



# TEST REPORT

**APPLICANT** : BLU Products, Inc.

**PRODUCT NAME** : Smart Phone

**MODEL NAME** : G70

**BRAND NAME** : BLU

**FCC ID** : YHLBLUG70

**STANDARD(S)** : 47 CFR Part 22, Subpart H  
47 CFR Part 24, Subpart E  
47 CFR Part 27, Subpart D&H&L&M

**RECEIPT DATE** : 2019-11-12

**TEST DATE** : 2019-11-12 to 2019-11-28

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<b>Change History</b>		
<b>Version</b>	<b>Date</b>	<b>Reason for change</b>
1.0	2019-12-23	First edition



# 1. Technical Information

Note: Provide by applicant.

## 1.1. Applicant and Manufacturer Information

<b>Applicant:</b>	BLU Products, Inc.
<b>Applicant Address:</b>	10814 NW 33rd St # 100 Doral, FL 33172,USA
<b>Manufacturer:</b>	BLU Products, Inc.
<b>ManufacturerAddress:</b>	10814 NW 33rd St # 100 Doral, FL 33172,USA

## 1.2. Equipment Under Test (EUT) Description

<b>Product Name:</b>	Smart Phone	
<b>Hardware Version:</b>	E959_V1.1	
<b>Software Version:</b>	E959_BLU_63_P0_V0.1.4_S190929	
<b>Modulation Type:</b>	QPSK, 16QAM,64QAM	
<b>Operation Band:</b>	Band 2 / 4 / 5 / 7 / 12 / 17	
<b>Frequency Range:</b>	LTE Band 2	Tx: 1850MHz -1910MHz
		Rx: 1930MHz -1990MHz
	LTE Band 4	Tx: 1710MHz -1755MHz
		Rx: 2110MHz - 2155MHz
	LTE Band 5	Tx: 824MHz -849MHz
		Rx: 869MHz – 894MHz
	LTE Band 7	Tx:2500MHz – 2670MHz
		Rx:2620MHz – 2690MHz
LTE Band 12	Tx: 699MHz - 716MHz	
	Rx: 729MHz– 746MHz	
LTE Band 17	Tx: 704MHz - 716MHz	
	Rx: 734MHz– 746MHz	
<b>Channel Bandwidth</b>	LTE Band 2	1.4MHz, 3 MHz, 5 MHz, 10MHz, 15 MHz, 20 MHz
	LTE Band 4	1.4MHz, 3 MHz, 5 MHz, 10MHz, 15 MHz, 20 MHz
	LTE Band 5	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 7	5MHz,10MHz,15MHz,20MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 17	5 MHz, 10MHz



<b>Antenna Type:</b>	Fixed External	
<b>Antenna Gain:</b>	LTE Band 2	0.45 dBi
	LTE Band 4	0.32 dBi
	LTE Band 5	0.05 dBi
	LTE Band 7	0.62 dBi
	LTE Band 12	0.03 dBi
	LTE Band 17	0.03 dBi
<b>Accessory Information:</b>	Battery	
	Brand Name:	BLU
	Model No.:	P866546390L
	Capacity:	3900mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.40V
	AC Adapter 1	
	Brand Name:	BLU
	Model No.:	US-WT-2000
	Rated Input:	100-240V~50/60Hz 0.3A
	Rated Output:	5V $\overline{\text{---}}$ 2.0A

**Note 1:** For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

### 1.3. Maximum ERP/EIRP and Emission Designator

LTE Band2	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
	BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM
20	0.259	0.190	0.158	18M0G7D	18M0W7D	18M0D7W
15	0.254	0.195	0.163	13M5G7D	13M5W7D	13M5D7W
10	0.252	0.194	0.160	9M04G7D	8M99W7D	9M00D7W
5	0.251	0.196	0.165	4M51G7D	4M52W7D	4M51D7W
3	0.253	0.194	0.167	2M69G7D	2M69W7D	2M70D7W
1.4	0.254	0.197	0.154	1M10G7D	1M10W7D	1M10D7W
LTE Band4	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
	BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM
20	0.246	0.209	0.159	18M0G7D	18M0W7D	18M0D7W
15	0.245	0.205	0.155	13M5G7D	13M5W7D	13M5D7W
10	0.243	0.204	0.150	9M02G7D	8M99W7D	9M01D7W
5	0.243	0.207	0.150	4M52G7D	4M52W7D	4M51D7W
3	0.241	0.203	0.151	2M69G7D	2M69W7D	2M70D7W
1.4	0.242	0.208	0.150	1M09G7D	1M10W7D	1M10D7W
LTE Band5	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
	BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM
10	0.152	0.119	0.097	9M05G7D	8M98W7D	9M02D7W
5	0.146	0.121	0.094	4M52G7D	4M52W7D	4M51D7W
3	0.143	0.114	0.091	2M69G7D	2M69W7D	2M70D7W
1.4	0.143	0.121	0.092	1M09G7D	1M10W7D	1M10D7W
LTE Band7	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
	BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM
20	0.102	0.081	0.084	18M0G7D	18M0W7D	18M0D7W
15	0.098	0.086	0.080	13M5G7D	13M5W7D	13M5D7W
10	0.269	0.219	0.171	9M04G7D	8M99W7D	9M02D7W
5	0.265	0.217	0.170	4M52G7D	4M52W7D	4M51D7W
LTE Band12	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
	BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM
10	0.143	0.117	0.091	9M02G7D	9M00W7D	9M02D7W
5	0.141	0.115	0.091	4M52G7D	4M53W7D	4M51D7W
3	0.135	0.118	0.093	2M69G7D	2M69W7D	2M70D7W
1.4	0.138	0.117	0.090	1M09G7D	1M10W7D	1M10D7W



LTE Band17	Maximum ERP/EIRP (W)			Emission Designator (99%OBW)		
	BW(MHz)	QPSK	16QAM	64QAM	QPSK	16QAM
10	0.140	0.116	0.094	9M03G7D	8M98W7D	9M00D7W
5	0.139	0.117	0.093	4M53G7D	4M52W7D	4M51D7W



## 1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 22, Part 24 and Part 27 for the EUT FCC ID Certification:

No	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 24	Personal Communications Services
4	47 CFR Part 27	Miscellaneous Wireless Communications Services





Test detailed items/section required by FCC rules and results are as below:

Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
2.1046, 22.913(a)(2), 24.232(c),27.50(c)(10) 27.50(d)(4),27.50(h)(2 ) 27.50(a)(3)	Transmitter Conducted Output Power and ERP/EIRP	Nov 13 and 28 2019	Gao Mingzhou Peng Xuewei	PASS	No deviation
2.1049	Occupied Bandwidth	Nov 12, 2019	Gao Mingzhou	PASS	No deviation
2.1055, 22.355, 24.235, 27.54	Frequency Stability	Nov 12 to 16, 2019	Gao Mingzhou	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Nov 14, 2019	Gao Mingzhou	PASS	No deviation
2.1051, 22.917(a), 24.238, 27.53(g)(h) 27.53(m)(4)(a)(4)	Conducted Spurious Emissions	Nov 16, 2019	Gao Mingzhou	PASS	No deviation
2.1051, 22.917(a), 24.238, 27.53(g)(h) 27.53(m)(4)(a)(4)	Band Edge	Nov 13, and 16, 2019	Gao Mingzhou	PASS	No deviation
2.1051, 22.917(a), 24.238, 27.53(g)(h) 27.53(m)(4)(a)(4)	Radiated Spurious Emissions	Nov 12 to 16, 2019	Peng Xuewei	PASS	No deviation

**Note 1:** The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.

**Note 2:** The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 26.5dB contains two parts that cable loss 16.5dB and Attenuator 10dB.



## 1.5. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 -60
Atmospheric Pressure (kPa):	86-106

## 2. 47 CFR Part 2, Part 22H, Part 24E and 27D&H&L&M Requirements

### 2.1. Transmitter Conducted Output Power And ERP/EIRP

#### 2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

According to FCC section 24.232 (c) for LTE Band 2/25, Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

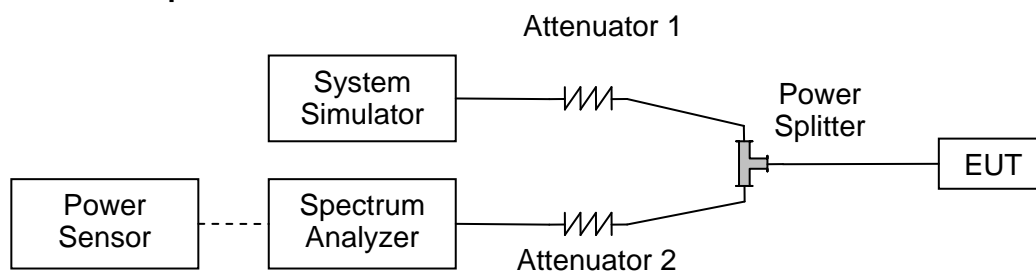
According to FCC section 27.50 (d) for LTE Band 4, fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat EIRP.

According to FCC section 22.913 (a.2) for LTE Band 5/26, the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 27.50 (h) for LTE Band 7/41, 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.

According to FCC section 27.50 (c) for LTE Band 12/17, Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts ERP.

#### 2.1.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.



### 2.1.3. Test procedure

KDB 971168 D01v03 Section 5.2 and ANSI/TIA-603-E-2016.

$EIRP \text{ (dBm)} = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$ERP \text{ (dBm)} = EIPR \text{ (dBm)} - 2.15$

### 2.1.4. Result

**Conducted Output Power:**

LTE Band2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	23.52	23.69	23.54
20	QPSK	1	49	23.42	23.33	23.53
20	QPSK	1	99	23.42	23.55	23.56
20	QPSK	50	0	22.36	22.56	22.51
20	QPSK	50	24	22.46	22.47	22.47
20	QPSK	50	50	22.42	22.49	22.36
20	QPSK	100	0	22.54	22.39	22.32
20	16QAM	1	0	22.07	22.27	22.21
20	16QAM	1	49	22.23	22.27	22.28
20	16QAM	1	99	22.34	22.11	22.06
20	16QAM	50	0	21.53	21.39	21.37
20	16QAM	50	24	21.46	21.30	21.38
20	16QAM	50	50	21.56	21.19	21.38
20	16QAM	100	0	21.62	21.32	21.32
20	64QAM	1	0	21.53	21.46	21.26
20	64QAM	1	49	21.51	21.54	21.45
20	64QAM	1	99	21.22	21.25	21.15
20	64QAM	50	0	21.44	21.21	21.33
20	64QAM	50	24	21.32	21.39	21.33
20	64QAM	50	50	21.16	21.19	21.38
20	64QAM	100	0	21.33	21.27	21.31



LTE Band2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	23.51	23.57	23.41
15	QPSK	1	37	23.47	23.52	23.54
15	QPSK	1	74	23.59	23.43	23.59
15	QPSK	36	0	22.52	22.56	22.52
15	QPSK	36	20	22.57	22.59	22.73
15	QPSK	36	39	22.63	22.55	22.79
15	QPSK	75	0	22.54	22.54	22.52
15	16QAM	1	0	22.37	22.12	22.31
15	16QAM	1	37	22.18	22.44	22.17
15	16QAM	1	74	22.21	22.12	22.11
15	16QAM	36	0	21.59	21.62	21.63
15	16QAM	36	20	21.44	21.71	21.51
15	16QAM	36	39	21.62	21.59	21.57
15	16QAM	75	0	21.52	21.76	21.65
15	64QAM	1	0	21.57	21.67	21.57
15	64QAM	1	37	21.51	21.64	21.66
15	64QAM	1	74	21.62	21.59	21.54
15	64QAM	36	0	21.23	21.39	21.35
15	64QAM	36	20	21.34	21.28	21.36
15	64QAM	36	39	21.31	21.24	21.36
15	64QAM	75	0	21.42	21.45	21.47



LTE Band2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	23.55	23.57	23.55
10	QPSK	1	25	23.52	23.57	23.52
10	QPSK	1	49	23.51	23.52	23.57
10	QPSK	25	0	22.52	22.53	22.54
10	QPSK	25	12	22.53	22.56	22.55
10	QPSK	25	25	22.74	22.52	22.59
10	QPSK	50	0	22.63	22.52	22.62
10	16QAM	1	0	22.43	22.38	22.29
10	16QAM	1	25	22.20	22.36	22.29
10	16QAM	1	49	22.28	22.37	22.41
10	16QAM	25	0	21.52	21.51	21.45
10	16QAM	25	12	21.57	21.53	21.54
10	16QAM	25	25	21.67	21.68	21.53
10	16QAM	50	0	21.64	21.58	21.51
10	64QAM	1	0	21.58	21.53	21.47
10	64QAM	1	25	21.48	21.52	21.56
10	64QAM	1	49	21.51	21.59	21.59
10	64QAM	25	0	21.31	21.32	21.25
10	64QAM	25	12	21.24	21.32	21.34
10	64QAM	25	25	21.20	21.35	21.31
10	64QAM	50	0	21.26	21.40	21.36



LTE Band2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	23.51	23.52	23.52
5	QPSK	1	12	23.52	23.51	23.54
5	QPSK	1	24	23.44	23.51	23.55
5	QPSK	12	0	22.52	22.61	22.53
5	QPSK	12	7	22.66	22.53	22.68
5	QPSK	12	13	22.56	22.54	22.76
5	QPSK	25	0	22.53	22.54	22.56
5	16QAM	1	0	22.26	22.18	22.16
5	16QAM	1	12	22.48	22.11	22.11
5	16QAM	1	24	22.35	22.42	22.23
5	16QAM	12	0	21.42	21.52	21.51
5	16QAM	12	7	21.56	21.51	21.55
5	16QAM	12	13	21.51	21.52	21.64
5	16QAM	25	0	21.53	21.29	21.52
5	64QAM	1	0	21.57	21.72	21.54
5	64QAM	1	12	21.66	21.53	21.68
5	64QAM	1	24	21.53	21.67	21.53
5	64QAM	12	0	21.28	21.31	21.24
5	64QAM	12	7	21.16	21.34	21.21
5	64QAM	12	13	21.16	21.32	21.32
5	64QAM	25	0	21.16	21.32	21.13





LTE Band2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	23.54	23.58	23.52
3	QPSK	1	8	23.58	23.51	23.58
3	QPSK	1	14	23.55	23.57	23.56
3	QPSK	8	0	22.54	22.66	22.58
3	QPSK	8	4	22.57	22.52	22.71
3	QPSK	8	7	22.64	22.69	22.61
3	QPSK	15	0	22.75	22.56	22.53
3	16QAM	1	0	22.14	22.13	22.12
3	16QAM	1	8	22.23	22.42	22.33
3	16QAM	1	14	22.29	22.22	22.09
3	16QAM	8	0	21.17	21.38	21.34
3	16QAM	8	4	21.31	21.47	21.14
3	16QAM	8	7	21.30	21.20	21.12
3	16QAM	15	0	21.28	21.16	21.11
3	64QAM	1	0	21.58	21.78	21.55
3	64QAM	1	8	21.55	21.58	21.52
3	64QAM	1	14	21.65	21.55	21.54
3	64QAM	8	0	21.04	21.28	21.22
3	64QAM	8	4	21.28	21.21	21.21
3	64QAM	8	7	21.23	21.16	21.03
3	64QAM	15	0	21.11	21.31	21.13



