	1	Max	1	0	23.50	0.2265
L	16QAM	1	Max	1	0	22.54	0.1816
M	16QAM	1	Max	1	0	22.75	0.1905
H	16QAM	1	Max	1	0	22.73	0.1897
L	64QAM	1	Max	1	0	22.49	0.1795
M	64QAM	1	Max	1	0	22.64	0.1858
H	64QAM	1	Max	1	0	22.58	0.1832
L	256QAM	1	Max	1	0	18.24	0.0675
M	256QAM	1	Max	1	0	18.31	0.0685
H	256QAM	1	Max	1	0	18.25	0.0676
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.57	0.2301
M	16QAM	1	Max	1	0	22.54	0.1816
Combination 15MHz+20MHz (75RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.64	0.2339
M	16QAM	1	Max	1	0	22.56	0.1824
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.50	0.2265
M	16QAM	1	Max	1	0	22.51	0.1803
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.64	0.2339
M	16QAM	1	Max	1	0	22.49	0.1795
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.50	0.2265
M	16QAM	1	Max	1	0	22.52	0.1807
Combination 15MHz+10MHz (75RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	23.66	0.2350
M	16QAM	1	Max	1	0	22.72	0.1892

LTE CA_38C

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.84	0.1932
M	QPSK	1	Max	1	0	22.64	0.1845
H	QPSK	1	Max	1	0	22.69	0.1866
L	16QAM	1	Max	1	0	21.72	0.1493
M	16QAM	1	Max	1	0	21.77	0.1510
H	16QAM	1	Max	1	0	21.88	0.1549
L	64QAM	1	Max	1	0	21.65	0.1469
M	64QAM	1	Max	1	0	21.72	0.1493
H	64QAM	1	Max	1	0	21.68	0.1479
L	256QAM	1	Max	1	0	17.41	0.0553
M	256QAM	1	Max	1	0	17.45	0.0558
H	256QAM	1	Max	1	0	17.35	0.0546
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.63	0.1841
H	16QAM	1	Max	1	0	21.37	0.1377

LTE CA_41C

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.88	0.1963
M	QPSK	1	Max	1	0	22.59	0.1837
H	QPSK	1	Max	1	0	22.58	0.1832
L	16QAM	1	Max	1	0	21.70	0.1496
M	16QAM	1	Max	1	0	21.88	0.1560
H	16QAM	1	Max	1	0	21.80	0.1531
L	64QAM	1	Max	1	0	21.54	0.1442
M	64QAM	1	Max	1	0	21.58	0.1455
H	64QAM	1	Max	1	0	21.59	0.1459
L	256QAM	1	Max	1	0	17.33	0.0547
M	256QAM	1	Max	1	0	17.30	0.0543
H	256QAM	1	Max	1	0	17.39	0.0555
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.59	0.1837
M	16QAM	1	Max	1	0	21.32	0.1371
Combination 15MHz+20MHz (75RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		

L	QPSK	1	Max	1	0	22.44	0.1774
M	16QAM	1	Max	1	0	21.34	0.1377
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.61	0.1845
M	16QAM	1	Max	1	0	21.31	0.1368
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.64	0.1858
M	16QAM	1	Max	1	0	21.29	0.1361
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.55	0.1820
M	16QAM	1	Max	1	0	21.34	0.1377
Combination 15MHz+10MHz (75RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.58	0.1832
M	16QAM	1	Max	1	0	21.31	0.1368
Combination 10MHz+15MHz (50RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.59	0.1837
M	16QAM	1	Max	1	0	21.37	0.1387
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.56	0.1824
M	16QAM	1	Max	1	0	21.37	0.1387
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	22.59	0.1837
M	16QAM	1	Max	1	0	21.32	0.1371

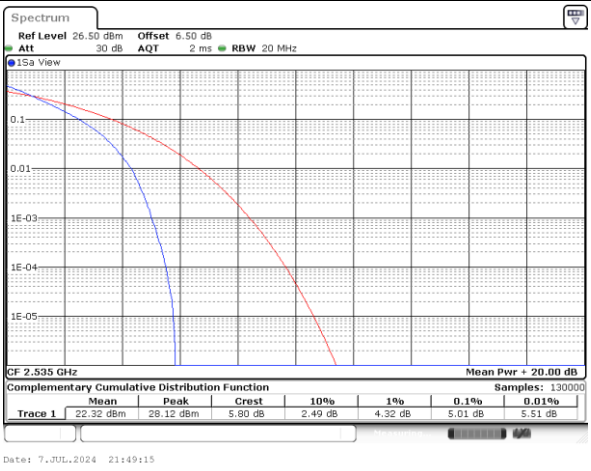
LTE Band 7

Peak-to-Average Ratio

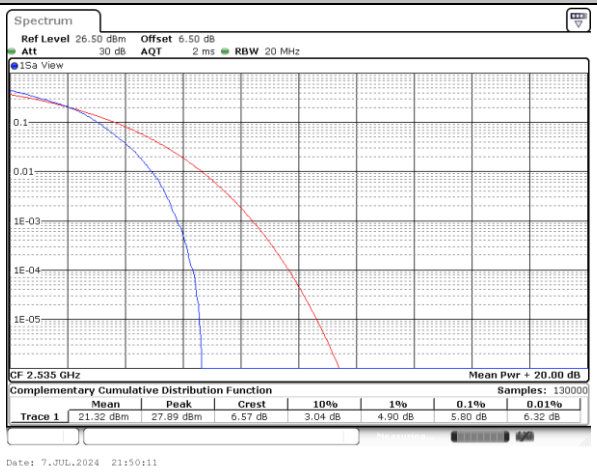
Mode	LTE Band 7 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.01	5.80	6.61	6.70	PASS

LTE Band 7 / 20MHz

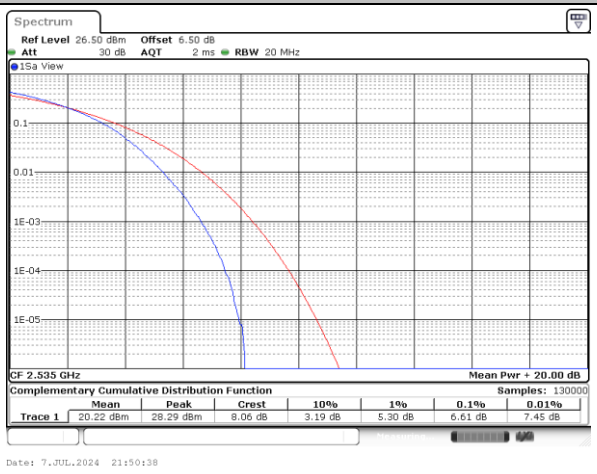
Middle Channel / Full RB/ QPSK



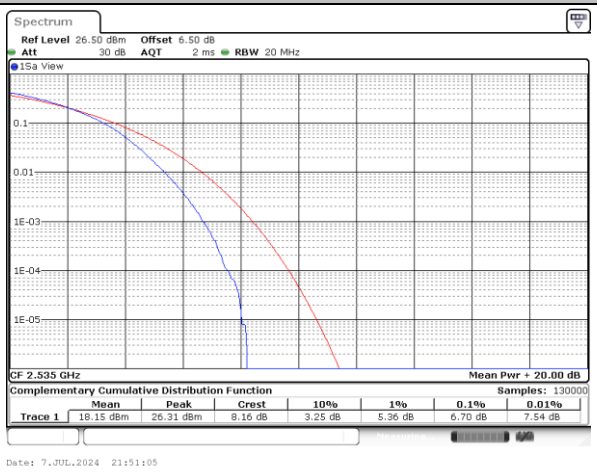
Middle Channel / Full RB/ 16QAM



Middle Channel / Full RB/ 64QAM



Middle Channel / Full RB/ 256QAM

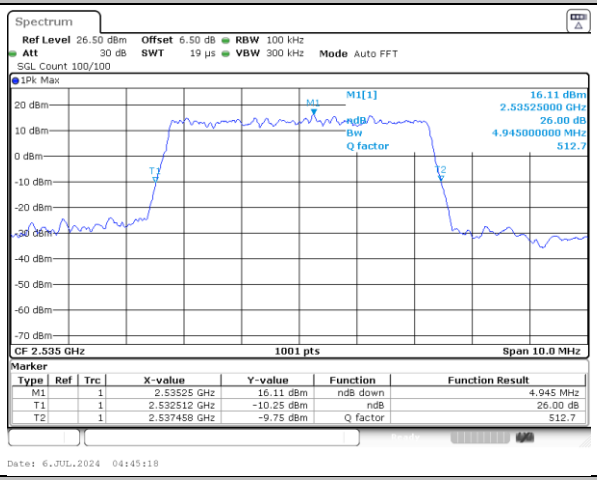


26dB Bandwidth

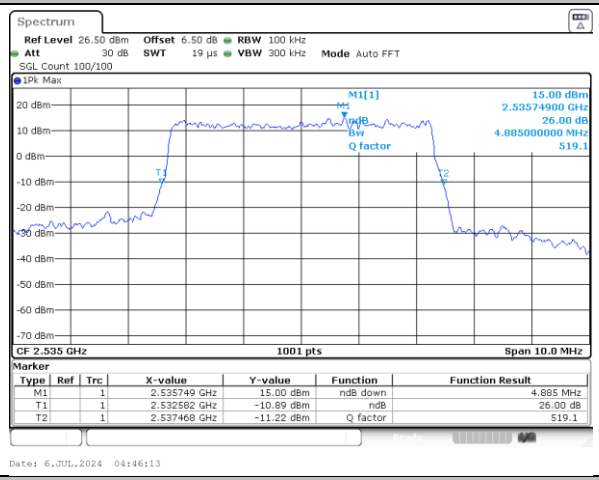
Mode	LTE Band 7 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.95	4.89	9.91	9.89	14.48	14.60	18.90	19.18

