



Certificate #4312.01

FCC TEST REPORT

Product Name: Smartphone

Trade Mark: inventus

Model No.: CT1

Add. Model No.: N/A

Report Number: 2312288686RFM-2

Test Standards: FCC 47 CFR Part 22
FCC 47 CFR Part 24
FCC 47 CFR Part 27
FCC 47 CFR Part 90

FCC ID: 2BDXXBDCT1

Test Result: PASS

Date of Issue: April 23, 2024

Prepared for:

INVENTUS GROUP LTD
C/O FLB ACCOUNTANTS LLP 1010 ESKDALE ROAD, WINNERSH
TRIANGLE, WOKINGHAM, UNITED KINGDOM, RG41 5TS

Prepared by:

Shenzhen UnionTrust Quality and Technology Co., Ltd.
Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and
technology park, Longhua district, Shenzhen, China

TEL: +86-755-2823 0888

FAX: +86-755-2823 0886

Prepared by: David Chen
David Chen
Senior Project Engineer

Reviewed by: Robben Chen
Robben Chen
Assistant Manager

Approved by: Billy Li
Billy Li
Technical Director

Date: April 23, 2024

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

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Version

Version No.	Date	Description
V1.0	April 23, 2024	Original

**Shenzhen UnionTrust Quality and Technology Co., Ltd.**

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com<http://www.uttlab.com>

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1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	INVENTUS GROUP LTD
Address of Applicant:	C/O FLB ACCOUNTANTS LLP 1010 ESKDALE ROAD, WINNERSH TRIANGLE, WOKINGHAM, UNITED KINGDOM, RG41 5TS
Manufacturer:	INVENTUS GROUP LTD
Address of Manufacturer:	C/O FLB ACCOUNTANTS LLP 1010 ESKDALE ROAD, WINNERSH TRIANGLE, WOKINGHAM, UNITED KINGDOM, RG41 5TS

1.2 EUT INFORMATION

1.2.1 General Description of EUT

Product Name:	Smartphone			
Model No.:	CT1			
Add. Model No.:	N/A			
Trade Mark:	inventus			
DUT Stage:	Identical Prototype			
EUT Supports Function: (Provided by the customer)	GSM Bands:	GSM850/E-GSM900/DCS 1800/PCS 1900		
	UTRA Bands:	WCDMA Band I/II/IV/V/VIII/XI/XIX		
	E-UTRA Bands:	FDD Band 1/2/3/4/5/7/8/11/12/13/17/18/19/20/21/25/26/28/30/66/71		
	2.4 GHz ISM Band:	IEEE 802.11b/g/n		
		Bluetooth V5.2		
	5 GHz U-NII Bands:	5 150 MHz to 5 250 MHz	IEEE 802.11a/n/ac	
		5 250 MHz to 5 350 MHz	IEEE 802.11a/n/ac	
		5 470 MHz to 5 725 MHz	IEEE 802.11a/n/ac	
		5 725 MHz to 5 850 MHz	IEEE 802.11a/n/ac	
	RNSS Band:	1559 MHz to 1610 MHz	GPS/ BDS/ GLONASS	
BSR:	VHF Band II	FM		
NFC:	13.553 MHz to 13.567 MHz			
Software Version:	SW1_V7.0_SCT1INVS_ROW_A13_140324(Provided by the customer)			
Hardware Version:	HW1 (Provided by the customer)			
Sample Received Date:	December 28, 2023			
Sample Tested Date:	January 16, 2024 to March 26, 2024			
Remark:	The above EUT's information was provided by customer. Please refer to the specifications or user's manual for more detailed description.			

1.2.2 Description of Accessories

Adapter	
Model No.:	TPD-203A120167UF01
Input:	100-240V~50/60Hz 0.6A
Output:	5.0V==3.0A or 9.0V==2.22A or 12.0V==1.67A

Battery	
Model No.:	INV012
Battery Type:	Lithium-ion Rechargeable Battery
Rated Voltage:	3.85Vdc
Limited Charge Voltage:	4.4Vdc
Rated Capacity:	4850mAh

Cable	
Connector:	USB Type-C Plug Cable
Cable Type:	Shielded without ferrite
Length:	1.15Meter

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1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Support Networks:	Single Carrier: LTE Band 2/4/5/7/12/13/17/25/26/30/38/41/66/71	
Type of Modulation:	QPSK, 16QAM	
Antenna Type: (Provided by the customer)	Antenna 0: LDS Antenna Antenna 1&2: FPCB Antenna	
Antenna Gain: (Provided by the customer)	LTE Band 2:	-0.9 dBi
	LTE Band 4:	-0.68 dBi
	LTE Band 5:	-1.29 dBi
	LTE Band 7:	0.07 dBi
	LTE Band 12:	-3.07 dBi
	LTE Band 13:	-1.58 dBi
	LTE Band 17:	-3.67 dBi
	LTE Band 25:	-0.9 dBi
	LTE Band 26:	-1.4 dBi
	LTE Band 30:	-3.2 dBi
	LTE Band 38:	0.07 dBi
	LTE Band 40:	-3.1 dBi
	LTE Band 41:	0.07 dBi
	LTE Band 66:	-0.68 dBi
LTE Band 71:	-3.89 dBi	
IEMI:	Radiated: S202312282554-ZJB06/06	
	Conducted: S202312282554-ZJA02/2, S202312282554-ZJB05/06	
Normal Test Voltage:	3.8 Vdc	
Extreme Test Voltage:	3.6 to 4.35Vdc	
Extreme Test Temperature:	-30 °C to +50 °C	

