REPORT No. : SZ21070268W05

TEST REPORT

APPLICANT	:	BLU Products, Inc.
PRODUCT NAME	:	Smart Phone
MODEL NAME	:	G51S
BRAND NAME	:	BLU
FCC ID	:	YHLBLUG51S
STANDARD(S)	:	47 CFR Part 22, Subpart H 47 CFR Part 24, Subpart E 47 CFR Part 27, Subpart H&L&M
RECEIPT DATE	:	2021-08-11
TEST DATE	:	2021-08-22 to 2021-09-16
ISSUE DATE	:	2021-09-27

Edited by: Peng Mi

Peng Mi (Rapporteur)

Approved by: Shen Junsheng

Shen Junsheng (Supervisor)

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MORLAB

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DIRECTORY

Change History		
Version	Date	Reason for change
1.0	2021-09-27	First edition

1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

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

1.2. Equipment Under Test (EUT) Description

Product Name:	Smart Phone	
Sample No.:	2#	
Hardware Version:	FS185-MB-V5.0	
Software Version:	BLU_G0590WW_V11.0.G.01.00_GENERIC 04-08-2021 17:37	
Modulation Type:	QPSK, 16QAM	
Carrier Aggregation:	Not support	
Operation Band:	Band 2 / 4 / 5 / 7 / 12 / 17	
Frequency Range:	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–2570MHz
		Rx: 2620MHz–2690MHz
	LTE Band 12	Tx: 699MHz - 716MHz
		Rx: 729MHz – 746MHz
	LTE Band 17	Tx: 704MHz - 716MHz
		Rx: 734MHz – 746MHz
Channel Bandwidth:	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 5	1.4MHz, 3MHz, 5MHz, 10MHz
	LTE Band 7	5 MHz, 10MHz, 15MHz, 20MHz

Channel Bandwidth:	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 17	5 MHz, 10MHz
Antenna Type:	PIFA Antenna	
Antenna Gain:	LTE Band 2	0.50dBi
	LTE Band 4	0.50dBi
	LTE Band 5	0.50dBi
	LTE Band 7	0.50dBi
	LTE Band 12	-0.50dBi
	LTE Band 17	-0.50dBi
Accessory Information:	Battery	
	Brand Name:	BLU
	Model No.:	C856343400P
	Serial No.:	N/A
	Capacity:	4000mAh
	Rated Voltage:	3.85V
	Charge Limit:	4.4V
	Manufacturer:	Shenzhen jiuliyuan electronic technology Co., Ltd
	AC Adapter	
	Brand Name:	BLU
	Model No.:	US-HY-2000
	Serial No.:	N/A
	Rated Output:	5.0V⎓2.0A
	Rated Input:	100-240V～50/60Hz, 0.35A
	Manufacturer:	Chongqing Lianmao Electronics Co., Ltd.

Note 1: SIM 1 and SIM 2 is a chipset unit and tested as a single chipset. The SIM 1 is chosen for test.

Note 2: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

1.3. Maximum E.R.P./E.I.R.P. and Emission Designator

LTE Band 2	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.191	0.167	18M0G7D	18M0W7D
15	0.187	0.163	13M5G7D	13M5W7D
10	0.187	0.173	9M03G7D	8M98W7D
5	0.188	0.177	4M50G7D	4M50W7D
3	0.190	0.174	2M72G7D	2M72W7D
1.4	0.190	0.172	1M10G7D	1M10W7D
LTE Band 4	**Maximum E.R.P./E.I.R.P. (W)**		**Emission Designator (99%OBW)**	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.194	0.165	18M0G7D	18M0W7D
15	0.193	0.168	13M5G7D	13M4W7D
10	0.185	0.170	9M02G7D	8M98W7D
5	0.194	0.173	4M50G7D	4M50W7D
3	0.186	0.164	2M72G7D	2M72W7D
1.4	0.191	0.165	1M10G7D	1M10W7D
LTE Band 5	**Maximum E.R.P./E.I.R.P. (W)**		**Emission Designator (99%OBW)**	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.121	0.099	9M02G7D	8M98W7D
5	0.121	0.098	4M50G7D	4M51W7D
3	0.120	0.102	2M71G7D	2M71W7D
1.4	0.120	0.097	1M10G7D	1M10W7D
LTE Band 7	**Maximum E.R.P./E.I.R.P. (W)**		**Emission Designator (99%OBW)**	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
20	0.188	0.160	18M0G7D	18M1W7D
15	0.187	0.164	13M5G7D	13M5W7D
10	0.184	0.164	9M01G7D	8M99W7D
5	0.185	0.162	4M52G7D	4M51W7D
LTE Band 12	**Maximum E.R.P./E.I.R.P. (W)**		**Emission Designator (99%OBW)**	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.096	0.079	9M03G7D	8M98W7D
5	0.095	0.079	4M50G7D	4M51W7D
3	0.095	0.079	2M72G7D	2M72W7D
1.4	0.095	0.079	1M10G7D	1M10W7D

LTE Band 17	Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)	QPSK	16QAM	QPSK	16QAM
10	0.094	0.080	8M99G7D	8M96W7D
5	0.094	0.080	4M51G7D	4M51W7D

1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 22, Part 24, 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)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Sep 16, 2021	Chen Hao Li Huaijie Yin Xiaogang	PASS	No deviation
2.1049	Occupied Bandwidth	Aug 24&25, 2021	Li Huaijie	PASS	No deviation
2.1055 22.355 24.235 27.54	Frequency Stability	Aug 23, 2021	Li Huaijie	PASS	No deviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Aug 24, 2021	Li Huaijie	PASS	No deviation
2.1051 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Conducted Spurious Emissions	Aug 24&25, 2021	Li Huaijie	PASS	No deviation
2.1051 22.917(a) 24.238(a)	Band Edge	Aug 24&25, 2021	Li Huaijie	PASS	No deviation

27.53(g) 27.53(h) 27.53(m)(4)					
2.1051 22.917(a) 24.238(a) 27.53(g) 27.53(h) 27.53(m)(4)	Radiated Spurious Emissions	Aug 22&23, 2021	Gao Jianrou	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 24.5dB contains two parts that cable loss 14.5dB and Attenuator 10dB. **Note 3:** Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table. **Note 4:** When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.					

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, Part 27 H&L&M Requirements

2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.

2.1.1. Requirement

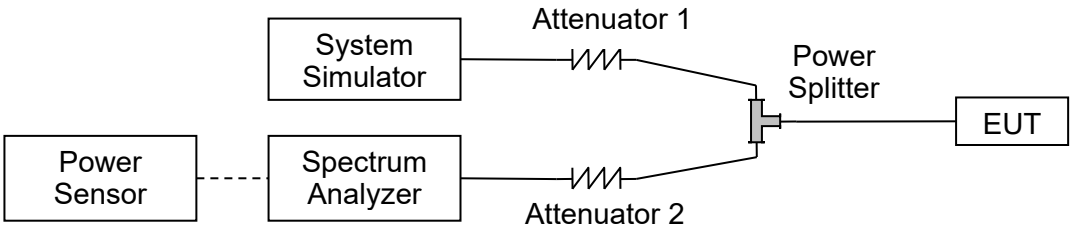
According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current 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, Mobile and portable stations are limited to 2 watts E.I.R.P. and the equipment must employ a means for limiting power to the minimum necessary for successful communications.
According to FCC section 27.50 (d)(4) for LTE Band 4, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.
According to FCC section22.913 (a)(2) for LTE Band 5, the E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 27.50 (h)(2) for LTE Band 7, Mobile and other user stations. Mobile stations are limited to 2 watts E.I.R.P. All user stations are limited to 2 watts transmitter output power.

According to FCC section 27.50 (c)(10) for LTE Band 12/17, Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts E.R.P.

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 50Ohm; 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.

E.I.R.P. (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)
E.R.P. (dBm) = E.I.R.P. (dBm) - 2.15

2.1.4. Result

Conducted Output Power:

LTE Band 2						
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	22.19	22.32	22.18
20	QPSK	1	49	21.97	22.13	22.00
20	QPSK	1	99	22.11	22.09	22.19
20	QPSK	50	0	21.37	21.41	21.26
20	QPSK	50	24	21.17	21.39	21.38
20	QPSK	50	50	21.34	21.25	21.40
20	QPSK	100	0	21.36	21.53	21.33
20	16QAM	1	0	21.74	21.38	21.58
20	16QAM	1	49	21.35	21.32	21.75
20	16QAM	1	99	21.45	21.54	21.61
20	16QAM	50	0	21.25	21.09	21.23
20	16QAM	50	24	21.14	21.24	21.27
20	16QAM	50	50	21.13	21.32	21.27
20	16QAM	100	0	21.19	21.21	21.29

LTE Band 2						
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	21.81	22.06	21.87
15	QPSK	1	37	22.01	22.13	22.22
15	QPSK	1	74	22.02	22.07	22.07
15	QPSK	36	0	21.31	21.42	21.34
15	QPSK	36	20	21.32	21.29	21.42
15	QPSK	36	39	21.31	21.29	21.44
15	QPSK	75	0	21.09	21.30	21.36
15	16QAM	1	0	21.28	21.38	21.58
15	16QAM	1	37	21.56	21.35	21.51
15	16QAM	1	74	21.62	21.40	21.47
15	16QAM	36	0	21.30	21.42	21.45
15	16QAM	36	20	21.38	21.41	21.51
15	16QAM	36	39	21.40	21.58	21.48
15	16QAM	75	0	21.46	21.33	21.52

LTE Band 2						
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	22.12	21.98	22.22
10	QPSK	1	25	21.95	22.03	22.22
10	QPSK	1	49	22.08	21.96	22.03
10	QPSK	25	0	21.37	21.49	21.31
10	QPSK	25	12	21.50	21.62	21.74
10	QPSK	25	25	21.35	21.62	21.63
10	QPSK	50	0	21.48	21.49	21.56
10	16QAM	1	0	21.59	21.66	21.62
10	16QAM	1	25	21.89	21.52	21.63
10	16QAM	1	49	21.58	21.55	21.88
10	16QAM	25	0	21.09	21.18	21.23
10	16QAM	25	12	21.25	21.21	21.28
10	16QAM	25	25	21.03	21.38	21.37
10	16QAM	50	0	21.26	21.16	21.33

LTE Band 2						
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	22.14	22.25	22.11
5	QPSK	1	12	22.02	22.15	22.23
5	QPSK	1	24	22.13	22.24	22.22
5	QPSK	12	0	21.59	21.54	21.57
5	QPSK	12	7	21.38	21.55	21.54
5	QPSK	12	13	21.43	21.54	21.49
5	QPSK	25	0	21.55	21.65	21.51
5	16QAM	1	0	21.62	21.66	21.68
5	16QAM	1	12	21.85	21.65	21.62
5	16QAM	1	24	21.99	21.62	21.77
5	16QAM	12	0	21.20	21.26	21.29
5	16QAM	12	7	21.12	21.27	21.40
5	16QAM	12	13	21.19	21.30	21.22
5	16QAM	25	0	21.32	21.18	21.33

LTE Band 2						
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	22.04	22.24	22.29
3	QPSK	1	8	22.19	22.12	22.07
3	QPSK	1	14	22.12	22.12	22.13
3	QPSK	8	0	21.18	21.12	21.36
3	QPSK	8	4	21.11	21.14	21.31
3	QPSK	8	7	21.32	21.45	21.40
3	QPSK	15	0	21.29	21.43	21.52
3	16QAM	1	0	21.60	21.55	21.62
3	16QAM	1	8	21.74	21.56	21.66
3	16QAM	1	14	21.75	21.49	21.91
3	16QAM	8	0	21.19	21.20	21.24
3	16QAM	8	4	21.12	21.28	21.28
3	16QAM	8	7	21.25	21.30	21.19
3	16QAM	15	0	21.11	21.19	21.34

LTE Band 2						
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	22.28	22.16	22.16
1.4	QPSK	1	3	22.12	22.16	22.07
1.4	QPSK	1	5	22.23	22.16	21.89
1.4	QPSK	3	0	21.37	21.35	21.36
1.4	QPSK	3	1	21.44	21.35	21.31
1.4	QPSK	3	3	21.38	21.36	21.28
1.4	QPSK	6	0	21.27	21.33	21.39
1.4	16QAM	1	0	21.69	21.55	21.54
1.4	16QAM	1	3	21.52	21.55	21.86
1.4	16QAM	1	5	21.65	21.48	21.78
1.4	16QAM	3	0	21.11	21.50	21.26
1.4	16QAM	3	1	21.43	21.50	21.21
1.4	16QAM	3	3	21.19	21.31	21.25
1.4	16QAM	6	0	21.29	21.23	21.35

LTE Band 4						
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	22.28	22.38	22.36
20	QPSK	1	49	22.31	22.22	22.32
20	QPSK	1	99	22.11	22.24	22.20
20	QPSK	50	0	21.47	21.57	21.39
20	QPSK	50	24	21.42	21.39	21.53
20	QPSK	50	50	21.41	21.34	21.43
20	QPSK	100	0	21.36	21.27	21.43
20	16QAM	1	0	21.42	21.40	21.40
20	16QAM	1	49	21.44	21.33	21.41
20	16QAM	1	99	21.30	21.15	21.30
20	16QAM	50	0	21.22	21.40	21.29
20	16QAM	50	24	21.27	21.22	21.35
20	16QAM	50	50	21.21	21.26	21.68
20	16QAM	100	0	21.29	21.37	21.37

LTE Band 4						
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	22.36	22.13	22.22
15	QPSK	1	37	22.27	22.13	22.17
15	QPSK	1	74	22.12	22.16	22.24
15	QPSK	36	0	21.28	21.34	21.43
15	QPSK	36	20	21.37	21.33	21.62
15	QPSK	36	39	21.37	21.43	21.38
15	QPSK	75	0	21.30	21.36	21.51
15	16QAM	1	0	21.37	21.62	21.55
15	16QAM	1	37	21.56	21.54	21.65
15	16QAM	1	74	21.33	21.76	21.63
15	16QAM	36	0	21.17	21.16	21.16
15	16QAM	36	20	21.18	21.31	21.37
15	16QAM	36	39	21.30	21.20	21.54
15	16QAM	75	0	21.20	21.39	21.36

LTE Band 4						
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	22.06	22.12	22.09
10	QPSK	1	25	21.99	22.16	22.13
10	QPSK	1	49	21.90	22.08	22.08
10	QPSK	25	0	21.27	21.53	21.50
10	QPSK	25	12	21.34	21.40	21.55
10	QPSK	25	25	21.45	21.49	21.31
10	QPSK	50	0	21.20	21.34	21.38
10	16QAM	1	0	21.74	21.62	21.52
10	16QAM	1	25	21.55	21.58	21.66
10	16QAM	1	49	21.81	21.44	21.52
10	16QAM	25	0	21.27	21.30	21.36
10	16QAM	25	12	21.17	21.28	21.36
10	16QAM	25	25	21.51	21.27	21.41
10	16QAM	50	0	21.21	21.28	21.40

LTE Band 4						
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	22.19	22.37	22.00
5	QPSK	1	12	22.15	22.14	22.15
5	QPSK	1	24	22.18	22.21	22.23
5	QPSK	12	0	21.40	21.55	21.45
5	QPSK	12	7	21.44	21.46	21.50
5	QPSK	12	13	21.35	21.43	21.40
5	QPSK	25	0	21.09	21.15	21.19
5	16QAM	1	0	21.46	21.88	21.62
5	16QAM	1	12	21.52	21.86	21.55
5	16QAM	1	24	21.62	21.42	21.75
5	16QAM	12	0	21.34	21.38	21.32
5	16QAM	12	7	21.17	21.26	21.32
5	16QAM	12	13	21.42	21.28	21.44
5	16QAM	25	0	21.26	21.26	21.36

LTE Band 4						
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	22.08	22.16	22.09
3	QPSK	1	8	22.00	22.13	22.11
3	QPSK	1	14	22.01	21.79	22.20
3	QPSK	8	0	21.46	21.38	21.47
3	QPSK	8	4	21.41	21.38	21.52
3	QPSK	8	7	21.40	21.33	21.42
3	QPSK	15	0	21.62	21.52	21.21
3	16QAM	1	0	21.64	21.62	21.55
3	16QAM	1	8	21.55	21.52	21.62
3	16QAM	1	14	21.62	21.37	21.52
3	16QAM	8	0	21.44	21.62	21.51
3	16QAM	8	4	21.49	21.44	21.57
3	16QAM	8	7	21.43	21.48	21.90
3	16QAM	15	0	21.51	21.59	21.59

