

TEST REPORT



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1. Report No : DRTFCC1901-0023(2)
2. Customer
 - Name : SEOWON INTECH CO., LTD
 - Address : 689-47, Kumjung-Dong, Kunpo-City, Kyunggi-Do, 435-862, South Korea
3. Use of Report : FCC Original Grant
4. Product Name / Model Name : LTE Outdoor CPE / SLC-120T42OGA
FCC ID : V7MBSLC-120T42OGA
5. Test Method Used : ANSI C63.26-2015, ANSI/TIA-603-E-2016,
KDB 971168 D01v03r01, KDB 940660 D01v02
Test Specification : §2, §96
6. Date of Test : 2018.12.17 ~ 2019.01.22, 2019.03.11 ~ 2019.03.13
7. Testing Environment : Refer to appended test report.
8. Test Result : Refer to the attached test result.

Affirmation	Tested by		Reviewed by	
	Name: Inhee Bae		Name: GeunKi Son	

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2020 . 03 . 13 .

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If this report is required to confirmation of authenticity, please contact to report@dtnc.net

Test Report Version

Test Report No.	Date	Description
DRTFCC1901-0023	Jan. 24, 2019	Initial issue
DRTFCC1901-0023(1)	Mar. 14, 2019	Added EIRP/10MHz Data and PSD re-measurement
DRTFCC1901-0023(2)	Mar. 13, 2020	Update the test procedure

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1 GENERAL INFORMATION

Applicant Name : SEOWON INTECH CO., LTD
Address : 689-47, Kumjung-Dong, Kunpo-City, Kyunggi-Do, 435-862, South Korea
FCC ID : V7MBSLC-120T42OGA
FCC Classification : Citizens Band Category A and B Devices (CBD)
EUT : LTE Outdoor CPE
Model Name : SLC-120T42OGA
Add Model Name : N/A
Supplying power : DC 48 V
Antenna Information : Internal Patch Antenna

Device

-	End User Device
-	Category A CBSD
v	Category B CBSD

- LTE CA Band48 Carrier aggregation Configurations

Note: This device supports LTE single transmitting and LTE up-link carrier aggregation (Intra-band).
The supporting UL-CA combination are as below.

▪ LTE CA_intra-band_continuous

Range	CC-Combo / N _{RB_agg} [RB]	CC1			CC2		
		BW [RB]	N _{UL/DL}	f _{UL/DL} [MHz]	BW [RB]	N _{UL/DL}	f _{UL/DL} [MHz]
Low	25 + 100	25	55273	3553.3	100	55390	3565
		100	55340	3560	25	55457	3571.7
	50 + 100	50	55295	3555.5	100	55439	3569.9
		100	55340	3560	50	55484	3574.4
	75 + 100	75	55318	3557.8	100	55489	3574.9
		100	55340	3560	75	55511	3577.1
	100 + 100	100	55340	3560	100	55511	3579.8
Mid	25 + 100	25	55273	3553.3	100	55390	3565
		100	55340	3560	25	55457	3571.7
	50 + 100	50	55295	3555.5	100	55439	3569.9
		100	55340	3560	50	55484	3574.4
	75 + 100	75	55318	3557.8	100	55489	3574.9
		100	55340	3560	75	55511	3577.1
	100 + 100	100	55340	3560	100	55511	3579.8
High	25 + 100	25	55273	3553.3	100	55390	3565
		100	55340	3560	25	55457	3571.7
	50 + 100	50	55295	3555.5	100	55439	3569.9
		100	55340	3560	50	55484	3574.4
	75 + 100	75	55318	3557.8	100	55489	3574.9
		100	55340	3560	75	55511	3577.1
	100 + 100	100	56442	3560	100	55511	3579.8

▪ LTE CA_intra-band_non-continuous

Test Frequency ID	CC-Combo / N _{RB_agg} [RB]	CC1			Wgap [MHz]	CC2		
		BW [RB]	N _{UL/DL}	f _{UL/DL} [MHz]		BW [RB]	N _{UL/DL}	f _{UL/DL} [MHz]
Max Wgap	25 + 25	25	55265	3552.5	140	25	56715	3697.5
	25 + 50	25	55265	3552.5	135	50	56690	3695
		50	55290	3555	135	25	56715	3697.5
	25 + 75	25	55265	3552.5	130	75	56665	3692.5
		75	55315	3557.5	130	25	56715	3697.5
	50 + 50	50	55290	3555	130	50	56690	3695
	25 + 75	25	55265	3552.5	125	100	56640	3690
		100	55340	3560	125	25	56715	3697.5
	25 + 75	50	55290	3555	125	75	56665	3692.5
		75	55315	3557.5	125	50	56690	3695
	25 + 75	50	55290	3555	120	100	56640	3690
		100	55340	3560	120	50	56690	3695
	25 + 75	75	55315	3557.5	115	100	56640	3690
		100	55340	3560	115	75	56665	3692.5
	25 + 100	100	55340	3560	110	100	56640	3690

- Emission Designator and Max power (Single Transmitting)

Mode	TX Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max power (dBm)	Max power (W)
LTE Band 48	3560 ~ 3690	17M8G7D	QPSK	36.47	4.436
LTE Band 48	3560 ~ 3690	17M8W7D	16QAM	34.86	3.062
LTE Band 48	3560 ~ 3690	17M9W7D	64QAM	33.19	2.084
LTE Band 48	3557.5 ~ 3692.5	13M3G7D	QPSK	36.46	4.426
LTE Band 48	3557.5 ~ 3692.5	13M2W7D	16QAM	35.02	3.177
LTE Band 48	3557.5 ~ 3692.5	13M4W7D	64QAM	33.54	2.259
LTE Band 48	3555 ~ 3695	8M87G7D	QPSK	34.58	2.871
LTE Band 48	3555 ~ 3695	8M88W7D	16QAM	33.15	2.065
LTE Band 48	3555 ~ 3695	8M79W7D	64QAM	31.81	1.517
LTE Band 48	3552.5 ~ 3697.5	4M47G7D	QPSK	35.16	3.281
LTE Band 48	3552.5 ~ 3697.5	4M47W7D	16QAM	33.74	2.366
LTE Band 48	3552.5 ~ 3697.5	4M44W7D	64QAM	32.41	1.742

- Emission Designator and Max power (UL-CA, intra-band_continuous)

Mode	TX Frequency (MHz)	Emission Designator	Modulation	EIRP	
				Max power (dBm)	Max power (W)
5 MHz + 20 MHz	3553.3 ~ 3690	22M7G7D	QPSK	33.31	2.143
5 MHz + 20 MHz	3553.3 ~ 3690	22M7W7D	16QAM	32.42	1.746
5 MHz + 20 MHz	3553.3 ~ 3690	22M7W7D	64QAM	30.57	1.140
20 MHz + 5 MHz	3560 ~ 3696.7	22M7G7D	QPSK	33.76	2.377
20 MHz + 5 MHz	3560 ~ 3696.7	22M7W7D	16QAM	32.65	1.841
20 MHz + 5 MHz	3560 ~ 3696.7	22M7W7D	64QAM	30.48	1.117
10 MHz + 20 MHz	3555.5 ~ 3569.9	27M6G7D	QPSK	33.75	2.371
10 MHz + 20 MHz	3555.5 ~ 3569.9	27M6W7D	16QAM	32.64	1.837
10 MHz + 20 MHz	3555.5 ~ 3569.9	27M6W7D	64QAM	30.59	1.146
20 MHz + 10 MHz	3560 ~ 3694.5	27M6G7D	QPSK	32.86	1.932
20 MHz + 10 MHz	3560 ~ 3694.5	27M6W7D	16QAM	31.92	1.556
20 MHz + 10 MHz	3560 ~ 3694.5	27M6W7D	64QAM	30.27	1.064
15 MHz + 20 MHz	3557.8 ~ 3690	32M5G7D	QPSK	33.28	2.128
15 MHz + 20 MHz	3557.8 ~ 3690	32M5W7D	16QAM	32.16	1.644
15 MHz + 20 MHz	3557.8 ~ 3690	32M5W7D	64QAM	30.51	1.125
20 MHz + 15 MHz	3560 ~ 3692.2	32M6G7D	QPSK	34.30	2.692
20 MHz + 15 MHz	3560 ~ 3692.2	32M5W7D	16QAM	32.46	1.762
20 MHz + 15 MHz	3560 ~ 3692.2	32M5W7D	64QAM	30.53	1.130
20 MHz + 20 MHz	3560 ~ 3690	37M4G7D	QPSK	33.46	2.218
20 MHz + 20 MHz	3560 ~ 3690	37M4W7D	16QAM	32.38	1.730
20 MHz + 20 MHz	3560 ~ 3690	37M4W7D	64QAM	30.70	1.175

- Emission Designator and Max power (UL-CA, intra-band_non-continuous)

Mode	TX Frequency (MHz)	Emission Designator	Modulation	EIRP			
				PCC (dBm)	SCC (dBm)	Max power (dBm)	Max power (W)
5MHz + 5MHz	3552.5 ~ 3697.5	8M91G7D	QPSK	29.65	31.35	33.59	2.287
5MHz + 5MHz	3552.5 ~ 3697.5	8M93W7D	16QAM	29.86	31.69	33.88	2.444
5MHz + 5MHz	3552.5 ~ 3697.5	8M92W7D	64QAM	29.44	31.44	33.56	2.272
5MHz + 10MHz	3552.5 ~ 3695	13M4G7D	QPSK	28.90	32.87	34.33	2.713
5MHz + 10MHz	3552.5 ~ 3695	13M4W7D	16QAM	29.91	32.60	34.47	2.799
5MHz + 10MHz	3552.5 ~ 3695	13M4W7D	64QAM	30.04	32.36	34.36	2.731
10MHz + 5MHz	3555 ~ 3697.5	13M4G7D	QPSK	30.86	31.54	34.22	2.645
10MHz + 5MHz	3555 ~ 3697.5	13M4W7D	16QAM	31.08	31.61	34.36	2.731
10MHz + 5MHz	3555 ~ 3697.5	13M4W7D	64QAM	30.93	31.38	34.17	2.613
5MHz + 15MHz	3552.5 ~ 3692.5	17M8G7D	QPSK	29.51	32.42	34.21	2.639
5MHz + 15MHz	3552.5 ~ 3692.5	17M8W7D	16QAM	29.43	32.61	34.32	2.701
5MHz + 15MHz	3552.5 ~ 3692.5	17M8W7D	64QAM	29.27	32.55	34.22	2.644
15MHz + 5MHz	3557.5 ~ 3697.5	17M8G7D	QPSK	30.09	31.46	33.84	2.421
15MHz + 5MHz	3557.5 ~ 3697.5	17M8W7D	16QAM	30.32	31.34	33.87	2.438
15MHz + 5MHz	3557.5 ~ 3697.5	17M8W7D	64QAM	30.17	31.38	33.83	2.414
10MHz + 10MHz	3555 ~ 3695	17M8G7D	QPSK	31.25	32.26	34.79	3.016
10MHz + 10MHz	3555 ~ 3695	17M8W7D	16QAM	31.03	32.51	34.84	3.050
10MHz + 10MHz	3555 ~ 3695	17M8W7D	64QAM	30.97	32.36	34.73	2.972
5MHz + 20MHz	3552.5 ~ 3690	22M3G7D	QPSK	28.76	33.86	35.03	3.184
5MHz + 20MHz	3552.5 ~ 3690	22M3W7D	16QAM	29.18	34.19	35.38	3.452
5MHz + 20MHz	3552.5 ~ 3690	22M3W7D	64QAM	29.32	34.02	35.29	3.379
20MHz + 5MHz	3560 ~ 3697.5	22M3G7D	QPSK	29.18	32.45	34.13	2.586
20MHz + 5MHz	3560 ~ 3697.5	22M3W7D	16QAM	29.30	32.46	34.17	2.613
20MHz + 5MHz	3560 ~ 3697.5	22M2W7D	64QAM	29.54	32.18	34.07	2.551
10MHz + 15MHz	3555 ~ 3692.5	22M3G7D	QPSK	29.89	31.43	33.74	2.365
10MHz + 15MHz	3555 ~ 3692.5	22M3W7D	16QAM	30.30	31.19	33.78	2.387
10MHz + 15MHz	3555 ~ 3692.5	22M3W7D	64QAM	29.67	30.88	33.33	2.151
15MHz + 10MHz	3557.5 ~ 3695	22M3G7D	QPSK	29.65	31.84	33.89	2.450
15MHz + 10MHz	3557.5 ~ 3695	22M3W7D	16QAM	29.62	32.07	34.03	2.527
15MHz + 10MHz	3557.5 ~ 3695	22M2W7D	64QAM	29.73	32.00	34.02	2.525
10MHz + 20MHz	3555 ~ 3690	26M7G7D	QPSK	29.54	33.86	35.23	3.332
10MHz + 20MHz	3555 ~ 3690	26M7W7D	16QAM	29.77	34.07	35.44	3.501
10MHz + 20MHz	3555 ~ 3690	26M7W7D	64QAM	29.85	33.70	35.20	3.310
20MHz + 10MHz	3560 ~ 3695	26M7G7D	QPSK	29.97	31.99	34.11	2.574
20MHz + 10MHz	3560 ~ 3695	26M7W7D	16QAM	29.63	32.04	34.01	2.518
20MHz + 10MHz	3560 ~ 3695	26M7W7D	64QAM	29.82	32.19	34.18	2.615
15MHz + 20MHz	3557.5 ~ 3690	31M2G7D	QPSK	29.74	34.06	35.43	3.489
15MHz + 20MHz	3557.5 ~ 3690	31M2W7D	16QAM	29.83	34.29	35.62	3.647
15MHz + 20MHz	3557.5 ~ 3690	31M2W7D	64QAM	29.81	34.17	35.53	3.569

Mode	TX Frequency (MHz)	Emission Designator	Modulation	EIRP			
				PCC (dBm)	SCC (dBm)	Max power (dBm)	Max power (W)
20MHz + 15MHz	3560 ~ 3692.5	31M2G7D	QPSK	30.65	32.42	34.63	2.907
20MHz + 15MHz	3560 ~ 3692.5	31M2W7D	16QAM	30.72	32.39	34.65	2.914
20MHz + 15MHz	3560 ~ 3692.5	31M2W7D	64QAM	30.86	32.12	34.55	2.848
20MHz + 20MHz	3560 ~ 3690	35M6G7D	QPSK	32.19	33.57	35.94	3.931
20MHz + 20MHz	3560 ~ 3690	35M6W7D	16QAM	31.86	33.48	35.76	3.763
20MHz + 20MHz	3560 ~ 3690	35M6W7D	64QAM	32.08	33.29	35.74	3.747

2 INTRODUCTION

2.1 EUT DESCRIPTION

The Equipment under Test (EUT) supports LTE.

2.2 EUT CAPABILITIES

This ETU contains the following capabilities:
LTE Band 48.

2.3 TESTING ENVIRONMENT

Ambient Condition	
▪ Temperature	+21 °C ~ +25 °C
▪ Relative Humidity	39 % ~ 45 %

2.4 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

2.5 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with requirements of ANSI C 63.4-2014. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95 % level of confidence.

Parameter	Measurement uncertainty
Radiated Disturbance (Below 1 GHz)	5.1 dB (The confidence level is about 95 %, $k = 2$)
Radiated Disturbance (1 GHz ~ 18 GHz)	5.4 dB (The confidence level is about 95 %, $k = 2$)
Radiated Disturbance (Above 18 GHz)	5.3 dB (The confidence level is about 95 %, $k = 2$)

2.6 TEST FACILITY

DT&C Co., Ltd.		
The 3 m test site and conducted measurement facility used to collect the radiated data are located at the 42, Yurim-ro, 154beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea 17042.		
The test site complies with the requirements of § 2.948 according to ANSI C63.4-2014.		
- FCC MRA Accredited Test Firm No. : KR0034		
www.dtnet.net		
Telephone	:	+ 82-31-321-2664
FAX	:	+ 82-31-321-1664

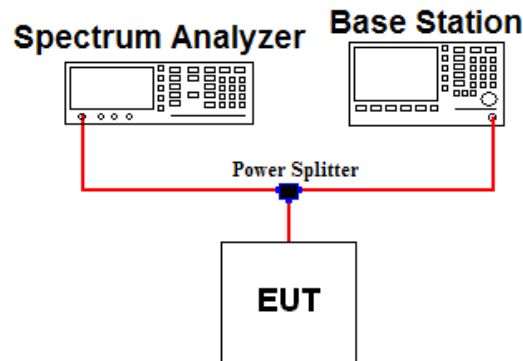
3 SUMMARY OF TEST RESULTS

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Status Note 1
2.1046	Conducted Output Power	N/A	Conducted	C ^{Note2}
2.1049	Occupied Bandwidth	N/A		C ^{Note2}
96.41(b)	Maximum Power Spectral Density	End User Device: N/A Category A CBSD: < 20dBm/MHz Category B CBSD: < 37dBm/MHz		C
96.41(g)	Peak to Average Ratio	< 13 dB		C
2.1051 96.41(e)	Band Edge / Conducted Spurious Emissions	Within 0 MHz to 10 MHz above and below the assigned channel ≤ -13 dBm/MHz Greater than 10 MHz above and below the assigned channel ≤ -25 dBm/MHz Any emission below 3530 MHz and above 3720 MHz ≤ -40 dBm/MHz		C
2.1055	Frequency Stability	Within the authorized frequency band		C
96.41(b)	Maximum Effective Isotropic Radiated Power(EIRP)	End User Device: < 23dBm/10MHz Category A CBSD: < 30dBm/10MHz Category B CBSD: < 47dBm/10MHz	Radiated	C
2.1053 96.41	Undesirable Emissions	Any emission below 3530 MHz and above 3720 MHz ≤ -40 dBm/MHz		C
Note 1: C=Comply NC=Not Comply NT=Not Tested NA=Not Applicable Note 2: For contiguous intra-band carrier aggregation, was measured occupied BW across component carriers and measured power. For non-contiguous intra-band carrier aggregation, was summed of measured occupied bandwidths of the individual carriers.				

4 DESCRIPTION OF TESTS

4.1 OCCUPIED BANDWIDTH.

Test set-up



Test Procedure

- KDB971168 D01v03r01 - Section 4.3
- ANSI C63.26-2015 – Section 5.4.4

The occupied bandwidth, that 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 of a given emission.

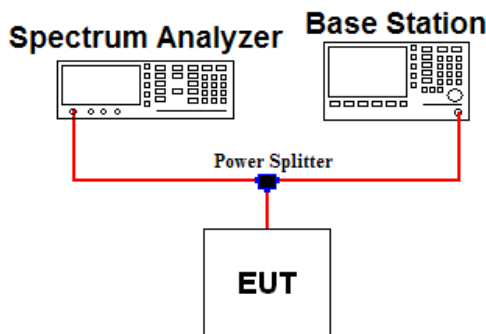
Test setting

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99 % occupied bandwidth and the 26 dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. $RBW = 1 \sim 5 \%$ of the expected OBW & $VBW \geq 3 \times RBW$
3. Detector = Peak
4. Trance mode = Max hold
5. Sweep = Auto couple
6. The trace was allowed to stabilize
7. If necessary, step 2 ~ 6 were repeated after changing the RBW such that it would be within 1 ~ 5 % of the 99 % occupied bandwidth observed in step 6.

Limit
NA

4.2 MAXIMUM PSD (Power Spectral Density)

Test Set-up



Test Procedure

- KDB971168 D01v03r01 - Section 5.4
- ANSI C63.26-2015 – Section 5.2.4.5

The maximum power spectral density is measured by means of a calibrated spectrum analyzer. The EUT was setup to maximum output power at its lowest and highest channel with all bandwidths, modulations and RB configurations.

Test setting

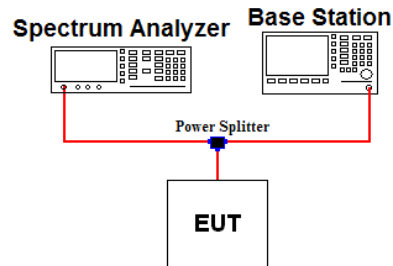
1. Set span to 2 x to 3 x the OBW.
2. Set RBW = 1% to 5% of the OBW.
3. Set VBW $\geq 3 \times$ RBW.
4. Set number of points in sweep $\geq 2 \times$ span / RBW.
5. Sweep time:
 - 1) Set = auto-couple, or
 - 2) Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission period})]$ for single sweep (automation-compatible) measurement. Transmission period is the on and off time of the transmitter.
6. Detector = power averaging (rms).
7. If the EUT can be configured to transmit continuously, then set the trigger to free run.
8. If the EUT cannot be configured to transmit continuously, then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Verify that the sweep time is less than or equal to the transmission burst duration. Time gating can also be used under similar constraints (i.e., configured such that measurement data is collected only during active full-power transmissions).
9. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over multiple symbols, it can be necessary to increase the number of traces to be averaged above 100 or, if using a manually configured sweep time, increase the sweep time.

Limit

Device	Maximum EIRP (dBm/10MHz)	Maximum PSD (dBm/MHz)
End User Device	23	N/A
Category A CBSD	30	20
Category B CBSD	47	37

4.3 BAND EDGE EMISSIONS(Conducted)

Test set-up



Test Procedure

- KDB971168 D01v03r01 - Section 6
- ANSI C63.26-2015 – Section 5.7

All out of band emissions are measured by means of a calibrated spectrum analyzer. The EUT was setup to maximum output power at its lowest and highest channel with all bandwidths, modulations and RB configurations.

Test setting

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW $\geq$ 1MHz
4. VBW $\geq$ 3 X RBW
5. Detector = RMS & Trace mode = Max hold
6. Sweep time = Auto couple or 1 s
7. Number of sweep point $\geq$ 2 X span / RBW
8. The trace was allowed to stabilize

Note: Part 96.41(e)(3)(i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (i.e., 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

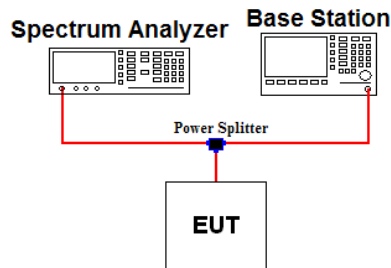
Limit

Part 96.41(e)(1) General protection levels. Except as otherwise specified in paragraph (e)(2) of this section, for channel and frequency assignments made by the SAS to CBSDs, the conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any emission shall not exceed -25 dBm/MHz. The upper and lower SAS assigned channel edges are the upper and lower limits of any channel assigned to a CBSD by an SAS, or in the case of multiple contiguous channels, the upper and lower limits of the combined contiguous channels.

(2) Additional protection levels. Notwithstanding paragraph (d)(1) of this section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

4.4 SPURIOUS AND HARMONIC EMISSIONS(Conducted)

Test set-up



Test Procedure

- KDB971168 D01v03r01 - Section 6
- ANSI C63.26-2015 – Section 5.7

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The EUT was setup to maximum output power at its low, middle, high channel with all bandwidths, modulations and RB configurations. The spectrum is scanned from 9 kHz up to a frequency including its 10th harmonic.

Test setting

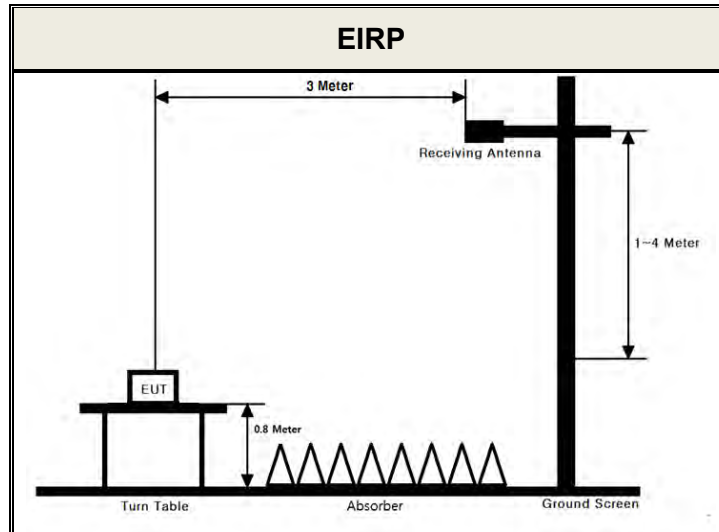
1. RBW = 1 MHz & VBW $\geq 3 \times$ RBW
2. Detector = RMS & Trace mode = Max hold
3. Sweep time = Auto couple or 1 s
4. Number of sweep point $\geq 2 \times$ span / RBW
5. The trace was allowed to stabilize

Limit

Part 96.41(e)(2)The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

4.5 MAXIMUM EIRP (Equivalent Isotropic Radiated Power)

Test Set-up



These measurements were performed at 3 m test site. The equipment under test is placed on a non-conductive table 0.8-meters above a turntable which is flush with the ground plane and 3 meters from the receive antenna. For measurements above 1GHz absorbers are placed on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1 GHz, the absorbers are removed.

Test Procedure

- ANSI/TIA-603-E-2016 - Section 2.2.17
- KDB971168 D01v03r01 - Section 5.2.2
- ANSI C63.26-2015 – Section 5.2.4.4.1

Test setting

1. Set span to 2 x to 3 x the OBW.
2. Set RBW = 1% to 5% of the OBW.
3. Set VBW $\geq$ 3 x RBW.
4. Set number of points in sweep $\geq$ 2 x span / RBW.
5. Sweep time:
 - 1) Set = auto-couple, or
 - 2) Set $\geq$ [10 x (number of points in sweep) x (transmission period)] for single sweep (automation-compatible) measurement. Transmission period is the on and off time of the transmitter.
6. Detector = power averaging (rms).
7. If the EUT can be configured to transmit continuously, then set the trigger to free run.
8. If the EUT cannot be configured to transmit continuously, then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Verify that the sweep time is less than or equal to the transmission burst duration. Time gating can also be used under similar constraints (i.e., configured such that measurement data is collected only during active full-power transmissions).
9. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over multiple symbols, it can be necessary to increase the number of traces to be averaged above 100 or, if using a manually configured sweep time, increase the sweep time.

10. Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band or channel power measurement function, with the band/channel limits set equal to the OBW band edges. If the instrument does not have a band or channel power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

The receiver antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer.

A horn antenna was substituted in place of the EUT. This horn antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. The conducted power at the terminal of the substitute antenna is measured.

The EIRP is calculated using the following formula:

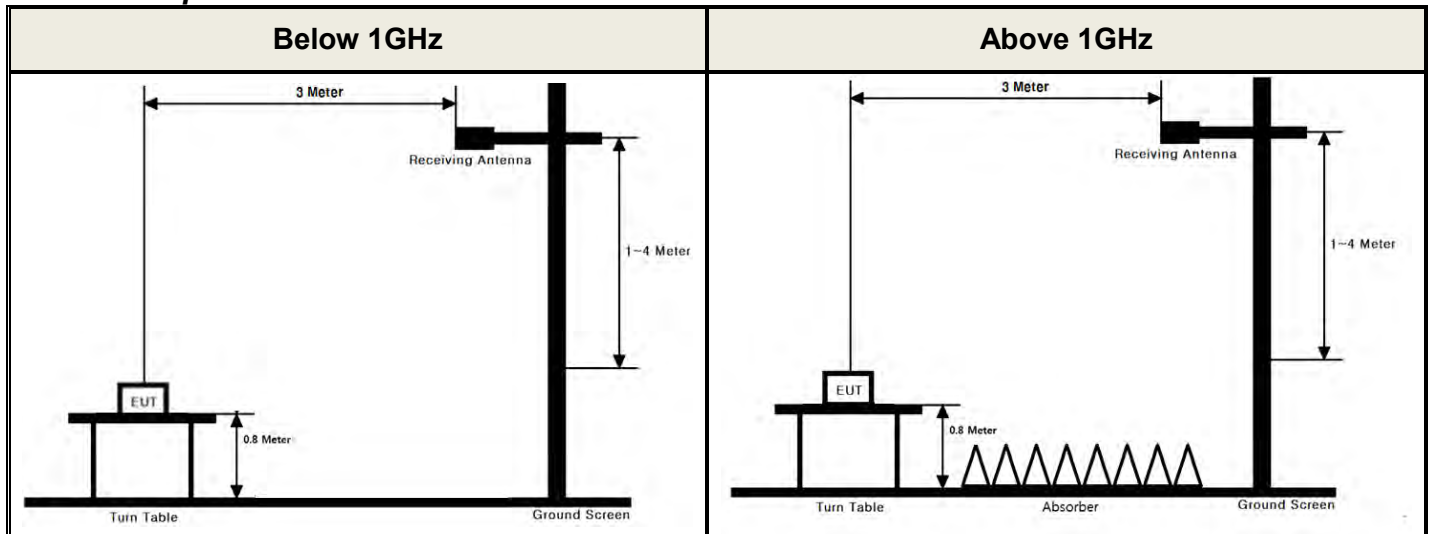
EIRP = The conducted power at the substitute antenna's terminal [dBm] + Substitute Antenna gain [dBi for EIRP]

Limit

Device	Maximum EIRP (dBm/10MHz)	Maximum PSD (dBm/MHz)
End User Device	23	N/A
Category A CBSD	30	20
Category B CBSD	47	37

4.6 UNDESIRABLE EMISSIONS

Test Set-up



These measurements were performed at 3 test site. The equipment under test is placed on a non-conductive table 0.8-meters above a turntable which is flush with the ground plane and 3 meters from the receive antenna. For measurements above 1GHz absorbers are placed on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections. For measurements below 1 GHz, the absorbers are removed.

Test Procedure

- ANSI/TIA-603-E-2016 - Section 2.2.12
- KDB971168 D01v03r01 - Section 5.8
- ANSI C63.26-2015 – Section 5.5

Test setting

1. RBW = 1 MHz & VBW $\geq$ 3 X RBW
2. Detector = RMS & Trace mode = Max hold
3. Sweep time = Auto couple or 1 s
4. Number of sweep point $\geq$ 2 X span / RBW
5. The trace was allowed to stabilize

The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. For radiated power measurements below 1 GHz, a half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading.

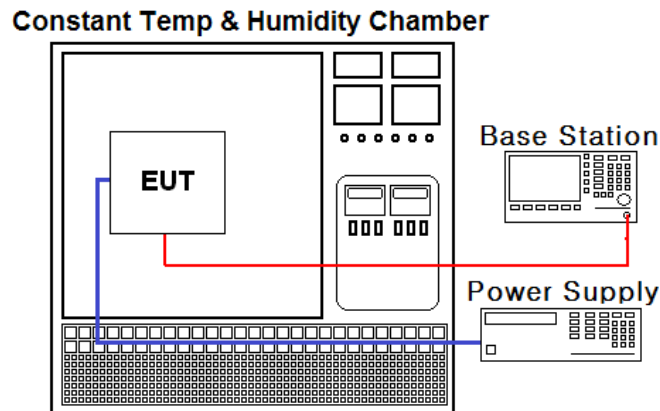
For radiated power measurements above 1 GHz, a Horn antenna was substituted in place of the EUT. This Horn antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same spectrum analyzer reading. The difference between the gain of the horn and an isotropic antenna are taken into consideration.

Limit

Part 96.41(e)(2)The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz.

4.7 FREQUENCY STABILITY

Test Set-up



Test Procedure

- ANSI/TIA-603-E-2016
- KDB971168 D01v03r01 - Section 9

The frequency stability of the transmitter is measured by:

a.) **Temperature:**

The temperature is varied from - 30 °C to + 50 °C using an environmental chamber.

b.) **Primary Supply Voltage:**

The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

Time Period and Procedure:

1. The carrier frequency of the transmitter is measured at room temperature.
(20 °C to provide a reference)
2. The equipment is turned on in a “standby” condition for one minute before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10 °C intervals ranging from -30 °C to +50 °C.
A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Limit

Within the authorized frequency band

5 LIST OF TEST EQUIPMENT

Type	Manufacturer	Model	Cal.Date (yy/mm/dd)	Next.Cal. Date (yy/mm/dd)	S/N
Spectrum Analyzer	Agilent Technologies	N9030A	18/07/09	19/07/09	MY53310140
Spectrum Analyzer	Agilent Technologies	N9020A	18/07/09	19/07/09	MY50410163
Spectrum Analyzer	Agilent Technologies	N9020A	18/07/09	19/07/09	MY46471251
DC power supply	Agilent Technologies	66332A	18/07/02	19/07/02	MY43000394
Multimeter	FLUKE	17B	17/12/26 18/12/18	18/12/26 19/12/18	26030065WS
Power Divider	Weinschel	WA1575	18/11/07	19/11/07	WA1575-1
Power Divider	Aeroflex/Weinschel	1594	18/07/05	19/07/05	1741
Power Divider	Aeroflex/Weinschel	1594	18/07/05	19/07/05	1740
Temp & Humi	SJ Science	SJ-TH-S50	18/07/06	19/07/06	U5542113
Radio Communication Analyzer	Anritsu	MT8820C	18/07/04	19/07/04	6201274519
Radio Communication Analyzer	KEYSIGHT	E7515A	17/12/27 18/12/19	18/12/27 19/12/19	MY57270113
Thermohygrometer	BODYCOM	BJ5478	18/01/03 18/12/27	19/01/03 19/12/27	120612-2
Thermohygrometer	BODYCOM	BJ5478	18/01/03 18/12/27	19/01/03 19/12/27	120612-1
Signal Generator	Rohde Schwarz	SMBV100A	17/12/27 18/12/19	18/12/27 19/12/19	255571
Signal Generator	Rohde Schwarz	SMF100A	18/06/07	19/06/07	102341
Loop Antenna	Schwarzbeck	FMZB1513	18/01/30	20/01/30	1513-128
Dipole Antenna	Schwarzbeck	VHA9103	18/04/13	20/04/13	2117
Dipole Antenna	Schwarzbeck	UHA9105	18/04/13	20/04/13	2262
HORN ANT	ETS	3117	18/05/10	20/05/10	00140394
HORN ANT	ETS	3117	18/03/26	20/03/26	00152145
HORN ANT	A.H.Systems	SAS-574	17/04/25	19/04/25	154
HORN ANT	A.H.Systems	SAS-574	17/07/31	19/07/31	155
Amplifier	RF Bay Inc	MPA-40-40	17/12/28 18/12/20	18/12/28 19/12/20	21151801
Amplifier	EMPOWER	BBS3Q8CCJ	18/07/06	19/07/06	1005
PreAmplifier	H.P	8447D	17/12/26 18/12/18	18/12/26 19/12/18	2944A07774
PreAmplifier	Agilent	8449B	18/07/05	19/07/05	3008A02108
PreAmplifier	A.H.Systems Inc.	PAM-1840VH	18/07/06	19/07/06	163
High-pass filter	Wainwright	WHNX5.0	18/07/05	19/07/05	8
Cable	Radiall	TESTPRO3	18/07/06	19/07/06	M-01
Cable	DTNC	Cable	18/07/06	19/07/06	M-02
Cable	Junkosha	MWX315	18/11/19	19/11/19	M-05
Cable	Junkosha	MWX221	18/11/19	19/11/19	M-06
Cable	Junkosha	MWX241	18/06/25	19/06/25	G-04
Cable	DTNC	Cable	18/07/05	19/07/05	RF-84
Cable	DTNC	Cable	18/07/06	19/07/06	RF-10

Note1: The measurement antennas were calibrated in accordance to the requirements of ANSI C63.5-2017.

Note2: The cable is not a regular calibration item, so it has been calibrated by DT & C itself.

6 SAMPLE CALCULATION

A. Emission Designator

LTE Band 48(QPSK) single transmitting

Emission Designator = **17M8G7D**

LTE OBW = 17.821 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data Transmission

LTE Band 48(64QAM) single transmitting

Emission Designator = **17M9W7D**

LTE OBW = 17.889 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data Transmission

LTE Band 48(QPSK) LTE CA continuous

Emission Designator = **37M4G7D**

LTE OBW = 37.418 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data Transmission

LTE Band 48(64QAM) LTE CA continuous

Emission Designator = **37M4W7D**

LTE OBW = 37.425 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data Transmission

LTE Band 48(QPSK) ▪ LTE CA non-continuous

Emission Designator = **35M6G7D**

LTE OBW = 35.630 MHz

G = Phase Modulation

7 = Quantized/Digital Info

D = Data Transmission

LTE Band 48(64QAM) ▪ LTE CA non-continuous

Emission Designator = **35M6W7D**

LTE OBW = 35.621 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data Transmission

LTE Band 48(16QAM) single transmitting

Emission Designator = **17M8W7D**

LTE OBW = 17.784 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data Transmission

LTE Band 48(16QAM) LTE CA continuous

Emission Designator = **37M4W7D**

LTE OBW = 37.417 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data Transmission

LTE Band 48(16QAM) ▪ LTE CA non-continuous

Emission Designator = **35M6W7D**

LTE OBW = 35.622 MHz

W = Amplitude/Angle Modulated

7 = Quantized/Digital Info

D = Data Transmission

B. For substitution method

EIRP for Band 48

Channel Bandwidth (MHz)	Test Frequency (MHz)	Test Mode	RB Size/ Offset	Spectrum Reading Value(dBm)	EUT Axis	Ant Pol (H/V)	Level(dBm) @ Ant Terminal	TX Ant Gain (dBi)	EIRP (dBm)	EIRP (W)
20M	3690	QPSK	1/50	-18.26	Z	V	28.09	8.38	36.47	4.436

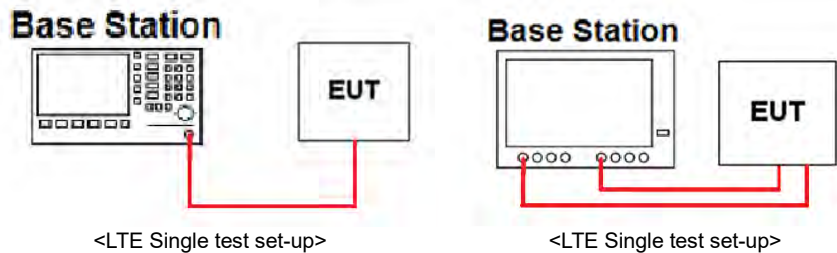
ERP or EIRP = Level @ Ant Terminal LEVEL(dBm) + Tx Ant. Gain

- 1) The EUT mounted on a non-conductive turntable is 0.8 meter above test site ground level.
- 2) During the test, the turn table is rotated until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with dipole/Horn antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item (3).
- 6) The signal generator output level with substituted antenna gain is the rating of ERP, EIRP or Radiated spurious emission.

7 TEST DATA

7.1 CONDUCTED OUTPUT POWER

A base station simulator was used to establish communication with the EUT. The base station simulator parameters were set to produce the maximum power from the EUT. This device was tested under all configurations and the highest power is reported. Conducted Output Powers of EUT are reported below.



Note 1: The conducted output power was measured using the Anritsu MT8820C, E7515A

▪ Band 48 (Single Transmitting)_Total Channel Power

Conducted Power [dBm]									
RB Allocation			1 RB			MID RB			FULL RB
B.W(MHz)	Freq.(MHz)	Modulation	LOW	MID	HIGH	LOW	MID	HIGH	
20M	3560	QPSK	23.78	23.20	23.83	22.08	22.07	22.14	22.18
		16QAM	22.73	22.45	22.83	21.03	20.80	21.12	21.16
		64QAM	21.70	21.07	21.68	19.88	20.11	20.07	20.09
	3625	QPSK	24.01	22.93	23.38	22.19	22.02	21.93	22.04
		16QAM	23.09	22.02	22.48	21.18	21.10	20.94	20.97
		64QAM	21.89	20.94	21.28	20.18	20.14	20.04	20.12
	3690	QPSK	23.48	22.84	23.17	21.85	21.82	21.82	21.85
		16QAM	22.59	22.02	22.52	20.72	21.11	20.61	20.63
		64QAM	21.23	21.17	21.11	19.92	19.95	19.86	19.88
15M	3557.5	QPSK	23.61	23.18	23.52	21.90	21.86	21.99	21.78
		16QAM	22.43	22.26	22.57	20.52	20.62	20.65	20.59
		64QAM	21.40	20.98	21.52	19.80	19.89	19.90	19.80
	3625	QPSK	23.61	22.88	23.18	22.04	21.93	21.78	21.87
		16QAM	22.66	21.99	22.14	20.98	20.90	20.78	20.89
		64QAM	21.45	20.88	20.94	20.07	19.99	19.86	19.95
	3692.5	QPSK	23.09	22.87	22.98	21.70	21.67	21.64	21.63
		16QAM	22.26	21.86	22.16	20.45	20.83	20.38	20.43
		64QAM	20.89	21.05	20.96	19.91	19.90	19.75	19.74
10M	3555	QPSK	23.31	22.80	23.33	21.89	21.84	21.85	21.84
		16QAM	22.42	21.70	22.49	20.60	20.65	20.65	20.61
		64QAM	21.02	20.66	21.33	19.87	19.87	19.87	19.84
	3625	QPSK	23.18	22.76	23.02	21.98	21.91	21.77	21.93
		16QAM	22.24	21.86	22.16	20.91	20.90	20.73	20.88
		64QAM	21.11	20.90	21.04	20.03	20.03	19.85	19.97
	3695	QPSK	22.99	22.65	23.04	21.69	21.59	21.77	21.74
		16QAM	22.00	21.70	22.18	20.94	20.88	20.54	20.89
		64QAM	21.04	20.72	20.86	19.83	19.77	19.98	19.88

Conducted Power [dBm]									
RB Allocation			1 RB			MID RB			FULL RB
B.W(MHz)	Freq.(MHz)	Modulation	LOW	MID	HIGH	LOW	MID	HIGH	
5M	3552.5	QPSK	22.92	23.00	22.59	22.34	21.66	21.44	21.51
		16QAM	21.95	22.16	21.45	21.03	20.58	20.42	20.45
		64QAM	20.57	20.79	20.59	20.34	19.85	19.69	19.70
	3625	QPSK	22.71	22.85	22.64	22.25	21.80	21.60	21.73
		16QAM	21.83	22.01	21.65	21.25	20.89	20.69	20.77
		64QAM	20.79	20.98	20.59	20.36	19.86	19.70	19.73
	3697.5	QPSK	22.42	23.06	22.63	22.05	21.80	21.71	21.62
		16QAM	21.46	22.09	21.70	21.24	20.99	20.90	20.86
		64QAM	20.58	21.22	20.81	20.26	19.99	19.93	19.85

▪ Band 48 (Single Transmitting)_Channel Power / 10 MHz

Conducted Power [dBm]									
RB Allocation			1 RB			MID RB			FULL RB
B.W(MHz)	Freq.(MHz)	Modulation	LOW	MID	HIGH	LOW	MID	HIGH	
20M ^{Note1}	3560	QPSK	23.78	23.20	23.83	22.08	22.07	22.14	22.18
		16QAM	22.73	22.45	22.83	21.03	20.80	21.12	21.16
		64QAM	21.70	21.07	21.68	19.88	20.11	20.07	20.09
	3625	QPSK	24.01	22.93	23.38	22.19	22.02	21.93	22.04
		16QAM	23.09	22.02	22.48	21.18	21.10	20.94	20.97
		64QAM	21.89	20.94	21.28	20.18	20.14	20.04	20.12
	3690	QPSK	23.48	22.84	23.17	21.85	21.82	21.82	21.85
		16QAM	22.59	22.02	22.52	20.72	21.11	20.61	20.63
		64QAM	21.23	21.17	21.11	19.92	19.95	19.86	19.88
15M ^{Note1}	3557.5	QPSK	23.61	23.18	23.52	21.90	21.86	21.99	21.78
		16QAM	22.43	22.26	22.57	20.52	20.62	20.65	20.59
		64QAM	21.40	20.98	21.52	19.80	19.89	19.90	19.80
	3625	QPSK	23.61	22.88	23.18	22.04	21.93	21.78	21.87
		16QAM	22.66	21.99	22.14	20.98	20.90	20.78	20.89
		64QAM	21.45	20.88	20.94	20.07	19.99	19.86	19.95
	3692.5	QPSK	23.09	22.87	22.98	21.70	21.67	21.64	21.63
		16QAM	22.26	21.86	22.16	20.45	20.83	20.38	20.43
		64QAM	20.89	21.05	20.96	19.91	19.90	19.75	19.74
10M ^{Note1}	3555	QPSK	23.31	22.80	23.33	21.89	21.84	21.85	21.84
		16QAM	22.42	21.70	22.49	20.60	20.65	20.65	20.61
		64QAM	21.02	20.66	21.33	19.87	19.87	19.87	19.84
	3625	QPSK	23.18	22.76	23.02	21.98	21.91	21.77	21.93
		16QAM	22.24	21.86	22.16	20.91	20.90	20.73	20.88
		64QAM	21.11	20.90	21.04	20.03	20.03	19.85	19.97
	3695	QPSK	22.99	22.65	23.04	21.69	21.59	21.77	21.74
		16QAM	22.00	21.70	22.18	20.94	20.88	20.54	20.89
		64QAM	21.04	20.72	20.86	19.83	19.77	19.98	19.88

Conducted Power [dBm]									
RB Allocation			1 RB			MID RB			FULL RB
B.W(MHz)	Freq.(MHz)	Modulation	LOW	MID	HIGH	LOW	MID	HIGH	
5M	3552.5	QPSK	23.22	23.41	23.73	22.59	22.47	22.49	22.58
		16QAM	22.72	22.83	22.82	22.19	21.88	21.79	20.79
		64QAM	21.88	21.87	22.20	21.41	20.69	21.36	20.26
	3625	QPSK	23.49	23.40	23.24	22.38	22.36	22.04	21.76
		16QAM	22.72	22.87	22.82	21.10	21.55	20.93	20.87
		64QAM	22.05	22.25	22.04	20.82	20.67	20.49	20.05
	3697.5	QPSK	23.30	23.68	23.47	22.08	21.91	22.07	21.70
		16QAM	22.76	22.92	22.33	21.30	21.15	21.32	20.91
		64QAM	21.57	22.05	21.61	20.42	20.35	20.61	20.02

Note1: 20M, 15M, and 10MHz Bandwidth was used the total channel power as the worst data.