LTE Band 7

Middle Channel / 5MHz / QPSK

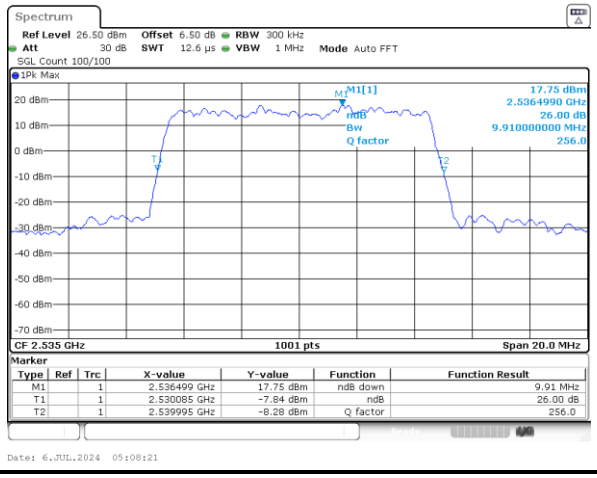


Middle Channel / 5MHz / 16QAM

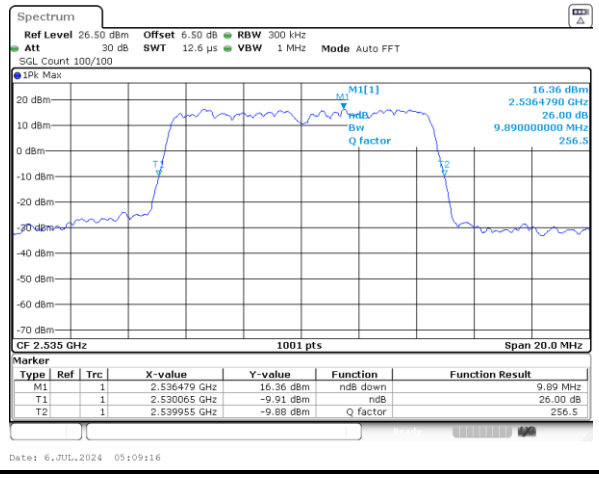


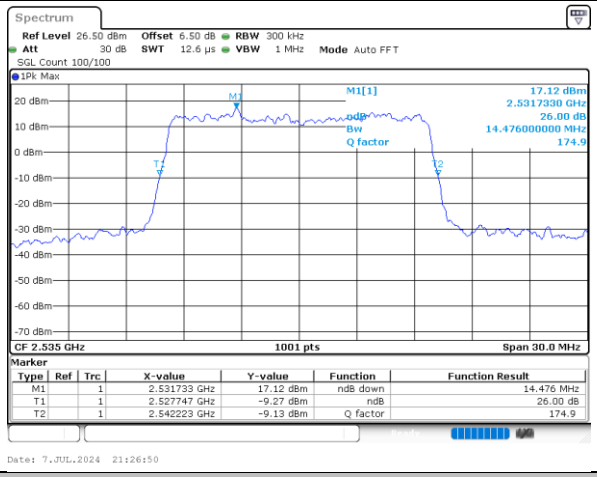
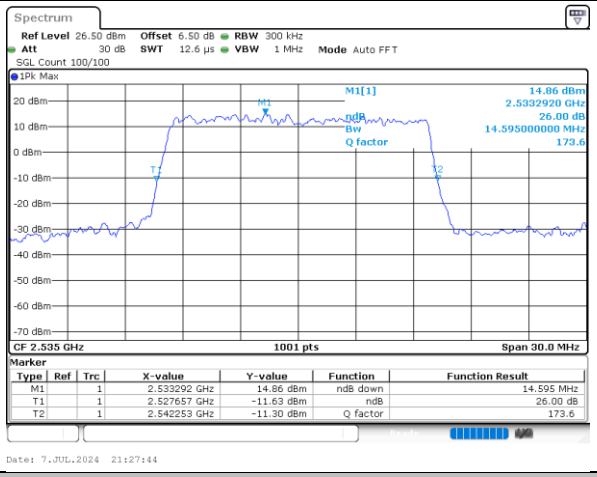
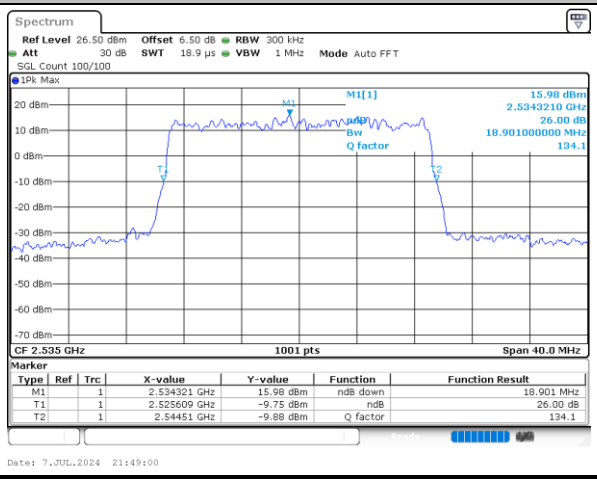
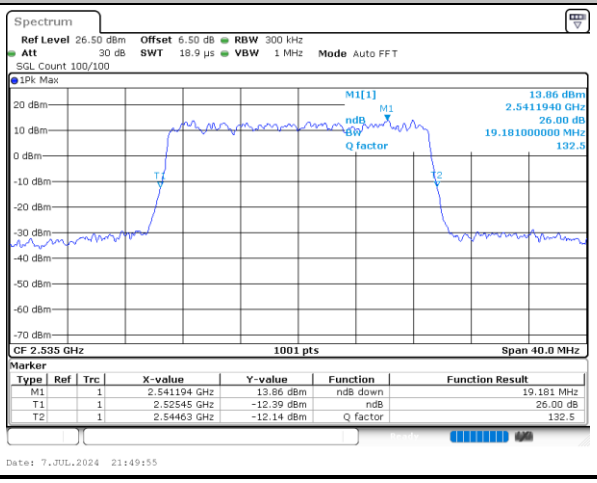
LTE Band 7

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM



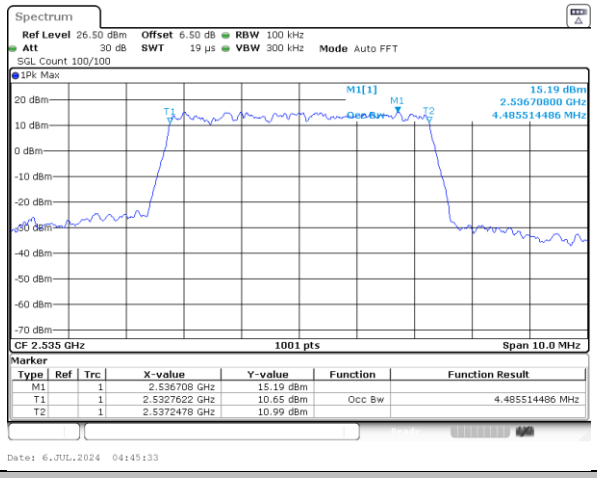
LTE Band 7	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
	
LTE Band 7	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	

Occupied Bandwidth

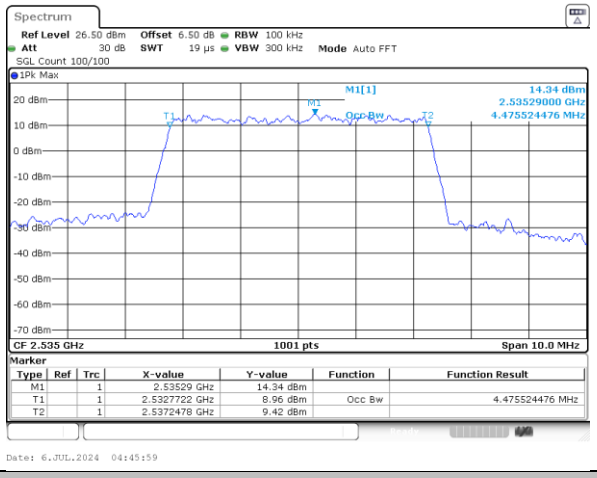
Mode	LTE Band 7 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.48	8.99	9.03	13.37	13.40	17.82	17.86

LTE Band 7

Middle Channel / 5MHz / QPSK

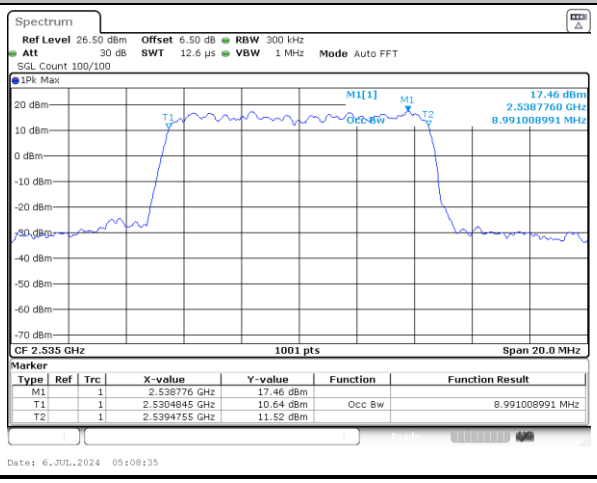


Middle Channel / 5MHz / 16QAM

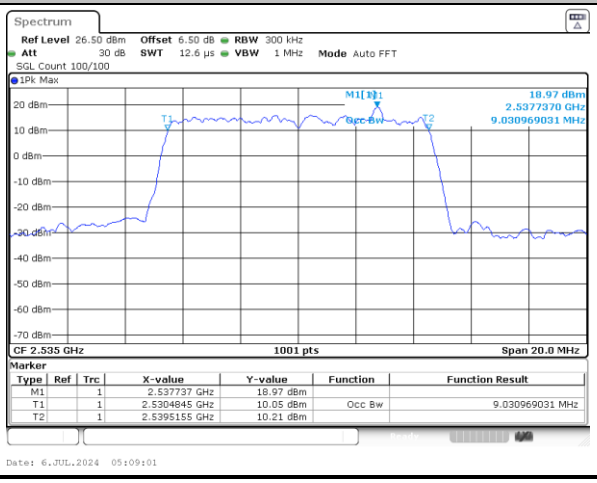


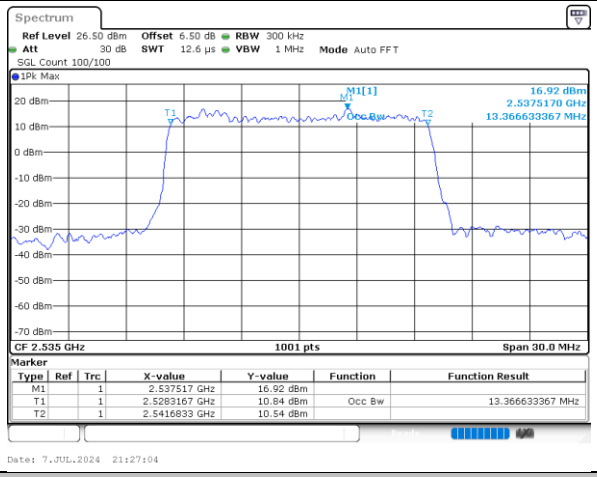
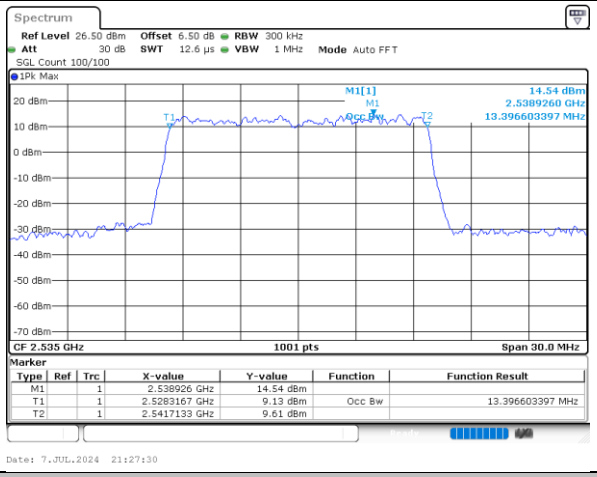
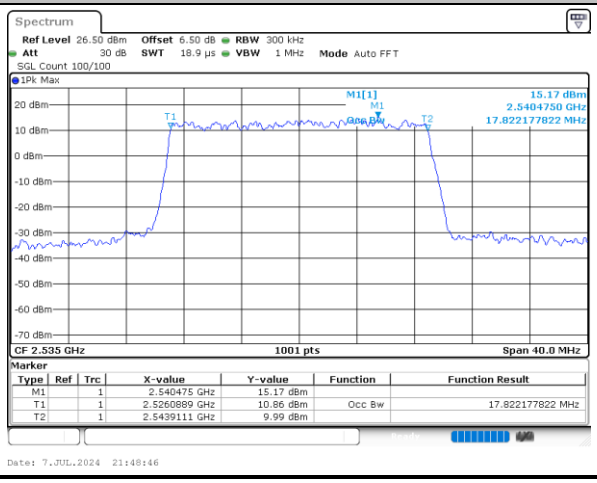
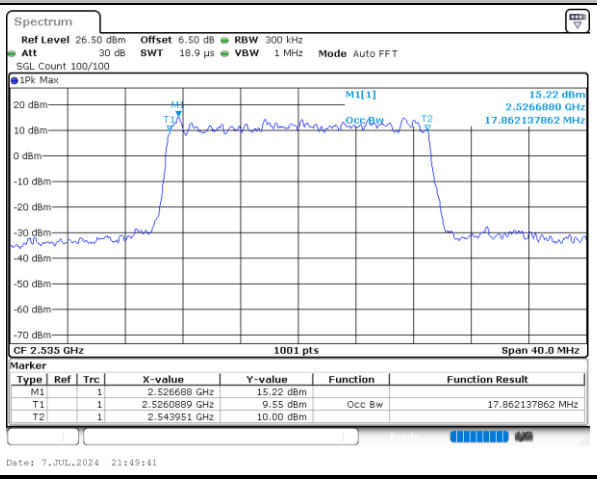
LTE Band 7

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

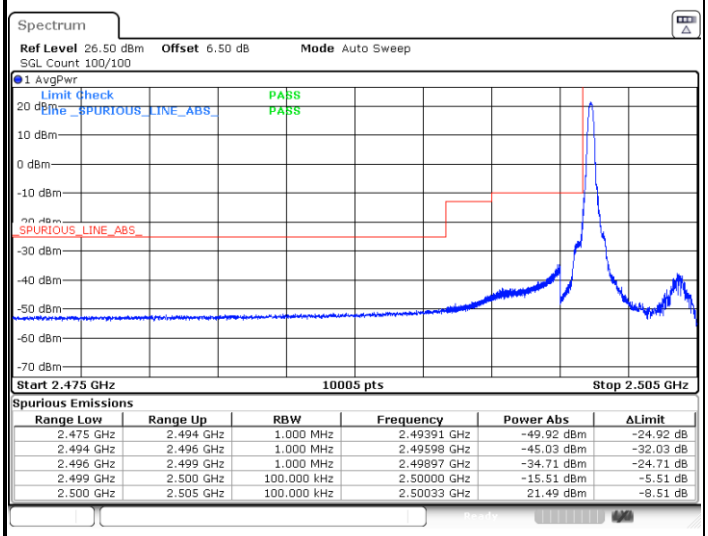


LTE Band 7	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
	
LTE Band 7	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	

Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB

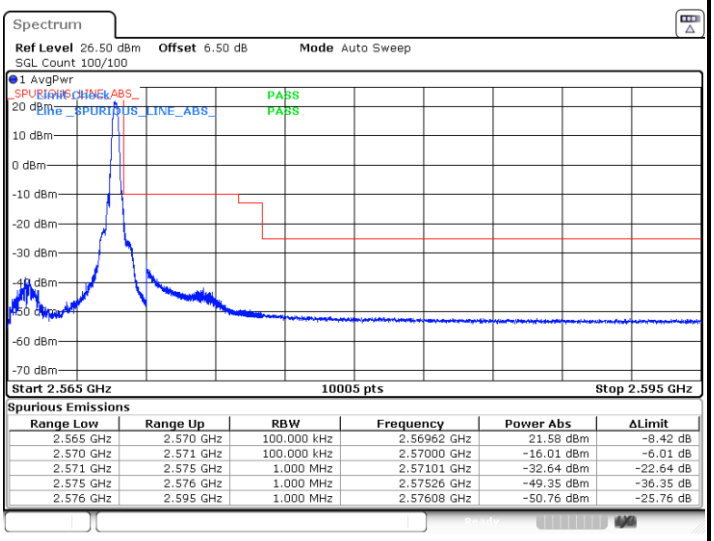


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49391 GHz	-49.92 dBm	-24.92 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49598 GHz	-45.03 dBm	-32.03 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49897 GHz	-34.71 dBm	-24.71 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-15.51 dBm	-5.51 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50033 GHz	21.49 dBm	-8.51 dB