LTE Band 4						
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	22.12	22.20	22.13
1.4	QPSK	1	3	22.04	22.17	22.15
1.4	QPSK	1	5	22.05	22.15	22.12
1.4	QPSK	3	0	22.13	22.05	22.14
1.4	QPSK	3	1	22.29	22.26	22.26
1.4	QPSK	3	3	22.28	22.21	22.30
1.4	QPSK	6	0	21.66	21.56	21.25
1.4	16QAM	1	0	21.68	21.66	21.59
1.4	16QAM	1	3	21.59	21.56	21.66
1.4	16QAM	1	5	21.66	21.41	21.56
1.4	16QAM	3	0	21.27	21.45	21.34
1.4	16QAM	3	1	21.32	21.27	21.40
1.4	16QAM	3	3	21.26	21.31	21.55
1.4	16QAM	6	0	21.34	21.42	21.42

LTE Band 5						
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	22.26	22.48	22.39
10	QPSK	1	25	22.08	22.28	22.12
10	QPSK	1	49	22.30	22.31	22.40
10	QPSK	25	0	21.39	21.49	21.28
10	QPSK	25	12	21.34	21.38	21.37
10	QPSK	25	25	21.44	21.48	21.37
10	QPSK	50	0	21.42	21.39	21.46
10	16QAM	1	0	21.34	21.37	21.17
10	16QAM	1	25	21.61	21.49	21.42
10	16QAM	1	49	21.32	21.51	21.31
10	16QAM	25	0	21.29	21.67	21.61
10	16QAM	25	12	21.29	21.48	21.61
10	16QAM	25	25	21.58	21.51	21.58
10	16QAM	50	0	21.22	21.27	21.42

LTE Band 5						
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	22.02	22.21	22.46
5	QPSK	1	12	22.10	22.24	22.04
5	QPSK	1	24	22.10	22.37	22.12
5	QPSK	12	0	21.41	21.43	21.40
5	QPSK	12	7	21.06	21.44	21.53
5	QPSK	12	13	21.25	21.51	21.25
5	QPSK	25	0	21.37	21.31	21.50
5	16QAM	1	0	21.25	21.25	21.26
5	16QAM	1	12	21.22	21.26	21.22
5	16QAM	1	24	21.42	21.55	21.55
5	16QAM	12	0	21.33	21.48	21.56
5	16QAM	12	7	21.50	21.39	21.38
5	16QAM	12	13	21.48	21.25	21.19
5	16QAM	25	0	21.49	21.34	21.35

LTE Band 5						
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	22.07	22.11	22.39
3	QPSK	1	8	22.43	22.03	22.24
3	QPSK	1	14	22.13	22.06	22.34
3	QPSK	8	0	21.20	21.62	21.48
3	QPSK	8	4	21.44	21.51	21.51
3	QPSK	8	7	21.55	21.46	21.29
3	QPSK	15	0	21.37	21.33	21.62
3	16QAM	1	0	21.33	21.60	21.37
3	16QAM	1	8	21.68	21.24	21.74
3	16QAM	1	14	21.56	21.57	21.52
3	16QAM	8	0	21.28	21.48	21.50
3	16QAM	8	4	21.37	21.54	21.32
3	16QAM	8	7	21.32	21.39	21.40
3	16QAM	15	0	21.33	21.25	21.40

LTE Band 5						
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	22.27	22.18	22.35
1.4	QPSK	1	3	22.34	22.23	22.40
1.4	QPSK	1	5	22.32	22.26	22.45
1.4	QPSK	3	0	22.30	22.19	22.25
1.4	QPSK	3	1	22.23	22.18	22.38
1.4	QPSK	3	3	22.18	22.16	22.28
1.4	QPSK	6	0	21.56	21.39	21.57
1.4	16QAM	1	0	21.22	21.32	21.32
1.4	16QAM	1	3	21.44	21.42	21.42
1.4	16QAM	1	5	21.22	21.49	21.44
1.4	16QAM	3	0	21.57	21.49	21.36
1.4	16QAM	3	1	21.48	21.40	21.51
1.4	16QAM	3	3	21.27	21.53	21.19
1.4	16QAM	6	0	21.38	21.37	21.31

LTE Band 7						
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	22.20	22.24	22.21
20	QPSK	1	49	22.18	22.14	22.15
20	QPSK	1	99	22.19	22.11	22.16
20	QPSK	50	0	21.33	21.45	21.35
20	QPSK	50	24	21.41	21.31	21.37
20	QPSK	50	50	21.34	21.22	21.37
20	QPSK	100	0	21.35	21.34	21.17
20	16QAM	1	0	21.46	21.27	21.47
20	16QAM	1	49	21.14	21.37	21.22
20	16QAM	1	99	21.05	21.42	21.12
20	16QAM	50	0	21.41	21.64	21.23
20	16QAM	50	24	21.52	21.20	21.24
20	16QAM	50	50	21.54	21.23	21.26
20	16QAM	100	0	21.19	21.25	21.50

LTE Band 7						
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	22.13	22.16	22.12
15	QPSK	1	37	22.16	22.18	22.21
15	QPSK	1	74	22.21	22.16	22.15
15	QPSK	36	0	21.44	21.35	21.09
15	QPSK	36	20	21.32	21.33	21.37
15	QPSK	36	39	21.48	21.12	21.50
15	QPSK	75	0	21.37	21.40	21.51
15	16QAM	1	0	21.43	21.34	21.22
15	16QAM	1	37	21.45	21.64	21.22
15	16QAM	1	74	21.42	21.35	21.35
15	16QAM	36	0	21.01	21.16	21.16
15	16QAM	36	20	21.29	21.12	21.26
15	16QAM	36	39	21.05	21.08	21.15
15	16QAM	75	0	21.22	21.21	21.15

LTE Band 7						
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	22.10	22.11	22.13
10	QPSK	1	25	22.12	22.12	22.12
10	QPSK	1	49	22.04	22.14	22.14
10	QPSK	25	0	21.50	21.26	21.18
10	QPSK	25	12	21.34	21.27	21.30
10	QPSK	25	25	21.25	21.25	21.36
10	QPSK	50	0	21.35	21.07	21.36
10	16QAM	1	0	21.54	21.60	21.64
10	16QAM	1	25	21.38	21.52	21.64
10	16QAM	1	49	21.45	21.25	21.66
10	16QAM	25	0	21.47	21.22	21.15
10	16QAM	25	12	21.30	21.11	21.22
10	16QAM	25	25	21.36	21.24	21.24
10	16QAM	50	0	21.37	21.26	21.22

LTE Band 7						
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	22.12	22.08	22.17
5	QPSK	1	12	22.13	22.10	22.01
5	QPSK	1	24	22.16	22.05	22.06
5	QPSK	12	0	21.46	21.20	21.14
5	QPSK	12	7	21.35	21.19	21.31
5	QPSK	12	13	21.42	21.38	21.15
5	QPSK	25	0	21.51	21.21	21.16
5	16QAM	1	0	21.46	21.40	21.35
5	16QAM	1	12	21.35	21.12	21.43
5	16QAM	1	24	21.44	21.42	21.30
5	16QAM	12	0	21.33	21.61	21.45
5	16QAM	12	7	21.42	21.46	21.41
5	16QAM	12	13	21.36	21.58	21.53
5	16QAM	25	0	21.31	21.48	21.60

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	22.41	22.49	22.35
10	QPSK	1	25	22.28	22.44	22.42
10	QPSK	1	49	22.28	22.40	22.29
10	QPSK	25	0	21.42	21.50	21.45
10	QPSK	25	12	21.39	21.49	21.30
10	QPSK	25	25	21.44	21.38	21.31
10	QPSK	50	0	21.42	21.60	21.32
10	16QAM	1	0	21.63	21.39	21.24
10	16QAM	1	25	21.42	21.29	21.42
10	16QAM	1	49	21.32	21.43	21.32
10	16QAM	25	0	21.09	21.29	21.39
10	16QAM	25	12	21.18	21.00	21.08
10	16QAM	25	25	21.08	21.09	21.09
10	16QAM	50	0	21.09	21.28	21.28

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	22.41	22.16	22.24
5	QPSK	1	12	22.30	22.41	22.34
5	QPSK	1	24	22.42	22.45	22.34
5	QPSK	12	0	21.29	21.40	21.48
5	QPSK	12	7	21.27	21.61	21.34
5	QPSK	12	13	21.32	21.28	21.60
5	QPSK	25	0	21.46	21.64	21.49
5	16QAM	1	0	21.48	21.35	21.63
5	16QAM	1	12	21.32	21.32	21.39
5	16QAM	1	24	21.46	21.39	21.32
5	16QAM	12	0	21.39	21.32	21.29
5	16QAM	12	7	21.32	21.39	21.43
5	16QAM	12	13	21.39	21.37	21.39
5	16QAM	25	0	21.43	21.29	21.39

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	22.18	22.30	22.34
3	QPSK	1	8	22.28	22.44	22.31
3	QPSK	1	14	22.28	22.40	22.48
3	QPSK	8	0	21.35	21.35	21.43
3	QPSK	8	4	21.39	21.70	21.30
3	QPSK	8	7	21.44	21.38	21.67
3	QPSK	15	0	21.42	21.60	21.32
3	16QAM	1	0	21.63	21.39	21.24
3	16QAM	1	8	21.39	21.43	21.44
3	16QAM	1	14	21.62	21.39	21.32
3	16QAM	8	0	21.32	21.29	21.39
3	16QAM	8	4	21.39	21.41	21.32
3	16QAM	8	7	21.39	21.32	21.39
3	16QAM	15	0	21.29	21.02	21.44

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	22.16	22.28	22.32
1.4	QPSK	1	3	22.26	22.42	22.29
1.4	QPSK	1	5	22.26	22.38	22.35
1.4	QPSK	3	0	22.33	22.33	22.41
1.4	QPSK	3	1	22.37	22.35	22.28
1.4	QPSK	3	3	22.42	22.36	22.33
1.4	QPSK	6	0	21.40	21.58	21.30
1.4	16QAM	1	0	21.61	21.37	21.22
1.4	16QAM	1	3	21.37	21.41	21.42
1.4	16QAM	1	5	21.60	21.37	21.30
1.4	16QAM	3	0	21.30	21.27	21.37
1.4	16QAM	3	1	21.37	21.39	21.30
1.4	16QAM	3	3	21.37	21.30	21.37
1.4	16QAM	6	0	21.27	21.00	21.42

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	22.19	22.40	22.33
10	QPSK	1	25	22.20	22.28	22.28
10	QPSK	1	49	22.20	22.35	22.34
10	QPSK	25	0	21.13	21.49	21.43
10	QPSK	25	12	21.47	21.18	21.04
10	QPSK	25	25	21.06	21.03	21.41
10	QPSK	50	0	21.51	21.13	21.13
10	16QAM	1	0	21.63	21.57	21.60
10	16QAM	1	25	21.32	21.61	21.67
10	16QAM	1	49	21.39	21.64	21.59
10	16QAM	25	0	21.32	21.29	21.29
10	16QAM	25	12	21.39	21.39	21.39
10	16QAM	25	25	21.32	21.39	21.32
10	16QAM	50	0	21.19	20.99	21.39

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				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	22.16	22.26	22.40
5	QPSK	1	12	22.21	22.23	22.31
5	QPSK	1	24	22.27	22.22	22.29
5	QPSK	12	0	21.12	21.39	21.44
5	QPSK	12	7	21.17	21.09	21.51
5	QPSK	12	13	21.43	21.44	21.48
5	QPSK	25	0	21.04	21.04	21.44
5	16QAM	1	0	21.59	21.70	21.45
5	16QAM	1	12	21.59	21.45	21.53
5	16QAM	1	24	21.56	21.65	21.41
5	16QAM	12	0	21.29	21.22	21.13
5	16QAM	12	7	21.39	21.39	21.12
5	16QAM	12	13	21.21	21.21	21.14
5	16QAM	25	0	20.99	21.12	21.11

Effective Radiated Power and Effective Isotropic Radiated Power:

LTE Band 2				Measured E.I.R.P.					
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	22.69	0.186	22.82	0.191	22.68	0.185
20	QPSK	1	49	22.47	0.177	22.63	0.183	22.50	0.178
20	QPSK	1	99	22.61	0.182	22.59	0.182	22.69	0.186
20	QPSK	50	0	21.87	0.154	21.91	0.155	21.76	0.150
20	QPSK	50	24	21.67	0.147	21.89	0.155	21.88	0.154
20	QPSK	50	50	21.84	0.153	21.75	0.150	21.90	0.155
20	QPSK	100	0	21.86	0.153	22.03	0.160	21.83	0.152
20	16QAM	1	0	22.24	0.167	21.88	0.154	22.08	0.161
20	16QAM	1	49	21.85	0.153	21.82	0.152	22.25	0.168
20	16QAM	1	99	21.95	0.157	22.04	0.160	22.11	0.163
20	16QAM	50	0	21.75	0.150	21.59	0.144	21.73	0.149
20	16QAM	50	24	21.64	0.146	21.74	0.149	21.77	0.150
20	16QAM	50	50	21.63	0.146	21.82	0.152	21.77	0.150
20	16QAM	100	0	21.69	0.148	21.71	0.148	21.79	0.151

LTE Band 2				Measured E.I.R.P.					
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	22.31	0.170	22.56	0.180	22.37	0.173
15	QPSK	1	37	22.51	0.178	22.63	0.183	22.72	0.187
15	QPSK	1	74	22.52	0.179	22.57	0.181	22.57	0.181
15	QPSK	36	0	21.81	0.152	21.92	0.156	21.84	0.153
15	QPSK	36	20	21.82	0.152	21.79	0.151	21.92	0.156
15	QPSK	36	39	21.81	0.152	21.79	0.151	21.94	0.156
15	QPSK	75	0	21.59	0.144	21.80	0.151	21.86	0.153
15	16QAM	1	0	21.78	0.151	21.88	0.154	22.08	0.161
15	16QAM	1	37	22.06	0.161	21.85	0.153	22.01	0.159
15	16QAM	1	74	22.12	0.163	21.90	0.155	21.97	0.157
15	16QAM	36	0	21.80	0.151	21.92	0.156	21.95	0.157
15	16QAM	36	20	21.88	0.154	21.91	0.155	22.01	0.159
15	16QAM	36	39	21.90	0.155	22.08	0.161	21.98	0.158
15	16QAM	75	0	21.96	0.157	21.83	0.152	22.02	0.159

LTE Band 2				Measured E.I.R.P.					
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	22.62	0.183	22.48	0.177	22.72	0.187
10	QPSK	1	25	22.45	0.176	22.53	0.179	22.72	0.187
10	QPSK	1	49	22.58	0.181	22.46	0.176	22.53	0.179
10	QPSK	25	0	21.87	0.154	21.99	0.158	21.81	0.152
10	QPSK	25	12	22.00	0.158	22.12	0.163	22.24	0.167
10	QPSK	25	25	21.85	0.153	22.12	0.163	22.13	0.163
10	QPSK	50	0	21.98	0.158	21.99	0.158	22.06	0.161
10	16QAM	1	0	22.09	0.162	22.16	0.164	22.12	0.163
10	16QAM	1	25	22.39	0.173	22.02	0.159	22.13	0.163
10	16QAM	1	49	22.08	0.161	22.05	0.160	22.38	0.173
10	16QAM	25	0	21.59	0.144	21.68	0.147	21.73	0.149
10	16QAM	25	12	21.75	0.150	21.71	0.148	21.78	0.151
10	16QAM	25	25	21.53	0.142	21.88	0.154	21.87	0.154
10	16QAM	50	0	21.76	0.150	21.66	0.147	21.83	0.152

LTE Band 2				Measured E.I.R.P.					
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	22.64	0.184	22.75	0.188	22.61	0.182
5	QPSK	1	12	22.52	0.179	22.65	0.184	22.73	0.187
5	QPSK	1	24	22.63	0.183	22.74	0.188	22.72	0.187
5	QPSK	12	0	22.09	0.162	22.04	0.160	22.07	0.161
5	QPSK	12	7	21.88	0.154	22.05	0.160	22.04	0.160
5	QPSK	12	13	21.93	0.156	22.04	0.160	21.99	0.158
5	QPSK	25	0	22.05	0.160	22.15	0.164	22.01	0.159
5	16QAM	1	0	22.12	0.163	22.16	0.164	22.18	0.165
5	16QAM	1	12	22.35	0.172	22.15	0.164	22.12	0.163
5	16QAM	1	24	22.49	0.177	22.12	0.163	22.27	0.169
5	16QAM	12	0	21.70	0.148	21.76	0.150	21.79	0.151
5	16QAM	12	7	21.62	0.145	21.77	0.150	21.90	0.155
5	16QAM	12	13	21.69	0.148	21.80	0.151	21.72	0.149
5	16QAM	25	0	21.82	0.152	21.68	0.147	21.83	0.152

