TESTREPORT

Applicant Name :	Franklin Technology Inc.
Address :	906 JEI Platz, 186, Gasan digital 1-ro, Gumcheon-Gu Seoul South Korea
Report Number :	RA221031-50431E-RF-00AA1
FCC ID:	XHG-M2500

Test Standard (s)

FCC PART 27; FCC PART 90

Sample Description

Product Type:	5G RF Module
Model No.:	M2600
Multiple Model(s) No.:	N/A
Trade Mark:	N/A
Date Received:	2022/10/31
Report Date:	2022/12/16

Test Result:	Pass*

* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Roger Ling
EMC Engineer

Approved By:

Candy Li
EMC Engineer

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Shenzhen Accurate Technology Co., Ltd. This report must not be used by the customer to claim product certification, approval, or endorsement by A2LA* or any agency of the Federal Government. * This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "*".
This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	LTE Band 7: 2500-2570MHz(TX); 2620-2690MHz(RX) LTE Band 14: 788-798MHz(TX); 758-768MHz(RX) LTE Band 29: 717-728MHz(RX) LTE Band 30: 2305-2315MHz(TX);2350-2360MHz(RX)
Modulation Technique	QPSK, 16QAM
Antenna Specification*	LTE Band 7: -2.99dBi; LTE Band14 :-0.93dBi; LTE Band 30: -2.39dBi (provided by the applicant)
Voltage Range	DC 3.8V
Sample serial number	RA221031-50431E-RFA1-S1 (Assigned by ATC)
Sample/EUT Status	Good condition
Extreme condition*	L.V.: Low Voltage 3.6V N.V.: Normal Voltage 3.8V H.V.: High Voltage 4.2V (provided by the applicant)

Objective

This test report is in accordance with Part 2-Subpart J Part 27 and Part 90 of the Federal Communication Commission's rules.

The objective is to determine the compliance of the EUT with FCC rules for output power, modulation characteristic, occupied bandwidth, and spurious emission at antenna terminal, spurious radiated emission, frequency stability and band edge.

Note: This is CIIPC application base on original equipment granted on 2022-08-03, the details as follow:

(1) Adding the Frequency band of LTE Band 7, LTE Band 14, LTE Band 29 and LTE Band 30 by software upgrade.

Based on above differences, it will affect all test data for the new adding bands; all the test items for those bands were performed.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2-Subpart J as well as the following parts:

Part 27 - Miscellaneous Wireless Communications Services
Part 90 – Private Land Mobile Radio Services

ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF output power, conducted		±0.73dB
Unwanted Emission, conducted		±1.6dB
RF Frequency		$\pm 0.082*10^{-7}$
Emissions, Radiated	30MHz - 1GHz	±4.28dB
	1GHz - 18GHz	±4.98dB
	18GHz - 26.5GHz	±5.06dB
Temperature		±1℃
Humidity		±6%
Supply voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358,the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISEDC), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The final qualification test was performed with the EUT operating at normal mode.

Test was performed as below table:

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
LTE B7	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560
LTE B14	5	790.5	793	795.5
	10	/	793	/
LTE B30	5	2307.5	2310	2312.5
	10	/	2310	/

Equipment Modifications

No modification was made to the EUT.

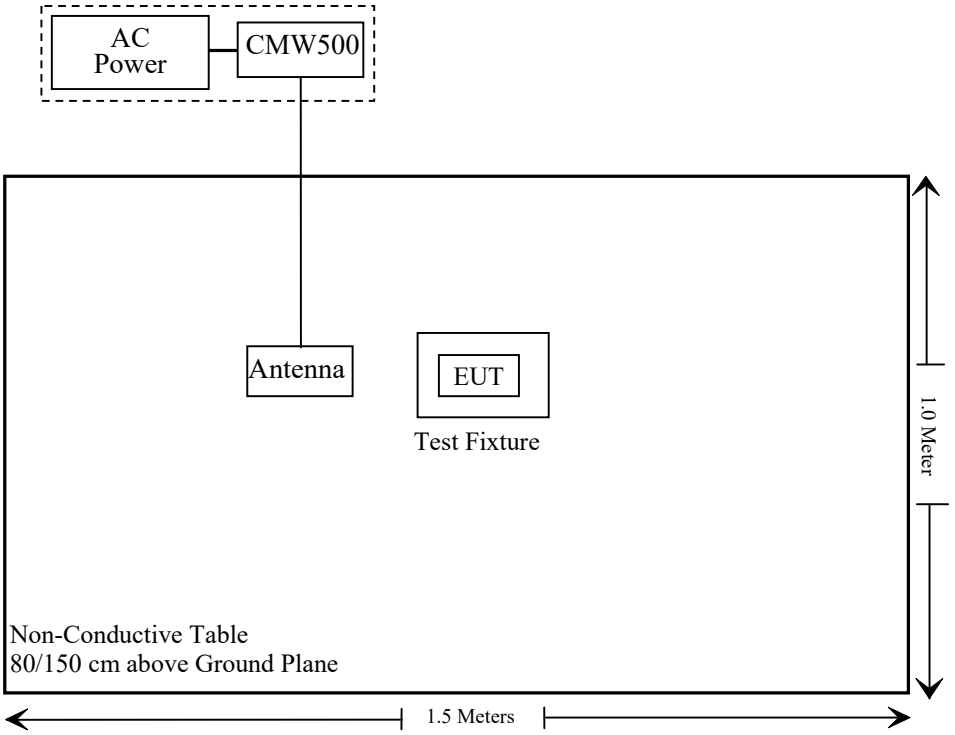
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606
Franklin Technology Inc.	Test Fixture	RG2102	Unknown

Support Cable Description

Cable Description	Length (m)	From / Port	To
Unshielded Un-detachable AC cable	1.2	AC Power	CMW500

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1309(b), §2.1091	RF EXPOSURE	Compliant
§27.50(a)(h); §90.542	RF Output Power	Compliant
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; §27.53;§90.209	Occupied Bandwidth	Compliant
§ 2.1051;§90.543	Spurious Emissions at Antenna Terminal	Compliant
§ 2.1053;§90.543	Field Strength of Spurious Radiation	Compliant
§27.53(a)(m); §90.543	Band Edge	Compliant
§ 2.1055; §27.54;§90.539	Frequency stability	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2021/12/13	2022/12/12
SONOMA INSTRUMENT	Amplifier	310 N	186131	2022/11/08	2023/11/07
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2022/11/08	2023/11/07
Quinstar	Amplifier	QLW-184055 36-J0	15964001002	2022/11/08	2023/11/07
Radiated Emission Test Software: e3 19821b (V9)					
Unknown	RF Coaxial Cable	No.10	N050	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.11	N1000	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.12	N040	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.13	N300	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.14	N800	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.15	N600	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.16	N650	2022/11/25	2023/11/24
Schwarzbeck	Bilog Antenna	VULB9163	9163-194	2020/01/05	2023/01/04
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-655	2020/01/05	2023/01/04
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
PASTERNACK	Horn Antenn	PE9852/2F-20	1120 (ATC-BA-024-1)	2020/01/05	2023/01/04
PASTERNACK	Horn Antenn	PE9852/2F-20	1120 (ATC-BA-025-1)	2020/01/05	2023/01/04
Unknown	RFCoaxialCable	No.16	N200	2022/11/25	2023/11/24
Agilent	Signal Generator	N5183A	MY51040755	2022/11/25	2023/11/24

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
SPECTRUM ANALYZER	Rohde & Schwarz	FSU26	200982	2022/07/04	2023/07/03
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101590	2022/01/19	2023/01/18
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2022/11/25	2023/11/24
WEINSCHEL	10dB Attenuator	5324	AU 3842	2022/11/25	2023/11/24
REALE	Temp. & Humid. Chamber	RHP-800BT	R20170318310	2022/11/23	2023/11/22
Fluke	Desktop Multi Meter	45	7664009	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.31	RF-01	Each time	

* Statement of Traceability: Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1307 (b) (3) & §2.1091- RF EXPOSURE

Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 Interim General RF Exposure Guidance

MPE-Based Exemption:

General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] to support an exemptionfrom further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

Ris the minimum separation distance in meters
f = frequency in MHz

For multiple RF sources: Multiple RF sources are exempt if:

in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation:

$$\sum_{i=1}^{a} \frac{P_i}{P_{th,i}} + \sum_{j=1}^{b} \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^{c} \frac{Evaluated_k}{Exposure\ Limit_k} \leq 1$$

Result

Mode	Frequency (MHz)	Tune up conducted power	Antenna Gain		ERP		Evaluation Distance (m)	ERP Limit (W)
		(dBm)	(dBi)	(dBd)	(dBm)	(W)		
LTE B7	2500-2570	24.0	-2.99	-5.14	18.86	0.077	0.2	0.768
LTE B14	788-798	24.0	-0.93	-3.08	20.92	0.124	0.2	0.403
LTE B30	2305-2315	24.0	-2.39	-4.54	19.46	0.088	0.2	0.768
5G n2	1850-1910	24.0	-1.66	-3.81	20.19	0.107	0.2	0.768
5G n5	824-849	24.0	-0.66	-2.81	21.19	0.132	0.2	0.422

Note:
1. The tune up conducted power and antenna gain was declared by the applicant.
2. 0dBd=2.15dBi

For below frequency bands were refer to the original granted FCC ID: XHG-M2500 granted on 2022-08-03.

