



FCC TEST REPORT

Product Name: Smart Mobile Payment Terminal
Trade Mark: PAX
Model No.: A99
Report Number: 24090313575RFM-2
Test Standards: FCC 47 CFR Part 22
FCC 47 CFR Part 24
FCC 47 CFR Part 27
FCC ID: V5PA99
Test Result: PASS
Date of Issue: November 22, 2024

Prepared for:

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Prepared by:

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November 22, 2024

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Version

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V1.0	November 22, 2024	Original



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1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	PAX Technology Limited
Address of Applicant:	Room 2416, 24/F., Sun Hung Kai Centre, 30 Harbour Road, Wanchai, Hong Kong
Manufacturer:	PAX Computer Technology (Shenzhen) Co., Ltd.
Address of Manufacturer:	Room 701, PAX Technology Building, Shanxia Community, Pinghu Sub-district, Longgang District, Shenzhen, China

1.2 EUT INFORMATION

1.2.1 General Description of EUT

Product Name:	Smart Mobile Payment Terminal		
Model No.:	A99		
Trade Mark:	PAX		
EUT Supports Function: (Provided by the customer)	GSM Bands:	GSM850/PCS 1900	
	UTRA Bands:	WCDMA Band II/ Band IV/ Band V	
	E-UTRA Bands:	FDD Band 2/ Band 4/ Band 5/ Band 7/ Band 38/ Band 40/ Band 41/ Band 66	
	2.4 GHz ISM Band:	IEEE 802.11b/g/n	
		Bluetooth 5.0	
	RNSS Band:	1559 MHz to 1610 MHz	BDS/ GLONASS/ GPS/ SBAS
NFC:	13.553 MHz to 13.567 MHz		
Sample Received Date:	September 3, 2024		
Sample Tested Date:	September 10, 2024 to October 24, 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(1)	
Model No.:	SW-0983
Input:	100-240 V~50/60 Hz 0.5 A
Output:	5.0 V $\Rightarrow$ 2.0 A

Adapter(2)	
Model No.:	GLH50E2000HW
Input:	100-240 V~50/60 Hz 0.40 A
Output:	5.0 V $\Rightarrow$ 2.0 A

Cable	
Connector:	USB Cable
Cable Type:	Unshielded without ferrite
Length:	1.0 Meter

Battery	
Model No.:	BF1024
Battery Type:	Lithium-ion Polymer Battery
Rated Voltage:	7.2 Vdc
Rated Capacity:	2600 mAh

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1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Support Networks:	Single Carrier: LTE Band 2/4/5/7/38/41/66	
Type of Modulation:	QPSK, 16QAM	
Antenna Type: (Provided by the customer)	PIFA Antenna	
Antenna Gain: (Provided by the customer)	LTE Band 2:	1.47 dBi
	LTE Band 4:	2.66 dBi
	LTE Band 5:	-3.33 dBi
	LTE Band 7:	4.49 dBi
	LTE Band 38:	3.83 dBi
	LTE Band 40:	2.59 dBi
	LTE Band 41:	4.49 dBi
	LTE Band 66:	2.79 dBi
Sample No.:	Radiated: S202409034259-ZJA02/6	
	Conducted: S202409034259-ZJA01/6	
Normal Test Voltage:	7.2 Vdc	
Extreme Test Voltage:	6.8 to 8.4Vdc	
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)			Conducted (Average)	ERP/EIRP (Average)			
2	1.4	QPSK	1850.7-1909.3	24.32	25.79	0.3793	1.0997	1M10G7D
		16QAM		23.84	25.31	0.3396	1.1016	1M10W7D
	3	QPSK	1851.5-1908.5	24.34	25.81	0.3811	2.7151	2M72G7D
		16QAM		23.90	25.37	0.3443	2.7036	2M70W7D
	5	QPSK	1852.5-1907.5	24.36	25.83	0.3828	4.5042	4M50G7D
		16QAM		23.39	24.86	0.3062	4.5255	4M53W7D
	10	QPSK	1855.0-1905.0	24.38	25.85	0.3846	9.0103	9M01G7D
		16QAM		23.81	25.28	0.3373	9.0029	9M00W7D
	15	QPSK	1857.5-1902.5	24.22	25.69	0.3707	13.5070	13M5G7D
		16QAM		23.93	25.40	0.3467	13.5230	13M5W7D
	20	QPSK	1860.0-1900.0	24.45	25.92	0.3908	18.0840	18M1G7D
		16QAM		23.90	25.37	0.3443	18.0420	18M0W7D
4	1.4	QPSK	1710.7-1754.3	24.49	27.15	0.5188	1.0977	1M10G7D
		16QAM		23.89	26.55	0.4519	1.1019	1M10W7D
	3	QPSK	1711.5-1753.5	24.40	27.06	0.5082	2.7204	2M72G7D
		16QAM		24.02	26.68	0.4656	2.7062	2M71W7D
	5	QPSK	1712.5-1752.5	24.55	27.21	0.5260	4.5096	4M51G7D
		16QAM		23.60	26.26	0.4227	4.5197	4M52W7D
	10	QPSK	1715-1750	24.37	27.03	0.5047	8.9992	9M10G7D
		16QAM		24.15	26.81	0.4797	9.0054	9M01W7D
	15	QPSK	1717.5-1747.5	24.42	27.08	0.5105	13.5020	13M5G7D
		16QAM		23.39	26.05	0.4027	13.5170	13M5W7D
	20	QPSK	1720-1745	24.68	27.34	0.5420	18.0840	18M1G7D
		16QAM		23.34	26.00	0.3981	18.0630	18M1W7D
5	1.4	QPSK	824.7-848.3	23.87	18.39	0.0690	1.0989	1M10G7D
		16QAM		23.32	17.84	0.0608	1.1041	1M10W7D
	3	QPSK	825.5-847.5	23.98	18.50	0.0708	2.7162	2M72G7D
		16QAM		23.42	17.94	0.0622	2.7066	2M71W7D
	5	QPSK	826.5-846.5	24.02	18.54	0.0714	4.5057	4M51G7D
		16QAM		23.02	17.54	0.0568	4.5175	4M52W7D
	10	QPSK	829-844	24.03	18.55	0.0716	9.0091	9M01G7D
		16QAM		23.50	18.02	0.0634	9.0110	9M01W7D
7	5	QPSK	2502.5-2567.5	24.38	28.87	0.7709	4.5100	4M5G7D
		16QAM		23.65	28.14	0.6516	4.5301	4M53W7D
	10	QPSK	2505-2565	24.13	28.62	0.7278	8.9958	9M00G7D
		16QAM		24.04	28.53	0.7129	9.0252	9M03W7D
	15	QPSK	2507.5-2562.5	23.95	28.44	0.6982	13.5080	13M5G7D
		16QAM		23.99	28.48	0.7047	13.5460	13M5W7D
	20	QPSK	2510-2560	24.46	28.95	0.7852	18.0450	18M0G7D
		16QAM		24.08	28.57	0.7194	18.0870	18M1W7D
38	5	QPSK	2572.5-2617.5	23.84	27.67	0.5848	4.5135	4M51G7D
		16QAM		23.89	27.72	0.5916	4.5114	4M51W7D
	10	QPSK	2575-2615	23.70	27.53	0.5662	9.0143	9M01G7D
		16QAM		23.73	27.56	0.5702	9.0088	9M01W7D
	15	QPSK	2577.5-2612.5	24.02	27.85	0.6095	13.5350	13M5G7D
		16QAM		24.02	27.85	0.6095	13.5320	13M5W7D
	20	QPSK	2580-2610	24.12	27.95	0.6237	18.0120	18M0G7D
		16QAM		23.71	27.54	0.5675	18.0260	18M0W7D
40A	5	QPSK	2307.5-2312.5	20.14	22.73	0.1875	4.5143	4M51G7D
		16QAM		19.11	21.70	0.1479	4.5376	4M54W7D
	10	QPSK	2310.0	19.91	22.50	0.1778	9.0085	9M01G7D
		16QAM		21.18	23.77	0.2382	8.9904	8M99W7D
40B	5	QPSK	2352.5-2357.5	20.37	22.96	0.1977	4.5163	4M52G7D
		16QAM		20.35	22.94	0.1968	4.5363	4M54W7D
	10	QPSK	2355.0	20.39	22.98	0.1986	8.9927	8M99G7D
		16QAM		19.96	22.55	0.1799	8.9755	8M98W7D
41	5	QPSK	2557.5-2652.5	23.87	28.36	0.6855	4.5162	4M52G7D
		16QAM		23.78	28.27	0.6714	4.5158	4M52W7D
	10	QPSK	2560-2650	23.60	28.09	0.6442	9.0407	9M04G7D
		16QAM		23.87	28.36	0.6855	9.0077	9M01W7D
	15	QPSK	2562.5-2647.5	23.67	28.16	0.6546	13.5340	13M5G7D
		16QAM		23.75	28.24	0.6668	13.5150	13M5W7D
	20	QPSK	2565-2645	24.21	28.70	0.7413	18.0030	18M0G7D
		16QAM						

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66	1.4	16QAM	1710.7-1779.3	23.82	28.31	0.6776	17.9900	18M0W7D
		QPSK		24.39	27.18	0.5224	1.0974	1M10G7D
		16QAM		23.85	26.64	0.4613	1.1036	1M10W7D
	3	QPSK	1711.5-1778.5	24.43	27.22	0.5272	2.7181	2M72G7D
		16QAM		23.21	26.00	0.3981	2.7085	2M71W7D
		QPSK		24.36	27.15	0.5188	4.5094	4M51G7D
	5	16QAM	1712.5-1777.5	23.61	26.40	0.4365	4.5225	4M52W7D
		QPSK		24.38	27.17	0.5212	9.0064	9M01G7D
		16QAM		23.90	26.69	0.4667	8.9960	9M00W7D
	10	QPSK	1715-1775	24.36	27.15	0.5188	13.5010	13M5G7D
		16QAM		23.89	26.68	0.4656	13.5100	13M5W7D
		QPSK		24.55	27.34	0.5420	18.0350	18M0G7D
	15	16QAM	1717.5-1772.5	24.03	26.82	0.4808	18.0170	18M0W7D
		QPSK						
		16QAM						

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	UnionTek

2) Support Cable

Cable No.	Description	Connector	Length	Supplied by
1	Antenna Cable	SMA	0.1 Meter	UnionTrust

1.5 TEST LOCATION

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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.

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.