LTE Band 2				Measured E.I.R.P.					
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	22.54	0.179	22.74	0.188	22.79	0.190
3	QPSK	1	8	22.69	0.186	22.62	0.183	22.57	0.181
3	QPSK	1	14	22.62	0.183	22.62	0.183	22.63	0.183
3	QPSK	8	0	21.68	0.147	21.62	0.145	21.86	0.153
3	QPSK	8	4	21.61	0.145	21.64	0.146	21.81	0.152
3	QPSK	8	7	21.82	0.152	21.95	0.157	21.90	0.155
3	QPSK	15	0	21.79	0.151	21.93	0.156	22.02	0.159
3	16QAM	1	0	22.10	0.162	22.05	0.160	22.12	0.163
3	16QAM	1	8	22.24	0.167	22.06	0.161	22.16	0.164
3	16QAM	1	14	22.25	0.168	21.99	0.158	22.41	0.174
3	16QAM	8	0	21.69	0.148	21.70	0.148	21.74	0.149
3	16QAM	8	4	21.62	0.145	21.78	0.151	21.78	0.151
3	16QAM	8	7	21.75	0.150	21.80	0.151	21.69	0.148
3	16QAM	15	0	21.61	0.145	21.69	0.148	21.84	0.153

LTE Band 2				Measured E.I.R.P.					
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	22.78	0.190	22.66	0.185	22.66	0.185
1.4	QPSK	1	3	22.62	0.183	22.66	0.185	22.57	0.181
1.4	QPSK	1	5	22.73	0.187	22.66	0.185	22.39	0.173
1.4	QPSK	3	0	21.87	0.154	21.85	0.153	21.86	0.153
1.4	QPSK	3	1	21.94	0.156	21.85	0.153	21.81	0.152
1.4	QPSK	3	3	21.88	0.154	21.86	0.153	21.78	0.151
1.4	QPSK	6	0	21.77	0.150	21.83	0.152	21.89	0.155
1.4	16QAM	1	0	22.19	0.166	22.05	0.160	22.04	0.160
1.4	16QAM	1	3	22.02	0.159	22.05	0.160	22.36	0.172
1.4	16QAM	1	5	22.15	0.164	21.98	0.158	22.28	0.169
1.4	16QAM	3	0	21.61	0.145	22.00	0.158	21.76	0.150
1.4	16QAM	3	1	21.93	0.156	22.00	0.158	21.71	0.148
1.4	16QAM	3	3	21.69	0.148	21.81	0.152	21.75	0.150
1.4	16QAM	6	0	21.79	0.151	21.73	0.149	21.85	0.153

LTE Band 4				Measured E.I.R.P.					
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	22.78	0.190	22.88	0.194	22.86	0.193
20	QPSK	1	49	22.81	0.191	22.72	0.187	22.82	0.191
20	QPSK	1	99	22.61	0.182	22.74	0.188	22.70	0.186
20	QPSK	50	0	21.97	0.157	22.07	0.161	21.89	0.155
20	QPSK	50	24	21.92	0.156	21.89	0.155	22.03	0.160
20	QPSK	50	50	21.91	0.155	21.84	0.153	21.93	0.156
20	QPSK	100	0	21.86	0.153	21.77	0.150	21.93	0.156
20	16QAM	1	0	21.92	0.156	21.90	0.155	21.90	0.155
20	16QAM	1	49	21.94	0.156	21.83	0.152	21.91	0.155
20	16QAM	1	99	21.80	0.151	21.65	0.146	21.80	0.151
20	16QAM	50	0	21.72	0.149	21.90	0.155	21.79	0.151
20	16QAM	50	24	21.77	0.150	21.72	0.149	21.85	0.153
20	16QAM	50	50	21.71	0.148	21.76	0.150	22.18	0.165
20	16QAM	100	0	21.79	0.151	21.87	0.154	21.87	0.154

LTE Band 4				Measured E.I.R.P.					
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	22.86	0.193	22.63	0.183	22.72	0.187
15	QPSK	1	37	22.77	0.189	22.63	0.183	22.67	0.185
15	QPSK	1	74	22.62	0.183	22.66	0.185	22.74	0.188
15	QPSK	36	0	21.78	0.151	21.84	0.153	21.93	0.156
15	QPSK	36	20	21.87	0.154	21.83	0.152	22.12	0.163
15	QPSK	36	39	21.87	0.154	21.93	0.156	21.88	0.154
15	QPSK	75	0	21.80	0.151	21.86	0.153	22.01	0.159
15	16QAM	1	0	21.87	0.154	22.12	0.163	22.05	0.160
15	16QAM	1	37	22.06	0.161	22.04	0.160	22.15	0.164
15	16QAM	1	74	21.83	0.152	22.26	0.168	22.13	0.163
15	16QAM	36	0	21.67	0.147	21.66	0.147	21.66	0.147
15	16QAM	36	20	21.68	0.147	21.81	0.152	21.87	0.154
15	16QAM	36	39	21.80	0.151	21.70	0.148	22.04	0.160
15	16QAM	75	0	21.70	0.148	21.89	0.155	21.86	0.153

LTE Band 4				Measured E.I.R.P.					
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	22.56	0.180	22.62	0.183	22.59	0.182
10	QPSK	1	25	22.49	0.177	22.66	0.185	22.63	0.183
10	QPSK	1	49	22.40	0.174	22.58	0.181	22.58	0.181
10	QPSK	25	0	21.77	0.150	22.03	0.160	22.00	0.158
10	QPSK	25	12	21.84	0.153	21.90	0.155	22.05	0.160
10	QPSK	25	25	21.95	0.157	21.99	0.158	21.81	0.152
10	QPSK	50	0	21.70	0.148	21.84	0.153	21.88	0.154
10	16QAM	1	0	22.24	0.167	22.12	0.163	22.02	0.159
10	16QAM	1	25	22.05	0.160	22.08	0.161	22.16	0.164
10	16QAM	1	49	22.31	0.170	21.94	0.156	22.02	0.159
10	16QAM	25	0	21.77	0.150	21.80	0.151	21.86	0.153
10	16QAM	25	12	21.67	0.147	21.78	0.151	21.86	0.153
10	16QAM	25	25	22.01	0.159	21.77	0.150	21.91	0.155
10	16QAM	50	0	21.71	0.148	21.78	0.151	21.90	0.155

LTE Band 4				Measured E.I.R.P.					
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	22.69	0.186	22.87	0.194	22.50	0.178
5	QPSK	1	12	22.65	0.184	22.64	0.184	22.65	0.184
5	QPSK	1	24	22.68	0.185	22.71	0.187	22.73	0.187
5	QPSK	12	0	21.90	0.155	22.05	0.160	21.95	0.157
5	QPSK	12	7	21.94	0.156	21.96	0.157	22.00	0.158
5	QPSK	12	13	21.85	0.153	21.93	0.156	21.90	0.155
5	QPSK	25	0	21.59	0.144	21.65	0.146	21.69	0.148
5	16QAM	1	0	21.96	0.157	22.38	0.173	22.12	0.163
5	16QAM	1	12	22.02	0.159	22.36	0.172	22.05	0.160
5	16QAM	1	24	22.12	0.163	21.92	0.156	22.25	0.168
5	16QAM	12	0	21.84	0.153	21.88	0.154	21.82	0.152
5	16QAM	12	7	21.67	0.147	21.76	0.150	21.82	0.152
5	16QAM	12	13	21.92	0.156	21.78	0.151	21.94	0.156
5	16QAM	25	0	21.76	0.150	21.76	0.150	21.86	0.153

LTE Band 4				Measured E.I.R.P.					
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	22.58	0.181	22.66	0.185	22.59	0.182
3	QPSK	1	8	22.50	0.178	22.63	0.183	22.61	0.182
3	QPSK	1	14	22.51	0.178	22.29	0.169	22.70	0.186
3	QPSK	8	0	21.96	0.157	21.88	0.154	21.97	0.157
3	QPSK	8	4	21.91	0.155	21.88	0.154	22.02	0.159
3	QPSK	8	7	21.90	0.155	21.83	0.152	21.92	0.156
3	QPSK	15	0	22.12	0.163	22.02	0.159	21.71	0.148
3	16QAM	1	0	22.14	0.164	22.12	0.163	22.05	0.160
3	16QAM	1	8	22.05	0.160	22.02	0.159	22.12	0.163
3	16QAM	1	14	22.12	0.163	21.87	0.154	22.02	0.159
3	16QAM	8	0	21.94	0.156	22.12	0.163	22.01	0.159
3	16QAM	8	4	21.99	0.158	21.94	0.156	22.07	0.161
3	16QAM	8	7	21.93	0.156	21.98	0.158	22.40	0.174
3	16QAM	15	0	22.01	0.159	22.09	0.162	22.09	0.162

LTE Band 4				Measured E.I.R.P.					
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	22.62	0.183	22.70	0.186	22.63	0.183
1.4	QPSK	1	3	22.54	0.179	22.67	0.185	22.65	0.184
1.4	QPSK	1	5	22.55	0.180	22.65	0.184	22.62	0.183
1.4	QPSK	3	0	22.63	0.183	22.55	0.180	22.64	0.184
1.4	QPSK	3	1	22.79	0.190	22.76	0.189	22.76	0.189
1.4	QPSK	3	3	22.78	0.190	22.71	0.187	22.80	0.191
1.4	QPSK	6	0	22.16	0.164	22.06	0.161	21.75	0.150
1.4	16QAM	1	0	22.18	0.165	22.16	0.164	22.09	0.162
1.4	16QAM	1	3	22.09	0.162	22.06	0.161	22.16	0.164
1.4	16QAM	1	5	22.16	0.164	21.91	0.155	22.06	0.161
1.4	16QAM	3	0	21.77	0.150	21.95	0.157	21.84	0.153
1.4	16QAM	3	1	21.82	0.152	21.77	0.150	21.90	0.155
1.4	16QAM	3	3	21.76	0.150	21.81	0.152	22.05	0.160
1.4	16QAM	6	0	21.84	0.153	21.92	0.156	21.92	0.156

LTE Band 5				Measured E.R.P.					
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	20.61	0.115	20.83	0.121	20.74	0.119
10	QPSK	1	25	20.43	0.110	20.63	0.116	20.47	0.111
10	QPSK	1	49	20.65	0.116	20.66	0.116	20.75	0.119
10	QPSK	25	0	19.74	0.094	19.84	0.096	19.63	0.092
10	QPSK	25	12	19.69	0.093	19.73	0.094	19.72	0.094
10	QPSK	25	25	19.79	0.095	19.83	0.096	19.72	0.094
10	QPSK	50	0	19.77	0.095	19.74	0.094	19.81	0.096
10	16QAM	1	0	19.69	0.093	19.72	0.094	19.52	0.090
10	16QAM	1	25	19.96	0.099	19.84	0.096	19.77	0.095
10	16QAM	1	49	19.67	0.093	19.86	0.097	19.66	0.092
10	16QAM	25	0	19.64	0.092	20.02	0.100	19.96	0.099
10	16QAM	25	12	19.64	0.092	19.83	0.096	19.96	0.099
10	16QAM	25	25	19.93	0.098	19.86	0.097	19.93	0.098
10	16QAM	50	0	19.57	0.091	19.62	0.092	19.77	0.095

LTE Band 5				Measured E.R.P.					
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	20.37	0.109	20.56	0.114	20.81	0.121
5	QPSK	1	12	20.45	0.111	20.59	0.115	20.39	0.109
5	QPSK	1	24	20.45	0.111	20.72	0.118	20.47	0.111
5	QPSK	12	0	19.76	0.095	19.78	0.095	19.75	0.094
5	QPSK	12	7	19.41	0.087	19.79	0.095	19.88	0.097
5	QPSK	12	13	19.60	0.091	19.86	0.097	19.60	0.091
5	QPSK	25	0	19.72	0.094	19.66	0.092	19.85	0.097
5	16QAM	1	0	19.60	0.091	19.60	0.091	19.61	0.091
5	16QAM	1	12	19.57	0.091	19.61	0.091	19.57	0.091
5	16QAM	1	24	19.77	0.095	19.90	0.098	19.90	0.098
5	16QAM	12	0	19.68	0.093	19.83	0.096	19.91	0.098
5	16QAM	12	7	19.85	0.097	19.74	0.094	19.73	0.094
5	16QAM	12	13	19.83	0.096	19.60	0.091	19.54	0.090
5	16QAM	25	0	19.84	0.096	19.69	0.093	19.70	0.093

LTE Band 5				Measured E.R.P.					
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	20.42	0.110	20.46	0.111	20.74	0.119
3	QPSK	1	8	20.78	0.120	20.38	0.109	20.59	0.115
3	QPSK	1	14	20.48	0.112	20.41	0.110	20.69	0.117
3	QPSK	8	0	19.55	0.090	19.97	0.099	19.83	0.096
3	QPSK	8	4	19.79	0.095	19.86	0.097	19.86	0.097
3	QPSK	8	7	19.90	0.098	19.81	0.096	19.64	0.092
3	QPSK	15	0	19.72	0.094	19.68	0.093	19.97	0.099
3	16QAM	1	0	19.68	0.093	19.95	0.099	19.72	0.094
3	16QAM	1	8	20.03	0.101	19.59	0.091	20.09	0.102
3	16QAM	1	14	19.91	0.098	19.92	0.098	19.87	0.097
3	16QAM	8	0	19.63	0.092	19.83	0.096	19.85	0.097
3	16QAM	8	4	19.72	0.094	19.89	0.097	19.67	0.093
3	16QAM	8	7	19.67	0.093	19.74	0.094	19.75	0.094
3	16QAM	15	0	19.68	0.093	19.60	0.091	19.75	0.094

LTE Band 5				Measured E.R.P.					
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	20.62	0.115	20.53	0.113	20.70	0.117
1.4	QPSK	1	3	20.69	0.117	20.58	0.114	20.75	0.119
1.4	QPSK	1	5	20.67	0.117	20.61	0.115	20.80	0.120
1.4	QPSK	3	0	20.65	0.116	20.54	0.113	20.60	0.115
1.4	QPSK	3	1	20.58	0.114	20.53	0.113	20.73	0.118
1.4	QPSK	3	3	20.53	0.113	20.51	0.112	20.63	0.116
1.4	QPSK	6	0	19.91	0.098	19.74	0.094	19.92	0.098
1.4	16QAM	1	0	19.57	0.091	19.67	0.093	19.67	0.093
1.4	16QAM	1	3	19.79	0.095	19.77	0.095	19.77	0.095
1.4	16QAM	1	5	19.57	0.091	19.84	0.096	19.79	0.095
1.4	16QAM	3	0	19.92	0.098	19.84	0.096	19.71	0.094
1.4	16QAM	3	1	19.83	0.096	19.75	0.094	19.86	0.097
1.4	16QAM	3	3	19.62	0.092	19.88	0.097	19.54	0.090
1.4	16QAM	6	0	19.73	0.094	19.72	0.094	19.66	0.092

LTE Band 7				Measured E.I.R.P.					
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	22.70	0.186	22.74	0.188	22.71	0.187
20	QPSK	1	49	22.68	0.185	22.64	0.184	22.65	0.184
20	QPSK	1	99	22.69	0.186	22.61	0.182	22.66	0.185
20	QPSK	50	0	21.83	0.152	21.95	0.157	21.85	0.153
20	QPSK	50	24	21.91	0.155	21.81	0.152	21.87	0.154
20	QPSK	50	50	21.84	0.153	21.72	0.149	21.87	0.154
20	QPSK	100	0	21.85	0.153	21.84	0.153	21.67	0.147
20	16QAM	1	0	21.96	0.157	21.77	0.150	21.97	0.157
20	16QAM	1	49	21.64	0.146	21.87	0.154	21.72	0.149
20	16QAM	1	99	21.55	0.143	21.92	0.156	21.62	0.145
20	16QAM	50	0	21.91	0.155	22.14	0.164	21.73	0.149
20	16QAM	50	24	22.02	0.159	21.70	0.148	21.74	0.149
20	16QAM	50	50	22.04	0.160	21.73	0.149	21.76	0.150
20	16QAM	100	0	21.69	0.148	21.75	0.150	22.00	0.158

LTE Band 7				Measured E.I.R.P.					
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	22.63	0.183	22.66	0.185	22.62	0.183
15	QPSK	1	37	22.66	0.185	22.68	0.185	22.71	0.187
15	QPSK	1	74	22.71	0.187	22.66	0.185	22.65	0.184
15	QPSK	36	0	21.94	0.156	21.85	0.153	21.59	0.144
15	QPSK	36	20	21.82	0.152	21.83	0.152	21.87	0.154
15	QPSK	36	39	21.98	0.158	21.62	0.145	22.00	0.158
15	QPSK	75	0	21.87	0.154	21.90	0.155	22.01	0.159
15	16QAM	1	0	21.93	0.156	21.84	0.153	21.72	0.149
15	16QAM	1	37	21.95	0.157	22.14	0.164	21.72	0.149
15	16QAM	1	74	21.92	0.156	21.85	0.153	21.85	0.153
15	16QAM	36	0	21.51	0.142	21.66	0.147	21.66	0.147
15	16QAM	36	20	21.79	0.151	21.62	0.145	21.76	0.150
15	16QAM	36	39	21.55	0.143	21.58	0.144	21.65	0.146
15	16QAM	75	0	21.72	0.149	21.71	0.148	21.65	0.146

