



RF Test Report

Applicant : Getac Technology Corporation
Product Type : Wireless Module
Trade Name : Getac
Model Number : EM7455
Applicable Standard : FCC 47 CFR PART 22H
FCC 47 CFR PART 24E
FCC 47 CFR PART 27
ANSI C63.26
Receive Date : Mar. 06, 2019
Test Period : Mar. 15 ~ Mar. 26, 2019
Issue Date : May 07, 2019

Issue by

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Taiwan Accreditation Foundation accreditation number: 1330
Test Firm MRA designation number: TW0010

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Revision History

Rev.	Issue Date	Revisions	Revised By
00	Apr. 15, 2019	Initial Issue	Nina Lin
01	May 07, 2019	Page 5 Revised Class II Permissive Change description Page 31 Revised Test Procedure description	Nina Lin

Verification of Compliance

Issued Date: May 07, 2019

Applicant : Getac Technology Corporation
Product Type : Wireless Module
Trade Name : Getac
Model Number : EM7455
FCC ID : QYLEM7455U
EUT Rated Voltage : DC 3.7 V
Test Voltage : 120 Vac, 60 Hz
Applicable Standard : FCC 47 CFR PART 22H
FCC 47 CFR PART 24E
FCC 47 CFR PART 27
ANSI C63.26

Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.
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<http://www.atl-lab.com.tw/e-index.htm>



A Test Lab Techno Corp. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by A Test Lab Techno Corp. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : Fly Lu (Manager) (Fly Lu)
Reviewed By : Eric Ou Yang (Testing Engineer) (Eric Ou Yang)

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1 General Information

1.1. EUT Description

Applicant	Getac Technology Corporation 5F., Building A, No.209, Sec.1, Nangang Rd., Nangang Dist., Taipei City, 11568, Taiwan		
Manufacturer	Sierra Wireless Inc. 13811 Wireless Way, Richmond, BC, V6V 3A4, Canada		
Product Type	Wireless Module		
Trade Name	Getac		
Model Number	EM7455		
FCC ID	QYLEM7455U		
Class II Permissive Change	This is to request a Class II permissive change for FCC ID:QYLEM7455U , originally granted on 2019/4/9 The major change filed under this application is: Change #1: Additional Chassis added, Getac, model number: UX10 #2: Addition one antenna, the antenna type is same, the antenna gain is low than the original application. #3: Disable LTE band 30 by software.		
Host Information	Product Type: Tablet Trade Name: Getac Model Name: UX10		
IMEI No.	353431080191380		
Operate Band	Frequency Range (MHz)	Modulation	Channel Bandwidth
LTE Band 2	UL: 1850 ~ 1910	QPSK, 16QAM	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	DL: 1930 ~ 1990	QPSK, 16QAM	
LTE Band 4	UL: 1710 ~ 1755	QPSK, 16QAM	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	DL: 2110 ~ 2155	QPSK, 16QAM	
LTE Band 5	UL: 824 ~ 849	QPSK, 16QAM	1.4 MHz, 3 MHz, 5 MHz, 10 MHz
	DL: 869 ~ 894	QPSK, 16QAM	
LTE Band 7	UL: 2500 ~ 2570	QPSK, 16QAM	5 MHz, 10 MHz, 15 MHz, 20 MHz
	DL: 2620 ~ 2690	QPSK, 16QAM	
LTE Band 12	UL: 699 ~ 716	QPSK, 16QAM	1.4 MHz, 3 MHz, 5 MHz, 10 MHz
	DL: 728 ~ 746	QPSK, 16QAM	
LTE Band 13	UL: 777 ~ 787	QPSK, 16QAM	5 MHz, 10 MHz
	DL: 746 ~ 756	QPSK, 16QAM	
LTE Band 25	UL: 1850 ~ 1915	QPSK, 16QAM	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz
	DL: 1930 ~ 1995	QPSK, 16QAM	
LTE Band 26(Part 22)	UL: 824 ~ 849	QPSK, 16QAM	1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz
	DL: 869 ~ 894	QPSK, 16QAM	
LTE Band 41	UL/DL: 2496 ~ 2690	QPSK, 16QAM	5 MHz, 10 MHz, 15 MHz, 20 MHz



Type of Antenna	FPC Antenna		
Antenna Gain	Main	LTE Band 2	3.01 dBi
		LTE Band 4	2.90 dBi
		LTE Band 5	0.47 dBi
		LTE Band 7	2.32 dBi
		LTE Band 12	-0.21 dBi
		LTE Band 13	1.06 dBi
		LTE Band 25	3.01 dBi
		LTE Band 26	0.49 dBi
		LTE Band 41	3 dBi
	AUX	LTE Band 2	3.23 dBi
		LTE Band 4	0.95 dBi
		LTE Band 5	0.30 dBi
		LTE Band 7	4.02 dBi
		LTE Band 12	-0.95 dBi
		LTE Band 13	-1.38 dBi
		LTE Band 25	3.23 dBi
		LTE Band 26	0.30 dBi
		LTE Band 41	4.02 dBi
Operate Temp. Range	-40 ~ 85 °C		



Band	Channel Bandwidth	Modulation	Max. RF Output Power	E.R.P. /E.I.R.P.
			(W)	(W)
LTE Band2	1.4 MHz	QPSK	0.226	---
LTE Band2	1.4 MHz	16QAM	0.182	---
LTE Band2	3 MHz	QPSK	0.231	---
LTE Band2	3 MHz	16QAM	0.188	---
LTE Band2	5 MHz	QPSK	0.230	---
LTE Band2	5 MHz	16QAM	0.190	---
LTE Band2	10 MHz	QPSK	0.228	---
LTE Band2	10 MHz	16QAM	0.189	---
LTE Band2	15 MHz	QPSK	0.230	---
LTE Band2	15 MHz	16QAM	0.189	---
LTE Band2	20 MHz	QPSK	0.226	---
LTE Band2	20 MHz	16QAM	0.184	---
LTE Band4	1.4 MHz	QPSK	0.226	---
LTE Band4	1.4 MHz	16QAM	0.178	---
LTE Band4	3 MHz	QPSK	0.226	---
LTE Band4	3 MHz	16QAM	0.178	---
LTE Band4	5 MHz	QPSK	0.231	---
LTE Band4	5 MHz	16QAM	0.179	---
LTE Band4	10 MHz	QPSK	0.233	0.225
LTE Band4	10 MHz	16QAM	0.183	---
LTE Band4	15 MHz	QPSK	0.229	---
LTE Band4	15 MHz	16QAM	0.177	---
LTE Band4	20 MHz	QPSK	0.226	---
LTE Band4	20 MHz	16QAM	0.176	---
LTE Band5	1.4 MHz	QPSK	0.222	---
LTE Band5	1.4 MHz	16QAM	0.186	---
LTE Band5	3 MHz	QPSK	0.221	---
LTE Band5	3 MHz	16QAM	0.181	---
LTE Band5	5 MHz	QPSK	0.231	---
LTE Band5	5 MHz	16QAM	0.195	---
LTE Band5	10 MHz	QPSK	0.227	---
LTE Band5	10 MHz	16QAM	0.187	---



Band	Channel Bandwidth	Modulation	Max. RF Output Power	E.R.P. /E.I.R.P.
			(W)	(W)
LTE Band7	5 MHz	QPSK	0.185	---
LTE Band7	5 MHz	16QAM	0.158	---
LTE Band7	10 MHz	QPSK	0.187	---
LTE Band7	10 MHz	16QAM	0.164	---
LTE Band7	15 MHz	QPSK	0.187	---
LTE Band7	15 MHz	16QAM	0.166	---
LTE Band7	20 MHz	QPSK	0.189	---
LTE Band7	20 MHz	16QAM	0.163	---
LTE Band12	1.4 MHz	QPSK	0.227	---
LTE Band12	1.4 MHz	16QAM	0.182	---
LTE Band12	3 MHz	QPSK	0.228	---
LTE Band12	3 MHz	16QAM	0.182	---
LTE Band12	5 MHz	QPSK	0.226	---
LTE Band12	5 MHz	16QAM	0.177	---
LTE Band12	10 MHz	QPSK	0.223	---
LTE Band12	10 MHz	16QAM	0.177	---
LTE Band13	5 MHz	QPSK	0.210	---
LTE Band13	5 MHz	16QAM	0.172	---
LTE Band13	10 MHz	QPSK	0.203	---
LTE Band13	10 MHz	16QAM	0.167	---
LTE Band25	1.4 MHz	QPSK	0.225	---
LTE Band25	1.4 MHz	16QAM	0.182	---
LTE Band25	3 MHz	QPSK	0.226	---
LTE Band25	3 MHz	16QAM	0.183	---
LTE Band25	5 MHz	QPSK	0.227	---
LTE Band25	5 MHz	16QAM	0.185	---
LTE Band25	10 MHz	QPSK	0.224	---
LTE Band25	10 MHz	16QAM	0.189	---
LTE Band25	15 MHz	QPSK	0.227	---
LTE Band25	15 MHz	16QAM	0.184	---
LTE Band25	20 MHz	QPSK	0.230	---
LTE Band25	20 MHz	16QAM	0.188	---



Band	Channel Bandwidth	Modulation	Max. RF Output Power	E.R.P. /E.I.R.P.
			(W)	(W)
LTE Band26(Part 22)	1.4 MHz	QPSK	0.218	---
LTE Band26(Part 22)	1.4 MHz	16QAM	0.173	---
LTE Band26(Part 22)	3 MHz	QPSK	0.216	---
LTE Band26(Part 22)	3 MHz	16QAM	0.173	---
LTE Band26(Part 22)	5 MHz	QPSK	0.218	---
LTE Band26(Part 22)	5 MHz	16QAM	0.182	---
LTE Band26(Part 22)	10 MHz	QPSK	0.219	---
LTE Band26(Part 22)	10 MHz	16QAM	0.178	---
LTE Band26(Part 22)	15 MHz	QPSK	0.219	---
LTE Band26(Part 22)	15 MHz	16QAM	0.179	---
LTE Band41	5 MHz	QPSK	0.185	---
LTE Band41	5 MHz	16QAM	0.152	---
LTE Band41	10 MHz	QPSK	0.184	---
LTE Band41	10 MHz	16QAM	0.150	---
LTE Band41	15 MHz	QPSK	0.184	---
LTE Band41	15 MHz	16QAM	0.150	---
LTE Band41	20 MHz	QPSK	0.183	---
LTE Band41	20 MHz	16QAM	0.150	---

1.2. Mode of Operation

Three channels had been tested for each channel bandwidth.

LTE Band 2						
Channel Bandwidth	1.4 MHz		3 MHz		5 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	18607	1850.7	18615	1851.5	18625	1852.5
Middle CH	18900	1880.0	18900	1880.0	18900	1880.0
High CH	19193	1909.3	19185	1908.5	19175	1907.5
Channel Bandwidth	10 MHz		15 MHz		20 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	18650	1855.0	18675	1857.5	18700	1860.0
Middle CH	18900	1880.0	18900	1880.0	18900	1880.0
High CH	19150	1905.0	19125	1902.5	19100	1900.0

LTE Band 4						
Channel Bandwidth	1.4 MHz		3 MHz		5 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	19957	1710.7	19965	1711.5	19975	1712.5
Middle CH	20175	1732.5	20175	1732.5	20175	1732.5
High CH	20393	1754.3	20385	1753.5	20375	1752.5
Channel Bandwidth	10 MHz		15 MHz		20 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20000	1715.0	20025	1717.5	20050	1720.0
Middle CH	20175	1732.5	20175	1732.5	20175	1732.5
High CH	20350	1750.0	20325	1747.5	20300	1745.0

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.



LTE Band 5				
Channel Bandwidth	1.4 MHz		3 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20407	824.7	20415	825.5
Middle CH	20525	836.5	20525	836.5
High CH	20643	848.3	20635	847.5
Channel Bandwidth	5 MHz		10 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20425	826.5	20450	829.0
Middle CH	20525	836.5	20525	836.5
High CH	20625	846.5	20600	844.0

LTE Band 7				
Channel Bandwidth	5 MHz		10 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20775	2502.5	20800	2505.0
Middle CH	21100	2535.0	21100	2535.0
High CH	21425	2567.5	21400	2565.0
Channel Bandwidth	15 MHz		20 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	20825	2507.5	20850	2510.0
Middle CH	21100	2535.0	21100	2535.0
High CH	21375	2562.5	21350	2560.0

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.



LTE Band 12				
Channel Bandwidth	1.4 MHz		3 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	23017	699.7	23025	700.5
Middle CH	23095	707.5	23095	707.5
High CH	23173	715.3	23165	714.5
Channel Bandwidth	5 MHz		10 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	23035	701.5	23060	704.0
Middle CH	23095	707.5	23095	707.5
High CH	23155	713.5	23130	711.0

LTE Band 13				
Channel Bandwidth	5 MHz		10 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	23205	779.5	---	---
Middle CH	23230	782.0	23230	782.0
High CH	23255	784.5	---	---

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.