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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 %

2. TEST SUMMARY

FCC 47 CFR Part 24 Test Cases (Band 2)			
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)			
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 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
☒	3m SAC	ETS-LINDGREN	3M	Euroshiedpn-CT001270-1317	11-Nov-2023	10-Nov-2026
☒	Receiver	R&S	ESIB26	100114	27-Oct-2023	26-Oct-2024
☒	Broadband Antenna	ETS-LINDGREN	3142E	00201566	30-Oct-2023	29-Oct-2024
☒	6dB Attenuator	Talent	RA6A5-N-18	18103001	30-Oct-2023	29-Oct-2024
☒	Preamplifier	HP	8447F	2805A02960	31-Oct-2023	30-Oct-2024
☒	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3117-PA	00201541	01-Apr-2024	31-Mar-2025
☒	Pre-amplifier	ETS-LINDGREN	00118385	00201874	31-Oct-2023	30-Oct-2024
☒	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3116C-PA	00202652	30-Oct-2023	29-Oct-2024
☒	Pre-amplifier	ETS-LINDGREN	00118384	00202652	30-Oct-2023	29-Oct-2024
☒	Multi device Controller	ETS-LINDGREN	7006-001	00160105	N/A	N/A
☒	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
☒	EXA Signal Analyzer	KEYSIGHT	N9010B	MY62060155	29-Mar-2024	28-Mar-2025
☒	DC Source	KIKUSUI	PWR400L	LK003024	19-July-2024	18-July-2025
☒	Digital multimeter	FLUKE	15B+	30701460WS15	31-Oct-2023	30-Oct-2024
☒	Temp & Humidity chamber	Votisch	VT4002	58566133290020	29-Mar-2024	28-Mar-2025
☒	Wideband Radio Communication Tester	R&S	CMW500	119583	29-Mar-2024	28-Mar-2025
☐	Wideband Radio Communication Tester	R&S	CMW500	120932	29-Mar-2024	28-Mar-2025

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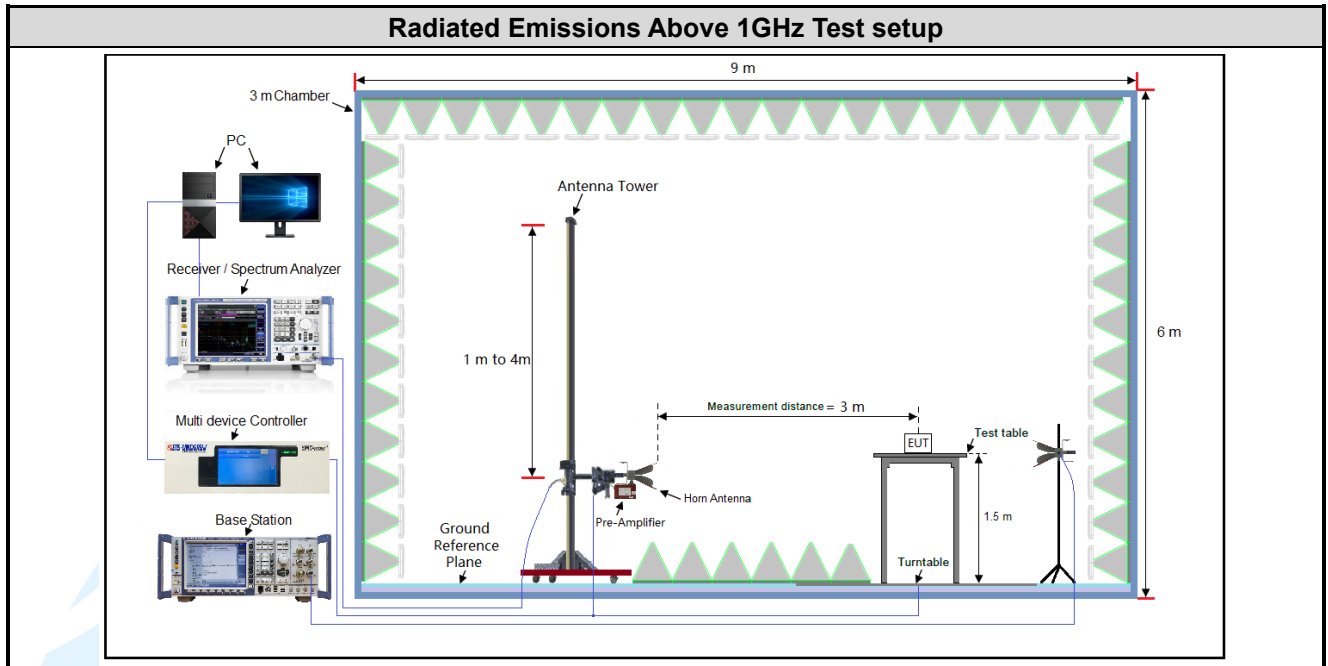
Tel: +86-755-28230888

Fax: +86-755-28230886

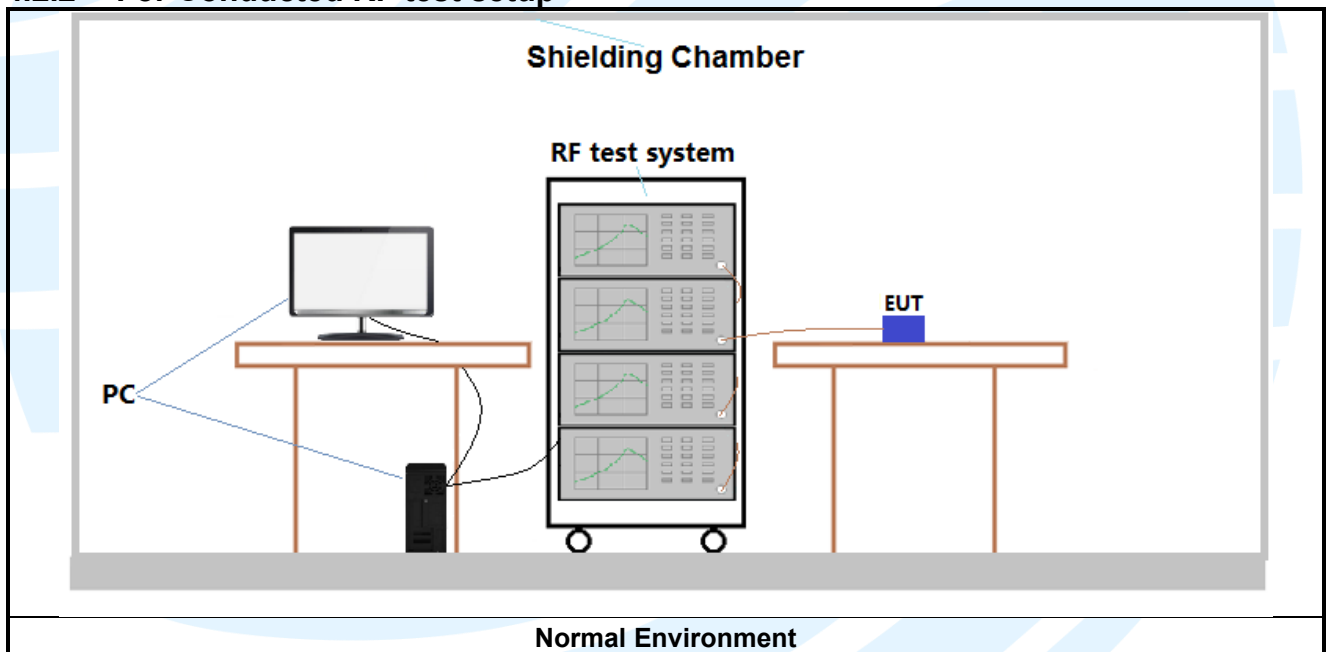
E-mail: info@uttlab.com

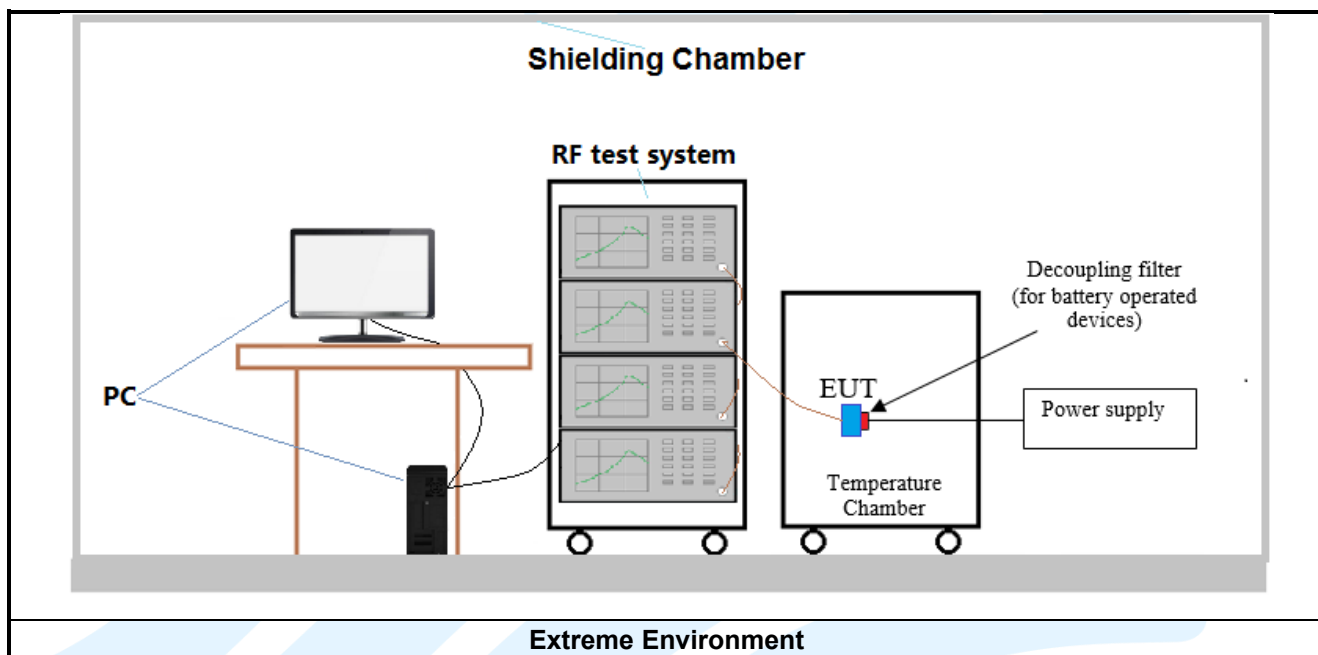
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4.2.2 For Conducted RF test setup





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
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

Band	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink (MHz)
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 40A TX:2305-2315MHz	Low Range	5	38725	2307.5
		10	/	/
	Middle Range	5/10	38750	2310
	High Range	5	38775	2312.5
		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 41 TX: 2555-2655MHz	Low Range	5	40265	2557.5
		10	40290	2560
		15	40315	2562.5
		20	40340	2565
	Middle Range	5/10/ 15/20	40690	2600
	High Range	5	41215	2652.5
		10	41190	2650
		15	41165	2647.5
		20	41140	2645
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

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. 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	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☒	☒	☒	☒	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	38	-	-	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	40	-	-	☒	☒	-	-	☒	☒	☐	☒	☒	☒	☒	☒	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
99%&26dB Bandwidth	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☐	☐	☒	☒	☒	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	38	-	-	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	40	-	-	☒	☒	-	-	☒	☒	☐	☐	☐	☒	☒	☒	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
peak-to-average ratio	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☐	☒	☒	☒	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☒	☒
	38	-	-	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	40	-	-	☐	☒	-	-	☒	☒	☐	☐	☐	☒	☐	☒	☐
	41	-	-	☐	☐	☐	☒	☒	☒	☐	☐	☐	☒	☐	☒	☐
	66	☐	☐	☐	☐	☐	☒	☒	☒	☐	☐	☐	☒	☐	☒	☐

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

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Frequency stability	2	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	4	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	5	☐	☐	☐	☒	--	--	☒	☐	☐	☐	☐	☒	☐	☒	☐
	7	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	38	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	40	-	-	☐	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	41	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	66	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
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	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
6	KDB 971168 D01	KDB 971168 D01 Power Meas License Digital Systems v03r01

5.2 CONDUCTED OUTPUT POWER

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2 : FCC 47 CFR Part 24.232(c)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(4)
LTE Band 5 : FCC 47 CFR Part 22.913(a)
LTE Band 7 & Band 38 & Band 41: FCC 47 CFR Part 27.50(h)(2)
LTE 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(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(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(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 band. Power averaging shall not include intervals in which the transmitter is off.

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.

