Certificate #6613.01

FCC TEST REPORT

(PART 27)

Applicant:	Telit Communications S.p.A.
Address:	Via Stazione di Prosecco 5/b – 34010 Sgonico, Trieste – Italy

Manufacturer or Supplier:	Telit Communications S.p.A.
Address:	Via Stazione di Prosecco 5/b – 34010 Sgonico, Trieste – Italy
Product:	ME310M1-W2 / ME310M1-W1
Brand Name:	Telit Cinterion
Model Name:	ME310M1-W2 / ME310M1-W1
Series Model:	RI7ME310M1WX
FCC ID	Telit Communications SpA
Date of tests	Feb. 18, 2024 ~ Apr. 26, 2024

The tests have been carried out according to the requirements of the following standard:

☒ **FCC Part 27** ☒ **ANSI/TIA/EIA-603-D**
☒ **FCC Part 2** ☒ **ANSI/TIA/EIA-603-E** ☒ **ANSI C63.26-2015**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Hanwen Xu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department
Date: Apr. 26, 2024	Date: Apr. 26, 2024

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-240204W001RF03	Original release	Apr. 26, 2024

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 27 & PART 2			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**TEST LAB***
§2.1046	Conducted Output Power	Compliance	A
§27.50(c)(10) §27.50(b)(10) §27.1507(a)&(b)	Effective Radiated Power (Band 12) (Band 13) (Band 14) (Band 17) (Band 71) (Band 85) (Band 8)	Compliance	A
§27.50(d)(4) §27.50(h)(2)	Equivalent Isotropically Radiated Power	Compliance	A
§2.1055 §27.54	Frequency Stability	Compliance	A
§2.1049	Occupied Bandwidth	Compliance	A
§2.1051 §27.53(c)(2) §27.53(g) §27.53(h) §27.53(m)(4)	Conducted Band Edge Measurements (Band 12) (Band 13) (Band 14) (Band 17) (Band 71) (Band 85) (Band 8)	Compliance	A
§2.1051 §27.53(g) §27.53(c)(2) §27.53(f) §27.53(h) §27.53(m)(4) §27.1509(a)	Conducted Spurious Emissions (Band 12) (Band 13) (Band 14) (Band 17) (Band 71) (Band 85) (Band 8)	Compliance	A
§2.1053 §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h) §27.53(m)(4) §27.1509(a)	Radiated Spurious Emissions (Band 12) (Band 13) (Band 14) (Band 17) (Band 71) (Band 85) (Band 8)	Compliance	A
§27.50	Peak to average ratio*	Compliance	A

* Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01.

Note:

The differences between LTE NB-IoT/Cat-M1 modules ME310M1-W1 (FCC ID:RI7ME310M1WX) HW 0.0 and ME310M1-W2 (FCC ID: RI7ME310M1W2) HW0.0 are as shown in the following list. Testing has been run on parent product ME310M1-W2 and the worst cases of power and RSE have been verified also on ME310M1-W1 variant. Only the worst-case data (ME310M1-W2) have been reported.

Model	ME310M1-W1 HW0.0	ME310M1-W2 HW0.0
The PSRAM section (U403/R402/R402/C402)	NOT-mounted	Mounted
The FLASH dimensions and capacity (U401)	(Small dimensions) 8MB	(Big dimensions) 16MB

***Test Lab Information Reference**

Lab A:

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

Lab Address:

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

Accredited Test Lab Cert 6613.01

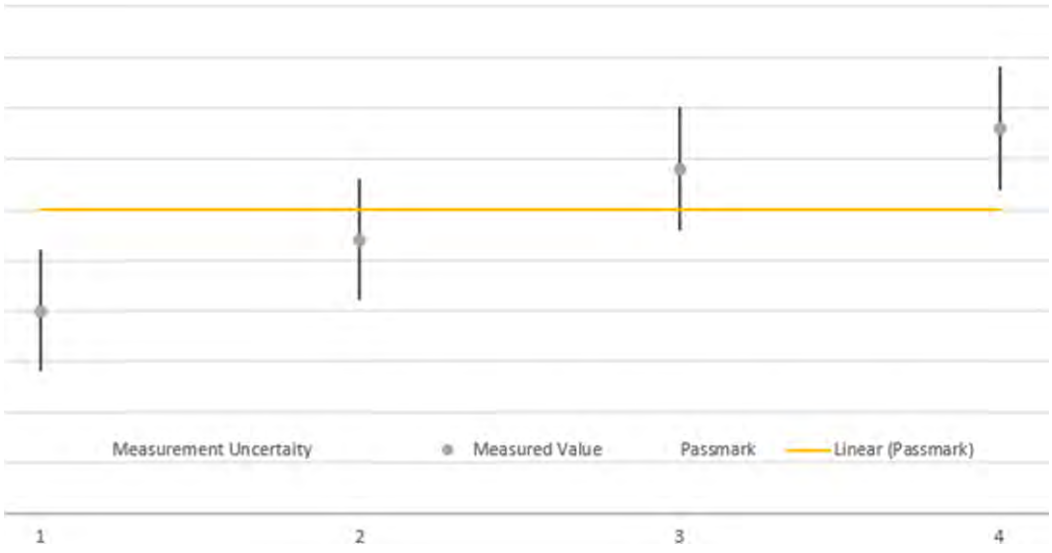
The FCC Site Registration No. is 434559; The Designation No. is CN1325.

1.1 MEASREMENT 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
Frequency Stability	±76.97Hz
Radiated emissions (9KHz~30MHz)	±2.68dB
Radiated emissions & Radiated Power (30MHz~1GHz)	±4.98dB
Radiated emissions & Radiated Power (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
Conducted Output power	±2.06dB
Band Edge Measurements	±4.70dB

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



The verdicts in this test report are given according the above diagram:

Case	Measured Value	Uncertainty Range	Verdict
1	below pass mark	below pass mark	Passed
2	below pass mark	within pass mark	Passed
3	above pass mark	within pass mark	Failed
4	above pass mark	above pass mark	Failed

That means, the laboratory applies, as decision rule (see ISO/IEC 17025:2017), the so-called shared risk principle.

1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Pre-Amplifier	R&S	SCU18F1	100815	Aug.30,22	Aug.29,24
Pre-Amplifier	R&S	SCU08F1	101028	Sep.16,22	Sep.15,24
Vector Signal Generator	R&S	SMBV100B	102176	Feb.15,24	Feb.14,26
Signal Generator	R&S	SMB100A	182185	Feb.15,24	Feb.14,26
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-01Chamber	Nov.25,22	Nov.24,25
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Nov.25,22	Nov.24,25
EMI TEST Receiver	R&S	ESR26	101734	Feb.25,22	Feb.24,24
EMI TEST Receiver	R&S	ESR26	101734	Feb.24,24	Feb.23,26
EMI TEST Receiver	R&S	ESW44	101973	Feb.25,22	Feb.24,24
EMI TEST Receiver	R&S	ESW44	101973	Feb.24,24	Feb.23,26
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Feb.28,22	Feb.27,24
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Feb.27,24	Feb.26,26
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.22,22	Aug.21,24
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Feb.23,22	Feb.22,24
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Feb.22,24	Feb.21,26
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	Aug.22,22	Aug.21,24
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.23,22	Feb.22,24
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	Feb.22,24	Feb.21,26
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.27,22	Jun.26,24
Test Software	EMC32	EMC32	N/A	N/A	N/A
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
Open Switch and Control Unit	R&S	OSP220	101964	Oct.01,22	Sep.30,24
DC Source	HYELEC	HY3010B	551016	Aug.31,22	Aug.30,24
Hygrothermograph	DELI	20210528	SZ014	Sep.06,22	Sep.05,24
PC	LENOVO	E14	HRSW0024	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-7.00M	N/A	N/A	N/A
TMC-AMI18843A(CABLE)	R&S	HF290-NMNM-4.00M	N/A	N/A	N/A
CABLE	R&S	W13.02	N/A	Apr.28,23	Apr.27,24
CABLE	R&S	W12.14	N/A	Apr.28,23	Apr.27,24
CABLE	R&S	J12J103539-00-1	SEP-03-20-069	Apr.28,23	Apr.27,24
CABLE	R&S	J12J103539-00-1	SEP-03-20-070	Apr.28,23	Apr.27,24
Temperature Chamber	votsch	VT4002	58566078100050	May.31,22	May.30,24

NOTE: 1. The calibration interval of the above test instruments is 12/ 24 / 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 434559; The Designation No. is CN1325.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT*	ME310M1-W2 / ME310M1-W1	
BRAND NAME*	Telit Cinterion	
MODEL NAME*	ME310M1-W2 / ME310M1-W1	
NOMINAL VOLTAGE*	EUT 3.8Vdc	
MODULATION TECHNOLOGY	**CAT-M / NB-IOT :LTE**	BPSK, QPSK, 16QAM
FREQUENCY RANGE CAM-T	**LTE Band 12 Channel Bandwidth: 1.4MHz**	699.7MHz ~ 715.3MHz
	LTE Band 12 Channel Bandwidth: 3MHz	700.5MHz ~ 714.5MHz
	LTE Band 12 Channel Bandwidth: 5MHz	701.5MHz ~ 713.5MHz
	LTE Band 12 Channel Bandwidth: 10MHz	704MHz ~ 711MHz
	LTE Band 13 Channel Bandwidth: 5MHz	779.5MHz ~ 784.5MHz
	LTE Band 13 Channel Bandwidth: 10MHz	782MHz
	LTE Band 71 Channel Bandwidth: 5MHz	665.5MHz ~ 695.5MHz
	LTE Band 71 Channel Bandwidth: 10MHz	668MHz ~ 693MHz
	LTE Band 71 Channel Bandwidth: 15MHz	670.5MHz ~ 690.5MHz
	LTE Band 71 Channel Bandwidth: 20MHz	673MHz ~ 688MHz
	LTE Band 85 Channel Bandwidth: 5MHz	700.5MHz ~ 713.5MHz
	LTE Band 85 Channel Bandwidth: 10MHz	703MHz ~ 711MHz
	LTE Band 8 Channel Bandwidth: 1.4MHz	898.2MHz ~ 899.8MHz
	LTE Band 8 Channel Bandwidth: 3MHz	899MHz
FREQUENCY RANGE NB-IOT	**LTE Band 12 (Sub-carrier Speacing: 3.75/15KHz)**	699.1MHz ~ 715.8MHz
	LTE Band 13 (Sub-carrier Speacing: 3.75/15KHz)	771.1MHz ~ 786.8MHz
	LTE Band 71 (Sub-carrier Speacing: 3.75/15KHz)	663.2MHz ~ 697.8MHz

	LTE Band 85 (Sub-carrier Speacing: 3.75/15KHz)	698.2MHz ~ 715.8MHz
	LTE Band 8 (Sub-carrier Speacing: 3.75/15KHz)	897.7MHz ~ 900.3MHz
MAX. ERP/EIRP POWER CAM-T	**LTE Band 12 Channel Bandwidth: 1.4MHz**	302.69mW
	LTE Band 12 Channel Bandwidth: 3MHz	302mW
	LTE Band 12 Channel Bandwidth: 5MHz	303.39mW
	LTE Band 12 Channel Bandwidth: 10MHz	304.79mW
	LTE Band 13 Channel Bandwidth: 5MHz	297.85mW
	LTE Band 13 Channel Bandwidth: 10MHz	299.23mW
	LTE Band 71 Channel Bandwidth: 5MHz	320.63mW
	LTE Band 71 Channel Bandwidth: 10MHz	317.69mW
	LTE Band 71 Channel Bandwidth: 15MHz	316.96mW
	LTE Band 71 Channel Bandwidth: 20MHz	323.59mW
	LTE Band 85 Channel Bandwidth: 5MHz	334.97mW
	LTE Band 85 Channel Bandwidth: 10MHz	344.35mW
	LTE Band 8 Channel Bandwidth: 1.4MHz	294.44mW
	LTE Band 8 Channel Bandwidth: 3MHz	297.17mW
MAX. ERP/EIRP POWER NB-IOT	**LTE Band 12 (Sub-carrier Speacing: 3.75KHz)**	302mW
	LTE Band 12 (Sub-carrier Speacing: 15KHz)	303.39mW
	LTE Band 13 (Sub-carrier Speacing: 3.75KHz)	305.49mW
	LTE Band 13 (Sub-carrier Speacing: 15KHz)	304.09mW

	LTE Band 71 (Sub-carrier Speacing: 3.75KHz)	310.46mW
	LTE Band 71 (Sub-carrier Speacing: 15KHz)	311.17mW
	LTE Band 85 (Sub-carrier Speacing: 3.75KHz)	309.03mW
	LTE Band 85 (Sub-carrier Speacing: 15KHz)	306.2mW
	LTE Band 8 (Sub-carrier Speacing: 3.75KHz)	308.32mW
	LTE Band 8(Sub-carrier Speacing: 15KHz)	307.61mW
EMISSION DESIGNATOR CAM-T	**LTE Band 12 Channel Bandwidth: 1.4MHz**	QPSK: 1M08G7D
		16QAM: 1M08W7D
	LTE Band 12 Channel Bandwidth: 3MHz	QPSK: 1M08G7D
		16QAM: 1M07W7D
	LTE Band 12 Channel Bandwidth: 5MHz	QPSK: 1M08G7D
		16QAM: 1M08W7D
	LTE Band 12 Channel Bandwidth: 10MHz	QPSK: 1M07G7D
		16QAM: 1M07W7D
	LTE Band 13 Channel Bandwidth: 5MHz	QPSK: 1M08G7D
		16QAM: 1M08W7D
	LTE Band 13 Channel Bandwidth: 10MHz	QPSK: 1M08G7D
		16QAM: 1M08W7D
	LTE Band 71 Channel Bandwidth: 5MHz	QPSK: 1M08G7D
		16QAM: 1M08W7D
	LTE Band 71 Channel Bandwidth: 10MHz	QPSK: 1M08G7D
		16QAM: 1M08W7D
	LTE Band 71 Channel Bandwidth: 15MHz	QPSK: 1M09G7D
		16QAM: 1M09W7D
	LTE Band 71 Channel Bandwidth: 20MHz	QPSK: 1M09G7D
		16QAM: 1M08W7D

	LTE Band 85 Channel Bandwidth: 5MHz	QPSK: 1M08G7D
		16QAM: 1M08W7D
	LTE Band 85 Channel Bandwidth: 10MHz	QPSK: 1M08G7D
		16QAM: 1M08W7D
	LTE Band 8 Channel Bandwidth: 1.4MHz	QPSK: 1M07G7D
		16QAM: 1M08W7D
	LTE Band 8 Channel Bandwidth: 3MHz	QPSK: 1M06G7D
		16QAM: 1M08W7D
EMISSION DESIGNATOR NB-IOT	**LTE Band 12 (Sub-carrier Speacing: 3.75KHz)**	BPSK: 69K09G7D
		QPSK: 96K45W7D
	LTE Band 12 (Sub-carrier Speacing: 15KHz)	BPSK: 132K5G7D
		QPSK: 190K6W7D
	LTE Band 13 (Sub-carrier Speacing: 3.75KHz)	BPSK: 43K11G7D
		QPSK: 47K97W7D
	LTE Band 13 (Sub-carrier Speacing: 15KHz)	BPSK: 127K2G7D
		QPSK: 191K5W7D
	LTE Band 71 (Sub-carrier Speacing: 3.75KHz)	BPSK: 44K66G7D
		QPSK: 49K15W7D
	LTE Band 71 (Sub-carrier Speacing: 15KHz)	BPSK: 120K0G7D
		QPSK: 121K6W7D
	LTE Band 85 (Sub-carrier Speacing: 3.75KHz)	BPSK: 45K32G7D
		QPSK: 48K78W7D
	LTE Band 85 (Sub-carrier Speacing: 15KHz)	BPSK: 111K58G7D
		QPSK: 191K04W7D
	LTE Band 8 (Sub-carrier Speacing: 3.75KHz)	BPSK: 47K22G7D
		QPSK: 46K19W7D
	LTE Band 8 (Sub-carrier Speacing: 15KHz)	BPSK: 133K59G7D
		QPSK: 190K8W7D
ANTENNA TYPE*	1/4 1 Antenna with 2.14dBi for LTE12/ LTE13/ LTE71/ LTE85/LTE8	

HW VERSION*	0.0
SW VERSION*	ME310M1-W2: M0U.100001/ME310M1-W1: M0U.000001
I/O PORTS*	Refer to user's manual
CABLE SUPPLIED*	N/A
EXTREME TEMPERATURE*	-40-85 ℃
EXTREME VOLTAGE*	2.5V - 4.5V

NOTE:

1. ***Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information , Test Lab is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.

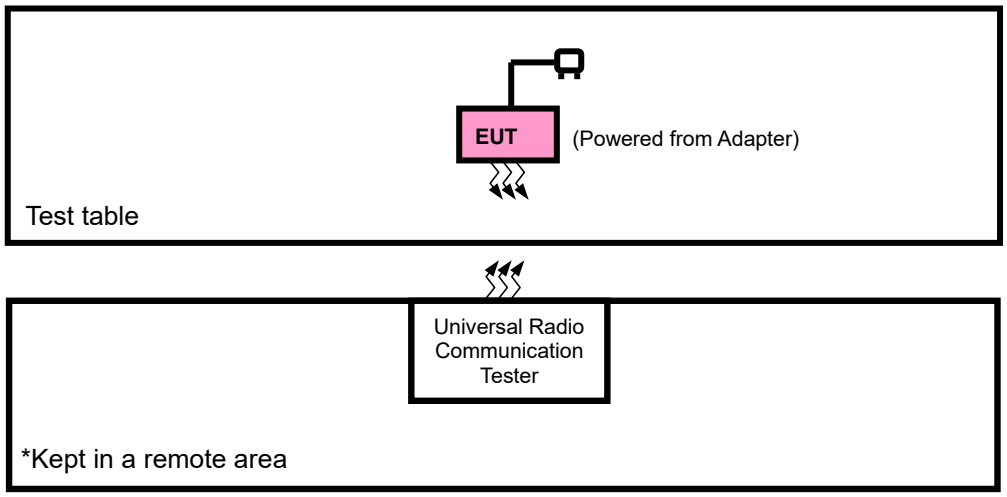
2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

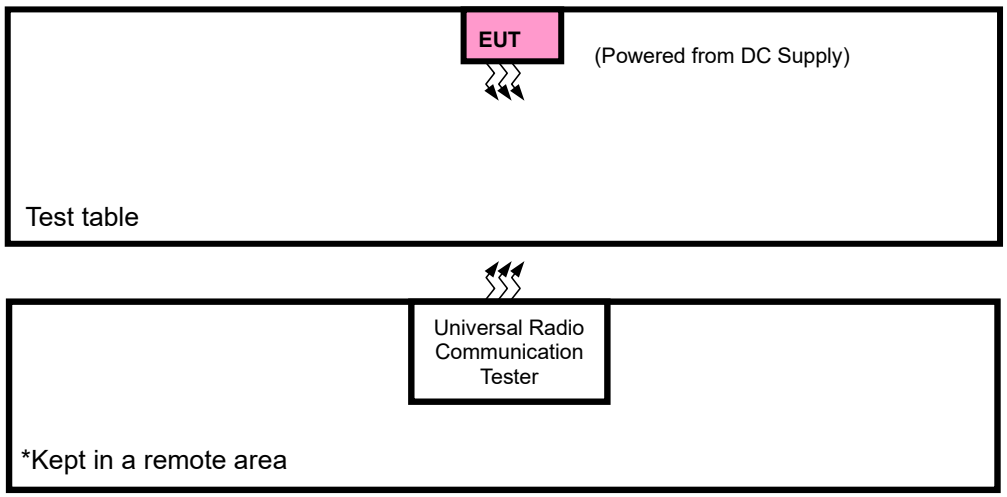
MODULATION MODE	TX FUNCTION
LTE	1TX/1RX

4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in the test report.

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	Laptop	Lenovo	ThinkPad E14	HRSW00024	N/A
2	DC Source	HYELEC	HY3010B	551016	N/A
3	Adapter	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable, 1.0m;
2	USB Line: Unshielded, Detachable, 1.0m;

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 LTE link**
B	**EUT + DC Source with LTE link**

CAM-T LTE BAND 12 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM, 64QAM	6 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	15 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	25 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	23017 to 23173	23017	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						6 RB / 0 RB Offset
			23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 5 RB Offset
						6 RB / 0 RB Offset
		23025 to 23165	23025	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						15 RB / 0 RB Offset
			23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 14 RB Offset
						15 RB / 0 RB Offset
		23035 to 23155	23035	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		23060 to 23130	23060	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
			23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
A	CONDCUDETED EMISSION	23017 to 23173	23017, 23095, 23173	1.4MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	23017 to 23173	23095	1.4MHz	QPSK	1 RB / 0 RB Offset
		23025 to 23165	23095	3MHz	QPSK	1 RB / 0 RB Offset
		23035 to 23155	23095	5MHz	QPSK	1 RB / 0 RB Offset
		23060 to 23130	23060,23095,23130	10MHz	QPSK	1 RB / 0 RB Offset

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

NB-IOT LTE BAND 12 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	MODE
A	ERP	23012 to 23178	23012,23095,23178	BPSK,QPSK	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23095	23095	BPSK,QPSK	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23012 to 23178	23012,23095,23178	BPSK,QPSK	6 RB / 0 RB Offset
		23095	23095	BPSK,QPSK	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23095	23095	BPSK,QPSK	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	23012 to 23178	23012	BPSK,QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
			23178	BPSK,QPSK	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
		23095	23095	BPSK,QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
			23095	BPSK,QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
A	CONDUCTED EMISSION	23012 to 23178	23012,23095,23178	BPSK,QPSK	1 RB / 0 RB Offset
		23095	23095	BPSK,QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	23012 to 23178	23012,23095,23178	QPSK	1 RB / 0 RB Offset
		23095	23095	QPSK	1 RB / 0 RB Offset

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

CAM-T LTE BAND 13 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	23205 to 23255	23205, 20175, 23255	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23230	23230	10MHz	QPSK,16QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23205 to 23255	23205, 20175, 23255	5MHz	QPSK,16QAM	25 RB / 0 RB Offset
		23230	23230	10MHz	QPSK,16QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23230	23230	10MHz	QPSK,16QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	23205 to 23255	23205	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			23255	5MHz	QPSK,16QAM, 64QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		23230	23230	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						1 RB / 49 RB Offset
						50 RB / 0 RB Offset
A	CONDCUDETED EMISSION	23205 to 23255	23205, 20175, 23255	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	23205 to 23255	23205,23230, 23255	5MHz	QPSK	1 RB / 0 RB Offset
		23230	23230	10MHz	QPSK	1 RB / 0 RB Offset

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

NB-IOT LTE BAND 13 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	MODE
A	ERP	23182 to 23278	23182, 23230, 23278	BPSK,QPSK	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23230	23230	BPSK,QPSK	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23182 to 23278	23182, 23230, 23278	BPSK,QPSK	6 RB / 0 RB Offset
		23230	23230	BPSK,QPSK	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23230	23230	BPSK,QPSK	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	23182 to 23278	23182	BPSK,QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
			23278	BPSK,QPSK	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
		23230	23230	BPSK,QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
			23230	BPSK,QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
A	CONDUCTED EMISSION	23182 to 23278	23182, 23230, 23278	BPSK,QPSK	1 RB / 0 RB Offset
		23230	23230	BPSK,QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	23182 to 23278	23182, 23230, 23278	QPSK	1 RB / 0 RB Offset
		23230	23230	QPSK	1 RB / 0 RB Offset

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

CAM-T LTE BAND 71 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	133147 to 133447	133147, 133297, 133447	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		133172 to 133422	133172, 133297 133422	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
		133197 to 133397	133197, 133297, 133397	15MHz	QPSK,16QAM	1 RB / 0 RB Offset
		133222 to 133372	133222, 133322, 133372	20MHz	QPSK,16QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	133222 to 133372	133222, 133322, 133372	20MHz	QPSK	100 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	133147 to 133447	133147, 133297, 133447	5MHz	QPSK,16QAM	25 RB / 0 RB Offset
		133172 to 133422	133172, 133297 133422	10MHz	QPSK,16QAM	50 RB / 0 RB Offset
		133197 to 133397	133197, 133297, 133397	15MHz	QPSK,16QAM	75 RB / 0 RB Offset
		133222 to 133372	133222, 133322, 133372	20MHz	QPSK,16QAM	100 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	133222 to 133372	133222, 133322, 133372	20MHz	QPSK, 16QAM	1 RB / 99 RB Offsett 100 RB / 0 RB Offset
A	BAND EDGE	133147 to 133447	133147	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			133447	5MHz	QPSK,16QAM, 64QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		133172 to 133422	133172	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
			133422	10MHz	QPSK,16QAM, 64QAM	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
		133197 to 133397	133197	15MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						75 RB / 0 RB Offset
			133397	15MHz	QPSK,16QAM, 64QAM	1 RB / 74 RB Offset
						75 RB / 0 RB Offset
		133222 to 133372	133222	20MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						100 RB / 0 RB Offset
			133372	20MHz	QPSK,16QAM, 64QAM	1 RB / 99 RB Offset
						100 RB / 0 RB Offset
A	CONDCUDETED EMISSION	133147 to 133447	133147, 133297, 133447	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		133172 to 133422	133172, 133297 133422	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		133197 to 133397	133197, 133297, 133397	15MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		133222 to 133372	133222, 133322, 133372	20MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	133147 to 133447	133297	5MHz	QPSK	1 RB / 0 RB Offset
		133172 to 133422	133172, 133297, 133422	10MHz	QPSK	1 RB / 0 RB Offset
		133197 to 133397	133297	15MHz	QPSK	1 RB / 0 RB Offset
		133222 to 133372	133297	20MHz	QPSK	1 RB / 0 RB Offset

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

NB-IOT LTE BAND 71 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	MODE
A	ERP	133124 to 133297	133124, 13297, 133470	BPSK,QPSK	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	133297	133297	BPSK,QPSK	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	26692 to 26788	26697, 26740, 26783	BPSK,QPSK	6 RB / 0 RB Offset
		133297	133297	BPSK,QPSK	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	133297	133297	BPSK,QPSK	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	133124 to 133297	133124	BPSK,QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
			133297	BPSK,QPSK	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
		133297	133297	BPSK,QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
			133297	BPSK,QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
A	CONDUCTED EMISSION	133124 to 133297	133124, 13297, 133470	BPSK,QPSK	1 RB / 0 RB Offset
		133297	133297	BPSK,QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	133124 to 133297	133124, 13297, 133470	QPSK	1 RB / 0 RB Offset
		133297	133297	QPSK	1 RB / 0 RB Offset

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

CAM-T LTE BAND 85 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	134027 to 134157	134027, 134092, 134157	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		134052 to 134132	134052, 134092, 134132	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	134052 to 134132	134052, 134092, 134132	10MHz	QPSK	100 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	134027 to 134157	134027, 134092, 134157	5MHz	QPSK,16QAM	25 RB / 0 RB Offset
		134052 to 134132	134052, 134092, 134132	10MHz	QPSK,16QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	134052 to 134132	134052, 134092, 134132	10MHz	QPSK, 16QAM	1 RB / 99 RB Offsett 100 RB / 0 RB Offset
A	BAND EDGE	134027 to 134157	134027, 134092, 134157	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						25 RB / 0 RB Offset
			134027, 134092, 134157	5MHz	QPSK,16QAM, 64QAM	1 RB / 24 RB Offset
						25 RB / 0 RB Offset
		134052 to 134132	134052, 134092, 134132	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
			134052, 134092, 134132	10MHz	QPSK,16QAM, 64QAM	1 RB / 49 RB Offset
						50 RB / 0 RB Offset
A	CONDCUDETED EMISSION	134027 to 134157	134027, 134092, 134157	5MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
		134052 to 134132	134052, 134092, 134132	10MHz	QPSK,16QAM, 64QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	134027 to 134157	134092	5MHz	QPSK	1 RB / 0 RB Offset
		134052 to 134132	134052, 134092, 134132	10MHz	QPSK	1 RB / 0 RB Offset

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

NB-IOT LTE BAND 85 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	MODE
A	ERP	134004 to 132180	134004, 134092, 134180	BPSK,QPSK	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	134092	134092	BPSK,QPSK	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	134004 to 132180	134004, 134092, 134180	BPSK,QPSK	6 RB / 0 RB Offset
		134092	134092	BPSK,QPSK	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	134092	134092	BPSK,QPSK	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	134004 to 132180	134004	BPSK,QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
			132670	BPSK,QPSK	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
		134092	134092	BPSK,QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
			134092	BPSK,QPSK	1 RB / 49 RB Offset
					50 RB / 0 RB Offset
A	CONDUCTED EMISSION	134004 to 132180	134004, 134092, 134180	BPSK,QPSK	1 RB / 0 RB Offset
		134092	134092	BPSK,QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	134004 to 132180	134004, 134092, 134180	QPSK	1 RB / 0 RB Offset
		134092	134092	QPSK	1 RB / 0 RB Offset

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

CAM-T LTE BAND 8 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	ERP	21632 to 21648	21632,21640,21648	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		21640	21640	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	21632 to 21648	21632,21640,21648	1.4MHz	QPSK, 16QAM	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	21632 to 21648	21632,21640,21648	1.4MHz	QPSK, 16QAM	6 RB / 0 RB Offset
		21640	21640	3MHz	QPSK, 16QAM	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	21632 to 21648	21632,21640,21648	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	21632 to 21648	21632	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
				3MHz		6 RB / 0 RB Offset
			21648	1.4MHz	QPSK, 16QAM	1 RB / 5 RB Offset
				3MHz		6 RB / 0 RB Offset
		21640	21640	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						50 RB / 0 RB Offset
A	CONDUCTED EMISSION	21632 to 21648	21632,21640,21648	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		21640	21640	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	21640	21640	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		21640	21640	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset

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

NB-IOT LTE BAND 8 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION	MODE
A	ERP	21627 to 21653	21627,21640,21653	BPSK,QPSK	1 RB / 0 RB Offset
		21640	21640	BPSK,QPSK	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	21640	21640	BPSK,QPSK	50 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	21627 to 21653	21627,21640,21653	BPSK,QPSK	6 RB / 0 RB Offset
		21640	21640	BPSK,QPSK	50 RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	21627 to 21653	21627,21640,21653	BPSK,QPSK	1 RB / 0 RB Offset 50 RB / 0 RB Offset
A	BAND EDGE	21627 to 21653	21627	BPSK,QPSK	1 RB / 0 RB Offset
					6 RB / 0 RB Offset
			21653	BPSK,QPSK	1 RB / 5 RB Offset
					6 RB / 0 RB Offset
		21640	21640	BPSK,QPSK	1 RB / 0 RB Offset
					50 RB / 0 RB Offset
A	CONDUCTED EMISSION	21627 to 21653	21627,21640,21653	BPSK,QPSK	1 RB / 0 RB Offset
		21640	21640	BPSK,QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	21627 to 21653	21627,21640,21653	QPSK	1 RB / 0 RB Offset
		21640	21640	QPSK	1 RB / 0 RB Offset

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

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	DC 4.5V By Adapter	Hanwen Xu
FREQUENCY STABILITY	23deg. C, 70%RH	DC 2.5V/ 3.8V/ 4.5V By DC Source	Hanwen Xu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	DC 4.5V By Adapter	Hanwen Xu
BAND EDGE	23deg. C, 70%RH	DC 4.5V By Adapter	Hanwen Xu
CONDCUDETED EMISSION	23deg. C, 70%RH	DC 4.5V By Adapter	Hanwen Xu
RADIATED EMISSION	23deg. C, 70%RH	DC 4.5V By Adapter	Hanwen Xu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	DC 4.5V By Adapter	Hanwen Xu

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 27

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-D

ANSI/TIA/EIA-603-E

ANSI C63.26-2015

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

3 TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

The radiated peak output power shall be according to the specific rule Part 27.50(h)(2) that “User stations are limited to 2 watts” and 27.50(i) specific that “Peak transmit power must be measure over any interval of continuous transmission using instrumentation calibration in terms of rms-equivalent voltage.”

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1-watt EIRP.

According to the specific rule Part 27.50(c)(10) Portable stations (hand-held devices) in the 600 MHz uplink band and the 698–746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

Part 27.50(b)(10)：Portable stations (hand-held devices) transmitting in the 746–757 MHz, 776–788 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

FCC §27.1507 (a) & (d):
(a) Maximum ERP. The power limits specified in this section are applicable to operations in areas more than
110 km (68.4 miles) from the U.S./Mexico border and 140 km (87 miles) from the U.S./Canada border.
(3) Mobile, control and auxiliary test stations. Mobile, control and auxiliary test stations must not
exceed 10 watts ERP.
(4) Portable stations. Portable stations must not exceed 3 watts ERP.
(d) PAR limit. The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB.

3.1.2 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);

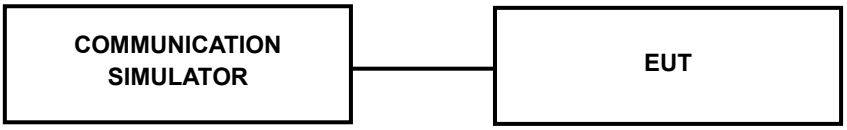
L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

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.

3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



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

3.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

CAM-T

LTE Band 12

Band/BW	Modulation	RB Size	RB Offset	Low CH 23017	Mid CH 23095	High CH 23173
				Frequency 699.7 MHz	Frequency 707.5 MHz	Frequency 715.3 MHz
12/ 1.4	QPSK	1	0	22.43	22.51	22.38
		1	5	22.59	22.42	22.42
		3	0	22.54	22.61	22.56
		3	3	22.59	22.63	22.55
		6	0	22.41	22.42	22.33
	16QAM	1	0	22.48	22.44	22.38
		1	5	22.52	22.43	22.47
		3	0	22.54	22.53	22.64
		3	3	22.67	22.61	22.51
		6	0	22.40	22.35	22.35

Band/BW	Modulation	RB Size	RB Offset	Low CH 23025 Frequency 700.5 MHz	Mid CH 23095 Frequency 707.5 MHz	High CH 23165 Frequency 714.5 MHz
12/ 3	QPSK	1	0	22.43	22.52	22.41
		1	5	22.54	22.39	22.48
		3	0	22.57	22.57	22.64
		3	3	22.59	22.54	22.55
		6	0	22.47	22.33	22.30
	16QAM	1	0	22.44	22.49	22.42
		1	5	22.52	22.48	22.41
		3	0	22.53	22.66	22.60
		3	3	22.56	22.66	22.55
		6	0	22.39	22.37	22.36

Band/BW	Modulation	RB Size	RB Offset	Low CH 23035 Frequency 701.5 MHz	Mid CH 23095 Frequency 707.5 MHz	High CH 23155 Frequency 713.5 MHz
12/ 5	QPSK	1	0	22.48	22.50	22.38
		1	5	22.56	22.53	22.51
		3	0	22.66	22.54	22.59
		3	3	22.55	22.55	22.52
		6	0	22.47	22.32	22.35
	16QAM	1	0	22.47	22.42	22.39
		1	5	22.57	22.52	22.55
		3	0	22.61	22.62	22.53
		3	3	22.68	22.60	22.55
		6	0	22.37	22.30	22.33

Band/BW	Modulation	RB Size	RB Offset	Low CH 23060	Mid CH 23095	High CH 23130
				Frequency 704 MHz	Frequency 707.5 MHz	Frequency 711 MHz
12/ 10	QPSK	1	0	22.58	22.55	22.48
		1	5	22.66	22.54	22.56
		3	0	22.68	22.67	22.66
		3	3	22.70	22.68	22.65
		6	0	22.51	22.45	22.41
	16QAM	1	0	22.54	22.46	22.43
		1	5	22.59	22.46	22.47
		3	0	22.64	22.65	22.59
		3	3	22.64	22.65	22.59
		6	0	22.36	22.33	22.37

LTE Band 13

Band/BW	Modulation	RB Size	RB Offset	Low CH 23205	Mid CH 23230	High CH 23255
				Frequency 779.5 MHz	Frequency 782.0 MHz	Frequency 784.5 MHz
13/ 5	QPSK	1	0	22.43	22.35	22.39
		1	5	22.41	22.45	22.46
		3	0	22.58	22.53	22.54
		3	3	22.55	22.60	22.58
		6	0	22.24	22.36	22.34
	16QAM	1	0	22.40	22.36	22.31
		1	5	22.33	22.38	22.40
		3	0	22.47	22.35	22.51
		3	3	22.45	22.36	22.57
		6	0	22.18	22.13	22.20

Band/BW	Modulation	RB Size	RB Offset	/	Mid CH 23230	/
				/	Frequency 782.0 MHz	/
13/ 10	QPSK	1	0	/	22.48	/
		1	5	/	22.53	/
		3	0	/	22.59	/
		3	3	/	22.62	/
		6	0	/	22.37	/
	16QAM	1	0	/	22.38	/
		1	5	/	22.40	/
		3	0	/	22.48	/
		3	3	/	22.50	/
		6	0	/	22.26	/

LTE Band 71

Band/BW	Modulation	RB Size	RB Offset	Low CH 133147	Mid CH 133297	High CH 133447
				Frequency 709 MHz	Frequency 710 MHz	Frequency 711 MHz
71/ 5	QPSK	1	0	22.67	22.57	22.63
		1	5	22.62	22.71	22.64
		3	0	22.76	22.75	22.79
		3	3	22.82	22.75	22.73
		6	0	22.86	22.92	22.88
	16QAM	1	0	22.54	22.64	22.67
		1	5	22.69	22.54	22.61
		3	0	22.73	22.72	22.65
		3	3	22.70	22.66	22.67
		6	0	22.74	22.64	22.67

Band/BW	Modulation	RB Size	RB Offset	Low CH 133172 Frequency 709 MHz	Mid CH 133297 Frequency 710 MHz	High CH 133422 Frequency 711 MHz
71/ 10	QPSK	1	0	22.68	22.62	22.66
		1	5	22.76	22.75	22.61
		3	0	22.75	22.79	22.73
		3	3	22.78	22.77	22.82
		6	0	22.88	22.82	22.87
	16QAM	1	0	22.60	22.55	22.57
		1	5	22.59	22.64	22.59
		3	0	22.60	22.67	22.69
		3	3	22.70	22.66	22.73
		6	0	22.68	22.73	22.73

Band/BW	Modulation	RB Size	RB Offset	Low CH 133197 Frequency 709 MHz	Mid CH 133297 Frequency 710 MHz	High CH 133397 Frequency 711 MHz
71/ 15	QPSK	1	0	22.68	22.69	22.63
		1	5	22.66	22.61	22.57
		3	0	22.79	22.74	22.80
		3	3	22.78	22.82	22.71
		6	0	22.84	22.87	22.74
	16QAM	1	0	22.66	22.57	22.67
		1	5	22.57	22.58	22.62
		3	0	22.65	22.63	22.68
		3	3	22.81	22.64	22.68
		6	0	22.81	22.64	22.68

Band/BW	Modulation	RB Size	RB Offset	Low CH 133222 Frequency 709 MHz	Mid CH 133322 Frequency 710 MHz	High CH 133372 Frequency 711 MHz
71/ 20	QPSK	1	0	22.73	22.71	22.75
		1	5	22.77	22.76	22.72
		3	0	22.86	22.83	22.85
		3	3	22.87	22.85	22.84
		6	0	22.96	22.94	22.89
	16QAM	1	0	22.69	22.68	22.71
		1	5	22.72	22.68	22.63
		3	0	22.75	22.73	22.79
		3	3	22.85	22.78	22.79
		6	0	22.83	22.79	22.77

LTE Band 85

Band/BW	Modulation	RB Size	RB Offset	Low CH 134027 Frequency 700.5 MHz	Mid CH 134092 Frequency 707 MHz	High CH 134157 Frequency 713.5 MHz
85/ 5	QPSK	1	0	22.71	22.71	22.59
		1	5	22.74	22.75	22.61
		3	0	22.69	22.65	22.76
		3	3	22.82	22.80	22.73
		6	0	22.57	22.58	22.62
	16QAM	1	0	23.11	23.05	22.96
		1	5	23.10	23.05	23.11
		3	0	22.87	22.93	22.88
		3	3	22.84	22.88	22.84
		6	0	22.20	22.16	22.24

Band/BW	Modulation	RB Size	RB Offset	Low CH 134052 Frequency 703 MHz	Mid CH 134092 Frequency 707 MHz	High CH 134132 Frequency 711 MHz
85/ 10	QPSK	1	0	22.72	22.73	22.69
		1	5	22.76	22.81	22.74
		3	0	22.81	22.80	22.86
		3	3	22.83	22.84	22.85
		6	0	22.64	22.71	22.68
	16QAM	1	0	23.23	23.13	23.09
		1	5	23.16	23.07	23.13
		3	0	22.97	22.96	22.94
		3	3	22.96	22.92	22.93
		6	0	22.29	22.24	22.25

LTE Band 8

Band/BW	Modulation	RB Size	RB Offset	Low CH 21632 Frequency 898.2 MHz	Mid CH 21640 Frequency 899 MHz	High CH 134157 Frequency 899.8MHz
8/ 1.4	QPSK	1	0	22.45	22.44	22.40
		1	5	22.55	22.51	22.48
		3	0	22.26	22.25	22.34
		3	3	22.40	22.37	22.38
		6	0	22.46	22.44	22.44
	16QAM	1	0	22.12	22.23	22.20
		1	5	22.22	22.24	22.29
		3	0	22.27	22.16	22.16
		3	3	22.14	22.09	22.06
		6	0	22.15	22.25	22.23

Band/BW	Modulation	RB Size	RB Offset	/	Mid CH 21640	/
				/	Frequency 899 MHz	/
8/ 3	QPSK	1	0	/	22.52	/
		1	5	/	22.59	/
		3	0	/	22.35	/
		3	3	/	22.50	/
		6	0	/	22.56	/
	16QAM	1	0	/	22.24	/
		1	5	/	22.33	/
		3	0	/	22.31	/
		3	3	/	22.18	/
		6	0	/	22.29	/

NB-IOT

LTE Band 12						
Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		23011	23095	23178
		Frequence (MHz)		699.1	707.5	715.8
3.75	BPSK	1	0	**22.66**	22.58	22.63
		1	47	22.62	22.61	22.64
	QPSK	1	0	22.65	22.64	22.62
		1	47	22.64	22.59	22.63
15	BPSK	1	0	22.65	22.62	**22.68**
		1	11	22.61	22.59	22.62
	QPSK	1	0	22.63	22.62	22.58
		1	11	22.63	**22.63**	22.65
		12	0	21.45	21.44	21.59

LTE Band 13						
Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		23181	23230	23278
		Frequence (MHz)		777.1	782	786.8
3.75	BPSK	1	0	22.68	**22.71**	22.64
		1	47	22.67	22.69	22.58
	QPSK	1	0	22.61	22.62	22.57
		1	47	22.67	22.68	22.56
15	BPSK	1	0	22.62	22.69	22.63
		1	11	22.61	22.60	22.51
	QPSK	1	0	22.63	22.62	22.61
		1	11	22.62	22.61	22.59
		12	0	21.59	21.55	21.46

LTE Band 71						
Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		133124	133297	133470
		Frequence (MHz)		663.2	680.5	697.8
3.75	BPSK	1	0	22.72	22.69	22.63
		1	47	22.78	22.71	22.67
	QPSK	1	0	22.76	22.73	22.65
		1	47	22.75	22.68	22.62
15	BPSK	1	0	22.78	22.76	22.71
		1	11	**22.79**	22.75	22.66
	QPSK	1	0	22.75	22.74	22.67
		1	11	22.77	22.75	22.71
		12	0	21.61	21.45	21.48

LTE Band 85						
Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		134004	134092	134180
		Frequence (MHz)		698.2	707	715.8
3.75	BPSK	1	0	22.75	22.63	22.72
		1	47	**22.76**	22.65	22.74
	QPSK	1	0	22.66	22.60	22.64
		1	47	22.74	22.59	22.69
15	BPSK	1	0	22.70	22.67	22.72
		1	11	22.69	22.72	22.68
	QPSK	1	0	22.68	22.70	22.71
		1	11	22.72	22.71	22.69
		12	0	21.65	21.63	21.67

LTE Band 8（106）Part27						
Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		21627	21640	21653
		Frequence (MHz)		897.7	899	900.3
3.75	BPSK	1	0	22.68	22.67	22.65
		1	47	**22.75**	22.66	22.68
	QPSK	1	0	22.67	22.64	22.72
		1	47	22.73	22.72	22.74
15	BPSK	1	0	22.73	22.72	22.74
		1	11	22.59	22.65	22.66
	QPSK	1	0	22.62	22.67	22.64
		1	11	22.72	22.66	22.65
		12	0	21.47	21.46	21.38

ERP /EIRP

LTE BAND 12
CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	22.59	2.14	24.73	297.17	3
23095	707.5	22.63	2.14	24.77	299.92	3
23173	715.3	22.56	2.14	24.7	295.12	3

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23017	699.7	22.67	2.14	24.81	302.69	3
23095	707.5	22.61	2.14	24.75	298.54	3
23173	715.3	22.64	2.14	24.78	300.61	3

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	22.59	2.14	24.73	297.17	3
23095	707.5	22.57	2.14	24.71	295.8	3
23165	714.5	22.64	2.14	24.78	300.61	3

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23025	700.5	22.56	2.14	24.7	295.12	3
23095	707.5	22.66	2.14	24.8	302	3
23165	714.5	22.6	2.14	24.74	297.85	3

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	22.66	2.14	24.8	302	3
23095	707.5	22.55	2.14	24.69	294.44	3
23155	713.5	22.59	2.14	24.73	297.17	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23035	701.5	22.68	2.14	24.82	303.39	3
23095	707.5	22.62	2.14	24.76	299.23	3
23155	713.5	22.55	2.14	24.69	294.44	3

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	22.7	2.14	24.84	304.79	3
23095	707.5	22.68	2.14	24.82	303.39	3
23130	711	22.66	2.14	24.8	302	3

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23060	704	22.64	2.14	24.78	300.61	3
23095	707.5	22.65	2.14	24.79	301.3	3
23130	711	22.59	2.14	24.73	297.17	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

LTE BAND 13

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23205	779.5	22.58	2.14	24.72	296.48	3
23230	782	22.6	2.14	24.74	297.85	3
23255	784.5	22.58	2.14	24.72	296.48	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23205	779.5	22.47	2.14	24.61	289.07	3
23230	782	22.38	2.14	24.52	283.14	3
23255	784.5	22.57	2.14	24.71	295.8	3

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23230	782	22.62	2.14	24.76	299.23	3

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23230	782	22.5	2.14	24.64	291.07	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

LTE BAND 71

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133147	665.5	22.74	2.14	24.88	307.61	1
133297	680.5	22.72	2.14	24.86	306.2	1
133447	695.5	22.67	2.14	24.81	302.69	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133147	665.5	22.86	2.14	25	316.23	1
133297	680.5	22.92	2.14	25.06	320.63	1
133447	695.5	22.88	2.14	25.02	317.69	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133172	668	22.88	2.14	25.02	317.69	1
133297	680.5	22.82	2.14	24.96	313.33	1
133422	693	22.87	2.14	25.01	316.96	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133172	668	22.7	2.14	24.84	304.79	1
133297	680.5	22.73	2.14	24.87	306.9	1
133422	693	22.73	2.14	24.87	306.9	1

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133197	670.5	22.84	2.14	24.98	314.77	1
133297	680.5	22.87	2.14	25.01	316.96	1
133397	690.5	22.8	2.14	24.94	311.89	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133197	670.5	22.81	2.14	24.95	312.61	1
133297	680.5	22.64	2.14	24.78	300.61	1
133397	690.5	22.68	2.14	24.82	303.39	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133222	673	22.96	2.14	25.1	323.59	1
133322	683	22.94	2.14	25.08	322.11	1
133372	688	22.89	2.14	25.03	318.42	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133222	673	22.85	2.14	24.99	315.5	1
133322	683	22.79	2.14	24.93	311.17	1
133372	688	22.79	2.14	24.93	311.17	1

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

LTE BAND 85

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
134027	700.5	22.82	2.14	24.96	313.33	3
134092	707	22.8	2.14	24.94	311.89	3
134157	713.5	22.76	2.14	24.9	309.03	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
134027	700.5	23.11	2.14	25.25	334.97	3
134092	707	23.05	2.14	25.19	330.37	3
134157	713.5	23.11	2.14	25.25	334.97	3

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
134052	703	22.83	2.14	24.97	314.05	3
134092	707	22.84	2.14	24.98	314.77	3
134132	711	22.86	2.14	25	316.23	3

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
134052	703	23.23	2.14	25.37	344.35	3
134092	707	23.13	2.14	25.27	336.51	3
134132	711	23.13	2.14	25.27	336.51	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

LTE BAND 8

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
21632	898.2	22.55	2.14	24.69	294.44	3
21640	899	22.51	2.14	24.65	291.74	3
21648	899.8	22.48	2.14	24.62	289.73	3

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
21632	898.2	22.27	2.14	24.41	276.06	3
21640	899	22.25	2.14	24.39	274.79	3
21648	899.8	22.29	2.14	24.43	277.33	3

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
21640	899	22.59	2.14	24.73	297.17	3

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
21640	899	22.33	2.14	24.47	279.9	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

NB-IOT

LTE B12 3.75KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23011	699.1	22.66	2.14	24.8	302	3
23095	707.5	22.61	2.14	24.75	298.54	3
23178	715.8	22.64	2.14	24.78	300.61	3

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23011	699.1	22.65	2.14	24.79	301.3	3
23095	707.5	22.64	2.14	24.78	300.61	3
23178	715.8	22.63	2.14	24.77	299.92	3

LTE B12 15KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23011	699.1	22.65	2.14	24.79	301.3	3
23095	707.5	22.62	2.14	24.76	299.23	3
23178	715.8	22.68	2.14	24.82	303.39	3

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23011	699.1	22.63	2.14	24.77	299.92	3
23095	707.5	22.63	2.14	24.77	299.92	3
23178	715.8	22.65	2.14	24.79	301.3	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

NB-IOT

LTE B13 3.75KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23181	777.1	22.68	2.14	24.82	303.39	3
23230	782	22.71	2.14	24.85	305.49	3
23278	786.8	22.64	2.14	24.78	300.61	3

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23181	777.1	22.67	2.14	24.81	302.69	3
23230	782	22.68	2.14	24.82	303.39	3
23278	786.8	22.57	2.14	24.71	295.8	3

LTE B13 15KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23181	777.1	22.62	2.14	24.76	299.23	3
23230	782	22.69	2.14	24.83	304.09	3
23278	786.8	22.63	2.14	24.77	299.92	3

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
23181	777.1	22.63	2.14	24.77	299.92	3
23230	782	22.62	2.14	24.76	299.23	3
23278	786.8	22.61	2.14	24.75	298.54	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

NB-IOT

LTE B71 3.75KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133124	663.2	22.78	2.14	24.92	310.46	1
133297	680.5	22.71	2.14	24.85	305.49	1
133470	697.8	22.67	2.14	24.81	302.69	1

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133124	663.2	22.76	2.14	24.9	309.03	1
133297	680.5	22.73	2.14	24.87	306.9	1
133470	697.8	22.65	2.14	24.79	301.3	1

LTE B71 15KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133124	663.2	22.79	2.14	24.93	311.17	1
133297	680.5	22.76	2.14	24.9	309.03	1
133470	697.8	22.71	2.14	24.85	305.49	1

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
133124	663.2	22.77	2.14	24.91	309.74	1
133297	680.5	22.75	2.14	24.89	308.32	1
133470	697.8	22.71	2.14	24.85	305.49	1

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

NB-IOT

LTE B85 3.75KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
134004	698.2	22.76	2.14	24.9	309.03	3
134092	707	22.65	2.14	24.79	301.3	3
134180	715.8	22.74	2.14	24.88	307.61	3

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
134004	698.2	22.74	2.14	24.88	307.61	3
134092	707	22.6	2.14	24.74	297.85	3
134180	715.8	22.69	2.14	24.83	304.09	3

LTE B85 15KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
134004	698.2	22.7	2.14	24.84	304.79	3
134092	707	22.72	2.14	24.86	306.2	3
134180	715.8	22.72	2.14	24.86	306.2	3

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
134004	698.2	22.72	2.14	24.86	306.2	3
134092	707	22.71	2.14	24.85	305.49	3
134180	715.8	22.71	2.14	24.85	305.49	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

NB-IOT

LTE B8A 3.75KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
21627	897.7	22.75	2.14	24.89	308.32	3
21640	899	22.67	2.14	24.81	302.69	3
21653	900.3	22.68	2.14	24.82	303.39	3

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
21627	897.7	22.73	2.14	24.87	306.9	3
21640	899	22.72	2.14	24.86	306.2	3
21653	900.3	22.74	2.14	24.88	307.61	3

LTE B8A 15KHz

CHANNEL BANDWIDTH: BPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
21627	897.7	22.73	2.14	24.87	306.9	3
21640	899	22.72	2.14	24.86	306.2	3
21653	900.3	22.74	2.14	24.88	307.61	3

CHANNEL BANDWIDTH: QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	ERP (dBm)	ERP (mW)	Limit (W)
21627	897.7	22.72	2.14	24.86	306.2	3
21640	899	22.67	2.14	24.81	302.69	3
21653	900.3	22.65	2.14	24.79	301.3	3

REMARKS: ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

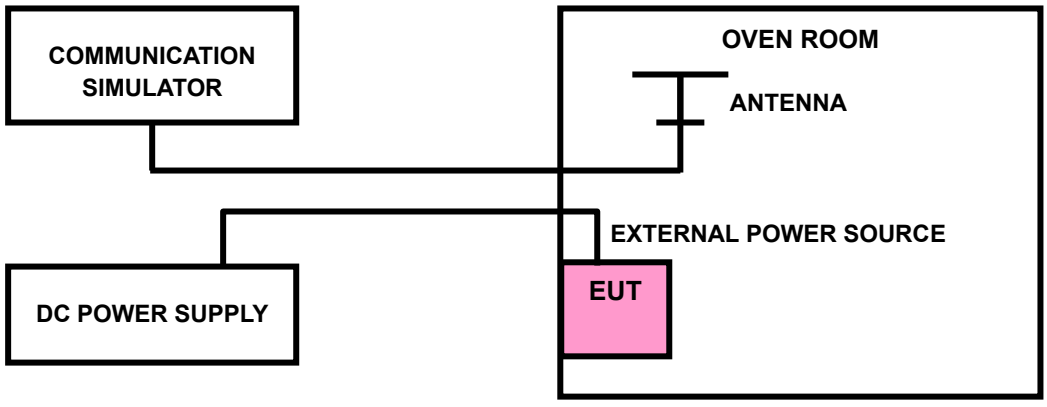
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

3.2.3 TEST SETUP



3.2.4 TEST RESULTS

Please Refer to Appendix Of this test report.

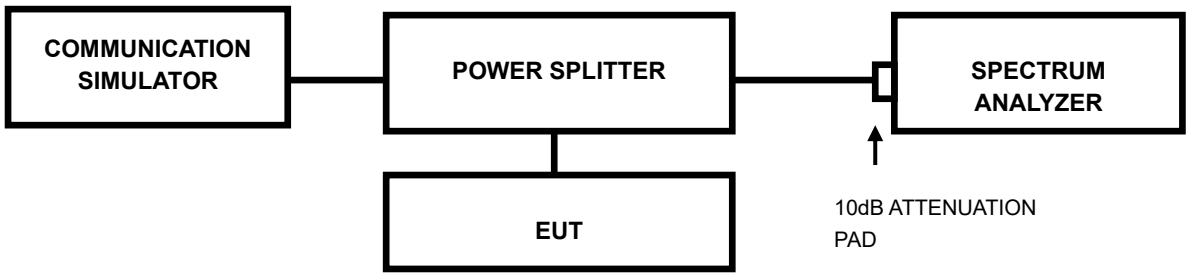
Note: VL = Low voltage(2.5V); VN/NV = Normal voltage(3.8V); VH = High voltage(4.5V);
NT = Normal temperature (25℃)

3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

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 power of a given emission.

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

a. The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
b. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

3.3.4 TEST RESULTS

Please Refer to Appendix Of this test report.

3.4 BAND EDGE MEASUREMENT

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

According to FCC 27.53(g) specified that For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a 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, by at least 43 + 10 log (P) dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

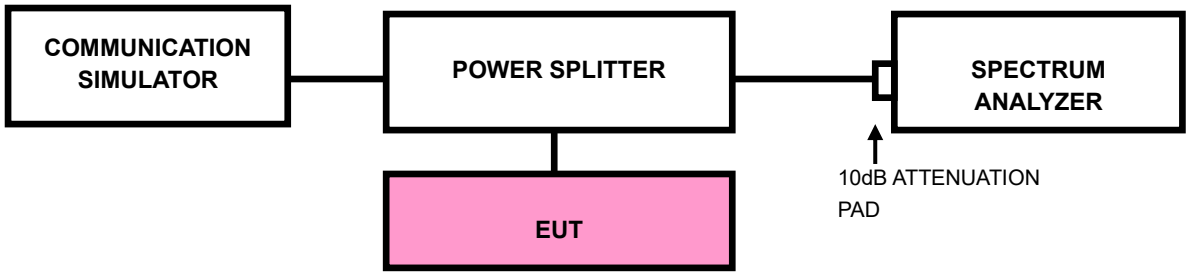
According to FCC 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. 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.

According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1-megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

47 CFR 27.53(c)(2)：On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

47 CFR 27.53(f)：For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

3.4.2 TEST SETUP



3.4.3 TEST PROCEDURES

a) All measurements were done at low and high operational frequency range

b) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.

c) Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW)

d) .Set the resolution bandwidth (RBW) ≧ 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.

e) Beyond the 1MHz band from the band edge, RBW=1MHz was used.

f) Set the video bandwidth (VBW) to ≧3 x RBW.

g) Select the average power (RMS) display detector.

h) Set the number of measurement points to ≧ 1001.

i) Use auto-coupled sweep time.

j) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.

k) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 100KHz.

l) Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix Of this test report.

3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

According to FCC 27.53(g) specified that For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a 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, by at least 43 + 10 log (P) dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a 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, by at least 43 + 10 log (P) dB. 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.

According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1-megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

47 CFR 27.53(c)(2)：On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

47 CFR 27.53(f)：For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC §27.1509 (a):

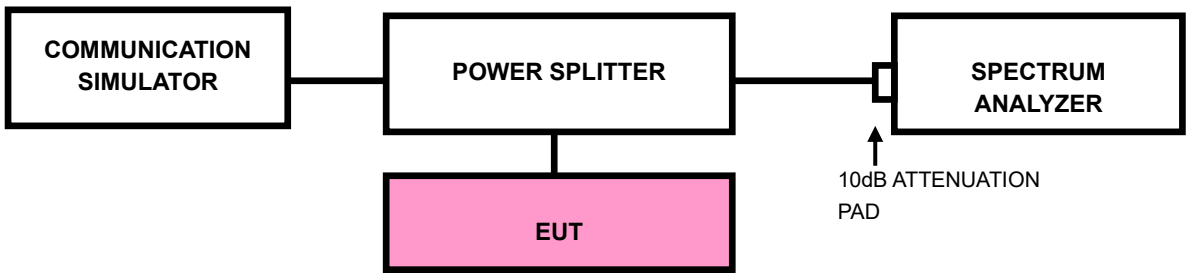
The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) in watts by at least the following amounts: (a) For 900 MHz broadband operations in 897.5–900.5 MHz band by at least 43 + 10 log (P) dB.

3.5.2 TEST PROCEDURE

a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.

b. Measuring frequency range is from 9kHz up to a frequency including its 10th harmonic. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.

3.5.3 TEST SETUP



3.5.4 TEST RESULTS

NOTE：The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

Please Refer to Appendix Of this test report.

3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

According to FCC 27.53(g) specified that For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a 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, by at least 43 + 10 log (P) dB. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a 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, by at least 43 + 10 log (P) dB. 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.

According to FCC 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1-megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

47 CFR 27.53(c)(2)：On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

47 CFR 27.53(f)：For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC §27.1509 (a):

The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) in watts by at least the following amounts: (a) For 900 MHz broadband operations in 897.5–900.5 MHz band by at least 43 + 10 log (P) dB.

3.6.2 TEST PROCEDURES

a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.
b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value “ of step a. Record the power level of S.G.
c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.

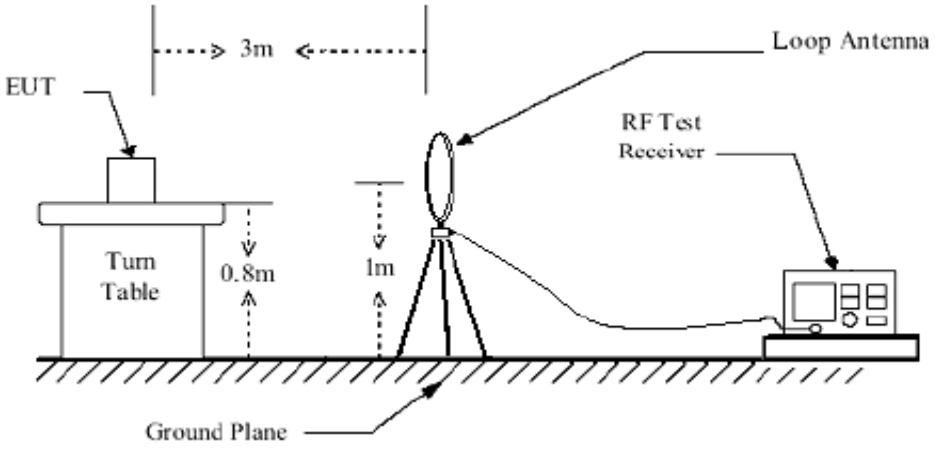
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.6.3 DEVIATION FROM TEST STANDARD

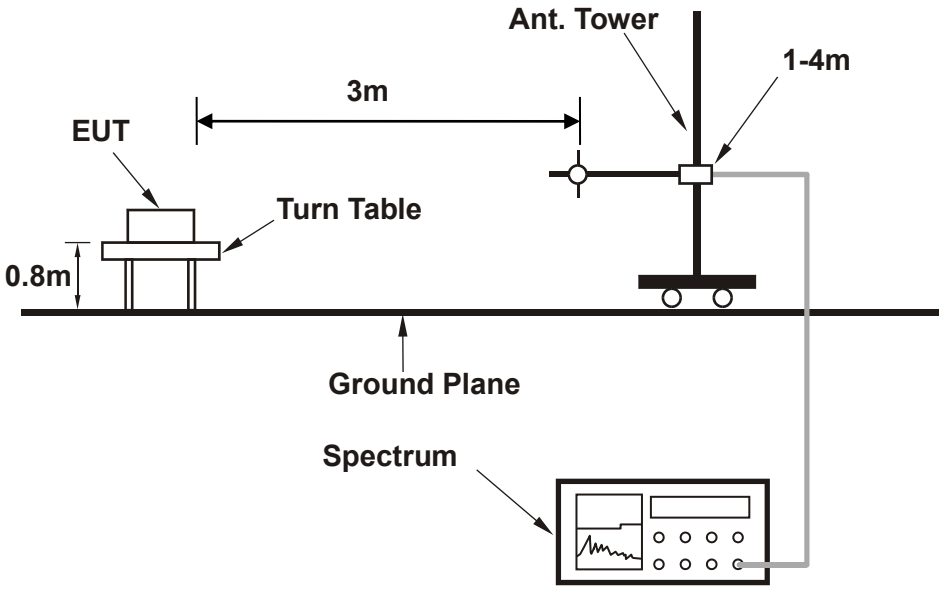
No deviation

3.6.4 TEST SETUP

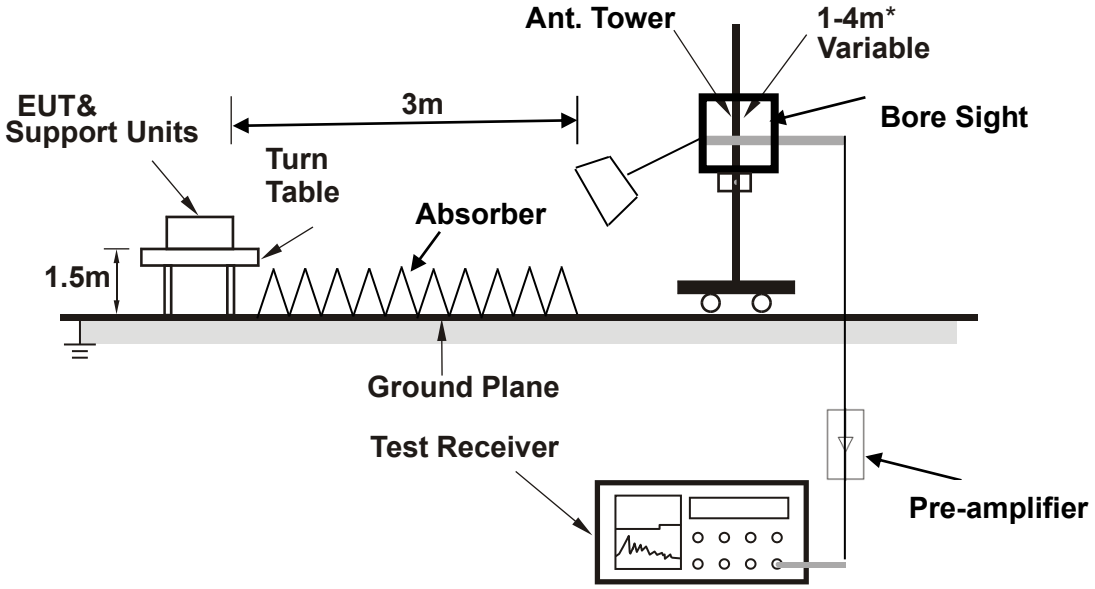
< Frequency Range below 30MHz >



< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

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

3.6.5 TEST RESULTS

NOTE： The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

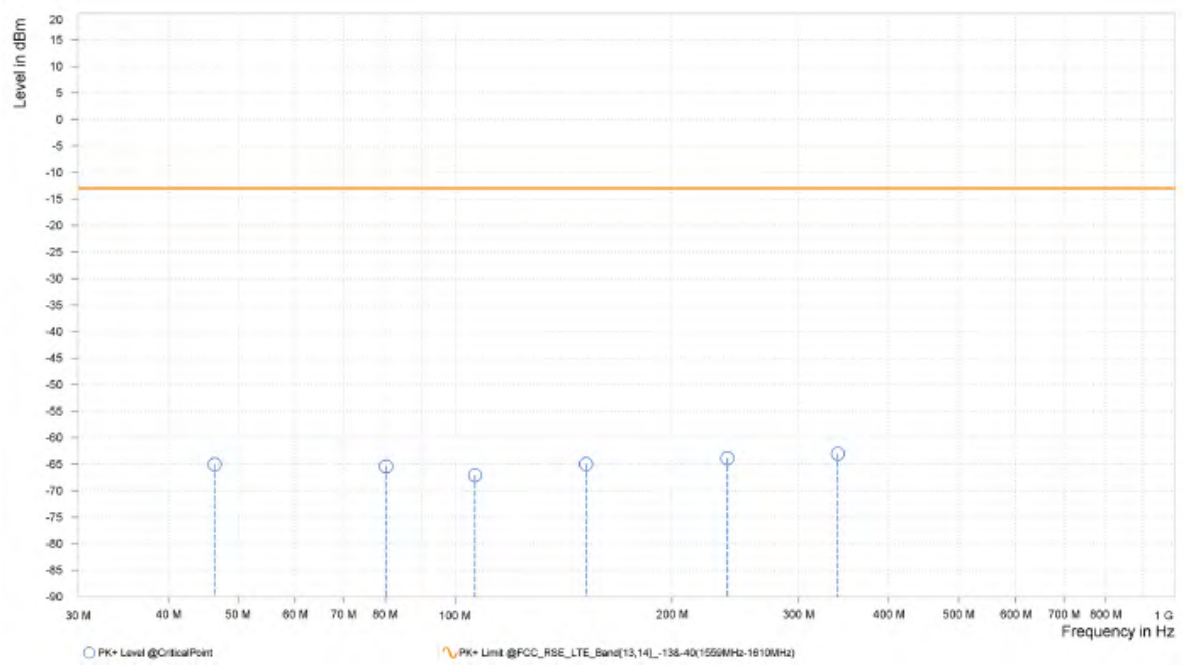
BELOW 1GHz WORST-CASE DATA

30 MHz – 1GHz data:

NB-IOT LTE Band 13
CHANNEL BANDWIDTH: 5MHz / QPSK

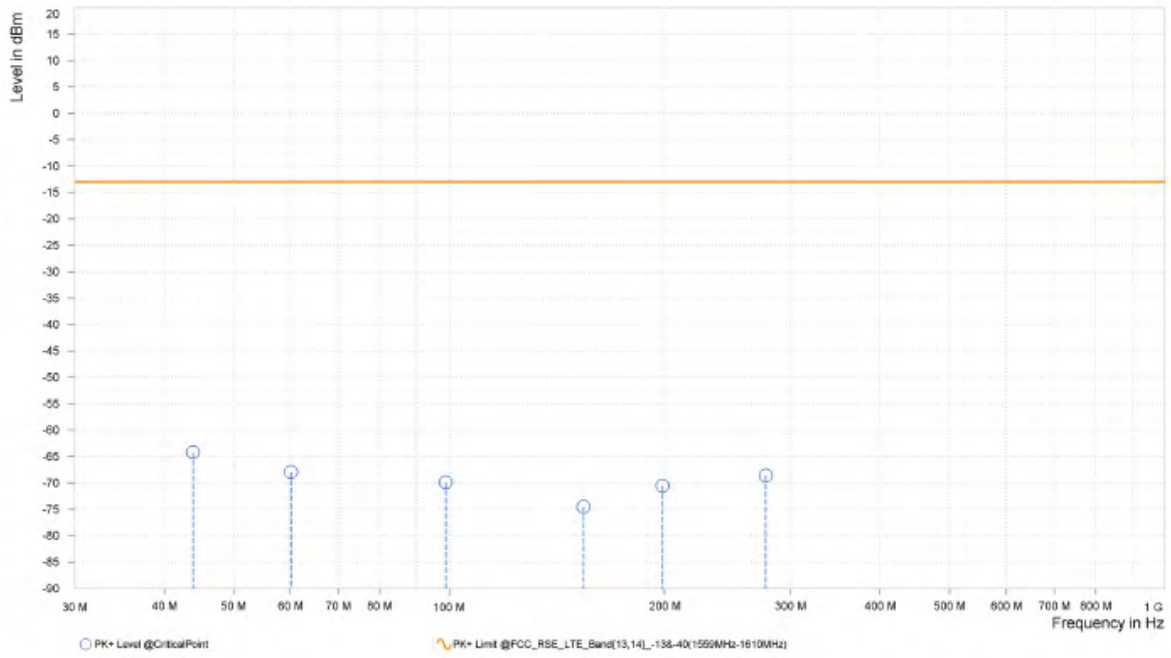
MODE	TX channel 23230	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	46.400	-65.03	-13.00	52.03	2.88	H	227.8	2.00
1	80.200	-65.40	-13.00	52.40	-5.69	H	280.5	1.00
1	106.550	-67.05	-13.00	54.05	-0.26	H	355.5	2.00
1	152.000	-64.98	-13.00	51.98	-5.25	H	280.5	1.00
1	238.650	-63.88	-13.00	50.88	2.47	H	280.5	1.00
1	339.900	-63.01	-13.00	50.01	6.06	H	127.4	2.00



MODE	TX channel 23255	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	43.850	-64.22	-13.00	51.22	5.54	V	302	1.00
1	60.100	-67.94	-13.00	54.94	4.44	V	203.9	1.00
1	98.900	-69.86	-13.00	56.86	4.26	V	1	1.00
1	154.100	-74.55	-13.00	61.55	-2.44	V	359.1	1.00
1	198.500	-70.54	-13.00	57.54	1.14	V	203.9	1.00
1	276.750	-68.61	-13.00	55.61	3.20	V	203.9	1.00



ABOVE 1GHz

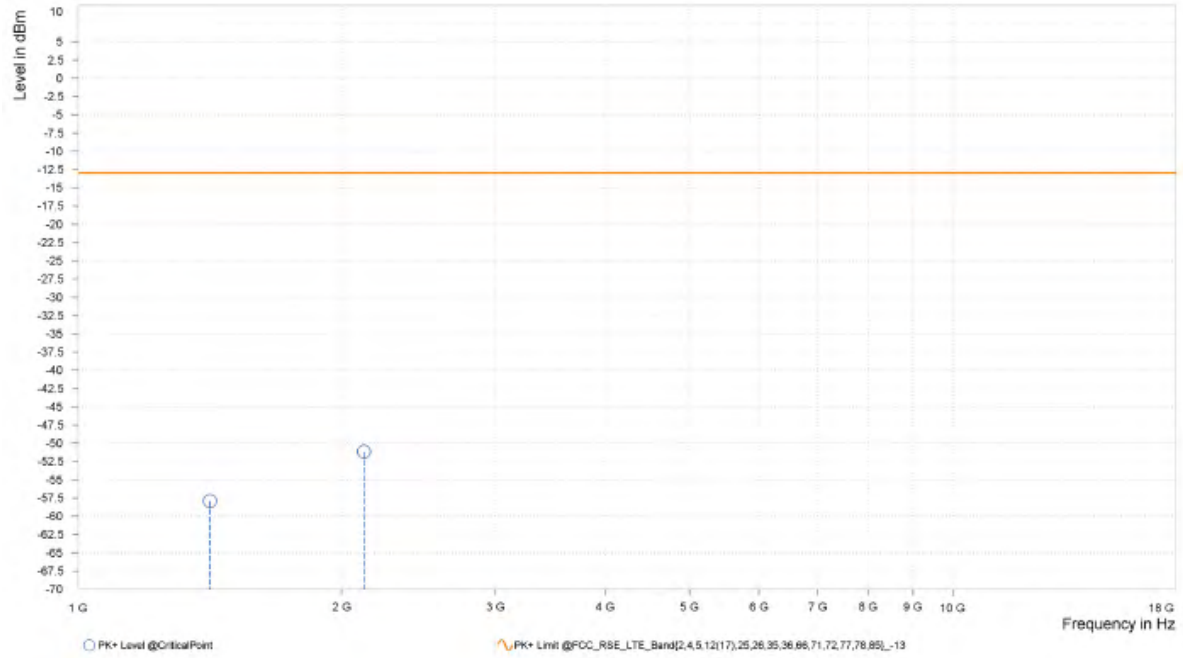
Note: For higher frequency, the emission is too low to be detected.

LTE BAND 12

CHANNEL BANDWIDTH: 1.4MHz / QPSK

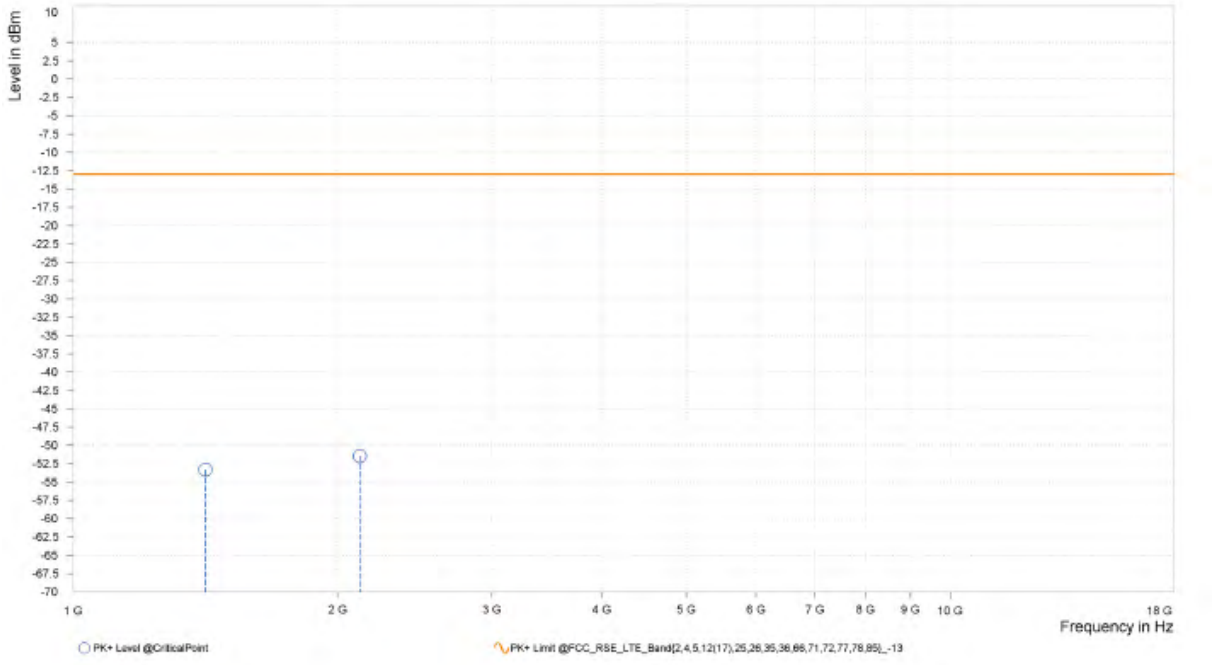
MODE	TX channel 23095	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,413.740	-57.91	-13.00	44.91	2.91	H	354.8	2.00
1	2,120.610	-51.16	-13.00	38.16	10.89	H	1	1.00



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

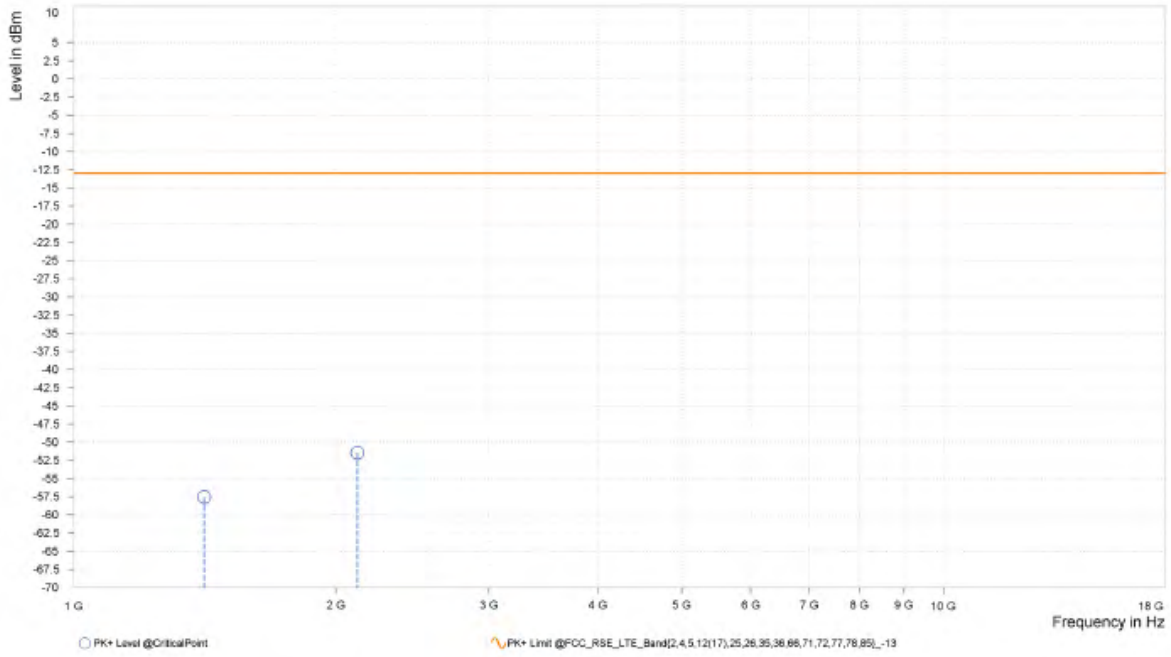
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,413.740	-53.33	-13.00	40.33	2.81	V	2.6	2.00
1	2,120.610	-51.45	-13.00	38.45	10.53	V	256.6	1.00



CHANNEL BANDWIDTH: 3MHz / QPSK
CH23095

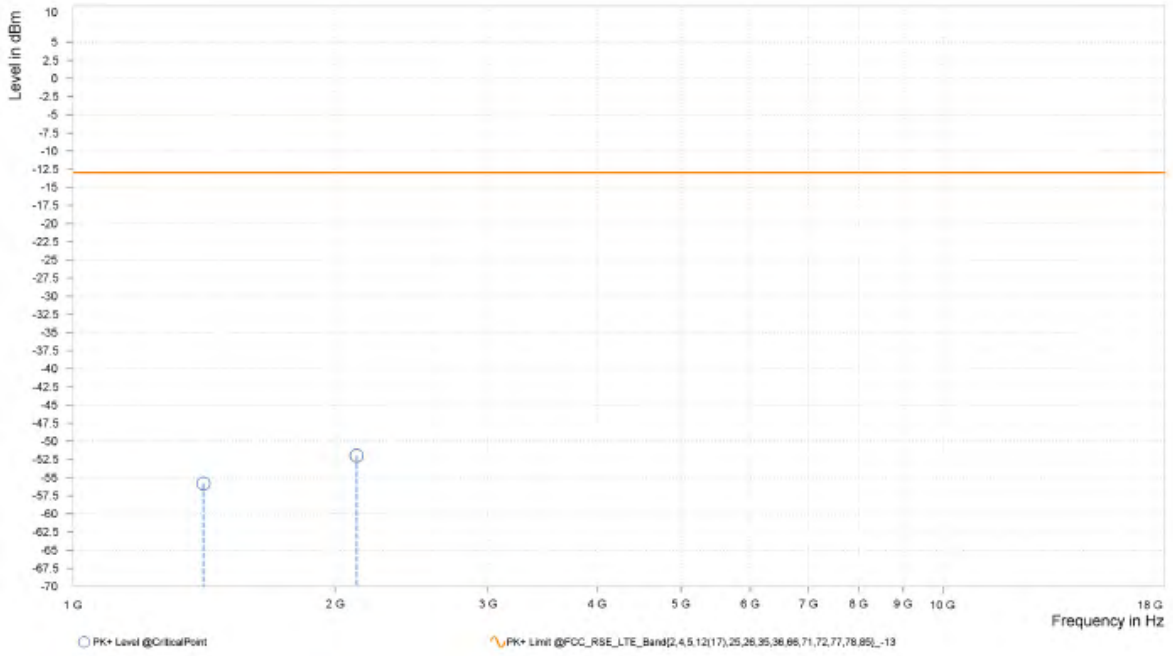
MODE	TX channel 23095	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,412.300	-57.55	-13.00	44.55	3.05	H	355.4	2.00
1	2,118.450	-51.46	-13.00	38.46	10.80	H	355.4	2.00



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,412.300	-55.81	-13.00	42.81	2.96	V	357.5	1.00
1	2,118.450	-51.98	-13.00	38.98	10.47	V	1	1.00

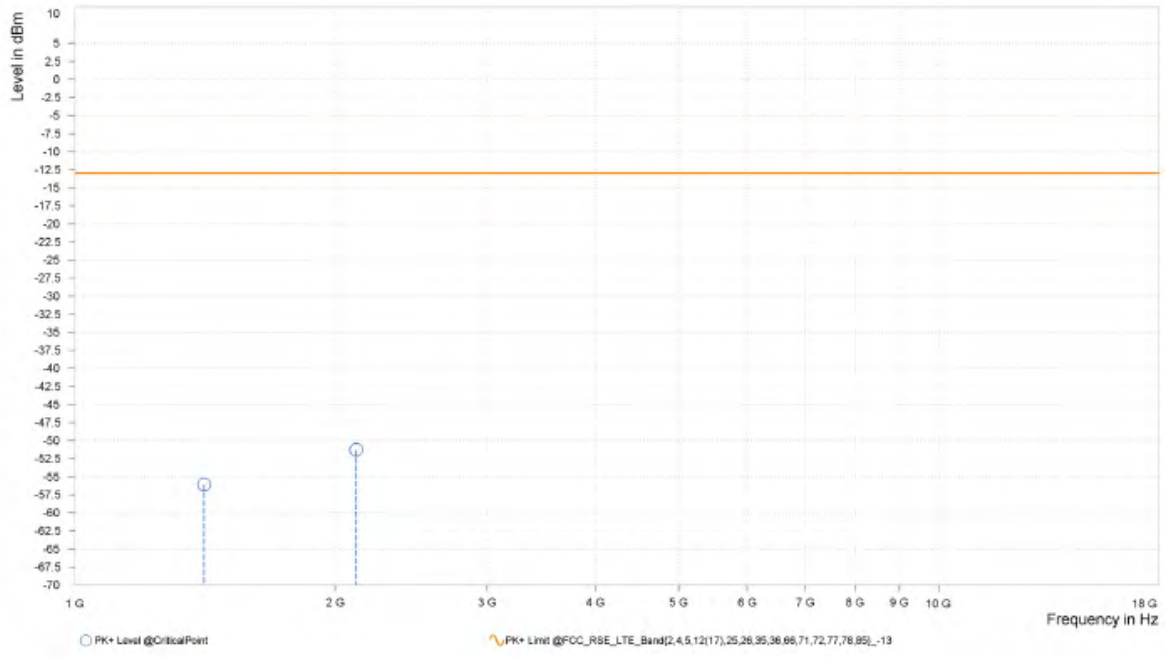


CHANNEL BANDWIDTH: 5MHz / QPSK

CH23095

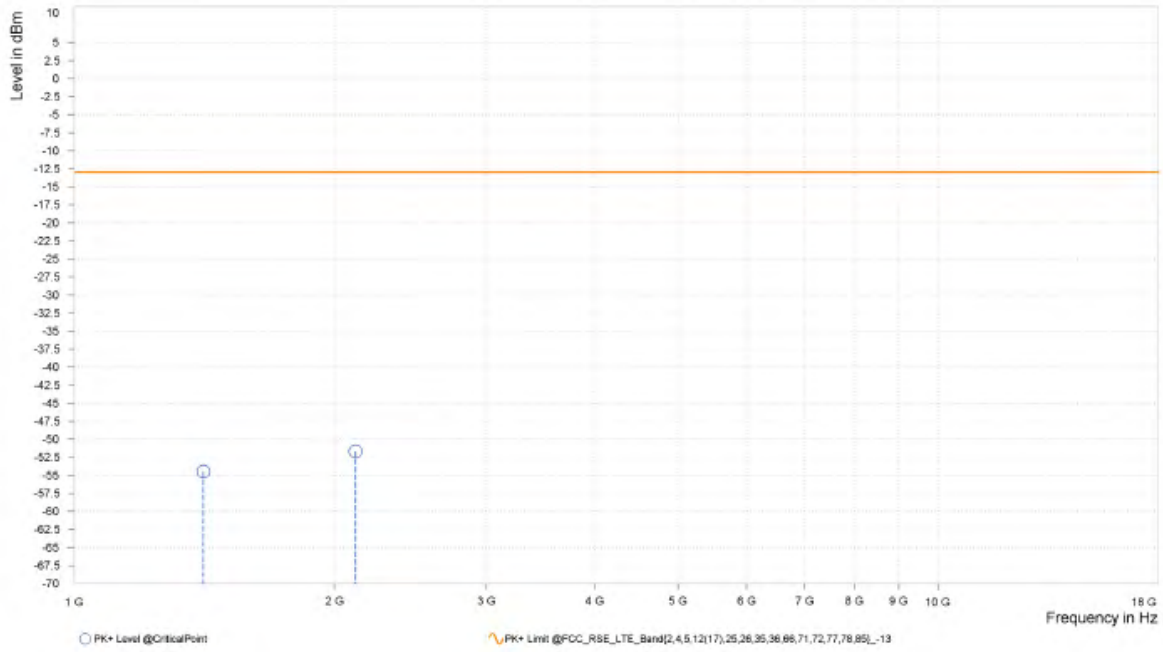
MODE	TX channel 23095	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,410.500	-56.09	-13.00	43.09	3.34	H	2.6	2.00
1	2,115.750	-51.29	-13.00	38.29	10.67	H	224.4	1.00



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,410.500	-54.50	-13.00	41.50	3.26	V	5.2	1.00
1	2,115.750	-51.67	-13.00	38.67	10.38	V	354.9	2.00

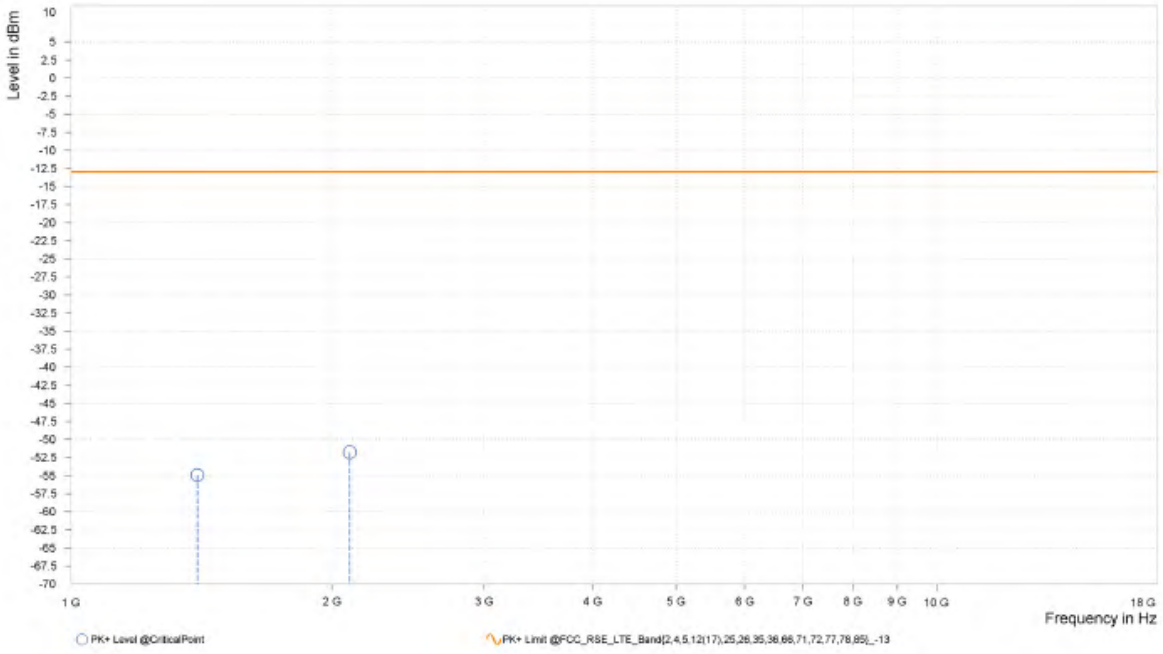


CHANNEL BANDWIDTH: 10MHz / QPSK

CH 23060

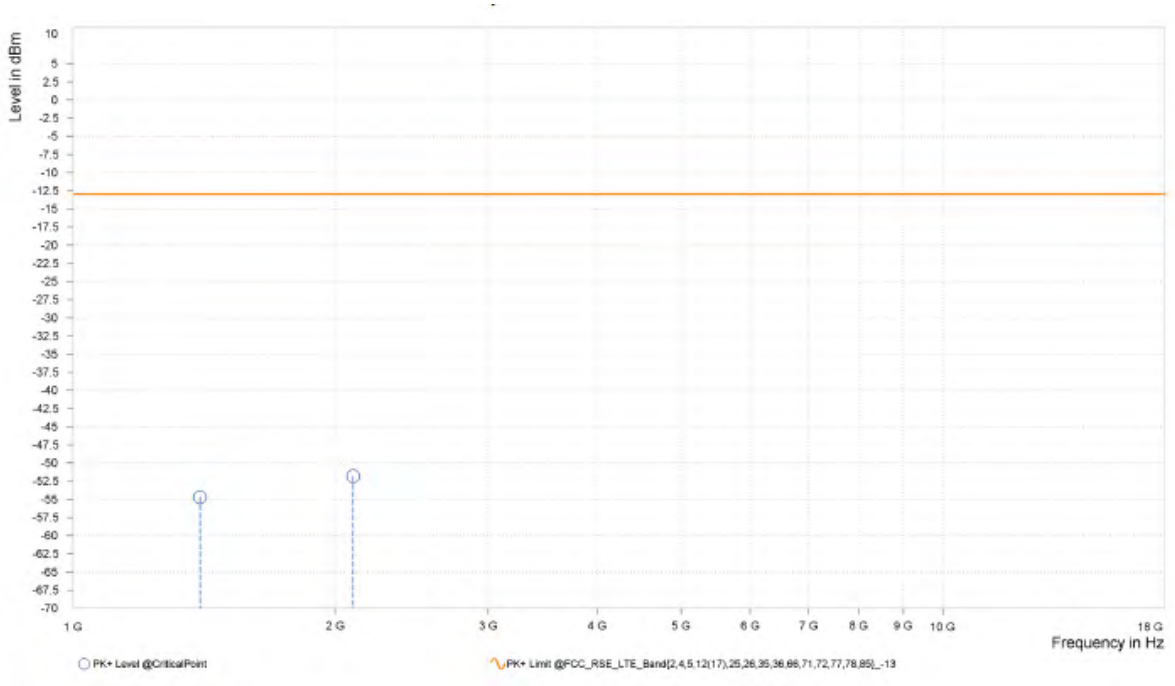
MODE	TX channel 23060	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,399.000	-54.91	-13.00	41.91	4.97	H	135.8	2.00
1	2,098.500	-51.77	-13.00	38.77	9.95	H	229.2	1.00



MODE	TX channel 23060	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

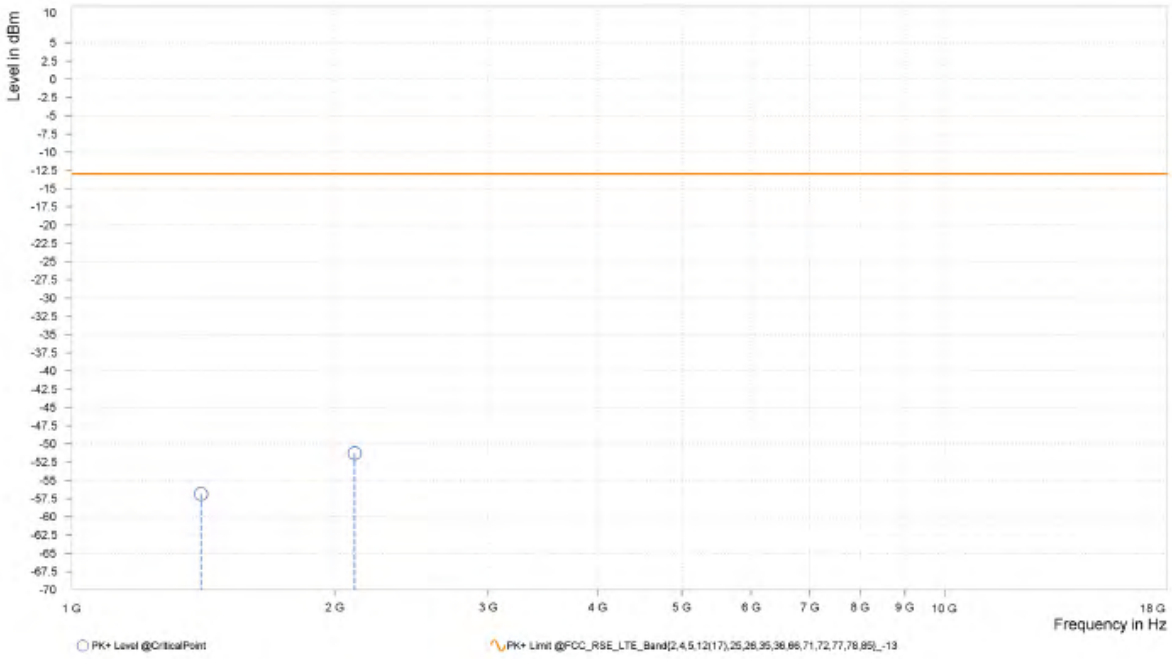
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,399.000	-54.68	-13.00	41.68	4.96	V	1	1.00
1	2,098.500	-51.80	-13.00	38.80	9.85	V	358.1	1.00



CH 23095

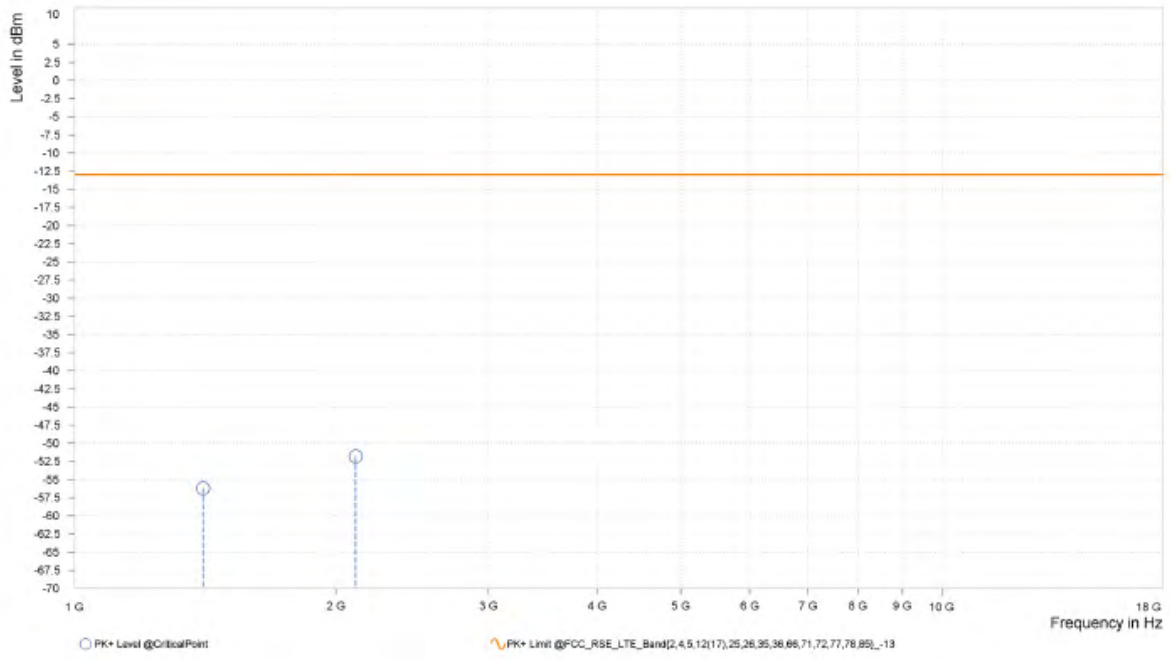
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,406.000	-56.86	-13.00	43.86	3.97	H	359	2.00
1	2,109.000	-51.27	-13.00	38.27	10.40	H	134.6	2.00



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

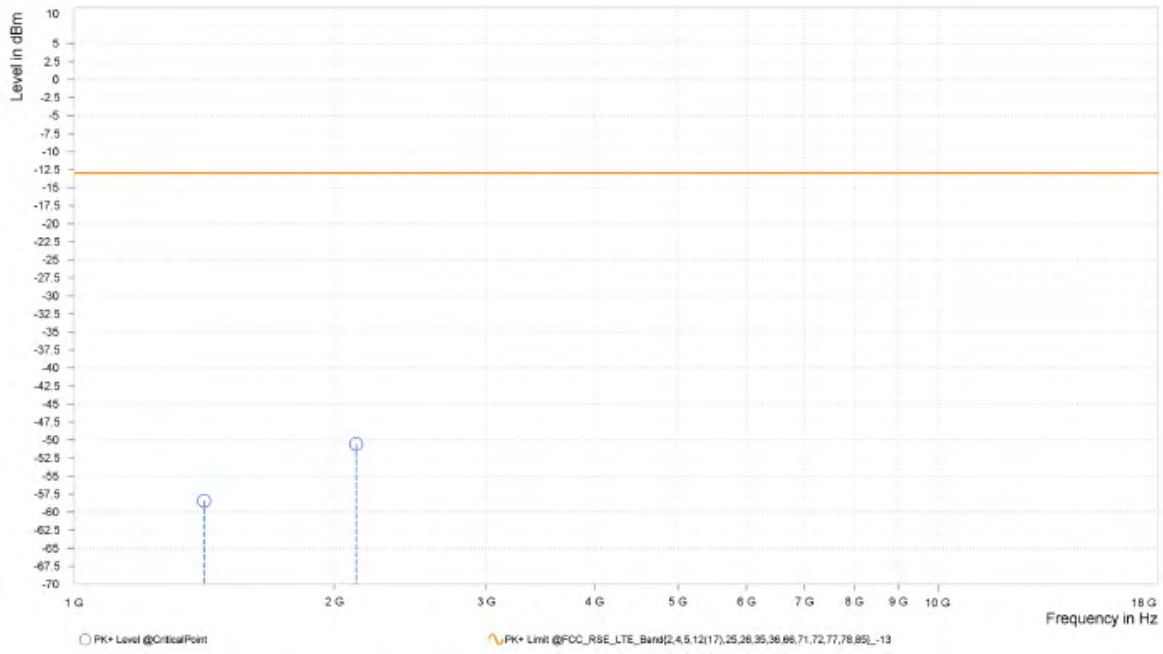
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,406.000	-56.21	-13.00	43.21	3.92	V	2.9	2.00
1	2,109.000	-51.81	-13.00	38.81	10.17	V	5	1.00



CH 23130

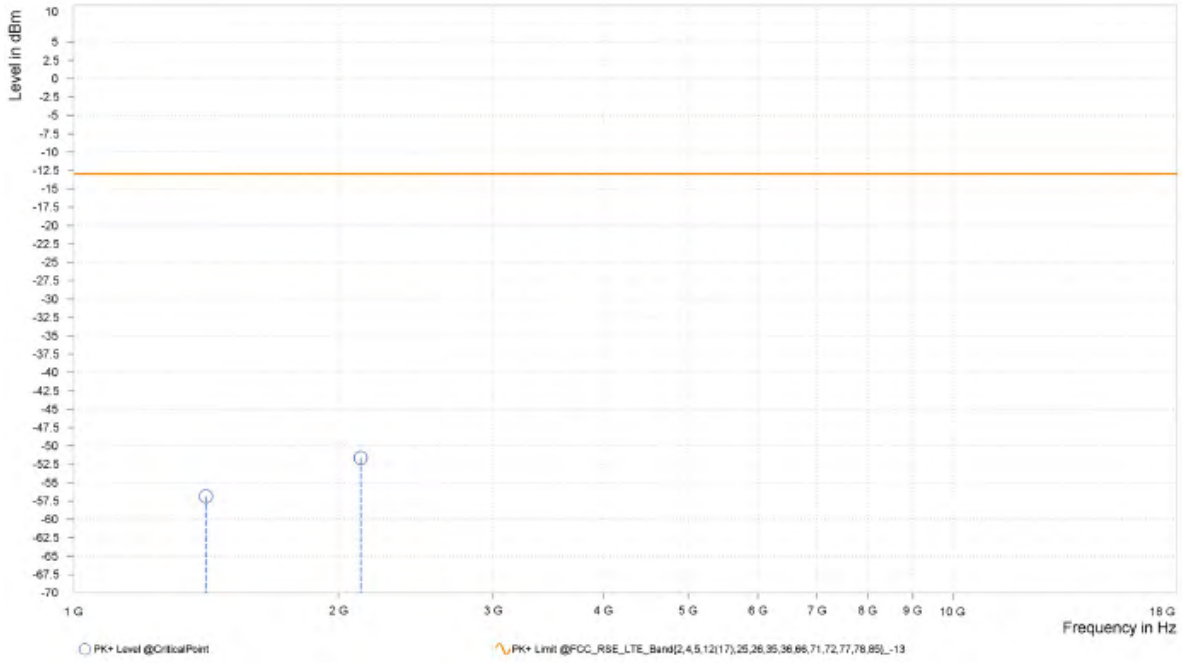
MODE	TX channel 23130	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,413.000	-58.44	-13.00	45.44	2.98	H	355.4	2.00
1	2,119.500	-50.56	-13.00	37.56	10.84	H	355.4	2.00



MODE	TX channel 23130	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,413.000	-56.90	-13.00	43.90	2.89	V	357.6	1.00
1	2,119.500	-51.62	-13.00	38.62	10.50	V	133.4	2.00



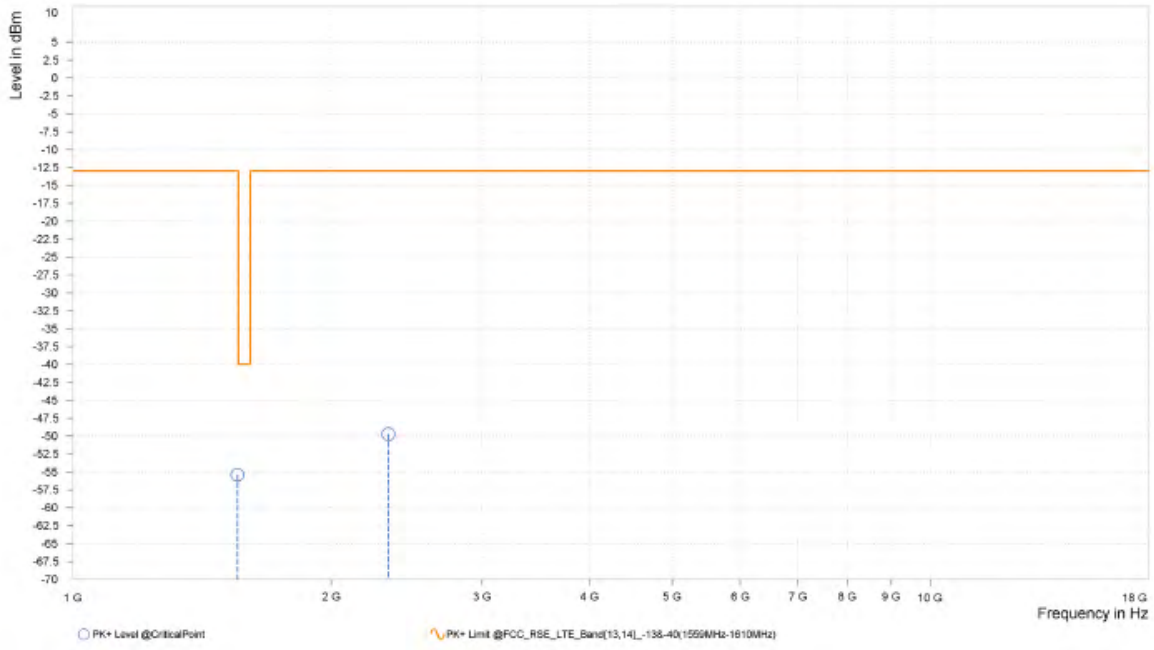
LTE B13

CHANNEL BANDWIDTH: 5MHz / QPSK

CH23205

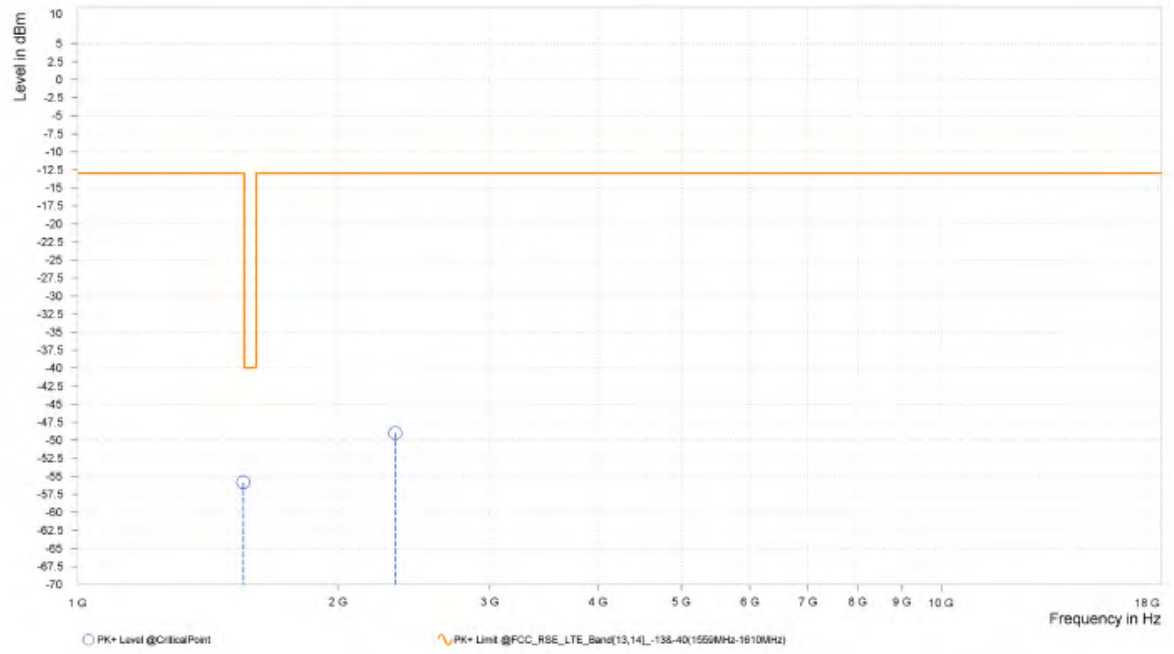
MODE	TX channel 23205	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,554.500	-55.40	-13.00	42.40	5.29	H	2.4	2.00
1	2,331.750	-49.70	-13.00	36.70	13.06	H	2.4	2.00



MODE	TX channel 23205	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

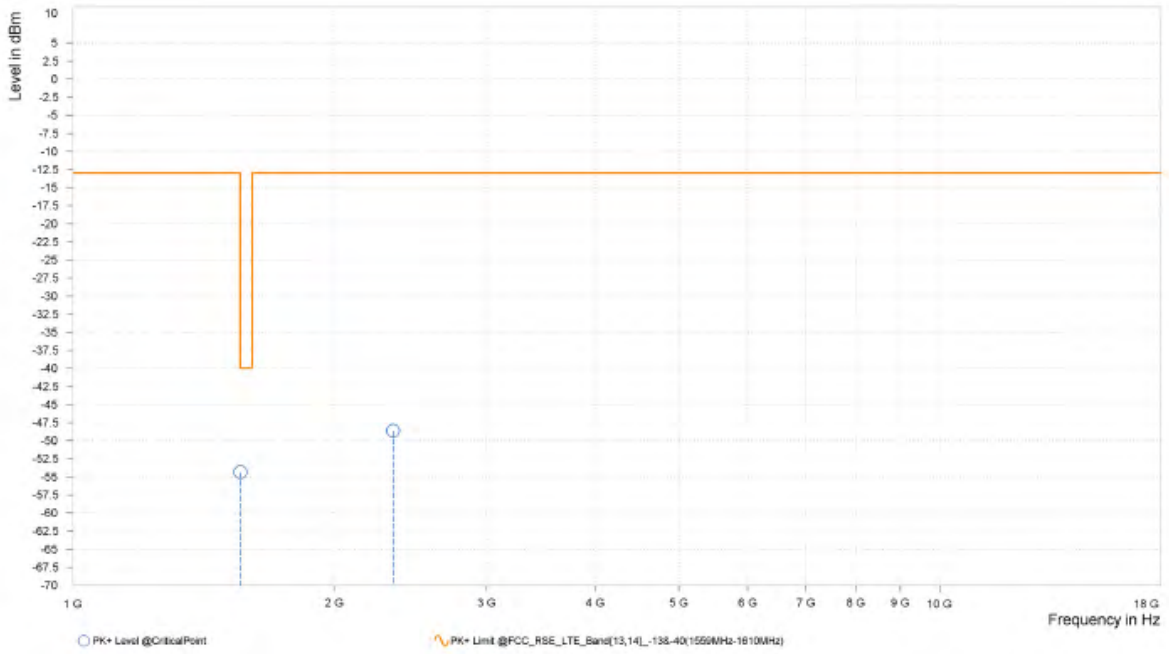
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,554.500	-55.83	-13.00	42.83	4.93	V	1	1.00
1	2,331.750	-49.00	-13.00	36.00	12.57	V	5.2	1.00



CH23230

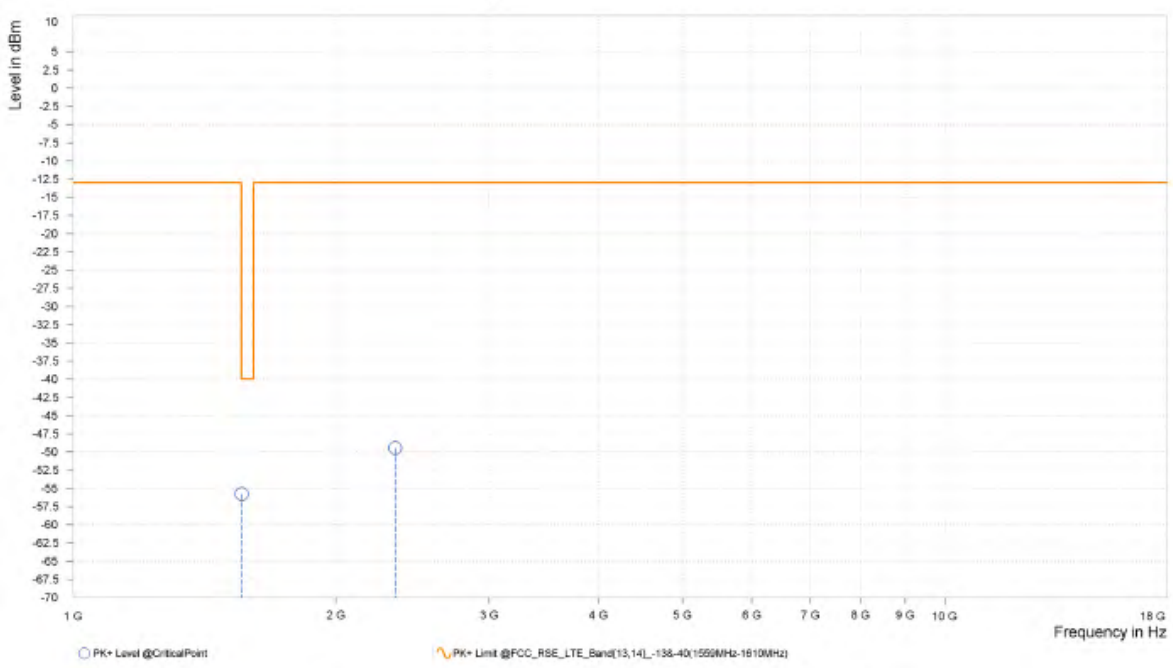
MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,559.500	-54.36	-40.00	14.36	5.35	H	1	1.00
1	2,339.250	-48.63	-13.00	35.63	13.06	H	359	2.00



MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

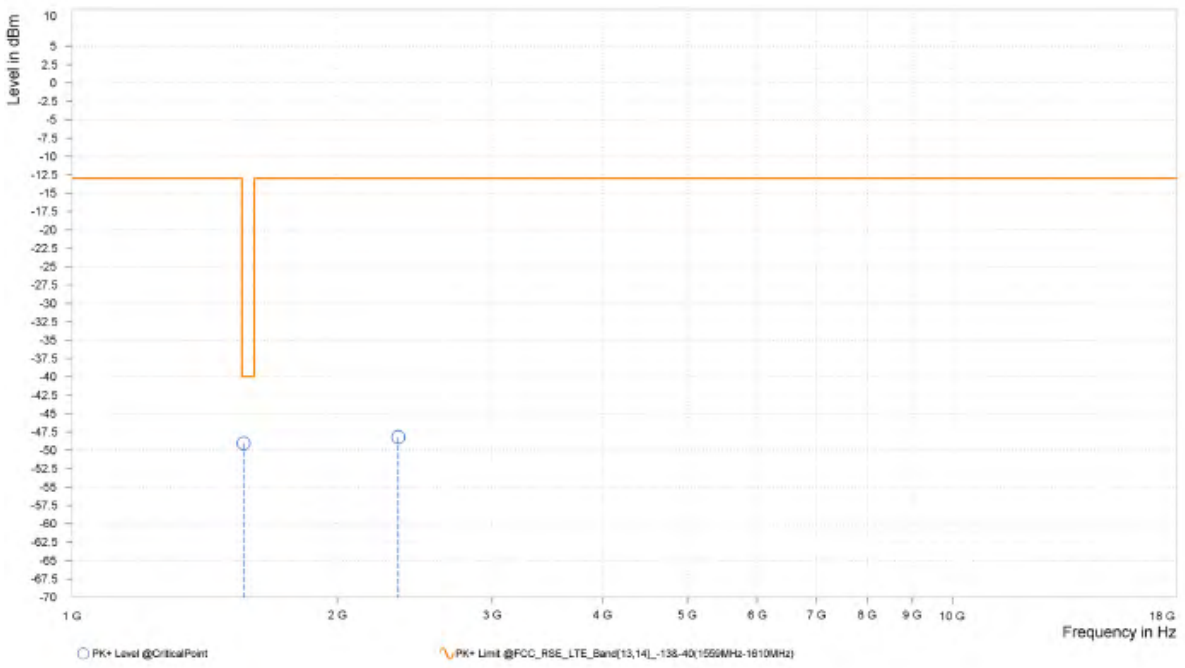
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,559.500	-55.75	-40.00	15.75	5.02	V	132.2	2.00
1	2,339.250	-49.47	-13.00	36.47	12.62	V	132.2	2.00



CH23255

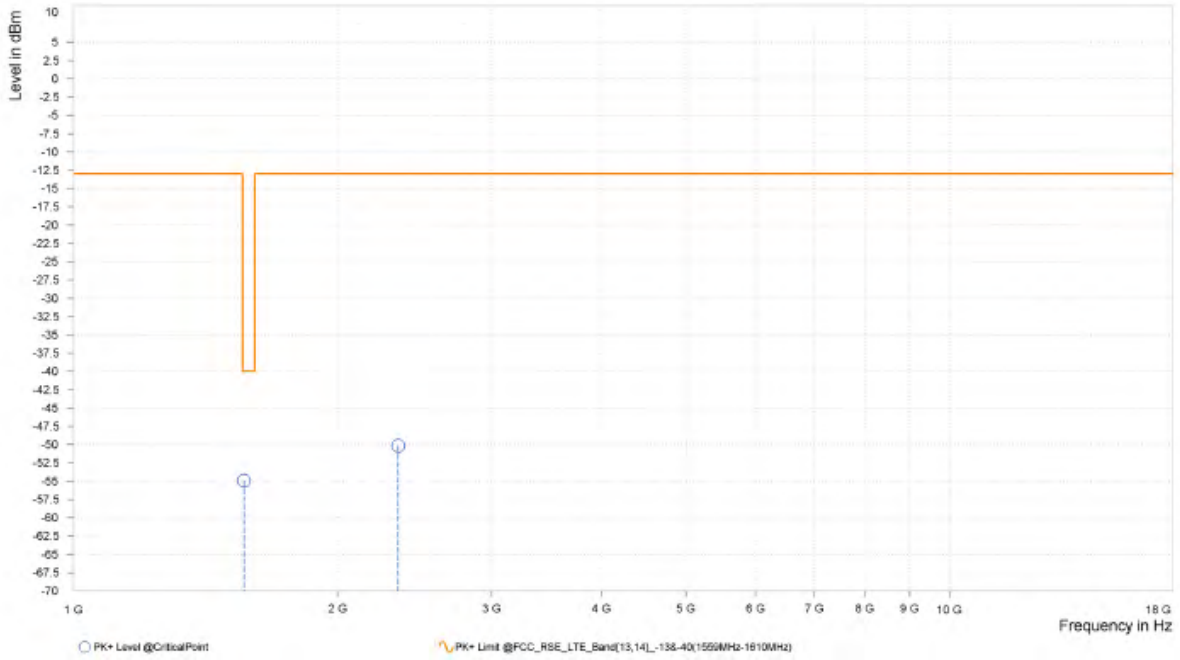
MODE	TX channel 23255	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,566.000	-49.05	-40.00	9.05	5.33	H	4.5	1.00
1	2,346.750	-48.23	-13.00	35.23	13.06	H	224.2	1.00



MODE	TX channel 23255	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

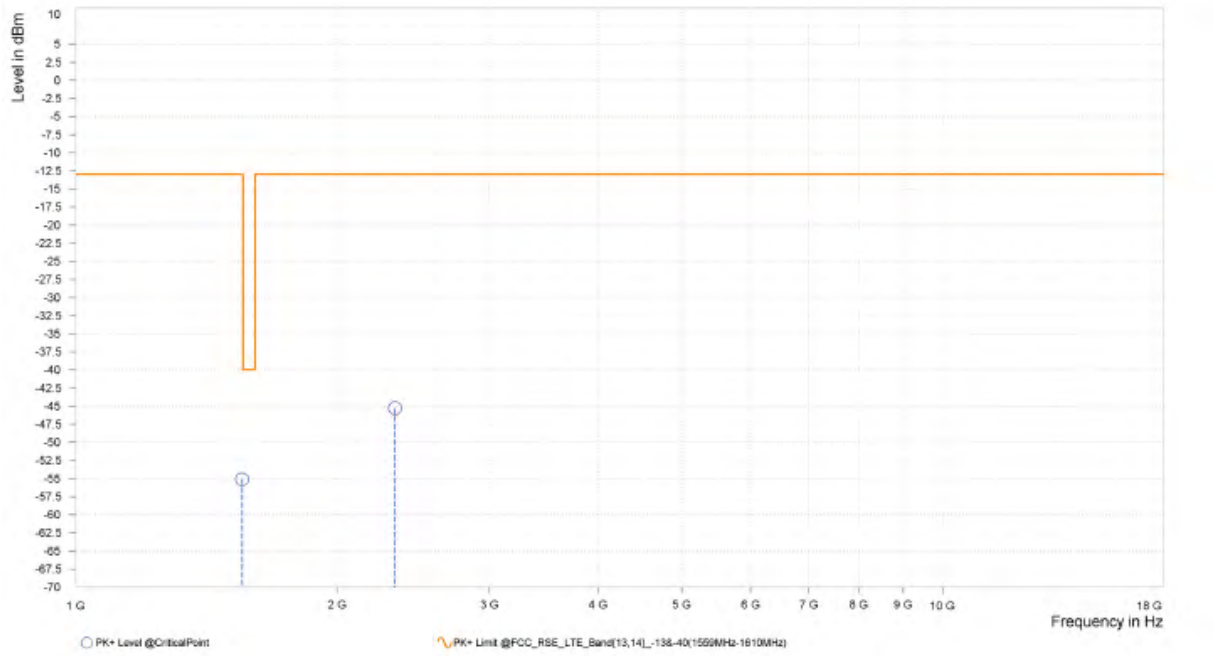
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,564.500	-54.92	-40.00	14.92	5.04	V	359	2.00
1	2,346.750	-50.16	-13.00	37.16	12.66	V	355	2.00



CHANNEL BANDWIDTH: 10MHz /QPSK

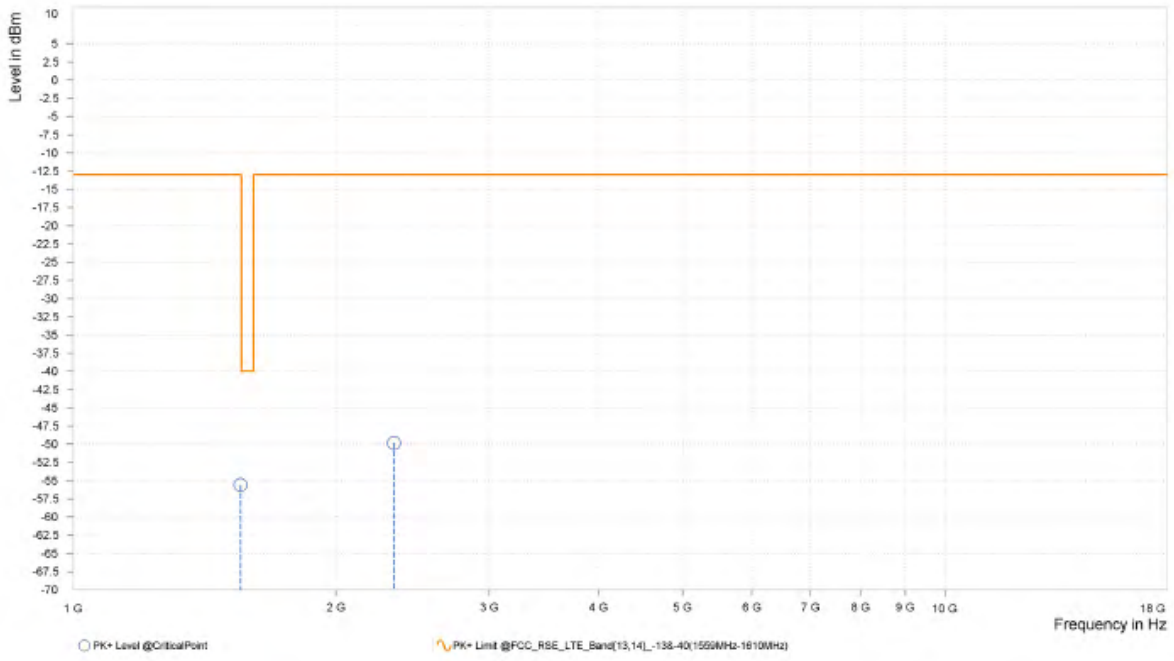
MODE	TX channel 23230	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	AC 120V/60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,555.000	-55.08	-13.00	42.08	5.31	H	1	1.00
1	2,335.000	-45.28	-13.00	32.28	13.06	H	3.9	1.00



MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

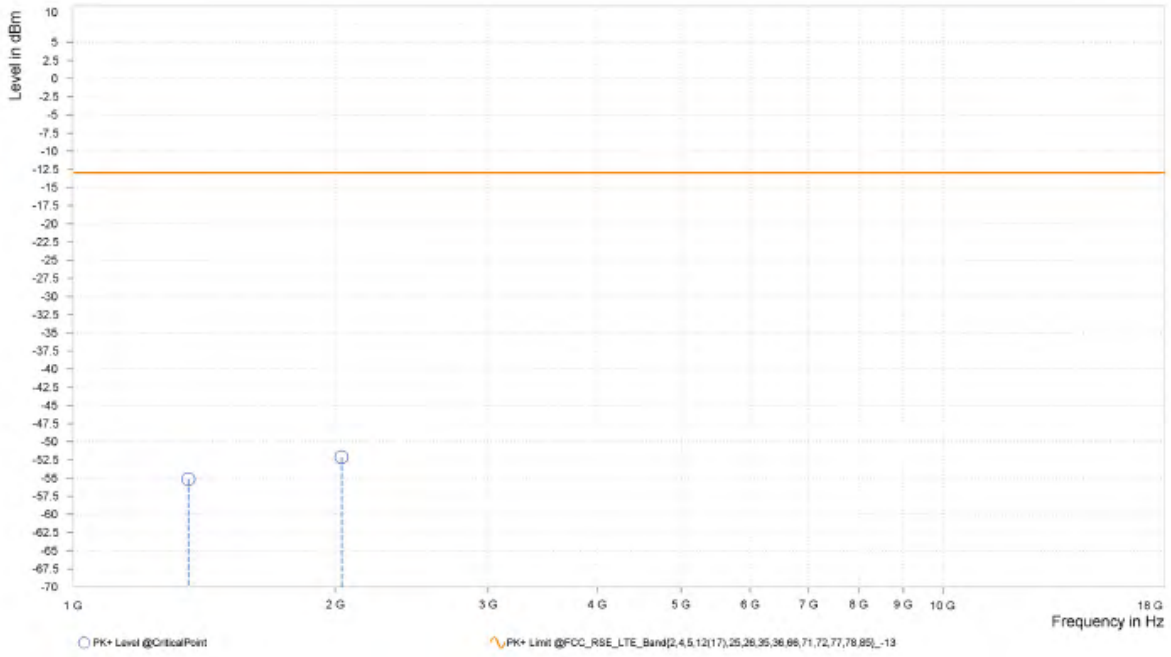
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,555.000	-55.57	-13.00	42.57	4.95	V	49.6	2.00
1	2,332.500	-49.84	-13.00	36.84	12.58	V	226.7	1.00



LTE Band 71
CHANNEL BANDWIDTH: 5MHz / QPSK

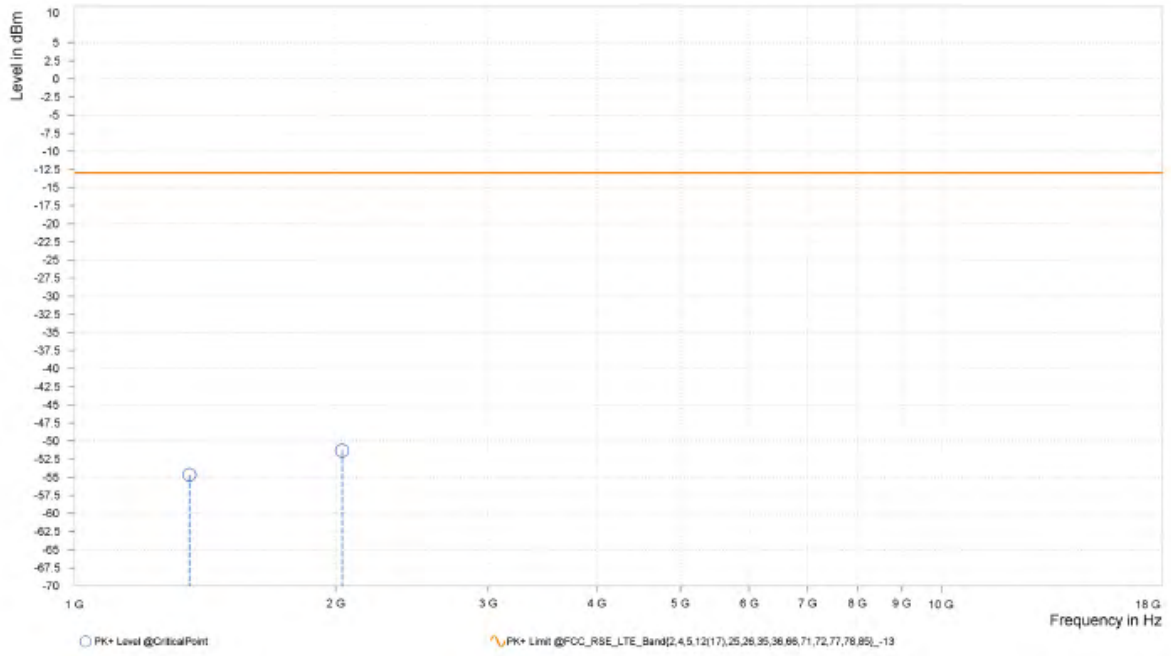
MODE	TX channel 133297	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,356.500	-55.14	-13.00	42.14	6.95	H	354.9	2.00
1	2,034.750	-52.15	-13.00	39.15	11.39	H	2.1	2.00



MODE	TX channel 133297	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,356.500	-54.67	-13.00	41.67	7.03	V	358.8	1.00
1	2,034.750	-51.31	-13.00	38.31	11.93	V	1	1.00

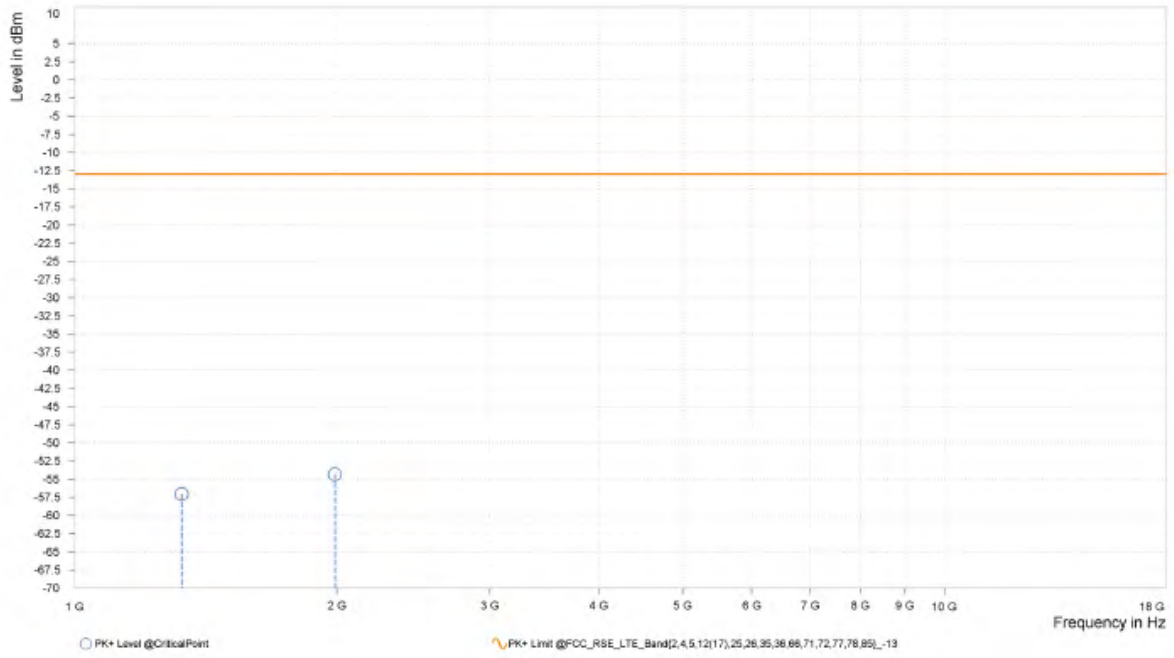


CHANNEL BANDWIDTH: 10MHz / QPSK

CH:133172

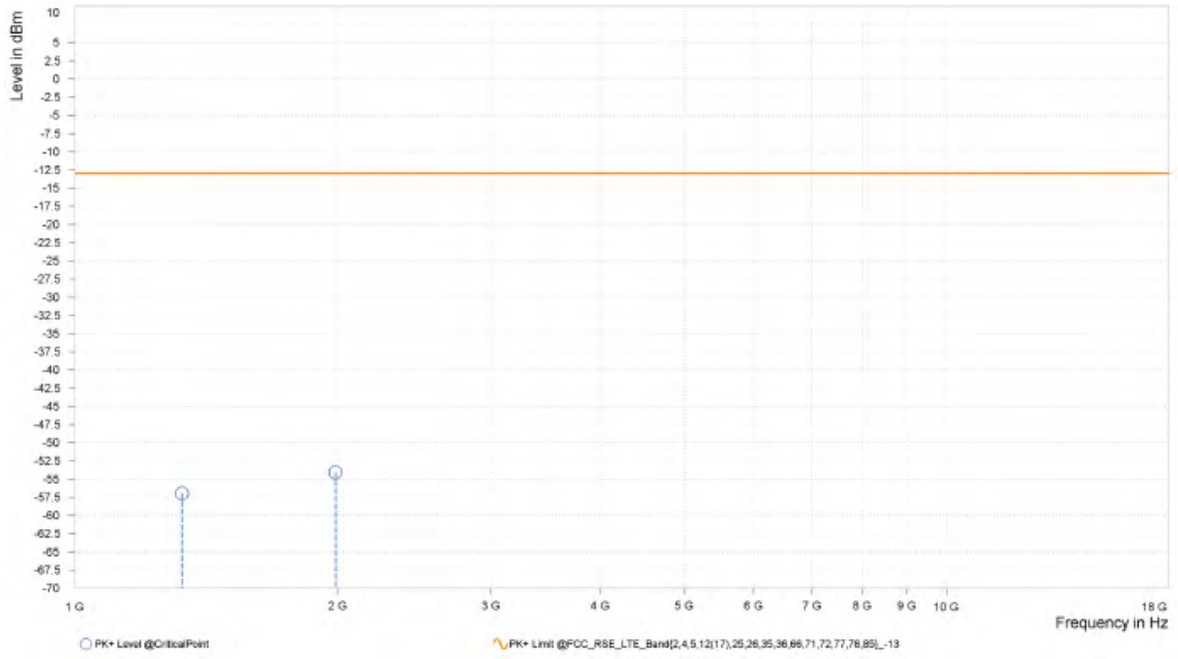
MODE	TX channel 133172	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,327.000	-57.05	-13.00	44.05	4.45	H	4.5	1.00
1	1,990.500	-54.34	-13.00	41.34	9.58	H	1.2	2.00



MODE	TX channel 133172	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

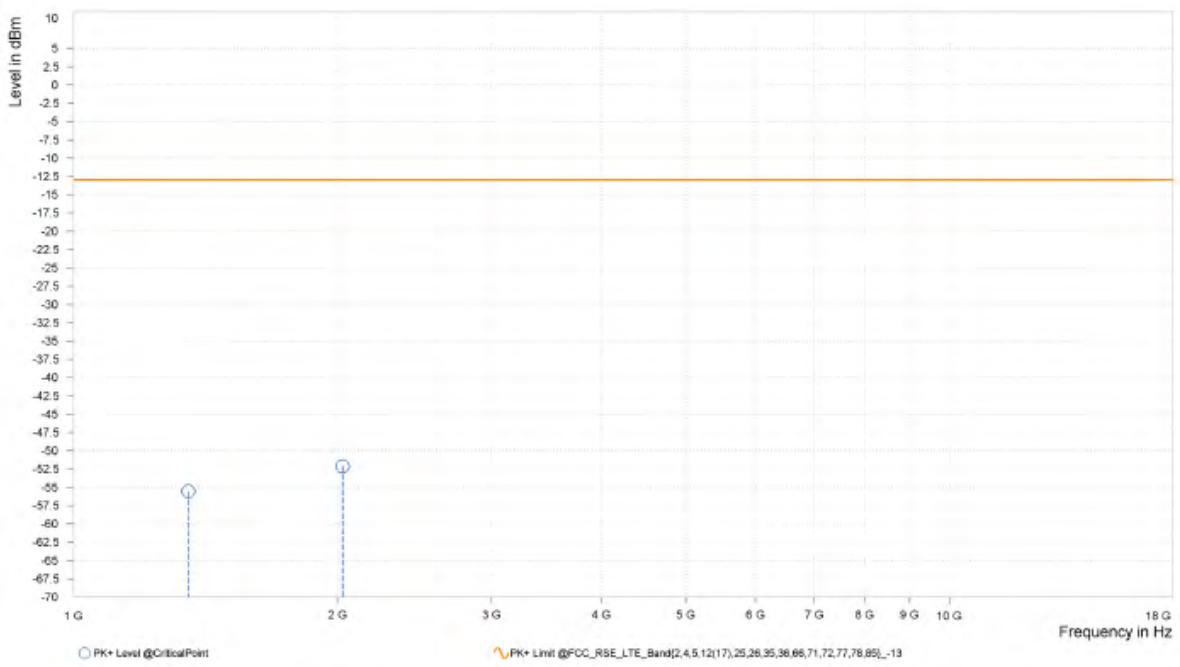
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,327.000	-56.97	-13.00	43.97	4.51	V	359	2.00
1	1,990.500	-54.08	-13.00	41.08	9.54	V	359	1.00



CH133297

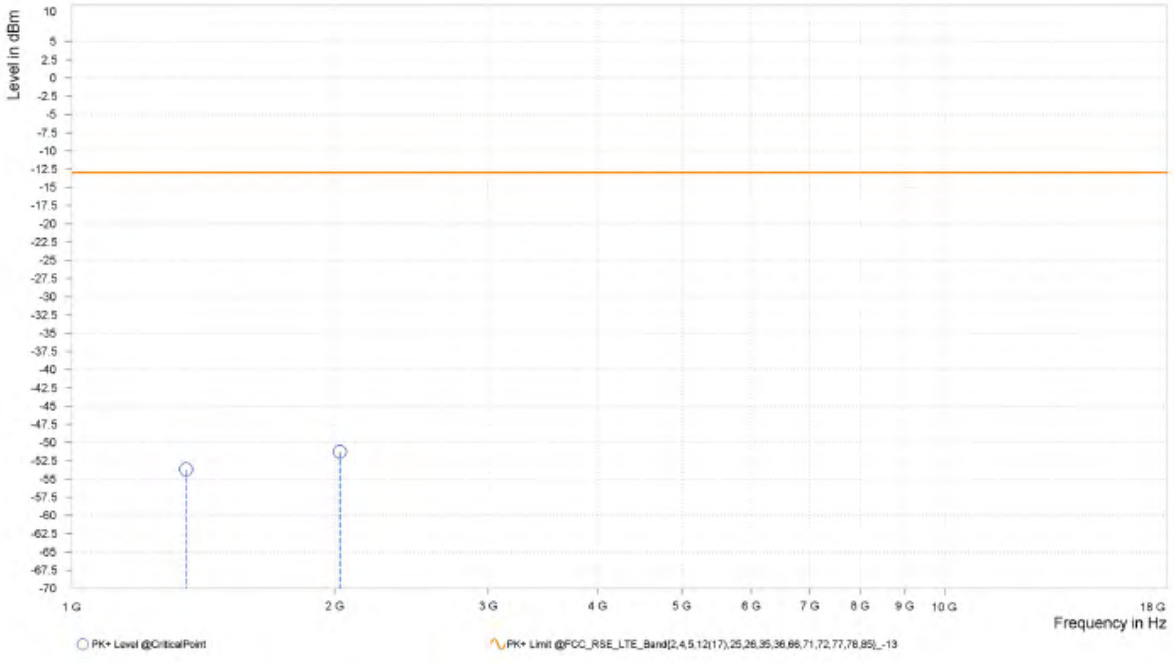
MODE	TX channel 133297	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,352.000	-55.55	-13.00	42.55	6.90	H	1	1.00
1	2,028.000	-52.11	-13.00	39.11	11.48	H	355.6	2.00



MODE	TX channel 133297	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

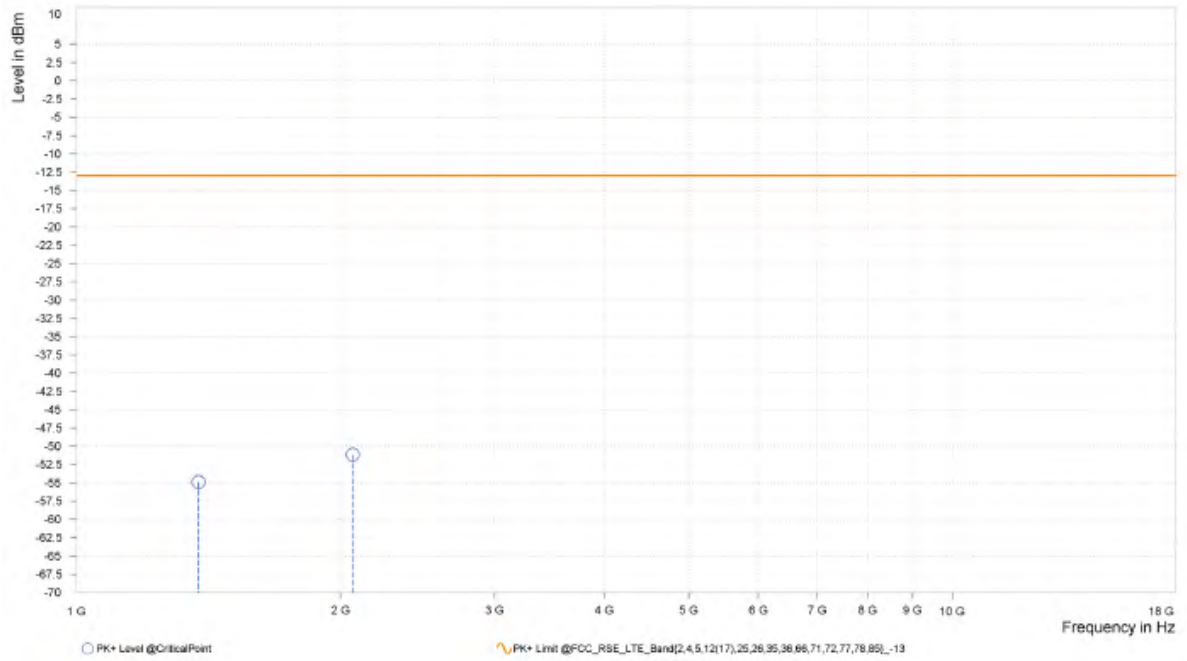
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,352.000	-53.69	-13.00	40.69	6.97	V	2.2	2.00
1	2,028.000	-51.29	-13.00	38.29	12.05	V	4.6	1.00



CH:133422

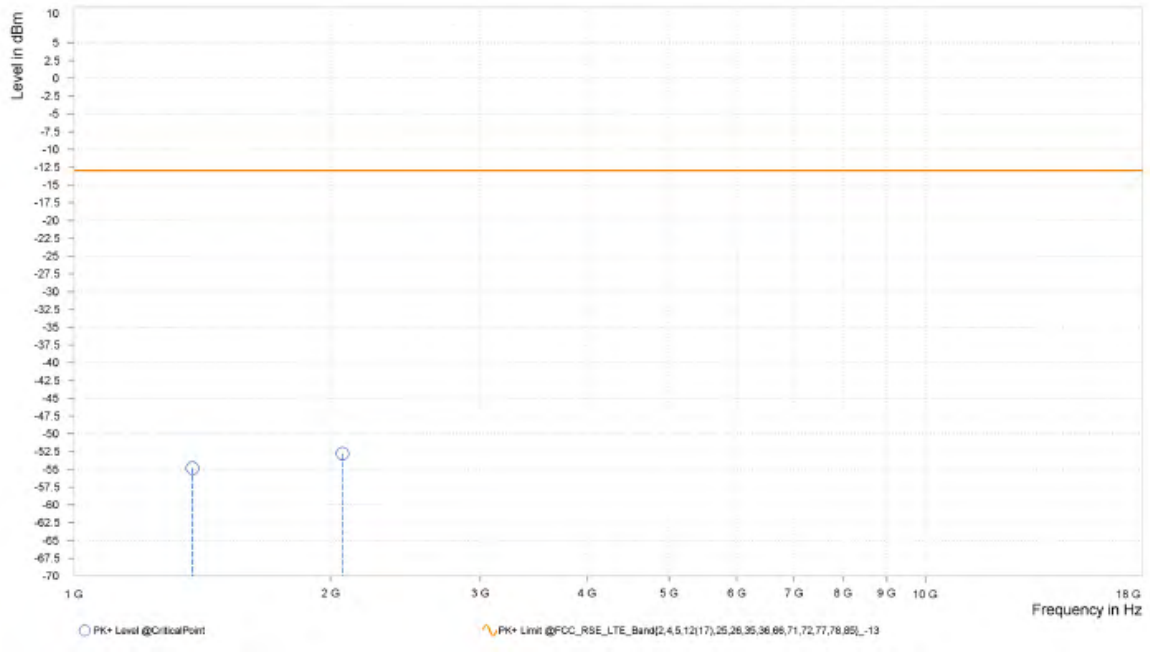
MODE	TX channel 133422	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,377.000	-54.88	-13.00	41.88	7.20	H	1	1.00
1	2,065.500	-51.16	-13.00	38.16	10.31	H	243.5	1.00



MODE	TX channel 133422	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

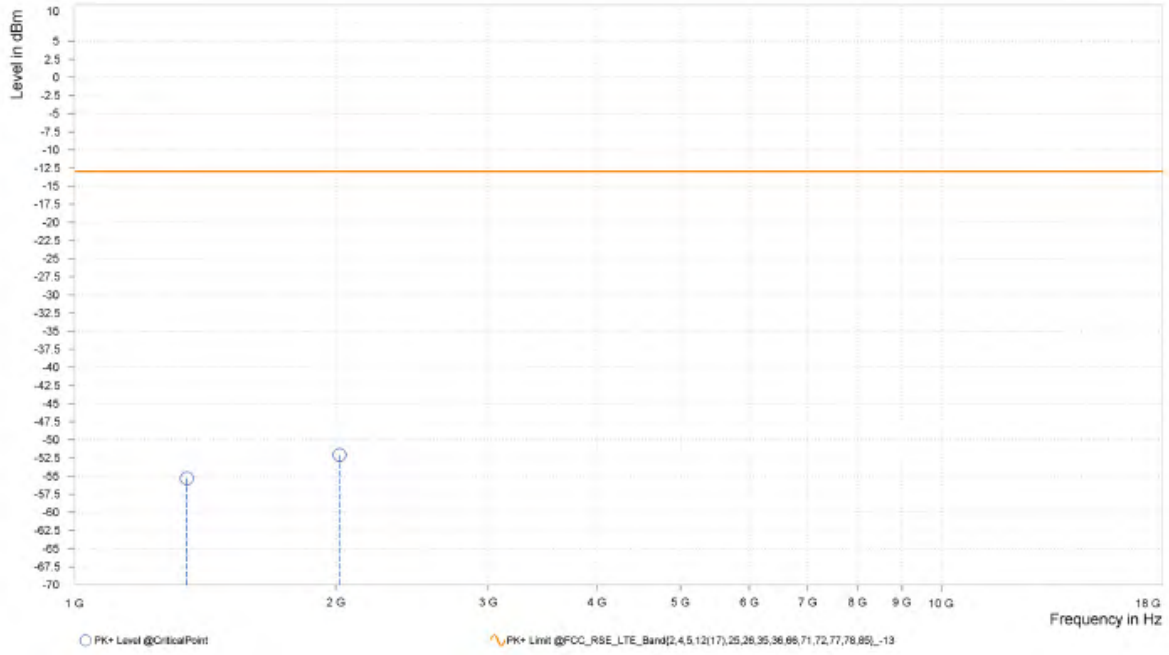
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,377.000	-54.83	-13.00	41.83	7.29	V	354.9	2.00
1	2,065.500	-52.80	-13.00	39.80	10.55	V	121.4	2.00



CHANNEL BANDWIDTH: 15MHz / QPSK

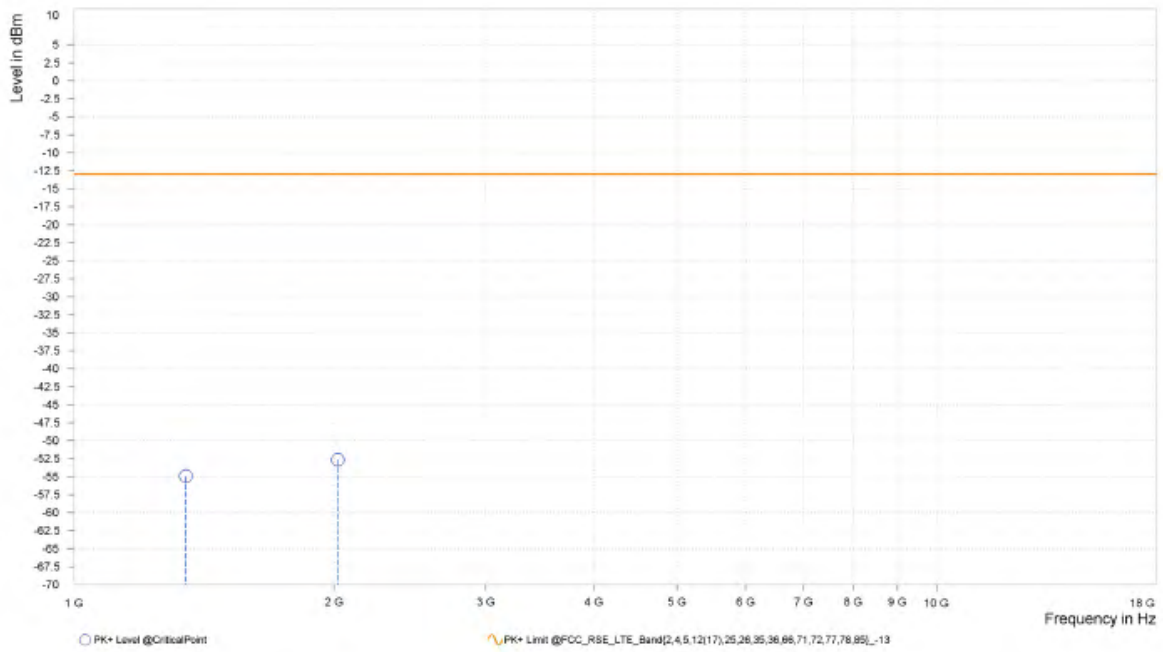
MODE	TX channel 133297	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,347.500	-55.34	-13.00	42.34	6.85	H	1	1.00
1	2,021.250	-52.10	-13.00	39.10	11.13	H	129.8	2.00



MODE	TX channel 133297	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,347.500	-54.93	-13.00	41.93	6.91	V	354.9	2.00
1	2,021.250	-52.64	-13.00	39.64	11.58	V	262.5	1.00

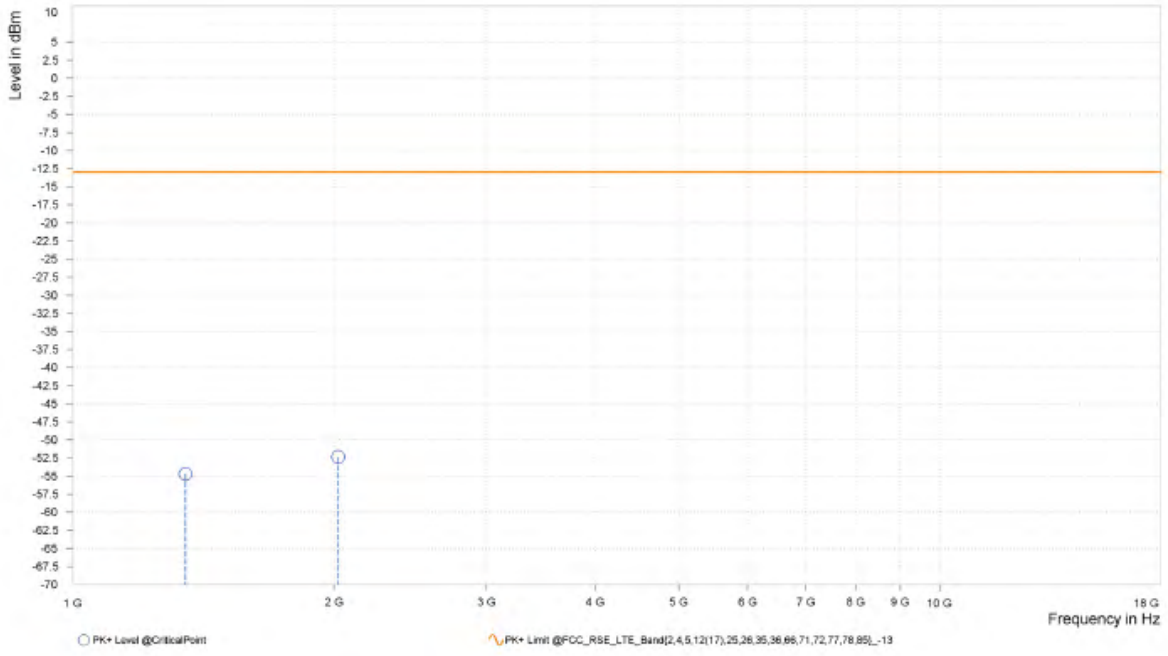


CHANNEL BANDWIDTH: 20MHz / QPSK

CH:133297

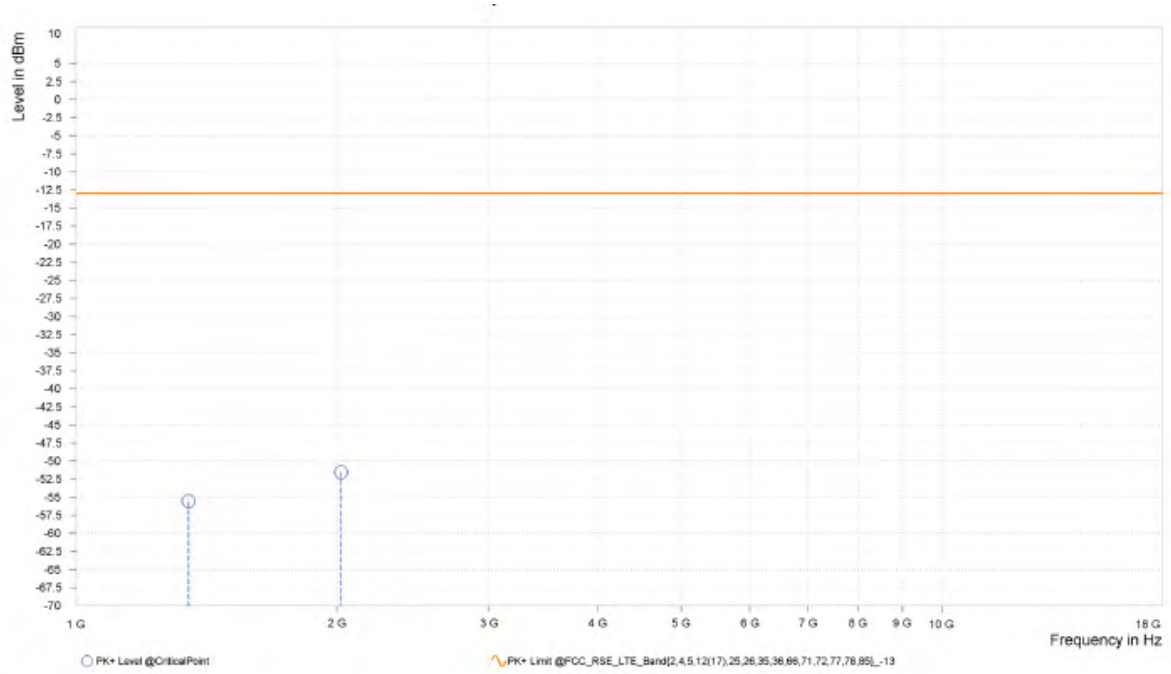
MODE	TX channel 133297	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,348.000	-54.69	-13.00	41.69	6.85	H	117.8	2.00
1	2,022.000	-52.35	-13.00	39.35	11.18	H	117.8	2.00



MODE	TX channel 133297	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

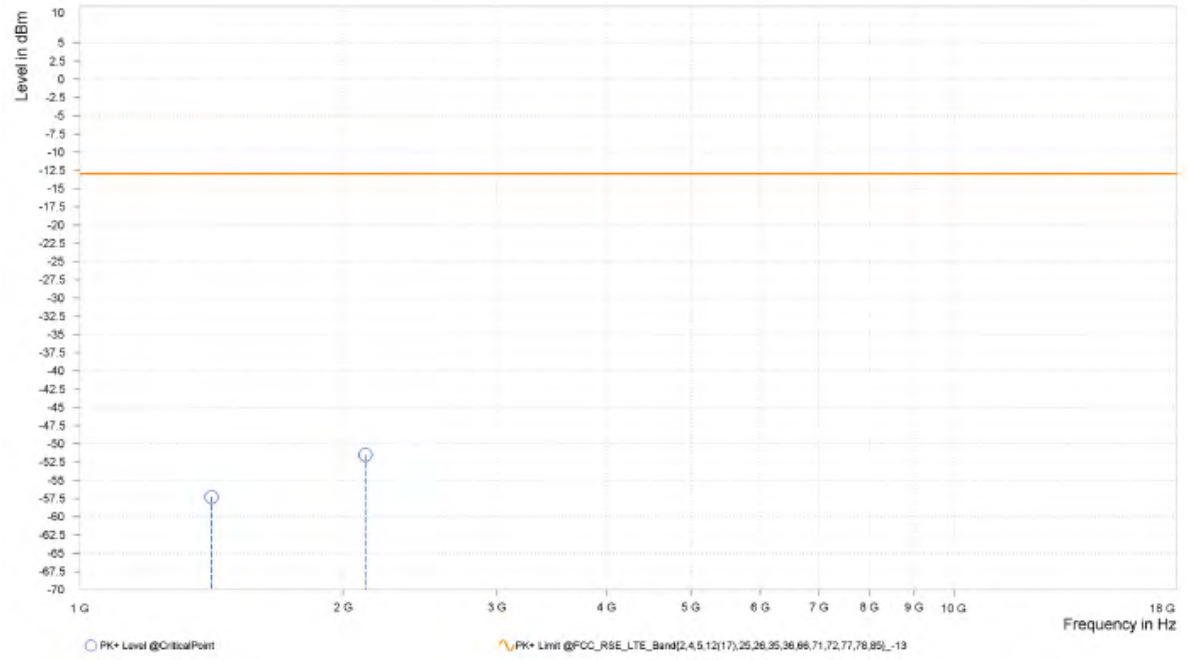
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,348.000	-55.55	-13.00	42.55	6.91	V	0.9	2.00
1	2,022.000	-51.54	-13.00	38.54	11.65	V	350.2	2.00



LTE Band 85
CHANNEL BANDWIDTH: 5MHz / QPSK

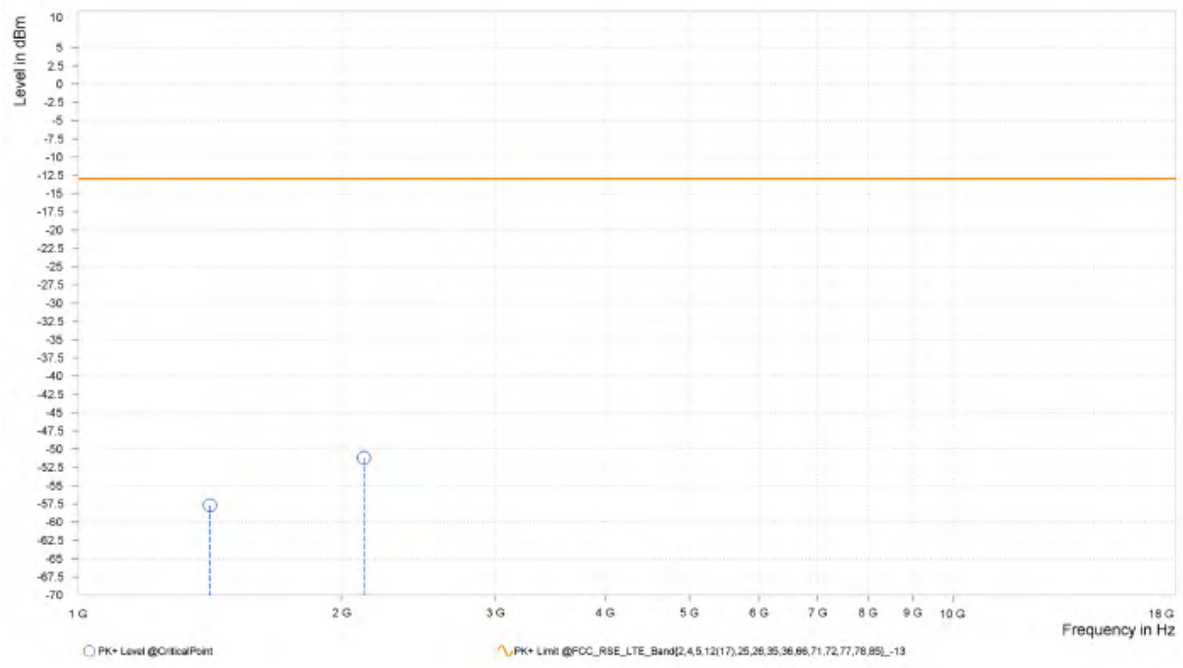
MODE	TX channel 134092	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,414.000	-57.31	-13.00	44.31	2.84	H	121.4	2.00
1	2,121.000	-51.51	-13.00	38.51	10.91	H	355.5	2.00



MODE	TX channel 134092	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,414.000	-57.70	-13.00	44.70	2.74	V	1	1.00
1	2,121.000	-51.17	-13.00	38.17	10.55	V	119	2.00

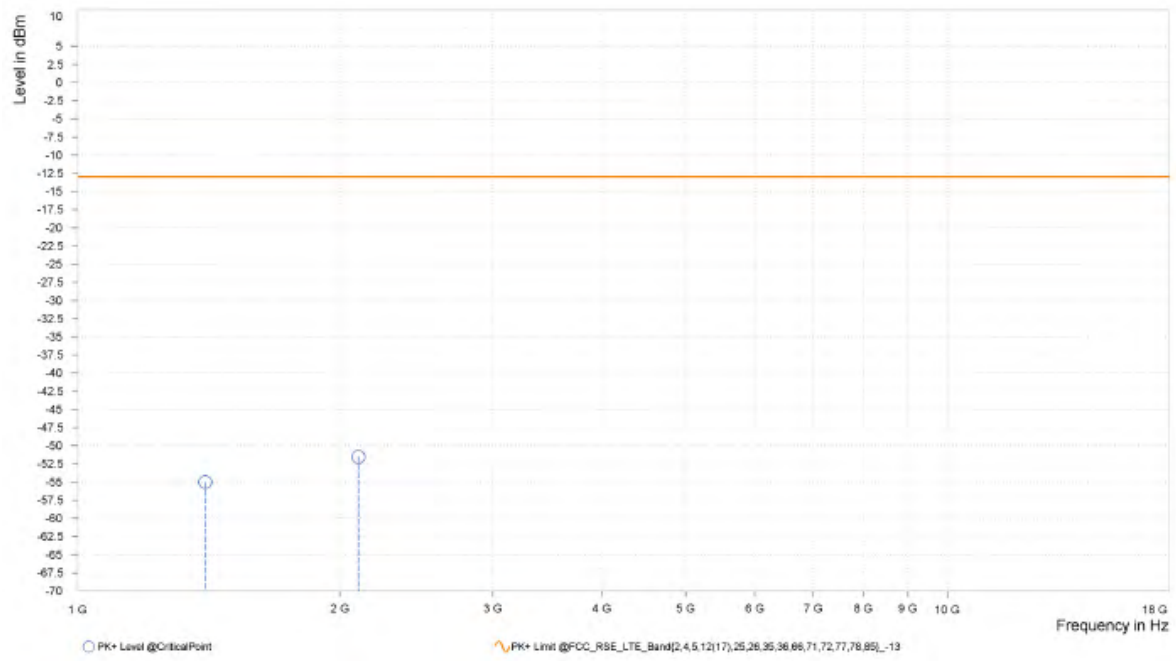


CHANNEL BANDWIDTH: 10MHz / QPSK

CH:134052

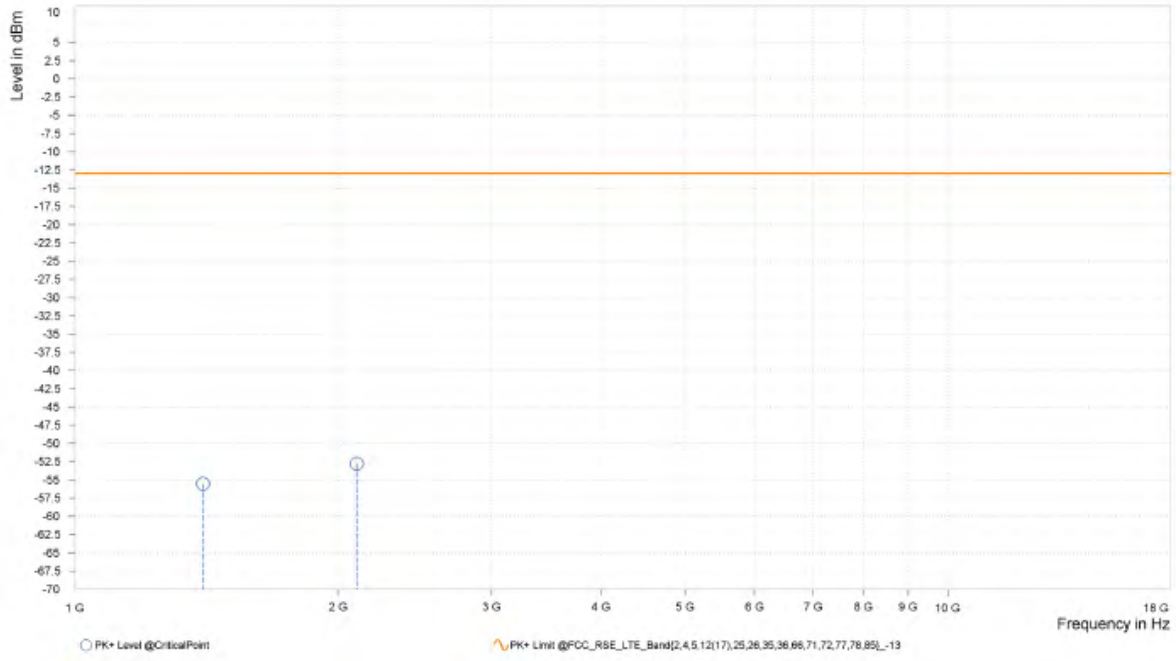
MODE	TX channel 134052	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,401.000	-55.02	-13.00	42.02	4.68	H	359	2.00
1	2,101.500	-51.54	-13.00	38.54	10.08	H	1	2.00



