TEST REPORT

REPORT NUMBER:I23W00020-LTE RF

ON

Type of Equipment:	**4G Smart Phone**
Type of Designation:	**MobiWire H6322, Altice S35**
Brand Name:	**MobiWire, Altice**
Manufacturer:	**MobiWire SAS**
FCC ID:	**QPN-H6322**

ACCORDING TO

FCC 47 CFR Part 24; FCC 47 CFR Part 22;FCC 47 CFR Part 2;

Chongqing Academy of Information and Communications Technology

Month date, year
Jun 16, 2023

Signature

Xiang Luoyong
Director

Note:
The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Academy of Information and Communications Technology.

Revision Version

Report Number	Revision	Date	Memo
I23W00020-LTE RF	00	2023-06-16	Initial creation of test report

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1. Test Laboratory

1.1. Testing Location

Name:	Chongqing Academy of Information and Communications Technology
FCC Registration Number:	CN1239
Address:	Building C, Technology Innovation Center, No.8, Yuma Road, Chayuan New Area, Nan'an District, Chongqing, People's Republic of China
Postal Code:	401336
Telephone:	0086-23-88069965
Fax:	0086-23-88608777

1.2. Testing Environment

Normal Temperature:	15-35℃
Relative Humidity:	30-60%

1.3. Project data

Testing Start Date:	2023-05-23
Testing End Date:	2023-05-26

1.4. Signature

董俊鑫	2023-06-16
Dong Junxin **(Prepared this test report)**	**Date**
李 照	2023-06-16
Li Xu **(Reviewed this test report)**	**Date**
向罗勇	2023-06-16
Xiang Luoyong **Director of the laboratory** **(Approved this test report)**	**Date**

2. Client Information

2.1. Applicant Information

Company Name:	MobiWire SAS
Address /Post:	107 Boulevard de la Mission Marchand 92400 Courbevoie,France
City:	Courbevoie
Country:	France
Telephone:	+33625028368
Fax:	N/A
Email:	olivier.tiennault@mobiwire.com
Contact Person:	Olivier Tiennault

2.2. Manufacturer Information

Company Name:	MobiWire SAS
Address /Post:	107 Boulevard de la Mission Marchand 92400 Courbevoie,France
City:	Courbevoie
Country:	France
Telephone:	+33625028368
Fax:	N/A
Email:	olivier.tiennault@mobiwire.com
Contact Person:	Olivier Tiennault

3. Equipment under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description	4G Smart Phone
Model name	MobiWire H6322, Altice S35
Brand name	MobiWire, Altice
GSM Frequency Band	GSM:850/ 900/ 1800/1900
WCDMA Frequency Band	WCDMA:B1/B2/B5/B8
LTE Frequency Band	LTE:B1/2/3/4/5/7/8/20/28/38/41
BLUETOOTH Frequency Band	2402MHz-2480MHz
WLAN Frequency Band	Wi-Fi 2.4G:802.11b/g/n, Wi-Fi 5G U-NII-1/ U-NII-2a/U-NII-2c/U-NII-3:802.11a/n/ac
Type of modulation	QPSK/16QAM
Power Class 2	N/A
Power Class 3	LTE:B1/2/3/4/5/7/8/20/28/38/41
Extreme Temperature	-10/+55℃
Nominal Voltage	3.85V
Extreme High Voltage	4.4V
Extreme Low Voltage	3.6V

Note: Photographs of EUT are shown in ANNEX A of this test report.

Note: High and low voltage values in extreme condition test are given by manufacturer.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version	Date of receipt
S3	354365420004383 354365420004391	V01	Mobiwire_H6322_V01	2023-05-23
S8	354365420006222 354365420006230	V01	Mobiwire_H6322_V01	2023-05-23
S9	354365420009044 354365420009051	V01	Mobiwire_H6322_V01	2023-05-23

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Outline of Equipment under Test

Technology	Band	UL Freq.(MHz)	DL Freq.(MHz)	Note
4G	2	1850-1910	1930-1990	--
	4	1710-1755	2110-2155	--
	5	824-849	869-894	--
	7	2500-2570	2620-2690	--
	38	2570-2620	2570-2620	--
	41	2496-2690	2496-2690	--

3.4. Internal Identification of AE used during the test

AE ID*	Description	dB*
AE1	RF cable	0.5

*AE ID: is used to identify the test sample in the lab internally.

4. Reference Documents

4.1. Documents supplied by applicant

PICS/PIXIT, referring to Annex B for detailed information, is supplied by the client or manufacturer, which is the basis of testing.

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC 47 CFR Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	--
FCC 47 CFR Part 22	PUBLIC MOBILE SERVICES	--
FCC 47 CFR Part 24	PERSONAL COMMUNICATIONS SERVICES	--
FCC 47 CFR Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	--

5. Test Equipments Utilized

5.1. RF Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal.Due Date
1	Spectrum analyzer	FSQ 26	201137/026	--	--	R&S	2023-06-29
2	Spectrum analyzer	FSW26	104280	--	--	R&S	2023-06-29
3	DC Power Supply	3303D	801128	--	--	Topward	2023-06-29
4	Universal Radio Communication Tester	CMW500	152395	--	--	R&S	2023-06-29

5.2. RSE Test System

No.	Equipment	Model	SN	HW Version	SW Version	Manufacture	Cal.Due Date
1	EMI Test Receiver	ESU40	100307	--	--	R&S	2023-06-29
2	TRILOG Broadband Antenna	VULB9163	9163-586	--	--	Schwarzbeck	2024-10-28
3	Horn antenna	9120D	1083	--	--	Schwarzbeck	2024-12-14
4	Horn antenna	DATE 1152	LM7127	--	--	ETS	2024-09-06
5	Horn antenna	DATE 1012	LM5945	--	--	ETS	2024-09-06
6	Amplifier1	SCU-08F1	8320027	--	--	R&S	2023-06-29
7	Amplifier2	SCU-18F	180093	--	--	R&S	2023-06-29

5.3. Climate Chamber

No.	Name	Type	SN	Manufacture	Cal.Due Date
1	Climate chamber	SH-241	92010759	ESPEC	2023-06-29

5.4. Anechoic chamber Vibration table

No.	Name	Type	SN	Manufacture	Cal.Due Date
1	Fully-Anechoic Chamber	FAC 5	--	TDK	2024-09-22

5.5. Test software

No.	Name	version	SN	Manufacture
1	EMC32	V 10.20.01	--	R&S

6. Test Results

6.1. Summary of Test Results

A brief summary of the tests carried out is shown as following.

FCC Rules	Name of Test	Result
Output Power	24.232(c)/ 27.50(d)(4)/ 2.1046(a), 22.913(a)/	PASS
Peak-to-Average Ratio	24.232(d)/ 27.50(a)	PASS
99%Occupied Bandwidth	2.1049(h)(i)	PASS
-26dB Emission Bandwidth	24.238(b)/ 27.53(h)/ 22.917(b)	PASS
Band Edge at antenna terminals	22.917(a)/24.238(a)/ 27.53(h)	PASS
Frequency stability	2.1055/24.235	PASS
Conducted Spurious mission	2.1053/22.917(a)/24.238(a)/ 27.53(h)/ 2.1057	PASS
Emission Limit	2.1051/22.917/24.238/22.913/24.232	PASS
Note:The MobiWire H6322, Altice S35, manufactured by MobiWire SAS is a new product for testing.		

6.2. Output Power

Specifications:	FCC Part 24.232(c)/ 27.50(d)(4)/ 2.1046(a), 22.913(a)
DUT Serial Number:	S3
Test conditions:	Ambient Temperature:15°C-35°C Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

During the process of testing, the EUT was controlled Rhode & Schwarz Digital Radio. Communication tester to ensure max power transmission and proper modulation.

This result contains peak output power and EIRP measurements for the EUT. In all cases, output power is within the specified limits.

6.2.1. Method of Measurements

Method of measurements please refer to KDB971168 D01 v03 clause 5.

The EUT was set up for the max output power with pseudo random data modulation.

The power was measured with Rhode & Schwarz Spectrum Analyzer FSQ(peak).

These measurements were done at 3 frequencies, 1850.2 MHz, 1880.0MHz and 1909.8MHz for PCS1900 band; 824.2MHz, 836.6MHz and 848.8MHz for GSM850 band. (bottom, middle and top of operational frequency range).

6.2.2. Test procedures

The transmitter output port was connected to base station.

Set the EUT at maximum power through base station.

Select lowest, middle, and highest channels for each band and different modulation.

Measure maximum average power for other modulation signal.

6.2.3. Limit

22.913(a) Mobile stations are limited to 7 watts.

24.232(c) Mobile and portable stations are limited to 2 watts.

Measurement Uncertainty:

Item	Uncertainty
Expanded Uncertainty	0.62dB (k=2)

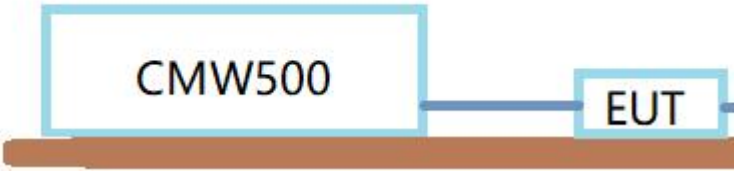
6.2.4. Test Proceduer

The transmitter output power was connected to calibrated attenuator, the other end of which was connected to signal analyzer. Transmitter output power was read off the power in dBm. The power outputs at the transmitter antenna port was determined by adding the value of attenuator to the signal analyzer reading.