Mode	Frequency (MHz)	Tune up conducted power	Antenna Gain		ERP		Evaluation Distance (m)	ERP Limit (W)
		(dBm)	(dBi)	(dBd)	(dBm)	(W)		
WCDMA B2	1850-1910	24.0	-1.66	-3.81	20.19	0.104	0.2	0.768
WCDMA B4	1710-1755	24.0	-1.56	-3.71	20.29	0.107	0.2	0.768
WCDMA B5	824-849	25.0	-0.66	-2.81	22.19	0.166	0.2	0.422
LTE B2	1850-1910	23.0	-1.66	-3.81	19.19	0.083	0.2	0.768
LTE B4	1710-1755	23.5	-1.56	-3.71	19.79	0.095	0.2	0.768
LTE B5	824-849	23.5	-0.66	-2.81	20.69	0.117	0.2	0.422
LTE B12	699-716	24.0	-1.43	-3.58	20.42	0.110	0.2	0.358
LTE B25	1850-1915	23.0	-1.66	-3.81	19.19	0.083	0.2	0.768
LTE B26	814-849	24.0	-0.66	-2.81	21.19	0.132	0.2	0.417
LTE B41	2496-2690	27.0	-2.99	-5.14	21.86	0.153	0.2	0.768
LTE B48	3550-3700	23.0	-1.71	-3.86	19.14	0.082	0.2	0.768
LTE B66	1710-1780	23.5	-1.56	-3.71	19.79	0.095	0.2	0.768
LTE B71	663-698	24.0	-2.75	-4.90	19.10	0.081	0.2	0.339
5G n25	1850-1915	24.5	-1.54	-3.69	20.81	0.121	0.2	0.768
5G n41	2496-2690	26.0	-2.18	-4.33	21.67	0.147	0.2	0.768
5G n66	1710-1780	24.0	-1.19	-3.34	20.66	0.116	0.2	0.768
5G n48	3550-3700	23.5	-1.71	-3.86	19.64	0.092	0.2	0.768
5G n71	663-698	24.5	-2.75	-4.90	19.60	0.091	0.2	0.339
5G n77	3450-3550/ 3700-3980	26.0	-1.49	-3.64	22.36	0.172	0.2	0.768

For EN-DC mode consider, use the worst LTE and 5G NR bands to calculate:

The ratio=$ERP_{LTE}/ERP_{Limit}+ERP_{5G\ NR}/\ ERP_{5G\ NR}$=0.132/0.417+0.132/0.422=0.629<1

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 20cm from nearby persons.

Result: Compliant.

FCC§2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 27 & 90, there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046, §27.50(a)(h); §90.542- RF OUTPUT POWER

Applicable Standard

According to §27.50(a), for mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

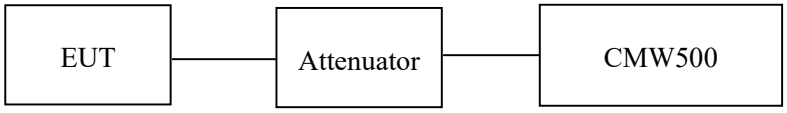
According to §27.50(h), the maximum EIRP must not exceed 2Watts (33dBm) for 2496-2690 MHz.

According to §90.542, Portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP.

Test Procedure

Conducted method:

The RF output of the transmitter was connected to the CMW500 through sufficient attenuation.



Test Data

Environmental Conditions

Temperature:	23.2-24.6 ℃
Relative Humidity:	53~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu from 2022-11-12 to 2022-11-22.

Note: for ERP/EIRP calculate, the path loss was included in the antenna gain.

LTE Band 7

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.45	23.59	23.87	20.46	20.60	20.88
		RB1#13	23.66	23.77	24.12	20.67	20.78	21.13
		RB1#24	23.54	23.72	23.92	20.55	20.73	20.93
		RB15#0	22.52	22.57	22.79	19.53	19.58	19.80
		RB15#10	22.59	22.68	22.95	19.60	19.69	19.96
		RB25#0	22.54	22.70	22.82	19.55	19.71	19.83
	16QAM	RB1#0	22.49	22.80	23.05	19.50	19.81	20.06
		RB1#13	22.73	22.88	23.20	19.74	19.89	20.21
		RB1#24	22.72	22.87	23.19	19.73	19.88	20.20
		RB15#0	21.54	21.60	21.83	18.55	18.61	18.84
		RB15#10	21.65	21.76	21.99	18.66	18.77	19.00
		RB25#0	21.55	21.66	21.88	18.56	18.67	18.89
10.0	QPSK	RB1#0	23.55	23.59	23.86	20.56	20.60	20.87
		RB1#25	23.62	23.68	23.94	20.63	20.69	20.95
		RB1#49	23.60	23.73	24.01	20.61	20.74	21.02
		RB25#0	22.45	22.64	22.77	19.46	19.65	19.78
		RB25#25	22.60	22.70	22.92	19.61	19.71	19.93
		RB50#0	22.60	22.71	22.83	19.61	19.72	19.84
	16QAM	RB1#0	22.65	22.72	23.08	19.66	19.73	20.09
		RB1#25	22.79	22.93	23.14	19.80	19.94	20.15
		RB1#49	22.83	23.03	23.07	19.84	20.04	20.08
		RB25#0	21.50	21.68	21.83	18.51	18.69	18.84
		RB25#25	21.58	21.77	21.89	18.59	18.78	18.90
		RB50#0	21.58	21.72	21.83	18.59	18.73	18.84

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	23.24	23.46	23.73	20.25	20.47	20.74
		RB1#38	23.36	23.58	23.85	20.37	20.59	20.86
		RB1#74	23.20	23.53	23.84	20.21	20.54	20.85
		RB36#0	22.37	22.49	22.72	19.38	19.50	19.73
		RB36#39	22.47	22.60	22.80	19.48	19.61	19.81
		RB75#0	22.47	22.60	22.71	19.48	19.61	19.72
	16QAM	RB1#0	22.54	22.61	22.84	19.55	19.62	19.85
		RB1#38	22.69	22.68	22.93	19.70	19.69	19.94
		RB1#74	22.47	22.72	23.09	19.48	19.73	20.10
		RB36#0	21.40	21.49	21.73	18.41	18.50	18.74
		RB36#39	21.48	21.61	21.82	18.49	18.62	18.83
		RB75#0	21.51	21.61	21.73	18.52	18.62	18.74
20.0	QPSK	RB1#0	23.52	23.42	23.62	20.53	20.43	20.63
		RB1#50	23.37	23.48	23.74	20.38	20.49	20.75
		RB1#99	23.32	23.57	23.72	20.33	20.58	20.73
		RB50#0	22.43	22.53	22.76	19.44	19.54	19.77
		RB50#50	22.51	22.66	22.84	19.52	19.67	19.85
		RB100#0	22.52	22.61	22.77	19.53	19.62	19.78
	16QAM	RB1#0	22.44	22.55	22.76	19.45	19.56	19.77
		RB1#50	22.51	22.69	22.99	19.52	19.70	20.00
		RB1#99	22.52	22.78	23.16	19.53	19.79	20.17
		RB50#0	21.44	21.54	21.74	18.45	18.55	18.75
		RB50#50	21.55	21.64	21.88	18.56	18.65	18.89
		RB100#0	21.52	21.69	21.79	18.53	18.70	18.80

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band7: Antenna Gain = -2.99dBi
Limit: EIRP≤33dBm

LTE Band 14

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5	QPSK	RB1#0	23.76	23.74	23.79	20.68	20.66	20.71
		RB1#13	23.69	23.72	23.81	20.61	20.64	20.73
		RB1#24	23.58	23.60	23.66	20.50	20.52	20.58
		RB15#0	22.68	22.69	22.74	19.60	19.61	19.66
		RB15#10	22.67	22.59	22.65	19.59	19.51	19.57
		RB25#0	22.71	22.65	22.71	19.63	19.57	19.63
	16QAM	RB1#0	22.88	22.83	22.93	19.80	19.75	19.85
		RB1#13	22.90	23.03	22.85	19.82	19.95	19.77
		RB1#24	22.89	22.75	22.76	19.81	19.67	19.68
		RB15#0	21.73	21.68	21.75	18.65	18.60	18.67
		RB15#10	21.71	21.56	21.69	18.63	18.48	18.61
		RB25#0	21.75	21.61	21.73	18.67	18.53	18.65
10	QPSK	RB1#0	/	23.63	/	/	20.55	/
		RB1#25	/	23.69	/	/	20.61	/
		RB1#49	/	23.54	/	/	20.46	/
		RB25#0	/	22.67	/	/	19.59	/
		RB25#25	/	22.64	/	/	19.56	/
		RB50#0	/	22.65	/	/	19.57	/
	16QAM	RB1#0	/	22.85	/	/	19.77	/
		RB1#25	/	22.87	/	/	19.79	/
		RB1#49	/	22.83	/	/	19.75	/
		RB25#0	/	21.75	/	/	18.67	/
		RB25#25	/	21.68	/	/	18.60	/
		RB50#0	/	21.63	/	/	18.55	/