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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	1RB#0	24.01	24.05	23.69	23.84	23.43	22.75
		1RB#2	24.07	24.04	24.18	22.55	23.64	22.54
		1RB#5	24.32	24.03	24.18	23.25	23.25	22.63
		3RB#0	24.27	24.15	24.21	22.96	23.34	22.99
		3RB#1	24.24	24.26	24.17	22.94	23.35	22.83
		3RB#3	24.22	24.25	24.20	23.03	23.24	23.06
		6RB#0	23.17	23.25	23.17	22.67	22.36	22.58
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	1RB#0	24.22	24.07	24.34	22.60	23.67	23.90
		1RB#8	24.23	24.08	24.20	23.18	23.74	23.09
		1RB#14	24.16	24.02	24.19	23.12	23.00	23.31
		8RB#0	23.26	23.11	23.28	22.53	22.40	22.57
		8RB#4	23.26	23.15	23.25	22.52	22.47	22.53
		8RB#7	23.20	23.22	23.18	22.89	22.40	22.55
		15RB#0	23.30	23.15	23.27	22.23	22.19	22.30
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	1RB#0	24.04	24.14	23.97	23.33	23.31	22.74
		1RB#12	24.08	24.28	24.22	23.39	23.05	22.63
		1RB#24	24.04	24.36	24.20	23.33	23.09	22.66
		12RB#0	23.10	23.14	23.17	22.16	22.24	22.26
		12RB#6	23.17	23.13	23.29	22.27	22.15	22.24
		12RB#13	23.12	23.20	23.22	22.27	22.33	22.32
		25RB#0	23.10	23.13	23.24	22.32	22.34	22.40
Band	Bandwidth (MHz)	RB	18650	18900	19150	18650	18900	19150
			1855 MHz	1880 MHz	1905 MHz	1855 MHz	1880 MHz	1905 MHz
2	10	1RB#0	23.78	24.20	24.18	23.16	23.81	22.57
		1RB#24	24.10	24.27	24.25	23.06	23.75	22.64
		1RB#49	24.22	24.38	24.25	22.48	23.20	22.66
		25RB#0	23.27	23.26	23.20	22.35	22.48	22.48
		25RB#12	23.13	23.13	23.24	22.36	22.45	22.43
		25RB#25	23.14	23.18	23.18	22.58	22.25	22.34
		50RB#0	23.19	23.21	23.26	22.27	22.33	22.33
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	1RB#0	24.21	24.10	24.22	23.28	23.84	23.34
		1RB#38	24.10	24.17	24.21	23.22	23.80	23.86
		1RB#74	24.12	24.20	24.19	23.23	23.93	23.81
		38RB#0	23.09	23.09	23.21	23.16	23.07	23.22
		38RB#18	23.16	23.05	23.19	23.14	23.08	23.23
		38RB#37	23.14	23.10	23.25	23.12	23.03	23.20
		75RB#0	23.14	23.08	23.19	22.34	22.27	22.31
Band	Bandwidth (MHz)	RB	18700	18900	19100	18700	18900	19100
			1860 MHz	1880 MHz	1900 MHz	1860 MHz	1880 MHz	1900 MHz
2	20	1RB#0	24.45	23.17	24.25	23.10	23.10	23.89
		1RB#49	24.36	24.16	24.31	23.02	23.25	23.74
		1RB#99	24.18	24.27	24.39	23.10	23.48	23.90
		50RB#0	23.14	23.11	23.33	22.29	22.36	22.36
		50RB#25	23.04	23.15	23.28	22.35	22.35	22.32
		50RB#50	23.12	23.29	23.22	22.35	22.36	22.36
		100RB#0	23.04	23.15	23.15	22.36	22.31	23.32

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5.2.2 LTE Band 4

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	19957	20175	20393	19957	20175	20393
			1710.7 MHz	1732.5 MHz	1754.3 MHz	1710.7 MHz	1732.5 MHz	1754.3 MHz
4	1.4	1RB#0	24.23	24.44	24.22	23.84	22.94	23.33
		1RB#2	24.40	24.29	24.26	23.89	23.25	23.41
		1RB#5	24.19	24.27	24.16	23.24	23.29	23.35
		3RB#0	24.30	24.30	24.49	23.22	23.43	23.18
		3RB#1	24.28	24.10	24.31	23.26	23.21	23.30
		3RB#3	24.36	24.09	24.41	23.30	23.34	23.18
		6RB#0	23.13	23.11	23.25	22.71	22.46	23.20
Band	Bandwidth (MHz)	RB	19965	20175	20385	19965	20175	20385
			1711.5 MHz	1732.5 MHz	1753.5 MHz	1711.5 MHz	1732.5 MHz	1753.5 MHz
4	3	1RB#0	24.20	24.24	24.11	23.28	23.42	23.87
		1RB#8	24.15	24.33	24.20	23.39	23.23	23.85
		1RB#14	24.40	23.23	24.25	23.21	24.02	23.24
		8RB#0	23.17	23.29	23.22	22.57	22.63	23.21
		8RB#4	23.19	23.24	23.23	23.23	22.64	23.13
		8RB#7	23.34	23.26	23.27	22.54	22.65	22.53
		15RB#0	23.24	23.25	23.20	22.47	26.36	22.39
Band	Bandwidth (MHz)	RB	19975	20175	20375	19975	20175	20375
			1712.5 MHz	1732.5 MHz	1752.5 MHz	1712.5 MHz	1732.5 MHz	1752.5 MHz
4	5	1RB#0	24.39	24.55	24.48	23.23	23.18	22.61
		1RB#12	24.23	24.09	24.53	23.12	23.60	22.65
		1RB#24	24.42	24.44	24.41	23.23	23.51	22.70
		12RB#0	23.24	23.19	23.27	22.37	22.33	22.41
		12RB#6	23.21	23.21	23.25	22.34	22.26	22.41
		12RB#13	23.24	23.17	23.32	22.29	22.29	22.38
		25RB#0	23.15	23.14	23.16	22.24	22.37	22.56
Band	Bandwidth (MHz)	RB	20000	20175	20350	20000	20175	20350
			1715 MHz	1732.5 MHz	1750 MHz	1715 MHz	1732.5 MHz	1750 MHz
4	10	1RB#0	24.14	24.33	24.24	23.36	23.19	24.06
		1RB#24	24.15	24.25	24.37	23.33	23.23	24.15
		1RB#49	24.16	24.35	24.35	23.40	23.21	24.09
		25RB#0	23.11	23.22	23.28	22.36	22.56	22.47
		25RB#12	23.23	23.27	23.18	22.34	22.55	22.47
		25RB#25	23.32	23.19	23.19	22.43	22.55	22.48
		50RB#0	23.23	23.14	23.36	22.39	22.44	22.65
Band	Bandwidth (MHz)	RB	20025	20175	20325	20025	20175	20325
			1717.5 MHz	1732.5 MHz	1747.5 MHz	1717.5 MHz	1732.5 MHz	1747.5 MHz
4	15	1RB#0	24.20	24.31	24.14	23.13	23.21	23.31
		1RB#38	24.16	24.39	24.23	23.33	23.32	23.28
		1RB#74	24.23	24.42	24.29	23.34	23.39	23.38
		38RB#0	23.21	23.14	23.31	23.18	23.27	23.30
		38RB#18	23.16	23.24	23.29	23.21	23.21	23.28
		38RB#37	23.16	23.29	23.27	23.16	23.27	23.26
		75RB#0	23.28	23.26	23.25	22.37	22.52	22.39
Band	Bandwidth (MHz)	RB	20050	20175	20300	20050	20175	20300
			1720 MHz	1732.5 MHz	1745 MHz	1720 MHz	1732.5 MHz	1745 MHz
4	20	1RB#0	24.34	24.27	24.52	23.20	22.99	22.48
		1RB#49	24.50	24.30	24.65	23.30	22.97	22.86
		1RB#99	24.58	24.36	24.68	23.34	23.11	22.90
		50RB#0	23.20	23.33	23.24	22.46	22.50	22.50
		50RB#25	23.25	23.31	23.26	22.44	22.49	22.48
		50RB#50	23.23	23.17	23.46	22.49	22.53	22.67
		100RB#0	23.24	23.22	23.25	22.50	22.35	22.43

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	1RB#0	23.57	23.84	23.82	22.78	22.53	23.09
		1RB#2	23.62	23.74	23.84	22.75	22.57	23.32
		1RB#5	23.60	23.84	23.86	22.72	22.51	22.27
		3RB#0	23.69	23.78	23.84	22.56	22.66	22.42
		3RB#1	23.84	23.76	23.77	22.34	22.70	22.47
		3RB#3	23.74	23.87	23.84	22.27	22.65	22.37
		6RB#0	22.72	22.76	22.84	21.68	22.40	21.92
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	1RB#0	23.44	23.72	23.98	22.74	23.23	22.43
		1RB#8	23.65	23.71	23.80	22.96	23.38	23.05
		1RB#14	23.82	23.66	23.85	23.01	23.42	23.08
		8RB#0	22.75	22.70	22.83	22.05	21.75	22.14
		8RB#4	22.68	22.70	22.81	22.00	21.77	22.12
		8RB#7	22.78	22.67	22.78	22.50	22.34	22.07
		15RB#0	22.73	22.68	22.85	21.83	22.22	21.90
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	1RB#0	23.67	23.89	23.73	21.92	22.92	22.96
		1RB#12	23.85	23.77	23.66	22.08	22.87	22.85
		1RB#24	23.73	24.02	23.68	22.12	23.02	22.82
		12RB#0	22.70	22.86	22.91	21.83	21.82	21.85
		12RB#6	22.69	22.86	22.87	21.85	21.87	21.85
		12RB#13	22.75	22.83	22.85	22.22	22.29	21.78
		25RB#0	22.86	22.85	22.86	22.34	22.29	22.00
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	1RB#0	23.84	23.82	23.80	22.52	23.03	22.32
		1RB#24	23.69	23.89	23.76	22.67	23.50	22.63
		1RB#49	23.79	23.83	23.72	22.60	23.43	22.61
		25RB#0	22.83	22.78	22.73	22.39	21.89	22.41
		25RB#12	22.76	22.85	22.88	22.37	21.89	22.41
		25RB#25	22.80	22.78	22.85	21.90	22.27	22.04
		50RB#0	22.86	22.72	22.79	21.92	22.33	21.84

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	1RB#0	24.57	24.25	24.47	22.74	23.58	23.05
		1RB#12	24.47	24.21	24.36	22.82	23.62	22.99
		1RB#24	24.58	24.24	24.38	22.80	23.65	23.06
		12RB#0	22.98	22.79	23.01	22.06	22.18	22.01
		12RB#6	22.89	22.79	23.01	22.02	22.12	22.01
		12RB#13	22.99	22.94	22.99	22.03	22.19	21.98
		25RB#0	22.97	22.90	22.93	22.07	22.17	22.09
Band	Bandwidth (MHz)	RB	20800	21100	21400	20800	21100	21400
			2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz
7	10	1RB#0	23.83	23.98	23.92	23.39	23.12	23.96
		1RB#24	23.81	24.07	23.96	23.49	23.32	24.04
		1RB#49	23.91	24.13	23.96	23.51	23.32	23.97
		25RB#0	22.90	22.99	23.05	21.96	22.20	22.07
		25RB#12	22.89	22.99	22.94	21.95	22.20	22.09
		25RB#25	22.87	22.89	22.94	22.02	22.23	22.21
		50RB#0	22.86	22.98	23.07	22.08	22.15	22.20
Band	Bandwidth (MHz)	RB	20825	21100	21375	20825	21100	21375
			2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz
7	15	1RB#0	23.80	23.56	23.85	23.44	23.23	23.93
		1RB#38	23.84	23.53	23.84	23.41	23.28	23.95
		1RB#74	23.83	23.55	23.95	23.56	23.38	23.99
		38RB#0	23.04	22.88	23.01	22.84	22.87	23.01
		38RB#18	22.85	22.87	23.01	22.83	22.87	23.01
		38RB#37	22.84	22.88	23.01	22.85	22.88	23.01
		75RB#0	22.85	22.87	23.00	22.01	22.11	22.13
Band	Bandwidth (MHz)	RB	20850	21100	21350	20850	21100	21350
			2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz
7	20	1RB#0	24.11	23.91	24.03	23.19	23.92	23.36
		1RB#49	24.12	23.96	24.06	23.19	23.96	23.36
		1RB#99	24.15	24.14	24.13	23.20	24.08	23.40
		50RB#0	23.01	22.85	23.00	22.14	22.05	22.33
		50RB#25	22.83	22.86	23.07	22.16	22.06	22.15
		50RB#50	22.88	23.02	23.01	22.04	22.19	22.30
		100RB#0	22.99	22.98	22.99	22.08	22.14	22.12