Summary of Results:									
Bands	BW	Modulation	Frequency Range	Max RF Output Power (dBm)		ERP/EIRP	99% BW	Emission Designator	
	(MHz)		(MHz)	Conducted (Average)	ERP/EIRP (Average)	(W)	(MHz)		
2	1.4	QPSK	1850.7-1909.3	23.24	22.34	0.1714	1.0792	1M08G7D	
		16QAM		22.41	21.51	0.1416	1.0781	1M08W7D	
	3	QPSK	1851.5-1908.5	23.14	22.24	0.1675	2.6800	2M68G7D	
		16QAM		22.59	21.69	0.1476	2.6751	2M68W7D	
	5	QPSK	1852.5-1907.5	23.43	22.53	0.1791	4.4626	4M46G7D	
		16QAM		22.56	21.66	0.1466	4.4694	4M47W7D	
	10	QPSK	1855.0-1905.0	23.43	22.53	0.1791	8.9325	8M93G7D	
		16QAM		22.94	22.04	0.1600	8.9408	8M94W7D	
	15	QPSK	1857.5-1902.5	23.39	22.49	0.1774	13.433	13M4G7D	
		16QAM		22.93	22.03	0.1596	13.422	13M4W7D	
	20	QPSK	1860.0-1900.0	23.43	22.53	0.1791	17.857	17M9G7D	
		16QAM		22.82	21.92	0.1556	17.848	17M8W7D	
	4	1.4	QPSK	1710.7-1754.3	23.58	22.90	0.1950	1.0799	1M08G7D
			16QAM		22.63	21.95	0.1567	1.0778	1M08W7D
3		QPSK	1711.5-1753.5	23.50	22.82	0.1914	2.6775	2M68G7D	
		16QAM		22.85	22.17	0.1648	2.6768	2M68W7D	
5		QPSK	1712.5-1752.5	23.77	23.09	0.2037	4.4572	4M46G7D	
		16QAM		22.70	22.02	0.1592	4.4668	4M47W7D	
10		QPSK	1715-1750	23.74	23.06	0.2023	8.9379	8M94G7D	
		16QAM		23.07	22.39	0.1734	8.9395	8M94W7D	
15		QPSK	1717.5-1747.5	23.73	23.05	0.2018	13.412	13M4G7D	
		16QAM		23.09	22.41	0.1742	13.415	13M4W7D	
20		QPSK	1720-1745	23.77	23.09	0.2037	17.886	17M9G7D	
		16QAM		23.12	22.44	0.1754	17.874	17M9W7D	
5		1.4	QPSK	824.7-848.3	23.55	21.40	0.1380	1.0801	1M08G7D
			16QAM		22.72	20.57	0.1140	1.0818	1M08W7D
	3	QPSK	825.5-847.5	23.54	21.39	0.1377	2.6751	2M68G7D	
		16QAM		22.85	20.70	0.1175	2.6723	2M67W7D	
	5	QPSK	826.5-846.5	23.71	21.56	0.1432	4.4676	4M47G7D	
		16QAM		22.81	20.66	0.1164	4.4733	4M47W7D	
	10	QPSK	829-844	23.71	21.56	0.1432	8.9324	8M93G7D	
		16QAM		23.25	21.10	0.1288	8.9394	8M94W7D	
	7	5	QPSK	2502.5-2567.5	23.10	23.17	0.2075	4.4683	4M47G7D
			16QAM		22.17	22.24	0.1675	4.4670	4M47W7D
10		QPSK	2505-2565	23.05	23.12	0.2051	8.9466	8M95G7D	
		16QAM		22.48	22.55	0.1799	8.9398	8M94W7D	
15		QPSK	2507.5-2562.5	23.08	23.15	0.2065	13.417	13M4G7D	
		16QAM		22.54	22.61	0.1824	13.414	13M4W7D	
20		QPSK	2510-2560	23.13	23.20	0.2089	17.856	17M9G7D	
		16QAM		22.46	22.53	0.1791	17.853	17M9W7D	
12	1.4	QPSK	699.7-715.3	23.39	18.17	0.0656	1.0804	1M08G7D	
		16QAM		22.57	17.35	0.0543	1.0795	1M08W7D	
	3	QPSK	700.5-714.5	23.26	18.04	0.0637	2.6775	2M68G7D	
		16QAM		22.76	17.54	0.0568	2.6750	2M68W7D	
	5	QPSK	701.5-713.5	23.53	18.31	0.0678	4.4762	4M48G7D	
		16QAM		22.70	17.48	0.0560	4.4696	4M47W7D	
	10	QPSK	704-711	23.63	18.41	0.0693	8.9420	8M94G7D	
		16QAM		23.05	17.83	0.0607	8.9322	8M93W7D	
13	5	QPSK	779.5-784.5	23.56	19.83	0.0962	4.4851	4M49G7D	
		16QAM		22.65	18.92	0.0780	4.4635	4M46W7D	
	10	QPSK	782-782	23.58	19.85	0.0966	8.9245	8M92G7D	
		16QAM		22.34	18.61	0.0726	8.9193	8M92W7D	
17	5	QPSK	706.5-713.5	23.56	17.74	0.0594	4.4808	4M48G7D	
		16QAM		22.68	16.86	0.0485	4.4657	4M47W7D	
	10	QPSK	709-711	23.59	17.77	0.0598	8.9280	8M93G7D	
		16QAM		23.07	17.25	0.0531	8.9249	8M92W7D	

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Bands	BW	Modulation	Frequency Range	Max RF Output Power (dBm)		ERP/EIRP (W)	99% BW (MHz)	Emission Designator	
	(MHz)		(MHz)	Conducted (Average)	ERP/EIRP (Average)				
25	1.4	QPSK	1850.7-1914.3	23.28	22.38	0.1730	1.0803	1M08G7D	
		16QAM		22.44	21.54			1M08W7D	
	3	QPSK	1851.5-1913.5	23.15	22.25	0.1679	2.6805	2M68G7D	
		16QAM		22.55	21.65			2M67W7D	
	5	QPSK	1852.5-1912.5	23.43	22.53	0.1791	4.4677	4M47G7D	
		16QAM		22.53	21.63			4M47W7D	
	10	QPSK	1855.0-1910.0	23.40	22.50	0.1778	8.9454	8M95G7D	
		16QAM		22.92	22.02			8M93W7D	
	15	QPSK	1857.5-1907.5	23.44	22.54	0.1795	13.436	13M4G7D	
		16QAM		22.86	21.96			13M4W7D	
	20	QPSK	1860.0-1905.0	23.46	22.56	0.1803	17.863	17M9G7D	
		16QAM		22.88	21.98			17M9W7D	
26	1.4	QPSK	824.7-848.3	23.51	19.96	0.0991	1.0801	1M08G7D	
		16QAM		22.67	19.12			1M08W7D	
	3	QPSK	825.5-847.5	23.42	19.87	0.0971	2.6772	2M68G7D	
		16QAM		22.88	19.33			2M68W7D	
	5	QPSK	826.5-846.5	23.71	20.16	0.1038	4.4601	4M46G7D	
		16QAM		22.83	19.28			4M47W7D	
	10	QPSK	829-844	23.66	20.11	0.1026	8.9407	8M94G7D	
		16QAM		23.18	19.63			8M91W7D	
	15	QPSK	831.5-841.5	23.72	20.17	0.1040	13.397	13M4G7D	
		16QAM		22.88	19.33			13M4W7D	
	26 (Part 90S)	1.4	QPSK	814.7-823.3	23.60	20.05	0.1012	1.0798	1M08G7D
			16QAM		22.70	19.15			1M08W7D
3		QPSK	815.5-822.5	23.46	19.91	0.0979	2.6784	2M68G7D	
		16QAM		22.98	19.43			2M68W7D	
5		QPSK	816.5-821.5	23.77	20.22	0.1052	4.4594	4M46G7D	
		16QAM		22.94	19.39			4M47W7D	
10		QPSK	819	23.76	20.21	0.1050	8.9396	8M94G7D	
		16QAM		23.20	19.65			8M93W7D	
15		QPSK	821.5	23.78	20.23	0.1054	13.421	13M4G7D	
		16QAM		23.31	19.76			13M4W7D	
30		5	QPSK	2307.5-2312.5	23.57	20.37	0.1089	4.4671	4M47G7D
			16QAM		22.54	19.34			4M47W7D
	10	QPSK	2310.0	23.57	20.37	0.1089	8.9445	8M94G7D	
		16QAM		22.24	19.04			8M94W7D	
38	5	QPSK	2572.5-2617.5	23.41	23.48	0.2228	4.4821	4M48G7D	
		16QAM		22.46	22.53			4M46W7D	
	10	QPSK	2575-2615	23.36	23.43	0.2203	8.9460	8M95G7D	
		16QAM		22.30	22.37			8M93W7D	
	15	QPSK	2577.5-2612.5	23.36	23.43	0.2203	13.435	13M4G7D	
		16QAM		22.50	22.57			13M4W7D	
	20	QPSK	2580-2610	23.47	23.54	0.2259	17.852	17M9G7D	
		16QAM		22.41	22.48			17M9W7D	
40A	5	QPSK	2307.5-2312.5	22.67	19.57	0.0906	4.4614	4M46G7D	
		16QAM		21.90	18.80			4M46W7D	
	10	QPSK	2310.0	22.68	19.58	0.0908	8.9199	8M92W7D	
		16QAM		21.63	18.53			8M93G7D	
40B	5	QPSK	2352.5-2357.5	22.66	19.56	0.0904	4.4708	4M47W7D	
		16QAM		21.89	18.79			4M47W7D	
	10	QPSK	2355.0	22.66	19.56	0.0904	8.9085	8M91G7D	
		16QAM		21.57	18.47			8M95W7D	
41	5	QPSK	2498.5-2687.5	23.76	23.83	0.2415	4.4892	4M49G7D	
		16QAM		22.82	22.89			4M47W7D	
	10	QPSK	2501-2685	23.76	23.83	0.2415	8.9474	8M95G7D	
		16QAM		22.61	22.68			8M95W7D	
	15	QPSK	2503.5-2682.5	23.63	23.70	0.2344	13.419	13M4G7D	
		16QAM		22.78	22.85			13M4W7D	
	20	QPSK	2506-2680	23.78	23.85	0.2427	17.875	17M9G7D	
		16QAM		22.48	22.55			17M8W7D	

