Certificate #6613.01

FCC TEST REPORT

(PART 27)

Applicant:	u-blox AG
Address:	Zuercherstrasse 68, 8800 Thalwil, Switzerland

Manufacturer or Supplier:	u-blox AG
Address:	Zuercherstrasse 68, 8800 Thalwil, Switzerland
Product:	LENA-R8001
Brand Name:	u-blox
Model Name:	LENA-R8001
FCC ID:	XPYUBX22EL01
Date of tests:	Jun. 06, 2022 ~ Nov.17, 2022

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

☒ **FCC Part 27, Subpart C, M** ☒ **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 Chao Wu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department
Chao Wu Date: Nov.17, 2022	Sun Peibo Date: Nov.17, 2022

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-NQN2204290110RF03	Original release	Nov.17, 2022

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**	**RESULT**	**Test lab***
§2.1046	Coduncted Output Power	Compliance	B
§27.50(c)(10)	Equivalent Radiated Power (Band12)	Compliance	B
§27.50(d)(4) §27.50(h)(2)	Equivalent Isotropically Radiated Power (Band4) (Band7) (Band38) (Band41)	Compliance	B
§2.1055 §27.54	Frequency Stability	Compliance	B
§2.1049	Occupied Bandwidth	Compliance	B
§2.1051 §27.53(c)(2)(4) §27.53(g) §27.53(h) §27.53(m)(4)(6)	Band Edge Measurements	Compliance	B
§2.1051 §27.53(g) §27.53(h) §27.53(m)(4)(6)	Conducted Spurious Emissions	Compliance	B
§2.1053 §27.53(g) §27.53(h) §27.53(m)(4)(6)	Radiated Spurious Emissions	Compliance	A
NA	Peak to average ratio	Compliance	B

***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.

Lab B:

BV 7Layers Communications Technology (Shenzhen) Co. Ltd

Lab Address:

No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China

Accredited Test Lab Cert 3939.01

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

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 & Radiated Power (30MHz~1GMHz)	±4.98dB
Radiated emissions & Radiated Power (1GMHz ~6GMHz)	±4.70dB
Radiated emissions (6GMHz ~18GMHz)	±4.60dB
Radiated emissions (18GMHz ~40GMHz)	±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.

1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Feb. 18,22	Feb. 17,23
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.15,22	May.14,23
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.05,21	Sep.04,22
Loop Antenna	Schwarzbeck	FMZB 1519B	00173	Sep.04,22	Sep.03,23
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 06,22	Mar. 05,23
Horn Antenna	ETS-LINDGREN	3117	00168692	Mar. 06,22	Mar. 05,23
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 25, 21	Aug. 24, 22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 24, 22	Aug. 23, 23
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 15,22	Feb. 14,23
Signal Pre-Amplifier	EMSI	EMC 9135	980249	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	May.12,22	May.11,23
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Feb. 21,22	Feb.20,23
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 19,20	May. 18,23
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	JS1120	3.1.36	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	May. 07,22	May. 06,23
Power Meter	Anritsu	ML2495A	1506002	Feb. 22,22	Feb. 21,23
Power Sensor	Anritsu	MA2411B	1339352	May. 07,22	May. 06,23
Temperature Chamber	ESPEC	SH-242	93000855	May. 12,22	May. 11,23
MXG Analog Microvave Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 18,22	Feb. 17,23
Base station R&S CMW500	Rohde&Schwarz	CMW500	153085	May.12,22	May.11,23
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 25,21	Aug. 24,22
DC Source	Kikusui/JP	PMX18-5A	0000001	Aug. 24,22	Aug. 23,23

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Due Date
Pre-Amplifier	R&S	SCU18F1	100815	Sep.21.20	Sep.20.22
Pre-Amplifier	R&S	SCU18F1	100815	Sep.20.22	Sep.19.23
Pre-Amplifier	R&S	SCU08F1	101110	Dec.13.21	Dec.12.23
Signal Generator	R&S	SMB100A	182185	Dec.13.21	Dec.12.23
3m Semi-anechoic Chamber	TDK	9m*6m*6m	N/A	Nov.13.20	Nov.12.22
3m Semi-anechoic Chamber	TDK	9m*6m*6m	N/A	Nov.12.22	Nov.11.23
EMI TEST Receiver	R&S	ESW44	101973	Feb.25.22	Feb.24.23
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Feb.28.22	Feb.27.23
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.23.21	Aug.22.22
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.22.22	Aug.21.23
Biconical Antenna	SCHWARZ	VUBA 9117	69250	Nov.15.20	Nov.14.22
Biconical Antenna	SCHWARZ	VUBA 9117	69250	Nov.14.22	Nov.13.23
Horn Antenna (18GHz-40GHz)	Steatite Q-par Antennas	QMS 00880	23486	Feb.23.22	Feb.22.23
Horn Antenna	Steatite Q-par Antennas	QMS 00208	23485	N/A	N/A
Loop Antenna	SCHWARZ	HFH2-Z2/Z2E	100976	N/A	N/A
Horn Antenna	SCHWARZ	BBHA 9120D	2341	Jul.30.20	Jul.29.22
Horn Antenna	SCHWARZ	BBHA 9120D	2341	Jul.29.22	Jul.28.23
Horn Antenna	SCHWARZ	BBHA 9170	1025	Jul.30.20	Jul.29.22
Horn Antenna	SCHWARZ	BBHA 9170	1025	Jul.29.22	Jul.28.23
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.28.21	Jun.27.22
WIDEBANDRADIO COMMUNICATION TESTER	R&S	CMW500	169399	Jun.27.22	Jun.26.23
Test Software	ELEKTRA	ELEKTRA4.32	N/A	N/A	N/A
OSP	R&S	OSP-B157W8	100836	Sep.25.21	Sep.24.22
OSP	R&S	OSP-B157W8	100836	Sep.24.22	Sep.23.23
Switch Unit	R&S	OSP-B155G	101967	Oct.02.21	Oct.01.23
Open Switch and Control Unit	R&S	OSP220	101964	Oct.02.21	Oct.01.22
Open Switch and Control Unit	R&S	OSP220	101964	Oct.01.22	Sep.30.23
DC Source	AMETEK	ACS 500N6	P2028242390	Jul.31.21	Jul.30.22
DC Source	AMETEK	ACS 500N6	P2028242390	Jul.30.22	Jul.29.23
Hygrothermograph	DELI	20210528	SZ014	N/A	N/A
PC	LENOVO	E14	HRSW0024	N/A	N/A

NOTE: 1. The calibration interval of the above test instruments is 12 months or 24 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

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

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

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	LENA-R8001	
BRAND NAME	u-blox	
MODEL NAME	LENA-R8001	
NOMINAL VOLTAGE	EUT 3.8V	
MODULATION TECHNOLOGY	**LTE**	QPSK, 16QAM
FREQUENCY RANGE	**LTE Band 4 Channel Bandwidth: 1.4MHz**	1710.7MHz ~ 1754.3MHz
	LTE Band 4 Channel Bandwidth: 3MHz	1711.5MHz ~ 1753.5MHz
	LTE Band 4 Channel Bandwidth: 5MHz	1712.5MHz ~ 1752.5MHz
	LTE Band 4 Channel Bandwidth: 10MHz	1715MHz ~ 1750MHz
	LTE Band 4 Channel Bandwidth: 15MHz	1717.5MHz ~ 1747.5 MHz
	LTE Band 4 Channel Bandwidth: 20MHz	1720MHz ~ 1745MHz
	LTE Band 7 Channel Bandwidth: 5MHz	2502.5MHz ~ 2567.5MHz
	LTE Band 7 Channel Bandwidth: 10MHz	2505MHz ~ 2565MHz
	LTE Band 7 Channel Bandwidth: 15MHz	2507.5MHz ~ 2562.5MHz
	LTE Band 7 Channel Bandwidth: 20MHz	2510MHz ~ 2560MHz
	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 38 Channel Bandwidth: 5MHz	2572.5MHz ~ 2617.5MHz
	LTE Band 38 Channel Bandwidth: 10MHz	2575MHz ~ 2615MHz
	LTE Band 38 Channel Bandwidth: 15MHz	2577.5MHz ~ 2612.5MHz
	LTE Band 38 Channel Bandwidth: 20MHz	2580MHz ~ 2610MHz

	LTE Band 41 Channel Bandwidth: 5MHz	2498.5MHz ~ 2687.5MHz
	LTE Band 41 Channel Bandwidth: 10MHz	2501MHz ~ 2685MHz
	LTE Band 41 Channel Bandwidth: 15MHz	2503.5MHz ~ 2682.5MHz
	LTE Band 41 Channel Bandwidth: 20MHz	2506MHz ~ 2680MHz
	LTE Band 66 Channel Bandwidth: 1.4MHz	1710.7MHz ~ 1779.3MHz
	LTE Band 66 Channel Bandwidth: 3MHz	1711.5MHz ~ 1778.5MHz
	LTE Band 66 Channel Bandwidth: 5MHz	1712.5MHz ~ 1777.5MHz
	LTE Band 66 Channel Bandwidth: 10MHz	1715MHz ~ 1775MHz
	LTE Band 66 Channel Bandwidth: 15MHz	1717.5MHz ~ 1772.5MHz
	LTE Band 66 Channel Bandwidth: 20MHz	1720MHz ~ 1770MHz
MAX. EIRP POWER	**LTE Band 4 Channel Bandwidth: 1.4MHz**	165.96mW
	LTE Band 4 Channel Bandwidth: 3MHz	175.39mW
	LTE Band 4 Channel Bandwidth: 5MHz	178.24mW
	LTE Band 4 Channel Bandwidth: 10MHz	189.67mW
	LTE Band 4 Channel Bandwidth: 15MHz	197.24mW
	LTE Band 4 Channel Bandwidth: 20MHz	216.27mW
	LTE Band 7 Channel Bandwidth: 5MHz	204.64mW
	LTE Band 7 Channel Bandwidth: 10MHz	237.14mW
	LTE Band 7 Channel Bandwidth: 15MHz	206.54mW
	LTE Band 7 Channel Bandwidth: 20MHz	249.46mW
	LTE Band 12 Channel Bandwidth: 1.4MHz	137.72mW
	LTE Band 12 Channel Bandwidth: 3MHz	145.55mW
	LTE Band 12 Channel Bandwidth: 5MHz	135.83mW
	LTE Band 12 Channel Bandwidth: 10MHz	136.77mW

	LTE Band 38 Channel Bandwidth: 5MHz	195.88mW
	LTE Band 38 Channel Bandwidth: 10MHz	219.28mW
	LTE Band 38 Channel Bandwidth: 15MHz	219.79mW
	LTE Band 38 Channel Bandwidth: 20MHz	222.84mW
	LTE Band 41 Channel Bandwidth: 5MHz	222.33mW
	LTE Band 41 Channel Bandwidth: 10MHz	225.42mW
	LTE Band 41 Channel Bandwidth: 15MHz	224.91mW
	LTE Band 41 Channel Bandwidth: 20MHz	226.46mW
	LTE Band 66 Channel Bandwidth: 1.4MHz	221.31mW
	LTE Band 66 Channel Bandwidth: 3MHz	200.91mW
	LTE Band 66 Channel Bandwidth: 5MHz	200.45mW
	LTE Band 66 Channel Bandwidth: 10MHz	201.84mW
	LTE Band 66 Channel Bandwidth: 15MHz	201.84mW
	LTE Band 66 Channel Bandwidth: 20MHz	202.77mW
EMISSION DESIGNATOR	**LTE Band 4 Channel Bandwidth: 1.4MHz**	QPSK: 1M09G7D
		16QAM: 1M09W7D
	LTE Band 4 Channel Bandwidth: 3MHz	QPSK: 2M68G7D
		16QAM: 2M68W7D
	LTE Band 4 Channel Bandwidth: 5MHz	QPSK: 4M48G7D
		16QAM: 4M48W7D
	LTE Band 4 Channel Bandwidth: 10MHz	QPSK: 8M93G7D
		16QAM: 4M93W7D
	LTE Band 4 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 5M07W7D
	LTE Band 4 Channel Bandwidth: 20MHz	QPSK: 17M9G7D
		16QAM: 5M18W7D
	LTE Band 7	QPSK: 4M49G7D

	Channel Bandwidth: 5MHz	16QAM: 4M48W7D
	LTE Band 7 Channel Bandwidth: 10MHz	QPSK:8M93G7D
		16QAM: 4M95W7D
	LTE Band 7 Channel Bandwidth: 15MHz	QPSK: 13M5G7D
		16QAM: 5M07W7D
	LTE Band 7 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 5M21W7D
	LTE Band 12 Channel Bandwidth: 1.4MHz	QPSK: 1M09G7D
		16QAM: 1M09W7D
	LTE Band 12 Channel Bandwidth: 3MHz	QPSK: 2M69G7D
		16QAM: 2M69W7D
	LTE Band 12 Channel Bandwidth: 5MHz	QPSK: 4M48G7D
		16QAM: 4M49W7D
	LTE Band 12 Channel Bandwidth: 10MHz	QPSK: 8M94G7D
		16QAM: 4M94W7D
	LTE Band 41 Channel Bandwidth: 5MHz	QPSK: 4M47G7D
		16QAM: 4M49W7D
	LTE Band 41 Channel Bandwidth: 10MHz	QPSK: 8M93G7D
		16QAM: 4M93W7D
	LTE Band 41 Channel Bandwidth: 15MH	QPSK: 13M5G7D
		16QAM: 5M06W7D
	LTE Band 41 Channel Bandwidth: 20MHz	QPSK: 18M0G7D
		16QAM: 5M17W7D
	LTE Band 66 Channel Bandwidth: 1.4MHz	QPSK: 1M11G7D
		16QAM: 1M10W7D
	LTE Band 66 Channel Bandwidth: 3MHz	QPSK: 2M74G7D
		16QAM: 2M75W7D
	LTE Band 66 Channel Bandwidth: 5MHz	QPSK: 4M46G7D
		16QAM: 4M47W7D

	LTE Band 66 Channel Bandwidth: 10MHz	QPSK: 9M03G7D
		16QAM: 5M67W7D
	LTE Band 66 Channel Bandwidth: 15MH	QPSK: 13M5G7D
		16QAM: 5M60W7D
	LTE Band 66 Channel Bandwidth: 20MHz	QPSK: 17M9G7D
		16QAM: 7M29W7D
ANTENNA TYPE	Fixed External Antenna with -0.39dBi gain for LTE B4 Fixed External Antenna with 0.32dBi gain for LTE B12 Fixed External Antenna with 0.23 dBi gain for LTE B7 Fixed External Antenna with 0.86 dBi gain for LTE B38 Fixed External Antenna with 0.86 dBi gain for LTE B41 Fixed External Antenna with -0.39 dBi gain for LTE B66	
HW VERSION	UBX-R80A00	
SW VERSION	02.00	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	
EXTREME TEMPERATURE	-20-65 ℃	
EXTREME VOLTAGE	EUT 3.4V - EUT 4.2V	

NOTE:

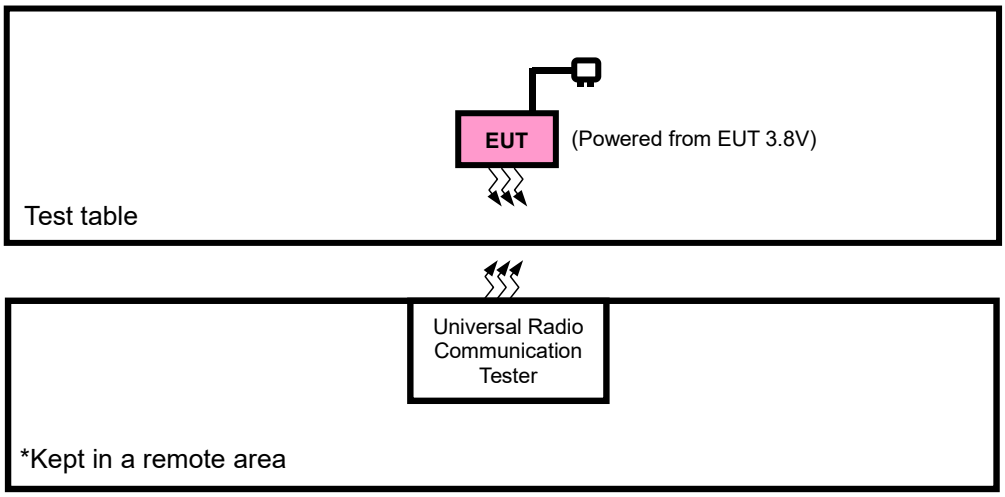
1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and two receiver.

MODULATION MODE	TX FUNCTION
LTE	1TX/1RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in 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	DC source	LONG WEI	PS-6403D	010934269	N/A
2	Adapter	N/A	N/A	N/A	N/A
3	Earphone	N/A	N/A	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N.A

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 with GSM or LTE link
B	EUT + DC source with GSM or LTE link

LTE BAND 4 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK,16QAM	Full RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK,16QAM	Full RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK,16QAM	Full RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK,16QAM	Full RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK,16QAM	Full RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK,16QAM	Full RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	Full RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
A	BAND EDGE	19957 to 20393	19957	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
			20393	1.4MHz	QPSK, 16QAM	1 RB / 5 RB Offset Full RB / 0 RB Offset
		19965 to 20385	19965	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
			20385	3MHz	QPSK, 16QAM	1 RB / 14 RB Offset Full RB / 0 RB Offset
		19975 to 20375	19975	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
			20375	5MHz	QPSK, 16QAM	1 RB / 24 RB Offset Full RB / 0 RB Offset
		20000 to 20350	20000	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
			20350	10MHz	QPSK, 16QAM	1 RB / 49 RB Offset Full RB / 0 RB Offset

A	BAND EDGE	20025 to 20325	20025	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			20325	15MHz	QPSK, 16QAM	1 RB / 74 RB Offset
						Full RB / 0 RB Offset
		20050 to 20300	20050	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			20300	20MHz	QPSK, 16QAM	1 RB / 99 RB Offset
						Full RB / 0 RB Offset
A	CONDCUDETED EMISSION	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
		19965 to 20385	19965, 20175, 20385	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
		19975 to 20375	19975, 20175, 20375	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20000 to 20350	20000, 20175, 20350	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20025 to 20325	20025, 20175, 20325	15MHz	QPSK,16QAM	1 RB / 0 RB Offset
		20050 to 20300	20050, 20175, 20300	20MHz	QPSK,16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	19957 to 20393	19957, 20175, 20393	1.4MHz	QPSK	1 RB / 0 RB Offset
		19965 to 20385	20175	3MHz	QPSK	1 RB / 0 RB Offset
		19975 to 20375	20175	5MHz	QPSK	1 RB / 0 RB Offset
		20000 to 20350	20175	10MHz	QPSK	1 RB / 0 RB Offset
		20025 to 20325	20175	15MHz	QPSK	1 RB / 0 RB Offset
		20050 to 20300	20175	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.

LTE BAND 7 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	1 RB / 0RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	Full RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	Full RB / 0 RB Offset
A	BAND EDGE	20775 to 21425	20775	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			21425	5MHz	QPSK, 16QAM	1 RB / 24 RB Offset
						Full RB / 0 RB Offset
		20800 to 21400	20800	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			21400	10MHz	QPSK, 16QAM	1 RB / 49 RB Offset
						Full RB / 0 RB Offset
		20825 to 21375	20825	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			21375	15MHz	QPSK, 16QAM	1 RB / 74 RB Offset
						Full RB / 0 RB Offset
		20850 to 21350	20850	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			21350	20MHz	QPSK, 16QAM	1 RB / 99 RB Offset
						Full RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
A	CONDCUDE TED EMISSION	20775 to 21425	20775, 21100, 21425	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20800 to 21400	20800, 21100, 21400	10MHz	QPSK, 16QAM	1 RB / 0RB Offset
		20825 to 21375	20825, 21100, 21375	15MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20850 to 21350	20850, 21100, 21350	20MHz	QPSK, 16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	20775 to 21425	21100	5MHz	QPSK	1 RB / 0 RB Offset
		20800 to 21400	21100	10MHz	QPSK	1 RB / 0 RB Offset
		20825 to 21375	21100	15MHz	QPSK	1 RB / 0 RB Offset
		20850 to 21350	20850,21100,21350	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.

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	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM	Full RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM	Full RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM	Full RB / 0 RB Offset
A	PEAK TO AVERAGE RATIO	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
A	BAND EDGE	23017 to 23173	23017	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
			23173	1.4MHz	QPSK, 16QAM	1 RB / 5 RB Offset Full RB / 0 RB Offset
		23025 to 23165	23025	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
			23165	3MHz	QPSK, 16QAM	1 RB / 14 RB Offset Full RB / 0 RB Offset
		23035 to 23155	23035	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
			23155	5MHz	QPSK, 16QAM	1 RB / 24 RB Offset Full RB / 0 RB Offset
		23060 to 23130	23060	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset Full RB / 0 RB Offset
			23130	10MHz	QPSK, 16QAM	1 RB / 49 RB Offset Full RB / 0 RB Offset
A	CONDCUDETED EMISSION	23017 to 23173	23017, 23095 , 23173	1.4MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23025 to 23165	23025, 23095 ,23165	3MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23035 to 23155	23035, 23095 ,23155	5MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		23060 to 23130	23060, 23095 ,23130	10MHz	QPSK, 16QAM	1 RB / 0 RB Offset
A	RADIATED EMISSION	23017 to 23173	23017,23095,23173	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	23095	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.

LTE BAND 38 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		37850 to38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY （See Note 2）	37775 to 38225	37775, 38225	5MHz	QPSK	1 RB / 0 RB Offset
		37800 to 38200	37800, 38200	10MHz	QPSK	1 RB / 0RB Offset
		37825 to 38175	37825, 38175	15MHz	QPSK	1 RB / 0 RB Offset
		37850 to38150	37850, 38150	20MHz	QPSK	1 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH （See Note 2）	37775 to 38225	37775, 38000, 38225	5MHz	QPSK, 16QAM, 64QAM	Full RB / 0 RB Offset
		37800 to 38200	37800, 38000, 38200	10MHz	QPSK, 16QAM, 64QAM	Full RB / 0 RB Offset
		37825 to 38175	37825, 38000, 38175	15MHz	QPSK, 16QAM, 64QAM	Full RB / 0 RB Offset
		37850 to38150	37850, 38000, 38150	20MHz	QPSK, 16QAM, 64QAM	Full RB / 0 RB Offset
A	BAND EDGE （See Note 2）	37775 to 38225	37775	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			38825	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
						Full RB / 0 RB Offset
		37800 to 38200	37800	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			38200	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
						Full RB / 0 RB Offset
		37825 to 38175	37825	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			38175	15MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset
						Full RB / 0 RB Offset
		37850 to38150	37850	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			38150	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset
						Full RB / 0 RB Offset
A	CONDCUDE TED EMISSION （See Note 2）	37775 to 38225	37775, 38000, 38225	5MHz	QPSK	1 RB / 0 RB Offset
		37800 to 38200	37800, 38000, 38200	10MHz	QPSK	1 RB / 0RB Offset
		37825 to 38175	37825, 38000, 38175	15MHz	QPSK	1 RB / 0 RB Offset
		37850 to38150	37850, 38000, 38150	20MHz	QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION （See Note 2）	37775 to 38225	38000	5MHz	QPSK	1 RB / 0 RB Offset
		37800 to 38200	38000	10MHz	QPSK	1 RB / 0RB Offset
		37825 to 38175	37825,38000,38175	15MHz	QPSK	1 RB / 0 RB Offset
		37850 to38150	38000	20MHz	QPSK	1 RB / 0 RB Offset

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

2、 The Band 38 is included in the range of Band 41,and the power(or EIRP) is lower than Band 41,the test data please refer to Band 41.

LTE BAND 41 MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	39675 to 41565	39675, 41565	5MHz	QPSK	1 RB / 0 RB Offset
		39700 to 41540	39700, 41540	10MHz	QPSK	1 RB / 0RB Offset
		39725 to 41515	39725, 41515	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	39750, 41490	20MHz	QPSK	1 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	39675 to 41565	39675, 40620, 41565	5MHz	QPSK, 16QAM, 64QAM	Full RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK, 16QAM, 64QAM	Full RB / 0 RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK, 16QAM, 64QAM	Full RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK, 16QAM, 64QAM	Full RB / 0 RB Offset
A	BAND EDGE	39675 to 41565	39675	5MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			41565	5MHz	QPSK, 16QAM, 64QAM	1 RB / 24 RB Offset
						Full RB / 0 RB Offset
		39700 to 41540	39700	10MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			41540	10MHz	QPSK, 16QAM, 64QAM	1 RB / 49 RB Offset
						Full RB / 0 RB Offset
		39725 to 41515	39725	15MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			41515	15MHz	QPSK, 16QAM, 64QAM	1 RB / 74 RB Offset
						Full RB / 0 RB Offset
		39750 to 41490	39750	20MHz	QPSK, 16QAM, 64QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			41490	20MHz	QPSK, 16QAM, 64QAM	1 RB / 99 RB Offset
						Full RB / 0 RB Offset
A	CONDCUDETED EMISSION	39675 to 41565	39675, 40620, 41565	5MHz	QPSK	1 RB / 0 RB Offset
		39700 to 41540	39700, 40620, 41540	10MHz	QPSK	1 RB / 0RB Offset
		39725 to 41515	39725, 40620, 41515	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	39750, 40620, 41490	20MHz	QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	39675 to 41565	40620	5MHz	QPSK	1 RB / 0 RB Offset
		39700 to 41540	40620	10MHz	QPSK	1 RB / 0RB Offset
		39725 to 41515	39725,40620,41515	15MHz	QPSK	1 RB / 0 RB Offset
		39750 to 41490	40620	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.

LTE BAND 66

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
A	EIRP	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM	1 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM	1 RB / 0 RB Offset
B	FREQUENCY STABILITY	131979 to 132665	131979,132665	1.4MHz	QPSK	1 RB / 0 RB Offset
		131987 to 132657	131987,132657	3MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	131997,132647	5MHz	QPSK	1 RB / 0 RB Offset
		132022 to 132622	132022,132622	10MHz	QPSK	1 RB / 0 RB Offset
		132047 to 132597	132047,132597	15MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132072,132572	20MHz	QPSK	1 RB / 0 RB Offset
A	OCCUPIED BANDWIDTH	131979 to 132665	131979,132322,132665	1.4MHz	QPSK,16QAM	Full RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK,16QAM	Full RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK,16QAM	Full RB / 0 RB Offset
		132022 to 132622	132022,132322,132622	10MHz	QPSK,16QAM	Full RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK,16QAM	Full RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK,16QAM	Full RB / 0 RB Offset
A	BAND EDGE	131979 to 132322	131979	1.4MHz	QPSK,16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			132322	1.4MHz	QPSK,16QAM	1 RB / 5 RB Offset
						Full RB / 0 RB Offset
		131987 to 132657	131987	3MHz	QPSK,16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			132657	3MHz	QPSK,16QAM	1 RB / 14 RB Offset
						Full RB / 0 RB Offset
		131987 to 132657	131987	5MHz	QPSK,16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset t
			132657	5MHz	QPSK,16QAM	1 RB / 24 RB Offset
						Full RB / 0 RB Offset
		131997 to 132647	131997	10MHz	QPSK,16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			132647	10MHz	QPSK,16QAM	1 RB / 49 RB Offset
						Full RB / 0 RB Offset
		132047 to 132597	132047	15MHz	QPSK,16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			132597	15MHz	QPSK,16QAM	1 RB / 74 RB Offset
						Full RB / 0 RB Offset
		132072 to 132572	132072	20MHz	QPSK,16QAM	1 RB / 0 RB Offset
						Full RB / 0 RB Offset
			132572	20MHz	QPSK,16QAM	1 RB / 99 RB Offset
						Full RB / 0 RB Offset
A	CONDCUDETED EMISSION	131979 to 132665	131979,132322,132665	1.4MHz	QPSK	1 RB / 0 RB Offset
		131987 to 132657	131987,132322,132657	3MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	131997,132322,132647	5MHz	QPSK	1 RB / 0 RB Offset

		132022 to 132622	132022,132322,132622	10MHz	QPSK	1 RB / 0 RB Offset
		132047 to 132597	132047,132322,132597	15MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132072,132322,132572	20MHz	QPSK	1 RB / 0 RB Offset
A	RADIATED EMISSION	131979 to 132665	132322	1.4MHz	QPSK	1 RB / 0 RB Offset
		131987 to 132657	132322	3MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	132322	5MHz	QPSK	1 RB / 0 RB Offset
		132022 to 132622	131997,132322,132647	10MHz	QPSK	1 RB / 0 RB Offset
		132047 to 132597	132322	15MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132322	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.

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	EUT 3.8V	Walker Ye
FREQUENCY STABILITY	23deg. C, 70%RH	EUT 3.8V	Walker Ye
OCCUPIED BANDWIDTH	23deg. C, 70%RH	EUT 3.8V	Walker Ye
BAND EDGE	23deg. C, 70%RH	EUT 3.8V	Walker Ye
CONDCUDETED EMISSION	23deg. C, 70%RH	EUT 3.8V	Walker Ye
RADIATED EMISSION	23deg. C, 70%RH	EUT 3.8V	Chao Wu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	EUT 3.8V	Walker Ye

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(b)(10) and 27.50(c)(10) Fixed, mobile, and Portable stations (hand-held devices) transmitting in the 698-746 MHz, 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.

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);

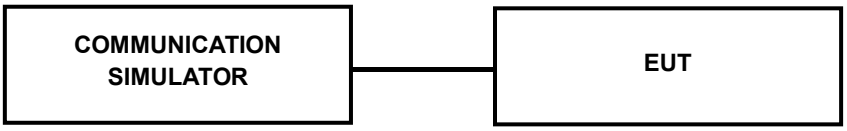
L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

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

AVERAGE CONDUCTED OUTPUT POWER (dBm)

LTE Band 4

Band/BW	Modulation	RB Size	RB Offset	Low CH 19957	Mid CH 20175	High CH 20393	MPR
				Frequency 1710.7 MHz	Frequency 1732.5 MHz	Frequency 1754.3 MHz	
4/ 1.4	QPSK	1	0	21.37	21.93	21.30	0
		1	2	22.03	22.57	21.96	0
		1	5	21.73	21.87	21.55	0
		3	0	21.91	22.37	21.73	0
		3	1	22.17	22.35	21.79	0
		3	3	21.90	22.34	21.75	0
		6	0	21.31	21.41	20.74	1
	16QAM	1	0	21.42	21.98	21.48	1
		1	2	22.17	22.59	22.02	1
		1	5	21.58	21.98	21.36	1
		3	0	21.74	22.20	21.60	1
		3	1	21.72	22.17	21.75	1
		3	3	21.74	22.15	21.61	1
		6	0	21.02	21.43	20.80	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 19965	Mid CH 20175	High CH 20385	MPR
				Frequency 1711.5 MHz	Frequency 1732.5 MHz	Frequency 1753.5 MHz	
4/ 3	QPSK	1	0	20.93	21.47	21.01	0
		1	7	22.41	22.77	22.19	0
		1	14	21.49	21.36	20.73	0
		8	0	21.19	21.58	21.08	1
		8	3	21.45	21.56	21.00	1
		8	7	21.21	21.55	20.96	1
		15	0	21.20	21.51	20.98	1
	16QAM	1	0	21.14	21.68	21.14	1
		1	7	22.60	22.83	22.34	1
		1	14	21.38	21.52	21.23	1
		8	0	21.20	21.61	21.08	2
		8	3	21.19	21.59	21.04	2
		8	7	21.23	21.58	21.12	2
		15	0	21.49	21.52	21.00	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 19975 Frequency 1712.5 MHz	Mid CH 20175 Frequency 1732.5 MHz	High CH 20375 Frequency 1752.5 MHz	MPR
4/ 5	QPSK	1	0	21.96	22.48	21.45	0
		1	12	22.90	22.79	21.89	0
		1	24	21.73	21.45	21.97	0
		12	0	21.30	21.61	21.20	1
		12	6	21.22	21.59	21.16	1
		12	13	21.34	21.58	21.50	1
		25	0	21.41	21.50	21.07	1
	16QAM	1	0	21.93	22.47	21.50	1
		1	12	22.62	22.70	22.00	1
		1	24	21.87	21.38	22.04	1
		12	0	21.24	21.61	21.17	2
		12	6	21.50	21.54	21.13	2
		12	13	21.33	21.56	21.24	2
		25	0	21.65	21.48	21.03	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20000 Frequency 1715 MHz	Mid CH 20175 Frequency 1732.5 MHz	High CH 20350 Frequency 1750 MHz	MPR
4/ 10	QPSK	1	0	20.51	21.52	21.80	0
		1	24	22.42	22.25	22.08	0
		1	49	22.25	21.39	21.27	0
		25	0	21.48	21.46	20.40	1
		25	12	21.58	21.42	20.23	1
		25	25	22.24	21.15	20.82	1
		50	0	21.61	21.32	21.07	1
	16QAM	1	0	20.88	21.29	21.94	1
		1	24	22.66	22.40	23.17	1
		1	49	22.44	21.65	22.01	1
		12	0	21.84	22.21	21.77	2
		12	18	22.49	22.41	21.18	2
		12	37	23.01	21.86	21.67	2
		27	0	20.94	21.40	20.40	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20025	Mid CH 20175	High CH 20325	MPR
				Frequency 1717.5 MHz	Frequency 1732.5 MHz	Frequency 1747.5 MHz	
4/ 15	QPSK	1	0	21.10	21.47	22.39	0
		1	37	22.48	22.13	21.73	0
		1	74	22.90	21.21	20.44	0
		36	0	21.02	21.32	21.48	1
		36	19	21.71	21.44	21.07	1
		36	39	22.34	20.95	20.38	1
		75	0	21.61	21.16	21.03	1
	16QAM	1	0	20.86	21.80	22.53	1
		1	37	22.77	22.40	21.96	1
		1	74	23.26	21.19	20.54	1
		12	0	21.28	21.95	22.50	2
		12	31	22.57	22.43	21.85	2
		12	62	23.34	21.39	20.92	2
		27	0	20.91	21.43	21.57	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20050	Mid CH 20175	High CH 20300	MPR
				Frequency 1720 MHz	Frequency 1732.5 MHz	Frequency 1745 MHz	
4/ 20	QPSK	1	0	20.59	22.15	21.85	0
		1	50	**23.54**	23.07	23.08	0
		1	99	22.96	21.26	21.86	0
		50	0	21.54	21.84	20.73	1
		50	25	22.48	21.98	20.31	1
		50	50	22.31	21.93	21.56	1
		100	0	21.64	21.00	21.09	1
	16QAM	1	0	20.90	22.47	21.99	1
		1	50	23.74	23.25	23.19	1
		1	99	23.28	21.52	22.02	1
		12	0	21.36	22.29	21.82	2
		12	43	21.61	22.49	21.87	2
		12	87	22.03	22.79	21.91	2
		27	0	20.97	21.46	21.06	2

LTE Band 7

Band/BW	Modulation	RB Size	RB Offset	Low CH 20775 Frequency 2502.5 MHz	Mid CH 21100 Frequency 2535 MHz	High CH 21425 Frequency 2567.5 MHz	MPR
7/ 5	QPSK	1	0	20.82	22.88	21.88	0
		1	12	21.05	22.06	21.92	0
		1	24	20.54	22.10	21.88	0
		12	0	20.56	21.24	21.43	1
		12	6	20.56	21.21	21.38	1
		12	13	20.55	21.18	21.51	1
		25	0	19.37	20.25	20.49	1
	16QAM	1	0	20.76	22.87	21.90	1
		1	12	20.95	22.43	21.92	1
		1	24	20.45	21.94	21.60	1
		12	0	20.57	21.17	21.31	2
		12	6	20.52	21.17	21.69	2
		12	13	20.57	21.14	21.36	2
		25	0	19.38	20.24	20.44	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20800 Frequency 2505 MHz	Mid CH 21100 Frequency 2535 MHz	High CH 21400 Frequency 2565 MHz	MPR
7/ 10	QPSK	1	0	22.09	23.32	21.61	0
		1	24	20.71	23.18	22.08	0
		1	49	21.84	22.74	21.75	0
		25	0	19.31	21.23	21.13	1
		25	12	19.06	21.50	21.34	1
		25	25	20.14	21.33	21.97	1
		50	0	19.73	20.37	20.71	1
	16QAM	1	0	22.17	23.52	21.88	1
		1	24	20.40	23.30	22.21	1
		1	49	22.05	23.02	21.86	1
		12	0	20.54	22.06	22.21	2
		12	18	19.98	22.40	22.23	2
		12	37	20.77	22.25	22.63	2
		27	0	19.41	21.36	20.98	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20825 Frequency 2507.5 MHz	Mid CH 21100 Frequency 2535 MHz	High CH 21375 Frequency 2562.5 MHz	MPR
7/ 15	QPSK	1	0	21.35	19.07	20.35	0
		1	37	20.93	21.58	21.83	0
		1	74	18.74	21.41	22.60	0
		36	0	20.21	18.90	19.47	1
		36	19	19.60	19.32	19.92	1
		36	39	18.67	20.72	21.97	1
		75	0	20.26	20.47	20.96	1
	16QAM	1	0	21.60	19.37	20.59	1
		1	37	21.21	21.87	22.06	1
		1	74	19.07	21.67	22.73	1
		12	0	21.82	19.53	20.20	2
		12	31	21.15	21.56	21.79	2
		12	62	19.25	22.05	22.92	2
		27	0	20.36	18.86	19.41	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 20850 Frequency 2510 MHz	Mid CH 21100 Frequency 2535 MHz	High CH 21350 Frequency 2560 MHz	MPR
7/ 20	QPSK	1	0	22.15	23.40	22.72	0
		1	50	22.62	22.41	**23.45**	0
		1	99	23.41	21.72	22.68	0
		50	0	20.61	21.85	21.14	1
		50	25	20.19	22.23	21.39	1
		50	50	21.30	21.39	22.74	1
		100	0	20.18	20.15	20.76	1
	16QAM	1	0	22.23	23.60	23.00	1
		1	50	22.91	22.69	23.58	1
		1	99	23.57	22.03	22.75	1
		12	0	21.84	22.65	22.23	2
		12	43	22.35	22.86	22.24	2
		12	87	23.74	22.38	23.00	2
		27	0	21.08	21.27	20.99	2

LTE Band 12

Band/BW	Modulation	RB Size	RB Offset	Low CH 23017	Mid CH 23095	High CH 23173	MPR
				Frequency 699.7 MHz	Frequency 707.5 MHz	Frequency 715.3 MHz	
12/ 1.4	QPSK	1	0	21.68	22.40	21.62	0
		1	2	22.46	23.17	22.21	0
		1	5	21.80	22.48	21.57	0
		3	0	21.87	22.57	22.03	0
		3	1	21.87	22.56	22.02	0
		3	3	21.87	22.55	22.02	0
		6	0	21.29	21.99	21.11	1
	16QAM	1	0	21.66	22.35	21.73	1
		1	2	22.52	23.22	22.30	1
		1	5	21.89	22.59	21.63	1
		3	0	21.73	22.42	21.91	1
		3	1	21.73	22.42	21.91	1
		3	3	21.72	22.41	21.91	1
		6	0	21.29	22.01	20.98	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 23025	Mid CH 23095	High CH 23165	MPR
				Frequency 700.5 MHz	Frequency 707.5 MHz	Frequency 714.5 MHz	
12/ 3	QPSK	1	0	21.59	22.06	21.86	0
		1	7	22.69	23.41	22.60	0
		1	14	21.74	22.31	22.65	0
		8	0	21.38	22.06	21.36	1
		8	3	21.38	22.08	21.40	1
		8	7	21.38	22.08	21.39	1
		15	0	21.42	22.10	21.33	1
	16QAM	1	0	21.66	22.17	21.72	1
		1	7	22.83	23.46	22.50	1
		1	14	21.91	22.37	22.54	1
		8	0	21.38	22.03	21.36	2
		8	3	21.40	22.04	21.38	2
		8	7	21.39	22.05	21.37	2
		15	0	21.38	21.96	21.21	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 23035	Mid CH 23095	High CH 23155	MPR
				Frequency 701.5 MHz	Frequency 707.5 MHz	Frequency 713.5 MHz	
12/ 5	QPSK	1	0	21.50	21.91	22.10	0
		1	12	22.39	23.04	22.38	0
		1	24	21.62	22.08	21.32	0
		12	0	20.79	21.24	21.72	1
		12	6	20.80	21.26	21.73	1
		12	13	20.81	21.27	21.73	1
		25	0	21.52	22.07	21.54	1
	16QAM	1	0	21.43	22.00	21.99	1
		1	12	22.34	23.16	22.30	1
		1	24	21.52	22.24	21.29	1
		12	0	20.76	21.27	21.70	2
		12	6	20.76	21.25	21.70	2
		12	13	20.82	21.26	21.73	2
		25	0	21.46	21.99	21.51	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 23060	Mid CH 23095	High CH 23130	MPR
				Frequency 704 MHz	Frequency 707.5 MHz	Frequency 711 MHz	
12/ 10	QPSK	1	0	21.99	22.00	21.29	0
		1	24	**22.84**	22.25	22.03	0
		1	49	21.99	21.80	20.65	0
		25	0	21.37	22.03	21.45	1
		25	12	21.30	22.21	21.40	1
		25	25	21.31	21.16	21.28	1
		50	0	20.91	21.09	20.76	1
	16QAM	1	0	22.06	22.27	21.44	1
		1	24	23.01	22.50	22.20	1
		1	49	22.14	22.06	20.90	1
		12	0	22.10	22.88	22.21	2
		12	18	22.09	23.19	22.29	2
		12	37	22.19	21.98	21.83	2
		27	0	21.26	22.08	21.44	2

LTE Band 38

Band/BW	Modulation	RB Size	RB Offset	Low CH 37775 Frequency 2572.5 MHz	Mid CH 38000 Frequency 2595 MHz	High CH 38225 Frequency 2617.5MHz	MPR
38/ 5	QPSK	1	0	21.15	21.65	21.25	0
		1	12	21.77	21.89	21.65	0
		1	24	20.76	20.88	21.15	0
		12	0	21.10	21.18	20.88	1
		12	6	21.15	21.20	20.89	1
		12	13	21.18	21.20	20.89	1
		25	0	21.06	21.07	20.81	1
	16QAM	1	0	21.45	21.76	21.52	1
		1	12	22.06	22.01	21.89	1
		1	24	21.05	21.06	21.45	1
		12	0	21.15	21.19	20.91	2
		12	6	21.19	21.18	20.93	2
		12	13	21.21	21.19	20.91	2
		25	0	21.08	21.08	20.83	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 37800 Frequency 2575 MHz	Mid CH 38000 Frequency 2595 MHz	High CH 38200 Frequency 2615 MHz	MPR
38/ 10	QPSK	1	0	22.50	22.20	21.51	0
		1	24	22.27	22.06	21.62	0
		1	49	22.18	21.51	20.56	0
		25	0	21.59	21.37	20.82	1
		25	12	21.37	21.11	20.76	1
		25	25	20.64	20.55	20.48	1
		50	0	21.18	21.01	20.53	1
	16QAM	1	0	22.55	22.25	21.55	1
		1	24	22.36	22.08	21.69	1
		1	49	22.31	21.63	20.67	1
		12	0	22.50	22.22	21.57	2
		12	18	21.97	22.06	21.62	2
		12	37	21.88	21.82	20.87	2
		27	0	21.71	21.47	20.88	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 37825 Frequency 2577.5 MHz	Mid CH 38000 Frequency 2595 MHz	High CH 38175 Frequency 2612.5MHz	MPR
38/ 15	QPSK	1	0	22.51	22.19	21.50	0
		1	37	22.31	22.01	21.62	0
		1	74	22.19	21.48	20.56	0
		36	0	21.66	21.37	20.79	1
		36	19	21.32	21.11	20.72	1
		36	39	20.69	20.55	20.54	1
		75	0	21.22	20.96	20.54	1
	16QAM	1	0	22.56	22.22	21.55	1
		1	37	22.40	22.07	21.73	1
		1	74	22.30	21.64	20.64	1
		12	0	22.56	22.16	21.62	2
		12	31	21.97	22.03	21.59	2
		12	62	21.89	21.81	20.93	2
		27	0	21.77	21.41	20.85	2

Band/BW	Modulation	RB Size	RB Offset	Low CH 37850 Frequency 2580 MHz	Mid CH 38000 Frequency 2595 MHz	High CH 38150 Frequency 2610 MHz	MPR
38/ 20	QPSK	1	0	22.54	22.25	21.52	0
		1	50	22.33	22.08	21.67	0
		1	99	22.25	21.56	20.58	0
		50	0	21.67	21.39	20.87	1
		50	25	21.39	21.19	20.78	1
		50	50	20.72	20.61	20.56	1
		100	0	21.24	21.03	20.59	1
	16QAM	1	0	22.62	22.30	21.57	1
		1	50	22.42	22.15	21.74	1
		1	99	22.38	21.68	20.69	1
		12	0	22.58	22.24	21.63	2
		12	43	22.05	22.07	21.64	2
		12	87	21.92	21.87	20.95	2
		27	0	21.79	21.48	20.90	2

