FCC TEST REPORT

(PART 96)

Applicant:	Xiaomi Communications Co., Ltd.
Address:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Manufacturer or Supplier:	Xiaomi Communications Co., Ltd.
Address:	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Product:	Mobile Phone
Brand Name:	POCO
Model Name:	2409FPCC4G
FCC ID:	2AFZZPCC4G
Date of tests:	Jul. 12, 2024 ~ Aug. 05, 2024
The tests have been carried out according to the requirements of the following standard:	
☒ **47 CFR FCC Part 96**	
CONCLUSION: The submitted sample was found to COMPLY with the test requirement	

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
Simon Wang Date: Aug. 05, 2024	Luke Lu Date: Aug. 05, 2024

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RELEASE CONTROL RECORD

ISSUE NO.	DESCRIPTION	DATE ISSUED
W7L-240618W002RF13	Original release	Aug. 05, 2024

1 SUMMARY OF TEST RESULTS

47 CFR FCC PART 96		
FCC CLAUSE	**TEST ITEM**	**RESULT**
2.1046 96.41(b)	Maximum Peak Output Power and Maximum EIRP	Compliance
2.1051 96.41(e)	Conducted Band Edge	Compliance
2.1049	Occupied Bandwidth	Compliance
2.1055	Frequency Stability	Compliance
2.1051 96.41(e)	Conducted Spurious Emissions	Compliance
2.1053 96.41(e)	Radiated Spurious Emissions	Compliance
96.41(g)	Peak-to-Average Power Ratio	Compliance

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. This report refers to the data of W7L-240618W001RF13(FCC ID: 2AFZZRAD4G), the difference of 24094RAD4G and 2409FPCC4G is model, FCC ID, brand name and 2409FPCC4G remove one camera. This report verify power and RSE worse case. The verified power is similar as the original report. So this report only update the RSE worse case(N48 100M CH 641666(30K)), other data of spot-Check Please Refer to folder the naming (xiaomi O17p Spot-check).
3. List of the verified results (worse case) in the test item as follows:

Test Item / Report No.	W7L-240618W001RF13	W7L-240618W002RF13
Radiated Emission Test	N48 100M CH 641666(30K) Margin:-3.37Db	N48 100M CH 641666(30K) Margin:-4.12Db
Remark: All validation data are within 3dB variation or better, the new result is better than the original data.		

1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
Maximum Peak Output Power	±2.06dB
Frequency Stability	±76.97Hz
Radiated emissions (9KHz~30MHz)	±2.68dB
Radiated emissions (30MHz~1GHz)	±4.98dB
Radiated emissions (1GHz ~6GHz)	±4.70dB
Radiated emissions (6GHz ~18GHz)	±4.60dB
Radiated emissions (18GHz ~40GHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Band Edge Measurements	±4.70dB
Peak to average ratio	±0.76dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 28,24	Mar. 27,25
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.10,24	May.09,25
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.03,23	Sep.02,24
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Feb. 18,24	Feb. 17,25
Horn Antenna	ETS-LINDGREN	3117	00168692	Feb. 18,24	Feb. 17,25
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Sep.04, 23	Sep.03, 24
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 14,24	Feb. 13,25
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May. 06,24	May. 05,25
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.10,24	May.09,25
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 17,24	Feb.16,25
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	Nov. 14,23	Nov. 13,26
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120	3.1.36	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	50HF-010-SMA	May. 06,24	May. 05,25
Power Meter	Anritsu	ML2495A	1506002	Feb. 14,24	Feb. 13,25
Power Sensor	Anritsu	MA2411B	1339352	Feb. 14,24	Feb. 13,25
Temperature Chamber	ESPEC	SH-242	93000855	May. 06,24	May. 05,25
MXG Analog Microvave Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 14,24	Feb. 13,25
Base station R&S CMW500	Rohde&Schwarz	CMW500	153085	May.10,24	May.09,25
DC Source	Kikusui/JP	PMX18-5A	N/A	Aug. 11,23	Aug. 10,24

NOTE: 1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.