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)
For Band14: Antenna Gain = -0.93dBi* =-3.08dBd (0dBd=2.15dBi)(provided by the applicant)
Limit: ERP≤34.77dBm

LTE Band 30

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	22.66	22.76	22.72	20.27	20.37	20.33
		RB1#13	22.72	22.89	22.79	20.33	20.50	20.40
		RB1#24	22.69	22.72	22.66	20.30	20.33	20.27
		RB15#0	21.58	21.60	21.69	19.19	19.21	19.30
		RB15#10	21.67	21.63	21.70	19.28	19.24	19.31
		RB25#0	21.65	21.63	21.67	19.26	19.24	19.28
	16QAM	RB1#0	21.80	21.90	21.86	19.41	19.51	19.47
		RB1#13	21.80	22.03	22.05	19.41	19.64	19.66
		RB1#24	21.91	22.00	21.81	19.52	19.61	19.42
		RB15#0	20.61	20.68	20.69	18.22	18.29	18.30
		RB15#10	20.70	20.69	20.70	18.31	18.30	18.31
		RB25#0	20.68	20.63	20.66	18.29	18.24	18.27
10.0	QPSK	RB1#0	/	22.66	/	/	20.27	/
		RB1#25	/	22.73	/	/	20.34	/
		RB1#49	/	22.68	/	/	20.29	/
		RB25#0	/	21.60	/	/	19.21	/
		RB25#25	/	21.58	/	/	19.19	/
		RB50#0	/	21.58	/	/	19.19	/
	16QAM	RB1#0	/	21.69	/	/	19.30	/
		RB1#25	/	21.90	/	/	19.51	/
		RB1#49	/	21.76	/	/	19.37	/
		RB25#0	/	20.61	/	/	18.22	/
		RB25#25	/	20.62	/	/	18.23	/
		RB50#0	/	20.57	/	/	18.18	/

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi)
For Band30: Antenna Gain =-2.39dBi*
Limit: EIRP≤24dBm/5MHz
For 5MHz mode, the channel power is equal to the test result in dBm/5MHz.
For 10MHz mode, the channel power is sum of 10MHz bandwidth, the result is less then 24dBm, so in any 5MHz bandwidth, it will not exceed the limit.

Peak-to-average ratio (PAR)

Note: pre-scan all bandwidth, the worst case as below:

LTE Band 7 20MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	3.80	3.28	2.67	13	Pass
QPSK (100RB Size)	3.74	4.55	4.17	13	Pass
16QAM (1RB Size)	4.70	5.62	3.45	13	Pass
16QAM (100RB Size)	4.70	5.57	5.13	13	Pass

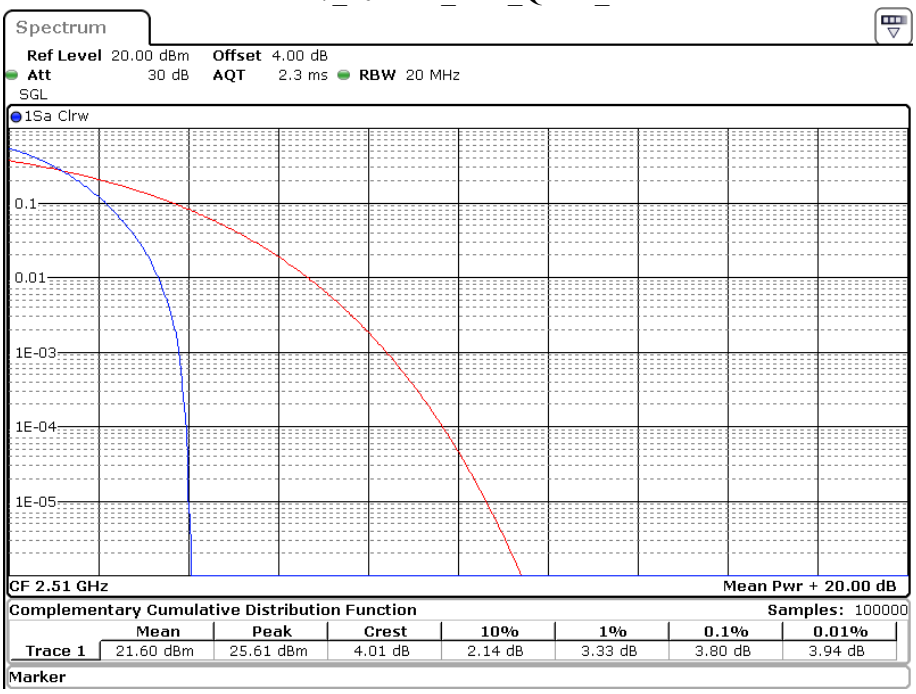
LTE Band 14 10MHz Bandwidth

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	/	3.94	/	13	Pass
QPSK (50RB Size)	/	5.10	/	13	Pass
16QAM (1RB Size)	/	5.06	/	13	Pass
16QAM (50RB Size)	/	5.99	/	13	Pass

LTE Band 30 10MHz Bandwidth

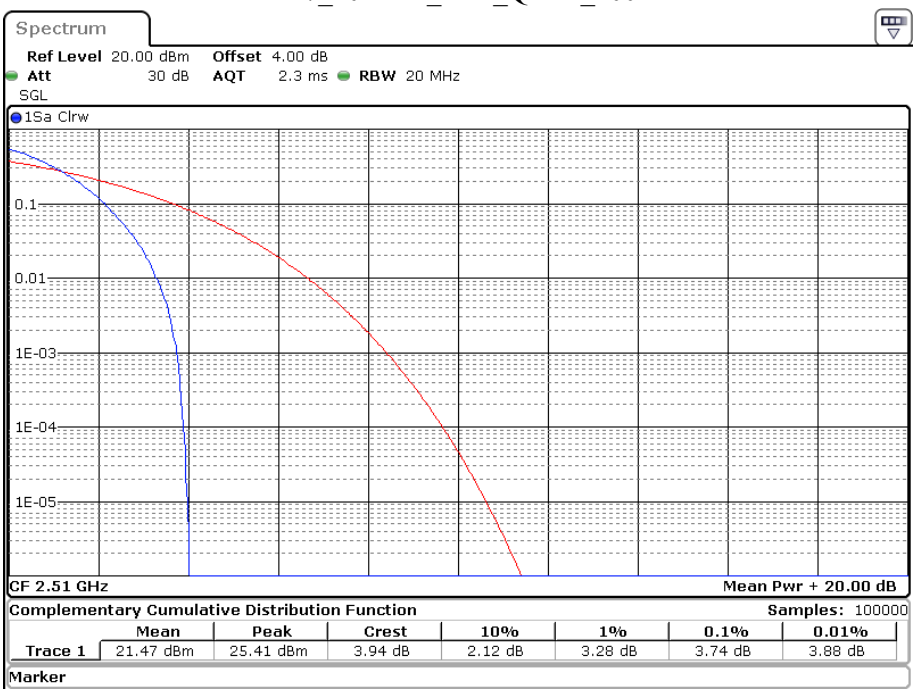
Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	/	3.40	/	13	Pass
QPSK (50RB Size)	/	4.97	/	13	Pass
16QAM (1RB Size)	/	4.07	/	13	Pass
16QAM (50RB Size)	/	5.83	/	13	Pass