LTE Band 25						
Channel Bandwidth	1.4 MHz		3 MHz		5 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	26047	1850.7	26055	1851.5	26065	1852.5
Middle CH	26365	1882.5	26365	1882.5	26365	1882.5
High CH	26683	1914.3	26675	1913.5	26665	1912.5
Channel Bandwidth	10 MHz		15 MHz		20 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	26090	1855	26115	1857.5	26140	1860
Middle CH	26365	1882.5	26365	1882.5	26365	1882.5
High CH	26640	1910	26615	1907.5	26590	1905

LTE Band 26 (Part 22)						
Channel Bandwidth	1.4 MHz		3 MHz		5 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	26797	824.7	26805	825.5	26815	826.5
Middle CH	26915	836.5	26915	836.5	26915	836.5
High CH	27003	848.3	27025	847.5	27015	846.5
Channel Bandwidth	10 MHz		15 MHz		NA	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	NA	NA
Low CH	26840	829.0	26865	831.5	NA	NA
Middle CH	26915	836.5	26915	836.5	NA	NA
High CH	26990	844.0	26965	841.5	NA	NA

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.



LTE Band 41				
Channel Bandwidth	5 MHz		10 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	39675	2498.5	39700	2501.0
Middle CH	40620	2593.0	40620	2593.0
High CH	41565	2687.5	41540	2685.0
Channel Bandwidth	15 MHz		20 MHz	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)
Low CH	39725	2503.5	39750	2506.0
Middle CH	40620	2593.0	40620	2593.0
High CH	41515	2682.5	41490	2680.0

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.



During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Frequency range investigated for radiated emission: 30 MHz to 26.5 GHz.

Band	Channel Bandwidth	Test Modes	
LTE Band 2	1.4 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 2) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 5) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 1) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 6, RB Offset 0) Link	QPSK
	3 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 14) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 15, RB Offset 0) Link	QPSK
	5 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK
	15 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 37) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 74) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 19) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 39) Link <input type="checkbox"/> LTE(RB Size 75, RB Offset 0) Link	QPSK
	20 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 99) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 50) Link <input type="checkbox"/> LTE(RB Size 100, RB Offset 0) Link	QPSK



Band	Channel Bandwidth	Test Modes	
LTE Band 4	1.4 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 2) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 5) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 1) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 6, RB Offset 0) Link	QPSK
	3 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 14) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 15, RB Offset 0) Link	QPSK
	5 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK
	15 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 37) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 74) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 19) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 39) Link <input type="checkbox"/> LTE(RB Size 75, RB Offset 0) Link	QPSK
	20 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 99) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 50) Link <input type="checkbox"/> LTE(RB Size 100, RB Offset 0) Link	QPSK



Band	Channel Bandwidth	Test Modes	
LTE Band 5	1.4 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 2) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 5) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 1) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 6, RB Offset 0) Link	QPSK
	3 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 14) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 15, RB Offset 0) Link	QPSK
	5 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK
LTE Band 7	5 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK
	15 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 37) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 74) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 19) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 39) Link <input type="checkbox"/> LTE(RB Size 75, RB Offset 0) Link	QPSK
	20 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 99) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 50) Link <input type="checkbox"/> LTE(RB Size 100, RB Offset 0) Link	QPSK



Band	Channel Bandwidth	Test Modes	
LTE Band 12	1.4 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 2) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 5) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 1) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 6, RB Offset 0) Link	QPSK
	3 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 14) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 15, RB Offset 0) Link	QPSK
	5 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK
LTE Band 13	5 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK



Band	Channel Bandwidth	Test Modes	
LTE Band 25	1.4 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 2) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 5) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 1) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 6, RB Offset 0) Link	QPSK
	3 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 14) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 15, RB Offset 0) Link	QPSK
	5 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK
	15 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 37) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 74) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 19) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 39) Link <input type="checkbox"/> LTE(RB Size 75, RB Offset 0) Link	QPSK
	20 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 99) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 50) Link <input type="checkbox"/> LTE(RB Size 100, RB Offset 0) Link	QPSK



Band	Channel Bandwidth	Test Modes	
LTE Band 26 (Part 22)	1.4 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 2) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 5) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 1) Link <input type="checkbox"/> LTE(RB Size 3, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 6, RB Offset 0) Link	QPSK
	3 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 14) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 3) Link <input type="checkbox"/> LTE(RB Size 8, RB Offset 7) Link <input type="checkbox"/> LTE(RB Size 15, RB Offset 0) Link	QPSK
	5 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK
	15 MHz	<input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 37) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 74) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 19) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 39) Link <input type="checkbox"/> LTE(RB Size 75, RB Offset 0) Link	QPSK



Band	Channel Bandwidth	Test Modes	
LTE Band 41	5 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 12) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 6) Link <input type="checkbox"/> LTE(RB Size 12, RB Offset 13) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link	QPSK
	10 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 24) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 12) Link <input type="checkbox"/> LTE(RB Size 25, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link	QPSK
	15 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 37) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 74) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 19) Link <input type="checkbox"/> LTE(RB Size 36, RB Offset 39) Link <input type="checkbox"/> LTE(RB Size 75, RB Offset 0) Link	QPSK
	20 MHz	<input type="checkbox"/> LTE(RB Size 1, RB Offset 0) Link <input checked="" type="checkbox"/> LTE(RB Size 1, RB Offset 49) Link <input type="checkbox"/> LTE(RB Size 1, RB Offset 99) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 0) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 25) Link <input type="checkbox"/> LTE(RB Size 50, RB Offset 50) Link <input type="checkbox"/> LTE(RB Size 100, RB Offset 0) Link	QPSK

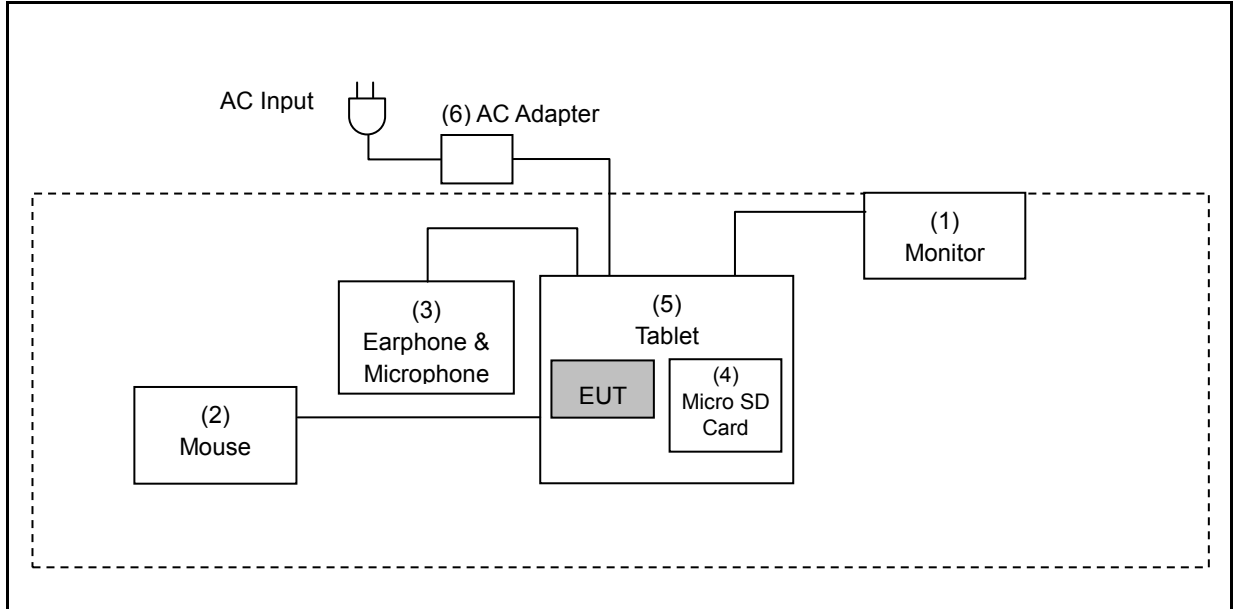
1.3. EUT Test Step

1	Setup the EUT shown on "Configuration of Test System Details".
2	Turn on the power of all equipment.
3	EUT run test program test.

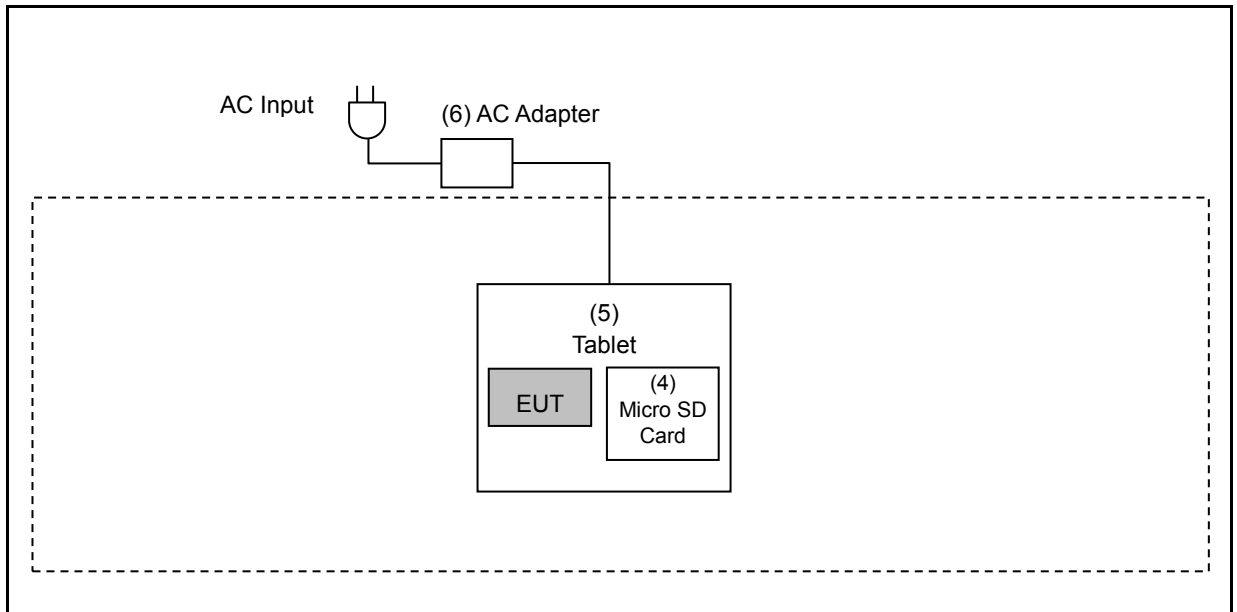
Measurement Software			
No.	Description	Software	Version
1	Radiated Emission	EZ EMC	1.1.4.4

1.4. Configuration of Test System Details

Radiated Emission_ Below 1 GHz



Radiated Emission_ Above 1 GHz





Devices Description					
Product		Manufacturer	Model Number	Serial Number	Power Cord
(1)	Monitor	DELL	P2415Qb	CN-0D3C8Y-74261-523 -0HUL	---
(2)	Mouse	Logitech	M-UAG96B	---	---
(3)	Earphone & Microphone	HTC	---	---	---
(4)	Micro SD Card	Transcend	---	---	---
(5)	Tablet	Getac	UX10	---	---
(6)	AC adapter	FSP	FSP065-RBBN3	---	---

1.5. Test Instruments

For Conducted

Test Period: Mar. 15 ~ Mar. 17, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
Power Supply	KEITHLEY	2303	4045290	02/12/2019	1 year
Radio Communication Analyzer	Anritsu	MT8820C	6201342039	12/13/2018	1 year

For Radiated Emissions

Test Period: Mar. 26, 2019

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
EXA Signal Analyzer (10 Hz~44 GHz)	Keysight	N9010A	MY52221312	01/14/2019	1 year
Pre Amplifier (1~26.5 GHz)	Agilent	8449B	3008A02237	10/16/2018	1 year
Pre Amplifier (100 kHz~1.3 GHz)	Agilent	8447D	2944A11119	01/14/2019	1 year
Trilog Broadband Antenna	Schwarzbeck Mess-Elektronik	VULB9168	416	10/23/2018	1 year
Horn Antenna (1~18 GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	08/23/2018	1 year
RF Cable	EMCI	EMC104-N-N-6000	TE01-1	02/20/2019	1 year
Microwave Cable	EMCI	EMC104-SM-SM-1 3000	170814	10/30/2018	1 year
Microwave Cable	EMCI	EMC102-KM-KM-1 4000	151001	02/20/2019	1 year

1.6. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	990

Test Setting Condition		
N.V.	Normal Voltage	AC 120 V
N.T.	Normal Temperature	+25 °C



1.7. Summary of Test Result

FCC Rule	Description	Result
§2.1046	Conducted Output Average Power	Pass
§22.913 §24.232 §27.50 §27.50	Equivalent Isotropic Radiated Power / Equivalent Radiated Power	Pass (Note2)
§2.1055 §22.355 §24.235 §27.54	Frequency Stability	N/A (Note1)
§2.1049	Emission Bandwidth & Occupied Bandwidth	N/A (Note1)
§24.232 §27.50	Peak to average ratio	N/A (Note1)
§2.1051 §22.917 §24.238 §27.53	Band Edge	N/A (Note1)
§2.1051 §22.917 §24.238 §27.53	Conducted Spurious Emissions	N/A (Note1)
§2.1053 §22.917 §24.238 §27.53	Radiated Spurious Emissions	Pass (Note2)

Note1: Class II permissive change. No need for verification.