MODE	TX channel 134052	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

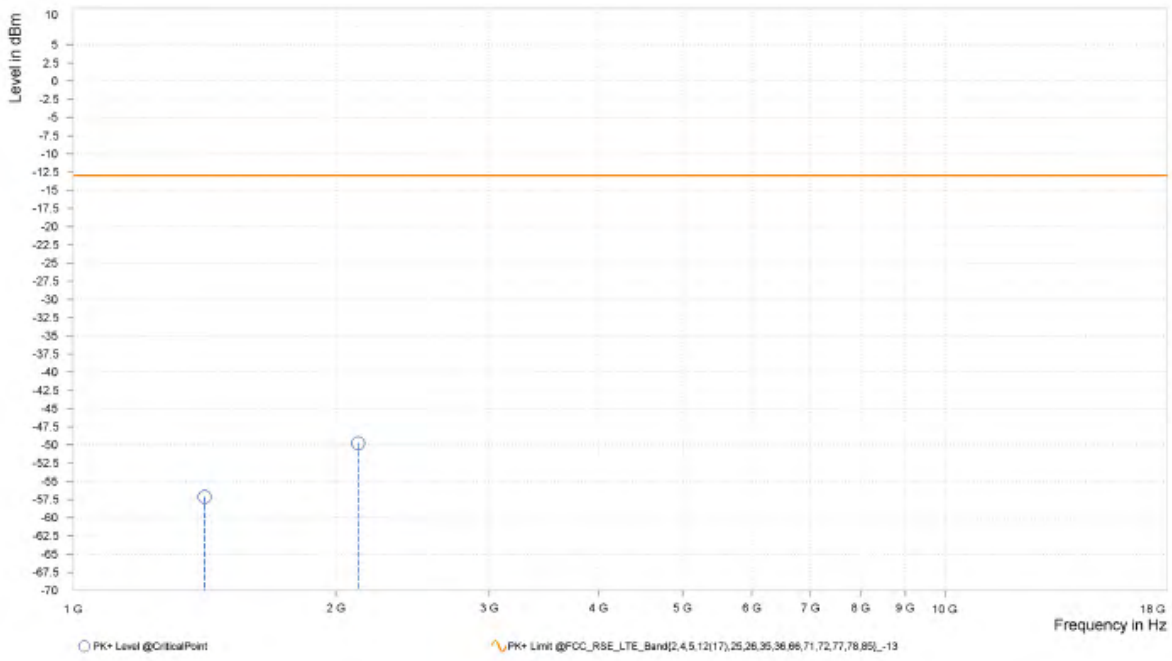
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,401.000	-55.55	-13.00	42.55	4.66	V	114.3	2.00
1	2,101.500	-52.79	-13.00	39.79	9.94	V	359	2.00



CH134092

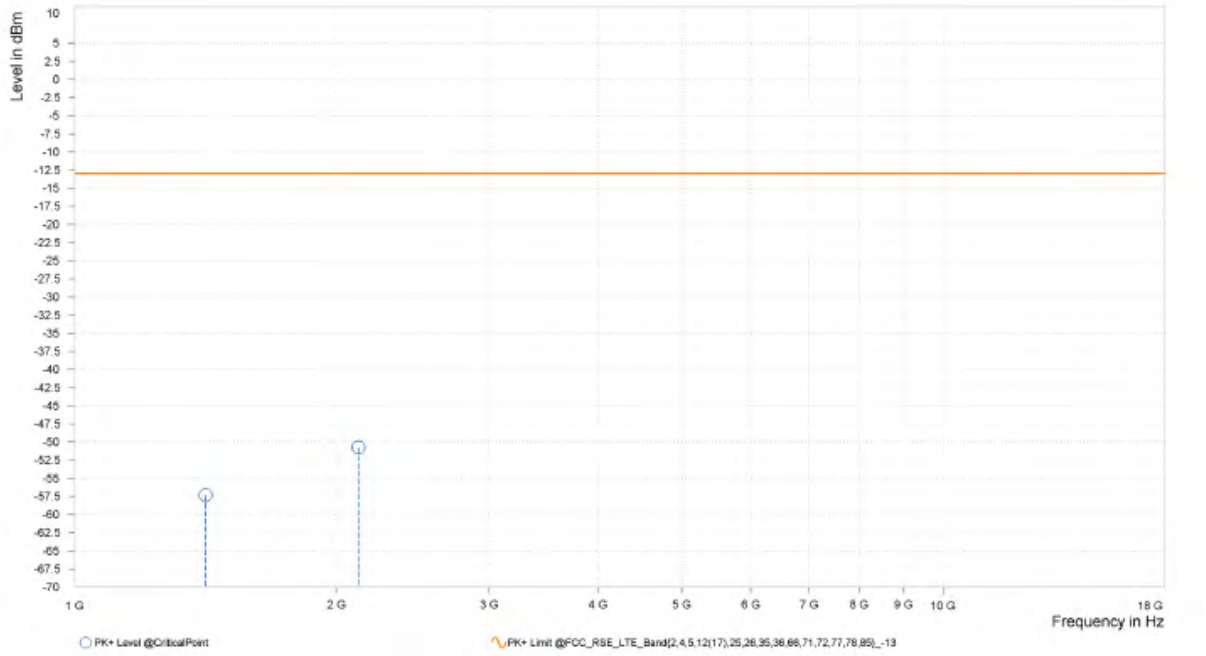
MODE	TX channel 134092	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,414.000	-57.14	-13.00	44.14	2.84	H	242.2	1.00
1	2,121.000	-49.75	-13.00	36.75	10.91	H	0.9	2.00



MODE	TX channel 134092	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

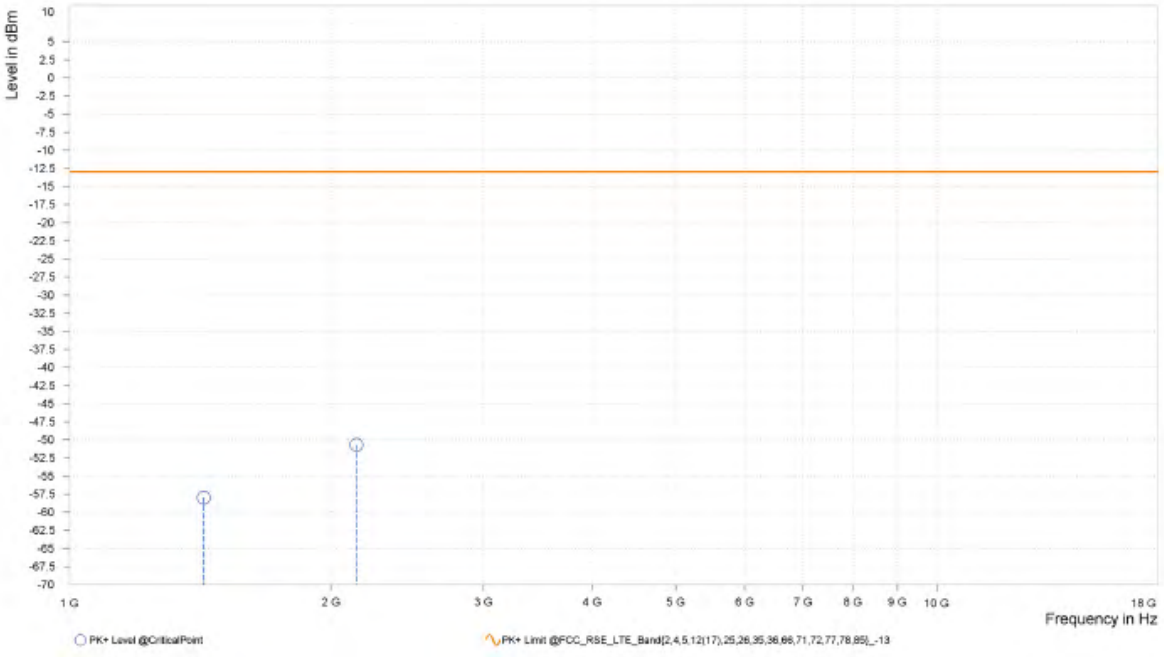
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,414.000	-57.33	-13.00	44.33	2.74	V	1	2.00
1	2,121.000	-50.76	-13.00	37.76	10.55	V	354.8	2.00



CH:134132

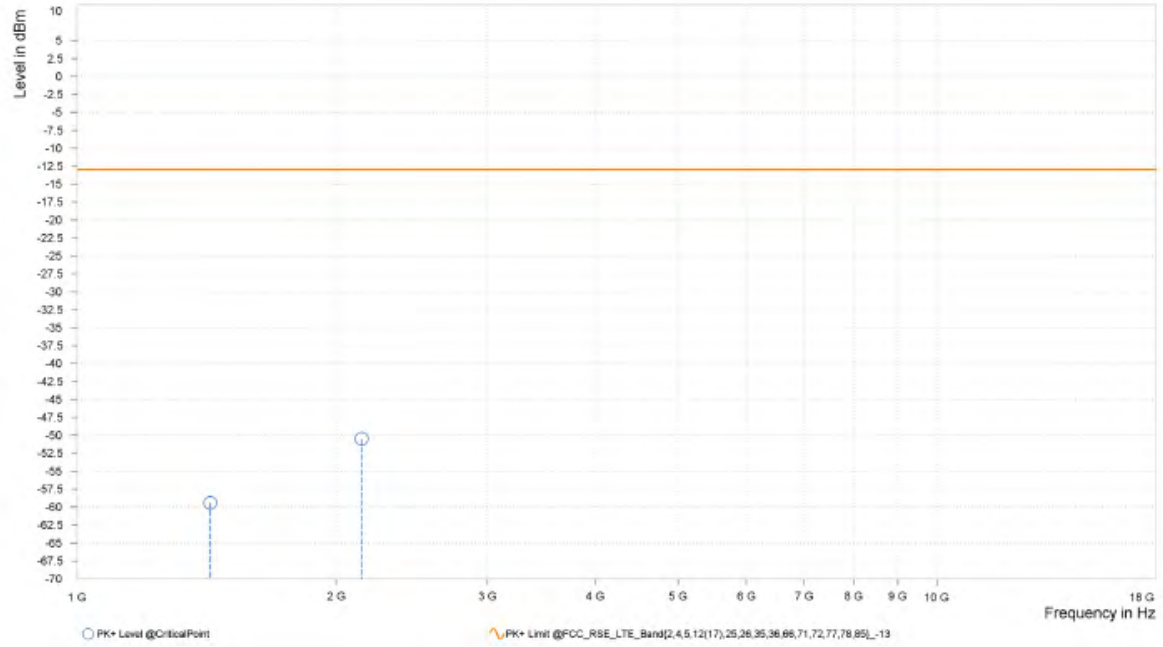
MODE	TX channel 134132	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,427.000	-57.99	-13.00	44.99	1.64	H	354.2	2.00
1	2,140.500	-50.69	-13.00	37.69	11.73	H	290	1.00



MODE	TX channel 134132	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,427.000	-59.42	-13.00	46.42	1.48	V	359	1.00
1	2,140.500	-50.50	-13.00	37.50	11.15	V	359	2.00



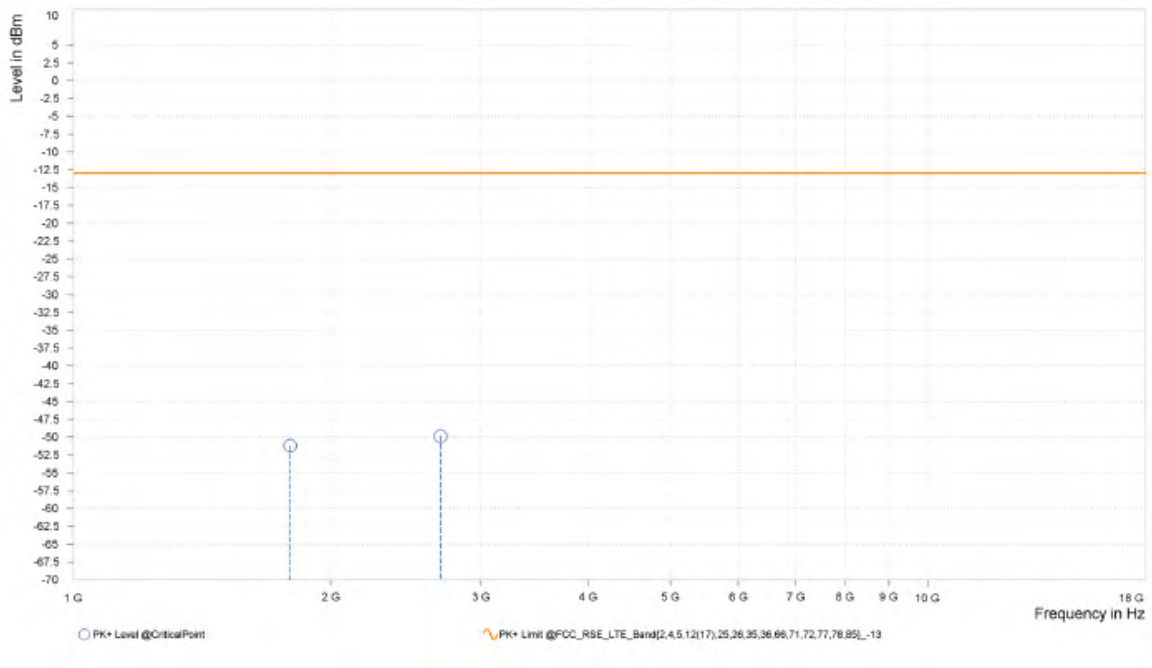
LTE BAND 8

CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH 21640

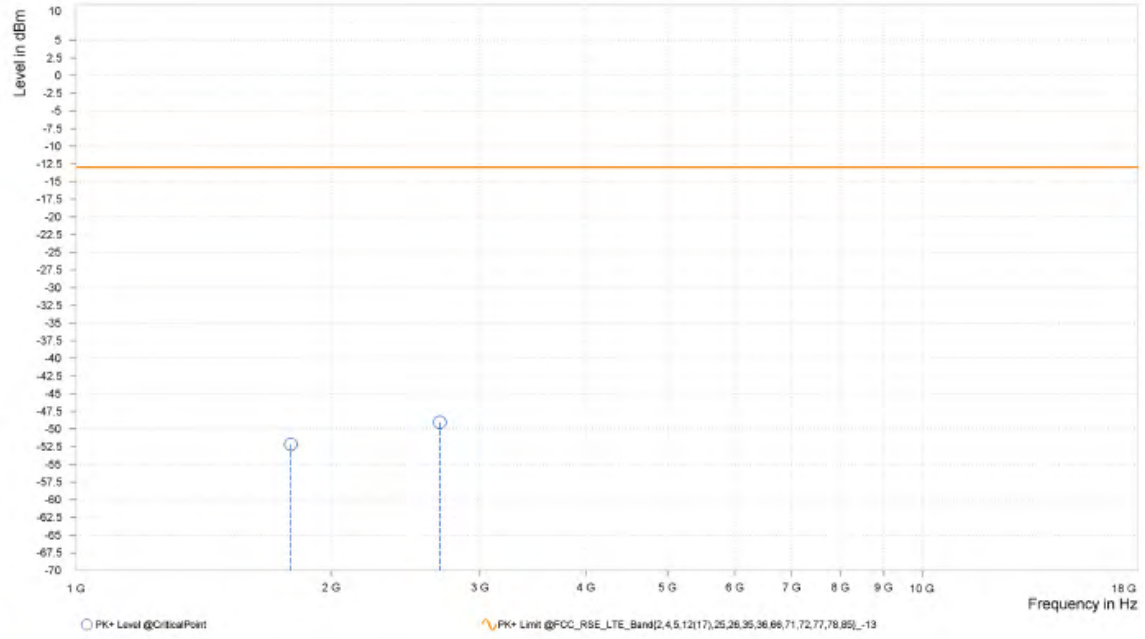
MODE	TX channel 21640	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,797.000	-51.17	-13.00	38.17	9.16	H	125	2.00
1	2,695.000	-49.89	-13.00	36.89	13.32	H	355.5	2.00



MODE	TX channel 21640	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

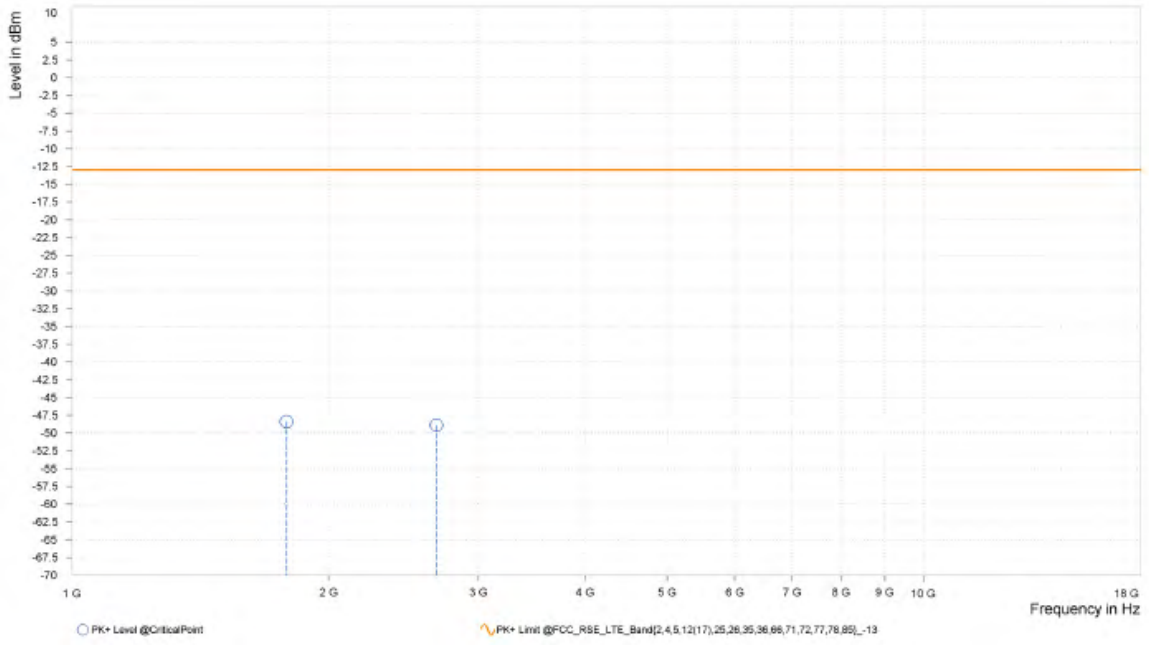
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,797.000	-52.17	-13.00	39.17	9.19	V	1.9	2.00
1	2,695.000	-49.07	-13.00	36.07	13.13	V	359	2.00



CHANNEL BANDWIDTH: 3MHz / QPSK
CH21640

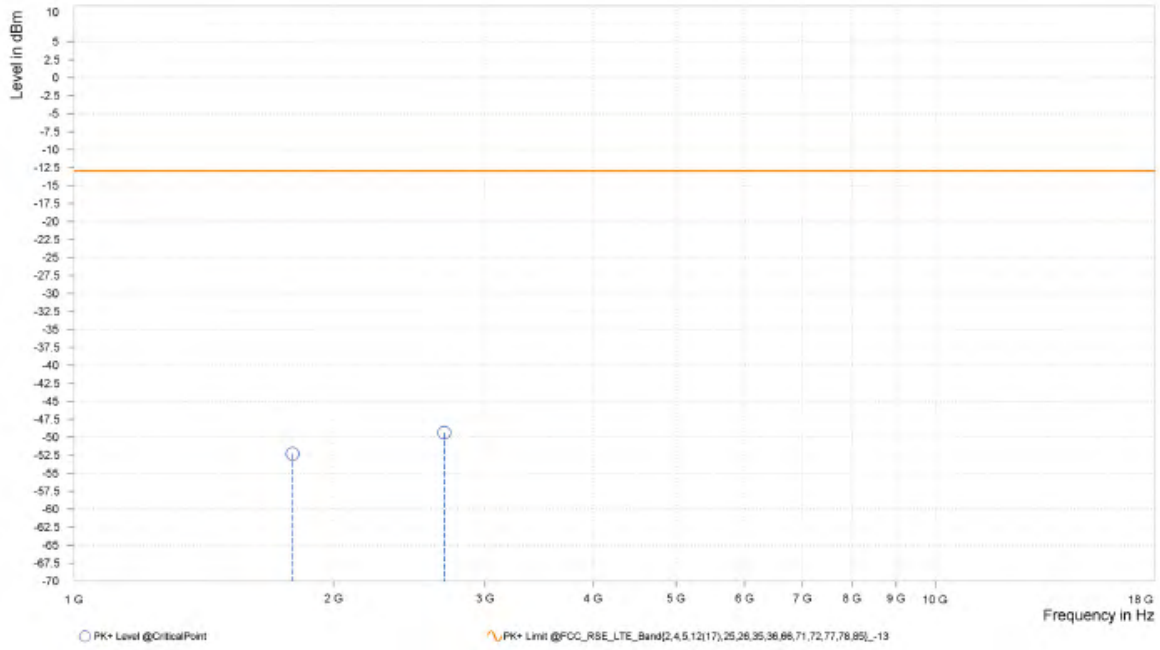
MODE	TX channel 21640	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,795.000	-48.38	-13.00	35.38	9.19	H	5.2	1.00
1	2,693.000	-48.89	-13.00	35.89	13.54	H	123.8	2.00



MODE	TX channel 21640	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

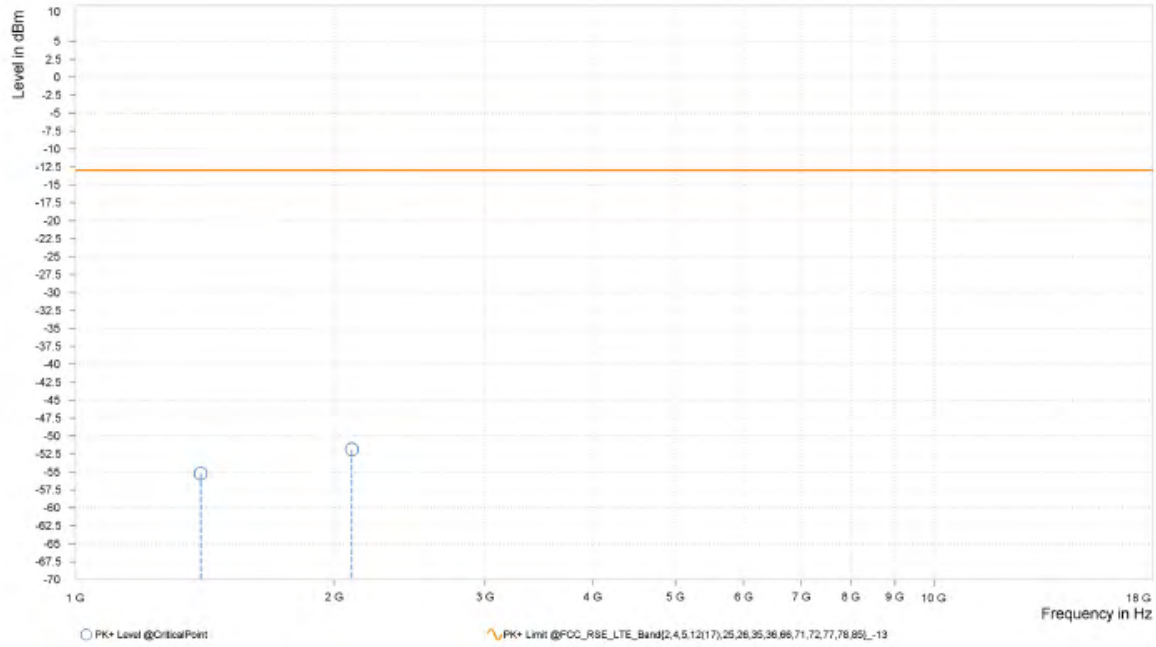
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,795.000	-52.30	-13.00	39.30	9.17	V	359	2.00
1	2,693.000	-49.38	-13.00	36.38	13.17	V	359	1.00



NB-IOT LTE Band 12
CHANNEL BANDWIDTH: QPSK

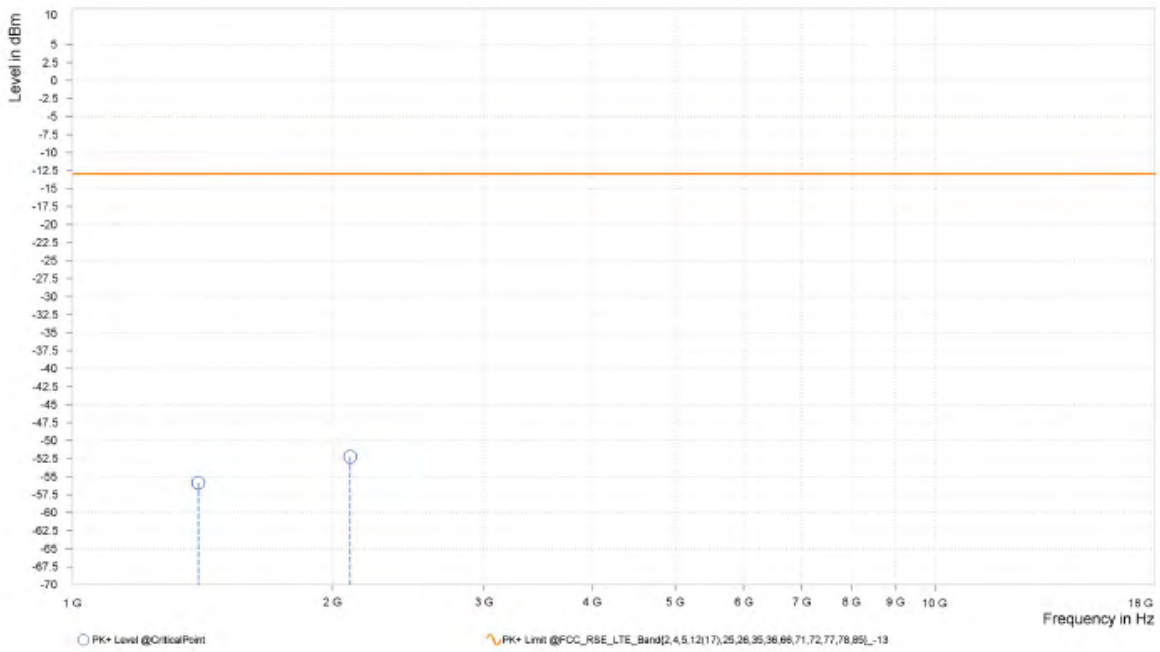
MODE	TX channel 23012	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,398.200	-55.24	-13.00	42.24	5.11	H	354.9	2.00
1	2,097.300	-51.87	-13.00	38.87	9.91	H	1	1.00



MODE	TX channel 23012	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

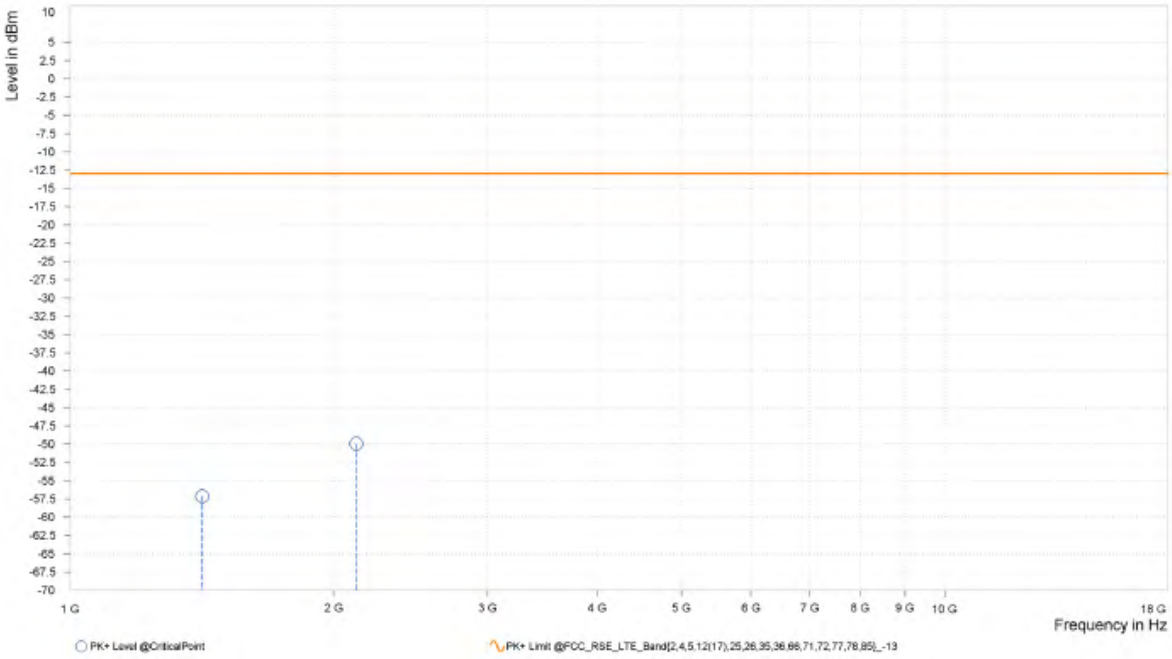
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,398.200	-55.85	-13.00	42.85	5.11	V	9	1.00
1	2,097.300	-52.26	-13.00	39.26	9.81	V	1	1.00



CH 23095

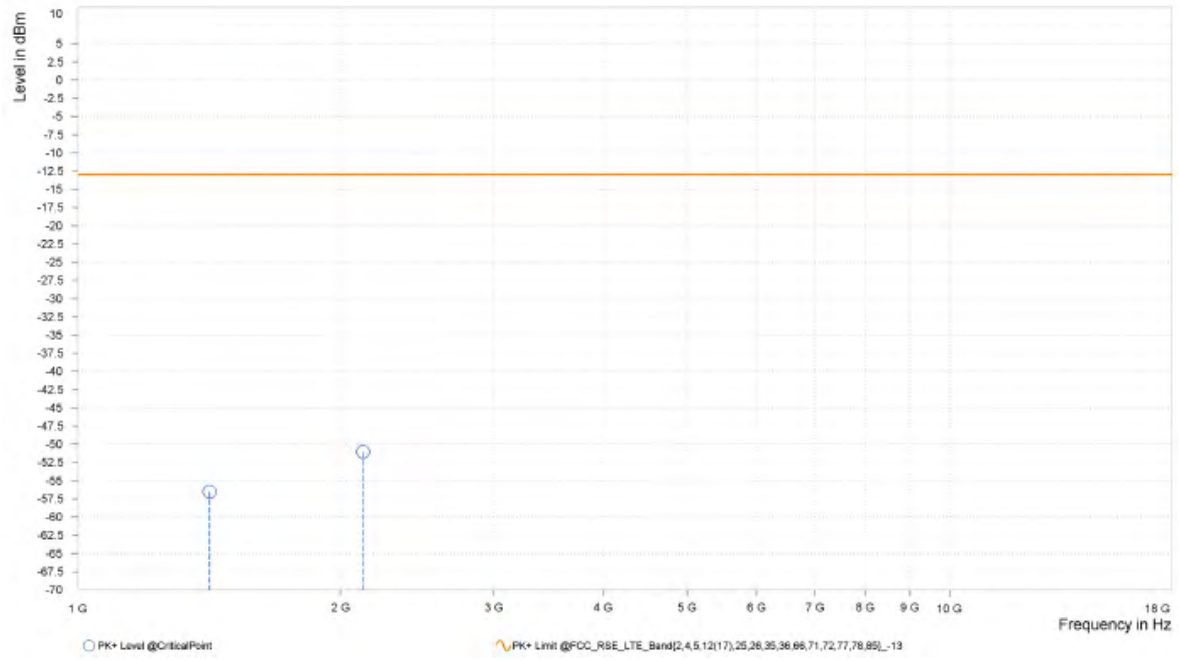
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,415.000	-57.13	-13.00	44.13	2.70	H	5	1.00
1	2,122.500	-49.96	-13.00	36.96	10.97	H	5	1.00



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

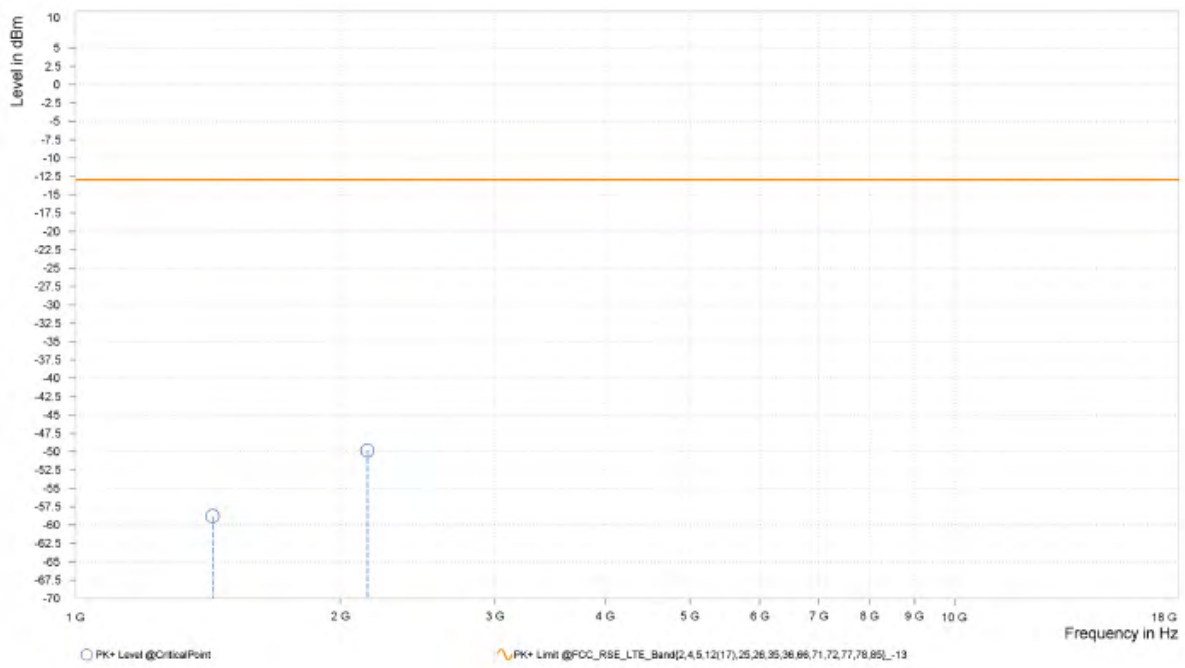
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,415.000	-56.52	-13.00	43.52	2.59	V	359	2.00
1	2,122.500	-51.07	-13.00	38.07	10.59	V	358.2	1.00