Band 7_20 MHz_Low_QPSK_1RB



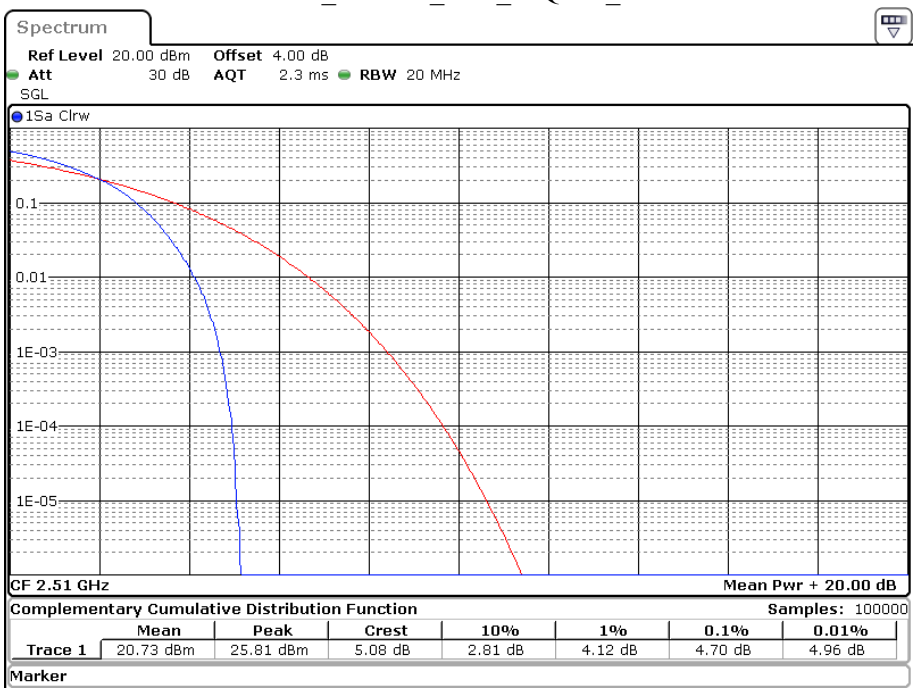
Date: 18.NOV.2022 19:44:16

Band 7_20 MHz_Low_QPSK_100RB



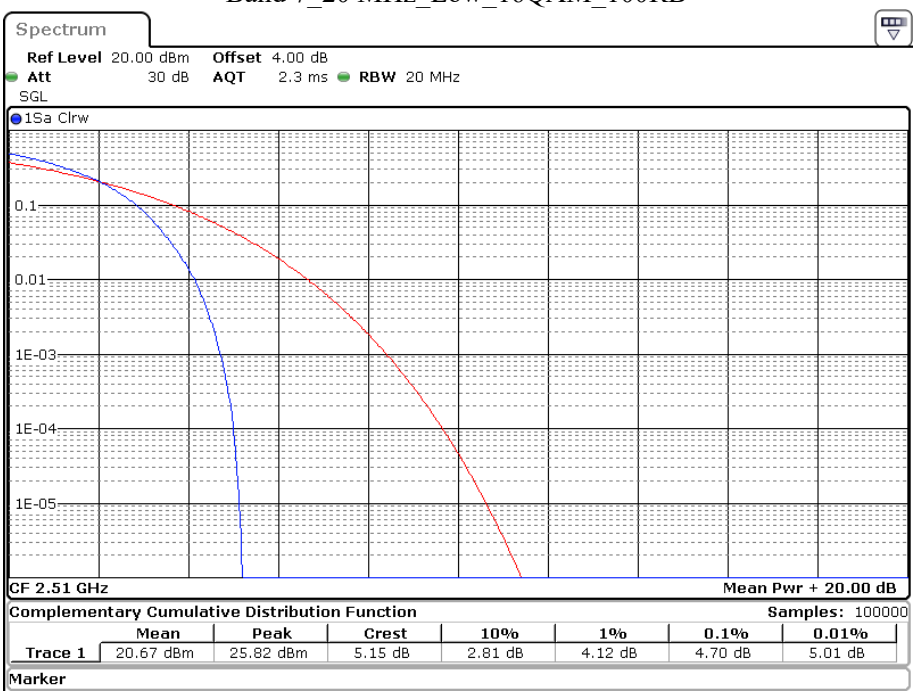
Date: 18.NOV.2022 19:43:49

Band 7_20 MHz_Low_16QAM_1RB



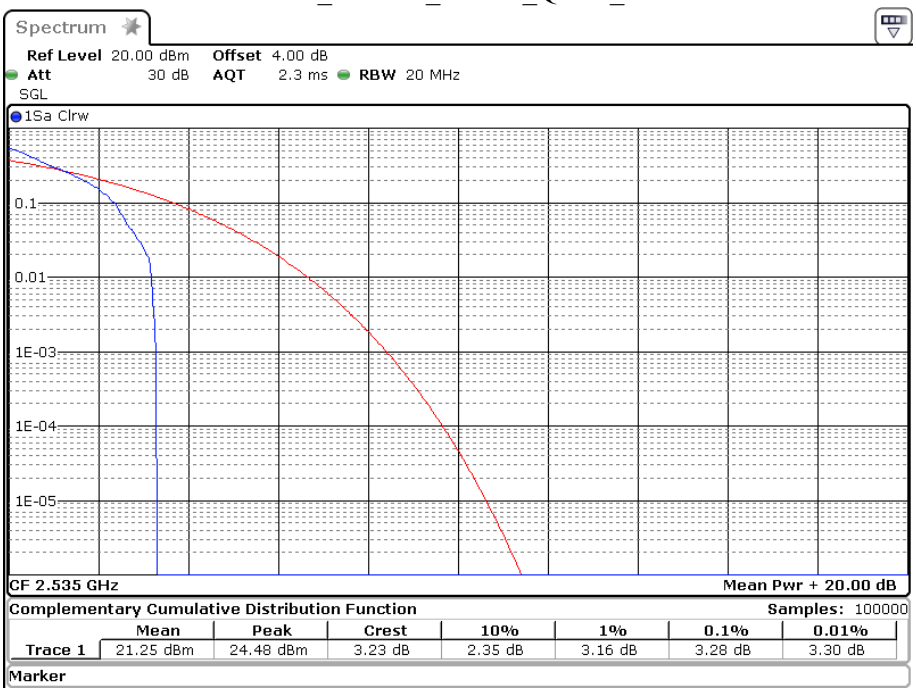
Date: 18.NOV.2022 19:45:11

Band 7_20 MHz_Low_16QAM_100RB



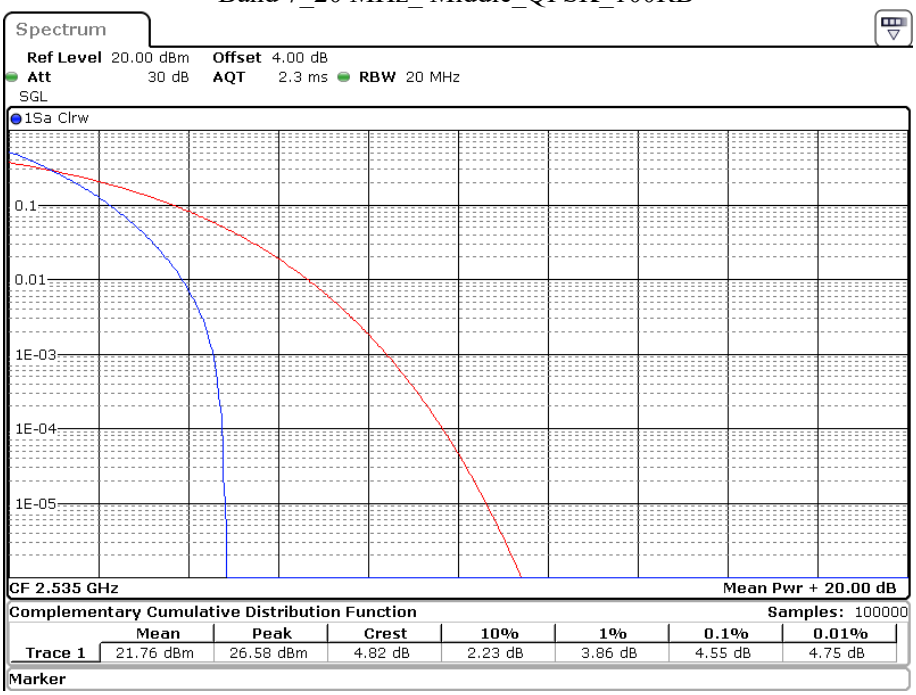
Date: 18.NOV.2022 19:45:29

Band 7_20 MHz_Middle_QPSK_1RB



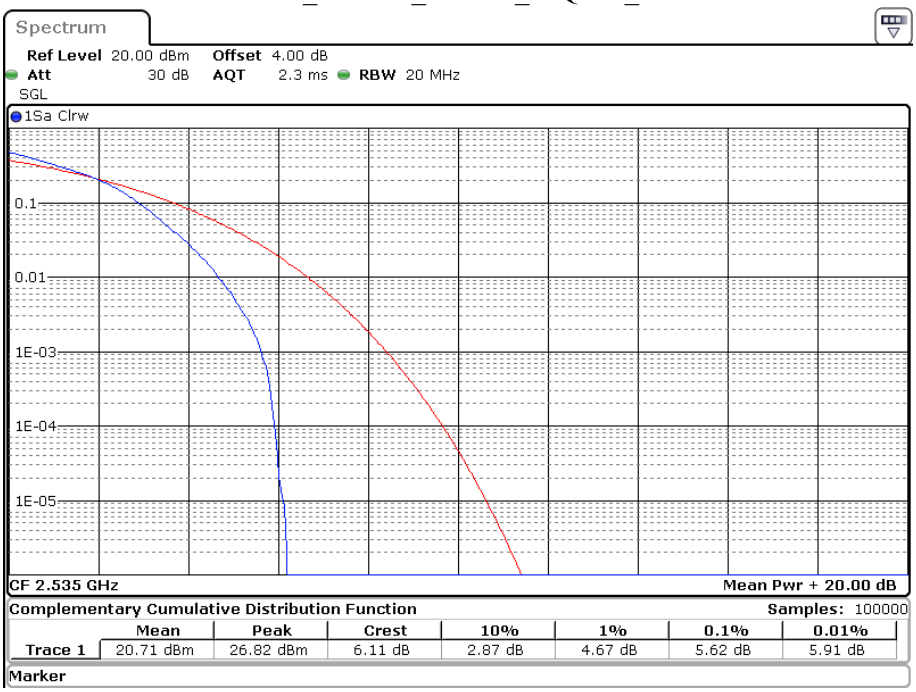
Date: 18.NOV.2022 19:46:16

Band 7_20 MHz_ Middle_QPSK_100RB



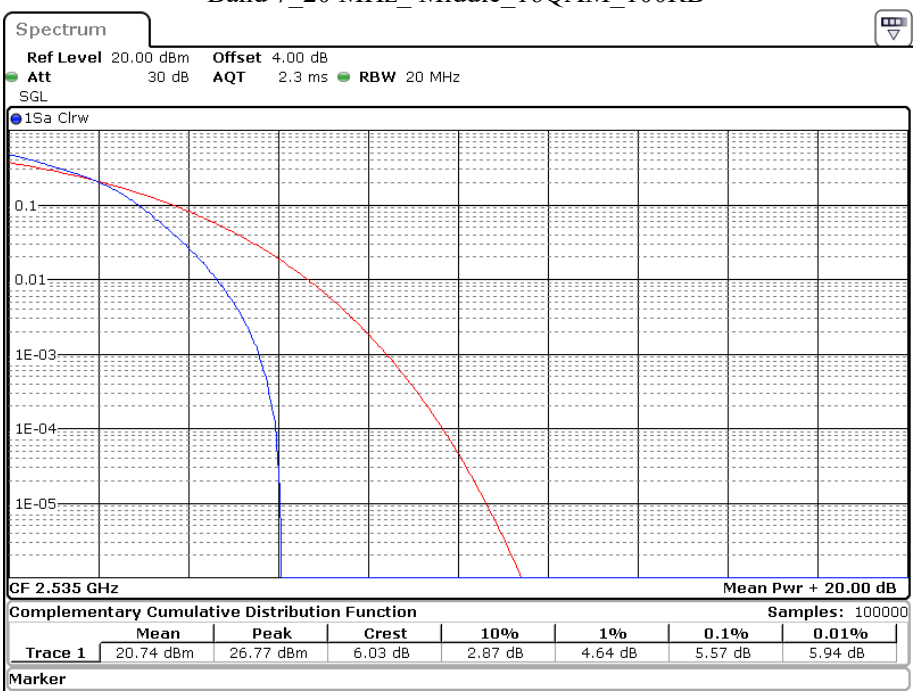
Date: 18.NOV.2022 19:46:37

Band 7_20 MHz_ Middle_16QAM_1RB



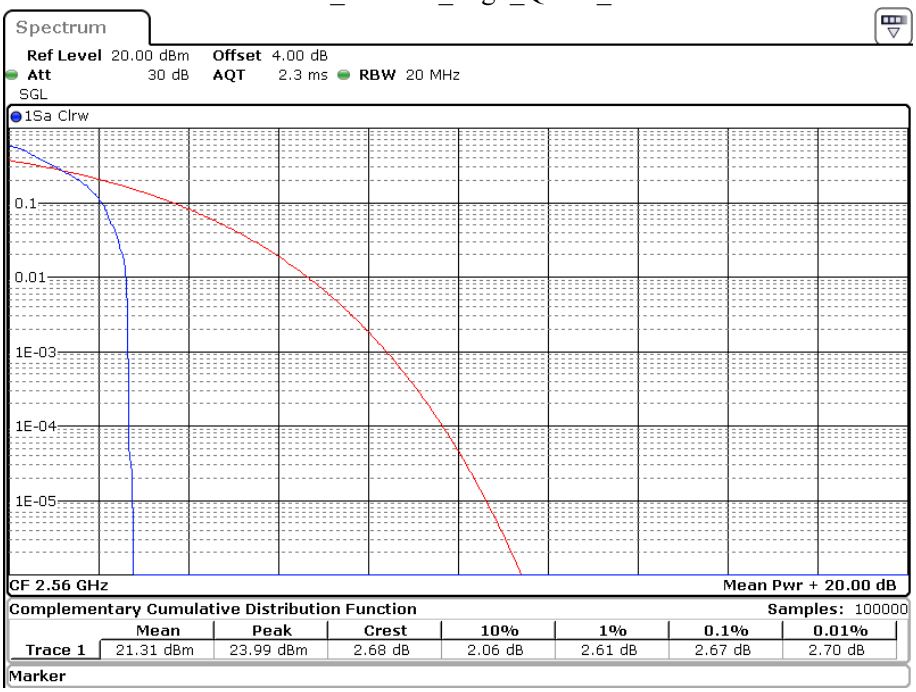
Date: 18.NOV.2022 19:47:34

Band 7_20 MHz_ Middle_16QAM_100RB



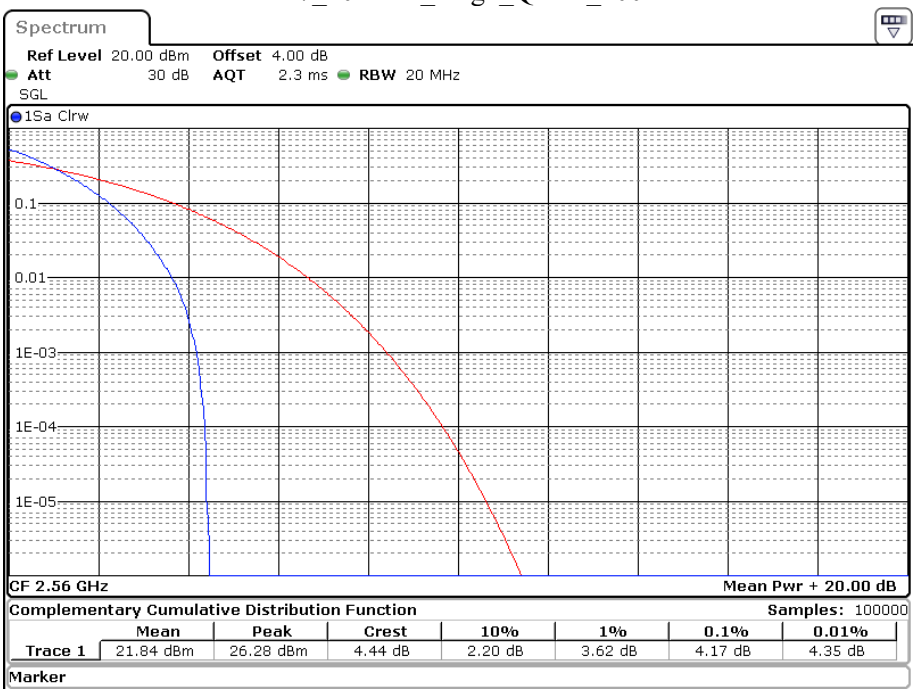