Note2: Equivalent Isotropic Radiated Power / Equivalent Radiated Power and Radiated Spurious Emissions is tested using the worst Conducted Output Average Power.

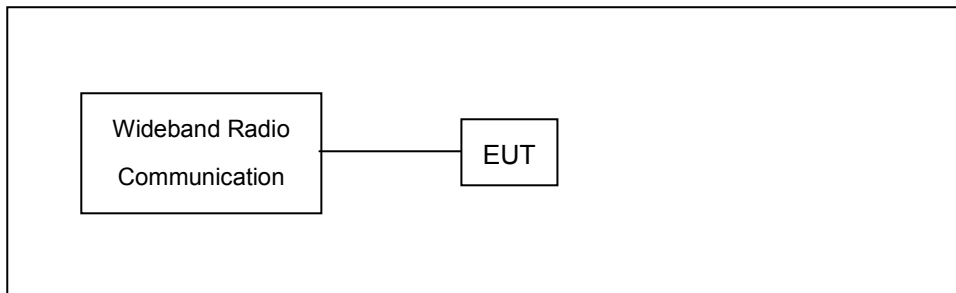
2 Measurement Procedure

2.1. Conducted Output Average Power Test

- **Limit**

N/A

- **Test Setup**



- **Test Procedure**

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

- **Uncertainty**

The measurement uncertainty is defined as for Conducted Power measurement is 1.2 dB.

2.2. Effective Radiated Power / Equivalent Isotropic Radiated Power Test

■ Limit

For FCC Part 27: The EIRP of Portable transmitters and auxiliary test transmitters must not exceed 1 Watts.

For FCC Part 27.50(b)(9): Control stations and Portable stations transmitting in the 746-757 MHz, and 776-788 MHz bands are limited to 30 watts ERP.

For FCC 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

For FCC Part 27.50(h)(2): Portable stations are limited to 2.0 watts EIRP.

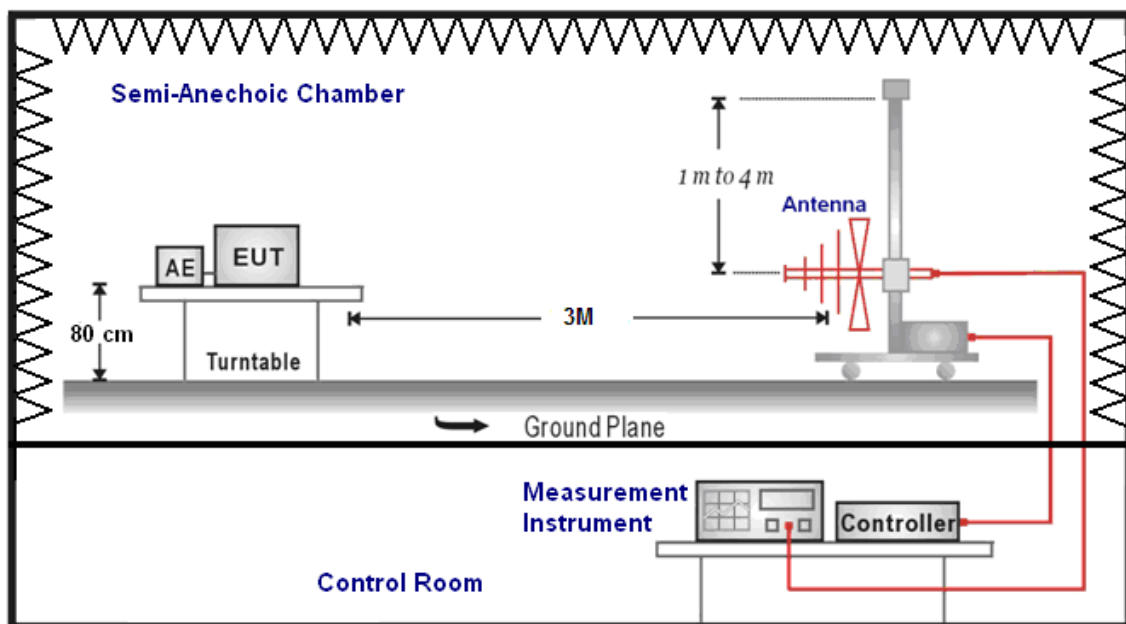
For FCC Part 22.913(a)(5): The ERP of Portable transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(c): The E.I.R.P. of Mobile and portable stations test transmitters must not exceed 2 Watts.

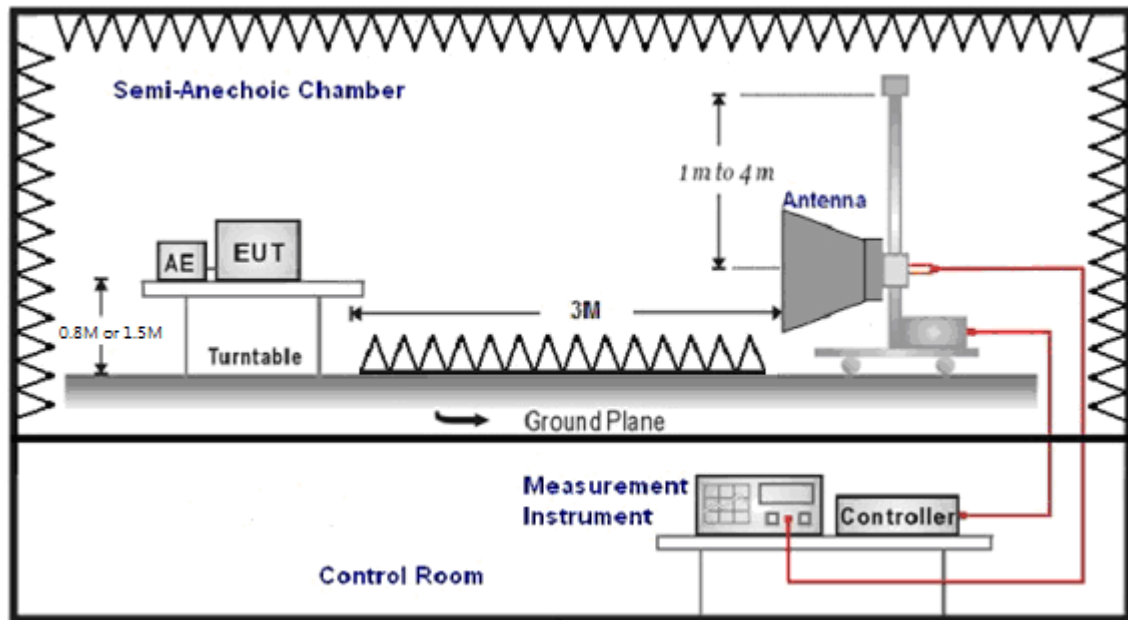
For FCC Part 27.50(h)(2): Portable stations in BRS and EBS band are limited to 2 watts EIRP.

■ Test Setup

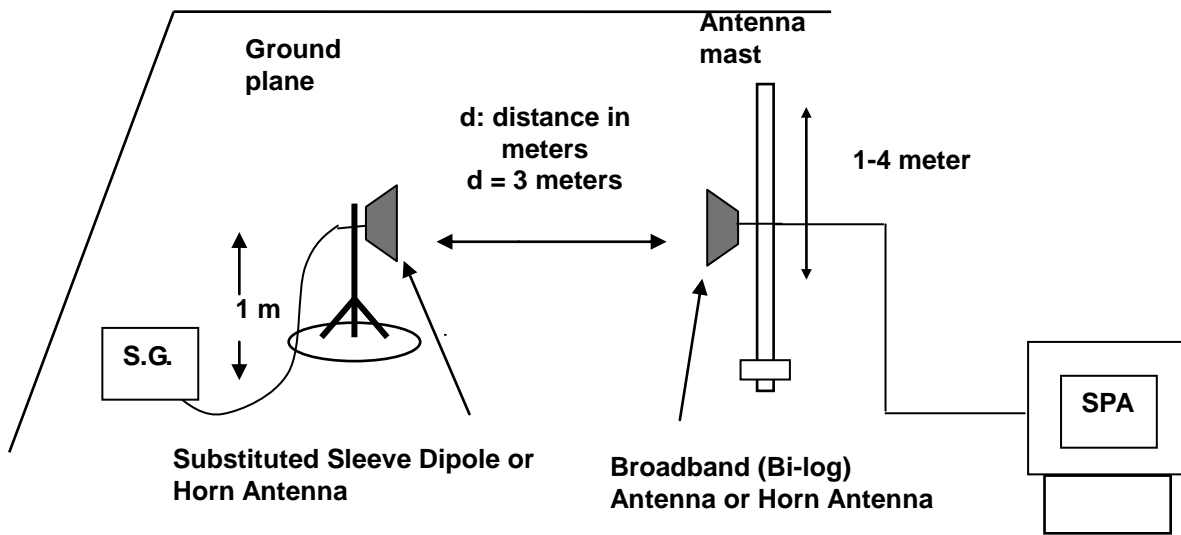
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP





■ Test Procedure

- a. The EUT was set up for the maximum power with wwan link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range).
- b. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (1.5 m for above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- d. $E.I.R.P. = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$
- e. $E.R.P. = E.I.R.P. - 2.15 \text{ dB}$

Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna

2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenna

■ Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is $\pm 3.072 \text{ dB}$.

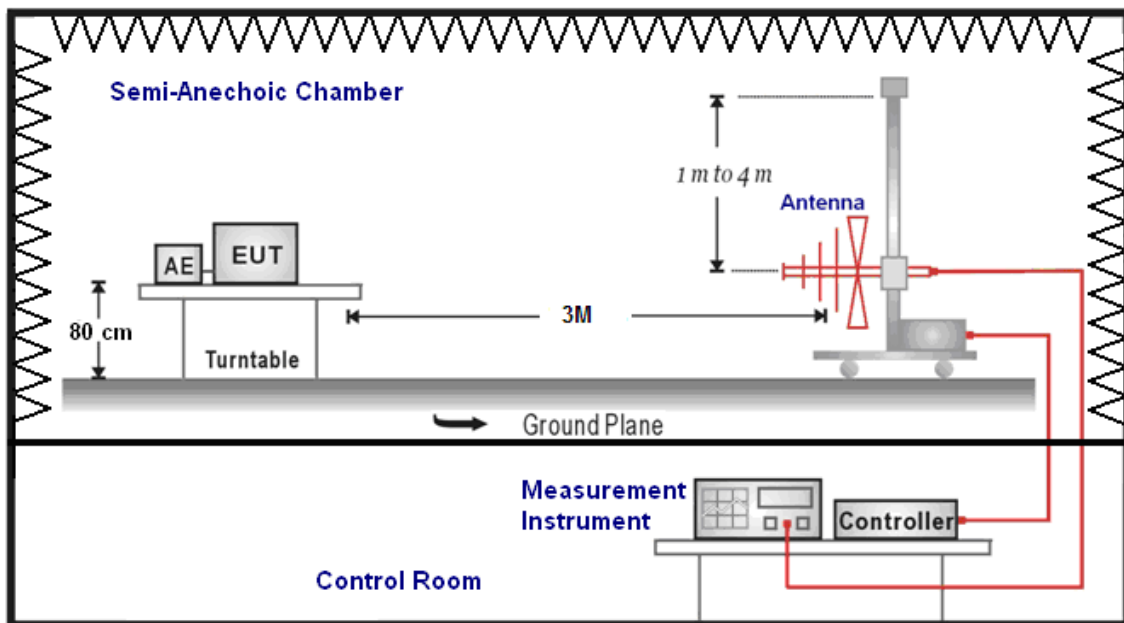
2.3. Radiated Emission Test

■ Limit

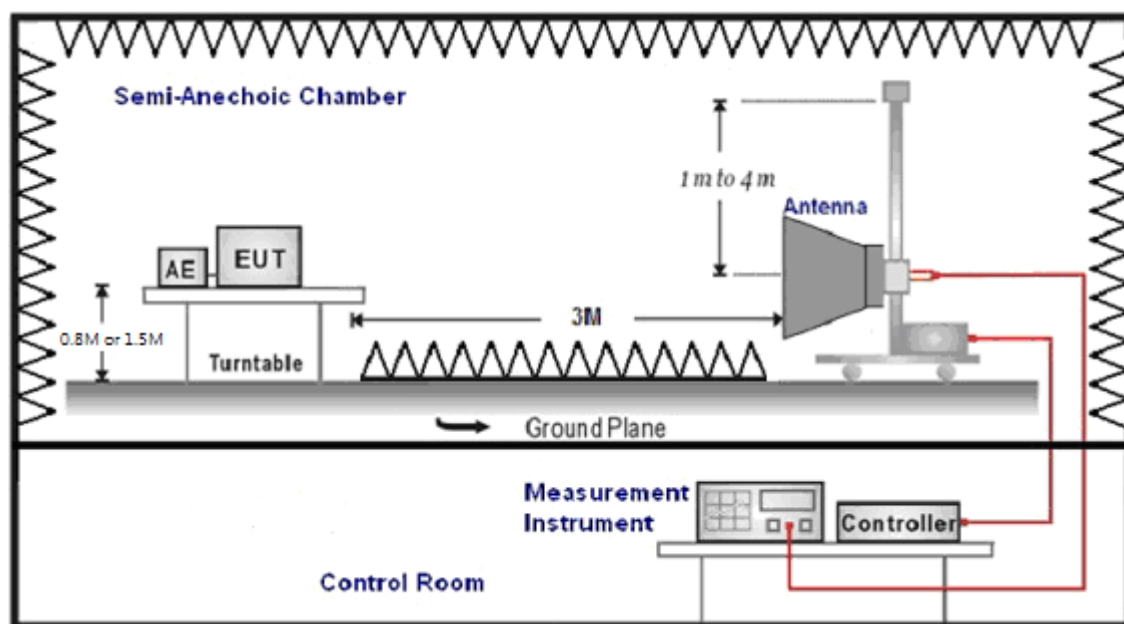
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13 dBm

