

FCC TEST REPORT

Product Name: Smart Phone

Trade Mark:



or RHINO

Model No.: PACE A1

Add. Model No.: N/A

Report Number: 220514003RFM-1

Test Standards: FCC 47 CFR Part 22

FCC 47 CFR Part 24

FCC 47 CFR Part 27

FCC 47 CFR Part 90

FCC ID: 2AUOUPA1NA

Test Result: PASS

Date of Issue: July 25, 2022

Prepared for:

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UTTR-RF-FCC4G-V1.1

Version

Version No.	Date	Description
V1.0	July 25, 2022	Original

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1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	Rhino Mobility LLC
Address of Applicant:	8 The Green, Suite A, Dover, Delaware,19901, USA
Manufacturer:	Rhino Mobility LLC
Address of Manufacturer:	8 The Green, Suite A, Dover, Delaware,19901, USA

1.2 EUT INFORMATION

1.2.1 General Description of EUT

Product Name:	Smart Phone					
Model No.:	PACE A1					
Add. Model No.:	N/A					
Trade Mark:	 or RHINO					
DUT Stage:	Identical Prototype					
EUT Supports Function: (Provided by the customer)	UTRA Bands:	Band II/ Band IV/ Band V				
	E-UTRA Bands:	FDD Band 2/ Band 4/ Band 5/ Band 12/ Band 13/ Band 25/ Band 26/ Band 66/ Band 71				
		TDD Band 41				
	2.4 GHz ISM Band:	IEEE 802.11b/g/n				
		Bluetooth V4.2				
	5 GHz U-NII Bands:	5 150 MHz to 5 250 MHz	IEEE 802.11a/n			
		5 250 MHz to 5 350 MHz	IEEE 802.11a/n			
		5 470 MHz to 5 725 MHz	IEEE 802.11a/n			
		5 725 MHz to 5 850 MHz	IEEE 802.11a/n			
	RNSS Bands:	1559 MHz to 1610 MHz	GPS			
Software Version:	PACE_A1(005)_20220531 (Provided by the customer)					
Hardware Version:	H318_MB_V2 (Provided by the customer)					
Sample Received Date:	May 18, 2022					
Sample Tested Date:	May 20, 2022 to June 14, 2022					
Note: The PACE A1 have two LCD Module from different vendors. This report has evaluated and pre-testing of two batches of LCD Module, with only the worst data recorded in the report.						
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.:	MST-0501000
Input:	100-240 V~50/60 Hz 0.15 A Max
Output:	5.0 V == 1000mA
AC Cable:	N/A
DC Cable:	N/A

Battery	
Model No.:	BPA1
Battery Type:	Lithium-ion Rechargeable Battery
Rated Voltage:	3.8 Vdc
Limited Charge Voltage:	4.35 Vdc
Rated Capacity:	2400 mAh

Cable	
Description:	USB Type-C Plug Cable
Cable Type:	Shielded without ferrite
Length:	1 Meter

1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Support Networks:	Single Carrier: LTE Band 2/4/5/12/13/25/26/41/66/71
Type of Modulation:	QPSK, 16QAM, 64QAM
Antenna Type: (Provided by the customer)	LDS Antenna
Antenna Gain: (Provided by the customer)	LTE Band 2: 1.46 dBi
	LTE Band 4: 1.44 dBi
	LTE Band 5: 0.75 dBi
	LTE Band 12: -0.25 dBi
	LTE Band 13: -0.16 dBi
	LTE Band 25: 1.45 dBi
	LTE Band 26: 0.77 dBi
	LTE Band 41: 1.55 dBi
	LTE Band 66: 1.46 dBi
	LTE Band 71: -0.36 dBi
IEMI:	Radiated: 351528101297138
	Conducted: 351528101296957
Normal Test Voltage:	3.8 Vdc
Extreme Test Voltage:	3.5 to 4.35Vdc
Extreme Test Temperature:	-30 °C to +50 °C

Summary of Results:								
Bands	BW	Modulation	Frequency Range	Max RF Output Power (dBm)		EIRP	99% BW	Emission Designator
	(MHz)		(MHz)	Conducted (Average)	ERP/EIRP (Average)	(W)	(MHz)	
2	1.4	QPSK	1850.7-1909.3	22.59	24.05	0.2541	1.0999	1M10G7D
		16QAM		21.44	22.90	0.1950	1.0981	1M10W7D
		64QAM		20.57	22.03	0.1596	1.0990	1M10W7D
	3	QPSK	1851.5-1908.5	22.46	23.92	0.2466	2.6927	2M69G7D
		16QAM		21.60	23.06	0.2023	2.6862	2M69W7D
		64QAM		20.68	22.14	0.1637	2.6897	2M69W7D
	5	QPSK	1852.5-1907.5	22.43	23.89	0.2449	4.5289	4M53G7D
		16QAM		21.38	22.84	0.1923	4.5485	4M55W7D
		64QAM		20.55	22.01	0.1589	4.5488	4M55W7D
	10	QPSK	1855.0-1905.0	22.49	23.95	0.2483	9.0312	9M03G7D
		16QAM		21.88	23.34	0.2158	9.0245	9M02W7D
		64QAM		20.94	22.40	0.1738	9.0291	9M03W7D
	15	QPSK	1857.5-1902.5	22.46	23.92	0.2466	13.517	13M5G7D
		16QAM		22.04	23.50	0.2239	13.528	13M5W7D
		64QAM		21.10	22.56	0.1803	13.539	13M5W7D
	20	QPSK	1860.0-1900.0	22.69	24.15	0.2600	18.026	18M0G7D
		16QAM		22.13	23.59	0.2286	17.951	18M0W7D
		64QAM		21.21	22.67	0.1849	18.056	18M1W7D
4	1.4	QPSK	1710.7-1754.3	22.00	23.44	0.2208	1.1002	1M10G7D
		16QAM		21.03	22.47	0.1766	1.0958	1M10W7D
		64QAM		20.15	21.59	0.1442	1.1009	1M10W7D
	3	QPSK	1711.5-1753.5	21.89	23.33	0.2153	2.6973	2M70G7D
		16QAM		21.03	22.47	0.1766	2.6835	2M68W7D
		64QAM		20.19	21.63	0.1455	2.6889	2M69W7D
	5	QPSK	1712.5-1752.5	21.80	23.24	0.2109	4.5431	4M54G7D
		16QAM		20.92	22.36	0.1722	4.5372	4M54W7D
		64QAM		20.03	21.47	0.1403	4.5449	4M54W7D
	10	QPSK	1715-1750	22.05	23.49	0.2234	9.0324	9M03G7D
		16QAM		21.23	22.67	0.1849	9.0093	9M01W7D
		64QAM		20.32	21.76	0.1500	9.0133	9M01W7D
	15	QPSK	1717.5-1747.5	21.79	23.23	0.2104	13.522	13M5G7D
		16QAM		21.37	22.81	0.1910	13.492	13M5W7D
		64QAM		20.50	21.94	0.1563	13.512	13M5W7D
	20	QPSK	1720-1745	22.08	23.52	0.2249	17.978	18M0G7D
		16QAM		21.24	22.68	0.1854	18.013	18M0W7D
		64QAM		20.38	21.82	0.1521	18.053	18M1W7D

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Bands	BW (MHz)	Modulation	Frequency Range	Max RF Output Power (dBm)		EIRP	99% BW	Emission Designator
			(MHz)	Conducted (Average)	ERP/EIRP (Average)	(W)	(MHz)	
5	1.4	QPSK	824.7-848.3	22.57	21.17	0.1309	1.1007	1M10G7D
		16QAM		21.73	20.33	0.1079	1.1011	1M10W7D
		64QAM		20.83	19.43	0.0877	1.1000	1M10W7D
	3	QPSK	825.5-847.5	22.51	21.11	0.1291	2.6931	2M69G7D
		16QAM		21.66	20.26	0.1062	2.6832	2M68W7D
		64QAM		20.79	19.39	0.0869	2.6876	2M69W7D
	5	QPSK	826.5-846.5	22.44	21.04	0.1271	4.5430	4M54G7D
		16QAM		21.44	20.04	0.1009	4.5437	4M54W7D
		64QAM		20.61	19.21	0.0834	4.5668	4M57W7D
	10	QPSK	829-844	22.59	21.19	0.1315	9.0269	9M03G7D
		16QAM		21.72	20.32	0.1076	9.0342	9M03W7D
		64QAM		20.80	19.40	0.0871	9.0251	9M03W7D
12	1.4	QPSK	699.7-715.3	22.25	19.85	0.0966	1.105	1M11G7D
		16QAM		21.22	18.82	0.0762	1.0926	1M09G7D
		64QAM		20.24	17.84	0.0608	1.0992	1M10W7D
	3	QPSK	700.5-714.5	22.08	19.68	0.0929	2.6966	2M70G7D
		16QAM		21.59	19.19	0.0830	2.6858	2M69W7D
		64QAM		20.78	18.38	0.0689	2.691	2M69W7D
	5	QPSK	701.5-713.5	22.13	19.73	0.0940	4.5454	4M55G7D
		16QAM		21.67	19.27	0.0845	4.5372	4M54W7D
		64QAM		20.87	18.47	0.0703	4.555	4M56W7D
	10	QPSK	704-711	22.28	19.88	0.0973	9.0271	9M03G7D
		16QAM		21.00	18.60	0.0724	9.0292	9M03W7D
		64QAM		20.13	17.73	0.0593	9.0336	9M03W7D
13	5	QPSK	779.5-784.5	22.07	19.76	0.0946	4.5331	4M53G7D
		16QAM		21.04	18.73	0.0746	4.5465	4M55W7D
		64QAM		20.15	17.84	0.0608	4.5301	4M53W7D
	10	QPSK	782-782	22.18	19.87	0.0971	9.0498	9M05G7D
		16QAM		21.16	18.85	0.0767	9.0487	9M05W7D
		64QAM		20.26	17.95	0.0624	9.0472	9M05W7D

