



TEST REPORT

APPLICANT : Shenzhen Jimi IoT Co., Ltd.

PRODUCT NAME : Smart 4G Employee ID Card

MODEL NAME : PL200

BRAND NAME : JimiIoT

FCC ID : 2AMLF-PL200

STANDARD(S) : 47 CFR Part 2
47 CFR Part 22, Subpart H
47 CFR Part 24, Subpart E
47 CFR Part 27, Subpart L&M

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DIRECTORY

- 1. Technical Information 3**
- 1.1. Applicant and Manufacturer Information 3**
- 1.2. Equipment Under Test (EUT) Description 3**
- 1.3. Maximum E.R.P./E.I.R.P. and Emission Designator 5**
- 1.4. Test Standards and Results 6**
- 1.5. Environmental Conditions 7**
- 2. 47 CFR Part 2, Part 22H, Part 24E,Part 27L&M Requirements 8**
- 2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P. 8**
- 2.2. Occupied Bandwidth 49**
- 2.3. Frequency Stability 74**
- 2.4. Peak to Average Ratio 77**
- 2.5. Conducted Spurious Emissions 92**
- 2.6. Band Edge 105**
- 2.7. Radiated Spurious Emissions 121**
- Annex A Test Uncertainty 148**
- Annex B Testing Laboratory Information 149**

Change History		
Version	Date	Reason for change
1.0	2023-11-23	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	Shenzhen Jimi IoT Co., Ltd.
Applicant Address:	3-4/F, Block A, Building #7, Shenzhen International Innovation Valley, Dashi 1st Road, Nanshan District, Shenzhen, Guangdong, China
Manufacturer:	Shenzhen Jimi IoT Co., Ltd.
Manufacturer Address:	3-4/F, Block A, Building #7, Shenzhen International Innovation Valley, Dashi 1st Road, Nanshan District, Shenzhen, Guangdong, China

1.2. Equipment Under Test (EUT) Description

Product Name:	Smart 4G Employee ID Card	
Sample No.:	2#	
Hardware Version:	PL200_MB_V1.0	
Software Version:	PL200_PL200_AAHB_ENGLISH_V1.1.0_231110.1900	
Modulation Type:	QPSK, 16QAM	
Carrier Aggregation:	Not Support	
LTE Category:	1 bis	
Operation Band:	Band 2 / 4 / 5 / 7	
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
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



Antenna Type:	PIFA Antenna	
Antenna Gain:	LTE Band 2	0.17dBi
	LTE Band 4	1.02dBi
	LTE Band 5	0.86dBi
	LTE Band 7	0.67dBi
Accessory Information:	Battery	
	Brand Name:	N/A
	Model No.:	PL 605252
	Serial No.:	N/A
	Capacity:	2000mAh
	Rated Voltage:	3.7V
	Charge Limit:	4.2V
	Manufacturer:	Huizhou city of KM-Chi Technology Co. Ltd

Note1: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	0.195	0.161	18M0G7D	5M19W7D	
15	0.188	0.160	13M5G7D	5M04W7D	
10	0.190	0.159	8M99G7D	4M92W7D	
5	0.187	0.160	4M50G7D	4M50W7D	
3	0.187	0.160	2M70G7D	2M71W7D	
1.4	0.190	0.159	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	0.248	0.198	18M0G7D	5M21W7D	
15	0.239	0.204	13M5G7D	5M09W7D	
10	0.240	0.204	8M99G7D	4M58W7D	
5	0.239	0.201	4M50G7D	4M51W7D	
3	0.240	0.202	2M70G7D	2M70W7D	
1.4	0.240	0.193	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	0.158	0.127	8M99G7D	4M92W7D	
5	0.152	0.131	4M50G7D	4M50W7D	
3	0.151	0.126	2M70G7D	2M72W7D	
1.4	0.152	0.126	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	0.199	0.163	18M0G7D	5M18W7D	
15	0.195	0.163	13M5G7D	5M05W7D	
10	0.194	0.161	9M00G7D	4M97W7D	
5	0.195	0.163	4M51G7D	4M51W7D	

Note: The UE capability is category 1, and the maximum RB Number is 29 when the modulation is 16QAM.



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(d)(4) 27.50(h)(2)	Transmitter Conducted Output Power and E.R.P./E.I.R.P.	Nov.08,2023	Chen Hao Gan Jing	PASS	Nodeviation
2.1049	Occupied Bandwidth	Nov.22,2023	Gan Jing	PASS	Nodeviation
2.1055 22.355 24.235 27.54	Frequency Stability	Nov.08,2023	Gan Jing	PASS	Nodeviation
24.232(d), 27.50(d)(5)	Peak to Average Radio	Nov.08,2023	Gan Jing	PASS	Nodeviation
2.1051 22.917(a) 24.238(a) 27.53(h) 27.53(m)(4)	Conducted Spurious Emissions	Nov.08,2023	Gan Jing	PASS	Nodeviation
2.1051 22.917(a) 24.238(a) 27.53(h) 27.53(m)(4)	Band Edge	Nov.08,2023	Gan Jing	PASS	Nodeviation
2.1053	Radiated	Oct. 30, 2023	Yang Lian	PASS	Nodeviation



22.917(a) 24.238(a) 27.53(h) 27.53(m)(4)	Spurious Emissions				
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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 27L&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).

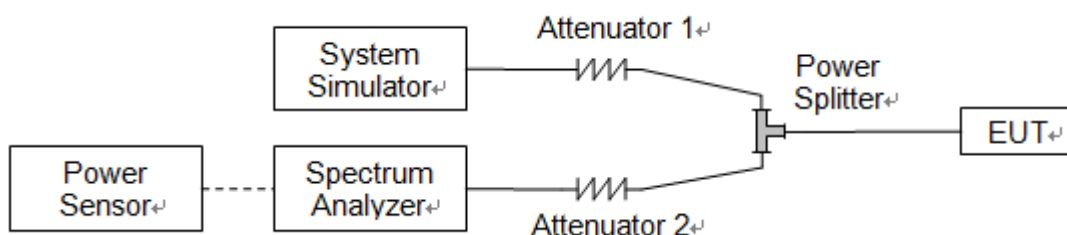
According to FCC section 24.232 (c) for LTE Band 2, Mobile and portable stations are limited to 2 watts E.I.R.P. and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

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 1 watt E.I.R.P.

According to FCC section 22.913 (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.

2.1.2. Test Description



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



2.1.3. Test Procedure

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

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	22.69	22.72	22.68
20	QPSK	1	49	22.47	22.53	22.49
20	QPSK	1	99	22.45	22.51	22.50
20	QPSK	50	0	21.71	21.78	21.68
20	QPSK	50	24	21.68	21.74	21.70
20	QPSK	50	50	21.63	21.70	21.68
20	QPSK	100	0	21.65	21.68	21.63
20	16QAM	1	0	21.89	21.91	21.89
20	16QAM	1	49	21.86	21.88	21.80
20	16QAM	1	99	21.83	21.87	21.86



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	22.51	22.57	22.50
15	QPSK	1	37	22.39	22.48	22.44
15	QPSK	1	74	22.44	22.49	22.45
15	QPSK	36	0	21.69	21.74	21.71
15	QPSK	36	20	21.60	21.67	21.69
15	QPSK	36	39	21.61	21.68	21.67
15	QPSK	75	0	21.63	21.60	21.56
15	16QAM	1	0	21.88	21.86	21.82
15	16QAM	1	37	21.79	21.81	21.76
15	16QAM	1	74	21.75	21.79	21.81



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	22.50	22.61	22.53
10	QPSK	1	25	22.40	22.48	22.43
10	QPSK	1	49	22.38	22.47	22.42
10	QPSK	25	0	21.74	21.71	21.71
10	QPSK	25	12	21.67	21.69	21.66
10	QPSK	25	25	21.61	21.62	21.64
10	QPSK	50	0	21.58	21.67	21.59
10	16QAM	1	0	21.82	21.83	21.85
10	16QAM	1	25	21.83	21.81	21.72
10	16QAM	1	49	21.77	21.81	21.78
10	16QAM	25	0	20.52	20.56	20.46
10	16QAM	25	12	20.53	20.52	20.46
10	16QAM	25	25	20.53	20.56	20.46



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	22.48	22.55	22.52
5	QPSK	1	12	22.42	22.52	22.43
5	QPSK	1	24	22.38	22.43	22.47
5	QPSK	12	0	21.70	21.71	21.69
5	QPSK	12	7	21.61	21.66	21.62
5	QPSK	12	13	21.59	21.68	21.64
5	QPSK	25	0	21.63	21.61	21.58
5	16QAM	1	0	21.87	21.83	21.85
5	16QAM	1	12	21.80	21.87	21.77
5	16QAM	1	24	21.75	21.80	21.79
5	16QAM	12	0	20.48	20.55	20.45
5	16QAM	12	7	20.55	20.57	20.46
5	16QAM	12	13	20.52	20.51	20.49
5	16QAM	25	0	20.44	20.54	20.48



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	22.50	22.56	22.51
3	QPSK	1	8	22.43	22.45	22.47
3	QPSK	1	14	22.43	22.48	22.45
3	QPSK	8	0	21.71	21.74	21.72
3	QPSK	8	4	21.61	21.72	21.63
3	QPSK	8	7	21.62	21.66	21.65
3	QPSK	15	0	21.57	21.64	21.56
3	16QAM	1	0	21.88	21.86	21.88
3	16QAM	1	8	21.85	21.86	21.79
3	16QAM	1	14	21.76	21.80	21.78
3	16QAM	8	0	20.54	20.55	20.48
3	16QAM	8	4	20.50	20.55	20.48
3	16QAM	8	7	20.51	20.51	20.49
3	16QAM	15	0	20.44	20.53	20.49



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	22.46	22.61	22.53
1.4	QPSK	1	3	22.40	22.47	22.46
1.4	QPSK	1	5	22.37	22.48	22.46
1.4	QPSK	3	0	22.43	22.52	22.49
1.4	QPSK	3	1	22.55	22.58	22.48
1.4	QPSK	3	3	22.49	22.53	22.50
1.4	QPSK	6	0	21.57	21.67	21.59
1.4	16QAM	1	0	21.85	21.84	21.81
1.4	16QAM	1	3	21.85	21.82	21.78
1.4	16QAM	1	5	21.76	21.85	21.85
1.4	16QAM	3	0	21.65	21.70	21.62
1.4	16QAM	3	1	21.63	21.67	21.59
1.4	16QAM	3	3	21.64	21.68	21.57
1.4	16QAM	6	0	20.67	20.64	20.57



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	22.84	22.93	22.87
20	QPSK	1	49	22.78	22.80	22.73
20	QPSK	1	99	22.70	22.77	22.74
20	QPSK	50	0	21.84	21.96	21.85
20	QPSK	50	24	21.88	21.82	21.80
20	QPSK	50	50	21.85	21.88	21.81
20	QPSK	100	0	21.88	21.89	21.78
20	16QAM	1	0	21.92	21.83	21.66
20	16QAM	1	49	21.80	21.89	21.84
20	16QAM	1	99	21.90	21.67	21.94



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	22.71	22.76	22.67
15	QPSK	1	37	22.75	22.76	22.70
15	QPSK	1	74	22.61	22.76	22.73
15	QPSK	36	0	21.80	21.86	21.75
15	QPSK	36	20	21.94	21.75	21.76
15	QPSK	36	39	21.84	21.81	21.72
15	QPSK	75	0	21.83	21.81	21.68
15	16QAM	1	0	21.88	21.77	21.60
15	16QAM	1	37	21.87	21.99	21.79
15	16QAM	1	74	21.92	22.07	21.93



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	22.78	22.79	22.72
10	QPSK	1	25	22.71	22.75	22.67
10	QPSK	1	49	22.62	22.76	22.66
10	QPSK	25	0	21.78	21.95	21.80
10	QPSK	25	12	21.86	21.73	21.79
10	QPSK	25	25	21.76	21.86	21.74
10	QPSK	50	0	21.79	21.85	21.72
10	16QAM	1	0	21.86	21.78	21.59
10	16QAM	1	25	21.86	22.03	21.83
10	16QAM	1	49	21.88	22.08	21.89
10	16QAM	25	0	20.88	20.87	20.90
10	16QAM	25	12	20.97	20.83	20.85
10	16QAM	25	25	20.91	20.86	20.93



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	22.77	22.77	22.68
5	QPSK	1	12	22.68	22.70	22.72
5	QPSK	1	24	22.69	22.75	22.65
5	QPSK	12	0	21.75	21.91	21.79
5	QPSK	12	7	21.89	21.77	21.71
5	QPSK	12	13	21.82	21.82	21.71
5	QPSK	25	0	21.86	21.85	21.70
5	16QAM	1	0	21.82	21.81	21.62
5	16QAM	1	12	21.85	22.01	21.82
5	16QAM	1	24	21.90	22.01	21.86
5	16QAM	12	0	20.94	20.84	20.91
5	16QAM	12	7	20.95	20.85	20.81
5	16QAM	12	13	20.87	20.87	20.93
5	16QAM	25	0	20.81	20.83	20.79



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	22.68	22.78	22.64
3	QPSK	1	8	22.72	22.77	22.68
3	QPSK	1	14	22.64	22.67	22.65
3	QPSK	8	0	21.77	21.89	21.81
3	QPSK	8	4	21.85	21.79	21.78
3	QPSK	8	7	21.81	21.80	21.78
3	QPSK	15	0	21.78	21.80	21.72
3	16QAM	1	0	21.82	21.82	21.59
3	16QAM	1	8	21.86	22.00	21.82
3	16QAM	1	14	21.92	22.03	21.91
3	16QAM	8	0	20.89	20.82	20.88
3	16QAM	8	4	21.02	20.82	20.83
3	16QAM	8	7	20.82	20.88	20.94
3	16QAM	15	0	20.81	20.84	20.85



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	22.68	22.76	22.65
1.4	QPSK	1	3	22.68	22.71	22.64
1.4	QPSK	1	5	22.64	22.75	22.69
1.4	QPSK	3	0	22.78	22.73	22.78
1.4	QPSK	3	1	22.77	22.77	22.75
1.4	QPSK	3	3	22.75	22.79	22.79
1.4	QPSK	6	0	21.79	21.79	21.68
1.4	16QAM	1	0	21.83	21.80	21.57
1.4	16QAM	1	3	21.69	21.77	21.60
1.4	16QAM	1	5	21.64	21.80	21.70
1.4	16QAM	3	0	21.42	21.42	21.45
1.4	16QAM	3	1	21.57	21.36	21.33
1.4	16QAM	3	3	21.39	21.46	21.41
1.4	16QAM	6	0	20.83	20.82	20.79



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	23.26	23.29	23.21
10	QPSK	1	25	23.09	23.12	23.01
10	QPSK	1	49	23.01	23.08	22.83
10	QPSK	25	0	22.19	22.27	22.13
10	QPSK	25	12	22.26	22.23	22.18
10	QPSK	25	25	22.18	22.14	22.17
10	QPSK	50	0	22.07	22.09	22.06
10	16QAM	1	0	22.16	22.06	22.02
10	16QAM	1	25	22.15	22.33	22.19
10	16QAM	1	49	22.12	22.13	22.05
10	16QAM	25	0	21.11	21.02	20.99
10	16QAM	25	12	21.03	20.99	20.96
10	16QAM	25	25	21.11	21.07	21.02



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	23.10	23.11	23.03
5	QPSK	1	12	23.06	23.06	22.99
5	QPSK	1	24	22.96	23.03	22.77
5	QPSK	12	0	22.18	22.24	22.00
5	QPSK	12	7	22.22	22.20	22.15
5	QPSK	12	13	22.08	22.10	22.07
5	QPSK	25	0	22.12	22.10	22.15
5	16QAM	1	0	22.26	22.17	22.12
5	16QAM	1	12	22.25	22.45	22.31
5	16QAM	1	24	22.24	22.21	22.17
5	16QAM	12	0	21.17	21.13	21.04
5	16QAM	12	7	21.11	21.10	21.02
5	16QAM	12	13	21.16	21.15	21.09
5	16QAM	25	0	21.25	21.06	21.03



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	23.01	23.09	23.05
3	QPSK	1	8	23.08	23.06	22.94
3	QPSK	1	14	22.92	23.01	22.75
3	QPSK	8	0	22.12	22.23	22.01
3	QPSK	8	4	22.22	22.20	22.13
3	QPSK	8	7	21.94	21.99	21.97
3	QPSK	15	0	21.99	21.98	22.02
3	16QAM	1	0	22.13	21.97	21.98
3	16QAM	1	8	22.13	22.31	22.12
3	16QAM	1	14	22.05	22.03	22.03
3	16QAM	8	0	21.08	20.96	20.92
3	16QAM	8	4	20.94	20.96	20.95
3	16QAM	8	7	21.05	20.97	20.94
3	16QAM	15	0	21.11	20.98	20.95



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	23.11	23.12	22.99
1.4	QPSK	1	3	23.04	23.04	22.93
1.4	QPSK	1	5	23.00	23.05	22.78
1.4	QPSK	3	0	23.00	23.11	22.85
1.4	QPSK	3	1	23.06	23.03	22.96
1.4	QPSK	3	3	22.95	22.99	23.02
1.4	QPSK	6	0	22.06	21.96	21.97
1.4	16QAM	1	0	22.13	22.01	21.94
1.4	16QAM	1	3	22.13	22.31	22.09
1.4	16QAM	1	5	22.11	22.08	22.00
1.4	16QAM	3	0	22.16	22.09	22.11
1.4	16QAM	3	1	22.15	22.10	22.04
1.4	16QAM	3	3	22.16	22.16	22.14
1.4	16QAM	6	0	21.27	21.13	21.10



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	22.24	22.32	22.29
20	QPSK	1	49	22.11	22.18	22.23
20	QPSK	1	99	22.22	22.23	22.24
20	QPSK	50	0	21.32	21.45	21.44
20	QPSK	50	24	21.39	21.44	21.43
20	QPSK	50	50	21.42	21.41	21.43
20	QPSK	100	0	21.47	21.48	21.40
20	16QAM	1	0	21.33	21.27	21.32
20	16QAM	1	49	21.40	21.39	21.31
20	16QAM	1	99	21.41	21.46	21.42



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	22.23	22.17
15	QPSK	1	37	22.03	22.10	22.15
15	QPSK	1	74	22.15	22.20	22.22
15	QPSK	36	0	21.29	21.44	21.36
15	QPSK	36	20	21.29	21.42	21.37
15	QPSK	36	39	21.36	21.40	21.41
15	QPSK	75	0	21.39	21.36	21.31
15	16QAM	1	0	21.29	21.26	21.24
15	16QAM	1	37	21.35	21.30	21.30
15	16QAM	1	74	21.38	21.45	21.32



