FCC CFR47 PART 22H, 24E, 27 CERTIFICATION TEST REPORT

FCC ID: ZLE-RG725

Product: LTE SMARTPHONE

Trade Mark: RugGear

Model Number: PSM01E

Family Model: RG725

Report No.: S20072200103006

Prepared for

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TEST RESULT CERTIFICATION

Applicant's name ..... :	Power Idea Technology (Shenzhen) Co., Ltd.
Address ..... :	4th Floor, A Section ,Languang Science&technology Xinxi RD, Hi-Tech Industrial Park North, Nanshan ShenZhen, 518057 China
Manufacturer's Name ..... :	RUGGEAR LIMITED
Address ..... :	RM1301,13/F WING TUCK COMM CTR 177-183 WING LOK ST SHEUNG WAN HONG KONG
Product name ..... :	LTE SMARTPHONE
Model and/or type reference ..... :	PSM01E
Family Model:	RG725
Standards ..... :	FCC CFR 47 Part 22H, Part 24E, Part 27
Test procedure..... :	ANSI C63.26:2015
	ANSI/TIA-603-E-2016

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test .....

Date (s) of performance of tests..... 24 Nov. 2018 ~ 29 Dec. 2018; 25 Jul. 2020 ~ 12 Aug. 2020

Date of Issue..... 12 Aug. 2020

Test Result..... **Pass**

Note: A part of test data of this report are based on the original test report S18112300402E006, dated by 2018-12-29.

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Revision History

Report No.	Version	Description	Issued Date
S18112300402E005	Rev.01	Initial issue of report	Dec. 29, 2018
S20072200103006	Rev.02	1. Add WCDMA Band II and LTE Band II 2. Add a Battery 3. Changed camera and RAM 4. Changed Model Name	Aug 12, 2020

1. GENERAL INFORMATION

1.1 PRODUCT DESCRIPTION

A major technical description of EUT is described as following:

Product Designation:	LTE SMARTPHONE
Trade Mark	RugGear
Model Name	PSM01E
FCC ID:	ZLE-RG725
Frequency Bands:	U.S. Bands: ☒LTE FDD Band 2, 4, 5, 7 LTE TDD Band 38, 40, 41
Frequency Range:	LTE FDD Band 2 Uplink: 1850MHz-1910MHz, Downlink: 1930MHz-1990MHz; LTE FDD Band 4 Uplink: 1710MHz-1755MHz, Downlink: 2110MHz-2155MHz; LTE FDD Band 5 Uplink: 824MHz-849MHz, Downlink: 869MHz-894MHz; LTE FDD Band 7 Uplink: 2500MHz-2570MHz, Downlink: 2620MHz-2690MHz; LTE TDD Band 38 Uplink: 2570MHz-2620MHz Downlink: 2570MHz-2620MHz(Number Of Channel see note 2) LTE TDD Band 40 Uplink: 2305MHz-2320MHz&2345-2360MHz Downlink: 2305MHz-2320MHz&2345-2360MHz(Number Of Channel see note 3) LTE TDD Band 41 Uplink: 2496MHz-2690MHz Downlink: 2496MHz-2690MHz (Number Of Channel see note 4)
Type of Modulation:	QPSK/16QAM
Antenna:	PIFA Antenna
Antenna gain:	LTE Band 4/5/7/38/40/41: -0.8dBi; LTE Band 2: -3dBi
Power Supply:	Battery 1:DC 3.8V from Battery or DC 5V from USB port Battery 2:DC 3.6V from Battery or DC 5V from USB port
Battery parameter:	Battery 1: DC3.80V/5000mAh(19Wh) Battery 2: DC3.6V/3120mAh(11.232Wh)
Adapter:	Model: HKC0115021-2D Input: 100-240V~50/60Hz 0.5A Output: 5V⎓2A
Extreme Vol. Limits:	DC 3.2V to DC 4.2V (Nominal DC 3.8V)
HW Version	S955_V1.3

SW Version	N/A
** Note: 1. The High Voltage DC 4.2V and Low Voltage 3.2V was declared by manufacturer, The EUT couldn't be operate normally with higher or lower voltage.	

Note: 2

Test Frequency ID	Bandwidth(MHz)	EARFCN	Frequency (UL and DL) (MHz)
Low Range	5	37775	2572.5
	10	37800	2575
	15	37825	2577.5
	20	37850	2580
Mid Range	5/10/15/20	38000	2595
High Range	5	38225	2617.5
	10	38200	2615
	15	38175	2612.5
	20	38150	2610

Note: 3

Frequency Bands	Modes	Bandwidth (MHz)	Test Frequency(MHz)		
			Low	Middle	High
LTE Band 40 2305-2320MHz	Single Carrier	5	2307.5	2312.5	2317.5
		10	2310	2312.5	2315
		15	/	2312.5	/
LTE Band 40 2345-2360MHz	Single Carrier	5	2347.5	2352.5	2357.5
		10	2350	2352.5	2355
		15	/	2352.5	/

Note: 4

Test Frequency ID	Bandwidth(MHz)	EARFCN	Frequency (UL and DL) (MHz)
Low Range	5	39675	2498.5
	10	39700	2501
	15	39725	2503.5
	20	39750	2506
Mid Range	5/10/15/20	40620	2593
High Range	5	41565	2687.5
	10	41540	2685
	15	41515	2682.5
	20	41490	2680

1.2 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: ZLE-RG725** filing to comply with the FCC Part 22H&27&24E.

1.3 TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI/TIA-603-E-2016, FCC CFR 47 Part 2, Part 22/24/27, ANSI C63.26:2015.

1.4 TEST FACILITY

The test site used to collect the radiated data is located at:

ShenZhen NTEK Testing Technology Co., Ltd.

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R.China.

The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.26:2015& ANSI C63.4: 2014.

FCC Registration No.:463705

IC Registration No.:9270A-1,

CNAS Registration No.:L5516

MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.5dB

1.5 SPECIAL ACCESSORIES

The battery and the charger, earphone supplied by the applicant were used as accessories and being tested with EUT intended for FCC grant together.

1.6 WORST-CASE CONFIGURATION AND MODE

The worst-case scenario for all measurements is based on the investigation results.

The device has LTE Bands of: Band 2, Band 4, Band 5, Band 7, Band 38, Band 40, Band 41.

The RB Size was selected to measure for peak or average ERP and EIRP, which was based on the conducted power verification baseline data.

For the fundamental investigation of radiated emissions, the EUT is investigated for vertical and horizontal antenna orientations and X Y and Z orientations of the EUT alone. After the investigations the worst case was determined to be at X orientation for all LTE bands.

2. SYSTEM TEST CONFIGURATION

2.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT EXERCISE

The Transmitter was operated in the maximum output power mode through Communication Tester. The TX frequency was fixed which was for the purpose of the measurements.

2.3 CONFIGURATION OF EUT SYSTEM

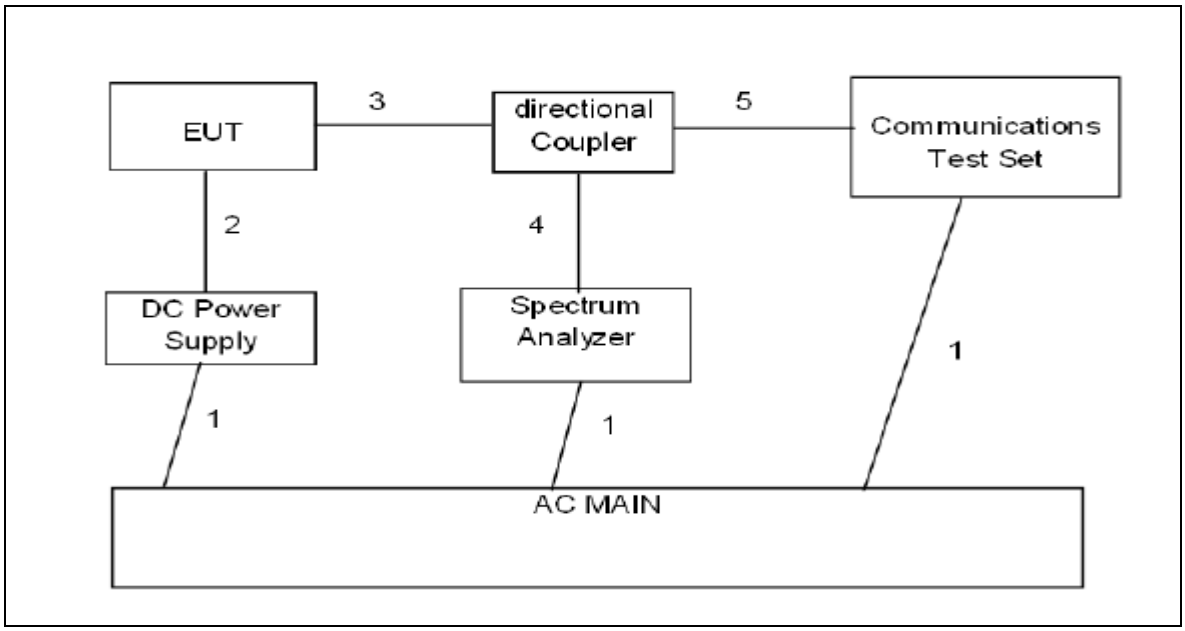
Table 2-1 Equipment Used in EUT System

Item	Equipment	Model No.	ID or Specification	Note
1	LTE SMARTPHONE	PSM01E	FCC ID: ZLE-RG725	EUT

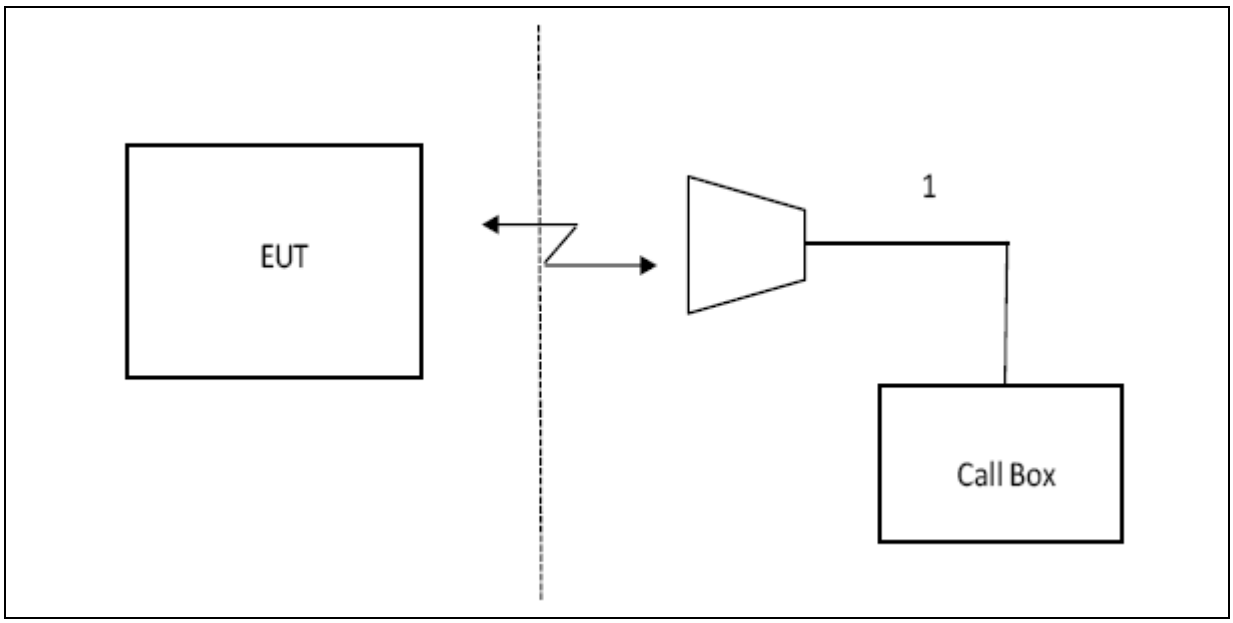
Note: All the accessories have been used during the test.
the following "EUT" in setup diagram means EUT system.

2.4 TEST SETUP

CONDUCTED SETUP DIAGRAM FOR TESTS



RADIATED SETUP DIAGRAM FOR TESTS



3.TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

NAME OF EQUIPMENT	MANUFACTURER	MODEL	SERIAL NUMBER	NEXT CAL. DATE
SPECTRUM ANALYZER	AGILENT	N9020A	MY49100060	2019.10.07
TEST RECEIVER	R&S	ESCI	101318	2019.05.18
COMMUNICATION TESTER	R&S	CMU200	117858	2019.05.18
COMMUNICATION TESTER	R&S	CMW500	148500	2019.05.18
TEST RECEIVER	R&S	FCKL1528	A0304230	2019.05.18
LISN	SCHWARZBECK	NSLK8127	A0304233	2019.05.18
CLIMATE CHAMBER	ALBATROSS	--	--	2019.05.18
Loop Antenna	Daze	ZN30900N	SEL0097	2019.05.18
Bilogical Antenna	A.H. Systems Inc.	SAS-521-4	N/A	2019.05.18
Horn Antenna	EM	EM-AH-10180	2011071402	2019.05.18
DC Power Source	N/A	PS-6005D	20170402923	2019.05.18

The following test and measurement equipment was utilized for the tests documented in this report:

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	MXA Signal Analyzer	Agilent	N9020A	MY49100060	2019.08.28	2020.08.27	1 year
2	Test Receiver	R&S	ESPI	101318	2020.05.11	2021.05.10	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2020.04.11	2021.04.10	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2020.05.11	2023.05.10	3 year
5	Horn Antenna	EM	EM-AH-10180	2011071402	2020.04.11	2021.04.10	1 year
6	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2019.12.10	2020.12.09	1 year
7	Amplifier	EM	EM-30180	060538	2020.05.11	2021.05.10	1 year
8	Loop Antenna	ARA	PLA-1030/B	1029	2020.05.11	2021.05.10	1 year
9	Power Meter	R&S	NRVS	100696	2020.07.13	2021.07.12	1 year
10	Power Sensor	R&S	URV5-Z4	0395.1619.05	2020.05.11	2021.05.10	1 year
11	Test Cable	N/A	R-01	N/A	2020.05.11	2023.05.10	3 year

12	Test Cable	N/A	R-02	N/A	2020.05.11	2023.05.10	3 year
13	Test Cable	N/A	R-03	N/A	2019.06.28	2022.06.27	3 year
14	Test Receiver	R&S	ESCI	101160	2020.05.11	2021.05.10	1 year
15	LISN	R&S	ENV216	101313	2020.05.11	2021.05.10	1 year
16	LISN	EMCO	3816/2	00042990	2020.05.11	2021.05.10	1 year
17	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2020.05.11	2021.05.10	1 year
18	Passive Voltage Probe	R&S	ESH2-Z3	100196	2020.04.11	2021.04.10	1 year
19	Test Cable	N/A	C01	N/A	2020.05.11	2023.05.10	3 year
20	Test Cable	N/A	C02	N/A	2020.05.11	2023.05.10	3 year
21	Test Cable	N/A	C03	N/A	2020.05.11	2023.05.10	3 year
22	Attenuator	MCE	24-10-34	BN9258	2020.05.11	2021.05.10	1 year
23	Spectrum Analyzer	agilent	e4440a	us44300399	2020.05.11	2021.05.10	1 year
24	test receiver	R&S	ESCI	a0304218	2020.05.11	2021.05.10	1 year
25	Communication Tester	R&S	CMU200	A0304247	2020.05.11	2021.05.10	1 year
26	Thermal Chamber	Ten Billion	TTC-B3C	TBN-960502	2020.05.11	2021.05.10	1 year
27	DC Power Source	N/A	PS-6005D	20170402923	2018.06.06	2021.06.05	3 year
28	PSG Analog Signal Generator	Agilent	E8257D	MY51110112	2020.05.11	2021.05.10	1 year
29	Communication Tester	R&S	CMW500	148500	2020.05.11	2021.05.10	1 year

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable& DC Power Source which is scheduled for calibration every 3 years.

4. OUTPUT POWER

4.1 OUTPUT POWER MEASUREMENT

LTE Measurement Procedure:

All LTE bands conducted power peak and average are obtained from the CMW500 telecommunication test set. The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of “NS_01”.3

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4,10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23[1]	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
--					
NS_32	-	-	-	-	-
Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.					

4.2 LTE BAND 2

Test data reference attachment

4.3 LTE BAND 4

OUTPUT POWER FOR LTE BAND 4 (1.4MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 4	1.4MHz	19957	1710.7	QPSK	1	Low	23.17	27.68
					1	Mid	23.40	27.59
					1	High	23.21	27.48
					3	Low	23.37	27.92
					3	High	23.36	27.80
					6	Low	22.44	27.97
				16QAM	1	Low	22.31	27.41
					1	Mid	22.48	27.41
					1	High	22.37	27.37
					3	Low	22.41	27.79
					3	High	22.44	27.79
					6	Low	21.34	28.22
	1.4MHz	20175	1732.5	QPSK	1	Low	23.26	28.10
					1	Mid	23.46	28.13
					1	High	23.33	28.05
					3	Low	23.47	28.84
					3	High	23.45	28.73
					6	Low	22.46	28.53
				16QAM	1	Low	22.43	27.85
					1	Mid	22.69	27.94
					1	High	22.46	27.86
					3	Low	22.45	28.79
					3	High	22.44	28.67
					6	Low	21.41	28.52
	1.4MHz	20393	1754.3	QPSK	1	Low	23.32	28.04
					1	Mid	23.46	28.04
					1	High	23.35	28.02
					3	Low	23.45	28.50
					3	High	23.47	28.53
					6	Low	22.46	28.30
				16QAM	1	Low	22.53	27.55
					1	Mid	22.71	27.75
					1	High	22.54	27.56
					3	Low	22.41	28.55
					3	High	22.44	28.49
					6	Low	21.49	28.52

OUTPUT POWER FOR LTE BAND 4 (3.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 4	3.0 MHz	19965	1711.5	QPSK	1	Low	23.33	27.28
					1	Mid	23.33	27.26
					1	High	23.27	27.25
					8	Low	22.42	27.92
					8	High	22.35	27.63
					15	Low	22.42	27.99
				16QAM	1	Low	22.44	27.66
					1	Mid	22.38	27.49
					1	High	22.38	27.69
					8	Low	21.46	27.90
					8	High	21.44	27.75
					15	Low	21.50	27.76
	3.0 MHz	20175	1732.5	QPSK	1	Low	23.38	27.96
					1	Mid	23.36	27.98
					1	High	23.33	27.96
					8	Low	22.47	28.75
					8	High	22.44	28.74
					15	Low	22.48	29.39
				16QAM	1	Low	22.41	27.74
					1	Mid	22.46	27.78
					1	High	22.49	27.85
					8	Low	21.43	28.16
					8	High	21.41	28.42
					15	Low	21.48	28.63
	3.0 MHz	20385	1753.5	QPSK	1	Low	23.34	28.03
					1	Mid	23.34	27.96
					1	High	23.36	28.01
					8	Low	22.45	28.62
					8	High	22.43	28.50
					15	Low	22.43	28.64
				16QAM	1	Low	22.43	27.57
					1	Mid	22.46	27.61
					1	High	22.43	27.50
					8	Low	21.40	28.00
					8	High	21.33	28.21
					15	Low	21.36	28.69

OUTPUT POWER FOR LTE BAND 4 (5.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 4	5.0 MHz	19975	1712.5	QPSK	1	Low	23.20	27.45
					1	Mid	23.31	27.48
					1	High	23.22	27.57
					12	Low	22.42	27.88
					12	High	22.35	27.80
					25	Low	22.40	28.37
				16QAM	1	Low	22.16	27.30
					1	Mid	22.26	27.31
					1	High	22.15	27.37
					12	Low	21.40	27.95
					12	High	21.36	27.93
					25	Low	21.43	28.54
	5.0 MHz	20175	1732.5	QPSK	1	Low	23.21	28.09
					1	Mid	23.34	28.24
					1	High	23.23	28.24
					12	Low	22.40	28.41
					12	High	22.44	28.56
					25	Low	22.44	28.83
				16QAM	1	Low	22.41	27.79
					1	Mid	22.50	27.92
					1	High	22.42	28.04
					12	Low	21.40	28.47
					12	High	21.43	28.47
					25	Low	21.46	28.75
	5.0 MHz	20375	1752.5	QPSK	1	Low	23.28	27.91
					1	Mid	23.38	27.89
					1	High	23.28	27.84
					12	Low	22.43	28.72
					12	High	22.39	28.71
					25	Low	22.42	29.03
				16QAM	1	Low	22.44	28.07
					1	Mid	22.43	28.10
					1	High	22.42	28.08
					12	Low	21.49	28.34
					12	High	21.44	28.45
					25	Low	21.40	29.58

OUTPUT POWER FOR LTE BAND 4 (10.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 4	10.0 MHz	20000	1715.0	QPSK	1	Low	23.25	27.16
					1	Mid	23.42	27.12
					1	High	23.30	27.18
					25	Low	22.44	28.04
					25	High	22.39	28.09
					50	Low	22.48	28.38
				16QAM	1	Low	22.46	27.27
					1	Mid	22.40	27.55
					1	High	22.45	27.62
					25	Low	21.43	27.91
					25	High	21.45	28.03
					50	Low	21.49	28.54
	10.0 MHz	20175	1732.5	QPSK	1	Low	23.34	27.70
					1	Mid	23.44	27.87
					1	High	23.36	27.92
					25	Low	22.47	28.78
					25	High	22.49	29.15
					50	Low	22.43	29.09
				16QAM	1	Low	22.14	27.55
					1	Mid	22.33	27.72
					1	High	22.15	27.77
					25	Low	21.47	28.79
					25	High	21.48	28.96
					50	Low	21.47	29.46
	10.0 MHz	20350	1750.0	QPSK	1	Low	23.29	28.15
					1	Mid	23.47	28.08
					1	High	23.31	28.03
					25	Low	22.46	28.71
					25	High	22.40	28.64
					50	Low	22.43	28.84
				16QAM	1	Low	22.20	27.38
					1	Mid	22.43	27.52
					1	High	22.23	27.45
					25	Low	21.46	28.79
					25	High	21.46	28.66
					50	Low	21.41	28.80

OUTPUT POWER FOR LTE BAND 4 (15.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 4	15.0 MHz	20025	1717.5	QPSK	1	Low	23.16	27.10
					1	Mid	23.26	27.12
					1	High	23.23	27.46
					36	Low	22.43	28.04
					36	High	22.48	28.39
					75	Low	22.50	29.09
				16QAM	1	Low	22.31	27.29
					1	Mid	22.39	27.62
					1	High	22.37	28.01
					36	Low	21.42	28.27
					36	High	21.40	28.45
					75	Low	21.48	28.58
	15.0 MHz	20175	1732.5	QPSK	1	Low	23.28	27.45
					1	Mid	23.39	27.70
					1	High	23.30	27.81
					36	Low	22.48	28.78
					36	High	22.46	29.03
					75	Low	22.55	29.44
				16QAM	1	Low	22.35	27.75
					1	Mid	22.37	28.01
					1	High	22.33	27.98
					36	Low	21.44	28.85
					36	High	21.42	29.11
					75	Low	21.47	29.01
	15.0 MHz	20325	1747.5	QPSK	1	Low	23.25	28.21
					1	Mid	23.33	28.21
					1	High	23.27	28.17
					36	Low	22.39	28.62
					36	High	22.43	28.66
					75	Low	22.43	29.18
				16QAM	1	Low	22.41	27.48
					1	Mid	22.35	27.47
					1	High	22.35	27.45
					36	Low	21.43	29.02
					36	High	21.43	29.02
					75	Low	21.41	28.97

OUTPUT POWER FOR LTE BAND 4 (20.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 4	20.0 MHz	20050	1720.0	QPSK	1	Low	23.09	27.07
					1	Mid	23.45	27.50
					1	High	23.17	27.75
					50	Low	22.45	28.15
					50	High	22.42	28.59
					100	Low	22.46	28.71
				16QAM	1	Low	22.17	27.09
					1	Mid	22.32	27.50
					1	High	22.29	27.78
					50	Low	21.41	28.32
					50	High	21.47	28.66
					100	Low	21.45	29.20
	20.0 MHz	20175	1732.5	QPSK	1	Low	23.12	27.44
					1	Mid	23.45	27.81
					1	High	23.07	27.88
					50	Low	22.49	28.66
					50	High	22.48	29.02
					100	Low	22.47	29.24
				16QAM	1	Low	22.48	27.38
					1	Mid	22.41	27.80
					1	High	22.45	27.93
					50	Low	21.48	28.67
					50	High	21.47	29.00
					100	Low	21.47	29.30
	20.0 MHz	20300	1745.0	QPSK	1	Low	23.23	27.90
					1	Mid	23.46	27.97
					1	High	23.21	27.77
					50	Low	22.38	28.77
					50	High	22.42	28.64
					100	Low	22.36	29.00
				16QAM	1	Low	22.18	27.96
					1	Mid	22.35	28.01
					1	High	22.16	27.84
					50	Low	21.33	28.72
					50	High	21.39	28.69
					100	Low	21.37	29.00

4.4 LTE BAND 5

OUTPUT POWER FOR LTE BAND 5 (1.4MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 5	1.4MHz	20407	824.7	QPSK	1	Low	23.43	27.83
					1	Mid	23.44	27.86
					1	High	23.31	27.77
					3	Low	23.48	28.06
					3	High	23.42	28.02
					6	Low	22.43	28.14
				16QAM	1	Low	21.99	27.35
					1	Mid	22.14	27.41
					1	High	22.00	27.30
					3	Low	22.27	27.65
					3	High	22.31	27.77
					6	Low	21.15	27.99
	1.4MHz	20525	836.5	QPSK	1	Low	23.02	27.74
					1	Mid	23.20	27.81
					1	High	22.97	27.70
					3	Low	23.12	28.23
					3	High	23.20	28.17
					6	Low	22.15	27.92
				16QAM	1	Low	22.01	27.26
					1	Mid	22.21	27.46
					1	High	22.07	27.33
					3	Low	22.19	28.11
					3	High	22.20	28.09
					6	Low	21.06	28.07
	1.4MHz	20643	848.3	QPSK	1	Low	23.02	26.90
					1	Mid	23.22	26.87
					1	High	23.02	26.67
					3	Low	23.12	27.09
					3	High	23.09	26.96
					6	Low	22.13	27.25
				16QAM	1	Low	22.08	26.43
					1	Mid	22.26	26.48
					1	High	22.06	26.28
					3	Low	21.98	27.13
					3	High	22.00	27.04
					6	Low	21.15	27.29

OUTPUT POWER FOR LTE BAND 5 (3.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 5	3.0 MHz	20415	825.5	QPSK	1	Low	23.13	27.34
					1	Mid	23.05	27.27
					1	High	23.09	27.24
					8	Low	22.10	27.43
					8	High	22.10	27.47
					15	Low	22.10	27.66
				16QAM	1	Low	22.41	27.84
					1	Mid	22.43	27.63
					1	High	22.47	27.87
					8	Low	21.27	27.55
					8	High	21.26	27.51
					15	Low	21.17	27.64
	3.0 MHz	20525	836.5	QPSK	1	Low	23.11	27.69
					1	Mid	23.09	27.73
					1	High	23.10	27.76
					8	Low	22.13	28.11
					8	High	22.12	28.16
					15	Low	22.09	28.96
				16QAM	1	Low	22.12	27.26
					1	Mid	22.05	27.32
					1	High	22.09	27.35
					8	Low	21.22	27.75
					8	High	21.21	27.81
					15	Low	21.23	28.51
	3.0 MHz	20635	847.5	QPSK	1	Low	23.07	27.31
					1	Mid	23.07	26.91
					1	High	23.09	26.74
					8	Low	22.08	27.43
					8	High	22.14	27.29
					15	Low	22.09	27.63
				16QAM	1	Low	22.15	26.72
					1	Mid	22.13	26.47
					1	High	22.16	26.31
					8	Low	21.05	27.11
					8	High	21.07	27.02
					15	Low	21.07	27.28

OUTPUT POWER FOR LTE BAND 5 (5.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 5	5.0 MHz	20425	826.5	QPSK	1	Low	23.02	27.81
					1	Mid	23.15	27.67
					1	High	23.04	27.67
					12	Low	21.96	27.54
					12	High	22.05	27.51
					25	Low	22.02	27.81
				16QAM	1	Low	21.90	27.18
					1	Mid	21.99	27.14
					1	High	21.89	27.13
					12	Low	21.05	27.68
					12	High	21.14	27.69
					25	Low	21.11	28.30
	5.0 MHz	20525	836.5	QPSK	1	Low	23.01	27.70
					1	Mid	23.15	27.87
					1	High	23.00	27.88
					12	Low	22.09	27.77
					12	High	22.05	27.78
					25	Low	22.10	28.09
				16QAM	1	Low	22.05	27.66
					1	Mid	22.13	27.83
					1	High	22.07	27.86
					12	Low	21.13	27.79
					12	High	21.05	27.82
					25	Low	21.17	28.48
	5.0 MHz	20625	846.5	QPSK	1	Low	23.02	27.49
					1	Mid	23.10	27.06
					1	High	22.98	26.62
					12	Low	22.02	27.68
					12	High	22.08	27.25
					25	Low	22.05	27.99
				16QAM	1	Low	22.29	27.40
					1	Mid	22.34	27.02
					1	High	22.17	26.59
					12	Low	21.07	27.41
					12	High	21.13	27.13
					25	Low	21.05	28.45

OUTPUT POWER FOR LTE BAND 5 (10.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 5	10.0 MHz	20450	829.0	QPSK	1	Low	23.10	27.34
					1	Mid	23.28	27.36
					1	High	23.11	27.50
					25	Low	22.07	27.62
					25	High	22.06	27.74
					50	Low	22.11	27.89
				16QAM	1	Low	22.43	27.72
					1	Mid	22.44	27.61
					1	High	22.49	27.79
					25	Low	21.14	27.57
					25	High	21.17	27.71
					50	Low	21.15	28.37
	10.0 MHz	20525	836.5	QPSK	1	Low	23.09	27.53
					1	Mid	23.29	27.84
					1	High	23.12	27.79
					25	Low	22.23	28.12
					25	High	22.14	28.33
					50	Low	22.23	28.37
				16QAM	1	Low	22.08	27.15
					1	Mid	22.25	27.45
					1	High	22.07	27.33
					25	Low	21.33	28.03
					25	High	21.22	28.10
					50	Low	21.23	28.54
	10.0 MHz	20600	844.0	QPSK	1	Low	23.13	27.89
					1	Mid	23.23	27.61
					1	High	23.08	26.75
					25	Low	22.09	28.00
					25	High	22.20	27.53
					50	Low	22.14	28.01
				16QAM	1	Low	22.24	27.15
					1	Mid	22.34	27.00
					1	High	22.12	26.35
					25	Low	21.14	28.15
					25	High	21.21	27.63
					50	Low	21.18	27.96

4.5 LTE BAND 7

OUTPUT POWER FOR LTE BAND 7 (5.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 7	5.0MHz	20775	2502.5	QPSK	1	Low	22.43	27.14
					1	Mid	22.63	27.33
					1	High	22.42	27.29
					12	Low	21.53	27.48
					12	High	21.57	27.73
					25	Low	21.58	27.53
				16QAM	1	Low	21.69	26.97
					1	Mid	21.91	27.14
					1	High	21.76	27.17
					12	Low	20.60	27.22
					12	High	20.65	27.36
					25	Low	20.61	28.13
	5.0MHz	21100	2535.0	QPSK	1	Low	22.60	26.84
					1	Mid	22.77	27.05
					1	High	22.62	27.20
					12	Low	21.69	26.76
					12	High	21.73	27.08
					25	Low	21.75	27.55
				16QAM	1	Low	21.41	26.29
					1	Mid	21.61	26.56
					1	High	21.47	26.64
					12	Low	20.70	27.06
					12	High	20.69	27.23
					25	Low	20.76	27.54
	5.0MHz	21425	2567.5	QPSK	1	Low	22.73	26.41
					1	Mid	22.92	26.59
					1	High	22.75	26.74
					12	Low	21.83	26.59
					12	High	21.77	26.68
					25	Low	21.83	27.13
				16QAM	1	Low	21.74	26.31
					1	Mid	21.91	26.52
					1	High	21.75	26.67
					12	Low	20.81	26.56
					12	High	20.73	26.71
					25	Low	20.83	27.15

OUTPUT POWER FOR LTE BAND 7 (10.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 7	10.0 MHz	20800	2505.0	QPSK	1	Low	22.56	26.94
					1	Mid	22.72	27.17
					1	High	22.59	27.00
					25	Low	21.64	27.51
					25	High	21.75	27.66
					50	Low	21.73	27.92
				16QAM	1	Low	21.95	27.32
					1	Mid	21.93	27.53
					1	High	21.84	27.48
					25	Low	20.73	27.50
					25	High	20.79	27.58
					50	Low	20.74	28.17
	10.0 MHz	21100	2535.0	QPSK	1	Low	22.73	26.45
					1	Mid	22.97	26.81
					1	High	22.82	26.95
					25	Low	21.77	27.14
					25	High	21.79	27.30
					50	Low	21.80	27.61
				16QAM	1	Low	21.69	26.14
					1	Mid	21.91	26.48
					1	High	21.74	26.61
					25	Low	20.83	26.98
					25	High	20.82	27.22
					50	Low	20.80	27.74
	10.0 MHz	21400	2565.0	QPSK	1	Low	22.82	26.42
					1	Mid	22.87	26.40
					1	High	22.86	26.71
					25	Low	21.92	26.68
					25	High	21.89	26.80
					50	Low	21.88	27.36
				16QAM	1	Low	21.90	25.93
					1	Mid	21.92	26.01
					1	High	21.94	26.27
					25	Low	20.87	26.77
					25	High	20.89	26.87
					50	Low	20.83	26.93

OUTPUT POWER FOR LTE BAND 7 (15.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 7	15.0 MHz	20825	2507.5	QPSK	1	Low	22.53	26.93
					1	Mid	22.68	27.01
					1	High	22.64	26.71
					36	Low	21.70	27.55
					36	High	21.80	27.43
					75	Low	21.78	28.22
				16QAM	1	Low	21.95	27.32
					1	Mid	21.80	27.44
					1	High	21.91	27.11
					36	Low	20.67	27.68
					36	High	20.78	27.66
					75	Low	20.71	27.90
	15.0 MHz	21100	2535.0	QPSK	1	Low	22.75	26.34
					1	Mid	22.83	26.67
					1	High	22.76	26.80
					36	Low	21.90	27.02
					36	High	21.84	27.34
					75	Low	21.96	27.77
				16QAM	1	Low	21.96	26.11
					1	Mid	21.87	26.47
					1	High	21.98	26.55
					36	Low	20.81	26.96
					36	High	20.83	27.38
					75	Low	20.84	27.45
	15.0 MHz	21375	2562.5	QPSK	1	Low	22.77	26.63
					1	Mid	22.99	26.31
					1	High	22.83	26.58
					36	Low	22.00	26.86
					36	High	21.95	26.92
					75	Low	21.94	27.83
				16QAM	1	Low	21.85	26.11
					1	Mid	21.87	25.93
					1	High	21.91	26.19
					36	Low	20.92	27.03
					36	High	20.94	26.96
					75	Low	20.94	27.44

OUTPUT POWER FOR LTE BAND 7 (20.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 7	20.0 MHz	20850	2510.0	QPSK	1	Low	22.62	27.20
					1	Mid	22.83	27.23
					1	High	22.38	26.71
					50	Low	21.62	27.59
					50	High	21.71	27.42
					100	Low	21.61	28.00
				16QAM	1	Low	21.90	26.83
					1	Mid	21.98	26.97
					1	High	21.90	26.52
					50	Low	20.64	27.64
					50	High	20.70	27.35
					100	Low	20.64	27.79
	20.0 MHz	21100	2535.0	QPSK	1	Low	22.52	26.30
					1	Mid	22.92	26.75
					1	High	22.52	26.92
					50	Low	21.75	26.97
					50	High	21.72	27.34
					100	Low	21.74	27.79
				16QAM	1	Low	21.60	26.48
					1	Mid	21.95	26.93
					1	High	21.68	27.16
					50	Low	20.72	26.95
					50	High	20.67	27.39
					100	Low	20.70	27.55
	20.0 MHz	21350	2560.0	QPSK	1	Low	22.53	26.97
					1	Mid	22.96	26.42
					1	High	22.63	26.56
					50	Low	21.83	27.19
					50	High	21.76	26.79
					100	Low	21.80	27.65
				16QAM	1	Low	21.80	26.97
					1	Mid	21.85	26.39
					1	High	21.86	26.59
					50	Low	20.74	27.39
					50	High	20.70	26.97
					100	Low	20.75	27.92

4.6 LTE BAND 38

OUTPUT POWER FOR LTE BAND 38 (5.0 MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 38	5.0 MHz	37775	2572.5	QPSK	1	Low	22.96	27.97
					1	Mid	23.10	27.96
					1	High	22.97	27.92
					12	Low	21.98	28.53
					12	High	21.93	28.48
					25	Low	21.99	29.18
				16QAM	1	Low	21.99	27.84
					1	Mid	22.16	27.80
					1	High	21.97	27.78
					12	Low	21.05	28.46
					12	High	21.00	28.39
					25	Low	21.03	28.90
	5.0 MHz	38000	2595.0	QPSK	1	Low	22.87	27.84
					1	Mid	23.05	27.89
					1	High	22.85	27.91
					12	Low	21.92	28.13
					12	High	21.88	28.23
					25	Low	21.92	28.83
				16QAM	1	Low	21.82	27.72
					1	Mid	21.99	27.80
					1	High	21.82	27.74
					12	Low	20.96	28.19
					12	High	20.89	28.30
					25	Low	20.92	28.85
	5.0 MHz	38225	2617.5	QPSK	1	Low	22.81	27.78
					1	Mid	22.98	27.79
					1	High	22.80	27.73
					12	Low	21.81	28.38
					12	High	21.75	28.44
					25	Low	21.81	28.95
				16QAM	1	Low	21.81	27.75
					1	Mid	21.91	27.76
					1	High	21.76	27.72
					12	Low	20.86	28.05
					12	High	20.82	28.06
					25	Low	20.88	29.02

OUTPUT POWER FOR LTE BAND 38 (10.0 MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 38	10.0 MHz	37800	2575.0	QPSK	1	Low	23.10	28.03
					1	Mid	23.36	28.01
					1	High	23.11	28.01
					25	Low	22.07	28.42
					25	High	21.99	28.35
					50	Low	22.04	29.39
				16QAM	1	Low	21.92	27.96
					1	Mid	22.21	27.95
					1	High	21.91	27.93
					25	Low	21.09	28.66
					25	High	21.01	28.58
					50	Low	21.08	29.17
	10.0 MHz	38000	2595.0	QPSK	1	Low	23.09	27.82
					1	Mid	23.39	27.89
					1	High	23.10	27.86
					25	Low	22.04	28.51
					25	High	21.99	28.51
					50	Low	22.00	29.33
				16QAM	1	Low	22.08	27.84
					1	Mid	22.36	27.88
					1	High	22.13	27.86
					25	Low	21.06	28.17
					25	High	20.98	28.23
					50	Low	21.04	29.10
	10.0 MHz	38200	2615.0	QPSK	1	Low	23.03	27.77
					1	Mid	23.29	27.87
					1	High	22.97	27.74
					25	Low	21.91	28.45
					25	High	21.86	28.45
					50	Low	21.92	28.96
				16QAM	1	Low	21.74	27.85
					1	Mid	21.98	27.90
					1	High	21.70	27.81
					25	Low	20.97	28.30
					25	High	20.90	28.24
					50	Low	20.94	29.09

OUTPUT POWER FOR LTE BAND 38 (15.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 38	15.0 MHz	37825	2577.5	QPSK	1	Low	23.01	28.01
					1	Mid	23.07	27.92
					1	High	22.96	27.88
					36	Low	22.19	28.64
					36	High	22.12	28.58
					75	Low	22.18	29.34
				16QAM	1	Low	22.05	27.91
					1	Mid	21.89	27.88
					1	High	21.11	27.80
					36	Low	21.06	28.46
					36	High	21.07	28.47
					75	Low	23.01	29.41
	15.0 MHz	38000	2595.0	QPSK	1	Low	23.09	27.82
					1	Mid	23.18	27.77
					1	High	22.99	27.76
					36	Low	22.14	28.53
					36	High	22.09	28.46
					75	Low	22.13	29.32
				16QAM	1	Low	21.89	27.77
					1	Mid	21.78	27.80
					1	High	21.14	27.78
					36	Low	21.09	28.37
					36	High	21.06	28.22
					75	Low	23.09	29.09
	15.0 MHz	38175	2612.5	QPSK	1	Low	23.01	27.75
					1	Mid	22.97	27.81
					1	High	22.84	27.75
					36	Low	22.07	28.66
					36	High	22.01	28.72
					75	Low	22.07	29.50
				16QAM	1	Low	21.65	27.81
					1	Mid	21.47	27.85
					1	High	20.98	27.77
					36	Low	20.91	28.25
					36	High	20.98	28.42
					75	Low	23.01	29.05

