



REPORT No.: SZ24020115W05

TEST REPORT

APPLICANT : Fell Technology AS

PRODUCT NAME : Hub Move

MODEL NAME : W3706

BRAND NAME : Fell Technology AS

FCC ID : 2AFOZW3701

STANDARD(S) : 47 CFR Part 2
47 CFR Part 24, Subpart E
47 CFR Part 27, Subpart F&H&L

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Edited by:

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Change History		
Version	Date	Reason for change
1.0	2025-06-12	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Fell Technology AS
Applicant Address:	Bragernes Torg 2 3017 Drammen Norway
Manufacturer:	Fell Technology AS
Manufacturer Address:	Bragernes Torg 2 3017 Drammen Norway

1.2. Equipment Under Test (EUT) Description

Product Name:	Hub Move	
Sample No.:	2#	
Hardware Version:	E3	
Software Version:	3.5.16	
Modulation Type:	QPSK, 16QAM	
LTE Category:	M1	
Carrier Aggregation:	Not Support	
Operation Band:	LTE Band 2 / 4 / 12 / 13	
Frequency Range:	LTE Band 2	Tx: 1850MHz–1910MHz
		Rx: 1930MHz–1990MHz
	LTE Band 4	Tx: 1710MHz–1755MHz
		Rx: 2110MHz–2155MHz
	LTE Band 12	Tx: 699MHz – 716MHz
		Rx: 729MHz– 746MHz
	LTE Band 13	Tx: 777MHz–787MHz
		Rx: 746MHz–756MHz
Channel Bandwidth:	LTE Band 2	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 4	1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz
	LTE Band 12	1.4MHz, 3 MHz, 5 MHz, 10MHz
	LTE Band 13	5 MHz, 10MHz
Antenna Type:	Fixed Internal Antenna	
Antenna Gain:	LTE Band 2	3.00dBi
	LTE Band 4	3.00dBi



	LTE Band 12	-0.50dBi
	LTE Band 13	-0.50dBi

Note 1: This is a variant report of original report (Report No.: SZ22020094W04, FCC ID: 2AFOZW3701), based on the similarity between before, change the appearance and power supply method, and adjust the PCB layout accordingly. Enable GPS and disable WIFI function by software. Change the product name, model, hardware and software version information. There is no other change, in addition to the above, all other RF parameters and circuits remain the same as before. The changes only affect the results of frequency stability and radiated spurious emissions in this report.

Note 2: The declared of EUT description presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer for more detailed information.

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		0.258	0.263	1M14G7D	1M12W7D
15		0.258	0.262	1M13G7D	0M97W7D
10		0.265	0.255	1M13G7D	1M00W7D
5		0.265	0.256	1M13G7D	0M97W7D
3		0.243	0.195	1M11G7D	0M96W7D
1.4		0.244	0.191	1M11G7D	0M95W7D
LTE Band 4		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
20		0.282	0.284	1M14G7D	0M97W7D
15		0.281	0.278	1M13G7D	0M97W7D
10		0.282	0.281	1M13G7D	0M99W7D
5		0.284	0.272	1M13G7D	0M97W7D
3		0.276	0.216	1M11G7D	0M96W7D
1.4		0.212	0.211	1M10G7D	0M95W7D
LTE Band 12		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	QPSK	16QAM
10		0.105	0.108	1M12G7D	0M97W7D
5		0.104	0.106	1M18G7D	0M96W7D
3		0.104	0.078	1M11G7D	0M95W7D
1.4		0.103	0.077	1M11G7D	1M10W7D
LTE Band 13		Maximum E.R.P./E.I.R.P. (W)		Emission Designator (99%OBW)	
BW(MHz)		QPSK	16QAM	BW(MHz)	QPSK
10		0.084	0.085	1M12G7D	0M94W7D
5		0.090	0.092	1M12G7D	0M96W7D



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 24	Personal Communications Services
3	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	Remark
2.1046 24.232(c) 27.50(b)(10) 27.50(d)(4) 27.50(c)(10)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Apr.02 to 22, 2022	Li Huaijie ^[4]	PASS	/
2.1049	Occupied Bandwidth	Apr.02 to 27, 2022	Li Huaijie	PASS	/
2.1055 24.235 27.54	Frequency Stability	February 13, 2025	Gan Jing	PASS	/
24.232(d), 27.50(d)(5)	Peak to Average Radio	Apr.25 to 28, 2022	Li Huaijie	PASS	/
2.1051 24.238(a) 27.53(c)(2) 27.53(g) 27.53(h)	Conducted Spurious Emissions	Apr.25 to 28, 2022	Li Huaijie	PASS	/
2.1051 24.238(a) 27.53(c)(2) 27.53(g) 27.53(h)	Band Edge	Apr.25 to 28, 2022	Li Huaijie	PASS	/



2.1051 24.238(a) 27.53(c)(2) 27.53(g) 27.53(h)	Radiated Spurious Emissions	June 5, 2024 to February 13, 2025	Li Hanbin	PASS	/
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: Any additions, deviation, or exclusions from the method shall be noted in the "Remark". Note 4: The declaration of EUT presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information.					

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 24E, Part 27F&H&L 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).

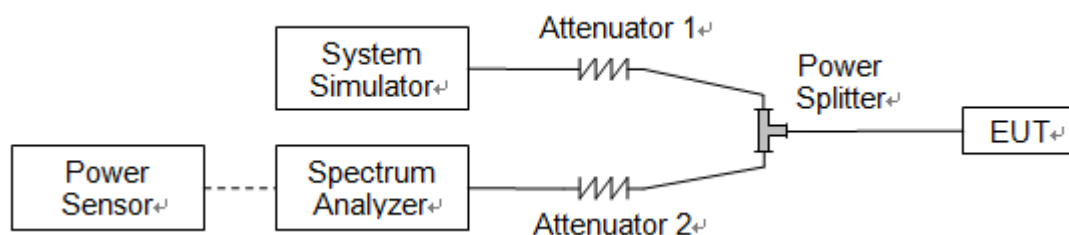
According to FCC section 24.232 (c) for LTE Band 2, Mobile and portable stations are limited to 2 watts E.I.R.P. and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

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

According to FCC section 27.50 (b)(10) for LTE Band 13, Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts 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	20.92	20.87	21.12
20	QPSK	1	5	20.68	20.64	20.79
20	QPSK	3	0	21.03	21.00	20.90
20	QPSK	3	3	20.90	20.87	20.87
20	QPSK	6	0	20.87	20.90	20.81
20	16QAM	1	0	20.99	21.03	21.20
20	16QAM	1	5	20.87	20.77	21.00
20	16QAM	3	0	20.97	20.95	20.90
20	16QAM	3	3	20.69	20.80	20.65
20	16QAM	5	0	20.76	20.86	20.96



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	21.01	21.06	21.03
15	QPSK	1	5	20.46	20.74	20.88
15	QPSK	3	0	20.96	21.06	21.11
15	QPSK	3	3	20.79	20.92	20.88
15	QPSK	6	0	20.83	20.90	20.84
15	16QAM	1	0	20.86	21.19	21.02
15	16QAM	1	5	20.81	21.07	20.65
15	16QAM	3	0	20.90	21.03	20.85
15	16QAM	3	3	20.77	20.72	20.77
15	16QAM	5	0	20.81	21.05	20.94

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	20.85	20.92	21.04
10	QPSK	1	5	20.72	20.87	20.98
10	QPSK	3	0	21.04	21.24	21.01
10	QPSK	3	3	20.92	20.99	20.97
10	QPSK	6	0	19.93	20.02	19.86
10	16QAM	1	0	20.90	21.09	20.89
10	16QAM	1	5	20.68	20.87	20.86
10	16QAM	3	0	20.86	21.04	20.70
10	16QAM	3	3	20.72	20.91	20.66
10	16QAM	5	0	20.90	20.99	20.97



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	20.80	20.84	20.97
5	QPSK	1	5	20.64	20.73	21.01
5	QPSK	3	0	21.09	21.12	21.24
5	QPSK	3	3	20.94	20.98	21.00
5	QPSK	6	0	19.94	19.97	19.87
5	16QAM	1	0	21.02	21.05	21.07
5	16QAM	1	5	20.92	20.93	20.97
5	16QAM	3	0	21.01	21.05	20.85
5	16QAM	3	3	20.74	20.88	20.58
5	16QAM	5	0	19.87	19.96	19.96

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	20.77	20.85	20.86
3	QPSK	1	5	20.64	20.73	20.74
3	QPSK	3	0	19.91	20.00	19.90
3	QPSK	3	3	19.70	19.79	19.74
3	QPSK	6	0	18.78	18.88	18.73
3	16QAM	1	0	19.75	19.80	19.91
3	16QAM	1	5	19.64	19.64	19.77
3	16QAM	3	0	18.68	18.86	18.85
3	16QAM	3	3	18.46	18.64	18.59
3	16QAM	5	0	18.59	18.78	18.53



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	19.33	18.64	20.88
1.4	QPSK	1	5	19.84	20.67	20.78
1.4	QPSK	3	0	19.74	19.84	19.92
1.4	QPSK	3	3	19.54	19.73	19.75
1.4	QPSK	6	0	19.74	18.83	18.74
1.4	16QAM	1	0	19.53	19.80	19.74
1.4	16QAM	1	5	19.73	19.66	19.58
1.4	16QAM	3	0	19.80	18.91	18.75
1.4	16QAM	3	3	19.62	18.66	18.61
1.4	16QAM	5	0	19.71	18.47	18.64



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	21.24	21.38	21.50
20	QPSK	1	5	21.02	21.17	21.36
20	QPSK	3	0	21.15	21.42	21.48
20	QPSK	3	3	20.92	21.26	21.26
20	QPSK	6	0	20.96	21.23	21.31
20	16QAM	1	0	21.20	21.30	21.54
20	16QAM	1	5	20.91	21.06	21.38
20	16QAM	3	0	20.96	21.23	21.38
20	16QAM	3	3	20.79	21.08	21.20
20	16QAM	5	0	21.02	21.17	21.38

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	21.24	21.38	21.50
15	QPSK	1	5	21.02	21.17	21.36
15	QPSK	3	0	21.15	21.42	21.48
15	QPSK	3	3	20.92	21.26	21.26
15	QPSK	6	0	20.96	21.23	21.31
15	16QAM	1	0	21.20	21.30	21.54
15	16QAM	1	5	20.91	21.06	21.38
15	16QAM	3	0	20.96	21.23	21.38
15	16QAM	3	3	20.79	21.08	21.20
15	16QAM	5	0	21.02	21.17	21.38



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
10	QPSK	1	0	21.24	21.38	21.50
10	QPSK	1	5	21.02	21.17	21.36
10	QPSK	3	0	21.15	21.42	21.48
10	QPSK	3	3	20.92	21.26	21.26
10	QPSK	6	0	20.96	21.23	21.31
10	16QAM	1	0	21.20	21.30	21.54
10	16QAM	1	5	20.91	21.06	21.38
10	16QAM	3	0	20.96	21.23	21.38
10	16QAM	3	3	20.79	21.08	21.20
10	16QAM	5	0	21.02	21.17	21.38

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	21.24	21.38	21.50
5	QPSK	1	5	21.02	21.17	21.36
5	QPSK	3	0	21.15	21.42	21.48
5	QPSK	3	3	20.92	21.26	21.26
5	QPSK	6	0	20.96	21.23	21.31
5	16QAM	1	0	21.20	21.30	21.54
5	16QAM	1	5	20.91	21.06	21.38
5	16QAM	3	0	20.96	21.23	21.38
5	16QAM	3	3	20.79	21.08	21.20
5	16QAM	5	0	21.02	21.17	21.38



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	21.24	21.38	21.50
3	QPSK	1	5	21.02	21.17	21.36
3	QPSK	3	0	21.15	21.42	21.48
3	QPSK	3	3	20.92	21.26	21.26
3	QPSK	6	0	20.96	21.23	21.31
3	16QAM	1	0	21.20	21.30	21.54
3	16QAM	1	5	20.91	21.06	21.38
3	16QAM	3	0	20.96	21.23	21.38
3	16QAM	3	3	20.79	21.08	21.20
3	16QAM	5	0	21.02	21.17	21.38