▪ Band 48 (UL-CA, intra-band_continuous)

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	Conducted Average [dBm]
				Size	Offset	Size	Offset	
5 MHz / 20 MHz	3553.3	3565	QPSK	1	24	1	0	23.28
				25	0	100	0	19.95
			16QAM	1	24	1	0	22.39
				25	0	100	0	19.02
			64QAM	1	24	1	0	20.54
				25	0	100	0	18.94
	3615.8	3627.5	QPSK	1	24	1	0	24.46
				25	0	100	0	21.07
			16QAM	1	24	1	0	23.59
				25	0	100	0	20.02
			64QAM	1	24	1	0	21.57
				25	0	100	0	20.05
	3678.3	3690	QPSK	1	24	1	0	22.94
				25	0	100	0	19.21
			16QAM	1	24	1	0	22.02
				25	0	100	0	18.17
			64QAM	1	24	1	0	19.77
				25	0	100	0	18.26
20 MHz / 5 MHz	3560	3571.7	QPSK	1	99	1	0	23.62
				100	0	25	0	19.95
			16QAM	1	99	1	0	22.60
				100	0	25	0	19.05
			64QAM	1	99	1	0	20.78
				100	0	25	0	18.99
	3622.5	3634.2	QPSK	1	99	1	0	24.49
				100	0	25	0	20.88
			16QAM	1	99	1	0	23.47
				100	0	25	0	19.86
			64QAM	1	99	1	0	21.54
				100	0	25	0	19.79
	3685	3696.7	QPSK	1	99	1	0	22.56
				100	0	25	0	18.98
			16QAM	1	99	1	0	17.82
				100	0	25	0	21.69
			64QAM	1	99	1	0	19.40
				100	0	25	0	17.81

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	Conducted Average [dBm]
				Size	Offset	Size	Offset	
10 MHz / 20 MHz	3555.5	3569.9	QPSK	1	49	1	0	23.08
				50	0	100	0	19.89
			16QAM	1	49	1	0	21.72
				50	0	100	0	18.91
			64QAM	1	49	1	0	20.14
				50	0	100	0	18.95
	3615.6	3630	QPSK	1	49	1	0	24.13
				50	0	100	0	20.72
			16QAM	1	49	1	0	23.01
				50	0	100	0	19.70
			64QAM	1	49	1	0	21.13
				50	0	100	0	19.78
	3675.6	3690	QPSK	1	49	1	0	22.57
				50	0	100	0	19.03
			16QAM	1	49	1	0	21.64
				50	0	100	0	17.92
			64QAM	1	49	1	0	19.12
				50	0	100	0	17.95
20 MHz / 10 MHz	3560	3574.4	QPSK	1	99	1	0	23.15
				100	0	50	0	20.00
			16QAM	1	99	1	0	22.16
				100	0	50	0	19.05
			64QAM	1	99	1	0	20.47
				100	0	50	0	19.06
	3620.1	3634.5	QPSK	1	99	1	0	24.03
				100	0	50	0	20.76
			16QAM	1	99	1	0	23.07
				100	0	50	0	19.76
			64QAM	1	99	1	0	21.10
				100	0	50	0	19.79
	3680.1	3694.5	QPSK	1	99	1	0	22.21
				100	0	50	0	19.06
			16QAM	1	99	1	0	21.39
				100	0	50	0	17.78
			64QAM	1	99	1	0	19.05
				100	0	50	0	17.91

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	Conducted Average [dBm]
				Size	Offset	Size	Offset	
15 MHz / 20 MHz	3557.8	3574.9	QPSK	1	74	1	0	22.27
				75	0	100	0	19.90
			16QAM	1	74	1	0	21.19
				75	0	100	0	18.93
			64QAM	1	74	1	0	19.27
				75	0	100	0	18.96
	3615.3	3632.4	QPSK	1	74	1	0	23.05
				75	0	100	0	20.75
			16QAM	1	74	1	0	22.15
				75	0	100	0	19.77
			64QAM	1	74	1	0	20.20
				75	0	100	0	19.77
	3672.9	3690	QPSK	1	74	1	0	21.56
				75	0	100	0	19.17
			16QAM	1	74	1	0	20.39
				75	0	100	0	18.15
			64QAM	1	74	1	0	18.35
				75	0	100	0	18.08
20 MHz / 15 MHz	3560	3577.1	QPSK	1	99	1	0	22.17
				100	0	75	0	19.90
			16QAM	1	99	1	0	21.14
				100	0	75	0	18.90
			64QAM	1	99	1	0	19.31
				100	0	75	0	18.93
	3617.6	3634.7	QPSK	1	99	1	0	22.99
				100	0	75	0	20.65
			16QAM	1	99	1	0	22.03
				100	0	75	0	19.66
			64QAM	1	99	1	0	20.22
				100	0	75	0	19.62
	3675.1	3692.2	QPSK	1	99	1	0	21.40
				100	0	75	0	19.10
			16QAM	1	99	1	0	20.46
				100	0	75	0	17.94
			64QAM	1	99	1	0	18.13
				100	0	75	0	17.91
20 MHz / 20 MHz	3560	3579.8	QPSK	1	99	1	0	22.31
				100	0	100	0	20.06
			16QAM	1	99	1	0	21.27
				100	0	100	0	19.06
			64QAM	1	99	1	0	19.49
				100	0	100	0	19.10
	3615.1	3634.9	QPSK	1	99	1	0	23.21
				100	0	100	0	20.76
			16QAM	1	99	1	0	22.26
				100	0	100	0	19.70
			64QAM	1	99	1	0	20.38
				100	0	100	0	19.68
	3670.2	3690	QPSK	1	99	1	0	21.75
				100	0	100	0	19.33
			16QAM	1	99	1	0	20.82
				100	0	100	0	18.13
			64QAM	1	99	1	0	18.38
				100	0	100	0	18.18

▪ Band 48 (UL-CA, intra-band_non-continuous)

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	PCC Conducted Average [dBm]	SCC Conducted Average [dBm]
				Size	Offset	Size	Offset		
5 MHz / 5 MHz	3552.5	3697.5	QPSK	1	0	1	24	18.59	17.79
				25	0	25	0	18.53	17.65
			16QAM	1	0	1	24	18.65	17.81
				25	0	25	0	18.61	17.69
			64QAM	1	0	1	24	18.48	17.87
				25	0	25	0	18.59	17.63
5 MHz / 10 MHz	3552.5	3695	QPSK	1	0	1	49	18.68	18.46
				25	0	50	0	18.63	18.21
			16QAM	1	0	1	49	18.73	18.49
				25	0	50	0	18.67	18.26
			64QAM	1	0	1	49	18.67	18.51
				25	0	50	0	18.69	18.27
10 MHz / 5 MHz	3555	3697.5	QPSK	1	0	1	24	19.18	17.99
				50	0	25	0	18.93	17.94
			16QAM	1	0	1	24	19.25	18.12
				50	0	25	0	18.92	17.87
			64QAM	1	0	1	24	19.17	18.06
				50	0	25	0	18.96	17.95
5 MHz / 15 MHz	3552.5	3692.5	QPSK	1	0	1	74	18.74	18.41
				25	0	75	0	18.96	18.17
			16QAM	1	0	1	74	18.80	18.43
				25	0	75	0	18.86	18.17
			64QAM	1	0	1	74	18.60	18.49
				25	0	75	0	19.02	18.10
15 MHz / 5 MHz	3557.5	3697.5	QPSK	1	0	1	24	19.51	18.06
				75	0	25	0	19.13	17.78
			16QAM	1	0	1	24	19.58	18.06
				75	0	25	0	19.05	17.89
			64QAM	1	0	1	24	19.38	18.12
				75	0	25	0	19.03	17.72
10 MHz / 10 MHz	3555	3695	QPSK	1	0	1	49	19.29	18.53
				50	0	50	0	18.96	18.11
			16QAM	1	0	1	49	19.35	18.56
				50	0	50	0	18.88	18.07
			64QAM	1	0	1	49	19.26	18.58
				50	0	50	0	18.92	18.08
5 MHz / 20 MHz	3552.5	3690	QPSK	1	0	1	99	18.94	18.68
				25	0	100	0	18.97	18.23
			16QAM	1	0	1	99	18.95	18.67
				25	0	100	0	18.91	18.18
			64QAM	1	0	1	99	18.85	18.65
				25	0	100	0	18.95	18.21

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	PCC Conducted Average [dBm]	SCC Conducted Average [dBm]
				Size	Offset	Size	Offset		
20 MHz / 5 MHz	3560	3697.5	QPSK	1	0	1	24	19.46	17.73
				100	0	25	0	19.05	17.71
			16QAM	1	0	1	24	19.54	17.90
				100	0	25	0	18.97	17.69
			64QAM	1	0	1	24	19.43	17.99
				100	0	25	0	18.96	17.66
10 MHz / 15 MHz	3555	3692.5	QPSK	1	0	1	74	19.33	18.29
				50	0	75	0	19.05	18.00
			16QAM	1	0	1	74	19.44	18.32
				50	0	75	0	18.61	17.89
			64QAM	1	0	1	74	19.23	18.27
				50	0	75	0	19.00	17.94
15 MHz / 10 MHz	3557.5	3695	QPSK	1	0	1	49	19.19	18.45
				75	0	50	0	18.65	18.07
			16QAM	1	0	1	49	19.33	18.50
				75	0	50	0	18.86	18.15
			64QAM	1	0	1	49	19.17	18.54
				75	0	50	0	18.83	18.17
10 MHz / 20 MHz	3555	3690	QPSK	1	0	1	99	19.21	18.77
				50	0	100	0	18.99	18.41
			16QAM	1	0	1	99	19.24	18.79
				50	0	100	0	18.88	18.22
			64QAM	1	0	1	99	19.12	18.78
				50	0	100	0	18.93	18.24
20 MHz / 10 MHz	3560	3695	QPSK	1	0	1	49	19.55	18.49
				100	0	50	0	18.97	18.18
			16QAM	1	0	1	49	19.60	18.51
				100	0	50	0	18.90	18.15
			64QAM	1	0	1	49	19.51	18.63
				100	0	50	0	18.92	18.19
15 MHz / 20 MHz	3557.5	3690	QPSK	1	0	1	99	18.59	17.41
				75	0	100	0	18.24	17.53
			16QAM	1	0	1	99	18.69	17.49
				75	0	100	0	18.24	17.65
			64QAM	1	0	1	99	18.56	17.49
				75	0	100	0	18.13	17.56
20 MHz / 15 MHz	3560	3692.5	QPSK	1	0	1	74	19.35	18.27
				100	0	75	0	18.85	18.14
			16QAM	1	0	1	74	19.42	18.28
				100	0	75	0	18.83	18.14
			64QAM	1	0	1	74	19.34	18.35
				100	0	75	0	18.85	18.14
20 MHz / 20 MHz	3560	3690	QPSK	1	0	1	99	19.36	18.58
				100	0	100	0	18.82	18.21
			16QAM	1	0	1	99	19.43	18.49
				100	0	100	0	18.72	18.11
			64QAM	1	0	1	99	19.37	18.51
				100	0	100	0	18.70	18.15

7.2 OCCUPIED BANDWIDTH

- Plots of the EUT's Occupied Bandwidth are shown in Clause 8.1

7.3 MAXIMUM PSD

- Conducted Maximum PSD

▪ Band 48 (Single Transmitting)

Conducted PSD [dBm/MHz]									
RB Allocation			1 RB			MID RB			FULL RB
B.W(MHz)	Freq.(MHz)	Modulation	LOW	MID	HIGH	LOW	MID	HIGH	
20M	3560	QPSK	22.839	22.097	22.943	12.959	12.693	13.496	10.490
		16QAM	21.611	21.748	22.421	11.996	11.633	12.140	9.125
		64QAM	20.758	20.279	20.908	10.606	10.685	11.152	8.421
	3625	QPSK	22.164	21.358	20.965	12.006	12.028	11.795	8.881
		16QAM	21.291	20.497	21.327	10.613	11.264	11.377	7.907
		64QAM	19.403	18.463	18.941	10.707	10.178	9.918	7.440
	3690	QPSK	20.989	21.221	21.587	11.761	11.434	11.569	8.677
		16QAM	20.505	20.111	20.553	10.319	10.794	10.372	7.866
		64QAM	19.338	19.000	19.422	9.490	9.377	9.273	6.726
15M	3557.5	QPSK	22.625	22.102	23.102	13.934	14.530	14.051	11.235
		16QAM	21.292	21.818	21.392	12.631	12.672	13.509	9.911
		64QAM	20.877	20.049	20.740	12.158	11.967	12.481	8.908
	3625	QPSK	21.949	21.298	21.403	13.268	13.069	12.943	9.847
		16QAM	21.001	20.863	20.895	11.757	11.686	12.418	9.214
		64QAM	19.610	19.318	19.456	11.469	11.171	11.334	8.091
	3692.5	QPSK	20.662	20.936	21.706	12.669	12.331	12.604	9.569
		16QAM	20.071	20.138	20.216	10.906	11.761	11.693	8.452
		64QAM	19.098	19.056	19.257	10.929	10.689	10.349	7.921
10M	3555	QPSK	22.635	22.172	22.655	15.480	15.613	15.410	12.895
		16QAM	21.852	20.997	21.514	14.056	14.222	13.815	11.848
		64QAM	21.018	20.542	20.579	13.279	13.609	13.386	10.553
	3625	QPSK	21.178	20.984	21.722	14.839	14.466	14.155	11.863
		16QAM	20.525	20.345	20.757	13.351	13.380	13.567	11.066
		64QAM	19.499	19.478	19.450	12.948	12.055	12.467	10.136
	3695	QPSK	20.760	20.359	21.648	13.995	13.910	13.780	11.191
		16QAM	20.217	19.838	20.888	13.827	13.238	13.489	10.523
		64QAM	19.374	18.997	19.401	12.574	12.030	12.318	9.547
5M	3552.5	QPSK	22.130	22.058	22.037	18.449	18.358	18.245	15.246
		16QAM	22.039	21.339	21.112	17.943	17.541	17.161	14.303
		64QAM	20.452	20.250	20.496	17.110	16.579	15.909	13.505
	3625	QPSK	20.917	21.260	20.924	17.382	17.015	17.214	14.861
		16QAM	20.255	20.309	20.262	16.949	16.945	16.295	13.792
		64QAM	19.531	19.756	19.232	15.848	15.280	15.175	12.662
	3697.5	QPSK	20.802	20.995	20.665	16.735	17.082	16.546	13.812
		16QAM	19.667	20.531	19.714	16.149	16.540	15.847	13.446
		64QAM	18.801	19.817	19.039	15.409	15.465	15.036	12.587

Note1: The above results are obtained by adding the measured average value to the Duty compensation value.

Duty compensation value = $10 \times \log(1 / \text{duty cycle}) = 10 \times \log(4.995 / 1.995) = \underline{\underline{3.986 \text{ dB}}}$

▪ Band 48 (UL-CA, intra-band_continuous)

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	Conducted PSD [dBm/MHz]
				Size	Offset	Size	Offset	
5 MHz / 20 MHz	3553.3	3565	QPSK	1	24	1	0	9.30
				25	0	100	0	5.97
			16QAM	1	24	1	0	8.41
				25	0	100	0	5.04
			64QAM	1	24	1	0	6.57
				25	0	100	0	4.96
	3615.8	3627.5	QPSK	1	24	1	0	10.48
				25	0	100	0	7.09
			16QAM	1	24	1	0	9.62
				25	0	100	0	6.04
			64QAM	1	24	1	0	7.59
				25	0	100	0	6.07
	3678.3	3690	QPSK	1	24	1	0	8.96
				25	0	100	0	5.23
			16QAM	1	24	1	0	8.04
				25	0	100	0	4.19
			64QAM	1	24	1	0	5.79
				25	0	100	0	4.29
20 MHz / 5 MHz	3560	3571.7	QPSK	1	99	1	0	9.64
				100	0	25	0	5.97
			16QAM	1	99	1	0	8.62
				100	0	25	0	5.07
			64QAM	1	99	1	0	6.80
				100	0	25	0	5.01
	3622.5	3634.2	QPSK	1	99	1	0	10.51
				100	0	25	0	6.90
			16QAM	1	99	1	0	9.49
				100	0	25	0	5.88
			64QAM	1	99	1	0	7.56
				100	0	25	0	5.82
	3685	3696.7	QPSK	1	99	1	0	8.58
				100	0	25	0	5.00
			16QAM	1	99	1	0	3.84
				100	0	25	0	7.71
			64QAM	1	99	1	0	5.42
				100	0	25	0	3.83

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	Conducted PSD [dBm/MHz]
				Size	Offset	Size	Offset	
10 MHz / 20 MHz	3555.5	3569.9	QPSK	1	49	1	0	8.31
				50	0	100	0	5.12
			16QAM	1	49	1	0	6.95
				50	0	100	0	4.14
			64QAM	1	49	1	0	5.37
				50	0	100	0	4.18
	3615.6	3630	QPSK	1	49	1	0	9.35
				50	0	100	0	5.95
			16QAM	1	49	1	0	8.24
				50	0	100	0	4.93
			64QAM	1	49	1	0	6.35
				50	0	100	0	5.01
	3675.6	3690	QPSK	1	49	1	0	7.80
				50	0	100	0	4.26
			16QAM	1	49	1	0	6.87
				50	0	100	0	3.15
			64QAM	1	49	1	0	4.35
				50	0	100	0	3.18
20 MHz / 10 MHz	3560	3574.4	QPSK	1	99	1	0	8.31
				100	0	50	0	5.12
			16QAM	1	99	1	0	6.95
				100	0	50	0	4.14
			64QAM	1	99	1	0	5.37
				100	0	50	0	4.18
	3620.1	3634.5	QPSK	1	99	1	0	9.35
				100	0	50	0	5.95
			16QAM	1	99	1	0	8.24
				100	0	50	0	4.93
			64QAM	1	99	1	0	6.35
				100	0	50	0	5.01
	3680.1	3694.5	QPSK	1	99	1	0	7.80
				100	0	50	0	4.26
			16QAM	1	99	1	0	6.87
				100	0	50	0	3.15
			64QAM	1	99	1	0	4.35
				100	0	50	0	3.18

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	Conducted PSD [dBm/MHz]
				Size	Offset	Size	Offset	
15 MHz / 20 MHz	3557.8	3574.9	QPSK	1	74	1	0	8.38
				75	0	100	0	5.23
			16QAM	1	74	1	0	7.39
				75	0	100	0	4.28
			64QAM	1	74	1	0	5.69
				75	0	100	0	4.29
	3615.3	3632.4	QPSK	1	74	1	0	9.26
				75	0	100	0	5.99
			16QAM	1	74	1	0	8.30
				75	0	100	0	4.99
			64QAM	1	74	1	0	6.33
				75	0	100	0	5.02
	3672.9	3690	QPSK	1	74	1	0	7.44
				75	0	100	0	4.29
			16QAM	1	74	1	0	6.62
				75	0	100	0	3.01
			64QAM	1	74	1	0	4.28
				75	0	100	0	3.14
20 MHz / 15 MHz	3560	3577.1	QPSK	1	99	1	0	6.83
				100	0	75	0	4.46
			16QAM	1	99	1	0	5.75
				100	0	75	0	3.49
			64QAM	1	99	1	0	3.83
				100	0	75	0	3.51
	3617.6	3634.7	QPSK	1	99	1	0	7.61
				100	0	75	0	5.31
			16QAM	1	99	1	0	6.71
				100	0	75	0	4.33
			64QAM	1	99	1	0	4.76
				100	0	75	0	4.33
	3675.1	3692.2	QPSK	1	99	1	0	6.12
				100	0	75	0	3.73
			16QAM	1	99	1	0	4.95
				100	0	75	0	2.71
			64QAM	1	99	1	0	2.91
				100	0	75	0	2.64
20 MHz / 20 MHz	3560	3579.8	QPSK	1	99	1	0	6.73
				100	0	100	0	4.46
			16QAM	1	99	1	0	5.70
				100	0	100	0	3.46
			64QAM	1	99	1	0	3.87
				100	0	100	0	3.49
	3615.1	3634.9	QPSK	1	99	1	0	7.55
				100	0	100	0	5.21
			16QAM	1	99	1	0	6.59
				100	0	100	0	4.22
			64QAM	1	99	1	0	4.78
				100	0	100	0	4.18
	3670.2	3690	QPSK	1	99	1	0	5.96
				100	0	100	0	3.65
			16QAM	1	99	1	0	5.02
				100	0	100	0	2.50
			64QAM	1	99	1	0	2.69
				100	0	100	0	2.47

▪ Band 48 (UL-CA, intra-band_non-continuous)

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	PCC Conducted [dBm/10MHz]	SCC Conducted [dBm/10MHz]	Conducted PSD [dBm/MHz]
				Size	Offset	Size	Offset			
5 MHz / 5 MHz	3552.5	3697.5	QPSK	1	0	1	24	11.60	10.80	14.23
				25	0	25	0	11.54	10.66	14.13
			16QAM	1	0	1	24	11.66	10.82	14.27
				25	0	25	0	11.62	10.70	14.19
			64QAM	1	0	1	24	11.49	10.88	14.21
				25	0	25	0	11.60	10.64	14.16
5 MHz / 10 MHz	3552.5	3695	QPSK	1	0	1	49	11.69	8.46	13.38
				25	0	50	0	11.64	8.21	13.27
			16QAM	1	0	1	49	11.74	8.49	13.42
				25	0	50	0	11.68	8.26	13.31
			64QAM	1	0	1	49	11.68	8.51	13.39
				25	0	50	0	11.70	8.27	13.33
10 MHz / 5 MHz	3555	3697.5	QPSK	1	0	1	24	9.18	11.00	13.19
				50	0	25	0	8.93	10.95	13.07
			16QAM	1	0	1	24	9.25	11.13	13.30
				50	0	25	0	8.92	10.88	13.02
			64QAM	1	0	1	24	9.17	11.07	13.23
				50	0	25	0	8.96	10.96	13.08
5 MHz / 15 MHz	3552.5	3692.5	QPSK	1	0	1	74	11.75	6.65	12.92
				25	0	75	0	11.97	6.41	13.04
			16QAM	1	0	1	74	11.81	6.67	12.97
				25	0	75	0	11.87	6.41	12.96
			64QAM	1	0	1	74	11.61	6.72	12.83
				25	0	75	0	12.03	6.45	13.09
15 MHz / 5 MHz	3557.5	3697.5	QPSK	1	0	1	24	7.75	11.07	12.73
				75	0	25	0	7.37	10.79	12.42
			16QAM	1	0	1	24	7.82	11.07	12.75
				75	0	25	0	7.29	10.90	12.47
			64QAM	1	0	1	24	7.62	11.13	12.73
				75	0	25	0	7.27	10.73	12.35
10 MHz / 10 MHz	3555	3695	QPSK	1	0	1	49	9.29	8.53	11.94
				50	0	50	0	8.96	8.11	11.57
			16QAM	1	0	1	49	9.35	8.56	11.98
				50	0	50	0	8.88	8.07	11.50
			64QAM	1	0	1	49	9.26	8.58	11.94
				50	0	50	0	8.92	8.08	11.53
5 MHz / 20 MHz	3552.5	3690	QPSK	1	0	1	99	11.95	5.67	12.87
				25	0	100	0	11.98	5.22	12.81
			16QAM	1	0	1	99	11.96	5.66	12.87
				25	0	100	0	11.92	5.17	12.75
			64QAM	1	0	1	99	11.86	5.64	12.79
				25	0	100	0	11.96	5.20	12.79

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	Modulation	PCC RB	PCC RB	SCC RB	SCC RB	PCC Conducted [dBm/10MHz]	SCC Conducted [dBm/10MHz]	Conducted PSD [dBm/MHz]
				Size	Offset	Size	Offset			
20 MHz / 5 MHz	3560	3697.5	QPSK	1	0	1	24	6.45	10.74	12.11
				100	0	25	0	6.04	10.72	11.99
			16QAM	1	0	1	24	6.53	10.91	12.26
				100	0	25	0	5.96	10.70	11.96
			64QAM	1	0	1	24	6.42	11.00	12.30
				100	0	25	0	5.95	10.67	11.93
10 MHz / 15 MHz	3555	3692.5	QPSK	1	0	1	74	9.33	6.53	11.16
				50	0	75	0	9.05	6.24	10.88
			16QAM	1	0	1	74	9.44	6.56	11.24
				50	0	75	0	8.61	6.13	10.55
			64QAM	1	0	1	74	9.23	6.51	11.09
				50	0	75	0	9.00	6.18	10.83
15 MHz / 10 MHz	3557.5	3695	QPSK	1	0	1	49	7.43	8.45	10.98
				75	0	50	0	6.89	8.07	10.53
			16QAM	1	0	1	49	7.57	8.50	11.07
				75	0	50	0	7.10	8.15	10.67
			64QAM	1	0	1	49	7.41	8.54	11.02
				75	0	50	0	7.07	8.17	10.67
10 MHz / 20 MHz	3555	3690	QPSK	1	0	1	99	9.21	5.76	10.83
				50	0	100	0	8.99	5.40	10.57
			16QAM	1	0	1	99	9.24	5.78	10.86
				50	0	100	0	8.88	5.21	10.43
			64QAM	1	0	1	99	9.12	5.77	10.77
				50	0	100	0	8.93	5.23	10.47
20 MHz / 10 MHz	3560	3695	QPSK	1	0	1	49	6.54	8.49	10.63
				100	0	50	0	5.96	8.18	10.22
			16QAM	1	0	1	49	6.59	8.51	10.67
				100	0	50	0	5.89	8.15	10.18
			64QAM	1	0	1	49	6.50	8.63	10.70
				100	0	50	0	5.91	8.19	10.21
15 MHz / 20 MHz	3557.5	3690	QPSK	1	0	1	99	6.83	4.40	8.79
				75	0	100	0	6.48	4.51	8.62
			16QAM	1	0	1	99	6.92	4.48	8.88
				75	0	100	0	6.48	4.64	8.67
			64QAM	1	0	1	99	6.80	4.48	8.80
				75	0	100	0	6.37	4.55	8.56
20 MHz / 15 MHz	3560	3692.5	QPSK	1	0	1	74	6.34	6.50	9.43
				100	0	75	0	5.84	6.37	9.12
			16QAM	1	0	1	74	6.41	6.52	9.48
				100	0	75	0	5.82	6.38	9.12
			64QAM	1	0	1	74	6.33	6.59	9.47
				100	0	75	0	5.83	6.38	9.12
20 MHz / 20 MHz	3560	3690	QPSK	1	0	1	99	6.35	5.57	8.99
				100	0	100	0	5.81	5.20	8.53
			16QAM	1	0	1	99	6.42	5.48	8.99
				100	0	100	0	5.71	5.10	8.43
			64QAM	1	0	1	99	6.36	5.50	8.96
				100	0	100	0	5.69	5.14	8.43

7.4 PEAK TO AVERAGE RATIO (Conducted)

- Plots of the EUT's Peak to Average Ratio are shown in Clause 8.3

7.5 BAND EDEG EMISSIONS (Conducted)

- Plots of the EUT's Band Edge Emissions are shown in Clause 8.4

7.6 SPURIOUS AND HARMONICS EMISSIONS (Conducted)

- Plots of the EUT's Spurious Emissions are shown in Clause 8.5

7.6 MAXIMUM EIRP

▪ Band 48 (Single Transmitting)

Channel Bandwidth (MHz)	Test Frequency (MHz)	Test Mode	RB Size/ Offset	Ant Pol (H/V)	Level(dBm) @ Ant Terminal	TX Ant Gain (dBi)	EIRP (dBm)	EIRP (W)
20M	3560	QPSK	1/50	V	25.30	8.33	33.63	2.307
		16QAM	1/50	V	23.69	8.33	32.02	1.592
		64QAM	1/50	V	22.39	8.33	30.72	1.180
	3625	QPSK	1/50	V	26.63	8.36	34.99	3.155
		16QAM	1/50	V	25.18	8.36	33.54	2.259
		64QAM	1/50	V	23.35	8.36	31.71	1.483
	3690	QPSK	1/50	V	28.09	8.38	36.47	4.436
		16QAM	1/50	V	26.48	8.38	34.86	3.062
		64QAM	1/50	V	24.81	8.38	33.19	2.084
15M	3557.5	QPSK	1/36	V	25.84	8.32	34.16	2.606
		16QAM	1/36	V	24.44	8.32	32.76	1.888
		64QAM	1/36	V	23.10	8.32	31.42	1.387
	3625	QPSK	1/36	V	27.28	8.36	35.64	3.664
		16QAM	1/36	V	25.76	8.36	34.12	2.582
		64QAM	1/36	V	24.28	8.36	32.64	1.837
	3692.5	QPSK	1/36	V	28.08	8.38	36.46	4.426
		16QAM	1/36	V	26.64	8.38	35.02	3.177
		64QAM	1/36	V	25.16	8.38	33.54	2.259
10M	3555	QPSK	1/0	V	23.23	8.32	31.55	1.429
		16QAM	1/0	V	21.79	8.32	30.11	1.026
		64QAM	1/0	V	20.55	8.32	28.87	0.771
	3625	QPSK	1/0	V	25.38	8.36	33.74	2.366
		16QAM	1/0	V	24.02	8.36	32.38	1.730
		64QAM	1/0	V	22.83	8.36	31.19	1.315
	3695	QPSK	1/0	V	26.20	8.38	34.58	2.871
		16QAM	1/0	V	24.77	8.38	33.15	2.065
		64QAM	1/0	V	23.43	8.38	31.81	1.517
5M	3552.5	QPSK	1/12	V	24.03	8.32	32.35	1.718
		16QAM	1/12	V	22.57	8.32	30.89	1.227
		64QAM	1/12	V	21.31	8.32	29.63	0.918
	3625	QPSK	1/12	V	25.70	8.36	34.06	2.547
		16QAM	1/12	V	24.35	8.36	32.71	1.866
		64QAM	1/12	V	22.93	8.36	31.29	1.346
	3697.5	QPSK	1/12	V	26.78	8.38	35.16	3.281
		16QAM	1/12	V	25.36	8.38	33.74	2.366
		64QAM	1/12	V	24.03	8.38	32.41	1.742

Note: This device was tested under all bandwidths, modulations and RB configurations and the worst case data are reported in the table above.

▪ Band 48 (UL-CA, intra-band_continuous)

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	PCC Modulation	SCC Modulation	PCC RB	PCC RB	SCC RB	SCC RB	EIRP [dBm]
					Size	Offset	Size	Offset	
5 MHz + 20 MHz	3615.8	3627.5	QPSK	QPSK	1	24	1	0	33.31
5 MHz + 20 MHz	3615.8	3627.5	16QAM	16QAM	1	24	1	0	32.42
5 MHz + 20 MHz	3615.8	3627.5	64QAM	64QAM	1	24	1	0	30.57
20 MHz + 5 MHz	3622.5	3634.2	QPSK	QPSK	1	99	1	0	33.76
20 MHz + 5 MHz	3622.5	3634.2	16QAM	16QAM	1	99	1	0	32.65
20 MHz + 5 MHz	3622.5	3634.2	64QAM	64QAM	1	99	1	0	30.48
10 MHz + 20 MHz	3615.6	3630	QPSK	QPSK	1	49	1	0	33.75
10 MHz + 20 MHz	3615.6	3630	16QAM	16QAM	1	49	1	0	32.64
10 MHz + 20 MHz	3615.6	3630	64QAM	64QAM	1	49	1	0	30.59
20 MHz + 10 MHz	3620.1	3634.5	QPSK	QPSK	1	99	1	0	32.86
20 MHz + 10 MHz	3620.1	3634.5	16QAM	16QAM	1	99	1	0	31.92
20 MHz + 10 MHz	3620.1	3634.5	64QAM	64QAM	1	99	1	0	30.27
15 MHz + 20 MHz	3615.3	3632.4	QPSK	QPSK	1	74	1	0	33.28
15 MHz + 20 MHz	3615.3	3632.4	16QAM	16QAM	1	74	1	0	32.16
15 MHz + 20 MHz	3615.3	3632.4	64QAM	64QAM	1	74	1	0	30.51
20 MHz + 15 MHz	3617.6	3634.7	QPSK	QPSK	1	99	1	0	34.30
20 MHz + 15 MHz	3617.6	3634.7	16QAM	16QAM	1	99	1	0	32.46
20 MHz + 15 MHz	3617.6	3634.7	64QAM	64QAM	1	99	1	0	30.53
20 MHz + 20 MHz	3615.1	3634.9	QPSK	QPSK	1	99	1	0	33.46
20 MHz + 20 MHz	3615.1	3634.9	16QAM	16QAM	1	99	1	0	32.38
20 MHz + 20 MHz	3615.1	3634.9	64QAM	64QAM	1	99	1	0	30.70

Note 1: The EIRP was tested in the worst case based on Conducted Power.

▪ Band 48 (UL-CA, intra-band_non-continuous)

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	PCC Modulation	SCC Modulation	PCC RB	PCC RB	SCC RB	SCC RB	PCC EIRP [dBm]	SCC EIRP [dBm]
					Size	Offset	Size	Offset		
5 MHz / 5 MHz	3552.5	3697.5	QPSK	QPSK	1	0	1	24	29.65	31.35
5 MHz / 5 MHz	3552.5	3697.5	16QAM	16QAM	1	0	1	24	29.86	31.69
5 MHz / 5 MHz	3552.5	3697.5	64QAM	64QAM	1	0	1	24	29.44	31.44
5 MHz / 10 MHz	3552.5	3695	QPSK	QPSK	1	0	1	49	28.90	32.87
5 MHz / 10 MHz	3552.5	3695	16QAM	16QAM	1	0	1	49	29.91	32.60
5 MHz / 10 MHz	3552.5	3695	64QAM	64QAM	1	0	1	49	30.04	32.36
10 MHz / 5 MHz	3555	3697.5	QPSK	QPSK	1	0	1	24	30.86	31.54
10 MHz / 5 MHz	3555	3697.5	16QAM	16QAM	1	0	1	24	31.08	31.61
10 MHz / 5 MHz	3555	3697.5	64QAM	64QAM	1	0	1	24	30.93	31.38
5 MHz / 15 MHz	3552.5	3692.5	QPSK	QPSK	1	0	1	74	29.51	32.42
5 MHz / 15 MHz	3552.5	3692.5	16QAM	16QAM	1	0	1	74	29.43	32.61
5 MHz / 15 MHz	3552.5	3692.5	64QAM	64QAM	1	0	1	74	29.27	32.55
15 MHz / 5 MHz	3557.5	3697.5	QPSK	QPSK	1	0	1	24	30.09	31.46
15 MHz / 5 MHz	3557.5	3697.5	16QAM	16QAM	1	0	1	24	30.32	31.34
15 MHz / 5 MHz	3557.5	3697.5	64QAM	64QAM	1	0	1	24	30.17	31.38
10 MHz / 10 MHz	3555	3695	QPSK	QPSK	1	0	1	49	31.25	32.26
10 MHz / 10 MHz	3555	3695	16QAM	16QAM	1	0	1	49	31.03	32.51
10 MHz / 10 MHz	3555	3695	64QAM	64QAM	1	0	1	49	30.97	32.36
5 MHz / 20 MHz	3552.5	3690	QPSK	QPSK	1	0	1	99	28.76	33.86
5 MHz / 20 MHz	3552.5	3690	16QAM	16QAM	1	0	1	99	29.18	34.19
5 MHz / 20 MHz	3552.5	3690	64QAM	64QAM	1	0	1	99	29.32	34.02
20 MHz / 5 MHz	3560	3697.5	QPSK	QPSK	1	0	1	24	29.18	32.45
20 MHz / 5 MHz	3560	3697.5	16QAM	16QAM	1	0	1	24	29.30	32.46
20 MHz / 5 MHz	3560	3697.5	64QAM	64QAM	1	0	1	24	29.54	32.18
10 MHz / 15 MHz	3555	3692.5	QPSK	QPSK	1	0	1	74	29.89	31.43
10 MHz / 15 MHz	3555	3692.5	16QAM	16QAM	1	0	1	74	30.30	31.19
10 MHz / 15 MHz	3555	3692.5	64QAM	64QAM	1	0	1	74	29.67	30.88
15 MHz / 10 MHz	3557.5	3695	QPSK	QPSK	1	0	1	49	29.65	31.84
15 MHz / 10 MHz	3557.5	3695	16QAM	16QAM	1	0	1	49	29.62	32.07
15 MHz / 10 MHz	3557.5	3695	64QAM	64QAM	1	0	1	49	29.73	32.00
10 MHz / 20 MHz	3555	3690	QPSK	QPSK	1	0	1	99	29.54	33.86
10 MHz / 20 MHz	3555	3690	16QAM	16QAM	1	0	1	99	29.77	34.07
10 MHz / 20 MHz	3555	3690	64QAM	64QAM	1	0	1	99	29.85	33.70
20 MHz / 10 MHz	3560	3695	QPSK	QPSK	1	0	1	49	29.97	31.99
20 MHz / 10 MHz	3560	3695	16QAM	16QAM	1	0	1	49	29.63	32.04
20 MHz / 10 MHz	3560	3695	64QAM	64QAM	1	0	1	49	29.82	32.19

B.W(MHz)	PCC Frequency [MHz]	SCC Frequency [MHz]	PCC Modulation	SCC Modulation	PCC RB	PCC RB	SCC RB	SCC RB	PCC EIRP [dBm]	SCC EIRP [dBm]
					Size	Offset	Size	Offset		
15 MHz / 20 MHz	3557.5	3690	QPSK	QPSK	1	0	1	99	29.74	34.06
15 MHz / 20 MHz	3557.5	3690	16QAM	16QAM	1	0	1	99	29.83	34.29
15 MHz / 20 MHz	3557.5	3690	64QAM	64QAM	1	0	1	99	29.81	34.17
20 MHz / 15 MHz	3560	3692.5	QPSK	QPSK	1	0	1	74	30.65	32.42
20 MHz / 15 MHz	3560	3692.5	16QAM	16QAM	1	0	1	74	30.72	32.39
20 MHz / 15 MHz	3560	3692.5	64QAM	64QAM	1	0	1	74	30.86	32.12
20 MHz / 20 MHz	3560	3690	QPSK	QPSK	1	0	1	99	32.19	33.57
20 MHz / 20 MHz	3560	3690	16QAM	16QAM	1	0	1	99	31.86	33.48
20 MHz / 20 MHz	3560	3690	64QAM	64QAM	1	0	1	99	32.08	33.29

Note 1: The EIRP was tested in the worst case based on Conducted Power.

7.7 UNDESIRABLE EMISSIONS (Radiated)

B.W (MHz)	Test Freq. (MHz)	RB Size/ Offset	Test Mode	Freq.(MHz)	Ant Pol (H/V)	Level(dBm) @ Ant Terminal	TX Ant Gain(dBi)	Result (dBm)	Limit (dBm)	Margin (dB)
20	3560	1/50	QPSK	7102.47	V	-57.83	11.44	-46.39	-40.00	6.39
			16QAM	7102.14	V	-58.38	11.44	-46.94	-40.00	6.94
			64QAM	7102.90	V	-57.61	11.44	-46.17	-40.00	6.17
	3625	1/50	QPSK	7232.42	V	-55.42	11.51	-43.91	-40.00	3.91
			16QAM	7232.05	V	-56.01	11.51	-44.50	-40.00	4.50
			64QAM	7232.14	V	-55.86	11.51	-44.35	-40.00	4.35
	3690	1/50	QPSK	7362.32	V	-56.17	11.66	-44.51	-40.00	4.51
			16QAM	7362.24	V	-56.79	11.66	-45.13	-40.00	5.13
			64QAM	7362.04	V	-56.28	11.66	-44.62	-40.00	4.62
15	3557.5	1/36	QPSK	7102.14	V	-57.77	11.44	-46.33	-40.00	6.33
			16QAM	7101.31	V	-57.96	11.44	-46.52	-40.00	6.52
			64QAM	7101.61	V	-58.09	11.44	-46.65	-40.00	6.65
	3625	1/36	QPSK	7236.91	V	-56.34	11.51	-44.83	-40.00	4.83
			16QAM	7236.54	V	-57.07	11.51	-45.56	-40.00	5.56
			64QAM	7236.79	V	-57.04	11.51	-45.53	-40.00	5.53
	3692.5	1/36	QPSK	7372.05	V	-57.22	11.67	-45.55	-40.00	5.55
			16QAM	7371.79	V	-56.50	11.67	-44.83	-40.00	4.83
			64QAM	7371.51	V	-57.32	11.67	-45.65	-40.00	5.65
10	3555	1/0	QPSK	7101.62	V	-57.93	11.44	-46.49	-40.00	6.49
			16QAM	7101.66	V	-58.31	11.44	-46.87	-40.00	6.87
			64QAM	7101.68	V	-58.55	11.44	-47.11	-40.00	7.11
	3625	1/0	QPSK	7238.60	V	-56.54	11.52	-45.02	-40.00	5.02
			16QAM	7239.09	V	-56.56	11.52	-45.04	-40.00	5.04
			64QAM	7238.86	V	-56.35	11.52	-44.83	-40.00	4.83
	3695	1/0	QPSK	7378.83	V	-57.00	11.68	-45.32	-40.00	5.32
			16QAM	7378.98	V	-57.53	11.68	-45.85	-40.00	5.85
			64QAM	7378.54	V	-57.42	11.68	-45.74	-40.00	5.74
5	3552.5	1/12	QPSK	7104.96	V	-58.16	11.45	-46.71	-40.00	6.71
			16QAM	7104.94	V	-57.45	11.45	-46.00	-40.00	6.00
			64QAM	7104.28	V	-57.58	11.45	-46.13	-40.00	6.13
	3625	1/12	QPSK	7250.07	V	-56.11	11.53	-44.58	-40.00	4.58
			16QAM	7249.67	V	-56.11	11.53	-44.58	-40.00	4.58
			64QAM	7250.25	V	-59.04	11.53	-47.51	-40.00	7.51
	3697.5	1/12	QPSK	7394.97	V	-55.88	11.69	-44.19	-40.00	4.19
			16QAM	7395.17	V	-56.34	11.70	-44.64	-40.00	4.64
			64QAM	7394.65	V	-58.16	11.69	-46.47	-40.00	6.47

Note 1: Limit = -40dBm/MHz

Note 2: This device was tested under all bandwidths, modulations and RB configurations and the worst case data are reported in the table above.

Note 3: The frequency spectrum is examined from 9 kHz to the 10th harmonic of the fundamental frequency of the transmitter. No other spurious and harmonic emissions were reported greater than listed emissions above table.

7.8 FREQUENCY STABILITY

OPERATING FREQUENCY : 3625 MHz
 REFERENCE VOLTAGE : 48 VDC
 LIMIT : Within the authorized frequency band

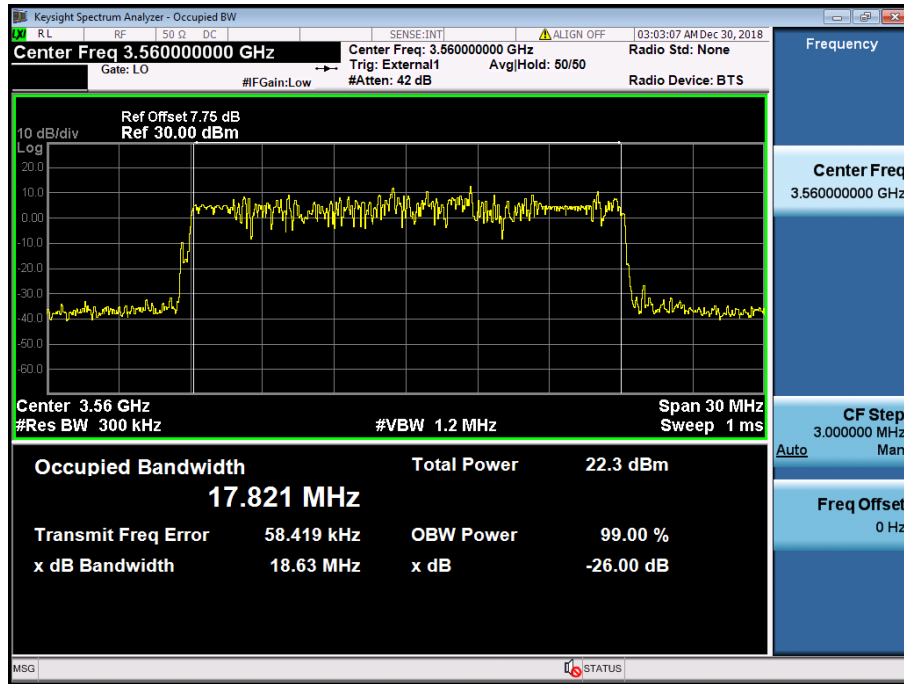
VOLTAGE (%)	POWER (V DC)	TEMP (°C)	FREQUENCY (Hz)	FREQ.Dev (Hz)	Deviation	
					(ppm)	(%)
100%	48	+20(Ref)	3,624,999,987	-13	-0.0036	-0.000000359
100%		-30	3,625,000,043	43	0.0117	0.000001172
100%		-20	3,625,000,033	33	0.0091	0.000000910
100%		-10	3,625,000,017	17	0.0047	0.000000469
100%		0	3,625,000,016	16	0.0044	0.000000441
100%		+10	3,625,000,003	3	0.0008	0.000000083
100%		+20	3,624,999,987	-13	-0.0036	-0.000000359
100%		+30	3,624,999,982	-18	-0.0050	-0.000000497
100%		+40	3,624,999,976	-24	-0.0066	-0.000000662
100%		+50	3,624,999,979	-21	-0.0058	-0.000000579
115%	40.80	+20	3,624,999,992	-8	-0.0022	-0.000000221
85%	55.20	+20	3,624,999,989	-11	-0.0030	-0.000000303

8. TEST PLOTS

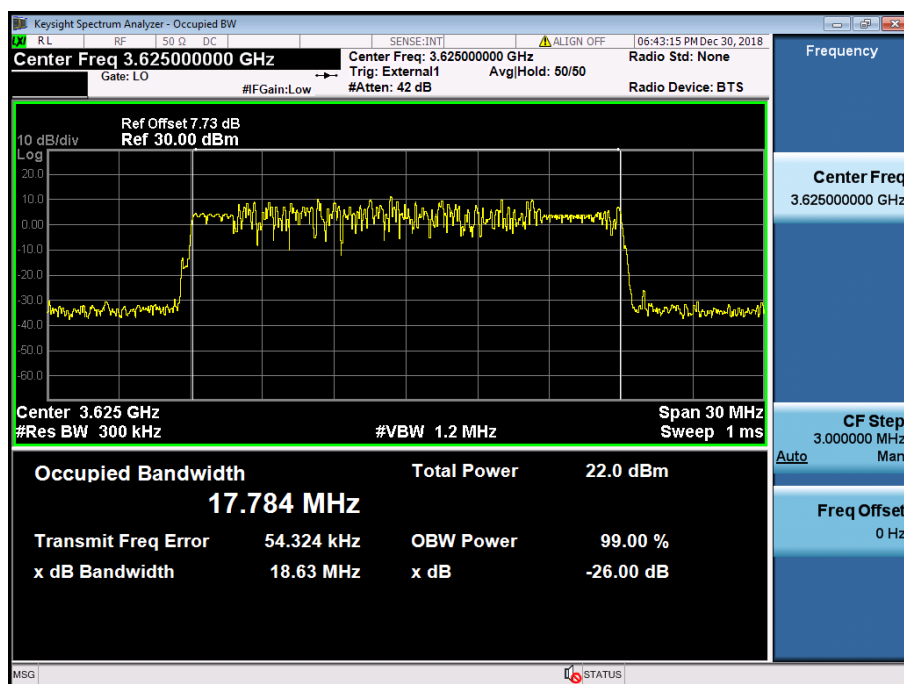
Note: All bandwidths, RB configurations, and modulations were investigated.
The worst case test results are reported below.