Date: 6.JUL.2024 04:38:36

Highest Band Edge / 1 RB

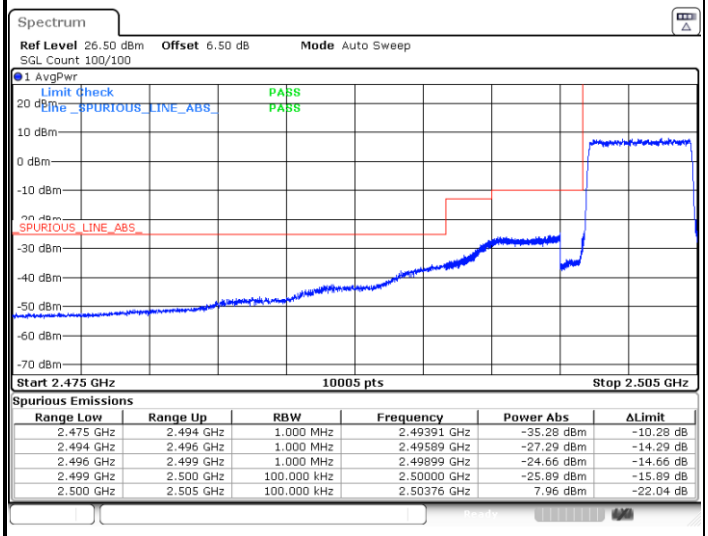


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56962 GHz	21.58 dBm	-8.42 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-16.01 dBm	-6.01 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57101 GHz	-32.64 dBm	-22.64 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57526 GHz	-49.35 dBm	-36.35 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57608 GHz	-50.76 dBm	-25.76 dB

Date: 6.JUL.2024 04:48:46

Lowest Band Edge / Full RB

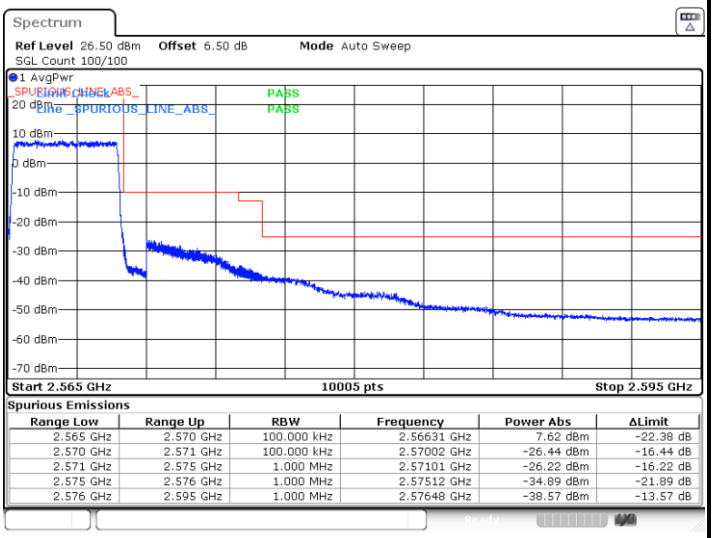


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49391 GHz	-35.28 dBm	-10.28 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49589 GHz	-27.29 dBm	-14.29 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-24.66 dBm	-14.66 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-25.89 dBm	-15.89 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50376 GHz	7.96 dBm	-22.04 dB

Date: 6.JUL.2024 04:34:29

Highest Band Edge / Full RB



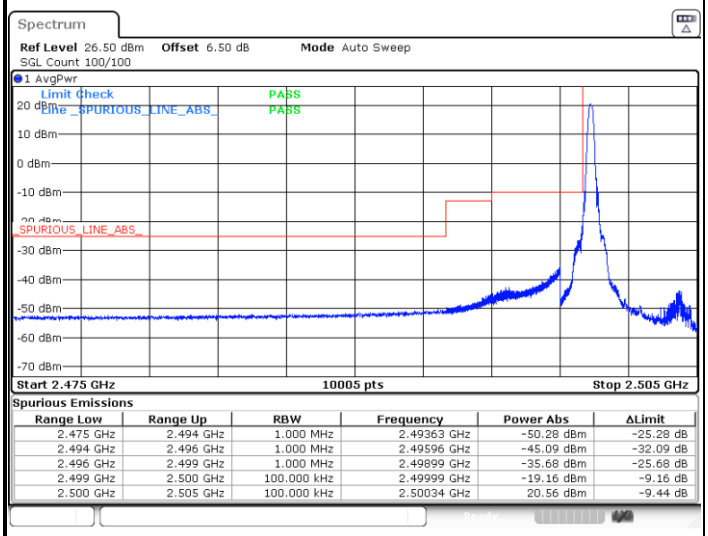
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56631 GHz	7.62 dBm	-22.38 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57002 GHz	-26.44 dBm	-16.44 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57101 GHz	-26.22 dBm	-16.22 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57512 GHz	-34.89 dBm	-21.89 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57648 GHz	-38.57 dBm	-13.57 dB

Date: 6.JUL.2024 04:52:50

LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB

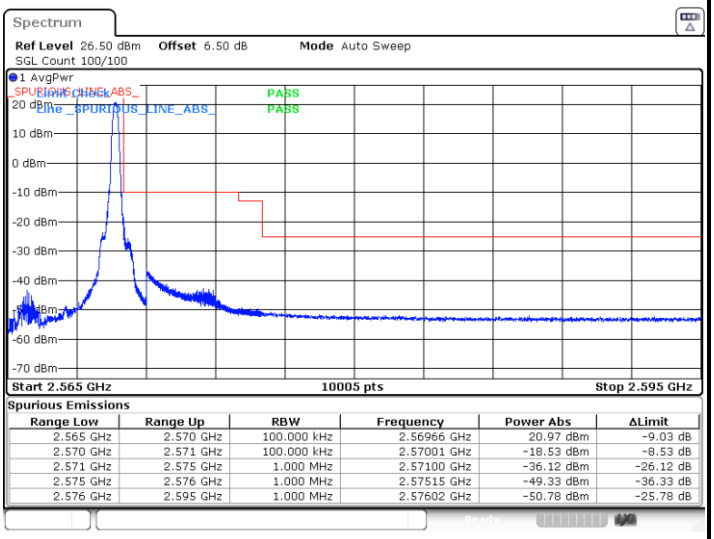


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49363 GHz	-50.28 dBm	-25.28 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49596 GHz	-45.09 dBm	-32.09 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-35.68 dBm	-25.68 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.49999 GHz	-19.16 dBm	-9.16 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50034 GHz	20.56 dBm	-9.44 dB

Date: 6.JUL.2024 04:39:35

Highest Band Edge / 1 RB

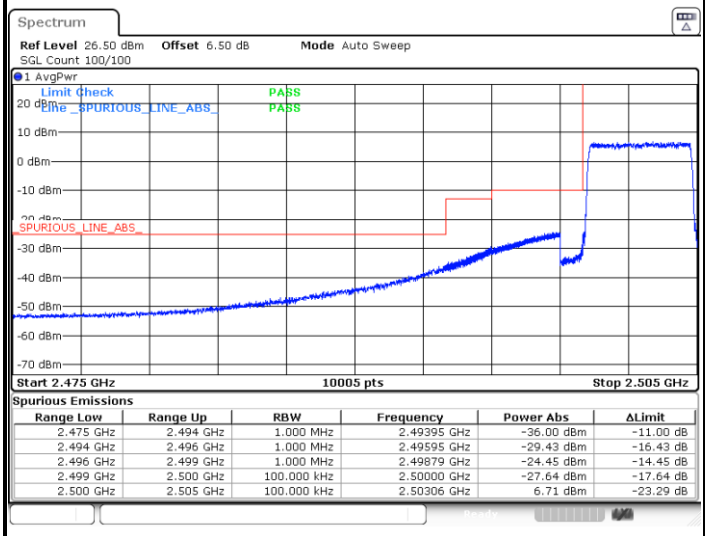


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56966 GHz	20.97 dBm	-9.03 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-18.53 dBm	-8.53 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-36.12 dBm	-26.12 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57515 GHz	-49.33 dBm	-36.33 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57602 GHz	-50.78 dBm	-25.78 dB

Date: 6.JUL.2024 04:49:45

Lowest Band Edge / Full RB

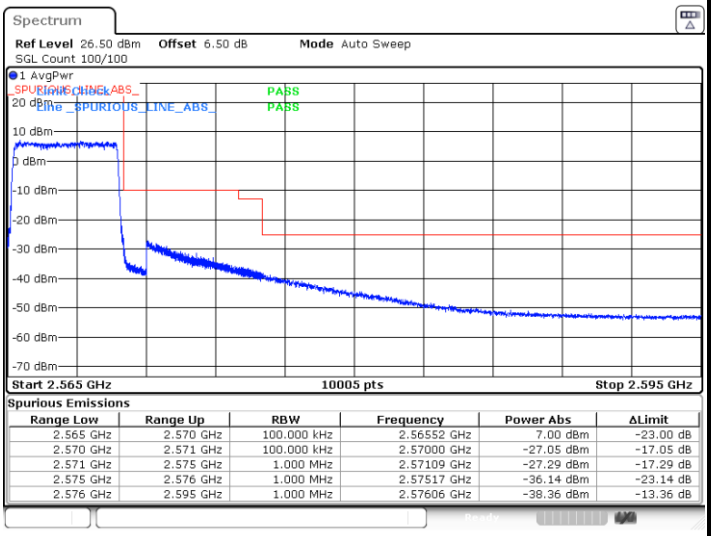


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49395 GHz	-36.00 dBm	-11.00 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49595 GHz	-29.43 dBm	-16.43 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49879 GHz	-24.45 dBm	-14.45 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-27.64 dBm	-17.64 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50306 GHz	6.71 dBm	-23.29 dB

Date: 6.JUL.2024 04:35:31

Highest Band Edge / Full RB



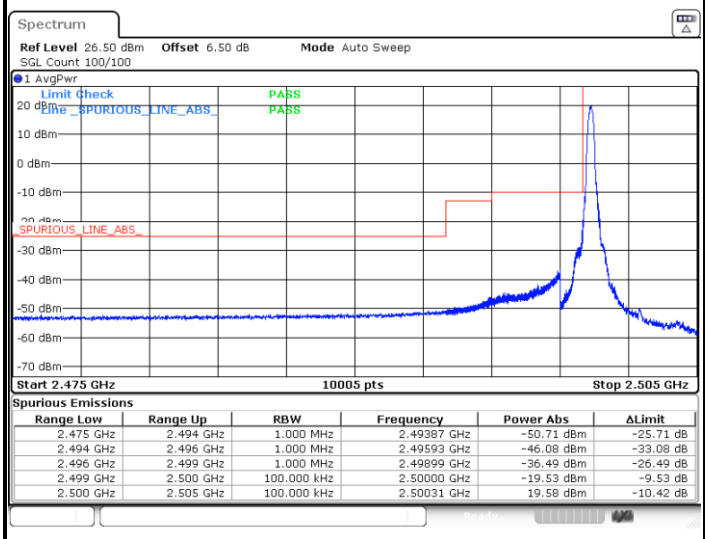
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56552 GHz	7.00 dBm	-23.00 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-27.05 dBm	-17.05 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57109 GHz	-27.29 dBm	-17.29 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57517 GHz	-36.14 dBm	-23.14 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57606 GHz	-38.36 dBm	-13.36 dB