6.2.5. Test Condition

RBW	VBW	Sweep time	Span
3MHz	10MHz	Auto	50MHz

6.2.6. Test Setup



6.2.7. Measurement results

LTE B2			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	1.4MHz		
				Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
QPSK	1	Low	23.50	22.85	22.85	22.78
		Middle		22.90	23.04	22.88
		High		22.75	22.64	22.83
	50%	Low	22.50	22.77	22.89	22.97
		Middle		22.91	22.92	22.91
		High		22.87	23.00	22.77
	100%	/	22.50	21.86	21.98	21.93
16QAM	1	Low	22.50	22.11	22.11	21.87
		Middle		22.09	22.17	22.20
		High		21.98	21.91	22.11
	50%	Low	22.50	21.84	21.88	21.86
		Middle		22.05	21.95	21.90
		High		22.03	22.01	21.90
	100%	/	21.50	20.99	21.09	21.05
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
QPSK	1	Low	23.50	22.87	22.89	22.81
		Middle		22.88	23.07	22.92
		High		22.78	22.69	22.87
	50%	Low	22.50	21.87	22.01	22.10

		Middle		22.03	22.02	22.03
		High		21.97	22.11	21.87
	100%	/	22.50	21.86	22.02	21.96
16QAM	1	Low	22.50	22.14	22.13	21.90
		Middle		22.12	22.17	22.24
		High		22.00	21.95	22.14
	50%	Low	21.50	20.95	21.01	20.98
		Middle		21.16	21.08	21.02
		High		21.13	21.13	21.03
	100%	/	21.50	21.02	21.13	21.08
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5
QPSK	1	Low	23.50	22.84	22.87	22.77
		Middle		22.86	23.03	22.89
		High		22.75	22.64	22.83
	50%	Low	22.50	21.84	21.96	22.06
		Middle		22.01	21.98	21.98
		High		21.95	22.09	21.83
	100%	/	22.50	21.86	22.01	21.94
16QAM	1	Low	22.50	22.11	22.09	21.87
		Middle		22.09	22.15	22.21
		High		21.97	21.93	22.10
	50%	Low	21.50	20.93	20.97	20.95
		Middle		21.13	21.03	20.98
		High		21.10	21.08	20.99
	100%	/	21.50	21.00	21.09	21.03
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
QPSK	1	Low	23.50	22.86	22.88	22.80
		Middle		22.89	23.08	22.93
		High		22.77	22.68	22.86
	50%	Low	22.50	21.87	22.01	22.10
		Middle		22.04	22.03	22.02
		High		21.97	22.13	21.88
	100%	/	22.50	21.90	22.03	21.98
16QAM	1	Low	22.50	22.13	22.12	21.89
		Middle		22.12	22.19	22.24
		High		22.00	21.95	22.13
	50%	Low	21.50	20.96	21.02	20.99

		Middle		21.15	21.07	21.01
		High		21.13	21.13	21.03
	100%	/	21.50	21.03	21.14	21.07
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
QPSK	1	Low	23.50	22.85	22.84	22.78
		Middle		22.87	23.07	22.90
		High		22.74	22.63	22.82
	50%	Low	22.50	21.85	21.97	22.07
		Middle		22.01	21.98	21.98
		High		21.94	22.10	21.84
	100%	/	22.50	21.88	21.99	21.93
16QAM	1	Low	22.50	22.08	22.10	21.87
		Middle		22.10	22.16	22.22
		High		21.97	21.91	22.10
	50%	Low	21.50	20.93	21.00	20.96
		Middle		21.12	21.02	20.97
		High		21.11	21.09	21.00
	100%	/	21.50	21.00	21.09	21.03
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900
QPSK	1	Low	23.50	22.94	22.92	22.87
		Middle		22.98	23.15	23.00
		High		22.84	22.74	22.91
	50%	Low	22.50	21.94	22.04	22.15
		Middle		22.11	22.06	22.07
		High		22.03	22.17	21.92
	100%	/	22.50	21.97	22.06	22.01
16QAM	1	Low	22.50	22.00	22.18	21.94
		Middle		22.18	22.26	22.30
		High		22.07	22.00	22.20
	50%	Low	21.50	21.02	21.08	21.05
		Middle		21.21	21.12	21.06
		High		21.20	21.16	21.08
	100%	/	21.50	21.10	21.17	21.12

LTE B4			Maximum Conducted Power (dBm)	
Modulation	RB	RB Offset	Tune up	1.4MHz
				Channel/Frequency(MHz)

				19957/1710.7	20175/1732.5	20393/1754.3
QPSK	1	Low	23.50	22.57	22.80	22.62
		Middle		22.67	22.95	22.74
		High		22.45	22.69	22.47
	50%	Low	23.50	22.69	22.69	22.70
		Middle		22.68	22.64	22.73
		High		22.57	22.58	22.69
	100%	/	22.50	21.65	21.79	21.77
16QAM	1	Low	22.50	21.80	21.85	21.73
		Middle		21.78	21.94	21.88
		High		21.74	21.71	21.77
	50%	Low	22.50	21.76	21.68	21.69
		Middle		21.68	21.68	21.61
		High		21.71	21.65	21.61
	100%	/	21.50	20.65	20.77	20.76
Modulation	RB	RB Offset	Tune up	3MHz		
				Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1	Low	23.50	22.59	22.84	22.65
		Middle		22.65	22.98	22.78
		High		22.48	22.74	22.51
	50%	Low	22.50	21.79	21.81	21.83
		Middle		21.80	21.74	21.85
		High		21.67	21.69	21.79
	100%	/	22.50	21.65	21.83	21.80
16QAM	1	Low	22.50	21.83	21.87	21.76
		Middle		21.81	21.94	21.92
		High		21.76	21.75	21.80
	50%	Low	21.50	20.87	20.81	20.81
		Middle		20.79	20.81	20.73
		High		20.81	20.77	20.74
	100%	/	21.50	20.68	20.81	20.79
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
QPSK	1	Low	23.50	22.56	22.82	22.61
		Middle		22.63	22.94	22.75
		High		22.45	22.69	22.47
	50%	Low	22.50	21.76	21.76	21.79
		Middle		21.78	21.70	21.80
		High		21.65	21.67	21.75

	100%	/	22.50	21.65	21.82	21.78
16QAM	1	Low	22.50	21.80	21.83	21.73
		Middle		21.78	21.92	21.89
		High		21.73	21.73	21.76
	50%	Low	21.50	20.85	20.77	20.78
		Middle		20.76	20.76	20.69
		High		20.78	20.72	20.70
	100%	/	21.50	20.66	20.77	20.74
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750
QPSK	1	Low	23.50	22.58	22.83	22.64
		Middle		22.66	22.99	22.79
		High		22.47	22.73	22.50
	50%	Low	22.50	21.79	21.81	21.83
		Middle		21.81	21.75	21.84
		High		21.67	21.71	21.80
	100%	/	22.50	21.69	21.84	21.82
16QAM	1	Low	22.50	21.82	21.86	21.75
		Middle		21.81	21.96	21.92
		High		21.76	21.75	21.79
	50%	Low	21.50	20.88	20.82	20.82
		Middle		20.78	20.80	20.72
		High		20.81	20.77	20.74
	100%	/	21.50	20.69	20.82	20.78
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
QPSK	1	Low	23.50	22.57	22.79	22.62
		Middle		22.64	22.98	22.76
		High		22.44	22.68	22.46
	50%	Low	22.50	21.77	21.77	21.80
		Middle		21.78	21.70	21.80
		High		21.64	21.68	21.76
	100%	/	22.50	21.67	21.80	21.77
16QAM	1	Low	22.50	21.77	21.84	21.73
		Middle		21.79	21.93	21.90
		High		21.73	21.71	21.76
	50%	Low	21.50	20.85	20.80	20.79
		Middle		20.75	20.75	20.68
		High		20.79	20.73	20.71

	100%	/	21.50	20.66	20.77	20.74
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				20050/1720	20175/1732.5	20300/1745
QPSK	1	Low	23.50	22.63	22.84	22.68
		Middle		22.72	23.03	22.83
		High		22.51	22.76	22.52
	50%	Low	22.50	21.83	21.81	21.85
		Middle		21.85	21.75	21.86
		High		21.70	21.72	21.81
	100%	/	22.50	21.73	21.84	21.82
16QAM	1	Low	22.50	21.91	21.89	21.77
		Middle		21.84	22.00	21.95
		High		21.80	21.77	21.83
	50%	Low	21.50	20.91	20.85	20.85
		Middle		20.81	20.82	20.74
		High		20.85	20.77	20.76
	100%	/	21.50	20.73	20.82	20.80

LTE B5		Maximum Conducted Power (dBm)			
RB	RB Offset	Tune up	1.4MHz		
			Channel/Frequency(MHz)		
			20407/824.7	20525/836.5	20643/848.3
1	Low	22.50	21.51	21.36	21.38
	Middle		21.41	21.50	21.48
	High		21.41	21.29	21.45
50%	Low	22.50	21.43	21.38	21.31
	Middle		21.47	21.45	21.46
	High		21.45	21.50	21.36
100%	/	22.50	21.48	21.41	21.43
1	Low	22.50	21.31	21.33	21.29
	Middle		21.29	21.44	21.28
	High		21.42	21.45	21.43
50%	Low	22.50	21.49	21.37	21.41
	Middle		21.45	21.40	21.45
	High		21.33	21.36	21.39
100%	/	22.50	21.50	21.49	21.53
RB	RB Offset	Tune up	3MHz		
			Channel/Frequency(MHz)		
			20415/825.5	20525/836.5	20635/847.5
1	Low	22.50	21.53	21.37	21.41

	Middle		21.44	21.51	21.51
	High		21.43	21.33	21.48
50%	Low	22.50	21.46	21.43	21.35
	Middle		21.50	21.50	21.50
	High		21.47	21.54	21.41
100%	/	22.50	21.52	21.43	21.47
1	Low	22.50	21.33	21.36	21.31
	Middle		21.32	21.48	21.31
	High		21.45	21.47	21.46
50%	Low	22.50	21.52	21.42	21.45
	Middle		21.47	21.44	21.48
	High		21.36	21.41	21.43
100%	/	22.50	21.53	21.54	21.57
RB	RB Offset	Tune up	5MHz		
			Channel/Frequency(MHz)		
			20425/826.5	20525/836.5	20625/846.5
1	Low	22.50	21.52	21.33	21.39
	Middle		21.42	21.48	21.53
	High		21.40	21.28	21.44
50%	Low	22.50	21.44	21.39	21.32
	Middle		21.47	21.45	21.46
	High		21.44	21.51	21.37
100%	/	22.50	21.50	21.39	21.42
1	Low	22.50	21.28	21.34	21.29
	Middle		21.30	21.45	21.29
	High		21.42	21.43	21.43
50%	Low	22.50	21.49	21.40	21.42
	Middle		21.44	21.39	21.44
	High		21.34	21.37	21.40
100%	/	22.50	21.50	21.49	21.53
RB	RB Offset	Tune up	10MHz		
			Channel/Frequency(MHz)		
			20450/829	20525/836.5	20600/844
1	Low	22.50	21.58	21.38	21.45
	Middle		21.50	21.61	21.60
	High		21.47	21.36	21.50
50%	Low	22.50	21.50	21.43	21.37
	Middle		21.54	21.50	21.52
	High		21.50	21.55	21.42
100%	/	22.50	21.56	21.43	21.47
1	Low	22.50	21.44	21.50	21.44