Date: 18.NOV.2022 19:47:48

Band 7_20 MHz_High_QPSK_1RB



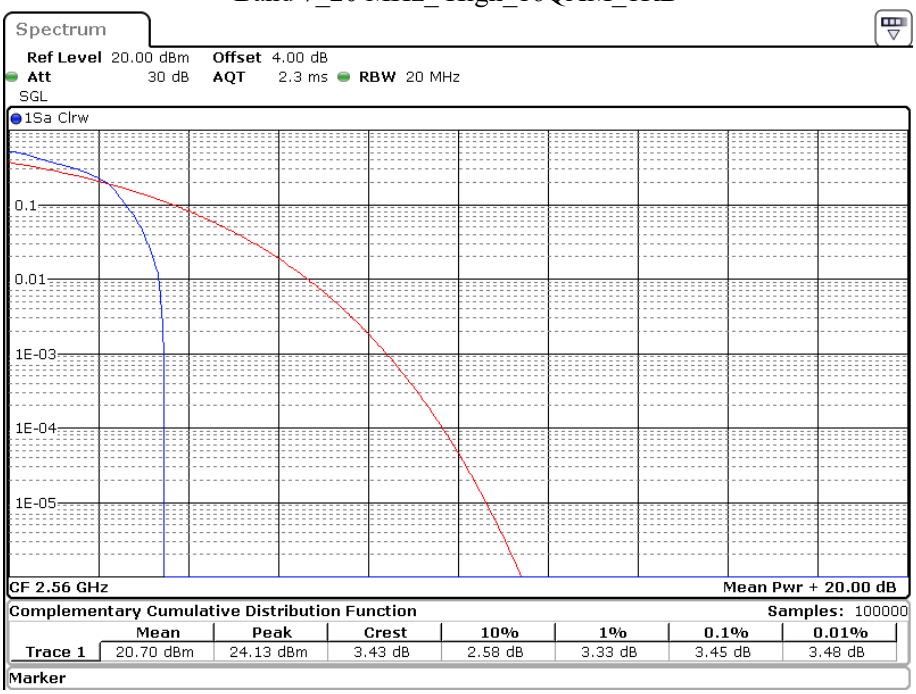
Date: 18.NOV.2022 19:49:12

Band 7_20 MHz_ High_QPSK_100RB



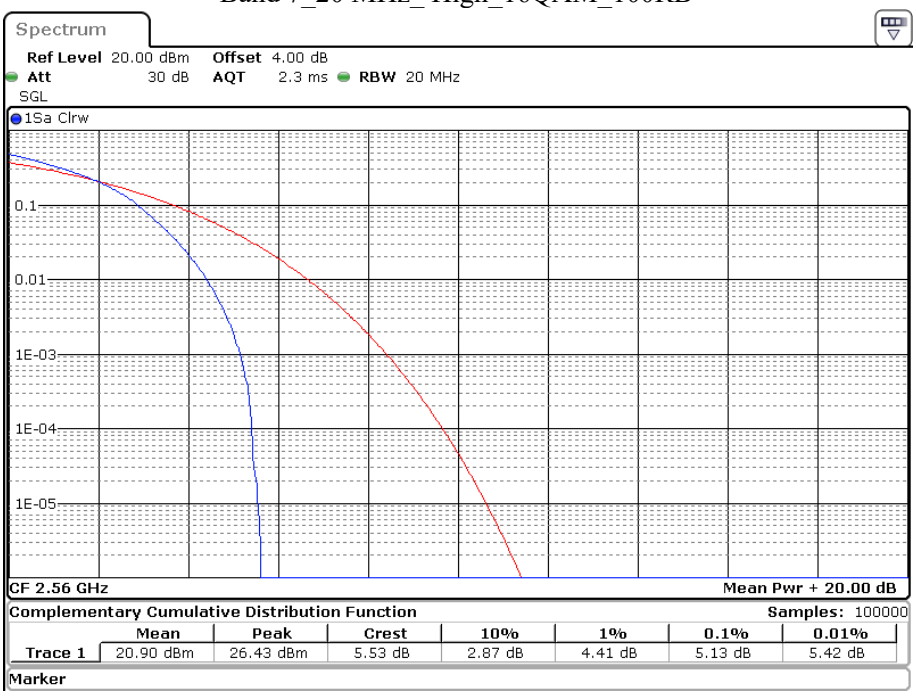
Date: 18.NOV.2022 19:49:34

Band 7_20 MHz_ High_16QAM_1RB



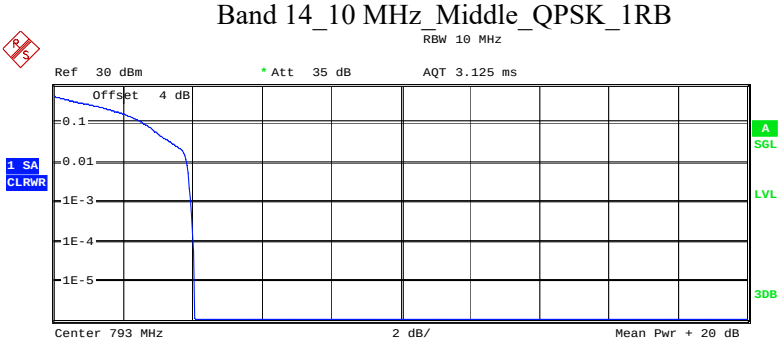
Date: 18.NOV.2022 19:50:39

Band 7_20 MHz_ High_16QAM_100RB



Date: 18.NOV.2022 19:50:56

Band 14_10 MHz_Middle_QPSK_1RB

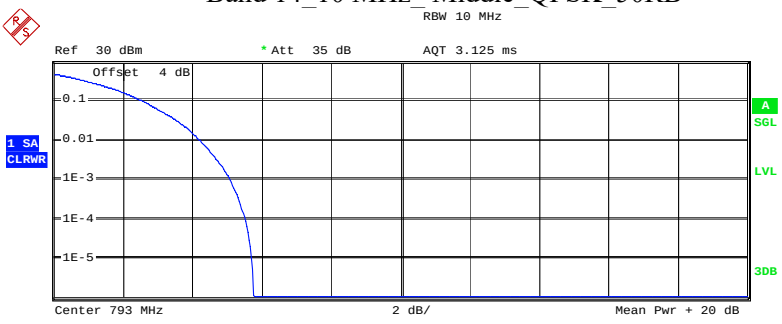


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	20.50 dBm
Peak	24.54 dBm
Crest	4.05 dB
10 %	2.60 dB
1 %	3.85 dB
.1 %	3.94 dB
.01 %	4.04 dB

Date: 12.NOV.2022 18:42:10

Band 14_10 MHz_ Middle_QPSK_50RB

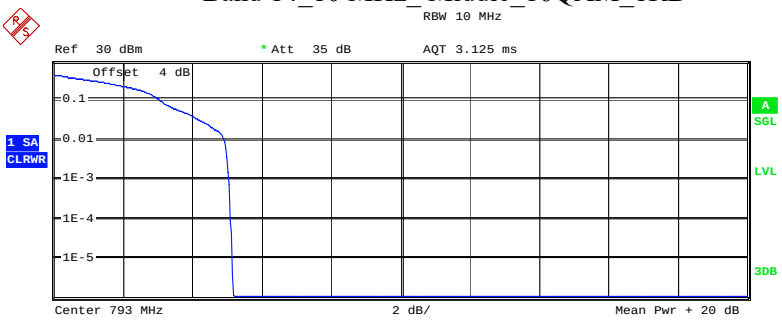


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	21.53 dBm
Peak	27.30 dBm
Crest	5.77 dB
