



Spot Check Evaluation

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2503-4, XT2505-1
FCC ID : IHDT56AU8
STANDARD : 47 CFR Part 2, 22, 24, 27, 90S
47 CFR Part 15 Subpart C §15.225
47 CFR Part 15 Subpart C §15.247
47 CFR Part 15 Subpart E §15.407
TEST DATE(S) : Jan. 03, 2025 ~ Jan. 23, 2025

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

This report contains data that were produced under subcontract by Sporton International Inc. (KunShan)

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

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China



TABLE OF CONTENTS

REVISION HISTORY.....	3
1 GENERAL DESCRIPTION.....	4
1.1 Applicant.....	4
1.2 Manufacturer.....	4
1.3 Product Feature of Equipment Under Test.....	4
1.4 Modification of EUT	4
1.5 Testing Site.....	5
1.6 Test Software.....	5
1.7 Applicable Standards.....	6
1.8 Specification of Accessory.....	6
2 RE-USE OF MEASURED DATA.....	7
2.1 Introduction Section.....	7
2.2 Model Difference Information	7
2.3 Reference detail Section:	8
2.4 Spot Check Verification Data Section.....	9
3 LIST OF MEASURING EQUIPMENT.....	13
4 MEASUREMENT UNCERTAINTY	15
APPENDIX A. RADIATED SPURIOUS EMISSION	
APPENDIX B. SETUP PHOTOGRAPHS	
APPENDIX C. REFERENCE REPORT	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG4D1311-01H	Rev. 01	Initial issue of report	Feb. 10, 2025

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/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

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



1 General Description

1.1 Applicant

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

1.2 Manufacturer

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

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2503-4, XT2505-1
FCC ID	IHDT56AU8
IMEI Code	Conducted/DFS: 357706750005150/357706750005168 Radiation: 357706750006133/357706750006141 Conduction: 357706750006158/357706750006166
HW Version	DVT2
SW Version	V2VC35.13
EUT Stage	Identical Prototype

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

1.4 Modification of EUT

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

1.5 Testing Site

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ DFS01-SZ	CN1256	421272

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH01-SZ	CN1256	421272

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

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	CO01-KS 03CH02-KS 03CH08-KS	CN1257	314309

1.6 Test Software

Item	Site	Manufacturer	Name	Version
1.	CO01-KS	AUDIX	E3	6.2009-8-24
2.	03CH02-KS	AUDIX	E3	6.2009-8-24a1
3.	03CH08-KS	AUDIX	E3	210616
4.	03CH01-SZ	AUDIX	E3	6.2009-8-24
5.	DFS01-SZ	Sporton	Test Tools	1.0

1.7 Applicable Standards

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

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

1.8 Specification of Accessory

Accessories Information				
AC Adapter 1(US)	Brand Name	Motorola(Chenyang)	Model Name	MC-681N
AC Adapter 1(EU)	Brand Name	Motorola(Chenyang)	Model Name	MC-682N
AC Adapter 1(UK)	Brand Name	Motorola(Chenyang)	Model Name	MC-683N
AC Adapter 1(AU)	Brand Name	Motorola(Chenyang)	Model Name	MC-685N
AC Adapter 1(AR)	Brand Name	Motorola(Chenyang)	Model Name	MC-686N
AC Adapter 1(BR)	Brand Name	Motorola(Chenyang)	Model Name	MC-687N
AC Adapter 1(CHILE)	Brand Name	Motorola(Chenyang)	Model Name	MC-689N
AC Adapter 2(US)	Brand Name	Motorola(Acbel)	Model Name	MC-681N
AC Adapter 2(EU)	Brand Name	Motorola(Acbel)	Model Name	MC-682N
AC Adapter 2(UK)	Brand Name	Motorola(Acbel)	Model Name	MC-683N
AC Adapter 2(AU)	Brand Name	Motorola(Acbel)	Model Name	MC-685N
AC Adapter 2(AR)	Brand Name	Motorola(Acbel)	Model Name	MC-686N
AC Adapter 2(BR)	Brand Name	Motorola(Acbel)	Model Name	MC-687N
AC Adapter 2(CHILE)	Brand Name	Motorola(Acbel)	Model Name	MC-689N
Battery 1	Brand Name	Motorola(ATL)	Model Name	RM52
Battery 2	Brand Name	Motorola(Cosmx)	Model Name	RM52
Earphone	Brand Name	Motorola(Lyand)	Model Name	MI181C
USB Cable 1	Brand Name	Motorola(saibao)	Model Name	SC18D71644
USB Cable 2	Brand Name	Motorola(Luxshare)	Model Name	SC18E08104
USB Cable 3	Brand Name	Motorola(saibao)	Model Name	SC18D86731
USB Cable 4	Brand Name	Motorola(Luxshare)	Model Name	SC18E08103



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: XT2503-4, XT2505-1, FCC ID: IHDT56AU8) is electrically identical to the reference device (Model: XT2503-1, XT2505-3, FCC ID: IHDT56AU7) 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 FA4D1311-01.

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

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: IHDT56AU8 .

2.2 Model Difference Information

The **main** difference between FCC ID: IHDT56AU7 and FCC ID: IHDT56AU8 is as below:

- Remove WCDMA B4, LTE B4/12/13/17/66 and 5G NR n2/n66.
- Add LTE B18/19/20/32/43/71, 5G NR n20/n71/n75.
- Add n5 NSA mode and n41 SA mode.
- LTE B41, 5G NR n77/N78 upgraded to PC2 via software.

Other differences and all the details of similarity and difference can be found in the confidential documents (IHDT56AU8 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	IHDT56AU7	Full test	FR4D1311A	IHDT56AU8	Spot check	Y, All test items
	DTS (BLE)	2400~2483.5	IHDT56AU7	Full test	FR4D1311B	IHDT56AU8	Spot check	Y, All test items
	DTS (WLAN)	2400~2483.5	IHDT56AU7	Full test	FR4D1311C	IHDT56AU8	Spot check	Y, All test items
	DXX (NFC)	13.56	IHDT56AU7	Full test	FR4D1311D	IHDT56AU8	Spot check	Y, All test items
15E	U-NII	5180~5240	IHDT56AU7	Full test	FR4D1311E	IHDT56AU8	Spot check	Y, All test items
		5260~5320	IHDT56AU7	Full test	FR4D1311E	IHDT56AU8	Spot check	Y, All test items
		5500~5720	IHDT56AU7	Full test	FR4D1311E	IHDT56AU8	Spot check	Y, All test items
		5745~5825	IHDT56AU7	Full test	FR4D1311E	IHDT56AU8	Spot check	Y, All test items
		5260~5320 5500~5720	IHDT56AU7	Full test	FZ4D1311	IHDT56AU8	Spot check	Y, All test items
22, 24, 27, 90,	PCE (GSM)	GSM 850/1900	IHDT56AU7	Full test	FG4D1311A	IHDT56AU8	Spot check	Y, All test items
	PCE (WCDMA)	Band II, V	IHDT56AU7	Full test	FG4D1311A	IHDT56AU8	Spot check	Y, All test items
	PCE (LTE)	B2/5/7/26/38/42/ 7C/38C/42C	IHDT56AU7	Full test	FG4D1311B FG4D1311C FG4D1311E FG4D1311F	IHDT56AU8	Spot check	Y, All test items
	PCE (LTE)	B26 (90S)	IHDT56AU7	Full test	FG4D1311D	IHDT56AU8	Spot check	Y, All test items
	PCE (NR)	n5/n7/n26/n38/n41	IHDT56AU7	Full test	FG4D1311G FG4D1311H	IHDT56AU8	Spot check	Y, All test items except for n5 NSA RSE, n41 RSE
	PCE (NR)	n26 (90S)	IHDT56AU7	Full test	FG4D1311I	IHDT56AU8	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 d_{dB} from the reference data satisfies the following condition:

$$d_{dB} = |V_{dB} - R_{dB}| \leq (3 + M_{dB} / 20) \text{ dB} , \text{ for } 0 \leq M_{dB} \leq 60 \text{ dB} \quad (2)$$

$$d_{dB} = |V_{dB} - R_{dB}| = 6 \text{ dB} , \text{ for } M_{dB} > 60 \text{ dB}$$

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	IHDT56AU7 Parent Worst mode Test Result	IHDT56AU8 Variant Check Test Result	Deviation	Deviation Limit
BT 1Mbps (CH39)	Number of Channels	79	79	0	3
	Hopping Channel Separation	1	1.003	0.003 MHz	3
	Dwell Time of Each Channel	0.306	0.307	0.001 s	3
	20dB Bandwidth	0.87	0.865	0.005 MHz	3
	99% Bandwidth	0.758	0.757	0.01 MHz	3
	Conducted Band Edges	-43.67	-45.85	2.18 dBm	3
	Conducted Spurious Emission	-36.12	-38.30	2.18 dBm	3
BT 1Mbps (CH78)	Radiated Band Edges and Radiated Spurious Emission	-18.78	-18	0.78 dB	3
BT	AC Conducted Emission	-13.67	-11.94	1.73 dB	3
BLE 2Mbps (CH01)	6dB Bandwidth	1.16	1.17	0.01 MHz	3
	99% Bandwidth	2.056	2.050	0.006 MHz	3
	Power Spectral Density	-4.23	-4.94	0.71 dBm/3kHz	3
	Conducted Band Edges	-52.99	-53.56	0.57 dBm/100kHz	3
	Conducted Spurious Emission	-35.36	-37.17	1.81 dBm/100kHz	3
BLE 1Mbps (CH19)	Radiated Band Edges and Spurious Emission	-3.41	-3.13	0.28 dB	3
BLE	AC Conducted Emission	-13.67	-11.94	1.73 dB	3
WIFI 2.4G (802.11ax HE20 CH06)	6dB Bandwidth	18.48	18.70	0.22 MHz	3
	99% Bandwidth	19.874	20.280	0.406 MHz	3
	Power Spectral Density	-6.15	-7.19	1.04 dBm/3kHz	3
	Conducted Band Edges	-14.78	-15.00	0.22 dBm/100kHz	3
	Conducted Spurious Emission	-35.5	-38.06	-2.56 dBm/100kHz	3
WIFI 2.4G (802.11ax HE40 CH06)	Radiated Band Edges and Spurious Emission	-3.11	-3.38	0.27 dB	3
WIFI 2.4G	AC Conducted Emission	-13.67	-11.94	1.73 dB	3
WIFI 5G (802.11ax HE40 CH142)	26dB & 99% Bandwidth	75.60	75.24	0.36 MHz	3
	Power Spectral Density	3.62	3.14	0.48 dBm/MHz	3
WIFI 5G (802.11ax HE80 CH58)	DFS	0.951632	0.88803	0.63602 s	3
WIFI 5G (802.11ax HE20 CH36)	Radiated Band Edges and Spurious Emission	-3.07	-3.23	0.16 dB	3
WIFI 5G	AC Conducted Emission	-17.62	-15.89	1.73 dB	3
NFC	20dB Spectrum Bandwidth	2.58	2.57	0.01 kHz	3
	99% Occupied Bandwidth	2.19	2.19	0 kHz	3
	Field Strength of Fundamental Emissions@3m	52.46	52.54	0.08 dBuV/m	3
	Radiated Spurious Emissions	47.17	49.99	0.82 dBuV/m	3
	AC Power Line Conducted Emissions	-14.93	-13.10	1.83 dB	3
Part 22H (GSM 850)	Peak-to-Average Ratio	0.17	0.14	0.03 dB	3
	Occupied Bandwidth	0.242	0.243	0.001 MHz	3
	Conducted Band Edge	-14.83	-14.60	0.23 dBm	3
	Conducted Spurious Emission	-31.6	-30.52	1.08 dBm	3
	Frequency Stability	0.0023	0.0024	0.0001 ppm	3
Part 27M (LTE Band 7)	26dB Bandwidth	0.32	0.31	0.01 MHz	3
	Radiated Spurious Emission	-49.04	-51.39	2.35 dB	3



Test Item	Mode	IHDT56AU7 Parent Worst mode Test Result	IHDT56AU8 Variant Check Test Result	Deviation (dB)	Deviation Limit (dB)
Conducted Power (dBm)	BT BR/EDR	17.40	17.30	0.10	3
	BLE 1Mbps/2Mbps	12.66	11.40	1.26	3
	11b, 2.4GHz	21.28	20.82	0.46	3
	11g, 2.4GHz	23.72	23.55	0.17	3
	11n HT20, 2.4GHz	23.68	23.53	0.15	3
	11n HT40, 2.4GHz	22.95	22.48	0.47	3
	11ax HE20, 2.4GHz	23.77	23.49	0.28	3
	11ax HE40, 2.4GHz	23.03	22.5	0.53	3
	11a, 5GHz	18.78	18.67	0.11	3
	11n HT20, 5GHz	18.69	18.67	0.02	3
	11n HT40, 5GHz	18.79	18.70	0.09	3
	11ac VHT20, 5GHz	18.75	18.74	0.01	3
	11ac VHT40, 5GHz	18.83	18.70	0.13	3
	11ac VHT80, 5GHz	17.98	17.95	0.03	3
	11ax HE20, 5GHz	18.83	18.78	0.05	3
	11ax HE40, 5GHz	18.95	18.82	0.13	3
	11ax HE80, 5GHz	18.07	18.06	0.01	3
	GSM 850	31.75	31.34	0.41	3
	GSM 1900	28.86	26.57	2.29	3
	WCDMA II	22.68	20.42	2.26	3
	WCDMA V	22.81	22.39	0.42	3
	LTE B2	22.51	22.27	0.24	3
	LTE B5	22.49	22.39	0.10	3
	LTE B7	23.67	22.36	1.31	3
	LTE B7C	22.52	22.39	0.13	3
	LTE B26L	22.47	22.13	0.34	3
	LTE B26H	22.52	22.28	0.24	3
	LTE B38	23.58	23.28	0.30	3
	LTE B38C	22.39	22.53	0.14	3
	LTE B42	22.49	22.23	0.26	3
	LTE B42C	22.38	22.18	0.20	3
	5GNR n5	23.17	22.95	0.22	3
	5GNR n7	23.57	22.84	0.73	3
	5GNR n38	23.10	23.01	0.29	3
	5GNR n41	23.62	23.26	0.36	3
	5GNR n26L	23.66	22.87	0.79	3
	5GNR n26H	23.45	23.19	0.26	3

**Conclusion:**

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

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

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

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

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



3 List of Measuring Equipment

For BT/WIFI:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Jan. 22, 2025	Apr. 08, 2025	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1339473	30MHz~40GHz	Dec. 25, 2024	Jan. 22, 2025	Dec. 24, 2025	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Oct.14, 2024	Jan. 22, 2025	Oct. 13, 2025	Conducted (TH01-SZ)
EMI Test Receiver	Keysight	N9038A	MY57290151	3Hz~8.5GHz;Max 30dBm	Jul. 04, 2024	Jan. 20, 2025	Jul. 03, 2025	Radiation (03CH08-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57441079	10Hz~44GHz	Oct. 09, 2024	Jan. 20, 2025	Oct. 08, 2025	Radiation (03CH08-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Jan. 20, 2025	Sep. 07, 2025	Radiation (03CH08-KS)
Bilog Antenna	TESEQ	CBL 6111D	59915	30MHz~1GHz	Aug. 18, 2024	Jan. 20, 2025	Aug.17, 2025	Radiation (03CH08-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00240138	1GHz~18GHz	Jul. 06, 2024	Jan. 20, 2025	Jul. 05, 2025	Radiation (03CH08-KS)
high gain Amplifier	EM	EM01G18GA	060890	1Ghz~18Ghz	Jul. 23, 2024	Jan. 20, 2025	Jul. 22, 2025	Radiation (03CH08-KS)
SHF-EHF Horn	Com-power	AH-840	101116	18GHz~40GHz	Oct. 22, 2024	Jan. 20, 2025	Oct. 21, 2025	Radiation (03CH08-KS)
Amplifier	SONOMA	310N	380826	9KHz~1GHz	Jul. 03, 2024	Jan. 20, 2025	Jul. 02, 2025	Radiation (03CH08-KS)
Amplifier	Keysight	83017A	MY53270417	500MHz~26.5GHz	Oct. 09, 2024	Jan. 20, 2025	Oct. 08, 2025	Radiation (03CH08-KS)
Amplifier	EM	EM18G40GGA	060737	18~40GHz	Jan. 03, 2025	Jan. 20, 2025	Jan. 02, 2026	Radiation (03CH08-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Jan. 20, 2025	NCR	Radiation (03CH08-KS)
Turn Table	EM	EM 1000-T	N/A	0~360 degree	NCR	Jan. 20, 2025	NCR	Radiation (03CH08-KS)
Antenna Mast	EM	EM 1000-A	N/A	1 m~4 m	NCR	Jan. 20, 2025	NCR	Radiation (03CH08-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 18, 2024	Jan. 20, 2025	Apr. 17, 2025	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Aug. 20, 2024	Jan. 20, 2025	Aug. 19, 2025	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Apr. 18, 2024	Jan. 20, 2025	Apr. 17, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 09, 2024	Jan. 20, 2025	Oct. 08, 2025	Conduction (CO01-KS)
Signal Analyzer	R&S	FSV7	101473	10Hz~7GHz	Dec. 25, 2024	Jan. 08, 2025	Dec. 24, 2025	DFS (DFS01-SZ)
MXG-B RF Vector Signal Generator	Keysight	N5182B	MY56200424	9kHz~6GHz	Apr. 09, 2024	Jan. 08, 2025	Apr. 08, 2025	DFS (DFS01-SZ)
Combiner	TOJOIN	PS-2AM-0460	SZE14011007	0.4~6GHz	Sep. 05, 2024	Jan. 08, 2025	Sep. 04, 2025	DFS (DFS01-SZ)

NCR: No Calibration Required.



For NFC:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Jan. 23, 2025	Apr. 08, 2025	Conducted (TH01-SZ)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2024	Jan. 23, 2025	Jul. 03, 2025	Conducted (TH01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Max 30dBm	Oct. 11, 2024	Jan. 03, 2025	Oct. 10, 2025	Radiation (03CH02-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Jan. 03, 2025	Sep. 07, 2025	Radiation (03CH02-KS)
Bilog Antenna	TeseQ	CBL6111D	59915	30MHz~1GHz	Aug. 18, 2024	Jan. 03, 2025	Aug. 17, 2025	Radiation (03CH02-KS)
AC Power Source	Chroma	61601	616010002473	N/A	NCR	Jan. 03, 2025	NCR	Radiation (03CH02-KS)
Turn Table	MF	MF7802	N/A	0~360 degree	NCR	Jan. 03, 2025	NCR	Radiation (03CH02-KS)
Antenna Mast	MF	MF7802	N/A	1 m~4 m	NCR	Jan. 03, 2025	NCR	Radiation (03CH02-KS)
Amplifier	SONOMA	310N	413740	9KHz~1GHz	Jan. 02, 2025	Jan. 03, 2025	Jan. 01, 2026	Radiation (03CH02-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 18, 2024	Jan. 20, 2025	Apr. 17, 2025	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Aug. 20, 2024	Jan. 20, 2025	Aug. 19, 2025	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Apr. 18, 2024	Jan. 20, 2025	Apr. 17, 2025	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP00000811	AC 0V~300V, 45Hz~1000Hz	Oct. 09, 2024	Jan. 20, 2025	Oct. 08, 2025	Conduction (CO01-KS)

For WWAN Bands:

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Jan. 08, 2025	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V , 3A	Oct.14, 2024	Jan. 08, 2025	Oct. 13, 2025	Conducted (TH01-SZ)
Power Divider	Titan	P02N005180	923402	0.4GHz~26.5GHz	Nov. 08, 2024	Jan. 08, 2025	Nov. 07, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 03, 2024	Jan. 08, 2025	Jul. 02, 2025	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 25, 2024	Jan. 18, 2025	Dec. 24, 2025	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 28, 2024	Jan. 18, 2025	Dec. 27, 2025	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz~2GHz	Oct. 24, 2023	Jan. 18, 2025	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2024	Jan. 18, 2025	Jul. 03, 2025	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Apr. 09, 2024	Jan. 18, 2025	Apr. 08, 2025	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 09, 2024	Jan. 18, 2025	Apr. 08, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 14, 2024	Jan. 18, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2024	Jan. 18, 2025	Jul. 02, 2025	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	Oct. 14, 2024	Jan. 18, 2025	Oct. 13, 2025	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jan. 18, 2025	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jan. 18, 2025	NCR	Radiation (03CH01-SZ)

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	± 1.34 dB
Occupied Channel Bandwidth	± 0.012 MHz
Conducted Power	± 1.34 dB
Conducted Power Spectral Density	± 1.32 dB
Frequency	± 1.3 Hz

Uncertainty of Conducted Measurement (NFC)

Test Item	Uncertainty
Occupied Channel Bandwidth	± 0.012 MHz
Frequency	± 1.3 Hz

Uncertainty of Conducted Measurement (DFS)

Test Item	Uncertainty
Conducted Generated signal Levels	± 1.23 dB
Conducted Time	0.38%

Uncertainty of Conducted Measurement (WWAN)

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	± 1.34 dB
Occupied Channel Bandwidth	± 0.012 MHz
Conducted Power	± 1.34 dB
Peak to Average Ratio	± 1.34 dB
Frequency Stability	± 1.3 Hz

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

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

03CH08-KS(BT/WIF):

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

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

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.26 dB
---	---------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.40 dB
---	---------

03CH02-KS(NFC):

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

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

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

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



03CH01-SZ(WWAN):

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.48 dB
---	---------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.53 dB
---	---------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.02 dB
---	---------

-THE END-



Appendix A. Radiated Spurious Emission

For Simultaneous transmission:

Test Engineer :	Zhaohui Liang	Relative Humidity :	50%
		Temperature :	20-22℃

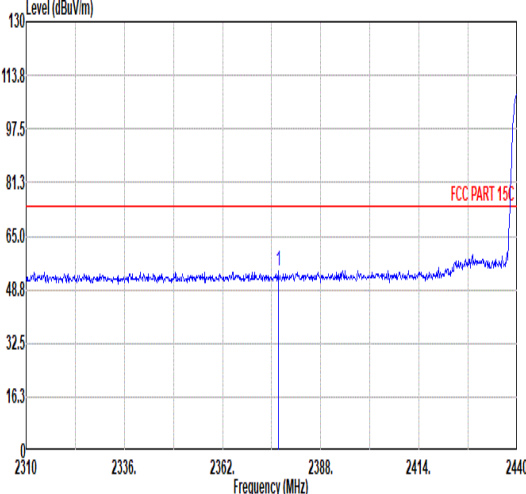
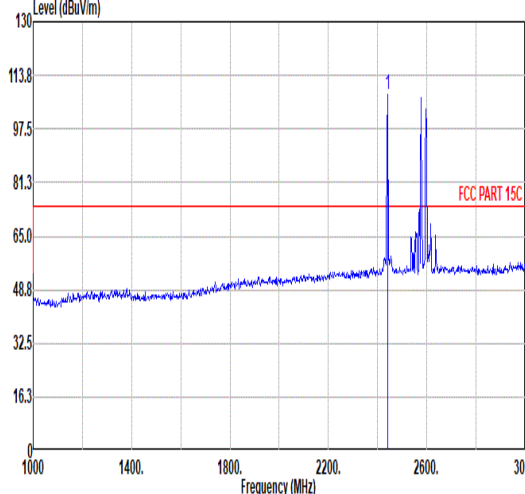
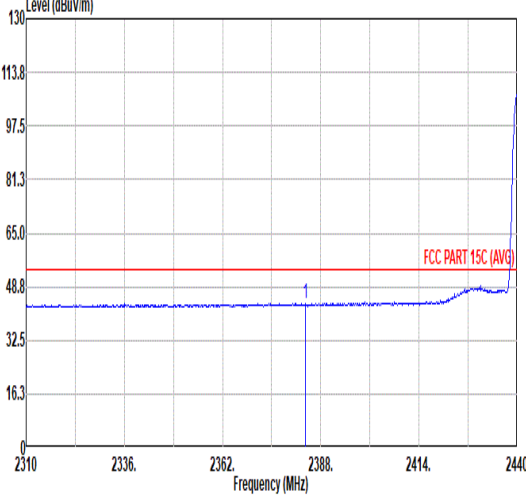
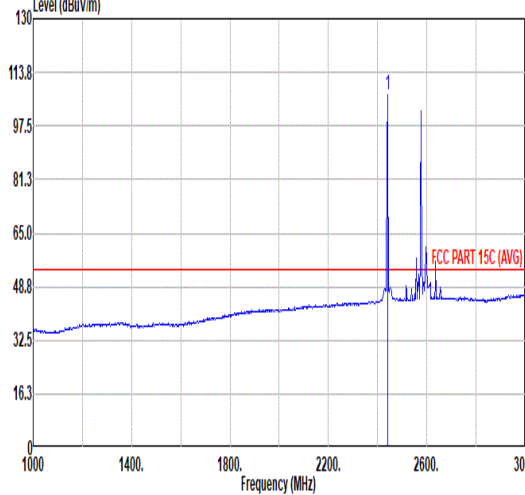
Radiated Spurious Emission Test Modes

Mode	Band	Band (GHz)	Antenna	Modulation	Channel	Frequency	Data Rate	RU	Remark
Mode 1	2400-2483.5	2400-2483.5	3	Bluetooth-LE_GSKF	19	2440	1Mbps	-	-
	U-NII-1	5.15-5.25	4	802.11ax HE20	36	5180	MCS0	Full RU	-
	LTE Band 41C								

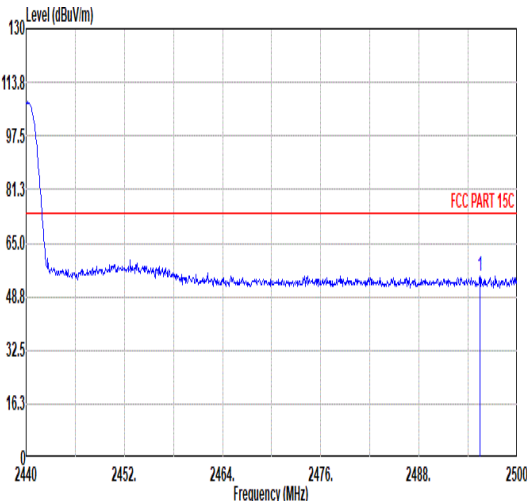
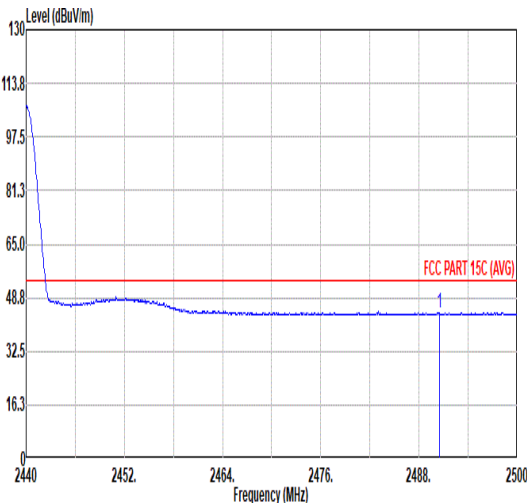
Summary of each worse mode

Mode	Modulation	Ch.	Freq. (MHz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol.	Peak Avg.	Result	Remark
1	Bluetooth-LE_GSKF	19	2490.46	44.29	54.00	-9.71	H	AVERAGE	Pass	Band Edge
	Bluetooth-LE_GSKF	19	4880.00	50.74	54.00	-3.26	H	AVERAGE	Pass	Harmonic
1	802.11ax HE20	36	5149.65	50.39	54.00	-3.61	H	AVERAGE	Pass	Band Edge
	802.11ax HE20	36	10360.00	44.85	68.20	-23.35	H	PEAK	Pass	Harmonic

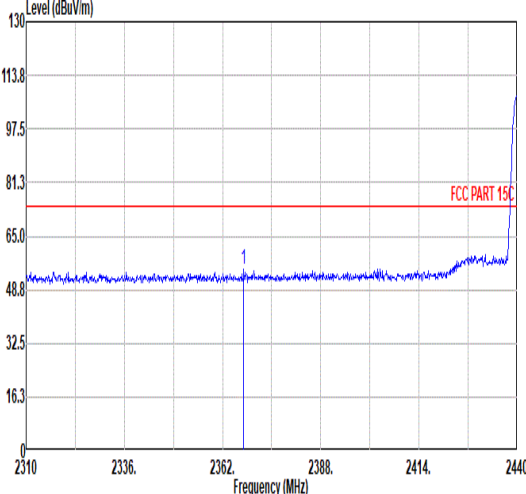
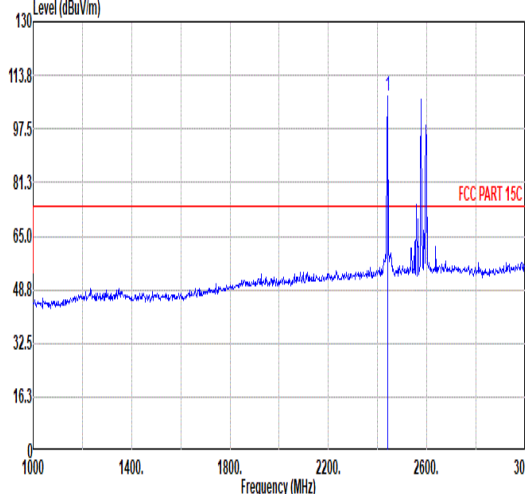
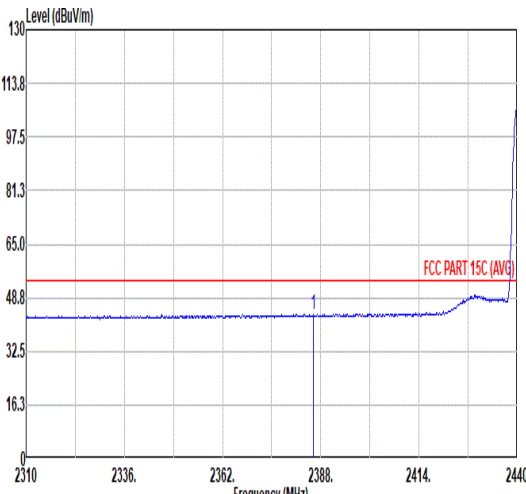
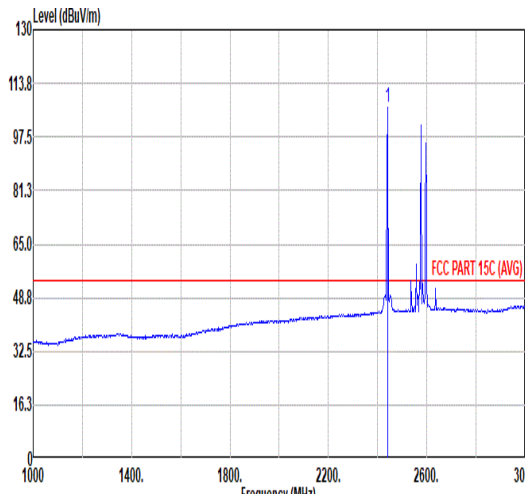


Mode	1																																																																																																			
	Band Edge - L																																																																																																			
	2400-2483.5_2400-2483.5_Bluetooth-LE_GSKF_CH19_2440MHz																																																																																																			
ANT	3																																																																																																			
Pol.	Horizontal						Fundamental																																																																																													
Peak																																																																																																				
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2376.69</td><td>54.35</td><td>74.00</td><td>-19.65</td><td>38.95</td><td>32.06</td><td>8.03</td><td>30.69</td><td>6.00</td><td>300</td><td>349</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2376.69	54.35	74.00	-19.65	38.95	32.06	8.03	30.69	6.00	300	349	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2440.00</td><td>108.03</td><td>-----</td><td>-----</td><td>92.27</td><td>32.28</td><td>8.15</td><td>30.67</td><td>6.00</td><td>300</td><td>349</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2440.00	108.03	-----	-----	92.27	32.28	8.15	30.67	6.00	300	349	PEAK
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																											
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																										
1	2376.69	54.35	74.00	-19.65	38.95	32.06	8.03	30.69	6.00	300	349	PEAK																																																																																								
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																												
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																										
1	2440.00	108.03	-----	-----	92.27	32.28	8.15	30.67	6.00	300	349	PEAK																																																																																								
Avg																																																																																																				
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2383.84</td><td>43.66</td><td>54.00</td><td>-10.34</td><td>28.21</td><td>32.10</td><td>8.04</td><td>30.69</td><td>6.00</td><td>300</td><td>349</td><td>AVERAGE</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2383.84	43.66	54.00	-10.34	28.21	32.10	8.04	30.69	6.00	300	349	AVERAGE	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2440.00</td><td>106.84</td><td>-----</td><td>-----</td><td>91.08</td><td>32.28</td><td>8.15</td><td>30.67</td><td>6.00</td><td>300</td><td>349</td><td>AVERAGE</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2440.00	106.84	-----	-----	91.08	32.28	8.15	30.67	6.00	300	349	AVERAGE
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																											
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																										
1	2383.84	43.66	54.00	-10.34	28.21	32.10	8.04	30.69	6.00	300	349	AVERAGE																																																																																								
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																												
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																											
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																										
1	2440.00	106.84	-----	-----	91.08	32.28	8.15	30.67	6.00	300	349	AVERAGE																																																																																								

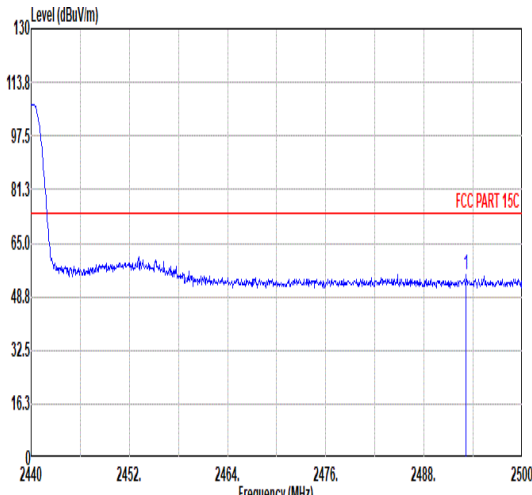
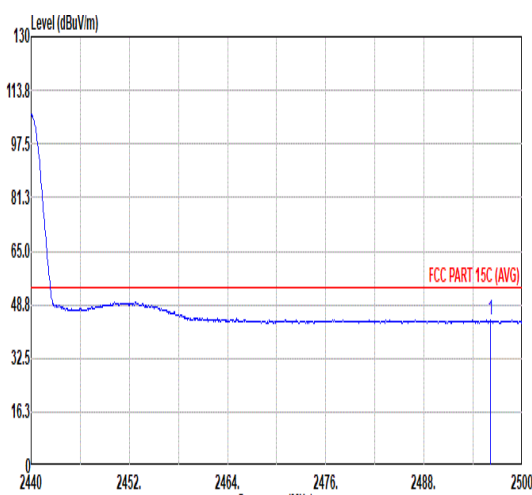


Mode	1																																																						
	Band Edge - R																																																						
	2400-2483.5_2400-2483.5_Bluetooth-LE_GSKF_CH19_2440MHz																																																						
ANT	3																																																						
Pol.	Horizontal						Fundamental																																																
Peak	 <table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2495.44</td><td>54.75</td><td>74.00</td><td>-19.25</td><td>38.75</td><td>32.39</td><td>8.26</td><td>30.65</td><td>6.00</td><td>300</td><td>349</td><td>PEAK</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2495.44	54.75	74.00	-19.25	38.75	32.39	8.26	30.65	6.00	300	349	PEAK	Blank				
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																														
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																													
1	2495.44	54.75	74.00	-19.25	38.75	32.39	8.26	30.65	6.00	300	349	PEAK																																											
Avg	 <table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th>Remark</th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th></th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2490.46</td><td>44.29</td><td>54.00</td><td>-9.71</td><td>28.31</td><td>32.38</td><td>8.25</td><td>30.65</td><td>6.00</td><td>300</td><td>349</td><td>AVERAGE</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark	Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor			MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2490.46	44.29	54.00	-9.71	28.31	32.38	8.25	30.65	6.00	300	349	AVERAGE	Blank				
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos	Remark																																														
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor																																															
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																													
1	2490.46	44.29	54.00	-9.71	28.31	32.38	8.25	30.65	6.00	300	349	AVERAGE																																											

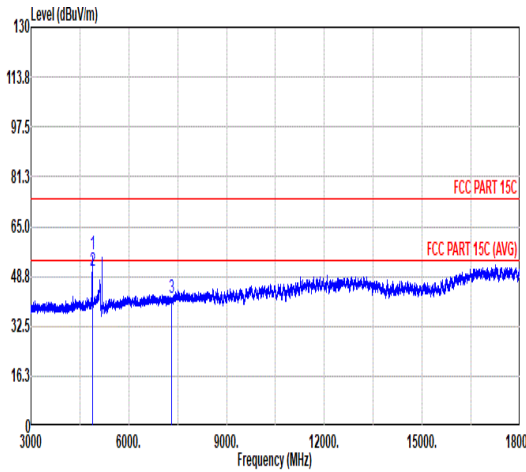
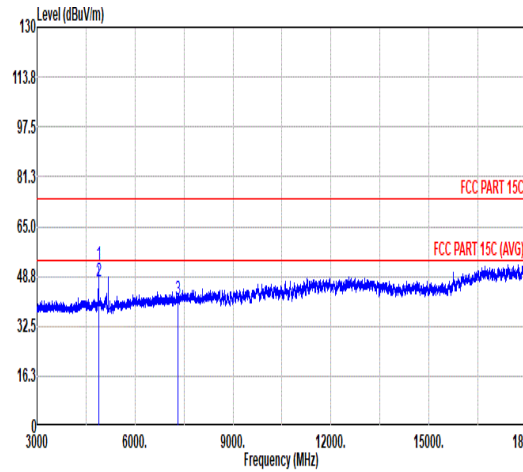


Mode	1																																																																																																		
	Band Edge - L																																																																																																		
	2400-2483.5_2400-2483.5_Bluetooth-LE_GSKF_CH19_2440MHz																																																																																																		
ANT	3																																																																																																		
Pol.	Vertical						Fundamental																																																																																												
Peak																																																																																																			
	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2367.59</td><td>54.72</td><td>74.00</td><td>-19.28</td><td>39.39</td><td>32.01</td><td>8.02</td><td>30.70</td><td>6.00</td><td>397</td><td>45</td><td>PEAK</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2367.59	54.72	74.00	-19.28	39.39	32.01	8.02	30.70	6.00	397	45	PEAK	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2440.00</td><td>107.48</td><td>-----</td><td>-----</td><td>91.72</td><td>32.28</td><td>8.15</td><td>30.67</td><td>6.00</td><td>397</td><td>45</td><td>PEAK</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2440.00	107.48	-----	-----	91.72	32.28	8.15	30.67	6.00	397	45
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																											
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2367.59	54.72	74.00	-19.28	39.39	32.01	8.02	30.70	6.00	397	45	PEAK																																																																																							
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																											
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2440.00	107.48	-----	-----	91.72	32.28	8.15	30.67	6.00	397	45	PEAK																																																																																							
Avg																																																																																																			
	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2386.05</td><td>43.84</td><td>54.00</td><td>-10.16</td><td>28.36</td><td>32.12</td><td>8.05</td><td>30.69</td><td>6.00</td><td>397</td><td>45</td><td>AVERAGE</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2386.05	43.84	54.00	-10.16	28.36	32.12	8.05	30.69	6.00	397	45	AVERAGE	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>2440.00</td><td>106.28</td><td>-----</td><td>-----</td><td>90.52</td><td>32.28</td><td>8.15</td><td>30.67</td><td>6.00</td><td>397</td><td>45</td><td>AVERAGE</td></tr></tbody></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2440.00	106.28	-----	-----	90.52	32.28	8.15	30.67	6.00	397	45
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																											
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2386.05	43.84	54.00	-10.16	28.36	32.12	8.05	30.69	6.00	397	45	AVERAGE																																																																																							
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																											
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																										
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																									
1	2440.00	106.28	-----	-----	90.52	32.28	8.15	30.67	6.00	397	45	AVERAGE																																																																																							

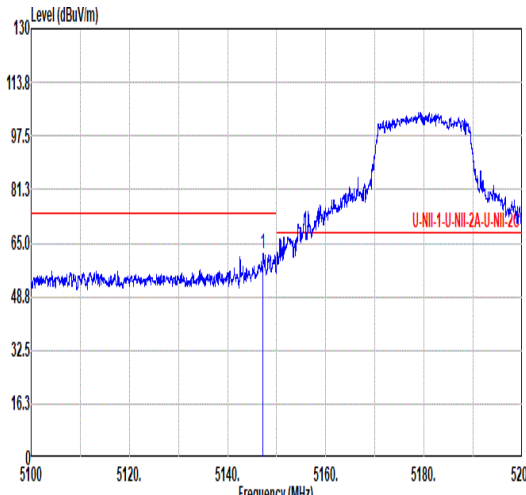
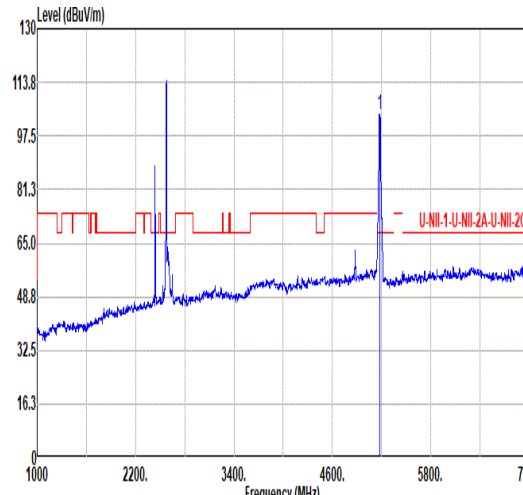
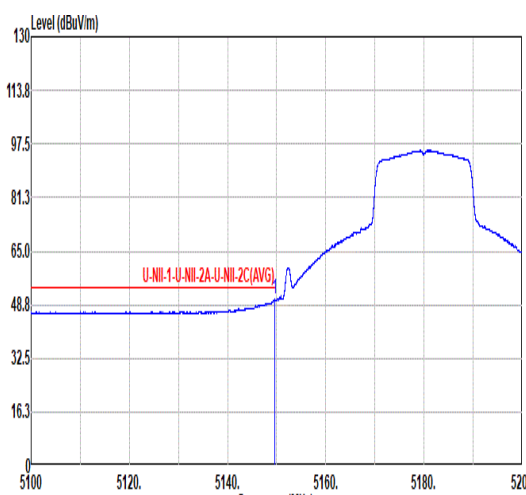
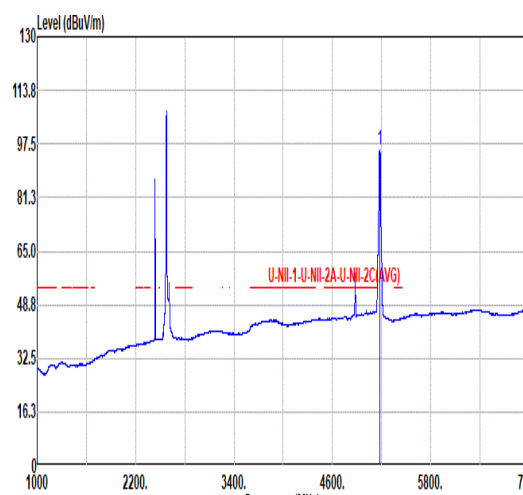


