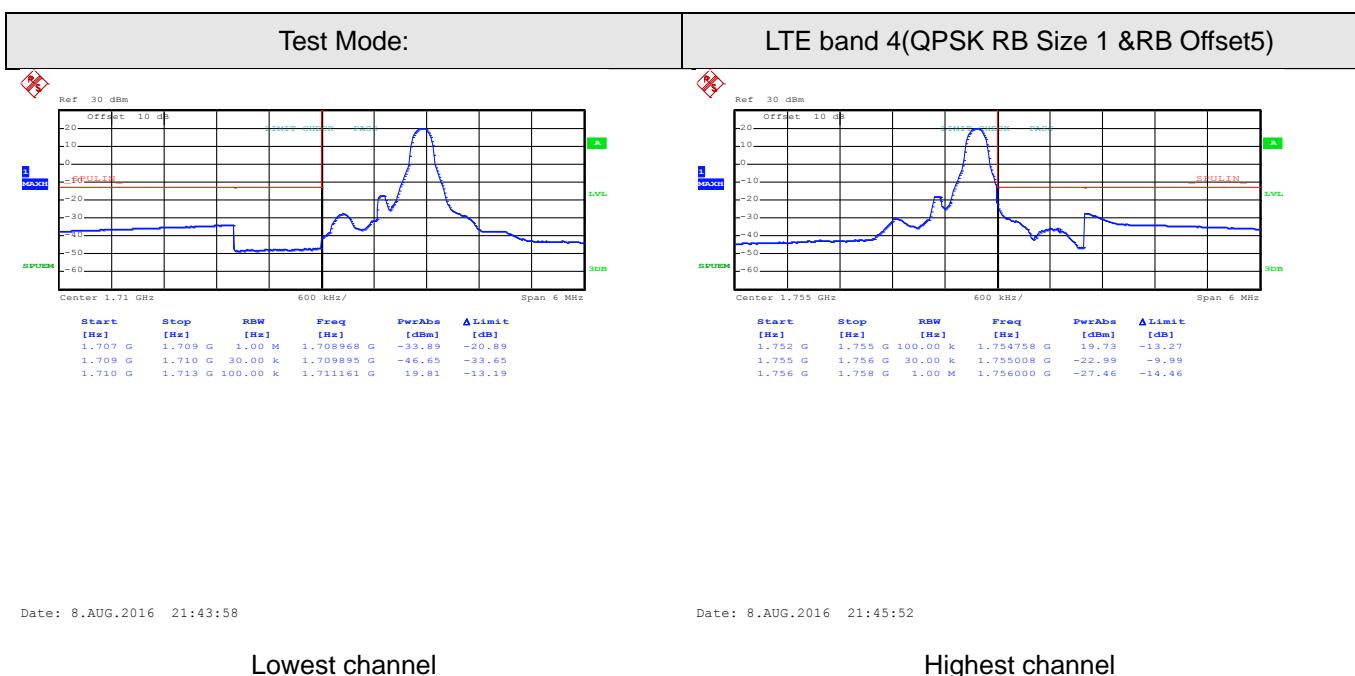
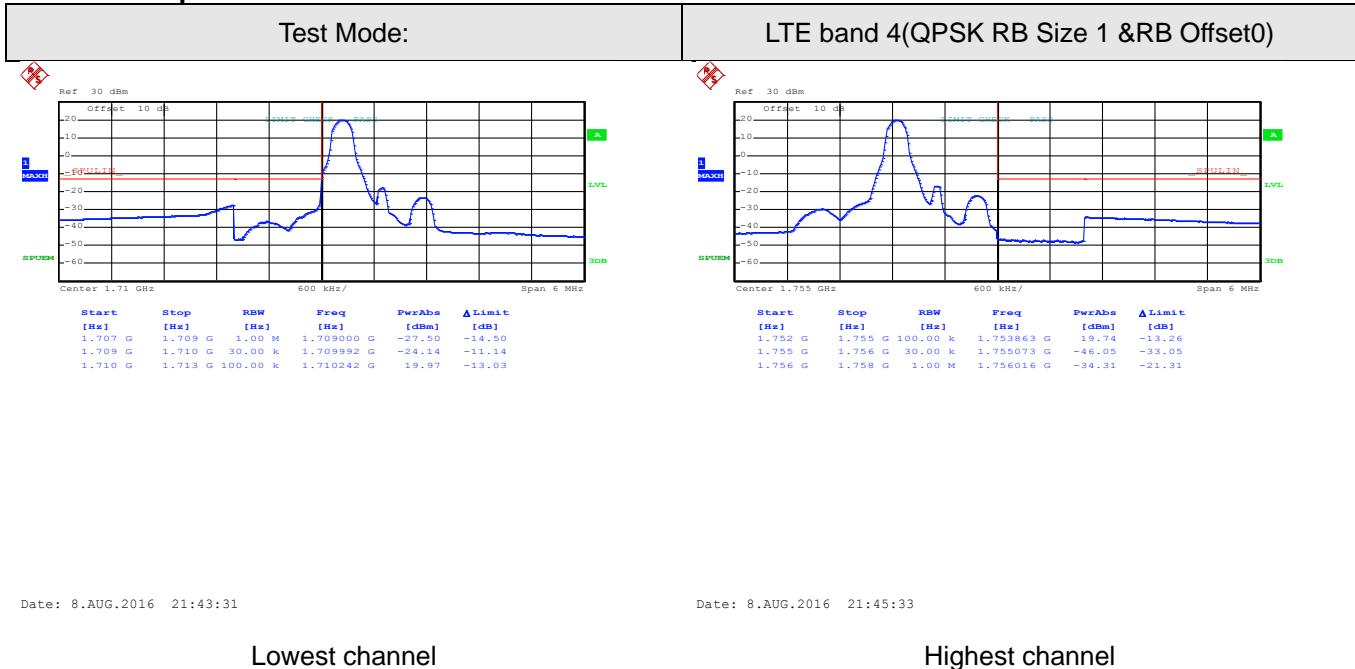
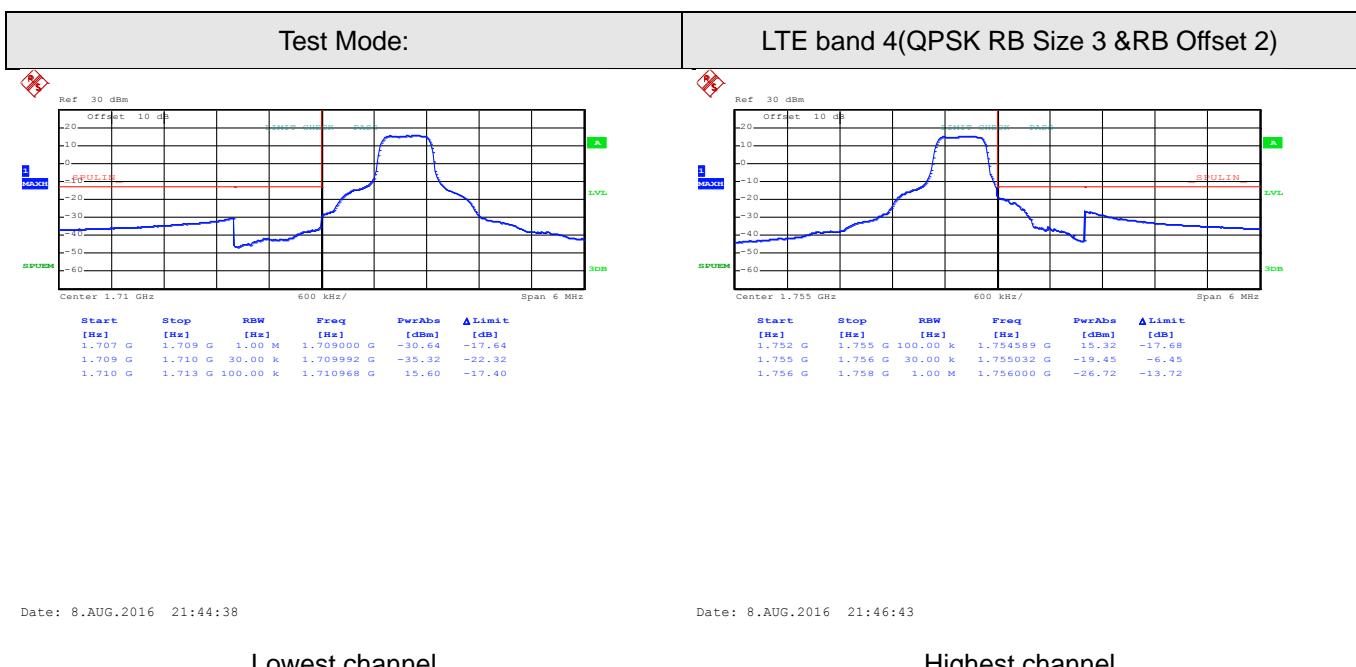
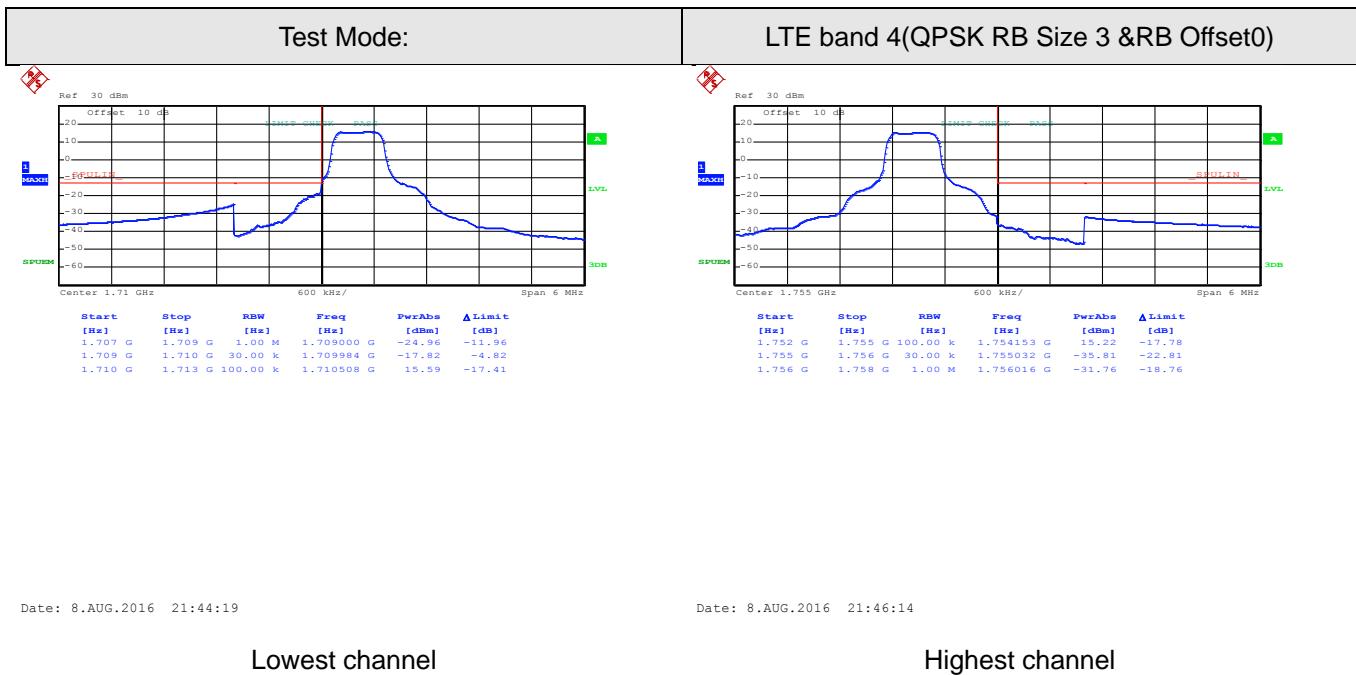
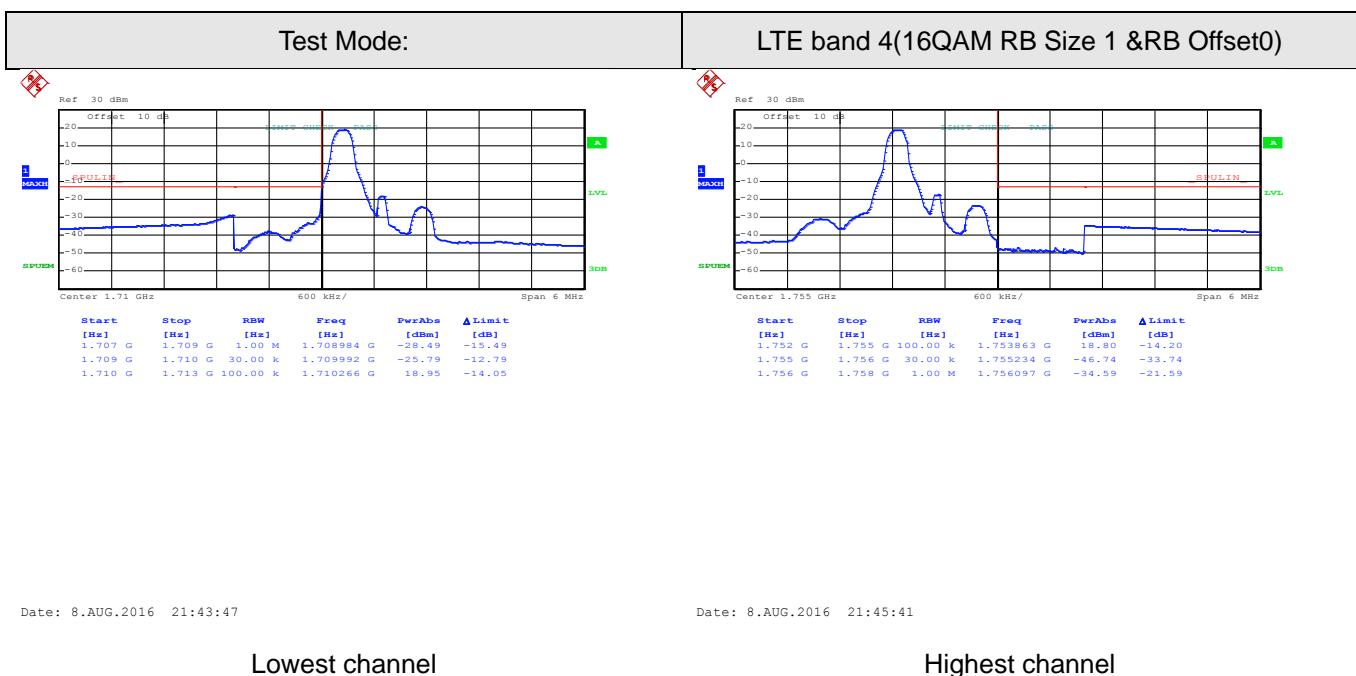
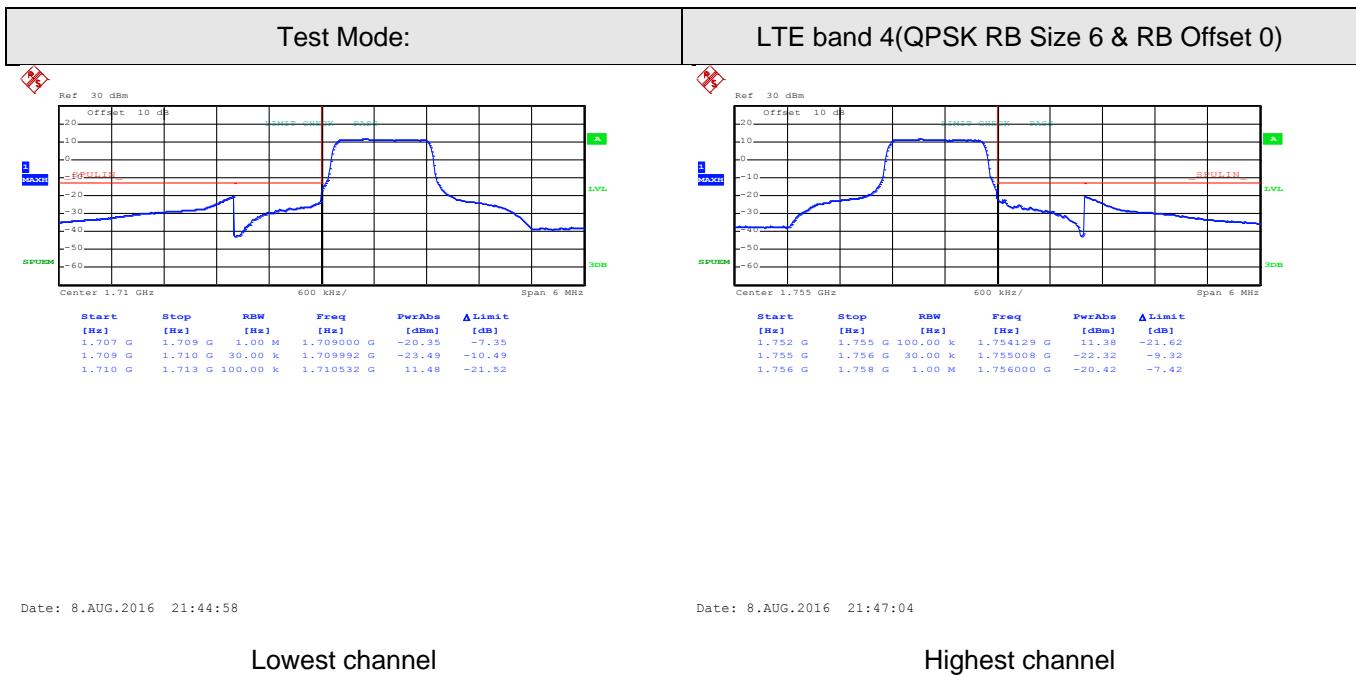
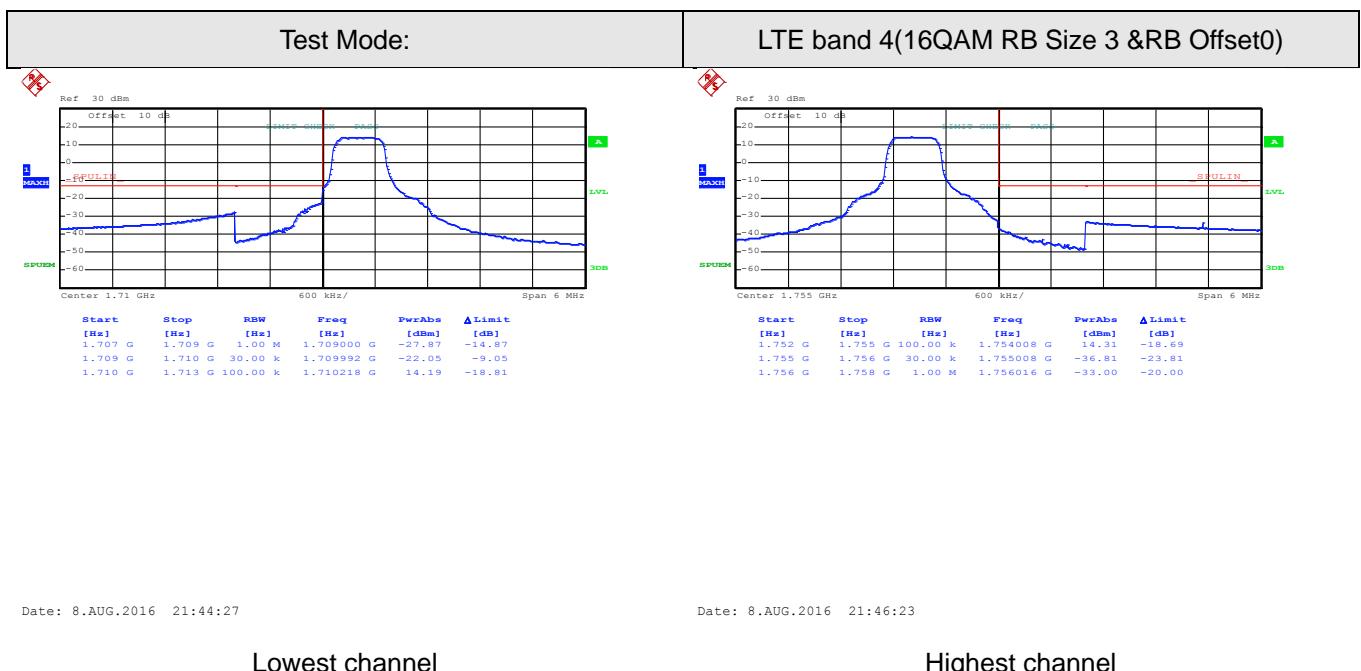
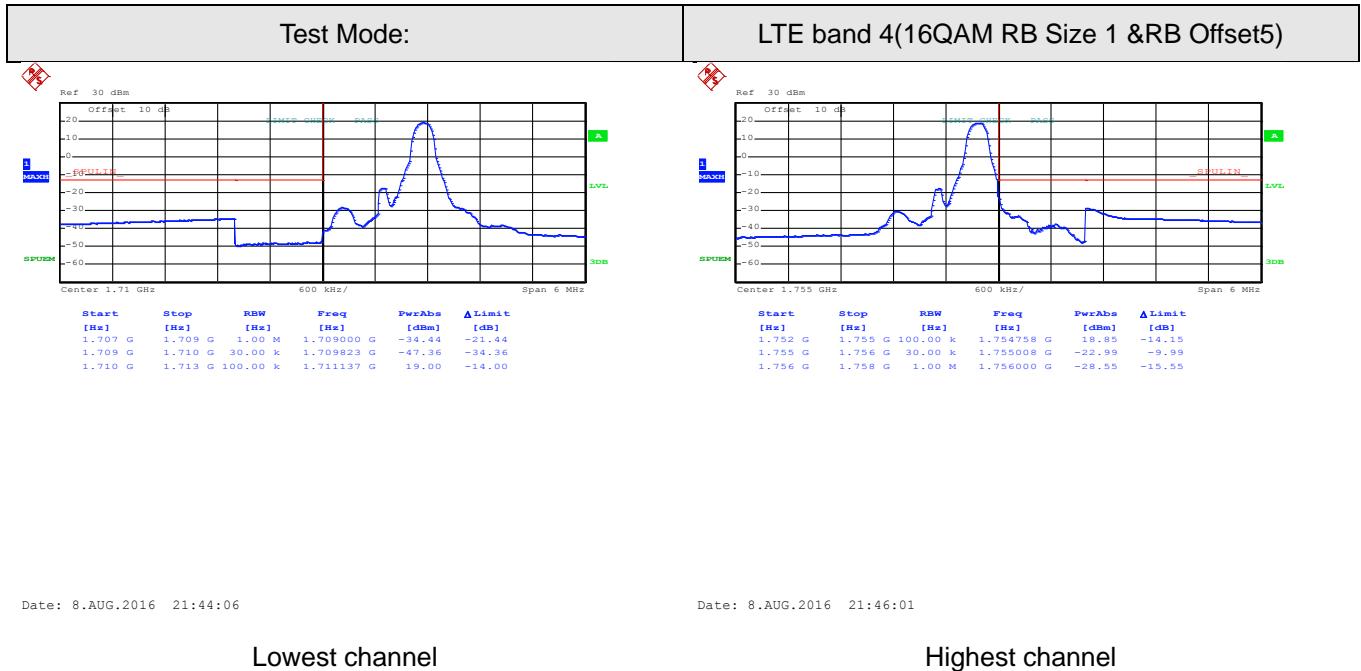


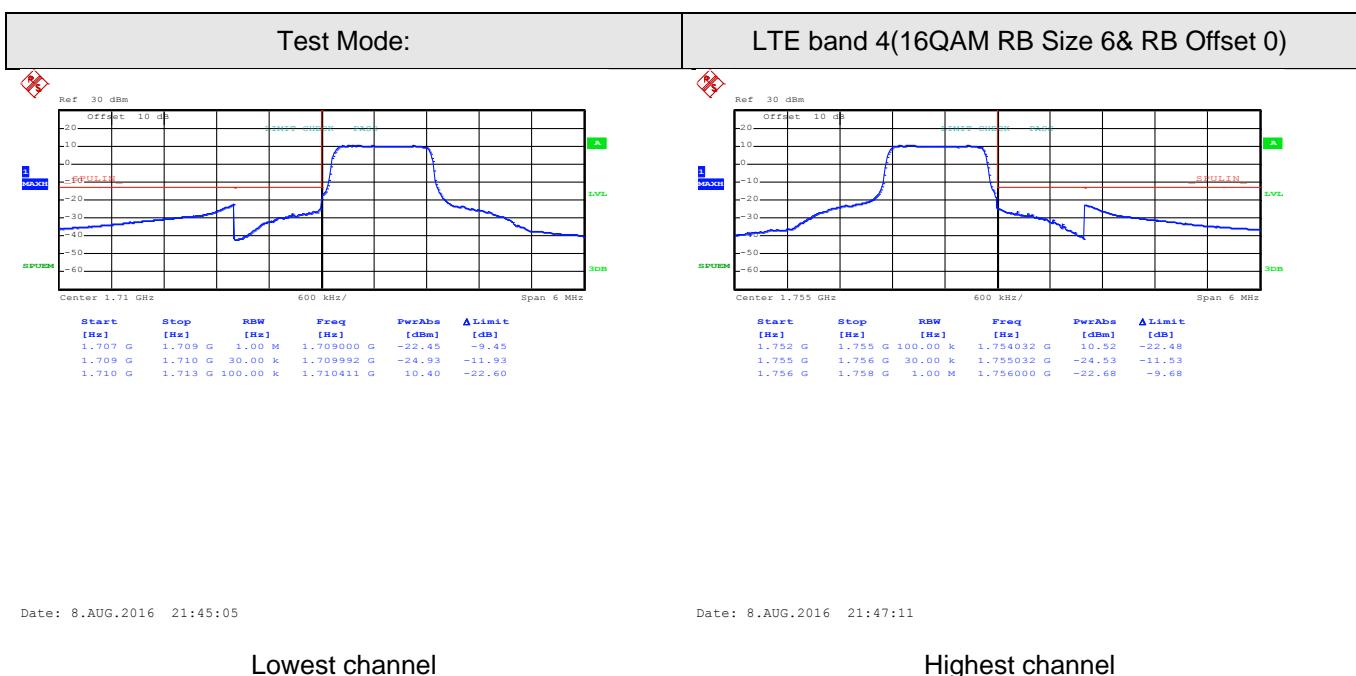
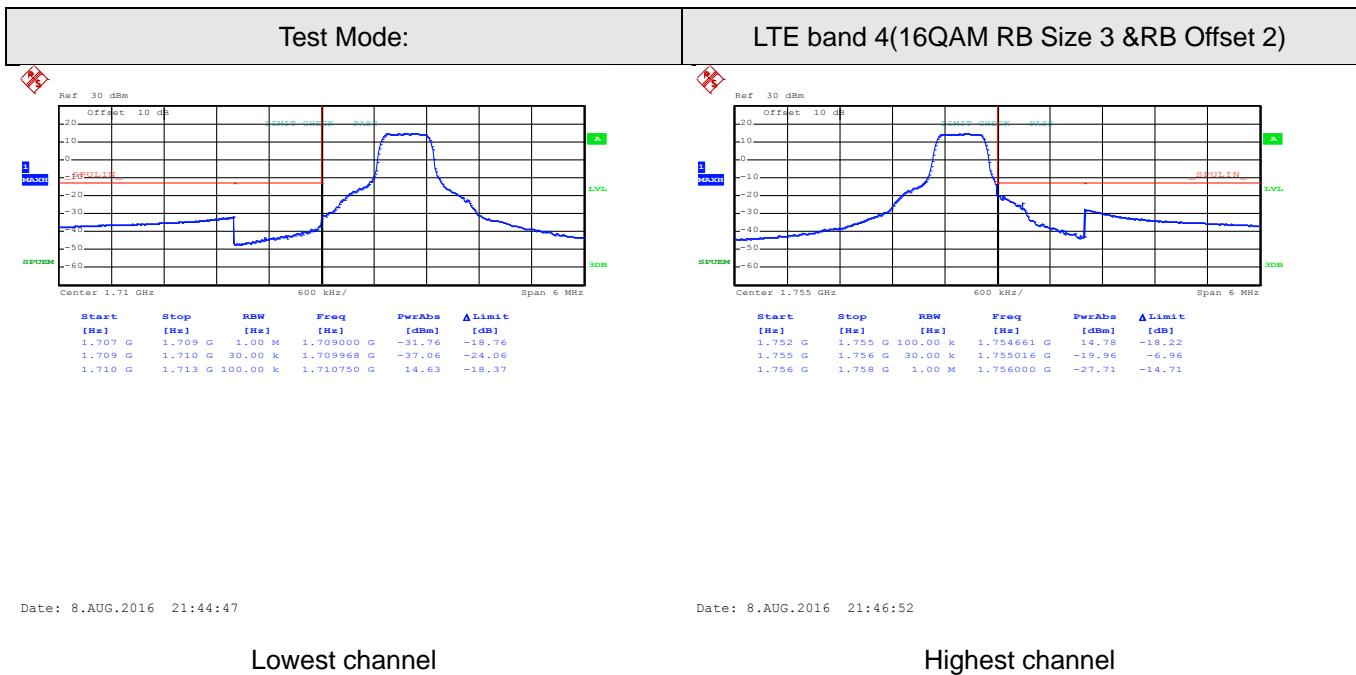
LTE band 4 part: 1.4MHz:



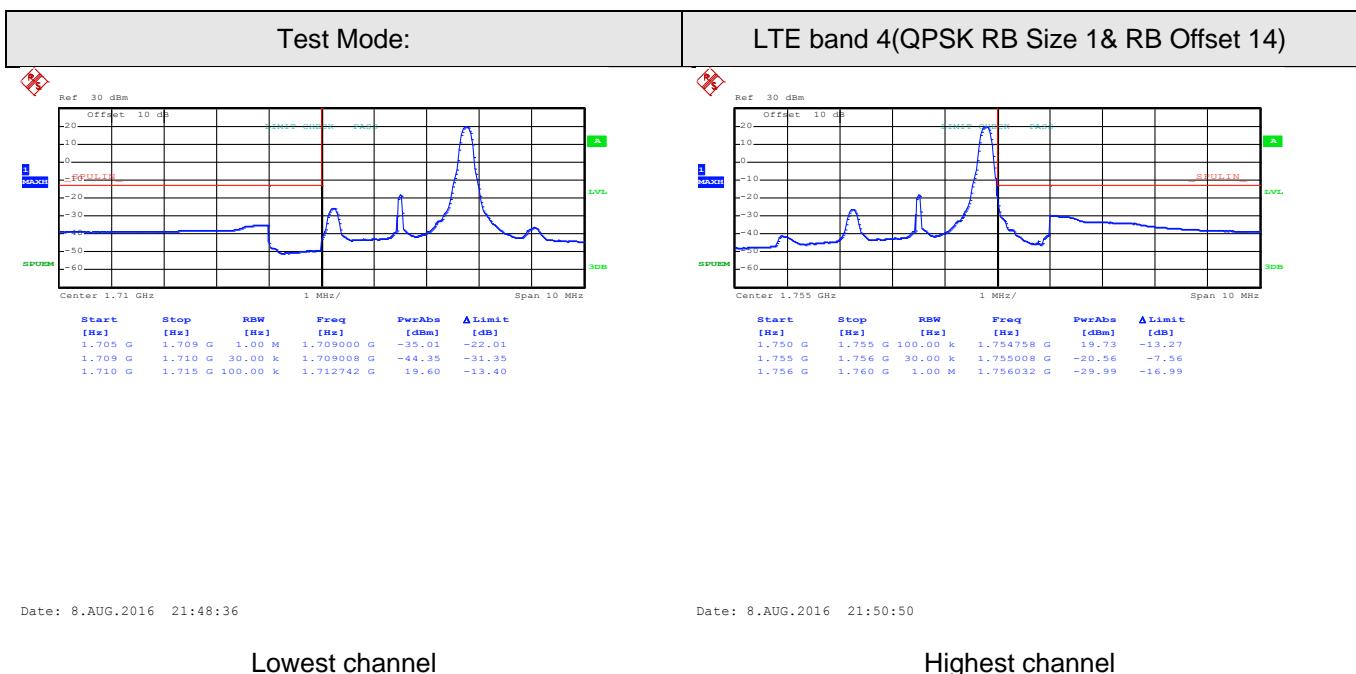
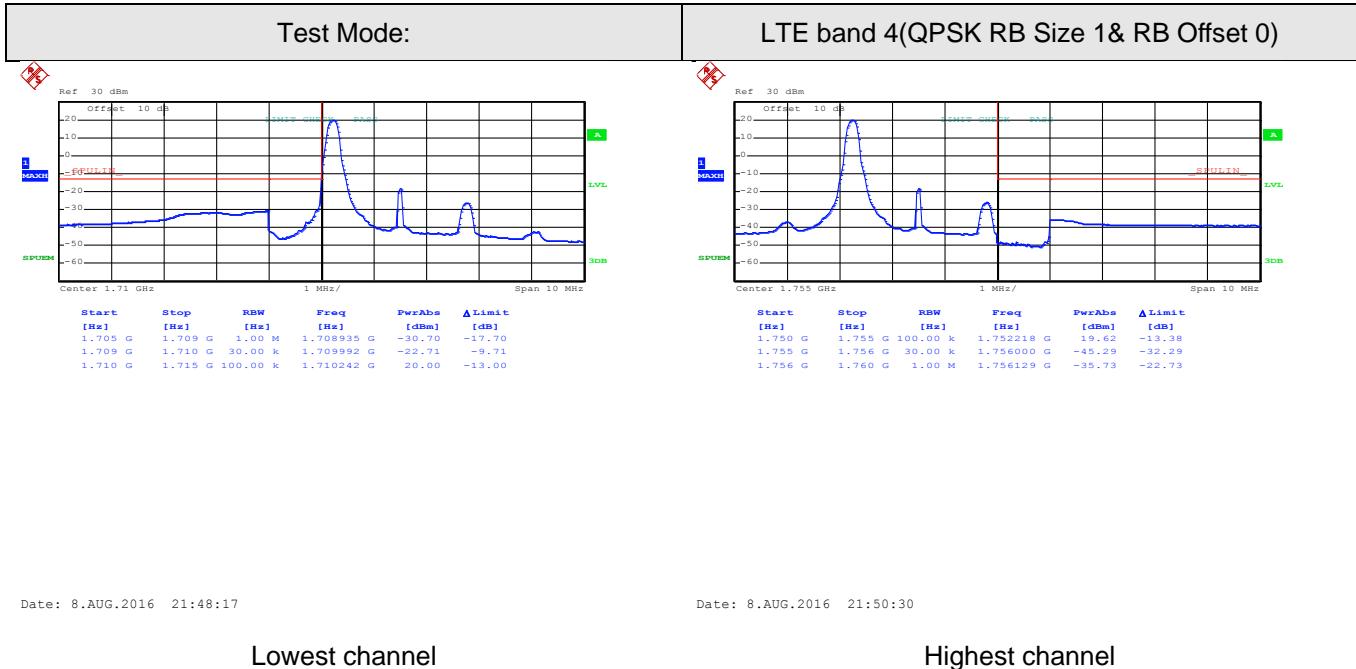


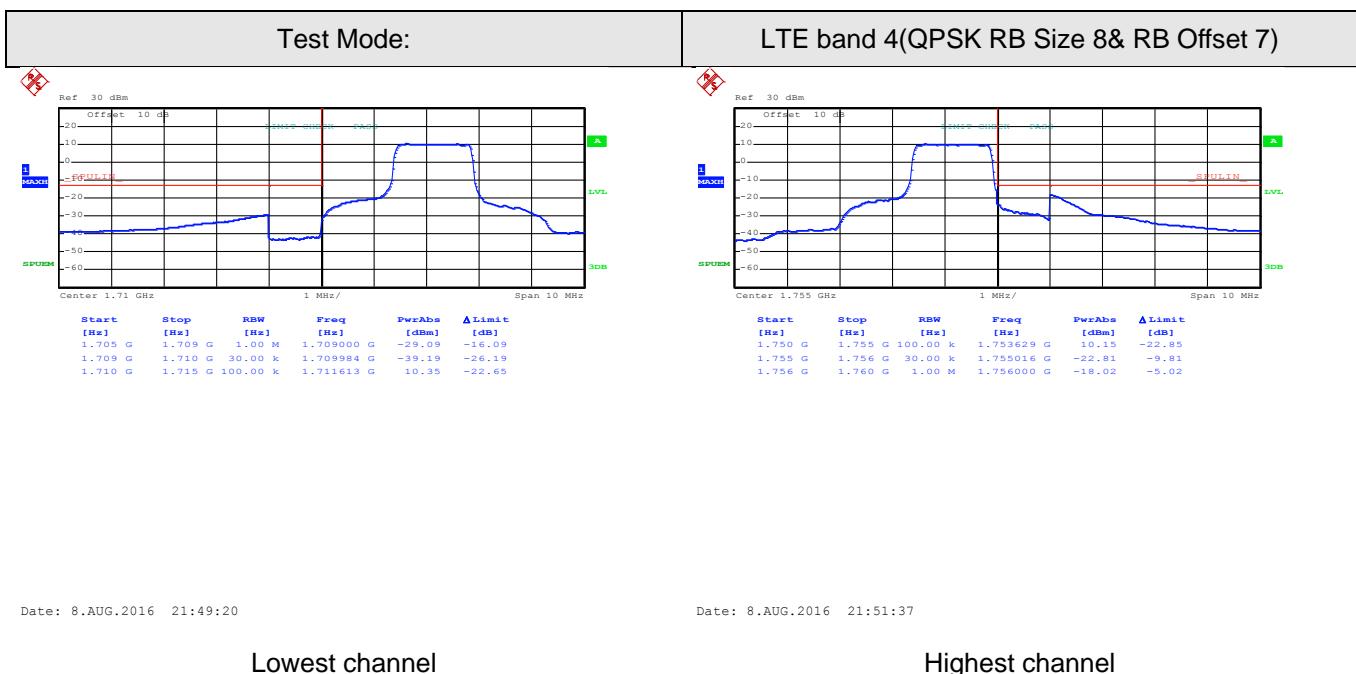
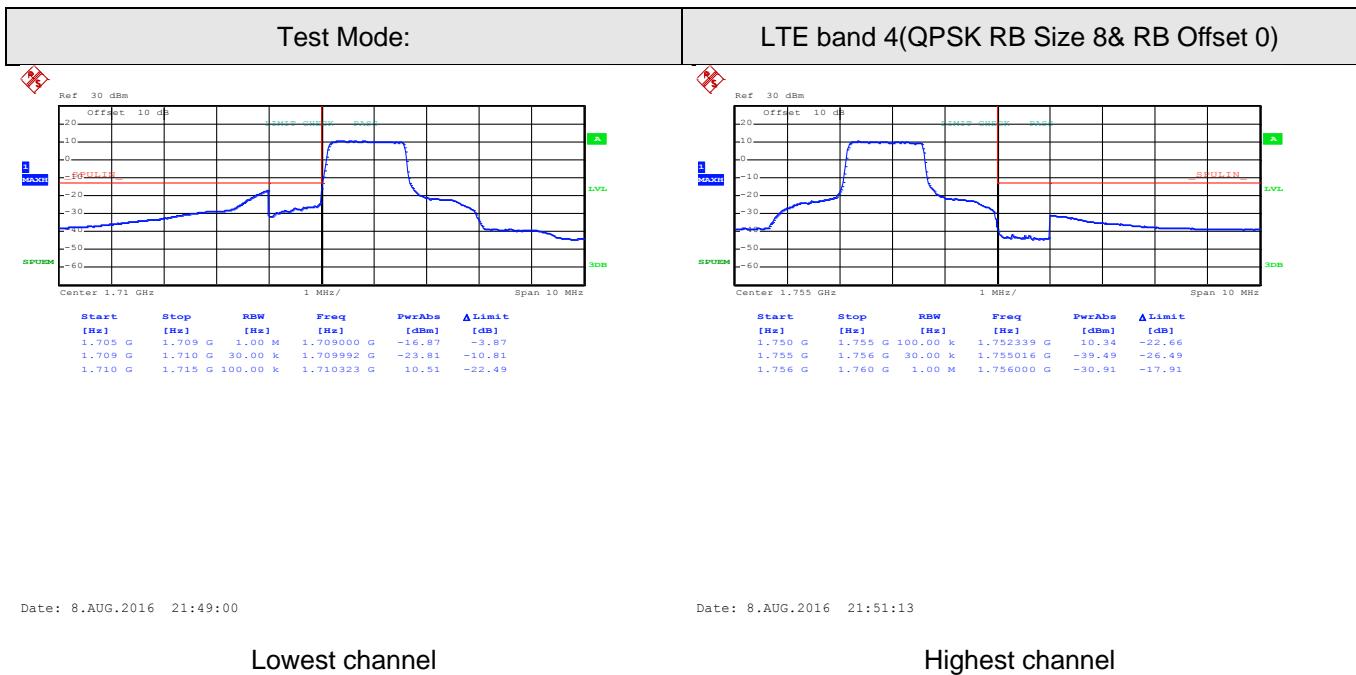


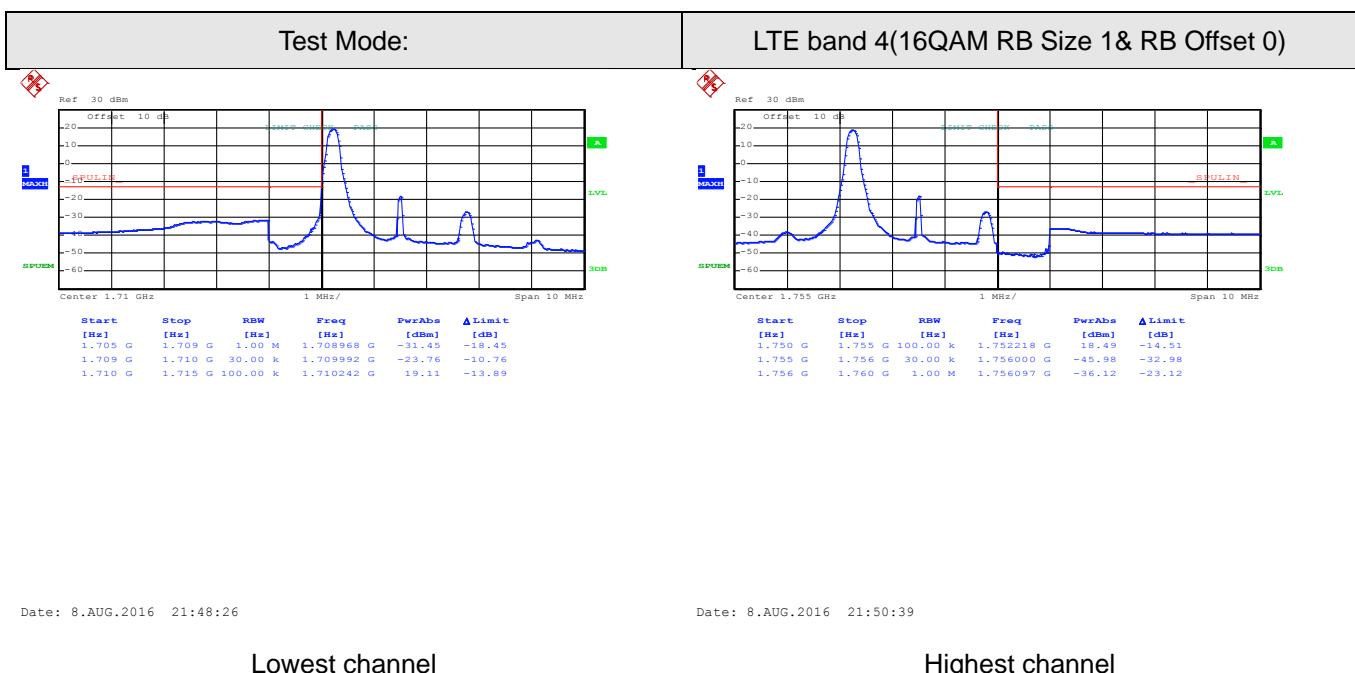
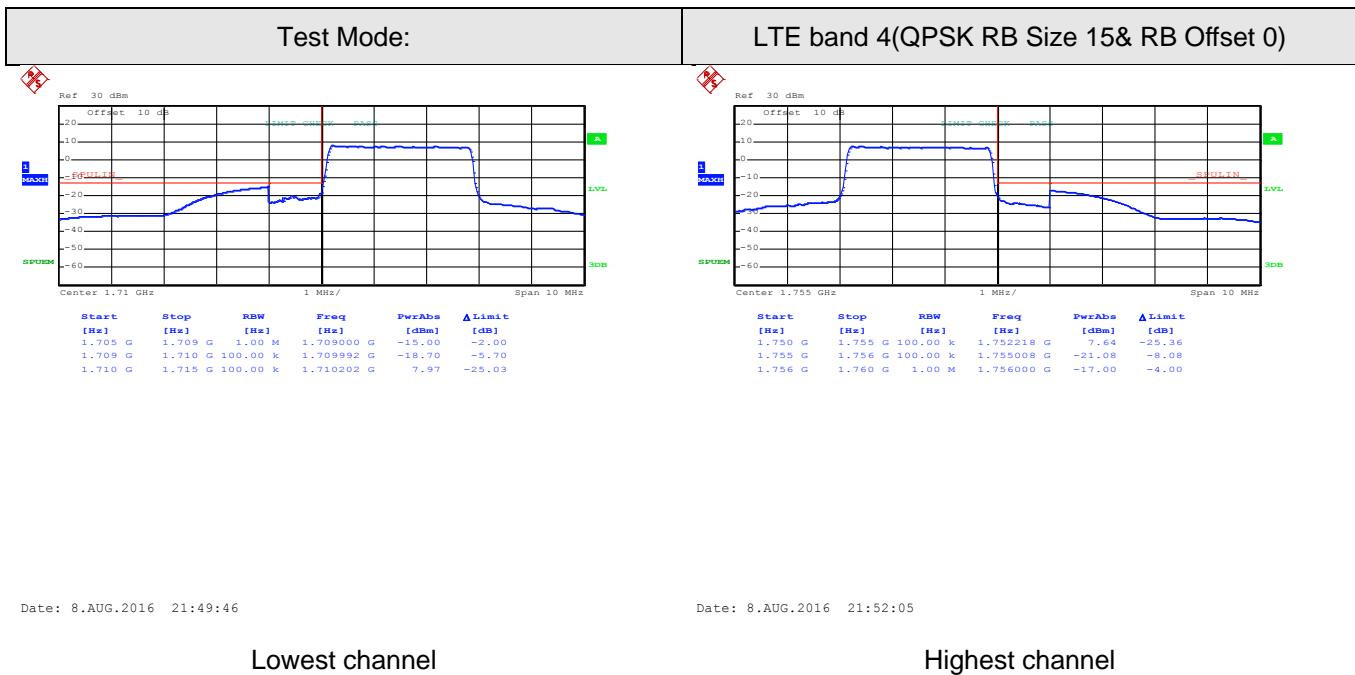


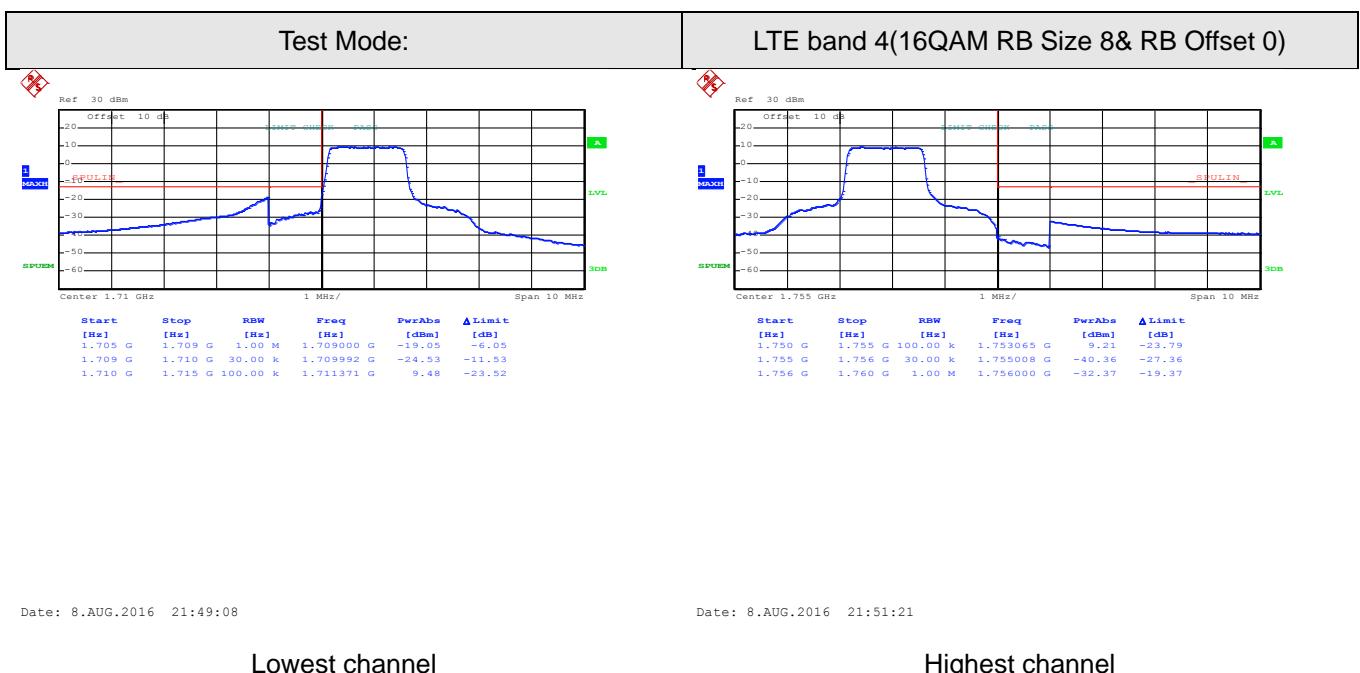
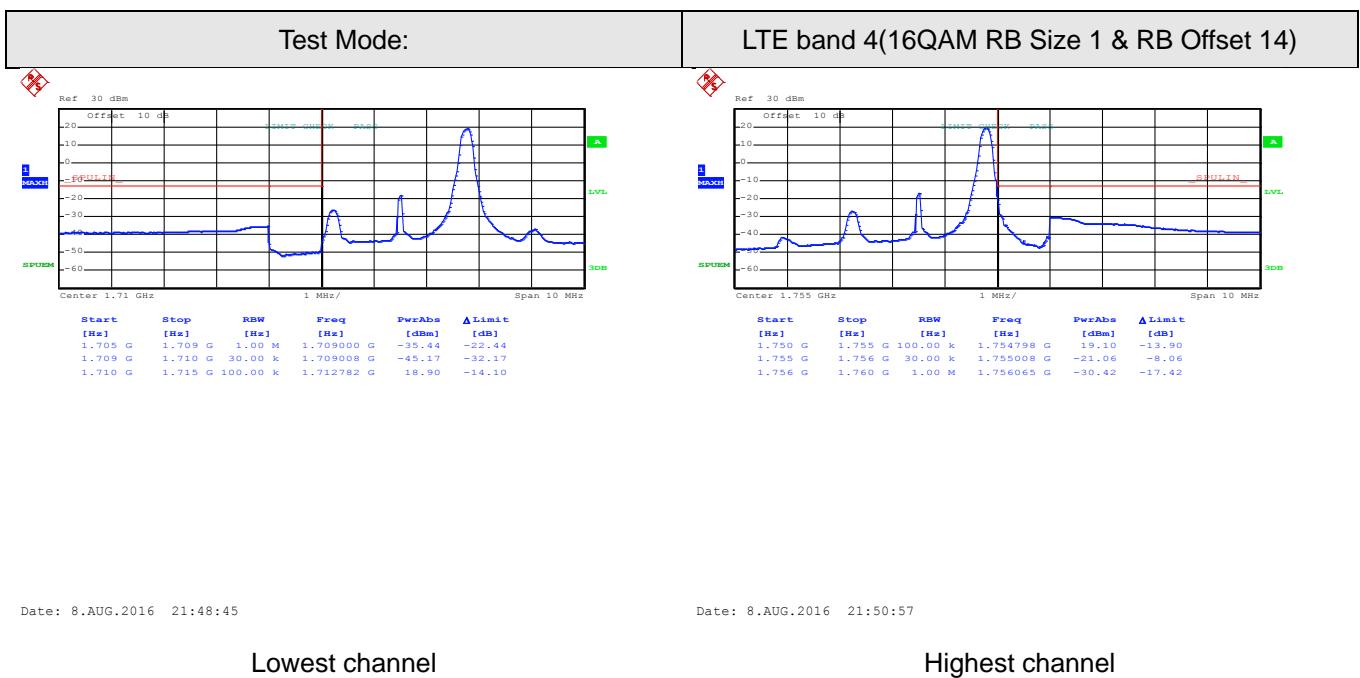


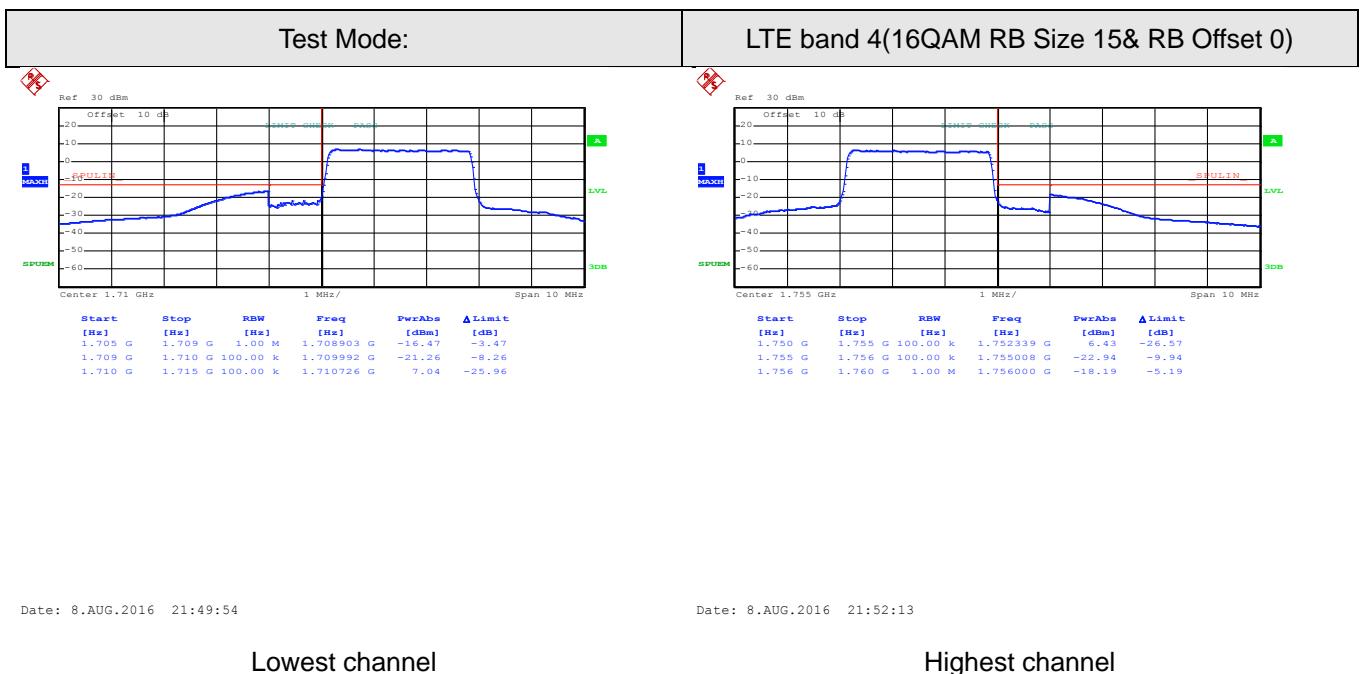
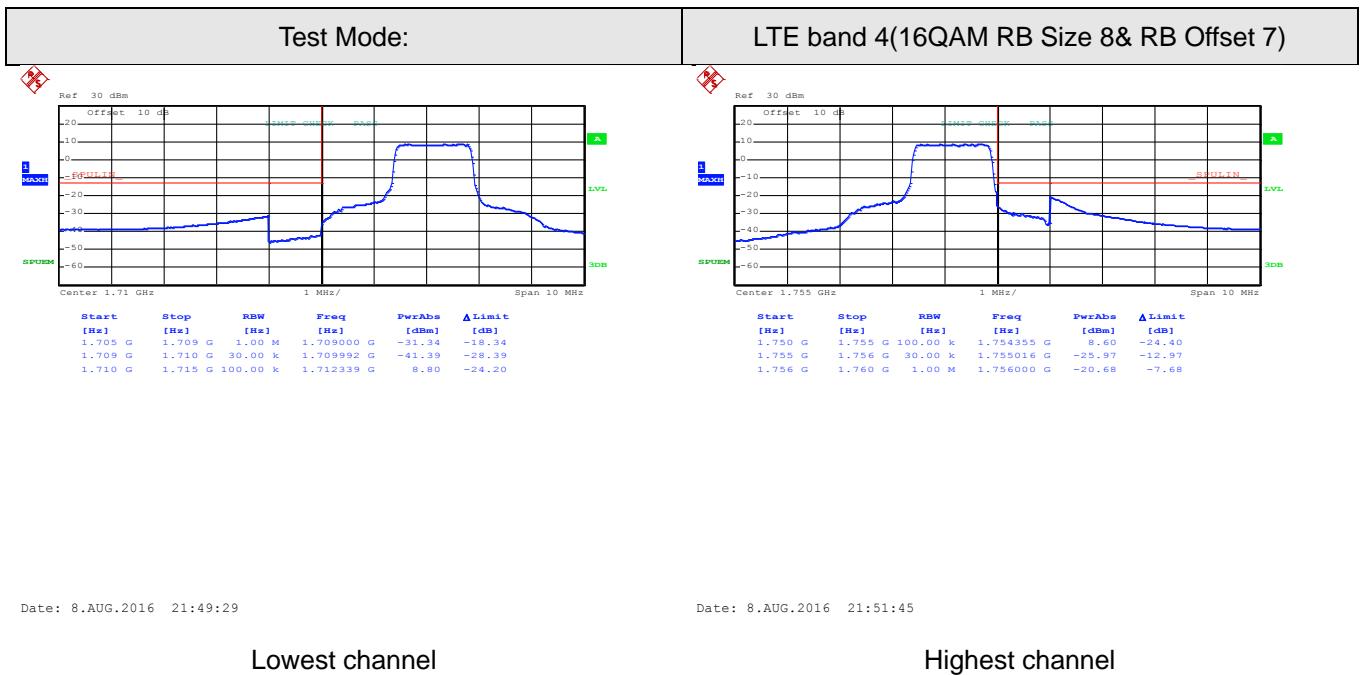
3MHz:



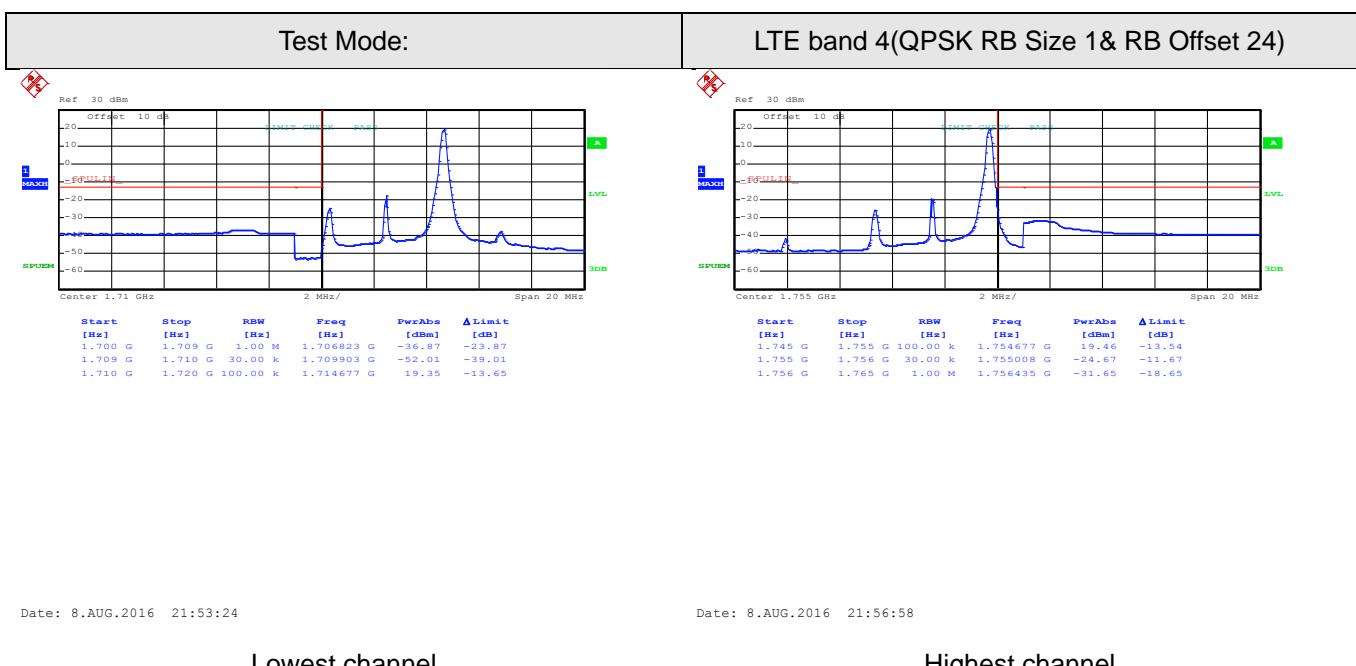
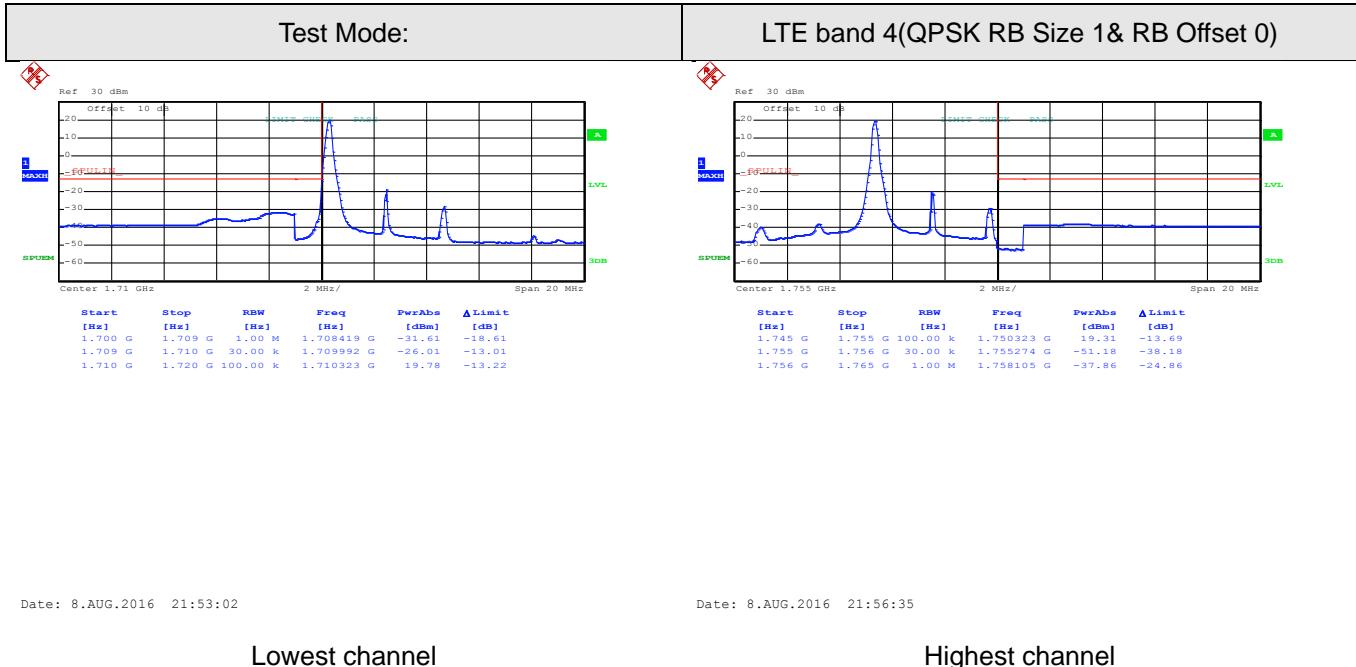


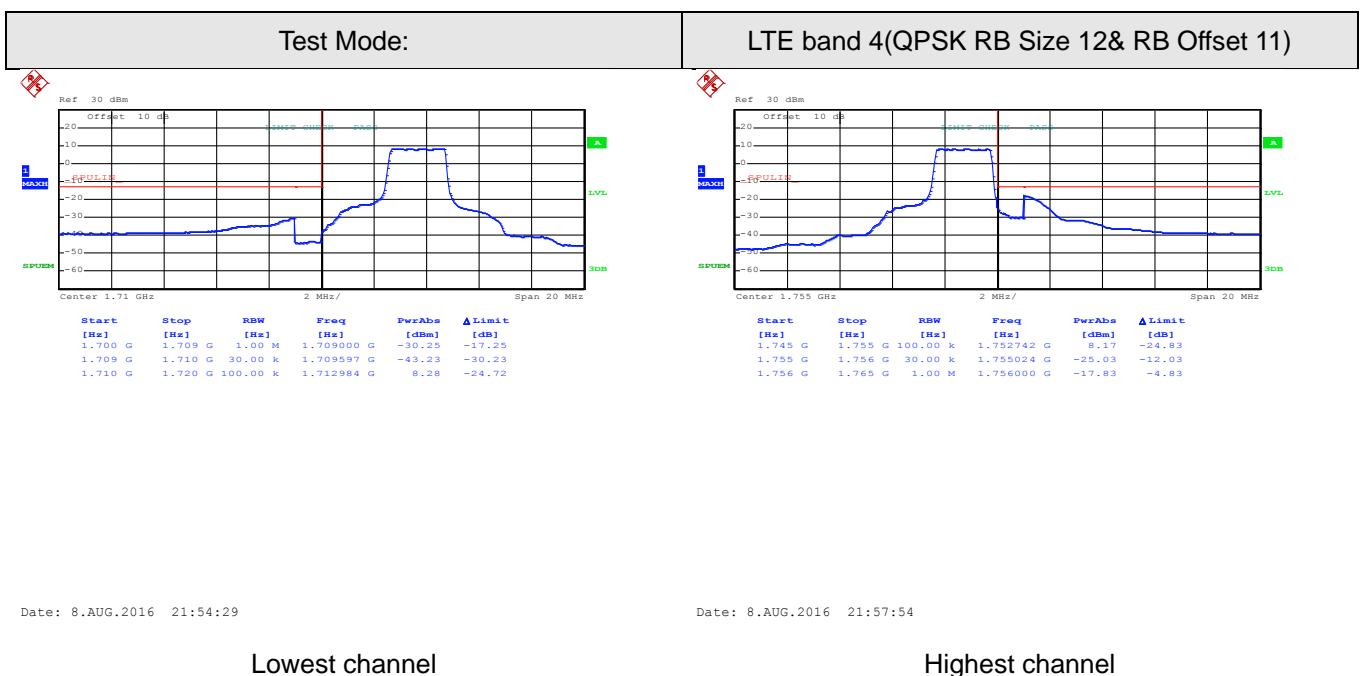
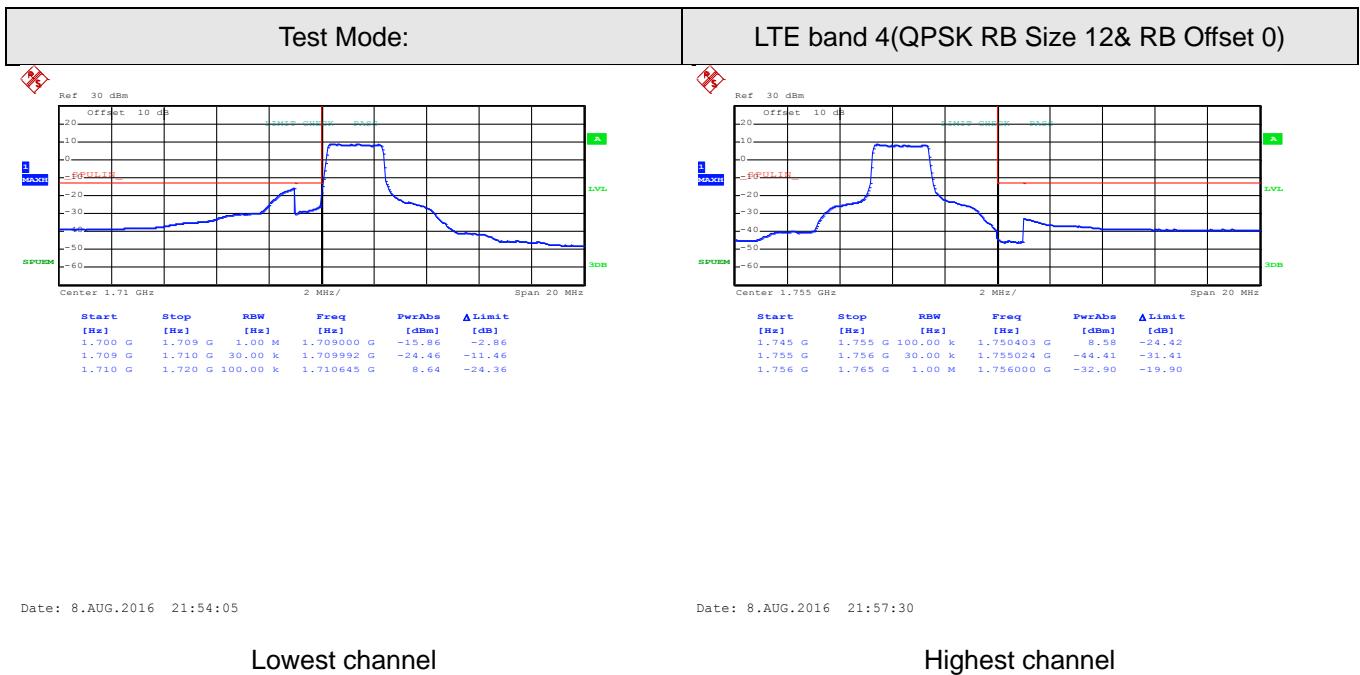


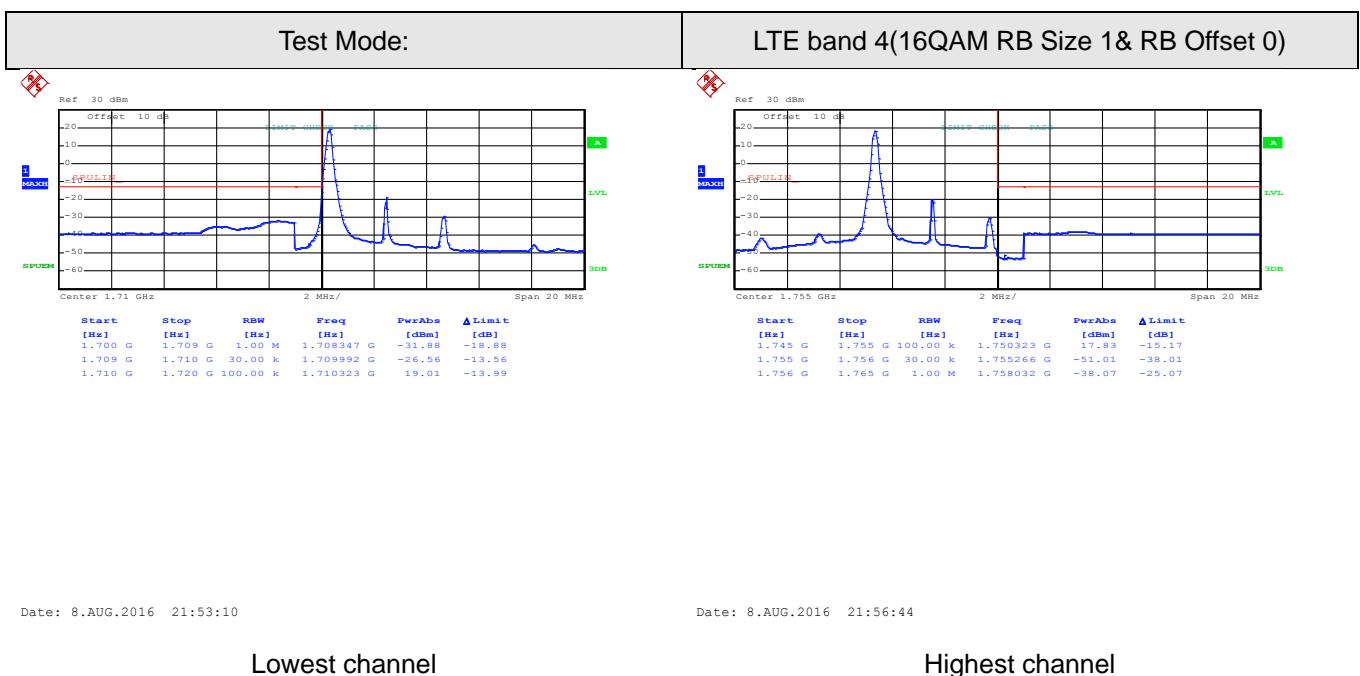
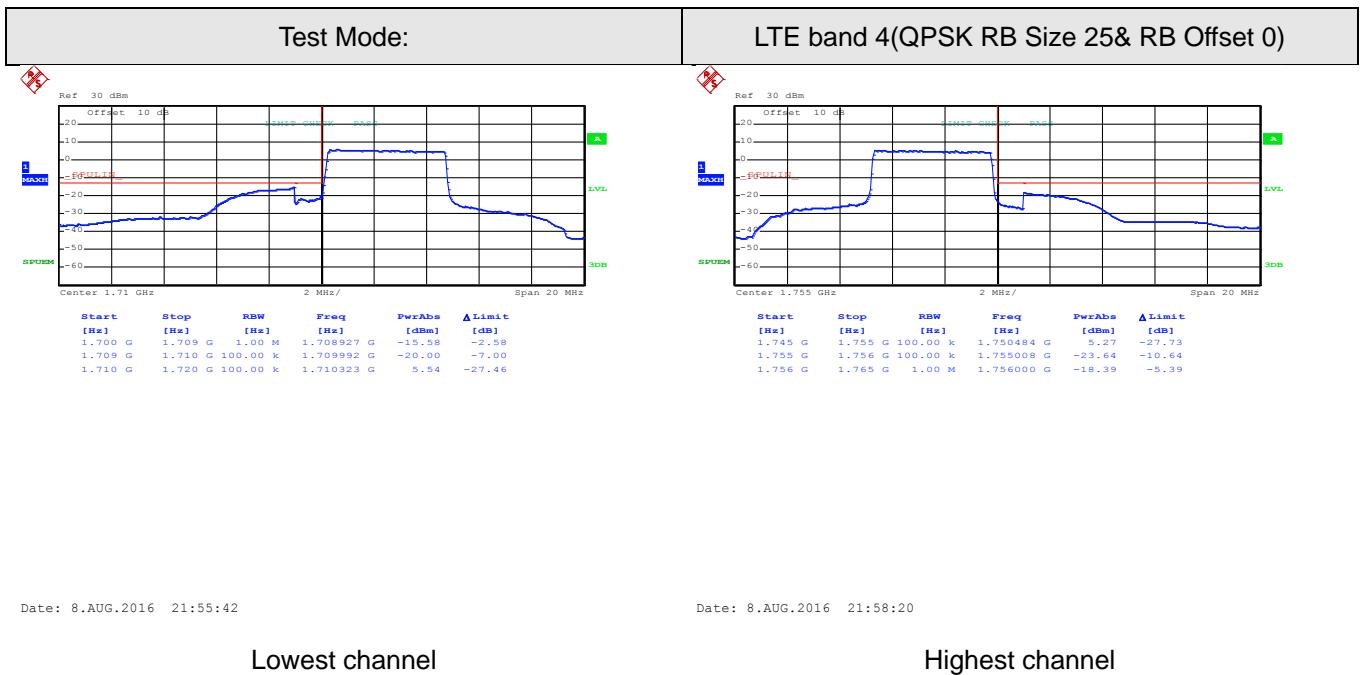


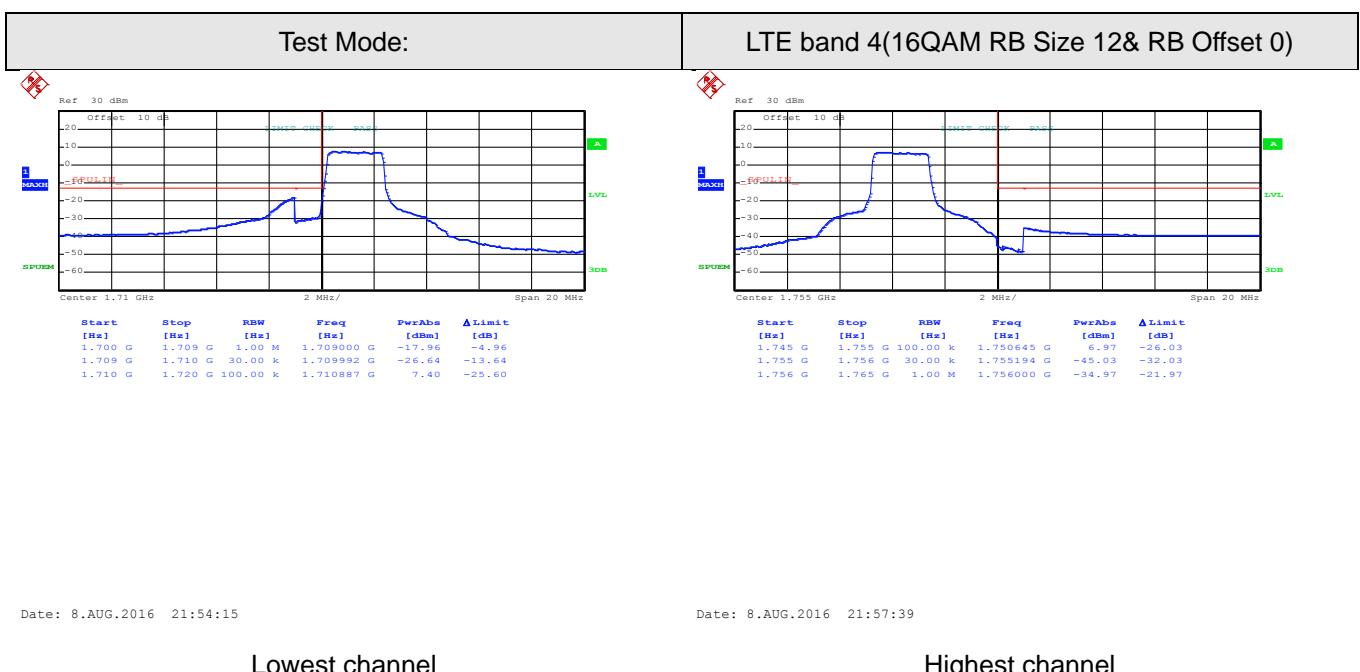
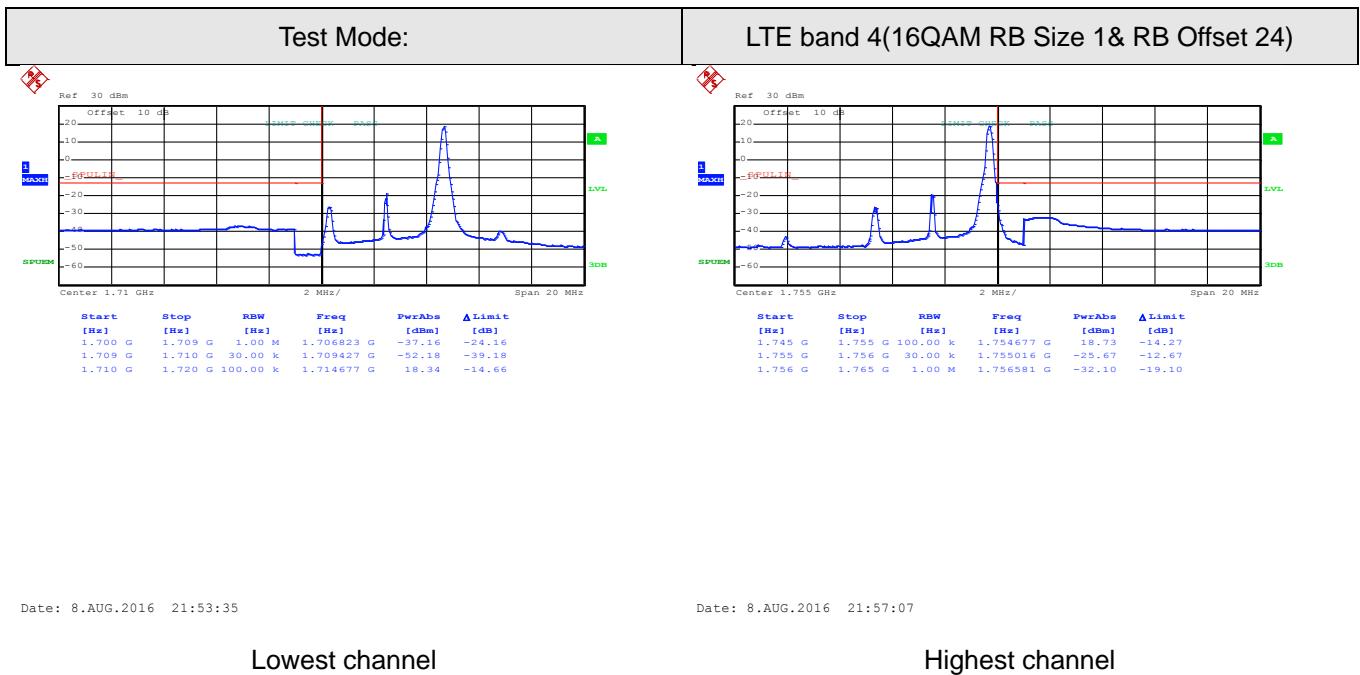


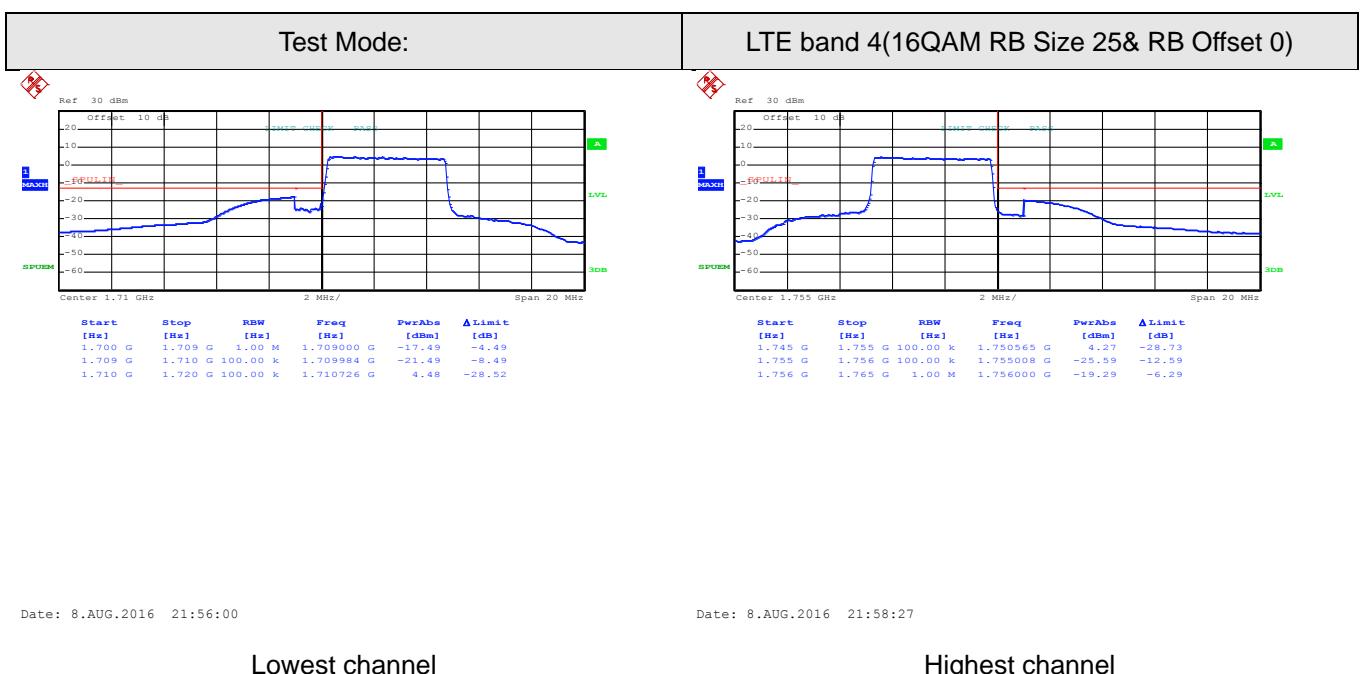
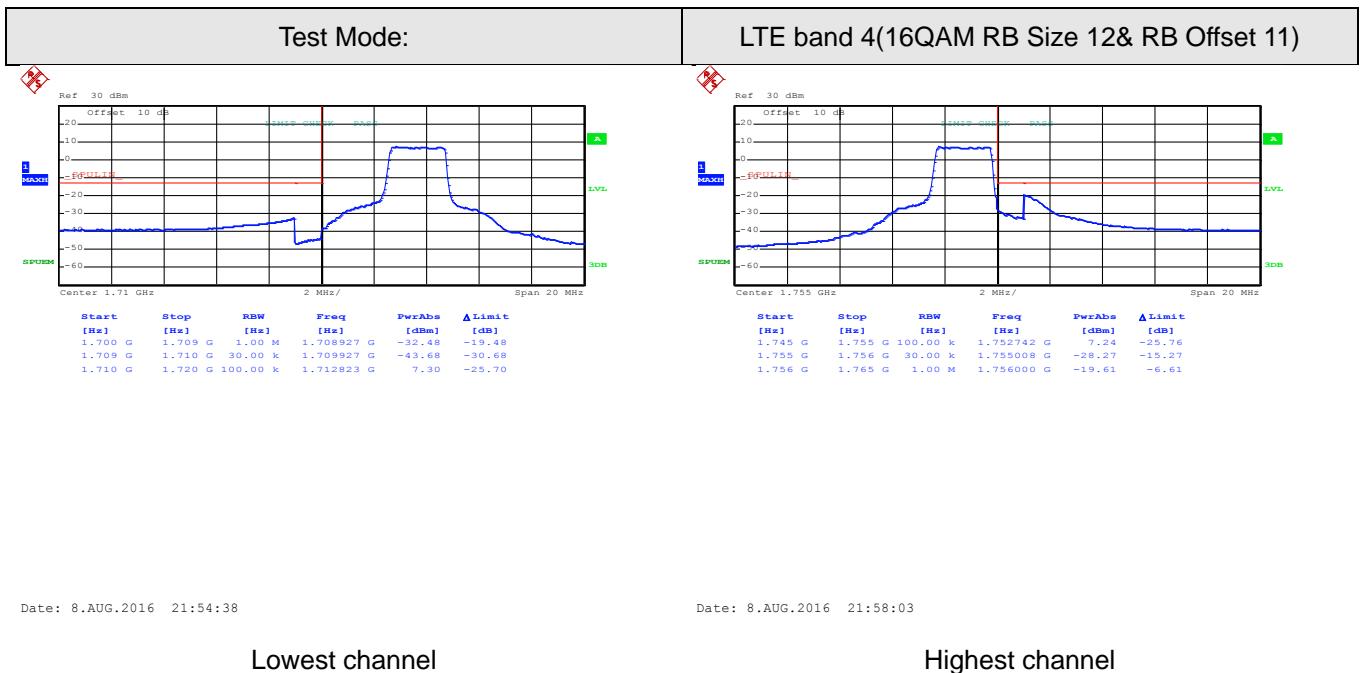
5MHz:



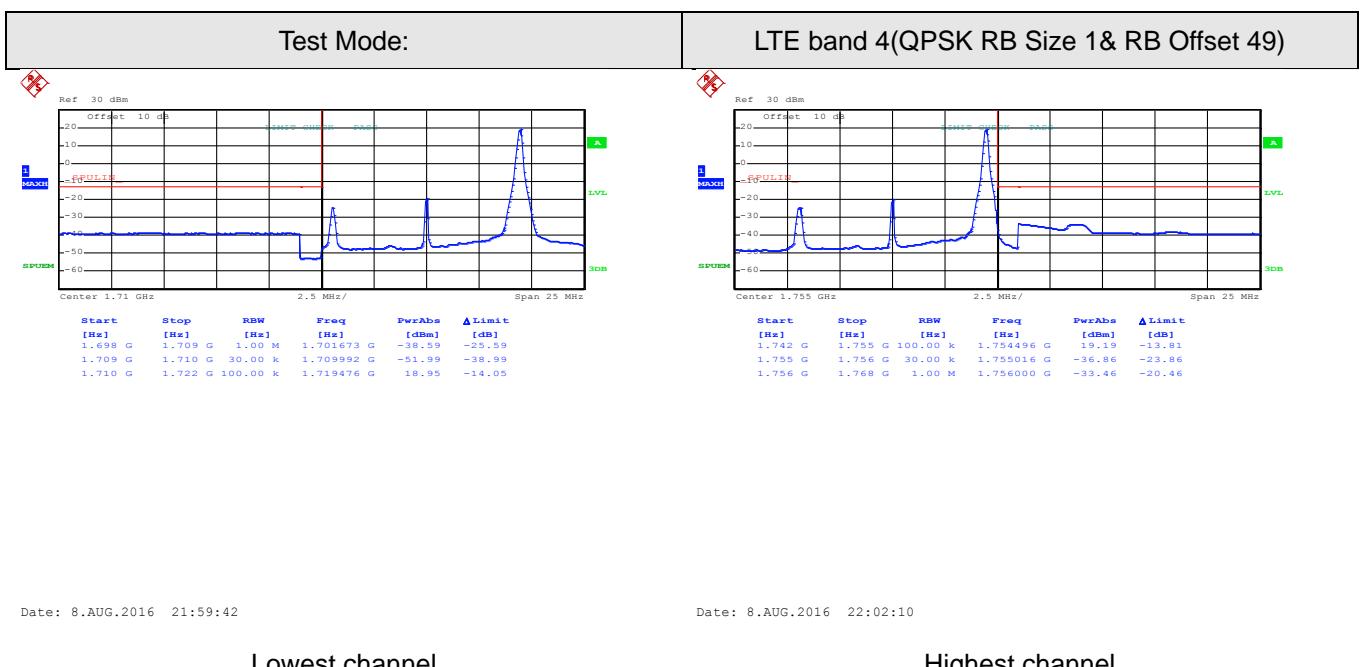
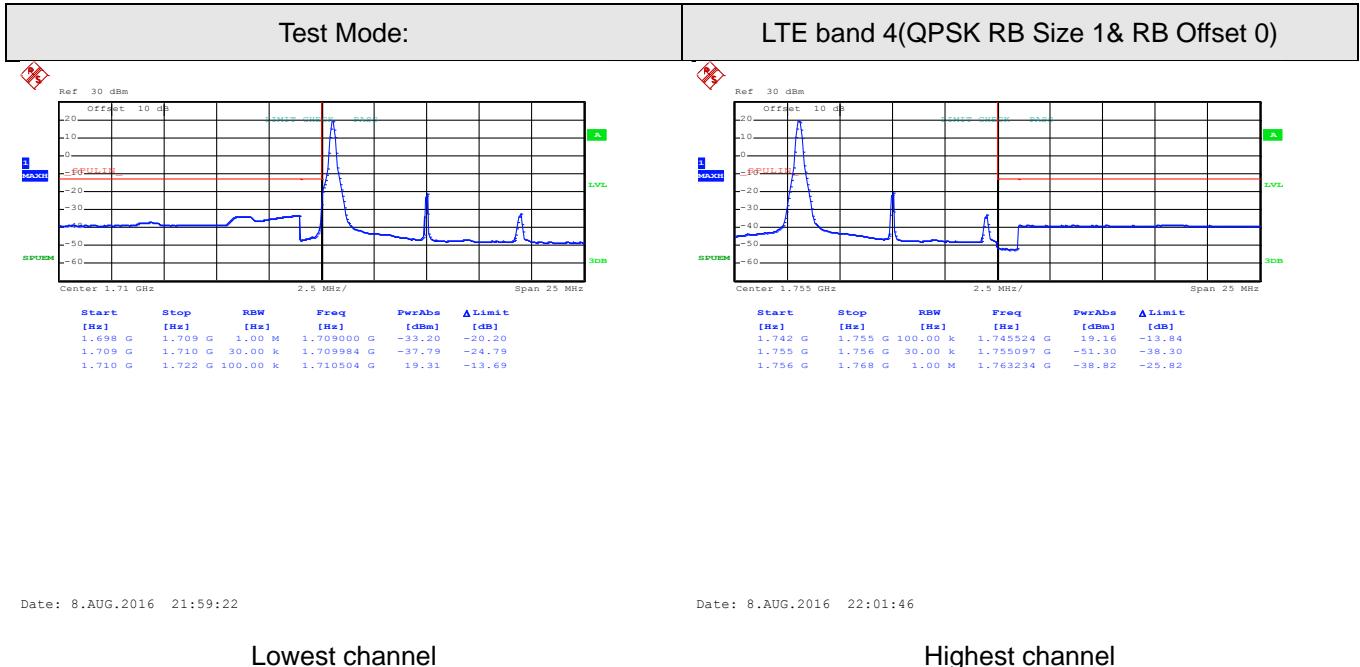


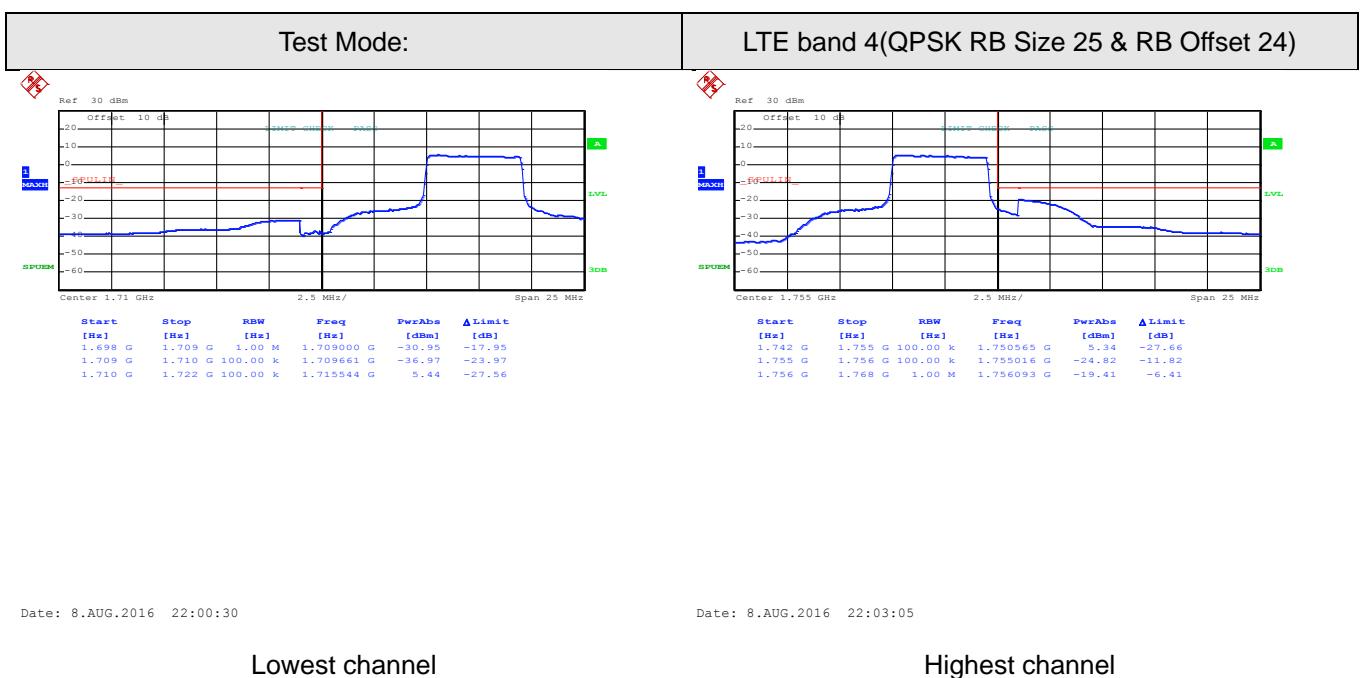
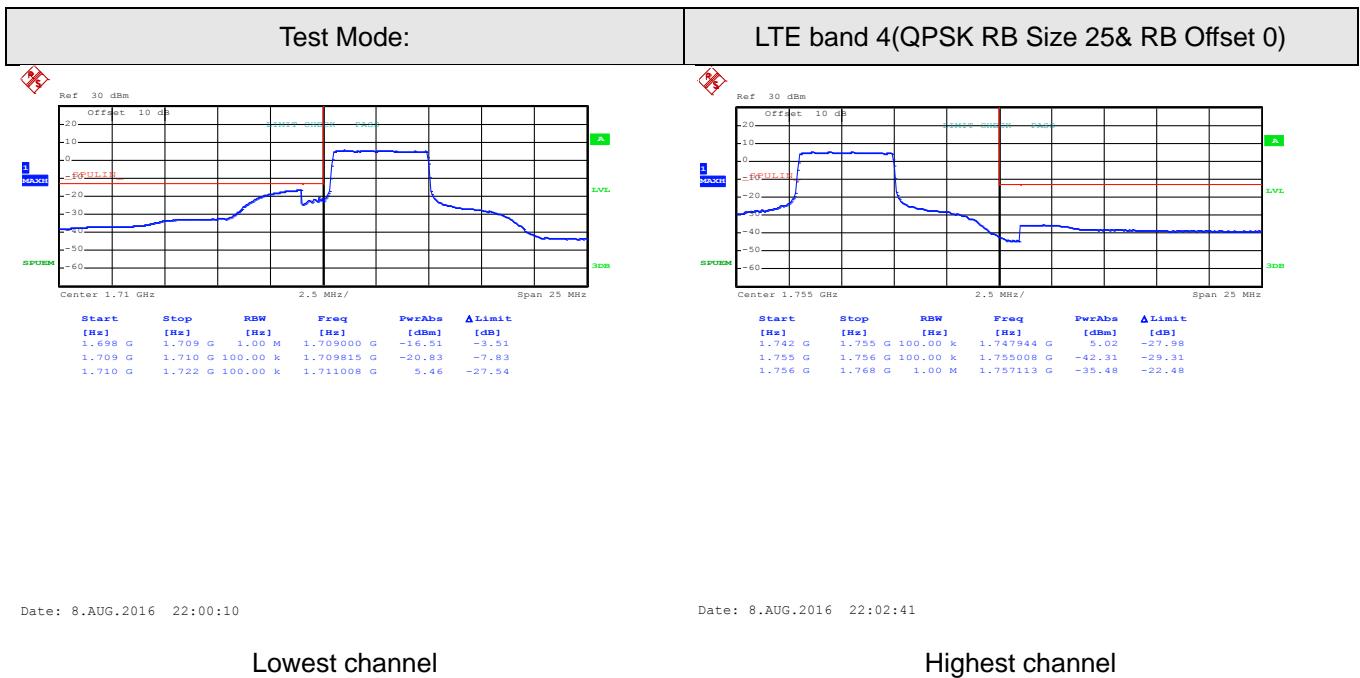




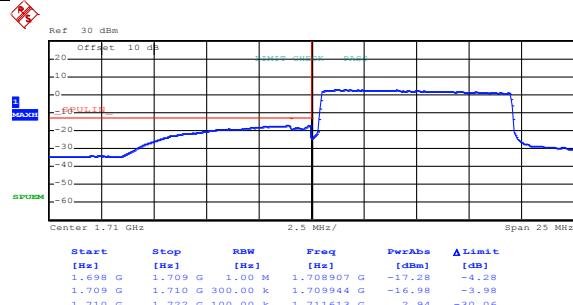


10MHz:





Test Mode:	LTE band 4(QPSK RB Size 50& RB Offset 0)
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Date: 8.AUG.2016 22:00:56

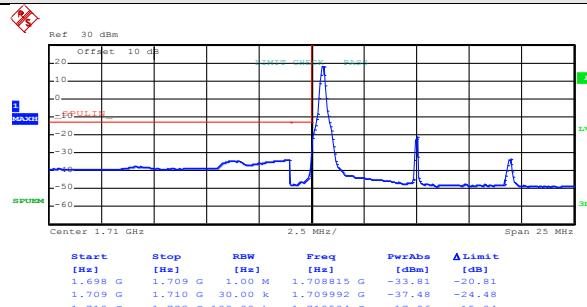
Lowest channel



Date: 8.AUG.2016 22:03:32

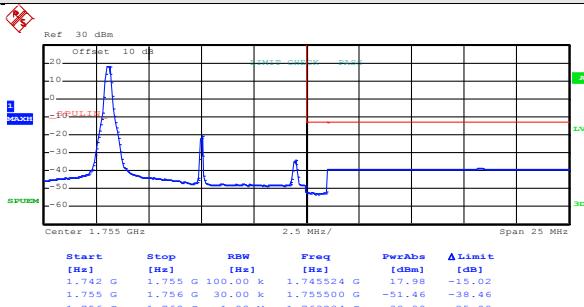
Highest channel

Test Mode:	LTE band 4(16QAM RB Size 1& RB Offset 0)
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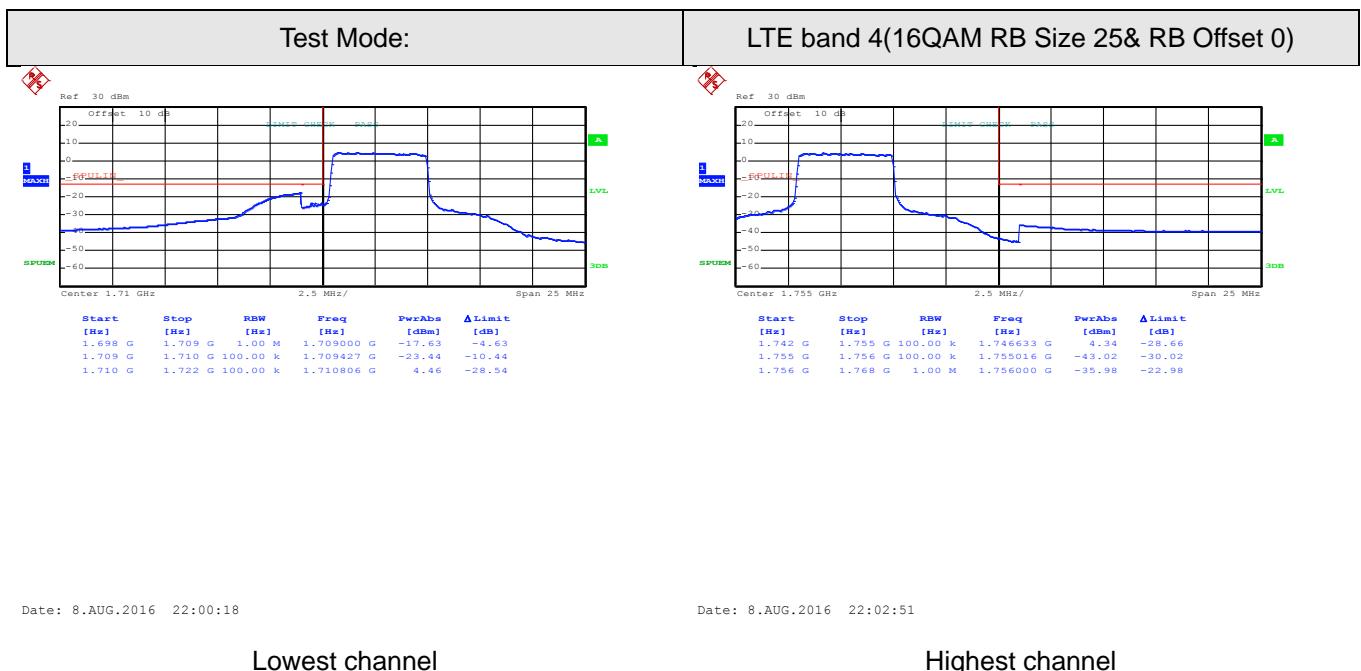
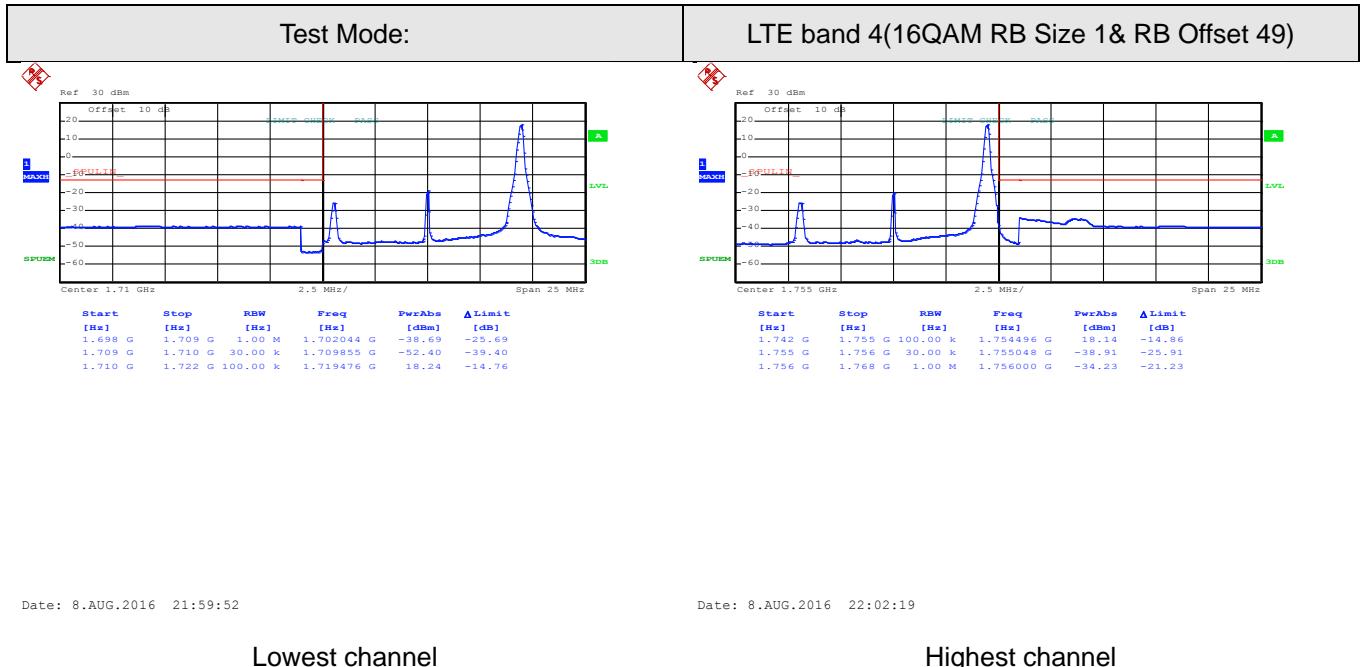
Date: 8.AUG.2016 21:59:31

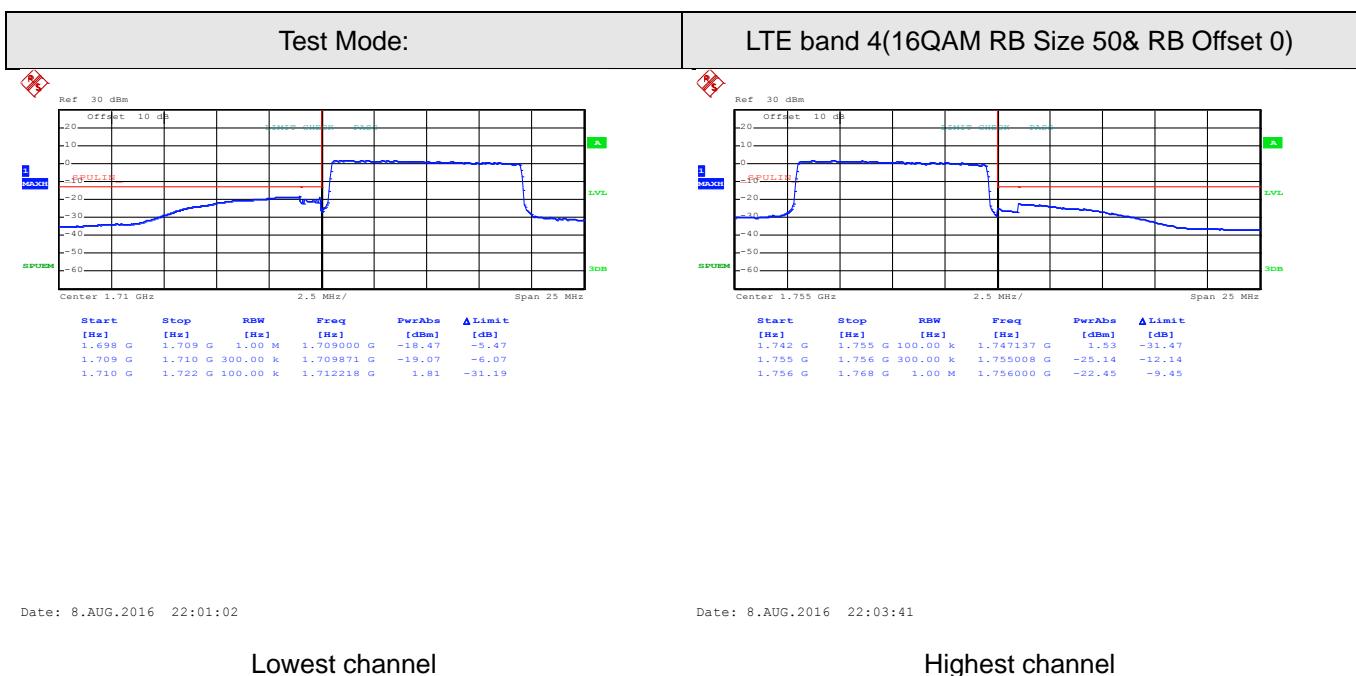
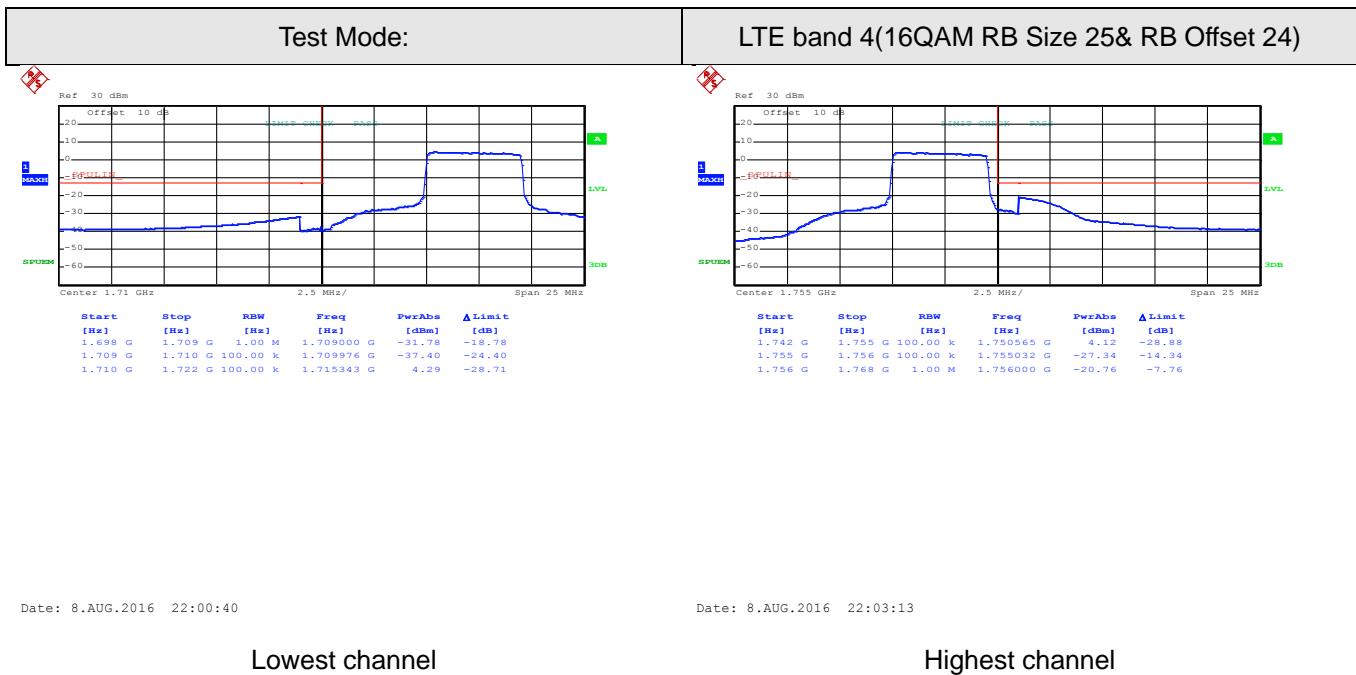
Lowest channel