8.1 OCCUPIED BANDWIDTH

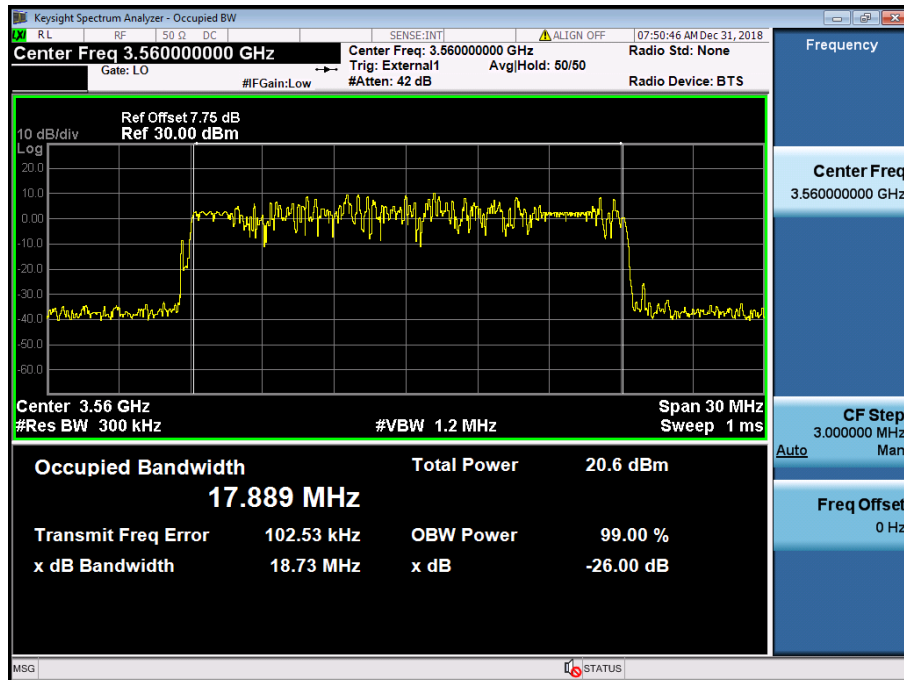
8.1.1 LTE Band 48 (Single Transmitting)



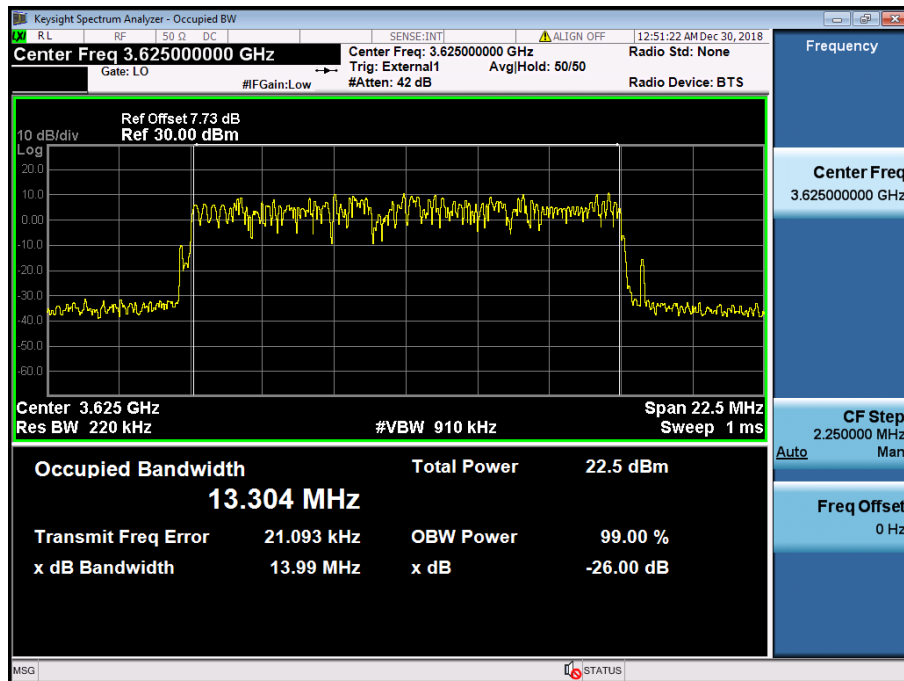
LTE Band 48 / 20 MHz / QPSK - RB Size 100



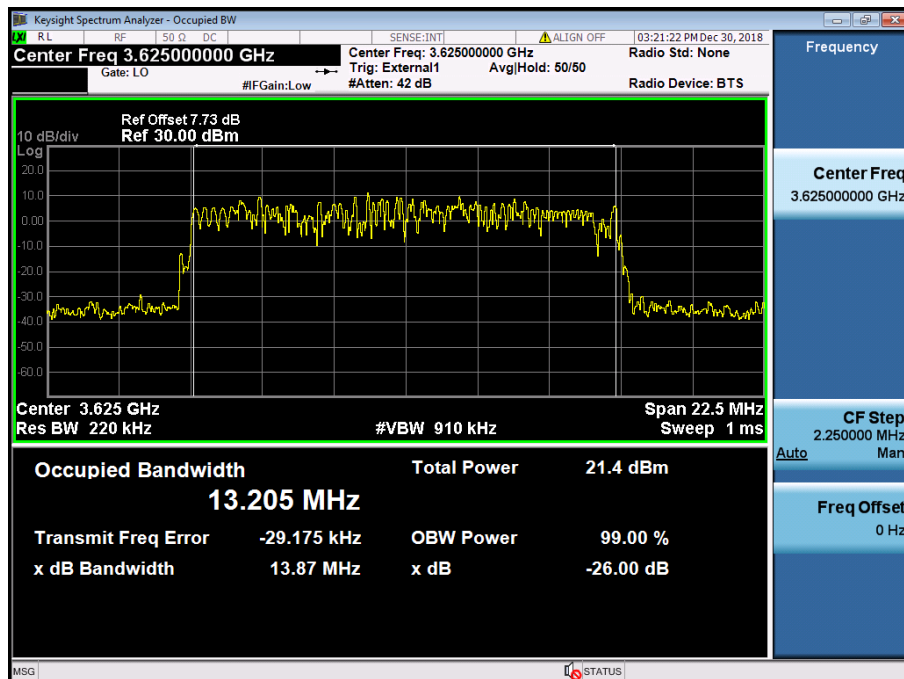
LTE Band 48 / 20 MHz / 16QAM - RB Size 100



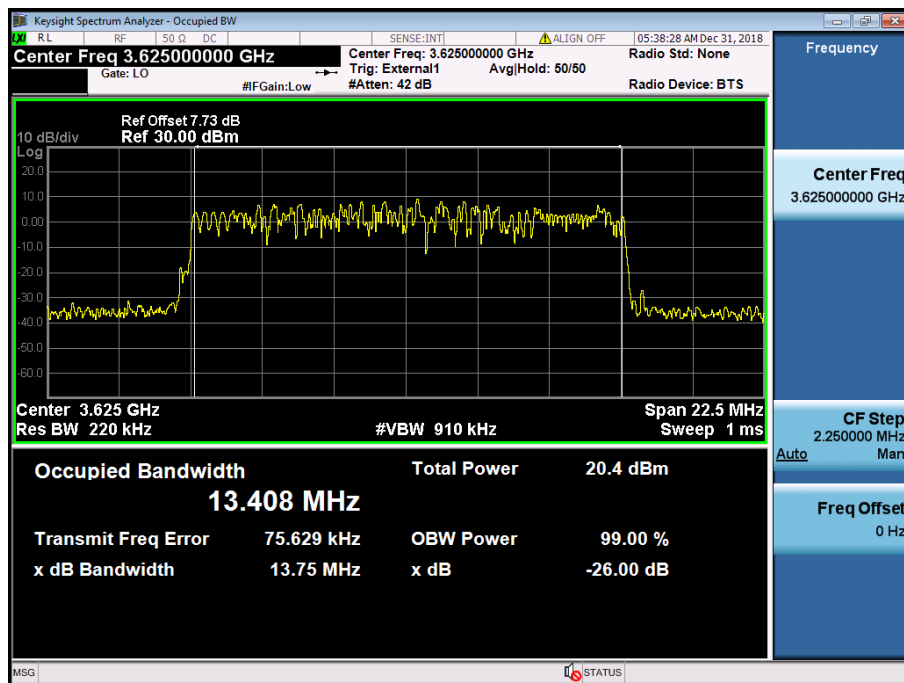
LTE Band 48 / 20 MHz / 64QAM - RB Size 100



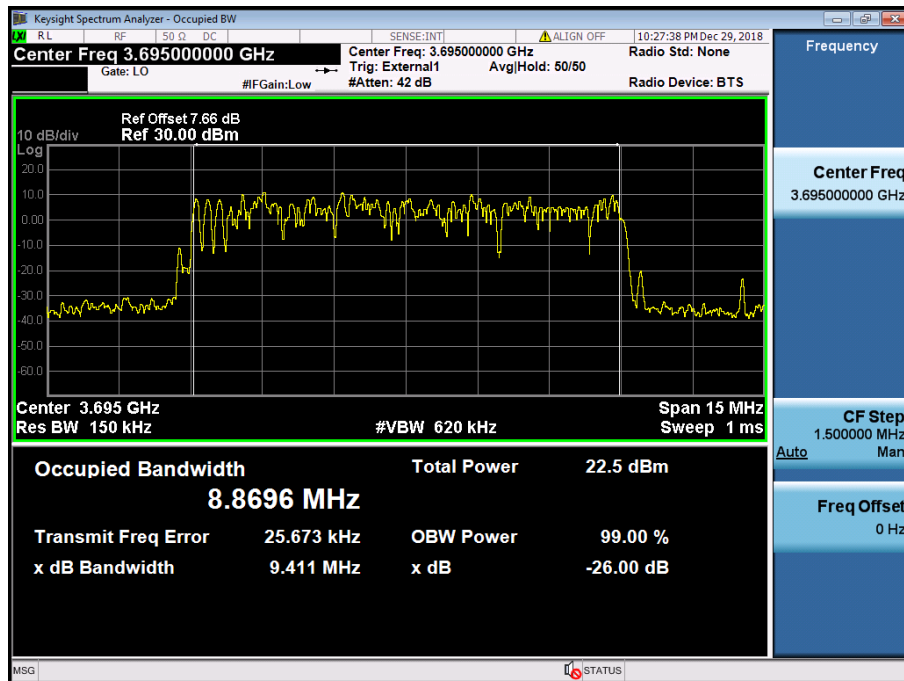
LTE Band 48 / 15 MHz / QPSK - RB Size 75



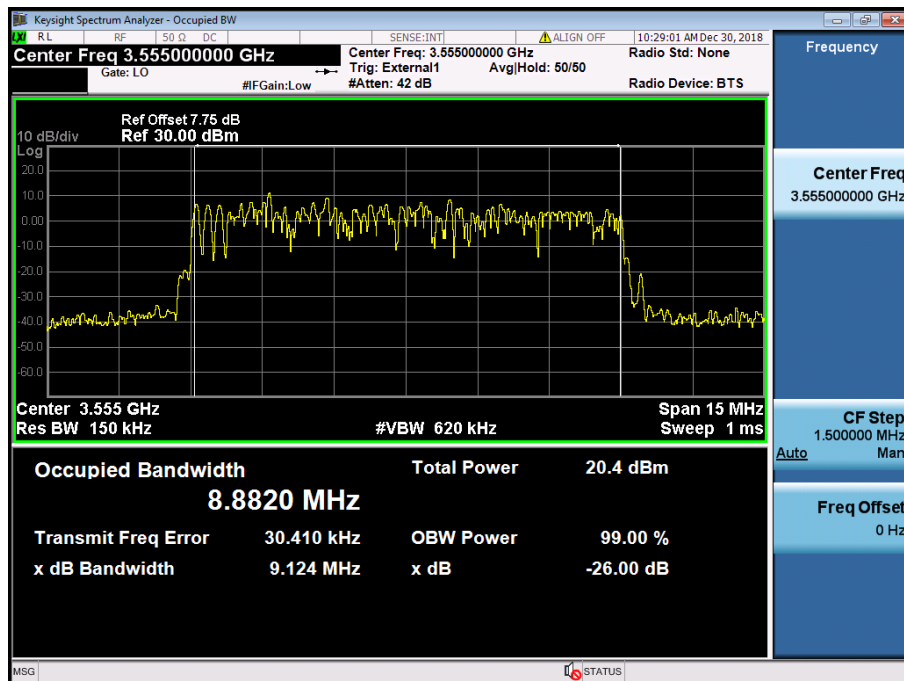
LTE Band 48 / 15 MHz / 16QAM - RB Size 75



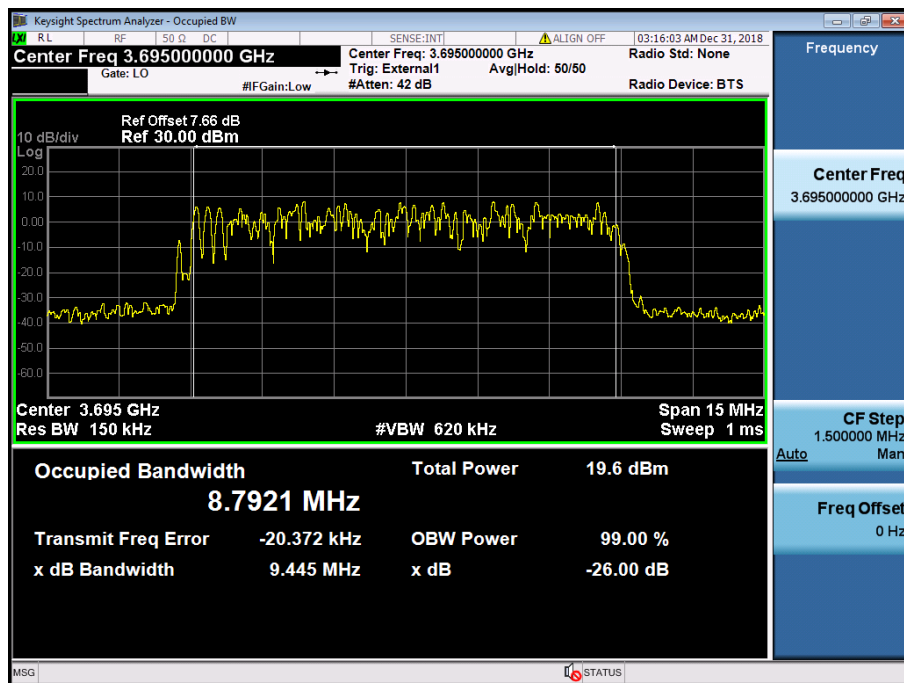
LTE Band 48 / 15 MHz / 64QAM - RB Size 75



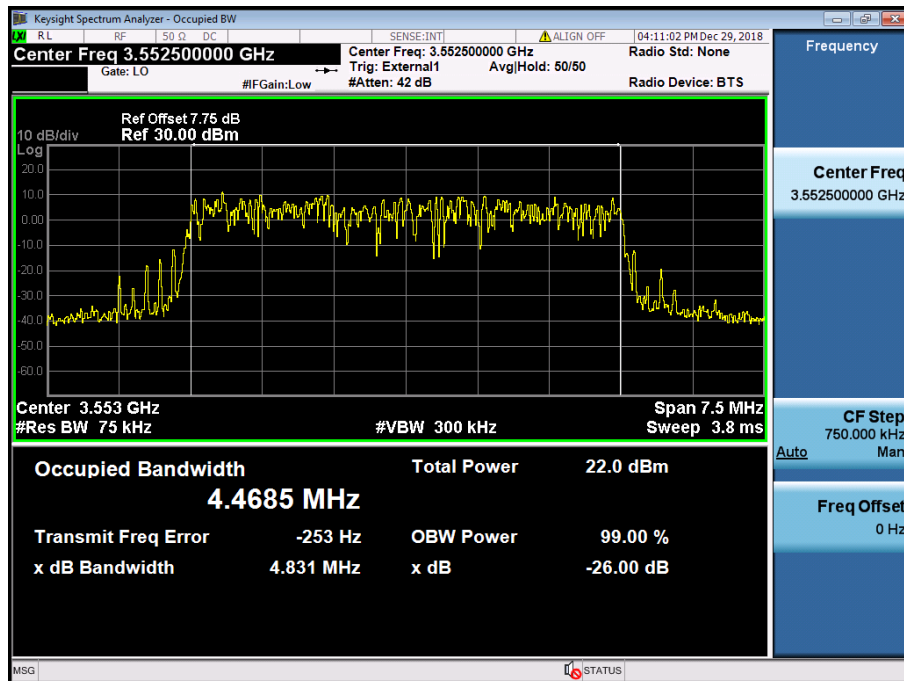
LTE Band 48 / 10 MHz / QPSK - RB Size 50



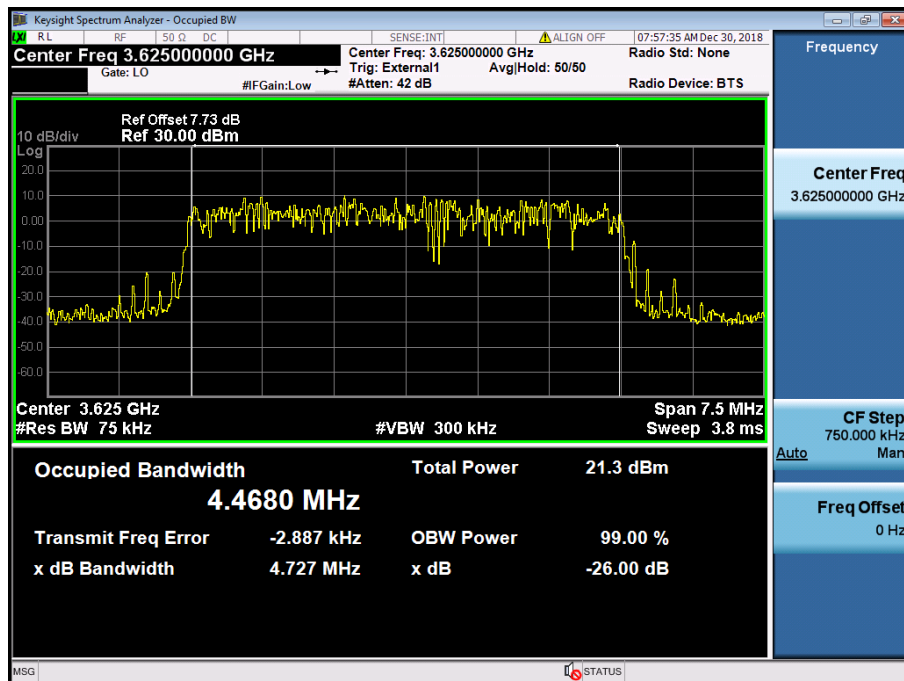
LTE Band 48 / 10 MHz / 16QAM - RB Size 50



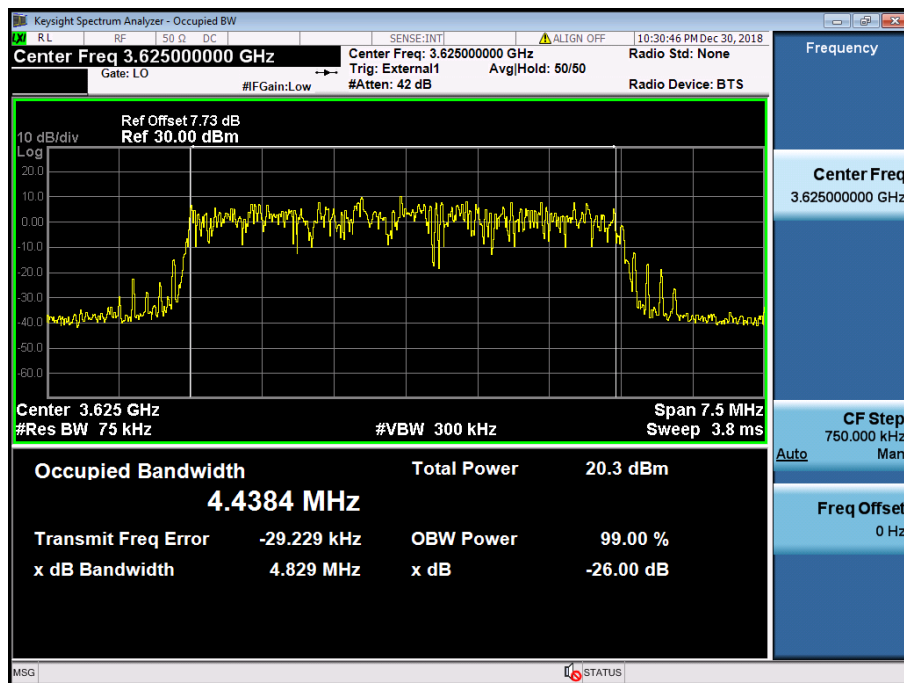
LTE Band 48 / 10 MHz / 64QAM - RB Size 50



LTE Band 48 / 5 MHz / QPSK - RB Size 25

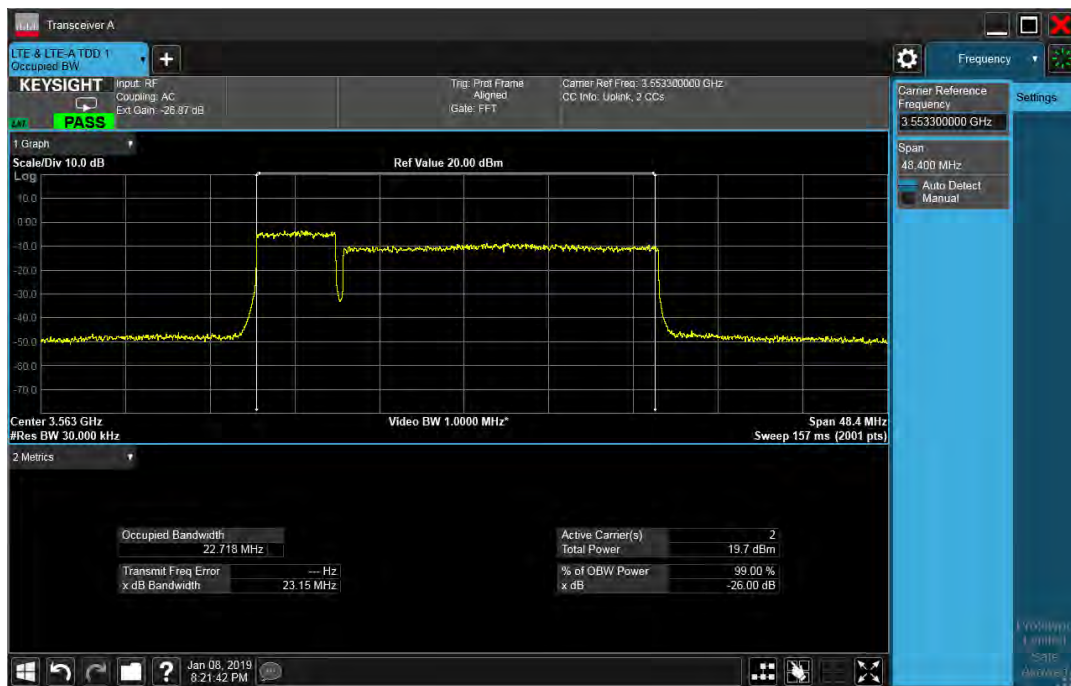


LTE Band 48 / 5 MHz / 16QAM - RB Size 25

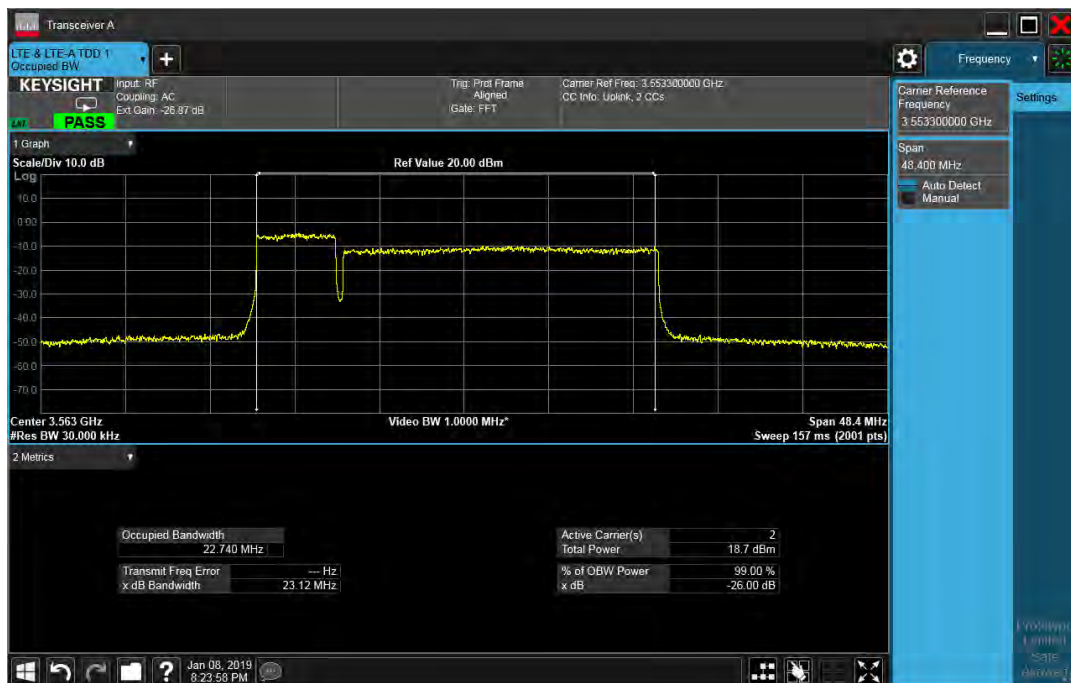


LTE Band 48 / 5 MHz / 64QAM - RB Size 25

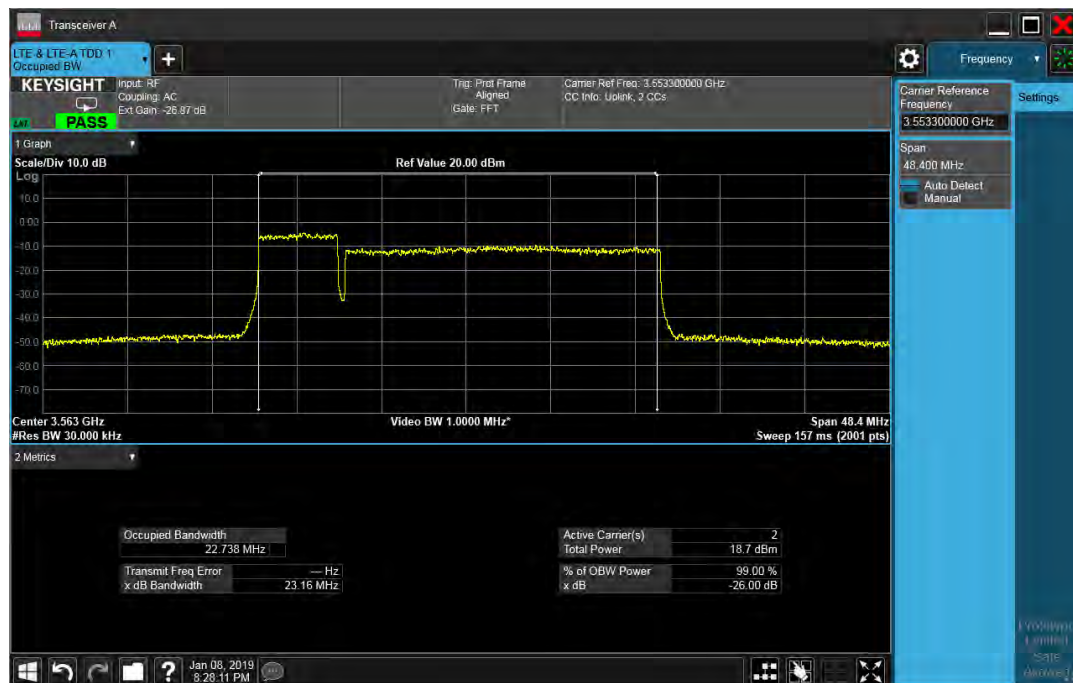
8.1.2 LTE Band 48 (UL-CA, intra-band_continuous)



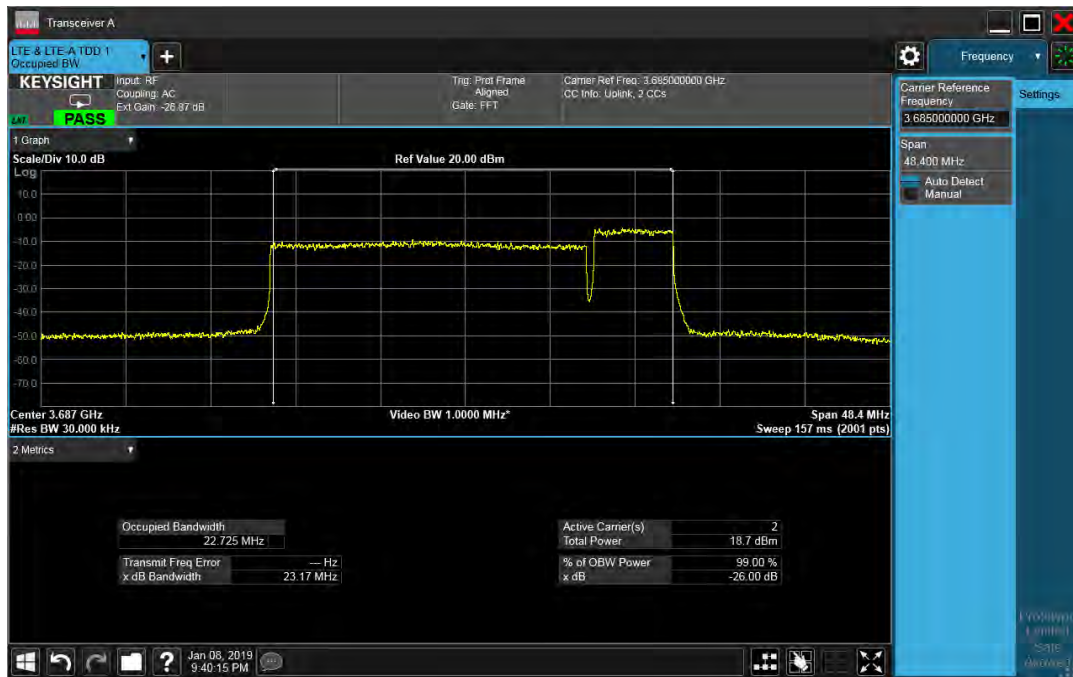
LTE CA intra-band 48 / 25(5+20) / QPSK - RB Size 125(25+100)



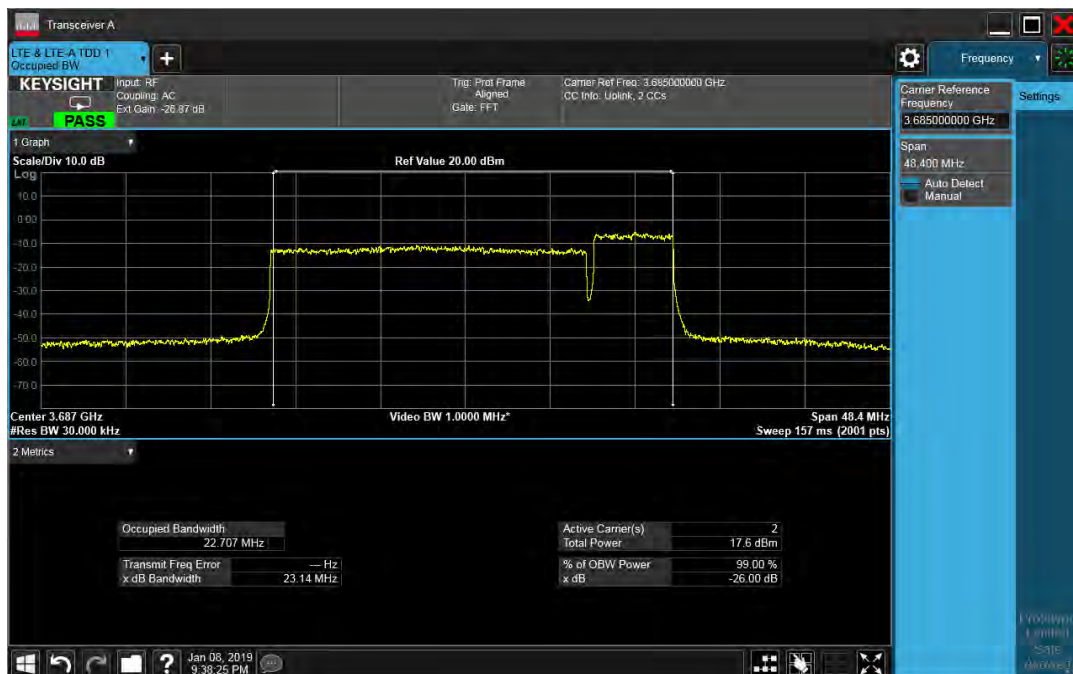
LTE CA intra-band 48 / 25(5+20) / 16QAM - RB Size 125(25+100)



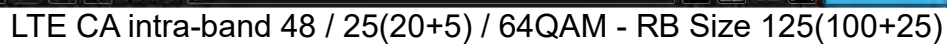
LTE CA intra-band 48 / 25(5+20) / 64QAM - RB Size 125(25+100)

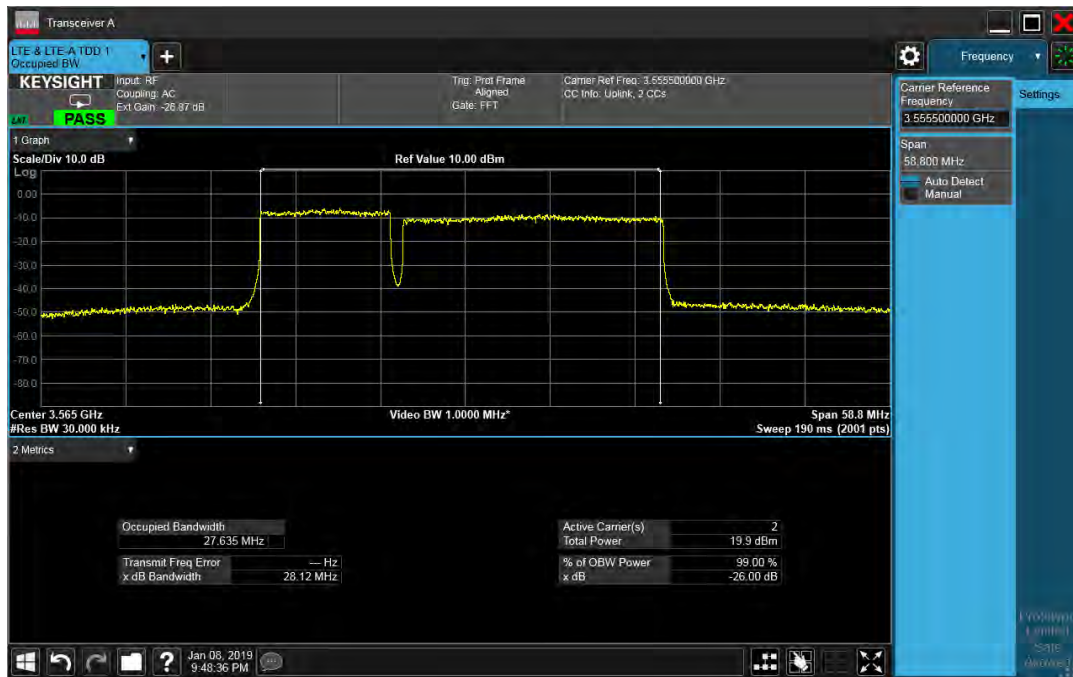


LTE CA intra-band 48 / 25(20+5) / QPSK - RB Size 125(100+25)

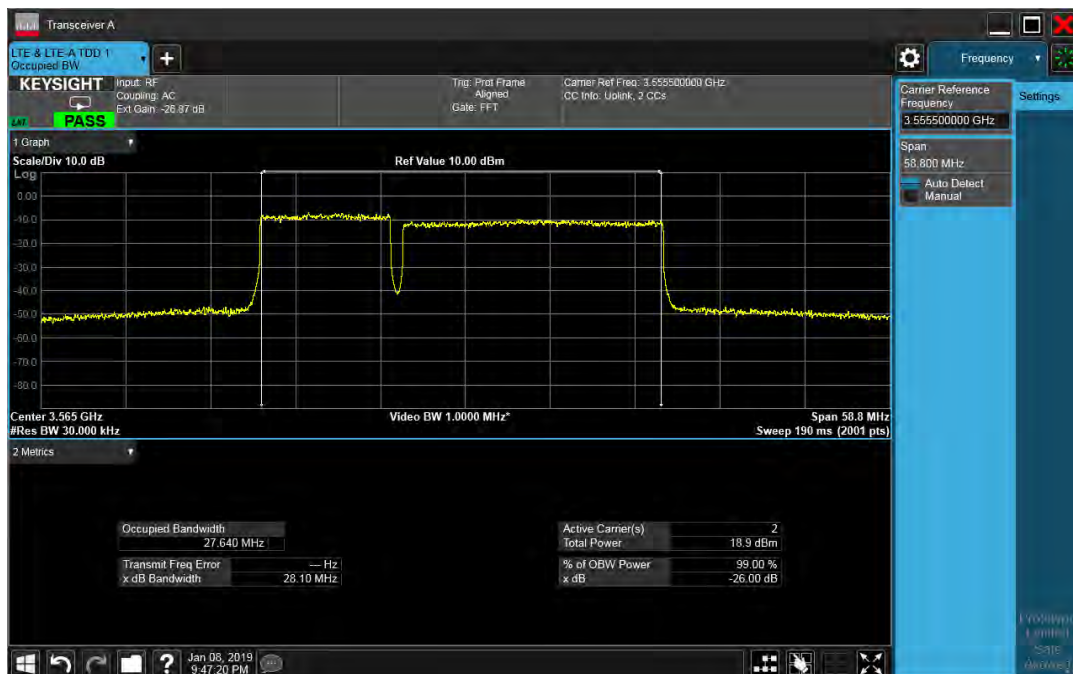


LTE CA intra-band 48 / 25(20+5) / 16QAM - RB Size 125(100+25)

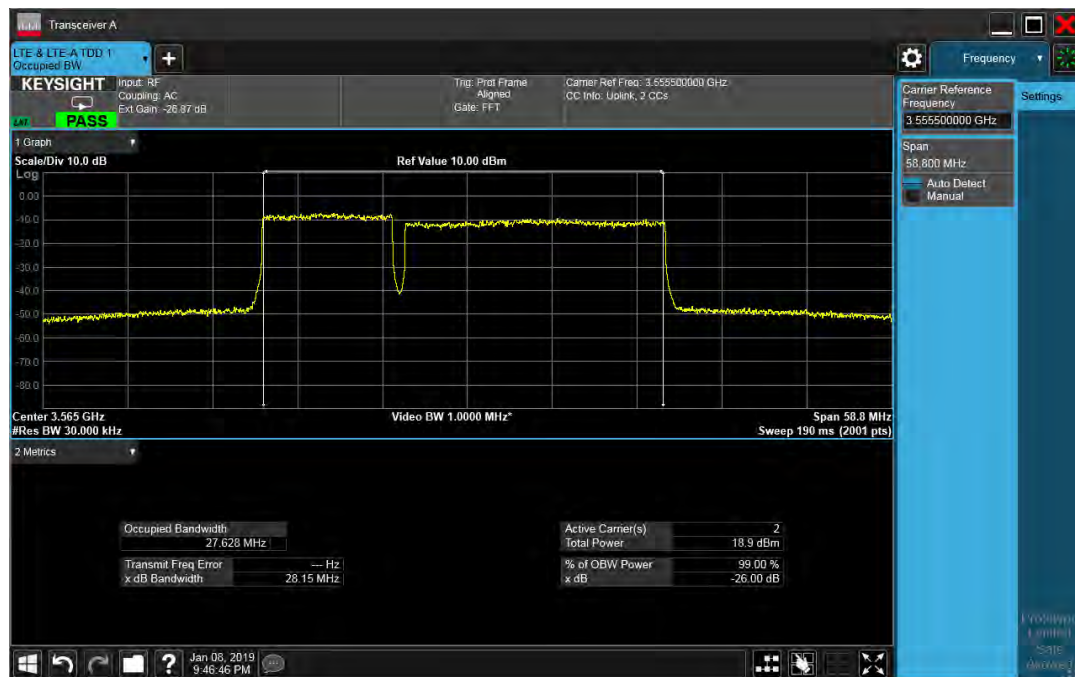




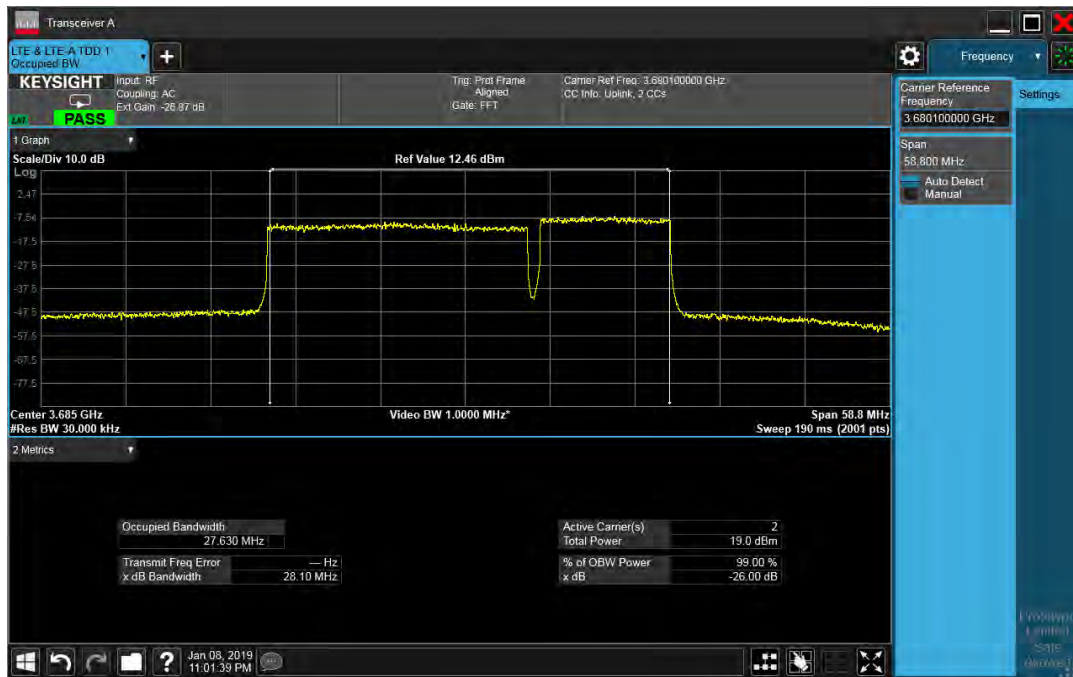
LTE CA intra-band 48 / 30(10+20) / QPSK - RB Size 150(50+100)



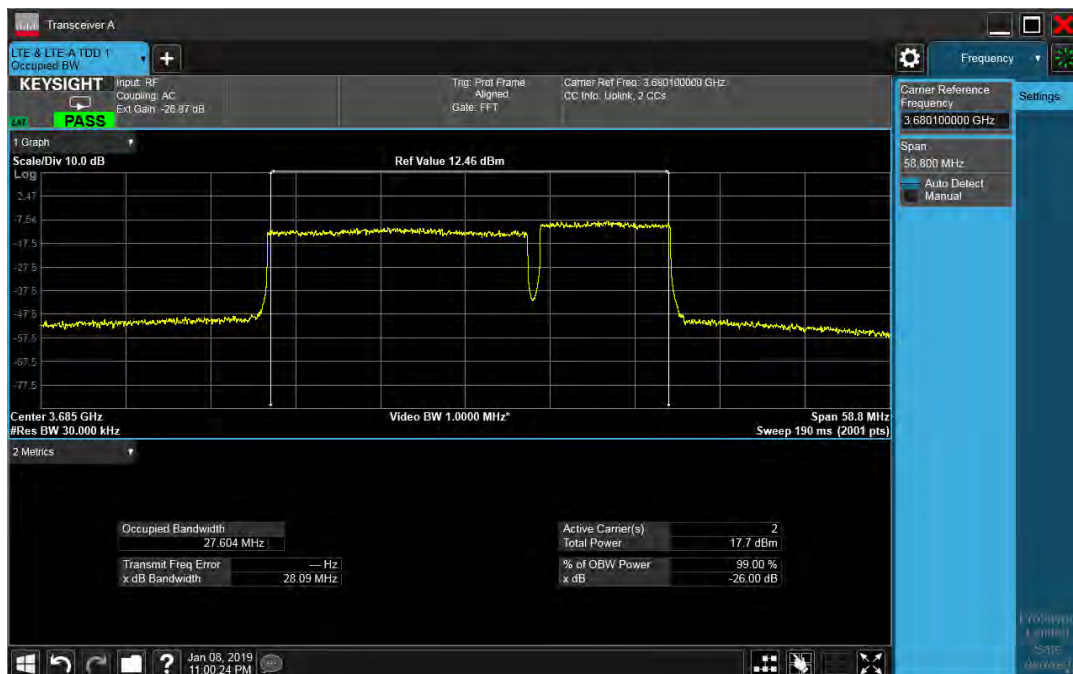
LTE CA intra-band 48 / 30(10+20) / 16QAM - RB Size 150(50+100)