Bands	BW (MHz)	Modulation	Frequency Range	Max RF Output Power (dBm)		EIRP	99% BW	Emission Designator
			(MHz)	Conducted (Average)	ERP/EIRP (Average)	(W)	(MHz)	
25	1.4	QPSK	1850.7-1914.3	22.83	24.28	0.2679	1.0971	1M10G7D
		16QAM		21.63	23.08	0.2032	1.0982	1M10W7D
		64QAM		20.79	22.24	0.1675	1.0968	1M10W7D
	3	QPSK	1851.5-1913.5	22.62	24.07	0.2553	2.6848	2M68G7D
		16QAM		21.58	23.03	0.2009	2.6888	2M69W7D
		64QAM		20.74	22.19	0.1656	2.6901	2M69W7D
	5	QPSK	1852.5-1912.5	22.90	24.35	0.2723	4.5433	4M54G7D
		16QAM		21.53	22.98	0.1986	4.5441	4M54W7D
		64QAM		20.56	22.01	0.1589	4.5487	4M55W7D
	10	QPSK	1855.0-1910.0	22.91	24.36	0.2729	9.0121	9M01G7D
		16QAM		22.22	23.67	0.2328	9.0141	9M01W7D
		64QAM		21.37	22.82	0.1914	9.0179	9M02W7D
	15	QPSK	1857.5-1907.5	22.60	24.05	0.2541	13.511	13M5G7D
		16QAM		22.09	23.54	0.2259	13.505	13M5W7D
		64QAM		21.21	22.66	0.1845	13.529	13M5W7D
	20	QPSK	1860.0-1905.0	22.92	24.37	0.2735	18.024	18M0G7D
		16QAM		22.20	23.65	0.2317	17.995	18M0W7D
		64QAM		21.21	22.66	0.1845	18.054	18M1W7D
26	1.4	QPSK	824.7-848.3	22.25	20.87	0.1222	1.1019	1M10G7D
		16QAM		21.17	19.79	0.0953	1.1006	1M10W7D
		64QAM		20.34	18.96	0.0787	1.0995	1M10W7D
	3	QPSK	825.5-847.5	22.53	21.15	0.1303	2.6938	2M69G7D
		16QAM		22.09	20.71	0.1178	2.6823	2M68W7D
		64QAM		21.14	19.76	0.0946	2.6880	2M69W7D
	5	QPSK	826.5-846.5	21.99	20.61	0.1151	4.5378	4M54G7D
		16QAM		20.89	19.51	0.0893	4.5436	4M54W7D
		64QAM		20.06	18.68	0.0738	4.5523	4M55W7D
	10	QPSK	829-844	22.35	20.97	0.1250	9.0087	9M01G7D
		16QAM		21.73	20.35	0.1084	9.0122	9M01W7D
		64QAM		20.93	19.55	0.0902	9.0266	9M03W7D
	15	QPSK	831.5-841.5	22.60	21.22	0.1324	13.553	13M6G7D
		16QAM		22.22	20.84	0.1213	13.527	13M5W7D
		64QAM		21.37	19.99	0.0998	13.537	13M5W7D

Bands	BW (MHz)	Modulation	Frequency Range	Max RF Output Power (dBm)		EIRP	99% BW	Emission Designator
			(MHz)	Conducted (Average)	ERP/EIRP (Average)	(W)	(MHz)	
26 (Part 90S)	1.4	QPSK	814.7-823.3	22.59	21.21	0.1321	1.1102	1M11G7D
		16QAM		21.74	20.36	0.1086	1.1007	1M10W7D
		64QAM		20.91	19.53	0.0897	1.0992	1M10W7D
	3	QPSK	815.5-822.5	22.60	21.22	0.1324	2.6896	2M69G7D
		16QAM		21.60	20.22	0.1052	2.6868	2M69W7D
		64QAM		20.76	19.38	0.0867	2.6872	2M69W7D
	5	QPSK	816.5-821.5	22.61	21.23	0.1327	4.5374	4M54G7D
		16QAM		21.60	20.22	0.1052	4.5374	4M54W7D
		64QAM		20.75	19.37	0.0865	4.539	4M54W7D
	10	QPSK	819	22.61	21.23	0.1327	9.0317	9M03G7D
		16QAM		21.61	20.23	0.1054	9.0136	8M01W7D
		64QAM		20.65	19.27	0.0845	9.0236	9M02W7D
	15	QPSK	821.5	22.68	21.30	0.1349	13.497	13M5G7D
		16QAM		22.07	20.69	0.1172	13.528	13M5W7D
		64QAM		21.11	19.73	0.0940	13.520	13M5W7D
41	5	QPSK	2498.5-2687.5	22.52	24.07	0.2553	4.5268	4M53G7D
		16QAM		21.47	23.02	0.2004	4.5459	4M55W7D
		64QAM		20.58	22.13	0.1633	4.5317	4M53W7D
	10	QPSK	2501-2685	22.67	24.22	0.2642	9.0396	9M04G7D
		16QAM		21.68	23.23	0.2104	9.0396	9M04W7D
		64QAM		20.72	22.27	0.1687	9.0352	9M04W7D
	15	QPSK	2503.5-2682.5	22.42	23.97	0.2495	13.531	13M5G7D
		16QAM		21.44	22.99	0.1991	13.542	13M5W7D
		64QAM		20.61	22.16	0.1644	13.588	13M6W7D
	20	QPSK	2506-2680	22.69	24.24	0.2655	18.052	18M1G7D
		16QAM		21.66	23.21	0.2094	18.016	18M0W7D
		64QAM		20.84	22.39	0.1734	18.039	18M0W7D

Bands	BW (MHz)	Modulation	Frequency Range	Max RF Output Power (dBm)		EIRP	99% BW	Emission Designator
			(MHz)	Conducted (Average)	ERP/EIRP (Average)	(W)	(MHz)	
66	1.4	QPSK	1710.7-1779.3	21.92	23.38	0.2178	1.0999	1M10G7D
		16QAM		21.10	22.56	0.1803	1.0997	1M10W7D
		64QAM		20.20	21.66	0.1466	1.1001	1M10W7D
	3	QPSK	1711.5-1778.5	21.93	23.39	0.2183	2.6927	2M69G7D
		16QAM		20.96	22.42	0.1746	2.6855	2M69W7D
		64QAM		20.15	21.61	0.1449	2.6882	2M69W7D
	5	QPSK	1712.5-1777.5	21.92	23.38	0.2178	4.5394	4M54G7D
		16QAM		21.08	22.54	0.1795	4.5322	4M53W7D
		64QAM		20.19	21.65	0.1462	4.5399	4M54W7D
	10	QPSK	1715-1775	22.01	23.47	0.2223	8.9943	8M99G7D
		16QAM		21.02	22.48	0.1770	8.9942	8M99W7D
		64QAM		20.16	21.62	0.1452	8.9997	9M00W7D
	15	QPSK	1717.5-1772.5	21.80	23.26	0.2118	13.495	13M5G7D
		16QAM		20.95	22.41	0.1742	13.512	13M5W7D
		64QAM		20.06	21.52	0.1419	13.516	13M5W7D
	20	QPSK	1720-1770	22.11	23.57	0.2275	18.054	18M1G7D
		16QAM		21.11	22.57	0.1807	17.992	18M0W7D
		64QAM		20.15	21.61	0.1449	18.031	18M0W7D
71	5	QPSK	665.5-695.5	22.23	19.72	0.0938	4.5434	4M54G7D
		16QAM		21.38	18.87	0.0771	4.5522	4M55W7D
		64QAM		20.45	17.94	0.0622	4.5720	4M57W7D
	10	QPSK	668-693	22.56	20.05	0.1012	9.0491	9M05G7D
		16QAM		22.11	19.60	0.0912	9.0499	9M05W7D
		64QAM		21.19	18.68	0.0738	9.0651	9M07W7D
	15	QPSK	670.5-690.5	22.31	19.80	0.0955	13.531	13M5G7D
		16QAM		22.01	19.50	0.0891	13.542	13M5W7D
		64QAM		21.07	18.56	0.0718	13.553	13M6W7D
	20	QPSK	673-688	22.57	20.06	0.1014	18.001	18M0G7D
		16QAM		21.88	19.37	0.0865	18.077	18M1W7D
		64QAM		20.91	18.40	0.0692	18.025	18M0W7D

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
--	--	--	--	--

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, 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.

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.