LTE Band 41

Band/BW	Modulation	RB Size	RB Offset	Low CH (39675) Frequency (2498.5)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41565) Frequency (2687.5)MHz	MPR
41/ 5	QPSK	1	0	21.34	22.30	21.35	0
		1	12	22.10	22.13	21.84	0
		1	24	21.32	22.39	20.75	0
		12	0	21.33	22.20	19.39	1
		12	6	21.34	22.21	19.42	1
		12	13	21.35	22.21	19.44	1
		25	0	21.33	21.24	21.17	1
	16QAM	1	0	21.44	22.54	21.61	1
		1	12	22.17	22.38	22.06	1
		1	24	21.44	22.61	21.05	1
		12	0	21.29	22.17	19.42	2
		12	6	21.28	22.19	19.45	2
		12	13	21.28	22.19	19.44	2
		25	0	21.30	21.24	21.12	2

Band/BW	Modulation	RB Size	RB Offset	Low CH (39700) Frequency (2501)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41540) Frequency (2685)MHz	MPR
41/ 10	QPSK	1	0	21.69	21.92	21.59	0
		1	24	22.67	22.04	21.89	0
		1	49	22.34	21.90	20.07	0
		25	0	21.39	21.27	21.14	1
		25	12	21.65	21.12	21.02	1
		25	25	21.74	20.66	20.41	1
		50	0	21.54	20.96	20.81	1
	16QAM	1	0	21.56	21.93	21.63	1
		1	24	22.61	22.05	21.95	1
		1	49	22.26	21.98	20.14	1
		12	0	21.70	21.91	21.70	2
		12	18	22.27	22.03	21.75	2
		12	37	22.15	22.11	20.27	2
		27	0	21.03	21.20	21.00	2

Band/BW	Modulation	RB Size	RB Offset	Low CH (39725) Frequency (2503.5)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41515) Frequency (2682.5)MHz	MPR
41/ 15	QPSK	1	0	21.64	21.94	21.56	0
		1	37	22.66	22.05	21.92	0
		1	74	22.38	21.91	20.04	0
		36	0	21.34	21.21	21.20	1
		36	19	21.71	21.18	21.00	1
		36	39	21.70	20.64	20.37	1
		75	0	21.53	20.97	20.84	1
	16QAM	1	0	21.60	21.94	21.60	1
		1	37	22.57	22.05	21.94	1
		1	74	22.32	21.94	20.18	1
		12	0	21.64	21.95	21.66	2
		12	31	22.33	21.99	21.79	2
		12	62	22.10	22.13	20.24	2
		27	0	21.02	21.21	21.03	2

Band/BW	Modulation	RB Size	RB Offset	Low CH (39750) Frequency (2506)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41490) Frequency (2680)MHz	MPR
41/ 20	QPSK	1	0	21.72	21.98	21.61	0
		1	50	**22.69**	22.11	21.94	0
		1	99	22.40	21.98	20.09	0
		50	0	21.40	21.29	21.22	1
		50	25	21.72	21.20	21.08	1
		50	50	21.77	20.72	20.43	1
		100	0	21.56	21.03	20.86	1
	16QAM	1	0	21.62	22.01	21.65	1
		1	50	22.63	22.13	21.96	1
		1	99	22.34	22.02	20.19	1
		12	0	21.72	21.99	21.71	2
		12	43	22.35	22.07	21.80	2
		12	87	22.18	22.17	20.29	2
		27	0	21.05	21.27	21.05	2

LTE Band 66

Band/BW	Modulation	RB Size	RB Offset	Low CH (39675) Frequency (2498.5)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41565) Frequency (2687.5)MHz	MPR
66/ 1.4	QPSK	1	0	21.92	23.00	22.13	0
		1	2	23.29	22.53	22.93	0
		1	5	22.53	20.90	22.25	0
		3	0	22.38	22.68	22.73	0
		3	1	23.84	22.31	23.25	0
		3	3	22.94	21.91	22.89	0
		6	0	21.96	21.43	21.85	1
	16QAM	1	0	22.12	22.95	22.77	1
		1	2	23.17	22.84	23.44	1
		1	5	22.55	21.36	22.74	1
		3	0	23.49	23.33	23.80	1
		3	1	23.83	22.30	23.38	1
		3	3	23.43	23.40	23.31	1
		6	0	22.46	22.36	22.30	2

Band/BW	Modulation	RB Size	RB Offset	Low CH (39700) Frequency (2501)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41540) Frequency (2685)MHz	MPR
66/ 3	QPSK	1	0	21.94	23.02	22.12	0
		1	7	23.25	22.54	22.93	0
		1	14	22.49	20.90	22.25	0
		8	0	21.37	21.71	21.73	1
		8	3	22.77	21.31	22.27	1
		8	7	21.91	20.98	21.93	1
		15	0	21.93	21.44	21.79	1
	16QAM	1	0	22.09	23.01	22.80	1
		1	7	23.14	22.87	23.42	1
		1	14	22.58	21.36	22.74	1
		8	0	22.45	22.34	22.80	2
		8	3	22.88	21.25	22.41	2
		8	7	22.45	22.38	22.27	2
		15	0	22.46	22.30	22.33	2

Band/BW	Modulation	RB Size	RB Offset	Low CH (39725) Frequency (2503.5)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41515) Frequency (2682.5)MHz	MPR
66/ 5	QPSK	1	0	21.95	22.97	22.13	0
		1	12	23.30	22.51	22.93	0
		1	24	22.50	20.89	22.29	0
		12	0	21.40	21.71	21.70	1
		12	6	22.77	21.32	22.28	1
		12	13	21.95	20.94	21.94	1
		25	0	21.91	21.47	21.82	1
	16QAM	1	0	22.10	22.97	22.80	1
		1	12	23.11	22.90	23.41	1
		1	24	22.58	21.36	22.73	1
		12	0	22.45	22.32	22.77	2
		12	6	22.85	21.29	22.37	2
		12	13	22.40	22.40	22.30	2
		25	0	22.46	22.31	22.30	2

Band/BW	Modulation	RB Size	RB Offset	Low CH (39750) Frequency (2506)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41490) Frequency (2680)MHz	MPR
66/ 10	QPSK	1	0	21.92	23.00	22.13	0
		1	24	23.30	22.51	22.94	0
		1	49	22.47	20.93	22.25	0
		25	0	21.41	21.70	21.73	1
		25	12	22.83	21.26	22.28	1
		25	25	21.93	20.91	21.93	1
		50	0	21.96	21.47	21.79	1
	16QAM	1	0	22.10	22.94	22.76	1
		1	24	23.16	22.86	23.44	1
		1	49	22.58	21.37	22.70	1
		12	0	22.47	22.30	22.83	2
		12	18	22.89	21.23	22.42	2
		12	37	22.39	22.41	22.27	2
		27	0	22.50	22.30	22.34	2

Band/BW	Modulation	RB Size	RB Offset	Low CH (39750) Frequency (2506)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41490) Frequency (2680)MHz	MPR
66/ 15	QPSK	1	0	21.99	23.00	22.10	0
		1	37	23.28	22.56	22.89	0
		1	74	22.53	20.96	22.26	0
		36	0	21.38	21.71	21.74	1
		36	19	22.84	21.31	22.28	1
		36	39	21.91	20.92	21.93	1
		75	0	21.96	21.45	21.84	1
	16QAM	1	0	22.14	23.01	22.76	1
		1	37	23.15	22.87	23.44	1
		1	74	22.54	21.42	22.72	1
		12	0	22.51	22.30	22.84	2
		12	31	22.83	21.27	22.38	2
		12	62	22.44	22.39	22.30	2
		27	0	22.51	22.33	22.27	2

Band/BW	Modulation	RB Size	RB Offset	Low CH (39750) Frequency (2506)MHz	Mid CH (40620) Frequency (2593)MHz	High CH (41490) Frequency (2680)MHz	MPR
66/ 20	QPSK	1	0	22.00	23.04	22.18	0
		1	50	**23.32**	22.59	22.95	0
		1	99	22.55	20.97	22.30	0
		50	0	21.44	21.76	21.75	1
		50	25	22.85	21.33	22.33	1
		50	50	21.99	20.99	21.95	1
		100	0	21.97	21.49	21.87	1
	16QAM	1	0	22.17	23.02	22.82	1
		1	50	23.19	22.92	23.46	1
		1	99	22.60	21.44	22.75	1
		12	0	22.53	22.38	22.85	2
		12	43	22.91	21.31	22.43	2
		12	87	22.47	22.45	22.32	2
		27	0	22.52	22.38	22.35	2

EIRP

LTE BAND 4
CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	22.17	-0.39	21.78	150.66	1
20175	1732.5	22.57	-0.39	22.18	165.2	1
20393	1754.3	21.96	-0.39	21.57	143.55	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	22.17	-0.39	21.78	150.66	1
20175	1732.5	22.59	-0.39	22.2	165.96	1
20393	1754.3	22.02	-0.39	21.63	145.55	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	22.41	-0.39	22.02	159.22	1
20175	1732.5	22.77	-0.39	22.38	172.98	1
20385	1753.5	22.19	-0.39	21.8	151.36	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	22.6	-0.39	22.21	166.34	1
20175	1732.5	22.83	-0.39	22.44	175.39	1
20385	1753.5	21	-0.39	20.61	115.08	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.9	-0.39	22.51	178.24	1
20175	1732.5	22.79	-0.39	22.4	173.78	1
20375	1752.5	21.97	-0.39	21.58	143.88	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.62	-0.39	22.23	167.11	1
20175	1732.5	22.7	-0.39	22.31	170.22	1
20375	1752.5	22.04	-0.39	21.65	146.22	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	22.42	-0.39	22.03	159.59	1
20175	1732.5	22.25	-0.39	21.86	153.46	1
20350	1750	22.08	-0.39	21.69	147.57	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	23.01	-0.39	22.62	182.81	1
20175	1732.5	22.41	-0.39	22.02	159.22	1
20350	1750	23.17	-0.39	22.78	189.67	1

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	22.9	-0.39	22.51	178.24	1
20175	1732.5	22.13	-0.39	21.74	149.28	1
20325	1747.5	22.39	-0.39	22	158.49	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	23.34	-0.39	22.95	197.24	1
20175	1732.5	22.43	-0.39	22.04	159.96	1
20325	1747.5	22.53	-0.39	22.14	163.68	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.54	-0.39	23.15	206.54	1
20175	1732.5	23.07	-0.39	22.68	185.35	1
20300	1745	23.08	-0.39	22.69	185.78	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.74	-0.39	23.35	216.27	1
20175	1732.5	23.25	-0.39	22.86	193.2	1
20300	1745	23.19	-0.39	22.8	190.55	1

LTE BAND 7
CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20775	2502.5	21.05	0.23	21.28	134.28	2
21100	2535.0	22.88	0.23	23.11	204.64	2
21425	2567.5	21.92	0.23	22.15	164.06	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20775	2502.5	20.95	0.23	21.18	131.22	2
21100	2535.0	22.87	0.23	23.1	204.17	2
21425	2567.5	21.92	0.23	22.15	164.06	2

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20800	2505.0	22.09	0.23	22.32	170.61	2
21100	2535.0	23.32	0.23	23.55	226.46	2
21400	2565.0	22.08	0.23	22.31	170.22	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20800	2505.0	22.17	0.23	22.4	173.78	2
21100	2535.0	23.52	0.23	23.75	237.14	2
21400	2565.0	22.63	0.23	22.86	193.2	2

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20825	2507.5	21.35	0.23	21.58	143.88	2
21100	2535.0	21.58	0.23	21.81	151.71	2
21375	2562.5	22.6	0.23	22.83	191.87	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20825	2507.5	21.82	0.23	22.05	160.32	2
21100	2535.0	22.05	0.23	22.28	169.04	2
21375	2562.5	22.92	0.23	23.15	206.54	2

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20850	2510.0	23.41	0.23	23.64	231.21	2
21100	2535.0	23.4	0.23	23.63	230.67	2
21350	2560.0	23.45	0.23	23.68	233.35	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20850	2510.0	23.74	0.23	23.97	249.46	2
21100	2535.0	23.6	0.23	23.83	241.55	2
21350	2560.0	23.58	0.23	23.81	240.44	2

EIRP

LTE BAND 12
CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23017	699.7	22.46	0.32	20.63	115.61	3
23095	707.5	23.17	0.32	21.34	136.14	3
23173	715.3	22.21	0.32	20.38	109.14	3

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23017	699.7	22.52	0.32	20.69	117.22	3
23095	707.5	23.22	0.32	21.39	137.72	3
23173	715.3	22.3	0.32	20.47	111.43	3

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23025	700.5	22.69	0.32	20.86	121.9	3
23095	707.5	23.41	0.32	21.58	143.88	3
23165	714.5	22.65	0.32	20.82	120.78	3

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23025	700.5	22.83	0.32	21	125.89	3
23095	707.5	23.46	0.32	21.63	145.55	3
23165	714.5	22.54	0.32	20.71	117.76	3

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23035	701.5	22.39	0.32	20.56	113.76	3
23095	707.5	23.04	0.32	21.21	132.13	3
23155	713.5	22.38	0.32	20.55	113.5	3

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23035	701.5	22.34	0.32	20.51	112.46	3
23095	707.5	23.16	0.32	21.33	135.83	3
23155	713.5	22.3	0.32	20.47	111.43	3

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23060	704	22.84	0.32	21.01	126.18	3
23095	707.5	22.25	0.32	20.42	110.15	3
23130	711	22.03	0.32	20.2	104.71	3

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
23060	704	23.01	0.32	21.18	131.22	3
23095	707.5	23.19	0.32	21.36	136.77	3
23130	711	22.29	0.32	20.46	111.17	3

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

EIRP

LTE BAND 38

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	21.77	0.86	22.63	183.23	2
38000	2595.0	21.89	0.86	22.75	188.36	2
38225	2617.5	21.65	0.86	22.51	178.24	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	22.06	0.86	22.92	195.88	2
38000	2595.0	22.01	0.86	22.87	193.64	2
38225	2617.5	21.89	0.86	22.75	188.36	2

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	22.5	0.86	23.36	216.77	2
38000	2595.0	22.2	0.86	23.06	202.3	2
38200	2615.0	21.62	0.86	22.48	177.01	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	22.55	0.86	23.41	219.28	2
38000	2595.0	22.25	0.86	23.11	204.64	2
38200	2615.0	21.69	0.86	22.55	179.89	2

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	22.51	0.86	23.37	217.27	2
38000	2595.0	22.19	0.86	23.05	201.84	2
38175	2612.5	21.62	0.86	22.48	177.01	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	22.56	0.86	23.42	219.79	2
38000	2595.0	22.22	0.86	23.08	203.24	2
38175	2612.5	21.73	0.86	22.59	181.55	2

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	22.54	0.86	23.4	218.78	2
38000	2595.0	22.25	0.86	23.11	204.64	2
38150	2610.0	21.67	0.86	22.53	179.06	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	22.62	0.86	23.48	222.84	2
38000	2595.0	22.3	0.86	23.16	207.01	2
38150	2610.0	21.74	0.86	22.6	181.97	2

LTE BAND 41

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	22.1	0.86	22.96	197.7	2
40620	2593.0	22.39	0.86	23.25	211.35	2
41565	2687.5	21.84	0.86	22.7	186.21	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	22.17	0.86	23.03	200.91	2
40620	2593.0	22.61	0.86	23.47	222.33	2
41565	2687.5	22.06	0.86	22.92	195.88	2

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	22.67	0.86	23.53	225.42	2
40620	2593.0	22.04	0.86	22.9	194.98	2
41540	2685.0	21.89	0.86	22.75	188.36	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	22.61	0.86	23.47	222.33	2
40620	2593.0	22.11	0.86	22.97	198.15	2
41540	2685.0	21.95	0.86	22.81	190.99	2

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5.0	22.66	0.86	23.52	224.91	2
40620	2593.0	22.05	0.86	22.91	195.43	2
41515	2682.5.0	21.92	0.86	22.78	189.67	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	22.57	0.86	23.43	220.29	2
40620	2593.0	22.13	0.86	22.99	199.07	2
41515	2682.5	21.94	0.86	22.8	190.55	2

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	22.69	0.86	23.55	226.46	2
40620	2593.0	22.11	0.86	22.97	198.15	2
41490	2680.0	21.94	0.86	22.8	190.55	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	22.63	0.86	23.49	223.36	2
40620	2593.0	22.17	0.86	23.03	200.91	2
41490	2680.0	21.96	0.86	22.82	191.43	2

LTE BAND 66

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	23.84	-0.39	23.45	221.31	1
132322	1745	23	-0.39	22.61	182.39	1
132665	1779.3	23.25	-0.39	22.86	193.2	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	23.83	-0.39	23.44	220.8	1
132322	1745	23.4	-0.39	23.01	199.99	1
132665	1779.3	23.8	-0.39	23.41	219.28	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	23.25	-0.39	22.86	193.20	1
132322	1745	23.02	-0.39	22.63	183.23	1
132657	1778.5	22.93	-0.39	22.54	179.47	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	23.14	-0.39	22.75	188.36	1
132322	1745	23.01	-0.39	22.62	182.81	1
132657	1778.5	23.42	-0.39	23.03	200.91	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	23.3	-0.39	22.91	195.43	1
132322	1745	22.97	-0.39	22.58	181.13	1
132647	1777.5	22.93	-0.39	22.54	179.47	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	23.11	-0.39	22.72	187.07	1
132322	1745	22.97	-0.39	22.58	181.13	1
132647	1777.5	23.41	-0.39	23.02	200.45	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	23.3	-0.39	22.91	195.43	1
132322	1745	23	-0.39	22.61	182.39	1
132622	1775	22.94	-0.39	22.55	179.89	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	23.16	-0.39	22.77	189.23	1
132322	1745	22.94	-0.39	22.55	179.89	1
132622	1775	23.44	-0.39	23.05	201.84	1

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	23.28	-0.39	22.89	194.54	1
132322	1745	23	-0.39	22.61	182.39	1
132597	1772.5	22.89	-0.39	22.5	177.83	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	23.15	-0.39	22.76	188.8	1
132322	1745	23.01	-0.39	22.62	182.81	1
132597	1772.5	23.44	-0.39	23.05	201.84	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	23.32	-0.39	22.93	196.34	1
132322	1745	23.04	-0.39	22.65	184.08	1
132572	1770	22.95	-0.39	22.56	180.30	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G_T-L_C (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	23.19	-0.39	22.8	190.55	1
132322	1745	23.02	-0.39	22.63	183.23	1
132572	1770	23.46	-0.39	23.07	202.77	1

3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILIITY MEASUREMENT

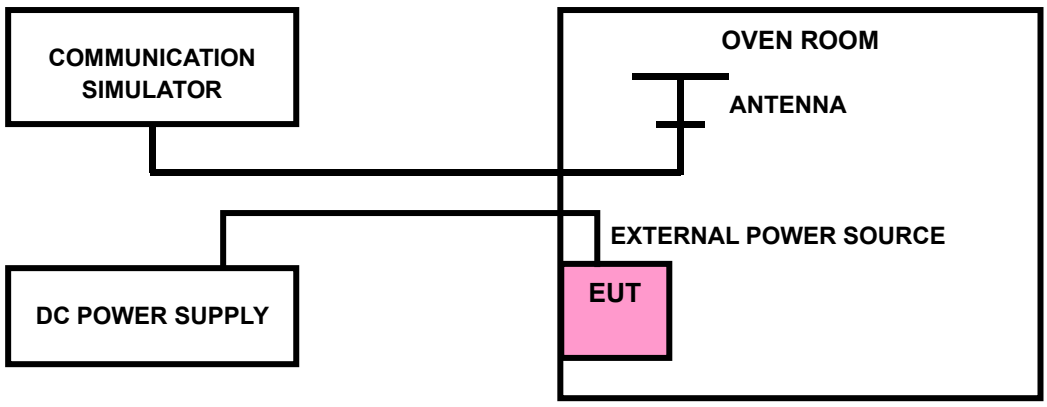
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

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°C 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

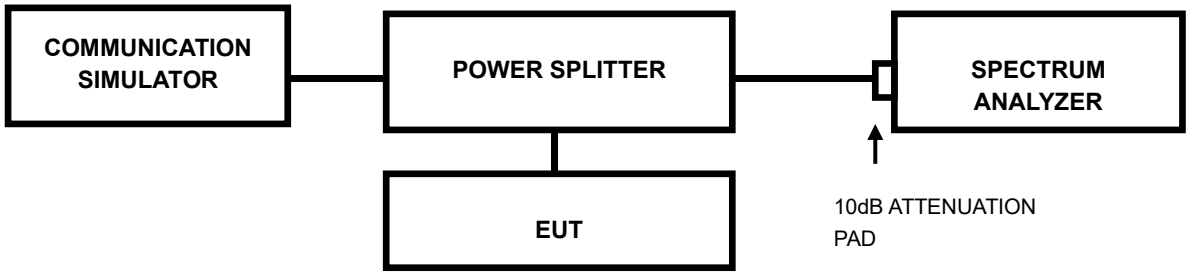
Please Refer to Appendix A Of this test report.

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 A Of this test report.

3.4 BAND EDGE MEASUREMENT

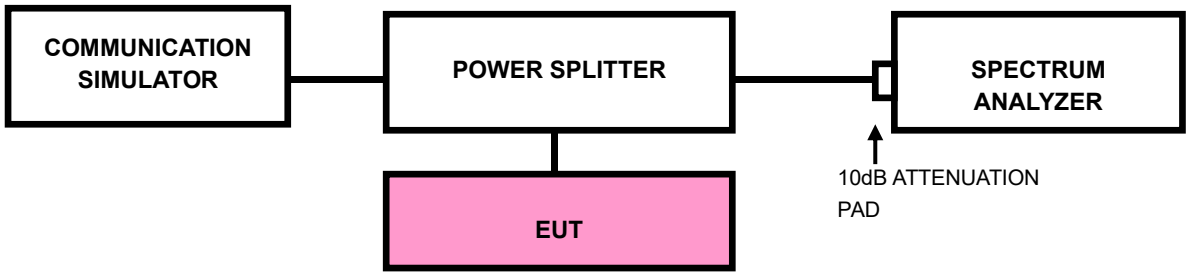
3.4.1 LIMITS OF BAND EDGE MEASUREMENT

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.

3.4.2 TEST SETUP



3.4.3 TEST PROCEDURES

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

b. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz.
RBW of the spectrum is 10kHz and VBW of the spectrum is 30kHz (LTE bandwidth for (1.4M/3M/5M/10M/15M/20M)1RB/0RB&1RB/MAXRB).

c. The center frequency of spectrum is the band edge frequency and span is 10MHz.
RBW of the spectrum is 100kHz and VBW of the spectrum is 300kHz (WCDMA).

d. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz.
RBW of the spectrum is ⩾1%*EBW kHz and VBW of the spectrum is 3*RBW kHz.
(LTE bandwidth 1.4M/3M/5M/10M/15M/20MHz).

e. Record the max trace plot into the test report.

3.4.4 TEST RESULTS

Please Refer to Appendix A Of this test report.

3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

For:LTE Band 4/12
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13dBm.

For:LTE Band 7/38/41

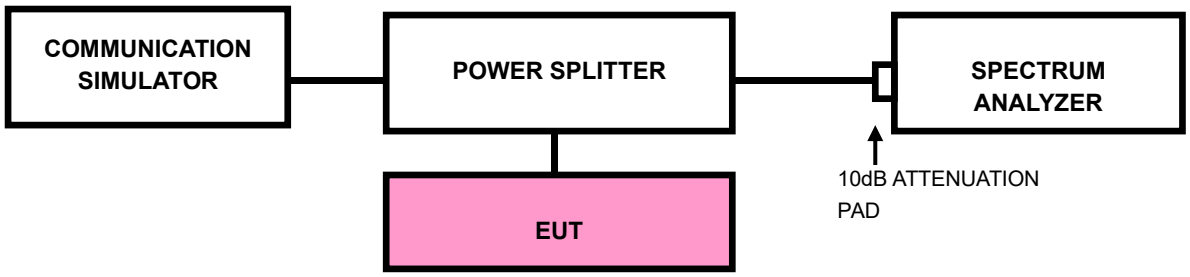
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 55 +10 log10(P) dB. The limit of emission is equal to -25dBm.

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 10^{th} 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 A Of this test report.

3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

For:LTE Band 4/12

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13dBm.

For:LTE Band 7/38/41

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 55 +10 log10(P) dB. The limit of emission is equal to -25dBm.

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.

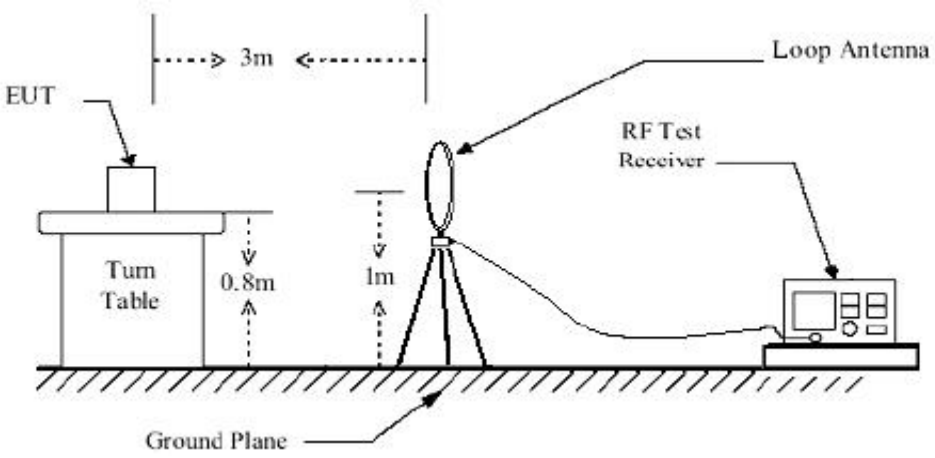
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.6.3 DEVIATION FROM TEST STANDARD

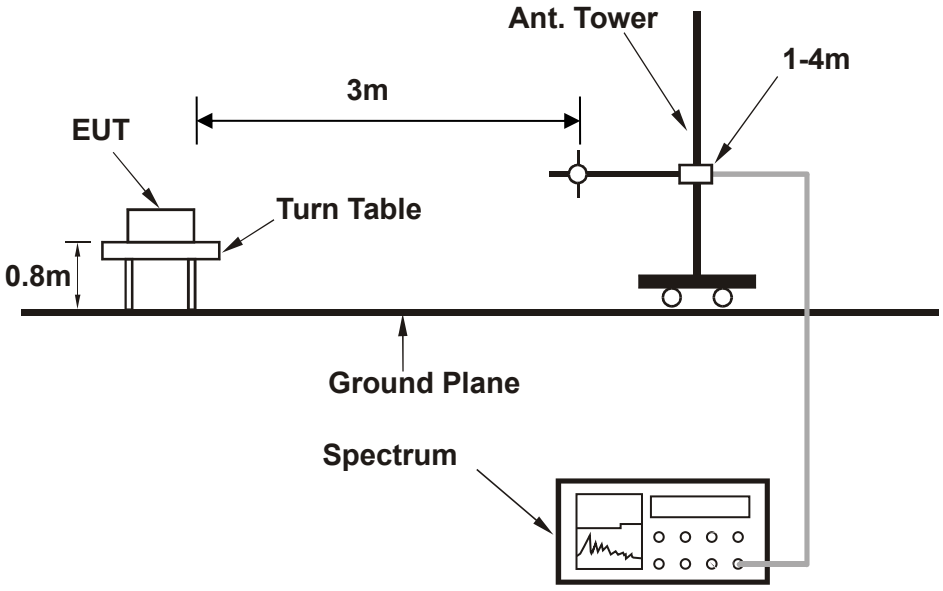
No deviation

3.6.4 TEST SETUP

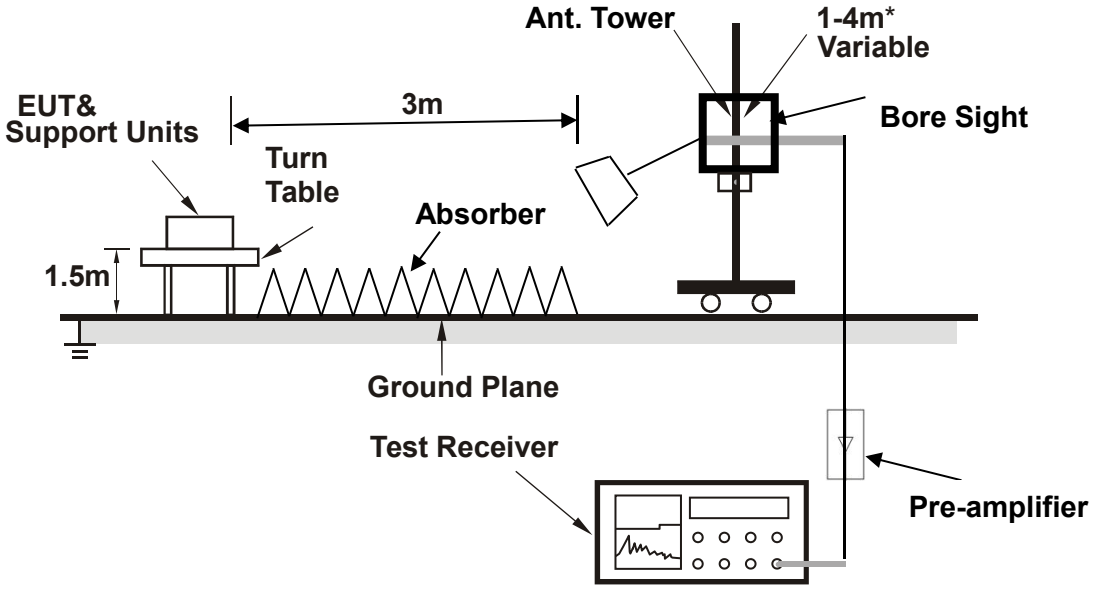
< Frequency Range below 30MHz >



< 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.

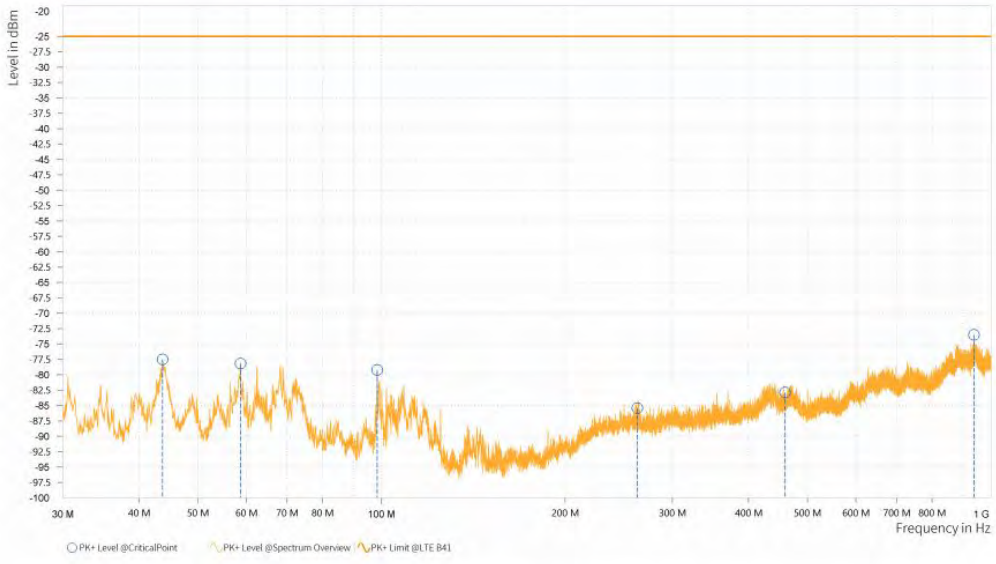
BELOW 1GHz WORST-CASE DATA

30 MHz – 1GHz data:

LTE Band 7
CHANNEL BANDWIDTH: 10MHz / QPSK

MODE	TX channel 21100	**FREQUENCY RANGE**	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
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	43.750	-77.50	-25.00	52.50	-5.49	H	360	2
1	58.700	-78.18	-25.00	53.18	-5.81	H	0	2
1	98.400	-79.23	-25.00	54.23	-12.14	H	356.4	2
1	262.850	-85.43	-25.00	60.43	-7.84	H	207.8	1
2	459.396	-82.88	-25.00	57.88	-4.36	H	0	2
2	937.621	-73.51	-25.00	48.51	3.47	H	0	2



MODE	TX channel 21100	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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	43.400	-77.29	-25.00	52.29	-6.79	V	1.4	2
1	68.200	-63.34	-25.00	38.34	-3.76	V	360	2
1	98.450	-66.96	-25.00	41.96	-8.93	V	153.3	2
1	250.000	-84.59	-25.00	59.59	-9.47	V	1.4	2
2	519.575	-80.45	-25.00	55.45	-2.99	V	281.9	1
2	937.667	-73.23	-25.00	48.23	2.30	V	360	2

ABOVE 1GHz

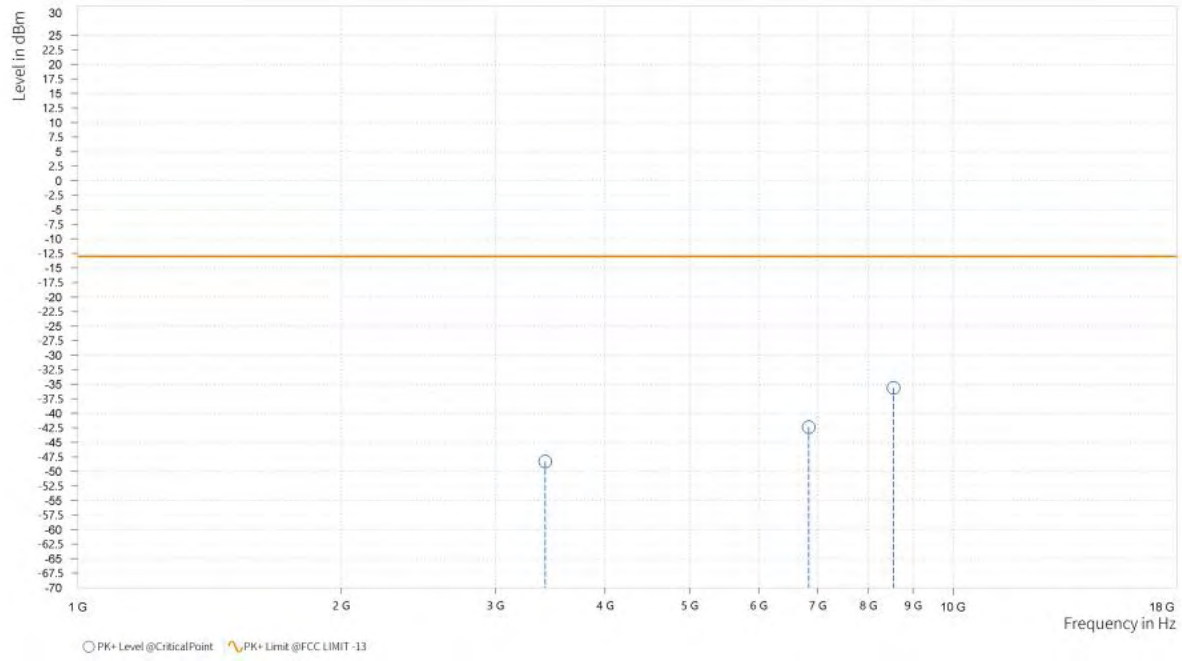
Note: For higher frequency, the emission is too low to be detected.

LTE Band 4
CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH 19957

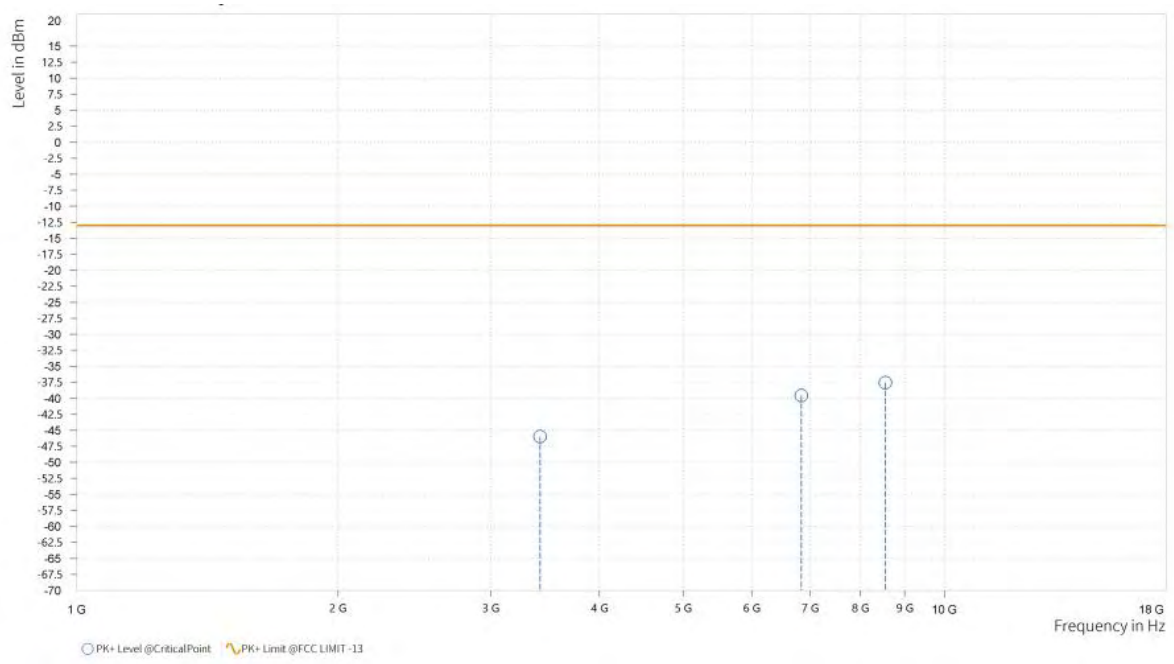
MODE	TX channel 19957	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,420.500	-48.29	-13.00	35.29	23.08	H	360	2
5	6,840.500	-42.38	-13.00	29.38	33.00	H	0	2
6	8,551.000	-35.63	-13.00	22.63	22.79	H	334.6	1



MODE	TX channel 19957	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

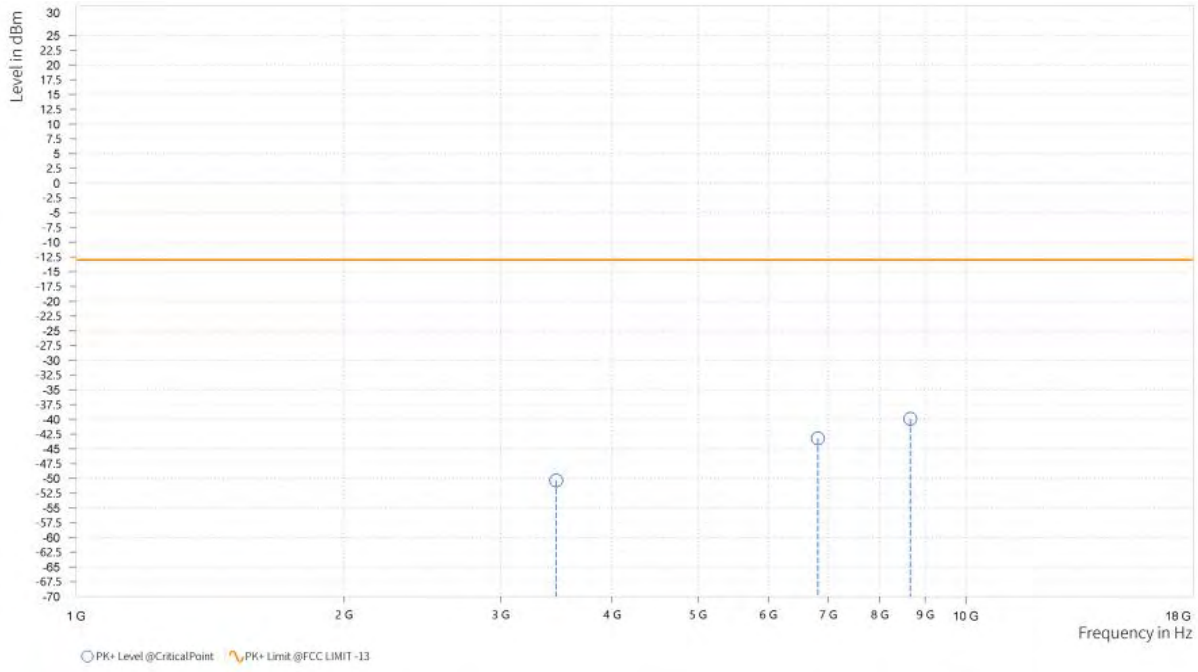
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,420.000	-45.99	-13.00	32.99	22.36	V	0	2
5	6,840.500	-39.56	-13.00	26.56	32.66	V	360	2
6	8,551.000	-37.55	-13.00	24.55	20.17	V	0	2



CH 20175

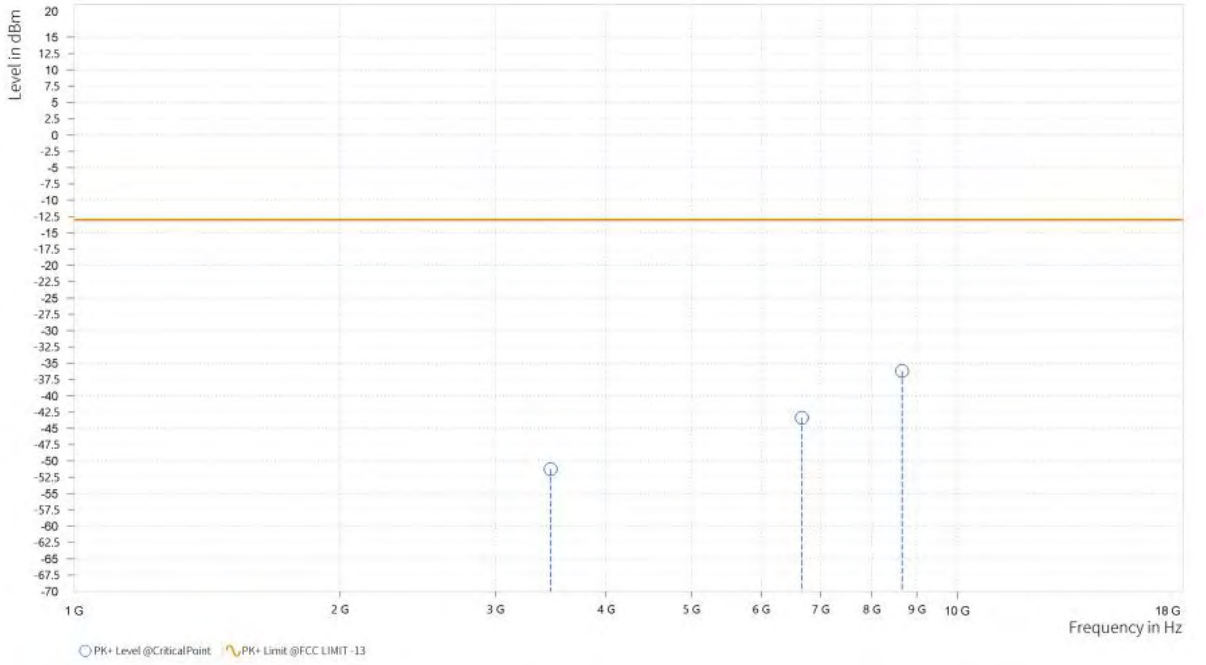
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,464.000	-50.37	-13.00	37.37	22.95	H	0	2
5	6,818.500	-43.21	-13.00	30.21	32.92	H	0	2
6	8,660.000	-39.91	-13.00	26.91	22.53	H	14.2	2