LTE Band2						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	23.59	23.58	23.52
1.4	QPSK	1	3	23.51	23.57	23.52
1.4	QPSK	1	5	23.51	23.53	23.42
1.4	QPSK	3	0	23.53	23.52	23.53
1.4	QPSK	3	1	23.56	23.52	23.59
1.4	QPSK	3	3	23.55	23.43	23.55
1.4	QPSK	6	0	22.64	22.51	22.51
1.4	16QAM	1	0	22.20	22.36	22.21
1.4	16QAM	1	3	22.24	22.37	22.18
1.4	16QAM	1	5	22.22	22.22	22.22
1.4	16QAM	3	0	22.22	22.35	22.27
1.4	16QAM	3	1	22.32	22.50	22.27
1.4	16QAM	3	3	22.19	22.21	22.23
1.4	16QAM	6	0	21.64	21.53	21.55
1.4	64QAM	1	0	21.17	21.34	21.24
1.4	64QAM	1	3	21.12	21.37	21.14
1.4	64QAM	1	5	21.29	21.13	21.19
1.4	64QAM	3	0	21.35	21.22	21.17
1.4	64QAM	3	1	21.22	21.38	21.19
1.4	64QAM	3	3	21.21	21.43	21.23
1.4	64QAM	6	0	21.21	21.26	21.11



LTE Band4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	23.53	23.59	23.56
20	QPSK	1	49	23.44	23.53	23.49
20	QPSK	1	99	23.54	23.55	23.57
20	QPSK	50	0	23.21	23.35	23.34
20	QPSK	50	24	23.21	23.18	23.23
20	QPSK	50	50	23.29	23.24	23.17
20	QPSK	100	0	23.14	23.13	23.18
20	16QAM	1	0	22.89	22.73	22.73
20	16QAM	1	49	22.66	22.83	22.56
20	16QAM	1	99	22.61	22.75	22.63
20	16QAM	50	0	21.53	21.52	21.55
20	16QAM	50	24	21.45	21.35	21.51
20	16QAM	50	50	21.54	21.51	21.59
20	16QAM	100	0	21.38	21.41	21.42
20	64QAM	1	0	21.51	21.64	21.55
20	64QAM	1	49	21.59	21.65	21.49
20	64QAM	1	99	21.69	21.58	21.51
20	64QAM	50	0	21.36	21.27	21.28
20	64QAM	50	24	21.39	21.36	21.34
20	64QAM	50	50	21.41	21.25	21.34
20	64QAM	100	0	21.28	21.29	21.41



LTE Band4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	23.42	23.55	23.37
15	QPSK	1	37	23.5	23.57	23.35
15	QPSK	1	74	23.38	23.35	23.48
15	QPSK	36	0	22.44	22.43	22.37
15	QPSK	36	20	22.45	22.39	22.35
15	QPSK	36	39	22.39	22.28	22.36
15	QPSK	75	0	22.54	22.57	22.59
15	16QAM	1	0	22.54	22.48	22.62
15	16QAM	1	37	22.66	22.51	22.57
15	16QAM	1	74	22.55	22.79	22.6
15	16QAM	36	0	21.44	21.55	21.42
15	16QAM	36	20	21.44	21.47	21.33
15	16QAM	36	39	21.52	21.46	21.32
15	16QAM	75	0	21.64	21.57	21.35
15	64QAM	1	0	21.57	21.24	21.52
15	64QAM	1	37	21.53	21.49	21.28
15	64QAM	1	74	21.43	21.39	21.47
15	64QAM	36	0	21.29	21.15	21.13
15	64QAM	36	20	21.24	21.14	21.12
15	64QAM	36	39	21.14	21.33	21.47
15	64QAM	75	0	21.33	21.22	21.24



LTE Band4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	23.37	23.38	23.46
10	QPSK	1	25	23.42	23.53	23.44
10	QPSK	1	49	23.37	23.4	23.33
10	QPSK	25	0	22.51	22.46	22.47
10	QPSK	25	12	22.49	22.36	22.54
10	QPSK	25	25	22.41	22.35	22.36
10	QPSK	50	0	22.48	22.53	22.24
10	16QAM	1	0	22.75	22.61	22.58
10	16QAM	1	25	22.46	22.69	22.57
10	16QAM	1	49	22.78	22.59	22.45
10	16QAM	25	0	21.57	21.64	21.52
10	16QAM	25	12	21.56	21.56	21.54
10	16QAM	25	25	21.68	21.53	21.59
10	16QAM	50	0	21.54	21.48	21.42
10	64QAM	1	0	21.28	21.14	21.16
10	64QAM	1	25	21.13	21.22	21.38
10	64QAM	1	49	21.21	21.28	21.11
10	64QAM	25	0	21.32	21.25	21.45
10	64QAM	25	12	21.16	21.37	21.41
10	64QAM	25	25	21.25	21.13	21.29
10	64QAM	50	0	21.29	21.32	21.18



LTE Band4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	23.48	23.53	23.47
5	QPSK	1	12	23.54	23.49	23.44
5	QPSK	1	24	23.52	23.49	23.41
5	QPSK	12	0	22.54	22.59	22.41
5	QPSK	12	7	22.43	22.63	22.44
5	QPSK	12	13	22.45	22.59	22.33
5	QPSK	25	0	22.47	22.51	22.41
5	16QAM	1	0	22.54	22.83	22.51
5	16QAM	1	12	22.82	22.51	22.73
5	16QAM	1	24	22.45	22.51	22.48
5	16QAM	12	0	21.26	21.47	21.36
5	16QAM	12	7	21.41	21.31	21.14
5	16QAM	12	13	21.43	21.14	21.29
5	16QAM	25	0	21.22	21.34	21.28
5	64QAM	1	0	21.39	21.43	21.31
5	64QAM	1	12	21.41	21.24	21.26
5	64QAM	1	24	21.31	21.31	21.41
5	64QAM	12	0	21.30	21.34	21.43
5	64QAM	12	7	21.23	21.3	21.43
5	64QAM	12	13	21.42	21.41	21.42
5	64QAM	25	0	21.38	21.30	21.40



LTE Band4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	23.4	23.35	23.41
3	QPSK	1	8	23.44	23.5	23.35
3	QPSK	1	14	23.43	23.44	23.49
3	QPSK	8	0	22.44	22.47	22.41
3	QPSK	8	4	22.55	22.49	22.55
3	QPSK	8	7	22.51	22.44	22.37
3	QPSK	15	0	22.48	22.36	22.39
3	16QAM	1	0	22.74	22.61	22.59
3	16QAM	1	8	22.60	22.38	22.41
3	16QAM	1	14	22.75	22.65	22.63
3	16QAM	8	0	21.24	21.26	21.18
3	16QAM	8	4	21.25	21.29	21.46
3	16QAM	8	7	21.41	21.37	21.36
3	16QAM	15	0	21.37	21.39	21.43
3	64QAM	1	0	21.48	21.43	21.22
3	64QAM	1	8	21.16	21.24	21.21
3	64QAM	1	14	21.14	21.23	21.29
3	64QAM	8	0	21.40	21.25	21.44
3	64QAM	8	4	21.28	21.34	21.21
3	64QAM	8	7	21.25	21.25	21.31
3	64QAM	15	0	21.44	21.22	21.32



LTE Band4						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	23.29	23.35	23.34
1.4	QPSK	1	3	23.34	23.44	23.32
1.4	QPSK	1	5	23.29	23.23	23.31
1.4	QPSK	3	0	23.43	23.34	23.42
1.4	QPSK	3	1	23.51	23.48	23.43
1.4	QPSK	3	3	23.29	23.34	23.37
1.4	QPSK	6	0	22.54	22.63	22.53
1.4	16QAM	1	0	22.79	22.62	22.85
1.4	16QAM	1	3	22.65	22.53	22.87
1.4	16QAM	1	5	22.67	22.56	22.52
1.4	16QAM	3	0	22.52	22.48	22.48
1.4	16QAM	3	1	22.37	22.24	22.47
1.4	16QAM	3	3	22.49	22.4	22.47
1.4	16QAM	6	0	21.58	21.59	21.56
1.4	64QAM	1	0	21.38	21.28	21.36
1.4	64QAM	1	3	21.29	21.22	21.24
1.4	64QAM	1	5	21.35	21.44	21.23
1.4	64QAM	3	0	21.28	21.15	21.24
1.4	64QAM	3	1	21.23	21.24	21.35
1.4	64QAM	3	3	21.18	21.29	21.23
1.4	64QAM	6	0	21.42	21.40	21.34





LTE Band5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	23.91	23.71	23.88
10	QPSK	1	25	23.61	23.75	23.57
10	QPSK	1	49	23.56	23.68	23.68
10	QPSK	25	0	22.76	22.66	22.48
10	QPSK	25	12	22.65	22.56	22.65
10	QPSK	25	25	22.53	22.62	22.49
10	QPSK	50	0	22.51	22.6	22.54
10	16QAM	1	0	22.85	22.69	22.56
10	16QAM	1	25	22.71	22.79	22.85
10	16QAM	1	49	22.52	22.85	22.87
10	16QAM	25	0	21.51	21.58	21.6
10	16QAM	25	12	21.61	21.59	21.53
10	16QAM	25	25	21.58	21.56	21.46
10	16QAM	50	0	21.52	21.53	21.47
10	64QAM	1	0	21.57	21.59	21.58
10	64QAM	1	25	21.95	21.81	21.59
10	64QAM	1	49	21.61	21.86	21.60
10	64QAM	25	0	21.41	21.53	21.44
10	64QAM	25	12	21.55	21.76	21.62
10	64QAM	25	25	21.51	21.67	21.49
10	64QAM	50	0	21.51	21.55	21.47



LTE Band5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	23.73	23.63	23.53
5	QPSK	1	12	23.58	23.66	23.67
5	QPSK	1	24	23.38	23.38	23.43
5	QPSK	12	0	22.44	22.49	22.54
5	QPSK	12	7	22.62	22.59	22.51
5	QPSK	12	13	22.56	22.56	22.44
5	QPSK	25	0	22.42	22.56	22.52
5	16QAM	1	0	22.85	22.92	22.77
5	16QAM	1	12	22.58	22.73	22.85
5	16QAM	1	24	22.91	22.85	22.59
5	16QAM	12	0	21.46	21.58	21.62
5	16QAM	12	7	21.62	21.56	21.67
5	16QAM	12	13	21.60	21.60	21.40
5	16QAM	25	0	21.59	21.51	21.59
5	64QAM	1	0	21.59	21.62	21.54
5	64QAM	1	12	21.57	21.54	21.83
5	64QAM	1	24	21.66	21.53	21.51
5	64QAM	12	0	21.45	21.59	21.55
5	64QAM	12	7	21.65	21.56	21.58
5	64QAM	12	13	21.56	21.62	21.50
5	64QAM	25	0	21.51	21.54	21.46



LTE Band5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	23.52	23.58	23.52
3	QPSK	1	8	23.41	23.49	23.46
3	QPSK	1	14	23.65	23.43	23.56
3	QPSK	8	0	22.45	22.58	22.45
3	QPSK	8	4	22.50	22.60	22.60
3	QPSK	8	7	22.59	22.58	22.56
3	QPSK	15	0	22.59	22.57	22.47
3	16QAM	1	0	22.62	22.6	22.54
3	16QAM	1	8	22.51	22.61	22.68
3	16QAM	1	14	22.54	22.55	22.59
3	16QAM	8	0	21.38	21.61	21.63
3	16QAM	8	4	21.68	21.57	21.51
3	16QAM	8	7	21.65	21.66	21.55
3	16QAM	15	0	21.53	21.48	21.55
3	64QAM	1	0	21.71	21.54	21.61
3	64QAM	1	8	21.53	21.62	21.58
3	64QAM	1	14	21.68	21.52	21.68
3	64QAM	8	0	21.63	21.52	21.52
3	64QAM	8	4	21.54	21.58	21.61
3	64QAM	8	7	21.59	21.47	21.54
3	64QAM	15	0	21.54	21.62	21.47



LTE Band5						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	23.44	23.4	23.42
1.4	QPSK	1	3	23.49	23.53	23.59
1.4	QPSK	1	5	23.44	23.43	23.34
1.4	QPSK	3	0	23.50	23.41	23.53
1.4	QPSK	3	1	23.44	23.65	23.59
1.4	QPSK	3	3	23.52	23.47	23.49
1.4	QPSK	6	0	22.53	22.56	22.58
1.4	16QAM	1	0	22.64	22.72	22.94
1.4	16QAM	1	3	22.58	22.59	22.61
1.4	16QAM	1	5	22.59	22.68	22.85
1.4	16QAM	3	0	22.77	22.61	22.54
1.4	16QAM	3	1	22.57	22.64	22.66
1.4	16QAM	3	3	22.55	22.56	22.63
1.4	16QAM	6	0	21.68	21.66	21.61
1.4	64QAM	1	0	21.66	21.75	21.56
1.4	64QAM	1	3	21.54	21.63	21.56
1.4	64QAM	1	5	21.55	21.55	21.63
1.4	64QAM	3	0	21.65	21.54	21.49
1.4	64QAM	3	1	21.56	21.59	21.62
1.4	64QAM	3	3	21.56	21.49	21.54
1.4	64QAM	6	0	21.50	21.50	21.58



LTE Band7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	18.80	18.89	19.48
20	QPSK	1	49	18.99	19.28	19.11
20	QPSK	1	99	18.83	19.01	18.98
20	QPSK	50	0	18.79	18.78	18.88
20	QPSK	50	24	18.80	18.87	18.82
20	QPSK	50	50	18.76	18.87	18.87
20	QPSK	100	0	18.52	18.03	18.07
20	16QAM	1	0	18.21	17.95	18.38
20	16QAM	1	49	18.42	18.26	18.44
20	16QAM	1	99	18.01	18.44	18.34
20	16QAM	50	0	16.90	16.99	17.10
20	16QAM	50	24	16.94	16.97	17.12
20	16QAM	50	50	16.97	17.13	17.20
20	16QAM	100	0	16.90	17.01	17.15
20	64QAM	1	0	17.66	18.03	17.79
20	64QAM	1	49	18.06	18.01	18.61
20	64QAM	1	99	17.67	17.92	17.86
20	64QAM	50	0	16.73	17.08	17.06
20	64QAM	50	24	16.96	16.94	17.21
20	64QAM	50	50	16.95	16.99	17.08
20	64QAM	100	0	16.90	17.04	17.03



LTE Band7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	18.88	19.13	19.23
15	QPSK	1	37	18.81	18.95	19.28
15	QPSK	1	74	18.88	19.05	19.11
15	QPSK	36	0	17.78	18.22	18.38
15	QPSK	36	20	17.89	18.22	18.26
15	QPSK	36	39	17.86	18.25	18.34
15	QPSK	75	0	17.82	18.21	18.39
15	16QAM	1	0	18.19	18.21	18.44
15	16QAM	1	37	18.44	18.62	18.74
15	16QAM	1	74	18.25	18.74	18.38
15	16QAM	36	0	17.14	17.39	17.31
15	16QAM	36	20	17.18	17.31	17.47
15	16QAM	36	39	17.21	17.30	17.43
15	16QAM	75	0	17.08	17.32	17.38
15	64QAM	1	0	18.04	18.13	18.33
15	64QAM	1	37	18.35	18.32	18.43
15	64QAM	1	74	17.14	17.27	17.39
15	64QAM	36	0	17.26	17.33	17.34
15	64QAM	36	20	17.21	17.37	17.30
15	64QAM	36	39	17.30	17.33	17.38
15	64QAM	75	0	17.50	17.24	17.42