5.2.5 LTE Band 38

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	37775	38000	38225	37775	38000	38225
			2572.5 MHz	2595 MHz	2617.5 MHz	2572.5 MHz	2595 MHz	2617.5 MHz
38	5	1RB#0	23.79	23.68	23.82	23.61	23.23	23.84
		1RB#12	23.81	23.73	23.83	23.89	23.19	23.84
		1RB#24	23.75	23.80	23.84	23.54	23.48	23.82
		12RB#0	22.84	22.96	22.95	21.35	21.48	21.43
		12RB#6	22.84	22.94	22.97	21.39	21.52	21.43
		12RB#13	22.86	22.90	22.93	21.38	21.58	21.38
		25RB#0	22.86	22.86	22.94	21.50	21.39	21.63
Band	Bandwidth (MHz)	RB	37800	38000	38200	37800	38000	38200
			2575 MHz	2595 MHz	2615 MHz	2575 MHz	2595 MHz	2615 MHz
38	10	1RB#0	23.43	23.39	23.70	23.06	22.88	23.60
		1RB#24	23.45	23.43	23.60	23.12	23.73	23.62
		1RB#49	23.54	23.50	23.70	23.21	23.13	23.43
		25RB#0	22.47	22.51	22.60	21.07	21.34	21.19
		25RB#12	22.43	22.62	22.67	21.10	21.35	21.24
		25RB#25	22.49	22.57	22.58	21.14	21.36	21.30
		50RB#0	22.41	22.53	22.48	21.14	21.20	21.19
Band	Bandwidth (MHz)	RB	37825	38000	38175	37825	38000	38175
			2577.5 MHz	2595 MHz	2612.5 MHz	2577.5 MHz	2595 MHz	2612.5 MHz
38	15	1RB#0	23.77	23.98	23.83	22.97	24.02	23.13
		1RB#38	23.78	23.98	23.91	22.96	23.45	23.13
		1RB#74	23.76	24.02	23.96	23.11	23.53	23.17
		38RB#0	22.83	22.85	23.03	22.83	22.86	23.02
		38RB#18	22.83	22.86	23.02	22.82	22.86	23.02
		38RB#37	22.82	22.86	23.02	22.81	22.86	23.02
		75RB#0	22.81	22.86	23.02	21.51	21.66	21.67
Band	Bandwidth (MHz)	RB	37850	38000	38150	37850	38000	38150
			2580 MHz	2595 MHz	2610 MHz	2580 MHz	2595 MHz	2610 MHz
38	20	1RB#0	23.81	23.83	23.78	23.51	23.52	22.97
		1RB#49	23.81	23.98	23.98	23.47	23.55	22.88
		1RB#99	23.93	24.12	24.02	23.56	23.71	22.80
		50RB#0	22.96	23.11	23.15	21.89	21.72	21.74
		50RB#25	23.09	23.14	23.18	21.89	21.73	21.72
		50RB#50	22.98	23.23	23.20	21.85	21.89	21.69
		100RB#0	23.06	23.06	23.23	21.75	21.67	21.73

5.2.6 LTE Band 40A

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	38725	38750	38775	38725	38750	38775
			2307.5 MHz	2310 MHz	2312.5 MHz	2307.5 MHz	2310 MHz	2312.5 MHz
40	5	1RB#0	22.55	22.52	22.5	21.36	21.44	21.67
		1RB#12	22.73	22.54	22.43	21.4	21.5	21.65
		1RB#24	22.72	22.55	22.46	21.44	21.48	21.7
		12RB#0	21.03	21.14	21.19	20.17	20.02	20.27
		12RB#6	21.07	21.15	21.24	20.16	20.02	20.28
		12RB#13	21.07	21.15	21.21	20.16	20.03	20.28
		25RB#0	21.04	21.15	21.14	21.04	21.15	21.22
Band	Bandwidth (MHz)	RB	--	38750	--	--	38750	--
			--	2310 MHz	--	--	2310 MHz	--
40	10	1RB#0	--	22.41	--	--	21.18	--
		1RB#24	--	22.5	--	--	21.15	--
		1RB#49	--	22.5	--	--	21.08	--
		25RB#0	--	20.84	--	--	20.06	--
		25RB#12	--	20.84	--	--	20.06	--
		25RB#25	--	20.96	--	--	19.92	--
		50RB#0	--	18.91	--	--	17.87	--

5.2.7 LTE Band 40B

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	39175	39200	39225	39175	39200	39225
			2352.5 MHz	2355 MHz	2357.5 MHz	2352.5 MHz	2355 MHz	2357.5 MHz
40	5	1RB#0	22.96	22.85	22.92	22.86	21.82	22.11
		1RB#12	22.94	22.82	22.94	22.93	21.75	22.24
		1RB#24	22.92	22.95	22.88	22.93	21.80	22.07
		12RB#0	22.93	21.44	21.49	22.94	20.55	20.76
		12RB#6	22.94	21.44	21.49	22.94	20.43	20.76
		12RB#13	22.94	21.44	21.49	22.94	20.54	20.76
		25RB#0	22.94	21.44	21.49	22.94	21.44	21.49
Band	Bandwidth (MHz)	RB	--	39200	--	--	39200	--
			--	2355 MHz	--	--	2355 MHz	--
40	10	1RB#0	--	22.86	--	--	21.44	--
		1RB#24	--	22.89	--	--	21.46	--
		1RB#49	--	22.98	--	--	21.59	--
		25RB#0	--	21.21	--	--	20.40	--
		25RB#12	--	21.21	--	--	20.33	--
		25RB#25	--	21.19	--	--	20.49	--
		50RB#0	--	19.26	--	--	18.17	--

5.2.8 LTE Band 41

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	40265	40690	41215	40265	40690	41215
			2557.5 MHz	2600 MHz	2652.5 MHz	2557.5 MHz	2600 MHz	2652.5 MHz
41	5	1RB#0	23.74	23.70	23.77	23.66	23.39	23.77
		1RB#12	23.75	23.82	23.87	23.44	23.37	23.78
		1RB#24	23.84	23.80	23.83	23.54	23.38	23.76
		12RB#0	22.81	22.96	23.03	21.38	21.47	21.33
		12RB#6	22.73	22.93	22.97	21.38	21.50	21.35
		12RB#13	22.84	22.85	22.95	21.40	21.56	21.45
		25RB#0	22.79	22.91	22.95	21.53	21.41	21.51
Band	Bandwidth (MHz)	RB	40290	40690	41190	40290	40690	41190
			2560 MHz	2600 MHz	2650 MHz	2560 MHz	2600 MHz	2650 MHz
41	10	1RB#0	23.20	23.57	23.48	22.96	22.89	23.33
		1RB#24	23.29	23.50	23.53	22.87	22.89	23.40
		1RB#49	23.32	23.54	23.60	22.97	22.91	23.87
		25RB#0	22.40	22.65	22.42	21.08	21.23	21.17
		25RB#12	22.41	22.55	22.37	21.10	21.28	21.19
		25RB#25	22.48	22.57	22.55	21.04	21.31	21.28
		50RB#0	22.37	22.48	22.48	21.06	21.26	21.17
Band	Bandwidth (MHz)	RB	40315	40690	41165	40315	40690	41165
			2562.5 MHz	2600 MHz	2647.5 MHz	2562.5 MHz	2600 MHz	2647.5 MHz
41	15	1RB#0	23.33	23.55	23.54	22.90	22.83	23.75
		1RB#38	23.24	23.67	23.49	22.82	22.96	23.52
		1RB#74	23.44	23.61	23.53	22.97	22.90	23.71
		38RB#0	22.37	22.48	22.43	22.37	22.49	22.43
		38RB#18	22.37	22.50	22.43	22.37	22.50	22.43
		38RB#37	22.37	22.50	22.43	22.37	22.51	22.43
		75RB#0	22.38	22.51	22.43	21.20	21.36	21.18
Band	Bandwidth (MHz)	RB	40340	40690	41140	40340	40690	41140
			2565 MHz	2600 MHz	2645 MHz	2565 MHz	2600 MHz	2645 MHz
41	20	1RB#0	23.74	23.92	23.86	23.65	23.45	22.64
		1RB#49	23.76	24.11	23.88	23.61	23.47	22.67
		1RB#99	23.86	24.21	23.83	23.82	23.69	22.76
		50RB#0	22.50	22.77	22.63	21.41	21.37	21.28
		50RB#25	22.51	22.80	22.63	21.42	21.39	21.28
		50RB#50	22.71	22.73	22.77	21.49	21.47	21.39
		100RB#0	22.67	22.73	22.61	21.31	21.44	21.34