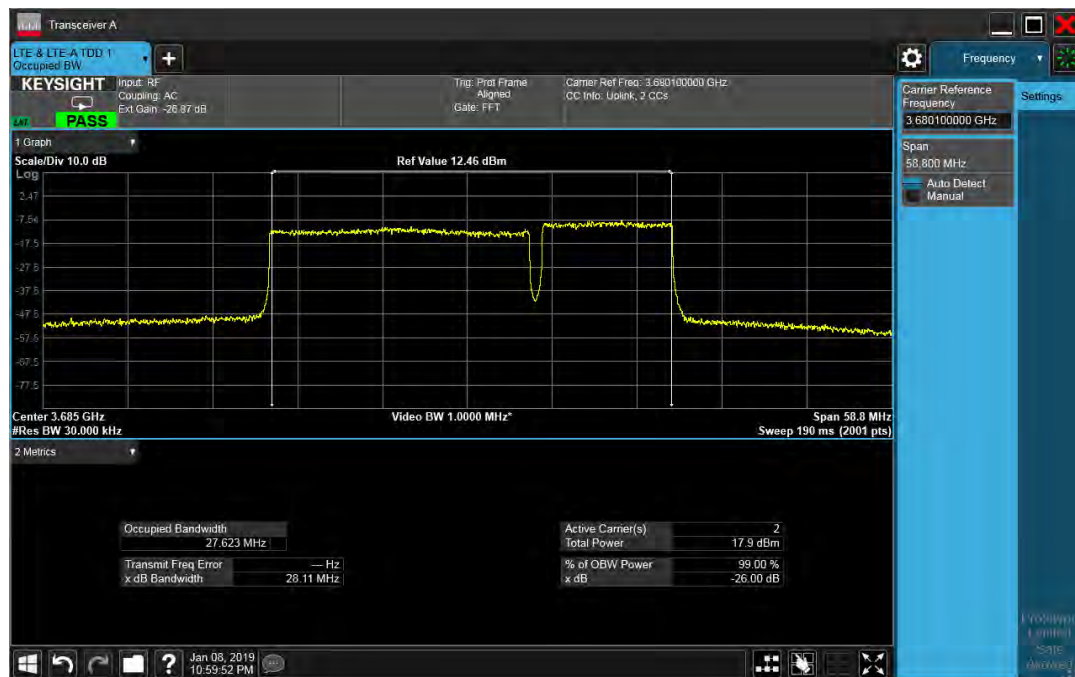
LTE CA intra-band 48 / 30(10+20) / 64QAM - RB Size 150(50+100)



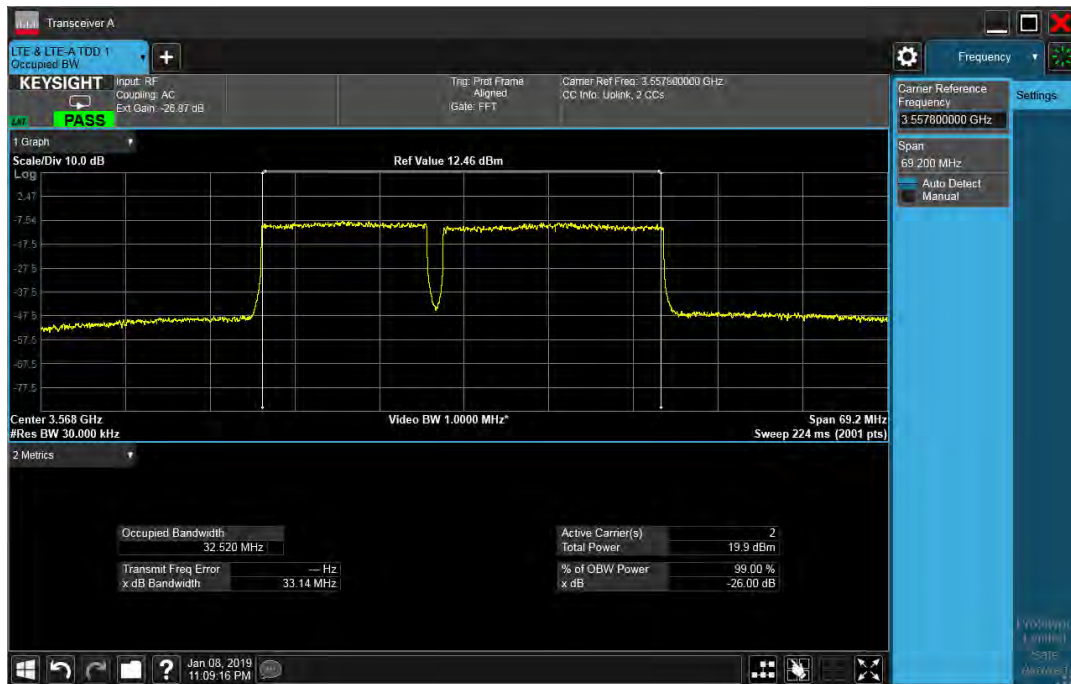
LTE CA intra-band 48 / 30(10+20) / 64QAM - RB Size 150(50+100)



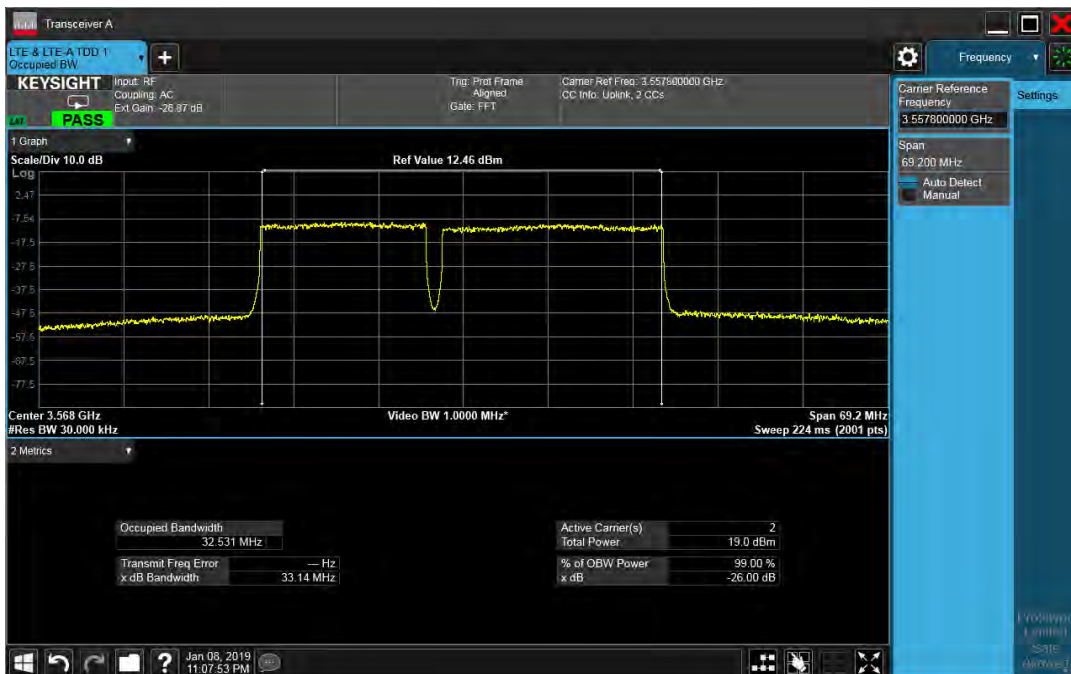
LTE CA intra-band 48 / 30(20+10) / 16QAM - RB Size 150(100+50)



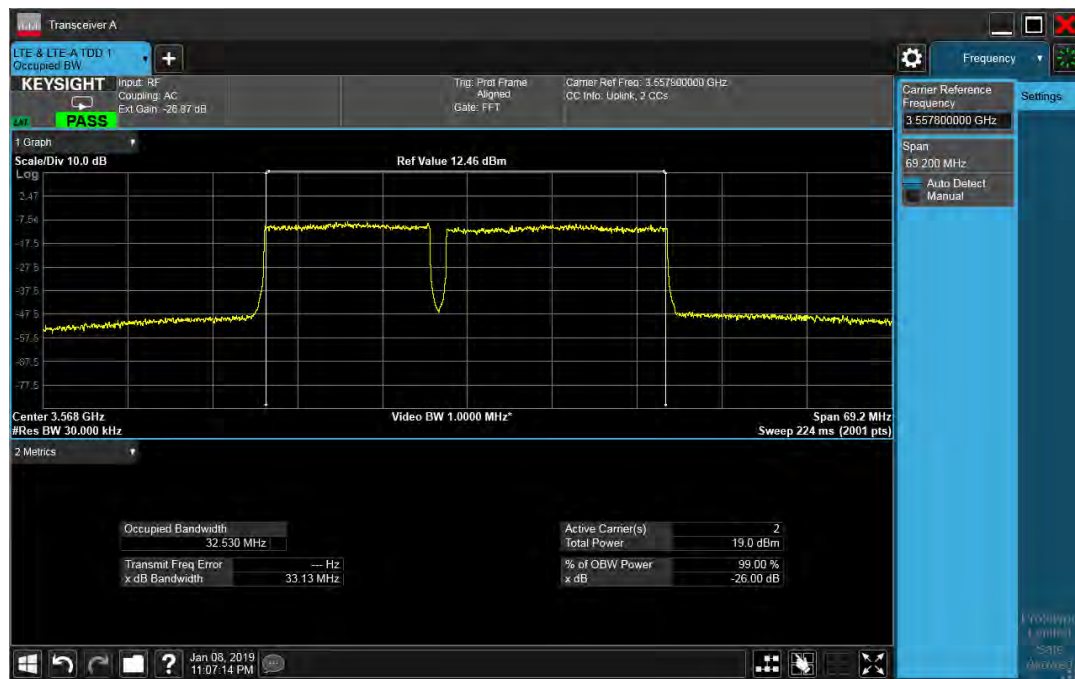
LTE CA intra-band 48 / 30(20+10) / 64QAM - RB Size 150(100+50)



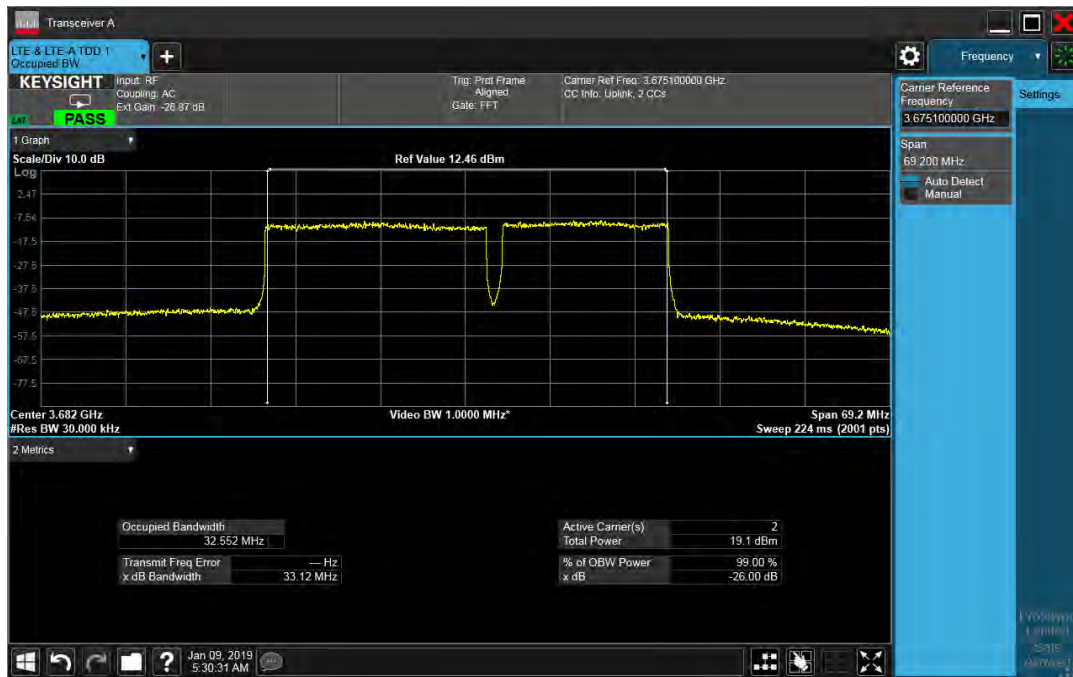
LTE CA intra-band 48 / 35(15+20) / QPSK - RB Size 175(75+100)



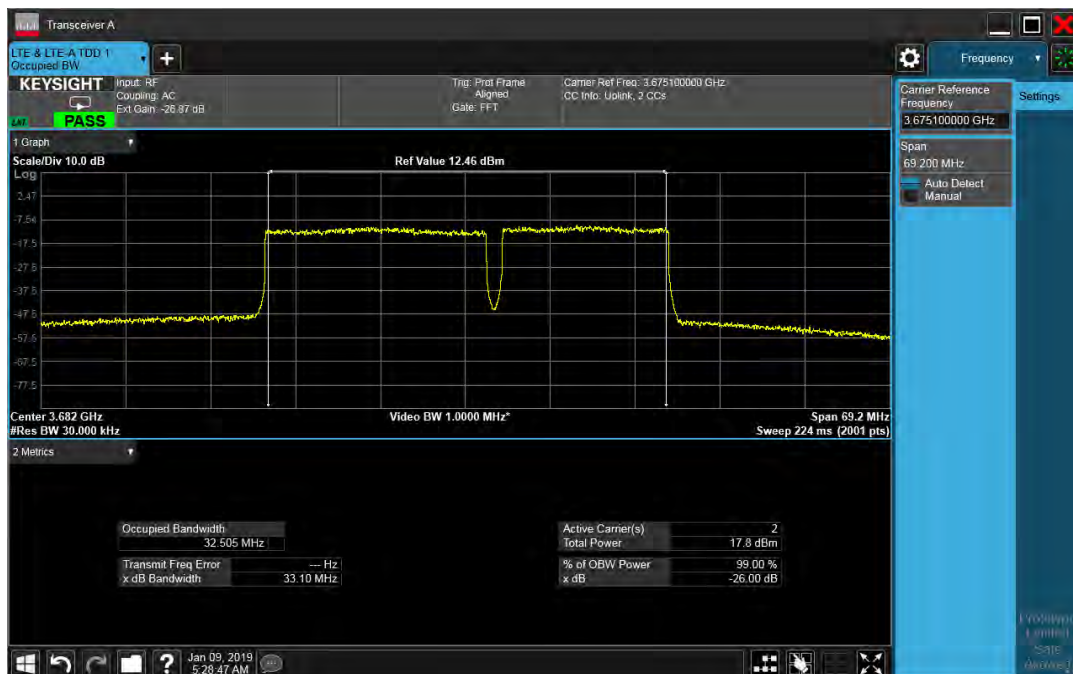
LTE CA intra-band 48 / 35(15+20) / 16QAM - RB Size 175(75+100)



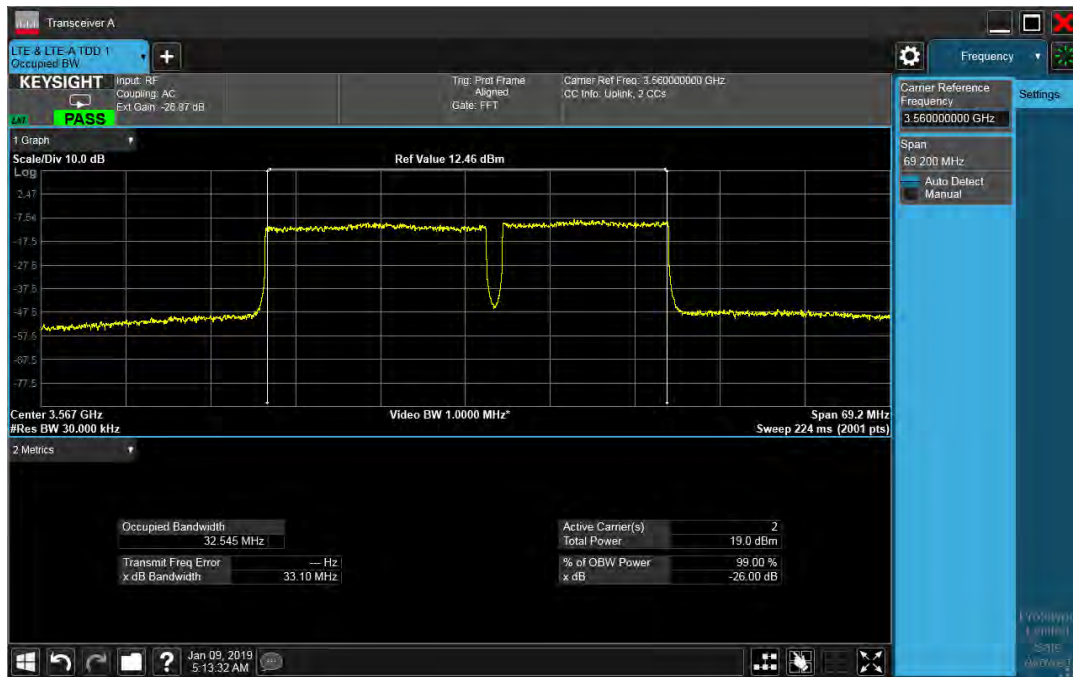
LTE CA intra-band 48 / 35(15+20) / 64QAM - RB Size 175(75+100)



LTE CA intra-band 48 / 35(20+15) / QPSK - RB Size 175(100+75)



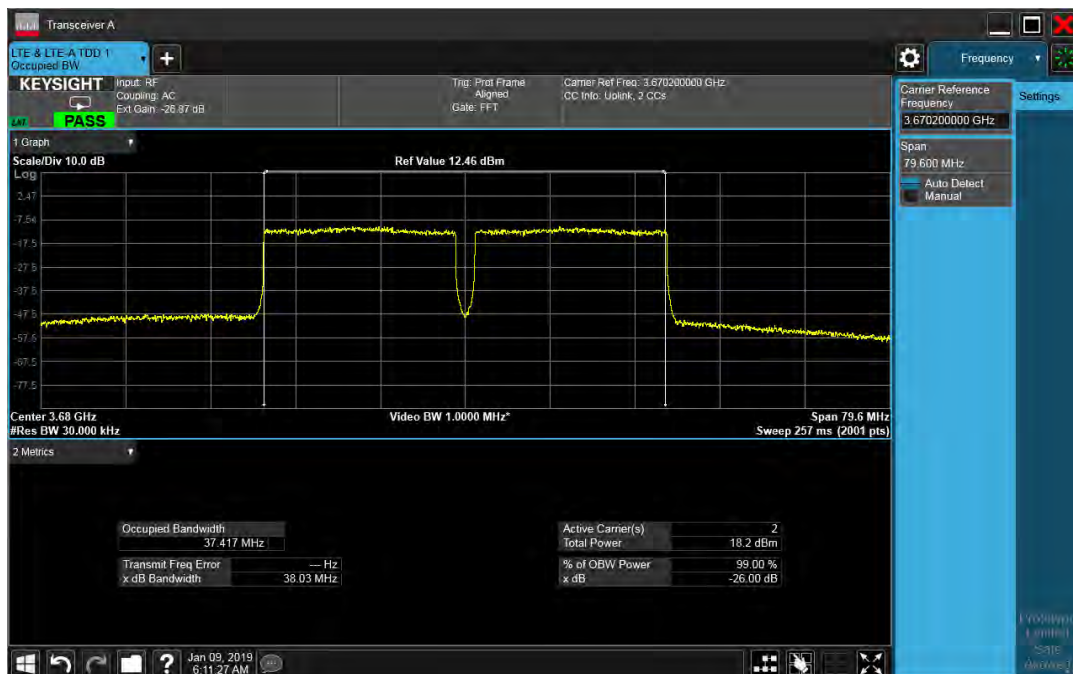
LTE CA intra-band 48 / 35(20+15) / 16QAM - RB Size 175(100+75)



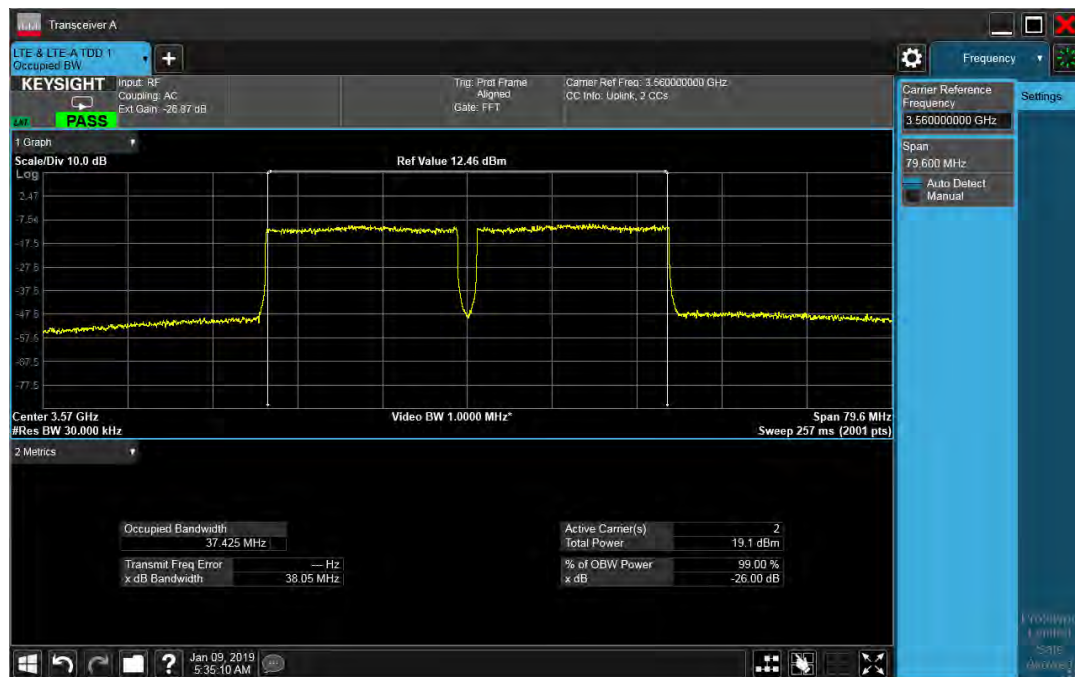
LTE CA intra-band 48 / 35(20+15) / 64QAM - RB Size 175(100+75)



LTE CA intra-band 48 / 40(20+20) / QPSK - RB Size 200(100+100)

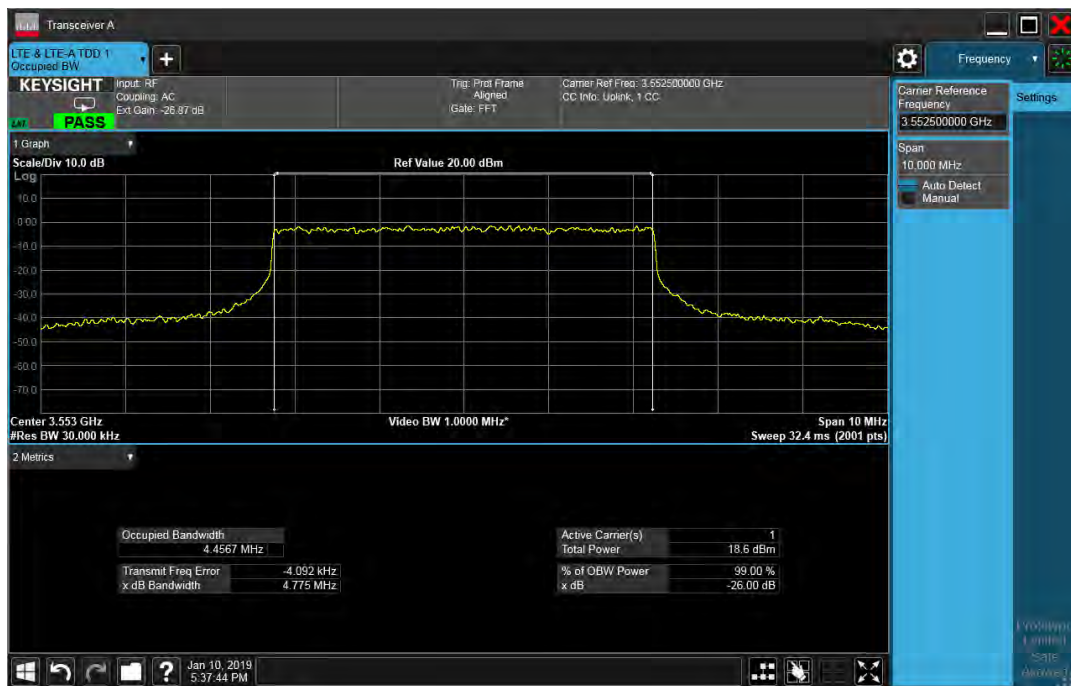


LTE CA intra-band 48 / 40(20+20) / 16QAM - RB Size 200(100+100)

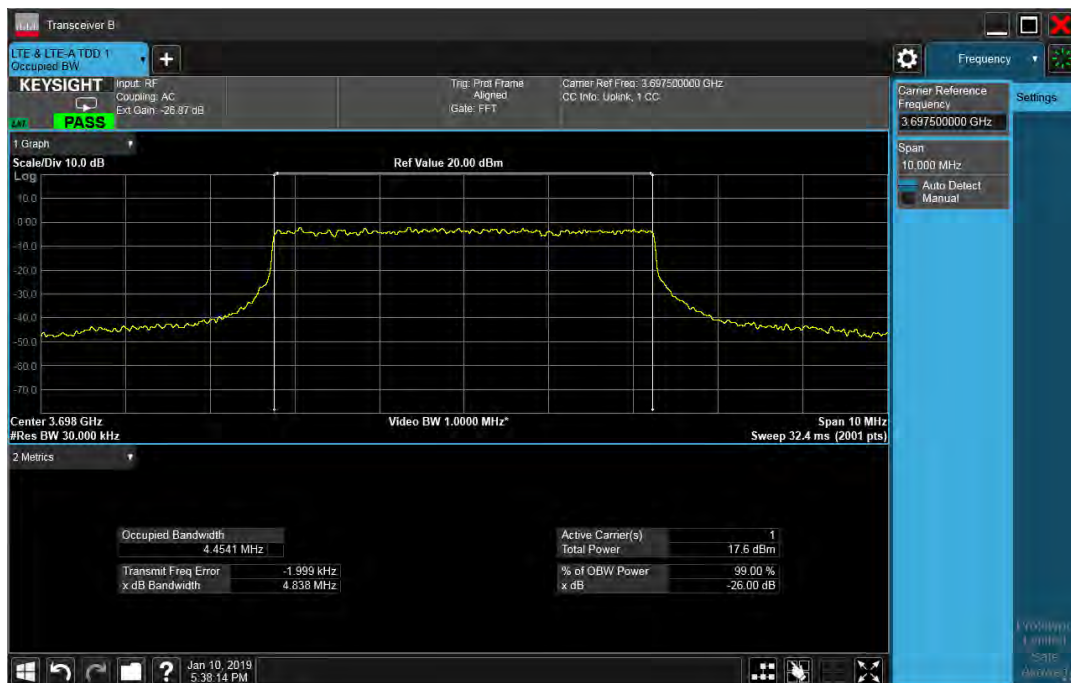


LTE CA intra-band 48 / 40(20+20) / 64QAM - RB Size 200(100+100)

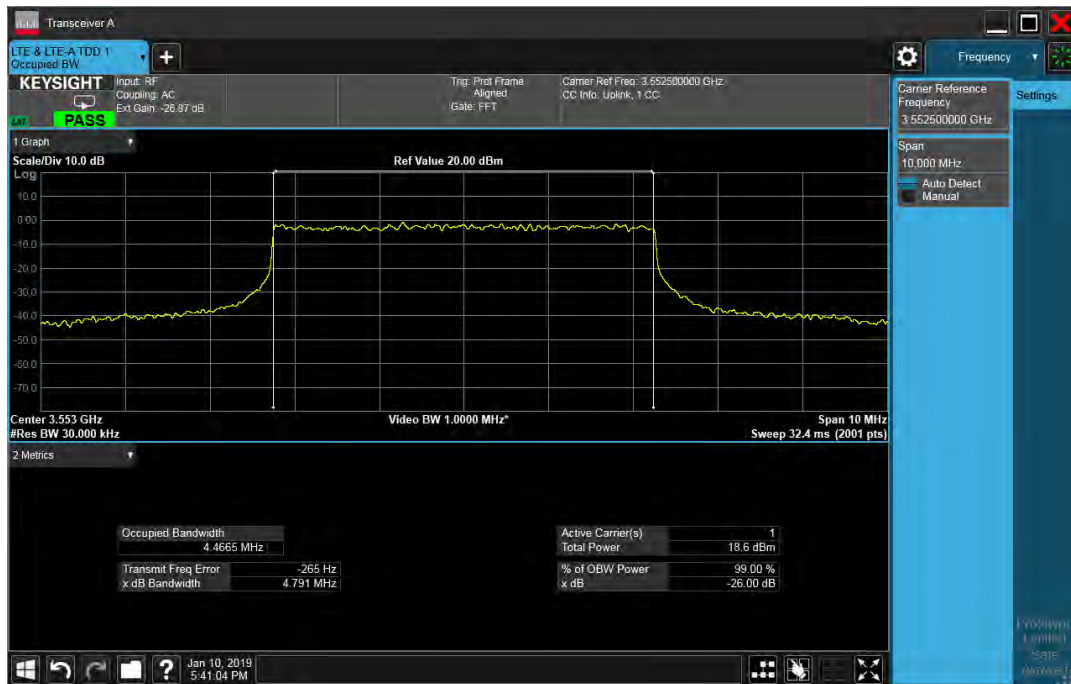
8.1.3 LTE Band 48 (UL-CA, intra-band_non-continuous)



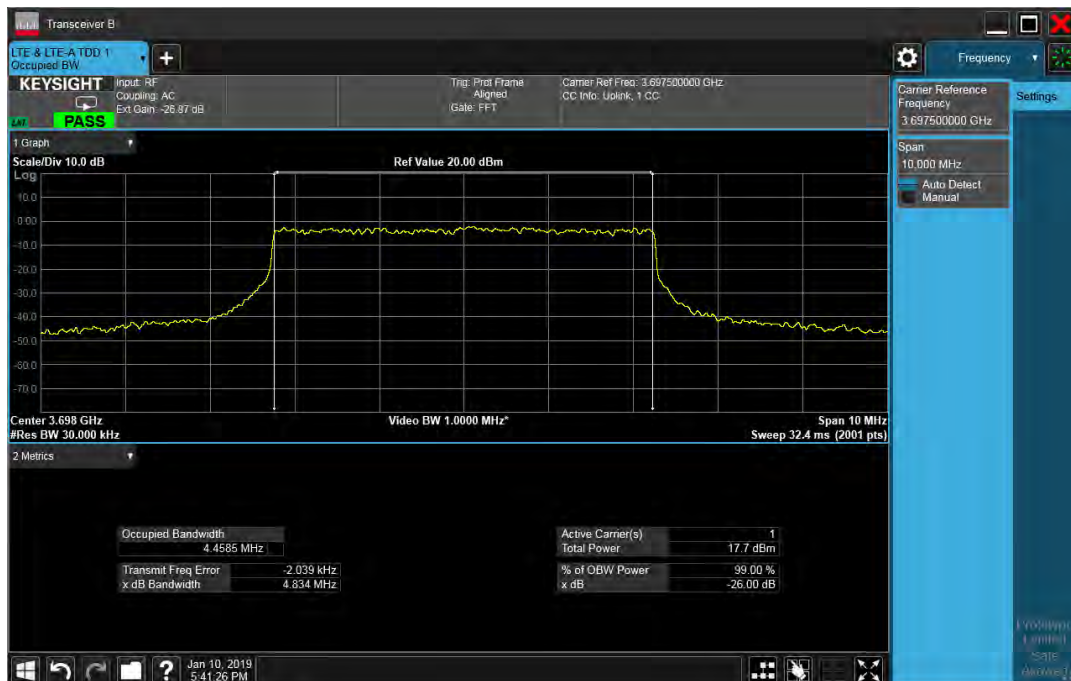
LTE CA intra-band 48 / 10(5+5) / 5MHz(PCC) / QPSK - RB Size 50(25+25)



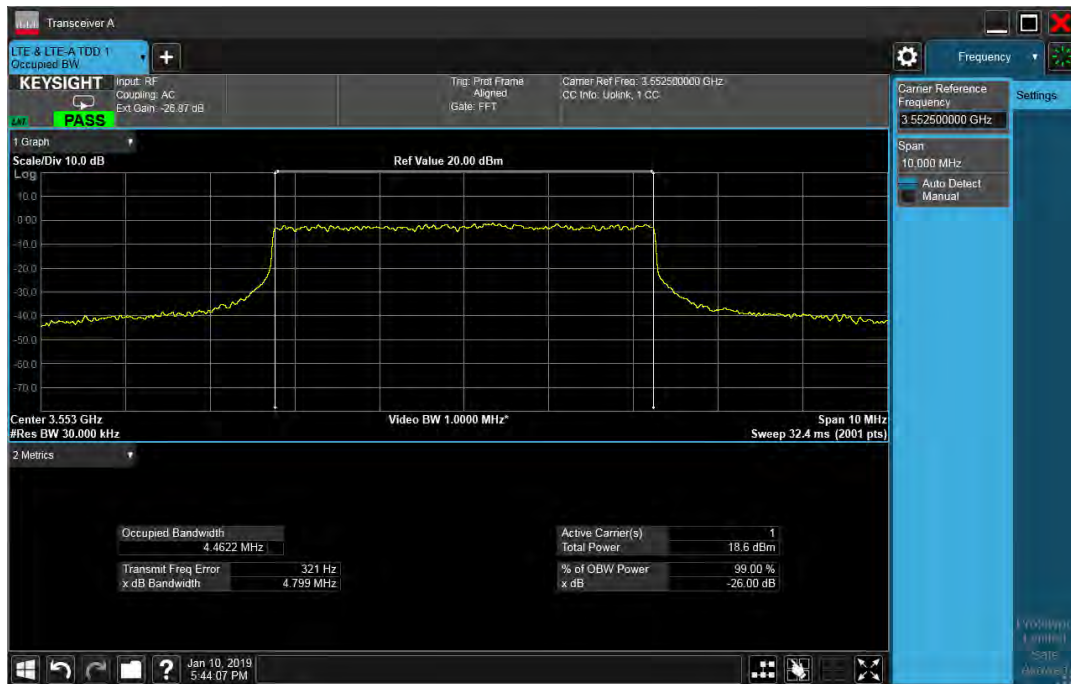
LTE CA intra-band 48 / 10(5+5) / 5MHz(SCC) / QPSK - RB Size 50(25+25)



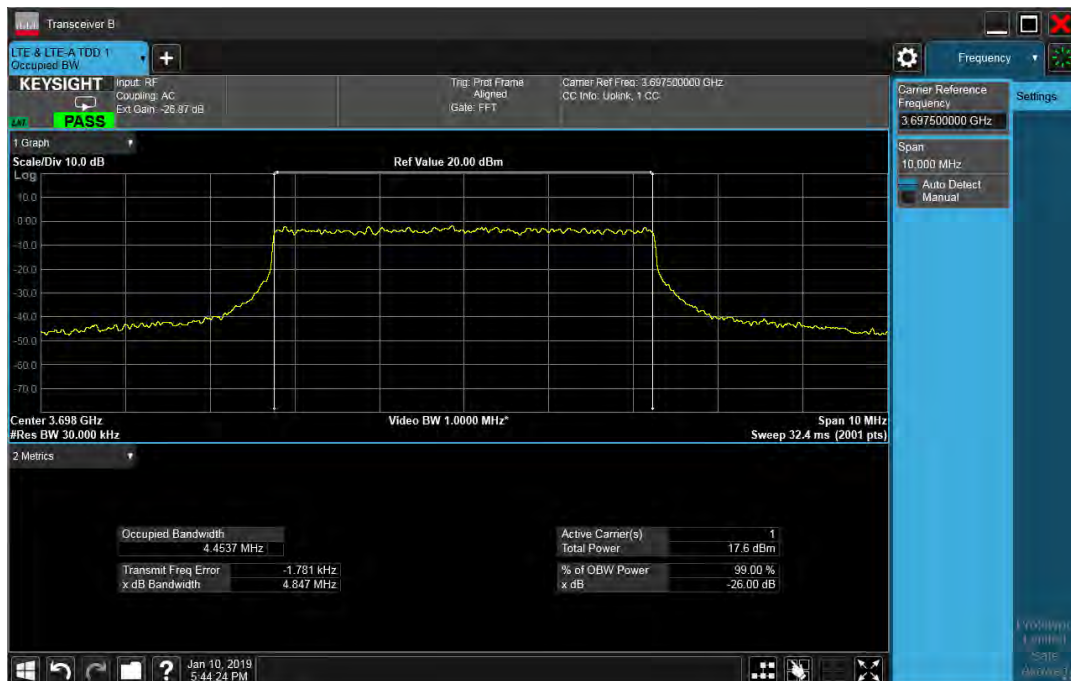
LTE CA intra-band 48 / 10(5+5) / 5MHz(PCC) / 16QAM - RB Size 50(25+25)



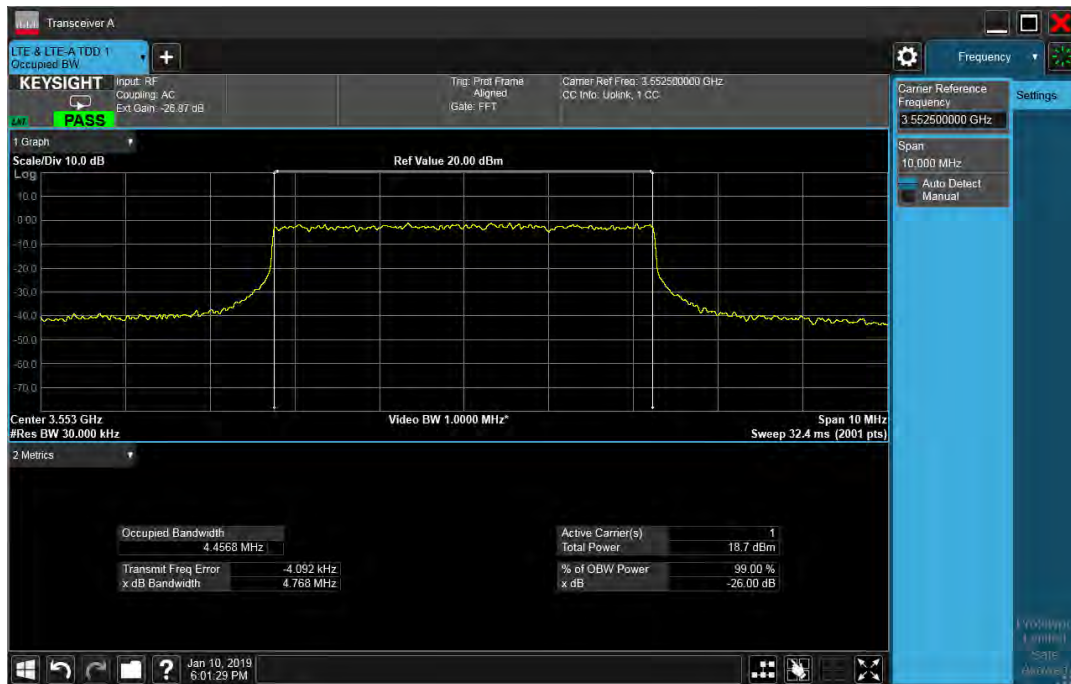
LTE CA intra-band 48 / 10(5+5) / 5MHz(SCC) / 16QAM - RB Size 50(25+25)



LTE CA intra-band 48 / 10(5+5) / 5MHz(PCC) / 64QAM - RB Size 50(25+25)



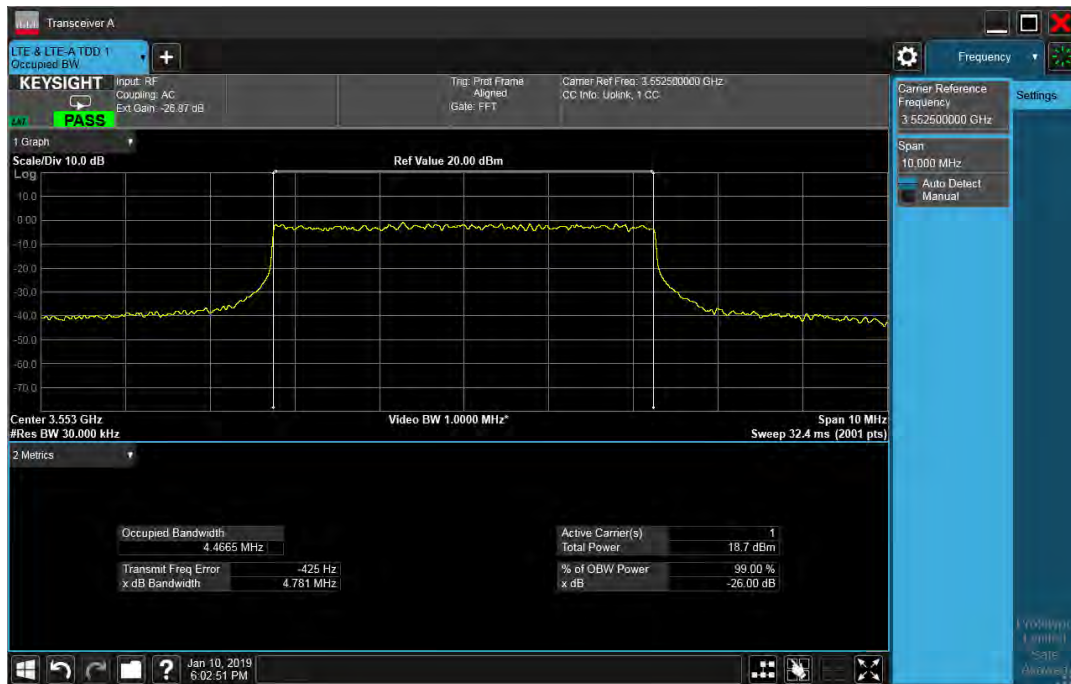
LTE CA intra-band 48 / 10(5+5) / 5MHz(SCC) / 64QAM - RB Size 50(25+25)



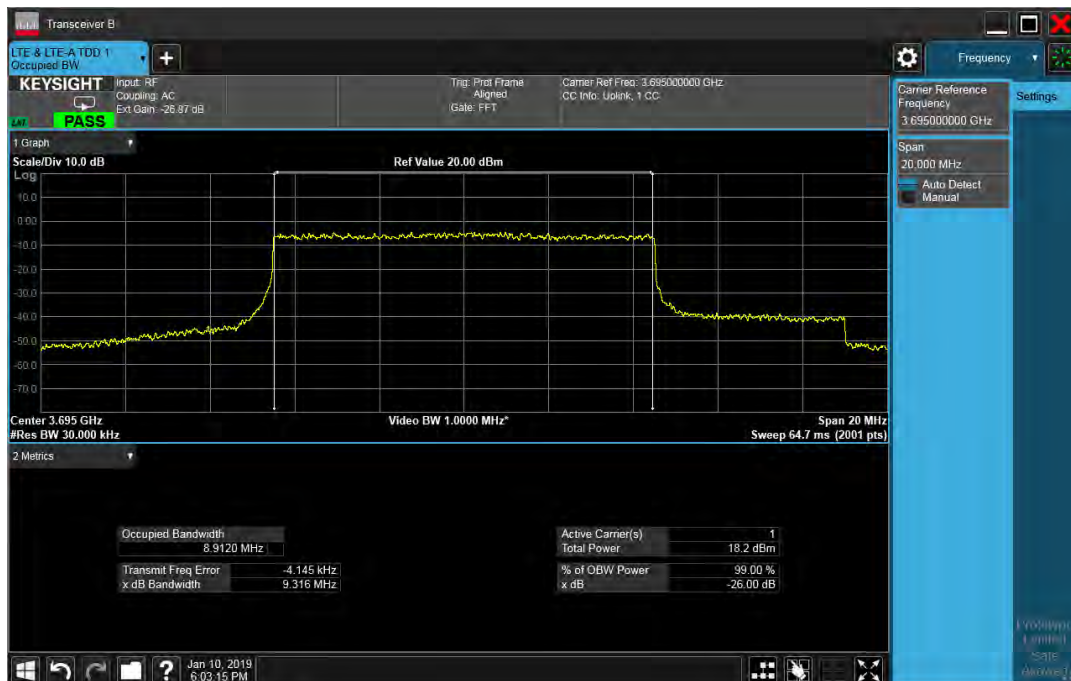
LTE CA intra-band 48 / 15(5+10) / 5MHz(PCC) / QPSK - RB Size 75(25+50)