Mode	1																																																						
	Band Edge - R																																																						
	2400-2483.5_2400-2483.5_Bluetooth-LE_GSKF_CH19_2440MHz																																																						
ANT	3																																																						
Pol.	Vertical										Fundamental																																												
Peak	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2493.16</td><td>55.44</td><td>74.00</td><td>-18.56</td><td>39.45</td><td>32.39</td><td>8.25</td><td>30.65</td><td>6.00</td><td>397</td><td>45</td><td>PEAK</td></tr></table>											Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2493.16	55.44	74.00	-18.56	39.45	32.39	8.25	30.65	6.00	397	45	PEAK	Blank
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																															
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																														
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																													
1	2493.16	55.44	74.00	-18.56	39.45	32.39	8.25	30.65	6.00	397	45	PEAK																																											
Avg	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>2496.10</td><td>44.10</td><td>54.00</td><td>-9.90</td><td>28.10</td><td>32.39</td><td>8.26</td><td>30.65</td><td>6.00</td><td>397</td><td>45</td><td>AVERAGE</td></tr></table>											Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	2496.10	44.10	54.00	-9.90	28.10	32.39	8.26	30.65	6.00	397	45	AVERAGE	Blank
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																															
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																														
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																													
1	2496.10	44.10	54.00	-9.90	28.10	32.39	8.26	30.65	6.00	397	45	AVERAGE																																											

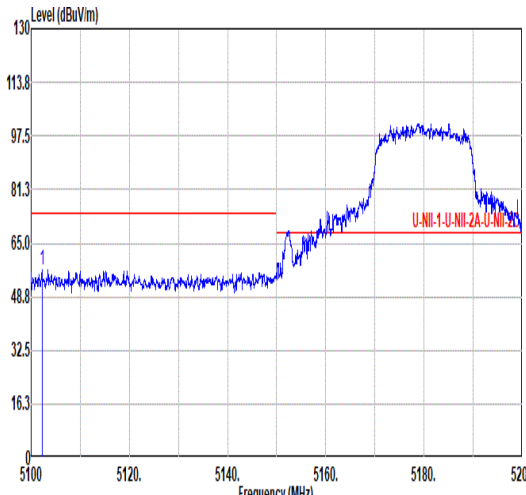
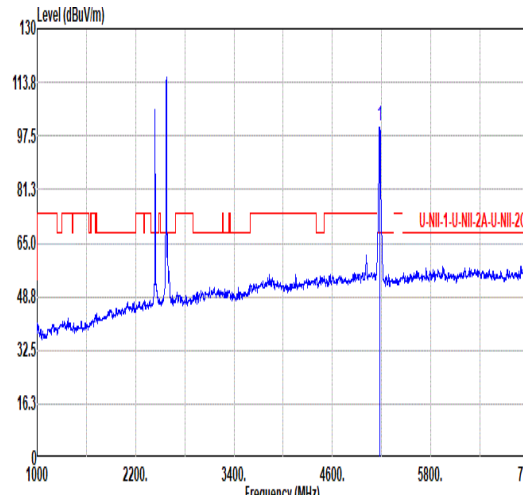
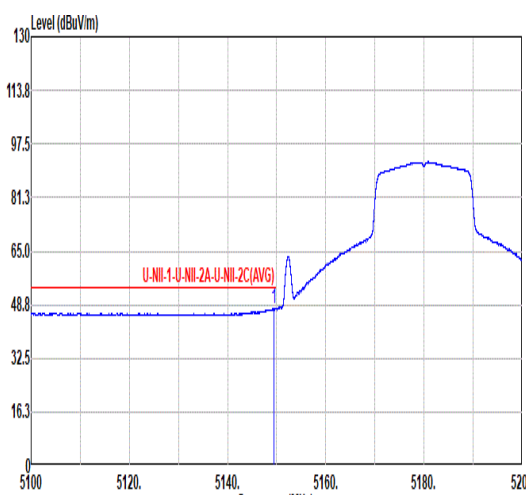
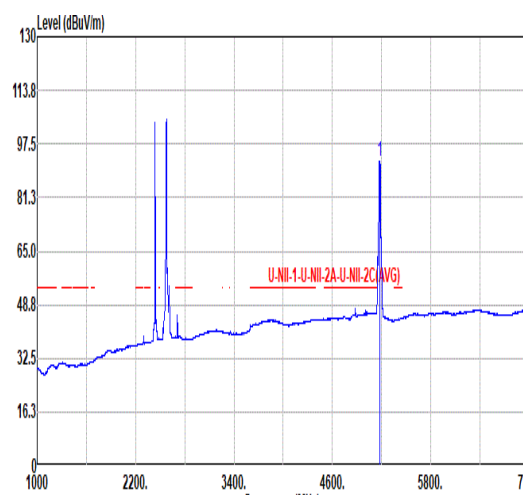


Mode	1																																																																																	
	Harmonic																																																																																	
	2400-2483.5_2400-2483.5_Bluetooth-LE_GSKF_CH19_2440MHz																																																																																	
ANT	3																																																																																	
Pol.	Horizontal																																																																																	
Peak Avg																																																																																		
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level Factor</th><th>Loss Factor</th><th>Factor</th><th>Factor</th><th></th><th></th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4880.00</td><td>56.06</td><td>74.00</td><td>-17.94</td><td>75.48</td><td>34.14</td><td>11.69</td><td>65.25</td><td>0.00</td><td>100</td><td>57</td><td>PEAK</td></tr><tr><td>2</td><td>4880.00</td><td>50.74</td><td>54.00</td><td>-3.26</td><td>70.16</td><td>34.14</td><td>11.69</td><td>65.25</td><td>0.00</td><td>100</td><td>57</td><td>AVERAGE</td></tr><tr><td>3</td><td>7320.00</td><td>41.79</td><td>74.00</td><td>-32.21</td><td>58.99</td><td>35.76</td><td>14.49</td><td>67.45</td><td>0.00</td><td>--</td><td>--</td><td>PEAK</td></tr></table>												Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line Margin	Level Factor	Loss Factor	Factor	Factor			Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	4880.00	56.06	74.00	-17.94	75.48	34.14	11.69	65.25	0.00	100	57	PEAK	2	4880.00	50.74	54.00	-3.26	70.16	34.14	11.69	65.25	0.00	100	57	AVERAGE	3	7320.00	41.79	74.00	-32.21	58.99	35.76	14.49	67.45	0.00	--	--	PEAK	
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																									
	Freq	Level	Line Margin	Level Factor	Loss Factor	Factor	Factor			Remark																																																																								
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																								
1	4880.00	56.06	74.00	-17.94	75.48	34.14	11.69	65.25	0.00	100	57	PEAK																																																																						
2	4880.00	50.74	54.00	-3.26	70.16	34.14	11.69	65.25	0.00	100	57	AVERAGE																																																																						
3	7320.00	41.79	74.00	-32.21	58.99	35.76	14.49	67.45	0.00	--	--	PEAK																																																																						
Peak Avg																																																																																		
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line Margin</th><th>Level Factor</th><th>Loss Factor</th><th>Factor</th><th>Factor</th><th></th><th></th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>4880.00</td><td>52.43</td><td>74.00</td><td>-21.57</td><td>71.85</td><td>34.14</td><td>11.69</td><td>65.25</td><td>0.00</td><td>366</td><td>211</td><td>PEAK</td></tr><tr><td>2</td><td>4880.00</td><td>47.14</td><td>54.00</td><td>-6.86</td><td>66.56</td><td>34.14</td><td>11.69</td><td>65.25</td><td>0.00</td><td>366</td><td>211</td><td>AVERAGE</td></tr><tr><td>3</td><td>7320.00</td><td>41.30</td><td>74.00</td><td>-32.70</td><td>58.50</td><td>35.76</td><td>14.49</td><td>67.45</td><td>0.00</td><td>--</td><td>--</td><td>PEAK</td></tr></table>												Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line Margin	Level Factor	Loss Factor	Factor	Factor			Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg	1	4880.00	52.43	74.00	-21.57	71.85	34.14	11.69	65.25	0.00	366	211	PEAK	2	4880.00	47.14	54.00	-6.86	66.56	34.14	11.69	65.25	0.00	366	211	AVERAGE	3	7320.00	41.30	74.00	-32.70	58.50	35.76	14.49	67.45	0.00	--	--	PEAK
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																									
	Freq	Level	Line Margin	Level Factor	Loss Factor	Factor	Factor			Remark																																																																								
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	dB	cm	deg																																																																							
1	4880.00	52.43	74.00	-21.57	71.85	34.14	11.69	65.25	0.00	366	211	PEAK																																																																						
2	4880.00	47.14	54.00	-6.86	66.56	34.14	11.69	65.25	0.00	366	211	AVERAGE																																																																						
3	7320.00	41.30	74.00	-32.70	58.50	35.76	14.49	67.45	0.00	--	--	PEAK																																																																						

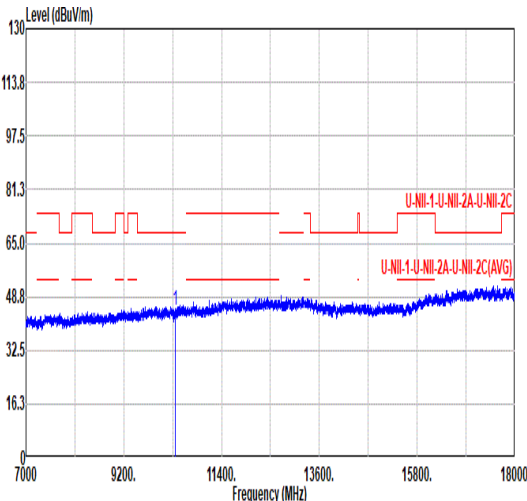
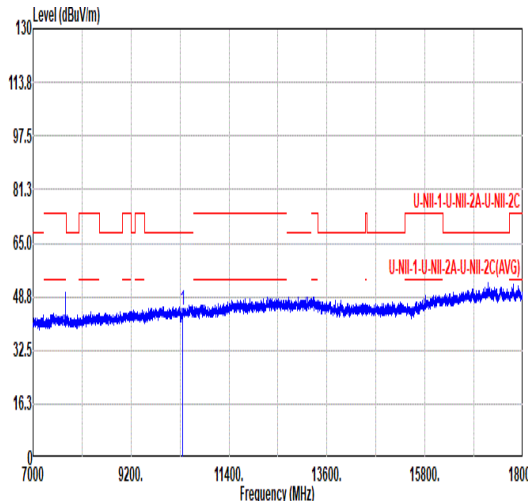


		1																																																																																																											
Mode		Band Edge																																																																																																											
		U-NII-1_5.15-5.25_802.11ax HE20_CH36_Full RU_5180MHz																																																																																																											
ANT		4																																																																																																											
Pol.	Horizontal											Fundamental																																																																																																	
Peak																																																																																																													
	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>5147.25</td><td>62.01</td><td>74.00</td><td>-11.99</td><td>45.74</td><td>34.11</td><td>12.03</td><td>29.87</td><td>0.00</td><td>105</td><td>246</td><td>PEAK</td></tr></tbody></table>												Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5147.25	62.01	74.00	-11.99	45.74	34.11	12.03	29.87	0.00	105	246	PEAK	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>5180.00</td><td>104.18</td><td>-----</td><td>-----</td><td>87.78</td><td>34.22</td><td>12.06</td><td>29.88</td><td>0.00</td><td>105</td><td>246</td><td>PEAK</td></tr></tbody></table>												Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5180.00	104.18	-----	-----	87.78	34.22	12.06	29.88	0.00	105	246
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																					
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																				
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																			
1	5147.25	62.01	74.00	-11.99	45.74	34.11	12.03	29.87	0.00	105	246	PEAK																																																																																																	
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																					
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																				
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																			
1	5180.00	104.18	-----	-----	87.78	34.22	12.06	29.88	0.00	105	246	PEAK																																																																																																	
Avg																																																																																																													
	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>5149.65</td><td>50.39</td><td>54.00</td><td>-3.61</td><td>34.13</td><td>34.10</td><td>12.03</td><td>29.87</td><td>0.00</td><td>105</td><td>246</td><td>AVERAGE</td></tr></tbody></table>												Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5149.65	50.39	54.00	-3.61	34.13	34.10	12.03	29.87	0.00	105	246	AVERAGE	<table><thead><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr></thead><tbody><tr><td>1</td><td>5180.00</td><td>95.61</td><td>-----</td><td>-----</td><td>79.21</td><td>34.22</td><td>12.06</td><td>29.88</td><td>0.00</td><td>105</td><td>246</td><td>AVERAGE</td></tr></tbody></table>												Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5180.00	95.61	-----	-----	79.21	34.22	12.06	29.88	0.00	105	246
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																					
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																				
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																			
1	5149.65	50.39	54.00	-3.61	34.13	34.10	12.03	29.87	0.00	105	246	AVERAGE																																																																																																	
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																					
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																				
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																			
1	5180.00	95.61	-----	-----	79.21	34.22	12.06	29.88	0.00	105	246	AVERAGE																																																																																																	



Mode	1																																																																																																														
	Band Edge																																																																																																														
	U-NII-1_5.15-5.25_802.11ax HE20_CH36_Full RU_5180MHz																																																																																																														
ANT	4																																																																																																														
Pol.	Vertical						Fundamental																																																																																																								
Peak																																																																																																															
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5102.25</td><td>57.06</td><td>74.00</td><td>-16.94</td><td>40.62</td><td>34.29</td><td>12.00</td><td>29.85</td><td>0.00</td><td>338</td><td>50</td><td>PEAK</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5102.25	57.06	74.00	-16.94	40.62	34.29	12.00	29.85	0.00	338	50	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5180.00</td><td>100.33</td><td>-----</td><td>-----</td><td>83.93</td><td>34.22</td><td>12.06</td><td>29.88</td><td>0.00</td><td>338</td><td>50</td><td>PEAK</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5180.00	100.33	-----	-----	83.93	34.22	12.06	29.88	0.00	338	50
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																							
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																						
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																					
1	5102.25	57.06	74.00	-16.94	40.62	34.29	12.00	29.85	0.00	338	50	PEAK																																																																																																			
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																							
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																						
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																					
1	5180.00	100.33	-----	-----	83.93	34.22	12.06	29.88	0.00	338	50	PEAK																																																																																																			
Avg																																																																																																															
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5149.45</td><td>47.65</td><td>54.00</td><td>-6.35</td><td>31.39</td><td>34.10</td><td>12.03</td><td>29.87</td><td>0.00</td><td>338</td><td>50</td><td>AVERAGE</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5149.45	47.65	54.00	-6.35	31.39	34.10	12.03	29.87	0.00	338	50	AVERAGE	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>5180.00</td><td>92.18</td><td>-----</td><td>-----</td><td>75.78</td><td>34.22</td><td>12.06</td><td>29.88</td><td>0.00</td><td>338</td><td>50</td><td>AVERAGE</td></tr></table>													Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	5180.00	92.18	-----	-----	75.78	34.22	12.06	29.88	0.00	338	50
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																							
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																						
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																					
1	5149.45	47.65	54.00	-6.35	31.39	34.10	12.03	29.87	0.00	338	50	AVERAGE																																																																																																			
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																																							
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																																						
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																																					
1	5180.00	92.18	-----	-----	75.78	34.22	12.06	29.88	0.00	338	50	AVERAGE																																																																																																			



Mode	1																																																																																																	
	Harmonic																																																																																																	
	U-NII-1_5.15-5.25_802.11ax HE20_CH36_Full RU_5180MHz																																																																																																	
ANT	4																																																																																																	
Pol.	Horizontal						Vertical																																																																																											
Peak Avg																																																																																																		
	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>10360.00</td><td>44.85</td><td>68.20</td><td>-23.35</td><td>56.40</td><td>37.46</td><td>17.53</td><td>66.54</td><td>0.00</td><td>--</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	10360.00	44.85	68.20	-23.35	56.40	37.46	17.53	66.54	0.00	--	PEAK	<table><tr><th></th><th>Limit</th><th>Read</th><th>Ant</th><th>Cable</th><th>Preamp</th><th>Aux</th><th>APos</th><th>TPos</th><th></th></tr><tr><th>Freq</th><th>Level</th><th>Line</th><th>Margin</th><th>Level</th><th>Factor</th><th>Loss</th><th>Factor</th><th>Factor</th><th>Remark</th></tr><tr><th></th><th>MHz</th><th>dBuV/m</th><th>dBuV/m</th><th>dB</th><th>dBuV</th><th>dB/m</th><th>dB</th><th>dB</th><th>cm</th><th>deg</th></tr><tr><td>1</td><td>10360.00</td><td>44.55</td><td>68.20</td><td>-23.65</td><td>56.08</td><td>37.47</td><td>17.54</td><td>66.54</td><td>0.00</td><td>--</td><td>PEAK</td></tr></table>							Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos		Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark		MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg	1	10360.00	44.55	68.20	-23.65	56.08	37.47	17.54	66.54	0.00	--	PEAK
		Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																									
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																									
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																								
1	10360.00	44.85	68.20	-23.35	56.40	37.46	17.53	66.54	0.00	--	PEAK																																																																																							
	Limit	Read	Ant	Cable	Preamp	Aux	APos	TPos																																																																																										
Freq	Level	Line	Margin	Level	Factor	Loss	Factor	Factor	Remark																																																																																									
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB/m	dB	dB	cm	deg																																																																																								
1	10360.00	44.55	68.20	-23.65	56.08	37.47	17.54	66.54	0.00	--	PEAK																																																																																							

Note: For all plots above, the over limit line signals are Fundamental signal which can be ignored

**For 5G NR n5 NSA:**

Test Engineer :	HuaCong Liang	Relative Humidity :	48~52%
		Temperature :	22-25℃

EN-DC_7A_n5A / LTE 10MHz + NR 20MHz / QPSK (ANT2+0)									
Channel	Frequency (MHz)	ERP/EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n5 Middle	1654.5	-65.70	-13	-52.70	-77.23	-68.95	4.00	9.40	H
	2481.75	-59.92	-13	-46.92	-78.65	-63.49	4.88	10.60	H
	3309	-59.16	-13	-46.16	-79.95	-64.09	5.52	12.60	H
	1654.5	-64.93	-13	-51.93	-77.10	-68.18	4.00	9.40	V
	2481.75	-59.78	-13	-46.78	-78.83	-63.35	4.88	10.60	V
	3309	-58.45	-13	-45.45	-79.94	-63.38	5.52	12.60	V
LTE Band7 Middle	5061.18	-58.04	-25	-33.04	-81.16	-63.60	7.14	12.70	H
	7591.77	-55.00	-25	-30.00	-81.25	-58.30	8.30	11.60	H
	10122.36	-52.53	-25	-27.53	-82.91	-54.05	10.48	12.00	H
	5061.18	-57.38	-25	-32.38	-81.71	-62.94	7.14	12.70	V
	7591.77	-55.73	-25	-30.73	-81.98	-59.03	8.30	11.60	V
	10122.36	-51.58	-25	-26.58	-83.01	-53.10	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



Appendix C. Reference Report

FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2503-1, XT2505-3
FCC ID : IHDT56AU7
STANDARD : 47 CFR Part 27 Subpart Q
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S) : Dec. 26, 2024 ~ Jan. 23, 2025

We, Sporton International Inc. (Shenzhen), 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. (Shenzhen), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China

TABLE OF CONTENTS

REVISION HISTORY.....	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant	5
1.2 Manufacturer	5
1.3 Product Feature of Equipment Under Test.....	5
1.4 Product Specification of Equipment Under Test.....	5
1.5 Modification of EUT	6
1.6 Maximum EIRP Power and Emission Designator	6
1.7 Testing Site	7
1.8 Test Software.....	7
1.9 Applied Standards	7
1.10 Specification of Accessory.....	8
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	9
2.1 Test Mode	9
2.2 Connection Diagram of Test System.....	10
2.3 Support Unit used in test configuration and system	11
2.4 Measurement Results Explanation Example.....	11
2.5 Frequency List of Low/Middle/High Channels	11
3 CONDUCTED TEST ITEMS	14
3.1 Measuring Instruments	14
3.2 Test Setup	14
3.3 Test Result of Conducted Test	14
3.4 Conducted Output Power Measurement	15
3.5 Peak-to-Average Ratio	16
3.6 EIRP	17
3.7 Occupied Bandwidth.....	18
3.8 Conducted Band Edge Measurement	19
3.9 Conducted Spurious Emission Measurement	20
3.10 Frequency Stability Measurement.....	21
4 RADIATED TEST ITEMS	22
4.1 Measuring Instruments	22
4.2 Test Setup	22
4.3 Test Result of Radiated Test	23
4.4 Radiated Spurious Emission Measurement	24
5 LIST OF MEASURING EQUIPMENT	25
6 MEASUREMENT UNCERTAINTY	26
APPENDIX A. TEST RESULTS OF CONDUCTED TEST	
APPENDIX B. TEST RESULTS OF RADIATED TEST	
APPENDIX C. TEST SETUP PHOTOGRAPHS	

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG4D1311E	Rev. 01	Initial issue of report	Jan. 24, 2025

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	—	Report Only	-
3.5	§27.50 (k)(4)	Peak-to-Average Ratio	<13dB	PASS	
3.6	§27.50 (k)(3)	EIRP	EIRP < 1W (30dBm)	PASS	-
3.7	§2.1049	Occupied Bandwidth	—	Report Only	-
3.8	§2.1051 §27.53 (n)(2)	Conducted Band Edge Measurement	-13dBm/MHz	PASS	-
3.9	§2.1051 §27.53 (n)(2)	Conducted Spurious Emission	-13dBm/MHz	PASS	-
3.10	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within the band	PASS	-
4.4	§2.1053 §27.53 (n)(2)	Radiated Spurious Emission	-13dBm/MHz	PASS	Under limit 41.41 dB at 10473.00 MHz

Conformity Assessment Condition:

- 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/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

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

1 General Description

1.1 Applicant

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

1.2 Manufacturer

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

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2503-1, XT2505-3
FCC ID	IHDT56AU7
IMEI Code	Conducted: 354424860019615 Radiation: 354424860020035/354424860020043
HW Version	DVT2
SW Version	V2VC35.13
EUT Stage	Identical Prototype

Note : The two model name XT2503-1, XT2505-3 are the same product except model name different for market segment.