Date: 6.JUL.2024 04:53:51

LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB

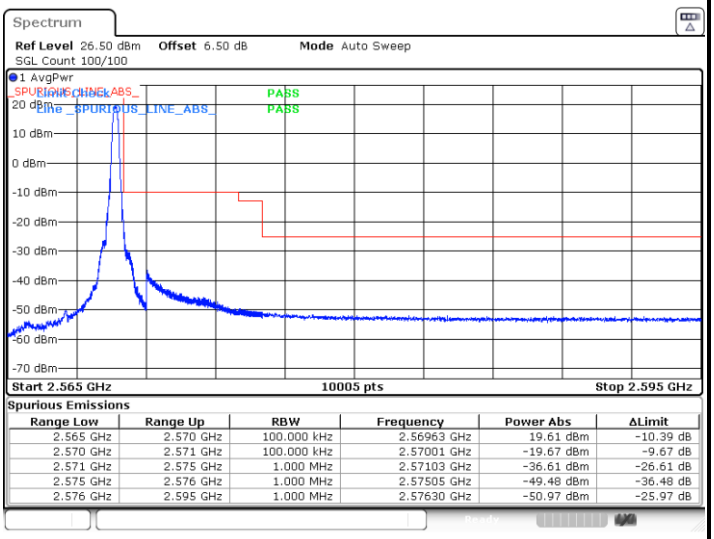


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49387 GHz	-50.71 dBm	-25.71 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49593 GHz	-46.08 dBm	-33.08 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-36.49 dBm	-26.49 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-19.53 dBm	-9.53 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50031 GHz	19.58 dBm	-10.42 dB

Date: 6.JUL.2024 04:40:37

Highest Band Edge / 1 RB

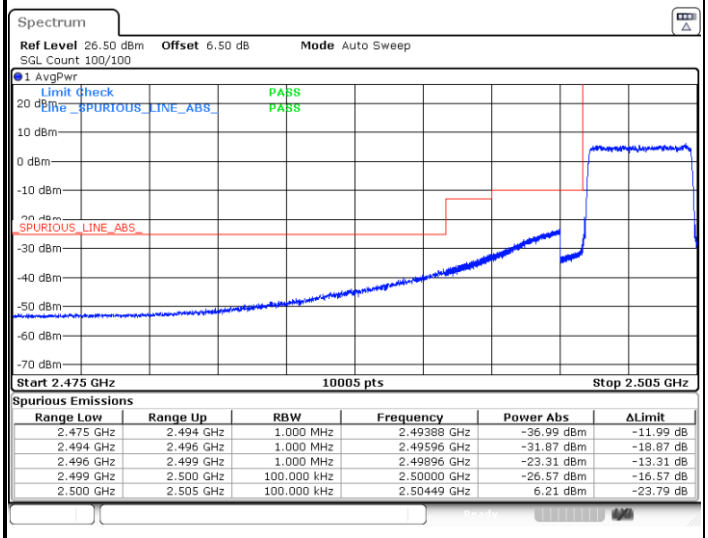


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56963 GHz	19.61 dBm	-10.39 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57001 GHz	-19.67 dBm	-9.67 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57103 GHz	-36.61 dBm	-26.61 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57505 GHz	-49.48 dBm	-36.48 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57630 GHz	-50.97 dBm	-25.97 dB

Date: 6.JUL.2024 04:50:47

Lowest Band Edge / Full RB

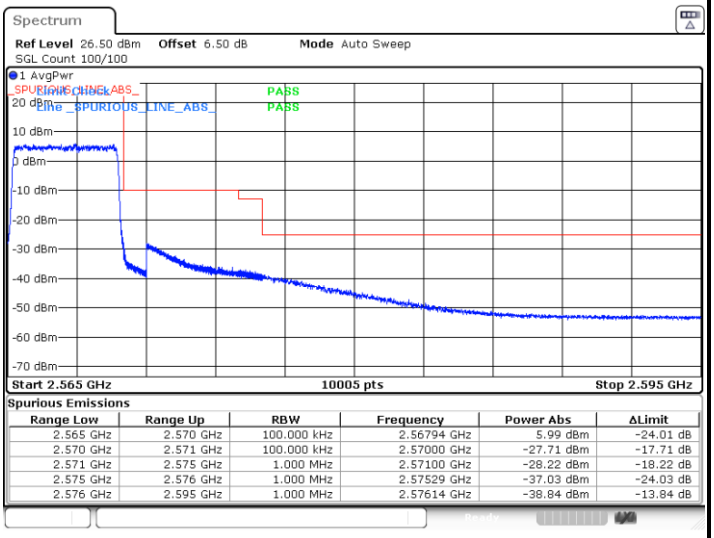


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49388 GHz	-36.99 dBm	-11.99 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49596 GHz	-31.87 dBm	-18.87 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-23.31 dBm	-13.31 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-26.57 dBm	-16.57 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50449 GHz	6.21 dBm	-23.79 dB

Date: 6.JUL.2024 04:36:32

Highest Band Edge / Full RB



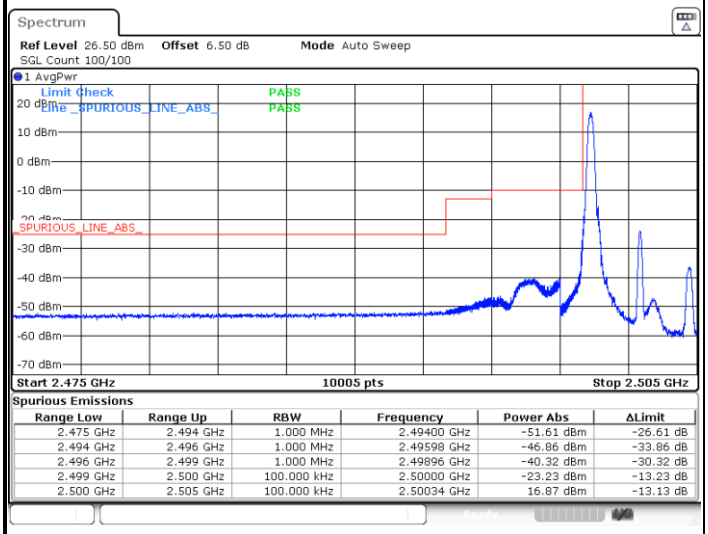
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56794 GHz	5.99 dBm	-24.01 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-27.71 dBm	-17.71 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-28.22 dBm	-18.22 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57529 GHz	-37.03 dBm	-24.03 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57614 GHz	-38.84 dBm	-13.84 dB

Date: 6.JUL.2024 04:54:53

LTE Band 7 / 5MHz / 256QAM

Lowest Band Edge / 1RB

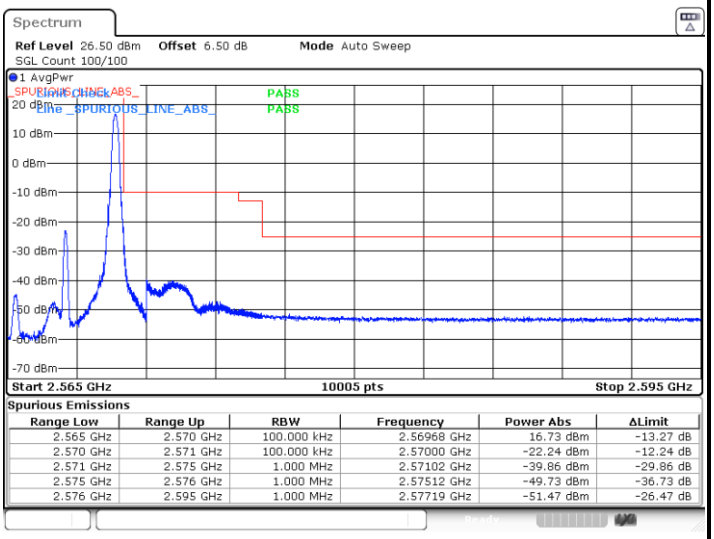


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49400 GHz	-51.61 dBm	-26.61 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49598 GHz	-46.86 dBm	-33.86 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-40.32 dBm	-30.32 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-23.23 dBm	-13.23 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50034 GHz	16.87 dBm	-13.13 dB

Date: 6.JUL.2024 04:41:38

Highest Band Edge / 1 RB

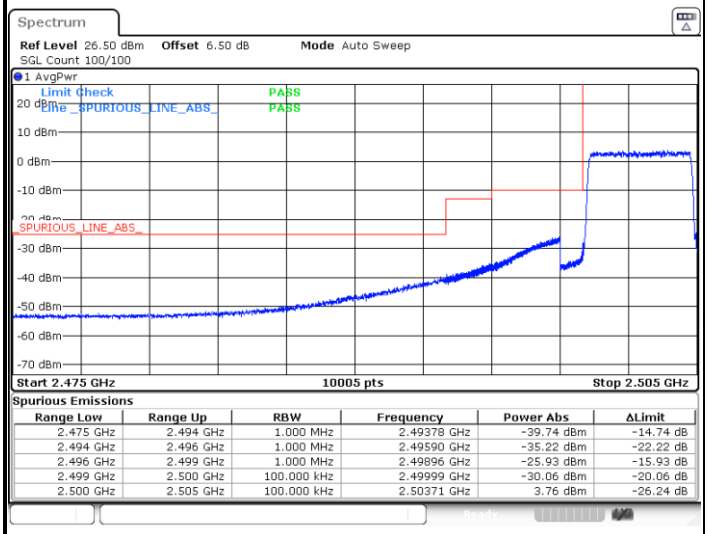


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56968 GHz	16.73 dBm	-13.27 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-22.24 dBm	-12.24 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57102 GHz	-39.86 dBm	-29.86 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57512 GHz	-49.73 dBm	-36.73 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57719 GHz	-51.47 dBm	-26.47 dB

Date: 6.JUL.2024 04:51:48

Lowest Band Edge / Full RB

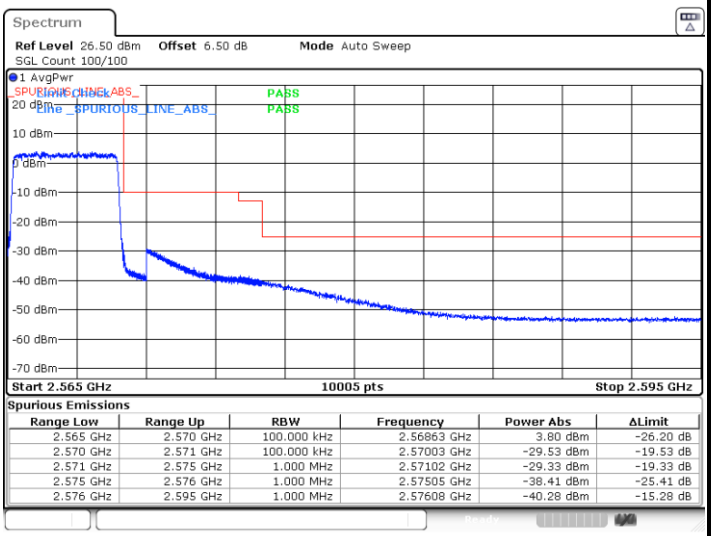


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49378 GHz	-39.74 dBm	-14.74 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49590 GHz	-35.22 dBm	-22.22 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-25.93 dBm	-15.93 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.49999 GHz	-30.06 dBm	-20.06 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50371 GHz	3.76 dBm	-26.24 dB

Date: 6.JUL.2024 04:37:34

Highest Band Edge / Full RB



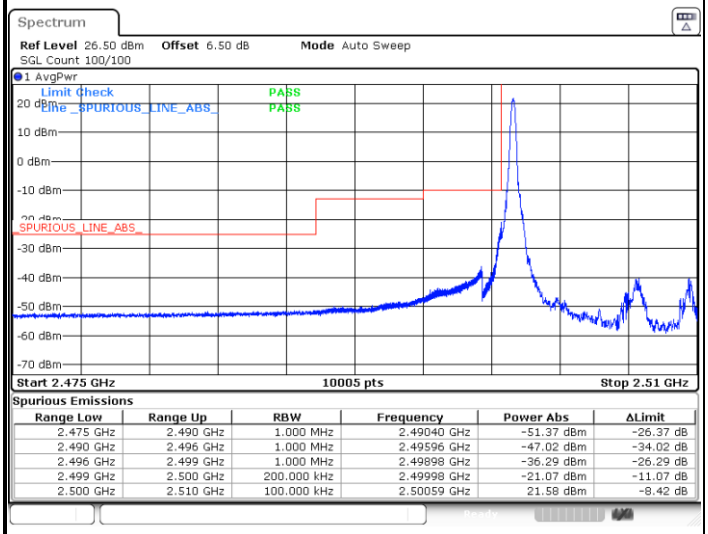
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56863 GHz	3.80 dBm	-26.20 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57003 GHz	-29.53 dBm	-19.53 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57102 GHz	-29.33 dBm	-19.33 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57505 GHz	-38.41 dBm	-25.41 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57608 GHz	-40.28 dBm	-15.28 dB