OUTPUT POWER FOR LTE BAND 38 (20.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 38	20.0 MHz	37850	2580.0	QPSK	1	Low	22.91	27.88
					1	Mid	23.36	27.92
					1	High	22.89	27.83
					50	Low	22.08	28.59
					50	High	21.97	28.48
					100	Low	22.06	29.15
				16QAM	1	Low	21.93	27.73
					1	Mid	22.35	27.77
					1	High	21.86	27.70
					50	Low	21.08	28.44
					50	High	21.02	28.49
					100	Low	21.06	29.19
	20.0 MHz	38000	2595.0	QPSK	1	Low	22.87	27.82
					1	Mid	23.38	27.95
					1	High	22.81	27.90
					50	Low	22.06	28.46
					50	High	21.95	28.42
					100	Low	21.95	29.21
				16QAM	1	Low	21.85	27.70
					1	Mid	22.26	27.81
					1	High	21.75	27.76
					50	Low	21.06	28.37
					50	High	20.94	28.39
					100	Low	20.96	29.08
	20.0 MHz	38150	2610.0	QPSK	1	Low	22.71	27.72
					1	Mid	23.12	27.84
					1	High	22.66	27.74
					50	Low	21.98	28.36
					50	High	21.85	28.35
					100	Low	21.89	29.15
				16QAM	1	Low	21.52	27.60
					1	Mid	22.01	27.58
					1	High	21.49	27.47
					50	Low	21.04	28.53
					50	High	20.85	28.45
					100	Low	20.91	29.28

4.7 LTE BAND 40

OUTPUT POWER FOR LTE BAND 40 (2305-2320MHz) (5.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 40	5.0MHz	38725	2307.5	QPSK	1	Low	23.34	28.03
					1	Mid	23.45	28.23
					1	High	23.33	28.34
					12	Low	22.32	28.78
					12	High	22.30	28.97
					25	Low	22.36	29.56
				16QAM	1	Low	22.44	28.07
					1	Mid	22.47	28.24
					1	High	22.45	28.41
					12	Low	21.33	28.48
					12	High	21.30	28.67
					25	Low	21.28	29.45
	5.0MHz	38775	2312.5	QPSK	1	Low	23.28	28.34
					1	Mid	23.37	28.47
					1	High	23.23	28.61
					12	Low	22.28	28.94
					12	High	22.25	29.08
					25	Low	22.32	29.57
				16QAM	1	Low	22.32	28.27
					1	Mid	22.45	28.40
					1	High	22.30	28.51
					12	Low	21.38	28.90
					12	High	21.27	29.03
					25	Low	21.27	29.37
	5.0MHz	38825	2317.5	QPSK	1	Low	23.26	27.61
					1	Mid	23.35	27.05
					1	High	23.27	0.00
					12	Low	22.32	28.00
					12	High	22.23	27.43
					25	Low	22.32	28.54
				16QAM	1	Low	22.37	27.71
					1	Mid	22.46	27.30
					1	High	22.38	26.78
					12	Low	21.37	28.15
					12	High	21.26	27.59
					25	Low	21.34	28.77

OUTPUT POWER FOR LTE BAND 40 (2305-2320MHz) (10.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 40	10.0 MHz	38750	2310.0	QPSK	1	Low	22.97	28.11
					1	Mid	23.22	28.49
					1	High	22.94	28.69
					25	Low	21.97	28.78
					25	High	21.79	29.14
					50	Low	21.88	29.88
				16QAM	1	Low	21.84	28.15
					1	Mid	22.08	28.57
					1	High	21.80	28.78
					25	Low	21.39	29.00
					25	High	20.93	29.26
					50	Low	20.84	29.72
	10.0 MHz	38775	2312.5	QPSK	1	Low	22.99	28.35
					1	Mid	23.23	28.52
					1	High	22.92	28.69
					25	Low	21.97	29.15
					25	High	21.82	29.33
					50	Low	21.87	29.84
				16QAM	1	Low	22.10	28.43
					1	Mid	22.38	28.60
					1	High	22.06	28.82
					25	Low	20.95	28.83
					25	High	20.80	29.03
					50	Low	20.83	29.71
	10.0 MHz	38800	2315.0	QPSK	1	Low	22.91	28.06
					1	Mid	23.19	27.73
					1	High	23.00	27.52
					25	Low	22.04	28.63
					25	High	21.78	27.92
					50	Low	21.88	29.03
				16QAM	1	Low	21.87	28.05
					1	Mid	22.14	27.69
					1	High	21.95	26.73
					25	Low	20.94	28.57
					25	High	20.75	27.97
					50	Low	20.83	29.09

OUTPUT POWER FOR LTE BAND 40 (2305-2320MHz) (15.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 40	15.0 MHz	38775	2312.5	QPSK	1	Low	23.18	28.31
					1	Mid	23.21	28.51
					1	High	23.13	28.74
					36	Low	22.27	29.00
					36	High	22.11	29.27
					75	Low	22.11	29.91
				16QAM	1	Low	22.23	28.33
					1	Mid	22.38	28.59
					1	High	22.13	28.82
					36	Low	21.21	28.97
					36	High	21.08	29.13
					75	Low	21.08	29.79

OUTPUT POWER FOR LTE BAND 40 (2345-2360MHz) (15.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 40	15.0 MHz	39175	2352.5	QPSK	1	Low	23.42	28.10
					1	Mid	23.44	28.57
					1	High	23.42	28.78
					36	Low	22.46	29.13
					36	High	22.45	29.47
					75	Low	22.48	29.84
				16QAM	1	Low	22.48	28.19
					1	Mid	22.38	28.67
					1	High	22.44	28.94
					36	Low	21.49	28.98
					36	High	21.41	29.41
					75	Low	21.46	30.14

OUTPUT POWER FOR LTE BAND 40 (2345-2360MHz) (5.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 40	5.0MHz	39125	2347.5	QPSK	1	Low	23.49	28.06
					1	Mid	23.45	28.14
					1	High	23.46	28.19
					12	Low	22.42	28.68
					12	High	22.44	29.47
					25	Low	22.48	29.71
				16QAM	1	Low	22.42	27.80
					1	Mid	22.48	28.02
					1	High	22.40	27.96
					12	Low	21.44	28.69
					12	High	21.43	28.29
					25	Low	21.43	29.56
	5.0MHz	39175	2352.5	QPSK	1	Low	23.45	28.49
					1	Mid	23.45	28.42
					1	High	23.47	28.81
					12	Low	22.43	28.87
					12	High	22.46	29.30
					25	Low	22.48	29.73
				16QAM	1	Low	22.34	28.19
					1	Mid	22.42	28.14
					1	High	22.27	28.38
					12	Low	21.39	28.58
					12	High	21.43	28.77
					25	Low	21.44	28.90
	5.0MHz	39225	2357.5	QPSK	1	Low	23.45	27.19
					1	Mid	23.46	26.69
					1	High	23.43	0.37
					12	Low	22.43	28.22
					12	High	22.46	27.46
					25	Low	22.48	28.31
				16QAM	1	Low	22.28	28.15
					1	Mid	22.40	27.26
					1	High	22.24	26.56
					12	Low	21.46	27.79
					12	High	21.47	27.84
					25	Low	21.45	28.78

OUTPUT POWER FOR LTE BAND 40 (2345-2360MHz) (10.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 40	10.0 MHz	39150	2350.0	QPSK	1	Low	23.27	27.30
					1	Mid	23.48	27.72
					1	High	23.26	27.56
					25	Low	22.50	26.85
					25	High	22.50	27.01
					50	Low	22.49	26.53
				16QAM	1	Low	22.49	26.59
					1	Mid	22.37	27.13
					1	High	22.36	27.15
					25	Low	21.46	26.22
					25	High	21.48	26.41
					50	Low	21.45	26.06
	10.0 MHz	39175	2352.5	QPSK	1	Low	23.32	27.61
					1	Mid	23.45	27.61
					1	High	23.40	27.56
					25	Low	22.42	26.86
					25	High	22.42	27.09
					50	Low	22.45	27.13
				16QAM	1	Low	22.45	26.59
					1	Mid	22.46	26.71
					1	High	22.37	27.16
					25	Low	21.48	26.30
					25	High	21.49	25.95
					50	Low	21.48	25.81
	10.0 MHz	39200	2355.0	QPSK	1	Low	23.28	28.16
					1	Mid	23.44	28.10
					1	High	23.24	27.26
					25	Low	22.48	26.64
					25	High	22.42	26.73
					50	Low	22.50	27.12
				16QAM	1	Low	22.43	26.84
					1	Mid	22.30	26.67
					1	High	22.40	27.00
					25	Low	21.49	25.96
					25	High	21.45	25.51
					50	Low	21.46	26.45

4.8 LTE BAND 41

OUTPUT POWER FOR LTE BAND 41 (5MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 41	5.0 MHz	39675	2498.5	QPSK	1	Low	22.00	29.47
					1	Mid	21.95	28.55
					1	High	21.99	29.45
					12	Low	21.97	29.26
					12	High	22.00	29.45
					25	Low	21.94	30.45
				16QAM	1	Low	22.16	29.44
					1	Mid	22.16	29.38
					1	High	22.15	29.15
					12	Low	22.16	29.41
					12	High	22.17	29.38
					25	Low	22.17	29.25
	5.0 MHz	40620	2593	QPSK	1	Low	22.17	29.28
					1	Mid	22.15	29.43
					1	High	22.17	29.30
					12	Low	22.18	29.01
					12	High	22.19	29.49
					25	Low	22.19	29.41
				16QAM	1	Low	22.20	29.06
					1	Mid	22.16	29.48
					1	High	22.18	29.46
					12	Low	22.20	29.29
					12	High	22.19	28.93
					25	Low	22.20	29.47
	5.0 MHz	41565	2687.5	QPSK	1	Low	22.17	29.37
					1	Mid	22.18	29.39
					1	High	22.19	29.14
					12	Low	22.20	29.47
					12	High	22.20	29.29
					25	Low	22.21	29.32
				16QAM	1	Low	22.21	29.46
					1	Mid	22.20	29.32
					1	High	22.19	29.07
					12	Low	22.18	29.47
					12	High	22.17	29.38
					25	Low	21.68	29.16

OUTPUT POWER FOR LTE BAND 41 (10.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 41	10.0 MHz	40265	2557.5	QPSK	1	Low	22.14	29.24
					1	Mid	21.84	29.18
					1	High	21.76	28.95
					25	Low	21.71	28.96
					25	High	21.74	28.97
					50	Low	21.74	28.84
				16QAM	1	Low	21.78	29.16
					1	Mid	21.72	28.97
					1	High	21.73	28.86
					25	Low	21.73	28.86
					25	High	21.73	28.87
					50	Low	21.73	28.96
	10.0 MHz	40620	2593	QPSK	1	Low	21.75	28.96
					1	Mid	21.75	28.85
					1	High	21.72	28.92
					25	Low	21.75	28.97
					25	High	21.77	28.88
					50	Low	21.74	28.95
				16QAM	1	Low	21.76	28.95
					1	Mid	21.76	28.92
					1	High	21.76	28.99
					25	Low	21.72	29.03
					25	High	21.76	28.86
					50	Low	21.77	28.99
	10.0 MHz	41215	2652.5	QPSK	1	Low	21.74	28.94
					1	Mid	21.76	29.02
					1	High	21.74	28.85
					25	Low	21.76	28.89
					25	High	21.74	29.01
					50	Low	21.75	28.80
				16QAM	1	Low	21.75	28.98
					1	Mid	21.74	28.94
					1	High	21.73	28.99
					25	Low	21.75	28.90
					25	High	21.72	28.87
					50	Low	21.75	28.97

OUTPUT POWER FOR LTE BAND 41 (15.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 41	15.0 MHz	40290	2560.0	QPSK	1	Low	21.76	29.40
					1	Mid	21.77	29.47
					1	High	21.79	29.46
					36	Low	21.80	29.47
					36	High	21.78	29.43
					75	Low	21.78	29.49
				16QAM	1	Low	21.79	29.49
					1	Mid	21.78	29.38
					1	High	21.79	29.49
					36	Low	21.79	29.53
					36	High	21.79	29.51
					75	Low	21.76	29.43
	15.0 MHz	40620	2593	QPSK	1	Low	21.81	29.37
					1	Mid	21.80	29.40
					1	High	21.76	29.47
					36	Low	21.78	29.50
					36	High	21.78	29.43
					75	Low	21.79	29.50
				16QAM	1	Low	21.78	29.52
					1	Mid	21.79	29.48
					1	High	21.80	29.47
					36	Low	21.77	29.52
					36	High	21.77	29.47
					75	Low	21.81	29.46
	15.0 MHz	41190	2650.0	QPSK	1	Low	21.78	29.52
					1	Mid	21.80	29.53
					1	High	21.80	29.45
					36	Low	21.77	29.46
					36	High	21.79	29.39
					75	Low	21.78	29.42
				16QAM	1	Low	21.80	29.47
					1	Mid	21.78	29.49
					1	High	21.78	29.39
					36	Low	21.78	29.44
					36	High	21.78	29.40
					75	Low	21.78	29.52

OUTPUT POWER FOR LTE BAND 41 (20.0MHZ)

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		Average Power(dBm)	Peak Power(dBm)
					RB Size	RB Offset		
Band 41	20.0 MHz	40315	2562.5	QPSK	1	Low	21.68	29.04
					1	Mid	21.68	29.00
					1	High	21.68	29.08
					50	Low	21.69	29.03
					50	High	21.68	29.06
					100	Low	21.69	29.03
				16QAM	1	Low	21.66	28.97
					1	Mid	21.68	28.99
					1	High	21.66	29.02
					50	Low	21.66	29.02
					50	High	21.67	29.05
					100	Low	21.68	29.05
	20.0 MHz	40620	2593	QPSK	1	Low	21.68	28.97
					1	Mid	21.69	29.01
					1	High	21.68	29.07
					50	Low	21.68	29.05
					50	High	21.68	29.00
					100	Low	21.68	29.01
				16QAM	1	Low	21.66	29.08
					1	Mid	21.68	29.01
					1	High	21.68	29.04
					50	Low	21.67	29.01
					50	High	21.70	29.01
					100	Low	21.66	29.02
	20.0 MHz	41165	2647.5	QPSK	1	Low	21.69	29.06
					1	Mid	21.68	28.96
					1	High	21.70	29.07
					50	Low	21.70	29.06
					50	High	21.69	29.01
					100	Low	21.66	29.03
				16QAM	1	Low	21.67	29.09
					1	Mid	21.66	29.09
					1	High	21.67	28.96
					50	Low	21.67	29.01
					50	High	21.72	29.01
					100	Low	21.68	29.07

5. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only

TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The -26dB bandwidth was also measured and recorded.

MODES TESTED

LTE Band 2
LTE Band 4
LTE Band 5
LTE Band 7
LTE Band 38
LTE Band 40
LTE Band 41

RESULTS

PASS

Test results:

LTE Band 2 Test data reference attachment

Band	Mode	RB Size/RB Offset	Frequency (MHz)	99% Occupied Bandwidth (MHz)	-26dBc Occupied Bandwidth (MHz)
LTE Band 4	1.4MHz BAND QPSK	6/0	1732.5	1.08	1.24
	1.4MHz BAND 16QAM	6/0	1732.5	1.08	1.26
	3.0MHz BAND QPSK	15/0	1732.5	2.69	2.87
	3.0MHz BAND 16QAM	15/0	1732.5	2.69	2.86
	5.0MHz BAND QPSK	25/0	1732.5	4.49	4.90
	5.0MHz BAND 16QAM	25/0	1732.5	4.49	4.85
	10.0MHz BAND QPSK	50/0	1732.5	8.98	9.54
	10.0MHz BAND 16QAM	50/0	1732.5	8.97	9.54
	15.0MHz BAND QPSK	75/0	1732.5	13.46	14.26
	15.0MHz BAND 16QAM	75/0	1732.5	13.46	14.25
	20.0MHz BAND QPSK	100/0	1732.5	17.96	19.04
	20.0MHz BAND 16QAM	100/0	1732.5	17.97	19.04

Band	Mode	RB Size/RB Offset	Frequency (MHz)	99% Occupied Bandwidth (MHz)	-26dBc Occupied Bandwidth (MHz)
LTE Band 5	1.4MHz BAND QPSK	6/0	836.5	1.08	1.26
	1.4MHz BAND 16QAM	6/0	836.5	1.08	1.26
	3.0MHz BAND QPSK	15/0	836.5	2.69	2.87
	3.0MHz BAND 16QAM	15/0	836.5	2.69	2.87
	5.0MHz BAND QPSK	25/0	836.5	4.49	4.91
	5.0MHz BAND 16QAM	25/0	836.5	4.49	4.87
	10.0MHz BAND QPSK	50/0	836.5	8.97	9.58
	10.0MHz BAND 16QAM	50/0	836.5	8.97	9.55

Band	Mode	RB Size/RB Offset	Frequenc y (MHz)	99% Occupied Bandwidth (MHz)	-26dBc Occupied Bandwidth (MHz)
LTE Band 7	5.0MHz BAND QPSK	25/0	2535.0	4.49	4.94
	5.0MHz BAND 16QAM	25/0	2535.0	4.49	4.88
	10.0MHz BAND QPSK	50/0	2535.0	8.98	9.63
	10.0MHz BAND 16QAM	50/0	2535.0	8.97	9.56
	15.0MHz BAND QPSK	75/0	2535.0	13.47	14.33

	15.0MHz BAND 16QAM	75/0	2535.0	13.46	14.26
	20.0MHz BAND QPSK	100/0	2535.0	17.94	19.05
	20.0MHz BAND 16QAM	100/0	2535.0	17.94	19.04

Band	Mode	RB Size/RB Offset	Frequency (MHz)	99% Occupied Bandwidth (MHz)	-26dBc Occupied Bandwidth (MHz)
LTE Band 38	5.0MHz BAND QPSK	25/0	2595.0	4.49	4.82
	5.0MHz BAND 16QAM	25/0	2595.0	4.49	4.84
	10.0MHz BAND QPSK	50/0	2595.0	8.97	9.54
	10.0MHz BAND 16QAM	50/0	2595.0	8.97	9.54
	15.0MHz BAND QPSK	75/0	2595.0	13.46	14.28
	15.0MHz BAND 16QAM	75/0	2595.0	13.45	14.28
	20.0MHz BAND QPSK	100/0	2595.0	17.95	19.04
	20.0MHz BAND 16QAM	100/0	2595.0	17.94	19.03

Band	Mode	RB Size/RB Offset	Frequency (MHz)	99% Occupied Bandwidth (MHz)	-26dBc Occupied Bandwidth (MHz)
LTE Band 40(2305-2320MHz)	5.0MHz BAND QPSK	25/0	2312.5	4.49	4.88
	5.0MHz BAND 16QAM	25/0	2312.5	4.49	4.85
	10.0MHz BAND QPSK	50/0	2312.5	8.97	9.53
	10.0MHz BAND 16QAM	50/0	2312.5	8.97	9.54
	15.0MHz BAND QPSK	75/0	2312.5	13.45	14.24
	15.0MHz BAND 16QAM	75/0	2312.5	13.45	14.26

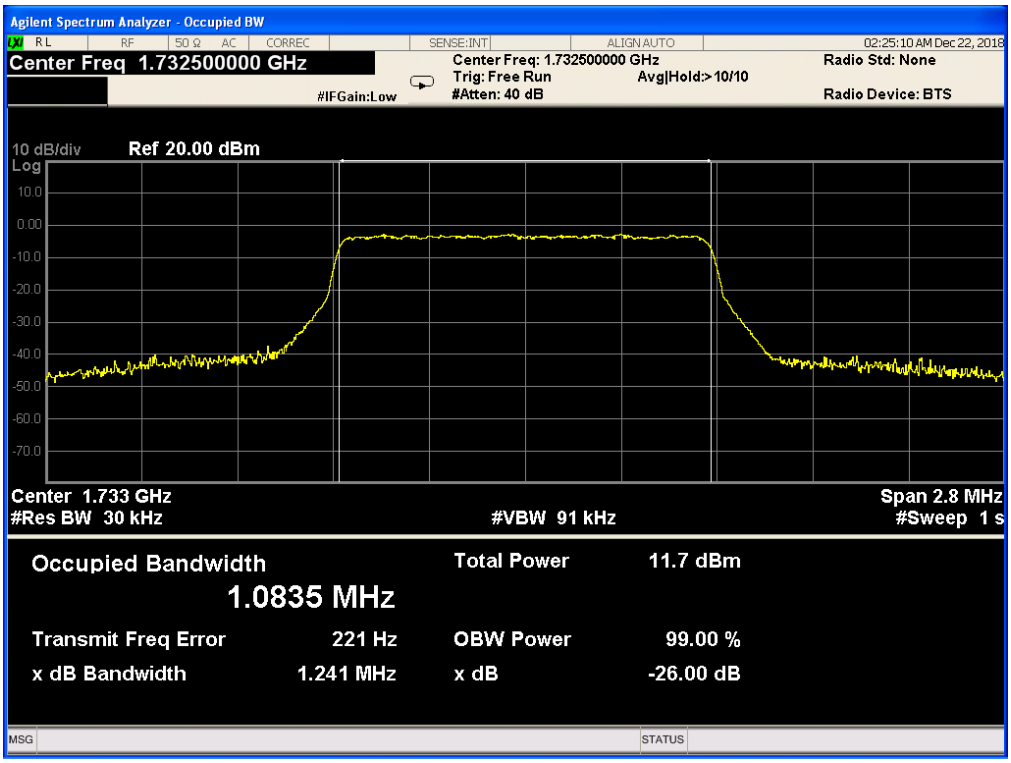
Band	Mode	RB Size/RB Offset	Frequency (MHz)	99% Occupied Bandwidth (MHz)	-26dBc Occupied Bandwidth (MHz)
LTE Band 40(2345-2360MHz)	5.0MHz BAND QPSK	25/0	2352.5	4.49	4.88
	5.0MHz BAND 16QAM	25/0	2352.5	4.49	4.85
	10.0MHz BAND QPSK	50/0	2352.5	8.97	9.52
	10.0MHz BAND 16QAM	50/0	2352.5	8.97	9.52
	15.0MHz BAND QPSK	75/0	2352.5	13.46	14.25
	15.0MHz BAND 16QAM	75/0	2352.5	13.45	14.26

Band	Mode	RB Size/RB Offset	Frequency (MHz)	99% Occupied Bandwidth (MHz)	-26dBc Occupied Bandwidth (MHz)
LTE Band 41	5.0MHz BAND QPSK	25/0	2593.0	4.49	4.89
	5.0MHz BAND 16QAM	25/0	2593.0	4.49	4.88
	10.0MHz BAND QPSK	50/0	2593.0	8.97	9.55
	10.0MHz BAND 16QAM	50/0	2593.0	8.97	9.52
	15.0MHz BAND QPSK	75/0	2593.0	13.46	14.28
	15.0MHz BAND 16QAM	75/0	2593.0	13.45	14.26
	20.0MHz BAND QPSK	100/0	2593.0	17.95	19.04
	20.0MHz BAND 16QAM	100/0	2593.0	17.94	19.02

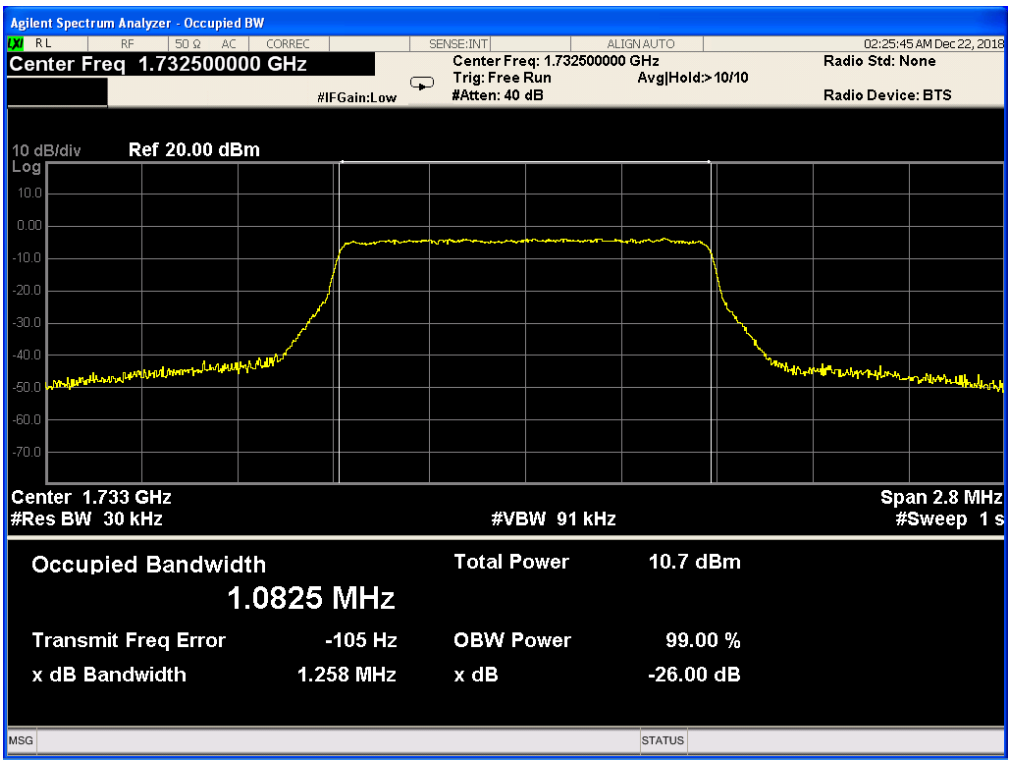
Note: This test was only measured at maximum RB allocation and at CENTER of band for each LTE BW

5.1 LTE BAND 4

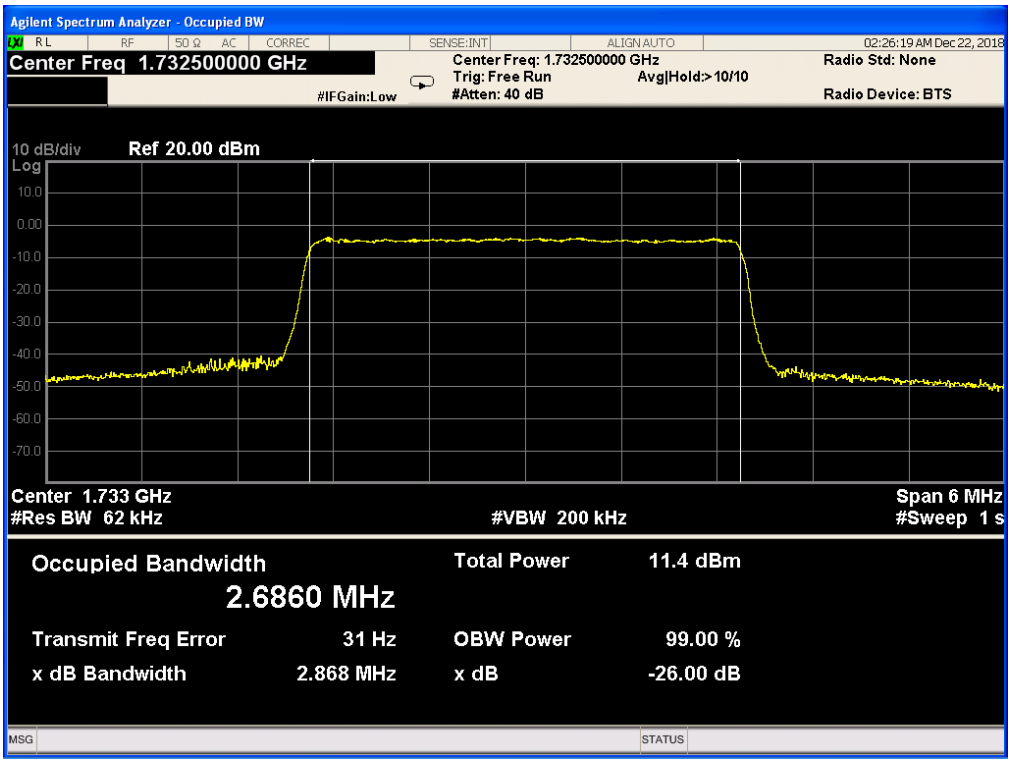
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 1.4,NO. RB 6,RB POS. Low,QPSK



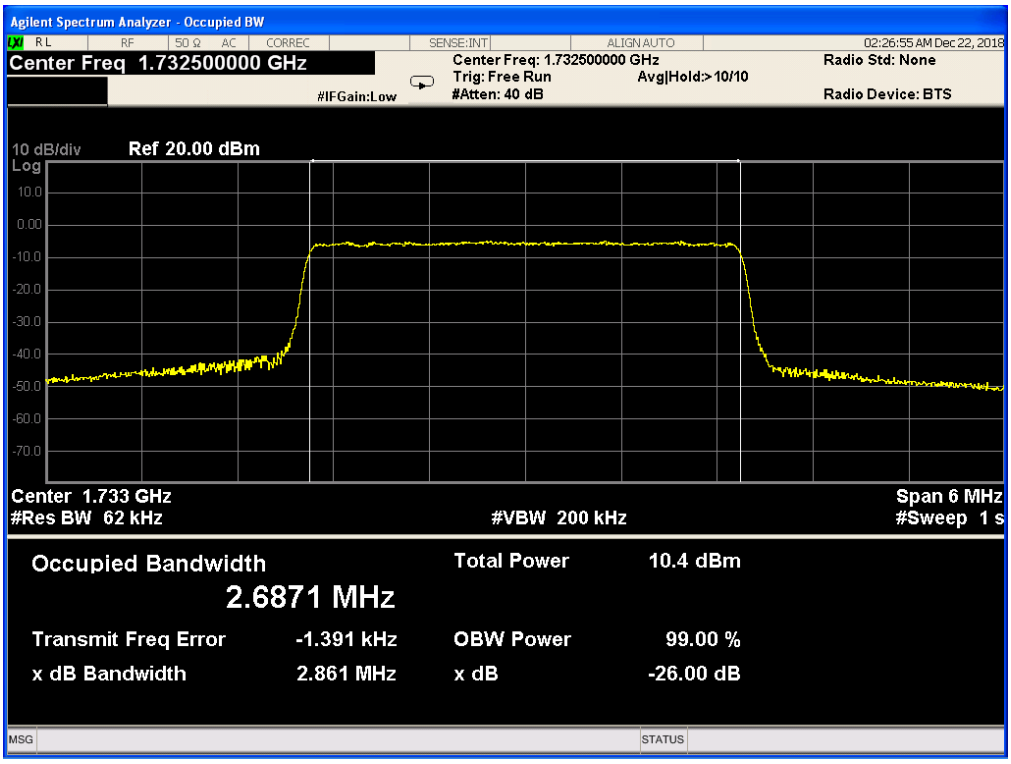
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 1.4,NO. RB 6,RB POS. Low,16-QAM



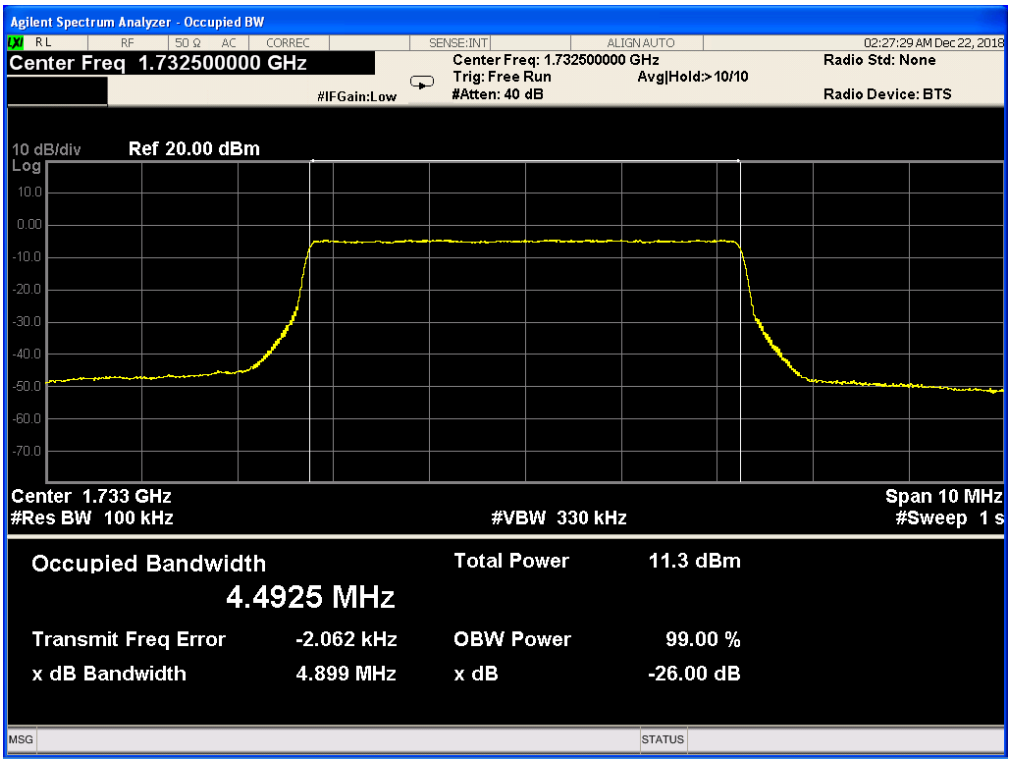
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



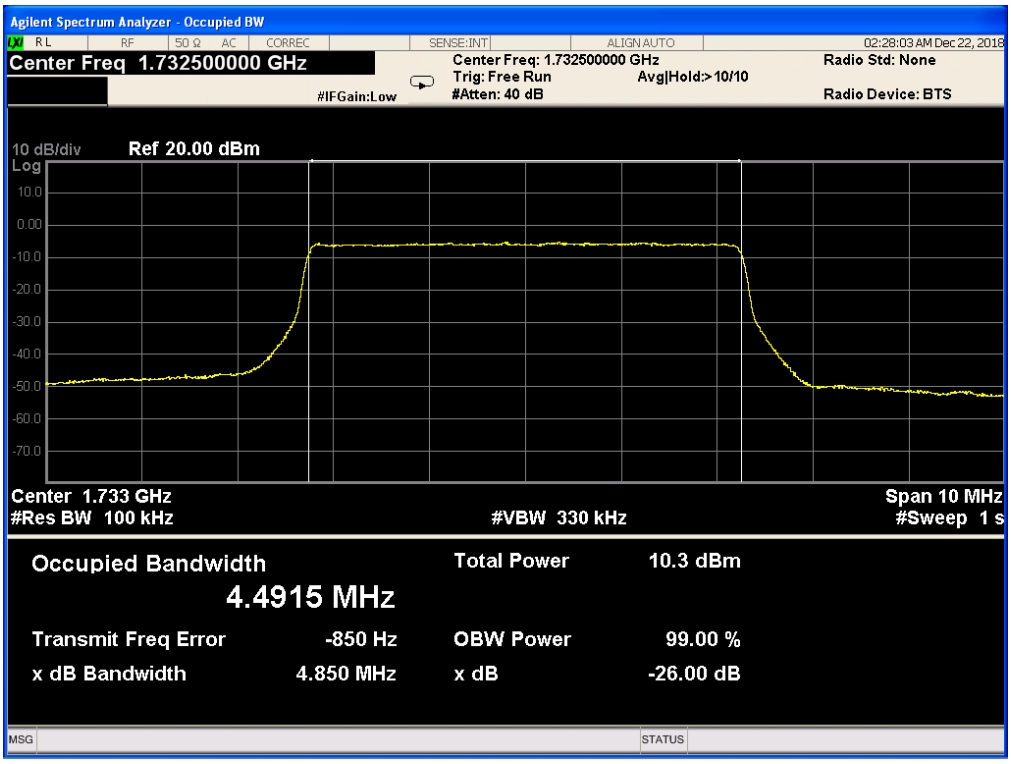
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 3.0,NO. RB 15,RB POS. Low,16-QAM



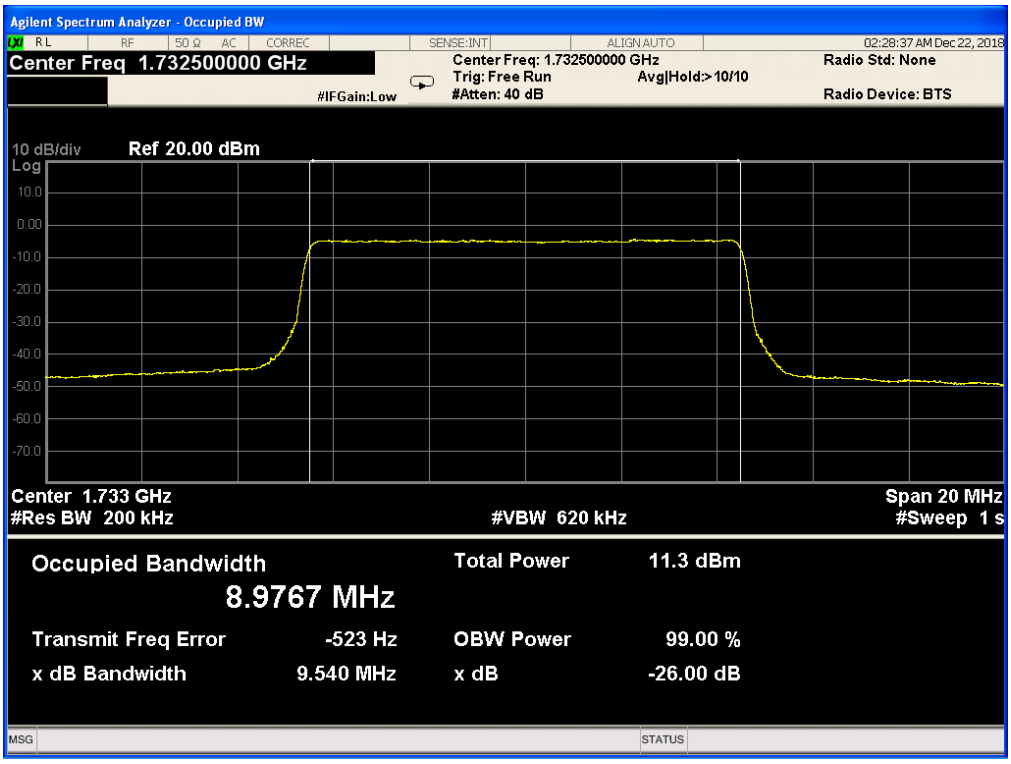
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



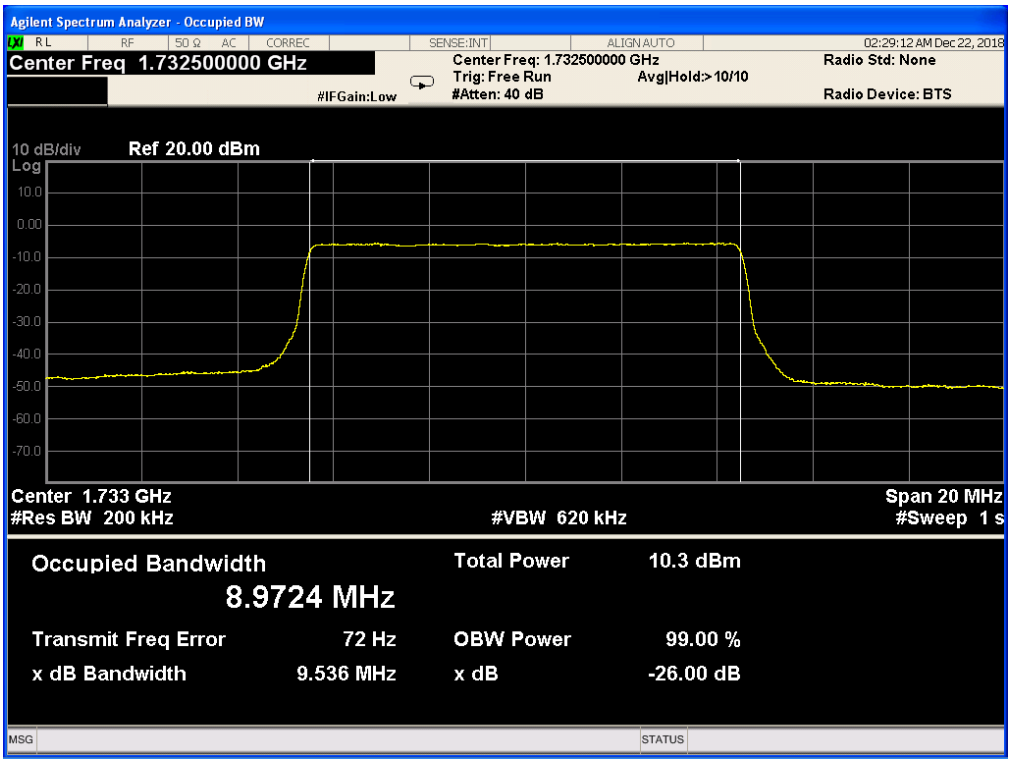
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