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

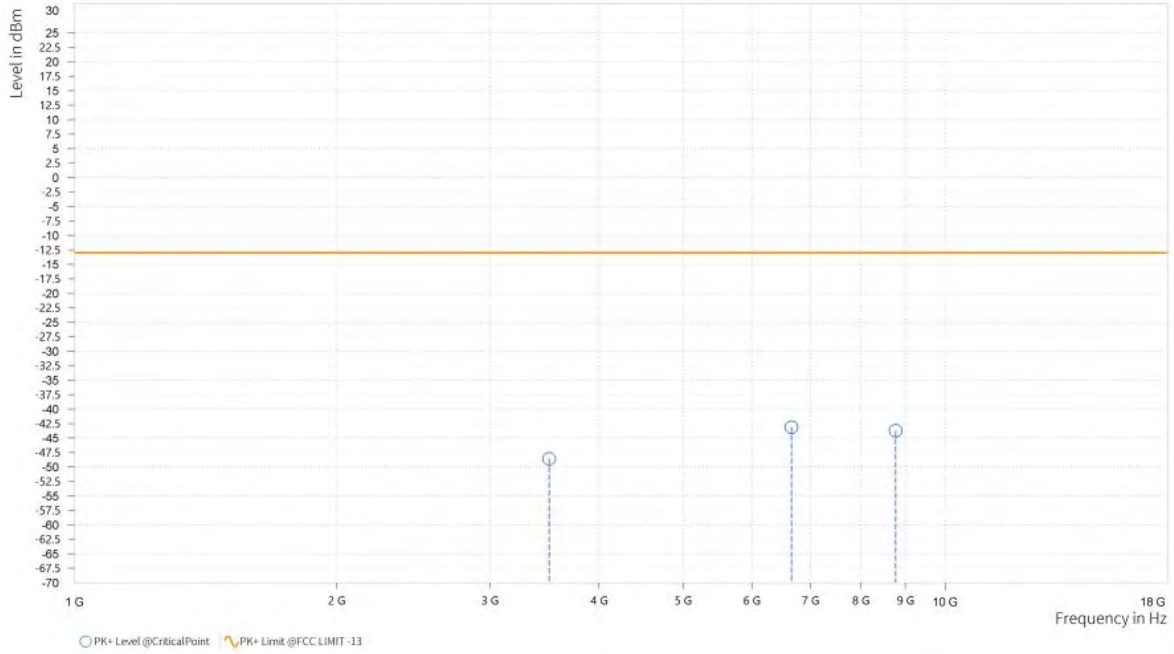
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,464.000	-51.25	-13.00	38.25	22.01	V	177.3	2
5	6,669.000	-43.37	-13.00	30.37	33.02	V	0	1
6	8,660.000	-36.20	-13.00	23.20	20.72	V	0	2



CH 20393

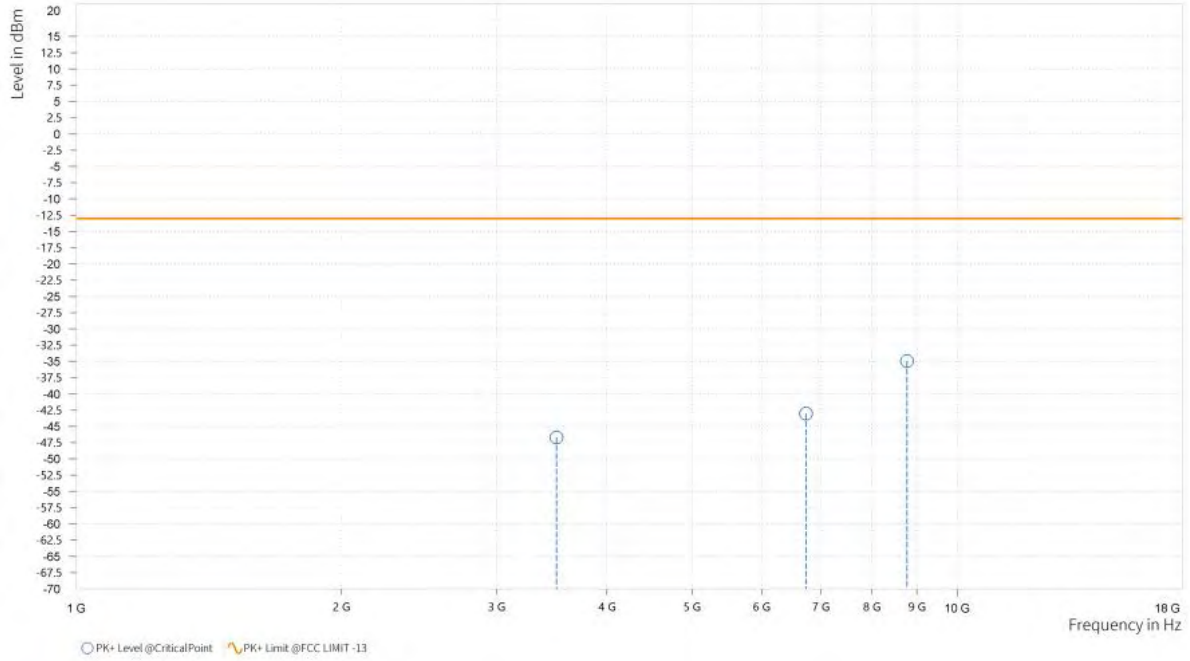
MODE	TX channel 20393	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,507.500	-48.61	-13.00	35.61	22.54	H	360	2
5	6,657.000	-43.15	-13.00	30.15	32.96	H	360	2
6	8,769.500	-43.74	-13.00	30.74	21.68	H	15.7	2



MODE	TX channel 20393	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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]
4	3,507.500	-46.68	-13.00	33.68	22.12	V	0	2
5	6,737.000	-43.02	-13.00	30.02	32.80	V	266.4	1
6	8,769.000	-34.96	-13.00	21.96	21.01	V	0	2

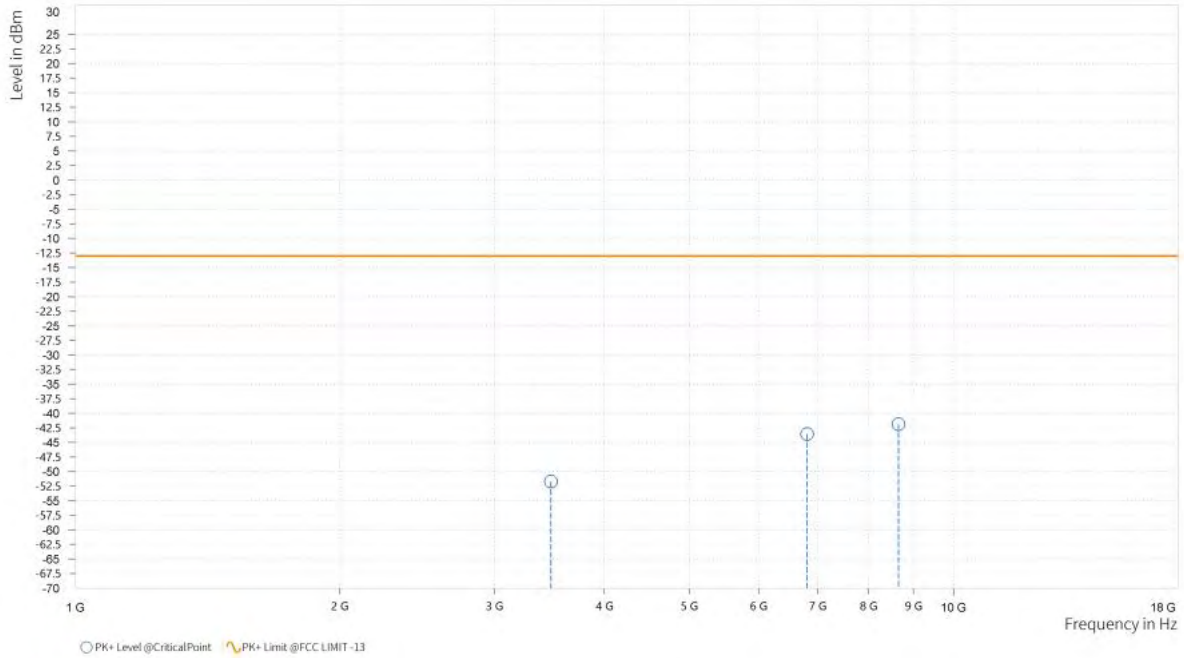


CHANNEL BANDWIDTH: 3MHz / QPSK

CH 20175

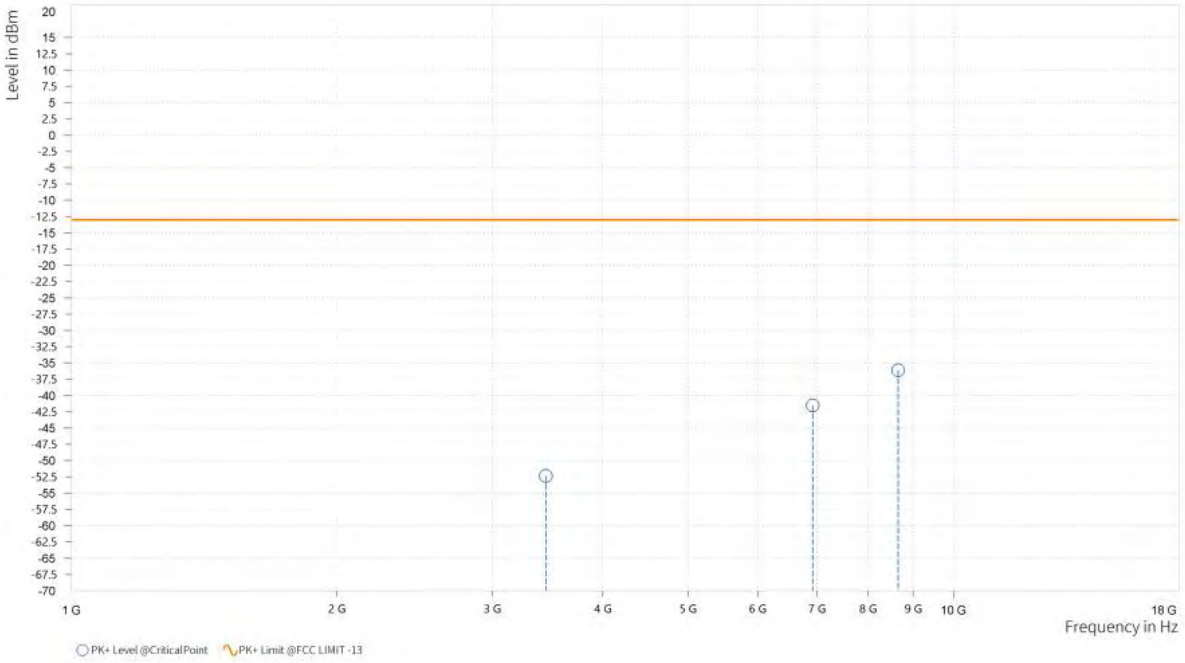
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,478.500	-51.68	-13.00	38.68	22.76	H	0	1
5	6,809.000	-43.56	-13.00	30.56	32.89	H	360	2
6	8,655.500	-41.90	-13.00	28.90	22.58	H	14.9	2



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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]
4	3,450.000	-52.36	-13.00	39.36	22.05	V	183.8	1
5	6,925.000	-41.52	-13.00	28.52	32.51	V	0	2
6	8,656.000	-36.12	-13.00	23.12	20.71	V	0	2

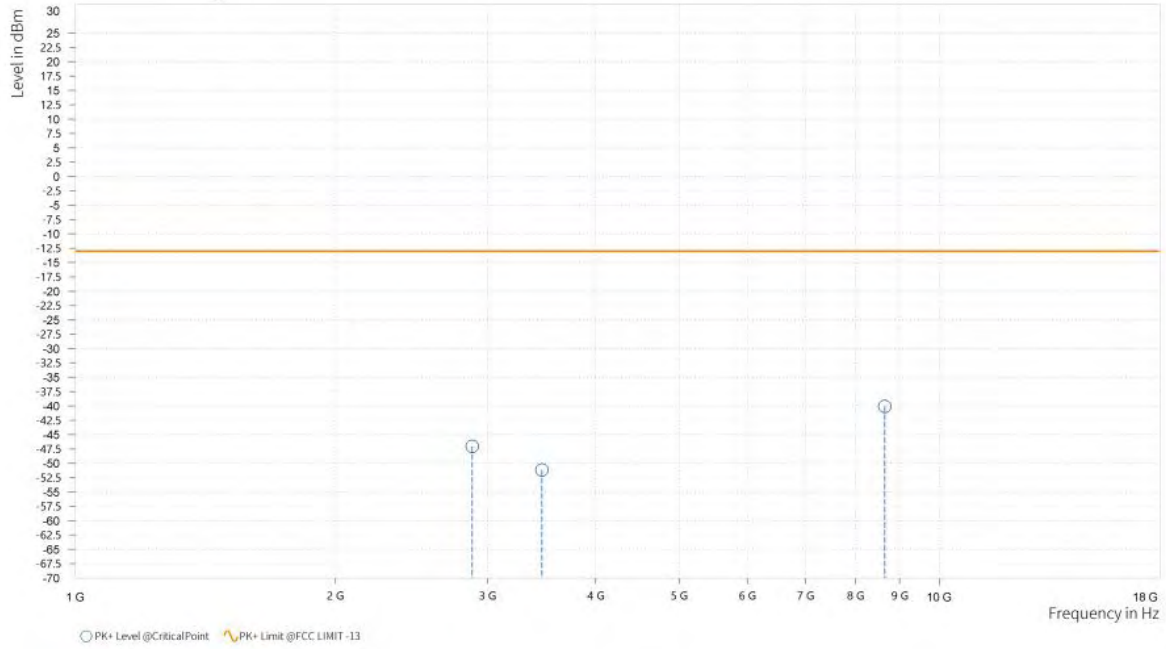


CHANNEL BANDWIDTH: 5MHz / QPSK

CH 20175

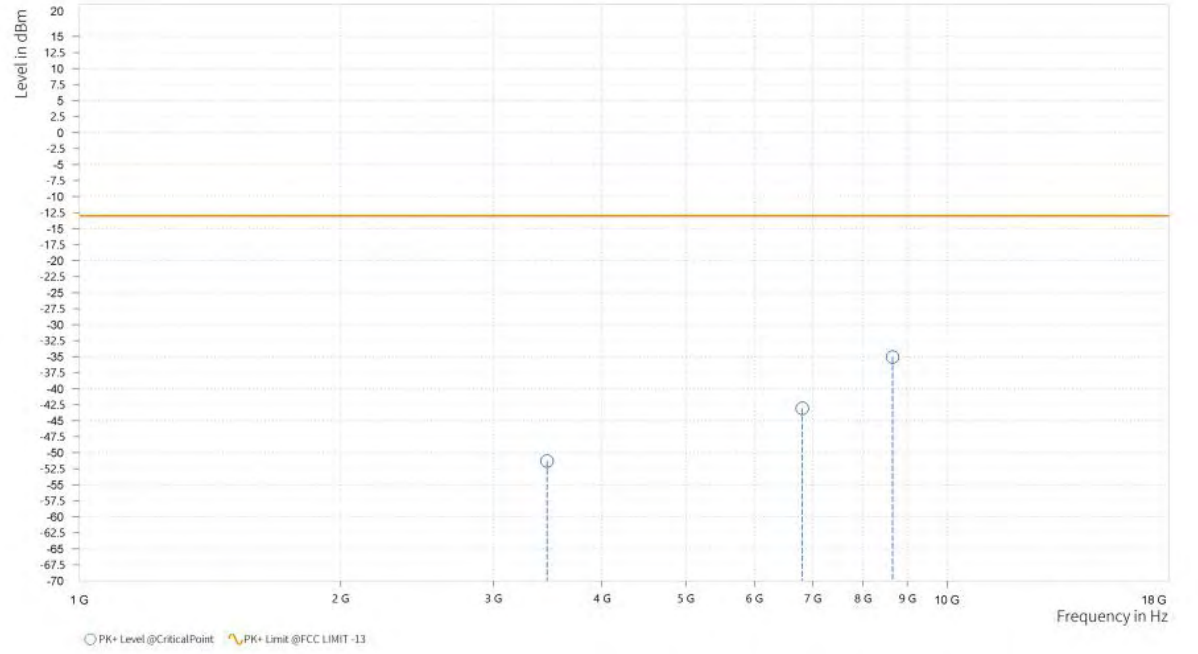
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
3	2,879.500	-47.03	-13.00	34.03	26.90	H	0	2
4	3,468.000	-51.17	-13.00	38.17	22.92	H	0	2
6	8,651.000	-40.07	-13.00	27.07	22.62	H	332.2	1



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

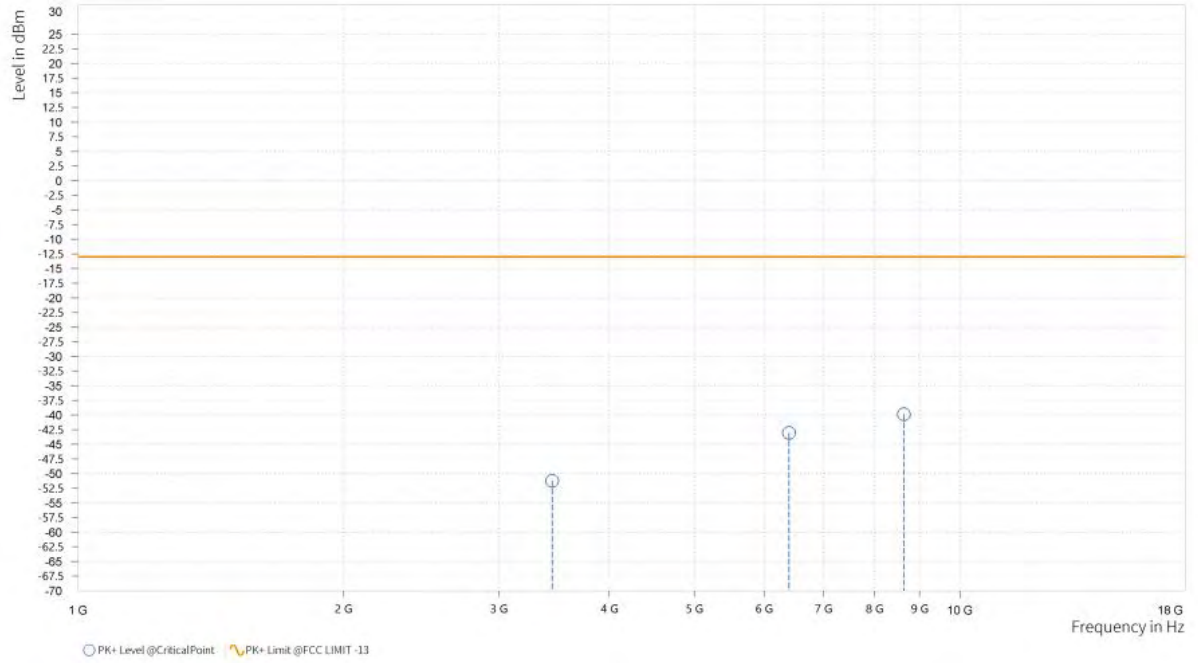
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,460.000	-51.32	-13.00	38.32	21.98	V	360	2
5	6,812.000	-43.09	-13.00	30.09	32.71	V	266.4	1
6	8,651.500	-35.07	-13.00	22.07	20.68	V	360	2



CHANNEL BANDWIDTH: 10MHz / QPSK

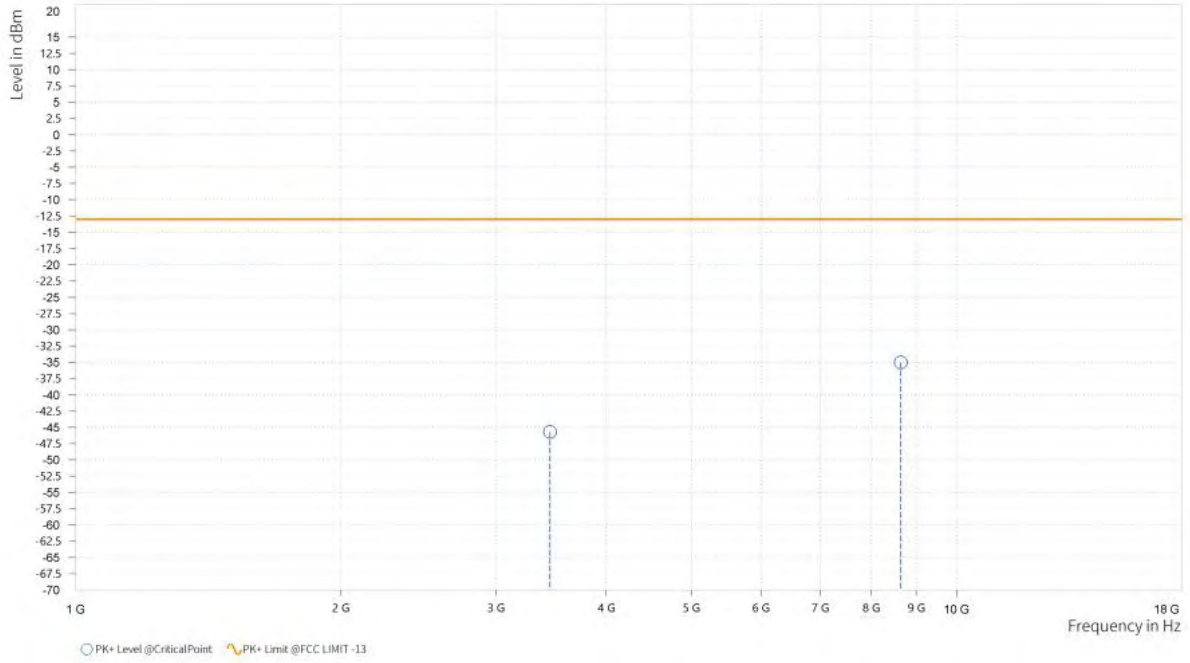
MODE	TX channel 20175	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,447.500	-51.22	-13.00	38.22	22.97	H	0	2
5	6,399.000	-43.08	-13.00	30.08	32.74	H	360	2
6	8,640.000	-39.89	-13.00	26.89	22.67	H	335.7	1



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

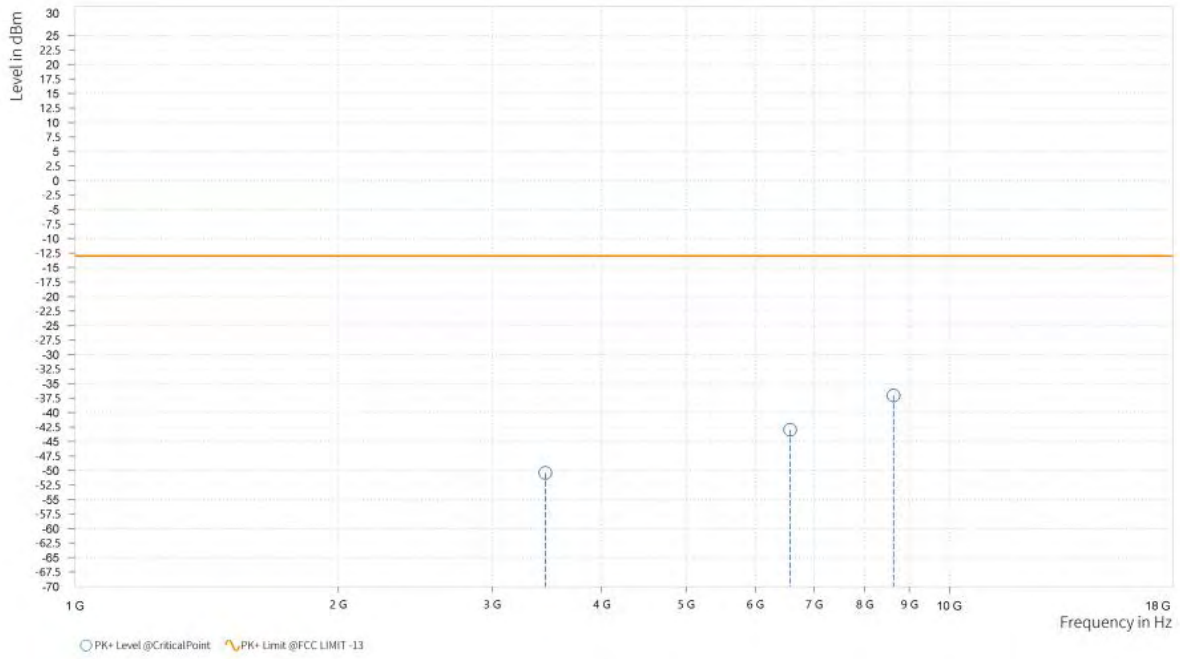
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,456.000	-45.73	-13.00	32.73	22.01	V	177.3	2
6	8,640.500	-35.02	-13.00	22.02	20.56	V	0	2



CHANNEL BANDWIDTH: 15MHz / QPSK

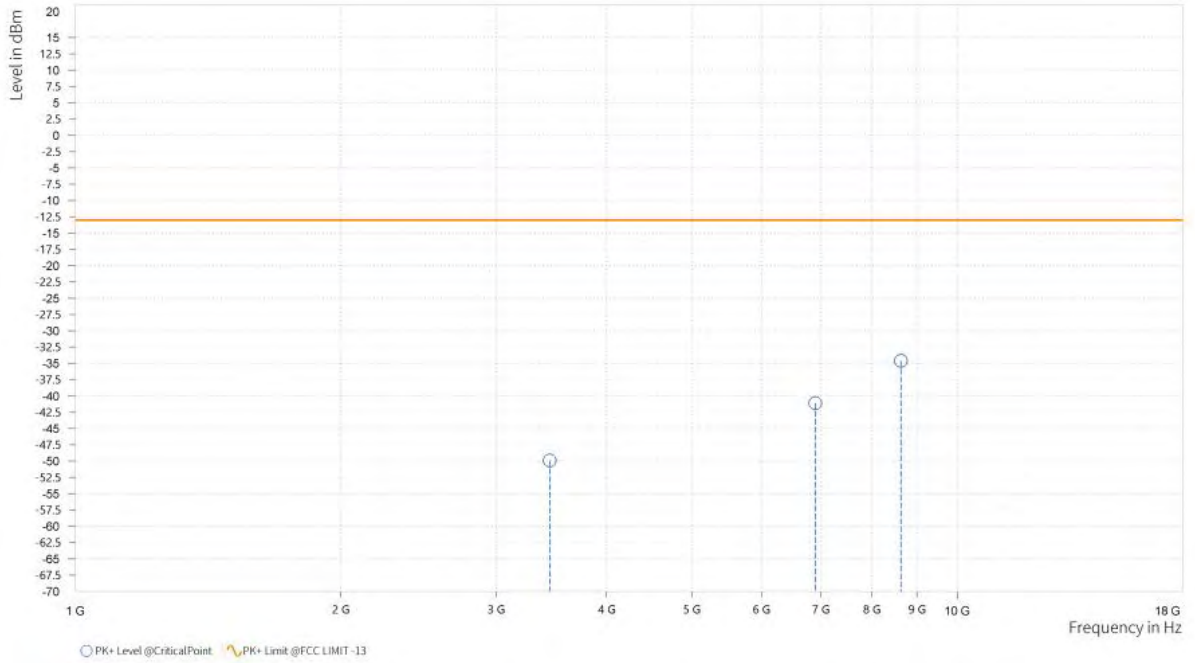
MODE	TX channel 20175	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,451.000	-50.42	-13.00	37.42	22.97	H	360	2
5	6,572.500	-42.99	-13.00	29.99	32.96	H	360	2
6	8,629.000	-37.04	-13.00	24.04	22.71	H	335.8	1



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

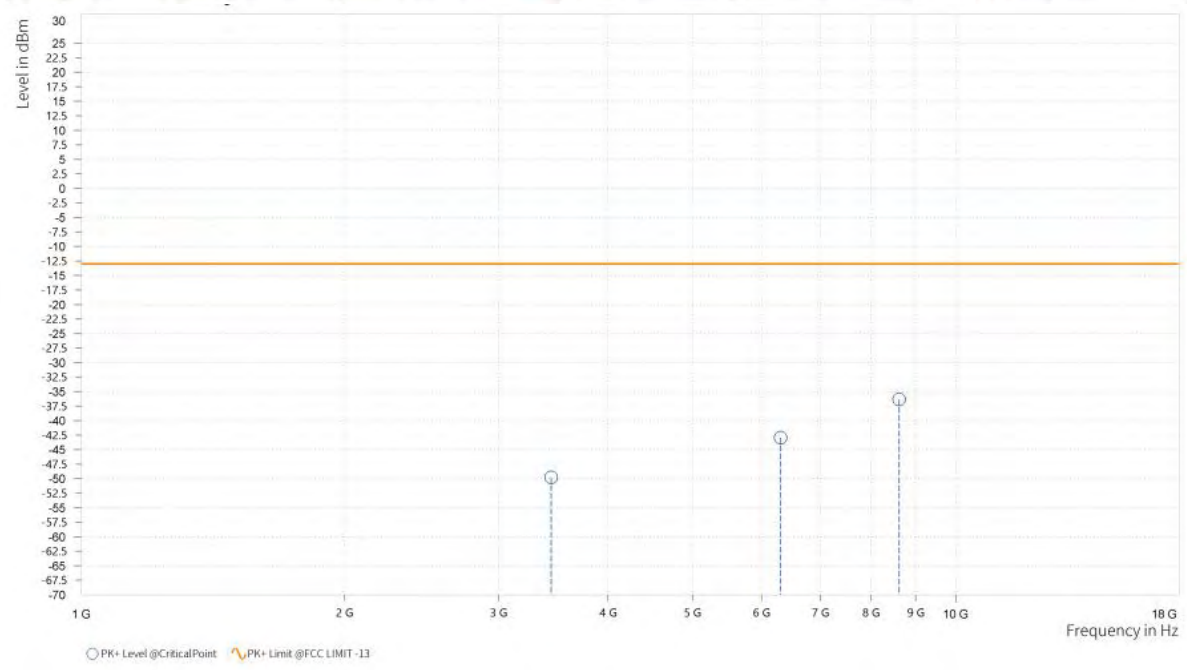
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,451.500	-49.91	-13.00	36.91	22.04	V	0	2
5	6,903.000	-41.10	-13.00	28.10	32.60	V	360	2
6	8,629.000	-34.62	-13.00	21.62	20.45	V	0	2



CHANNEL BANDWIDTH: 20MHz / QPSK

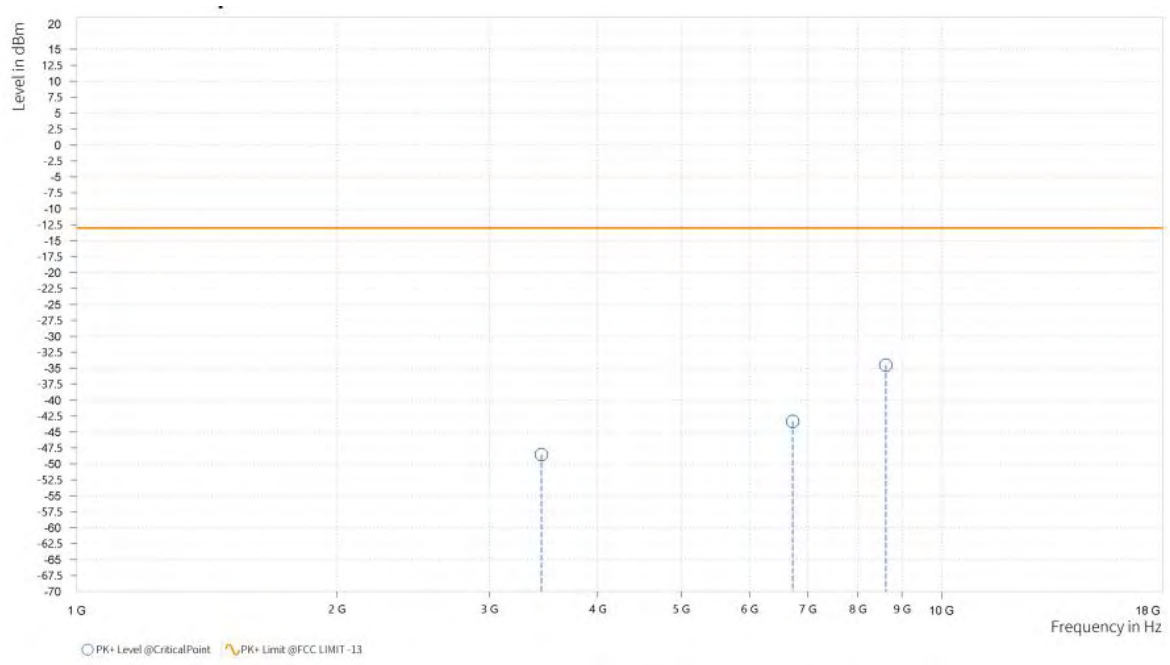
MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,447.000	-49.77	-13.00	36.77	22.96	H	360	1
5	6,306.500	-42.95	-13.00	29.95	33.81	H	0	2
6	8,617.500	-36.32	-13.00	23.32	22.69	H	333.4	1



MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

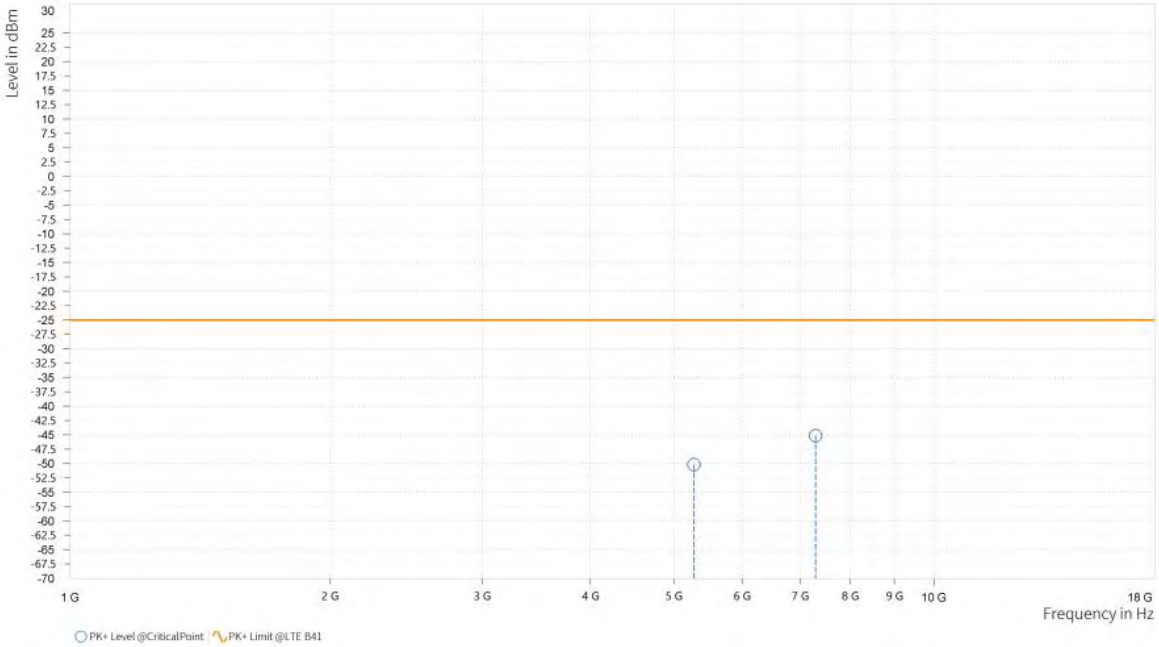
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,446.500	-48.56	-13.00	35.56	22.07	V	0	2
5	6,725.500	-43.34	-13.00	30.34	32.85	V	360	2
6	8,618.000	-34.55	-13.00	21.55	20.37	V	360	2



LTE Band 7
CHANNEL BANDWIDTH: 5MHz / QPSK

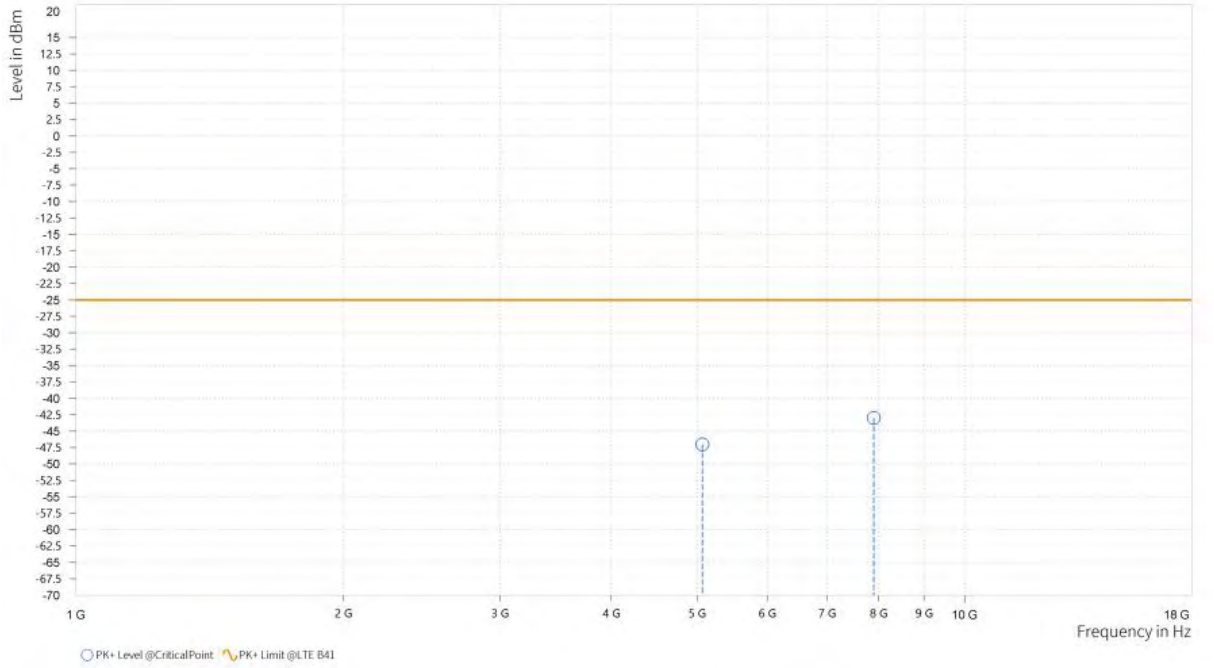
MODE	TX channel 21100	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,275.000	-50.19	-25.00	25.19	26.49	H	182.6	1
5	7,292.000	-45.16	-25.00	20.16	31.52	H	0	1



MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

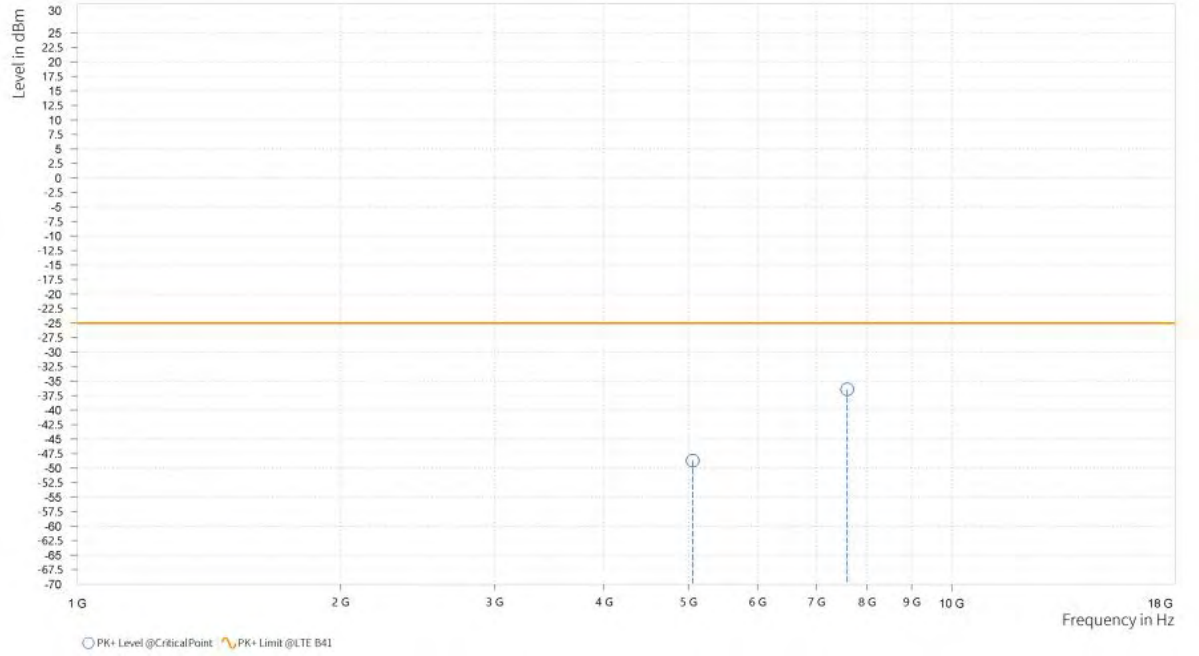
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,067.500	-47.04	-25.00	22.04	25.68	V	360	2
5	7,901.500	-42.99	-25.00	17.99	33.07	V	360	1



CHANNEL BANDWIDTH: 10MHz / QPSK

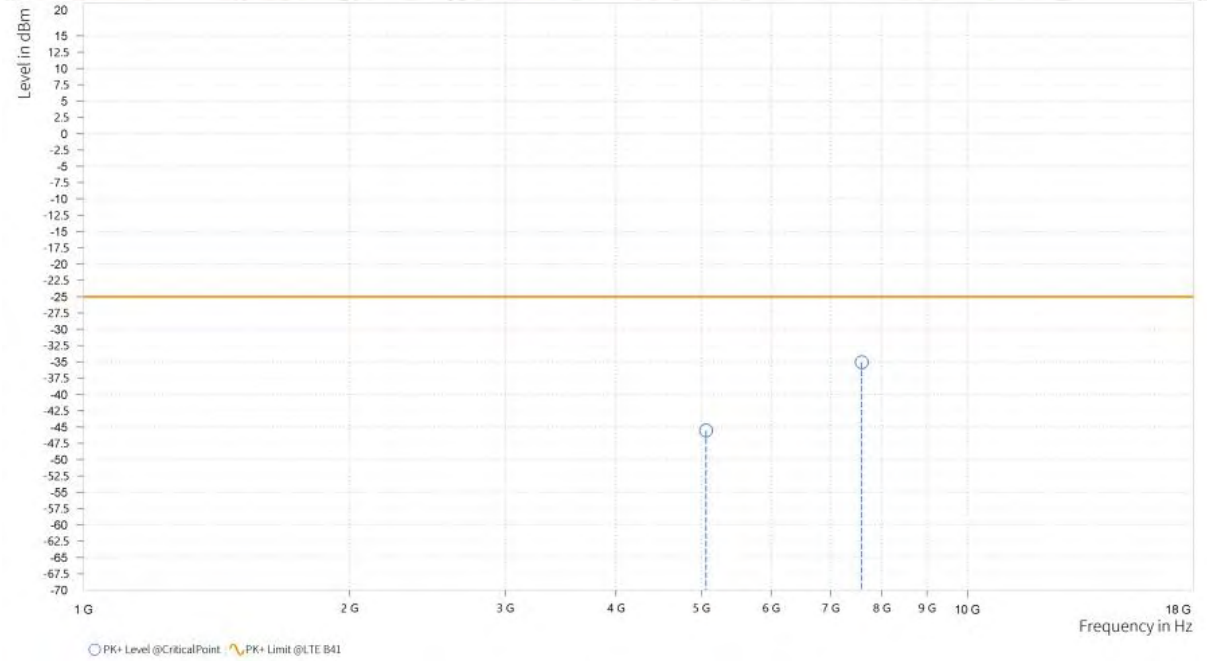
MODE	TX channel 21100	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,056.000	-48.72	-25.00	23.72	26.91	H	0	1
5	7,592.000	-36.43	-25.00	11.43	33.35	H	0	2



MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

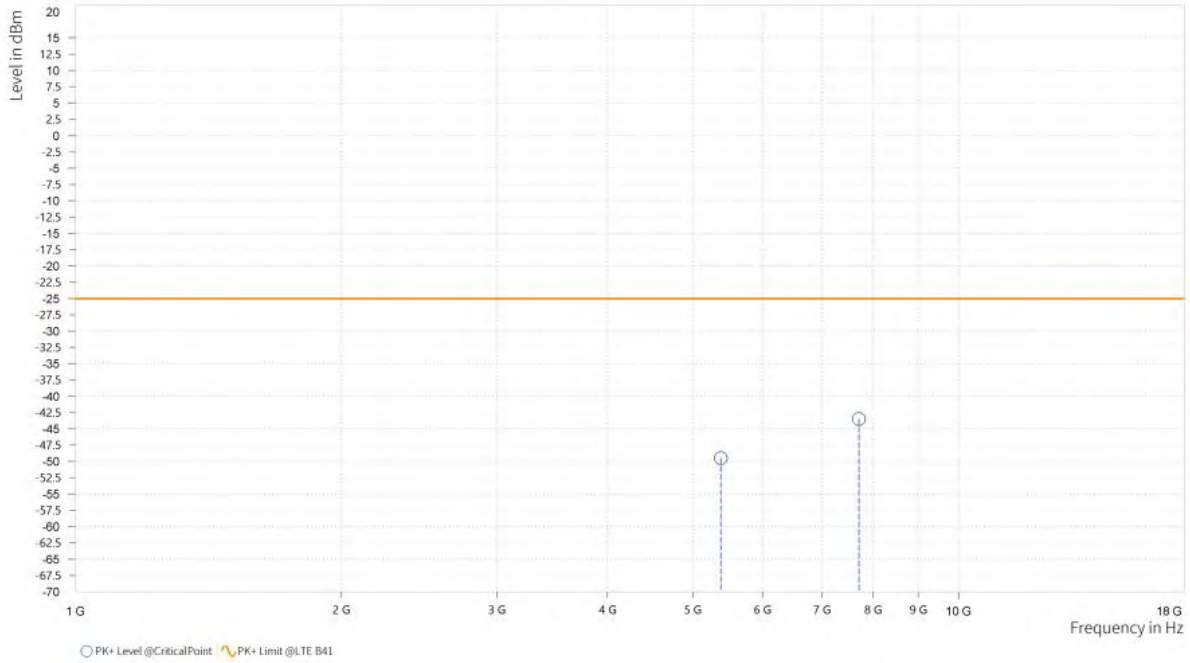
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,061.500	-45.53	-25.00	20.53	27.53	V	0	2
5	7,592.000	-35.06	-25.00	10.06	32.41	V	313	1