LTE Band7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	19.10	19.22	19.16
10	QPSK	1	25	19.09	19.32	19.29
10	QPSK	1	49	19.14	19.35	19.35
10	QPSK	25	0	18.11	18.27	18.43
10	QPSK	25	12	18.20	18.33	18.43
10	QPSK	25	25	18.28	18.26	18.43
10	QPSK	50	0	18.10	18.28	18.42
10	16QAM	1	0	18.32	18.74	18.42
10	16QAM	1	25	18.35	18.54	18.71
10	16QAM	1	49	18.74	18.50	18.79
10	16QAM	25	0	17.09	17.36	17.52
10	16QAM	25	12	17.16	17.45	17.57
10	16QAM	25	25	17.24	17.22	17.28
10	16QAM	50	0	17.31	17.29	17.31
10	64QAM	1	0	18.15	18.38	18.48
10	64QAM	1	25	18.46	18.78	18.53
10	64QAM	1	49	18.07	18.76	18.84
10	64QAM	25	0	17.15	17.39	17.38
10	64QAM	25	12	17.23	17.27	17.43
10	64QAM	25	25	17.22	17.32	17.34
10	64QAM	50	0	17.17	17.28	17.34



LTE Band7						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	18.95	19.02	19.12
5	QPSK	1	12	19.11	19.14	19.03
5	QPSK	1	24	18.96	19.07	19.12
5	QPSK	12	0	17.94	18.22	18.34
5	QPSK	12	7	18.01	18.29	18.23
5	QPSK	12	13	18.03	18.22	18.22
5	QPSK	25	0	17.98	18.16	18.33
5	16QAM	1	0	18.97	18.61	18.76
5	16QAM	1	12	18.77	19.07	19.02
5	16QAM	1	24	18.59	18.63	18.56
5	16QAM	12	0	17.13	17.18	17.39
5	16QAM	12	7	17.13	17.36	17.49
5	16QAM	12	13	17.16	17.34	17.23
5	16QAM	25	0	17.08	17.22	17.34
5	64QAM	1	0	18.31	18.20	18.15
5	64QAM	1	12	18.32	18.22	18.02
5	64QAM	1	24	17.99	17.93	18.35
5	64QAM	12	0	16.90	17.19	17.37
5	64QAM	12	7	17.05	17.26	17.39
5	64QAM	12	13	17.04	17.28	17.32
5	64QAM	25	0	17.05	17.24	17.41





LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	23.62	23.62	23.67
10	QPSK	1	25	23.54	23.58	23.56
10	QPSK	1	49	23.59	23.57	23.51
10	QPSK	25	0	22.43	22.64	22.66
10	QPSK	25	12	22.47	22.54	22.37
10	QPSK	25	25	22.47	22.55	22.35
10	QPSK	50	0	22.62	22.48	22.31
10	16QAM	1	0	22.51	22.79	22.61
10	16QAM	1	25	22.61	22.71	22.50
10	16QAM	1	49	22.74	22.59	22.73
10	16QAM	25	0	21.50	21.39	21.18
10	16QAM	25	12	21.44	21.36	21.46
10	16QAM	25	25	21.57	21.53	21.42
10	16QAM	50	0	21.58	21.50	21.32
10	64QAM	1	0	21.70	21.45	21.71
10	64QAM	1	25	21.32	21.35	21.53
10	64QAM	1	49	21.44	21.36	21.55
10	64QAM	25	0	21.39	21.40	21.29
10	64QAM	25	12	21.55	21.45	21.42
10	64QAM	25	25	21.38	21.52	21.38
10	64QAM	50	0	21.44	21.51	21.54



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	23.52	23.56	23.55
5	QPSK	1	12	23.51	23.52	23.61
5	QPSK	1	24	23.52	23.58	23.31
5	QPSK	12	0	22.39	22.23	22.30
5	QPSK	12	7	22.41	22.45	22.38
5	QPSK	12	13	22.30	22.49	22.34
5	QPSK	25	0	22.37	22.43	22.40
5	16QAM	1	0	22.62	22.54	22.56
5	16QAM	1	12	22.61	22.61	22.61
5	16QAM	1	24	22.74	22.50	22.63
5	16QAM	12	0	21.42	21.40	21.33
5	16QAM	12	7	21.50	21.54	21.41
5	16QAM	12	13	21.25	21.54	21.39
5	16QAM	25	0	21.38	21.47	21.36
5	64QAM	1	0	21.66	21.69	21.56
5	64QAM	1	12	21.48	21.59	21.45
5	64QAM	1	24	21.58	21.48	21.55
5	64QAM	12	0	21.53	21.41	21.47
5	64QAM	12	7	21.45	21.63	21.46
5	64QAM	12	13	21.31	21.46	21.43
5	64QAM	25	0	21.37	21.42	21.43



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	23.17	23.32	23.27
3	QPSK	1	8	23.23	23.43	23.32
3	QPSK	1	14	23.36	23.22	23.33
3	QPSK	8	0	22.26	22.36	22.42
3	QPSK	8	4	22.37	22.52	22.45
3	QPSK	8	7	22.39	22.31	22.27
3	QPSK	15	0	22.32	22.40	22.40
3	16QAM	1	0	22.84	22.73	22.52
3	16QAM	1	8	22.81	22.54	22.57
3	16QAM	1	14	22.79	22.52	22.67
3	16QAM	8	0	21.24	21.49	21.50
3	16QAM	8	4	21.44	21.51	21.33
3	16QAM	8	7	21.46	21.34	21.53
3	16QAM	15	0	21.45	21.26	21.56
3	64QAM	1	0	21.59	21.82	21.59
3	64QAM	1	8	21.55	21.57	21.62
3	64QAM	1	14	21.58	21.54	21.53
3	64QAM	8	0	21.52	21.37	21.61
3	64QAM	8	4	21.49	21.36	21.32
3	64QAM	8	7	21.56	21.39	21.44
3	64QAM	15	0	21.43	21.42	21.36



LTE Band 12						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	23.20	23.39	23.30
1.4	QPSK	1	3	23.36	23.52	23.35
1.4	QPSK	1	5	23.36	23.36	23.37
1.4	QPSK	3	0	23.21	23.47	23.36
1.4	QPSK	3	1	23.31	23.37	23.25
1.4	QPSK	3	3	23.36	23.53	23.38
1.4	QPSK	6	0	22.38	22.48	22.34
1.4	16QAM	1	0	22.44	22.54	22.40
1.4	16QAM	1	3	22.57	22.52	22.58
1.4	16QAM	1	5	22.79	22.58	22.73
1.4	16QAM	3	0	22.47	22.61	22.52
1.4	16QAM	3	1	22.47	22.56	22.54
1.4	16QAM	3	3	22.56	22.56	22.44
1.4	16QAM	6	0	21.47	21.56	21.64
1.4	64QAM	1	0	21.52	21.47	21.51
1.4	64QAM	1	3	21.61	21.56	21.35
1.4	64QAM	1	5	21.52	21.45	21.51
1.4	64QAM	3	0	21.51	21.44	21.36
1.4	64QAM	3	1	21.52	21.63	21.48
1.4	64QAM	3	3	21.68	21.59	21.39
1.4	64QAM	6	0	21.53	21.54	21.58



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	23.4	23.35	23.41
10	QPSK	1	25	23.55	23.52	23.58
10	QPSK	1	49	23.34	23.33	23.39
10	QPSK	25	0	22.33	22.27	22.58
10	QPSK	25	12	22.51	22.49	22.45
10	QPSK	25	25	22.49	22.43	22.32
10	QPSK	50	0	22.49	22.31	22.35
10	16QAM	1	0	22.78	22.57	22.73
10	16QAM	1	25	22.53	22.55	22.59
10	16QAM	1	49	22.57	22.67	22.56
10	16QAM	25	0	21.44	21.59	21.56
10	16QAM	25	12	21.46	21.51	21.51
10	16QAM	25	25	21.58	21.43	21.57
10	16QAM	50	0	21.65	21.53	21.38
10	64QAM	1	0	21.57	21.67	21.62
10	64QAM	1	25	21.56	21.56	21.53
10	64QAM	1	49	21.61	21.74	21.83
10	64QAM	25	0	21.51	21.55	21.56
10	64QAM	25	12	21.44	21.42	21.44
10	64QAM	25	25	21.44	21.51	21.53
10	64QAM	50	0	21.41	21.44	21.56



LTE Band 17						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23035	23790	23155
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	23.54	23.28	23.24
5	QPSK	1	12	23.39	23.55	23.54
5	QPSK	1	24	23.23	23.38	23.21
5	QPSK	12	0	22.34	22.29	22.44
5	QPSK	12	7	22.4	22.42	22.38
5	QPSK	12	13	22.52	22.32	22.32
5	QPSK	25	0	22.49	22.39	22.33
5	16QAM	1	0	22.58	22.72	22.69
5	16QAM	1	12	22.67	22.69	22.82
5	16QAM	1	24	22.54	22.73	22.72
5	16QAM	12	0	21.39	21.39	21.42
5	16QAM	12	7	21.57	21.45	21.34
5	16QAM	12	13	21.55	21.33	21.36
5	16QAM	25	0	21.40	21.46	21.48
5	64QAM	1	0	21.79	21.52	21.42
5	64QAM	1	12	21.59	21.57	21.56
5	64QAM	1	24	21.56	21.59	21.69
5	64QAM	12	0	21.33	21.33	21.38
5	64QAM	12	7	21.48	21.51	21.35
5	64QAM	12	13	21.54	21.39	21.33
5	64QAM	25	0	21.35	21.35	21.42



**Effective Radiated Power and Effective Isotropic Radiated Power:**

LTE Band2				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18700		18900		19100	
Frequency (MHz)				1860		1880		1900	
				dbm	W	dbm	W	dbm	W
20	QPSK	1	0	23.97	0.249	24.14	0.259	23.99	0.251
20	QPSK	1	49	23.87	0.244	23.78	0.239	23.98	0.250
20	QPSK	1	99	23.87	0.244	24.00	0.251	24.01	0.252
20	QPSK	50	0	22.81	0.191	23.01	0.200	22.96	0.198
20	QPSK	50	24	22.91	0.195	22.92	0.196	22.92	0.196
20	QPSK	50	50	22.87	0.194	22.94	0.197	22.81	0.191
20	QPSK	100	0	22.99	0.199	22.84	0.192	22.77	0.189
20	16QAM	1	0	22.52	0.179	22.72	0.187	22.66	0.185
20	16QAM	1	49	22.68	0.185	22.72	0.187	22.73	0.187
20	16QAM	1	99	22.79	0.190	22.56	0.180	22.51	0.178
20	16QAM	50	0	21.98	0.158	21.84	0.153	21.82	0.152
20	16QAM	50	24	21.91	0.155	21.75	0.150	21.83	0.152
20	16QAM	50	50	22.01	0.159	21.64	0.146	21.83	0.152
20	16QAM	100	0	22.07	0.161	21.77	0.150	21.77	0.150
20	64QAM	1	0	21.98	0.158	21.91	0.155	21.71	0.148
20	64QAM	1	49	21.96	0.157	21.99	0.158	21.90	0.155
20	64QAM	1	99	21.67	0.147	21.70	0.148	21.60	0.145
20	64QAM	50	0	21.89	0.155	21.66	0.147	21.78	0.151
20	64QAM	50	24	21.77	0.150	21.84	0.153	21.78	0.151
20	64QAM	50	50	21.61	0.145	21.64	0.146	21.83	0.152
20	64QAM	100	0	21.78	0.151	21.72	0.149	21.76	0.150



LTE Band2				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18675		18900		19125	
Frequency (MHz)				1857.5		1880		1902.5	
				dbm	W	dbm	W	dbm	W
15	QPSK	1	0	23.96	0.249	24.02	0.252	23.86	0.243
15	QPSK	1	37	23.92	0.247	23.97	0.249	23.99	0.251
15	QPSK	1	74	24.04	0.254	23.88	0.244	24.04	0.254
15	QPSK	36	0	22.97	0.198	23.01	0.200	22.97	0.198
15	QPSK	36	20	23.02	0.200	23.04	0.201	23.18	0.208
15	QPSK	36	39	23.08	0.203	23.00	0.200	23.24	0.211
15	QPSK	75	0	22.99	0.199	22.99	0.199	22.97	0.198
15	16QAM	1	0	22.82	0.191	22.57	0.181	22.76	0.189
15	16QAM	1	37	22.63	0.183	22.89	0.195	22.62	0.183
15	16QAM	1	74	22.66	0.185	22.57	0.181	22.56	0.180
15	16QAM	36	0	22.04	0.160	22.07	0.161	22.08	0.161
15	16QAM	36	20	21.89	0.155	22.16	0.164	21.96	0.157
15	16QAM	36	39	22.07	0.161	22.04	0.160	22.02	0.159
15	16QAM	75	0	21.97	0.157	22.21	0.166	22.10	0.162
15	64QAM	1	0	22.02	0.159	22.12	0.163	22.02	0.159
15	64QAM	1	37	21.96	0.157	22.09	0.162	22.11	0.163
15	64QAM	1	74	22.07	0.161	22.04	0.160	21.99	0.158
15	64QAM	36	0	21.68	0.147	21.84	0.153	21.80	0.151
15	64QAM	36	20	21.79	0.151	21.73	0.149	21.81	0.152
15	64QAM	36	39	21.76	0.150	21.69	0.148	21.81	0.152
15	64QAM	75	0	21.87	0.154	21.90	0.155	21.92	0.156





LTE Band2				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18650		18900		19150	
Frequency (MHz)				1855		1880		1905	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	24.00	0.251	24.02	0.252	24.00	0.251
10	QPSK	1	25	23.97	0.249	24.02	0.252	23.97	0.249
10	QPSK	1	49	23.96	0.249	23.97	0.249	24.02	0.252
10	QPSK	25	0	22.97	0.198	22.98	0.199	22.99	0.199
10	QPSK	25	12	22.98	0.199	23.01	0.200	23.00	0.200
10	QPSK	25	25	23.19	0.208	22.97	0.198	23.04	0.201
10	QPSK	50	0	23.08	0.203	22.97	0.198	23.07	0.203
10	16QAM	1	0	22.88	0.194	22.83	0.192	22.74	0.188
10	16QAM	1	25	22.65	0.184	22.81	0.191	22.74	0.188
10	16QAM	1	49	22.73	0.187	22.82	0.191	22.86	0.193
10	16QAM	25	0	21.97	0.157	21.96	0.157	21.90	0.155
10	16QAM	25	12	22.02	0.159	21.98	0.158	21.99	0.158
10	16QAM	25	25	22.12	0.163	22.13	0.163	21.98	0.158
10	16QAM	50	0	22.09	0.162	22.03	0.160	21.96	0.157
10	64QAM	1	0	22.03	0.160	21.98	0.158	21.92	0.156
10	64QAM	1	25	21.93	0.156	21.97	0.157	22.01	0.159
10	64QAM	1	49	21.96	0.157	22.04	0.160	22.04	0.160
10	64QAM	25	0	21.76	0.150	21.77	0.150	21.70	0.148
10	64QAM	25	12	21.69	0.148	21.77	0.150	21.79	0.151
10	64QAM	25	25	21.65	0.146	21.80	0.151	21.76	0.150
10	64QAM	50	0	21.71	0.148	21.85	0.153	21.81	0.152