10 %	2.53 dB
1 %	4.20 dB
.1 %	5.10 dB
.01 %	5.51 dB

Date: 12.NOV.2022 18:42:27

Band 14_10 MHz_ Middle_16QAM_1RB

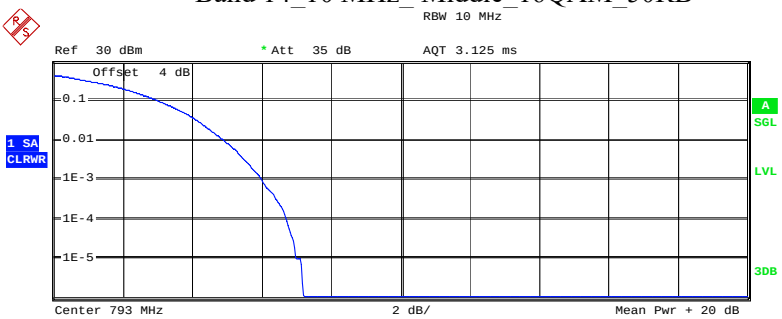


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	19.39 dBm
Peak	24.54 dBm
Crest	5.15 dB
10 %	3.04 dB
1 %	4.90 dB
.1 %	5.06 dB
.01 %	5.10 dB

Date: 12.NOV.2022 18:43:05

Band 14_10 MHz_ Middle_16QAM_50RB

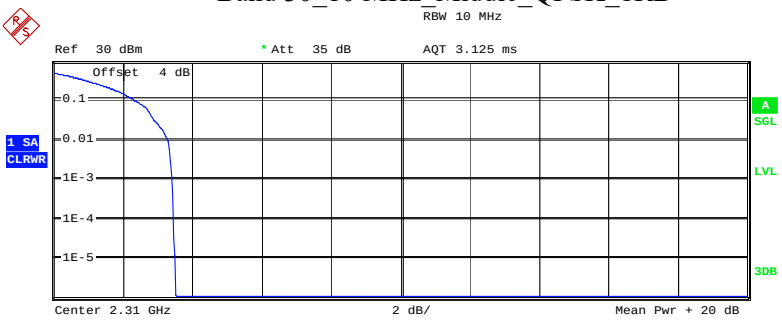


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	20.61 dBm
Peak	27.79 dBm
Crest	7.18 dB
10 %	3.01 dB
1 %	4.87 dB
.1 %	5.99 dB
.01 %	6.70 dB

Date: 12.NOV.2022 18:43:17

Band 30_10 MHz_Middle_QPSK_1RB

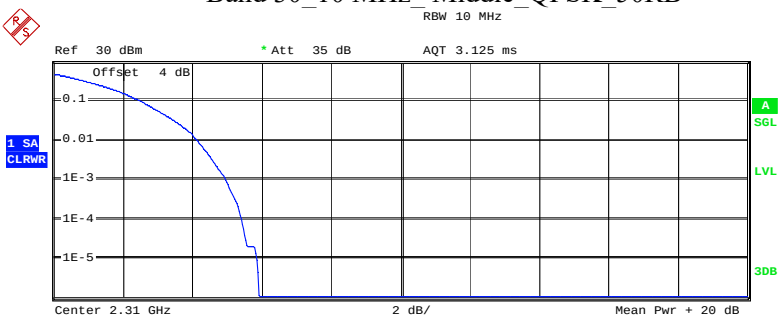


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	18.50 dBm
Peak	22.00 dBm
Crest	3.51 dB
10 %	2.34 dB
1 %	3.27 dB
.1 %	3.40 dB
.01 %	3.46 dB