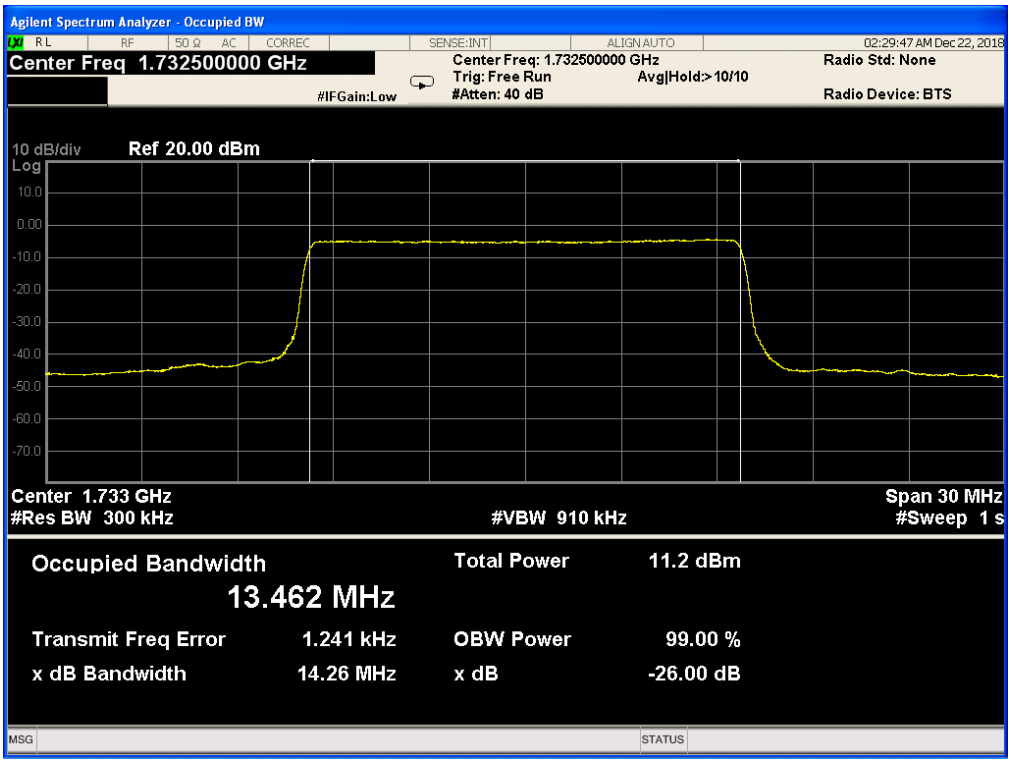
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 10.0,NO. RB 50,RB POS. Low,QPSK



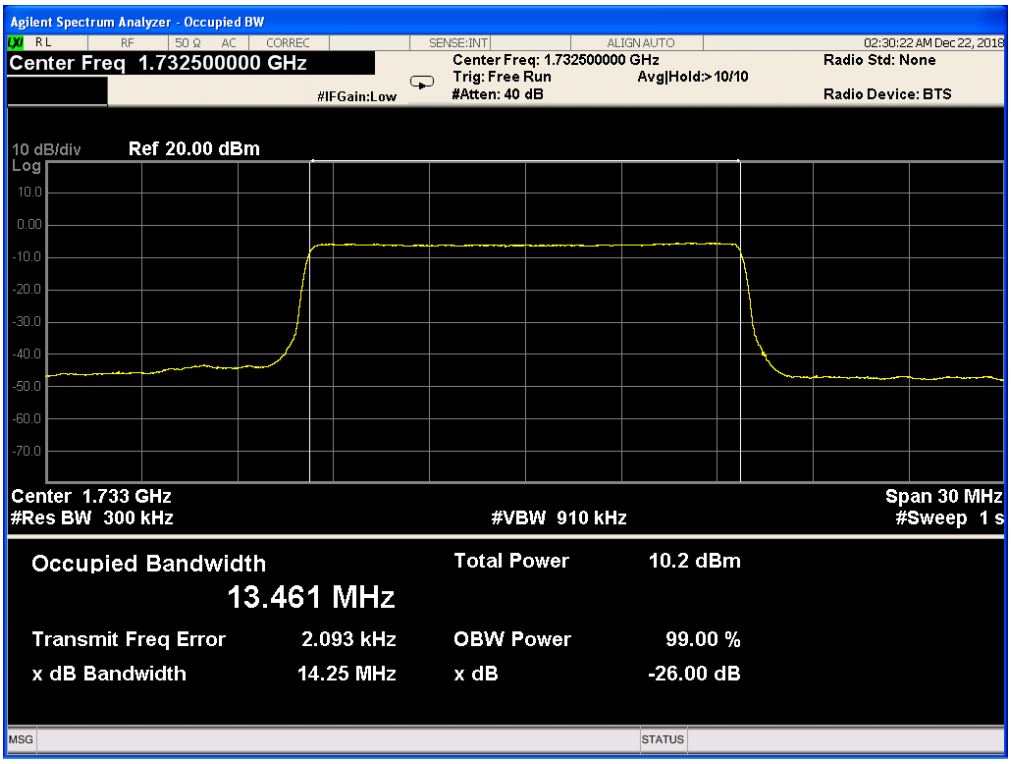
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 10.0,NO. RB 50,RB POS. Low,16-QAM



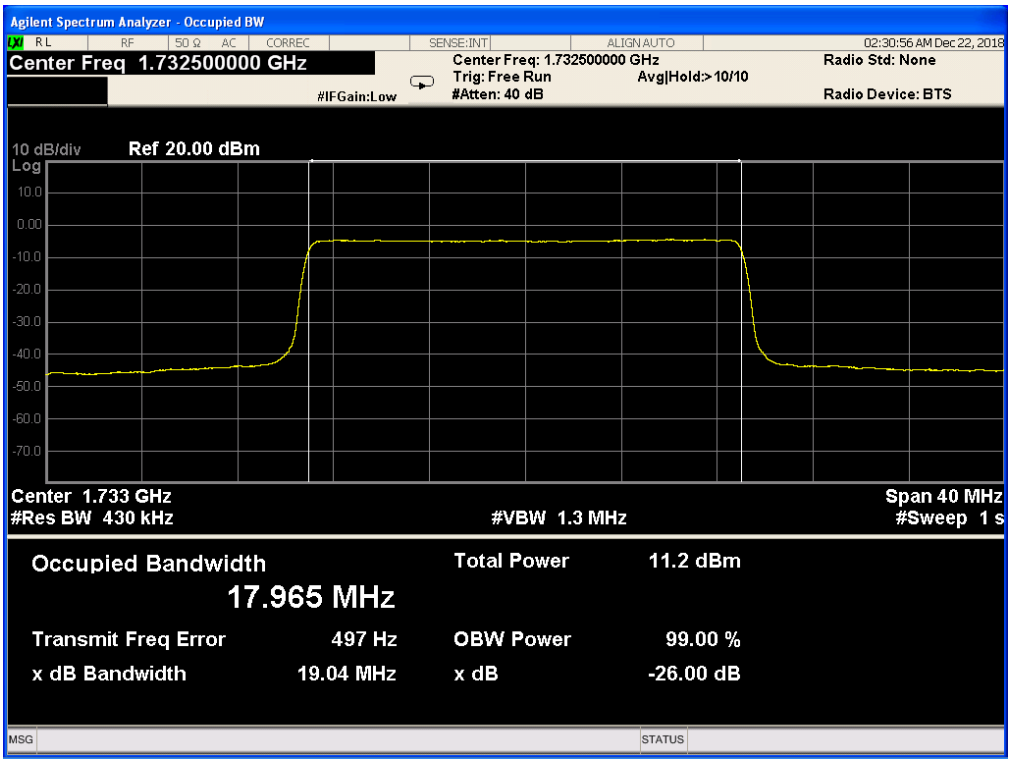
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



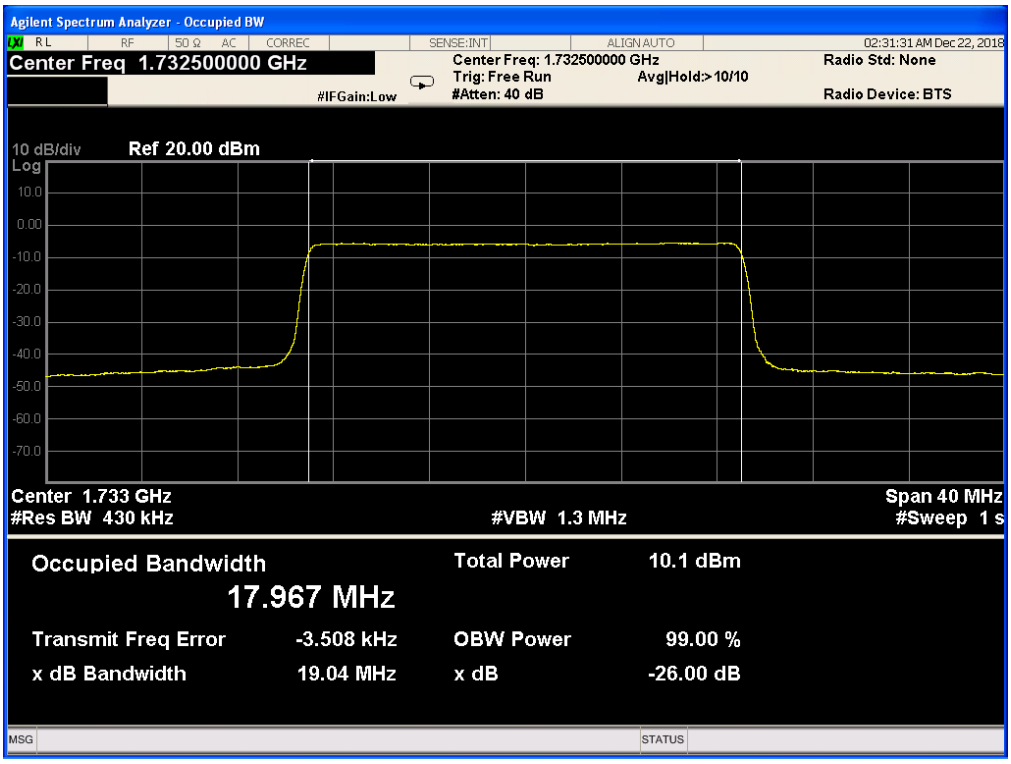
Band 4,UL Channel 20175,UL Frequency 1732.5,BW 15.0,NO. RB 75,RB POS. Low,16-QAM



Band 4,UL Channel 20175,UL Frequency 1732.5,BW 20.0,NO. RB 100,RB POS. Low,QPSK

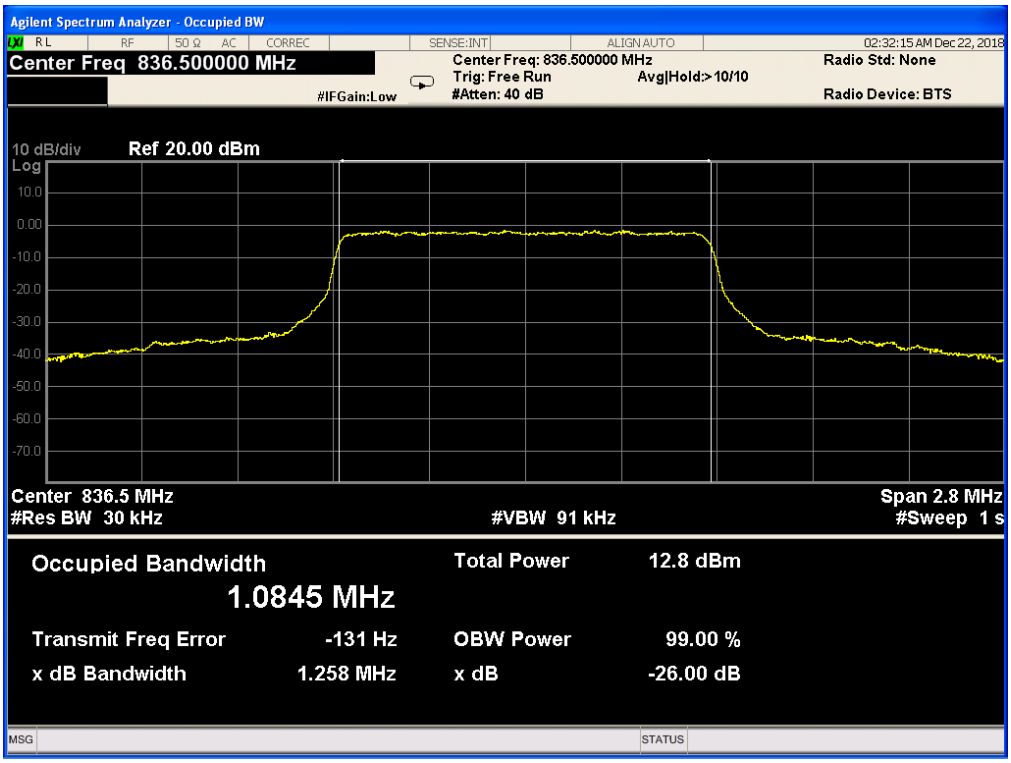


Band 4,UL Channel 20175,UL Frequency 1732.5,BW 20.0,NO. RB 100,RB POS. Low,16-QAM

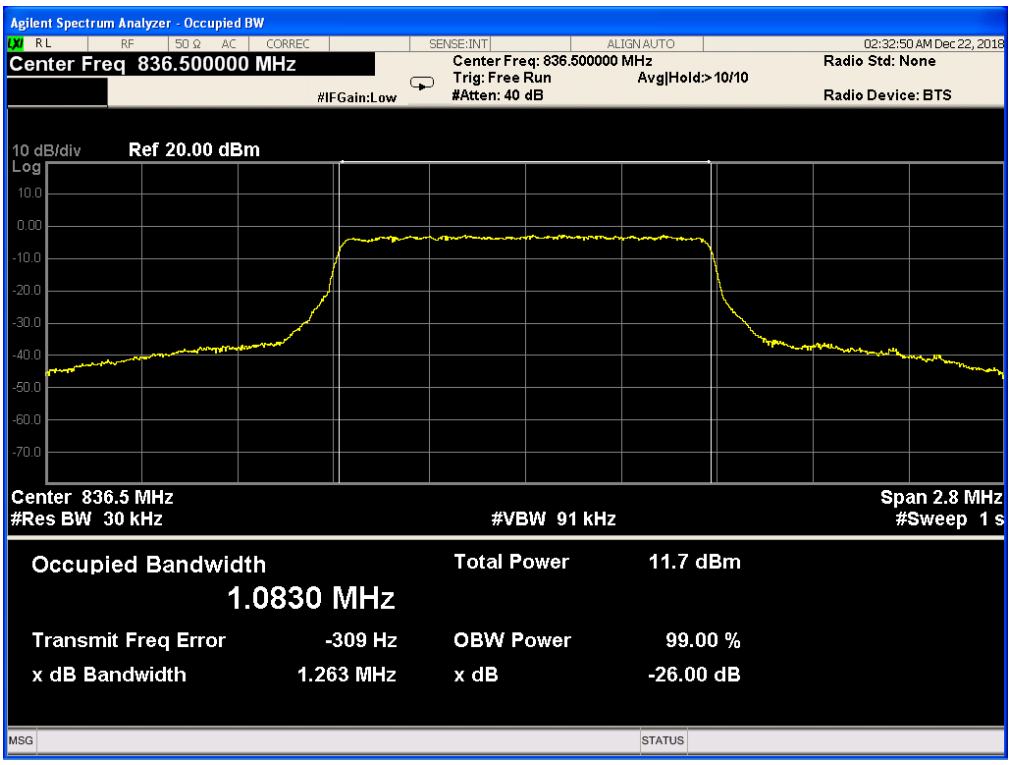


5.2 LTE BAND 5

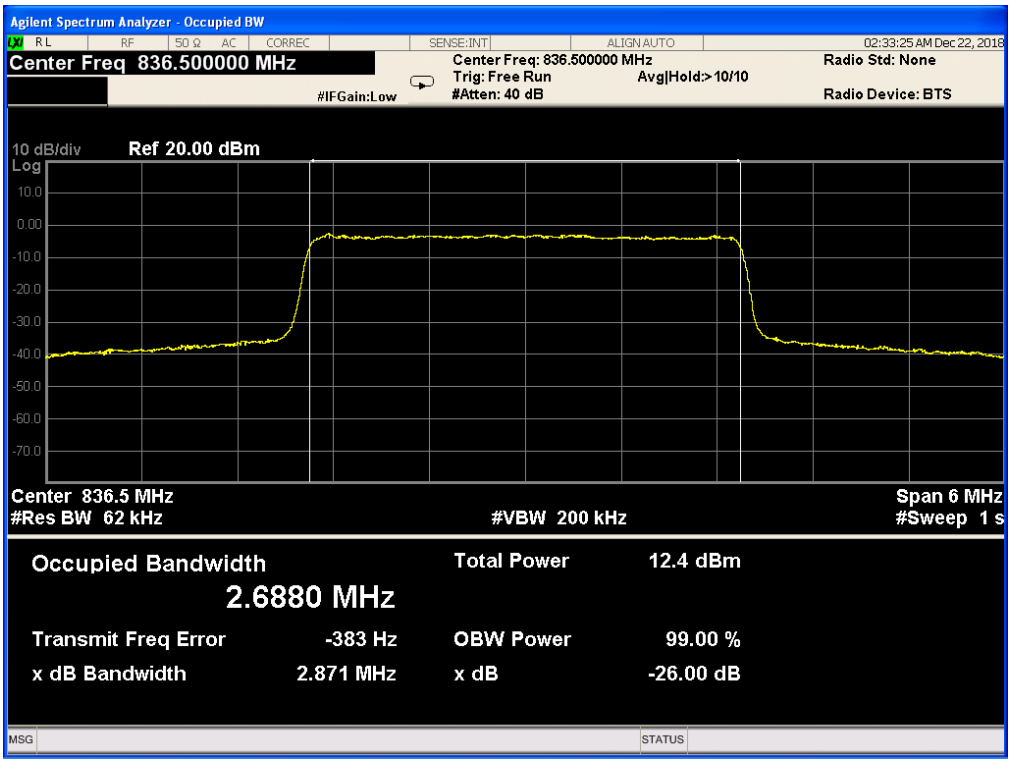
Band 5,UL Channel 20525,UL Frequency 836.5,BW 1.4,NO. RB 6,RB POS. Low,QPSK



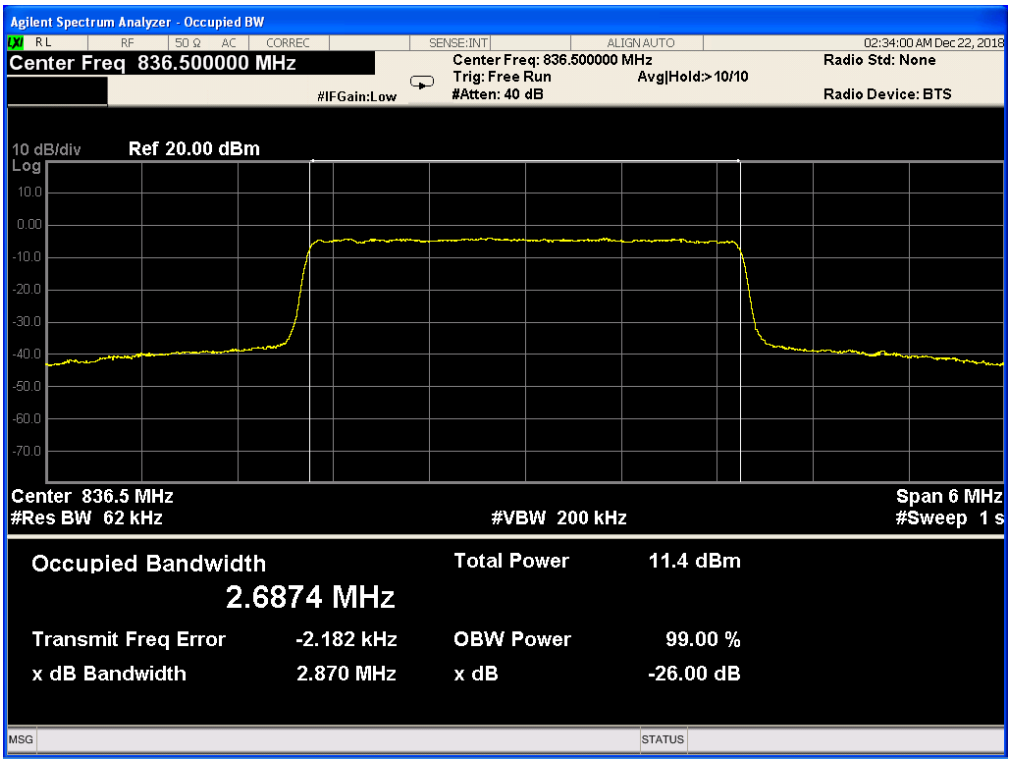
Band 5,UL Channel 20525,UL Frequency 836.5,BW 1.4,NO. RB 6,RB POS. Low,16-QAM



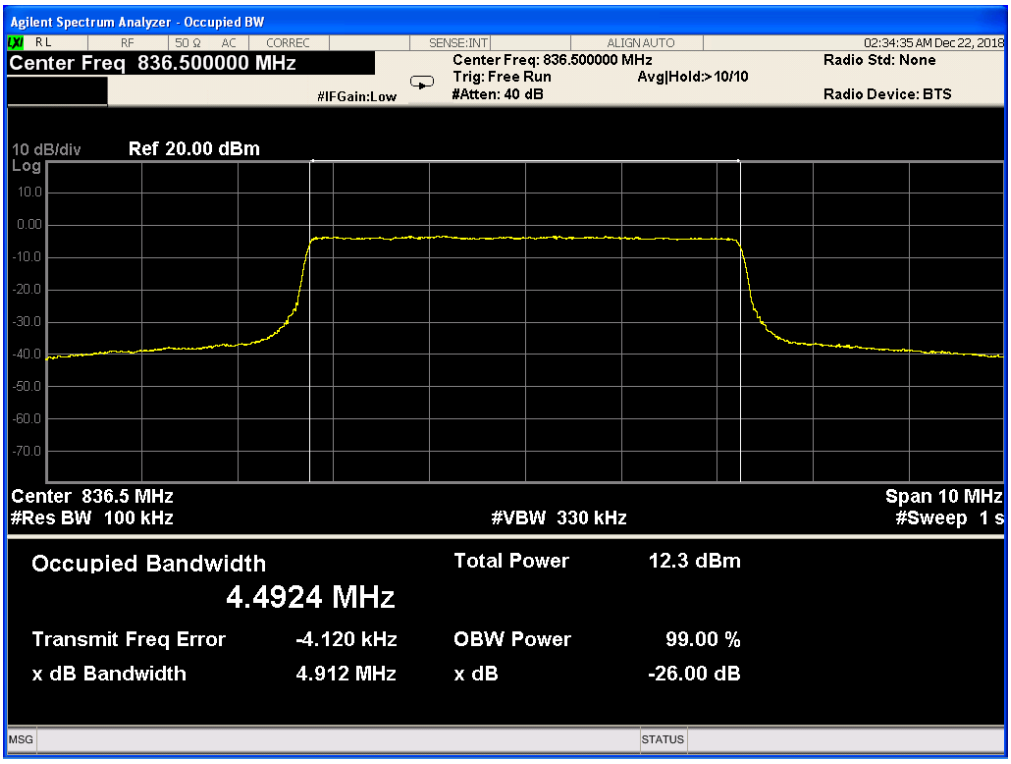
Band 5,UL Channel 20525,UL Frequency 836.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



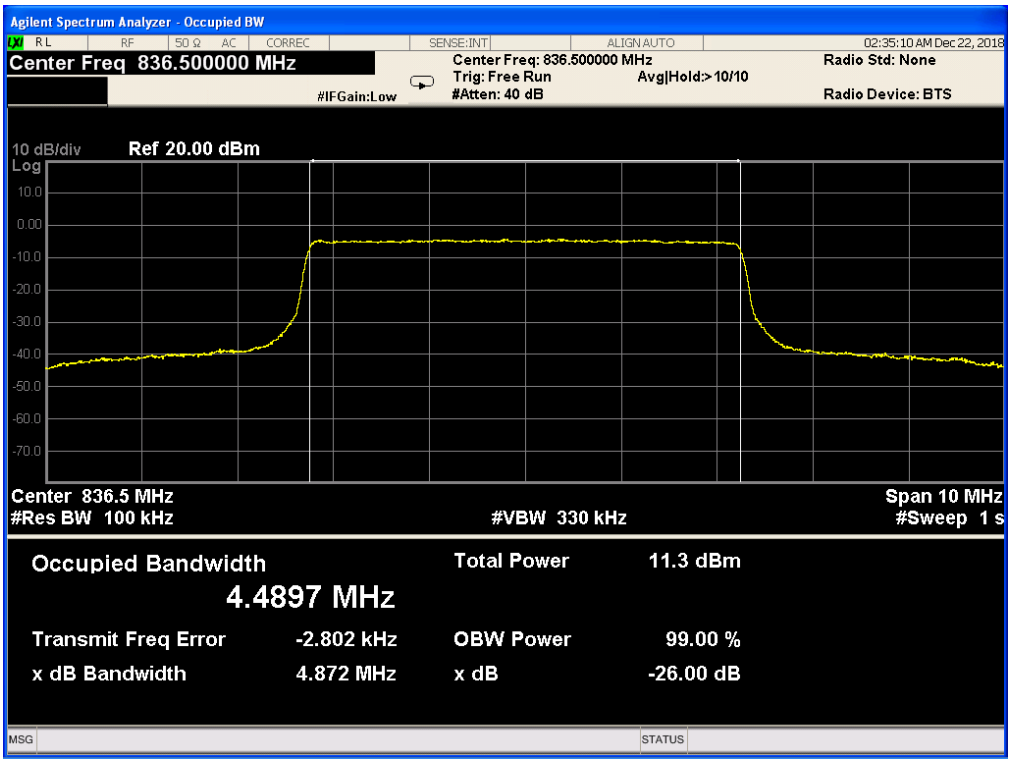
Band 5,UL Channel 20525,UL Frequency 836.5,BW 3.0,NO. RB 15,RB POS. Low,16-QAM



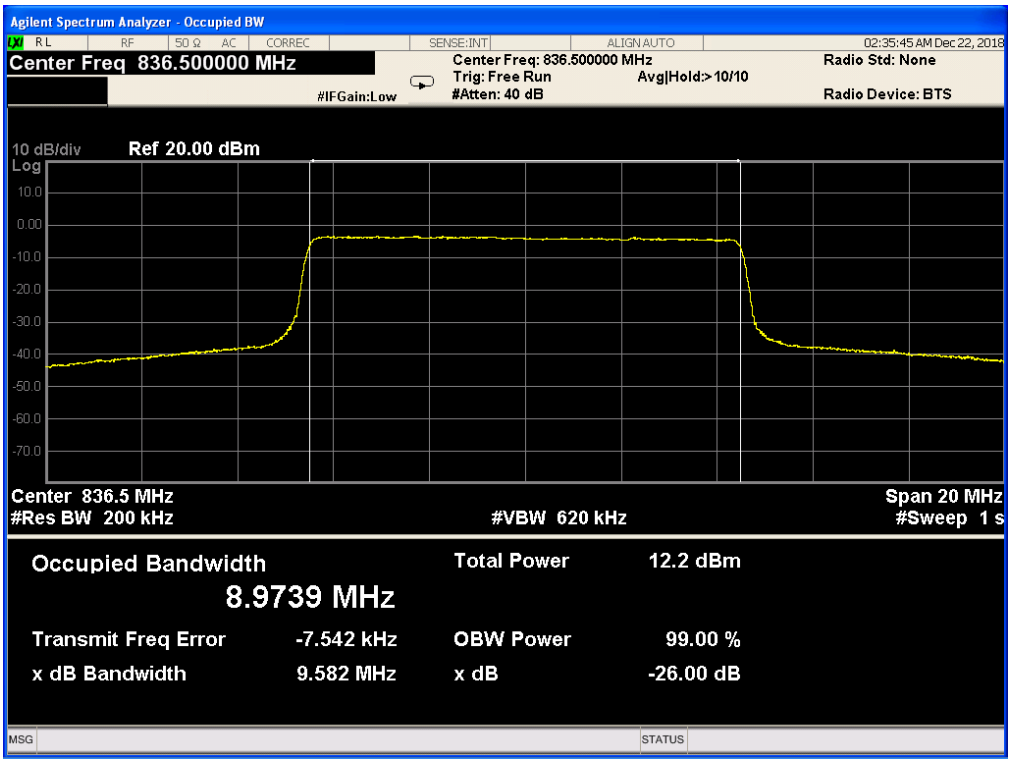
Band 5,UL Channel 20525,UL Frequency 836.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



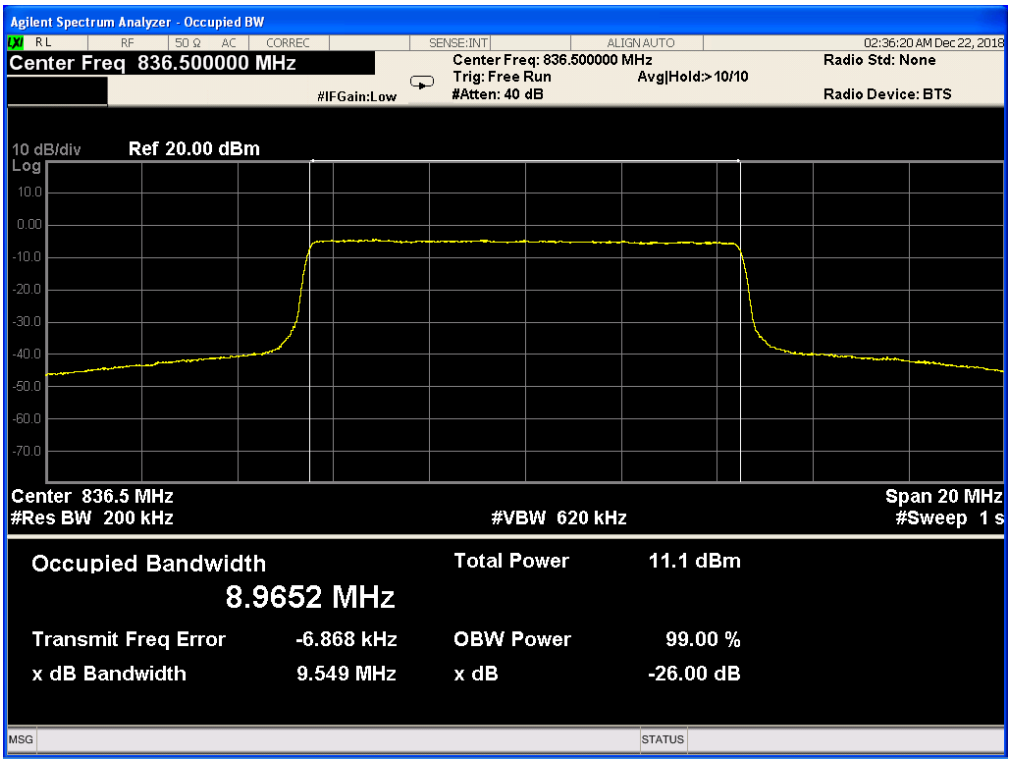
Band 5,UL Channel 20525,UL Frequency 836.5,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



Band 5,UL Channel 20525,UL Frequency 836.5,BW 10.0,NO. RB 50,RB POS. Low,QPSK

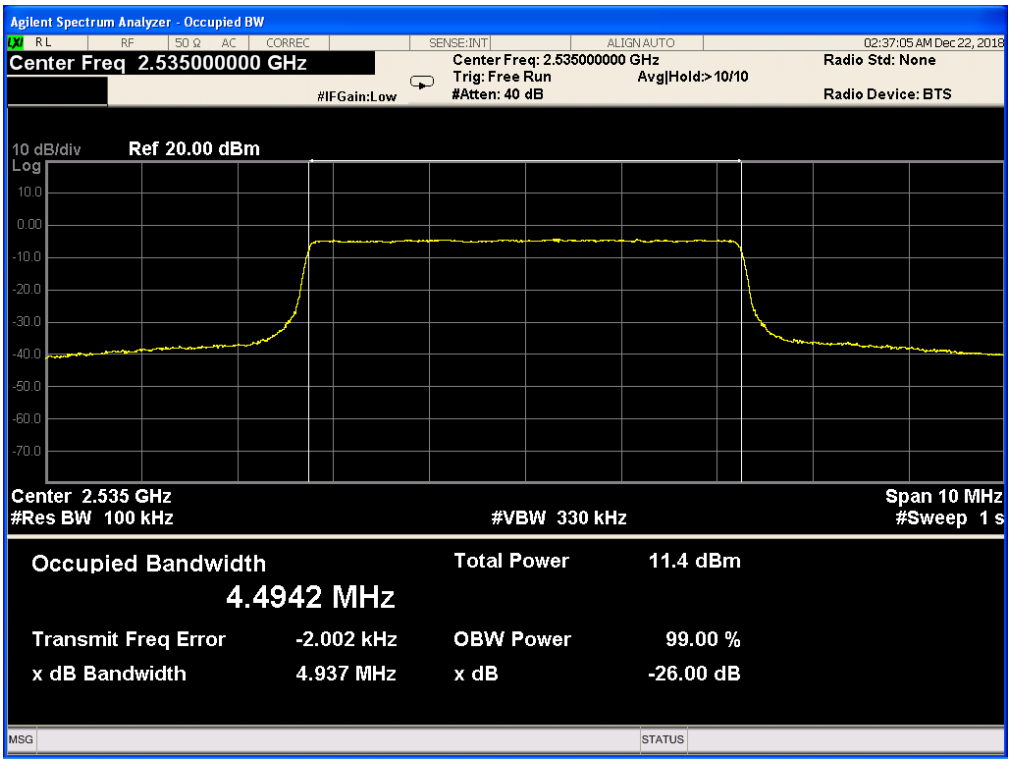


Band 5,UL Channel 20525,UL Frequency 836.5,BW 10.0,NO. RB 50,RB POS. Low,16-QAM

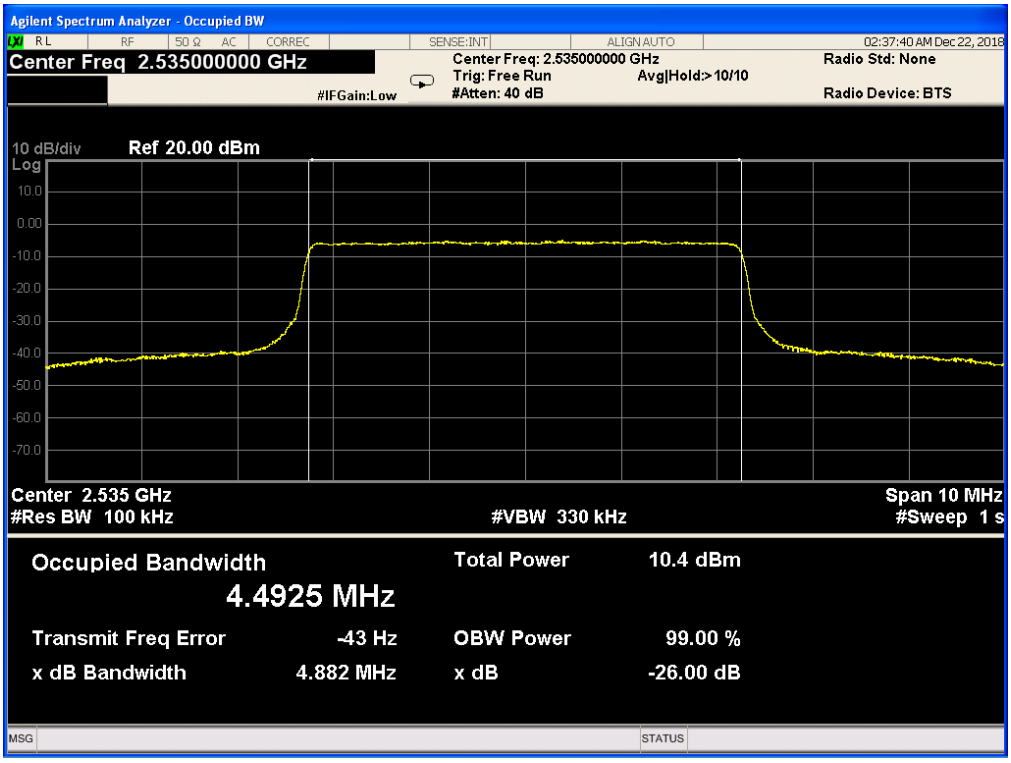


5.3 LTE BAND 7

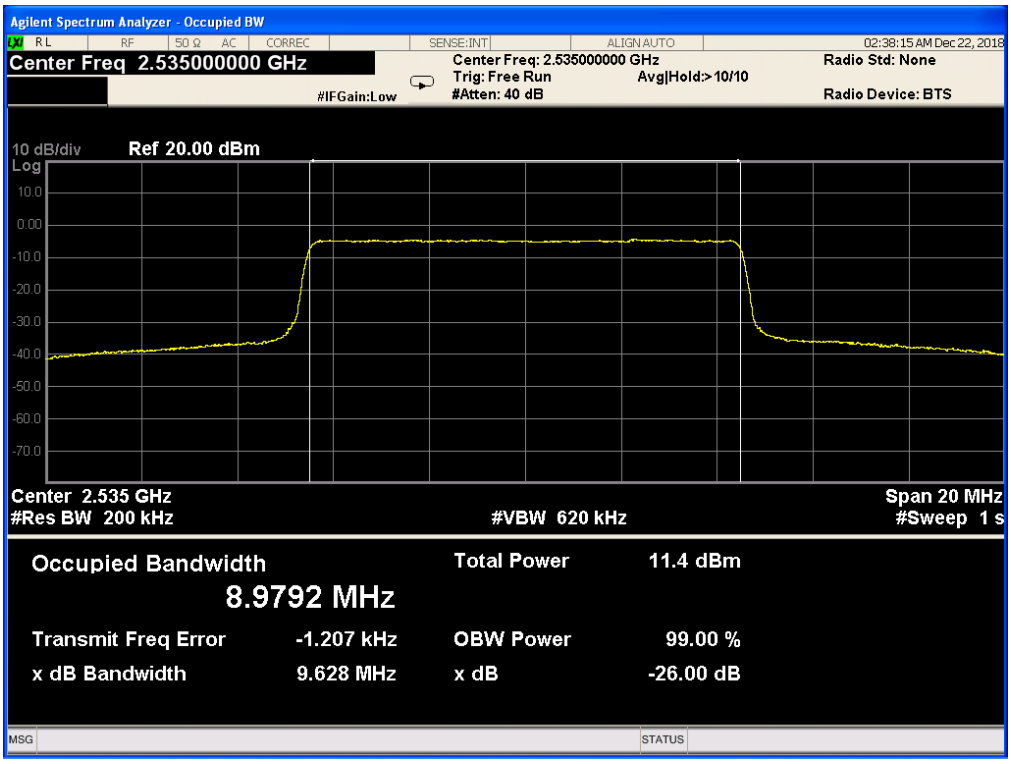
Band 7,UL Channel 21100,UL Frequency 2535.0,BW 5.0,NO. RB 25,RB POS. Low,QPSK



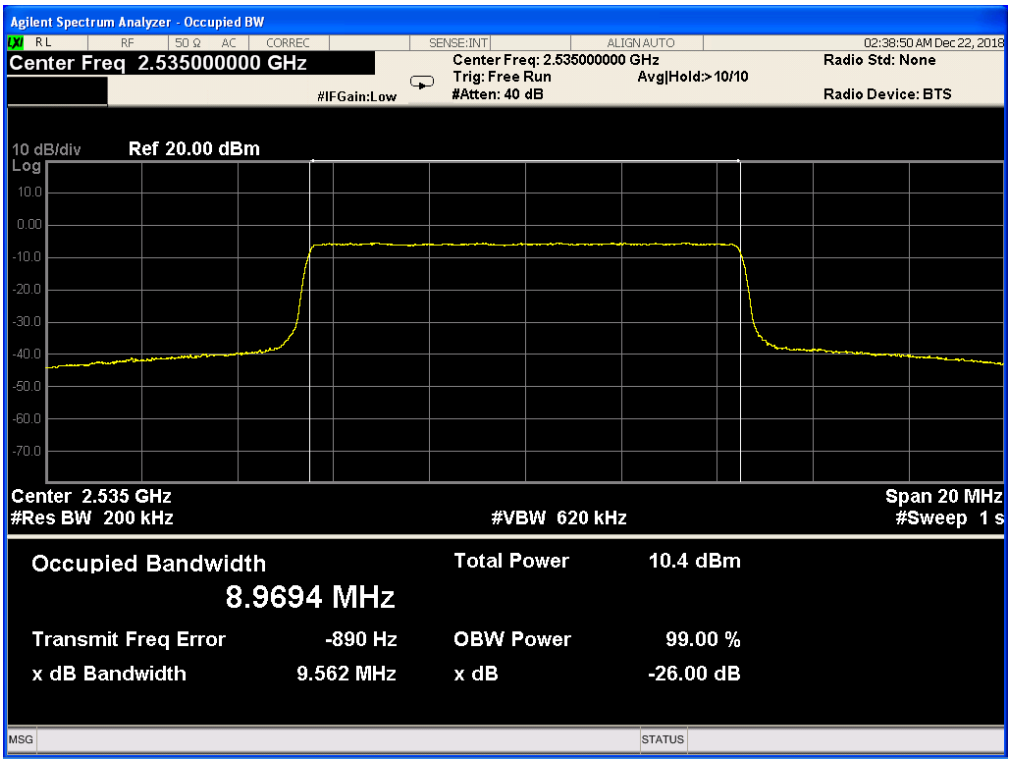
Band 7,UL Channel 21100,UL Frequency 2535.0,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