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Bands	BW	Modulation	Frequency Range	Max RF Output Power (dBm)		ERP/EIRP	99% BW	Emission Designator
	(MHz)		(MHz)	Conducted (Average)	ERP/EIRP (Average)	(W)	(MHz)	
66	1.4	QPSK	1710.7-1779.3	23.61	22.93	0.1963	1.0807	1M08G7D
		16QAM		22.64	21.96	0.1570	1.0819	1M08W7D
	3	QPSK	1711.5-1778.5	23.56	22.88	0.1941	2.6840	2M68G7D
		16QAM		22.86	22.18	0.1652	2.6796	2M68W7D
	5	QPSK	1712.5-1777.5	23.83	23.15	0.2065	4.4639	4M46G7D
		16QAM		22.70	22.02	0.1592	4.4705	4M47W7D
	10	QPSK	1715-1775	23.82	23.14	0.2061	8.9355	8M94G7D
		16QAM		23.19	22.51	0.1782	8.9395	8M94W7D
	15	QPSK	1717.5-1772.5	23.85	23.17	0.2075	13.410	13M4G7D
		16QAM		23.23	22.55	0.1799	13.433	13M4W7D
	20	QPSK	1720-1770	23.88	23.20	0.2089	17.874	17M9G7D
		16QAM		23.16	22.48	0.1770	17.846	17M8W7D
71	5	QPSK	665.5-695.5	23.58	17.54	0.0568	4.4755	4M48G7D
		16QAM		22.74	16.70	0.0468	4.4646	4M46W7D
	10	QPSK	668-693	23.58	17.54	0.0568	8.9603	8M96G7D
		16QAM		23.16	17.12	0.0515	8.9421	8M94W7D
	15	QPSK	670.5-690.5	23.55	17.51	0.0564	13.422	13M4G7D
		16QAM		23.17	17.13	0.0516	13.438	13M4W7D
	20	QPSK	673-688	23.62	17.58	0.0573	17.861	17M8G7D
		16QAM		23.01	16.97	0.0498	17.834	17M9W7D

1.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested with associated equipment below.

1) Support Equipment

Description	Manufacturer	Model No.	Serial Number	Supplied by
Dummy battery	N/A	N/A	N/A	Manufacturer

2) Support Cable

Cable No.	Description	Connector	Length	Supplied by
1	Antenna Cable	SMA	0.3 Meter	UnionTrust

1.5 TEST LOCATION

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China 518109
 Telephone: +86 (0) 755 2823 0888
 Fax: +86 (0) 755 2823 0886

1.6 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L9069

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

Shenzhen UnionTrust Quality and Technology Co., Ltd.

A2LA-Lab Certificate No.: 4312.01

Shenzhen UnionTrust Quality and Technology Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

ISED Wireless Device Testing Laboratories

CAB identifier: CN0032

FCC Accredited Lab.

Designation Number: CN1194

Test Firm Registration Number: 259480

1.7 DEVIATION FROM STANDARDS

None.

1.8 ABNORMALITIES FROM STANDARD CONDITIONS

None.

1.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

1.10 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Measurement Uncertainty
1	Conducted Output Power	±0.7 dB
2	99%&26dB Bandwidth	±1.86 %
3	Emission Mask	±2.7 dBm
4	Spurious emissions at antenna terminals	±2.7 dBm
5	Field strength of spurious radiation	30 MHz-1 GHz: ±4.9 dB 1 GHz-18 GHz: ±4.8 dB 18 GHz-40 GHz: ±5.1 dB
6	Frequency stability	±6.5 x 10 ⁻⁸
7	Humidity	±3.9 %
8	Temperature	±0.62 °C
9	DC Voltages	±0.68 %

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2. TEST SUMMARY

FCC 47 CFR Part 24 Test Cases (Band 2 & Band 25)			
Test Item	Test Requirement	Test Method	Result
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 24.232(c)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 24.232(c)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 24.232(d)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) & FCC 47 CFR Part 24.238(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 24.238(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 24.238(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 24.238(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 24.235	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 27 Test Cases (LTE Band 4 & Band 66)			
Test Item	Test Requirement	Test Method	Result
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(d)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(d)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(d)(5)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) & FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(h)(1)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 22 Test Cases (Band 5 & Band 26)			
Test Item	Test Requirement	Test Method	Result
Effective Radiated Power (ERP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 22.913(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 22.913(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 22.913(a)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 22.917(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 22.917(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 22.917(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 22.355	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 27 Test Cases (LTE Band 7 & Band 38 & Band 41)			
Test Item	Test Requirement	Test Method	Result
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(h)(2)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(h)(2)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(d)(5)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(m)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(m)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(m)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 27 Test Cases (LTE Band 12 & Band 17 & Band 71)			
Test Item	Test Requirement	Test Method	Result
Effective Radiated Power (ERP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(c)(10)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(c)(10)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(d)(5)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) FCC 47 CFR Part 27.53(g)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(g)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(g)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(g)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

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E-mail: info@uttlab.com

<http://www.uttlab.com>

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FCC 47 CFR Part 27 Test Cases (LTE Band 13)			
Test Item	Test Requirement	Test Method	Result
Effective Radiated Power (ERP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(b)(10)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(b)(10)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(d)(5)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 90 Test Cases (LTE Band 26)			
Test Item	Test Requirement	Test Method	Result
Effective Radiated Power (ERP)	FCC 47 CFR Part 2.1046 & FCC 47 CFR Part 90.635	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 90.635	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	N/A	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h)	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Emission Mask	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 90.691	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 90.691	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 90.691	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 90.213	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS

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FCC 47 CFR Part 27 Test Cases (LTE Band 30 & Band 40)			
Test Item	Test Requirement	Test Method	Result
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(a)(3)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(a)(3)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(a)(B)	KDB 971168 D01v02r02	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) FCC 47 CFR Part 27.50(a)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(a)(4)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(a) (4)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(a) (4)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS

Disclaimer and Explanations:

The declared of product specification and data (e.g. antenna gain, RF specification, etc) for EUT presented in the report are provided by the customer, and the customer takes all the responsibilities for the accuracy of product specification.

3. EQUIPMENT LIST

Radiated Emission Test Equipment List						
Used	Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
<input checked="" type="checkbox"/>	3m SAC	ETS-LINDGREN	3M	Euroshiedpn-CT001270-1317	10-Dec-2023	09-Dec-2026
<input checked="" type="checkbox"/>	Receiver	R&S	ESIB26	100114	27-Oct-2023	26-Oct-2024
<input checked="" type="checkbox"/>	EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY51440197	14-Apr-2023	13-Apr-2024
<input checked="" type="checkbox"/>	Loop Antenna	ETS-LINDGREN	6502	00202525	30-Oct-2023	29-Oct-2024
<input checked="" type="checkbox"/>	Broadband Antenna	ETS-LINDGREN	3142E	00201566	30-Oct-2023	29-Oct-2024
<input checked="" type="checkbox"/>	6dB Attenuator	Talent	RA6A5-N-18	18103001	30-Oct-2023	29-Oct-2024
<input checked="" type="checkbox"/>	Preamplifier	HP	8447F	2805A02960	31-Oct-2023	30-Oct-2024
<input checked="" type="checkbox"/>	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3117-PA	00201541	16-Apr-2023	15-Apr-2025
<input checked="" type="checkbox"/>	Pre-amplifier	ETS-LINDGREN	00118385	00201874	31-Oct-2023	30-Oct-2024
<input checked="" type="checkbox"/>	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3116C-PA	00202652	30-Oct-2023	29-Oct-2024
<input checked="" type="checkbox"/>	Pre-amplifier	ETS-LINDGREN	00118384	00202652	30-Oct-2023	29-Oct-2024
<input checked="" type="checkbox"/>	Multi device Controller	ETS-LINDGREN	7006-001	00160105	N/A	N/A
<input checked="" type="checkbox"/>	Test Software	Audix	e3	Software Version: 9.160323		