Date: 6.JUL.2024 04:55:54

LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

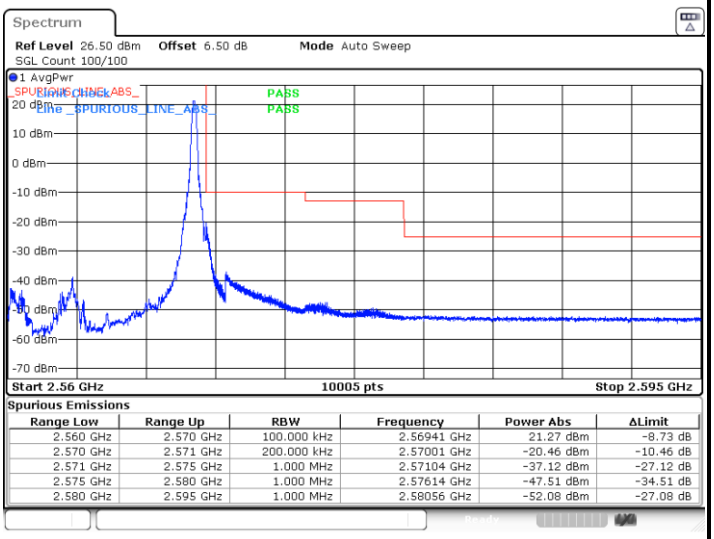


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49040 GHz	-51.37 dBm	-26.37 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49596 GHz	-47.02 dBm	-34.02 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49898 GHz	-36.29 dBm	-26.29 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49998 GHz	-21.07 dBm	-11.07 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50059 GHz	21.58 dBm	-8.42 dB

Date: 6.JUL.2024 05:01:40

Highest Band Edge / 1 RB

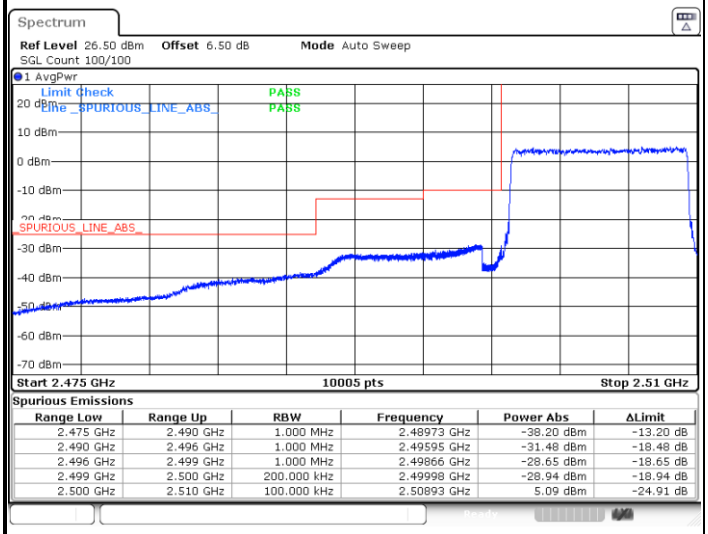


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56941 GHz	21.27 dBm	-8.73 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	-20.46 dBm	-10.46 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57104 GHz	-37.12 dBm	-27.12 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57614 GHz	-47.51 dBm	-34.51 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58056 GHz	-52.08 dBm	-27.08 dB

Date: 6.JUL.2024 05:11:49

Lowest Band Edge / Full RB

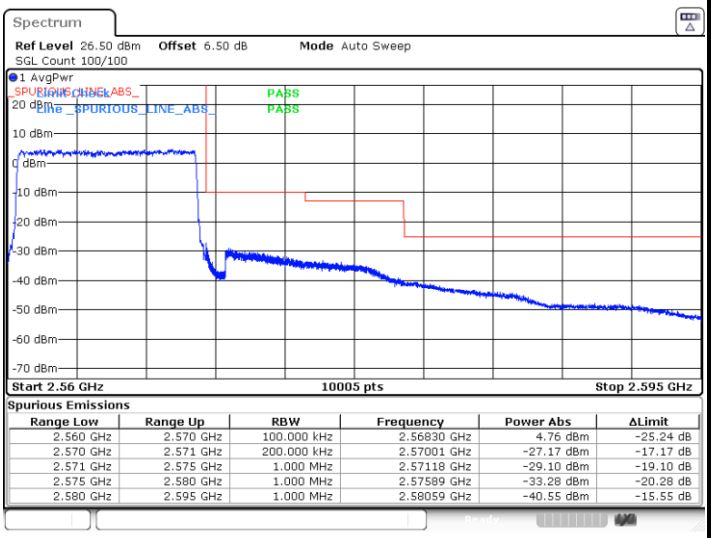


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48973 GHz	-38.20 dBm	-13.20 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49595 GHz	-31.48 dBm	-18.48 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49866 GHz	-28.65 dBm	-18.65 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49998 GHz	-28.94 dBm	-18.94 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50893 GHz	5.09 dBm	-24.91 dB

Date: 6.JUL.2024 04:57:36

Highest Band Edge / Full RB



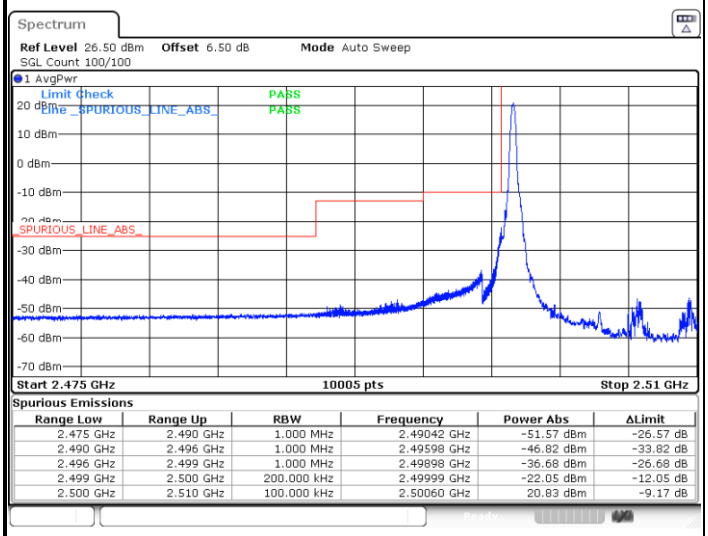
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56830 GHz	4.76 dBm	-25.24 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	-27.17 dBm	-17.17 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57118 GHz	-29.10 dBm	-19.10 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57589 GHz	-33.28 dBm	-20.28 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58059 GHz	-40.55 dBm	-15.55 dB

Date: 6.JUL.2024 05:15:51

LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

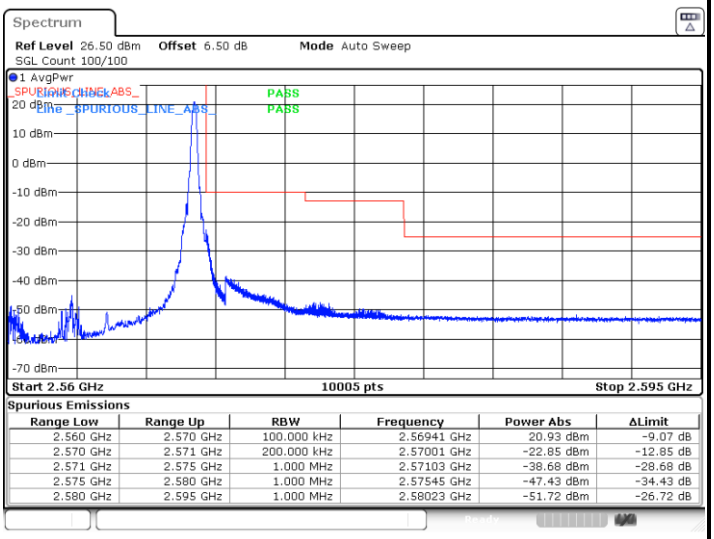


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49042 GHz	-51.57 dBm	-26.57 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49598 GHz	-46.82 dBm	-33.82 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49898 GHz	-36.68 dBm	-26.68 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49999 GHz	-22.05 dBm	-12.05 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50060 GHz	20.83 dBm	-9.17 dB

Date: 6.JUL.2024 05:02:38

Highest Band Edge / 1 RB

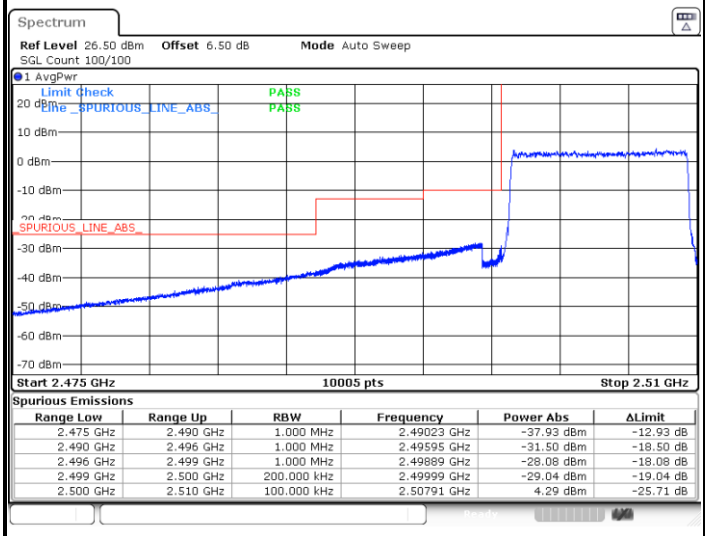


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56941 GHz	20.93 dBm	-9.07 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	-22.85 dBm	-12.85 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57103 GHz	-38.68 dBm	-28.68 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57545 GHz	-47.43 dBm	-34.43 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58023 GHz	-51.72 dBm	-26.72 dB

Date: 6.JUL.2024 05:12:47

Lowest Band Edge / Full RB

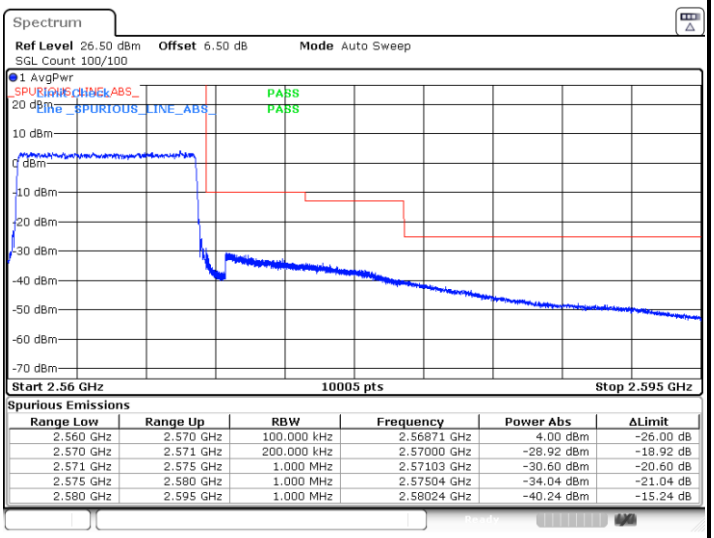


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49023 GHz	-37.93 dBm	-12.93 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49595 GHz	-31.50 dBm	-18.50 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49889 GHz	-28.08 dBm	-18.08 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49999 GHz	-29.04 dBm	-19.04 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50791 GHz	4.29 dBm	-25.71 dB

Date: 6.JUL.2024 04:58:37

Highest Band Edge / Full RB



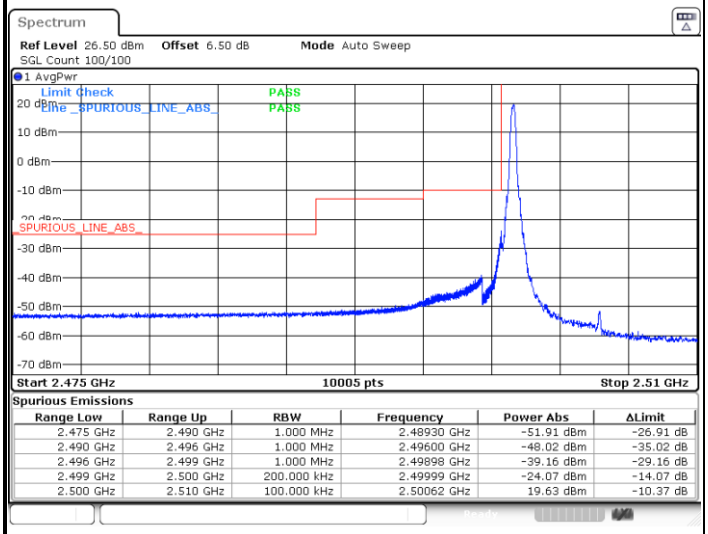
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56871 GHz	4.00 dBm	-26.00 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-28.92 dBm	-18.92 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57103 GHz	-30.60 dBm	-20.60 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57504 GHz	-34.04 dBm	-21.04 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58024 GHz	-40.24 dBm	-15.24 dB