Date: 12.NOV.2022 18:55:12

Band 30_10 MHz_ Middle_QPSK_50RB

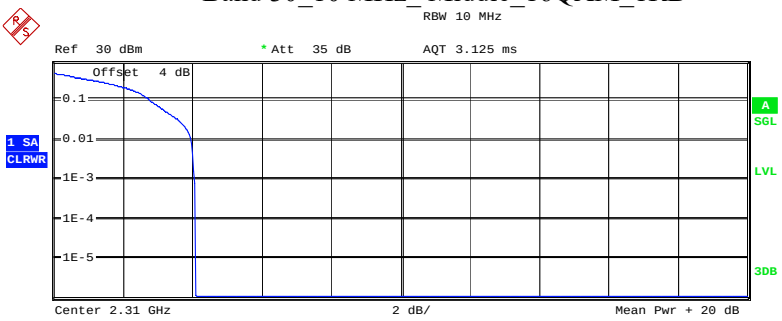


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	19.97 dBm
Peak	25.88 dBm
Crest	5.92 dB
10 %	2.47 dB
1 %	4.13 dB
.1 %	4.97 dB
.01 %	5.42 dB

Date: 12.NOV.2022 18:55:22

Band 30_10 MHz_ Middle_16QAM_1RB

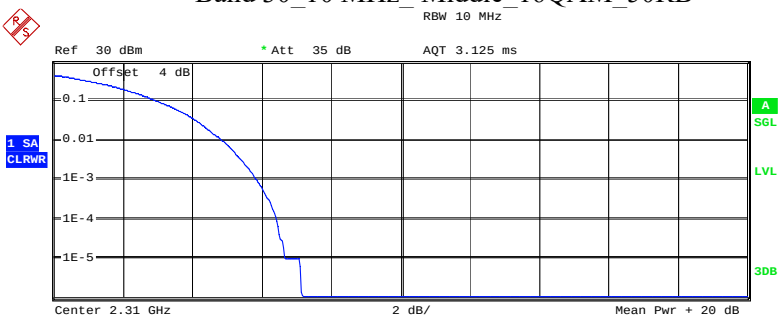


Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	17.84 dBm
Peak	21.93 dBm
Crest	4.09 dB
10 %	2.76 dB
1 %	3.94 dB
.1 %	4.07 dB
.01 %	4.10 dB

Date: 12.NOV.2022 18:55:39

Band 30_10 MHz_ Middle_16QAM_50RB



Complementary Cumulative Distribution Function (100000 samples)

	Trace 1
Mean	18.95 dBm
Peak	26.10 dBm
Crest	7.15 dB
10 %	2.95 dB
1 %	4.84 dB
.1 %	5.83 dB
.01 %	6.41 dB

Date: 12.NOV.2022 18:55:55

FCC §2.1049, §27.53 &§90.209- OCCUPIED BANDWIDTH

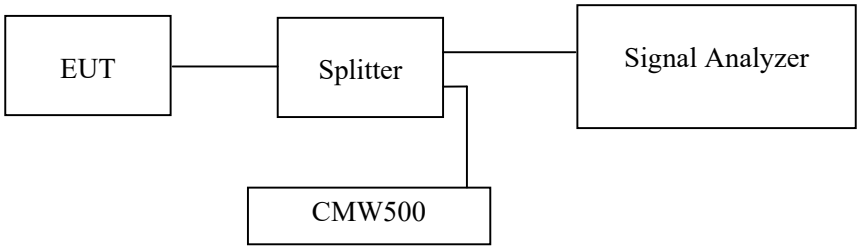
Applicable Standard

FCC 47 §2.1049, §27.53 and §90.209.

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 1% to 5% of the anticipated emission bandwidth and the 26 dB & 99% bandwidth was recorded.



Test Data

Environmental Conditions

Temperature:	23.2-24.6 ℃
Relative Humidity:	53~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu from 2022-11-12 to 2022-12-14.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

LTE Band 7:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.560	5.200	4.540	5.220	4.560	5.240
	16QAM	4.540	5.160	4.540	5.220	4.540	5.220
10 MHz	QPSK	9.000	9.880	9.000	9.920	9.000	9.800
	16QAM	9.000	9.800	8.960	9.840	8.960	9.920
15 MHz	QPSK	13.560	15.000	13.620	15.180	13.620	15.240
	16QAM	13.560	16.020	13.620	15.060	13.620	15.240
20 MHz	QPSK	18.000	19.840	18.000	19.920	18.080	19.840
	16QAM	18.000	19.840	18.000	19.840	18.080	19.870

LTE Band 14:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.540	5.200	4.540	5.180	4.540	5.140
	16QAM	4.540	5.200	4.540	5.140	4.540	5.180
10 MHz	QPSK	/	/	8.920	9.880	/	/
	16QAM	/	/	8.960	9.720	/	/

LTE Band 30:

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.540	5.220	4.540	5.240	4.540	5.220
	16QAM	4.540	5.160	4.560	5.260	4.520	5.220
10 MHz	QPSK	/	/	8.960	9.992	/	/
	16QAM	/	/	8.960	9.928	/	/

The test plots of LTE band please refer to the Appendix A.

FCC §2.1051&§27.53&§90.543 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

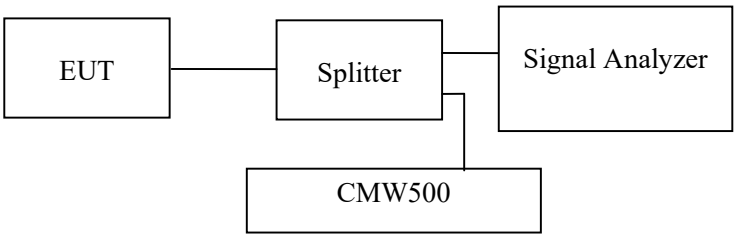
Applicable Standard

FCC §2.1051, §27.53 and §90.543.

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1MHz. Sufficient scans were taken to show any out of band emissions up to 10^{th} harmonic.



Note: the worst case path loss(cable loss and splitter inset loss) among the test frequency range has included in plots.

Test Data

Environmental Conditions

Temperature:	23.2-24.6 ℃
Relative Humidity:	53~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu from 2022-11-12 to 2022-12-13.

EUT operation mode: Transmitting

Test result: Pass

The test plots of LTE band please refer to the Appendix B.

FCC § 2.1053;§27.53; §90.543- SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053,§ 27.53&§90.543.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the receiving antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Test Data

Environmental Conditions

Temperature:	26.2 ℃
Relative Humidity:	56%
ATM Pressure:	101.0 kPa

The testing was performed by Zeki Ma on 2022-11-22~2022-11-26.

Test mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case Z-axis of orientation was recorded)

The worst case is as below:

LTE Band: *(Pre-scan with all the bandwidth and modulation, and worst case as below)*

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 7								
Test frequency range: 30MHz-26.5GHz								
QPSK, 5MHz, Low Channel								
239.70	-53.76	80	2.5	H	7.44	-46.32	-25	-21.32
634.50	-47.93	71	2.0	V	6.69	-41.24	-25	-16.24
5005	-58.8	98	1.5	H	10.8	-48.0	-25	-23.0
5005	-57.4	341	2.1	V	10.2	-47.2	-25	-22.2
QPSK, 5MHz, Middle Channel								
239.70	-53.10	210	2.0	H	7.44	-45.66	-25	-20.66
634.50	-47.85	345	1.1	V	6.69	-41.16	-25	-16.16
5070	-58.5	187	1.9	H	11.1	-47.4	-25	-22.4
5070	-58.1	150	2.2	V	10.8	-47.3	-25	-22.3
QPSK, 5MHz, High Channel								
239.70	-51.71	297	1.6	H	7.44	-44.27	-25	-19.27
634.50	-47.08	229	1.9	V	6.69	-40.39	-25	-15.39
5135	-58.5	249	2.5	H	11.3	-47.2	-25	-22.2
5135	-58.1	192	2.0	V	10.8	-47.3	-25	-22.3

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 14								
Test frequency range: 30MHz-10GHz								
QPSK, 5MHz, Low Channel								
239.70	-52.02	49	1.7	H	7.44	-44.58	-13	-31.58
634.50	-47.80	179	2.5	V	6.69	-41.11	-13	-28.11
1581	-63.1	326	1.3	H	4.1	-59.0	-13	-46.0
1581	-61.4	275	1.2	V	3.2	-58.2	-13	-45.2
2371.5	-60.5	243	2.1	H	7.1	-53.4	-13	-40.4
2371.5	-59.4	187	2.4	V	6.2	-53.2	-13	-40.2
3162	-54.7	320	1.1	H	7.3	-47.4	-13	-34.4
3162	-54.3	203	1.9	V	6.7	-47.6	-13	-34.6
QPSK, 5MHz, Middle Channel								
239.70	-54.22	22	2.4	H	7.44	-46.78	-13	-33.78
634.50	-49.35	4	1.7	V	6.69	-42.66	-13	-29.66
1586	-63.3	275	1.9	H	4.1	-59.2	-13	-46.2
1586	-61.3	56	2.3	V	3.2	-58.1	-13	-45.1
2379	-59.8	356	1.7	H	7.1	-52.7	-13	-39.7
2379	-59.1	358	1.3	V	6.1	-53.0	-13	-40.0
3172	-54.5	304	2.4	H	7.2	-47.3	-13	-34.3
3172	-53.9	54	1.1	V	6.7	-47.2	-13	-34.2
QPSK, 5MHz, High Channel								
239.70	-51.96	38	2.2	H	7.44	-44.52	-13	-31.52
634.50	-48.43	92	1.1	V	6.69	-41.74	-13	-28.74
1591	-62.1	315	2.5	H	4.1	-58.0	-13	-45.0
1591	-61.2	265	2.1	V	3.2	-58.0	-13	-45.0
2386.5	-60.5	246	1.3	H	7	-53.5	-13	-40.5
2386.5	-59.4	257	1.2	V	6	-53.4	-13	-40.4
3182	-54.1	140	1.5	H	7.1	-47.0	-13	-34.0
3182	-54.1	261	1.1	V	6.8	-47.3	-13	-34.3