3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Mobile Phone	
BRAND NAME	POCO	
MODEL NAME	2409FPCC4G	
NOMINAL VOLTAGE	5/5~11Vdc(adapter or host equipment) 3.91Vdc (Li-ion, battery)	
MODULATION TECHNOLOGY	**5G NR**	DFT-s-OFDM(Pi/2 BPSK,QPSK,16QAM,64QAM,256QAM); CP-OFDM(QPSK,16QAM,64QAM,256QAM);
SUPPORT ENDC COMBINE	**LTE Anchor Band for NR Band n48**	SA ONLY
FREQUENCY RANGE	**NR Band n48**	3555 MHz ~ 3694.98MHz
EMISSION DESIGNATOR(SCS 15K)	**NR Band n48 Channel Bandwidth: 10MHz**	DFT-PI2BPSK 8M93G7D DFT-QPSK 8M92G7D DFT-16QAM 8M91W7D DFT-64QAM 8M91W7D DFT-256QAM 8M94W7D
	NR Band n48 Channel Bandwidth: 15MHz	DFT-PI2BPSK 13M4G7D DFT-QPSK 13M4G7D DFT-16QAM 13M4W7D DFT-64QAM 13M4W7D DFT-256QAM 13M4W7D
	NR Band n48 Channel Bandwidth: 20MHz	DFT-PI2BPSK 17M9G7D DFT-QPSK 17M9G7D DFT-16QAM 17M9W7D DFT-64QAM 17M9W7D DFT-256QAM 17M8W7D
	NR Band n48 Channel Bandwidth: 40MHz	DFT-PI2BPSK 38M5G7D DFT-QPSK 38M6G7D DFT-16QAM 38M6W7D DFT-64QAM 38M5W7D DFT-256QAM 38M5W7D

EMISSION DESIGNATOR(SCS 15K)	**NR Band n48 Channel Bandwidth: 50MHz**	DFT-PI2BPSK 48M1G7D DFT-QPSK 48M2G7D DFT-16QAM 48M1W7D DFT-64QAM 48M2W7D DFT-256QAM 48M2W7D
EMISSION DESIGNATOR(SCS 30K)	**NR Band n48 Channel Bandwidth: 10MHz**	DFT-PI2BPSK 8M56G7D DFT-QPSK 8M57G7D DFT-16QAM 8M56W7D DFT-64QAM 8M59W7D DFT-256QAM 8M57W7D
	NR Band n48 Channel Bandwidth: 15MHz	DFT-PI2BPSK 12M7G7D DFT-QPSK 12M9G7D DFT-16QAM 12M9W7D DFT-64QAM 12M9W7D DFT-256QAM 12M9W7D
	NR Band n48 Channel Bandwidth: 20MHz	DFT-PI2BPSK 17M8G7D DFT-QPSK 17M8G7D DFT-16QAM 17M8W7D DFT-64QAM 17M8W7D DFT-256QAM 17M8W7D
	NR Band n48 Channel Bandwidth: 30MHz	DFT-PI2BPSK 26M8G7D DFT-QPSK 26M8G7D DFT-16QAM 26M8W7D DFT-64QAM 26M7W7D DFT-256QAM 26M8W7D
	NR Band n48 Channel Bandwidth: 40MHz	DFT-PI2BPSK 35M7G7D DFT-QPSK 35M7G7D DFT-16QAM 35M7W7D DFT-64QAM 35M7W7D DFT-256QAM 35M7W7D
	NR Band n48 Channel Bandwidth: 50MHz	DFT-PI2BPSK 45M7G7D DFT-QPSK 45M6G7D DFT-16QAM 45M7W7D DFT-64QAM 45M6W7D DFT-256QAM 45M8W7D

EMISSION DESIGNATOR(SCS 30K)	**NR Band n48 Channel Bandwidth: 60MHz**	DFT-PI2BPSK 57M8G7D DFT-QPSK 57M7G7D DFT-16QAM 57M8W7D DFT-64QAM 57M8W7D DFT-256QAM 57M7W7D
	NR Band n48 Channel Bandwidth: 70MHz	DFT-PI2BPSK 64M3G7D DFT-QPSK 64M2G7D DFT-16QAM 64M2W7D DFT-64QAM 64M3W7D DFT-256QAM 64M2W7D
	NR Band n48 Channel Bandwidth: 80MHz	DFT-PI2BPSK 77M0G7D DFT-QPSK 76M8G7D DFT-16QAM 76M9W7D DFT-64QAM 76M9W7D DFT-256QAM 76M9W7D
	NR Band n48 Channel Bandwidth: 90MHz	DFT-PI2BPSK 86M6G7D DFT-QPSK 86M5G7D DFT-16QAM 74M1W7D DFT-64QAM 86M5W7D DFT-256QAM 86M6W7D
	NR Band n48 Channel Bandwidth: 100MHz	DFT-PI2BPSK 96M3G7D DFT-QPSK 96M0G7D DFT-16QAM 44M3W7D DFT-64QAM 96M1W7D DFT-256QAM 96M2W7D
MAX. EIRP POWER (SCS 15K)	**NR Band n48 Channel Bandwidth: 10MHz**	162.93mW
	NR Band n48 Channel Bandwidth: 15MHz	166.72mW
	NR Band n48 Channel Bandwidth: 20MHz	159.59mW
	NR Band n48 Channel Bandwidth: 40MHz	169.43mW
	NR Band n48 Channel Bandwidth: 50MHz	170.61mW
MAX. EIRP POWER (SCS 30K)	**NR Band n48 Channel Bandwidth: 10MHz**	175.79mW