RF Conducted Test Equipment List						
Used	Equipment	Manufacturer	Model No.	Serial Number	Cal. date	Cal. Due date
<input checked="" type="checkbox"/>	EXA Signal Analyzer	KEYSIGHT	N9010B	MY62060155	19-Apr-2023	18-Apr-2024
<input checked="" type="checkbox"/>	DC Source	KIKUSUI	PWR400L	LK003024	N/A	N/A
<input checked="" type="checkbox"/>	Signal Analyzer	R&S	FSV40-N	101653	14-Apr-2023	13-Apr-2024
<input checked="" type="checkbox"/>	Digital multimeter	FLUKE	15B+	30701460WS15	31-Oct-2023	30-Oct-2024
<input checked="" type="checkbox"/>	Temp & Humidity chamber	Votisch	VT4002	58566133290020	14-Apr-2023	13-Apr-2024
<input checked="" type="checkbox"/>	Wideband Radio Communication Tester	R&S	CMW500	119583	14-Apr-2023	13-Apr-2024
<input checked="" type="checkbox"/>	Wideband Radio Communication Tester	R&S	CMW500	120932	14-Apr-2023	13-Apr-2024

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4. TEST CONFIGURATION

4.1 ENVIRONMENTAL CONDITIONS FOR TESTING

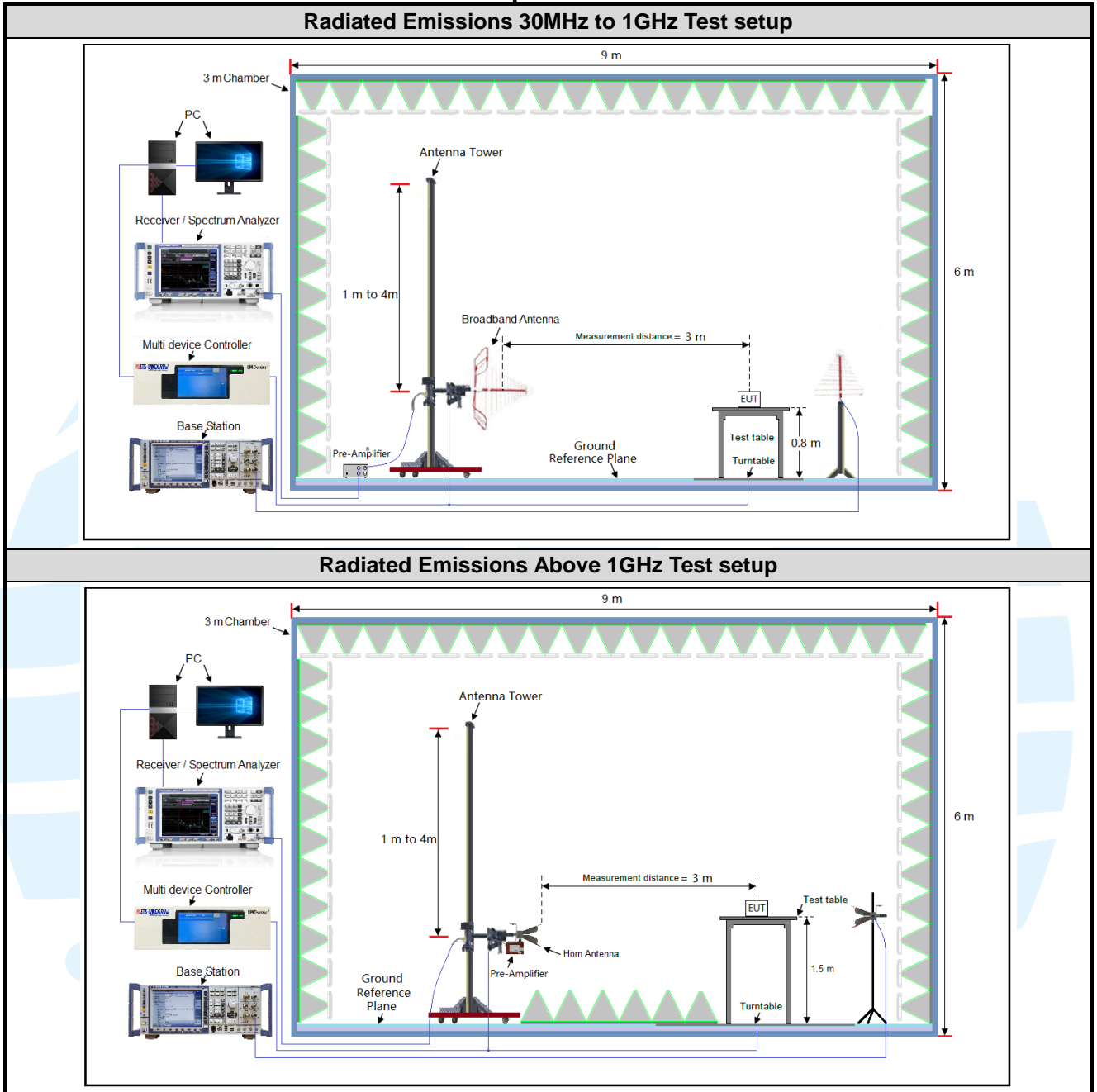
Test Environment	Selected Values During Tests		
Test Condition	Ambient		
	Temperature (°C)	Voltage (V)	Relative Humidity (%)
TN/VN	+15 to +35	3.8	20 to 75
TL/VL	-30	3.6	20 to 75
TH/VL	+50	3.6	20 to 75
TL/VH	-30	4.35	20 to 75
TH/VH	+50	4.35	20 to 75

Remark:

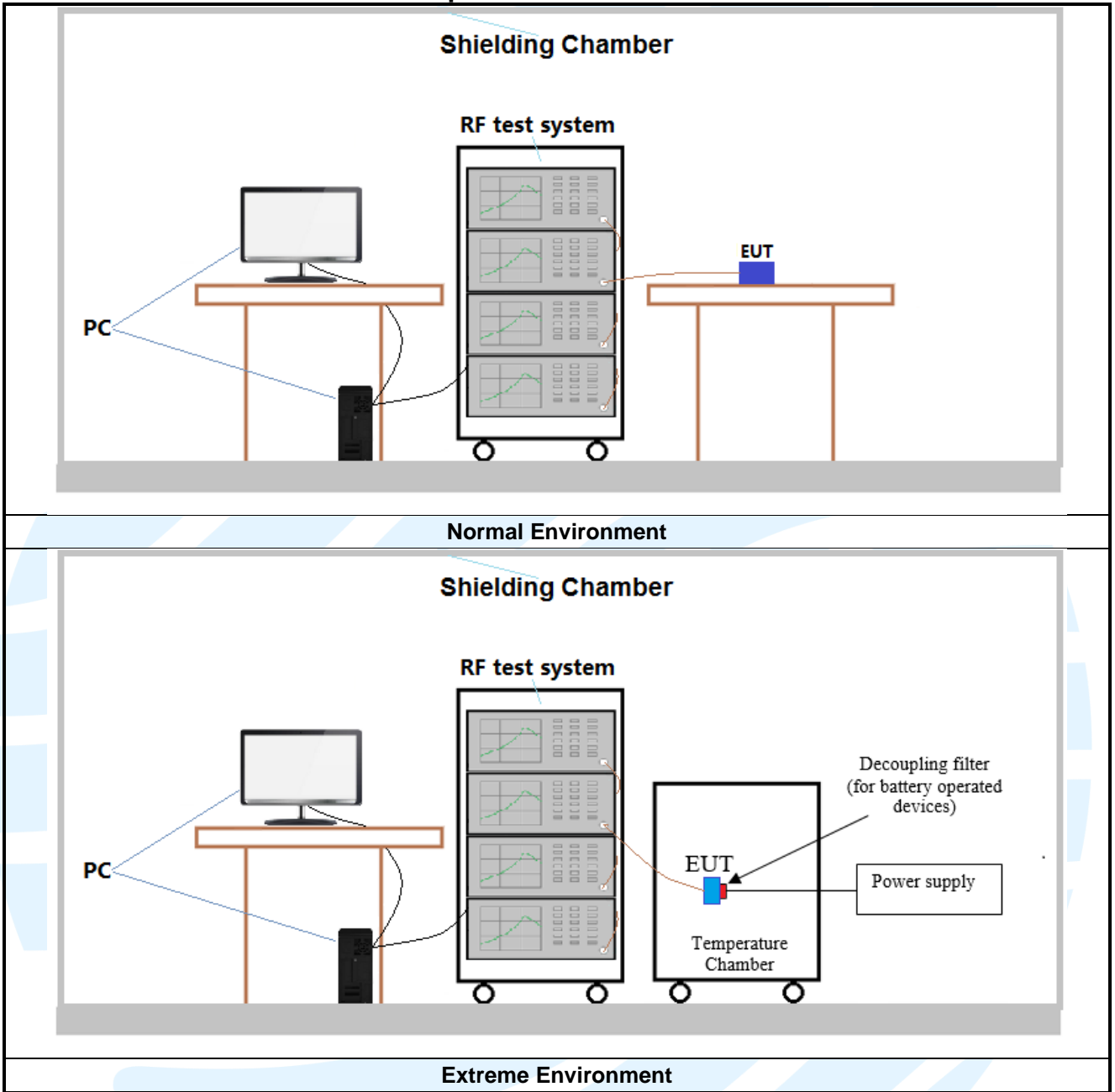
- 1) The EUT just work in such extreme temperature of -30 °C to +50 °C and the extreme voltage of 3.6 V to 4.35 V, so here the EUT is tested in the temperature of -30 °C to +50 °C and the voltage of 3.6 V to 4.35 V.
- 2) VN: Normal Voltage; TN: Normal Temperature;
 TL: Low Extreme Test Temperature; TH: High Extreme Test Temperature;
 VL: Low Extreme Test Voltage; VH: High Extreme Test Voltage.

4.2 TEST SETUP

4.2.1 For Radiated Emissions test setup



4.2.2 For Conducted RF test setup



4.3 TEST CHANNELS

Band	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink (MHz)
LTE Band 2 TX: 1850-1910MHz	Low Range	1.4	18607	1850.7
		3	18615	1851.5
		5	18625	1852.5
		10	18650	1855
		15	18675	1857.5
		20	18700	1860
	Middle Range	1.4/3/5/10/15/20	18900	1880
	High Range	1.4	19193	1909.3
		3	19185	1908.5
		5	19175	1907.5
		10	19150	1905
		15	19125	1902.5
20		19100	1900	
LTE Band 4 TX: 1710-1755MHz	Low Range	1.4	19957	1710.7
		3	19965	1711.5
		5	19975	1712.5
		10	20000	1715
		15	20025	1717.5
		20	20050	1720
	Middle Range	1.4/3/5/10/ 15/20	20175	1732.5
	High Range	1.4	20393	1754.3
		3	20385	1753.5
		5	20375	1752.5
		10	20350	1750
		15	20325	1747.5
20		20300	1745	
LTE band 5 TX: 824–849MHz	Low Range	1.4	20407	824.7
		3	20415	825.5
		5	20425	826.5
		10	20450	829
	Middle Range	1.4/3/5/10	20525	836.5
	High Range	1.4	20643	848.3
		3	20635	847.5
		5	20625	846.5
10		20600	844	
LTE Band 7 TX: 2500-2570MHz	Low Range	5	20775	2502.5
		10	20800	2505
		15	20825	2507.5
		20	20850	2510
	Middle Range	5/10/15/20	21100	2535
	High Range	5	21425	2567.5
		10	21400	2565
		15	21375	2562.5
20		21350	2560	
LTE Band 12 TX: 699-716MHz	Low Range	1.4	23017	699.7
		3	23025	700.5
		5	23035	701.5
		10	23060	704
	Middle Range	1.4/3/5/10	23095	707.5
	High Range	1.4	23173	715.3
		3	23165	714.5
		5	23155	713.5
		10	23130	711

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Band	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink (MHz)
LTE Band 13 TX: 777-787MHz	Low Range	5	23205	779.5
		10	--	--
	Middle Range	5/10	23230	782
	High Range	5	23255	784.5
		10	--	--
LTE Band 17 TX:704-716MHz	Low Range	5	23755	706.5
		10	23780	709
	Middle Range	5/10	23790	710
	High Range	5	23825	713.5
		10	23800	711
LTE Band 25 TX: 1850-1915MHz	Low Range	1.4	26047	1850.7
		3	26055	1851.5
		5	26065	1852.5
		10	26090	1855
		15	26115	1857.5
		20	26140	1860
	Middle Range	1.4/3/5/10/15/20	26340	1880
	High Range	1.4	26683	1914.3
		3	26675	1913.5
		5	26665	1912.5
		10	26640	1910
		15	26615	1907.5
		20	26590	1905
LTE band 26 TX:824-849MHz		Low Range	1.4	26797
	3		26805	825.5
	5		26815	826.5
	10		26840	829
	15		26865	831.5
	Middle Range	1.4/3/5/10/15	26915	836.5
	High Range	1.4	27033	848.3
		3	27025	847.5
		5	27015	846.5
		10	26990	844
15		26965	841.5	
LTE band 26 TX: 814-824MHz	Low Range	1.4	26697	814.7
		3	26705	815.5
		5	26715	816.5
		10	/	/
		15	26765	821.5
	Middle Range	1.4/3/5/10	26740	819
	High Range	1.4	26783	823.3
		3	26775	822.5
		5	26765	821.5
		10	/	/
15		/	/	
LTE Band 30 TX:2305-2315MHz	Low Range	5	27685	2307.5
		10	/	/
	Middle Range	5/10	27710	2310
	High Range	5	27735	2312.5
		10	/	/
LTE Band 40A TX:2305-2315MHz	Low Range	5	38725	2307.5
		10	/	/
	Middle Range	5/10	38750	2310
	High Range	5	38775	2312.5

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

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Band	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink (MHz)
		10	/	/
LTE Band 40B TX: 2350-2360MHz	Low Range	5	39175	2352.5
		10	/	/
	Middle Range	5/10	39200	2355
	High Range	5	39225	2357.5
		10	/	/
LTE Band 38 TX: 2570-2620MHz	Low Range	5	37775	2572.5
		10	37800	2575
		15	37825	2577.5
		20	37850	2580
	Middle Range	5/10/ 15/20	38000	2595
	High Range	5	38225	2617.5
		10	38200	2615
		15	38175	2612.5
		20	38150	2610
	LTE Band 41 TX: 2496-2690MHz	Low Range	5	39675
10			39700	2501
15			39725	2503.5
20			39750	2506
Middle Range		5/10/ 15/20	40620	2593
High Range		5	41565	2687.5
		10	41540	2685
		15	41515	2682.5
		20	41490	2680
LTE Band 66 TX: 1710-1780MHz	Low Range	1.4	131979	1710.7
		3	131987	1711.5
		5	131997	1712.5
		10	132022	1715
		15	132047	1717.5
		20	132072	1720
	Middle Range	1.4/3/5/10/ 15/20	132322	1745
	High Range	1.4	132665	1779.3
		3	132657	1778.5
		5	132647	1777.5
		10	132622	1775
		15	132597	1772.5
		20	132572	1770
LTE Band 71 TX: 663-698MHz		Low Range	5	133147
	10		133172	668
	15		133197	670.5
	20		133222	673
	Middle Range	5/10/15	133297	680.5
		20	133322	683
	High Range	5	133447	695.5
		10	133422	693
		15	133397	690.5
		20	133372	688

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4.4 SYSTEM TEST CONFIGURATION

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, radiated emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario. It was powered by a 3.8V battery. Only the worst case data were recorded in this test report.