	Middle		21.46	21.63	21.45
	High		21.60	21.60	21.61
50%	Low	22.50	21.57	21.47	21.50
	Middle		21.52	21.48	21.52
	High		21.42	21.43	21.47
100%	/	22.50	21.48	21.45	21.50

LTE B7			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				20775/2502.5	21100/2535	21425/2567.5
QPSK	1	Low	24.00	22.94	23.16	23.09
		Middle		23.31	23.42	23.40
		High		23.17	23.15	23.06
	50%	Low	23.00	22.20	22.29	22.30
		Middle		22.24	22.26	22.32
		High		22.27	22.38	22.36
	100%	/	23.00	22.19	22.31	22.35
16QAM	1	Low	23.00	22.02	22.18	22.27
		Middle		22.00	21.63	21.73
		High		22.12	22.07	21.92
	50%	Low	22.00	21.29	21.10	21.36
		Middle		21.25	21.30	21.24
		High		21.25	21.30	21.24
	100%	/	22.00	21.19	21.18	21.21
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				20800/2505	21100/2535	21400/2565
QPSK	1	Low	24.00	22.96	23.17	23.12
		Middle		23.34	23.34	23.40
		High		23.19	23.19	23.09
	50%	Low	23.00	22.23	22.34	22.34
		Middle		22.27	22.31	22.36
		High		22.29	22.42	22.41
	100%	/	23.00	22.23	22.33	22.39
16QAM	1	Low	23.00	22.04	22.21	22.29
		Middle		22.03	21.67	21.76
		High		22.15	22.09	21.95
	50%	Low	22.00	21.32	21.15	21.40
		Middle		21.27	21.34	21.27
		High		21.28	21.35	21.28

	100%	/	22.00	21.22	21.23	21.25
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				20825/2507.5	21100/2535	21375/2562.5
QPSK	1	Low	24.00	22.95	23.13	23.10
		Middle		23.32	23.41	23.39
		High		23.16	23.14	23.05
	50%	Low	23.00	22.21	22.30	22.31
		Middle		22.24	22.26	22.32
		High		22.26	22.39	22.37
	100%	/	23.00	22.21	22.29	22.34
16QAM	1	Low	23.00	21.99	22.19	22.27
		Middle		22.01	21.64	21.74
		High		22.12	22.05	21.92
	50%	Low	22.00	21.29	21.13	21.37
		Middle		21.24	21.29	21.23
		High		21.26	21.31	21.25
	100%	/	22.00	21.19	21.18	21.21
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				20850/2510	21100/2535	21350/2560
QPSK	1	Low	24.00	22.92	23.09	23.07
		Middle		23.31	23.42	23.41
		High		23.14	23.13	23.02
	50%	Low	23.00	22.18	22.25	22.27
		Middle		22.22	22.35	22.29
		High		22.23	22.34	22.33
	100%	/	23.00	22.18	22.24	22.30
16QAM	1	Low	23.00	22.40	22.15	22.22
		Middle		21.97	21.62	21.70
		High		22.10	22.02	21.90
	50%	Low	22.00	21.26	21.09	21.34
		Middle		21.21	21.27	21.20
		High		21.23	21.26	21.21
	100%	/	22.00	12.17	21.14	21.18

LTE B38			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				37775/2572.5	38000/2595	38225/2617.5
QPSK	1	Low	24.50	23.19	23.19	23.19

		Middle		23.40	23.38	23.42
		High		23.26	23.25	23.28
	50%	Low	23.50	22.27	22.15	22.25
		Middle		22.21	22.33	22.31
		High		22.30	22.27	22.24
	100%	/	23.50	22.29	22.39	22.35
16QAM	1	Low	23.50	22.38	22.27	22.24
		Middle		22.36	22.43	22.35
		High		22.27	22.32	22.23
	50%	Low	22.50	21.27	21.18	21.30
		Middle		21.28	21.30	21.28
		High		21.31	21.34	21.31
	100%	/	22.50	21.33	21.31	21.33
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				37800/2575	38000/2595	38200/2615
QPSK	1	Low	24.50	23.21	23.20	23.22
		Middle		23.43	23.41	23.39
		High		23.28	23.29	23.31
	50%	Low	23.50	22.30	22.20	22.29
		Middle		22.24	22.38	22.35
		High		22.32	22.31	22.29
	100%	/	23.50	22.33	22.41	22.39
16QAM	1	Low	23.50	22.40	22.30	22.26
		Middle		22.39	22.47	22.38
		High		22.30	22.34	22.26
	50%	Low	22.50	21.30	21.23	21.34
		Middle		21.30	21.34	21.31
		High		21.34	21.39	21.35
	100%	/	22.50	21.36	21.36	21.37
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				37825/2577.5	38000/2595	38175/2612.5
QPSK	1	Low	24.50	23.20	23.16	23.20
		Middle		23.41	23.40	23.43
		High		23.25	23.24	23.27
	50%	Low	23.50	22.28	22.16	22.26
		Middle		22.21	22.33	22.31
		High		22.29	22.28	22.25
	100%	/	23.50	22.31	22.37	22.34
16QAM	1	Low	23.50	22.35	22.28	22.24

		Middle		22.37	22.44	22.36
		High		22.27	22.30	22.23
	50%	Low	22.50	21.27	21.21	21.31
		Middle		21.27	21.29	21.27
		High		21.32	21.35	21.32
	100%	/	22.50	21.33	21.31	21.33
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				37850/2580	38000/2595	38150/2610
QPSK	1	Low	24.50	23.17	23.12	23.17
		Middle		23.40	23.44	23.41
		High		23.23	23.23	23.24
	50%	Low	23.50	22.25	22.11	22.22
		Middle		22.19	22.29	22.28
		High		22.26	22.23	22.21
	100%	/	23.50	22.28	22.32	22.30
16QAM	1	Low	23.50	22.22	22.24	22.19
		Middle		22.33	22.42	22.32
		High		22.25	22.27	22.21
	50%	Low	22.50	21.24	21.17	21.28
		Middle		21.24	21.27	21.24
		High		21.29	21.30	21.28
	100%	/	22.50	21.31	21.27	21.30

LTE B40			Maximum Conducted Power (dBm)			
Modulation	RB	RB Offset	Tune up	5MHz		
				Channel/Frequency(MHz)		
				38675/2302.5	39150/2350	39625/2397.5
QPSK	1	Low	24.50	23.28	23.31	23.13
		Middle		23.36	23.32	23.21
		High		23.14	23.05	22.97
	50%	Low	23.50	22.17	22.20	22.06
		Middle		22.14	22.14	22.02
		High		22.05	22.12	21.94
	100%	/	23.50	22.16	22.28	22.20
16QAM	1	Low	23.50	22.40	22.27	22.20
		Middle		22.38	22.33	22.25
		High		22.36	22.21	22.26
	50%	Low	22.50	21.22	21.26	21.11
		Middle		21.28	21.22	21.17

		High		21.22	21.17	21.21
	100%	/	22.50	21.16	21.27	21.24
Modulation	RB	RB Offset	Tune up	10MHz		
				Channel/Frequency(MHz)		
				38700/2305	39150/2350	39600/2395
QPSK	1	Low	24.50	23.30	23.32	23.16
		Middle		23.39	23.31	23.25
		High		23.16	23.09	23.00
	50%	Low	23.50	22.20	22.25	22.10
		Middle		22.17	22.19	22.06
		High		22.07	22.16	21.99
	100%	/	23.50	22.20	22.30	22.24
16QAM	1	Low	23.50	22.42	22.30	22.22
		Middle		22.41	22.37	22.28
		High		22.39	22.23	22.29
	50%	Low	22.50	21.25	21.31	21.15
		Middle		21.30	21.26	21.20
		High		21.25	21.22	21.25
	100%	/	22.50	21.19	21.32	21.28
Modulation	RB	RB Offset	Tune up	15MHz		
				Channel/Frequency(MHz)		
				38725/2307.5	39150/2350	39575/2392.5
QPSK	1	Low	24.50	23.29	23.28	23.14
		Middle		23.37	23.38	23.22
		High		23.13	23.04	22.96
	50%	Low	23.50	22.18	22.21	22.07
		Middle		22.14	22.14	22.02
		High		22.04	22.13	21.95
	100%	/	23.50	22.18	22.26	22.19
16QAM	1	Low	23.50	22.37	22.28	22.20
		Middle		22.39	22.34	22.26
		High		22.36	22.19	22.26
	50%	Low	22.50	21.22	21.29	21.12
		Middle		21.27	21.21	21.16
		High		21.23	21.18	21.22
	100%	/	22.50	21.16	21.27	21.24
Modulation	RB	RB Offset	Tune up	20MHz		
				Channel/Frequency(MHz)		
				38750/2310	39150/2350	39550/2390
QPSK	1	Low	24.50	23.26	23.24	23.11
		Middle		23.36	23.39	23.20

		High		23.11	23.03	22.93
	50%	Low	23.50	22.15	22.16	22.03
		Middle		22.12	22.10	21.99
		High		22.01	22.08	21.91
	100%	/	23.50	22.15	22.21	22.15
16QAM	1	Low	23.50	22.27	22.24	22.15
		Middle		22.35	22.32	22.22
		High		22.34	22.16	22.24
	50%	Low	22.50	21.19	21.25	21.09
		Middle		21.24	21.19	21.13
		High		21.20	21.13	21.18
	100%	/	22.50	21.14	21.23	21.21