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	22.07	22.20	22.18
10	QPSK	1	25	22.07	22.16	22.13
10	QPSK	1	49	22.14	22.14	22.17
10	QPSK	25	0	21.24	21.43	21.34
10	QPSK	25	12	21.34	21.40	21.38
10	QPSK	25	25	21.37	21.31	21.42
10	QPSK	50	0	21.46	21.43	21.38
10	16QAM	1	0	21.25	21.23	21.24
10	16QAM	1	25	21.36	21.37	21.21
10	16QAM	1	49	21.35	21.37	21.40
10	16QAM	25	0	20.29	20.37	20.50
10	16QAM	25	12	20.32	20.37	20.22
10	16QAM	25	25	20.31	20.37	20.24



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	22.13	22.24	22.11
5	QPSK	1	12	22.08	22.14	22.20
5	QPSK	1	24	22.16	22.19	22.18
5	QPSK	12	0	21.29	21.41	21.37
5	QPSK	12	7	21.38	21.42	21.37
5	QPSK	12	13	21.34	21.37	21.40
5	QPSK	25	0	21.39	21.42	21.32
5	16QAM	1	0	21.32	21.18	21.25
5	16QAM	1	12	21.37	21.34	21.25
5	16QAM	1	24	21.33	21.44	21.38
5	16QAM	12	0	20.29	20.36	20.44
5	16QAM	12	7	20.27	20.36	20.26
5	16QAM	12	13	20.26	20.36	20.23
5	16QAM	25	0	20.24	20.28	20.37



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	22.86	0.193	22.89	0.195	22.85	0.193
20	QPSK	1	49	22.64	0.184	22.70	0.186	22.66	0.185
20	QPSK	1	99	22.62	0.183	22.68	0.185	22.67	0.185
20	QPSK	50	0	21.88	0.154	21.95	0.157	21.85	0.153
20	QPSK	50	24	21.85	0.153	21.91	0.155	21.87	0.154
20	QPSK	50	50	21.80	0.151	21.87	0.154	21.85	0.153
20	QPSK	100	0	21.82	0.152	21.85	0.153	21.80	0.151
20	16QAM	1	0	22.06	0.161	22.08	0.161	22.06	0.161
20	16QAM	1	49	22.03	0.160	22.05	0.160	21.97	0.157
20	16QAM	1	99	22.00	0.158	22.04	0.160	22.03	0.160



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	22.68	0.185	22.74	0.188	22.67	0.185
15	QPSK	1	37	22.56	0.180	22.65	0.184	22.61	0.182
15	QPSK	1	74	22.61	0.182	22.66	0.185	22.62	0.183
15	QPSK	36	0	21.86	0.153	21.91	0.155	21.88	0.154
15	QPSK	36	20	21.77	0.150	21.84	0.153	21.86	0.153
15	QPSK	36	39	21.78	0.151	21.85	0.153	21.84	0.153
15	QPSK	75	0	21.80	0.151	21.77	0.150	21.73	0.149
15	16QAM	1	0	22.05	0.160	22.03	0.160	21.99	0.158
15	16QAM	1	37	21.96	0.157	21.98	0.158	21.93	0.156
15	16QAM	1	74	21.92	0.156	21.96	0.157	21.98	0.158



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	22.67	0.185	22.78	0.190	22.70	0.186
10	QPSK	1	25	22.57	0.181	22.65	0.184	22.60	0.182
10	QPSK	1	49	22.55	0.180	22.64	0.184	22.59	0.182
10	QPSK	25	0	21.91	0.155	21.88	0.154	21.88	0.154
10	QPSK	25	12	21.84	0.153	21.86	0.153	21.83	0.152
10	QPSK	25	25	21.78	0.151	21.79	0.151	21.81	0.152
10	QPSK	50	0	21.75	0.150	21.84	0.153	21.76	0.150
10	16QAM	1	0	21.99	0.158	22.00	0.158	22.02	0.159
10	16QAM	1	25	22.00	0.158	21.98	0.158	21.89	0.155
10	16QAM	1	49	21.94	0.156	21.98	0.158	21.95	0.157
10	16QAM	25	0	20.69	0.117	20.73	0.118	20.63	0.116
10	16QAM	25	12	20.70	0.117	20.69	0.117	20.63	0.116
10	16QAM	25	25	20.70	0.117	20.73	0.118	20.63	0.116



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	22.65	0.184	22.72	0.187	22.69	0.186
5	QPSK	1	12	22.59	0.182	22.69	0.186	22.60	0.182
5	QPSK	1	24	22.55	0.180	22.60	0.182	22.64	0.184
5	QPSK	12	0	21.87	0.154	21.88	0.154	21.86	0.153
5	QPSK	12	7	21.78	0.151	21.83	0.152	21.79	0.151
5	QPSK	12	13	21.76	0.150	21.85	0.153	21.81	0.152
5	QPSK	25	0	21.80	0.151	21.78	0.151	21.75	0.150
5	16QAM	1	0	22.04	0.160	22.00	0.158	22.02	0.159
5	16QAM	1	12	21.97	0.157	22.04	0.160	21.94	0.156
5	16QAM	1	24	21.92	0.156	21.97	0.157	21.96	0.157
5	16QAM	12	0	20.65	0.116	20.72	0.118	20.62	0.115
5	16QAM	12	7	20.72	0.118	20.74	0.119	20.63	0.116
5	16QAM	12	13	20.69	0.117	20.68	0.117	20.66	0.116
5	16QAM	25	0	20.61	0.115	20.71	0.118	20.65	0.116



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	22.67	0.185	22.73	0.187	22.68	0.185
3	QPSK	1	8	22.60	0.182	22.62	0.183	22.64	0.184
3	QPSK	1	14	22.60	0.182	22.65	0.184	22.62	0.183
3	QPSK	8	0	21.88	0.154	21.91	0.155	21.89	0.155
3	QPSK	8	4	21.78	0.151	21.89	0.155	21.80	0.151
3	QPSK	8	7	21.79	0.151	21.83	0.152	21.82	0.152
3	QPSK	15	0	21.74	0.149	21.81	0.152	21.73	0.149
3	16QAM	1	0	22.05	0.160	22.03	0.160	22.05	0.160
3	16QAM	1	8	22.02	0.159	22.03	0.160	21.96	0.157
3	16QAM	1	14	21.93	0.156	21.97	0.157	21.95	0.157
3	16QAM	8	0	20.71	0.118	20.72	0.118	20.65	0.116
3	16QAM	8	4	20.67	0.117	20.72	0.118	20.65	0.116
3	16QAM	8	7	20.68	0.117	20.68	0.117	20.66	0.116
3	16QAM	15	0	20.61	0.115	20.70	0.117	20.66	0.116



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	22.63	0.183	22.78	0.190	22.70	0.186
1.4	QPSK	1	3	22.57	0.181	22.64	0.184	22.63	0.183
1.4	QPSK	1	5	22.54	0.179	22.65	0.184	22.63	0.183
1.4	QPSK	3	0	22.60	0.182	22.69	0.186	22.66	0.185
1.4	QPSK	3	1	22.72	0.187	22.75	0.188	22.65	0.184
1.4	QPSK	3	3	22.66	0.185	22.70	0.186	22.67	0.185
1.4	QPSK	6	0	21.74	0.149	21.84	0.153	21.76	0.150
1.4	16QAM	1	0	22.02	0.159	22.01	0.159	21.98	0.158
1.4	16QAM	1	3	22.02	0.159	21.99	0.158	21.95	0.157
1.4	16QAM	1	5	21.93	0.156	22.02	0.159	22.02	0.159
1.4	16QAM	3	0	21.82	0.152	21.87	0.154	21.79	0.151
1.4	16QAM	3	1	21.80	0.151	21.84	0.153	21.76	0.150
1.4	16QAM	3	3	21.81	0.152	21.85	0.153	21.74	0.149
1.4	16QAM	6	0	20.84	0.121	20.81	0.121	20.74	0.119



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	23.86	0.243	23.95	0.248	23.89	0.245
20	QPSK	1	49	23.80	0.240	23.82	0.241	23.75	0.237
20	QPSK	1	99	23.72	0.236	23.79	0.239	23.76	0.238
20	QPSK	50	0	22.86	0.193	22.98	0.199	22.87	0.194
20	QPSK	50	24	22.90	0.195	22.84	0.192	22.82	0.191
20	QPSK	50	50	22.87	0.194	22.90	0.195	22.83	0.192
20	QPSK	100	0	22.90	0.195	22.91	0.195	22.80	0.191
20	16QAM	1	0	22.94	0.197	22.85	0.193	22.68	0.185
20	16QAM	1	49	22.82	0.191	22.91	0.195	22.86	0.193
20	16QAM	1	99	22.92	0.196	22.69	0.186	22.96	0.198



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	23.73	0.236	23.78	0.239	23.69	0.234
15	QPSK	1	37	23.77	0.238	23.78	0.239	23.72	0.236
15	QPSK	1	74	23.63	0.231	23.78	0.239	23.75	0.237
15	QPSK	36	0	22.82	0.191	22.88	0.194	22.77	0.189
15	QPSK	36	20	22.96	0.198	22.77	0.189	22.78	0.190
15	QPSK	36	39	22.86	0.193	22.83	0.192	22.74	0.188
15	QPSK	75	0	22.85	0.193	22.83	0.192	22.70	0.186
15	16QAM	1	0	22.90	0.195	22.79	0.190	22.62	0.183
15	16QAM	1	37	22.89	0.195	23.01	0.200	22.81	0.191
15	16QAM	1	74	22.94	0.197	23.09	0.204	22.95	0.197



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	23.80	0.240	23.81	0.240	23.74	0.237
10	QPSK	1	25	23.73	0.236	23.77	0.238	23.69	0.234
10	QPSK	1	49	23.64	0.231	23.78	0.239	23.68	0.233
10	QPSK	25	0	22.80	0.191	22.97	0.198	22.82	0.191
10	QPSK	25	12	22.88	0.194	22.75	0.188	22.81	0.191
10	QPSK	25	25	22.78	0.190	22.88	0.194	22.76	0.189
10	QPSK	50	0	22.81	0.191	22.87	0.194	22.74	0.188
10	16QAM	1	0	22.88	0.194	22.80	0.191	22.61	0.182
10	16QAM	1	25	22.88	0.194	23.05	0.202	22.85	0.193
10	16QAM	1	49	22.90	0.195	23.10	0.204	22.91	0.195
10	16QAM	25	0	21.90	0.155	21.89	0.155	21.92	0.156
10	16QAM	25	12	21.99	0.158	21.85	0.153	21.87	0.154
10	16QAM	25	25	21.93	0.156	21.88	0.154	21.95	0.157



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	23.79	0.239	23.79	0.239	23.70	0.234
5	QPSK	1	12	23.70	0.234	23.72	0.236	23.74	0.237
5	QPSK	1	24	23.71	0.235	23.77	0.238	23.67	0.233
5	QPSK	12	0	22.77	0.189	22.93	0.196	22.81	0.191
5	QPSK	12	7	22.91	0.195	22.79	0.190	22.73	0.187
5	QPSK	12	13	22.84	0.192	22.84	0.192	22.73	0.187
5	QPSK	25	0	22.88	0.194	22.87	0.194	22.72	0.187
5	16QAM	1	0	22.84	0.192	22.83	0.192	22.64	0.184
5	16QAM	1	12	22.87	0.194	23.03	0.201	22.84	0.192
5	16QAM	1	24	22.92	0.196	23.03	0.201	22.88	0.194
5	16QAM	12	0	21.96	0.157	21.86	0.153	21.93	0.156
5	16QAM	12	7	21.97	0.157	21.87	0.154	21.83	0.152
5	16QAM	12	13	21.89	0.155	21.89	0.155	21.95	0.157
5	16QAM	25	0	21.83	0.152	21.85	0.153	21.81	0.152



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	23.70	0.234	23.80	0.240	23.66	0.232
3	QPSK	1	8	23.74	0.237	23.79	0.239	23.70	0.234
3	QPSK	1	14	23.66	0.232	23.69	0.234	23.67	0.233
3	QPSK	8	0	22.79	0.190	22.91	0.195	22.83	0.192
3	QPSK	8	4	22.87	0.194	22.81	0.191	22.80	0.191
3	QPSK	8	7	22.83	0.192	22.82	0.191	22.80	0.191
3	QPSK	15	0	22.80	0.191	22.82	0.191	22.74	0.188
3	16QAM	1	0	22.84	0.192	22.84	0.192	22.61	0.182
3	16QAM	1	8	22.88	0.194	23.02	0.200	22.84	0.192
3	16QAM	1	14	22.94	0.197	23.05	0.202	22.93	0.196
3	16QAM	8	0	21.91	0.155	21.84	0.153	21.90	0.155
3	16QAM	8	4	22.04	0.160	21.84	0.153	21.85	0.153
3	16QAM	8	7	21.84	0.153	21.90	0.155	21.96	0.157
3	16QAM	15	0	21.83	0.152	21.86	0.153	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				19957		20175		20393	
Frequency (MHz)				1710.7		1732.5		1754.3	
				dBm	W	dBm	W	dBm	W
1.4	QPSK	1	0	23.70	0.234	23.78	0.239	23.67	0.233
1.4	QPSK	1	3	23.70	0.234	23.73	0.236	23.66	0.232
1.4	QPSK	1	5	23.66	0.232	23.77	0.238	23.71	0.235
1.4	QPSK	3	0	23.80	0.240	23.75	0.237	23.80	0.240
1.4	QPSK	3	1	23.79	0.239	23.79	0.239	23.77	0.238
1.4	QPSK	3	3	23.77	0.238	23.81	0.240	23.81	0.240
1.4	QPSK	6	0	22.81	0.191	22.81	0.191	22.70	0.186
1.4	16QAM	1	0	22.85	0.193	22.82	0.191	22.59	0.182
1.4	16QAM	1	3	22.71	0.187	22.79	0.190	22.62	0.183
1.4	16QAM	1	5	22.66	0.185	22.82	0.191	22.72	0.187
1.4	16QAM	3	0	22.44	0.175	22.44	0.175	22.47	0.177
1.4	16QAM	3	1	22.59	0.182	22.38	0.173	22.35	0.172
1.4	16QAM	3	3	22.41	0.174	22.48	0.177	22.43	0.175
1.4	16QAM	6	0	21.85	0.153	21.84	0.153	21.81	0.152



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	21.97	0.157	22.00	0.158	21.92	0.156
10	QPSK	1	25	21.80	0.151	21.83	0.152	21.72	0.149
10	QPSK	1	49	21.72	0.149	21.79	0.151	21.54	0.143
10	QPSK	25	0	20.90	0.123	20.98	0.125	20.84	0.121
10	QPSK	25	12	20.97	0.125	20.94	0.124	20.89	0.123
10	QPSK	25	25	20.89	0.123	20.85	0.122	20.88	0.122
10	QPSK	50	0	20.78	0.120	20.80	0.120	20.77	0.119
10	16QAM	1	0	20.87	0.122	20.77	0.119	20.73	0.118
10	16QAM	1	25	20.86	0.122	21.04	0.127	20.90	0.123
10	16QAM	1	49	20.83	0.121	20.84	0.121	20.76	0.119
10	16QAM	25	0	19.82	0.096	19.73	0.094	19.70	0.093
10	16QAM	25	12	19.74	0.094	19.70	0.093	19.67	0.093
10	16QAM	25	25	19.82	0.096	19.78	0.095	19.73	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				20425		20525		20625	
Frequency (MHz)				826.5		836.5		846.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	21.81	0.152	21.82	0.152	21.74	0.149
5	QPSK	1	12	21.77	0.150	21.77	0.150	21.70	0.148
5	QPSK	1	24	21.67	0.147	21.74	0.149	21.48	0.141
5	QPSK	12	0	20.89	0.123	20.95	0.124	20.71	0.118
5	QPSK	12	7	20.93	0.124	20.91	0.123	20.86	0.122
5	QPSK	12	13	20.79	0.120	20.81	0.121	20.78	0.120
5	QPSK	25	0	20.83	0.121	20.81	0.121	20.86	0.122
5	16QAM	1	0	20.97	0.125	20.88	0.122	20.83	0.121
5	16QAM	1	12	20.96	0.125	21.16	0.131	21.02	0.126
5	16QAM	1	24	20.95	0.124	20.92	0.124	20.88	0.122
5	16QAM	12	0	19.88	0.097	19.84	0.096	19.75	0.094
5	16QAM	12	7	19.82	0.096	19.81	0.096	19.73	0.094
5	16QAM	12	13	19.87	0.097	19.86	0.097	19.80	0.095
5	16QAM	25	0	19.96	0.099	19.77	0.095	19.74	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				20415		20525		20635	
Frequency (MHz)				825.5		836.5		847.5	
				dBm	W	dBm	W	dBm	W
3	QPSK	1	0	21.72	0.149	21.80	0.151	21.76	0.150
3	QPSK	1	8	21.79	0.151	21.77	0.150	21.65	0.146
3	QPSK	1	14	21.63	0.146	21.72	0.149	21.46	0.140
3	QPSK	8	0	20.83	0.121	20.94	0.124	20.72	0.118
3	QPSK	8	4	20.93	0.124	20.91	0.123	20.84	0.121
3	QPSK	8	7	20.65	0.116	20.70	0.117	20.68	0.117
3	QPSK	15	0	20.70	0.117	20.69	0.117	20.73	0.118
3	16QAM	1	0	20.84	0.121	20.68	0.117	20.69	0.117
3	16QAM	1	8	20.84	0.121	21.02	0.126	20.83	0.121
3	16QAM	1	14	20.76	0.119	20.74	0.119	20.74	0.119
3	16QAM	8	0	19.79	0.095	19.67	0.093	19.63	0.092
3	16QAM	8	4	19.65	0.092	19.67	0.093	19.66	0.092
3	16QAM	8	7	19.76	0.095	19.68	0.093	19.65	0.092
3	16QAM	15	0	19.82	0.096	19.69	0.093	19.66	0.092