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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 & 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 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 & 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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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

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 Chamber & Accessory Equipment	ETS-LINDGREN	3M	Euroshiedpn-CT001270-1317	22-Jan-2021	21-Jan-2024	
<input checked="" type="checkbox"/>	Receiver	R&S	ESIB26	100114	5-Nov-2021	4-Nov-2022	
<input type="checkbox"/>	EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY51440197	15-Apr-2022	14-Apr-2023	
<input type="checkbox"/>	Loop Antenna	ETS-LINDGREN	6502	00202525	11-Nov-2021	10-Nov-2023	
<input checked="" type="checkbox"/>	Broadband Antenna	ETS-LINDGREN	3142E	00201566	11-Nov-2021	10-Nov-2023	
<input checked="" type="checkbox"/>	6dB Attenuator	Talent	RA6A5-N-18	18103001	11-Nov-2021	10-Nov-2023	
<input checked="" type="checkbox"/>	Preamplifier	HP	8447F	2805A02960	5-Nov-2021	4-Nov-2022	
<input type="checkbox"/>	Broadband Antenna (Pre-amplifier)	ETS-LINDGREN	3142E-PA	00201891	30-Apr-2021	29-Apr-2023	
<input type="checkbox"/>	6dB Attenuator	Talent	RA6A5-N-18	18103002	5-Nov-2021	4-Nov-2022	
<input type="checkbox"/>	Horn Antenna	ETS-LINDGREN	3117	00164202	11-Nov-2021	10-Nov-2023	
<input checked="" type="checkbox"/>	Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3117-PA	00201874	17-Apr-2022	16-Apr-2024	
<input checked="" type="checkbox"/>	Pre-amplifier	ETS-LINDGREN	00118385	00201874	6-Nov-2021	5-Nov-2022	
<input type="checkbox"/>	Horn Antenna	ETS-LINDGREN	3116C	00200180	17-Apr-2022	16-Apr-2024	
<input checked="" type="checkbox"/>	Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3116C-PA	00202652	14-Nov-2020	13-Nov-2022	
<input checked="" type="checkbox"/>	Pre-amplifier	ETS-LINDGREN	00118384	00202652	17-Nov-2020	16-Nov-2022	
<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 Spectrum Analyzer	KEYSIGHT	N9010A	MY51440197	15-Apr-2022	14-Apr-2023
<input checked="" type="checkbox"/>	EXA Spectrum Analyzer	KEYSIGHT	N9020A	MY51286807	5-Nov-2021	4-Nov-2022
<input type="checkbox"/>	Spectrum analyzer	R&S	FSV40-N	101653	15-Apr-2022	14-Apr-2023
<input checked="" type="checkbox"/>	DC Source	KIKUSUI	PWR400L	LK003024	20-Aug-2021	19-Aug-2022
<input type="checkbox"/>	Temp & Humidity chamber	Espec	GL(U)04KA(W)	16921H201P3	20-Aug-2021	19-Aug-2022
<input checked="" type="checkbox"/>	Temp & Humidity chamber	Votisch	VT4002	58566133290020	15-Apr-2022	14-Apr-2023
<input type="checkbox"/>	Wideband Radio Communication Tester	R&S	CMW500	119583	15-Apr-2022	14-Apr-2023
<input checked="" type="checkbox"/>	Wideband Radio Communication Tester	R&S	CMW500	120932	15-Apr-2022	14-Apr-2023

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/LV	-30	3.5	20 to 75
TH/VL	+50	3.5	20 to 75
TL/VH	-30	4.35	20 to 75
TH/VH	+50	4.35	20 to 75

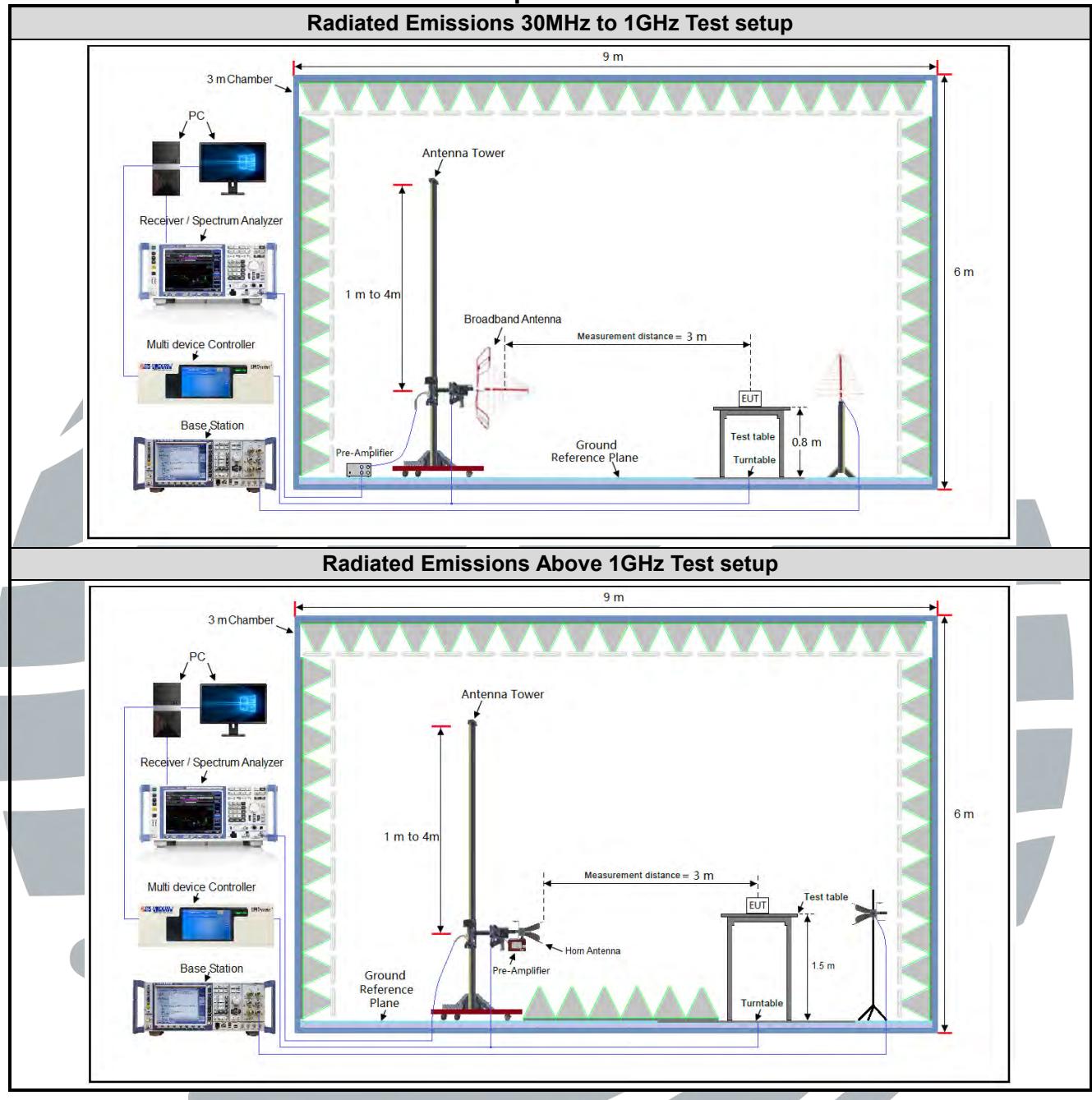
Remark:

1) The EUT just work in such extreme temperature of -30 °C to +50 °C and the extreme voltage of 3.5 V to 4.35 V, so here the EUT is tested in the temperature of -30 °C to +50 °C and the voltage of 3.5 V to 4.35 V.