LTE B41			Maximum Conducted Power (dBm)					
Modulation	RB	RB Offset	Tune up	5MHz				
				Channel/Frequency(MHz)				
				39675/2498.5	40148/2545.8	40620/2593	41093/2640.3	41565/2687.5
QPSK	1	Low	24.50	23.03	23.13	23.09	23.09	23.27
		Middle		23.34	23.24	23.42	23.34	23.41
		High		23.25	23.13	23.17	23.19	23.34
	50%	Low	23.50	22.13	22.18	22.12	22.35	22.26
		Middle		22.17	22.22	22.20	22.29	22.40
		High		22.28	22.23	22.24	22.28	22.42
	100%	/	23.50	22.09	22.23	22.25	22.35	22.38
16QAM	1	Low	23.50	22.29	22.34	22.15	22.21	22.31
		Middle		22.27	22.30	22.36	22.12	22.01
		High		22.24	22.25	22.24	22.23	21.94
	50%	Low	22.50	21.10	20.92	21.06	21.03	21.30
		Middle		21.18	21.05	21.18	21.12	21.22
		High		21.12	21.16	21.20	21.21	21.13
	100%	/	22.50	21.13	21.14	21.21	21.14	21.15
Modulation	RB	RB Offset	Tune up	10MHz				
				Channel/Frequency(MHz)				
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685
QPSK	1	Low	24.50	23.05	23.14	23.12	23.10	23.30
		Middle		23.37	23.29	23.46	23.39	23.45
		High		23.27	23.17	23.20	23.23	23.37

	50%	Low	23.50	22.16	22.23	22.16	22.40	22.30
		Middle		22.20	22.27	22.24	22.34	22.44
		High		22.30	22.27	22.29	22.32	22.47
	100%	/	23.50	22.13	22.25	22.29	22.37	22.42
16QAM	1	Low	23.50	22.31	22.37	22.17	22.24	22.33
		Middle		22.30	22.34	22.39	22.16	22.04
		High		22.27	22.27	22.27	22.25	21.97
	50%	Low	22.50	21.13	20.97	21.10	21.08	21.34
		Middle		21.20	21.09	21.21	21.16	21.25
		High		21.15	21.21	21.24	21.26	21.17
	100%	/	22.50	21.16	21.19	21.25	21.19	21.19
Modulation	RB	RB Offset	Tune up	15MHz				
				Channel/Frequency(MHz)				
				39725/2503.5	40173/2548.3	40620/2593	41068/2637.8	41515/2682.5
QPSK	1	Low	24.50	23.04	23.10	23.10	23.06	23.28
		Middle		23.35	23.28	23.43	23.38	23.42
		High		23.24	23.12	23.16	23.18	23.33
	50%	Low	23.50	22.14	22.19	22.13	22.36	22.27
		Middle		22.17	22.22	22.20	22.29	22.40
		High		22.27	22.24	22.25	22.29	22.43
	100%	/	23.50	22.11	22.21	22.24	22.33	22.37
16QAM	1	Low	23.50	22.26	22.35	22.15	22.22	22.31
		Middle		22.28	22.31	22.37	22.13	22.02
		High		22.24	22.23	22.24	22.21	21.94
	50%	Low	22.50	21.10	20.95	21.07	21.06	21.31
		Middle		21.17	21.04	21.17	21.11	21.21
		High		21.13	21.17	21.21	21.22	21.14
	100%	/	22.50	21.13	21.14	21.21	21.14	21.15
Modulation	RB	RB Offset	Tune up	20MHz				
				Channel/Frequency(MHz)				
				39750/2506	40185/2549.5	40620/2593	41055/2636.5	41490/2680
QPSK	1	Low	24.50	23.01	23.06	23.07	23.02	23.25
		Middle		23.34	23.24	23.41	23.34	23.40
		High		23.22	23.11	23.13	23.17	23.30
	50%	Low	23.5	22.11	22.14	22.09	22.31	22.23

		Middle	0	22.15	22.18	22.17	22.25	22.37
		High		22.24	22.19	22.21	22.24	22.39
	100 %	/	23.50	22.08	22.16	22.20	22.28	22.33
16QAM	1	Low	23.50	22.12	22.31	22.10	22.18	22.26
		Middle		22.24	22.29	22.33	22.11	21.98
		High		22.22	22.20	22.22	22.18	21.92
	50%	Low	22.50	21.07	20.91	21.04	21.02	21.28
		Middle		21.14	21.02	21.14	21.09	21.18
		High		21.10	21.12	21.17	21.17	21.10
	100 %	/	22.50	21.11	21.10	21.18	21.10	21.12

6.2.8. EIRP

Maximum of Antenna Gain:

No.	Item(s)	Data
1	2	0.12dBi
2	4	-0.39dBi
3	5	0.2 dBi
4	7	1.5 dBi
4	38	1.53 dBi
5	41	1.53 dBi
Note: The data of gain is provided by the customer may affect the validity of the test results in this report, and the impact and consequences of this shall be undertaken by the customer.		

LTE Band 2- EIRP 24. 232(b)

Limits: ≤33dBm (2W)

LTE Band 2_1.4MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1850.7	23.03	33.00	H
1880	23.16	33.00	H
1909.3	23.09	33.00	H

LTE Band 2_3MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1851.5	23.00	33.00	H
1880	23.19	33.00	H
1908.5	23.04	33.00	H

LTE Band 2_5MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1852.5	22.98	33.00	H
1880	23.15	33.00	H
1907.5	23.01	33.00	H

LTE Band 2_10MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1855	23.01	33.00	H
1880	23.20	33.00	H
1905	23.05	33.00	H

LTE Band 2_15MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1857.5	22.99	33.00	H
1880	23.19	33.00	H
1902.5	23.02	33.00	H

LTE Band 2_20 MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1860	23.10	33.00	H
1880	23.27	33.00	H
1900	23.12	33.00	H

LTE Band 2_1.4MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1850.7	22.23	33.00	H
1880	22.29	33.00	H
1909.3	22.32	33.00	H

LTE Band 2_3MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1851.5	22.26	33.00	H
1880	22.29	33.00	H
1908.5	22.36	33.00	H

LTE Band 2_5MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1852.5	22.23	33.00	H
1880	22.27	33.00	H
1907.5	22.33	33.00	H

LTE Band 2_10MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1855	22.25	33.00	H
1880	22.31	33.00	H
1905	22.36	33.00	H

LTE Band 2_15MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1857.5	22.22	33.00	H
1880	22.28	33.00	H
1902.5	22.34	33.00	H

LTE Band 2_20 MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1860	22.30	33.00	H
1880	22.38	33.00	H
1900	22.42	33.00	H

LTE Band 4- EIRP 27.50(d)

Limits: ≤30dBm (1W)

LTE Band 4_1.4MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1710.7	22.30	30.00	H
1732.5	22.56	30.00	H
1754.3	22.35	30.00	H

LTE Band 4_3MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1711.5	22.26	30.00	H
1732.5	22.59	30.00	H
1753.5	22.39	30.00	H

LTE Band 4_5MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1712.5	22.24	30.00	H
1732.5	22.55	30.00	H
1752.5	22.36	30.00	H

LTE Band 4_10MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1715	22.27	30.00	H
1732.5	22.60	30.00	H
1750	22.40	30.00	H

LTE Band 4_15MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1717.5	22.25	30.00	H
1732.5	22.59	30.00	H
1747.5	22.37	30.00	H

LTE Band 4_20MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1720	22.33	30.00	H

1732.5	22.64	30.00	H
1745	22.44	30.00	H

LTE Band 4_1.4MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1710.7	21.41	30.00	H
1732.5	21.55	30.00	H
1754.3	21.49	30.00	H

LTE Band 4_3MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1711.5	21.44	30.00	H
1732.5	21.55	30.00	H
1753.5	21.53	30.00	H

LTE Band 4_5MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1712.5	21.41	30.00	H
1732.5	21.53	30.00	H
1752.5	21.50	30.00	H

LTE Band 4_10MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1715	21.43	30.00	H
1732.5	21.57	30.00	H
1750.5	21.53	30.00	H

LTE Band 4_15MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1717.5	21.40	30.00	H
1732.5	21.54	30.00	H
1747.5	21.51	30.00	H

LTE Band 4_20MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
1720	21.52	30.00	H
1732.5	21.61	30.00	H
1745	21.56	30.00	H

LTE Band 5- ERP/EIRP 22.913(a)

Limits: ≤38.45dBm (7W)

LTE Band 5_1.4MHz_QPSK

Frequency(MHz)	ERP(dBm)	EIRP(dBm)	Limit(dBm)	Polarization
824.70	19.56	21.71	38.45	H
836.50	19.55	21.70	38.45	H
848.30	19.53	21.68	38.45	H

LTE Band 5_3MHz_QPSK

Frequency(MHz)	ERP(dBm)	EIRP(dBm)	Limit(dBm)	Polarization
825.50	19.58	21.73	38.45	H
836.50	19.59	21.74	38.45	H
847.50	19.56	21.71	38.45	H

LTE Band 5_5MHz_QPSK

Frequency(MHz)	ERP(dBm)	EIRP(dBm)	Limit(dBm)	Polarization
826.50	19.57	21.72	38.45	H
836.50	19.56	21.71	38.45	H
846.50	19.58	21.73	38.45	H

LTE Band 5_10MHz_QPSK

Frequency(MHz)	ERP(dBm)	EIRP(dBm)	Limit(dBm)	Polarization
829.00	19.63	21.78	38.45	H
836.50	19.66	21.81	38.45	H
844.00	19.65	21.80	38.45	H

LTE Band 5_1.4MHz_16QAM

Frequency(MHz)	ERP(dBm)	EIRP(dBm)	Limit(dBm)	Polarization
824.70	19.55	21.70	38.45	H
836.50	19.54	21.69	38.45	H
848.30	19.58	21.73	38.45	H

LTE Band 5_3MHz_16QAM

Frequency(MHz)	ERP(dBm)	EIRP(dBm)	Limit(dBm)	Polarization
825.50	19.58	21.73	38.45	H
836.50	19.59	21.74	38.45	H
847.50	19.62	21.77	38.45	H

LTE Band 5_5MHz_16QAM

Frequency(MHz)	ERP(dBm)	EIRP(dBm)	Limit(dBm)	Polarization
826.50	19.55	21.70	38.45	H
836.50	19.54	21.69	38.45	H
846.50	19.58	21.73	38.45	H

LTE Band 5_10MHz_16QAM

Frequency(MHz)	ERP(dBm)	EIRP(dBm)	Limit(dBm)	Polarization
829.00	19.65	21.80	38.45	H
836.50	19.68	21.83	38.45	H
844.00	19.66	21.81	38.45	H

LTE Band 7- EIRP 27.50(h)(2)

Limits: ≤33 dBm (2W)

LTE Band 7_5MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2502.5	24.81	33.00	H
2535	24.92	33.00	H

2567.5	24.90	33.00	H

LTE Band 7_10MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2505	24.84	33.00	H
2535	24.84	33.00	H
2565	24.90	33.00	H