■ Setup

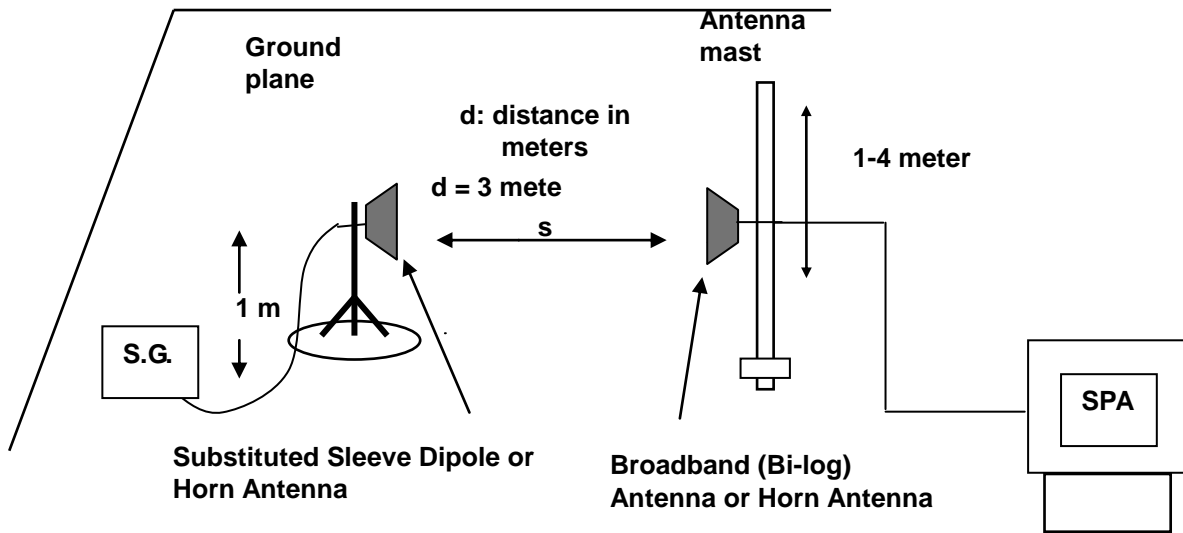
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



■ Test Procedure

- a. The EUT was set up for the maximum power with wwan link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range).
- b. Radiation Emission measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (1.5 m for above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- d. E.I.R.P. = Output power level of S.G - TX cable loss + Antenna gain of substitution horn
- e. E.R.P. = E.I.R.P- 2.15 dB
- f. Measurement range 9 kHz - 10 th Harmonic

Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna

2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenn

■ Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is ± 3.072 dB.