5.2.9 LTE Band 66

Conducted Power(dBm)								
Modulation			QPSK			16QAM		
Band	Bandwidth (MHz)	RB	131979	132322	132665	131979	132322	132665
			1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz
66	1.4	1RB#0	24.21	24.25	24.32	23.85	23.76	22.69
		1RB#2	24.22	24.26	24.30	23.83	23.77	22.55
		1RB#5	24.22	24.22	24.28	23.84	23.81	22.62
		3RB#0	24.39	24.27	24.25	23.01	22.78	23.19
		3RB#1	24.37	24.27	24.23	23.08	22.78	23.18
		3RB#3	24.38	24.25	24.18	23.07	22.75	23.22
		6RB#0	23.30	23.23	23.23	22.46	22.51	22.38
Band	Bandwidth (MHz)	RB	131987	132322	132657	131987	132322	132657
			1711.5 MHz	1745 MHz	1778.5 MHz	1711.5 MHz	1745 MHz	1778.5 MHz
66	3	1RB#0	24.26	24.37	24.34	23.21	22.95	23.20
		1RB#8	24.28	24.43	24.33	23.15	22.85	23.14
		1RB#14	24.28	24.39	24.30	23.18	22.95	23.21
		8RB#0	23.19	23.34	23.15	22.61	22.76	22.41
		8RB#4	23.20	23.35	23.26	22.61	22.77	22.42
		8RB#7	23.27	23.22	23.29	22.53	22.74	22.41
		15RB#0	23.23	23.34	23.15	22.40	22.30	22.42
Band	Bandwidth (MHz)	RB	131997	132322	132647	131997	132322	132647
			1712.5 MHz	1745 MHz	1777.5 MHz	1712.5 MHz	1745 MHz	1777.5 MHz
66	5	1RB#0	24.31	24.25	24.18	22.83	23.58	22.99
		1RB#12	24.36	24.25	24.11	22.77	23.61	22.94
		1RB#24	24.34	24.29	24.15	22.79	23.54	22.97
		12RB#0	23.23	23.27	23.25	22.38	22.58	22.23
		12RB#6	23.23	23.29	23.17	22.38	22.59	22.24
		12RB#13	23.34	23.21	23.28	22.39	22.61	22.30
		25RB#0	23.27	23.26	23.23	22.57	22.52	22.36
Band	Bandwidth (MHz)	RB	132022	132322	132622	132022	132322	132622
			1715 MHz	1745 MHz	1775 MHz	1715 MHz	1745 MHz	1775 MHz
66	10	1RB#0	24.16	24.31	24.28	23.42	23.11	23.86
		1RB#24	24.19	24.36	24.20	23.39	23.13	23.82
		1RB#49	24.17	24.38	24.22	23.41	23.18	23.90
		25RB#0	23.16	23.25	23.33	22.39	22.54	22.52
		25RB#12	23.15	23.37	23.23	22.39	22.55	22.53
		25RB#25	23.28	23.26	23.37	22.41	22.55	22.49
		50RB#0	23.32	23.36	23.32	22.37	22.54	22.51
Band	Bandwidth (MHz)	RB	132047	132322	132597	132047	132322	132597
			1717.5 MHz	1745 MHz	1772.5 MHz	1717.5 MHz	1745 MHz	1772.5 MHz
66	15	1RB#0	24.18	24.34	24.23	23.42	23.62	23.86
		1RB#38	24.18	24.36	24.23	23.40	23.64	23.89
		1RB#74	24.21	24.36	24.24	23.41	23.60	23.87
		38RB#0	23.20	23.19	23.31	23.20	23.21	23.32
		38RB#18	23.19	23.21	23.32	23.19	23.21	23.33
		38RB#37	23.19	23.21	23.33	23.19	23.22	23.32
		75RB#0	23.18	23.22	23.33	22.40	22.50	22.42
Band	Bandwidth (MHz)	RB	132072	132322	132572	132072	132322	132572
			1720 MHz	1745 MHz	1770 MHz	1720 MHz	1745 MHz	1770 MHz
66	20	1RB#0	24.54	24.27	24.31	23.17	23.96	22.97
		1RB#49	24.55	24.32	24.31	23.20	23.97	22.97
		1RB#99	24.55	24.39	24.33	23.28	24.03	23.05
		50RB#0	23.21	23.23	23.35	22.48	22.48	22.57
		50RB#25	23.20	23.29	23.33	22.47	22.50	22.56
		50RB#50	23.36	23.33	23.23	22.50	22.49	22.54
		100RB#0	23.28	23.18	23.25	22.40	22.60	22.42

5.3 ERP OR EIRP

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2 : FCC 47 CFR Part 24.232(c)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(4)
LTE Band 5 : FCC 47 CFR Part 22.913(a)
LTE Band 7 & Band 38 & Band 41: FCC 47 CFR Part 27.50(h)(2)
LTE Band 40: FCC 47 CFR Part 27.50(a)(3)

Test Method: KDB 971168 D01v03r01 Section 5.6 & 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(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(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 band. Power averaging shall not include intervals in which the transmitter is off.

Test Procedure:

According to KDB 412172 D01 Power Approach,

- **ERP or EIRP = $P_T + G_T - L_c$**
- **ERP = EIRP - 2.15**

where

- **P_T** = transmitter output power, expressed in dBW, dBm, or PSD;
- **G_T** = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);
- **L_c** = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

Test Setup: Refer to section 4.2.1 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: See table below

Note: The maximum ERP/EIRP is calculated from max output power and antenna gain, the antenna gain provided by the customer, and the customer takes all the responsibilities for the accuracy of antenna gain.

5.3.1 LTE Band 2

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	25.79	25.31	33.01	0.3793	0.3396	2	Pass
Middle	25.73	25.11	33.01	0.3741	0.3243	2	Pass
Highest	25.68	24.53	33.01	0.3698	0.2838	2	Pass
Channel Bandwidth: 3MHz							
Lowest	25.70	24.65	33.01	0.3715	0.2917	2	Pass
Middle	25.55	25.21	33.01	0.3589	0.3319	2	Pass
Highest	25.81	25.37	33.01	0.3811	0.3443	2	Pass
Channel Bandwidth: 5MHz							
Lowest	25.55	24.86	33.01	0.3589	0.3062	2	Pass
Middle	25.83	24.78	33.01	0.3828	0.3006	2	Pass
Highest	25.69	24.21	33.01	0.3707	0.2636	2	Pass
Channel Bandwidth: 10MHz							
Lowest	25.69	24.63	33.01	0.3707	0.2904	2	Pass
Middle	25.85	25.28	33.01	0.3846	0.3373	2	Pass
Highest	25.72	24.13	33.01	0.3733	0.2588	2	Pass
Channel Bandwidth: 15MHz							
Lowest	25.68	24.75	33.01	0.3698	0.2985	2	Pass
Middle	25.67	25.40	33.01	0.3690	0.3467	2	Pass
Highest	25.69	25.33	33.01	0.3707	0.3412	2	Pass
Channel Bandwidth: 20MHz							
Lowest	25.92	24.57	33.01	0.3908	0.2864	2	Pass
Middle	25.74	24.95	33.01	0.3750	0.3126	2	Pass
Highest	25.86	25.37	33.01	0.3855	0.3443	2	Pass

5.3.2 LTE Band 4

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	27.06	26.55	30.00	0.5082	0.4519	1	Pass
Middle	27.10	26.09	30.00	0.5129	0.4064	1	Pass
Highest	27.15	26.07	30.00	0.5188	0.4046	1	Pass
Channel Bandwidth: 3MHz							
Lowest	27.06	26.05	30.00	0.5082	0.4027	1	Pass
Middle	26.99	26.68	30.00	0.5000	0.4656	1	Pass
Highest	26.91	26.53	30.00	0.4909	0.4498	1	Pass
Channel Bandwidth: 5MHz							
Lowest	27.08	25.89	30.00	0.5105	0.3882	1	Pass
Middle	27.21	26.26	30.00	0.5260	0.4227	1	Pass
Highest	27.19	25.36	30.00	0.5236	0.3436	1	Pass
Channel Bandwidth: 10MHz							
Lowest	26.82	26.06	30.00	0.4808	0.4036	1	Pass
Middle	27.01	25.89	30.00	0.5023	0.3882	1	Pass
Highest	27.03	26.81	30.00	0.5047	0.4797	1	Pass
Channel Bandwidth: 15MHz							
Lowest	26.89	26.00	30.00	0.4887	0.3981	1	Pass
Middle	27.08	26.05	30.00	0.5105	0.4027	1	Pass
Highest	26.95	26.04	30.00	0.4955	0.4018	1	Pass
Channel Bandwidth: 20MHz							
Lowest	27.24	26.00	30.00	0.5297	0.3981	1	Pass
Middle	27.02	25.77	30.00	0.5035	0.3776	1	Pass
Highest	27.34	25.56	30.00	0.5420	0.3597	1	Pass

5.3.3 LTE Band 5

Channel	Maximum ERP (dBm)			Maximum ERP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	18.36	17.30	38.45	0.0685	0.0537	7	Pass
Middle	18.39	17.22	38.45	0.0690	0.0527	7	Pass
Highest	18.38	17.84	38.45	0.0689	0.0608	7	Pass
Channel Bandwidth: 3MHz							
Lowest	18.34	17.53	38.45	0.0682	0.0566	7	Pass
Middle	18.24	17.94	38.45	0.0667	0.0622	7	Pass
Highest	18.50	17.60	38.45	0.0708	0.0575	7	Pass
Channel Bandwidth: 5MHz							
Lowest	18.37	16.86	38.45	0.0687	0.0485	7	Pass
Middle	18.54	17.54	38.45	0.0714	0.0568	7	Pass
Highest	18.25	17.48	38.45	0.0668	0.0560	7	Pass
Channel Bandwidth: 10MHz							
Lowest	18.36	17.19	38.45	0.0685	0.0524	7	Pass
Middle	18.55	18.02	38.45	0.0716	0.0634	7	Pass
Highest	18.32	17.15	38.45	0.0679	0.0519	7	Pass

5.3.4 LTE Band 7

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	28.87	27.31	33.01	0.7709	0.5383	2	Pass
Middle	28.74	28.14	33.01	0.7482	0.6516	2	Pass
Highest	28.87	27.55	33.01	0.7709	0.5689	2	Pass
Channel Bandwidth: 10MHz							
Lowest	28.40	28.00	33.01	0.6918	0.6310	2	Pass
Middle	28.62	27.81	33.01	0.7278	0.6039	2	Pass
Highest	28.45	28.53	33.01	0.6998	0.7129	2	Pass
Channel Bandwidth: 15MHz							
Lowest	28.33	28.05	33.01	0.6808	0.6383	2	Pass
Middle	28.05	27.87	33.01	0.6383	0.6124	2	Pass
Highest	28.44	28.48	33.01	0.6982	0.7047	2	Pass
Channel Bandwidth: 20MHz							
Lowest	28.95	27.69	33.01	0.7852	0.5875	2	Pass
Middle	28.94	28.57	33.01	0.7834	0.7194	2	Pass
Highest	28.93	27.89	33.01	0.7816	0.6152	2	Pass

5.3.5 LTE Band 38

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	27.64	27.72	33.01	0.5808	0.5916	2	Pass
Middle	27.63	27.31	33.01	0.5794	0.5383	2	Pass
Highest	27.67	27.67	33.01	0.5848	0.5848	2	Pass
Channel Bandwidth: 10MHz							
Lowest	27.37	27.04	33.01	0.5458	0.5058	2	Pass
Middle	27.33	27.56	33.01	0.5408	0.5702	2	Pass
Highest	27.53	27.45	33.01	0.5662	0.5559	2	Pass
Channel Bandwidth: 15MHz							
Lowest	27.61	26.94	33.01	0.5768	0.4943	2	Pass
Middle	27.85	27.85	33.01	0.6095	0.6095	2	Pass
Highest	27.79	27.00	33.01	0.6012	0.5012	2	Pass
Channel Bandwidth: 20MHz							
Lowest	27.76	27.39	33.01	0.5970	0.5483	2	Pass
Middle	27.95	27.54	33.01	0.6237	0.5675	2	Pass
Highest	27.85	26.80	33.01	0.6095	0.4786	2	Pass

5.3.1 LTE Band 40A

Channel	Maximum EIRP (dBm/5MHz)			Maximum EIRP (W/5MHz)			Result
	QPSK	16QAM	Limit (dBm/5MHz)	QPSK	16QAM	Limit (W/5MHz)	
Channel Bandwidth: 5MHz							
Lowest	22.73	21.44	24.00	0.1875	0.1393	0.25	Pass
Middle	22.55	21.50	24.00	0.1799	0.1413	0.25	Pass
Highest	22.50	21.70	24.00	0.1778	0.1479	0.25	Pass
Channel Bandwidth: 10MHz							
Middle	22.50	23.77	24.00	0.1778	0.2382	0.25	Pass

5.3.1 LTE Band 40B

Channel	Maximum EIRP (dBm/5MHz)			Maximum EIRP (W/5MHz)			Result
	QPSK	16QAM	Limit (dBm/5MHz)	QPSK	16QAM	Limit (W/5MHz)	
Channel Bandwidth: 5MHz							
Lowest	22.96	22.94	24.00	0.1977	0.1968	0.25	Pass
Middle	22.95	21.82	24.00	0.1972	0.1521	0.25	Pass
Highest	22.94	22.24	24.00	0.1968	0.1675	0.25	Pass
Channel Bandwidth: 10MHz							
Middle	22.98	21.59	24.00	0.1986	0.1442	0.25	Pass