LTE Band 7_15MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2507.5	24.82	33.00	H
2535	24.91	33.00	H
2562.5	24.89	33.00	H

LTE Band 7_20MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2510	24.81	33.00	H
2535	24.92	33.00	H
2560	24.91	33.00	H

LTE Band 7_5MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2502.5	23.62	33.00	H
2535	23.68	33.00	H
2567.5	23.77	33.00	H

LTE Band 7_10MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2505	23.65	33.00	H
2535	23.71	33.00	H
2565	23.79	33.00	H

LTE Band 7_15MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2507.5	23.62	33.00	H
2535	23.69	33.00	H
2562.5	23.77	33.00	H

LTE Band 7_20MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2510	23.90	33.00	H
2535	23.65	33.00	H
2560	23.72	33.00	H

LTE Band 38- EIRP 27.50(h)(2)

Limits: ≤33 dBm (2W)

LTE Band 38_5MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization

2572.5	24.93	33.00	H
2595	24.91	33.00	H
2617.5	24.95	33.00	H

LTE Band 38_10MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2575	24.96	33.00	H
2595	24.94	33.00	H
2615	24.92	33.00	H

LTE Band 38_15MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2577.5	24.94	33.00	H
2595	24.93	33.00	H
2612.5	24.96	33.00	H

LTE Band 38_20MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2580	24.93	33.00	H
2595	24.97	33.00	H
2610	24.94	33.00	H

LTE Band 38_5MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2572.5	23.91	33.00	H
2595	23.96	33.00	H
2617.5	23.88	33.00	H

LTE Band 38_10MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2575	23.93	33.00	H
2595	24.00	33.00	H
2615	23.91	33.00	H

LTE Band 38_15MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2577.5	23.90	33.00	H
2595	23.97	33.00	H
2612.5	23.89	33.00	H

LTE Band 38_20MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2580	23.86	33.00	H
2595	23.95	33.00	H
2610	23.85	33.00	H

LTE Band 41- EIRP 27.50(h)(2)

Limits: ≤33 dBm (2W)

LTE Band 41_5MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2498.5	24.87	33.00	H
2593	24.95	33.00	H
2687.5	24.94	33.00	H

LTE Band 41_10MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2501	24.90	33.00	H
2593	24.99	33.00	H
2685	24.98	33.00	H

LTE Band 41_15MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2503.5	24.88	33.00	H
2593	24.96	33.00	H
2682.5	24.95	33.00	H

LTE Band 41_20MHz_QPSK

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2506	24.87	33.00	H
2593	24.94	33.00	H
2680	24.93	33.00	H

LTE Band 41_5MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2498.5	23.82	33.00	H
2593	23.89	33.00	H
2687.5	23.84	33.00	H

LTE Band 41_10MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2501	23.84	33.00	H
2593	23.92	33.00	H
2685	23.86	33.00	H

LTE Band 41_15MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2503.5	23.81	33.00	H
2593	23.90	33.00	H
2682.5	23.84	33.00	H

LTE Band 41_20MHz_16QAM

Frequency(MHz)	EIRP(dBm)	Limit(dBm)	Polarization
2506	23.77	33.00	H
2593	23.86	33.00	H
2680	23.79	33.00	H

ANALYZER SETTINGS:

RBW = VBW = 8MHz for occupied bandwdiths equal to or less than 5MHz.

RBW = VBW = 20MHz for occupied bandwidths equal to or greater than 10MHz.

6.3. Peak-to-Average Power Ratio

Specifications:	CFR Part 24.232(d)/ 27.50(a)
DUT Serial Number:	S3
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

6.3.1. PAPR Limit

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

According to KDB 971168 5.7:

a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

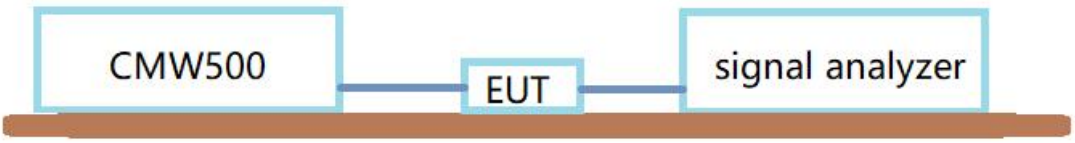
d) Set the measurement interval to 1 ms

e) Record the maximum PAPR level associated with a probability of 0.1%

Measurement Uncertainty:

Item	Uncertainty
Expanded Uncertainty	0.62dB (k=2)

6.3.2. Test Setup



6.3.3. Test result

LTE Band 2, 20MHz

Frequency (MHz)	RB	PAPR (dB)			
		QPSK	16QAM	64QAM	256QAM
1880	100%,0	5.07	6.00	N/A	N/A

LTE Band 4, 20MHz

Frequency (MHz)	RB	PAPR (dB)			
		QPSK	16QAM	64QAM	256QAM
1732.5	100%,0	5.51	6.26	N/A	N/A

LTE Band 5, 10MHz

Frequency (MHz)	RB	PAPR (dB)			
		QPSK	16QAM	64QAM	256QAM
836.5	100%,0	4.96	5.77	N/A	N/A

LTE Band 7, 20MHz

Frequency (MHz)	RB	PAPR (dB)			
		QPSK	16QAM	64QAM	256QAM
2535	100%,0	5.13	5.97	N/A	N/A

LTE Band 38, 20MHz

Frequency (MHz)	RB	PAPR (dB)			
		QPSK	16QAM	64QAM	256QAM
2595	100%,0	5.04	5.91	N/A	N/A

LTE Band 41, 20MHz

Frequency (MHz)	RB	PAPR (dB)			
		QPSK	16QAM	64QAM	256QAM
2593	100%,0	4.90	5.74		

6.4. 99% Occupied Bandwidth

Specifications:	FCC Part 2.1049(h)(i)
DUT Serial Number:	S3
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Test Results:	Pass

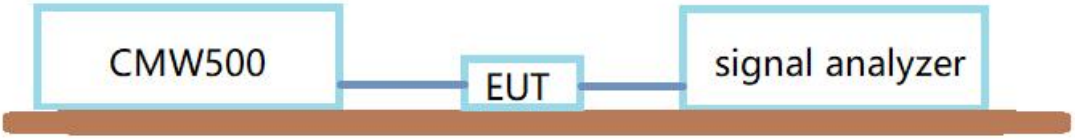
Measurement Uncertainty:

Item	Uncertainty
Expanded Uncertainty	500 kHz (k=2)

6.4.1. Test Procedure

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the US Cellular/PCS frequency bands. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.
The measurement method is from KDB 971168 4:
a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).
b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.
d) Set the detection mode to peak, and the trace mode to max hold.
e) Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

6.4.2. Test Setup

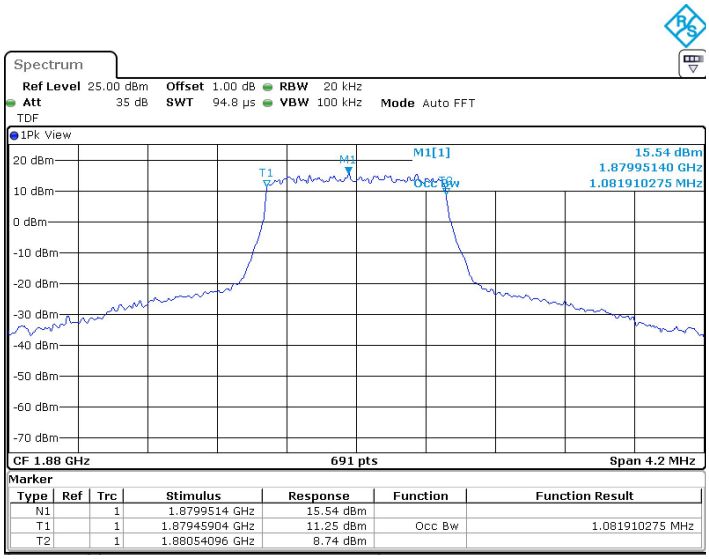


6.4.3. Test result

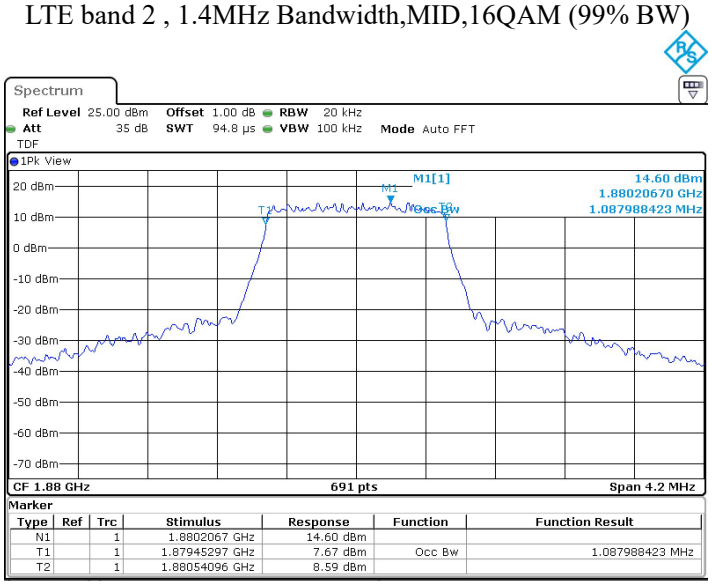
LTE band 2,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	1.082	1.088

LTE band 2 , 1.4MHz Bandwidth,MID,QPSK (99% BW)



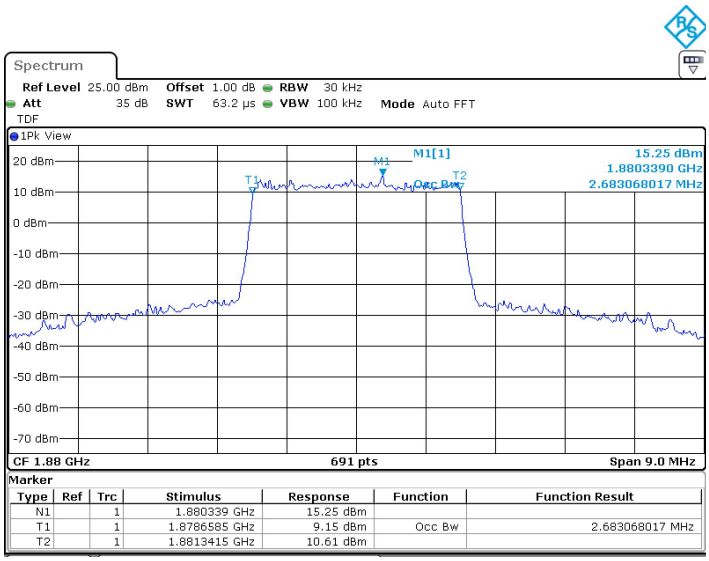
LTE band 2 , 1.4MHz Bandwidth,MID,16QAM (99% BW)