CHANNEL BANDWIDTH: 15MHz / QPSK

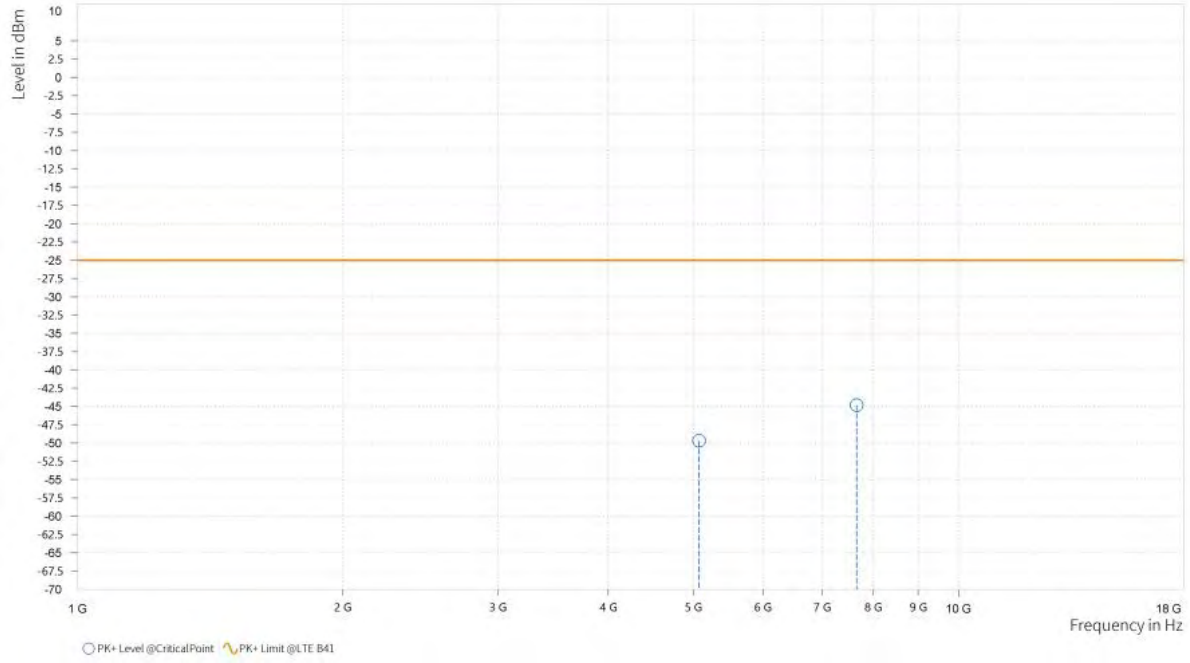
MODE	TX channel 21100	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,381.000	-49.48	-25.00	24.48	27.01	H	0	2
5	7,713.500	-43.50	-25.00	18.50	32.76	H	360	1



MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

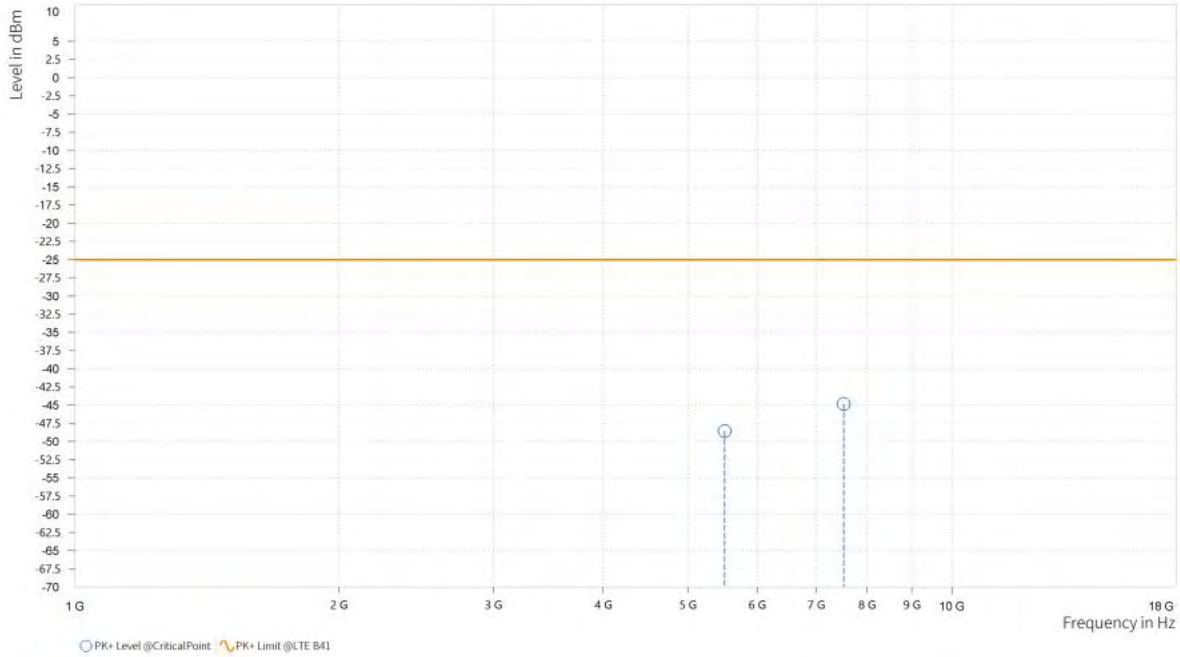
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,074.500	-49.69	-25.00	24.69	25.79	V	0	2
5	7,660.000	-44.82	-25.00	19.82	32.56	V	0	1



CHANNEL BANDWIDTH: 20MHz / QPSK
CH20850

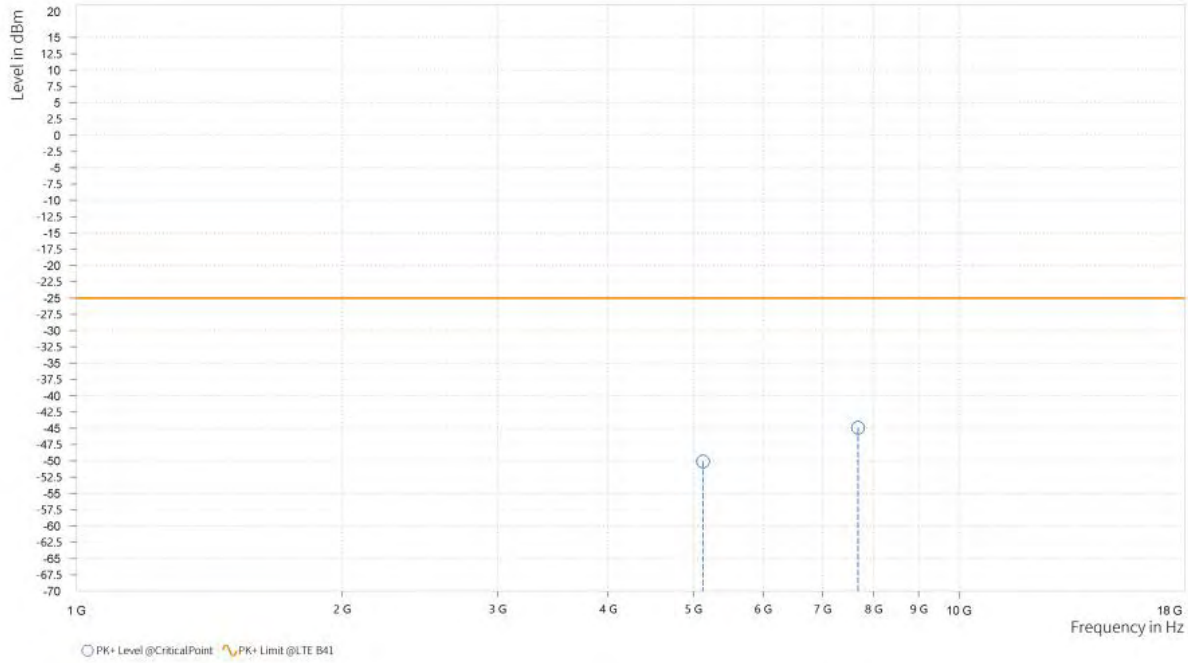
MODE	TX channel 20850	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,504.500	-48.57	-25.00	23.57	26.55	H	0	2
5	7,527.500	-44.85	-25.00	19.85	32.01	H	360	1



MODE	TX channel 20850	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

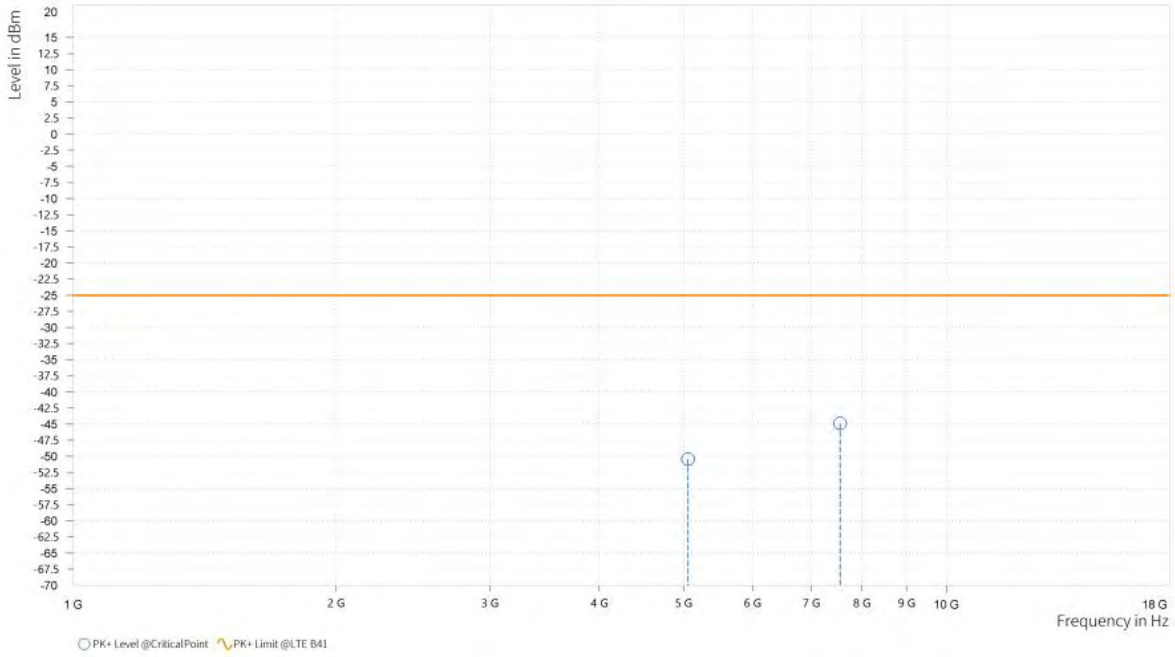
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,127.500	-50.10	-25.00	25.10	26.22	V	360	1
5	7,680.500	-44.92	-25.00	19.92	32.76	V	268.8	1



CH21100

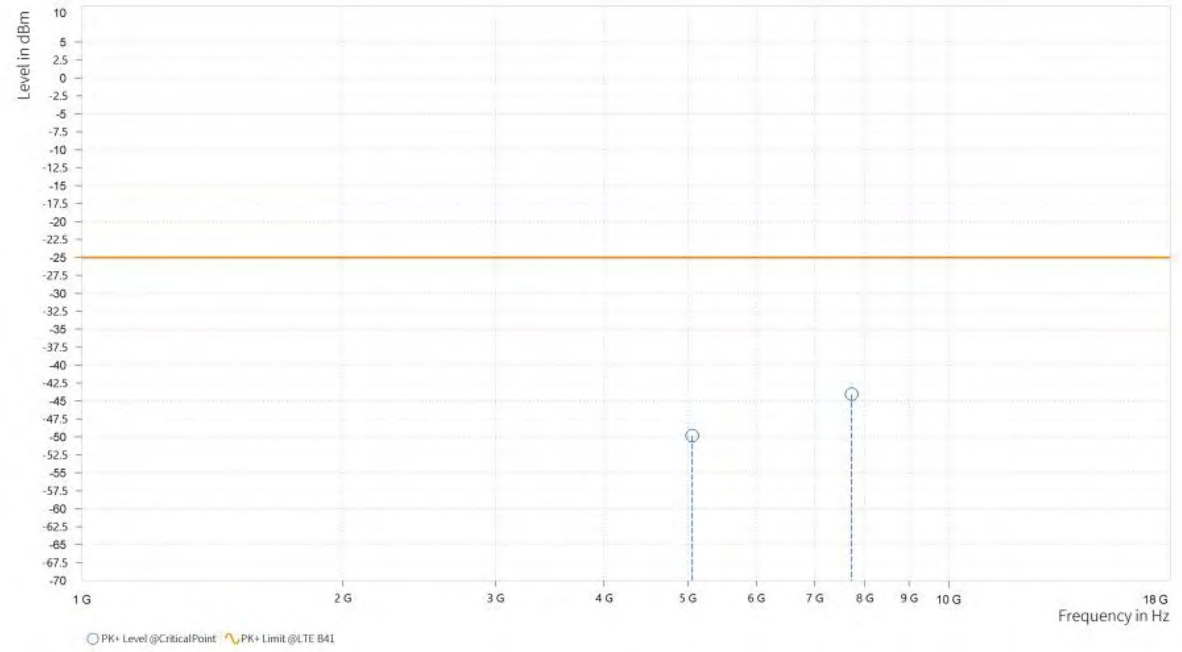
MODE	TX channel 21100	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,058.500	-50.43	-25.00	25.43	25.69	H	360	1
5	7,555.000	-44.89	-25.00	19.89	32.10	H	266.4	1



MODE	TX channel 21100	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

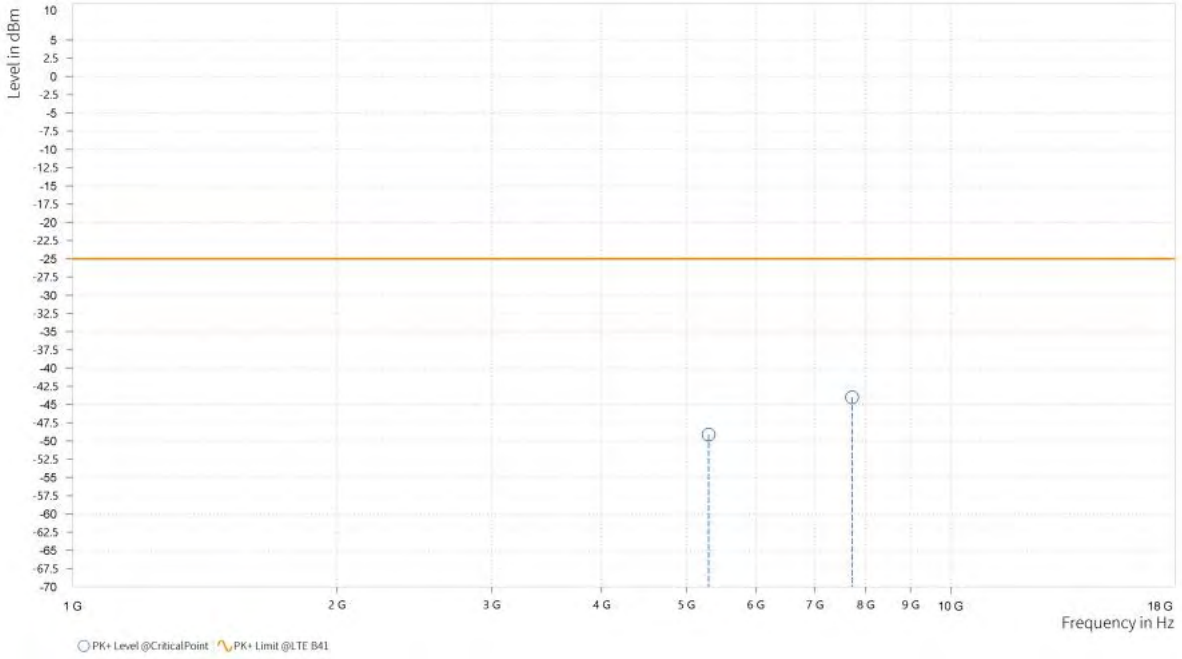
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,058.500	-49.83	-25.00	24.83	25.57	V	360	2
5	7,725.500	-44.07	-25.00	19.07	32.99	V	92.3	2



CH21350

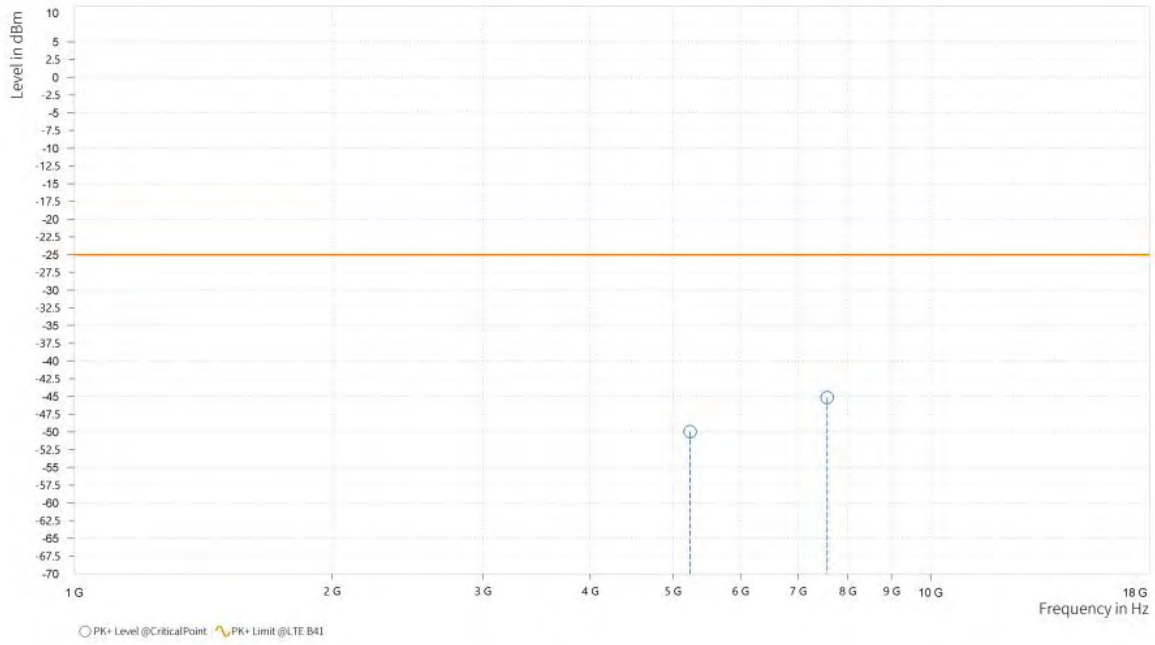
MODE	TX channel 21350	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,300.500	-49.12	-25.00	24.12	27.03	H	360	2
5	7,721.000	-44.03	-25.00	19.03	32.78	H	92.3	2



MODE	TX channel 21350	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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]
4	5,237.500	-49.94	-25.00	24.94	25.85	V	179.7	2
5	7,569.000	-45.16	-25.00	20.16	32.15	V	0	2



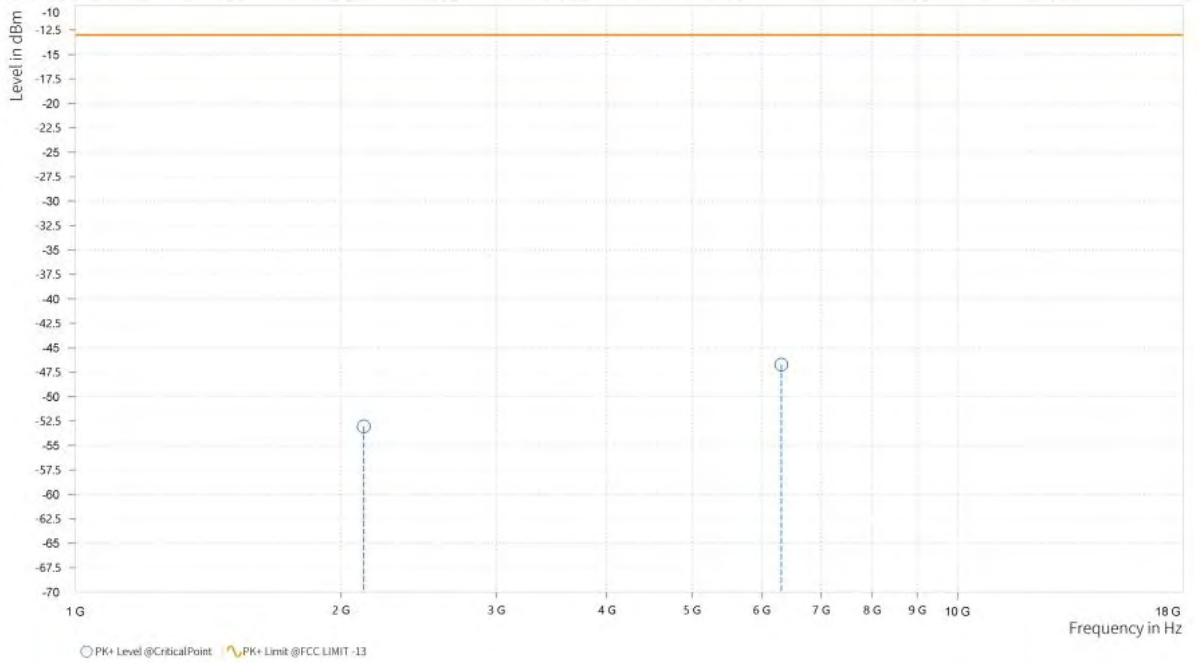
LTE BAND 12

CHANNEL BANDWIDTH: 1.4MHz / QPSK

CH23017

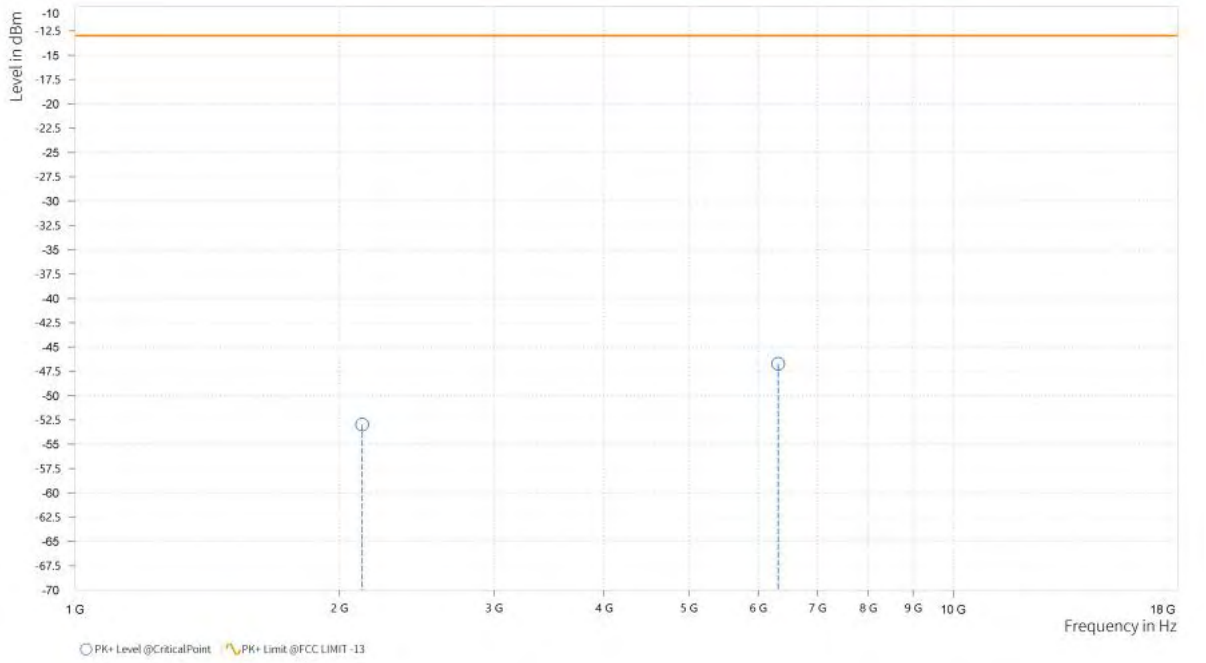
MODE	TX channel 23017	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,122.500	-53.05	-13.00	40.05	20.05	H	297.9	2
5	6,314.500	-46.75	-13.00	33.75	30.64	H	360	1



MODE	TX channel 23017	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

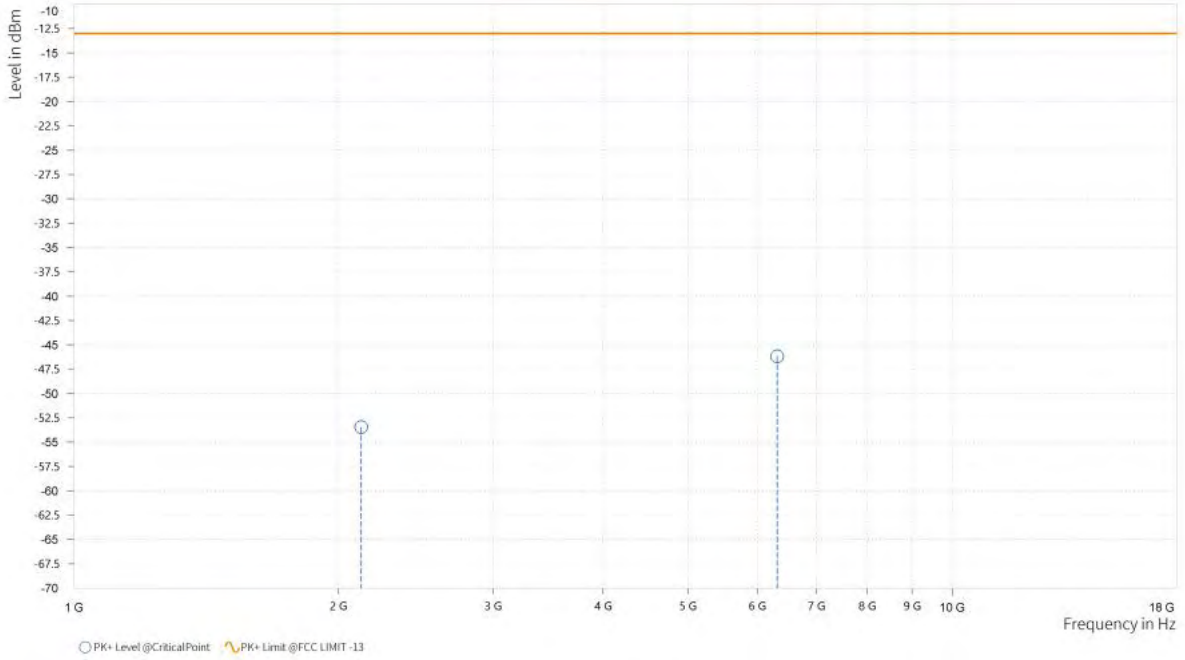
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,122.500	-52.99	-13.00	39.99	20.03	V	299.1	2
5	6,317.500	-46.75	-13.00	33.75	30.20	V	0	1



CH23095

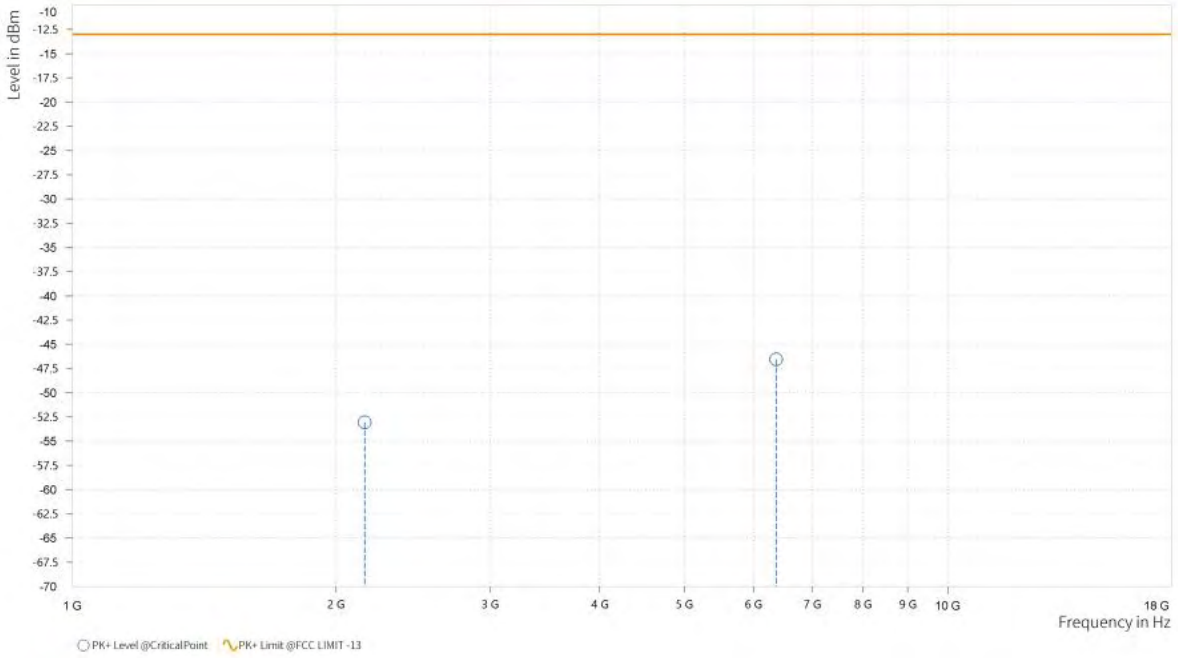
MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,123.000	-53.45	-13.00	40.45	20.07	H	59.6	1
5	6,316.500	-46.18	-13.00	33.18	30.64	H	92.3	2



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

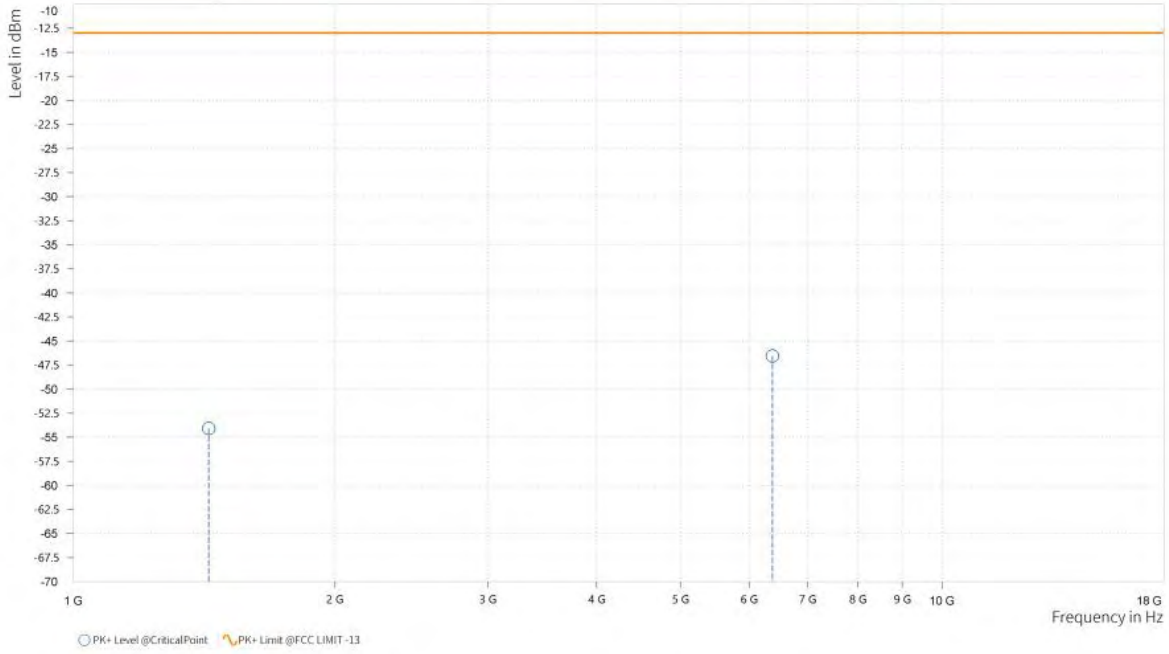
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,157.500	-53.05	-13.00	40.05	20.16	V	62	1
5	6,366.000	-46.55	-13.00	33.55	30.00	V	360	1



CH23173

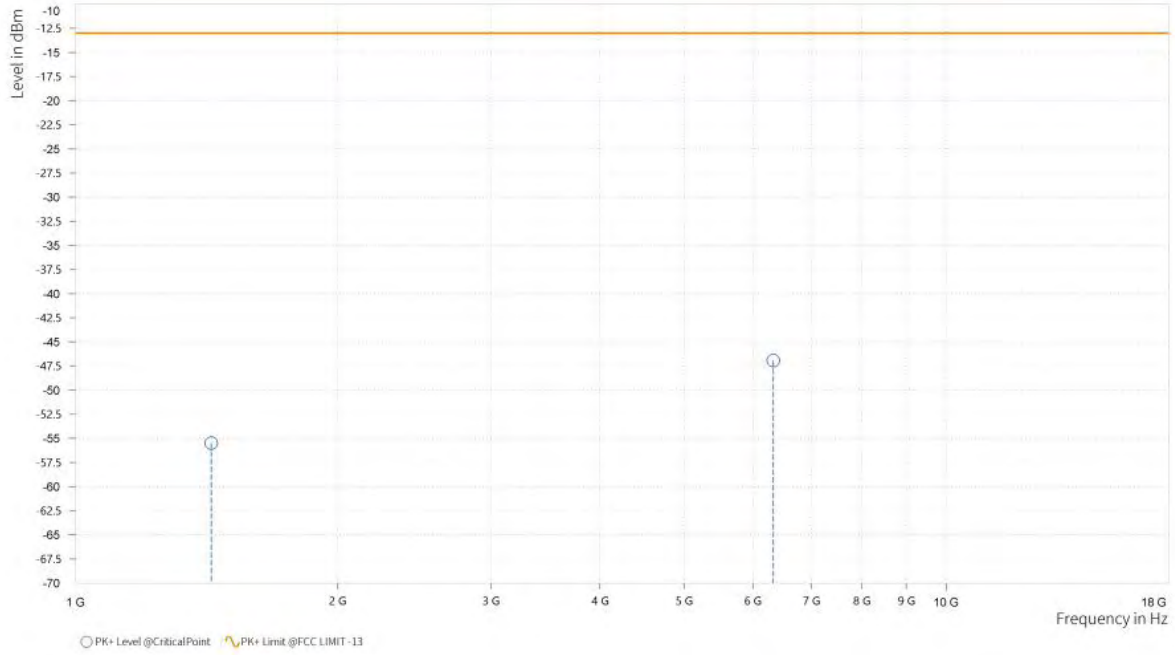
MODE	TX channel 23173	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,431.500	-54.09	-13.00	41.09	11.94	H	297.9	2
5	6,377.000	-46.56	-13.00	33.56	30.33	H	0	2



MODE	TX channel 23173	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

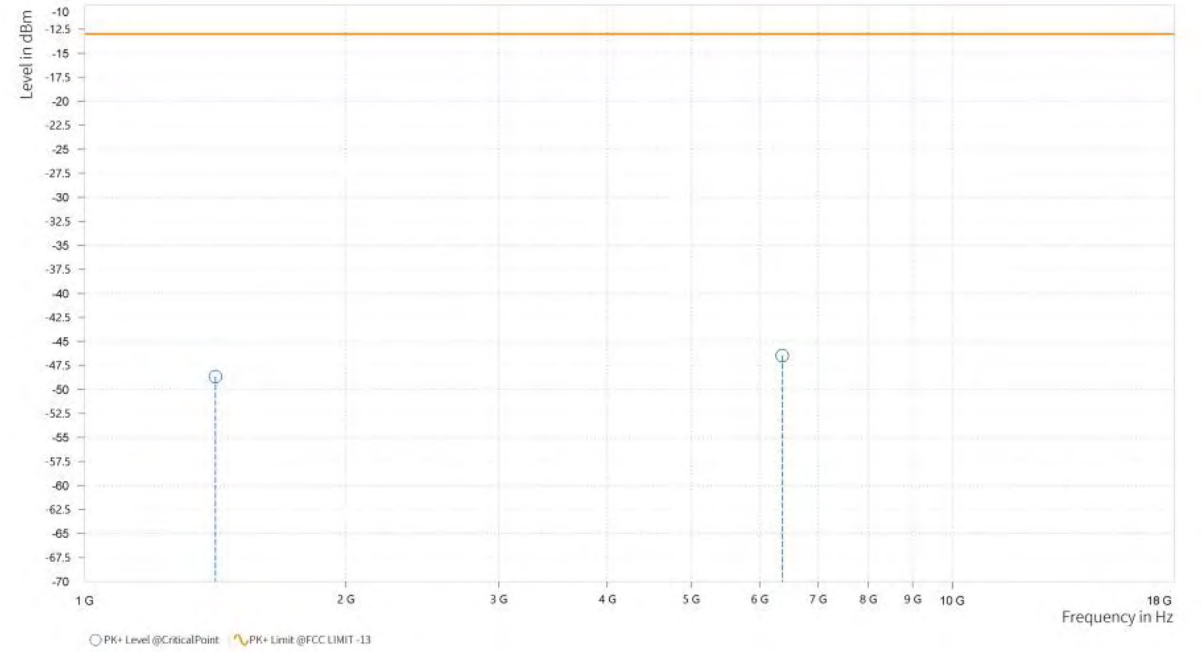
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,432.000	-55.49	-13.00	42.49	12.53	V	0	1
5	6,329.000	-46.93	-13.00	33.93	30.10	V	93.5	2



CHANNEL BANDWIDTH: 3MHz / QPSK

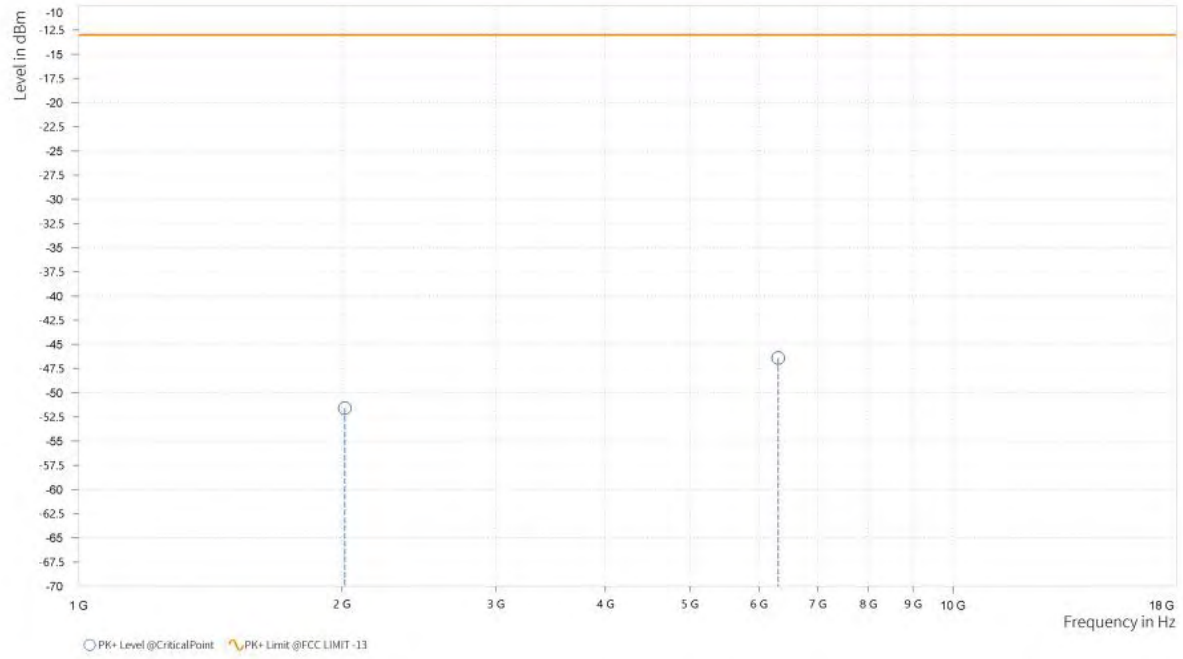
MODE	TX channel 23095	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,415.000	-48.67	-13.00	35.67	13.22	H	296.7	2
5	6,368.000	-46.47	-13.00	33.47	30.38	H	360	1



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

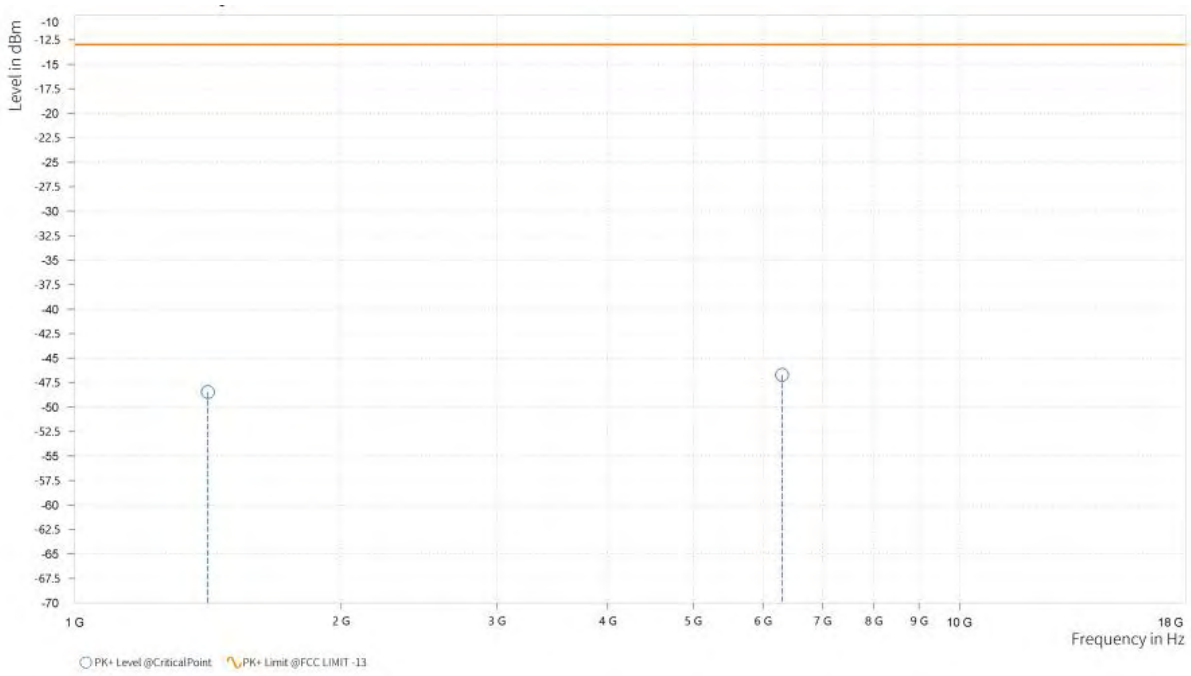
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,016.000	-51.59	-13.00	38.59	21.74	V	298	2
5	6,311.500	-46.40	-13.00	33.40	30.25	V	360	1