5.3.1 LTE Band 41

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 5MHz							
Lowest	28.33	28.15	33.01	0.6808	0.6531	2	Pass
Middle	28.31	27.88	33.01	0.6776	0.6138	2	Pass
Highest	28.36	28.27	33.01	0.6855	0.6714	2	Pass
Channel Bandwidth: 10MHz							
Lowest	27.81	27.46	33.01	0.6039	0.5572	2	Pass
Middle	28.06	27.40	33.01	0.6397	0.5495	2	Pass
Highest	28.09	28.36	33.01	0.6442	0.6855	2	Pass
Channel Bandwidth: 15MHz							
Lowest	27.93	27.46	33.01	0.6209	0.5572	2	Pass
Middle	28.16	27.45	33.01	0.6546	0.5559	2	Pass
Highest	28.03	28.24	33.01	0.6353	0.6668	2	Pass
Channel Bandwidth: 20MHz							
Lowest	28.35	28.31	33.01	0.6839	0.6776	2	Pass
Middle	28.70	28.18	33.01	0.7413	0.6577	2	Pass
Highest	28.37	27.25	33.01	0.6871	0.5309	2	Pass

5.3.1 LTE Band 66

Channel	Maximum EIRP (dBm)			Maximum EIRP (W)			Result
	QPSK	16QAM	Limit (dBm)	QPSK	16QAM	Limit (W)	
Channel Bandwidth: 1.4MHz							
Lowest	27.18	26.64	30.00	0.5224	0.4613	1	Pass
Middle	27.06	26.60	30.00	0.5082	0.4571	1	Pass
Highest	27.11	26.01	30.00	0.5140	0.3990	1	Pass
Channel Bandwidth: 3MHz							
Lowest	27.07	26.00	30.00	0.5093	0.3981	1	Pass
Middle	27.22	25.74	30.00	0.5272	0.3750	1	Pass
Highest	27.13	26.00	30.00	0.5164	0.3981	1	Pass
Channel Bandwidth: 5MHz							
Lowest	27.15	25.62	30.00	0.5188	0.3648	1	Pass
Middle	27.08	26.40	30.00	0.5105	0.4365	1	Pass
Highest	26.97	25.78	30.00	0.4977	0.3784	1	Pass
Channel Bandwidth: 10MHz							
Lowest	26.98	26.21	30.00	0.4989	0.4178	1	Pass
Middle	27.17	25.97	30.00	0.5212	0.3954	1	Pass
Highest	27.07	26.69	30.00	0.5093	0.4667	1	Pass
Channel Bandwidth: 15MHz							
Lowest	27.00	26.21	30.00	0.5012	0.4178	1	Pass
Middle	27.15	26.43	30.00	0.5188	0.4395	1	Pass
Highest	27.03	26.68	30.00	0.5047	0.4656	1	Pass
Channel Bandwidth: 20MHz							
Lowest	27.34	26.07	30.00	0.5420	0.4046	1	Pass
Middle	27.18	26.82	30.00	0.5224	0.4808	1	Pass
Highest	27.12	25.84	30.00	0.5152	0.3837	1	Pass

5.4 PEAK-TO-AVERAGE RATIO

	FCC 47 CFR Part 2.1046(a)
	LTE Band 2 : FCC 47 CFR Part 24.232(d)
Test Requirement:	LTE Band 4 & LTE Band 66 : FCC 47 CFR Part 27.50(d)(5)
	LTE Band 5 : FCC 47 CFR Part 22.913(a)
	LTE Band 7 & Band 38 & Band 41 : FCC 47 CFR Part 27.50(d)(5)
Test Method:	KDB 971168 D01v03r01 Section 5.7
Limit:	In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB
Test Procedure:	
	The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.
	a) Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth
	b) Set the number of counts to a value that stabilizes the measured CCDF curve
	c) Record the maximum PAPR level associated with a probability of 0.1 %
	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
Test Data:	Please refer to Appendix A1

5.5 99%&26DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 2.1049(h)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01 Section 4

Limit: No Limit, for reporting purposes only.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

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

Test Data: Please refer to Appendix A2

5.6 BAND EDGE AT ANTENNA TERMINALS

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2 : FCC 47 CFR Part 24.238(a)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)(1)
LTE Band 5 : FCC 47 CFR Part 22.917(a)
LTE Band 41: FCC 47 CFR Part 27.53(m)(4)
LTE Band 40: FCC 47 CFR Part 27.53(a)(4)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a):

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

FCC 47 CFR Part 27.53(m)(4):

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

FCC 47 CFR Part 27.53(a)(4): For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;
- (ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;
- (iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 MHz.

FCC 47 CFR Part 27.53(a)(5): Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e., 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.

For each band edge measurement:

- 1) Set the spectrum analyzer span to include the block edge frequency.
- 2) Set a marker to point the corresponding band edge frequency in each test case.
- 3) Set display line at -13 dBm
- 4) Set resolution bandwidth to at least 1% of emission bandwidth.
- 5) Set spectrum analyzer with RMS detector.
- 6) Record the max trace plot into the test report

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

Test Data: Please refer to Appendix A3



5.7 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

Test Requirement: LTE Band 2: FCC 47 CFR Part 24.238(a)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)
LTE Band 5 : FCC 47 CFR Part 22.917(a)
LTE Band 7 & Band 41: FCC 47 CFR Part 27.53(m)(4)
LTE Band 40: FCC 47 CFR Part 27.53(a)(4)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 27.53(c)(2):

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

FCC 47 CFR Part 27.53(a)(4): For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

(i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;

(iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 MHz.

FCC 47 CFR Part 27.53(m)(4):

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log(P)$ dB. The emission limit equal to -25 dBm.

Test Procedure:

The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range. b. Measuring frequency range is from 30 MHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

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

Test Data: Please refer to Appendix A4

5.8 FIELD STRENGTH OF SPURIOUS RADIATION

Test Requirement: LTE Band 2 : FCC 47 CFR Part 24.238(a)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)
LTE Band 5 : FCC 47 CFR Part 22.917(a)
LTE Band 7 & Band 41: FCC 47 CFR Part 27.53(m)(4)
LTE Band 40: FCC 47 CFR Part 27.53(a)(4)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009 MHz-30 MHz	Peak	10 kHz	30 KHz	Peak
30 MHz-1 GHz	Quasi-peak	100 kHz	300 KHz	Peak
Above 1 GHz	Peak	1 MHz	3 MHz	Peak

Limits:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a):

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

FCC 47 CFR Part 27.53(a)(4): For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

- (i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;
- (ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;
- (iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 MHz.

FCC 47 CFR Part 27.53(m)(4):

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log(P)$ dB. The emission limit equal to -25 dBm.

Test Setup: Refer to section 4.2.1 for details.

Test Procedures: KDB 971168 D01v03r01 Section 7

Equipment Used: Refer to section 3 for details.

Test Result: Pass

The worst measurement data as follows:

5.8.1 LTE Band 2

LTE Band 2_20 MHz_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	844.803	-80.78	13.42	-67.36	-13.00	-54.36	Horizontal
2	887.398	-80.34	14.17	-66.17	-13.00	-53.17	Horizontal
3	986.044	-81.39	15.44	-65.95	-13.00	-52.95	Horizontal
4	7440.000	-40.19	13.06	-27.13	-13.00	-14.13	Horizontal
5	9300.000	-42.70	14.68	-28.02	-13.00	-15.02	Horizontal
6	787.475	-80.25	12.31	-67.94	-13.00	-54.94	Vertical
7	899.958	-81.20	14.32	-66.88	-13.00	-53.88	Vertical
8	945.334	-80.81	14.69	-66.12	-13.00	-53.12	Vertical
9	7440.000	-40.62	13.06	-27.56	-13.00	-14.56	Vertical
10	9300.000	-50.61	14.68	-35.93	-13.00	-22.93	Vertical
Middle Channel							
1	821.387	-80.65	13.20	-67.45	-13.00	-54.45	Horizontal
2	850.760	-80.60	13.57	-67.03	-13.00	-54.03	Horizontal
3	952.000	-80.95	14.82	-66.13	-13.00	-53.13	Horizontal
4	7520.000	-32.77	13.07	-19.70	-13.00	-6.70	Horizontal
5	9400.000	-35.75	14.73	-21.02	-13.00	-8.02	Horizontal
6	760.287	-79.96	11.63	-68.33	-13.00	-55.33	Vertical
7	850.760	-80.60	13.57	-67.03	-13.00	-54.03	Vertical
8	919.132	-80.65	14.53	-66.12	-13.00	-53.12	Vertical
9	7520.000	-33.10	13.07	-20.03	-13.00	-7.03	Vertical
10	9400.000	-37.63	14.73	-22.90	-13.00	-9.90	Vertical
Highest Channel							
1	713.692	-79.99	11.53	-68.46	-13.00	-55.46	Horizontal
2	868.886	-79.32	13.80	-65.52	-13.00	-52.52	Horizontal
3	965.474	-81.18	14.91	-66.27	-13.00	-53.27	Horizontal
4	7600.000	-42.43	13.04	-29.39	-13.00	-16.39	Horizontal
5	9500.000	-47.60	14.79	-32.81	-13.00	-19.81	Horizontal
6	718.725	-80.49	11.51	-68.98	-13.00	-55.98	Vertical
7	804.252	-80.50	12.75	-67.75	-13.00	-54.75	Vertical
8	838.887	-80.39	13.30	-67.09	-13.00	-54.09	Vertical
9	7600.000	-44.77	13.04	-31.73	-13.00	-18.73	Vertical
10	9500.000	-50.09	14.79	-35.30	-13.00	-22.30	Vertical

5.8.2 LTE Band 4

LTE Band 4_20 MHz_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	698.804	-80.34	11.44	-68.90	-13.00	-55.90	Horizontal
2	844.803	-79.49	13.42	-66.07	-13.00	-53.07	Horizontal
3	932.141	-80.89	14.41	-66.48	-13.00	-53.48	Horizontal
4	6880.000	-47.43	13.00	-34.43	-13.00	-21.43	Horizontal
5	8600.000	-46.44	13.76	-32.68	-13.00	-19.68	Horizontal
6	698.804	-80.63	11.44	-69.19	-13.00	-56.19	Vertical
7	881.184	-80.89	14.07	-66.82	-13.00	-53.82	Vertical
8	986.044	-80.46	15.44	-65.02	-13.00	-52.02	Vertical
9	6880.000	-46.99	13.00	-33.99	-13.00	-20.99	Vertical
10	8600.000	-44.44	13.76	-30.68	-13.00	-17.68	Vertical
Middle Channel							
1	739.214	-80.09	11.58	-68.51	-13.00	-55.51	Horizontal
2	906.304	-81.34	14.53	-66.81	-13.00	-53.81	Horizontal
3	938.714	-81.00	14.52	-66.48	-13.00	-53.48	Horizontal
4	6930.000	-53.21	13.01	-40.20	-13.00	-27.20	Horizontal
5	8662.500	-50.18	13.87	-36.31	-13.00	-23.31	Horizontal
6	520.208	-79.27	7.71	-71.56	-13.00	-58.56	Vertical
7	804.252	-80.20	12.75	-67.45	-13.00	-54.45	Vertical
8	912.695	-81.07	14.49	-66.58	-13.00	-53.58	Vertical
9	6930.000	-54.19	13.01	-41.18	-13.00	-28.18	Vertical
10	8662.500	-50.65	13.87	-36.78	-13.00	-23.78	Vertical
Highest Channel							
1	698.804	-80.51	11.44	-69.07	-13.00	-56.07	Horizontal
2	781.961	-79.52	12.07	-67.45	-13.00	-54.45	Horizontal
3	992.997	-81.26	15.56	-65.70	-13.00	-52.70	Horizontal
4	6980.000	-46.25	13.01	-33.24	-13.00	-20.24	Horizontal
5	8725.000	-42.75	13.99	-28.76	-13.00	-15.76	Horizontal
6	698.804	-80.29	11.44	-68.85	-13.00	-55.85	Vertical
7	838.887	-80.60	13.30	-67.30	-13.00	-54.30	Vertical
8	887.398	-80.97	14.17	-66.80	-13.00	-53.80	Vertical
9	6980.000	-46.80	13.01	-33.79	-13.00	-20.79	Vertical
10	8725.000	-46.88	13.99	-32.89	-13.00	-19.89	Vertical