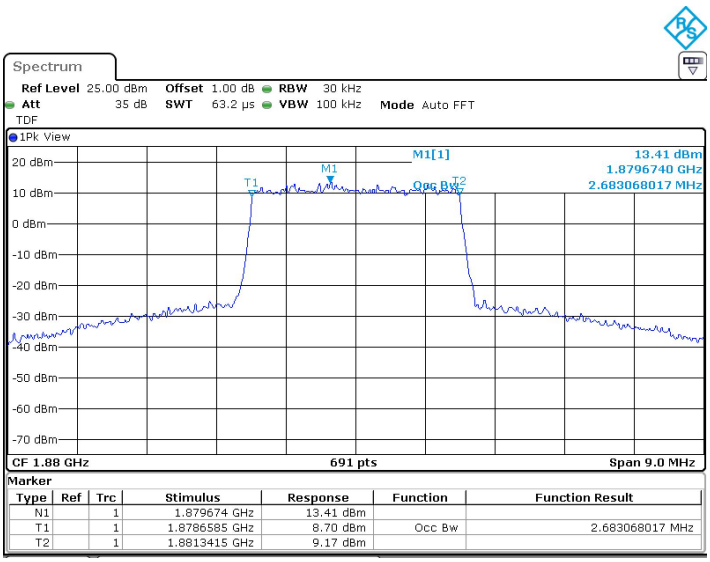
LTE band 2,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	2.683	2.683

LTE band 2 , 3MHz Bandwidth,MID,QPSK (99% BW)



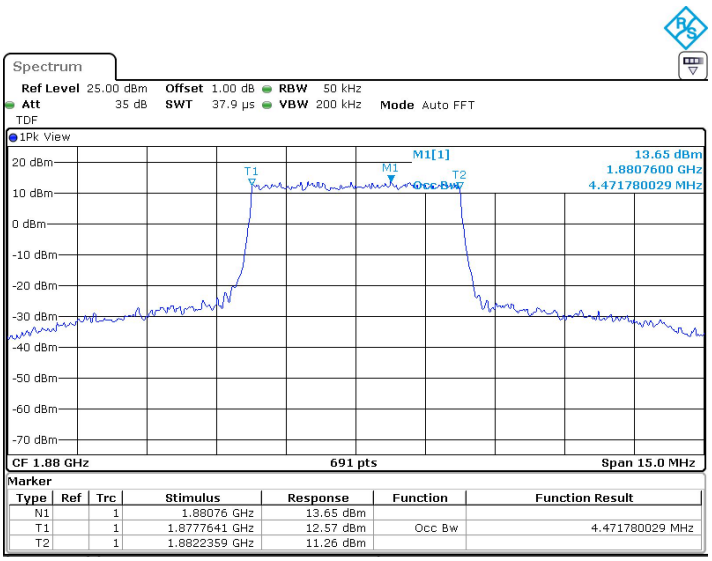
LTE band 2 , 3MHz Bandwidth,MID,16QAM (99% BW)



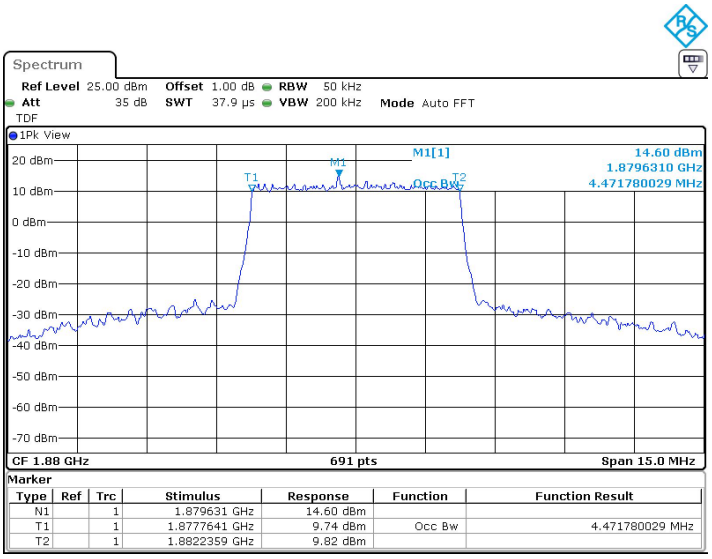
LTE band 2,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	4.472	4.472

LTE band 2 , 5MHz Bandwidth,MID,QPSK (99% BW)



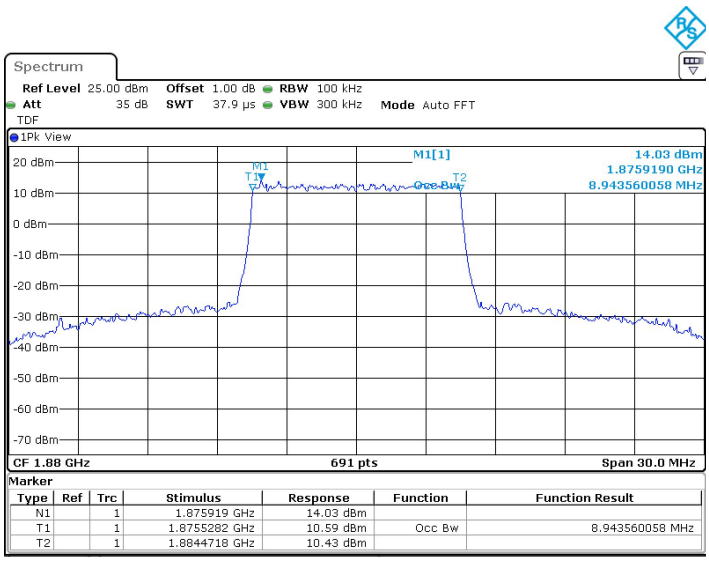
LTE band 2 , 5MHz Bandwidth,MID,16QAM (99% BW)



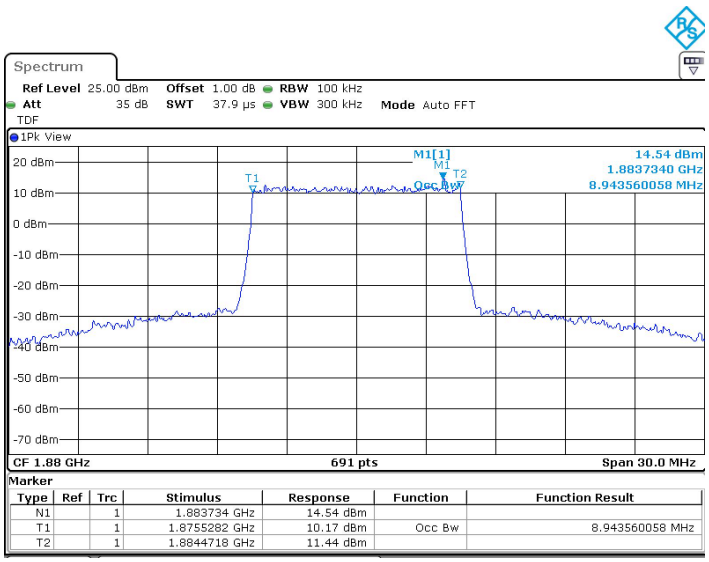
LTE band 2,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	8.944	8.944

LTE band 2 , 10MHz Bandwidth,MID,QPSK (99% BW)



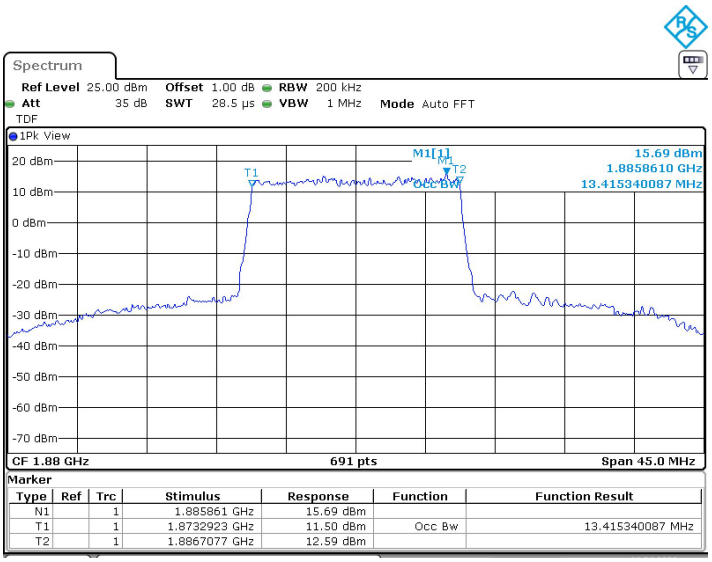
LTE band 2 , 10MHz Bandwidth,MID,16QAM (99% BW)



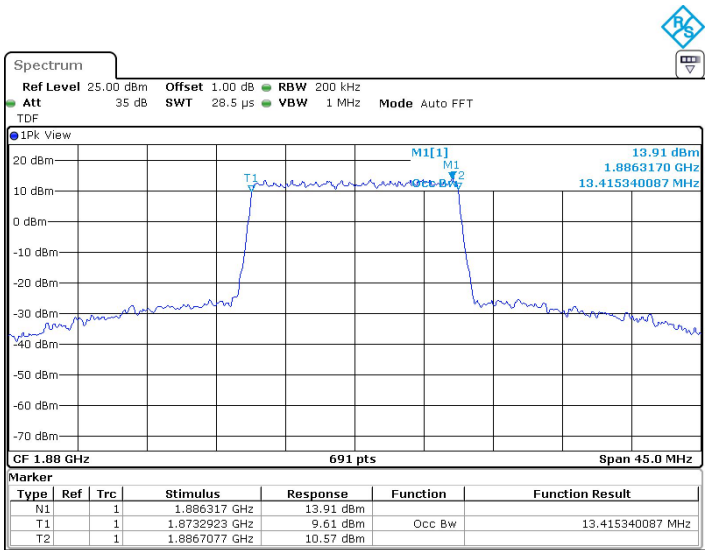
LTE band 2,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	13.415	13.415