Date: 6.JUL.2024 05:16:52

LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

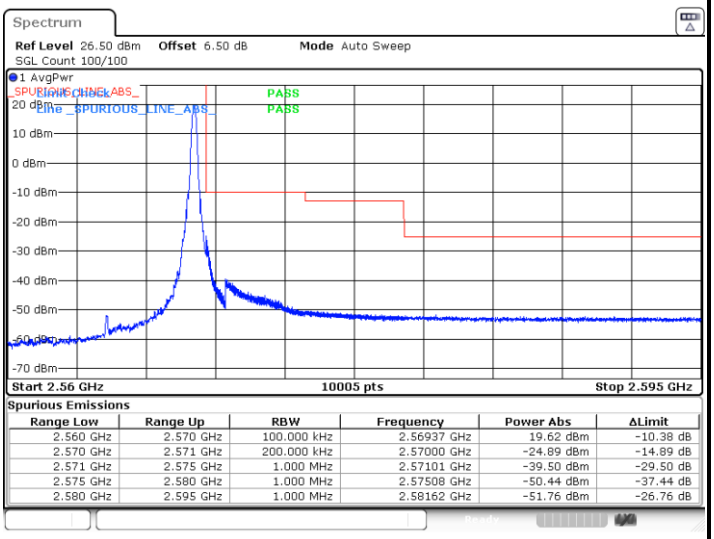


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48930 GHz	-51.91 dBm	-26.91 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49600 GHz	-48.02 dBm	-35.02 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49898 GHz	-39.16 dBm	-29.16 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49999 GHz	-24.07 dBm	-14.07 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50062 GHz	19.63 dBm	-10.37 dB

Date: 6.JUL.2024 05:03:39

Highest Band Edge / 1 RB

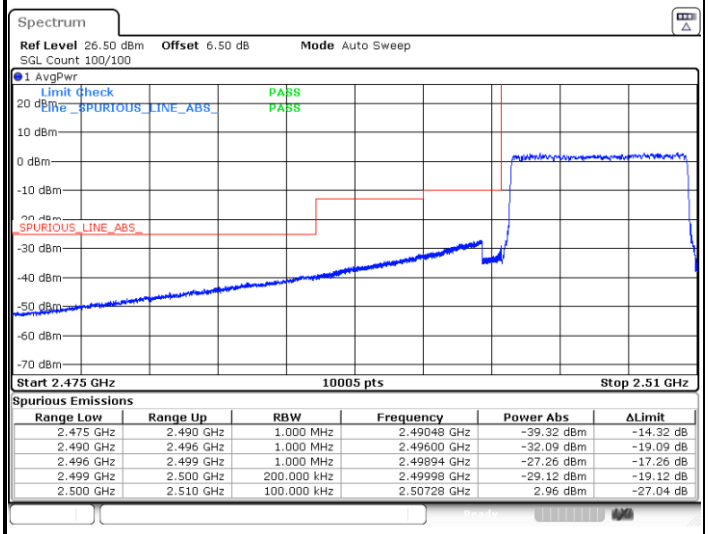


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56937 GHz	19.62 dBm	-10.38 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-24.89 dBm	-14.89 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57101 GHz	-39.50 dBm	-29.50 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57508 GHz	-50.44 dBm	-37.44 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58162 GHz	-51.76 dBm	-26.76 dB

Date: 6.JUL.2024 05:13:48

Lowest Band Edge / Full RB

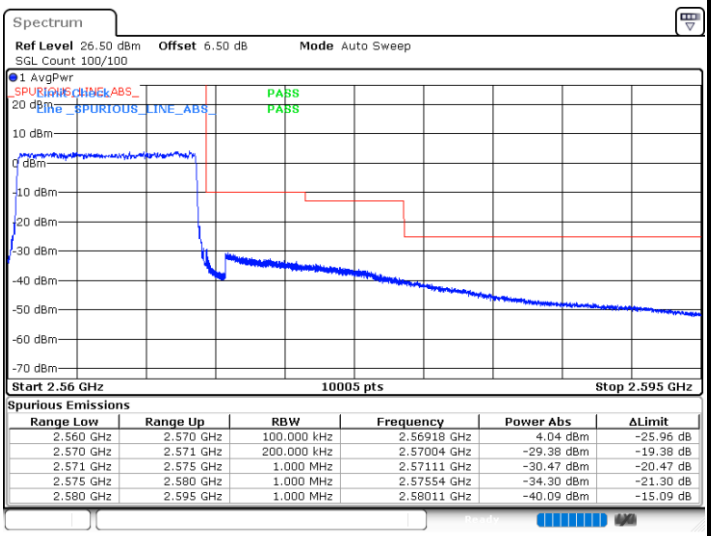


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49048 GHz	-39.32 dBm	-14.32 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49600 GHz	-32.09 dBm	-19.09 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49894 GHz	-27.26 dBm	-17.26 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49998 GHz	-29.12 dBm	-19.12 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50728 GHz	2.96 dBm	-27.04 dB

Date: 6.JUL.2024 04:59:38

Highest Band Edge / Full RB



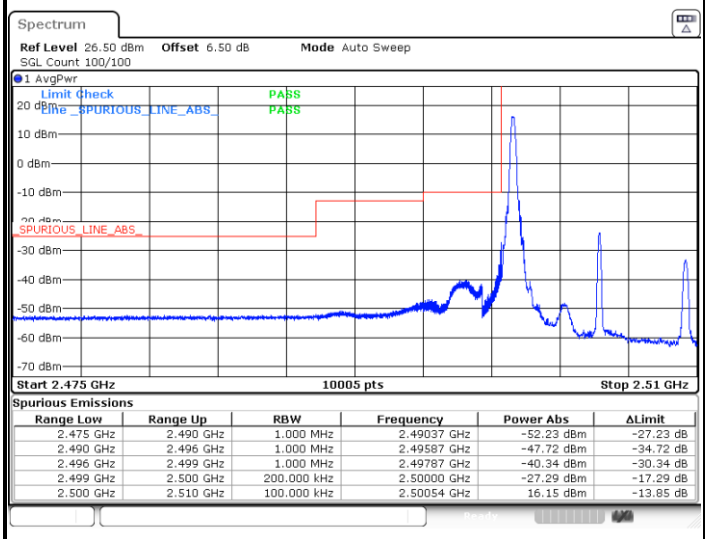
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56918 GHz	4.04 dBm	-25.96 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57004 GHz	-29.38 dBm	-19.38 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57111 GHz	-30.47 dBm	-20.47 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57554 GHz	-34.30 dBm	-21.30 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58011 GHz	-40.09 dBm	-15.09 dB

Date: 7.JUL.2024 21:13:57

LTE Band 7 / 10MHz / 256QAM

Lowest Band Edge / 1 RB

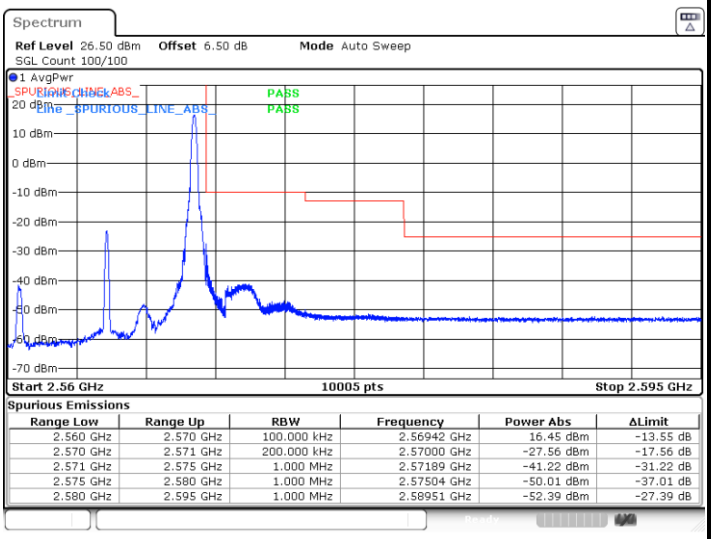


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49037 GHz	-52.23 dBm	-27.23 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49587 GHz	-47.72 dBm	-34.72 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49787 GHz	-40.34 dBm	-30.34 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-27.29 dBm	-17.29 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50054 GHz	16.15 dBm	-13.85 dB

Date: 6.JUL.2024 05:04:41

Highest Band Edge / 1 RB

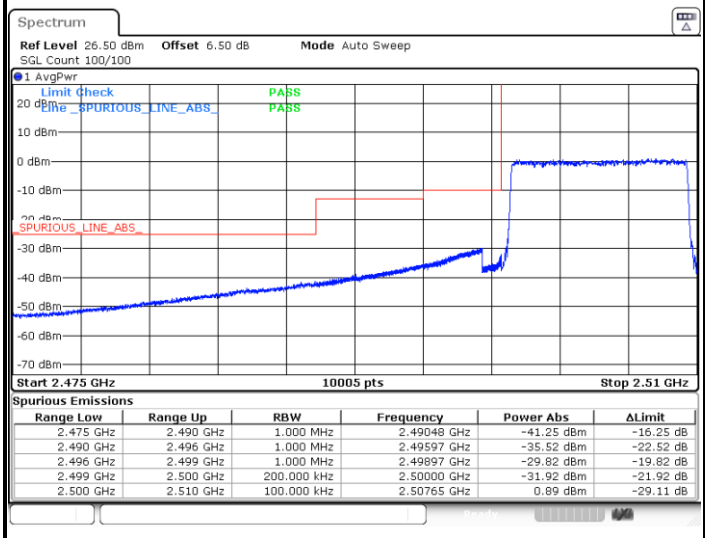


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56942 GHz	16.45 dBm	-13.55 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-27.56 dBm	-17.56 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57189 GHz	-41.22 dBm	-31.22 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57504 GHz	-50.01 dBm	-37.01 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58951 GHz	-52.39 dBm	-27.39 dB

Date: 6.JUL.2024 05:14:50

Lowest Band Edge / Full RB

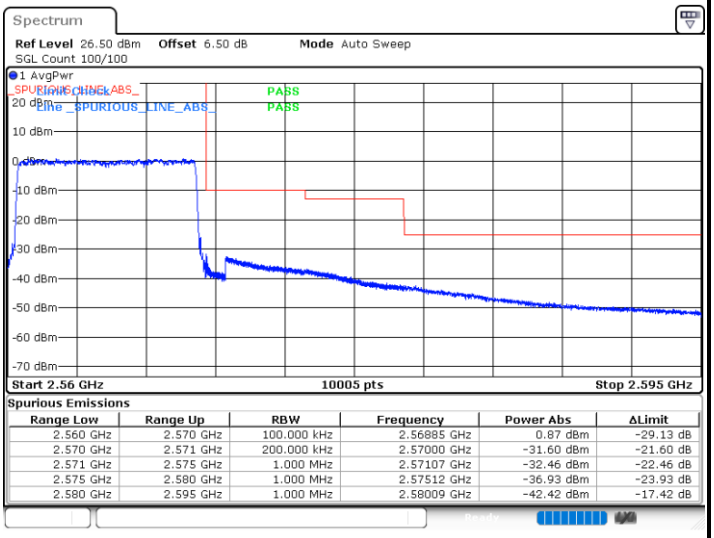


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49048 GHz	-41.25 dBm	-16.25 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49597 GHz	-35.52 dBm	-22.52 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49897 GHz	-29.82 dBm	-19.82 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-31.92 dBm	-21.92 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50765 GHz	0.89 dBm	-29.11 dB

Date: 6.JUL.2024 05:00:39

Highest Band Edge / Full RB



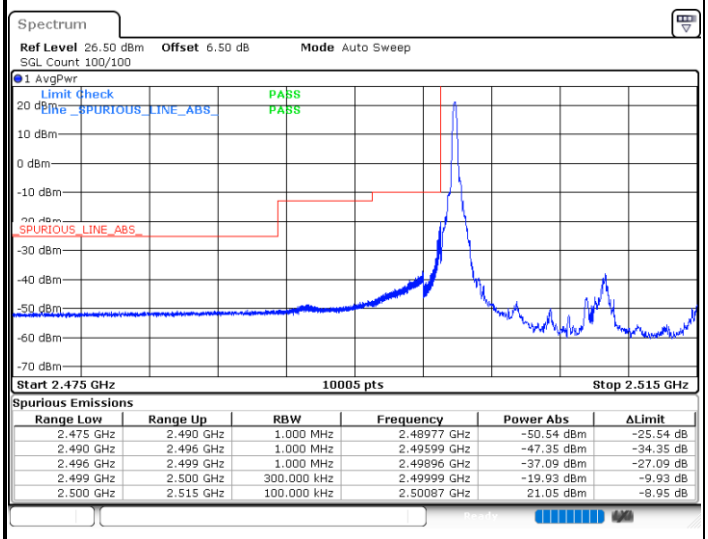
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56885 GHz	0.87 dBm	-29.13 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-31.60 dBm	-21.60 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57107 GHz	-32.46 dBm	-22.46 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57512 GHz	-36.93 dBm	-23.93 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58009 GHz	-42.42 dBm	-17.42 dB