1.4 Product Specification of Equipment Under Test

Product Feature	
Tx/Rx Frequency	LTE Band 42: 3450 MHz ~ 3550 MHz
Bandwidth	5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<Ant.4> LTE Band 42 : 17.45 dBm LTE CA_42C: 17.24 dBm <Ant.5> LTE Band 42 : 17.37 dBm LTE CA_42C: 17.23 dBm <Ant.7> LTE Band 42 : 22.49 dBm LTE CA_42C: 22.34 dBm <Ant.8> LTE Band 42 : 22.38 dBm LTE CA_42C: 22.38 dBm
Antenna Gain	LTE Band 42 : -4.5 dBi for Ant.4 LTE Band 42 : -6.7 dBi for Ant.5

	LTE Band 42 : -3.4 dBi for Ant.7 LTE Band 42 : -6.9 dBi for Ant.8
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The maximum EIRP is calculated from max output power and max antenna gain, so only the maximum EIRP of Antenna 7 for LTE Band42,42C is shown in the report.

1.5 Modification of EUT

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

1.6 Maximum EIRP Power and Emission Designator

LTE Band 42		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5	3452.5 ~ 3547.5	0.0809	4M49G7D	0.0701	4M50W7D
10	3455 ~ 3545	0.0809	9M03G7D	0.0708	9M05W7D
15	3457.5 ~ 3542.5	0.0807	13M4G7D	0.0700	13M4W7D
20	3460 ~ 3540	0.0811	17M9G7D	0.0698	17M9W7D

LTE Band 42 CA		QPSK		16QAM/64QAM/256QAM	
BW (MHz)		Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
20MHz+20MHz		0.0783	37M9G7D	0.0662	37M6W7D
20MHz+15MHz		0.0729	32M7G7D	0.0640	32M8W7D
15MHz+20MHz		0.0743	32M9G7D	0.0638	32M8W7D
20MHz+10MHz		0.0745	28M1G7D	0.0637	27M9W7D
10MHz+20MHz		0.0729	28M1G7D	0.0630	27M9W7D
20MHz+5MHz		0.0743	23M4G7D	0.0643	23M1W7D
5MHz+20MHz		0.0750	23M3G7D	0.0641	23M3W7D

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

1.7 Testing Site

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ	CN1256	421272

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH01-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24

1.9 Applied Standards

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

- ♦ 47 CFR Part 27 Subpart Q
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 Power Meas License Digital Systems D01 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.

1.10 Specification of Accessory

Accessories Information				
AC Adapter 1(US)	Brand Name	Motorola(Chenyang)	Model Name	MC-681N
AC Adapter 1(EU)	Brand Name	Motorola(Chenyang)	Model Name	MC-682N
AC Adapter 1(UK)	Brand Name	Motorola(Chenyang)	Model Name	MC-683N
AC Adapter 1(AU)	Brand Name	Motorola(Chenyang)	Model Name	MC-685N
AC Adapter 1(AR)	Brand Name	Motorola(Chenyang)	Model Name	MC-686N
AC Adapter 1(BR)	Brand Name	Motorola(Chenyang)	Model Name	MC-687N
AC Adapter 1(Chile)	Brand Name	Motorola(Chenyang)	Model Name	MC-689N
AC Adapter 2(US)	Brand Name	Motorola(Acbel)	Model Name	MC-681N
AC Adapter 2(EU)	Brand Name	Motorola(Acbel)	Model Name	MC-682N
AC Adapter 2(UK)	Brand Name	Motorola(Acbel)	Model Name	MC-683N
AC Adapter 2(AU)	Brand Name	Motorola(Acbel)	Model Name	MC-685N
AC Adapter 2(AR)	Brand Name	Motorola(Acbel)	Model Name	MC-686N
AC Adapter 2(BR)	Brand Name	Motorola(Acbel)	Model Name	MC-687N
AC Adapter 2(Chile)	Brand Name	Motorola(Acbel)	Model Name	MC-689N
Battery 1	Brand Name	Motorola(ATL)	Model Name	RM52
Battery 2	Brand Name	Motorola(Cosmx)	Model Name	RM52
USB Cable 1	Brand Name	Motorola(saibao)	Model Name	SC18D71644
USB Cable 2	Brand Name	Motorola(Luxshare)	Model Name	SC18E08104
USB Cable 3	Brand Name	Motorola(saibao)	Model Name	SC18D86731
USB Cable 4	Brand Name	Motorola(Luxshare)	Model Name	SC18E08103
Wireless Earphones	Brand Name	Motorola	Model Name	XT2443-1

2 Test Configuration of Equipment Under Test

2.1 Test Mode

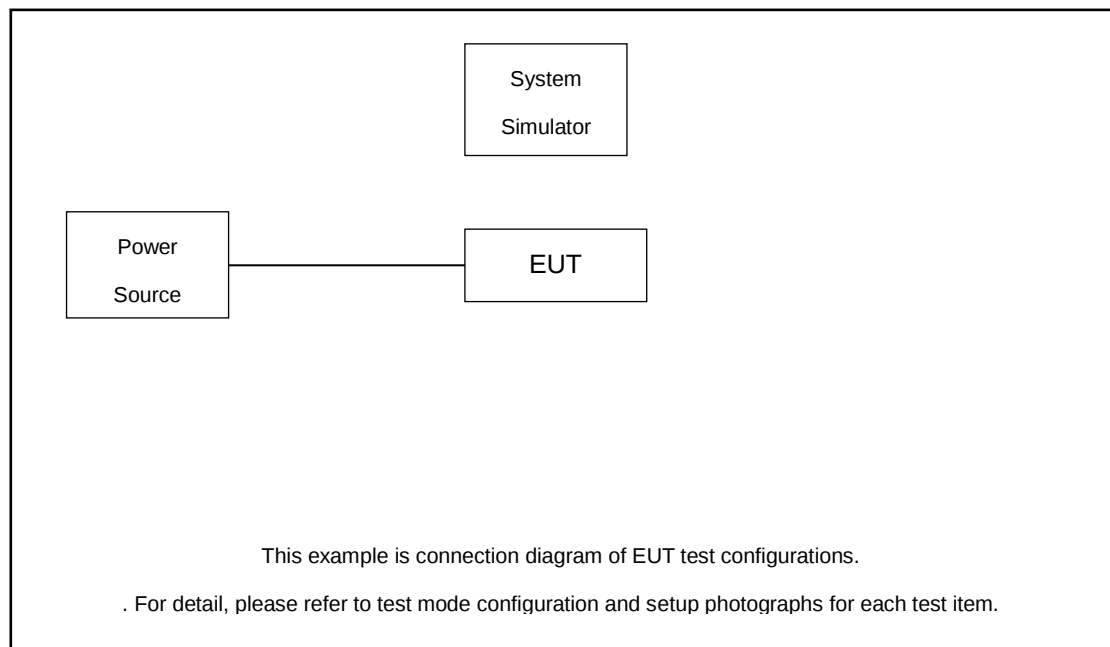
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

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

Test Cases	Band	Bandwidth (MHz)	Modulation	RB #	Test Channel
		eg. 5M, 10M, 15M, 20M	eg. QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L/M/H
Max. Output Power	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L, M, H
Peak-to-Average Ratio	LTE Band 42	20M	QPSK, 16QAM, 64QAM	Full RB	M
E.I.R.P	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM, 256QAM	1RB, Partial RB, Full RB	L, M, H
26dB and 99% Bandwidth	LTE Band 42	20M	QPSK, 16QAM	Full RB	M
Conducted Band Edge	LTE Band 42	5M, 10M, 15M, 20M	QPSK, 16QAM, 64QAM	1RB, Full RB	L, H
Conducted Spurious Emission	LTE Band 42	5M, 10M, 15M, 20M	QPSK	1RB	L, M, H
Frequency Stability	LTE Band 42	10M	QPSK	1RB	M
Radiated Spurious Emission	LTE Band 42	Worst case from maximum power			M
Note: 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	1	Half	Full	L	M	H	
Max. Output Power	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v	v	v	v	v	v	v	
26dB and 99% Bandwidth	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v			v		v		
Conducted Band Edge	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v	v		v	v		v	
Conducted Spurious Emission	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v	v			v	v	v	
E.I.R.P.	42C_CA	v	v	v	v	v	v	v	-	-	-	v	v	v	v			v	v	v	
Radiated Spurious Emission	42C_CA	Worst Case																		v	
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The mark “-” means that this bandwidth is not supported. 3. 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



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
3.	Fixture	INTEL	NGFF Card Carrier	N/A	N/A	N/A

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 and attenuator factor 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 and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5.5 dB and 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

$$= 5.5 + 10 = 15.5 \text{ (dB)}$$

2.5 Frequency List of Low/Middle/High Channels

LTE Band 42 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	42190	42590	42990
	Frequency	3460	3500	3540
15	Channel	42165	42590	43015
	Frequency	3457.5	3500	3542.5
10	Channel	42140	42590	43040
	Frequency	3455	3500	3545
5	Channel	42115	42590	43065
	Frequency	3452.5	3500	3547.5

LTE Band 42C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	41690	42491	43292
		Frequency	3410	3490.1	3570.2
	SCC	Channel	41888	42689	43490
		Frequency	3429.8	3509.9	3590
20 + 15	PCC	Channel	41690	42516	43341
		Frequency	3410	3492.6	3575.1
	SCC	Channel	41861	42687	43512
		Frequency	3427.1	3509.7	3592.2
15 + 20	PCC	Channel	41668	42493	43319
		Frequency	3407.8	3490.3	3572.9
	SCC	Channel	41839	42664	43490
		Frequency	3424.9	3507.4	3590
20 + 10	PCC	Channel	41690	42541	43391
		Frequency	3410	3495.1	3580.1
	SCC	Channel	41834	42685	43535
		Frequency	3424.4	3509.5	3594.5
10 + 20	PCC	Channel	41645	42496	43346
		Frequency	3405.5	3490.6	3575.6
	SCC	Channel	41789	42640	43490
		Frequency	3419.9	3505	3590

LTE Band 42C_CA Channel and Frequency List					
20 + 5	PCC	Channel	41690	42565	43440
		Frequency	3410	3497.5	3585
	SCC	Channel	41807	42682	43557
		Frequency	3421.7	3509.2	3596.7
5 + 20	PCC	Channel	41623	42498	43373
		Frequency	3403.3	3490.8	3578.3
	SCC	Channel	41740	42615	43490
		Frequency	3415	3502.5	3590

LTE Band 42C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	42190	42590	42792
		Frequency	3460	3500	3520.2
	SCC	Channel	42388	42788	42990
		Frequency	3479.8	3519.8	3540
20 + 15	PCC	Channel	42190	42590	42844
		Frequency	3460	3500	3525.4
	SCC	Channel	42361	42761	43015
		Frequency	3477.1	3517.1	3542.5
15 + 20	PCC	Channel	42165	42590	42819
		Frequency	3457.5	3500	3522.9
	SCC	Channel	42336	42761	42990
		Frequency	3474.6	3517.1	3540
20 + 10	PCC	Channel	42190	42590	42896
		Frequency	3460	3500	3530.6
	SCC	Channel	42334	42734	43040
		Frequency	3474.4	3514.4	3545
10 + 20	PCC	Channel	42140	42590	42846
		Frequency	3455	3500	3525.6
	SCC	Channel	42284	42734	42990
		Frequency	3469.4	3514.4	3540
20 + 5	PCC	Channel	42190	42590	42948
		Frequency	3460	3500	3535.8
	SCC	Channel	42307	42707	43065
		Frequency	3471.7	3511.7	3547.5
5 + 20	PCC	Channel	42115	42590	42873
		Frequency	3452.5	3500	3528.3
	SCC	Channel	42232	42707	42990
		Frequency	3464.2	3511.7	3540

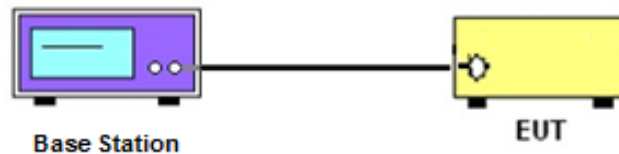
3 Conducted Test Items

3.1 Measuring Instruments

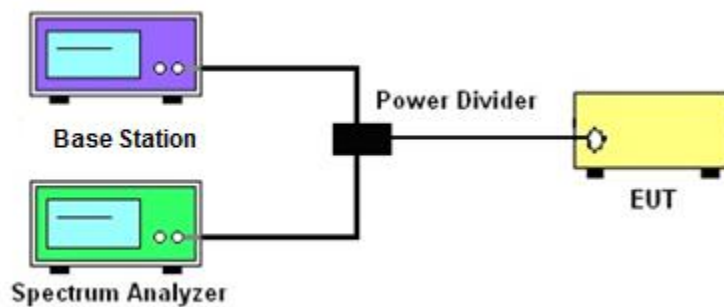
See list of measuring instruments of this test report.

3.2 Test Setup

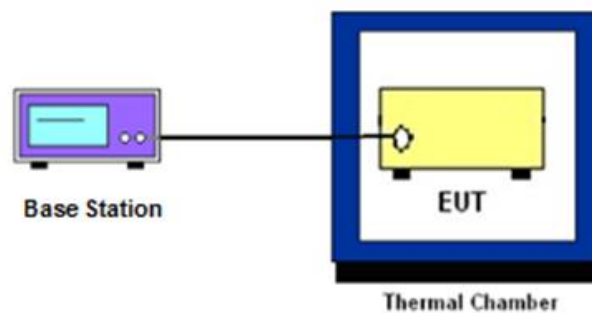
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied / 26dB Bandwidth ,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 Measurement

3.4.1 Description of the Conducted Output Power Measurement

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

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.

3.5 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 EIRP

3.6.1 Description of EIRP Limit

§ 27.50 (k)(3)

Mobile devices are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications

3.6.2 Test Procedures

1. According to KDB 412172 D01 Power Approach,
2. $EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, 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

3.7 Occupied Bandwidth

3.7.1 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.

3.7.2 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.

3.8 Conducted Band Edge Measurement

3.8.1 Description of Conducted Band Edge Measurement

§ 27.53 (n)(2)

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

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 band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq 1\%$ EBW but limited to a maximum of 200 kHz in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz and 5 MHz removed from the band edge, set RBW ≥ 500 KHz.
6. Beyond the 5 MHz removed from the band edge, set RBW = 1MHz.
7. Set spectrum analyzer with RMS detector.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.

3.9 Conducted Spurious Emission Measurement

3.9.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges shall not exceed -13 dBm/MHz.

It is measured by means of a calibrated spectrum analyzer and scanned from 9 kHz up to a frequency including its 10th harmonic.

3.9.2 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. Checked that all the results comply with the emission limit line.

3.10 Frequency Stability Measurement

3.10.1 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.

3.10.2 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.

3.10.3 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.

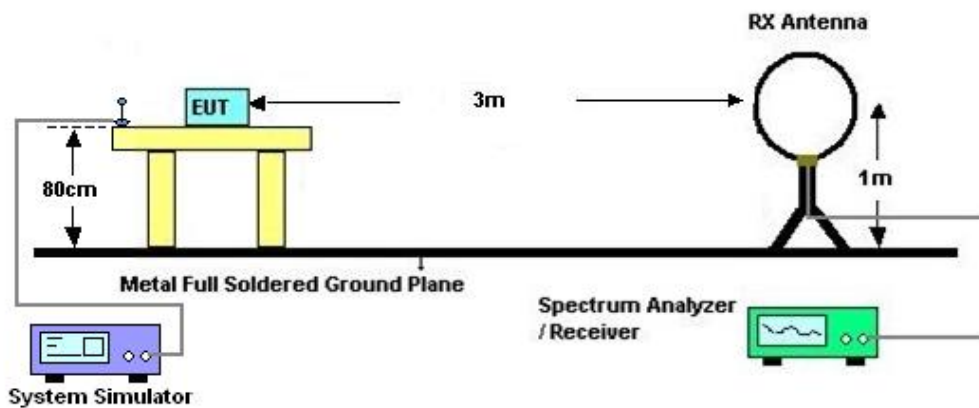
4 Radiated Test Items

4.1 Measuring Instruments

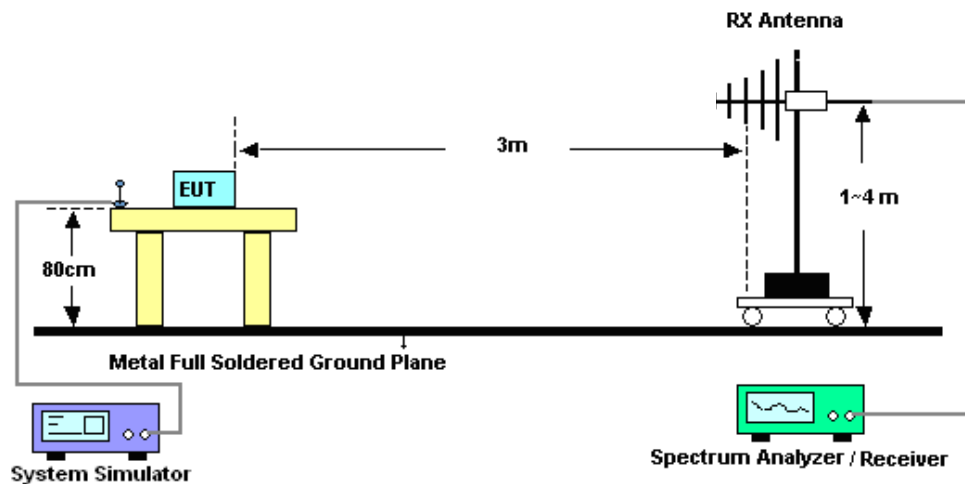
See list of measuring instruments of this test report.

4.2 Test Setup

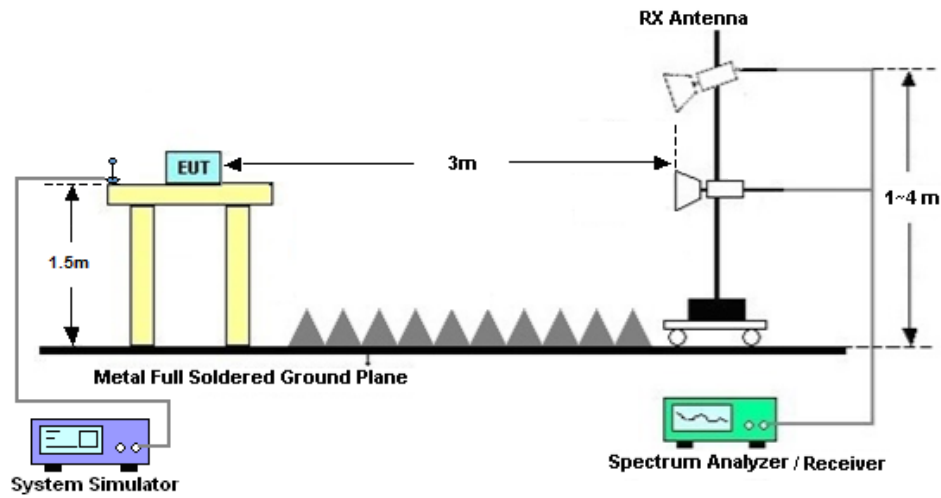
4.2.1 For radiated test below 30MHz



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 Measurement

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges shall not exceed -13 dBm/MHz.