CHANNEL BANDWIDTH: 5MHz / QPSK

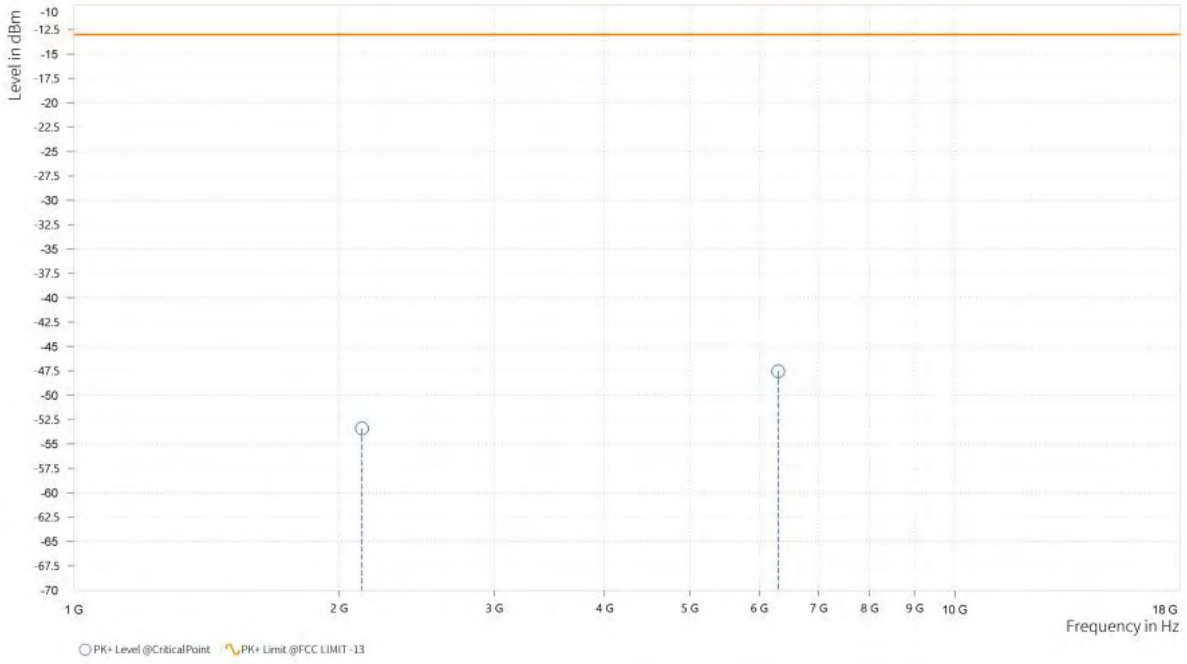
MODE	TX channel 23095	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,414.500	-48.47	-13.00	35.47	13.20	H	298	2
5	6,302.000	-46.71	-13.00	33.71	30.68	H	0	2



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

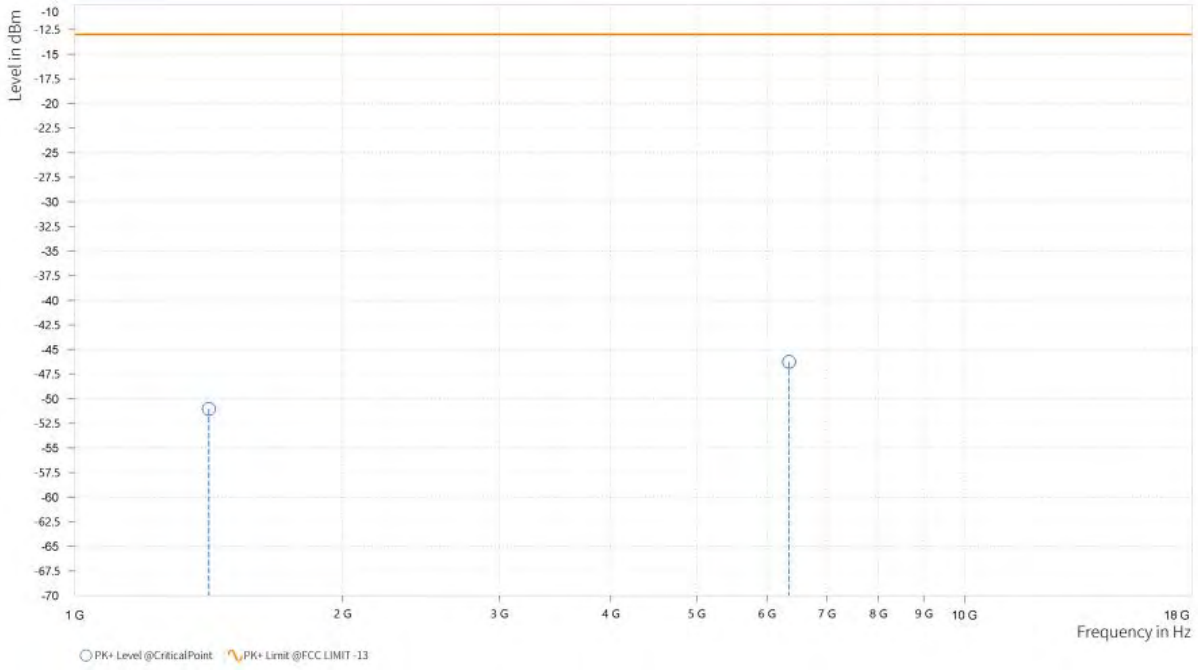
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	2,123.500	-53.40	-13.00	40.40	20.06	V	298	2
5	6,303.500	-47.54	-13.00	34.54	30.32	V	360	2



CHANNEL BANDWIDTH: 10MHz / QPSK

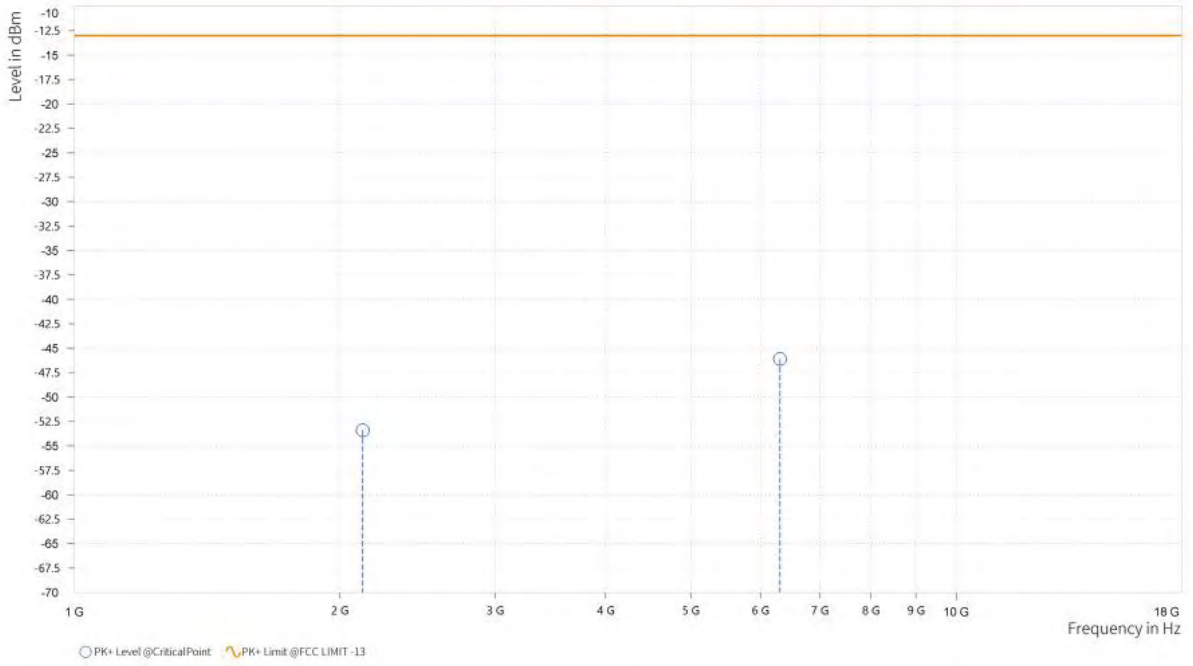
MODE	TX channel 23095	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,415.000	-51.03	-13.00	38.03	13.22	H	297.9	2
5	6,349.000	-46.26	-13.00	33.26	30.51	H	0	1



MODE	TX channel 23095	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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]
2	2,123.500	-53.40	-13.00	40.40	20.06	V	360	1
5	6,310.500	-46.11	-13.00	33.11	30.26	V	0	1

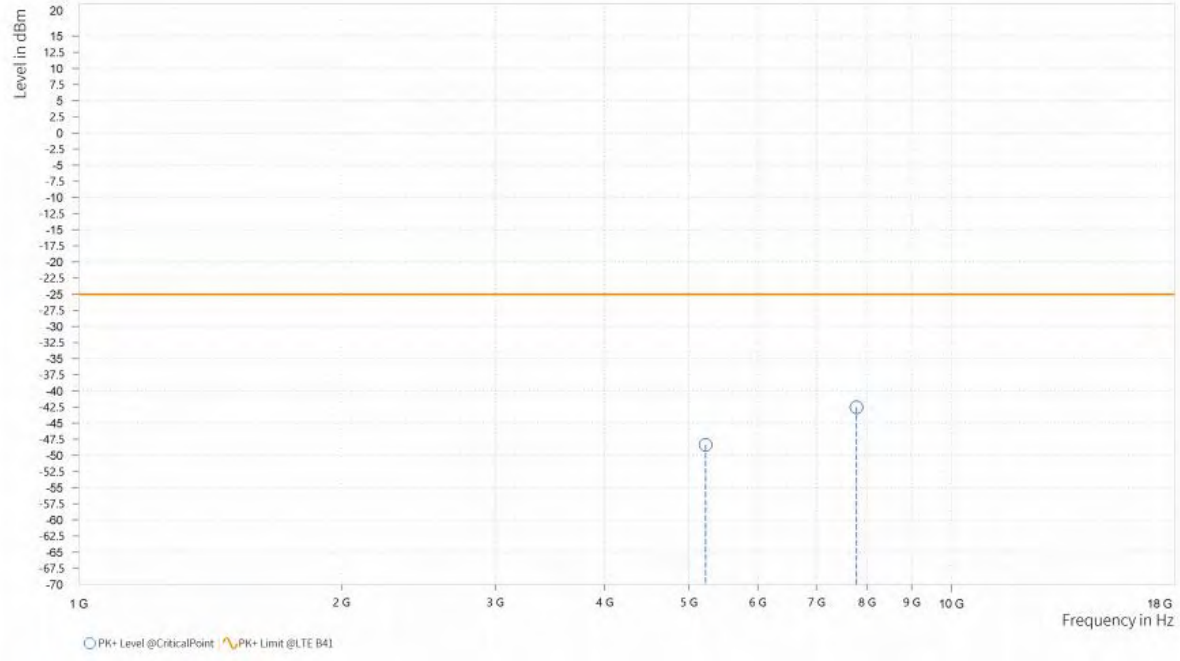


LTE BAND 41

CHANNEL BANDWIDTH: 5MHz / QPSK

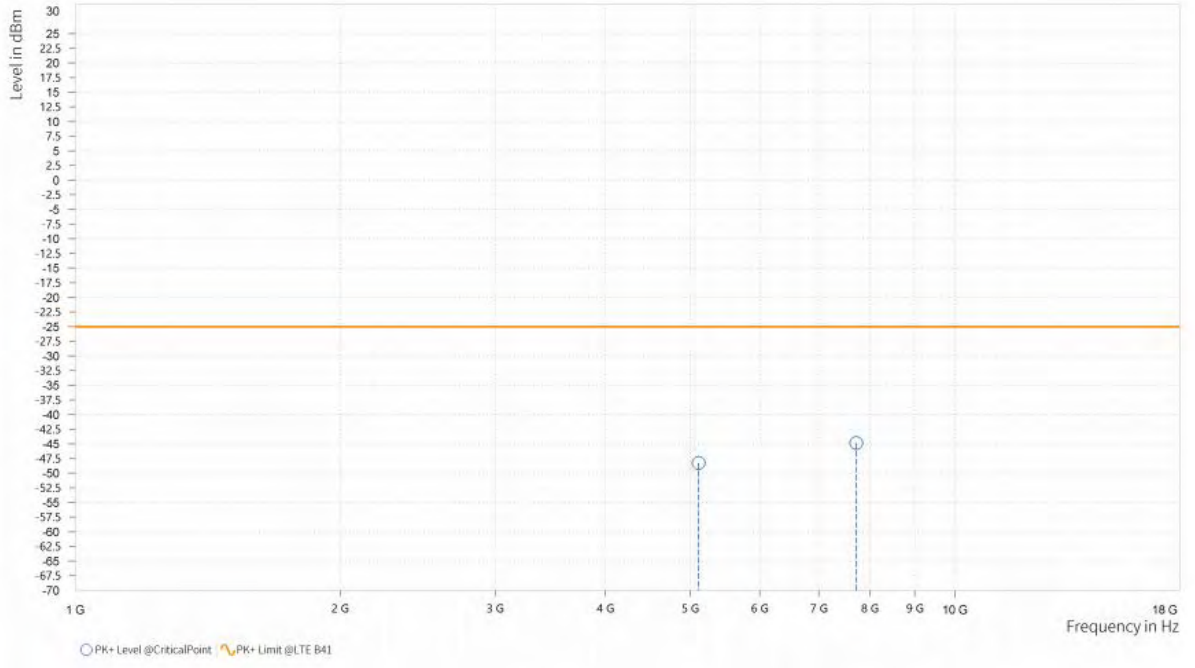
MODE	TX channel 40620	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,226.000	-48.37	-25.00	23.37	27.10	H	0	2
5	7,780.000	-42.55	-25.00	17.55	33.80	H	360	1



MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

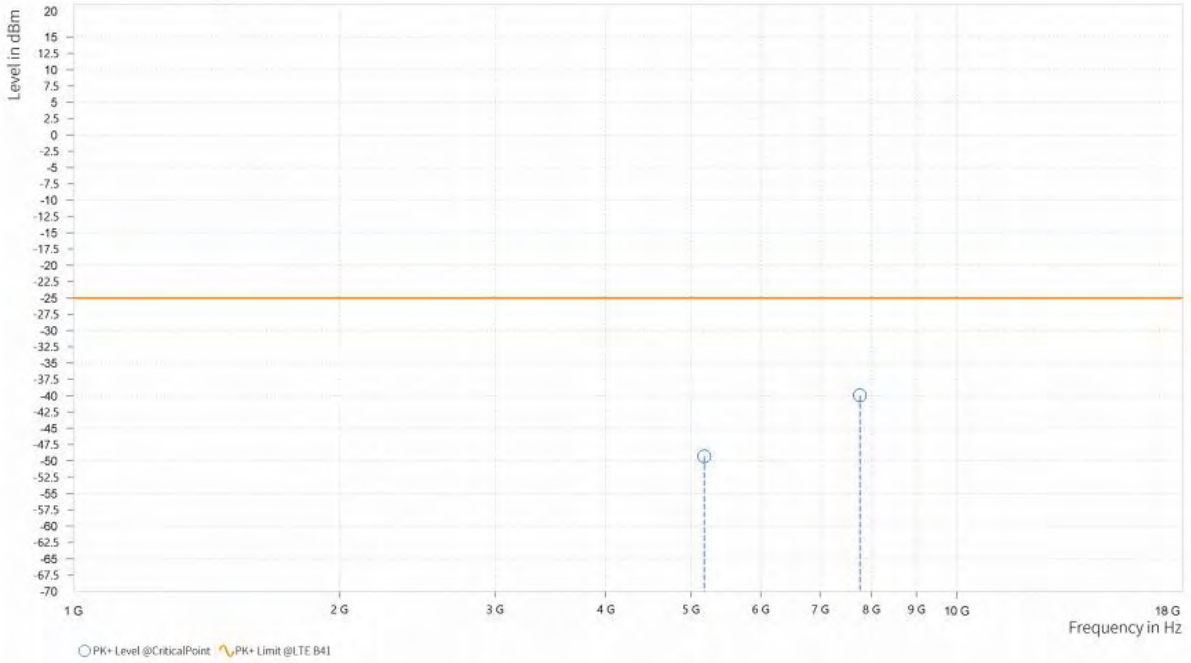
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,111.500	-48.26	-25.00	23.26	27.56	V	360	1
5	7,720.000	-44.85	-25.00	19.85	32.72	V	360	2



CHANNEL BANDWIDTH: 10MHz / QPSK

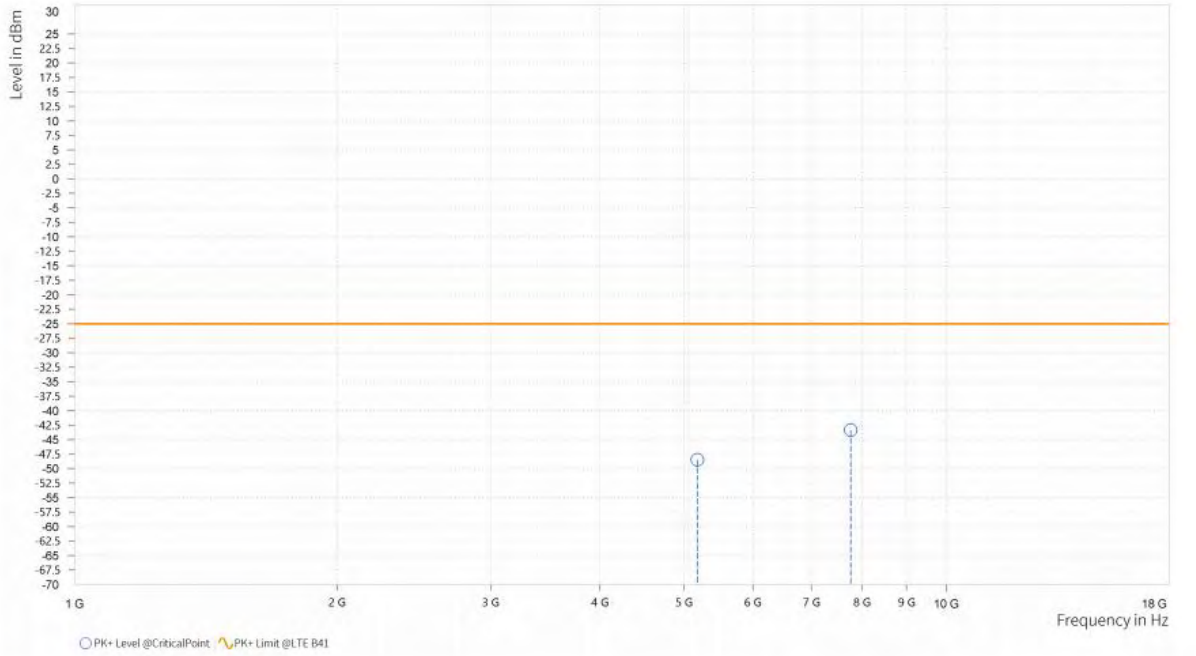
MODE	TX channel 40620	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,177.500	-49.30	-25.00	24.30	26.44	H	360	2
5	7,766.500	-39.93	-25.00	14.93	33.74	H	360	1



MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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]
4	5,178.500	-48.48	-25.00	23.48	26.89	V	0	2
5	7,766.000	-43.37	-25.00	18.37	32.64	V	0	1

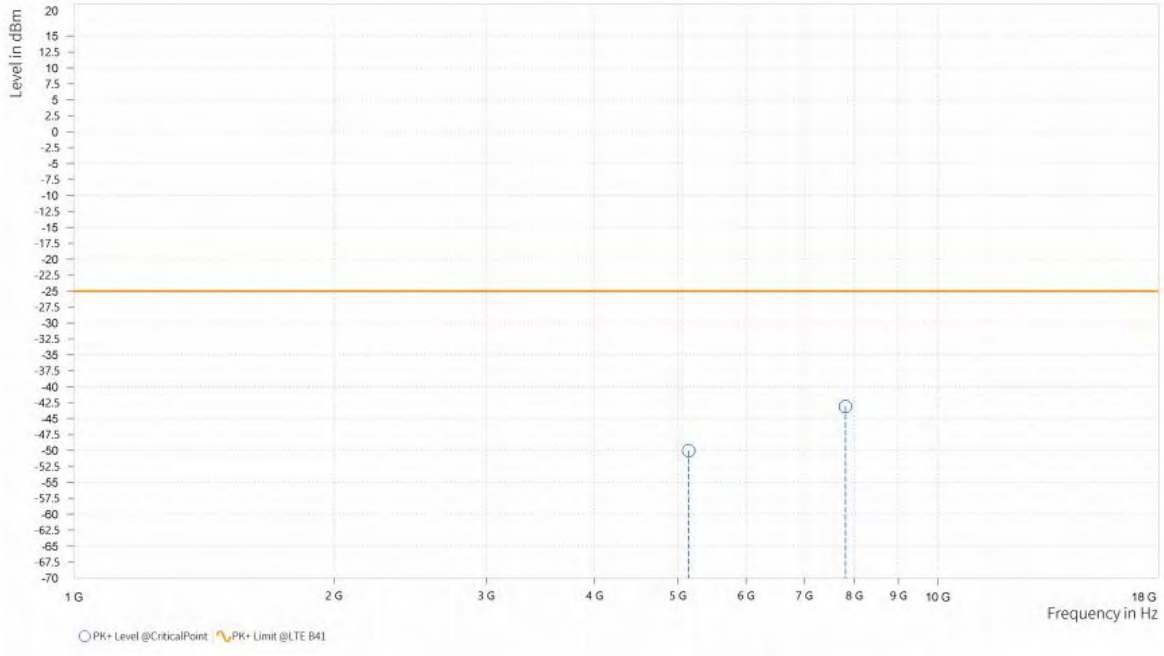


CHANNEL BANDWIDTH: 15MHz / QPSK

CH39725

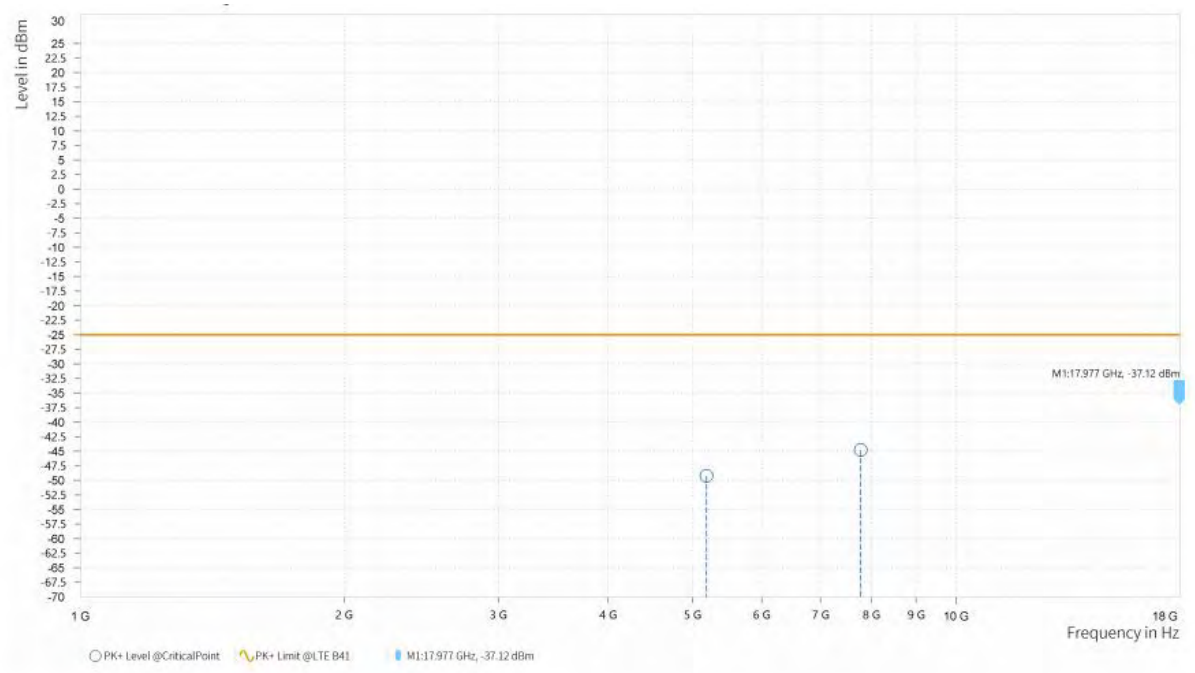
MODE	TX channel 39725	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,147.000	-50.03	-25.00	25.03	26.45	H	360	2
5	7,815.500	-43.11	-25.00	18.11	33.97	H	0	2



MODE	TX channel 39725	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

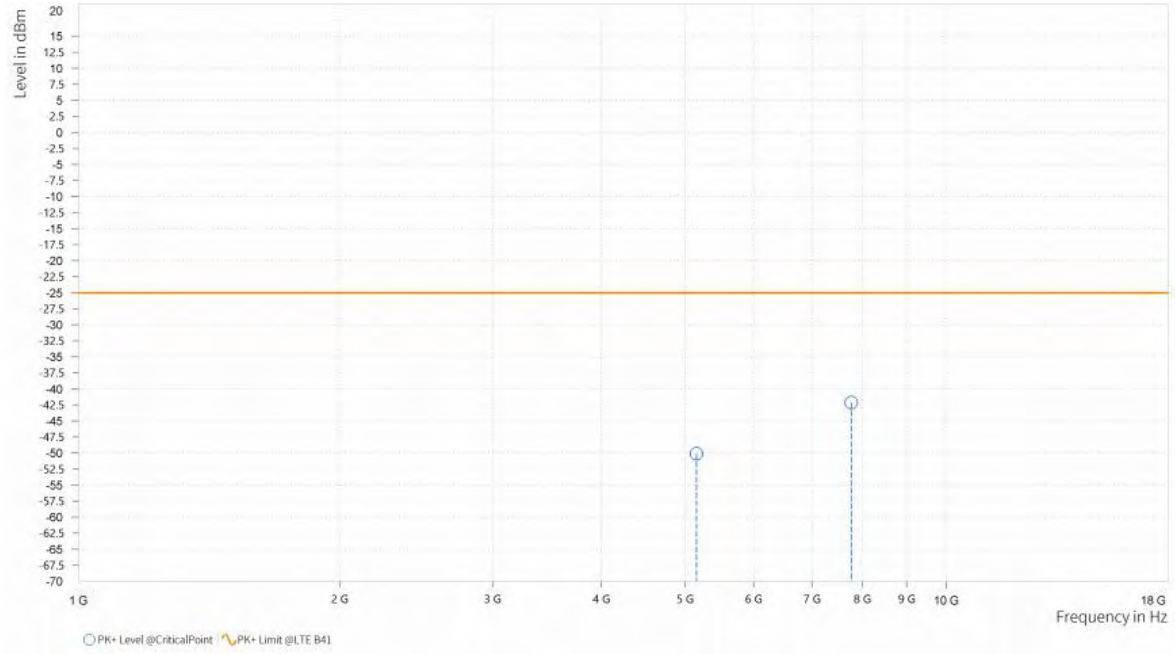
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,185.000	-49.25	-25.00	24.25	26.98	V	360	1
5	7,780.000	-44.80	-25.00	19.80	32.67	V	360	1



CH 40620

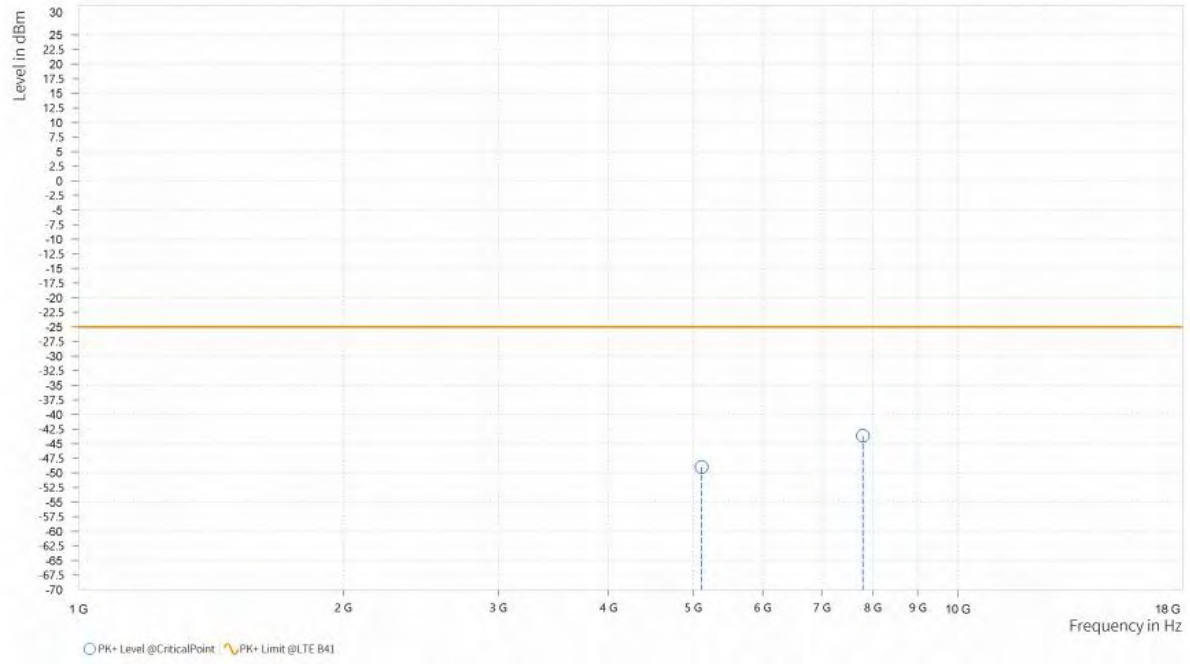
MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,153.000	-50.10	-25.00	25.10	26.34	H	176.1	2
5	7,771.500	-42.14	-25.00	17.14	33.76	H	0	1



MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

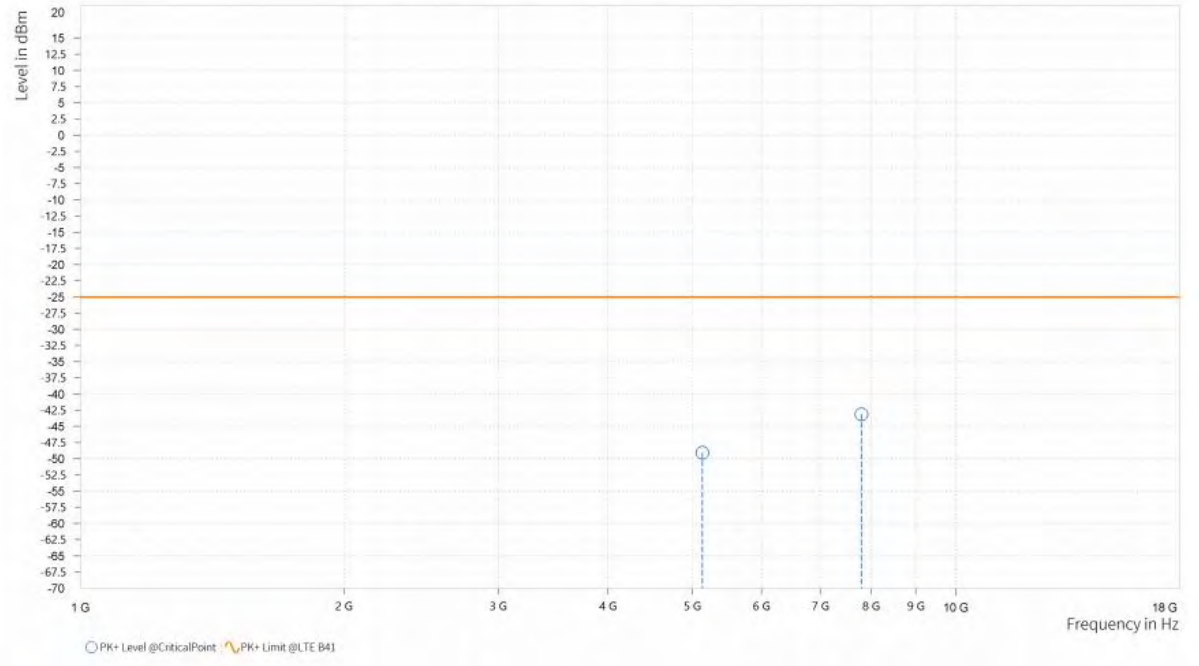
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,110.000	-48.97	-25.00	23.97	27.55	V	0	2
5	7,797.000	-43.66	-25.00	18.66	32.71	V	267.6	1



CH 41515

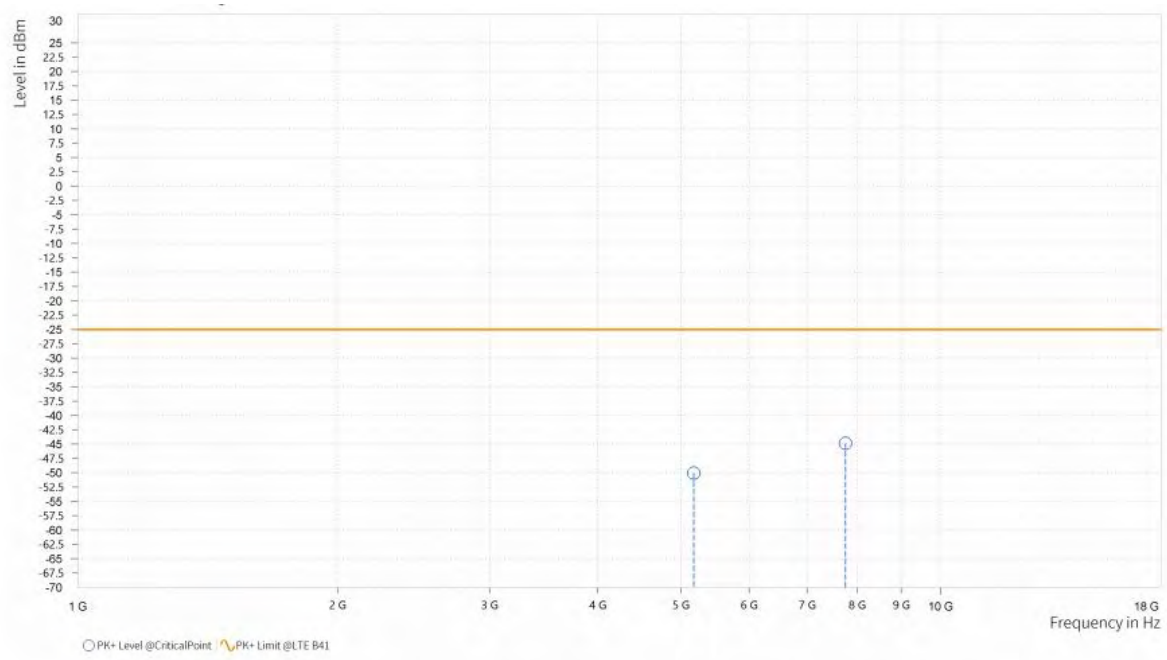
MODE	TX channel 41515	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,133.000	-49.09	-25.00	24.09	26.85	H	181.5	1
5	7,799.500	-43.16	-25.00	18.16	33.90	H	0	1



MODE	TX channel 41515	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

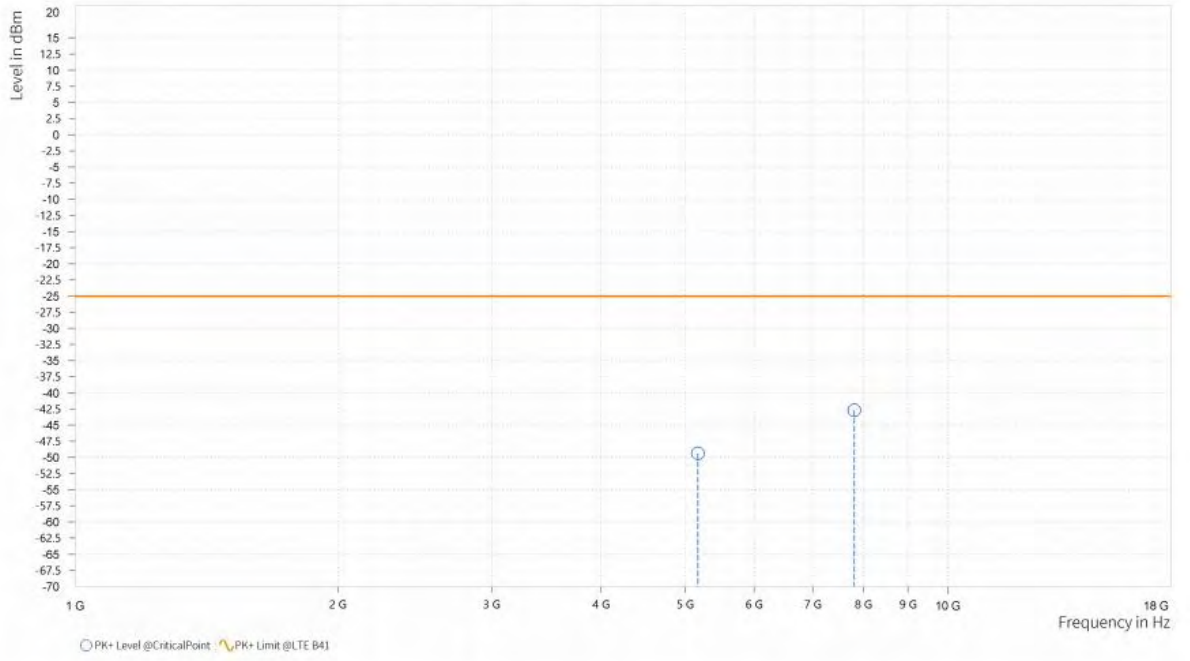
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,173.500	-50.06	-25.00	25.06	26.82	V	360	2
5	7,756.500	-44.88	-25.00	19.88	32.67	V	265.2	1



CHANNEL BANDWIDTH: 20MHz / QPSK

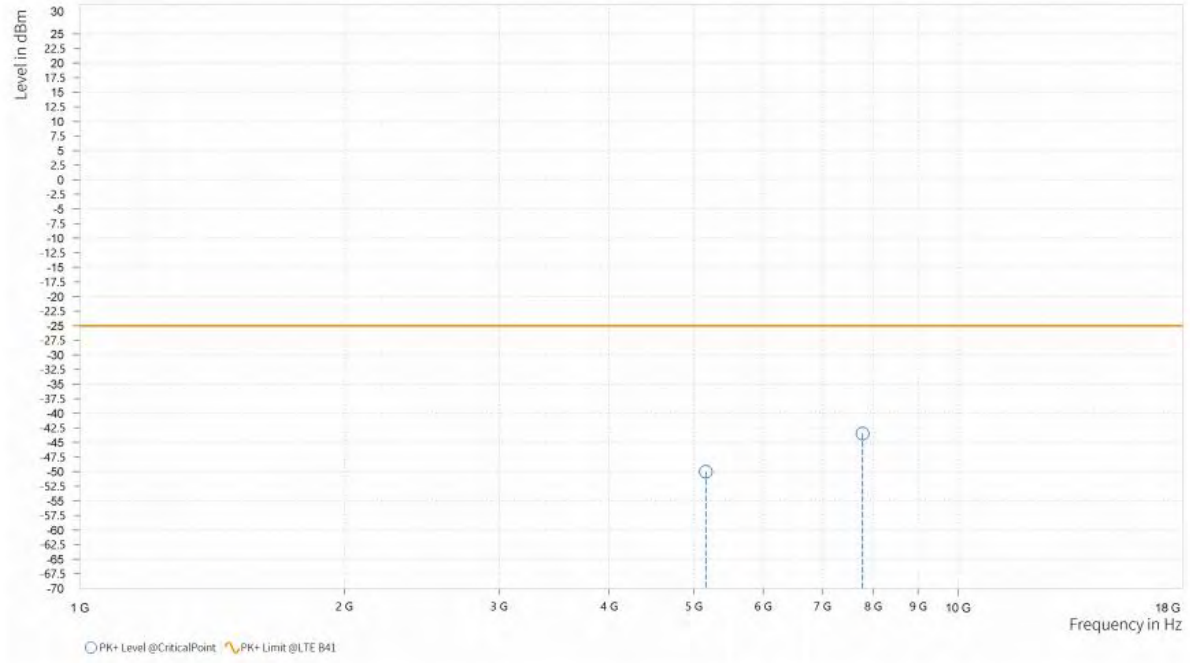
MODE	TX channel 40620	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	5,170.500	-49.40	-25.00	24.40	26.33	H	182.7	1
5	7,808.500	-42.69	-25.00	17.69	33.94	H	0	1



MODE	TX channel 40620	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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]
4	5,158.500	-50.04	-25.00	25.04	26.74	V	165.3	2
5	7,780.500	-43.49	-25.00	18.49	32.67	V	360	1

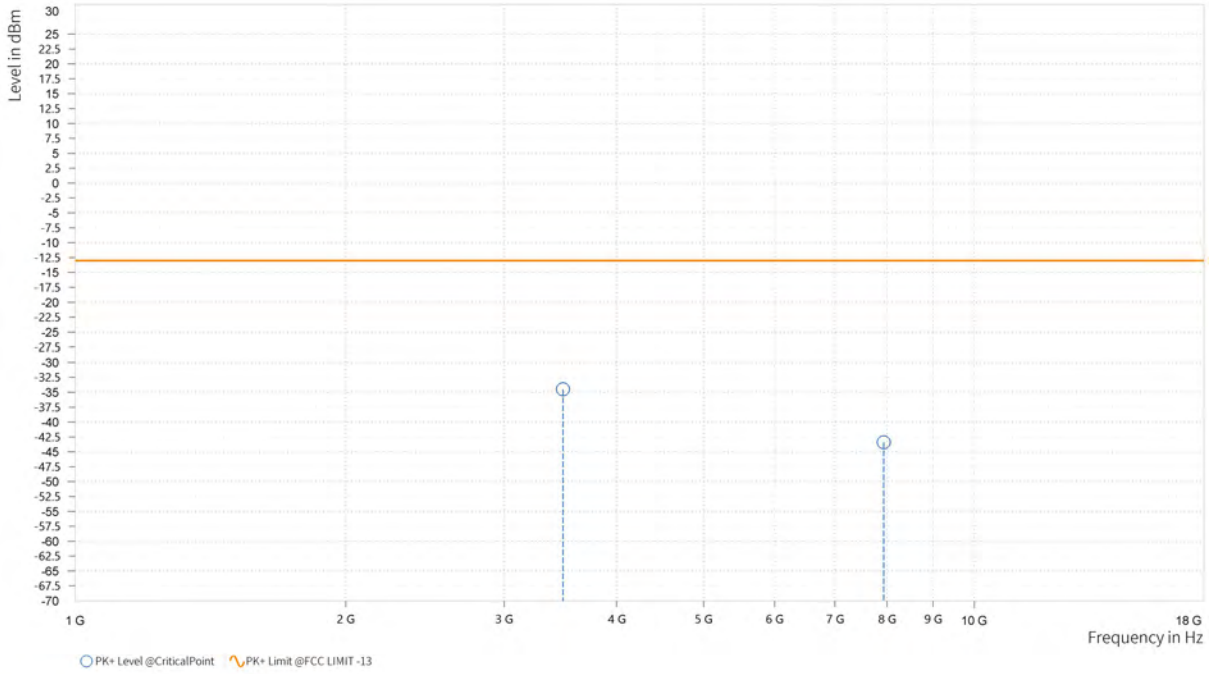


LTE BAND 66

CHANNEL BANDWIDTH: 1.4MHz / QPSK

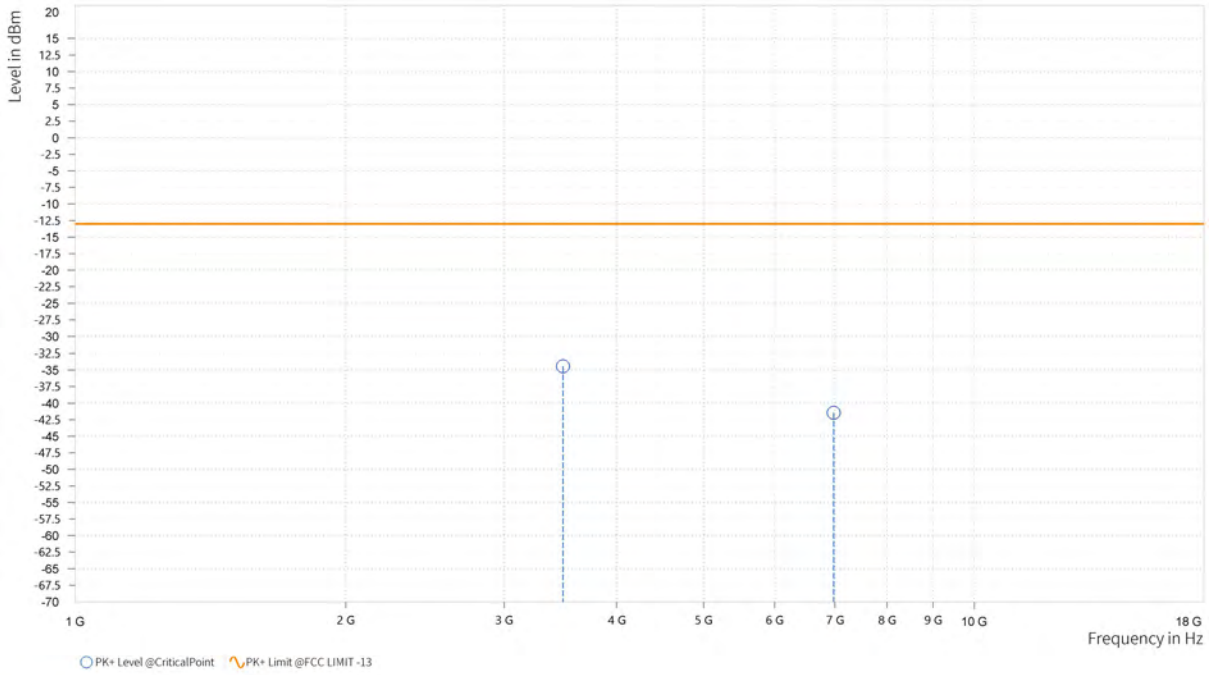
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,489.000	-34.52	-13.00	21.52	21.84	H	0.1	2
5	7,932.000	-43.38	-13.00	30.38	33.00	H	359.9	2