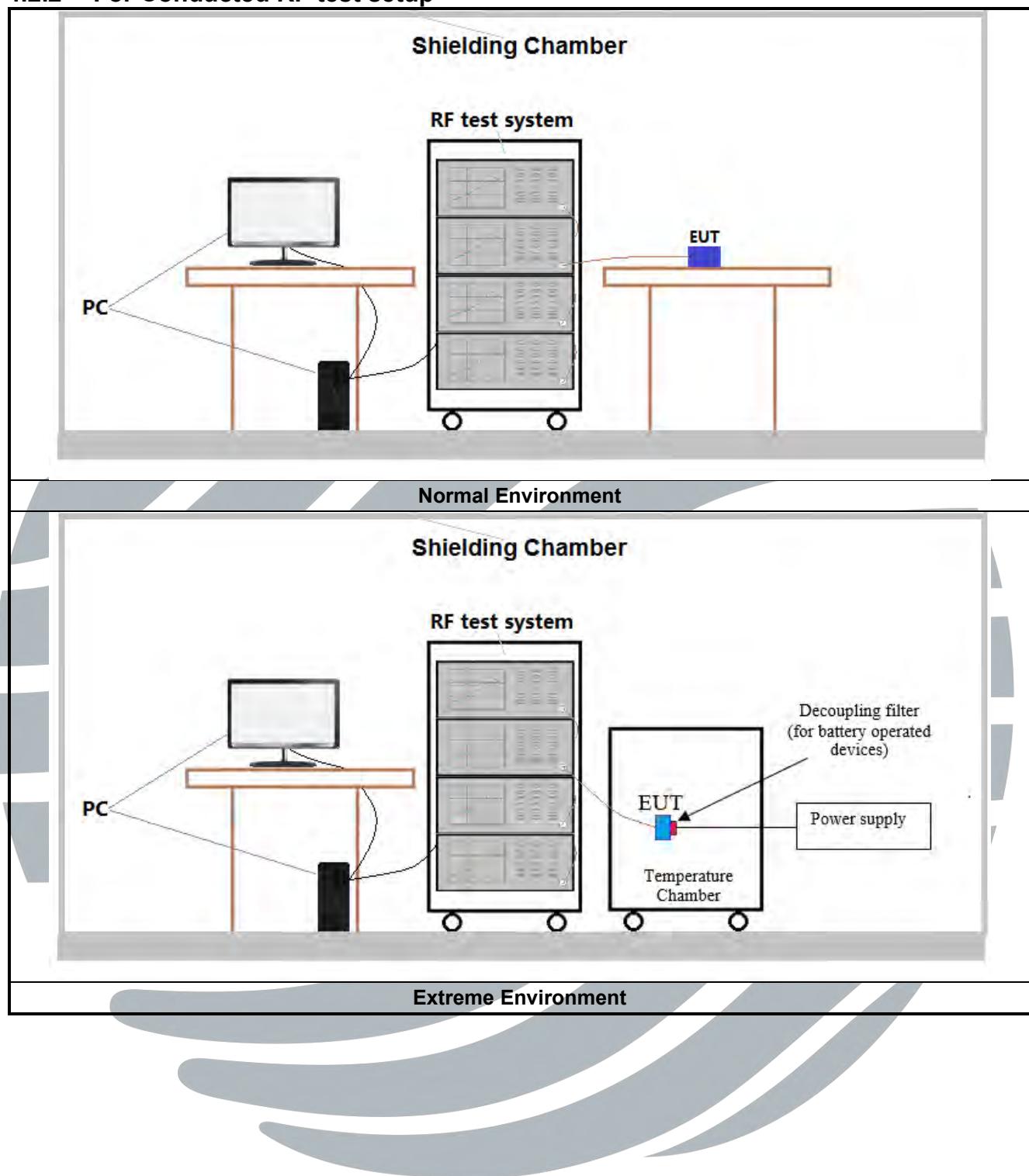
2) VN: Normal Voltage; TN: Normal Temperature;
TL: Low Extreme Test Temperature; TH: High Extreme Test Temperature;
VL: Low Extreme Test Voltage; VH: High Extreme Test Voltage.

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 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

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		10	23130	711
LTE Band 13 TX: 777-787MHz	Low Range	5	23205	779.5
		10	--	--
	Middle Range	5/10	23230	782
		5	23255	784.5
	High Range	10	--	--
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	824.7
		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 41 TX: 2496-2690MHz	Low Range	5	39675	2498.5
		10	39700	2501
		15	39725	2503.5
		20	39750	2506

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	Middle Range	5/10/ 15/20	40620	2593
LTE Band 66 TX: 1710-1780MHz	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	665.5
		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

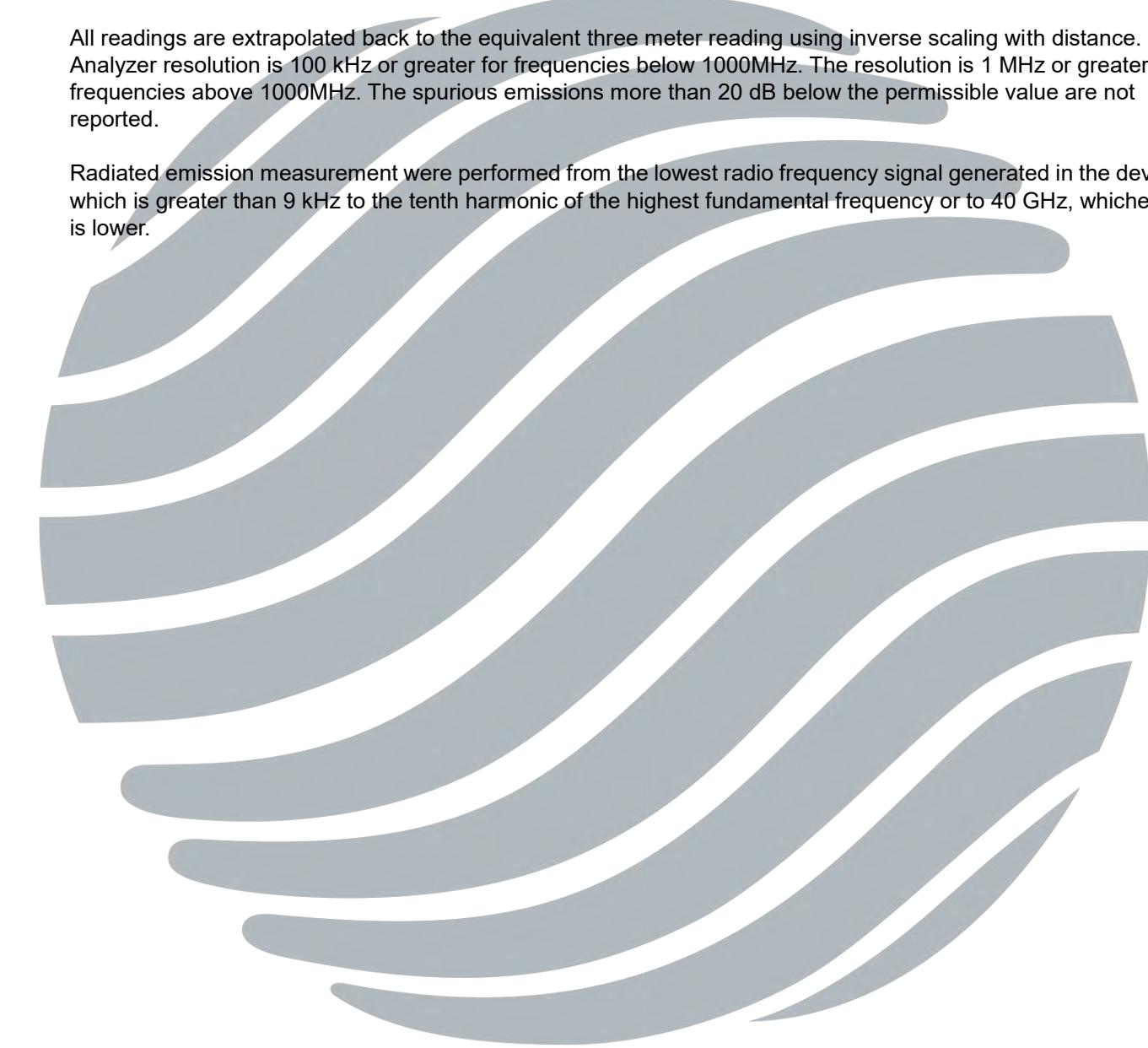
4.4 SYSTEM TEST CONFIGURATION

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 3.85V 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	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
	4	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
	5	☒	☒	☒	☒	☒	--	--	☒	☒	☒	☒	☒	☒	☒	☒	
	12	☒	☒	☒	☒	☒	-	-	☒	☒	☒	☒	☒	☒	☒	☒	
	13	-	-	☒	☒	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒	
	25	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
	26	☒	☒	☒	☒	☒	☒	--	☒	☒	☒	☒	☒	☒	☒	☒	
	41	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
	66	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
	71	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
99%&26dB Bandwidth	2	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
	5	☒	☒	☒	☒	☒	--	--	☒	☒	☒	☒	☒	☒	☒	☒	☒
	12	☒	☒	☒	☒	☒	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒
	13	-	-	☒	☒	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
	25	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
	26	☒	☒	☒	☒	☒	☒	--	☒	☒	☒	☒	☒	☒	☒	☒	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
	71	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
peak-to-average ratio	2	<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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	4	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	5	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	12	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	13	-	-	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	25	<input 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	41	-	-	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	66	<input 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Band Edge at antenna terminals	2	<input checked="" type="checkbox"/>														
	4	<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"/>								
	12	<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"/>								
	25	<input checked="" type="checkbox"/>														
	26	<input checked="" type="checkbox"/>	--	<input checked="" type="checkbox"/>												
	41	-	-	<input checked="" type="checkbox"/>												
	66	<input checked="" type="checkbox"/>														
	71	-	-	<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
Spurious emissions at antenna terminals	2	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☒	☒	☒
	5	☒	☒	☒	☒	☒	--	--	☒	☒	☒	☒	☒	☐	☒	☒
	12	☒	☒	☒	☒	☒	-	-	☒	☒	☒	☒	☒	☐	☒	☒
	13	-	-	☒	☒	-	-	☒	☒	☒	☒	☒	☐	☒	☒	☒
	25	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒
	26	☒	☒	☒	☒	☒	☒	--	☒	☒	☒	☒	☒	☐	☒	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒
	71	-	-	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒
Field strength of spurious radiation	2	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	4	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	5	☐	☐	☐	☒	--	--	☒	☐	☐	☒	☐	☐	☒	☒	☒
	12	☐	☐	☐	☒	-	-	☒	☐	☐	☒	☐	☐	☒	☒	☒
	13	-	-	☐	☒	-	-	☒	☐	☐	☒	☐	☐	☒	☒	☒
	25	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	26	☐	☐	☐	☐	☐	☒	--	☒	☐	☐	☒	☐	☐	☒	☒
	41	-	-	☐	☐	☐	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	66	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	71	-	-	☐	☐	☐	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒

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	<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 checked="" type="checkbox"/>	<input type="checkbox"/>				
	4	<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 checked="" type="checkbox"/>	<input type="checkbox"/>				
	5	<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 checked="" type="checkbox"/>	<input type="checkbox"/>				
	12	<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 checked="" type="checkbox"/>	<input type="checkbox"/>				
	13	-	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>				
	41	-	-	<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 checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>				

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)

LTE Band 41: FCC 47 CFR Part 27.50(h)(2)

LTE Band 12 & 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

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

Test Method:

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 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

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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			64QAM		
Band	Bandwidth (MHz)	RB	18607	18900	19193	18607	18900	19193	18607	18900	19193
2	1.4	1@0	22.33	22.39	22.32	21.28	21.25	21.19	20.35	20.34	20.24
		1@3	22.39	22.59	22.52	21.44	21.43	21.37	20.57	20.57	20.54
		1@5	22.34	22.33	22.29	21.36	21.28	21.23	20.39	20.37	20.37
		3@0	21.29	21.32	21.35	20.31	20.46	20.48	19.45	19.66	19.66
		3@1	21.37	21.39	21.37	20.51	20.46	20.46	19.55	19.46	19.49
		3@3	21.31	21.35	21.42	20.43	20.49	20.45	19.50	19.63	19.59
		6@0	21.32	21.29	21.26	20.42	20.40	20.33	19.52	19.54	19.40
		Band	18615	18900	19185	18615	18900	19185	18615	18900	19185
2	3	Bandwidth (MHz)	1851.5	1880	1908.5	1851.5	1880	1908.5	1851.5	1880	1908.5
		1@0	22.37	22.40	22.29	21.44	21.54	21.32	20.48	20.68	20.43
		1@8	22.40	22.30	22.31	21.37	21.52	21.27	20.41	20.65	20.42
		1@14	22.46	22.34	22.35	21.40	21.60	21.24	20.50	20.64	20.37
		8@0	21.37	21.44	21.38	20.34	20.49	20.35	19.50	19.55	19.51
		8@4	21.29	21.46	21.23	20.44	20.59	20.35	19.50	19.77	19.45
		8@7	21.26	21.38	21.25	20.26	20.58	20.24	19.40	19.61	19.34
		15@0	21.29	21.41	21.27	20.50	20.46	20.20	19.64	19.47	19.20
2	5	Bandwidth (MHz)	18625	18900	19175	18625	18900	19175	18625	18900	19175
		1852.5	1880	1907.5	1852.5	1880	1907.5	1852.5	1880	1907.5	
		1@0	22.20	22.28	22.14	21.20	21.33	21.12	20.29	20.52	20.16
		1@12	22.33	22.43	22.33	21.31	21.38	21.11	20.32	20.55	20.12
		1@24	22.18	22.34	22.17	21.21	21.28	21.04	20.27	20.44	20.05
		12@0	21.30	21.37	21.34	20.26	20.58	20.18	19.32	19.65	19.33
		12@7	21.33	21.46	21.30	20.50	20.63	20.41	19.68	19.67	19.51
		12@13	21.21	21.41	21.21	20.33	20.52	20.27	19.46	19.61	19.34
2	10	18650	18900	19150	18650	18900	19150	18650	18900	19150	
		1855	1880	1905	1855	1880	1905	1855	1880	1905	
		1@0	22.05	22.27	22.00	21.12	21.25	21.50	20.16	20.30	20.57
		1@25	22.49	22.47	22.37	21.43	21.68	21.88	20.59	20.76	20.94
		1@49	21.97	22.05	21.94	20.98	21.19	21.48	20.17	20.28	20.66
		25@0	21.45	21.33	21.23	20.43	20.35	20.26	19.62	19.46	19.40
		25@12	21.36	21.38	21.38	20.38	20.47	20.30	19.55	19.58	19.39
		25@25	21.40	21.18	21.29	20.38	20.21	20.23	19.46	19.24	19.26
2	15	18675	18900	19125	18675	18900	19125	18675	18900	19125	
		1857.5	1880	1902.5	1857.5	1880	1902.5	1857.5	1880	1902.5	
		1@0	22.25	22.25	22.13	21.99	21.33	21.60	21.10	20.42	20.70
		1@37	22.21	22.46	22.25	22.04	21.38	21.70	21.06	20.53	20.74
		1@74	22.10	22.31	22.12	21.85	21.19	21.54	20.93	20.32	20.55
		36@0	21.37	21.49	21.27	20.44	20.49	20.24	19.59	19.67	19.27
		36@20	21.31	21.38	21.27	20.44	20.56	20.29	19.53	19.68	19.35
		36@39	21.27	21.44	21.35	20.32	20.31	20.35	19.39	19.36	19.52
2	20	75@0	21.37	21.41	21.29	20.38	20.41	20.20	19.41	19.52	19.33
		18700	18900	19100	18700	18900	19100	18700	18900	19100	
		1860	1880	1900	1860	1880	1900	1860	1880	1900	
		1@0	22.43	22.50	22.28	21.28	21.54	21.90	20.30	20.56	21.08
		1@49	22.69	22.59	22.52	21.38	21.56	22.13	20.55	20.73	21.21
		1@99	22.36	22.41	22.30	21.26	21.33	21.99	20.26	20.41	21.11
		50@0	21.48	21.58	21.34	20.47	20.76	20.44	19.65	19.89	19.62
		50@24	21.43	21.52	21.27	20.56	20.61	20.33	19.71	19.81	19.41
		50@50	21.36	21.42	21.36	20.44	20.50	20.46	19.45	19.62	19.65
		100@0	21.40	21.64	21.45	20.44	20.66	20.32	19.45	19.70	19.47

5.2.2 LTE Band 4

Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	19957	20175	20393	19957	20175	20393	19957	20175	20393
4	1.4	1@0	21.72	21.72	21.73	20.83	20.85	20.90	19.92	19.90	20.02
		1@3	21.67	21.50	21.67	20.68	20.55	20.86	19.80	19.72	19.93
		1@5	21.83	21.68	22.00	20.95	20.81	21.03	20.08	20.00	20.15
		3@0	20.76	20.58	20.66	19.81	19.64	19.79	18.90	18.73	18.95
		3@1	20.82	21.06	20.49	19.84	20.11	19.68	18.85	19.16	18.80
		3@3	20.71	20.65	21.00	19.72	19.83	20.19	18.72	18.85	19.29
		6@0	20.84	21.07	20.58	19.91	20.14	19.67	18.92	19.15	18.71
Band	Bandwidth (MHz)	RB	19965	20175	20385	19965	20175	20385	19965	20175	20385
			1711.5	1732.5	1753.5	1711.5	1732.5	1753.5	1711.5	1732.5	1753.5
4	3	1@0	21.69	21.76	21.79	20.87	20.88	20.95	20.01	20.05	20.03
		1@8	21.81	21.83	21.74	20.98	20.98	20.78	20.05	20.06	19.89
		1@14	21.89	21.89	21.76	20.95	21.03	20.80	19.97	20.19	19.84
		8@0	20.84	21.28	20.75	19.86	20.39	19.82	18.95	19.55	18.97
		8@4	19.65	20.00	19.77	18.75	19.05	18.94	17.77	18.10	17.95
		8@7	20.01	19.92	19.81	19.20	18.94	19.01	18.30	18.11	18.01
		15@0	19.64	20.00	19.76	18.73	19.03	18.81	17.91	18.21	17.82
Band	Bandwidth (MHz)	RB	19975	20175	20375	19975	20175	20375	19975	20175	20375
			1712.5	1732.5	1752.5	1712.5	1732.5	1752.5	1712.5	1732.5	1752.5
4	5	1@0	21.67	21.66	21.77	20.83	20.70	20.90	19.97	19.85	19.95
		1@12	21.45	21.55	21.58	20.58	20.56	20.74	19.76	19.71	19.80
		1@24	21.53	21.77	21.80	20.67	20.92	20.87	19.68	20.03	19.94
		12@0	20.29	20.62	20.69	19.49	19.74	19.83	18.63	18.84	18.91
		12@7	19.71	19.67	19.78	18.80	18.69	18.88	17.83	17.87	18.01
		12@13	19.82	19.87	19.99	18.93	19.01	19.05	18.05	18.11	18.17
		25@0	19.67	19.68	19.74	18.79	18.83	18.76	17.87	17.99	17.79
Band	Bandwidth (MHz)	RB	20000	20175	20350	20000	20175	20350	20000	20175	20350
			1715	1732.5	1750	1715	1732.5	1750	1715	1732.5	1750
4	10	1@0	21.70	21.54	21.54	20.78	21.04	20.59	19.97	20.06	19.63
		1@25	21.93	21.93	22.05	21.07	21.23	21.08	20.11	20.32	20.26
		1@49	21.62	21.45	21.52	20.69	21.00	20.53	19.83	20.13	19.66
		25@0	20.72	20.86	20.78	19.70	19.99	19.88	18.84	19.11	19.02
		25@12	20.72	20.76	20.81	19.87	19.85	19.83	18.89	18.87	18.90
		25@25	20.74	20.66	20.86	19.76	19.79	19.66	18.89	18.80	18.82
		50@0	20.73	20.82	20.87	19.76	19.85	19.81	18.78	18.91	18.92
Band	Bandwidth (MHz)	RB	20025	20175	20325	20025	20175	20325	20025	20175	20325
			1717.5	1732.5	1747.5	1717.5	1732.5	1747.5	1717.5	1732.5	1747.5
4	15	1@0	21.74	21.62	21.77	21.16	21.36	20.81	20.17	20.50	19.87
		1@37	21.66	21.74	21.79	21.23	21.37	20.84	20.28	20.38	20.04
		1@74	21.78	21.54	21.67	21.19	21.26	20.65	20.34	20.46	19.73
		36@0	20.76	20.84	20.84	19.73	19.88	19.76	18.91	18.97	18.78
		36@20	20.75	20.80	20.75	19.77	19.78	19.85	18.92	18.86	18.85
		36@39	20.64	20.75	20.77	19.77	19.78	19.78	18.90	18.95	18.79
		75@0	20.73	20.74	20.77	19.78	19.84	19.74	18.84	19.02	18.77
Band	Bandwidth (MHz)	RB	20050	20175	20300	20050	20175	20300	20050	20175	20300
			1720	1732.5	1745	1720	1732.5	1745	1720	1732.5	1745
4	20	1@0	21.92	21.67	21.82	21.01	20.71	20.84	20.15	19.87	19.91
		1@49	22.08	21.88	21.77	21.24	21.01	20.78	20.34	20.05	19.89
		1@99	22.07	21.77	21.73	21.18	20.85	20.93	20.38	19.88	19.98
		50@0	20.81	20.82	21.06	19.88	19.97	20.20	18.96	19.10	19.39
		50@24	20.76	21.41	20.73	19.93	20.45	19.86	18.95	19.54	19.05
		50@50	20.68	21.63	19.69	19.71	20.65	18.77	18.84	19.69	17.91
		100@0	20.85	21.39	19.86	19.98	20.46	19.03	19.03	19.53	18.07