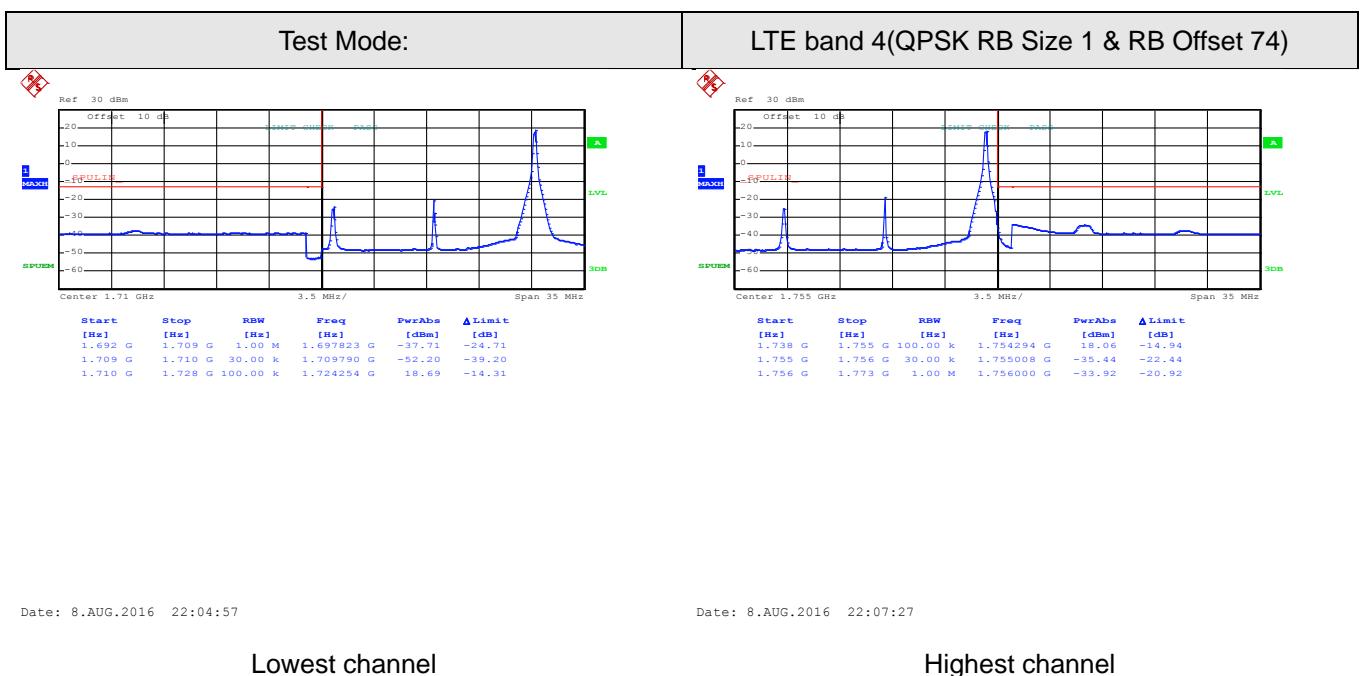
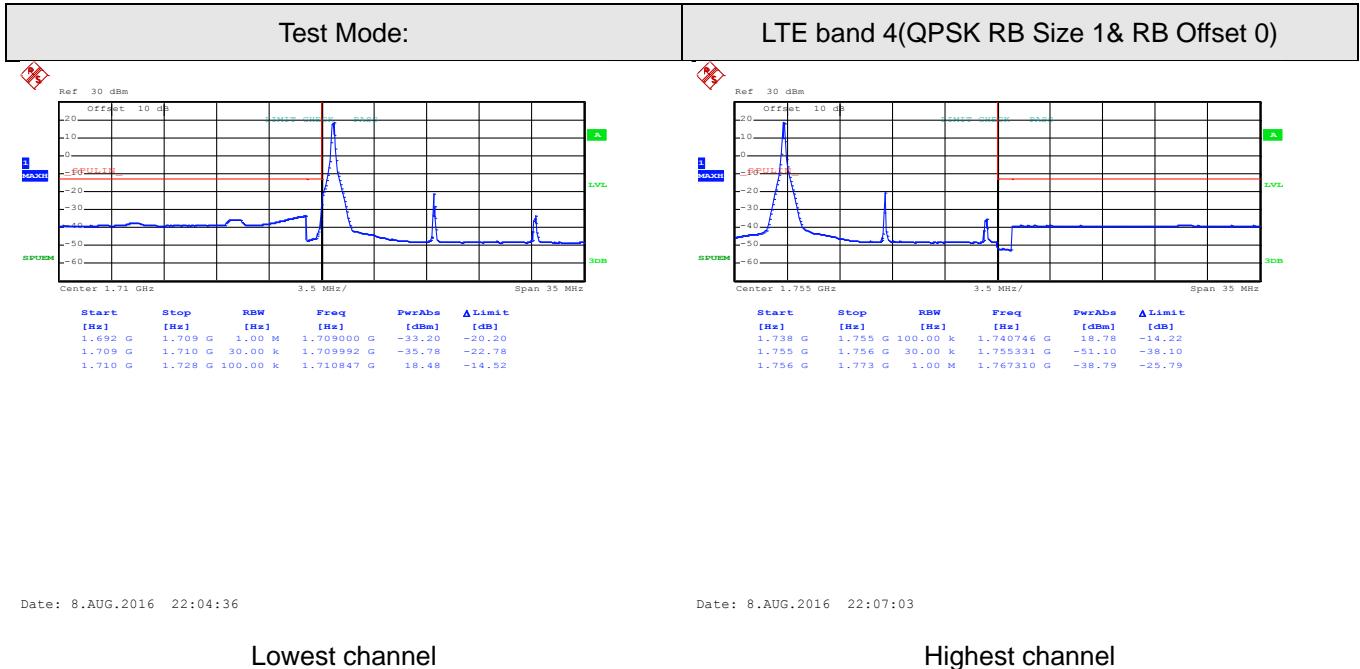
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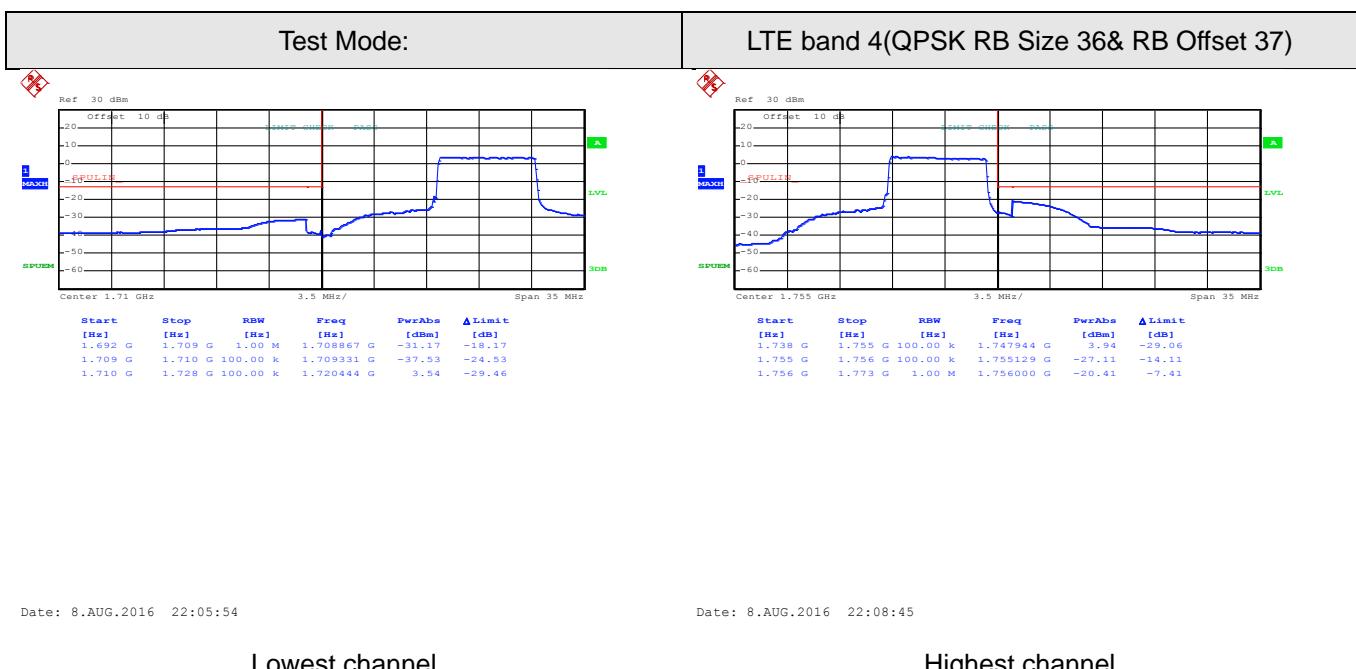
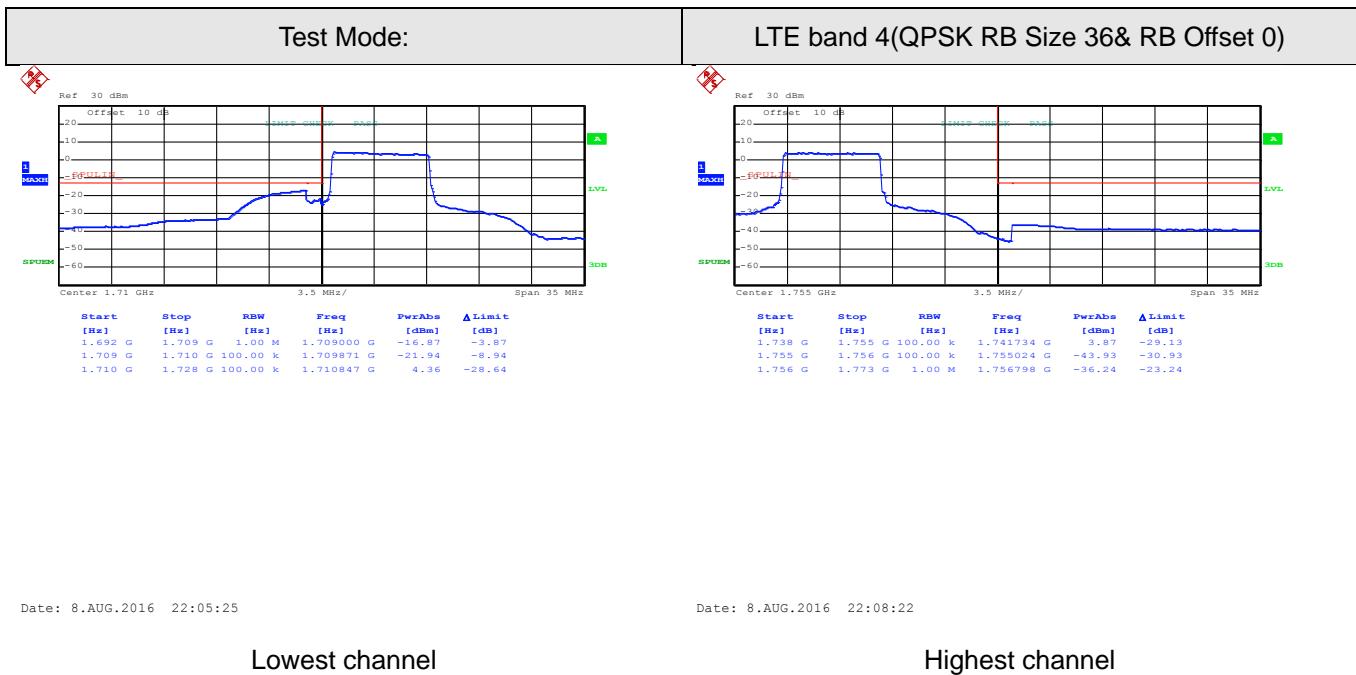
Highest channel

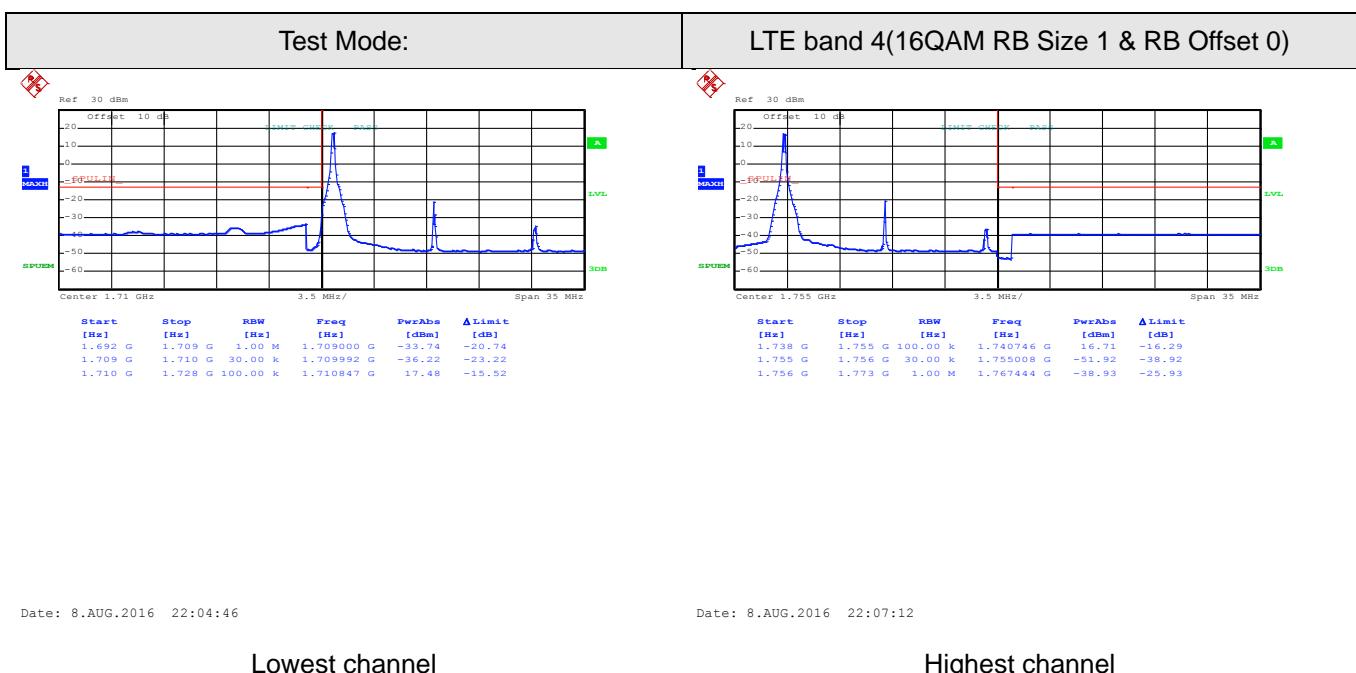
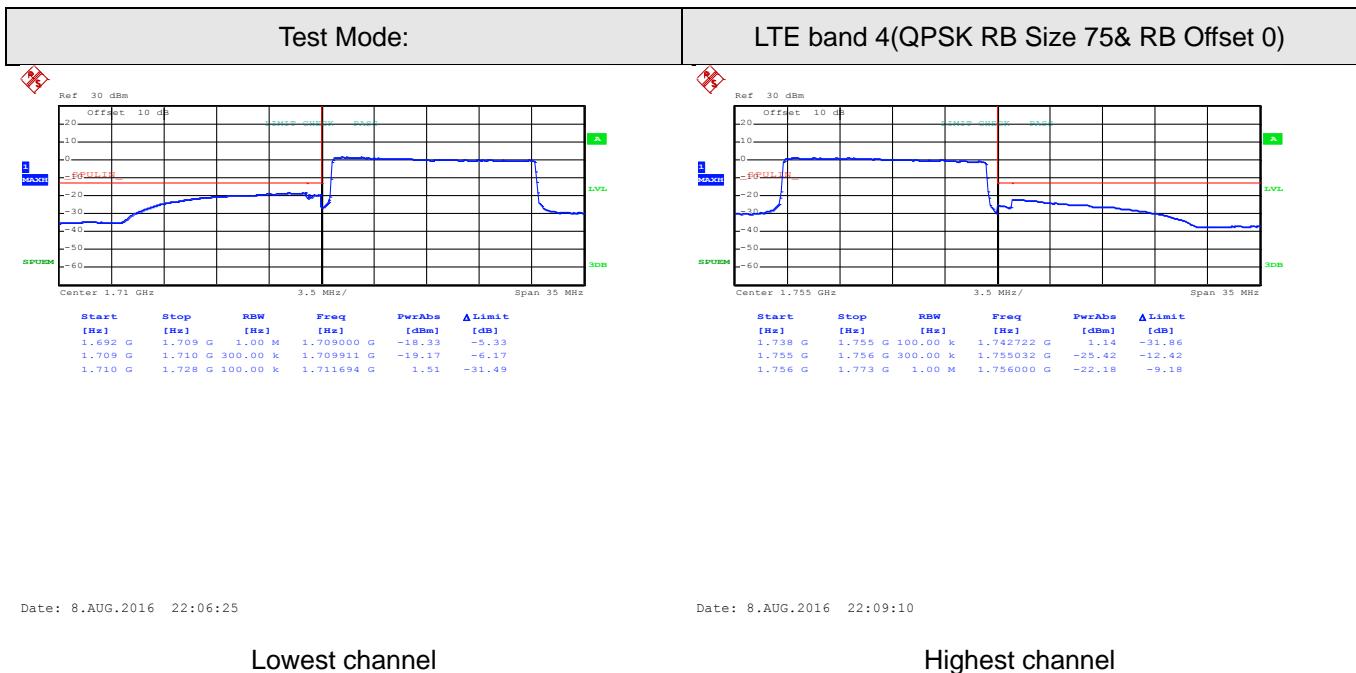


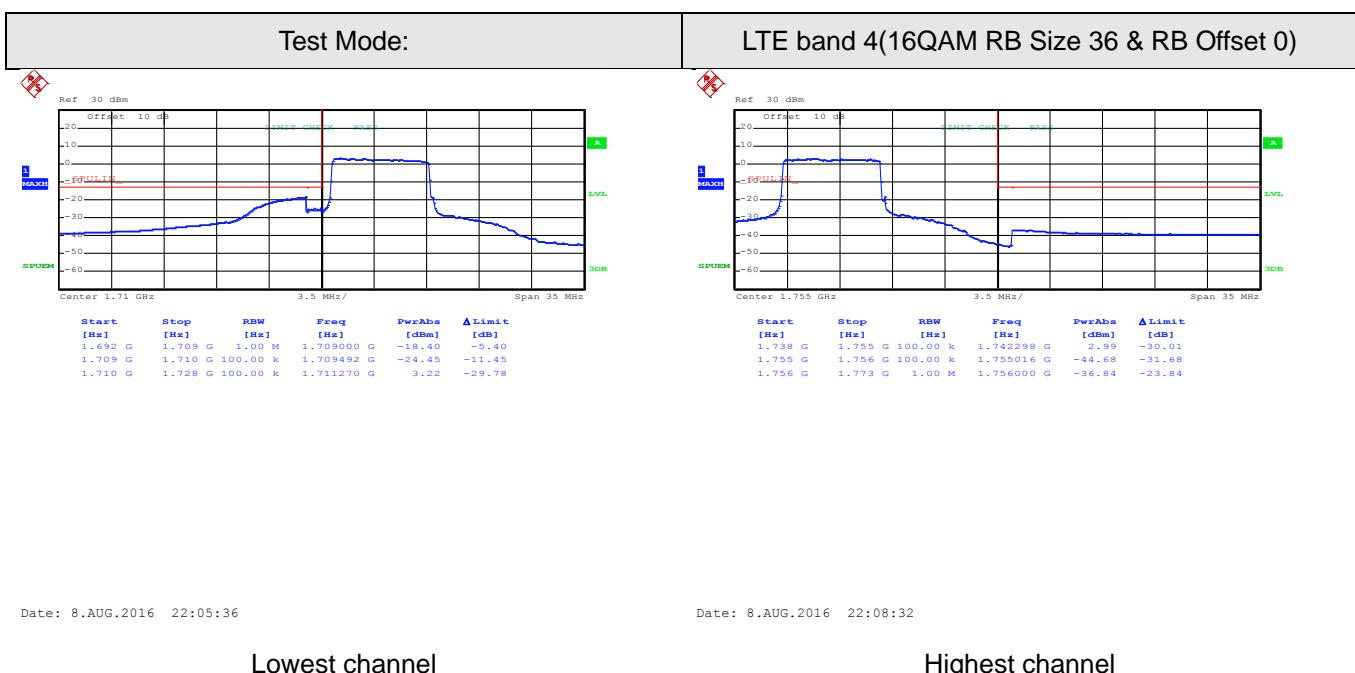
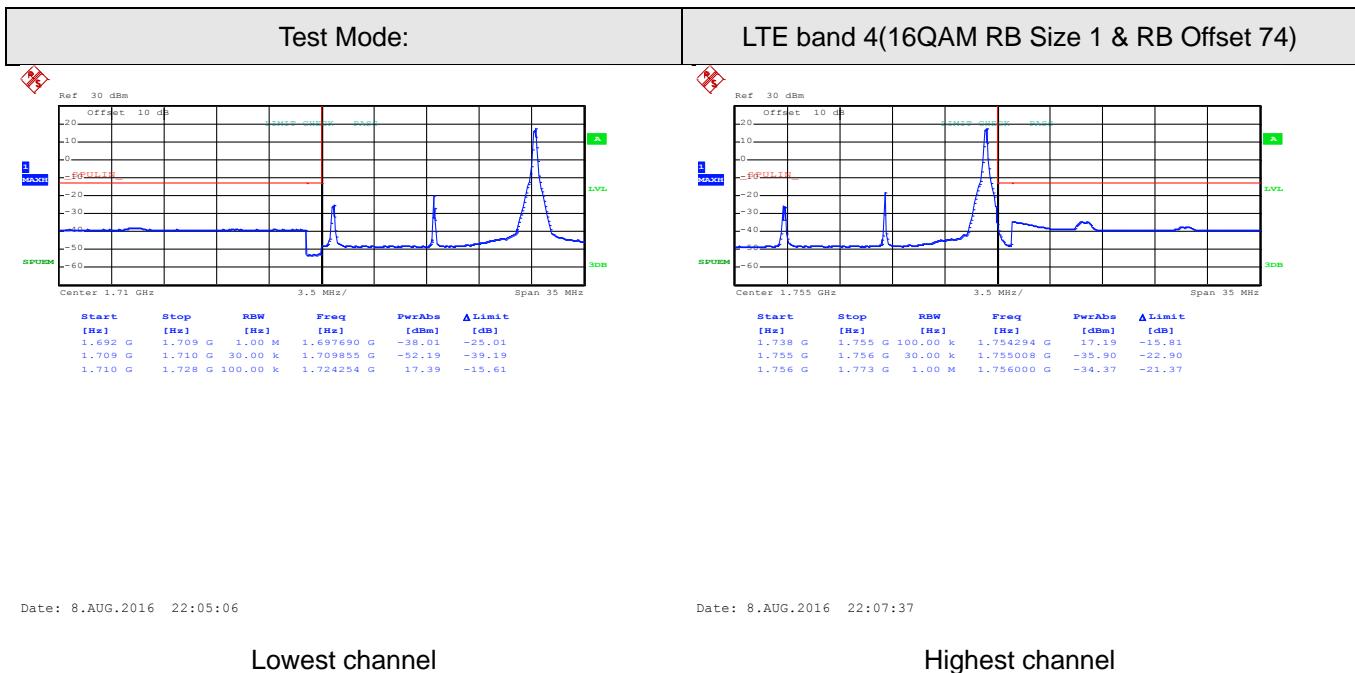


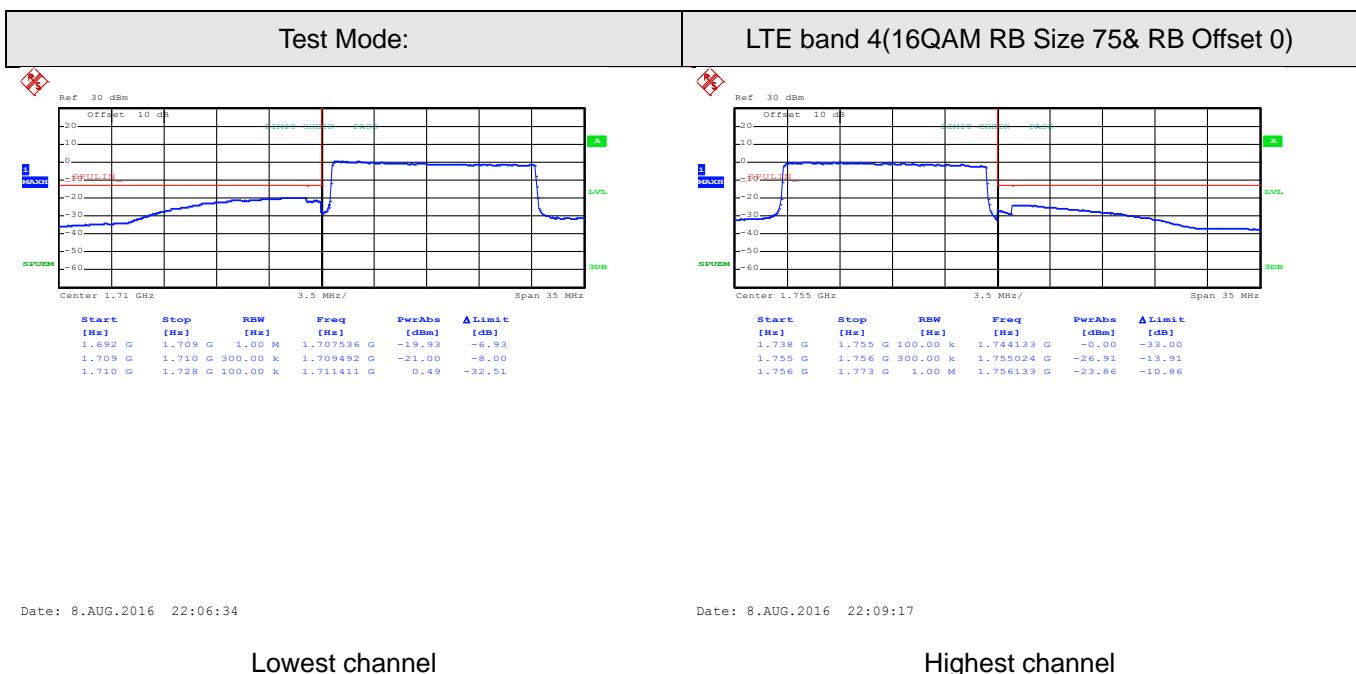
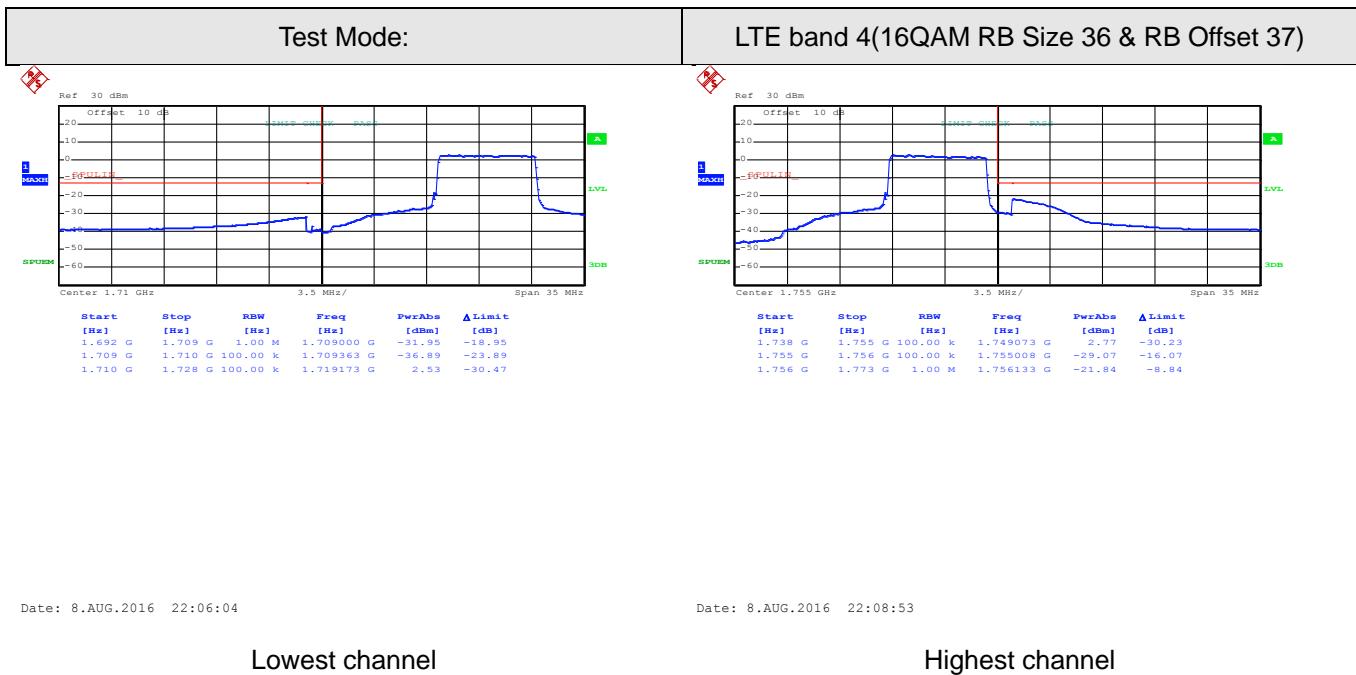
15MHz:



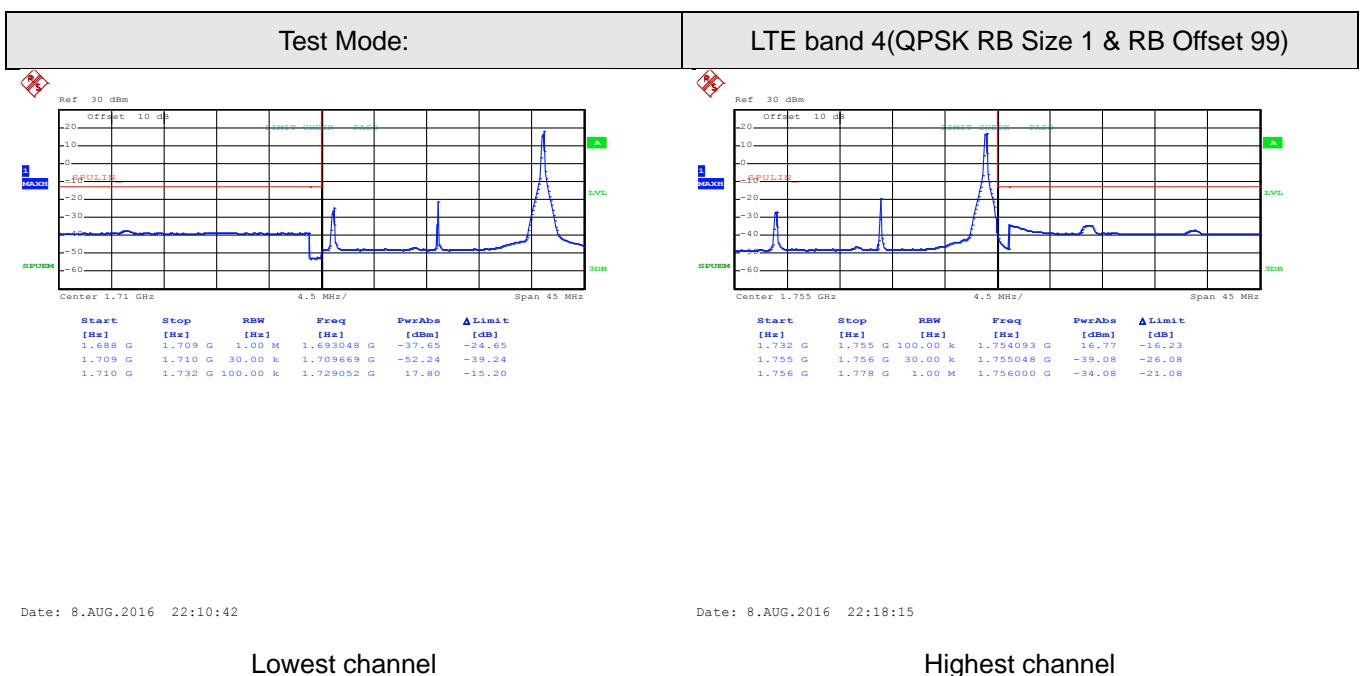
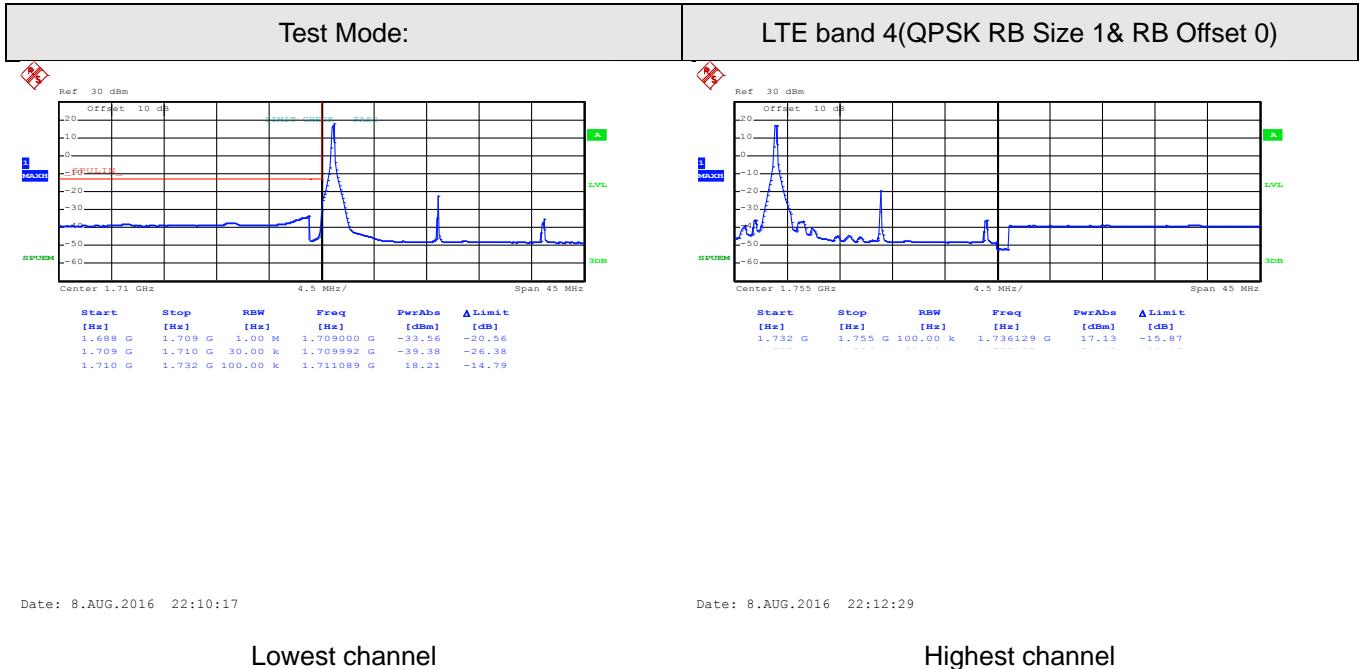


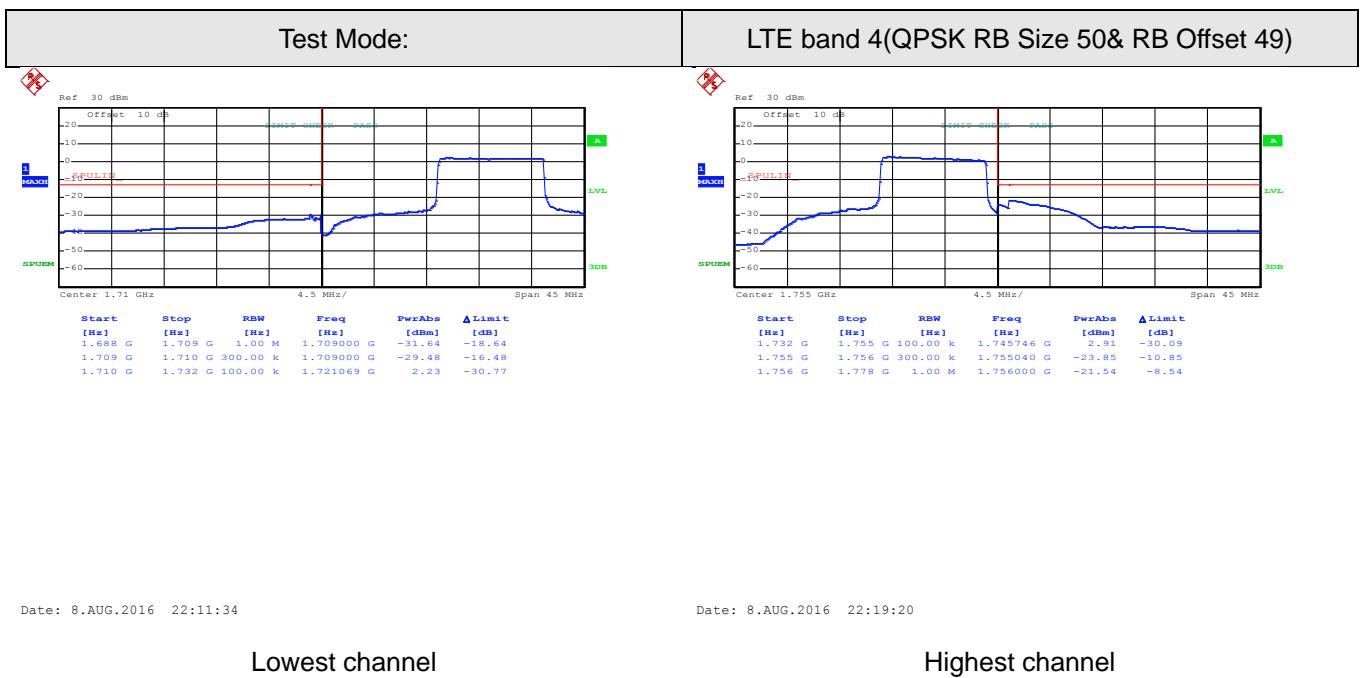
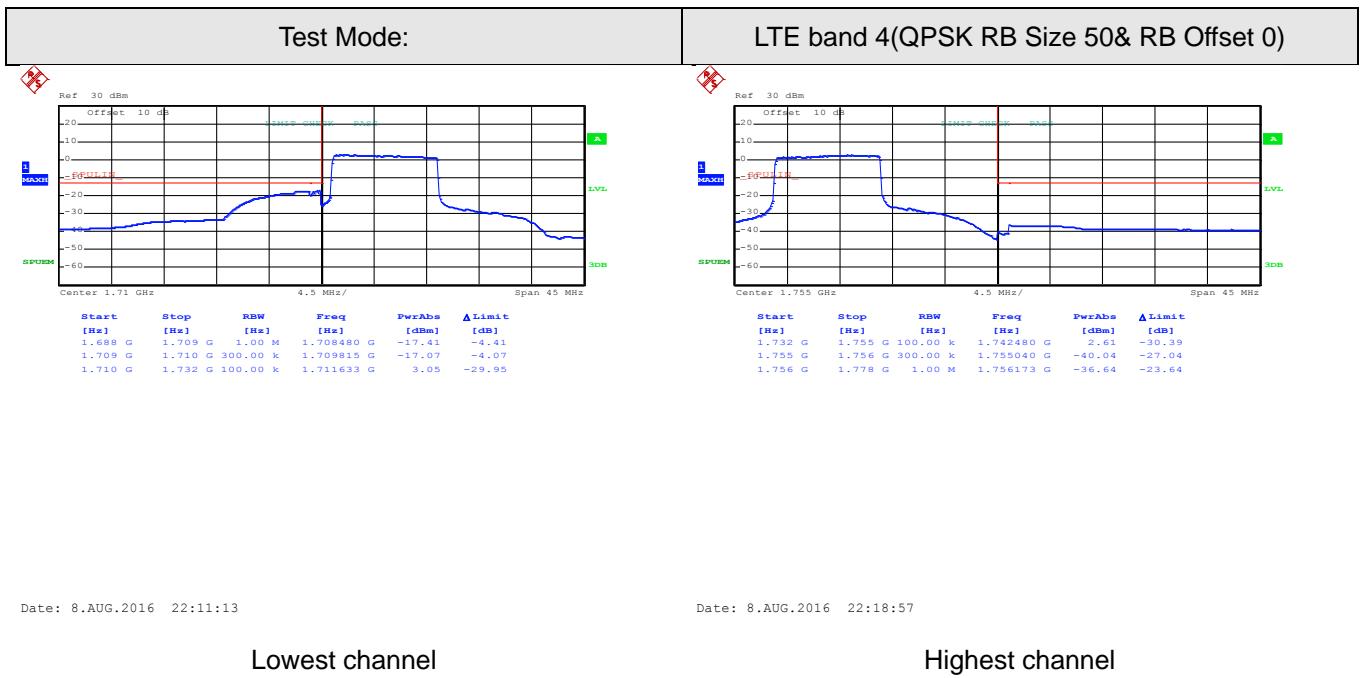


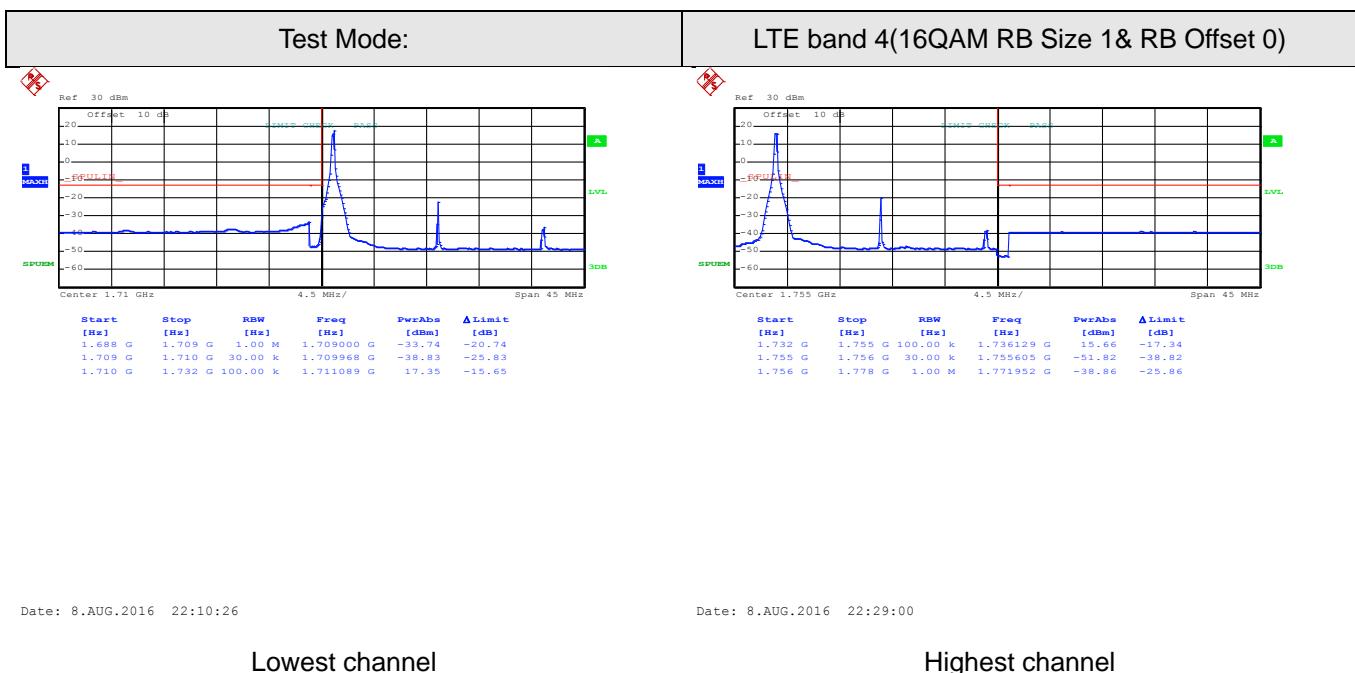
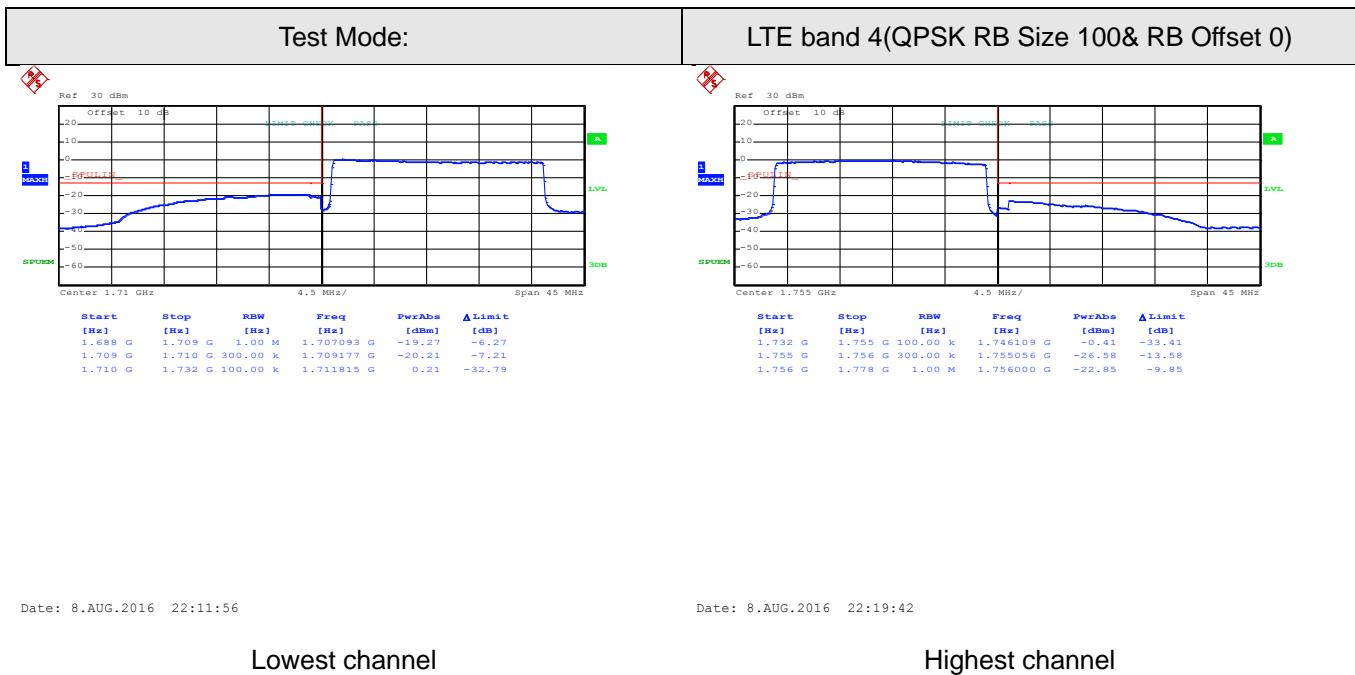


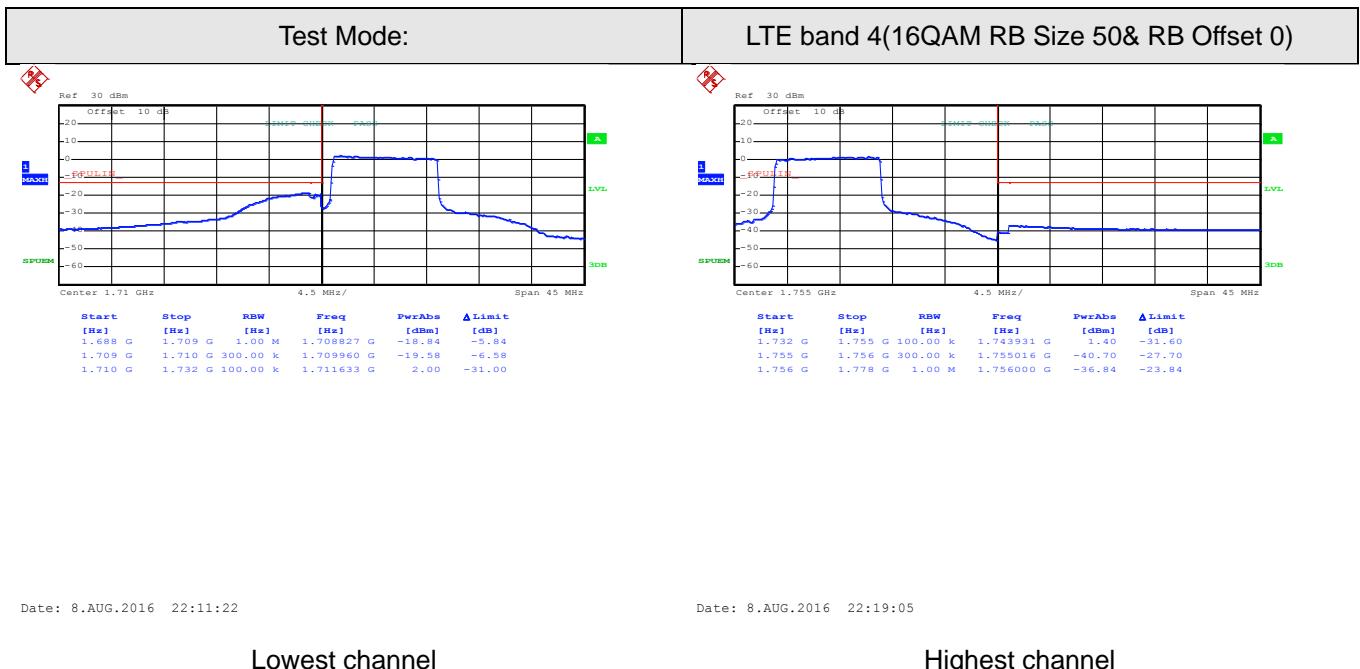
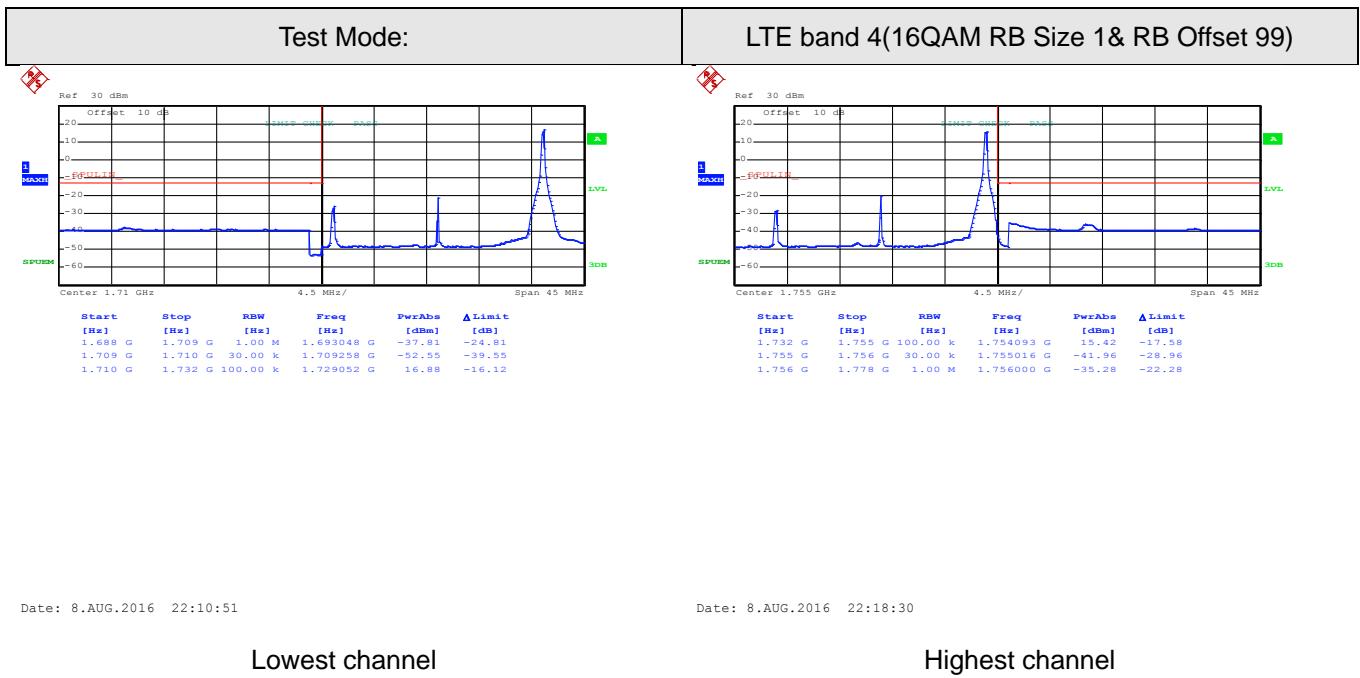


20MHz:

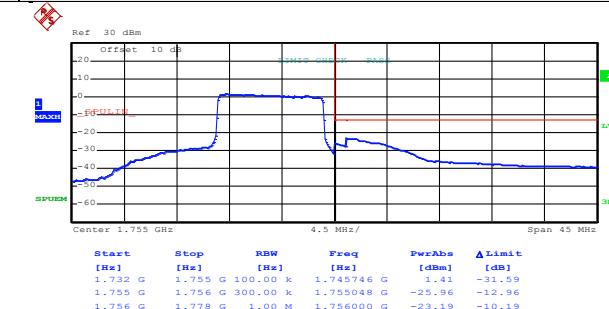
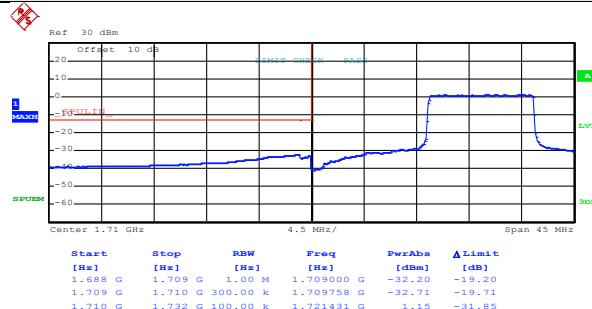








Test Mode:	LTE band 4(16QAM RB Size 50& RB Offset 49)
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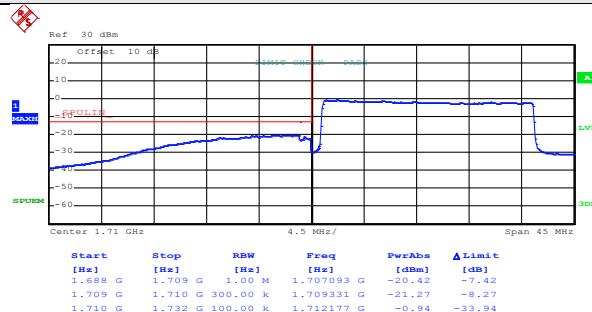
Date: 8.AUG.2016 22:11:43

Date: 8.AUG.2016 22:19:30

Lowest channel

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 100& RB Offset 0)
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Date: 8.AUG.2016 22:12:03

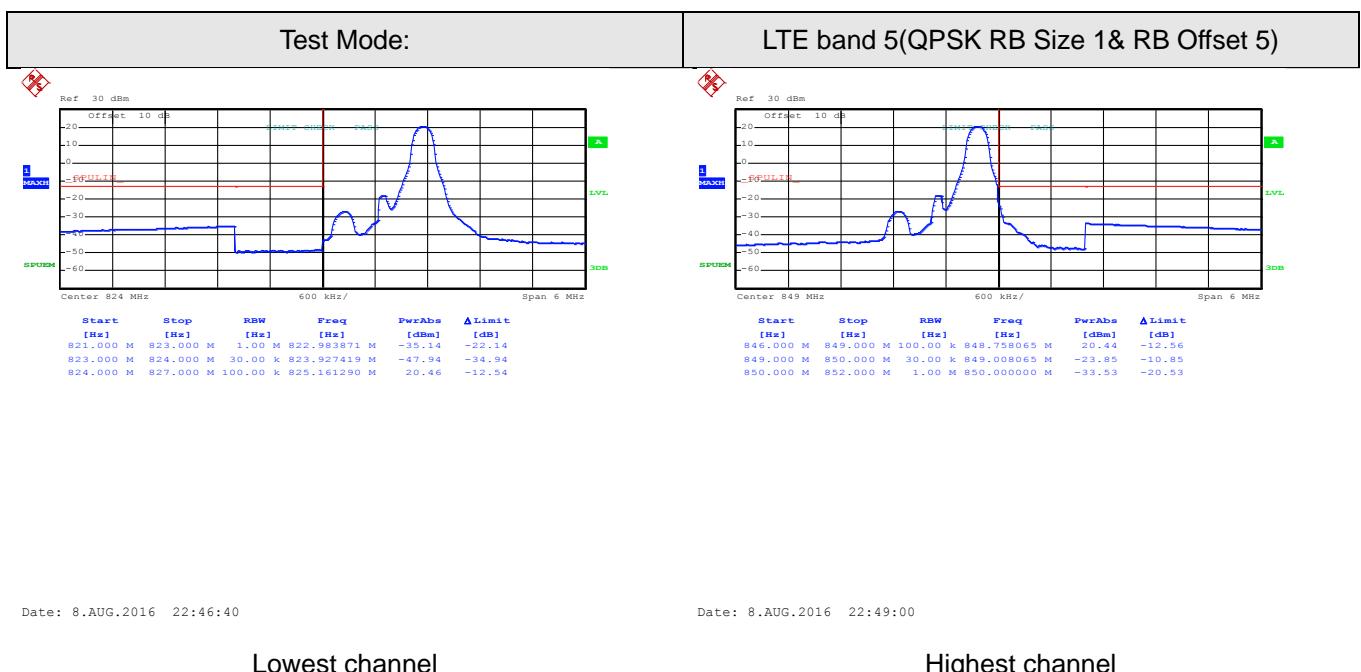
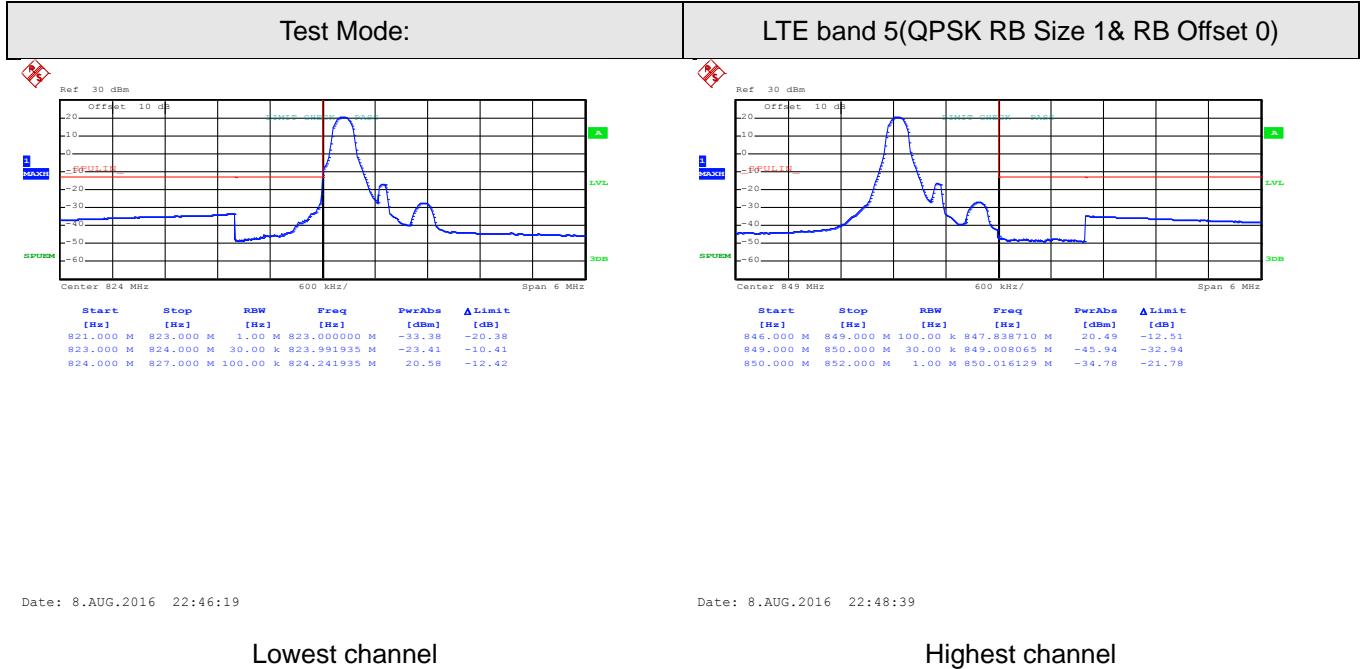
Date: 8.AUG.2016 22:19:49