LTE Band2				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18625		18900		19175	
Frequency (MHz)				1852.5		1880		1907.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	23.96	0.249	23.97	0.249	23.97	0.249
5	QPSK	1	12	23.97	0.249	23.96	0.249	23.99	0.251
5	QPSK	1	24	23.89	0.245	23.96	0.249	24.00	0.251
5	QPSK	12	0	22.97	0.198	23.06	0.202	22.98	0.199
5	QPSK	12	7	23.11	0.205	22.98	0.199	23.13	0.206
5	QPSK	12	13	23.01	0.200	22.99	0.199	23.21	0.209
5	QPSK	25	0	22.98	0.199	22.99	0.199	23.01	0.200
5	16QAM	1	0	22.71	0.187	22.63	0.183	22.61	0.182
5	16QAM	1	12	22.93	0.196	22.56	0.180	22.56	0.180
5	16QAM	1	24	22.80	0.191	22.87	0.194	22.68	0.185
5	16QAM	12	0	21.87	0.154	21.97	0.157	21.96	0.157
5	16QAM	12	7	22.01	0.159	21.96	0.157	22.00	0.158
5	16QAM	12	13	21.96	0.157	21.97	0.157	22.09	0.162
5	16QAM	25	0	21.98	0.158	21.74	0.149	21.97	0.157
5	64QAM	1	0	22.02	0.159	22.17	0.165	21.99	0.158
5	64QAM	1	12	22.11	0.163	21.98	0.158	22.13	0.163
5	64QAM	1	24	21.98	0.158	22.12	0.163	21.98	0.158
5	64QAM	12	0	21.73	0.149	21.76	0.150	21.69	0.148
5	64QAM	12	7	21.61	0.145	21.79	0.151	21.66	0.147
5	64QAM	12	13	21.61	0.145	21.77	0.150	21.77	0.150
5	64QAM	25	0	21.61	0.145	21.77	0.150	21.58	0.144



LTE Band2				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18615		18900		19185	
Frequency (MHz)				1851.5		1880		1908.5	
				dbm	W	dbm	W	dbm	W
3	QPSK	1	0	23.99	0.251	24.03	0.253	23.97	0.249
3	QPSK	1	8	24.03	0.253	23.96	0.249	24.03	0.253
3	QPSK	1	14	24.00	0.251	24.02	0.252	24.01	0.252
3	QPSK	8	0	22.99	0.199	23.11	0.205	23.03	0.201
3	QPSK	8	4	23.02	0.200	22.97	0.198	23.16	0.207
3	QPSK	8	7	23.09	0.204	23.14	0.206	23.06	0.202
3	QPSK	15	0	23.20	0.209	23.01	0.200	22.98	0.199
3	16QAM	1	0	22.59	0.182	22.58	0.181	22.57	0.181
3	16QAM	1	8	22.68	0.185	22.87	0.194	22.78	0.190
3	16QAM	1	14	22.74	0.188	22.67	0.185	22.54	0.179
3	16QAM	8	0	21.62	0.145	21.83	0.152	21.79	0.151
3	16QAM	8	4	21.76	0.150	21.92	0.156	21.59	0.144
3	16QAM	8	7	21.75	0.150	21.65	0.146	21.57	0.144
3	16QAM	15	0	21.73	0.149	21.61	0.145	21.56	0.143
3	64QAM	1	0	22.03	0.160	22.23	0.167	22.00	0.158
3	64QAM	1	8	22.00	0.158	22.03	0.160	21.97	0.157
3	64QAM	1	14	22.10	0.162	22.00	0.158	21.99	0.158
3	64QAM	8	0	21.49	0.141	21.73	0.149	21.67	0.147
3	64QAM	8	4	21.73	0.149	21.66	0.147	21.66	0.147
3	64QAM	8	7	21.68	0.147	21.61	0.145	21.48	0.141
3	64QAM	15	0	21.56	0.143	21.76	0.150	21.58	0.144



LTE Band2				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				18607		18900		19193	
Frequency (MHz)				1850.7		1880		1909.3	
				dbm	W	dbm	W	dbm	W
1.4	QPSK	1	0	24.04	0.254	24.03	0.253	23.97	0.249
1.4	QPSK	1	3	23.96	0.249	24.02	0.252	23.97	0.249
1.4	QPSK	1	5	23.96	0.249	23.98	0.250	23.87	0.244
1.4	QPSK	3	0	23.98	0.250	23.97	0.249	23.98	0.250
1.4	QPSK	3	1	24.01	0.252	23.97	0.249	24.04	0.254
1.4	QPSK	3	3	24.00	0.251	23.88	0.244	24.00	0.251
1.4	QPSK	6	0	23.09	0.204	22.96	0.198	22.96	0.198
1.4	16QAM	1	0	22.65	0.184	22.81	0.191	22.66	0.185
1.4	16QAM	1	3	22.69	0.186	22.82	0.191	22.63	0.183
1.4	16QAM	1	5	22.67	0.185	22.67	0.185	22.67	0.185
1.4	16QAM	3	0	22.67	0.185	22.80	0.191	22.72	0.187
1.4	16QAM	3	1	22.77	0.189	22.95	0.197	22.72	0.187
1.4	16QAM	3	3	22.64	0.184	22.66	0.185	22.68	0.185
1.4	16QAM	6	0	22.09	0.162	21.98	0.158	22.00	0.158
1.4	64QAM	1	0	21.62	0.145	21.79	0.151	21.69	0.148
1.4	64QAM	1	3	21.57	0.144	21.82	0.152	21.59	0.144
1.4	64QAM	1	5	21.74	0.149	21.58	0.144	21.64	0.146
1.4	64QAM	3	0	21.80	0.151	21.67	0.147	21.62	0.145
1.4	64QAM	3	1	21.67	0.147	21.83	0.152	21.64	0.146
1.4	64QAM	3	3	21.66	0.147	21.88	0.154	21.68	0.147
1.4	64QAM	6	0	21.66	0.147	21.71	0.148	21.56	0.143



LTE Band4				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20050		20175		20300	
Frequency (MHz)				1720		1732.5		1745	
				dbm	W	dbm	W	dbm	W
20	QPSK	1	0	23.85	0.243	23.91	0.246	23.88	0.244
20	QPSK	1	49	23.76	0.238	23.85	0.243	23.81	0.240
20	QPSK	1	99	23.86	0.243	23.87	0.244	23.89	0.245
20	QPSK	50	0	23.53	0.225	23.67	0.233	23.66	0.232
20	QPSK	50	24	23.53	0.225	23.50	0.224	23.55	0.226
20	QPSK	50	50	23.61	0.230	23.56	0.227	23.49	0.223
20	QPSK	100	0	23.46	0.222	23.45	0.221	23.50	0.224
20	16QAM	1	0	23.21	0.209	23.05	0.202	23.05	0.202
20	16QAM	1	49	22.98	0.199	23.15	0.207	22.88	0.194
20	16QAM	1	99	22.93	0.196	23.07	0.203	22.95	0.197
20	16QAM	50	0	21.85	0.153	21.84	0.153	21.87	0.154
20	16QAM	50	24	21.77	0.150	21.67	0.147	21.83	0.152
20	16QAM	50	50	21.86	0.153	21.83	0.152	21.91	0.155
20	16QAM	100	0	21.70	0.148	21.73	0.149	21.74	0.149
20	64QAM	1	0	21.83	0.152	21.96	0.157	21.87	0.154
20	64QAM	1	49	21.91	0.155	21.97	0.157	21.81	0.152
20	64QAM	1	99	22.01	0.159	21.90	0.155	21.83	0.152
20	64QAM	50	0	21.68	0.147	21.59	0.144	21.60	0.145
20	64QAM	50	24	21.71	0.148	21.68	0.147	21.66	0.147
20	64QAM	50	50	21.73	0.149	21.57	0.144	21.66	0.147
20	64QAM	100	0	21.60	0.145	21.61	0.145	21.73	0.149



LTE Band4				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20025		20175		20325	
Frequency (MHz)				1717.5		1732.5		1747.5	
				dbm	W	dbm	W	dbm	W
15	QPSK	1	0	23.74	0.237	23.87	0.244	23.69	0.234
15	QPSK	1	37	23.82	0.241	23.89	0.245	23.67	0.233
15	QPSK	1	74	23.70	0.234	23.67	0.233	23.80	0.240
15	QPSK	36	0	22.76	0.189	22.75	0.188	22.69	0.186
15	QPSK	36	20	22.77	0.189	22.71	0.187	22.67	0.185
15	QPSK	36	39	22.71	0.187	22.60	0.182	22.68	0.185
15	QPSK	75	0	22.86	0.193	22.89	0.195	22.91	0.195
15	16QAM	1	0	22.86	0.193	22.80	0.191	22.94	0.197
15	16QAM	1	37	22.98	0.199	22.83	0.192	22.89	0.195
15	16QAM	1	74	22.87	0.194	23.11	0.205	22.92	0.196
15	16QAM	36	0	21.76	0.150	21.87	0.154	21.74	0.149
15	16QAM	36	20	21.76	0.150	21.79	0.151	21.65	0.146
15	16QAM	36	39	21.84	0.153	21.78	0.151	21.64	0.146
15	16QAM	75	0	21.96	0.157	21.89	0.155	21.67	0.147
15	64QAM	1	0	21.89	0.155	21.56	0.143	21.84	0.153
15	64QAM	1	37	21.85	0.153	21.81	0.152	21.60	0.145
15	64QAM	1	74	21.75	0.150	21.71	0.148	21.79	0.151
15	64QAM	36	0	21.61	0.145	21.47	0.140	21.45	0.140
15	64QAM	36	20	21.56	0.143	21.46	0.140	21.44	0.139
15	64QAM	36	39	21.46	0.140	21.65	0.146	21.79	0.151
15	64QAM	75	0	21.65	0.146	21.54	0.143	21.56	0.143



LTE Band4				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20000		20175		20350	
Frequency (MHz)				1715		1732.5		1750	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	23.69	0.234	23.70	0.234	23.78	0.239
10	QPSK	1	25	23.74	0.237	23.85	0.243	23.76	0.238
10	QPSK	1	49	23.69	0.234	23.72	0.236	23.65	0.232
10	QPSK	25	0	22.83	0.192	22.78	0.190	22.79	0.190
10	QPSK	25	12	22.81	0.191	22.68	0.185	22.86	0.193
10	QPSK	25	25	22.73	0.187	22.67	0.185	22.68	0.185
10	QPSK	50	0	22.80	0.191	22.85	0.193	22.56	0.180
10	16QAM	1	0	23.07	0.203	22.93	0.196	22.90	0.195
10	16QAM	1	25	22.78	0.190	23.01	0.200	22.89	0.195
10	16QAM	1	49	23.10	0.204	22.91	0.195	22.77	0.189
10	16QAM	25	0	21.89	0.155	21.96	0.157	21.84	0.153
10	16QAM	25	12	21.88	0.154	21.88	0.154	21.86	0.153
10	16QAM	25	25	22.00	0.158	21.85	0.153	21.91	0.155
10	16QAM	50	0	21.86	0.153	21.80	0.151	21.74	0.149
10	64QAM	1	0	21.60	0.145	21.46	0.140	21.48	0.141
10	64QAM	1	25	21.45	0.140	21.54	0.143	21.70	0.148
10	64QAM	1	49	21.53	0.142	21.60	0.145	21.43	0.139
10	64QAM	25	0	21.64	0.146	21.57	0.144	21.77	0.150
10	64QAM	25	12	21.48	0.141	21.69	0.148	21.73	0.149
10	64QAM	25	25	21.57	0.144	21.45	0.140	21.61	0.145
10	64QAM	50	0	21.61	0.145	21.64	0.146	21.50	0.141



LTE Band4				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19975		20175		20375	
Frequency (MHz)				1712.5		1732.5		1752.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	23.80	0.240	23.85	0.243	23.79	0.239
5	QPSK	1	12	23.86	0.243	23.81	0.240	23.76	0.238
5	QPSK	1	24	23.84	0.242	23.81	0.240	23.73	0.236
5	QPSK	12	0	22.86	0.193	22.91	0.195	22.73	0.187
5	QPSK	12	7	22.75	0.188	22.95	0.197	22.76	0.189
5	QPSK	12	13	22.77	0.189	22.91	0.195	22.65	0.184
5	QPSK	25	0	22.79	0.190	22.83	0.192	22.73	0.187
5	16QAM	1	0	22.86	0.193	23.15	0.207	22.83	0.192
5	16QAM	1	12	23.14	0.206	22.83	0.192	23.05	0.202
5	16QAM	1	24	22.77	0.189	22.83	0.192	22.80	0.191
5	16QAM	12	0	21.58	0.144	21.79	0.151	21.68	0.147
5	16QAM	12	7	21.73	0.149	21.63	0.146	21.46	0.140
5	16QAM	12	13	21.75	0.150	21.46	0.140	21.61	0.145
5	16QAM	25	0	21.54	0.143	21.66	0.147	21.60	0.145
5	64QAM	1	0	21.71	0.148	21.75	0.150	21.63	0.146
5	64QAM	1	12	21.73	0.149	21.56	0.143	21.58	0.144
5	64QAM	1	24	21.63	0.146	21.63	0.146	21.73	0.149
5	64QAM	12	0	21.62	0.145	21.66	0.147	21.75	0.150
5	64QAM	12	7	21.55	0.143	21.62	0.145	21.75	0.150
5	64QAM	12	13	21.74	0.149	21.73	0.149	21.74	0.149
5	64QAM	25	0	21.70	0.148	21.62	0.145	21.72	0.149





LTE Band4				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19965		20175		20385	
Frequency (MHz)				1711.5		1732.5		1753.5	
				dbm	W	dbm	W	dbm	W
3	QPSK	1	0	23.72	0.236	23.67	0.233	23.73	0.236
3	QPSK	1	8	23.76	0.238	23.82	0.241	23.67	0.233
3	QPSK	1	14	23.75	0.237	23.76	0.238	23.81	0.240
3	QPSK	8	0	22.76	0.189	22.79	0.190	22.73	0.187
3	QPSK	8	4	22.87	0.194	22.81	0.191	22.87	0.194
3	QPSK	8	7	22.83	0.192	22.76	0.189	22.69	0.186
3	QPSK	15	0	22.80	0.191	22.68	0.185	22.71	0.187
3	16QAM	1	0	23.06	0.202	22.93	0.196	22.91	0.195
3	16QAM	1	8	22.92	0.196	22.70	0.186	22.73	0.187
3	16QAM	1	14	23.07	0.203	22.97	0.198	22.95	0.197
3	16QAM	8	0	21.56	0.143	21.58	0.144	21.50	0.141
3	16QAM	8	4	21.57	0.144	21.61	0.145	21.78	0.151
3	16QAM	8	7	21.73	0.149	21.69	0.148	21.68	0.147
3	16QAM	15	0	21.69	0.148	21.71	0.148	21.75	0.150
3	64QAM	1	0	21.80	0.151	21.75	0.150	21.54	0.143
3	64QAM	1	8	21.48	0.141	21.56	0.143	21.53	0.142
3	64QAM	1	14	21.46	0.140	21.55	0.143	21.61	0.145
3	64QAM	8	0	21.72	0.149	21.57	0.144	21.76	0.150
3	64QAM	8	4	21.60	0.145	21.66	0.147	21.53	0.142
3	64QAM	8	7	21.57	0.144	21.57	0.144	21.63	0.146
3	64QAM	15	0	21.76	0.150	21.54	0.143	21.64	0.146