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

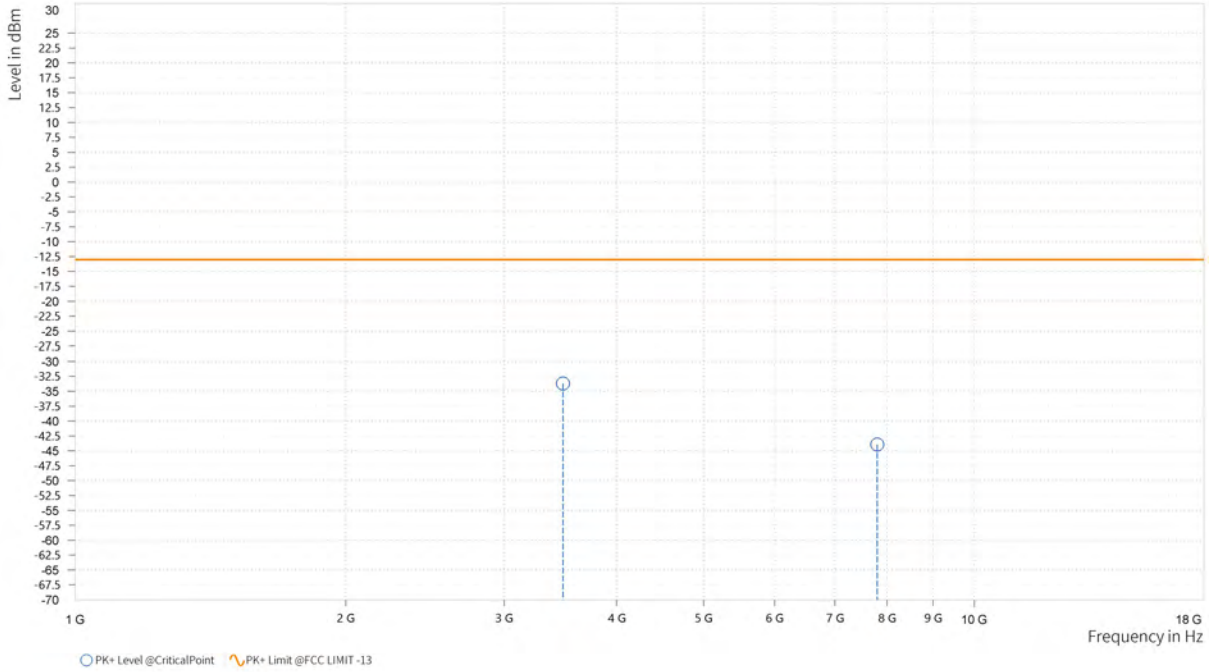
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,489.000	-34.42	-13.00	21.42	21.93	V	0.1	2
5	6,978.000	-41.45	-13.00	28.45	30.34	V	0.1	2



CHANNEL BANDWIDTH: 3MHz / QPSK

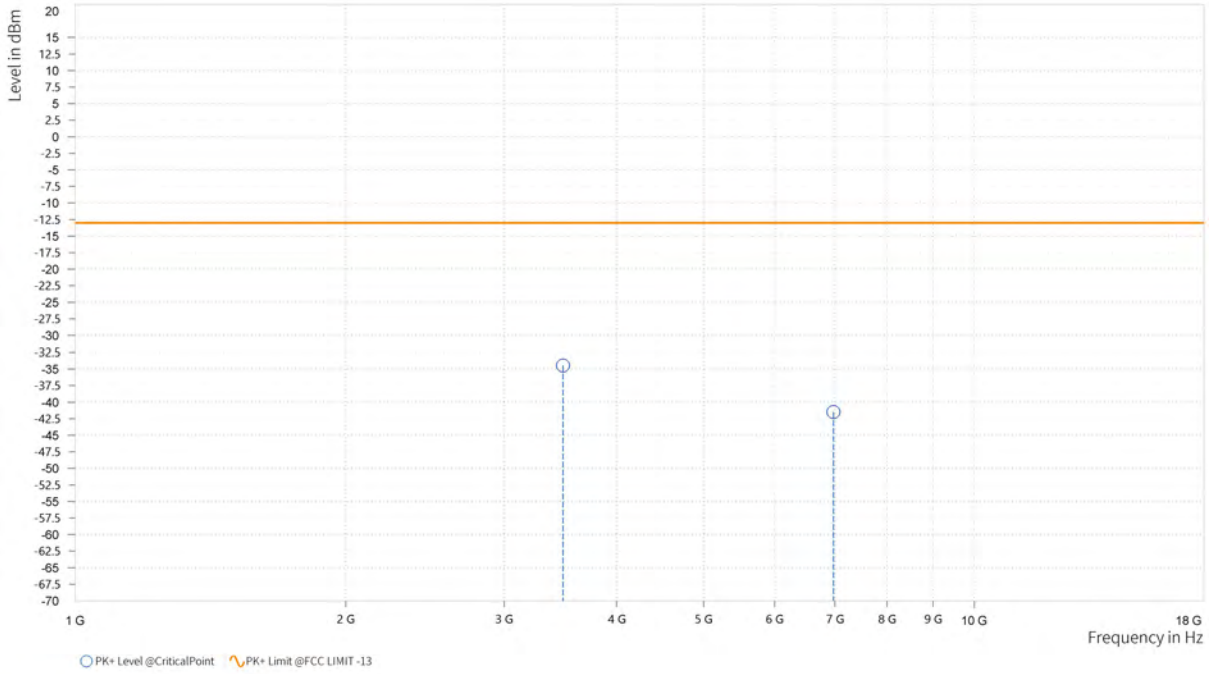
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,487.500	-33.69	-13.00	20.69	21.84	H	0.1	2
5	7,802.500	-43.95	-13.00	30.95	32.92	H	359.9	2



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

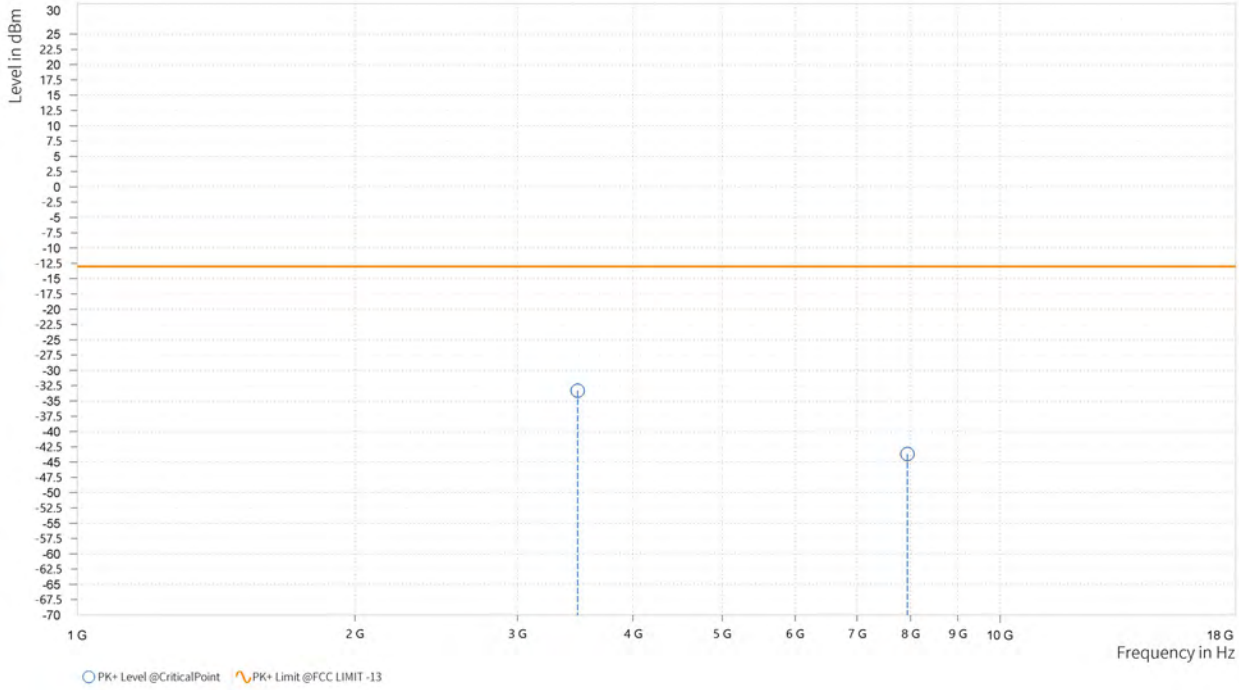
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,487.500	-34.46	-13.00	21.46	21.93	V	360	1
5	6,975.000	-41.49	-13.00	28.49	30.34	V	359.9	2



CHANNEL BANDWIDTH: 5MHz / QPSK

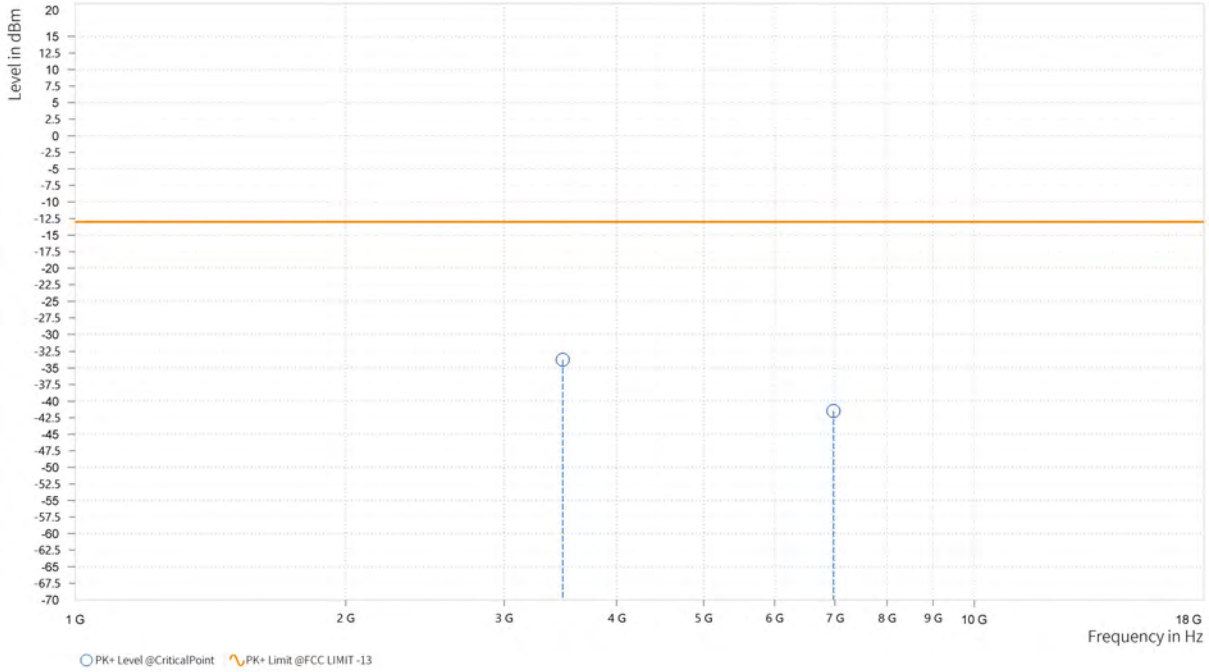
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,486.000	-33.34	-13.00	20.34	21.84	H	0	2
5	7,938.500	-43.67	-13.00	30.67	32.99	H	0	2



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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]
4	3,485.500	-33.76	-13.00	20.76	21.93	V	360	1
5	6,971.500	-41.50	-13.00	28.50	30.33	V	0.1	2

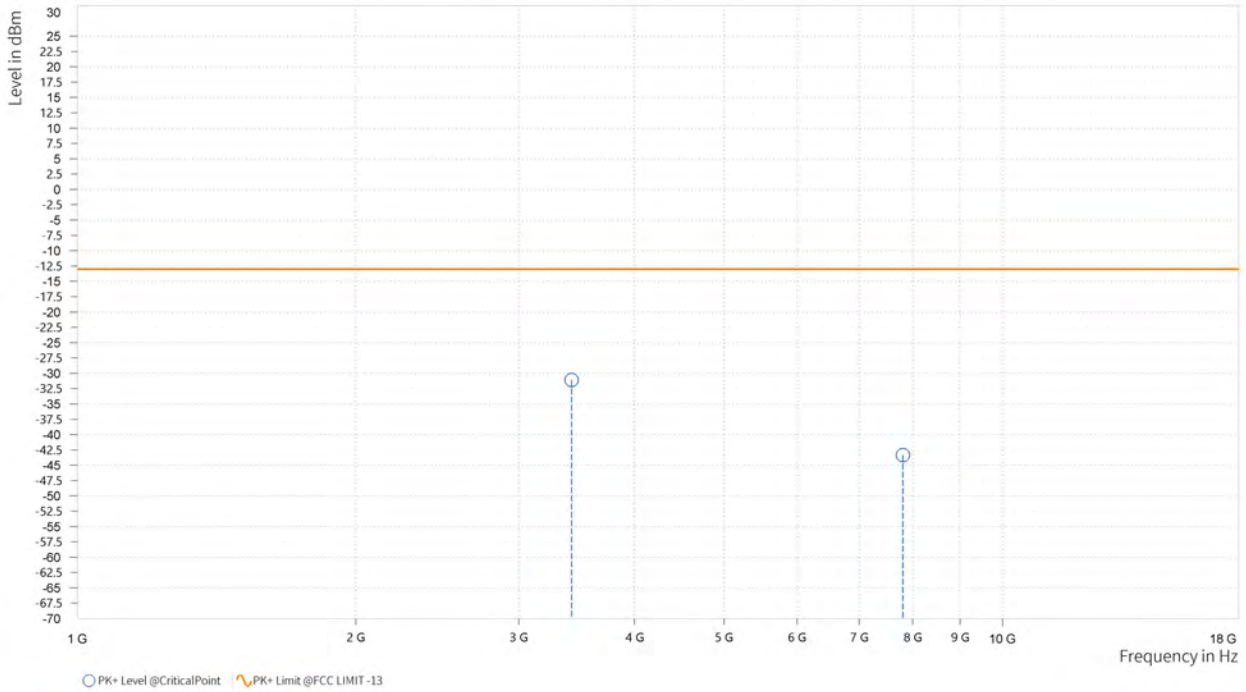


CHANNEL BANDWIDTH: 10MHz / QPSK

CH132022

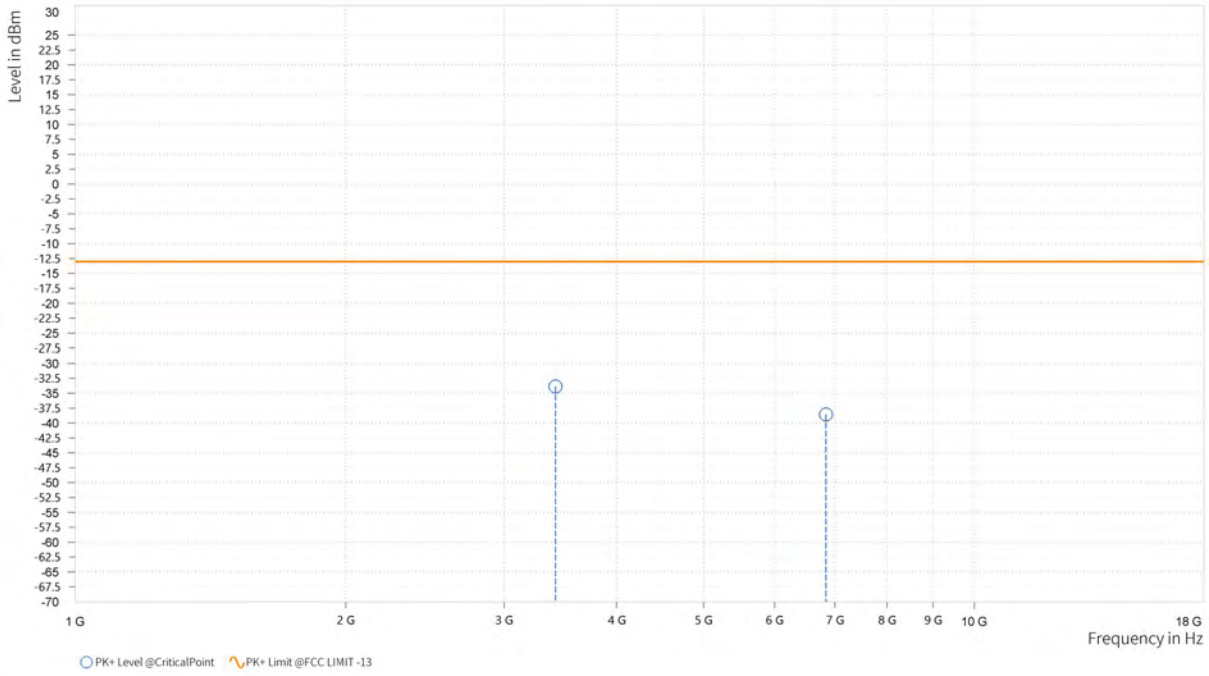
MODE	TX channel 132022	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,421.000	-31.11	-13.00	18.11	21.94	H	359.9	2
5	7,804.500	-43.36	-13.00	30.36	32.92	H	0	2



MODE	TX channel 132022	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

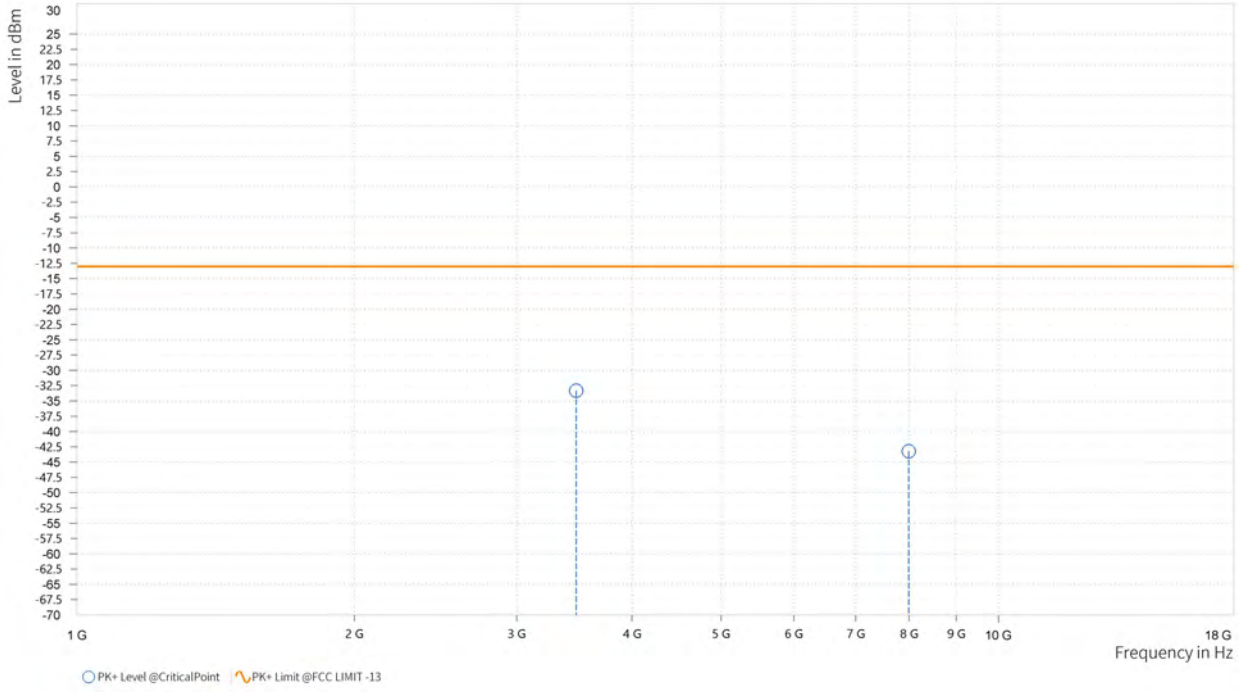
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,421.000	-33.89	-13.00	20.89	22.01	V	0.1	1
5	6,842.000	-38.56	-13.00	25.56	30.50	V	0	2



CH 132322

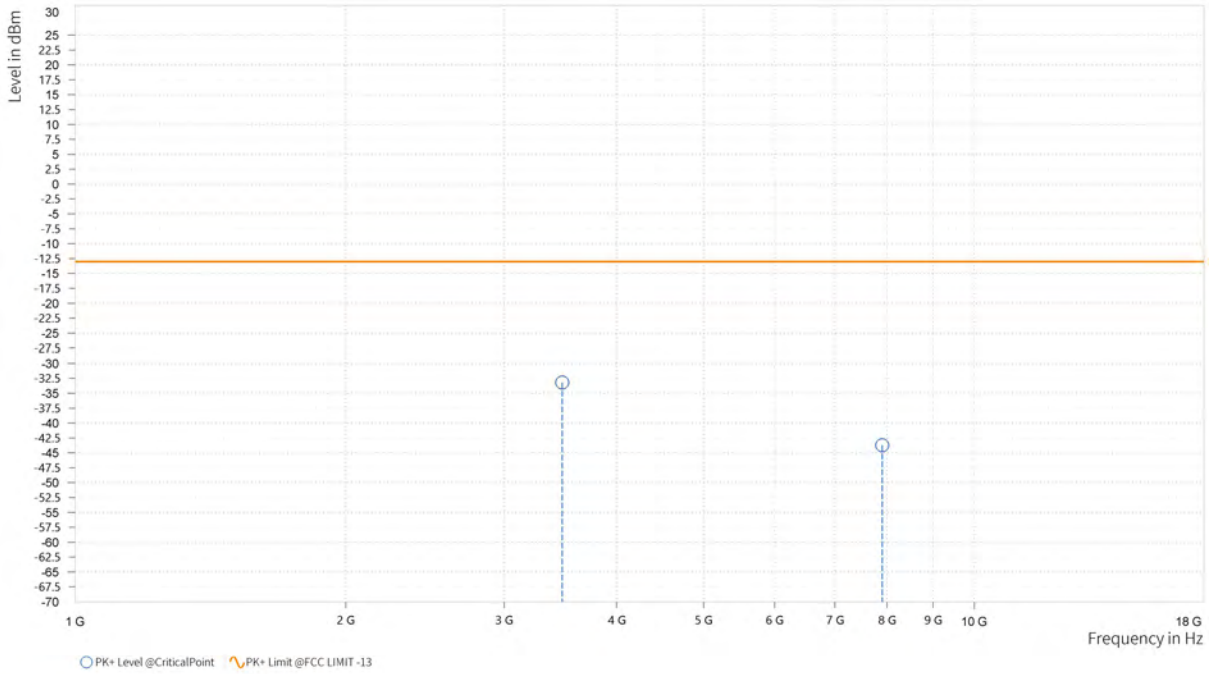
MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,481.000	-33.31	-13.00	20.31	21.85	H	200.7	1
5	7,992.500	-43.22	-13.00	30.22	33.11	H	359.9	2



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

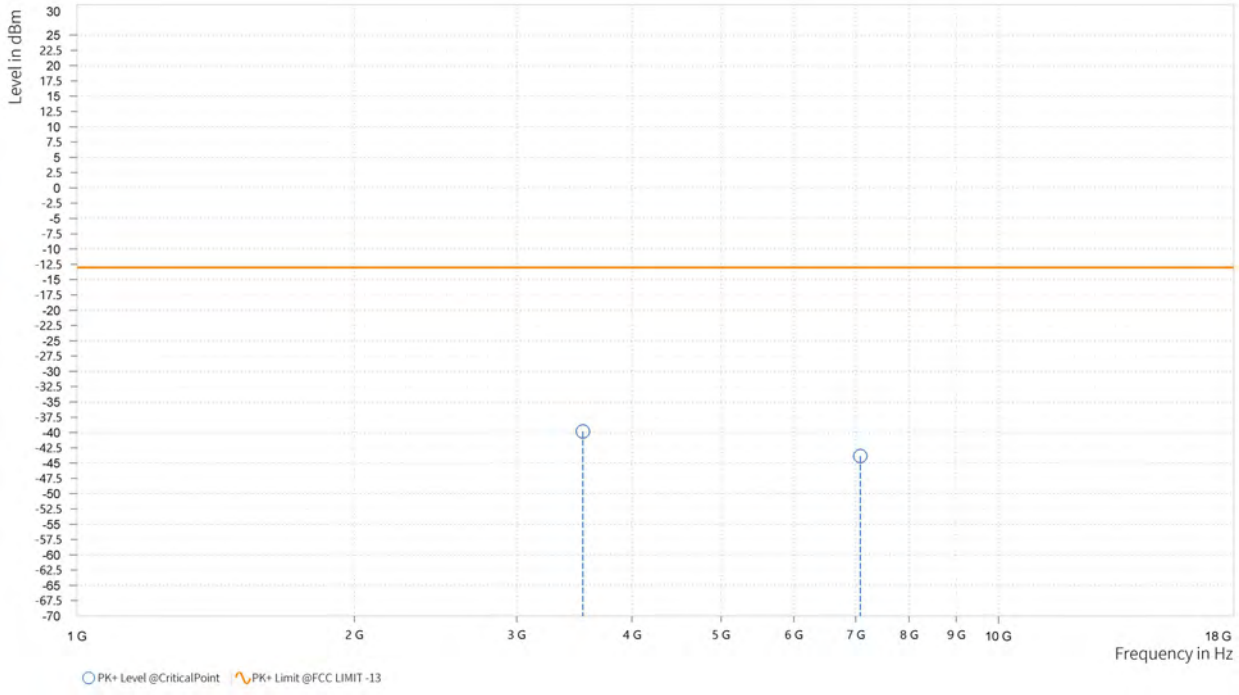
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,481.000	-33.19	-13.00	20.19	21.92	V	194.7	1
5	7,902.500	-43.73	-13.00	30.73	33.07	V	0.1	2



CH 132622

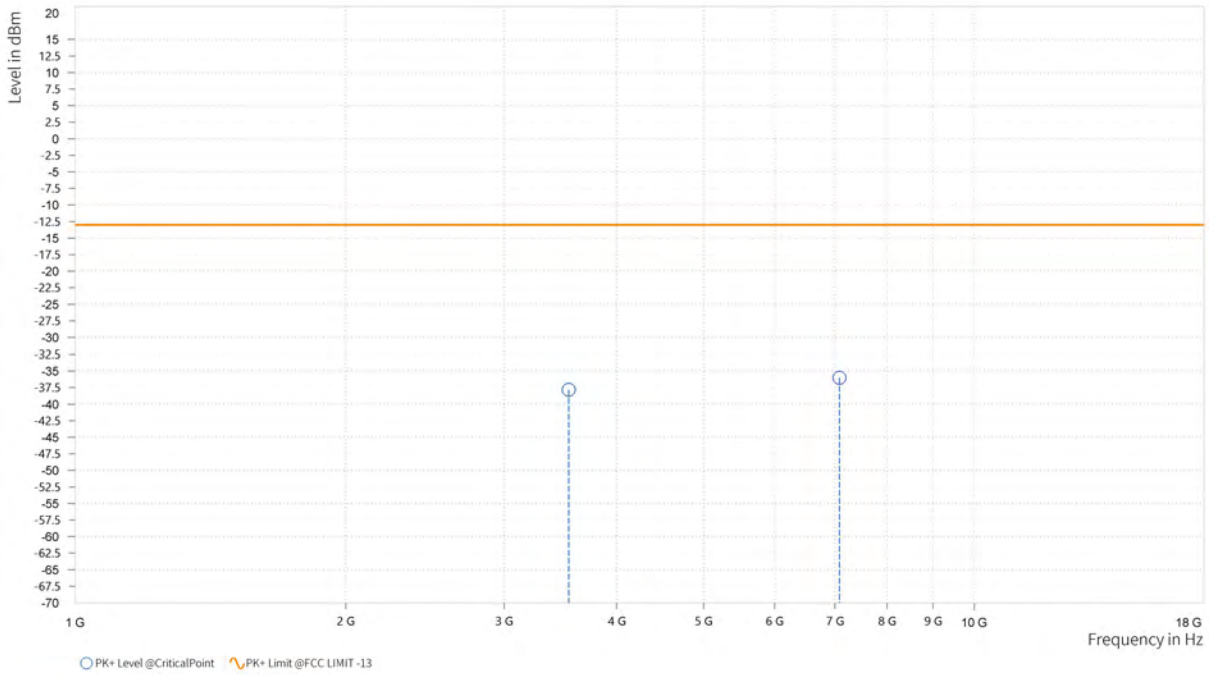
MODE	TX channel 132622	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,541.000	-39.82	-13.00	26.82	21.86	H	359.9	1
5	7,082.500	-43.84	-13.00	30.84	30.62	H	359.9	2



MODE	TX channel 132622	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

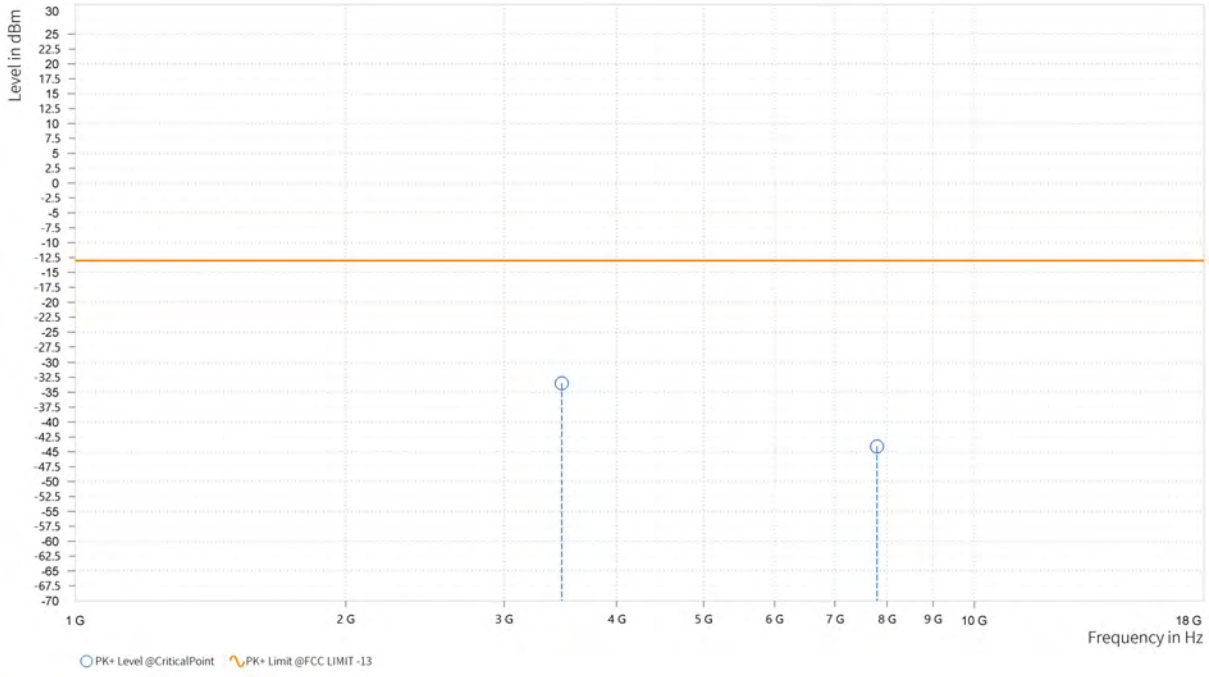
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,541.000	-37.81	-13.00	24.81	22.03	V	0.1	1
5	7,082.500	-36.00	-13.00	23.00	30.66	V	359.9	2



CHANNEL BANDWIDTH: 15MHz / QPSK

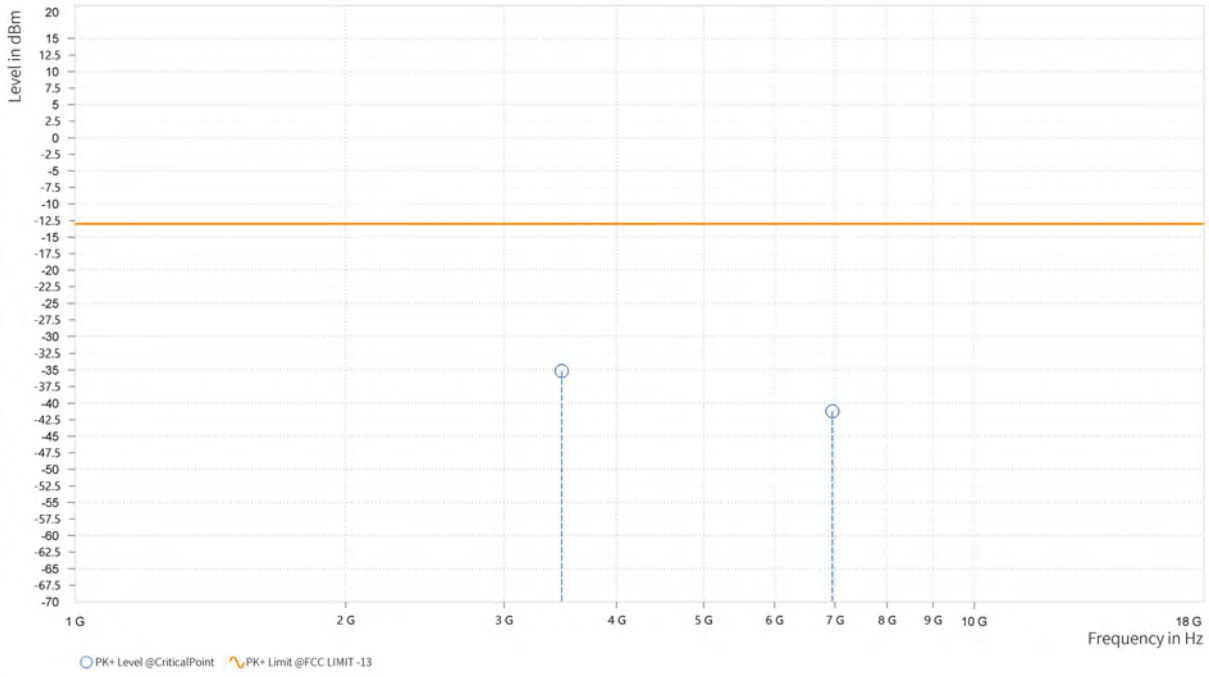
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,476.500	-33.48	-13.00	20.48	21.85	H	359.9	2
5	7,793.500	-44.10	-13.00	31.10	32.90	H	280.8	1



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

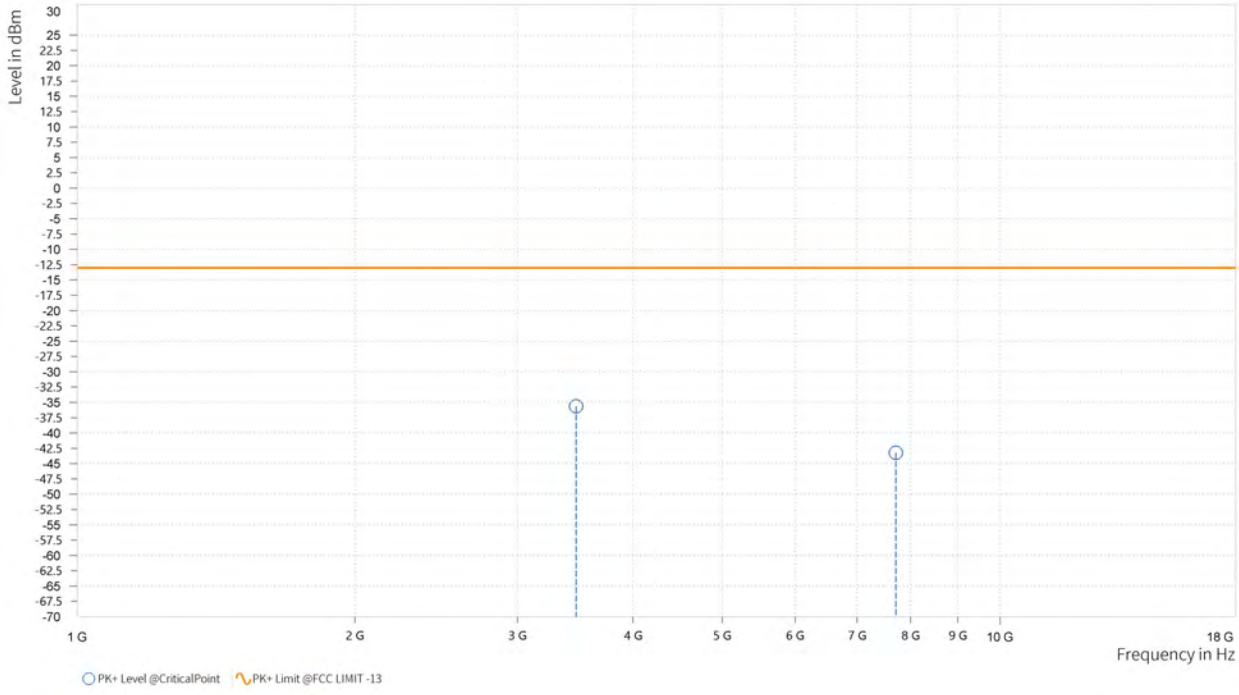
Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,476.500	-35.14	-13.00	22.14	21.92	V	0.1	1
5	6,953.500	-41.21	-13.00	28.21	30.40	V	359.9	2



CHANNEL BANDWIDTH: 20MHz / QPSK

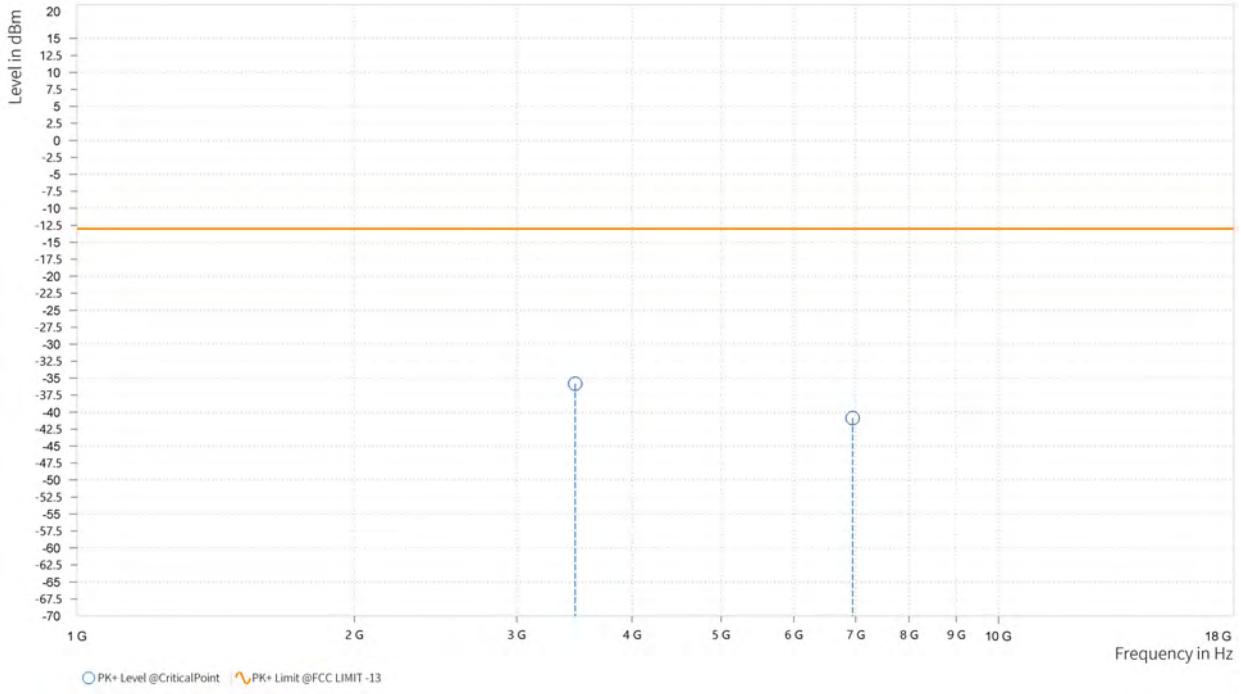
MODE	TX channel 132322	**FREQUENCY RANGE**	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	**INPUT POWER**	EUT 3.8V
TESTED BY	Chao Wu		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Rg	Frequency [MHz]	PK+ Level [dBm]	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
4	3,472.500	-35.61	-13.00	22.61	21.85	H	360	1
5	7,712.500	-43.23	-13.00	30.23	32.76	H	0.1	1



MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	EUT 3.8V
TESTED BY	Chao Wu		
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]
4	3,472.000	-35.80	-13.00	22.80	21.91	V	359.9	1
5	6,944.500	-40.89	-13.00	27.89	30.51	V	359.9	2

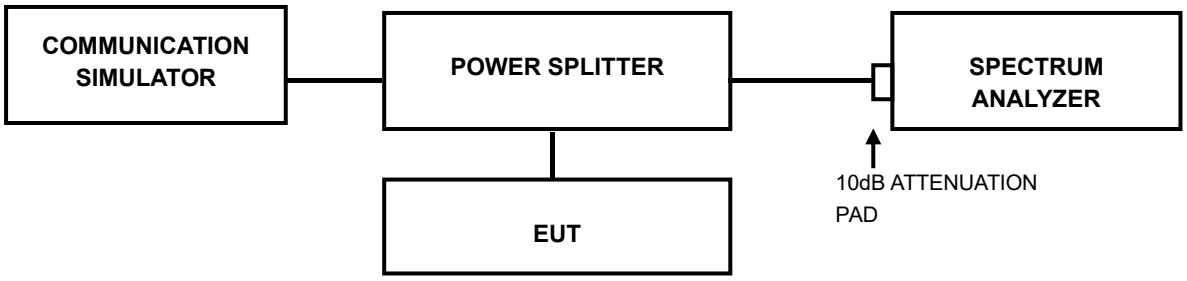


3.7 PEAK TO AVERAGE RATIO

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%.

3.7.4 TEST RESULTS

Please Refer to Appendix A Of this test report.

4 INFORMATION ON THE TESTING LABORATORIES

We, Huarui 7layers High Technology (Suzhou) Co., Ltd. ,were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Suzhou EMC/RF Lab:
Tel: +86 (0557) 368 1008

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

APPENDIX A:

LTE BAND4

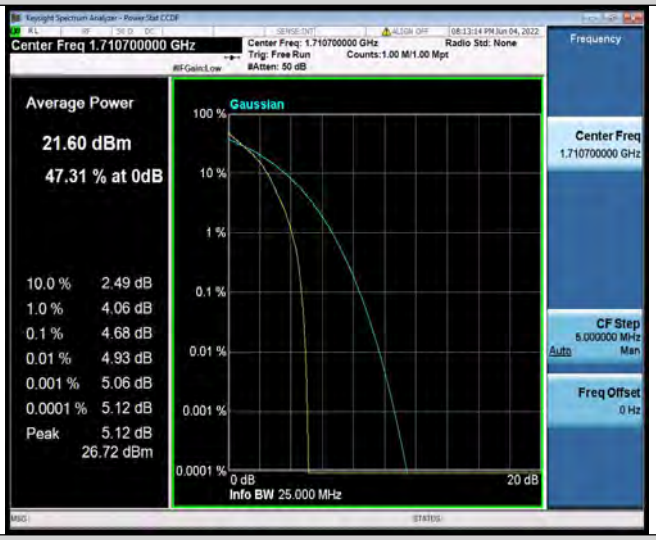
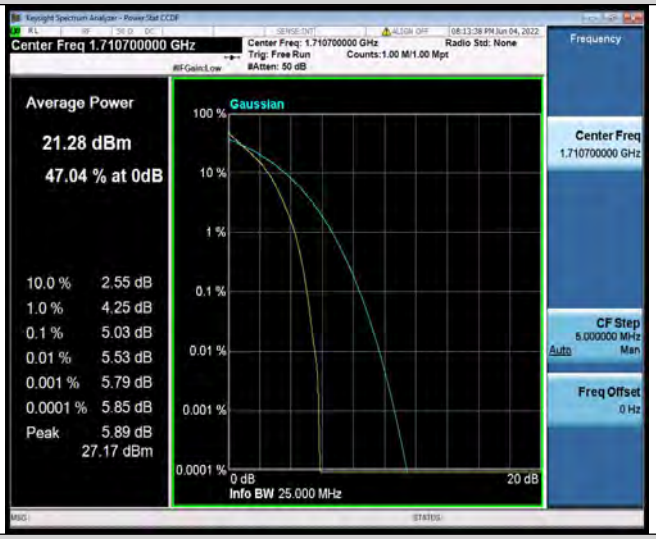
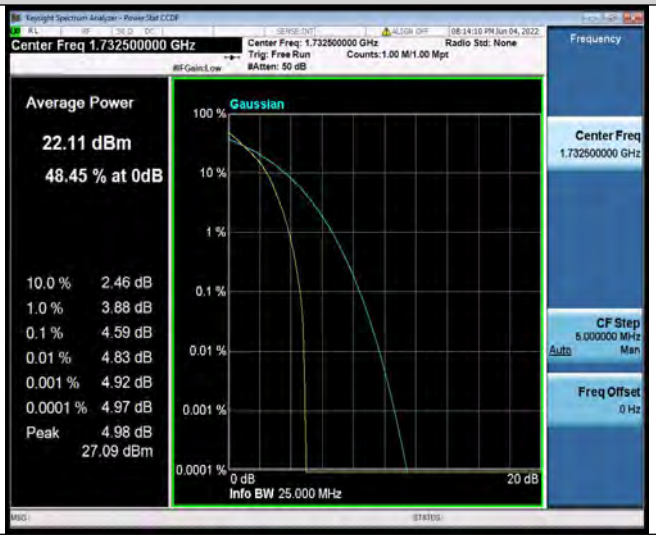
PEAK-TO-AVERAGE RATIO(CCDF)

Test Result

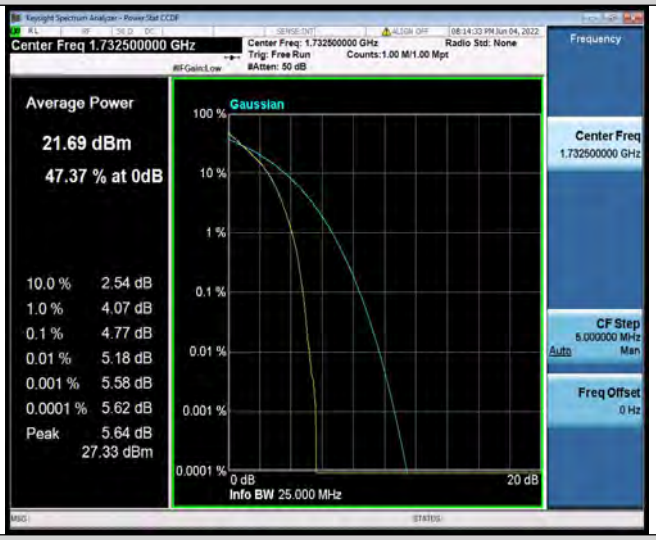
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	4.68	13	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	5.03	13	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	4.59	13	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	4.77	13	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	4.85	13	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	5.26	13	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	5.07	13	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	8.53	13	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	4.75	13	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	5.11	13	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	5.04	13	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	5.66	13	PASS
Band4	3MHz	QPSK	19965	1RB#0	5.02	13	PASS
Band4	3MHz	QPSK	19965	15RB#0	4.94	13	PASS
Band4	3MHz	QPSK	20175	1RB#0	4.79	13	PASS
Band4	3MHz	QPSK	20175	15RB#0	4.65	13	PASS
Band4	3MHz	QPSK	20385	1RB#0	4.98	13	PASS
Band4	3MHz	QPSK	20385	15RB#0	5.10	13	PASS
Band4	3MHz	16QAM	19965	1RB#0	5.22	13	PASS
Band4	3MHz	16QAM	19965	15RB#0	8.54	13	PASS
Band4	3MHz	16QAM	20175	1RB#0	5.13	13	PASS
Band4	3MHz	16QAM	20175	15RB#0	5.09	13	PASS
Band4	3MHz	16QAM	20385	1RB#0	5.14	13	PASS
Band4	3MHz	16QAM	20385	15RB#0	5.61	13	PASS
Band4	5MHz	QPSK	19975	1RB#0	4.40	13	PASS
Band4	5MHz	QPSK	19975	25RB#0	8.57	13	PASS
Band4	5MHz	QPSK	20175	1RB#0	4.25	13	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.80	13	PASS
Band4	5MHz	QPSK	20375	1RB#0	4.93	13	PASS
Band4	5MHz	QPSK	20375	25RB#0	5.16	13	PASS
Band4	5MHz	16QAM	19975	1RB#0	4.46	13	PASS
Band4	5MHz	16QAM	19975	25RB#0	5.26	13	PASS
Band4	5MHz	16QAM	20175	1RB#0	4.32	13	PASS
Band4	5MHz	16QAM	20175	25RB#0	5.10	13	PASS
Band4	5MHz	16QAM	20375	1RB#0	5.00	13	PASS
Band4	5MHz	16QAM	20375	25RB#0	5.57	13	PASS
Band4	10MHz	QPSK	20000	1RB#0	5.04	13	PASS
Band4	10MHz	QPSK	20000	50RB#0	4.92	13	PASS
Band4	10MHz	QPSK	20175	1RB#0	4.90	13	PASS
Band4	10MHz	QPSK	20175	50RB#0	4.77	13	PASS
Band4	10MHz	QPSK	20350	1RB#0	4.53	13	PASS

Band4	10MHz	QPSK	20350	50RB#0	5.09	13	PASS
Band4	10MHz	16QAM	20000	1RB#0	5.37	13	PASS
Band4	10MHz	16QAM	20000	27RB#0	5.43	13	PASS
Band4	10MHz	16QAM	20175	1RB#0	5.27	13	PASS
Band4	10MHz	16QAM	20175	27RB#0	5.14	13	PASS
Band4	10MHz	16QAM	20350	1RB#0	4.85	13	PASS
Band4	10MHz	16QAM	20350	27RB#0	5.77	13	PASS
Band4	15MHz	QPSK	20025	1RB#0	4.93	13	PASS
Band4	15MHz	QPSK	20025	75RB#0	5.24	13	PASS
Band4	15MHz	QPSK	20175	1RB#0	4.61	13	PASS
Band4	15MHz	QPSK	20175	75RB#0	5.14	13	PASS
Band4	15MHz	QPSK	20325	1RB#0	3.80	13	PASS
Band4	15MHz	QPSK	20325	75RB#0	5.25	13	PASS
Band4	15MHz	16QAM	20025	1RB#0	5.28	13	PASS
Band4	15MHz	16QAM	20025	27RB#0	5.65	13	PASS
Band4	15MHz	16QAM	20175	1RB#0	5.03	13	PASS
Band4	15MHz	16QAM	20175	27RB#0	5.24	13	PASS
Band4	15MHz	16QAM	20325	1RB#0	4.09	13	PASS
Band4	15MHz	16QAM	20325	27RB#0	4.83	13	PASS
Band4	20MHz	QPSK	20050	1RB#0	5.01	13	PASS
Band4	20MHz	QPSK	20050	100RB#0	5.08	13	PASS
Band4	20MHz	QPSK	20175	1RB#0	4.48	13	PASS
Band4	20MHz	QPSK	20175	100RB#0	5.09	13	PASS
Band4	20MHz	QPSK	20300	1RB#0	4.43	13	PASS
Band4	20MHz	QPSK	20300	100RB#0	5.13	13	PASS
Band4	20MHz	16QAM	20050	1RB#0	5.23	13	PASS
Band4	20MHz	16QAM	20050	27RB#0	5.61	13	PASS
Band4	20MHz	16QAM	20175	1RB#0	4.92	13	PASS
Band4	20MHz	16QAM	20175	27RB#0	5.26	13	PASS
Band4	20MHz	16QAM	20300	1RB#0	4.59	13	PASS
Band4	20MHz	16QAM	20300	27RB#0	5.31	13	PASS

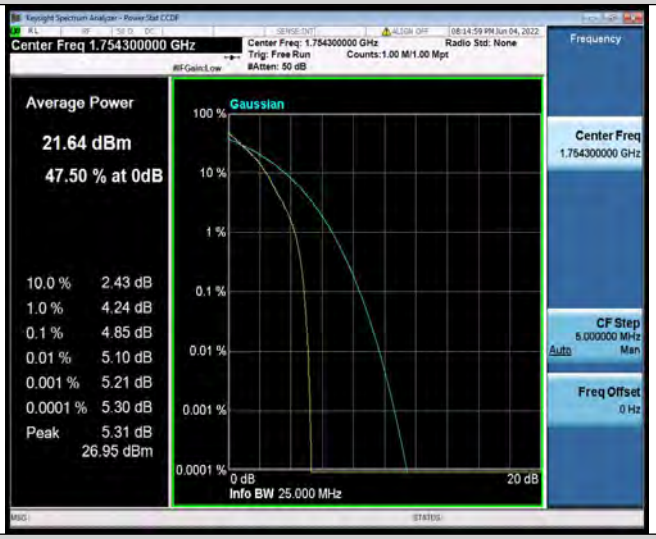
Test Graphs

Band4-1.4MHz-QPSK-19957-1RB#0

Band4-1.4MHz-QPSK-19957-6RB#0

Band4-1.4MHz-QPSK-20175-1RB#0


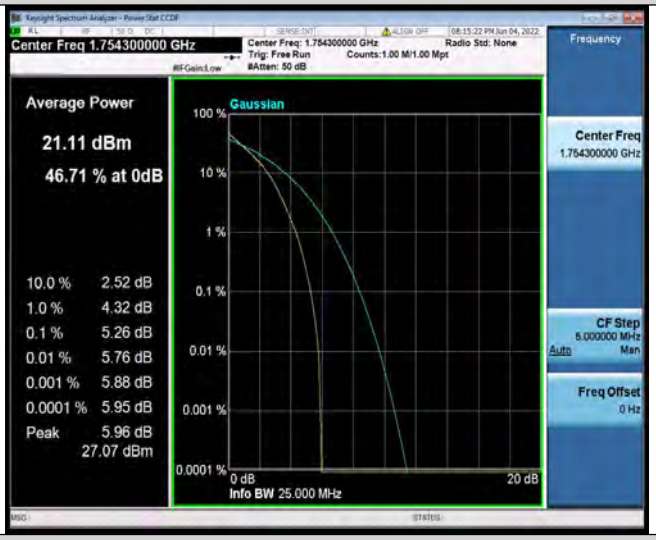
Band4-1.4MHz-QPSK-20175-6RB#0



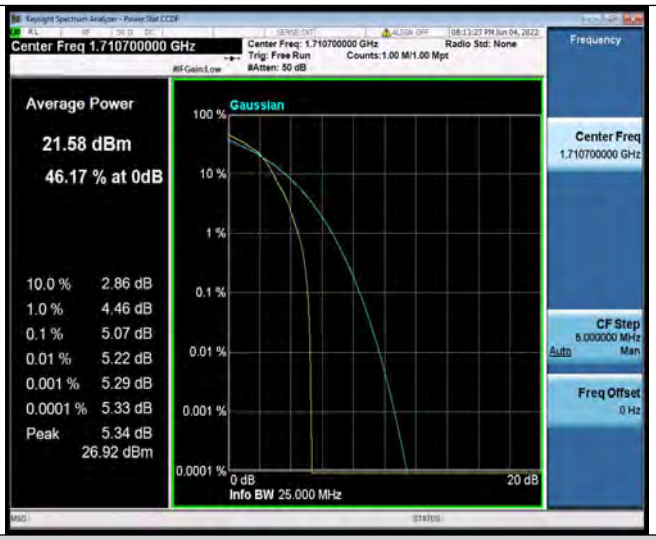
Band4-1.4MHz-QPSK-20393-1RB#0



Band4-1.4MHz-QPSK-20393-6RB#0



Band4-1.4MHz-16QAM-19957-1RB#0



Band4-1.4MHz-16QAM-19957-6RB#0

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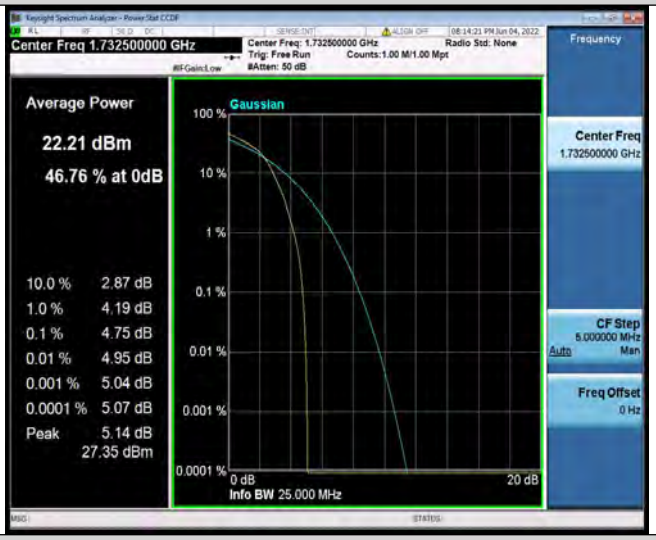

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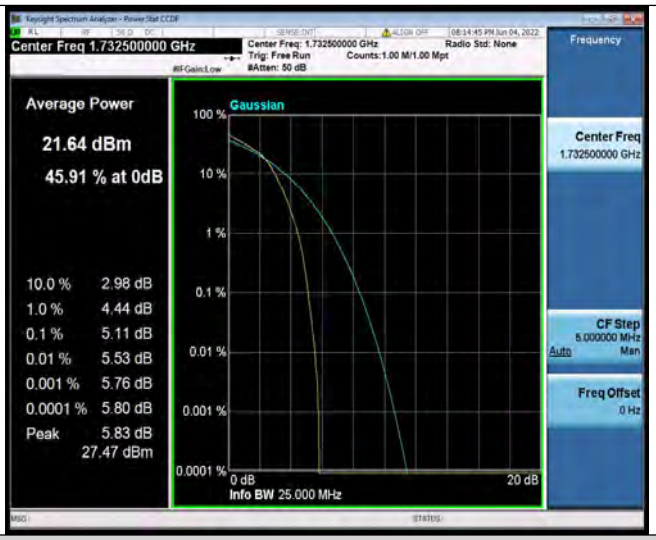

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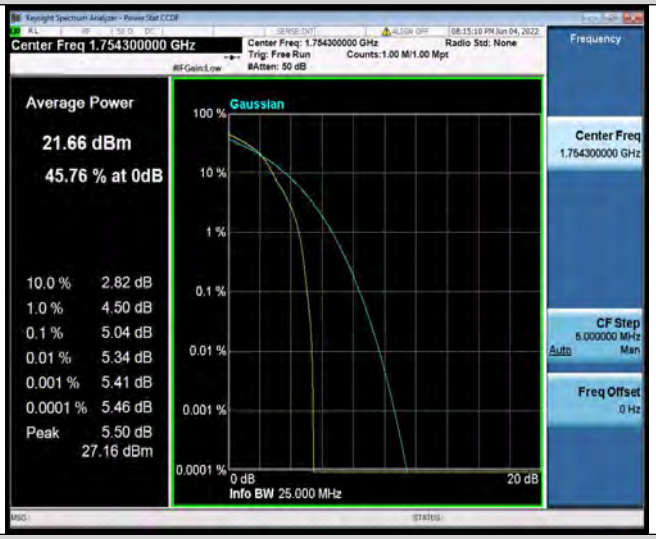

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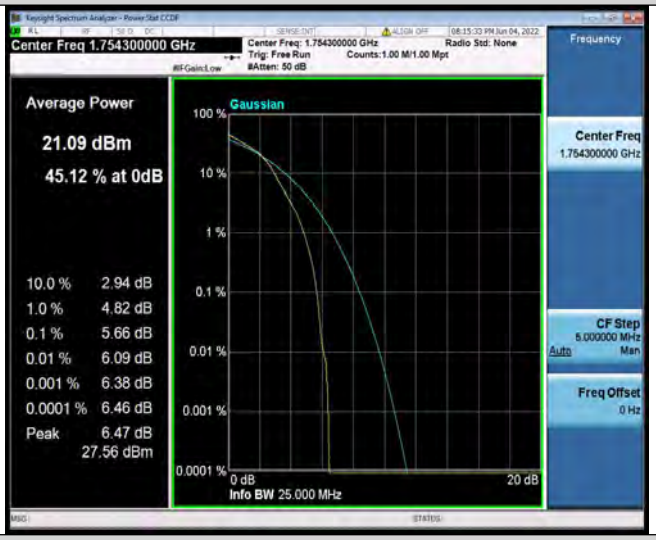

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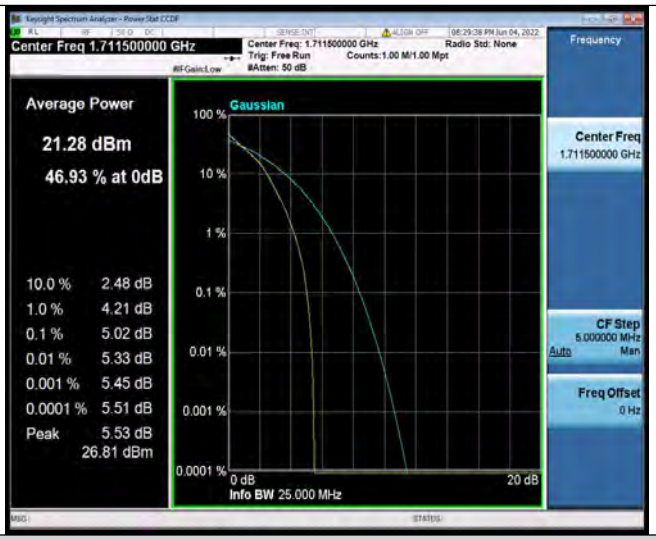

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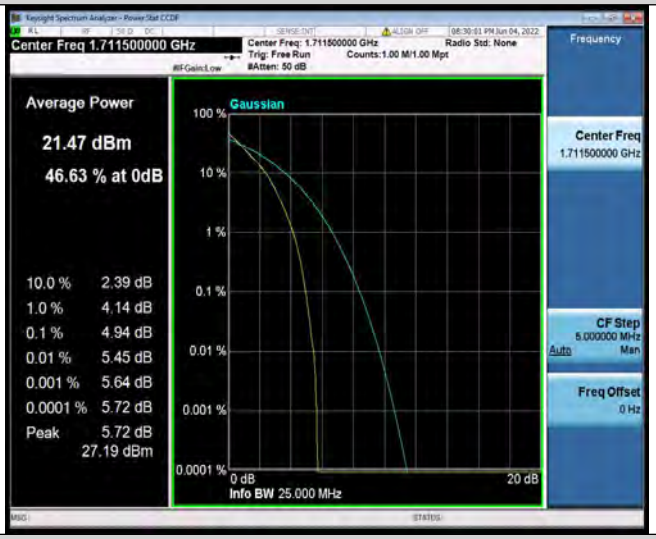

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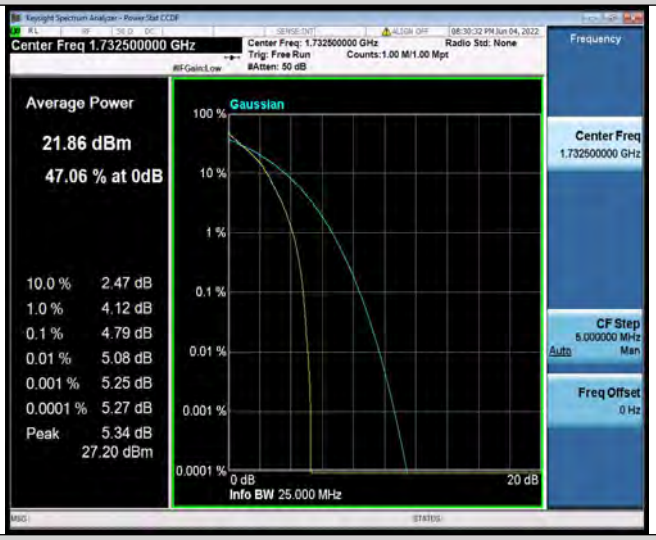

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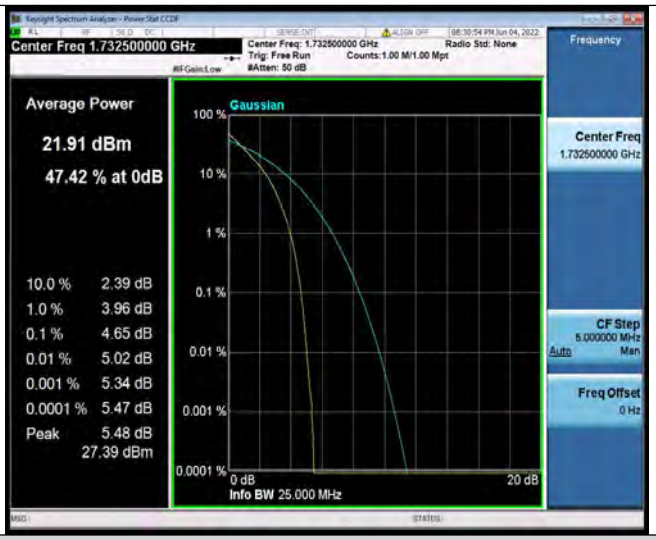

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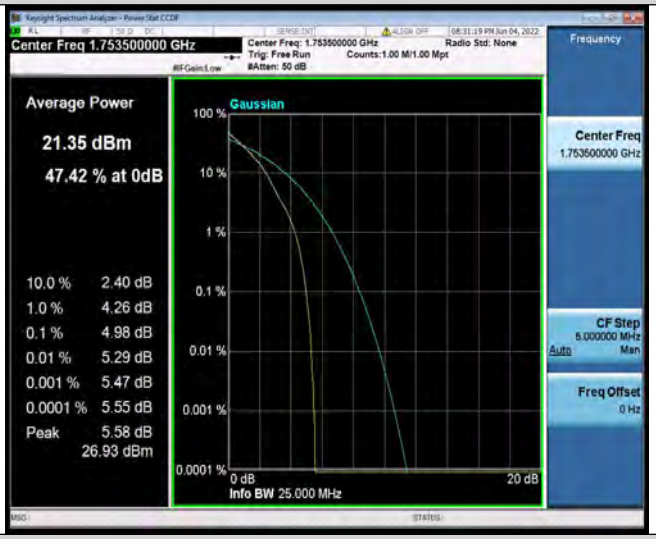

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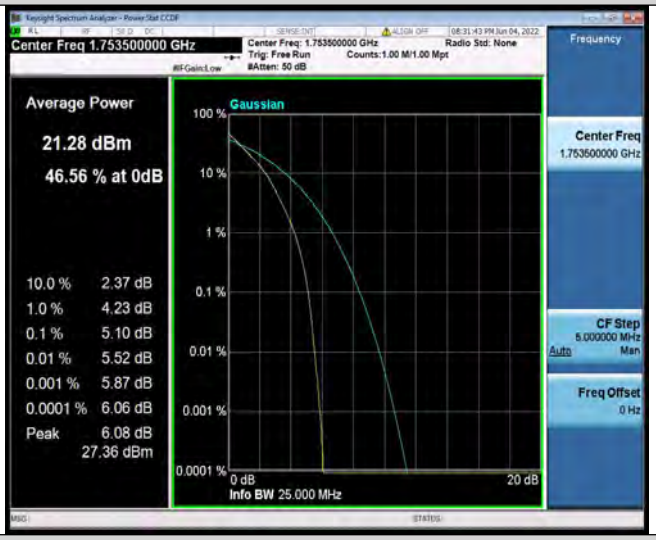

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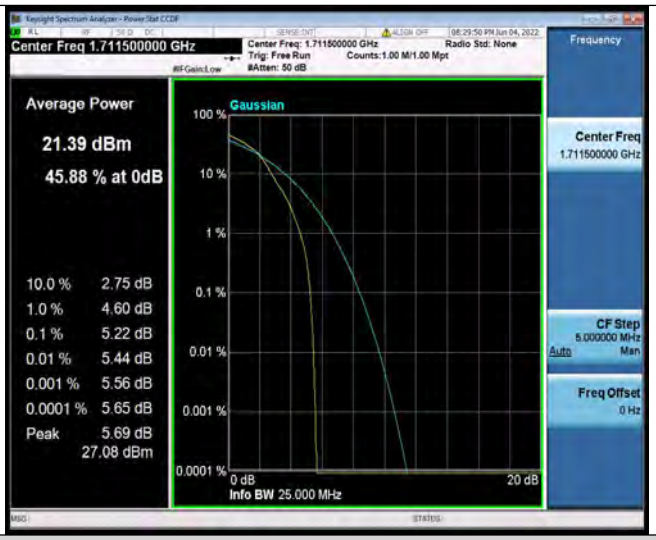

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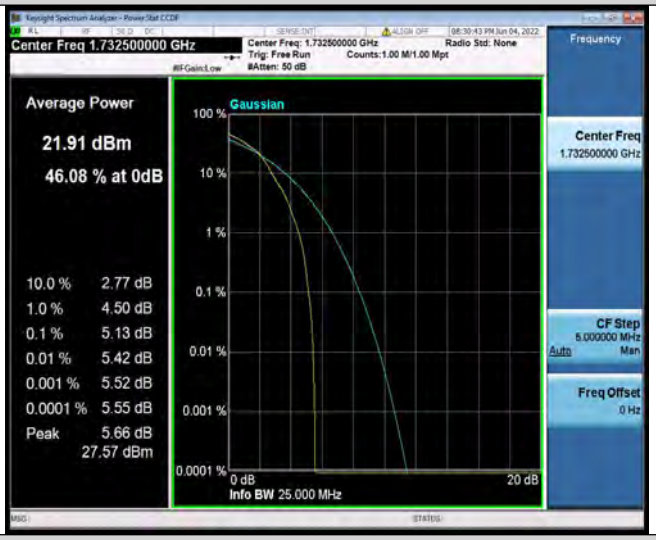

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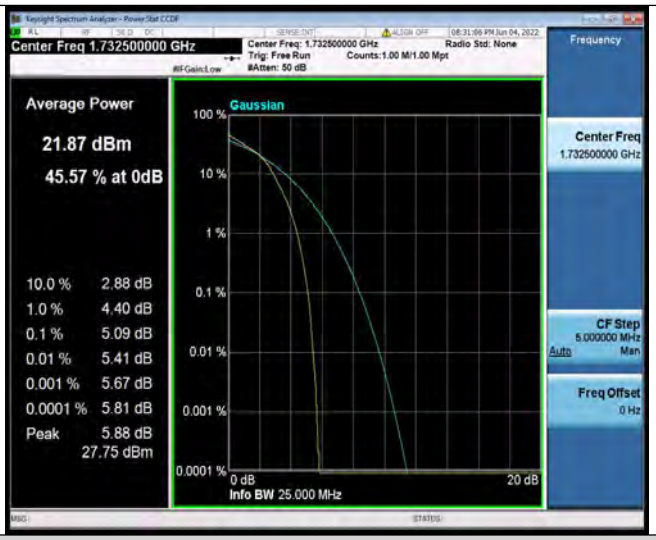

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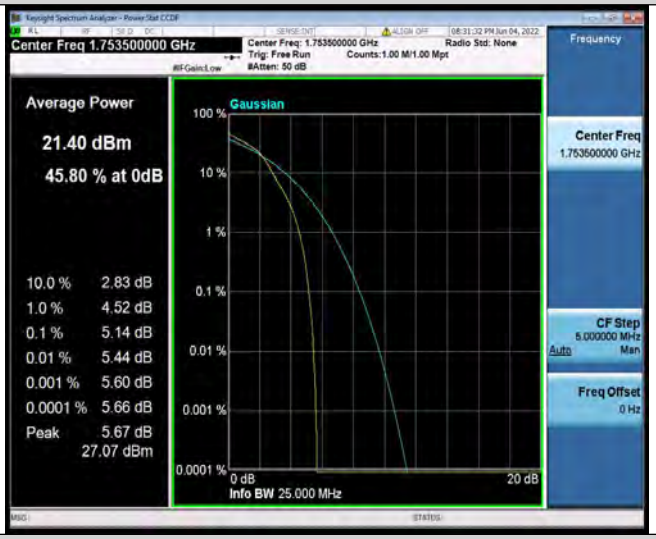

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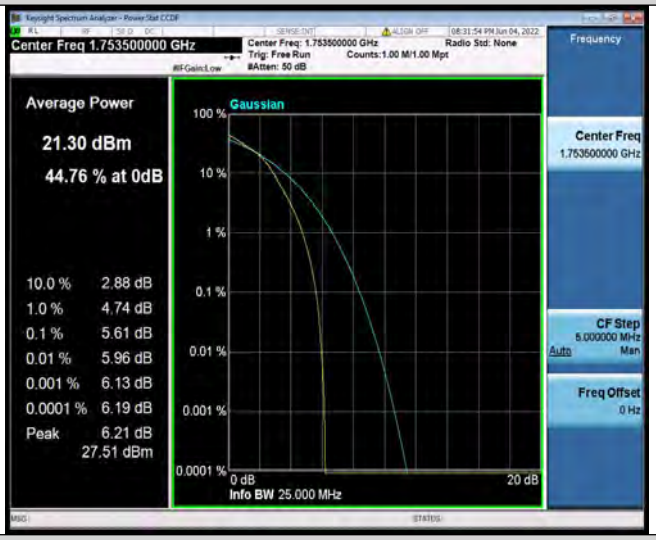

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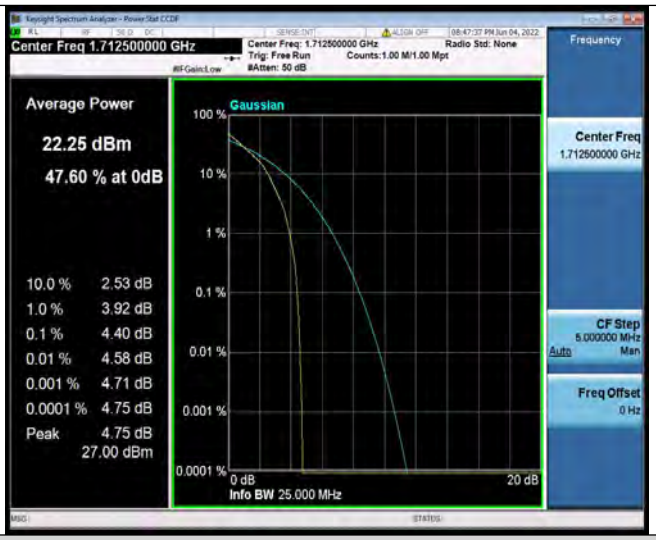

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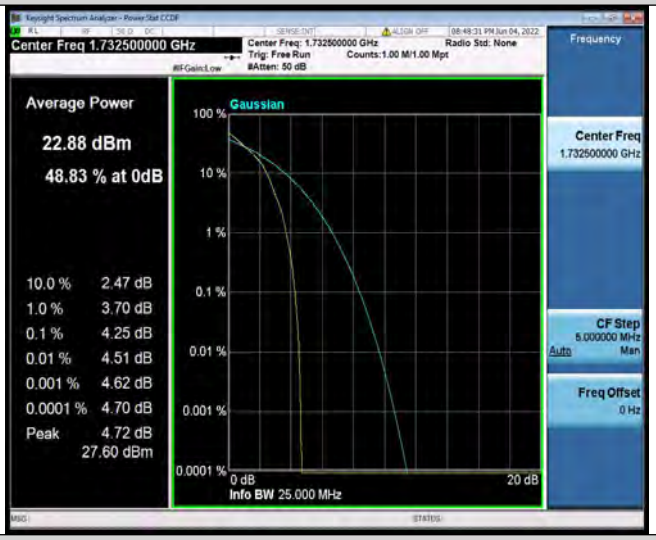

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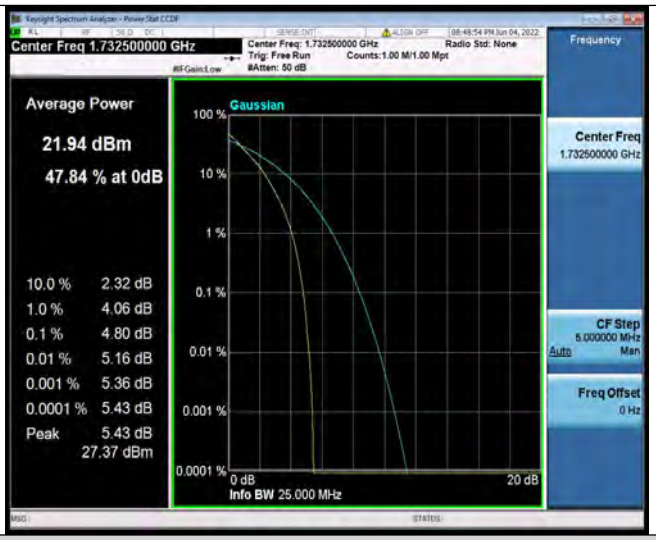

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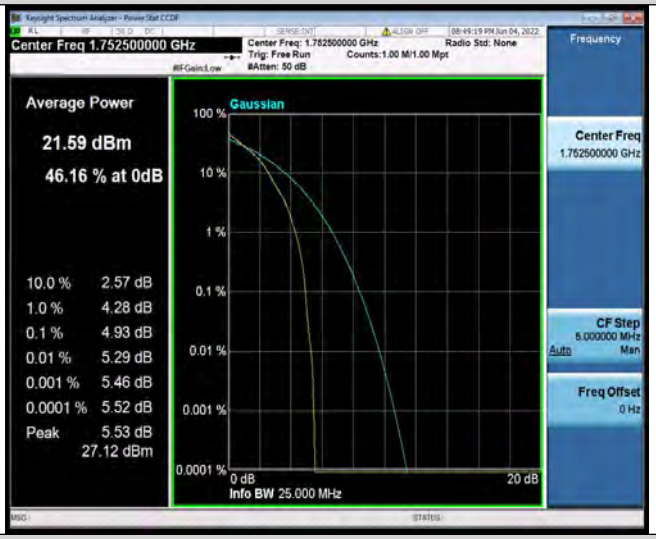

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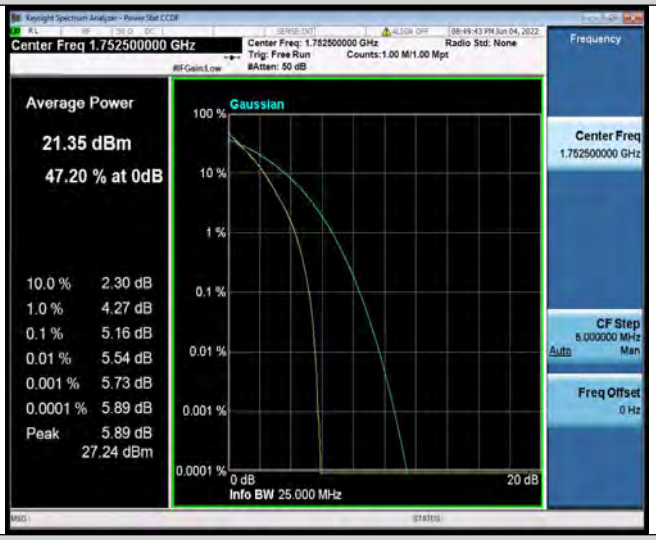

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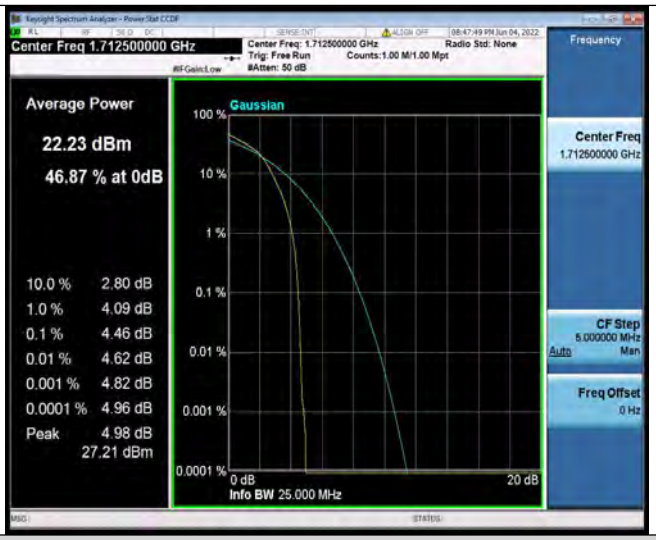

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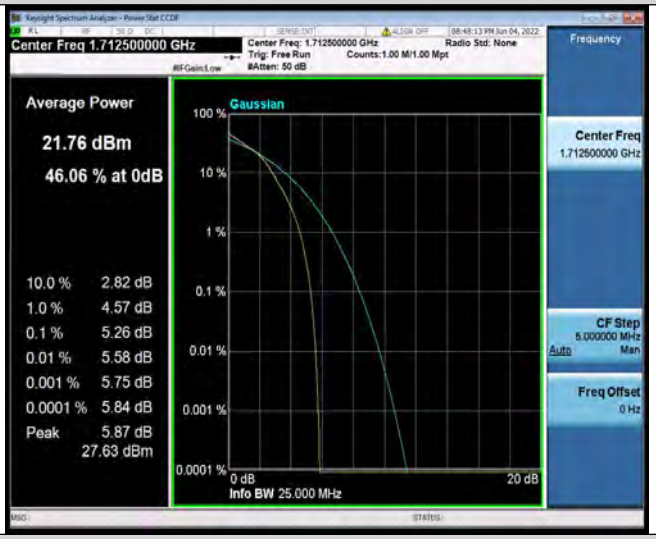

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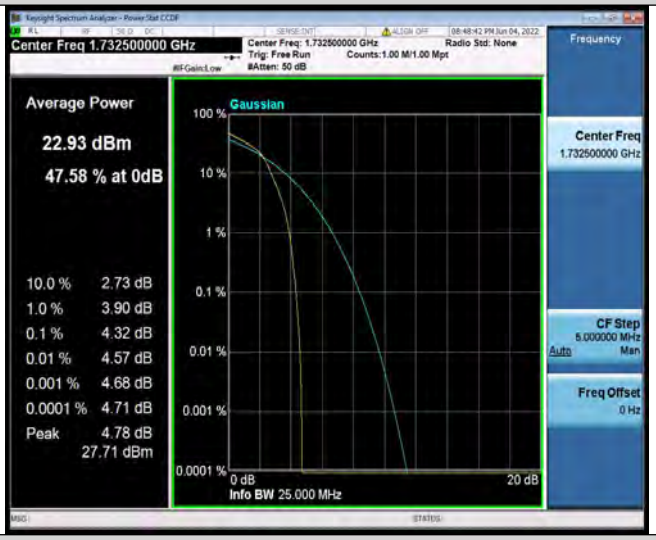

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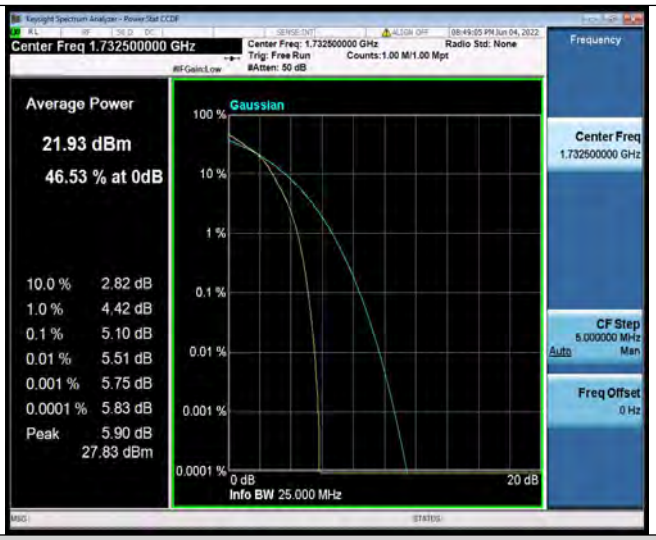

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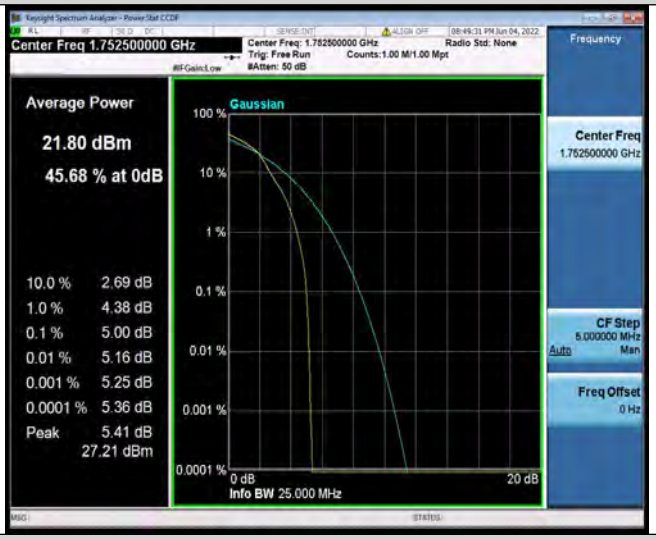

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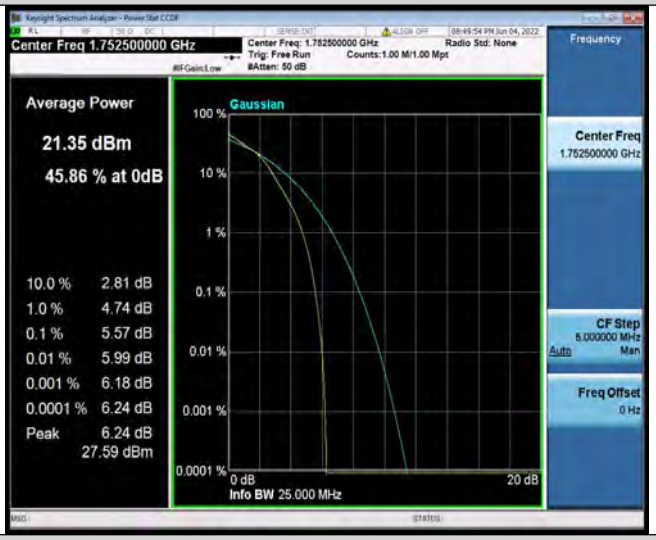

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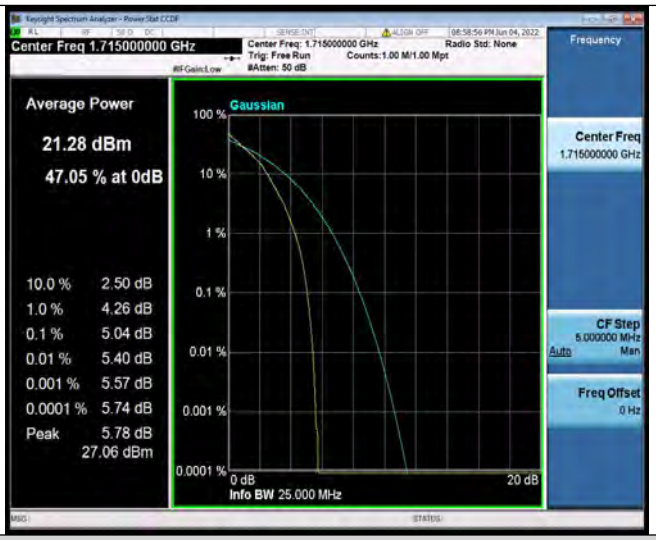

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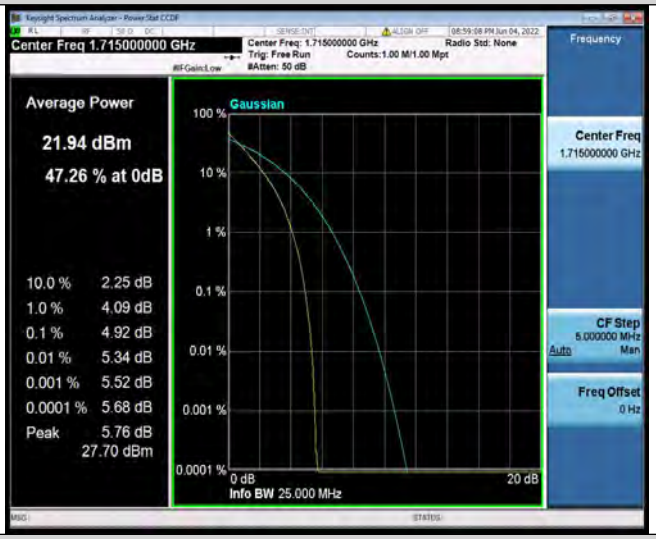