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	20.05	20.10	20.08
1.4	QPSK	1	5	19.93	20.23	20.08
1.4	QPSK	3	0	19.50	20.26	20.18
1.4	QPSK	3	3	19.70	20.03	20.08
1.4	QPSK	6	0	19.71	19.82	20.07
1.4	16QAM	1	0	19.69	20.22	20.06
1.4	16QAM	1	5	19.71	19.98	19.87
1.4	16QAM	3	0	19.50	19.83	19.99
1.4	16QAM	3	3	19.50	19.83	20.01
1.4	16QAM	5	0	19.71	19.82	20.25



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	20.70	20.43	20.52
10	QPSK	1	5	20.34	20.35	20.34
10	QPSK	3	0	20.58	20.61	20.63
10	QPSK	3	3	20.38	20.55	20.46
10	QPSK	6	0	19.44	19.48	19.45
10	16QAM	1	0	20.80	20.65	20.84
10	16QAM	1	5	20.44	20.59	20.45
10	16QAM	3	0	20.63	20.61	20.50
10	16QAM	3	3	20.30	20.44	20.40
10	16QAM	5	0	20.61	20.63	20.74

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	20.47	20.58	20.56
5	QPSK	1	5	20.29	20.38	20.35
5	QPSK	3	0	20.57	20.59	20.65
5	QPSK	3	3	20.42	20.52	20.46
5	QPSK	6	0	19.48	19.52	19.47
5	16QAM	1	0	20.64	20.69	20.77
5	16QAM	1	5	20.46	20.62	20.59
5	16QAM	3	0	20.50	20.75	20.43
5	16QAM	3	3	20.27	20.44	20.20
5	16QAM	5	0	19.66	19.56	19.46



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	20.29	20.67	20.22
3	QPSK	1	5	20.01	20.36	19.87
3	QPSK	3	0	19.45	19.60	19.36
3	QPSK	3	3	19.33	19.47	19.26
3	QPSK	6	0	18.31	18.42	18.23
3	16QAM	1	0	19.59	19.45	19.40
3	16QAM	1	5	19.39	19.37	19.22
3	16QAM	3	0	18.78	18.57	18.55
3	16QAM	3	3	18.54	18.30	18.17
3	16QAM	5	0	18.52	18.37	18.20

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	20.21	20.63	20.28
1.4	QPSK	1	5	19.13	20.55	19.99
1.4	QPSK	3	0	19.15	19.67	19.35
1.4	QPSK	3	3	19.03	19.43	19.23
1.4	QPSK	6	0	19.20	18.39	18.12
1.4	16QAM	1	0	19.12	19.38	19.19
1.4	16QAM	1	5	19.12	19.12	18.99
1.4	16QAM	3	0	19.12	18.60	18.23
1.4	16QAM	3	3	19.32	18.49	17.86
1.4	16QAM	5	0	19.12	18.48	18.21



LTE Band 13						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				/	23230	/
Frequency (MHz)				/	782	/
10	QPSK	1	0	/	19.51	/
10	QPSK	1	5	/	19.58	/
10	QPSK	3	0	/	19.73	/
10	QPSK	3	3	/	19.55	/
10	QPSK	6	0	/	18.50	/
10	16QAM	1	0	/	19.59	/
10	16QAM	1	5	/	19.57	/
10	16QAM	3	0	/	19.80	/
10	16QAM	3	3	/	19.55	/
10	16QAM	5	0	/	19.67	/

LTE Band 13						
BW [MHz]	Modulation	RB Size	RB Offset	Average Power Low Ch. / Freq.	Average Power Middle Ch. / Freq.	Average Power High Ch. / Freq.
Channel				23205	23230	23255
Frequency (MHz)				779.5	782	784.5
5	QPSK	1	0	19.68	19.77	20.00
5	QPSK	1	5	19.56	19.73	19.96
5	QPSK	3	0	19.73	19.86	20.05
5	QPSK	3	3	19.55	19.67	19.88
5	QPSK	6	0	18.50	18.63	18.94
5	16QAM	1	0	19.71	19.69	20.13
5	16QAM	1	5	19.68	19.73	19.94
5	16QAM	3	0	19.76	19.88	20.06
5	16QAM	3	3	19.47	19.77	19.88
5	16QAM	5	0	18.57	18.81	19.07

**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	23.92	0.247	23.87	0.244	24.12	0.258
20	QPSK	1	5	23.68	0.233	23.64	0.231	23.79	0.239
20	QPSK	3	0	24.03	0.253	24.00	0.251	23.90	0.245
20	QPSK	3	3	23.90	0.245	23.87	0.244	23.87	0.244
20	QPSK	6	0	23.87	0.244	23.90	0.245	23.81	0.240
20	16QAM	1	0	23.99	0.251	24.03	0.253	24.20	0.263
20	16QAM	1	5	23.87	0.244	23.77	0.238	24.00	0.251
20	16QAM	3	0	23.97	0.249	23.95	0.248	23.90	0.245
20	16QAM	3	3	23.69	0.234	23.80	0.240	23.65	0.232
20	16QAM	5	0	23.76	0.238	23.86	0.243	23.96	0.249

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	24.01	0.252	24.06	0.255	24.03	0.253
15	QPSK	1	5	23.46	0.222	23.74	0.237	23.88	0.244
15	QPSK	3	0	23.96	0.249	24.06	0.255	24.11	0.258
15	QPSK	3	3	23.79	0.239	23.92	0.247	23.88	0.244
15	QPSK	6	0	23.83	0.242	23.90	0.245	23.84	0.242
15	16QAM	1	0	23.86	0.243	24.19	0.262	24.02	0.252
15	16QAM	1	5	23.81	0.240	24.07	0.255	23.65	0.232
15	16QAM	3	0	23.90	0.245	24.03	0.253	23.85	0.243
15	16QAM	3	3	23.77	0.238	23.72	0.236	23.77	0.238
15	16QAM	5	0	23.81	0.240	24.05	0.254	23.94	0.248



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	23.85	0.243	23.92	0.247	24.04	0.254
10	QPSK	1	5	23.72	0.236	23.87	0.244	23.98	0.250
10	QPSK	3	0	24.04	0.254	24.24	0.265	24.01	0.252
10	QPSK	3	3	23.92	0.247	23.99	0.251	23.97	0.249
10	QPSK	6	0	22.93	0.196	23.02	0.200	22.86	0.193
10	16QAM	1	0	23.90	0.245	24.09	0.256	23.89	0.245
10	16QAM	1	5	23.68	0.233	23.87	0.244	23.86	0.243
10	16QAM	3	0	23.86	0.243	24.04	0.254	23.70	0.234
10	16QAM	3	3	23.72	0.236	23.91	0.246	23.66	0.232
10	16QAM	5	0	23.90	0.245	23.99	0.251	23.97	0.249

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	23.80	0.240	23.84	0.242	23.97	0.249
5	QPSK	1	5	23.64	0.231	23.73	0.236	24.01	0.252
5	QPSK	3	0	24.09	0.256	24.12	0.258	24.24	0.265
5	QPSK	3	3	23.94	0.248	23.98	0.250	24.00	0.251
5	QPSK	6	0	22.94	0.197	22.97	0.198	22.87	0.194
5	16QAM	1	0	24.02	0.252	24.05	0.254	24.07	0.255
5	16QAM	1	5	23.92	0.247	23.93	0.247	23.97	0.249
5	16QAM	3	0	24.01	0.252	24.05	0.254	23.85	0.243
5	16QAM	3	3	23.74	0.237	23.88	0.244	23.58	0.228
5	16QAM	5	0	22.87	0.194	22.96	0.198	22.96	0.198



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	23.77	0.238	23.85	0.243	23.86	0.243
3	QPSK	1	5	23.64	0.231	23.73	0.236	23.74	0.237
3	QPSK	3	0	22.91	0.195	23.00	0.200	22.90	0.195
3	QPSK	3	3	22.70	0.186	22.79	0.190	22.74	0.188
3	QPSK	6	0	21.78	0.151	21.88	0.154	21.73	0.149
3	16QAM	1	0	22.75	0.188	22.80	0.191	22.91	0.195
3	16QAM	1	5	22.64	0.184	22.64	0.184	22.77	0.189
3	16QAM	3	0	21.68	0.147	21.86	0.153	21.85	0.153
3	16QAM	3	3	21.46	0.140	21.64	0.146	21.59	0.144
3	16QAM	5	0	21.59	0.144	21.78	0.151	21.53	0.142

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	22.33	0.171	21.64	0.146	23.88	0.244
1.4	QPSK	1	5	22.84	0.192	23.67	0.233	23.78	0.239
1.4	QPSK	3	0	22.74	0.188	22.84	0.192	22.92	0.196
1.4	QPSK	3	3	22.54	0.179	22.73	0.187	22.75	0.188
1.4	QPSK	6	0	22.74	0.188	21.83	0.152	21.74	0.149
1.4	16QAM	1	0	22.53	0.179	22.80	0.191	22.74	0.188
1.4	16QAM	1	5	22.73	0.187	22.66	0.185	22.58	0.181
1.4	16QAM	3	0	22.80	0.191	21.91	0.155	21.75	0.150
1.4	16QAM	3	3	22.62	0.183	21.66	0.147	21.61	0.145
1.4	16QAM	5	0	22.71	0.187	21.47	0.140	21.64	0.146



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	24.24	0.265	24.38	0.274	24.50	0.282
20	QPSK	1	5	24.02	0.252	24.17	0.261	24.36	0.273
20	QPSK	3	0	24.15	0.260	24.42	0.277	24.48	0.281
20	QPSK	3	3	23.92	0.247	24.26	0.267	24.26	0.267
20	QPSK	6	0	23.96	0.249	24.23	0.265	24.31	0.270
20	16QAM	1	0	24.20	0.263	24.30	0.269	24.54	0.284
20	16QAM	1	5	23.91	0.246	24.06	0.255	24.38	0.274
20	16QAM	3	0	23.96	0.249	24.23	0.265	24.38	0.274
20	16QAM	3	3	23.79	0.239	24.08	0.256	24.20	0.263
20	16QAM	5	0	24.02	0.252	24.17	0.261	24.38	0.274

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	24.25	0.266	24.45	0.279	24.49	0.281
15	QPSK	1	5	24.02	0.252	24.22	0.264	24.34	0.272
15	QPSK	3	0	24.14	0.259	24.48	0.281	24.49	0.281
15	QPSK	3	3	24.02	0.252	24.25	0.266	24.32	0.270
15	QPSK	6	0	23.97	0.249	24.19	0.262	24.30	0.269
15	16QAM	1	0	24.20	0.263	24.19	0.262	24.44	0.278
15	16QAM	1	5	24.07	0.255	24.15	0.260	24.33	0.271
15	16QAM	3	0	24.00	0.251	24.28	0.268	24.29	0.269
15	16QAM	3	3	23.81	0.240	24.08	0.256	24.12	0.258
15	16QAM	5	0	24.02	0.252	24.21	0.264	24.33	0.271



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	24.07	0.255	24.46	0.279	24.45	0.279
10	QPSK	1	5	23.93	0.247	24.27	0.267	24.31	0.270
10	QPSK	3	0	24.14	0.259	24.50	0.282	24.44	0.278
10	QPSK	3	3	24.01	0.252	24.30	0.269	24.21	0.264
10	QPSK	6	0	23.08	0.203	23.31	0.214	23.28	0.213
10	16QAM	1	0	24.21	0.264	24.33	0.271	24.26	0.267
10	16QAM	1	5	24.06	0.255	24.09	0.256	24.16	0.261
10	16QAM	3	0	24.09	0.256	24.30	0.269	24.30	0.269
10	16QAM	3	3	23.73	0.236	24.18	0.262	24.09	0.256
10	16QAM	5	0	24.03	0.253	24.34	0.272	24.30	0.269