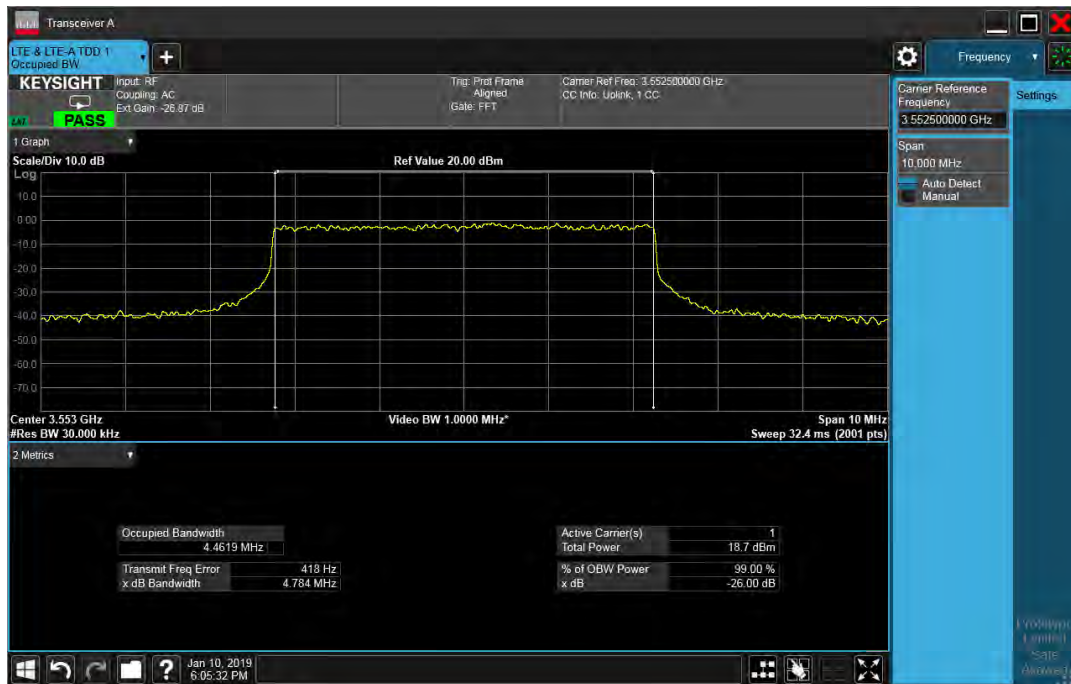
LTE CA intra-band 48 / 15(5+10) / 10MHz(SCC) / QPSK - RB Size 75(25+50)



LTE CA intra-band 48 / 15(5+10) / 5MHz(PCC) / 16QAM - RB Size 75(25+50)



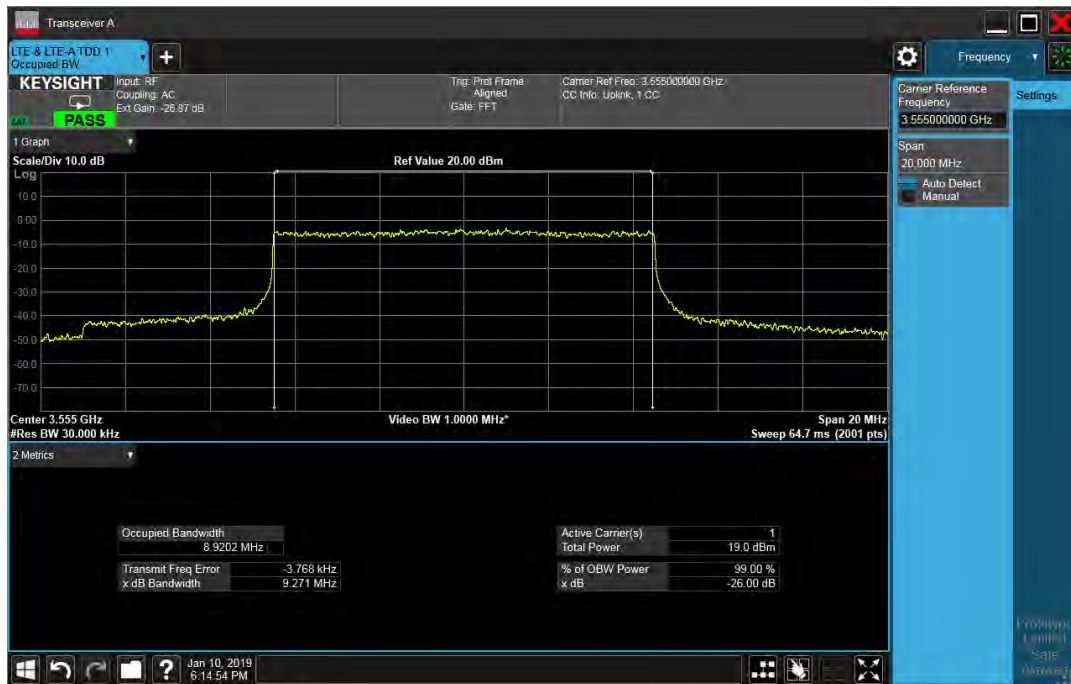
LTE CA intra-band 48 / 15(5+10) / 10MHz(SCC) / 16QAM - RB Size 75(25+50)



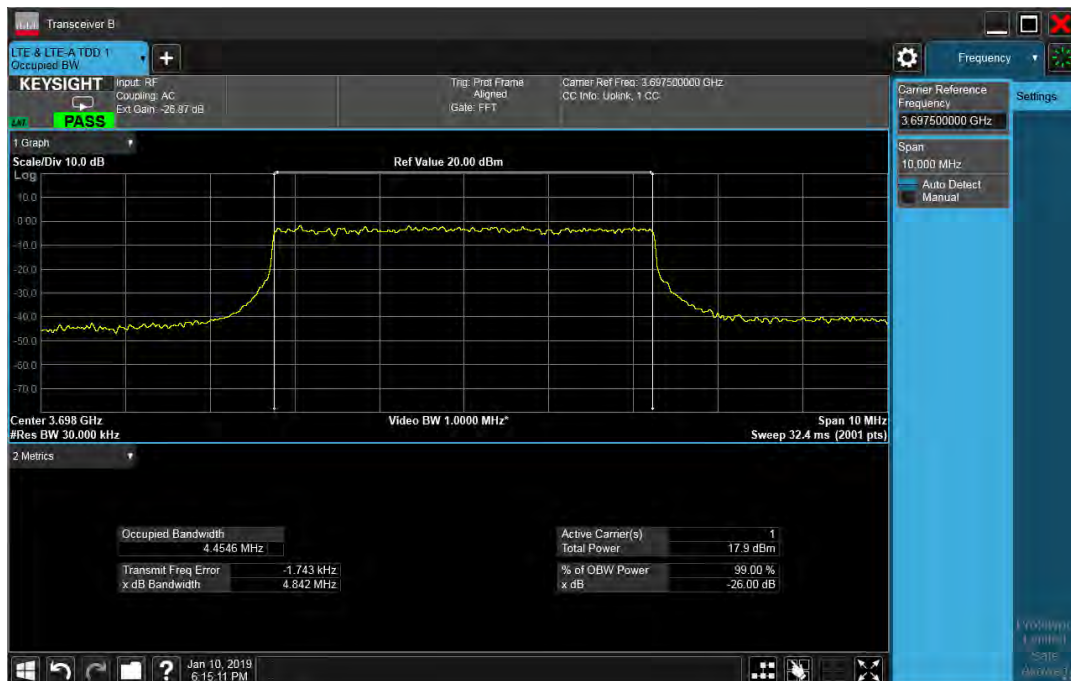
LTE CA intra-band 48 / 15(5+10) / 5MHz(PCC) / 64QAM - RB Size 75(25+50)



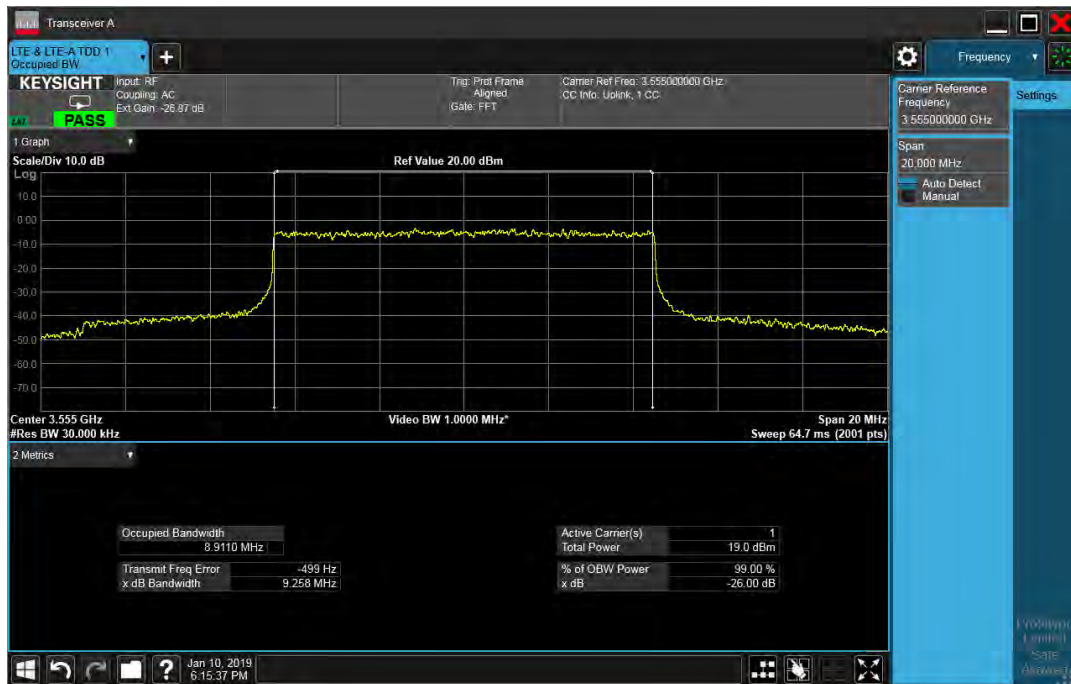
LTE CA intra-band 48 / 15(5+10) / 10MHz(SCC) / 64QAM - RB Size 75(25+50)



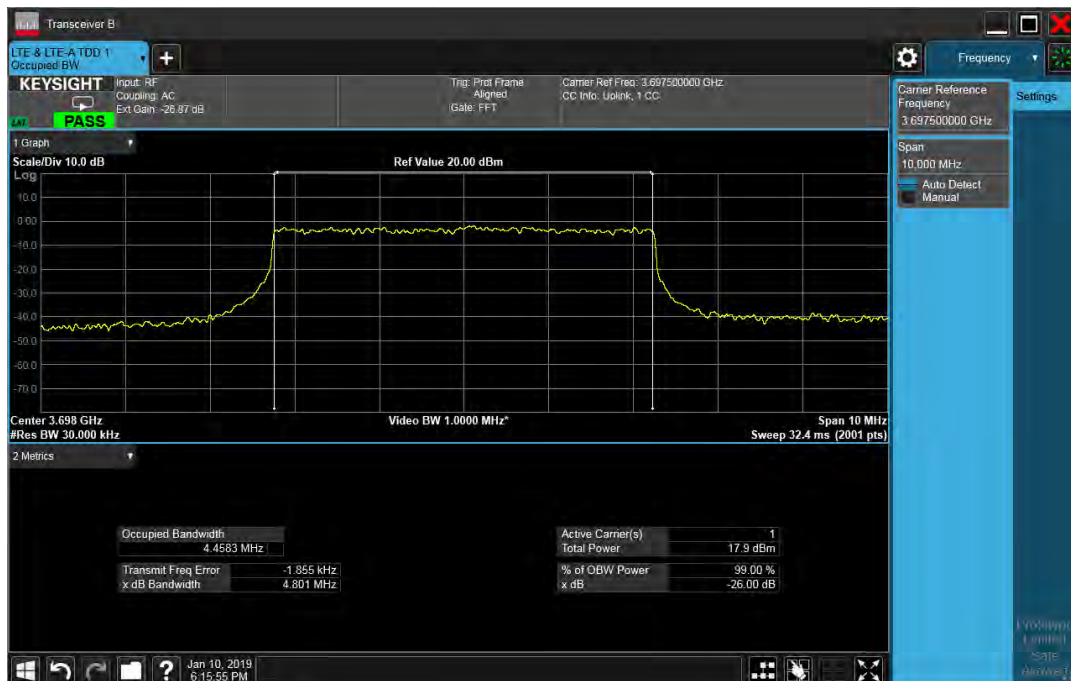
LTE CA intra-band 48 / 15(10+5) / 10MHz(PCC) / QPSK - RB Size 75(50+25)



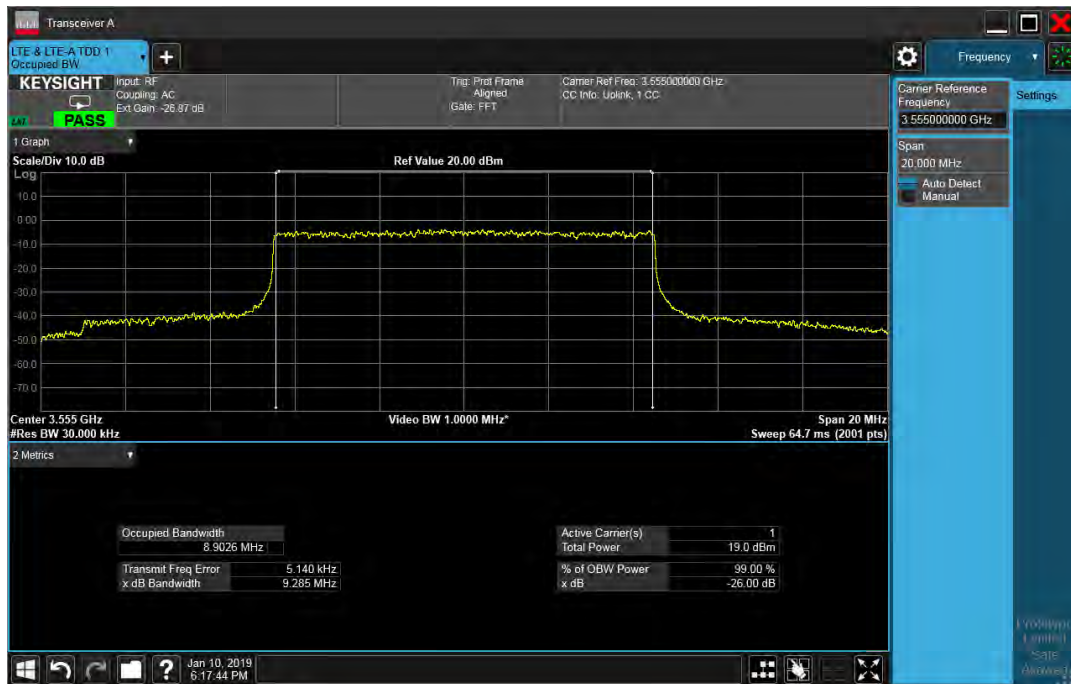
LTE CA intra-band 48 / 15(10+5) / 5MHz(SCC) / QPSK - RB Size 75(50+25)



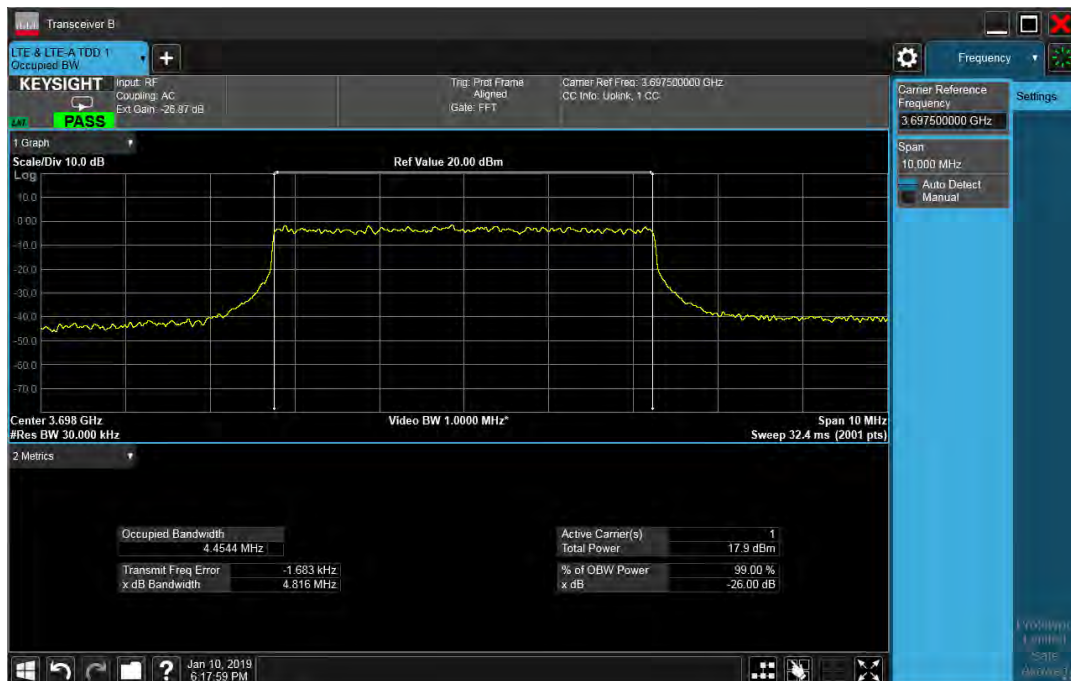
LTE CA intra-band 48 / 15(10+5) / 10MHz(PCC) / 16QAM - RB Size 75(50+25)



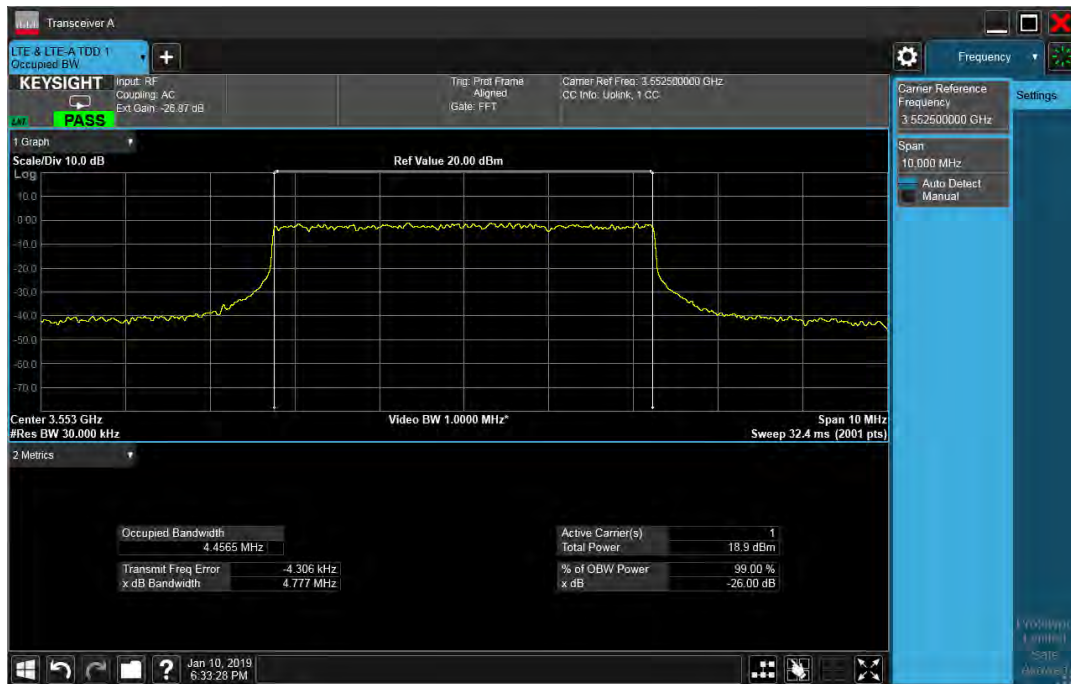
LTE CA intra-band 48 / 15(10+5) / 5MHz(SCC) / 16QAM - RB Size 75(50+25)



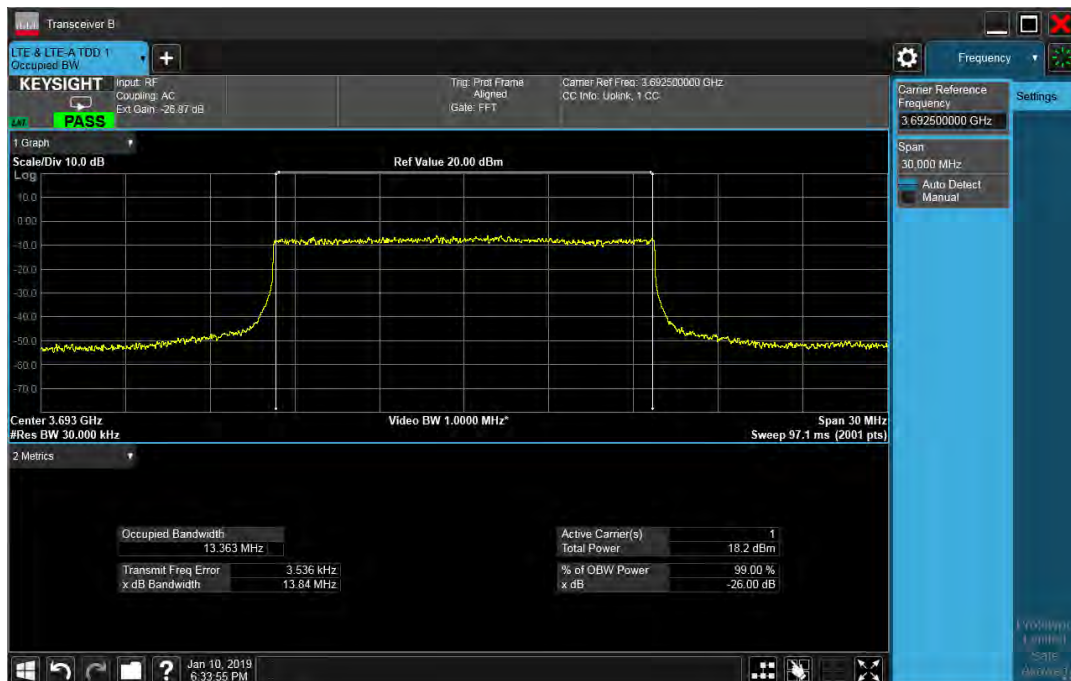
LTE CA intra-band 48 / 15(10+5) / 10MHz(PCC) / 64QAM - RB Size 75(50+25)



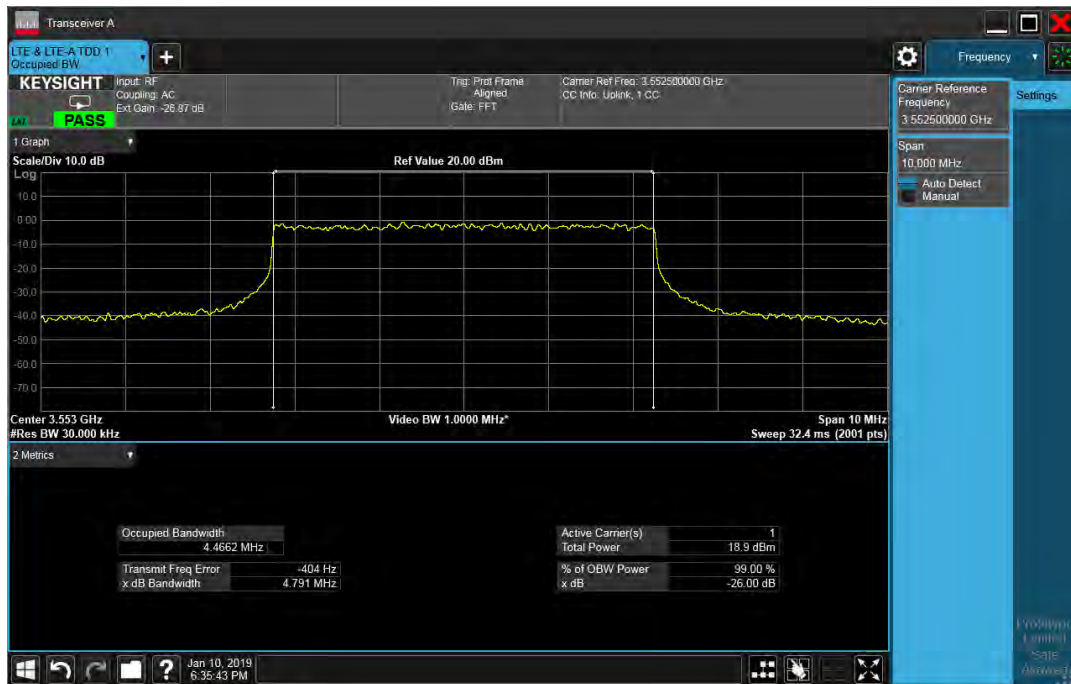
LTE CA intra-band 48 / 15(10+5) / 5MHz(SCC) / 64QAM - RB Size 75(50+25)



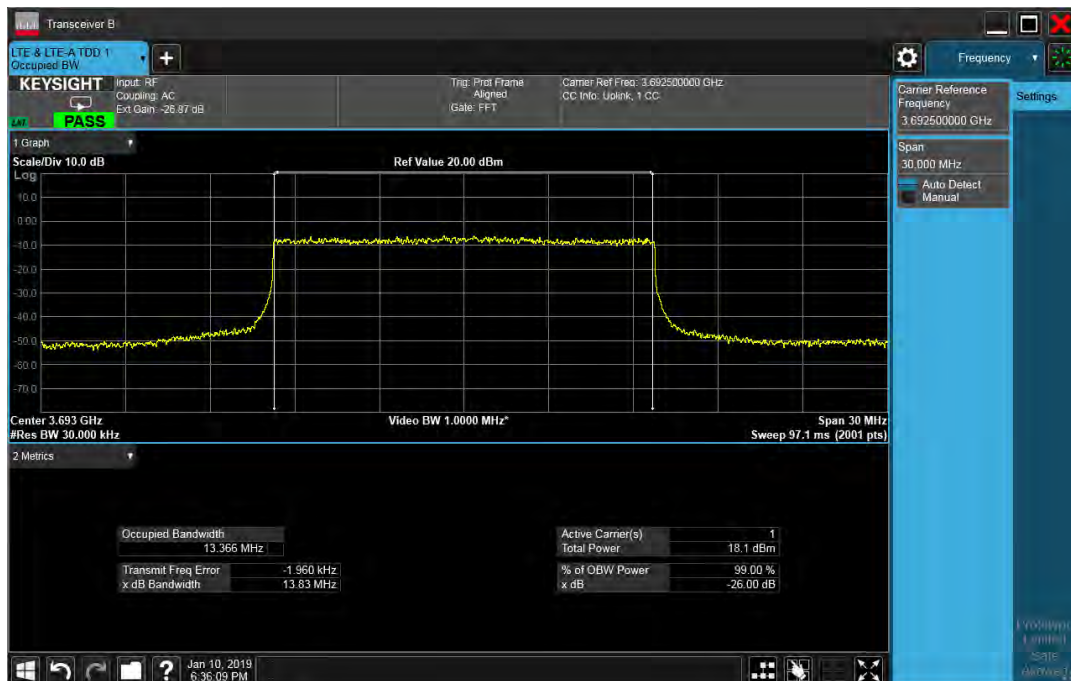
LTE CA intra-band 48 / 20(5+15) / 5MHz(PCC) / QPSK - RB Size 100(25+75)



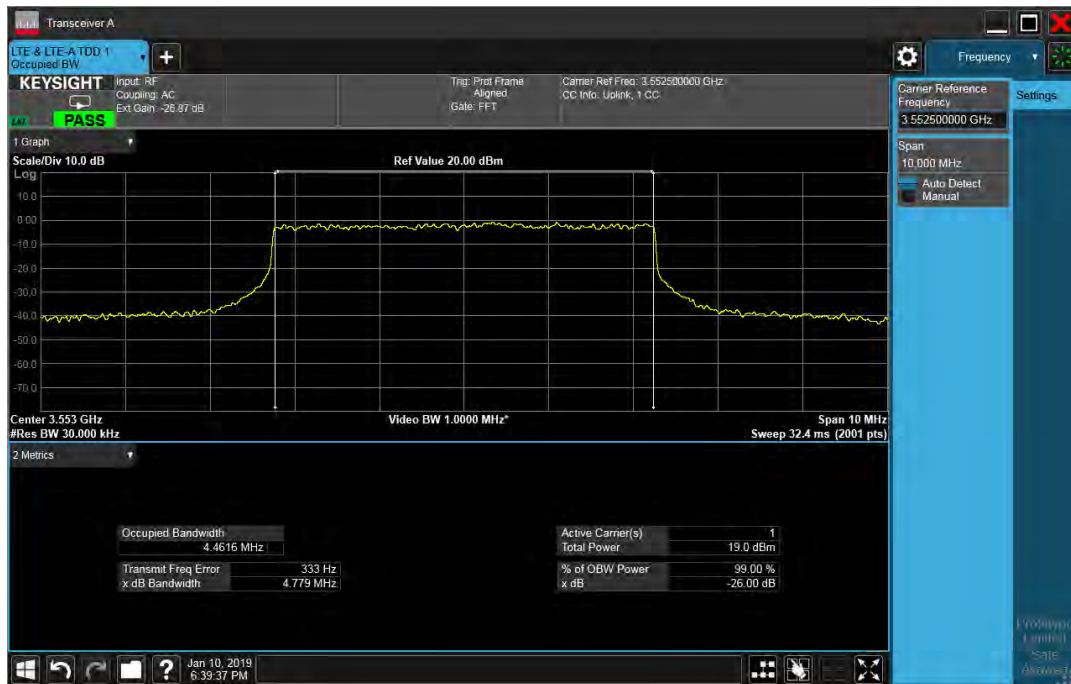
LTE CA intra-band 48 / 20(5+15) / 15MHz(SCC) / QPSK - RB Size 100(25+75)



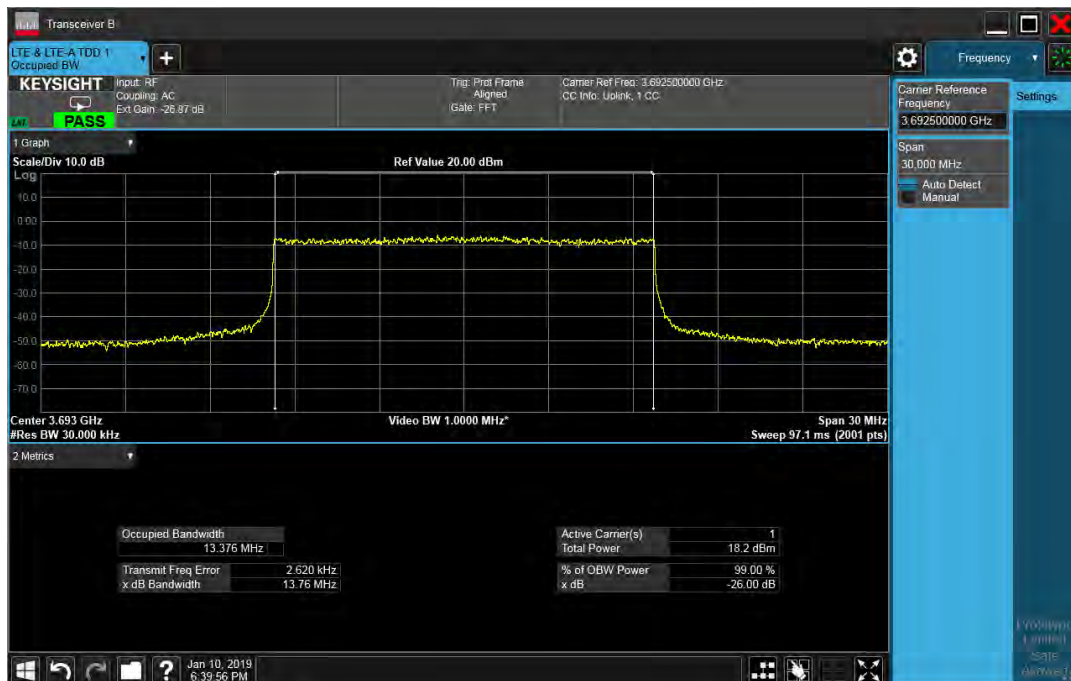
LTE CA intra-band 48 / 20(5+15) / 5MHz(PCC) / 16QAM - RB Size 100(25+75)



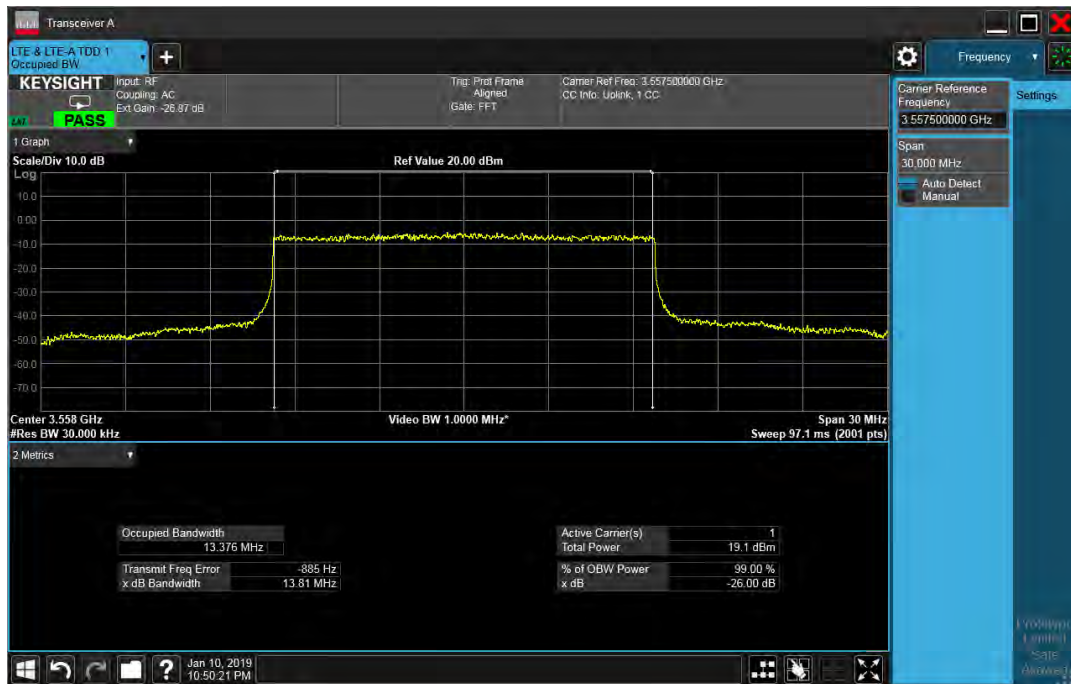
LTE CA intra-band 48 / 20(5+15) / 15MHz(SCC) / 16QAM - RB Size 100(25+75)



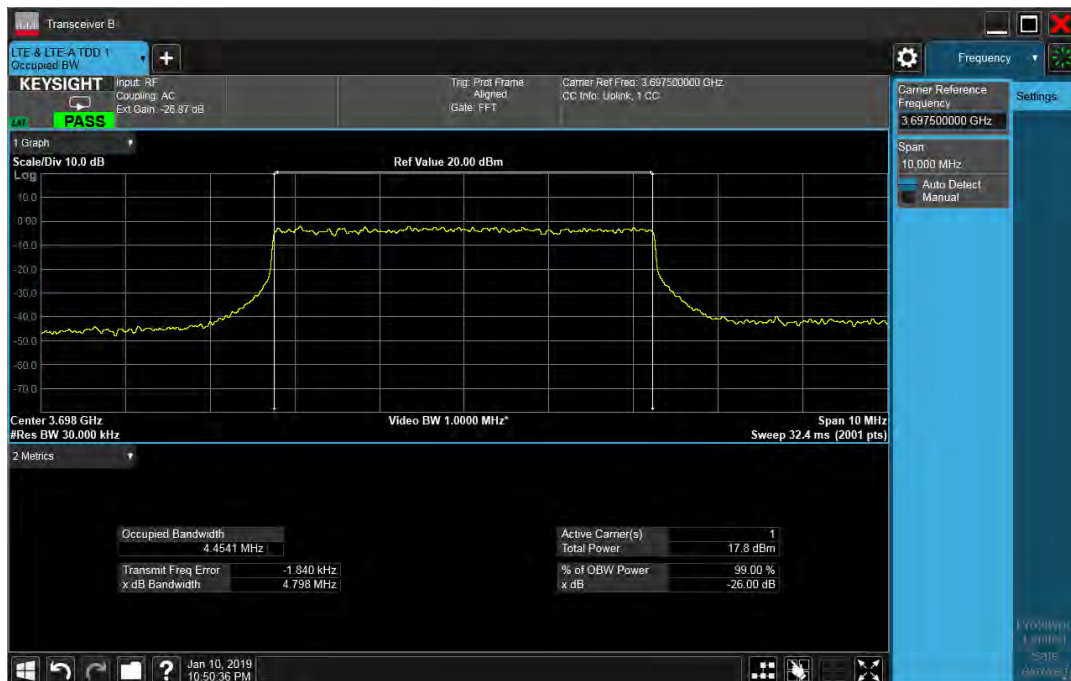
LTE CA intra-band 48 / 20(5+15) / 5MHz(PCC) / 64QAM - RB Size 100(25+75)



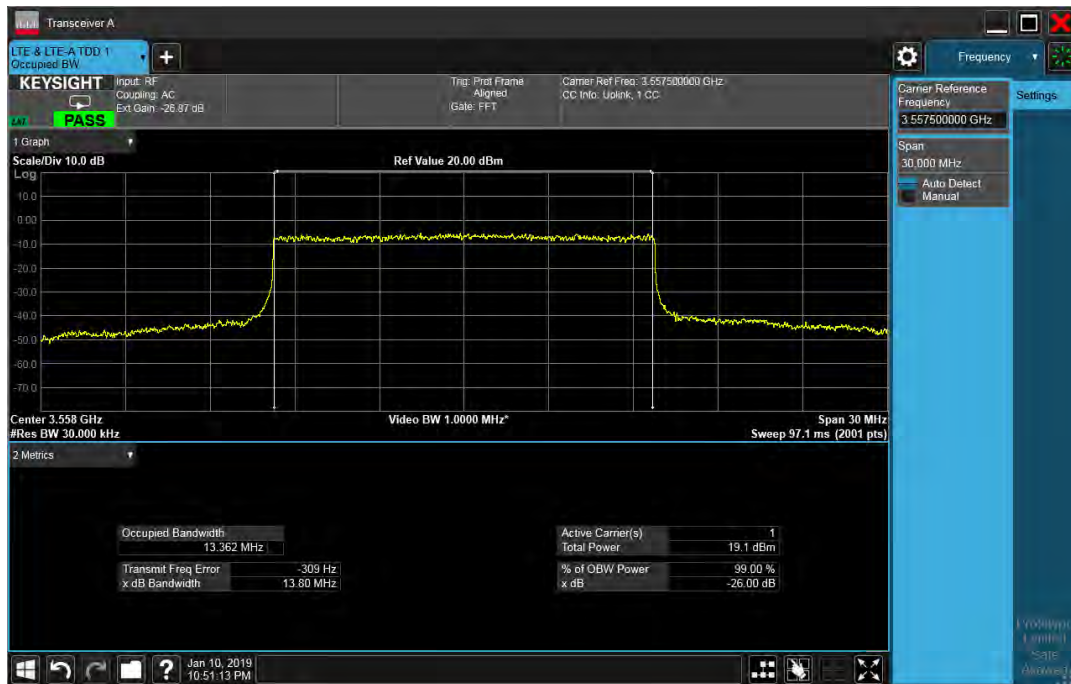
LTE CA intra-band 48 / 20(5+15) / 15MHz(SCC) / 64QAM - RB Size 100(25+75)



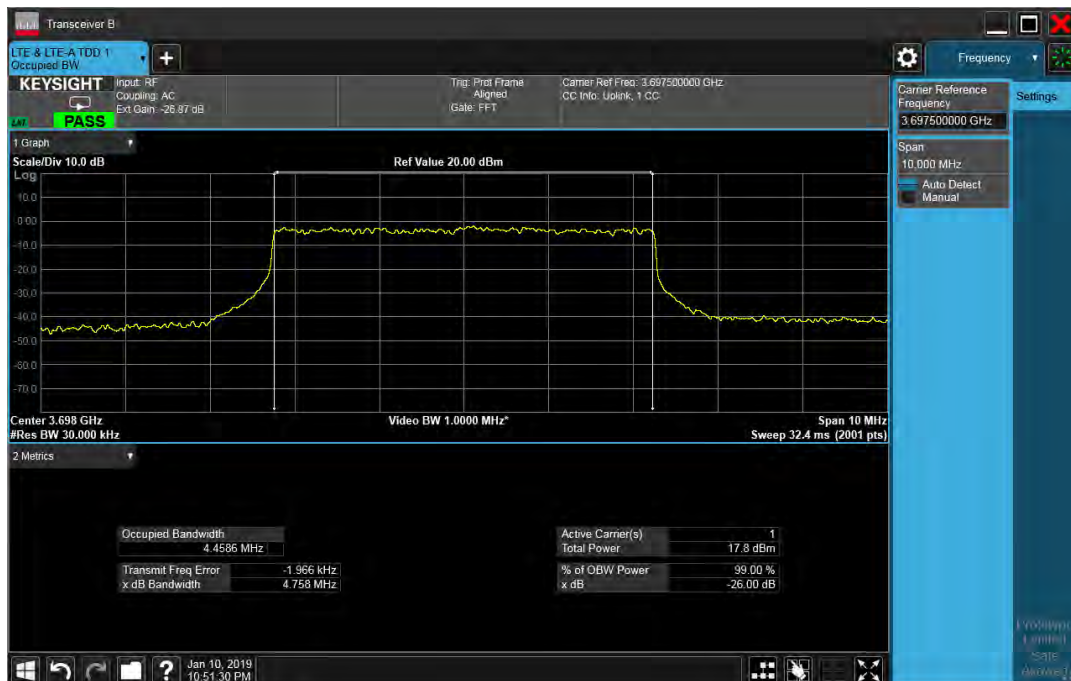
LTE CA intra-band 48 / 20(15+5) / 15MHz(PCC) / QPSK - RB Size 100(75+25)



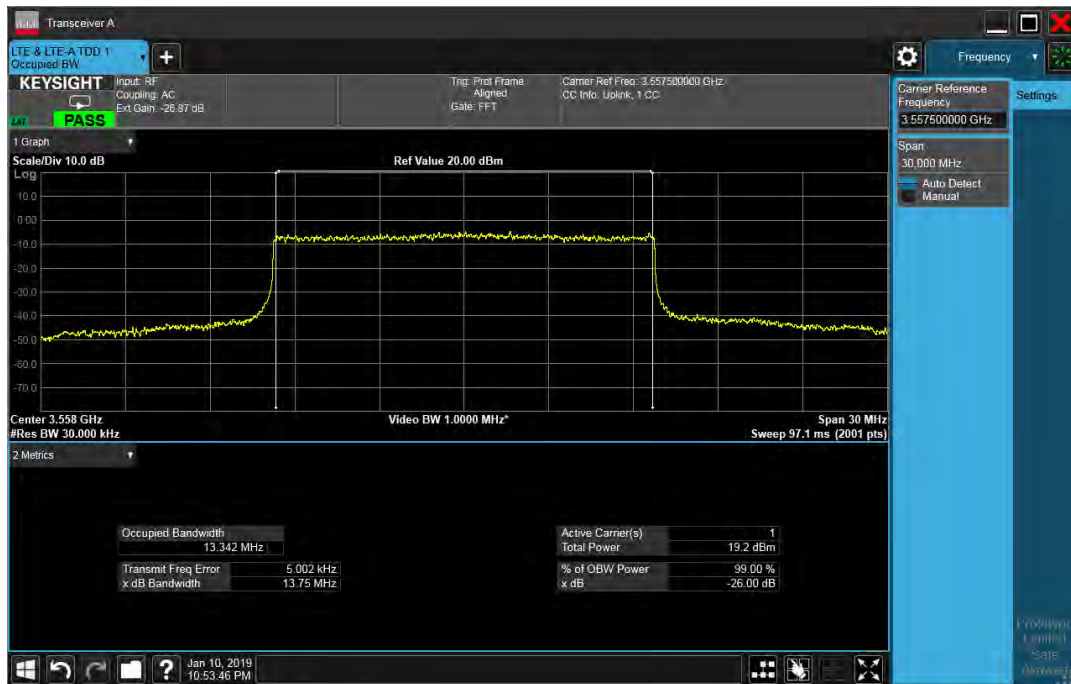
LTE CA intra-band 48 / 20(15+5) / 5MHz(SCC) / QPSK - RB Size 100(75+25)



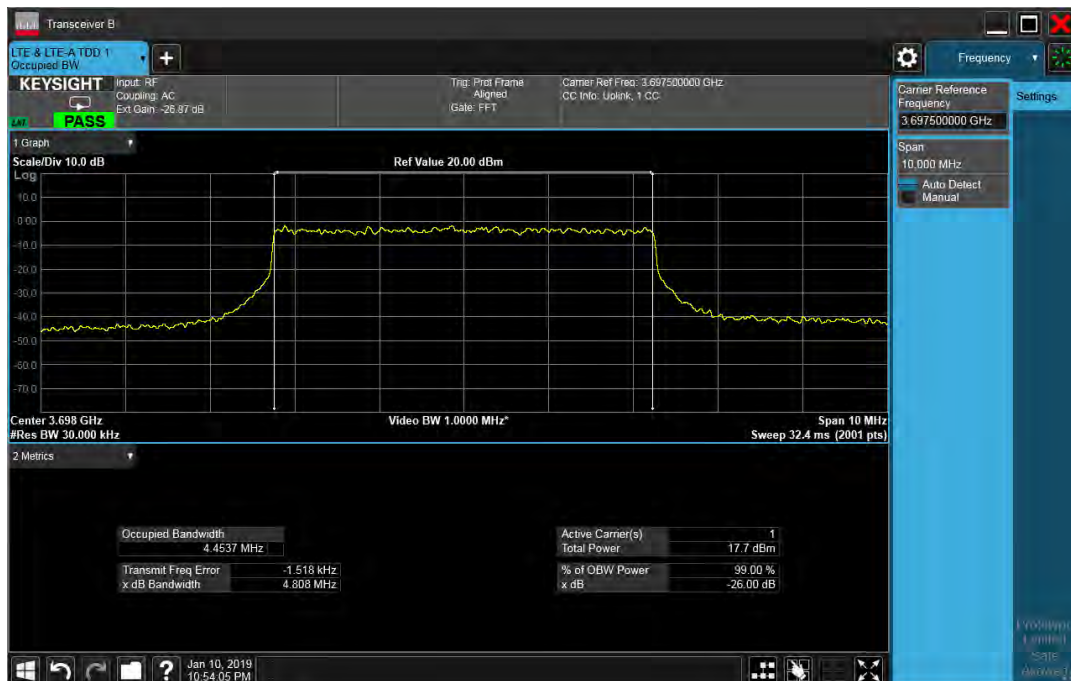
LTE CA intra-band 48 / 20(15+5) / 15MHz(PCC) / 16QAM - RB Size 100(75+25)