5.2.3 LTE Band 5

			Conducted Power(dBm)								
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	20407	20525	20643	20407	20525	20643	20407	20525	20643
5	1.4	1@0	22.51	21.93	21.90	21.64	21.08	20.98	20.83	20.23	20.17
		1@3	22.57	22.07	22.19	21.73	21.12	21.35	20.76	20.29	20.43
		1@5	22.42	21.96	21.91	21.46	21.04	21.07	20.66	20.16	20.18
		3@0	21.44	21.04	21.09	20.51	20.23	20.24	19.55	19.41	19.31
		3@1	21.40	20.96	21.01	20.43	20.15	20.15	19.63	19.25	19.26
		3@3	21.38	20.78	20.86	20.42	19.84	19.95	19.50	19.03	18.96
		6@0	21.42	21.10	21.02	20.61	20.15	20.12	19.70	19.17	19.20
Band	Bandwidth (MHz)	RB	20415	20525	20635	20415	20525	20635	20415	20525	20635
			825.5	836.5	847.5	825.5	836.5	847.5	825.5	836.5	847.5
5	3	1@0	22.44	21.98	21.91	21.50	21.04	21.09	20.58	20.19	20.12
		1@8	22.46	22.08	21.99	21.60	21.11	21.19	20.79	20.16	20.26
		1@14	22.51	22.04	21.96	21.66	21.04	21.09	20.70	20.07	20.15
		8@0	21.39	20.97	20.99	20.48	20.08	20.19	19.57	19.25	19.31
		8@4	21.51	21.04	21.04	20.61	20.20	20.21	19.64	19.28	19.24
		8@7	21.45	20.89	20.94	20.64	20.02	19.97	19.67	19.17	19.04
		15@0	21.43	21.00	20.97	20.46	20.15	20.08	19.63	19.30	19.13
Band	Bandwidth (MHz)	RB	20425	20525	20625	20425	20525	20625	20425	20525	20625
			826.5	836.5	846.5	826.5	836.5	846.5	826.5	836.5	846.5
5	5	1@0	22.44	21.87	21.94	21.32	20.74	20.74	20.38	19.90	19.81
		1@12	22.42	21.97	21.97	21.44	20.80	20.99	20.61	19.84	19.99
		1@24	22.36	21.76	21.93	21.35	20.67	20.82	20.46	19.77	20.00
		12@0	21.38	20.91	20.99	20.43	19.78	19.92	19.62	18.90	19.08
		12@7	21.47	21.02	21.03	20.59	20.11	19.99	19.79	19.13	19.13
		12@13	21.53	21.00	20.91	20.54	19.87	19.90	19.68	18.95	18.95
		25@0	21.44	21.02	20.88	20.49	19.91	19.96	19.67	19.07	18.98
Band	Bandwidth (MHz)	RB	20450	20525	20600	20450	20525	20600	20450	20525	20600
			829	836.5	844	829	836.5	844	829	836.5	844
5	10	1@0	22.47	22.55	21.98	21.54	21.72	21.14	20.74	20.72	20.31
		1@25	22.53	22.59	22.28	21.61	21.69	21.34	20.68	20.70	20.34
		1@49	22.43	22.51	22.06	21.61	21.66	21.08	20.80	20.69	20.14
		25@0	21.39	21.63	21.08	20.59	20.66	20.23	19.70	19.76	19.41
		25@12	21.56	21.57	20.98	20.70	20.62	20.11	19.78	19.72	19.12
		25@25	21.50	21.59	20.97	20.53	20.68	20.08	19.67	19.86	19.25
		50@0	21.40	21.62	21.12	20.59	20.66	20.27	19.76	19.85	19.31

5.2.4 LTE Band 12

			Conducted Power(dBm)									
Modulation			QPSK			16QAM			64QAM			
Band	Bandwidth (MHz)	RB	23017	23095	23173	23017	23095	23173	23017	23095	23173	
12	1.4	1@0	21.89	21.87	21.87	21.01	20.77	20.86	20.18	19.86	20.04	
		1@3	22.13	22.25	22.02	21.22	20.98	20.93	20.24	20.14	20.02	
		1@5	21.89	21.96	21.82	21.01	20.86	20.91	20.17	19.87	20.06	
		3@0	20.86	20.87	21.00	20.13	20.38	19.86	19.29	19.43	19.03	
		3@1	21.00	21.08	20.98	20.10	20.02	20.24	19.16	19.19	19.27	
		3@3	21.03	20.86	21.00	19.90	20.23	19.97	19.08	19.43	19.14	
		6@0	20.88	21.01	20.98	19.74	19.97	19.93	18.86	19.05	19.07	
		Band	23025	23095	23165	23025	23095	23165	23025	23095	23165	
12	3	Bandwidth (MHz)	RB	700.5	707.5	714.5	700.5	707.5	714.5	700.5	707.5	714.5
		1@0	21.96	22.01	21.95	20.97	20.96	21.54	20.03	20.04	20.64	
		1@8	21.82	21.99	21.80	20.90	20.97	21.59	19.95	20.16	20.78	
		1@14	21.87	22.08	21.86	20.85	21.08	21.59	20.03	20.20	20.69	
		8@0	20.88	20.98	20.91	20.02	19.92	20.21	19.22	19.10	19.30	
		8@4	20.92	21.03	20.99	20.06	20.09	20.08	19.08	19.22	19.12	
		8@7	20.87	20.90	20.88	19.88	19.85	20.17	18.92	19.01	19.23	
		15@0	20.98	21.04	20.95	19.91	20.15	20.14	19.00	19.25	19.21	
12	5	Bandwidth (MHz)	RB	23035	23095	23155	23035	23095	23155	23035	23095	23155
		1@0	21.86	21.96	21.86	20.91	20.98	21.58	20.08	20.16	20.64	
		1@12	21.88	22.13	21.96	21.15	21.26	21.67	20.22	20.43	20.87	
		1@24	21.96	22.03	21.79	20.89	21.03	21.47	20.09	20.23	20.50	
		12@0	20.84	20.89	21.12	19.92	20.05	20.22	19.03	19.08	19.28	
		12@7	21.01	20.92	20.97	20.09	20.14	20.00	19.23	19.33	19.15	
		12@13	20.81	20.96	21.07	19.84	20.03	20.15	18.97	19.06	19.34	
		25@0	20.91	21.06	21.16	19.90	20.07	20.15	18.93	19.13	19.32	
12	10	Bandwidth (MHz)	RB	23060	23095	23130	23060	23095	23130	23060	23095	23130
		1@0	22.04	22.08	22.04	20.88	20.70	20.86	20.01	19.88	20.02	
		1@25	22.15	22.28	22.18	20.91	20.86	21.00	19.95	19.90	20.13	
		1@49	22.02	22.11	22.09	20.76	20.67	20.85	19.84	19.80	19.91	
		25@0	20.77	21.13	21.01	20.00	20.02	20.02	19.08	19.18	19.14	
		25@12	20.90	21.02	20.94	20.09	20.17	20.08	19.24	19.32	19.15	
		25@25	21.05	20.98	20.88	20.04	19.88	19.88	19.16	18.93	18.95	
		50@0	21.54	21.06	21.00	19.88	20.08	20.13	18.90	19.17	19.22	