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	24.19	0.262	24.40	0.275	24.53	0.284
5	QPSK	1	5	23.97	0.249	24.07	0.255	24.39	0.275
5	QPSK	3	0	24.20	0.263	24.43	0.277	24.43	0.277
5	QPSK	3	3	23.97	0.249	24.30	0.269	24.20	0.263
5	QPSK	6	0	23.06	0.202	23.39	0.218	23.28	0.213
5	16QAM	1	0	24.15	0.260	24.33	0.271	24.48	0.281
5	16QAM	1	5	24.06	0.255	24.22	0.264	24.24	0.265
5	16QAM	3	0	24.08	0.256	24.32	0.270	24.27	0.267
5	16QAM	3	3	23.83	0.242	24.14	0.259	24.05	0.254
5	16QAM	5	0	23.19	0.208	23.33	0.215	23.34	0.216



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	21.77	0.150	24.41	0.276	24.29	0.269
3	QPSK	1	5	23.76	0.238	24.21	0.264	24.16	0.261
3	QPSK	3	0	22.89	0.195	23.29	0.213	23.33	0.215
3	QPSK	3	3	22.78	0.190	23.10	0.204	23.15	0.207
3	QPSK	6	0	21.85	0.153	22.20	0.166	22.29	0.169
3	16QAM	1	0	22.76	0.189	23.13	0.206	23.34	0.216
3	16QAM	1	5	22.63	0.183	23.03	0.201	23.19	0.208
3	16QAM	3	0	21.53	0.142	22.31	0.170	22.43	0.175
3	16QAM	3	3	21.54	0.143	21.92	0.156	22.29	0.169
3	16QAM	5	0	21.77	0.150	22.16	0.164	22.17	0.165

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	23.05	0.202	23.10	0.204	23.08	0.203
1.4	QPSK	1	5	22.93	0.196	23.23	0.210	23.08	0.203
1.4	QPSK	3	0	22.50	0.178	23.26	0.212	23.18	0.208
1.4	QPSK	3	3	22.70	0.186	23.03	0.201	23.08	0.203
1.4	QPSK	6	0	22.71	0.187	22.82	0.191	23.07	0.203
1.4	16QAM	1	0	22.69	0.186	23.22	0.210	23.06	0.202
1.4	16QAM	1	5	22.71	0.187	22.98	0.199	22.87	0.194
1.4	16QAM	3	0	22.50	0.178	22.83	0.192	22.99	0.199
1.4	16QAM	3	3	22.50	0.178	22.83	0.192	23.01	0.200
1.4	16QAM	5	0	22.71	0.187	22.82	0.191	23.25	0.211



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	20.20	0.105	19.93	0.098	20.02	0.100
10	QPSK	1	5	19.84	0.096	19.85	0.097	19.84	0.096
10	QPSK	3	0	20.08	0.102	20.11	0.103	20.13	0.103
10	QPSK	3	3	19.88	0.097	20.05	0.101	19.96	0.099
10	QPSK	6	0	18.94	0.078	18.98	0.079	18.95	0.079
10	16QAM	1	0	20.30	0.107	20.15	0.104	20.34	0.108
10	16QAM	1	5	19.94	0.099	20.09	0.102	19.95	0.099
10	16QAM	3	0	20.13	0.103	20.11	0.103	20.00	0.100
10	16QAM	3	3	19.80	0.095	19.94	0.099	19.90	0.098
10	16QAM	5	0	20.11	0.103	20.13	0.103	20.24	0.106

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	19.97	0.099	20.08	0.102	20.06	0.101
5	QPSK	1	5	19.79	0.095	19.88	0.097	19.85	0.097
5	QPSK	3	0	20.07	0.102	20.09	0.102	20.15	0.104
5	QPSK	3	3	19.92	0.098	20.02	0.100	19.96	0.099
5	QPSK	6	0	18.98	0.079	19.02	0.080	18.97	0.079
5	16QAM	1	0	20.14	0.103	20.19	0.104	20.27	0.106
5	16QAM	1	5	19.96	0.099	20.12	0.103	20.09	0.102
5	16QAM	3	0	20.00	0.100	20.25	0.106	19.93	0.098
5	16QAM	3	3	19.77	0.095	19.94	0.099	19.70	0.093
5	16QAM	5	0	19.16	0.082	19.06	0.081	18.96	0.079



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	19.79	0.095	20.17	0.104	19.72	0.094
3	QPSK	1	5	19.51	0.089	19.86	0.097	19.37	0.086
3	QPSK	3	0	18.95	0.079	19.10	0.081	18.86	0.077
3	QPSK	3	3	18.83	0.076	18.97	0.079	18.76	0.075
3	QPSK	6	0	17.81	0.060	17.92	0.062	17.73	0.059
3	16QAM	1	0	19.09	0.081	18.95	0.079	18.90	0.078
3	16QAM	1	5	18.89	0.077	18.87	0.077	18.72	0.074
3	16QAM	3	0	18.28	0.067	18.07	0.064	18.05	0.064
3	16QAM	3	3	18.04	0.064	17.80	0.060	17.67	0.058
3	16QAM	5	0	18.02	0.063	17.87	0.061	17.70	0.059

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	19.71	0.094	20.13	0.103	19.78	0.095
1.4	QPSK	1	5	18.63	0.073	20.05	0.101	19.49	0.089
1.4	QPSK	3	0	18.65	0.073	19.17	0.083	18.85	0.077
1.4	QPSK	3	3	18.53	0.071	18.93	0.078	18.73	0.075
1.4	QPSK	6	0	18.70	0.074	17.89	0.062	17.62	0.058
1.4	16QAM	1	0	18.62	0.073	18.88	0.077	18.69	0.074
1.4	16QAM	1	5	18.62	0.073	18.62	0.073	18.49	0.071
1.4	16QAM	3	0	18.62	0.073	18.10	0.065	17.73	0.059
1.4	16QAM	3	3	18.82	0.076	17.99	0.063	17.36	0.054
1.4	16QAM	5	0	18.62	0.073	17.98	0.063	17.71	0.059



LTE Band 13				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				/		23230		/	
Frequency (MHz)				/		782		/	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	/	/	19.01	0.080	/	/
10	QPSK	1	5	/	/	19.08	0.081	/	/
10	QPSK	3	0	/	/	19.23	0.084	/	/
10	QPSK	3	3	/	/	19.05	0.080	/	/
10	QPSK	6	0	/	/	18.00	0.063	/	/
10	16QAM	1	0	/	/	19.09	0.081	/	/
10	16QAM	1	5	/	/	19.07	0.081	/	/
10	16QAM	3	0	/	/	19.30	0.085	/	/
10	16QAM	3	3	/	/	19.05	0.080	/	/
10	16QAM	5	0	/	/	19.17	0.083	/	/

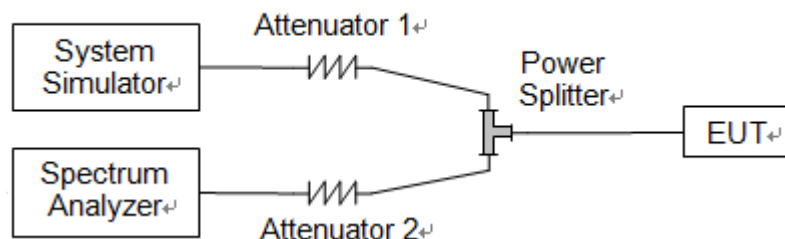
LTE Band 13				Measured E.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				23205		23230		23255	
Frequency (MHz)				779.5		782		784.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	19.18	0.083	19.27	0.085	19.50	0.089
5	QPSK	1	5	19.06	0.081	19.23	0.084	19.46	0.088
5	QPSK	3	0	19.23	0.084	19.36	0.086	19.55	0.090
5	QPSK	3	3	19.05	0.080	19.17	0.083	19.38	0.087
5	QPSK	6	0	18.00	0.063	18.13	0.065	18.44	0.070
5	16QAM	1	0	19.21	0.083	19.19	0.083	19.63	0.092
5	16QAM	1	5	19.18	0.083	19.23	0.084	19.44	0.088
5	16QAM	3	0	19.26	0.084	19.38	0.087	19.56	0.090
5	16QAM	3	3	18.97	0.079	19.27	0.085	19.38	0.087
5	16QAM	5	0	18.07	0.064	18.31	0.068	18.57	0.072

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	1.11	1.37
	Low	16QAM	0.94	1.16
	Mid	QPSK	1.11	1.36
	Mid	16QAM	0.95	1.19
	High	QPSK	1.10	1.34
	High	16QAM	0.95	1.30
3	Low	QPSK	1.11	1.31
	Low	16QAM	0.96	1.16
	Mid	QPSK	1.10	1.35
	Mid	16QAM	0.96	1.31
	High	QPSK	1.11	1.37
	High	16QAM	0.95	1.15
5	Low	QPSK	1.13	1.33
	Low	16QAM	0.97	1.24
	Mid	QPSK	1.13	1.34
	Mid	16QAM	0.97	1.20
	High	QPSK	1.10	1.33
	High	16QAM	0.96	1.17
10	Low	QPSK	1.13	1.33
	Low	16QAM	0.99	1.26
	Mid	QPSK	1.12	1.42
	Mid	16QAM	0.95	1.20
	High	QPSK	1.12	1.32
	High	16QAM	1.00	1.34
15	Low	QPSK	1.11	1.40
	Low	16QAM	0.97	1.20
	Mid	QPSK	1.12	1.44
	Mid	16QAM	0.95	1.17
	High	QPSK	1.13	1.36
	High	16QAM	0.96	1.25
20	Low	QPSK	1.14	1.45
	Low	16QAM	0.98	1.26
	Mid	QPSK	1.12	1.32
	Mid	16QAM	1.12	1.32
	High	QPSK	1.12	1.32
	High	16QAM	0.96	1.19

LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.33
	Low	16QAM	0.94	1.16
	Mid	QPSK	1.10	1.36
	Mid	16QAM	0.95	1.17
	High	QPSK	1.10	1.32
	High	16QAM	0.94	1.30
3	Low	QPSK	1.11	1.31
	Low	16QAM	0.96	1.44
	Mid	QPSK	1.11	1.32
	Mid	16QAM	0.94	1.26
	High	QPSK	1.10	1.31
	High	16QAM	0.94	1.16
5	Low	QPSK	1.11	1.33
	Low	16QAM	0.97	1.23
	Mid	QPSK	1.13	1.34
	Mid	16QAM	0.97	1.20
	High	QPSK	1.10	1.36
	High	16QAM	0.95	1.16
10	Low	QPSK	1.12	1.50
	Low	16QAM	0.96	1.19
	Mid	QPSK	1.13	1.39
	Mid	16QAM	0.98	1.43
	High	QPSK	1.12	1.40
	High	16QAM	0.99	1.23
15	Low	QPSK	1.13	1.35
	Low	16QAM	0.96	1.26
	Mid	QPSK	1.13	1.35
	Mid	16QAM	0.97	1.19
	High	QPSK	1.12	1.43
	High	16QAM	0.96	1.23
20	Low	QPSK	1.14	1.44
	Low	16QAM	0.97	1.30
	Mid	QPSK	1.13	1.35
	Mid	16QAM	0.97	1.26
	High	QPSK	1.13	1.47
	High	16QAM	0.96	1.20