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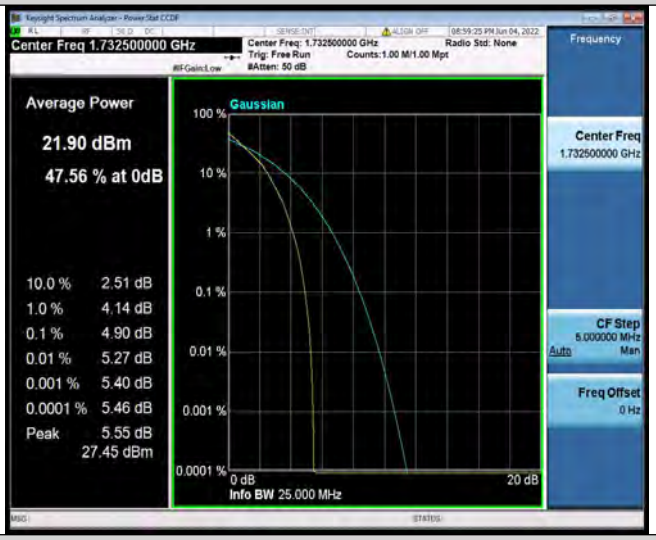

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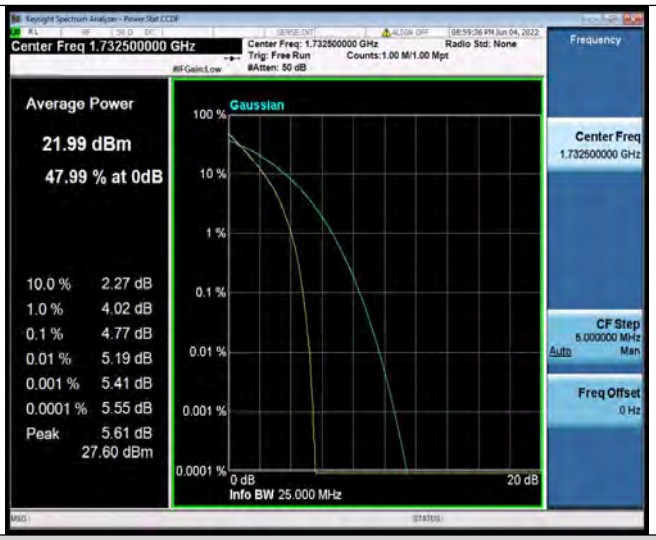

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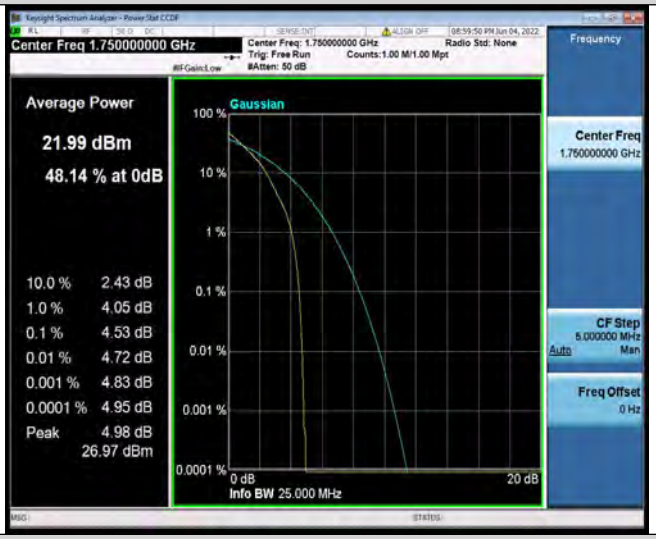

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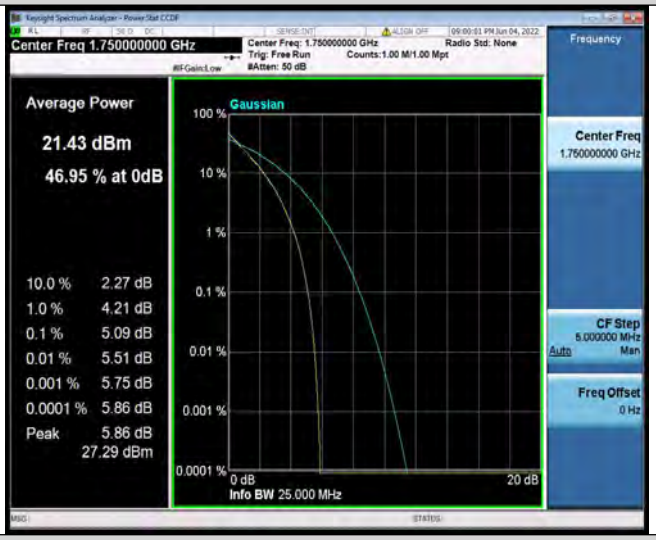

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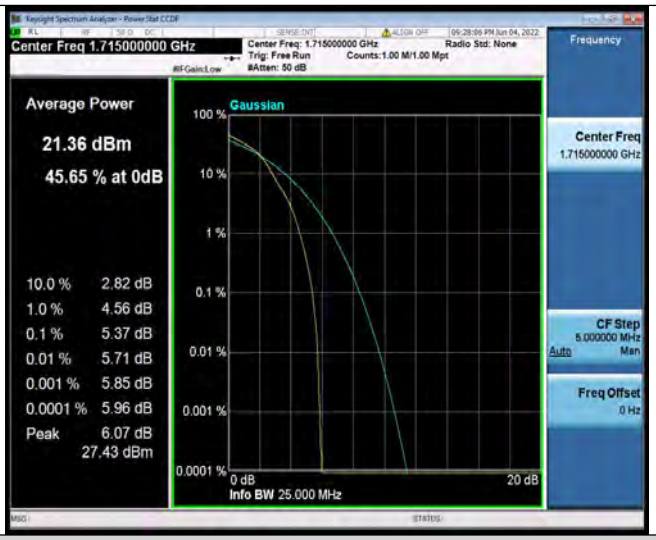

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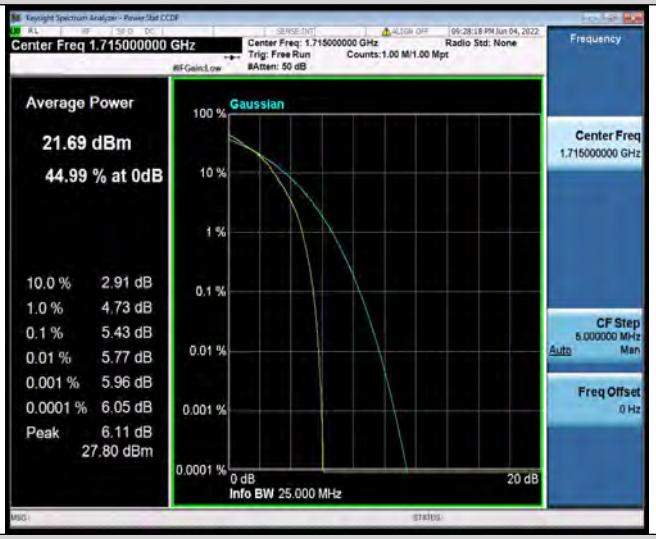

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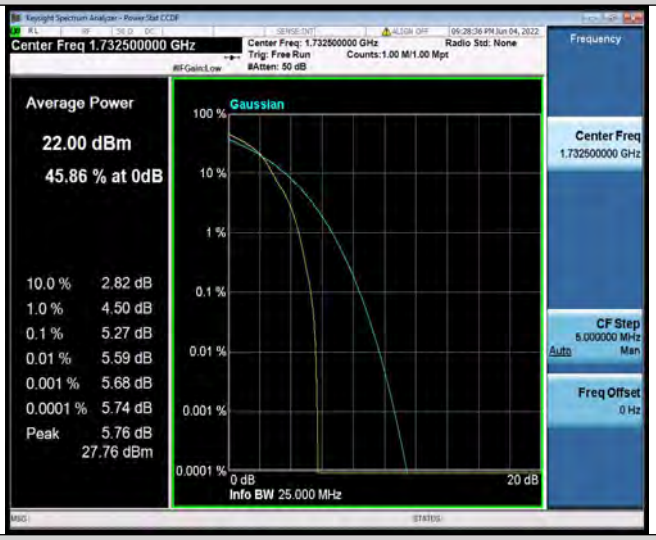

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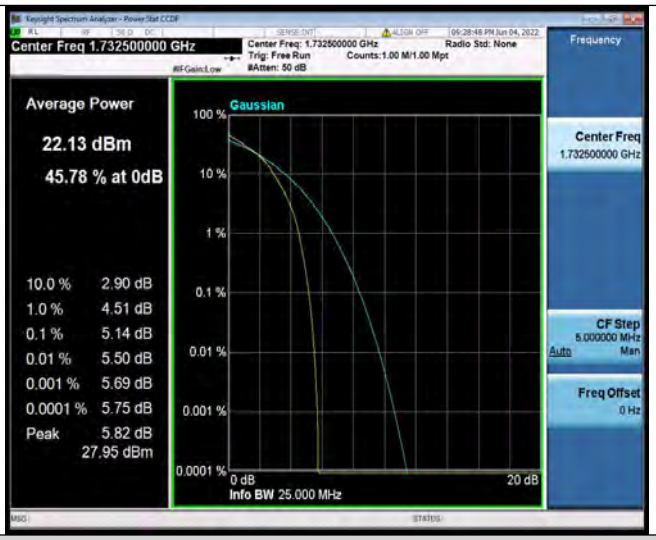

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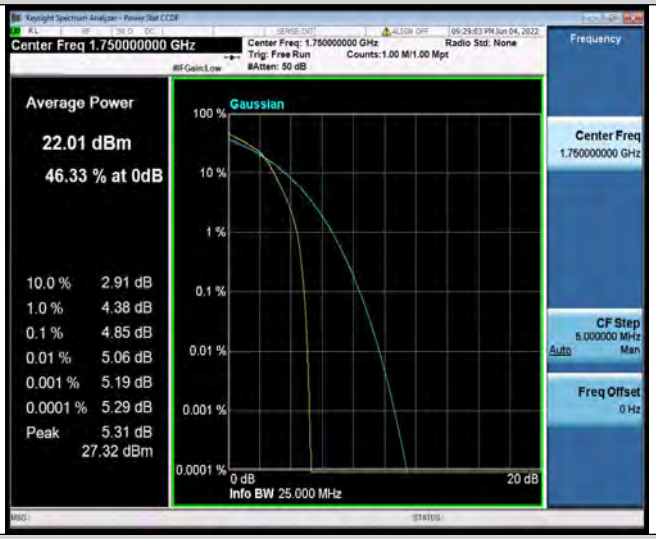

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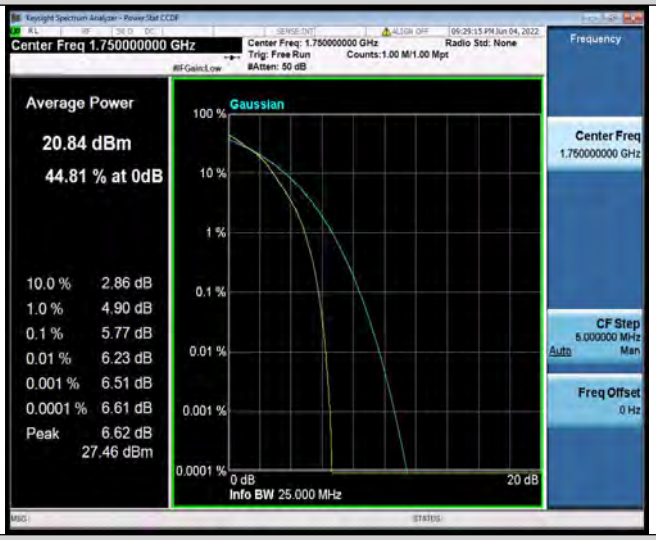

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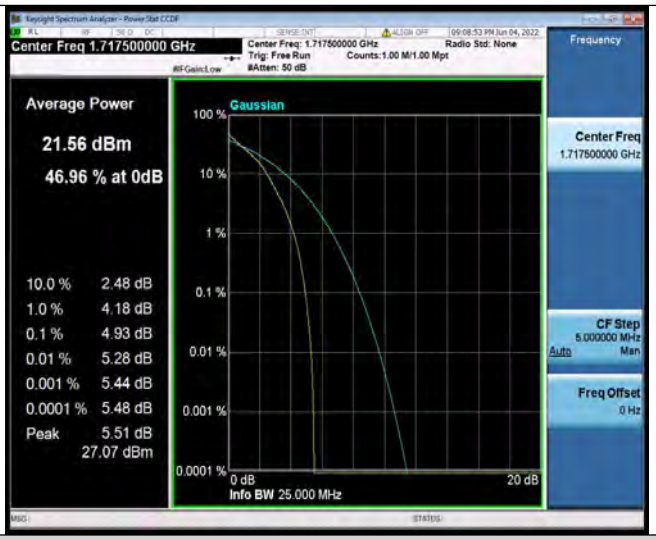

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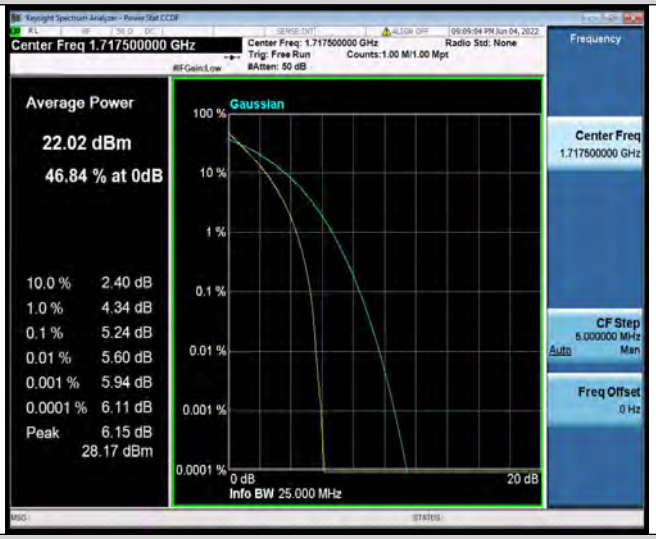

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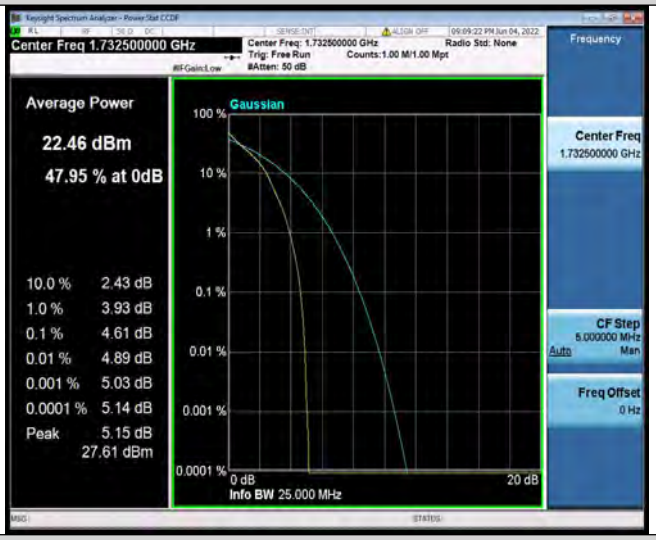

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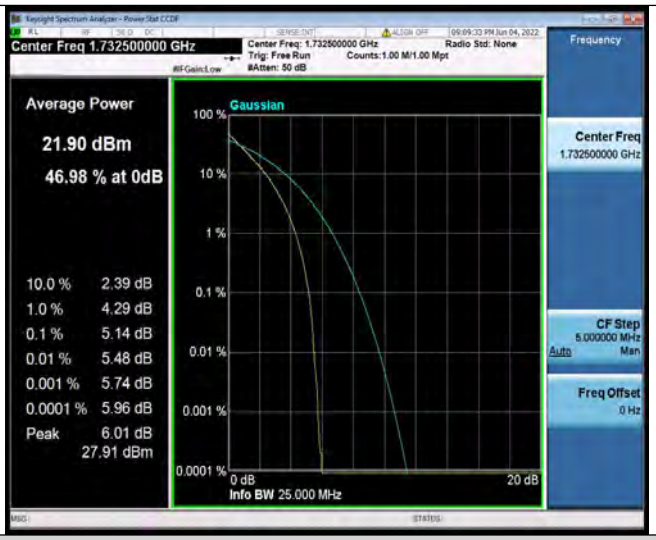

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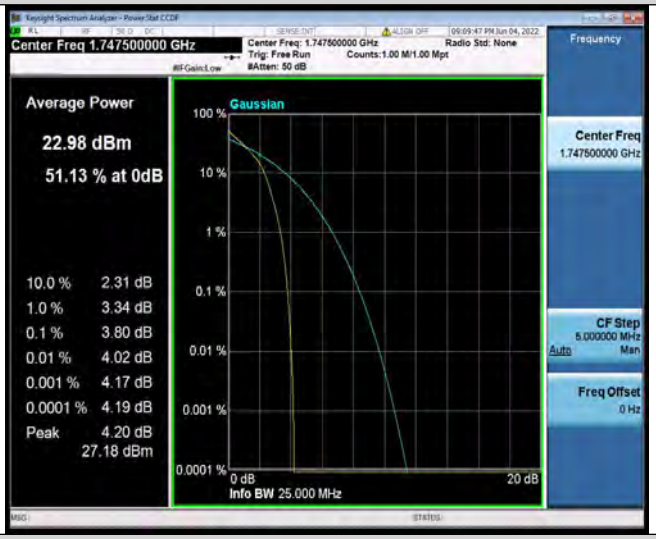

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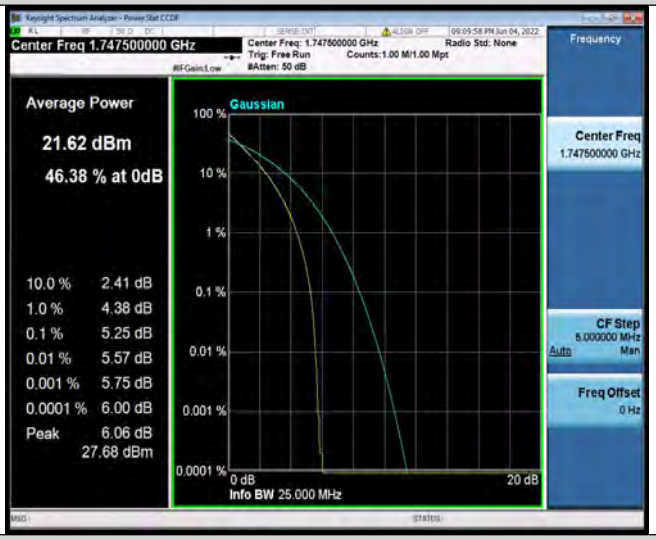

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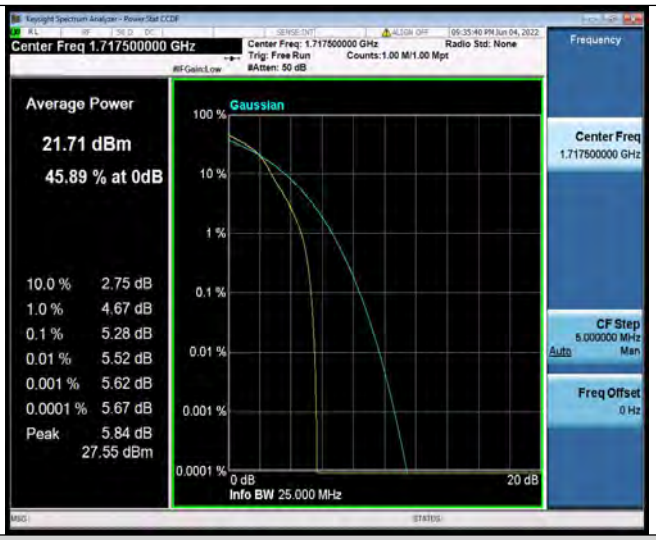

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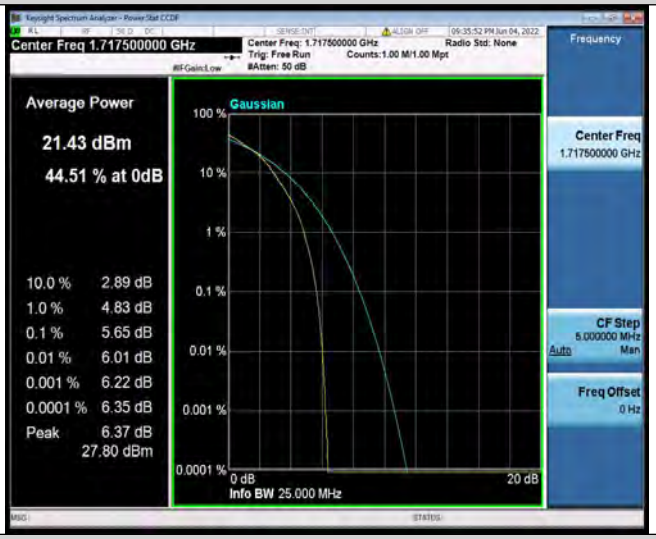

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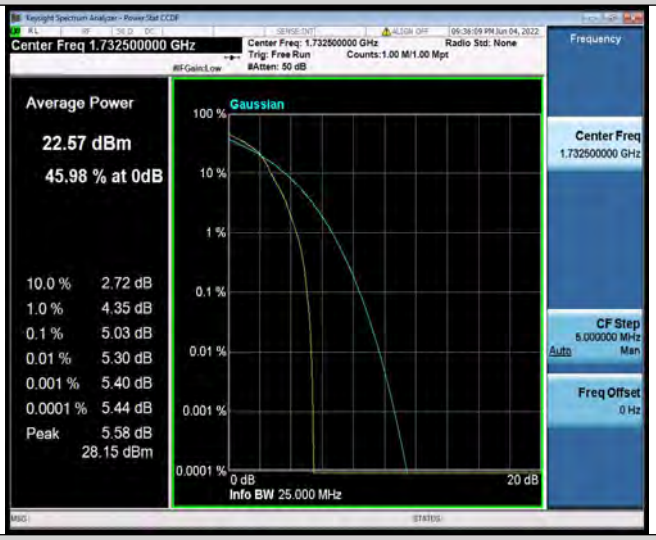

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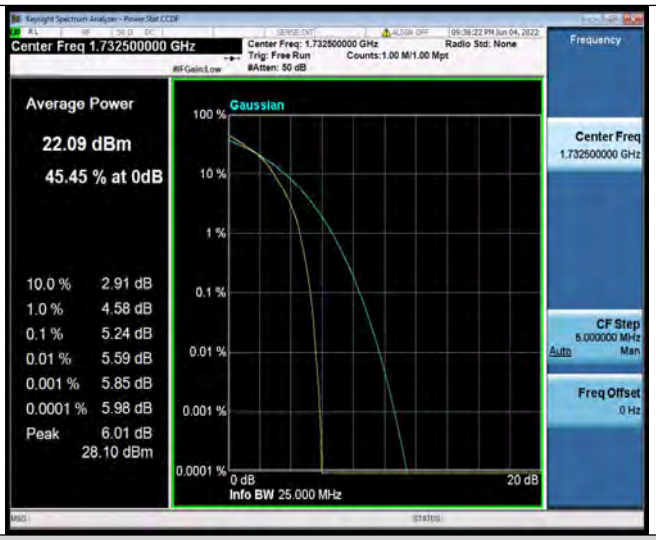

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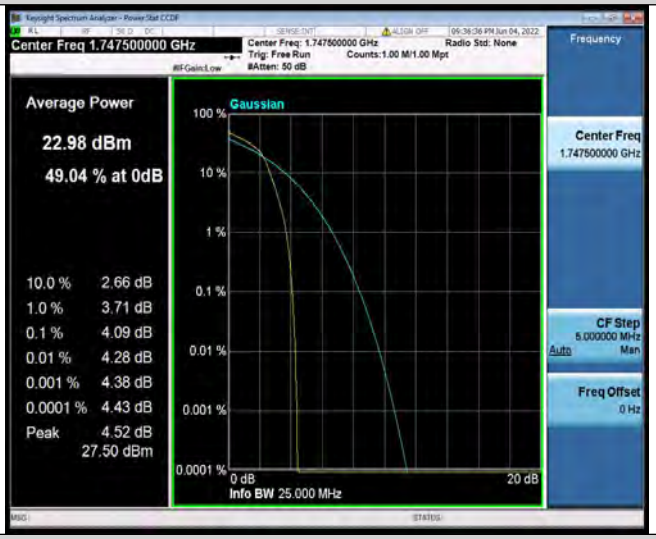

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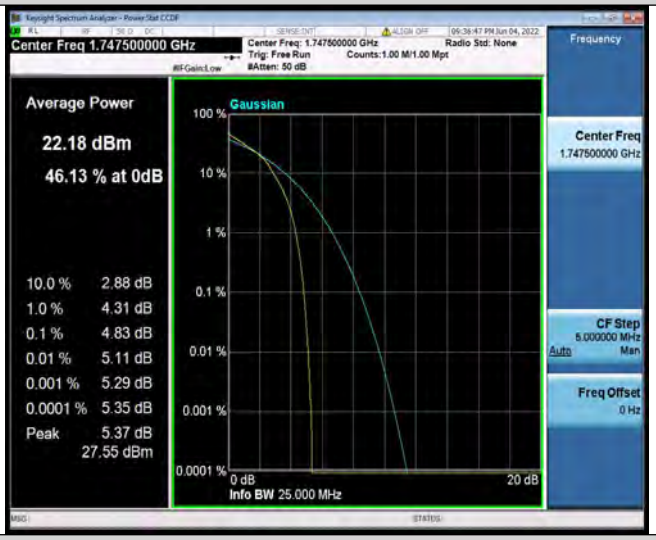

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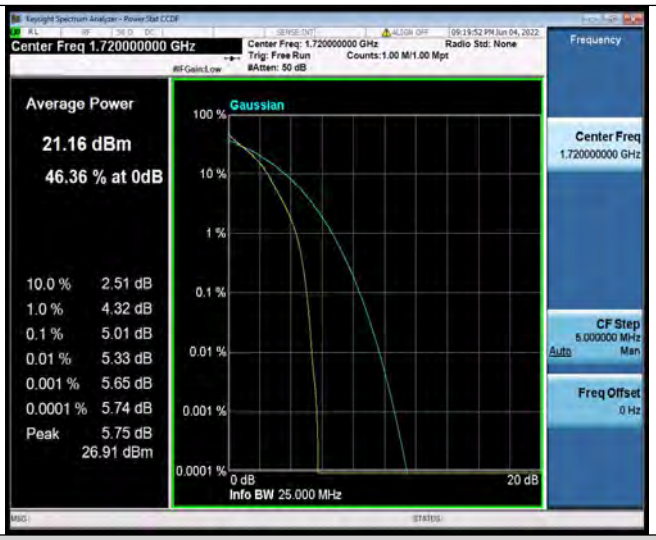
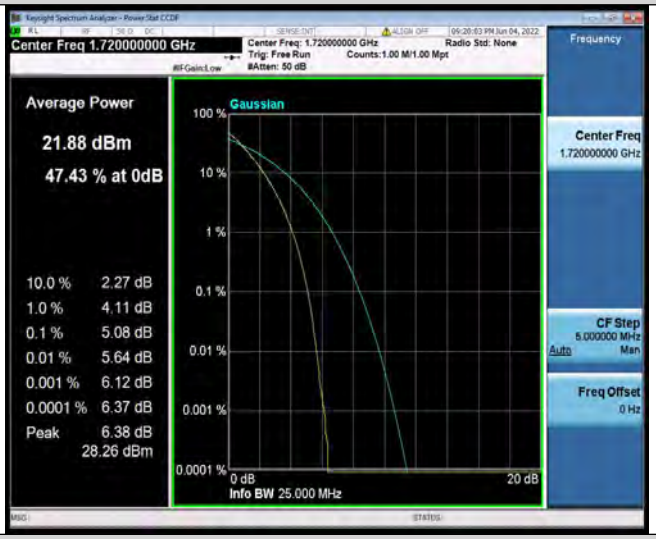
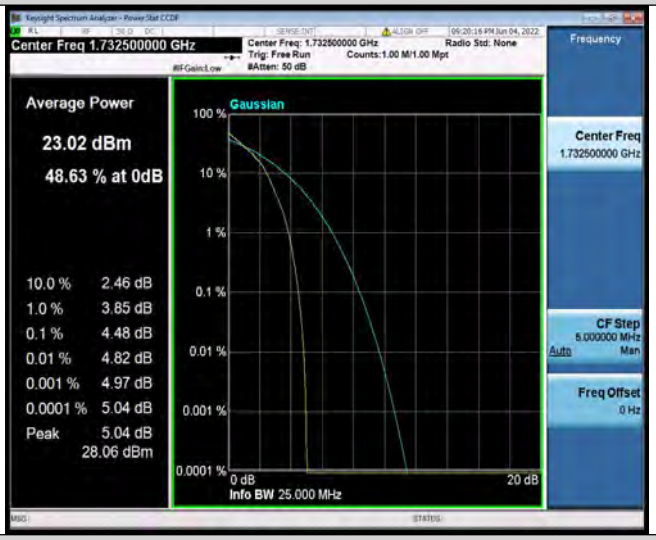


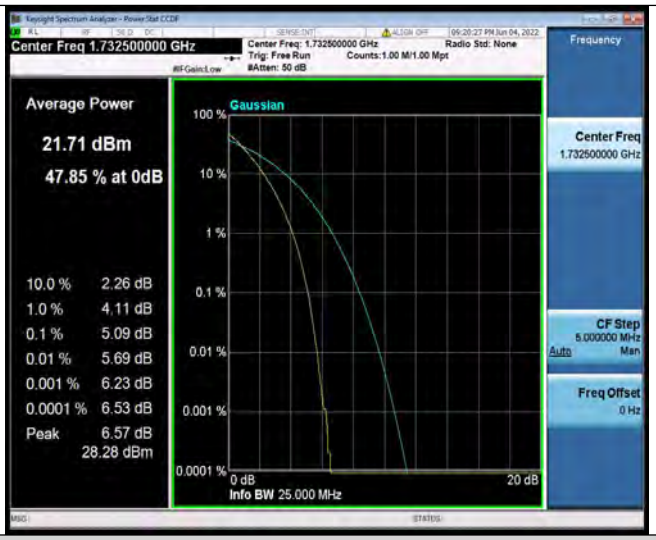
Band4-20MHz-QPSK-20050-100RB#0



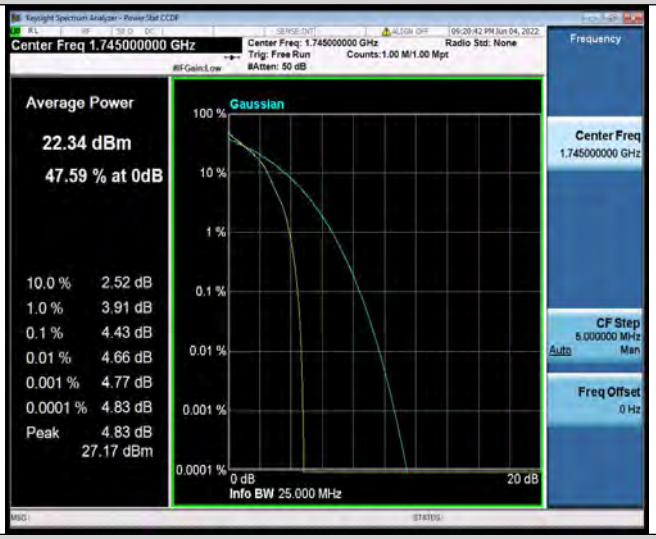
Band4-20MHz-QPSK-20175-1RB#0



Band4-20MHz-QPSK-20175-100RB#0



Band4-20MHz-QPSK-20300-1RB#0



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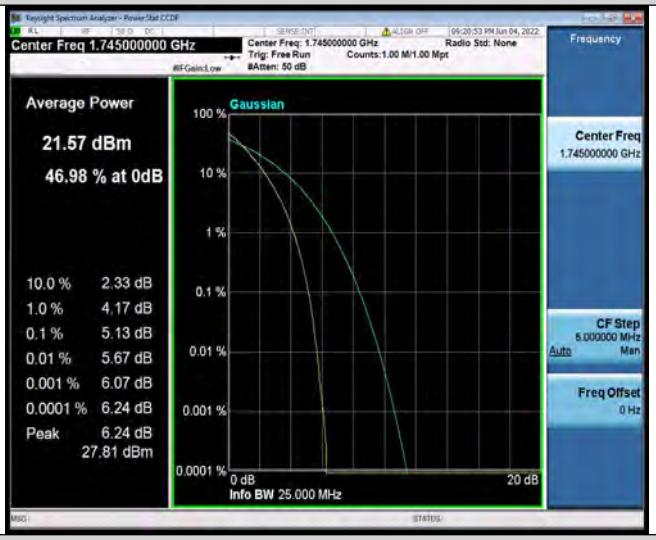
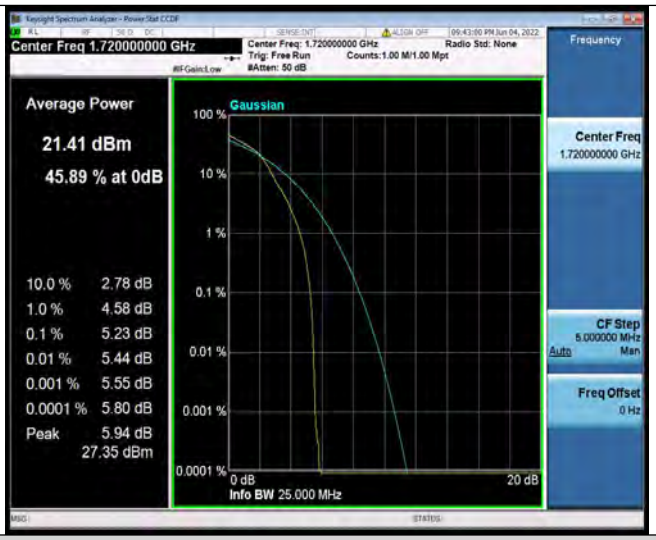
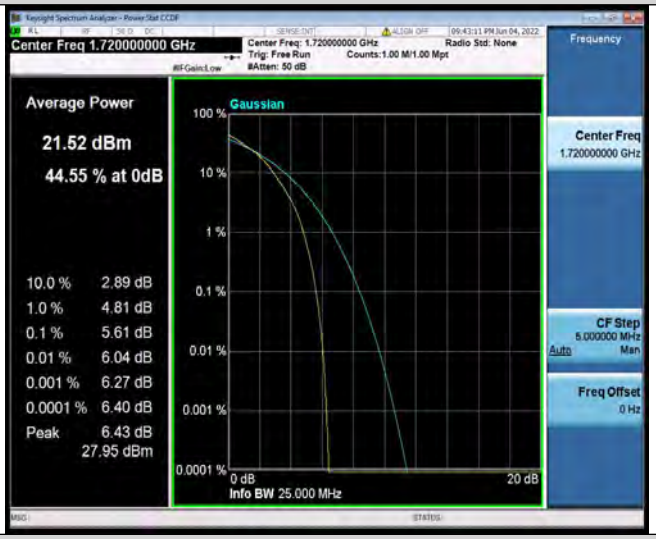


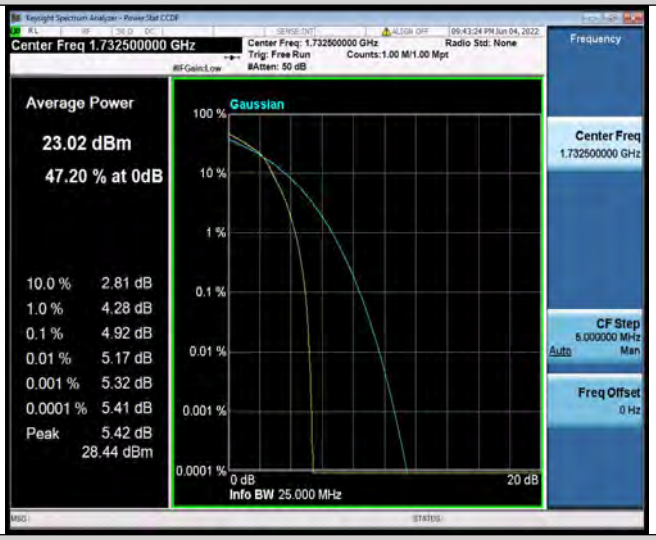
Band4-20MHz-16QAM-20050-1RB#0



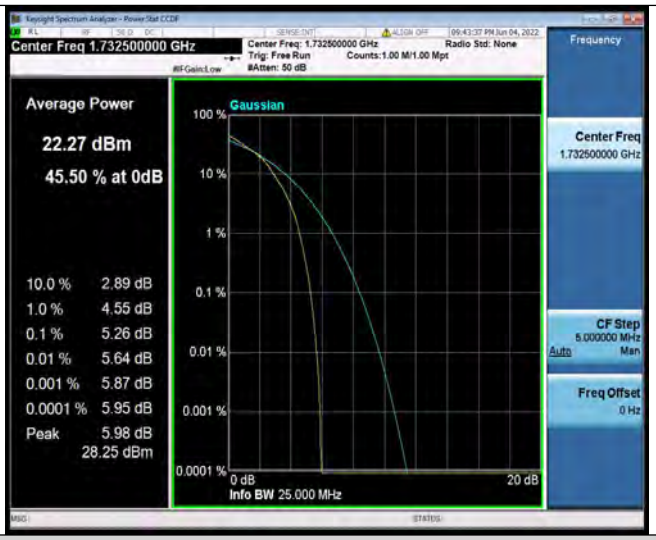
Band4-20MHz-16QAM-20050-27RB#0



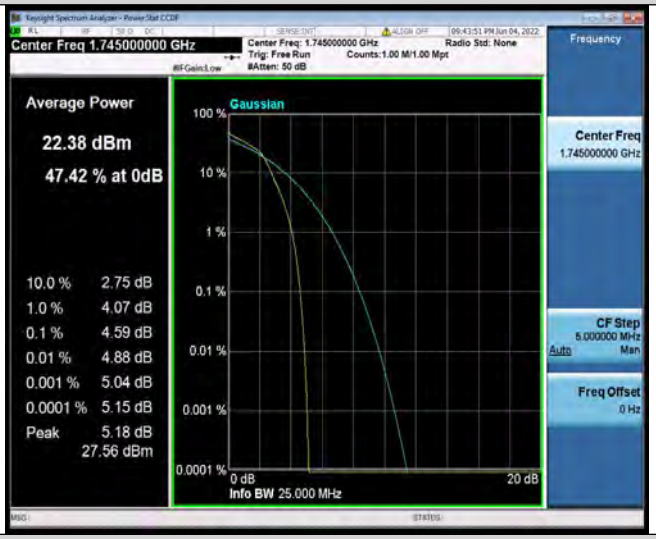
Band4-20MHz-16QAM-20175-1RB#0



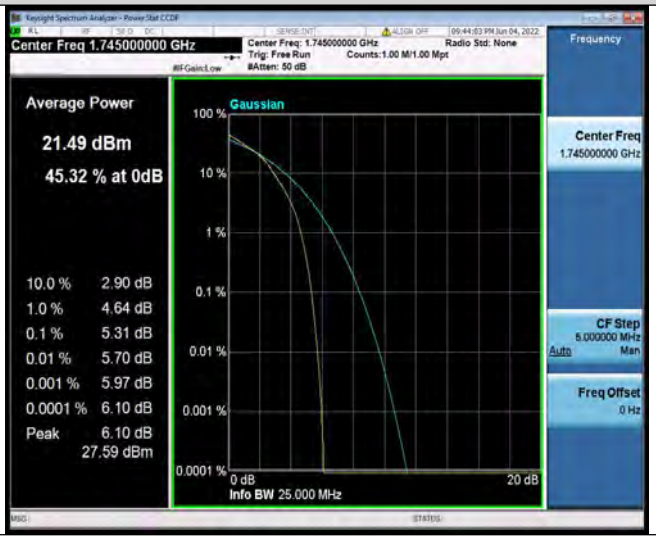
Band4-20MHz-16QAM-20175-27RB#0



Band4-20MHz-16QAM-20300-1RB#0



Band4-20MHz-16QAM-20300-27RB#0



26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band4	1.4MHz	QPSK	19957	6RB#0	1.0860	1.343	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.0861	1.313	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	1.0904	1.365	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	1.0882	1.372	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.0879	1.358	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	1.0877	1.367	PASS
Band4	3MHz	QPSK	19965	15RB#0	2.6793	3.002	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.6800	2.991	PASS
Band4	3MHz	QPSK	20385	15RB#0	2.6823	3.017	PASS
Band4	3MHz	16QAM	19965	15RB#0	2.6820	3.037	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.6801	3.011	PASS
Band4	3MHz	16QAM	20385	15RB#0	2.6742	3.020	PASS
Band4	5MHz	QPSK	19975	25RB#0	4.4758	6.040	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.4738	4.913	PASS
Band4	5MHz	QPSK	20375	25RB#0	4.4674	4.891	PASS
Band4	5MHz	16QAM	19975	25RB#0	4.4844	4.916	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.4774	4.929	PASS
Band4	5MHz	16QAM	20375	25RB#0	4.4739	4.881	PASS
Band4	10MHz	QPSK	20000	50RB#0	8.9235	9.511	PASS
Band4	10MHz	QPSK	20175	50RB#0	8.9246	9.489	PASS
Band4	10MHz	QPSK	20350	50RB#0	8.9280	9.475	PASS
Band4	10MHz	16QAM	20000	27RB#0	4.9332	5.884	PASS
Band4	10MHz	16QAM	20175	27RB#0	4.9227	5.837	PASS
Band4	10MHz	16QAM	20350	27RB#0	4.9307	5.605	PASS
Band4	15MHz	QPSK	20025	75RB#0	13.463	14.54	PASS
Band4	15MHz	QPSK	20175	75RB#0	13.430	14.33	PASS
Band4	15MHz	QPSK	20325	75RB#0	13.450	14.47	PASS
Band4	15MHz	16QAM	20025	27RB#0	5.0614	5.902	PASS
Band4	15MHz	16QAM	20175	27RB#0	5.0414	5.754	PASS
Band4	15MHz	16QAM	20325	27RB#0	5.0668	5.950	PASS
Band4	20MHz	QPSK	20050	100RB#0	17.900	19.15	PASS
Band4	20MHz	QPSK	20175	100RB#0	17.879	19.11	PASS
Band4	20MHz	QPSK	20300	100RB#0	17.901	19.14	PASS
Band4	20MHz	16QAM	20050	27RB#0	5.1826	5.963	PASS
Band4	20MHz	16QAM	20175	27RB#0	5.1810	5.995	PASS
Band4	20MHz	16QAM	20300	27RB#0	5.1648	6.121	PASS

Test Graphs

Band4-1.4MHz-QPSK-19957-6RB#0

Band4-1.4MHz-QPSK-20175-6RB#0

Band4-1.4MHz-QPSK-20393-6RB#0

Band4-1.4MHz-16QAM-19957-6RB#0

Band4-1.4MHz-16QAM-20175-6RB#0

Band4-1.4MHz-16QAM-20393-6RB#0

Band4-3MHz-QPSK-19965-15RB#0

Band4-3MHz-QPSK-20175-15RB#0

Band4-3MHz-QPSK-20385-15RB#0

Band4-3MHz-16QAM-19965-15RB#0

Band4-3MHz-16QAM-20175-15RB#0

Band4-3MHz-16QAM-20385-15RB#0

Band4-5MHz-QPSK-19975-25RB#0

Band4-5MHz-QPSK-20175-25RB#0

Band4-5MHz-QPSK-20375-25RB#0

Band4-5MHz-16QAM-19975-25RB#0

Band4-5MHz-16QAM-20175-25RB#0

Band4-5MHz-16QAM-20375-25RB#0

Band4-10MHz-QPSK-20000-50RB#0

Band4-10MHz-QPSK-20175-50RB#0

Band4-10MHz-QPSK-20350-50RB#0

Band4-10MHz-16QAM-20000-27RB#0

Band4-10MHz-16QAM-20175-27RB#0

Band4-10MHz-16QAM-20350-27RB#0

Band4-15MHz-QPSK-20025-75RB#0

Band4-15MHz-QPSK-20175-75RB#0

Band4-15MHz-QPSK-20325-75RB#0

Band4-15MHz-16QAM-20025-27RB#0

Band4-15MHz-16QAM-20175-27RB#0

Band4-15MHz-16QAM-20325-27RB#0

Band4-20MHz-QPSK-20050-100RB#0

Band4-20MHz-QPSK-20175-100RB#0

Band4-20MHz-QPSK-20300-100RB#0