5.2.5 LTE Band 13

			Conducted Power(dBm)								
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	23205	23230	23255	23205	23230	23255	23205	23230	23255
13	5	1@0	21.93	21.97	21.79	20.80	20.89	20.88	20.00	19.95	20.08
		1@12	22.03	22.05	22.07	20.93	20.94	21.04	19.94	20.07	20.15
		1@24	21.86	21.92	21.93	20.77	20.79	20.90	19.96	19.80	19.94
		12@0	20.96	20.85	20.98	19.95	19.77	20.26	18.99	18.89	19.45
		12@7	20.98	20.93	20.98	20.23	20.03	20.21	19.39	19.15	19.40
		12@13	21.16	20.92	20.97	20.11	20.01	20.09	19.29	19.12	19.26
		25@0	21.07	20.88	21.02	20.13	19.93	20.09	19.19	19.07	19.25
Band	Bandwidth (MHz)	RB	--	23230	--	--	23230	--	--	23230	--
13	10	--	--	782	--	--	782	--	--	782	--
		1@0	--	22.00	--	--	21.00	--	--	20.07	--
		1@25	--	22.18	--	--	21.16	--	--	20.26	--
		1@49	--	21.89	--	--	20.86	--	--	19.89	--
		25@0	--	21.09	--	--	20.15	--	--	19.21	--
		25@12	--	21.00	--	--	20.13	--	--	19.25	--
		25@25	--	21.18	--	--	20.15	--	--	19.31	--
		50@0	--	21.17	--	--	20.17	--	--	19.17	--

5.2.6 LTE Band 25

			Conducted Power(dBm)								
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	26047	26365	266263	26047	26365	266263	26047	26365	266263
25	1.4	1@0	22.62	22.55	22.42	21.32	21.46	21.39	20.41	20.52	20.46
		1@3	22.68	22.83	22.79	21.63	21.57	21.63	20.72	20.61	20.79
		1@5	22.57	22.59	22.33	21.37	21.44	21.47	20.44	20.53	20.61
		3@0	21.62	21.61	21.40	20.74	20.39	20.54	19.81	19.39	19.73
		3@1	21.69	21.58	21.57	20.52	20.63	20.58	19.68	19.72	19.61
		3@3	21.55	21.54	21.54	20.71	20.45	20.50	19.78	19.53	19.61
		6@0	21.43	21.53	21.38	20.51	20.67	20.12	19.71	19.80	19.14
Band	Bandwidth (MHz)	RB	26055	26365	26675	26055	26365	26675	26055	26365	26675
			1851.5	1882.5	1913.5	1851.5	1882.5	1913.5	1851.5	1882.5	1913.5
25	3	1@0	22.50	22.60	22.42	21.58	21.55	21.43	20.73	20.69	20.57
		1@8	22.42	22.62	22.54	21.57	21.44	21.56	20.66	20.59	20.61
		1@14	22.48	22.56	22.57	21.57	21.53	21.49	20.74	20.64	20.65
		8@0	21.46	21.59	21.41	20.71	20.54	20.32	19.81	19.69	19.42
		8@4	21.47	21.47	21.48	20.59	20.54	20.47	19.72	19.68	19.63
		8@7	21.48	21.55	21.33	20.71	20.53	20.31	19.77	19.70	19.44
		15@0	21.57	21.51	21.52	20.60	20.57	20.50	19.72	19.65	19.61
Band	Bandwidth (MHz)	RB	26065	26365	26665	26065	26365	26665	26065	26365	26665
			1852.5	1882.5	1912.5	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5
25	5	1@0	22.90	22.46	22.35	21.20	21.38	21.29	20.28	20.47	20.41
		1@12	22.55	22.53	22.43	21.33	21.42	21.53	20.52	20.52	20.56
		1@24	22.44	22.33	22.30	21.23	21.33	21.31	20.35	20.43	20.41
		12@0	21.46	21.57	21.44	20.42	20.45	20.61	19.45	19.50	19.78
		12@7	21.59	21.60	21.48	20.70	20.72	20.67	19.90	19.72	19.77
		12@13	21.53	21.52	21.47	20.39	20.33	20.61	19.45	19.40	19.75
		25@0	21.56	21.63	21.40	20.54	20.60	20.45	19.59	19.68	19.63
Band	Bandwidth (MHz)	RB	26090	26365	26640	26090	26365	26640	26090	26365	26640
			1855	1882.5	1910	1855	1882.5	1910	1855	1882.5	1910
25	10	1@0	22.64	22.48	22.45	21.56	22.22	21.48	20.66	21.37	20.49
		1@25	22.91	22.83	22.45	21.79	22.18	21.49	20.94	21.26	20.49
		1@49	22.47	22.45	22.46	21.52	21.88	21.41	20.68	21.02	20.55
		25@0	21.52	21.58	21.48	20.71	20.67	20.43	19.87	19.68	19.43
		25@12	21.58	21.62	21.52	20.66	20.67	20.51	19.74	19.68	19.54
		25@25	21.62	21.58	21.64	20.69	20.59	20.50	19.77	19.67	19.61
		50@0	21.60	21.56	21.53	20.61	20.55	20.54	19.62	19.72	19.58
Band	Bandwidth (MHz)	RB	26115	26365	26615	26115	26365	26615	26115	26365	26615
			1857.5	1882.5	1907.5	1857.5	1882.5	1907.5	1857.5	1882.5	1907.5
25	15	1@0	22.48	22.33	22.40	21.48	21.84	21.97	20.63	20.92	20.99
		1@37	22.60	22.52	22.44	21.54	22.04	22.09	20.69	21.19	21.21
		1@74	22.35	22.24	22.27	21.45	21.62	21.90	20.46	20.62	20.95
		36@0	21.63	21.61	21.38	20.62	20.63	20.38	19.73	19.82	19.38
		36@20	21.62	21.57	21.41	20.67	20.59	20.56	19.71	19.73	19.57
		36@39	21.54	21.59	21.46	20.51	20.55	20.39	19.52	19.67	19.49
		75@0	21.61	21.67	21.49	20.58	20.60	20.55	19.71	19.78	19.70
Band	Bandwidth (MHz)	RB	26140	26365	8590	26140	26365	8590	26140	26365	8590
			1860	1882.5	1905	1860	1882.5	1905	1860	1882.5	1905
25	20	1@0	22.39	22.40	22.38	21.81	21.33	21.28	20.90	20.37	20.34
		1@49	22.76	22.74	22.92	22.20	21.78	21.63	21.21	20.83	20.67
		1@99	22.32	22.30	22.40	21.61	21.18	21.27	20.72	20.28	20.37
		50@0	21.80	21.88	21.52	20.55	20.65	20.29	19.62	19.71	19.34
		50@24	21.65	21.75	21.55	20.63	20.71	20.49	19.65	19.80	19.54
		50@50	21.61	21.68	21.55	20.49	20.53	20.33	19.60	19.53	19.34
		100@0	21.76	21.79	21.54	20.54	20.66	20.37	19.68	19.76	19.46

5.2.7 LTE Band 26

			Conducted Power(dBm)								
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	26797	26915	27033	26797	26915	27033	26797	26915	27033
26	1.4	1@0	22.06	21.97	21.96	20.81	20.80	20.98	19.89	19.97	20.17
		1@3	22.09	22.07	22.25	20.91	20.95	21.09	20.08	20.05	20.25
		1@5	22.01	21.99	21.89	20.89	20.88	21.00	20.02	20.05	20.13
		3@0	21.59	21.55	21.50	21.08	20.79	20.92	20.17	19.97	20.09
		3@1	21.49	21.56	21.41	20.82	21.04	20.97	19.86	20.21	20.13
		3@3	21.29	21.38	21.46	21.17	20.68	21.09	20.34	19.73	20.09
		6@0	21.46	21.06	21.05	19.87	19.93	19.78	18.93	19.04	18.96
Band	Bandwidth (MHz)	RB	26805	26915	27025	26805	26915	27025	26805	26915	27025
			825.5	836.5	847.5	825.5	836.5	847.5	825.5	836.5	847.5
26	3	1@0	22.53	21.99	22.09	22.09	20.96	21.05	21.14	20.05	20.25
		1@8	22.33	21.98	22.12	21.94	20.96	21.06	21.13	20.04	20.09
		1@14	22.38	21.91	22.01	21.93	20.88	20.98	21.04	19.91	20.01
		8@0	21.47	20.88	21.00	20.62	19.89	19.94	19.79	19.03	19.01
		8@4	21.43	21.08	20.92	20.53	19.98	20.03	19.63	19.10	19.19
		8@7	21.54	20.91	20.88	20.62	19.85	19.82	19.64	18.97	18.99
		15@0	21.51	20.93	20.90	20.41	19.78	20.01	19.56	18.87	19.05
Band	Bandwidth (MHz)	RB	26815	26915	27015	26815	26915	27015	26815	26915	27015
			826.5	836.5	846.5	826.5	836.5	846.5	826.5	836.5	846.5
26	5	1@0	21.97	21.90	21.96	20.79	20.89	20.74	19.98	19.96	19.80
		1@12	21.99	21.86	21.93	20.84	20.87	20.86	19.84	19.98	20.06
		1@24	21.83	21.86	21.91	20.77	20.77	20.76	19.93	19.78	19.89
		12@0	20.91	20.93	20.91	19.84	19.95	19.93	18.98	19.11	19.03
		12@7	20.92	20.86	21.07	19.98	20.19	20.08	19.02	19.32	19.23
		12@13	20.91	20.91	20.97	19.82	19.99	19.88	18.97	19.02	18.92
		25@0	20.90	20.92	20.95	19.93	19.97	20.07	19.06	18.97	19.24
Band	Bandwidth (MHz)	RB	26840	26915	26990	26840	26915	26990	26840	26915	26990
			829	836.5	844	829	836.5	844	829	836.5	844
26	10	1@0	21.90	22.05	22.04	21.53	20.98	21.04	20.57	20.18	20.12
		1@25	22.02	22.18	22.35	21.73	21.09	21.14	20.93	20.17	20.16
		1@49	21.98	21.93	22.06	21.49	20.84	20.99	20.59	19.88	20.05
		25@0	20.96	21.17	21.04	19.92	20.08	20.18	18.97	19.23	19.37
		25@12	20.96	21.06	21.05	20.00	20.04	20.05	19.15	19.20	19.23
		25@25	21.02	20.99	21.08	20.04	19.97	20.11	19.10	19.10	19.24
		50@0	21.00	21.10	21.09	19.87	20.11	20.19	18.93	19.25	19.20
Band	Bandwidth (MHz)	RB	26865	26915	26965	26865	26915	26965	26865	26915	26965
			831.5	836.5	841.5	831.5	836.5	841.5	831.5	836.5	841.5
26	15	1@0	22.59	22.48	22.52	21.53	21.86	22.05	20.56	20.89	21.12
		1@37	22.60	22.51	22.52	21.54	21.88	22.22	20.57	21.03	21.37
		1@74	22.51	22.34	22.34	21.42	21.69	21.95	20.60	20.78	21.08
		36@0	21.52	21.50	21.71	20.53	20.46	20.63	19.55	19.52	19.80
		36@20	21.57	21.52	21.69	20.54	20.54	20.68	19.59	19.56	19.80
		36@39	21.54	21.55	21.66	20.52	20.46	20.63	19.66	19.64	19.68
		75@0	21.59	21.50	21.69	20.51	20.45	20.62	19.58	19.61	19.70