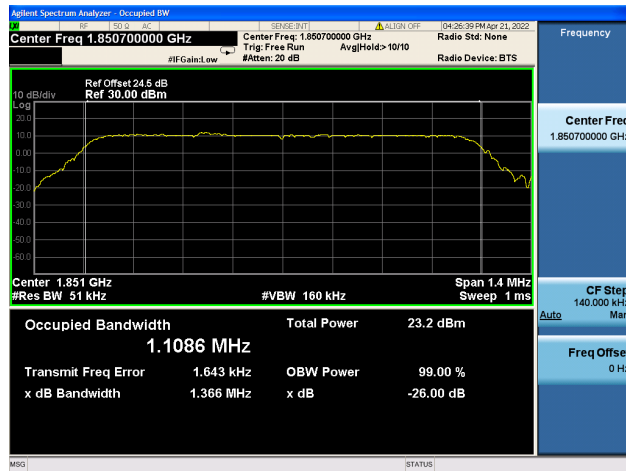
LTE Band 12				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.11	1.33
	Low	16QAM	0.94	1.16
	Mid	QPSK	1.11	1.36
	Mid	16QAM	0.94	1.15
	High	QPSK	1.11	1.35
	High	16QAM	1.10	1.29
3	Low	QPSK	1.11	1.33
	Low	16QAM	0.95	1.13
	Mid	QPSK	1.11	1.34
	Mid	16QAM	0.95	1.23
	High	QPSK	1.11	1.33
	High	16QAM	0.95	1.18
5	Low	QPSK	1.18	1.34
	Low	16QAM	0.95	1.19
	Mid	QPSK	1.12	1.33
	Mid	16QAM	0.96	1.19
	High	QPSK	1.11	1.31
	High	16QAM	0.95	1.15
10	Low	QPSK	1.11	1.34
	Low	16QAM	0.97	1.23
	Mid	QPSK	1.12	1.42
	Mid	16QAM	0.95	1.20
	High	QPSK	1.12	1.33
	High	16QAM	0.97	1.21



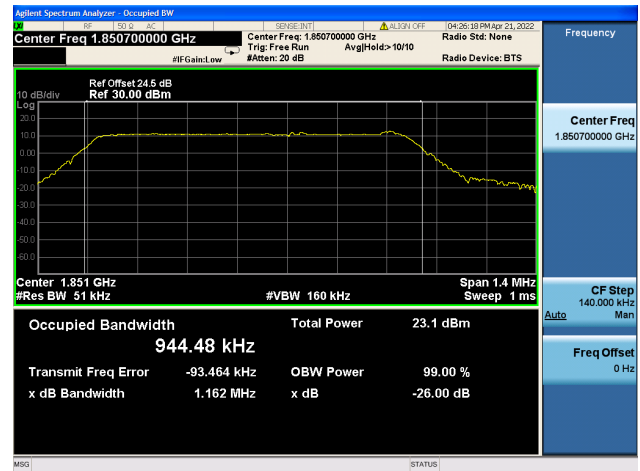
LTE Band 13				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	1.12	1.33
	Low	16QAM	0.95	1.17
	Mid	QPSK	1.12	1.33
	Mid	16QAM	0.96	1.18
	High	QPSK	1.11	1.40
	High	16QAM	0.94	1.16
10	Low	QPSK	/	/
	Low	16QAM	/	/
	Mid	QPSK	1.12	1.34
	Mid	16QAM	0.94	1.25
	High	QPSK	/	/
	High	16QAM	/	/



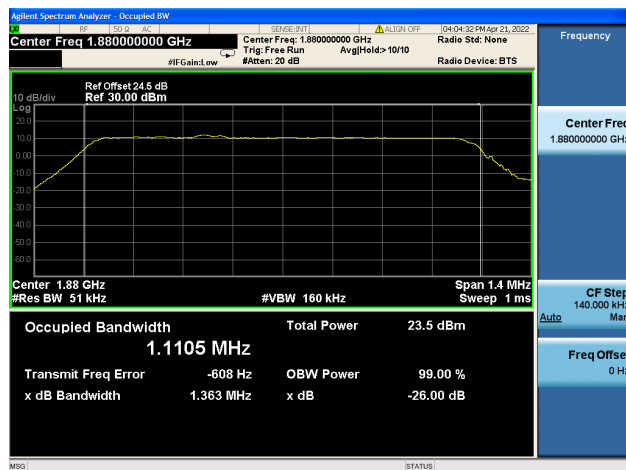
Band 2 / 1.4MHz / Low CH / QPSK



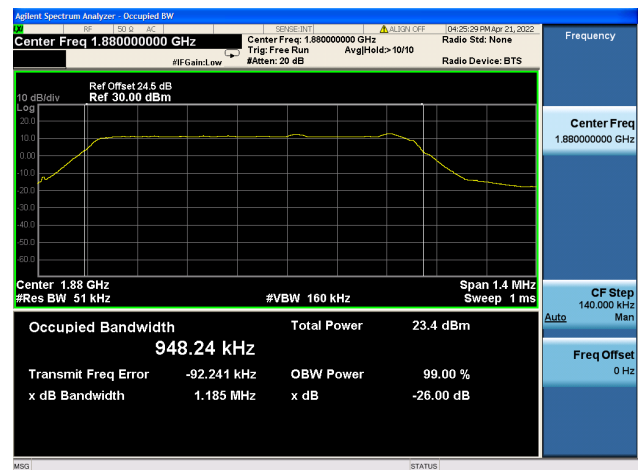
Band 2 / 1.4MHz / Low CH / 16QAM



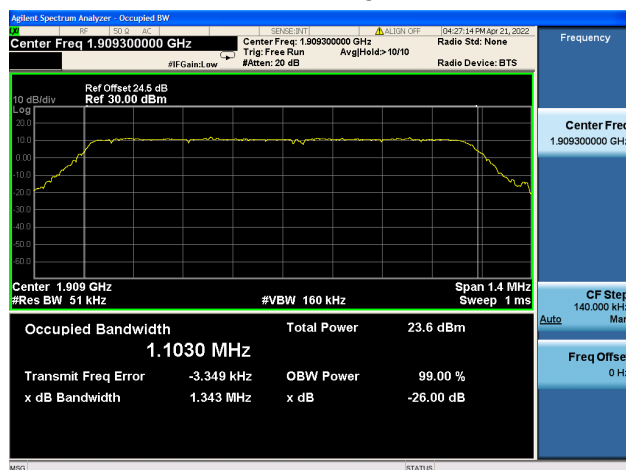
Band 2 / 1.4MHz / Mid CH / QPSK



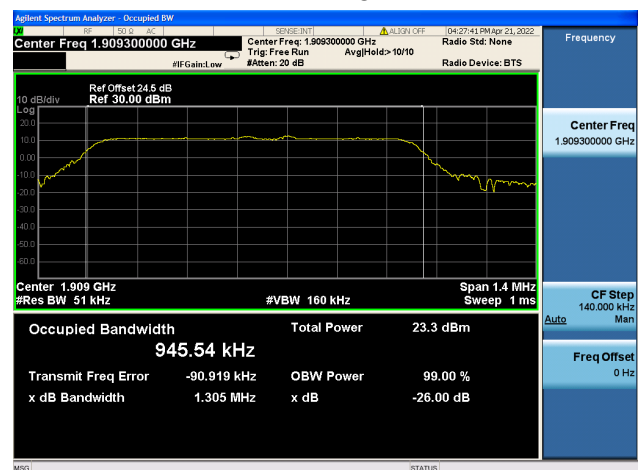
Band 2 / 1.4MHz / Mid CH / 16QAM



Band 2 / 1.4MHz / High CH / QPSK

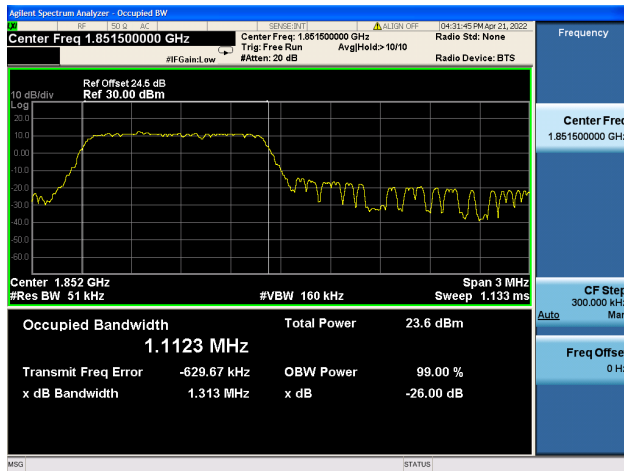


Band 2 / 1.4MHz / High CH / 16QAM

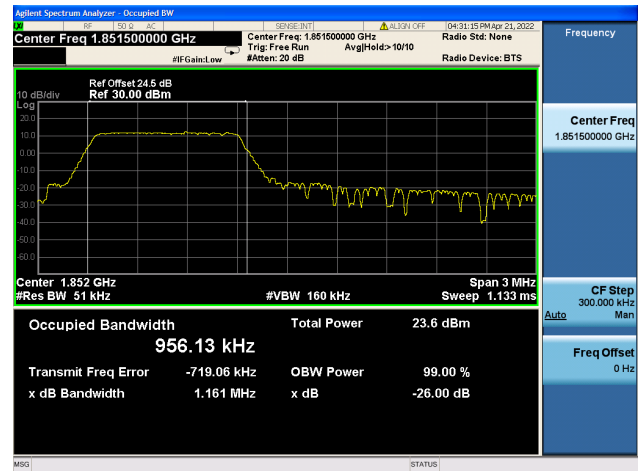




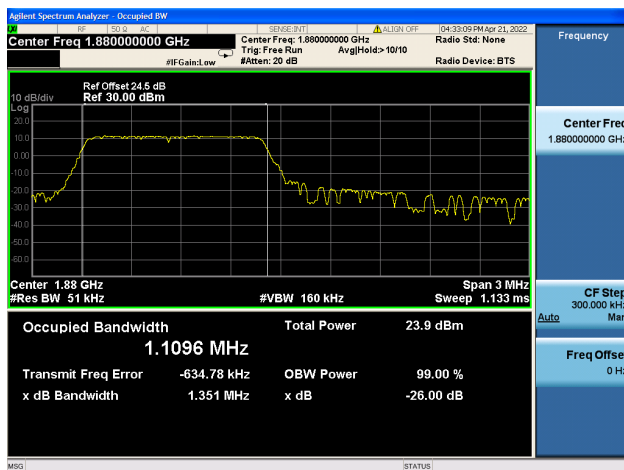
Band 2 / 3MHz / Low CH / QPSK



Band 2 / 3MHz / Low CH / 16QAM



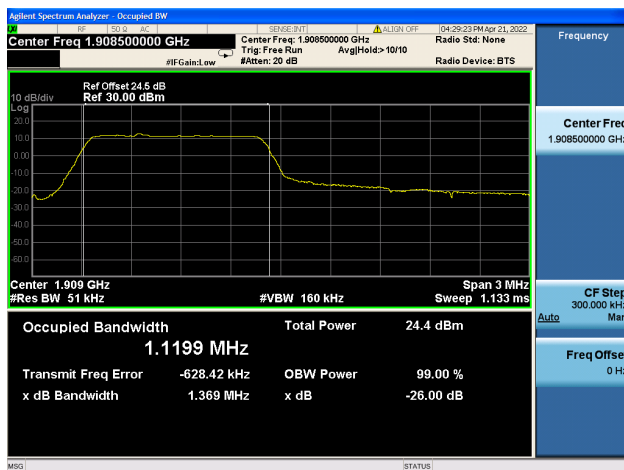
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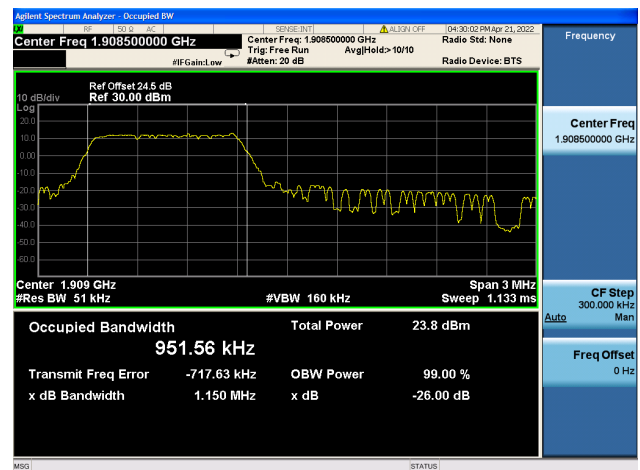
Band 2 / 3MHz / Mid CH / 16QAM