	NR Band n48 Channel Bandwidth: 15MHz	171.79mW
	NR Band n48 Channel Bandwidth: 20MHz	172.19mW
	NR Band n48 Channel Bandwidth: 30MHz	173.38mW
	NR Band n48 Channel Bandwidth: 40MHz	171.79mW
	NR Band n48 Channel Bandwidth: 50MHz	170.22mW
	NR Band n48 Channel Bandwidth: 60MHz	169.82mW
	NR Band n48 Channel Bandwidth: 70MHz	169.43mW
	NR Band n48 Channel Bandwidth: 80MHz	172.19mW
	NR Band n48 Channel Bandwidth: 90MHz	170.61mW
	NR Band n48 Channel Bandwidth: 100MHz	174.58mW
ANTENNA GAIN	ANT 2(UP): PIFA Antenna with -2dBi gain for NR Band n48 ANT 3(UP): PIFA Antenna with -5.7dBi gain for NR Band n48 ANT 5(UP): PIFA Antenna with -0.2dBi gain for NR Band n48 ANT 7(UP): PIFA Antenna with -0.1dBi gain for NR Band n48	
HW Version	13510O17P	
SW Version	Xiaomi HyperOS 1.0	
IMEI	861781070039865	
I/O PORTS	Refer to user's manual	
DATA CABLE	USB cable1: non-shielded cable, with w/o ferrite core, 1.0 meter USB cable2: non-shielded cable, with w/o ferrite core, 1.0 meter	
EXTREME TEMPERATURE	0-40 ℃	
EXTREME VOLTAGE	3.7V - 4.3V	

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

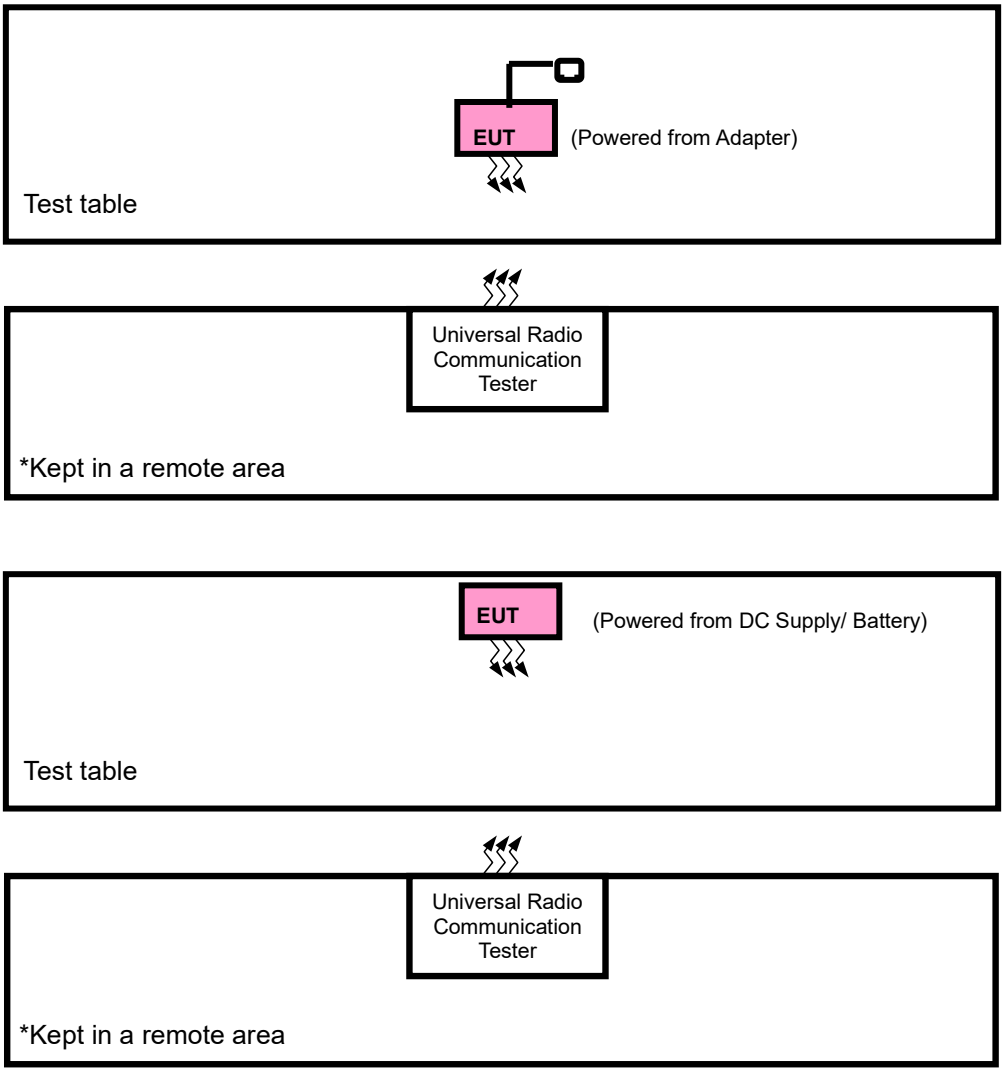
2. EUT Function:

MODULATION MODE	TX FUNCTION
NR	4TX/4RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
4. Antenna gain and EUT conducted cable loss are provided by the customer, and the laboratory will record the results based on these items that involve these two parameters.

2.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST



2.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	LONG WEI	PS-6403D	010934269	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable 1.8m

2.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports The worst case was found when positioned on Y-plane for EIRP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + Adapter + USB Cable with 5G NR link
B	EUT + DC Supply with 5G NR link

5G NR n48 MODE(15K)

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	637000 to 646332	637000 to 646332	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		637168 to 646166	637168 to 646166	Low, Middle, High	15MHz	QPSK	1RB/ 0RB Offset
		637334 to 646000	637334 to 646000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		638000 to 645332	638000 to 645332	Low, Middle, High	40MHz	QPSK	1RB/ 0RB Offset
		638334 to 645000	638334 to 645000	Low, Middle, High	50MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
B	FREQUENCY STABILITY	637334 to 642666	637334 to 642666	Low, Middle, High	20MHz	QPSK	Outer_ Full
A	PEAK TO AVERAGE RATIO	637334 to 646000	637334 to 646000	Low, Middle, High	20MHz	QPSK	Outer_ Full
A	OCCUPIED BANDWIDTH	637000 to 646332	637000 to 646332	Middle	10MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		637334 to 646000	637334 to 646000	Middle	20MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full

		638000 to 645332	638000 to 645332	Middle	40MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
A	BAND EDGE	637000 to 646332	637000 to 646332	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	10MHz	QPSK	1RB/ max Offset
							Outer_ Full
		637334 to 646000	637334 to 646000	Low	20MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	20MHz	QPSK	1RB/ max Offset
							Outer_ Full
		638000 to 645332	638000 to 645332	Low	40MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	40MHz	QPSK	1RB/ max Offset
							Outer_ Full
A	CONDUCTED EMISSION	637000 to 646332	637000 to 646332	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
A		637334 to 646000	637334 to 646000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		638000 to 645332	638000 to 645332	Low, Middle, High	40MHz	QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	637000 to 646332	637000 to 646332	Middle	10MHz	QPSK	1RB/ 0RB Offset
		637168 to 646166	637168 to 646166	Middle	15MHz	QPSK	1RB/ 0RB Offset
		637334 to 646000	637334 to 646000	Middle	20MHz	QPSK	1RB/ 0RB Offset
		638000 to 645332	638000 to 645332	Middle	40MHz	QPSK	1RB/ 0RB Offset
		638334 to 645000	638334 to 645000	Middle	50MHz	QPSK	1RB/ 0RB Offset
A	ACLR	637000 to 646332	637000 to 646332	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	10MHz	QPSK	1RB/ max Offset
							Outer_ Full
		637334 to 646000	637334 to 646000	Low	20MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	20MHz	QPSK	1RB/ max Offset
							Outer_ Full
		638000 to 645332	638000 to 645332	Low	40MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	40MHz	QPSK	1RB/ max Offset
							Outer_ Full

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. The test data presented in the report from worst SA_n48

5G NR n48 MODE(30K)

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	637000 to 646332	637000 to 646332	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		637168 to 646166	637168 to 646166	Low, Middle, High	15MHz	QPSK	1RB/ 0RB Offset
		637334 to 646000	637334 to 646000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		637668 to 645666	637668 to 645666	Low, Middle, High	30MHz	QPSK	1RB/ 0RB Offset
		638000 to 645332	638000 to 645332	Low, Middle, High	40MHz	QPSK	1RB/ 0RB Offset
		638334 to 645000	638334 to 645000	Low, Middle, High	50MHz	QPSK	1RB/ 0RB Offset
		638668 to 644666	638668 to 644666	Low, Middle, High	60MHz	QPSK	1RB/ 0RB Offset
		639000 to 644332	639000 to 644332	Low, Middle, High	70MHz	QPSK	1RB/ 0RB Offset
		639334 to 644000	639334 to 644000	Low, Middle, High	80MHz	QPSK	1RB/ 0RB Offset
		639668 to 643666	639668 to 643666	Low, Middle, High	90MHz	QPSK	1RB/ 0RB Offset
		640000 to 643332	640000 to 643332	Low, Middle, High	100MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
B	FREQUENCY STABILITY	637334 to 642666	637334 to 642666	Low, Middle, High	20MHz	QPSK	Outer_ Full
A	PEAK TO AVERAGE RATIO	637334 to 646000	637334 to 646000	Low, Middle, High	20MHz	QPSK	Outer_ Full
A	OCCUPIED BANDWIDTH	637000 to 646332	637000 to 646332	Middle	10MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		637334 to 646000	637334 to 646000	Middle	20MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		638000 to 645332	638000 to 645332	Middle	40MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
A	BAND EDGE	637000 to 646332	637000 to 646332	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	10MHz	QPSK	1RB/ max Offset
							Outer_ Full
		637334 to 646000	637334 to 646000	Low	20MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	20MHz	QPSK	1RB/ max Offset
							Outer_ Full
		638000 to 645332	638000 to 645332	Low	40MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	40MHz	QPSK	1RB/ max Offset
							Outer_ Full

A	CONDUCTED EMISSION	637000 to 646332	637000 to 646332	Low, Middle, High	10MHz	QPSK	1RB/ 0RB Offset
		637334 to 646000	637334 to 646000	Low, Middle, High	20MHz	QPSK	1RB/ 0RB Offset
		638000 to 645332	638000 to 645332	Low, Middle, High	40MHz	QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	637668 to 645666	637668 to 645666	Middle	30MHz	QPSK	1RB/ 0RB Offset
		638668 to 644666	638668 to 644666	Middle	60MHz	QPSK	1RB/ 0RB Offset
		639000 to 644332	639000 to 644332	Middle	70MHz	QPSK	1RB/ 0RB Offset
		639334 to 644000	639334 to 644000	Middle	80MHz	QPSK	1RB/ 0RB Offset
		639668 to 643666	639668 to 643666	Middle	90MHz	QPSK	1RB/ 0RB Offset
		640000 to 643332	640000 to 643332	Low, Middle, High	100MHz	QPSK	1RB/ 0RB Offset
A	ACLR	637000 to 646332	637000 to 646332	Low	10MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	10MHz	QPSK	1RB/ max Offset
							Outer_ Full
		637334 to 646000	637334 to 646000	Low	20MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	20MHz	QPSK	1RB/ max Offset
							Outer_ Full
		638000 to 645332	638000 to 645332	Low	40MHz	QPSK	1RB/ 0RB Offset
							Outer_ Full
				High	40MHz	QPSK	1RB/ max Offset
							Outer_ Full

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. The test data presented in the report from worst SA_n48

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	DC 5/5~11V By Adapter	Jace Hu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 3.7/3.91/4.3 By DC Source	James Fu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 5/5~11V By Adapter	James Fu
BAND EDGE	23deg. C, 70%RH	DC 5/5~11V By Adapter	James Fu
CONDUCTED EMISSION	23deg. C, 70%RH	DC 5/5~11V By Adapter	James Fu
RADIATED EMISSION	23deg. C, 70%RH	DC 5/5~11V By Adapter	Jace Hu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 5/5~11V By Adapter	James Fu

2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 96

KDB 971168 D02 Power Meas License Digital Systems v02r02

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.

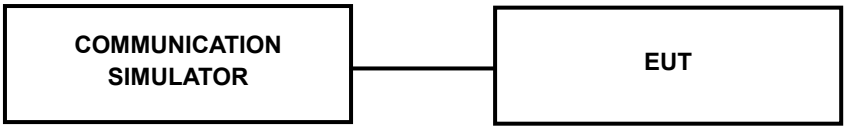
2 TEST TYPES AND RESULTS

3.1 MAXIMUM EIRP MEASUREMENT

3.1.1 LIMITS OF MAXIMUM EIRP MEASUREMENT

Device	Maximum EIRP (dBm/10 MHz)
End User Device	23
Category A CBSD	30
Category B CBSD	47

3.1.2 TEST SETUP



For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.1.3 TEST PROCEDURES

EIRP MEASUREMENT:

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determing the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

ERP or EIRP = $P_{Meas} + G_T – L_C$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

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

CONDUCTED POWER MEASUREMENT:

a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

3.1.4 DEVIATION FROM TEST STANDARD

No deviation.

3.1.5 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

5G SA

n48 (SCS 15 kHz) (Ant2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		638334	641666	645000
		Frequence (MHz)		3575.01	3624.99	3675
50M	DFT-s-OFDM Pi/2 BPSK	1	1	21.02	20.97	20.62
		1	135	21.32	20.99	20.79
		1	268	21.00	20.61	20.25
		135	0	20.51	20.15	19.77
		135	68	21.34	20.97	20.79
		135	135	20.39	19.97	19.95
		270	0	20.54	20.05	19.85
	DFT-s-OFDM QPSK	1	1	21.25	20.98	20.67
		1	135	21.32	21.08	20.85
		1	268	21.06	20.68	20.39
		135	0	20.59	20.23	19.93
		135	68	**21.36**	21.11	20.76
		135	135	20.48	20.07	19.94
		270	0	20.56	20.10	20.00
	DFT-s-OFDM 16QAM	135	68	20.63	20.29	20.06
	DFT-s-OFDM 64QAM	135	68	19.11	18.80	18.61
	DFT-s-OFDM 256QAM	135	68	17.18	16.90	16.57
BW	MCS Index	Channel		638000	641666	645332
		Frequence (MHz)		3570	3624.99	3679.98
40M	DFT-s-OFDM QPSK	108	54	21.22	20.88	20.77

BW	MCS Index	Channel		637334	641666	646000
		Frequence (MHz)		3560.01	3624.99	3690
20M	DFT-s-OFDM QPSK	50	25	20.97	20.74	20.81
BW	**MCS Index**	**Channel**		**637168**	**641666**	**646166**
		Frequence (MHz)		**3557.52**	**3624.99**	**3692.49**
15M	DFT-s-OFDM QPSK	36	18	21.20	20.83	20.70
BW	**MCS Index**	**Channel**		**637000**	**641666**	**646332**
		Frequence (MHz)		**3555**	**3624.99**	**3694.98**
10M	DFT-s-OFDM QPSK	25	12	21.17	20.85	20.72

n48 (SCS 15 kHz) (Ant3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		638334	641666	645000
		Frequence (MHz)		3575.01	3624.99	3675
50M	DFT-s-OFDM Pi/2 BPSK	1	1	18.04	18.23	18.07
		1	135	18.90	19.08	19.05
		1	268	18.27	18.47	18.76
		135	0	17.89	17.94	18.03
		135	68	19.03	19.06	19.28
		135	135	18.01	18.30	18.20
		270	0	17.88	17.96	18.01
	DFT-s-OFDM QPSK	1	1	18.25	18.38	18.24
		1	135	18.94	19.09	19.01
		1	268	18.55	18.64	18.69
		135	0	17.96	17.81	17.88
		135	68	19.09	19.14	**19.37**
		135	135	18.15	18.26	18.27
		270	0	17.81	18.11	18.01
	DFT-s-OFDM 16QAM	135	68	18.18	18.15	18.22
	DFT-s-OFDM 64QAM	135	68	16.90	16.85	17.05
	DFT-s-OFDM 256QAM	135	68	14.70	14.85	14.70
BW	MCS Index	Channel		638000	641666	645332
		Frequence (MHz)		3570	3624.99	3679.98
40M	DFT-s-OFDM QPSK	108	54	18.94	18.91	19.20

BW	MCS Index	Channel		637334	641666	646000
		Frequence (MHz)		3560.01	3624.99	3690
20M	DFT-s-OFDM QPSK	50	25	18.95	19.13	19.23
BW	MCS Index	Channel		637168	641666	646166
		Frequence (MHz)		3557.52	3624.99	3692.49
15M	DFT-s-OFDM QPSK	36	18	18.93	18.92	19.18
BW	MCS Index	Channel		637000	641666	646332
		Frequence (MHz)		3555	3624.99	3694.98
10M	DFT-s-OFDM QPSK	25	12	18.86	19.06	18.97

n48 (SCS 15 kHz) (Ant5)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		638334	641666	645000
		Frequence (MHz)		3575.01	3624.99	3675
50M	DFT-s-OFDM Pi/2 BPSK	1	1	22.24	22.21	22.32
		1	135	22.43	22.31	22.41
		1	268	22.18	22.28	22.45
		135	0	21.97	21.85	21.80
		135	68	22.46	22.50	22.31
		135	135	22.08	22.03	21.96
		270	0	22.12	21.95	21.98
	DFT-s-OFDM QPSK	1	1	22.23	22.26	22.29
		1	135	22.47	22.45	22.45
		1	268	22.22	22.35	22.49
		135	0	22.10	22.05	21.87
		135	68	**22.53**	22.41	22.37
		135	135	22.13	22.12	22.10
		270	0	22.12	22.04	21.93
	DFT-s-OFDM 16QAM	135	68	22.30	22.05	22.10
	DFT-s-OFDM 64QAM	135	68	20.98	20.99	20.89
	DFT-s-OFDM 256QAM	135	68	19.15	19.02	19.00
BW	MCS Index	Channel		638000	641666	645332
		Frequence (MHz)		3570	3624.99	3679.98
40M	DFT-s-OFDM QPSK	108	54	22.35	22.49	22.16
BW	MCS Index	Channel		637334	641666	646000
		Frequence (MHz)		3560.01	3624.99	3690
20M	DFT-s-OFDM QPSK	50	25	22.18	22.13	22.23
BW	MCS Index	Channel		637168	641666	646166
		Frequence (MHz)		3557.52	3624.99	3692.49
15M	DFT-s-OFDM QPSK	36	18	22.18	22.19	22.42
BW	MCS Index	Channel		637000	641666	646332
		Frequence (MHz)		3555	3624.99	3694.98
10M	DFT-s-OFDM QPSK	25	12	22.20	22.32	22.28

n48 (SCS 15 kHz) (Ant7)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		638334	641666	645000
		Frequence (MHz)		3575.01	3624.99	3675
50M	DFT-s-OFDM Pi/2 BPSK	1	1	21.02	20.77	20.89
		1	135	21.25	21.21	21.15
		1	268	20.92	20.89	21.06
		135	0	20.19	20.07	20.11
		135	68	21.06	21.11	21.21
		135	135	20.29	20.46	20.48
		270	0	20.21	20.24	20.46
	DFT-s-OFDM QPSK	1	1	21.05	20.88	21.01
		1	135	21.29	21.22	21.17
		1	268	20.95	20.99	21.08
		135	0	20.32	20.12	20.30
		135	68	21.11	21.18	**21.29**
		135	135	20.36	20.38	20.60
		270	0	20.37	20.28	20.47
	DFT-s-OFDM 16QAM	135	68	20.30	20.34	20.61
	DFT-s-OFDM 64QAM	135	68	19.06	19.26	19.37
	DFT-s-OFDM 256QAM	135	68	17.39	17.13	17.36
BW	MCS Index	Channel		638000	641666	645332
		Frequence (MHz)		3570	3624.99	3679.98
40M	DFT-s-OFDM QPSK	108	54	20.90	20.79	21.04

BW	MCS Index	Channel		637334	641666	646000
		Frequence (MHz)		3560.01	3624.99	3690
20M	DFT-s-OFDM QPSK	50	25	20.99	20.68	20.85
BW	**MCS Index**	**Channel**		**637168**	**641666**	**646166**
		Frequence (MHz)		**3557.52**	**3624.99**	**3692.49**
15M	DFT-s-OFDM QPSK	36	18	20.94	20.84	20.93
BW	**MCS Index**	**Channel**		**637000**	**641666**	**646332**
		Frequence (MHz)		**3555**	**3624.99**	**3694.98**
10M	DFT-s-OFDM QPSK	25	12	20.85	20.87	20.98

n48 (SCS 30 kHz) (Ant2)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		640000	641666	643332
		Frequence (MHz)		3600	3624.99	3649.98
100M	DFT-s-OFDM Pi/2 BPSK	1	1	20.51	20.22	20.09
		1	137	21.05	20.82	20.60
		1	271	20.17	20.05	20.06
		135	0	20.00	19.82	19.60
		135	69	20.94	20.82	20.68
		135	138	19.88	19.54	19.52
		270	0	19.82	19.60	19.65
	DFT-s-OFDM QPSK	1	1	20.36	20.27	20.20
		1	137	21.00	20.77	20.53
		1	271	20.22	20.06	20.13
		135	0	19.94	19.84	19.70
		135	69	**21.15**	20.89	20.73
		135	138	19.96	19.65	19.48
		270	0	19.85	19.81	19.66
	DFT-s-OFDM 16QAM	135	69	20.14	20.08	19.87
	DFT-s-OFDM 64QAM	135	69	18.79	18.70	18.73
	DFT-s-OFDM 256QAM	135	69	16.91	16.85	16.70
BW	MCS Index	Channel		639668	641666	643666
		Frequence (MHz)		3595.02	3624.99	3654.99
90M	DFT-s-OFDM QPSK	120	63	20.91	20.67	20.52
BW	MCS Index	Channel		639334	641666	644000
		Frequence (MHz)		3590.01	3624.99	3660
80M	DFT-s-OFDM QPSK	108	55	20.85	20.72	20.59
BW	MCS Index	Channel		639000	641666	644332
		Frequence (MHz)		3585	3624.99	3664.98
70M	DFT-s-OFDM QPSK	90	50	20.88	20.63	20.44