LTE Band4				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				19957		20175		20393	
Frequency (MHz)				1710.7		1732.5		1754.3	
				dbm	W	dbm	W	dbm	W
1.4	QPSK	1	0	23.61	0.230	23.67	0.233	23.66	0.232
1.4	QPSK	1	3	23.66	0.232	23.76	0.238	23.64	0.231
1.4	QPSK	1	5	23.61	0.230	23.55	0.226	23.63	0.231
1.4	QPSK	3	0	23.75	0.237	23.66	0.232	23.74	0.237
1.4	QPSK	3	1	23.83	0.242	23.80	0.240	23.75	0.237
1.4	QPSK	3	3	23.61	0.230	23.66	0.232	23.69	0.234
1.4	QPSK	6	0	22.86	0.193	22.95	0.197	22.85	0.193
1.4	16QAM	1	0	23.11	0.205	22.94	0.197	23.17	0.207
1.4	16QAM	1	3	22.97	0.198	22.85	0.193	23.19	0.208
1.4	16QAM	1	5	22.99	0.199	22.88	0.194	22.84	0.192
1.4	16QAM	3	0	22.84	0.192	22.80	0.191	22.80	0.191
1.4	16QAM	3	1	22.69	0.186	22.56	0.180	22.79	0.190
1.4	16QAM	3	3	22.81	0.191	22.72	0.187	22.79	0.190
1.4	16QAM	6	0	21.90	0.155	21.91	0.155	21.88	0.154
1.4	64QAM	1	0	21.70	0.148	21.60	0.145	21.68	0.147
1.4	64QAM	1	3	21.61	0.145	21.54	0.143	21.56	0.143
1.4	64QAM	1	5	21.67	0.147	21.76	0.150	21.55	0.143
1.4	64QAM	3	0	21.60	0.145	21.47	0.140	21.56	0.143
1.4	64QAM	3	1	21.55	0.143	21.56	0.143	21.67	0.147
1.4	64QAM	3	3	21.50	0.141	21.61	0.145	21.55	0.143
1.4	64QAM	6	0	21.74	0.149	21.72	0.149	21.66	0.147



LTE Band5				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20450		20525		20600	
Frequency (MHz)				829		836.5		844	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	21.81	0.152	21.61	0.145	21.78	0.151
10	QPSK	1	25	21.51	0.142	21.65	0.146	21.47	0.140
10	QPSK	1	49	21.46	0.140	21.58	0.144	21.58	0.144
10	QPSK	25	0	20.66	0.116	20.56	0.114	20.38	0.109
10	QPSK	25	12	20.55	0.114	20.46	0.111	20.55	0.114
10	QPSK	25	25	20.43	0.110	20.52	0.113	20.39	0.109
10	QPSK	50	0	20.41	0.110	20.50	0.112	20.44	0.111
10	16QAM	1	0	20.75	0.119	20.59	0.115	20.46	0.111
10	16QAM	1	25	20.61	0.115	20.69	0.117	20.75	0.119
10	16QAM	1	49	20.42	0.110	20.75	0.119	20.77	0.119
10	16QAM	25	0	19.41	0.087	19.48	0.089	19.50	0.089
10	16QAM	25	12	19.51	0.089	19.49	0.089	19.43	0.088
10	16QAM	25	25	19.48	0.089	19.46	0.088	19.36	0.086
10	16QAM	50	0	19.42	0.087	19.43	0.088	19.37	0.086
10	64QAM	1	0	19.47	0.089	19.49	0.089	19.48	0.089
10	64QAM	1	25	19.85	0.097	19.71	0.094	19.49	0.089
10	64QAM	1	49	19.51	0.089	19.76	0.095	19.50	0.089
10	64QAM	25	0	19.31	0.085	19.43	0.088	19.34	0.086
10	64QAM	25	12	19.45	0.088	19.66	0.092	19.52	0.090
10	64QAM	25	25	19.41	0.087	19.57	0.091	19.39	0.087
10	64QAM	50	0	19.41	0.087	19.45	0.088	19.37	0.086



LTE Band5				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	21.63	0.146	21.53	0.142	21.43	0.139
5	QPSK	1	12	21.48	0.141	21.56	0.143	21.57	0.144
5	QPSK	1	24	21.28	0.134	21.28	0.134	21.33	0.136
5	QPSK	12	0	20.34	0.108	20.39	0.109	20.44	0.111
5	QPSK	12	7	20.52	0.113	20.49	0.112	20.41	0.110
5	QPSK	12	13	20.46	0.111	20.46	0.111	20.34	0.108
5	QPSK	25	0	20.32	0.108	20.46	0.111	20.42	0.110
5	16QAM	1	0	20.75	0.119	20.82	0.121	20.67	0.117
5	16QAM	1	12	20.48	0.112	20.63	0.116	20.75	0.119
5	16QAM	1	24	20.81	0.121	20.75	0.119	20.49	0.112
5	16QAM	12	0	19.36	0.086	19.48	0.089	19.52	0.090
5	16QAM	12	7	19.52	0.090	19.46	0.088	19.57	0.091
5	16QAM	12	13	19.50	0.089	19.50	0.089	19.30	0.085
5	16QAM	25	0	19.49	0.089	19.41	0.087	19.49	0.089
5	64QAM	1	0	19.49	0.089	19.52	0.090	19.44	0.088
5	64QAM	1	12	19.47	0.089	19.44	0.088	19.73	0.094
5	64QAM	1	24	19.56	0.090	19.43	0.088	19.41	0.087
5	64QAM	12	0	19.35	0.086	19.49	0.089	19.45	0.088
5	64QAM	12	7	19.55	0.090	19.46	0.088	19.48	0.089
5	64QAM	12	13	19.46	0.088	19.52	0.090	19.40	0.087
5	64QAM	25	0	19.41	0.087	19.44	0.088	19.36	0.086



LTE Band5				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dbm	W	dbm	W	dbm	W
3	QPSK	1	0	21.42	0.139	21.48	0.141	21.42	0.139
3	QPSK	1	8	21.31	0.135	21.39	0.138	21.36	0.137
3	QPSK	1	14	21.55	0.143	21.33	0.136	21.46	0.140
3	QPSK	8	0	20.35	0.108	20.48	0.112	20.35	0.108
3	QPSK	8	4	20.40	0.110	20.50	0.112	20.50	0.112
3	QPSK	8	7	20.49	0.112	20.48	0.112	20.46	0.111
3	QPSK	15	0	20.49	0.112	20.47	0.111	20.37	0.109
3	16QAM	1	0	20.52	0.113	20.50	0.112	20.44	0.111
3	16QAM	1	8	20.41	0.110	20.51	0.112	20.58	0.114
3	16QAM	1	14	20.44	0.111	20.45	0.111	20.49	0.112
3	16QAM	8	0	19.28	0.085	19.51	0.089	19.53	0.090
3	16QAM	8	4	19.58	0.091	19.47	0.089	19.41	0.087
3	16QAM	8	7	19.55	0.090	19.56	0.090	19.45	0.088
3	16QAM	15	0	19.43	0.088	19.38	0.087	19.45	0.088
3	64QAM	1	0	19.61	0.091	19.44	0.088	19.51	0.089
3	64QAM	1	8	19.43	0.088	19.52	0.090	19.48	0.089
3	64QAM	1	14	19.58	0.091	19.42	0.087	19.58	0.091
3	64QAM	8	0	19.53	0.090	19.42	0.087	19.42	0.087
3	64QAM	8	4	19.44	0.088	19.48	0.089	19.51	0.089
3	64QAM	8	7	19.49	0.089	19.37	0.086	19.44	0.088
3	64QAM	15	0	19.44	0.088	19.52	0.090	19.37	0.086



LTE Band5				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20407		20525		20643	
Frequency (MHz)				824.7		836.5		848.3	
				dbm	W	dbm	W	dbm	W
1.4	QPSK	1	0	21.34	0.136	21.30	0.135	21.32	0.136
1.4	QPSK	1	3	21.39	0.138	21.43	0.139	21.49	0.141
1.4	QPSK	1	5	21.34	0.136	21.33	0.136	21.24	0.133
1.4	QPSK	3	0	21.40	0.138	21.31	0.135	21.43	0.139
1.4	QPSK	3	1	21.34	0.136	21.55	0.143	21.49	0.141
1.4	QPSK	3	3	21.42	0.139	21.37	0.137	21.39	0.138
1.4	QPSK	6	0	20.43	0.110	20.46	0.111	20.48	0.112
1.4	16QAM	1	0	20.54	0.113	20.62	0.115	20.84	0.121
1.4	16QAM	1	3	20.48	0.112	20.49	0.112	20.51	0.112
1.4	16QAM	1	5	20.49	0.112	20.58	0.114	20.75	0.119
1.4	16QAM	3	0	20.67	0.117	20.51	0.112	20.44	0.111
1.4	16QAM	3	1	20.47	0.111	20.54	0.113	20.56	0.114
1.4	16QAM	3	3	20.45	0.111	20.46	0.111	20.53	0.113
1.4	16QAM	6	0	19.58	0.091	19.56	0.090	19.51	0.089
1.4	64QAM	1	0	19.56	0.090	19.65	0.092	19.46	0.088
1.4	64QAM	1	3	19.44	0.088	19.53	0.090	19.46	0.088
1.4	64QAM	1	5	19.45	0.088	19.45	0.088	19.53	0.090
1.4	64QAM	3	0	19.55	0.090	19.44	0.088	19.39	0.087
1.4	64QAM	3	1	19.46	0.088	19.49	0.089	19.52	0.090
1.4	64QAM	3	3	19.46	0.088	19.39	0.087	19.44	0.088
1.4	64QAM	6	0	19.40	0.087	19.40	0.087	19.48	0.089



LTE Band7				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20850		21100		21350	
Frequency (MHz)				2510		2535		2560	
				dbm	W	dbm	W	dbm	W
20	QPSK	1	0	19.42	0.087	19.51	0.089	20.10	0.102
20	QPSK	1	49	19.61	0.091	19.90	0.098	19.73	0.094
20	QPSK	1	99	19.45	0.088	19.63	0.092	19.60	0.091
20	QPSK	50	0	19.41	0.087	19.40	0.087	19.50	0.089
20	QPSK	50	24	19.42	0.087	19.49	0.089	19.44	0.088
20	QPSK	50	50	19.38	0.087	19.49	0.089	19.49	0.089
20	QPSK	100	0	19.14	0.082	18.65	0.073	18.69	0.074
20	16QAM	1	0	18.83	0.076	18.57	0.072	19.00	0.079
20	16QAM	1	49	19.04	0.080	18.88	0.077	19.06	0.081
20	16QAM	1	99	18.63	0.073	19.06	0.081	18.96	0.079
20	16QAM	50	0	17.52	0.056	17.61	0.058	17.72	0.059
20	16QAM	50	24	17.56	0.057	17.59	0.057	17.74	0.059
20	16QAM	50	50	17.59	0.057	17.75	0.060	17.82	0.061
20	16QAM	100	0	17.52	0.056	17.63	0.058	17.77	0.060
20	64QAM	1	0	18.28	0.067	18.65	0.073	18.41	0.069
20	64QAM	1	49	18.68	0.074	18.63	0.073	19.23	0.084
20	64QAM	1	99	18.29	0.067	18.54	0.071	18.48	0.070
20	64QAM	50	0	17.35	0.054	17.70	0.059	17.68	0.059
20	64QAM	50	24	17.58	0.057	17.56	0.057	17.83	0.061
20	64QAM	50	50	17.57	0.057	17.61	0.058	17.70	0.059
20	64QAM	100	0	17.52	0.056	17.66	0.058	17.65	0.058



LTE Band7				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20825		21100		21375	
Frequency (MHz)				2507.5		2535		2562.5	
				dbm	W	dbm	W	dbm	W
15	QPSK	1	0	19.50	0.089	19.75	0.094	19.85	0.097
15	QPSK	1	37	19.43	0.088	19.57	0.091	19.90	0.098
15	QPSK	1	74	19.50	0.089	19.67	0.093	19.73	0.094
15	QPSK	36	0	18.40	0.069	18.84	0.077	19.00	0.079
15	QPSK	36	20	18.51	0.071	18.84	0.077	18.88	0.077
15	QPSK	36	39	18.48	0.070	18.87	0.077	18.96	0.079
15	QPSK	75	0	18.44	0.070	18.83	0.076	19.01	0.080
15	16QAM	1	0	18.81	0.076	18.83	0.076	19.06	0.081
15	16QAM	1	37	19.06	0.081	19.24	0.084	19.36	0.086
15	16QAM	1	74	18.87	0.077	19.36	0.086	19.00	0.079
15	16QAM	36	0	17.76	0.060	18.01	0.063	17.93	0.062
15	16QAM	36	20	17.80	0.060	17.93	0.062	18.09	0.064
15	16QAM	36	39	17.83	0.061	17.92	0.062	18.05	0.064
15	16QAM	75	0	17.70	0.059	17.94	0.062	18.00	0.063
15	64QAM	1	0	18.66	0.073	18.75	0.075	18.95	0.079
15	64QAM	1	37	18.97	0.079	18.94	0.078	19.05	0.080
15	64QAM	1	74	17.76	0.060	17.89	0.062	18.01	0.063
15	64QAM	36	0	17.88	0.061	17.95	0.062	17.96	0.063
15	64QAM	36	20	17.83	0.061	17.99	0.063	17.92	0.062
15	64QAM	36	39	17.92	0.062	17.95	0.062	18.00	0.063
15	64QAM	75	0	18.12	0.065	17.86	0.061	18.04	0.064