CH23178

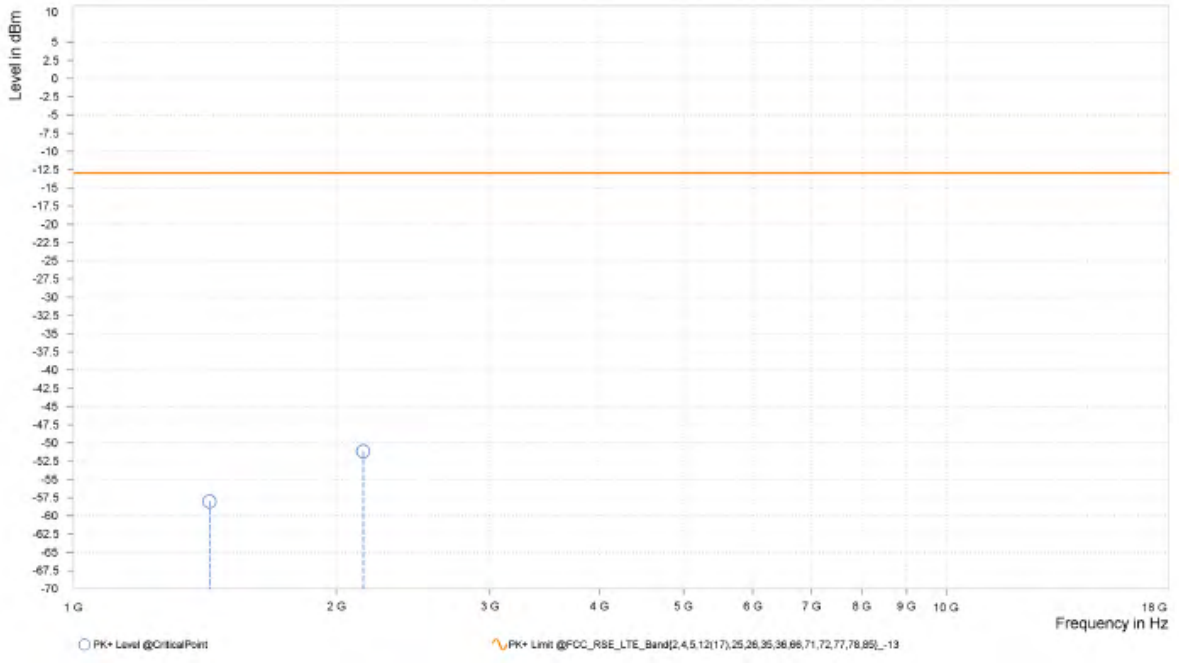
MODE	TX channel 23178	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,431.800	-58.81	-13.00	45.81	2.28	H	2.6	2.00
1	2,147.700	-49.84	-13.00	36.84	12.02	H	359	2.00



MODE	TX channel 23178	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

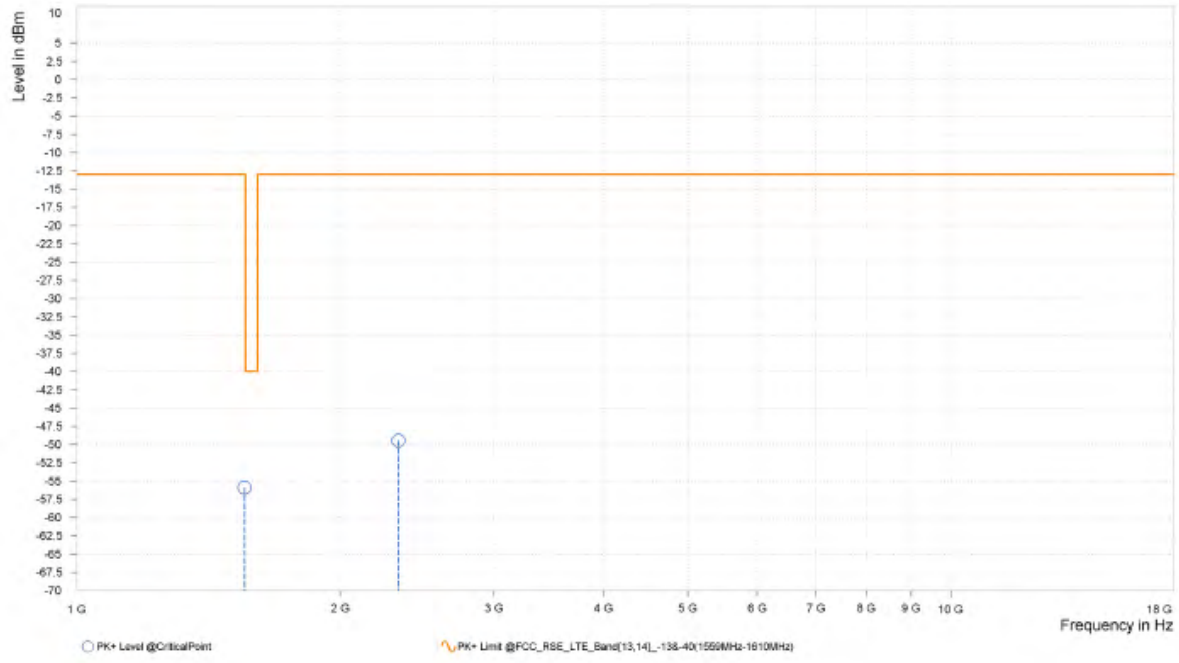
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,431.800	-58.04	-13.00	45.04	2.15	V	255.3	1.00
1	2,147.700	-51.13	-13.00	38.13	11.36	V	359	1.00



NB-IOT LTE Band 13
CHANNEL BANDWIDTH: QPSK

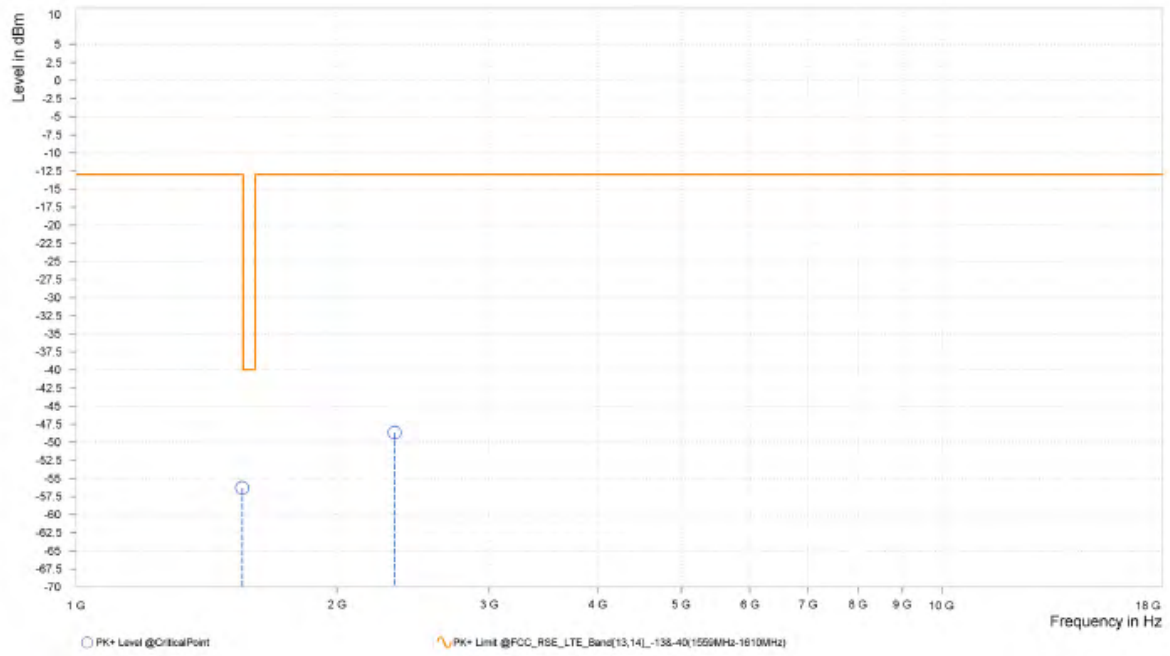
MODE	TX channel 23182	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,554.200	-55.92	-13.00	42.92	5.28	H	357.4	1.00
1	2,331.300	-49.45	-13.00	36.45	13.06	H	354.9	2.00



MODE	TX channel 23182	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

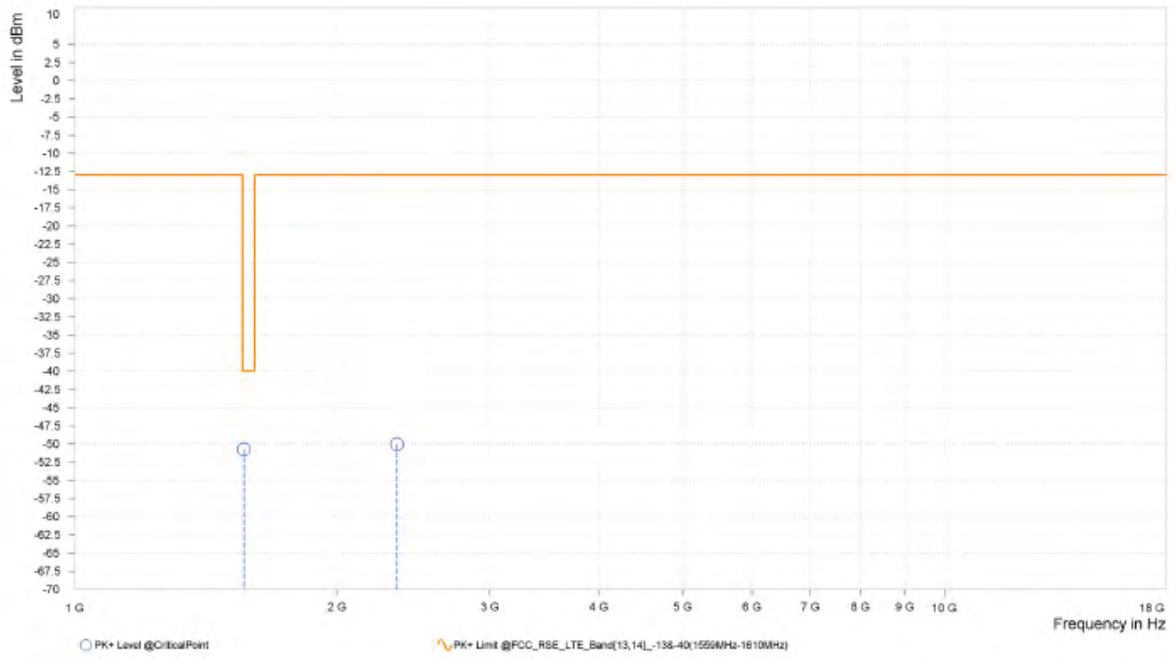
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,554.200	-56.32	-13.00	43.32	4.91	V	1	1.00
1	2,331.300	-48.67	-13.00	35.67	12.57	V	243.4	1.00



CH 23230

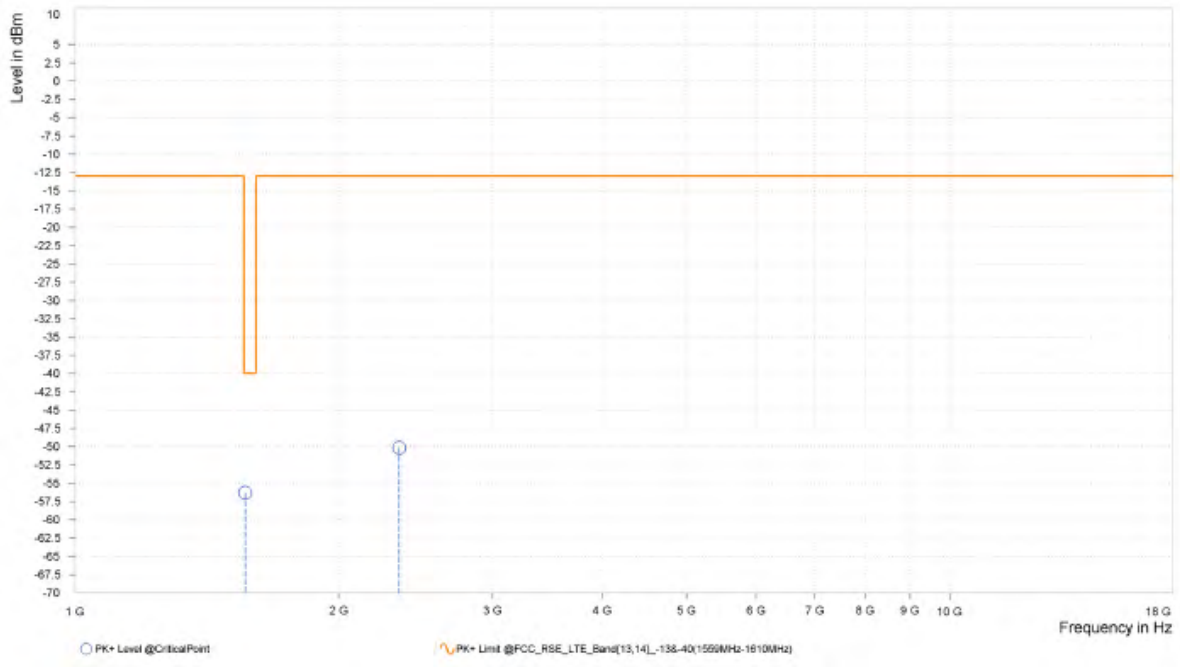
MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,564.000	-50.74	-40.00	10.74	5.33	H	359	2.00
1	2,346.000	-50.02	-13.00	37.02	13.06	H	134.6	2.00



MODE	TX channel 23230	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

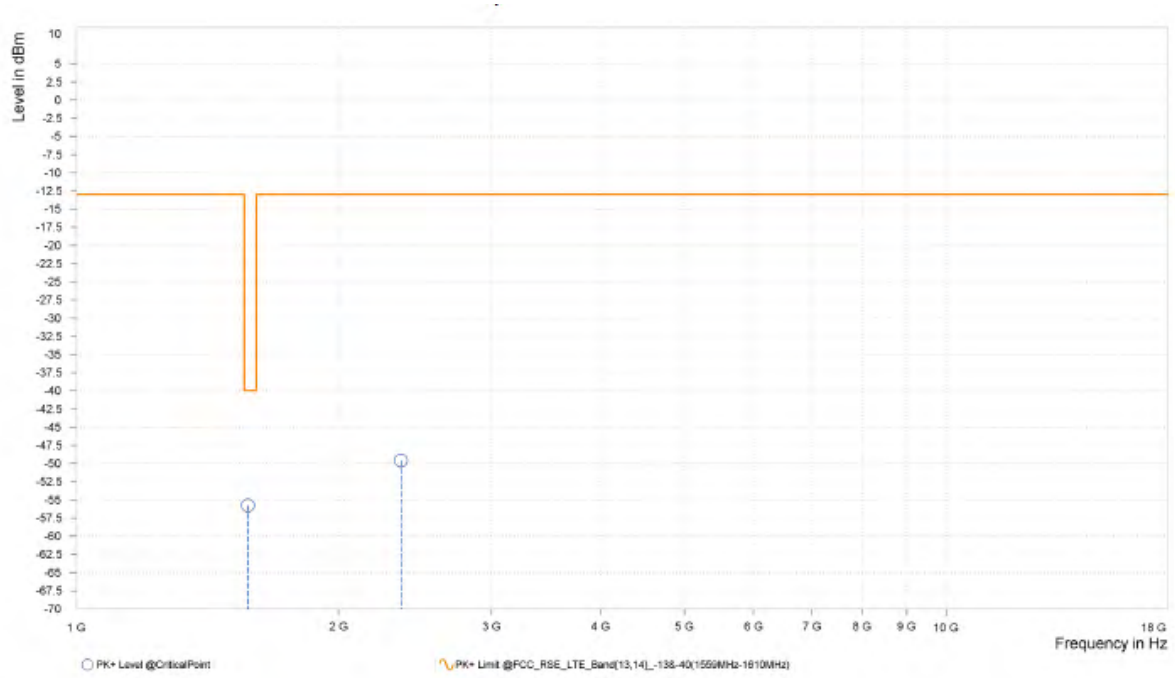
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,564.000	-56.32	-40.00	16.32	5.04	V	359	2.00
1	2,346.000	-50.16	-13.00	37.16	12.66	V	12.9	1.00



CH23178

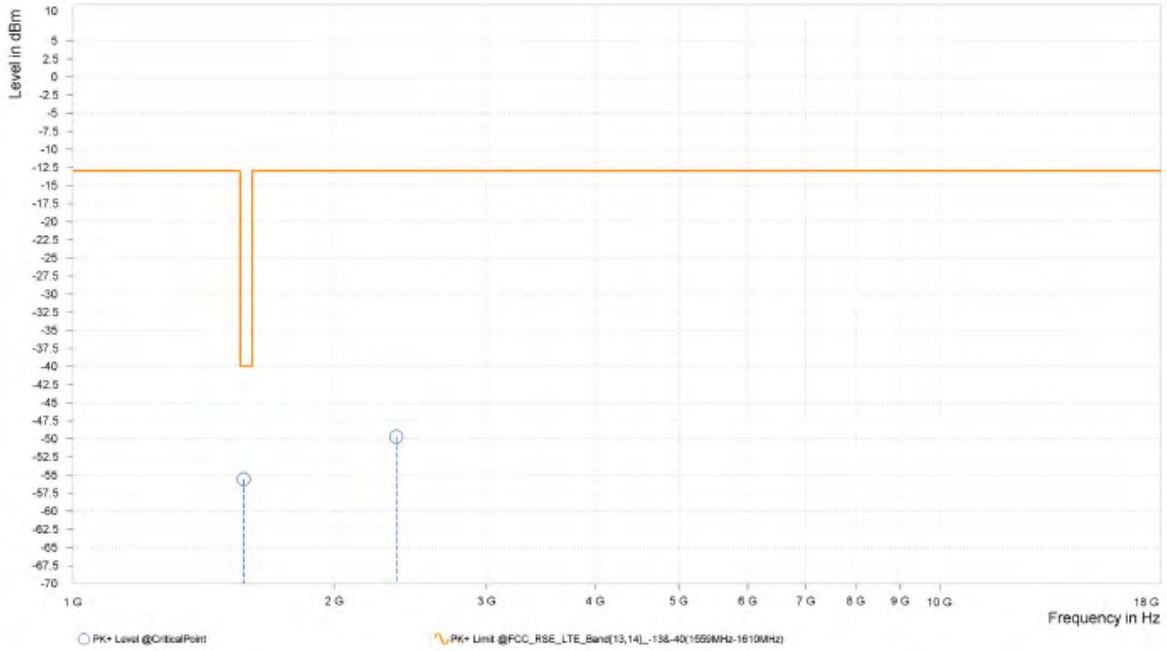
MODE	TX channel 23278	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,573.800	-55.77	-40.00	15.77	5.30	H	134.6	2.00
1	2,360.700	-49.58	-13.00	36.58	12.98	H	354.9	2.00



MODE	TX channel 23278	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

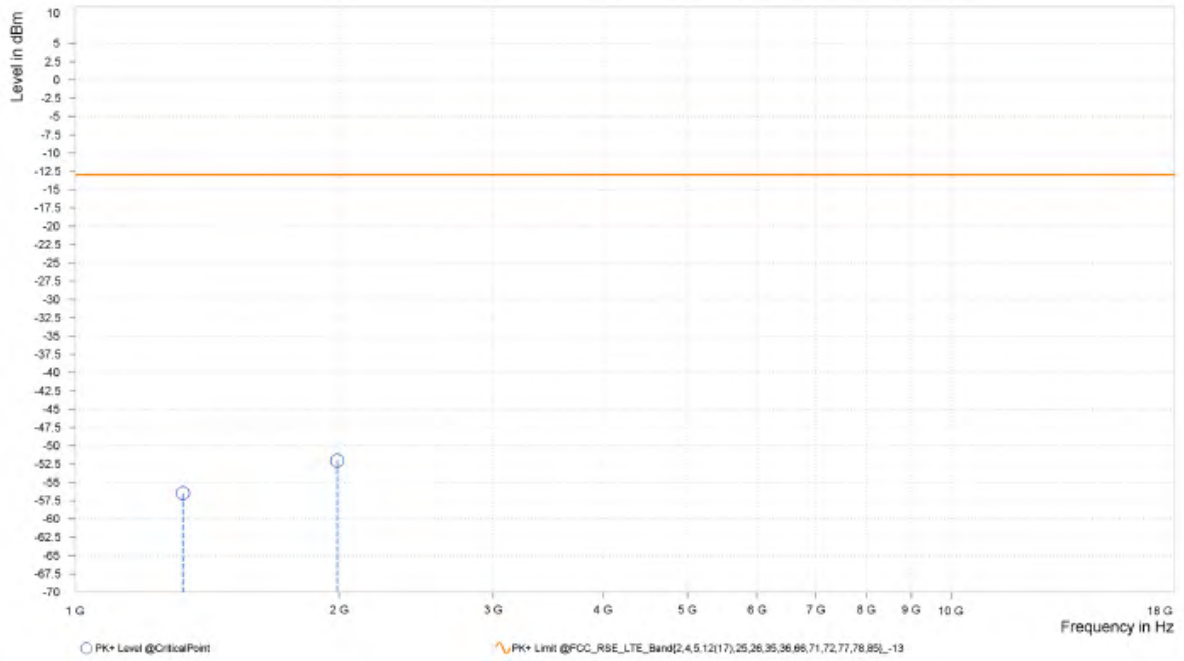
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,573.800	-55.58	-40.00	15.58	5.09	V	2.3	2.00
1	2,360.700	-49.73	-13.00	36.73	12.65	V	2.3	2.00



NB-IOT LTE Band 71
CHANNEL BANDWIDTH: QPSK
CH 133124

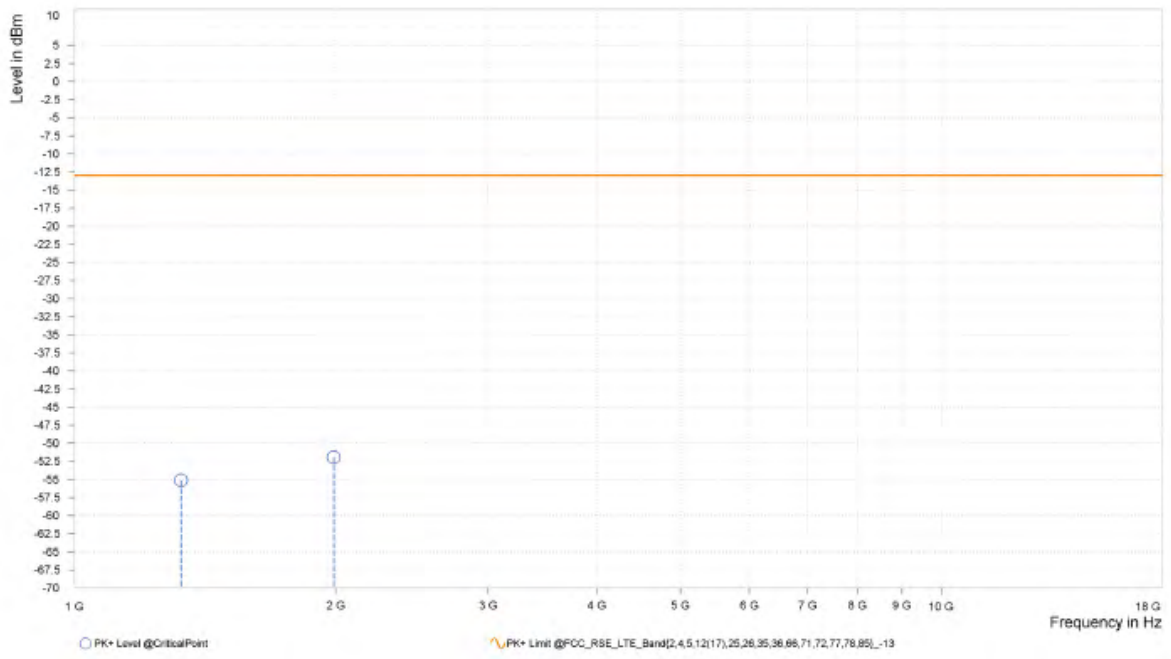
MODE	TX channel 133124	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,326.200	-56.50	-13.00	43.50	4.30	H	1	1.00
1	1,989.300	-52.02	-13.00	39.02	9.53	H	1.4	2.00



MODE	TX channel 133124	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

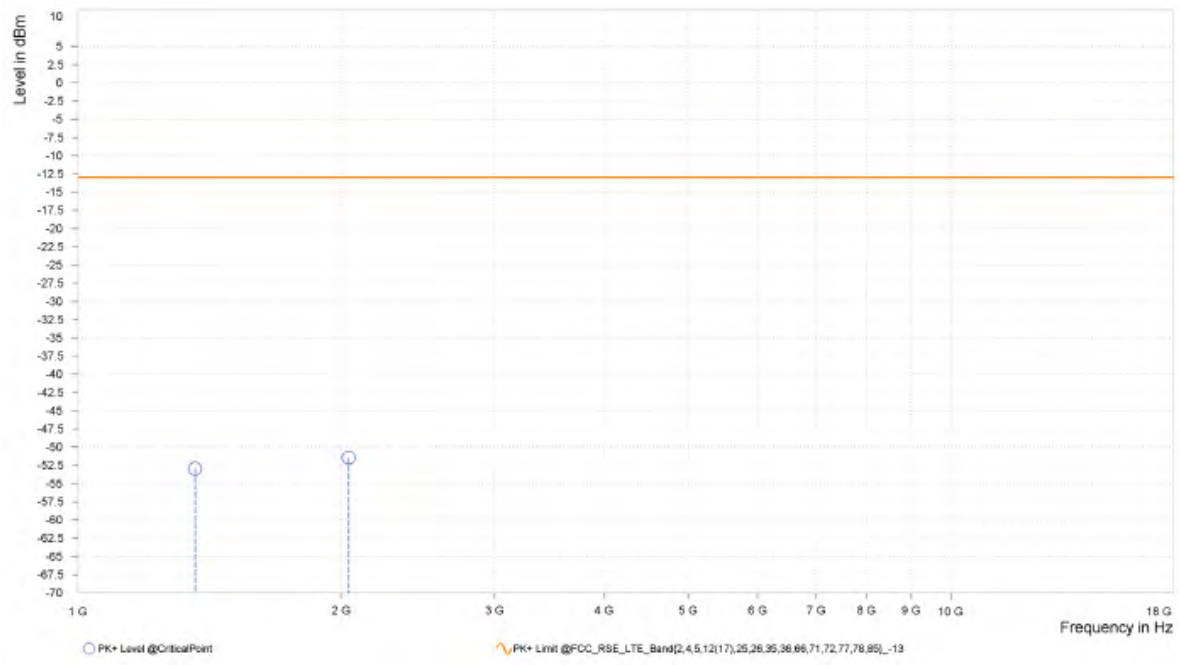
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,326.200	-55.11	-13.00	42.11	4.37	V	3.6	1.00
1	1,989.500	-51.97	-13.00	38.97	9.47	V	357.5	1.00



CH 133297

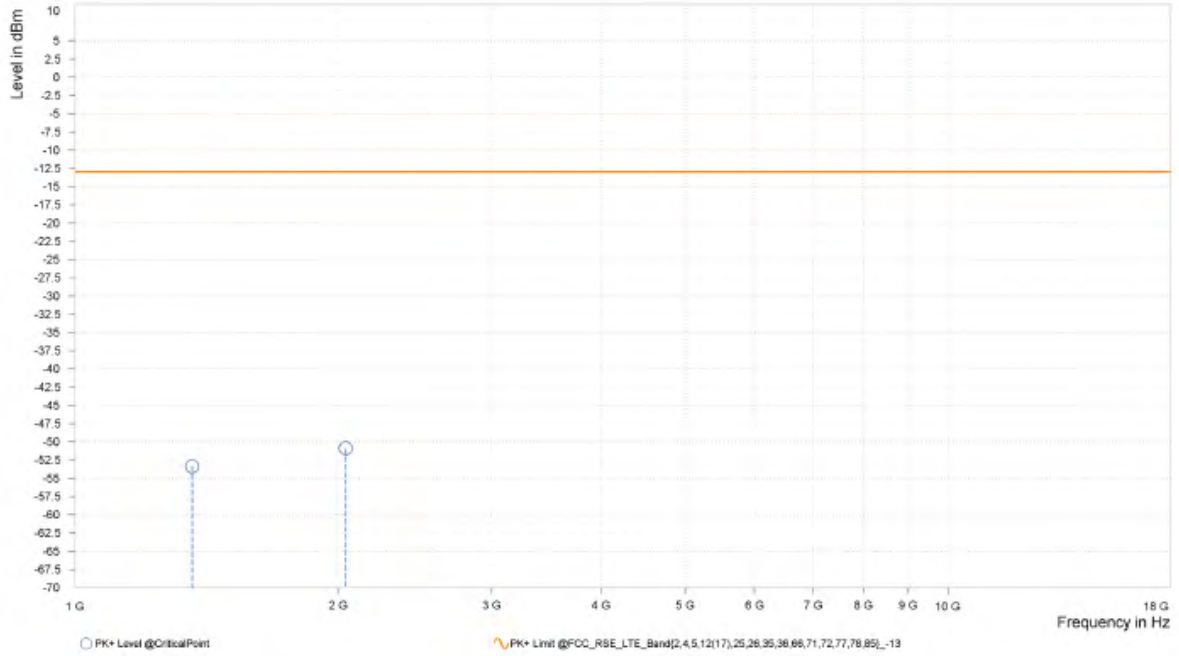
MODE	TX channel 133297	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,361.000	-52.97	-13.00	39.97	7.01	H	354.9	2.00
1	2,041.500	-51.46	-13.00	38.46	11.14	H	134.6	2.00



MODE	TX channel 133297	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

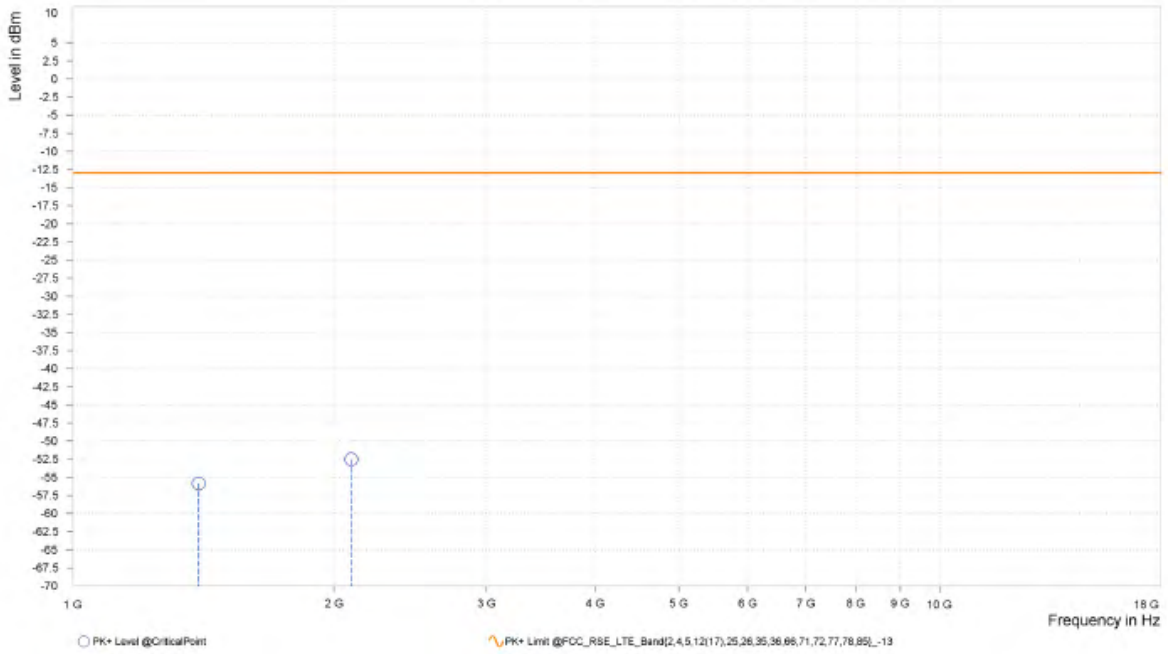
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,361.000	-53.36	-13.00	40.36	7.09	V	2.5	2.00
1	2,041.500	-50.88	-13.00	37.88	11.62	V	1	1.00



CH 133470

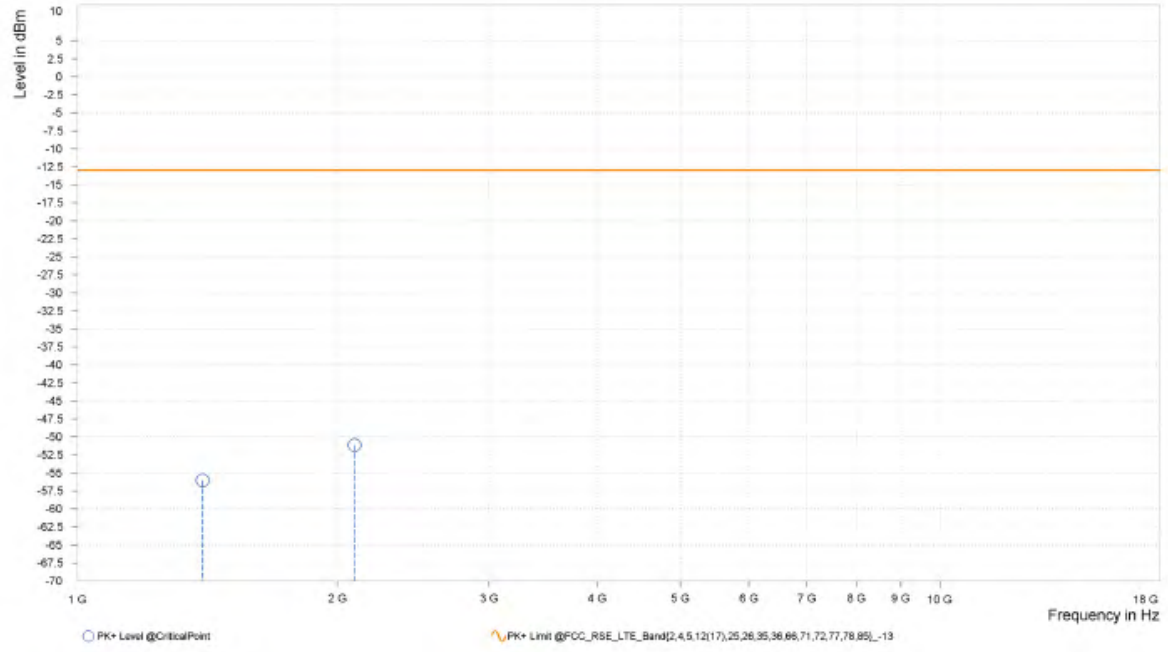
MODE	TX channel 133470	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,395.800	-55.84	-13.00	42.84	5.39	H	5.1	1.00
1	2,093.700	-52.50	-13.00	39.50	9.74	H	354.9	2.00