Lowest channel

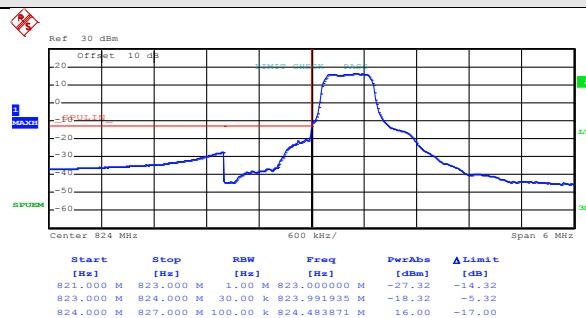
Highest channel

LTE band 5 part:

1.4MHz:

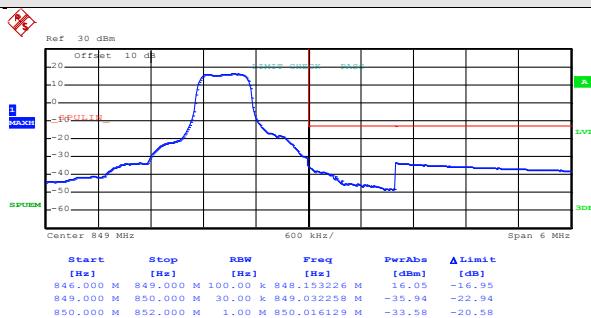


Test Mode:	LTE band 5(QPSK RB Size 3& RB Offset 0)
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Date: 8.AUG.2016 22:47:14

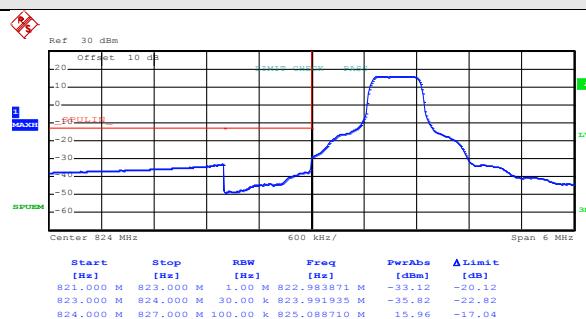
Lowest channel



Date: 8.AUG.2016 22:49:24

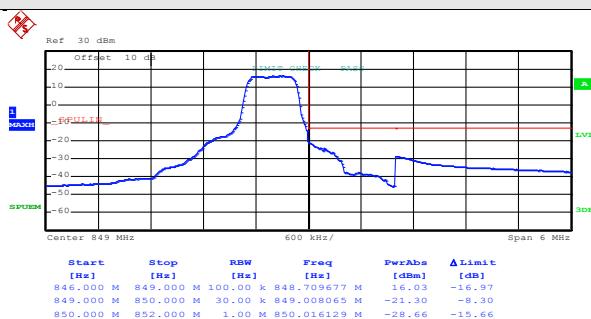
Highest channel

Test Mode:	LTE band 5(QPSK RB Size 3& RB Offset 2)
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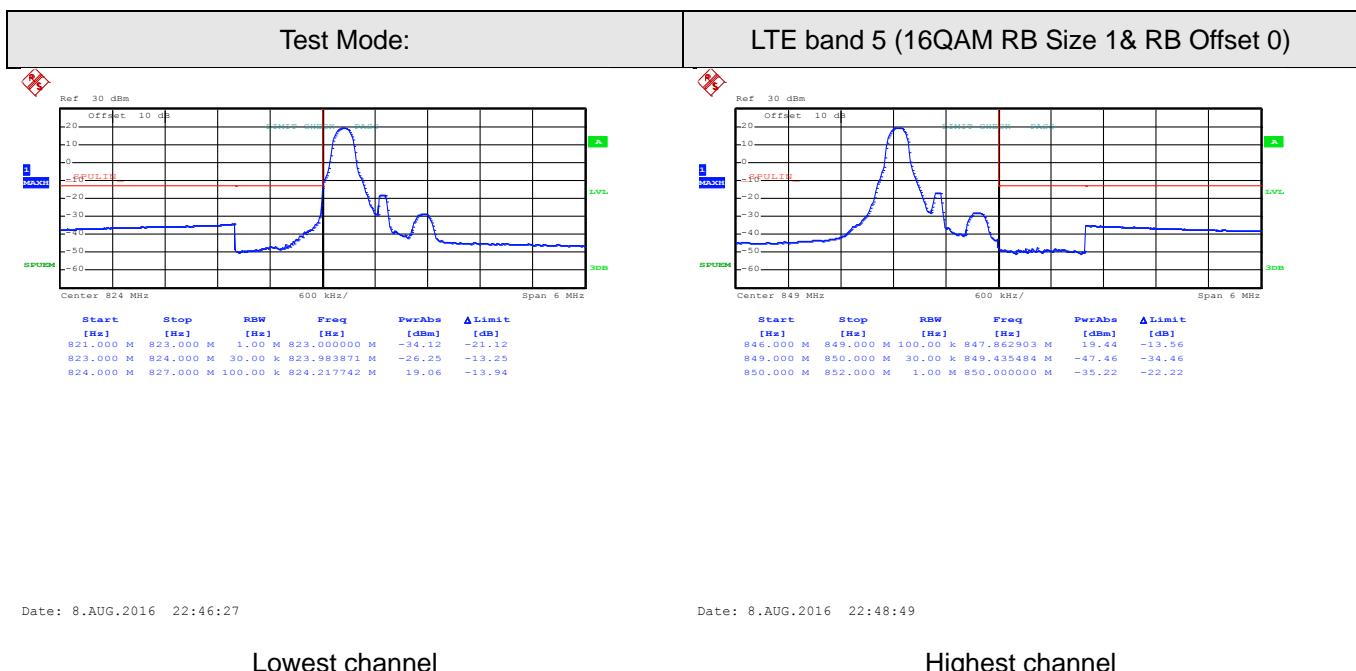
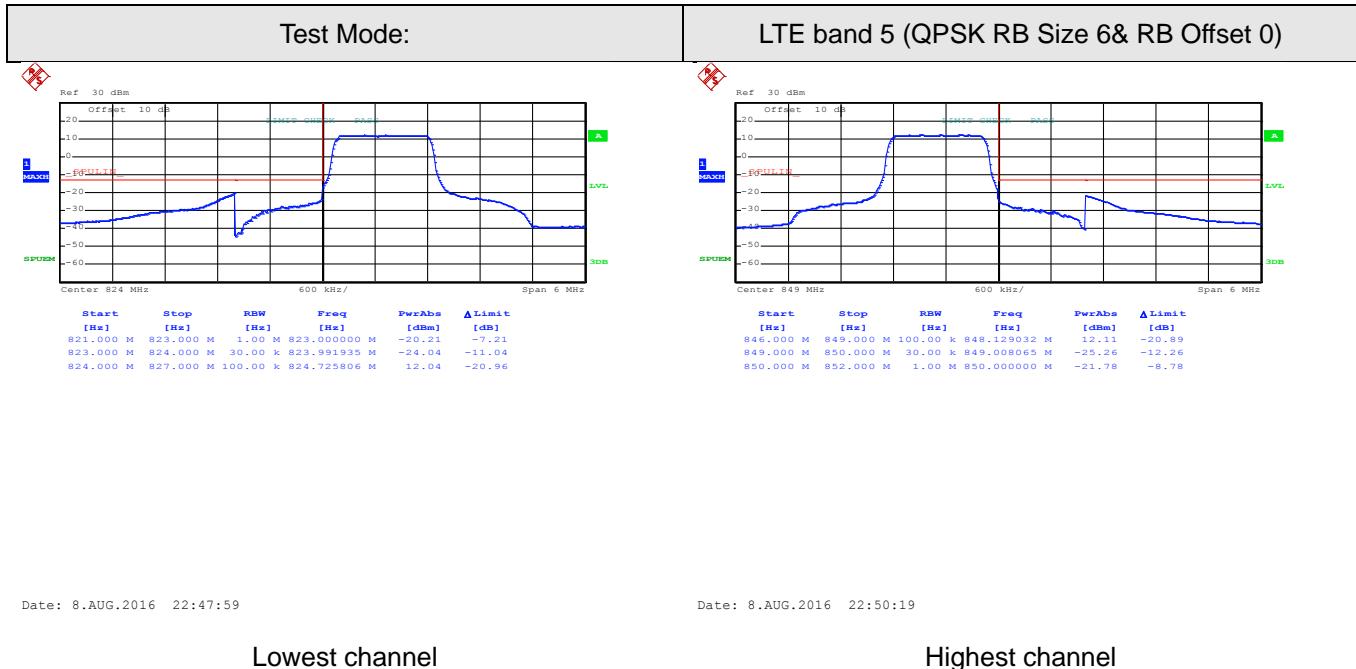
Date: 8.AUG.2016 22:47:37

Lowest channel

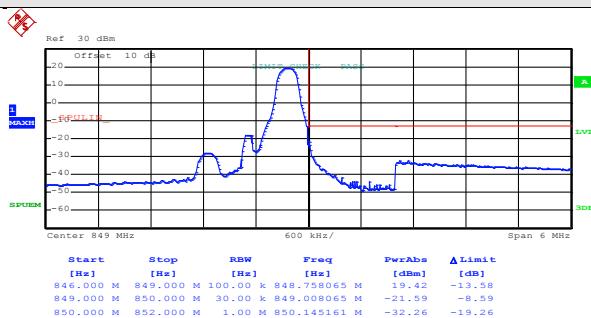
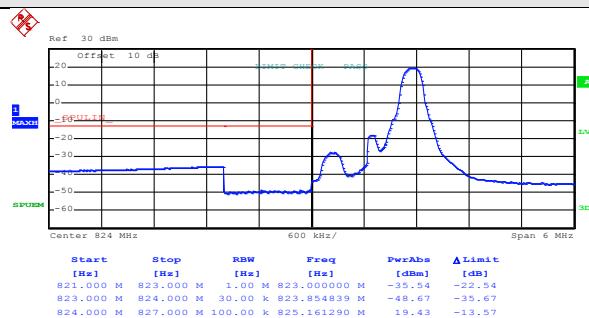


Date: 8.AUG.2016 22:49:54

Highest channel



Test Mode:	LTE band 5 (16QAM RB Size 1& RB Offset 5)
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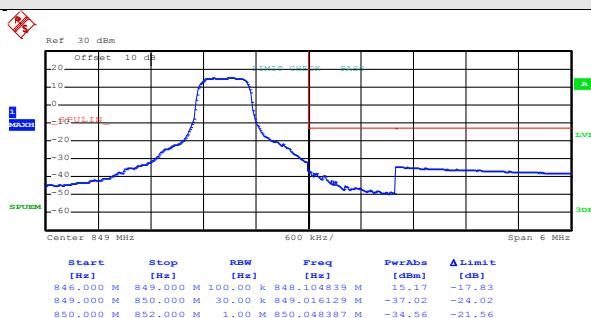
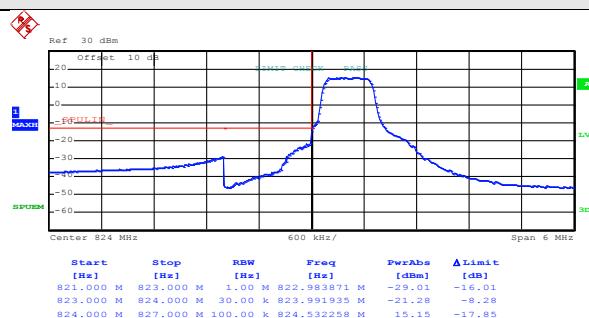
Date: 8.AUG.2016 22:46:50

Lowest channel

Date: 8.AUG.2016 22:49:11

Highest channel

Test Mode:	LTE band 5 (16QAM RB Size 3& RB Offset 0)
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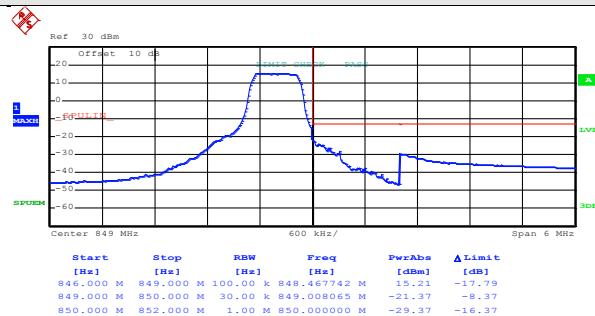
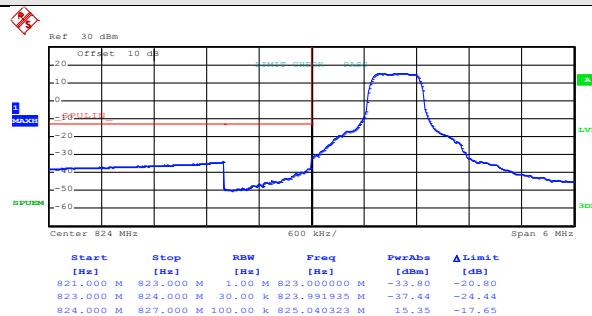
Date: 8.AUG.2016 22:47:24

Lowest channel

Date: 8.AUG.2016 22:49:32

Highest channel

Test Mode:	LTE band 5 (16QAM RB Size 3& RB Offset 2)
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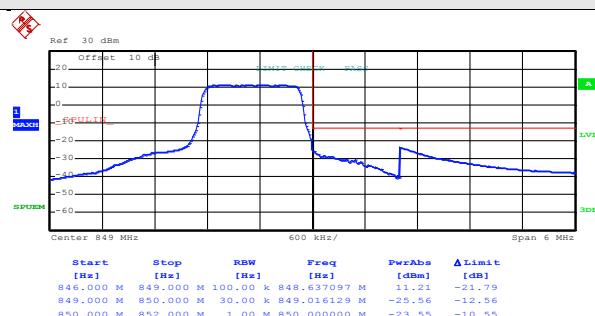
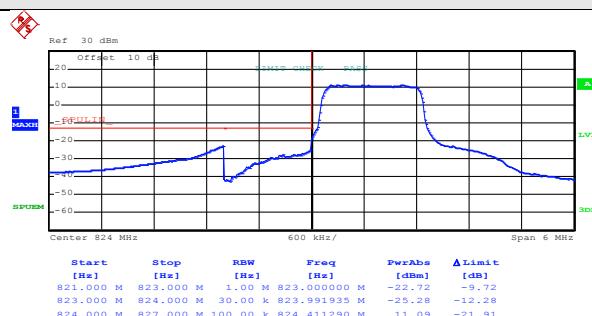
Date: 8.AUG.2016 22:47:46

Lowest channel

Date: 8.AUG.2016 22:50:08

Highest channel

Test Mode:	LTE band 5 (16QAM RB Size 6& RB Offset 0)
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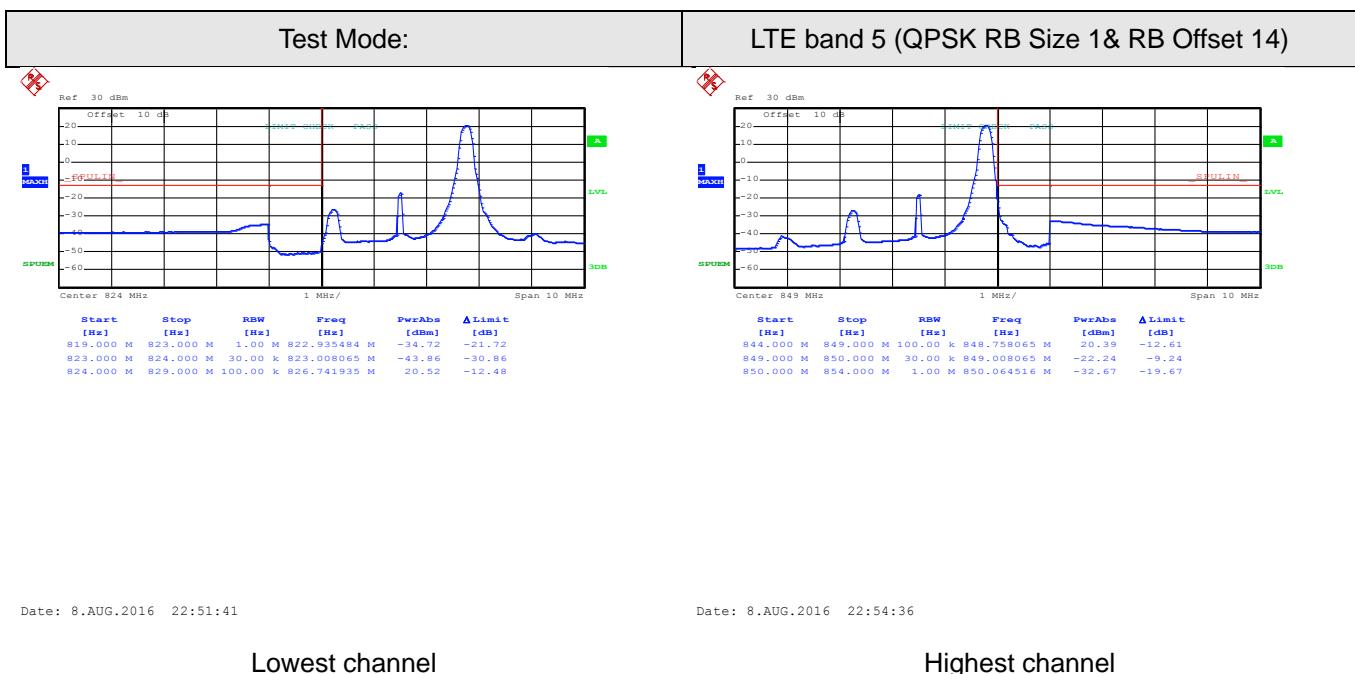
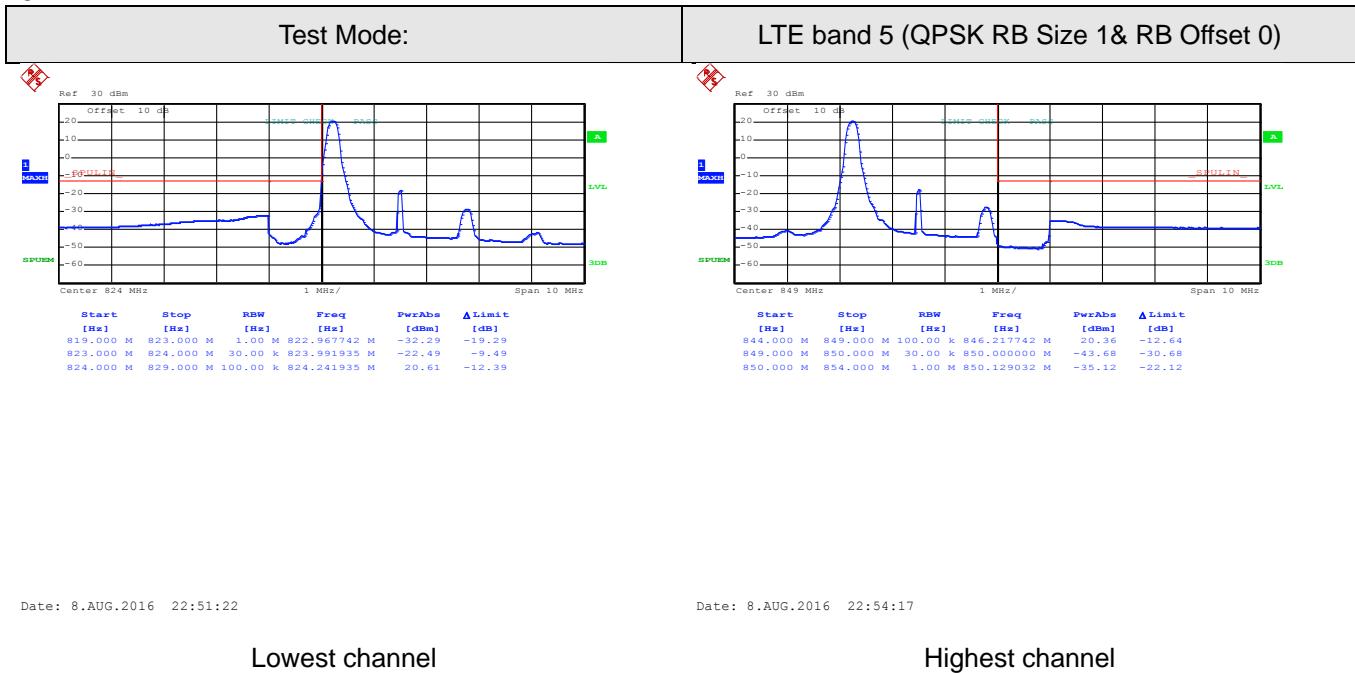
Date: 8.AUG.2016 22:48:06

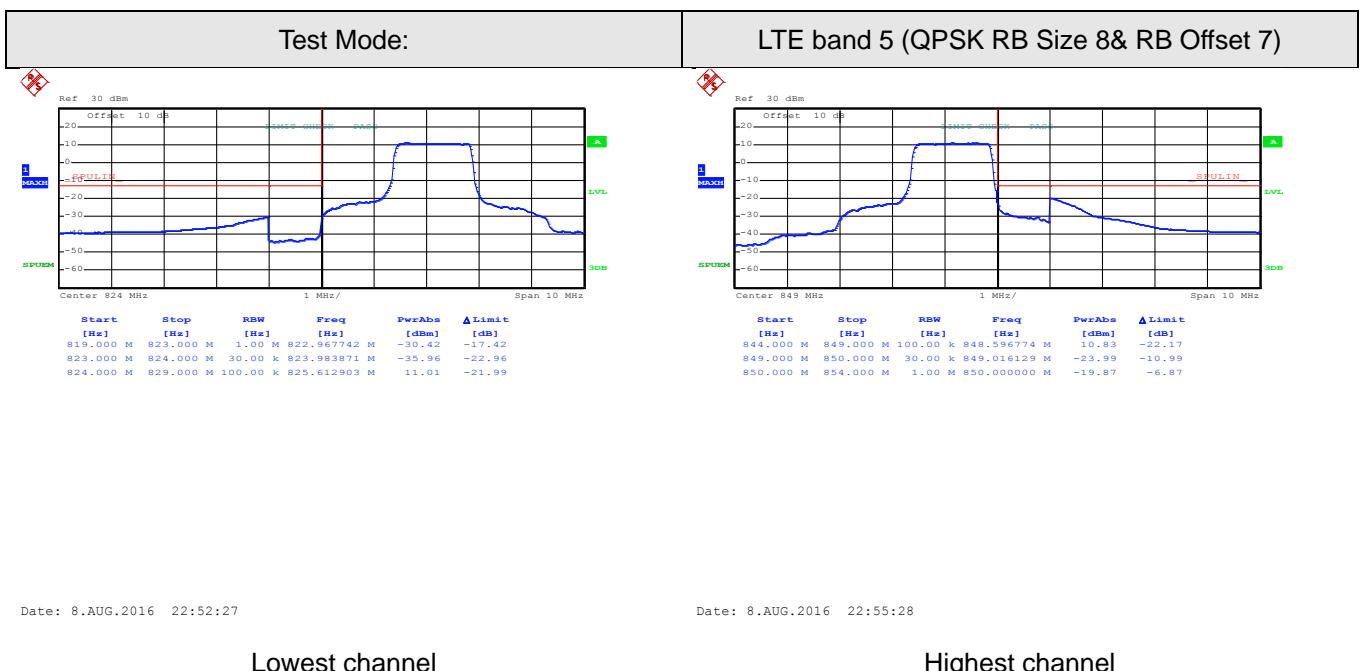
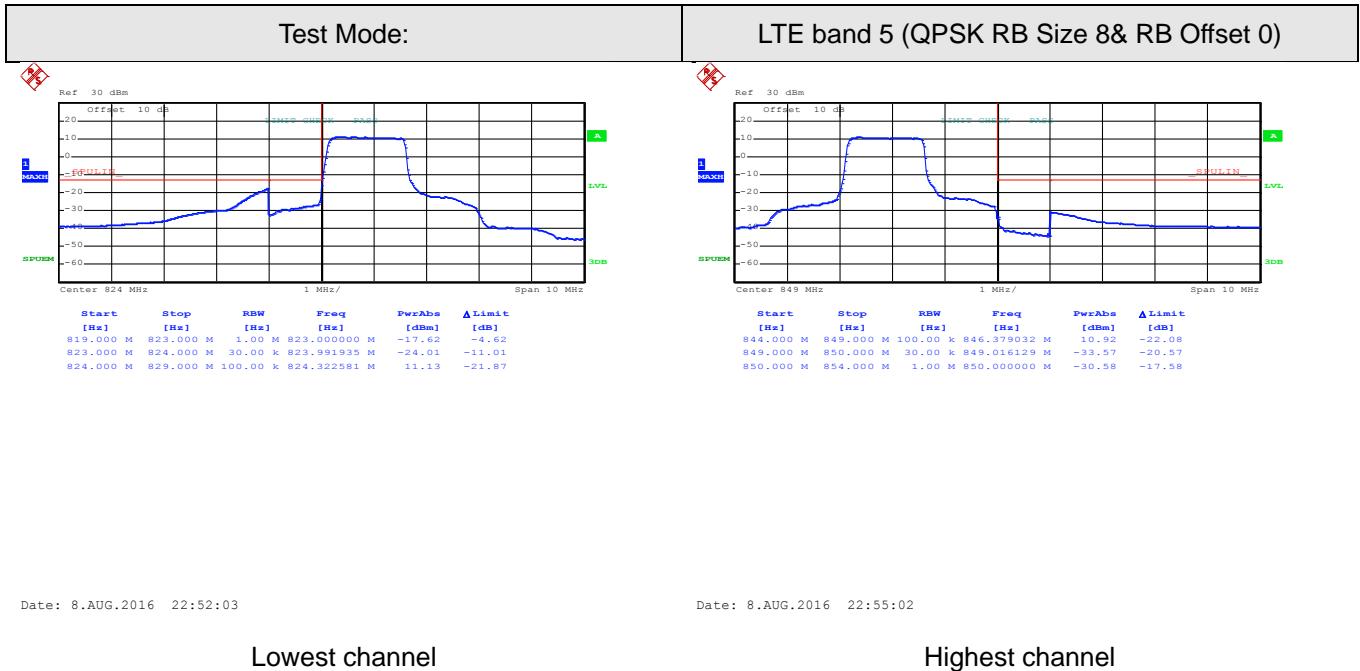
Lowest channel

Date: 8.AUG.2016 22:50:28

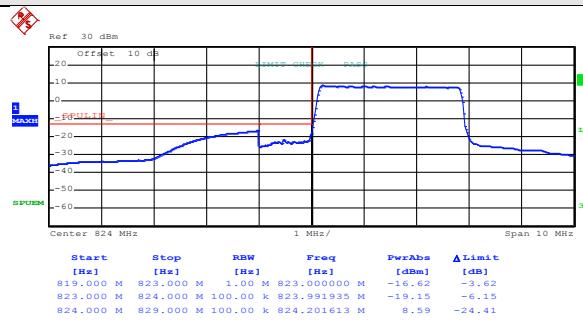
Highest channel

3MHz:



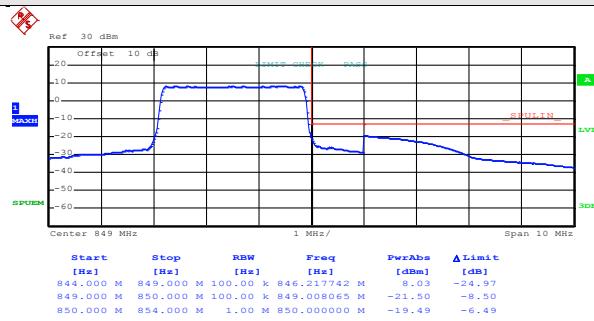


Test Mode:	LTE band 5(QPSK RB Size 15& RB Offset 0)
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Date: 8.AUG.2016 22:53:31

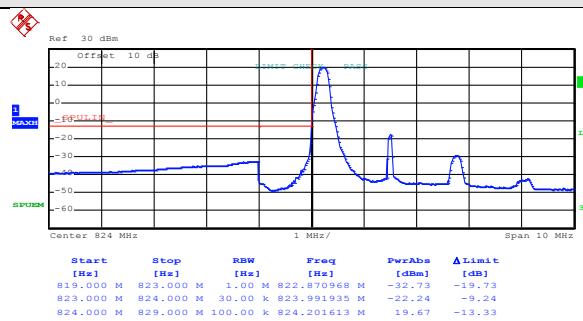
Lowest channel



Date: 8.AUG.2016 22:56:01

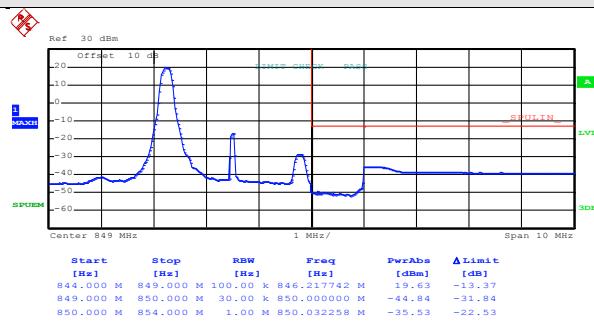
Highest channel

Test Mode:	LTE band 5(16QAM RB Size 1& RB Offset 0)
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Date: 8.AUG.2016 22:51:30

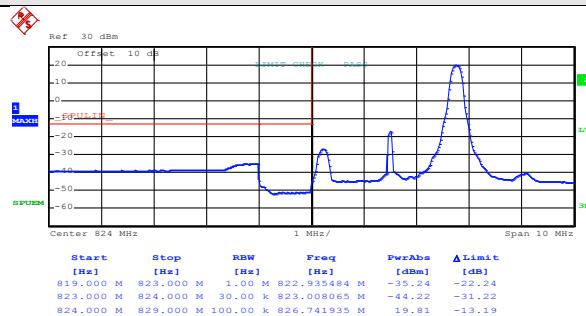
Lowest channel



Date: 8.AUG.2016 22:54:25

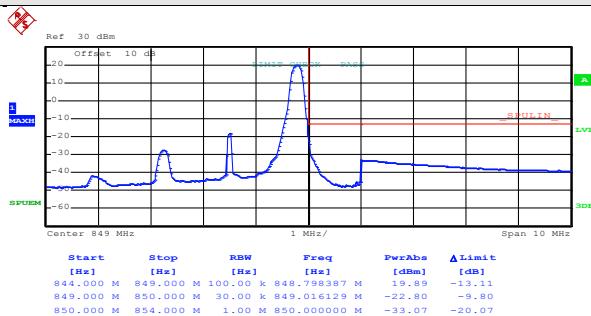
Highest channel

Test Mode:	LTE band 5(16QAM RB Size 1& RB Offset 14)
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Date: 8.AUG.2016 22:51:50

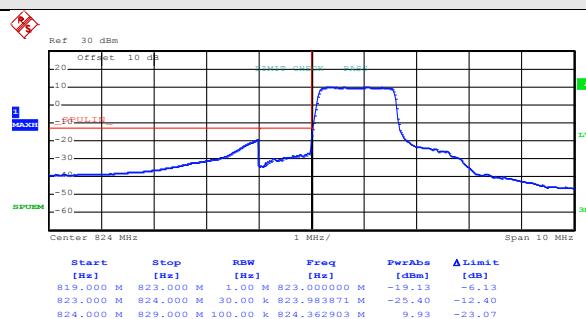
Lowest channel



Date: 8.AUG.2016 22:54:48

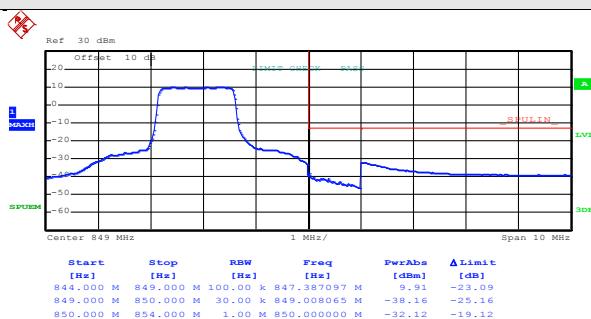
Highest channel

Test Mode:	LTE band 5(16QAM RB Size 8& RB Offset 0)
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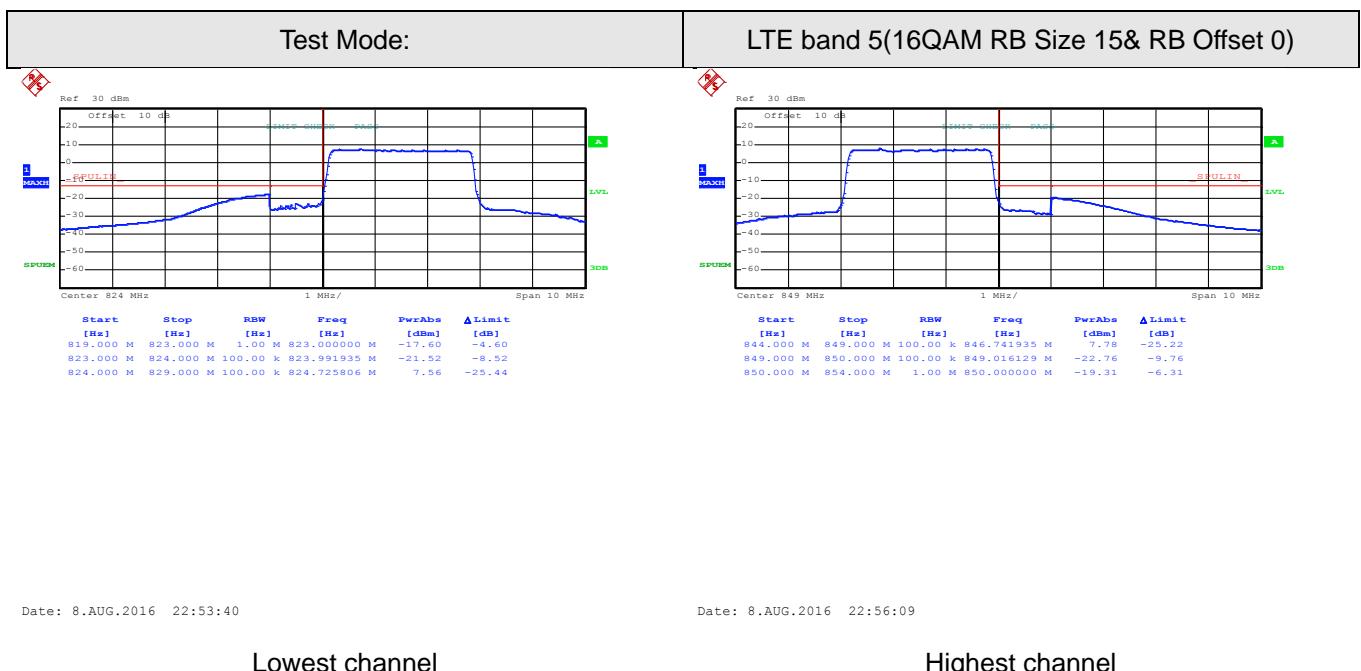
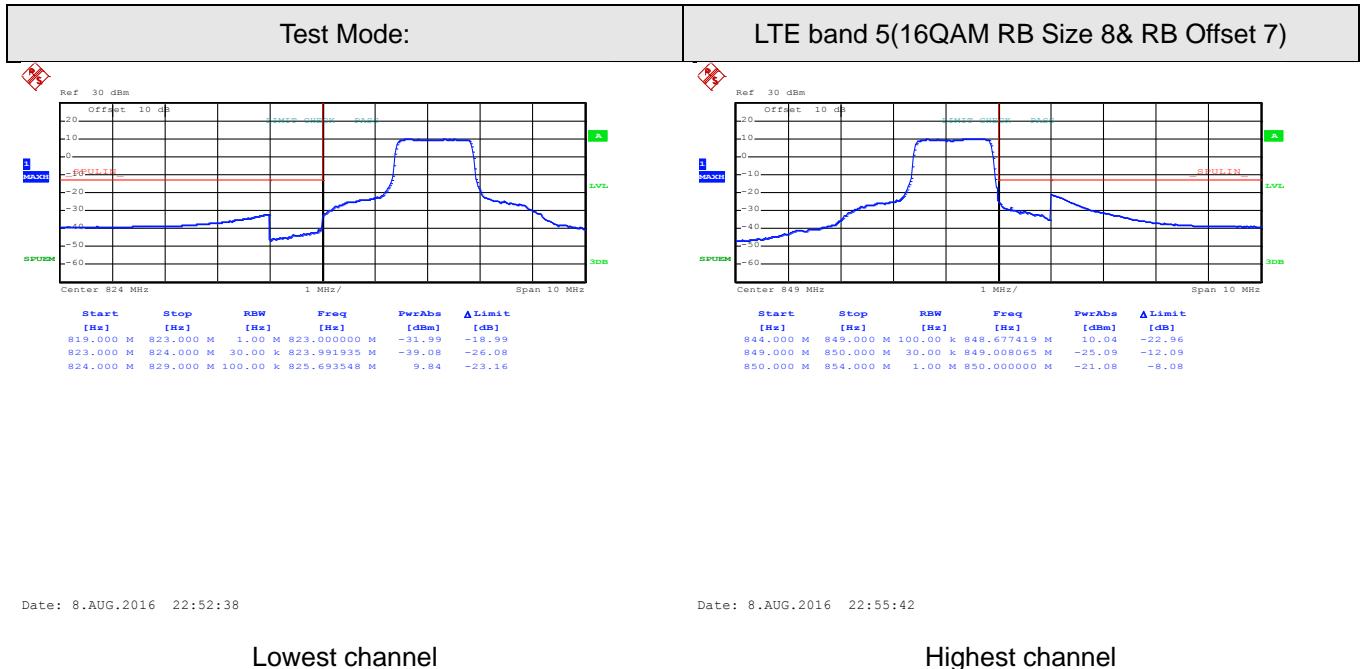
Date: 8.AUG.2016 22:52:12

Lowest channel

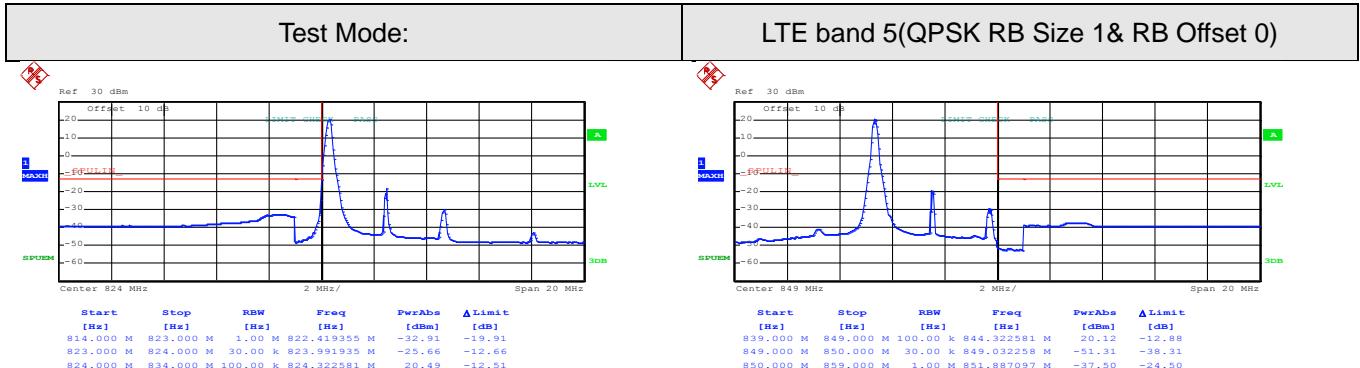


Date: 8.AUG.2016 22:55:10

Highest channel



5MHz:

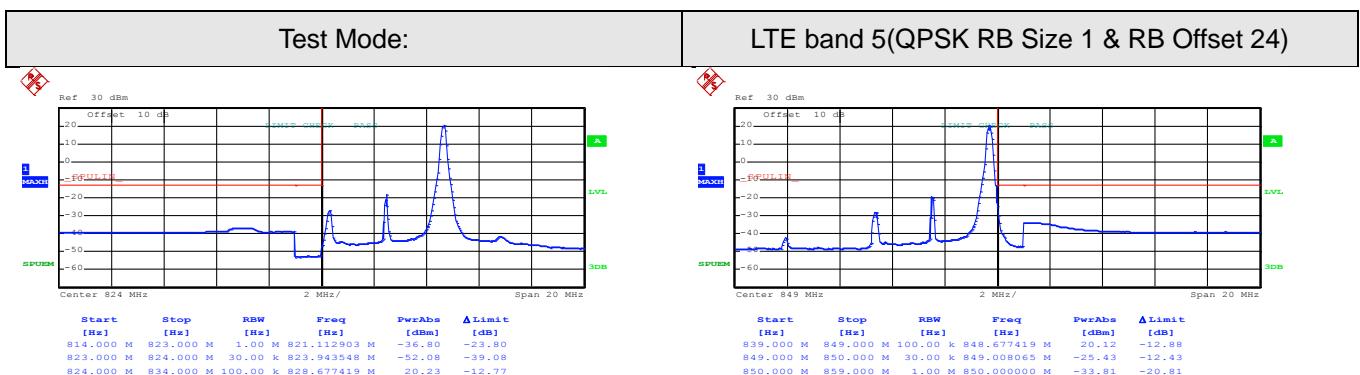


Date: 8.AUG.2016 22:57:38

Date: 8.AUG.2016 23:00:48

Lowest channel

Highest channel

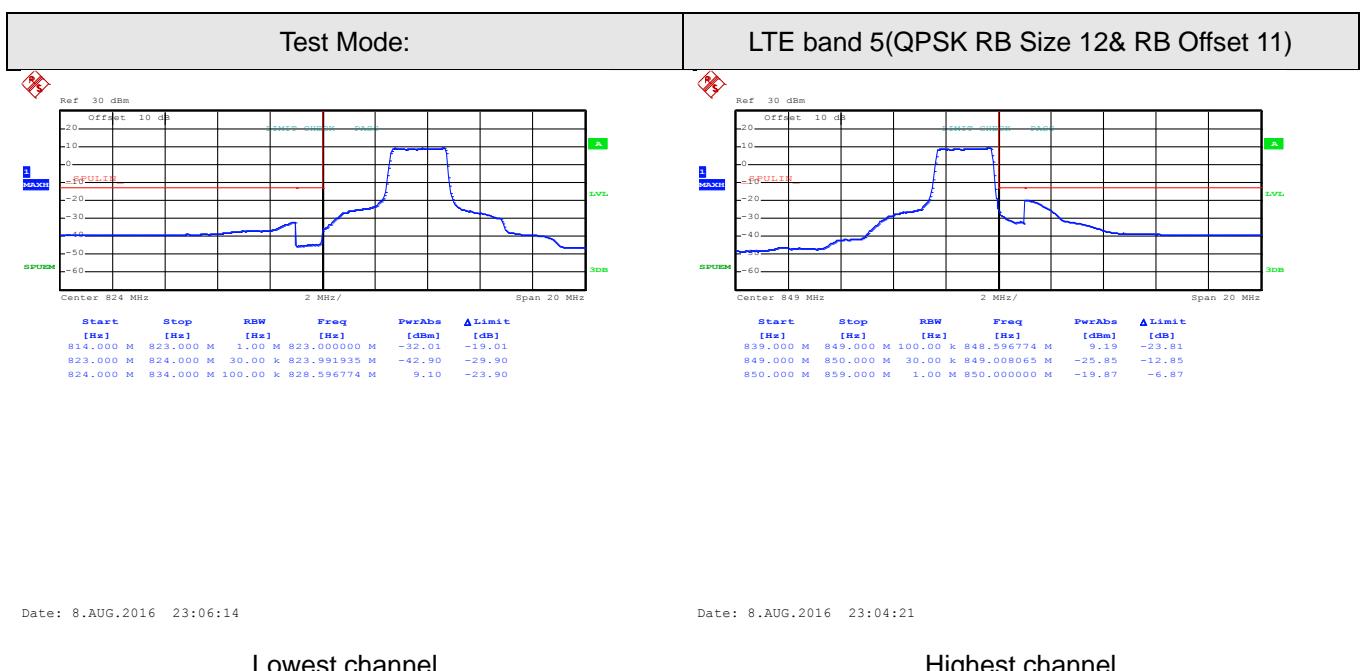
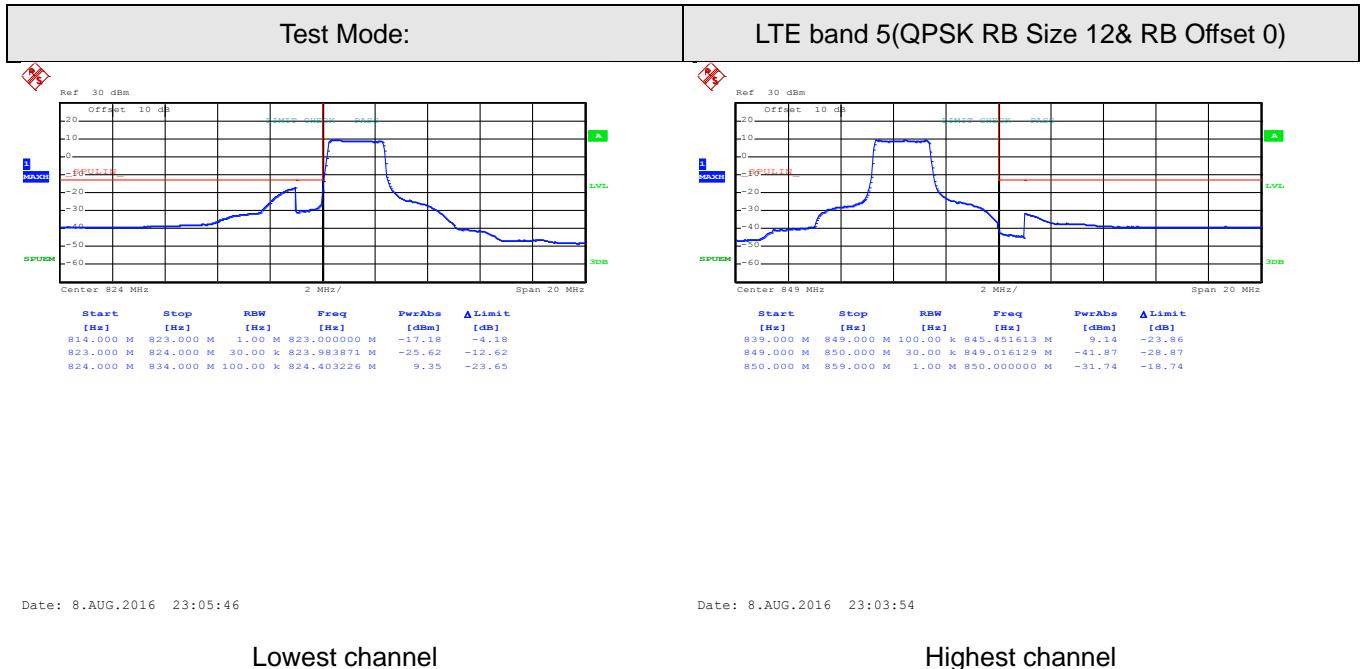


Date: 8.AUG.2016 22:57:59

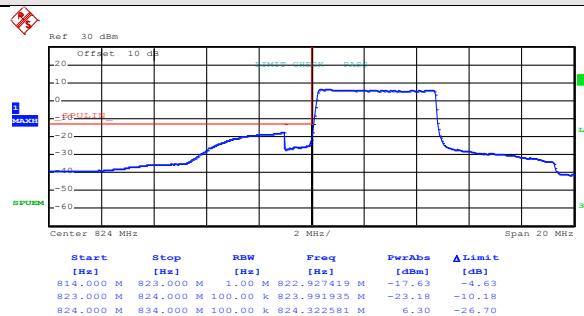
Date: 8.AUG.2016 23:01:09

Lowest channel

Highest channel



Test Mode:	LTE band 5(QPSK RB Size 25& RB Offset 0)
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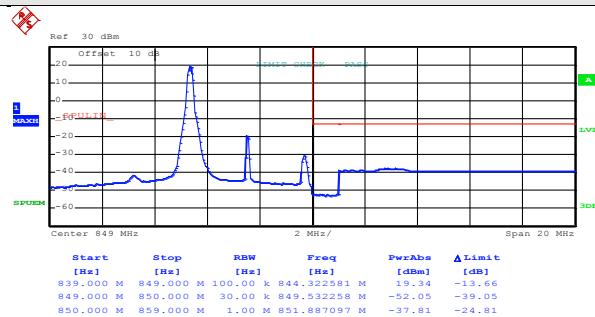
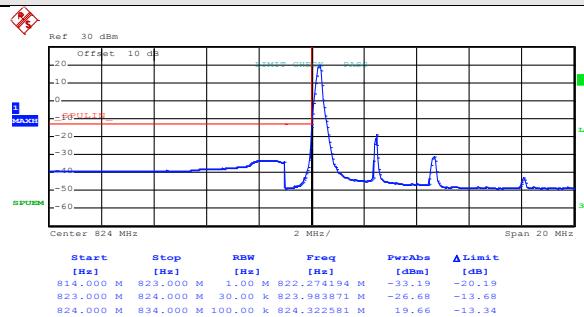
Date: 8.AUG.2016 23:06:44

Lowest channel

Date: 8.AUG.2016 23:04:55

Highest channel

Test Mode:	LTE band 5(16QAM RB Size 1 & RB Offset 0)
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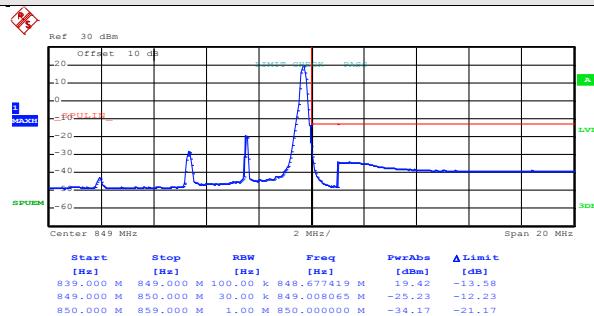
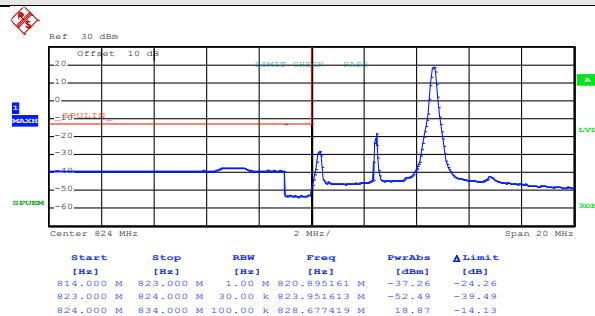
Date: 8.AUG.2016 22:57:46

Lowest channel

Date: 8.AUG.2016 23:00:56

Highest channel

Test Mode:	LTE band 5(16QAM RB Size 1 & RB Offset 24)
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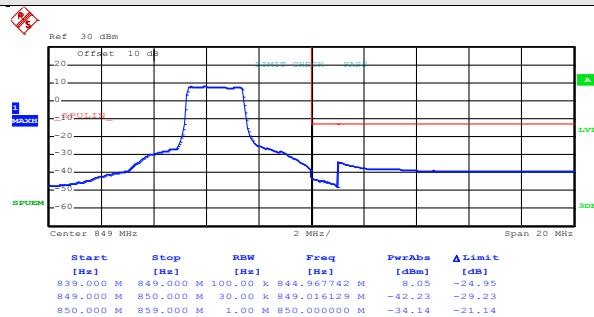
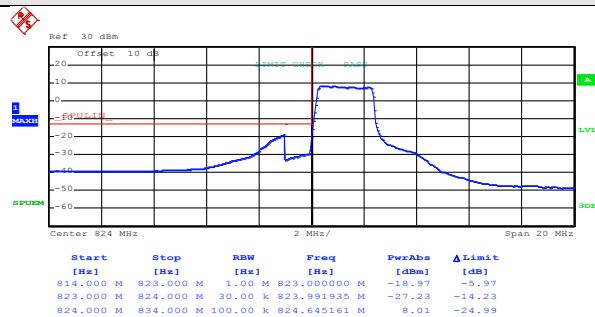
Date: 8.AUG.2016 22:58:09

Lowest channel

Date: 8.AUG.2016 23:01:18

Highest channel

Test Mode:	LTE band 5(16QAM RB Size 12& RB Offset 0)
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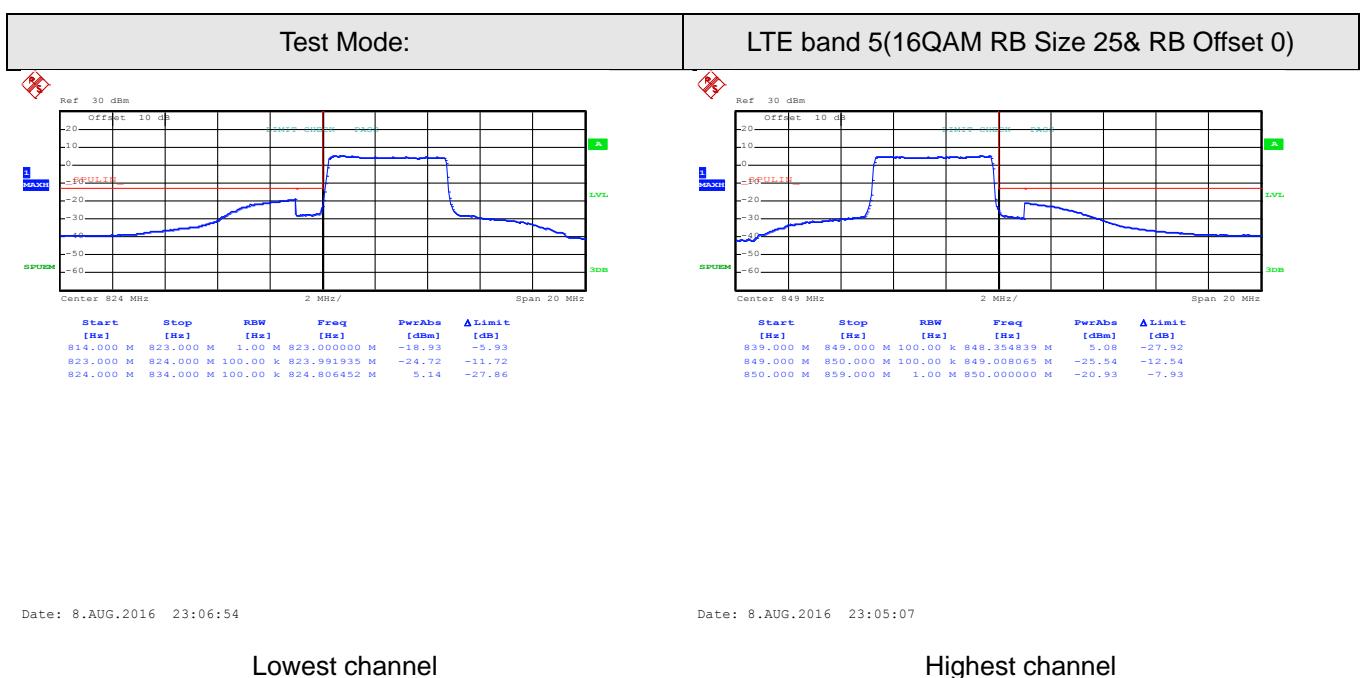
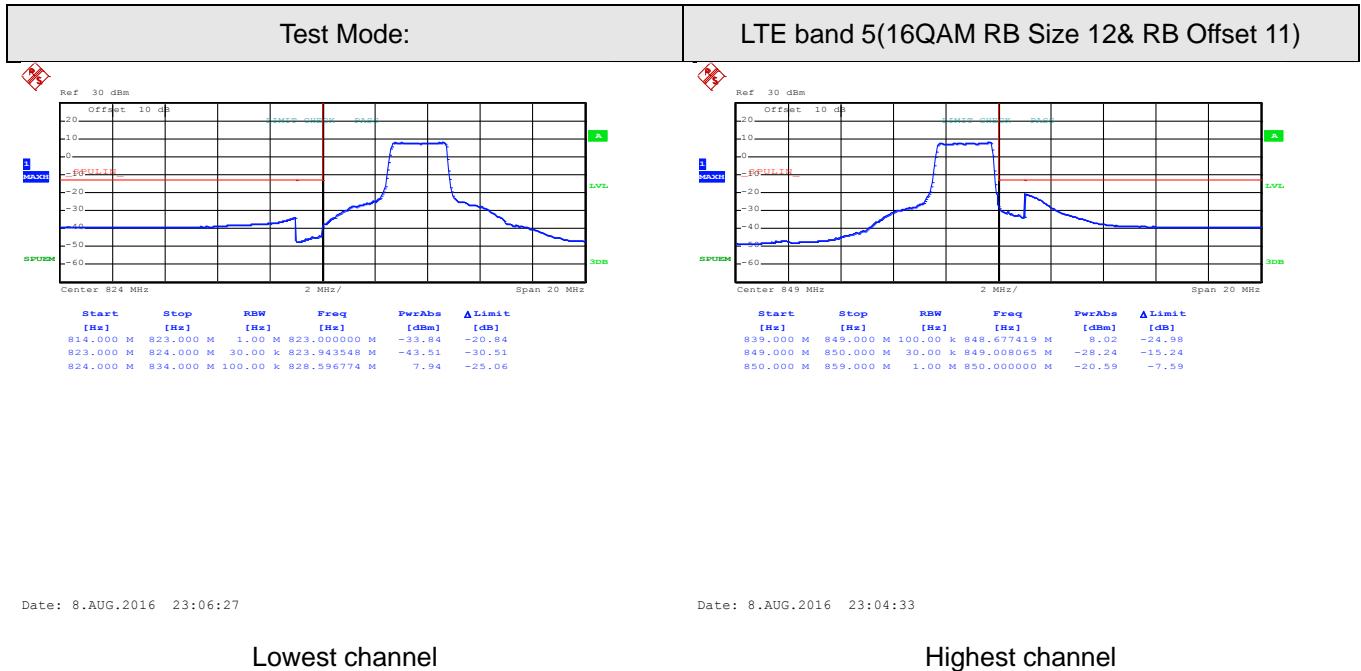