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, X/Y/Z axis, and antenna ports.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000MHz. The resolution is 1 MHz or greater for frequencies above 1000MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

Radiated emission measurement were performed from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

4.5 PRE-SCAN

Pre-scan all bandwidth and RB, find worse case mode are chosen to the report, the LTE worse case mode applicability and tested channel detail as below:

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Conducted output power	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	--	--	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	7	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	13	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	17	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	25	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	26	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	--	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	30	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	40	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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99%&26dB Bandwidth	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
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	13	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	17	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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peak-to-ave rage ratio	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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	17	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	--	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	30	-	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	40	-	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	38	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	41	-	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	66	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Band Edge at antenna terminals	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	--	--	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	7	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	12	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	13	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	17	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	25	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	26	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	--	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	30	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
40	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
	38	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	71	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
Spurious emissions at antenna terminals	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☐	☐	☒	☒	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	12	☒	☒	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	13	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	17	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	30	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	40	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	38	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	25	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	26	☒	☒	☒	☒	☒	--	☒	☒	☐	☒	☐	☐	☒	☒	☒
41	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒	
66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒	
71	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒	
Field strength of spurious radiation	2	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	4	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	5	☐	☐	☐	☒	--	--	☒	☐	☐	☒	☐	☐	☒	☒	☒
	7	-	-	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	12	☐	☐	☐	☒	-	-	☒	☐	☐	☒	☐	☐	☒	☒	☒
	13	-	-	☐	☒	-	-	☒	☐	☐	☒	☐	☐	☒	☒	☒
	17	-	-	☒	☒	-	-	☒	☐	☐	☒	☐	☐	☒	☒	☐
	25	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	26	☐	☐	☐	☐	☒	--	☒	☐	☐	☒	☐	☐	☒	☒	☒
	30	-	-	☐	☒	-	-	☒	☐	☐	☒	☐	☐	☒	☒	☒
	40	-	-	☐	☒	-	-	☒	☐	☐	☒	☐	☐	☒	☒	☒
	38	-	-	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
41	-	-	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒	
66	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒	
71	-	-	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒	
Frequency stability	2	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	4	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	5	☐	☐	☐	☒	--	--	☒	☐	☐	☐	☐	☒	☐	☒	☐
	7	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	12	☐	☐	☐	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	13	-	-	☐	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	17	-	-	☒	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	25	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	26	☐	☐	☐	☐	☒	--	☒	☐	☐	☐	☐	☒	☐	☒	☐
	30	-	-	☐	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	40	-	-	☐	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	38	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
41	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐	
66	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐	
71	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐	

Remark:
 The mark "☒" means is chosen for testing; The mark "☐" means is not chosen for testing;
 The mark "-" means is not supported bandwidth

5. RADIO TECHNICAL REQUIREMENTS SPECIFICATION

5.1 REFERENCE DOCUMENTS FOR TESTING

No.	Identity	Document Title
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations
2	FCC 47 CFR Part 22	Public Mobile Services
3	FCC 47 CFR Part 27	Miscellaneous Wireless Communications Services
4	FCC 47 CFR Part 24	Personal Communications Services
5	FCC 47 CFR Part 90	Private Land Mobile Radio Services
6	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
7	KDB 971168 D01	KDB 971168 D01 Power Meas License Digital Systems v03r01

5.2 CONDUCTED OUTPUT POWER

FCC 47 CFR Part 2.1046(a)

LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.232(c)

LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(4)

LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.913(a)

Test Requirement: **LTE Band 7 & Band 38 & Band 41:** FCC 47 CFR Part 27.50(h)(2)

LTE Band 12 & Band 17 & Band 71: FCC 47 CFR Part 27.50(c)(10)

LTE Band 13: FCC 47 CFR Part 27.50(b)(10)

LTE Band 26: FCC 47 CFR Part 90.635

LTE Band 30 & Band 40: FCC 47 CFR Part 27.50(a)(3)

Test Method:

KDB 971168 D01v03r01 & ANSI C63.26-2015

Limit:

FCC 47 CFR Part 22.913(a):

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

FCC 47 CFR Part 24.232(c):

Mobile and portable stations are limited to 2 watts EIRP.

FCC 47 CFR Part 27.50(d)(4):

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.

FCC 47 CFR Part 27.50(c)(10):

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

FCC 47 CFR Part 27.50(h)(2):

Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

FCC 47 CFR Part 27.50(b)(10):

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

FCC 47 CFR Part 27.50(a)(3):

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

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

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band. Power averaging shall not include intervals in which the transmitter is off.

FCC 47 CFR Part 90.635:

(a) The effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBw) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.

(b) The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

Table—Equivalent Power and Antenna Heights for Base Stations in the 851–869 MHz and 935–940 MHz Bands Which Have a Requirement for a 32 km (20 mi) Service Area Radius

Antenna height (ATT) meters (feet)	Effective radiated power (watts) ^{1 2 4}
Above 1,372 (4,500)	65
Above 1,220 (4,000) to 1,372 (4,500)	70
Above 1,067 (3,500) to 1,220 (4,000)	75
Above 915 (3,000) to 1,067 (3,500)	100
Above 763 (2,500) to 915 (3,000)	140
Above 610 (2,000) to 763 (2,500)	200
Above 458 (1,500) to 610 (2,000)	350
Above 305 (1,000) to 458 (1,500)	600
Up to 305 (1,000)	³ 1,000

1. Power is given in terms of effective radiated power (ERP).
2. Applicants in the Los Angeles, CA, area who demonstrate a need to serve both the downtown and fringe areas will be permitted to utilize an ERP of 1 kw at the following mountaintop sites: Santiago Park, Sierra Peak, Mount Lukens, and Mount Wilson.
3. Stations with antennas below 305 m (1,000 ft) (AAT) will be restricted to a maximum power of 1 kw (ERP).
4. Licensees in San Diego, CA, will be permitted to utilize an ERP of 500 watts at the following mountaintop sites: Palomar, Otay, Woodson and Miguel.

Test Procedure:

The EUT was set up for the maximum power with CMW500, and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