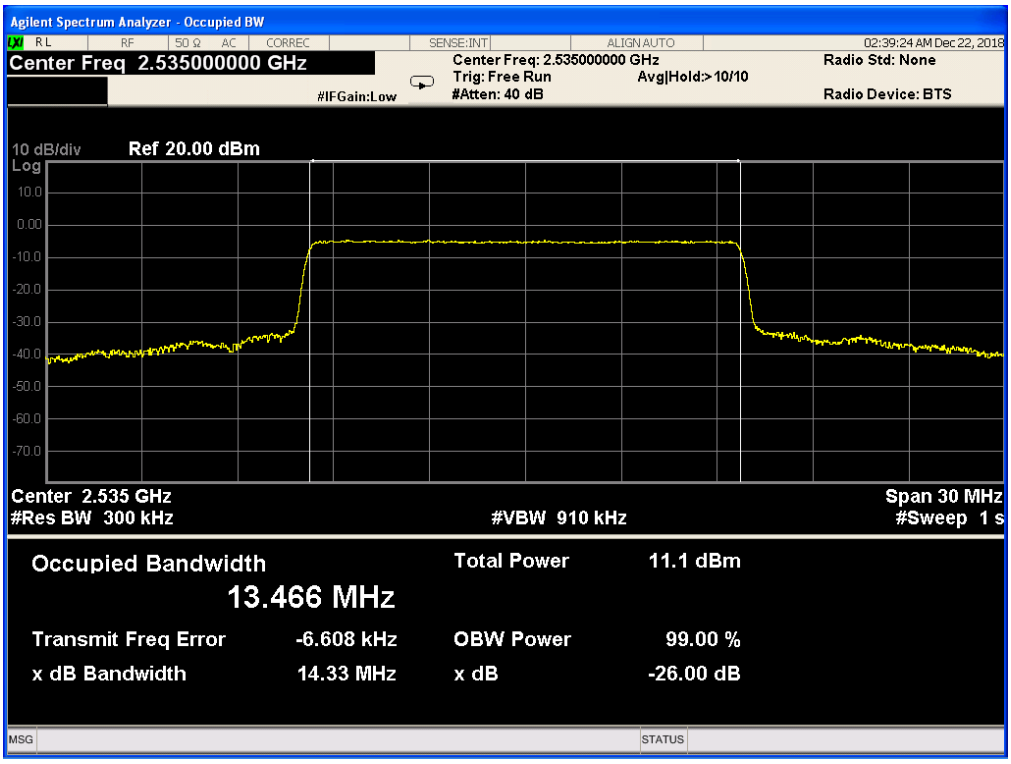
Band 7,UL Channel 21100,UL Frequency 2535.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



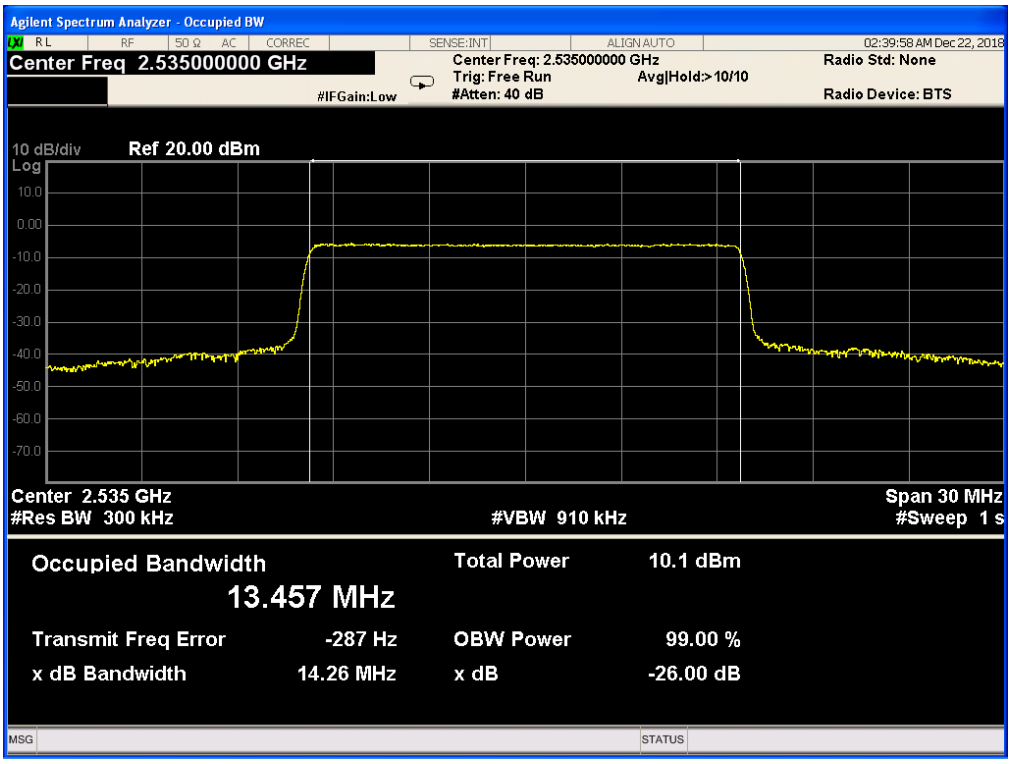
Band 7,UL Channel 21100,UL Frequency 2535.0,BW 10.0,NO. RB 50,RB POS. Low,16-QAM



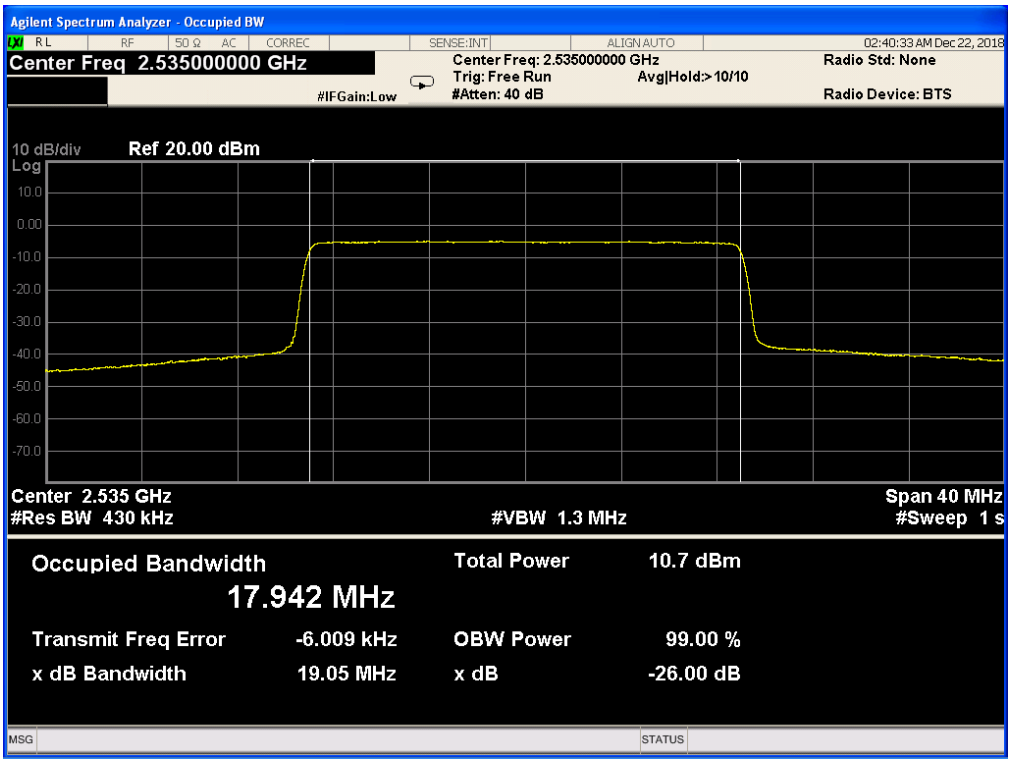
Band 7,UL Channel 21100,UL Frequency 2535.0,BW 15.0,NO. RB 75,RB POS. Low,QPSK



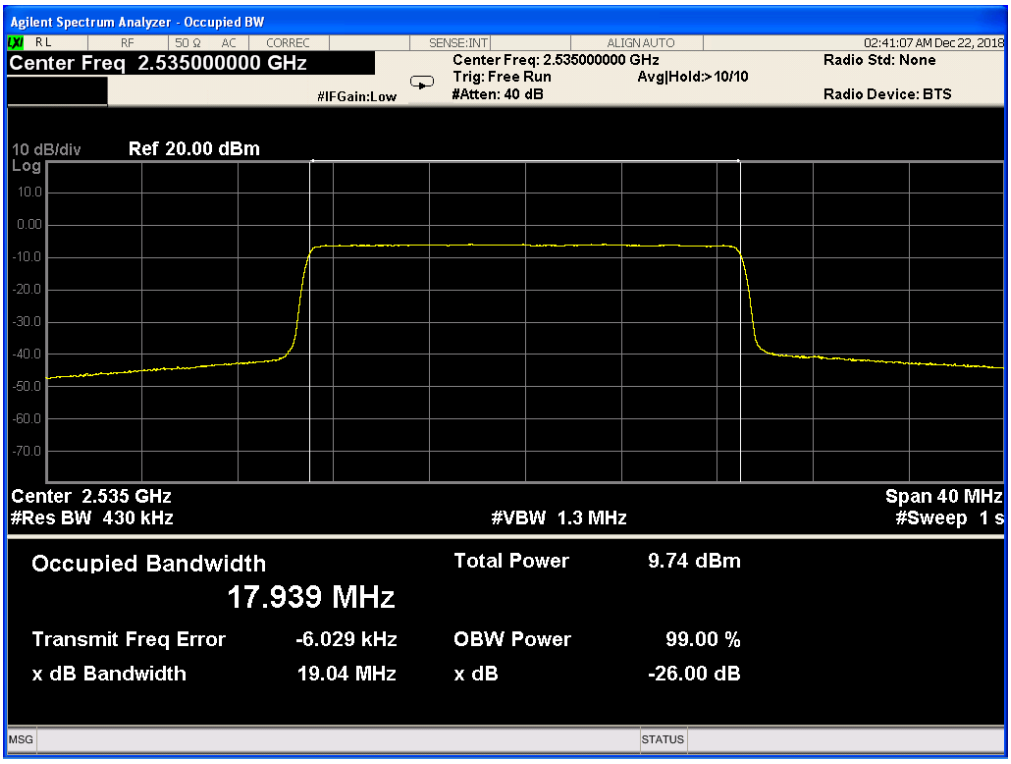
Band 7,UL Channel 21100,UL Frequency 2535.0,BW 15.0,NO. RB 75,RB POS. Low,16-QAM



Band 7,UL Channel 21100,UL Frequency 2535.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK

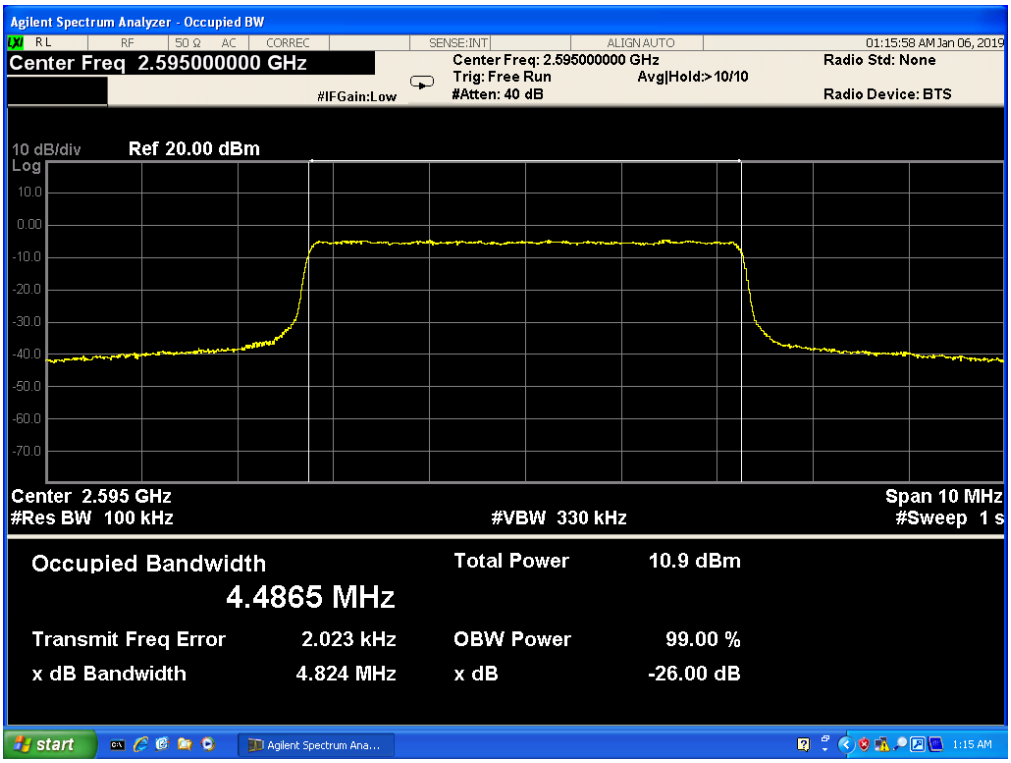


Band 7,UL Channel 21100,UL Frequency 2535.0,BW 20.0,NO. RB 100,RB POS. Low,16-QAM

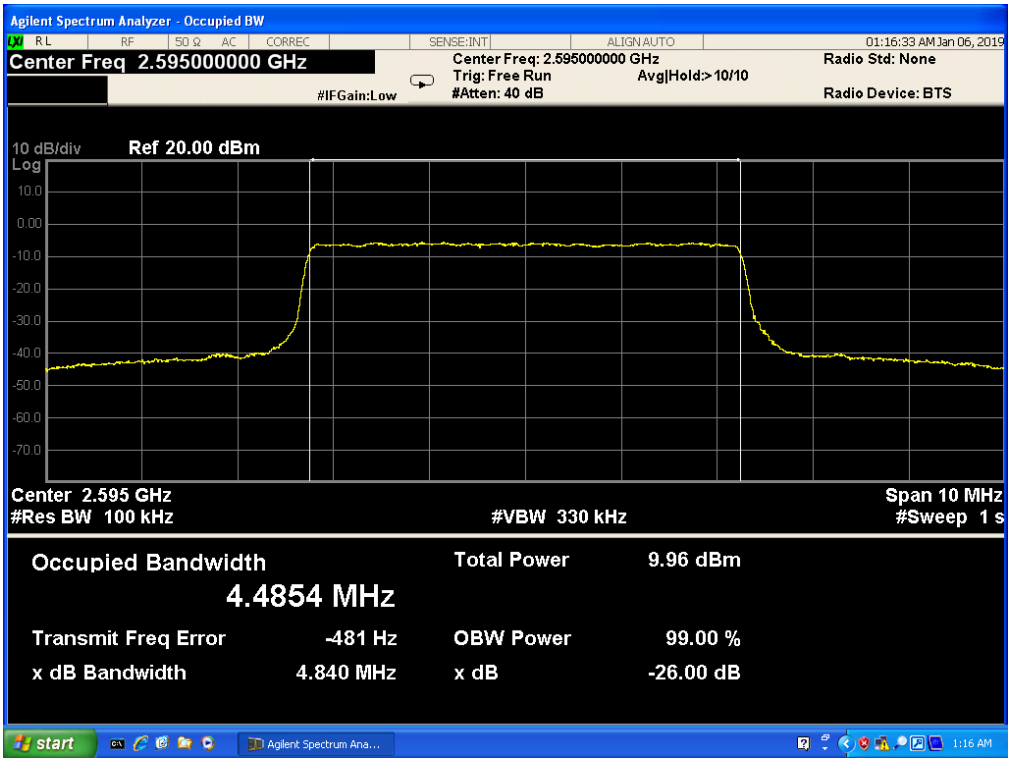


5.4 LTE BAND 38

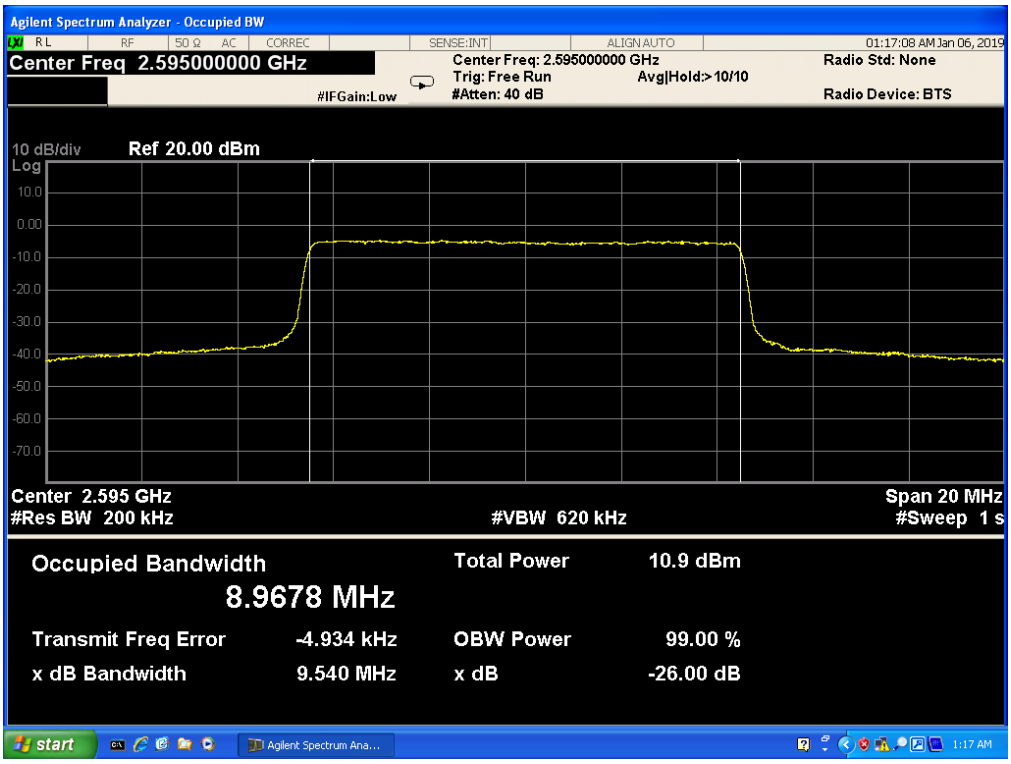
Band 38,UL Channel 38000,UL Frequency 2595.0,BW 5.0,NO. RB 25,RB POS. Low,QPSK



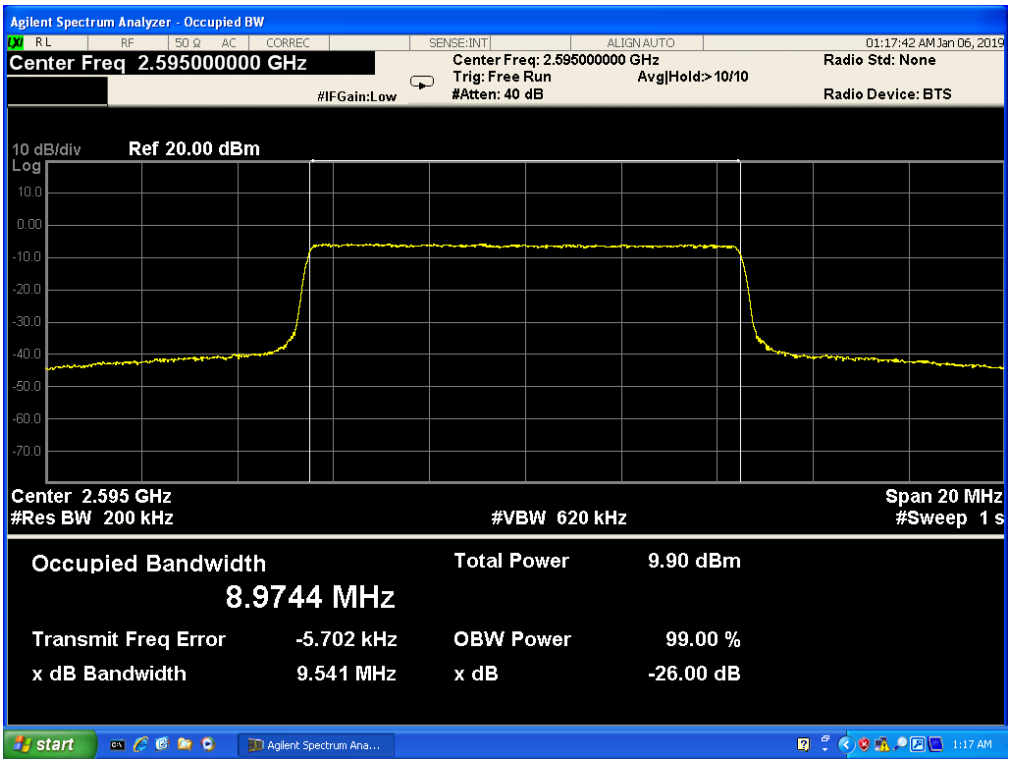
Band 38,UL Channel 38000,UL Frequency 2595.0,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



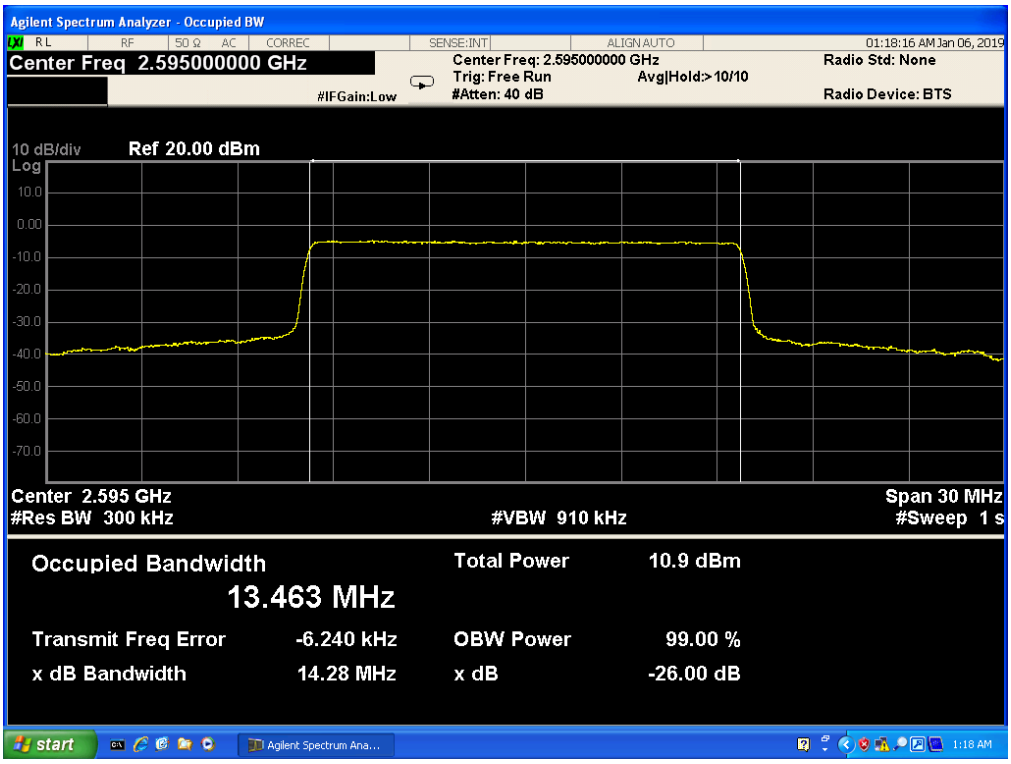
Band 38,UL Channel 38000,UL Frequency 2595.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



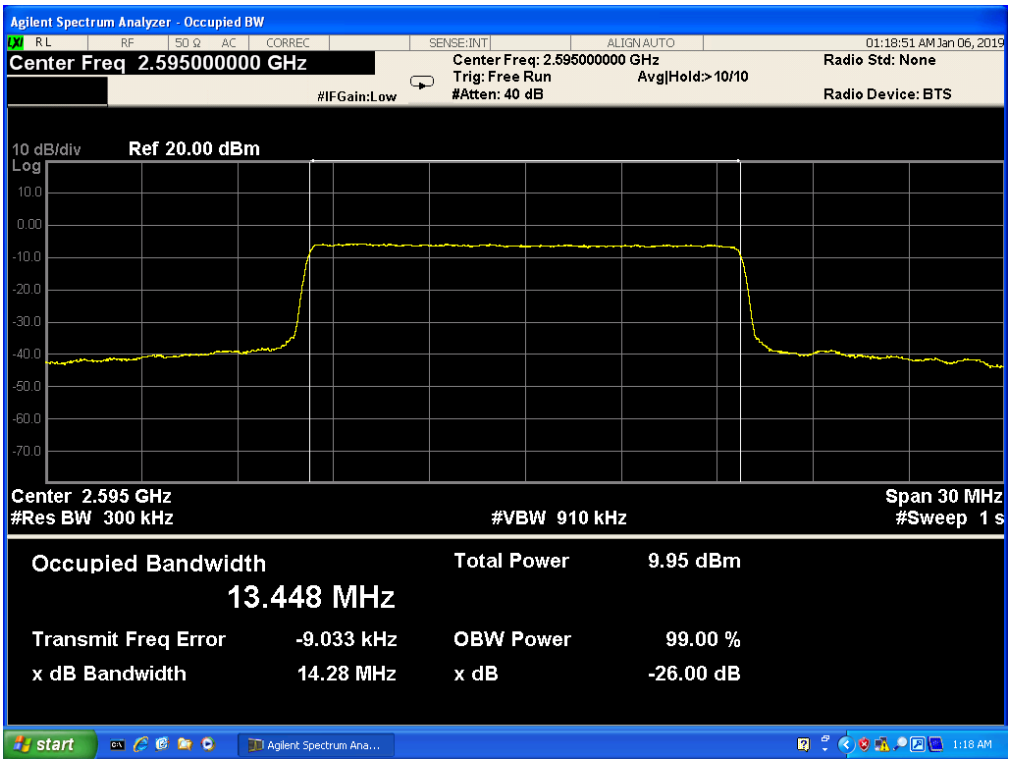
Band 38,UL Channel 38000,UL Frequency 2595.0,BW 10.0,NO. RB 50,RB POS. Low,16-QAM



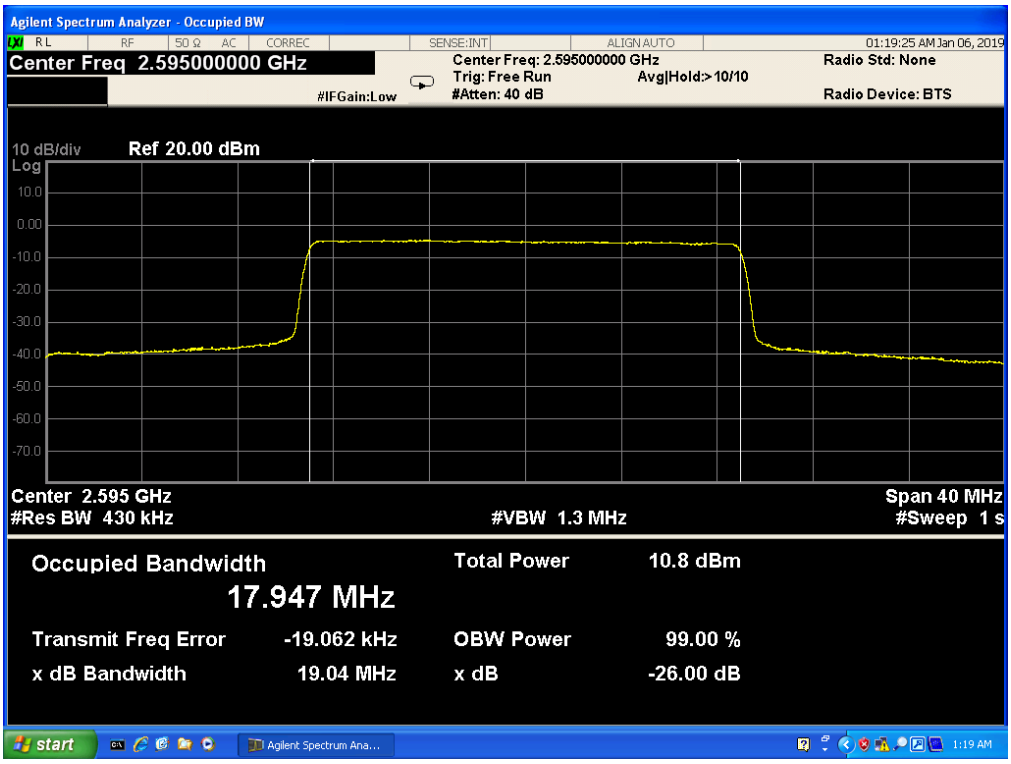
Band 38,UL Channel 38000,UL Frequency 2595.0,BW 15.0,NO. RB 75,RB POS. Low,QPSK



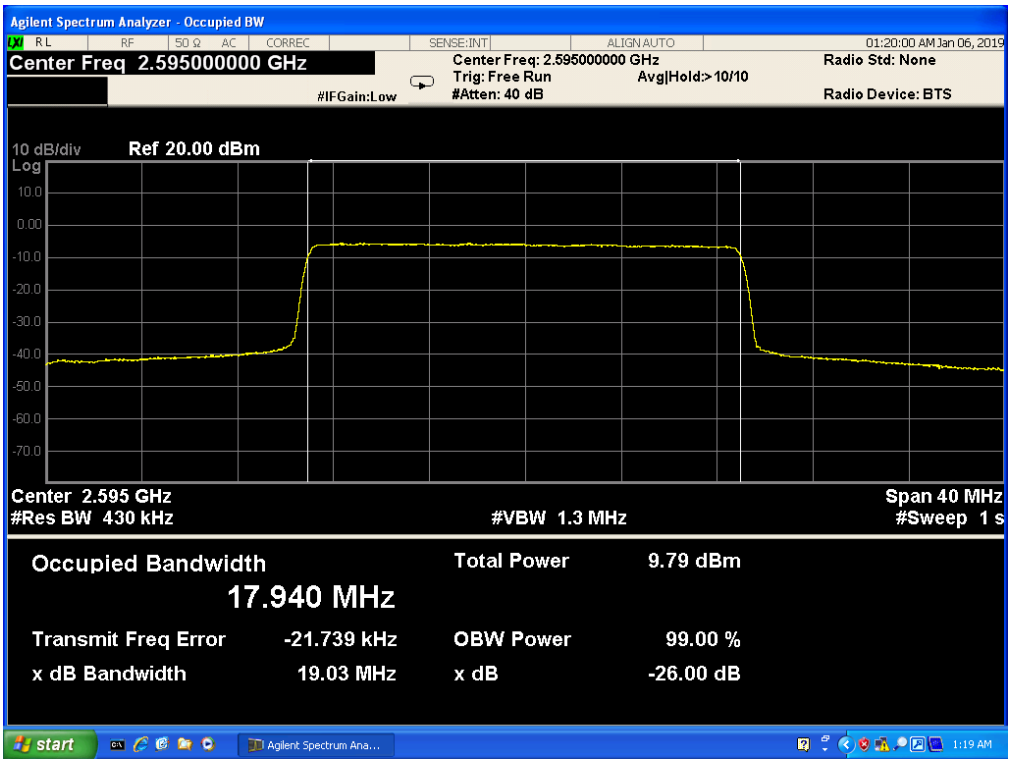
Band 38,UL Channel 38000,UL Frequency 2595.0,BW 15.0,NO. RB 75,RB POS. Low,16-QAM



Band 38,UL Channel 38000,UL Frequency 2595.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK

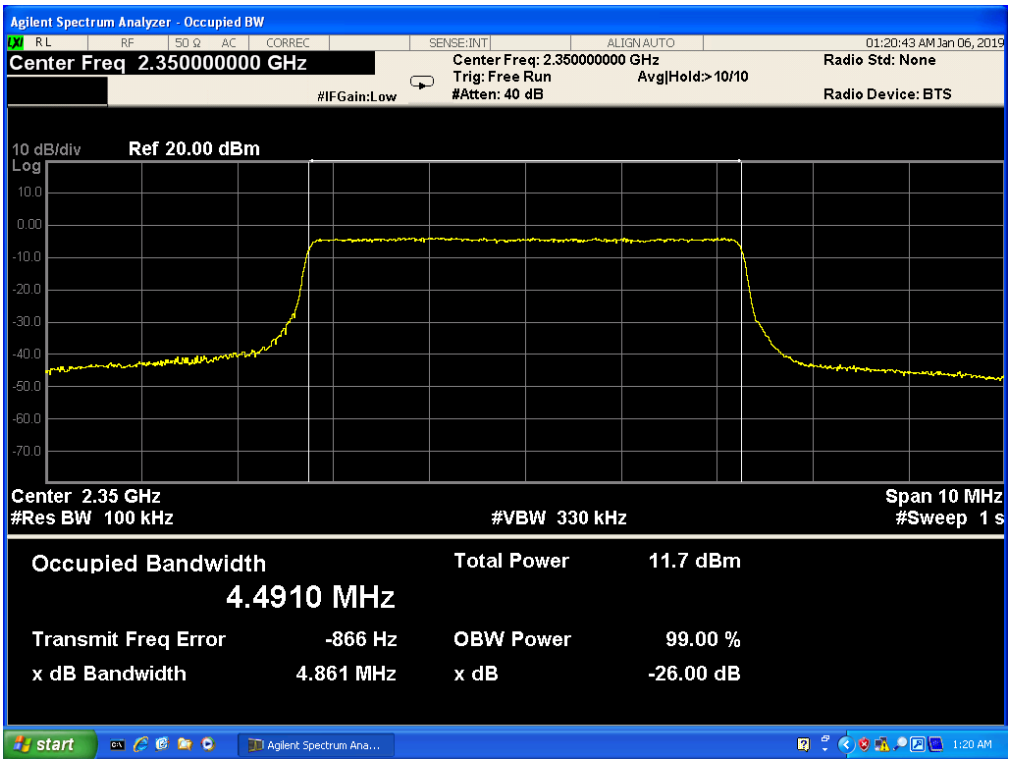


Band 38,UL Channel 38000,UL Frequency 2595.0,BW 20.0,NO. RB 100,RB POS. Low,16-QAM

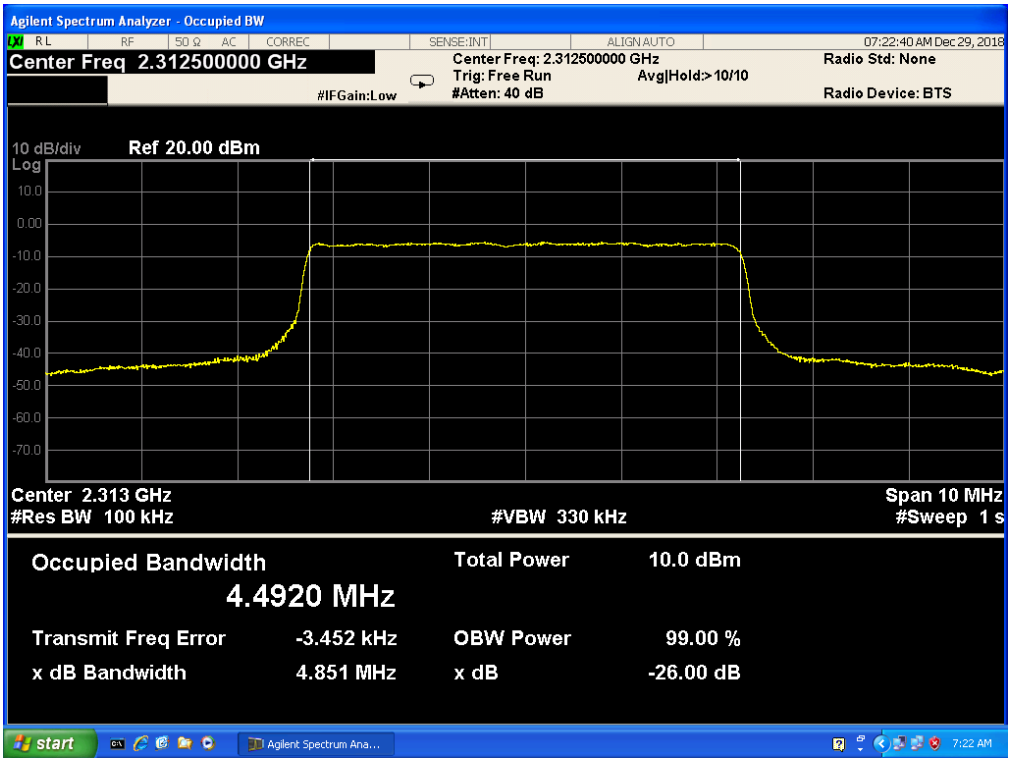


5.5 LTE BAND 40(2305-2320MHz)

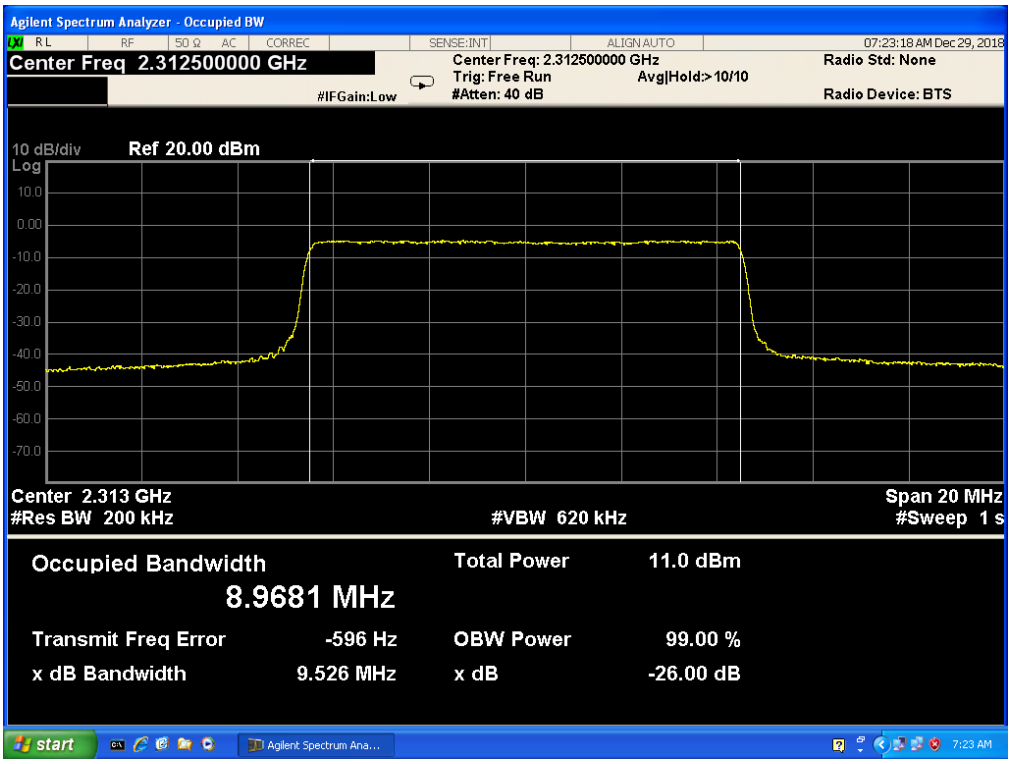
Band 40,UL Channel 38775,UL Frequency 2312.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



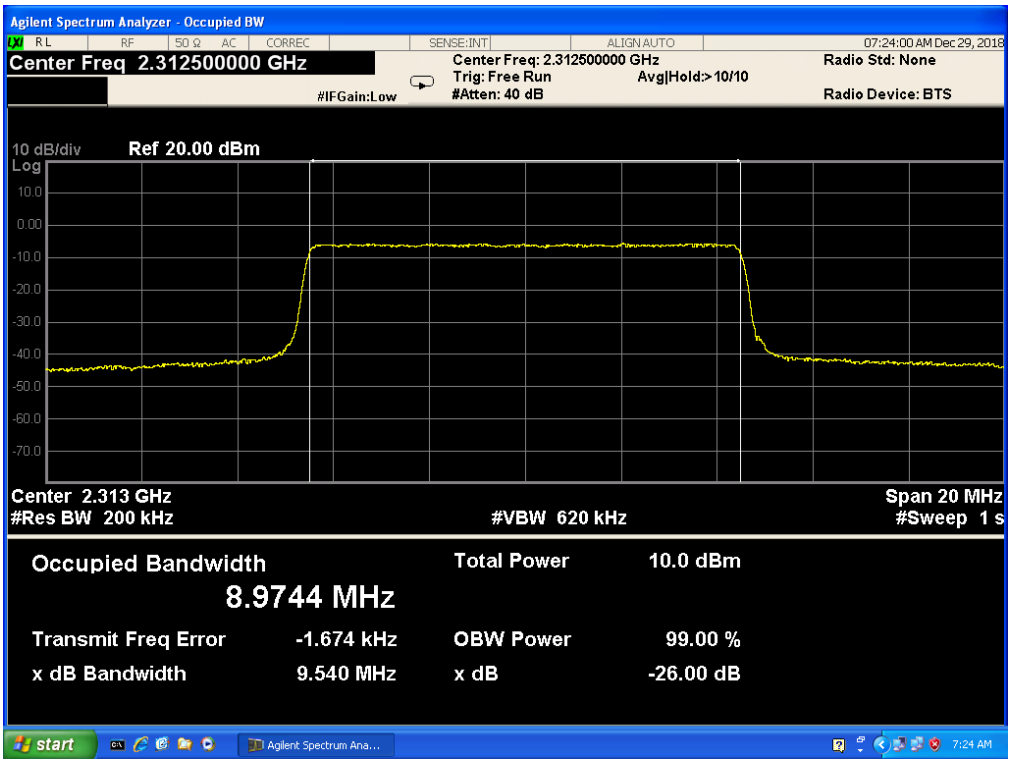
Band 40,UL Channel 38775,UL Frequency 2312.5,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