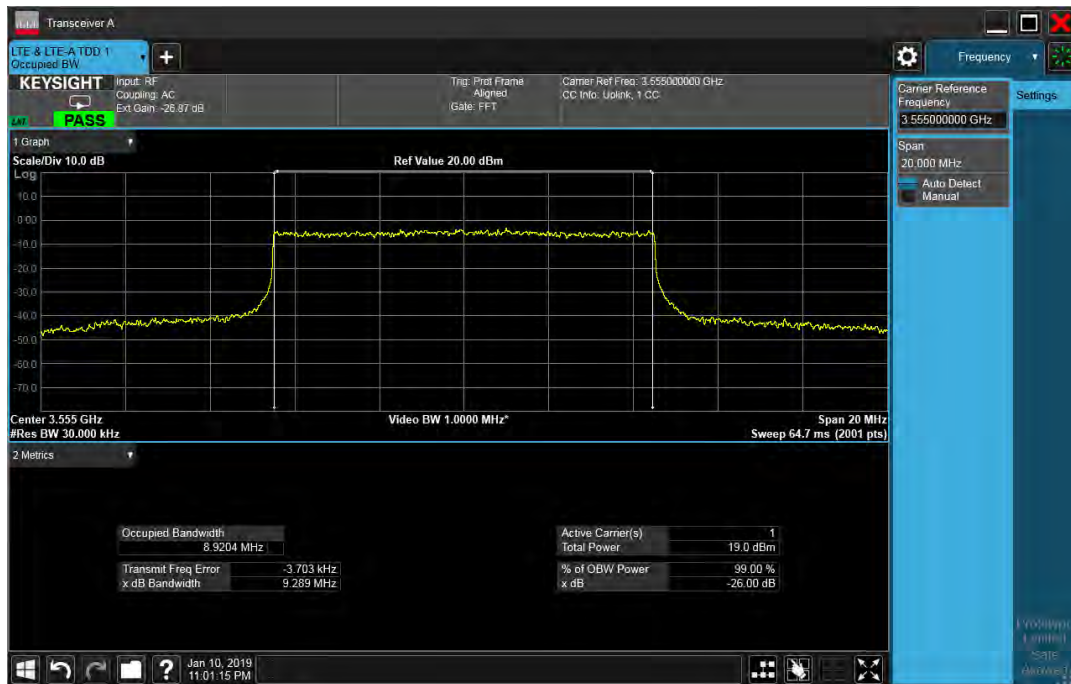
LTE CA intra-band 48 / 20(15+5) / 5MHz(SCC) / 16QAM - RB Size 100(75+25)