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	21.82	0.152	21.83	0.152	21.70	0.148
1.4	QPSK	1	3	21.75	0.150	21.75	0.150	21.64	0.146
1.4	QPSK	1	5	21.71	0.148	21.76	0.150	21.49	0.141
1.4	QPSK	3	0	21.71	0.148	21.82	0.152	21.56	0.143
1.4	QPSK	3	1	21.77	0.150	21.74	0.149	21.67	0.147
1.4	QPSK	3	3	21.66	0.147	21.70	0.148	21.73	0.149
1.4	QPSK	6	0	20.77	0.119	20.67	0.117	20.68	0.117
1.4	16QAM	1	0	20.84	0.121	20.72	0.118	20.65	0.116
1.4	16QAM	1	3	20.84	0.121	21.02	0.126	20.80	0.120
1.4	16QAM	1	5	20.82	0.121	20.79	0.120	20.71	0.118
1.4	16QAM	3	0	20.87	0.122	20.80	0.120	20.82	0.121
1.4	16QAM	3	1	20.86	0.122	20.81	0.121	20.75	0.119
1.4	16QAM	3	3	20.87	0.122	20.87	0.122	20.85	0.122
1.4	16QAM	6	0	19.98	0.100	19.84	0.096	19.81	0.096



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	22.91	0.195	22.99	0.199	22.96	0.198
20	QPSK	1	49	22.78	0.190	22.85	0.193	22.90	0.195
20	QPSK	1	99	22.89	0.195	22.90	0.195	22.91	0.195
20	QPSK	50	0	21.99	0.158	22.12	0.163	22.11	0.163
20	QPSK	50	24	22.06	0.161	22.11	0.163	22.10	0.162
20	QPSK	50	50	22.09	0.162	22.08	0.161	22.10	0.162
20	QPSK	100	0	22.14	0.164	22.15	0.164	22.07	0.161
20	16QAM	1	0	22.00	0.158	21.94	0.156	21.99	0.158
20	16QAM	1	49	22.07	0.161	22.06	0.161	21.98	0.158
20	16QAM	1	99	22.08	0.161	22.13	0.163	22.09	0.162



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	22.80	0.191	22.90	0.195	22.84	0.192
15	QPSK	1	37	22.70	0.186	22.77	0.189	22.82	0.191
15	QPSK	1	74	22.82	0.191	22.87	0.194	22.89	0.195
15	QPSK	36	0	21.96	0.157	22.11	0.163	22.03	0.160
15	QPSK	36	20	21.96	0.157	22.09	0.162	22.04	0.160
15	QPSK	36	39	22.03	0.160	22.07	0.161	22.08	0.161
15	QPSK	75	0	22.06	0.161	22.03	0.160	21.98	0.158
15	16QAM	1	0	21.96	0.157	21.93	0.156	21.91	0.155
15	16QAM	1	37	22.02	0.159	21.97	0.157	21.97	0.157
15	16QAM	1	74	22.05	0.160	22.12	0.163	21.99	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				20800		21100		21400	
Frequency (MHz)				2505		2535		2565	
				dBm	W	dBm	W	dBm	W
10	QPSK	1	0	22.74	0.188	22.87	0.194	22.85	0.193
10	QPSK	1	25	22.74	0.188	22.83	0.192	22.80	0.191
10	QPSK	1	49	22.81	0.191	22.81	0.191	22.84	0.192
10	QPSK	25	0	21.91	0.155	22.10	0.162	22.01	0.159
10	QPSK	25	12	22.01	0.159	22.07	0.161	22.05	0.160
10	QPSK	25	25	22.04	0.160	21.98	0.158	22.09	0.162
10	QPSK	50	0	22.13	0.163	22.10	0.162	22.05	0.160
10	16QAM	1	0	21.92	0.156	21.90	0.155	21.91	0.155
10	16QAM	1	25	22.03	0.160	22.04	0.160	21.88	0.154
10	16QAM	1	49	22.02	0.159	22.04	0.160	22.07	0.161
10	16QAM	25	0	20.96	0.125	21.04	0.127	21.17	0.131
10	16QAM	25	12	20.99	0.126	21.04	0.127	20.89	0.123
10	16QAM	25	25	20.98	0.125	21.04	0.127	20.91	0.123



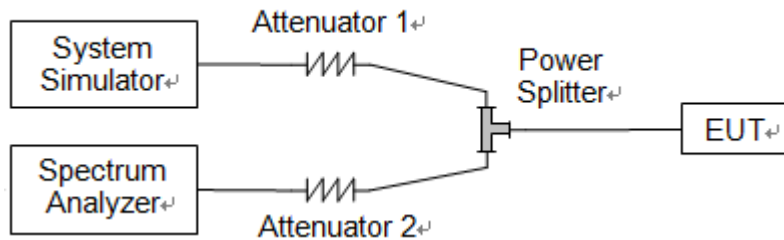
LTE Band 7				Measured E.I.R.P.					
BW [MHz]	Modulation	RB Size	RB Offset	Low Ch. / Freq.		Middle Ch. / Freq.		High Ch. / Freq.	
Channel				20775		21100		21425	
Frequency (MHz)				2502.5		2535		2567.5	
				dBm	W	dBm	W	dBm	W
5	QPSK	1	0	22.80	0.191	22.91	0.195	22.78	0.190
5	QPSK	1	12	22.75	0.188	22.81	0.191	22.87	0.194
5	QPSK	1	24	22.83	0.192	22.86	0.193	22.85	0.193
5	QPSK	12	0	21.96	0.157	22.08	0.161	22.04	0.160
5	QPSK	12	7	22.05	0.160	22.09	0.162	22.04	0.160
5	QPSK	12	13	22.01	0.159	22.04	0.160	22.07	0.161
5	QPSK	25	0	22.06	0.161	22.09	0.162	21.99	0.158
5	16QAM	1	0	21.99	0.158	21.85	0.153	21.92	0.156
5	16QAM	1	12	22.04	0.160	22.01	0.159	21.92	0.156
5	16QAM	1	24	22.00	0.158	22.11	0.163	22.05	0.160
5	16QAM	12	0	20.96	0.125	21.03	0.127	21.11	0.129
5	16QAM	12	7	20.94	0.124	21.03	0.127	20.93	0.124
5	16QAM	12	13	20.93	0.124	21.03	0.127	20.90	0.123
5	16QAM	25	0	20.91	0.123	20.95	0.124	21.04	0.127

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	1.27
	Low	16QAM	1.10	1.26
	Mid	QPSK	1.10	1.27
	Mid	16QAM	1.09	1.27
	High	QPSK	1.10	1.27
	High	16QAM	1.10	1.26
3	Low	QPSK	2.70	2.95
	Low	16QAM	2.70	2.96
	Mid	QPSK	2.70	2.94
	Mid	16QAM	2.69	2.94
	High	QPSK	2.69	2.94
	High	16QAM	2.71	2.90
5	Low	QPSK	4.49	4.94
	Low	16QAM	4.49	4.88
	Mid	QPSK	4.50	4.96
	Mid	16QAM	4.50	4.93
	High	QPSK	4.49	4.98
	High	16QAM	4.50	4.92
10	Low	QPSK	8.99	9.74
	Low	16QAM	4.59	5.15
	Mid	QPSK	8.99	9.72
	Mid	16QAM	4.92	5.58
	High	QPSK	8.99	9.72
	High	16QAM	4.58	5.23
15	Low	QPSK	13.43	14.41
	Low	16QAM	5.03	5.75
	Mid	QPSK	13.47	14.48
	Mid	16QAM	5.04	5.67
	High	QPSK	13.48	14.46
	High	16QAM	5.04	5.70
20	Low	QPSK	17.88	19.08
	Low	16QAM	5.17	5.93
	Mid	QPSK	17.97	19.17
	Mid	16QAM	5.15	5.96
	High	QPSK	17.87	18.98
	High	16QAM	5.19	6.06



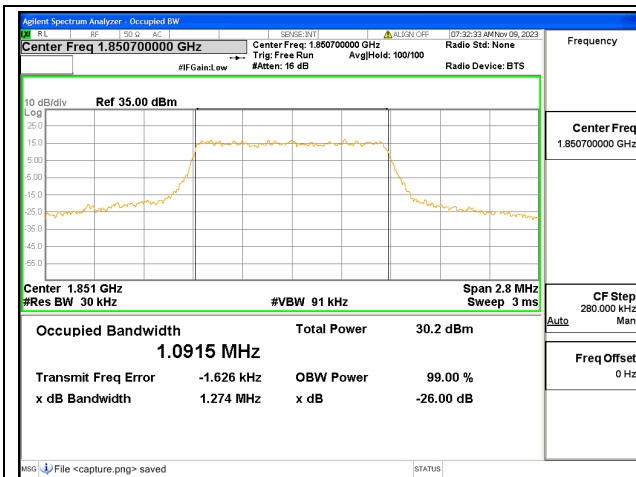
LTE Band 4				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.10	1.28
	Low	16QAM	1.10	1.26
	Mid	QPSK	1.09	1.28
	Mid	16QAM	1.10	1.27
	High	QPSK	1.10	1.25
	High	16QAM	1.10	1.26
3	Low	QPSK	2.70	2.94
	Low	16QAM	2.70	2.94
	Mid	QPSK	2.70	2.94
	Mid	16QAM	2.70	2.95
	High	QPSK	2.69	2.93
	High	16QAM	2.69	2.95
5	Low	QPSK	4.50	4.95
	Low	16QAM	4.51	4.97
	Mid	QPSK	4.50	4.95
	Mid	16QAM	4.50	4.91
	High	QPSK	4.50	4.96
	High	16QAM	4.50	4.92
10	Low	QPSK	8.96	9.74
	Low	16QAM	4.57	5.14
	Mid	QPSK	8.98	9.74
	Mid	16QAM	4.58	5.16
	High	QPSK	8.99	9.72
	High	16QAM	4.57	5.18
15	Low	QPSK	13.45	14.47
	Low	16QAM	5.01	5.70
	Mid	QPSK	13.44	14.48
	Mid	16QAM	5.03	5.65
	High	QPSK	13.49	14.51
	High	16QAM	5.09	5.81
20	Low	QPSK	17.87	19.09
	Low	16QAM	5.20	5.88
	Mid	QPSK	17.94	19.12
	Mid	16QAM	5.21	6.05
	High	QPSK	18.00	19.24
	High	16QAM	5.21	6.05



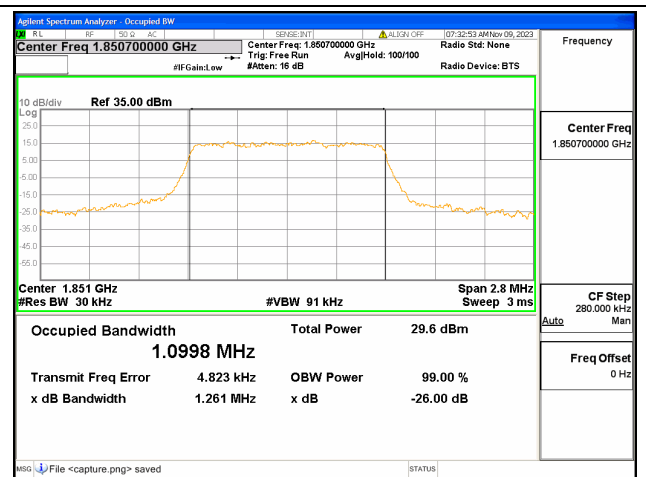
LTE Band 5				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
1.4	Low	QPSK	1.09	1.24
	Low	16QAM	1.09	1.23
	Mid	QPSK	1.10	1.27
	Mid	16QAM	1.10	1.21
	High	QPSK	1.10	1.22
	High	16QAM	1.10	1.28
3	Low	QPSK	2.70	2.95
	Low	16QAM	2.72	2.86
	Mid	QPSK	2.70	2.94
	Mid	16QAM	2.70	2.94
	High	QPSK	2.70	2.93
	High	16QAM	2.70	2.95
5	Low	QPSK	4.47	4.81
	Low	16QAM	4.50	4.95
	Mid	QPSK	4.50	4.94
	Mid	16QAM	4.50	4.93
	High	QPSK	4.50	4.99
	High	16QAM	4.49	4.95
10	Low	QPSK	8.98	9.69
	Low	16QAM	4.92	5.54
	Mid	QPSK	8.96	9.70
	Mid	16QAM	4.57	5.16
	High	QPSK	8.99	9.74
	High	16QAM	4.57	5.28



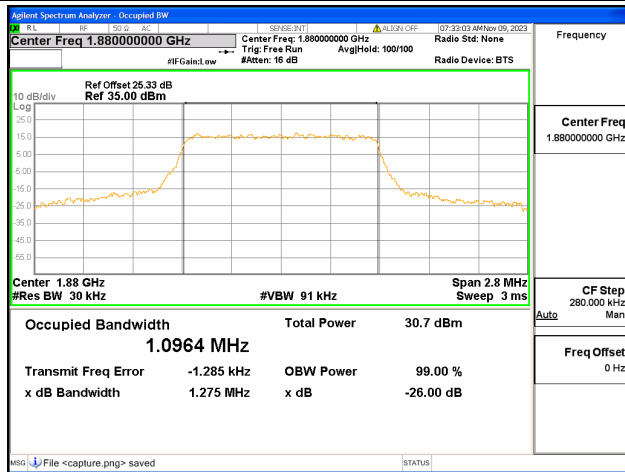
LTE Band 7				
BW(MHz)	Channel Level	Modulation	99% BW(MHz)	26dB BW(MHz)
5	Low	QPSK	4.51	4.93
	Low	16QAM	4.50	4.94
	Mid	QPSK	4.50	4.99
	Mid	16QAM	4.50	4.92
	High	QPSK	4.50	4.97
	High	16QAM	4.51	4.93
10	Low	QPSK	8.98	9.73
	Low	16QAM	4.92	5.57
	Mid	QPSK	9.00	9.75
	Mid	16QAM	4.97	5.55
	High	QPSK	8.97	9.72
	High	16QAM	4.95	5.55
15	Low	QPSK	13.50	14.48
	Low	16QAM	5.05	5.75
	Mid	QPSK	13.47	14.52
	Mid	16QAM	5.03	5.65
	High	QPSK	13.42	14.49
	High	16QAM	5.05	5.76
20	Low	QPSK	17.90	19.13
	Low	16QAM	5.17	5.90
	Mid	QPSK	17.95	19.23
	Mid	16QAM	5.16	6.00
	High	QPSK	17.90	19.14
	High	16QAM	5.18	5.92