Date: 7.JUL.2024 21:14:53

LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB

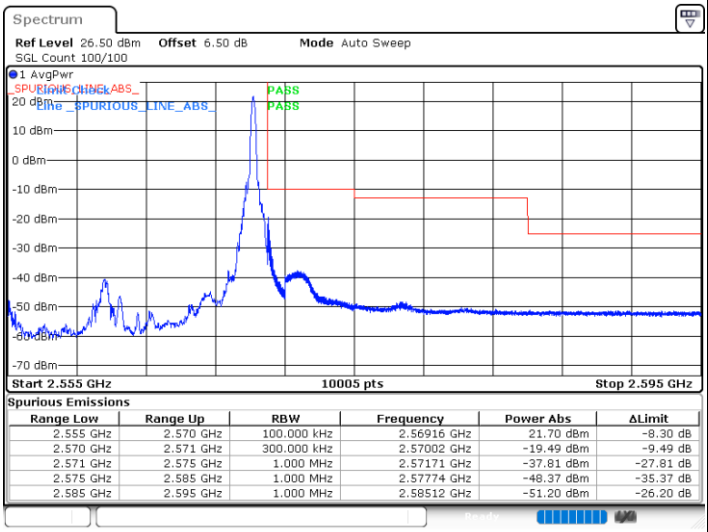


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48977 GHz	-50.54 dBm	-25.54 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49599 GHz	-47.35 dBm	-34.35 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-37.09 dBm	-27.09 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49999 GHz	-19.93 dBm	-9.93 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50087 GHz	21.05 dBm	-8.95 dB

Date: 7.JUL.2024 21:20:22

Highest Band Edge / 1 RB

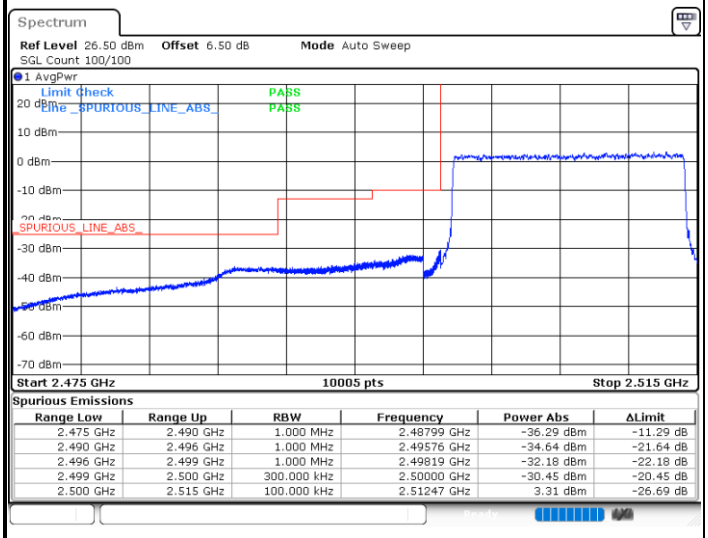


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56916 GHz	21.70 dBm	-8.30 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57002 GHz	-19.49 dBm	-9.49 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57171 GHz	-37.81 dBm	-27.81 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57774 GHz	-48.37 dBm	-35.37 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58512 GHz	-51.20 dBm	-26.20 dB

Date: 7.JUL.2024 21:30:14

Lowest Band Edge / Full RB

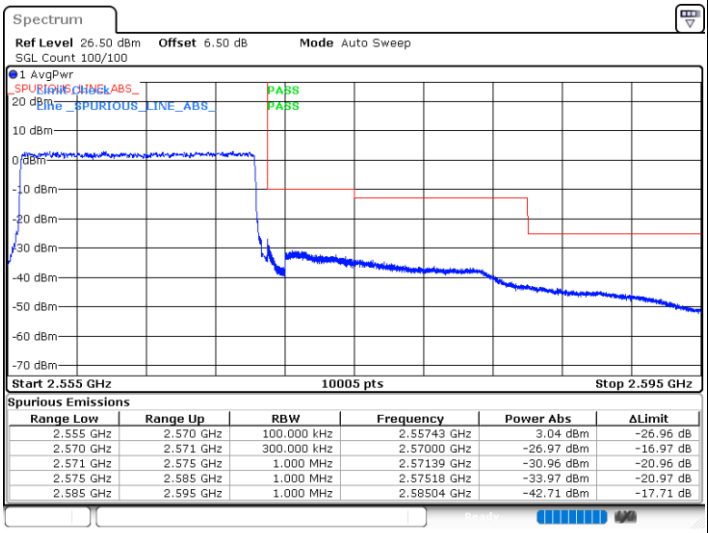


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48799 GHz	-36.29 dBm	-11.29 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49576 GHz	-34.64 dBm	-21.64 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49819 GHz	-32.18 dBm	-22.18 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.50000 GHz	-30.45 dBm	-20.45 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.51247 GHz	3.31 dBm	-26.69 dB

Date: 7.JUL.2024 21:16:33

Highest Band Edge / Full RB



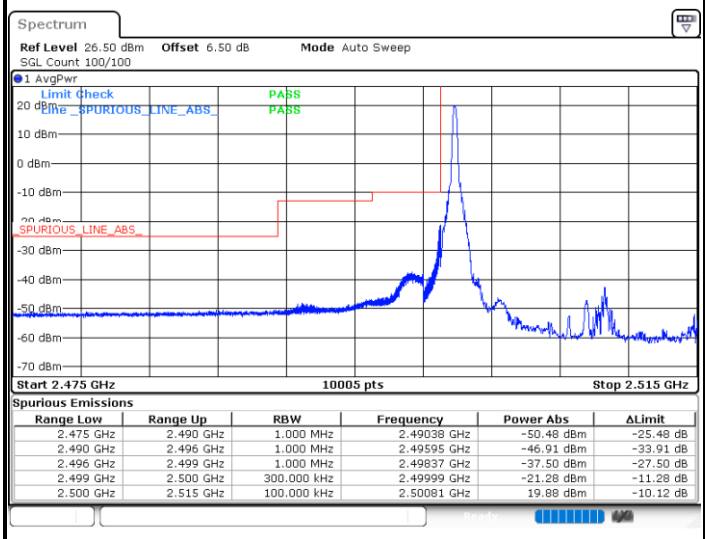
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.55743 GHz	3.04 dBm	-26.96 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57000 GHz	-26.97 dBm	-16.97 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57139 GHz	-30.96 dBm	-20.96 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57518 GHz	-33.97 dBm	-20.97 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58504 GHz	-42.71 dBm	-17.71 dB

Date: 7.JUL.2024 21:34:02

LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB

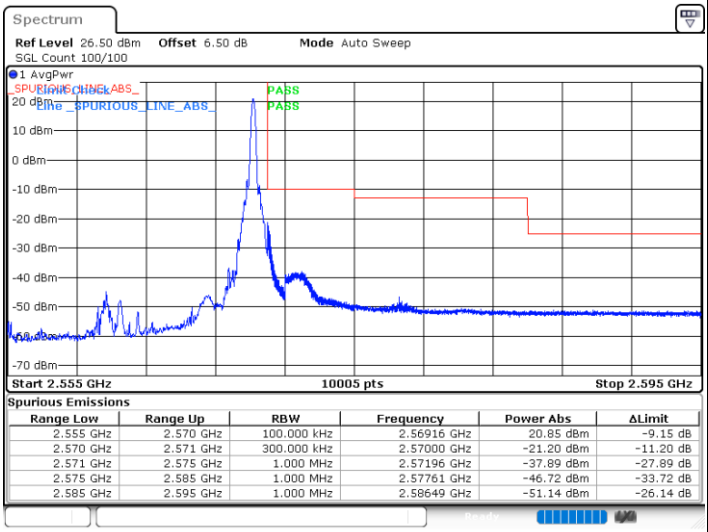


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49038 GHz	-50.48 dBm	-25.48 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49595 GHz	-46.91 dBm	-33.91 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49837 GHz	-37.50 dBm	-27.50 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49999 GHz	-21.28 dBm	-11.28 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50081 GHz	19.88 dBm	-10.12 dB

Date: 7.JUL.2024 21:21:18

Highest Band Edge / 1 RB

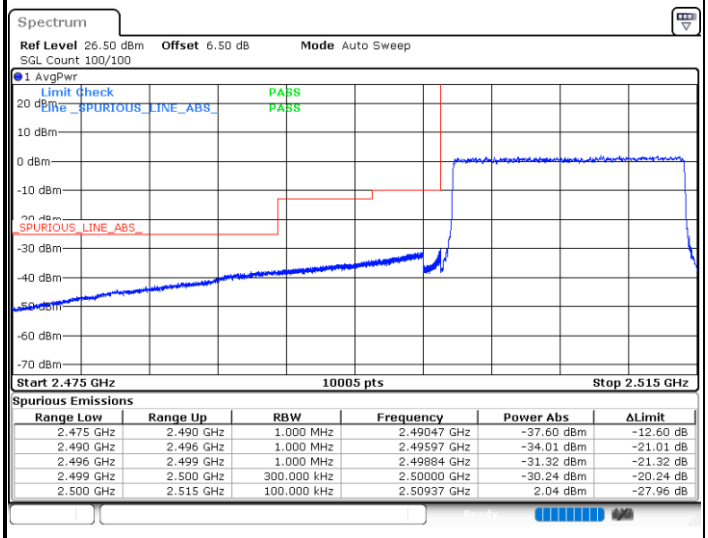


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56916 GHz	20.85 dBm	-9.15 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57000 GHz	-21.20 dBm	-11.20 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57196 GHz	-37.89 dBm	-27.89 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57761 GHz	-46.72 dBm	-33.72 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58649 GHz	-51.14 dBm	-26.14 dB

Date: 7.JUL.2024 21:31:10

Lowest Band Edge / Full RB

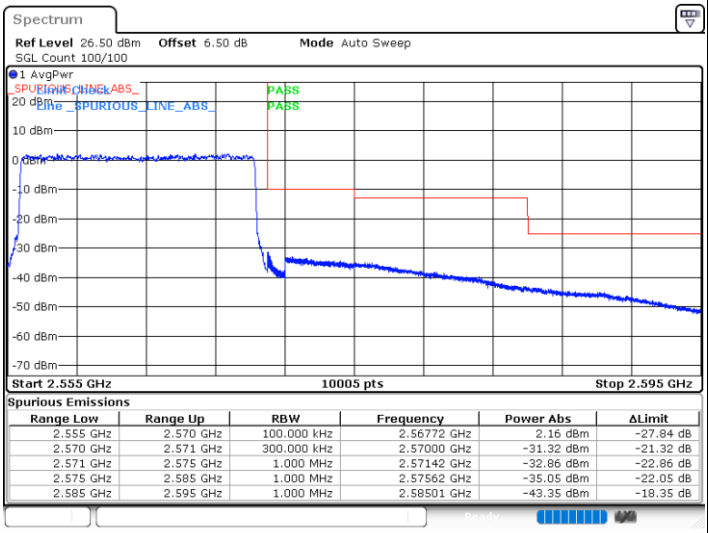


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49047 GHz	-37.60 dBm	-12.60 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49597 GHz	-34.01 dBm	-21.01 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49884 GHz	-31.32 dBm	-21.32 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.50000 GHz	-30.24 dBm	-20.24 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50937 GHz	2.04 dBm	-27.96 dB

Date: 7.JUL.2024 21:17:29

Highest Band Edge / Full RB



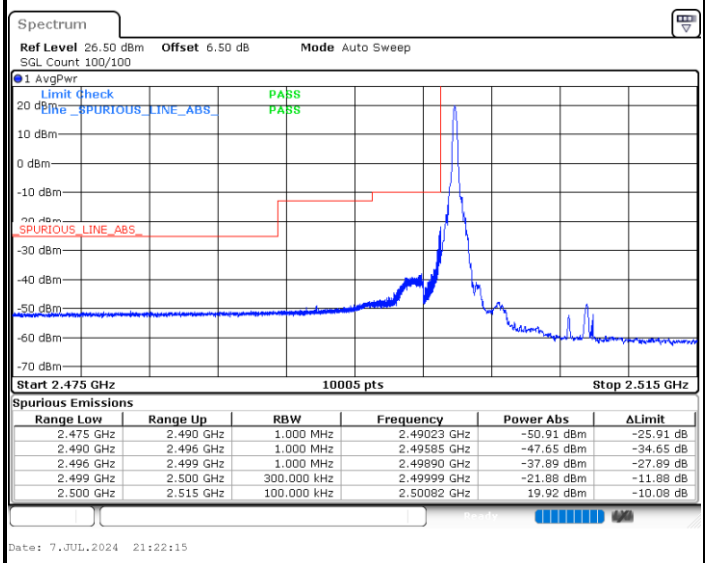
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56772 GHz	2.16 dBm	-27.84 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57000 GHz	-31.32 dBm	-21.32 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57142 GHz	-32.86 dBm	-22.86 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57562 GHz	-35.05 dBm	-22.05 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58501 GHz	-43.35 dBm	-18.35 dB