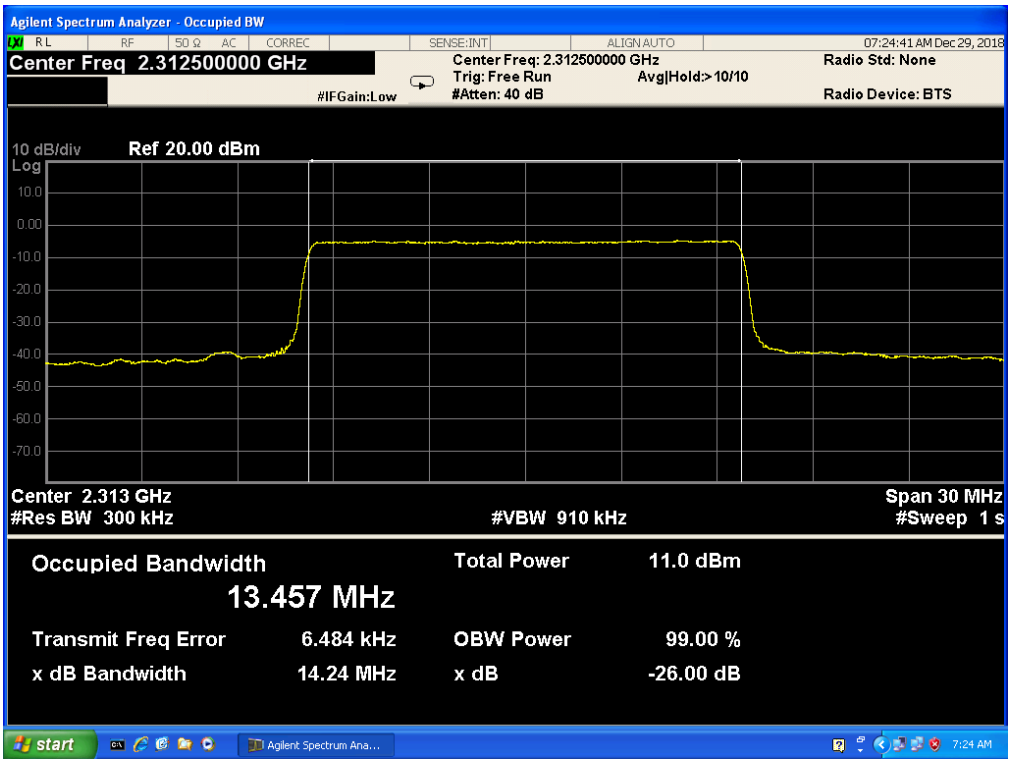
Band 40,UL Channel 38775,UL Frequency 2312.5,BW 10.0,NO. RB 50,RB POS. Low,QPSK



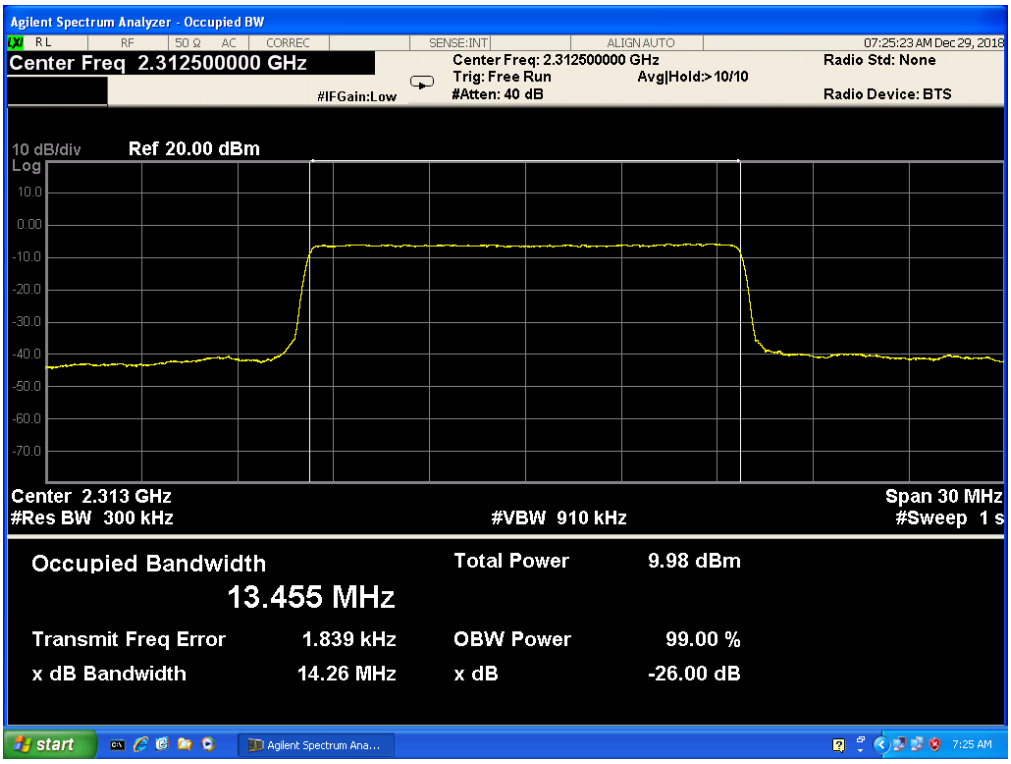
Band 40,UL Channel 38775,UL Frequency 2312.5,BW 10.0,NO. RB 50,RB POS. Low,16-QAM



Band 40,UL Channel 38775,UL Frequency 2312.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK

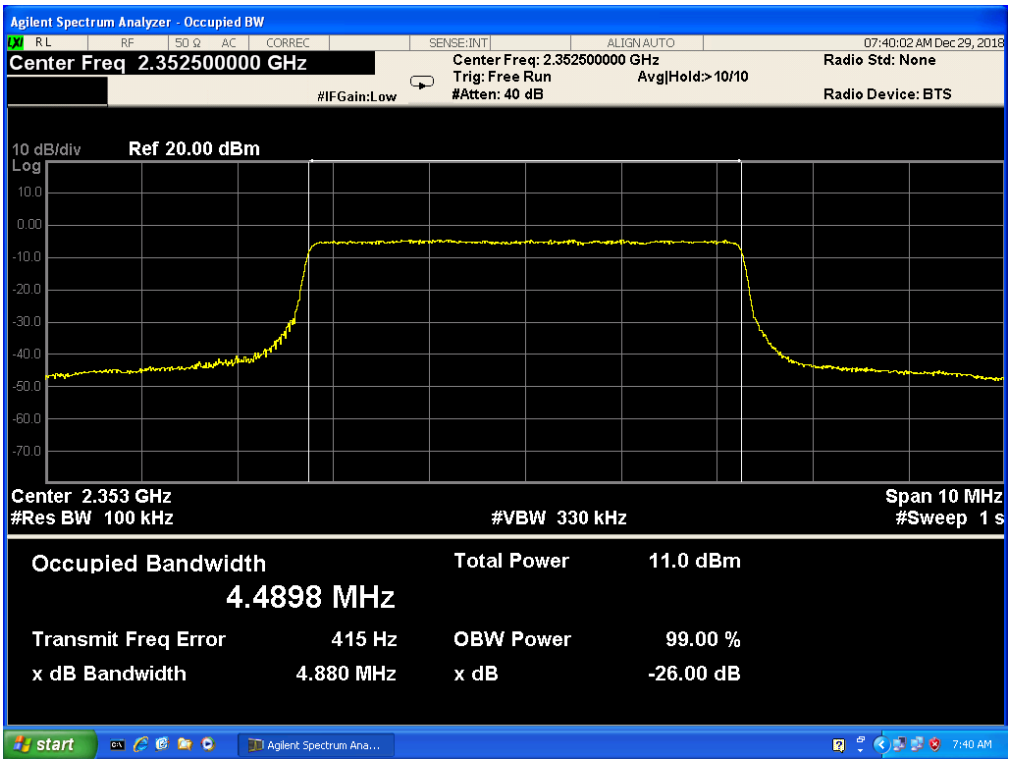


Band 40,UL Channel 38775,UL Frequency 2312.5,BW 15.0,NO. RB 75,RB POS. Low,16-QAM

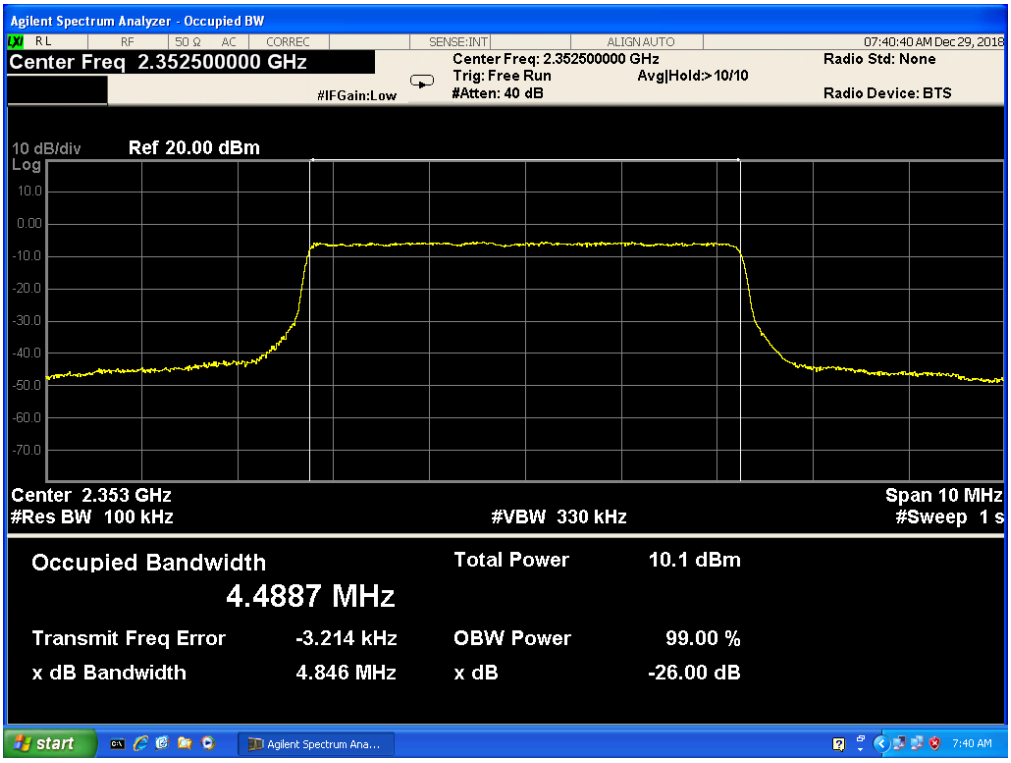


5.6 LTE BAND 40(2345-2360MHz)

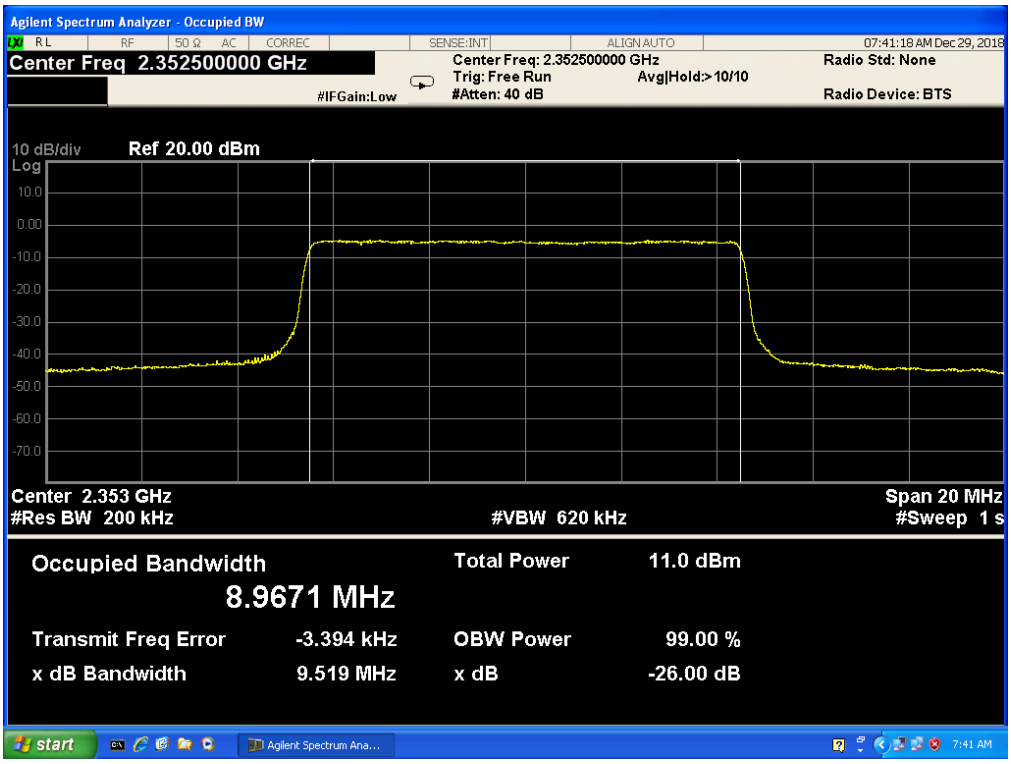
Band 40,UL Channel 39175,UL Frequency 2352.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



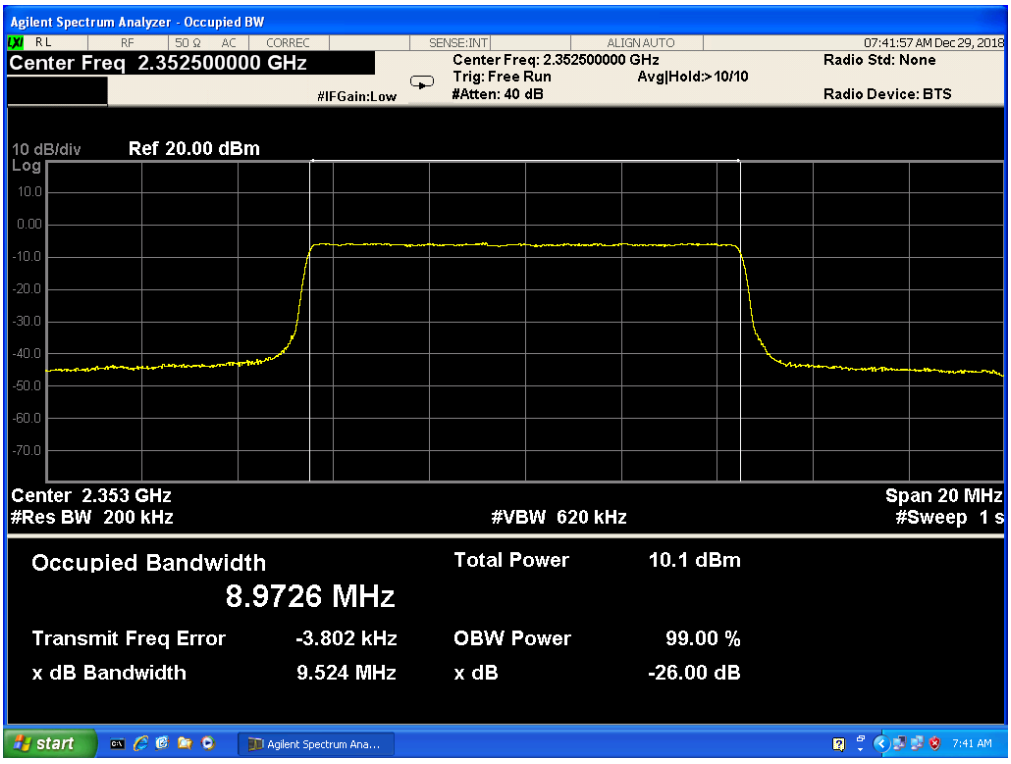
Band 40,UL Channel 39175,UL Frequency 2352.5,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



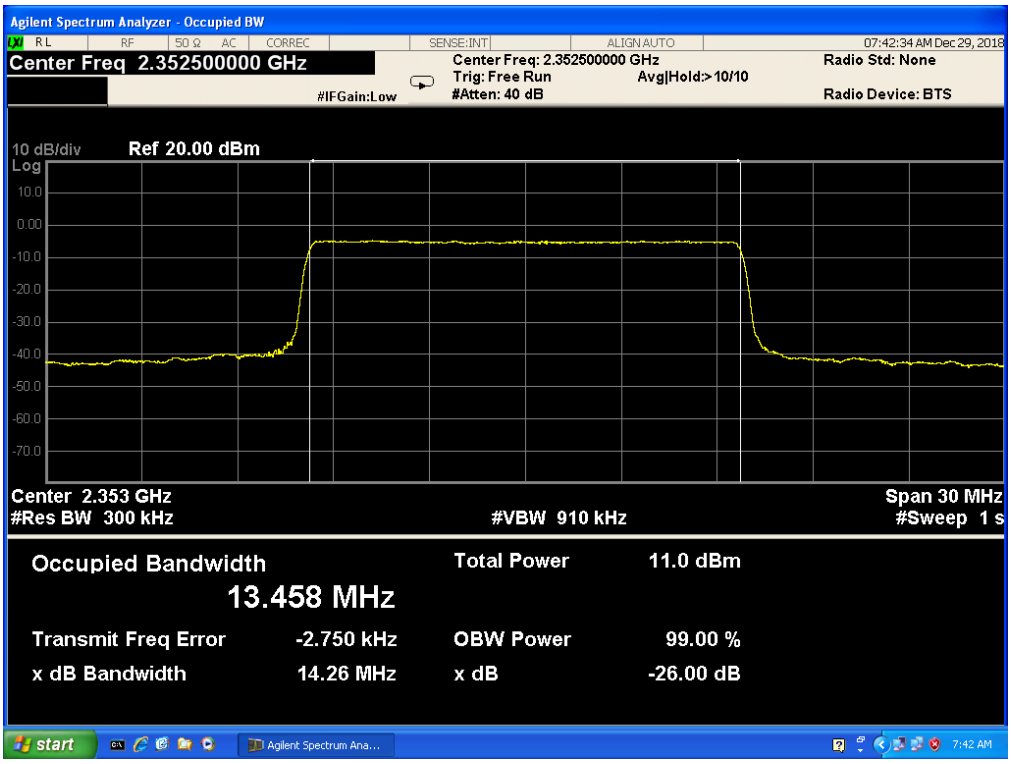
Band 40,UL Channel 39175,UL Frequency 2352.5,BW 10.0,NO. RB 50,RB POS. Low,QPSK



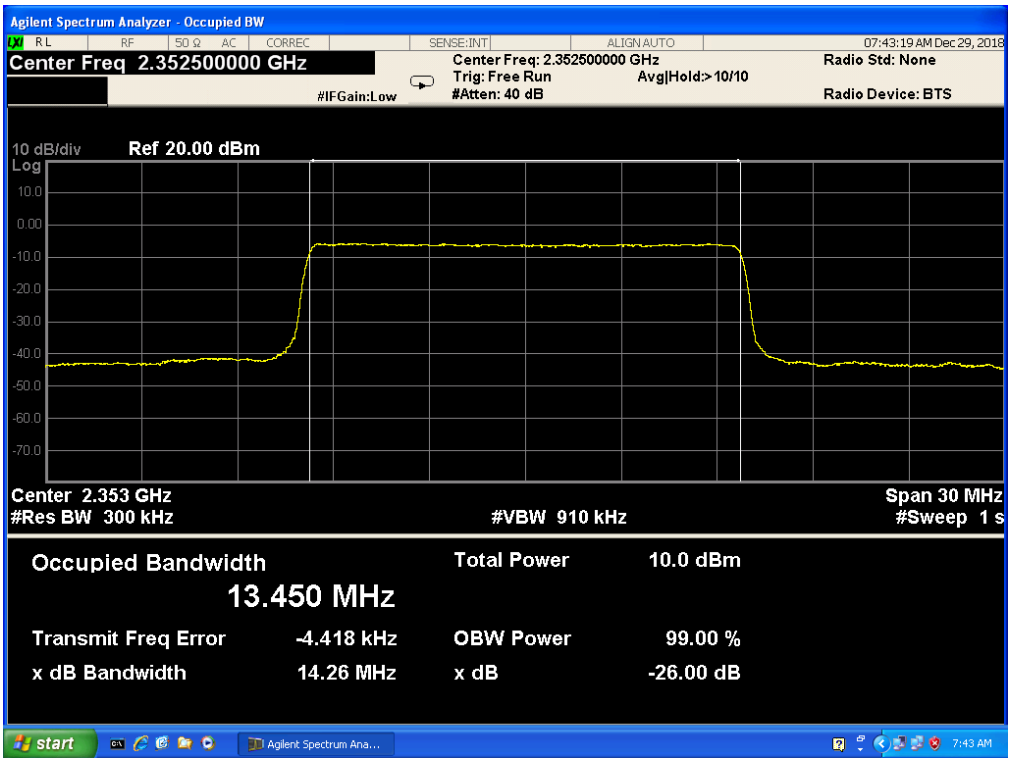
Band 40,UL Channel 39175,UL Frequency 2352.5,BW 10.0,NO. RB 50,RB POS. Low,16-QAM



Band 40,UL Channel 39175,UL Frequency 2352.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK

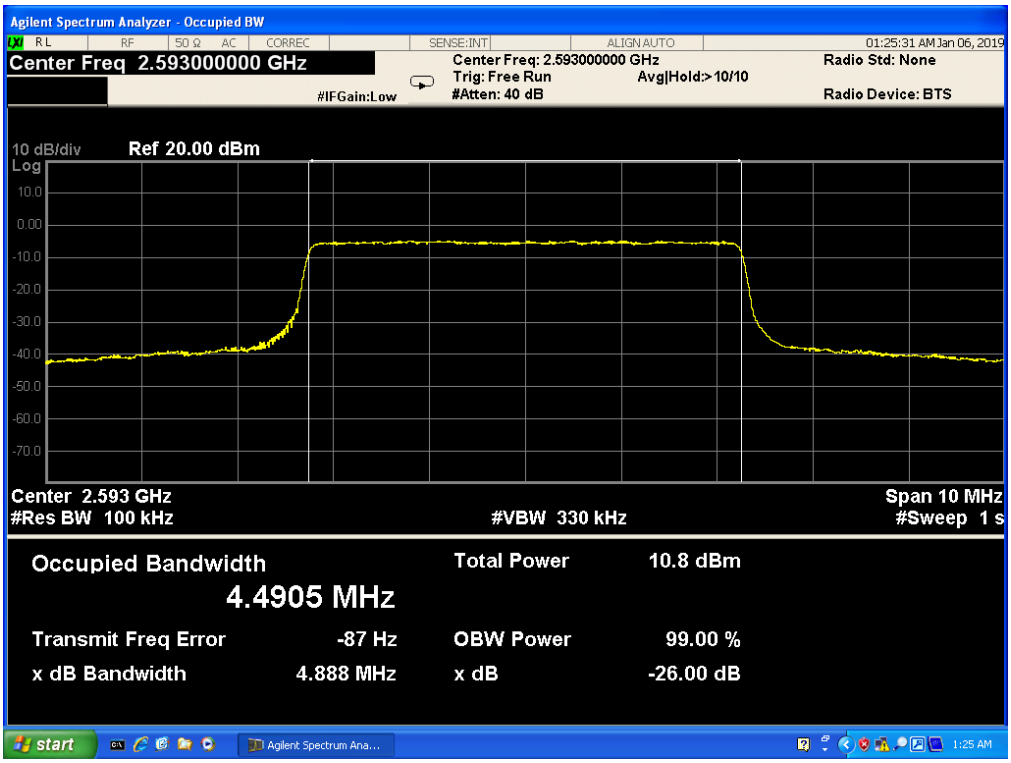


Band 40,UL Channel 39175,UL Frequency 2352.5,BW 15.0,NO. RB 75,RB POS. Low,16-QAM

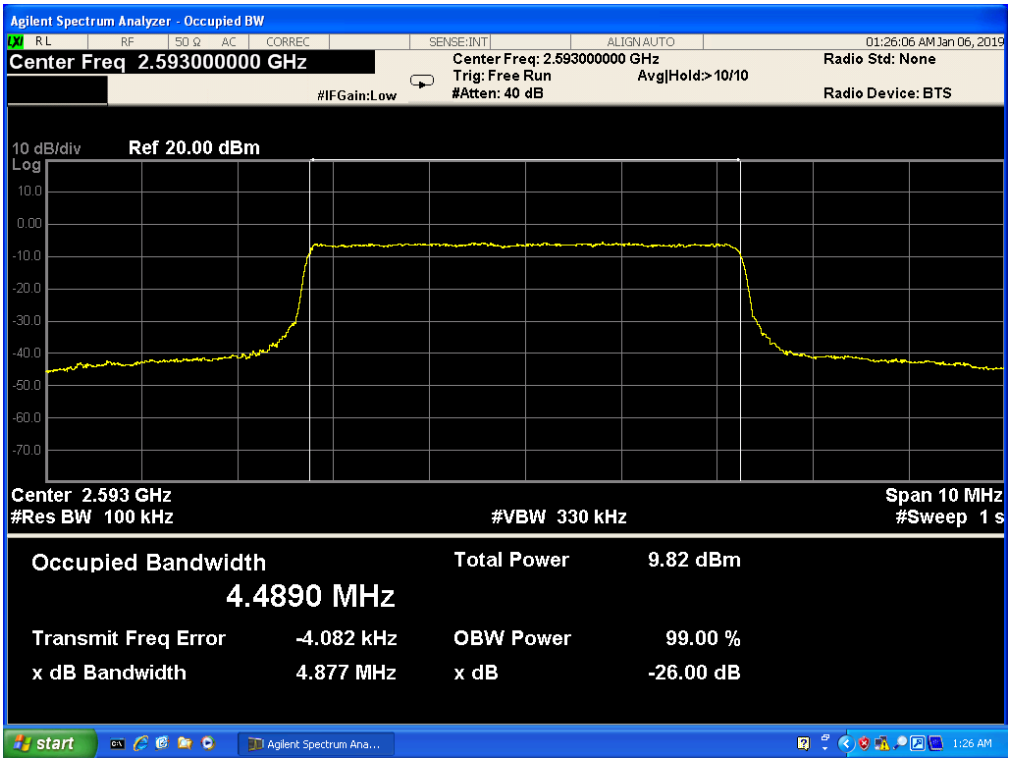


5.7 LTE BAND 41

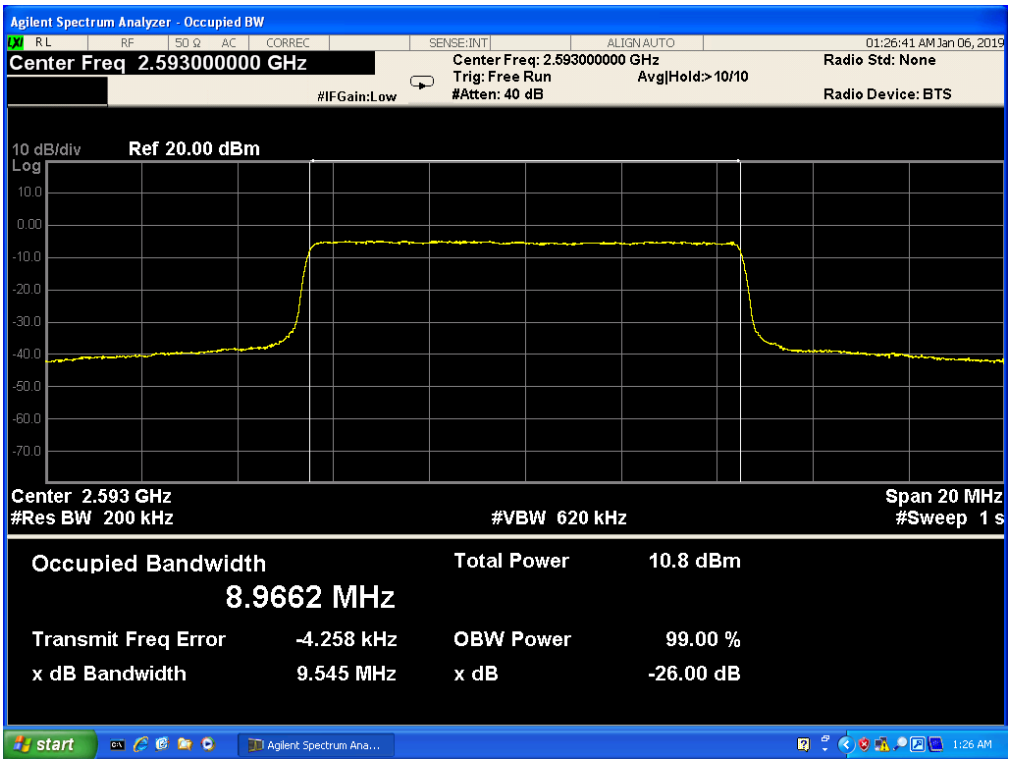
Band 41,UL Channel 40620,UL Frequency 2593.0,BW 5.0,NO. RB 25,RB POS. Low,QPSK



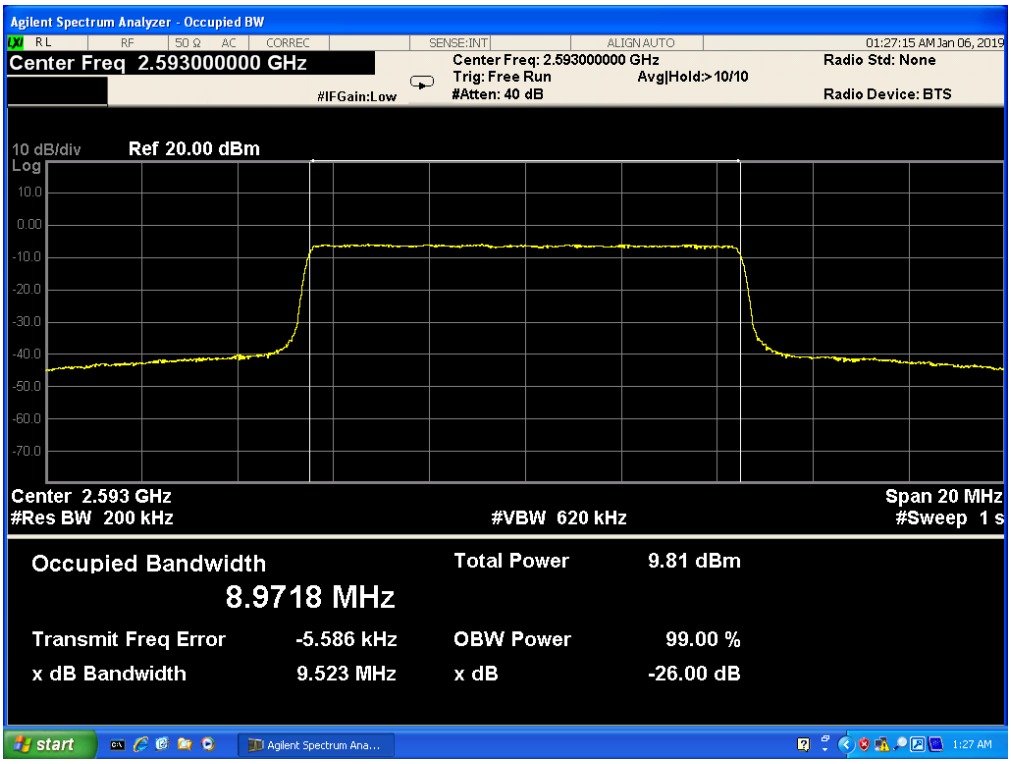
Band 41,UL Channel 40620,UL Frequency 2593.0,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



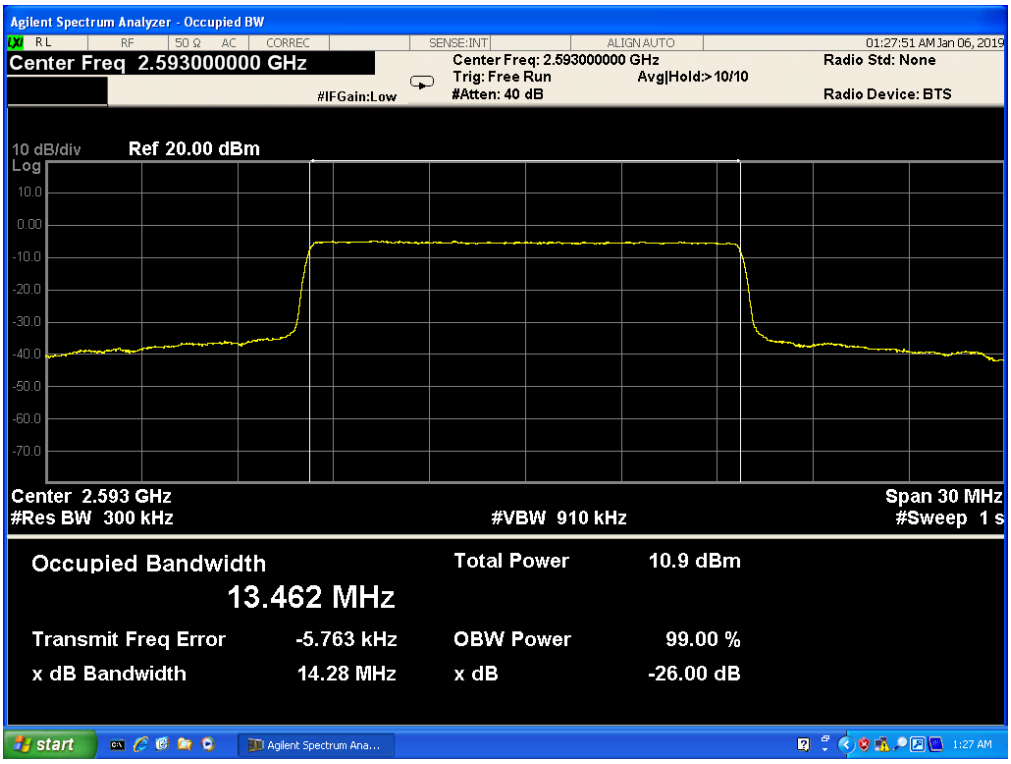
Band 41,UL Channel 40620,UL Frequency 2593.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



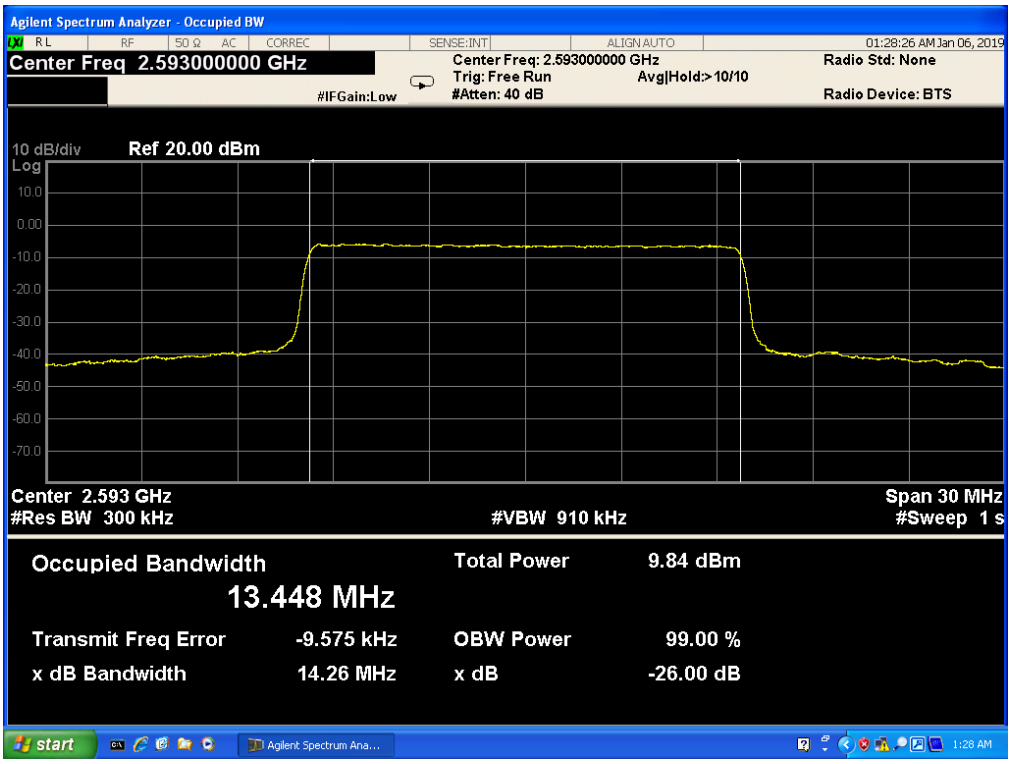
Band 41,UL Channel 40620,UL Frequency 2593.0,BW 10.0,NO. RB 50,RB POS. Low,16-QAM



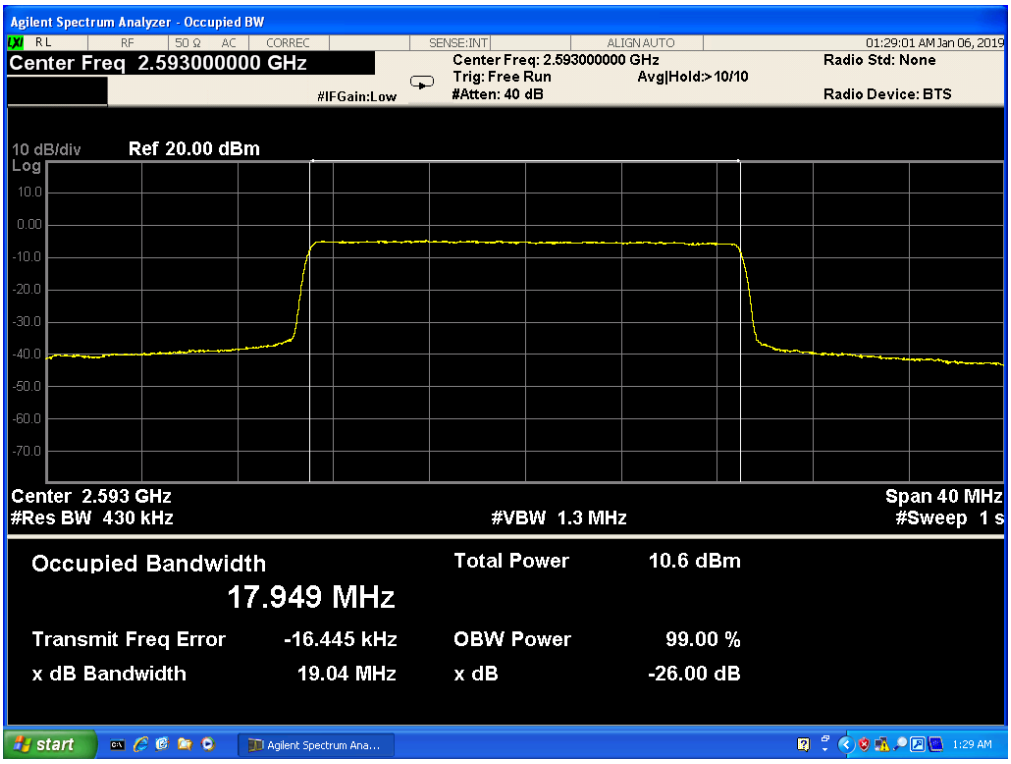
Band 41,UL Channel 40620,UL Frequency 2593.0,BW 15.0,NO. RB 75,RB POS. Low,QPSK



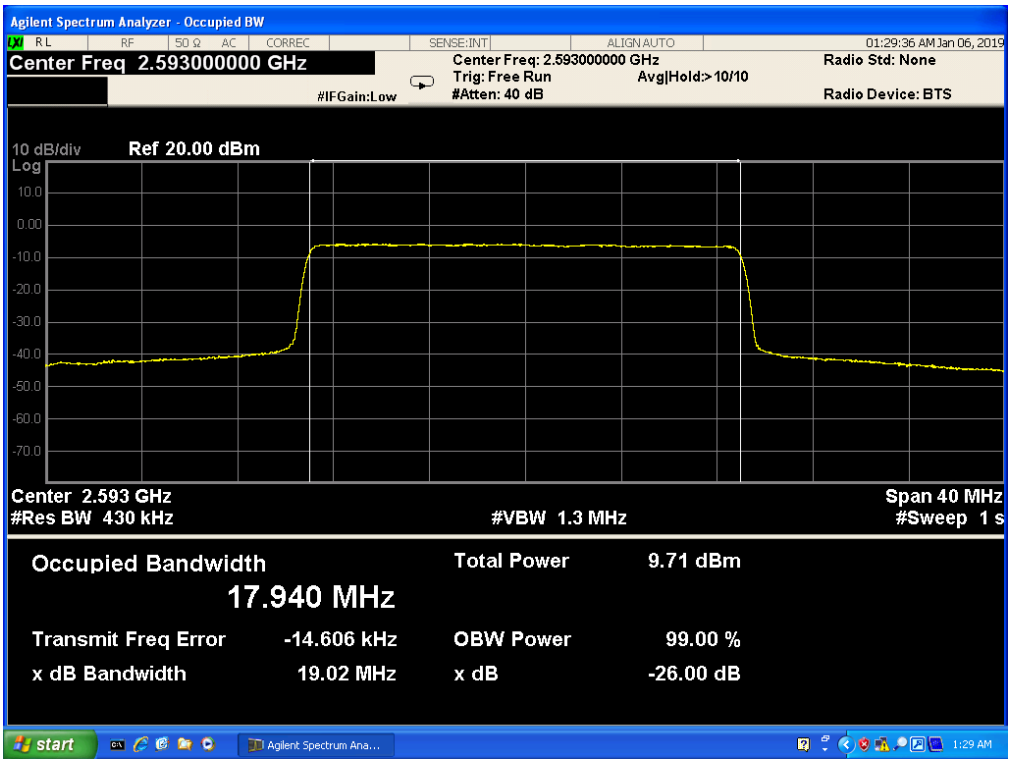
Band 41,UL Channel 40620,UL Frequency 2593.0,BW 15.0,NO. RB 75,RB POS. Low,16-QAM



Band 41,UL Channel 40620,UL Frequency 2593.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



Band 41,UL Channel 40620,UL Frequency 2593.0,BW 20.0,NO. RB 100,RB POS. Low,16-QAM



5.8 LTE BAND 2

Test data reference attachment

6. BANDEDGE AND EMISSION MASK

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53, and §90.691
FCC: §22.359

LIMITS

FCC: §22.359, §24.238,
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

(m)(4) For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.Show citation box.