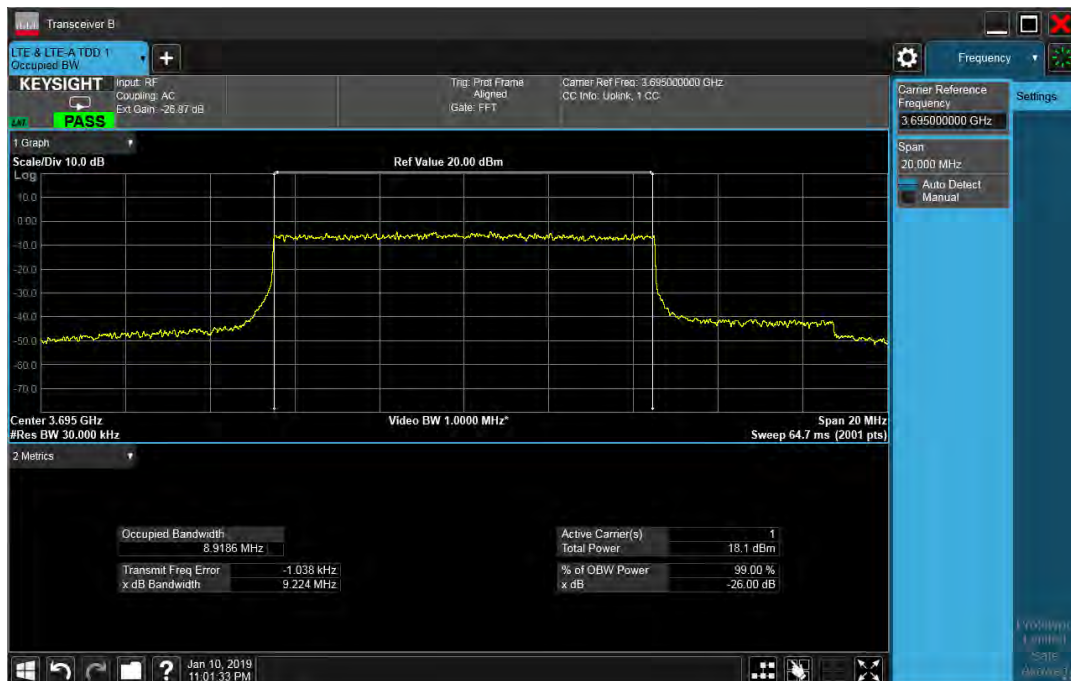
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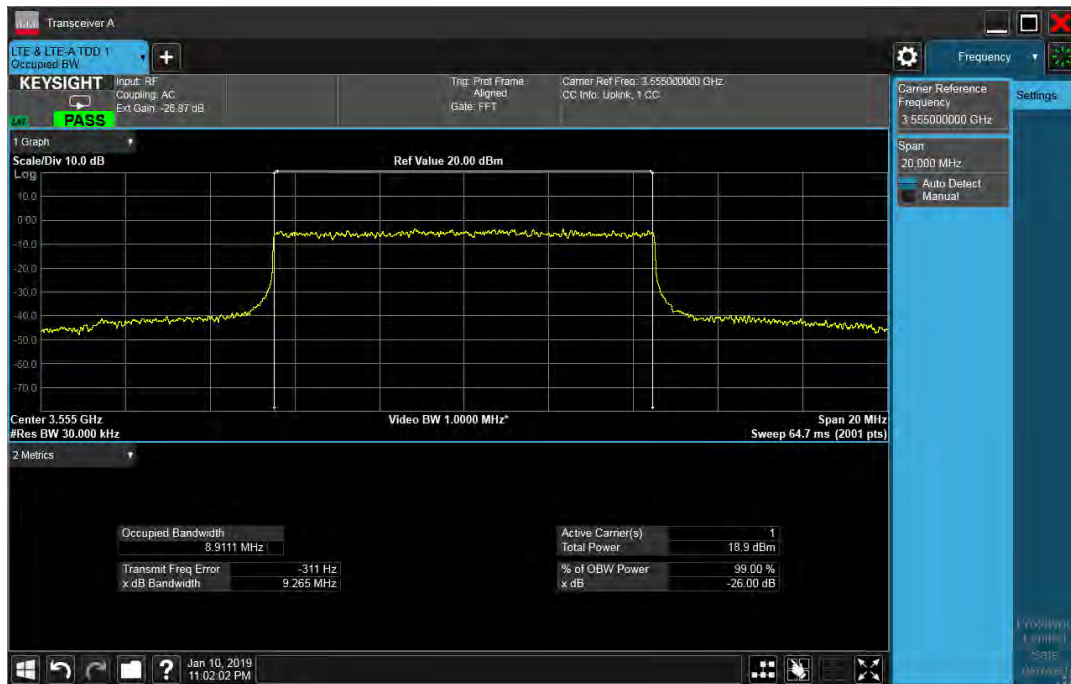
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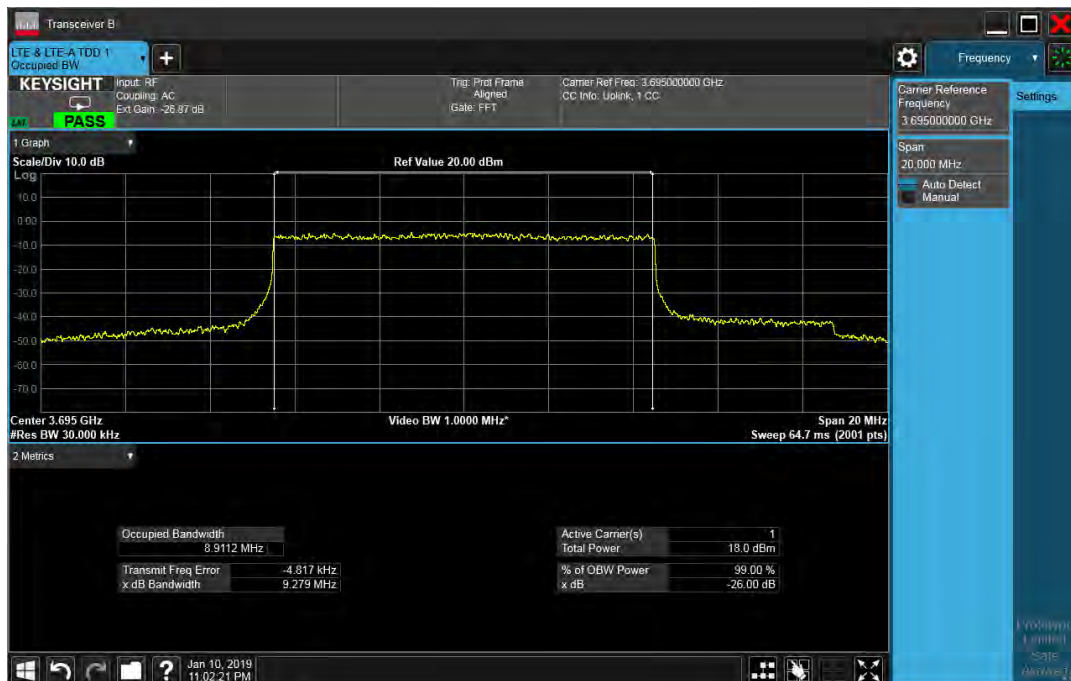
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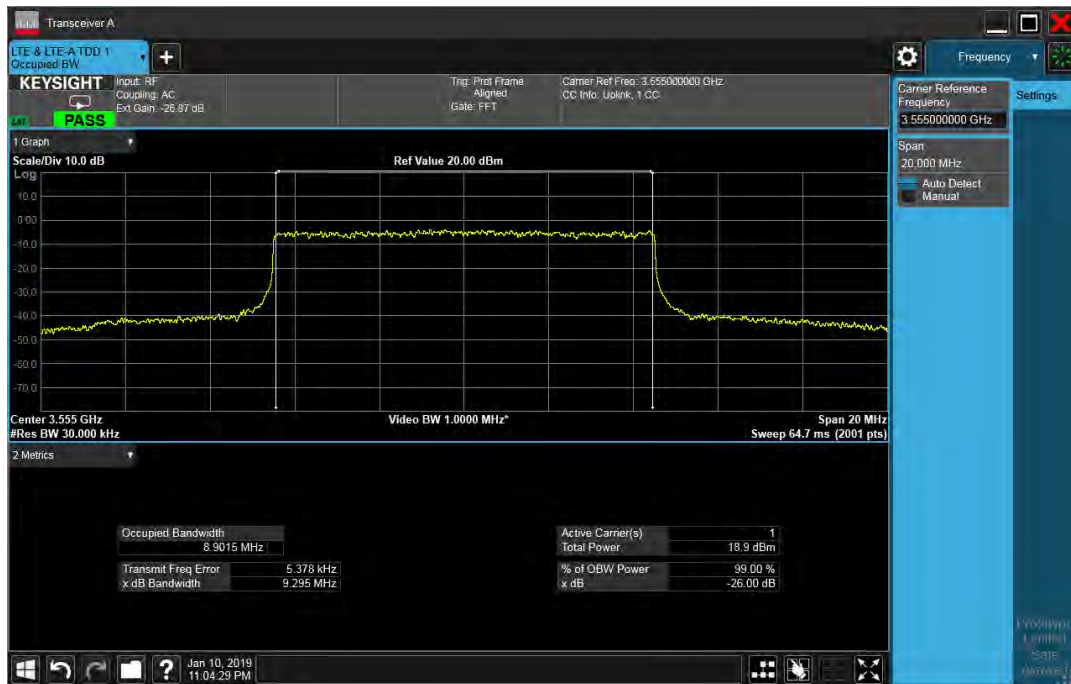
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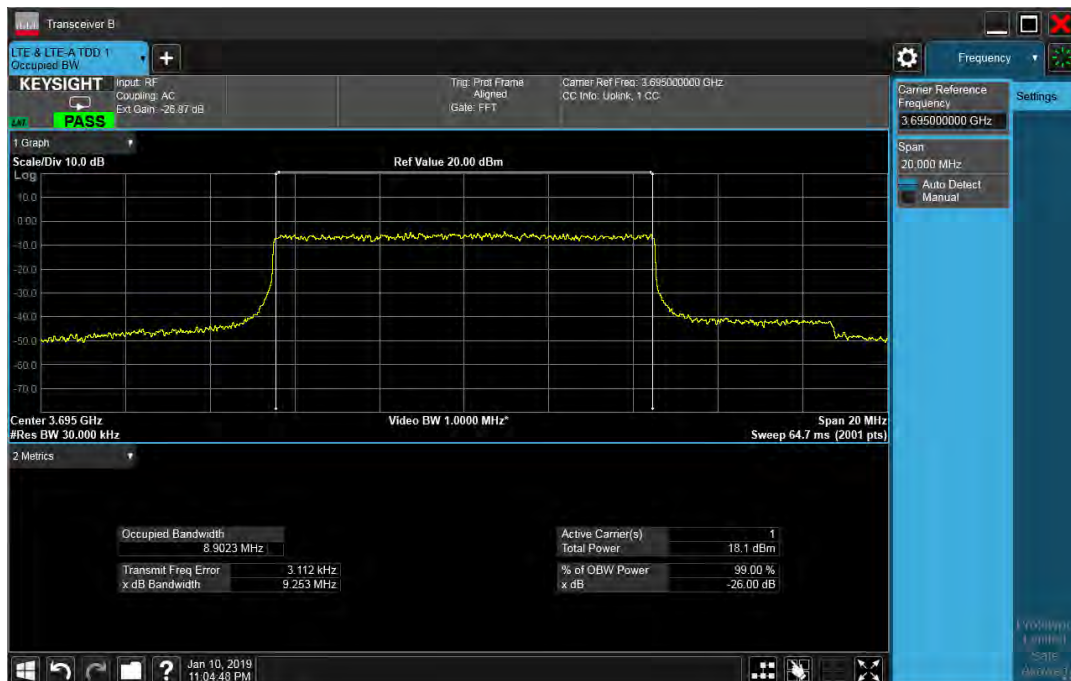
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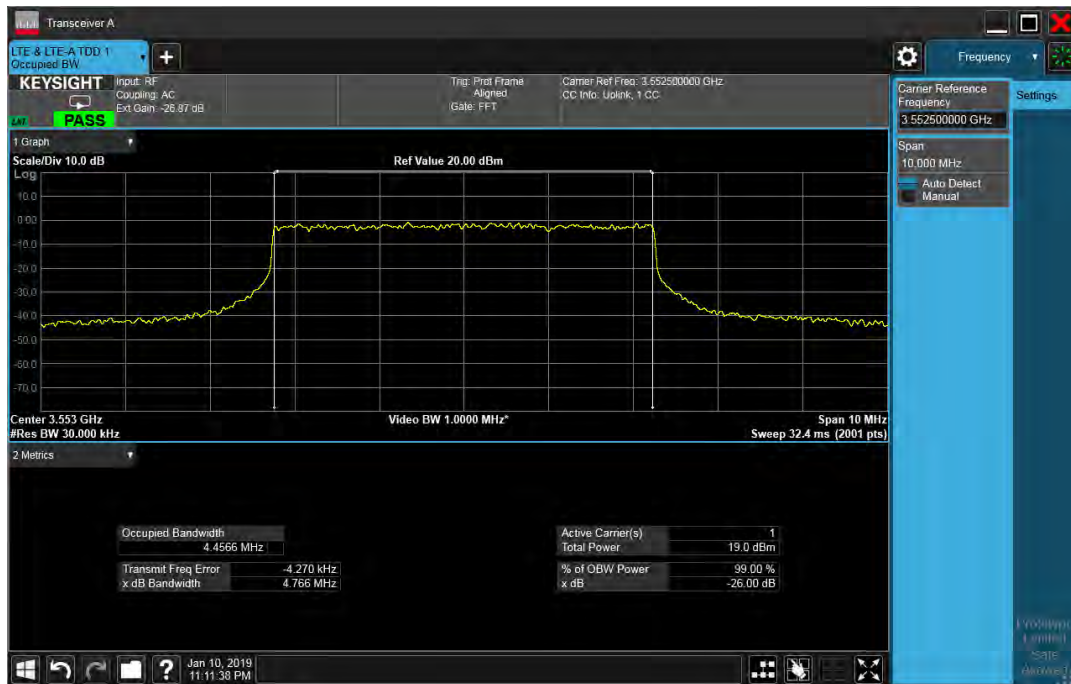
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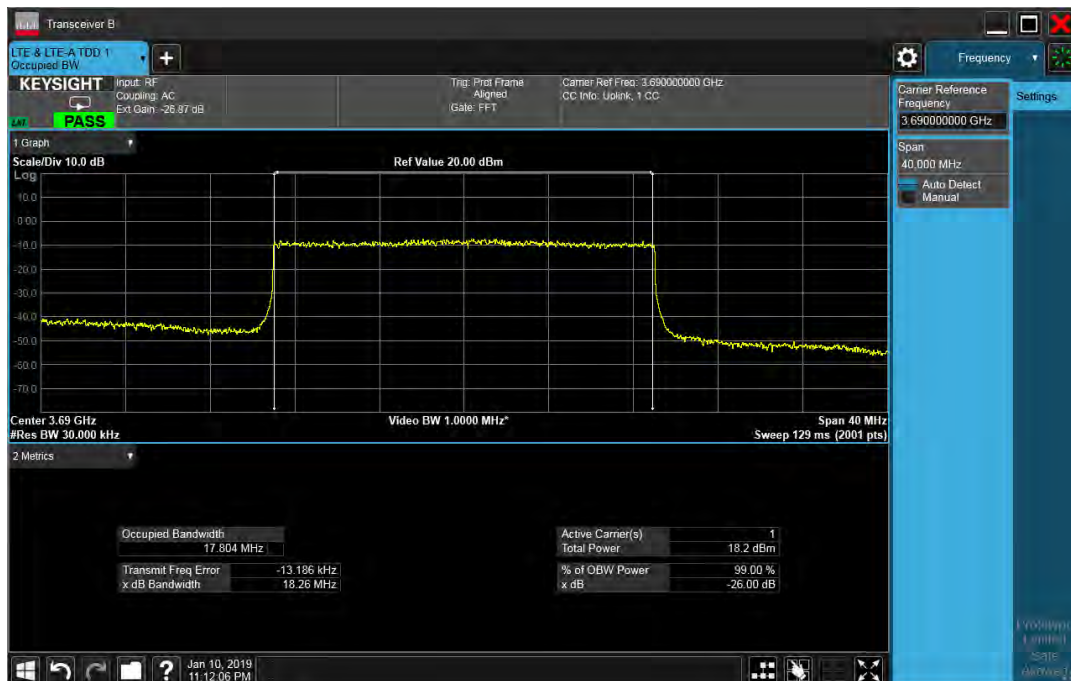
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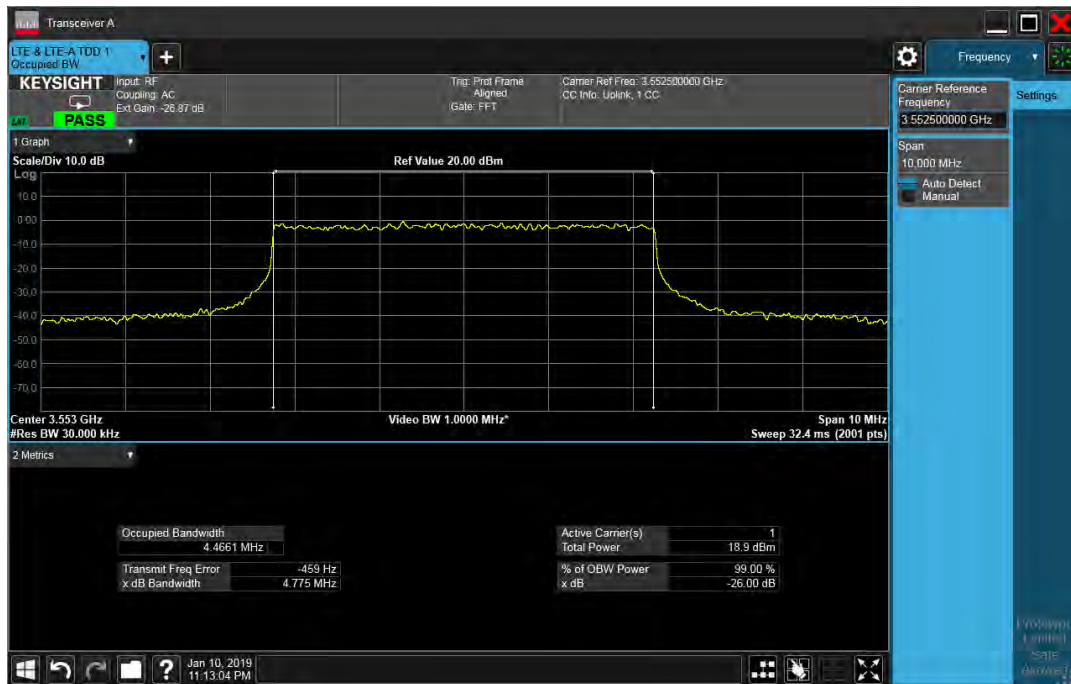
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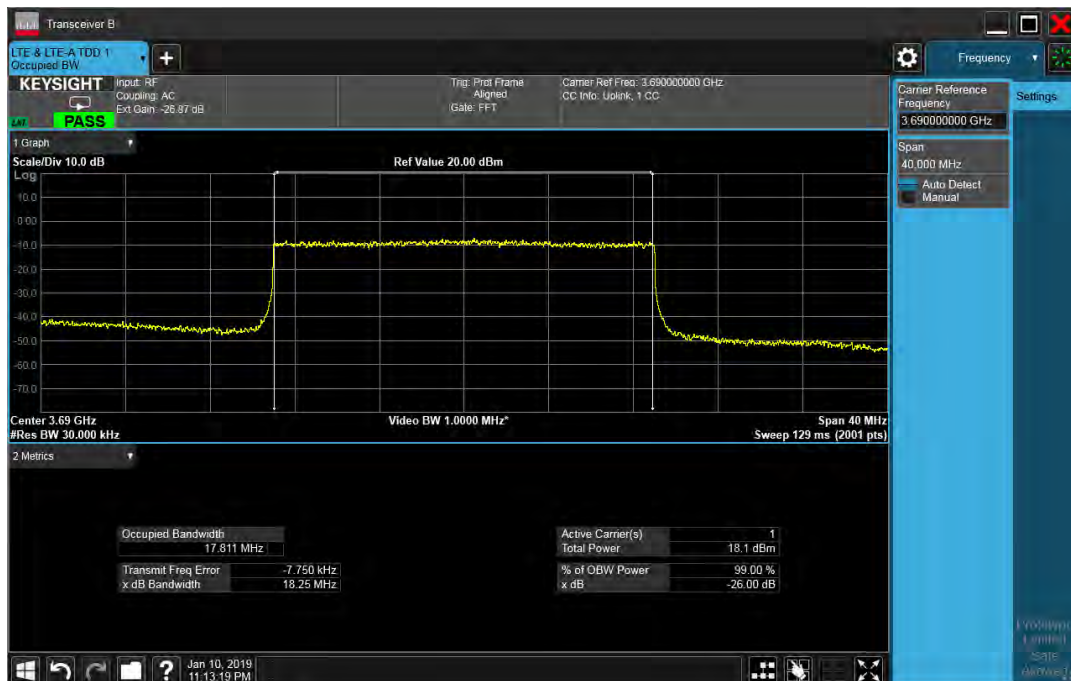
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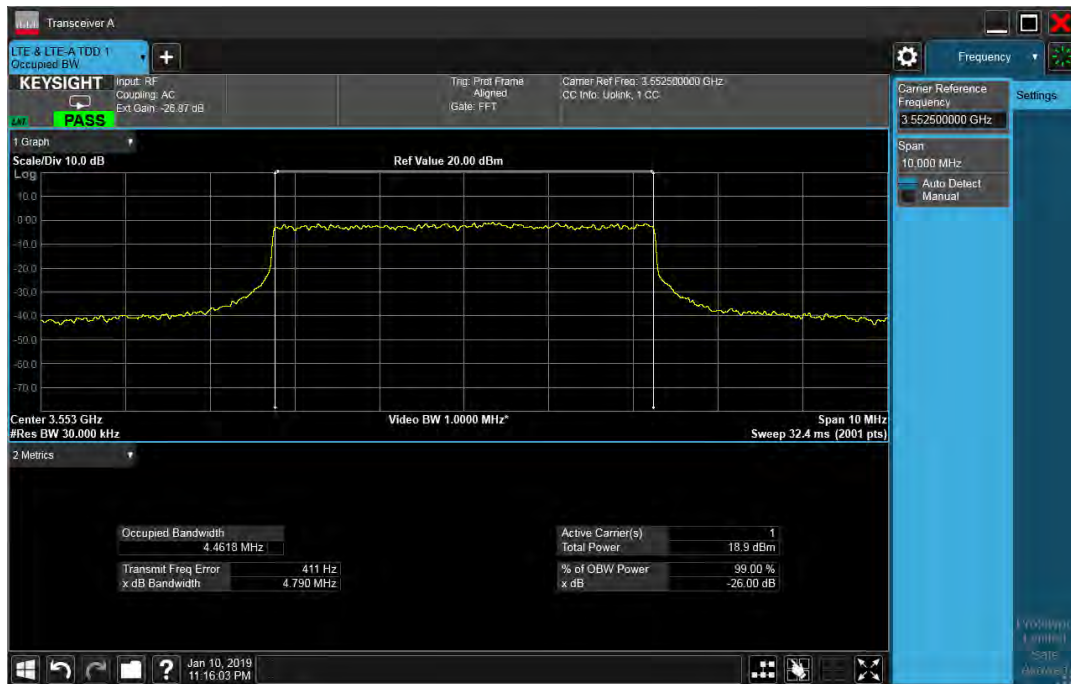
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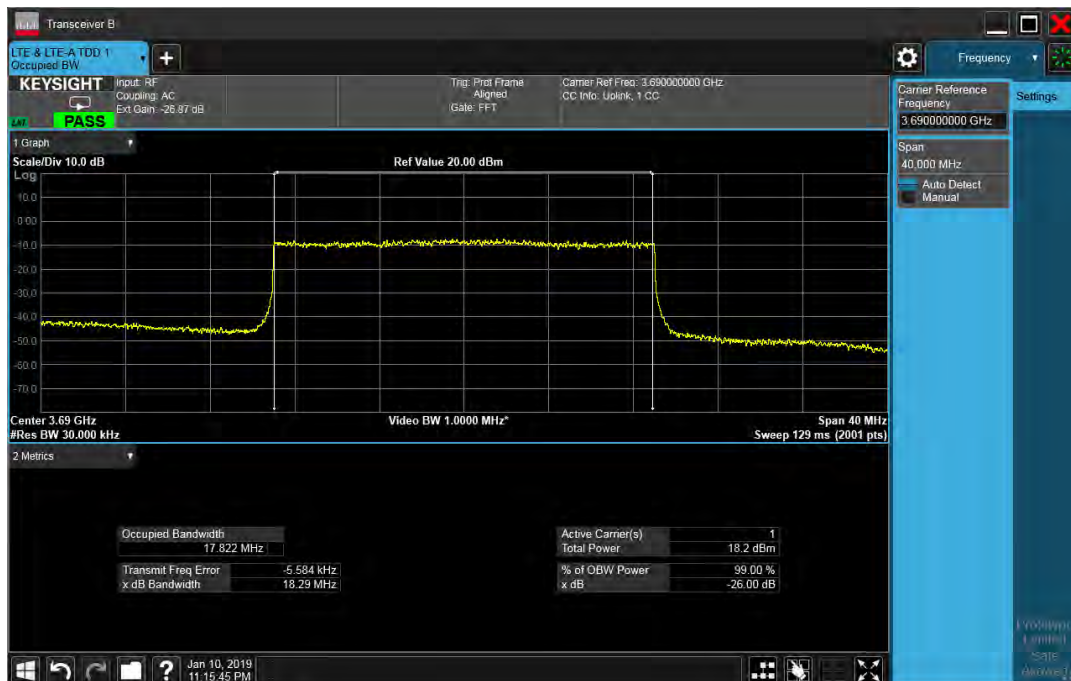
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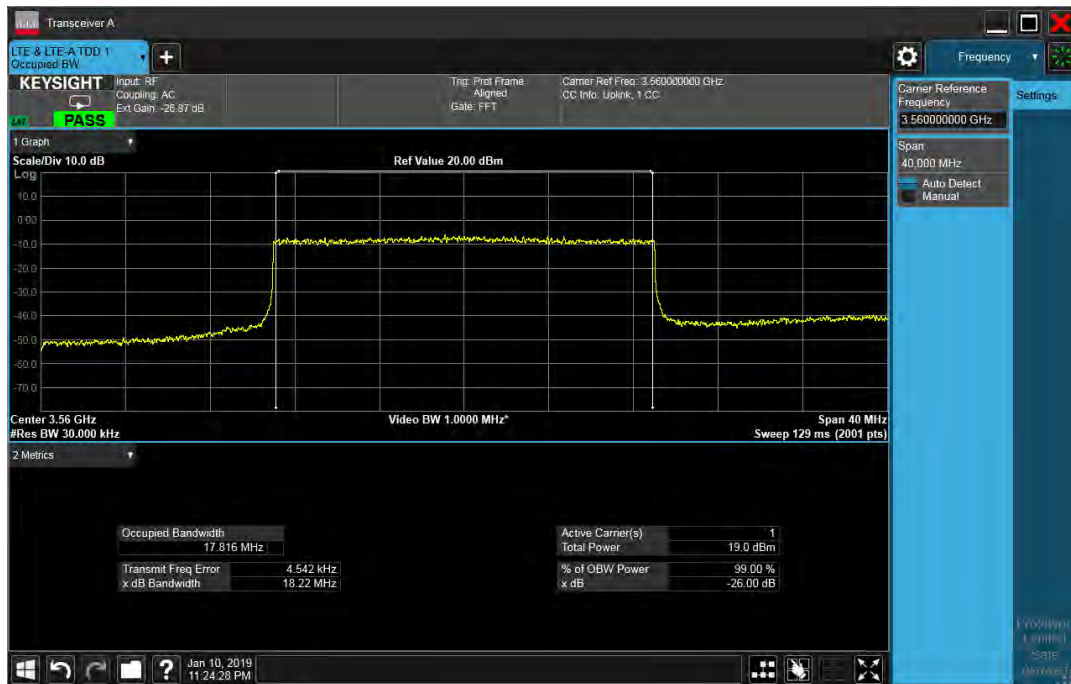
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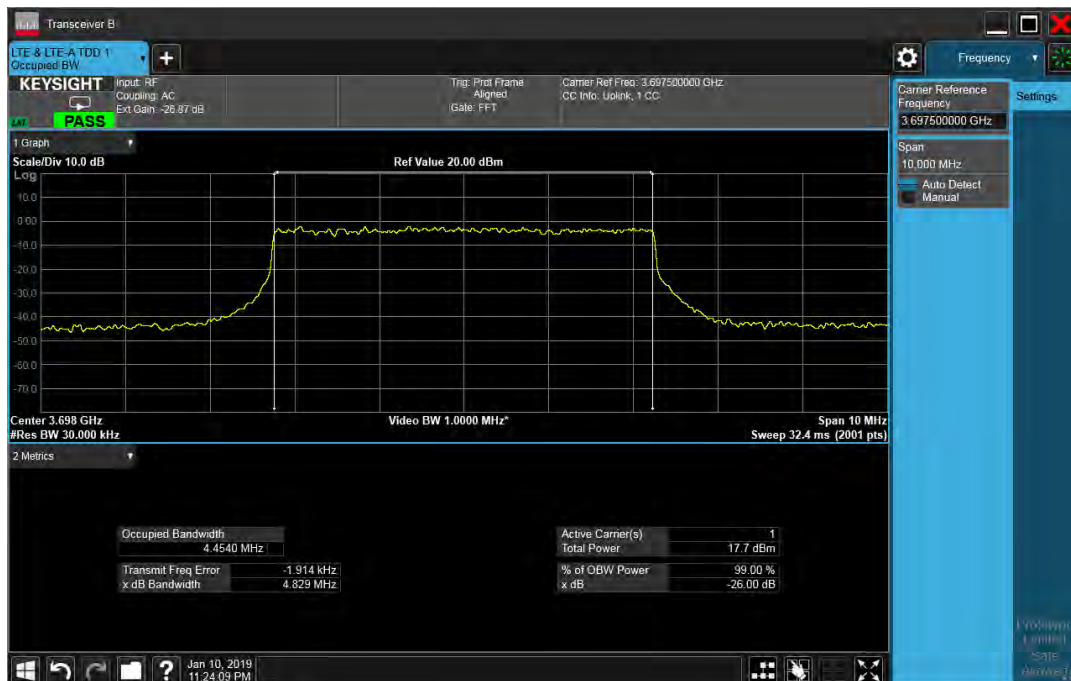
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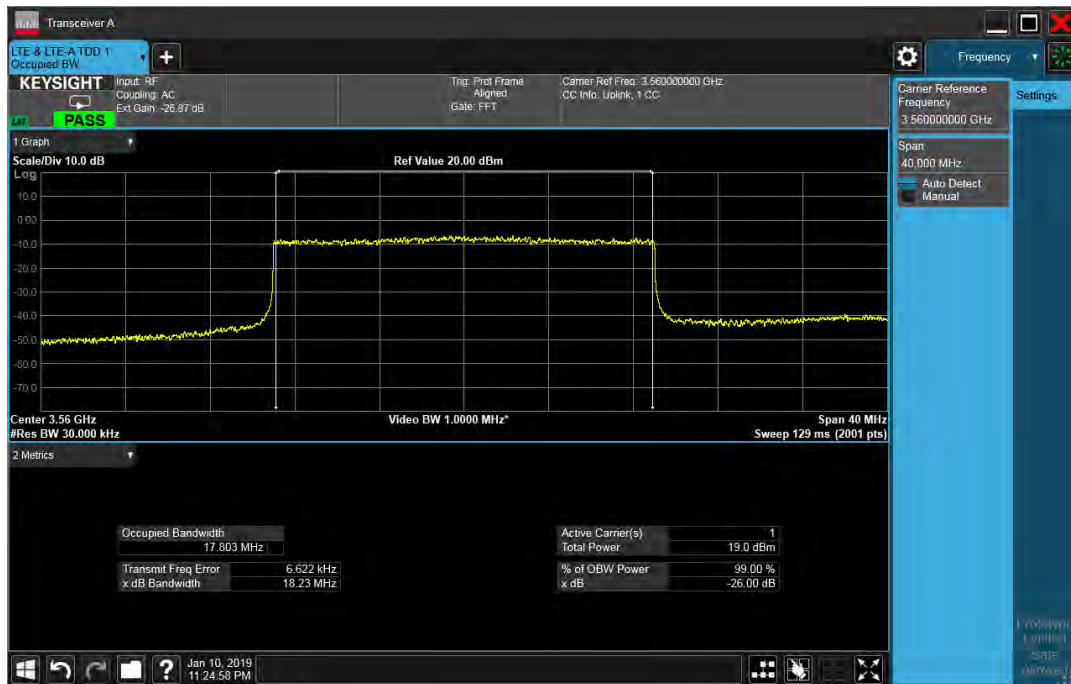
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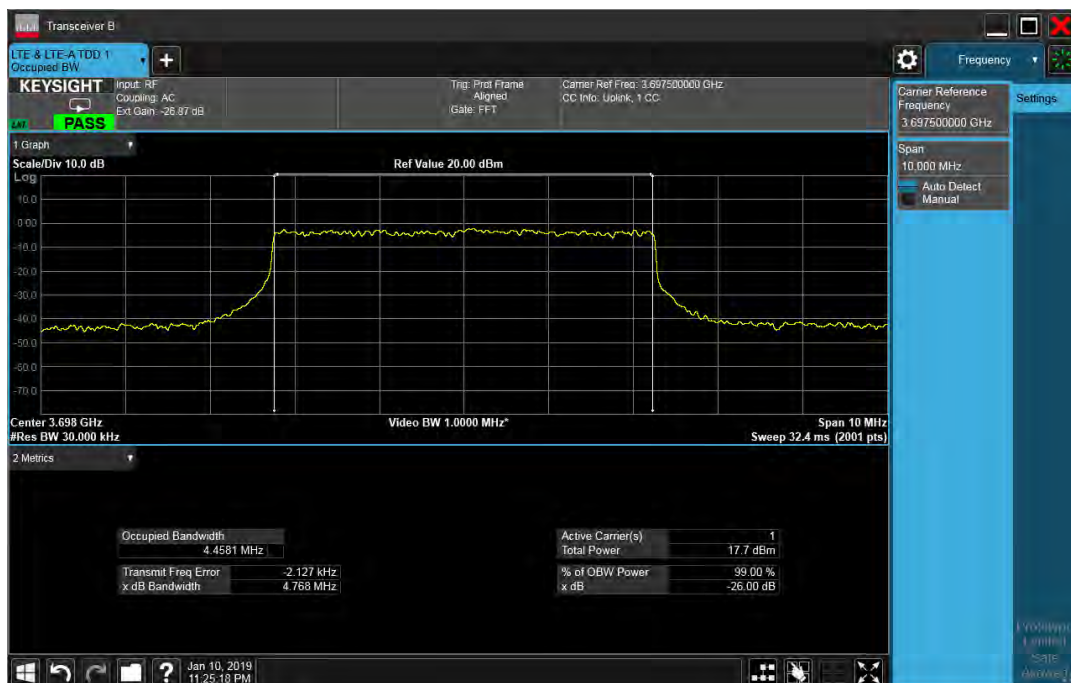
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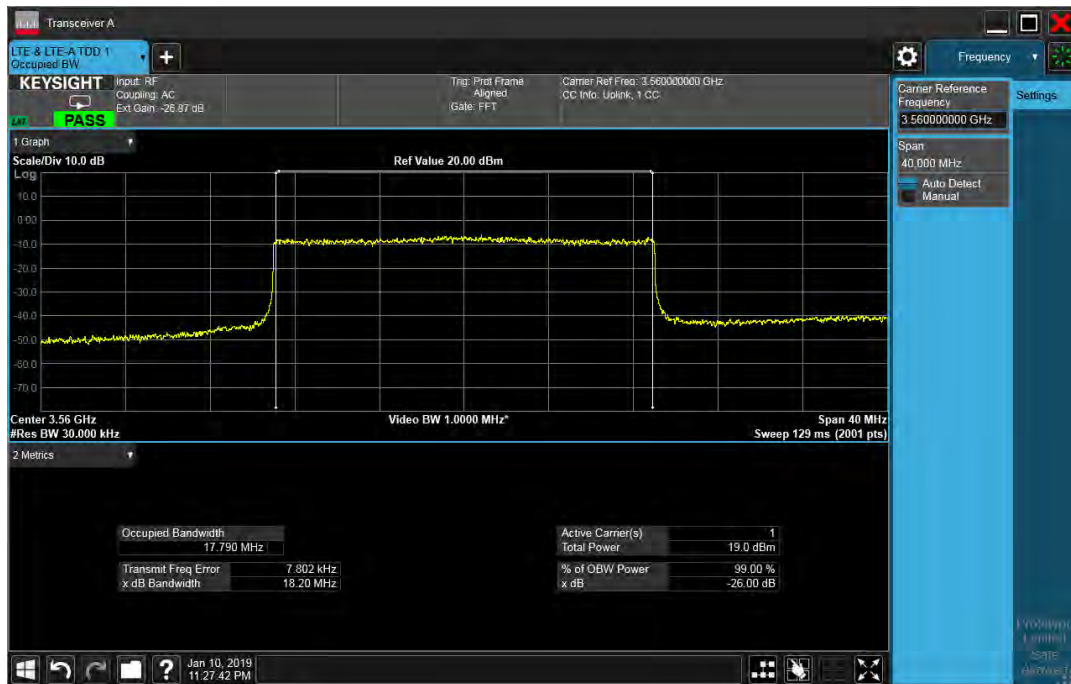
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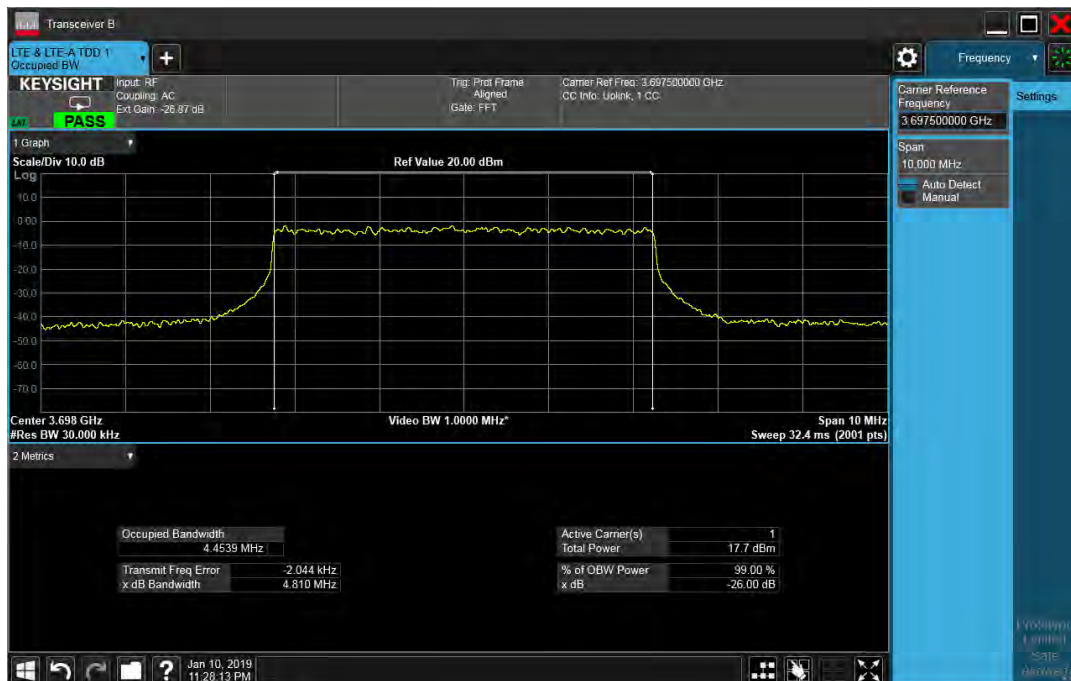
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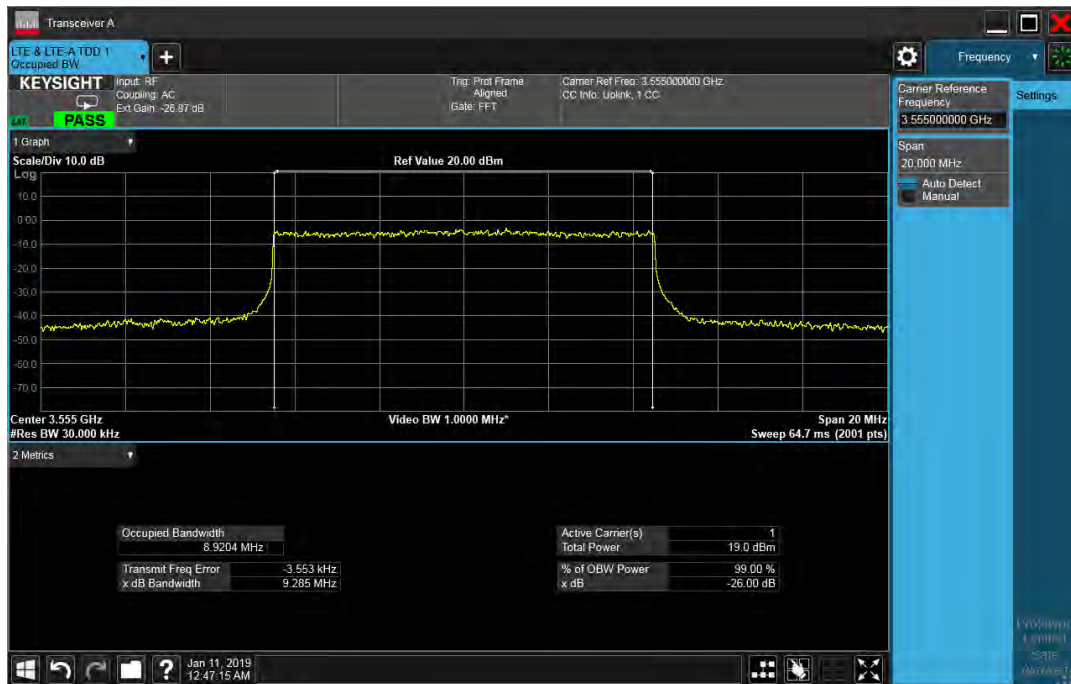
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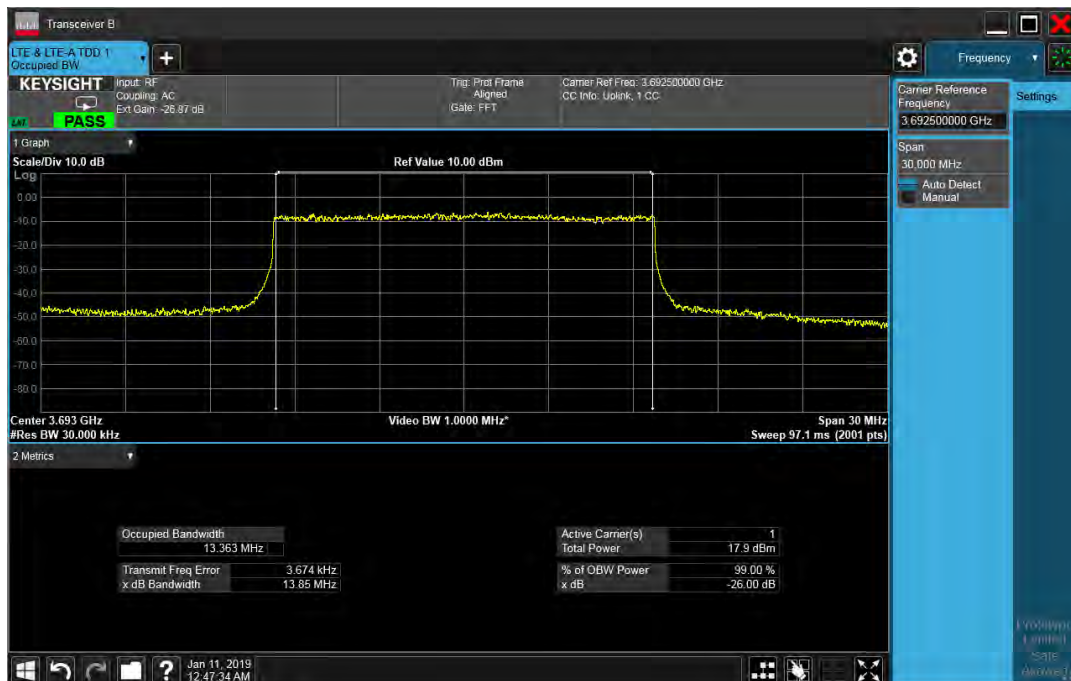
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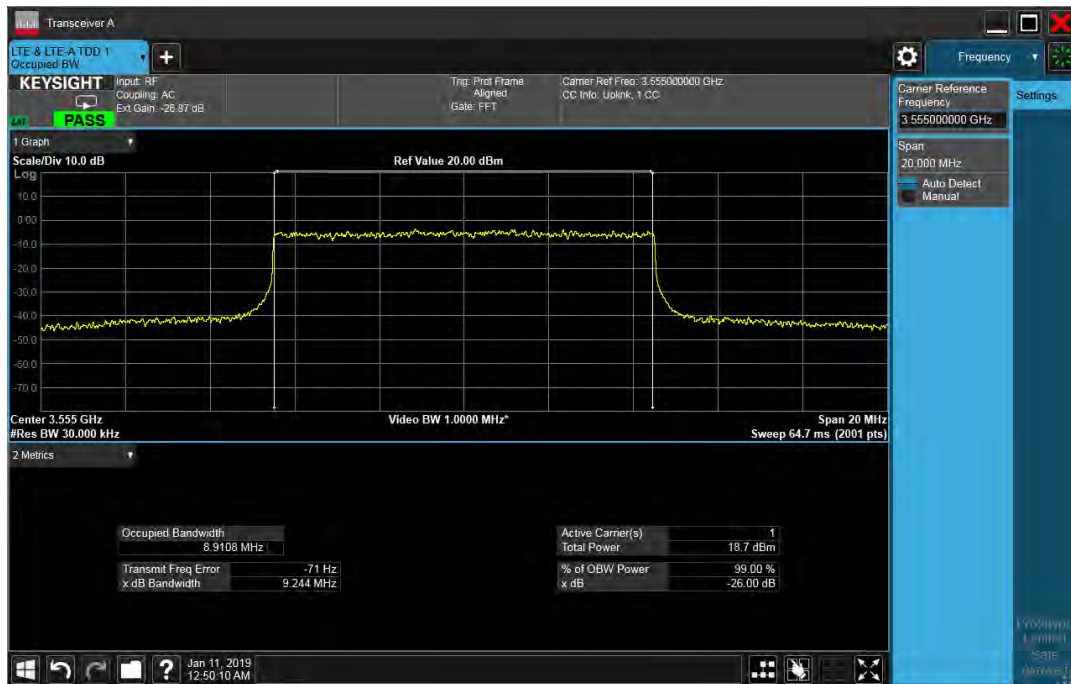
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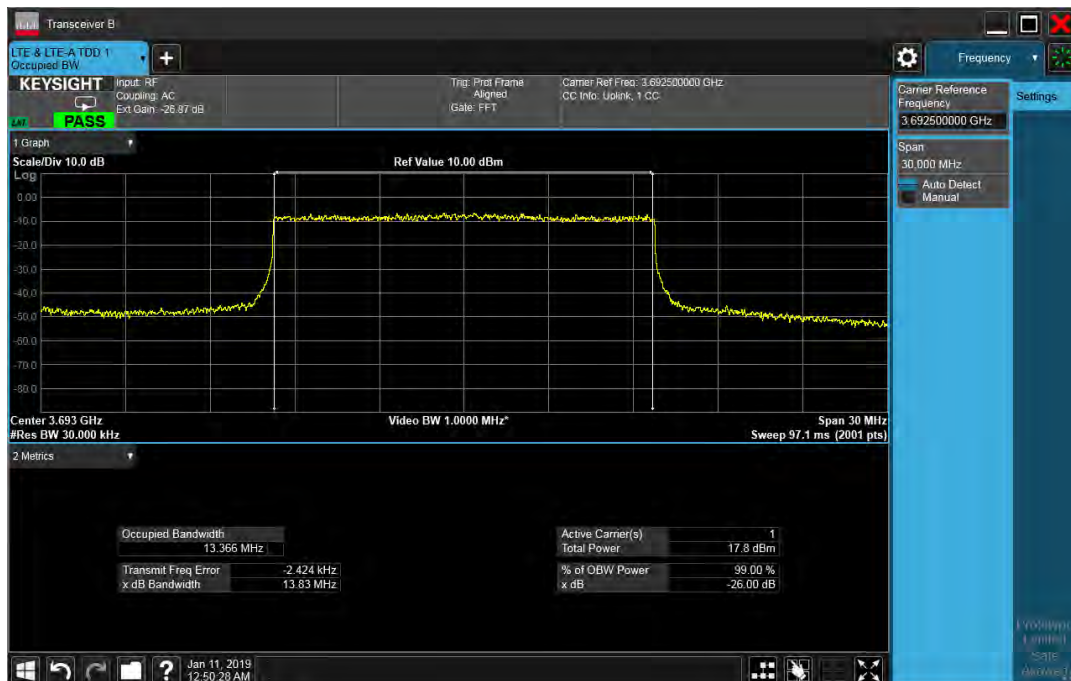
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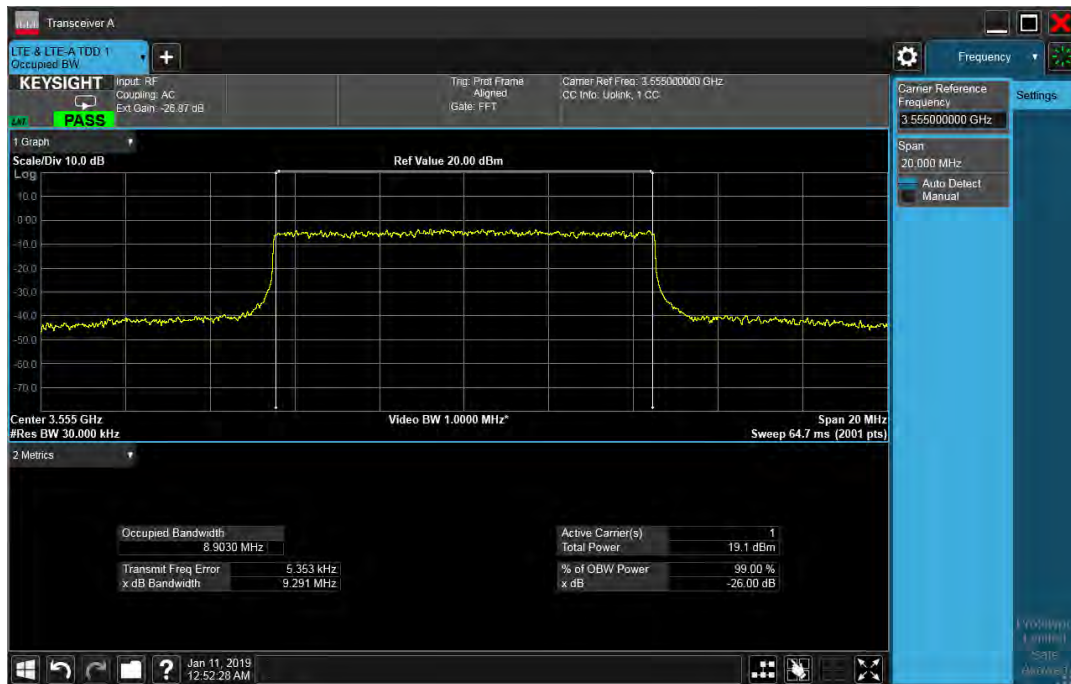
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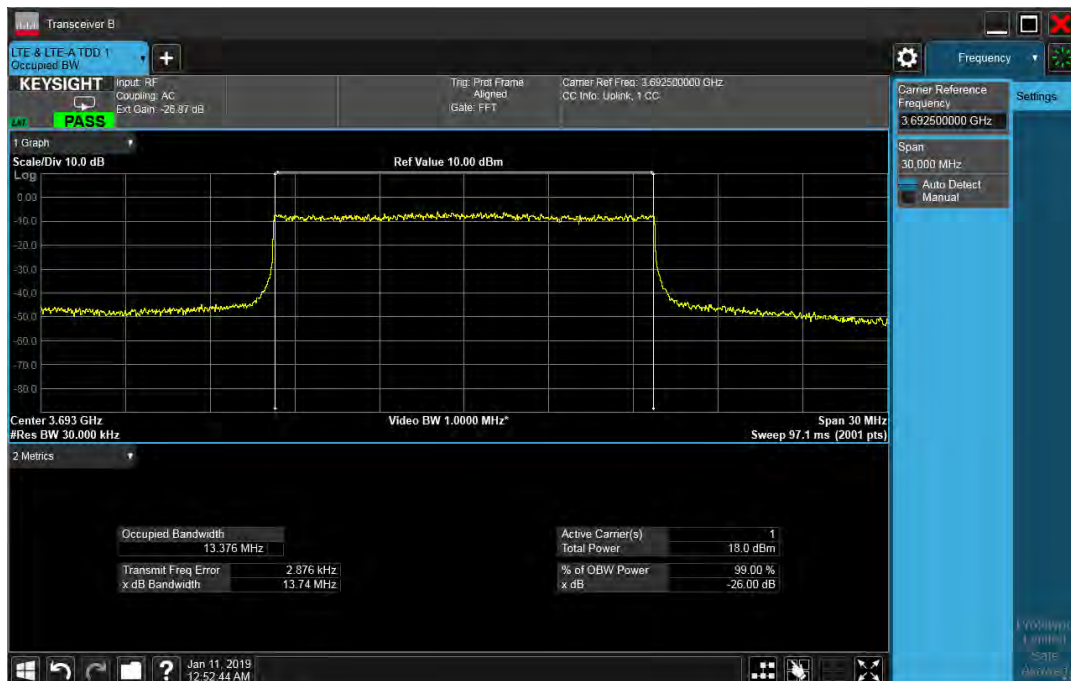
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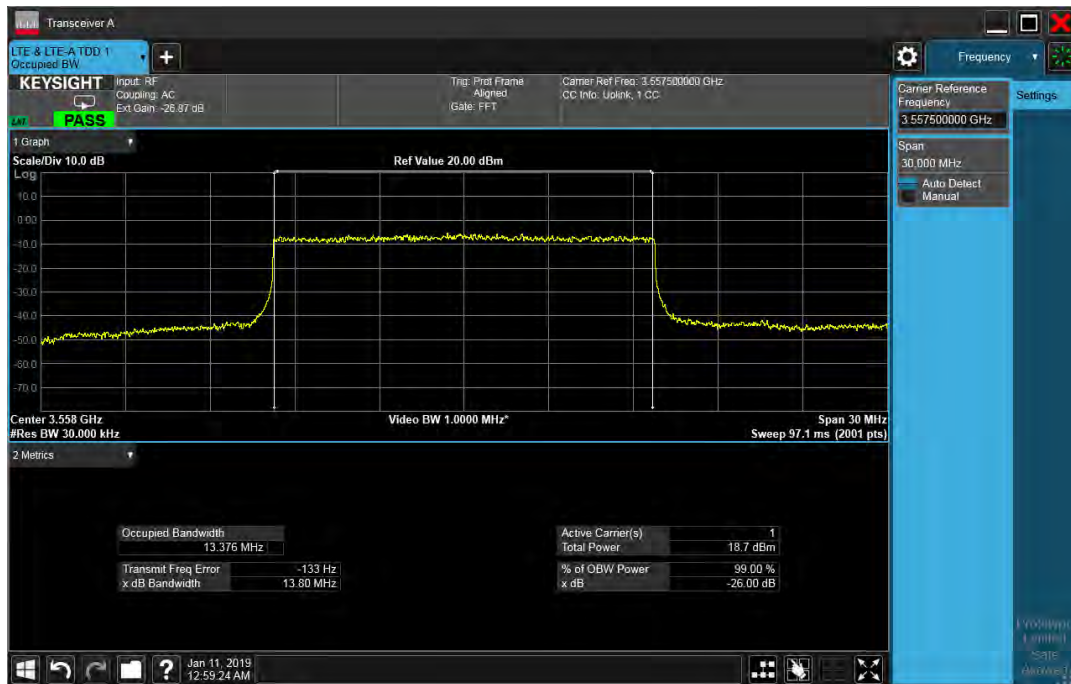
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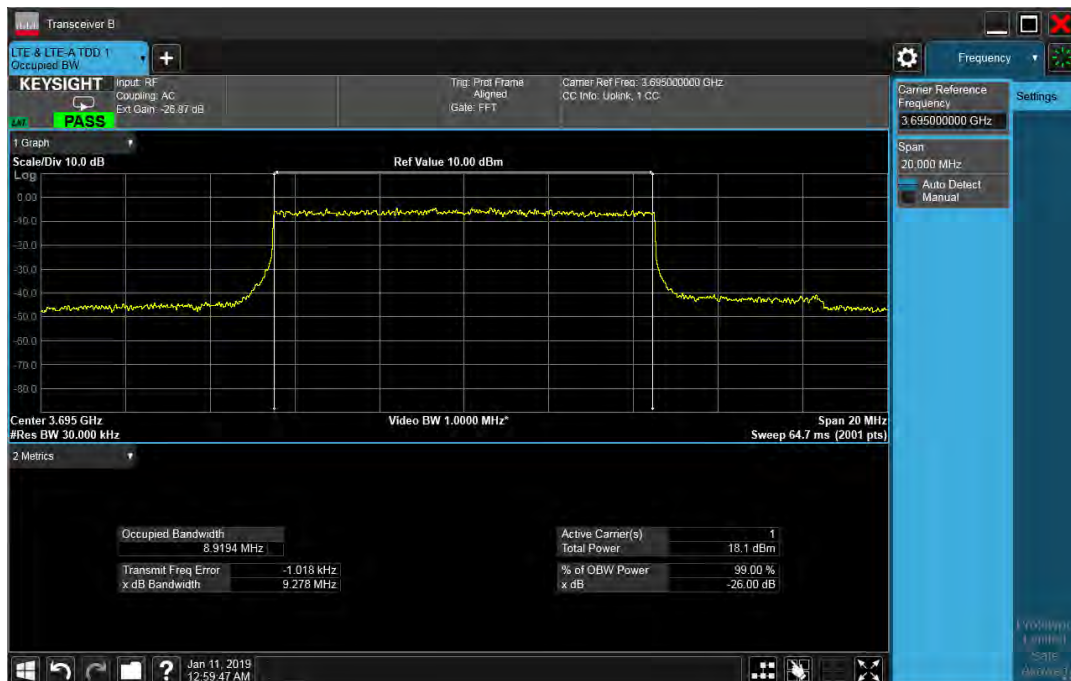
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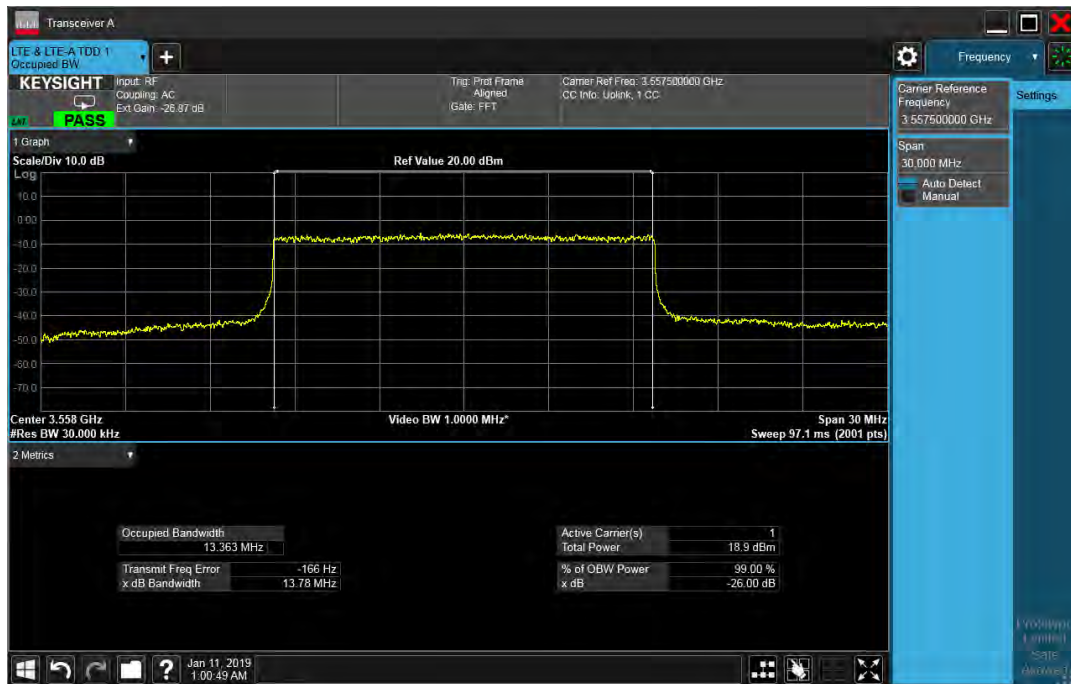
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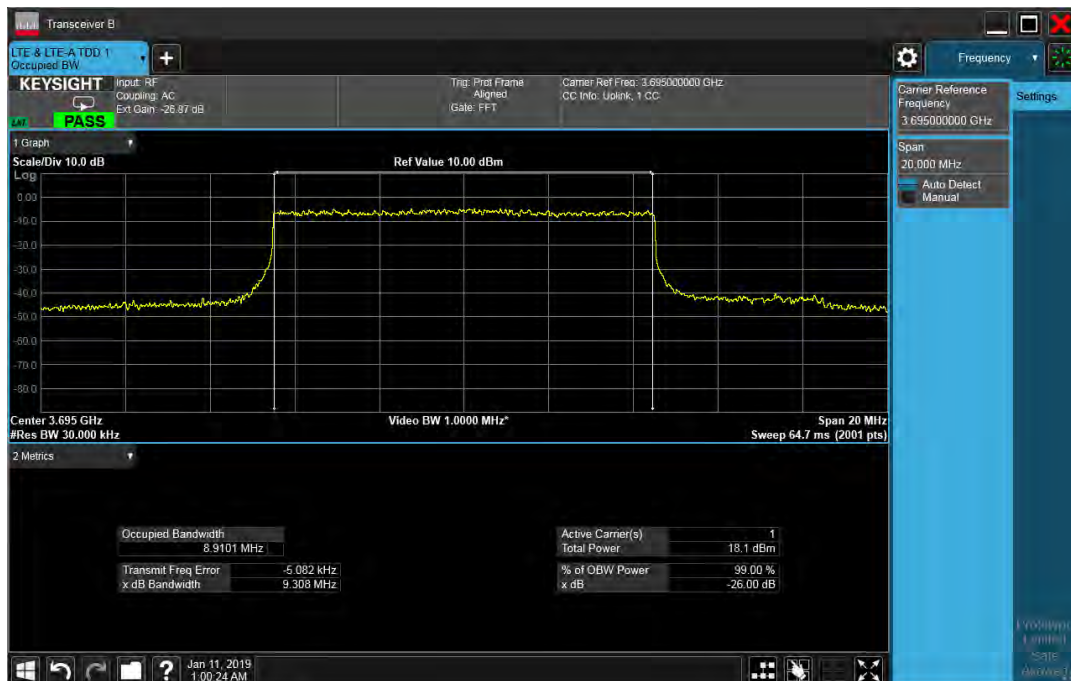
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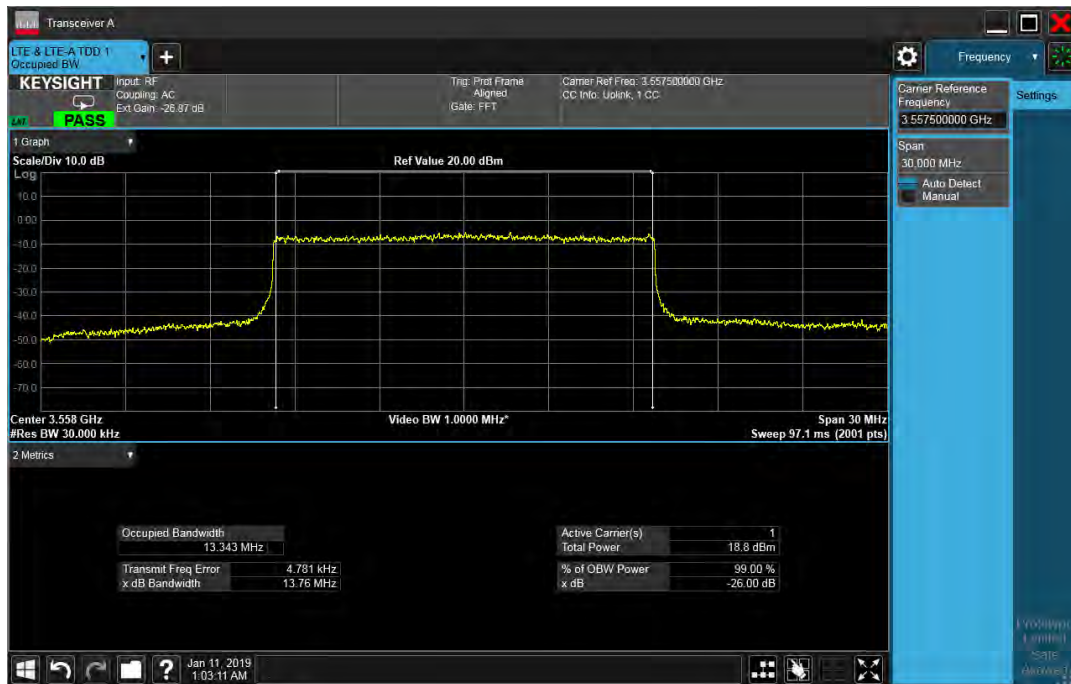
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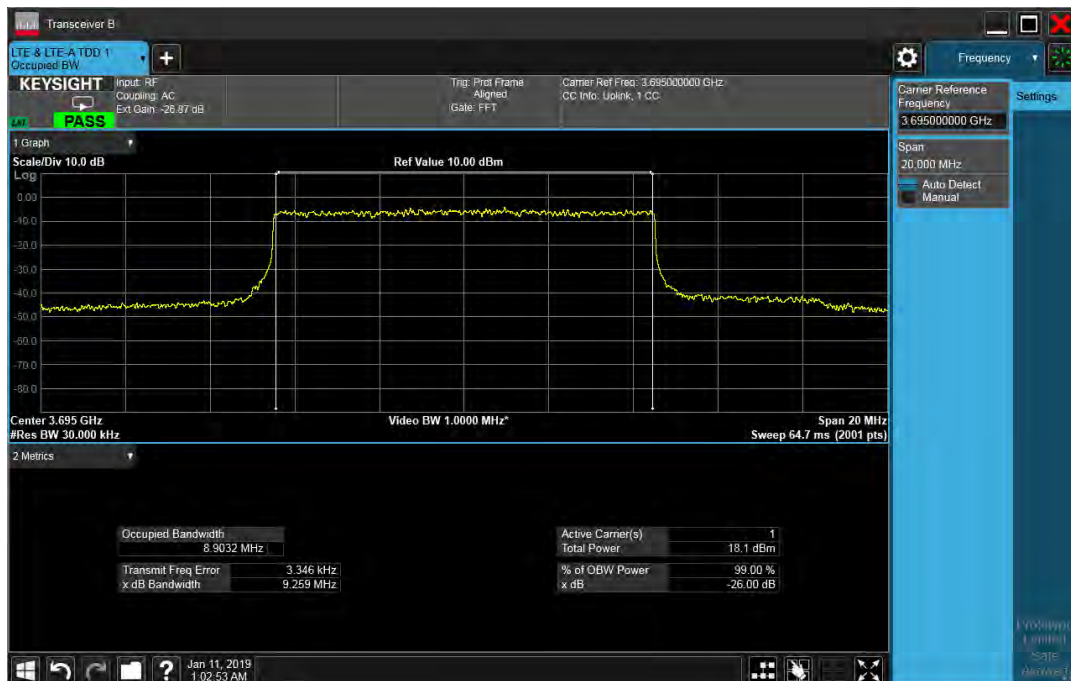
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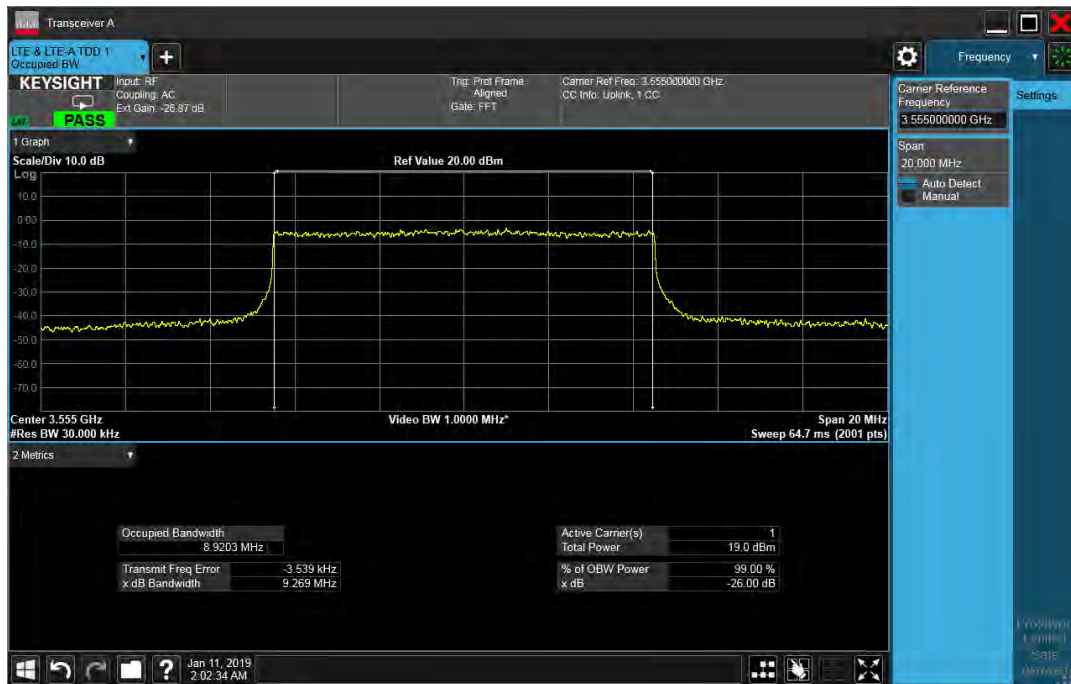