Date: 7.JUL.2024 21:34:58

LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / 1 RB

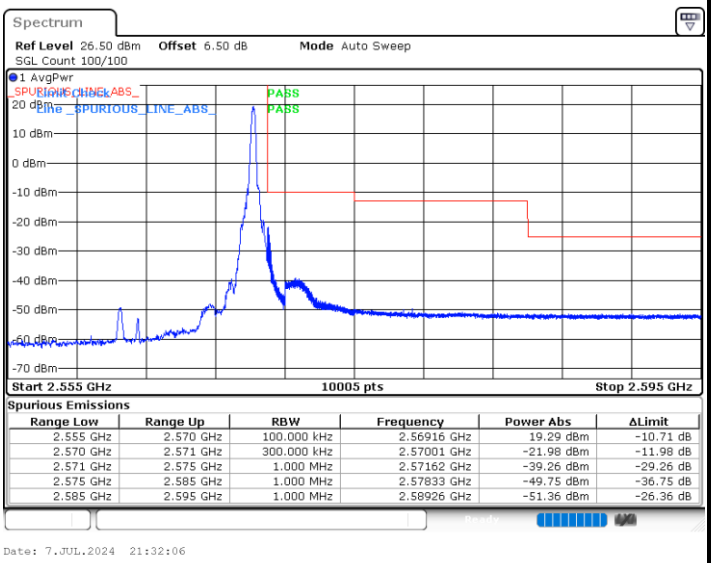


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49023 GHz	-50.91 dBm	-25.91 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49585 GHz	-47.65 dBm	-34.65 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49890 GHz	-37.89 dBm	-27.89 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49999 GHz	-21.88 dBm	-11.88 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50082 GHz	19.92 dBm	-10.08 dB

Date: 7.JUL.2024 21:22:15

Highest Band Edge / 1 RB

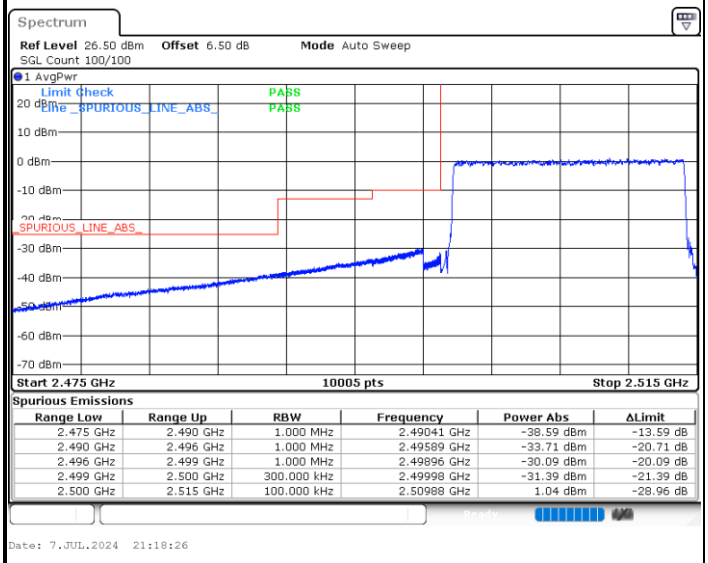


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56916 GHz	19.29 dBm	-10.71 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57001 GHz	-21.98 dBm	-11.98 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57162 GHz	-39.26 dBm	-29.26 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57833 GHz	-49.75 dBm	-36.75 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58926 GHz	-51.36 dBm	-26.36 dB

Date: 7.JUL.2024 21:32:06

Lowest Band Edge / Full RB

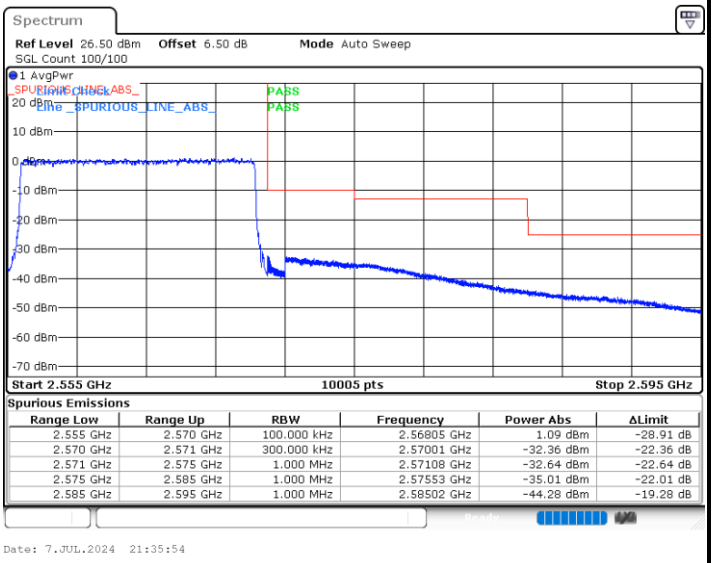


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49041 GHz	-38.59 dBm	-13.59 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49589 GHz	-33.71 dBm	-20.71 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49896 GHz	-30.09 dBm	-20.09 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.49998 GHz	-31.39 dBm	-21.39 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50988 GHz	1.04 dBm	-28.96 dB

Date: 7.JUL.2024 21:18:26

Highest Band Edge / Full RB



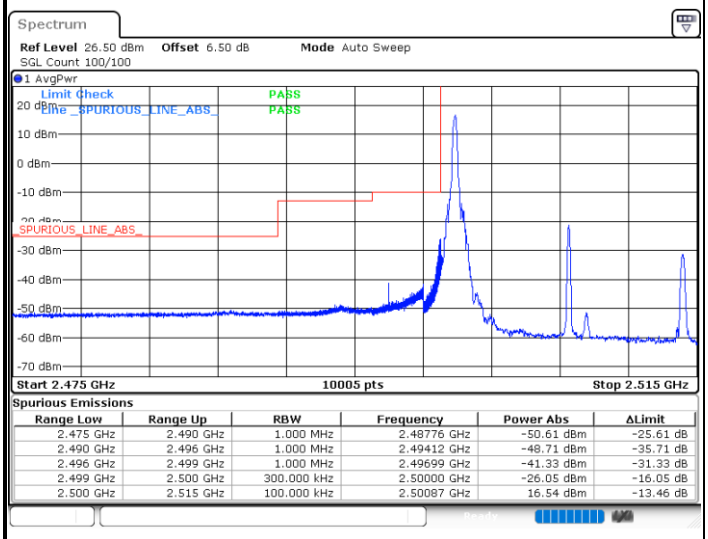
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56805 GHz	1.09 dBm	-28.91 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57001 GHz	-32.36 dBm	-22.36 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57108 GHz	-32.64 dBm	-22.64 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57553 GHz	-35.01 dBm	-22.01 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58502 GHz	-44.28 dBm	-19.28 dB

Date: 7.JUL.2024 21:35:54

LTE Band 7 / 15MHz / 256QAM

Lowest Band Edge / 1 RB

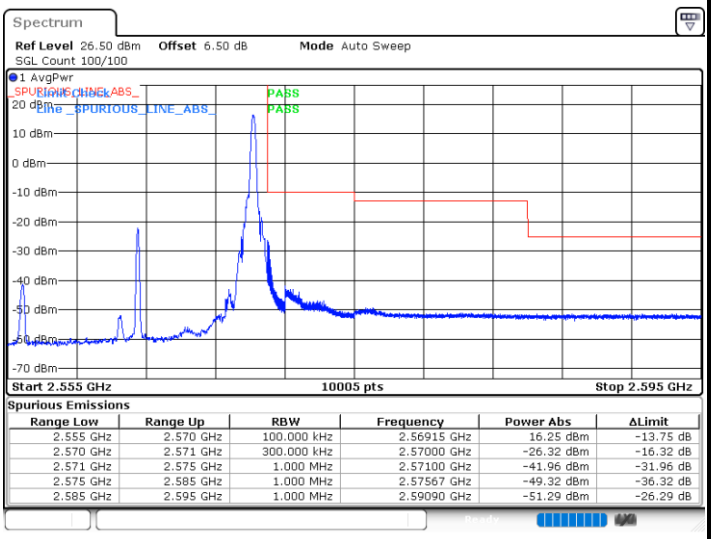


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48776 GHz	-50.61 dBm	-25.61 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49412 GHz	-48.71 dBm	-35.71 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49699 GHz	-41.33 dBm	-31.33 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.50000 GHz	-26.05 dBm	-16.05 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.50087 GHz	16.54 dBm	-13.46 dB

Date: 7.JUL.2024 21:23:11

Highest Band Edge / 1 RB

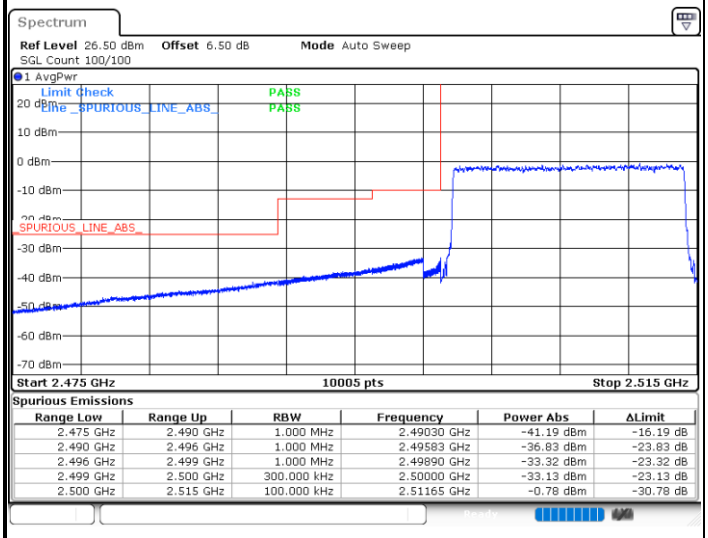


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56915 GHz	16.25 dBm	-13.75 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57000 GHz	-26.32 dBm	-16.32 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57100 GHz	-41.96 dBm	-31.96 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57567 GHz	-49.32 dBm	-36.32 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.59090 GHz	-51.29 dBm	-26.29 dB

Date: 7.JUL.2024 21:33:03

Lowest Band Edge / Full RB

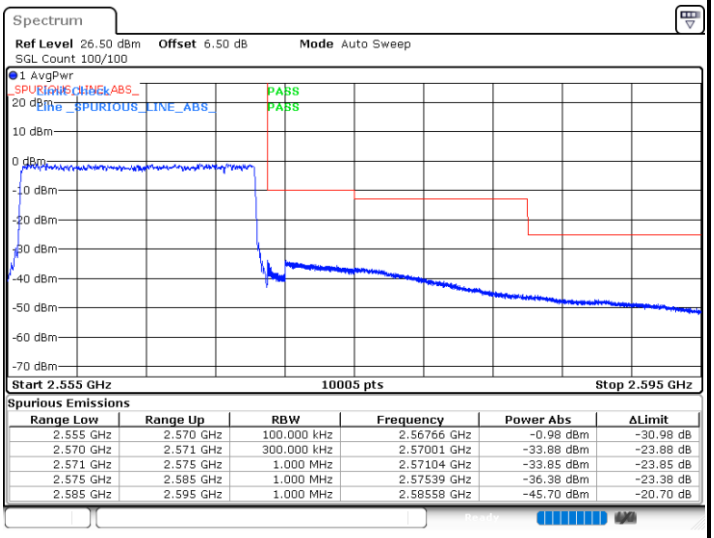


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49030 GHz	-41.19 dBm	-16.19 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49583 GHz	-36.83 dBm	-23.83 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49890 GHz	-33.32 dBm	-23.32 dB
2.499 GHz	2.500 GHz	300.000 kHz	2.50000 GHz	-33.13 dBm	-23.13 dB
2.500 GHz	2.515 GHz	100.000 kHz	2.51165 GHz	-0.78 dBm	-30.78 dB

Date: 7.JUL.2024 21:19:23

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.555 GHz	2.570 GHz	100.000 kHz	2.56766 GHz	-0.98 dBm	-30.98 dB
2.570 GHz	2.571 GHz	300.000 kHz	2.57001 GHz	-33.88 dBm	-23.88 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57104 GHz	-33.85 dBm	-23.85 dB
2.575 GHz	2.585 GHz	1.000 MHz	2.57539 GHz	-36.38 dBm	-23.38 dB
2.585 GHz	2.595 GHz	1.000 MHz	2.58558 GHz	-45.70 dBm	-20.70 dB

Date: 7.JUL.2024 21:36:50