Band 2 / 3MHz / High CH / QPSK

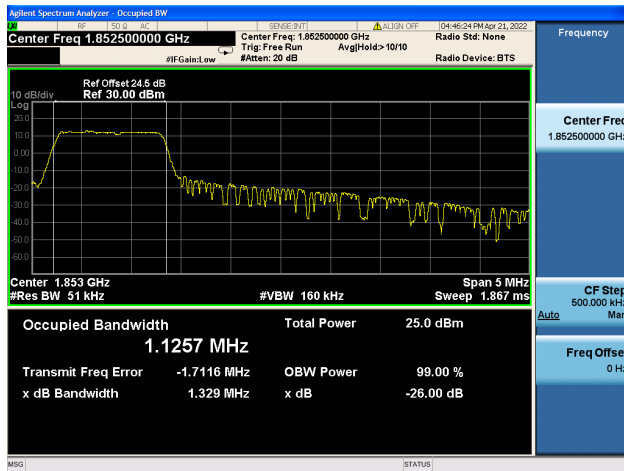


Band 2 / 3MHz / High CH / 16QAM

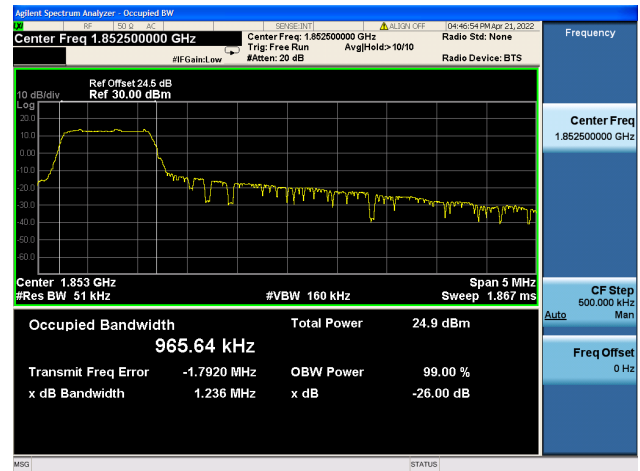




Band 2 / 5MHz / Low CH / QPSK



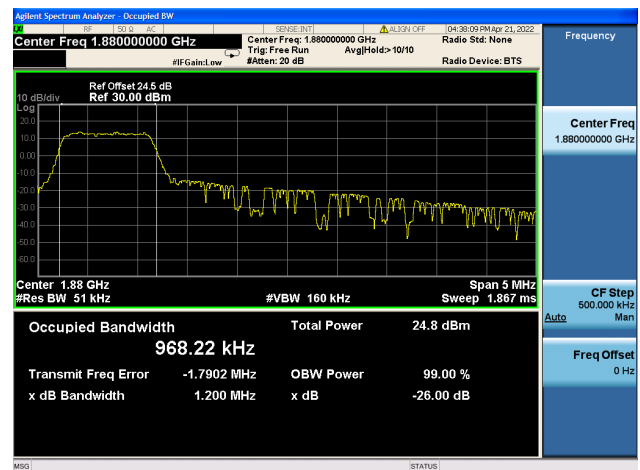
Band 2 / 5MHz / Low CH / 16QAM



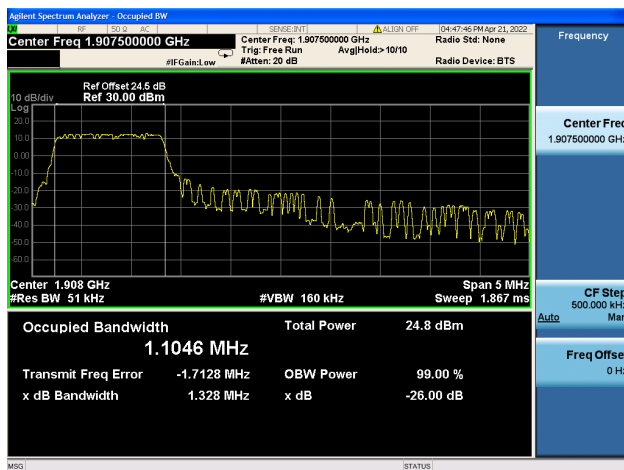
Band 2 / 5MHz / Mid CH / QPSK



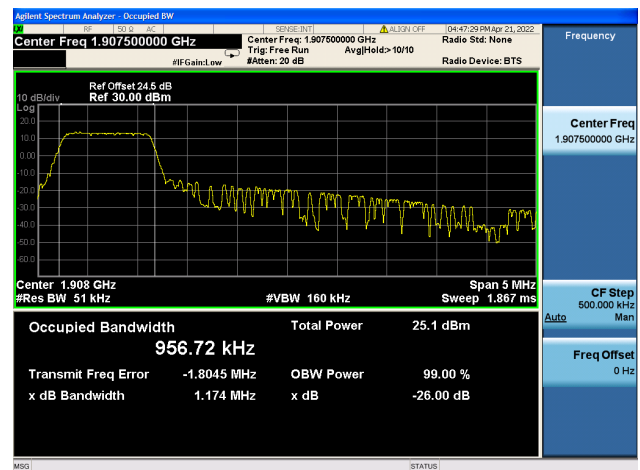
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Band 2 / 5MHz / High CH / QPSK