MODE	TX channel 133470	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

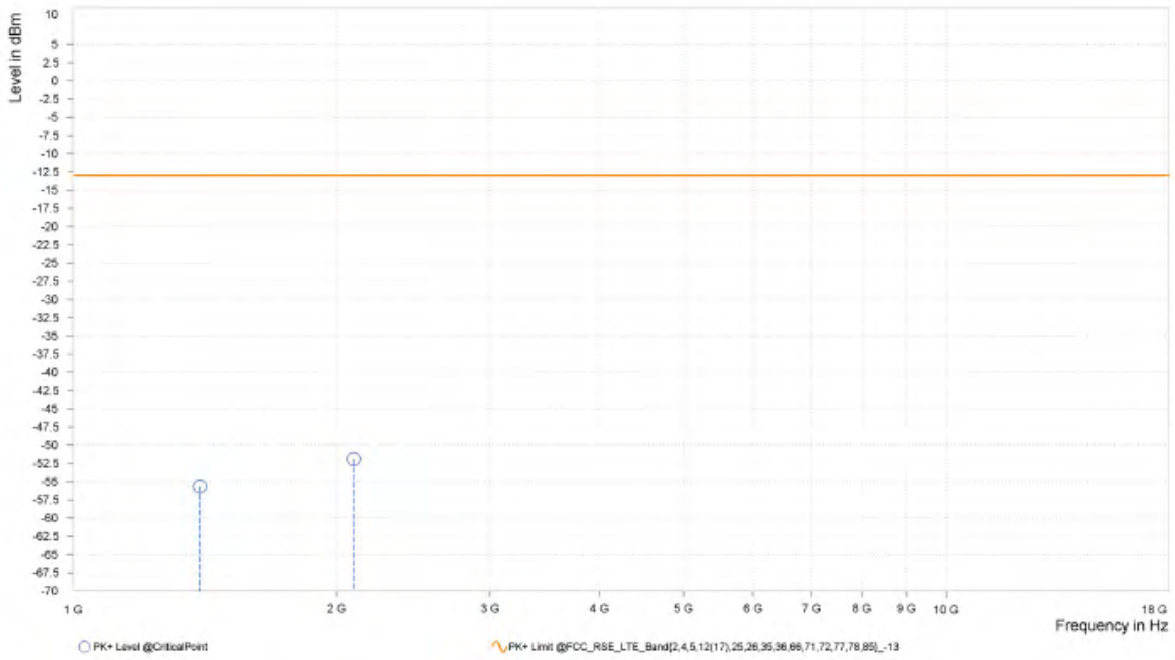
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,395.800	-56.04	-13.00	43.04	5.41	V	133.4	2.00
1	2,093.700	-51.12	-13.00	38.12	9.69	V	359	2.00



NB-IOT LTE Band 85
CHANNEL BANDWIDTH: QPSK
CH 134004

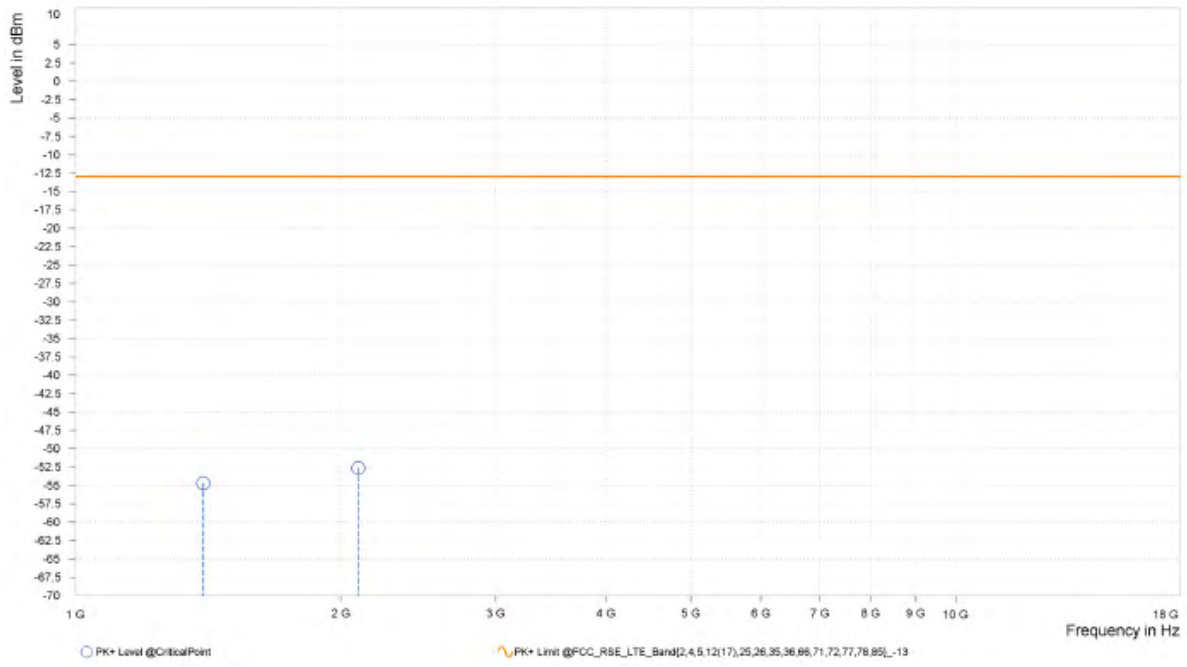
MODE	TX channel 134004	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,396.400	-55.66	-13.00	42.66	5.32	H	126.2	2.00
1	2,094.600	-51.89	-13.00	38.89	9.78	H	4.5	1.00



MODE	TX channel 134004	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

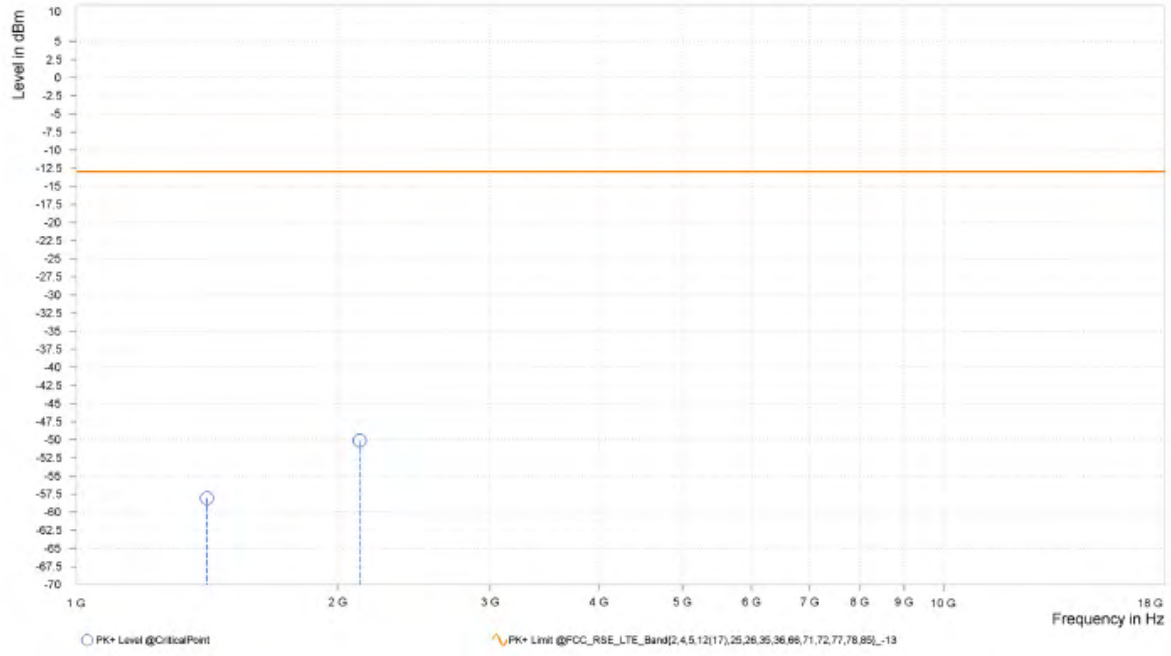
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,396.400	-54.72	-13.00	41.72	5.33	V	1	1.00
1	2,094.600	-52.65	-13.00	39.65	9.72	V	359.1	1.00



CH 134092

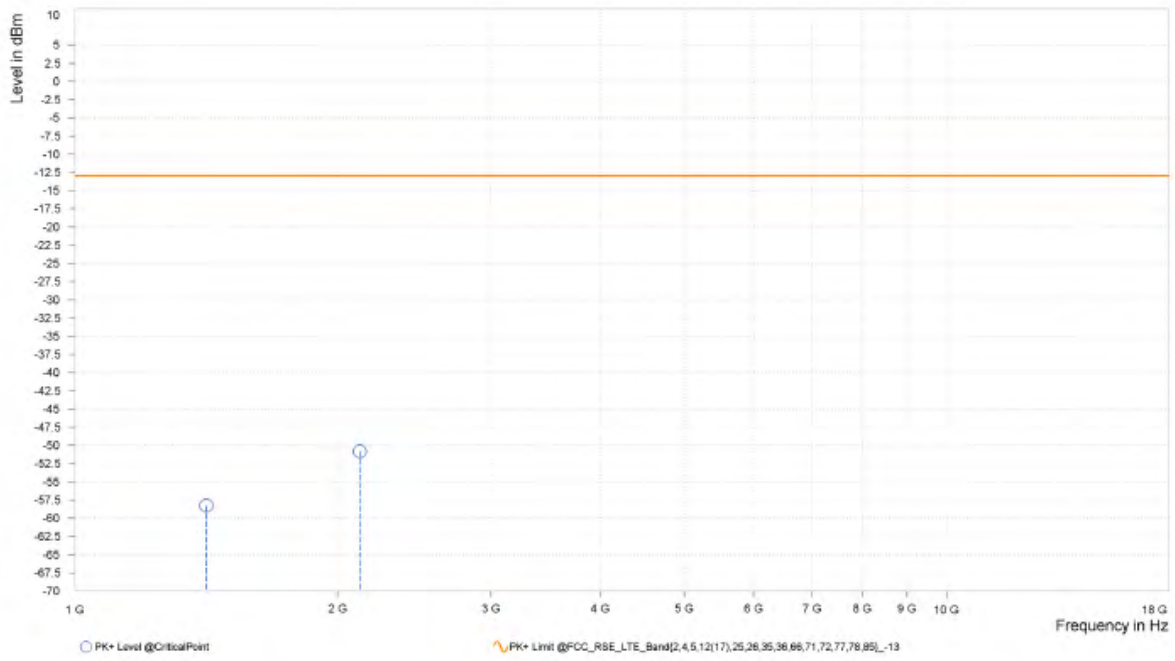
MODE	TX channel 134092	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,414.000	-58.07	-13.00	45.07	2.84	H	128.6	2.00
1	2,121.000	-50.13	-13.00	37.13	10.91	H	354.8	2.00



MODE	TX channel 134092	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

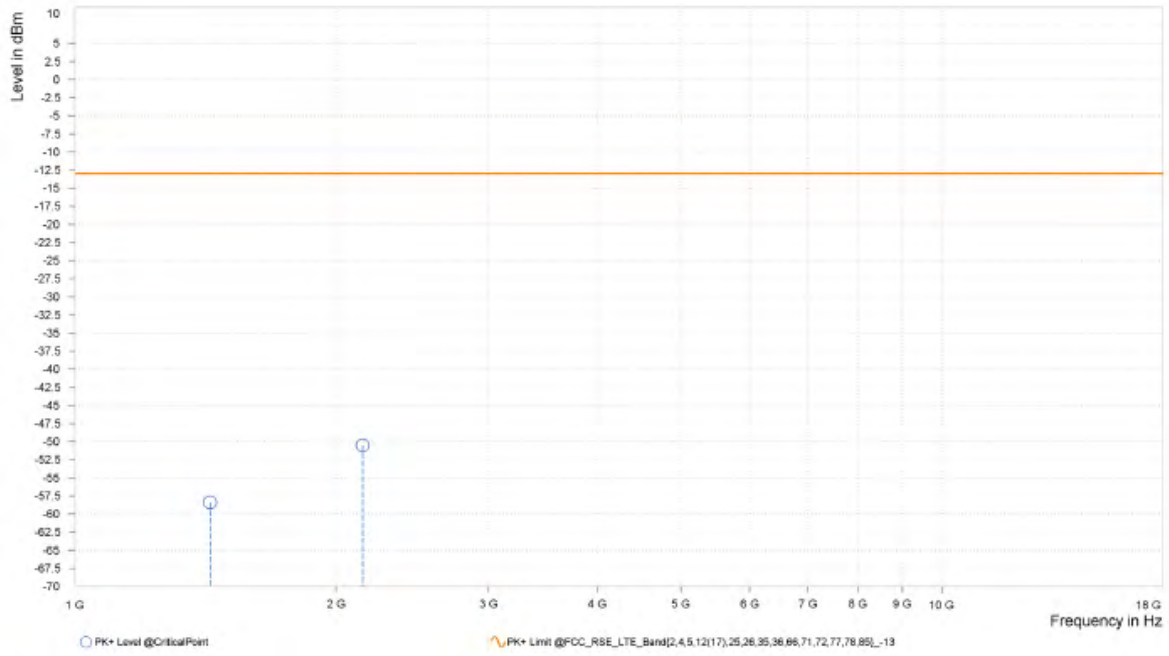
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,414.000	-58.27	-13.00	45.27	2.74	V	10.9	1.00
1	2,121.000	-50.83	-13.00	37.83	10.55	V	129.8	2.00



CH 134180

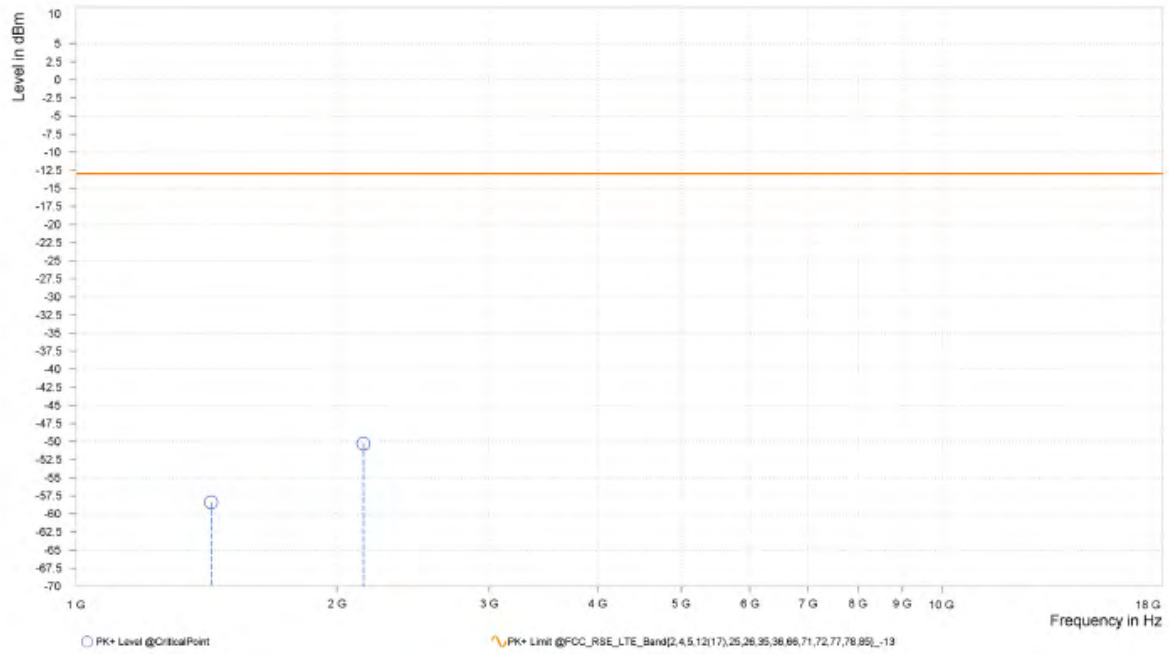
MODE	TX channel 134180	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,431.600	-58.40	-13.00	45.40	2.22	H	358.2	1.00
1	2,147.400	-50.51	-13.00	37.51	12.02	H	1.8	2.00



MODE	TX channel 134180	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

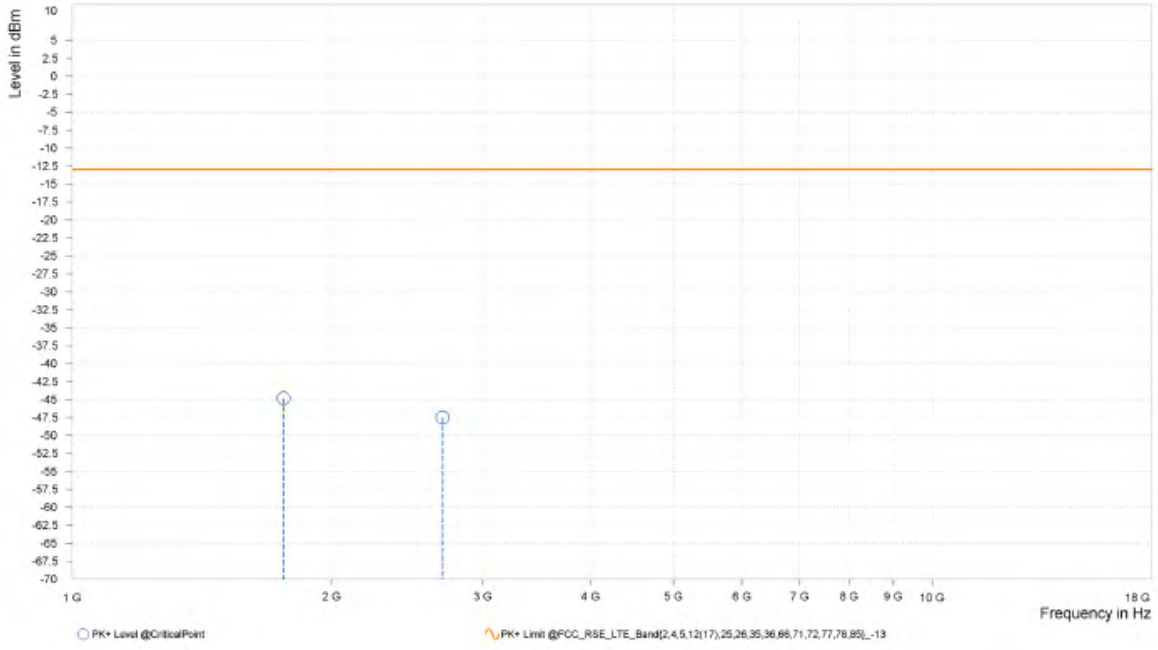
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,431.600	-58.38	-13.00	45.38	2.09	V	359	2.00
1	2,147.400	-50.30	-13.00	37.30	11.36	V	126.2	2.00



NB-IOT LTE Band 8
CHANNEL BANDWIDTH: QPSK

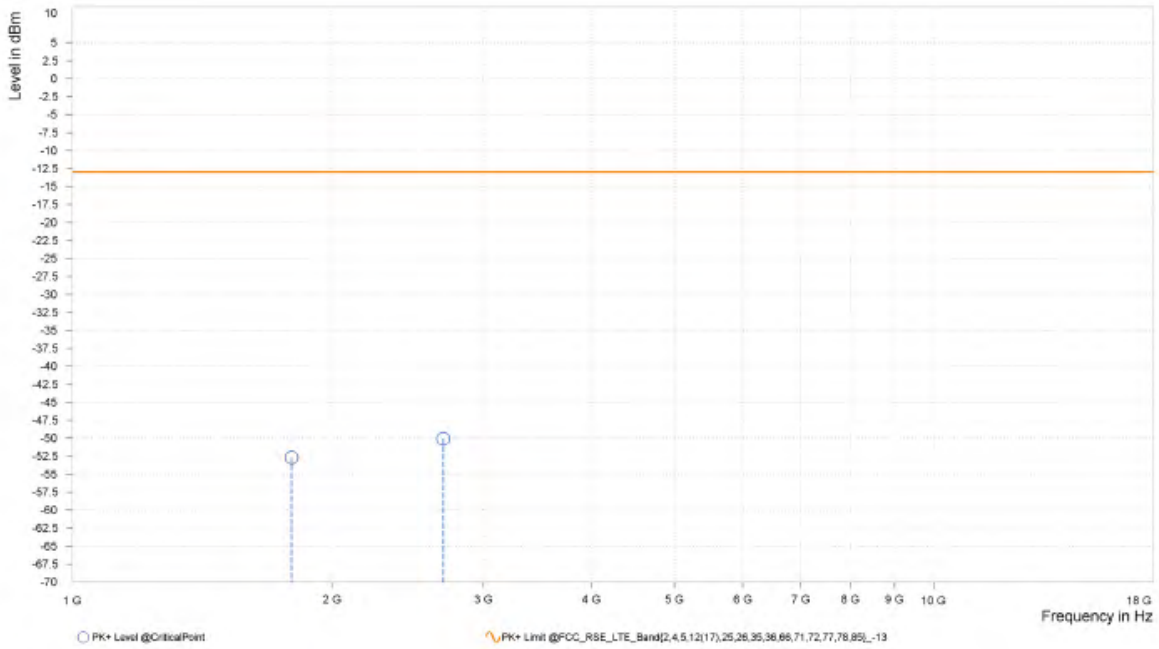
MODE	TX channel 21627	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,795.500	-44.84	-13.00	31.84	9.30	H	357.5	1.00
1	2,693.100	-47.49	-13.00	34.49	13.27	H	355.5	2.00



MODE	TX channel 21627	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

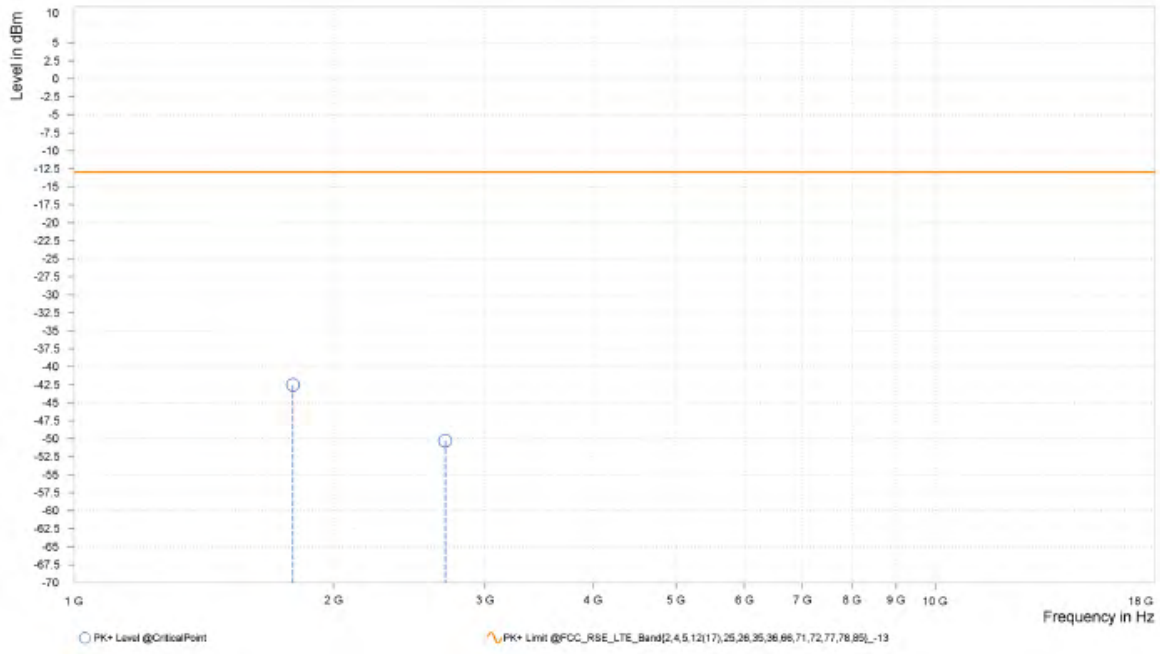
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,795.400	-52.69	-13.00	39.69	9.21	V	359	2.00
1	2,693.100	-50.07	-13.00	37.07	13.08	V	356.1	2.00



CH 21640

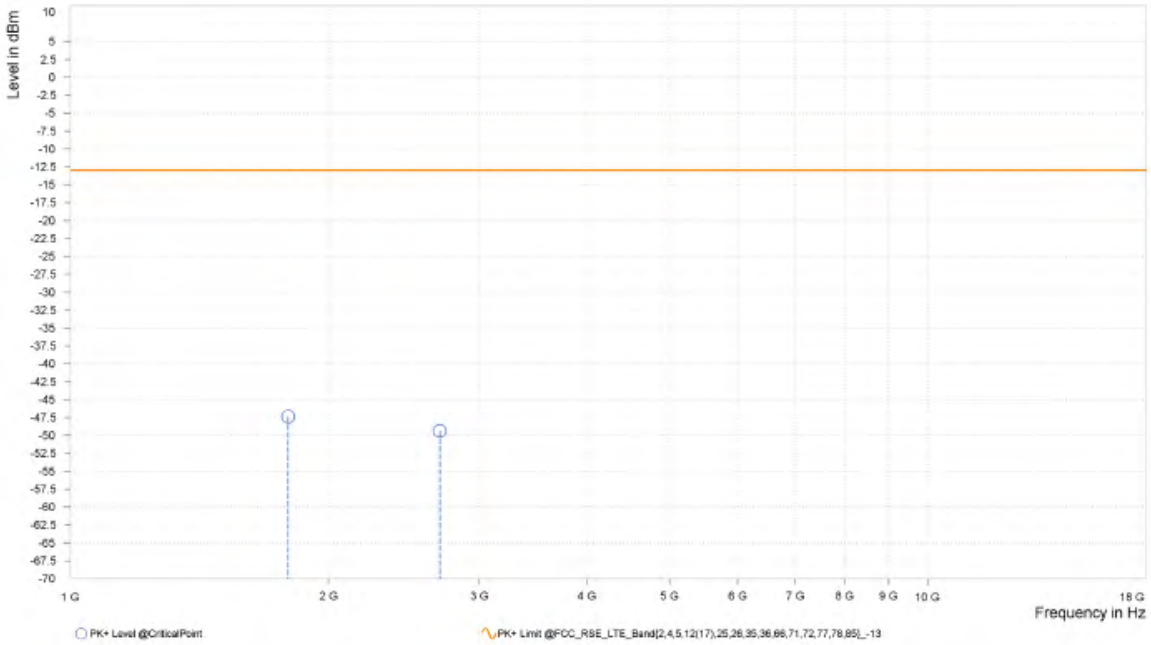
MODE	TX channel 21640	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,794.500	-42.52	-13.00	29.52	9.16	H	230.2	1.00
1	2,697.000	-50.31	-13.00	37.31	13.19	H	2.2	2.00



MODE	TX channel 21640	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

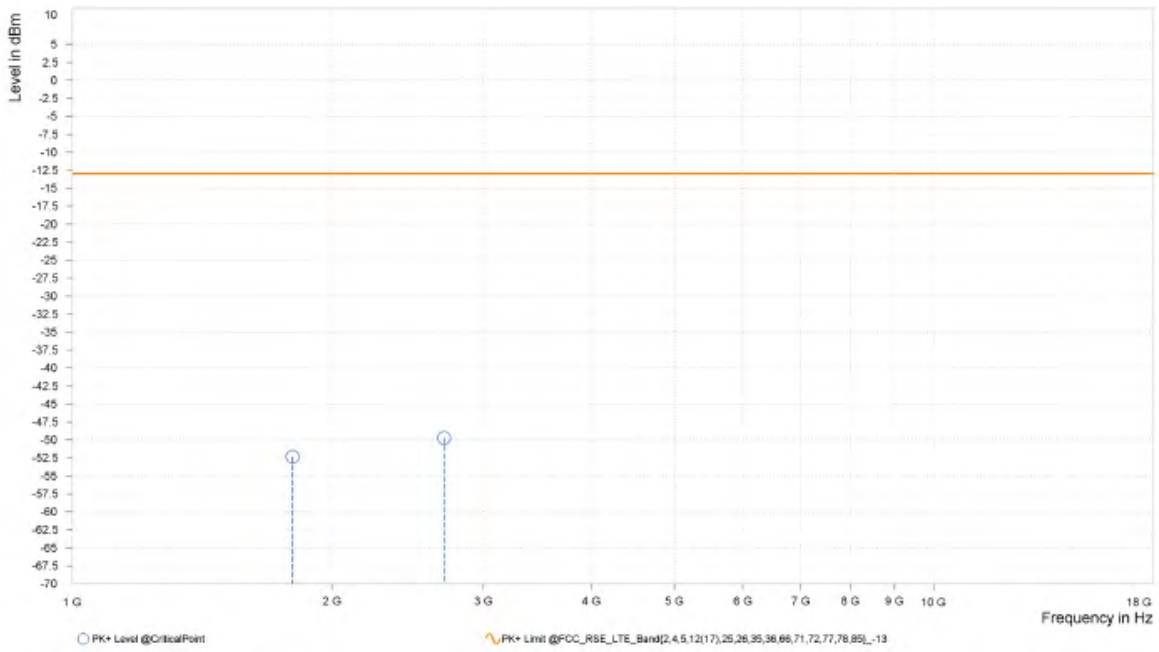
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,795.000	-47.37	-13.00	34.37	9.21	V	355.5	2.00
1	2,697.000	-49.37	-13.00	36.37	12.99	V	4.4	1.00



CH21653

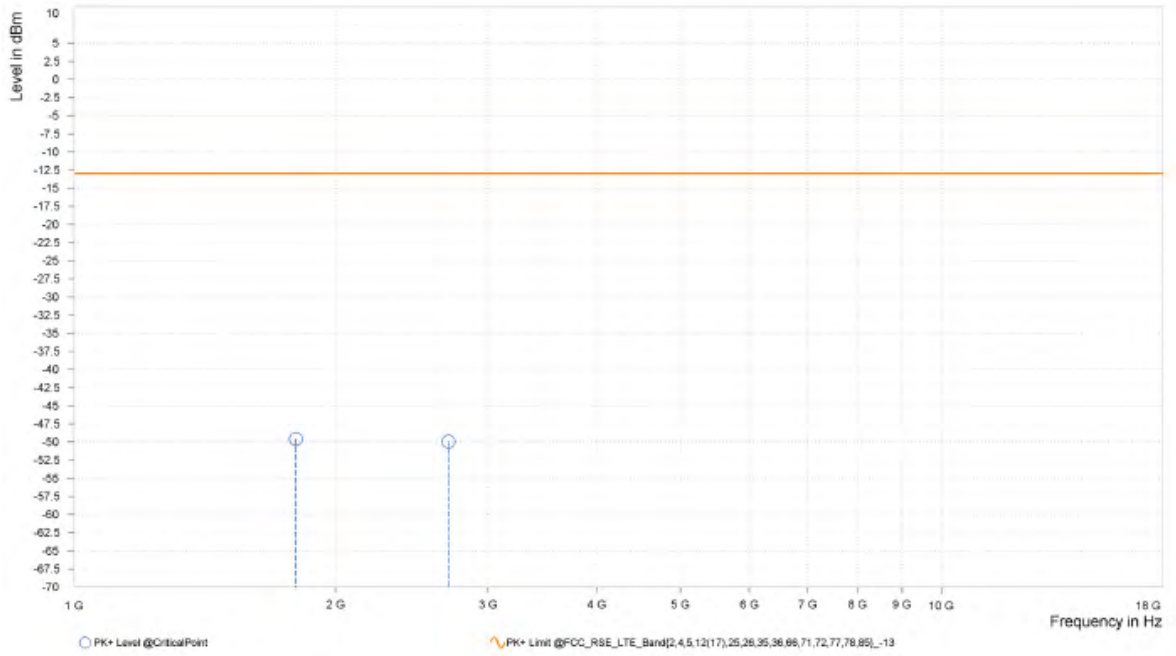
MODE	TX channel 21653	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,800.600	-52.34	-13.00	39.34	9.13	H	355	2.00
1	2,700.900	-49.71	-13.00	36.71	13.11	H	355	2.00



MODE	TX channel 21653	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	120Vac 60HZ
TESTED BY	Hanwen Xu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1	1,800.600	-49.58	-13.00	36.58	9.27	V	355.6	2.00
1	2,700.900	-49.93	-13.00	36.93	12.91	V	5	1.00

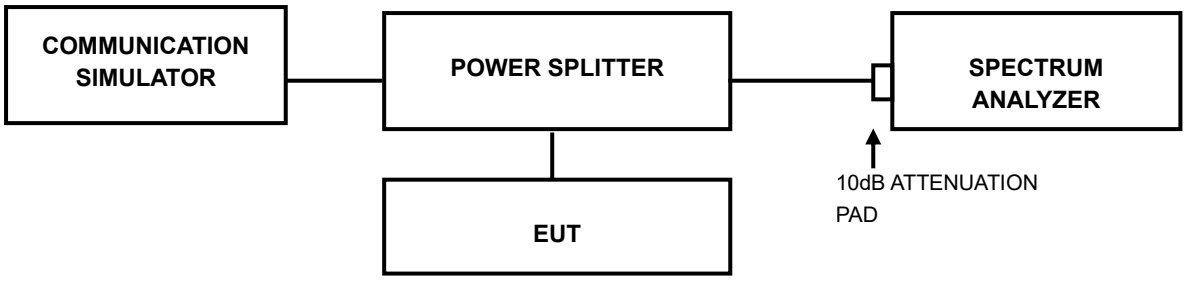


3.7 PEAK TO AVERAGE RATIO

3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

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

3.7.2 TEST SETUP



3.7.3 TEST PROCEDURES

1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;
2. Set the number of counts to a value that stabilizes the measured CCDF curve;
3. Record the maximum PAPR level associated with a probability of 0.1%.