5.2.8 LTE Band 26 (Part 90S)

Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	26697	26740	26783	26697	26740	26783	26697	26740	26783
26	1.4	1@0	22.56	22.49	22.54	21.60	21.49	21.50	20.72	20.66	20.70
		1@3	22.53	22.57	22.59	21.60	21.64	21.74	20.60	20.80	20.91
		1@5	22.51	22.58	22.49	21.56	21.47	21.47	20.64	20.55	20.56
		3@0	21.64	21.57	21.59	20.51	20.45	20.70	19.53	19.53	19.90
		3@1	21.54	21.64	21.47	20.62	20.63	20.58	19.62	19.69	19.75
		3@3	21.62	21.55	21.74	20.53	20.56	20.57	19.60	19.59	19.76
		6@0	21.55	21.47	21.74	20.70	20.57	20.51	19.89	19.70	19.61
		Band	Bandwidth (MHz)	RB	26705	26740	26775	26705	26740	26775	26705
26	3	1@0	22.59	22.46	22.55	21.60	21.50	21.45	20.76	20.53	20.57
		1@8	22.44	22.54	22.56	21.50	21.59	21.52	20.63	20.63	20.59
		1@14	22.55	22.56	22.60	21.54	21.52	21.51	20.59	20.70	20.55
		8@0	21.63	21.55	21.52	20.59	20.54	20.53	19.68	19.70	19.55
		8@4	21.51	21.57	21.54	20.57	20.53	20.62	19.73	19.69	19.70
		8@7	21.49	21.57	21.55	20.63	20.52	20.53	19.73	19.71	19.62
		15@0	21.50	21.50	21.60	20.63	20.57	20.57	19.79	19.57	19.59
		Band	Bandwidth (MHz)	RB	26715	26740	26765	26715	26740	26765	26715
26	5	1@0	22.56	22.54	22.53	21.49	21.57	21.51	20.64	20.59	20.68
		1@12	22.61	22.61	22.49	21.59	21.60	21.56	20.60	20.75	20.74
		1@24	22.59	22.60	22.50	21.49	21.53	21.55	20.60	20.57	20.63
		12@0	21.58	21.49	21.60	20.53	20.53	20.50	19.70	19.55	19.62
		12@7	21.61	21.52	21.53	20.47	20.52	20.52	19.57	19.53	19.54
		12@13	21.56	21.58	21.52	20.56	20.52	20.59	19.58	19.67	19.74
		25@0	21.60	21.52	21.51	20.56	20.48	20.52	19.64	19.54	19.60
		Band	Bandwidth (MHz)	RB	--	26740	--	26740	--	26740	--
26	10	--	--	819	--	--	819	--	--	819	--
		1@0	--	22.54	--	--	21.49	--	--	20.64	--
		1@25	--	22.61	--	--	21.61	--	--	20.65	--
		1@49	--	22.47	--	--	21.38	--	--	20.50	--
		25@0	--	21.57	--	--	20.60	--	--	19.76	--
		25@12	--	21.58	--	--	20.65	--	--	19.71	--
		25@25	--	21.59	--	--	20.63	--	--	19.82	--
		50@0	--	21.55	--	--	20.55	--	--	19.66	--
26	15	Band	Bandwidth (MHz)	RB	--	--	8765	--	--	8765	--
		--	--	--	--	821.5	--	--	--	821.5	--
		1@0	--	--	22.68	--	--	21.95	--	--	20.99
		1@37	--	--	22.48	--	--	22.07	--	--	21.11
		1@74	--	--	22.41	--	--	21.93	--	--	20.96
		36@0	--	--	21.65	--	--	20.56	--	--	19.69
		36@20	--	--	21.61	--	--	20.57	--	--	19.66
		36@39	--	--	21.59	--	--	20.57	--	--	19.64
		75@0	--	--	21.58	--	--	20.58	--	--	19.59

5.2.9 LTE Band 41

			Conducted Power(dBm)								
Modulation			QPSK			16QAM			64QAM		
Band	Bandwidth (MHz)	RB	39675	40620	41565	39675	40620	41565	39675	40620	41565
41	5	1@0	22.25	22.35	21.84	21.32	21.30	20.38	20.50	20.35	19.53
		1@12	22.34	22.52	21.98	21.47	21.39	21.11	20.58	20.54	20.14
		1@24	22.17	22.37	21.84	21.37	20.79	20.35	20.54	19.96	19.47
		12@0	21.32	21.50	20.90	20.43	19.92	20.53	19.44	19.01	19.68
		12@7	21.39	21.52	21.50	20.47	20.06	20.52	19.56	19.10	19.66
		12@13	21.30	21.58	20.93	20.36	19.86	19.94	19.42	19.00	19.05
		25@0	21.28	21.52	21.48	20.36	19.89	20.56	19.39	18.92	19.69
Band	Bandwidth (MHz)	RB	39700	40620	41540	39700	40620	41540	39700	40620	41540
41	10	1@0	22.39	22.40	22.01	21.51	20.61	21.22	20.58	19.80	20.27
		1@25	22.67	22.66	22.43	21.68	20.83	21.15	20.72	19.86	20.22
		1@49	22.45	22.39	22.04	21.35	20.51	21.28	20.45	19.55	20.47
		25@0	21.38	21.63	21.03	20.39	20.54	20.54	19.49	19.72	19.71
		25@12	21.40	21.60	20.97	20.50	20.01	20.53	19.61	19.16	19.53
		25@25	21.32	21.63	21.67	20.33	20.08	20.61	19.49	19.11	19.77
		50@0	21.51	21.52	21.49	20.44	20.03	20.52	19.51	19.12	19.64
Band	Bandwidth (MHz)	RB	39725	40620	41515	39725	40620	41515	39725	40620	41515
41	15	1@0	22.16	22.35	21.93	21.41	20.52	21.21	20.61	19.57	20.36
		1@37	22.23	22.42	22.06	21.44	21.12	21.43	20.59	20.23	20.49
		1@74	22.09	22.31	22.41	21.34	20.91	21.11	20.35	19.94	20.22
		36@0	21.37	21.63	21.05	20.38	20.04	20.44	19.50	19.22	19.44
		36@20	21.51	21.58	21.47	20.36	19.86	20.47	19.48	18.93	19.64
		36@39	21.42	21.51	21.41	20.38	20.48	20.37	19.44	19.59	19.55
		75@0	21.47	21.59	21.48	20.32	19.86	20.57	19.49	19.04	19.57
Band	Bandwidth (MHz)	RB	39750	40620	41490	39750	40620	41490	39750	40620	41490
41	20	1@0	22.29	22.28	22.14	20.95	21.18	20.84	20.04	20.38	19.95
		1@49	22.40	22.64	22.69	21.43	21.66	21.19	20.53	20.84	20.23
		1@99	22.19	22.19	22.16	20.89	21.13	20.70	20.02	20.22	19.78
		50@0	21.31	21.39	21.32	20.38	20.34	20.44	19.51	19.36	19.51
		50@24	21.40	21.40	21.40	20.34	20.50	20.47	19.38	19.69	19.56
		50@50	21.25	21.39	21.41	20.36	20.32	20.50	19.54	19.44	19.56
		100@0	21.39	21.46	21.56	20.35	20.39	20.38	19.38	19.49	19.48