5.8.3 LTE Band 5

LTE Band 5_10 MHz_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	698.804	-87.80	40.79	-47.01	-13.00	-34.01	Horizontal
2	887.398	-86.65	43.24	-43.41	-13.00	-30.41	Horizontal
3	938.714	-86.34	43.51	-42.83	-13.00	-29.83	Horizontal
4	1658.000	-38.02	-0.23	-38.25	-13.00	-25.25	Horizontal
5	4145.000	-49.65	9.05	-40.60	-13.00	-27.60	Horizontal
6	484.907	-87.80	35.93	-51.87	-13.00	-38.87	Vertical
7	538.811	-87.40	37.31	-50.09	-13.00	-37.09	Vertical
8	945.334	-86.35	43.67	-42.68	-13.00	-29.68	Vertical
9	1658.000	-42.61	-0.23	-42.84	-13.00	-29.84	Vertical
10	4145.000	-49.32	9.05	-40.27	-13.00	-27.27	Vertical
Middle Channel							
1	693.910	-88.01	40.53	-47.48	-13.00	-34.48	Horizontal
2	776.485	-87.34	41.14	-46.20	-13.00	-33.20	Horizontal
3	932.141	-86.71	43.41	-43.30	-13.00	-30.30	Horizontal
4	1673.000	-41.60	-0.12	-41.72	-13.00	-28.72	Horizontal
5	4182.500	-54.18	9.10	-45.08	-13.00	-32.08	Horizontal
6	624.490	-87.72	38.78	-48.94	-13.00	-35.94	Vertical
7	728.897	-87.89	40.92	-46.97	-13.00	-33.97	Vertical
8	815.635	-87.24	42.22	-45.02	-13.00	-32.02	Vertical
9	1673.000	-48.21	-0.12	-48.33	-13.00	-35.33	Vertical
10	4182.500	-54.43	9.10	-45.33	-13.00	-32.33	Vertical
Highest Channel							
1	698.804	-88.09	40.79	-47.30	-13.00	-34.30	Horizontal
2	821.387	-86.54	42.37	-44.17	-13.00	-31.17	Horizontal
3	899.958	-86.13	43.37	-42.76	-13.00	-29.76	Horizontal
4	1688.000	-46.02	-0.01	-46.03	-13.00	-33.03	Horizontal
5	2532.000	-59.48	3.68	-55.80	-13.00	-42.80	Horizontal
6	693.910	-87.37	40.53	-46.84	-13.00	-33.84	Vertical
7	906.304	-86.40	43.57	-42.83	-13.00	-29.83	Vertical
8	986.044	-86.80	44.36	-42.44	-13.00	-29.44	Vertical
9	1688.000	-49.74	-0.01	-49.75	-13.00	-36.75	Vertical
10	2532.000	-59.38	3.68	-55.70	-13.00	-42.70	Vertical

5.8.4 LTE Band 7

LTE Band 7_20 MHz_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	713.692	-80.15	11.53	-68.62	-25.00	-43.62	Horizontal
2	815.635	-80.50	13.04	-67.46	-25.00	-42.46	Horizontal
3	912.695	-80.81	14.49	-66.32	-25.00	-41.32	Horizontal
4	5020.000	-46.29	9.79	-36.50	-25.00	-11.50	Horizontal
5	7530.000	-46.90	13.06	-33.84	-25.00	-8.84	Horizontal
6	531.291	-79.70	7.82	-71.88	-25.00	-46.88	Vertical
7	875.013	-80.66	13.93	-66.73	-25.00	-41.73	Vertical
8	952.000	-80.62	14.82	-65.80	-25.00	-40.80	Vertical
9	5020.000	-52.04	9.79	-42.25	-25.00	-17.25	Vertical
10	7530.000	-45.04	13.06	-31.98	-25.00	-6.98	Vertical
Middle Channel							
1	850.760	-80.60	13.57	-67.03	-25.00	-42.03	Horizontal
2	893.656	-80.85	14.20	-66.65	-25.00	-41.65	Horizontal
3	992.997	-81.11	15.56	-65.55	-25.00	-40.55	Horizontal
4	5070.000	-45.06	9.90	-35.16	-25.00	-10.16	Horizontal
5	7605.000	-44.60	13.04	-31.56	-25.00	-6.56	Horizontal
6	739.214	-80.24	11.58	-68.66	-25.00	-43.66	Vertical
7	804.252	-80.50	12.75	-67.75	-25.00	-42.75	Vertical
8	899.958	-79.85	14.32	-65.53	-25.00	-40.53	Vertical
9	5070.000	-50.72	9.90	-40.82	-25.00	-15.82	Vertical
10	7605.000	-44.32	13.04	-31.28	-25.00	-6.28	Vertical
Highest Channel							
1	723.793	-80.87	11.58	-69.29	-25.00	-44.29	Horizontal
2	850.760	-80.95	13.57	-67.38	-25.00	-42.38	Horizontal
3	986.044	-81.55	15.44	-66.11	-25.00	-41.11	Horizontal
4	5120.000	-43.51	10.01	-33.50	-25.00	-8.50	Horizontal
5	7680.000	-44.52	13.02	-31.50	-25.00	-6.50	Horizontal
6	718.725	-80.90	11.51	-69.39	-25.00	-44.39	Vertical
7	862.802	-81.86	13.74	-68.12	-25.00	-43.12	Vertical
8	979.139	-81.70	15.25	-66.45	-25.00	-41.45	Vertical
9	5120.000	-50.50	10.01	-40.49	-25.00	-15.49	Vertical
10	7680.000	-44.23	13.02	-31.21	-25.00	-6.21	Vertical

5.8.5 LTE Band 38

LTE Band 38_20 MHz_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	698.804	-80.39	11.44	-68.95	-25.00	-43.95	Horizontal
2	881.184	-80.99	14.07	-66.92	-25.00	-41.92	Horizontal
3	919.132	-80.53	14.53	-66.00	-25.00	-41.00	Horizontal
4	5160.000	-44.00	10.10	-33.90	-25.00	-8.90	Horizontal
5	7740.000	-45.27	13.00	-32.27	-25.00	-7.27	Horizontal
6	749.676	-80.31	11.67	-68.64	-25.00	-43.64	Vertical
7	793.028	-80.44	12.44	-68.00	-25.00	-43.00	Vertical
8	925.613	-79.96	14.46	-65.50	-25.00	-40.50	Vertical
9	5160.000	-49.51	10.10	-39.41	-25.00	-14.41	Vertical
10	7740.000	-46.98	13.00	-33.98	-25.00	-8.98	Vertical
Middle Channel							
1	739.214	-79.14	11.58	-67.56	-25.00	-42.56	Horizontal
2	804.252	-79.78	12.75	-67.03	-25.00	-42.03	Horizontal
3	906.304	-80.60	14.53	-66.07	-25.00	-41.07	Horizontal
4	5190.000	-45.74	10.16	-35.58	-25.00	-10.58	Horizontal
5	7785.000	-46.73	12.99	-33.74	-25.00	-8.74	Horizontal
6	703.731	-79.96	11.46	-68.50	-25.00	-43.50	Vertical
7	793.028	-80.03	12.44	-67.59	-25.00	-42.59	Vertical
8	952.000	-81.26	14.82	-66.44	-25.00	-41.44	Vertical
9	5190.000	-51.47	10.16	-41.31	-25.00	-16.31	Vertical
10	7785.000	-49.41	12.99	-36.42	-25.00	-11.42	Vertical
Highest Channel							
1	815.635	-78.95	13.04	-65.91	-25.00	-40.91	Horizontal
2	856.760	-80.43	13.67	-66.76	-25.00	-41.76	Horizontal
3	906.304	-80.70	14.53	-66.17	-25.00	-41.17	Horizontal
4	5220.000	-44.00	10.23	-33.77	-25.00	-8.77	Horizontal
5	7830.000	-47.43	12.98	-34.45	-25.00	-9.45	Horizontal
6	718.725	-80.14	11.51	-68.63	-25.00	-43.63	Vertical
7	827.179	-80.43	13.16	-67.27	-25.00	-42.27	Vertical
8	979.139	-81.75	15.25	-66.50	-25.00	-41.50	Vertical
9	5220.000	-53.53	10.23	-43.30	-25.00	-18.30	Vertical
10	7830.000	-45.47	12.98	-32.49	-25.00	-7.49	Vertical

5.8.6 LTE Band 40A

LTE Band 40_ 5 MHz_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	646.822	-79.81	9.78	-70.03	-40.00	-30.03	Horizontal
2	821.387	-80.69	13.20	-67.49	-40.00	-27.49	Horizontal
3	906.304	-81.17	14.53	-66.64	-40.00	-26.64	Horizontal
4	4615.000	-56.73	9.59	-47.14	-40.00	-7.14	Horizontal
5	6922.500	-60.08	13.00	-47.08	-40.00	-7.08	Horizontal
6	739.214	-80.20	11.58	-68.62	-40.00	-28.62	Vertical
7	809.924	-80.24	12.89	-67.35	-40.00	-27.35	Vertical
8	925.613	-80.31	14.46	-65.85	-40.00	-25.85	Vertical
9	4615.000	-54.31	9.59	-44.72	-40.00	-4.72	Vertical
10	6922.500	-57.89	13.00	-44.89	-40.00	-4.89	Vertical
Middle Channel							
1	679.435	-79.43	10.55	-68.88	-40.00	-28.88	Horizontal
2	698.804	-80.15	11.44	-68.71	-40.00	-28.71	Horizontal
3	938.714	-81.04	14.52	-66.52	-40.00	-26.52	Horizontal
4	4620.000	-56.33	9.59	-46.74	-40.00	-6.74	Horizontal
5	6930.000	-58.37	13.01	-45.36	-40.00	-5.36	Horizontal
6	646.822	-79.54	9.78	-69.76	-40.00	-29.76	Vertical
7	771.047	-80.13	11.94	-68.19	-40.00	-28.19	Vertical
8	887.398	-80.01	14.17	-65.84	-40.00	-25.84	Vertical
9	4620.000	-53.93	9.59	-44.34	-40.00	-4.34	Vertical
10	6930.000	-56.67	13.01	-43.66	-40.00	-3.66	Vertical
Highest Channel							
1	862.802	-80.45	13.74	-66.71	-40.00	-26.71	Horizontal
2	925.613	-80.77	14.46	-66.31	-40.00	-26.31	Horizontal
3	992.997	-81.32	15.56	-65.76	-40.00	-25.76	Horizontal
4	4625.000	-56.97	9.59	-47.38	-40.00	-7.38	Horizontal
5	6937.500	-59.95	13.01	-46.94	-40.00	-6.94	Horizontal
6	787.475	-80.14	12.31	-67.83	-40.00	-27.83	Vertical
7	868.886	-80.71	13.80	-66.91	-40.00	-26.91	Vertical
8	899.958	-80.77	14.32	-66.45	-40.00	-26.45	Vertical
9	4625.000	-57.85	9.59	-48.26	-40.00	-8.26	Vertical
10	6937.500	-59.40	13.01	-46.39	-40.00	-6.39	Vertical