3 Test Results

Conducted Output Average Power

Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	1.4 MHz	QPSK	18607	1850.7	1	0	23.52	0.225
					1	2	23.54	0.226
					1	5	23.48	0.223
					3	0	23.41	0.219
					3	1	23.44	0.221
					3	3	23.36	0.217
			6	0	22.39	0.173		
			1	0	23.39	0.218		
			1	2	23.53	0.225		
			1	5	23.47	0.222		
			3	0	23.44	0.221		
			3	1	23.48	0.223		
			3	3	23.47	0.222		
			6	0	22.41	0.174		
			1	0	23.53	0.225		
			1	2	23.49	0.223		
			1	5	23.45	0.221		
			3	0	23.31	0.214		
		3	1	23.43	0.220			
		3	3	23.34	0.216			
		6	0	22.40	0.174			
		1	0	22.40	0.174			
		1	2	22.61	0.182			
		1	5	22.44	0.175			
		3	0	21.95	0.157			
		3	1	22.03	0.160			
		3	3	22.00	0.158			
		6	0	20.90	0.123			
		1	0	22.25	0.168			
		1	2	22.34	0.171			
		1	5	22.23	0.167			
		3	0	22.00	0.158			
		3	1	22.06	0.161			
		3	3	21.96	0.157			
		6	0	20.99	0.126			
		1	0	22.27	0.169			
1	2	22.33	0.171					
1	5	22.35	0.172					
3	0	22.04	0.160					
3	1	22.10	0.162					
3	3	22.08	0.161					
6	0	20.87	0.122					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	3 MHz	QPSK	18615	1851.5	1	0	23.08	0.203
					1	7	23.63	0.231
					1	14	23.08	0.203
					8	0	22.08	0.161
					8	3	22.13	0.163
					8	7	22.12	0.163
			15	0	22.05	0.160		
			1	0	23.25	0.211		
			1	7	23.64	0.231		
			1	14	22.95	0.197		
			8	0	22.03	0.160		
			8	3	22.04	0.160		
			8	7	22.06	0.161		
			15	0	22.04	0.160		
			1	0	23.01	0.200		
			1	7	23.12	0.205		
			1	14	22.99	0.199		
			8	0	22.00	0.158		
		8	3	22.06	0.161			
		8	7	22.07	0.161			
		15	0	22.04	0.160			
		1	0	22.47	0.177			
		1	7	22.64	0.184			
		1	14	22.43	0.175			
		8	0	21.11	0.129			
		8	3	21.12	0.129			
		8	7	21.11	0.129			
		15	0	21.08	0.128			
		1	0	22.51	0.178			
		1	7	22.75	0.188			
		1	14	22.36	0.172			
		8	0	20.93	0.124			
		8	3	20.98	0.125			
		8	7	21.01	0.126			
		15	0	21.00	0.126			
		1	0	22.42	0.175			
1	7	22.40	0.174					
1	14	22.57	0.181					
8	0	20.97	0.125					
8	3	21.02	0.126					
8	7	21.00	0.126					
15	0	21.07	0.128					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	5 MHz	QPSK	18625	1852.5	1	0	23.48	0.223
					1	12	23.44	0.221
					1	24	23.49	0.223
					12	0	22.29	0.169
					12	6	22.34	0.171
					12	13	22.37	0.173
			25	0	22.30	0.170		
			1	0	23.41	0.219		
			1	12	23.40	0.219		
			1	24	23.43	0.220		
			12	0	22.20	0.166		
			12	6	22.31	0.170		
			12	13	22.16	0.164		
			25	0	22.22	0.167		
			1	0	23.61	0.230		
			1	12	23.55	0.226		
			1	24	23.46	0.222		
			12	0	22.22	0.167		
		12	6	22.29	0.169			
		12	13	22.26	0.168			
		25	0	22.18	0.165			
		1	0	22.68	0.185			
		1	12	22.77	0.189			
		1	24	22.79	0.190			
		12	0	21.25	0.133			
		12	6	21.35	0.136			
		12	13	21.31	0.135			
		25	0	21.28	0.134			
		1	0	22.48	0.177			
		1	12	22.24	0.167			
		1	24	22.47	0.177			
		12	0	21.24	0.133			
		12	6	21.26	0.134			
		12	13	21.16	0.131			
		25	0	21.15	0.130			
		1	0	22.64	0.184			
1	12	22.53	0.179					
1	24	22.61	0.182					
12	0	21.08	0.128					
12	6	21.16	0.131					
12	11	21.15	0.130					
25	0	21.12	0.129					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	10 MHz	QPSK	18650	1855.0	1	0	23.43	0.220
					1	24	23.46	0.222
					1	49	23.31	0.214
					25	0	22.46	0.176
					25	12	22.46	0.176
					25	25	22.33	0.171
			18900	1880.0	50	0	22.33	0.171
					1	0	23.31	0.214
					1	24	23.40	0.219
					1	49	23.19	0.208
					25	0	22.31	0.170
					25	12	22.36	0.172
			19150	1905.0	25	25	22.28	0.169
					50	0	22.36	0.172
					1	0	23.58	0.228
					1	24	23.48	0.223
					1	49	23.21	0.209
					25	0	22.39	0.173
		16QAM	18650	1855.0	25	12	22.41	0.174
					25	25	22.27	0.169
					50	0	22.31	0.170
					1	0	22.72	0.187
					1	24	22.61	0.182
					1	49	22.68	0.185
			18900	1880.0	25	0	21.24	0.133
					25	12	21.23	0.133
					25	25	21.08	0.128
					50	0	21.08	0.128
					1	0	22.71	0.187
					1	24	22.67	0.185
19150	1905.0	1	49	22.76	0.189			
		25	0	21.13	0.130			
		25	12	21.16	0.131			
		25	25	21.11	0.129			
		50	0	21.14	0.130			
		1	0	22.52	0.179			
18650	1855.0	1	24	22.38	0.173			
		1	49	22.30	0.170			
		25	0	21.17	0.131			
		25	12	21.27	0.134			
		25	25	21.11	0.129			
		50	0	21.17	0.131			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	15 MHz	QPSK	18675	1857.5	1	0	23.54	0.226
					1	37	23.48	0.223
					1	74	23.34	0.216
					36	0	22.50	0.178
					36	19	22.48	0.177
					36	39	22.44	0.175
			75	0	22.37	0.173		
			1	0	23.62	0.230		
			1	37	23.36	0.217		
			1	74	23.49	0.223		
			36	0	22.49	0.177		
			36	19	22.49	0.177		
		36	39	22.48	0.177			
		75	0	22.47	0.177			
		1	0	23.55	0.226			
		1	37	23.49	0.223			
		1	74	23.51	0.224			
		36	0	22.56	0.180			
		36	19	22.64	0.184			
		36	39	22.55	0.180			
		75	0	22.50	0.178			
		1	0	22.58	0.181			
		1	37	22.51	0.178			
		1	74	22.36	0.172			
		36	0	21.19	0.132			
		36	19	21.21	0.132			
		36	39	21.14	0.130			
		75	0	21.16	0.131			
		1	0	22.77	0.189			
		1	37	22.36	0.172			
1	74	22.49	0.177					
36	0	21.23	0.133					
36	19	21.20	0.132					
36	39	21.20	0.132					
75	0	21.19	0.132					
1	0	22.69	0.186					
1	37	22.58	0.181					
1	74	22.59	0.182					
36	0	21.27	0.134					
36	19	21.36	0.137					
36	39	21.28	0.134					
75	0	21.25	0.133					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band2	20 MHz	QPSK	18700	1860.0	1	0	23.41	0.219
					1	49	23.29	0.213
					1	99	23.03	0.201
					50	0	22.33	0.171
					50	25	22.24	0.167
					50	50	22.21	0.166
			100	0	22.33	0.171		
			1	0	23.55	0.226		
			1	49	23.23	0.210		
			1	99	23.12	0.205		
			50	0	22.25	0.168		
			50	25	22.29	0.169		
			50	50	22.27	0.169		
			100	0	22.32	0.171		
			1	0	23.26	0.212		
			1	49	23.17	0.207		
			1	99	23.06	0.202		
			50	0	22.20	0.166		
		50	25	22.21	0.166			
		50	50	22.22	0.167			
		100	0	22.25	0.168			
		1	0	22.54	0.179			
		1	49	22.32	0.171			
		1	99	21.92	0.156			
		50	0	21.14	0.130			
		50	25	21.06	0.128			
		50	50	21.02	0.126			
		100	0	21.11	0.129			
		1	0	22.64	0.184			
		1	49	22.43	0.175			
		1	99	22.32	0.171			
		50	0	21.11	0.129			
		50	25	21.14	0.130			
		50	50	21.12	0.129			
		100	0	21.16	0.131			
		1	0	22.35	0.172			
1	49	22.22	0.167					
1	99	22.28	0.169					
50	0	21.05	0.127					
50	25	21.05	0.127					
50	50	21.04	0.127					
100	0	21.10	0.129					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	1.4 MHz	QPSK	19957	1710.7	1	0	23.48	0.223
					1	2	23.45	0.221
					1	5	23.54	0.226
					3	0	23.36	0.217
					3	1	23.40	0.219
					3	3	23.43	0.220
			6	0	22.34	0.171		
			1	0	23.23	0.210		
			1	2	23.44	0.221		
			1	5	23.19	0.208		
			3	0	23.23	0.210		
			3	1	23.36	0.217		
			3	3	23.34	0.216		
			6	0	22.32	0.171		
			1	0	23.30	0.214		
			1	2	23.20	0.209		
			1	5	23.06	0.202		
			3	0	23.22	0.210		
		3	1	23.19	0.208			
		3	3	23.08	0.203			
		6	0	22.26	0.168			
		1	0	22.48	0.177			
		1	2	22.43	0.175			
		1	5	22.47	0.177			
		3	0	22.03	0.160			
		3	1	22.09	0.162			
		3	3	22.19	0.166			
		6	0	20.94	0.124			
		1	0	22.34	0.171			
		1	2	22.50	0.178			
		1	5	22.24	0.167			
		3	0	22.04	0.160			
		3	1	22.11	0.163			
		3	3	22.14	0.164			
		6	0	21.06	0.128			
		1	0	22.17	0.165			
1	2	22.18	0.165					
1	5	22.03	0.160					
3	0	22.07	0.161					
3	1	22.05	0.160					
3	3	21.94	0.156					
6	0	20.90	0.123					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	3 MHz	QPSK	19965	1711.5	1	0	23.12	0.205
					1	7	23.55	0.226
					1	14	23.15	0.207
					8	0	22.09	0.162
					8	3	22.12	0.163
					8	7	22.05	0.160
			15	0	22.07	0.161		
			1	0	23.15	0.207		
			1	7	23.47	0.222		
			1	14	23.02	0.200		
			8	0	22.03	0.160		
			8	3	22.03	0.160		
			8	7	22.02	0.159		
			15	0	21.98	0.158		
			1	0	22.97	0.198		
			1	7	23.10	0.204		
			1	14	22.82	0.191		
			8	0	21.93	0.156		
		8	3	21.92	0.156			
		8	7	21.96	0.157			
		15	0	21.99	0.158			
		1	0	22.42	0.175			
		1	7	22.50	0.178			
		1	14	22.42	0.175			
		8	0	21.20	0.132			
		8	3	21.14	0.130			
		8	7	21.14	0.130			
		15	0	21.11	0.129			
		1	0	22.43	0.175			
		1	7	22.46	0.176			
		1	14	22.29	0.169			
		8	0	20.98	0.125			
		8	3	21.00	0.126			
		8	7	21.00	0.126			
		15	0	20.99	0.126			
		1	0	22.31	0.170			
1	7	22.27	0.169					
1	14	22.11	0.163					
8	0	20.93	0.124					
8	3	20.91	0.123					
8	7	21.02	0.126					
15	0	21.02	0.126					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	5 MHz	QPSK	19975	1712.5	1	0	23.64	0.231
					1	12	23.46	0.222
					1	24	23.61	0.230
					12	0	22.47	0.177
					12	6	22.48	0.177
					12	13	22.46	0.176
			25	0	22.42	0.175		
			1	0	23.52	0.225		
			1	12	23.42	0.220		
			1	24	23.49	0.223		
			12	0	22.34	0.171		
			12	6	22.35	0.172		
			12	13	22.32	0.171		
			25	0	22.21	0.166		
			1	0	23.60	0.229		
			1	12	23.32	0.215		
			1	24	23.17	0.207		
			12	0	22.40	0.174		
		12	6	22.40	0.174			
		12	13	22.44	0.175			
		25	0	22.32	0.171			
		1	0	22.54	0.179			
		1	12	22.36	0.172			
		1	24	22.43	0.175			
		12	0	21.15	0.130			
		12	6	21.20	0.132			
		12	13	21.10	0.129			
		25	0	21.15	0.130			
		1	0	22.28	0.169			
		1	12	22.04	0.160			
		1	24	22.45	0.176			
		12	0	21.16	0.131			
		12	6	21.11	0.129			
		12	13	21.08	0.128			
		25	0	20.94	0.124			
		1	0	22.38	0.173			
1	12	22.37	0.173					
1	24	22.07	0.161					
12	0	21.11	0.129					
12	6	21.09	0.129					
12	11	21.13	0.130					
25	0	21.08	0.128					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	10 MHz	QPSK	20000	1715.0	1	0	23.65	0.232
					1	24	23.64	0.231
					1	49	23.65	0.232
					25	0	22.68	0.185
					25	12	22.68	0.185
					25	25	22.56	0.180
			20175	1732.5	50	0	22.60	0.182
					1	0	23.61	0.230
					1	24	23.57	0.228
					1	49	23.50	0.224
					25	0	22.54	0.179
					25	12	22.69	0.186
			20350	1750.0	25	25	22.62	0.183
					50	0	22.56	0.180
					1	0	23.55	0.226
					1	24	23.67	0.233
					1	49	23.28	0.213
					25	0	22.50	0.178
		16QAM	20000	1715.0	25	12	22.54	0.179
					25	25	22.45	0.176
					50	0	22.51	0.178
					1	0	22.60	0.182
					1	24	22.57	0.181
					1	49	22.63	0.183
			20175	1732.5	25	0	21.12	0.129
					25	12	21.14	0.130
					25	25	21.08	0.128
					50	0	21.04	0.127
					1	0	22.61	0.182
					1	24	22.60	0.182
20350	1750.0	1	49	22.39	0.173			
		25	0	21.04	0.127			
		25	12	21.18	0.131			
		25	25	21.12	0.129			
		50	0	21.02	0.126			
		1	0	22.23	0.167			
20350	1750.0	1	24	22.29	0.169			
		1	49	22.07	0.161			
		25	0	20.94	0.124			
		25	12	21.06	0.128			
		25	25	20.91	0.123			
		50	0	21.03	0.127			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	15 MHz	QPSK	20025	1717.5	1	0	23.35	0.216
					1	37	23.59	0.229
					1	74	23.29	0.213
					36	0	22.34	0.171
					36	19	22.32	0.171
					36	39	22.25	0.168
			75	0	22.30	0.170		
			1	0	23.38	0.218		
			1	37	23.22	0.210		
			1	74	23.23	0.210		
			36	0	22.40	0.174		
			36	19	22.48	0.177		
			36	39	22.32	0.171		
			75	0	22.38	0.173		
			1	0	23.28	0.213		
			1	37	23.31	0.214		
			1	74	23.22	0.210		
			36	0	22.34	0.171		
		36	19	22.48	0.177			
		36	39	22.25	0.168			
		75	0	22.30	0.170			
		1	0	22.43	0.175			
		1	37	22.33	0.171			
		1	74	22.32	0.171			
		36	0	21.04	0.127			
		36	19	21.07	0.128			
		36	39	20.99	0.126			
		75	0	21.04	0.127			
		1	0	22.49	0.177			
		1	37	22.44	0.175			
		1	74	22.30	0.170			
		36	0	21.16	0.131			
		36	19	21.23	0.133			
		36	39	21.08	0.128			
		75	0	21.10	0.129			
		1	0	22.25	0.168			
1	37	22.27	0.169					
1	74	22.19	0.166					
36	0	21.04	0.127					
36	19	21.18	0.131					
36	39	20.97	0.125					
75	0	21.03	0.127					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band4	20 MHz	QPSK	20050	1720.0	1	0	23.46	0.222
					1	49	23.37	0.217
					1	99	23.28	0.213
					50	0	22.32	0.171
					50	25	22.37	0.173
					50	50	22.38	0.173
			20175	1732.5	100	0	22.41	0.174
					1	0	23.49	0.223
					1	49	23.54	0.226
					1	99	23.20	0.209
					50	0	22.43	0.175
					50	25	22.50	0.178
			20300	1745.0	50	50	22.52	0.179
					100	0	22.47	0.177
					1	0	23.24	0.211
					1	49	23.20	0.209
					1	99	23.01	0.200
					50	0	22.41	0.174
		16QAM	20050	1720.0	50	25	22.45	0.176
					50	50	22.36	0.172
					100	0	22.40	0.174
					1	0	22.33	0.171
					1	49	22.20	0.166
					1	99	22.25	0.168
			20175	1732.5	50	0	21.01	0.126
					50	25	21.11	0.129
					50	50	21.06	0.128
					100	0	21.12	0.129
					1	0	22.41	0.174
					1	49	22.46	0.176
20300	1745.0	1	99	22.21	0.166			
		50	0	21.16	0.131			
		50	25	21.26	0.134			
		50	50	21.18	0.131			
		100	0	21.17	0.131			
		1	0	22.31	0.170			
20175	1732.5	1	49	22.21	0.166			
		1	99	22.21	0.166			
		50	0	21.10	0.129			
		50	25	21.14	0.130			
		50	50	21.05	0.127			
		100	0	21.09	0.129			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band5	1.4 MHz	QPSK	20407	824.7	1	0	23.41	0.219
					1	2	23.46	0.222
					1	5	23.45	0.221
					3	0	23.28	0.213
					3	1	23.35	0.216
					3	3	23.33	0.215
			6	0	22.31	0.170		
			20525	836.5	1	0	23.24	0.211
					1	2	23.14	0.206
					1	5	23.12	0.205
					3	0	23.20	0.209
					3	1	23.06	0.202
					3	3	23.12	0.205
			20643	848.3	6	0	22.05	0.160
					1	0	22.80	0.191
					1	2	22.71	0.187
					1	5	22.52	0.179
					3	0	22.72	0.187
		3			1	22.71	0.187	
		16QAM	20407	824.7	3	3	22.57	0.181
					6	0	21.78	0.151
					1	0	22.58	0.181
					1	2	22.70	0.186
					1	5	22.59	0.182
					3	0	22.01	0.159
			20525	836.5	3	1	22.15	0.164
					3	3	22.19	0.166
					6	0	20.98	0.125
					1	0	22.10	0.162
					1	2	22.21	0.166
1	5				22.12	0.163		
20643	848.3	3	0	21.91	0.155			
		3	1	21.83	0.152			
		3	3	21.87	0.154			
		6	0	20.83	0.121			
		1	0	22.28	0.169			
		1	2	22.23	0.167			
20643	848.3	1	5	22.16	0.164			
		3	0	21.88	0.154			
		3	1	21.80	0.151			
		3	3	21.75	0.150			
		6	0	20.98	0.125			
		6	0	20.98	0.125			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band5	3 MHz	QPSK	20415	825.5	1	0	23.07	0.203
					1	7	23.45	0.221
					1	14	23.10	0.204
					8	0	22.00	0.158
					8	3	22.12	0.163
					8	7	22.05	0.160
			15	0	22.10	0.162		
			1	0	23.05	0.202		
			1	7	23.29	0.213		
			1	14	22.95	0.197		
			8	0	21.95	0.157		
			8	3	21.82	0.152		
			8	7	21.79	0.151		
			15	0	21.83	0.152		
			1	0	22.72	0.187		
			1	7	22.77	0.189		
			1	14	22.34	0.171		
			8	0	21.76	0.150		
		8	3	21.89	0.155			
		8	7	21.59	0.144			
		15	0	21.84	0.153			
		1	0	22.40	0.174			
		1	7	22.57	0.181			
		1	14	22.46	0.176			
		8	0	21.11	0.129			
		8	3	21.19	0.132			
		8	7	21.14	0.130			
		15	0	21.10	0.129			
		1	0	22.34	0.171			
		1	7	22.32	0.171			
		1	14	22.19	0.166			
		8	0	20.94	0.124			
		8	3	20.74	0.119			
		8	7	20.74	0.119			
		15	0	20.83	0.121			
		1	0	22.28	0.169			
1	7	22.06	0.161					
1	14	21.62	0.145					
8	0	20.76	0.119					
8	3	20.94	0.124					
8	7	20.63	0.116					
15	0	20.91	0.123					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band5	5 MHz	QPSK	20425	826.5	1	0	23.58	0.228
					1	12	23.64	0.231
					1	24	23.42	0.220
					12	0	22.37	0.173
					12	6	22.36	0.172
					12	13	22.36	0.172
			25	0	22.34	0.171		
			1	0	23.44	0.221		
			1	12	23.26	0.212		
			1	24	23.33	0.215		
			12	0	22.21	0.166		
			12	6	22.10	0.162		
			12	13	22.14	0.164		
			25	0	22.12	0.163		
			1	0	23.36	0.217		
			1	12	23.23	0.210		
			1	24	22.76	0.189		
			12	0	22.16	0.164		
		12	6	22.11	0.163			
		12	13	22.18	0.165			
		25	0	22.15	0.164			
		1	0	22.52	0.179			
		1	12	22.89	0.195			
		1	24	22.72	0.187			
		12	0	21.14	0.130			
		12	6	21.05	0.127			
		12	13	21.06	0.128			
		25	0	21.02	0.126			
		1	0	22.22	0.167			
		1	12	21.96	0.157			
		1	24	22.14	0.164			
		12	0	21.02	0.126			
		12	6	20.88	0.122			
		12	13	20.90	0.123			
		25	0	20.77	0.119			
		1	0	22.30	0.170			
1	12	22.10	0.162					
1	24	21.66	0.147					
12	0	20.85	0.122					
12	6	20.85	0.122					
12	11	20.91	0.123					
25	0	20.91	0.123					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band5	10 MHz	QPSK	20450	829.0	1	0	23.31	0.214
					1	24	23.30	0.214
					1	49	23.14	0.206
					25	0	22.35	0.172
					25	12	22.30	0.170
					25	25	22.13	0.163
			50	0	22.19	0.166		
			1	0	23.56	0.227		
			1	24	23.30	0.214		
			1	49	23.42	0.220		
			25	0	22.33	0.171		
			25	12	22.25	0.168		
			25	25	22.20	0.166		
			50	0	22.24	0.167		
			1	0	23.32	0.215		
			1	24	23.43	0.220		
			1	49	22.65	0.184		
			25	0	22.29	0.169		
		25	12	22.17	0.165			
		25	25	22.21	0.166			
		50	0	22.23	0.167			
		1	0	22.59	0.182			
		1	24	22.34	0.171			
		1	49	22.30	0.170			
		25	0	21.01	0.126			
		25	12	20.93	0.124			
		25	25	20.82	0.121			
		50	0	20.86	0.122			
		1	0	22.73	0.187			
		1	24	22.45	0.176			
1	49	22.48	0.177					
25	0	21.00	0.126					
25	12	20.95	0.124					
25	25	20.97	0.125					
50	0	20.97	0.125					
1	0	22.38	0.173					
1	24	22.11	0.163					
1	49	21.62	0.145					
25	0	20.92	0.124					
25	12	20.88	0.122					
25	25	20.84	0.121					
50	0	20.96	0.125					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band7	5 MHz	QPSK	20775	2502.5	1	0	22.45	0.176
					1	12	22.29	0.169
					1	24	22.30	0.170
					12	0	21.35	0.136
					12	6	21.44	0.139
					12	13	21.49	0.141
			25	0	21.40	0.138		
			1	0	22.44	0.175		
			1	12	22.42	0.175		
			1	24	22.45	0.176		
			12	0	21.34	0.136		
			12	6	21.43	0.139		
			12	13	21.46	0.140		
			25	0	21.38	0.137		
			1	0	22.54	0.179		
			1	12	22.67	0.185		
			1	24	22.60	0.182		
			12	0	21.72	0.149		
		12	6	21.66	0.147			
		12	13	21.75	0.150			
		25	0	21.66	0.147			
		1	0	21.55	0.143			
		1	12	21.59	0.144			
		1	24	21.53	0.142			
		12	0	20.61	0.115			
		12	6	20.58	0.114			
		12	13	20.63	0.116			
		25	0	20.54	0.113			
		1	0	21.64	0.146			
		1	12	21.52	0.142			
1	24	21.65	0.146					
12	0	20.58	0.114					
12	6	20.54	0.113					
12	13	20.49	0.112					
25	0	20.57	0.114					
1	0	21.82	0.152					
1	12	21.98	0.158					
1	24	21.85	0.153					
12	0	20.83	0.121					
12	6	20.77	0.119					
12	11	20.74	0.119					
25	0	20.99	0.126					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band7	10 MHz	QPSK	20800	2505.0	1	0	22.35	0.172
					1	24	22.31	0.170
					1	49	22.30	0.170
					25	0	21.49	0.141
					25	12	21.44	0.139
					25	25	21.42	0.139
			21100	2535.0	50	0	21.59	0.144
					1	0	22.27	0.169
					1	24	22.42	0.175
					1	49	22.28	0.169
					25	0	21.54	0.143
					25	12	21.47	0.140
			21400	2565.0	25	25	21.45	0.140
					50	0	21.51	0.142
					1	0	22.67	0.185
					1	24	22.73	0.187
					1	49	22.63	0.183
					25	0	21.70	0.148
		16QAM	20800	2505.0	25	12	21.78	0.151
					25	25	21.80	0.151
					50	0	21.77	0.150
					1	0	21.75	0.150
					1	24	21.66	0.147
					1	49	21.66	0.147
			21100	2535.0	25	0	20.38	0.109
					25	12	20.32	0.108
					25	25	20.35	0.108
					50	0	20.41	0.110
					1	0	21.82	0.152
					1	24	21.41	0.138
21400	2565.0	1	49	21.39	0.138			
		25	0	20.32	0.108			
		25	12	20.38	0.109			
		25	25	20.22	0.105			
		50	0	20.42	0.110			
		1	0	21.56	0.143			
21400	2565.0	1	24	21.78	0.151			
		1	49	22.14	0.164			
		25	0	20.71	0.118			
		25	12	20.67	0.117			
		25	25	20.67	0.117			
		50	0	20.64	0.116			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band7	15 MHz	QPSK	20825	2507.5	1	0	22.45	0.176
					1	37	22.31	0.170
					1	74	22.37	0.173
					36	0	21.42	0.139
					36	19	21.52	0.142
					36	39	21.39	0.138
			75	0	21.43	0.139		
			21100	2535.0	1	0	22.31	0.170
					1	37	22.44	0.175
					1	74	22.33	0.171
					36	0	21.50	0.141
					36	19	21.36	0.137
					36	39	21.30	0.135
			75	0	21.48	0.141		
			21375	2562.5	1	0	22.64	0.184
					1	37	22.72	0.187
					1	74	22.66	0.185
					36	0	21.85	0.153
		36			19	21.84	0.153	
		36			39	21.73	0.149	
		75	0	21.72	0.149			
		16QAM	20825	2507.5	1	0	21.91	0.155
					1	37	21.76	0.150
					1	74	21.21	0.132
					36	0	20.40	0.110
					36	19	20.24	0.106
					36	39	20.21	0.105
			75	0	20.34	0.108		
			21100	2535.0	1	0	21.92	0.156
					1	37	21.72	0.149
1	74				21.89	0.155		
36	0				20.22	0.105		
36	19				20.40	0.110		
36	39				20.26	0.106		
75	0		20.39	0.109				
21375	2562.5		1	0	21.88	0.154		
			1	37	21.98	0.158		
			1	74	22.21	0.166		
			36	0	20.68	0.117		
		36	19	20.66	0.116			
		36	39	20.65	0.116			
75	0	20.62	0.115					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band7	20 MHz	QPSK	20850	2510.0	1	0	22.40	0.174
					1	49	22.68	0.185
					1	99	22.31	0.170
					50	0	21.44	0.139
					50	25	21.35	0.136
					50	50	21.36	0.137
			100	0	21.33	0.136		
			21100	2535.0	1	0	22.34	0.171
					1	49	22.69	0.186
					1	99	22.32	0.171
					50	0	21.55	0.143
					50	25	21.38	0.137
					50	50	21.42	0.139
			100	0	21.37	0.137		
			21350	2560.0	1	0	22.70	0.186
					1	49	22.76	0.189
					1	99	22.68	0.185
					50	0	21.84	0.153
		50			25	21.74	0.149	
		50			50	21.74	0.149	
		100	0	21.79	0.151			
		16QAM	20850	2510.0	1	0	21.88	0.154
					1	49	21.81	0.152
					1	99	21.61	0.145
					50	0	20.45	0.111
					50	25	20.50	0.112
					50	50	20.49	0.112
			100	0	20.57	0.114		
			21100	2535.0	1	0	21.74	0.149
					1	49	21.70	0.148
1	99				21.82	0.152		
50	0				20.44	0.111		
50	25				20.54	0.113		
50	50	20.47			0.111			
100	0	20.58	0.114					
21350	2560.0	1	0	22.08	0.161			
		1	49	22.00	0.158			
		1	99	22.12	0.163			
		50	0	20.78	0.120			
		50	25	20.80	0.120			
		50	50	20.79	0.120			
100	0	20.71	0.118					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band12	1.4 MHz	QPSK	23017	699.7	1	0	23.46	0.222
					1	2	23.42	0.220
					1	5	23.56	0.227
					3	0	23.39	0.218
					3	1	23.46	0.222
					3	3	23.46	0.222
			23095	707.5	6	0	22.32	0.171
					1	0	23.50	0.224
					1	2	23.42	0.220
					1	5	23.35	0.216
					3	0	23.22	0.210
					3	1	23.28	0.213
			23173	715.3	3	3	23.19	0.208
					6	0	22.16	0.164
					1	0	22.49	0.177
					1	2	22.22	0.167
					1	5	21.77	0.150
					3	0	22.33	0.171
		16QAM	23017	699.7	3	1	22.21	0.166
					3	3	21.90	0.155
					6	0	21.31	0.135
					1	0	22.58	0.181
					1	2	22.60	0.182
					1	5	22.46	0.176
			23095	707.5	3	0	22.20	0.166
					3	1	22.21	0.166
					3	3	22.20	0.166
					6	0	21.17	0.131
					1	0	22.37	0.173
					1	2	22.53	0.179
			23173	715.3	1	5	22.42	0.175
					3	0	22.01	0.159
					3	1	22.04	0.160
					3	3	22.01	0.159
					6	0	20.81	0.121
					1	0	22.24	0.167
23095	707.5	1	2	22.40	0.174			
		1	5	22.29	0.169			
		3	0	21.88	0.154			
		3	1	21.91	0.155			
		3	3	21.88	0.154			
		6	0	20.68	0.117			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band12	3 MHz	QPSK	23025	700.5	1	0	23.51	0.224
					1	7	23.57	0.228
					1	14	23.37	0.217
					8	0	22.37	0.173
					8	3	22.39	0.173
					8	7	22.30	0.170
			15	0	22.37	0.173		
			1	0	23.48	0.223		
			1	7	23.44	0.221		
			1	14	23.43	0.220		
			8	0	22.28	0.169		
			8	3	22.21	0.166		
			8	7	22.19	0.166		
			15	0	22.24	0.167		
			1	0	23.26	0.212		
			1	7	22.93	0.196		
			1	14	21.78	0.151		
			8	0	22.18	0.165		
		8	3	22.09	0.162			
		8	7	21.42	0.139			
		15	0	22.06	0.161			
		1	0	22.34	0.171			
		1	7	22.47	0.177			
		1	14	22.18	0.165			
		8	0	20.89	0.123			
		8	3	20.87	0.122			
		8	7	20.79	0.120			
		15	0	20.84	0.121			
		1	0	22.16	0.164			
		1	7	22.61	0.182			
		1	14	22.30	0.170			
		8	0	20.78	0.120			
		8	3	20.72	0.118			
		8	7	20.66	0.116			
		15	0	20.73	0.118			
		1	0	22.30	0.170			
1	7	21.81	0.152					
1	14	20.64	0.116					
8	0	20.73	0.118					
8	3	20.62	0.115					
8	7	20.02	0.100					
15	0	20.61	0.115					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band12	5 MHz	QPSK	23035	701.5	1	0	23.54	0.226
					1	12	23.52	0.225
					1	24	23.37	0.217
					12	0	22.34	0.171
					12	6	22.37	0.173
					12	13	22.24	0.167
			25	0	22.26	0.168		
			1	0	23.49	0.223		
			1	12	23.49	0.223		
			1	24	23.33	0.215		
			12	0	22.13	0.163		
			12	6	22.20	0.166		
			12	13	22.17	0.165		
			25	0	22.12	0.163		
			1	0	23.51	0.224		
			1	12	23.11	0.205		
			1	24	22.18	0.165		
			12	0	22.25	0.168		
		12	6	22.23	0.167			
		12	13	22.06	0.161			
		25	0	22.18	0.165			
		1	0	22.20	0.166			
		1	12	22.47	0.177			
		1	24	22.49	0.177			
		12	0	20.84	0.121			
		12	6	20.92	0.124			
		12	13	20.80	0.120			
		25	0	20.84	0.121			
		1	0	22.11	0.163			
		1	12	21.74	0.149			
		1	24	22.01	0.159			
		12	0	20.77	0.119			
		12	6	20.80	0.120			
		12	13	20.76	0.119			
		25	0	20.65	0.116			
		1	0	22.37	0.173			
1	12	22.05	0.160					
1	24	20.94	0.124					
12	0	20.75	0.119					
12	6	20.72	0.118					
12	11	20.67	0.117					
25	0	20.63	0.116					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band12	10 MHz	QPSK	23060	704.0	1	0	23.47	0.222
					1	24	23.23	0.210
					1	49	23.21	0.209
					25	0	22.28	0.169
					25	12	22.27	0.169
					25	25	22.29	0.169
			50	0	22.16	0.164		
			1	0	23.49	0.223		
			1	24	23.34	0.216		
			1	49	23.26	0.212		
			25	0	22.25	0.168		
			25	12	22.25	0.168		
			25	25	22.14	0.164		
			50	0	22.24	0.167		
			1	0	23.36	0.217		
			1	24	23.39	0.218		
			1	49	22.06	0.161		
			25	0	22.26	0.168		
		25	12	22.13	0.163			
		25	25	22.15	0.164			
		50	0	22.18	0.165			
		1	0	22.48	0.177			
		1	24	22.02	0.159			
		1	49	22.05	0.160			
		25	0	20.56	0.114			
		25	12	20.54	0.113			
		25	25	20.52	0.113			
		50	0	20.50	0.112			
		1	0	22.44	0.175			
		1	24	22.22	0.167			
1	49	22.41	0.174					
25	0	20.60	0.115					
25	12	20.59	0.115					
25	25	20.52	0.113					
50	0	20.48	0.112					
1	0	22.12	0.163					
1	24	21.76	0.150					
1	49	20.74	0.119					
25	0	20.55	0.114					
25	12	20.53	0.113					
25	25	20.54	0.113					
50	0	20.50	0.112					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band13	5 MHz	QPSK	23205	779.5	1	0	22.12	0.163
					1	12	23.16	0.207
					1	24	23.17	0.207
					12	0	21.85	0.153
					12	6	21.92	0.156
					12	13	21.89	0.155
			25	0	21.94	0.156		
			1	0	23.01	0.200		
			1	12	23.18	0.208		
			1	24	23.02	0.200		
			12	0	21.79	0.151		
			12	6	21.92	0.156		
			12	13	22.02	0.159		
			25	0	21.90	0.155		
			1	0	23.20	0.209		
			1	12	23.23	0.210		
			1	24	22.99	0.199		
			12	0	22.01	0.159		
		12	6	22.00	0.158			
		12	13	21.85	0.153			
		25	0	21.98	0.158			
		1	0	22.21	0.166			
		1	12	22.11	0.163			
		1	24	22.34	0.171			
		12	0	20.71	0.118			
		12	6	20.88	0.122			
		12	13	20.90	0.123			
		25	0	20.91	0.123			
		1	0	22.20	0.166			
		1	12	22.35	0.172			
		1	24	22.29	0.169			
		12	0	20.82	0.121			
		12	6	21.01	0.126			
		12	13	20.97	0.125			
		25	0	20.94	0.124			
		1	0	22.21	0.166			
1	12	22.27	0.169					
1	24	22.14	0.164					
12	0	21.09	0.129					
12	6	21.07	0.128					
12	11	20.92	0.124					
25	0	21.03	0.127					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band13	10 MHz	QPSK	23230	782	1	0	22.11	0.163
					1	24	23.07	0.203
					1	49	22.87	0.194
					25	0	21.93	0.156
					25	12	21.98	0.158
					25	25	21.96	0.157
					50	0	21.99	0.158
		16QAM	23230	782	1	0	21.86	0.153
					1	24	22.16	0.164
					1	49	22.22	0.167
					25	0	20.8	0.120
					25	12	21.02	0.126
					25	25	20.87	0.122
					50	0	20.96	0.125