Date: 8.AUG.2016 23:05:59

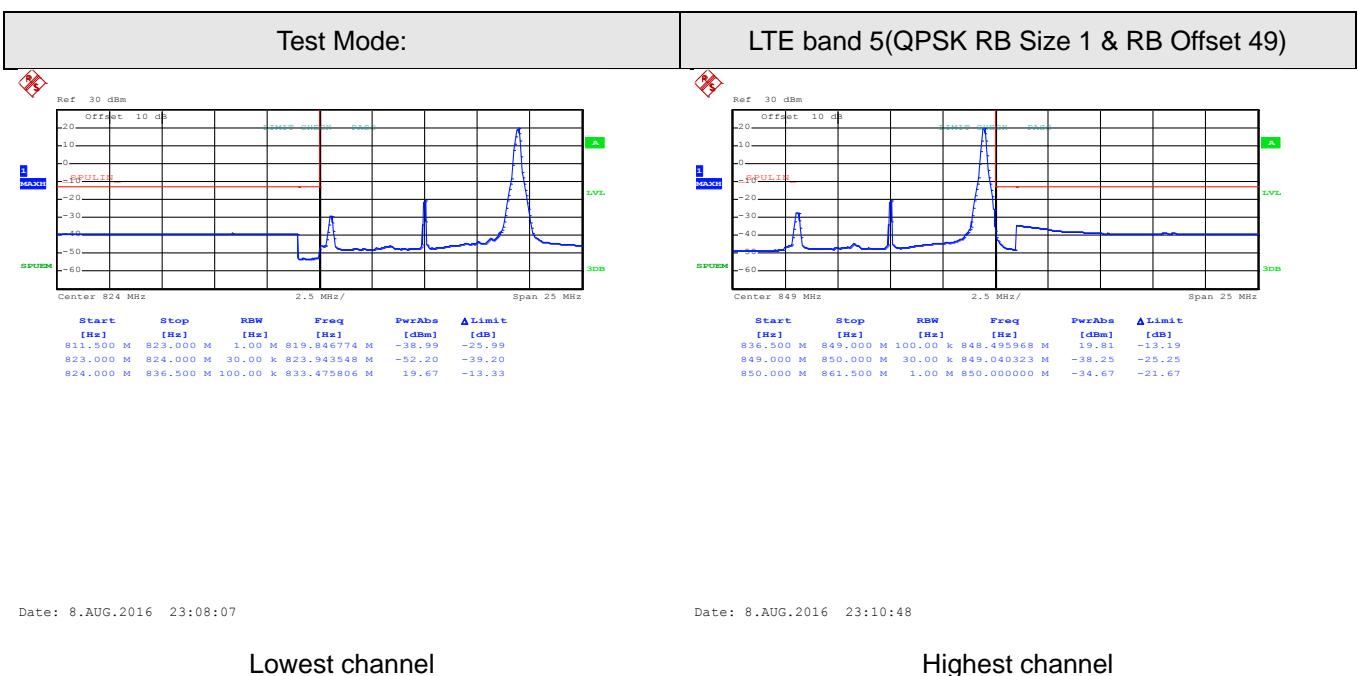
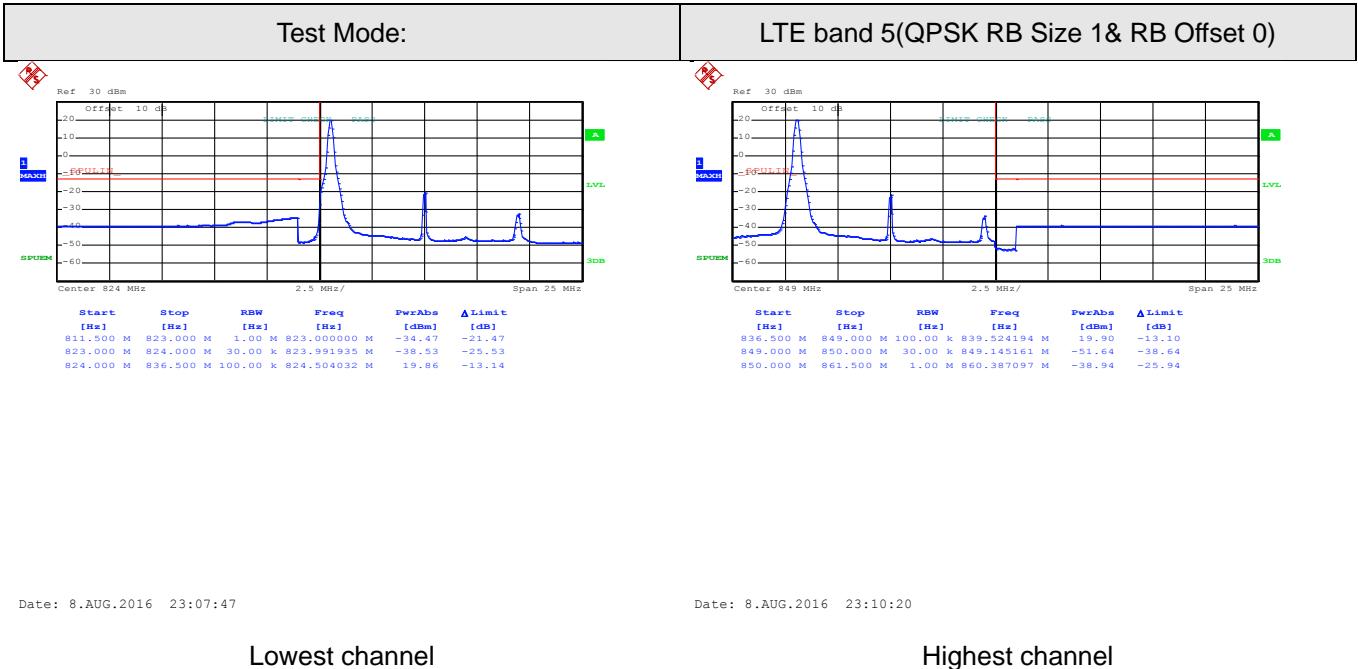
Lowest channel

Date: 8.AUG.2016 23:04:06

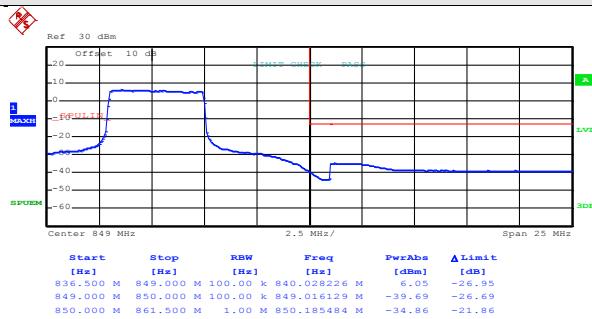
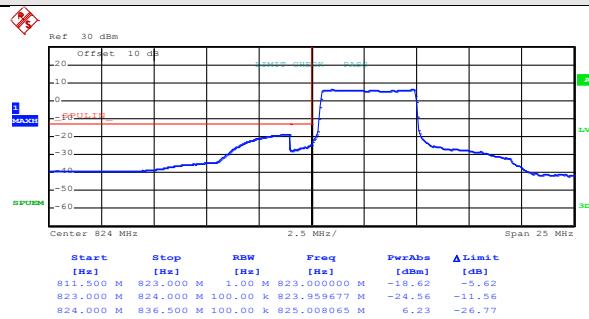
Highest channel



10MHz:



Test Mode:	LTE band 5(QPSK RB Size 25& RB Offset 0)
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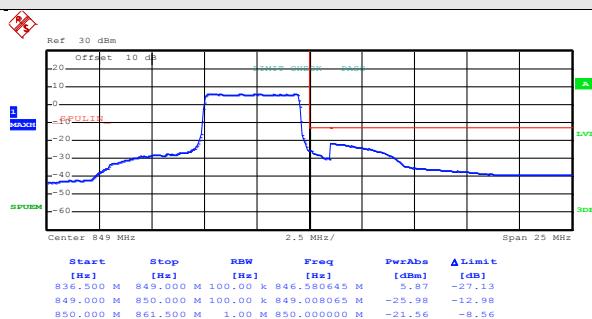
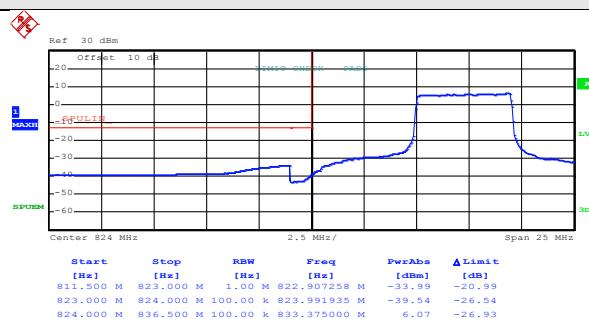
Date: 8.AUG.2016 23:08:44

Lowest channel

Date: 8.AUG.2016 23:11:19

Highest channel

Test Mode:	LTE band 5(QPSK RB Size 25& RB Offset 24)
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Date: 8.AUG.2016 23:09:05

Lowest channel

Date: 8.AUG.2016 23:11:40

Highest channel

Test Mode:

LTE band 5(QPSK RB Size 50& RB Offset 0)

Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
811.500 M	823.000 M	1.00 M	822.907258 M	-19.64	-6.64
823.000 M	824.000 M	300.00 k	823.991935 M	-22.51	-9.51
824.000 M	836.500 M	100.00 k	833.375000 M	3.20	-29.80

Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
836.500 M	849.000 M	100.00 k	840.229839 M	4.01	-28.99
849.000 M	850.000 M	300.00 k	849.008065 M	-23.30	-10.30
850.000 M	861.500 M	1.00 M	850.000000 M	-22.32	-9.32

Date: 8.AUG.2016 23:09:37

Lowest channel

Date: 8.AUG.2016 23:12:06

Highest channel

The figure consists of two side-by-side spectrum analysis plots. The left plot is titled "Test Mode:" and the right plot is titled "LTE band 5(16QAM RB Size 1& RB Offset 0)". Both plots show a blue spectrum line with several sharp peaks (spikes) and a red horizontal line representing a power limit. The y-axis ranges from -60 to 30 dBm, and the x-axis shows a center frequency of 824 MHz with a 2.5 MHz span.

Left Plot (Lowest channel):

- Y-axis: Ref 30 dBm, Offset 10 dB.
- X-axis: Center 824 MHz, Span 25 MHz.
- Annotations: SAW, GAIN, RBER, EQUILIBRIUM, LVL.
- Data table:

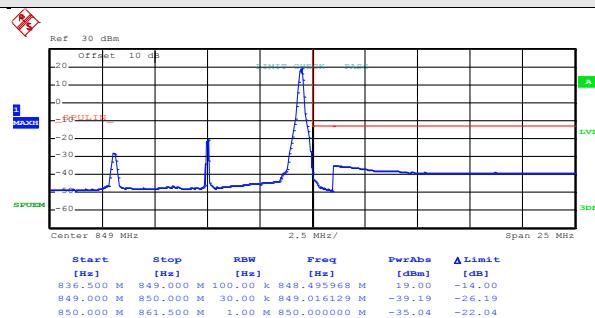
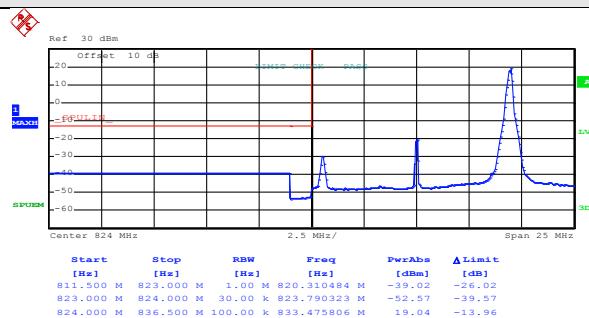
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
811.500 M	823.000 M	1.00 M	822.907258 M	-34.76	-21.76
823.000 M	824.000 M	30.00 k	823.991935 M	-38.75	-25.75
824.000 M	836.500 M	100.00 k	824.504032 M	18.43	-14.57

Right Plot (Highest channel):

- Y-axis: Ref 30 dBm, Offset 10 dB.
- X-axis: Center 849 MHz, Span 25 MHz.
- Annotations: SAW, GAIN, RBER, EQUILIBRIUM, LVL.
- Data table:

Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
836.500 M	849.000 M	100.00 k	839.524194 M	18.52	-14.48
849.000 M	850.000 M	30.00 k	849.685484 M	-52.14	-39.14
850.000 M	861.500 M	1.00 M	852.596774 M	-39.04	-26.04

Test Mode:	LTE band 5(16QAM RB Size 1& RB Offset 49)
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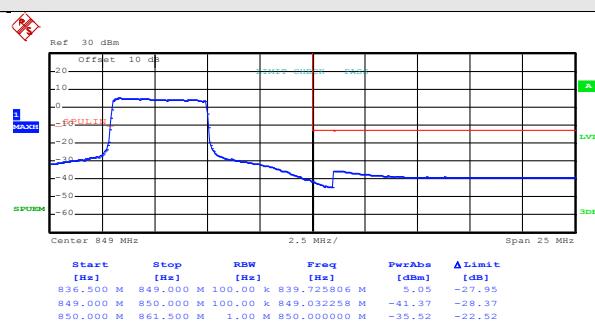
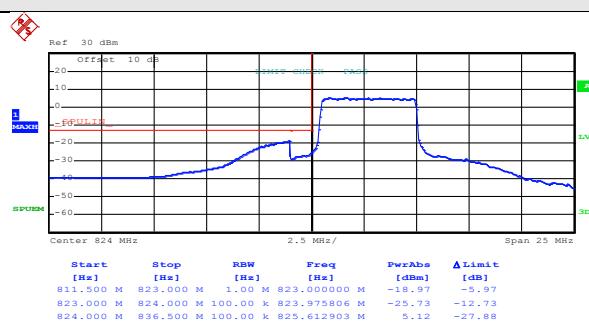
Date: 8.AUG.2016 23:08:18

Lowest channel

Date: 8.AUG.2016 23:10:57

Highest channel

Test Mode:	LTE band 5(16QAM RB Size 25& RB Offset 0)
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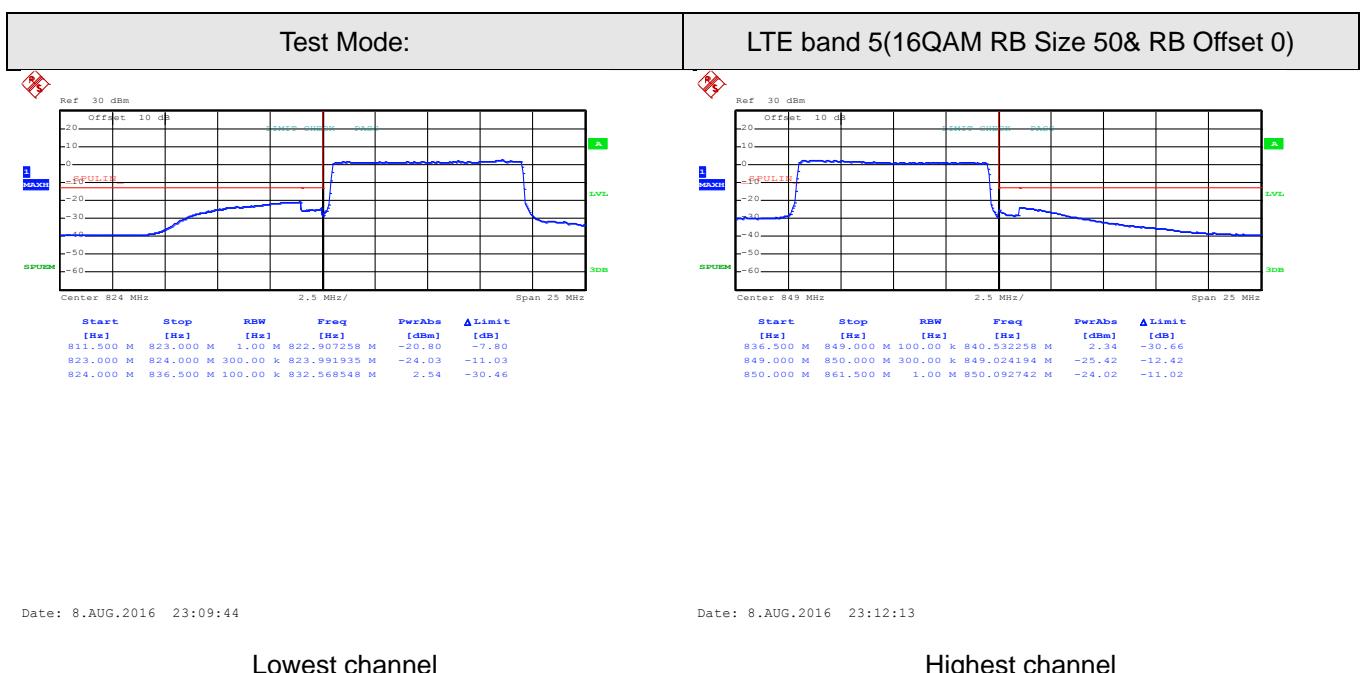
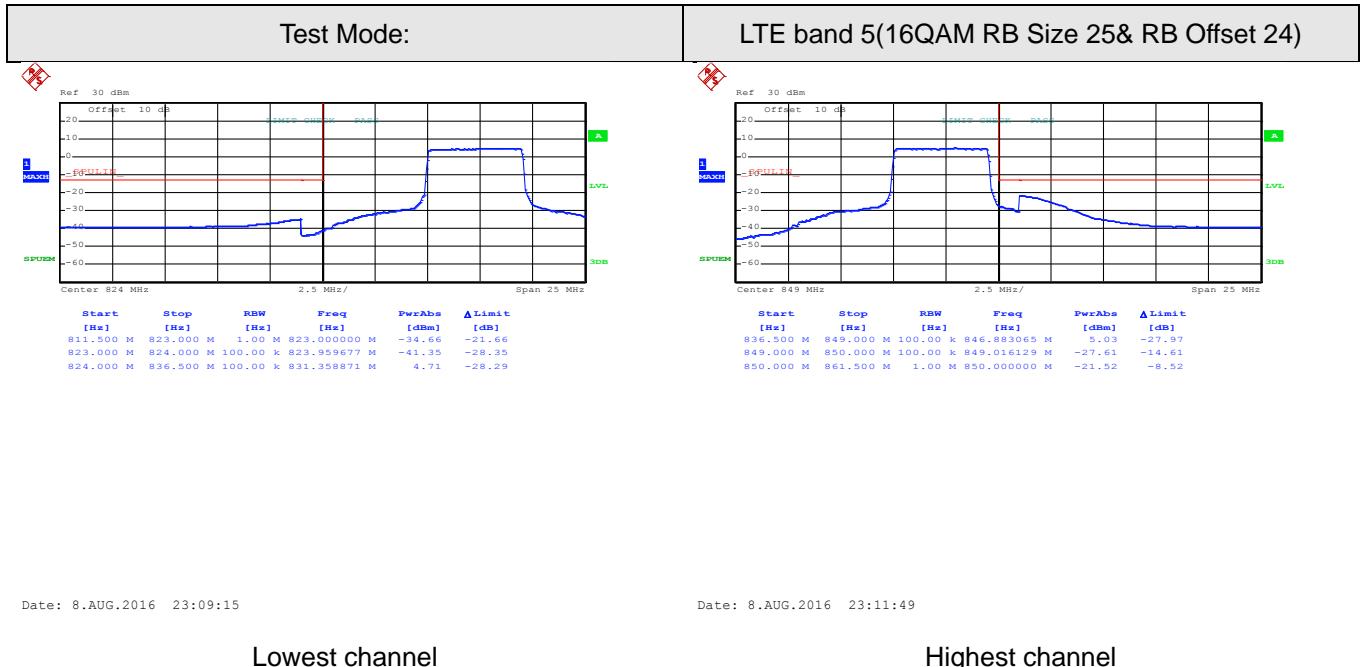


Date: 8.AUG.2016 23:08:52

Lowest channel

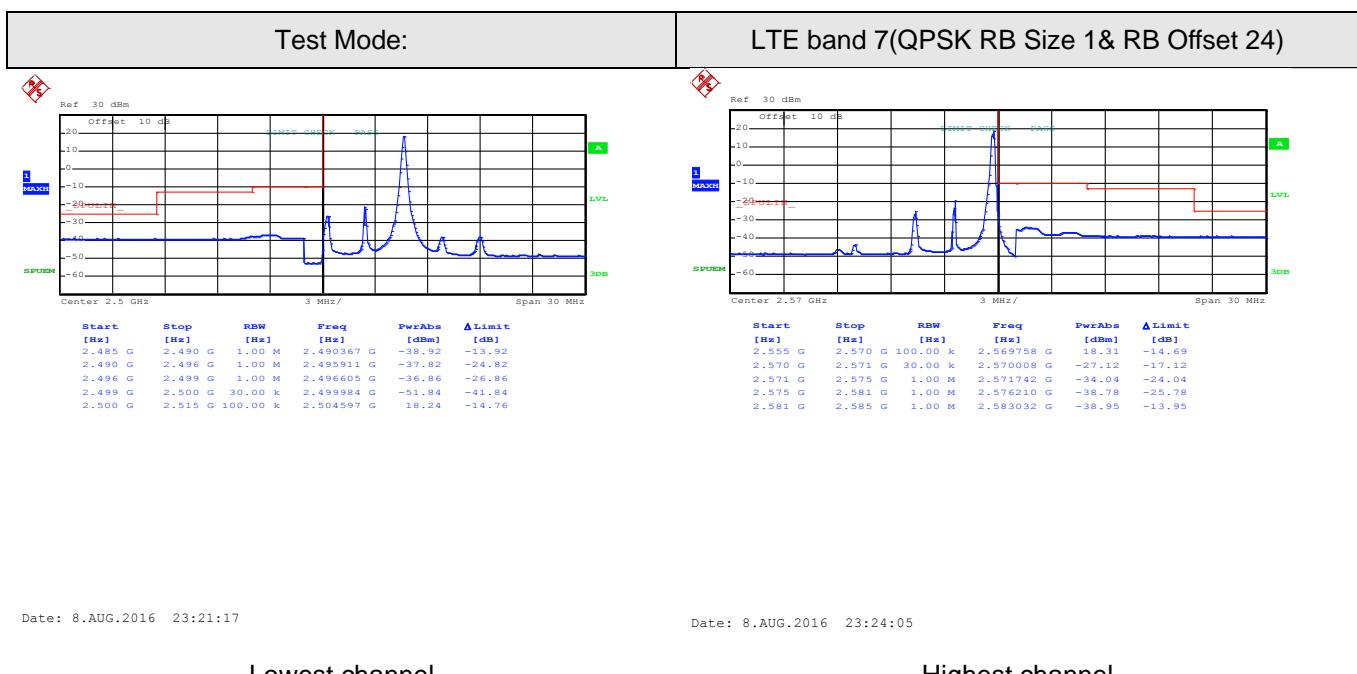
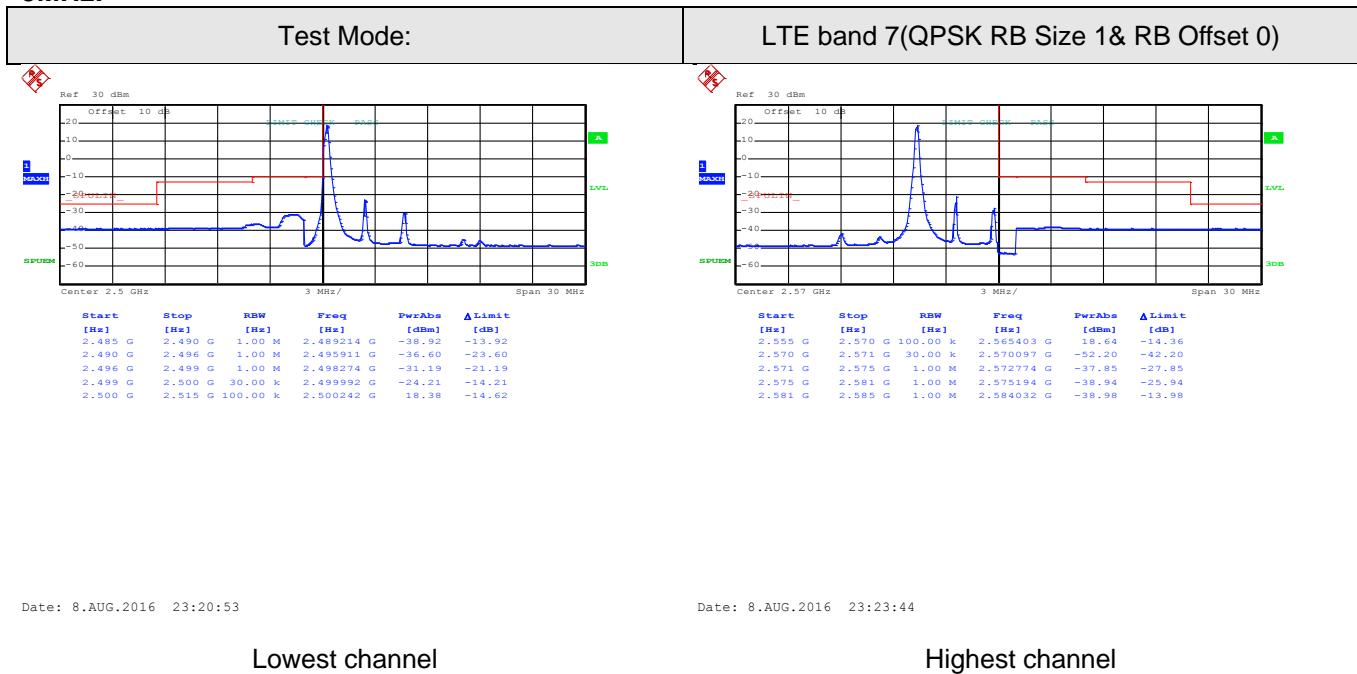
Date: 8.AUG.2016 23:11:27

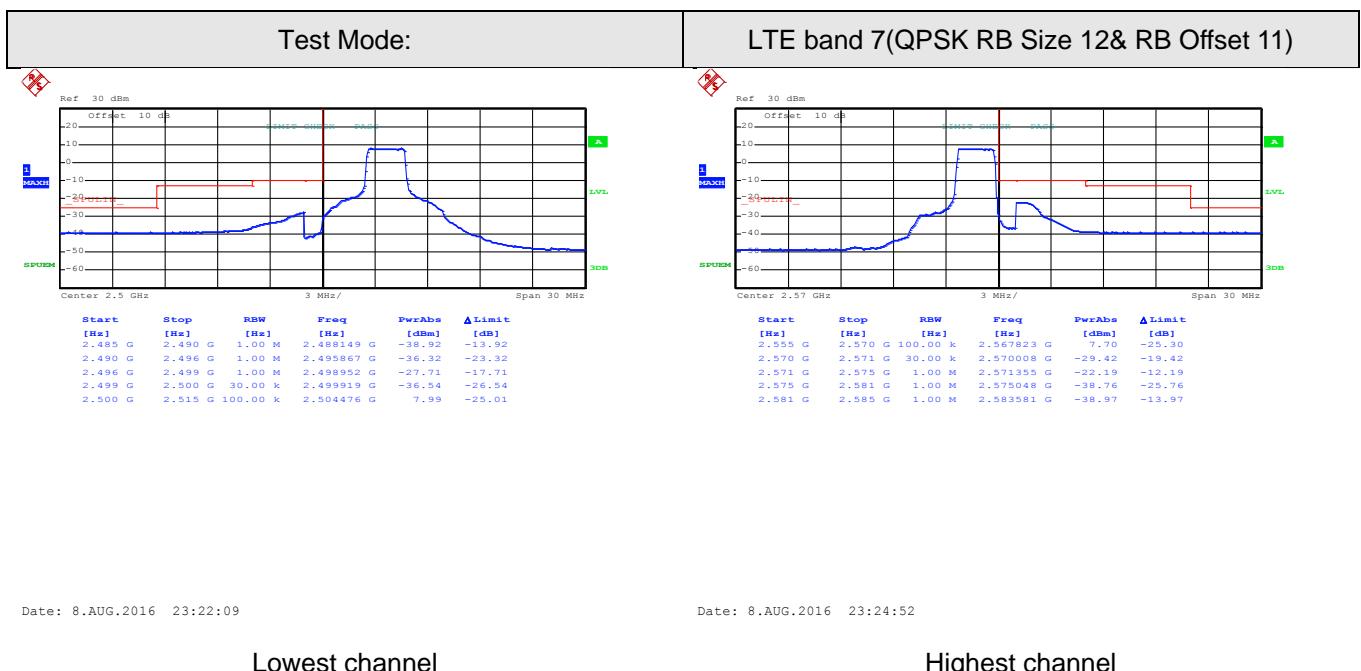
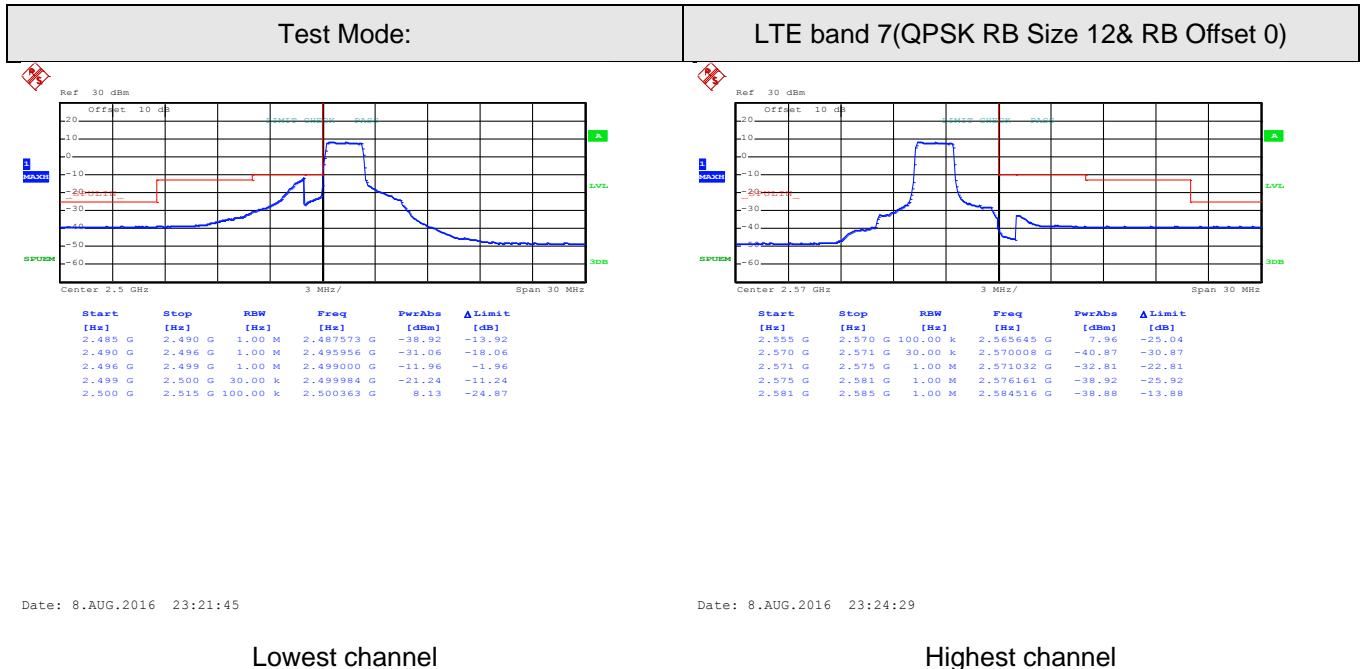
Highest channel

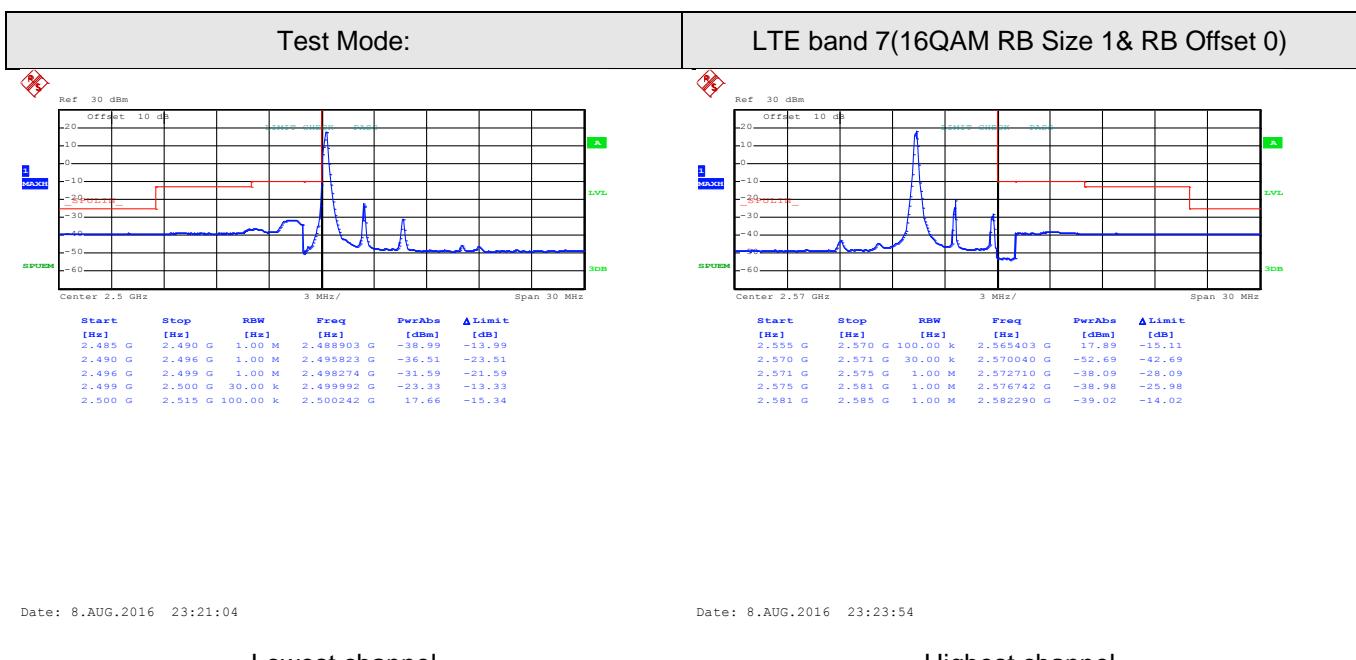
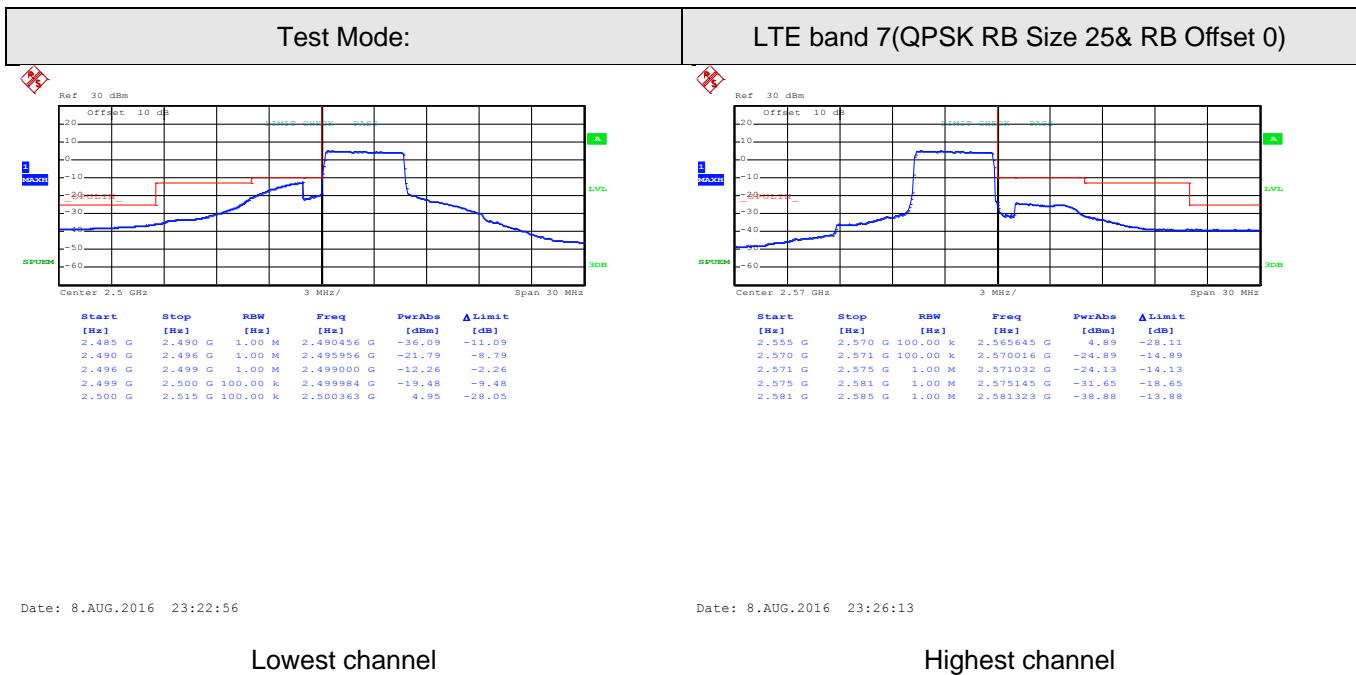


LTE band 7 part:

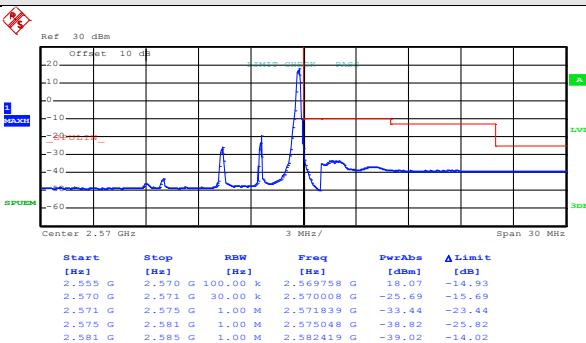
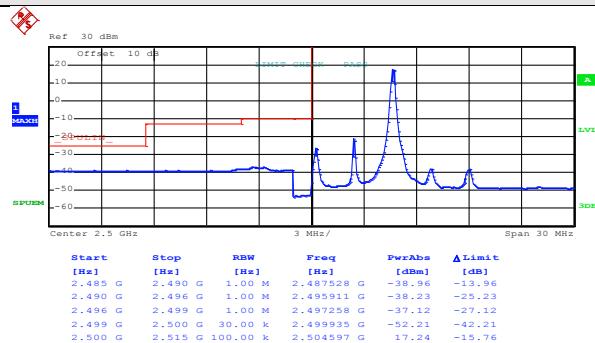
5MHz:







Test Mode:	LTE band 7(16QAM RB Size 1& RB Offset 24)
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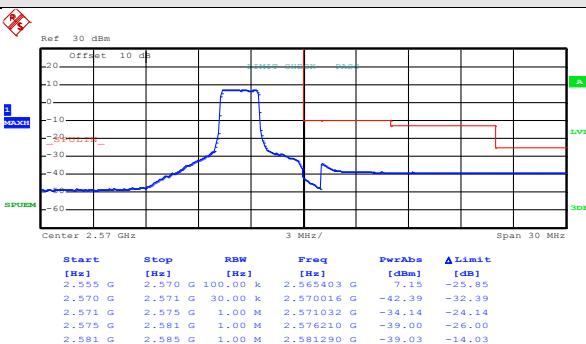
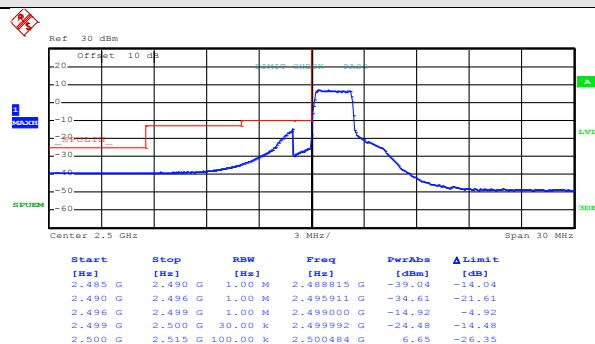
Date: 8.AUG.2016 23:21:27

Date: 8.AUG.2016 23:24:15

Lowest channel

Highest channel

Test Mode:	LTE band 7(16QAM RB Size 12& RB Offset 0)
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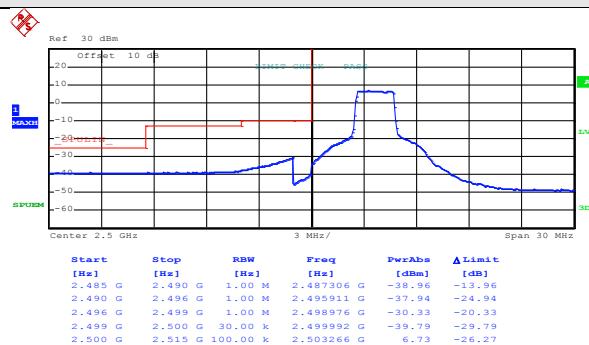
Date: 8.AUG.2016 23:21:55

Date: 8.AUG.2016 23:24:39

Lowest channel

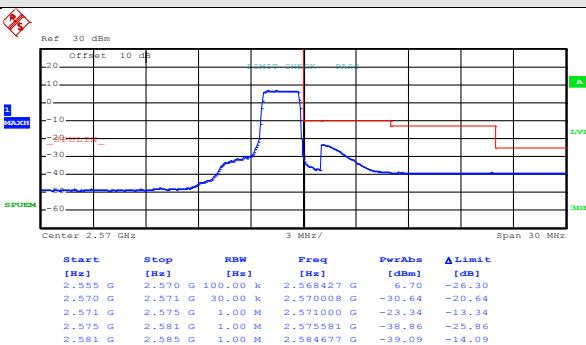
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 12& RB Offset 11)
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Date: 8.AUG.2016 23:22:20

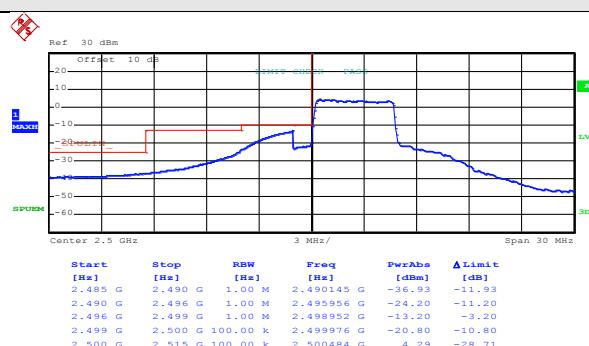
Lowest channel



Date: 8.AUG.2016 23:25:01

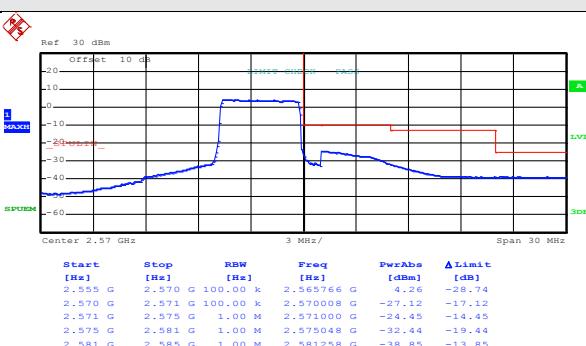
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 25& RB Offset 0)
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Date: 8.AUG.2016 23:23:04

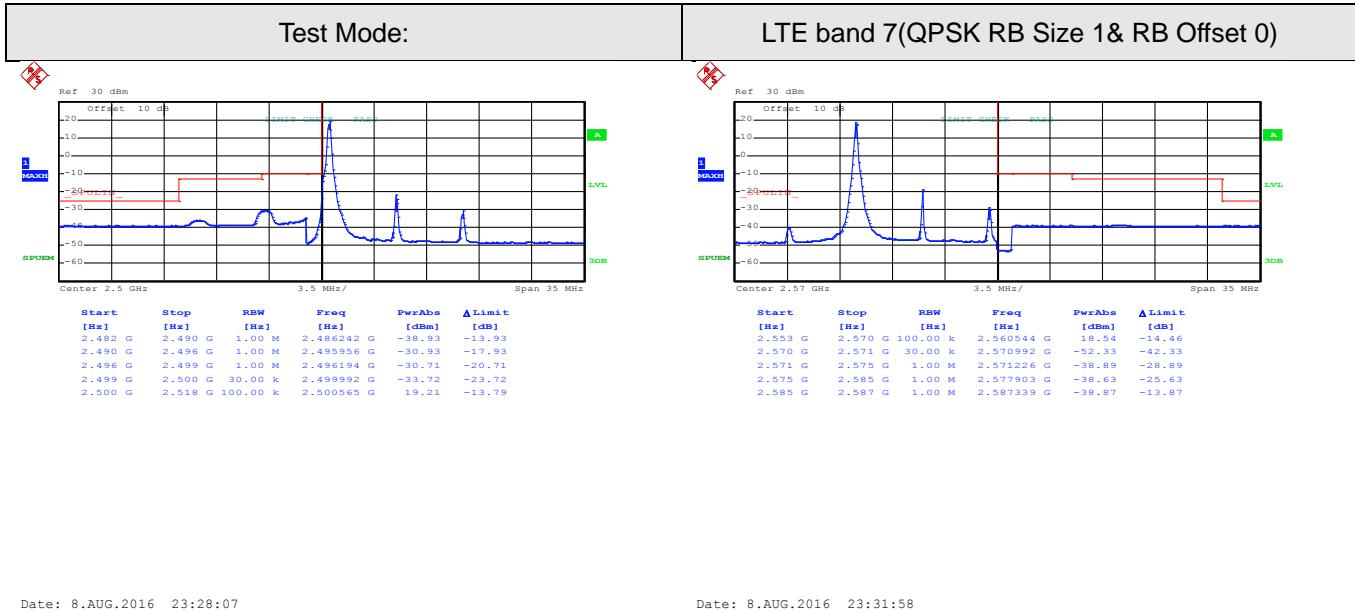
Lowest channel



Date: 8.AUG.2016 23:26:24

Highest channel

10MHz:

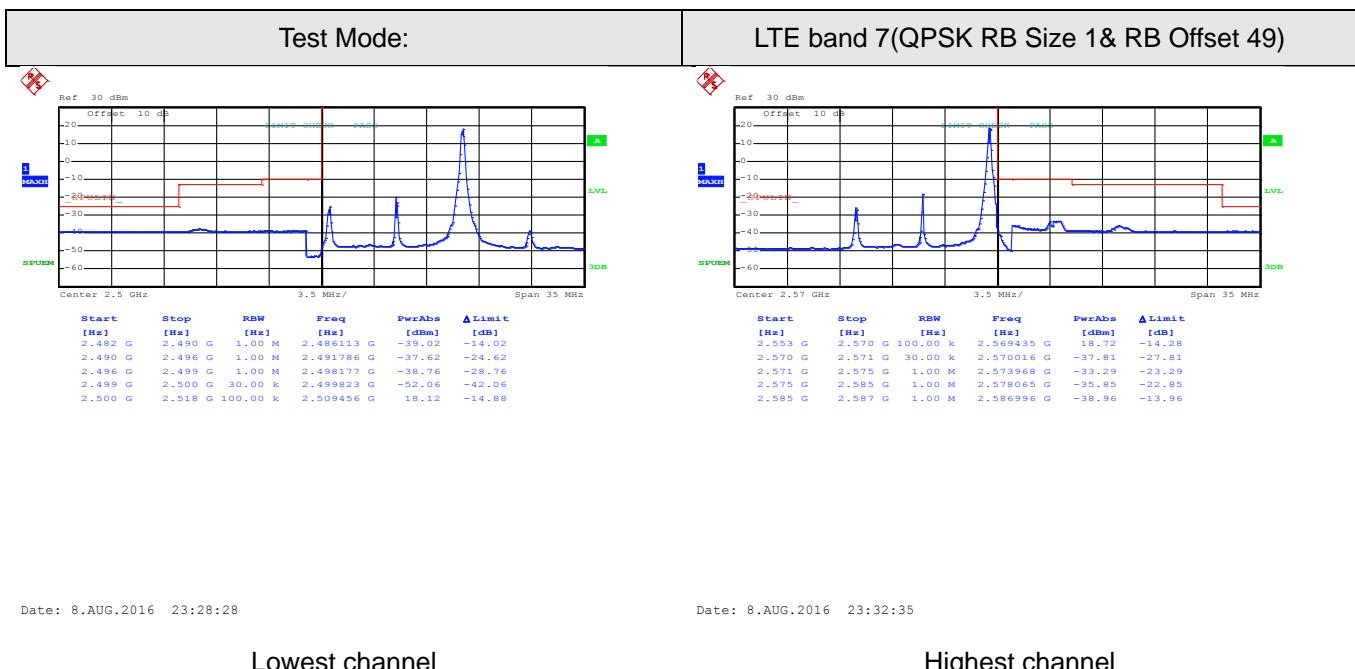


Date: 8.AUG.2016 23:28:07

Date: 8.AUG.2016 23:31:58

Lowest channel

Highest channel



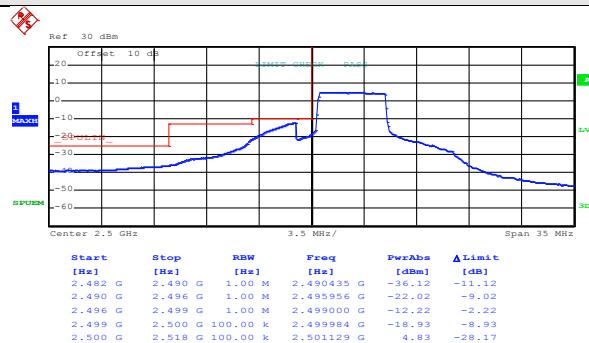
Date: 8.AUG.2016 23:28:28

Date: 8.AUG.2016 23:32:35

Lowest channel

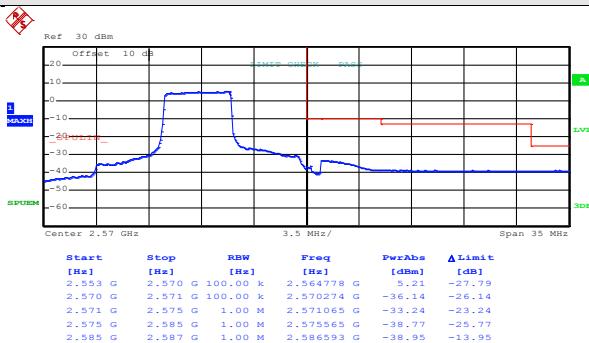
Highest channel

Test Mode:	LTE band 7(QPSK RB Size 25& RB Offset 0)
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Date: 8.AUG.2016 23:30:11

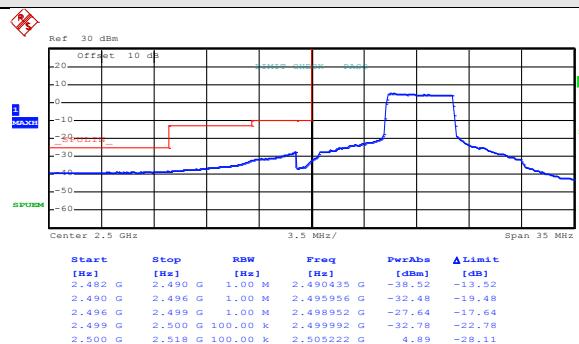
Lowest channel



Date: 8.AUG.2016 23:33:05

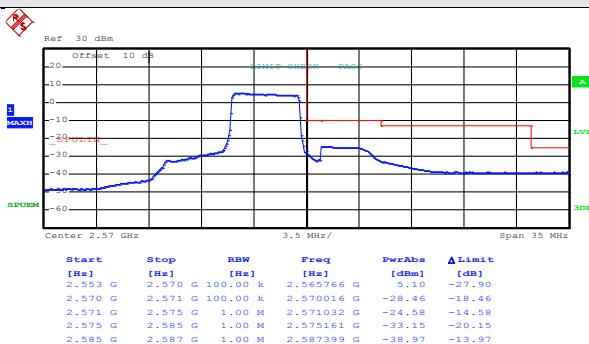
Highest channel

Test Mode:	LTE band 7(QPSK RB Size 25& RB Offset 24)
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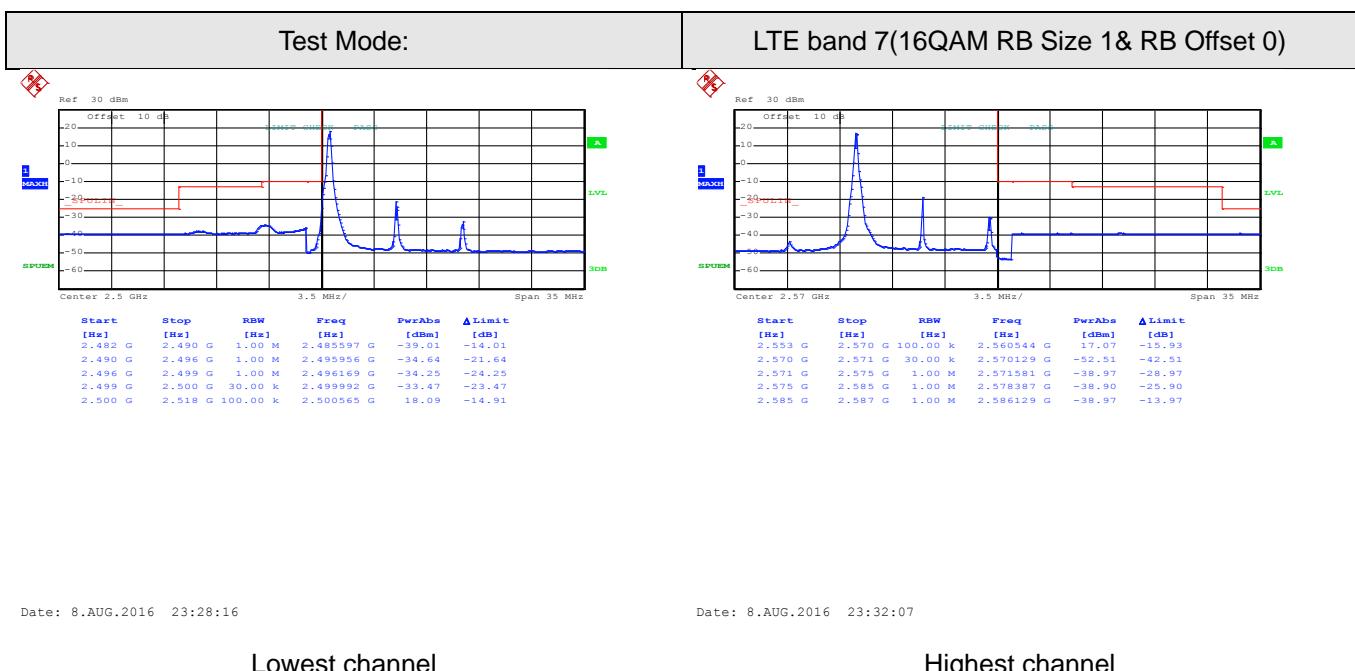
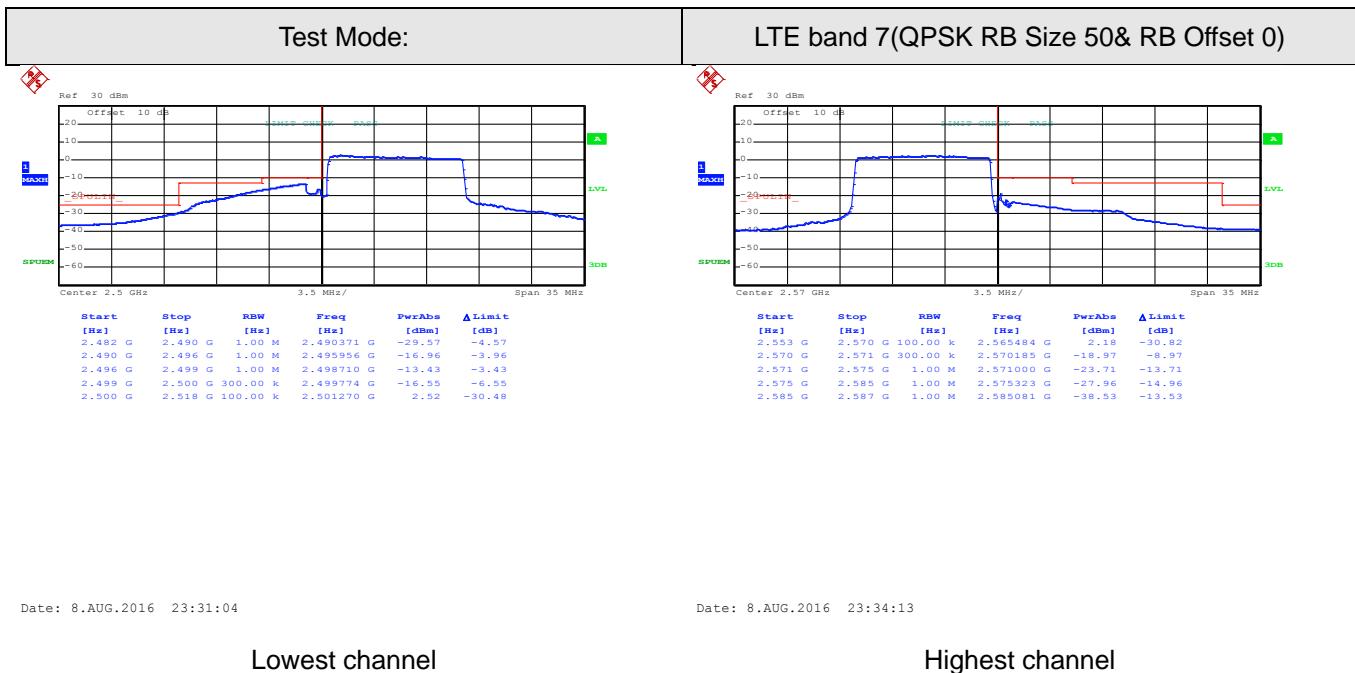
Date: 8.AUG.2016 23:30:33