LTE band 2 , 15MHz Bandwidth,MID,QPSK (99% BW)



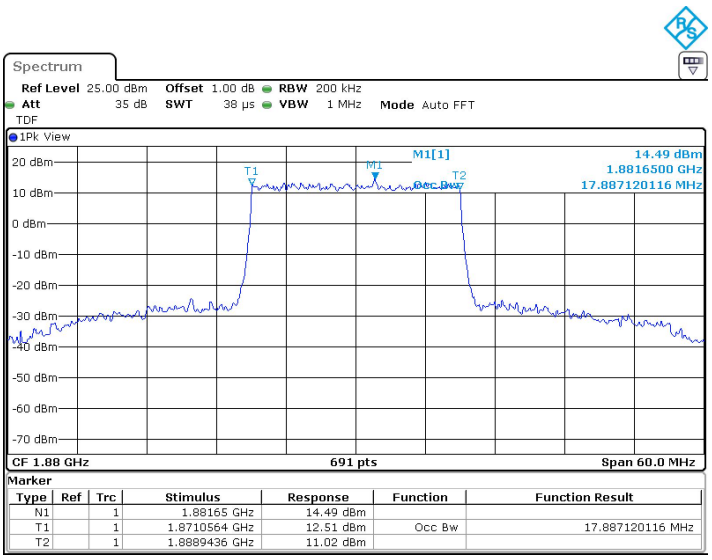
LTE band 2 , 15MHz Bandwidth,MID,16QAM (99% BW)



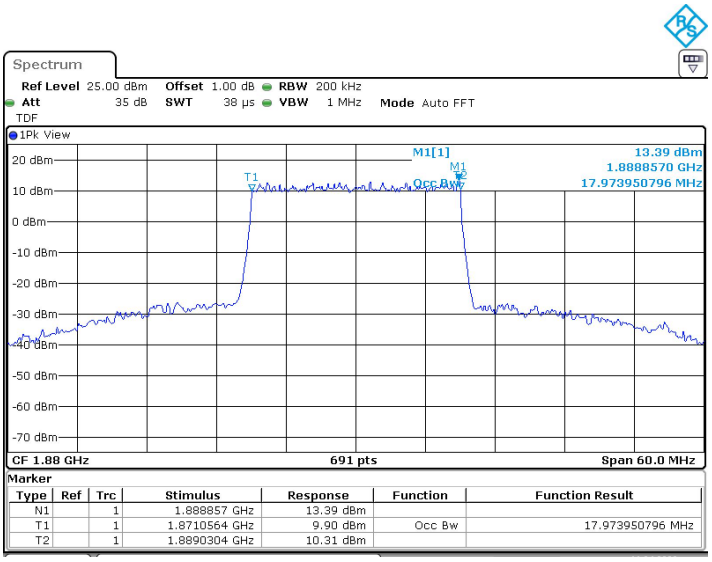
LTE band 2,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1880	17.887	17.974

LTE band 2 , 20MHz Bandwidth,MID,QPSK (99% BW)



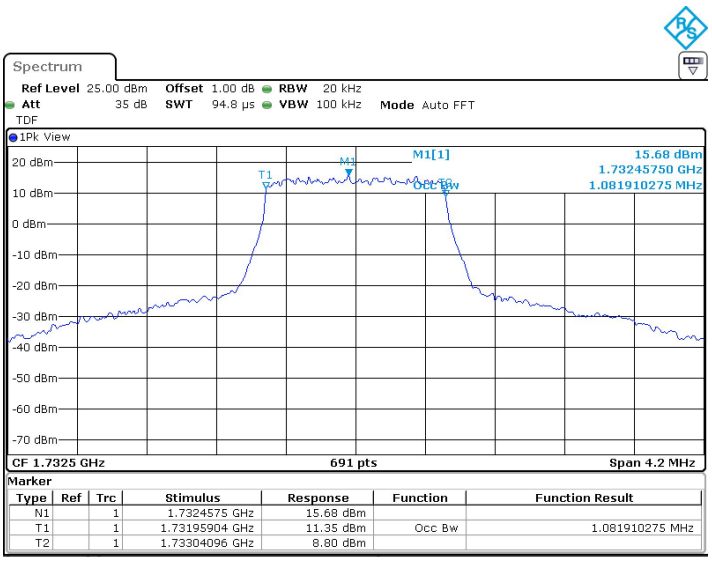
LTE band 2 , 20MHz Bandwidth,MID,16QAM (99% BW)



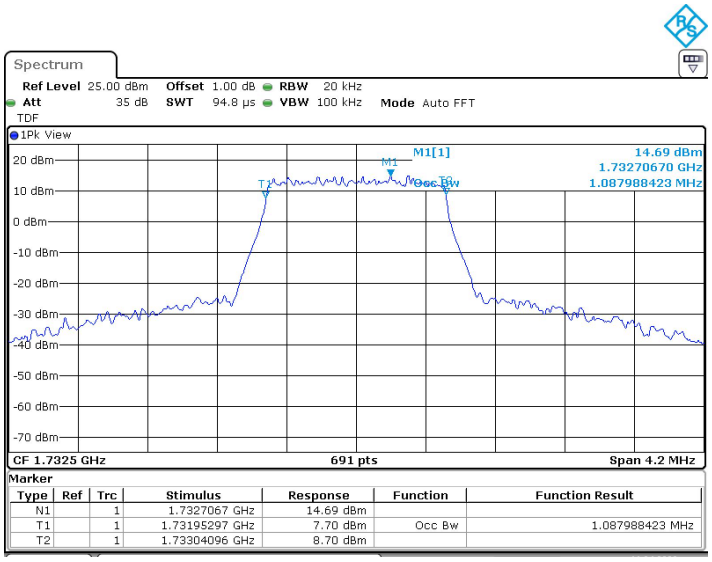
LTE band 4,1.4MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1732.5	1.082	1.088

LTE band 4 , 1.4MHz Bandwidth,MID,QPSK (99% BW)



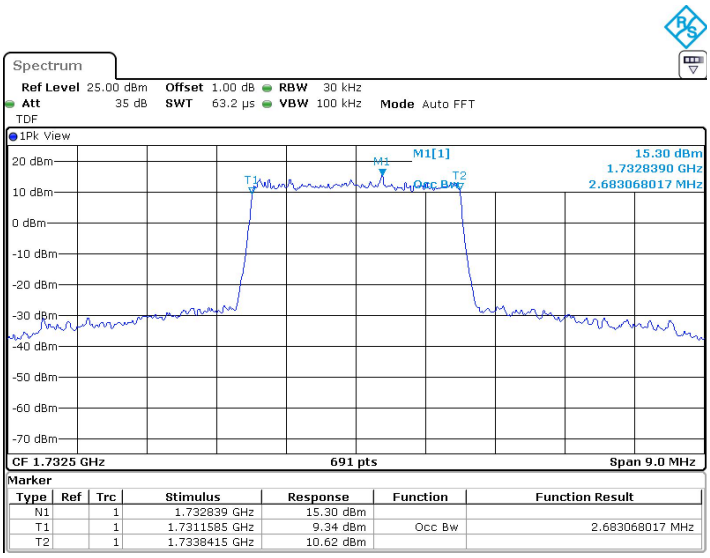
LTE band 4 , 1.4MHz Bandwidth,MID,16QAM (99% BW)



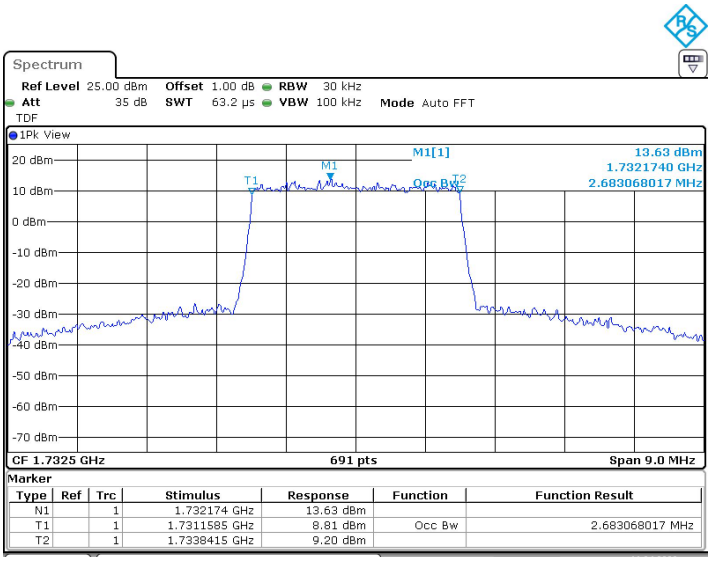
LTE band 4,3MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1732.5	2.683	2.683

LTE band 4 , 3MHz Bandwidth,MID,QPSK (99% BW)



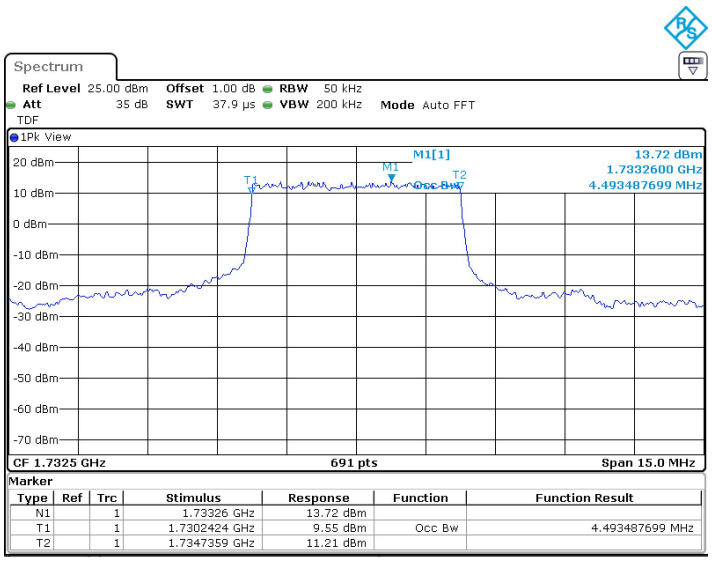
LTE band 4 , 3MHz Bandwidth,MID,16QAM (99% BW)