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	1.4 MHz	QPSK	26047	1850.7	1	0	23.26	0.212
					1	2	23.39	0.218
					1	5	23.11	0.205
					3	0	23.14	0.206
					3	1	23.31	0.214
					3	3	23.32	0.215
			6	0	22.24	0.167		
			1	0	23.46	0.222		
			1	2	23.40	0.219		
			1	5	23.21	0.209		
			3	0	23.42	0.220		
			3	1	23.41	0.219		
			3	3	23.40	0.219		
			6	0	22.23	0.167		
			1	0	23.46	0.222		
			1	2	23.52	0.225		
			1	5	23.26	0.212		
			3	0	23.41	0.219		
		3	1	23.45	0.221			
		3	3	23.46	0.222			
		6	0	22.30	0.170			
		1	0	22.33	0.171			
		1	2	22.41	0.174			
		1	5	22.27	0.169			
		3	0	22.26	0.168			
		3	1	22.35	0.172			
		3	3	22.33	0.171			
		6	0	21.30	0.135			
		1	0	22.34	0.171			
		1	2	22.31	0.170			
		1	5	22.30	0.170			
		3	0	22.43	0.175			
		3	1	22.41	0.174			
		3	3	22.33	0.171			
		6	0	21.38	0.137			
		1	0	22.45	0.176			
1	2	22.47	0.177					
1	5	22.41	0.174					
3	0	22.45	0.176					
3	1	22.50	0.178					
3	3	22.59	0.182					
6	0	21.38	0.137					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	3 MHz	QPSK	26055	1851.5	1	0	23.18	0.208
					1	7	23.54	0.226
					1	14	23.28	0.213
					8	0	22.29	0.169
					8	3	22.19	0.166
					8	7	22.15	0.164
			15	0	22.25	0.168		
			1	0	23.26	0.212		
			1	7	23.46	0.222		
			1	14	23.33	0.215		
			8	0	22.24	0.167		
			8	3	22.31	0.170		
			8	7	22.34	0.171		
			15	0	22.21	0.166		
			1	0	23.31	0.214		
			1	7	23.50	0.224		
			1	14	23.21	0.209		
			8	0	22.45	0.176		
		8	3	22.38	0.173			
		8	7	22.29	0.169			
		15	0	22.20	0.166			
		1	0	22.43	0.175			
		1	7	22.59	0.182			
		1	14	22.48	0.177			
		8	0	21.34	0.136			
		8	3	21.27	0.134			
		8	7	21.20	0.132			
		15	0	21.20	0.132			
		1	0	22.52	0.179			
		1	7	22.63	0.183			
		1	14	22.58	0.181			
		8	0	21.40	0.138			
		8	3	21.42	0.139			
		8	7	21.35	0.136			
		15	0	21.36	0.137			
		1	0	22.48	0.177			
1	7	22.42	0.175					
1	14	22.49	0.177					
8	0	21.44	0.139					
8	3	21.37	0.137					
8	7	21.36	0.137					
15	0	21.21	0.132					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power		
					Size	Offset	(dBm)	(W)	
LTE Band25	5 MHz	QPSK	26065	1852.5	1	0	23.10	0.204	
					1	12	23.32	0.215	
					1	24	23.36	0.217	
					12	0	22.30	0.170	
					12	6	22.29	0.169	
					12	13	22.35	0.172	
			25	0	22.33	0.171			
			26365	1882.5	1	0	23.40	0.219	
			1		12	23.49	0.223		
			1		24	23.46	0.222		
			12		0	22.25	0.168		
			12		6	22.44	0.175		
		12	13		22.44	0.175			
		25	0	22.49	0.177				
		26665	1912.5	1	0	23.45	0.221		
		1		12	23.56	0.227			
		1		24	23.42	0.220			
		12		0	22.40	0.174			
		12		6	22.50	0.178			
		12		13	22.53	0.179			
		25	0	22.50	0.178				
		26065	1852.5	16QAM	1852.5	1	0	22.60	0.182
		1				12	22.55	0.180	
		1				24	22.67	0.185	
12	0	21.35				0.136			
12	6	21.33				0.136			
12	13	21.35				0.136			
25	0	21.27	0.134						
26365	1882.5	1	0		22.61	0.182			
1		12	22.55		0.180				
1		24	22.57		0.181				
12		0	21.43		0.139				
12		6	21.41		0.138				
12		13	21.40	0.138					
25	0	21.46	0.140						
26665	1912.5	1	0	22.60	0.182				
1		12	22.46	0.176					
1		24	22.59	0.182					
12		0	21.58	0.144					
12		6	21.49	0.141					
12		11	21.45	0.140					
25	0	21.45	0.140						