5.2.1 LTE Band 2

			Conducted Power(dBm)					
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	18607	18900	19193	18607	18900	19193
			1850.7 MHz	1880 MHz	1909.3 MHz	1850.7 MHz	1880 MHz	1909.3 MHz
2	1.4	1@0	23.10	23.09	23.10	21.96	21.88	22.04
		1@3	23.19	23.16	23.13	21.99	21.89	22.15
		1@5	23.13	23.04	23.01	21.89	21.84	22.03
		3@0	23.19	23.19	23.19	22.21	22.31	22.11
		3@1	23.22	23.20	23.19	22.41	22.23	22.35
		3@3	23.24	23.19	23.20	22.26	22.33	22.11
		6@0	22.26	22.28	22.25	21.18	21.28	21.28
Band	Bandwidth (MHz)	RB	18615	18900	19185	18615	18900	19185
			1851.5 MHz	1880 MHz	1908.5 MHz	1851.5 MHz	1880 MHz	1908.5 MHz
2	3	1@0	23.02	22.96	23.01	21.81	22.56	21.96
		1@8	23.14	23.08	23.10	21.96	22.59	22.11
		1@14	23.06	22.99	22.98	21.92	22.51	22.02
		8@0	22.27	22.20	22.25	21.29	21.36	21.18
		8@4	22.29	22.24	22.25	21.33	21.40	21.42
		8@7	22.22	22.22	22.20	21.27	21.36	21.15
		15@0	22.23	22.21	22.22	21.27	21.28	21.15
Band	Bandwidth (MHz)	RB	18625	18900	19175	18625	18900	19175
			1852.5 MHz	1880 MHz	1907.5 MHz	1852.5 MHz	1880 MHz	1907.5 MHz
2	5	1@0	23.24	23.27	23.30	22.15	22.05	22.45
		1@12	23.43	23.36	23.39	22.26	22.16	22.56
		1@24	23.33	23.24	23.29	22.19	22.07	22.44
		12@0	22.27	22.28	22.34	21.28	21.28	21.32
		12@7	22.37	22.37	22.36	21.43	21.43	21.49
		12@13	22.36	22.23	22.28	21.27	21.25	21.32
		25@0	22.28	22.26	22.30	21.34	21.40	21.33
Band	Bandwidth (MHz)	RB	18650	18900	19150	18650	18900	19150
			1855 MHz	1880 MHz	1905 MHz	1855 MHz	1880 MHz	1905 MHz
2	10	1@0	23.31	23.33	23.30	22.16	22.86	22.33
		1@25	23.43	23.31	23.36	22.22	22.94	22.40
		1@49	23.40	23.29	23.38	22.20	22.84	22.35
		25@0	22.30	22.28	22.38	21.40	21.35	21.42
		25@12	22.36	22.35	22.35	21.52	21.39	21.43
		25@25	22.36	22.26	22.30	21.49	21.34	21.32
		50@0	22.37	22.34	22.33	21.40	21.30	21.34
Band	Bandwidth (MHz)	RB	18675	18900	19125	18675	18900	19125
			1857.5 MHz	1880 MHz	1902.5 MHz	1857.5 MHz	1880 MHz	1902.5 MHz
2	15	1@0	23.23	23.27	23.27	22.44	22.81	22.32
		1@37	23.34	23.37	23.39	22.64	22.93	22.33
		1@74	23.24	23.24	23.26	22.48	22.82	22.30
		36@0	22.31	22.32	22.29	21.32	21.35	21.34
		36@20	22.34	22.31	22.33	21.39	21.35	21.41
		36@39	22.33	22.26	22.28	21.39	21.26	21.25
		75@0	22.37	22.31	22.38	21.38	21.36	21.33
Band	Bandwidth (MHz)	RB	18700	18900	19100	18700	18900	19100
			1860 MHz	1880 MHz	1900 MHz	1860 MHz	1880 MHz	1900 MHz
2	20	1@0	23.15	23.25	23.17	22.60	22.42	22.22
		1@49	23.39	23.43	23.40	22.82	22.57	22.49
		1@99	23.19	23.19	23.25	22.66	22.37	22.32
		50@0	22.39	22.36	22.26	21.34	21.31	21.23
		50@24	22.50	22.37	22.40	21.42	21.41	21.44
		50@50	22.44	22.28	22.21	21.43	21.31	21.22
		100@0	22.40	22.28	22.21	21.43	21.32	21.24

5.2.2 LTE Band 4

Modulation			Conducted Power(dBm)					
Band	Bandwidth (MHz)	RB	QPSK			16QAM		
			19957 1710.7 MHz	20175 1732.5 MHz	20393 1754.3 MHz	19957 1710.7 MHz	20175 1732.5 MHz	20393 1754.3 MHz
4	1.4	1@0	23.48	23.43	23.36	22.17	22.33	22.10
		1@3	23.55	23.41	23.40	22.25	22.38	22.17
		1@5	23.49	23.44	23.34	22.19	22.33	22.11
		3@0	23.52	23.48	23.36	22.60	22.34	22.36
		3@1	23.58	23.50	23.38	22.50	22.62	22.52
		3@3	23.57	23.48	23.41	22.63	22.37	22.35
		6@0	22.64	22.57	22.53	21.58	21.54	21.35
Band	Bandwidth (MHz)	RB	19965 1711.5 MHz	20175 1732.5 MHz	20385 1753.5 MHz	19965 1711.5 MHz	20175 1732.5 MHz	20385 1753.5 MHz
4	3	1@0	23.46	23.31	23.29	22.10	22.77	22.17
		1@8	23.50	23.40	23.40	22.24	22.85	22.30
		1@14	23.42	23.35	23.28	22.24	22.70	22.21
		8@0	22.59	22.48	22.44	21.62	21.64	21.40
		8@4	22.65	22.55	22.53	21.65	21.63	21.56
		8@7	22.59	22.47	22.44	21.57	21.62	21.36
		15@0	22.53	22.44	22.43	21.56	21.47	21.35
Band	Bandwidth (MHz)	RB	19975 1712.5 MHz	20175 1732.5 MHz	20375 1752.5 MHz	19975 1712.5 MHz	20175 1732.5 MHz	20375 1752.5 MHz
4	5	1@0	23.65	23.59	23.54	22.45	22.35	22.57
		1@12	23.77	23.69	23.68	22.55	22.37	22.70
		1@24	23.63	23.58	23.55	22.47	22.27	22.58
		12@0	22.62	22.57	22.45	21.55	21.55	21.43
		12@7	22.69	22.63	22.53	21.73	21.68	21.62
		12@13	22.63	22.58	22.50	21.60	21.54	21.48
		25@0	22.64	22.56	22.49	21.65	21.63	21.50
Band	Bandwidth (MHz)	RB	20000 1715 MHz	20175 1732.5 MHz	20350 1750 MHz	20000 1715 MHz	20175 1732.5 MHz	20350 1750 MHz
4	10	1@0	23.74	23.73	23.65	22.46	23.07	22.54
		1@25	23.74	23.68	23.62	22.50	23.07	22.57
		1@49	23.73	23.67	23.62	22.47	23.06	22.52
		25@0	22.59	22.53	22.50	21.72	21.61	21.53
		25@12	22.64	22.61	22.55	21.73	21.66	21.59
		25@25	22.60	22.54	22.53	21.73	21.61	21.50
		50@0	22.60	22.59	22.53	21.65	21.57	21.49
Band	Bandwidth (MHz)	RB	20025 1717.5 MHz	20175 1732.5 MHz	20325 1747.5 MHz	20025 1717.5 MHz	20175 1732.5 MHz	20325 1747.5 MHz
4	15	1@0	23.67	23.59	23.61	22.77	23.06	22.51
		1@37	23.73	23.64	23.66	22.82	23.09	22.60
		1@74	23.60	23.53	23.54	22.74	22.98	22.47
		36@0	22.71	22.66	22.63	21.66	21.65	21.59
		36@20	22.75	22.69	22.69	21.69	21.67	21.71
		36@39	22.71	22.62	22.55	21.65	21.61	21.57
		75@0	22.75	22.63	22.63	21.67	21.61	21.58
Band	Bandwidth (MHz)	RB	20050 1720 MHz	20175 1732.5 MHz	20300 1745 MHz	20050 1720 MHz	20175 1732.5 MHz	20300 1745 MHz
4	20	1@0	23.60	23.59	23.50	22.94	22.64	22.52
		1@49	23.77	23.72	23.70	23.12	22.83	22.72
		1@99	23.55	23.52	23.49	22.94	22.62	22.48
		50@0	22.63	22.63	22.51	21.59	21.61	21.54
		50@24	22.76	22.73	22.65	21.72	21.69	21.62
		50@50	22.63	22.59	22.52	21.63	21.54	21.53
		100@0	22.62	22.57	22.54	21.63	21.58	21.54