Band 2 / 5MHz / High CH / 16QAM





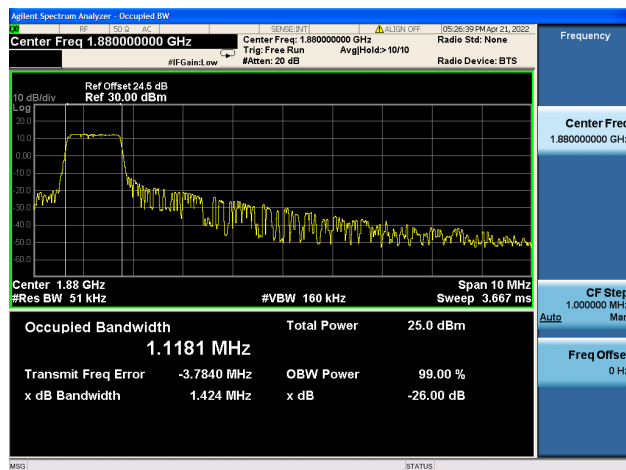
Band 2 / 10MHz / Low CH / QPSK



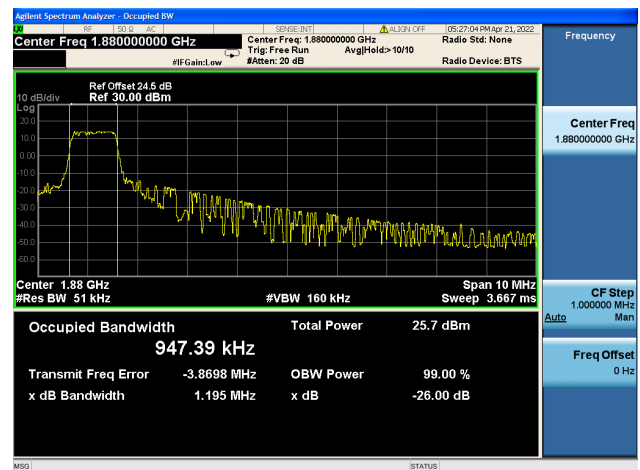
Band 2 / 10MHz / Low CH / 16QAM



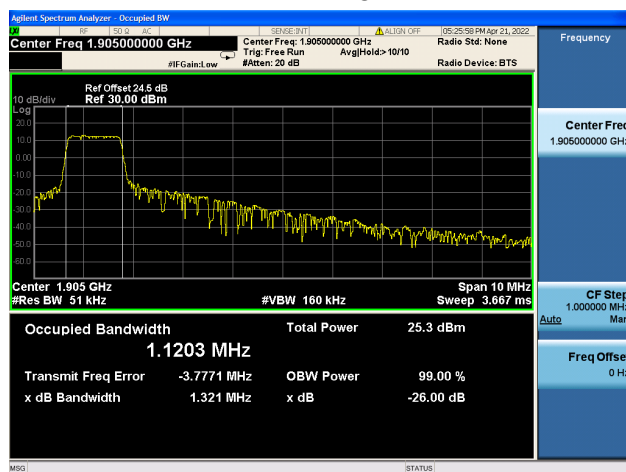
Band 2 / 10MHz / Mid CH / QPSK



Band 2 / 10MHz / Mid CH / 16QAM



Band 2 / 10MHz / High CH / QPSK

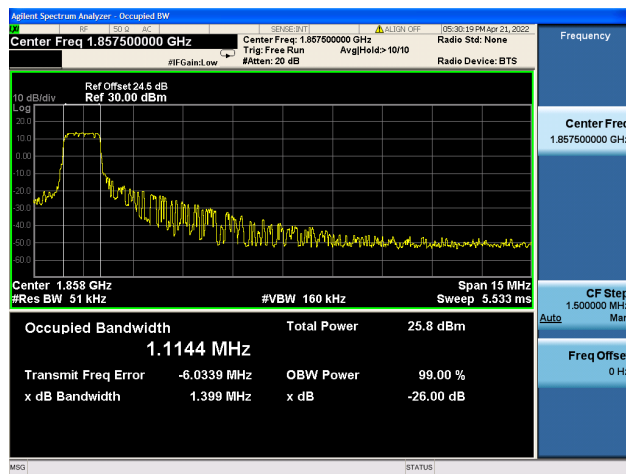


Band 2 / 10MHz / High CH / 16QAM

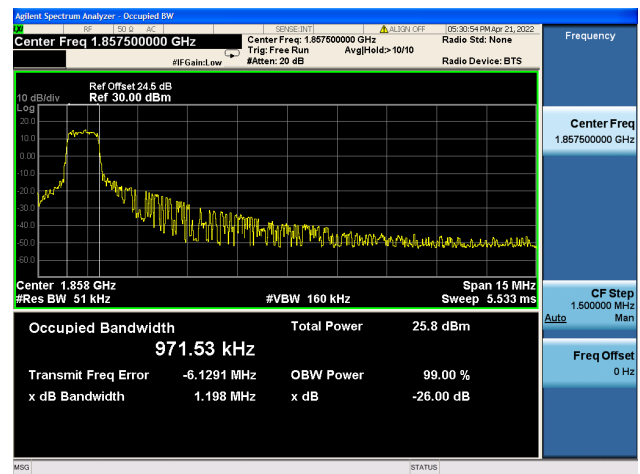




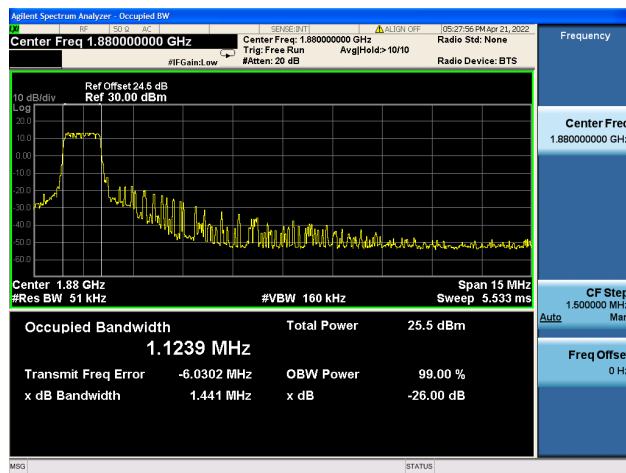
Band 2 / 15MHz / Low CH / QPSK



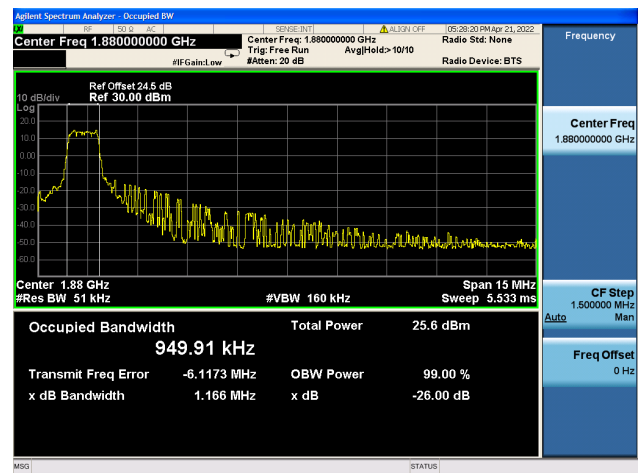
Band 2 / 15MHz / Low CH / 16QAM



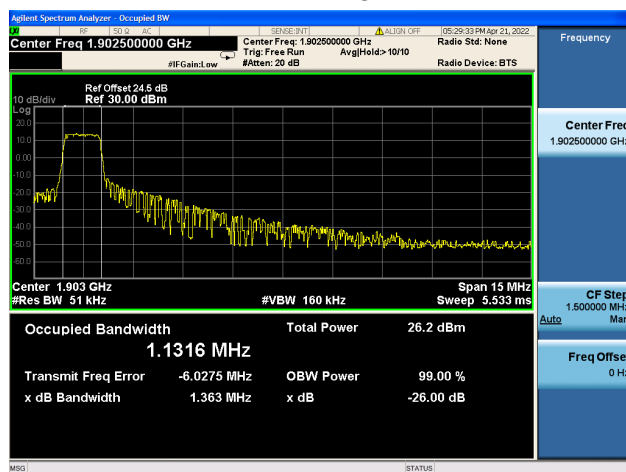
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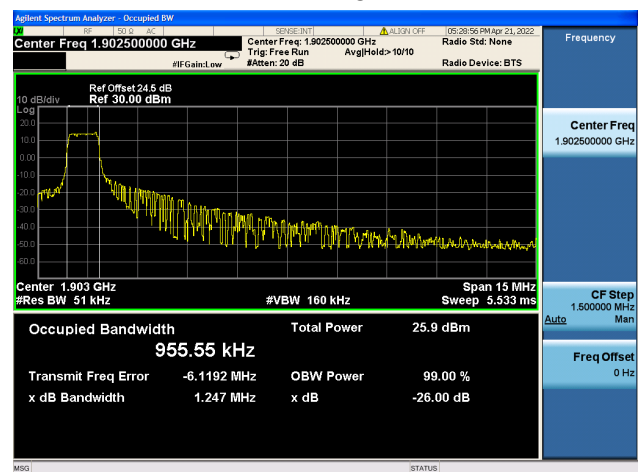
Band 2 / 15MHz / Mid CH / 16QAM



Band 2 / 15MHz / High CH / QPSK

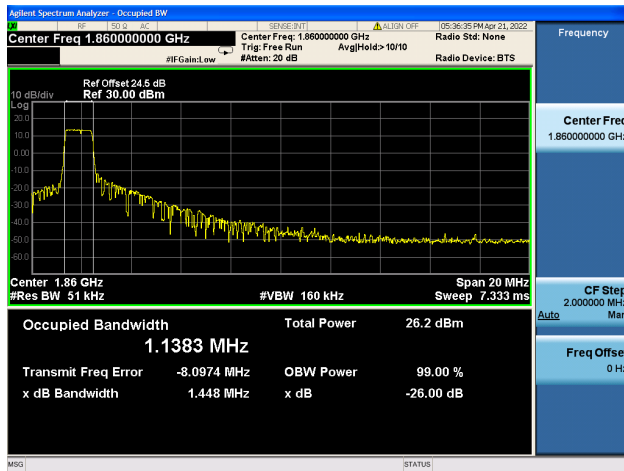


Band 2 / 15MHz / High CH / 16QAM

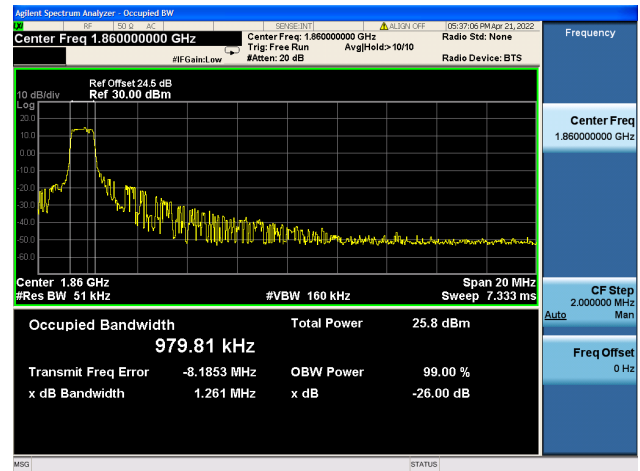




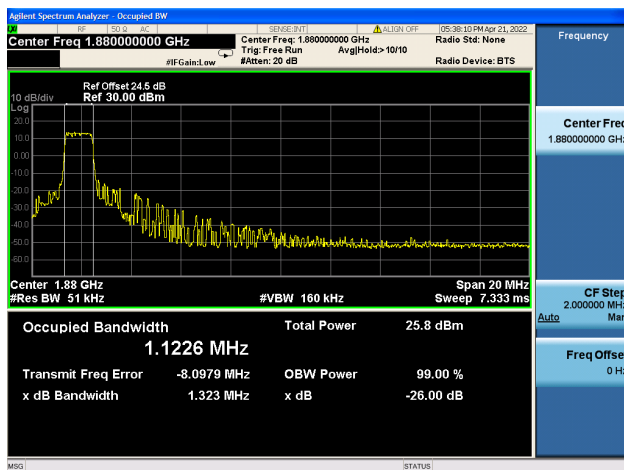
Band 2 / 20MHz / Low CH / QPSK



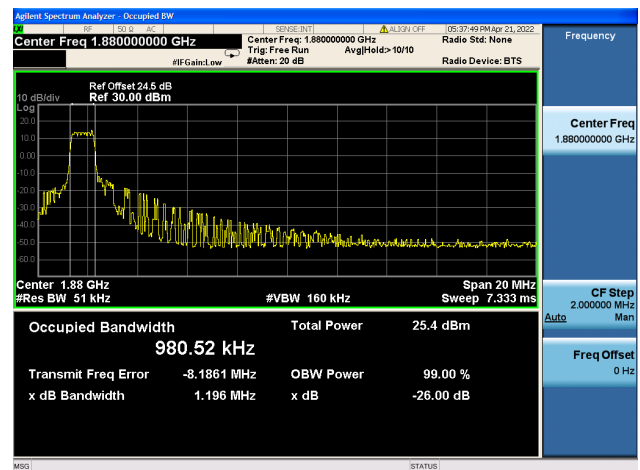
Band 2 / 20MHz / Low CH / 16QAM



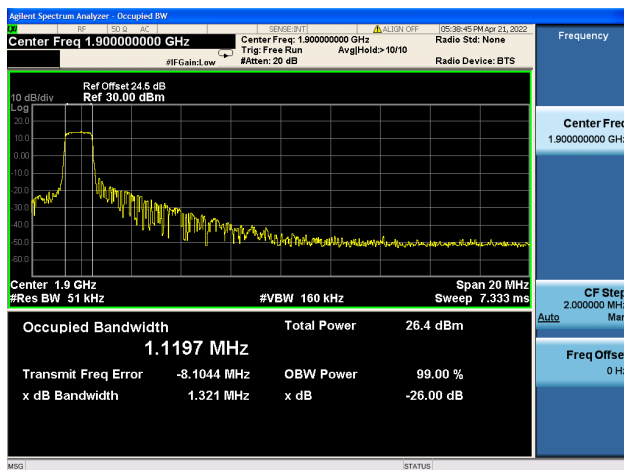
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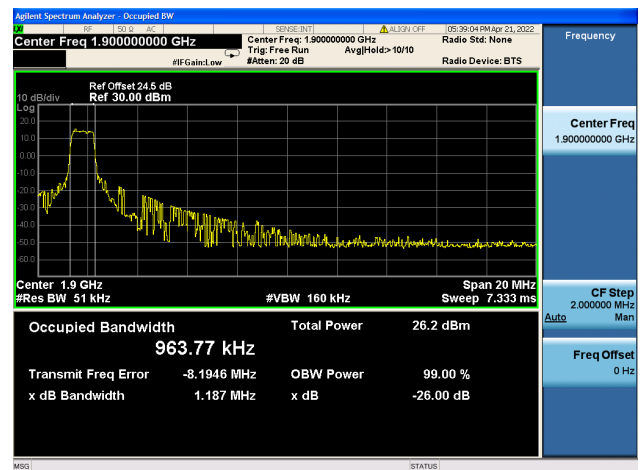
Band 2 / 20MHz / Mid CH / 16QAM