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	10 MHz	QPSK	26090	1855.0	1	0	23.28	0.213
					1	24	23.24	0.211
					1	49	23.15	0.207
					25	0	22.16	0.164
					25	12	22.26	0.168
					25	25	22.27	0.169
			50	0	22.21	0.166		
			26365	1882.5	1	0	23.31	0.214
					1	24	23.34	0.216
					1	49	23.46	0.222
					25	0	22.26	0.168
					25	12	22.49	0.177
					25	25	22.37	0.173
			26640	1910.0	50	0	22.40	0.174
					1	0	23.41	0.219
					1	24	23.35	0.216
					1	49	23.51	0.224
					25	0	22.28	0.169
		25			12	22.51	0.178	
		16QAM	26090	1855.0	25	25	22.54	0.179
					50	0	22.49	0.177
					1	0	22.58	0.181
					1	24	22.47	0.177
					1	49	22.53	0.179
					25	0	21.25	0.133
			26365	1882.5	25	12	21.31	0.135
					25	25	21.40	0.138
					50	0	21.31	0.135
					1	0	22.70	0.186
					1	24	22.64	0.184
1	49				22.77	0.189		
26640	1910.0	25	0	21.39	0.138			
		25	12	21.37	0.137			
		25	25	21.43	0.139			
		50	0	21.50	0.141			
		1	0	22.74	0.188			
		1	24	22.66	0.185			
26090	1855.0	1	49	22.64	0.184			
		25	0	21.28	0.134			
		25	12	21.43	0.139			
		25	25	21.64	0.146			
		50	0	21.61	0.145			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	15 MHz	QPSK	26115	1857.5	1	0	23.56	0.227
					1	37	23.47	0.222
					1	74	23.20	0.209
					36	0	22.54	0.179
					36	19	22.33	0.171
					36	39	22.32	0.171
			75	0	22.37	0.173		
			1	0	23.26	0.212		
			1	37	23.52	0.225		
			1	74	23.14	0.206		
			36	0	22.41	0.174		
			36	19	22.62	0.183		
		36	39	22.44	0.175			
		75	0	22.40	0.174			
		1	0	23.48	0.223			
		1	37	23.31	0.214			
		1	74	23.54	0.226			
		36	0	22.40	0.174			
		36	19	22.55	0.180			
		36	39	22.33	0.171			
		75	0	22.62	0.183			
		1	0	22.63	0.183			
		1	37	22.57	0.181			
		1	74	22.56	0.180			
36	0	21.42	0.139					
36	19	21.45	0.140					
36	39	21.49	0.141					
75	0	21.52	0.142					
1	0	22.65	0.184					
1	37	22.41	0.174					
1	74	22.47	0.177					
36	0	21.41	0.138					
36	19	21.54	0.143					
36	39	21.50	0.141					
75	0	21.44	0.139					
1	0	22.46	0.176					
1	37	22.35	0.172					
1	74	22.27	0.169					
36	0	21.53	0.142					
36	19	21.61	0.145					
36	39	21.55	0.143					
75	0	21.55	0.143					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band25	20 MHz	QPSK	26140	1860.0	1	0	23.48	0.223
					1	49	23.33	0.215
					1	99	23.17	0.207
					50	0	22.41	0.174
					50	25	22.49	0.177
					50	50	22.48	0.177
			100	0	22.66	0.185		
			1	0	23.61	0.230		
			1	49	23.49	0.223		
			1	99	23.22	0.210		
			50	0	22.53	0.179		
			50	25	22.57	0.181		
			50	50	22.55	0.180		
			100	0	22.35	0.172		
			1	0	23.60	0.229		
			1	49	23.52	0.225		
			1	99	23.38	0.218		
			50	0	22.56	0.180		
		50	25	22.56	0.180			
		50	50	22.54	0.179			
		100	0	22.45	0.176			
		1	0	22.64	0.184			
		1	49	22.68	0.185			
		1	99	22.67	0.185			
		50	0	21.54	0.143			
		50	25	21.60	0.145			
		50	50	21.42	0.139			
		100	0	21.59	0.144			
		1	0	22.55	0.180			
		1	49	22.75	0.188			
1	99	22.56	0.180					
50	0	21.60	0.145					
50	25	21.51	0.142					
50	50	21.49	0.141					
100	0	21.46	0.140					
1	0	22.69	0.186					
1	49	22.70	0.186					
1	99	22.49	0.177					
50	0	21.48	0.141					
50	25	21.48	0.141					
50	50	21.52	0.142					
100	0	21.60	0.145					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (Part 22)	1.4 MHz	QPSK	26797	824.7	1	0	23.17	0.207
					1	2	23.39	0.218
					1	5	23.31	0.214
					3	0	23.28	0.213
					3	1	23.36	0.217
					3	3	23.33	0.215
			6	0	22.31	0.170		
			26915	836.5	1	0	22.99	0.199
					1	2	22.91	0.195
					1	5	22.92	0.196
					3	0	22.86	0.193
					3	1	22.84	0.192
					3	3	22.82	0.191
			6	0	21.73	0.149		
			27033	848.3	1	0	23.01	0.200
					1	2	23.03	0.201
					1	5	22.97	0.198
					3	0	22.95	0.197
		3			1	22.98	0.199	
		3			3	22.98	0.199	
		6	0	21.83	0.152			
		16QAM	26797	824.7	1	0	22.20	0.166
					1	2	22.37	0.173
					1	5	22.39	0.173
					3	0	22.16	0.164
					3	1	22.27	0.169
					3	3	22.28	0.169
			6	0	21.18	0.131		
			26915	836.5	1	0	21.93	0.156
					1	2	21.89	0.155
					1	5	21.97	0.157
					3	0	21.78	0.151
					3	1	21.69	0.148
					3	3	21.71	0.148
			6	0	21.15	0.130		
			27033	848.3	1	0	21.95	0.157
1	2				22.03	0.160		
1	5				22.18	0.165		
3	0				21.89	0.155		
3	1	21.85			0.153			
3	3	21.86			0.153			
6	0	21.14	0.130					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (Part 22)	3 MHz	QPSK	26805	825.5	1	0	23.23	0.210
					1	7	23.34	0.216
					1	14	23.26	0.212
					8	0	22.27	0.169
					8	3	22.25	0.168
					8	7	22.29	0.169
			15	0	22.27	0.169		
			26915	836.5	1	0	22.86	0.193
					1	7	22.88	0.194
					1	14	22.78	0.190
					8	0	21.80	0.151
					8	3	21.87	0.154
					8	7	21.82	0.152
			27025	847.5	15	0	21.86	0.153
					1	0	22.89	0.195
					1	7	23.07	0.203
					1	14	22.93	0.196
					8	0	21.90	0.155
		8			3	21.94	0.156	
		16QAM	26805	825.5	8	7	21.95	0.157
					15	0	21.92	0.156
					1	0	22.25	0.168
					1	7	22.39	0.173
					1	14	22.30	0.170
					8	0	21.08	0.128
			26915	836.5	8	3	21.09	0.129
					8	7	21.12	0.129
					15	0	20.99	0.126
					1	0	21.86	0.153
					1	7	22.00	0.158
1	14				21.83	0.152		
27025	847.5	8	0	20.64	0.116			
		8	3	20.70	0.117			
		8	7	20.72	0.118			
		15	0	20.64	0.116			
		1	0	21.93	0.156			
		1	7	22.21	0.166			
27025	847.5	1	14	21.96	0.157			
		8	0	20.73	0.118			
		8	3	20.75	0.119			
		8	7	20.78	0.120			
		15	0	20.66	0.116			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (Part 22)	5 MHz	QPSK	26815	826.5	1	0	23.38	0.218
					1	12	23.28	0.213
					1	24	23.28	0.213
					12	0	22.48	0.177
					12	6	22.53	0.179
					12	13	22.32	0.171
			25	0	22.33	0.171		
			1	0	23.03	0.201		
			1	12	22.85	0.193		
			1	24	22.93	0.196		
			12	0	21.83	0.152		
			12	6	22.02	0.159		
			12	13	21.84	0.153		
			25	0	21.92	0.156		
			1	0	23.06	0.202		
			1	12	22.97	0.198		
			1	24	23.10	0.204		
			12	0	21.96	0.157		
		12	6	22.04	0.160			
		12	13	22.00	0.158			
		25	0	22.02	0.159			
		1	0	22.51	0.178			
		1	12	22.50	0.178			
		1	24	22.37	0.173			
		12	0	21.48	0.141			
		12	6	21.48	0.141			
		12	13	21.34	0.136			
		25	0	21.35	0.136			
		1	0	22.48	0.177			
		1	12	22.18	0.165			
		1	24	22.49	0.177			
		12	0	20.84	0.121			
		12	6	21.01	0.126			
		12	13	20.88	0.122			
		25	0	20.90	0.123			
		1	0	22.46	0.176			
1	12	22.37	0.173					
1	24	22.59	0.182					
12	0	21.02	0.126					
12	6	21.08	0.128					
12	11	21.07	0.128					
25	0	21.06	0.128					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (Part 22)	10 MHz	QPSK	26840	829.0	1	0	23.40	0.219
					1	24	23.23	0.210
					1	49	23.17	0.207
					25	0	22.30	0.170
					25	12	22.22	0.167
					25	25	22.11	0.163
			26915	836.5	50	0	22.24	0.167
					1	0	23.07	0.203
					1	24	22.97	0.198
					1	49	22.90	0.195
					25	0	21.97	0.157
					25	12	22.00	0.158
			26990	844.0	25	25	21.87	0.154
					50	0	22.00	0.158
					1	0	23.04	0.201
					1	24	23.09	0.204
					1	49	23.12	0.205
					25	0	22.00	0.158
		16QAM	26840	829.0	25	12	21.99	0.158
					25	25	22.05	0.160
					50	0	22.06	0.161
					1	0	22.46	0.176
					1	24	22.50	0.178
					1	49	22.32	0.171
			26915	836.5	25	0	21.32	0.136
					25	12	21.23	0.133
					25	25	21.16	0.131
					50	0	21.26	0.134
					1	0	22.34	0.171
					1	24	22.16	0.164
26990	844.0	1	49	22.07	0.161			
		25	0	20.96	0.125			
		25	12	21.03	0.127			
		25	25	20.91	0.123			
		50	0	20.99	0.126			
		1	0	22.21	0.166			
26840	829.0	1	24	22.22	0.167			
		1	49	22.31	0.170			
		25	0	21.03	0.127			
		25	12	20.97	0.125			
		25	25	21.05	0.127			
		50	0	21.00	0.126			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band26 (Part 22)	15 MHz	QPSK	26865	831.5	1	0	23.41	0.219
					1	37	23.29	0.213
					1	74	23.27	0.212
					36	0	22.22	0.167
					36	19	22.30	0.170
					36	39	22.03	0.160
			75	0	22.29	0.169		
			1	0	23.01	0.200		
			1	37	22.87	0.194		
			1	74	22.95	0.197		
			36	0	21.73	0.149		
			36	19	21.99	0.158		
			36	39	21.80	0.151		
			75	0	21.92	0.156		
			1	0	22.98	0.199		
			1	37	22.96	0.198		
			1	74	22.90	0.195		
			36	0	21.89	0.155		
		36	19	21.97	0.157			
		36	39	21.95	0.157			
		75	0	22.01	0.159			
		1	0	22.54	0.179			
		1	37	22.52	0.179			
		1	74	22.23	0.167			
		36	0	21.28	0.134			
		36	19	21.31	0.135			
		36	39	21.14	0.130			
		75	0	21.33	0.136			
		1	0	22.26	0.168			
		1	37	22.20	0.166			
		1	74	22.11	0.163			
		36	0	21.00	0.126			
		36	19	20.98	0.125			
		36	39	20.97	0.125			
		75	0	20.94	0.124			
		1	0	22.42	0.175			
1	37	22.25	0.168					
1	74	21.99	0.158					
36	0	21.02	0.126					
36	19	21.01	0.126					
36	39	21.01	0.126					
75	0	21.08	0.128					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	5 MHz	QPSK	39675	2498.5	1	0	22.38	0.173
					1	12	22.45	0.176
					1	24	22.5	0.178
					12	0	21.39	0.138
					12	6	21.6	0.145
					12	13	21.54	0.143
			25	0	21.47	0.140		
			1	0	22.49	0.177		
			1	12	22.62	0.183		
			1	24	22.67	0.185		
			12	0	21.71	0.148		
			12	6	21.74	0.149		
			12	13	21.67	0.147		
			25	0	21.69	0.148		
			1	0	22.24	0.167		
			1	12	22.11	0.163		
			1	24	22.19	0.166		
			12	0	21.56	0.143		
		12	6	21.57	0.144			
		12	13	21.47	0.140			
		25	0	21.49	0.141			
		1	0	21.23	0.133			
		1	12	21.38	0.137			
		1	24	21.48	0.141			
		12	0	20.14	0.103			
		12	6	20.22	0.105			
		12	13	20.18	0.104			
		25	0	20.25	0.106			
		1	0	21.82	0.152			
		1	12	21.73	0.149			
		1	24	21.82	0.152			
		12	0	20.57	0.114			
		12	6	20.56	0.114			
		12	13	20.52	0.113			
		25	0	20.45	0.111			
		1	0	21.2	0.132			
1	12	21.08	0.128					
1	24	20.84	0.121					
12	0	20.34	0.108					
12	6	20.31	0.107					
12	11	20.23	0.105					
25	0	20.19	0.104					