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.
$$\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$$
$$\text{ERP (dBm)} = \text{EIRP} - 2.15$$
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Dec. 29, 2024~Jan. 23, 2025	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V , 3A	Oct. 16, 2024	Dec. 29, 2024~Jan. 23, 2025	Oct. 15, 2025	Conducted (TH01-SZ)
Power Divider	Titan	P02N005180	923402	0.4GHz~26.5GHz	Nov. 08, 2024	Dec. 29, 2024~Jan. 23, 2025	Nov. 07, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 03, 2024	Dec. 29, 2024~Jan. 23, 2025	Jul. 02, 2025	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 27, 2023	Dec. 26, 2024	Dec. 27, 2024	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 29, 2023	Dec. 26, 2024	Dec. 28, 2024	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 14,2024	Dec. 26, 2024	Oct. 13, 2025	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	Dec. 26, 2024	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2024	Dec. 26, 2024	Jul. 03, 2025	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09 ,2024	Dec. 26, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 09, 2024	Dec. 26, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-1	1943528	1GHz~18GHz	Oct. 14,2024	Dec. 26, 2024	Oct. 13, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2024	Dec. 26, 2024	Jul. 02, 2025	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	Oct. 14,2024	Dec. 26, 2024	Oct. 13, 2025	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Dec. 26, 2024	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Dec. 26, 2024	NCR	Radiation (03CH01-SZ)

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	± 1.34 dB
Occupied Channel Bandwidth	± 0.012 MHz
Conducted Power	± 1.34 dB
Peak to Average Ratio	± 1.34 dB
Frequency Stability	± 1.3 Hz

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.48 dB
---	---------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.53 dB
---	---------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.02 dB
---	---------

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

Appendix A. Test Results of Conducted Test

Test Engineer :	Fly	Temperature :	22~23°C
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and EIRP

LTE Band42_ANT7:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				42190	42590	42990			
Frequency (MHz)				3460	3500	3540	L	M	H
20	QPSK	1	0	22.45	22.49	22.40	0.0804	0.0811	0.0794
20	QPSK	1	49	22.41	22.44	22.40	0.0796	0.0802	0.0794
20	QPSK	1	99	22.46	22.45	22.41	0.0805	0.0804	0.0796
20	QPSK	50	0	21.38	21.48	21.42	0.0628	0.0643	0.0634
20	QPSK	50	24	21.38	21.44	21.32	0.0628	0.0637	0.0619
20	QPSK	50	50	21.42	21.39	21.33	0.0634	0.0630	0.0621
20	QPSK	100	0	21.41	21.47	21.36	0.0632	0.0641	0.0625
20	16QAM	1	0	21.60	21.72	21.76	0.0661	0.0679	0.0685
20	16QAM	1	49	21.69	21.79	21.73	0.0675	0.0690	0.0681
20	16QAM	1	99	21.84	21.76	21.66	0.0698	0.0685	0.0670
20	16QAM	50	0	20.30	20.41	20.30	0.0490	0.0502	0.0490
20	16QAM	50	24	20.33	20.43	20.36	0.0493	0.0505	0.0497
20	16QAM	50	50	20.36	20.39	20.29	0.0497	0.0500	0.0489
20	16QAM	100	0	20.34	20.44	20.33	0.0494	0.0506	0.0493
20	64QAM	1	0	20.52	20.60	20.53	0.0515	0.0525	0.0516
20	64QAM	1	49	20.50	20.56	20.54	0.0513	0.0520	0.0518
20	64QAM	1	99	20.44	20.57	20.56	0.0506	0.0521	0.0520
20	64QAM	50	0	19.47	19.35	19.34	0.0405	0.0394	0.0393
20	64QAM	50	24	19.35	19.43	19.49	0.0394	0.0401	0.0406
20	64QAM	50	50	19.34	19.47	19.40	0.0393	0.0405	0.0398
20	64QAM	100	0	19.30	19.30	19.43	0.0389	0.0389	0.0401
20	256QAM	1	0	17.49	17.58	17.48	0.0256	0.0262	0.0256
20	256QAM	1	49	17.40	17.48	17.54	0.0251	0.0256	0.0259
20	256QAM	1	99	17.41	17.42	17.43	0.0252	0.0252	0.0253
20	256QAM	50	0	17.45	17.46	17.51	0.0254	0.0255	0.0258
20	256QAM	50	24	17.48	17.43	17.48	0.0256	0.0253	0.0256
20	256QAM	50	50	17.44	17.49	17.40	0.0254	0.0256	0.0251
20	256QAM	100	0	17.39	17.50	17.50	0.0251	0.0257	0.0257
Channel				42165	42590	43015	EIRP(W)		
Frequency (MHz)				3457.5	3500	3542.5	L	M	H
15	QPSK	1	0	22.47	22.47	22.47	0.0807	0.0807	0.0807
15	QPSK	1	37	22.37	22.47	22.44	0.0789	0.0807	0.0802



15	QPSK	1	74	22.45	22.45	22.37	0.0804	0.0804	0.0789
15	QPSK	36	0	21.36	21.40	21.41	0.0625	0.0631	0.0632
15	QPSK	36	20	21.38	21.35	21.37	0.0628	0.0624	0.0627
15	QPSK	36	39	21.35	21.39	21.32	0.0624	0.0630	0.0619
15	QPSK	75	0	21.36	21.45	21.34	0.0625	0.0638	0.0622
15	16QAM	1	0	21.62	21.77	21.82	0.0664	0.0687	0.0695
15	16QAM	1	37	21.79	21.80	21.76	0.0690	0.0692	0.0685
15	16QAM	1	74	21.85	21.81	21.70	0.0700	0.0693	0.0676
15	16QAM	36	0	20.36	20.40	20.34	0.0497	0.0501	0.0494
15	16QAM	36	20	20.39	20.38	20.38	0.0500	0.0499	0.0499
15	16QAM	36	39	20.43	20.39	20.36	0.0505	0.0500	0.0497
15	16QAM	75	0	20.34	20.43	20.35	0.0494	0.0505	0.0495
15	64QAM	1	0	20.55	20.53	20.52	0.0519	0.0516	0.0515
15	64QAM	1	37	20.48	20.52	20.55	0.0511	0.0515	0.0519
15	64QAM	1	74	20.46	20.58	20.63	0.0508	0.0522	0.0528
15	64QAM	36	0	19.39	19.40	19.40	0.0397	0.0398	0.0398
15	64QAM	36	20	19.37	19.45	19.42	0.0395	0.0403	0.0400
15	64QAM	36	39	19.32	19.45	19.37	0.0391	0.0403	0.0395
15	64QAM	75	0	19.37	19.32	19.40	0.0395	0.0391	0.0398
15	256QAM	1	0	17.46	17.48	17.42	0.0255	0.0256	0.0252
15	256QAM	1	37	17.47	17.51	17.50	0.0255	0.0258	0.0257
15	256QAM	1	74	17.44	17.46	17.47	0.0254	0.0255	0.0255
15	256QAM	36	0	17.41	17.46	17.46	0.0252	0.0255	0.0255
15	256QAM	36	20	17.51	17.45	17.39	0.0258	0.0254	0.0251
15	256QAM	36	39	17.47	17.49	17.48	0.0255	0.0256	0.0256
15	256QAM	75	0	17.50	17.53	17.46	0.0257	0.0259	0.0255
Channel				42140	42590	43040	EIRP(W)		
Frequency (MHz)				3455	3500	3545	L	M	H
10	QPSK	1	0	22.45	22.43	22.45	0.0804	0.0800	0.0804
10	QPSK	1	25	22.45	22.48	22.41	0.0804	0.0809	0.0796
10	QPSK	1	49	22.35	22.47	22.39	0.0785	0.0807	0.0793
10	QPSK	25	0	21.35	21.38	21.39	0.0624	0.0628	0.0630
10	QPSK	25	12	21.37	21.42	21.34	0.0627	0.0634	0.0622
10	QPSK	25	25	21.39	21.41	21.37	0.0630	0.0632	0.0627
10	QPSK	50	0	21.38	21.36	21.36	0.0628	0.0625	0.0625
10	16QAM	1	0	21.70	21.71	21.76	0.0676	0.0678	0.0685
10	16QAM	1	25	21.78	21.90	21.76	0.0689	0.0708	0.0685
10	16QAM	1	49	21.74	21.75	21.71	0.0682	0.0684	0.0678
10	16QAM	25	0	20.33	20.48	20.32	0.0493	0.0511	0.0492
10	16QAM	25	12	20.39	20.34	20.33	0.0500	0.0494	0.0493
10	16QAM	25	25	20.43	20.42	20.29	0.0505	0.0504	0.0489
10	16QAM	50	0	20.34	20.35	20.34	0.0494	0.0495	0.0494
10	64QAM	1	0	20.56	20.53	20.54	0.0520	0.0516	0.0518
10	64QAM	1	25	20.45	20.56	20.56	0.0507	0.0520	0.0520
10	64QAM	1	49	20.41	20.60	20.61	0.0502	0.0525	0.0526
10	64QAM	25	0	19.46	19.32	19.35	0.0404	0.0391	0.0394
10	64QAM	25	12	19.34	19.45	19.39	0.0393	0.0403	0.0397
10	64QAM	25	25	19.39	19.41	19.33	0.0397	0.0399	0.0392



10	64QAM	50	0	19.31	19.35	19.42	0.0390	0.0394	0.0400
10	256QAM	1	0	17.48	17.53	17.48	0.0256	0.0259	0.0256
10	256QAM	1	25	17.42	17.45	17.44	0.0252	0.0254	0.0254
10	256QAM	1	49	17.41	17.42	17.51	0.0252	0.0252	0.0258
10	256QAM	25	0	17.42	17.51	17.49	0.0252	0.0258	0.0256
10	256QAM	25	12	17.47	17.52	17.49	0.0255	0.0258	0.0256
10	256QAM	25	25	17.49	17.43	17.40	0.0256	0.0253	0.0251
10	256QAM	50	0	17.48	17.45	17.44	0.0256	0.0254	0.0254
Channel				42115	42590	43065	EIRP(W)		
Frequency (MHz)				3452.5	3500	3547.5	L	M	H
5	QPSK	1	0	22.40	22.44	22.37	0.0794	0.0802	0.0789
5	QPSK	1	12	22.42	22.48	22.40	0.0798	0.0809	0.0794
5	QPSK	1	24	22.36	22.44	22.47	0.0787	0.0802	0.0807
5	QPSK	12	0	21.42	21.45	21.37	0.0634	0.0638	0.0627
5	QPSK	12	7	21.43	21.43	21.34	0.0635	0.0635	0.0622
5	QPSK	12	13	21.43	21.44	21.32	0.0635	0.0637	0.0619
5	QPSK	25	0	21.38	21.37	21.30	0.0628	0.0627	0.0617
5	16QAM	1	0	21.69	21.74	21.79	0.0675	0.0682	0.0690
5	16QAM	1	12	21.71	21.86	21.71	0.0678	0.0701	0.0678
5	16QAM	1	24	21.83	21.77	21.71	0.0697	0.0687	0.0678
5	16QAM	12	0	20.35	20.39	20.30	0.0495	0.0500	0.0490
5	16QAM	12	7	20.31	20.33	20.39	0.0491	0.0493	0.0500
5	16QAM	12	13	20.36	20.40	20.39	0.0497	0.0501	0.0500
5	16QAM	25	0	20.34	20.44	20.29	0.0494	0.0506	0.0489
5	64QAM	1	0	20.49	20.55	20.45	0.0512	0.0519	0.0507
5	64QAM	1	12	20.56	20.57	20.47	0.0520	0.0521	0.0509
5	64QAM	1	24	20.39	20.68	20.55	0.0500	0.0535	0.0519
5	64QAM	12	0	19.44	19.35	19.40	0.0402	0.0394	0.0398
5	64QAM	12	7	19.30	19.40	19.37	0.0389	0.0398	0.0395
5	64QAM	12	13	19.39	19.44	19.32	0.0397	0.0402	0.0391
5	64QAM	25	0	19.35	19.30	19.46	0.0394	0.0389	0.0404
5	256QAM	1	0	17.49	17.54	17.42	0.0256	0.0259	0.0252
5	256QAM	1	12	17.44	17.50	17.54	0.0254	0.0257	0.0259
5	256QAM	1	24	17.43	17.44	17.51	0.0253	0.0254	0.0258
5	256QAM	12	0	17.43	17.44	17.46	0.0253	0.0254	0.0255
5	256QAM	12	7	17.41	17.47	17.41	0.0252	0.0255	0.0252
5	256QAM	12	13	17.41	17.47	17.41	0.0252	0.0255	0.0252
5	256QAM	25	0	17.41	17.49	17.46	0.0252	0.0256	0.0255

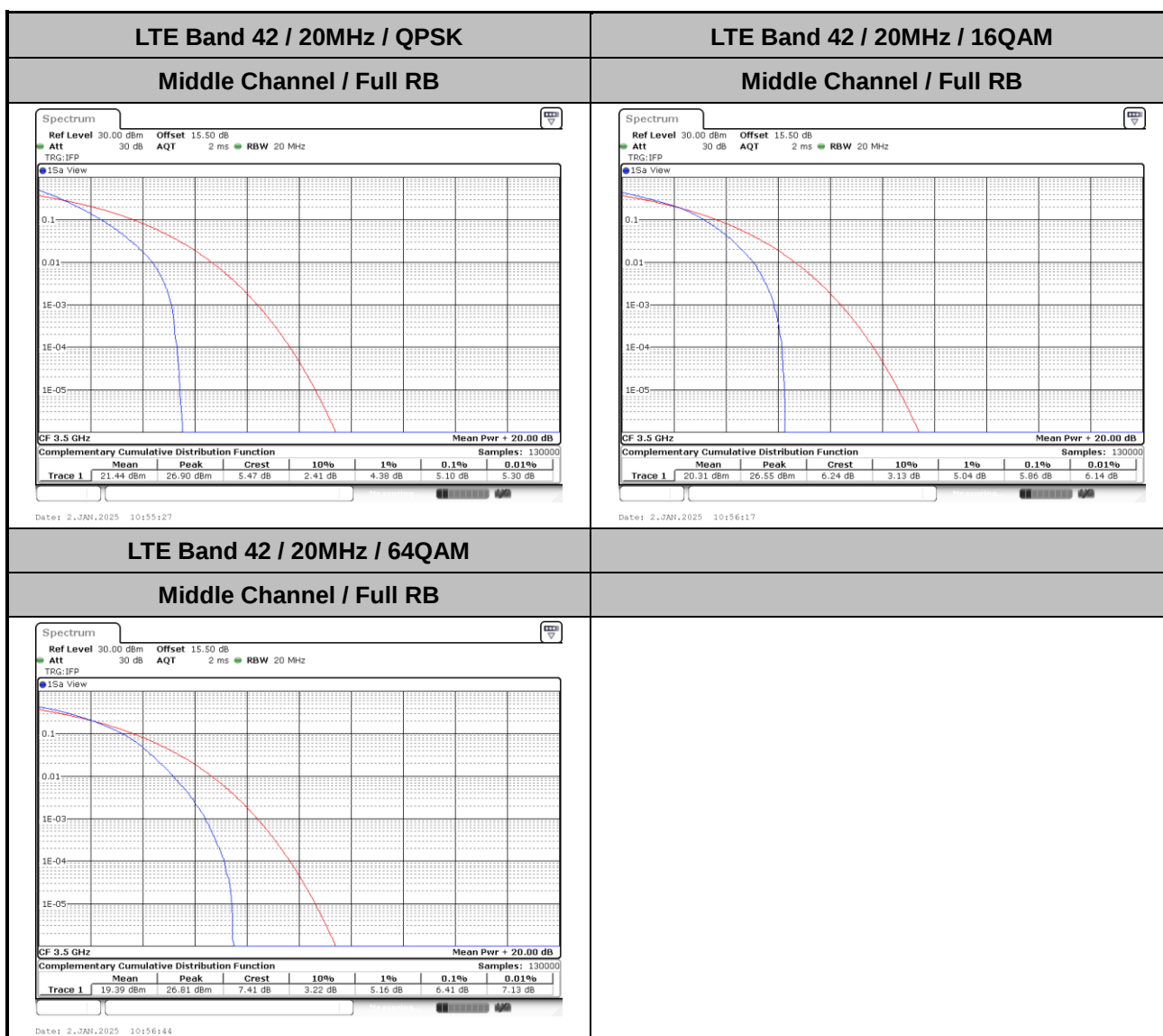
LTE Band 42C_ANT7:

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	22.28	0.0773
M	QPSK	1	Max	1	0	22.34	0.0783
H	QPSK	1	Max	1	0	22.23	0.0764
L	16QAM	1	Max	1	0	21.49	0.0644
M	16QAM	1	Max	1	0	21.61	0.0662
H	16QAM	1	Max	1	0	21.57	0.0656
L	64QAM	1	Max	1	0	20.39	0.0500
M	64QAM	1	Max	1	0	20.32	0.0492
H	64QAM	1	Max	1	0	20.43	0.0505
L	256QAM	1	Max	1	0	17.41	0.0252
M	256QAM	1	Max	1	0	17.29	0.0245
H	256QAM	1	Max	1	0	17.17	0.0238
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.03	0.0729
M	16QAM	1	Max	1	0	21.46	0.0640
Combination 15MHz+20MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.11	0.0743
M	16QAM	1	Max	1	0	21.45	0.0638
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.12	0.0745
M	16QAM	1	Max	1	0	21.44	0.0637
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.03	0.0729
M	16QAM	1	Max	1	0	21.39	0.0630
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.11	0.0743
M	16QAM	1	Max	1	0	21.48	0.0643
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	22.15	0.0750
M	16QAM	1	Max	1	0	21.47	0.0641

LTE Band 42

Peak-to-Average Ratio

Mode	LTE Band 42 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.10	5.86	6.41	PASS



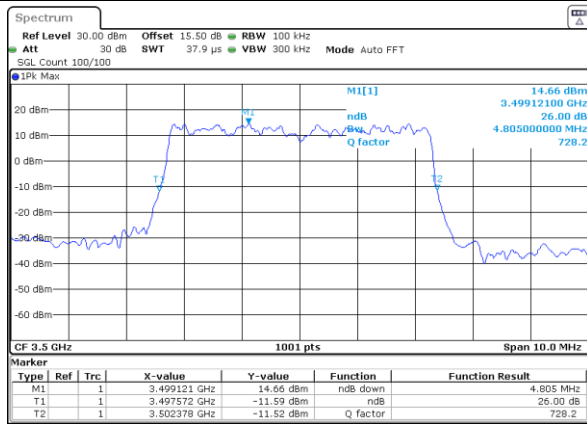


26dB Bandwidth

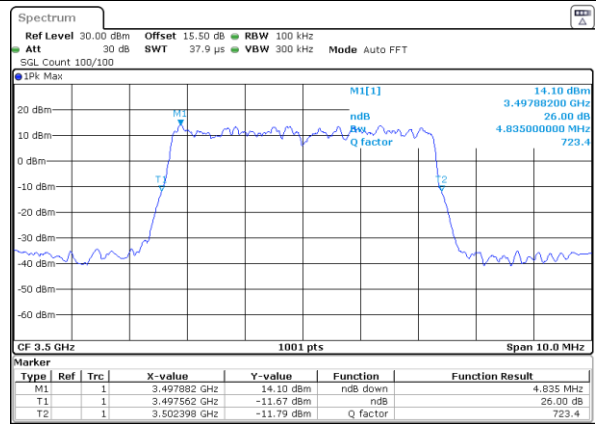
Mode	LTE Band 42 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.81	4.84	9.63	9.63	14.39	14.27	18.74	18.74

LTE Band 42

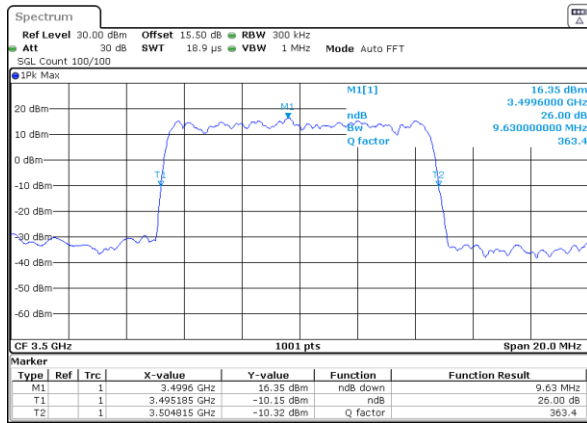
Middle Channel / 5MHz / QPSK



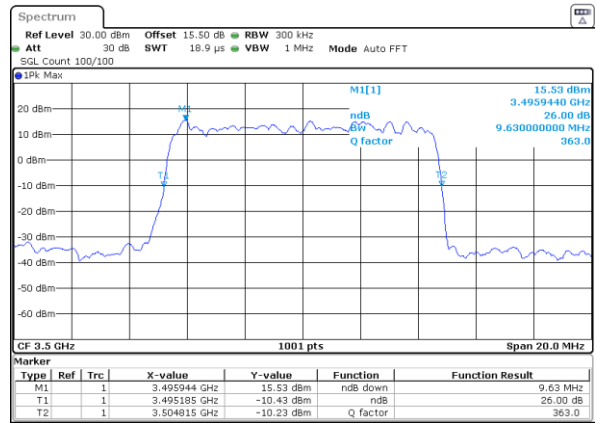
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK

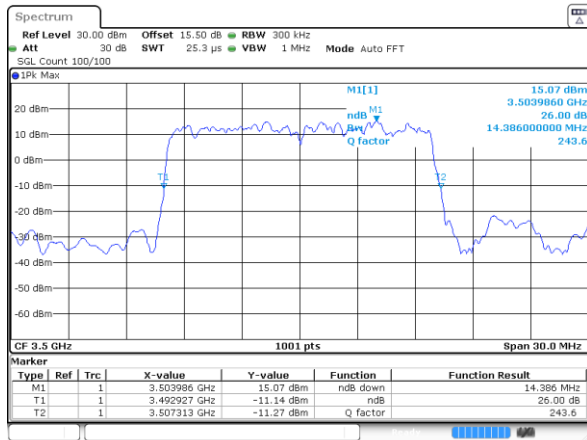


Middle Channel / 10MHz / 16QAM

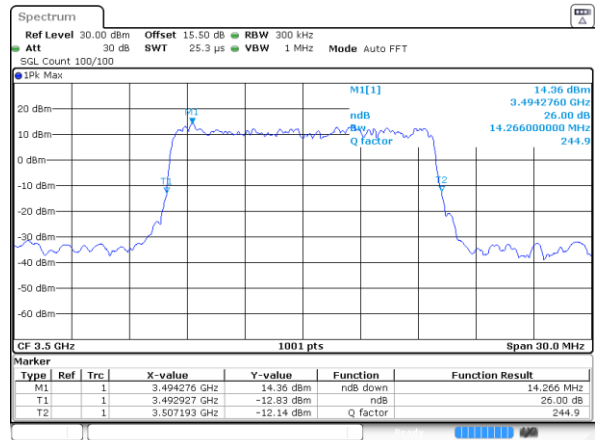




Middle Channel / 15MHz / QPSK

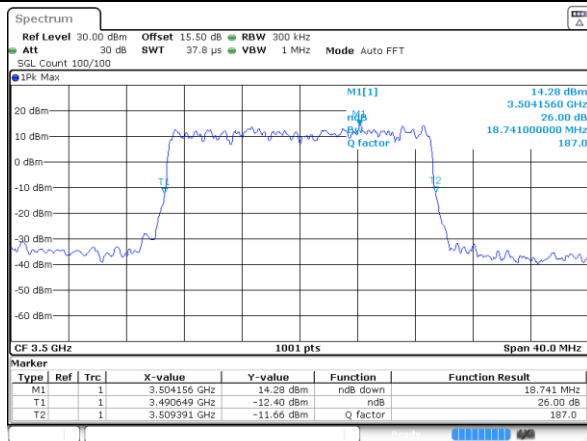


Middle Channel / 15MHz / 16QAM

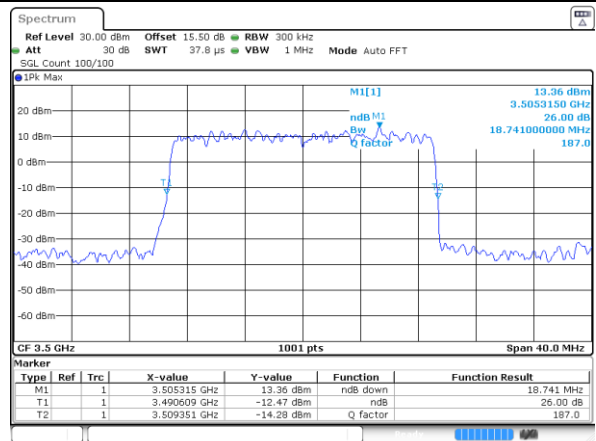


LTE Band 42

Middle Channel / 20MHz / QPSK

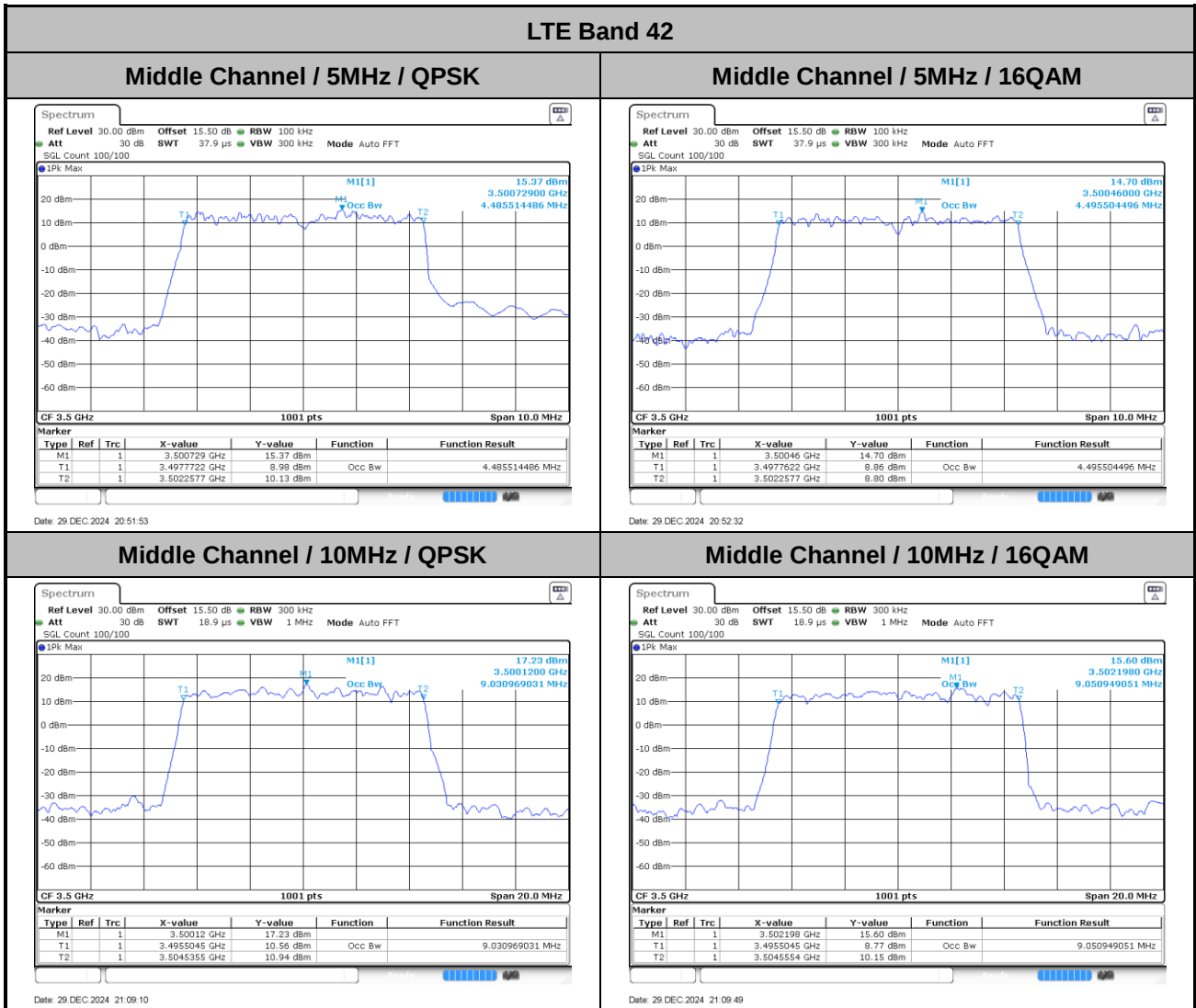


Middle Channel / 20MHz / 16QAM



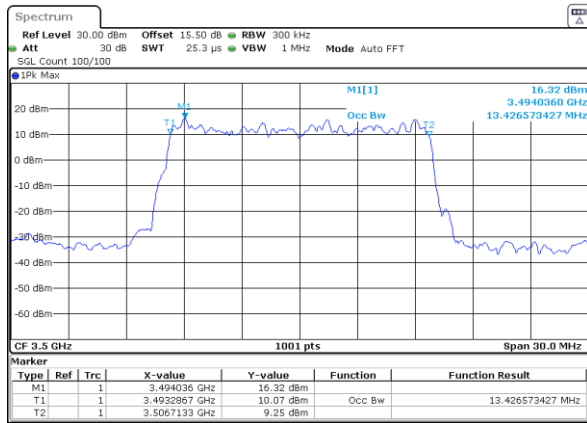
Occupied Bandwidth

Mode	LTE Band 42 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.49	4.50	9.03	9.05	13.43	13.40	17.86	17.94



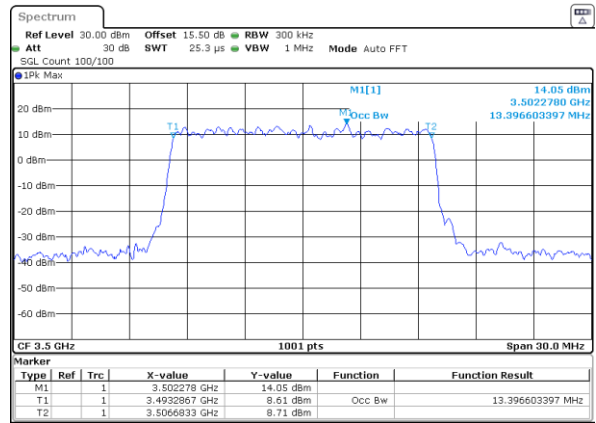


Middle Channel / 15MHz / QPSK



Date: 29 DEC 2024 21:24:45

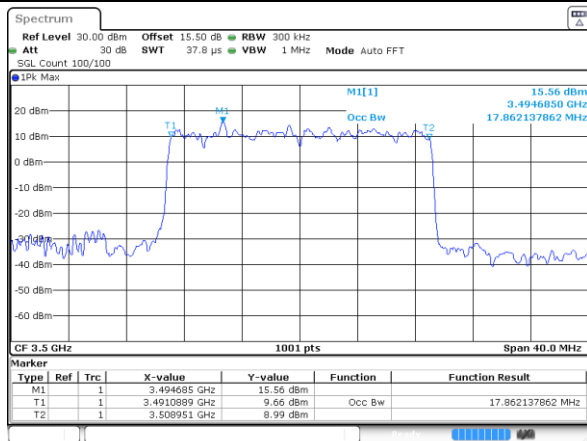
Middle Channel / 15MHz / 16QAM



Date: 29 DEC 2024 21:25:24

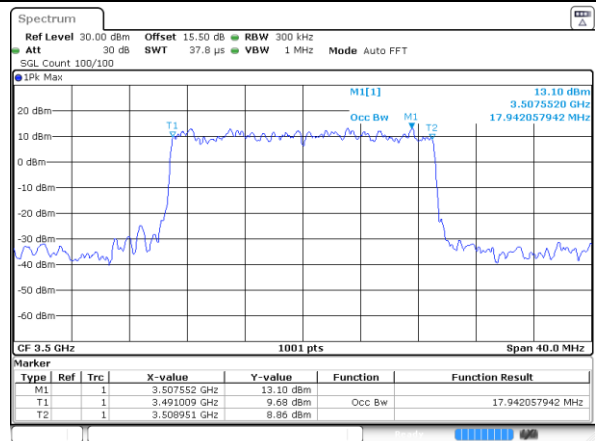
LTE Band 42

Middle Channel / 20MHz / QPSK



Date: 29 DEC 2024 21:40:00

Middle Channel / 20MHz / 16QAM



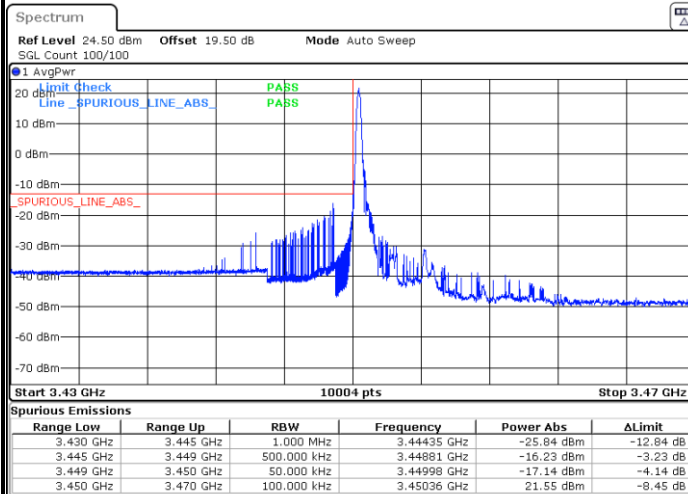
Date: 29 DEC 2024 21:40:39



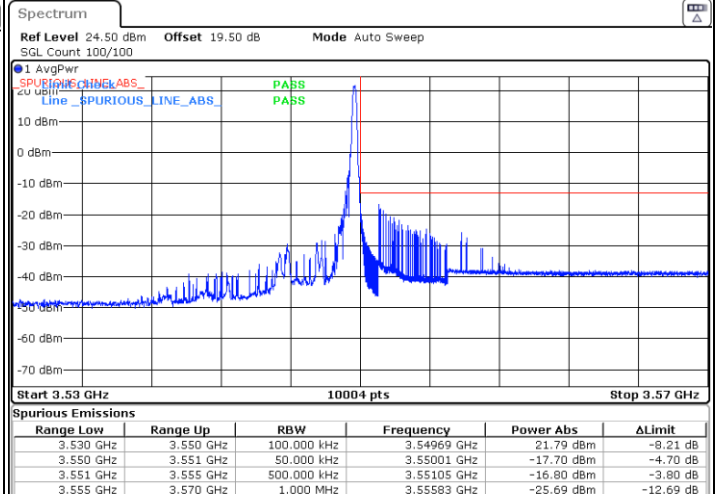
Conducted Band Edge

LTE Band 42 / 5MHz / QPSK

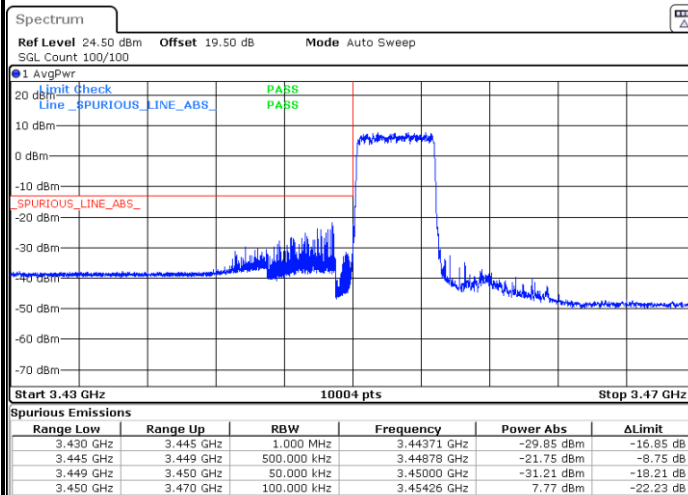
Lowest Band Edge / 1 RB



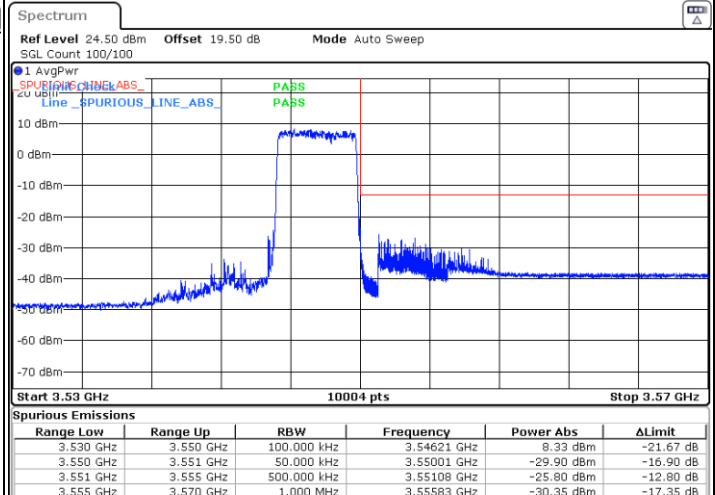
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



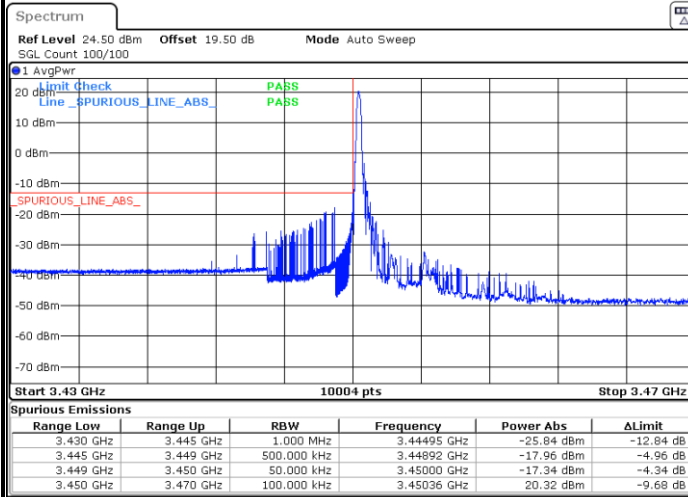
Highest Band Edge / Full RB



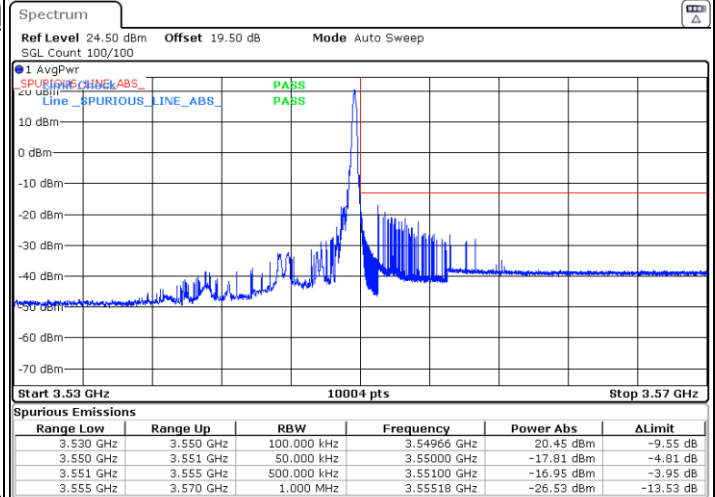


LTE Band 42 / 5MHz / 16QAM

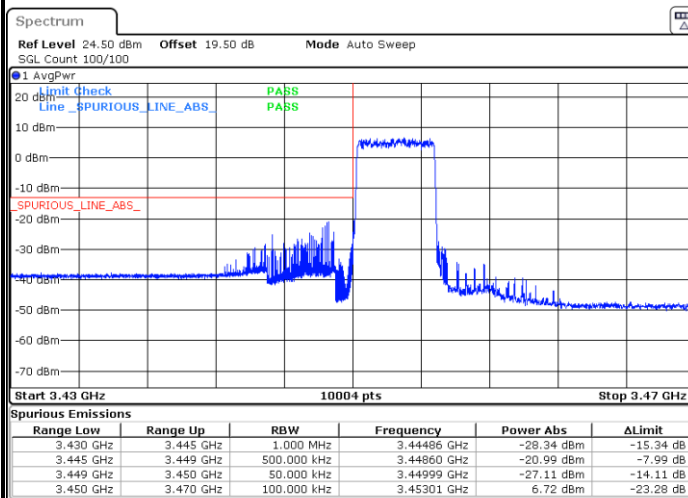
Lowest Band Edge / 1RB



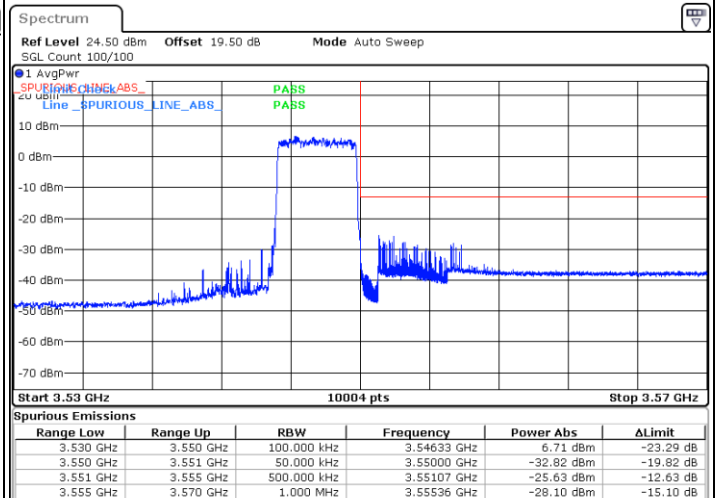
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