Band 2 / 20MHz / High CH / QPSK

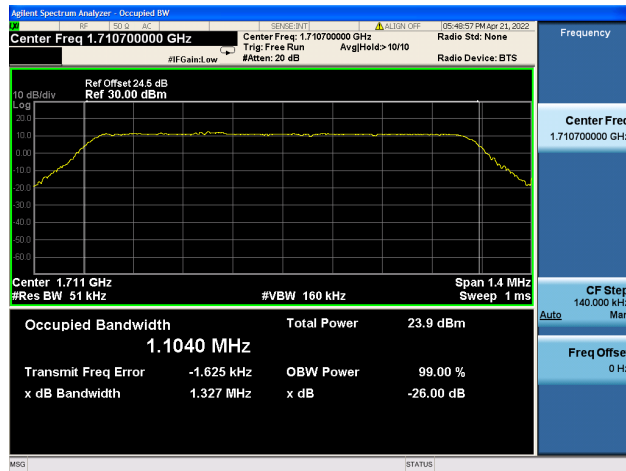


Band 2 / 20MHz / High CH / 16QAM

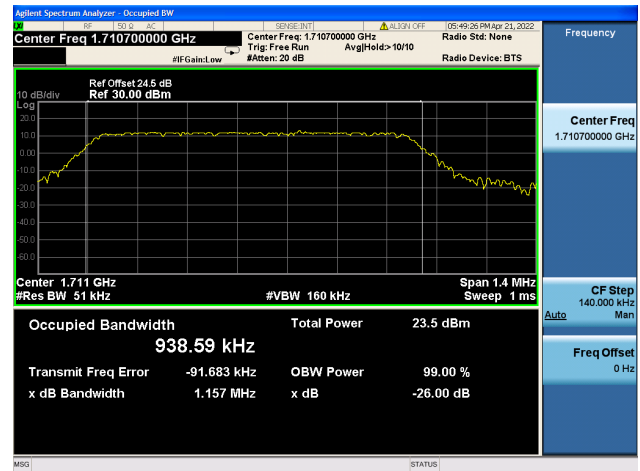




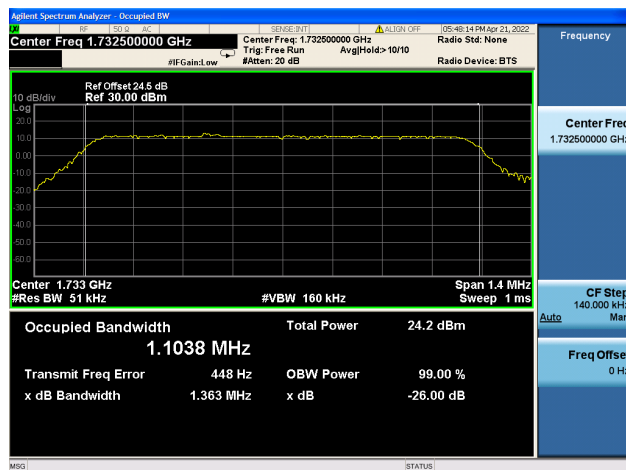
Band 4 / 1.4MHz / Low CH / QPSK



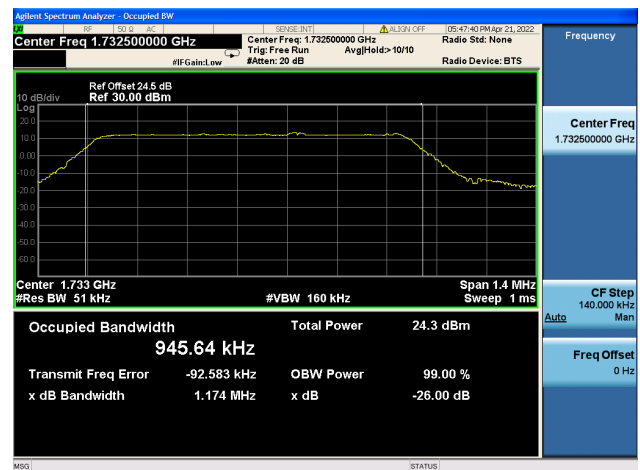
Band 4 / 1.4MHz / Low CH / 16QAM



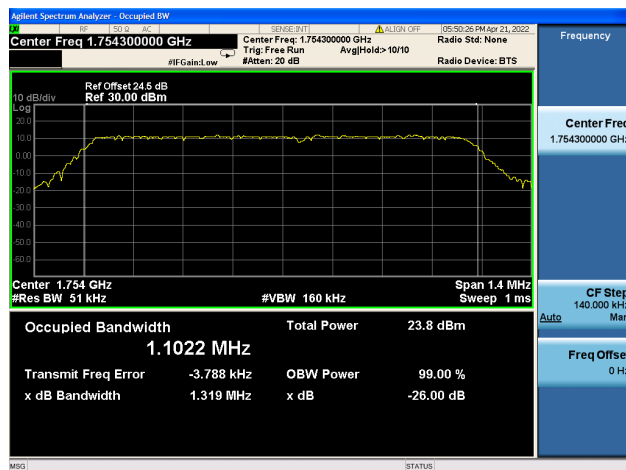
Band 4 / 1.4MHz / Mid CH / QPSK



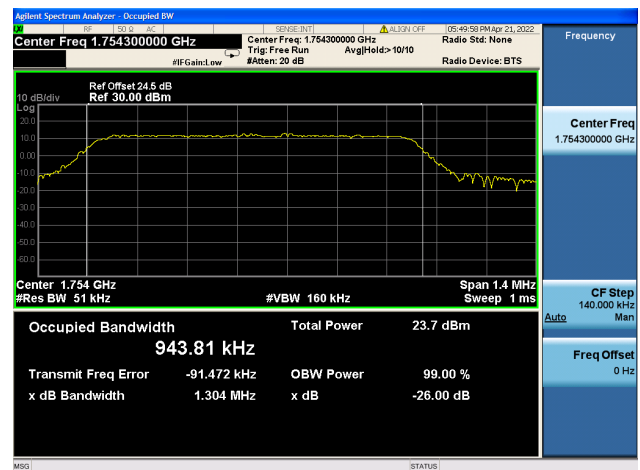
Band 4 / 1.4MHz / Mid CH / 16QAM



Band 4 / 1.4MHz / High CH / QPSK

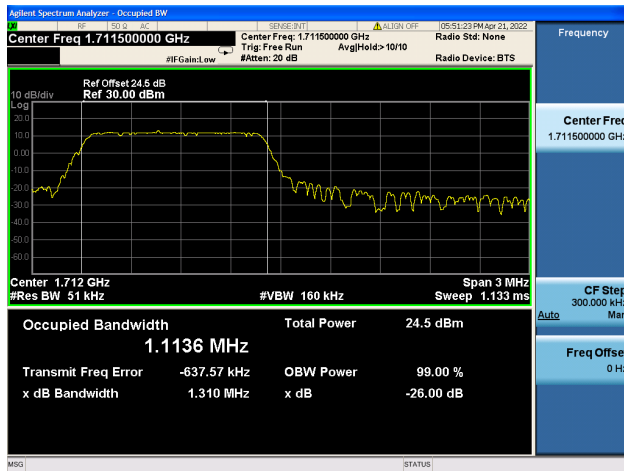


Band 4 / 1.4MHz / High CH / 16QAM

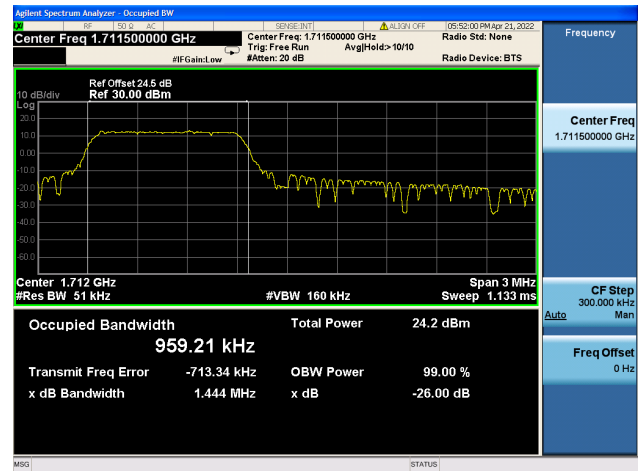




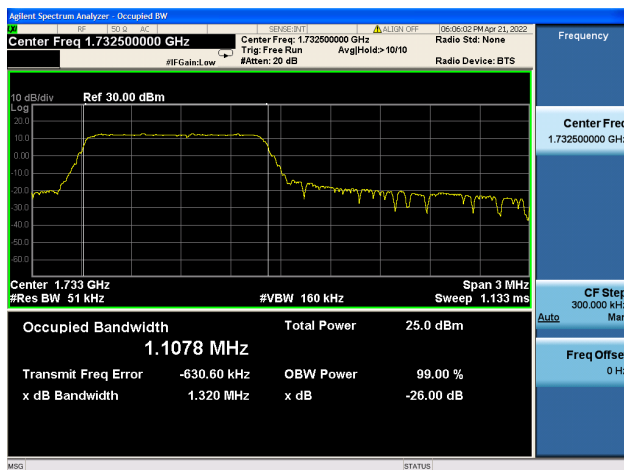
Band 4 / 3MHz / Low CH / QPSK



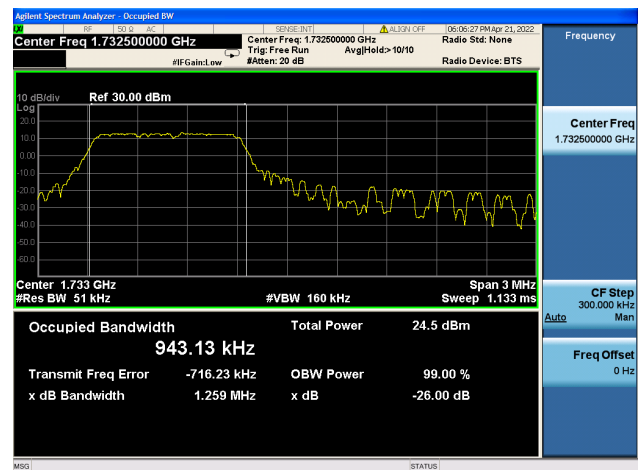
Band 4 / 3MHz / Low CH / 16QAM



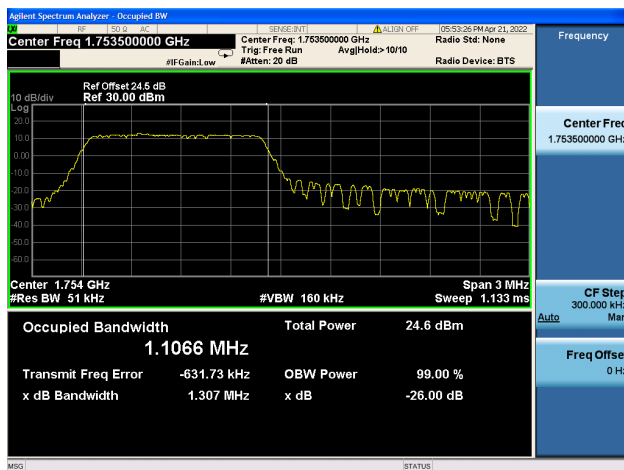
Band 4 / 3MHz / Mid CH / QPSK



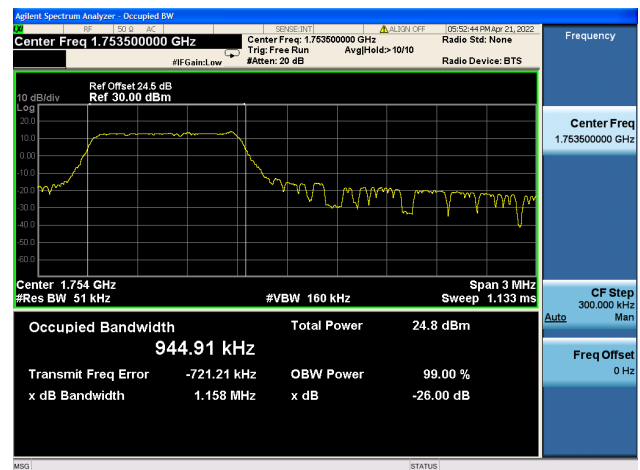
Band 4 / 3MHz / Mid CH / 16QAM



Band 4 / 3MHz / High CH / QPSK

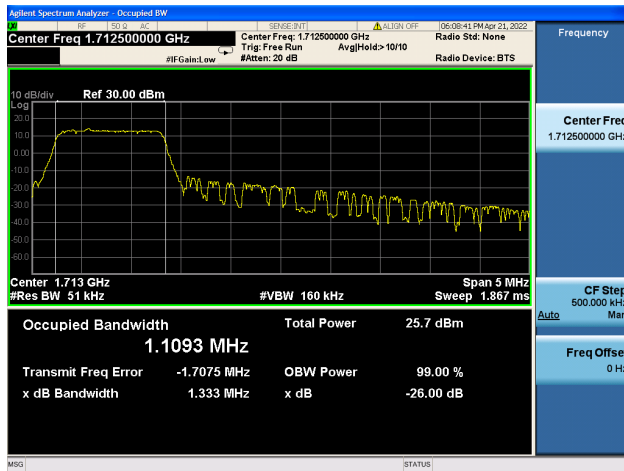


Band 4 / 3MHz / High CH / 16QAM

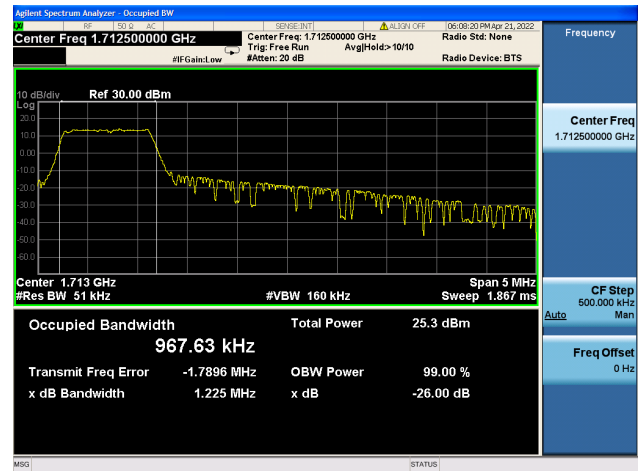




Band 4 / 5MHz / Low CH / QPSK