5.2.3 LTE Band 5

			Conducted Power(dBm)					
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	20407	20525	20643	20407	20525	20643
			824.7 MHz	836.5 MHz	848.3 MHz	824.7 MHz	836.5 MHz	848.3 MHz
5	1.4	1@0	23.34	23.32	23.48	22.35	22.23	22.19
		1@3	23.35	23.42	23.51	22.39	22.25	22.18
		1@5	23.37	23.43	23.55	22.31	22.22	22.13
		3@0	23.44	23.47	23.49	22.38	22.50	22.50
		3@1	23.47	23.53	23.52	22.64	22.72	22.45
		3@3	23.43	23.49	23.49	22.39	22.50	22.56
		6@0	22.51	22.58	22.63	21.54	21.51	21.54
Band	Bandwidth (MHz)	RB	20415	20525	20635	20415	20525	20635
			825.5 MHz	836.5 MHz	847.5 MHz	825.5 MHz	836.5 MHz	847.5 MHz
5	3	1@0	23.54	23.32	23.32	22.81	22.32	22.12
		1@8	23.36	23.42	23.46	22.85	22.36	22.24
		1@14	23.25	23.28	23.45	22.72	22.27	22.14
		8@0	22.47	22.57	22.52	21.61	21.52	21.59
		8@4	22.54	22.56	22.56	21.67	21.65	21.59
		8@7	22.50	22.50	22.46	21.64	21.45	21.50
		15@0	22.46	22.49	22.50	21.51	21.44	21.52
Band	Bandwidth (MHz)	RB	20425	20525	20625	20425	20525	20625
			826.5 MHz	836.5 MHz	846.5 MHz	826.5 MHz	836.5 MHz	846.5 MHz
5	5	1@0	23.52	23.60	23.57	22.44	22.37	22.75
		1@12	23.63	23.71	23.69	22.54	22.53	22.81
		1@24	23.53	23.54	23.67	22.41	22.37	22.66
		12@0	22.53	22.59	22.63	21.50	21.59	21.59
		12@7	22.58	22.65	22.60	21.68	21.74	21.78
		12@13	22.53	22.55	22.40	21.48	21.56	21.42
		25@0	22.54	22.63	22.54	21.59	21.69	21.56
Band	Bandwidth (MHz)	RB	20450	20525	20600	20450	20525	20600
			829 MHz	836.5 MHz	844 MHz	829 MHz	836.5 MHz	844 MHz
5	10	1@0	23.60	23.63	23.61	22.47	23.16	22.61
		1@25	23.65	23.63	23.65	22.42	23.25	22.61
		1@49	23.66	23.65	23.71	22.53	23.17	22.65
		25@0	22.61	22.63	22.56	21.68	21.71	21.70
		25@12	22.59	22.69	22.69	21.72	21.74	21.76
		25@25	22.56	22.65	22.57	21.64	21.71	21.58
		50@0	22.58	22.63	22.60	21.58	21.68	21.66

5.2.4 LTE Band 7

			Conducted Power(dBm)					
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	20775	21100	21425	20775	21100	21425
			2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz
7	5	1@0	22.83	22.91	22.94	21.61	22.05	21.80
		1@12	23.02	23.07	23.10	21.72	22.17	21.90
		1@24	22.88	22.95	22.98	21.66	22.08	21.81
		12@0	21.89	21.93	22.01	20.83	20.94	20.93
		12@7	21.96	21.96	22.03	21.01	21.10	21.06
		12@13	21.94	21.95	21.98	20.87	20.94	20.92
		25@0	21.90	21.93	21.97	20.95	20.95	21.05
Band	Bandwidth (MHz)	RB	20800	21100	21400	20800	21100	21400
7	10	1@0	22.97	23.00	23.02	22.47	21.97	21.76
		1@25	23.01	23.05	23.05	22.48	21.98	21.91
		1@49	23.00	23.02	23.03	22.48	21.99	21.87
		25@0	21.91	21.97	22.03	20.97	20.98	21.10
		25@12	21.93	21.99	22.01	21.00	21.06	21.14
		25@25	21.90	21.97	21.99	20.92	21.03	21.08
		50@0	21.94	21.97	22.03	20.92	20.95	21.05
Band	Bandwidth (MHz)	RB	20825	21100	21375	20825	21100	21375
7	15	1@0	22.86	22.93	22.92	22.07	22.41	21.89
		1@37	22.98	23.00	23.08	22.12	22.54	22.06
		1@74	22.86	22.91	22.97	21.98	22.40	21.98
		36@0	21.92	21.92	22.00	20.87	20.93	21.01
		36@20	21.97	22.01	22.06	20.95	20.95	21.03
		36@39	21.91	21.97	21.96	20.88	20.95	20.99
		75@0	21.97	21.97	22.03	20.91	20.93	21.02
Band	Bandwidth (MHz)	RB	20850	21100	21350	20850	21100	21350
7	20	1@0	22.81	22.86	22.83	21.92	21.85	22.22
		1@49	22.99	23.00	23.13	22.13	22.11	22.46
		1@99	22.79	22.80	22.89	21.90	21.91	22.31
		50@0	21.82	21.88	22.03	20.78	20.87	21.01
		50@24	21.96	22.00	22.03	20.97	21.02	20.98
		50@50	21.82	21.88	21.90	20.77	20.89	20.91
		100@0	21.79	21.87	22.00	20.82	20.88	20.95

5.2.5 LTE Band 12

			Conducted Power(dBm)					
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	23017	23095	23173	23017	23095	23173
			699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz
12	1.4	1@0	23.29	23.27	23.23	22.17	22.01	22.20
		1@3	23.26	23.21	23.28	22.16	21.95	22.27
		1@5	23.18	23.16	23.22	22.07	21.96	22.22
		3@0	23.32	23.33	23.35	22.39	22.43	22.26
		3@1	23.34	23.34	23.39	22.57	22.37	22.55
		3@3	23.37	23.31	23.35	22.41	22.45	22.29
		6@0	22.45	22.39	22.43	21.39	21.50	21.51
Band	Bandwidth (MHz)	RB	23025	23095	23165	23025	23095	23165
			700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz
12	3	1@0	23.19	23.09	23.10	22.04	22.69	22.10
		1@8	23.21	23.12	23.26	22.12	22.76	22.19
		1@14	23.17	23.13	23.20	22.01	22.61	22.16
		8@0	22.42	22.32	22.41	21.48	21.48	21.36
		8@4	22.47	22.38	22.43	21.52	21.55	21.57
		8@7	22.43	22.32	22.42	21.45	21.54	21.41
		15@0	22.36	22.32	22.40	21.42	21.39	21.32
Band	Bandwidth (MHz)	RB	23035	23095	23155	23035	23095	23155
			701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
12	5	1@0	23.47	23.42	23.42	22.37	22.20	22.53
		1@12	23.52	23.50	23.53	22.41	22.23	22.70
		1@24	23.41	23.38	23.47	22.31	22.17	22.59
		12@0	22.45	22.39	22.45	21.37	21.38	21.49
		12@7	22.56	22.45	22.48	21.58	21.58	21.67
		12@13	22.43	22.41	22.42	21.38	21.43	21.48
		25@0	22.45	22.44	22.43	21.52	21.50	21.53
Band	Bandwidth (MHz)	RB	23060	23095	23130	23060	23095	23130
			704 MHz	707.5 MHz	711 MHz	704 MHz	707.5 MHz	711 MHz
12	10	1@0	23.48	23.41	23.46	22.33	23.05	22.45
		1@25	23.47	23.46	23.50	22.33	23.02	22.47
		1@49	23.48	23.52	23.63	22.31	23.02	22.50
		25@0	22.40	22.38	22.36	21.52	21.53	21.49
		25@12	22.46	22.49	22.48	21.63	21.61	21.63
		25@25	22.48	22.45	22.35	21.56	21.57	21.43
		50@0	22.37	22.46	22.38	21.50	21.51	21.45