TEST PROCEDURE

The transmitter output was connected to a CMW500Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.
For each band edge measurement:
Set the spectrum analyzer span to include the block edge frequency (704, 716, 824, 849, 1710 and 1755, 1850 and 1910MHz)
Set a marker to point the corresponding band edge frequency in each test case.
Set display line at -13 dBm
Set resolution bandwidth to at least 1% of emission bandwidth.

MODES TESTED

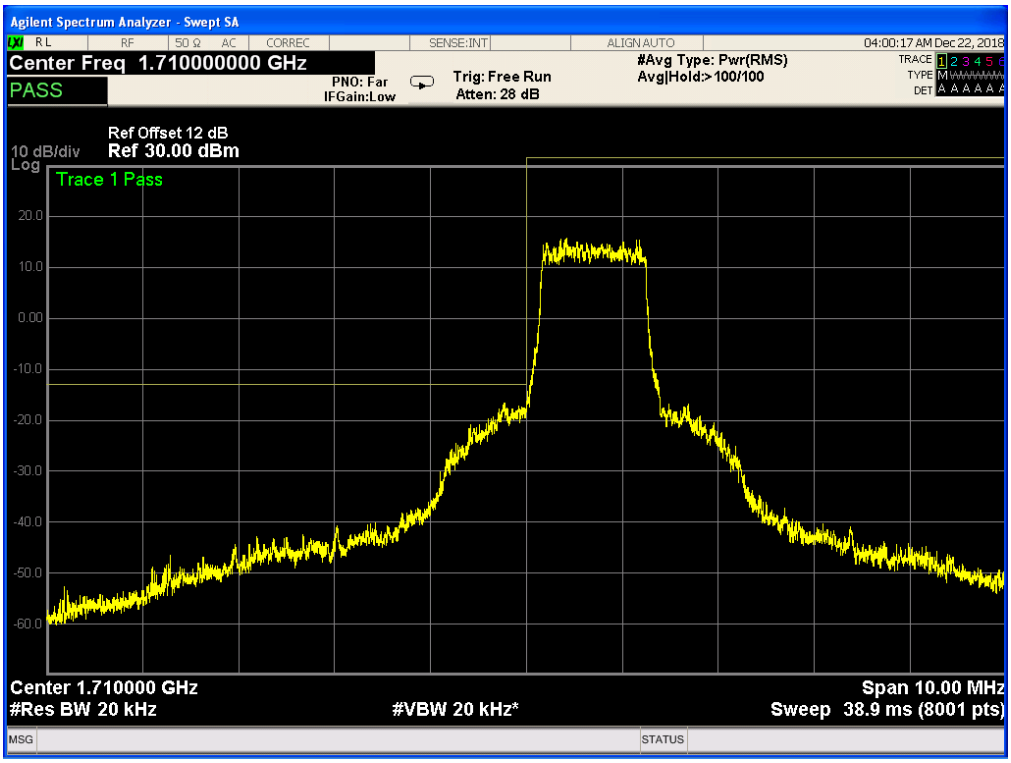
LTE Band 2/4/5/7/38/40/41

RESULTS

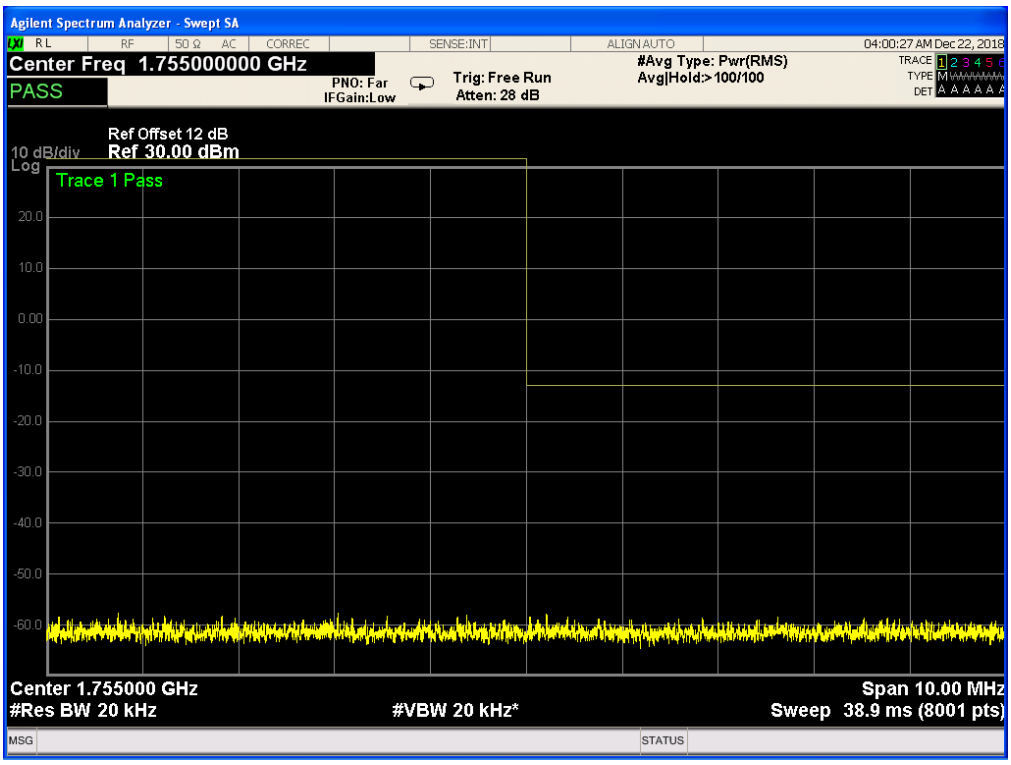
Pass

6.1 LTE BAND 4

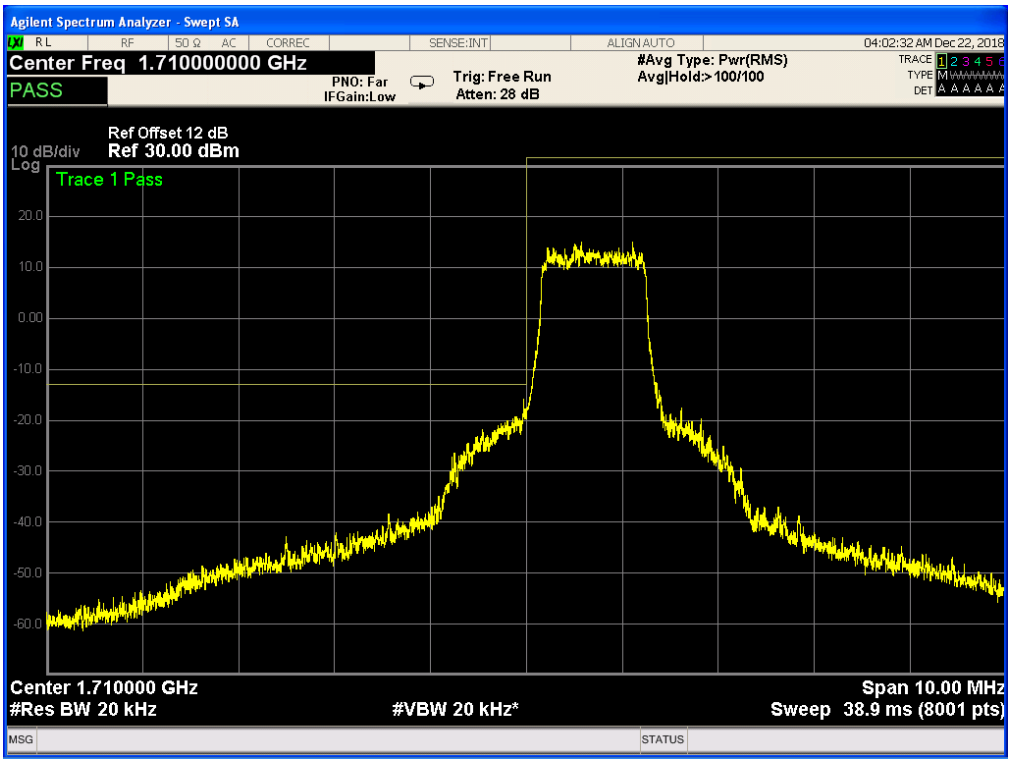
Band 4,UL Channel 19957,UL Frequency 1710.7,BW 1.4,NO. RB 6,RB POS. Low,QPSK



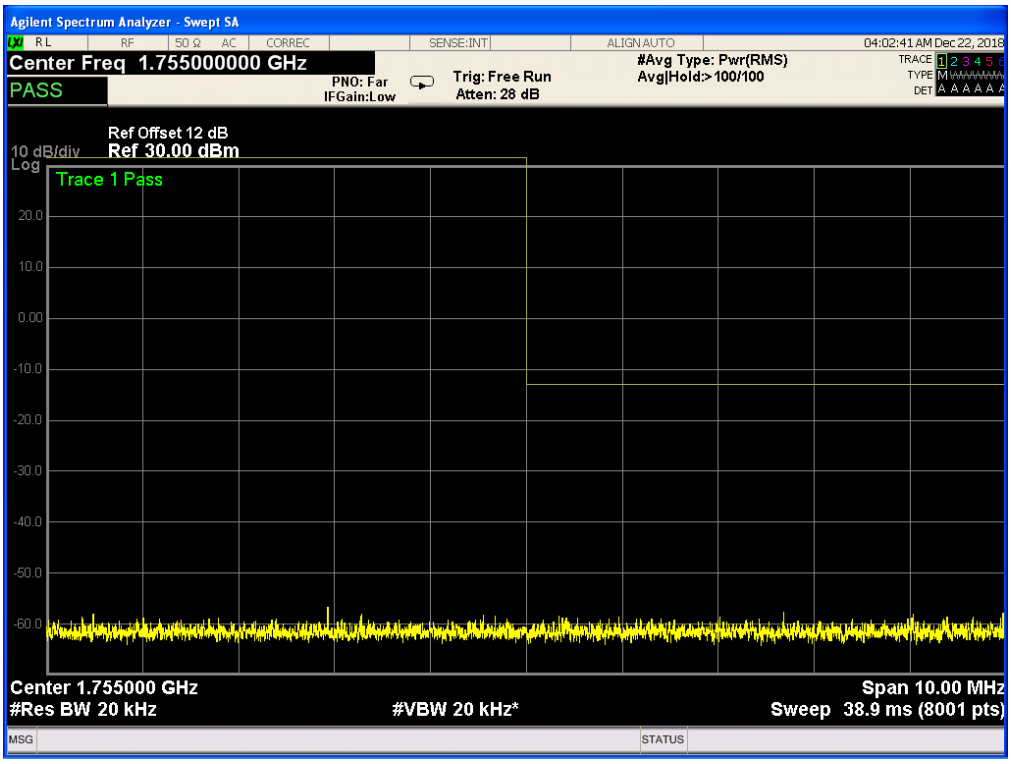
Band 4,UL Channel 19957,UL Frequency 1710.7,BW 1.4,NO. RB 6,RB POS. Low,QPSK



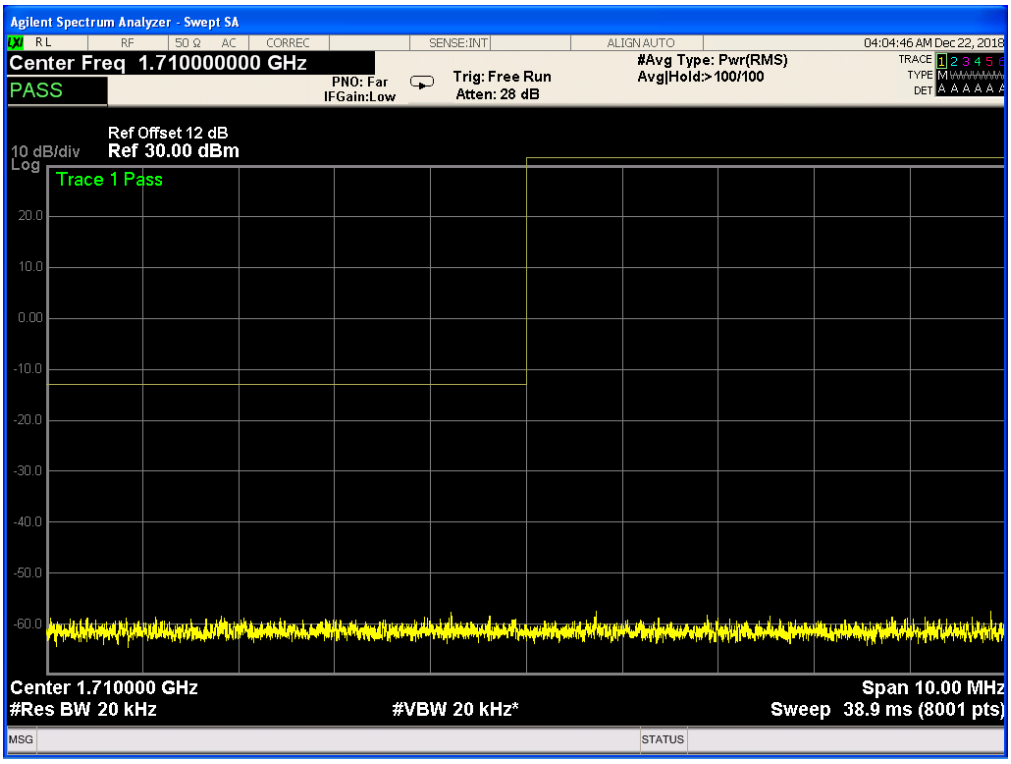
Band 4,UL Channel 19957,UL Frequency 1710.7,BW 1.4,NO. RB 6,RB POS. Low,16QAM



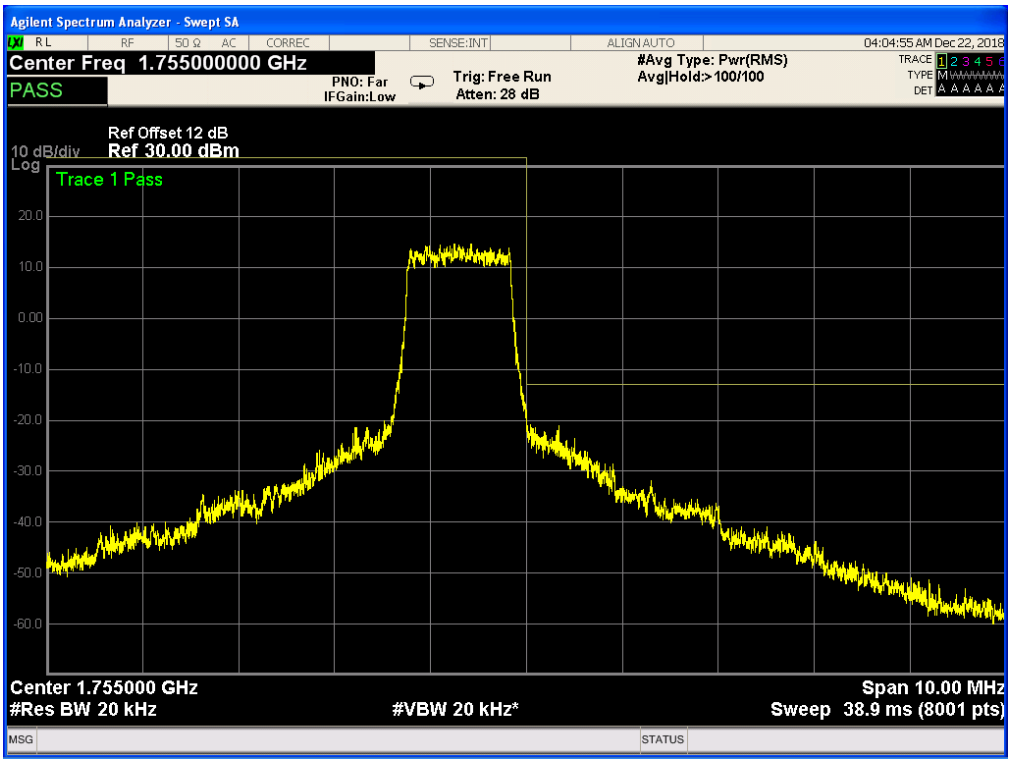
Band 4,UL Channel 19957,UL Frequency 1710.7,BW 1.4,NO. RB 6,RB POS. Low,16QAM



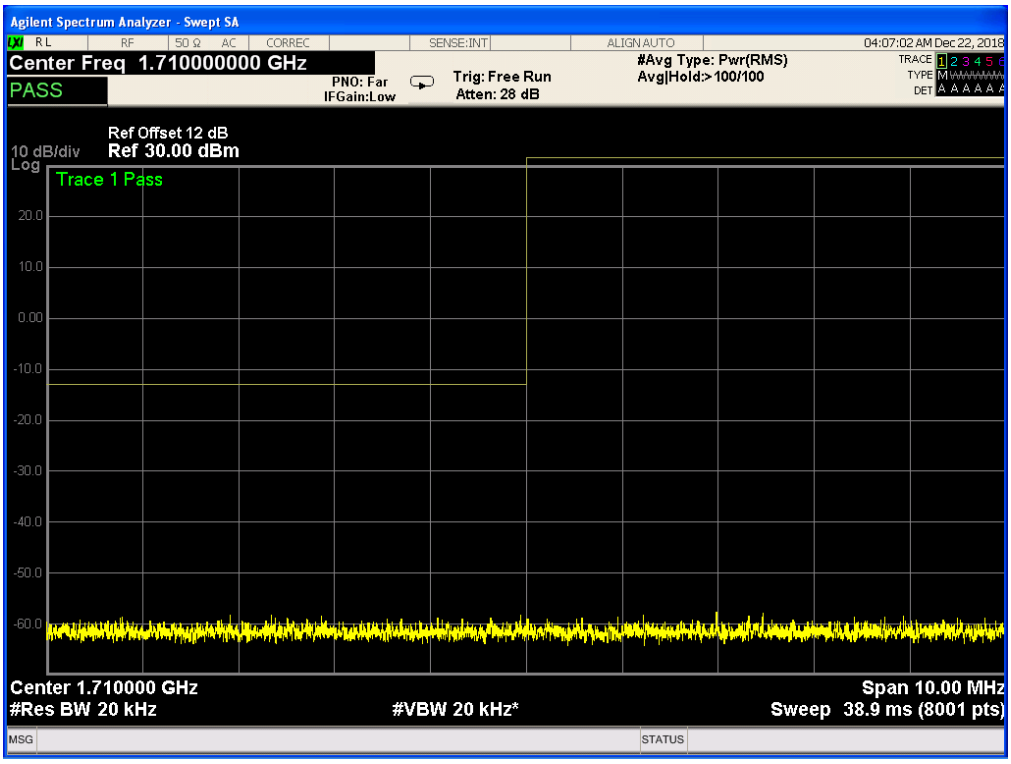
Band 4,UL Channel 20393,UL Frequency 1754.3,BW 1.4,NO. RB 6,RB POS. Low,QPSK



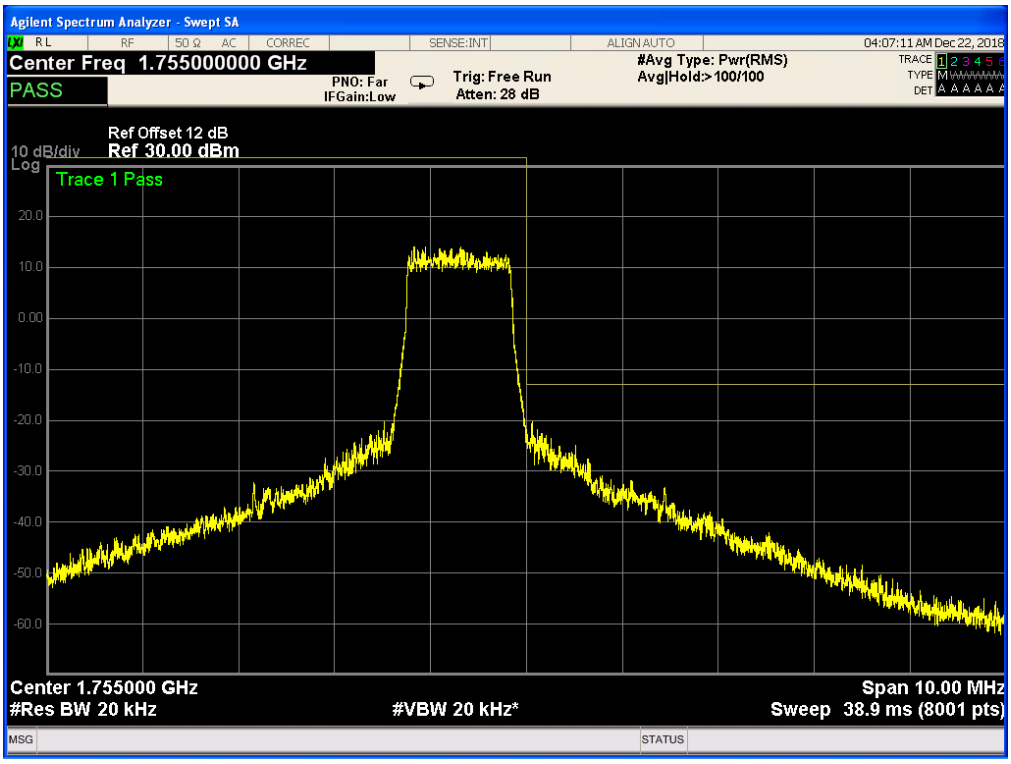
Band 4,UL Channel 20393,UL Frequency 1754.3,BW 1.4,NO. RB 6,RB POS. Low,QPSK



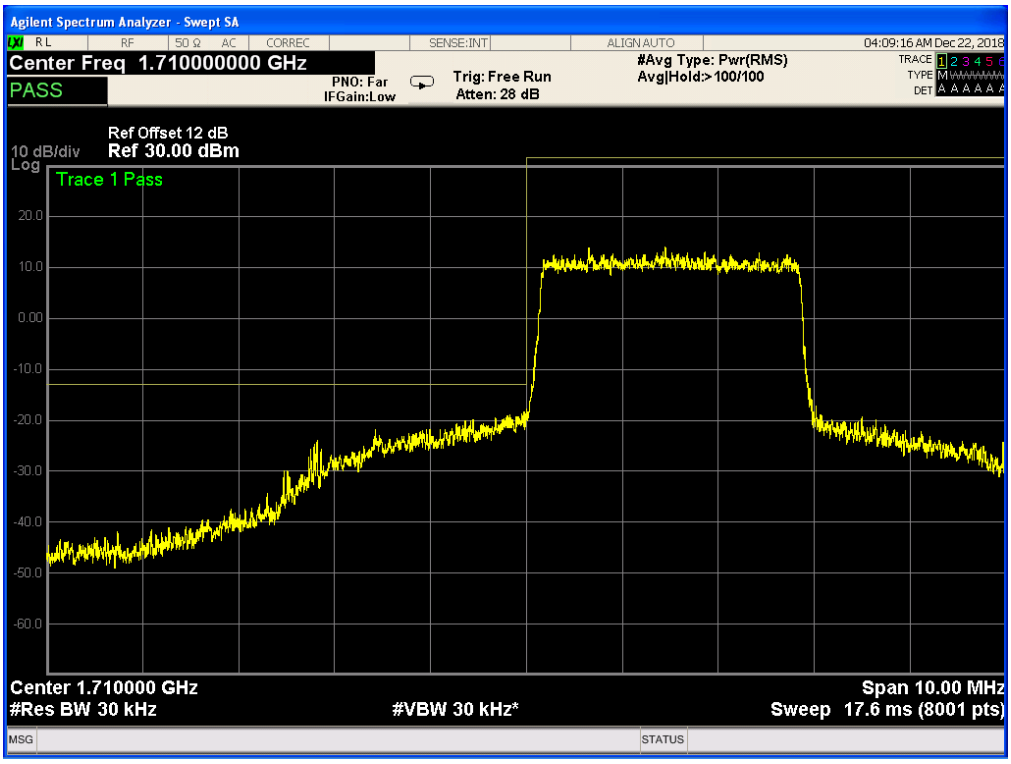
Band 4,UL Channel 20393,UL Frequency 1754.3,BW 1.4,NO. RB 6,RB POS. Low,16QAM



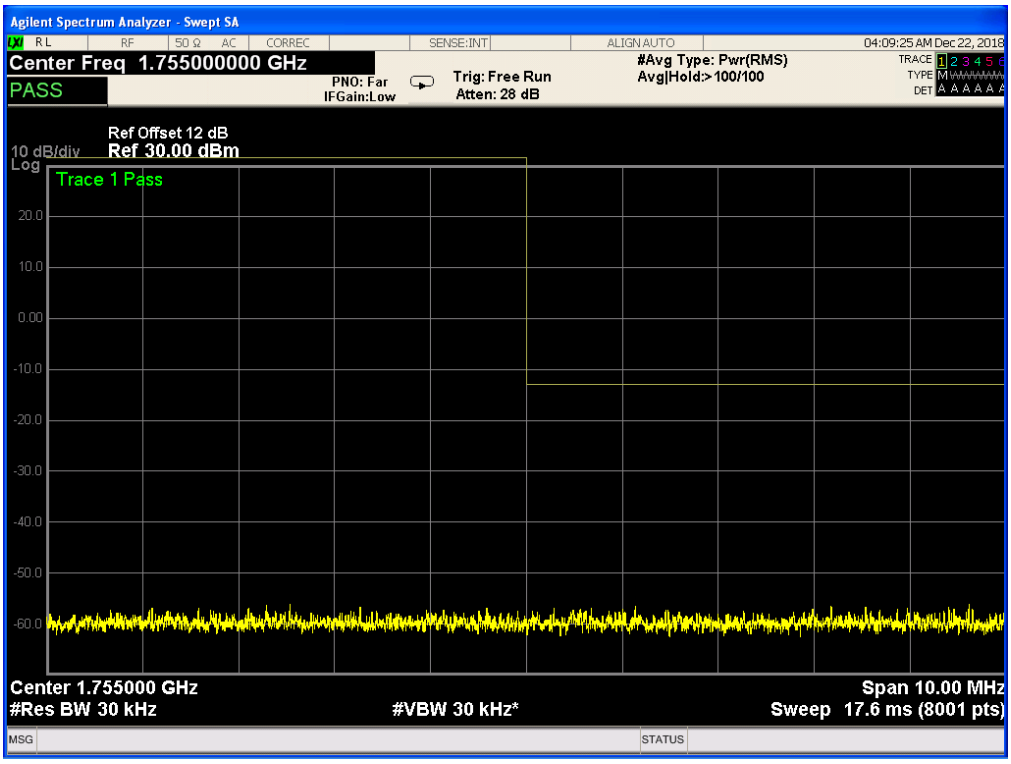
Band 4,UL Channel 20393,UL Frequency 1754.3,BW 1.4,NO. RB 6,RB POS. Low,16QAM



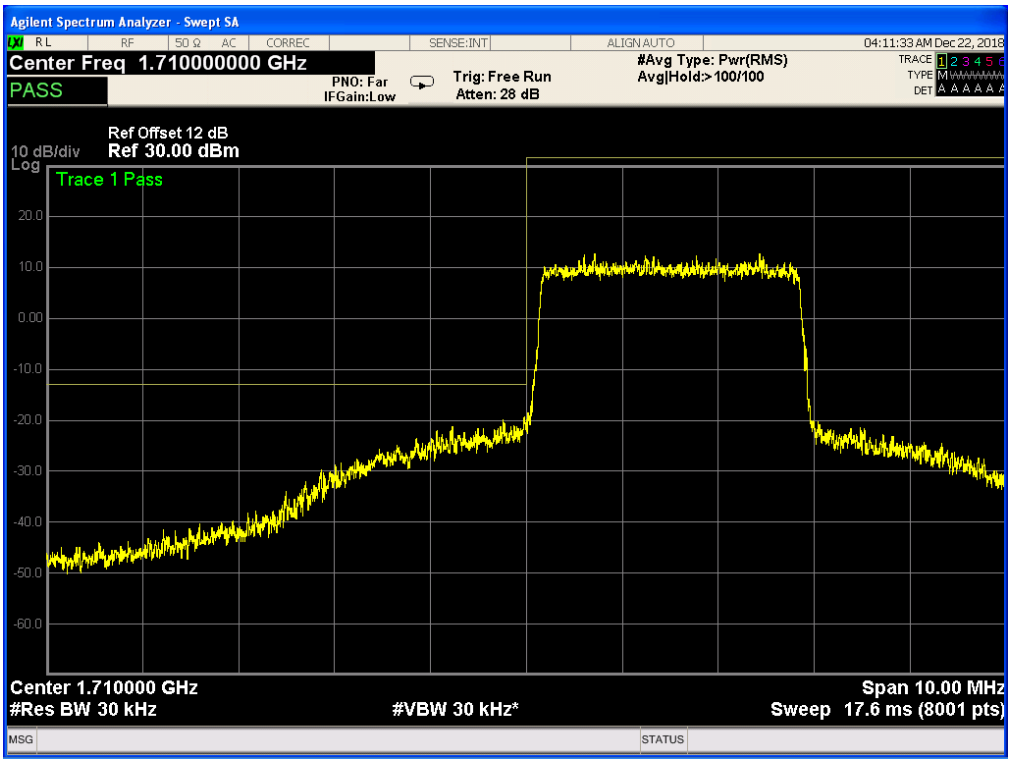
Band 4,UL Channel 19965,UL Frequency 1711.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



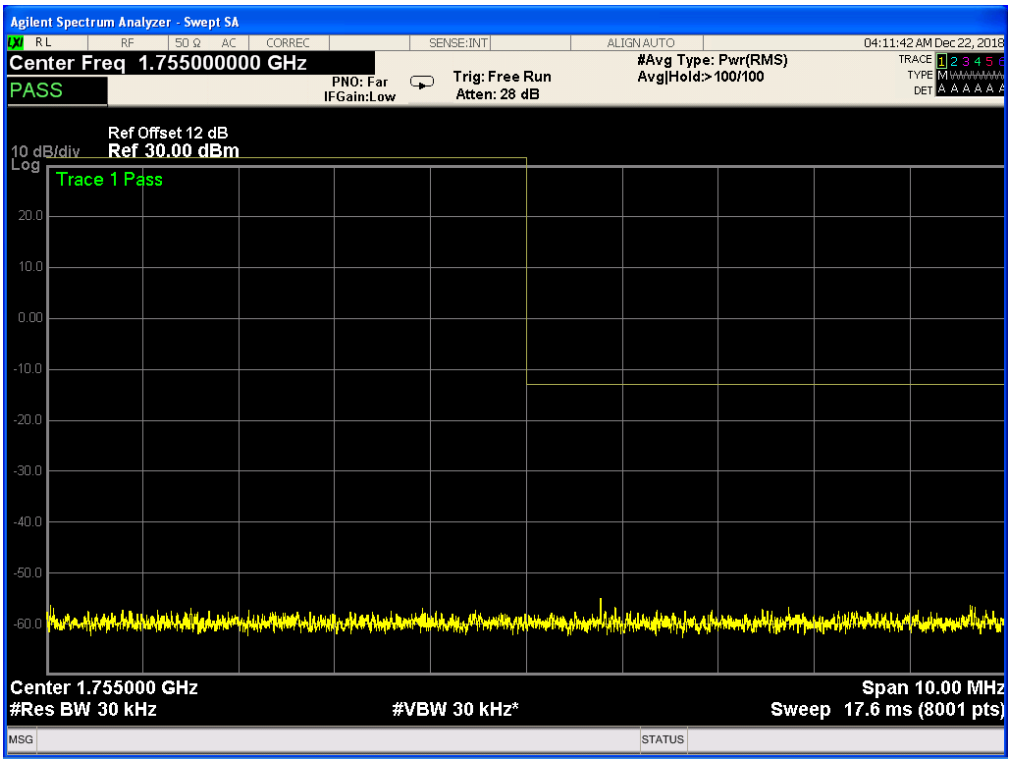
Band 4,UL Channel 19965,UL Frequency 1711.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



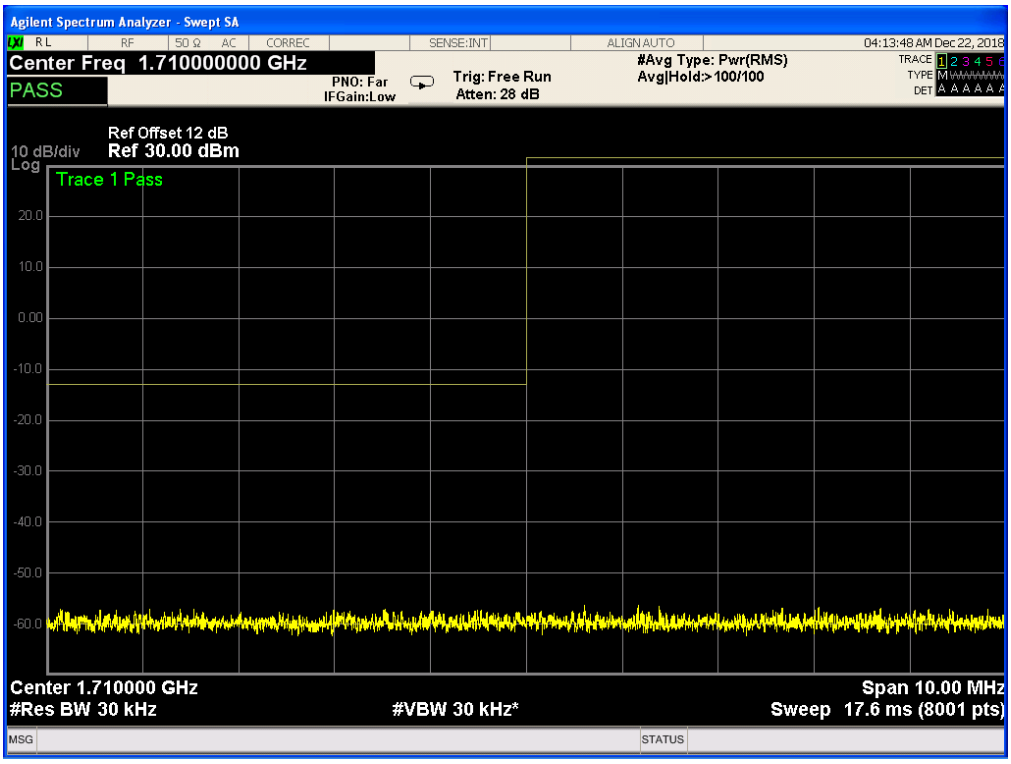
Band 4,UL Channel 19965,UL Frequency 1711.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



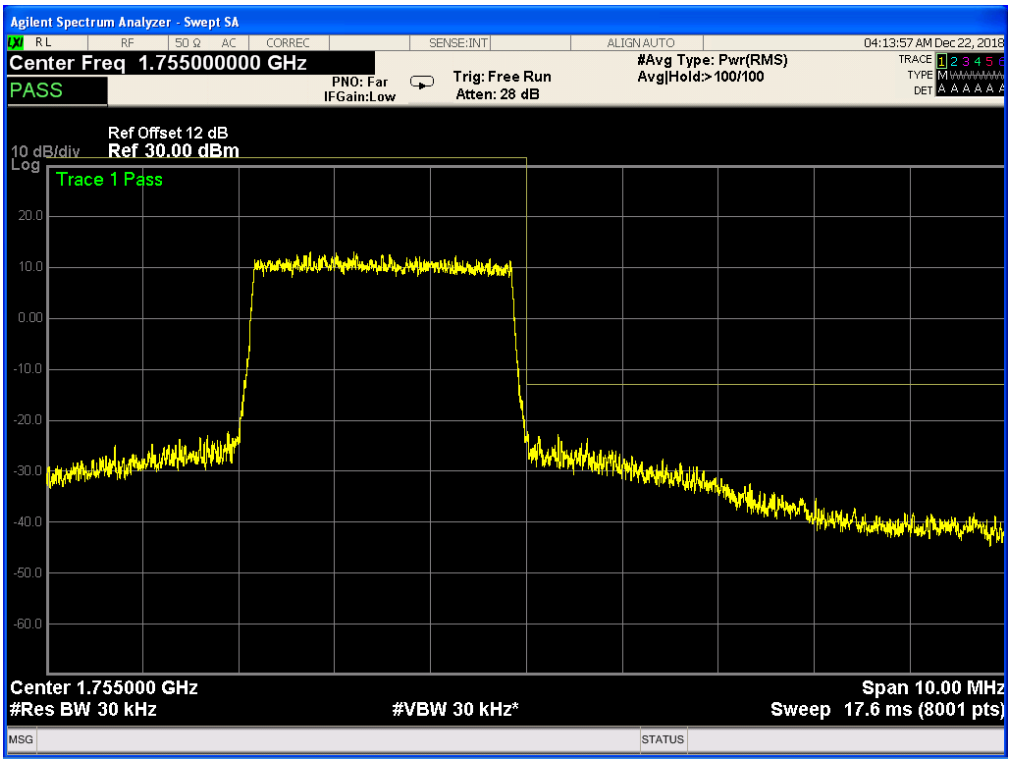
Band 4,UL Channel 19965,UL Frequency 1711.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



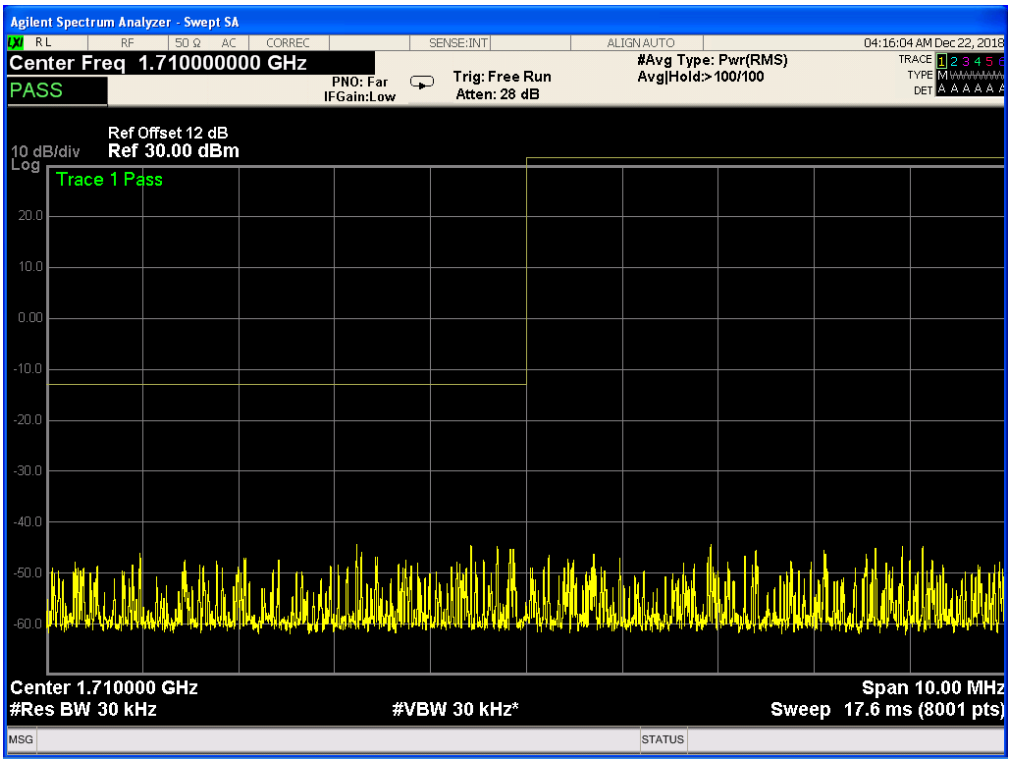
Band 4,UL Channel 20385,UL Frequency 1753.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



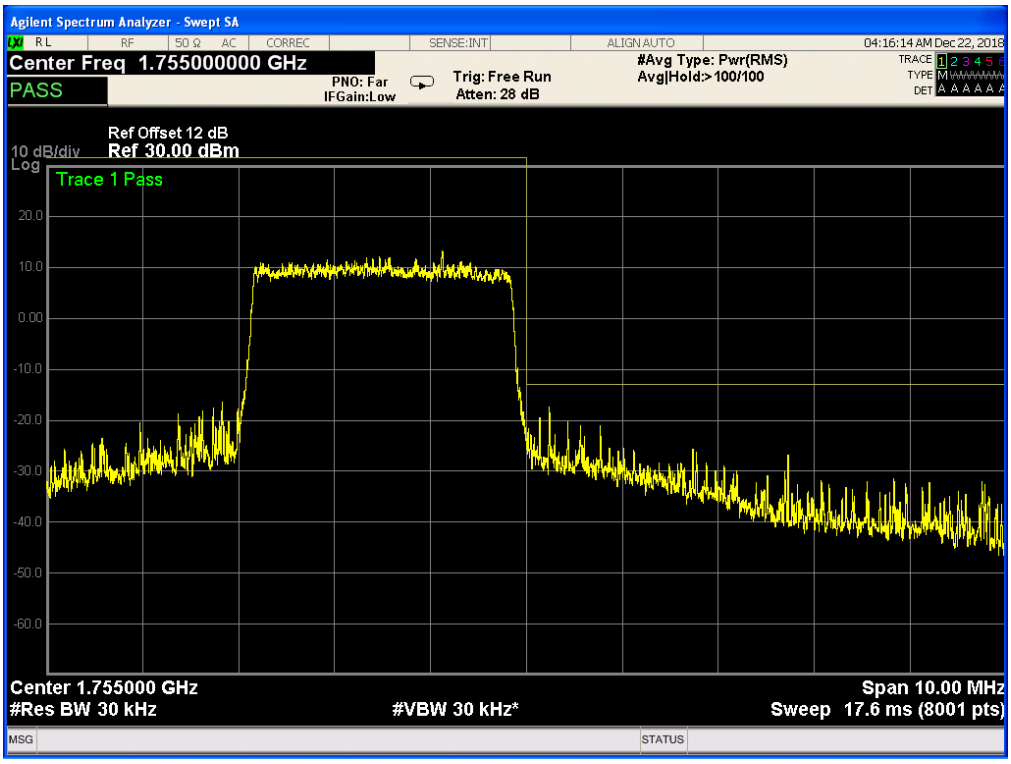
Band 4,UL Channel 20385,UL Frequency 1753.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