LTE Band7				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20800		21100		21400	
Frequency (MHz)				2505		2535		2565	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	24.24	0.265	24.24	0.265	24.29	0.269
10	QPSK	1	25	24.16	0.261	24.20	0.263	24.18	0.262
10	QPSK	1	49	24.21	0.264	24.19	0.262	24.13	0.259
10	QPSK	25	0	23.05	0.202	23.26	0.212	23.28	0.213
10	QPSK	25	12	23.09	0.204	23.16	0.207	22.99	0.199
10	QPSK	25	25	23.09	0.204	23.17	0.207	22.97	0.198
10	QPSK	50	0	23.24	0.211	23.10	0.204	22.93	0.196
10	16QAM	1	0	23.13	0.206	23.41	0.219	23.23	0.210
10	16QAM	1	25	23.23	0.210	23.33	0.215	23.12	0.205
10	16QAM	1	49	23.36	0.217	23.21	0.209	23.35	0.216
10	16QAM	25	0	22.12	0.163	22.01	0.159	21.80	0.151
10	16QAM	25	12	22.06	0.161	21.98	0.158	22.08	0.161
10	16QAM	25	25	22.19	0.166	22.15	0.164	22.04	0.160
10	16QAM	50	0	22.20	0.166	22.12	0.163	21.94	0.156
10	64QAM	1	0	22.32	0.171	22.07	0.161	22.33	0.171
10	64QAM	1	25	21.94	0.156	21.97	0.157	22.15	0.164
10	64QAM	1	49	22.06	0.161	21.98	0.158	22.17	0.165
10	64QAM	25	0	22.01	0.159	22.02	0.159	21.91	0.155
10	64QAM	25	12	22.17	0.165	22.07	0.161	22.04	0.160
10	64QAM	25	25	22.00	0.158	22.14	0.164	22.00	0.158
10	64QAM	50	0	22.06	0.161	22.13	0.163	22.16	0.164



LTE Band7				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20775		21100		21425	
Frequency (MHz)				2502.5		2535		2567.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	24.14	0.259	24.18	0.262	24.17	0.261
5	QPSK	1	12	24.13	0.259	24.14	0.259	24.23	0.265
5	QPSK	1	24	24.14	0.259	24.20	0.263	23.93	0.247
5	QPSK	12	0	23.01	0.200	22.85	0.193	22.92	0.196
5	QPSK	12	7	23.03	0.201	23.07	0.203	23.00	0.200
5	QPSK	12	13	22.92	0.196	23.11	0.205	22.96	0.198
5	QPSK	25	0	22.99	0.199	23.05	0.202	23.02	0.200
5	16QAM	1	0	23.24	0.211	23.16	0.207	23.18	0.208
5	16QAM	1	12	23.23	0.210	23.23	0.210	23.23	0.210
5	16QAM	1	24	23.36	0.217	23.12	0.205	23.25	0.211
5	16QAM	12	0	22.04	0.160	22.02	0.159	21.95	0.157
5	16QAM	12	7	22.12	0.163	22.16	0.164	22.03	0.160
5	16QAM	12	13	21.87	0.154	22.16	0.164	22.01	0.159
5	16QAM	25	0	22.00	0.158	22.09	0.162	21.98	0.158
5	64QAM	1	0	22.28	0.169	22.31	0.170	22.18	0.165
5	64QAM	1	12	22.10	0.162	22.21	0.166	22.07	0.161
5	64QAM	1	24	22.20	0.166	22.10	0.162	22.17	0.165
5	64QAM	12	0	22.15	0.164	22.03	0.160	22.09	0.162
5	64QAM	12	7	22.07	0.161	22.25	0.168	22.08	0.161
5	64QAM	12	13	21.93	0.156	22.08	0.161	22.05	0.160
5	64QAM	25	0	21.99	0.158	22.04	0.160	22.05	0.160



LTE Band 12				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23060		23095		23130	
Frequency (MHz)				704		707.5		711	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	21.50	0.141	21.50	0.141	21.55	0.143
10	QPSK	1	25	21.42	0.139	21.46	0.140	21.44	0.139
10	QPSK	1	49	21.47	0.140	21.45	0.140	21.39	0.138
10	QPSK	25	0	20.31	0.107	20.52	0.113	20.54	0.113
10	QPSK	25	12	20.35	0.108	20.42	0.110	20.25	0.106
10	QPSK	25	25	20.35	0.108	20.43	0.110	20.23	0.105
10	QPSK	50	0	20.50	0.112	20.36	0.109	20.19	0.104
10	16QAM	1	0	20.39	0.109	20.67	0.117	20.49	0.112
10	16QAM	1	25	20.49	0.112	20.59	0.115	20.38	0.109
10	16QAM	1	49	20.62	0.115	20.47	0.111	20.61	0.115
10	16QAM	25	0	19.38	0.087	19.27	0.085	19.06	0.081
10	16QAM	25	12	19.32	0.086	19.24	0.084	19.34	0.086
10	16QAM	25	25	19.45	0.088	19.41	0.087	19.30	0.085
10	16QAM	50	0	19.46	0.088	19.38	0.087	19.20	0.083
10	64QAM	1	0	19.58	0.091	19.33	0.086	19.59	0.091
10	64QAM	1	25	19.20	0.083	19.23	0.084	19.41	0.087
10	64QAM	1	49	19.32	0.086	19.24	0.084	19.43	0.088
10	64QAM	25	0	19.27	0.085	19.28	0.085	19.17	0.083
10	64QAM	25	12	19.43	0.088	19.33	0.086	19.30	0.085
10	64QAM	25	25	19.26	0.084	19.40	0.087	19.26	0.084
10	64QAM	50	0	19.32	0.086	19.39	0.087	19.42	0.087



LTE Band 12				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23035		23095		23155	
Frequency (MHz)				701.5		707.5		713.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	21.40	0.138	21.44	0.139	21.43	0.139
5	QPSK	1	12	21.39	0.138	21.40	0.138	21.49	0.141
5	QPSK	1	24	21.40	0.138	21.46	0.140	21.19	0.132
5	QPSK	12	0	20.27	0.106	20.11	0.103	20.18	0.104
5	QPSK	12	7	20.29	0.107	20.33	0.108	20.26	0.106
5	QPSK	12	13	20.18	0.104	20.37	0.109	20.22	0.105
5	QPSK	25	0	20.25	0.106	20.31	0.107	20.28	0.107
5	16QAM	1	0	20.50	0.112	20.42	0.110	20.44	0.111
5	16QAM	1	12	20.49	0.112	20.49	0.112	20.49	0.112
5	16QAM	1	24	20.62	0.115	20.38	0.109	20.51	0.112
5	16QAM	12	0	19.30	0.085	19.28	0.085	19.21	0.083
5	16QAM	12	7	19.38	0.087	19.42	0.087	19.29	0.085
5	16QAM	12	13	19.13	0.082	19.42	0.087	19.27	0.085
5	16QAM	25	0	19.26	0.084	19.35	0.086	19.24	0.084
5	64QAM	1	0	19.54	0.090	19.57	0.091	19.44	0.088
5	64QAM	1	12	19.36	0.086	19.47	0.089	19.33	0.086
5	64QAM	1	24	19.46	0.088	19.36	0.086	19.43	0.088
5	64QAM	12	0	19.41	0.087	19.29	0.085	19.35	0.086
5	64QAM	12	7	19.33	0.086	19.51	0.089	19.34	0.086
5	64QAM	12	13	19.19	0.083	19.34	0.086	19.31	0.085
5	64QAM	25	0	19.25	0.084	19.30	0.085	19.31	0.085



LTE Band 12				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23025		23095		23165	
Frequency (MHz)				700.5		707.5		714.5	
				dbm	W	dbm	W	dbm	W
3	QPSK	1	0	21.05	0.127	21.20	0.132	21.15	0.130
3	QPSK	1	8	21.11	0.129	21.31	0.135	21.20	0.132
3	QPSK	1	14	21.24	0.133	21.10	0.129	21.21	0.132
3	QPSK	8	0	20.14	0.103	20.24	0.106	20.30	0.107
3	QPSK	8	4	20.25	0.106	20.40	0.110	20.33	0.108
3	QPSK	8	7	20.27	0.106	20.19	0.104	20.15	0.104
3	QPSK	15	0	20.20	0.105	20.28	0.107	20.28	0.107
3	16QAM	1	0	20.72	0.118	20.61	0.115	20.40	0.110
3	16QAM	1	8	20.69	0.117	20.42	0.110	20.45	0.111
3	16QAM	1	14	20.67	0.117	20.40	0.110	20.55	0.114
3	16QAM	8	0	19.12	0.082	19.37	0.086	19.38	0.087
3	16QAM	8	4	19.32	0.086	19.39	0.087	19.21	0.083
3	16QAM	8	7	19.34	0.086	19.22	0.084	19.41	0.087
3	16QAM	15	0	19.33	0.086	19.14	0.082	19.44	0.088
3	64QAM	1	0	19.47	0.089	19.70	0.093	19.47	0.089
3	64QAM	1	8	19.43	0.088	19.45	0.088	19.50	0.089
3	64QAM	1	14	19.46	0.088	19.42	0.087	19.41	0.087
3	64QAM	8	0	19.40	0.087	19.25	0.084	19.49	0.089
3	64QAM	8	4	19.37	0.086	19.24	0.084	19.20	0.083
3	64QAM	8	7	19.44	0.088	19.27	0.085	19.32	0.086
3	64QAM	15	0	19.31	0.085	19.30	0.085	19.24	0.084



LTE Band 12				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23017		23095		23173	
Frequency (MHz)				699.7		707.5		715.3	
				dbm	W	dbm	W	dbm	W
1.4	QPSK	1	0	21.08	0.128	21.27	0.134	21.18	0.131
1.4	QPSK	1	3	21.24	0.133	21.40	0.138	21.23	0.133
1.4	QPSK	1	5	21.24	0.133	21.24	0.133	21.25	0.133
1.4	QPSK	3	0	21.09	0.129	21.35	0.136	21.24	0.133
1.4	QPSK	3	1	21.19	0.132	21.25	0.133	21.13	0.130
1.4	QPSK	3	3	21.24	0.133	21.41	0.138	21.26	0.134
1.4	QPSK	6	0	20.26	0.106	20.36	0.109	20.22	0.105
1.4	16QAM	1	0	20.32	0.108	20.42	0.110	20.28	0.107
1.4	16QAM	1	3	20.45	0.111	20.40	0.110	20.46	0.111
1.4	16QAM	1	5	20.67	0.117	20.46	0.111	20.61	0.115
1.4	16QAM	3	0	20.35	0.108	20.49	0.112	20.40	0.110
1.4	16QAM	3	1	20.35	0.108	20.44	0.111	20.42	0.110
1.4	16QAM	3	3	20.44	0.111	20.44	0.111	20.32	0.108
1.4	16QAM	6	0	19.35	0.086	19.44	0.088	19.52	0.090
1.4	64QAM	1	0	19.40	0.087	19.35	0.086	19.39	0.087
1.4	64QAM	1	3	19.49	0.089	19.44	0.088	19.23	0.084
1.4	64QAM	1	5	19.40	0.087	19.33	0.086	19.39	0.087
1.4	64QAM	3	0	19.39	0.087	19.32	0.086	19.24	0.084
1.4	64QAM	3	1	19.40	0.087	19.51	0.089	19.36	0.086
1.4	64QAM	3	3	19.56	0.090	19.47	0.089	19.27	0.085
1.4	64QAM	6	0	19.41	0.087	19.42	0.087	19.46	0.088



LTE Band 17				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23780		23790		23800	
Frequency (MHz)				709		710		711	
				dbm	W	dbm	W	dbm	W
10	QPSK	1	0	21.28	0.134	21.23	0.133	21.29	0.135
10	QPSK	1	25	21.43	0.139	21.40	0.138	21.46	0.140
10	QPSK	1	49	21.22	0.132	21.21	0.132	21.27	0.134
10	QPSK	25	0	20.21	0.105	20.15	0.104	20.46	0.111
10	QPSK	25	12	20.39	0.109	20.37	0.109	20.33	0.108
10	QPSK	25	25	20.37	0.109	20.31	0.107	20.20	0.105
10	QPSK	50	0	20.37	0.109	20.19	0.104	20.23	0.105
10	16QAM	1	0	20.66	0.116	20.45	0.111	20.61	0.115
10	16QAM	1	25	20.41	0.110	20.43	0.110	20.47	0.111
10	16QAM	1	49	20.45	0.111	20.55	0.114	20.44	0.111
10	16QAM	25	0	19.32	0.086	19.47	0.089	19.44	0.088
10	16QAM	25	12	19.34	0.086	19.39	0.087	19.39	0.087
10	16QAM	25	25	19.46	0.088	19.31	0.085	19.45	0.088
10	16QAM	50	0	19.53	0.090	19.41	0.087	19.26	0.084
10	64QAM	1	0	19.45	0.088	19.55	0.090	19.50	0.089
10	64QAM	1	25	19.44	0.088	19.44	0.088	19.41	0.087
10	64QAM	1	49	19.49	0.089	19.62	0.092	19.71	0.094
10	64QAM	25	0	19.39	0.087	19.43	0.088	19.44	0.088
10	64QAM	25	12	19.32	0.086	19.30	0.085	19.32	0.086
10	64QAM	25	25	19.32	0.086	19.39	0.087	19.41	0.087
10	64QAM	50	0	19.29	0.085	19.32	0.086	19.44	0.088



LTE Band 17				Measured ERP					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23035		23790		23155	
Frequency (MHz)				706.5		710		713.5	
				dbm	W	dbm	W	dbm	W
5	QPSK	1	0	21.42	0.139	21.16	0.131	21.12	0.129
5	QPSK	1	12	21.27	0.134	21.43	0.139	21.42	0.139
5	QPSK	1	24	21.11	0.129	21.26	0.134	21.09	0.129
5	QPSK	12	0	20.22	0.105	20.17	0.104	20.32	0.108
5	QPSK	12	7	20.28	0.107	20.30	0.107	20.26	0.106
5	QPSK	12	13	20.40	0.110	20.20	0.105	20.20	0.105
5	QPSK	25	0	20.37	0.109	20.27	0.106	20.21	0.105
5	16QAM	1	0	20.46	0.111	20.60	0.115	20.57	0.114
5	16QAM	1	12	20.55	0.114	20.57	0.114	20.70	0.117
5	16QAM	1	24	20.42	0.110	20.61	0.115	20.60	0.115
5	16QAM	12	0	19.27	0.085	19.27	0.085	19.30	0.085
5	16QAM	12	7	19.45	0.088	19.33	0.086	19.22	0.084
5	16QAM	12	13	19.43	0.088	19.21	0.083	19.24	0.084
5	16QAM	25	0	19.28	0.085	19.34	0.086	19.36	0.086
5	64QAM	1	0	19.67	0.093	19.40	0.087	19.30	0.085
5	64QAM	1	12	19.47	0.089	19.45	0.088	19.44	0.088
5	64QAM	1	24	19.44	0.088	19.47	0.089	19.57	0.091
5	64QAM	12	0	19.21	0.083	19.21	0.083	19.26	0.084
5	64QAM	12	7	19.36	0.086	19.39	0.087	19.23	0.084
5	64QAM	12	13	19.42	0.087	19.27	0.085	19.21	0.083
5	64QAM	25	0	19.23	0.084	19.23	0.084	19.30	0.085

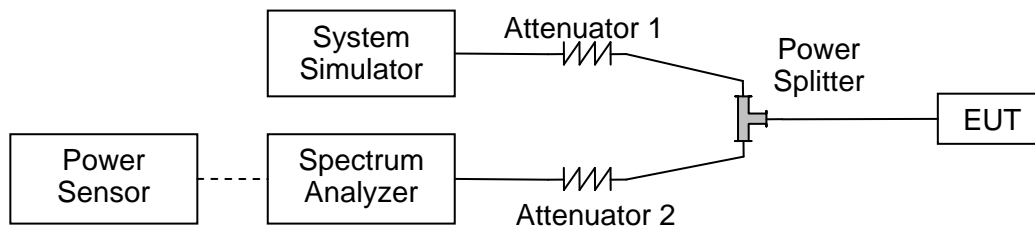


## 2.2. Occupied Bandwidth

### 2.2.1. Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

### 2.2.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50 Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

### 2.2.3. Test procedure

KDB 971168 D01v03 Section 4.1 and ANSI/TIA-603-E-2016.