LTE Band 7				Measured E.I.R.P.					
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	22.60	0.182	22.61	0.182	22.63	0.183
10	QPSK	1	25	22.62	0.183	22.62	0.183	22.62	0.183
10	QPSK	1	49	22.54	0.179	22.64	0.184	22.64	0.184
10	QPSK	25	0	22.00	0.158	21.76	0.150	21.68	0.147
10	QPSK	25	12	21.84	0.153	21.77	0.150	21.80	0.151
10	QPSK	25	25	21.75	0.150	21.75	0.150	21.86	0.153
10	QPSK	50	0	21.85	0.153	21.57	0.144	21.86	0.153
10	16QAM	1	0	22.04	0.160	22.10	0.162	22.14	0.164
10	16QAM	1	25	21.88	0.154	22.02	0.159	22.14	0.164
10	16QAM	1	49	21.95	0.157	21.75	0.150	22.16	0.164
10	16QAM	25	0	21.97	0.157	21.72	0.149	21.65	0.146
10	16QAM	25	12	21.80	0.151	21.61	0.145	21.72	0.149
10	16QAM	25	25	21.86	0.153	21.74	0.149	21.74	0.149
10	16QAM	50	0	21.87	0.154	21.76	0.150	21.72	0.149

LTE Band 7				Measured E.I.R.P.					
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	22.62	0.183	22.58	0.181	22.67	0.185
5	QPSK	1	12	22.63	0.183	22.60	0.182	22.51	0.178
5	QPSK	1	24	22.66	0.185	22.55	0.180	22.56	0.180
5	QPSK	12	0	21.96	0.157	21.70	0.148	21.64	0.146
5	QPSK	12	7	21.85	0.153	21.69	0.148	21.81	0.152
5	QPSK	12	13	21.92	0.156	21.88	0.154	21.65	0.146
5	QPSK	25	0	22.01	0.159	21.71	0.148	21.66	0.147
5	16QAM	1	0	21.96	0.157	21.90	0.155	21.85	0.153
5	16QAM	1	12	21.85	0.153	21.62	0.145	21.93	0.156
5	16QAM	1	24	21.94	0.156	21.92	0.156	21.80	0.151
5	16QAM	12	0	21.83	0.152	22.11	0.163	21.95	0.157
5	16QAM	12	7	21.92	0.156	21.96	0.157	21.91	0.155
5	16QAM	12	13	21.86	0.153	22.08	0.161	22.03	0.160
5	16QAM	25	0	21.81	0.152	21.98	0.158	22.10	0.162

LTE Band 12				Measured E.R.P.					
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	19.76	0.095	19.84	0.096	19.70	0.093
10	QPSK	1	25	19.63	0.092	19.79	0.095	19.77	0.095
10	QPSK	1	49	19.63	0.092	19.75	0.094	19.64	0.092
10	QPSK	25	0	18.77	0.075	18.85	0.077	18.80	0.076
10	QPSK	25	12	18.74	0.075	18.84	0.077	18.65	0.073
10	QPSK	25	25	18.79	0.076	18.73	0.075	18.66	0.073
10	QPSK	50	0	18.77	0.075	18.95	0.079	18.67	0.074
10	16QAM	1	0	18.98	0.079	18.74	0.075	18.59	0.072
10	16QAM	1	25	18.77	0.075	18.64	0.073	18.77	0.075
10	16QAM	1	49	18.67	0.074	18.78	0.076	18.67	0.074
10	16QAM	25	0	18.44	0.070	18.64	0.073	18.74	0.075
10	16QAM	25	12	18.53	0.071	18.35	0.068	18.43	0.070
10	16QAM	25	25	18.43	0.070	18.44	0.070	18.44	0.070
10	16QAM	50	0	18.44	0.070	18.63	0.073	18.63	0.073

LTE Band 12				Measured E.R.P.					
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	19.76	0.095	19.51	0.089	19.59	0.091
5	QPSK	1	12	19.65	0.092	19.76	0.095	19.69	0.093
5	QPSK	1	24	19.77	0.095	19.80	0.095	19.69	0.093
5	QPSK	12	0	18.64	0.073	18.75	0.075	18.83	0.076
5	QPSK	12	7	18.62	0.073	18.96	0.079	18.69	0.074
5	QPSK	12	13	18.67	0.074	18.63	0.073	18.95	0.079
5	QPSK	25	0	18.81	0.076	18.99	0.079	18.84	0.077
5	16QAM	1	0	18.83	0.076	18.70	0.074	18.98	0.079
5	16QAM	1	12	18.67	0.074	18.67	0.074	18.74	0.075
5	16QAM	1	24	18.81	0.076	18.74	0.075	18.67	0.074
5	16QAM	12	0	18.74	0.075	18.67	0.074	18.64	0.073
5	16QAM	12	7	18.67	0.074	18.74	0.075	18.78	0.076
5	16QAM	12	13	18.74	0.075	18.72	0.074	18.74	0.075
5	16QAM	25	0	18.78	0.076	18.64	0.073	18.74	0.075

LTE Band 12				Measured E.R.P.					
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	19.53	0.090	19.65	0.092	19.69	0.093
3	QPSK	1	8	19.63	0.092	19.79	0.095	19.66	0.092
3	QPSK	1	14	19.63	0.092	19.75	0.094	19.83	0.096
3	QPSK	8	0	18.70	0.074	18.70	0.074	18.78	0.076
3	QPSK	8	4	18.74	0.075	19.05	0.080	18.65	0.073
3	QPSK	8	7	18.79	0.076	18.73	0.075	19.02	0.080
3	QPSK	15	0	18.77	0.075	18.95	0.079	18.67	0.074
3	16QAM	1	0	18.98	0.079	18.74	0.075	18.59	0.072
3	16QAM	1	8	18.74	0.075	18.78	0.076	18.79	0.076
3	16QAM	1	14	18.97	0.079	18.74	0.075	18.67	0.074
3	16QAM	8	0	18.67	0.074	18.64	0.073	18.74	0.075
3	16QAM	8	4	18.74	0.075	18.76	0.075	18.67	0.074
3	16QAM	8	7	18.74	0.075	18.67	0.074	18.74	0.075
3	16QAM	15	0	18.64	0.073	18.37	0.069	18.79	0.076

LTE Band 12				Measured E.R.P.					
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	19.51	0.089	19.63	0.092	19.67	0.093
1.4	QPSK	1	3	19.61	0.091	19.77	0.095	19.64	0.092
1.4	QPSK	1	5	19.61	0.091	19.73	0.094	19.70	0.093
1.4	QPSK	3	0	19.68	0.093	19.68	0.093	19.76	0.095
1.4	QPSK	3	1	19.72	0.094	19.70	0.093	19.63	0.092
1.4	QPSK	3	3	19.77	0.095	19.71	0.094	19.68	0.093
1.4	QPSK	6	0	18.75	0.075	18.93	0.078	18.65	0.073
1.4	16QAM	1	0	18.96	0.079	18.72	0.074	18.57	0.072
1.4	16QAM	1	3	18.72	0.074	18.76	0.075	18.77	0.075
1.4	16QAM	1	5	18.95	0.079	18.72	0.074	18.65	0.073
1.4	16QAM	3	0	18.65	0.073	18.62	0.073	18.72	0.074
1.4	16QAM	3	1	18.72	0.074	18.74	0.075	18.65	0.073
1.4	16QAM	3	3	18.72	0.074	18.65	0.073	18.72	0.074
1.4	16QAM	6	0	18.62	0.073	18.35	0.068	18.77	0.075

LTE Band 17				Measured E.R.P.					
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	19.54	0.090	19.75	0.094	19.68	0.093
10	QPSK	1	25	19.55	0.090	19.63	0.092	19.63	0.092
10	QPSK	1	49	19.55	0.090	19.70	0.093	19.69	0.093
10	QPSK	25	0	18.48	0.070	18.84	0.077	18.78	0.076
10	QPSK	25	12	18.82	0.076	18.53	0.071	18.39	0.069
10	QPSK	25	25	18.41	0.069	18.38	0.069	18.76	0.075
10	QPSK	50	0	18.86	0.077	18.48	0.070	18.48	0.070
10	16QAM	1	0	18.98	0.079	18.92	0.078	18.95	0.079
10	16QAM	1	25	18.67	0.074	18.96	0.079	19.02	0.080
10	16QAM	1	49	18.74	0.075	18.99	0.079	18.94	0.078
10	16QAM	25	0	18.67	0.074	18.64	0.073	18.64	0.073
10	16QAM	25	12	18.74	0.075	18.74	0.075	18.74	0.075
10	16QAM	25	25	18.67	0.074	18.74	0.075	18.67	0.074
10	16QAM	50	0	18.54	0.071	18.34	0.068	18.74	0.075

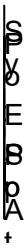
LTE Band 17				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23755		23790		23825	
Frequency (MHz)				706.5		710		713.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	19.51	0.089	19.61	0.091	19.75	0.094
5	QPSK	1	12	19.56	0.090	19.58	0.091	19.66	0.092
5	QPSK	1	24	19.62	0.092	19.57	0.091	19.64	0.092
5	QPSK	12	0	18.47	0.070	18.74	0.075	18.79	0.076
5	QPSK	12	7	18.52	0.071	18.44	0.070	18.86	0.077
5	QPSK	12	13	18.78	0.076	18.79	0.076	18.83	0.076
5	QPSK	25	0	18.39	0.069	18.39	0.069	18.79	0.076
5	16QAM	1	0	18.94	0.078	19.05	0.080	18.80	0.076
5	16QAM	1	12	18.94	0.078	18.80	0.076	18.88	0.077
5	16QAM	1	24	18.91	0.078	19.00	0.079	18.76	0.075
5	16QAM	12	0	18.64	0.073	18.57	0.072	18.48	0.070
5	16QAM	12	7	18.74	0.075	18.74	0.075	18.47	0.070
5	16QAM	12	13	18.56	0.072	18.56	0.072	18.49	0.071
5	16QAM	25	0	18.34	0.068	18.47	0.070	18.46	0.070

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 50Ohm; 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)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.25
	Low	16QAM	1.1	1.26
	Mid	QPSK	1.1	1.25
	Mid	16QAM	1.1	1.24
	High	QPSK	1.1	1.25
	High	16QAM	1.1	1.25
3	Low	QPSK	2.72	3.04
	Low	16QAM	2.71	3.04
	Mid	QPSK	2.72	3.04
	Mid	16QAM	2.72	3.05
	High	QPSK	2.72	3.03
	High	16QAM	2.72	4.12
5	Low	QPSK	4.5	4.99
	Low	16QAM	4.5	4.98
	Mid	QPSK	4.49	4.95
	Mid	16QAM	4.5	4.99
	High	QPSK	4.5	4.97
	High	16QAM	4.5	4.98
10	Low	QPSK	9.0	9.95
	Low	16QAM	8.98	9.81
	Mid	QPSK	9.03	9.91
	Mid	16QAM	8.98	9.86
	High	QPSK	9.01	9.88
	High	16QAM	8.98	9.87
15	Low	QPSK	13.46	14.91
	Low	16QAM	13.49	15.03
	Mid	QPSK	13.49	14.84
	Mid	16QAM	13.48	15.06
	High	QPSK	13.52	14.92
	High	16QAM	13.5	15.06
20	Low	QPSK	17.97	19.81
	Low	16QAM	18.02	19.91
	Mid	QPSK	18.0	19.75
	Mid	16QAM	17.99	19.68
	High	QPSK	18.02	19.91
	High	16QAM	18.04	19.9

LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.1	1.24
	Low	16QAM	1.1	1.25
	Mid	QPSK	1.1	1.25
	Mid	16QAM	1.1	1.25
	High	QPSK	1.1	1.24
	High	16QAM	1.1	1.25
3	Low	QPSK	2.72	3.05
	Low	16QAM	2.72	3.04
	Mid	QPSK	2.71	3.04
	Mid	16QAM	2.71	3.05
	High	QPSK	2.72	3.04
	High	16QAM	2.71	3.06
5	Low	QPSK	4.5	4.98
	Low	16QAM	4.5	4.97
	Mid	QPSK	4.5	4.99
	Mid	16QAM	4.5	4.98
	High	QPSK	4.5	4.97
	High	16QAM	4.49	5.01
10	Low	QPSK	9.0	9.88
	Low	16QAM	8.98	9.82
	Mid	QPSK	9.01	9.91
	Mid	16QAM	8.97	9.83
	High	QPSK	9.02	9.86
	High	16QAM	8.97	9.78
15	Low	QPSK	13.49	14.97
	Low	16QAM	13.49	15.03
	Mid	QPSK	13.52	14.96
	Mid	16QAM	13.48	14.92
	High	QPSK	13.47	14.89
	High	16QAM	13.47	14.92
20	Low	QPSK	17.97	19.81
	Low	16QAM	18.0	19.72
	Mid	QPSK	18.0	19.74
	Mid	16QAM	18.02	19.84
	High	QPSK	17.99	19.84
	High	16QAM	18.01	19.91

LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.1	1.25
	Low	16QAM	1.09	1.25
	Mid	QPSK	1.09	1.25
	Mid	16QAM	1.1	1.25
	High	QPSK	1.09	1.24
	High	16QAM	1.1	1.26
3	Low	QPSK	2.71	3.02
	Low	16QAM	2.71	3.04
	Mid	QPSK	2.71	3.05
	Mid	16QAM	2.71	3.05
	High	QPSK	2.71	3.04
	High	16QAM	2.71	3.06
5	Low	QPSK	4.49	4.97
	Low	16QAM	4.49	4.98
	Mid	QPSK	4.5	4.99
	Mid	16QAM	4.51	5.01
	High	QPSK	4.49	4.96
	High	16QAM	4.49	5.0
10	Low	QPSK	9.01	9.89
	Low	16QAM	8.96	9.79
	Mid	QPSK	9.01	9.82
	Mid	16QAM	8.98	9.89
	High	QPSK	9.02	9.91
	High	16QAM	8.97	9.86

LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.52	5.01
	Low	16QAM	4.51	4.99
	Mid	QPSK	4.49	4.99
	Mid	16QAM	4.5	4.98
	High	QPSK	4.5	4.97
	High	16QAM	4.51	4.98
10	Low	QPSK	9.01	9.96
	Low	16QAM	8.99	9.87
	Mid	QPSK	9.01	9.85
	Mid	16QAM	8.97	9.84
	High	QPSK	8.99	9.97
	High	16QAM	8.98	9.85
15	Low	QPSK	13.47	14.93
	Low	16QAM	13.52	14.96
	Mid	QPSK	13.49	14.95
	Mid	16QAM	13.48	15.0
	High	QPSK	13.45	14.88
	High	16QAM	13.48	14.91
20	Low	QPSK	18.01	19.82
	Low	16QAM	18.06	19.82
	Mid	QPSK	18.01	19.91
	Mid	16QAM	18.05	19.78
	High	QPSK	17.96	19.77
	High	16QAM	18.02	19.83

LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.1	1.24
	Low	16QAM	1.1	1.25
	Mid	QPSK	1.09	1.24
	Mid	16QAM	1.09	1.25
	High	QPSK	1.1	1.24
	High	16QAM	1.1	1.25
3	Low	QPSK	2.72	3.05
	Low	16QAM	2.71	3.04
	Mid	QPSK	2.72	3.05
	Mid	16QAM	2.72	3.07
	High	QPSK	2.72	3.05
	High	16QAM	2.71	3.05
5	Low	QPSK	4.5	4.98
	Low	16QAM	4.51	5.02
	Mid	QPSK	4.49	4.97
	Mid	16QAM	4.5	4.96
	High	QPSK	4.5	4.98
	High	16QAM	4.5	5.01
10	Low	QPSK	9.03	9.85
	Low	16QAM	8.98	9.81
	Mid	QPSK	8.99	9.88
	Mid	16QAM	8.96	9.76
	High	QPSK	9.0	9.87
	High	16QAM	8.97	9.79

LTE Band 17				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.51	4.99
	Low	16QAM	4.5	4.97
	Mid	QPSK	4.49	4.98
	Mid	16QAM	4.5	4.97
	High	QPSK	4.51	5.0
	High	16QAM	4.51	5.0
10	Low	QPSK	8.98	9.84
	Low	16QAM	8.96	9.78
	Mid	QPSK	8.97	9.84
	Mid	16QAM	8.94	9.81
	High	QPSK	8.99	9.88
	High	16QAM	8.96	9.82

Band2 / 1.4MHz / Low CH / QPSK

Band2 / 1.4MHz / Low CH / 16QAM

Band2 / 1.4MHz / Mid CH / QPSK

Band2 / 1.4MHz / Mid CH / 16QAM

Band2 / 1.4MHz / High CH / QPSK

Band2 / 1.4MHz / High CH / 16QAM

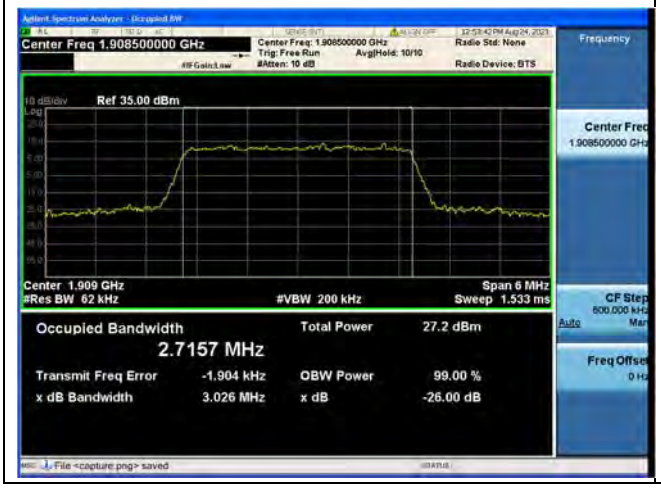
Band2 / 3MHz / Low CH / QPSK

Band2 / 3MHz / Low CH / 16QAM

Band2 / 3MHz / Mid CH / QPSK

Band2 / 3MHz / Mid CH / 16QAM

Band2 / 3MHz / High CH / QPSK



Band2 / 3MHz / High CH / 16QAM

Band2 / 5MHz / Low CH / QPSK

Band2 / 5MHz / Low CH / 16QAM

Band2 / 5MHz / Mid CH / QPSK

Band2 / 5MHz / Mid CH / 16QAM

Band2 / 5MHz / High CH / QPSK

Band2 / 5MHz / High CH / 16QAM

Band2 / 10MHz / Low CH / QPSK

Band2 / 10MHz / Low CH / 16QAM

Band2 / 10MHz / Mid CH / QPSK

Band2 / 10MHz / Mid CH / 16QAM

Band2 / 10MHz / High CH / QPSK

Band2 / 10MHz / High CH / 16QAM

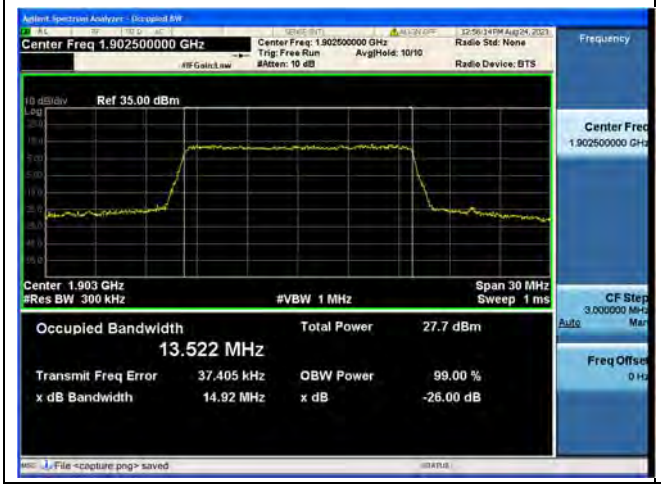
Band2 / 15MHz / Low CH / QPSK

Band2 / 15MHz / Low CH / 16QAM

Band2 / 15MHz / Mid CH / QPSK

Band2 / 15MHz / Mid CH / 16QAM

Band2 / 15MHz / High CH / QPSK



Band2 / 15MHz / High CH / 16QAM

Band2 / 20MHz / Low CH / QPSK

Band2 / 20MHz / Low CH / 16QAM

Band2 / 20MHz / Mid CH / QPSK

Band2 / 20MHz / Mid CH / 16QAM

Band2 / 20MHz / High CH / QPSK

Band2 / 20MHz / High CH / 16QAM

Band4 / 1.4MHz / Low CH / QPSK

Band4 / 1.4MHz / Low CH / 16QAM

Band4 / 1.4MHz / Mid CH / QPSK

Band4 / 1.4MHz / Mid CH / 16QAM

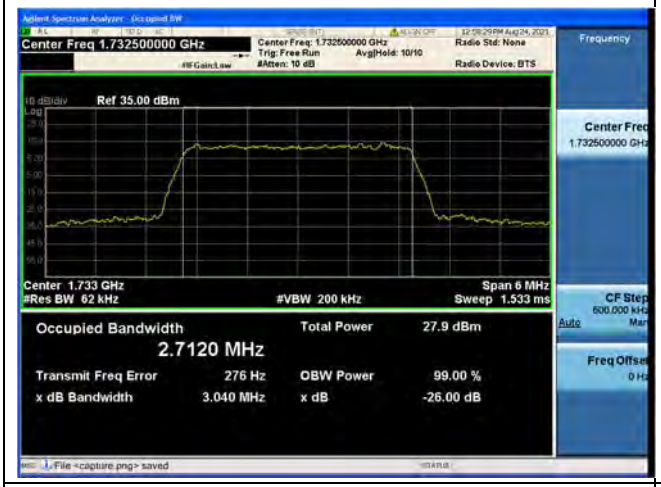
Band4 / 1.4MHz / High CH / QPSK

Band4 / 1.4MHz / High CH / 16QAM

Band4 / 3MHz / Low CH / QPSK

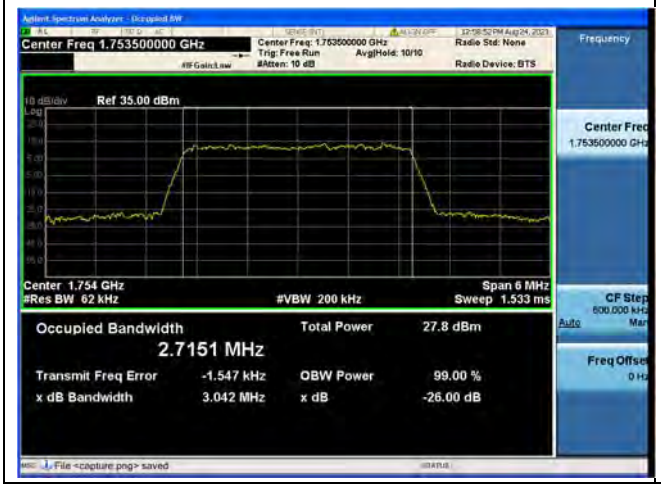
Band4 / 3MHz / Low CH / 16QAM

Band4 / 3MHz / Mid CH / QPSK



Band4 / 3MHz / Mid CH / 16QAM

Band4 / 3MHz / High CH / QPSK



Band4 / 3MHz / High CH / 16QAM

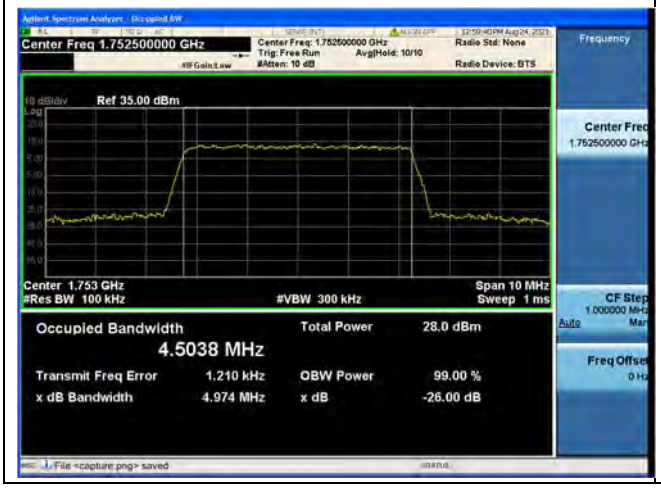
Band4 / 5MHz / Low CH / QPSK

Band4 / 5MHz / Low CH / 16QAM

Band4 / 5MHz / Mid CH / QPSK

Band4 / 5MHz / Mid CH / 16QAM

Band4 / 5MHz / High CH / QPSK

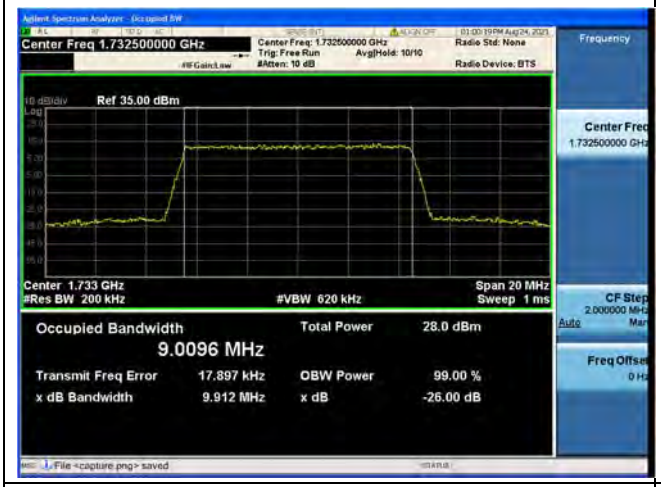


Band4 / 5MHz / High CH / 16QAM

Band4 / 10MHz / Low CH / QPSK

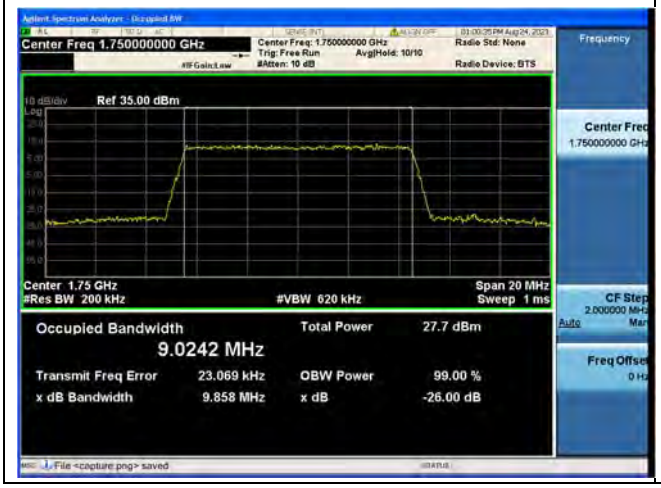
Band4 / 10MHz / Low CH / 16QAM

Band4 / 10MHz / Mid CH / QPSK



Band4 / 10MHz / Mid CH / 16QAM

Band4 / 10MHz / High CH / QPSK



Band4 / 10MHz / High CH / 16QAM

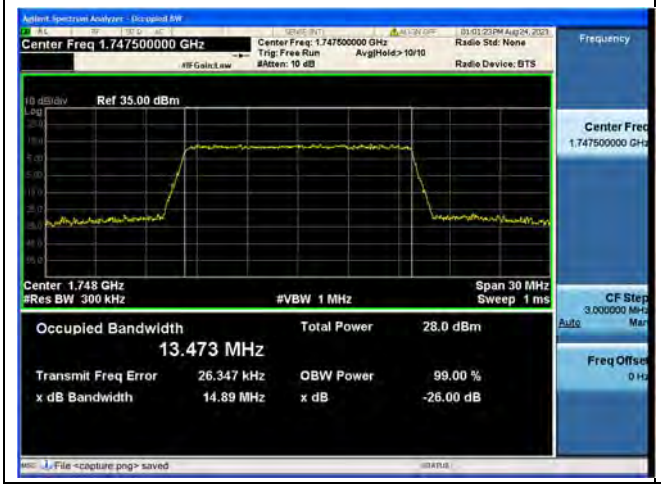
Band4 / 15MHz / Low CH / QPSK

Band4 / 15MHz / Low CH / 16QAM

Band4 / 15MHz / Mid CH / QPSK

Band4 / 15MHz / Mid CH / 16QAM

Band4 / 15MHz / High CH / QPSK

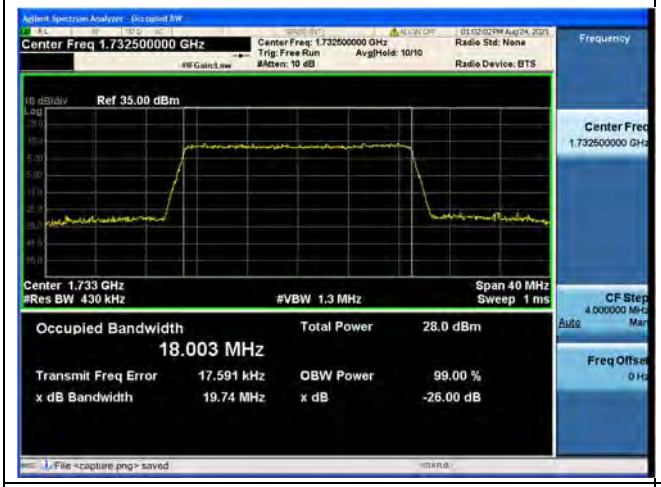


Band4 / 15MHz / High CH / 16QAM

Band4 / 20MHz / Low CH / QPSK

Band4 / 20MHz / Low CH / 16QAM

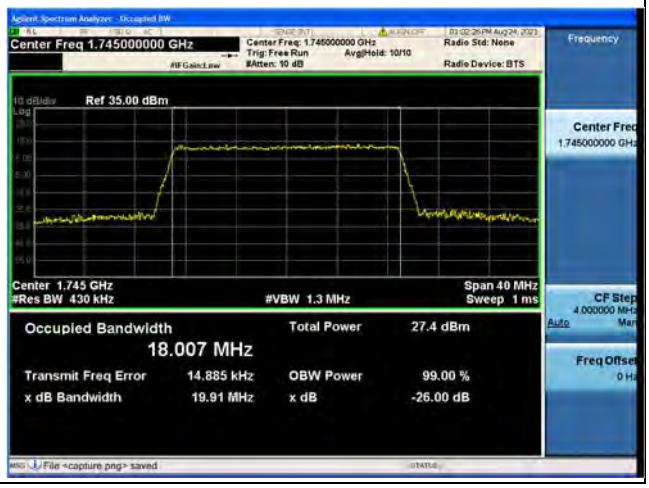
Band4 / 20MHz / Mid CH / QPSK



Band4 / 20MHz / Mid CH / 16QAM

Band4 / 20MHz / High CH / QPSK

Band4 / 20MHz / High CH / 16QAM



Band5 / 1.4MHz / Low CH / QPSK

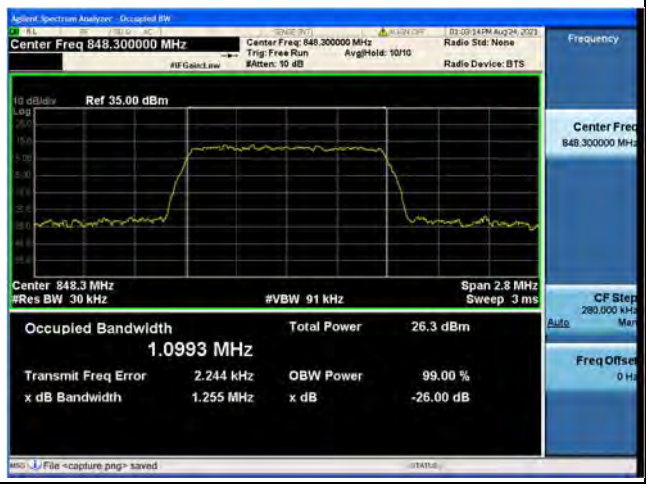
Band5 / 1.4MHz / Low CH / 16QAM

Band5 / 1.4MHz / Mid CH / QPSK

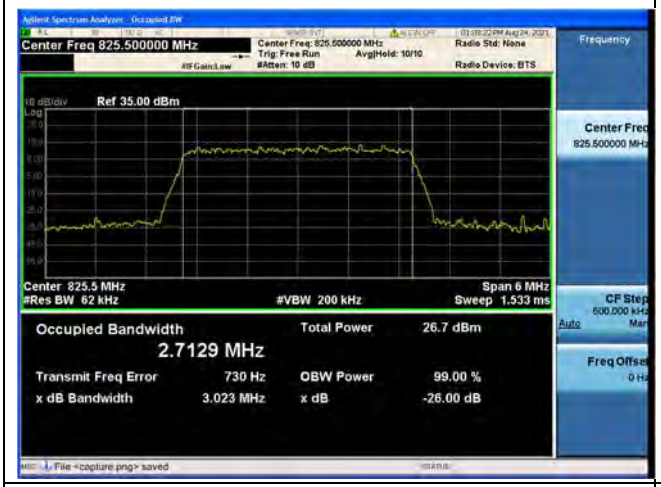
Band5 / 1.4MHz / Mid CH / 16QAM

Band5 / 1.4MHz / High CH / QPSK

Band5 / 1.4MHz / High CH / 16QAM



Band5 / 3MHz / Low CH / QPSK

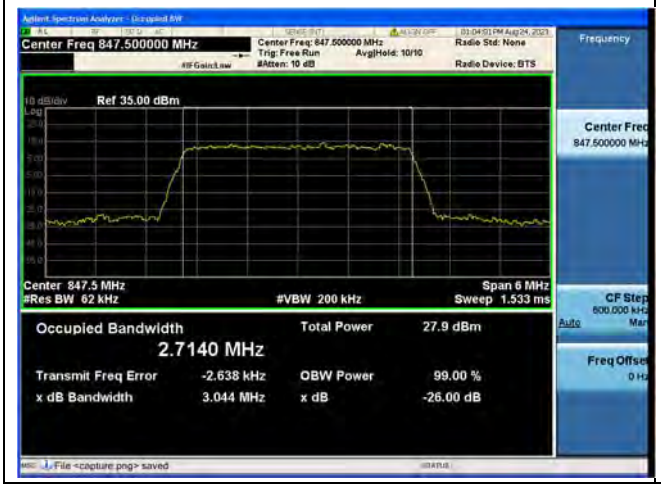


Band5 / 3MHz / Low CH / 16QAM

Band5 / 3MHz / Mid CH / QPSK

Band5 / 3MHz / Mid CH / 16QAM

Band5 / 3MHz / High CH / QPSK



Band5 / 3MHz / High CH / 16QAM

Band5 / 5MHz / Low CH / QPSK

Band5 / 5MHz / Low CH / 16QAM

Band5 / 5MHz / Mid CH / QPSK

Band5 / 5MHz / Mid CH / 16QAM

Band5 / 5MHz / High CH / QPSK

Band5 / 5MHz / High CH / 16QAM

Band5 / 10MHz / Low CH / QPSK

Band5 / 10MHz / Low CH / 16QAM

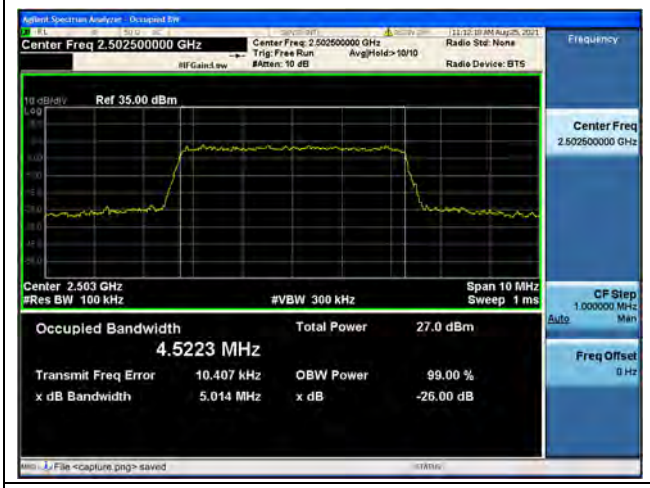
Band5 / 10MHz / Mid CH / QPSK

Band5 / 10MHz / Mid CH / 16QAM

Band5 / 10MHz / High CH / QPSK

Band5 / 10MHz / High CH / 16QAM

Band7 / 5MHz / Low CH / QPSK



Band7 / 5MHz / Low CH / 16QAM

Band7 / 5MHz / Mid CH / QPSK

Band7 / 5MHz / Mid CH / 16QAM

Band7 / 5MHz / High CH / QPSK

Band7 / 5MHz / High CH / 16QAM

Band7 / 10MHz / Low CH / QPSK

Band7 / 10MHz / Low CH / 16QAM

Band7 / 10MHz / Mid CH / QPSK

Band7 / 10MHz / Mid CH / 16QAM

Band7 / 10MHz / High CH / QPSK

Band7 / 10MHz / High CH / 16QAM

Band7 / 15MHz / Low CH / QPSK

Band7 / 15MHz / Low CH / 16QAM

Band7 / 15MHz / Mid CH / QPSK

Band7 / 15MHz / Mid CH / 16QAM

Band7 / 15MHz / High CH / QPSK

Band7 / 15MHz / High CH / 16QAM

Band7 / 20MHz / Low CH / QPSK

Band7 / 20MHz / Low CH / 16QAM

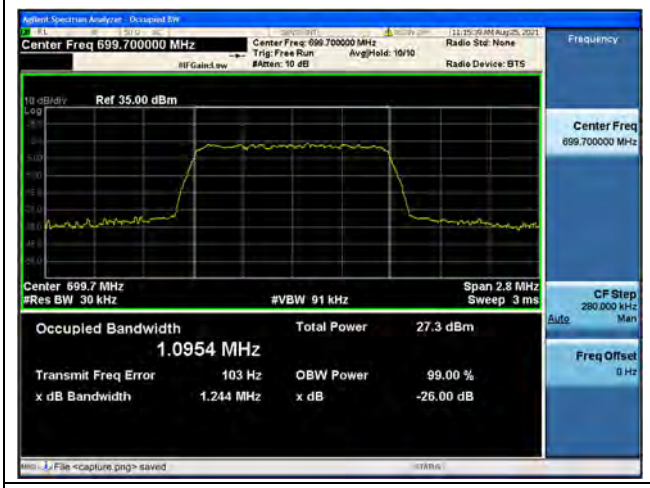
Band7 / 20MHz / Mid CH / QPSK

Band7 / 20MHz / Mid CH / 16QAM

Band7 / 20MHz / High CH / QPSK

Band7 / 20MHz / High CH / 16QAM

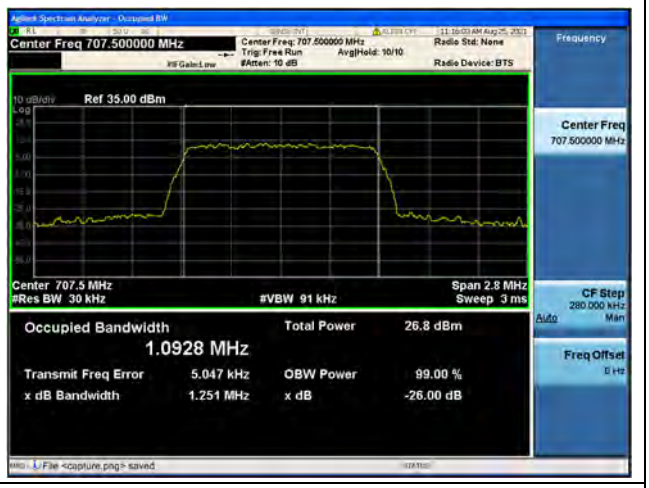
Band12 / 1.4MHz / Low CH / QPSK



Band12 / 1.4MHz / Low CH / 16QAM

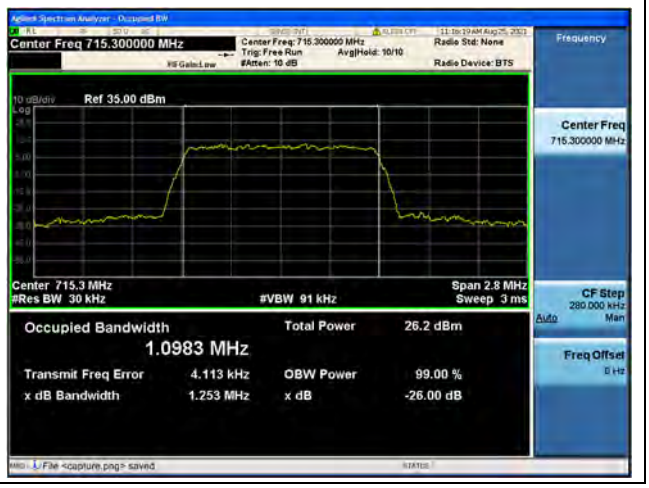
Band12 / 1.4MHz / Mid CH / QPSK

Band12 / 1.4MHz / Mid CH / 16QAM

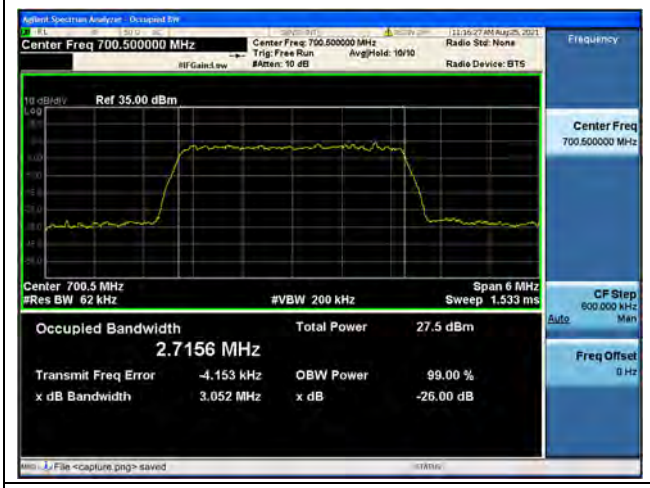


Band12 / 1.4MHz / High CH / QPSK

Band12 / 1.4MHz / High CH / 16QAM



Band12 / 3MHz / Low CH / QPSK



Band12 / 3MHz / Low CH / 16QAM

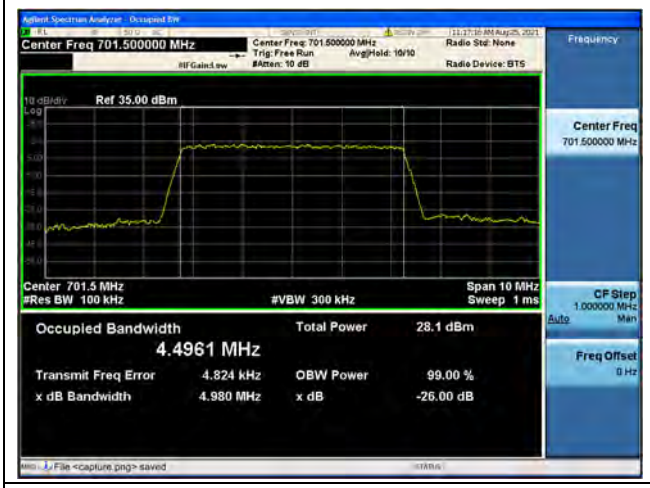
Band12 / 3MHz / Mid CH / QPSK

Band12 / 3MHz / Mid CH / 16QAM

Band12 / 3MHz / High CH / QPSK

Band12 / 3MHz / High CH / 16QAM

Band12 / 5MHz / Low CH / QPSK



Band12 / 5MHz / Low CH / 16QAM

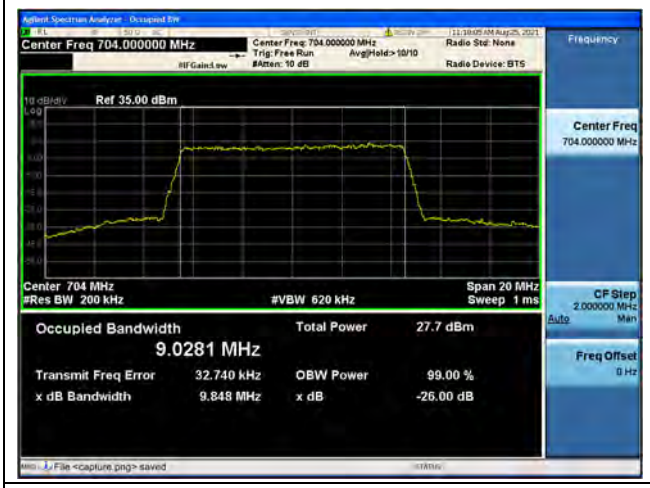
Band12 / 5MHz / Mid CH / QPSK

Band12 / 5MHz / Mid CH / 16QAM

Band12 / 5MHz / High CH / QPSK

Band12 / 5MHz / High CH / 16QAM

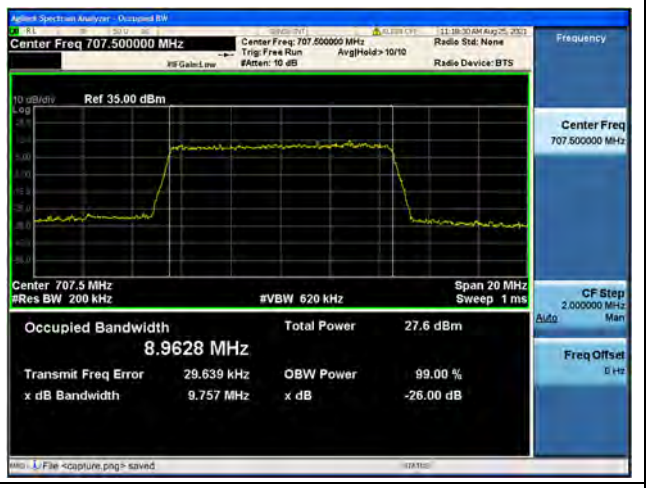
Band12 / 10MHz / Low CH / QPSK



Band12 / 10MHz / Low CH / 16QAM

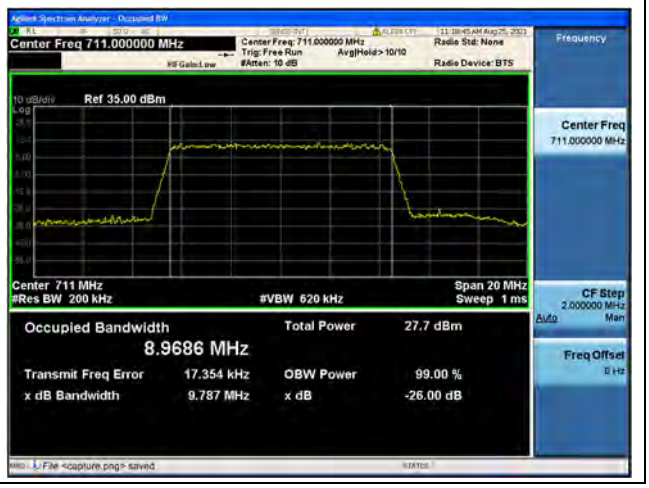
Band12 / 10MHz / Mid CH / QPSK

Band12 / 10MHz / Mid CH / 16QAM

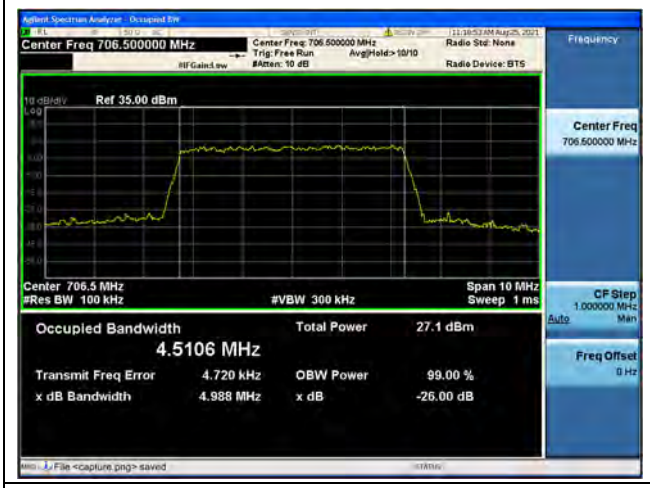


Band12 / 10MHz / High CH / QPSK

Band12 / 10MHz / High CH / 16QAM



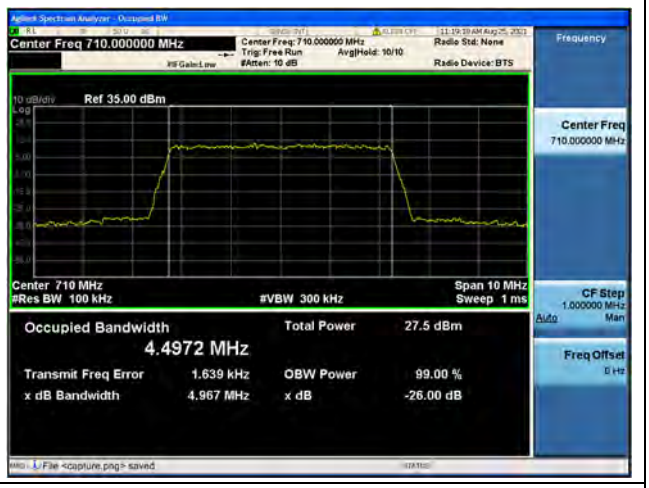
Band17 / 5MHz / Low CH / QPSK



Band17 / 5MHz / Low CH / 16QAM

Band17 / 5MHz / Mid CH / QPSK

Band17 / 5MHz / Mid CH / 16QAM

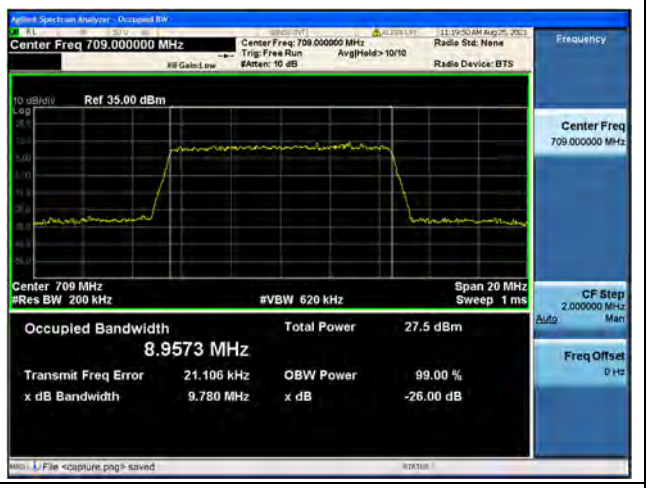


Band17 / 5MHz / High CH / QPSK

Band17 / 5MHz / High CH / 16QAM

Band17 / 10MHz / Low CH / QPSK

Band17 / 10MHz / Low CH / 16QAM



Band17 / 10MHz / Mid CH / QPSK

Band17 / 10MHz / Mid CH / 16QAM

Band17 / 10MHz / High CH / QPSK

Band17 / 10MHz / High CH / 16QAM

2.3. Frequency Stability

2.3.1. Requirement

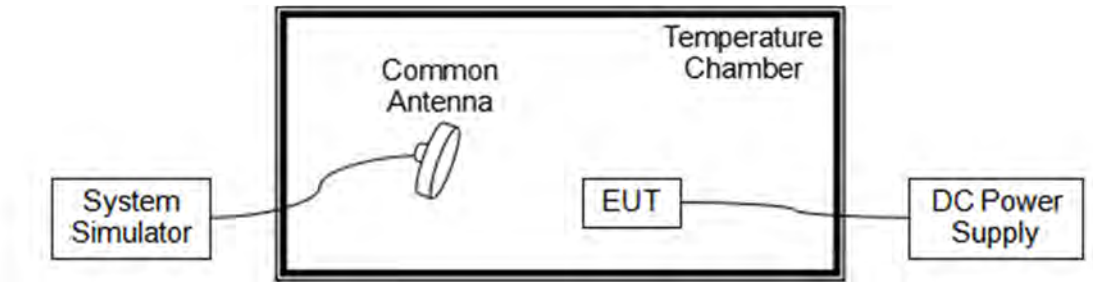
According to FCC section 2.1055, 24.235, 27.54, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

(a) The temperature is varied from -30°C to +50°C at intervals of not more than 10°C.

(b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from -10°C to 55°C, which are specified by the applicant.

2.3.2. Test Description



The EUT which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

2.3.3. Test Procedure

KDB 971168 D01v03 Section 9.0 and ANSI/TIA-603-E-2016.

2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.85V, 4.40V and 3.40V, which are specified by the applicant; the normal temperature here used is 20°C.

LTE Band 2, QPSK, Channel 18900, Frequency 1880.0MHz Limit =Within Authorized Band					
Voltage(%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20（Ref）	35	0.019	PASS
100		-20	-42	-0.022	
100		-10	-23	-0.012	
100		0	-41	-0.022	
100		+10	-43	-0.023	
100		+20	-28	-0.015	
100		+30	-35	-0.019	
100		+40	52	0.028	
100		+50	-30	-0.016	
115	4.40	+20	-35	-0.019	
85	3.40	+20	-54	-0.029	

LTE Band 4, QPSK, Channel 20175, Frequency 1732.5MHz Limit =Within Authorized Band					
Voltage(%)	**Power (VDC)**	**Temp(°C)**	**Fre. Dev.(Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20（Ref）	35	0.020	PASS
100		-20	-36	-0.021	
100		-10	30	0.017	
100		0	48	0.028	
100		+10	53	0.031	
100		+20	-58	-0.033	
100		+30	39	0.023	
100		+40	13	0.008	
100		+50	54	0.031	
115	4.40	+20	39	0.023	
85	3.40	+20	45	0.026	

LTE Band 5, QPSK, Channel 20525, Frequency 836.5MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20（Ref）	-41	-0.049	PASS
100		-20	-30	-0.036	
100		-10	36	0.043	
100		0	-22	-0.026	
100		+10	33	0.039	
100		+20	38	0.045	
100		+30	-41	-0.049	
100		+40	22	0.026	
100		+50	30	0.036	
115	4.40	+20	55	0.066	
85	3.40	+20	48	0.057	

LTE Band 7, QPSK, Channel 21100, Frequency 2535MHz Limit= Within Authorized Band					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20（Ref）	19	0.007	PASS
100		-20	-51	-0.020	
100		-10	-39	-0.015	
100		0	-20	-0.008	
100		+10	30	0.012	
100		+20	33	0.013	
100		+30	14	0.006	
100		+40	50	0.020	
100		+50	-39	-0.015	
115	4.40	+20	-51	-0.020	
85	3.40	+20	19	0.007	

LTE Band 12, QPSK, Channel 23095, Frequency 707.5MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20（Ref）	23	0.033	PASS
100		-20	-25	-0.035	
100		-10	32	0.045	
100		0	33	0.047	
100		+10	-58	-0.082	
100		+20	14	0.020	
100		+30	38	0.054	
100		+40	-44	-0.062	
100		+50	-56	-0.079	
115	4.40	+20	25	0.035	
85	3.40	+20	25	0.035	

LTE Band 17, QPSK, Channel 23790, Frequency 710MHz Limit=±2.5ppm					
Voltage (%)	**Power (VDC)**	**Temp (°C)**	**Fre. Dev. (Hz)**	**Deviation (ppm)**	**Result**
100	3.85	+20（Ref）	30	0.042	PASS
100		-20	-51	-0.072	
100		-10	53	0.075	
100		0	28	0.039	
100		+10	-53	-0.075	
100		+20	18	0.025	
100		+30	40	0.056	
100		+40	44	0.062	
100		+50	43	0.061	
115	4.40	+20	-44	-0.062	
85	3.40	+20	19	0.027	

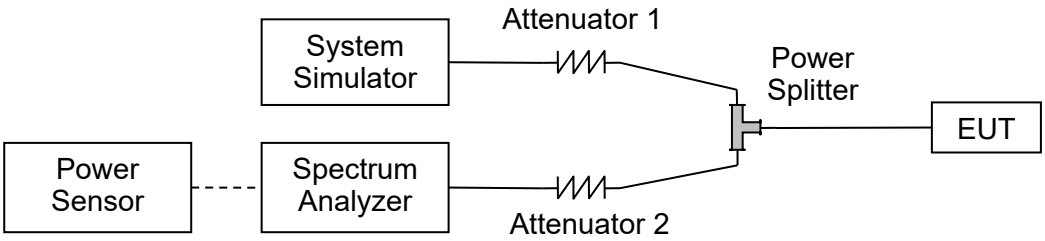
2.4. Peak to Average Radio

2.4.1. Requirement

According to FCC section 24.232(d) and 27.50(d), the peak to average ratio (PAR) of the transmission may not exceed 13dB.

2.4.2. Test Description

Test Set:



The EUTis 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 50Ohm; 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.

2.4.3. Test Procedure

KDB 971168 D01v03 Section 5.7 and ANSI/TIA-603-E-2016.

2.4.4. Test Result

Record the maximum PAPR level associated with a probability of 0.1%.

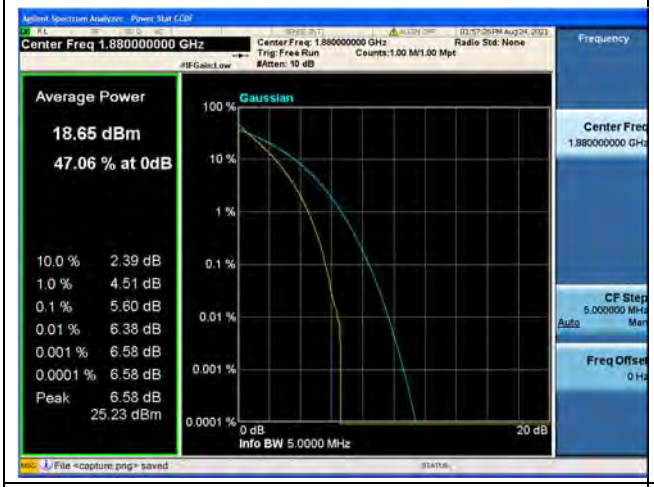
LTE Band 2					
BW(MHz)	**Channel Level**	**Modulation**	**PAR Radio(dB)**	**Limit(dB)**	**Verdict**
1.4	Low	QPSK	5.39	<=13	PASS
	Low	16QAM	6.39	<=13	PASS
	Mid	QPSK	5.6	<=13	PASS
	Mid	16QAM	6.37	<=13	PASS
	High	QPSK	5.13	<=13	PASS
	High	16QAM	5.96	<=13	PASS
3	Low	QPSK	5.59	<=13	PASS
	Low	16QAM	6.35	<=13	PASS
	Mid	QPSK	5.51	<=13	PASS
	Mid	16QAM	6.34	<=13	PASS
	High	QPSK	4.45	<=13	PASS
	High	16QAM	6.0	<=13	PASS
5	Low	QPSK	5.61	<=13	PASS
	Low	16QAM	6.25	<=13	PASS
	Mid	QPSK	5.53	<=13	PASS
	Mid	16QAM	6.22	<=13	PASS
	High	QPSK	6.4	<=13	PASS
	High	16QAM	5.89	<=13	PASS
10	Low	QPSK	5.69	<=13	PASS
	Low	16QAM	6.27	<=13	PASS
	Mid	QPSK	5.68	<=13	PASS
	Mid	16QAM	6.25	<=13	PASS
	High	QPSK	5.54	<=13	PASS
	High	16QAM	6.15	<=13	PASS
15	Low	QPSK	5.55	<=13	PASS
	Low	16QAM	6.2	<=13	PASS
	Mid	QPSK	5.52	<=13	PASS
	Mid	16QAM	6.13	<=13	PASS
	High	QPSK	5.94	<=13	PASS
	High	16QAM	6.04	<=13	PASS
20	Low	QPSK	5.56	<=13	PASS
	Low	16QAM	6.22	<=13	PASS
	Mid	QPSK	5.57	<=13	PASS
	Mid	16QAM	6.24	<=13	PASS
	High	QPSK	5.58	<=13	PASS
	High	16QAM	6.17	<=13	PASS

LTE Band 4					
BW(MHz)	**Channel Level**	**Modulation**	**PAR Radio(dB)**	**Limit(dB)**	**Verdict**
1.4	Low	QPSK	5.82	<=13	PASS
	Low	16QAM	6.64	<=13	PASS
	Mid	QPSK	5.93	<=13	PASS
	Mid	16QAM	6.77	<=13	PASS
	High	QPSK	5.68	<=13	PASS
	High	16QAM	6.49	<=13	PASS
3	Low	QPSK	5.74	<=13	PASS
	Low	16QAM	6.56	<=13	PASS
	Mid	QPSK	5.93	<=13	PASS
	Mid	16QAM	6.7	<=13	PASS
	High	QPSK	5.69	<=13	PASS
	High	16QAM	6.37	<=13	PASS
5	Low	QPSK	5.8	<=13	PASS
	Low	16QAM	6.42	<=13	PASS
	Mid	QPSK	5.82	<=13	PASS
	Mid	16QAM	6.5	<=13	PASS
	High	QPSK	5.59	<=13	PASS
	High	16QAM	6.31	<=13	PASS
10	Low	QPSK	5.88	<=13	PASS
	Low	16QAM	6.47	<=13	PASS
	Mid	QPSK	5.85	<=13	PASS
	Mid	16QAM	6.55	<=13	PASS
	High	QPSK	5.78	<=13	PASS
	High	16QAM	6.39	<=13	PASS
15	Low	QPSK	5.74	<=13	PASS
	Low	16QAM	6.44	<=13	PASS
	Mid	QPSK	5.83	<=13	PASS
	Mid	16QAM	6.47	<=13	PASS
	High	QPSK	5.7	<=13	PASS
	High	16QAM	6.33	<=13	PASS
20	Low	QPSK	5.74	<=13	PASS
	Low	16QAM	6.46	<=13	PASS
	Mid	QPSK	5.83	<=13	PASS
	Mid	16QAM	6.58	<=13	PASS
	High	QPSK	5.89	<=13	PASS
	High	16QAM	6.44	<=13	PASS

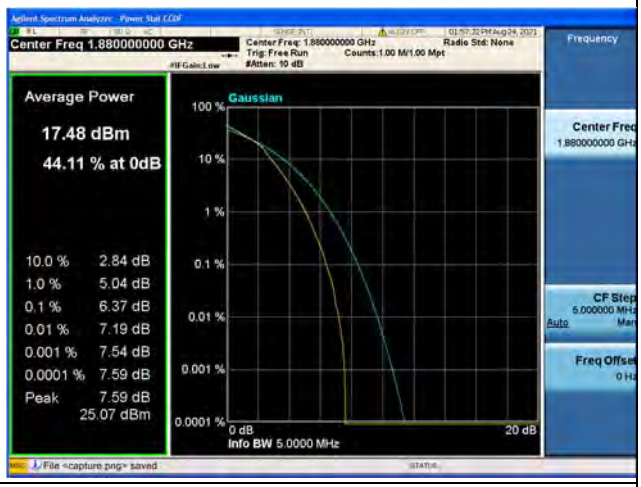
Band2 / 1.4MHz / Low CH / QPSK

Band2 / 1.4MHz / Low CH / 16QAM

Band2 / 1.4MHz / Mid CH / QPSK



Band2 / 1.4MHz / Mid CH / 16QAM



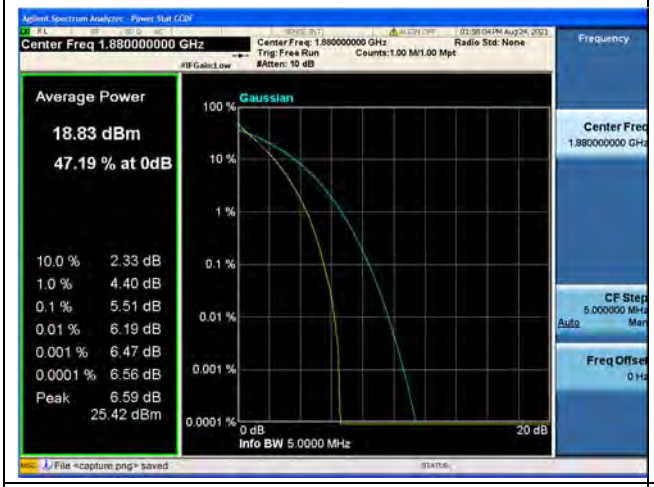
Band2 / 1.4MHz / High CH / QPSK

Band2 / 1.4MHz / High CH / 16QAM

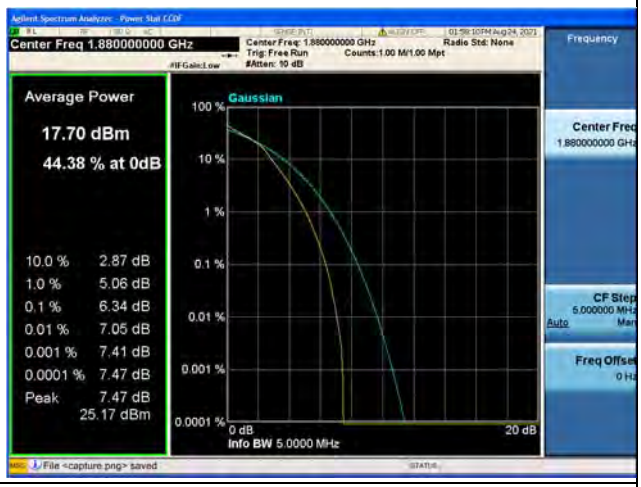
Band2 / 3MHz / Low CH / QPSK

Band2 / 3MHz / Low CH / 16QAM

Band2 / 3MHz / Mid CH / QPSK



Band2 / 3MHz / Mid CH / 16QAM



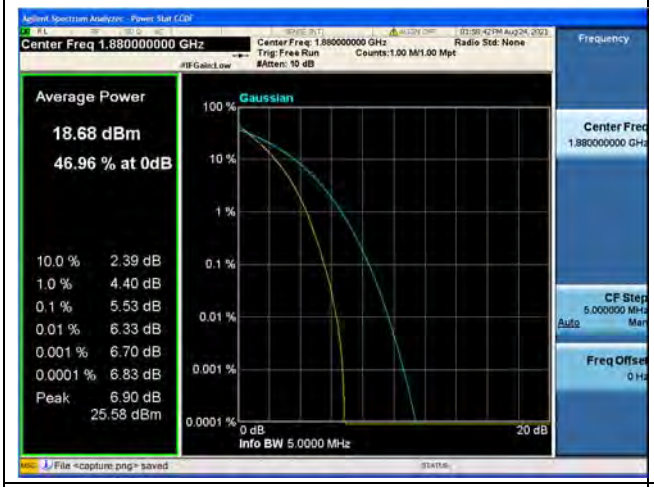
Band2 / 3MHz / High CH / QPSK

Band2 / 3MHz / High CH / 16QAM

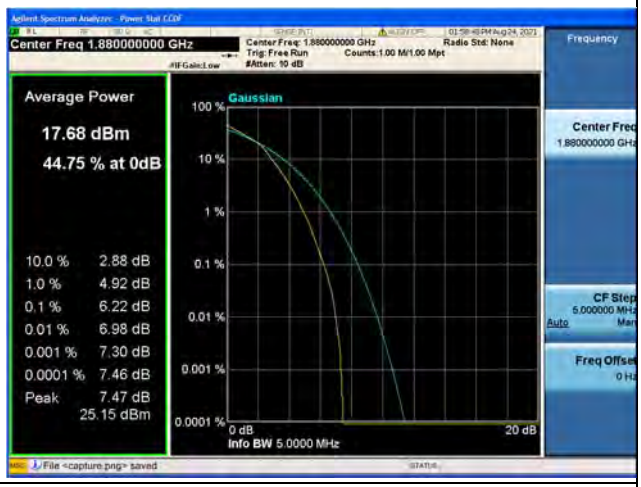
Band2 / 5MHz / Low CH / QPSK

Band2 / 5MHz / Low CH / 16QAM

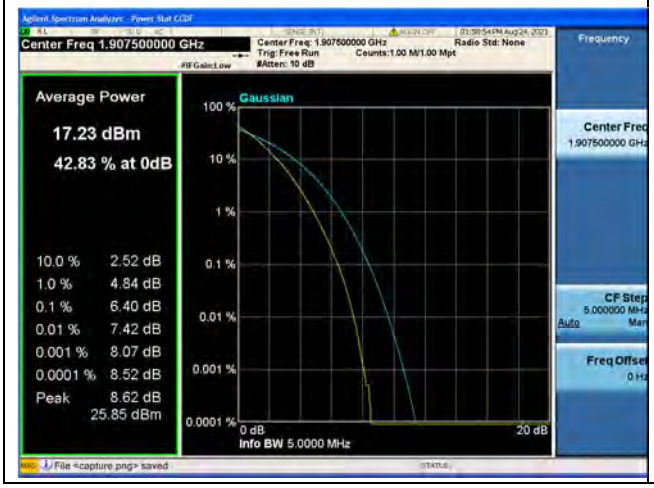
Band2 / 5MHz / Mid CH / QPSK



Band2 / 5MHz / Mid CH / 16QAM



Band2 / 5MHz / High CH / QPSK

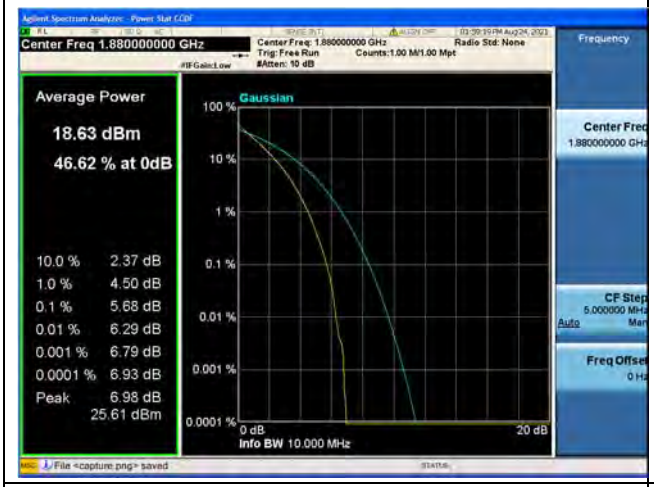


Band2 / 5MHz / High CH / 16QAM

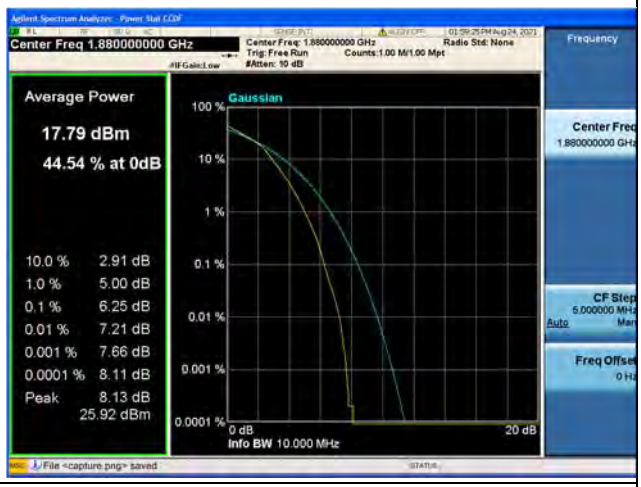
Band2 / 10MHz / Low CH / QPSK

Band2 / 10MHz / Low CH / 16QAM

Band2 / 10MHz / Mid CH / QPSK



Band2 / 10MHz / Mid CH / 16QAM



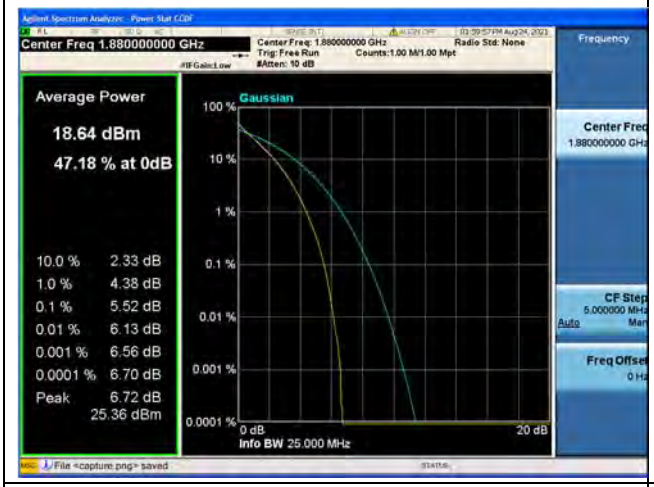
Band2 / 10MHz / High CH / QPSK

Band2 / 10MHz / High CH / 16QAM

Band2 / 15MHz / Low CH / QPSK

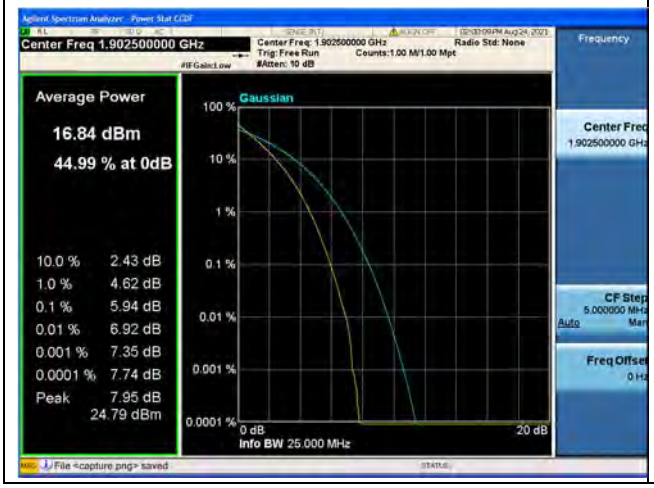
Band2 / 15MHz / Low CH / 16QAM

Band2 / 15MHz / Mid CH / QPSK



Band2 / 15MHz / Mid CH / 16QAM

Band2 / 15MHz / High CH / QPSK

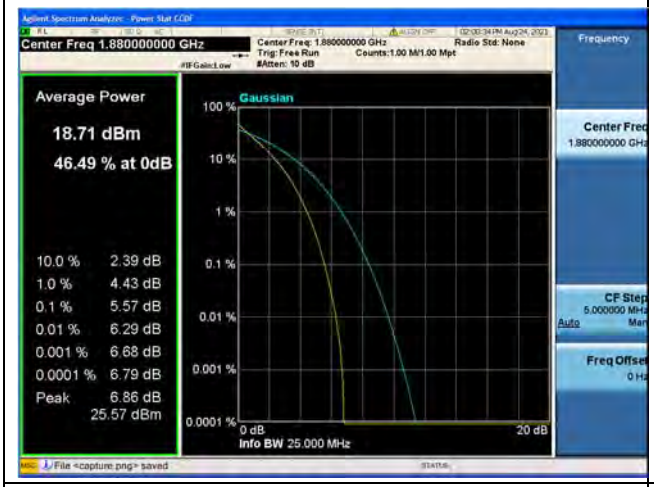


Band2 / 15MHz / High CH / 16QAM

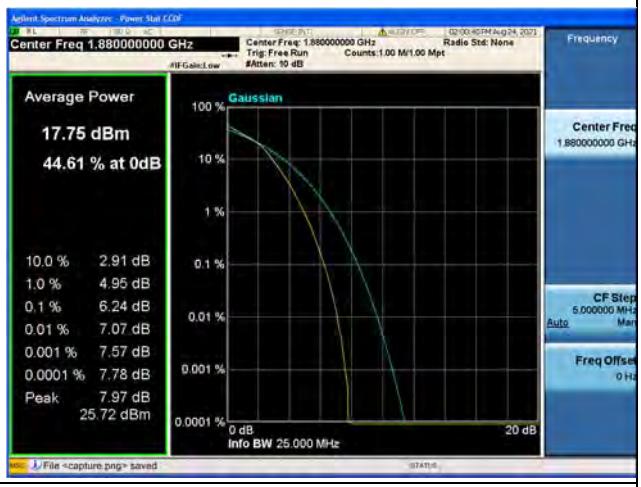
Band2 / 20MHz / Low CH / QPSK

Band2 / 20MHz / Low CH / 16QAM

Band2 / 20MHz / Mid CH / QPSK

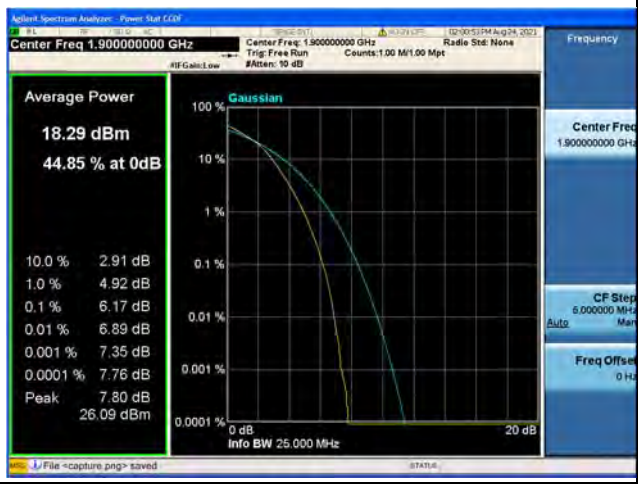


Band2 / 20MHz / Mid CH / 16QAM



Band2 / 20MHz / High CH / QPSK

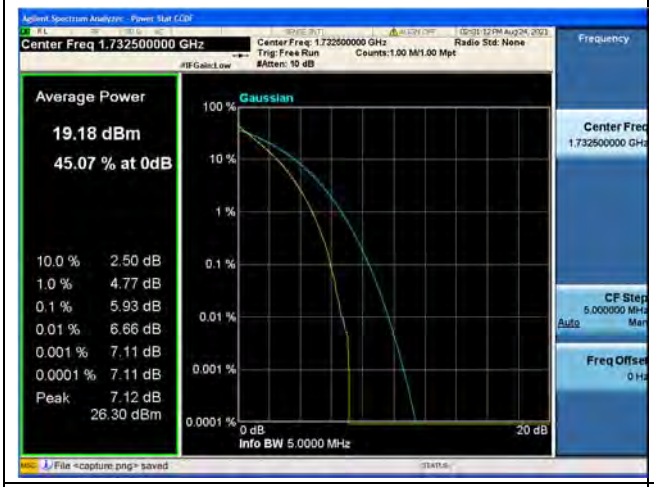
Band2 / 20MHz / High CH / 16QAM



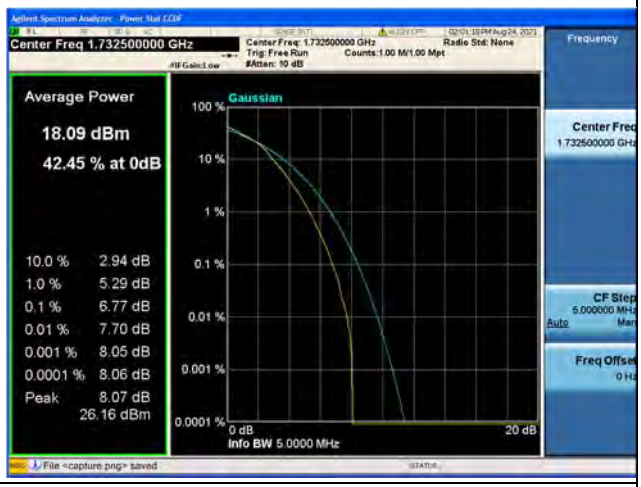
Band4 / 1.4MHz / Low CH / QPSK

Band4 / 1.4MHz / Low CH / 16QAM

Band4 / 1.4MHz / Mid CH / QPSK



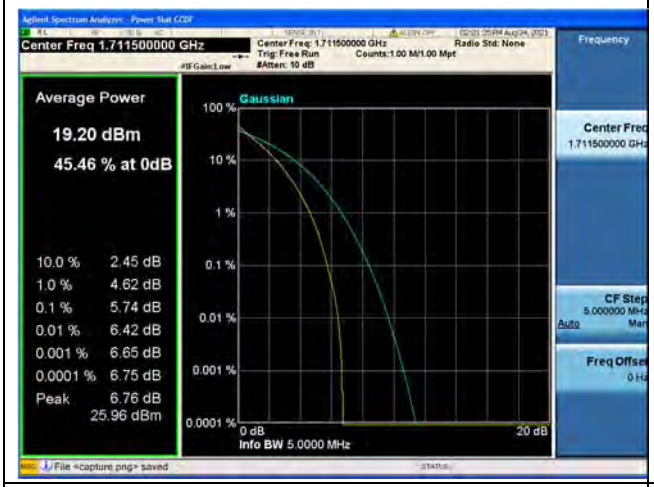
Band4 / 1.4MHz / Mid CH / 16QAM



Band4 / 1.4MHz / High CH / QPSK

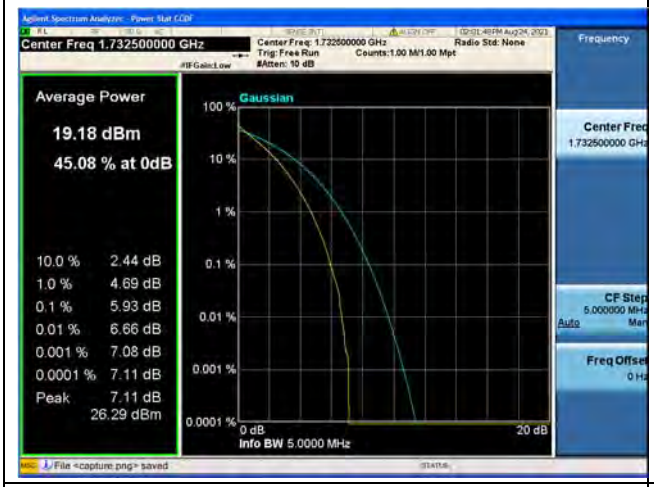
Band4 / 1.4MHz / High CH / 16QAM

Band4 / 3MHz / Low CH / QPSK

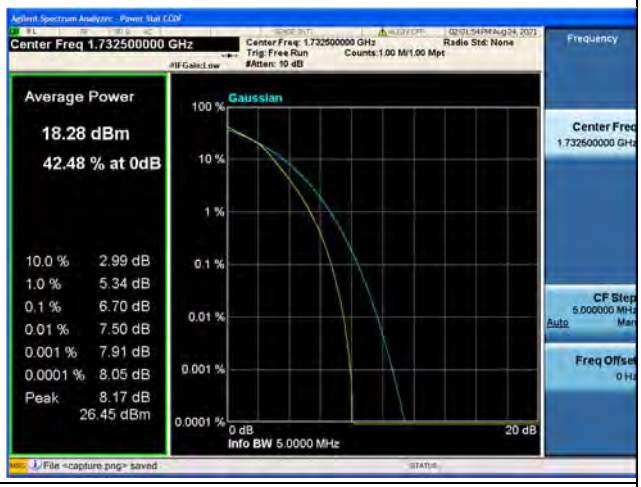


Band4 / 3MHz / Low CH / 16QAM

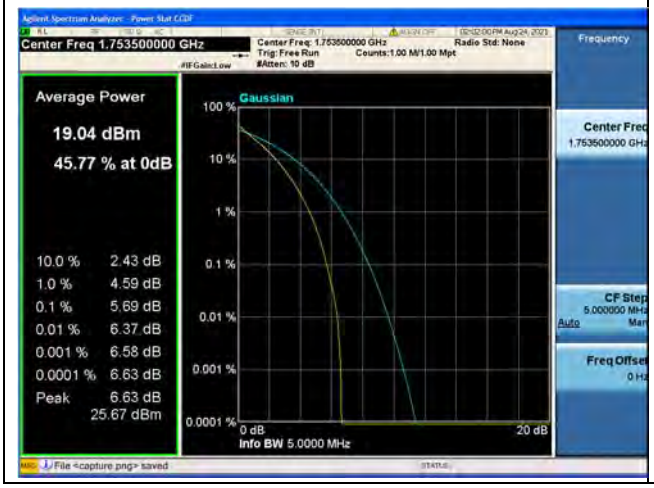
Band4 / 3MHz / Mid CH / QPSK



Band4 / 3MHz / Mid CH / 16QAM



Band4 / 3MHz / High CH / QPSK



Band4 / 3MHz / High CH / 16QAM