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 30								
Test frequency range: 30MHz-24GHz								
QPSK, 5MHz , Low Channel								
239.70	-53.17	119	2.4	H	7.44	-45.73	-40	-5.73
634.50	-46.74	168	1.9	V	6.69	-40.05	-40	-0.05
4615	-63.9	106	1.4	H	10.5	-53.4	-40	-13.4
4615	-62.7	268	2.0	V	10.1	-52.6	-40	-12.6
6922.5	-71.0	121	2.5	H	15.1	-55.9	-40	-15.9
6922.5	-69.1	137	1.7	V	14.3	-54.8	-40	-14.8
QPSK, 5MHz , Middle Channel								
239.70	-51.48	151	1.8	H	7.44	-44.04	-40	-4.04
634.50	-46.98	359	1.2	V	6.69	-40.29	-40	-0.29
4620	-62.7	244	1.1	H	10.5	-52.2	-40	-12.2
4620	-62.3	273	1.8	V	10.1	-52.2	-40	-12.2
6930	-69.0	268	2.3	H	15.2	-53.8	-40	-13.8
6930	-69.8	344	2.3	V	14.4	-55.4	-40	-15.4
QPSK, 5MHz , High Channel								
239.70	-52.74	254	2.4	H	7.44	-45.30	-40	-5.30
634.50	-47.10	254	1.8	V	6.69	-40.41	-40	-0.41
4625	-63.6	289	1.2	H	10.5	-53.1	-40	-13.1
4625	-62.2	259	1.4	V	10.1	-52.1	-40	-12.1
6937.5	-71.0	211	1.2	H	15.3	-55.7	-40	-15.7
6937.5	-70.7	220	1.8	V	14.4	-56.3	-40	-16.3

Note:
Absolute Level = Reading Level + Substituted Factor
Substituted Factor contains: SG Level - Cable loss+ Antenna Gain
Margin = Limit - Absolute Level

FCC§27.53(a)(m); §90.543 - BAND EDGES

Applicable Standard

According to FCC §27.53 (a), For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

(i) By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300 MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz;

(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

According to FCC §27.53 (m), the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz.

According to § 90.543, (e) For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

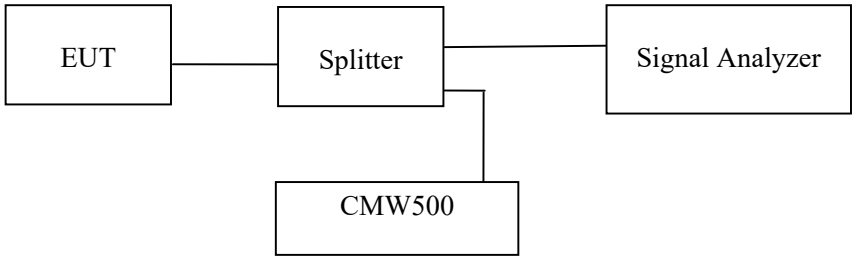
(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency



Test Data

Environmental Conditions

Temperature:	23.2-24.6 ℃
Relative Humidity:	53~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu from 2022-11-12 to 2022-12-13.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

Please refer to the following plots
The test plots of LTE bands please refer to the Appendix C.

FCC § 2.1055;§27.54; §90.539- FREQUENCY STABILITY

Applicable Standard

FCC § 2.1055,§27.54&§90.539.

According to FCC §27.54 the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

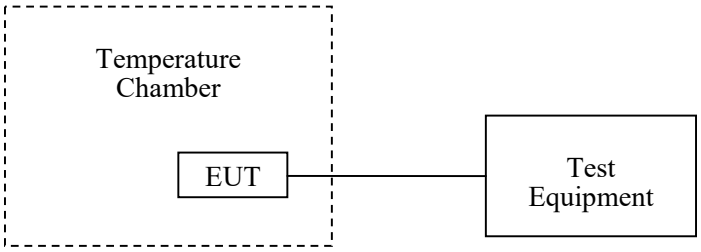
According to §90.539, The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 parts per million or better when AFC is locked to a base station, and 5 parts per million or better when AFC is not locked.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The DC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: For hand carried, battery powered equipment; reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.



Test Data

Environmental Conditions

Temperature:	23.2-24.6 ℃
Relative Humidity:	53~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Andy Yu from 2022-11-12 to 2022-11-18.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

LTE:
QPSK:
Band 7:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	NV	2500.1962	2569.8760	2500	2570
-20		2500.1956	2569.8862	2500	2570
-10		2500.1934	2569.8852	2500	2570
0		2500.1962	2569.8881	2500	2570
10		2500.1923	2569.8867	2500	2570
20		2500.1942	2569.8872	2500	2570
30		2500.1964	2569.8889	2500	2570
40		2500.1954	2569.8832	2500	2570
50		2500.1966	2569.8821	2500	2570
20	LV	2500.1942	2569.8826	2500	2570
	HV	2500.1967	2569.8864	2500	2570

Band 14:

10.0 MHz Middle Channel, f_o=793MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	NV	-1.09	-0.0014	1.25
-20		-5.25	-0.0066	1.25
-10		9.92	0.0125	1.25
0		7.75	0.0098	1.25
10		-8.23	-0.0104	1.25
20		6.74	0.0085	1.25
30		7.56	0.0095	1.25
40		6.20	0.0078	1.25
50		7.08	0.0089	1.25
20	LV	9.73	0.0123	1.25
	HV	-5.21	-0.0066	1.25

Band 30:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	NV	2305.1089	2314.8928	2305	2315
-20		2305.1121	2314.8836	2305	2315
-10		2305.1094	2314.8524	2305	2315
0		2305.1176	2314.8513	2305	2315
10		2305.1192	2314.8621	2305	2315
20		2305.1462	2314.8673	2305	2315
30		2305.1381	2314.8883	2305	2315
40		2305.1178	2314.8637	2305	2315
50		2305.1470	2314.8638	2305	2315
20	LV	2305.1475	2314.8836	2305	2315
	HV	2305.1057	2314.8746	2305	2315

16QAM:
Band 7:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	NV	2500.1482	2569.8564	2500	2570
-20		2500.1375	2569.8542	2500	2570
-10		2500.1365	2569.8456	2500	2570
0		2500.1244	2569.8542	2500	2570
10		2500.1387	2569.8242	2500	2570
20		2500.1246	2569.8874	2500	2570
30		2500.1334	2569.8852	2500	2570
40		2500.1322	2569.8447	2500	2570
50		2500.1325	2569.8452	2500	2570
20	LV	2500.1254	2569.8354	2500	2570
	HV	2500.1433	2569.8287	2500	2570

Band 14:

10.0 MHz Middle Channel, f_o=793MHz				
Temperature (℃)	**Voltage Supplied (V_{DC})**	**Frequency Error (Hz)**	**Frequency Error (ppm)**	**Limit (ppm)**
-30	NV	-0.51	-0.0006	1.25
-20		6.63	0.0084	1.25
-10		9.86	0.0124	1.25
0		-5.27	-0.0066	1.25
10		8.18	0.0103	1.25
20		7.05	0.0089	1.25
30		9.24	0.0117	1.25
40		8.51	0.0107	1.25
50		-6.32	-0.0080	1.25
20	LV	-5.04	-0.0064	1.25
	HV	-7.51	-0.0095	1.25

Band 30:

10 MHz Bandwidth					
Temperature (℃)	**Power Supplied (V_{DC})**	**F_L (MHz)**	**F_H (MHz)**	**F_L Limit (MHz)**	**F_H Limit (MHz)**
-30	NV	2305.1422	2314.8621	2305	2315
-20		2305.1410	2314.8815	2305	2315
-10		2305.1353	2314.8696	2305	2315
0		2305.1216	2314.8745	2305	2315
10		2305.1342	2314.8840	2305	2315
20		2305.1231	2314.8607	2305	2315
30		2305.1250	2314.8761	2305	2315
40		2305.1030	2314.8799	2305	2315
50		2305.1322	2314.8902	2305	2315
20	LV	2305.1158	2314.8541	2305	2315
	HV	2305.1460	2314.8939	2305	2315

******* END OF REPORT *******