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	10 MHz	QPSK	39700	2501	1	0	22.15	0.164
					1	24	22.62	0.183
					1	49	22.44	0.175
					25	0	21.6	0.145
					25	12	21.59	0.144
					25	25	21.62	0.145
			40620	2593	50	0	21.57	0.144
					1	0	22.57	0.181
					1	24	22.65	0.184
					1	49	22.62	0.183
					25	0	21.56	0.143
					25	12	21.61	0.145
			41540	2685	25	25	21.63	0.146
					50	0	21.54	0.143
					1	0	21.94	0.156
					1	24	21.74	0.149
					1	49	21.76	0.150
					25	0	21.5	0.141
		16QAM	39700	2501	25	12	21.36	0.137
					25	25	21.05	0.127
					50	0	21.26	0.134
					1	0	21.24	0.133
					1	24	21.67	0.147
					1	49	21.44	0.139
			40620	2593	25	0	20.45	0.111
					25	12	20.46	0.111
					25	25	20.45	0.111
					50	0	20.37	0.109
41540	2685	1	0	21.73	0.149			
		1	24	21.77	0.150			
		1	49	21.67	0.147			
		25	0	20.43	0.110			
		25	12	20.53	0.113			
		25	25	20.55	0.114			
41540	2685	50	0	20.49	0.112			
		1	0	21.15	0.130			
		1	24	20.96	0.125			
		1	49	20.53	0.113			
		25	0	20.35	0.108			
		25	12	20.22	0.105			
41540	2685	25	25	20.33	0.108			
		50	0	20.17	0.104			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	15 MHz	QPSK	39725	2503.5	1	0	22.44	0.175
					1	37	22.63	0.183
					1	74	22.49	0.177
					36	0	21.59	0.144
					36	19	21.66	0.147
					36	39	21.59	0.144
			40620	2593	75	0	21.66	0.147
					1	0	22.4	0.174
					1	37	22.64	0.184
					1	74	22.49	0.177
					36	0	21.61	0.145
					36	19	21.63	0.146
			41515	2682.5	36	39	21.61	0.145
					75	0	21.57	0.144
					1	0	22.5	0.178
					1	37	21.86	0.153
					1	74	21.58	0.144
					36	0	21.46	0.140
		16QAM	39725	2503.5	36	19	21.44	0.139
					36	39	21.22	0.132
					75	0	21.32	0.136
					1	0	21.59	0.144
					1	37	21.63	0.146
					1	74	21.56	0.143
			40620	2593	36	0	20.54	0.113
					36	19	20.66	0.116
					36	39	20.55	0.114
					75	0	20.6	0.115
					1	0	21.77	0.150
					1	37	21.55	0.143
41515	2682.5	1	74	21.6	0.145			
		36	0	20.58	0.114			
		36	19	20.65	0.116			
		36	39	20.63	0.116			
		75	0	20.58	0.114			
		1	0	21.28	0.134			
41515	2682.5	1	37	21.12	0.129			
		1	74	20.82	0.121			
		36	0	20.44	0.111			
		36	19	20.45	0.111			
		36	39	20.41	0.110			
		75	0	20.33	0.108			



Band	Channel Bandwidth	Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power	
					Size	Offset	(dBm)	(W)
LTE Band41	20 MHz	QPSK	39750	2506	1	0	22.52	0.179
					1	49	22.62	0.183
					1	99	22.16	0.164
					50	0	21.37	0.137
					50	25	21.45	0.140
					50	50	21.44	0.139
			100	0	21.35	0.136		
			1	0	22.29	0.169		
			1	49	22.39	0.173		
			1	99	22.21	0.166		
			50	0	21.52	0.142		
			50	25	21.61	0.145		
			50	50	21.51	0.142		
			100	0	21.2	0.132		
			1	0	22.12	0.163		
			1	49	22.57	0.181		
			1	99	22.08	0.161		
			50	0	21.38	0.137		
		50	25	21.3	0.135			
		50	50	20.97	0.125			
		100	0	21.06	0.128			
		1	0	21.57	0.144			
		1	49	21.73	0.149			
		1	99	21.38	0.137			
		50	0	20.38	0.109			
		50	25	20.58	0.114			
		50	50	20.55	0.114			
		100	0	20.48	0.112			
		1	0	21.69	0.148			
		1	49	21.75	0.150			
		1	99	21.4	0.138			
		50	0	20.5	0.112			
		50	25	20.53	0.113			
		50	50	20.41	0.110			
		100	0	20.66	0.116			
		1	0	21.28	0.134			
1	49	21.14	0.130					
1	99	21.2	0.132					
50	0	20.63	0.116					
50	25	20.48	0.112					
50	50	20.45	0.111					
100	0	20.47	0.111					
16QAM	39750	2506	1	0	21.57	0.144		
			1	49	21.73	0.149		
			1	99	21.38	0.137		
			50	0	20.38	0.109		
			50	25	20.58	0.114		
			50	50	20.55	0.114		
	100	0	20.48	0.112				
	1	0	21.69	0.148				
	1	49	21.75	0.150				
	1	99	21.4	0.138				
	50	0	20.5	0.112				
	50	25	20.53	0.113				
	50	50	20.41	0.110				
	100	0	20.66	0.116				
	1	0	21.28	0.134				
	1	49	21.14	0.130				
	1	99	21.2	0.132				
	50	0	20.63	0.116				
50	25	20.48	0.112					
50	50	20.45	0.111					
100	0	20.47	0.111					



Effective Radiated Power / Equivalent Isotropic Radiated Power

Band 4								
Channel Bandwidth	Modulation	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	E.I.R.P.		Limit (W)
						(dBm)	(W)	
10 M	QPSK	1750.0	H	15.29	8.24	23.53	0.225	< 1
			V	13.00	8.25	21.25	0.133	< 1

Radiated Emission

Standard:	Part 22H&24E&27	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	1750 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	4 G_BAND 4_10 M_QPSK_CH20350		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	3500.000	-71.23	13.43	-57.80	-13.00	-44.80	peak
2	5250.000	-73.06	18.13	-54.93	-13.00	-41.93	peak

Standard:	Part 22H&24E&27	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	1750 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	4 G_BAND 4_10 M_QPSK_CH20350		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	3500.000	-70.48	13.43	-57.05	-13.00	-44.05	peak
2	5250.000	-71.82	18.13	-53.69	-13.00	-40.69	peak



Standard:	Part 22H&24E&27	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	1750 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	4 G_BAND 4_10 M-16QAM_CH20350		
Ant.Polar.:	Horizontal		

No.	Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	3500.000	-73.43	13.43	-60.00	-13.00	-47.00	peak
2	5250.000	-76.07	18.13	-57.94	-13.00	-44.94	peak

Standard:	Part 22H&24E&27	Test Distance:	3 m
Test item:	Harmonic	Power:	AC 120 V/60 Hz
Frequency:	1750 MHz	Temp.(°C)/Hum.(%RH):	26(°C)/60 %RH
Mode:	4G_BAND 4_10 M-16QAM_CH20350		
Ant.Polar.:	Vertical		

No.	Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark
1	3500.000	-72.55	13.43	-59.12	-13.00	-46.12	peak
2	5250.000	-73.71	18.13	-55.58	-13.00	-42.58	peak