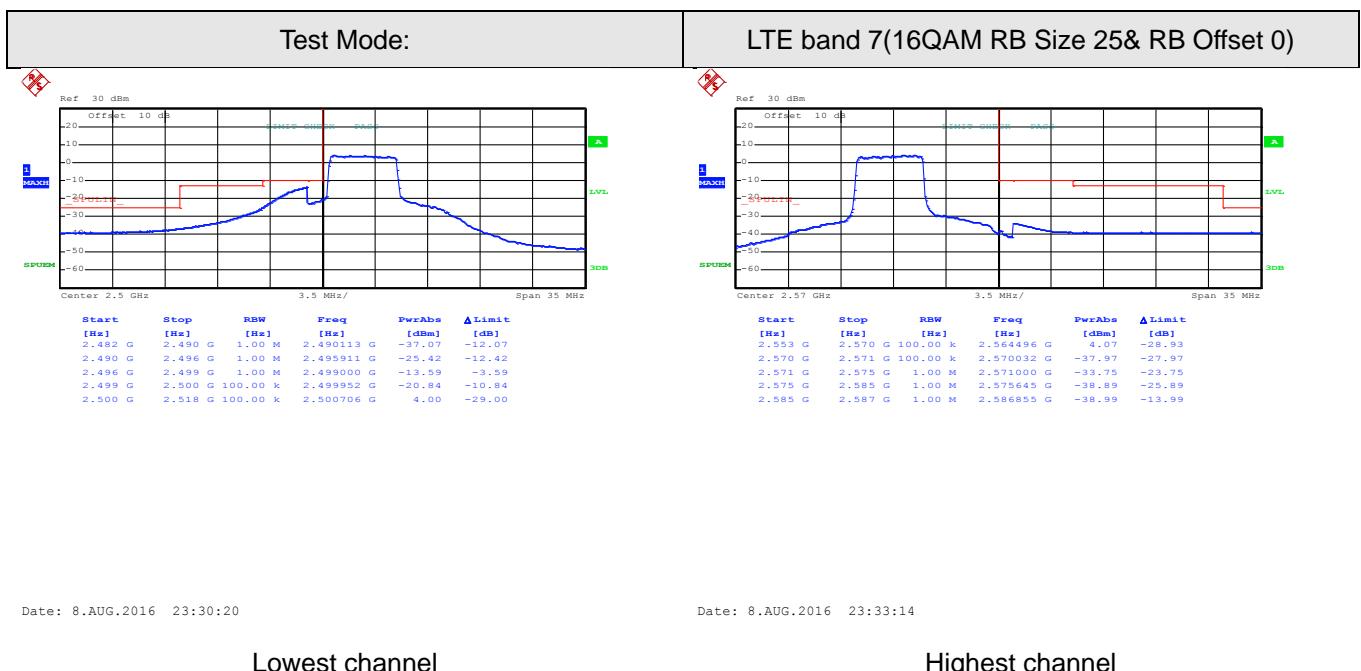
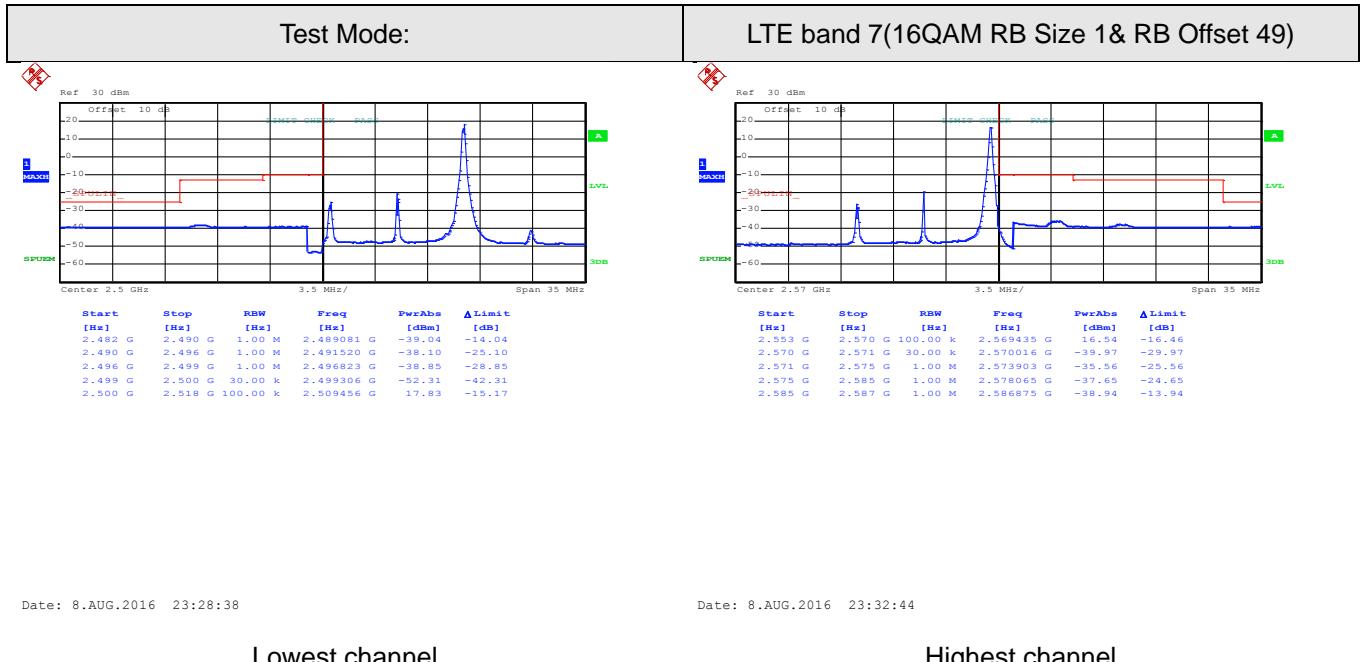
Lowest channel



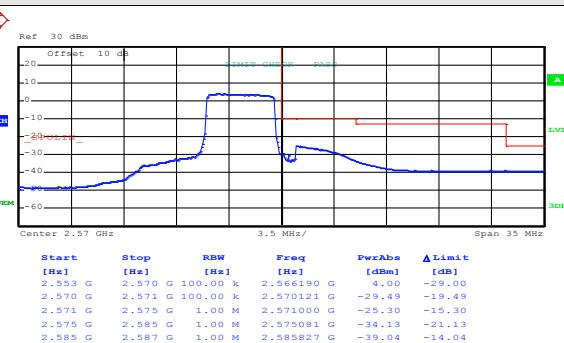
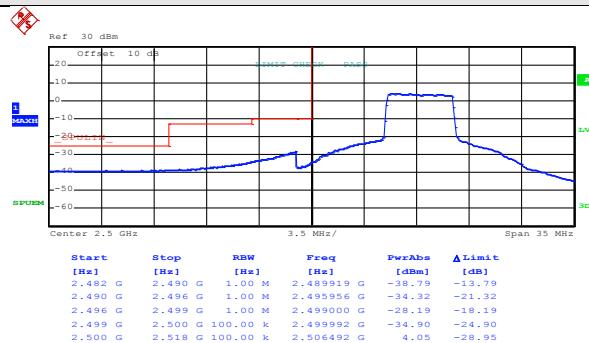
Date: 8.AUG.2016 23:33:28

Highest channel





Test Mode:	LTE band 7(16QAM RB Size 25& RB Offset 24)
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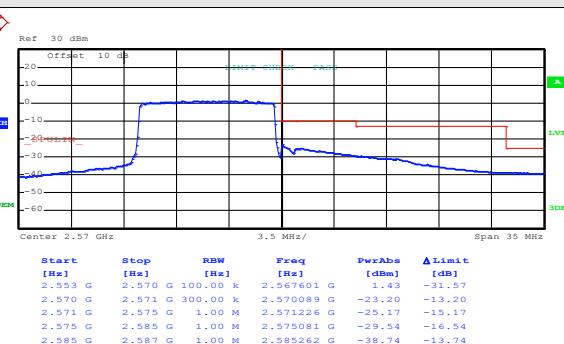
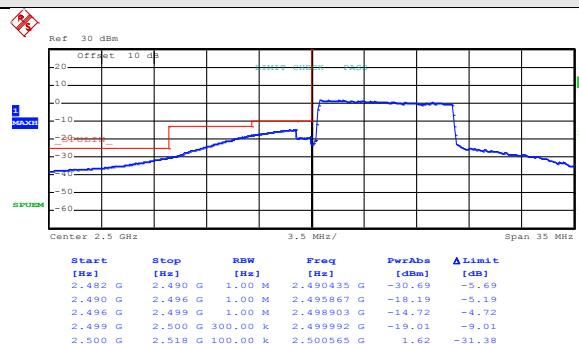
Date: 8.AUG.2016 23:30:43

Date: 8.AUG.2016 23:33:37

Lowest channel

Highest channel

Test Mode:	LTE band 7(16QAM RB Size 50& RB Offset 0)
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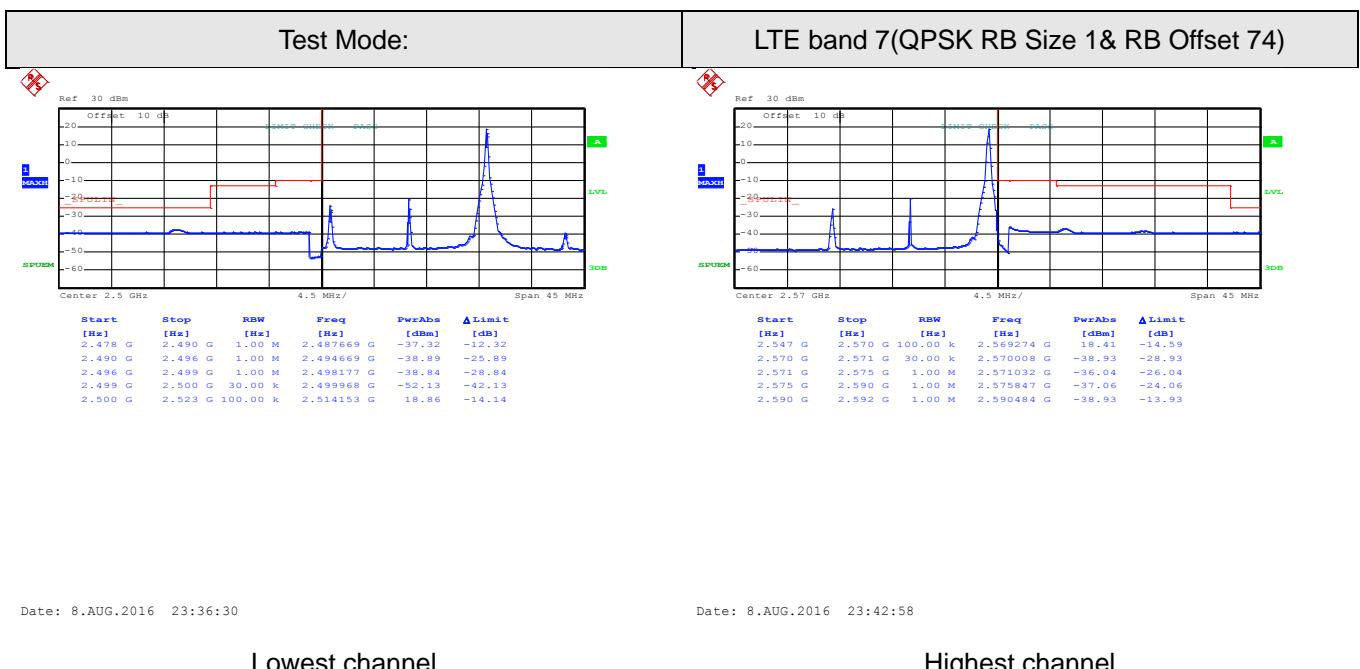
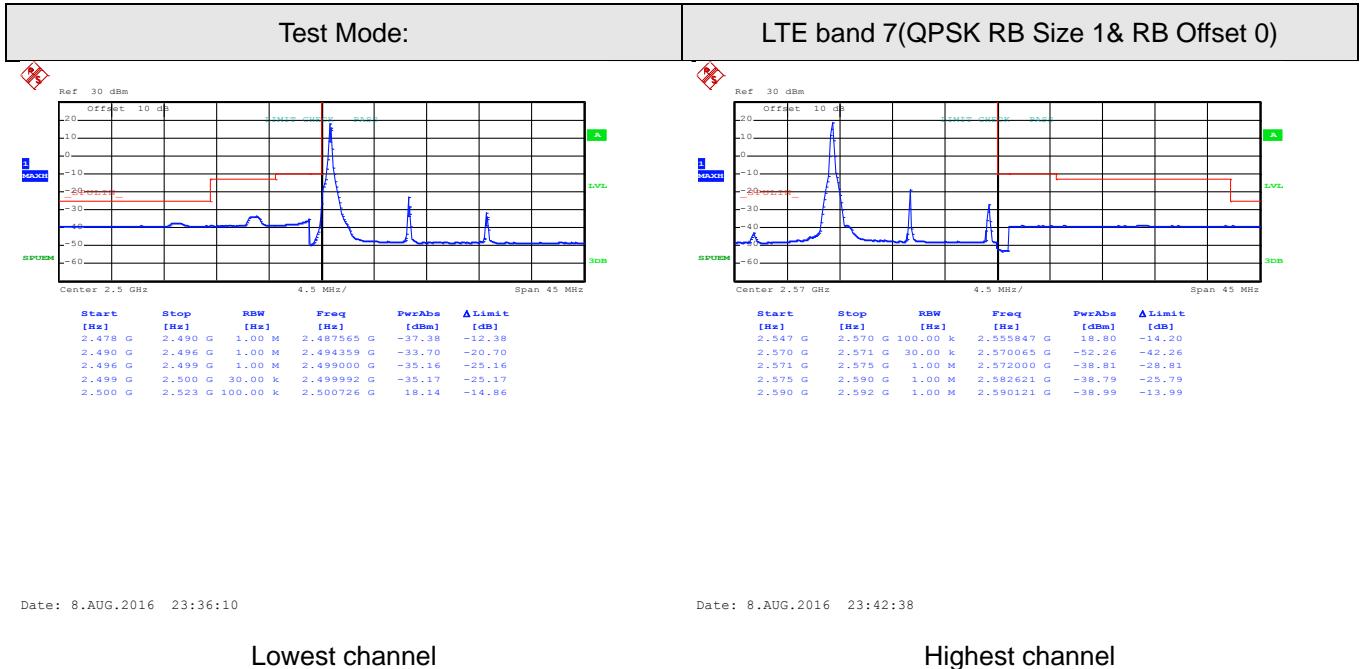
Date: 8.AUG.2016 23:31:12

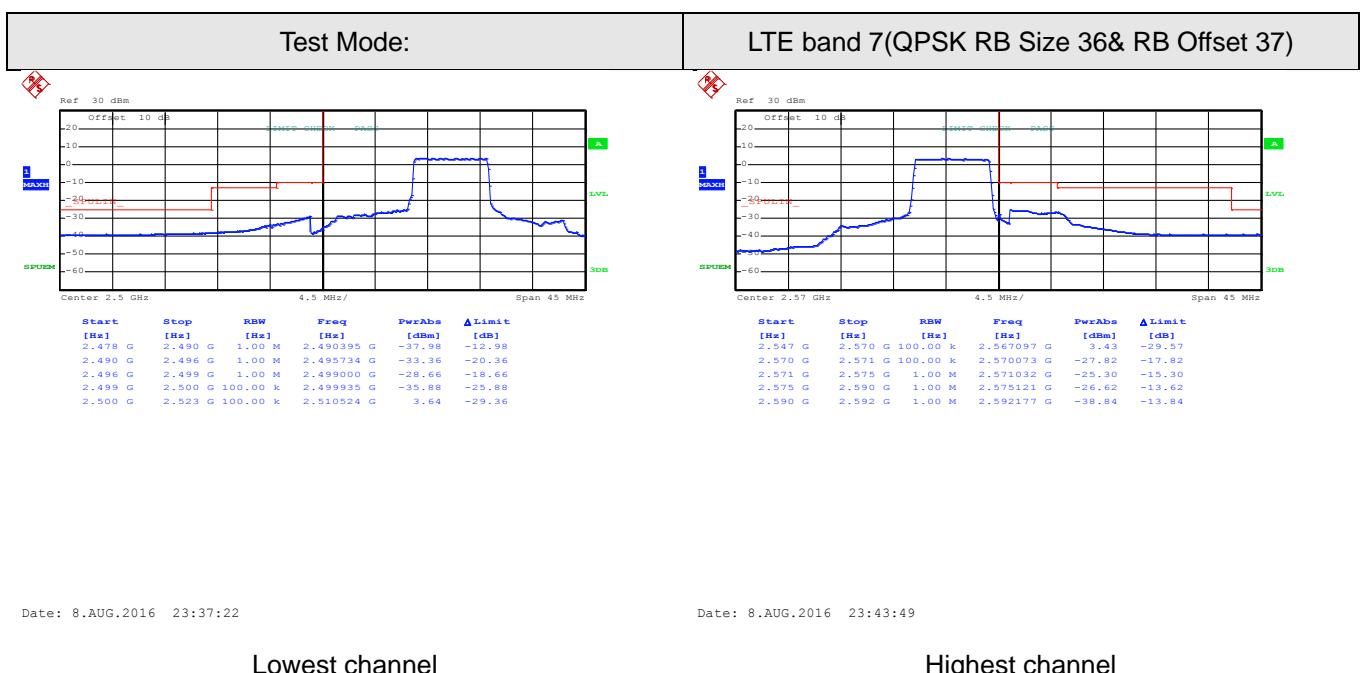
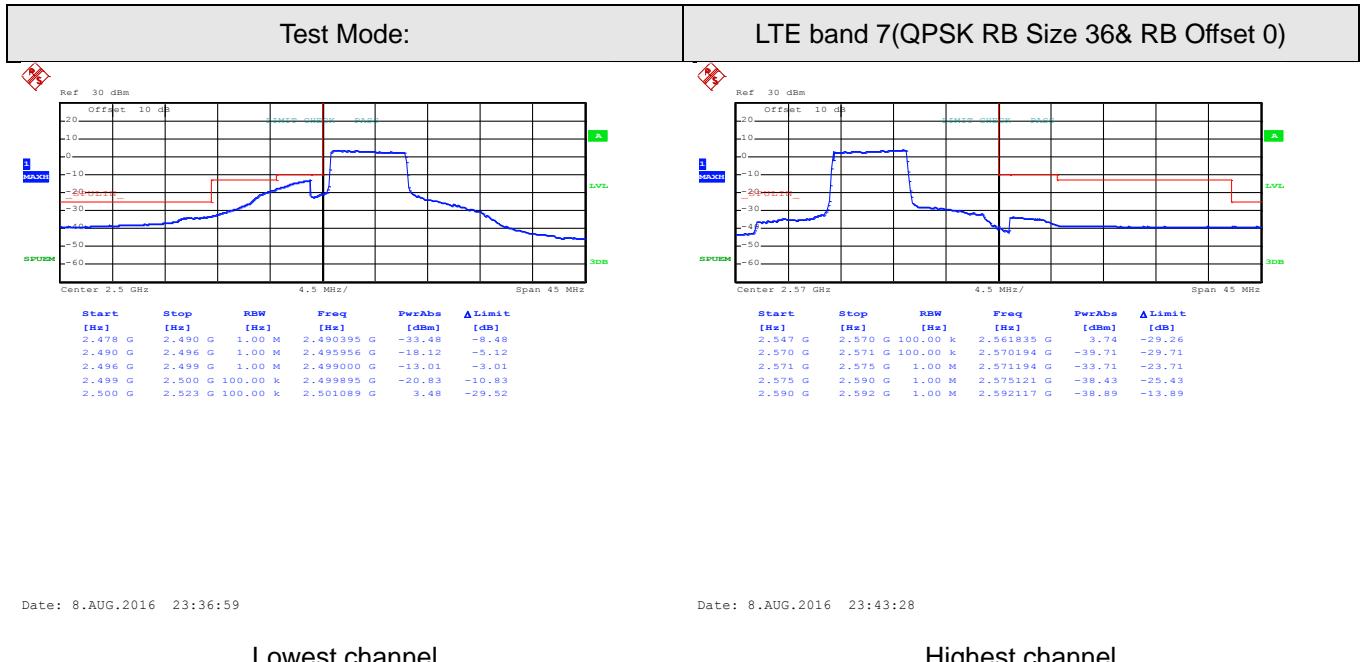
Date: 8.AUG.2016 23:34:21

Lowest channel

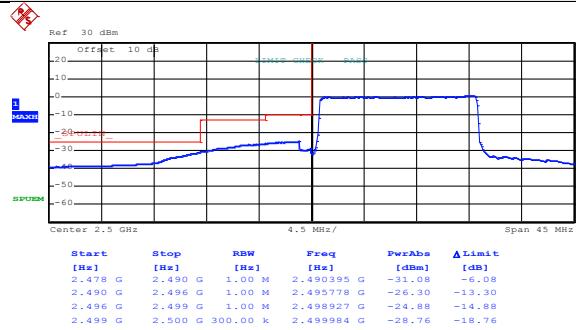
Highest channel

15MHz:



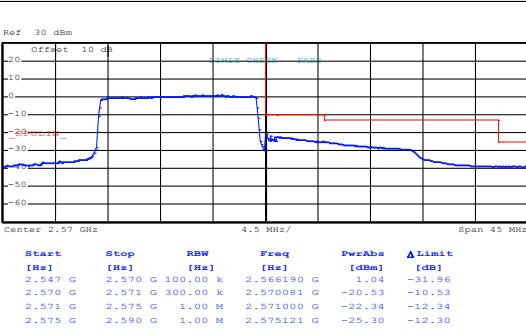


Test Mode:	LTE band 7(QPSK RB Size 75& RB Offset 0)
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Date: 14.AUG.2016 11:52:10

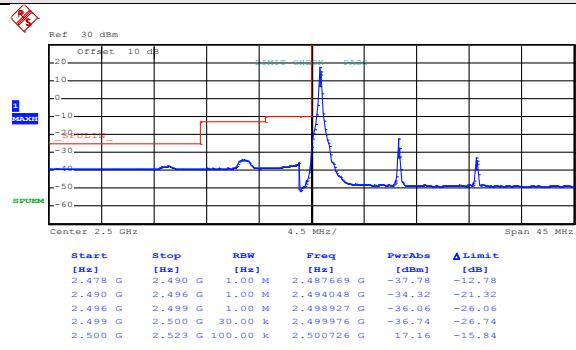
Lowest channel



Date: 8.AUG.2016 23:44:21

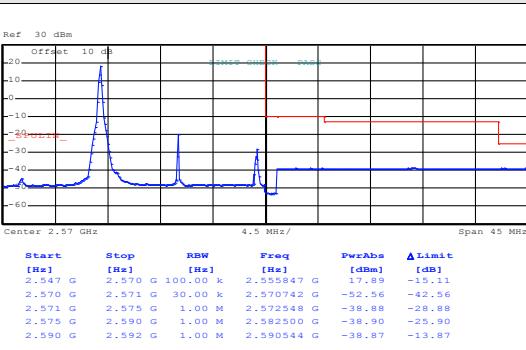
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 1& RB Offset 0)
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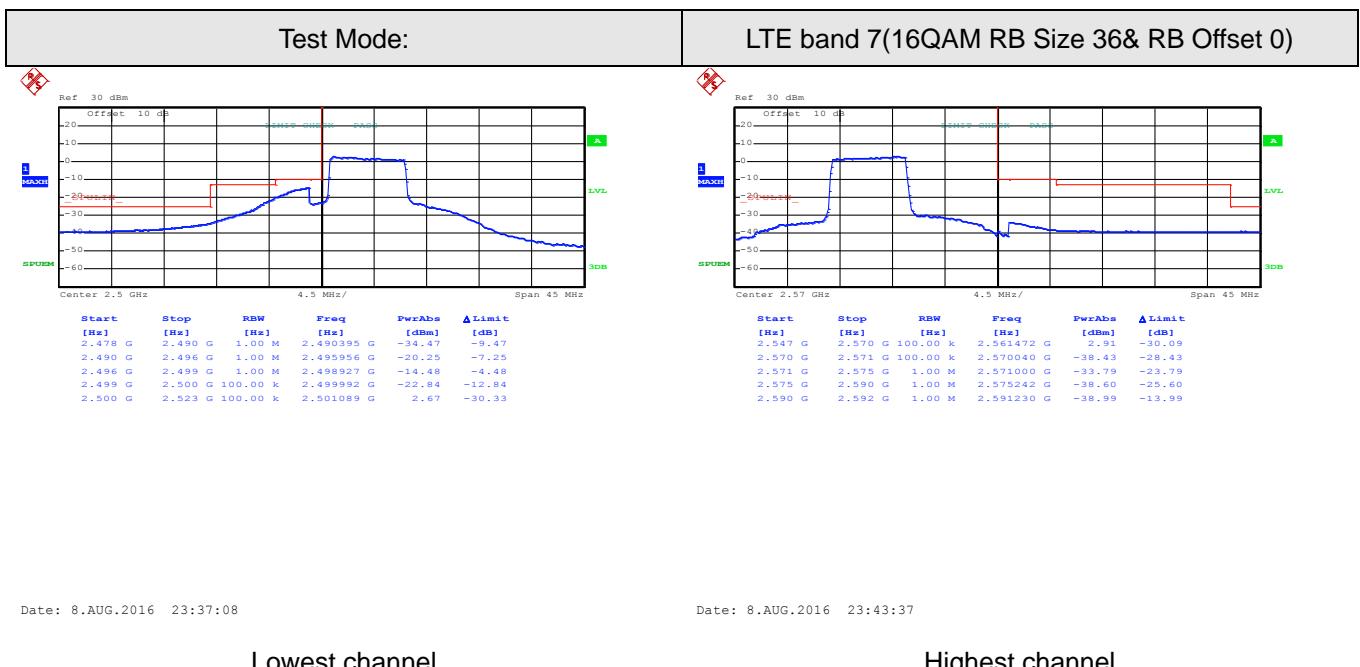
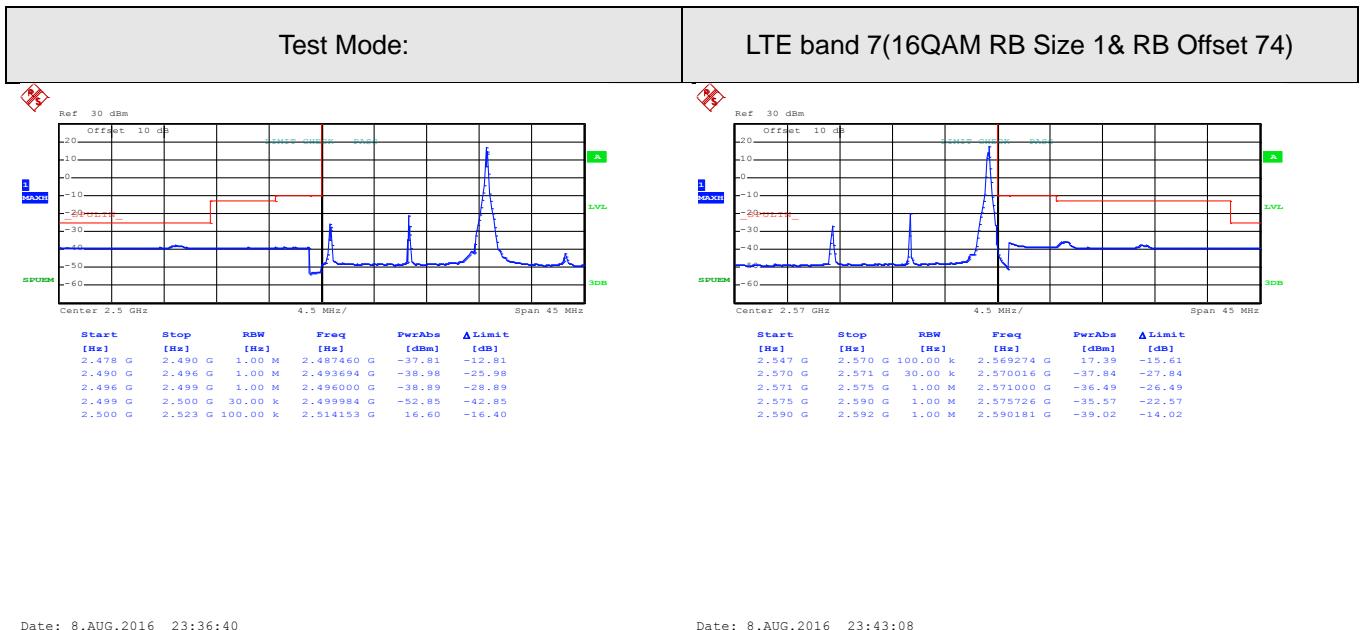
Date: 8.AUG.2016 23:36:19

Lowest channel

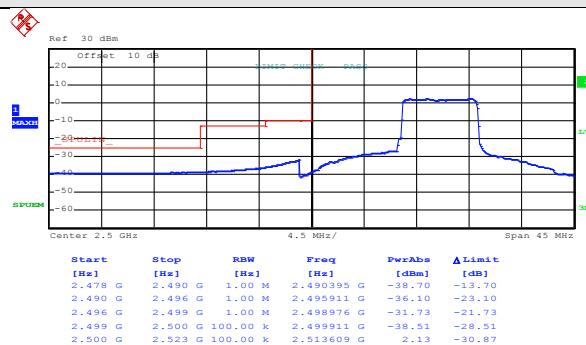


Date: 8.AUG.2016 23:42:46

Highest channel

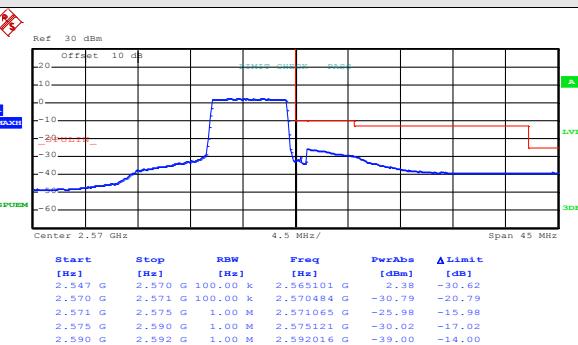


Test Mode:	LTE band 7(16QAM RB Size 36& RB Offset 37)
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Date: 8.AUG.2016 23:37:34

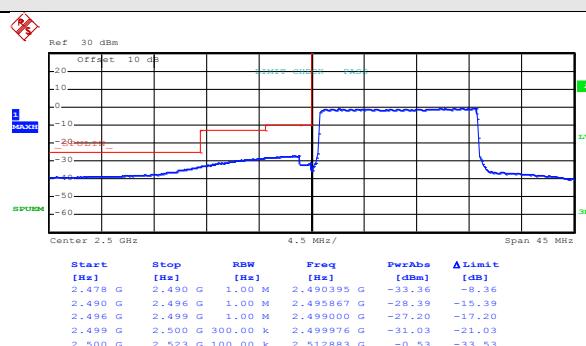
Lowest channel



Date: 8.AUG.2016 23:43:58

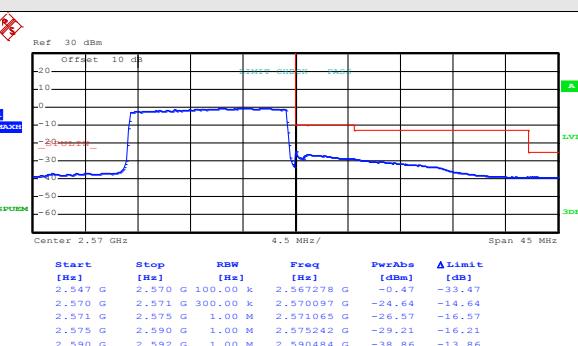
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 75& RB Offset 0)
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Date: 14.AUG.2016 11:52:18

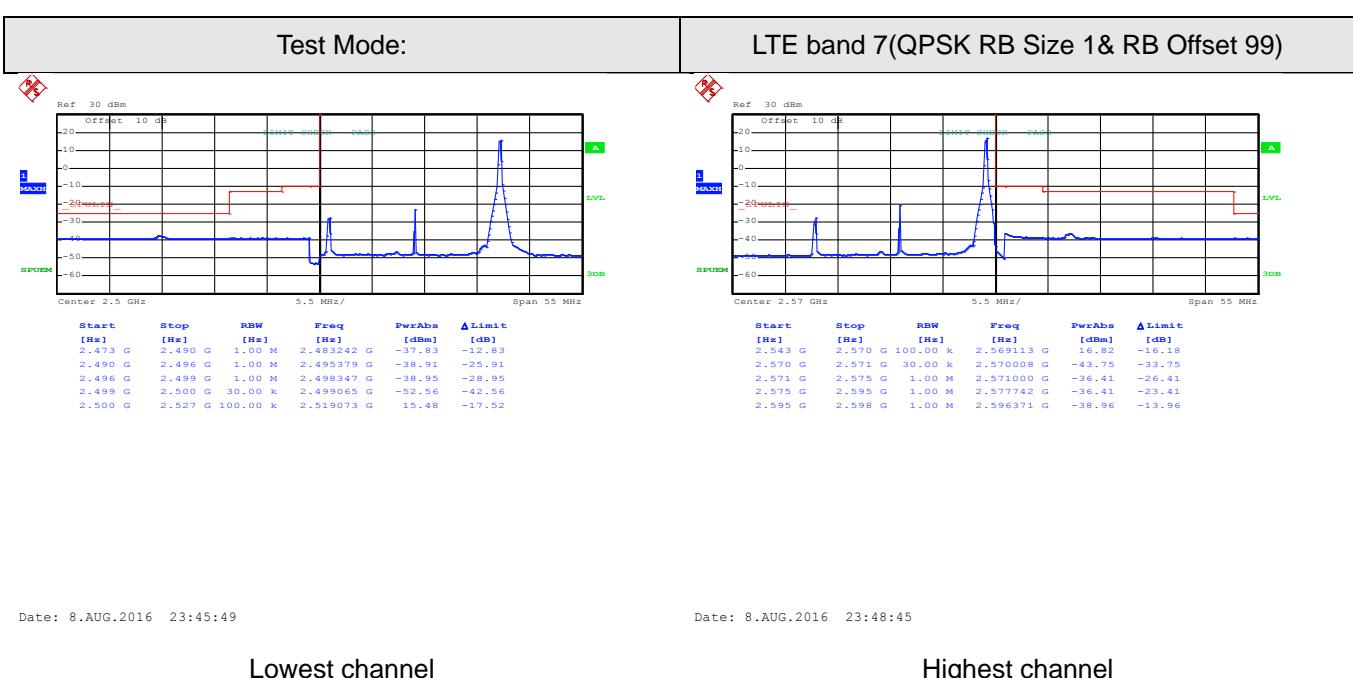
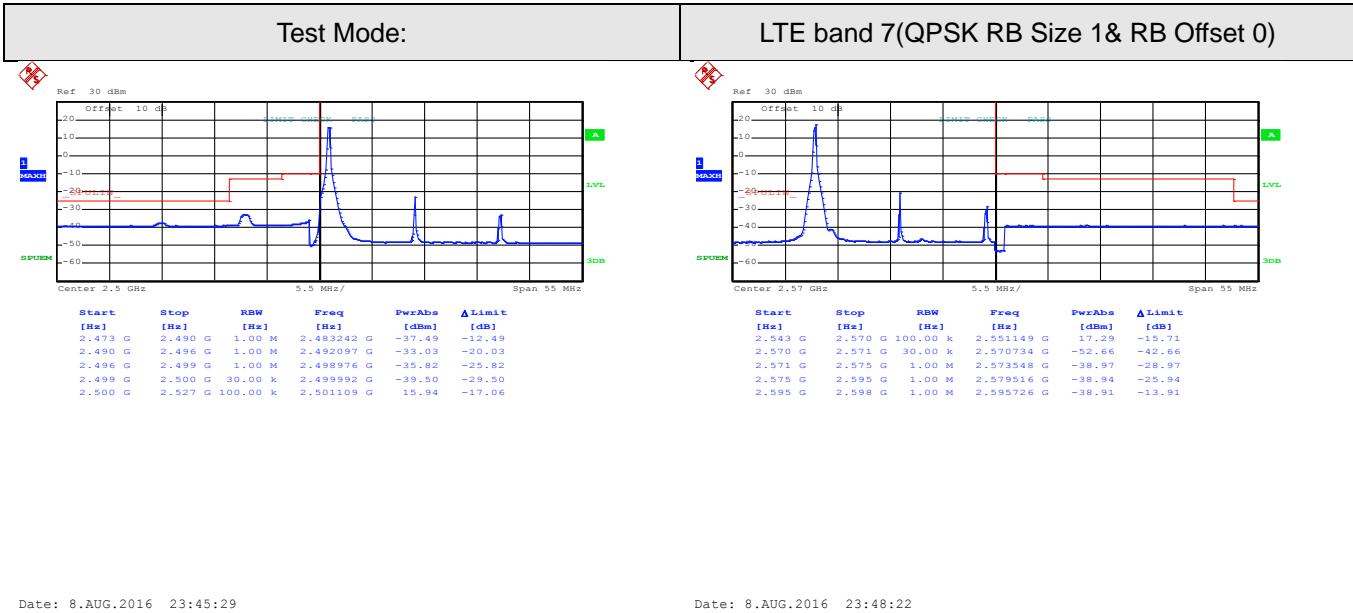
Lowest channel

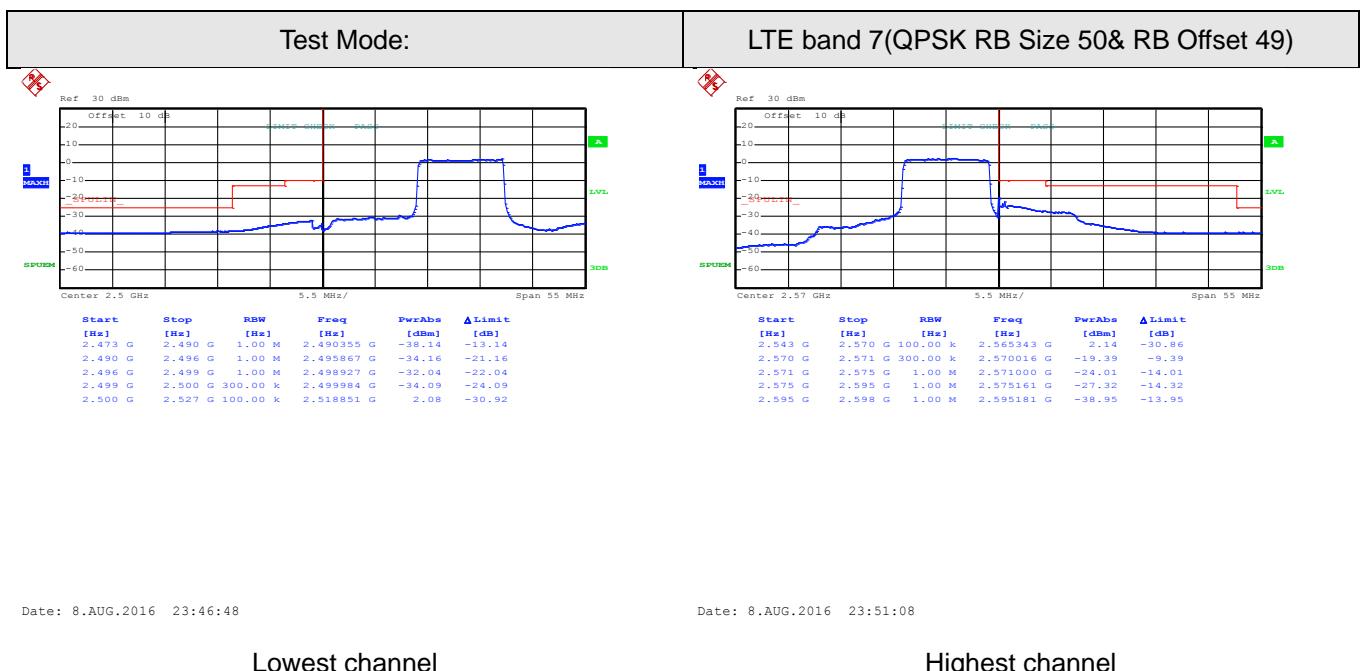
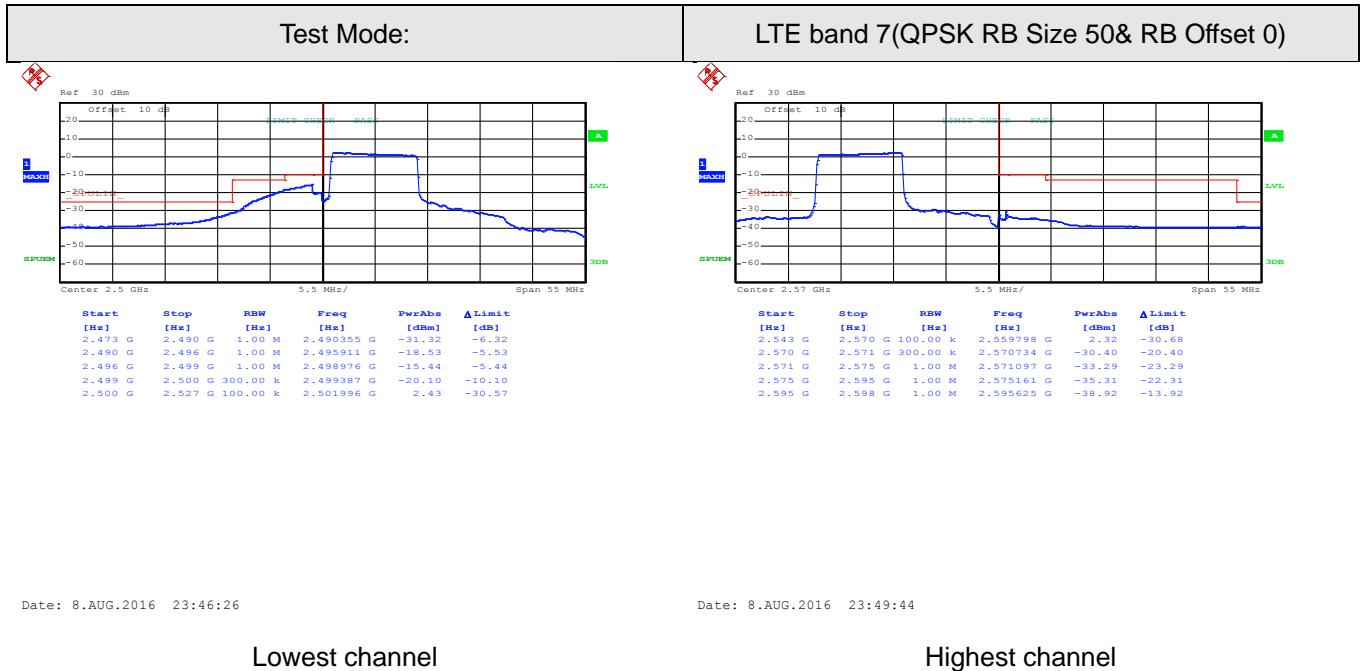


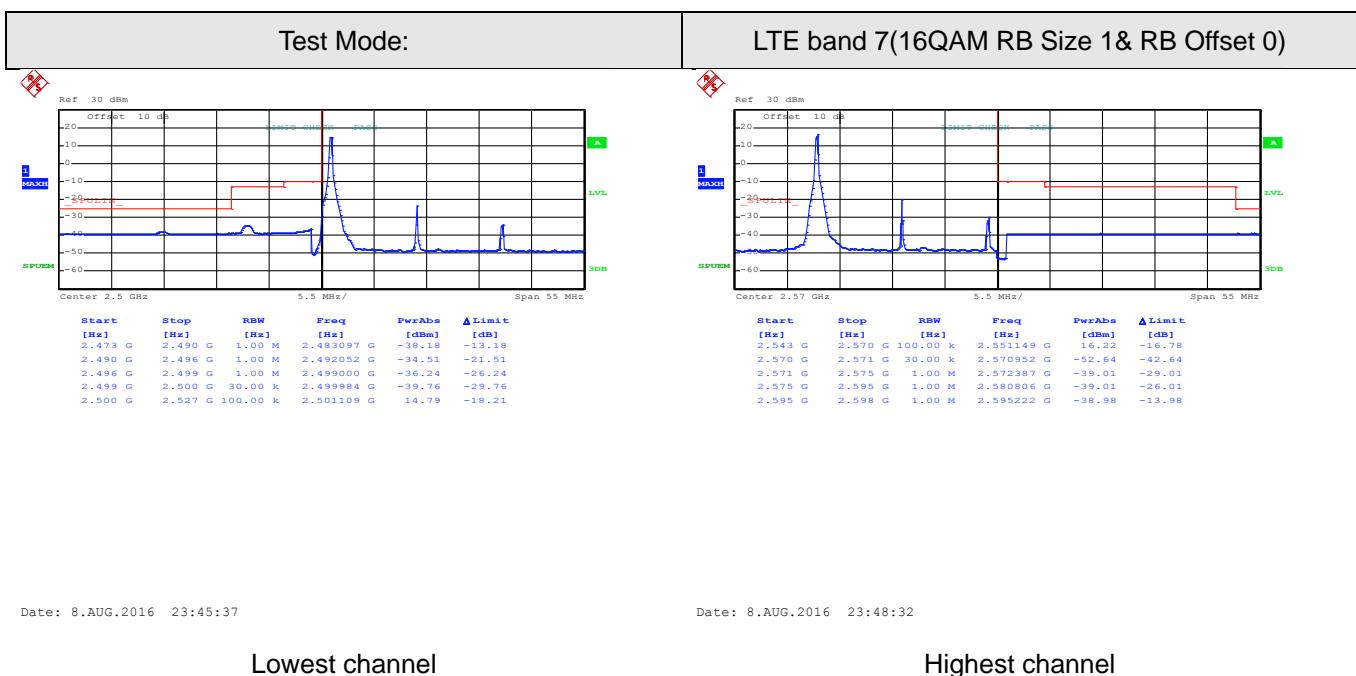
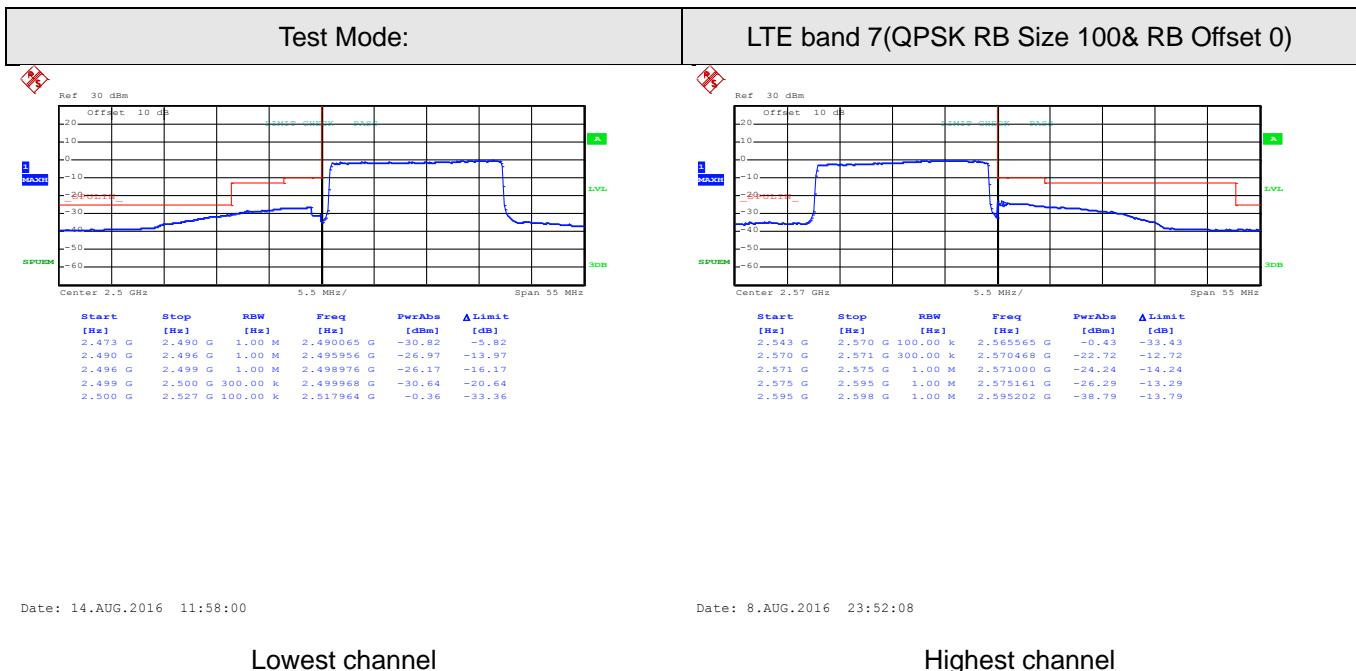
Date: 8.AUG.2016 23:44:28

Highest channel

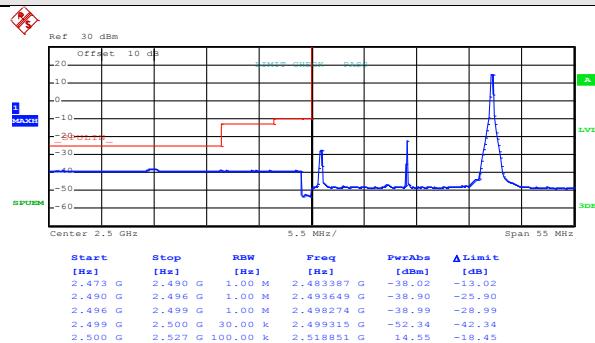
20MHz:





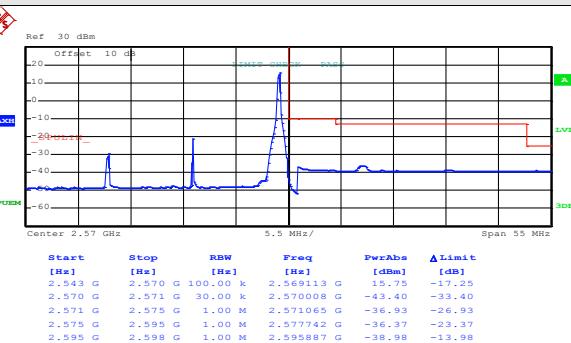


Test Mode:	LTE band 7(16QAM RB Size 1& RB Offset 99)
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Date: 8.AUG.2016 23:46:07