BW	MCS Index	Channel		638668	641666	644666
		Frequence (MHz)		3580.02	3624.99	3669.99
60M	DFT-s-OFDM QPSK	81	41	21.12	20.75	20.70
BW	MCS Index	Channel		638334	641666	645000
		Frequence (MHz)		3575.01	3624.99	3675
50M	DFT-s-OFDM QPSK	64	35	21.02	20.79	20.49
BW	MCS Index	Channel		638000	641666	645332
		Frequence (MHz)		3570	3624.99	3679.98
40M	DFT-s-OFDM QPSK	50	28	20.97	20.77	20.53
BW	MCS Index	Channel		637668	641666	645666
		Frequence (MHz)		3565.02	3624.99	3684.99
30M	DFT-s-OFDM QPSK	36	21	20.92	20.73	20.58
BW	MCS Index	Channel		637334	641666	646000
		Frequence (MHz)		3560.01	3624.99	3690
20M	DFT-s-OFDM QPSK	25	13	21.12	20.75	20.62
BW	MCS Index	Channel		637168	641666	646166
		Frequence (MHz)		3557.52	3624.99	3692.49
15M	DFT-s-OFDM QPSK	18	10	21.00	20.70	20.59
BW	MCS Index	Channel		637000	641666	646332
		Frequence (MHz)		3555	3624.99	3694.98
10M	DFT-s-OFDM QPSK	12	6	21.10	20.85	20.66

n48 (SCS 30 kHz) (Ant3)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		640000	641666	643332
		Frequence (MHz)		3600	3624.99	3649.98
100M	DFT-s-OFDM Pi/2 BPSK	1	1	18.22	18.46	18.42
		1	137	19.20	19.33	19.22
		1	271	18.46	18.70	18.86
		135	0	18.17	18.23	18.17
		135	69	19.20	19.40	19.32
		135	138	18.21	18.36	18.43
		270	0	18.08	18.03	18.01
	DFT-s-OFDM QPSK	1	1	18.47	18.52	18.50
		1	137	19.13	19.23	19.26
		1	271	18.62	18.76	18.91
		135	0	18.18	18.04	18.02
		135	69	19.20	19.25	**19.54**
		135	138	18.29	18.33	18.55
		270	0	18.12	18.21	18.24
	DFT-s-OFDM 16QAM	135	69	18.25	18.35	18.43
	DFT-s-OFDM 64QAM	135	69	16.93	16.99	17.06
	DFT-s-OFDM 256QAM	135	69	14.98	14.93	14.98
BW	MCS Index	Channel		639668	641666	643666
		Frequence (MHz)		3595.02	3624.99	3654.99
90M	DFT-s-OFDM QPSK	120	63	19.18	19.30	19.15
BW	MCS Index	Channel		639334	641666	644000
		Frequence (MHz)		3590.01	3624.99	3660
80M	DFT-s-OFDM QPSK	108	55	19.07	19.27	19.23
BW	MCS Index	Channel		639000	641666	644332
		Frequence (MHz)		3585	3624.99	3664.98
70M	DFT-s-OFDM QPSK	90	50	19.12	19.11	19.13

BW	MCS Index	Channel		638668	641666	644666
		Frequence (MHz)		3580.02	3624.99	3669.99
60M	DFT-s-OFDM QPSK	81	41	19.07	19.21	19.15
BW	MCS Index	Channel		638334	641666	645000
		Frequence (MHz)		3575.01	3624.99	3675
50M	DFT-s-OFDM QPSK	64	35	19.15	19.17	19.22
BW	MCS Index	Channel		638000	641666	645332
		Frequence (MHz)		3570	3624.99	3679.98
40M	DFT-s-OFDM QPSK	50	28	19.19	19.30	19.31
BW	MCS Index	Channel		637668	641666	645666
		Frequence (MHz)		3565.02	3624.99	3684.99
30M	DFT-s-OFDM QPSK	36	21	19.10	19.13	19.19
BW	MCS Index	Channel		637334	641666	646000
		Frequence (MHz)		3560.01	3624.99	3690
20M	DFT-s-OFDM QPSK	25	13	19.05	19.19	19.07
BW	MCS Index	Channel		637168	641666	646166
		Frequence (MHz)		3557.52	3624.99	3692.49
15M	DFT-s-OFDM QPSK	18	10	19.18	19.27	19.24
BW	MCS Index	Channel		637000	641666	646332
		Frequence (MHz)		3555	3624.99	3694.98
10M	DFT-s-OFDM QPSK	12	6	19.22	19.18	19.09