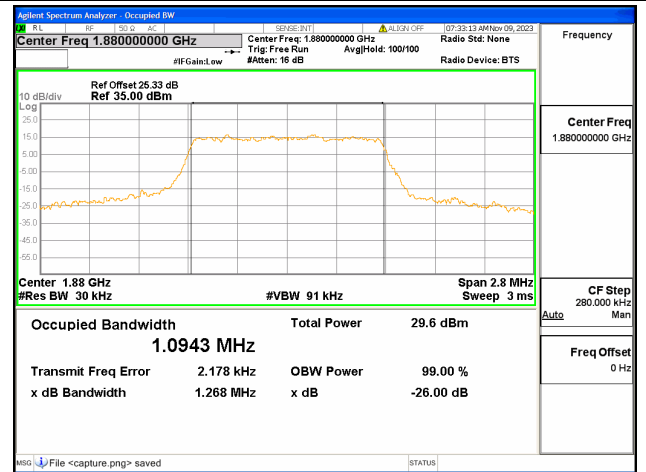
B2 / 1.4MHz / QPSK/ Low CH



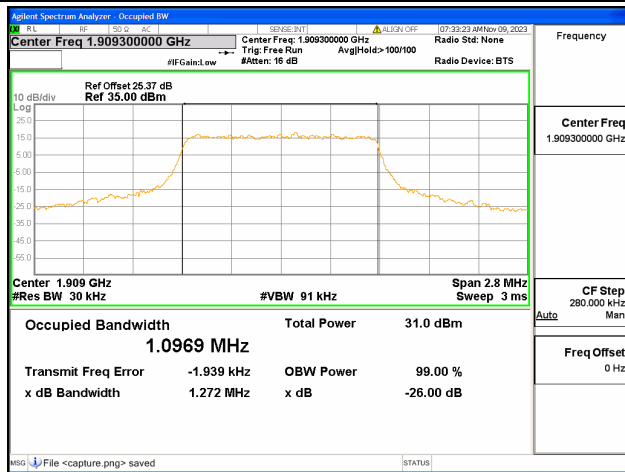
B2 / 1.4MHz / 16QAM/ Low CH



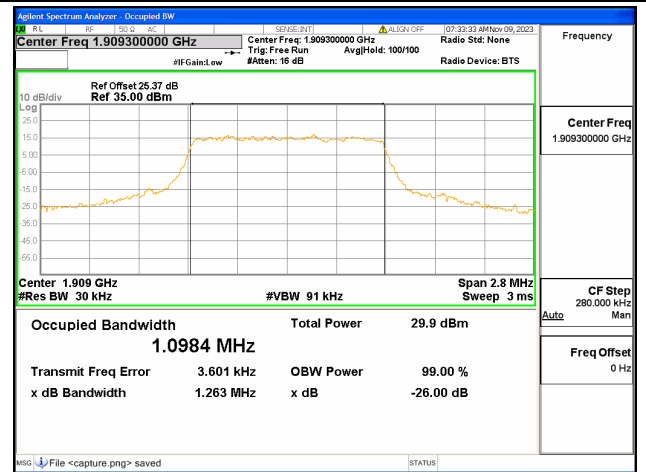
B2 / 1.4MHz / QPSK/ Mid CH



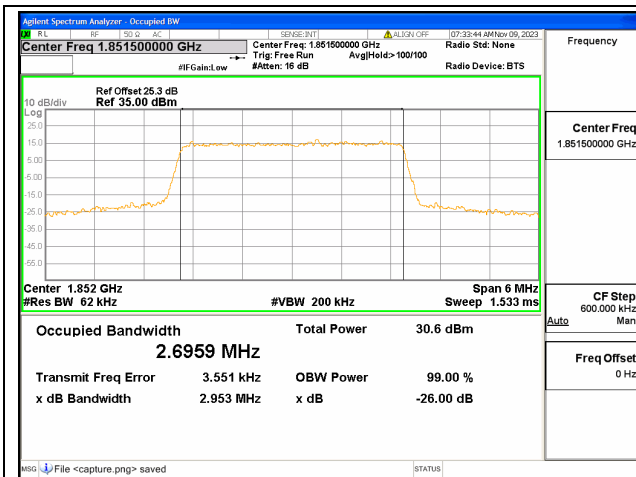
B2 / 1.4MHz / 16QAM/ Mid CH



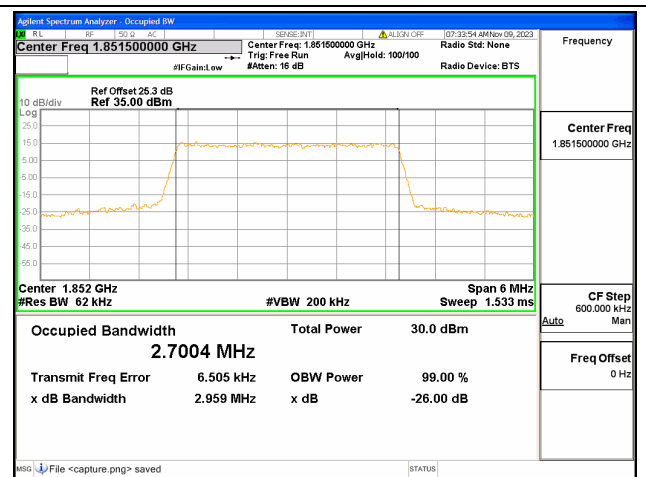
B2 / 1.4MHz / QPSK/ High CH



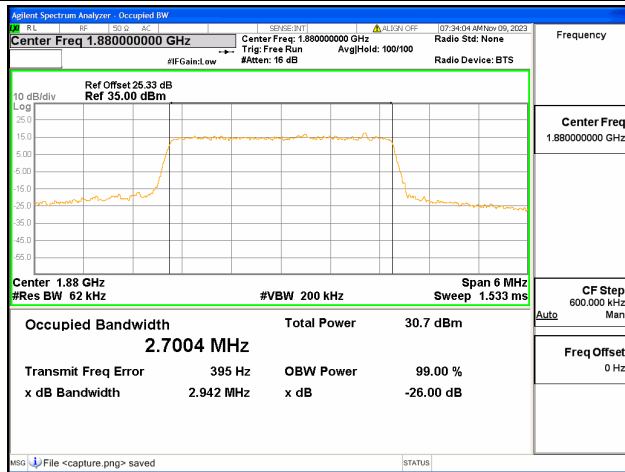
B2 / 1.4MHz / 16QAM/ High CH



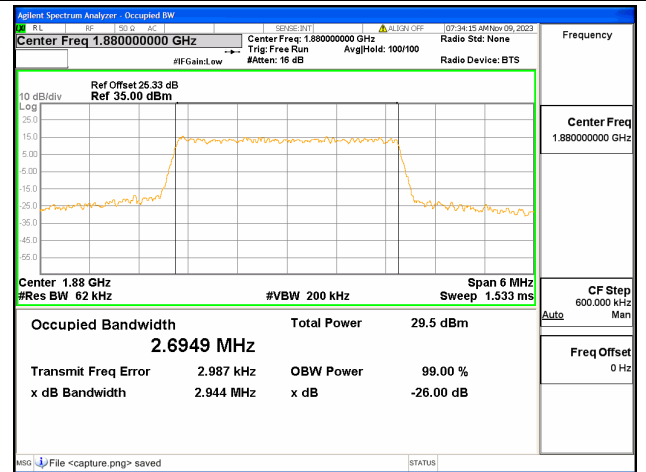
B2 / 3MHz / QPSK/ Low CH



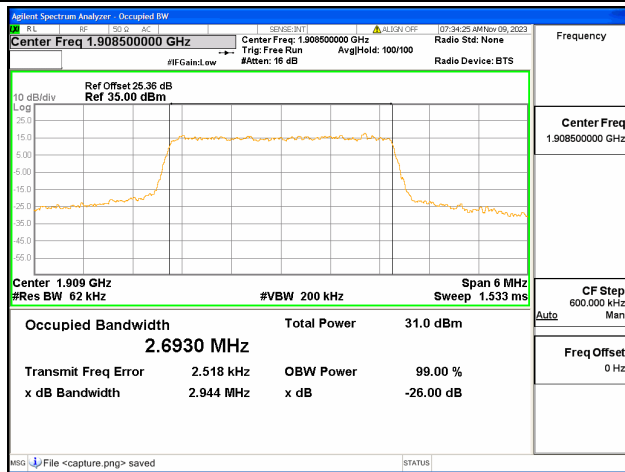
B2 / 3MHz / 16QAM/ Low CH



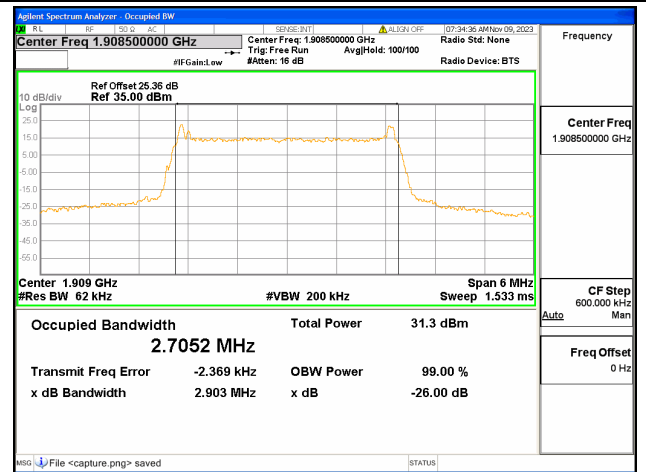
B2 / 3MHz / QPSK/ Mid CH



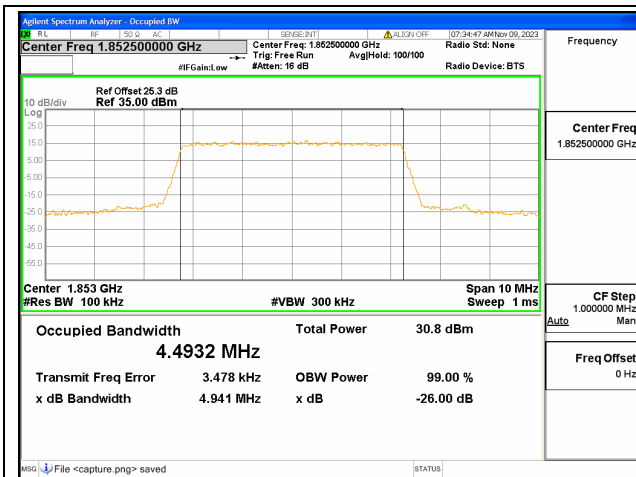
B2 / 3MHz / 16QAM/ Mid CH



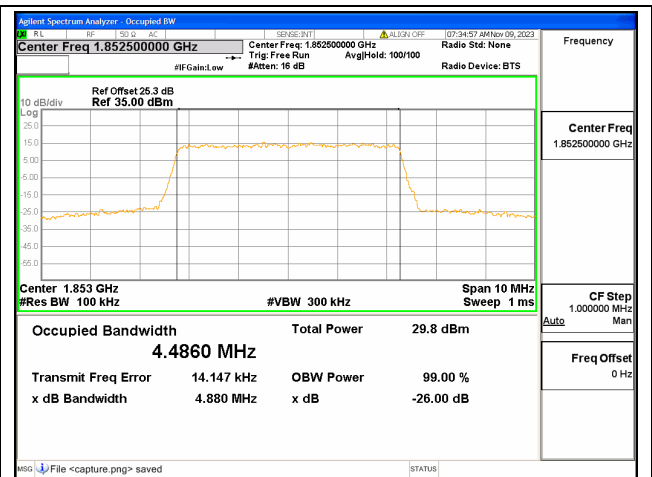
B2 / 3MHz / QPSK/ High CH



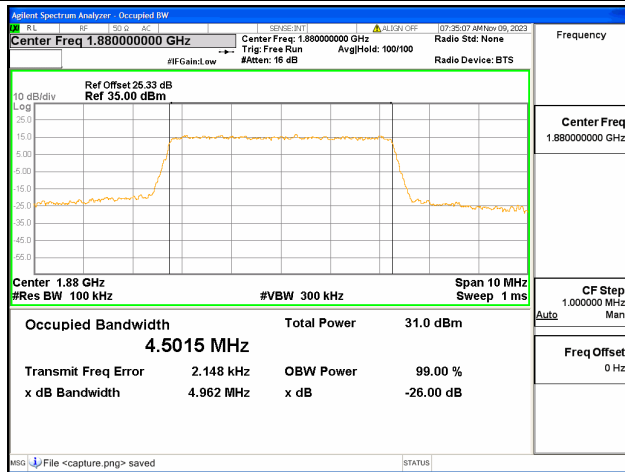
B2 / 3MHz / 16QAM/ High CH



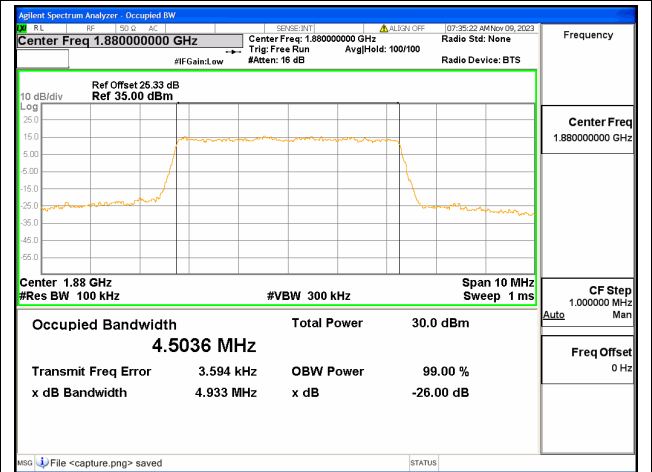
B2 / 5MHz / QPSK/ Low CH



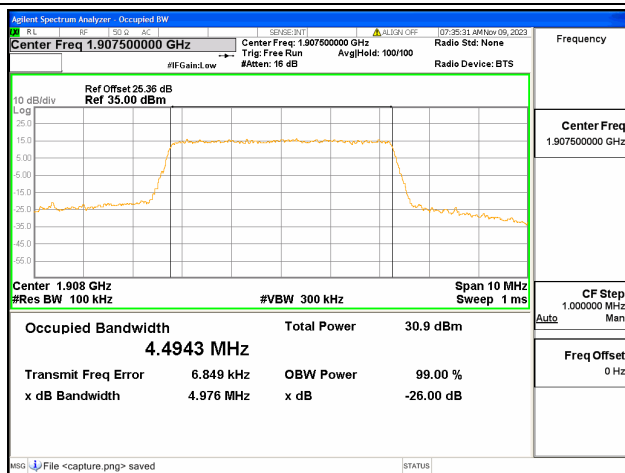
B2 / 5MHz / 16QAM/ Low CH



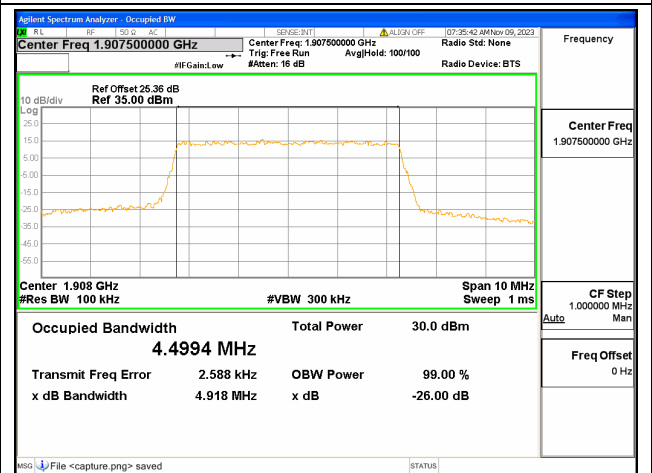
B2 / 5MHz / QPSK/ Mid CH



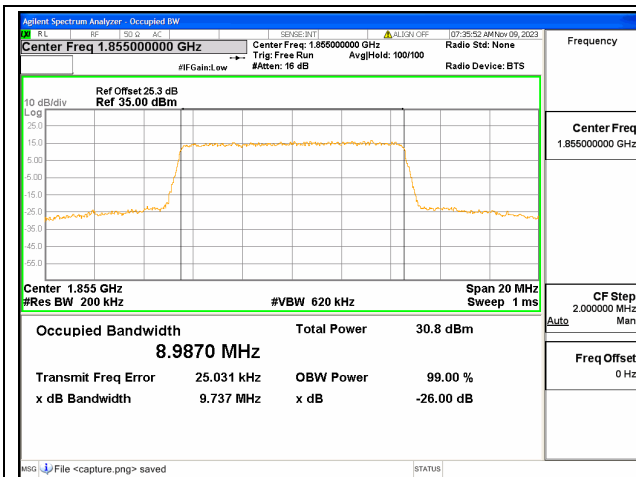
B2 / 5MHz / 16QAM/ Mid CH



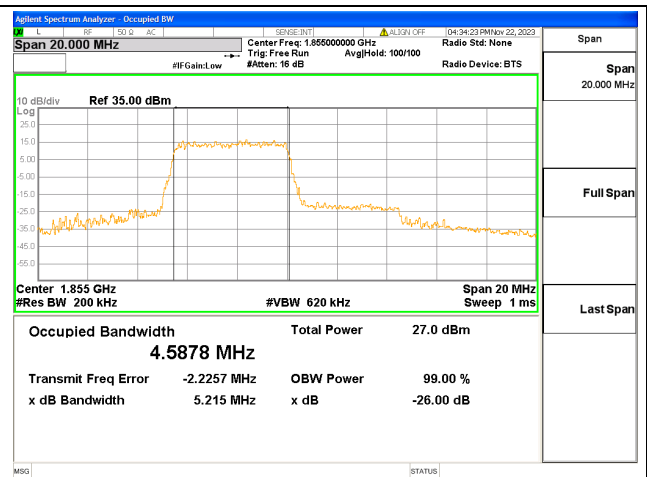
B2 / 5MHz / QPSK/ High CH



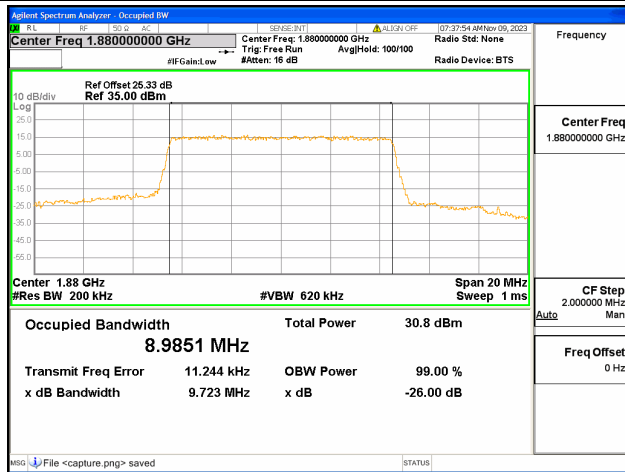
B2 / 5MHz / 16QAM/ High CH



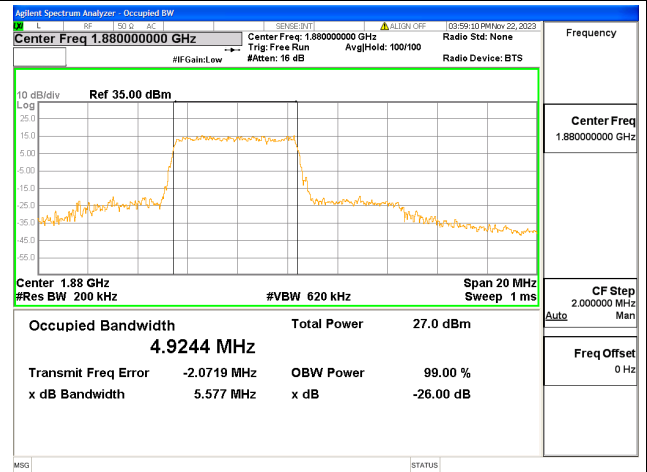
B2 / 10MHz / QPSK/ Low CH