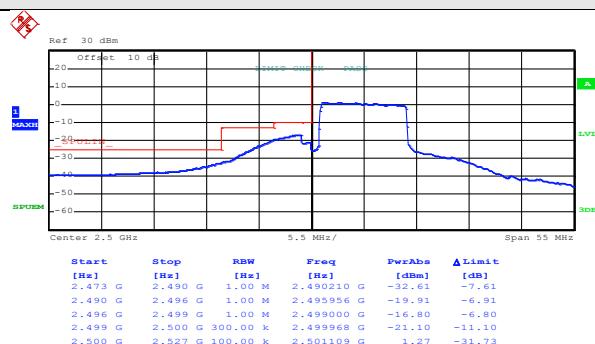
Lowest channel



Date: 8.AUG.2016 23:49:17

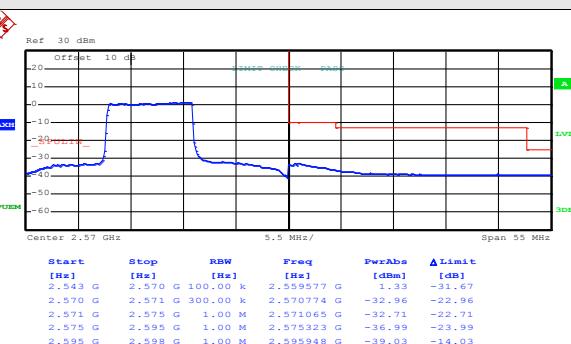
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 50& RB Offset 0)
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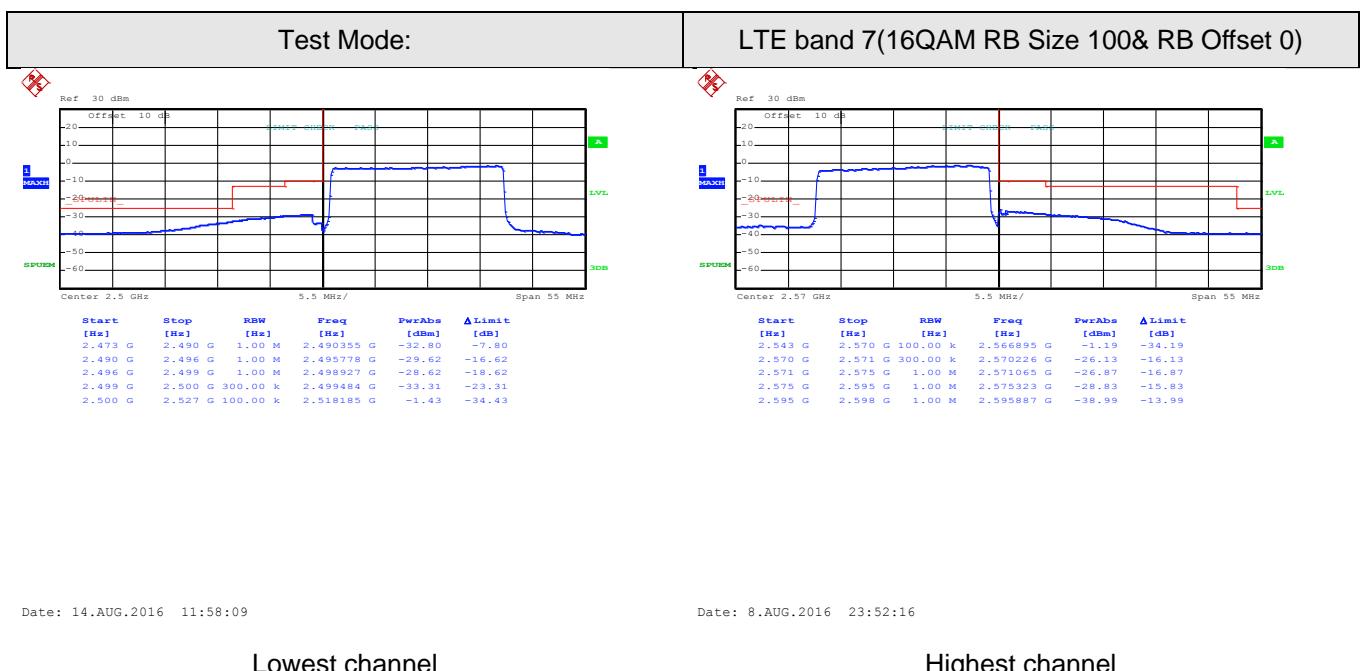
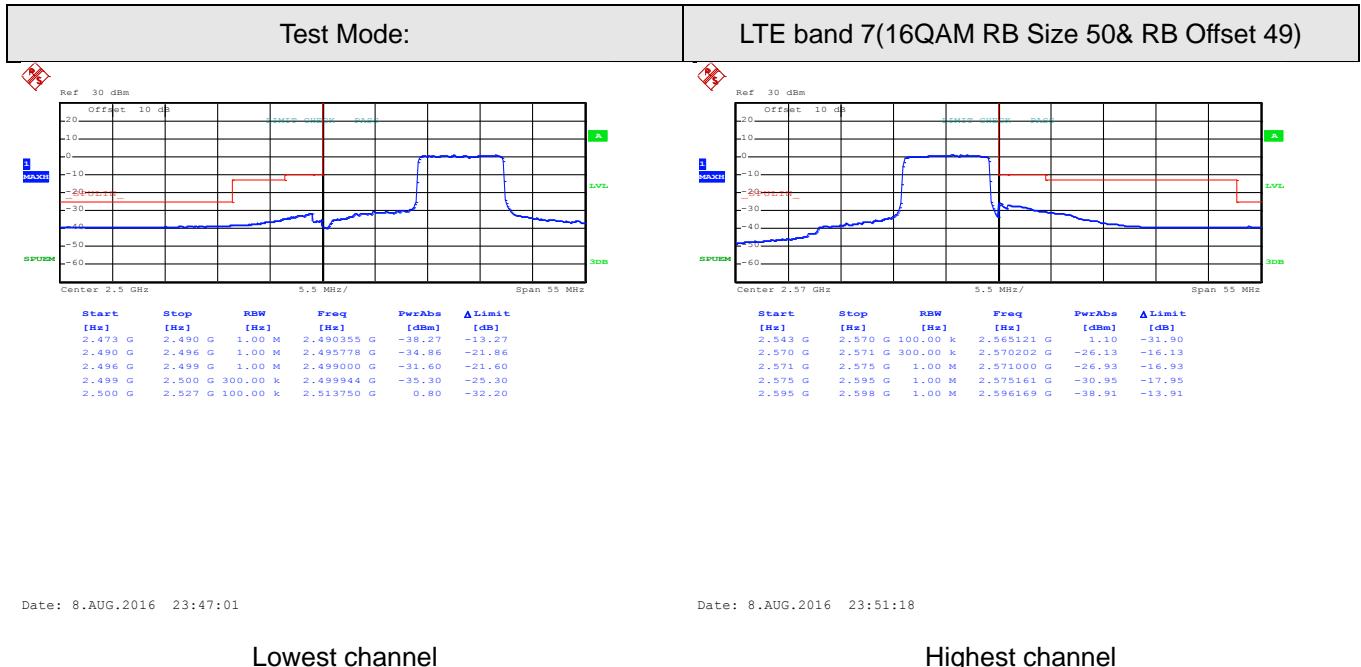
Date: 8.AUG.2016 23:46:35

Lowest channel

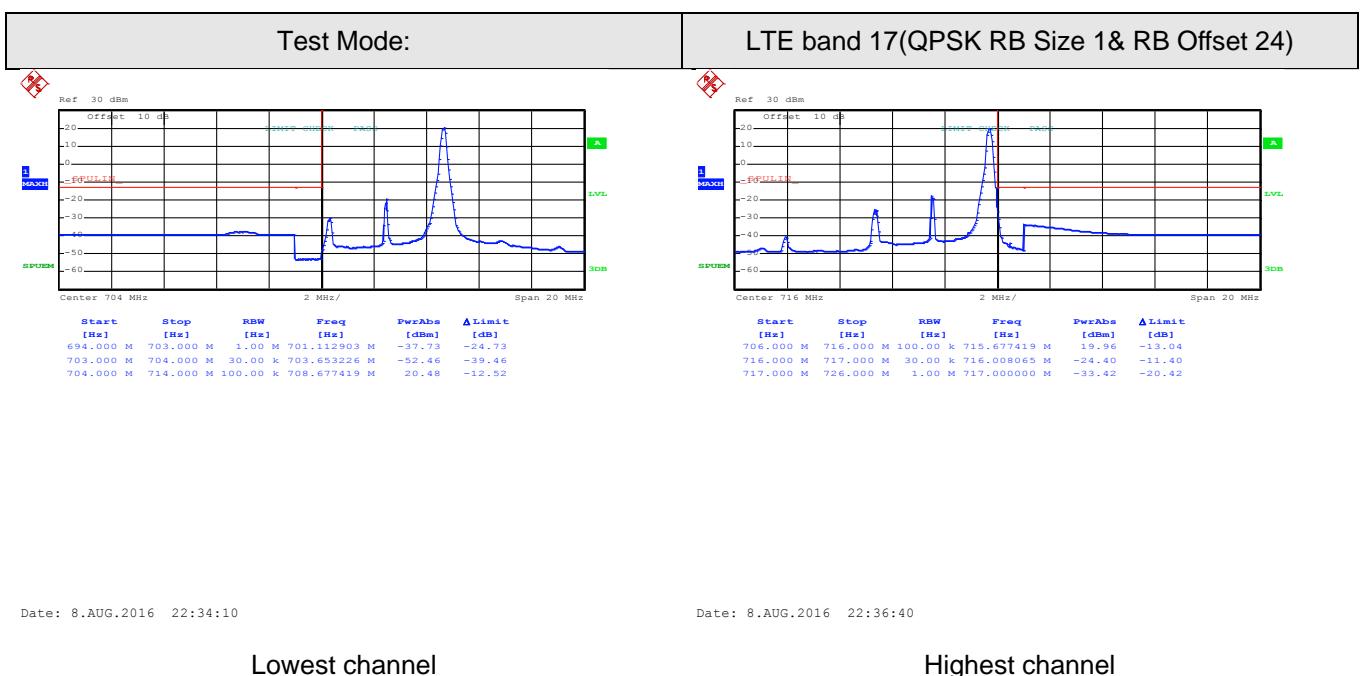
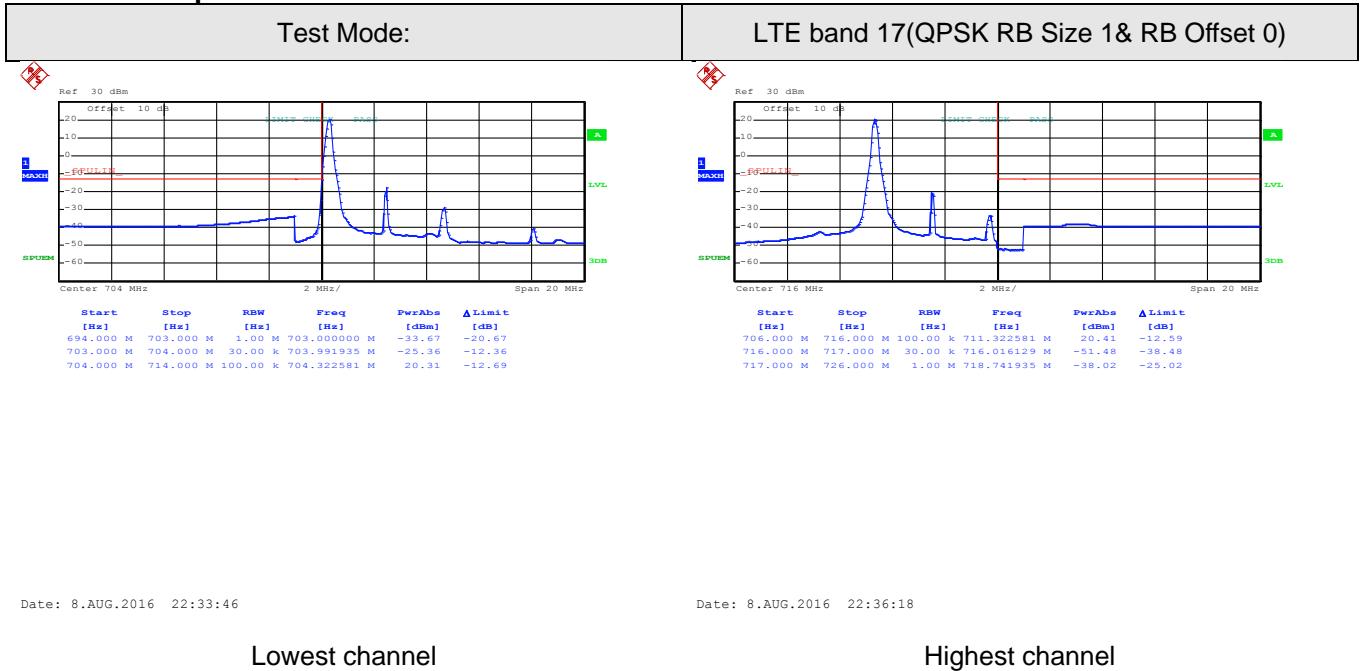


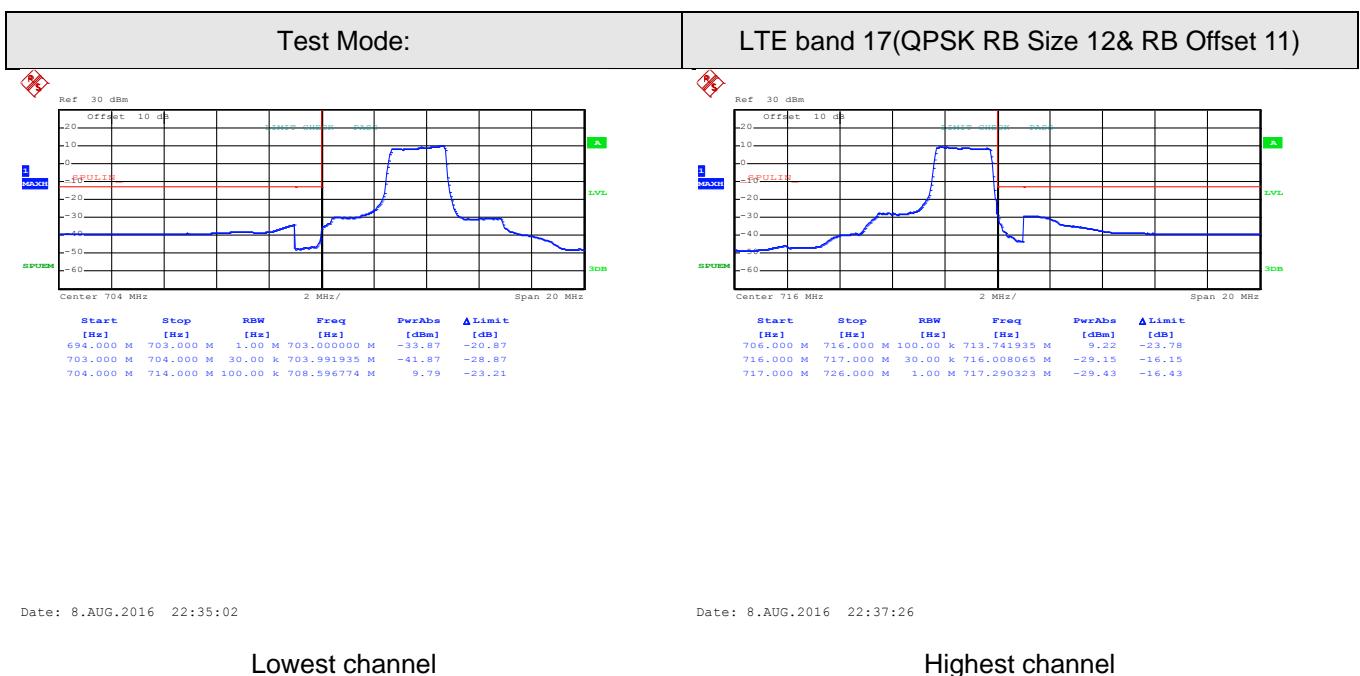
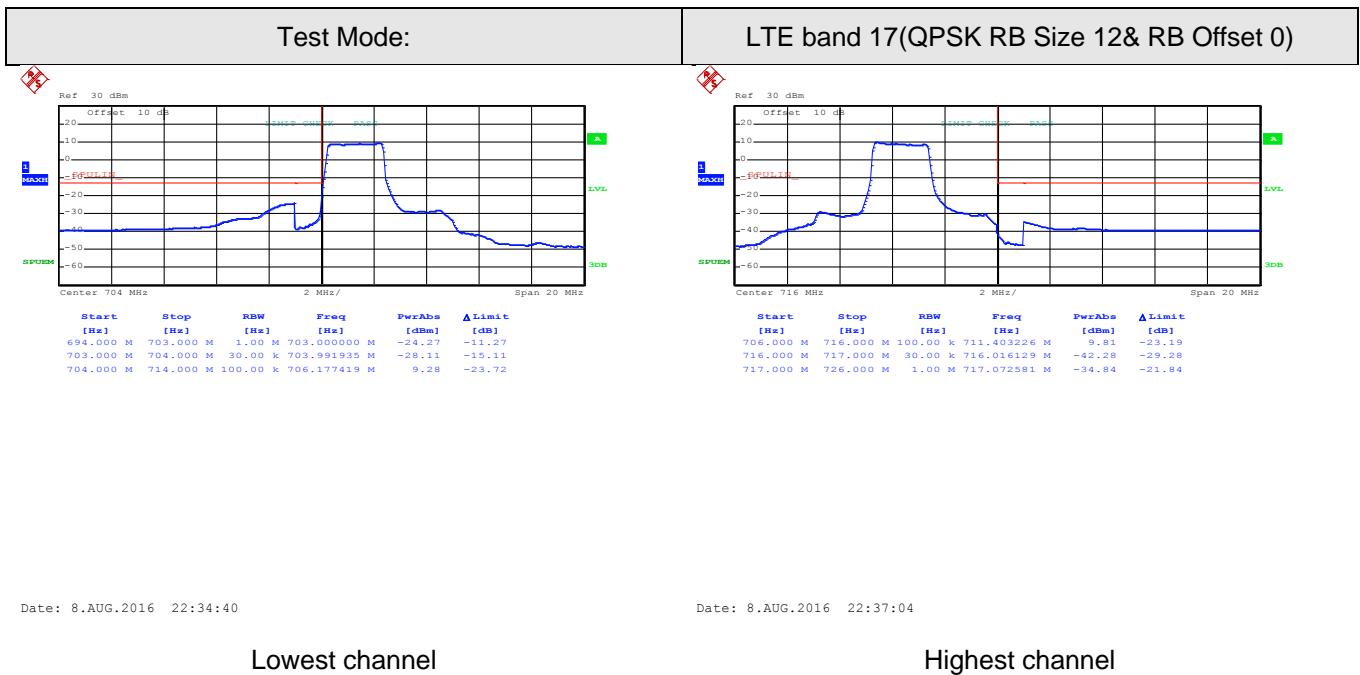
Date: 8.AUG.2016 23:50:51

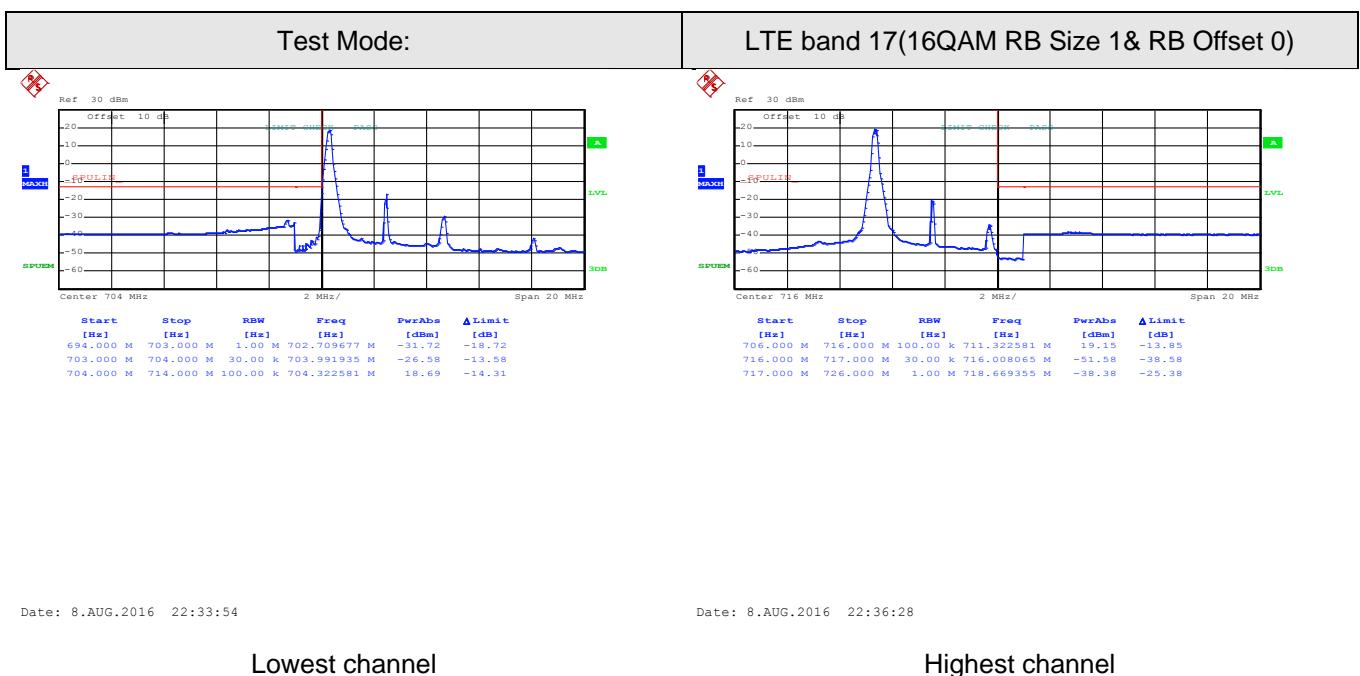
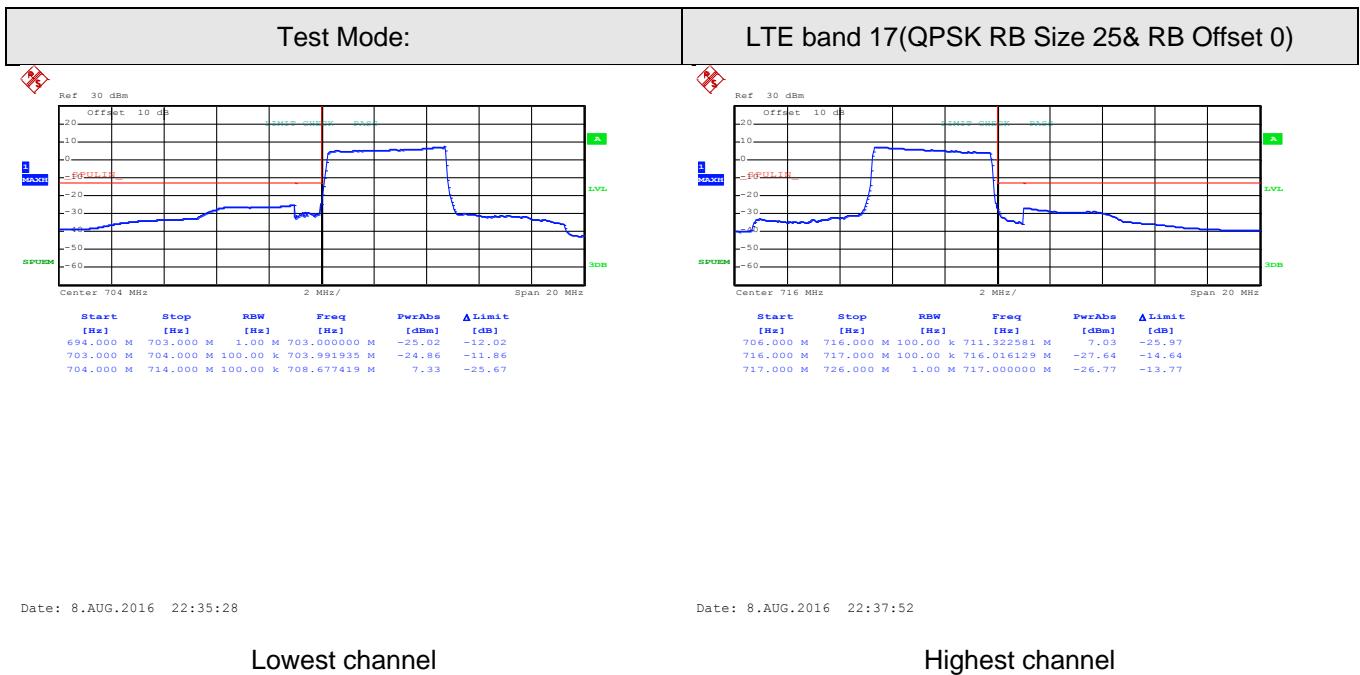
Highest channel



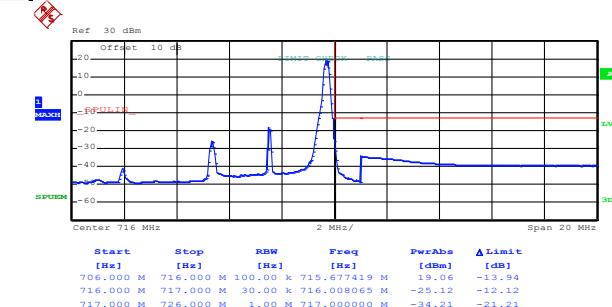
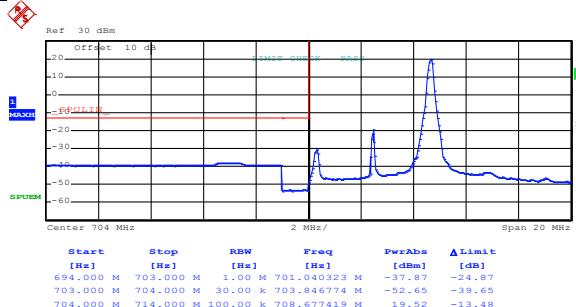
LTE band 17 part: 5MHz:







Test Mode:	LTE band 17(16QAM RB Size 1& RB Offset 24)
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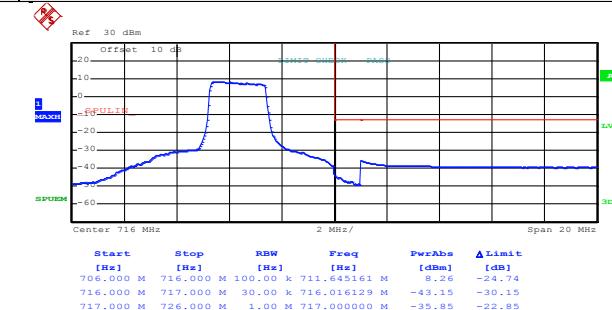
Date: 8.AUG.2016 22:34:19

Date: 8.AUG.2016 22:36:50

Lowest channel

Highest channel

Test Mode:	LTE band 17(16QAM RB Size 12& RB Offset 0)
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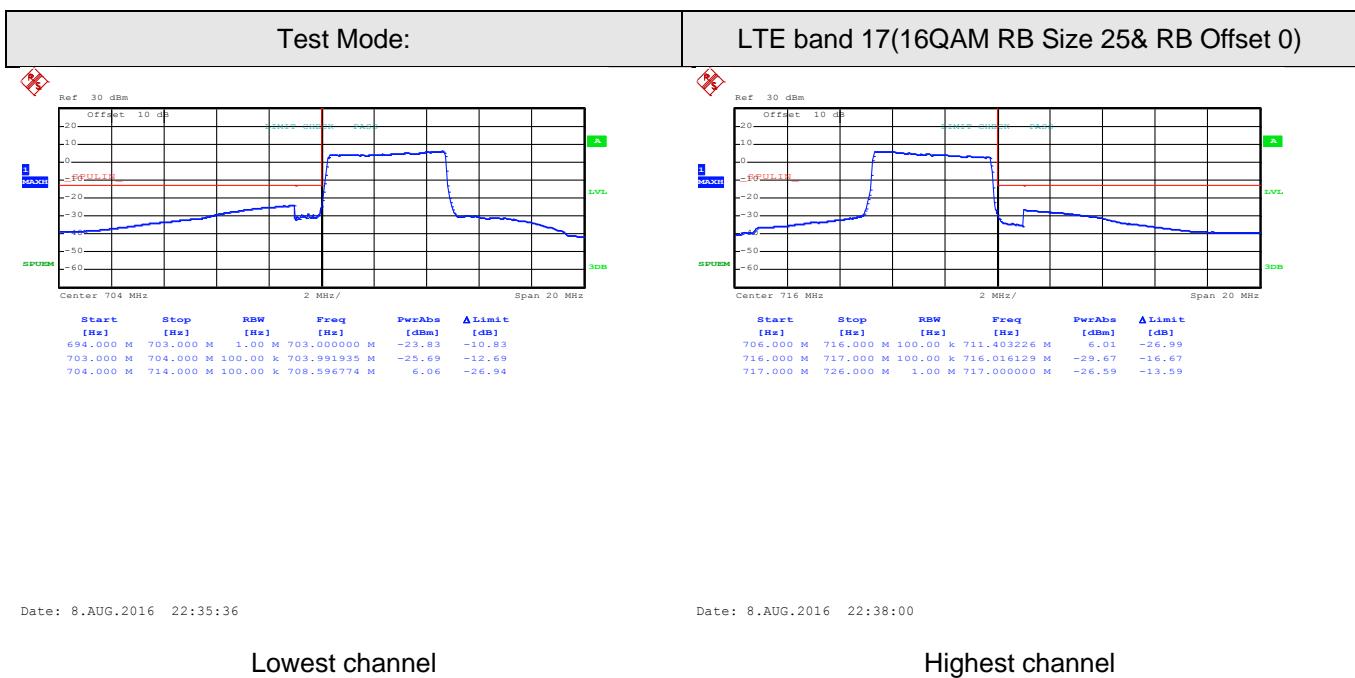
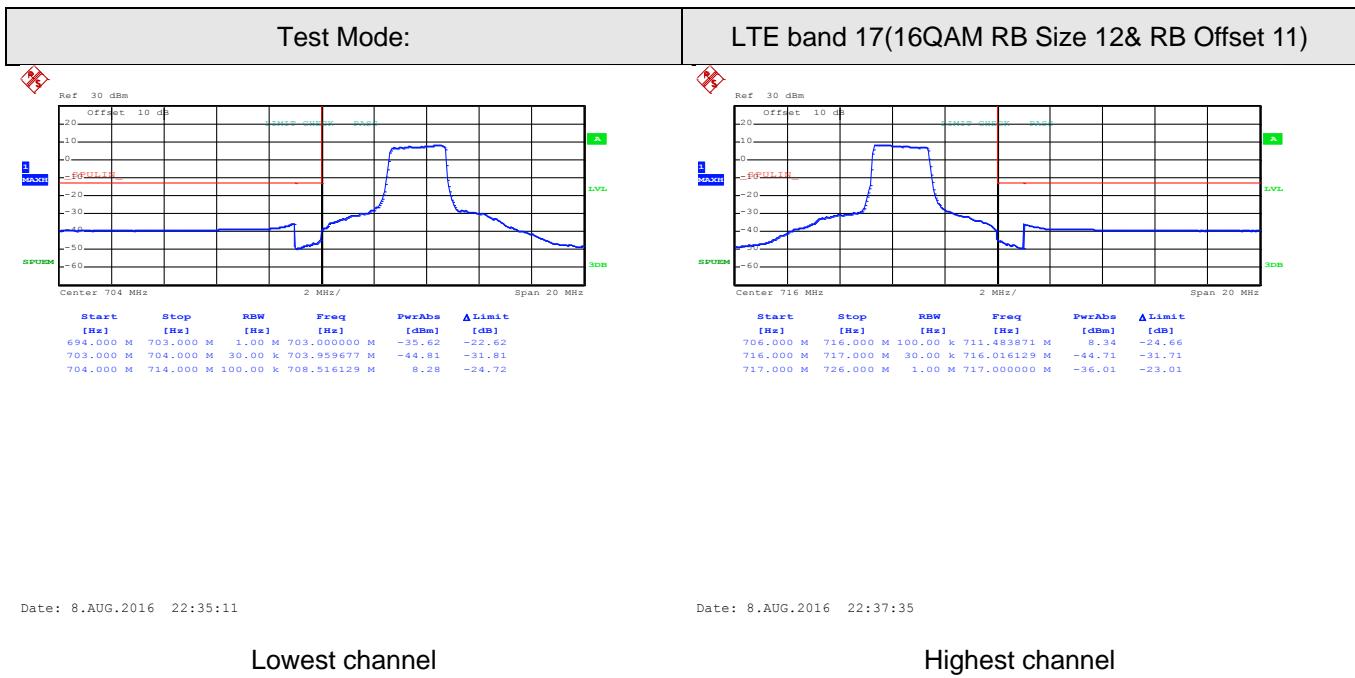


Date: 8.AUG.2016 22:34:48

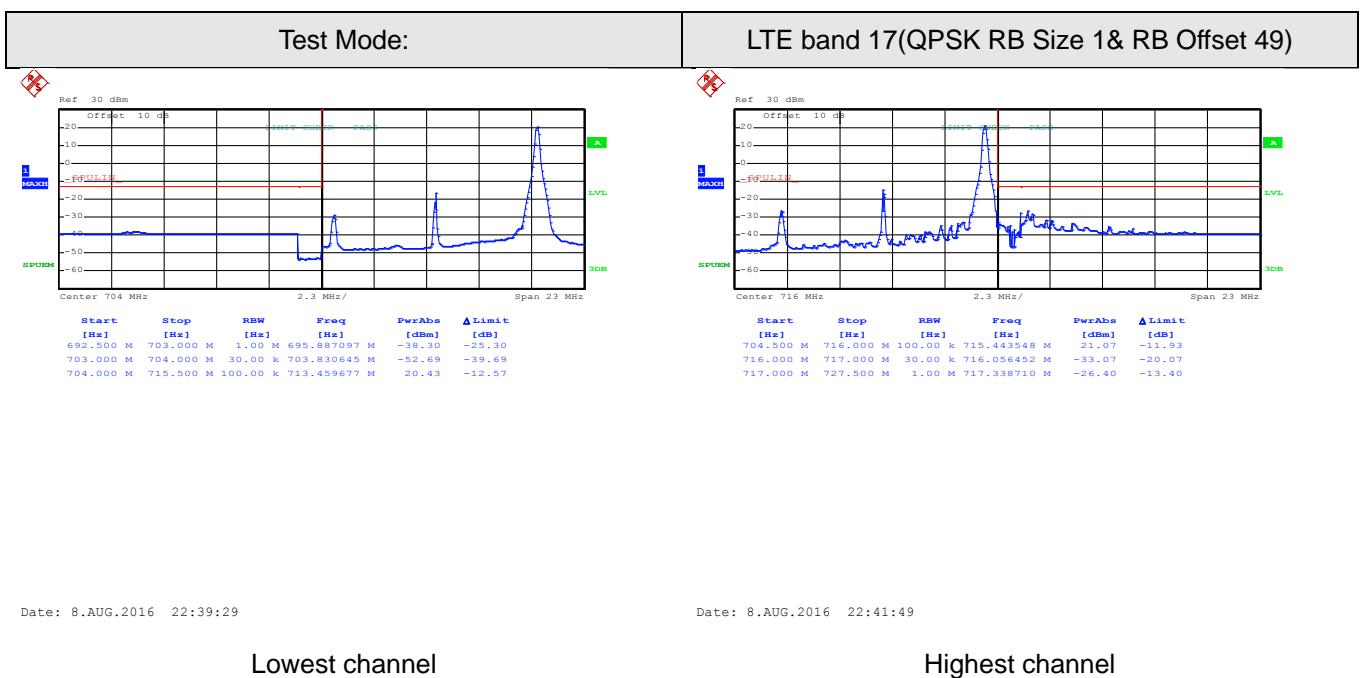
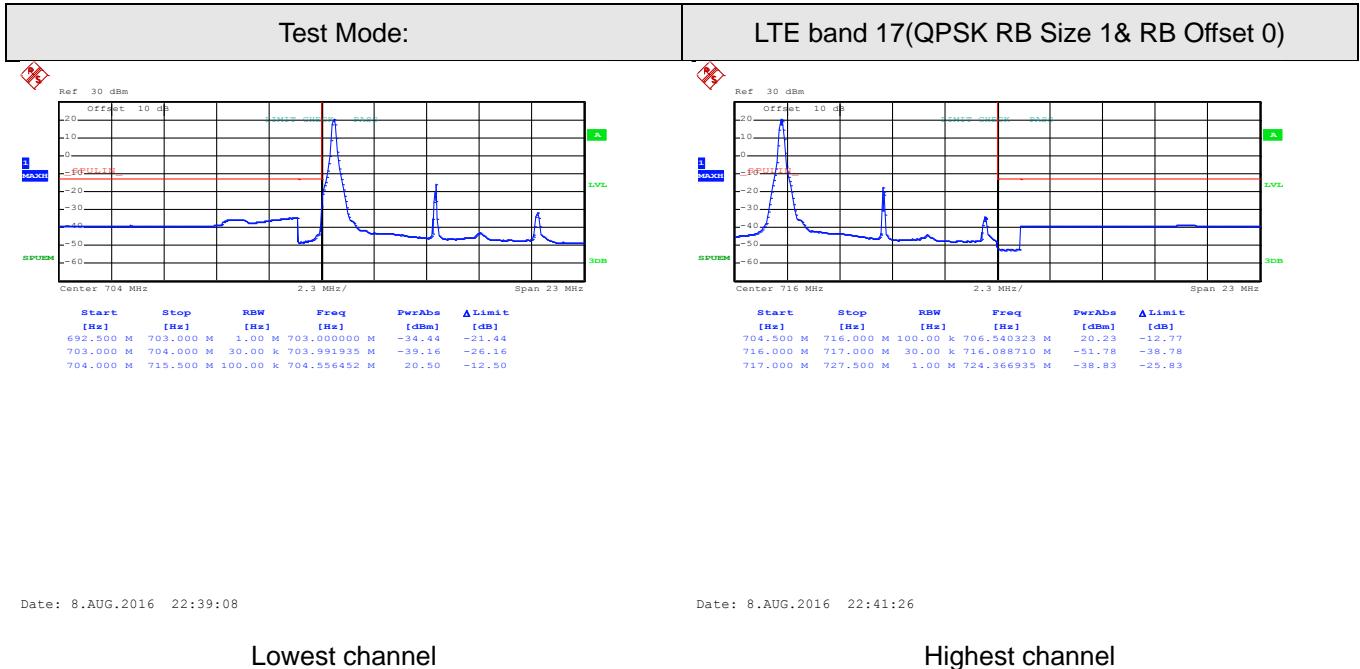
Date: 8.AUG.2016 22:37:13

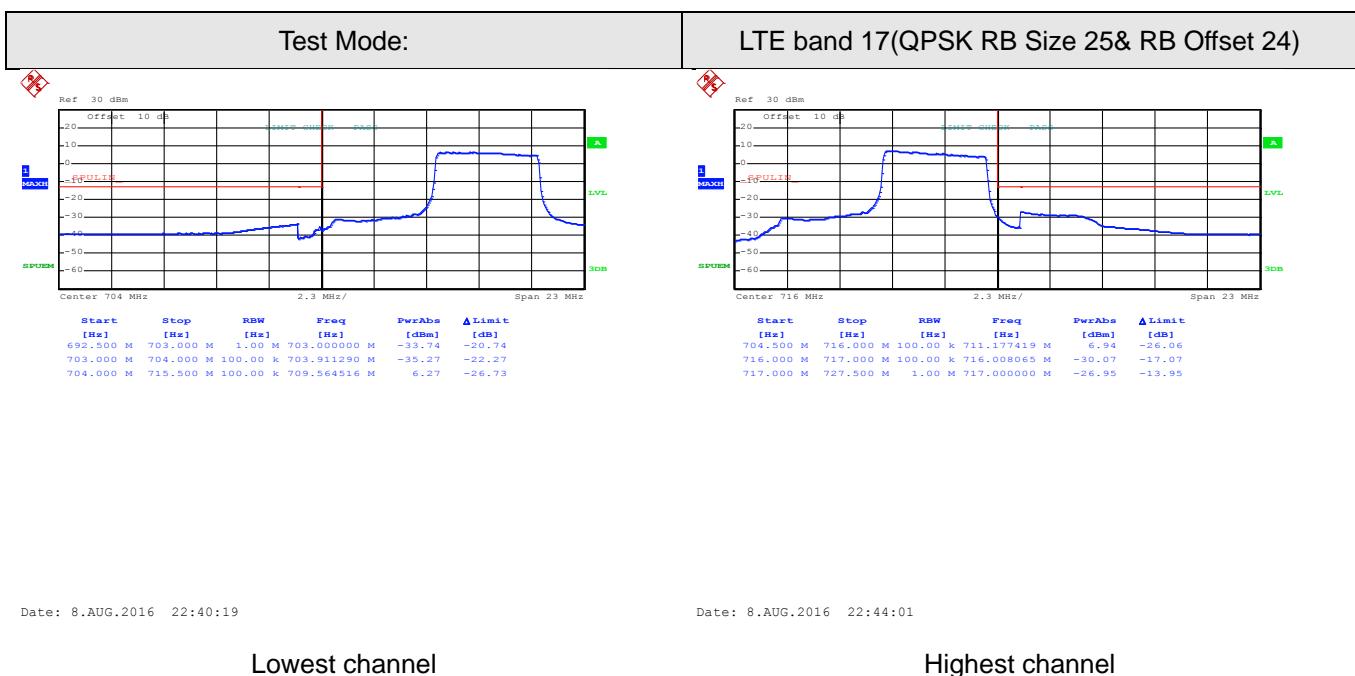
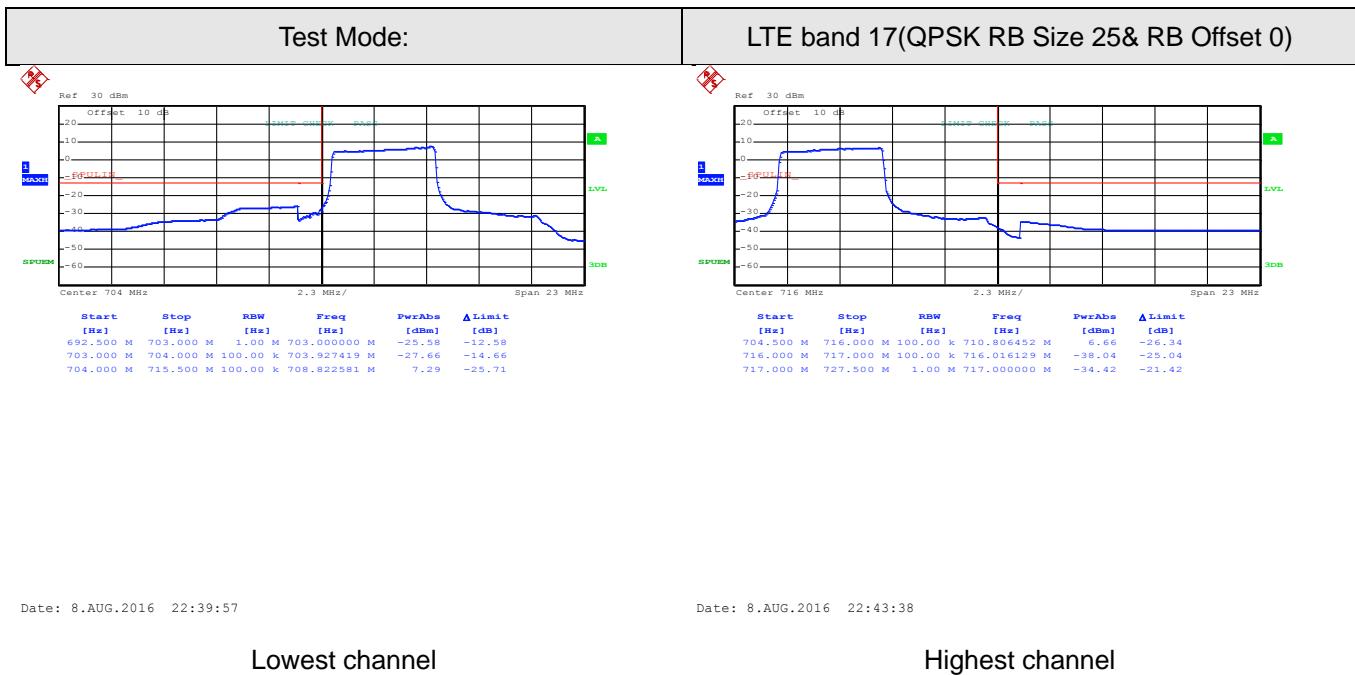
Lowest channel

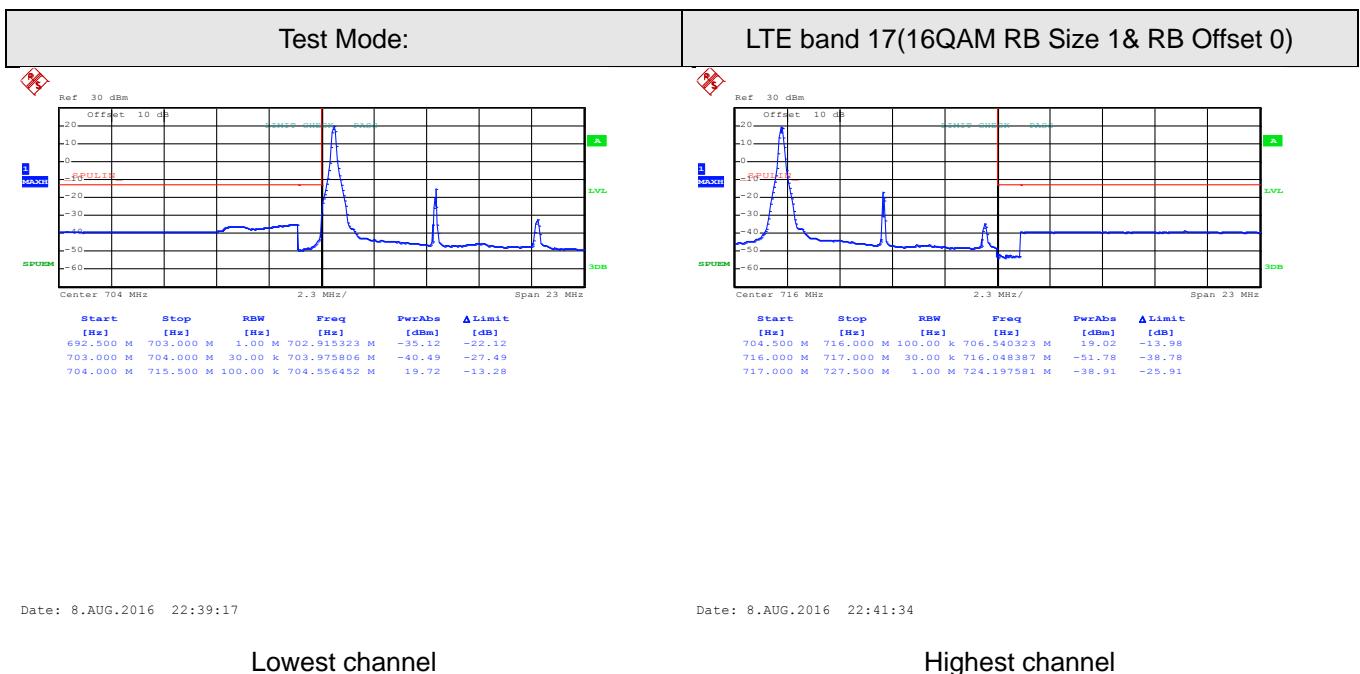
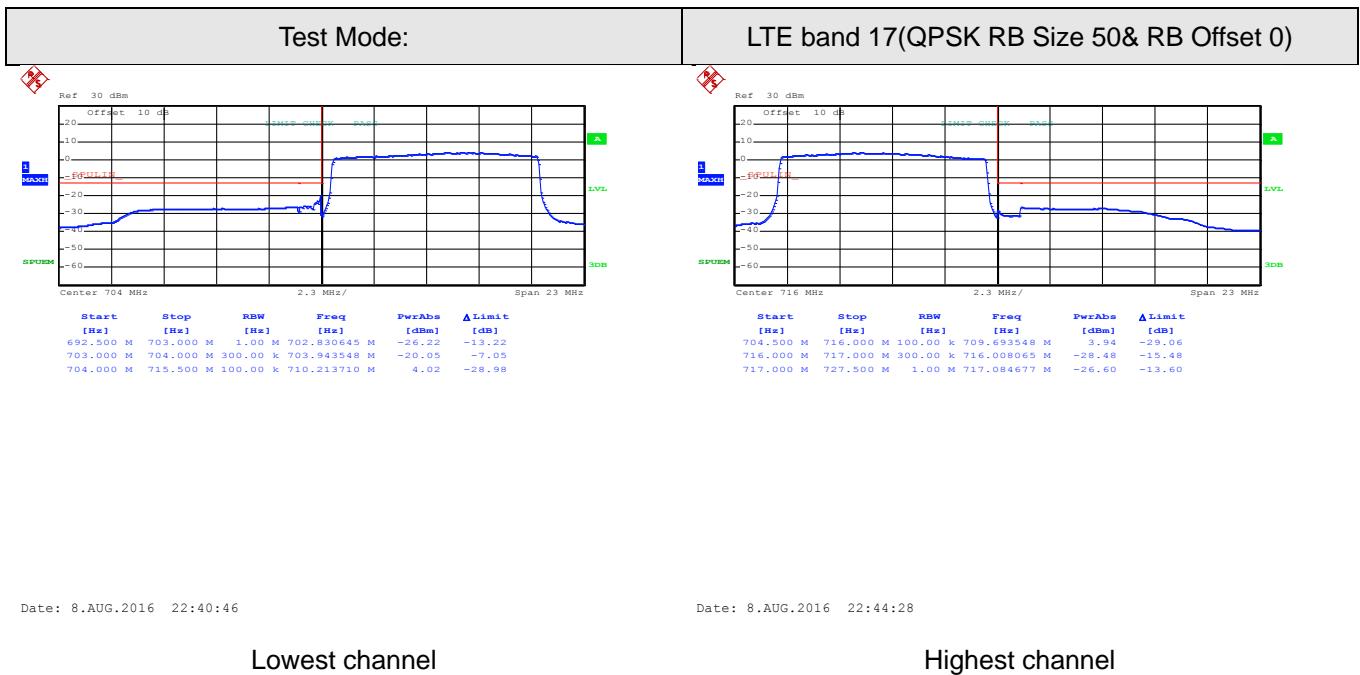
Highest channel

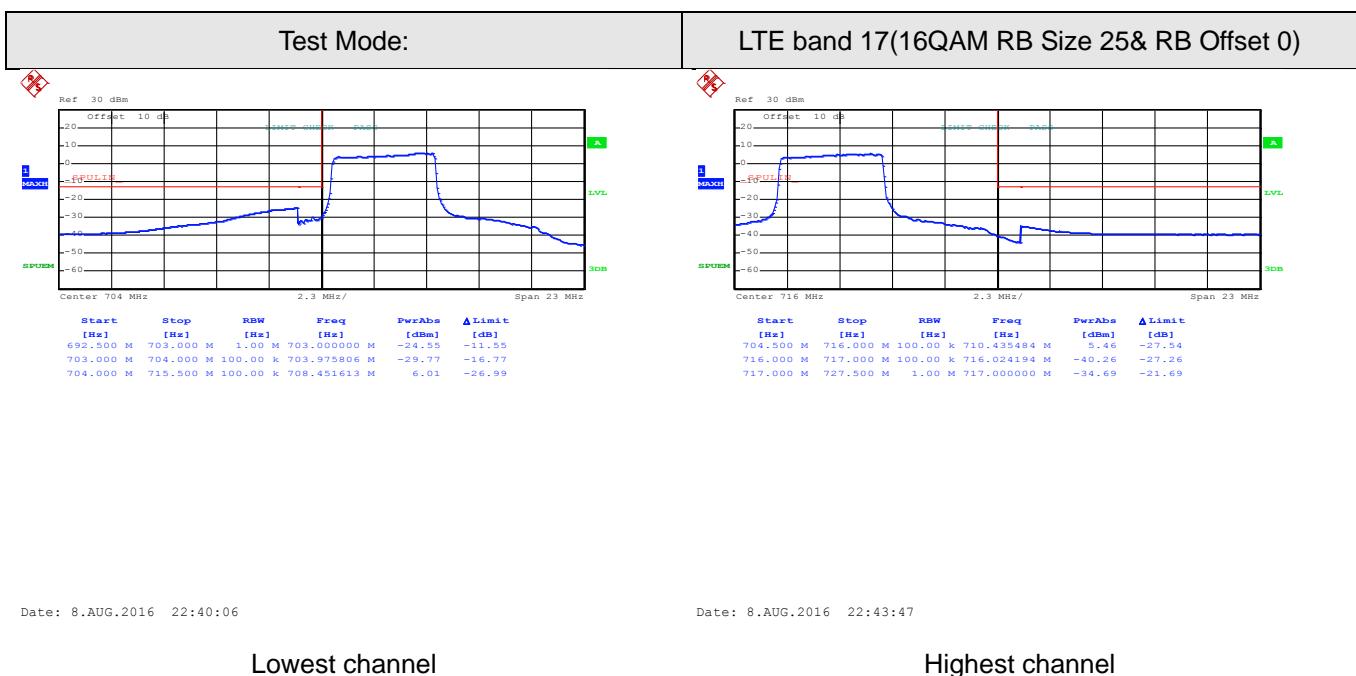
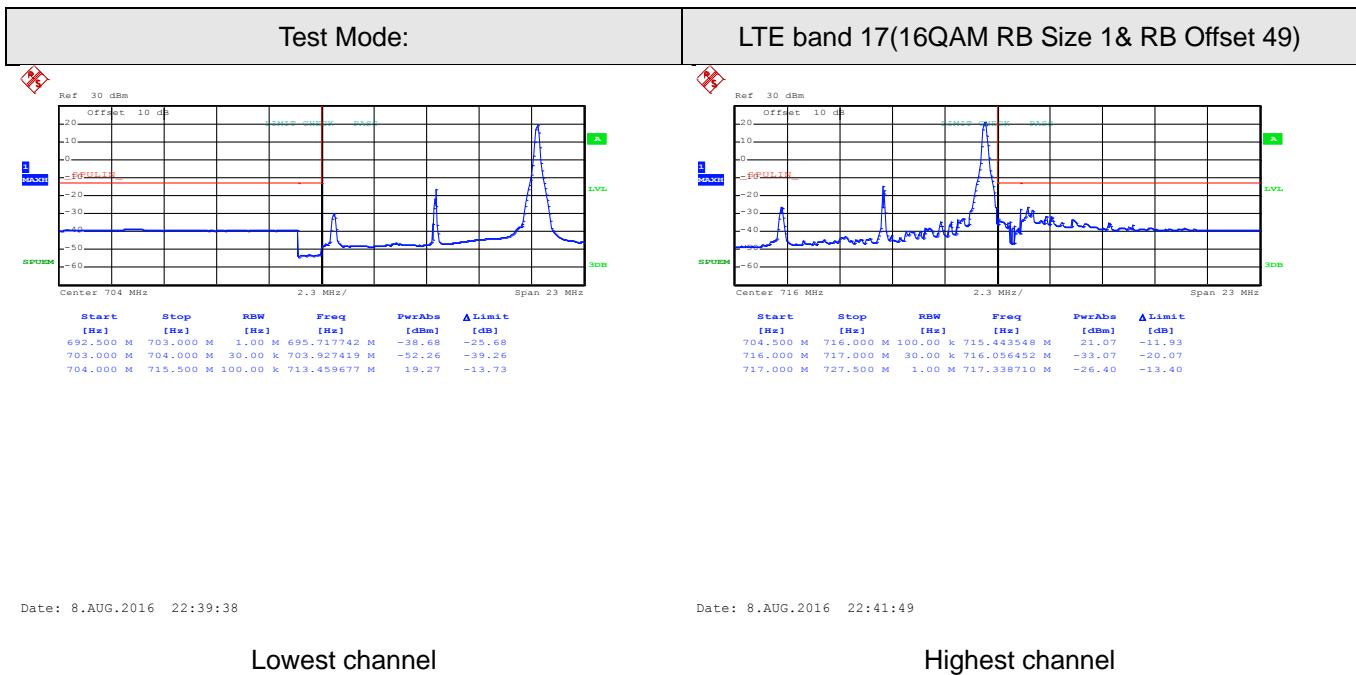


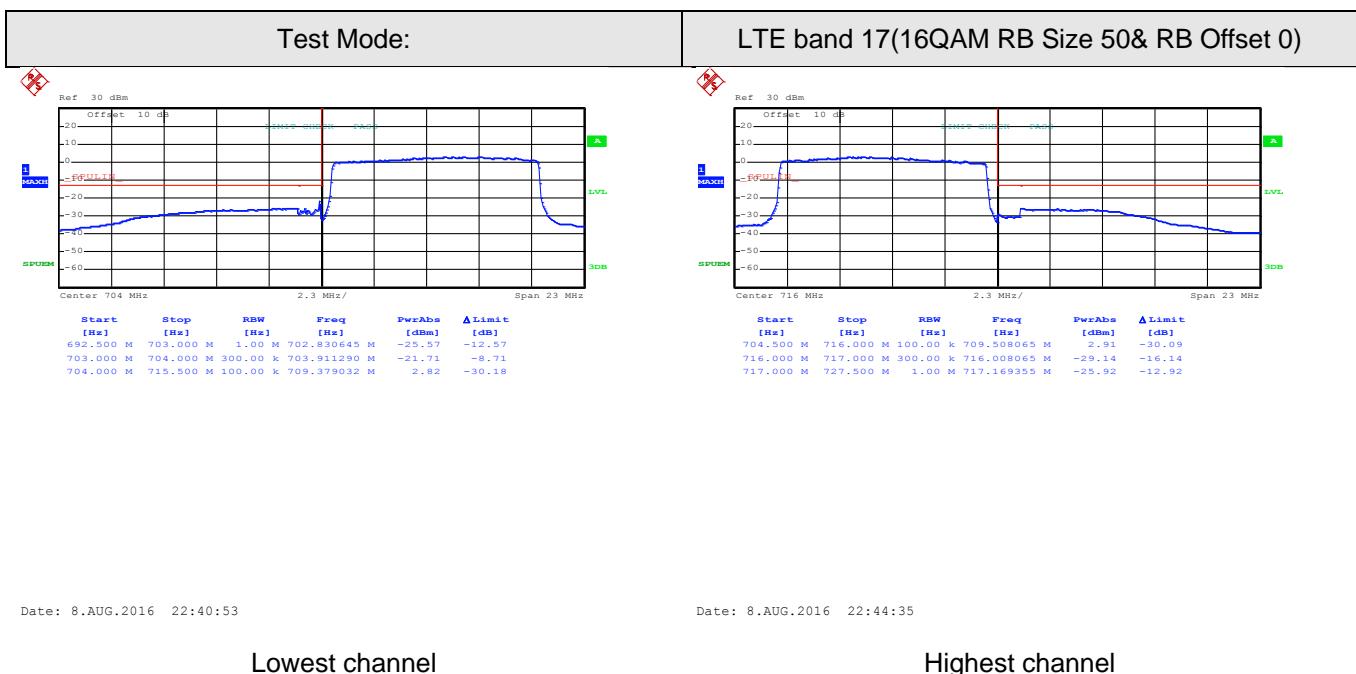
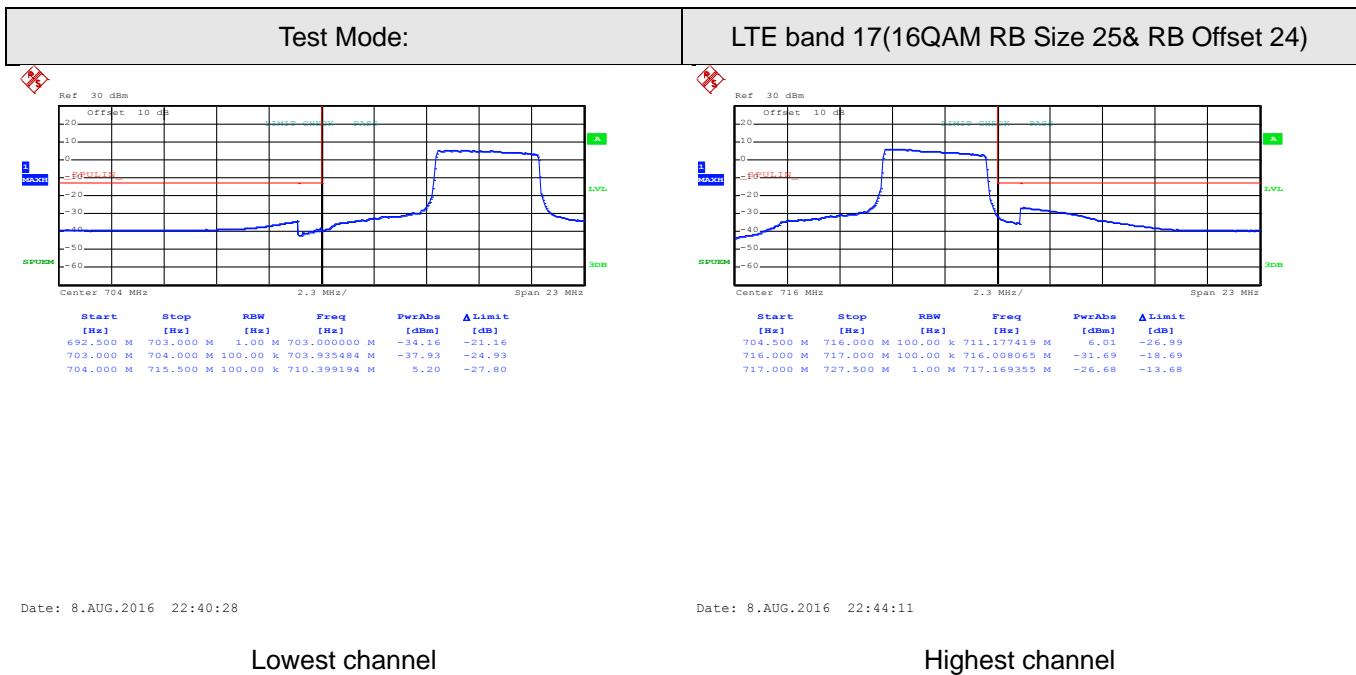
10MHz:











6.10 ERP, EIRP Measurement

Test Requirement:	FCC part 22.913 (a), 24.232 (c), part 27.50(c), part 27.50(d), part 27.50(h)
Test Method:	FCC part 2.1046
Limit:	LTE Band 2: 2W EIRP LTE Band 4: 1W EIRP LTE Band 5: 7W ERP LTE Band 7: 2W EIRP LTE Band 17: 3W ERP
Test setup:	<p>Below 1GHz</p> <p>Above 1GHz</p> <p>Substituted method:</p>

Test Procedure:	<ol style="list-style-type: none">1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated.3. ERP in frequency band below 1GHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows: $\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}$4. EIRP in frequency band above 1GHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows: $\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}$5. The worse case was relating to the conducted output power.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (worst case):**LTE band 2 part****Lowest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	26.46	33.00	Pass
					H	22.78		
1850.70	18607	16QAM	1.4	H	V	22.80	33.00	Pass
					H	21.08		
1.4MHz(RB size 3 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	22.26	33.00	Pass
					H	20.76		
1850.70	18607	16QAM	1.4	H	V	22.73	33.00	Pass
					H	20.01		
1.4MHz(RB size 6 & RB offset 0)								
1850.70	18607	QPSK	1.4	H	V	21.55	33.00	Pass
					H	20.12		
1850.70	18607	16QAM	1.4	H	V	20.51	33.00	Pass
					H	18.89		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1880.00	18900	QPSK	1.4	H	V	21.13	33.00	Pass
					H	18.37		
1880.00	18900	16QAM	1.4	H	V	19.87	33.00	Pass
					H	19.54		
1.4MHz(RB size 3 & RB offset 0)								
1880.00	18900	QPSK	1.4	H	V	20.30	33.00	Pass
					H	18.38		
1880.00	18900	16QAM	1.4	H	V	20.80	33.00	Pass
					H	18.74		
1.4MHz(RB size 6 & RB offset 0)								
1880.00	18900	QPSK	1.40	H	V	20.56	33.00	Pass
					H	19.05		
1880.00	18900	16QAM	1.40	H	V	21.13	33.00	Pass
					H	20.29		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	18.39	33.00	Pass
					H	18.35		
1909.30	19193	16QAM	1.4	H	V	20.85	33.00	Pass
					H	17.83		
1.4MHz(RB size 3 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	20.27	33.00	Pass
					H	19.56		
1909.30	19193	16QAM	1.4	H	V	19.86	33.00	Pass
					H	18.91		
1.4MHz(RB size 6 & RB offset 0)								
1909.30	19193	QPSK	1.4	H	V	19.81	33.00	Pass
					H	19.11		
1909.30	19193	16QAM	1.4	H	V	19.83	33.00	Pass
					H	19.02		

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	22.14	33.00	Pass
					H	20.09		
1860.00	18700	16QAM	20	H	V	22.16	33.00	Pass
					H	20.27		
20MHz(RB size 50 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	20.53	33.00	Pass
					H	19.54		
1860.00	18700	16QAM	20	H	V	20.80	33.00	Pass
					H	19.20		
20MHz(RB size 100 & RB offset 0)								
1860.00	18700	QPSK	20	H	V	20.12	33.00	Pass
					H	19.28		
1860.00	18700	16QAM	20	H	V	21.58	33.00	Pass
					H	20.01		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	21.36	33.00	Pass
					H	20.45		
1880.00	18900	16QAM	20	H	V	21.46	33.00	Pass
					H	20.76		
20MHz(RB size 50 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	19.63	33.00	Pass
					H	18.46		
1880.00	18900	16QAM	20	H	V	20.73	33.00	Pass
					H	19.63		
20MHz(RB size 100 & RB offset 0)								
1880.00	18900	QPSK	20	H	V	20.76	33.00	Pass
					H	19.46		
1880.00	18900	16QAM	20	H	V	22.05	33.00	Pass
					H	19.63		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	22.16	33.00	Pass
					H	20.43		
1900.00	19100	16QAM	20	H	V	21.77	33.00	Pass
					H	20.79		
20MHz(RB size 50 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	19.46	33.00	Pass
					H	19.63		
1900.00	19100	16QAM	20	H	V	20.15	33.00	Pass
					H	18.79		
20MHz(RB size 100 & RB offset 0)								
1900.00	19100	QPSK	20	H	V	20.43	33.00	Pass
					H	20.69		
1900.00	19100	16QAM	20	H	V	21.45	33.00	Pass
					H	18.76		

LTE band 4 part**Lowest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1710.70	19957	QPSK	1.4	H	V	25.81	30.00	Pass
					H	20.13		
1710.70	19957	16QAM	1.4	H	V	25.55	30.00	Pass
					H	19.23		
1.4MHz(RB size 3 & RB offset 0)								
1710.70	19957	QPSK	1.4	H	V	25.88	30.00	Pass
					H	22.33		
1710.70	19957	16QAM	1.4	H	V	25.68	30.00	Pass
					H	20.36		
1.4MHz(RB size 6 & RB offset 0)								
1710.70	19957	QPSK	1.4	H	V	24.36	30.00	Pass
					H	20.69		
1710.70	19957	16QAM	1.4	H	V	24.22	30.00	Pass
					H	19.65		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1732.50	20175	QPSK	1.4	H	V	24.13	30.00	Pass
					H	21.36		
1732.50	20175	16QAM	1.4	H	V	24.16	30.00	Pass
					H	20.32		
1.4MHz(RB size 3 & RB offset 0)								
1732.50	20175	QPSK	1.4	H	V	24.96	30.00	Pass
					H	22.57		
1732.50	20175	16QAM	1.4	H	V	24.31	30.00	Pass
					H	21.47		
1.4MHz(RB size 6 & RB offset 0)								
1732.50	20175	QPSK	1.4	H	V	23.63	30.00	Pass
					H	21.32		
1732.50	20175	16QAM	1.4	H	V	23.89	30.00	Pass
					H	20.01		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
1754.30	20393	QPSK	1.4	H	V	23.25	30.00	Pass
					H	22.69		
1754.30	20393	16QAM	1.4	H	V	23.45	30.00	Pass
					H	20.04		
1.4MHz(RB size 3 & RB offset 0)								
1754.30	20393	QPSK	1.4	H	V	24.67	30.00	Pass
					H	23.67		
1754.30	20393	16QAM	1.4	H	V	22.18	30.00	Pass
					H	21.79		
1.4MHz(RB size 6 & RB offset 0)								
1754.30	20393	QPSK	1.4	H	V	22.15	30.00	Pass
					H	22.98		
1754.30	20393	16QAM	1.4	H	V	22.45	30.00	Pass
					H	20.12		

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1720.00	20050	QPSK	20	H	V	25.81	30.00	Pass
					H	22.21		
1720.00	20050	16QAM	20	H	V	25.51	30.00	Pass
					H	20.30		
20MHz(RB size 50 & RB offset 0)								
1720.00	20050	QPSK	20	H	V	24.13	30.00	Pass
					H	21.42		
1720.00	20050	16QAM	20	H	V	24.21	30.00	Pass
					H	19.18		
20MHz(RB size 100 & RB offset 0)								
1720.00	20050	QPSK	20	H	V	22.85	30.00	Pass
					H	21.68		
1720.00	20050	16QAM	20	H	V	23.14	30.00	Pass
					H	19.03		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1732.50	20175	QPSK	20	H	V	24.63	30.00	Pass
					H	22.36		
1732.50	20175	16QAM	20	H	V	25.14	30.00	Pass
					H	21.69		
20MHz(RB size 50 & RB offset 0)								
1732.50	20175	QPSK	20	H	V	23.63	30.00	Pass
					H	22.45		
1732.50	20175	16QAM	20	H	V	23.69	30.00	Pass
					H	20.04		
20MHz(RB size 100 & RB offset 0)								
1732.50	20175	QPSK	20	H	V	21.45	30.00	Pass
					H	22.65		
1732.50	20175	16QAM	20	H	V	22.36	30.00	Pass
					H	20.79		

High channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
1745.00	20300	QPSK	20	H	V	23.15	30.00	Pass
					H	22.63		
1745.00	20300	16QAM	20	H	V	24.18	30.00	Pass
					H	22.04		
20MHz(RB size 50 & RB offset 0)								
1745.00	20300	QPSK	20	H	V	23.46	30.00	Pass
					H	22.14		
1745.00	20300	16QAM	20	H	V	23.58	30.00	Pass
					H	21.42		
20MHz(RB size 100 & RB offset 0)								
1745.00	20300	QPSK	20	H	V	22.63	30.00	Pass
					H	21.45		
1745.00	20300	16QAM	20	H	V	21.56	30.00	Pass
					H	20.36		

LTE band 5 part**Lowest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
824.70	20407	QPSK	1.4	H	V	20.13	38.45	Pass
					H	21.80		
824.70	20407	16QAM	1.4	H	V	22.76	38.45	Pass
					H	21.12		
1.4MHz(RB size 3& RB offset 0)								
824.70	20407	QPSK	1.4	H	V	22.78	38.45	Pass
					H	21.76		
824.70	20407	16QAM	1.4	H	V	22.89	38.45	Pass
					H	21.25		
1.4MHz(RB size 6& RB offset 0)								
824.70	20407	QPSK	1.4	H	V	21.36	38.45	Pass
					H	20.51		
824.70	20407	16QAM	1.4	H	V	21.56	38.45	Pass
					H	20.13		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
836.50	20525	QPSK	1.4	H	V	20.16	38.45	Pass
					H	21.36		
836.50	20525	16QAM	1.4	H	V	22.45	38.45	Pass
					H	21.25		
1.4MHz(RB size 3& RB offset 0)								
836.50	20525	QPSK	1.4	H	V	22.96	38.45	Pass
					H	22.65		
836.50	20525	16QAM	1.4	H	V	22.48	38.45	Pass
					H	21.95		
1.4MHz(RB size 6& RB offset 0)								
836.50	20525	QPSK	1.4	H	V	21.93	38.45	Pass
					H	20.02		
836.50	20525	16QAM	1.4	H	V	21.48	38.45	Pass
					H	21.96		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
1.4MHz(RB size 1 & RB offset 0)								
848.30	20643	QPSK	1.4	H	V	20.58	38.45	Pass
					H	21.96		
848.30	20643	16QAM	1.4	H	V	21.35	38.45	Pass
					H	21.47		
1.4MHz(RB size 3& RB offset 0)								
848.30	20643	QPSK	1.4	H	V	20.74	38.45	Pass
					H	21.42		
848.30	20643	16QAM	1.4	H	V	20.72	38.45	Pass
					H	21.32		
1.4MHz(RB size 6& RB offset 0)								
848.30	20643	QPSK	1.4	H	V	20.46	38.45	Pass
					H	21.52		
848.30	20643	16QAM	1.4	H	V	20.02	38.45	Pass
					H	21.37		

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
829.00	20450	QPSK	10	H	V	22.90	38.45	Pass
					H	21.17		
829.00	20450	16QAM	10	H	V	22.88	38.45	Pass
					H	21.24		
10MHz(RB size 25& RB offset 0)								
829.00	20450	QPSK	10	H	V	22.49	38.45	Pass
					H	21.46		
829.00	20450	16QAM	10	H	V	21.66	38.45	Pass
					H	20.86		
10MHz(RB size 50& RB offset 0)								
829.00	20450	QPSK	10	H	V	20.92	38.45	Pass
					H	18.47		
829.00	20450	16QAM	10	H	V	21.86	38.45	Pass
					H	17.46		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
836.50	20525	QPSK	10	H	V	21.42	38.45	Pass
					H	22.02		
836.50	20525	16QAM	10	H	V	21.25	38.45	Pass
					H	21.63		
10MHz(RB size 25& RB offset 0)								
836.50	20525	QPSK	10	H	V	20.47	38.45	Pass
					H	20.49		
836.50	20525	16QAM	10	H	V	21.24	38.45	Pass
					H	20.98		
10MHz(RB size 50 & RB offset 0)								
836.50	20525	QPSK	10	H	V	21.45	38.45	Pass
					H	22.25		
836.50	20525	16QAM	10	H	V	21.48	38.45	Pass
					H	22.03		

High channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
844.00	20600	QPSK	10	H	V	20.45	38.45	Pass
					H	21.32		
844.00	20600	16QAM	10	H	V	22.05	38.45	Pass
					H	21.85		
10MHz(RB size 25& RB offset 0)								
844.00	20600	QPSK	10	H	V	21.46	38.45	Pass
					H	22.96		
844.00	20600	16QAM	10	H	V	22.05	38.45	Pass
					H	21.74		
10MHz(RB size 50 & RB offset 0)								
844.00	20600	QPSK	10	H	V	21.95	38.45	Pass
					H	21.45		
844.00	20600	16QAM	10	H	V	22.41	38.45	Pass
					H	21.05		

LTE band 7 part**Lowest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
5MHz(RB size 1 & RB offset 0)								
2502.50	20775	QPSK	5	H	V	22.02	33.00	Pass
					H	19.08		
2502.50	20775	16QAM	5	H	V	21.14	33.00	Pass
					H	18.42		
5MHz(RB size 12 & RB offset 0)								
2502.50	20775	QPSK	5	H	V	20.44	33.00	Pass
					H	17.99		
2502.50	20775	16QAM	5	H	V	18.82	33.00	Pass
					H	18.24		
5MHz(RB size 25 & RB offset 0)								
2502.50	20775	QPSK	5	H	V	20.99	33.00	Pass
					H	19.54		
2502.50	20775	16QAM	5	H	V	21.00	33.00	Pass
					H	19.15		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
5MHz(RB size 1 & RB offset 0)								
2535.00	21100	QPSK	5	H	V	21.96	33.00	Pass
					H	20.47		
2535.00	21100	16QAM	5	H	V	22.36	33.00	Pass
					H	19.35		
5MHz(RB size 12 & RB offset 0)								
2535.00	21100	QPSK	5	H	V	20.65	33.00	Pass
					H	18.58		
2535.00	21100	16QAM	5	H	V	19.36	33.00	Pass
					H	18.57		
5MHz(RB size 25 & RB offset 0)								
2535.00	21100	QPSK	5	H	V	21.41	33.00	Pass
					H	20.15		
2535.00	21100	16QAM	5	H	V	21.82	33.00	Pass
					H	20.05		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
5MHz(RB size 1 & RB offset 0)								
2567.50	21425	QPSK	5	H	V	22.36	33.00	Pass
					H	21.01		
2567.50	21425	16QAM	5	H	V	22.48	33.00	Pass
					H	19.78		
5MHz(RB size 12 & RB offset 0)								
2567.50	21425	QPSK	5	H	V	20.16	33.00	Pass
					H	18.79		
2567.50	21425	16QAM	5	H	V	18.34	33.00	Pass
					H	19.26		
5MHz(RB size 25 & RB offset 0)								
2567.50	21425	QPSK	5	H	V	20.45	33.00	Pass
					H	21.32		
2567.50	21425	16QAM	5	H	V	21.78	33.00	Pass
					H	19.63		

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
2510.00	20850	QPSK	20	H	V	21.65	33.00	Pass
					H	19.39		
2510.00	20850	16QAM	20	H	V	22.04	33.00	Pass
					H	18.82		
20MHz(RB size 50 & RB offset 0)								
2510.00	20850	QPSK	20	H	V	21.22	33.00	Pass
					H	18.30		
2510.00	20850	16QAM	20	H	V	21.50	33.00	Pass
					H	19.97		
20MHz(RB size 100 & RB offset 0)								
2510.00	20850	QPSK	20	H	V	20.91	33.00	Pass
					H	19.54		
2510.00	20850	16QAM	20	H	V	22.14	33.00	Pass
					H	19.15		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
2535.00	21100	QPSK	20	H	V	20.36	33.00	Pass
					H	20.05		
2535.00	21100	16QAM	20	H	V	22.48	33.00	Pass
					H	19.67		
20MHz(RB size 50 & RB offset 0)								
2535.00	21100	QPSK	20	H	V	22.45	33.00	Pass
					H	19.79		
2535.00	21100	16QAM	20	H	V	21.45	33.00	Pass
					H	20.25		
20MHz(RB size 100 & RB offset 0)								
2535.00	21100	QPSK	20	H	V	20.64	33.00	Pass
					H	18.63		
2535.00	21100	16QAM	20	H	V	21.46	33.00	Pass
					H	20.35		

High channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
20MHz(RB size 1 & RB offset 0)								
2560.00	21350	QPSK	20	H	V	20.79	33.00	Pass
					H	19.64		
2560.00	21350	16QAM	20	H	V	21.34	33.00	Pass
					H	20.45		
20MHz(RB size 50 & RB offset 0)								
2560.00	21350	QPSK	20	H	V	21.46	33.00	Pass
					H	20.16		
2560.00	21350	16QAM	20	H	V	21.78	33.00	Pass
					H	20.43		
20MHz(RB size 100 & RB offset 0)								
2560.00	21350	QPSK	20	H	V	21.46	33.00	Pass
					H	19.48		
2560.00	21350	16QAM	20	H	V	21.58	33.00	Pass
					H	20.63		

**LTE band 17 part
Lowest channel**

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
5MHz(RB size 1 & RB offset 0)								
706.50	23755	QPSK	5	H	V	23.22	34.77	Pass
					H	23.32		
706.50	23755	16QAM	5	H	V	24.35	34.77	Pass
					H	23.45		
5MHz(RB size 12 & RB offset 0)								
706.50	23755	QPSK	5	H	V	23.35	34.77	Pass
					H	23.30		
706.50	23755	16QAM	5	H	V	24.18	34.77	Pass
					H	23.07		
5MHz(RB size 25 & RB offset 0)								
706.50	23755	QPSK	5	H	V	23.37	34.77	Pass
					H	23.34		
706.50	23755	16QAM	5	H	V	23.25	34.77	Pass
					H	23.10		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
5MHz(RB size 1 & RB offset 0)								
710.00	23790	QPSK	5	H	V	23.26	34.77	Pass
					H	23.52		
710.00	23790	16QAM	5	H	V	22.15	34.77	Pass
					H	23.49		
5MHz(RB size 12 & RB offset 0)								
710.00	23790	QPSK	5	H	V	22.45	34.77	Pass
					H	23.63		
710.00	23790	16QAM	5	H	V	23.48	34.77	Pass
					H	22.41		
5MHz(RB size 25 & RB offset 0)								
710.00	23790	QPSK	5	H	V	23.04	34.77	Pass
					H	22.79		
710.00	23790	16QAM	5	H	V	22.49	34.77	Pass
					H	21.46		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
5MHz(RB size 1 & RB offset 0)								
713.50	23825	QPSK	5	H	V	22.15	34.77	Pass
					H	23.49		
713.50	23825	16QAM	5	H	V	22.36	34.77	Pass
					H	21.48		
5MHz(RB size 12 & RB offset 0)								
713.50	23825	QPSK	5	H	V	23.75	34.77	Pass
					H	22.49		
713.50	23825	16QAM	5	H	V	22.36	34.77	Pass
					H	23.18		
5MHz(RB size 25 & RB offset 0)								
713.50	23825	QPSK	5	H	V	22.45	34.77	Pass
					H	23.95		
713.50	23825	16QAM	5	H	V	23.42	34.77	Pass
					H	22.15		

Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
709.00	23780	QPSK	10	H	V	23.48	34.77	Pass
					H	23.44		
709.00	23780	16QAM	10	H	V	23.85	34.77	Pass
					H	23.83		
10MHz(RB size 25& RB offset 0)								
709.00	23780	QPSK	10	H	V	23.61	34.77	Pass
					H	23.44		
709.00	23780	16QAM	10	H	V	23.16	34.77	Pass
					H	23.19		
10MHz(RB size 50& RB offset 0)								
709.00	23780	QPSK	10	H	V	23.50	34.77	Pass
					H	23.30		
709.00	23780	16QAM	10	H	V	23.46	34.77	Pass
					H	23.27		

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
710.00	23790	QPSK	10	H	V	22.46	34.77	Pass
					H	23.63		
710.00	23790	16QAM	10	H	V	22.15	34.77	Pass
					H	22.78		
10MHz(RB size 25& RB offset 0)								
710.00	23790	QPSK	10	H	V	22.54	34.77	Pass
					H	23.63		
710.00	23790	16QAM	10	H	V	22.02	34.77	Pass
					H	23.46		
10MHz(RB size 50& RB offset 0)								
710.00	23790	QPSK	10	H	V	22.75	34.77	Pass
					H	23.02		
710.00	23790	16QAM	10	H	V	21.45	34.77	Pass
					H	22.02		

Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
10MHz(RB size 1 & RB offset 0)								
711.00	23800	QPSK	10	H	V	22.15	34.77	Pass
					H	23.63		
711.00	23800	16QAM	10	H	V	22.79	34.77	Pass
					H	21.25		
10MHz(RB size 25& RB offset 0)								
711.00	23800	QPSK	10	H	V	23.32	34.77	Pass
					H	23.15		
711.00	23800	16QAM	10	H	V	22.46	34.77	Pass
					H	23.95		
10MHz(RB size 50& RB offset 0)								
711.00	23800	QPSK	10	H	V	22.15	34.77	Pass
					H	23.63		
711.00	23800	16QAM	10	H	V	23.25	34.77	Pass
					H	22.48		

6.11 Field strength of spurious radiation measurement

Test Requirement:	FCC Part 22.917(a), Part 24.238 (a), Part 27.53(g), Part 27.53(m), Part 27.53(h)
Test Method:	FCC part2.1053
Limit:	LTE Band 2, LTE Band 4, LTE Band 5 and LTE Band 17: -13dBm, LTE Band 7: -25dBm
Test setup:	<p>Below 1GHz</p> <p>Above 1GHz</p> <p>Substituted method:</p>
Test Procedure:	<ol style="list-style-type: none"> The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission

	<p>was determined using the substitution method.</p> <p>4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.</p> $\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details.
Test results:	Passed

Measurement Data (worst case):**Below 1GHz:**

The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

Above 1GHz

For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE band 2 part: 1.4MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3701.40	Vertical	-48.70	-13.00	Pass
5552.10	V	-41.20		
7402.00	V	-37.48		
3701.40	Horizontal	-48.08		
5552.10	H	-35.87		
7402.00	H	-36.95		
Middle				
3760.00	Vertical	-49.21	-13.00	Pass
5640.00	V	-41.66		
7520.00	V	-35.49		
3760.00	Horizontal	-48.11		
5640.00	H	-40.79		
7520.00	H	-36.43		
Highest				
3816.60	Vertical	-45.90	-13.00	Pass
5724.90	V	-39.96		
7633.20	V	-37.90		
3816.60	Horizontal	-46.35		
5724.90	H	-40.81		
7633.20	H	-38.24		

3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3703.00	Vertical	-48.79	-13.00	Pass
5554.50	V	-43.16		
7406.00	V	-40.12		
3703.00	Horizontal	-46.97		
5554.50	H	-39.72		
7406.00	H	-40.16		
Middle				
3760.00	Vertical	-48.91	-13.00	Pass
5640.00	V	-42.36		
7520.00	V	-42.18		
3760.00	Horizontal	-45.13		
5640.00	H	-40.70		
7520.00	H	-36.28		
Highest				
3817.00	Vertical	-48.21	-13.00	Pass
5725.50	V	-42.37		
7634.00	V	-40.18		
3817.00	Horizontal	-45.91		
5725.50	H	-39.62		
7634.00	H	-38.91		

5MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3705.00	Vertical	-48.32	-13.00	Pass
5557.50	V	-42.61		
7410.00	V	-36.84		
3705.00	Horizontal	-48.47		
5557.50	H	-36.97		
7410.00	H	-36.27		
Middle				
3760.00	Vertical	-49.51	-13.00	Pass
5640.00	V	-41.57		
7520.00	V	-36.95		
3760.00	Horizontal	-47.96		
5640.00	H	-40.41		
7520.00	H	-36.95		
Highest				
3815.00	Vertical	-44.78	-13.00	Pass
5722.50	V	-40.19		
7630.00	V	-37.84		
3815.00	Horizontal	-46.91		
5722.50	H	-42.18		
7630.00	H	-39.67		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3710.00	Vertical	-47.94	-13.00	Pass
5565.00	V	-42.19		
7420.00	V	-39.75		
3710.00	Horizontal	-45.19		
5565.00	H	-38.97		
7420.00	H	-35.12		
Middle				
3760.00	Vertical	-48.12	-13.00	Pass
5640.00	V	-42.67		
7520.00	V	-40.19		
3760.00	Horizontal	-45.78		
5640.00	H	-39.63		
7520.00	H	-35.15		
Highest				
3810.00	Vertical	-49.78	-13.00	Pass
5715.00	V	-42.16		
7620.00	V	-39.42		
3810.00	Horizontal	-46.18		
5715.00	H	-38.91		
7620.00	H	-37.42		

15MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3715.00	Vertical	-47.91	-13.00	Pass
5572.50	V	-42.63		
7430.00	V	-37.89		
3715.00	Horizontal	-47.15		
5572.50	H	-35.87		
7430.00	H	-35.96		
Middle				
3760.00	Vertical	-48.72	-13.00	Pass
5640.00	V	-42.18		
7520.00	V	-36.79		
3760.00	Horizontal	-47.85		
5640.00	H	-40.18		
7520.00	H	-36.45		
Highest				
3805.00	Vertical	-44.18	-13.00	Pass
5707.50	V	-40.79		
7610.00	V	-37.95		
3805.00	Horizontal	-45.18		
5707.50	H	-42.19		
7610.00	H	-40.19		

20MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3720.00	Vertical	-46.21	-13.00	Pass
5580.00	V	-42.76		
7440.00	V	-38.94		
3720.00	Horizontal	-48.12		
5580.00	H	-36.18		
7440.00	H	-36.48		
Middle				
3760.00	Vertical	-47.18	-13.00	Pass
5640.00	V	-46.18		
7520.00	V	-38.79		
3760.00	Horizontal	-49.18		
5640.00	H	-35.27		
7520.00	H	-37.94		
Highest				
3800.00	Vertical	-48.16	-13.00	Pass
5700.00	V	-47.94		
7600.00	V	-38.95		
3800.00	Horizontal	-48.15		
5700.00	H	-37.46		
7600.00	H	-38.91		

LTE Band 4 Part:

1.4MHz(RB size 1 & RB offset 0) for QPSK

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3421.40	Vertical	-47.65	-13.00	Pass
5132.10	V	-44.03		
6842.80	V	-40.40		
3421.40	Horizontal	-46.68		
5132.10	H	-43.11		
6842.80	H	-39.18		
Middle				
3465.00	Vertical	-47.59	-13.00	Pass
5197.50	V	-42.49		
6930.00	V	-40.26		
3465.00	Horizontal	-47.03		
5197.50	H	-42.95		
6930.00	H	-39.91		
Highest				
3508.60	Vertical	-49.05	-13.00	Pass
5262.90	V	-39.56		
7017.20	V	-37.30		
3508.60	Horizontal	-47.75		
5262.90	H	-41.18		
7017.20	H	-36.22		

3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3423.00	Vertical	-48.96	-13.00	Pass
5134.50	V	-42.13		
6846.00	V	-41.23		
3423.00	Horizontal	-47.81		
5134.50	H	-42.13		
6846.00	H	-40.18		
Middle				
3465.00	Vertical	-46.79	-13.00	Pass
5197.50	V	-42.13		
6930.00	V	-40.18		
3465.00	Horizontal	-47.91		
5197.50	H	-40.16		
6930.00	H	-39.58		
Highest				
3507.00	Vertical	-46.79	-13.00	Pass
5260.50	V	-43.15		
7014.00	V	-41.76		
3507.00	Horizontal	-45.12		
5260.50	H	-42.78		
7014.00	H	-36.65		

5MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3425.00	Vertical	-46.35	-13.00	Pass
5137.50	V	-45.97		
6850.00	V	-41.24		
3425.00	Horizontal	-45.91		
5137.50	H	-42.37		
6850.00	H	-40.19		
Middle				
3465.00	Vertical	-46.79	-13.00	Pass
5197.50	V	-42.15		
6930.00	V	-40.79		
3465.00	Horizontal	-46.32		
5197.50	H	-41.78		
6930.00	H	-40.13		
Highest				
3505.00	Vertical	-49.35	-13.00	Pass
5257.50	V	-40.18		
7010.00	V	-38.97		
3505.00	Horizontal	-48.31		
5257.50	H	-41.52		
7010.00	H	-37.95		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3430.00	Vertical	-47.15	-13.00	Pass
5145.00	V	-42.16		
6860.00	V	-40.19		
3430.00	Horizontal	-47.15		
5145.00	H	-43.20		
6860.00	H	-40.79		
Middle				
3465.00	Vertical	-46.19	-13.00	Pass
5197.50	V	-42.78		
6930.00	V	-40.18		
3465.00	Horizontal	-48.97		
5197.50	H	-39.63		
6930.00	H	-40.15		
Highest				
3500.00	Vertical	-47.81	-13.00	Pass
5250.00	V	-43.61		
7000.00	V	-40.15		
3500.00	Horizontal	-45.97		
5250.00	H	-42.91		
7000.00	H	-36.63		

15MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3435.00	Vertical	-46.31	-13.00	Pass
5152.50	V	-45.78		
6870.00	V	-42.16		
3435.00	Horizontal	-45.19		
5152.50	H	-42.79		
6870.00	H	-40.15		
Middle				
3465.00	Vertical	-46.12	-13.00	Pass
5197.50	V	-42.79		
6930.00	V	-40.13		
3465.00	Horizontal	-46.73		
5197.50	H	-42.15		
6930.00	H	-39.78		
Highest				
3495.00	Vertical	-49.13	-13.00	Pass
5242.50	V	-40.19		
6990.00	V	-39.45		
3495.00	Horizontal	-48.79		
5242.50	H	-41.34		
6990.00	H	-38.64		

20MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
3440.00	Vertical	-46.84	-13.00	Pass
5160.00	V	-42.83		
6880.00	V	-40.66		
3440.00	Horizontal	-46.17		
5160.00	H	-43.55		
6880.00	H	-39.98		
Middle				
3465.00	Vertical	-46.95	-13.00	Pass
5197.50	V	-42.33		
6930.00	V	-39.60		
3465.00	Horizontal	-47.75		
5197.50	H	-39.68		
6930.00	H	-39.63		
Highest				
3490.00	Vertical	-47.19	-13.00	Pass
5235.00	V	-43.17		
6980.00	V	-39.72		
3490.00	Horizontal	-45.57		
5235.00	H	-42.14		
6980.00	H	-35.85		

LTE Band 5 Part: 1.4MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1649.40	Vertical	-32.54	-13	Pass
2474.10	V	-52.60		
3298.80	V	-59.63		
1649.40	Horizontal	-40.15		
2474.10	H	-52.48		
3298.80	H	-38.92		
Middle				
1673.00	Vertical	-31.25	-13	Pass
2509.50	V	-54.79		
3346.00	V	-60.34		
1673.00	Horizontal	-39.65		
2509.50	H	-51.45		
3346.00	H	-37.96		
Highest				
1696.60	Vertical	-32.46	-13	Pass
2544.90	V	-55.97		
3393.20	V	-60.02		
1696.60	Horizontal	-39.54		
2544.90	H	-52.49		
3393.20	H	-38.79		

3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1651.00	Vertical	-31.53	-13	Pass
2476.50	V	-51.56		
3302.00	V	-39.32		
1651.00	Horizontal	-39.57		
2476.50	H	-51.22		
3302.00	H	-39.31		
Middle				
1673.00	Vertical	-35.68	-13	Pass
2509.50	V	-53.15		
3346.00	V	-46.43		
1673.00	Horizontal	-42.83		
2509.50	H	-51.92		
3346.00	H	-48.27		
Highest				
1695.00	Vertical	-36.40	-13	Pass
2542.50	V	-47.10		
3390.00	V	-43.86		
1695.00	Horizontal	-42.01		
2542.50	H	-48.85		
3390.00	H	-44.28		

5MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1653.00	Vertical	-32.45	-13	Pass
2479.50	V	-54.69		
3306.00	V	-59.76		
1653.00	Horizontal	-40.19		
2479.50	H	-53.68		
3306.00	H	-39.72		
Middle				
1673.00	Vertical	-32.42	-13	Pass
2509.50	V	-54.79		
3346.00	V	-59.63		
1673.00	Horizontal	-38.25		
2509.50	H	-52.15		
3346.00	H	-38.94		
Highest				
1693.00	Vertical	-32.42	-13	Pass
2539.50	V	-54.16		
3386.00	V	-59.76		
1693.00	Horizontal	-38.64		
2539.50	H	-52.49		
3386.00	H	-38.97		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1658.00	Vertical	-31.25	-13	Pass
2487.00	V	-52.64		
3316.00	V	-40.31		
1658.00	Horizontal	-40.39		
2487.00	H	-52.15		
3316.00	H	-38.94		
Middle				
1673.00	Vertical	-36.54	-13	Pass
2509.50	V	-54.81		
3346.00	V	-46.79		
1673.00	Horizontal	-42.15		
2509.50	H	-51.36		
3346.00	H	-48.96		
Highest				
1688.00	Vertical	-37.84	-13	Pass
2532.00	V	-48.19		
3376.00	V	-42.63		
1688.00	Horizontal	-42.18		
2532.00	H	-48.79		
3376.00	H	-45.78		

LTE Band 7 Part:

5MHz(RB size 1 & RB offset 0) for QPSK

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
5005.00	Vertical	-43.11	-25.00	Pass
7507.50	V	-35.24		
10010.00	V	-35.61		
5005.00	Horizontal	-41.26		
7507.50	H	-38.38		
10010.00	H	-36.54		
Middle				
5070.00	Vertical	-43.46	-25.00	Pass
7605.00	V	-38.40		
10140.00	V	-35.85		
5070.00	Horizontal	-42.55		
7605.00	H	-38.96		
10140.00	H	-35.68		
Highest				
5135.00	Vertical	-43.62	-25.00	Pass
7702.50	V	-36.39		
10270.00	V	-33.63		
5135.00	Horizontal	-43.81		
7702.50	H	-36.56		
10270.00	H	-33.84		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
5010.00	Vertical	-42.64	-25.00	Pass
7515.00	V	-39.75		
10020.00	V	-36.25		
5010.00	Horizontal	-40.71		
7515.00	H	-40.58		
10020.00	H	-37.95		
Middle				
5070.00	Vertical	-43.61	-25.00	Pass
7605.00	V	-39.54		
10140.00	V	-36.02		
5070.00	Horizontal	-43.15		
7605.00	H	-38.49		
10140.00	H	-36.72		
Highest				
5130.00	Vertical	-43.15	-25.00	Pass
7695.00	V	-37.84		
10260.00	V	-35.18		
5130.00	Horizontal	-42.79		
7695.00	H	-38.63		
10260.00	H	-34.52		

15MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
5015.00	Vertical	-42.61	-25.00	Pass
7522.50	V	-36.42		
10030.00	V	-36.95		
5015.00	Horizontal	-42.15		
7522.50	H	-39.74		
10030.00	H	-37.54		
Middle				
5070.00	Vertical	-42.16	-25.00	Pass
7605.00	V	-39.54		
10140.00	V	-36.54		
5070.00	Horizontal	-42.15		
7605.00	H	-38.79		
10140.00	H	-36.72		
Highest				
5125.00	Vertical	-42.16	-25.00	Pass
7687.50	V	-36.45		
10250.00	V	-34.81		
5125.00	Horizontal	-42.51		
7687.50	H	-37.94		
10250.00	H	-34.75		

20MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
5020.00	Vertical	-43.80	-25.00	Pass
7530.00	V	-38.58		
10040.00	V	-36.35		
5020.00	Horizontal	-39.75		
7530.00	H	-39.12		
10040.00	H	-36.62		
Middle				
5070.00	Vertical	-43.07	-25.00	Pass
7605.00	V	-38.70		
10140.00	V	-35.69		
5070.00	Horizontal	-43.34		
7605.00	H	-37.87		
10140.00	H	-35.54		
Highest				
5120.00	Vertical	-43.73	-25.00	Pass
7680.00	V	-36.55		
10240.00	V	-34.28		
5120.00	Horizontal	-43.15		
7680.00	H	-37.61		
10240.00	H	-33.96		

LTE Band 17 Part:

5MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1413.00	Vertical	-53.81	-13.00	Pass
2119.50	V	-44.89		
2826.00	V	-49.48		
1413.00	Horizontal	-56.89		
2119.50	H	-43.82		
2826.00	H	-51.28		
Middle				
1420.00	Vertical	-53.39	-13.00	Pass
2130.00	V	-45.33		
2840.00	V	-47.53		
1420.00	Horizontal	-46.53		
2130.00	H	-46.51		
2840.00	H	-46.96		
Highest				
1427.00	Vertical	-55.55	-13.00	Pass
2140.50	V	-44.38		
2854.00	V	-49.81		
1427.00	Horizontal	-56.77		
2140.50	H	-51.56		
2854.00	H	-50.62		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest				
1418.00	Vertical	-54.61	-13.00	Pass
2127.00	V	-43.61		
2836.00	V	-50.79		
1418.00	Horizontal	-56.32		
2127.00	H	-43.15		
2836.00	H	-52.32		
Middle				
1420.00	Vertical	-54.18	-13.00	Pass
2130.00	V	-45.96		
2840.00	V	-48.79		
1420.00	Horizontal	-47.12		
2130.00	H	-46.13		
2840.00	H	-46.85		
Highest				
1422.00	Vertical	-54.79	-13.00	Pass
2133.00	V	-46.25		
2844.00	V	-50.18		
1422.00	Horizontal	-56.96		
2133.00	H	-51.45		
2844.00	H	-50.78		

6.12 Frequency stability V.S. Temperature measurement

Test Requirement:	FCC Part2.1055(a)(1)(b)
Test Method:	FCC Part2.1055(a)(1)(b)
Limit:	±2.5ppm
Test setup:	<p style="text-align: center;">Temperature Chamber</p> <p style="text-align: center;">Note : Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> 1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	All three channels of all modulations have been tested, but only the worst channel and the worst modulation show in this test item.

Measurement Data (the worst channel):

LTE Band 2(QPSK):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	163	0.086702	±2.5	Pass
	-20	141	0.075000		
	-10	120	0.063830		
	0	130	0.069149		
	10	145	0.077128		
	20	160	0.085106		
	30	127	0.067553		
	40	138	0.073404		
	50	129	0.068617		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	178	0.094681	±2.5	Pass
	-20	166	0.088298		
	-10	145	0.077128		
	0	158	0.084043		
	10	155	0.082447		
	20	129	0.068617		
	30	136	0.072340		
	40	147	0.078191		
	50	150	0.079787		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	179	0.095213	±2.5	Pass
	-20	166	0.088298		
	-10	158	0.084043		
	0	152	0.080851		
	10	133	0.070745		
	20	147	0.078191		
	30	175	0.093085		
	40	169	0.089894		
	50	157	0.083511		

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	174	0.092553	±2.5	Pass
	-20	152	0.080851		
	-10	133	0.070745		
	0	165	0.087766		
	10	166	0.088298		
	20	133	0.070745		
	30	147	0.078191		
	40	120	0.063830		
	50	138	0.073404		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	177	0.094149	±2.5	Pass
	-20	152	0.080851		
	-10	166	0.088298		
	0	169	0.089894		
	10	152	0.080851		
	20	147	0.078191		
	30	143	0.076064		
	40	138	0.073404		
	50	128	0.068085		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	188	0.100000	±2.5	Pass
	-20	163	0.086702		
	-10	147	0.078191		
	0	152	0.080851		
	10	136	0.072340		
	20	174	0.092553		
	30	178	0.094681		
	40	166	0.088298		
	50	169	0.089894		

LTE Band 2(16QAM):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	169	0.089894	±2.5	Pass
	-20	157	0.083511		
	-10	142	0.075532		
	0	136	0.072340		
	10	148	0.078723		
	20	137	0.072872		
	30	160	0.085106		
	40	155	0.082447		
	50	142	0.075532		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.088298	±2.5	Pass
	-20	142	0.075532		
	-10	133	0.070745		
	0	150	0.079787		
	10	142	0.075532		
	20	160	0.085106		
	30	128	0.068085		
	40	124	0.065957		
	50	108	0.057447		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	180	0.095745	±2.5	Pass
	-20	152	0.080851		
	-10	133	0.070745		
	0	174	0.092553		
	10	178	0.094681		
	20	158	0.084043		
	30	164	0.087234		
	40	107	0.056915		
	50	129	0.068617		

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	185	0.098404	±2.5	Pass
	-20	163	0.086702		
	-10	157	0.083511		
	0	145	0.077128		
	10	128	0.068085		
	20	148	0.078723		
	30	169	0.089894		
	40	128	0.068085		
	50	147	0.078191		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	177	0.094149	±2.5	Pass
	-20	163	0.086702		
	-10	152	0.080851		
	0	149	0.079255		
	10	128	0.068085		
	20	137	0.072872		
	30	128	0.068085		
	40	162	0.086170		
	50	148	0.078723		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	186	0.098936	±2.5	Pass
	-20	147	0.078191		
	-10	159	0.084574		
	0	163	0.086702		
	10	180	0.095745		
	20	122	0.064894		
	30	136	0.072340		
	40	141	0.075000		
	50	174	0.092553		

LTE Band 4(QPSK):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	163	0.094084	±2.5	Pass
	-20	155	0.089466		
	-10	147	0.084848		
	0	129	0.074459		
	10	160	0.092352		
	20	158	0.091198		
	30	144	0.083117		
	40	142	0.081962		
	50	123	0.070996		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	189	0.109091	±2.5	Pass
	-20	163	0.094084		
	-10	157	0.090620		
	0	148	0.085426		
	10	128	0.073882		
	20	108	0.062338		
	30	136	0.078499		
	40	147	0.084848		
	50	105	0.060606		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	167	0.096392	±2.5	Pass
	-20	152	0.087734		
	-10	148	0.085426		
	0	136	0.078499		
	10	128	0.073882		
	20	127	0.073304		
	30	108	0.062338		
	40	122	0.070418		
	50	141	0.081385		

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	190	0.109668	±2.5	Pass
	-20	158	0.091198		
	-10	146	0.084271		
	0	174	0.100433		
	10	128	0.073882		
	20	136	0.078499		
	30	155	0.089466		
	40	185	0.106782		
	50	177	0.102165		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	168	0.096970	±2.5	Pass
	-20	155	0.089466		
	-10	163	0.094084		
	0	128	0.073882		
	10	155	0.089466		
	20	147	0.084848		
	30	136	0.078499		
	40	128	0.073882		
	50	151	0.087157		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	174	0.100433	±2.5	Pass
	-20	166	0.095815		
	-10	155	0.089466		
	0	124	0.071573		
	10	141	0.081385		
	20	139	0.080231		
	30	128	0.073882		
	40	156	0.090043		
	50	144	0.083117		

LTE Band 4(16QAM):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	177	0.102165	±2.5	Pass
	-20	149	0.086003		
	-10	163	0.094084		
	0	125	0.072150		
	10	133	0.076768		
	20	145	0.083694		
	30	148	0.085426		
	40	163	0.094084		
	50	159	0.091775		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	146	0.084271	±2.5	Pass
	-20	125	0.072150		
	-10	136	0.078499		
	0	108	0.062338		
	10	122	0.070418		
	20	118	0.068110		
	30	142	0.081962		
	40	137	0.079076		
	50	125	0.072150		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	195	0.112554	±2.5	Pass
	-20	156	0.090043		
	-10	147	0.084848		
	0	128	0.073882		
	10	136	0.078499		
	20	156	0.090043		
	30	146	0.084271		
	40	128	0.073882		
	50	109	0.062915		

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	188	0.108514	±2.5	Pass
	-20	163	0.094084		
	-10	157	0.090620		
	0	155	0.089466		
	10	146	0.084271		
	20	128	0.073882		
	30	136	0.078499		
	40	148	0.085426		
	50	154	0.088889		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.095815	±2.5	Pass
	-20	163	0.094084		
	-10	127	0.073304		
	0	133	0.076768		
	10	107	0.061760		
	20	136	0.078499		
	30	125	0.072150		
	40	147	0.084848		
	50	108	0.062338		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	189	0.109091	±2.5	Pass
	-20	174	0.100433		
	-10	166	0.095815		
	0	135	0.077922		
	10	148	0.085426		
	20	128	0.073882		
	30	136	0.078499		
	40	147	0.084848		
	50	128	0.073882		

LTE Band 5(QPSK):

Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	177	0.211596	±2.5	Pass
	-20	163	0.194860		
	-10	142	0.169755		
	0	128	0.153019		
	10	158	0.188882		
	20	146	0.174537		
	30	128	0.153019		
	40	109	0.130305		
	50	127	0.151823		
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	147	0.175732	±2.5	Pass
	-20	158	0.188882		
	-10	174	0.208010		
	0	163	0.194860		
	10	155	0.185296		
	20	128	0.153019		
	30	141	0.168559		
	40	126	0.150628		
	50	148	0.176928		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.198446	±2.5	Pass
	-20	157	0.187687		
	-10	130	0.155409		
	0	185	0.221160		
	10	114	0.136282		
	20	107	0.127914		
	30	158	0.188882		
	40	163	0.194860		
	50	122	0.145846		
Reference Frequency: LTE Band 5(10MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	169	0.202032	±2.5	Pass
	-20	157	0.187687		
	-10	136	0.162582		
	0	141	0.168559		
	10	174	0.208010		
	20	185	0.221160		
	30	136	0.162582		
	40	141	0.168559		
	50	152	0.181710		

LTE Band 5(16QAM):

Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	167	0.199641	±2.5	Pass
	-20	148	0.176928		
	-10	147	0.175732		
	0	128	0.153019		
	10	122	0.145846		
	20	136	0.162582		
	30	127	0.151823		
	40	136	0.162582		
	50	139	0.166169		
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	156	0.186491	±2.5	Pass
	-20	147	0.175732		
	-10	199	0.237896		
	0	147	0.175732		
	10	136	0.162582		
	20	152	0.181710		
	30	107	0.127914		
	40	109	0.130305		
	50	136	0.162582		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	188	0.224746	2.5	Pass
	-20	136	0.162582		
	-10	125	0.149432		
	0	147	0.175732		
	10	150	0.179319		
	20	116	0.138673		
	30	136	0.162582		
	40	147	0.175732		
	50	128	0.153019		
Reference Frequency: LTE Band 5(10MHz) Middle channel=20525Frequency=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	128	0.153019	2.5	Pass
	-20	163	0.194860		
	-10	148	0.176928		
	0	163	0.194860		
	10	128	0.153019		
	20	145	0.173341		
	30	108	0.129109		
	40	136	0.162582		
	50	147	0.175732		

LTE Band 7(QPSK):

Reference Frequency: LTE Band 7(5MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	155	0.061144	±2.5	Pass
	-20	163	0.064300		
	-10	127	0.050099		
	0	130	0.051282		
	10	148	0.058383		
	20	152	0.059961		
	30	141	0.055621		
	40	122	0.048126		
	50	129	0.050888		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	146	0.057594	±2.5	Pass
	-20	148	0.058383		
	-10	174	0.068639		
	0	152	0.059961		
	10	136	0.053649		
	20	128	0.050493		
	30	152	0.059961		
	40	127	0.050099		
	50	136	0.053649		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	175	0.069034	±2.5	Pass
	-20	163	0.064300		
	-10	185	0.072978		
	0	105	0.041420		
	10	146	0.057594		
	20	189	0.074556		
	30	125	0.049310		
	40	128	0.050493		
	50	136	0.053649		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	166	0.065483	±2.5	Pass
	-20	142	0.056016		
	-10	174	0.068639		
	0	125	0.049310		
	10	114	0.044970		
	20	163	0.064300		
	30	184	0.072584		
	40	126	0.049704		
	50	147	0.057988		

LTE Band 7(16QAM):

Reference Frequency: LTE Band 7(5MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	147	0.057988	±2.5	Pass
	-20	136	0.053649		
	-10	125	0.049310		
	0	105	0.041420		
	10	127	0.050099		
	20	174	0.068639		
	30	158	0.062327		
	40	116	0.045759		
	50	127	0.050099		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	147	0.057988	±2.5	Pass
	-20	139	0.054832		
	-10	158	0.062327		
	0	186	0.073373		
	10	127	0.050099		
	20	125	0.049310		
	30	148	0.058383		
	40	129	0.050888		
	50	136	0.053649		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	168	0.066272	2.5	Pass
	-20	174	0.068639		
	-10	158	0.062327		
	0	128	0.050493		
	10	169	0.066667		
	20	124	0.048915		
	30	174	0.068639		
	40	163	0.064300		
	50	128	0.050493		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	137	0.054043	2.5	Pass
	-20	166	0.065483		
	-10	107	0.042209		
	0	125	0.049310		
	10	163	0.064300		
	20	125	0.049310		
	30	128	0.050493		
	40	157	0.061933		
	50	112	0.044181		

LTE Band 17(QPSK):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	188	0.264789	±2.5	Pass
	-20	163	0.229577		
	-10	152	0.214085		
	0	147	0.207042		
	10	136	0.191549		
	20	152	0.214085		
	30	146	0.205634		
	40	157	0.221127		
	50	106	0.149296		
Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	163	0.229577	±2.5	Pass
	-20	125	0.176056		
	-10	142	0.200000		
	0	105	0.147887		
	10	163	0.229577		
	20	147	0.207042		
	30	152	0.214085		
	40	146	0.205634		
	50	158	0.222535		

LTE Band 17(16QAM):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	124	0.174648	±2.5	Pass
	-20	136	0.191549		
	-10	105	0.147887		
	0	152	0.214085		
	10	174	0.245070		
	20	133	0.187324		
	30	126	0.177465		
	40	152	0.214085		
	50	155	0.218310		
Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	160	0.225352	±2.5	Pass
	-20	125	0.176056		
	-10	141	0.198592		
	0	152	0.214085		
	10	136	0.191549		
	20	124	0.174648		
	30	145	0.204225		
	40	123	0.173239		
	50	152	0.214085		

6.13 Frequency stability V.S. Voltage measurement

Test Requirement:	FCC Part2.1055(d)(1)(2)
Test Method:	FCC Part2.1055(d)(1)(2)
Limit:	2.5ppm
Test setup:	<p style="text-align: center;">Temperature Chamber</p> <p style="text-align: center;">Note : Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> 1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details, and all channels have been tested, only shows the worst channel data in this report.
Test results:	Passed

Measurement Data (the worst channel):**LTE Band 2(QPSK):**

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	85	0.045213	±2.5	Pass
	3.80	63	0.033511		
	3.23	96	0.051064		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	66	0.035106	±2.5	Pass
	3.80	74	0.039362		
	3.23	85	0.045213		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	96	0.051064	±2.5	Pass
	3.80	85	0.045213		
	3.23	74	0.039362		
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	85	0.045213	±2.5	Pass
	3.80	76	0.040426		
	3.23	52	0.027660		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.039362	±2.5	Pass
	3.80	96	0.051064		
	3.23	63	0.033511		
Reference Frequency: LTE Band 2(20MHz) Middle channel=20175 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	85	0.045213	±2.5	Pass
	3.80	74	0.039362		
	3.23	96	0.051064		

LTE Band 2(16QAM):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.039362	±2.5	Pass
	3.80	48	0.025532		
	3.23	69	0.036702		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	59	0.031383	±2.5	Pass
	3.80	52	0.027660		
	3.23	63	0.033511		
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.039362	±2.5	Pass
	3.80	96	0.051064		
	3.23	52	0.027660		
Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	96	0.051064	±2.5	Pass
	3.80	93	0.049468		
	3.23	74	0.039362		
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	85	0.045213	±2.5	Pass
	3.80	46	0.024468		
	3.23	90	0.047872		
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.039362	±2.5	Pass
	3.80	85	0.045213		
	3.23	92	0.048936		

LTE Band 4(QPSK):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	78	0.045022	±2.5	Pass
	3.80	95	0.054834		
	3.23	45	0.025974		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	69	0.039827	±2.5	Pass
	3.80	63	0.036364		
	3.23	85	0.049062		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.042713	±2.5	Pass
	3.80	95	0.054834		
	3.23	88	0.050794		
Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	59	0.034055	±2.5	Pass
	3.80	63	0.036364		
	3.23	85	0.049062		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.042713	±2.5	Pass
	3.80	95	0.054834		
	3.23	85	0.049062		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	90	0.051948	±2.5	Pass
	3.80	85	0.049062		
	3.23	80	0.046176		

LTE Band 4(16QAM):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	88	0.050794	±2.5	Pass
	3.80	74	0.042713		
	3.23	90	0.051948		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	49	0.028283	±2.5	Pass
	3.80	62	0.035786		
	3.23	35	0.020202		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.042713	±2.5	Pass
	3.80	95	0.054834		
	3.23	82	0.047330		
Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.042713	±2.5	Pass
	3.80	85	0.049062		
	3.23	63	0.036364		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	84	0.048485	±2.5	Pass
	3.80	85	0.049062		
	3.23	79	0.045599		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	89	0.051371	±2.5	Pass
	3.80	86	0.049639		
	3.23	37	0.021356		

LTE Band 5(QPSK):

Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	85	0.101614	±2.5	Pass
	3.80	92	0.109982		
	3.23	74	0.088464		
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	90	0.107591	±2.5	Pass
	3.80	63	0.075314		
	3.23	82	0.098027		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	82	0.098027	±2.5	Pass
	3.80	92	0.109982		
	3.23	40	0.047818		
Reference Frequency: LTE Band5(10MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	69	0.082487	±2.5	Pass
	3.80	76	0.090855		
	3.23	85	0.101614		

LTE Band 5(16QAM):

Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	96	0.114764	±2.5	Pass
	3.80	87	0.104005		
	3.23	74	0.088464		
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	63	0.075314	±2.5	Pass
	3.80	92	0.109982		
	3.23	58	0.069337		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	78	0.093246	±2.5	Pass
	3.80	90	0.107591		
	3.23	52	0.062164		
Reference Frequency: LTE Band 5(10MHz) Middle channel=20525Frequency=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	63	0.075314	±2.5	Pass
	3.80	74	0.088464		
	3.23	88	0.105200		

LTE Band 7(QPSK):

Reference Frequency: LTE Band 7(5MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.029191	±2.5	Pass
	3.80	95	0.037475		
	3.23	82	0.032347		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	67	0.026430	±2.5	Pass
	3.80	48	0.018935		
	3.23	59	0.023274		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	63	0.024852	±2.5	Pass
	3.80	94	0.037081		
	3.23	80	0.031558		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	75	0.029586	±2.5	Pass
	3.80	49	0.019329		
	3.23	87	0.034320		

LTE Band 7(16QAM):

Reference Frequency: LTE Band 7(5MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	63	0.024852	±2.5	Pass
	3.80	92	0.036292		
	3.23	80	0.031558		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.029191	±2.5	Pass
	3.80	80	0.031558		
	3.23	90	0.035503		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	75	0.029586	±2.5	Pass
	3.80	92	0.036292		
	3.23	74	0.029191		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	63	0.024852	±2.5	Pass
	3.80	92	0.036292		
	3.23	85	0.033531		

LTE Band 17(QPSK):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	74	0.104225	±2.5	Pass
	3.80	95	0.133803		
	3.23	80	0.112676		

Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	82	0.115493	±2.5	Pass
	3.80	91	0.128169		
	3.23	74	0.104225		

LTE Band 17(16QAM):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	67	0.094366	±2.5	Pass
	3.80	49	0.069014		
	3.23	80	0.112676		

Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	63	0.088732	±2.5	Pass
	3.80	74	0.104225		
	3.23	80	0.112676		