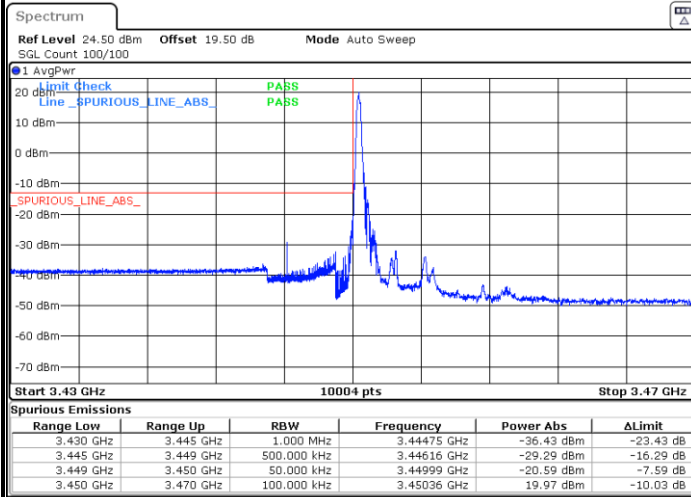
Highest Band Edge / Full RB





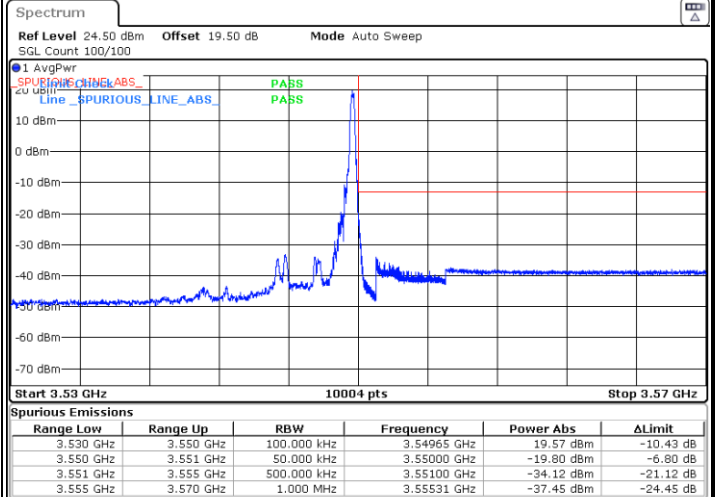
LTE Band 42 / 5MHz / 64QAM

Lowest Band Edge / 1RB



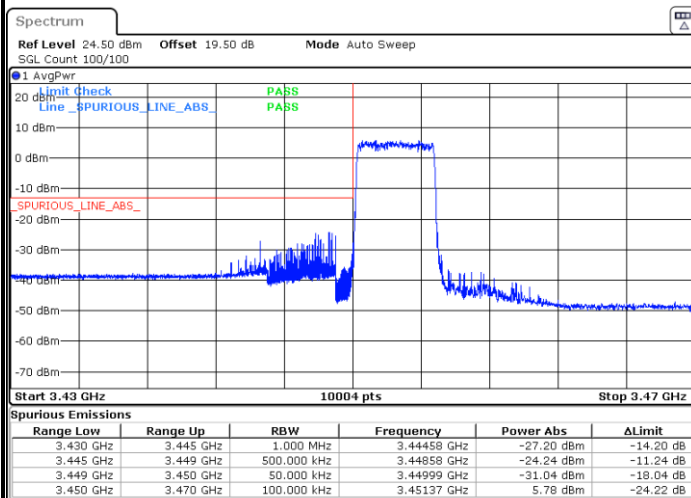
Date: 29 DEC 2024 20:46:15

Highest Band Edge / 1 RB



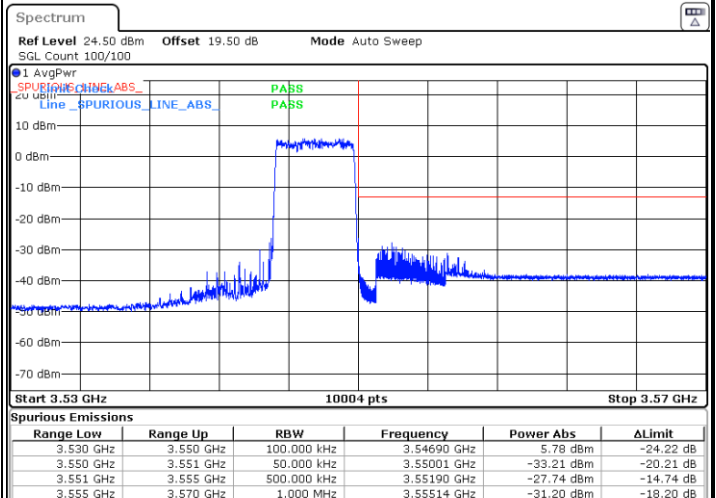
Date: 29 DEC 2024 20:55:08

Lowest Band Edge / Full RB



Date: 29 DEC 2024 20:48:43

Highest Band Edge / Full RB

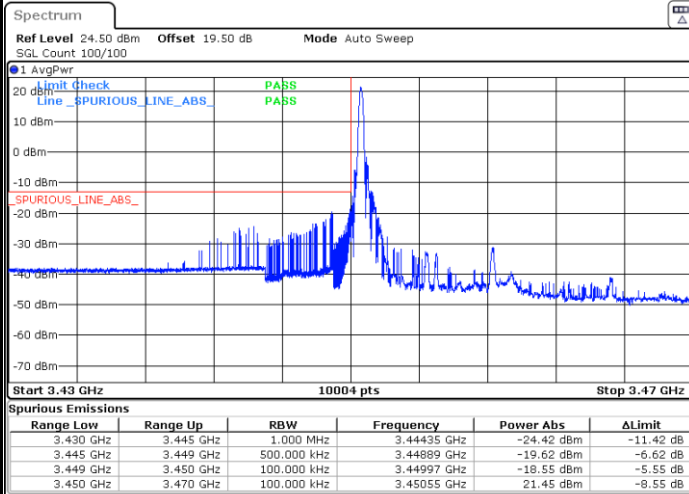


Date: 29 DEC 2024 20:57:36



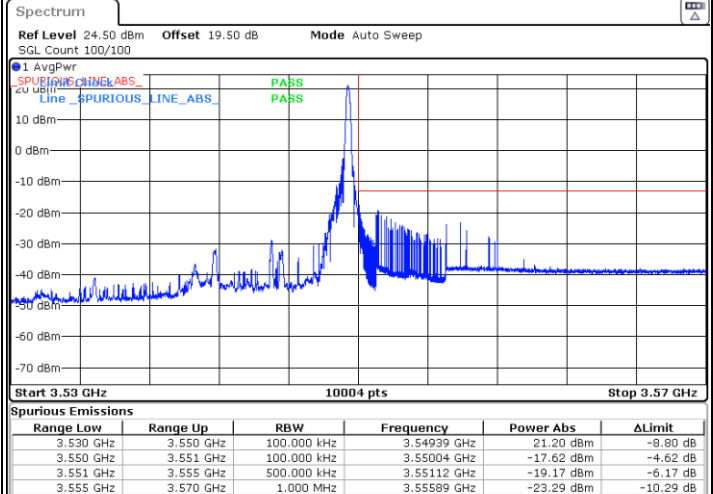
LTE Band 42 / 10MHz / QPSK

Lowest Band Edge / 1 RB



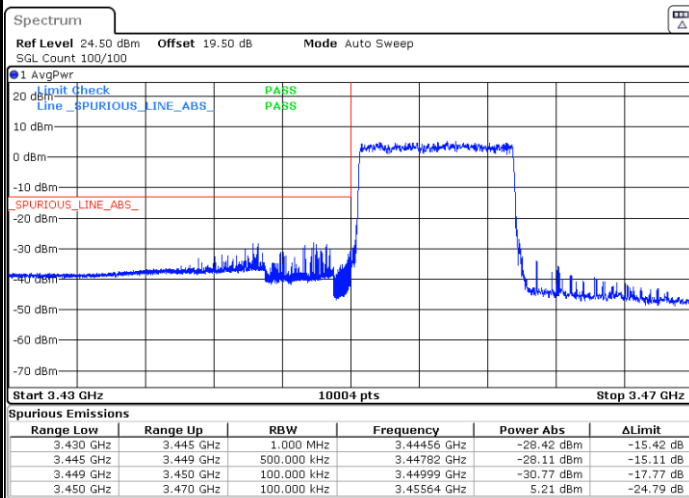
Date: 29 DEC 2024 21:01:54

Highest Band Edge / 1 RB



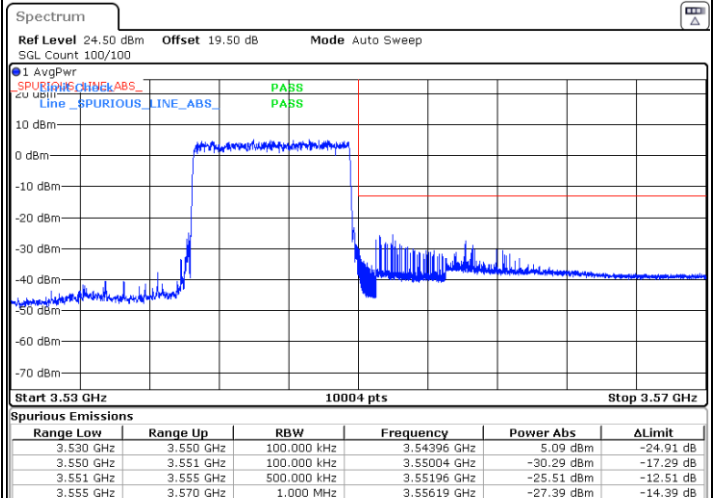
Date: 29 DEC 2024 21:10:47

Lowest Band Edge / Full RB



Date: 29 DEC 2024 21:04:22

Highest Band Edge / Full RB

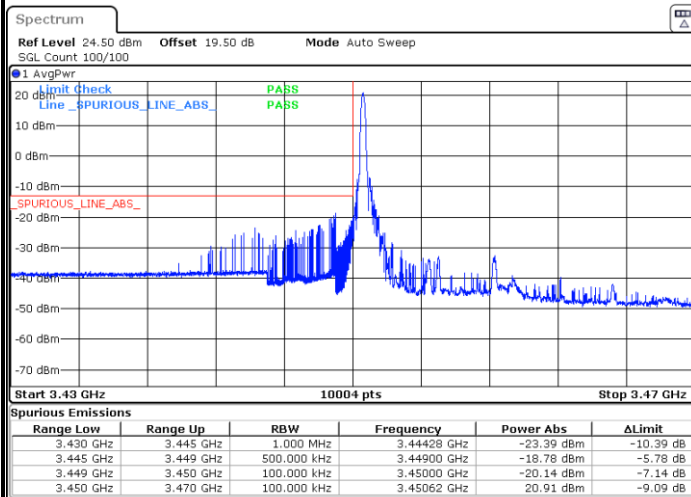


Date: 29 DEC 2024 21:13:15



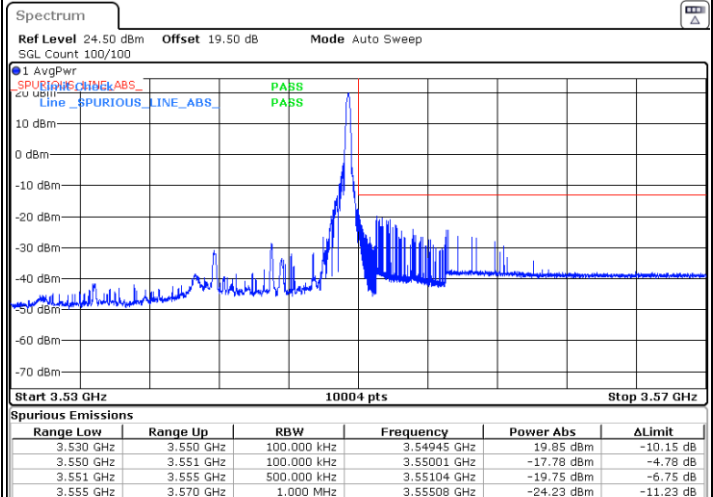
LTE Band 42 / 10MHz / 16QAM

Lowest Band Edge / 1RB



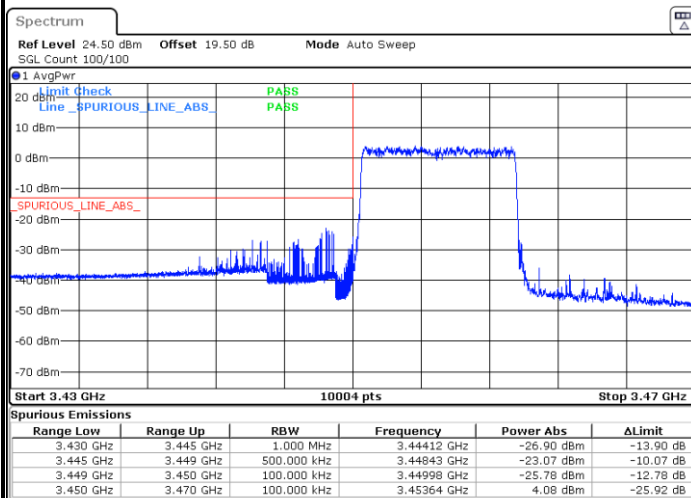
Date: 29 DEC 2024 21:02:43

Highest Band Edge / 1 RB



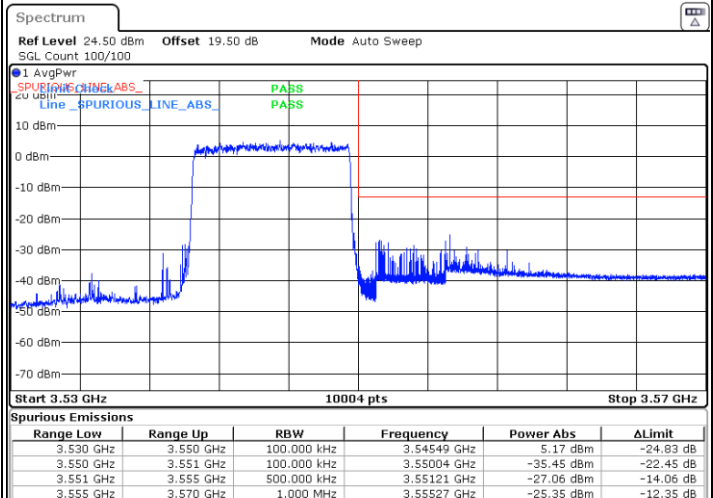
Date: 29 DEC 2024 21:11:37

Lowest Band Edge / Full RB



Date: 29 DEC 2024 21:05:11

Highest Band Edge / Full RB

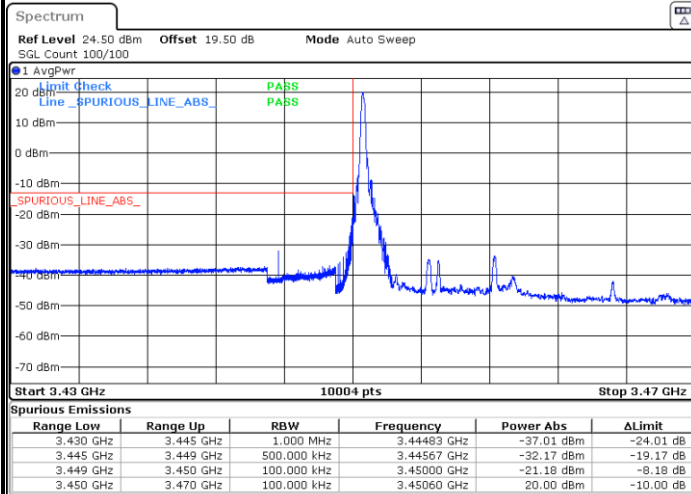


Date: 29 DEC 2024 21:14:04



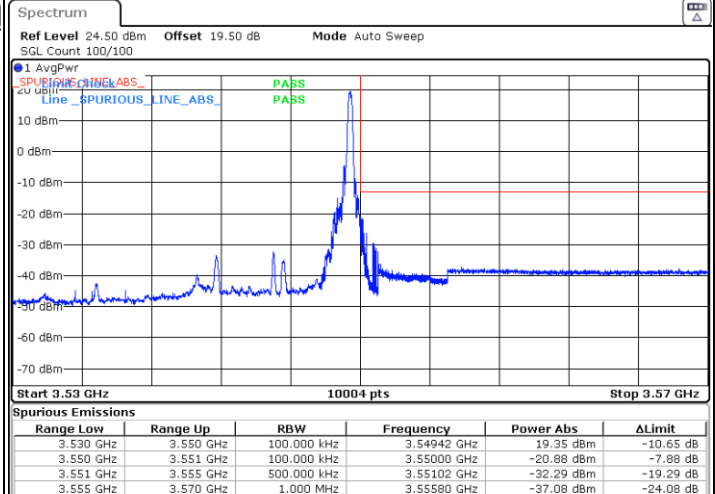
LTE Band 42 / 10MHz / 64QAM

Lowest Band Edge / 1RB



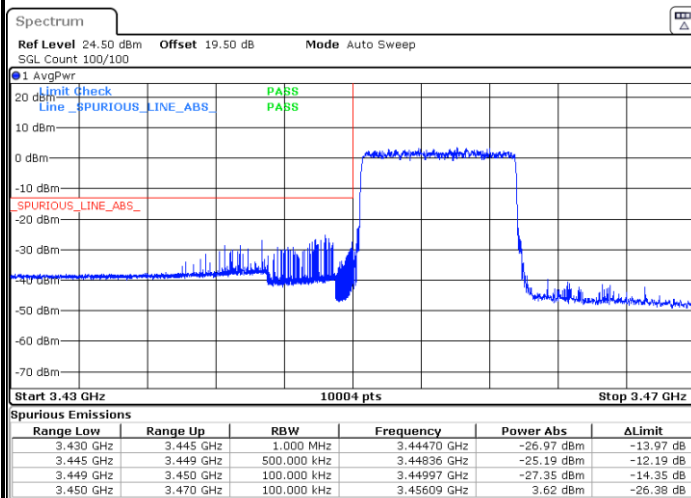
Date: 29 DEC 2024 21:03:32

Highest Band Edge / 1 RB



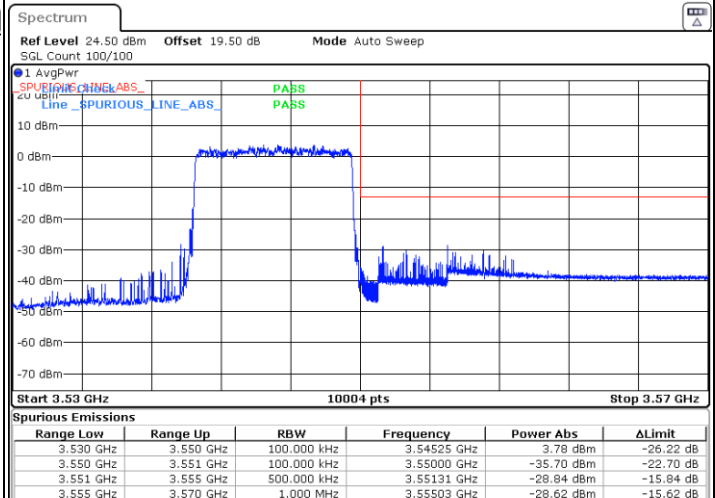
Date: 29 DEC 2024 21:12:25

Lowest Band Edge / Full RB



Date: 29 DEC 2024 21:06:00

Highest Band Edge / Full RB

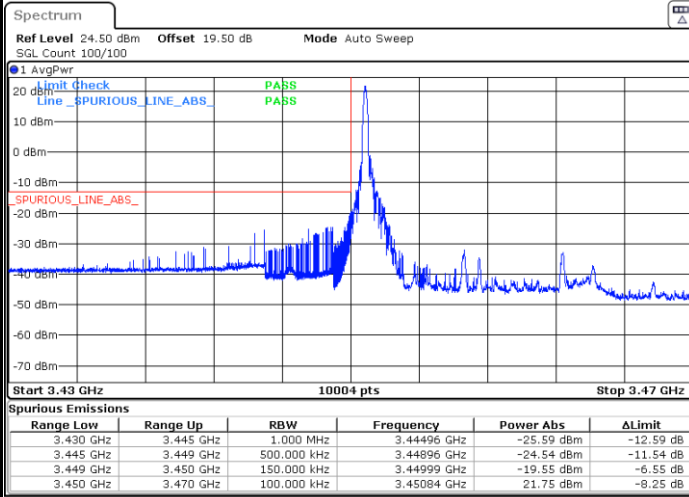


Date: 29 DEC 2024 21:14:53

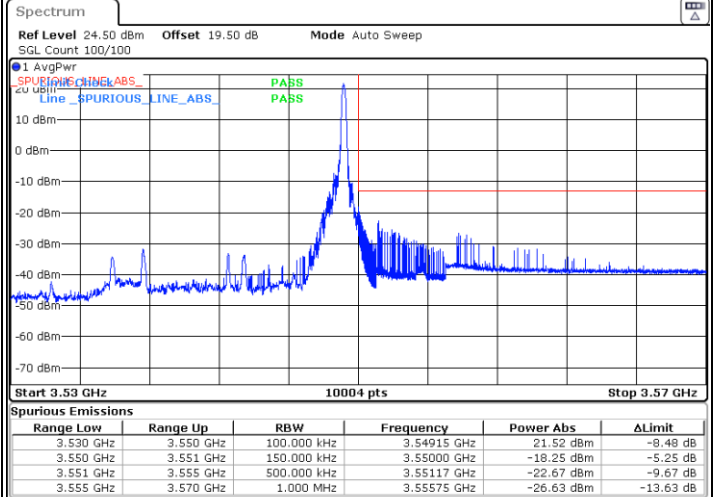


LTE Band 42 / 15MHz / QPSK

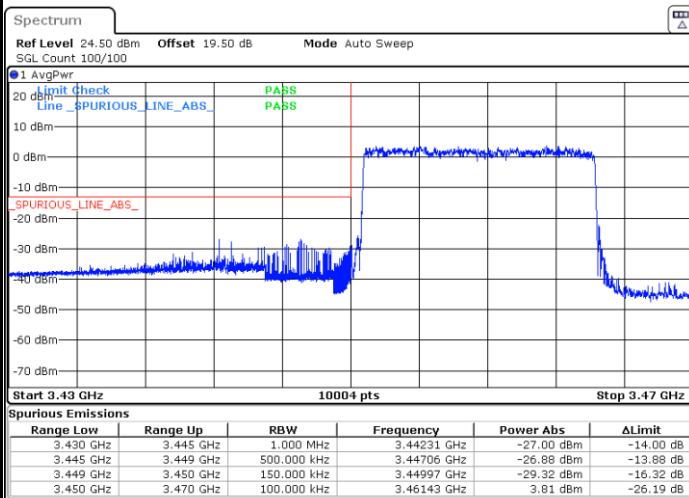
Lowest Band Edge / 1 RB



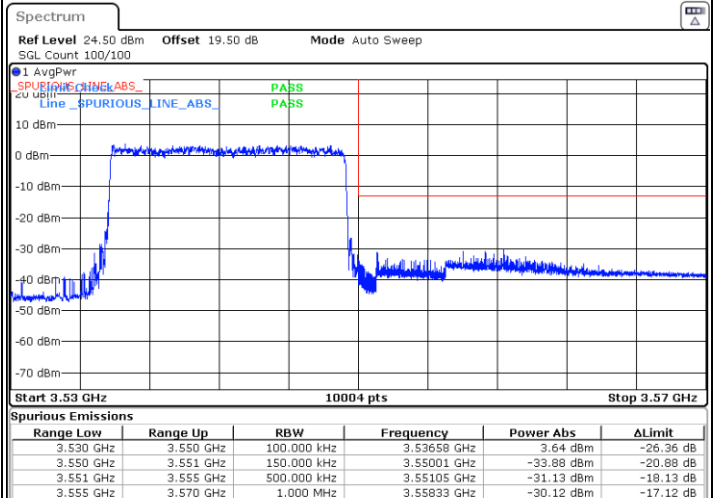
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