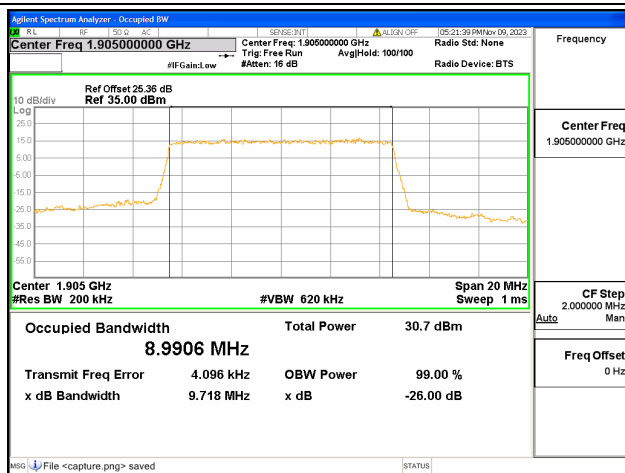
B2 / 10MHz / 16QAM/ Low CH



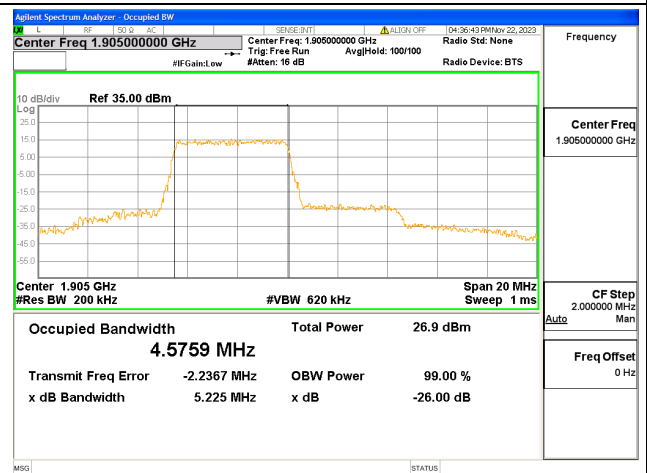
B2 / 10MHz / QPSK/ Mid CH



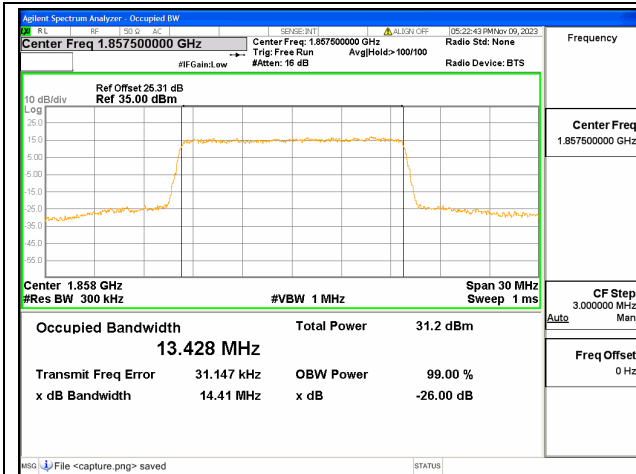
B2 / 10MHz / 16QAM/ Mid CH



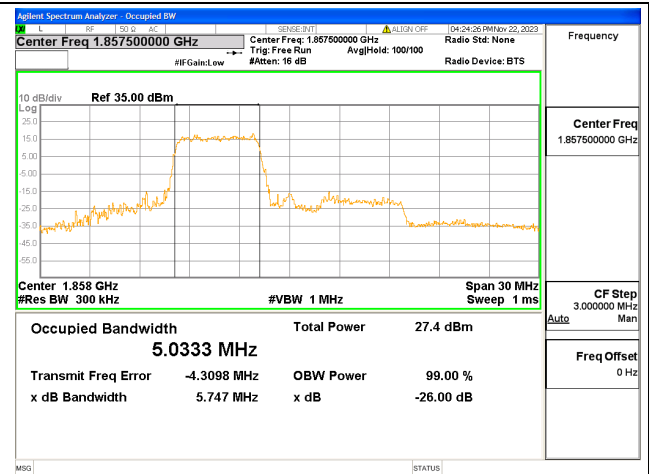
B2 / 10MHz / QPSK/ High CH



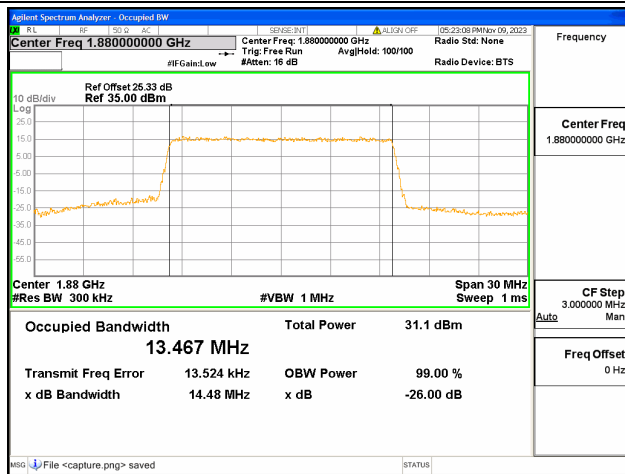
B2 / 10MHz / 16QAM/ High CH



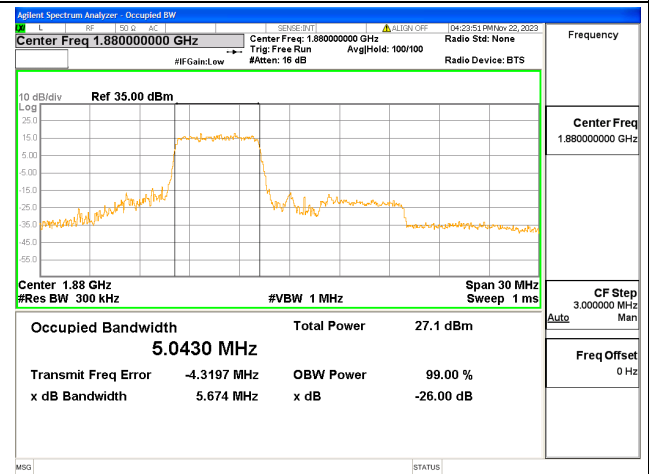
B2 / 15MHz / QPSK/ Low CH



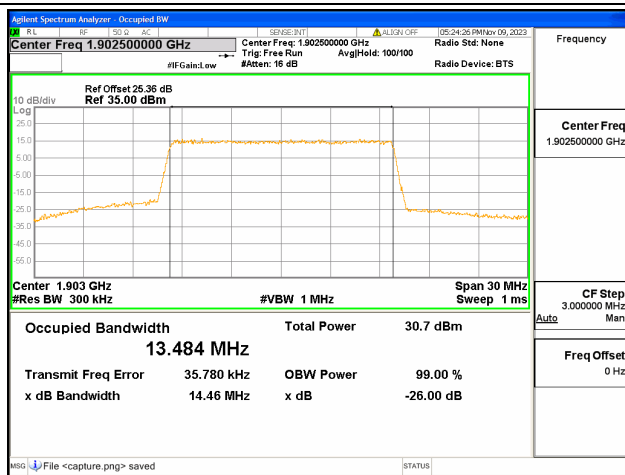
B2 / 15MHz / 16QAM/ Low CH



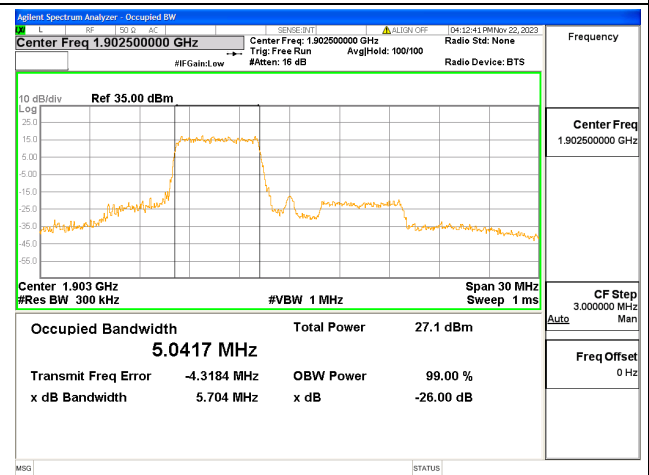
B2 / 15MHz / QPSK/ Mid CH



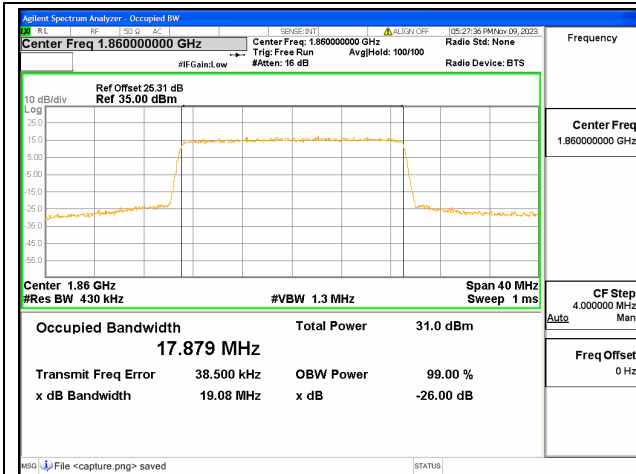
B2 / 15MHz / 16QAM/ Mid CH



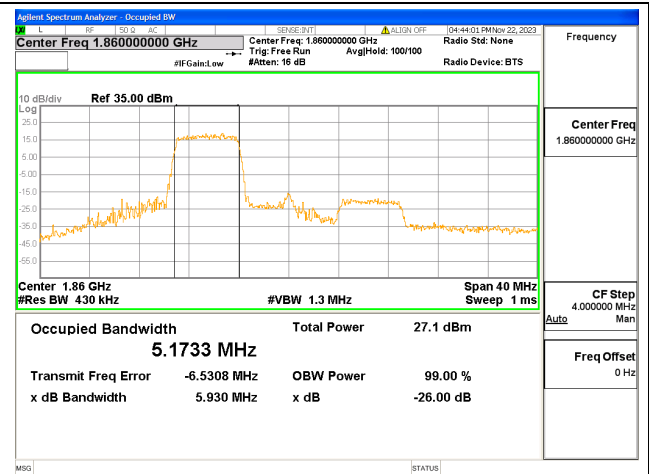
B2 / 15MHz / QPSK/ High CH



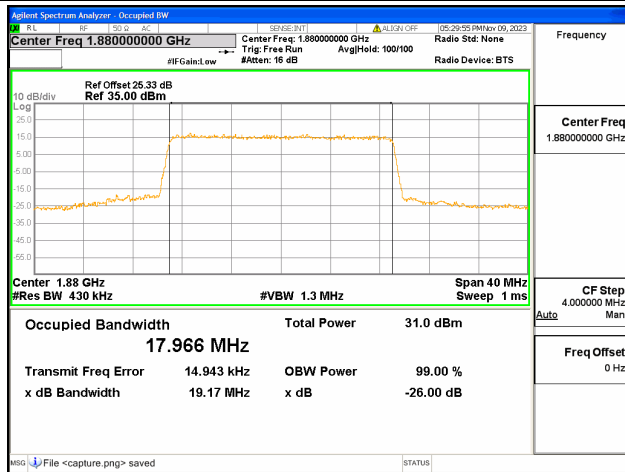
B2 / 15MHz / 16QAM/ High CH



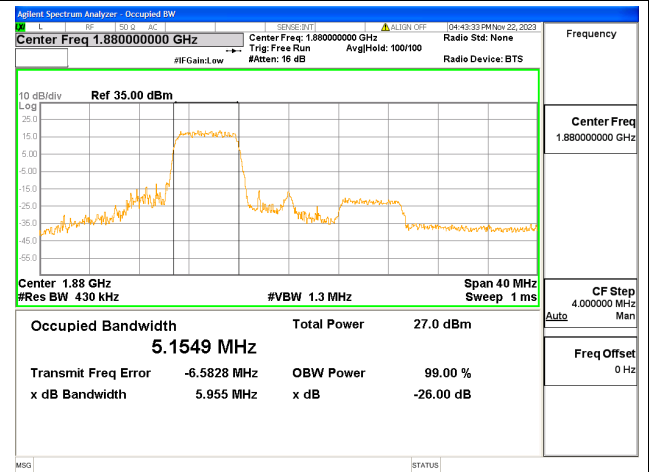
B2 / 20MHz / QPSK/ Low CH



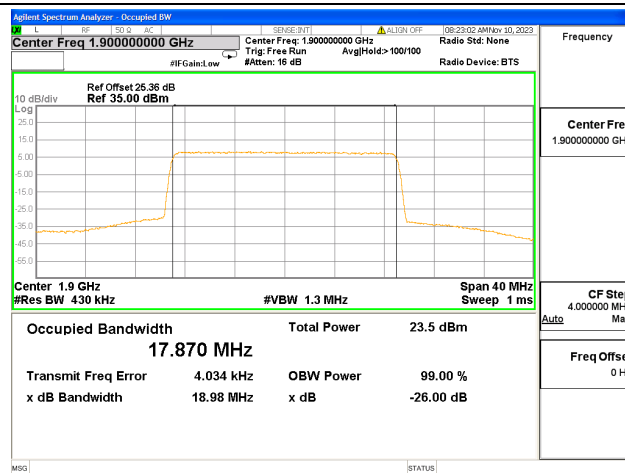
B2 / 20MHz / 16QAM/ Low CH



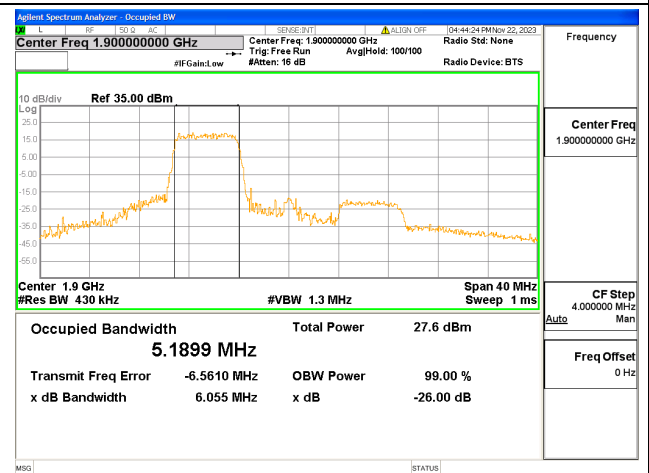
B2 / 20MHz / QPSK/ Mid CH



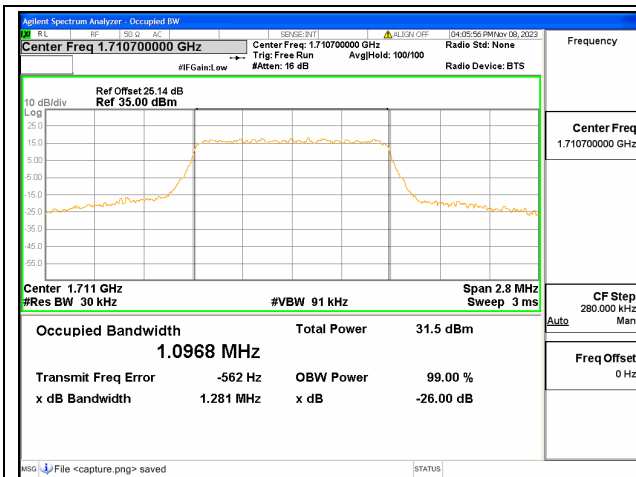
B2 / 20MHz / 16QAM/ Mid CH



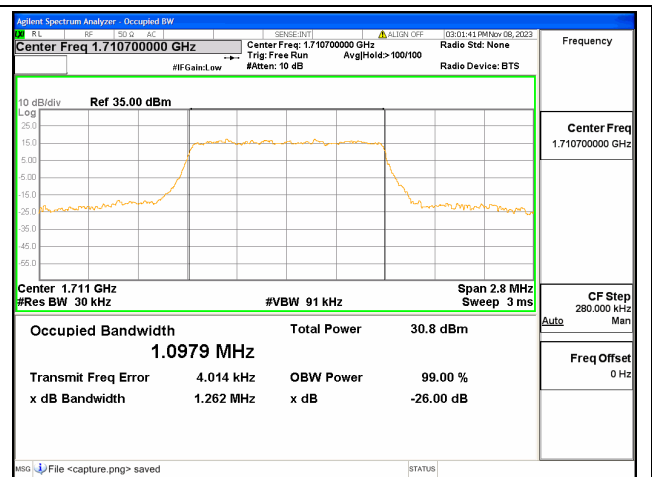
B2 / 20MHz / QPSK/ High CH



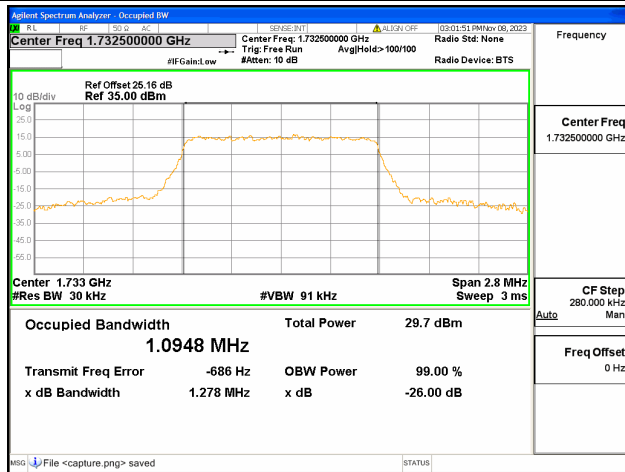
B2 / 20MHz / 16QAM/ High CH



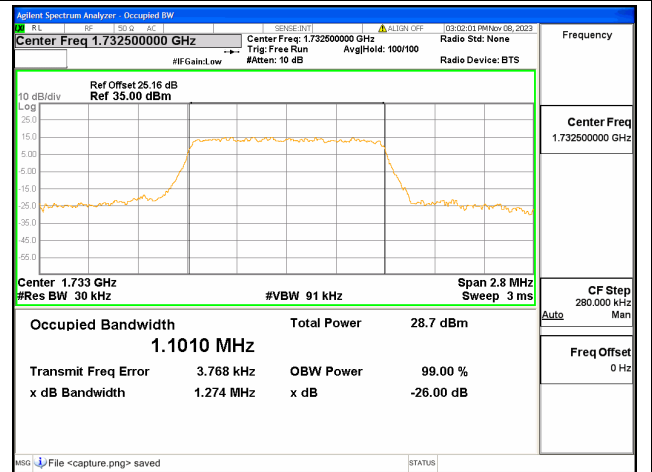
B4 / 1.4MHz / QPSK/ Low CH



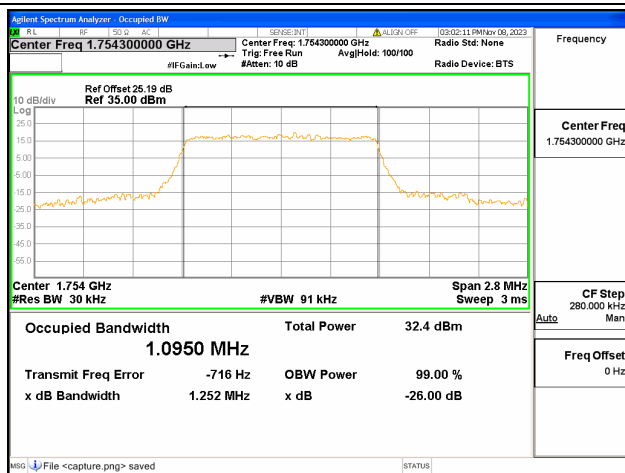