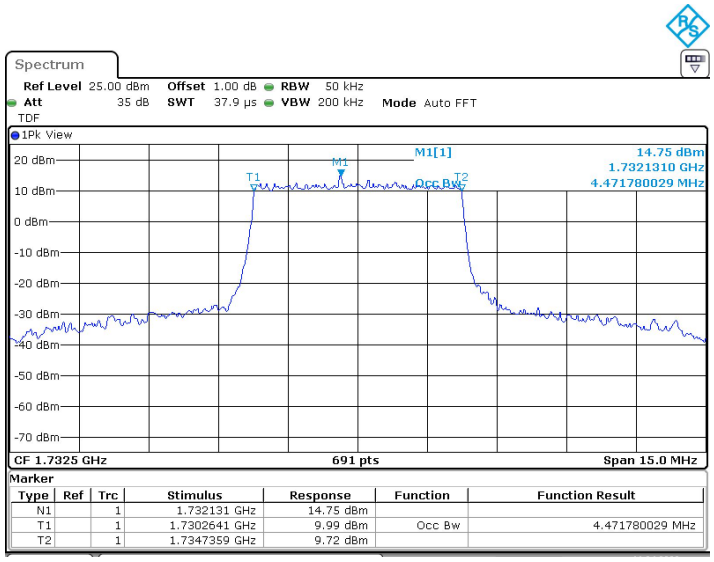
LTE band 4,5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1732.5	4.493	4.472

LTE band 4 , 5MHz Bandwidth,MID,QPSK (99% BW)



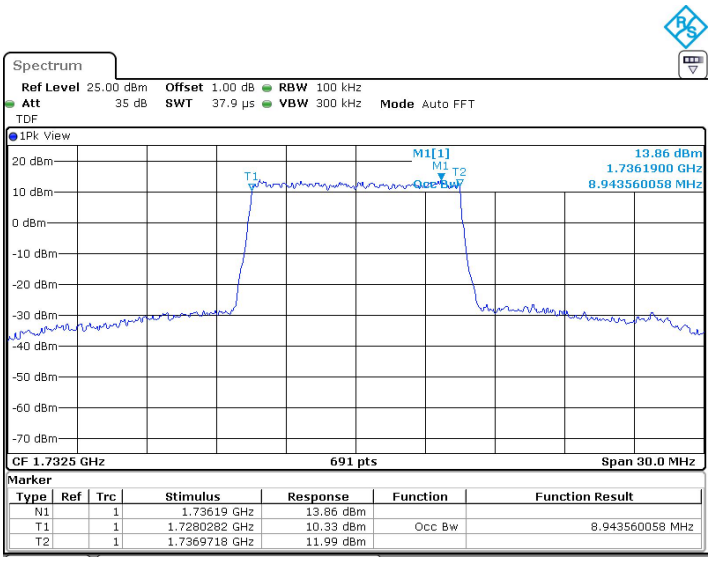
LTE band 4 , 5MHz Bandwidth,MID,16QAM (99% BW)



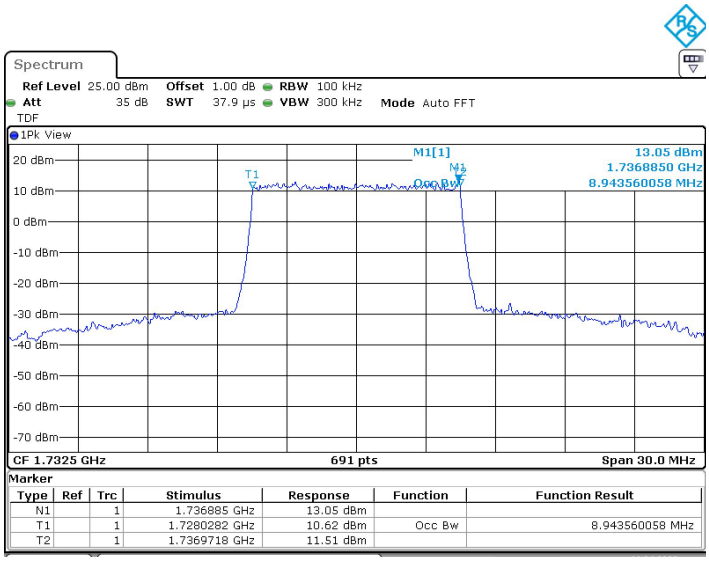
LTE band 4,10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1732.5	8.944	8.944

LTE band 4 , 10MHz Bandwidth,MID,QPSK (99% BW)



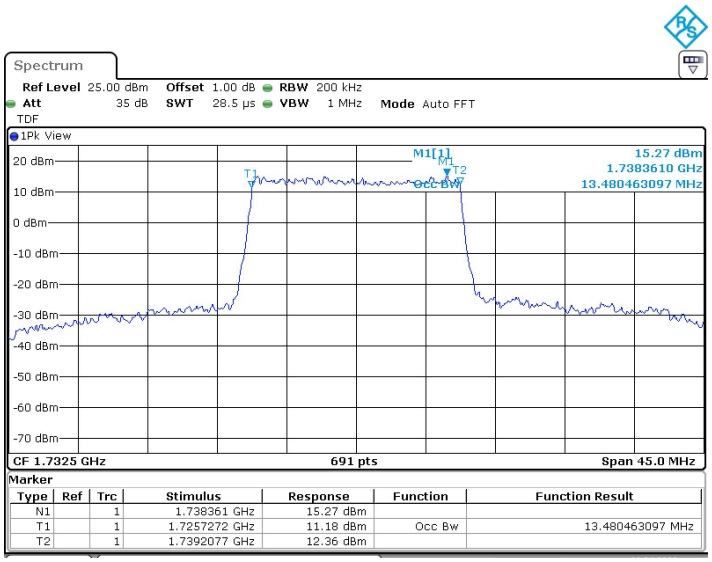
LTE band 4 , 10MHz Bandwidth,MID,16QAM (99% BW)



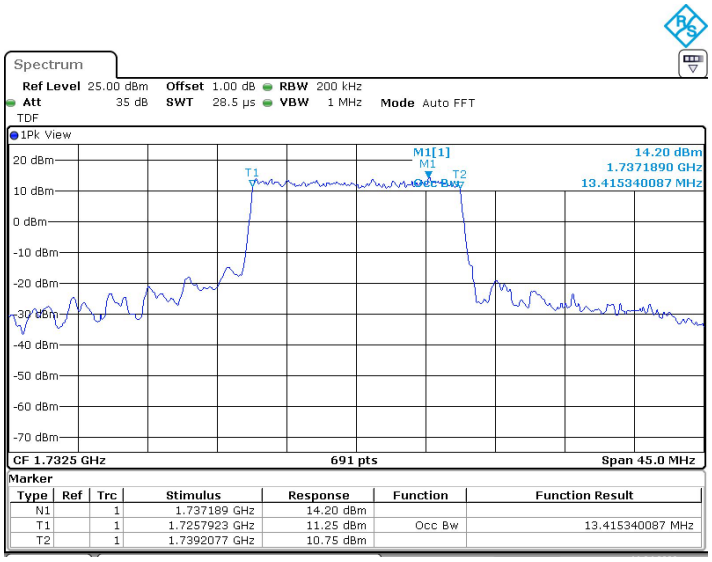
LTE band 4,15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1732.5	13.480	13.415

LTE band 4 , 15MHz Bandwidth,MID,QPSK (99% BW)



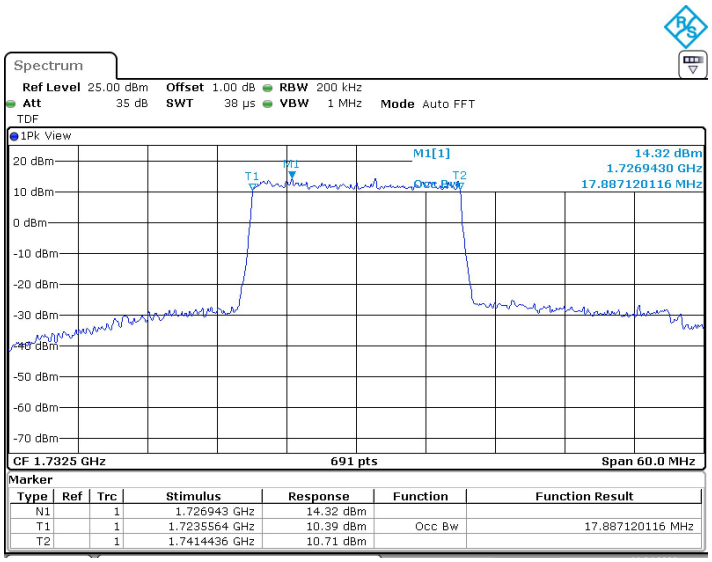
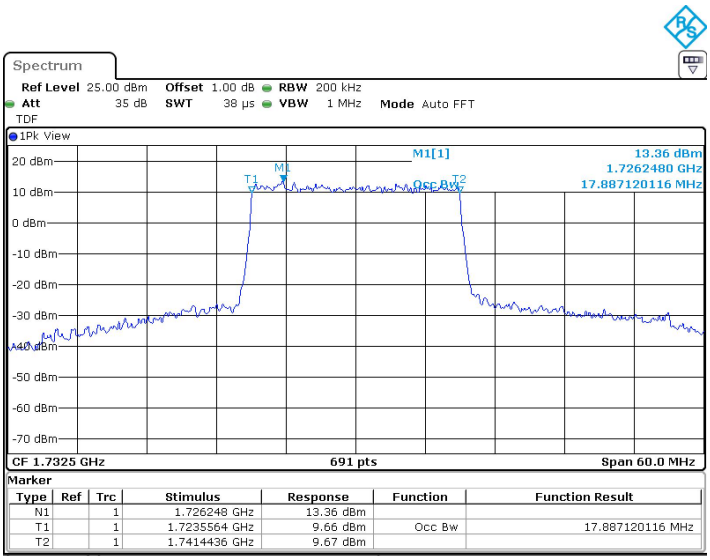
LTE band 4 , 15MHz Bandwidth,MID,16QAM (99% BW)



LTE band 4,20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%)(MHz)	
	QPSK	16QAM
1732.5	17.887	17.887

LTE band 4 , 20MHz Bandwidth,MID,QPSK (99% BW)



LTE band 4 , 20MHz Bandwidth,MID,16QAM (99% BW)