2.2.4. Test Result

LTE Band 2				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.28
	Low	16QAM	1.10	1.30
	Low	64QAM	1.10	1.28
	Mid	QPSK	1.10	1.29
	Mid	16QAM	1.10	1.30
	Mid	64QAM	1.10	1.30
	High	QPSK	1.10	1.28
	High	16QAM	1.10	1.29
	High	64QAM	1.10	1.29
3	Low	QPSK	2.69	2.91
	Low	16QAM	2.69	2.93
	Low	64QAM	2.69	2.93
	Mid	QPSK	2.69	2.91
	Mid	16QAM	2.69	2.93
	Mid	64QAM	2.70	2.92
	High	QPSK	2.69	2.92
	High	16QAM	2.69	2.93
	High	64QAM	2.70	2.93
5	Low	QPSK	4.51	5.17
	Low	16QAM	4.51	5.13
	Low	64QAM	4.51	5.12
	Mid	QPSK	4.51	5.16
	Mid	16QAM	4.51	5.16
	Mid	64QAM	4.51	5.13
	High	QPSK	4.51	5.13
	High	16QAM	4.52	5.19
	High	64QAM	4.50	5.14



10	Low	QPSK	9.03	10.06
	Low	16QAM	8.98	10.01
	Low	64QAM	9.00	10.06
	Mid	QPSK	9.04	10.04
	Mid	16QAM	8.99	9.86
	Mid	64QAM	9.00	10.02
	High	QPSK	9.03	10.05
	High	16QAM	8.98	9.85
	High	64QAM	9.00	10.11
15	Low	QPSK	13.49	15.05
	Low	16QAM	13.48	14.95
	Low	64QAM	13.48	15.04
	Mid	QPSK	13.50	14.98
	Mid	16QAM	13.49	15.04
	Mid	64QAM	13.49	15.08
	High	QPSK	13.52	15.06
	High	16QAM	13.51	15.16
	High	64QAM	13.51	15.08
20	Low	QPSK	17.98	19.82
	Low	16QAM	18.00	19.68
	Low	64QAM	18.00	19.78
	Mid	QPSK	17.95	19.80
	Mid	16QAM	17.98	19.81
	Mid	64QAM	17.94	19.52
	High	QPSK	18.01	19.72
	High	16QAM	18.02	19.77
	High	64QAM	18.04	19.76



LTE Band 4				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.27
	Low	16QAM	1.10	1.30
	Low	64QAM	1.10	1.30
	Mid	QPSK	1.09	1.26
	Mid	16QAM	1.10	1.27
	Mid	64QAM	1.09	1.31
	High	QPSK	1.09	1.28
	High	16QAM	1.10	1.29
	High	64QAM	1.09	1.28
3	Low	QPSK	2.69	2.90
	Low	16QAM	2.69	2.93
	Low	64QAM	2.70	2.94
	Mid	QPSK	2.69	2.93
	Mid	16QAM	2.69	2.93
	Mid	64QAM	2.70	2.93
	High	QPSK	2.69	2.93
	High	16QAM	2.69	2.93
	High	64QAM	2.70	2.92
5	Low	QPSK	4.52	5.16
	Low	16QAM	4.52	5.09
	Low	64QAM	4.50	5.14
	Mid	QPSK	4.51	5.13
	Mid	16QAM	4.51	5.16
	Mid	64QAM	4.51	5.12
	High	QPSK	4.51	5.18
	High	16QAM	4.51	5.12
	High	64QAM	4.51	5.13



10	Low	QPSK	9.01	10.04
	Low	16QAM	8.98	10.02
	Low	64QAM	9.00	10.01
	Mid	QPSK	9.01	10.12
	Mid	16QAM	8.98	9.95
	Mid	64QAM	9.01	10.09
	High	QPSK	9.02	10.01
	High	16QAM	8.98	9.90
	High	64QAM	9.00	10.02
15	Low	QPSK	13.53	15.02
	Low	16QAM	13.51	14.91
	Low	64QAM	13.49	14.95
	Mid	QPSK	13.48	14.96
	Mid	16QAM	13.48	14.92
	Mid	64QAM	13.46	14.99
	High	QPSK	13.50	14.98
	High	16QAM	13.48	15.10
	High	64QAM	13.50	15.13
20	Low	QPSK	17.98	19.82
	Low	16QAM	18.00	19.61
	Low	64QAM	17.96	19.62
	Mid	QPSK	17.94	19.53
	Mid	16QAM	17.98	19.73
	Mid	64QAM	17.94	19.64
	High	QPSK	18.01	19.76
	High	16QAM	18.01	19.77
	High	64QAM	17.98	19.69



LTE Band 5				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.26
	Low	16QAM	1.10	1.30
	Low	64QAM	1.09	1.30
	Mid	QPSK	1.09	1.28
	Mid	16QAM	1.10	1.28
	Mid	64QAM	1.10	1.29
	High	QPSK	1.09	1.27
	High	16QAM	1.10	1.28
	High	64QAM	1.10	1.29
3	Low	QPSK	2.69	2.91
	Low	16QAM	2.68	2.92
	Low	64QAM	2.70	2.93
	Mid	QPSK	2.69	2.92
	Mid	16QAM	2.69	2.93
	Mid	64QAM	2.70	2.93
	High	QPSK	2.68	2.92
	High	16QAM	2.69	2.93
	High	64QAM	2.70	2.93
5	Low	QPSK	4.51	5.10
	Low	16QAM	4.51	5.20
	Low	64QAM	4.50	5.09
	Mid	QPSK	4.51	5.16
	Mid	16QAM	4.52	5.15
	Mid	64QAM	4.51	5.13
	High	QPSK	4.52	5.15
	High	16QAM	4.51	5.19
	High	64QAM	4.50	5.13
10	Low	QPSK	9.00	10.08
	Low	16QAM	8.98	9.97
	Low	64QAM	9.02	10.00
	Mid	QPSK	9.05	10.05
	Mid	16QAM	8.98	9.93
	Mid	64QAM	9.00	10.03
	High	QPSK	9.02	9.99
	High	16QAM	8.97	9.98
	High	64QAM	8.99	10.04



LTE Band 7				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.21
	Low	16QAM	4.52	5.13
	Low	64QAM	4.51	5.15
	Mid	QPSK	4.51	5.11
	Mid	16QAM	4.52	5.15
	Mid	64QAM	4.51	5.12
	High	QPSK	4.52	5.19
	High	16QAM	4.52	5.17
	High	64QAM	4.51	5.12
10	Low	QPSK	9.01	10.09
	Low	16QAM	8.99	10.02
	Low	64QAM	9.02	10.12
	Mid	QPSK	9.04	10.10
	Mid	16QAM	8.98	9.94
	Mid	64QAM	8.99	10.07
	High	QPSK	9.00	10.03
	High	16QAM	8.98	9.96
	High	64QAM	9.00	10.04
15	Low	QPSK	13.48	15.02
	Low	16QAM	13.51	15.10
	Low	64QAM	13.50	14.91
	Mid	QPSK	13.51	15.09
	Mid	16QAM	13.50	14.88
	Mid	64QAM	13.51	15.00
	High	QPSK	13.47	14.93
	High	16QAM	13.48	14.98
	High	64QAM	13.47	15.02
20	Low	QPSK	17.99	19.76
	Low	16QAM	18.01	19.81
	Low	64QAM	18.01	19.81
	Mid	QPSK	17.97	19.70
	Mid	16QAM	18.01	19.83
	Mid	64QAM	17.97	19.81
	High	QPSK	17.97	19.68
	High	16QAM	17.96	19.73
	High	64QAM	17.96	19.63

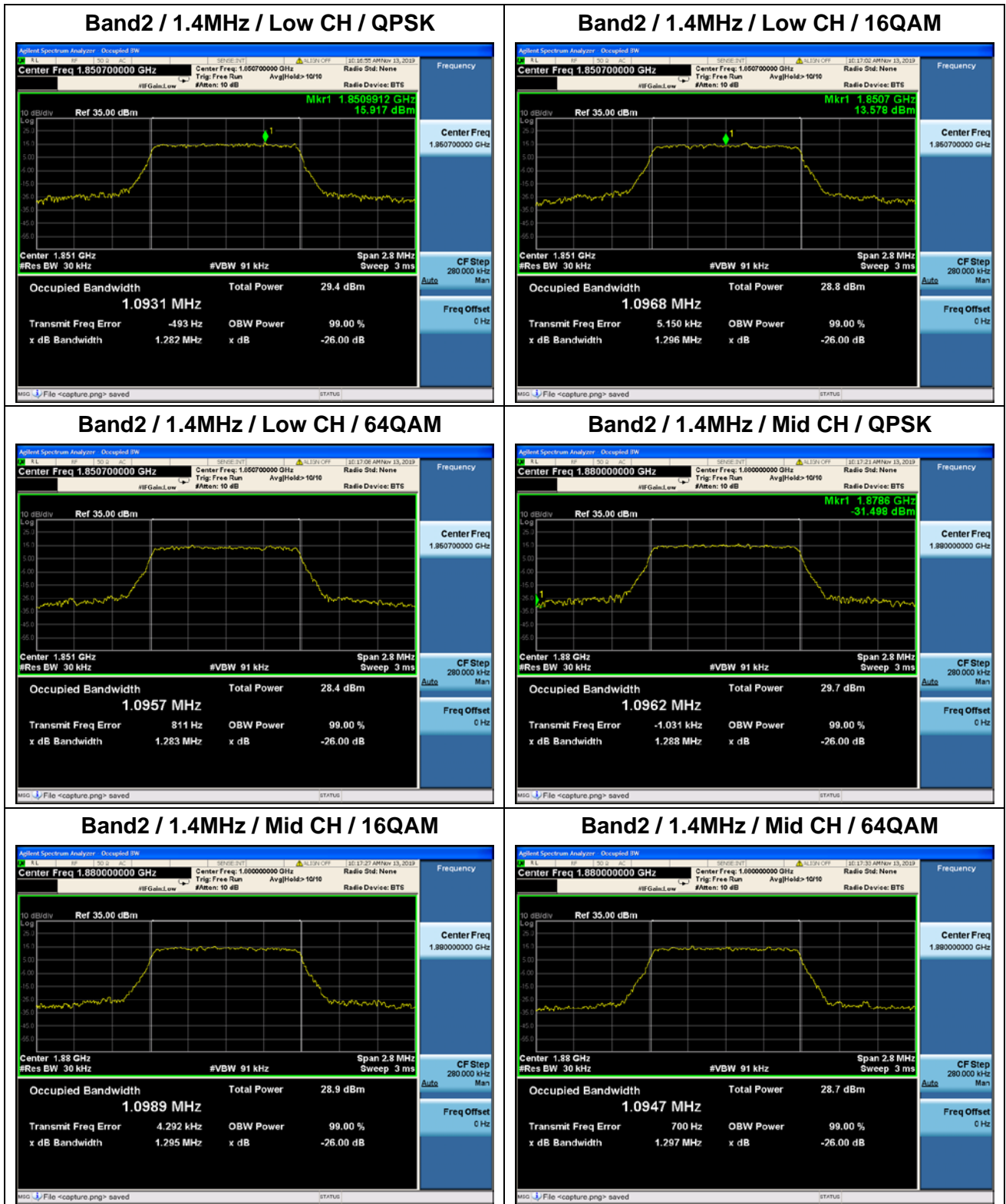


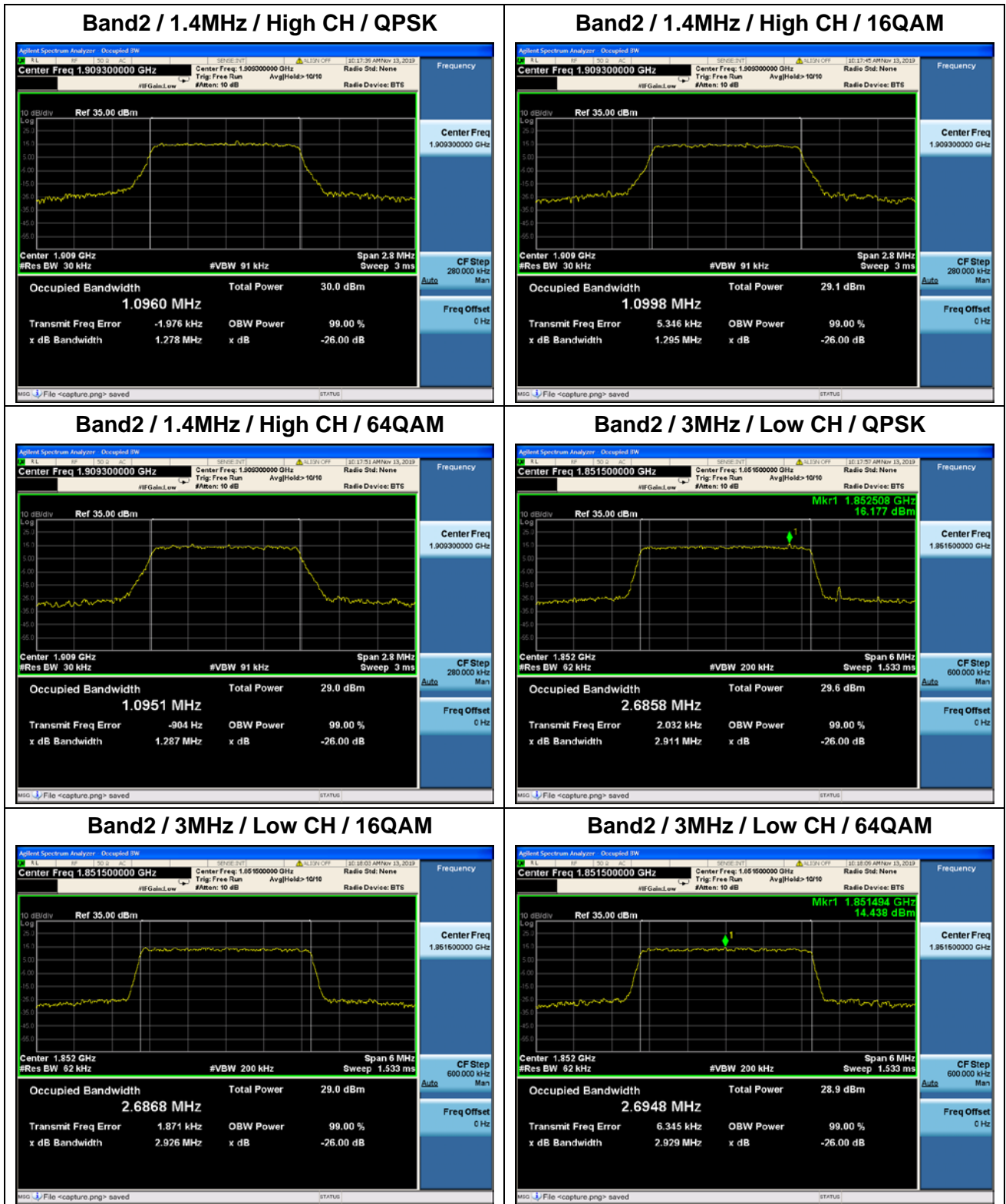
LTE Band 12				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.27
	Low	16QAM	1.10	1.28
	Low	64QAM	1.10	1.29
	Mid	QPSK	1.09	1.27
	Mid	16QAM	1.10	1.29
	Mid	64QAM	1.09	1.30
	High	QPSK	1.09	1.25
	High	16QAM	1.10	1.29
	High	64QAM	1.10	1.28
3	Low	QPSK	2.69	2.91
	Low	16QAM	2.69	2.93
	Low	64QAM	2.70	2.93
	Mid	QPSK	2.69	2.92
	Mid	16QAM	2.69	2.93
	Mid	64QAM	2.70	2.93
	High	QPSK	2.69	2.92
	High	16QAM	2.69	2.93
	High	64QAM	2.70	2.92
5	Low	QPSK	4.52	5.19
	Low	16QAM	4.52	5.12
	Low	64QAM	4.51	5.12
	Mid	QPSK	4.52	5.16
	Mid	16QAM	4.53	5.35
	Mid	64QAM	4.51	5.11
	High	QPSK	4.52	5.14
	High	16QAM	4.51	5.14
	High	64QAM	4.50	5.08
10	Low	QPSK	9.02	9.93
	Low	16QAM	9.00	9.98
	Low	64QAM	9.01	10.11
	Mid	QPSK	9.02	9.96
	Mid	16QAM	9.00	9.86
	Mid	64QAM	9.02	10.02
	High	QPSK	9.00	9.94
	High	16QAM	8.96	10.00
	High	64QAM	8.98	10.00