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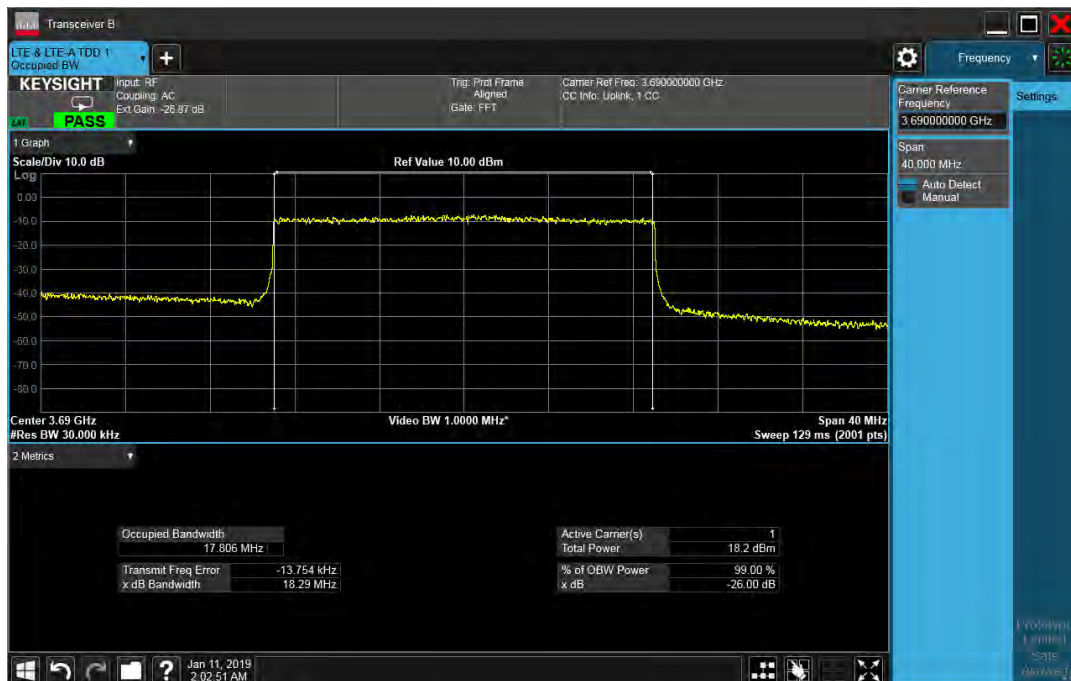
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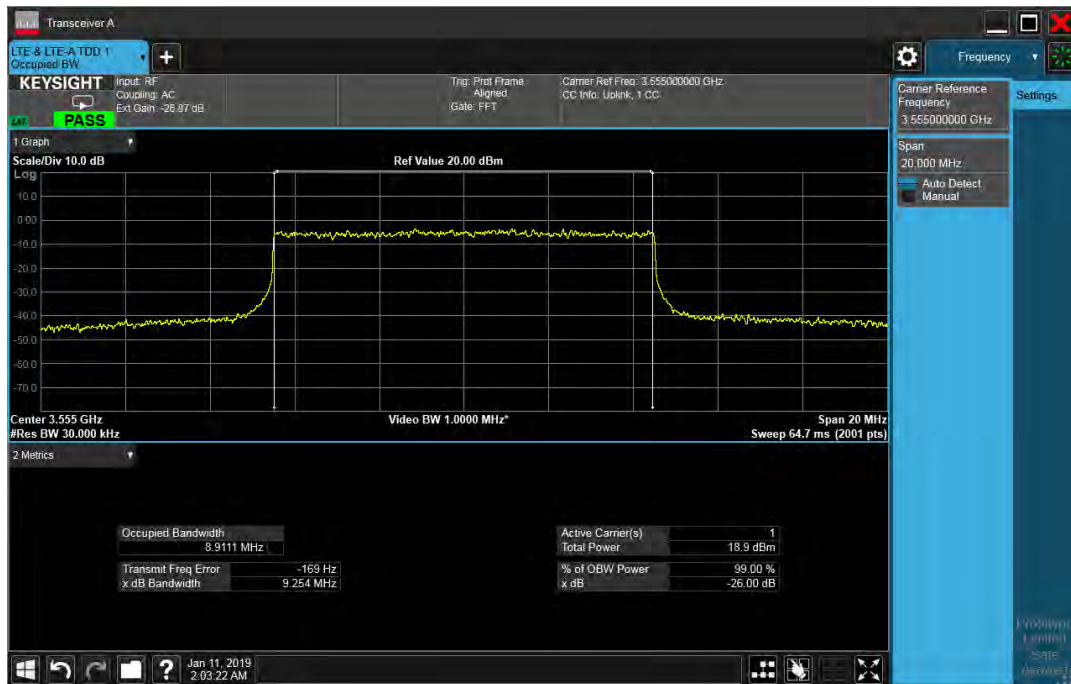
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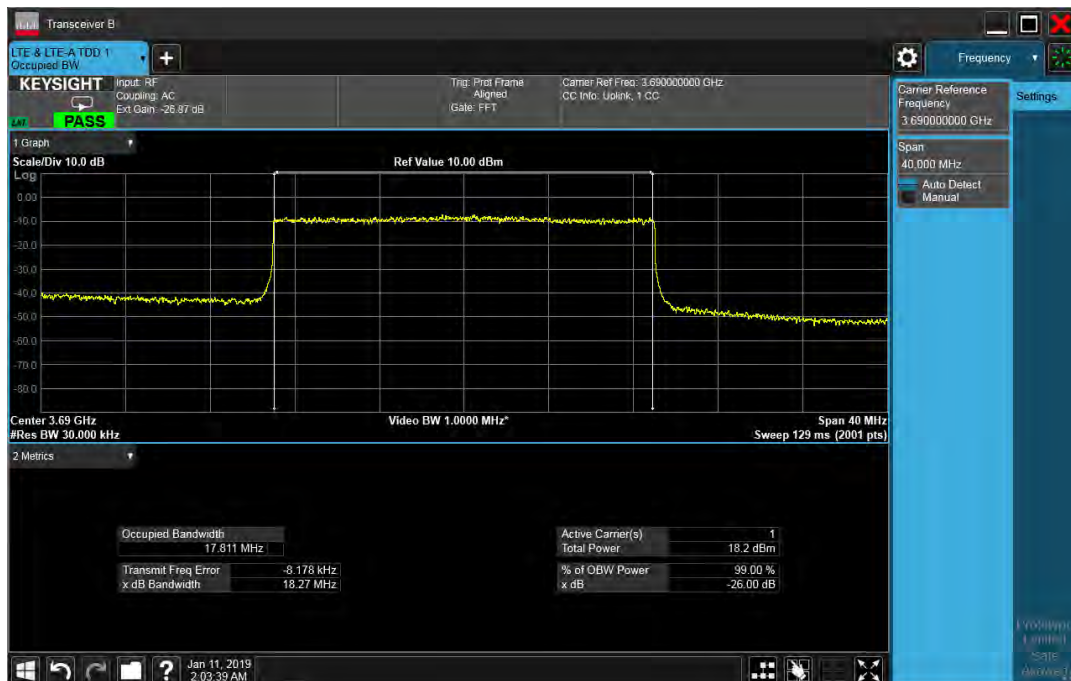
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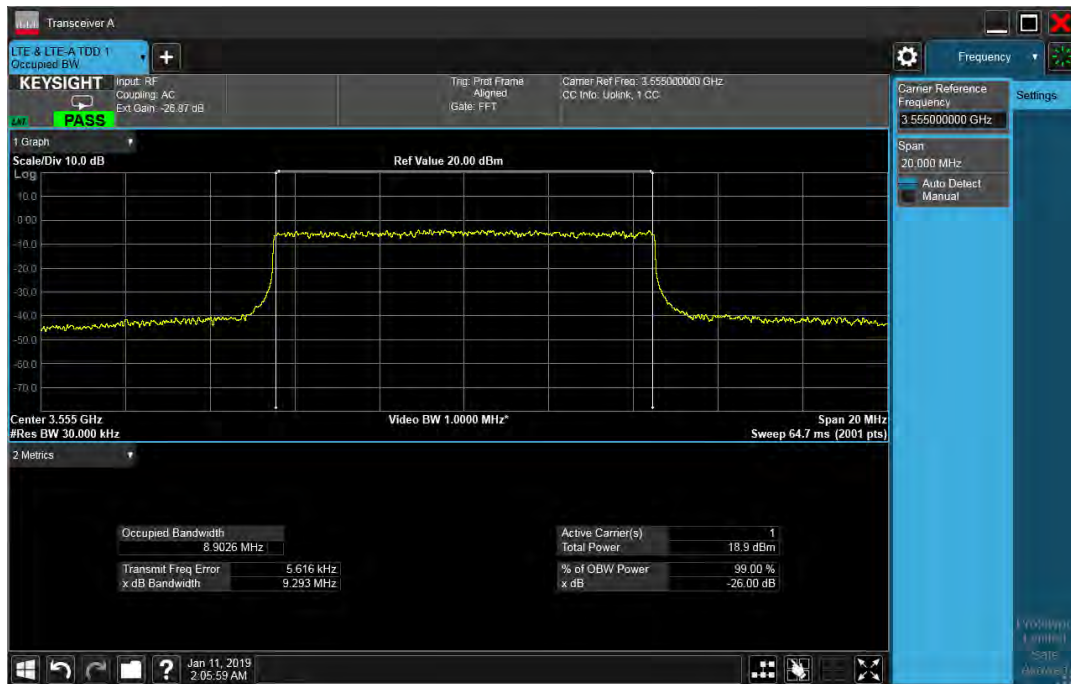
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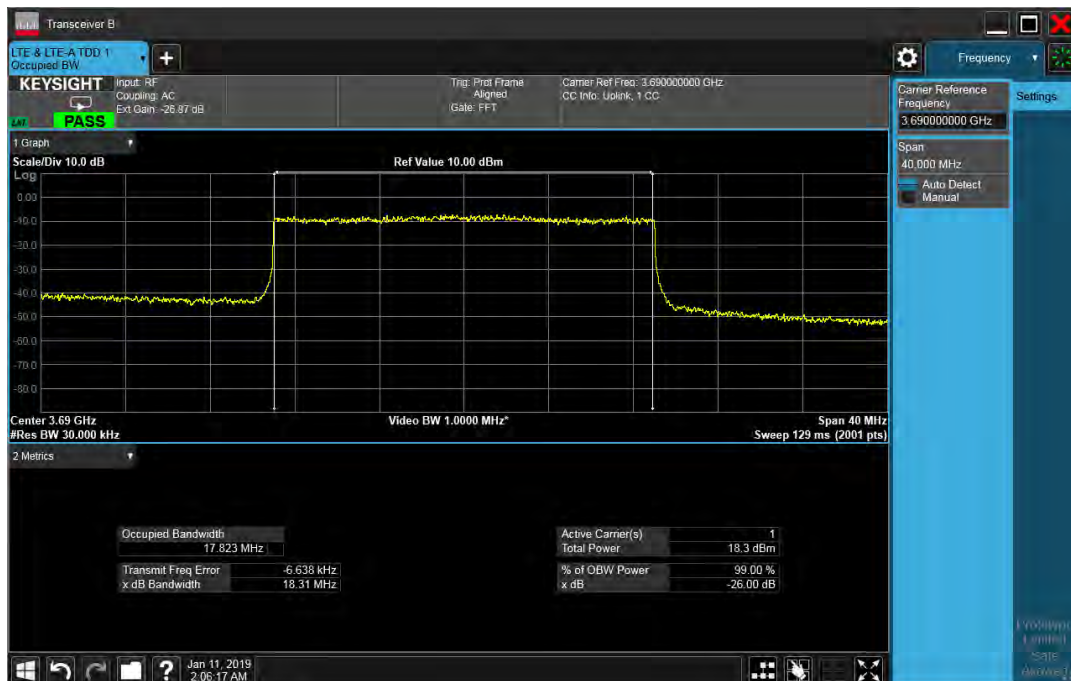
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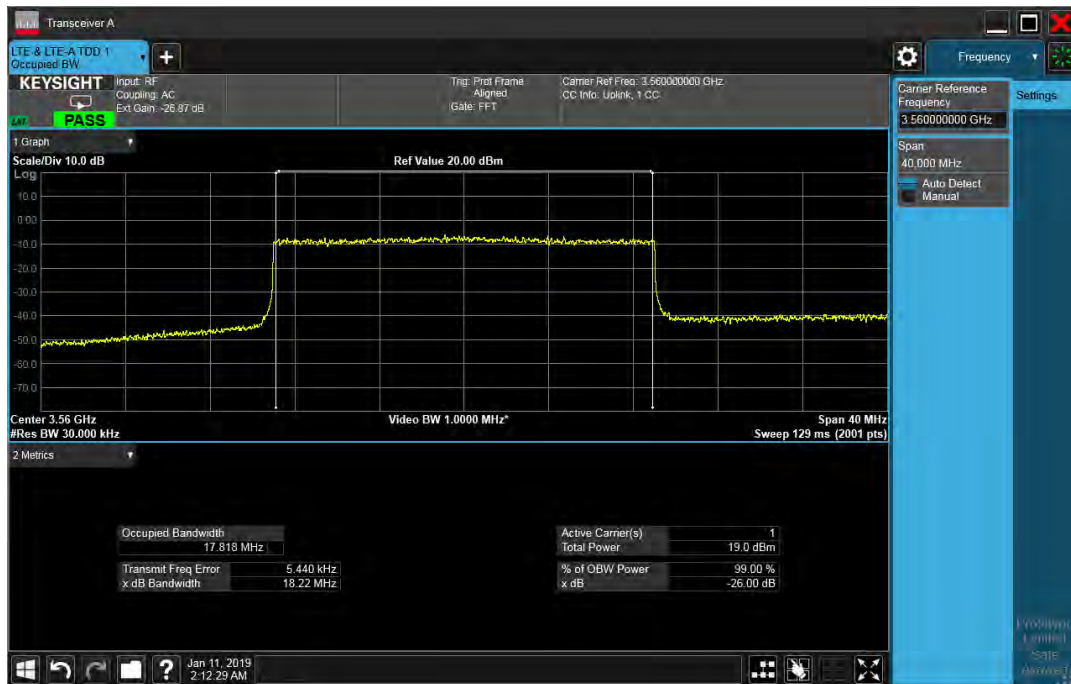
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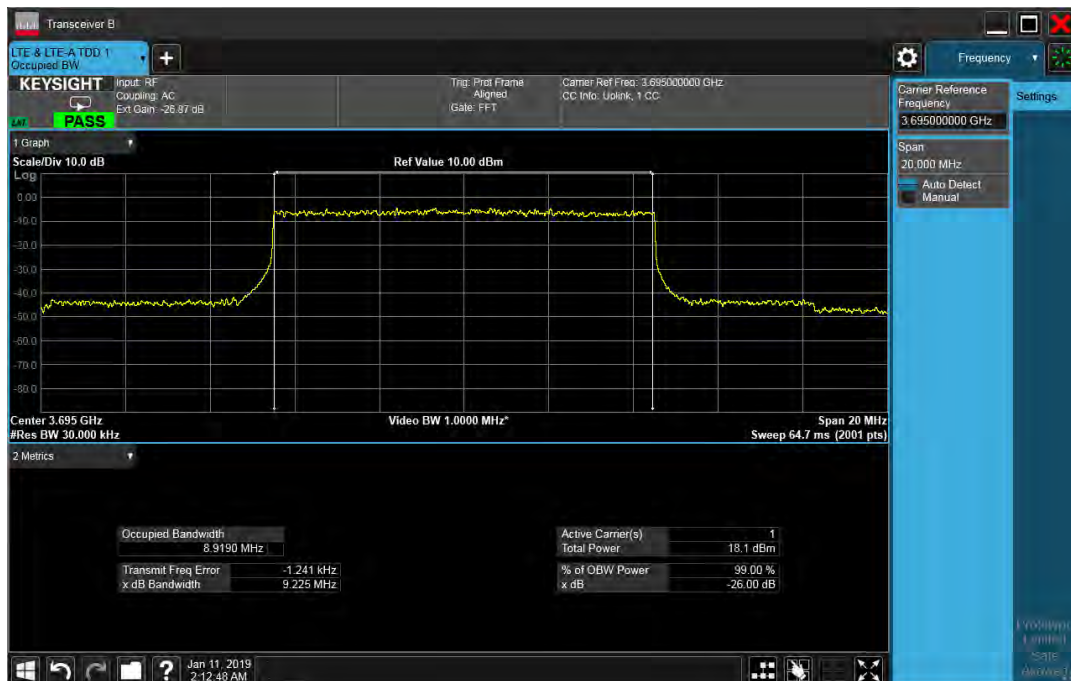
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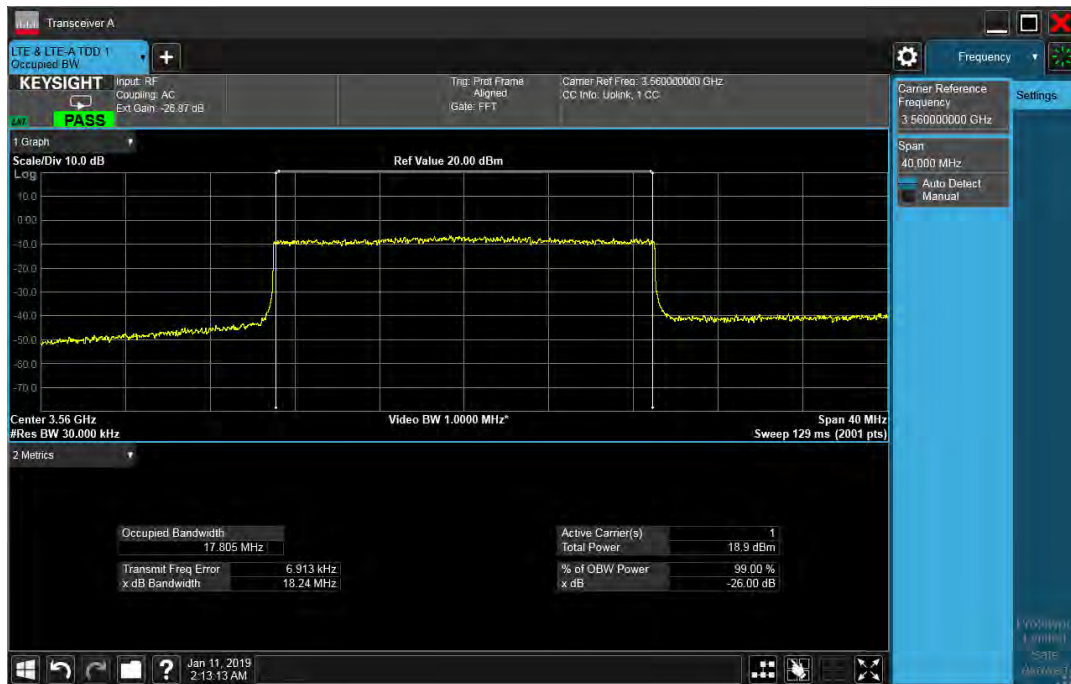
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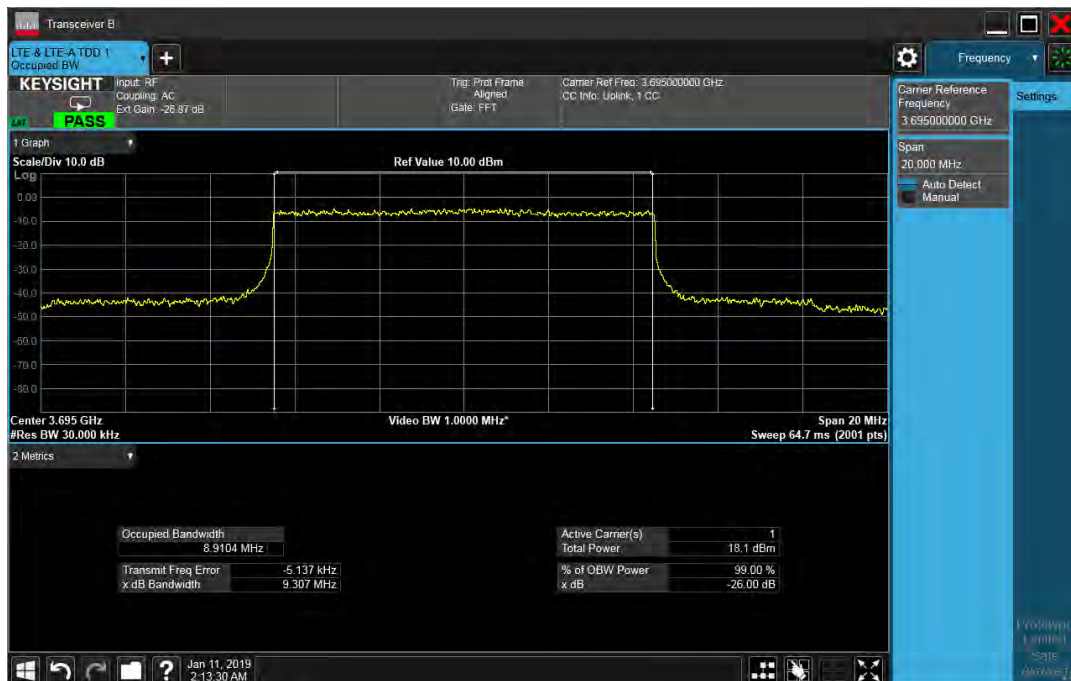
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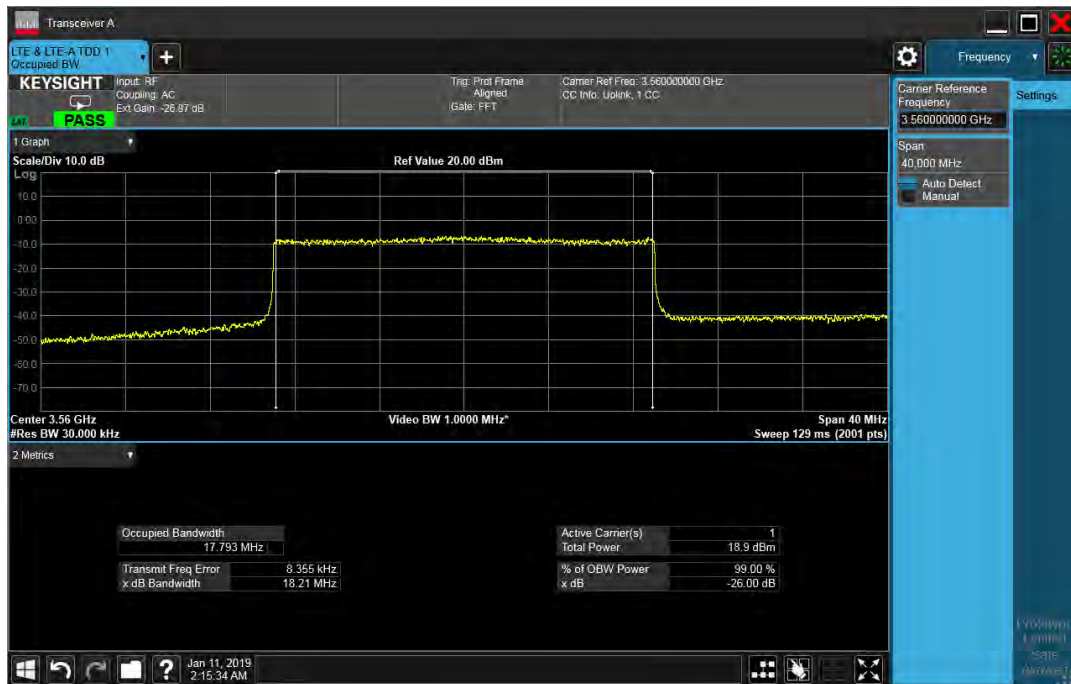
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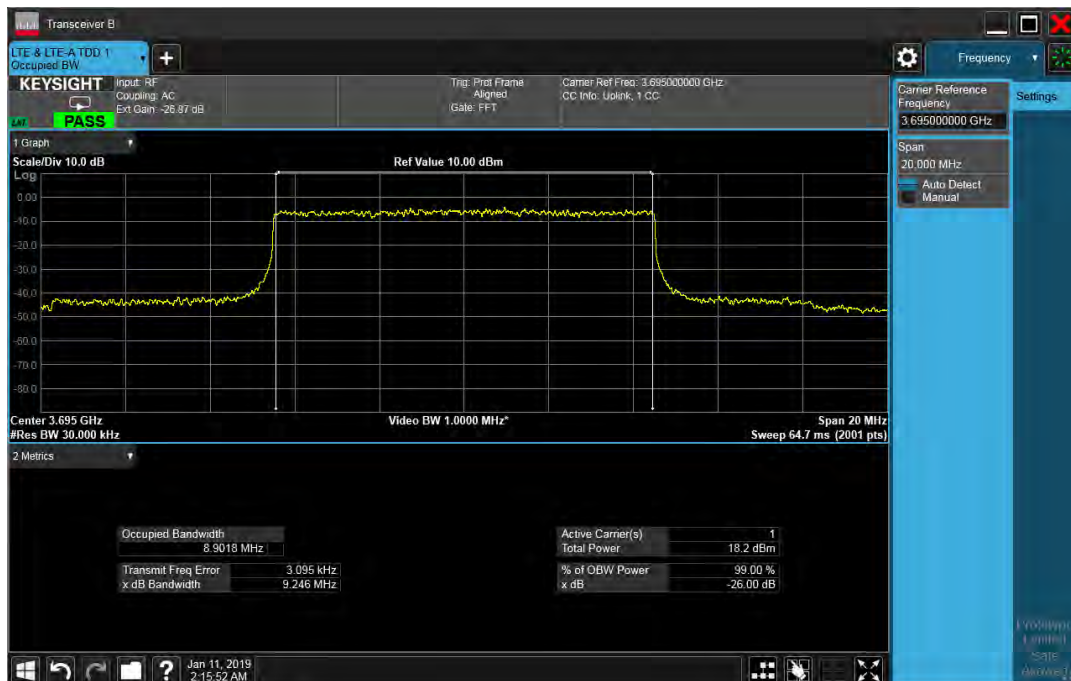
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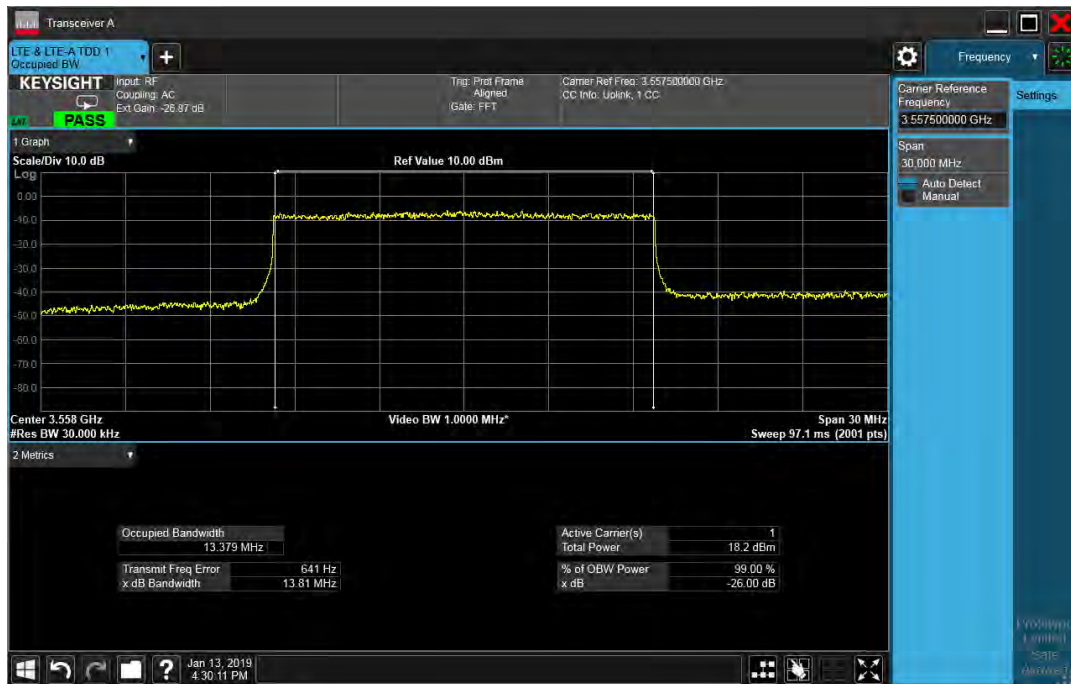
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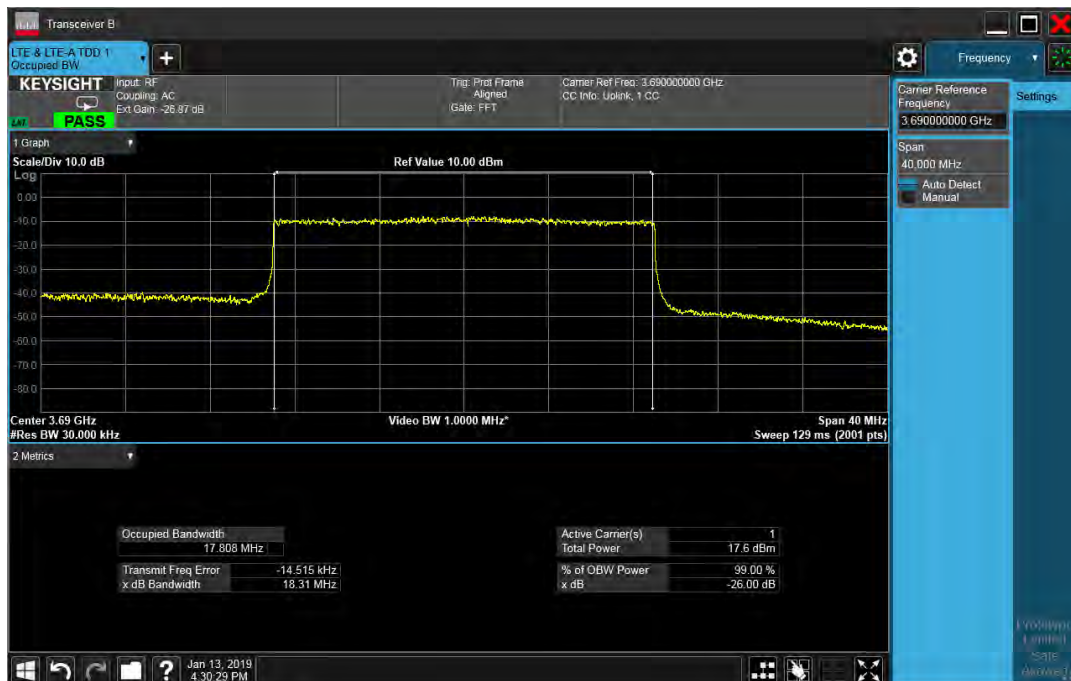
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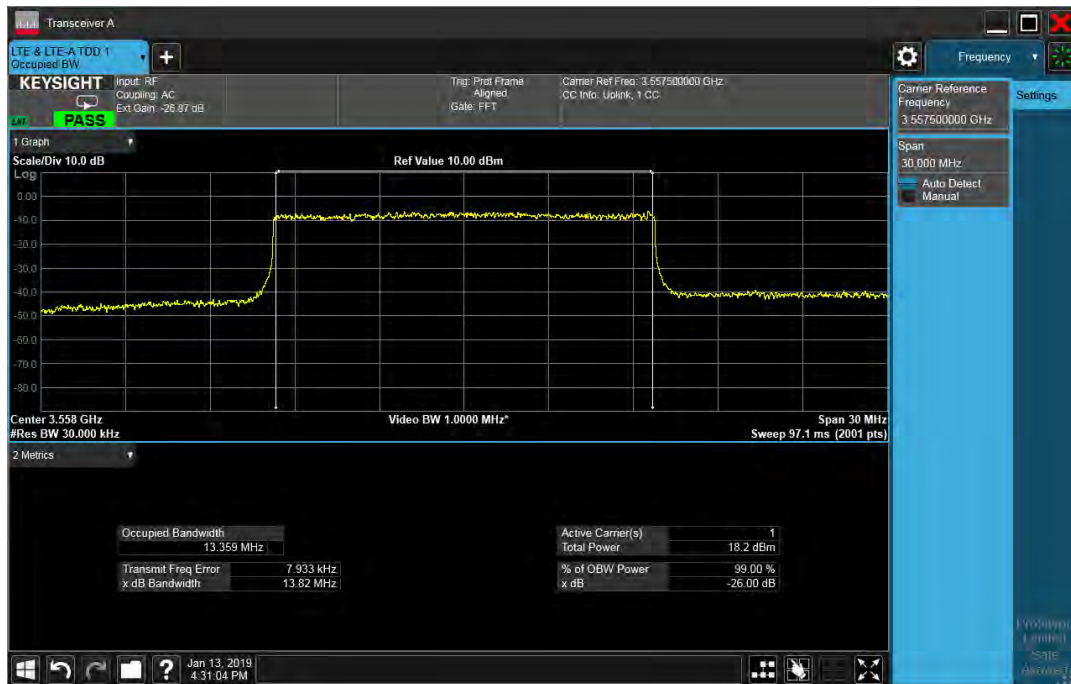
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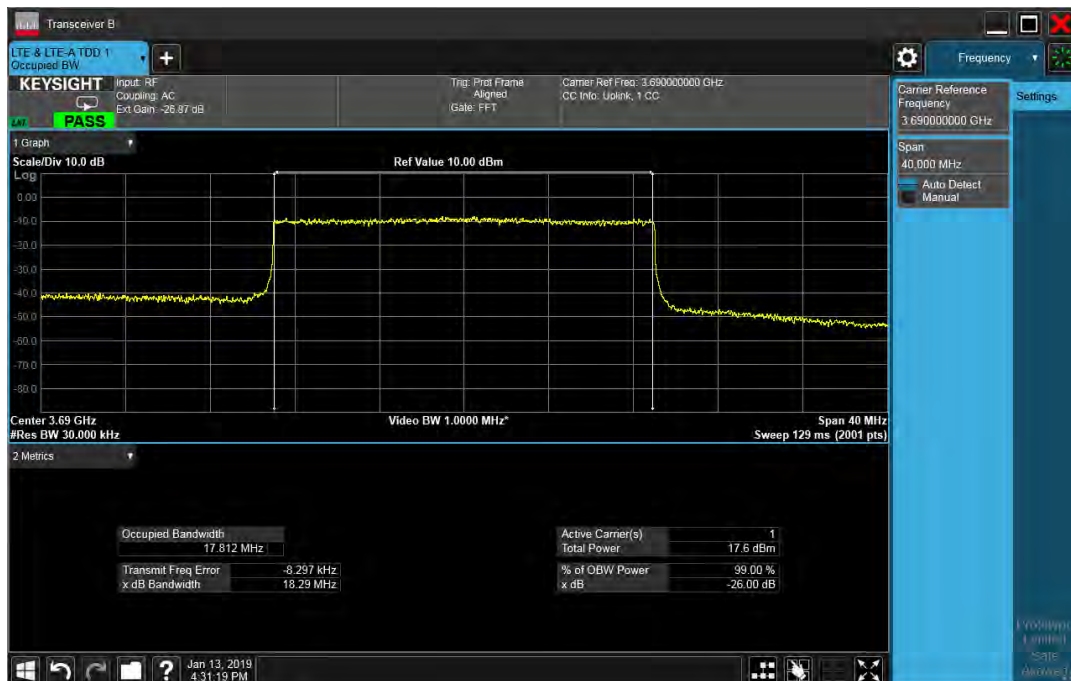
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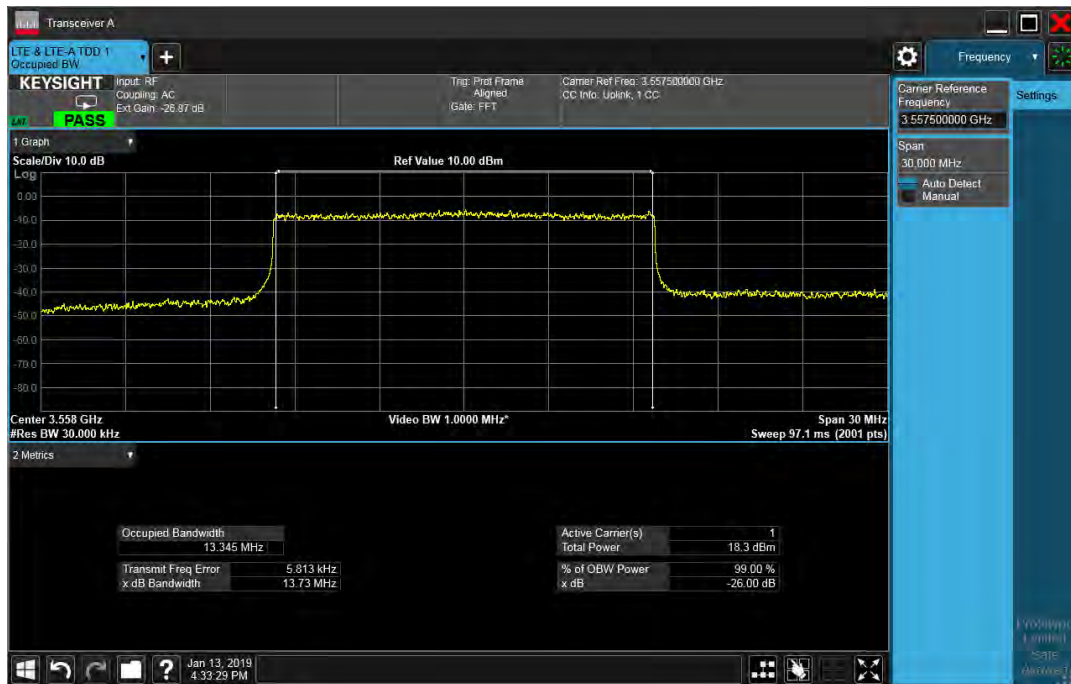
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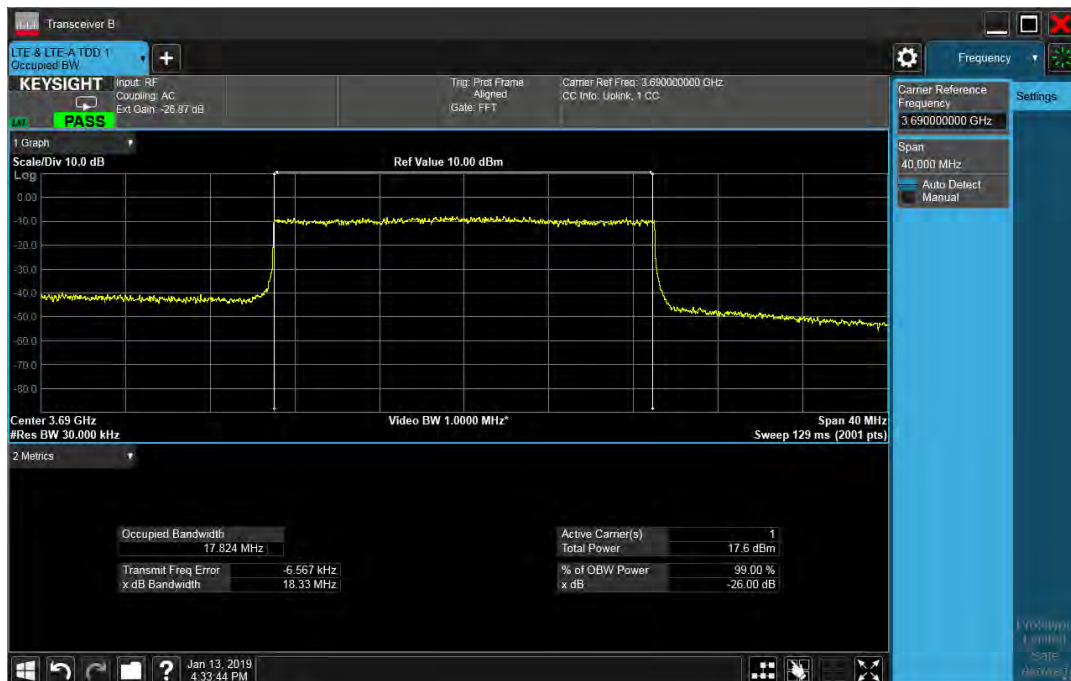
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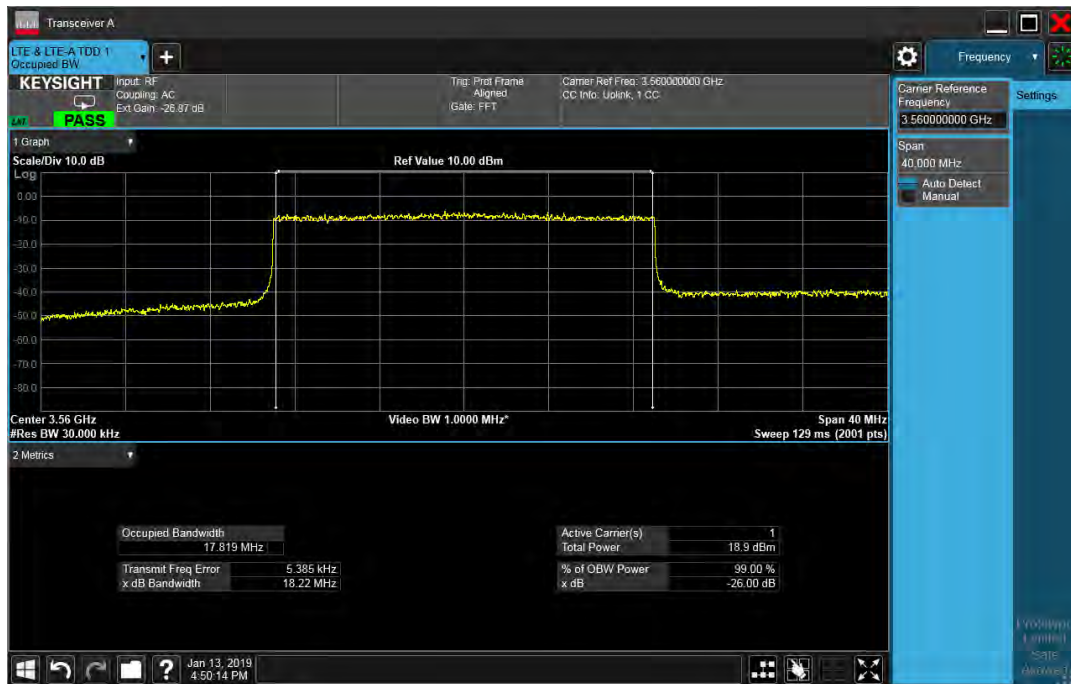
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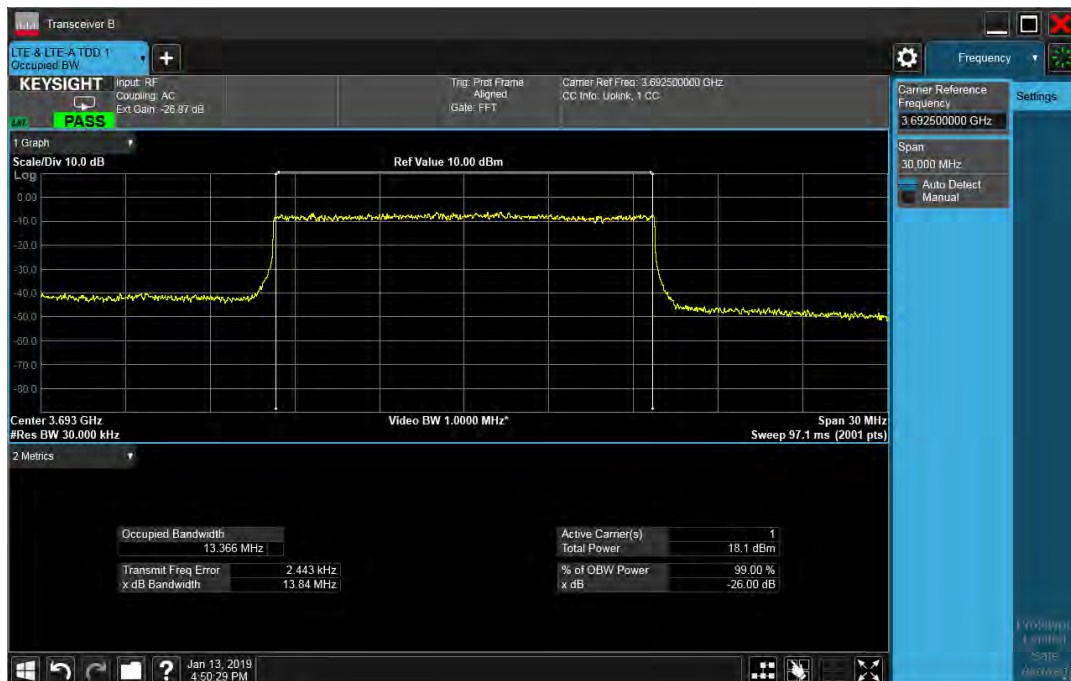
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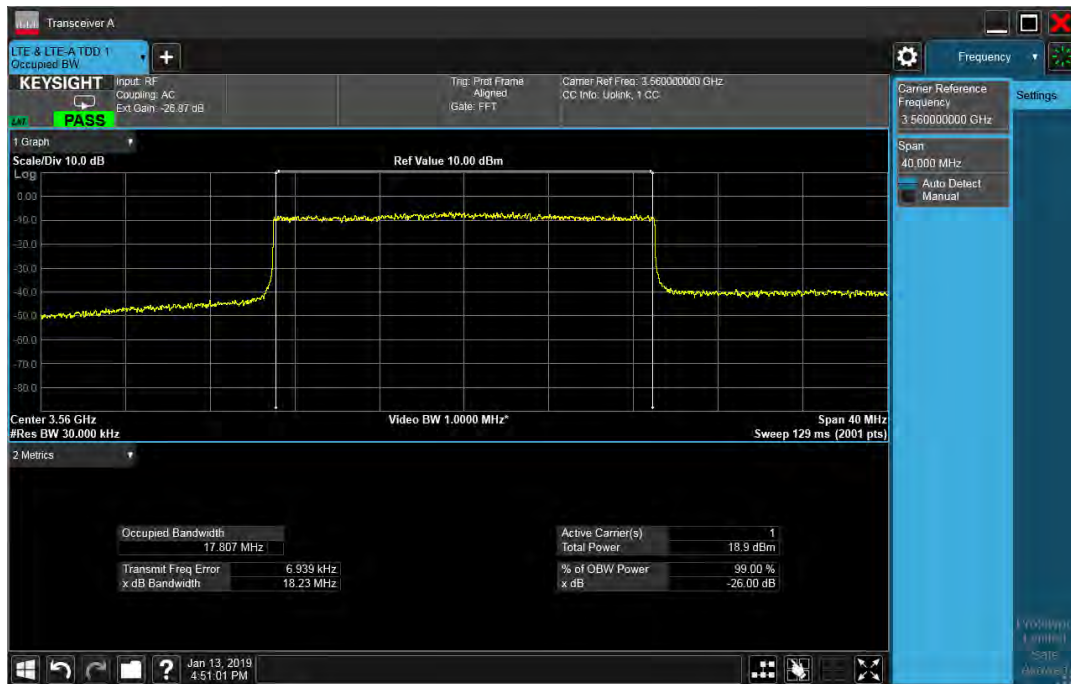
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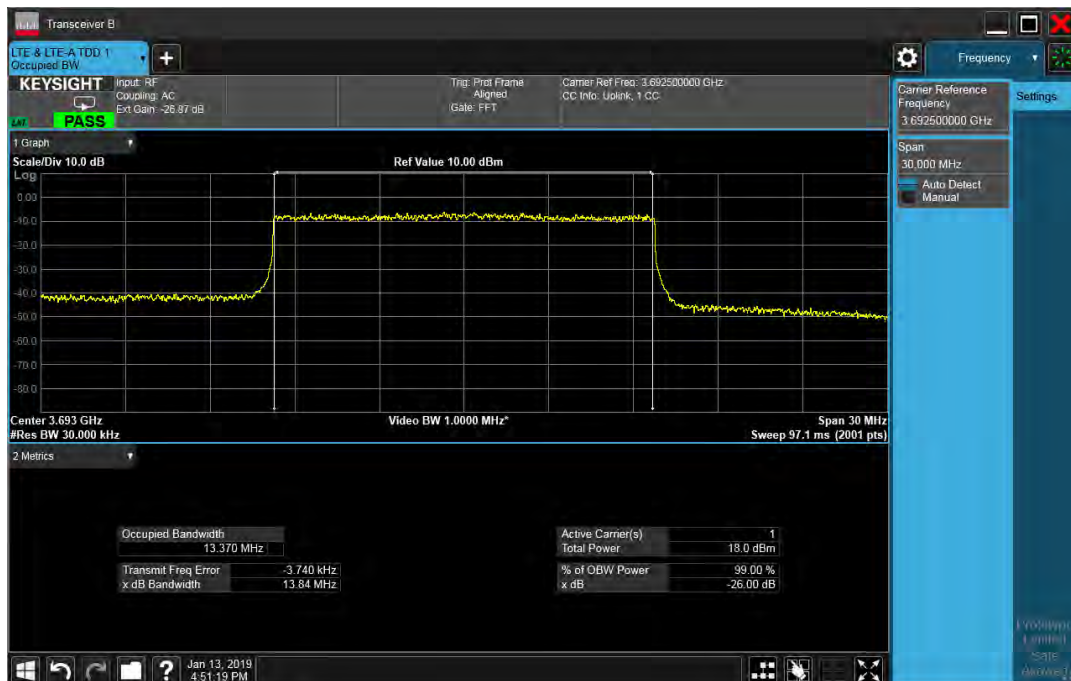
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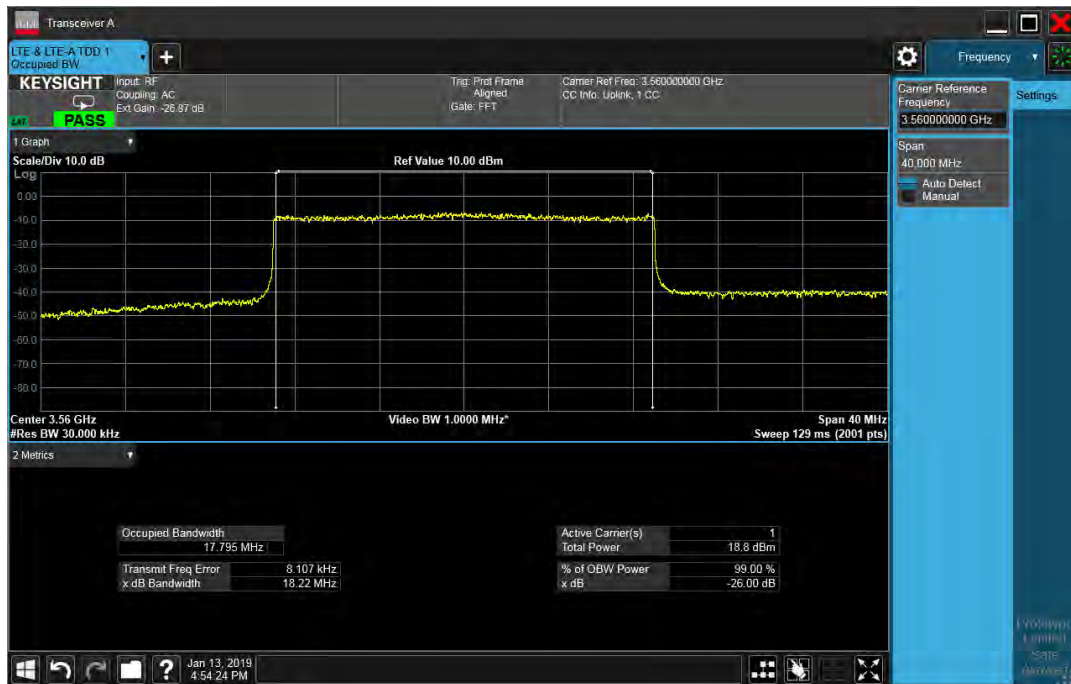
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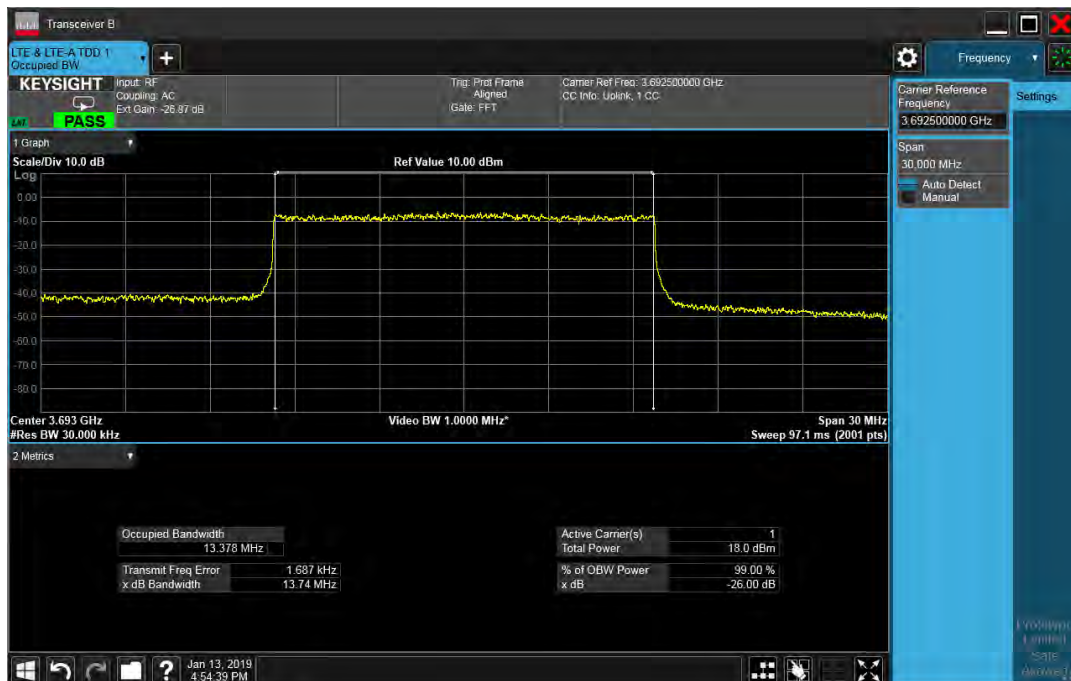
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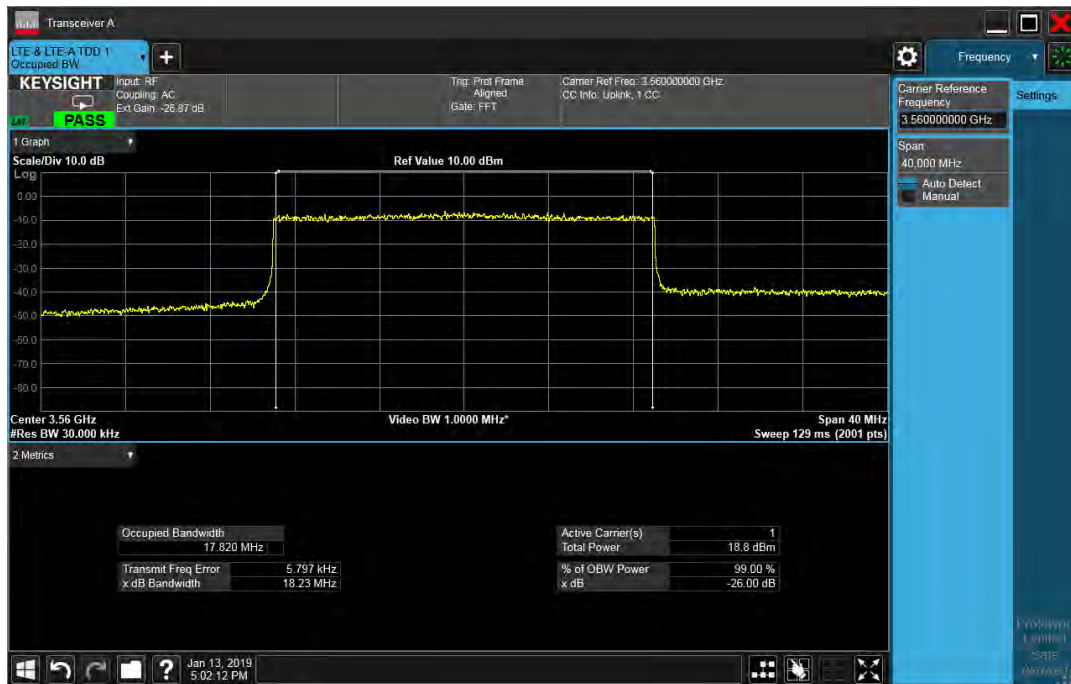
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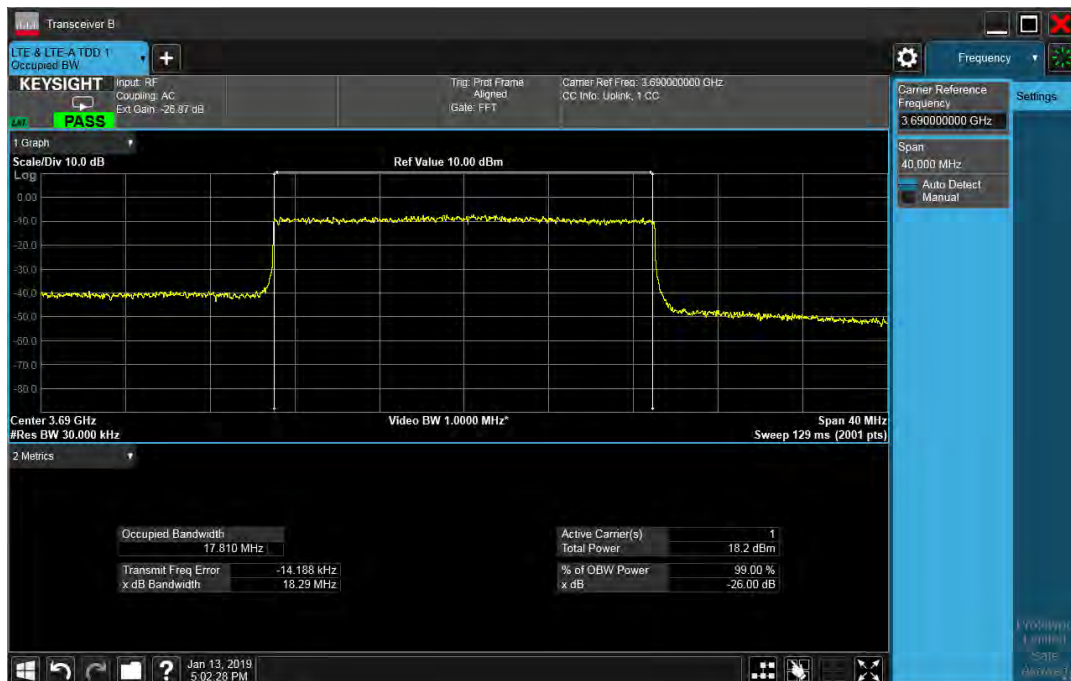
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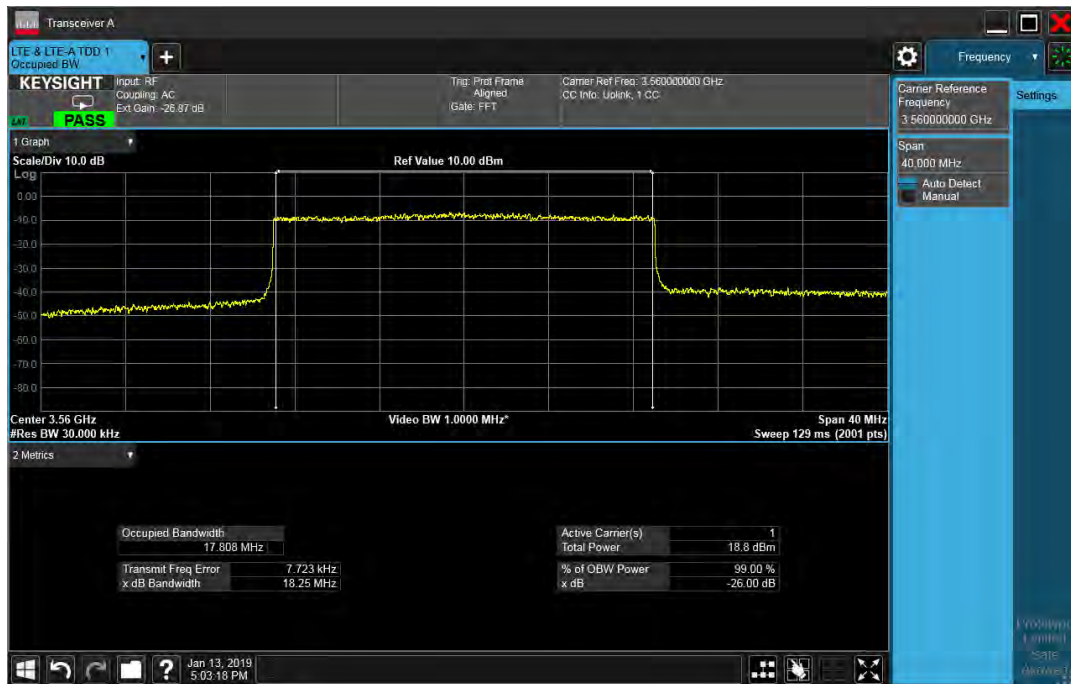
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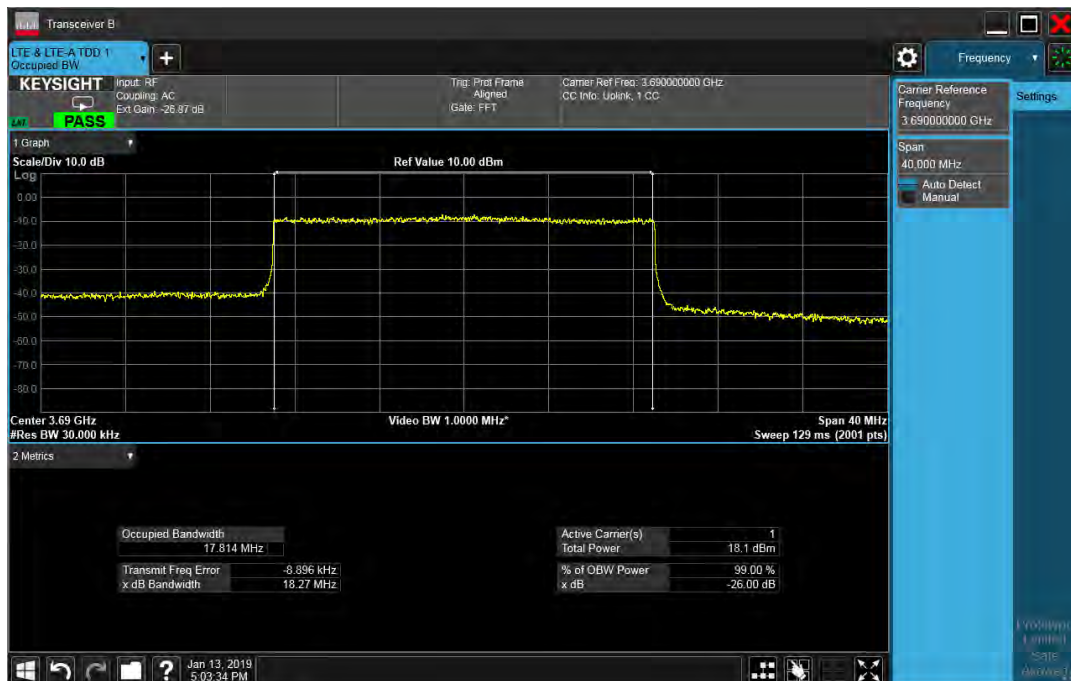
LTE CA intra-band 48 / 40(20+20) / 20MHz(PCC) / QPSK - RB Size 200(100+100)



LTE CA intra-band 48 / 40(20+20) / 20MHz(SCC) / QPSK - RB Size 200(100+100)



LTE CA intra-band 48 / 40(20+20) / 20MHz(PCC) / 16QAM - RB Size 200(100+100)



LTE CA intra-band 48 / 40(20+20) / 20MHz(SCC) / 16QAM - RB Size 200(100+100)