B4 / 1.4MHz / 16QAM/ Low CH



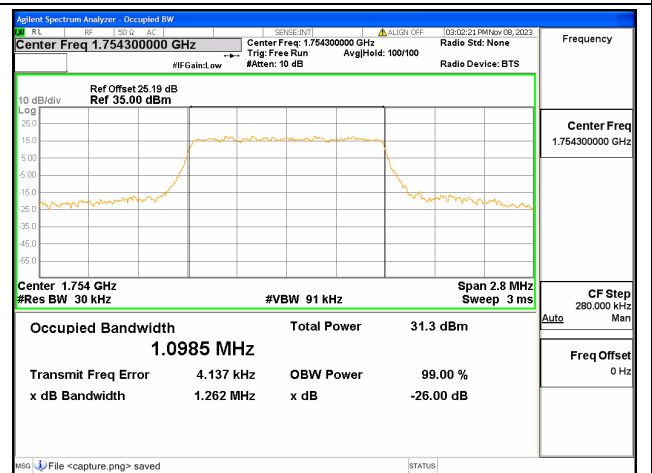
B4 / 1.4MHz / QPSK/ Mid CH



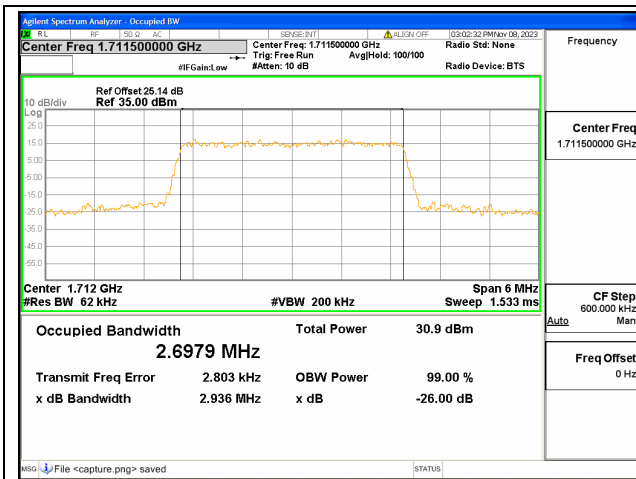
B4 / 1.4MHz / 16QAM/ Mid CH



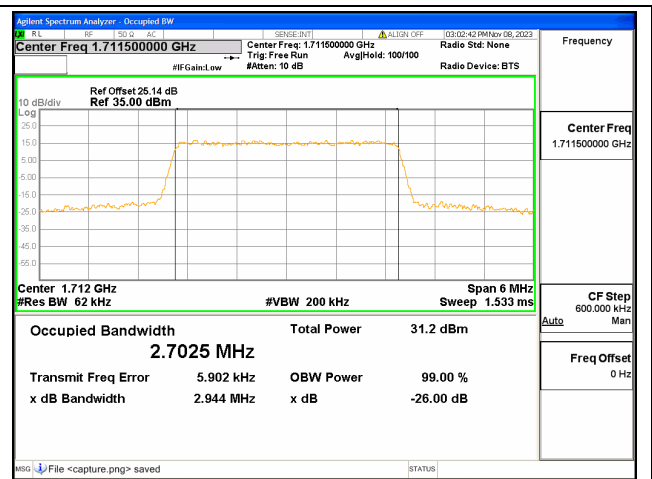
B4 / 1.4MHz / QPSK/ High CH



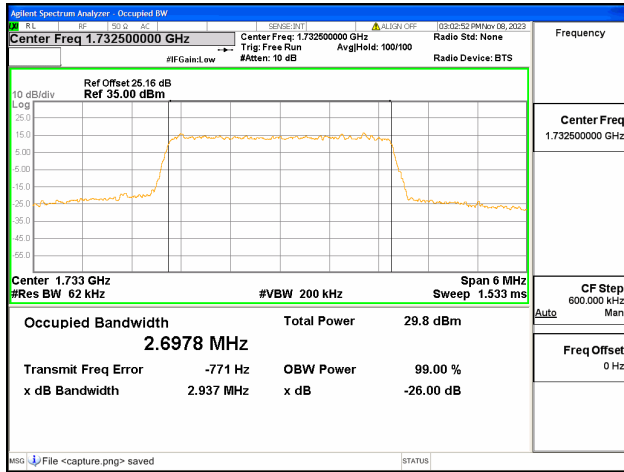
B4 / 1.4MHz / 16QAM/ High CH



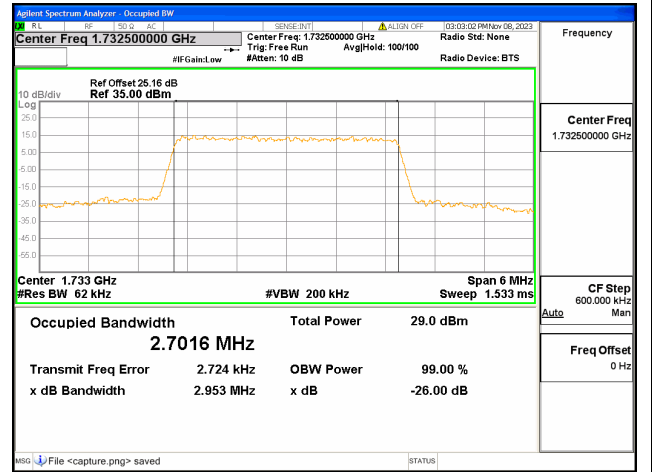
B4 / 3MHz / QPSK/ Low CH



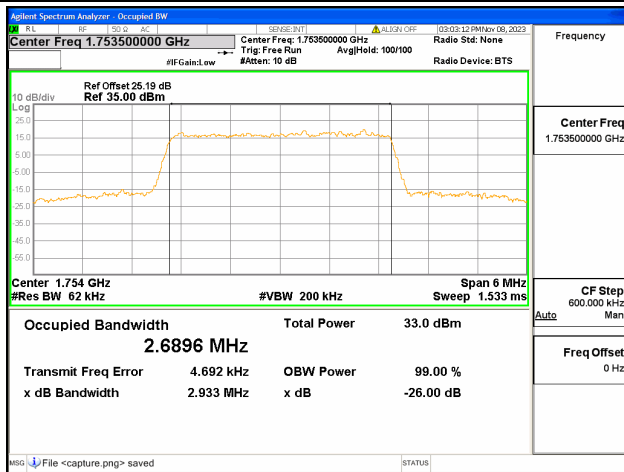
B4 / 3MHz / 16QAM/ Low CH



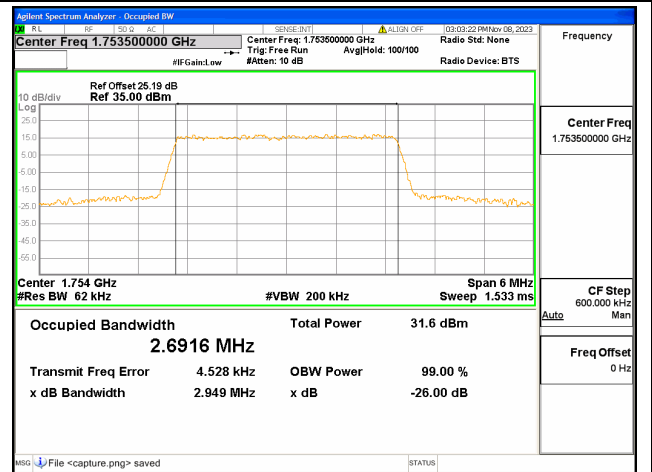
B4 / 3MHz / QPSK/ Mid CH



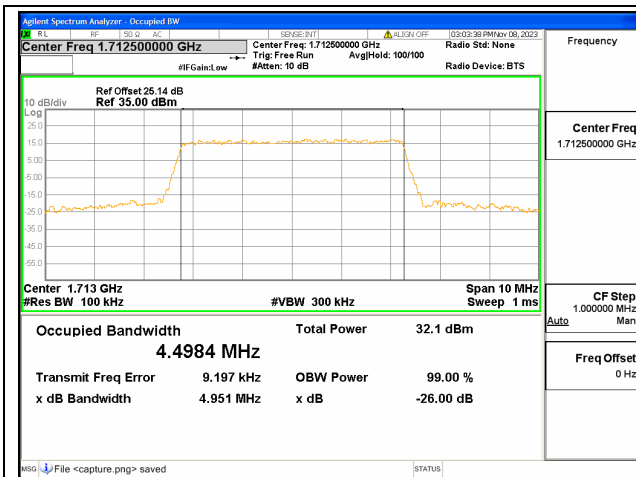
B4 / 3MHz / 16QAM/ Mid CH



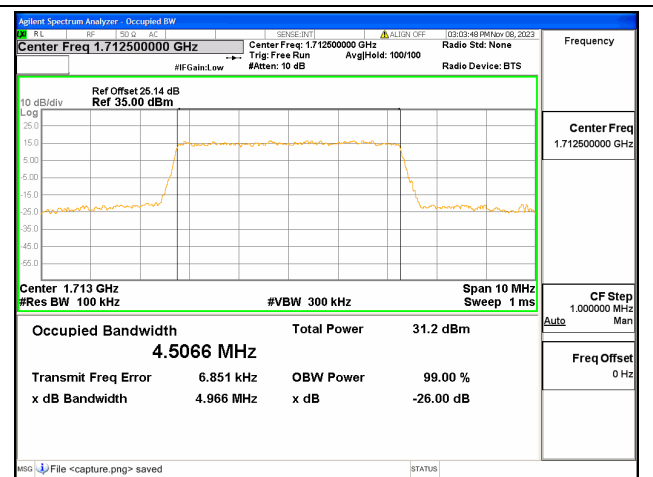
B4 / 3MHz / QPSK/ High CH



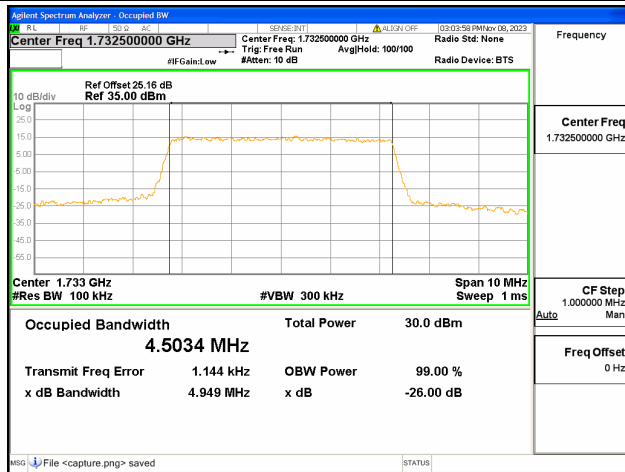
B4 / 3MHz / 16QAM/ High CH



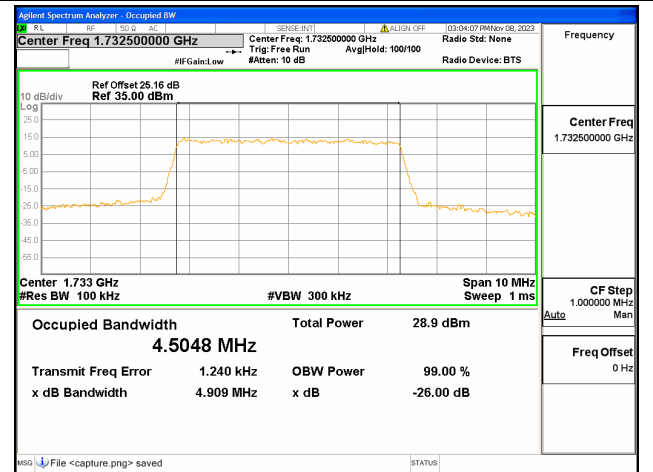
B4 / 5MHz / QPSK/ Low CH



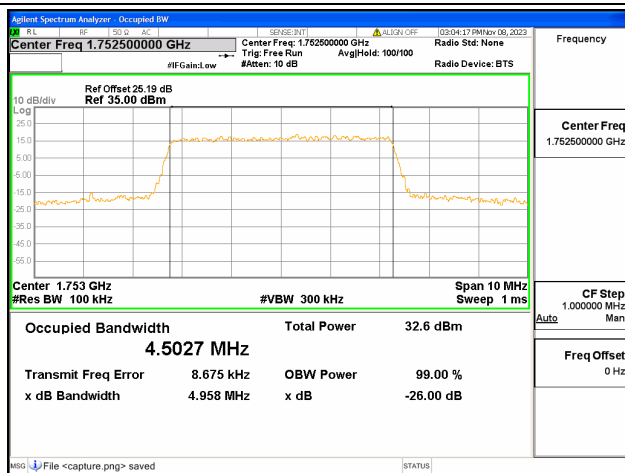
B4 / 5MHz / 16QAM/ Low CH



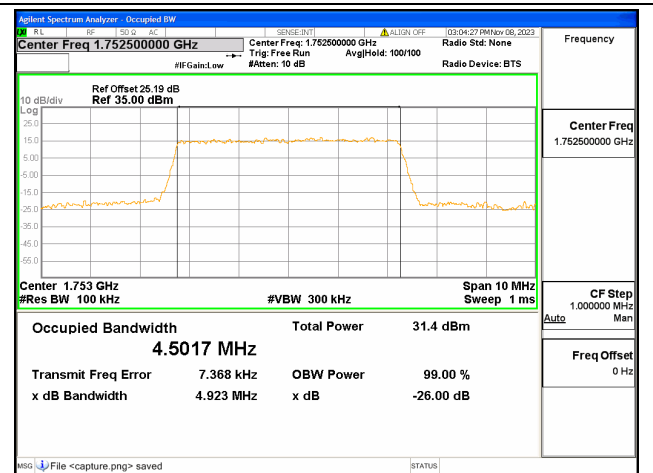
B4 / 5MHz / QPSK/ Mid CH



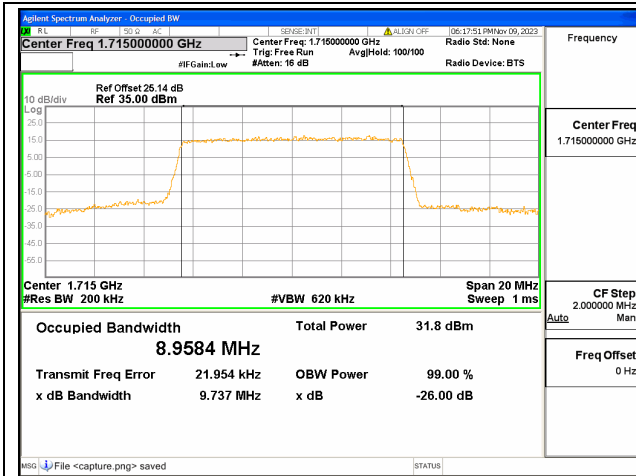
B4 / 5MHz / 16QAM/ Mid CH



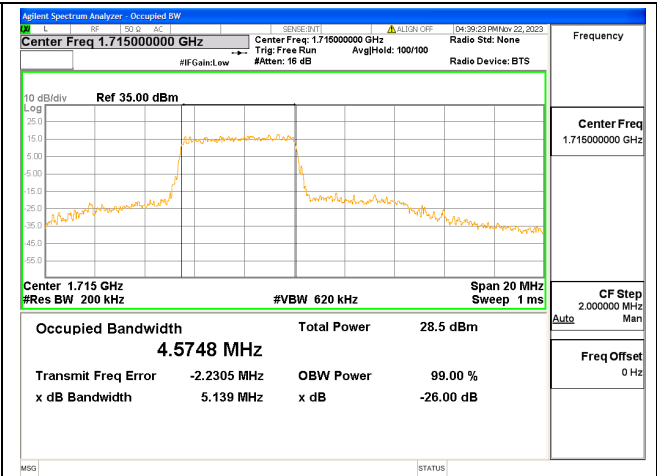
B4 / 5MHz / QPSK/ High CH



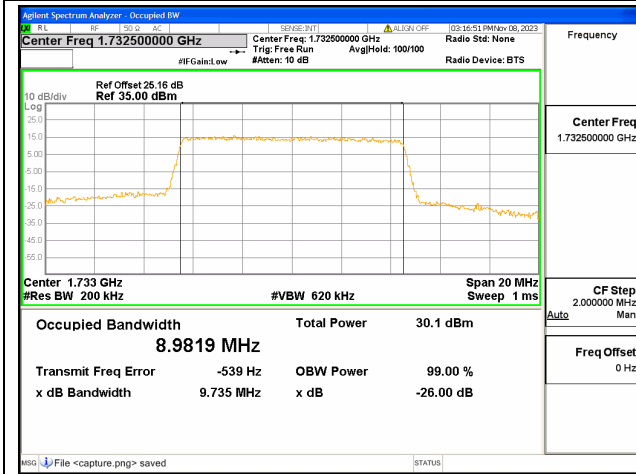
B4 / 5MHz / 16QAM/ High CH



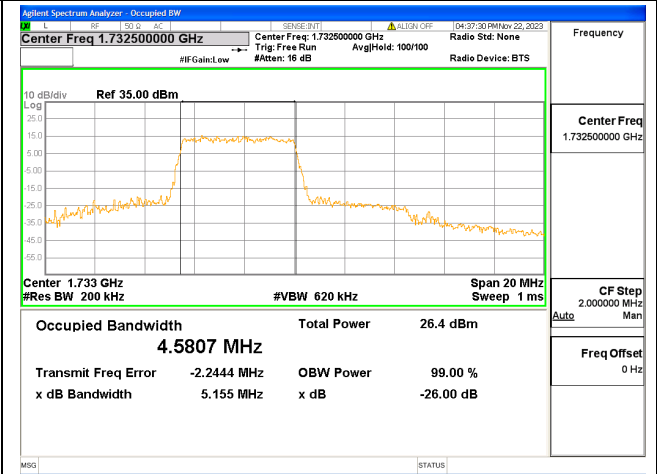
B4 / 10MHz / QPSK/ Low CH



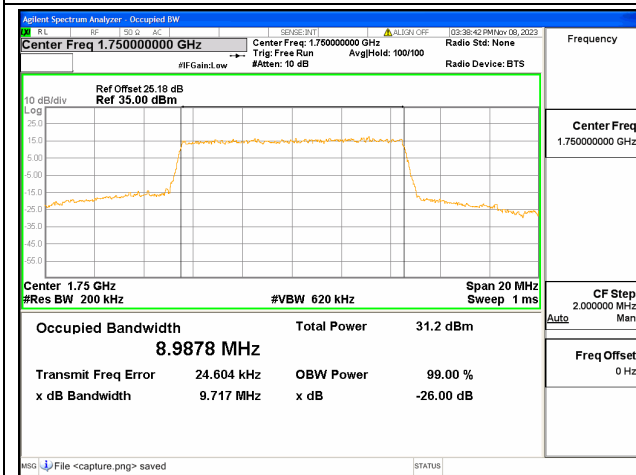
B4 / 10MHz / 16QAM/ Low CH



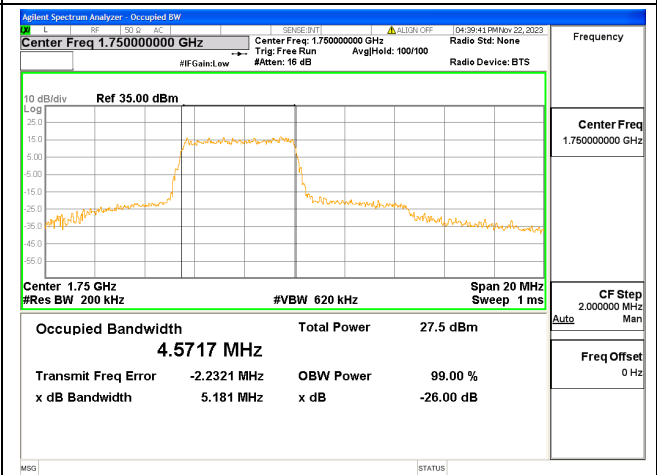