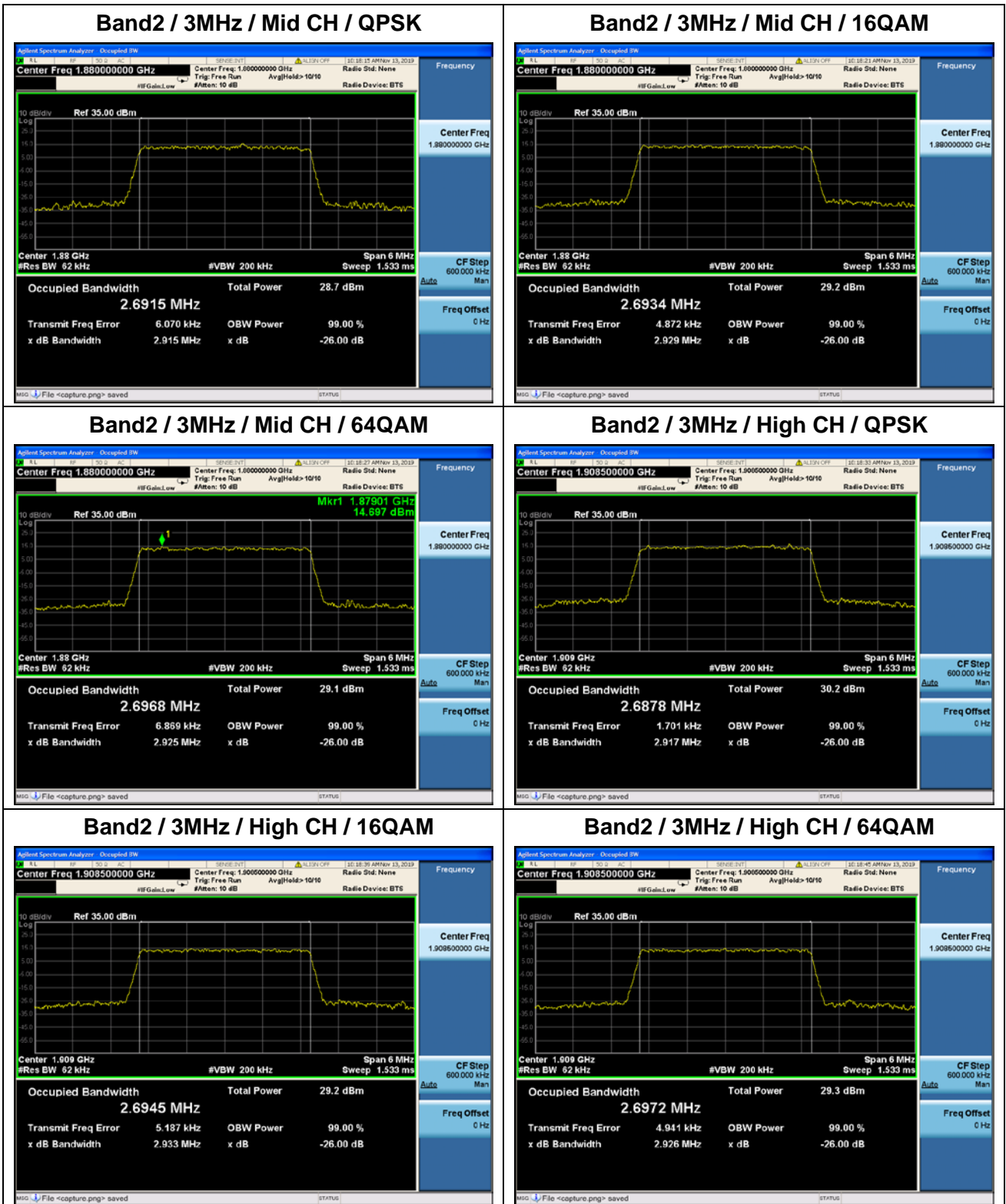


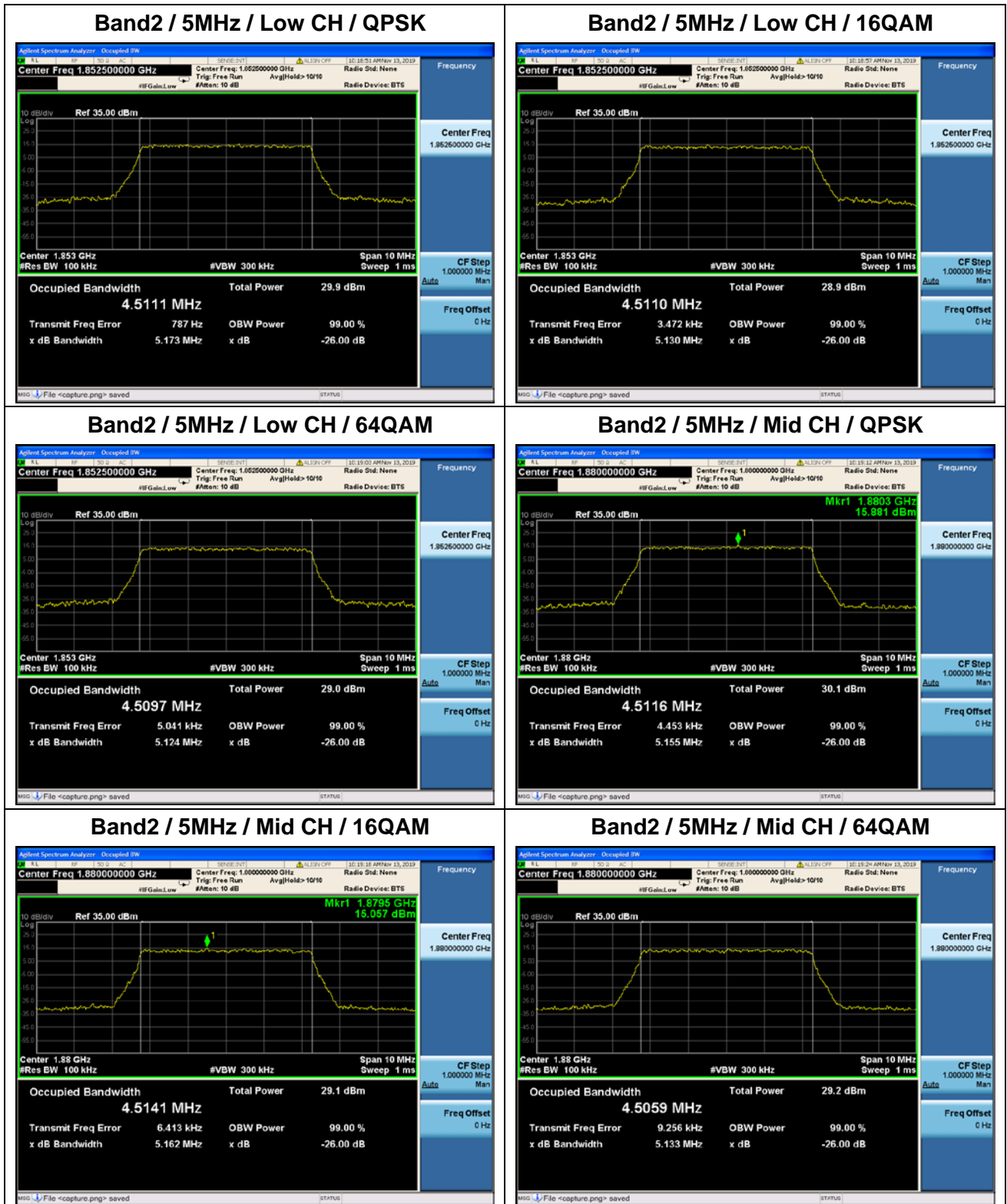


LTE Band 17				
BW(MHz)	ChannelLevel	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.53	5.16
	Low	16QAM	4.52	5.17
	Low	64QAM	4.51	5.15
	Mid	QPSK	4.51	5.15
	Mid	16QAM	4.51	5.15
	Mid	64QAM	4.50	5.10
	High	QPSK	4.50	5.17
	High	16QAM	4.51	5.16
	High	64QAM	4.51	5.14
10	Low	QPSK	9.03	9.98
	Low	16QAM	8.98	9.89
	Low	64QAM	9.00	10.06
	Mid	QPSK	9.00	9.93
	Mid	16QAM	8.97	9.88
	Mid	64QAM	8.98	10.03
	High	QPSK	8.99	10.08
	High	16QAM	8.96	9.96
	High	64QAM	8.99	10.11





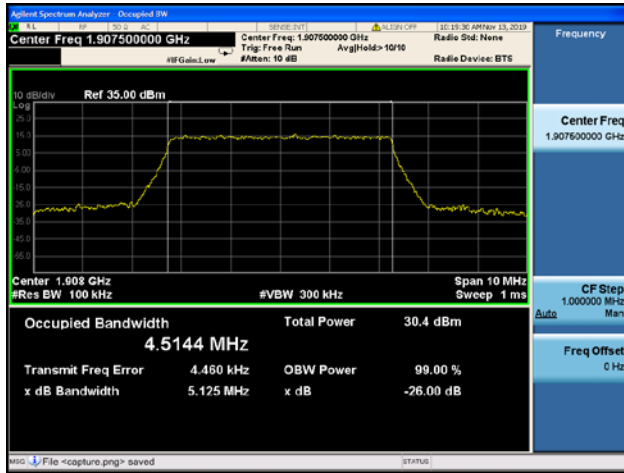




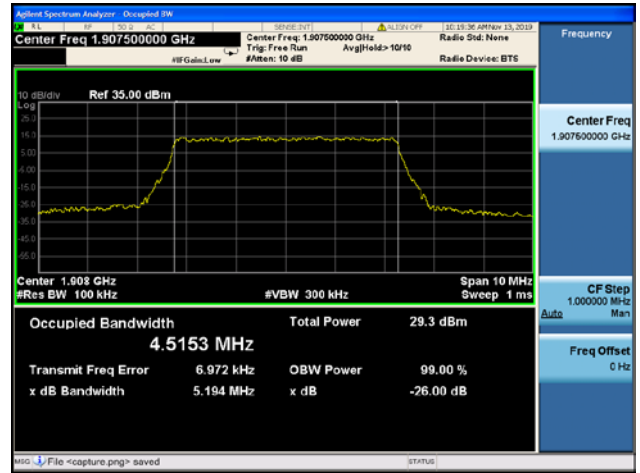




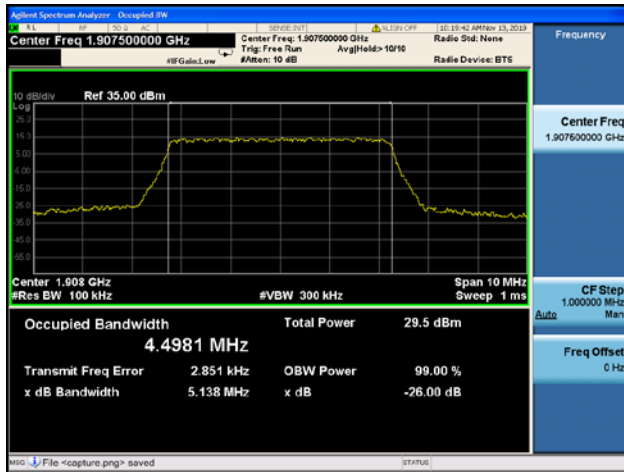
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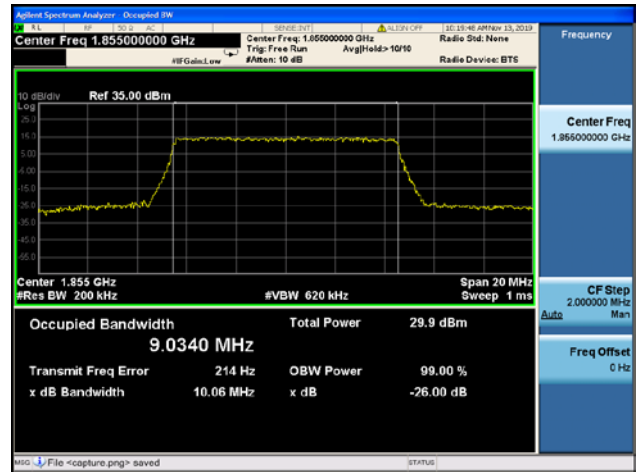
**Band2 / 5MHz / High CH / 16QAM**



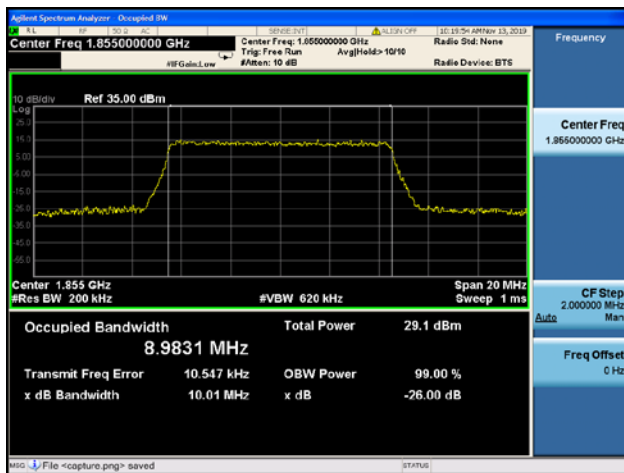
**Band2 / 5MHz / High CH / 64QAM**



**Band2 / 10MHz / Low CH / QPSK**



**Band2 / 10MHz / Low CH / 16QAM**



**Band2 / 10MHz / Low CH / 64QAM**