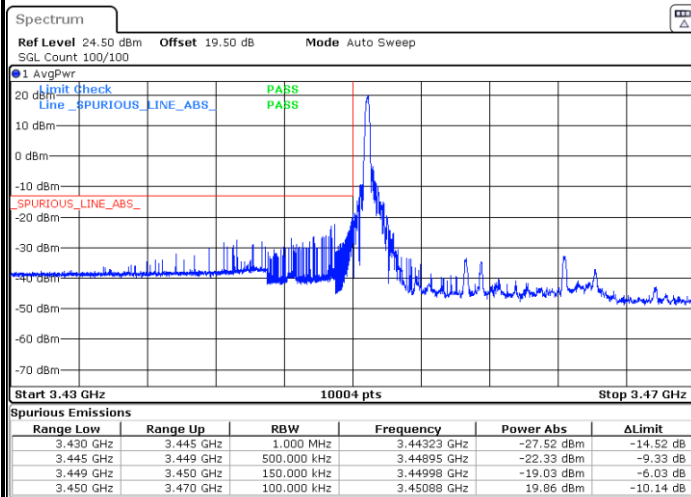
Highest Band Edge / Full RB



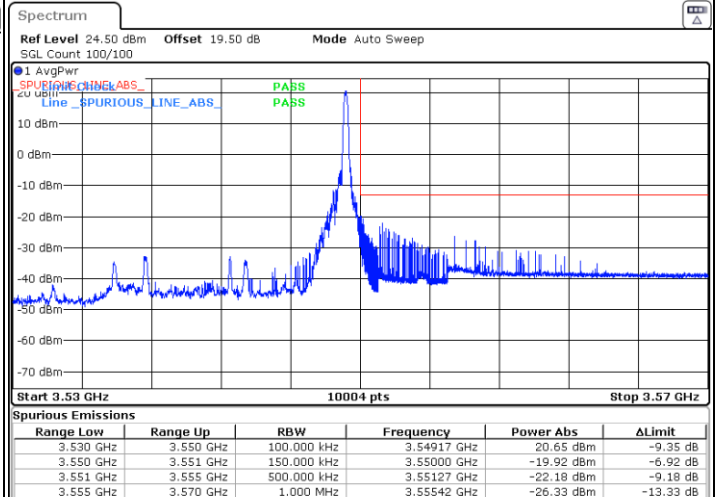


LTE Band 42 / 15MHz / 16QAM

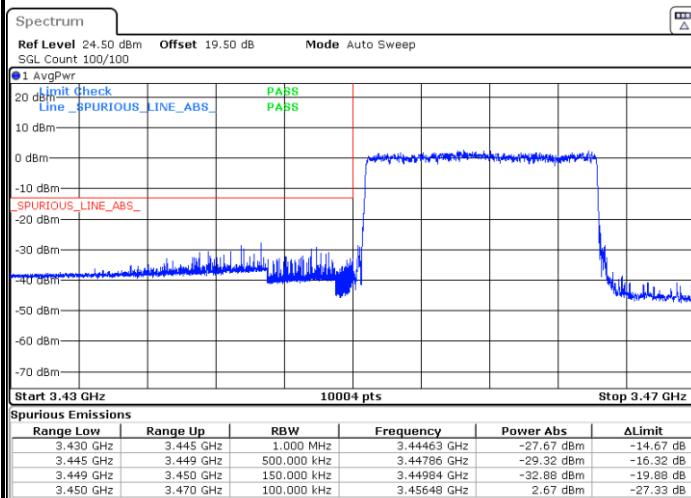
Lowest Band Edge / 1RB



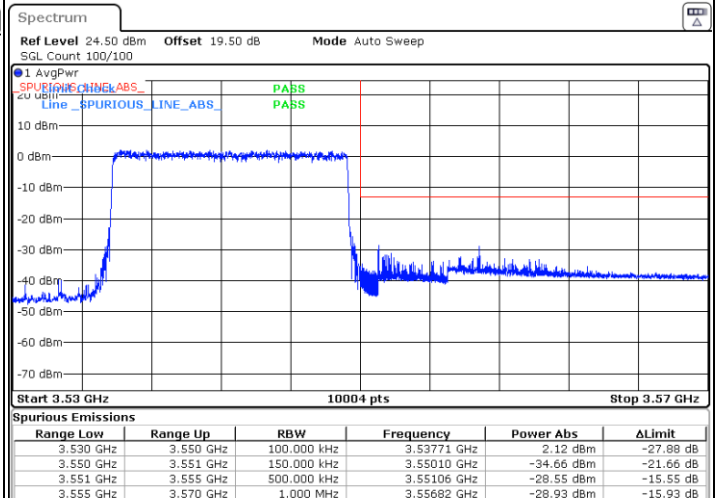
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



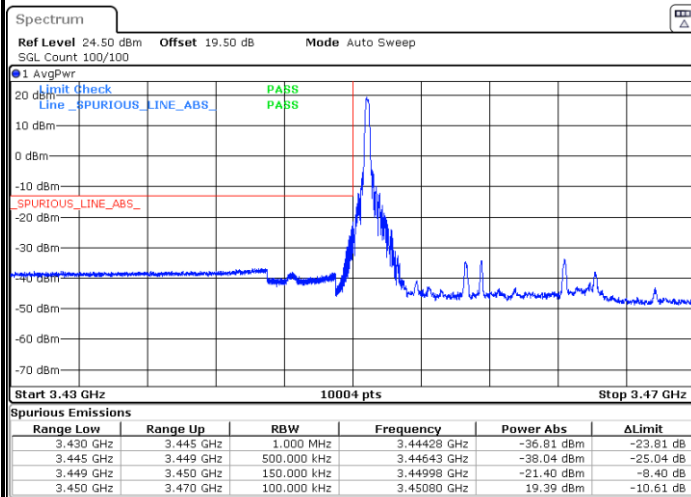
Highest Band Edge / Full RB



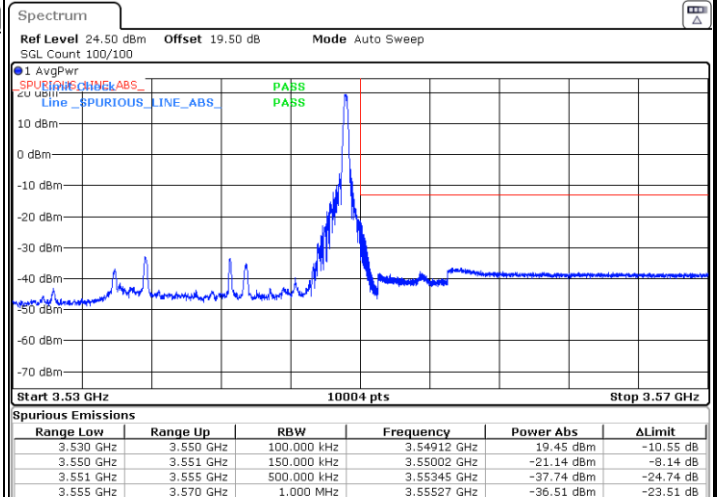


LTE Band 42 / 15MHz / 64QAM

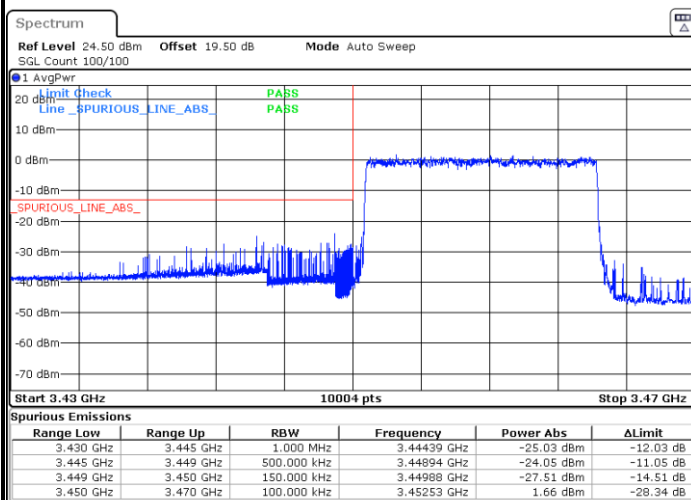
Lowest Band Edge / 1RB



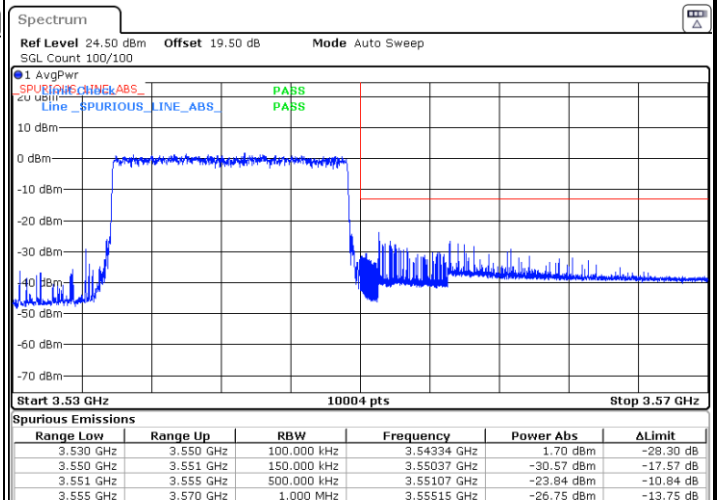
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



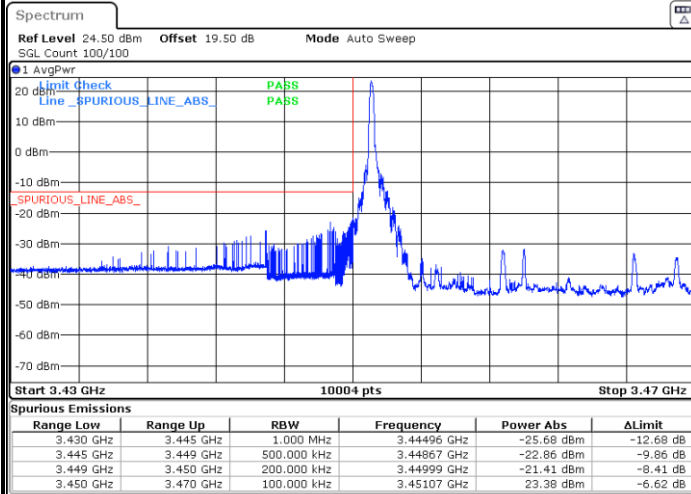
Highest Band Edge / Full RB





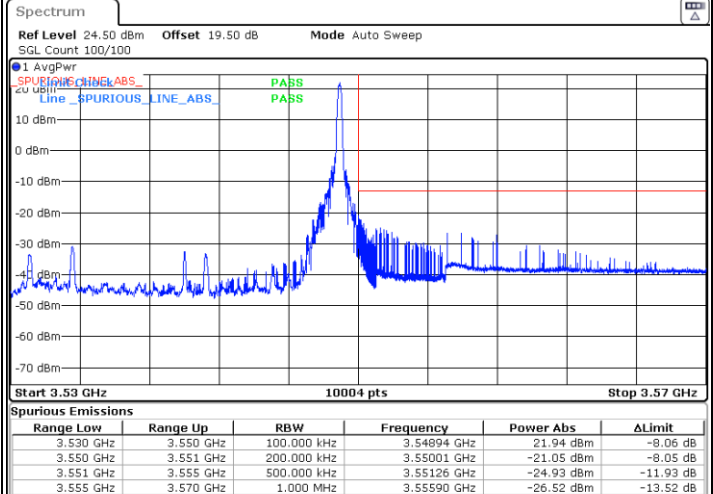
LTE Band 42 / 20MHz / QPSK

Lowest Band Edge / 1 RB



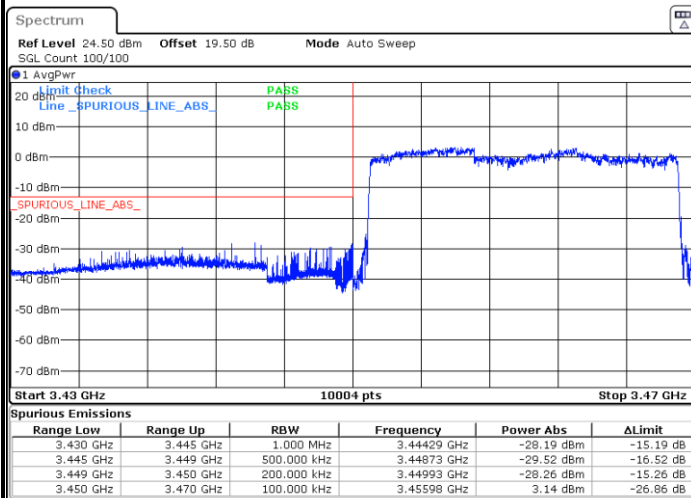
Date: 29 DEC 2024 21:33:02

Highest Band Edge / 1 RB



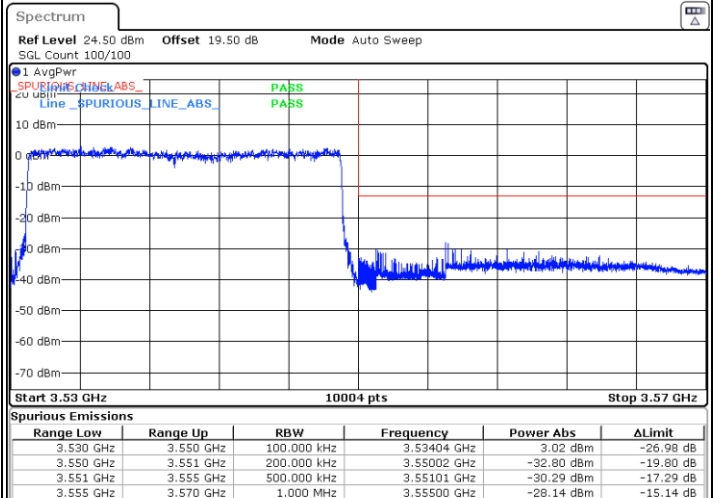
Date: 29 DEC 2024 21:42:58

Lowest Band Edge / Full RB



Date: 29 DEC 2024 21:35:21

Highest Band Edge / Full RB

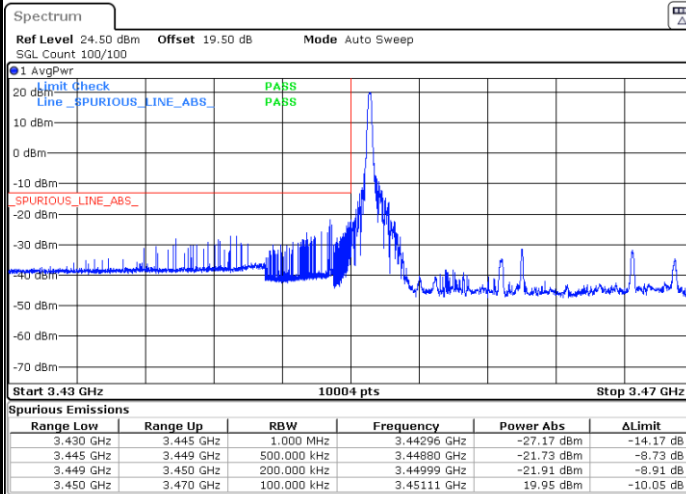


Date: 29 DEC 2024 21:45:17



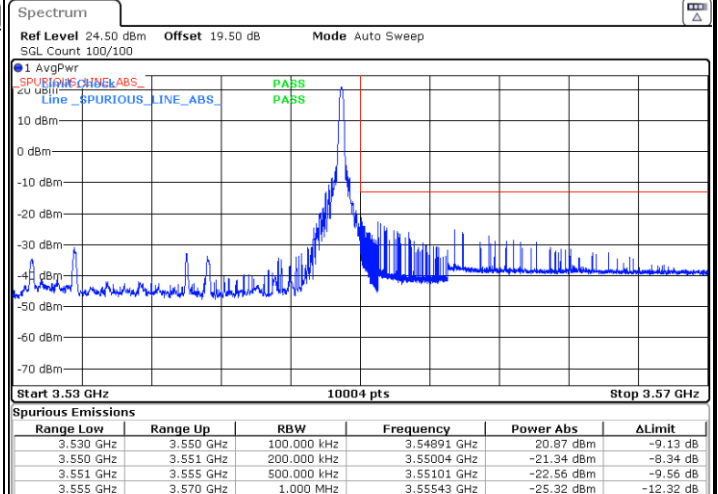
LTE Band 42 / 20MHz / 16QAM

Lowest Band Edge / 1RB



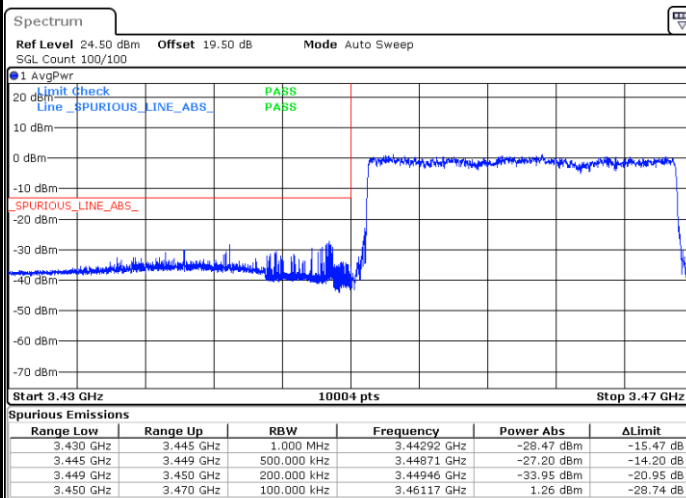
Date: 29 DEC 2024 21:33:48

Highest Band Edge / 1 RB



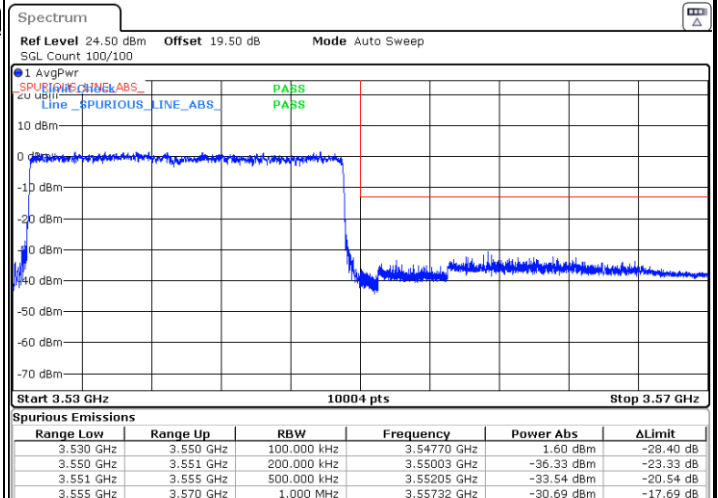
Date: 29 DEC 2024 21:43:44

Lowest Band Edge / Full RB



Date: 2 JAN 2025 20:52:08

Highest Band Edge / Full RB

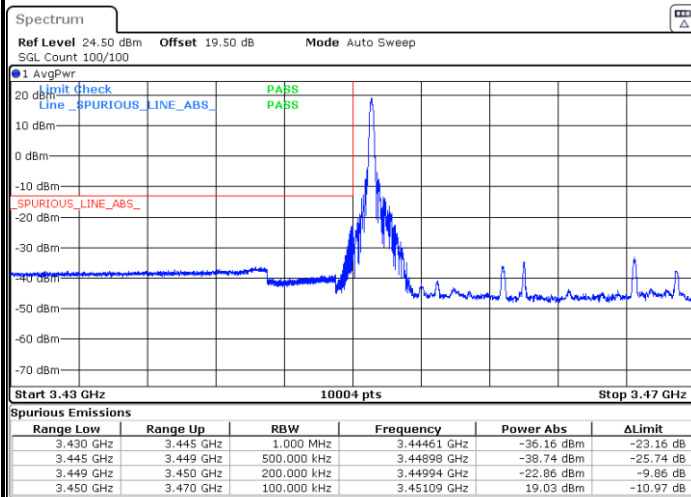


Date: 29 DEC 2024 21:46:03



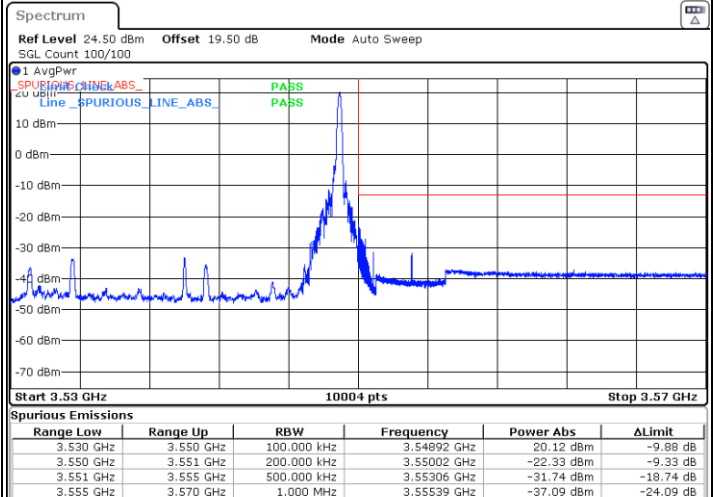
LTE Band 42 / 20MHz / 64QAM

Lowest Band Edge / 1RB



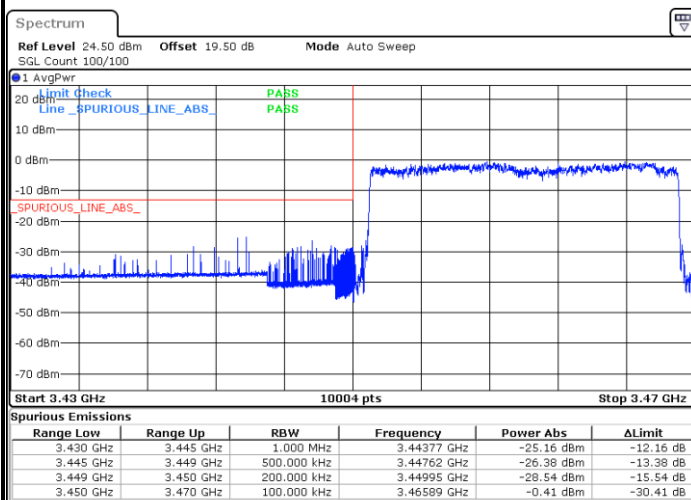
Date: 29 DEC 2024 21:34:34

Highest Band Edge / 1 RB



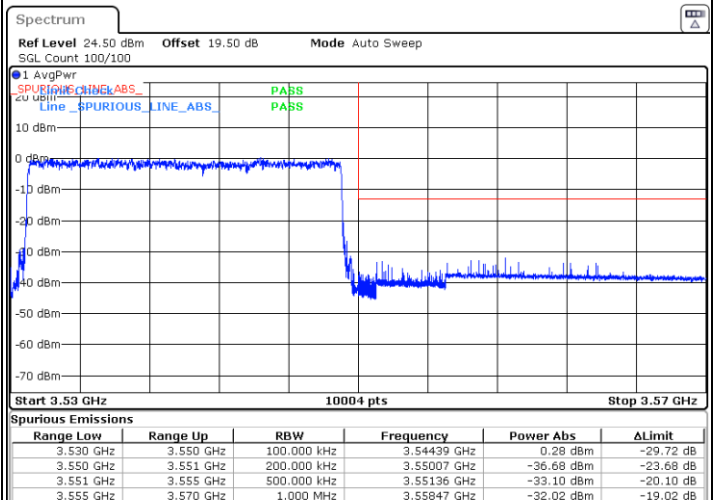
Date: 29 DEC 2024 21:44:30

Lowest Band Edge / Full RB



Date: 2 JAN 2025 20:53:54

Highest Band Edge / Full RB



Date: 29 DEC 2024 21:46:49