Band 4 / 5MHz / Low CH / 16QAM



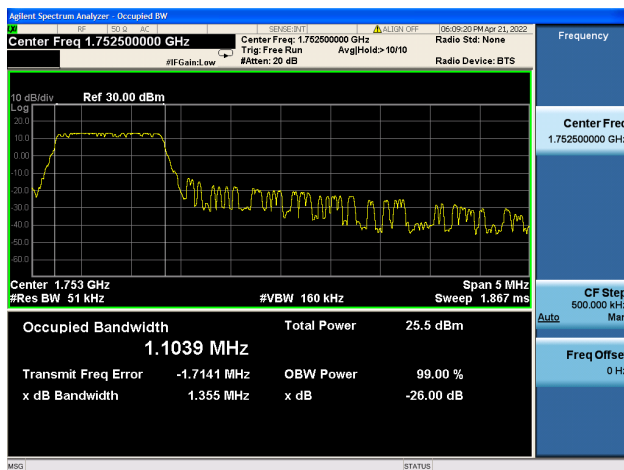
Band 4 / 5MHz / Mid CH / QPSK



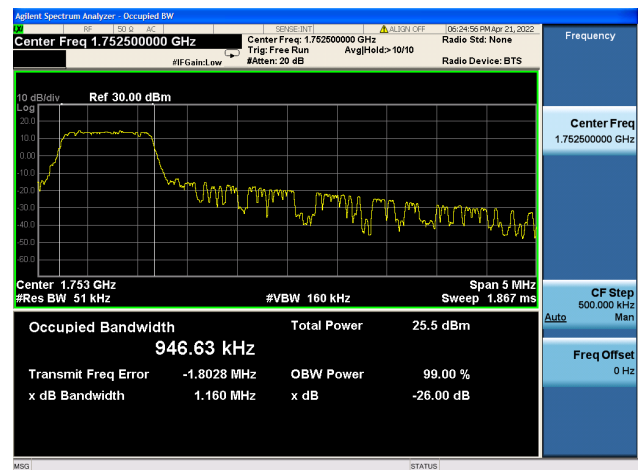
Band 4 / 5MHz / Mid CH / 16QAM



Band 4 / 5MHz / High CH / QPSK

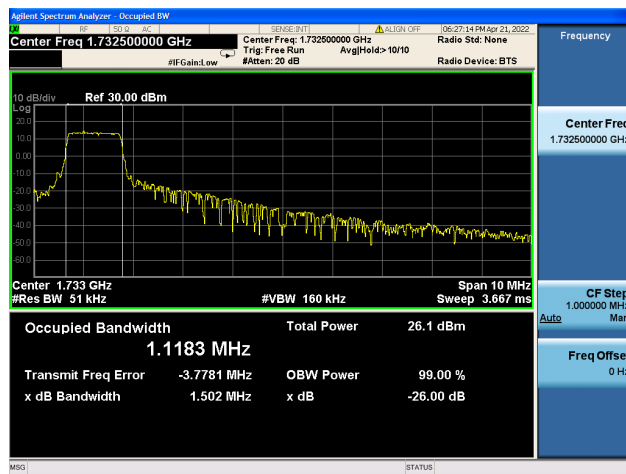


Band 4 / 5MHz / High CH / 16QAM

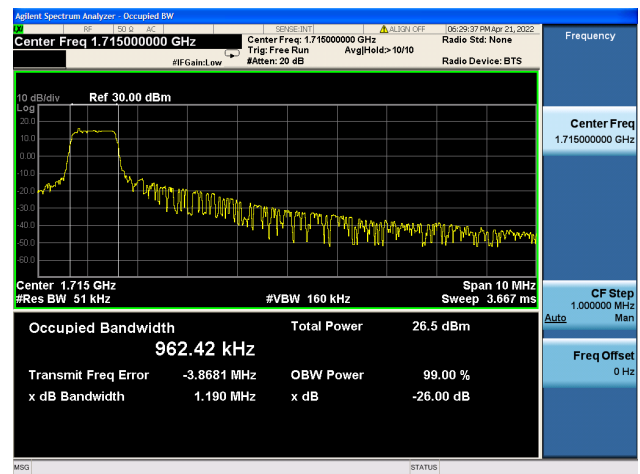




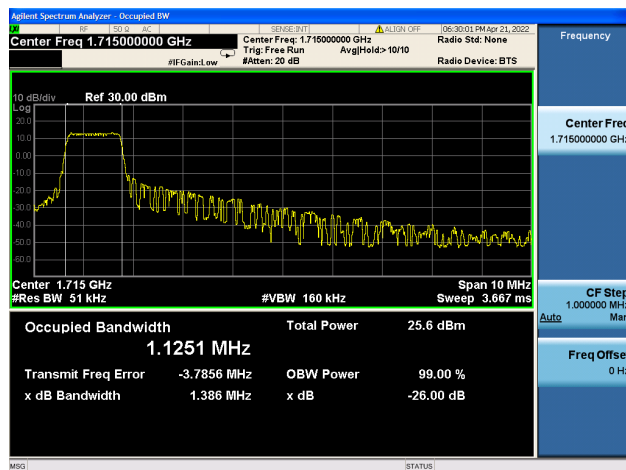
Band 4 / 10MHz / Low CH / QPSK



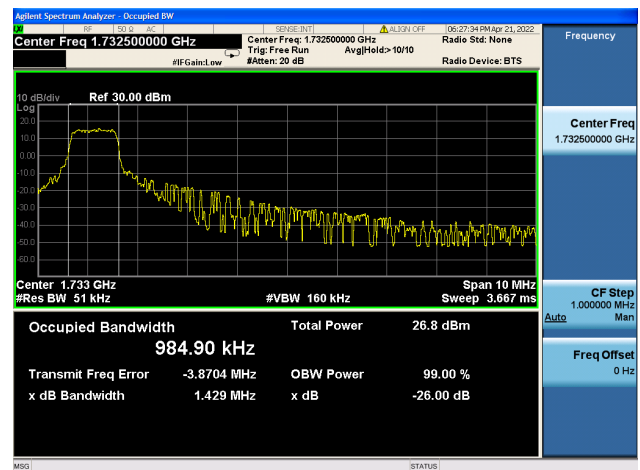
Band 4 / 10MHz / Low CH / 16QAM



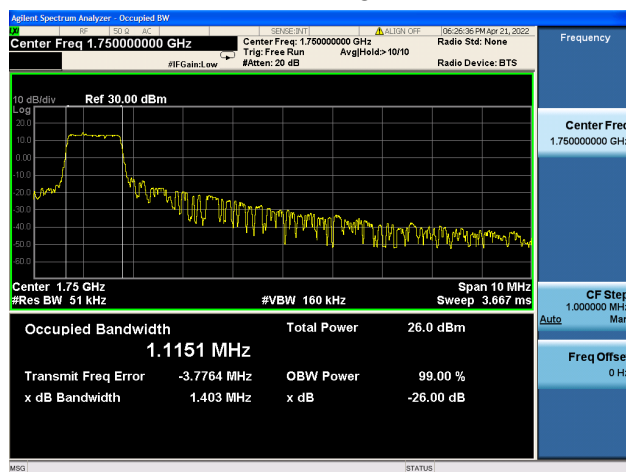
Band 4 / 10MHz / Mid CH / QPSK



Band 4 / 10MHz / Mid CH / 16QAM



Band 4 / 10MHz / High CH / QPSK

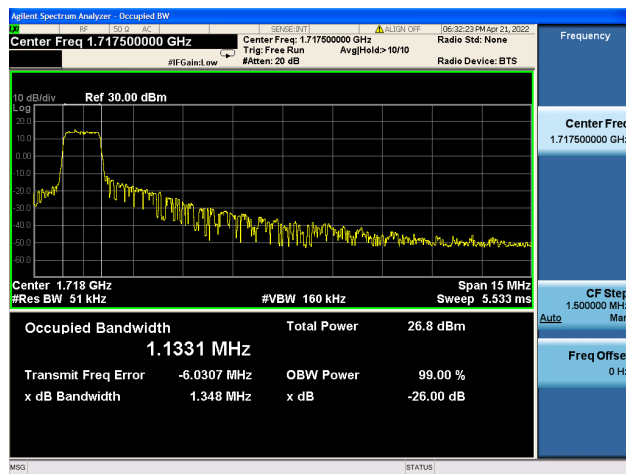


Band 4 / 10MHz / High CH / 16QAM

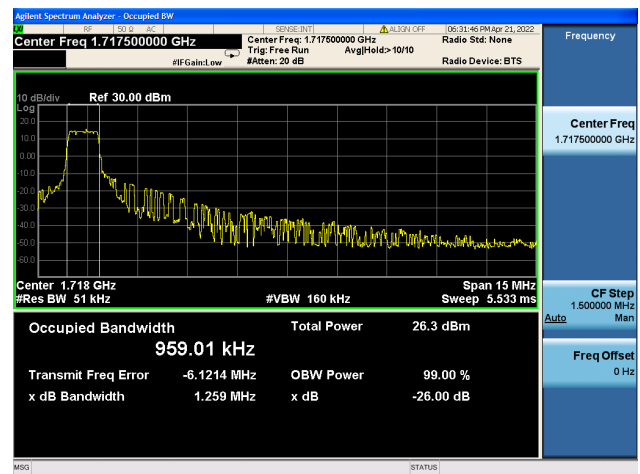




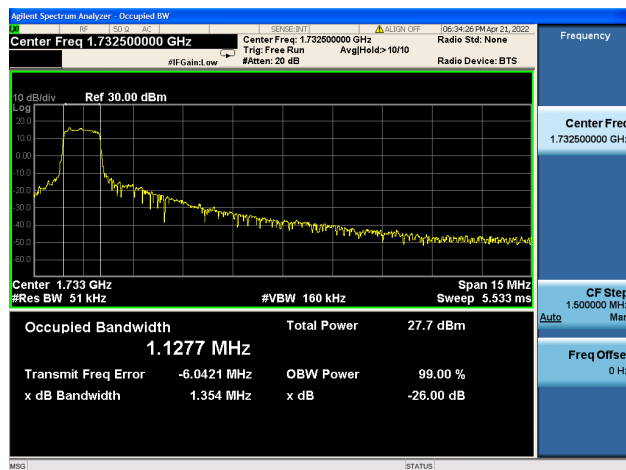
Band 4 / 15MHz / Low CH / QPSK



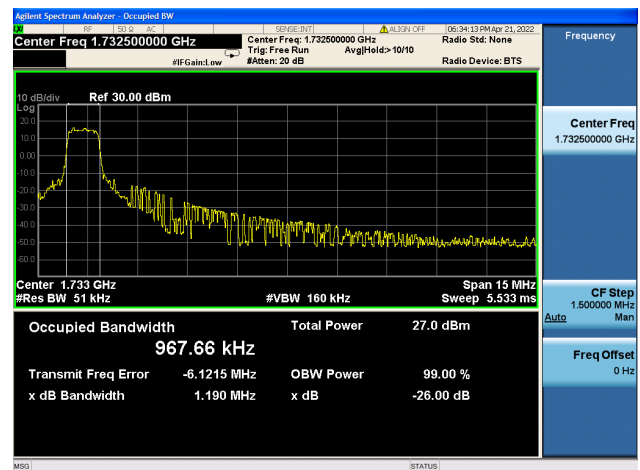
Band 4 / 15MHz / Low CH / 16QAM



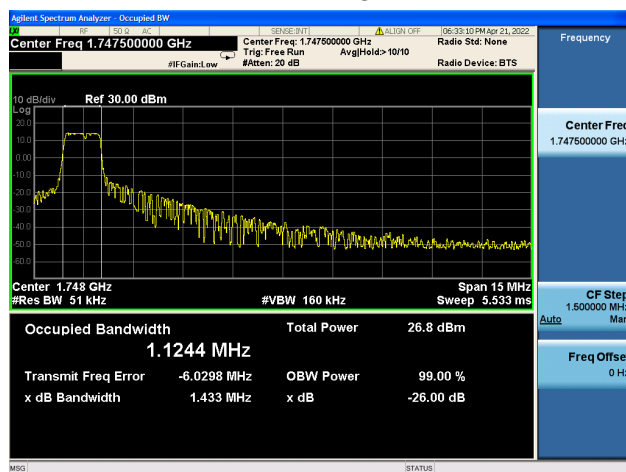
Band 4 / 15MHz / Mid CH / QPSK



Band 4 / 15MHz / Mid CH / 16QAM



Band 4 / 15MHz / High CH / QPSK



Band 4 / 15MHz / High CH / 16QAM