B4 / 10MHz / QPSK/ Mid CH



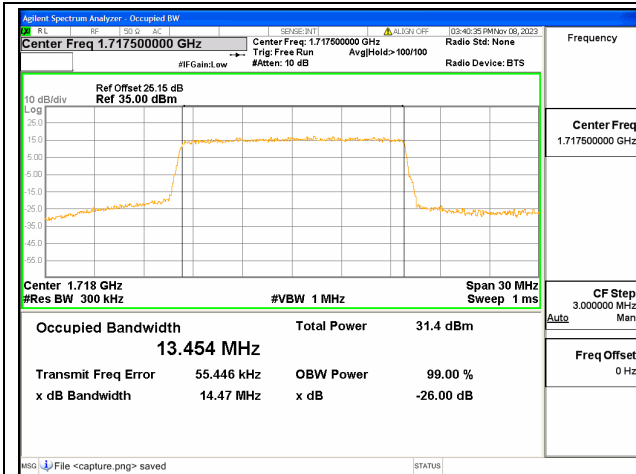
B4 / 10MHz / 16QAM/ Mid CH



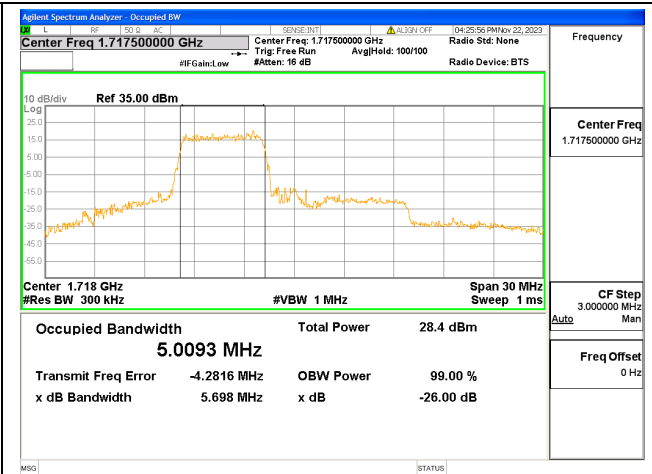
B4 / 10MHz / QPSK/ High CH



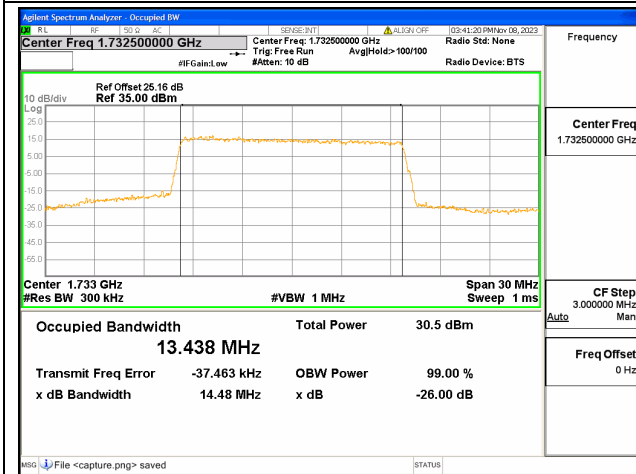
B4 / 10MHz / 16QAM/ High CH



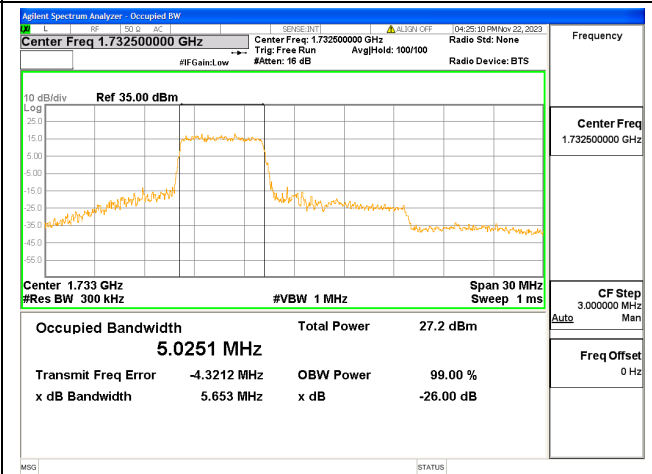
B4 / 15MHz / QPSK/ Low CH



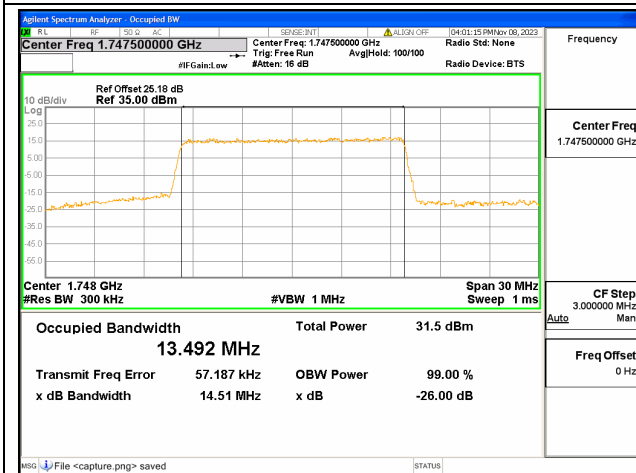
B4 / 15MHz / 16QAM/ Low CH



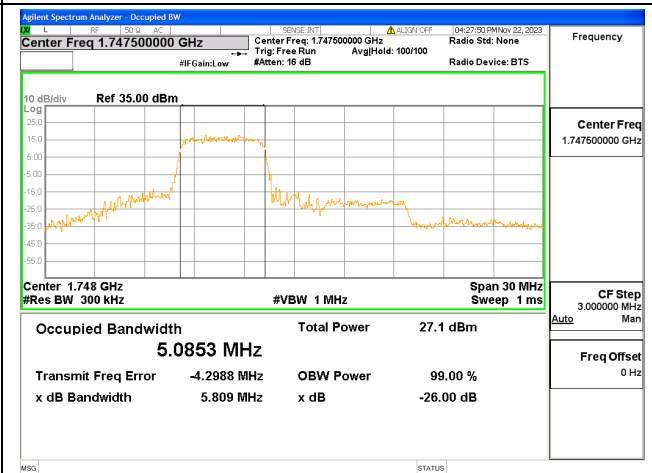
B4 / 15MHz / QPSK/ Mid CH



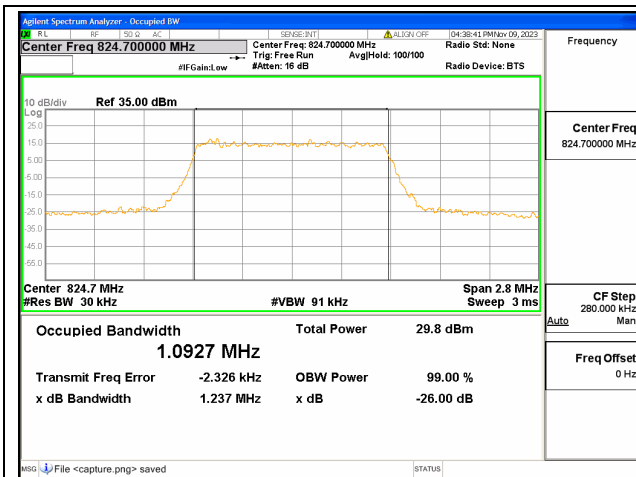
B4 / 15MHz / 16QAM/ Mid CH



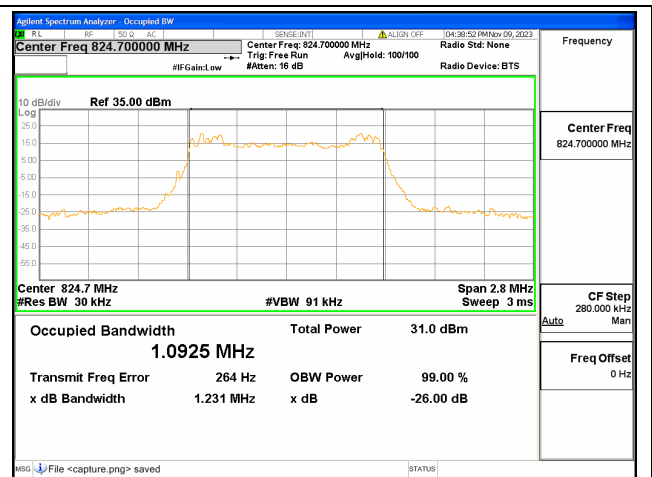
B4 / 15MHz / QPSK/ High CH



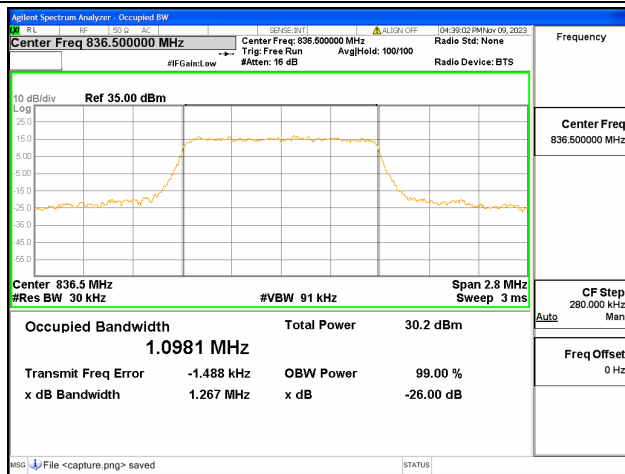
B4 / 15MHz / 16QAM/ High CH



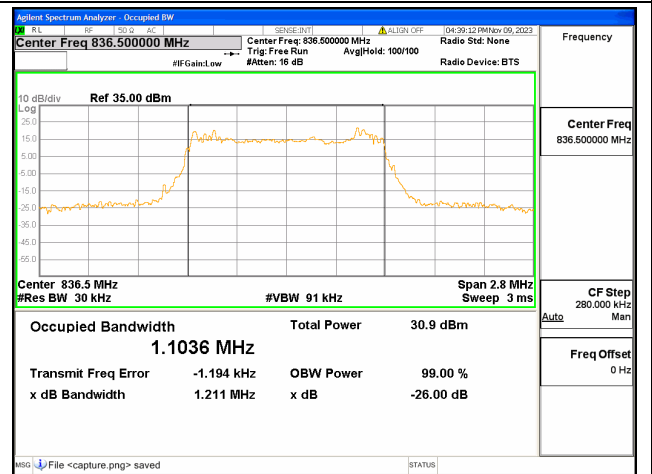
B5 / 1.4MHz / QPSK/ Low CH



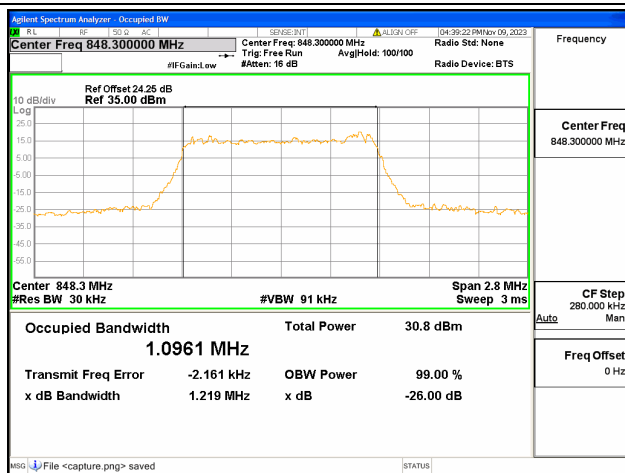
B5 / 1.4MHz / 16QAM/ Low CH



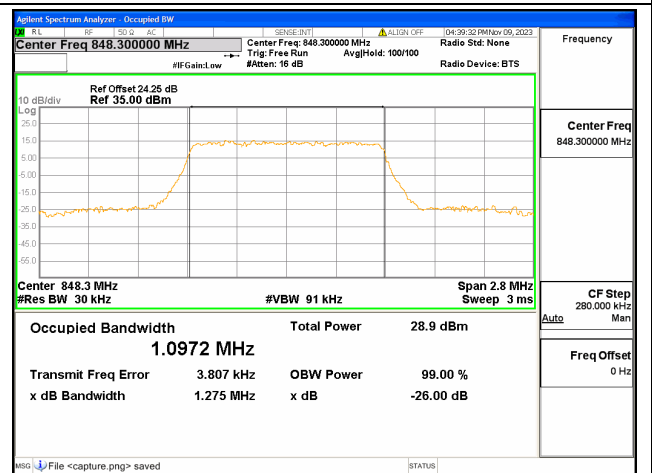
B5 / 1.4MHz / QPSK/ Mid CH



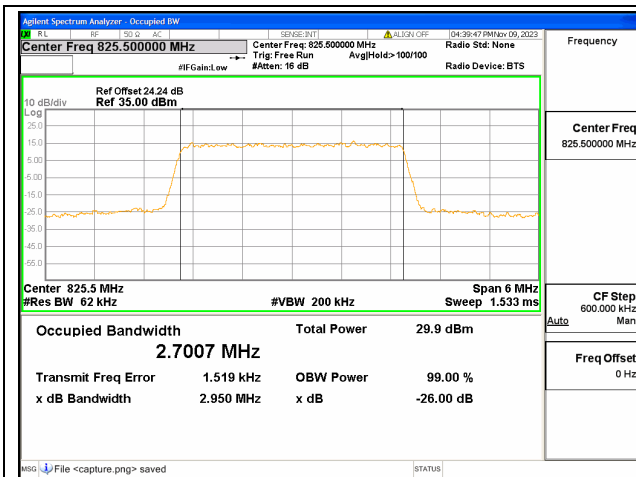
B5 / 1.4MHz / 16QAM/ Mid CH



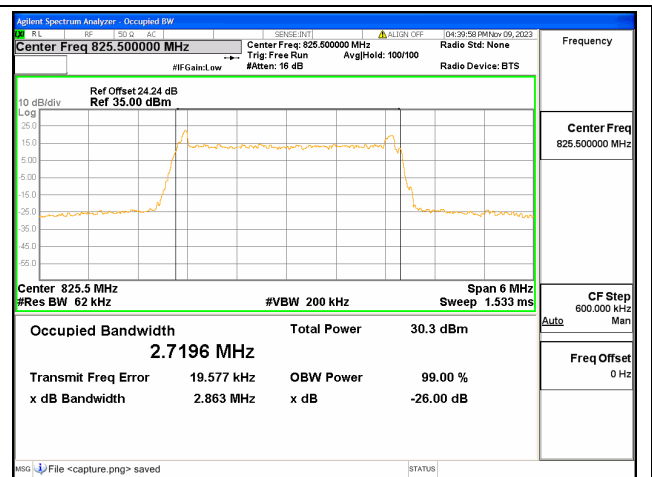
B5 / 1.4MHz / QPSK/ High CH



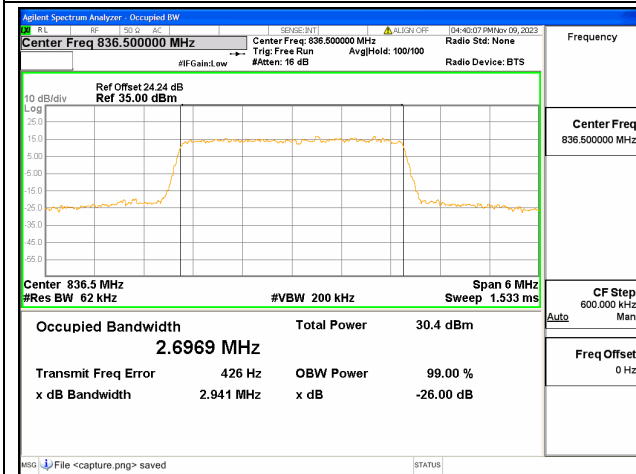
B5 / 1.4MHz / 16QAM/ High CH



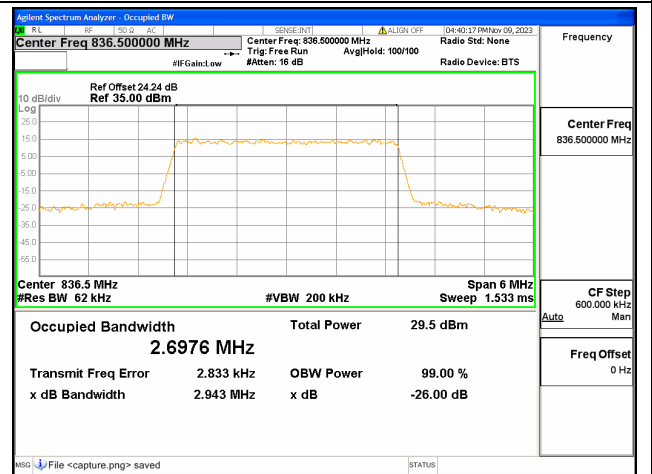
B5 / 3MHz / QPSK/ Low CH



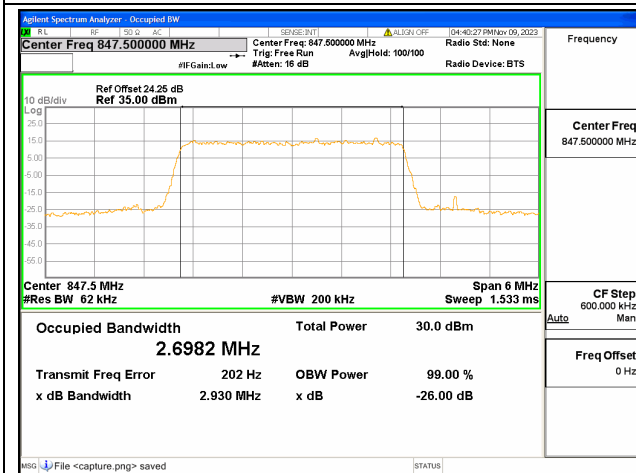
B5 / 3MHz / 16QAM/ Low CH



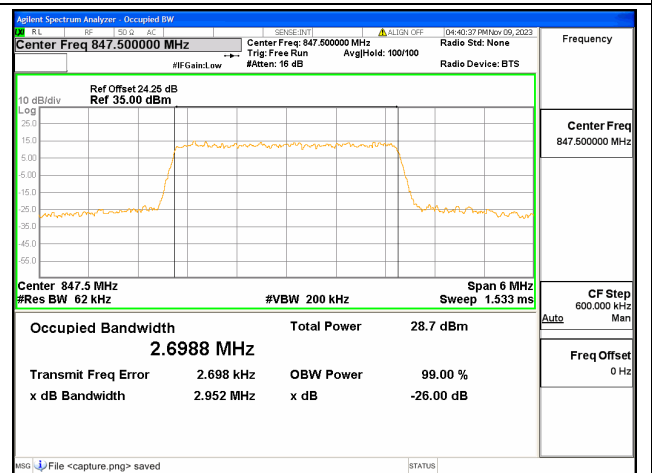
B5 / 3MHz / QPSK/ Mid CH



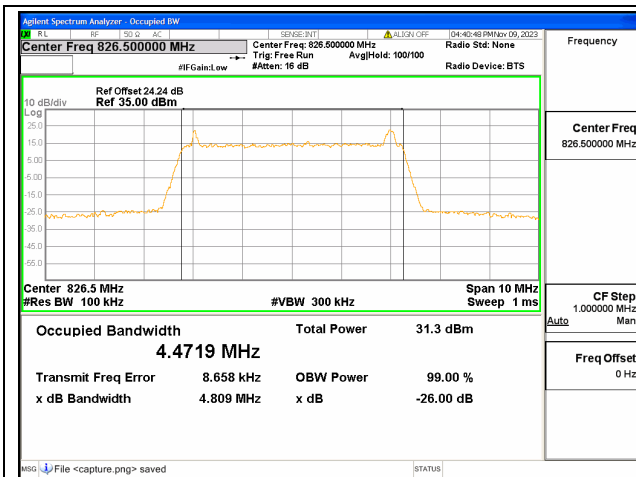
B5 / 3MHz / 16QAM/ Mid CH



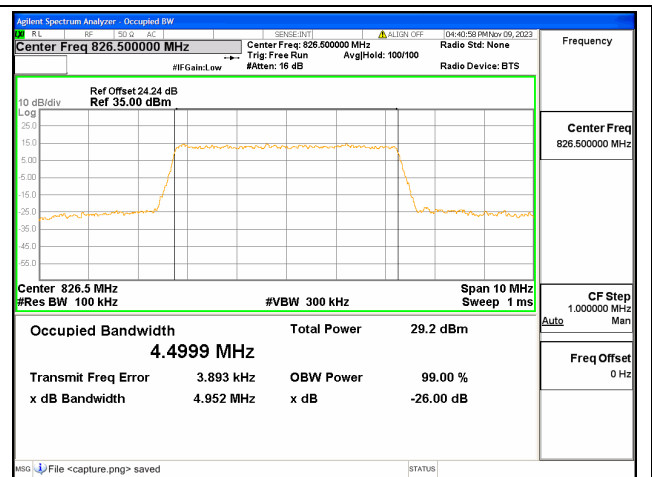
B5 / 3MHz / QPSK/ High CH



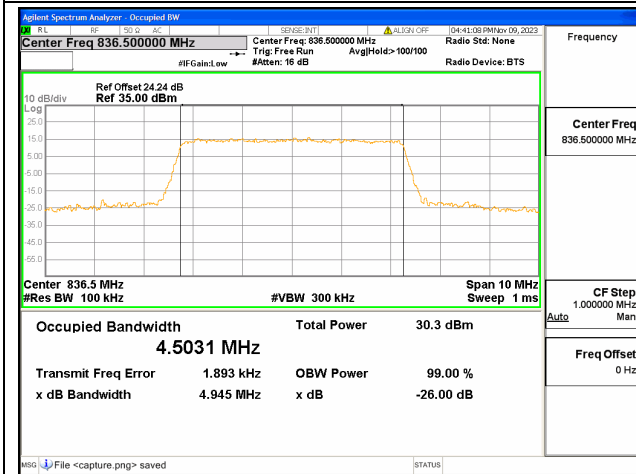
B5 / 3MHz / 16QAM/ High CH



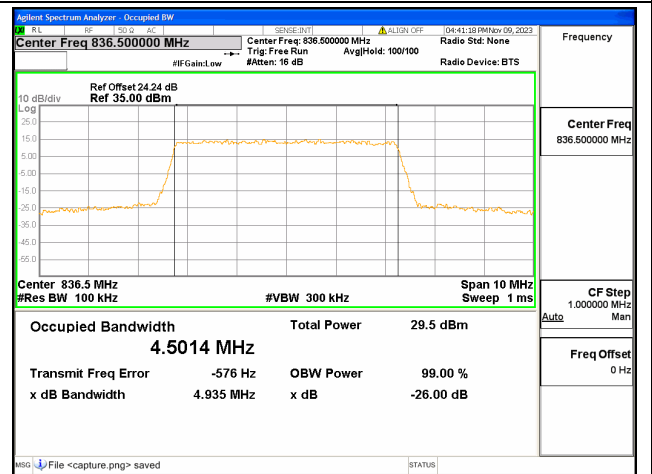
B5 / 5MHz / QPSK/ Low CH



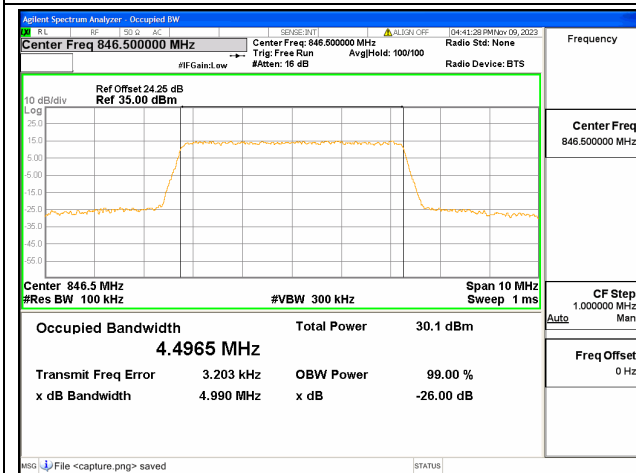
B5 / 5MHz / 16QAM/ Low CH



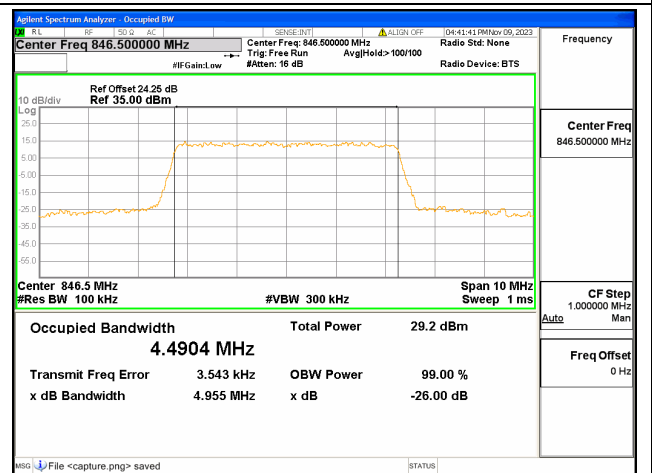
B5 / 5MHz / QPSK/ Mid CH



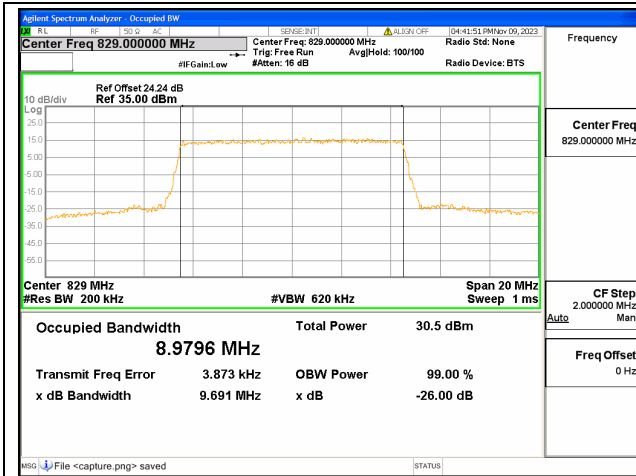
B5 / 5MHz / 16QAM/ Mid CH



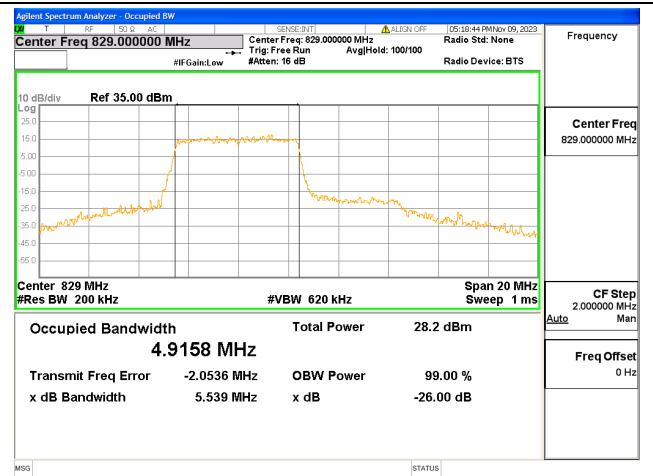
B5 / 5MHz / QPSK/ High CH



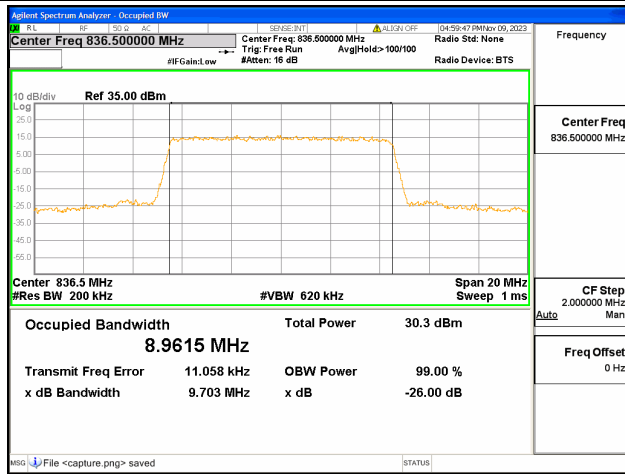
B5 / 5MHz / 16QAM/ High CH



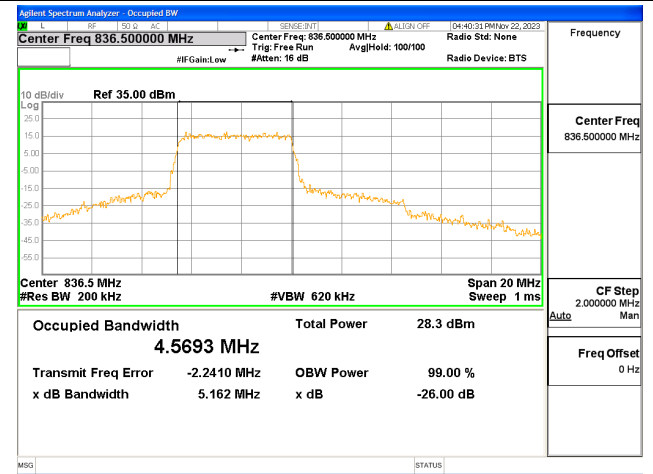
B5 / 10MHz / QPSK/ Low CH



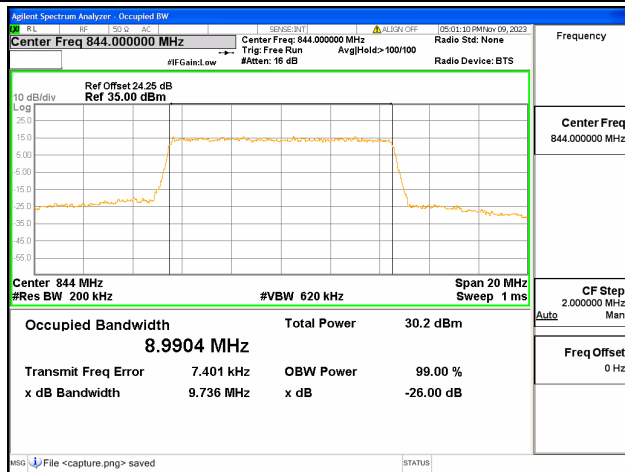
B5 / 10MHz / 16QAM/ Low CH



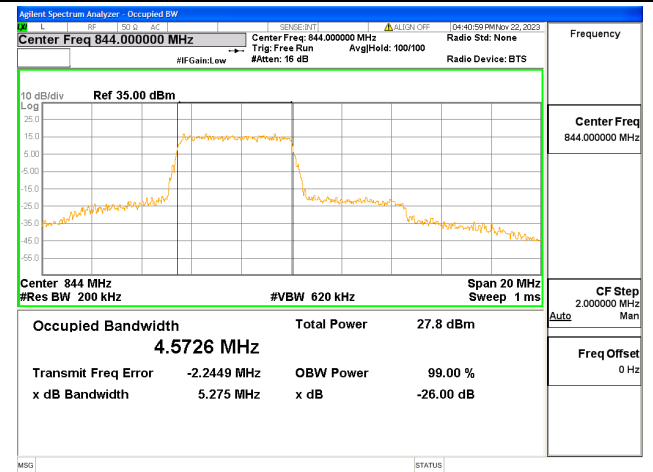
B5 / 10MHz / QPSK/ Mid CH



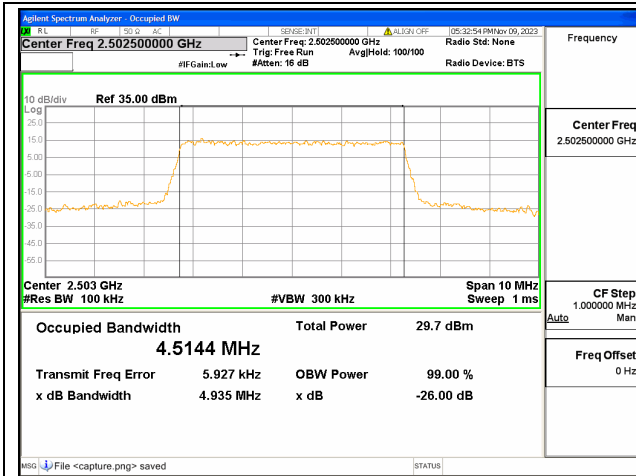
B5 / 10MHz / 16QAM/ Mid CH



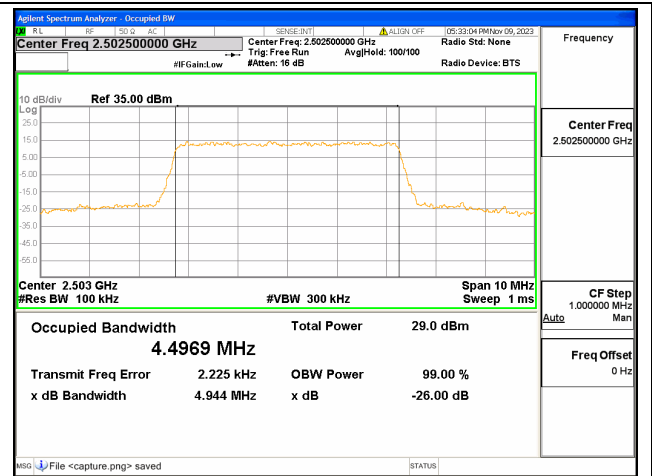
B5 / 10MHz / QPSK/ High CH



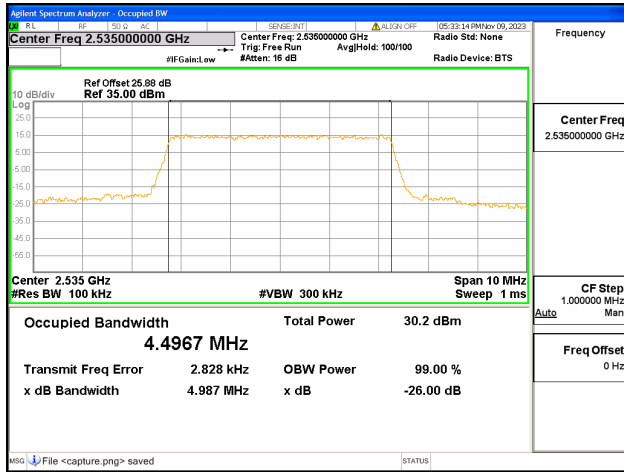
B5 / 10MHz / 16QAM/ High CH



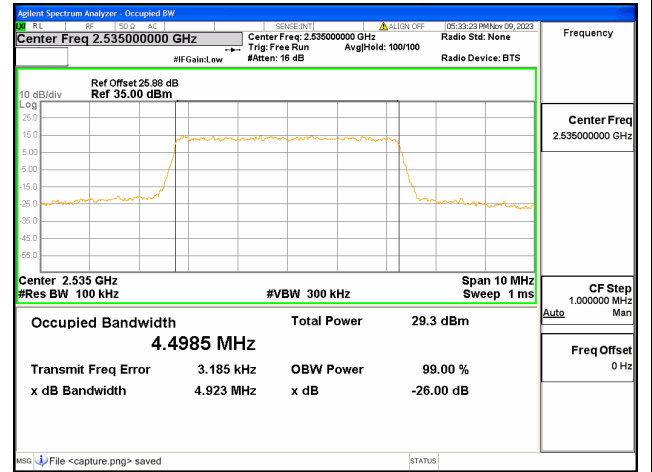
B7 / 5MHz / QPSK/ Low CH



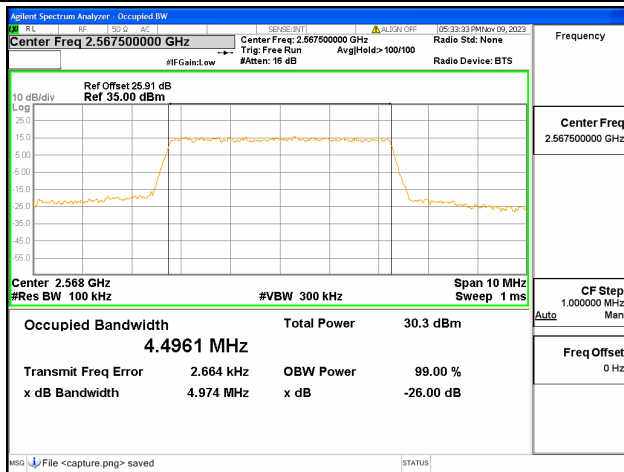
B7 / 5MHz / 16QAM/ Low CH



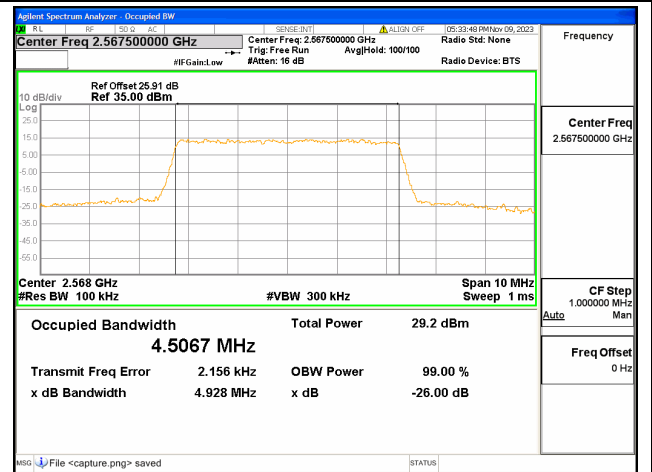
B7 / 5MHz / QPSK/ Mid CH



B7 / 5MHz / 16QAM/ Mid CH



B7 / 5MHz / QPSK/ High CH



B7 / 5MHz / 16QAM/ High CH