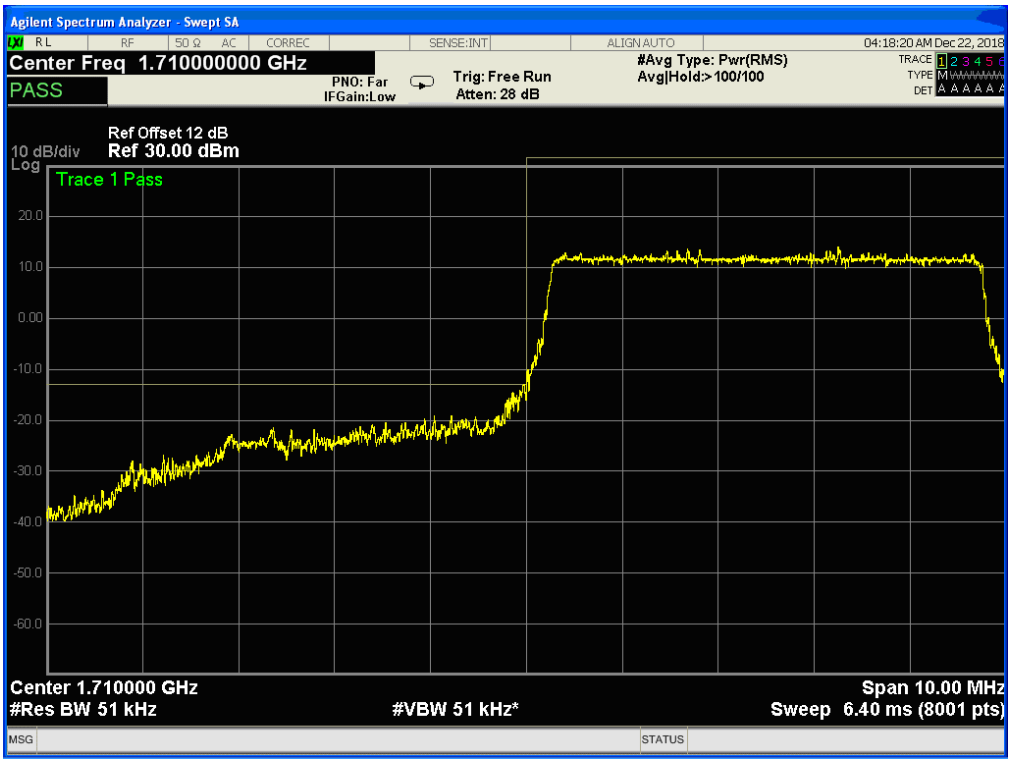
Band 4,UL Channel 20385,UL Frequency 1753.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



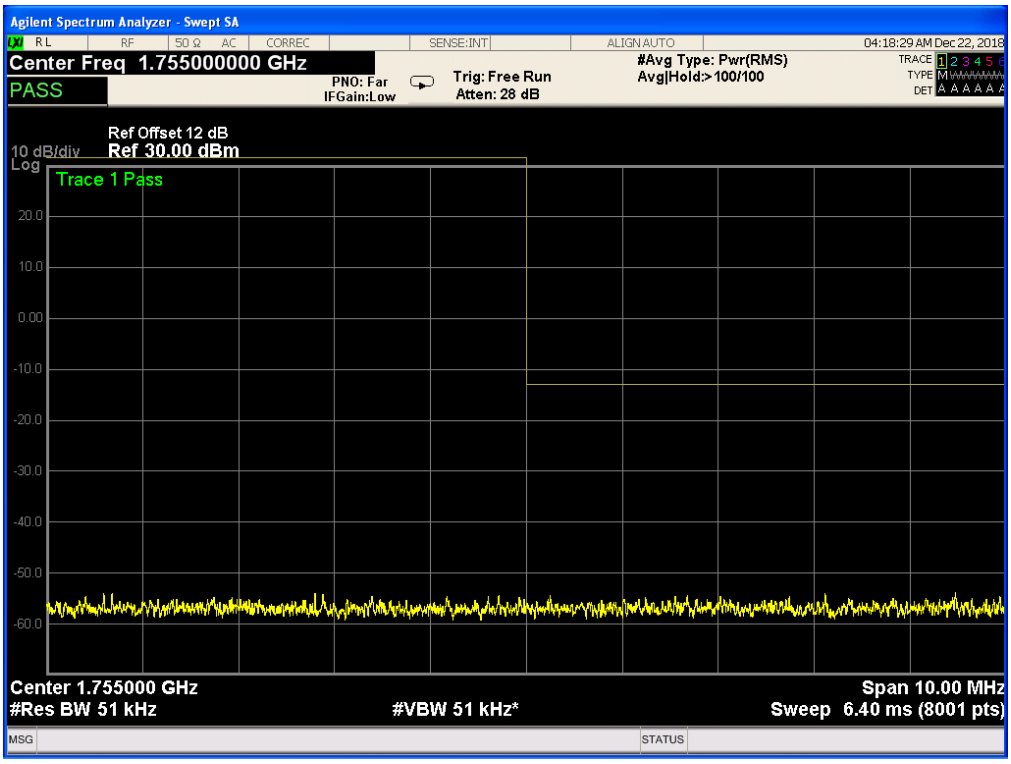
Band 4,UL Channel 20385,UL Frequency 1753.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



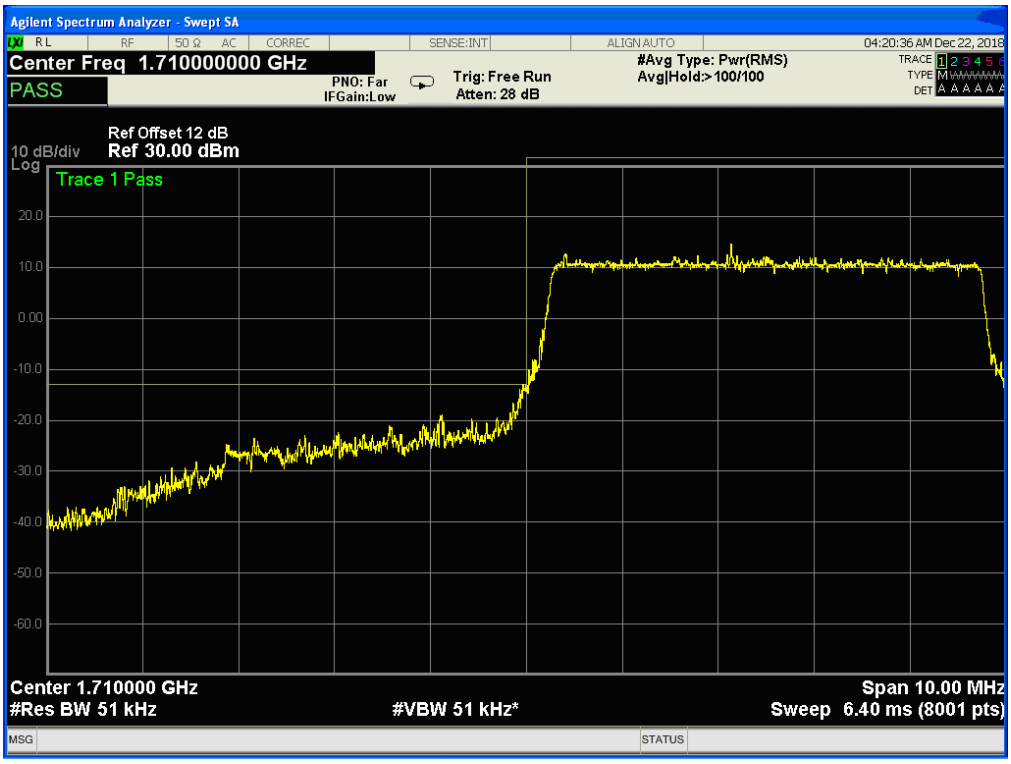
Band 4,UL Channel 19975,UL Frequency 1712.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



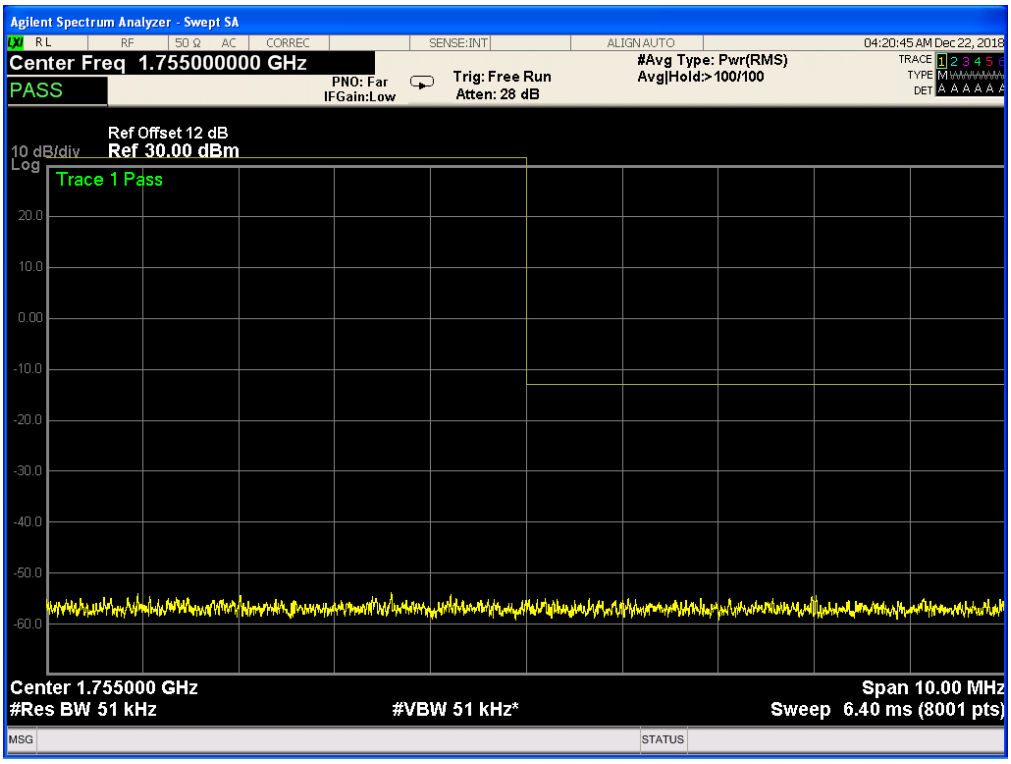
Band 4,UL Channel 19975,UL Frequency 1712.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



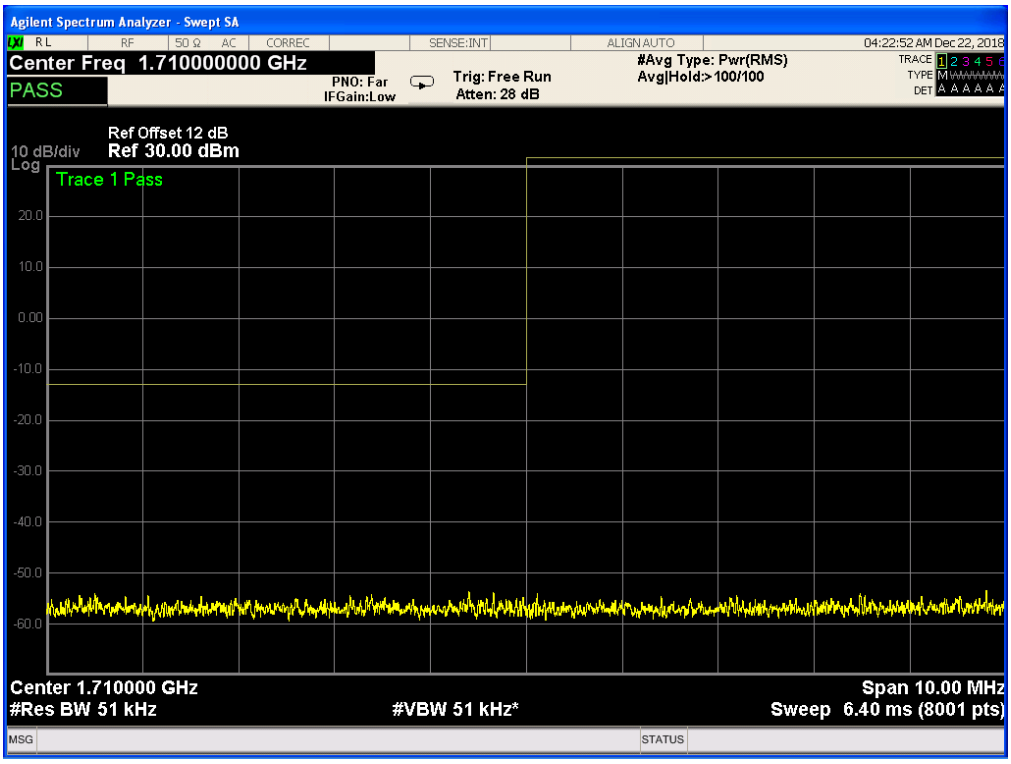
Band 4,UL Channel 19975,UL Frequency 1712.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



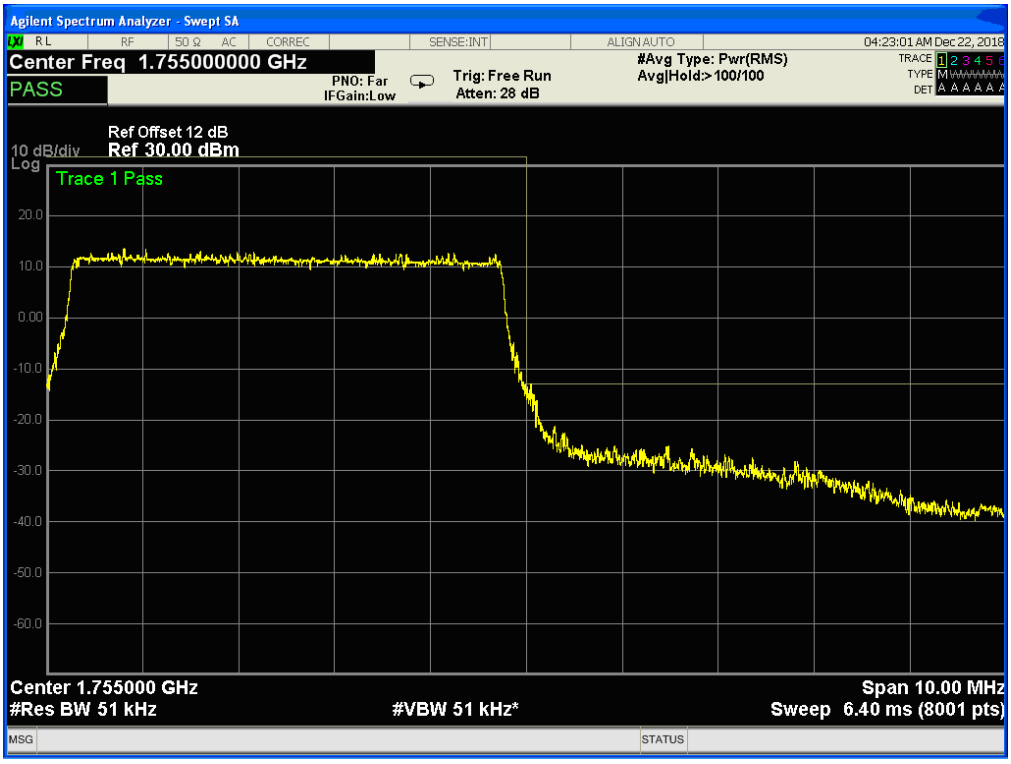
Band 4,UL Channel 19975,UL Frequency 1712.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



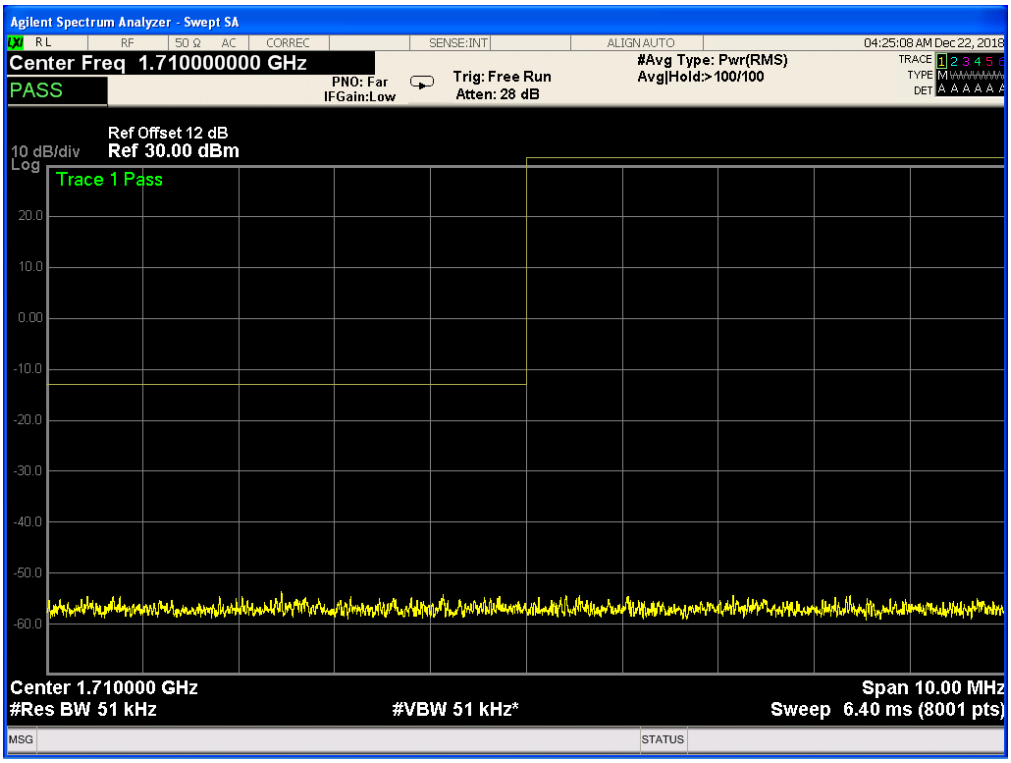
Band 4,UL Channel 20375,UL Frequency 1752.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



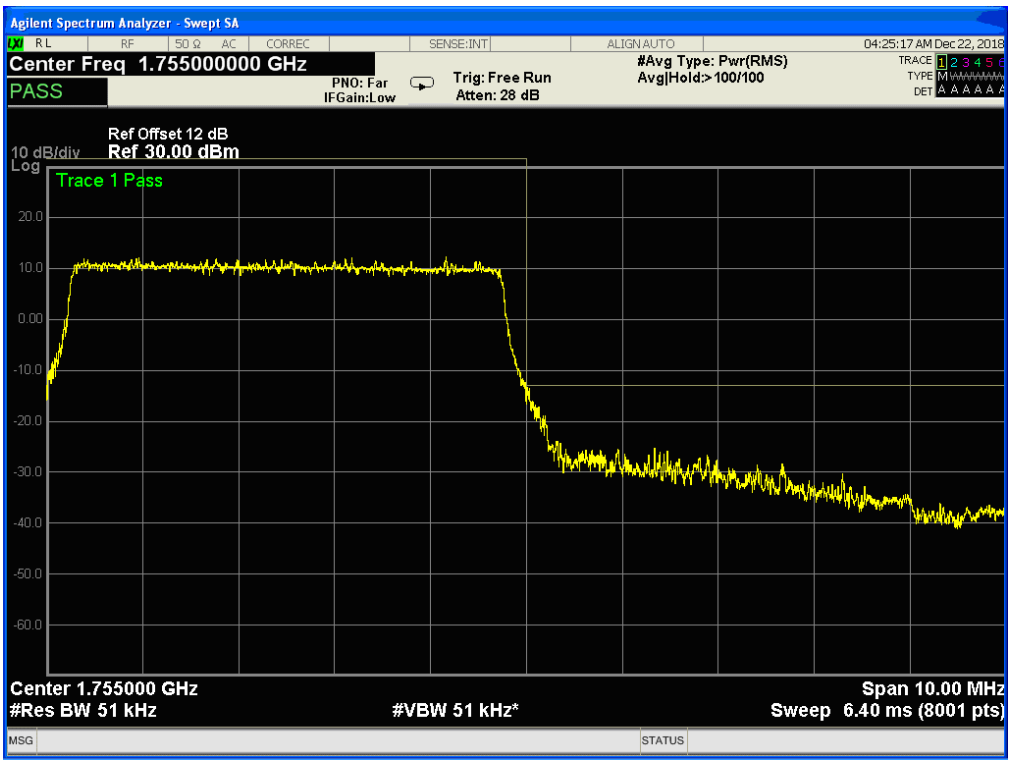
Band 4,UL Channel 20375,UL Frequency 1752.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



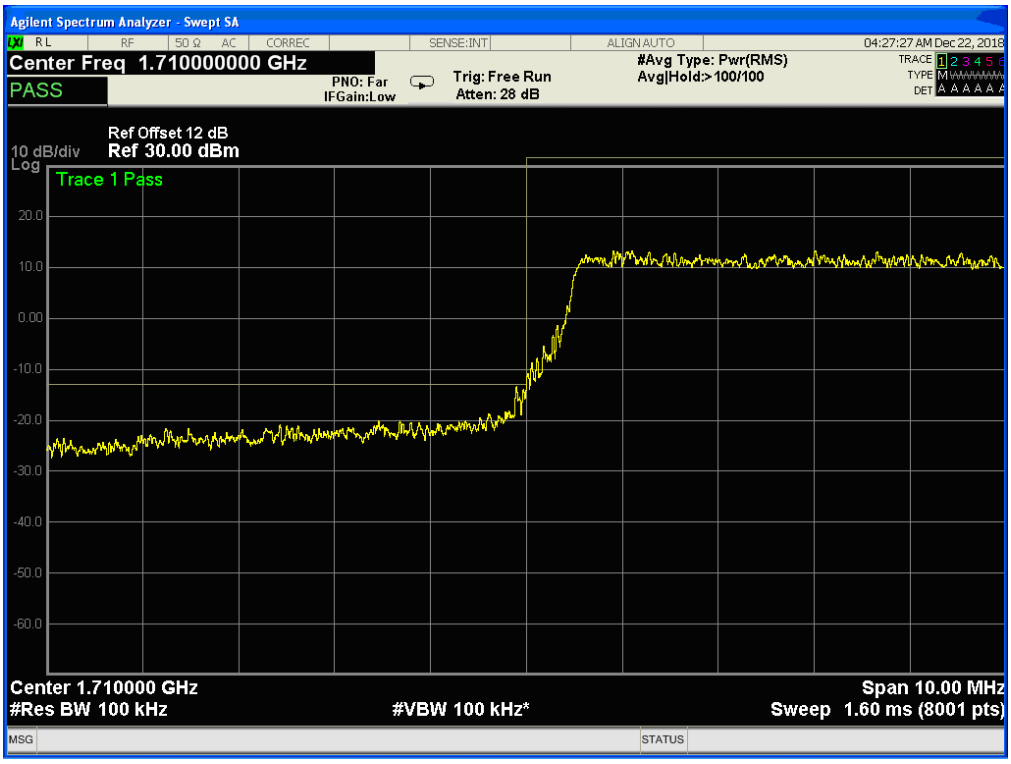
Band 4,UL Channel 20375,UL Frequency 1752.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



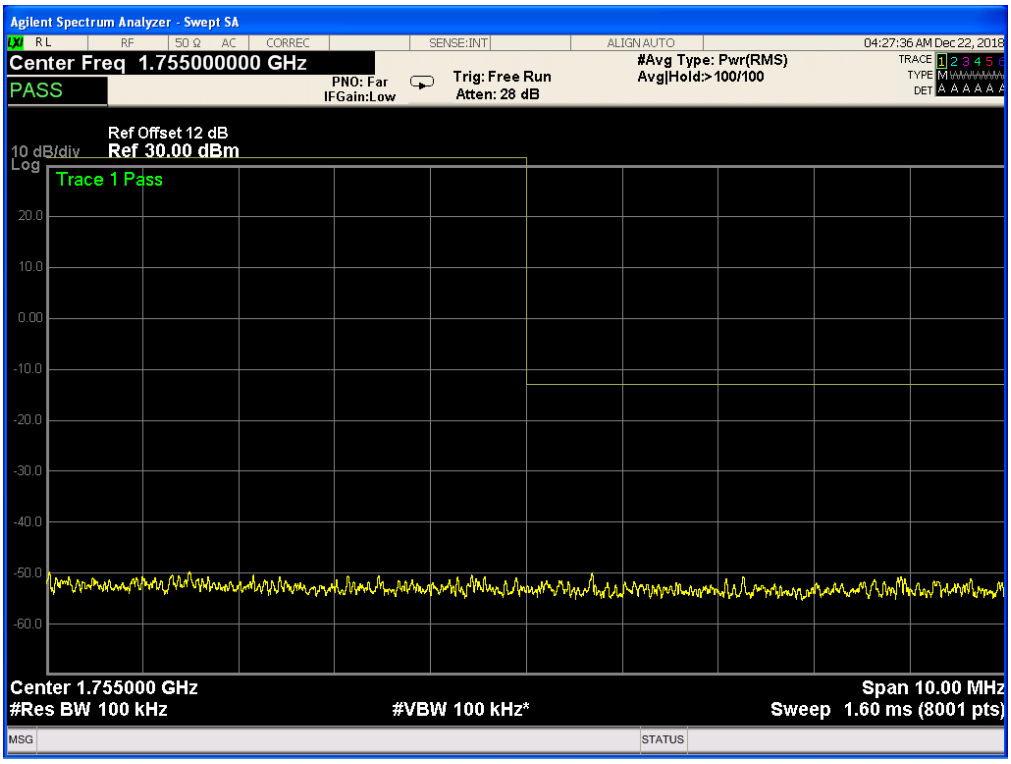
Band 4,UL Channel 20375,UL Frequency 1752.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



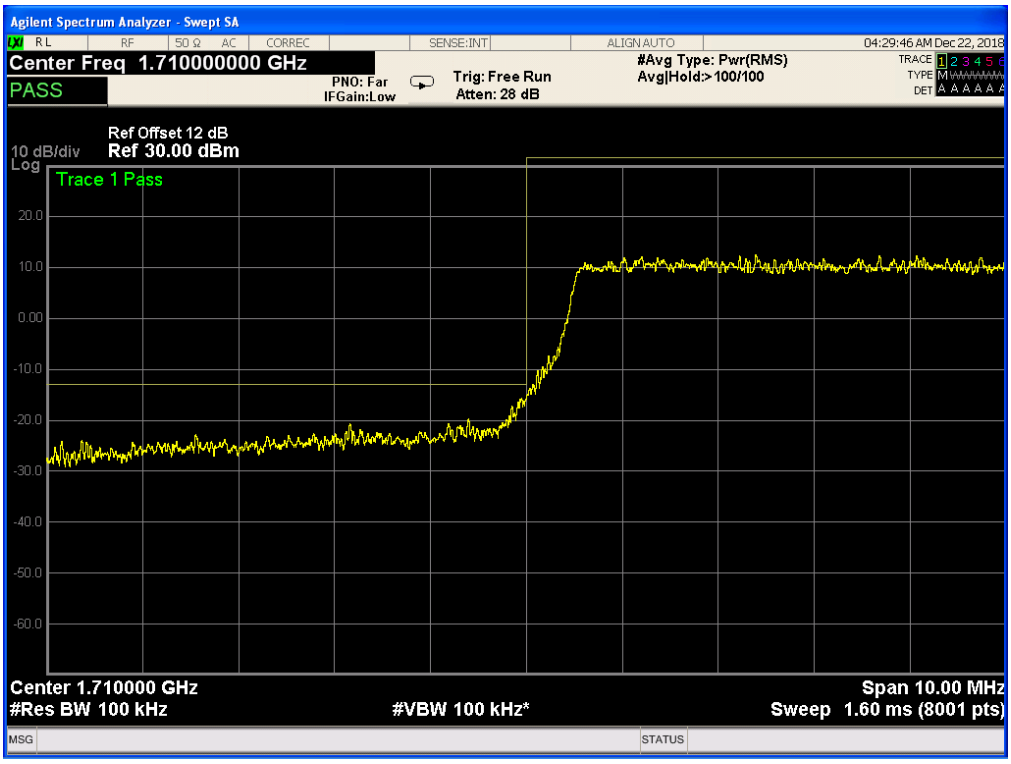
Band 4,UL Channel 20000,UL Frequency 1715.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



Band 4,UL Channel 20000,UL Frequency 1715.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



Band 4,UL Channel 20000,UL Frequency 1715.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



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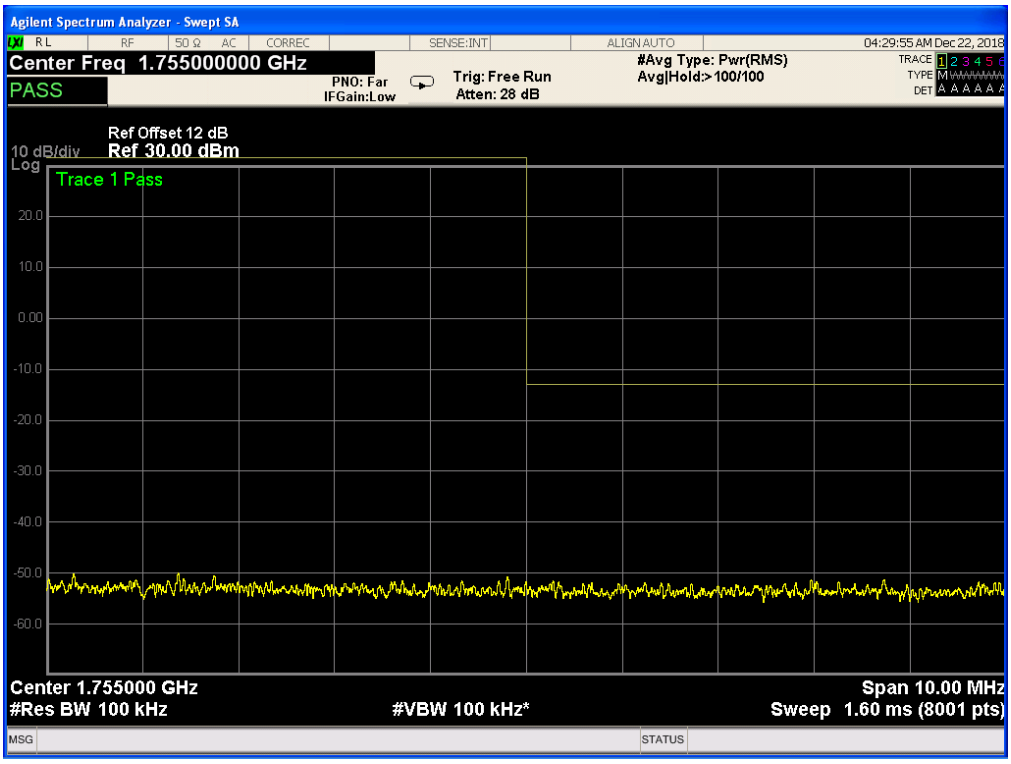
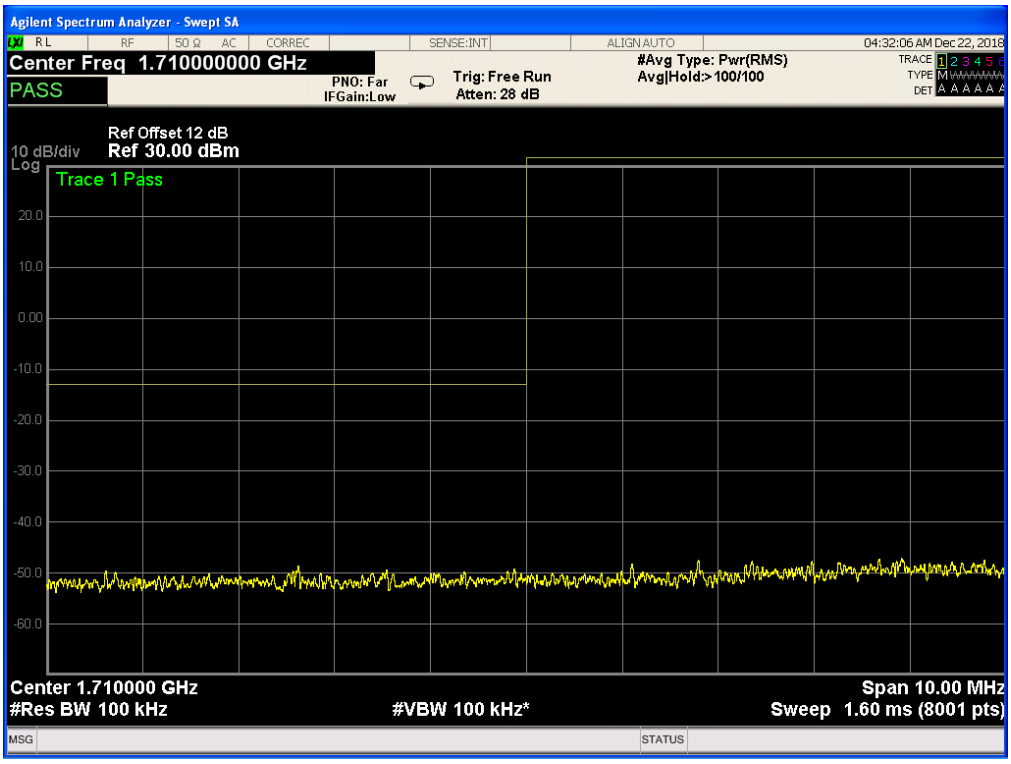
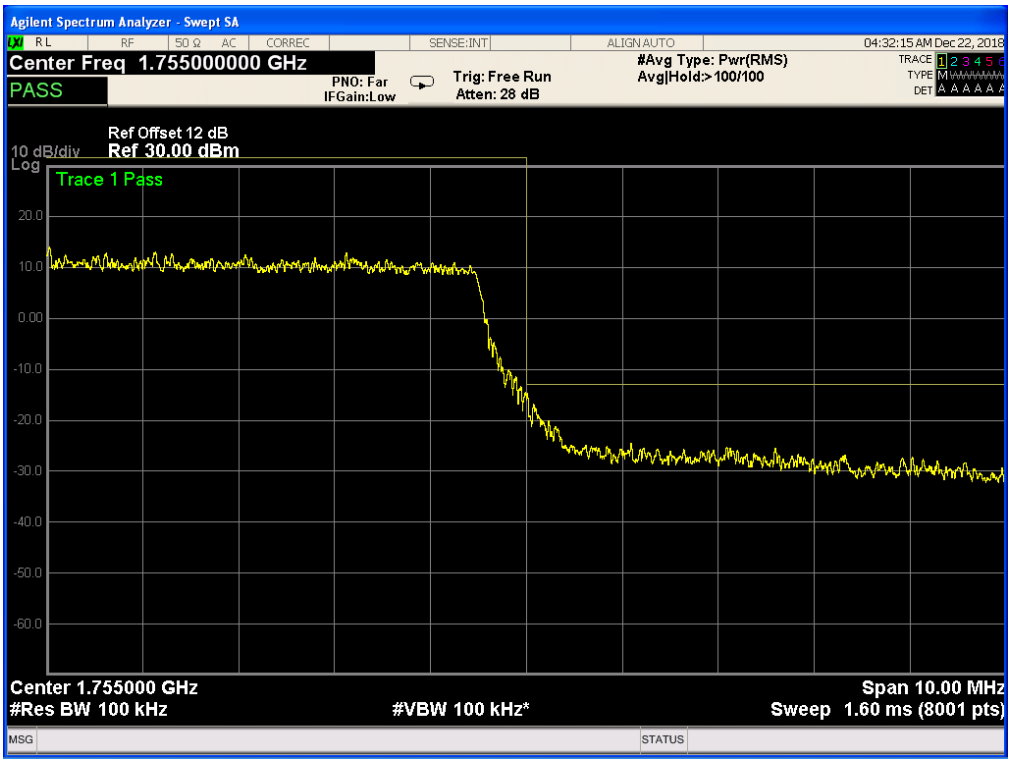


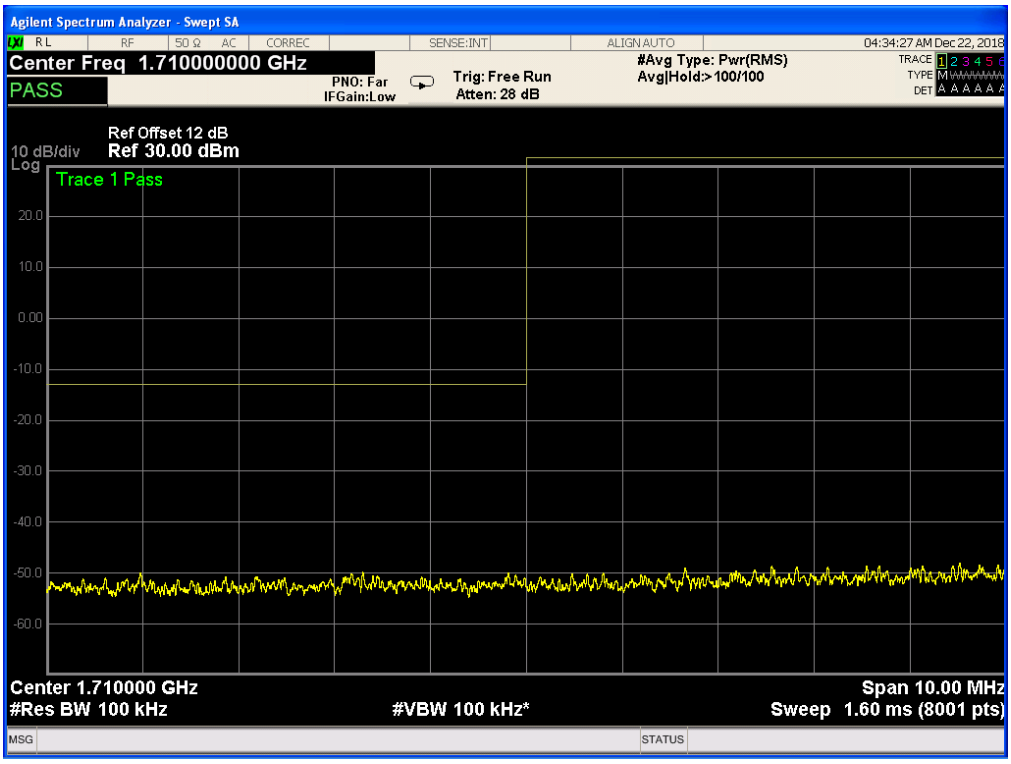
Band 4,UL Channel 20350,UL Frequency 1750.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



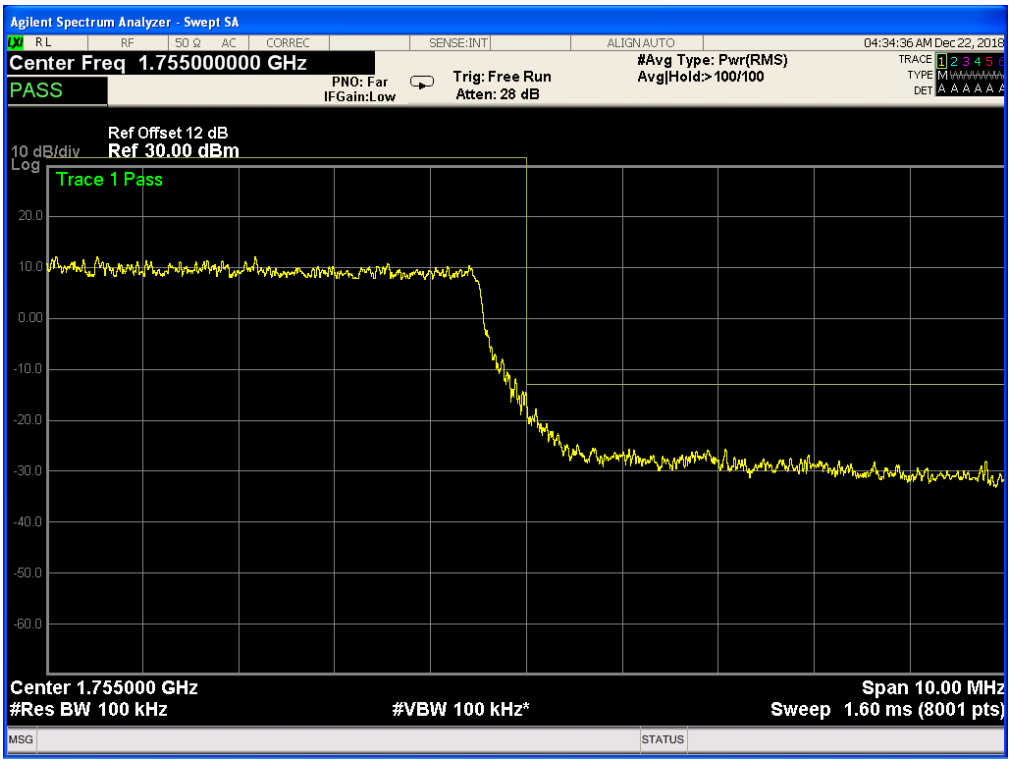
Band 4,UL Channel 20350,UL Frequency 1750.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