LTE Band 40_10 MHz_QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
1	723.793	-79.90	11.58	-68.32	-40.00	-28.32	Horizontal
2	844.803	-80.78	13.42	-67.36	-40.00	-27.36	Horizontal
3	986.044	-80.91	15.44	-65.47	-40.00	-25.47	Horizontal
4	4620.000	-53.93	9.59	-44.34	-40.00	-4.34	Horizontal
5	6930.000	-56.98	13.01	-43.97	-40.00	-3.97	Horizontal
6	739.214	-80.18	11.58	-68.60	-40.00	-28.60	Vertical
7	862.802	-80.83	13.74	-67.09	-40.00	-27.09	Vertical
8	912.695	-81.28	14.49	-66.79	-40.00	-26.79	Vertical
9	4620.000	-54.16	9.59	-44.57	-40.00	-4.57	Vertical
10	6930.000	-56.14	13.01	-43.13	-40.00	-3.13	Vertical

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5.8.7 LTE Band 40B

LTE Band 40_ 5 MHz_ QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
Lowest Channel							
1	793.028	-79.73	12.44	-67.29	-40.00	-27.29	Horizontal
2	844.803	-80.55	13.42	-67.13	-40.00	-27.13	Horizontal
3	945.334	-80.36	14.69	-65.67	-40.00	-25.67	Horizontal
4	4705.000	-56.51	9.62	-46.89	-40.00	-6.89	Horizontal
5	7057.500	-58.11	13.02	-45.09	-40.00	-5.09	Horizontal
6	862.802	-80.65	13.74	-66.91	-40.00	-26.91	Vertical
7	887.398	-80.97	14.17	-66.80	-40.00	-26.80	Vertical
8	932.141	-80.34	14.41	-65.93	-40.00	-25.93	Vertical
9	4705.000	-57.04	9.62	-47.42	-40.00	-7.42	Vertical
10	7057.500	-59.75	13.02	-46.73	-40.00	-6.73	Vertical
Middle Channel							
1	793.028	-80.07	12.44	-67.63	-40.00	-27.63	Horizontal
2	868.886	-80.37	13.80	-66.57	-40.00	-26.57	Horizontal
3	986.044	-81.56	15.44	-66.12	-40.00	-26.12	Horizontal
4	4710.000	-57.02	9.63	-47.39	-40.00	-7.39	Horizontal
5	7065.000	-58.96	13.02	-45.94	-40.00	-5.94	Horizontal
6	827.179	-80.67	13.16	-67.51	-40.00	-27.51	Vertical
7	912.695	-80.13	14.49	-65.64	-40.00	-25.64	Vertical
8	945.334	-80.86	14.69	-66.17	-40.00	-26.17	Vertical
9	4710.000	-56.36	9.63	-46.73	-40.00	-6.73	Vertical
10	7065.000	-57.72	13.02	-44.70	-40.00	-4.70	Vertical
Highest Channel							
1	862.802	-80.56	13.74	-66.82	-40.00	-26.82	Horizontal
2	906.304	-81.35	14.53	-66.82	-40.00	-26.82	Horizontal
3	992.997	-80.93	15.56	-65.37	-40.00	-25.37	Horizontal
4	4715.000	-56.20	9.63	-46.57	-40.00	-6.57	Horizontal
5	7072.500	-58.04	13.02	-45.02	-40.00	-5.02	Horizontal
6	734.037	-80.05	11.71	-68.34	-40.00	-28.34	Vertical
7	815.635	-80.50	13.04	-67.46	-40.00	-27.46	Vertical
8	945.334	-80.78	14.69	-66.09	-40.00	-26.09	Vertical
9	4715.000	-54.86	9.63	-45.23	-40.00	-5.23	Vertical
10	7072.500	-57.20	13.02	-44.18	-40.00	-4.18	Vertical

LTE Band 40_10 MHz_QPSK							
No.	Frequency	SA Reading	Correction factor	EIRP Result	Limit	Margin	Ant. Pol.
	(MHz)	(dBm)	(dB/m)	(dBm)	(dBm)	(dB)	
1	723.793	-77.90	11.58	-66.32	-40.00	-26.32	Horizontal
2	821.387	-79.40	13.20	-66.20	-40.00	-26.20	Horizontal
3	919.132	-79.76	14.53	-65.23	-40.00	-25.23	Horizontal
4	4710.000	-56.44	9.63	-46.81	-40.00	-6.81	Horizontal
5	7065.000	-57.68	13.02	-44.66	-40.00	-4.66	Horizontal
6	665.261	-78.67	10.14	-68.53	-40.00	-28.53	Vertical
7	734.037	-78.77	11.71	-67.06	-40.00	-27.06	Vertical
8	838.887	-79.05	13.30	-65.75	-40.00	-25.75	Vertical
9	4710.000	-56.34	9.63	-46.71	-40.00	-6.71	Vertical
10	7065.000	-58.35	13.02	-45.33	-40.00	-5.33	Vertical

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5.8.8 LTE Band 41

LTE Band 41_20 MHz_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	550.290	-79.38	7.94	-71.44	-25.00	-46.44	Horizontal
2	708.694	-79.87	11.44	-68.43	-25.00	-43.43	Horizontal
3	887.398	-80.03	14.17	-65.86	-25.00	-40.86	Horizontal
4	5130.000	-44.86	10.02	-34.84	-25.00	-9.84	Horizontal
5	7695.000	-44.22	13.01	-31.21	-25.00	-6.21	Horizontal
6	624.490	-79.22	9.32	-69.90	-25.00	-44.90	Vertical
7	906.304	-81.18	14.53	-66.65	-25.00	-41.65	Vertical
8	979.139	-81.07	15.25	-65.82	-25.00	-40.82	Vertical
9	5130.000	-48.19	10.02	-38.17	-25.00	-13.17	Vertical
10	7695.000	-43.42	13.01	-30.41	-25.00	-5.41	Vertical
Middle Channel							
1	728.897	-79.99	11.61	-68.38	-25.00	-43.38	Horizontal
2	856.760	-80.75	13.67	-67.08	-25.00	-42.08	Horizontal
3	899.958	-80.66	14.32	-66.34	-25.00	-41.34	Horizontal
4	5200.000	-46.26	10.18	-36.08	-25.00	-11.08	Horizontal
5	7800.000	-49.97	12.99	-36.98	-25.00	-11.98	Horizontal
6	838.887	-80.14	13.30	-66.84	-25.00	-41.84	Vertical
7	893.656	-80.56	14.20	-66.36	-25.00	-41.36	Vertical
8	945.334	-80.94	14.69	-66.25	-25.00	-41.25	Vertical
9	5200.000	-47.88	10.18	-37.70	-25.00	-12.70	Vertical
10	7800.000	-45.90	12.99	-32.91	-25.00	-7.91	Vertical
Highest Channel							
1	703.731	-80.21	11.46	-68.75	-25.00	-43.75	Horizontal
2	744.427	-79.74	11.57	-68.17	-25.00	-43.17	Horizontal
3	925.613	-80.10	14.46	-65.64	-25.00	-40.64	Horizontal
4	5290.000	-45.14	10.38	-34.76	-25.00	-9.76	Horizontal
5	7935.000	-45.96	12.95	-33.01	-25.00	-8.01	Horizontal
6	728.897	-80.03	11.61	-68.42	-25.00	-43.42	Vertical
7	765.648	-79.53	11.85	-67.68	-25.00	-42.68	Vertical
8	881.184	-80.41	14.07	-66.34	-25.00	-41.34	Vertical
9	5290.000	-48.29	10.38	-37.91	-25.00	-12.91	Vertical
10	7935.000	-45.03	12.95	-32.08	-25.00	-7.08	Vertical

5.8.9 LTE Band 66

LTE Band 66_20 MHz_QPSK							
No.	Frequency (MHz)	SA Reading (dBm)	Correction factor (dB/m)	EIRP Result (dBm)	Limit (dBm)	Margin (dB)	Ant. Pol.
Lowest Channel							
1	633.328	-79.58	9.57	-70.01	-13.00	-57.01	Horizontal
2	844.803	-80.70	13.42	-67.28	-13.00	-54.28	Horizontal
3	952.000	-80.48	14.82	-65.66	-13.00	-52.66	Horizontal
4	6880.000	-47.21	13.00	-34.21	-13.00	-21.21	Horizontal
5	8600.000	-44.35	13.76	-30.59	-13.00	-17.59	Horizontal
6	723.793	-79.49	11.58	-67.91	-13.00	-54.91	Vertical
7	827.179	-80.55	13.16	-67.39	-13.00	-54.39	Vertical
8	992.997	-81.31	15.56	-65.75	-13.00	-52.75	Vertical
9	6880.000	-47.52	13.00	-34.52	-13.00	-21.52	Vertical
10	8600.000	-46.83	13.76	-33.07	-13.00	-20.07	Vertical
Middle Channel							
1	703.731	-79.96	11.46	-68.50	-13.00	-55.50	Horizontal
2	875.013	-80.37	13.93	-66.44	-13.00	-53.44	Horizontal
3	945.334	-80.70	14.69	-66.01	-13.00	-53.01	Horizontal
4	6980.000	-47.07	13.01	-34.06	-13.00	-21.06	Horizontal
5	8725.000	-45.65	13.99	-31.66	-13.00	-18.66	Horizontal
6	660.602	-79.67	10.02	-69.65	-13.00	-56.65	Vertical
7	703.731	-79.91	11.46	-68.45	-13.00	-55.45	Vertical
8	827.179	-80.17	13.16	-67.01	-13.00	-54.01	Vertical
9	6980.000	-47.87	13.01	-34.86	-13.00	-21.86	Vertical
10	8725.000	-46.54	13.99	-32.55	-13.00	-19.55	Vertical
Highest Channel							
1	713.692	-80.39	11.53	-68.86	-13.00	-55.86	Horizontal
2	776.485	-80.31	11.90	-68.41	-13.00	-55.41	Horizontal
3	965.474	-80.74	14.91	-65.83	-13.00	-52.83	Horizontal
4	7080.000	-45.56	13.02	-32.54	-13.00	-19.54	Horizontal
5	8850.000	-47.06	14.23	-32.83	-13.00	-19.83	Horizontal
6	708.694	-80.54	11.44	-69.10	-13.00	-56.10	Vertical
7	809.924	-80.22	12.89	-67.33	-13.00	-54.33	Vertical
8	887.398	-80.32	14.17	-66.15	-13.00	-53.15	Vertical
9	7080.000	-45.66	13.02	-32.64	-13.00	-19.64	Vertical
10	8850.000	-46.65	14.23	-32.42	-13.00	-19.42	Vertical

Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result - Limit
4. For Radiated Emission above 3GHz or 6GHz or 8GHz, there was not any unwanted emission detected, so only the results of second and third harmonics are recorded in the report.

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5.9 FREQUENCY STABILITY

Test Requirement: FCC 47 CFR Part 2.1055 &
FCC 47 CFR Part 22.355 &
FCC 47 CFR Part 24.235 &
FCC 47 CFR Part 27.54

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limits:

FCC 47 CFR Part 22.355, FCC 47 CFR Part 90.213

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

FCC 47 CFR Part 24.235, FCC 47 CFR Part 27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Setup: Refer to section 4.2.2 for details.

Test Procedures:

- 1) Use CMW 500 with Frequency Error measurement capability.
 - a) Temp. = -30° to $+50^{\circ}\text{C}$
 - b) Voltage = low voltage, 6.8 Vdc, Normal, 7.2 Vdc and High voltage, 8.4 Vdc.

- 2) Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10°C degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until $+50^{\circ}\text{C}$ is reached.

- 3) Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

Equipment Used: Refer to section 3 for details.

Test Results: Pass

Test Data: Please refer to Appendix A5

APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp. The result(s) shown in this report refer only to the sample(s) tested. Without written approval of UnionTrust, this report can't be reproduced except in full.