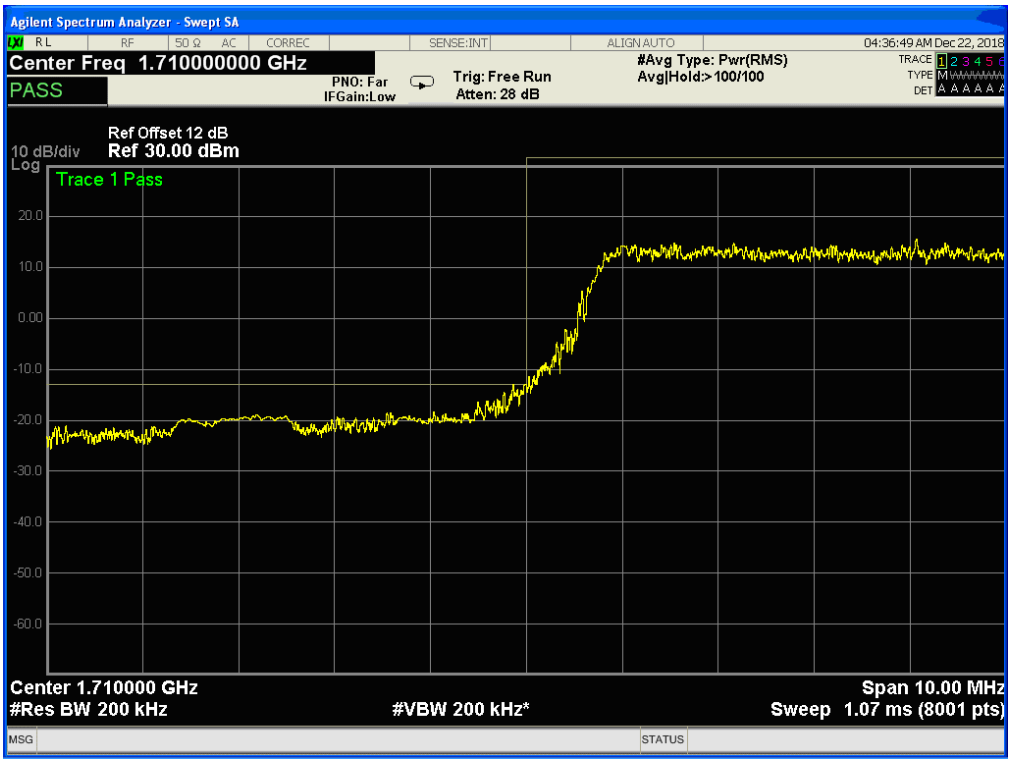
Band 4,UL Channel 20350,UL Frequency 1750.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



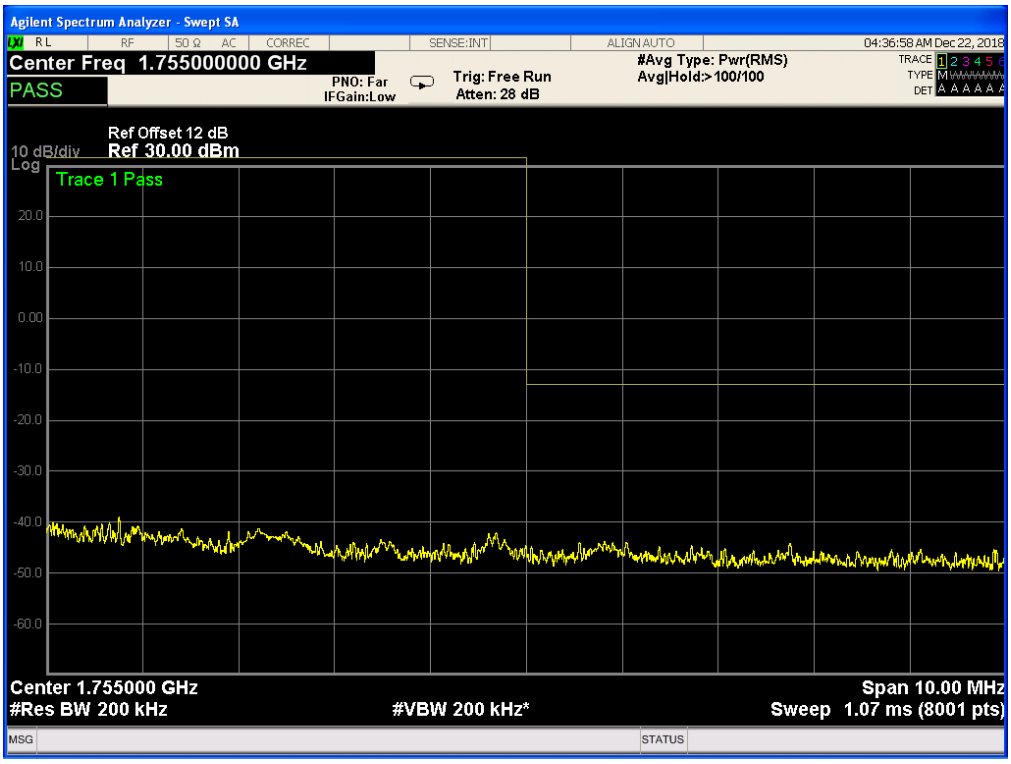
Band 4,UL Channel 20350,UL Frequency 1750.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



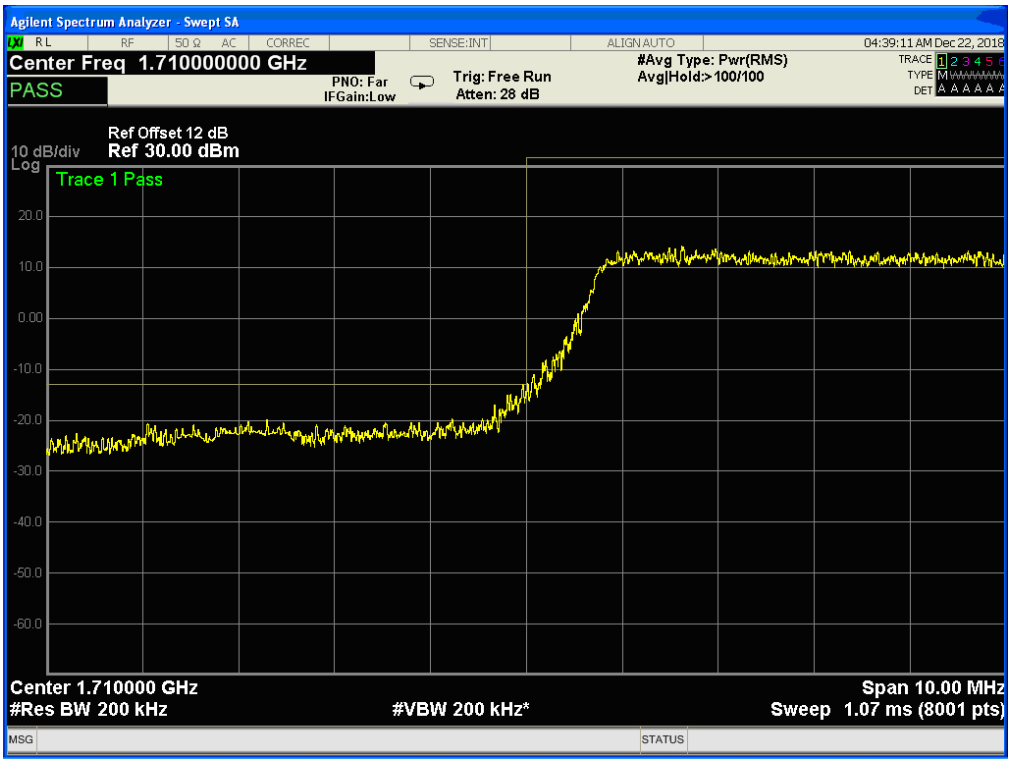
Band 4,UL Channel 20025,UL Frequency 1717.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



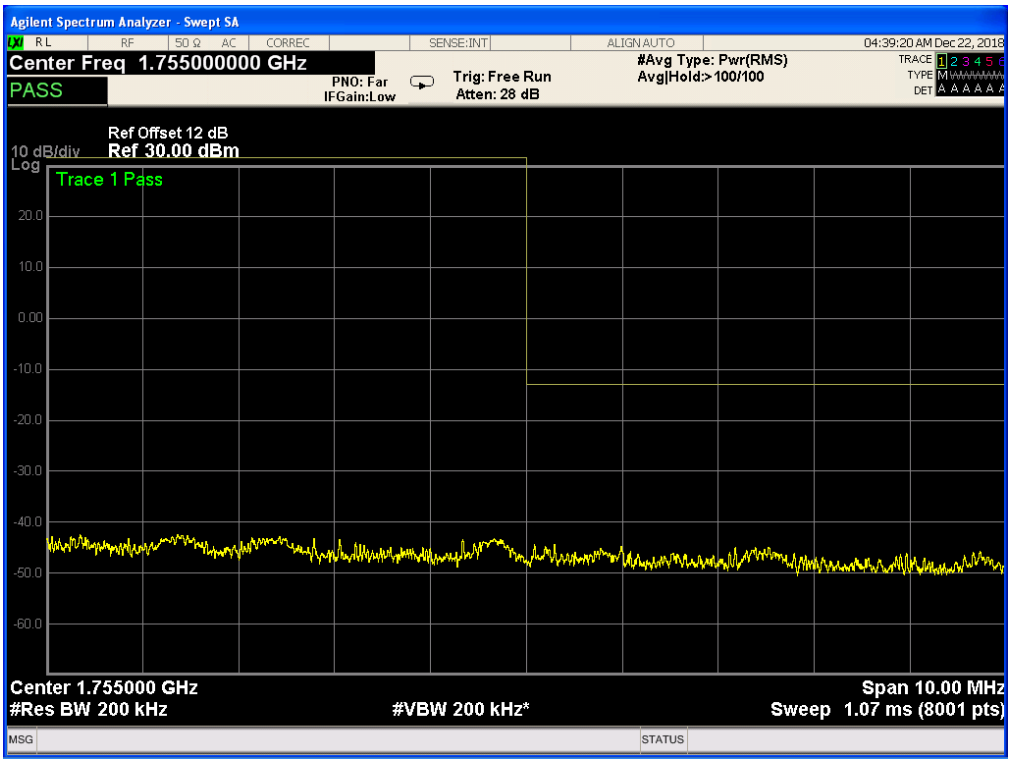
Band 4,UL Channel 20025,UL Frequency 1717.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



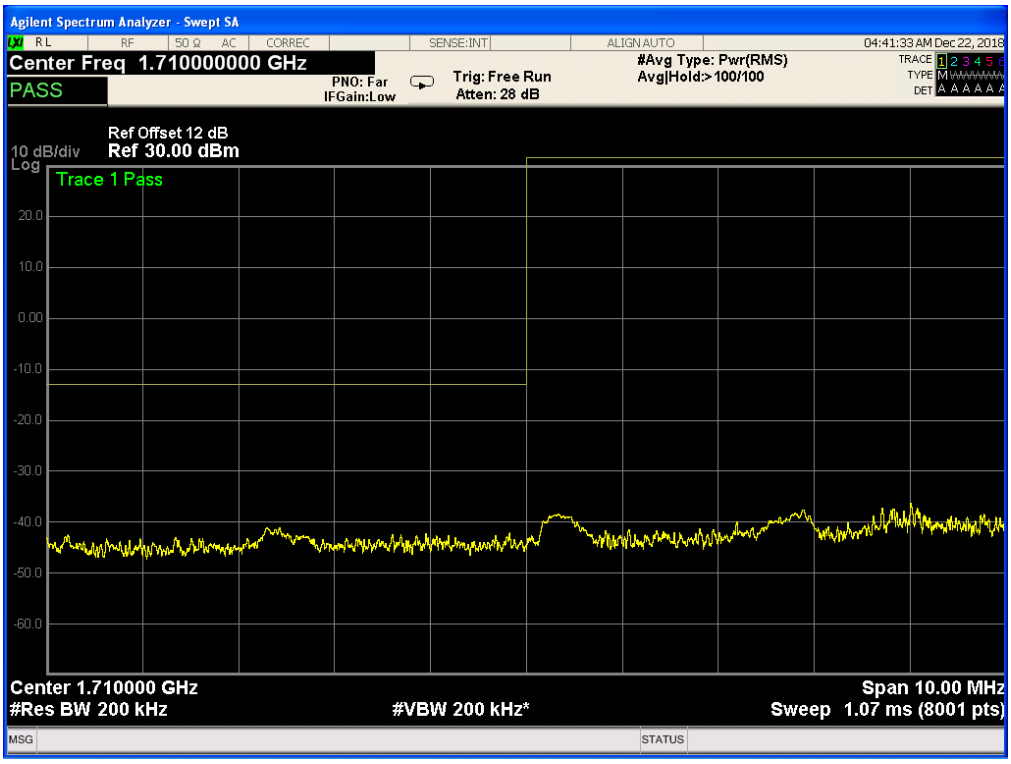
Band 4,UL Channel 20025,UL Frequency 1717.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



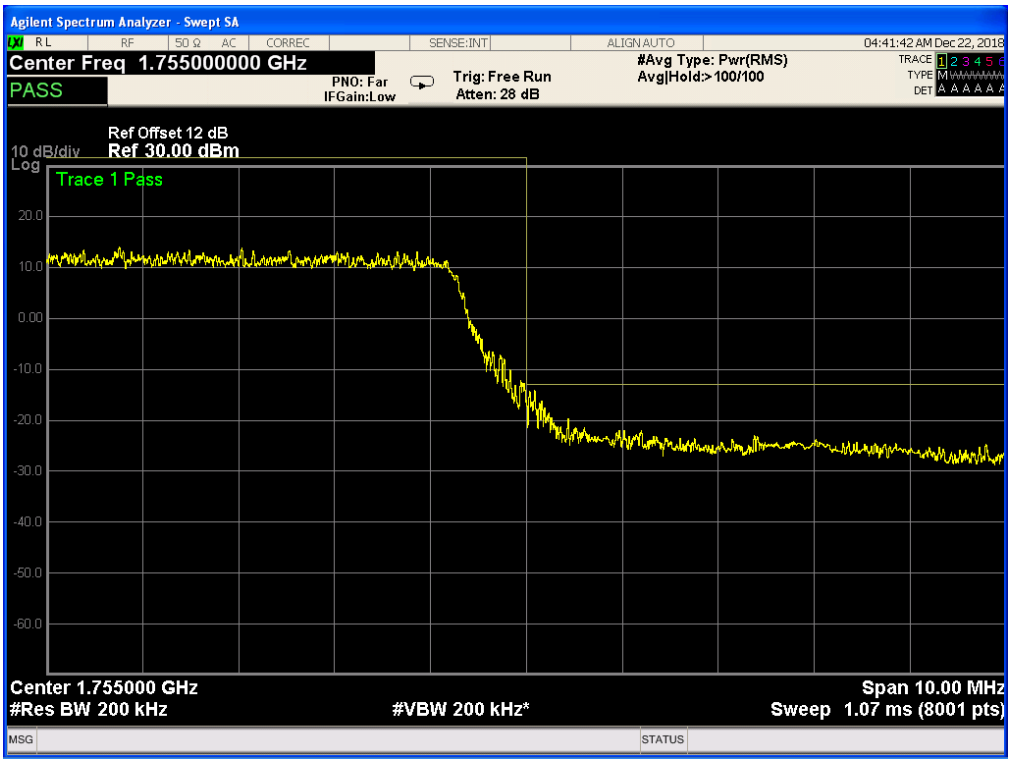
Band 4,UL Channel 20025,UL Frequency 1717.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



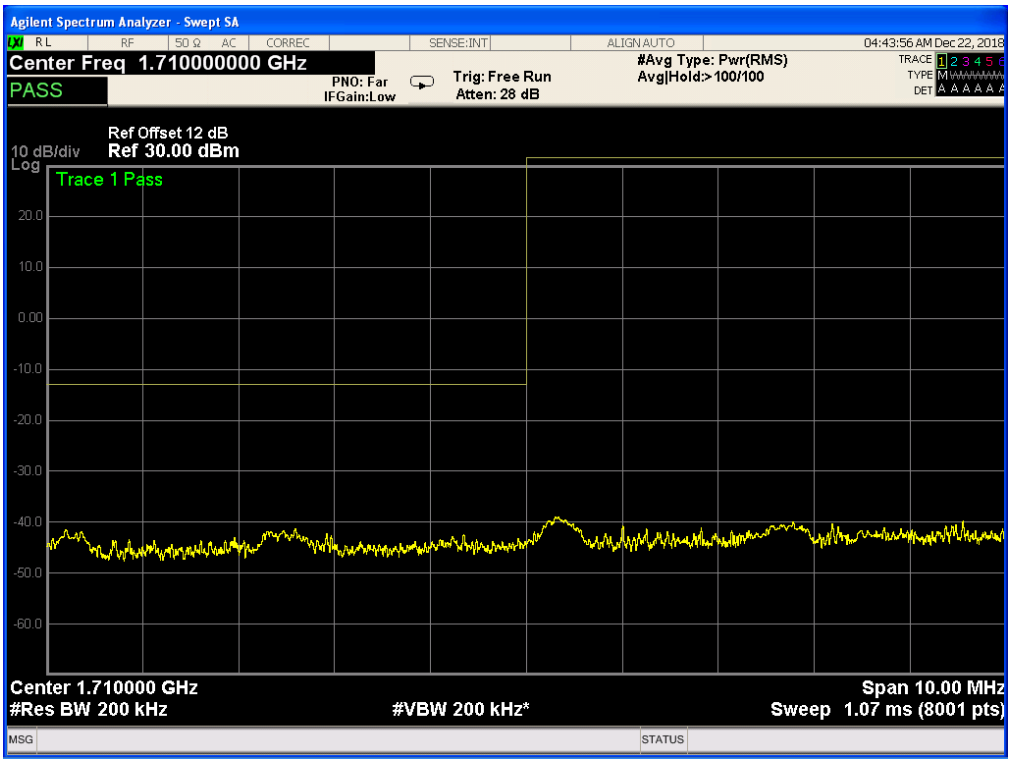
Band 4,UL Channel 20325,UL Frequency 1747.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



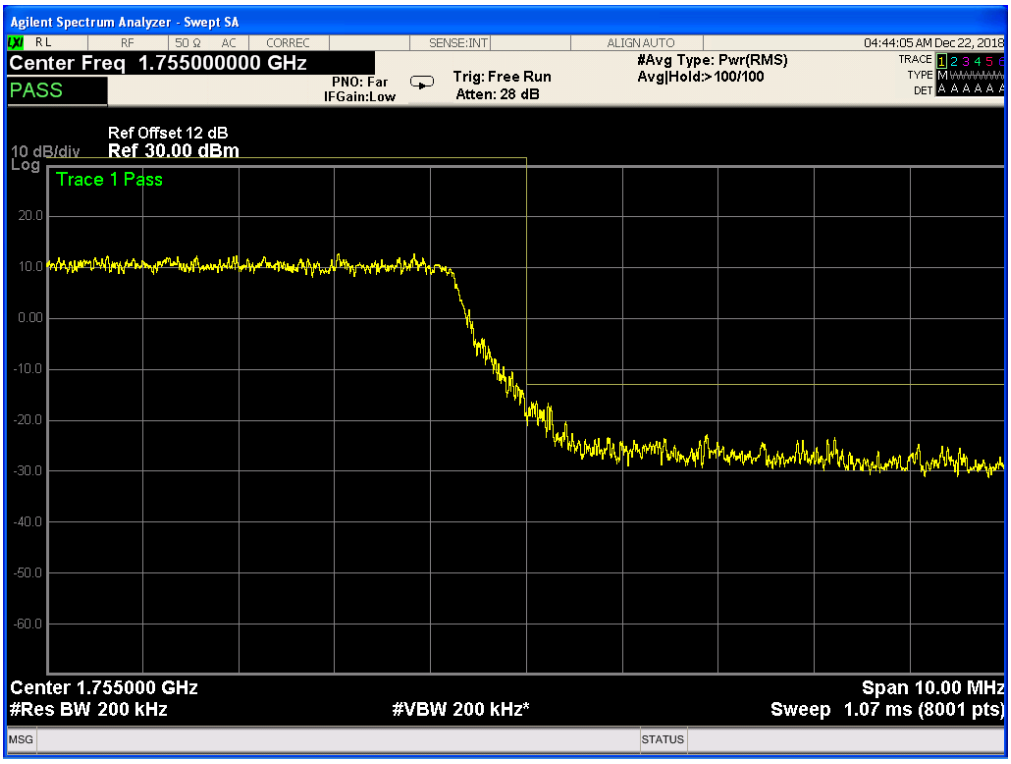
Band 4,UL Channel 20325,UL Frequency 1747.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



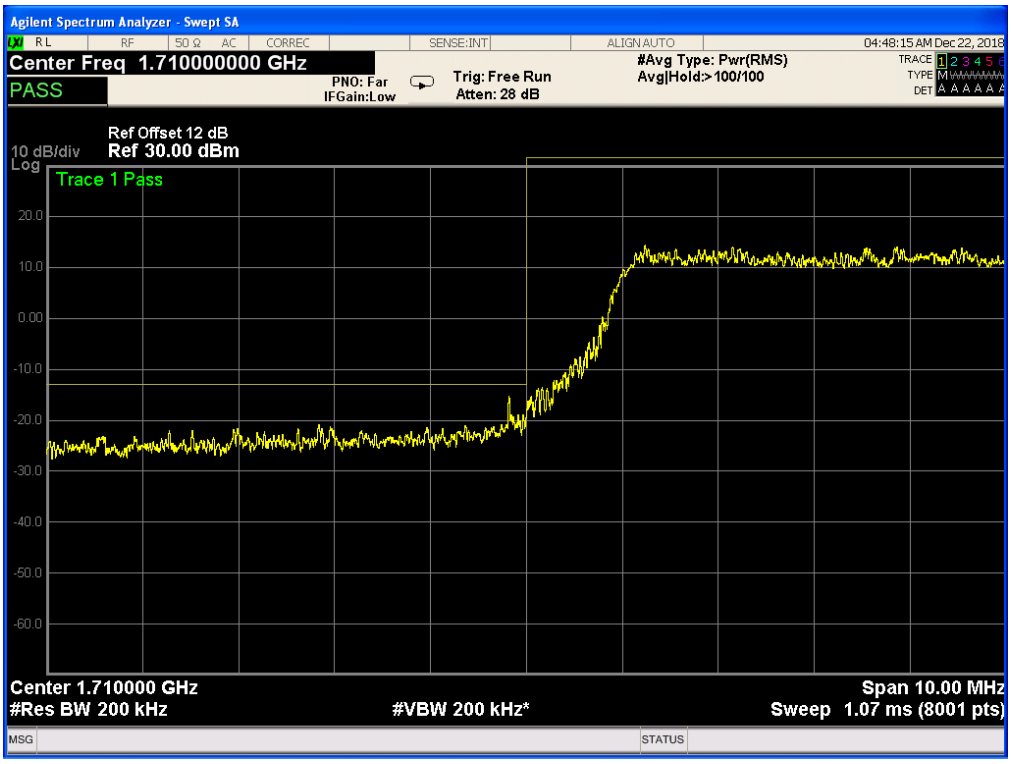
Band 4,UL Channel 20325,UL Frequency 1747.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



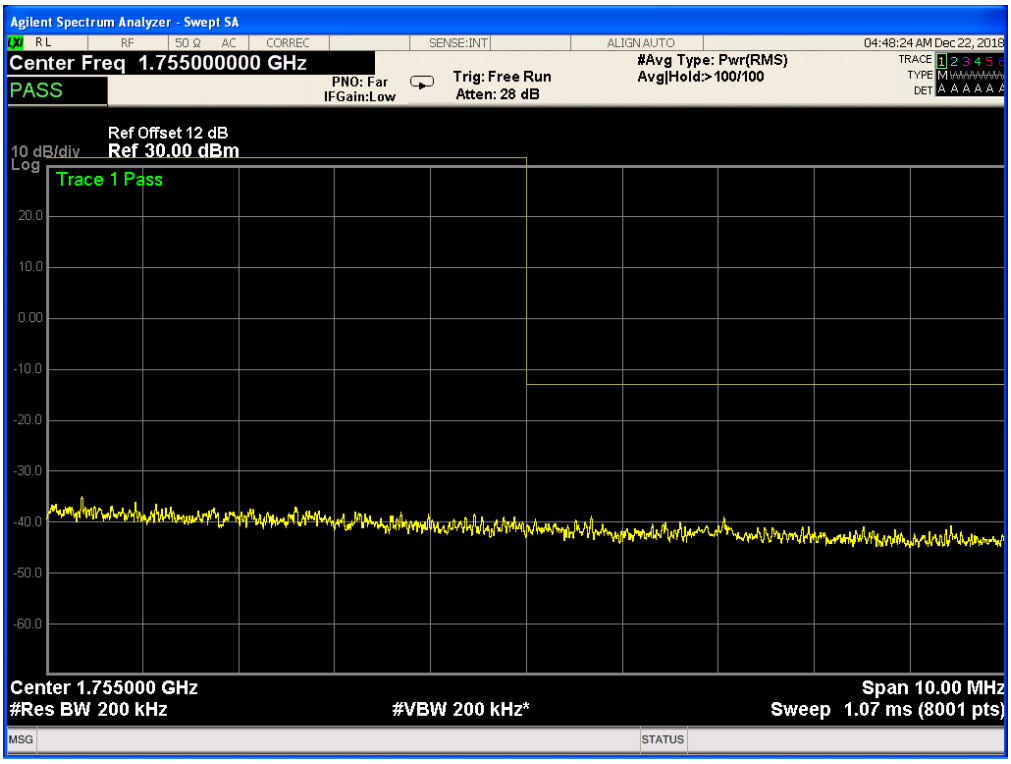
Band 4,UL Channel 20325,UL Frequency 1747.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



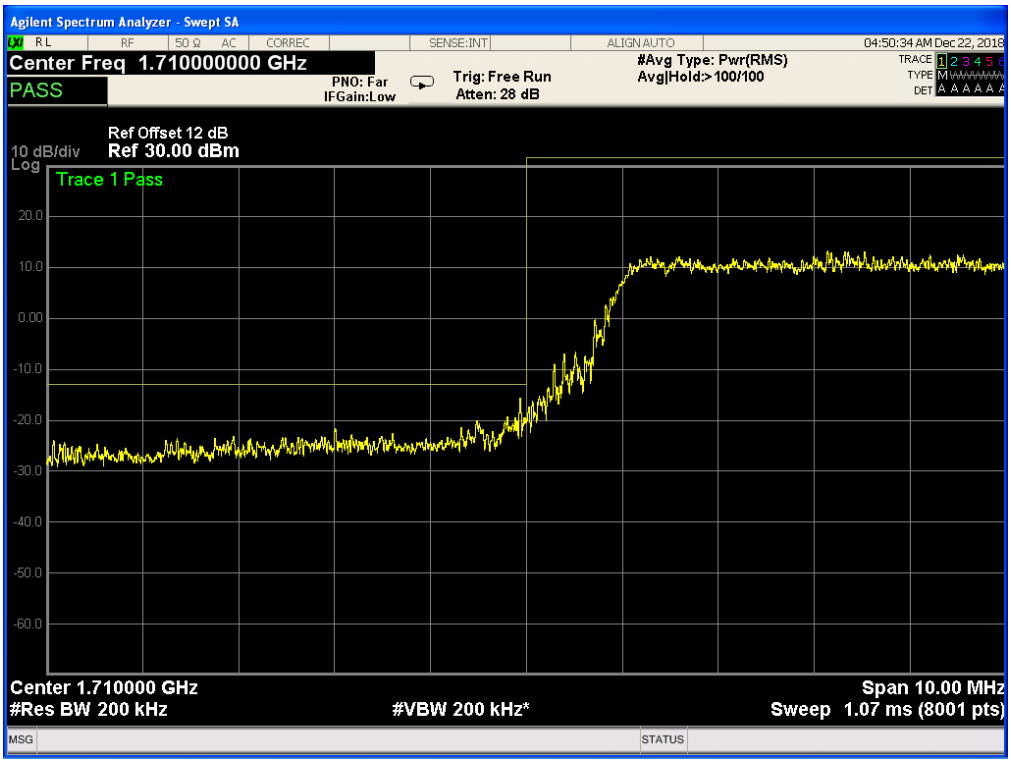
Band 4,UL Channel 20050,UL Frequency 1720.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



Band 4,UL Channel 20050,UL Frequency 1720.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



Band 4,UL Channel 20050,UL Frequency 1720.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



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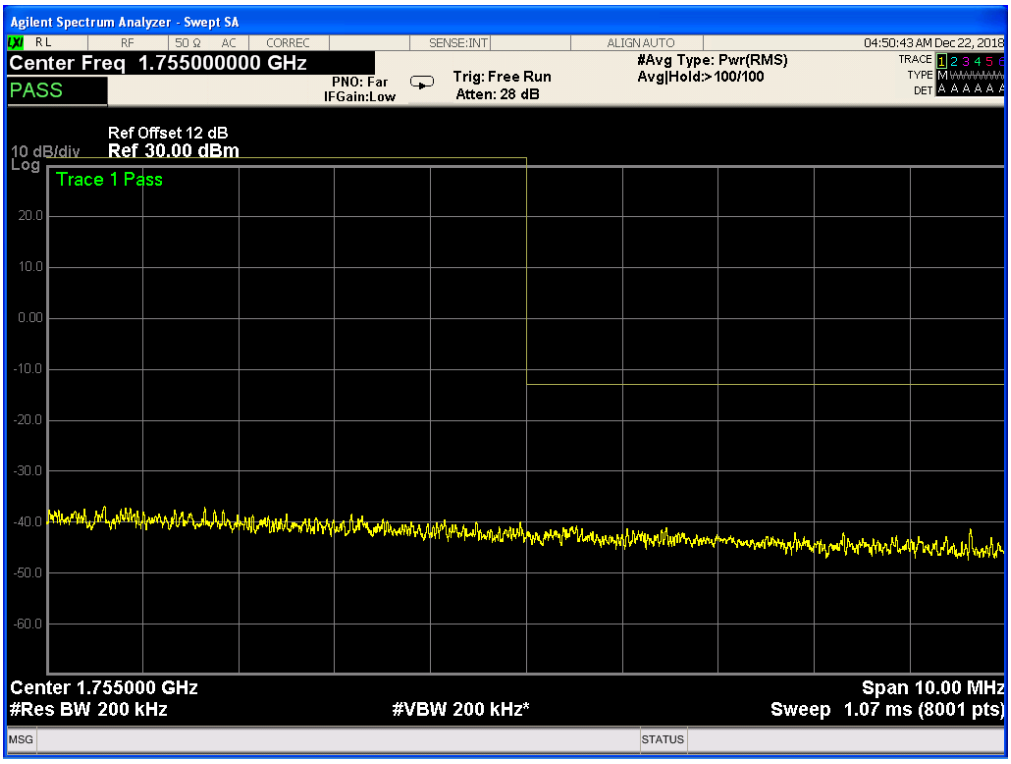
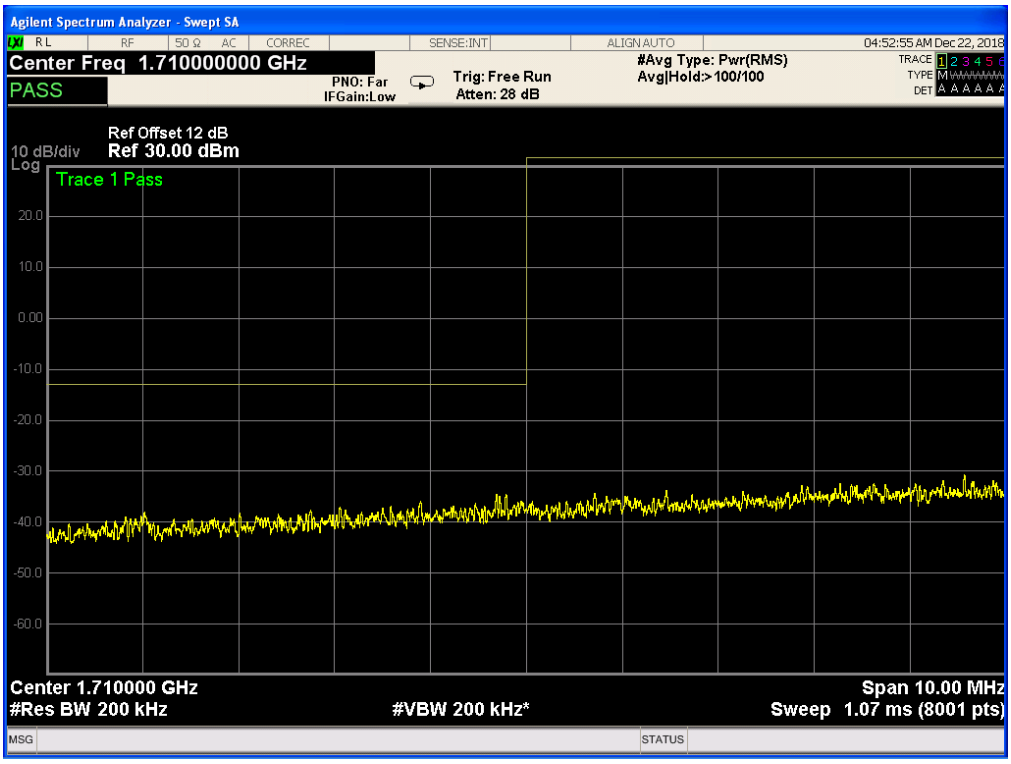
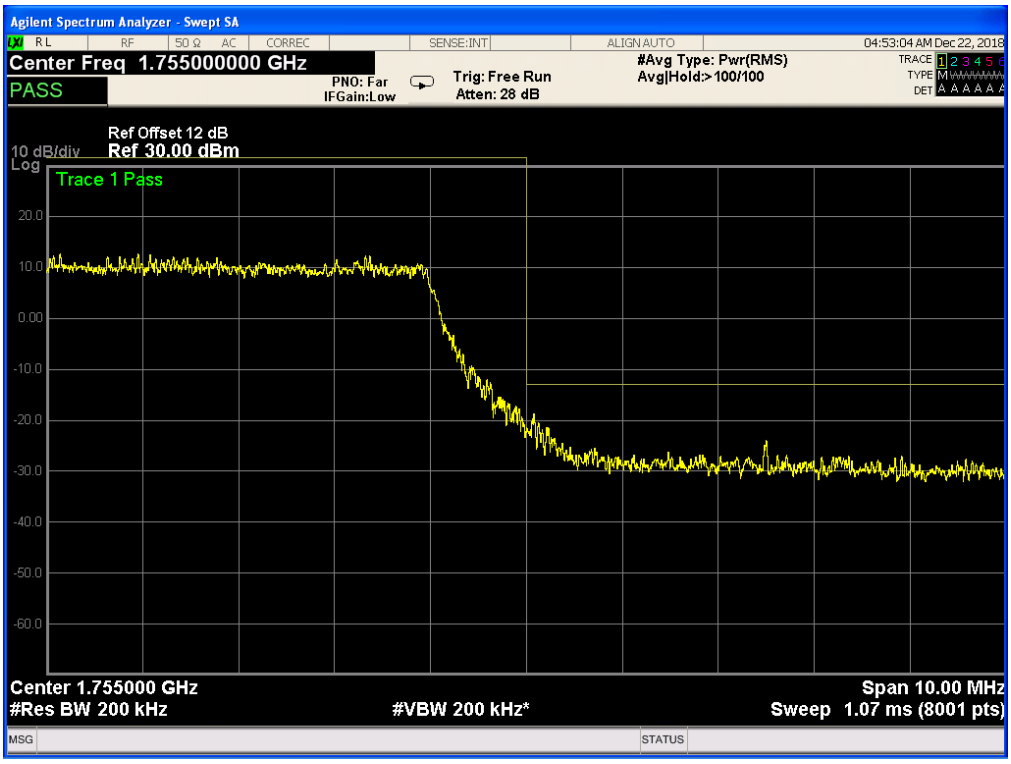


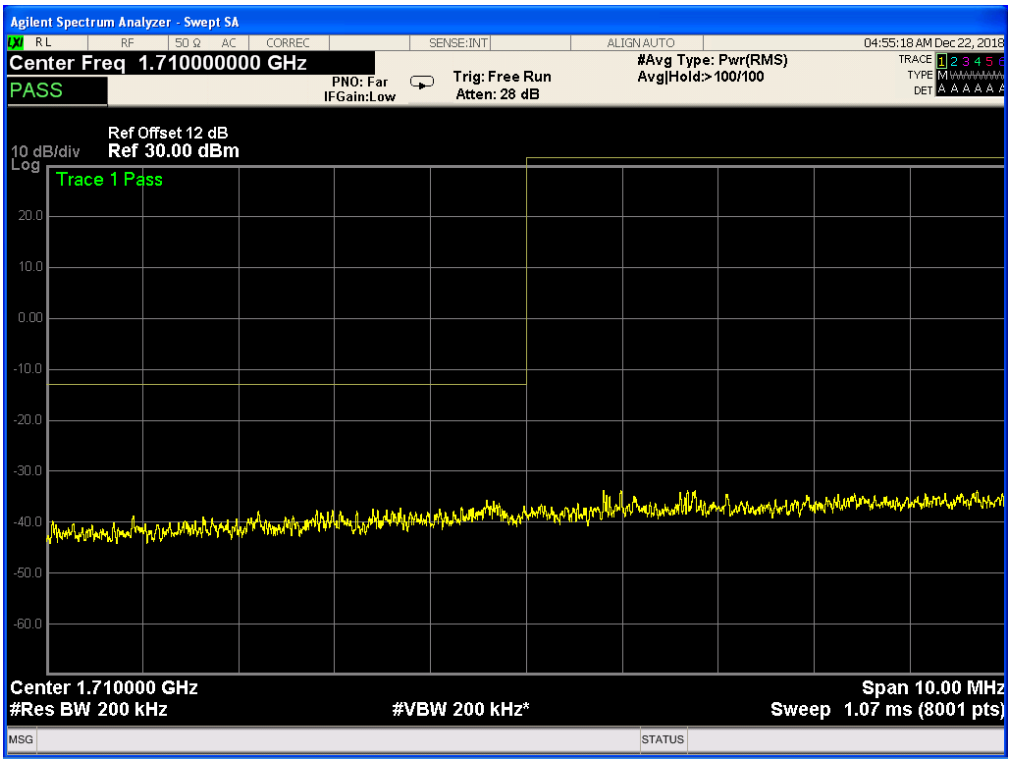
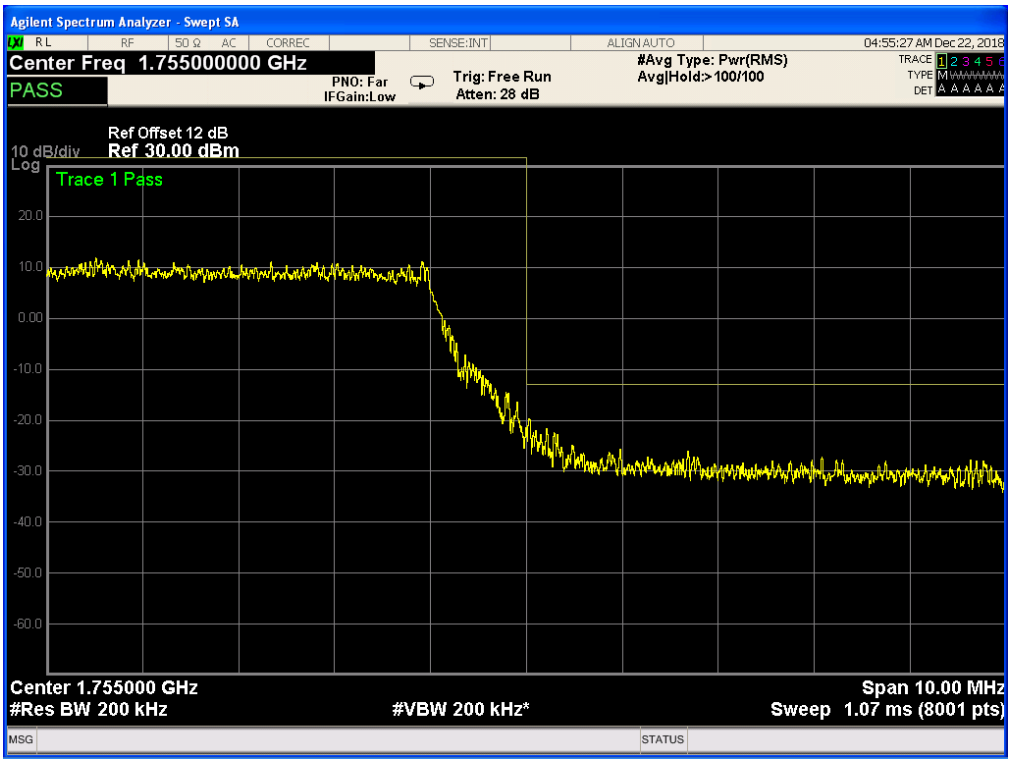
Band 4,UL Channel 20300,UL Frequency 1745.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



Band 4,UL Channel 20300,UL Frequency 1745.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



Band 4,UL Channel 20300,UL Frequency 1745.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



Band 4,UL Channel 20300,UL Frequency 1745.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM