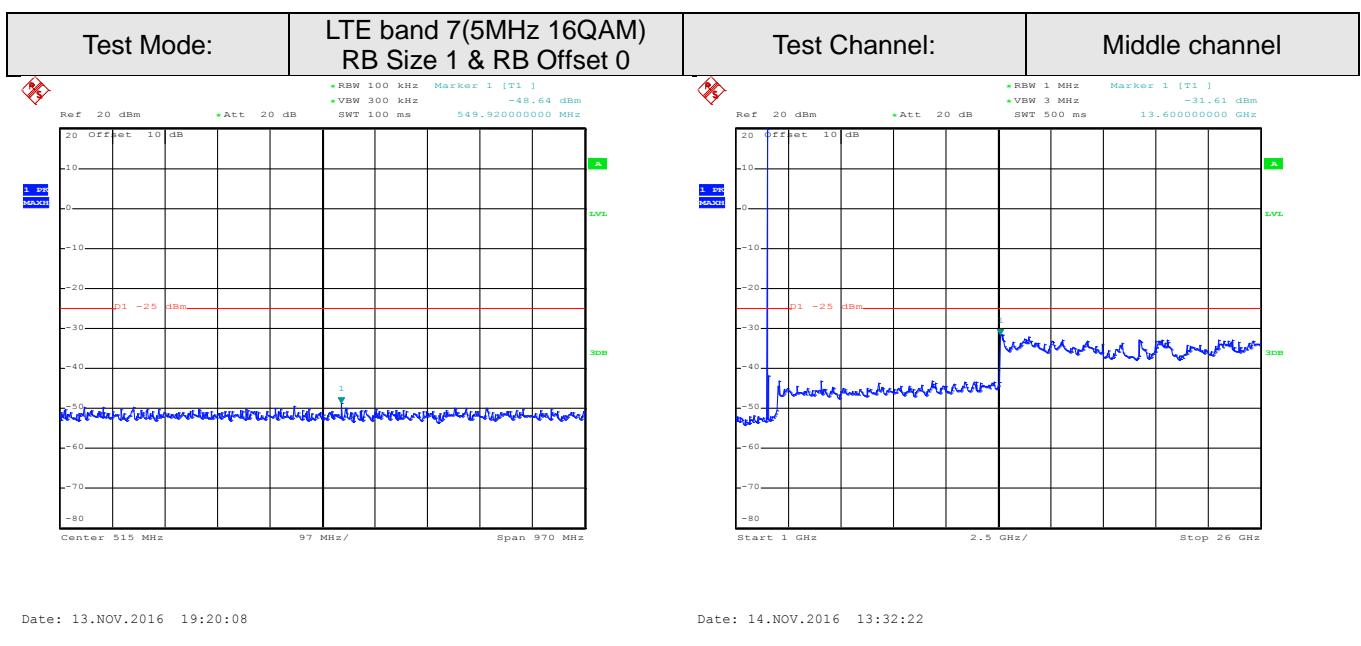
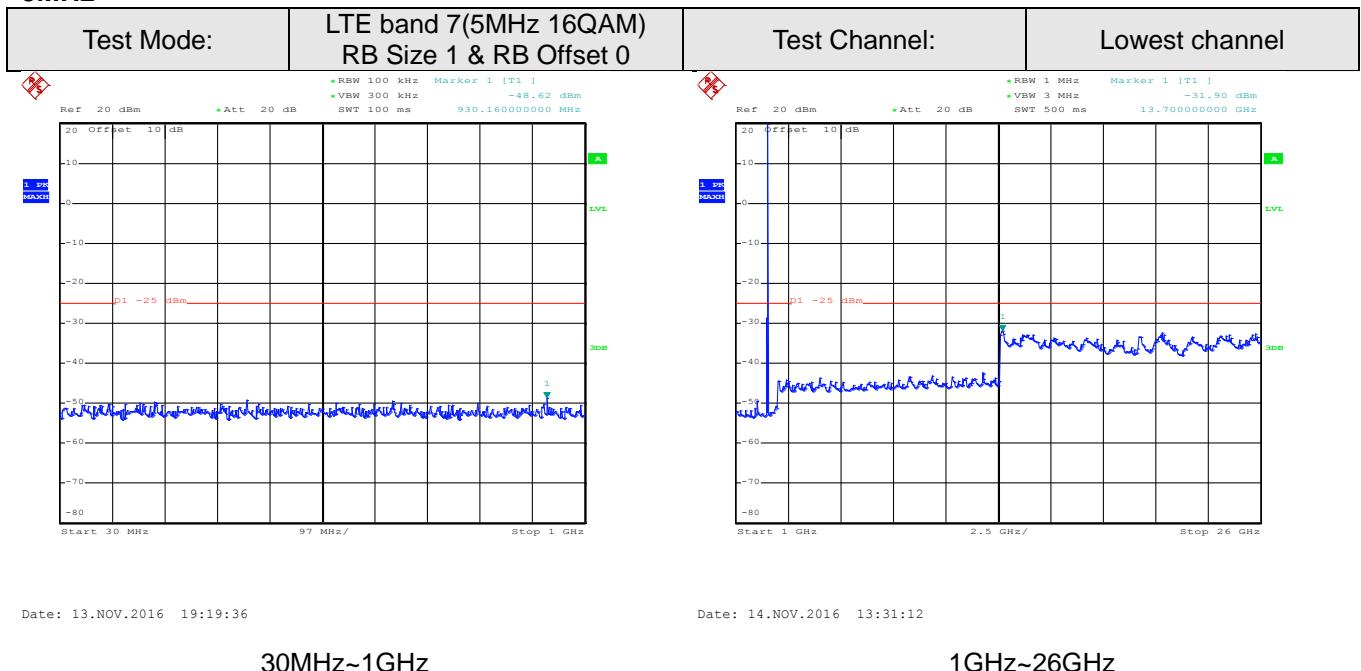
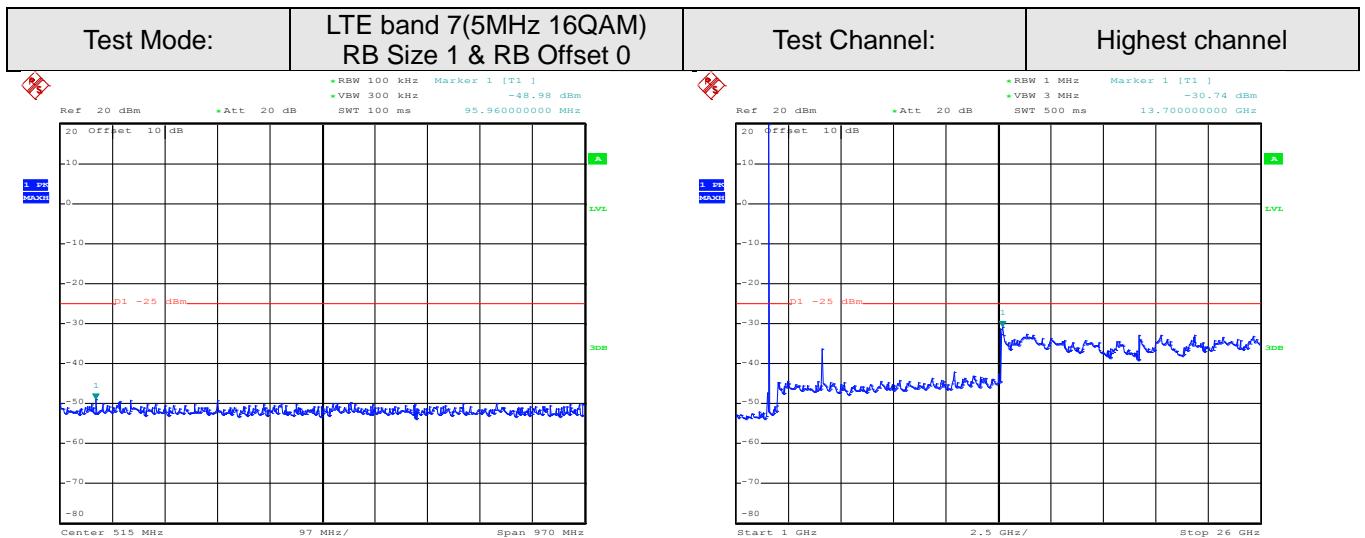


LTE band 7 part:

5MHz



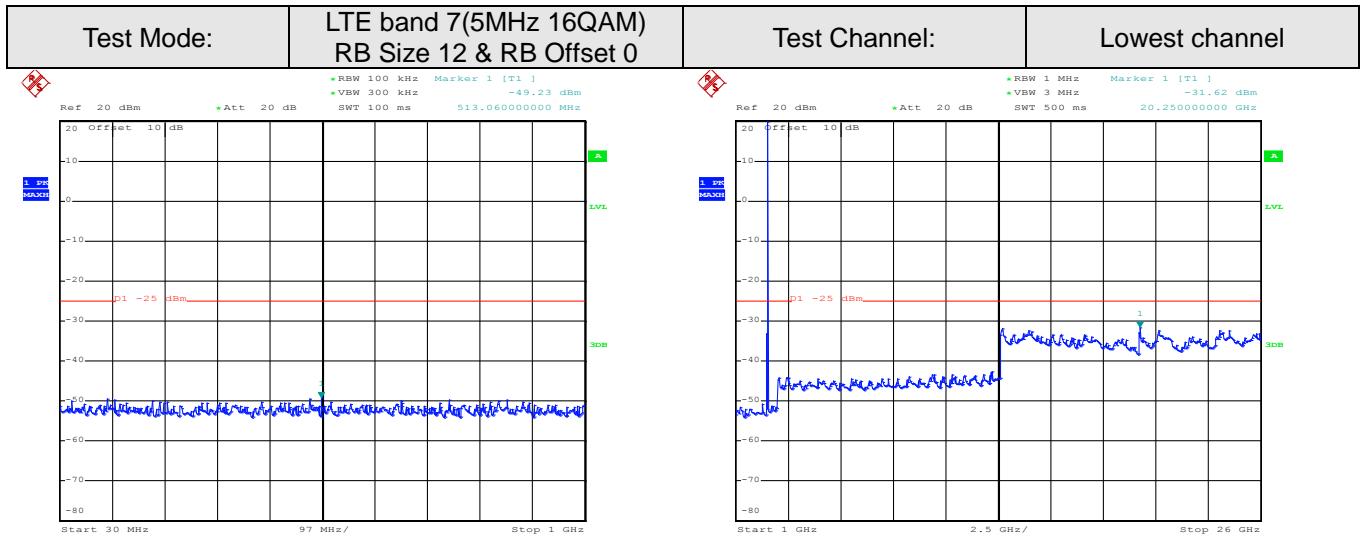


Date: 13.NOV.2016 19:20:39

30MHz~1GHz

Date: 14.NOV.2016 13:33:33

1GHz~26GHz

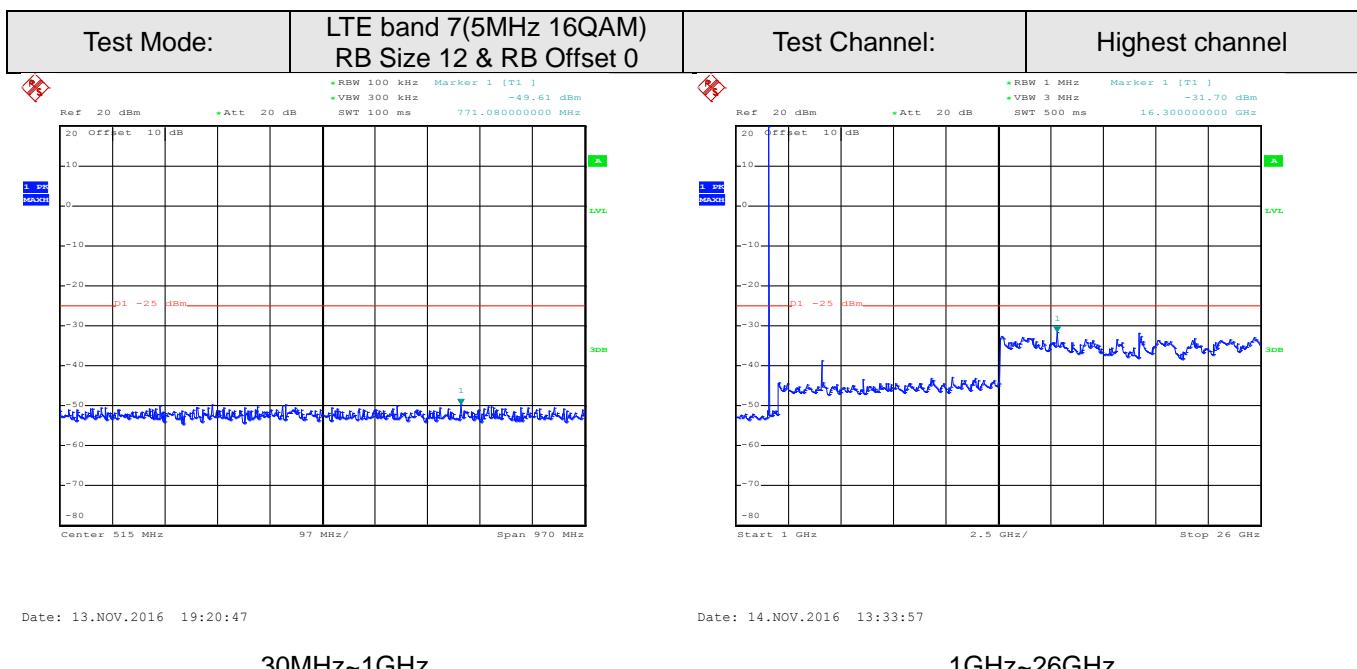
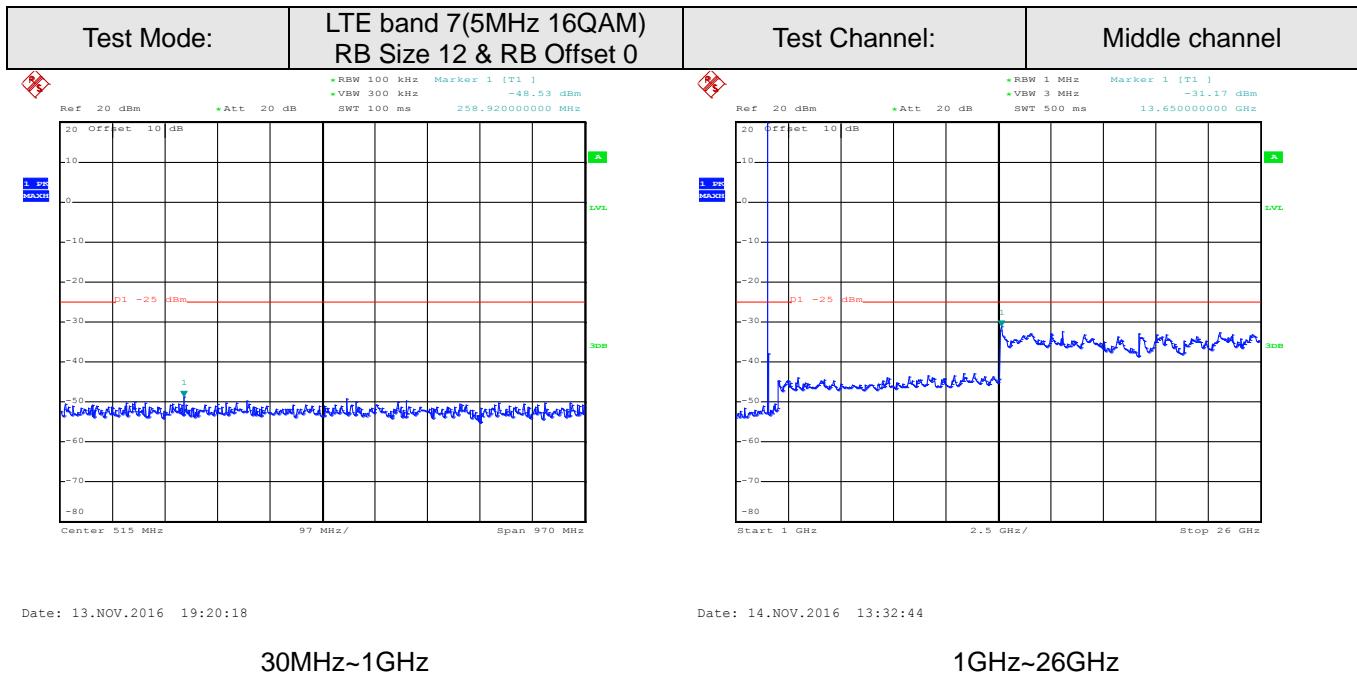


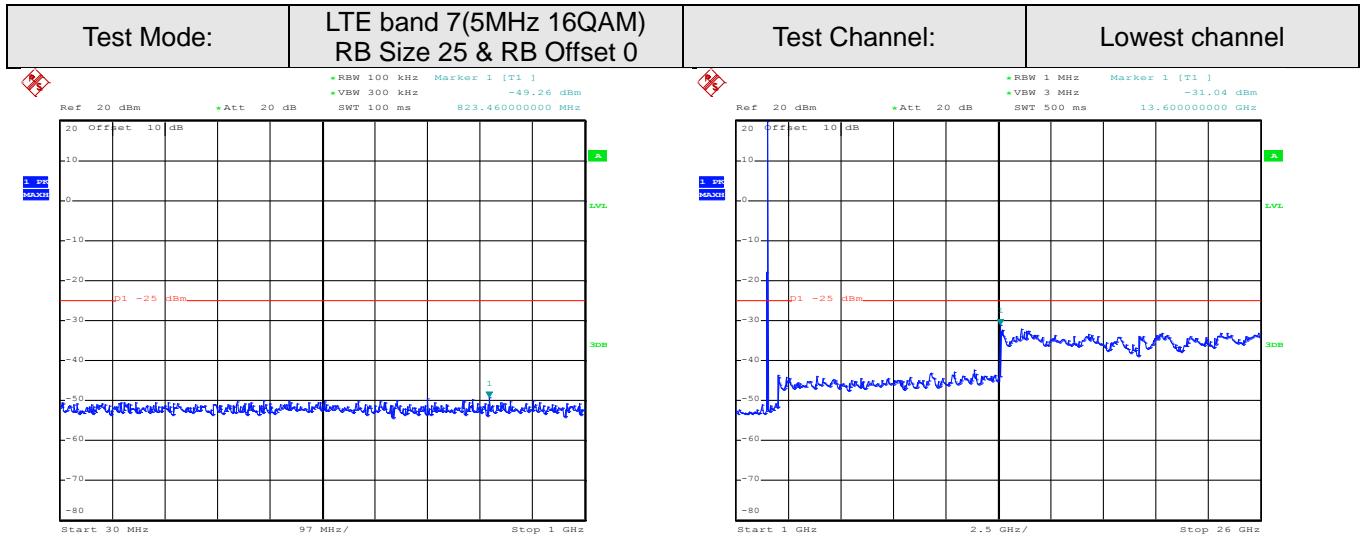
Date: 13.NOV.2016 19:19:45

30MHz~1GHz

Date: 14.NOV.2016 13:31:38

1GHz~26GHz



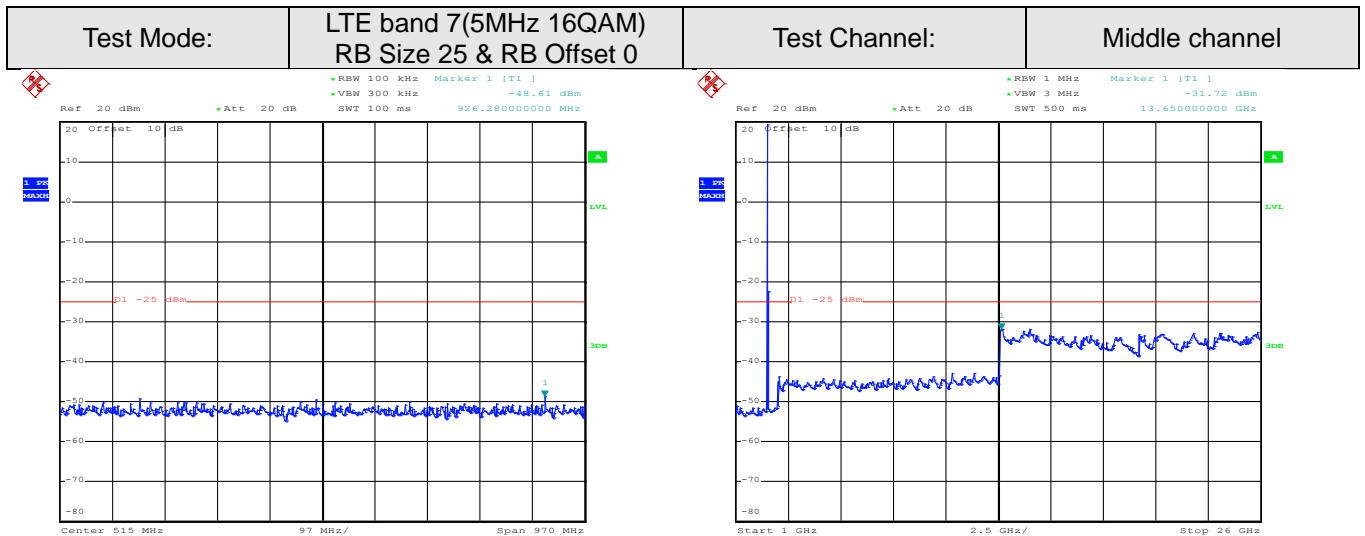


Date: 13.NOV.2016 19:19:54

30MHz~1GHz

Date: 14.NOV.2016 13:31:55

1GHz~26GHz

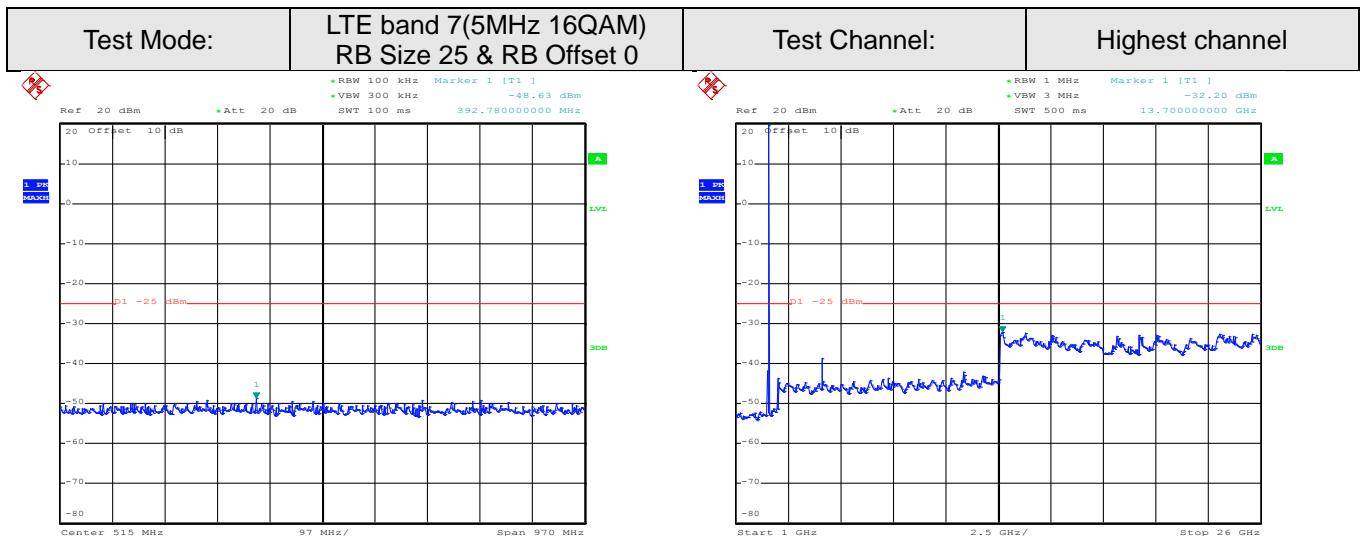


Date: 13.NOV.2016 19:20:27

30MHz~1GHz

Date: 14.NOV.2016 13:33:09

1GHz~26GHz

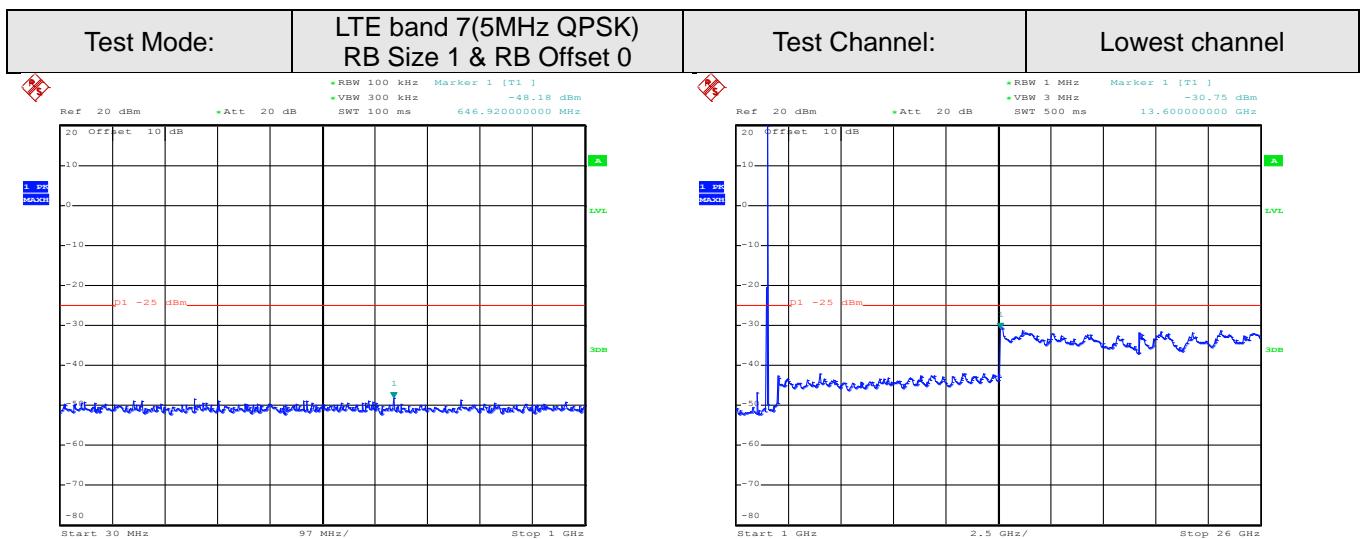


Date: 13.NOV.2016 19:21:00

30MHz~1GHz

Date: 14.NOV.2016 13:34:17

1GHz~26GHz

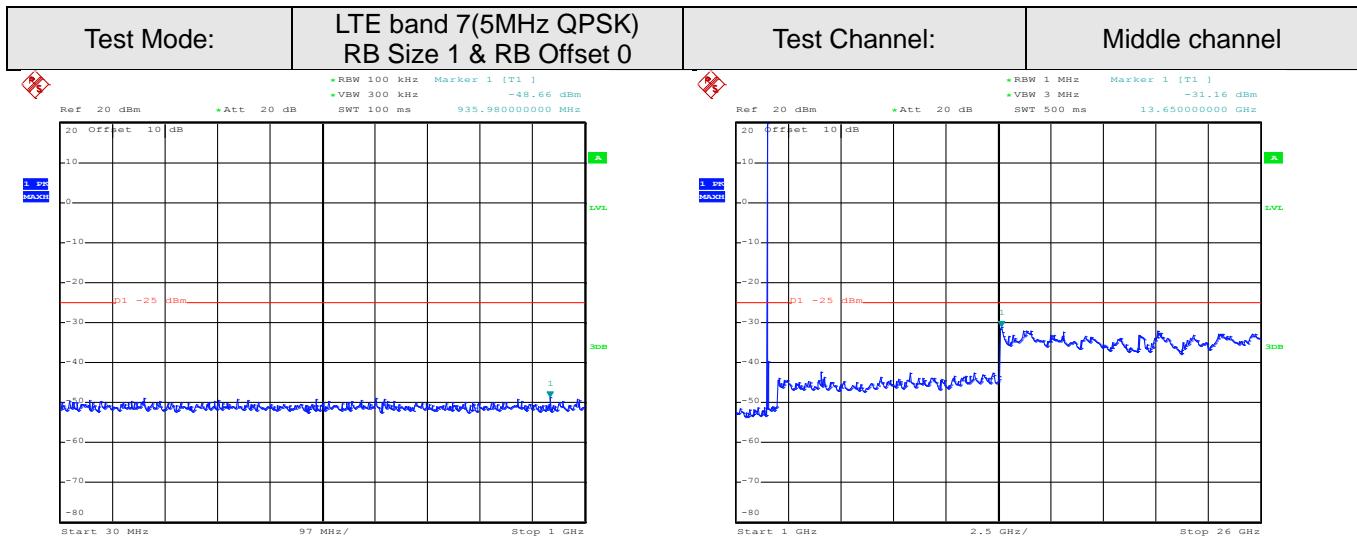


Date: 13.NOV.2016 19:19:32

30MHz~1GHz

Date: 14.NOV.2016 13:31:02

1GHz~26GHz

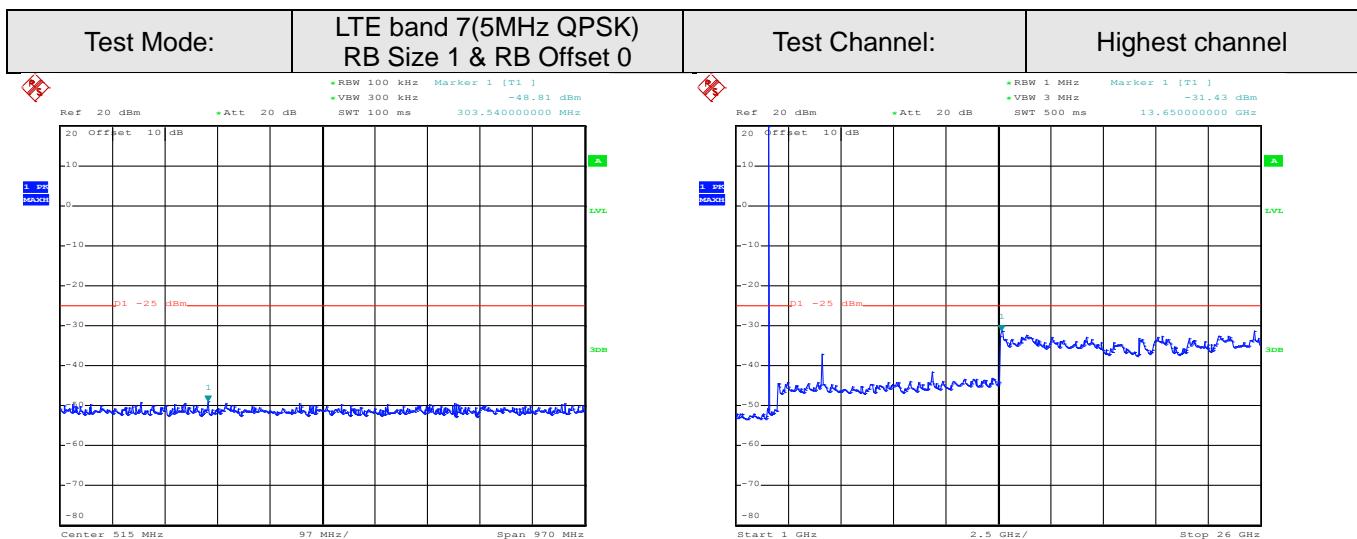


Date: 13.NOV.2016 19:20:03

30MHz~1GHz

Date: 14.NOV.2016 13:32:13

1GHz~26GHz

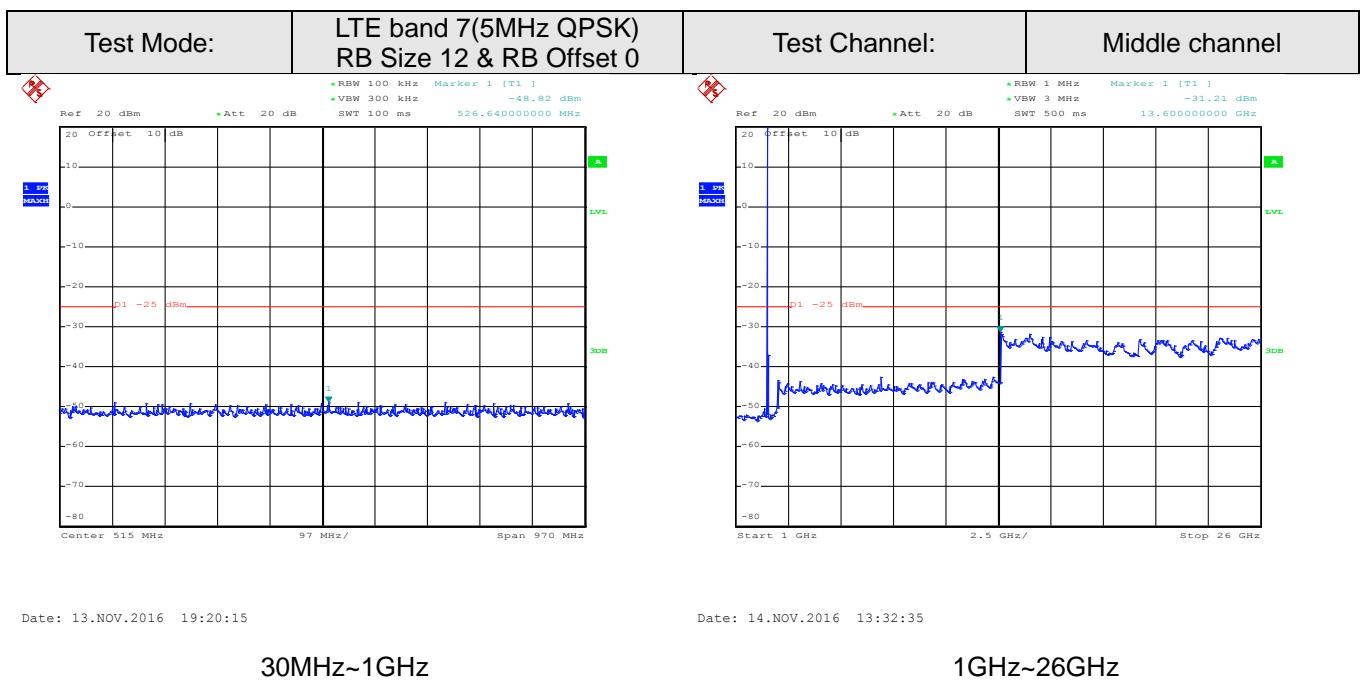
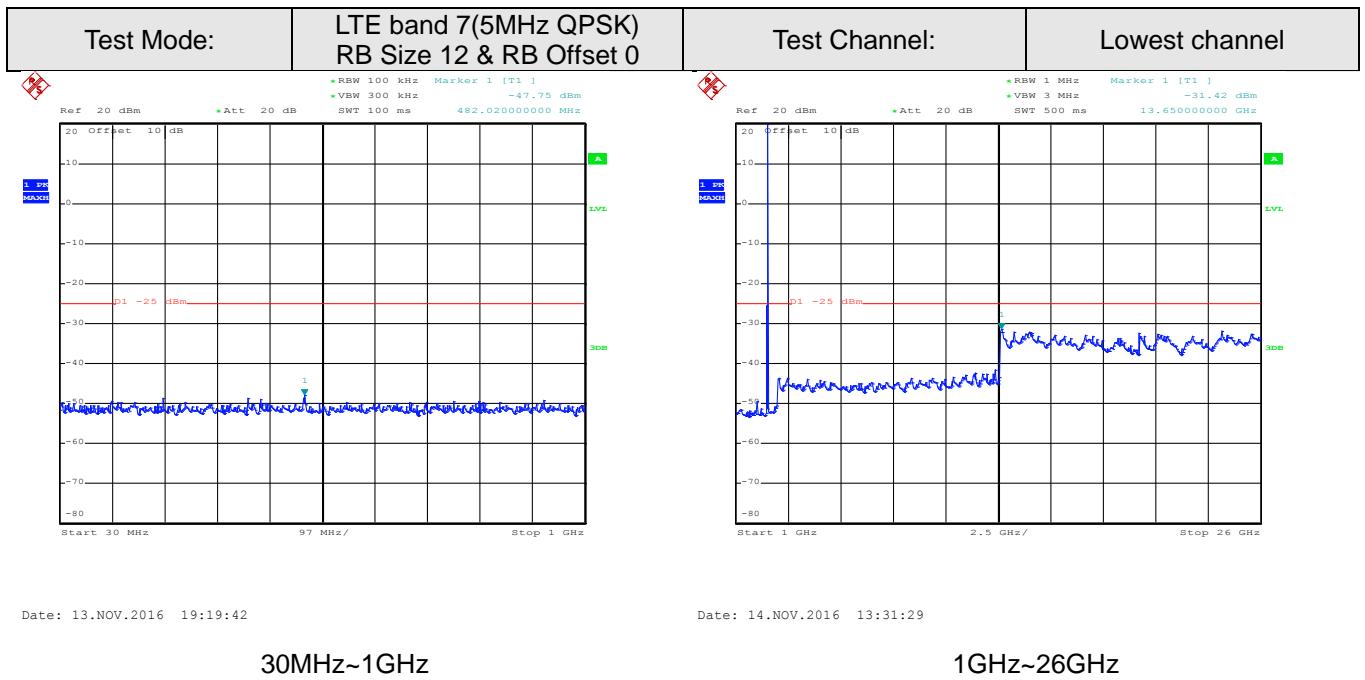


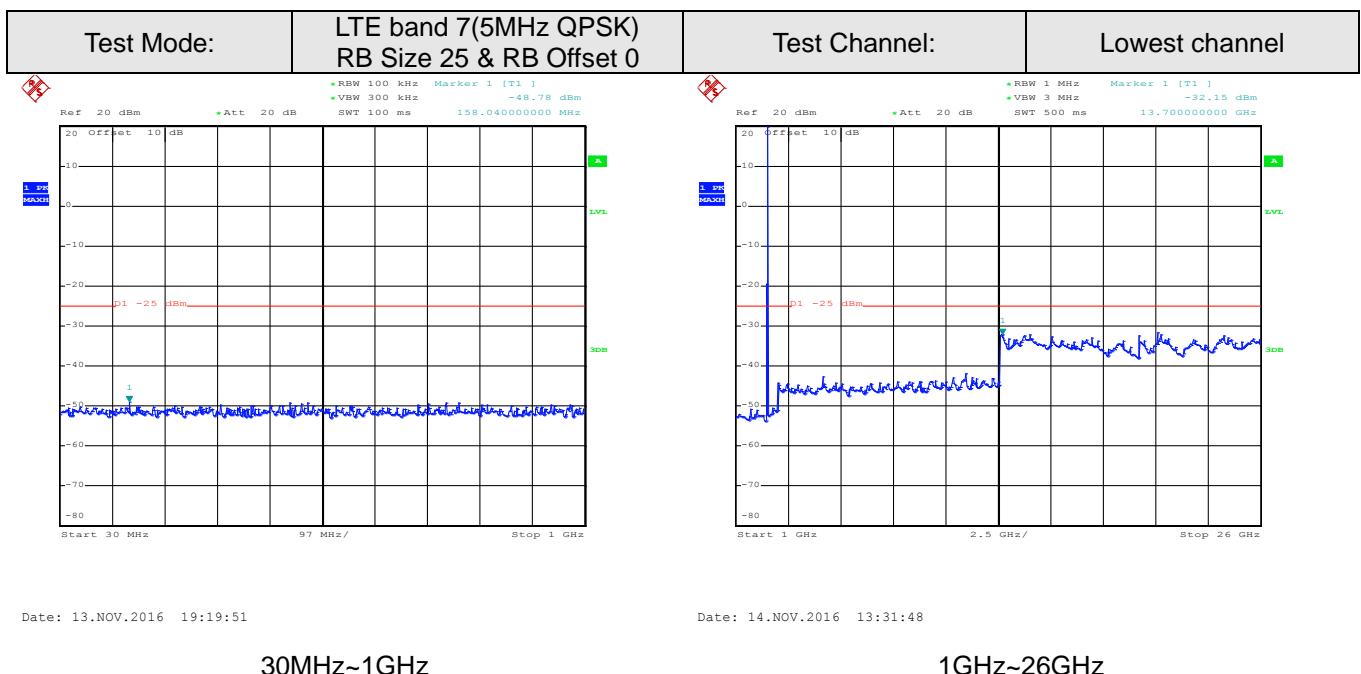
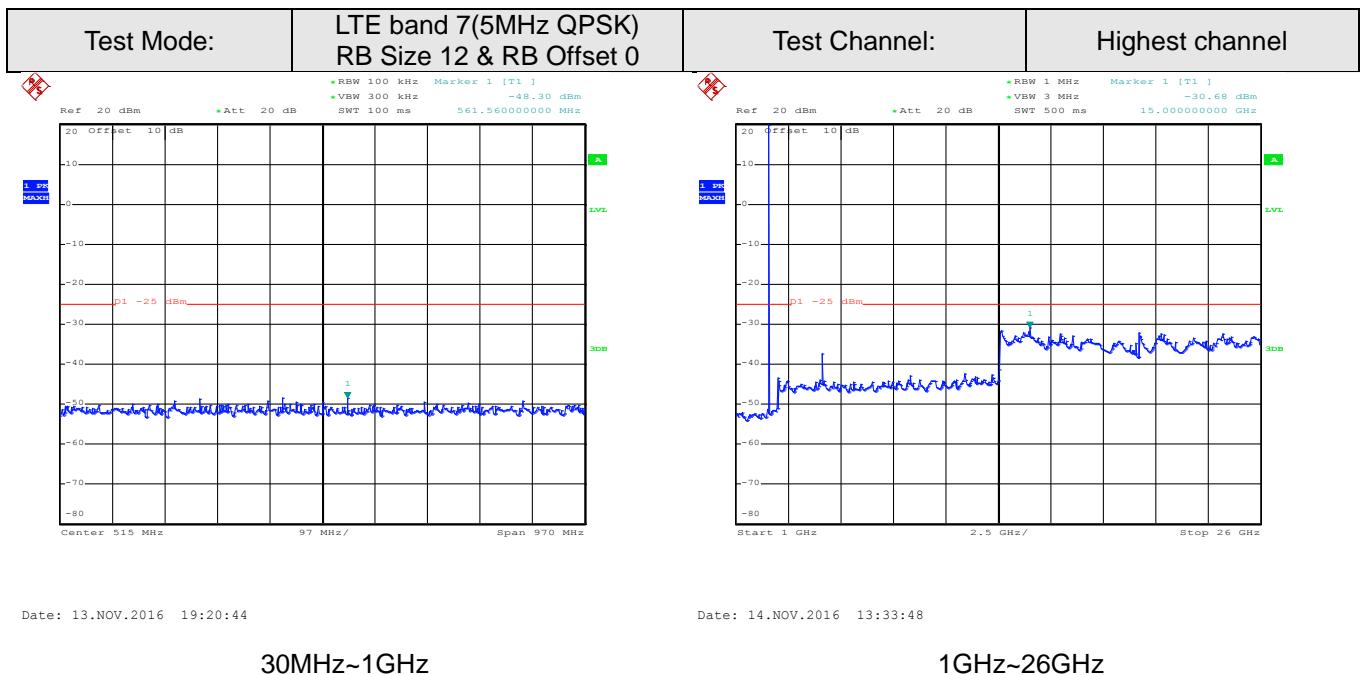
Date: 13.NOV.2016 19:20:34

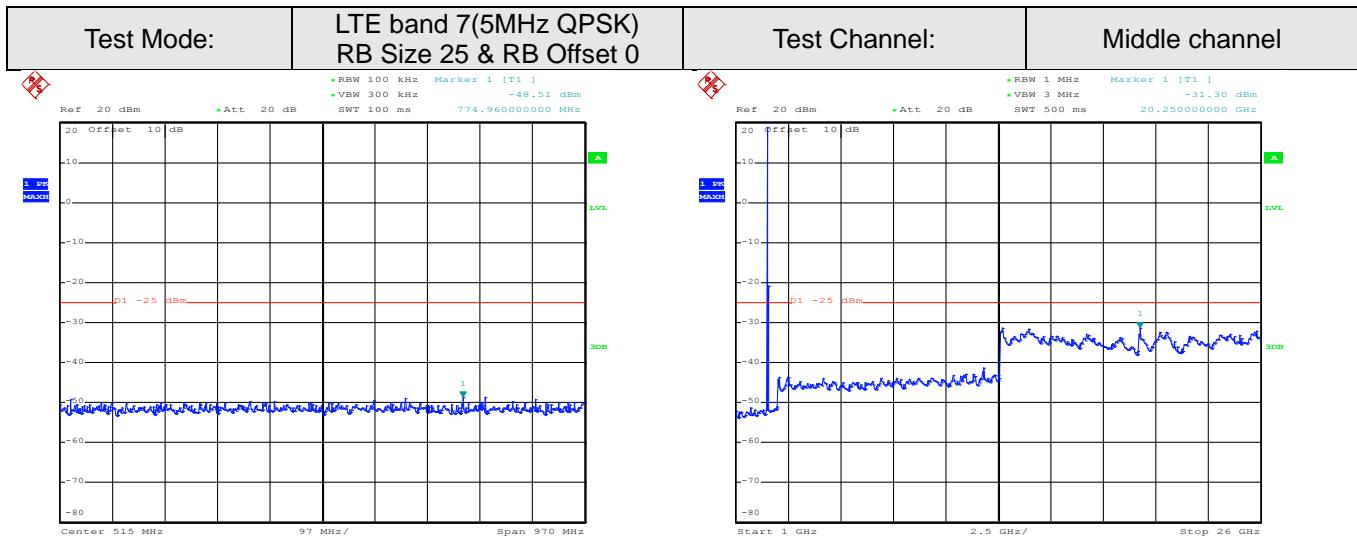
30MHz~1GHz

Date: 14.NOV.2016 13:33:26

1GHz~26GHz





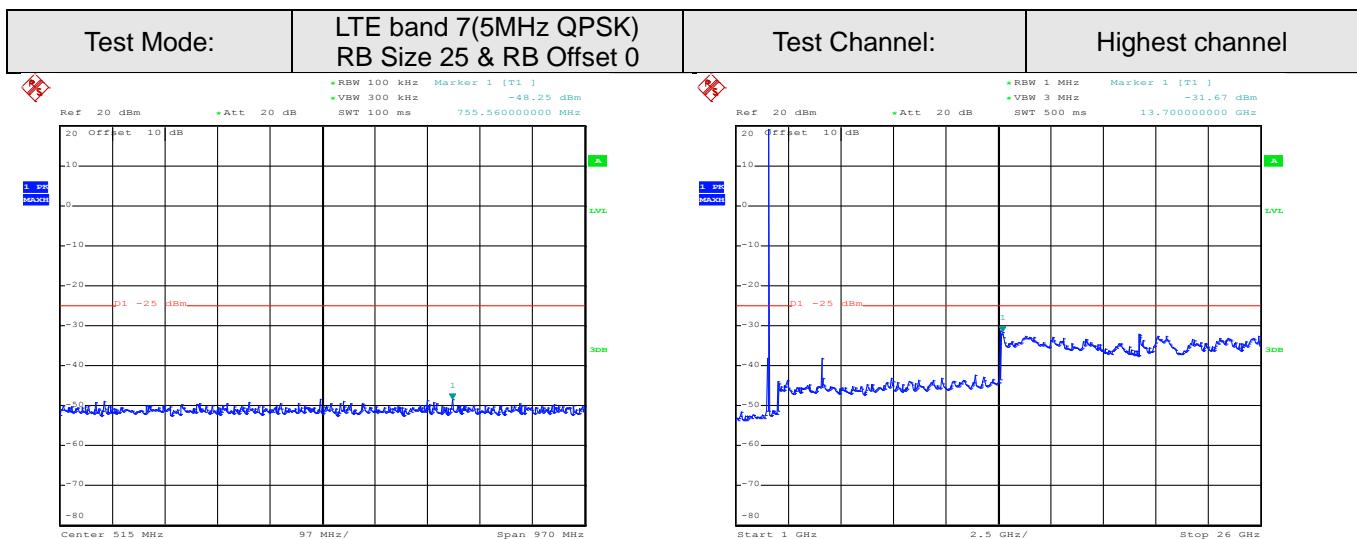


Date: 13.NOV.2016 19:20:23

30MHz~1GHz

Date: 14.NOV.2016 13:32:59

1GHz~26GHz



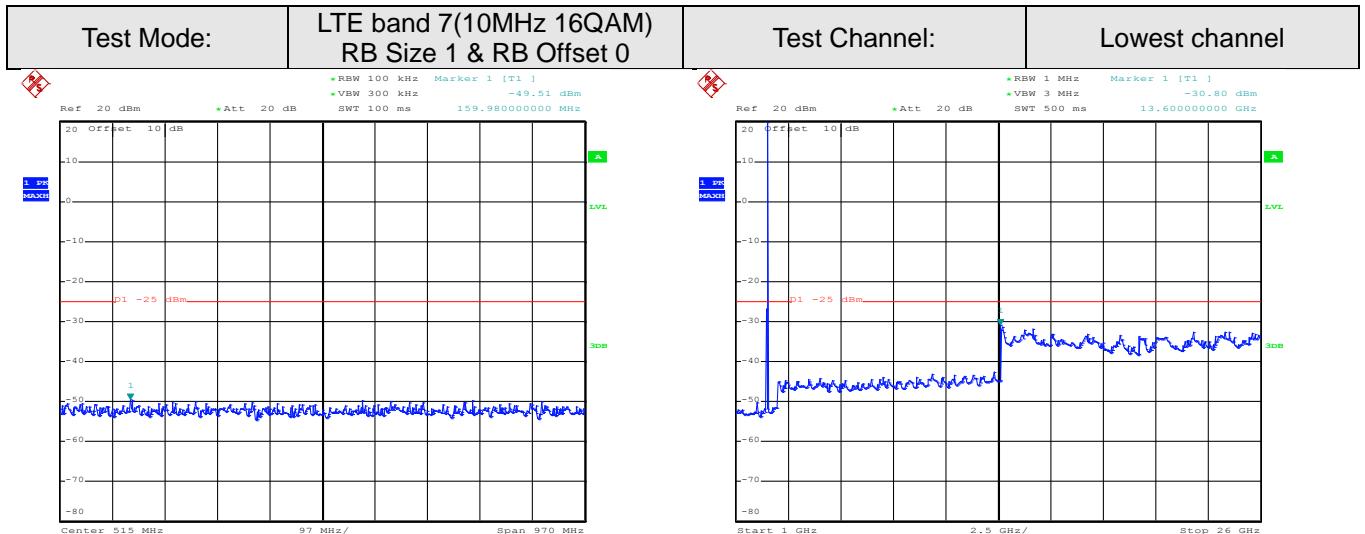
Date: 13.NOV.2016 19:20:55

30MHz~1GHz

Date: 14.NOV.2016 13:34:10

1GHz~26GHz

## 10MHz

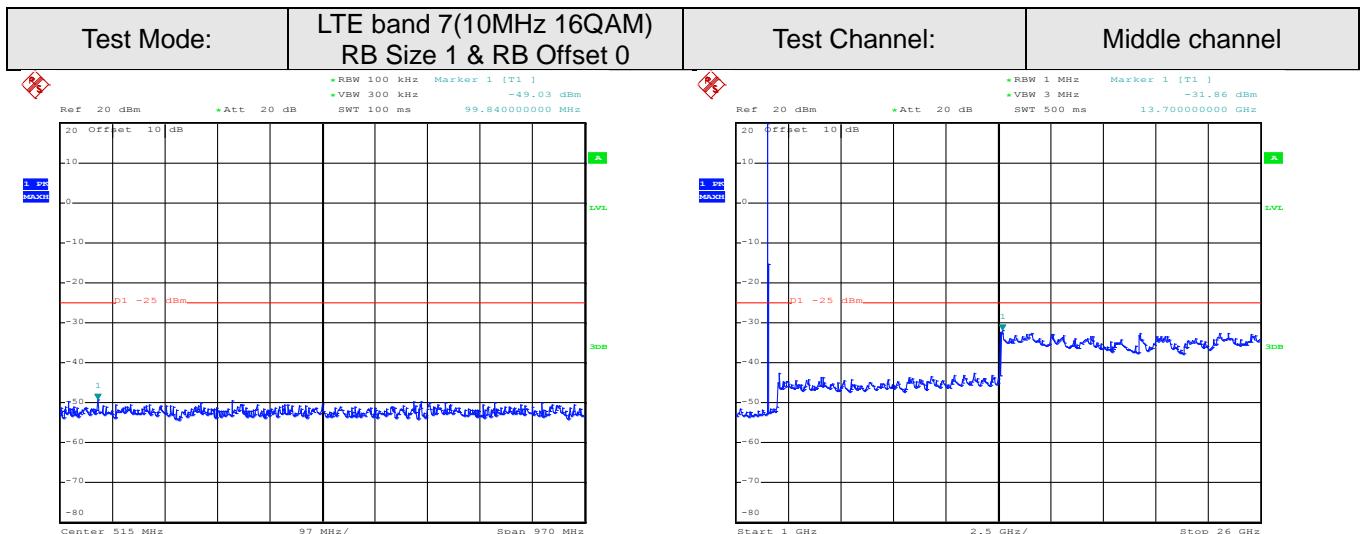


Date: 13.NOV.2016 19:21:13

Date: 14.NOV.2016 13:35:10

30MHz~1GHz

1GHz~26GHz

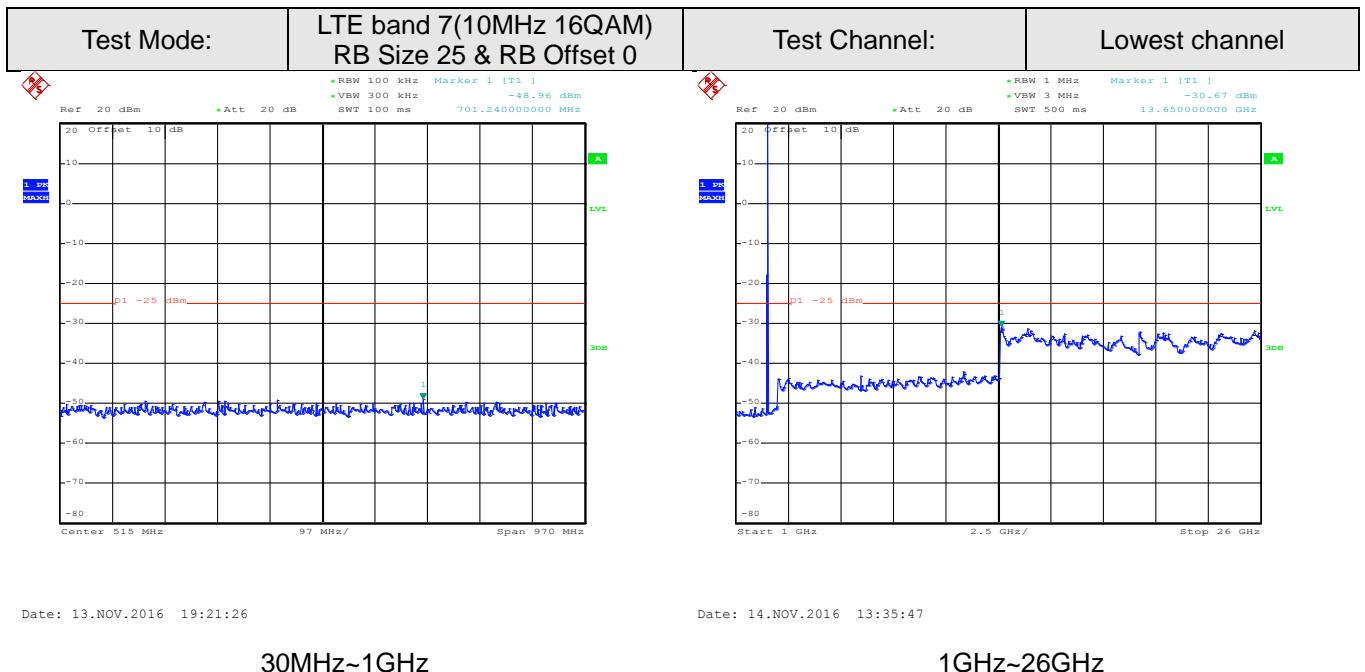
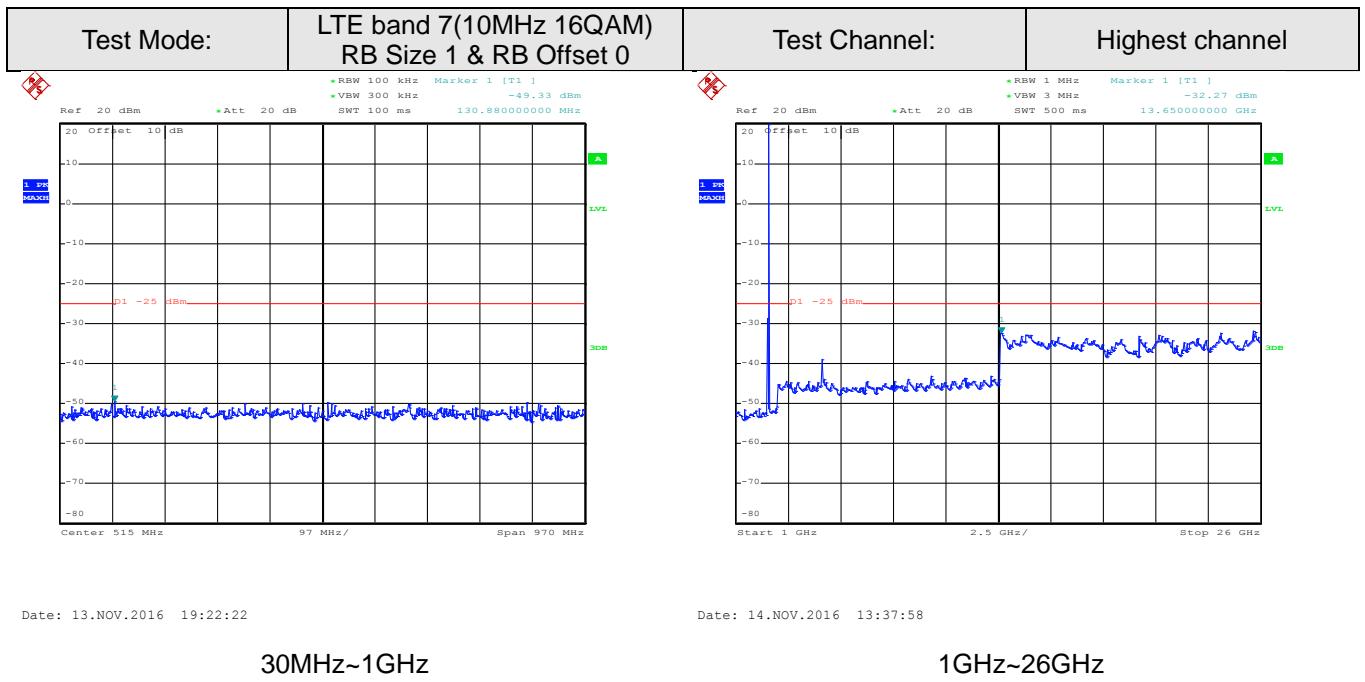


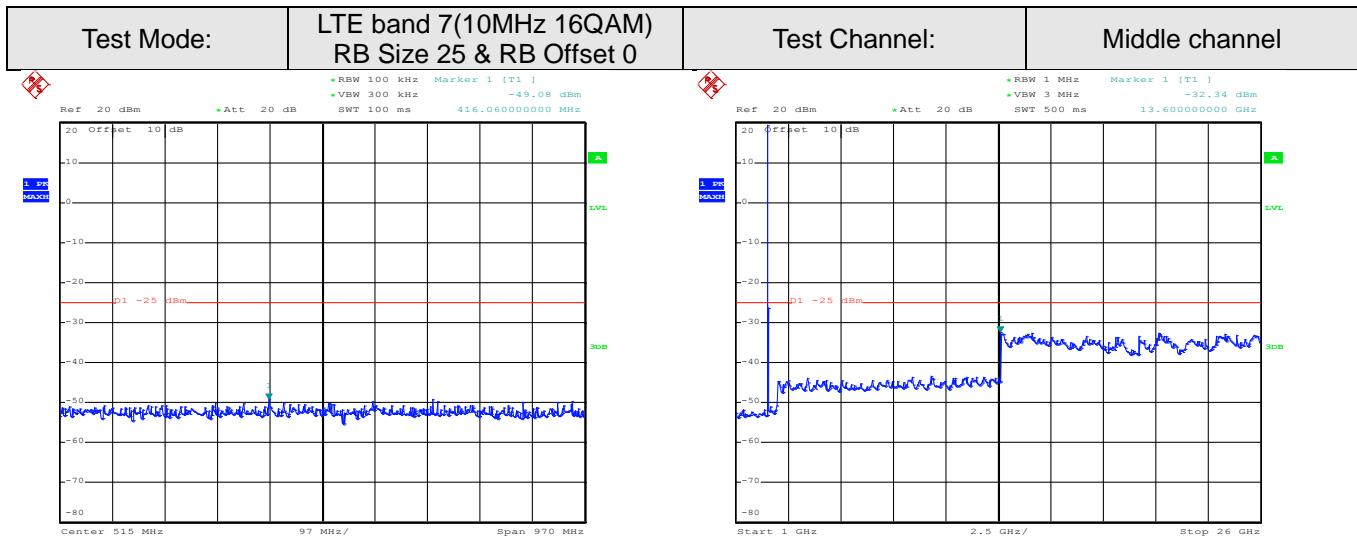
Date: 13.NOV.2016 19:21:52

Date: 14.NOV.2016 13:36:35

30MHz~1GHz

1GHz~26GHz



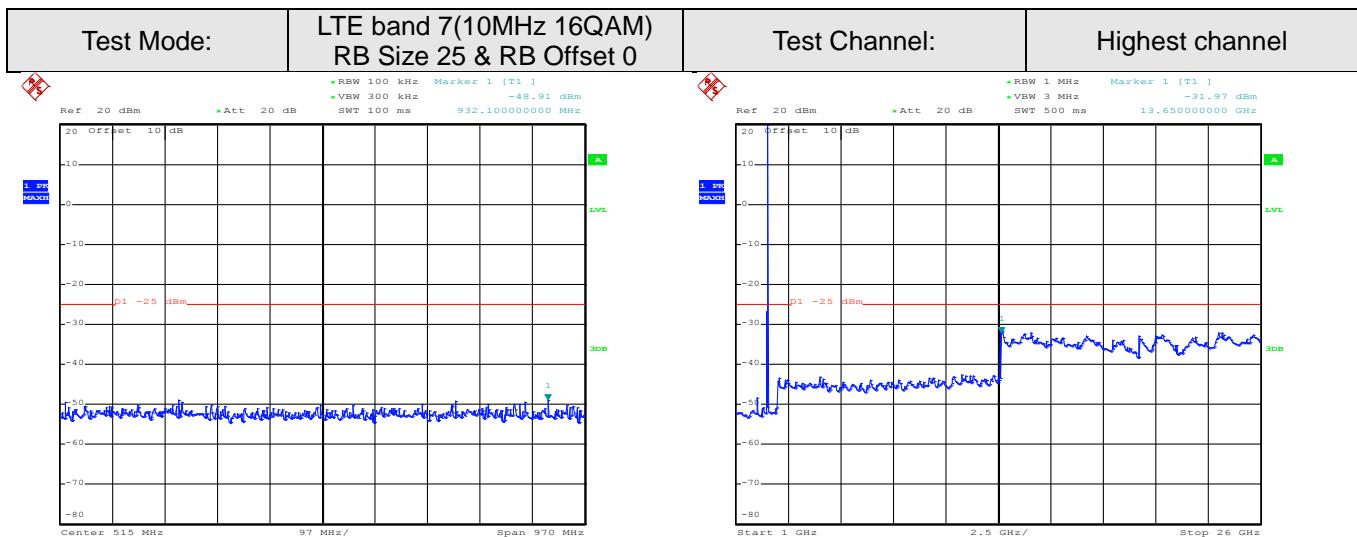


Date: 13.NOV.2016 19:22:01

30MHz~1GHz

Date: 14.NOV.2016 13:36:59

1GHz~26GHz



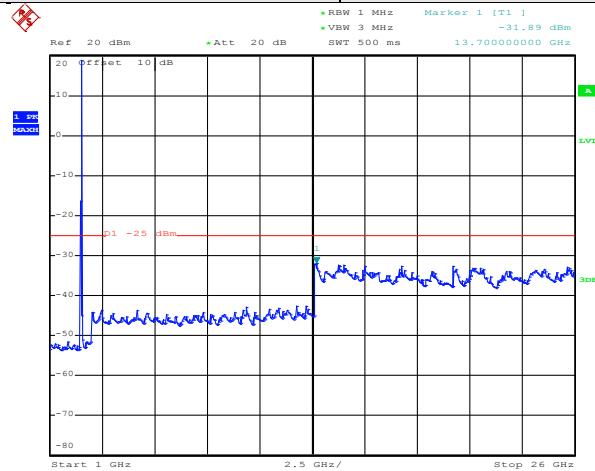
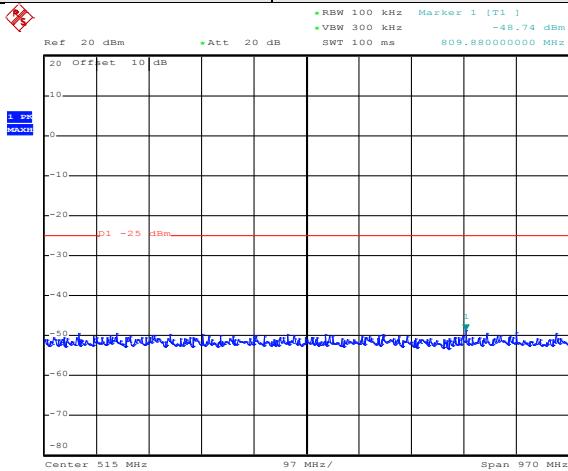
Date: 13.NOV.2016 19:22:30

30MHz~1GHz

Date: 14.NOV.2016 13:34:57

1GHz~26GHz

Test Mode:	LTE band 7(10MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------



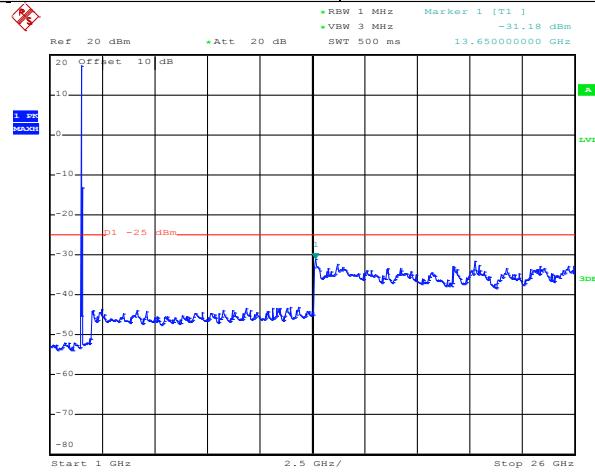
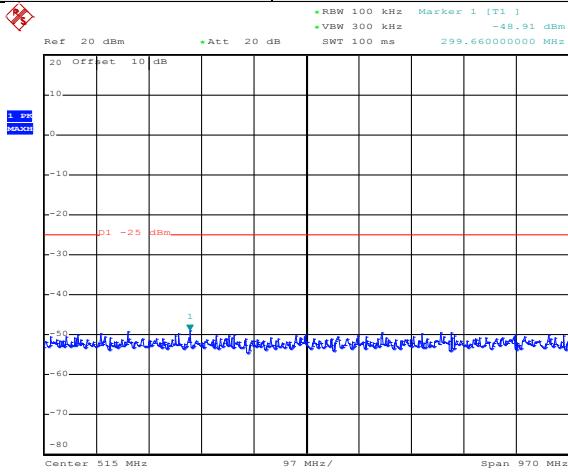
Date: 13.NOV.2016 19:21:39

30MHz~1GHz

Date: 14.NOV.2016 13:36:12

1GHz~26GHz

Test Mode:	LTE band 7(10MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------

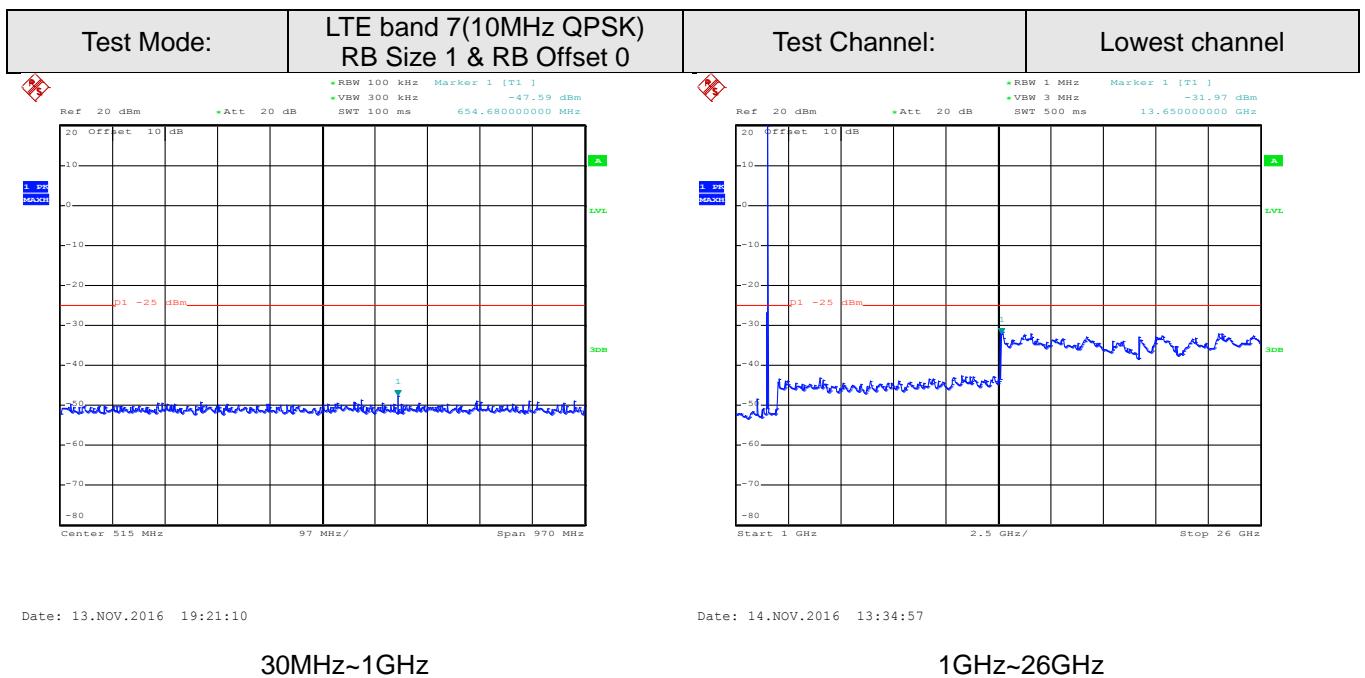
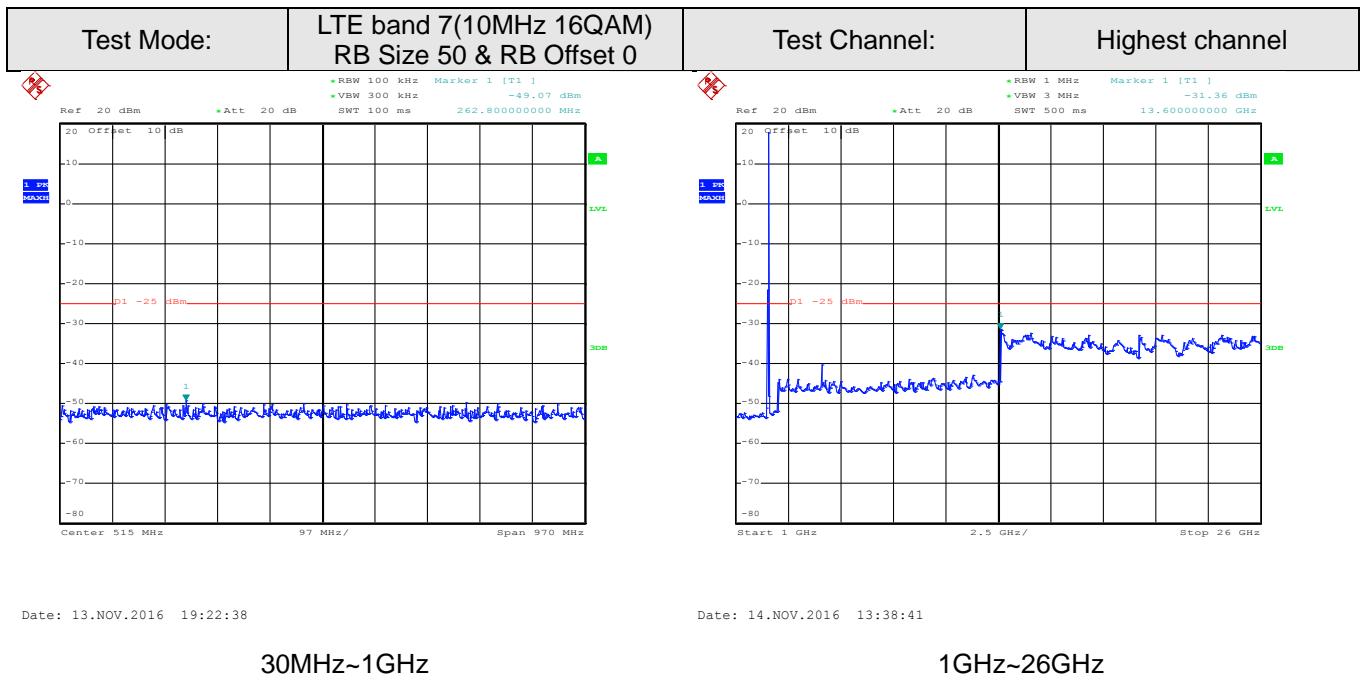


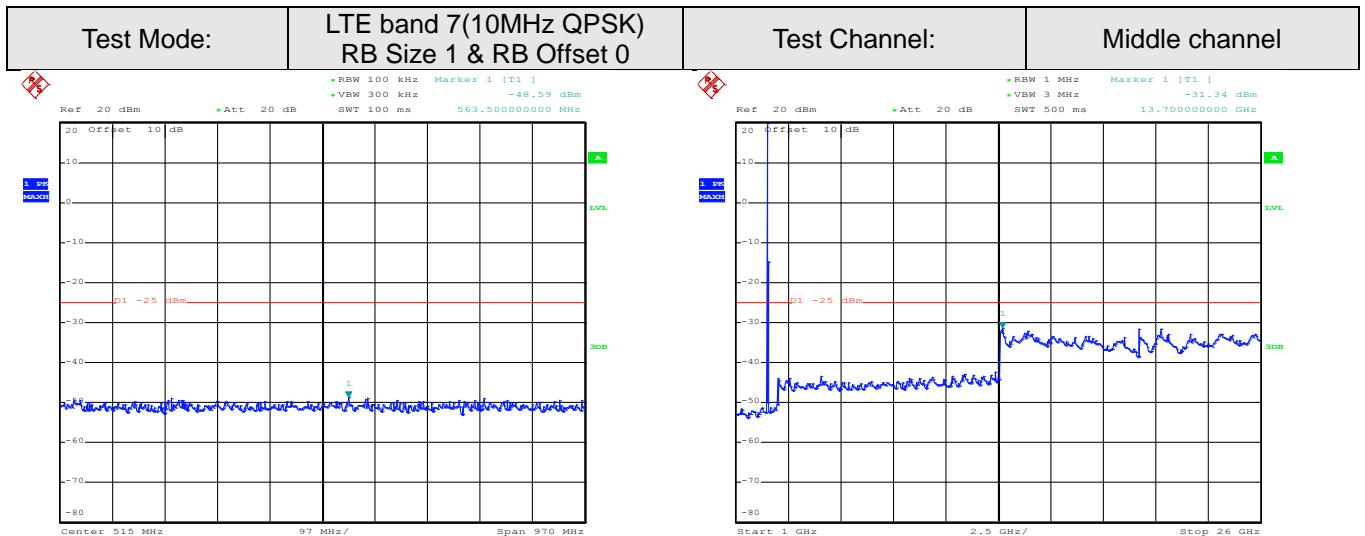
Date: 13.NOV.2016 19:22:10

30MHz~1GHz

Date: 14.NOV.2016 13:37:18

1GHz~26GHz



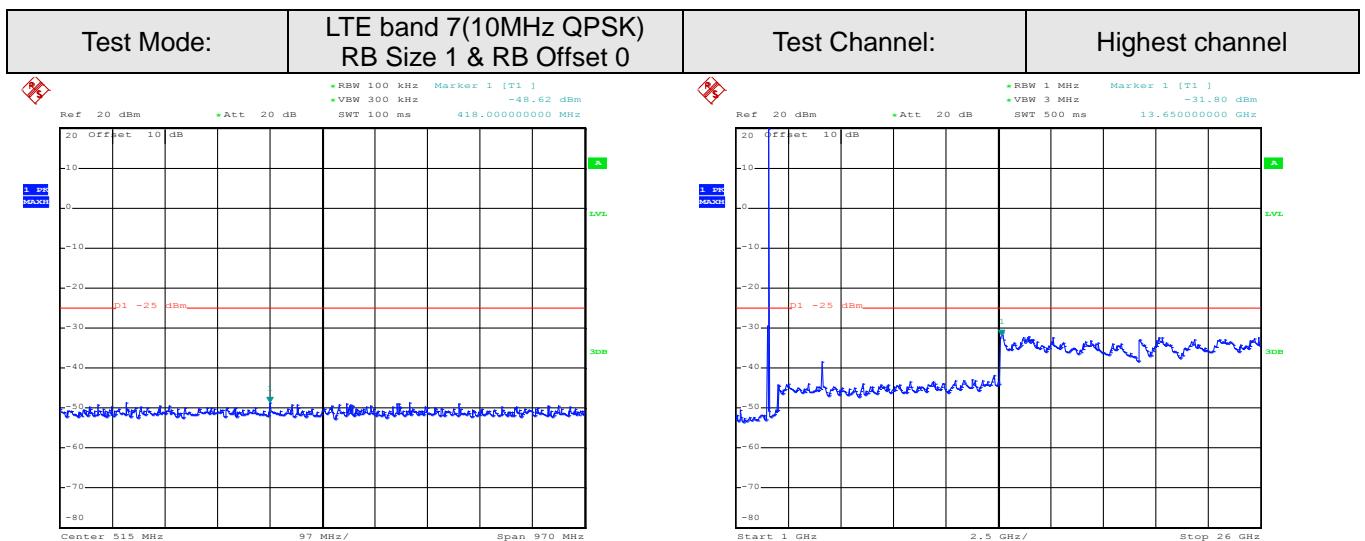


Date: 13.NOV.2016 19:21:48

30MHz~1GHz

Date: 14.NOV.2016 13:36:25

1GHz~26GHz



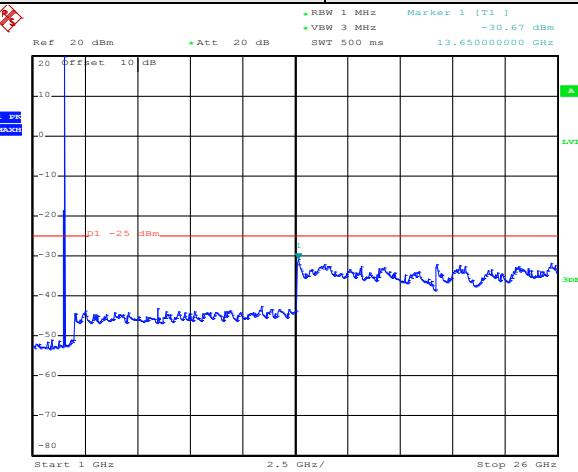
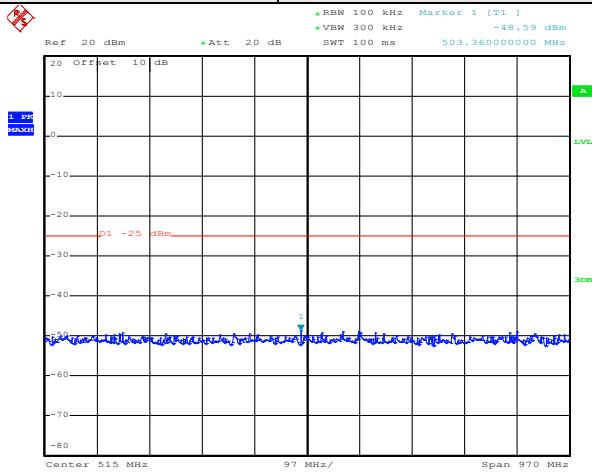
Date: 13.NOV.2016 19:22:18

30MHz~1GHz

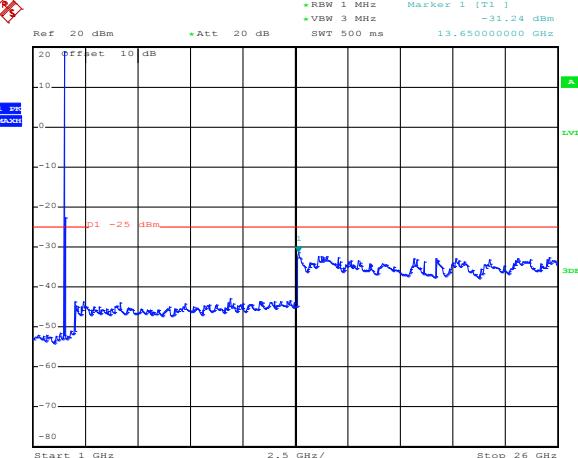
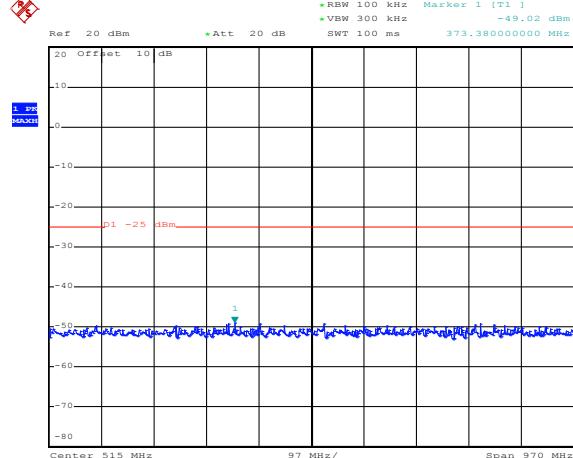
Date: 14.NOV.2016 13:37:50

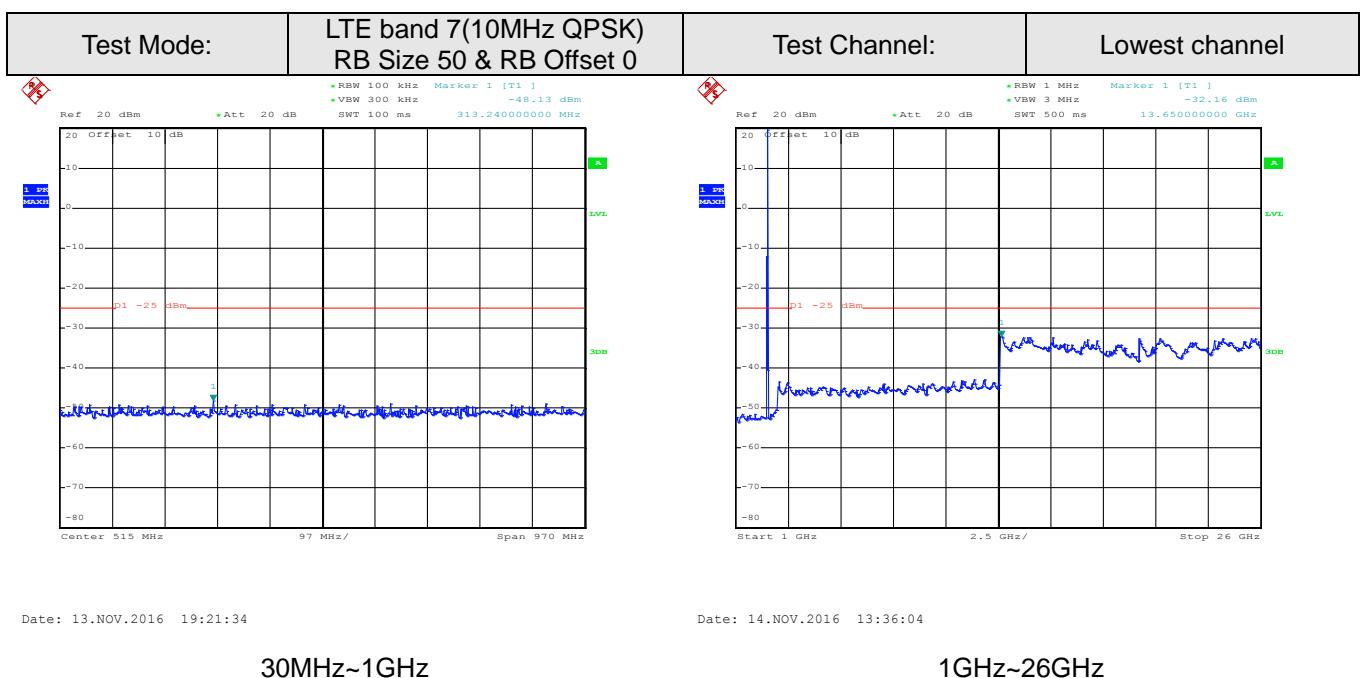
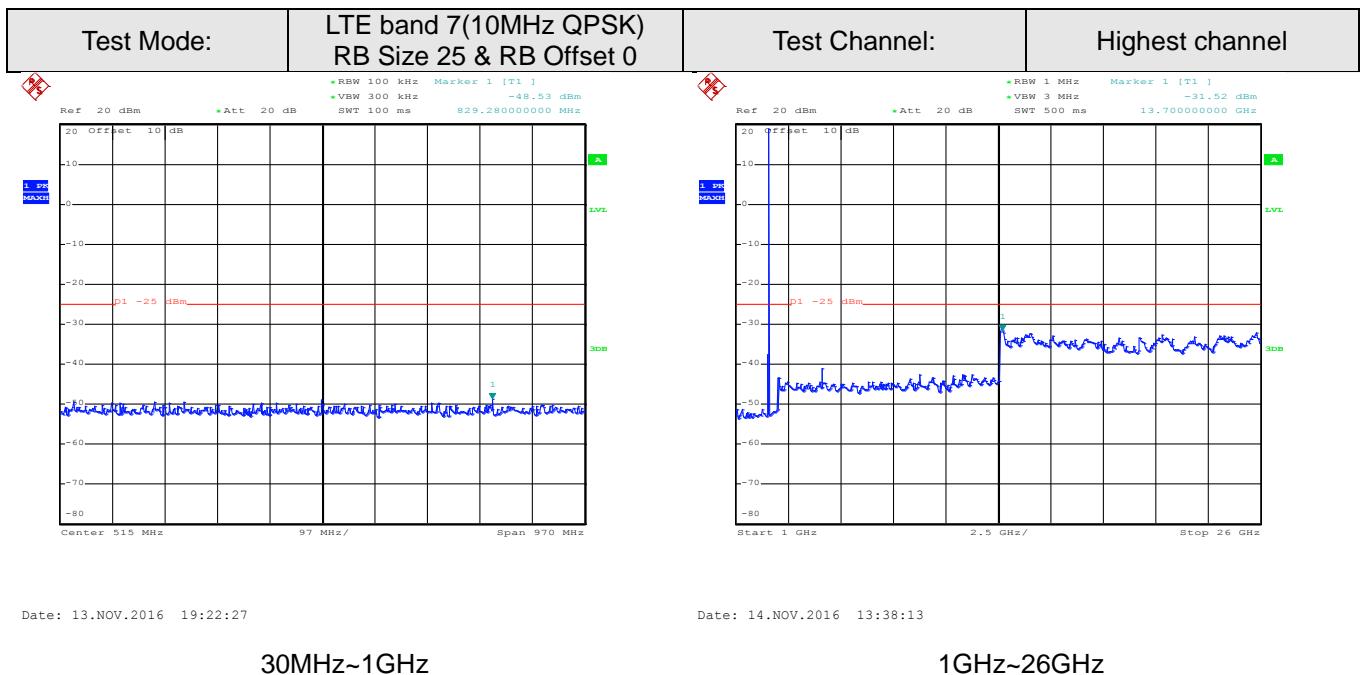
1GHz~26GHz

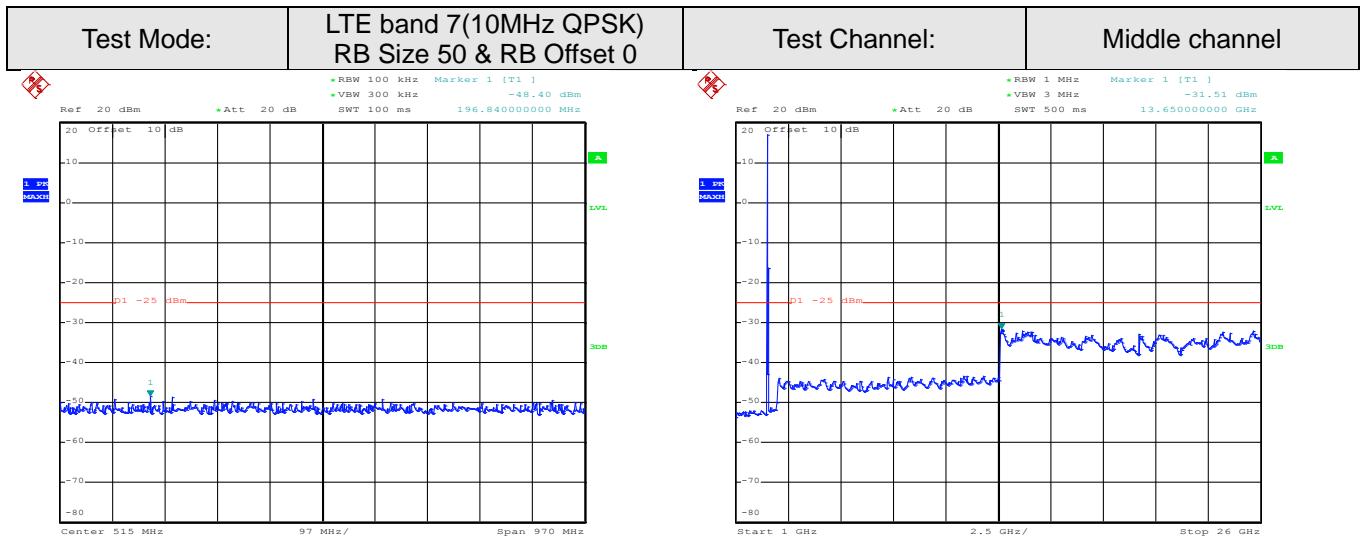
Test Mode:	LTE band 7(10MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Lowest channel
------------	--	---------------	----------------



Test Mode:	LTE band 7(10MHz QPSK) RB Size 25 & RB Offset 0	Test Channel:	Middle channel
------------	--	---------------	----------------





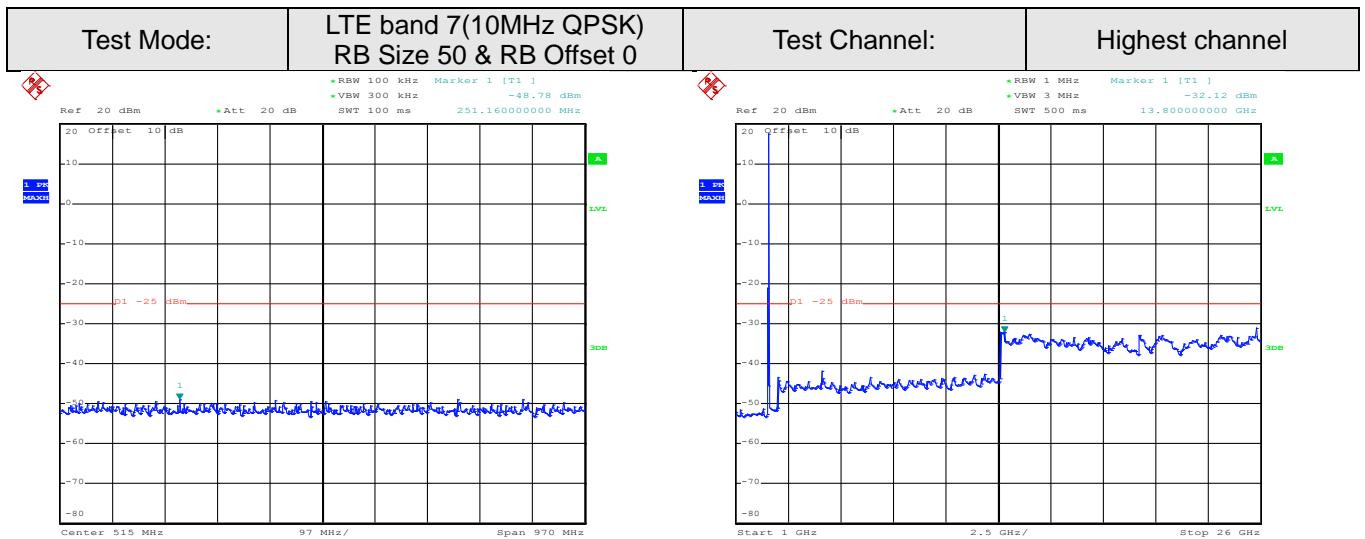


Date: 13.NOV.2016 19:22:06

30MHz~1GHz

Date: 14.NOV.2016 13:37:10

1GHz~26GHz



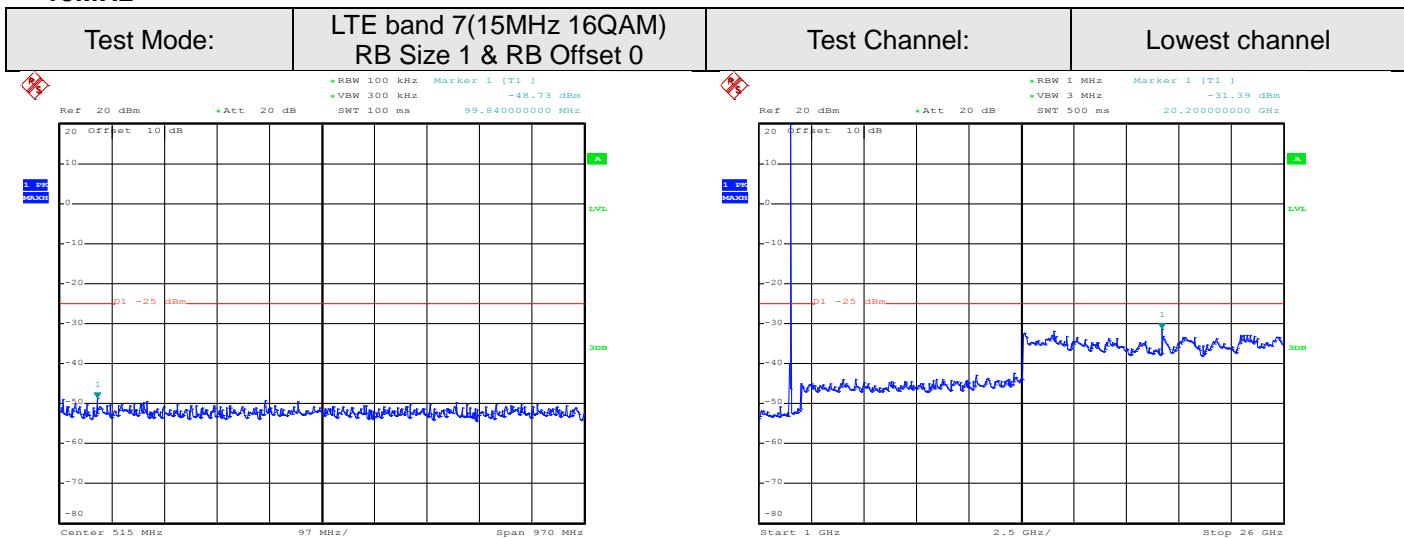
Date: 13.NOV.2016 19:22:35

30MHz~1GHz

Date: 14.NOV.2016 13:38:34

1GHz~26GHz

## 15MHz

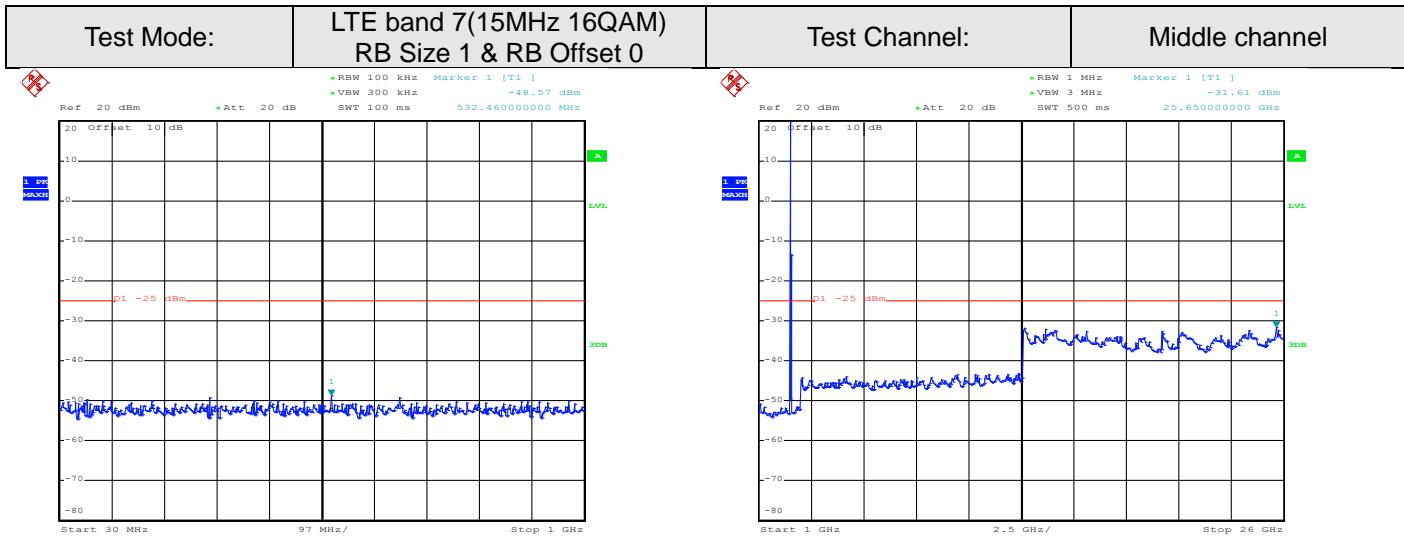


Date: 13.NOV.2016 19:22:52

Date: 14.NOV.2016 13:39:25

30MHz~1GHz

1GHz~26GHz

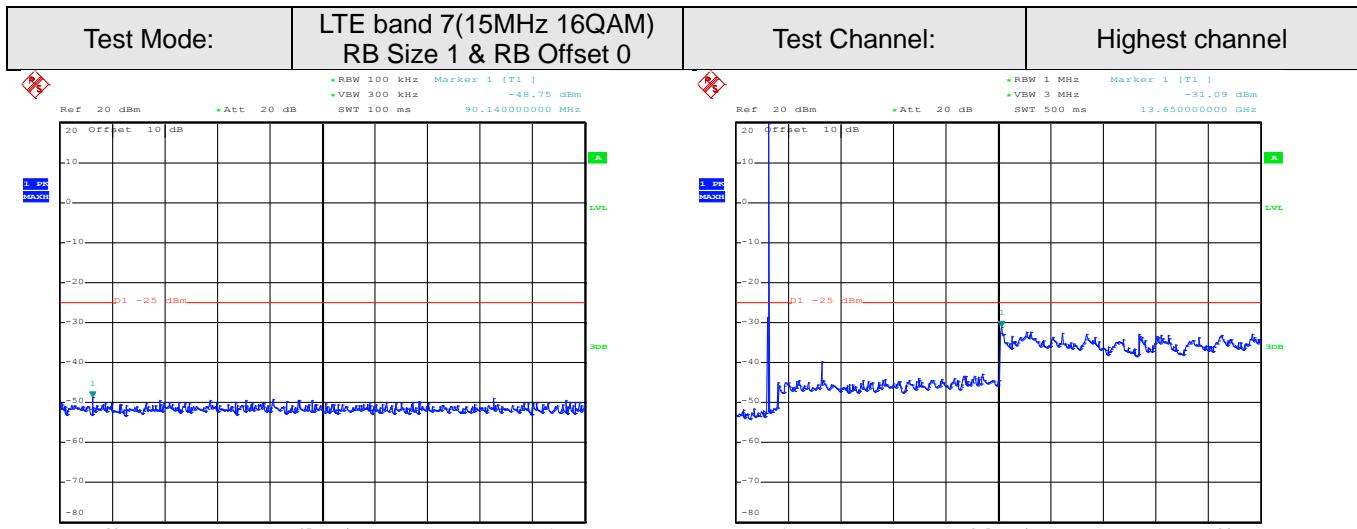


Date: 13.NOV.2016 19:23:29

Date: 14.NOV.2016 13:40:40

30MHz~1GHz

1GHz~26GHz

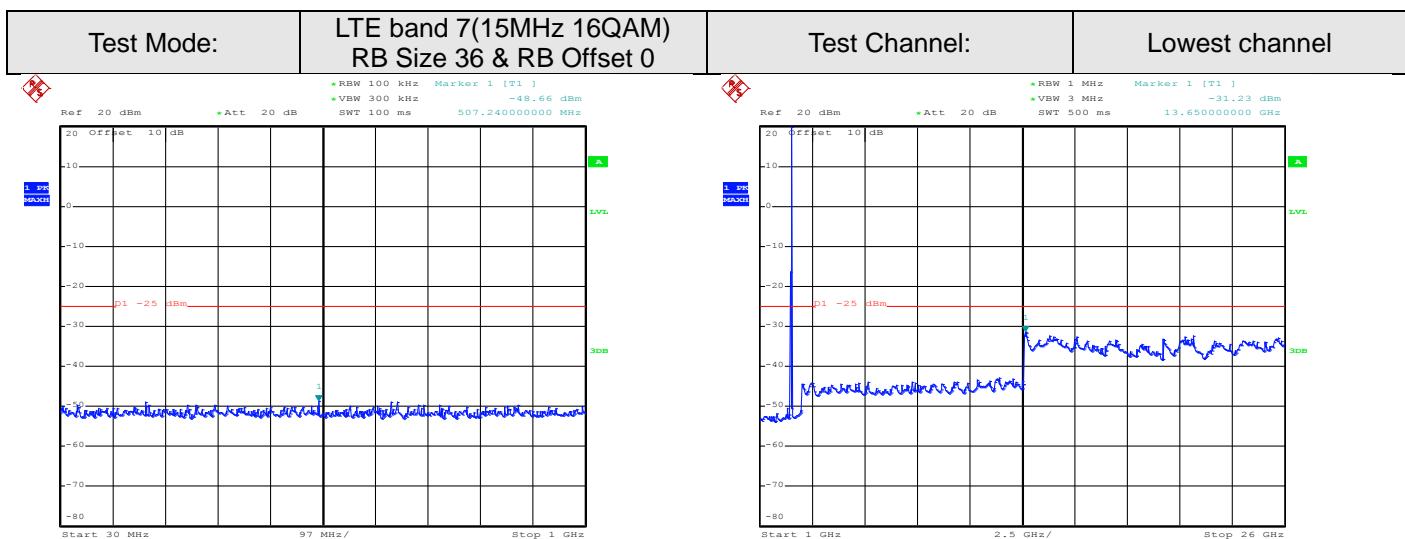


Date: 13.NOV.2016 19:24:04

30MHz~1GHz

Date: 14.NOV.2016 13:41:52

1GHz~26GHz



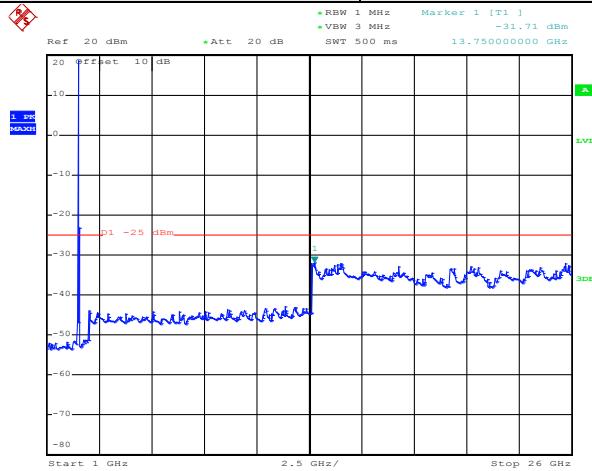
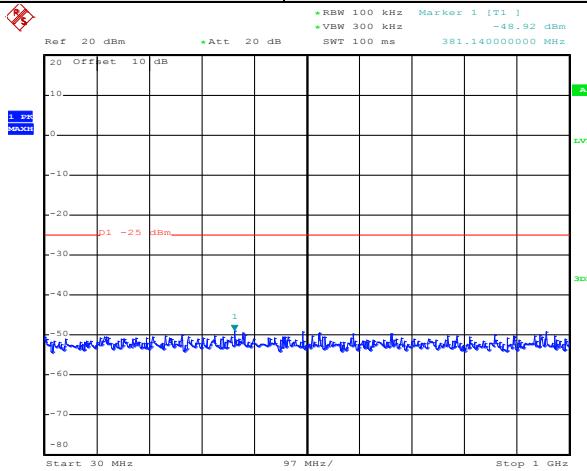
Date: 13.NOV.2016 19:23:04

30MHz~1GHz

Date: 14.NOV.2016 13:39:52

1GHz~26GHz

Test Mode:	LTE band 7(15MHz 16QAM) RB Size 36 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------

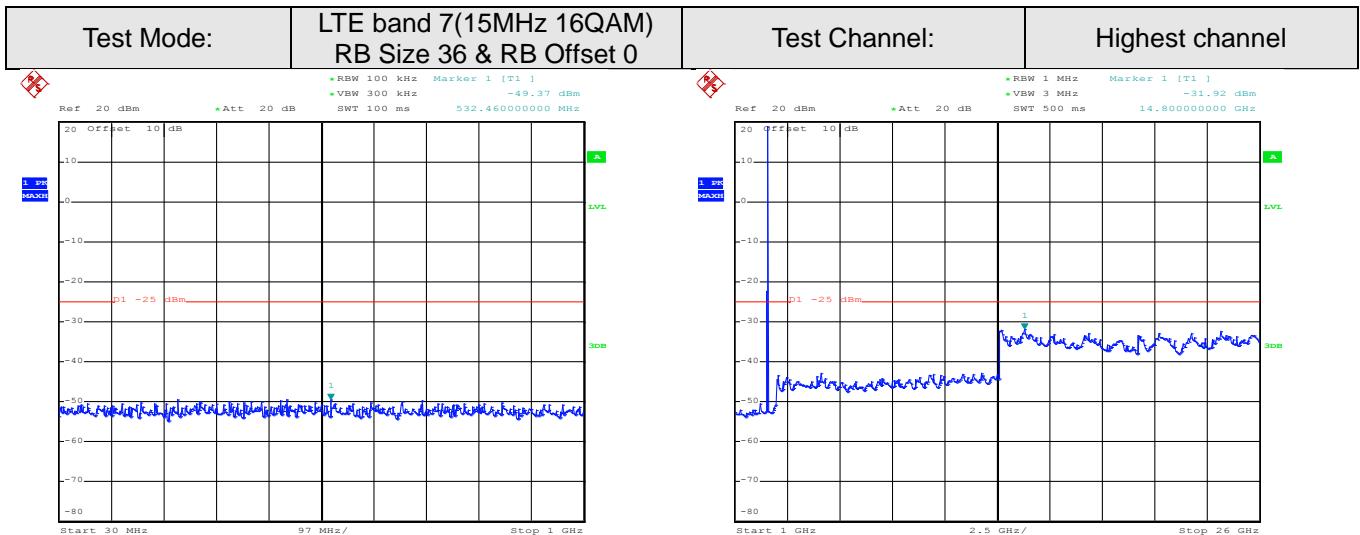


Date: 13.NOV.2016 19:23:39

30MHz~1GHz

Date: 14.NOV.2016 13:40:59

1GHz~26GHz

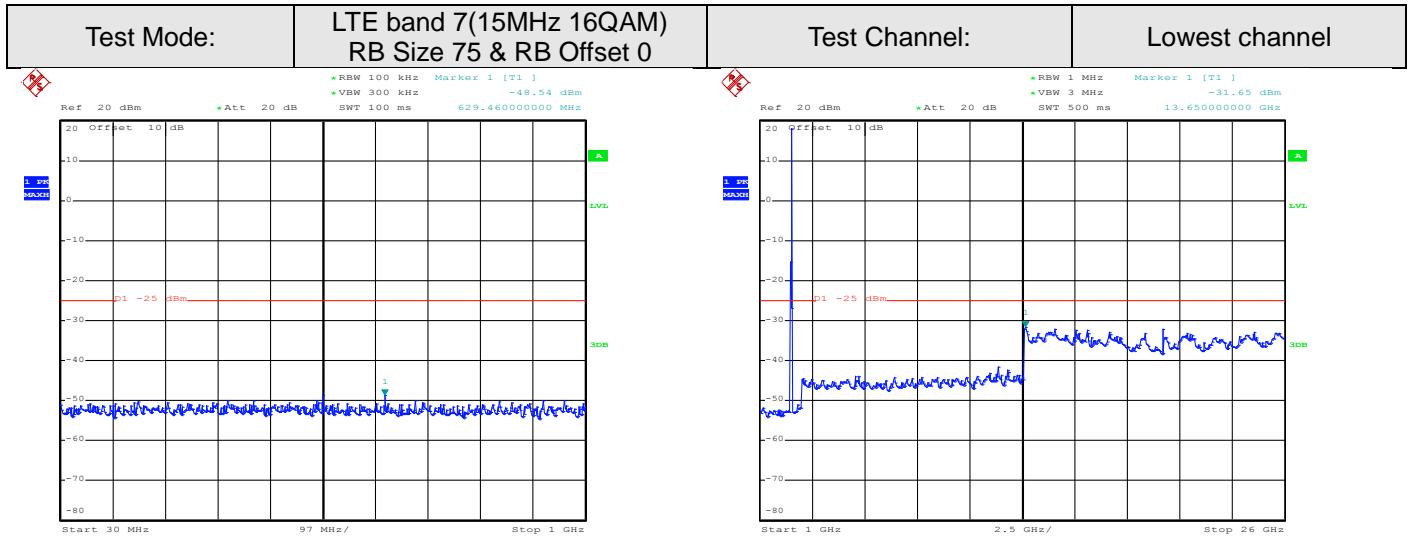


Date: 13.NOV.2016 19:24:14

30MHz~1GHz

Date: 14.NOV.2016 13:42:18

1GHz~26GHz

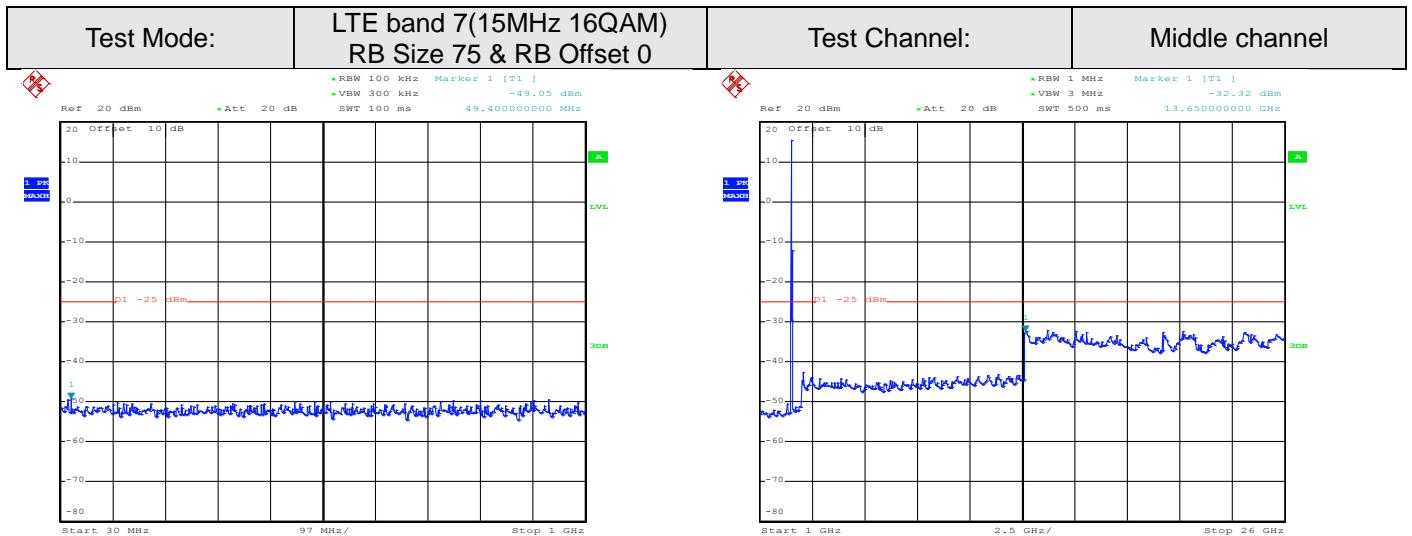


Date: 13.NOV.2016 19:23:13

30MHz~1GHz

Date: 14.NOV.2016 13:40:11

1GHz~26GHz



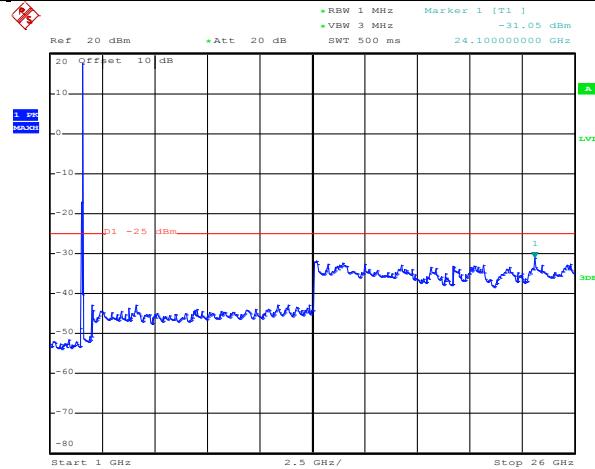
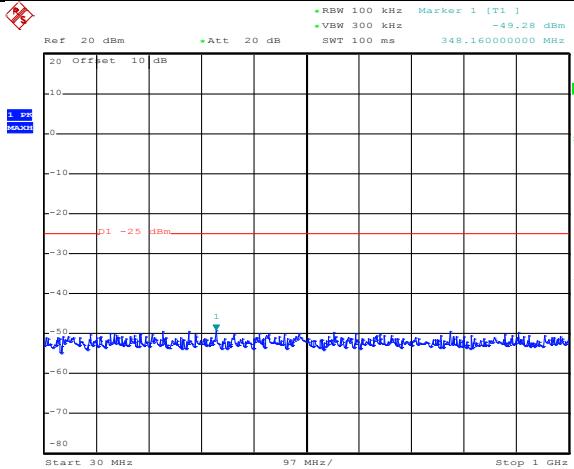
Date: 13.NOV.2016 19:23:48

30MHz~1GHz

Date: 14.NOV.2016 13:41:23

1GHz~26GHz

Test Mode:	LTE band 7(15MHz 16QAM) RB Size 75 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



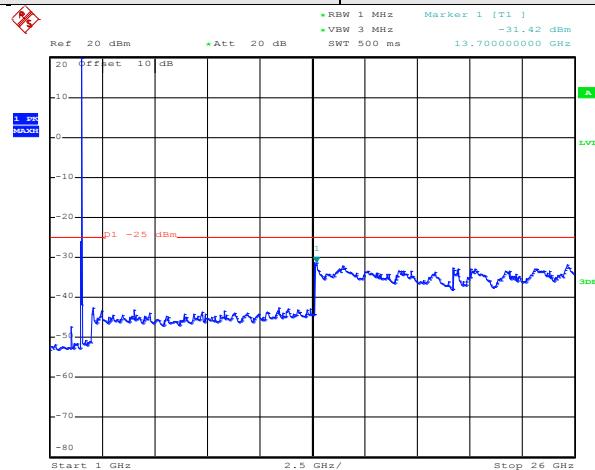
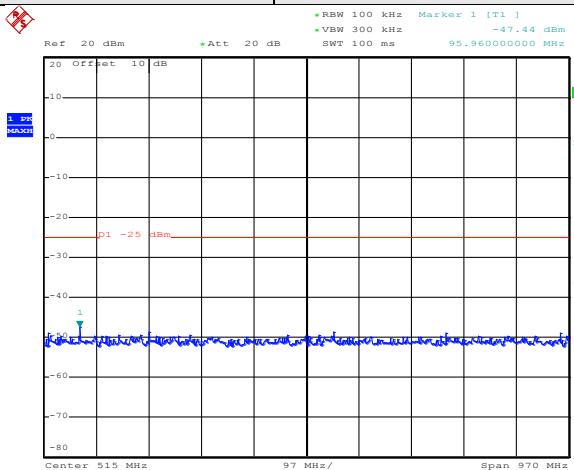
Date: 13.NOV.2016 19:24:23

30MHz~1GHz

Date: 14.NOV.2016 13:42:37

1GHz~26GHz

Test Mode:	LTE band 7(15MHz QPSK) RB Size 1 & RB Offset 0	Test Channel:	Lowest channel
------------	---	---------------	----------------

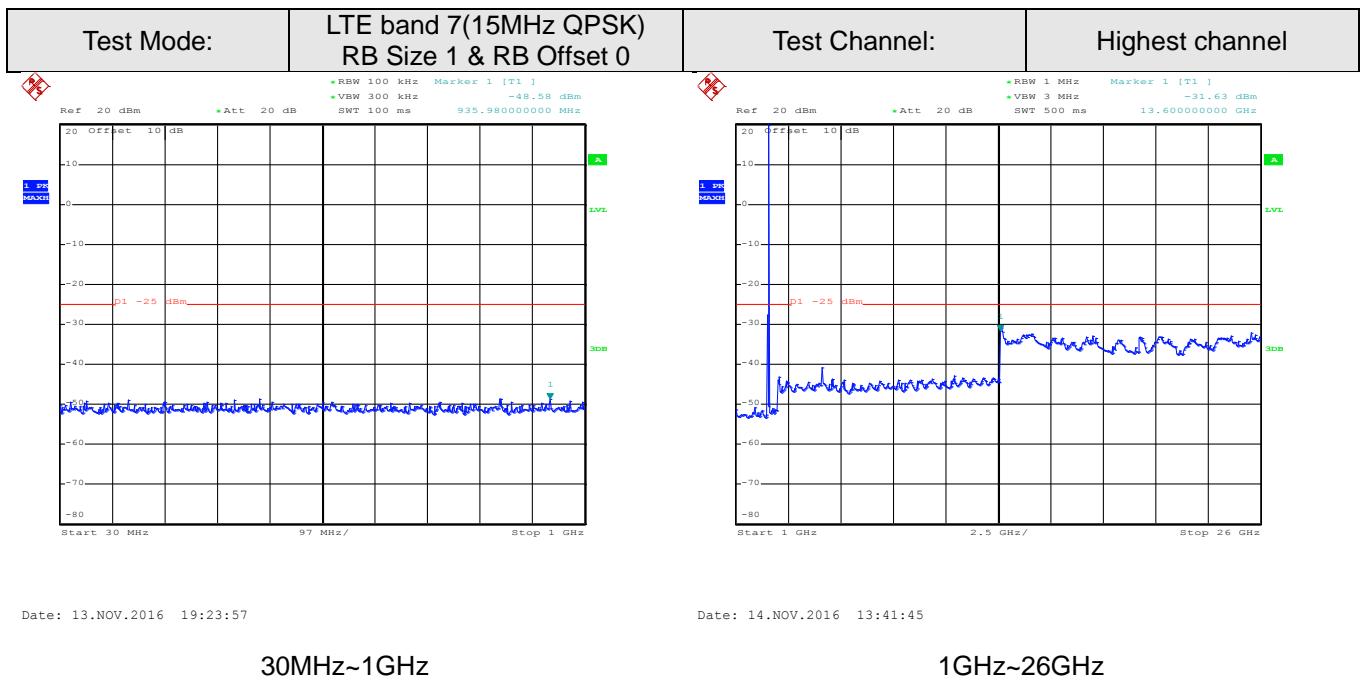
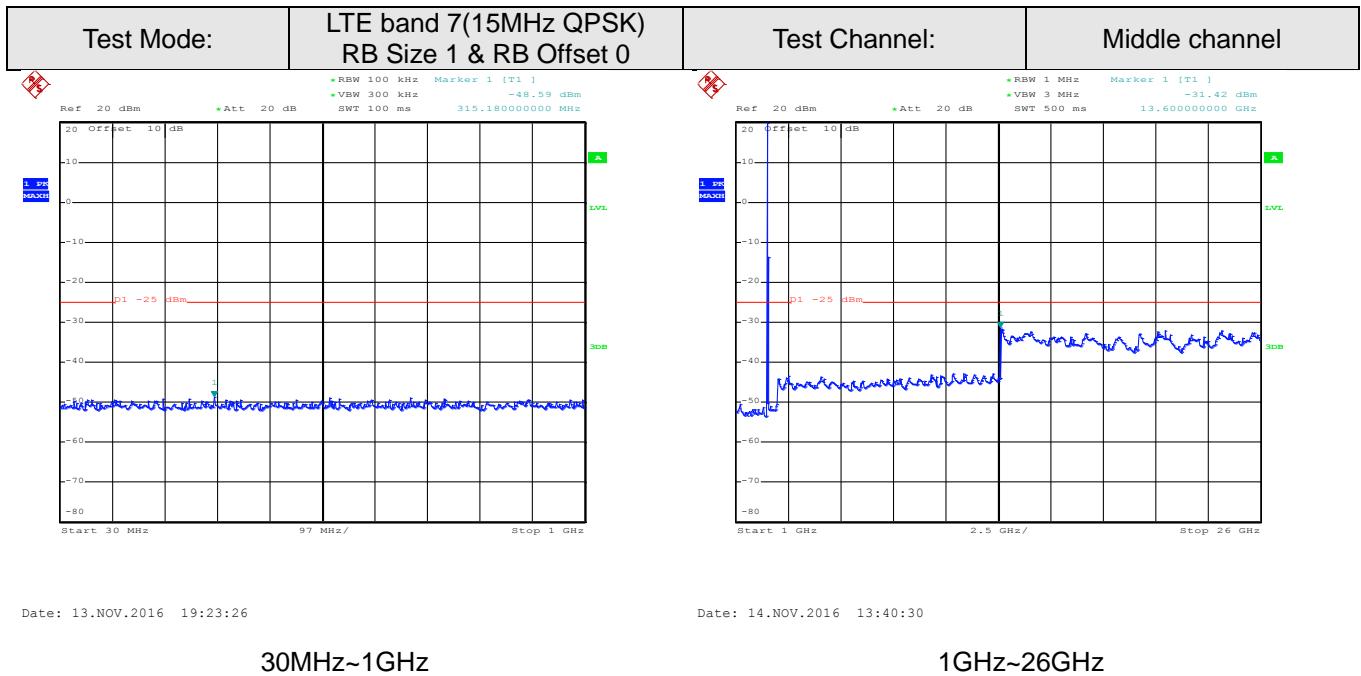


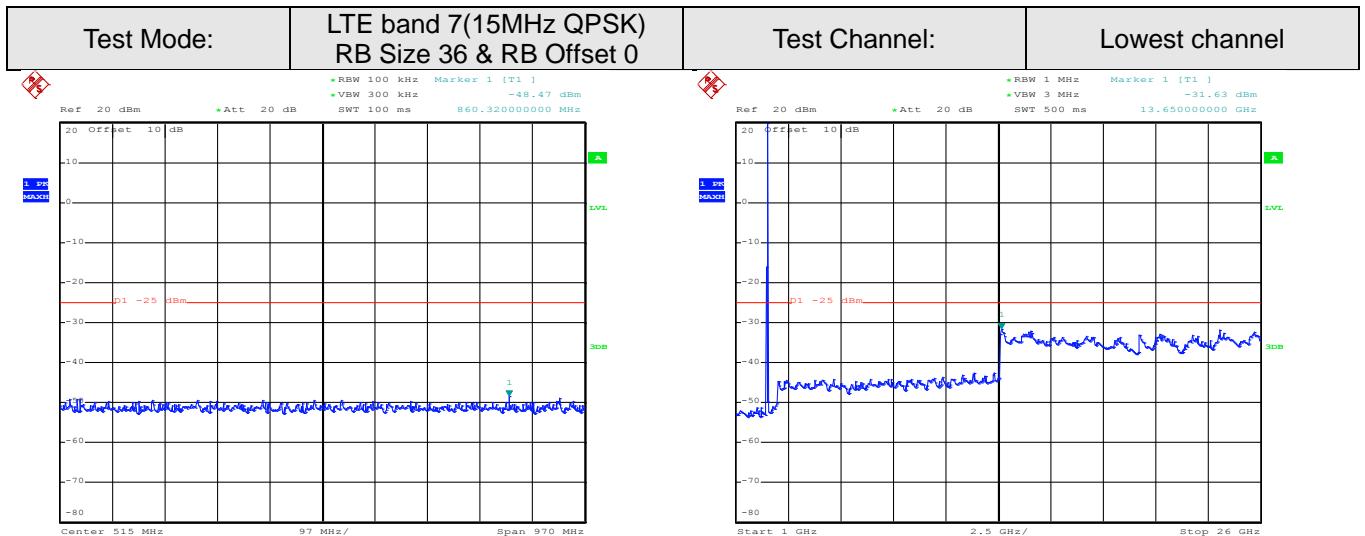
Date: 13.NOV.2016 19:22:49

30MHz~1GHz

Date: 14.NOV.2016 13:39:17

1GHz~26GHz



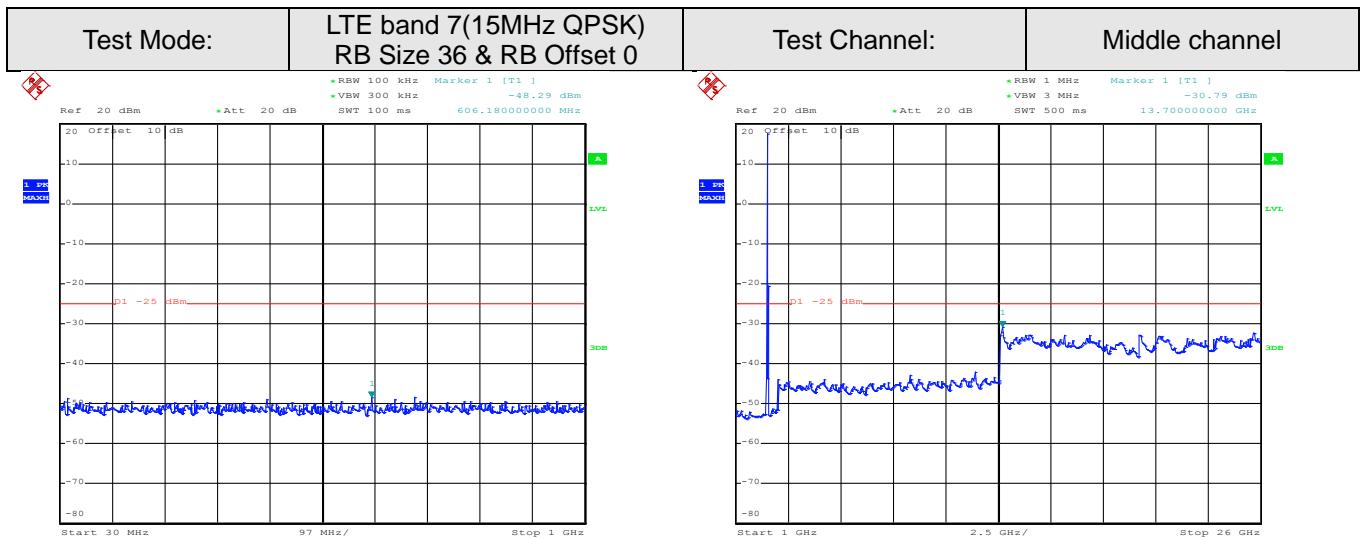


Date: 13.NOV.2016 19:22:58

30MHz~1GHz

Date: 14.NOV.2016 13:39:41

1GHz~26GHz

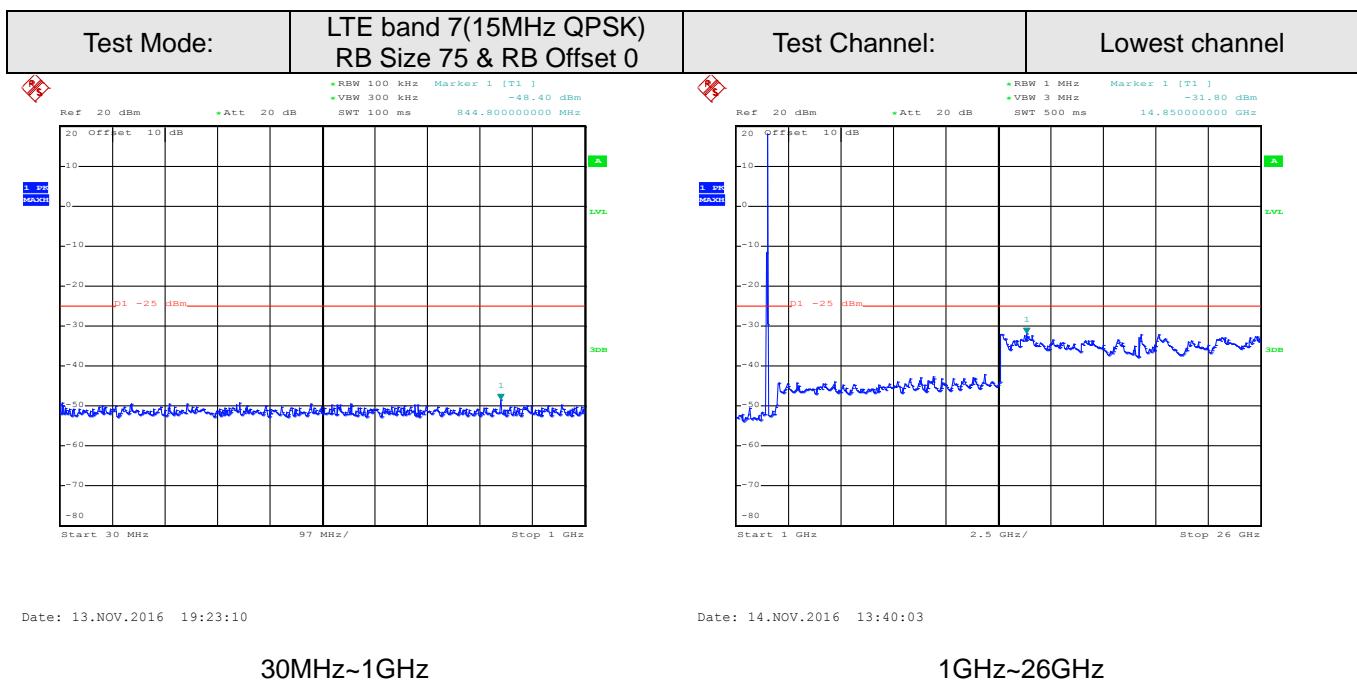
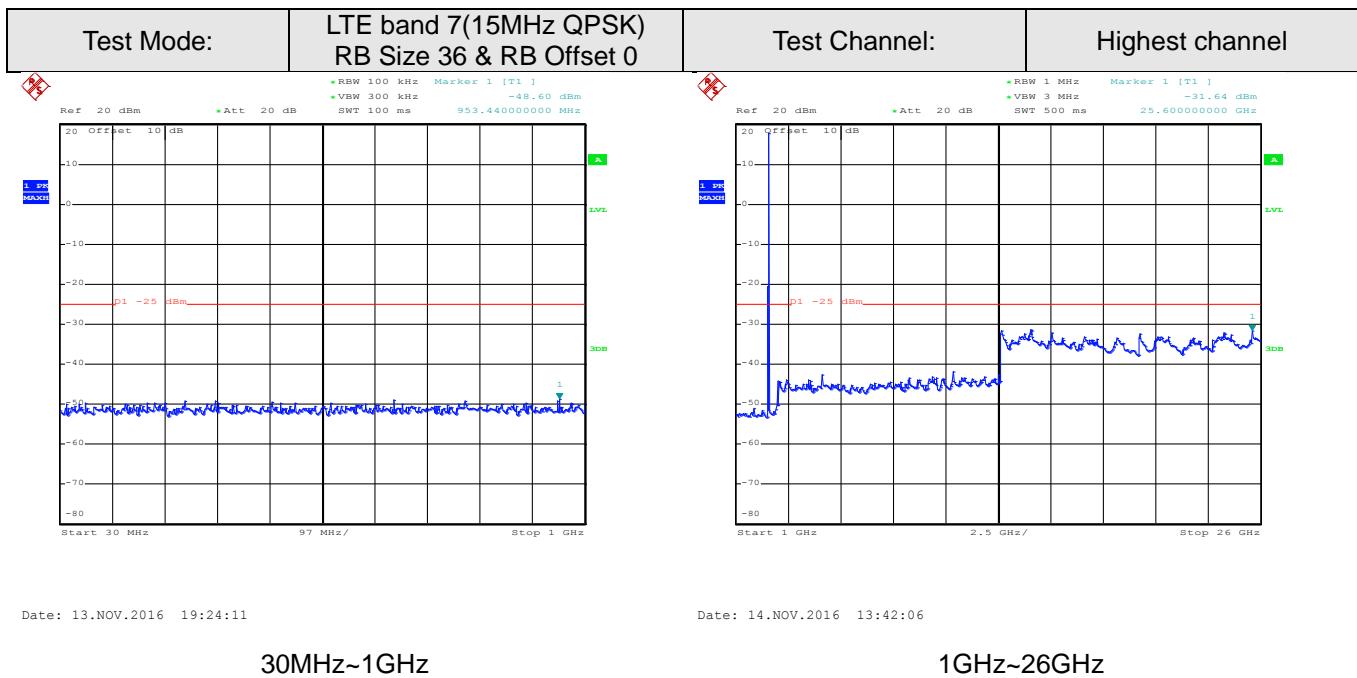


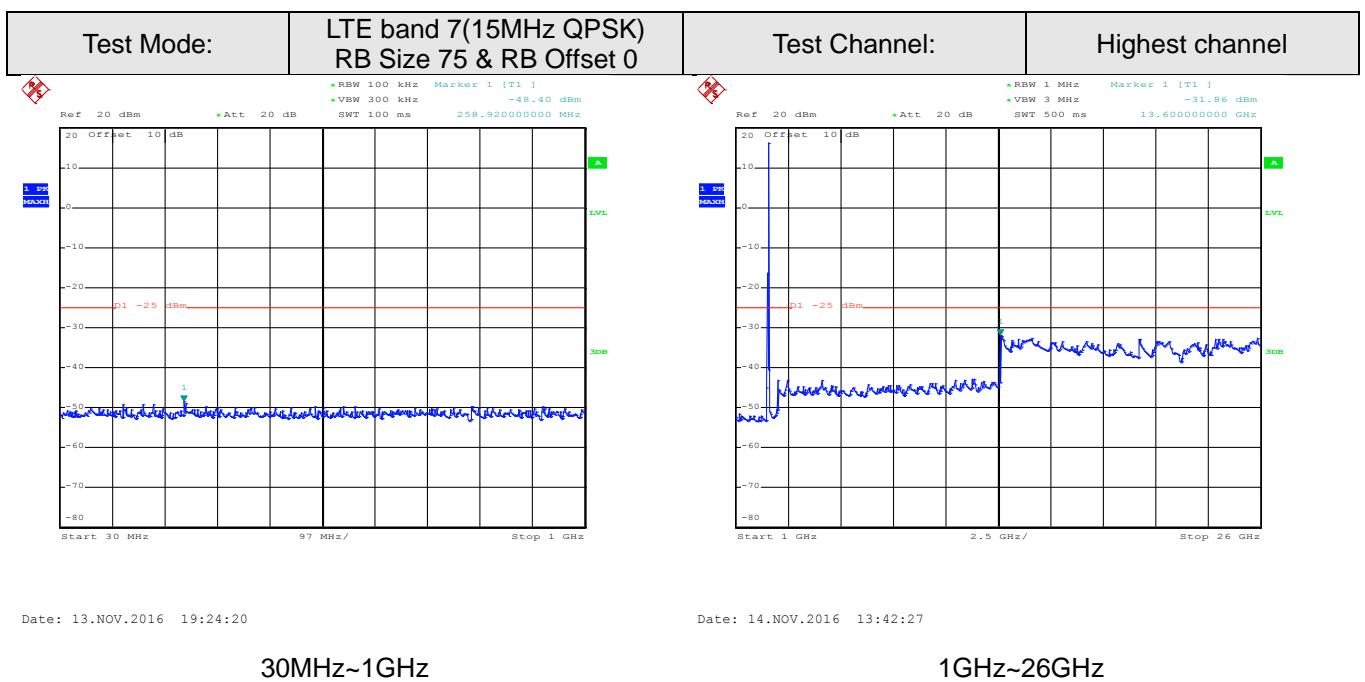
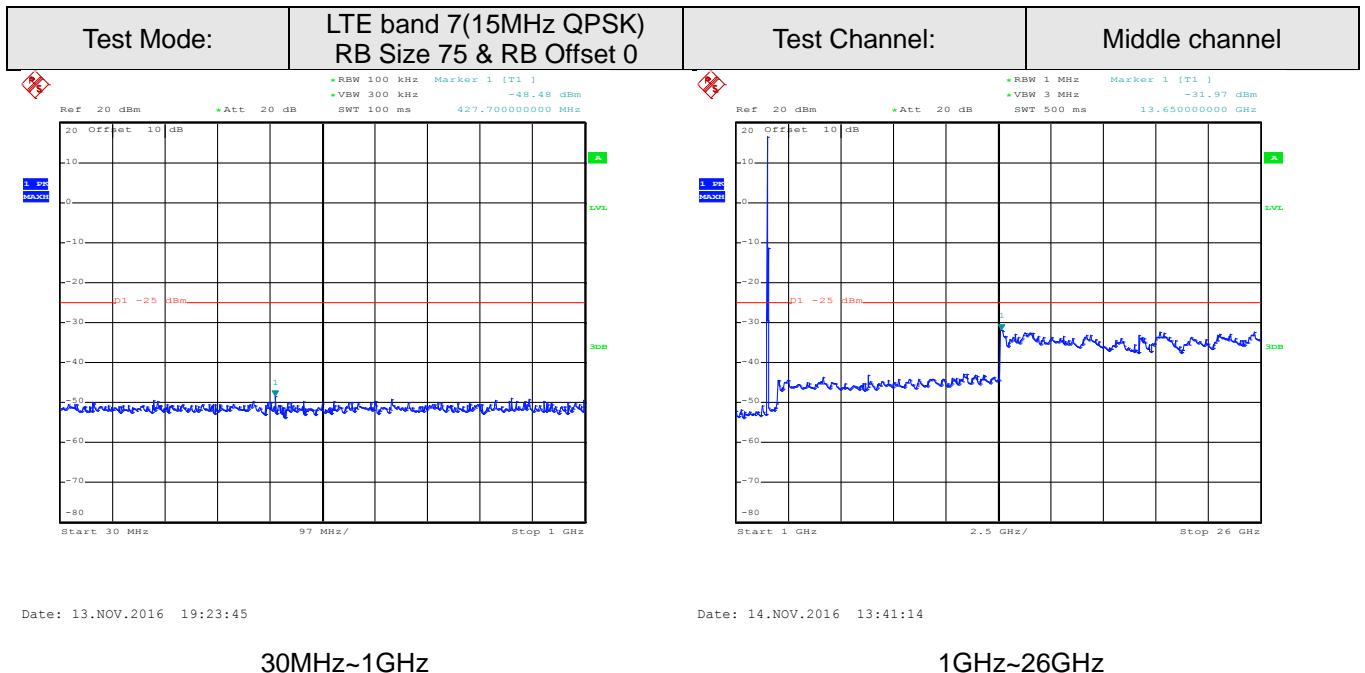
Date: 13.NOV.2016 19:23:36

30MHz~1GHz

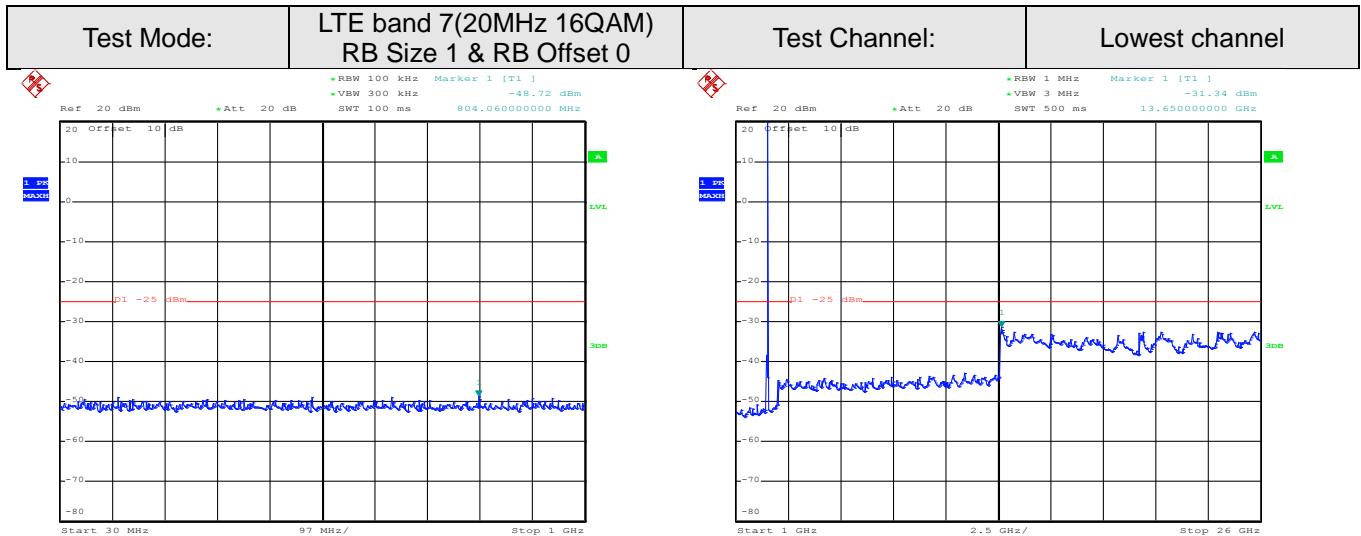
Date: 14.NOV.2016 13:40:51

1GHz~26GHz





## 20MHz

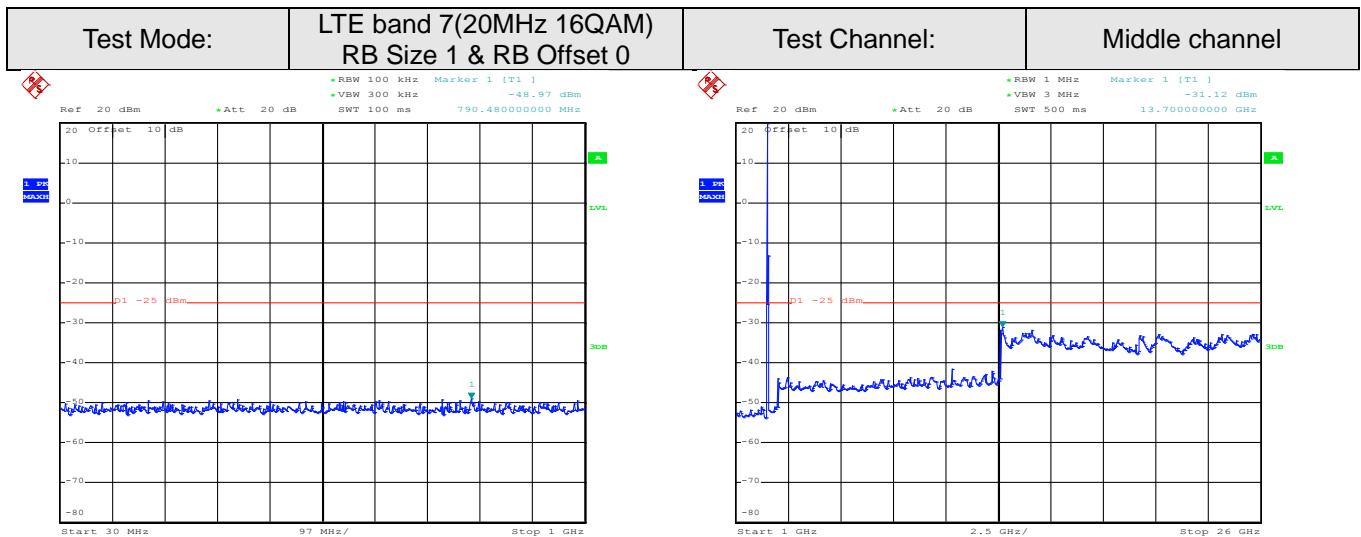


Date: 13.NOV.2016 19:24:40

Date: 14.NOV.2016 13:43:31

30MHz~1GHz

1GHz~26GHz

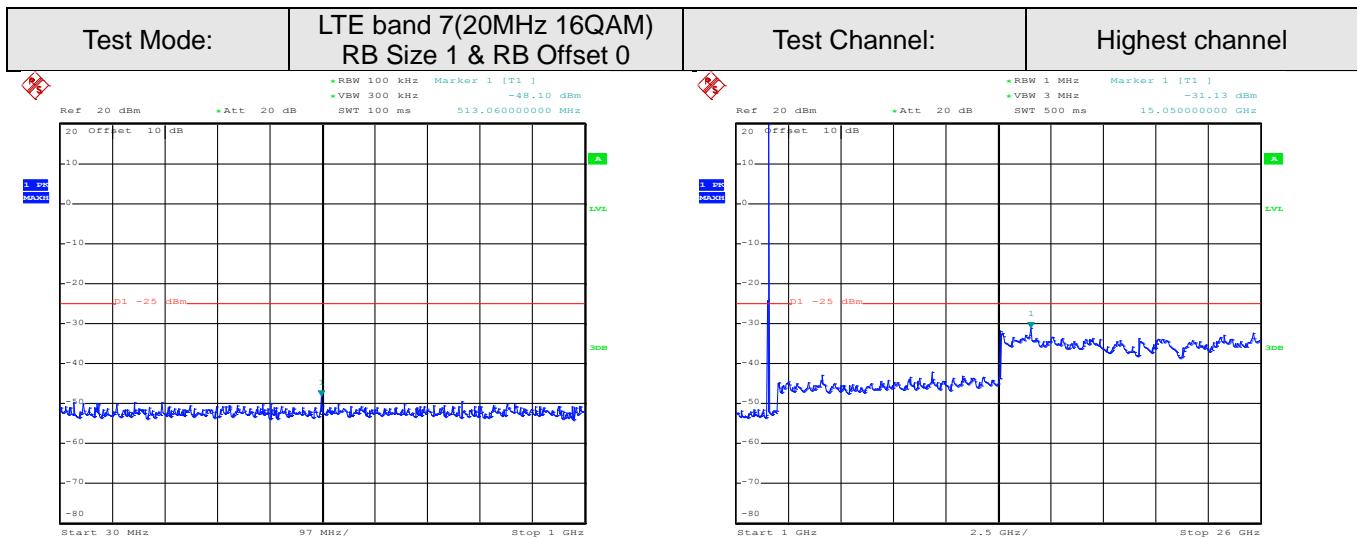


Date: 13.NOV.2016 19:25:30

Date: 14.NOV.2016 13:44:52

30MHz~1GHz

1GHz~26GHz

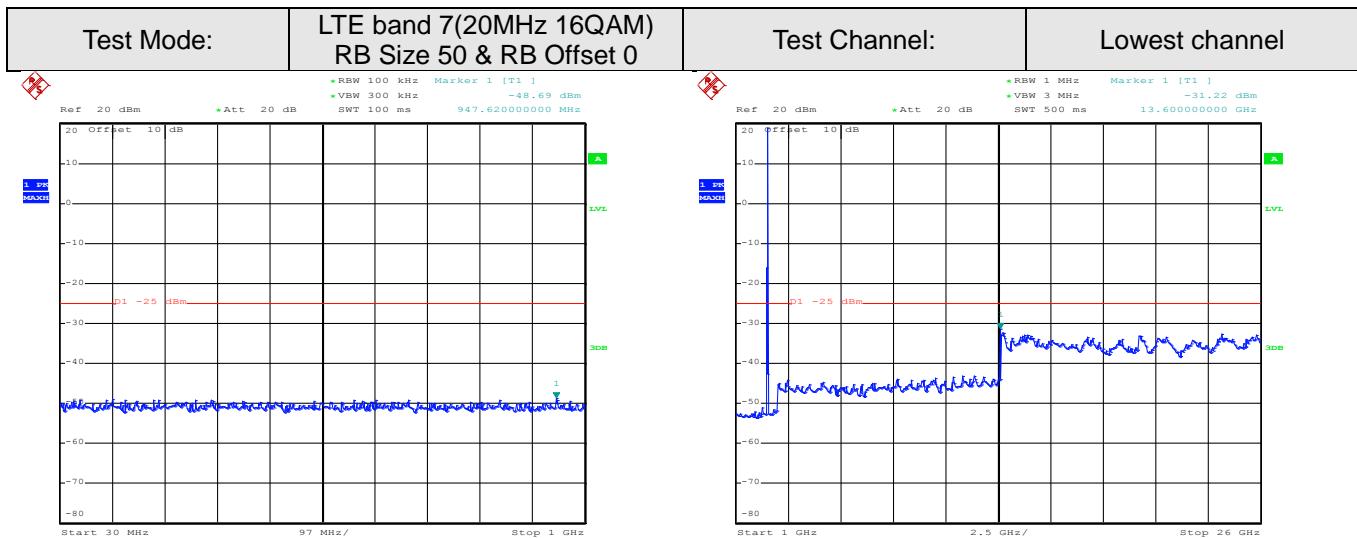


Date: 13.NOV.2016 19:26:15

30MHz~1GHz

Date: 14.NOV.2016 13:46:20

1GHz~26GHz



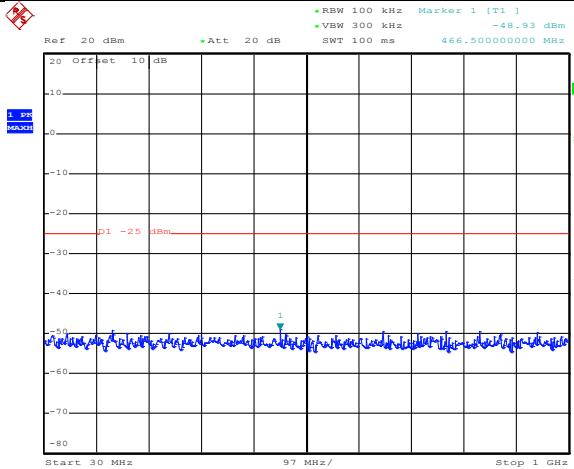
Date: 13.NOV.2016 19:25:01

30MHz~1GHz

Date: 14.NOV.2016 13:43:51

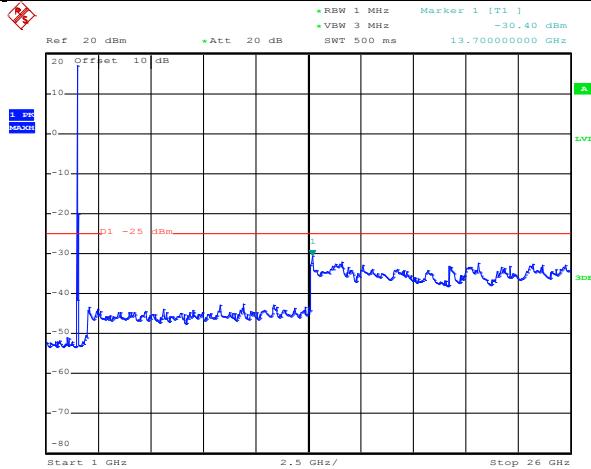
1GHz~26GHz

Test Mode:	LTE band 7(20MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Middle channel
------------	---	---------------	----------------



Date: 13.NOV.2016 19:25:44

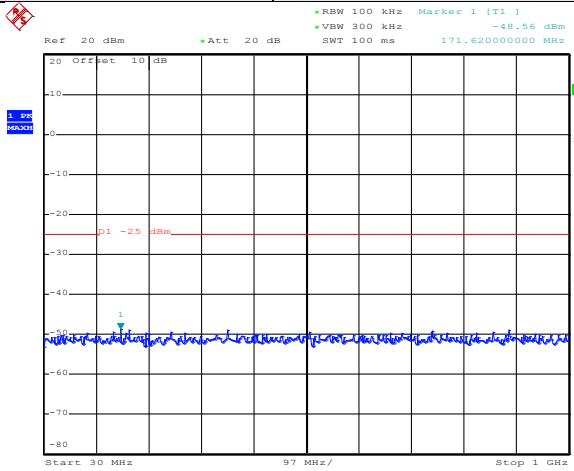
30MHz~1GHz



Date: 14.NOV.2016 13:45:22

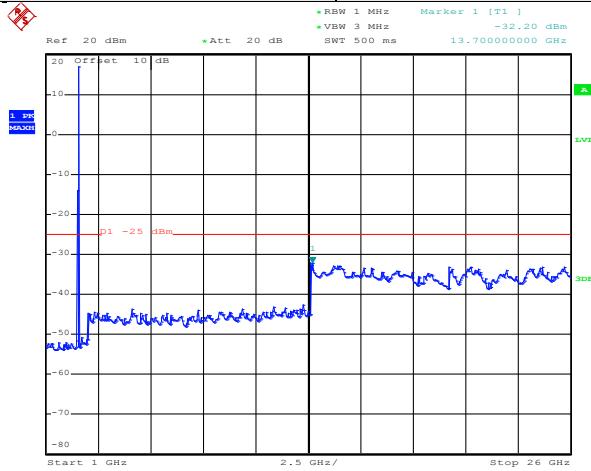
1GHz~26GHz

Test Mode:	LTE band 7(20MHz 16QAM) RB Size 50 & RB Offset 0	Test Channel:	Highest channel
------------	---	---------------	-----------------



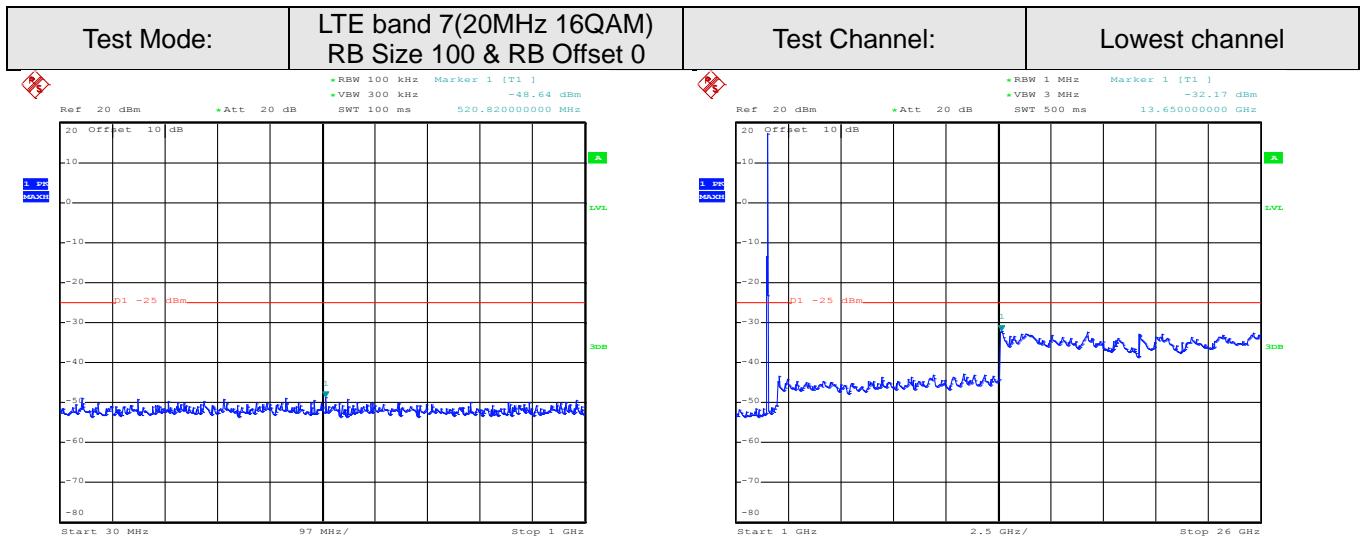
Date: 13.NOV.2016 19:26:30

30MHz~1GHz



Date: 14.NOV.2016 13:46:40

1GHz~26GHz

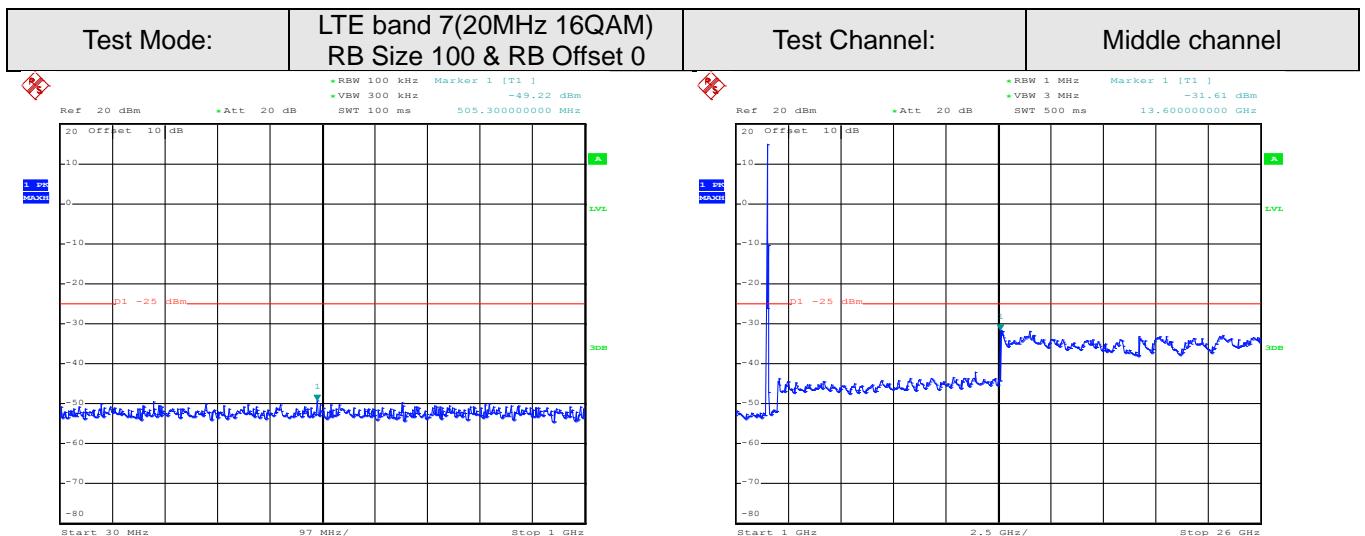


Date: 13.NOV.2016 19:25:13

30MHz~1GHz

Date: 14.NOV.2016 13:44:20

1GHz~26GHz

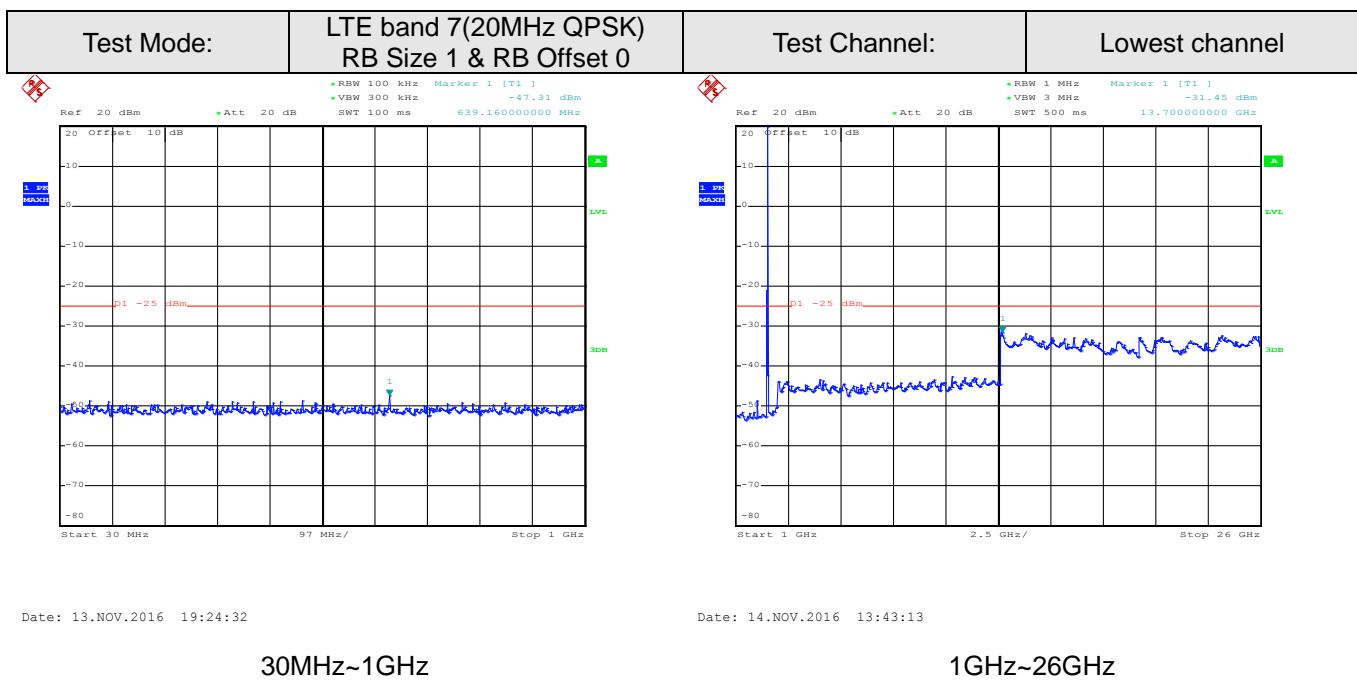
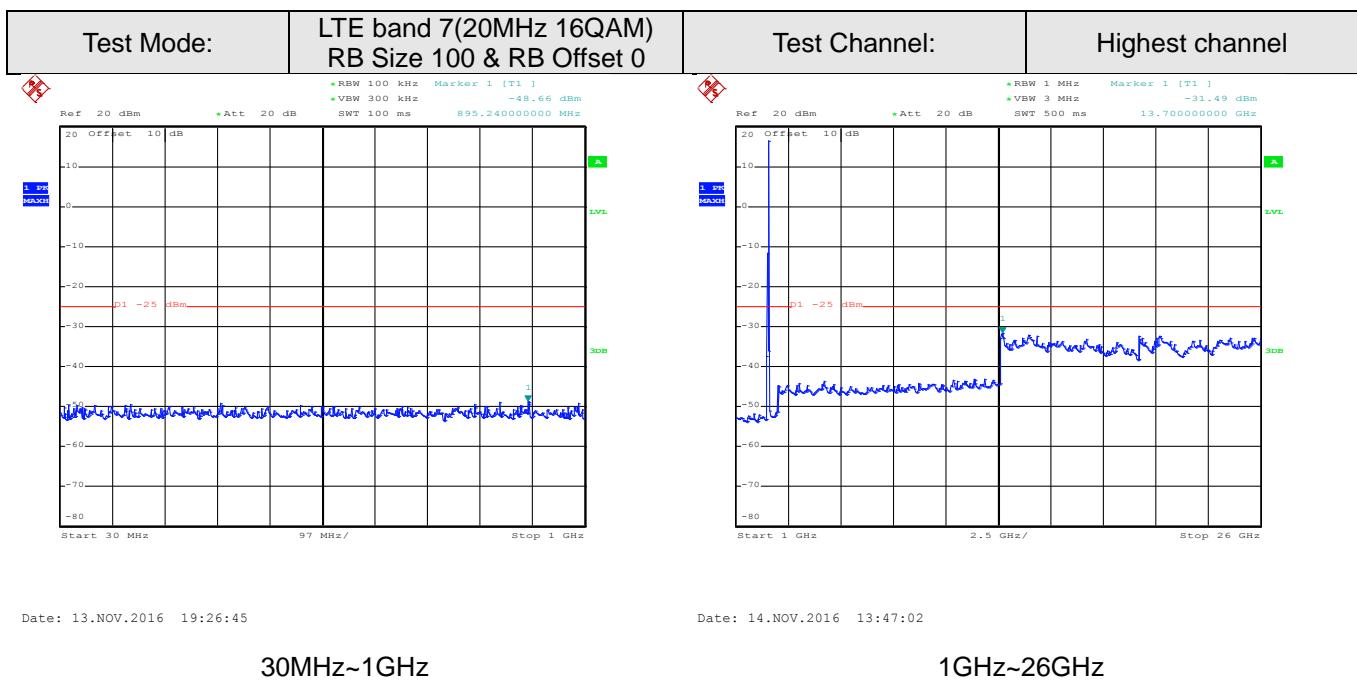


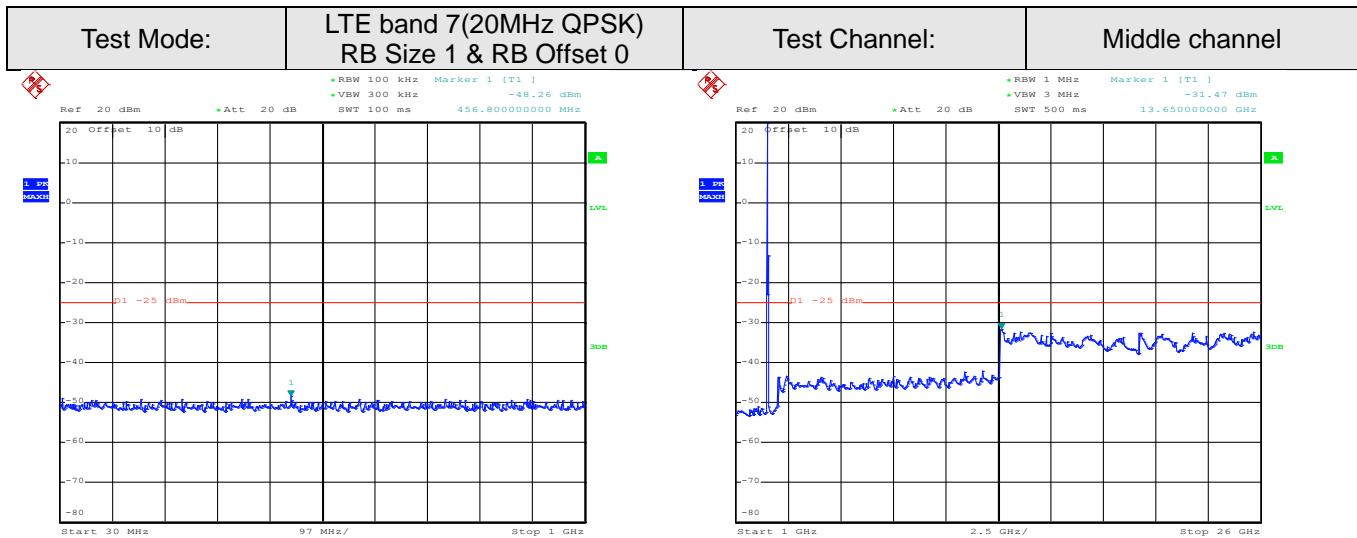
Date: 13.NOV.2016 19:25:59

30MHz~1GHz

Date: 14.NOV.2016 13:45:51

1GHz~26GHz



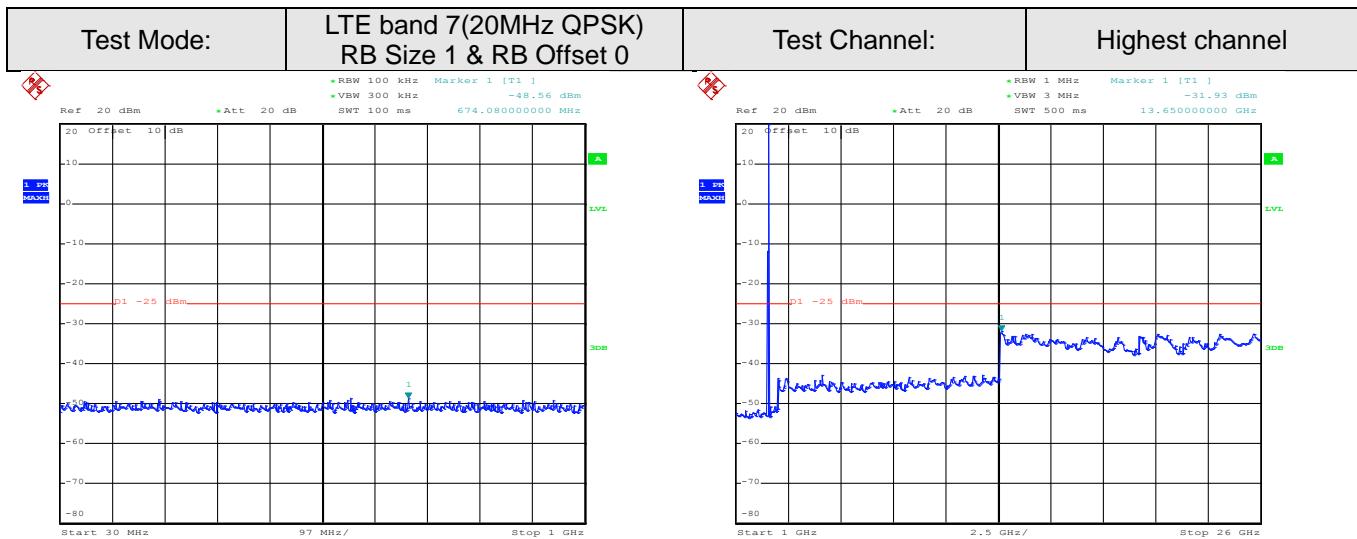


Date: 13.NOV.2016 19:25:24

30MHz~1GHz

Date: 14.NOV.2016 13:44:39

1GHz~26GHz

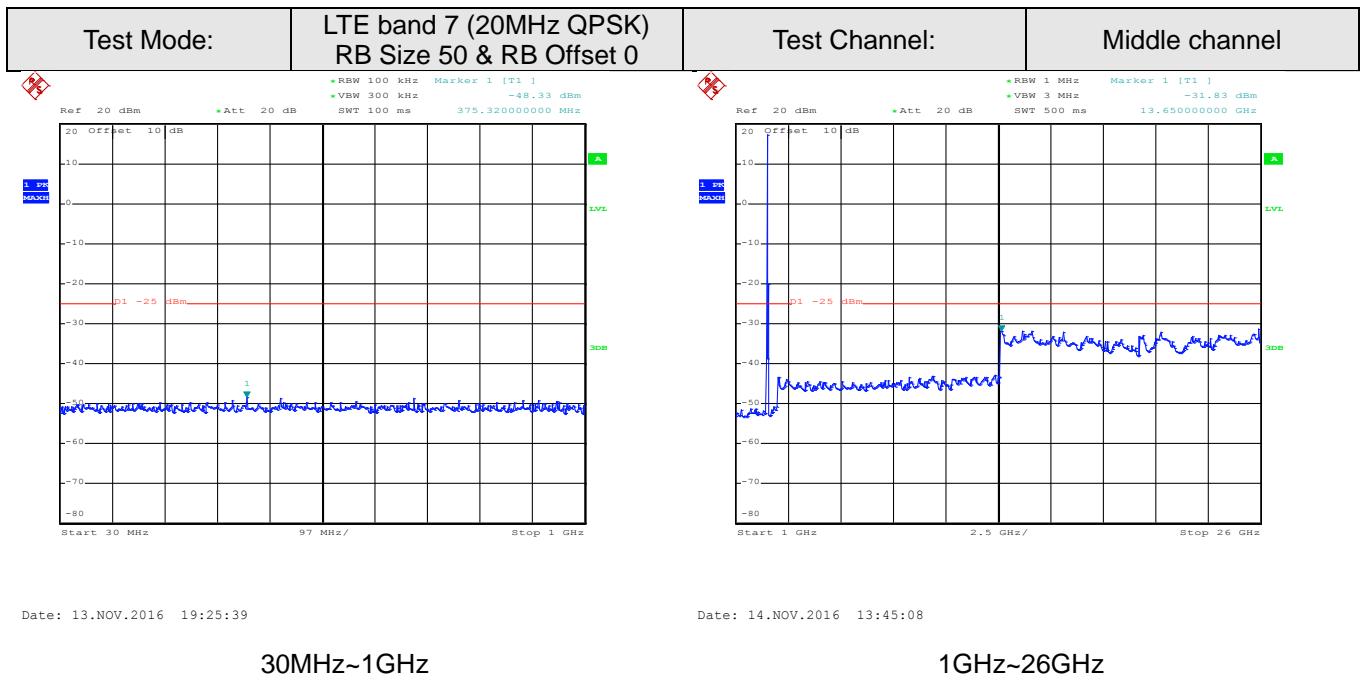
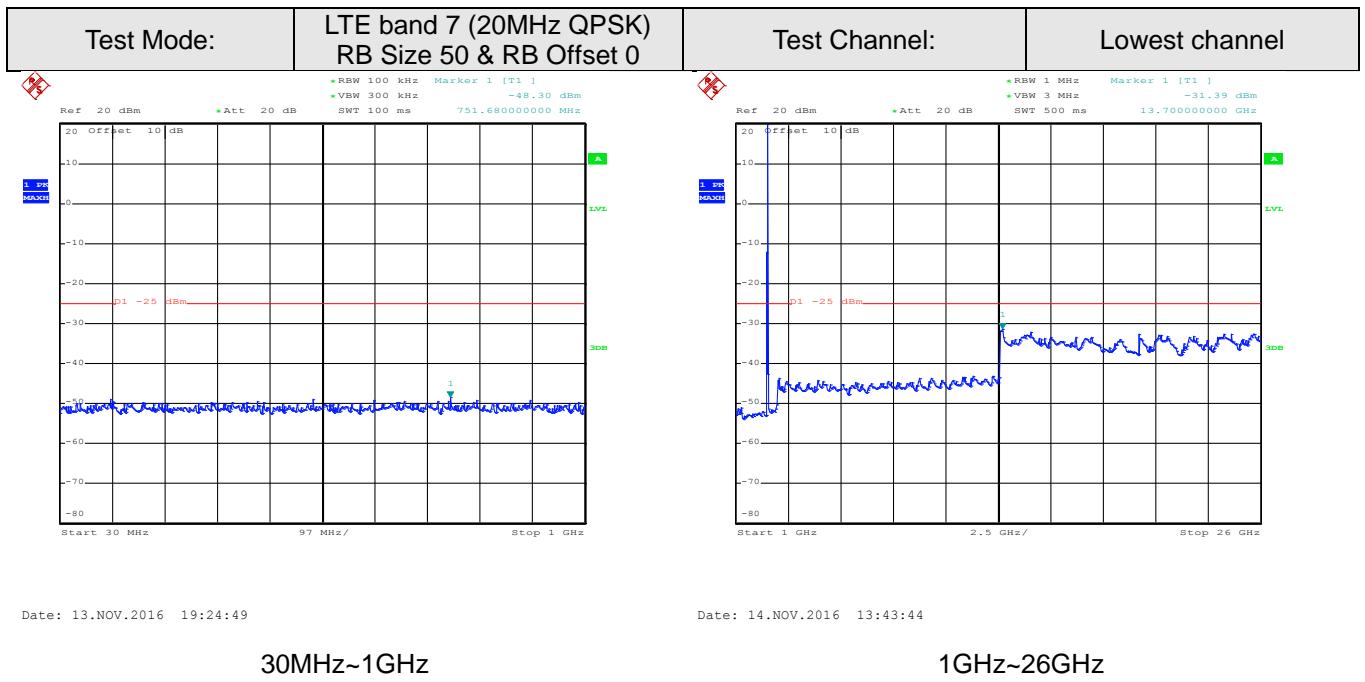


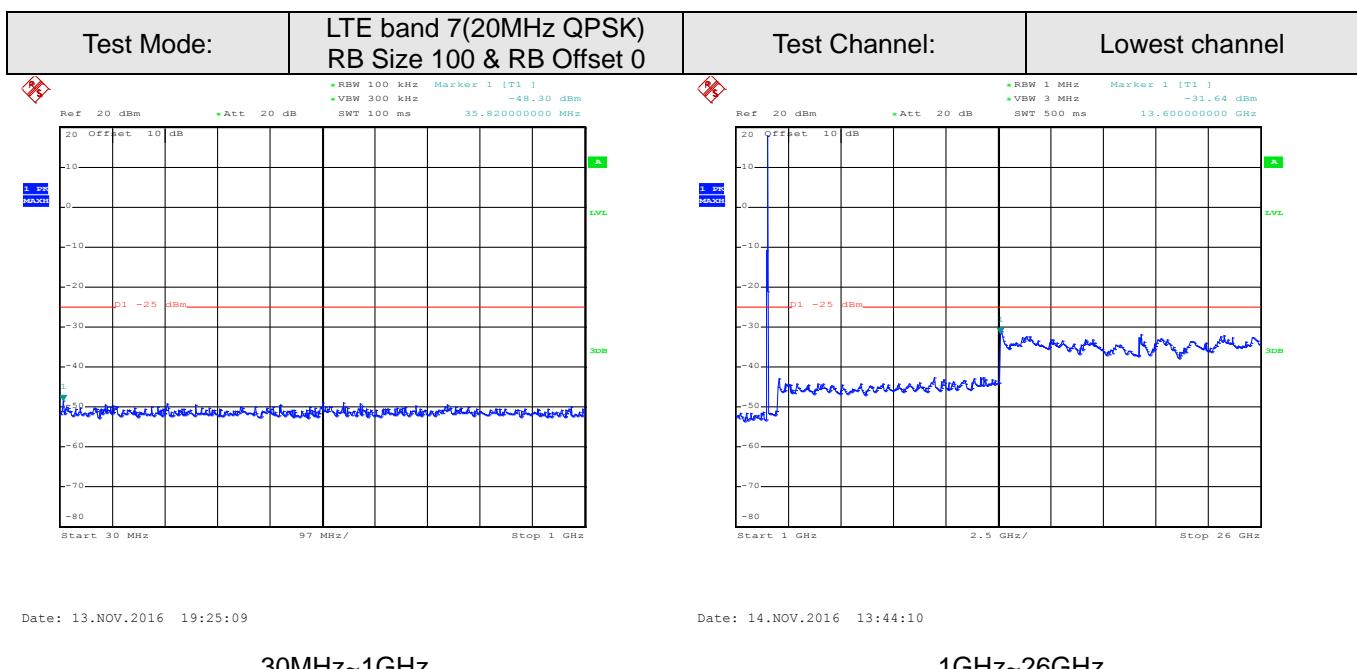
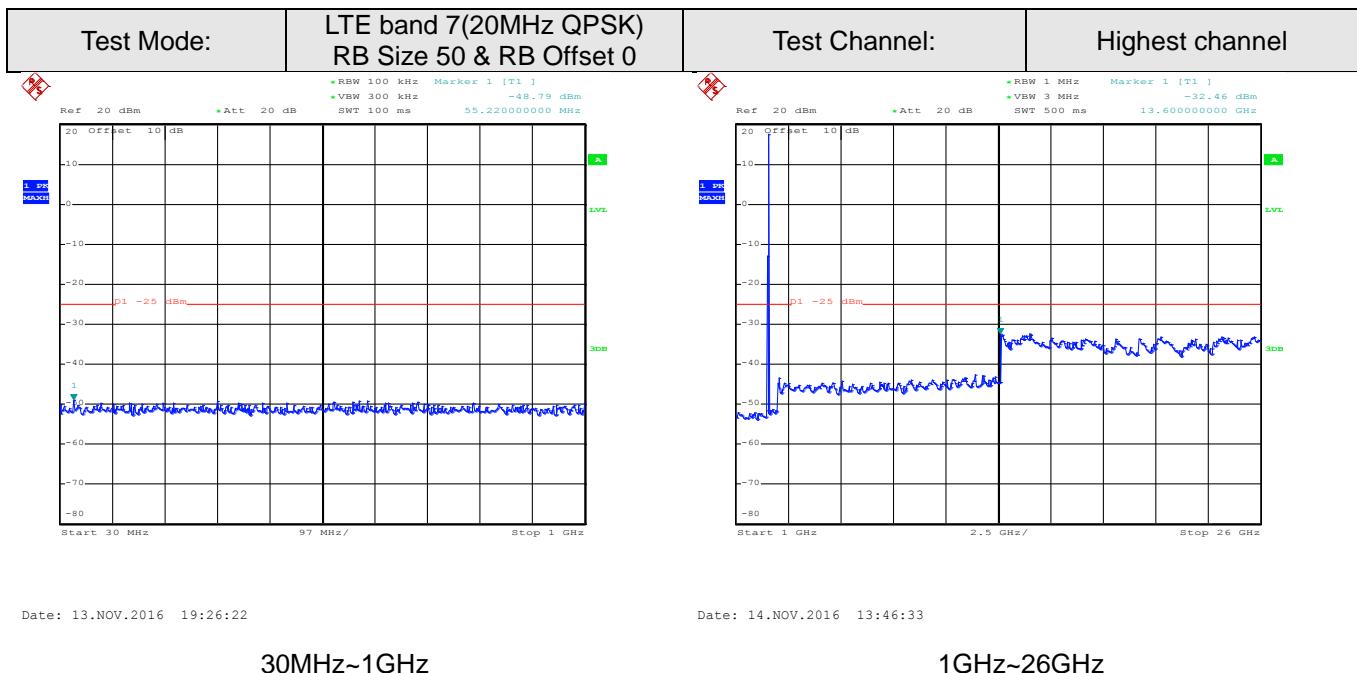
Date: 13.NOV.2016 19:26:10

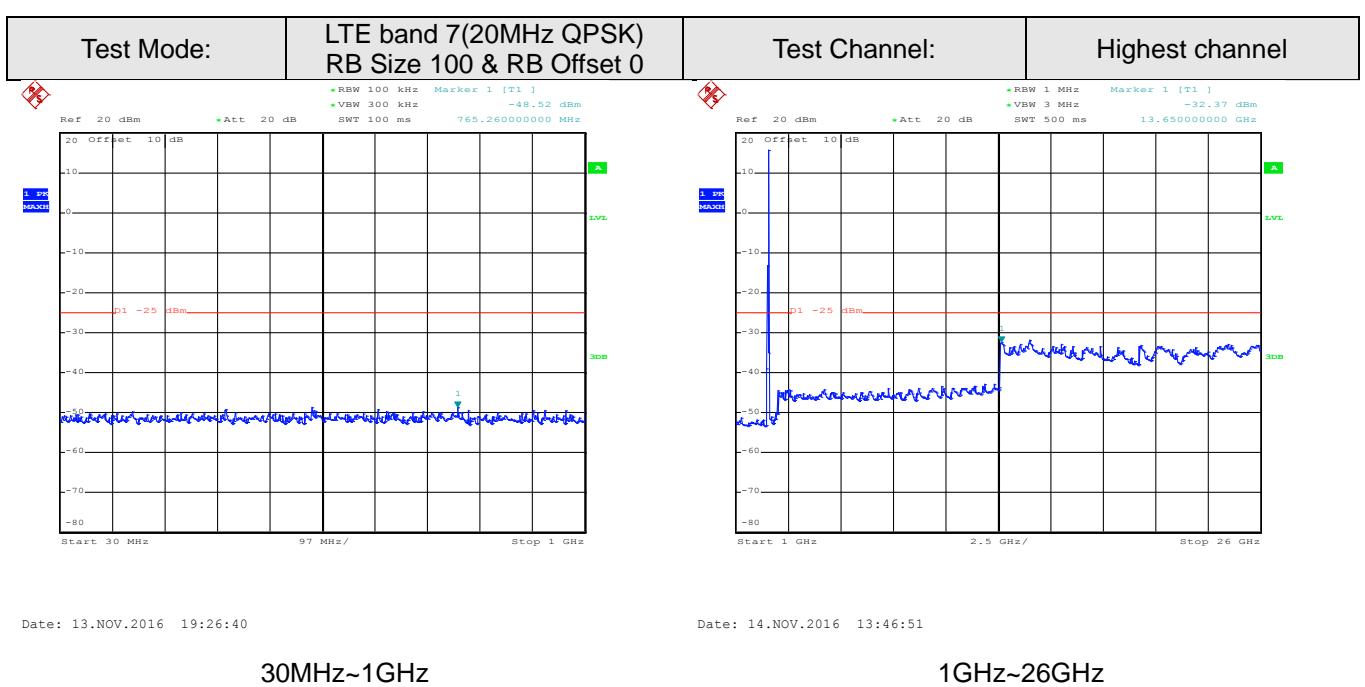
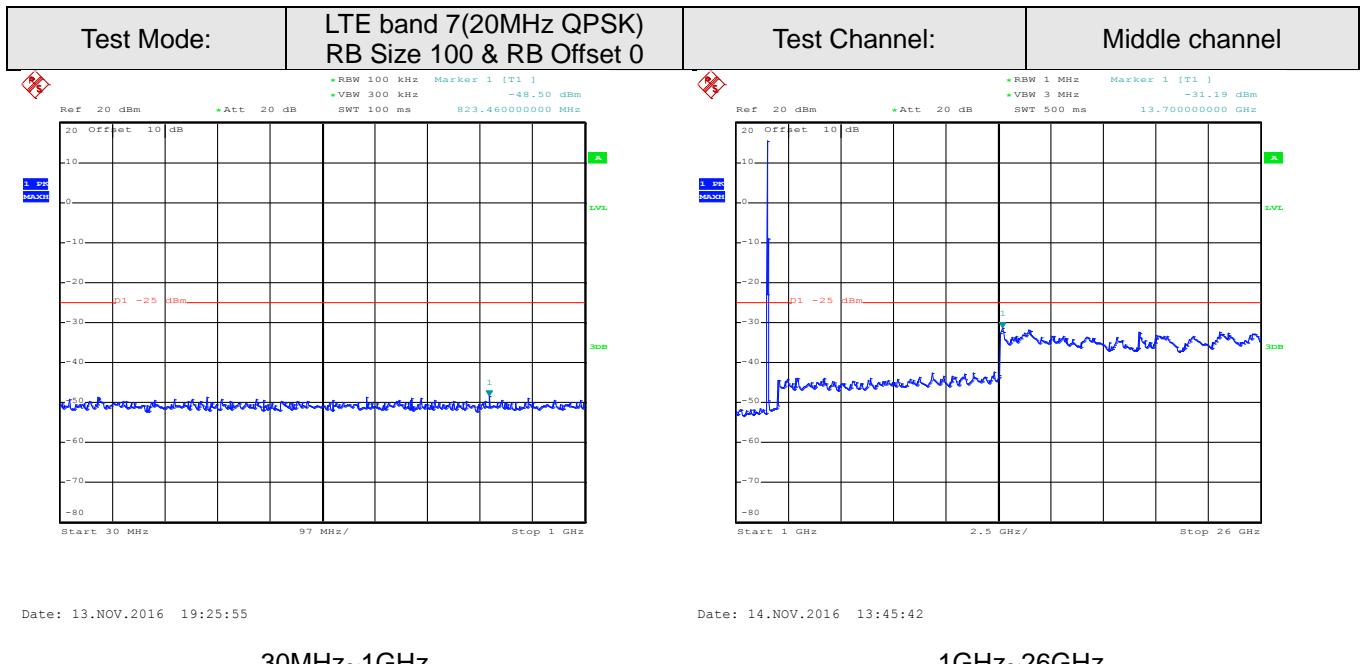
30MHz~1GHz

Date: 14.NOV.2016 13:46:11

1GHz~26GHz

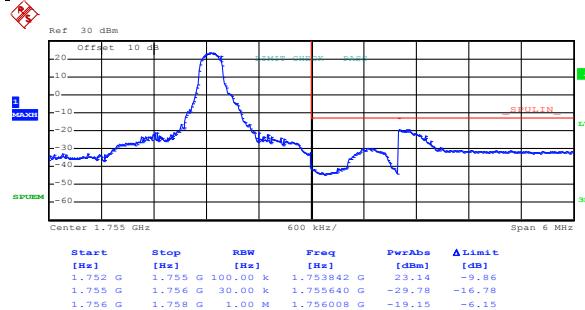
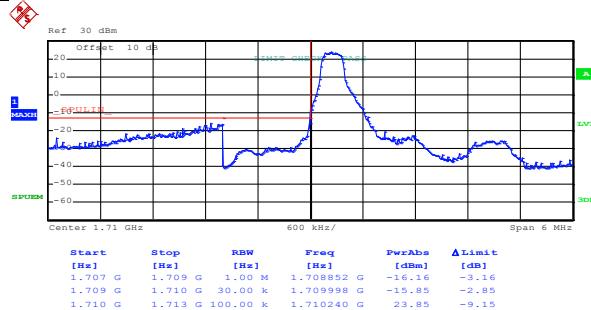






**Band edge emission:****LTE band 4 part:1.4MHz:**

Test Mode:	LTE band 4(QPSK RB Size 1 & RB Offset 0)
------------	--



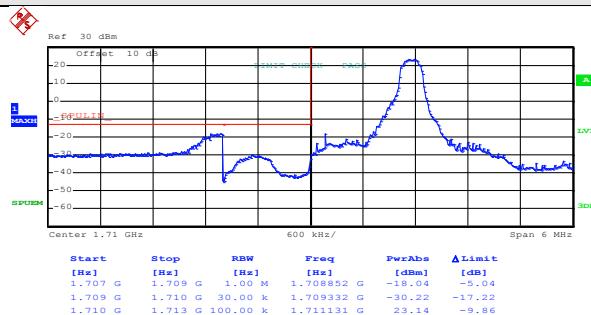
Date: 14.NOV.2016 07:38:57

Date: 14.NOV.2016 07:41:21

Lowest channel

Highest channel

Test Mode:	LTE band 4(QPSK RB Size 1 & RB Offset 5)
------------	--

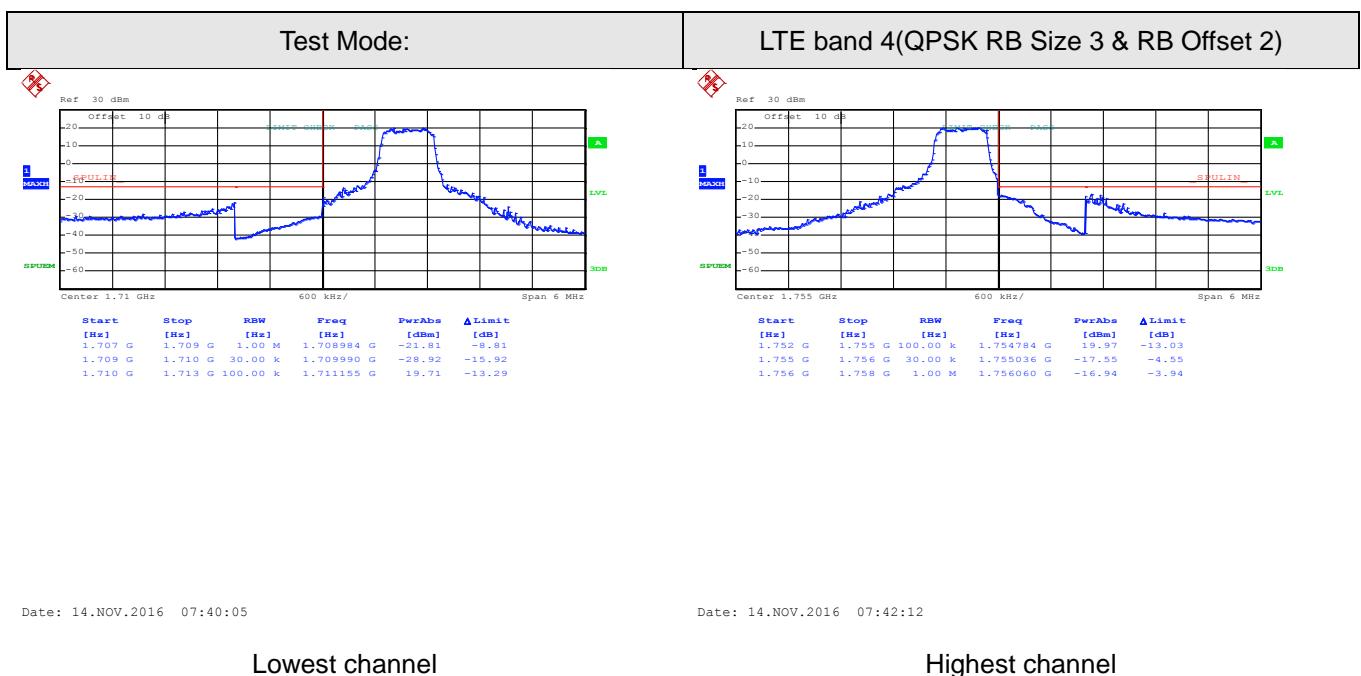
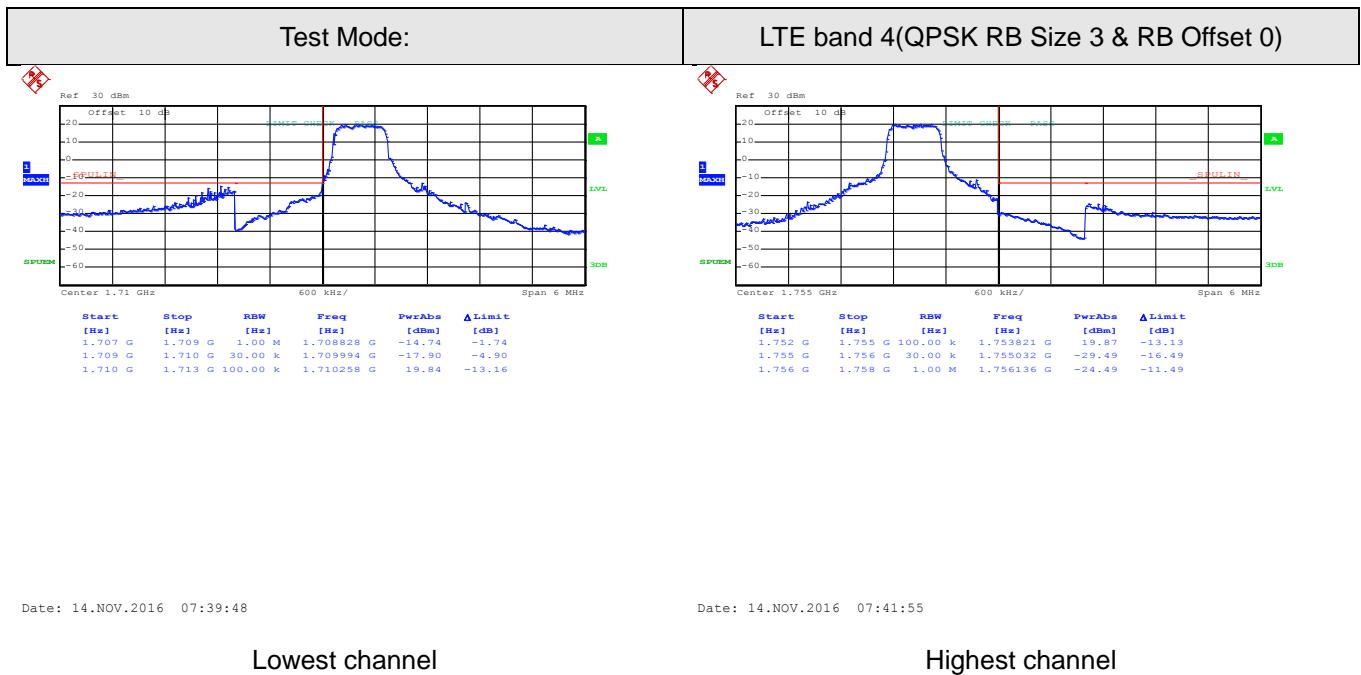


Date: 14.NOV.2016 07:39:29

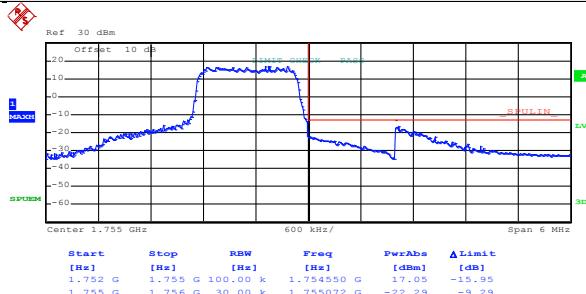
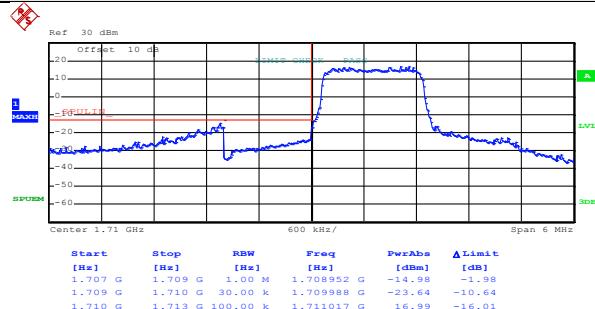
Date: 14.NOV.2016 07:41:38

Lowest channel

Highest channel



Test Mode:	LTE band 4(QPSK RB Size 6 & RB Offset 0)
------------	--



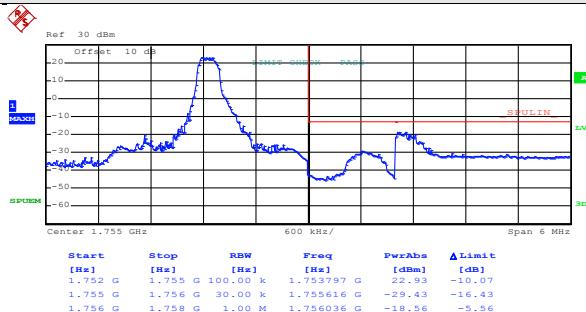
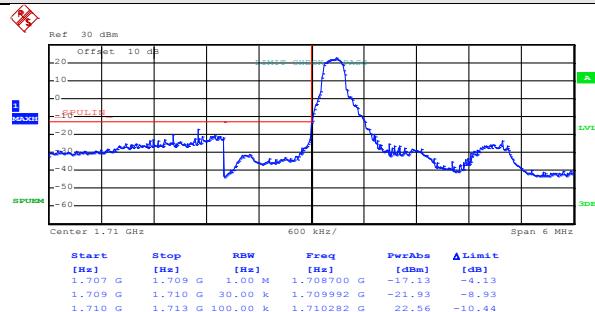
Date: 14.NOV.2016 07:40:48

Date: 14.NOV.2016 07:42:39

Lowest channel

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 1 & RB Offset 0)
------------	---



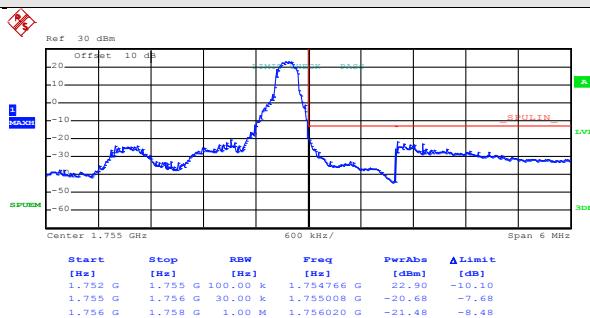
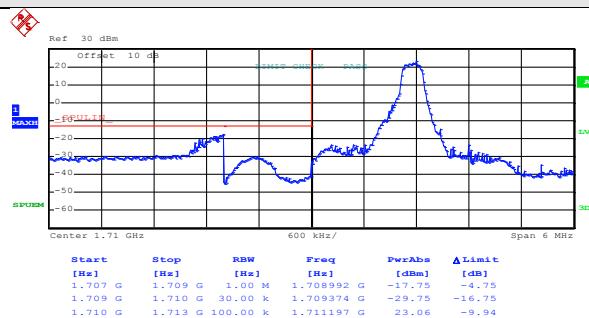
Date: 14.NOV.2016 07:39:12

Date: 14.NOV.2016 07:41:27

Lowest channel

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 1 & RB Offset 5)
------------	---



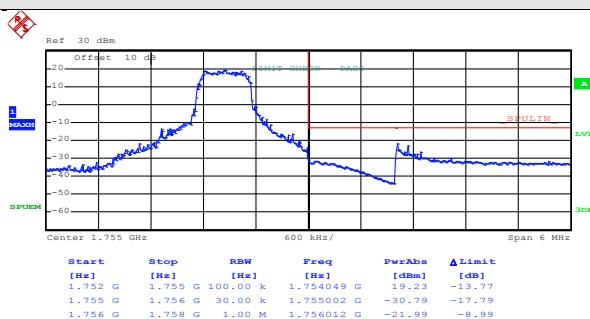
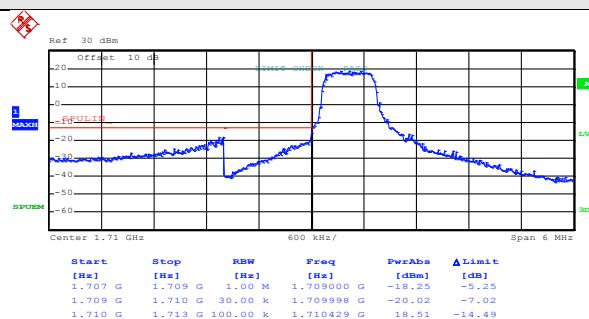
Date: 14.NOV.2016 07:39:36

Lowest channel

Date: 14.NOV.2016 07:41:46

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 3 & RB Offset 0)
------------	---

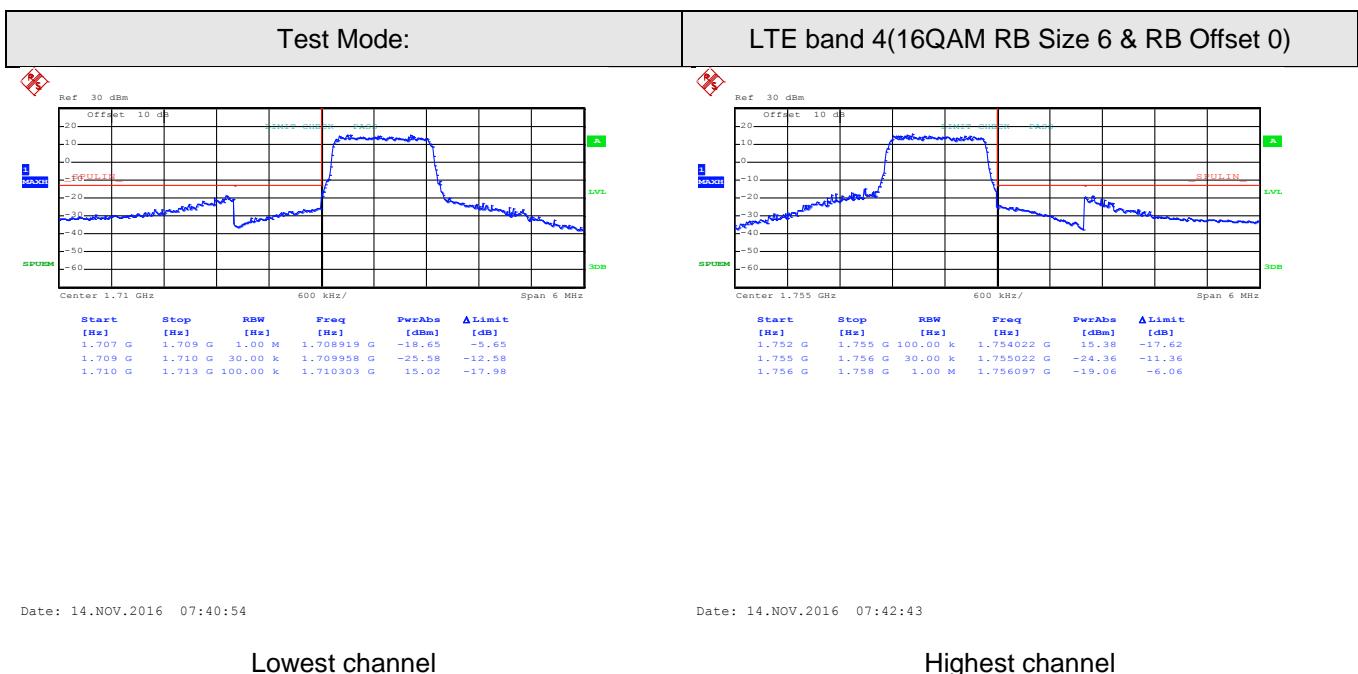
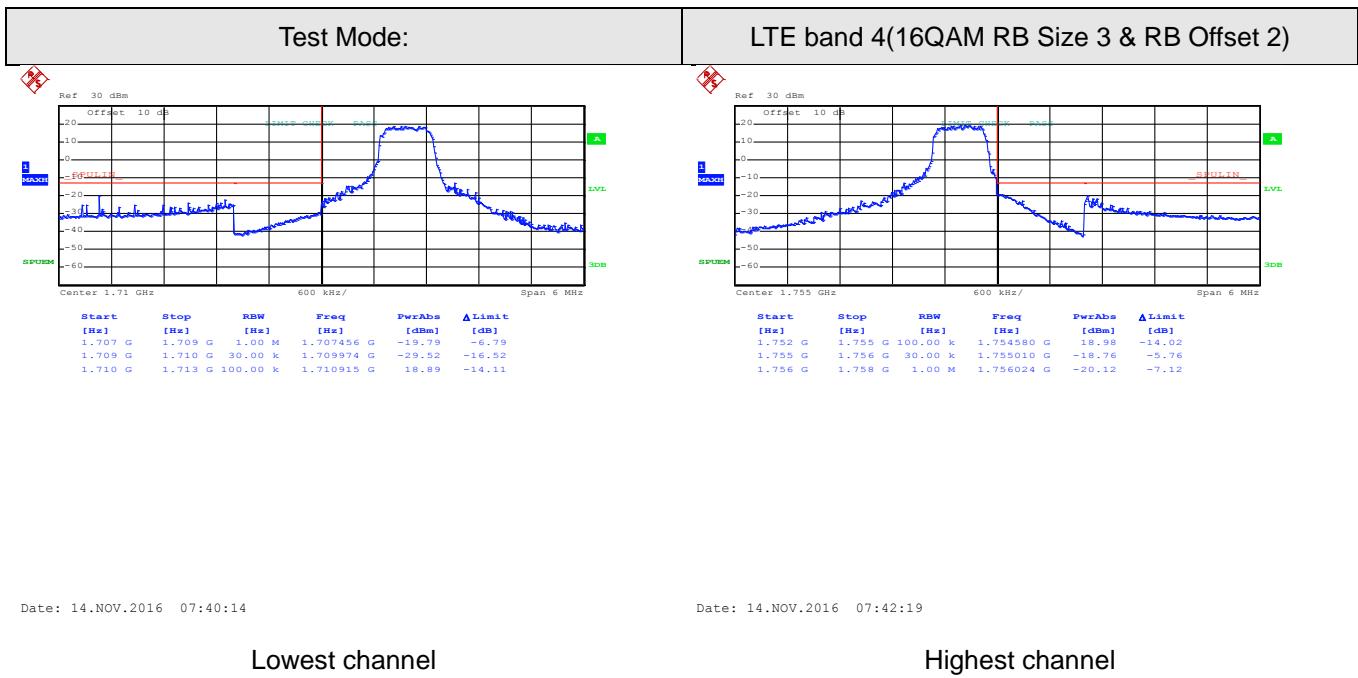


Date: 14.NOV.2016 07:39:55

Date: 14.NOV.2016 07:42:00

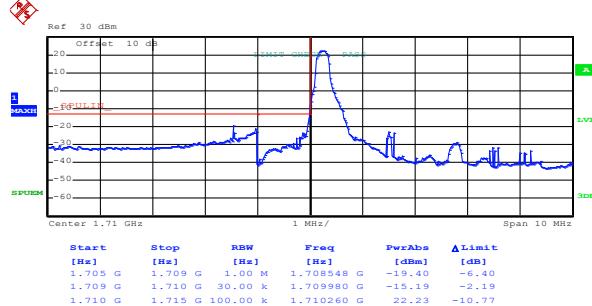
Lowest channel

Highest channel



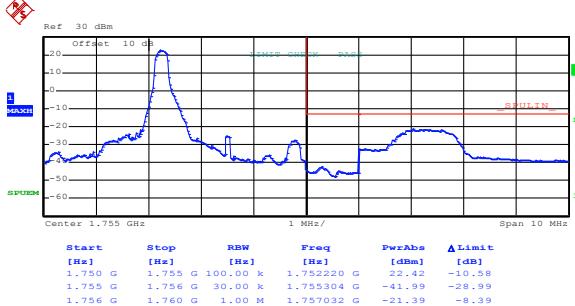
3MHz:

Test Mode:	LTE band 4(QPSK RB Size 1 & RB Offset 0)
------------	--



Date: 14.NOV.2016 07:43:36

Lowest channel



Date: 14.NOV.2016 07:45:30

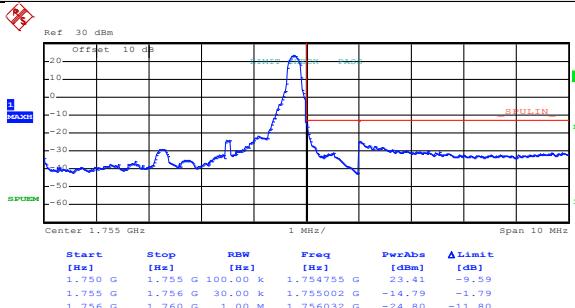
Highest channel

Test Mode:	LTE band 4(QPSK RB Size 1 & RB Offset 14)
------------	---



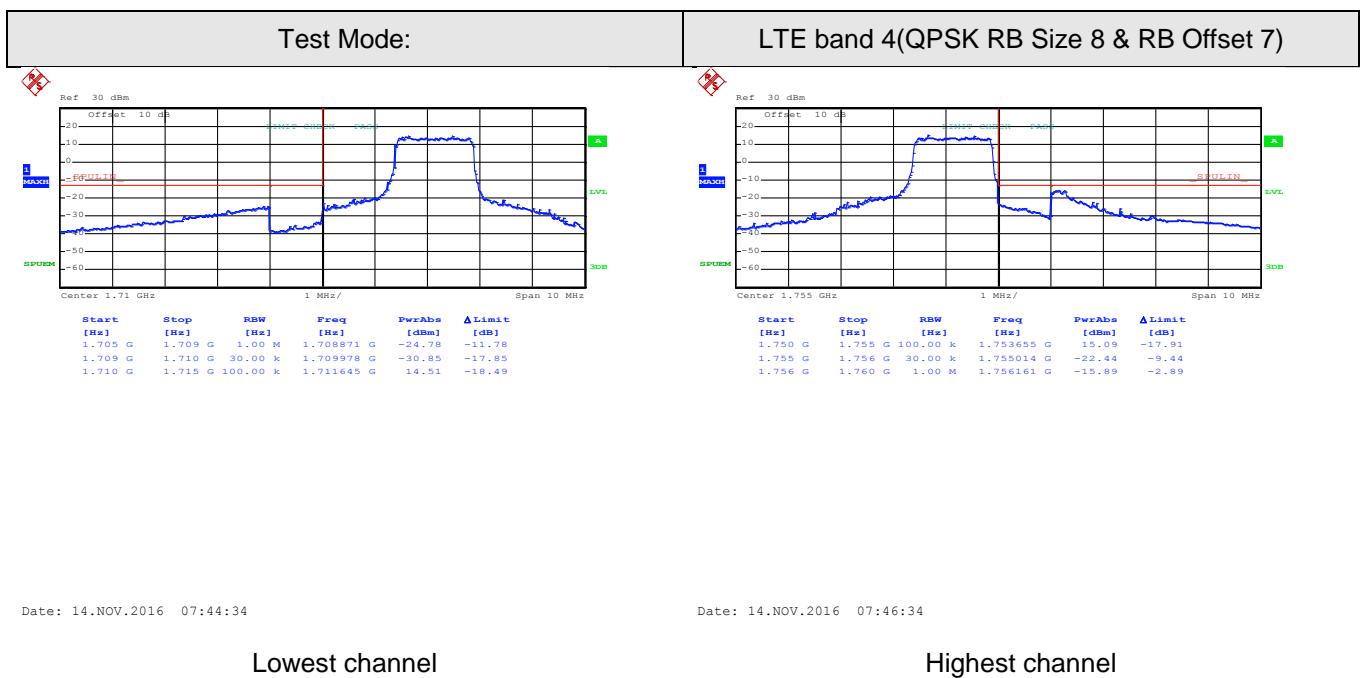
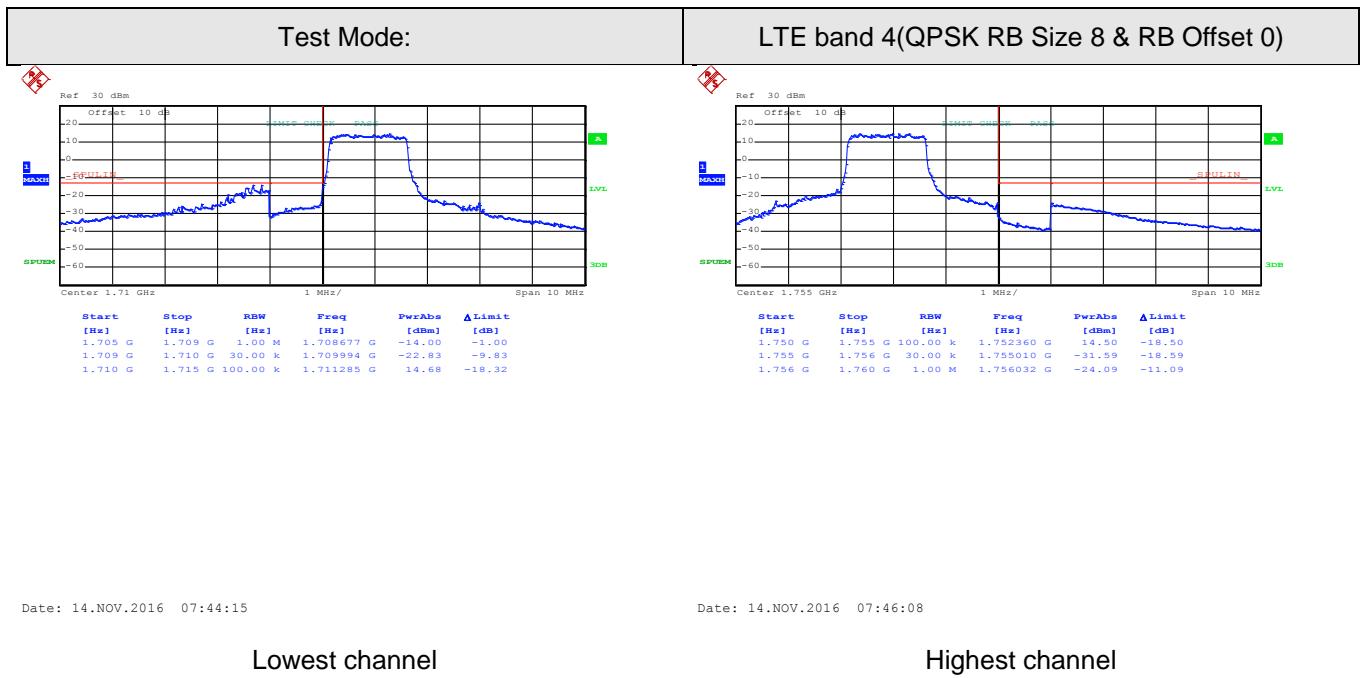
Date: 14.NOV.2016 07:43:55

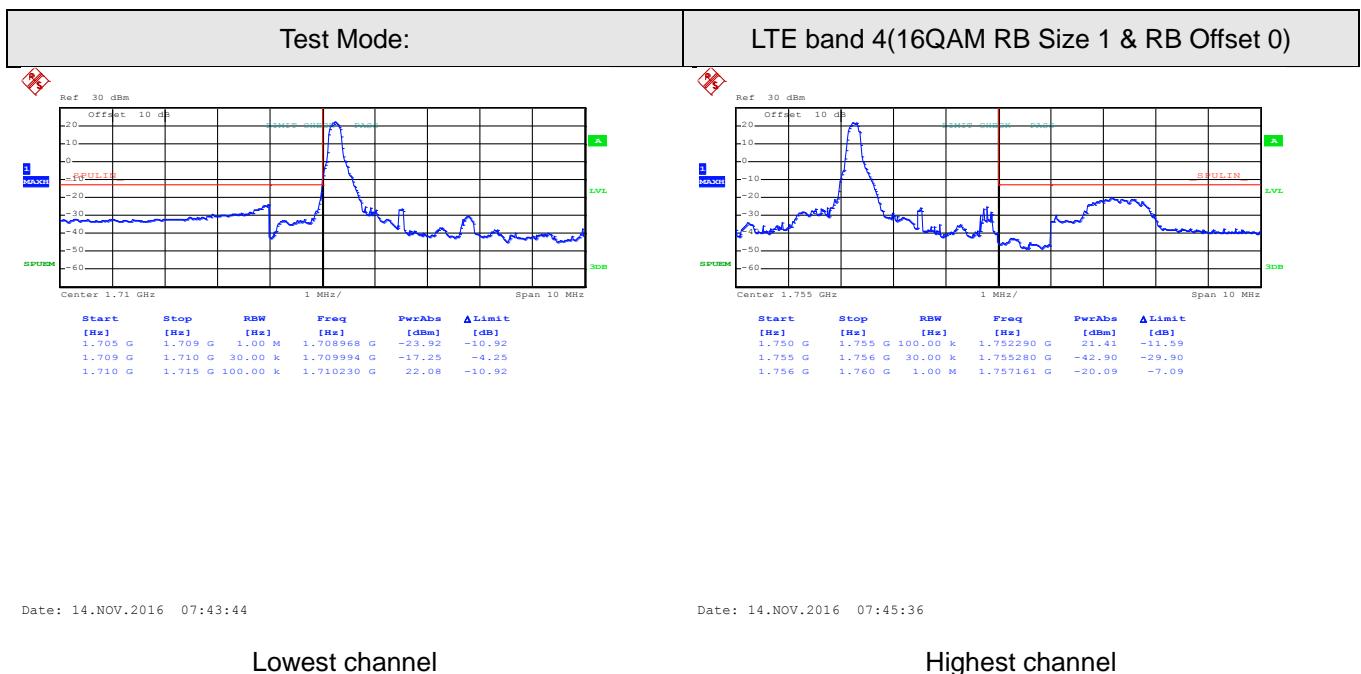
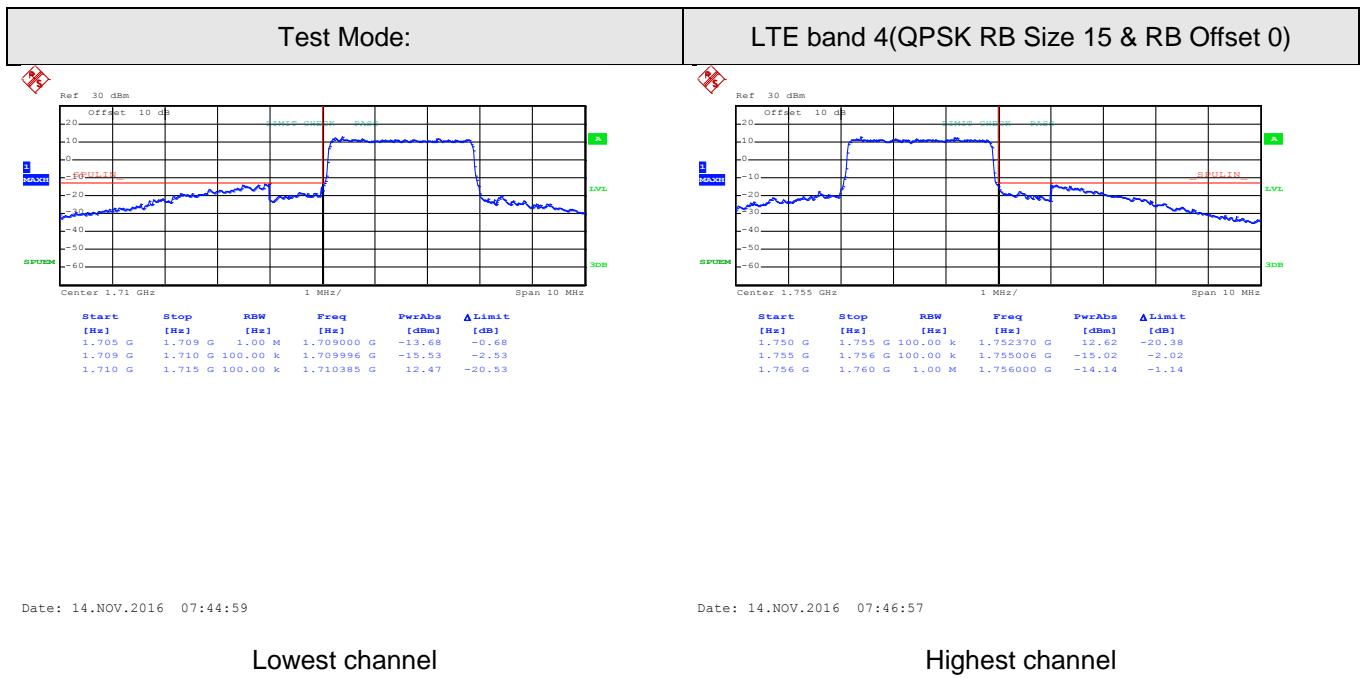
Lowest channel

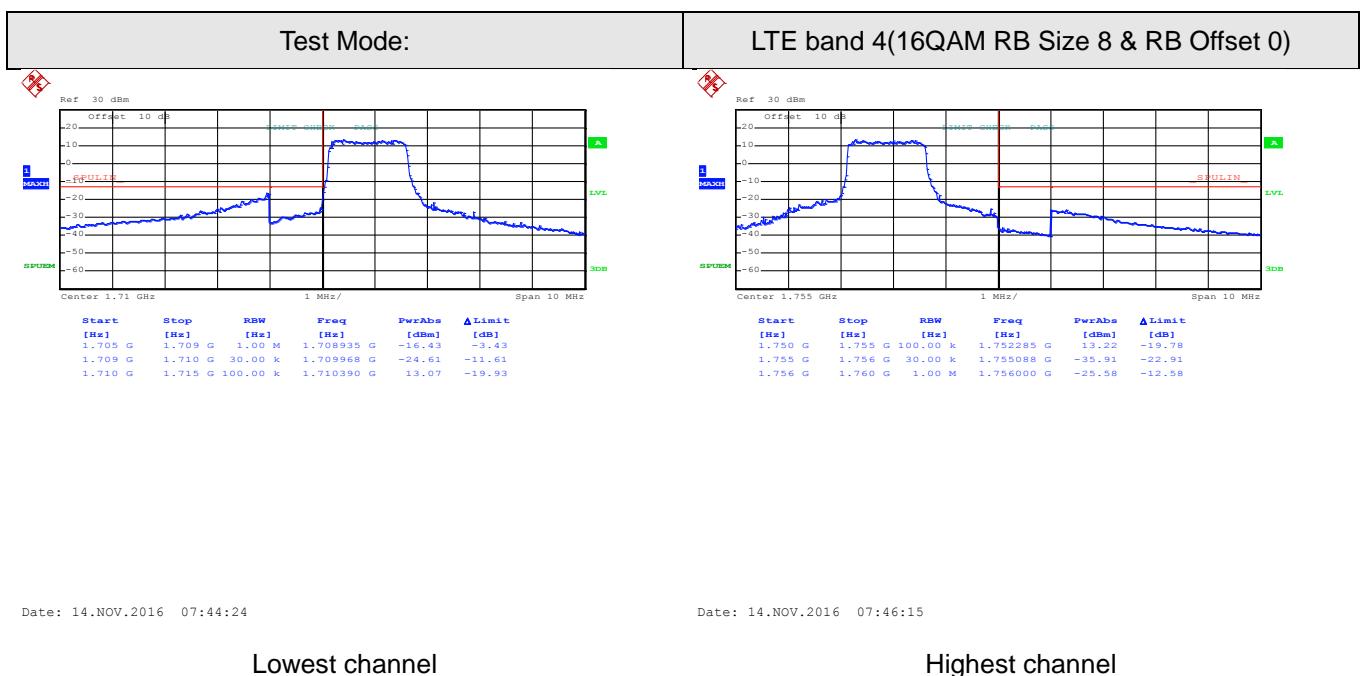
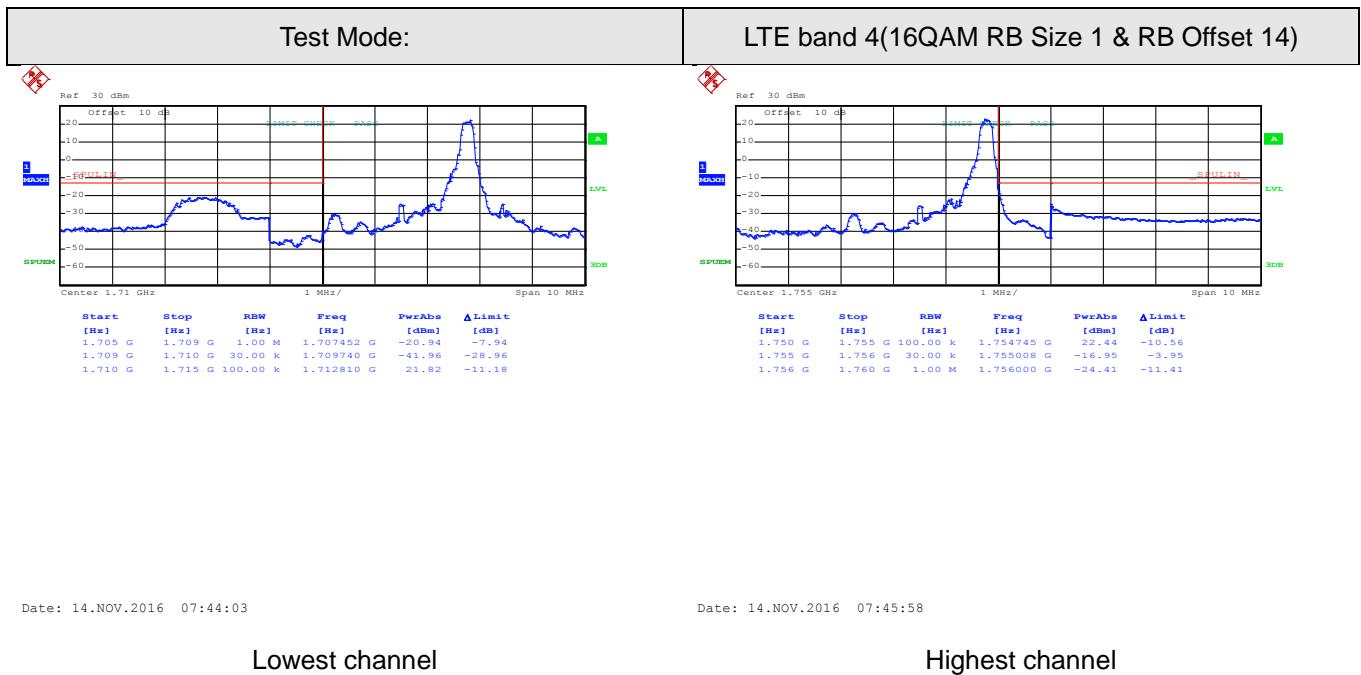


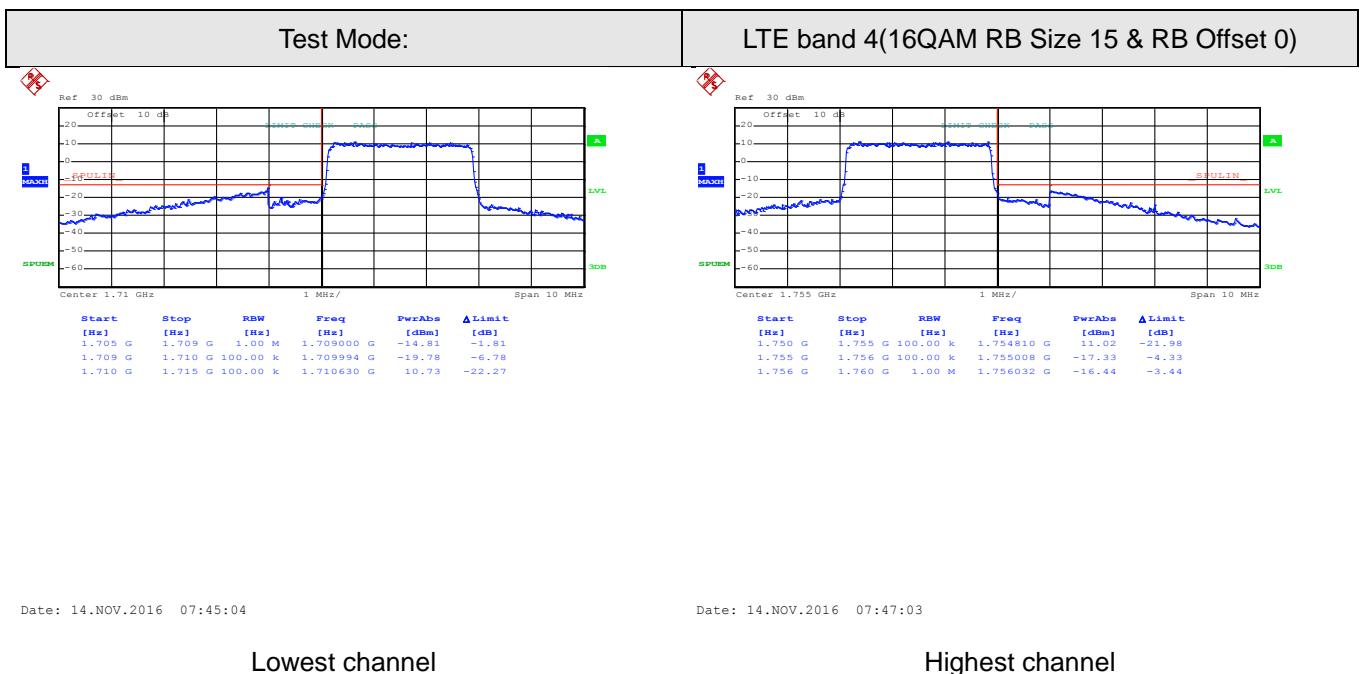
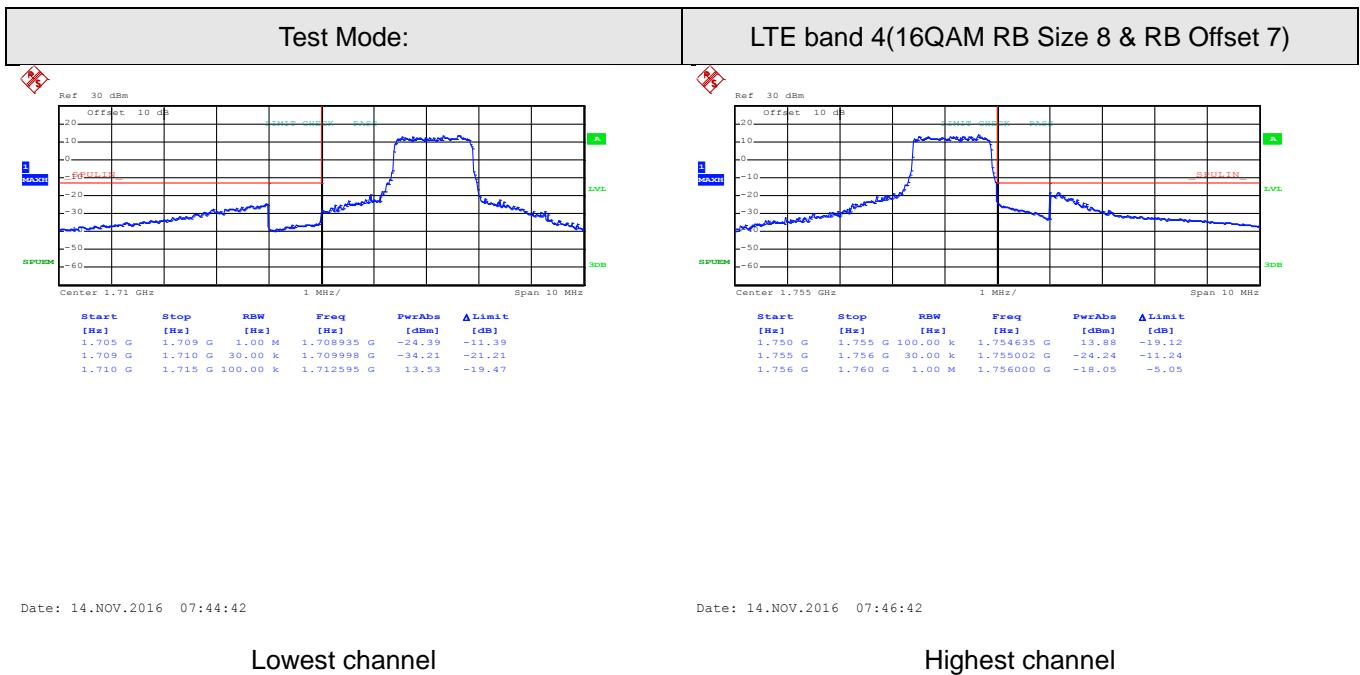
Date: 14.NOV.2016 07:45:51

Highest channel

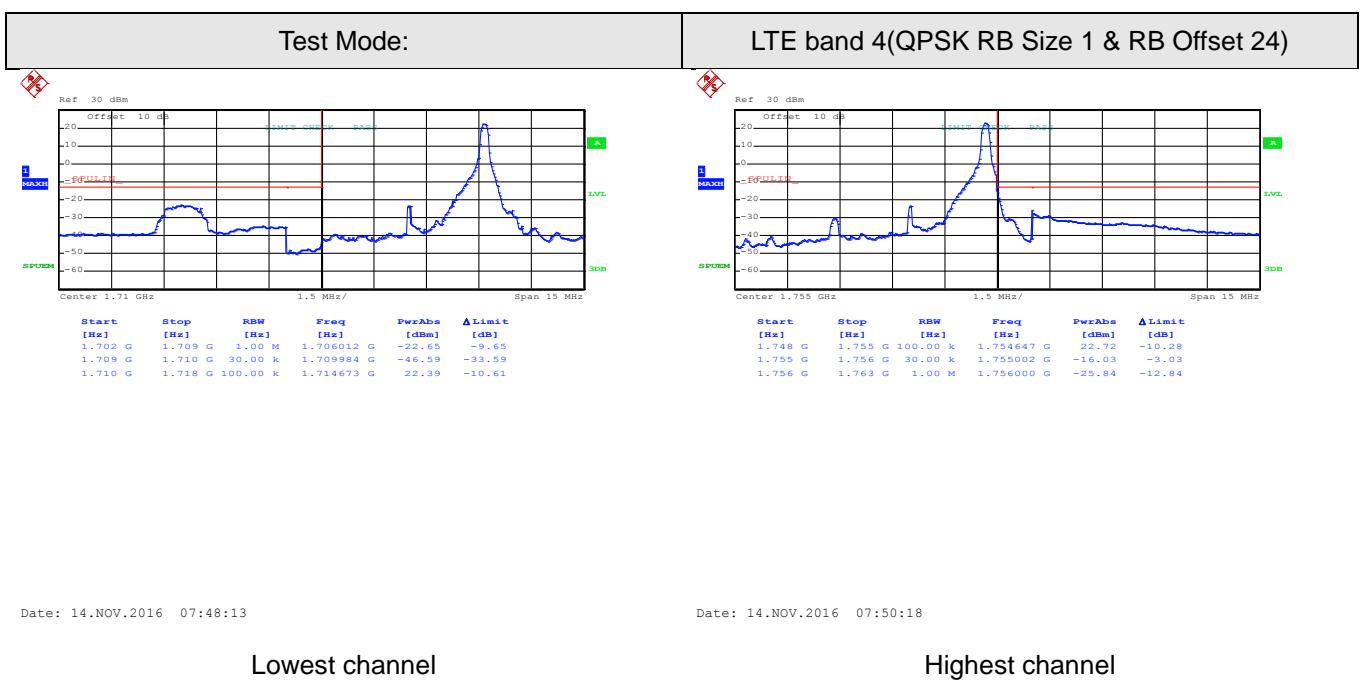
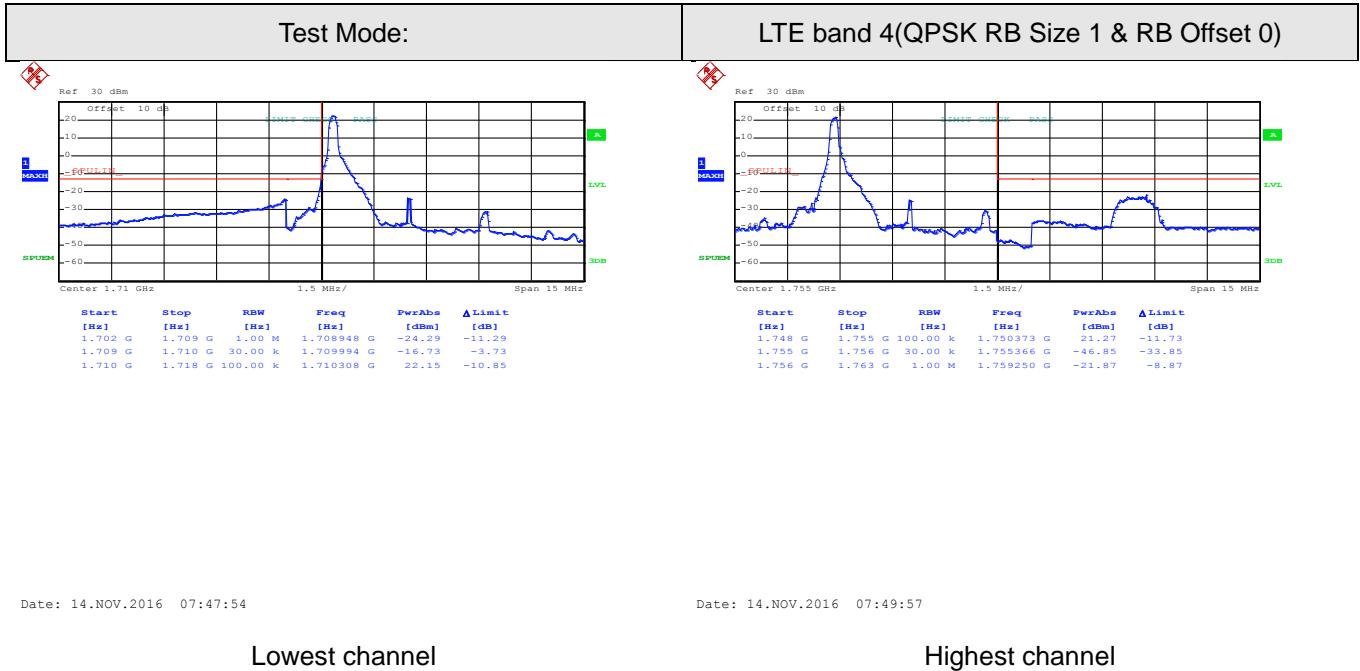




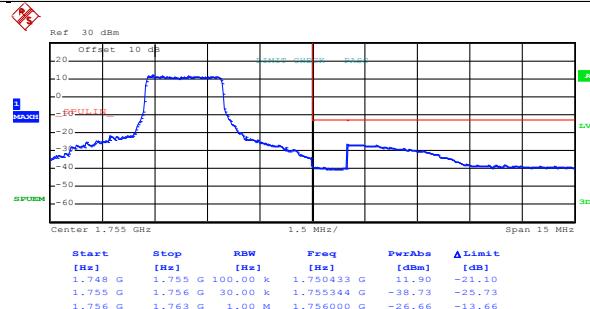
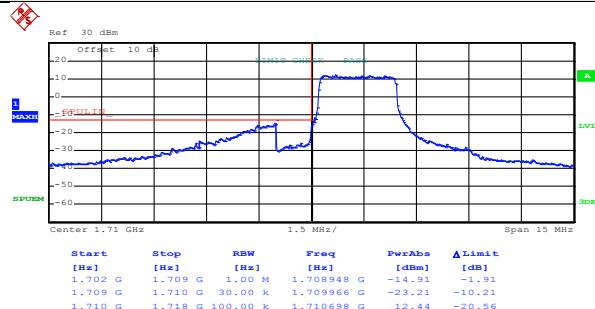




5MHz:



Test Mode:	LTE band 4(QPSK RB Size 12 & RB Offset 0)
------------	---



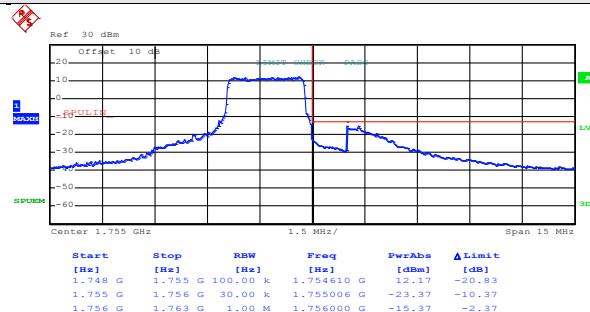
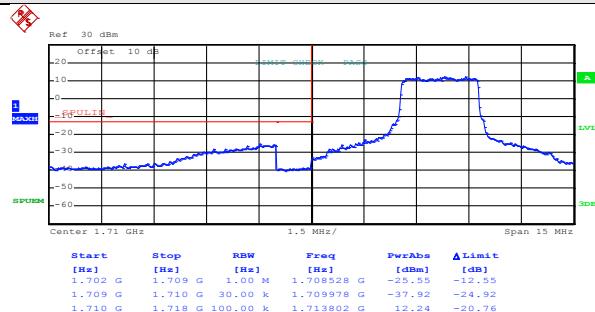
Date: 14.NOV.2016 07:48:36

Date: 14.NOV.2016 07:50:48

Lowest channel

Highest channel

Test Mode:	LTE band 4(QPSK RB Size 12 & RB Offset 11)
------------	--



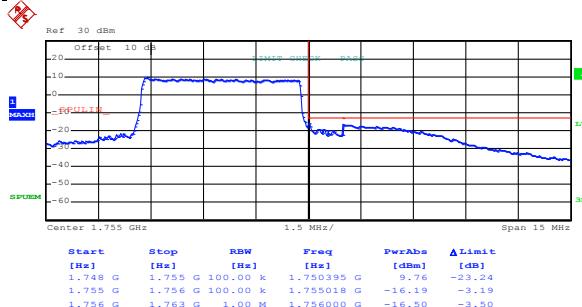
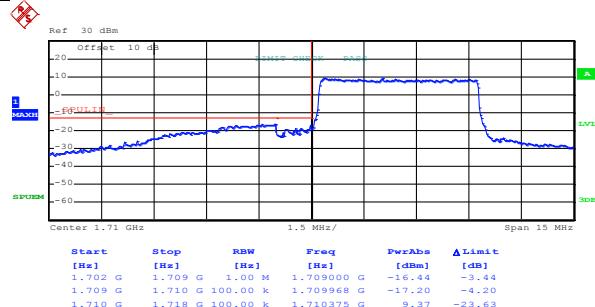
Date: 14.NOV.2016 07:48:55

Date: 14.NOV.2016 07:51:07

Lowest channel

Highest channel

Test Mode:	LTE band 4(QPSK RB Size 25 & RB Offset 0)
------------	---



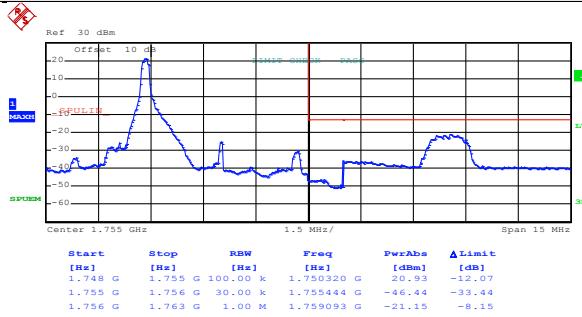
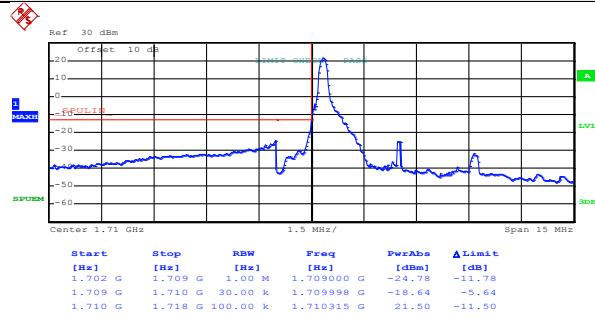
Date: 14.NOV.2016 07:49:24

Date: 14.NOV.2016 07:51:34

Lowest channel

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 1 & RB Offset 0)
------------	---

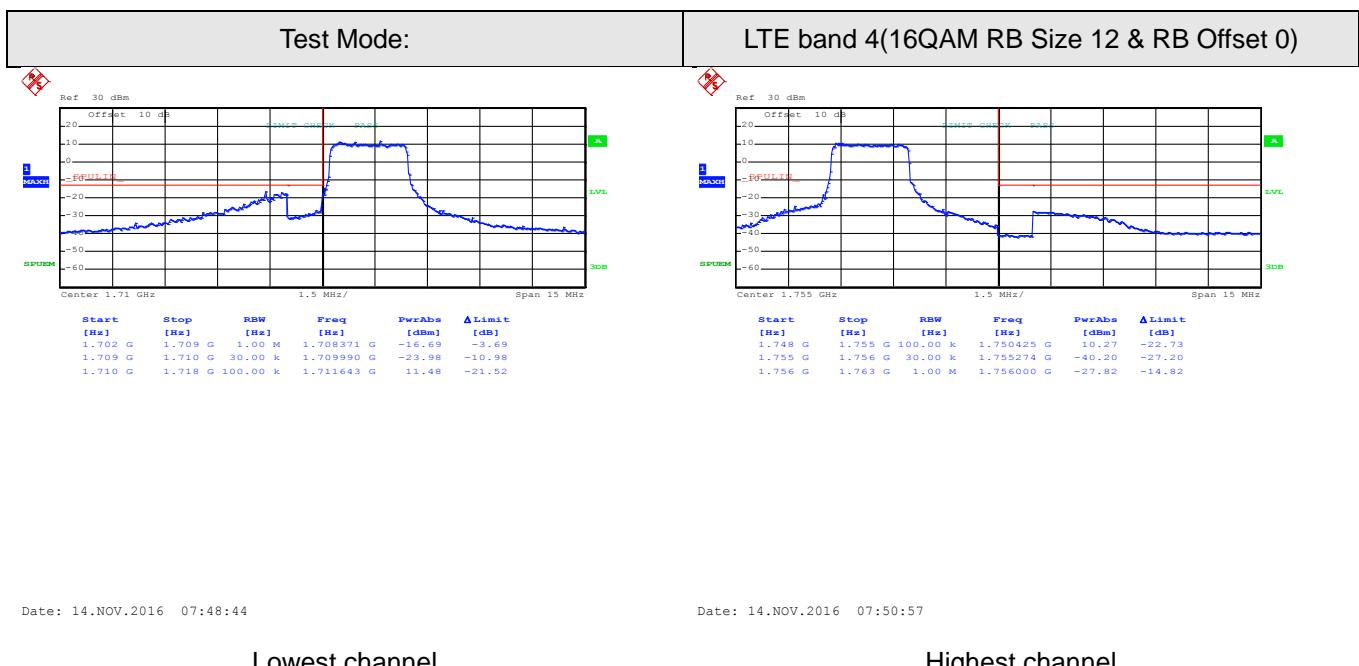
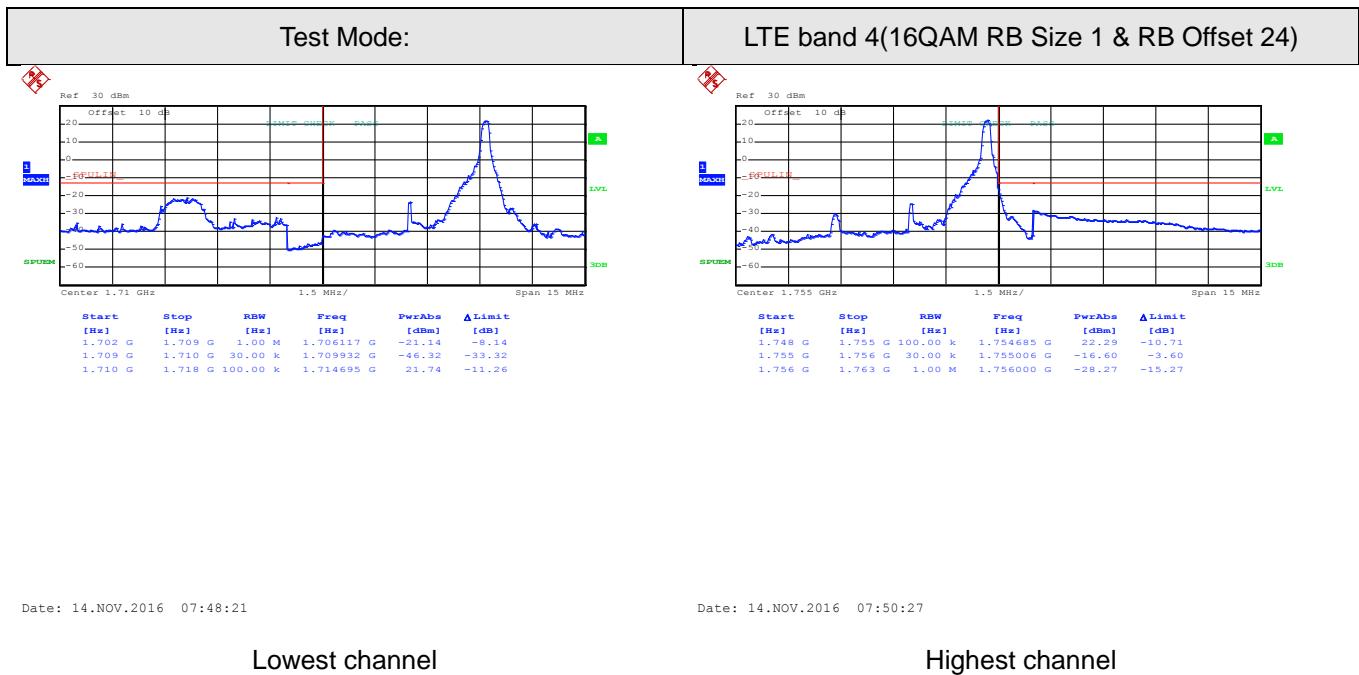


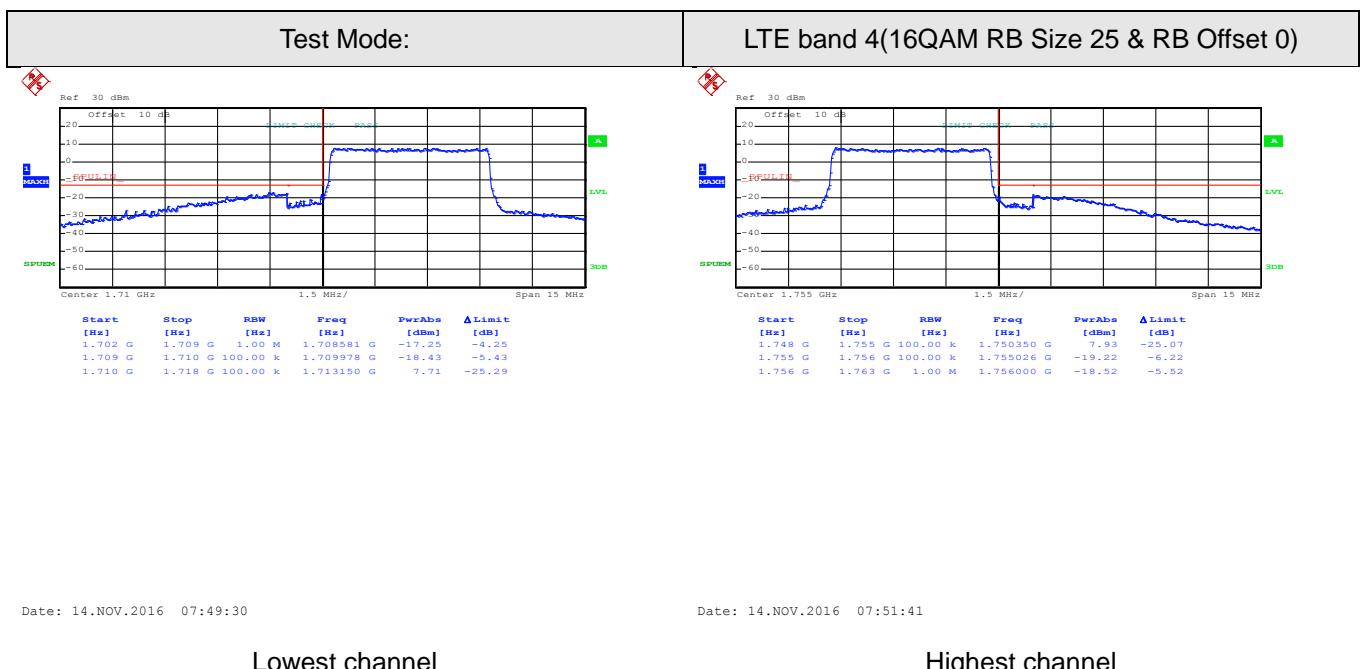
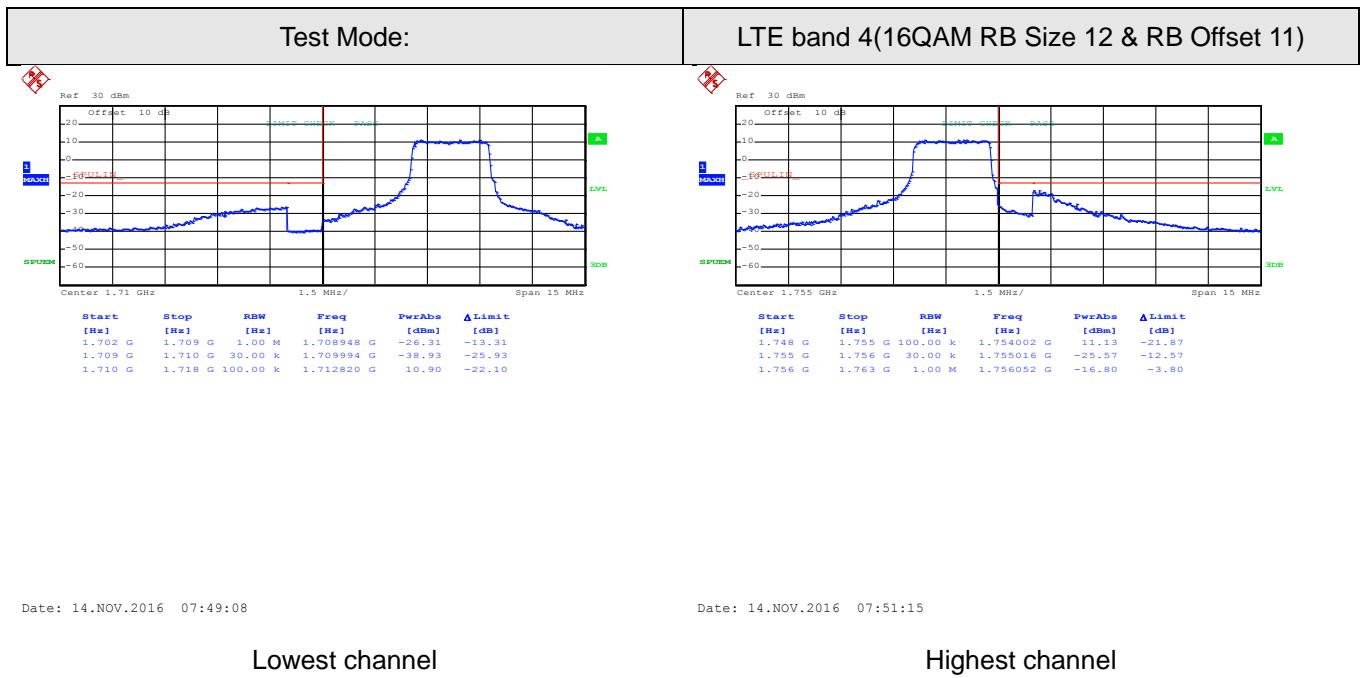
Date: 14.NOV.2016 07:48:03

Date: 14.NOV.2016 07:50:06

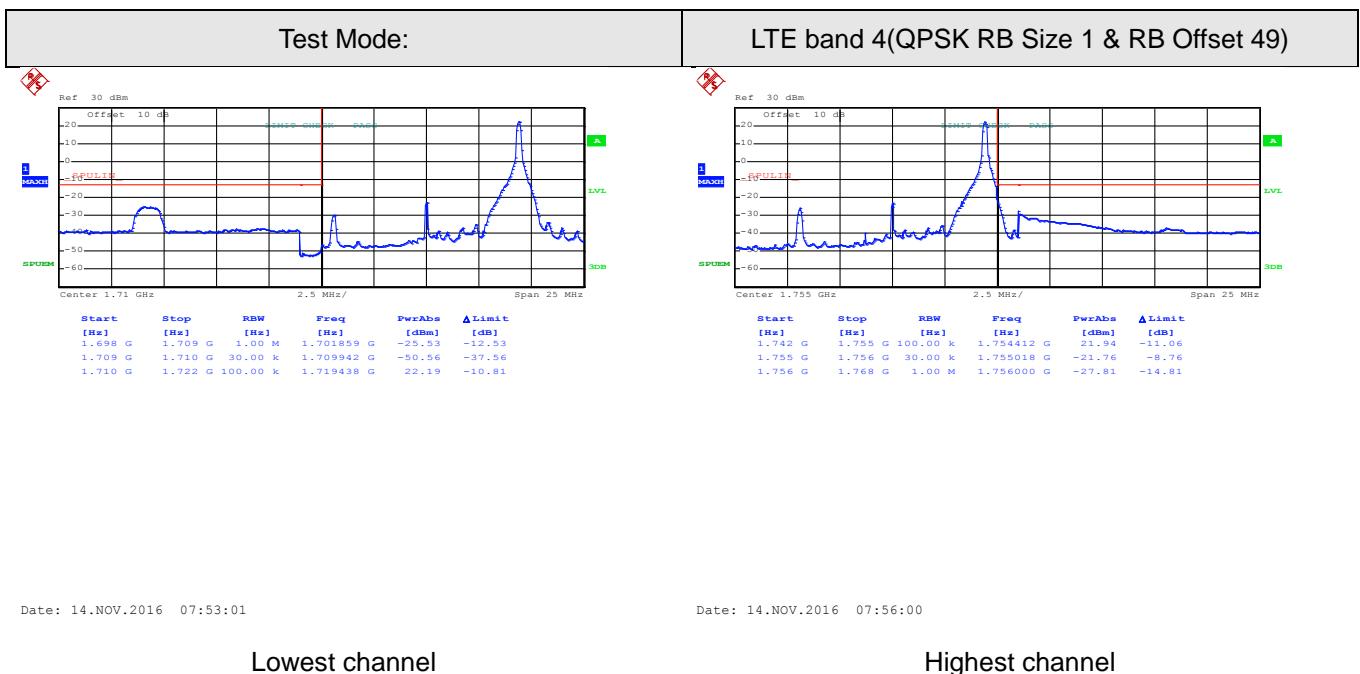
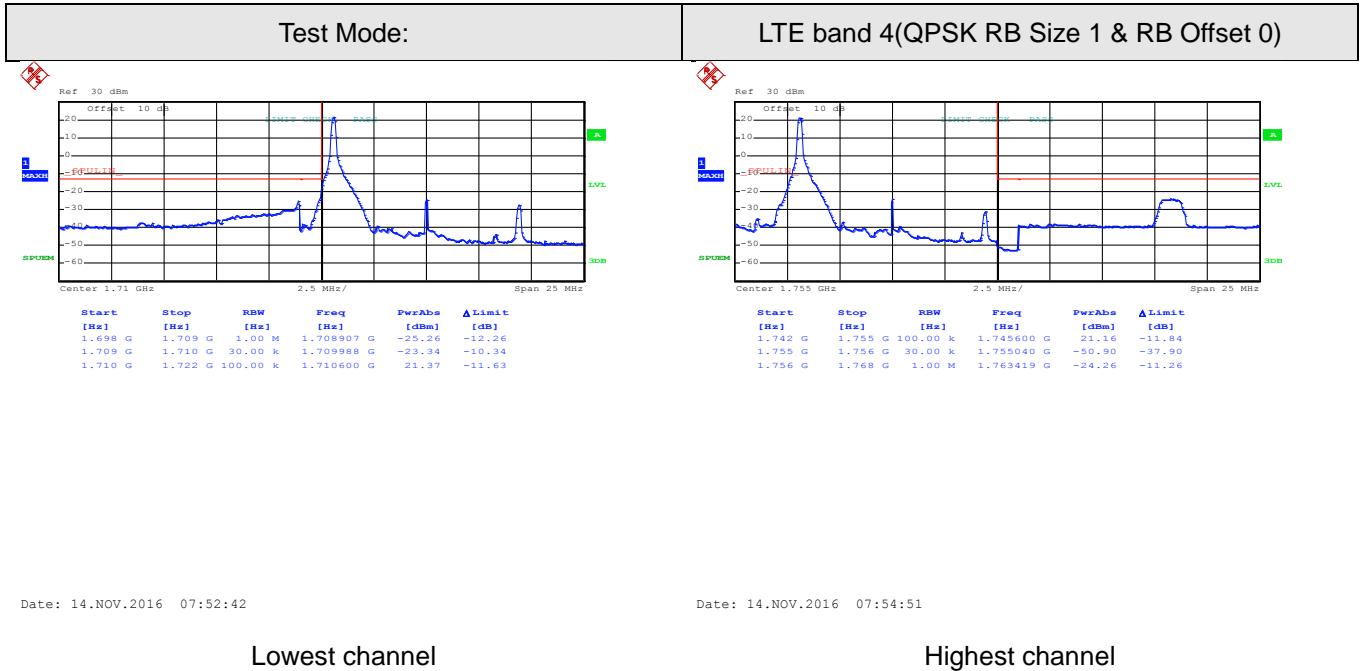
Lowest channel

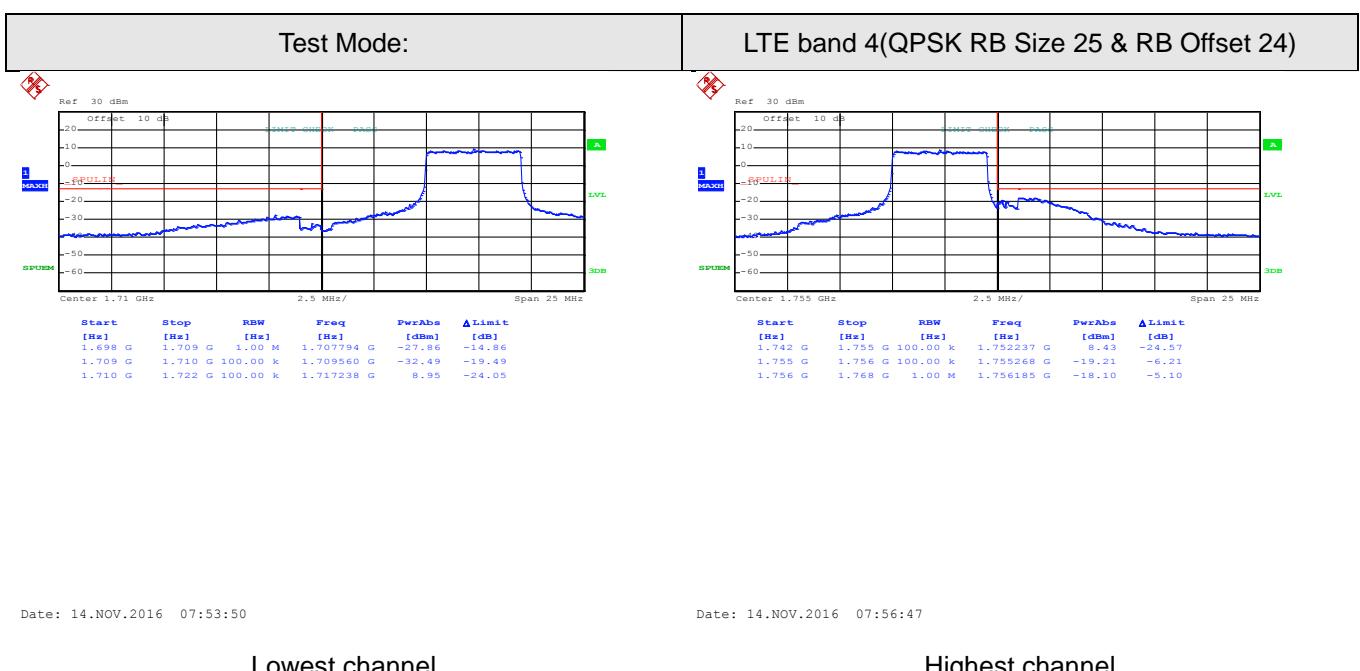
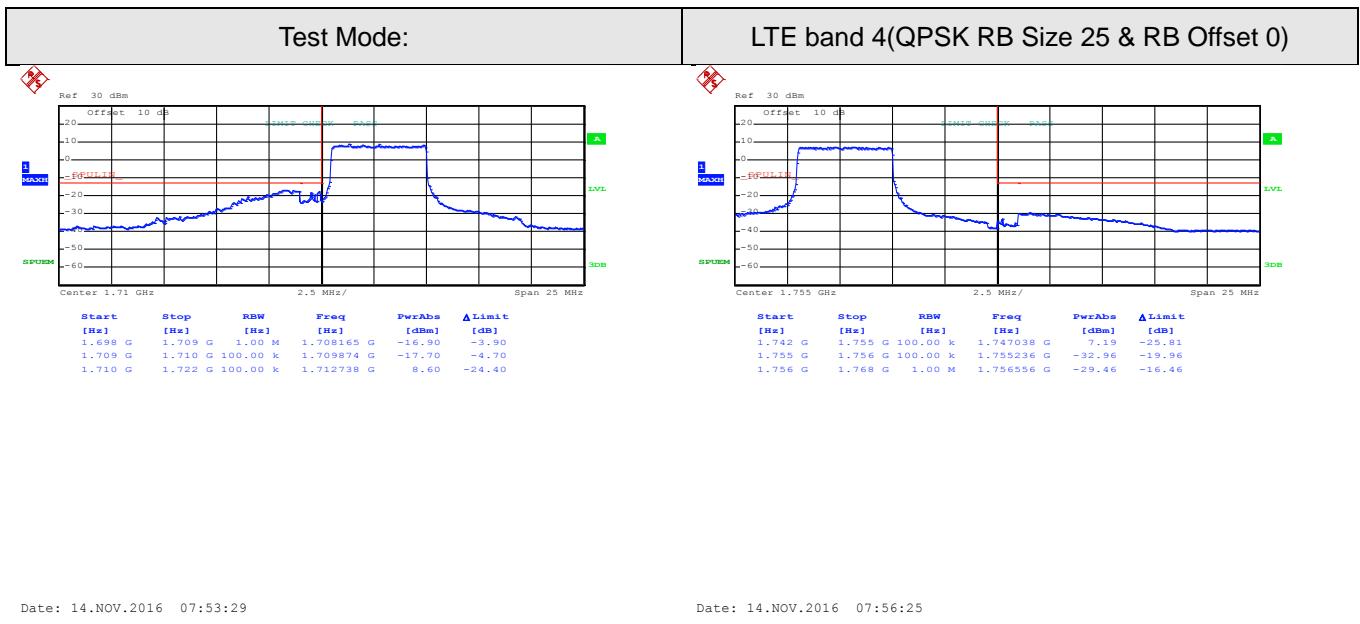
Highest channel



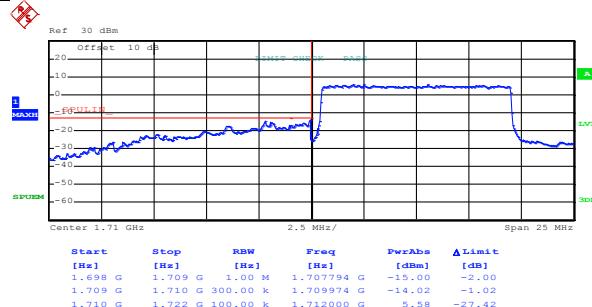


## 10MHz:



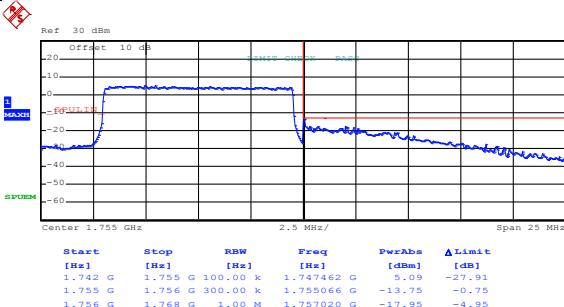


Test Mode:	LTE band 4(QPSK RB Size 50 & RB Offset 0)
------------	---



Date: 14.NOV.2016 07:54:18

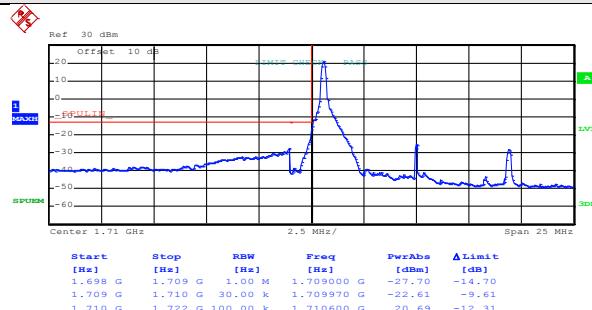
Lowest channel



Date: 14.NOV.2016 07:57:09

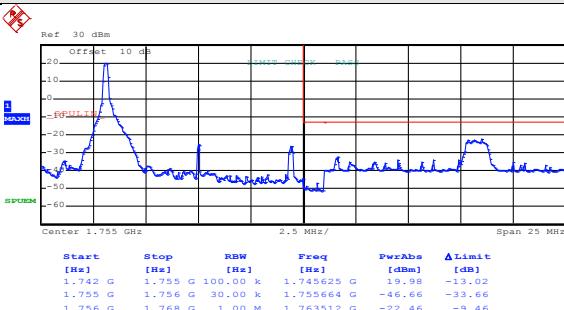
Highest channel

Test Mode:	LTE band 4(16QAM RB Size 1 & RB Offset 0)
------------	---



Date: 14.NOV.2016 07:52:50

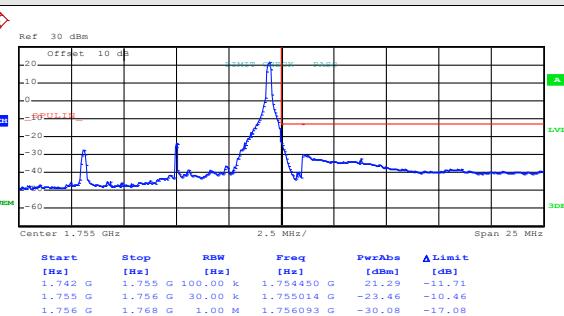
Lowest channel



Date: 14.NOV.2016 07:55:48

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 1 & RB Offset 49)
------------	--



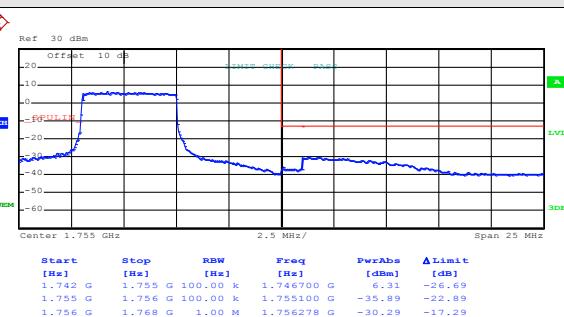
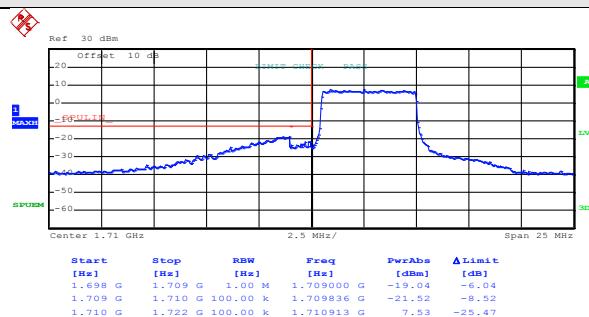
Date: 14.NOV.2016 07:53:10

Lowest channel

Date: 14.NOV.2016 07:56:09

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 25 & RB Offset 0)
------------	--



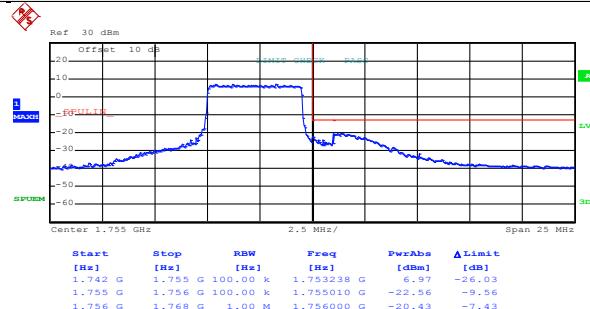
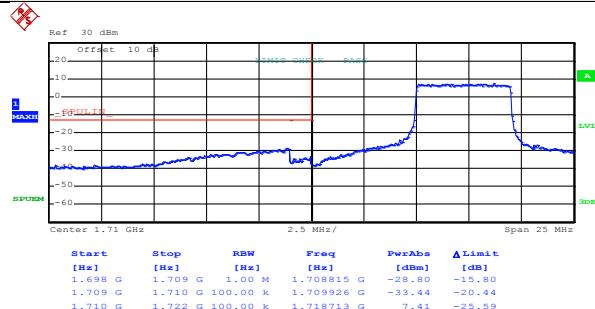
Date: 14.NOV.2016 07:53:37

Lowest channel

Date: 14.NOV.2016 07:56:34

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 25 & RB Offset 24)
------------	---



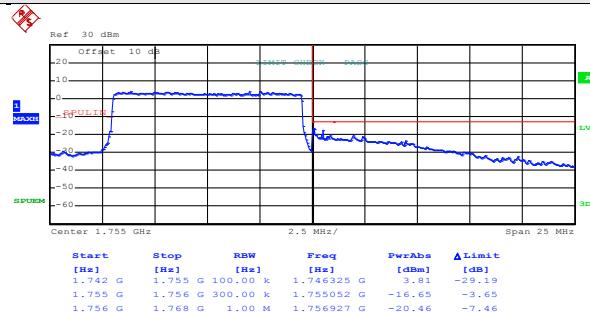
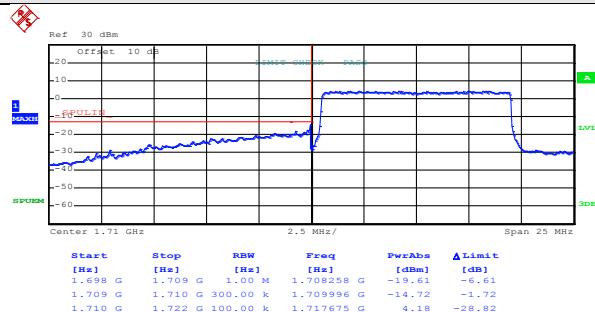
Date: 14.NOV.2016 07:54:01

Date: 14.NOV.2016 07:56:55

Lowest channel

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 50 & RB Offset 0)
------------	--



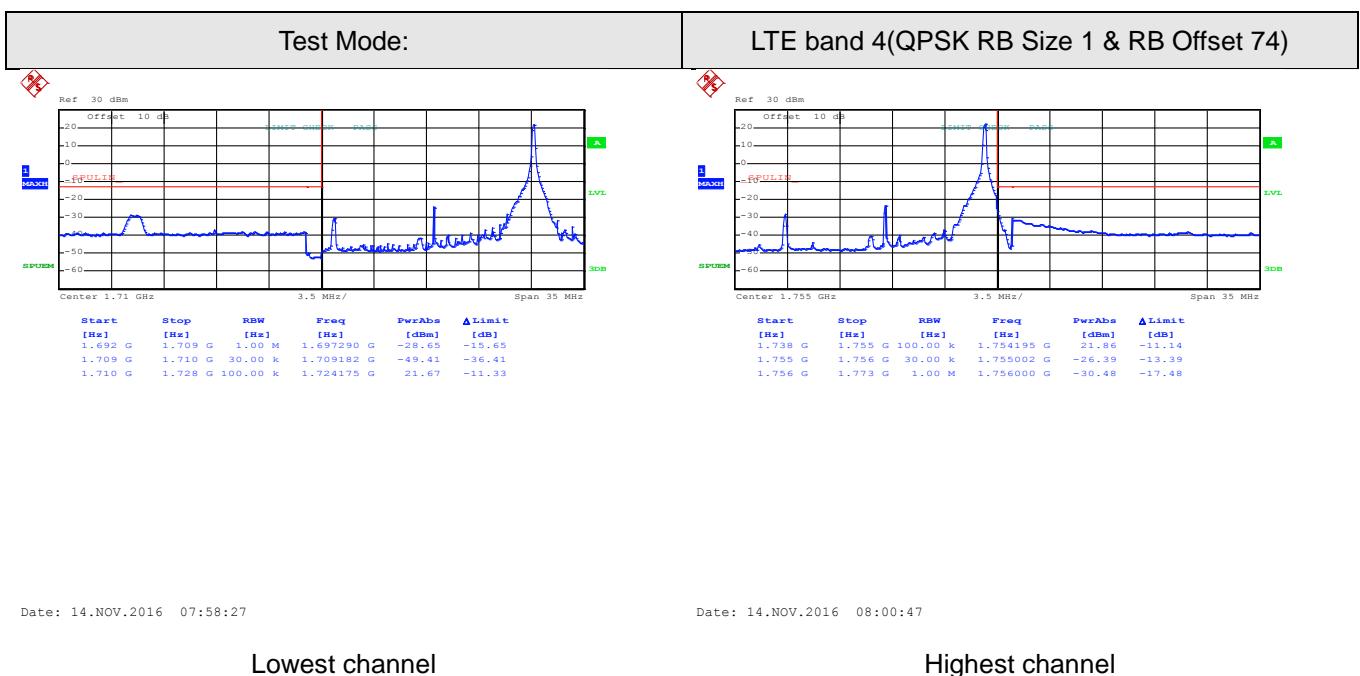
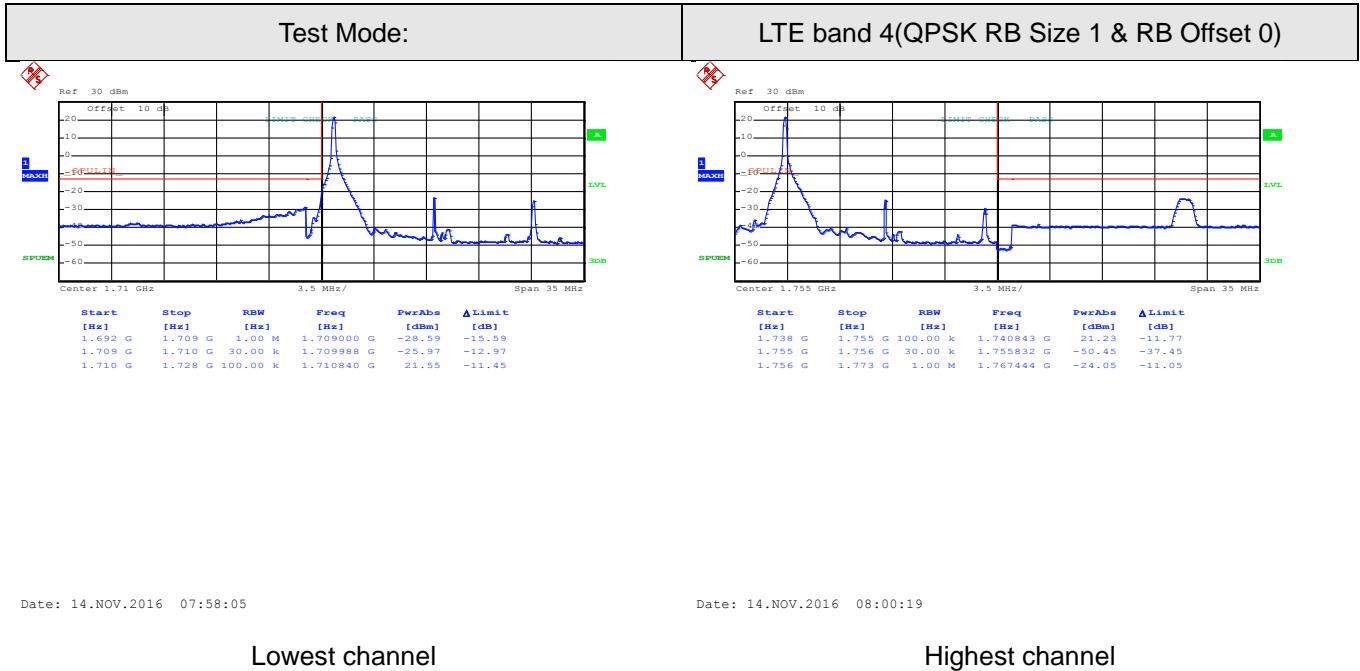
Date: 14.NOV.2016 07:54:26

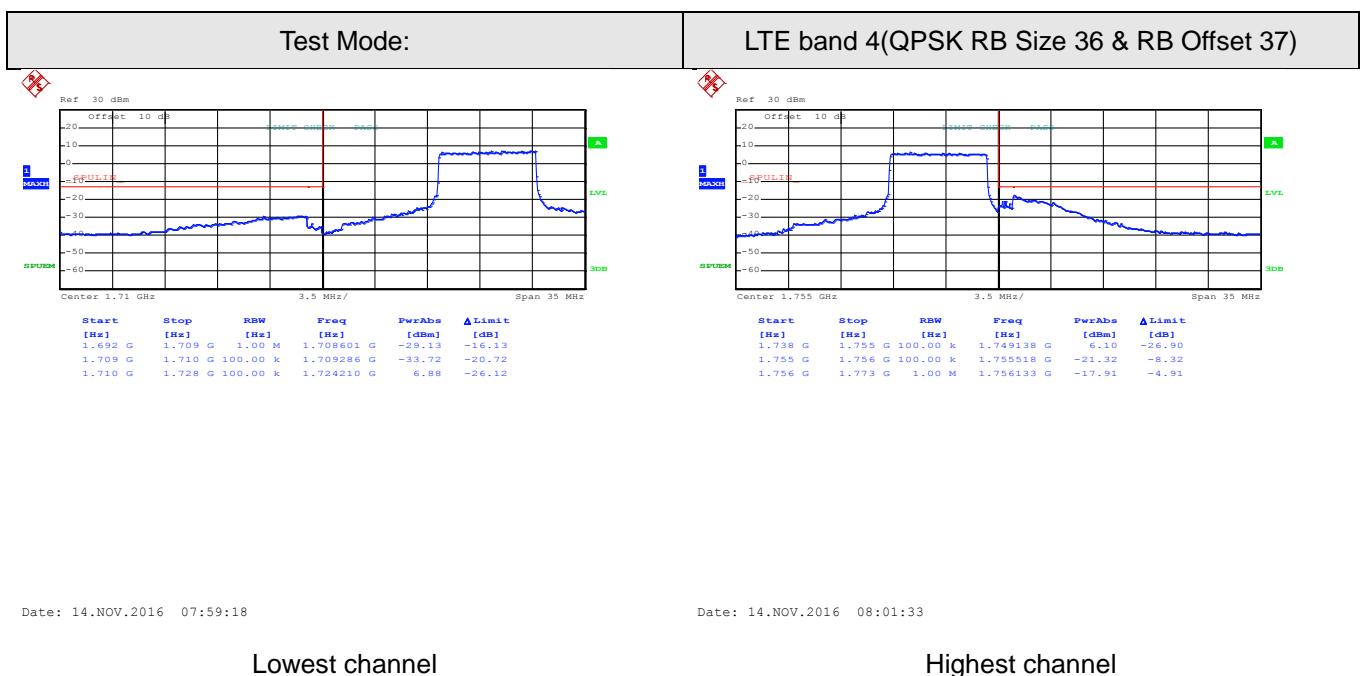
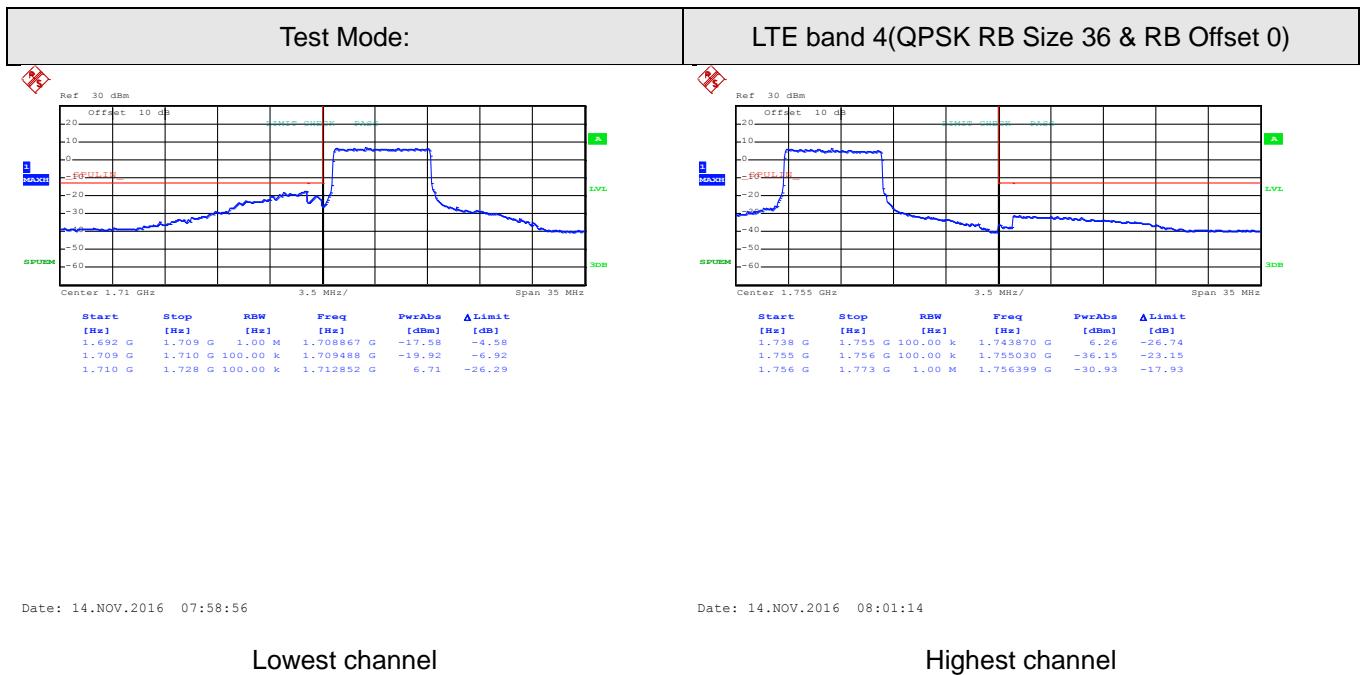
Date: 14.NOV.2016 07:57:15

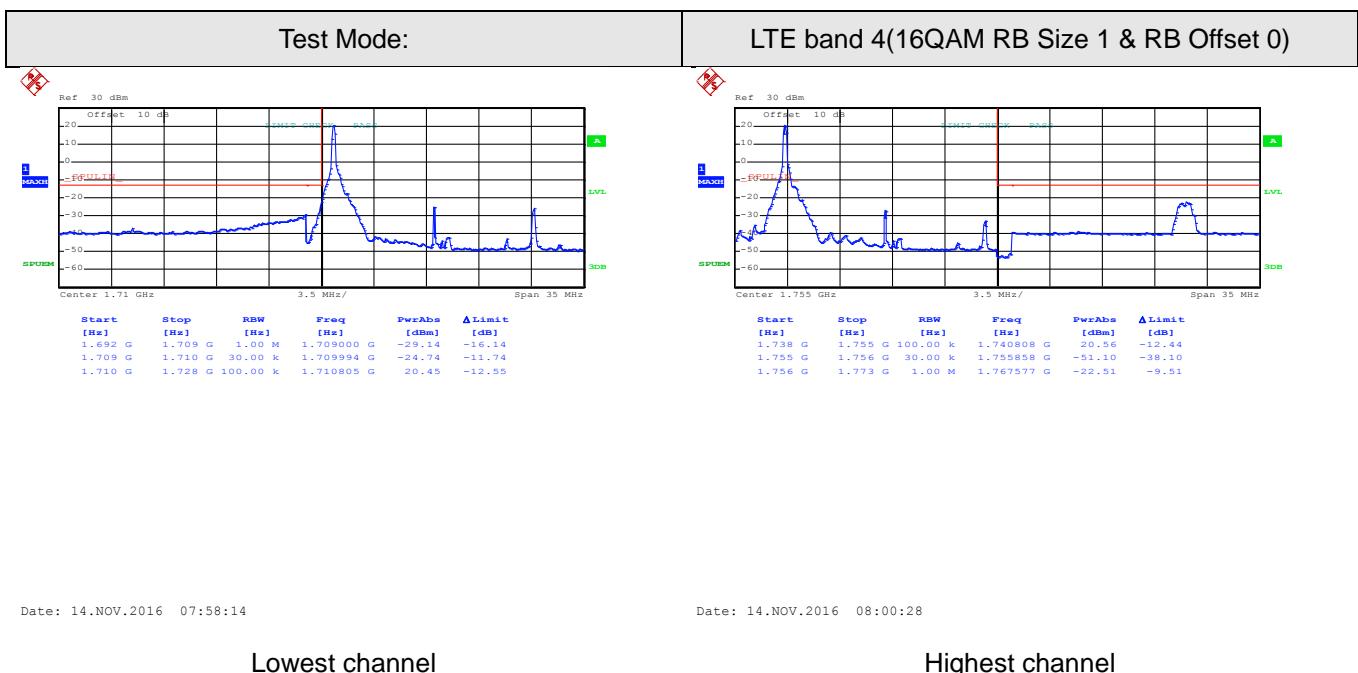
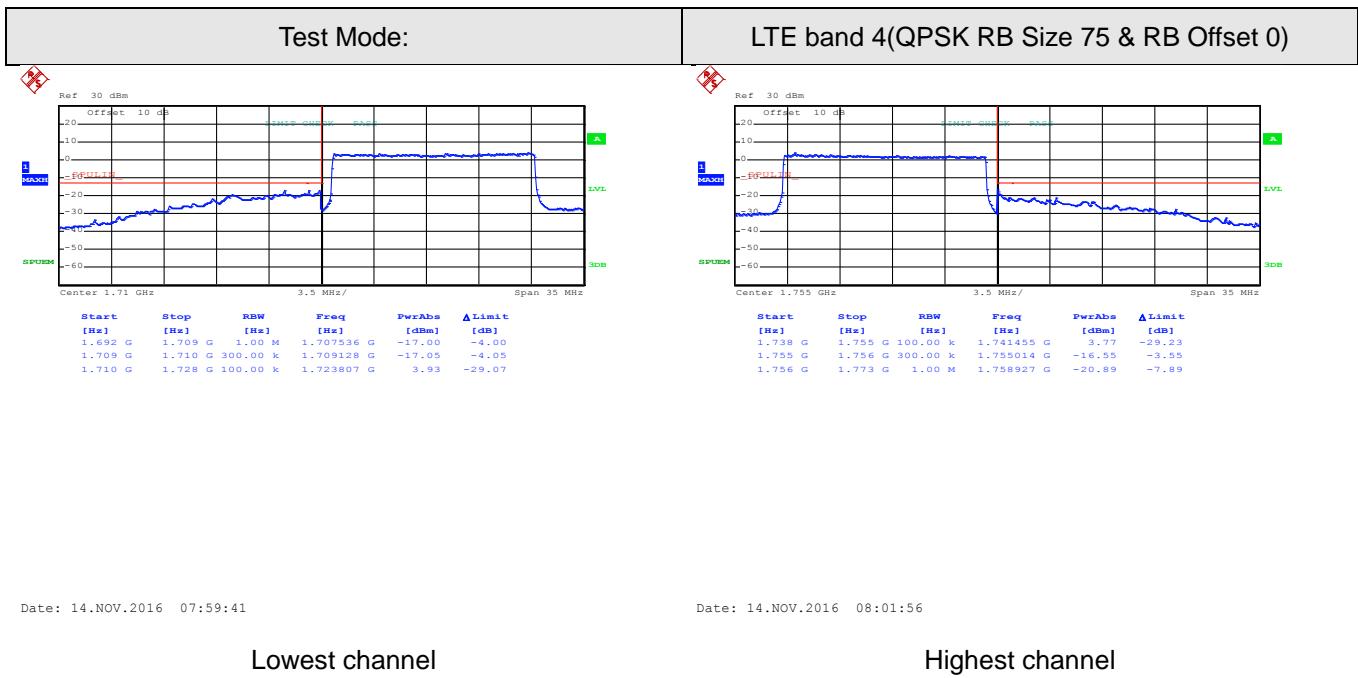
Lowest channel

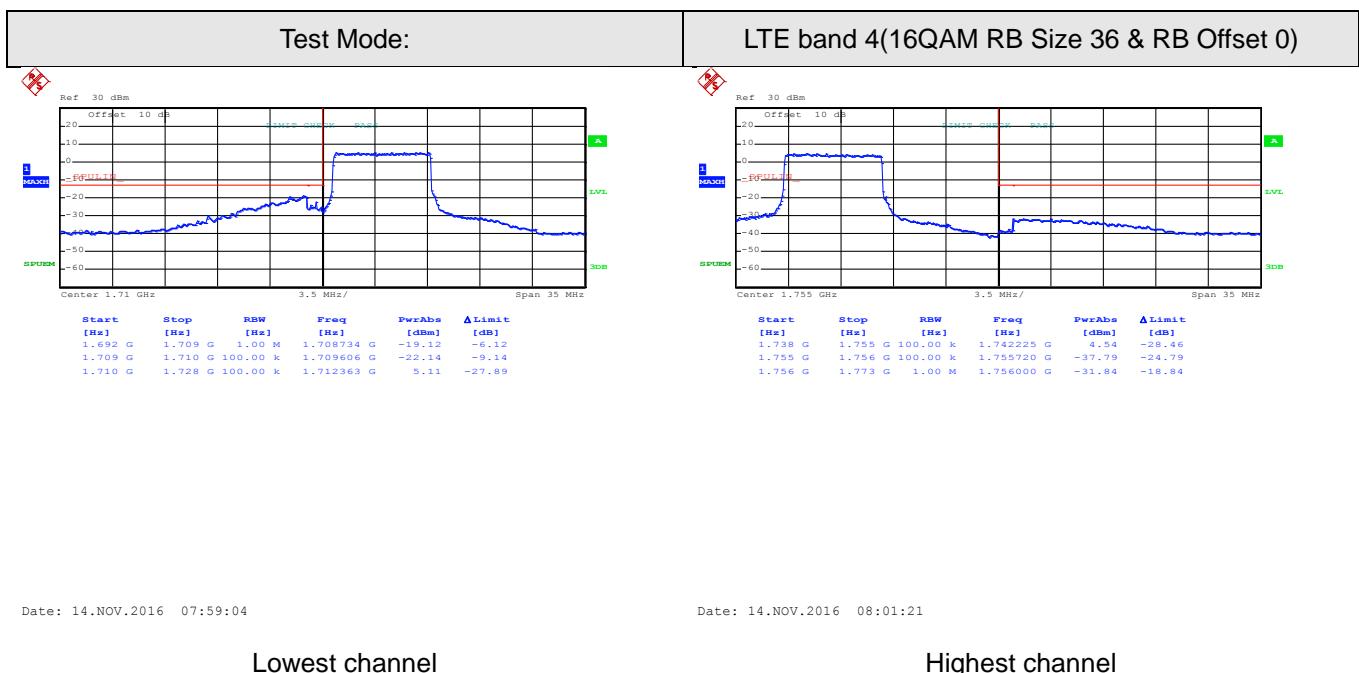
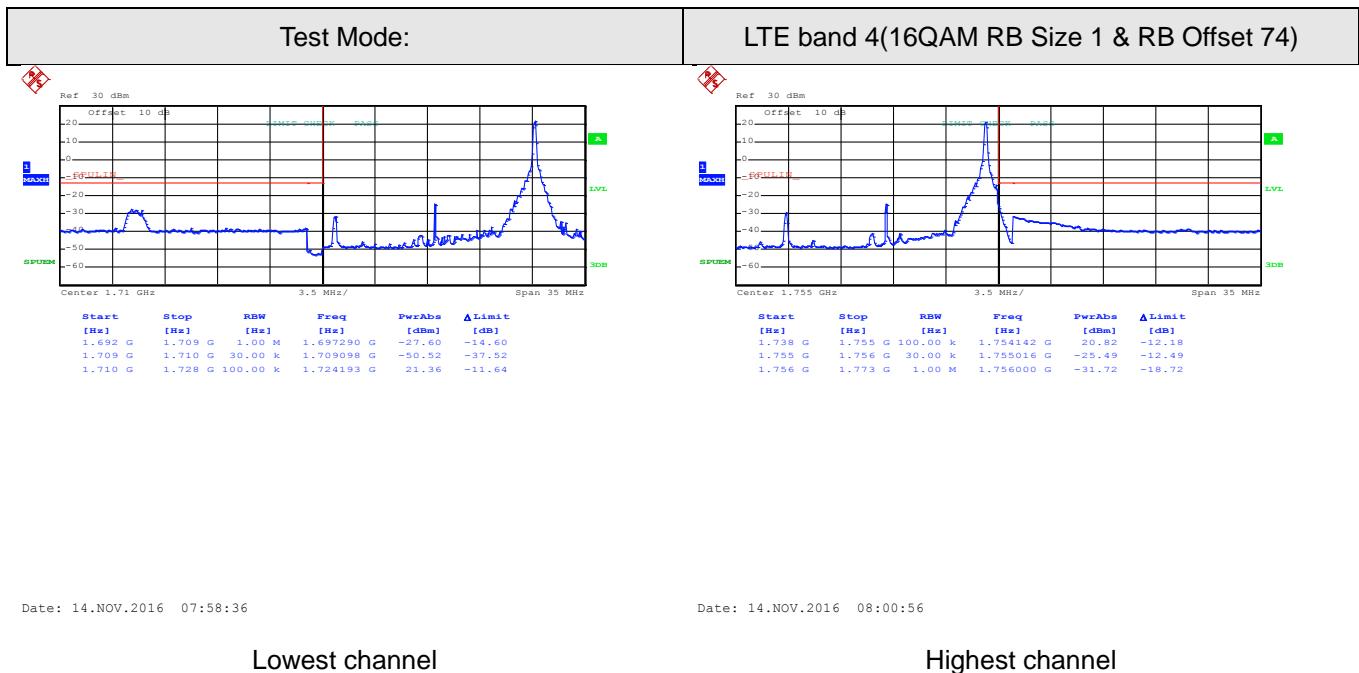
Highest channel

## 15MHz:

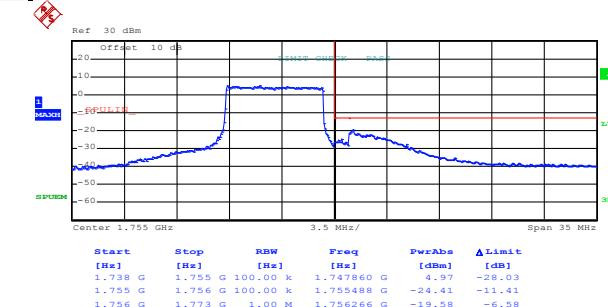
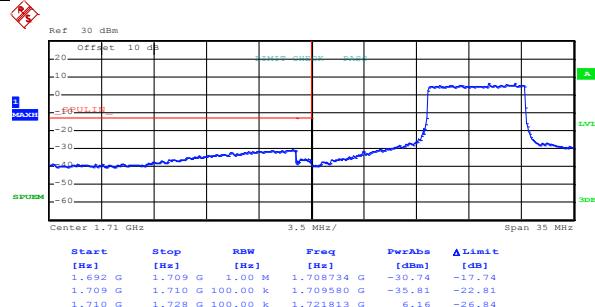








Test Mode:	LTE band 4(16QAM RB Size 36 & RB Offset 37)
------------	---



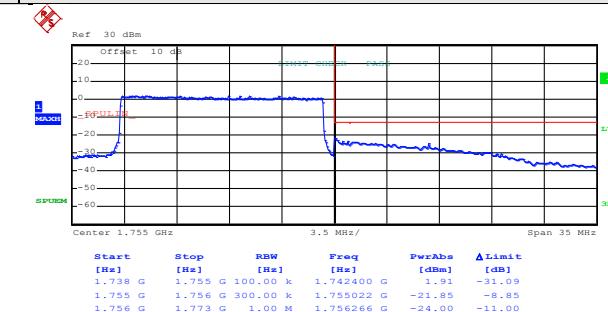
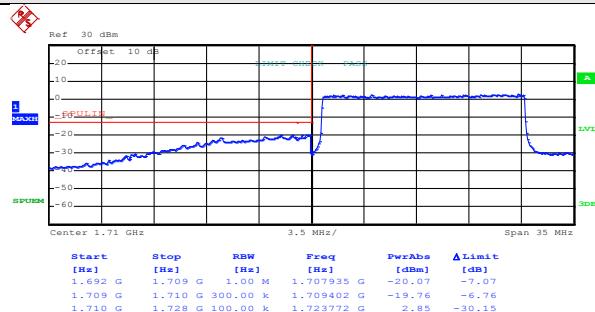
Date: 14.NOV.2016 07:59:26

Date: 14.NOV.2016 08:01:41

Lowest channel

Highest channel

Test Mode:	LTE band 4(16QAM RB Size 75 & RB Offset 0)
------------	--



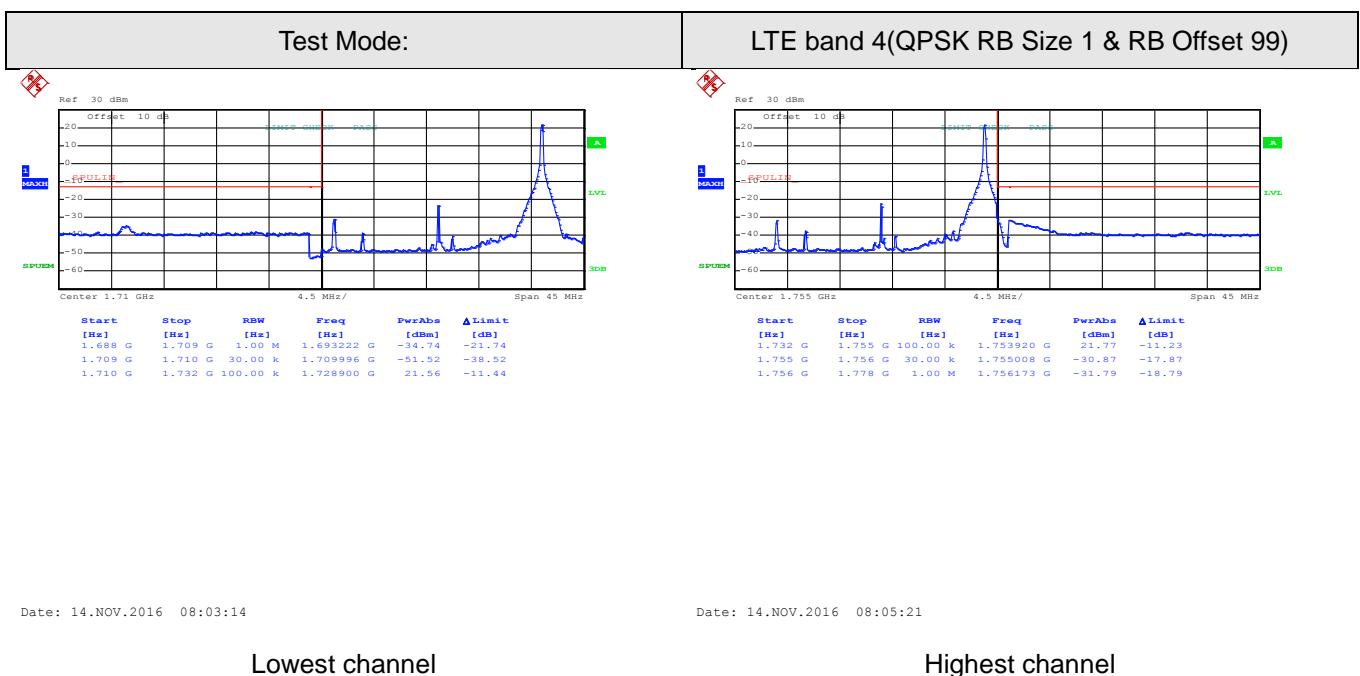
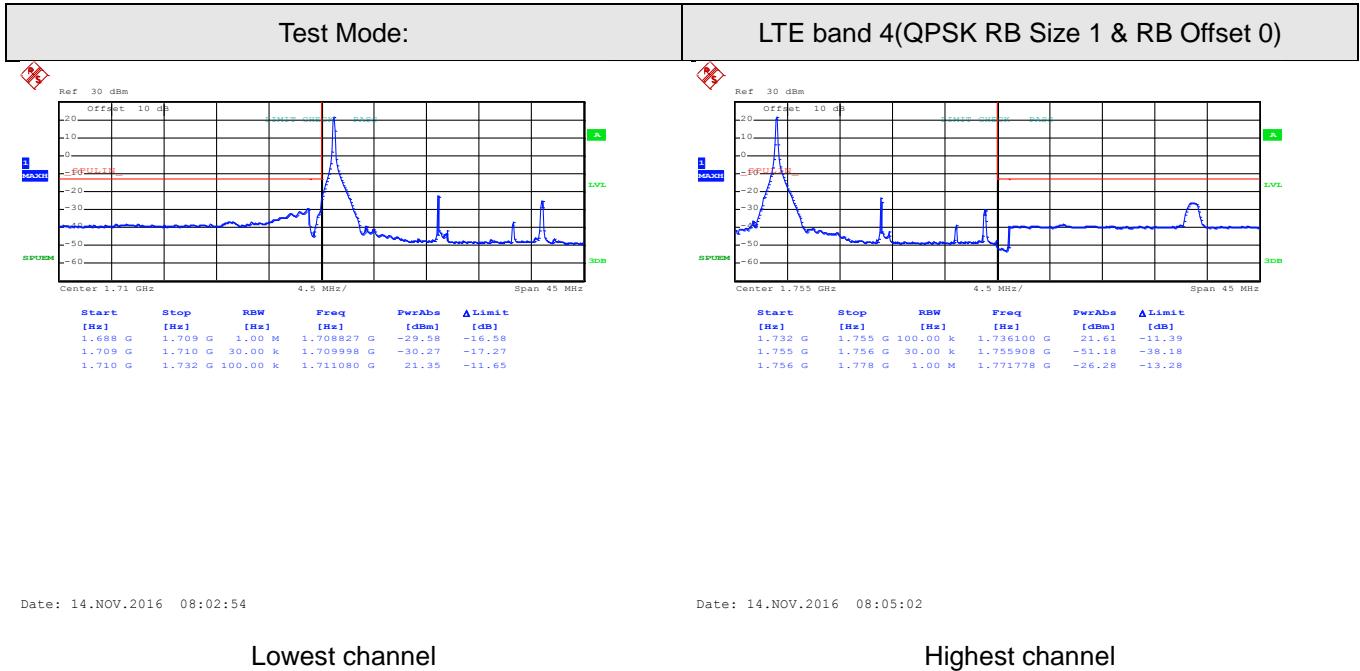
Date: 14.NOV.2016 07:59:49

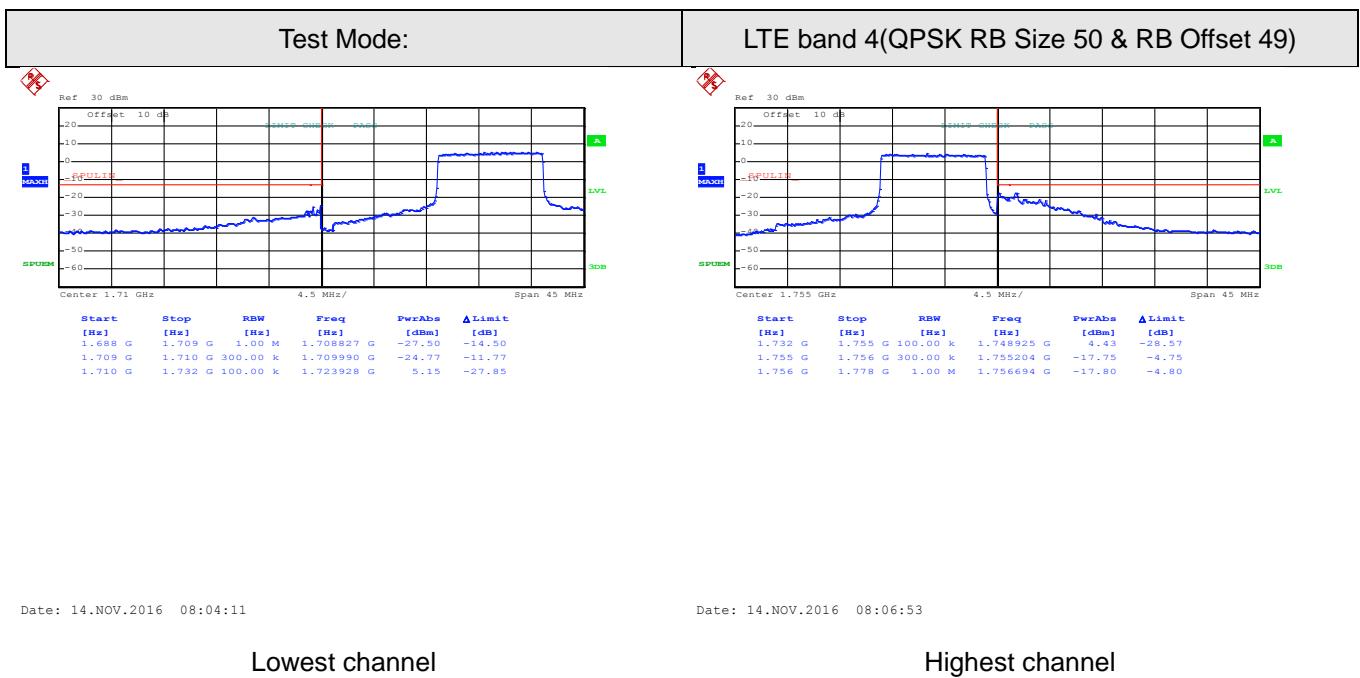
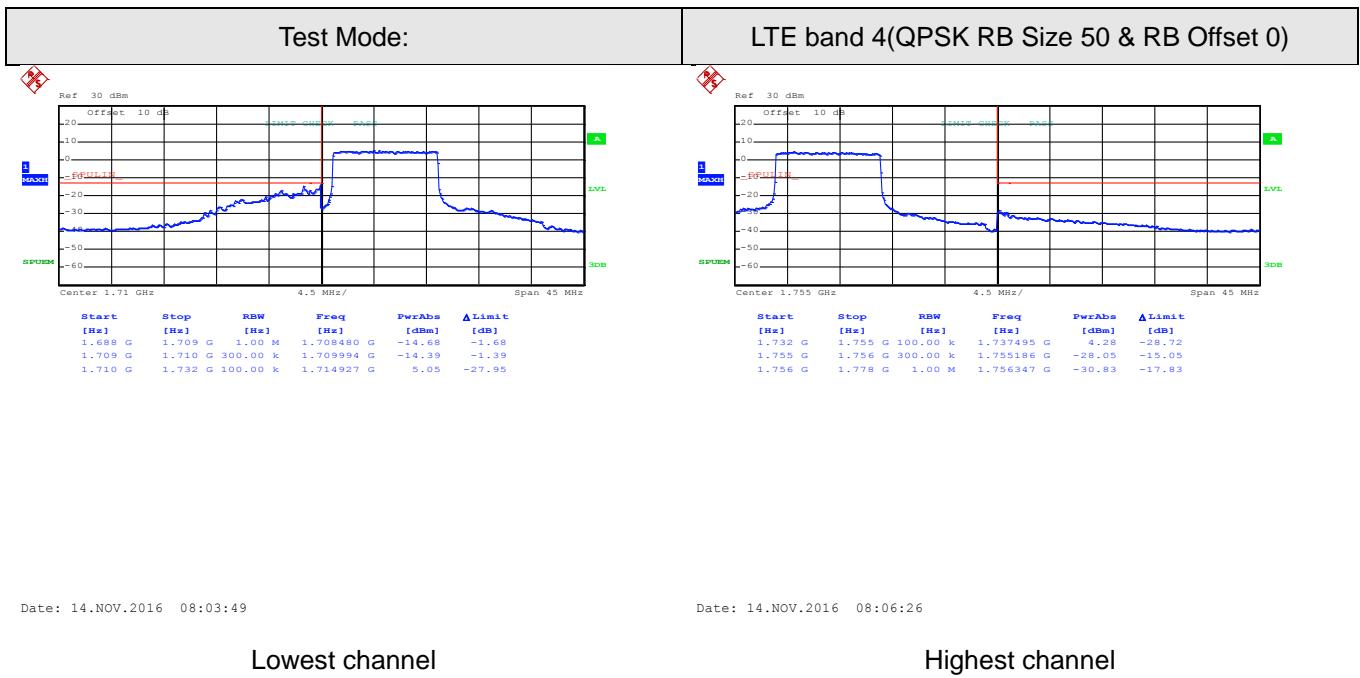
Date: 14.NOV.2016 08:02:03

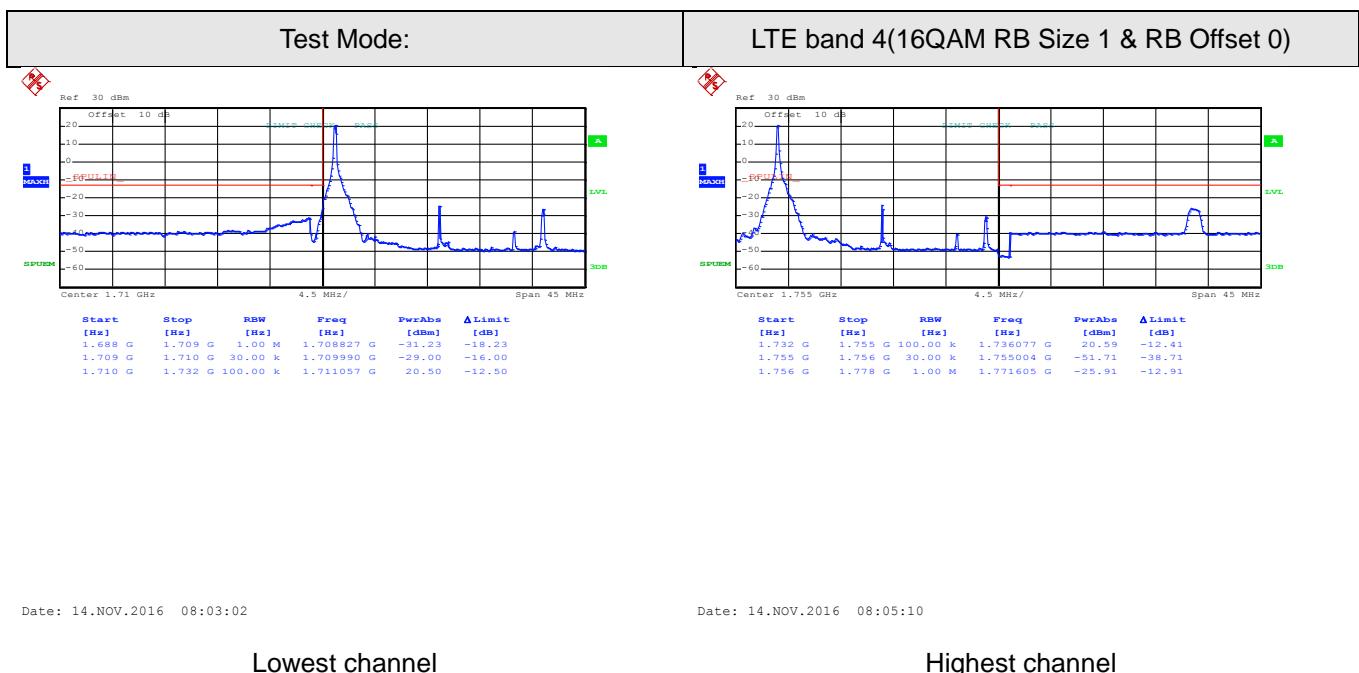
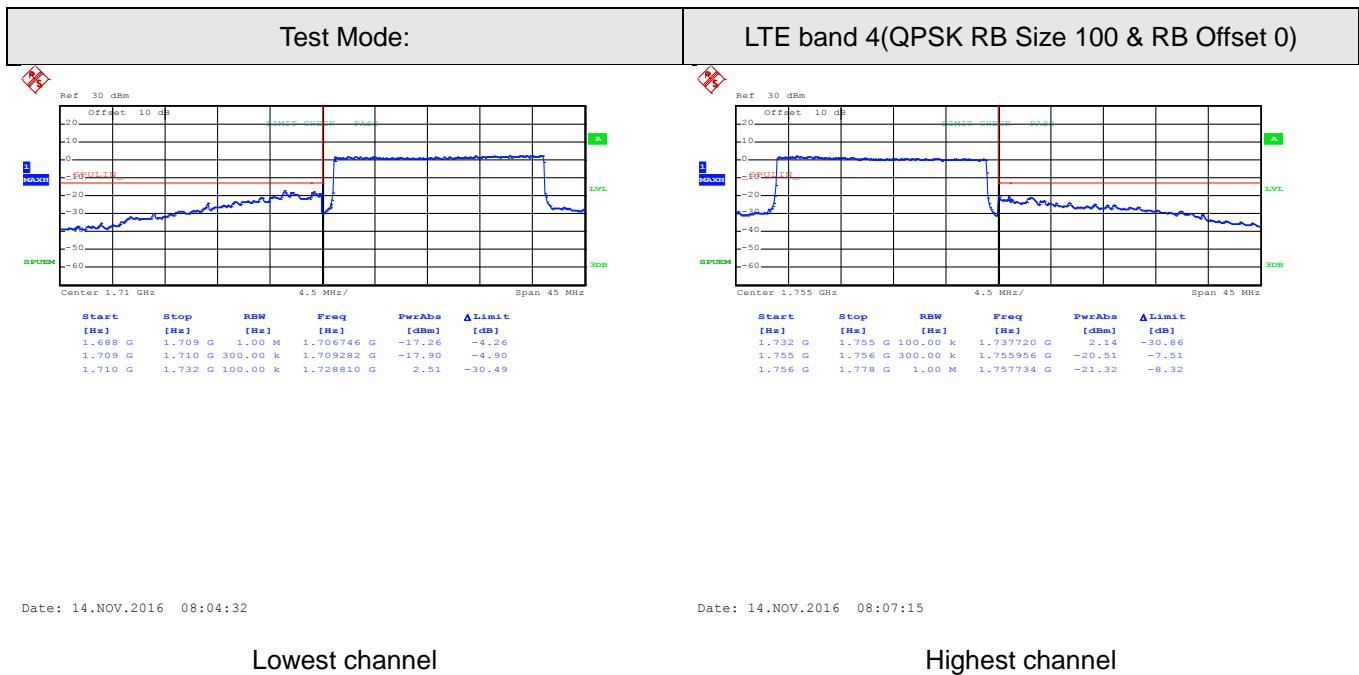
Lowest channel

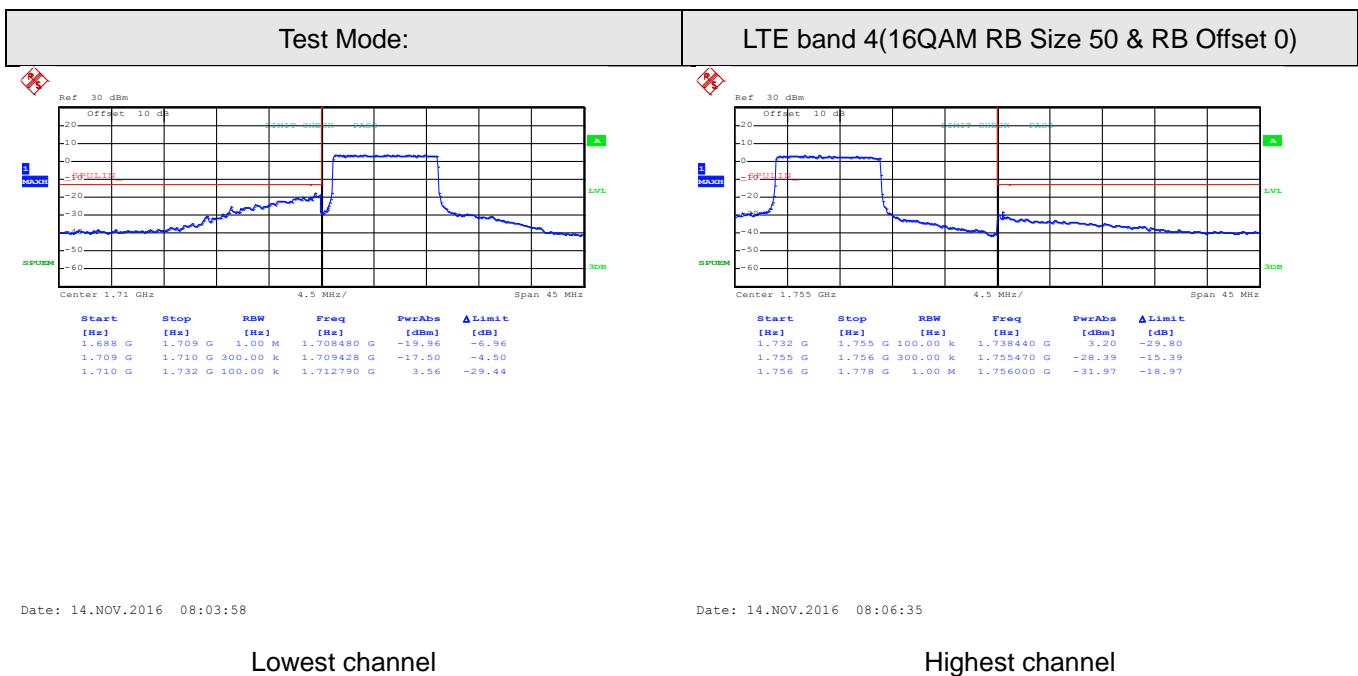
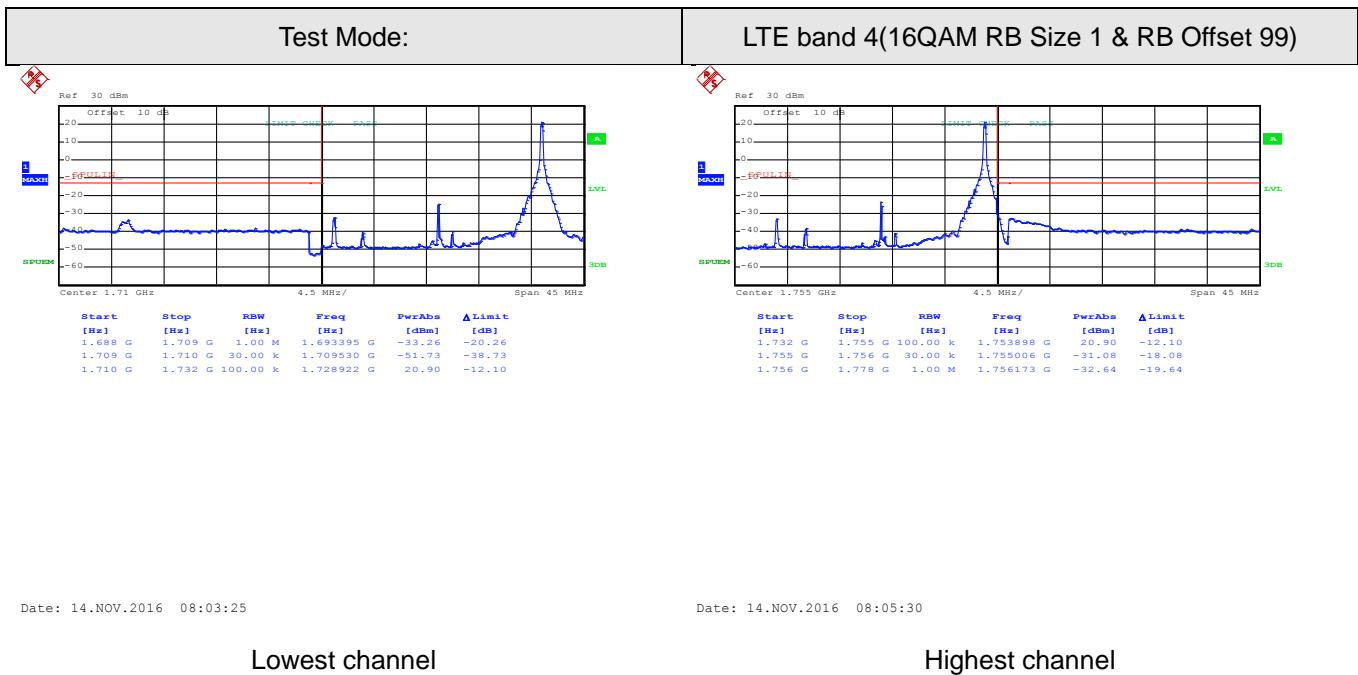
Highest channel

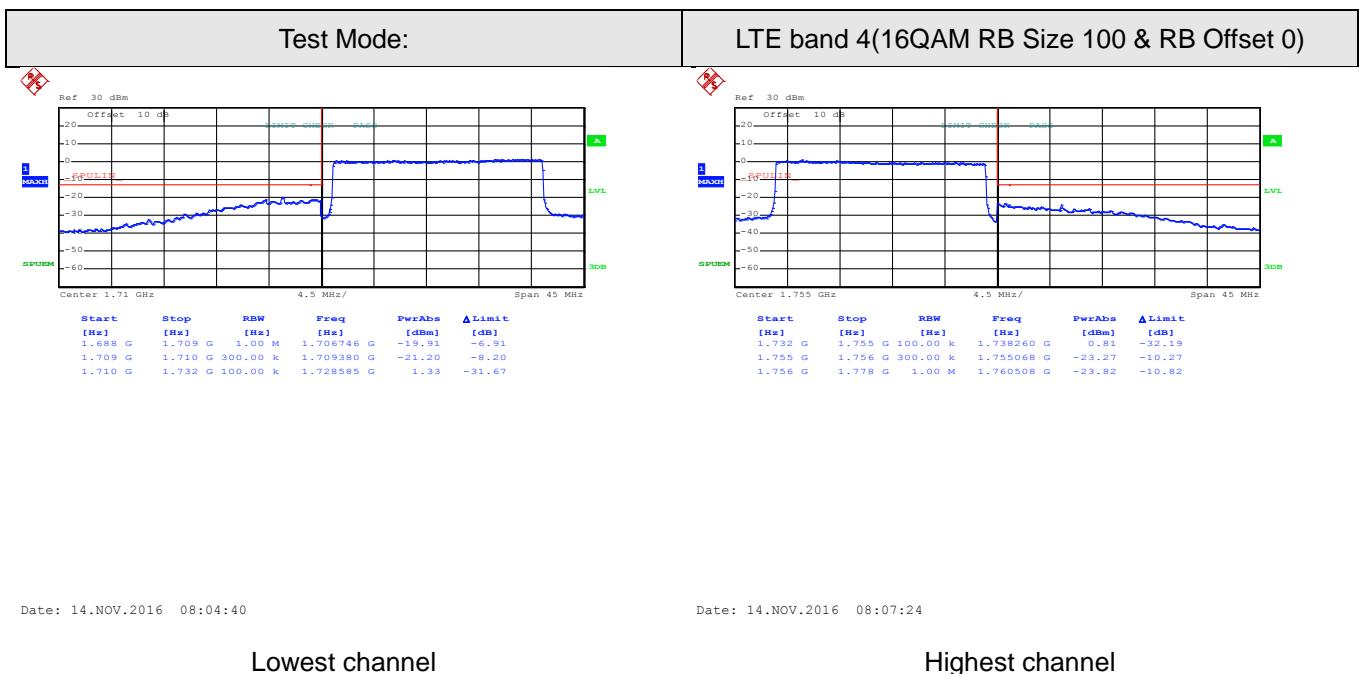
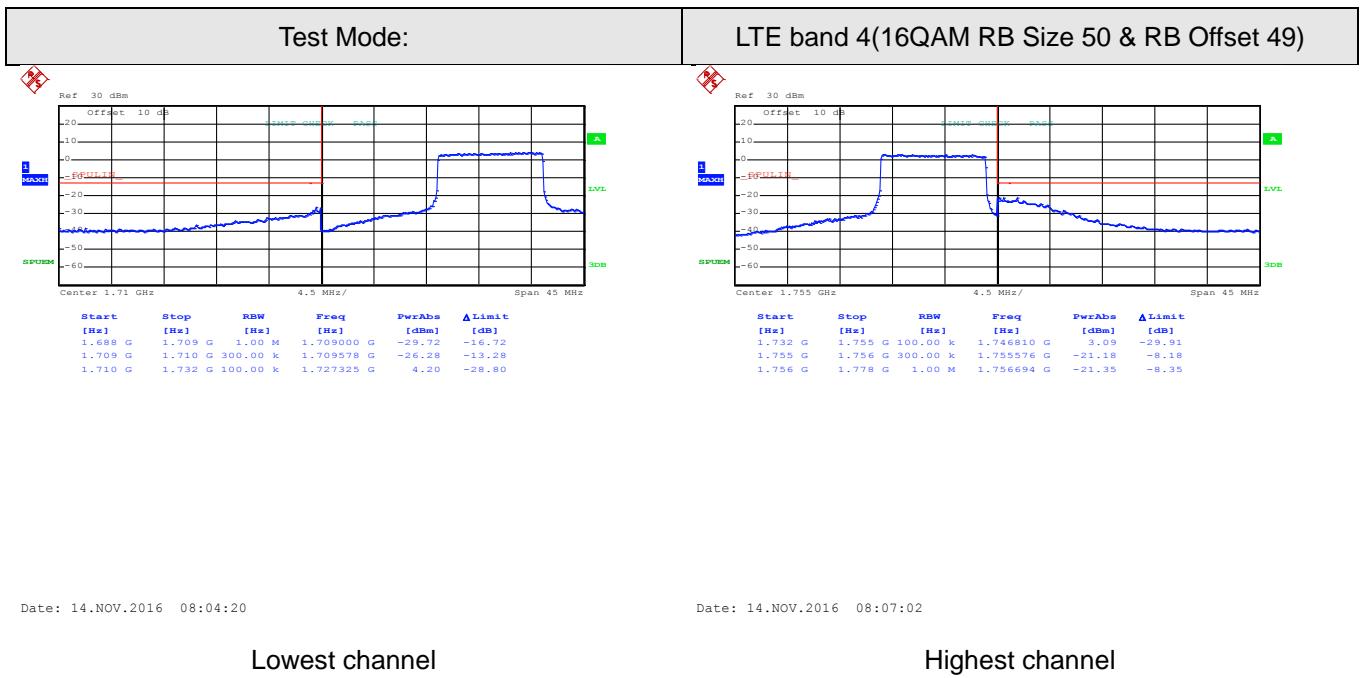
## 20MHz:







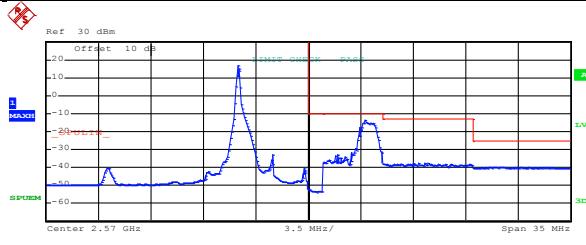
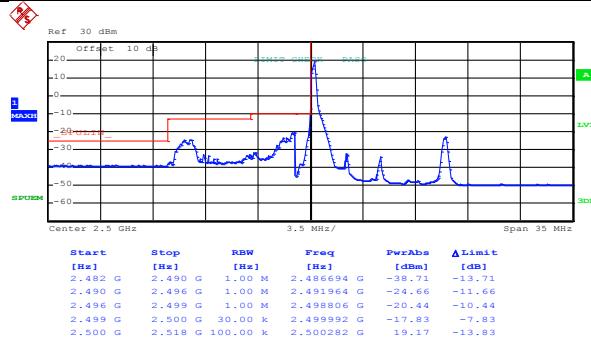




## LTE band 7 part:

5MHz:

Test Mode:	LTE band 7(QPSK RB Size 1 & RB Offset 0)
------------	--



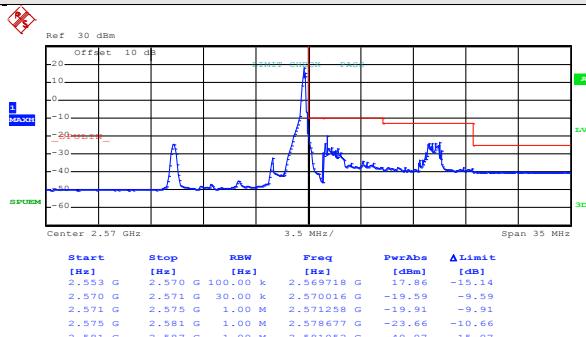
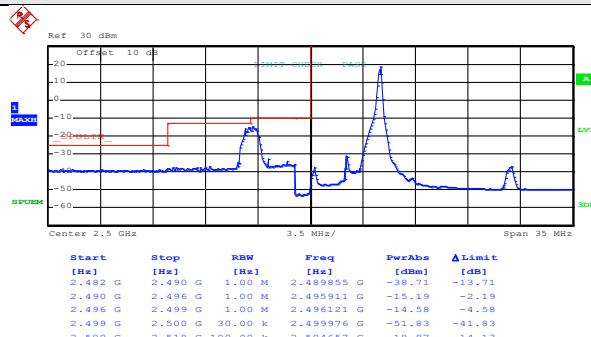
Date: 14.NOV.2016 08:34:33

Date: 14.NOV.2016 08:39:20

Lowest channel

Highest channel

Test Mode:	LTE band 7(QPSK RB Size 1 & RB Offset 24)
------------	---



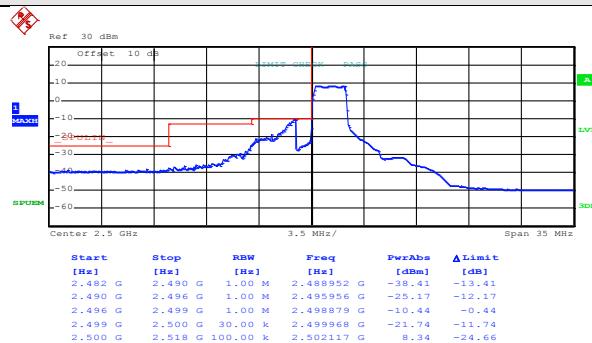
Date: 14.NOV.2016 08:35:22

Date: 14.NOV.2016 08:39:46

Lowest channel

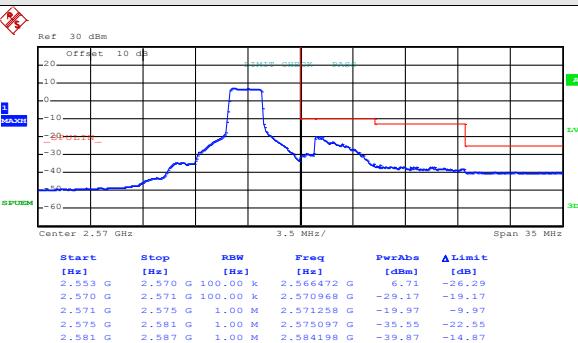
Highest channel

Test Mode:	LTE band 7(QPSK RB Size 12 & RB Offset 0)
------------	---



Date: 14.NOV.2016 08:35:51

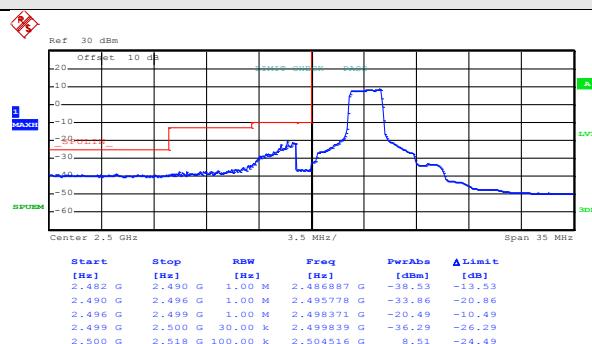
Lowest channel



Date: 14.NOV.2016 08:40:37

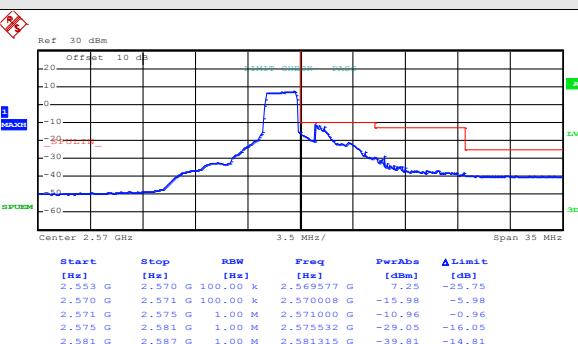
Highest channel

Test Mode:	LTE band 7(QPSK RB Size 12 & RB Offset 11)
------------	--



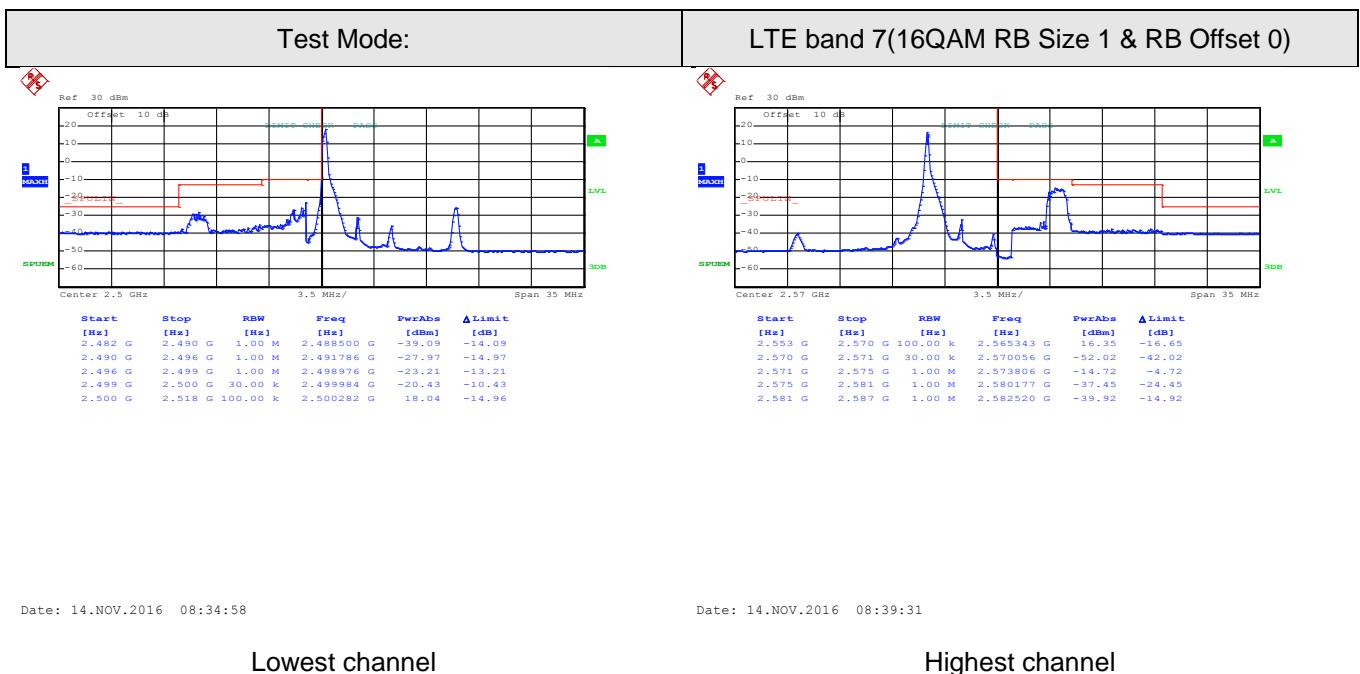
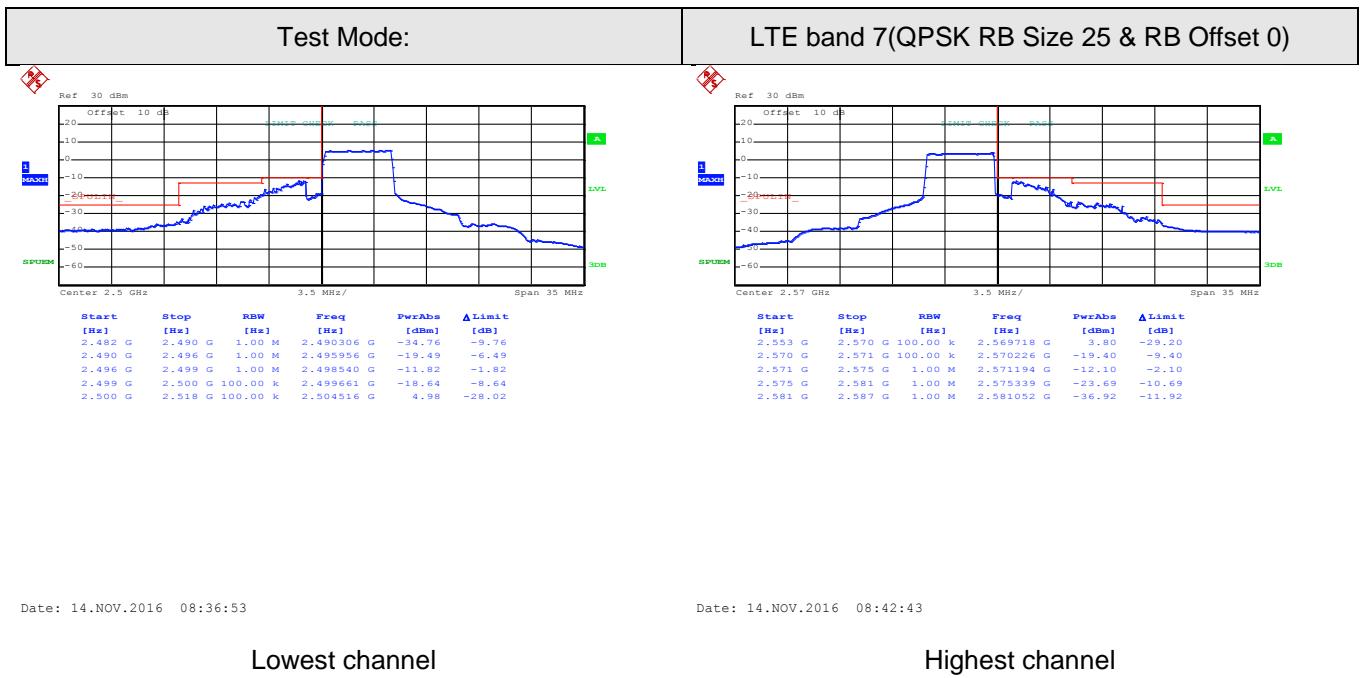
Date: 14.NOV.2016 08:36:27

Lowest channel

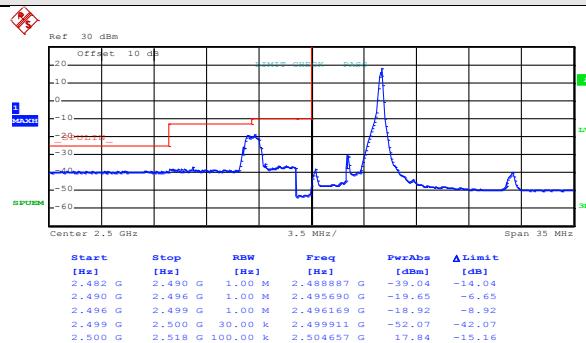


Date: 14.NOV.2016 08:41:04

Highest channel

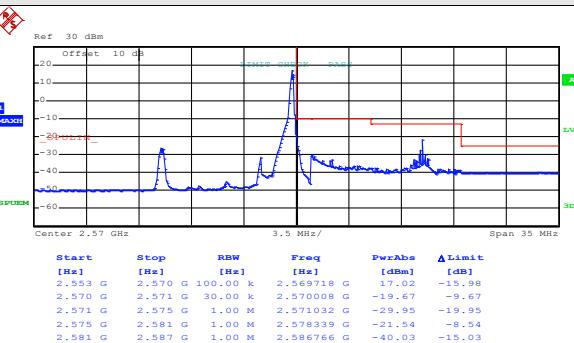


Test Mode:	LTE band 7(16QAM RB Size 1 & RB Offset 24)
------------	--



Date: 14.NOV.2016 08:35:32

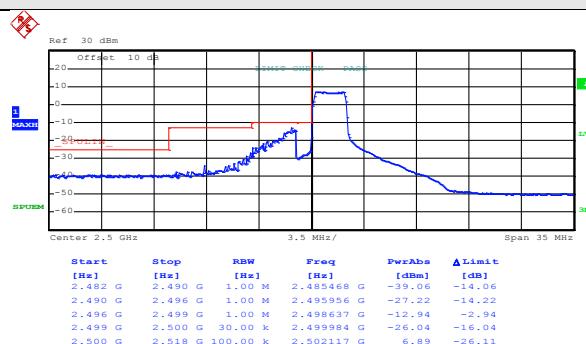
Lowest channel



Date: 14.NOV.2016 08:39:56

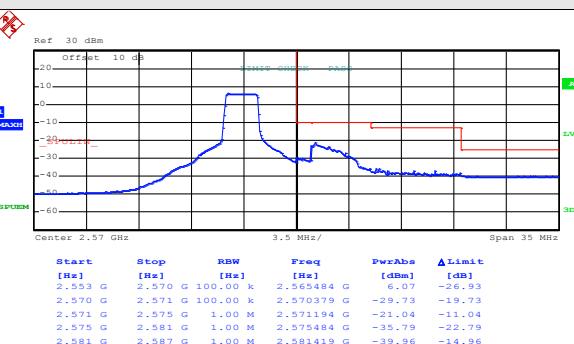
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 12 & RB Offset 0)
------------	--



Date: 14.NOV.2016 08:36:15

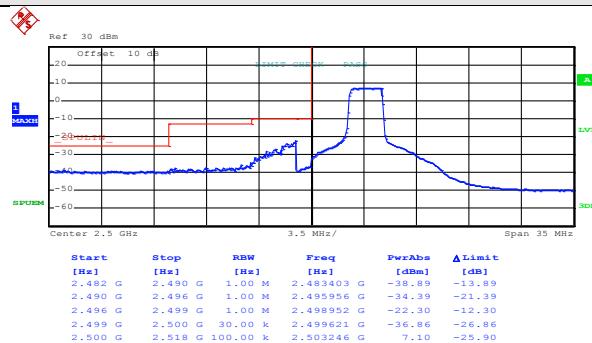
Lowest channel



Date: 14.NOV.2016 08:40:50

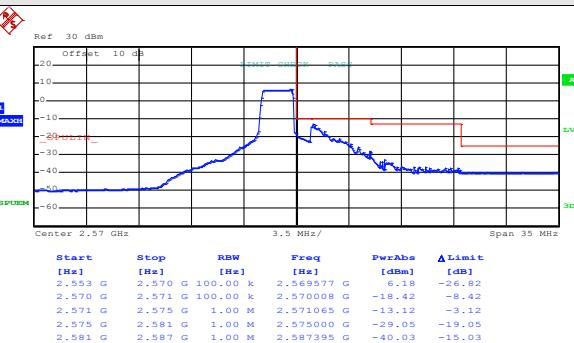
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 12 & RB Offset 11)
------------	---



Date: 14.NOV.2016 08:36:38

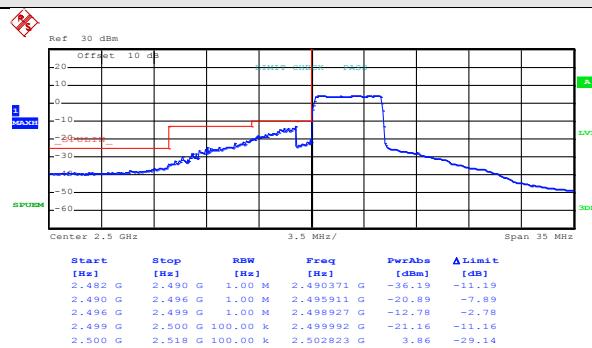
Lowest channel



Date: 14.NOV.2016 08:41:12

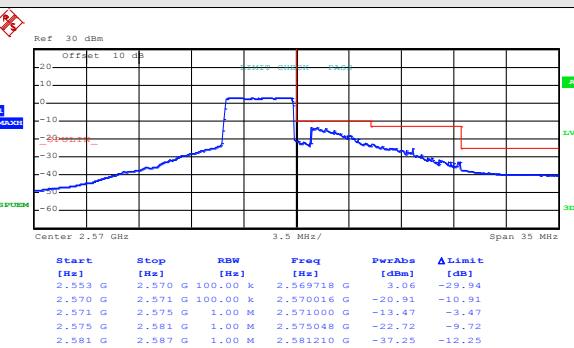
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 25 & RB Offset 0)
------------	--



Date: 14.NOV.2016 08:37:09

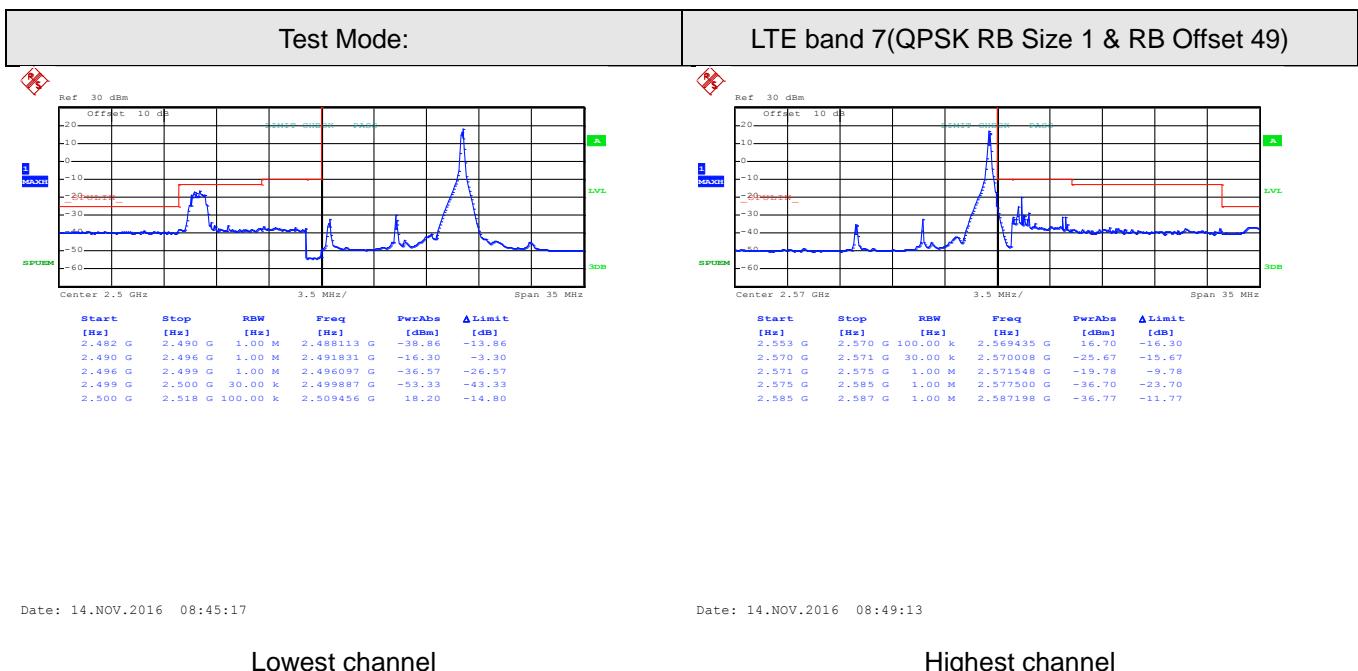
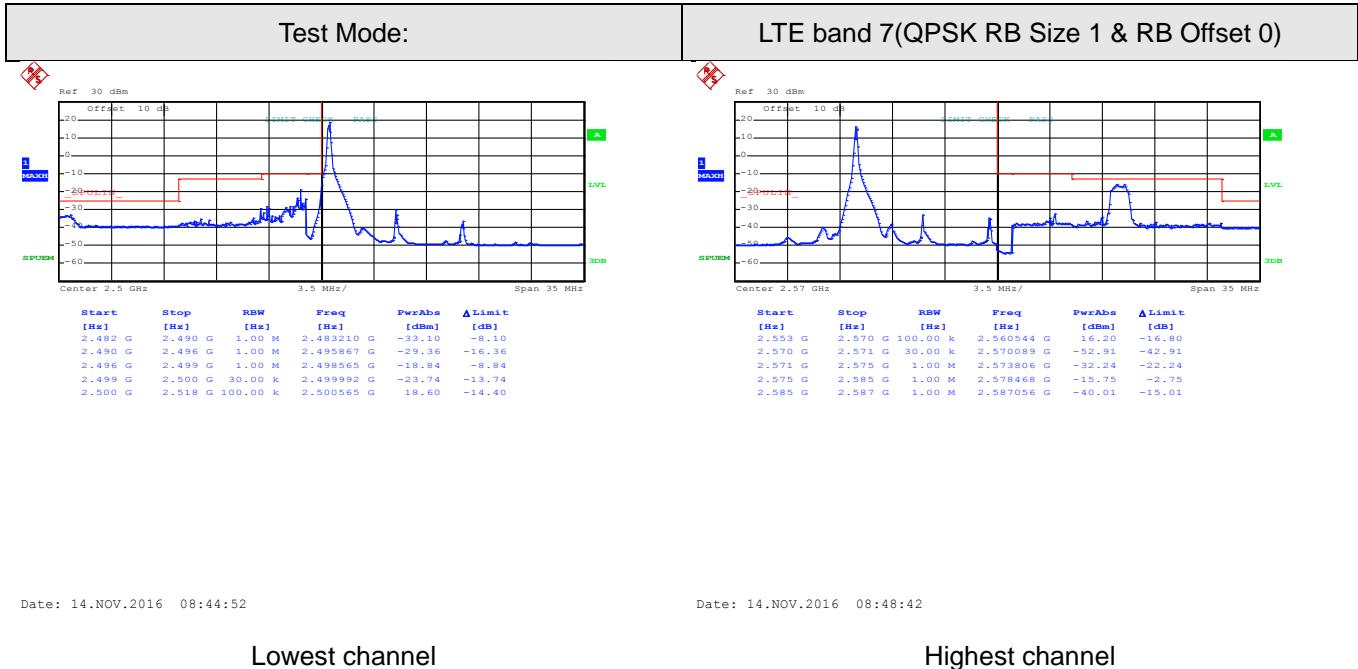
Lowest channel



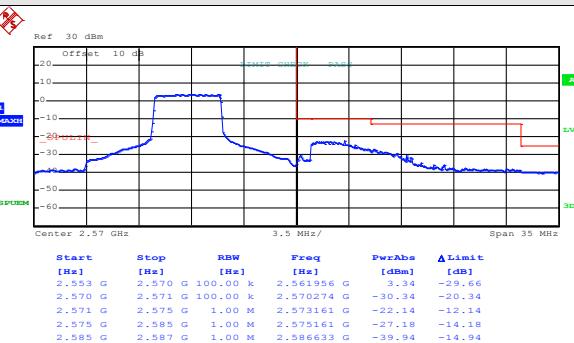
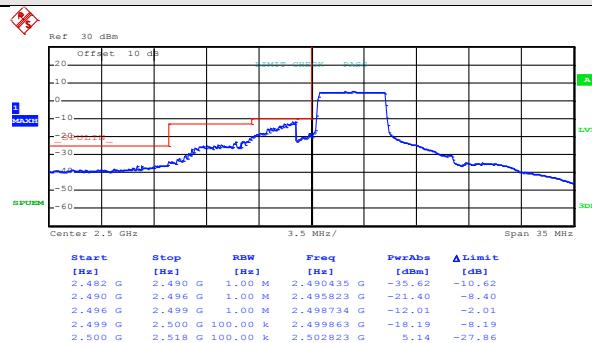
Date: 14.NOV.2016 08:42:52

Highest channel

10MHz:



Test Mode:	LTE band 7(QPSK RB Size 25 & RB Offset 0)
------------	---



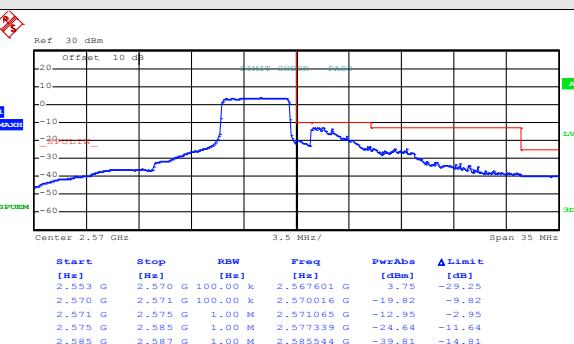
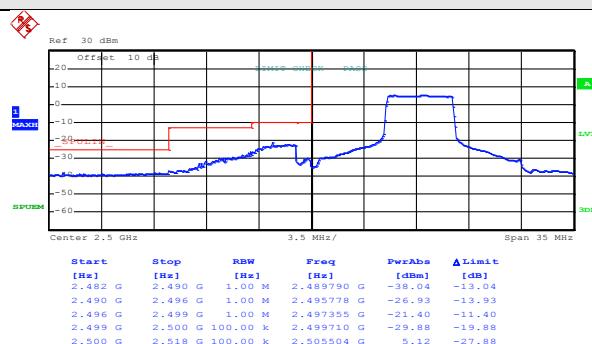
Date: 14.NOV.2016 08:45:57

Date: 14.NOV.2016 08:49:44

Lowest channel

Highest channel

Test Mode:	LTE band 7(QPSK RB Size 25 & RB Offset 24)
------------	--

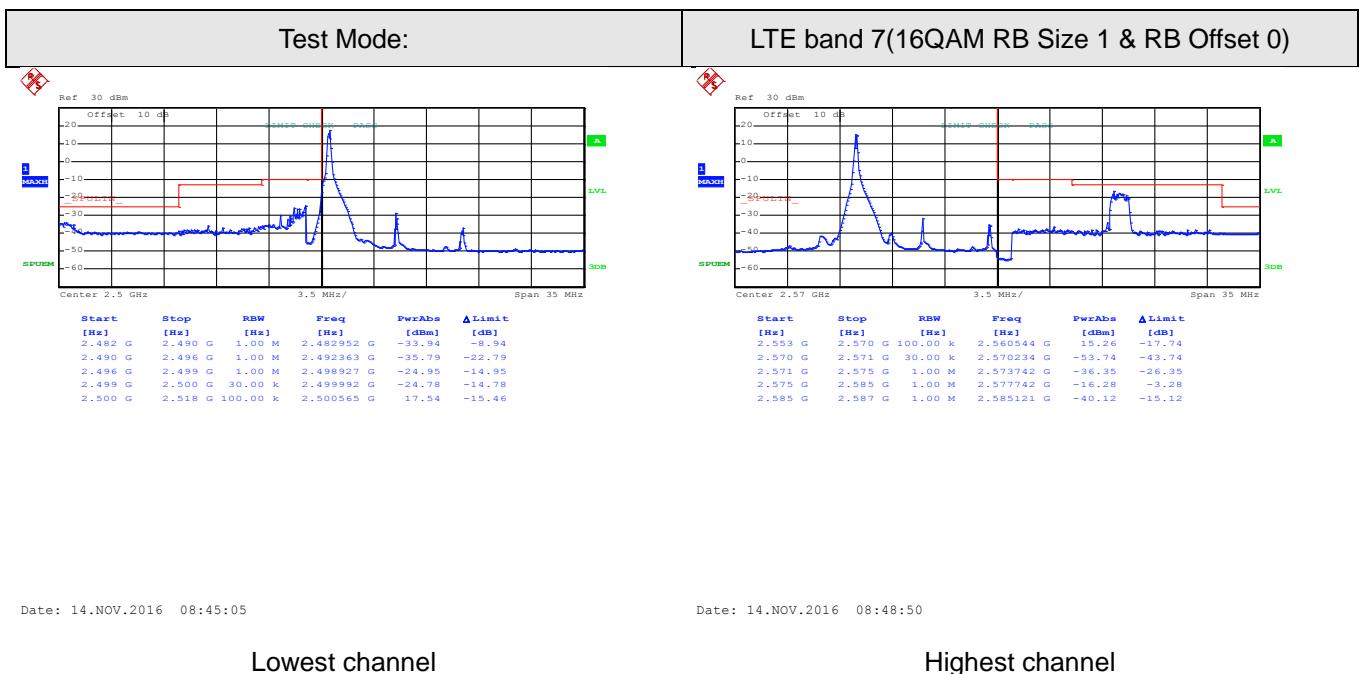
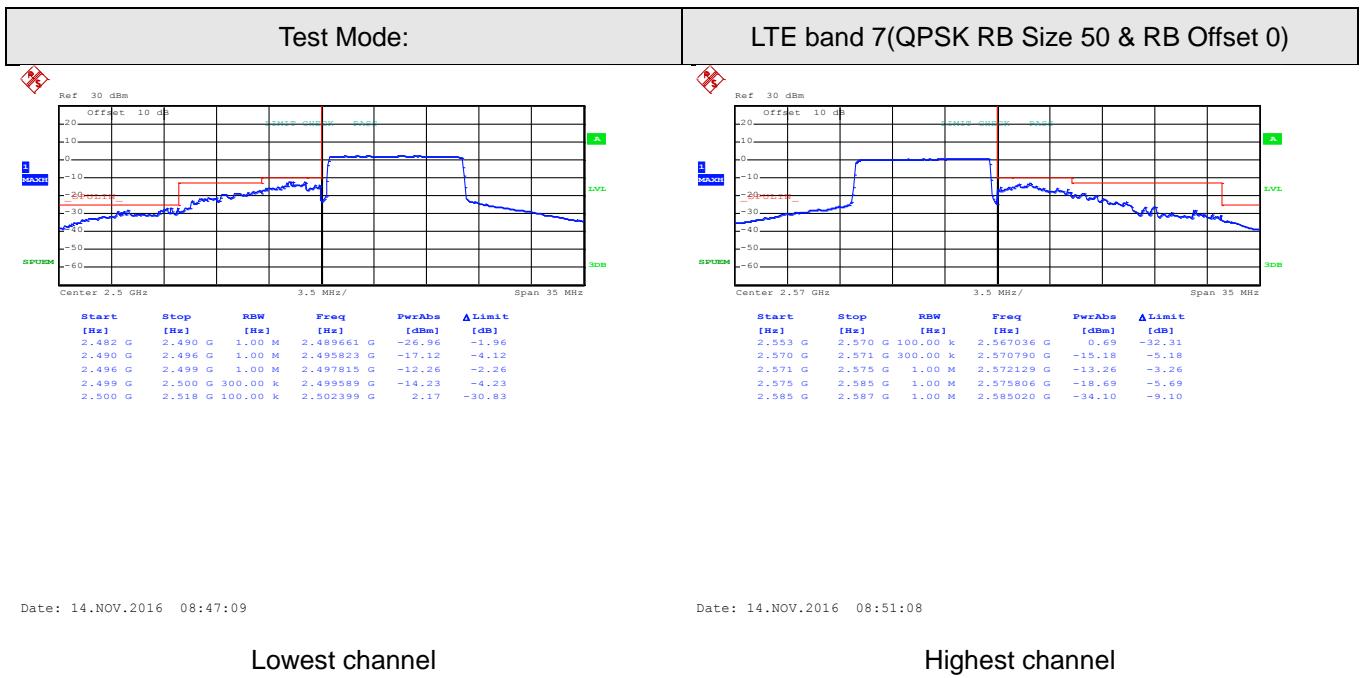


Date: 14.NOV.2016 08:46:31

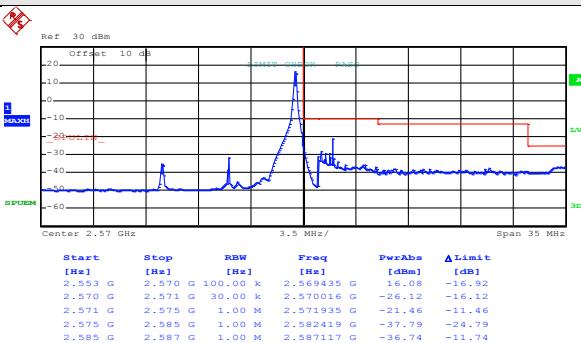
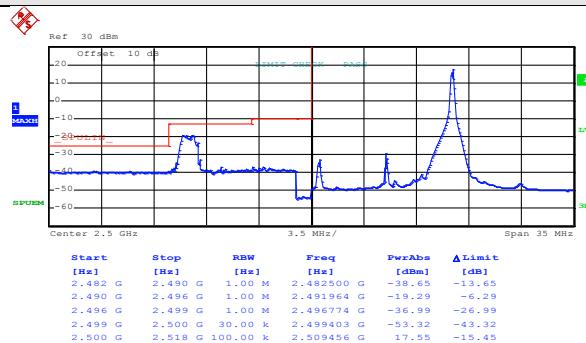
Date: 14.NOV.2016 08:50:28

Lowest channel

Highest channel



Test Mode:	LTE band 7(16QAM RB Size 1 & RB Offset 49)
------------	--



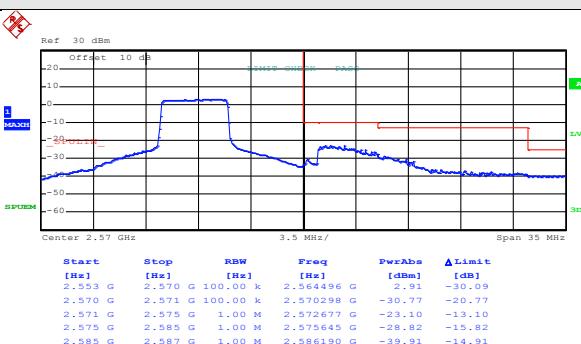
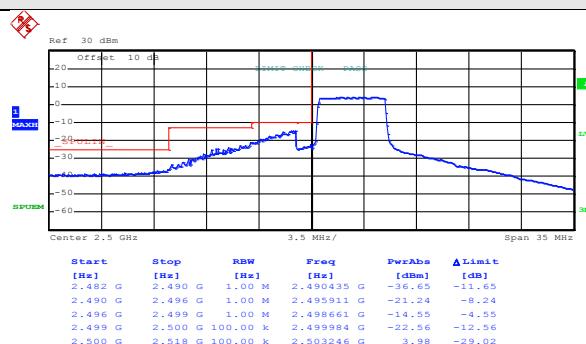
Date: 14.NOV.2016 08:45:27

Date: 14.NOV.2016 08:49:22

Lowest channel

Highest channel

Test Mode:	LTE band 7(16QAM RB Size 25 & RB Offset 0)
------------	--



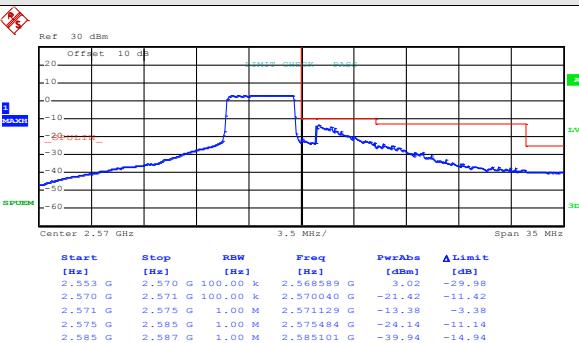
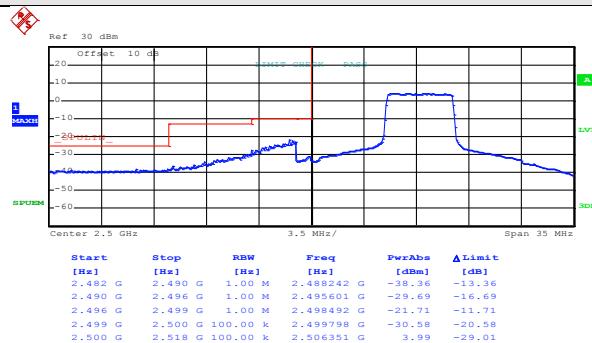
Date: 14.NOV.2016 08:46:13

Date: 14.NOV.2016 08:49:58

Lowest channel

Highest channel

Test Mode:	LTE band 7(16QAM RB Size 25 & RB Offset 24)
------------	---



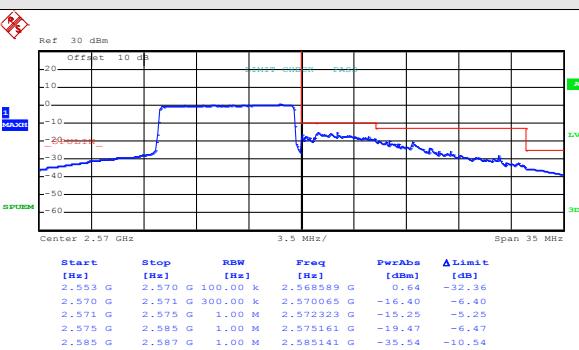
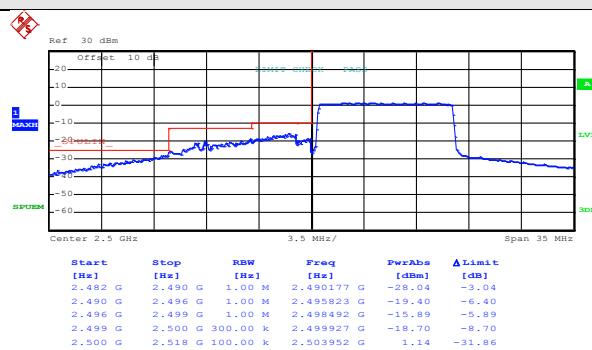
Date: 14.NOV.2016 08:46:51

Lowest channel

Date: 14.NOV.2016 08:50:42

Highest channel

Test Mode:	LTE band 7(16QAM RB Size 50 & RB Offset 0)
------------	--



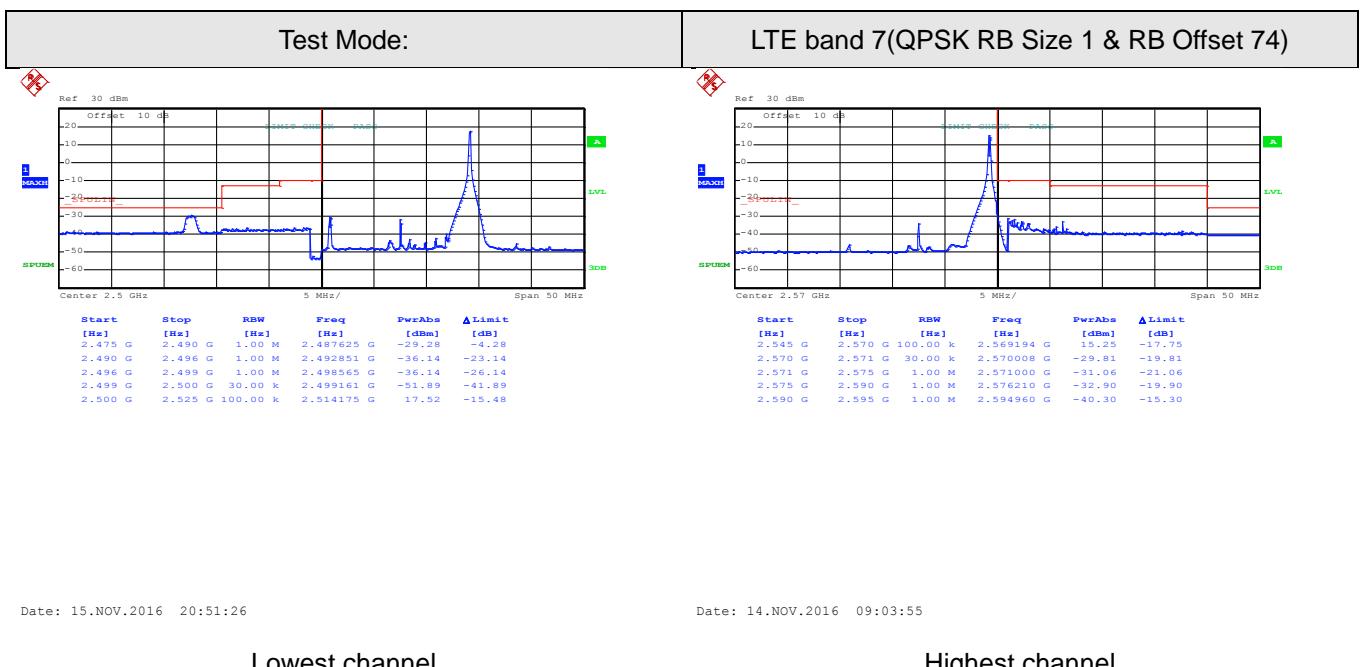
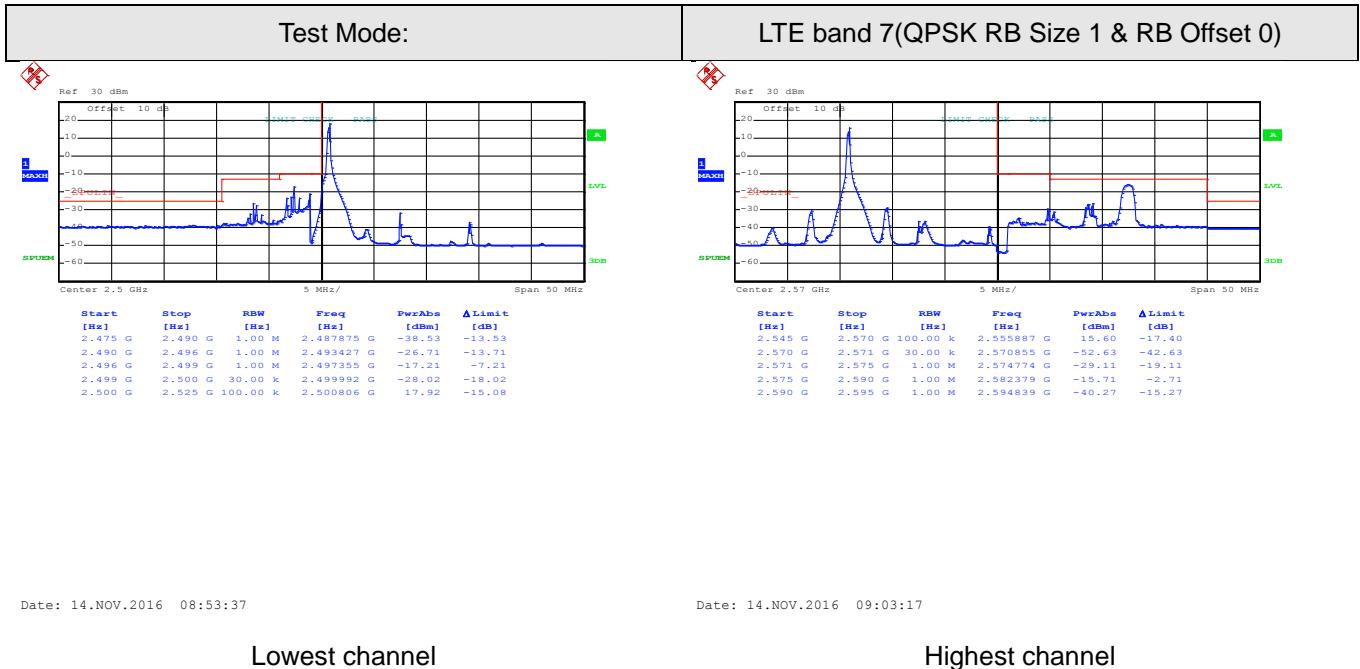
Date: 14.NOV.2016 08:47:17

Date: 14.NOV.2016 08:51:19

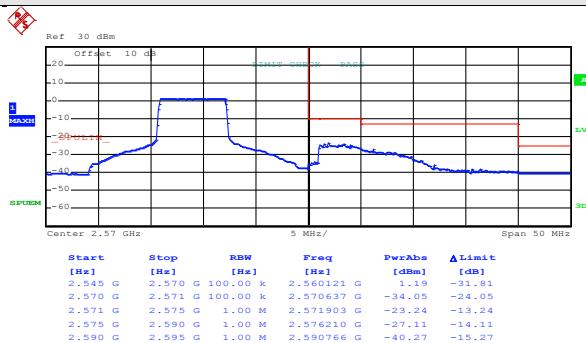
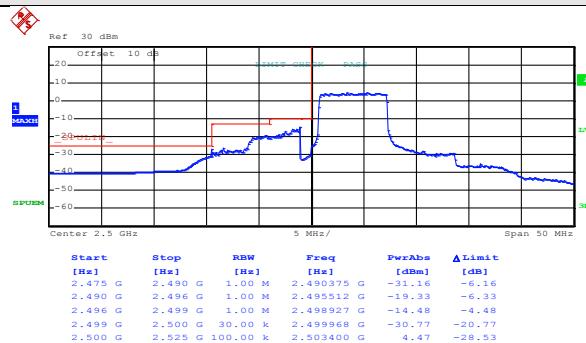
Lowest channel

Highest channel

15MHz:



Test Mode:	LTE band 7(QPSK RB Size 36 & RB Offset 0)
------------	---



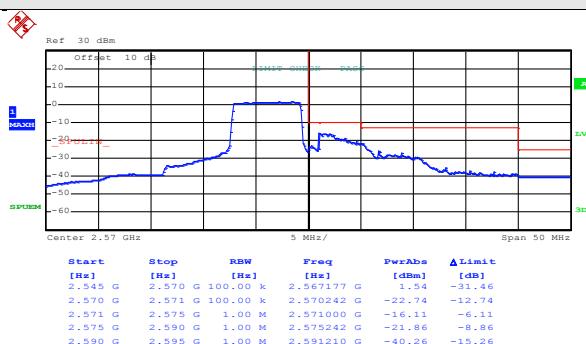
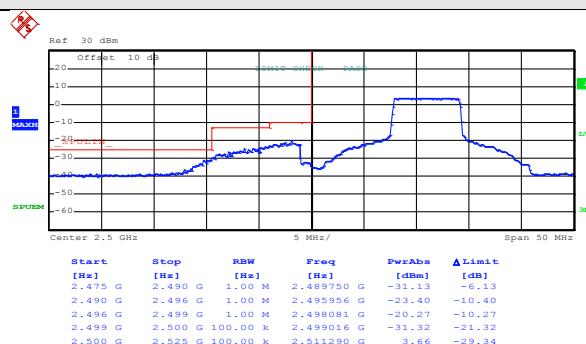
Date: 14.NOV.2016 13:13:29

Lowest channel

Date: 14.NOV.2016 09:04:31

Highest channel

Test Mode:	LTE band 7(QPSK RB Size 36 & RB Offset 37)
------------	--



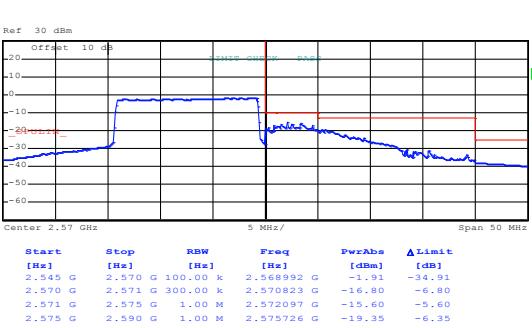
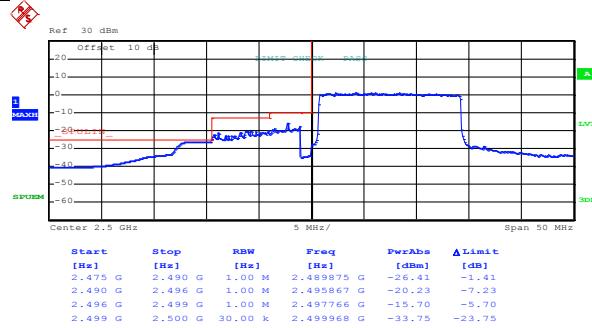
Date: 14.NOV.2016 09:01:29

Date: 14.NOV.2016 09:04:57

Lowest channel

Highest channel

Test Mode:	LTE band 7(QPSK RB Size 75 & RB Offset 0)
------------	---



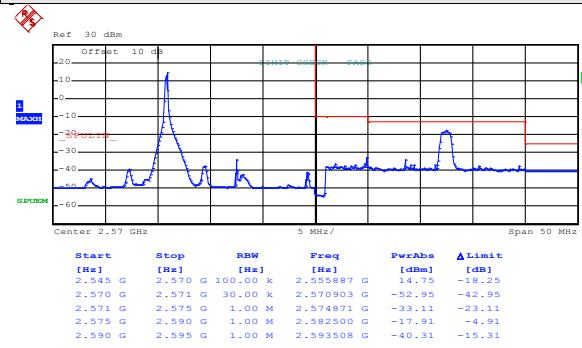
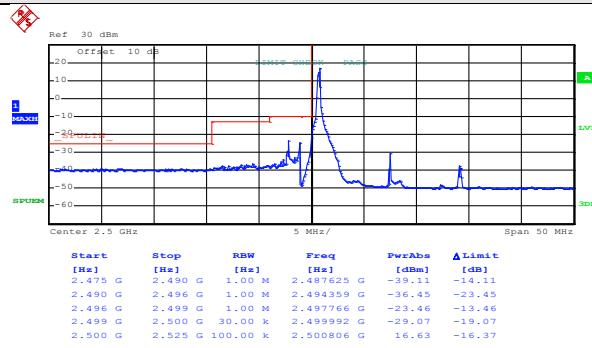
Date: 14.NOV.2016 13:12:58

Date: 14.NOV.2016 09:05:46

Lowest channel

Highest channel

Test Mode:	LTE band 7(16QAM RB Size 1 & RB Offset 0)
------------	---



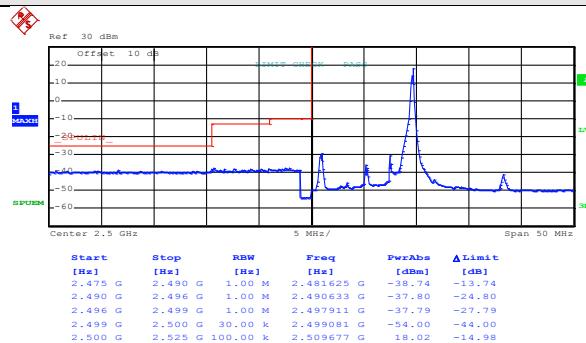
Date: 14.NOV.2016 08:53:45

Date: 14.NOV.2016 09:03:34

Lowest channel

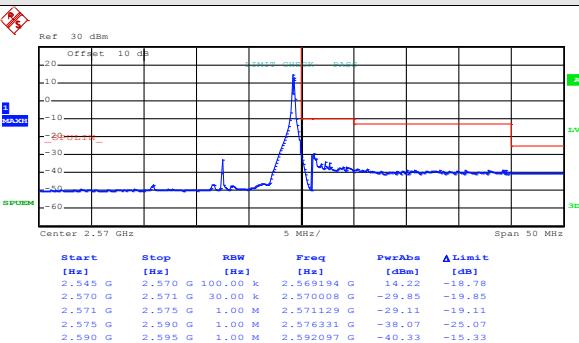
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 1 & RB Offset 74)
------------	--



Date: 26.NOV.2016 07:59:26

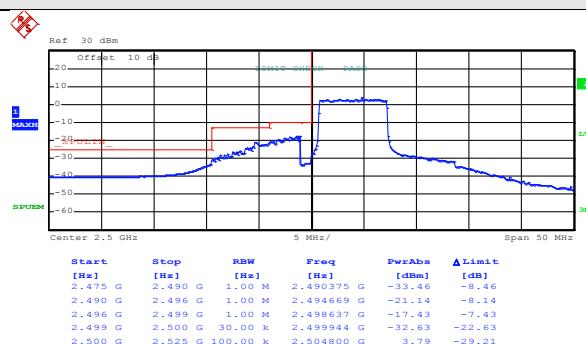
Lowest channel



Date: 14.NOV.2016 09:04:08

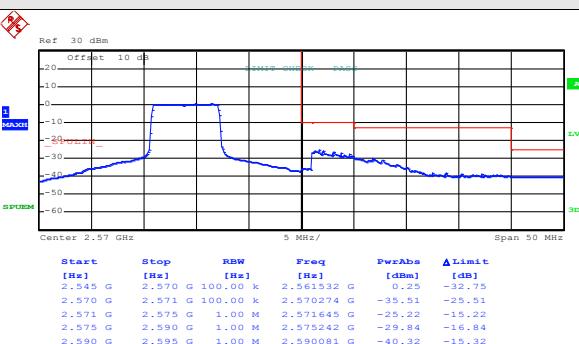
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 36 & RB Offset 0)
------------	--



Date: 14.NOV.2016 13:13:36

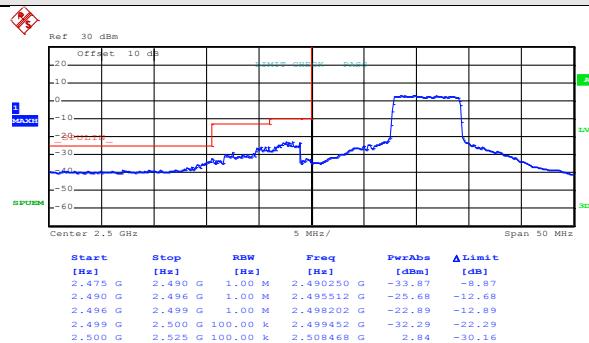
Lowest channel



Date: 14.NOV.2016 09:04:40

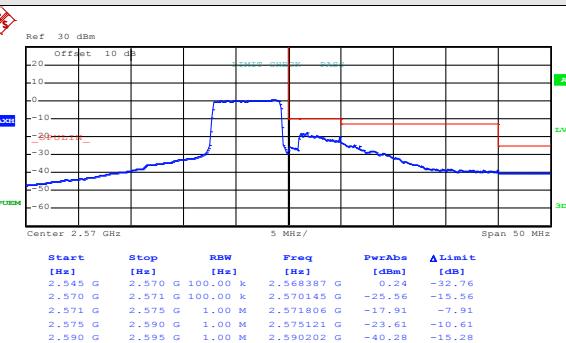
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 36 & RB Offset 37)
------------	---



Date: 14.NOV.2016 09:01:45

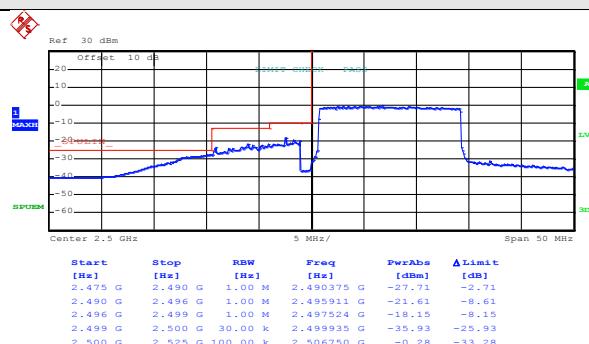
Lowest channel



Date: 14.NOV.2016 09:05:16

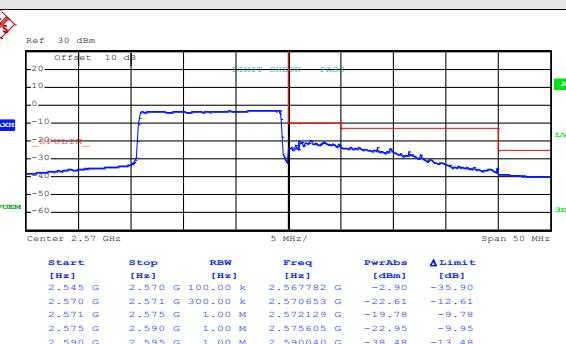
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 75 & RB Offset 0)
------------	--



Date: 14.NOV.2016 13:13:07

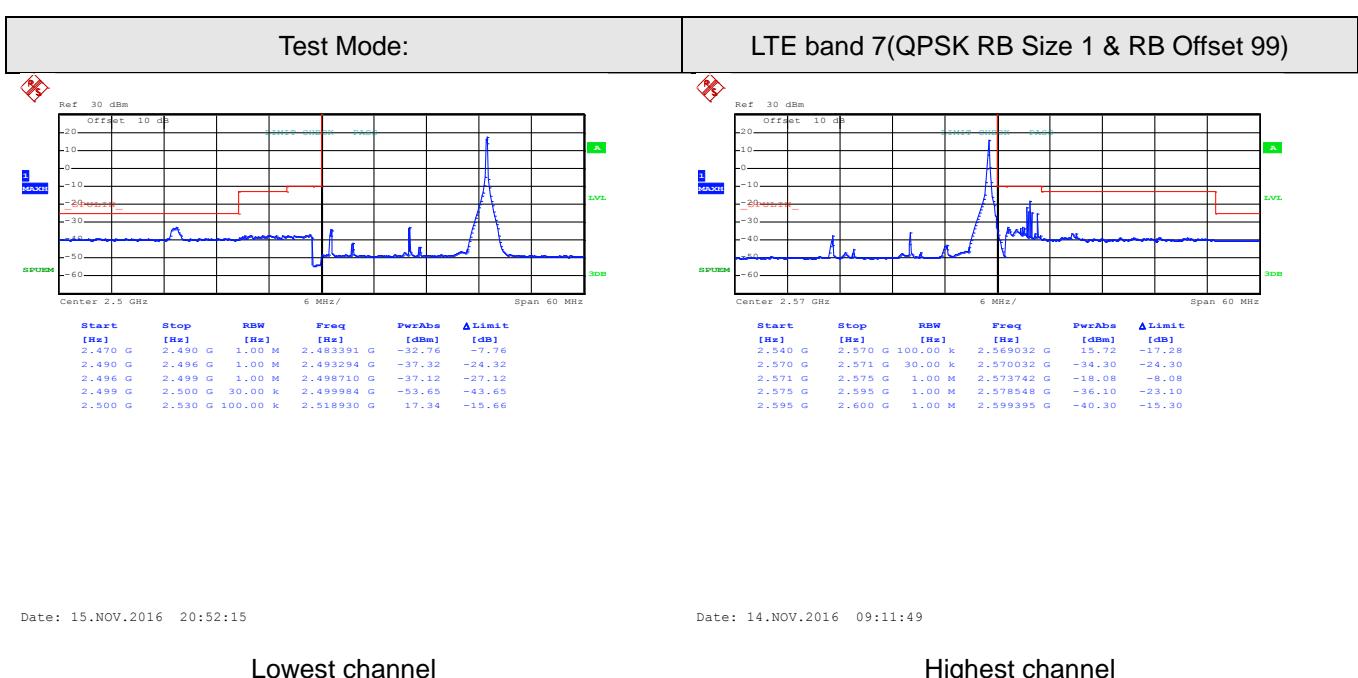
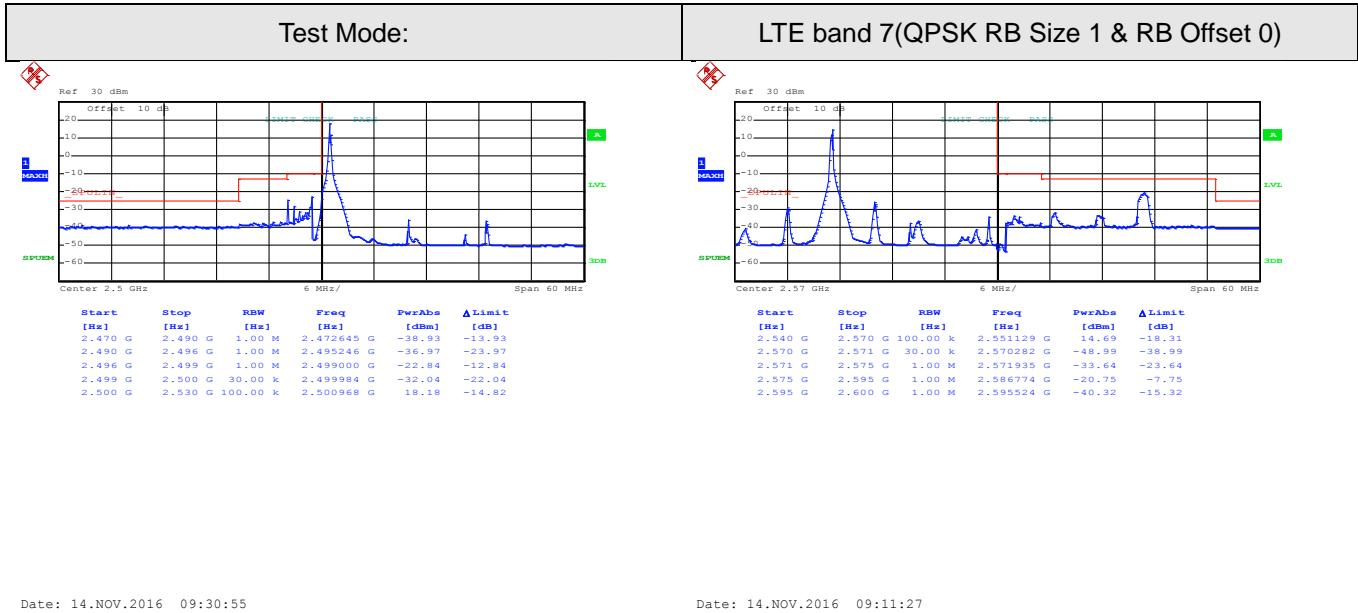
Lowest channel



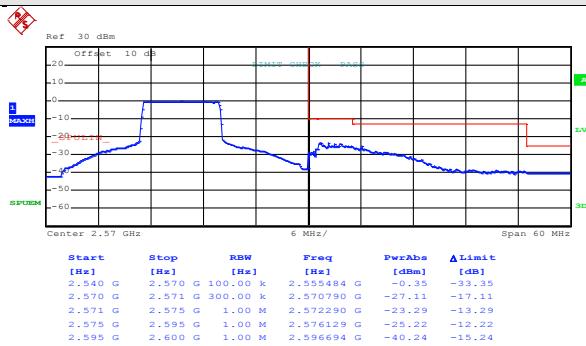
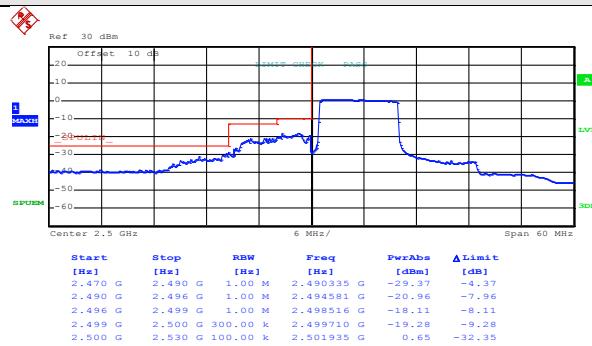
Date: 14.NOV.2016 09:05:57

Highest channel

20MHz:



Test Mode:	LTE band 7(QPSK RB Size 50 & RB Offset 0)
------------	---



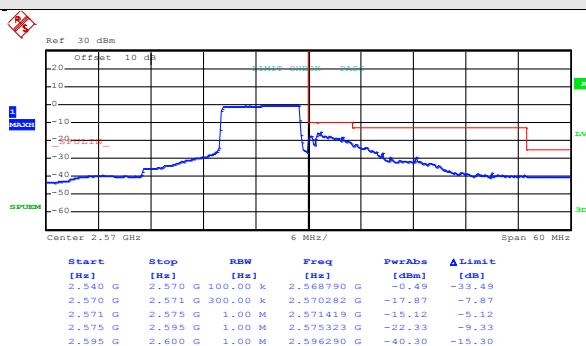
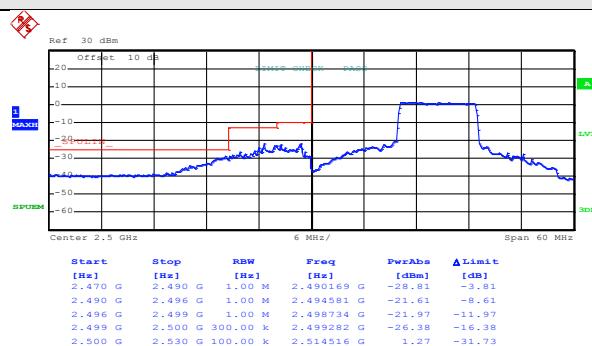
Date: 14.NOV.2016 09:08:45

Lowest channel

Date: 14.NOV.2016 09:12:27

Highest channel

Test Mode:	LTE band 7(QPSK RB Size 50 & RB Offset 49)
------------	--



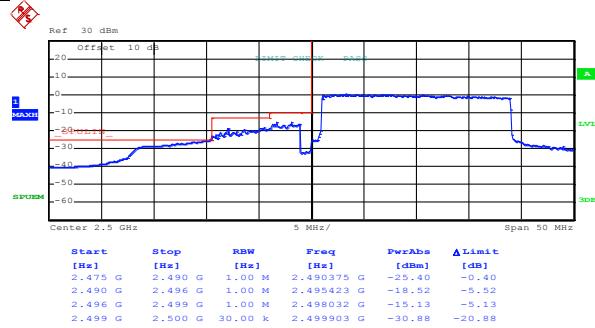
Date: 14.NOV.2016 09:09:10

Date: 14.NOV.2016 09:12:47

Lowest channel

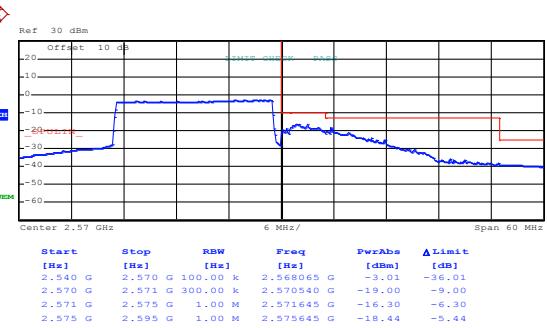
Highest channel

Test Mode:	LTE band 7(QPSK RB Size 100 & RB Offset 0)
------------	--



Date: 14.NOV.2016 13:24:57

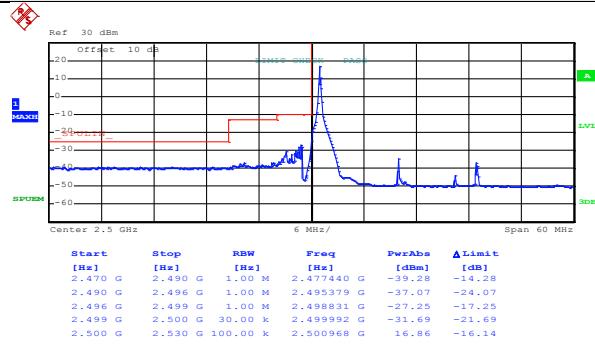
Lowest channel



Date: 14.NOV.2016 09:13:09

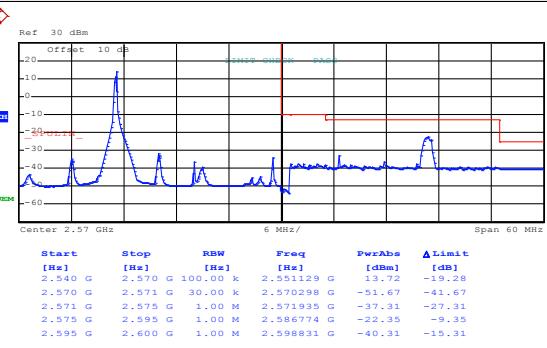
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 1 & RB Offset 0)
------------	---



Date: 14.NOV.2016 09:31:02

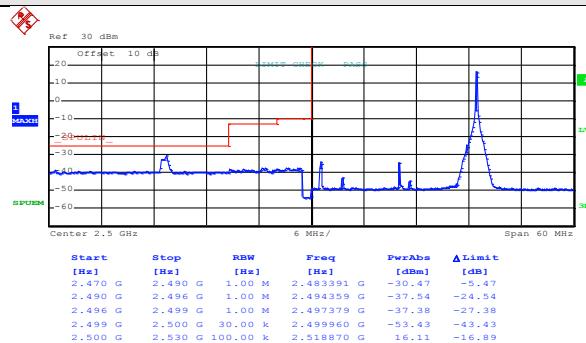
Lowest channel



Date: 14.NOV.2016 09:11:38

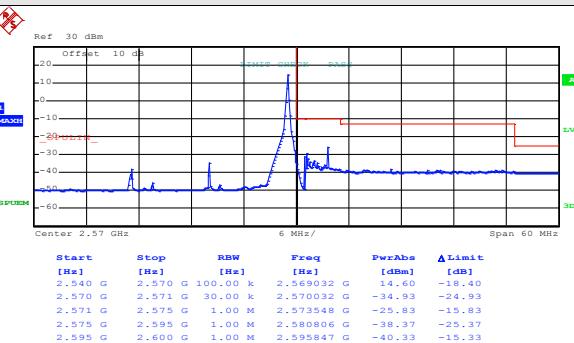
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 1 & RB Offset 99)
------------	--



Date: 15.NOV.2016 20:52:29

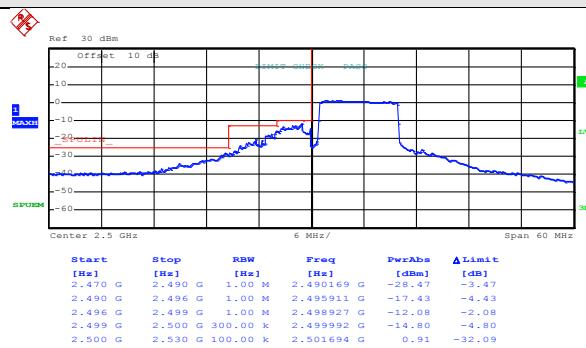
Lowest channel



Date: 14.NOV.2016 09:12:08

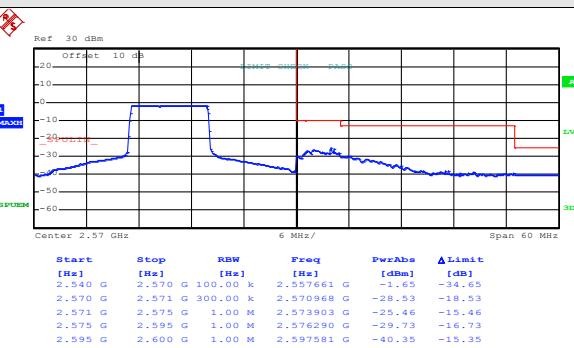
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 50 & RB Offset 0)
------------	--



Date: 14.NOV.2016 09:08:56

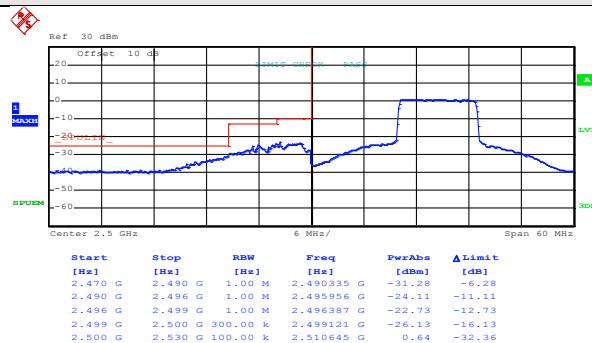
Lowest channel



Date: 14.NOV.2016 09:12:36

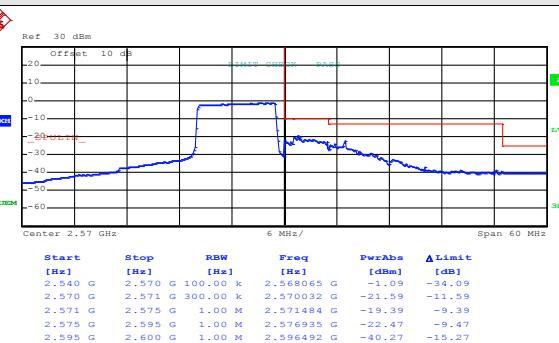
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 50 & RB Offset 49)
------------	---



Date: 14.NOV.2016 09:09:27

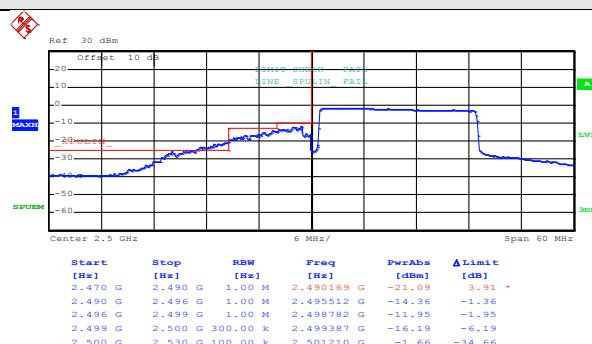
Lowest channel



Date: 14.NOV.2016 09:12:58

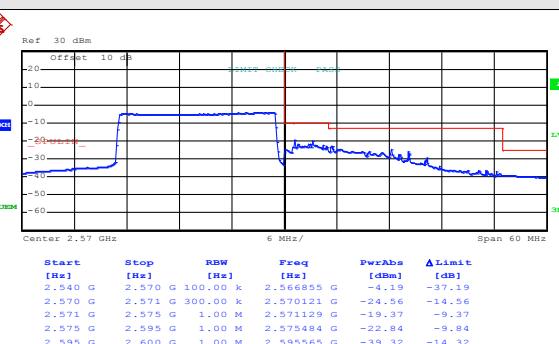
Highest channel

Test Mode:	LTE band 7(16QAM RB Size 100 & RB Offset 0)
------------	---



Date: 14.NOV.2016 09:10:41

Lowest channel



Date: 14.NOV.2016 09:13:16

Highest channel

## 6.10 ERP, EIRP Measurement

Test Requirement:	part 27.50(d), part 27.50 (h)
Test Method:	FCC part2.1046
Limit:	LTE Band 4: 1W EIRP LTE Band 7: 2W EIRP
Test setup:	<p>Below 1GHz</p> <p>Above 1GHz</p> <p>Substituted method:</p>

Test Procedure:	<ol style="list-style-type: none"><li>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.</li><li>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.</li><li>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: <math display="block">\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}</math></li><li>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: <math display="block">\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}</math></li><li>5. The worse case was relating to the conducted output power.</li></ol>
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 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	21.93	30.00	Pass
					H	16.19		
1710.70	19957	16QAM	1.4	H	V	21.75	30.00	Pass
					H	16.11		
1.4MHz(RB size 3 & RB offset 0)								
1710.70	19957	QPSK	1.4	H	V	21.93	30.00	Pass
					H	16.35		
1710.70	19957	16QAM	1.4	H	V	22.02	30.00	Pass
					H	16.36		
1.4MHz(RB size 6 & RB offset 0)								
1710.70	19957	QPSK	1.4	H	V	21.42	30.00	Pass
					H	15.84		
1710.70	19957	16QAM	1.4	H	V	21.64	30.00	Pass
					H	16.15		

**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	21.17	30.00	Pass
					H	16.71		
1732.50	20175	16QAM	1.4	H	V	21.19	30.00	Pass
					H	16.37		
1.4MHz(RB size 3 & RB offset 0)								
1732.50	20175	QPSK	1.4	H	V	21.21	30.00	Pass
					H	16.64		
1732.50	20175	16QAM	1.4	H	V	22.01	30.00	Pass
					H	16.37		
1.4MHz(RB size 6 & RB offset 0)								
1732.50	20175	QPSK	1.4	H	V	21.43	30.00	Pass
					H	15.39		
1732.50	20175	16QAM	1.4	H	V	21.37	30.00	Pass
					H	16.37		

**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	21.37	30.00	Pass
					H	16.21		
1754.30	20393	16QAM	1.4	H	V	21.01	30.00	Pass
					H	16.37		
1.4MHz(RB size 3 & RB offset 0)								
1754.30	20393	QPSK	1.4	H	V	21.43	30.00	Pass
					H	16.21		
1754.30	20393	16QAM	1.4	H	V	22.19	30.00	Pass
					H	16.44		
1.4MHz(RB size 6 & RB offset 0)								
1754.30	20393	QPSK	1.4	H	V	21.39	30.00	Pass
					H	15.37		
1754.30	20393	16QAM	1.4	H	V	21.37	30.00	Pass
					H	16.71		

**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	21.96	30.00	Pass
					H	16.61		
1720.00	20050	16QAM	20	H	V	22.33	30.00	Pass
					H	16.61		
20MHz(RB size 50 & RB offset 0)								
1720.00	20050	QPSK	20	H	V	20.76	30.00	Pass
					H	15.13		
1720.00	20050	16QAM	20	H	V	21.97	30.00	Pass
					H	15.67		
20MHz(RB size 100 & RB offset 0)								
1720.00	20050	QPSK	20	H	V	20.26	30.00	Pass
					H	14.79		
1720.00	20050	16QAM	20	H	V	20.91	30.00	Pass
					H	14.38		

**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	21.72	30.00	Pass
					H	16.77		
1732.50	20175	16QAM	20	H	V	22.37	30.00	Pass
					H	16.36		
20MHz(RB size 50 & RB offset 0)								
1732.50	20175	QPSK	20	H	V	20.42	30.00	Pass
					H	15.91		
1732.50	20175	16QAM	20	H	V	21.39	30.00	Pass
					H	15.01		
20MHz(RB size 100 & RB offset 0)								
1732.50	20175	QPSK	20	H	V	20.37	30.00	Pass
					H	14.72		
1732.50	20175	16QAM	20	H	V	20.39	30.00	Pass
					H	14.37		

**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	21.77	30.00	Pass
					H	16.42		
1745.00	20300	16QAM	20	H	V	22.39	30.00	Pass
					H	16.01		
20MHz(RB size 50 & RB offset 0)								
1745.00	20300	QPSK	20	H	V	20.37	30.00	Pass
					H	15.33		
1745.00	20300	16QAM	20	H	V	21.01	30.00	Pass
					H	15.37		
20MHz(RB size 100 & RB offset 0)								
1745.00	20300	QPSK	20	H	V	20.42	30.00	Pass
					H	14.37		
1745.00	20300	16QAM	20	H	V	20.37	30.00	Pass
					H	14.91		

**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	19.82	33.00	Pass
					H	27.00		
2502.50	20775	16QAM	5	H	V	19.79	33.00	Pass
					H	27.18		
5MHz(RB size 12& RB offset 0)								
2502.50	20775	QPSK	5	H	V	20.07	33.00	Pass
					H	27.19		
2502.50	20775	16QAM	5	H	V	20.53	33.00	Pass
					H	27.70		
5MHz(RB size 25& RB offset 0)								
2502.50	20775	QPSK	5	H	V	20.00	33.00	Pass
					H	26.95		
2502.50	20775	16QAM	5	H	V	20.11	33.00	Pass
					H	27.38		

**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	19.39	33.00	Pass
					H	27.03		
2535.00	21100	16QAM	5	H	V	19.25	33.00	Pass
					H	27.54		
5MHz(RB size 12& RB offset 0)								
2535.00	21100	QPSK	5	H	V	20.42	33.00	Pass
					H	27.11		
2535.00	21100	16QAM	5	H	V	20.39	33.00	Pass
					H	27.01		
5MHz(RB size 25& RB offset 0)								
2535.00	21100	QPSK	5	H	V	20.01	33.00	Pass
					H	26.37		
2535.00	21100	16QAM	5	H	V	20.27	33.00	Pass
					H	27.23		

**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	19.25	33.00	Pass
					H	27.96		
2567.50	21425	16QAM	5	H	V	19.91	33.00	Pass
					H	27.82		
5MHz(RB size 12& RB offset 0)								
2567.50	21425	QPSK	5	H	V	20.17	33.00	Pass
					H	27.74		
2567.50	21425	16QAM	5	H	V	20.37	33.00	Pass
					H	27.13		
5MHz(RB size 25& RB offset 0)								
2567.50	21425	QPSK	5	H	V	20.39	33.00	Pass
					H	26.73		
2567.50	21425	16QAM	5	H	V	20.27	33.00	Pass
					H	27.33		

**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	19.74	33.00	Pass
					H	27.00		
2510.00	20850	16QAM	20	H	V	19.98	33.00	Pass
					H	27.62		
20MHz(RB size 50 & RB offset 0)								
2510.00	20850	QPSK	20	H	V	21.71	33.00	Pass
					H	28.79		
2510.00	20850	16QAM	20	H	V	22.17	33.00	Pass
					H	28.98		
20MHz(RB size 100 & RB offset 0)								
2510.00	20850	QPSK	20	H	V	21.00	33.00	Pass
					H	28.15		
2510.00	20850	16QAM	20	H	V	21.58	33.00	Pass
					H	28.70		

**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	19.23	33.00	Pass
					H	27.25		
2535.00	21100	16QAM	20	H	V	19.10	33.00	Pass
					H	27.76		
20MHz(RB size 50 & RB offset 0)								
2535.00	21100	QPSK	20	H	V	21.17	33.00	Pass
					H	28.21		
2535.00	21100	16QAM	20	H	V	22.01	33.00	Pass
					H	28.37		
20MHz(RB size 100 & RB offset 0)								
2535.00	21100	QPSK	20	H	V	21.48	33.00	Pass
					H	28.15		
2535.00	21100	16QAM	20	H	V	21.48	33.00	Pass
					H	28.58		

**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	19.23	33.00	Pass
					H	27.76		
2560.00	21350	16QAM	20	H	V	19.48	33.00	Pass
					H	27.44		
20MHz(RB size 50 & RB offset 0)								
2560.00	21350	QPSK	20	H	V	21.58	33.00	Pass
					H	28.33		
2560.00	21350	16QAM	20	H	V	22.01	33.00	Pass
					H	28.37		
20MHz(RB size 100 & RB offset 0)								
2560.00	21350	QPSK	20	H	V	21.14	33.00	Pass
					H	28.43		
2560.00	21350	16QAM	20	H	V	21.21	33.00	Pass
					H	28.39		

## 6.11 Field strength of spurious radiation measurement

Test Requirement:	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"> <li>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.</li> <li>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.</li> <li>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</li> </ol>

	<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 which were not show in this report.

**Above 1GHz**

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

## LTE Band 4 Part:

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

Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3421.40	Vertical	-36.86	-13.00	Pass
5132.10	V	-42.56		
6842.80	V	-32.55		
3421.40	Horizontal	-42.86		
5132.10	H	-41.01		
6842.80	H	-26.91		
<b>Middle</b>				
3465.00	Vertical	-40.67	-13.00	Pass
5197.50	V	-43.20		
6930.00	V	-34.29		
3465.00	Horizontal	-45.17		
5197.50	H	-38.69		
6930.00	H	-28.57		
<b>Highest</b>				
3508.60	Vertical	-39.44	-13.00	Pass
5262.90	V	-41.51		
7017.20	V	-34.44		
3508.60	Horizontal	-43.27		
5262.90	H	-42.57		
7017.20	H	-31.12		

3MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3423.00	Vertical	-35.52	-13.00	Pass
5134.50	V	-42.41		
6846.00	V	-34.74		
3423.00	Horizontal	-42.73		
5134.50	H	-40.44		
6846.00	H	-25.26		
<b>Middle</b>				
3465.00	Vertical	-38.42	-13.00	Pass
5197.50	V	-41.41		
6930.00	V	-33.45		
3465.00	Horizontal	-46.84		
5197.50	H	-40.33		
6930.00	H	-31.42		
<b>Highest</b>				
3507.00	Vertical	-39.73	-13.00	Pass
5260.50	V	-44.73		
7014.00	V	-37.51		
3507.00	Horizontal	-47.42		
5260.50	H	-43.51		
7014.00	H	-30.15		

<b>5MHz(RB size 1 &amp; RB offset 0) for QPSK</b>				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3425.00	Vertical	-32.35	-13.00	Pass
5137.50	V	-42.50		
6850.00	V	-32.07		
3425.00	Horizontal	-42.76		
5137.50	H	-41.65		
6850.00	H	-26.52		
<b>Middle</b>				
3465.00	Vertical	-40.25	-13.00	Pass
5197.50	V	-43.50		
6930.00	V	-34.08		
3465.00	Horizontal	-45.84		
5197.50	H	-38.49		
6930.00	H	-28.24		
<b>Highest</b>				
3505.00	Vertical	-39.49	-13.00	Pass
5257.50	V	-41.54		
7010.00	V	-34.50		
3505.00	Horizontal	-43.42		
5257.50	H	-42.14		
7010.00	H	-31.12		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3430.00	Vertical	-35.34	-13.00	Pass
5145.00	V	-42.72		
6860.00	V	-34.19		
3430.00	Horizontal	-42.43		
5145.00	H	-40.94		
6860.00	H	-25.51		
<b>Middle</b>				
3465.00	Vertical	-38.16	-13.00	Pass
5197.50	V	-41.45		
6930.00	V	-33.89		
3465.00	Horizontal	-46.51		
5197.50	H	-40.16		
6930.00	H	-31.86		
<b>Highest</b>				
3500.00	Vertical	-39.46	-13.00	Pass
5250.00	V	-44.41		
7000.00	V	-37.39		
3500.00	Horizontal	-47.44		
5250.00	H	-43.15		
7000.00	H	-30.81		

15MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3435.00	Vertical	-32.41	-13.00	Pass
5152.50	V	-42.27		
6870.00	V	-32.12		
3435.00	Horizontal	-42.12		
5152.50	H	-41.30		
6870.00	H	-26.28		
<b>Middle</b>				
3465.00	Vertical	-40.99	-13.00	Pass
5197.50	V	-43.99		
6930.00	V	-34.16		
3465.00	Horizontal	-45.13		
5197.50	H	-38.28		
6930.00	H	-28.13		
<b>Highest</b>				
3495.00	Vertical	-39.12	-13.00	Pass
5242.50	V	-41.29		
6990.00	V	-34.13		
3495.00	Horizontal	-43.28		
5242.50	H	-42.12		
6990.00	H	-31.29		

20MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
3440.00	Vertical	-35.38	-13.00	Pass
5160.00	V	-42.93		
6880.00	V	-34.06		
3440.00	Horizontal	-42.79		
5160.00	H	-40.37		
6880.00	H	-25.91		
<b>Middle</b>				
3465.00	Vertical	-38.25	-13.00	Pass
5197.50	V	-41.45		
6930.00	V	-33.04		
3465.00	Horizontal	-46.77		
5197.50	H	-40.86		
6930.00	H	-31.22		
<b>Highest</b>				
3490.00	Vertical	-39.44	-13.00	Pass
5235.00	V	-44.60		
6980.00	V	-37.19		
3490.00	Horizontal	-47.75		
5235.00	H	-43.66		
6980.00	H	-30.47		

## LTE Band 7 Part:

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

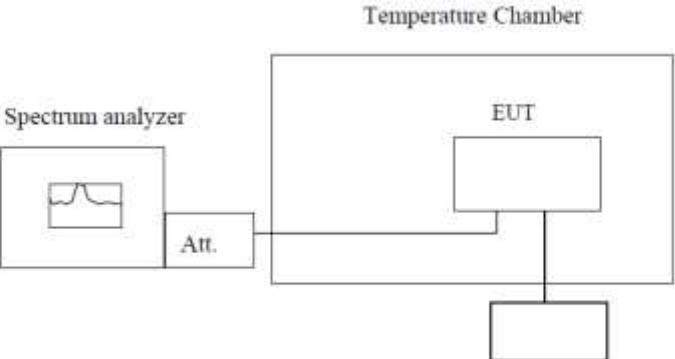
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
5005.00	Vertical	-39.44	-25.00	Pass
7507.50	V	-44.60		
10010.00	V	-37.19		
5005.00	Horizontal	-31.38		
7507.50	H	-32.99		
10010.00	H	-26.53		
<b>Middle</b>				
5070.00	Vertical	-36.64	-25.00	Pass
7605.00	V	-30.46		
10140.00	V	-29.14		
5070.00	Horizontal	-35.87		
7605.00	H	-32.26		
10140.00	H	-34.35		
<b>Highest</b>				
5135.00	Vertical	-28.29	-25.00	Pass
7702.50	V	-34.17		
10270.00	V	-30.85		
5135.00	Horizontal	-33.74		
7702.50	H	-33.55		
10270.00	H	-31.42		

10MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
5010.00	Vertical	-29.46	-25.00	Pass
7515.00	V	-34.27		
10020.00	V	-28.64		
5010.00	Horizontal	-39.51		
7515.00	H	-32.41		
10020.00	H	-31.46		
<b>Middle</b>				
5070.00	Vertical	-29.48	-25.00	Pass
7605.00	V	-36.76		
10140.00	V	-29.46		
5070.00	Horizontal	-33.41		
7605.00	H	-31.92		
10140.00	H	-32.46		
<b>Highest</b>				
5130.00	Vertical	-29.40	-25.00	Pass
7695.00	V	-36.43		
10260.00	V	-30.99		
5130.00	Horizontal	-34.29		
7695.00	H	-33.28		
10260.00	H	-34.41		

15MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
5015.00	Vertical	-39.41	-25.00	Pass
7522.50	V	-44.74		
10030.00	V	-37.25		
5015.00	Horizontal	-31.74		
7522.50	H	-32.46		
10030.00	H	-26.45		
<b>Middle</b>				
5070.00	Vertical	-36.51	-25.00	Pass
7605.00	V	-30.13		
10140.00	V	-29.38		
5070.00	Horizontal	-29.85		
7605.00	H	-32.79		
10140.00	H	-34.45		
<b>Highest</b>				
5125.00	Vertical	-28.27	-25.00	Pass
7687.50	V	-34.77		
10250.00	V	-30.74		
5125.00	Horizontal	-33.41		
7687.50	H	-33.74		
10250.00	H	-31.24		

20MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest</b>				
5020.00	Vertical	-29.11	-25.00	Pass
7530.00	V	-34.63		
10040.00	V	-28.60		
5020.00	Horizontal	-39.42		
7530.00	H	-32.83		
10040.00	H	-31.14		
<b>Middle</b>				
5070.00	Vertical	-29.49	-25.00	Pass
7605.00	V	-36.32		
10140.00	V	-29.63		
5070.00	Horizontal	-33.63		
7605.00	H	-31.92		
10140.00	H	-32.44		
<b>Highest</b>				
5120.00	Vertical	-29.58	-25.00	Pass
7680.00	V	-36.45		
10240.00	V	-30.67		
5120.00	Horizontal	-34.52		
7680.00	H	-33.48		
10240.00	H	-34.63		

## 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><b>Note :</b> Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> <li>1. The equipment under test was connected to an external DC power supply and input rated voltage.</li> <li>2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.</li> <li>3. The EUT was placed inside the temperature chamber.</li> <li>4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency.</li> <li>5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> <li>6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached</li> </ol>
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 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		
3.70	-30	165	0.095238	±2.5	Pass
	-20	142	0.081962		
	-10	133	0.076768		
	0	127	0.073304		
	10	160	0.092352		
	20	147	0.084848		
	30	128	0.073882		
	40	125	0.072150		
	50	109	0.062915		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	177	0.102165	±2.5	Pass
	-20	158	0.091198		
	-10	163	0.094084		
	0	169	0.097547		
	10	170	0.098124		
	20	135	0.077922		
	30	160	0.092352		
	40	157	0.090620		
	50	152	0.087734		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	163	0.094084	±2.5	Pass
	-20	178	0.102742		
	-10	159	0.091775		
	0	165	0.095238		
	10	157	0.090620		
	20	136	0.078499		
	30	125	0.072150		
	40	180	0.103896		
	50	144	0.083117		

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	169	0.097547	±2.5	Pass
	-20	157	0.090620		
	-10	150	0.086580		
	0	133	0.076768		
	10	162	0.093506		
	20	141	0.081385		
	30	125	0.072150		
	40	150	0.086580		
	50	133	0.076768		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	177	0.102165	±2.5	Pass
	-20	158	0.091198		
	-10	163	0.094084		
	0	141	0.081385		
	10	128	0.073882		
	20	160	0.092352		
	30	145	0.083694		
	40	142	0.081962		
	50	123	0.070996		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	160	0.092352	±2.5	Pass
	-20	134	0.077345		
	-10	107	0.061760		
	0	125	0.072150		
	10	123	0.070996		
	20	156	0.090043		
	30	141	0.081385		
	40	108	0.062338		
	50	136	0.078499		

**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		
3.70	-30	130	0.075036	±2.5	Pass
	-20	125	0.072150		
	-10	141	0.081385		
	0	127	0.073304		
	10	135	0.077922		
	20	150	0.086580		
	30	125	0.072150		
	40	150	0.086580		
	50	144	0.083117		
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	174	0.100433	±2.5	Pass
	-20	136	0.078499		
	-10	125	0.072150		
	0	185	0.106782		
	10	174	0.100433		
	20	152	0.087734		
	30	130	0.075036		
	40	124	0.071573		
	50	150	0.086580		
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	136	0.078499	±2.5	Pass
	-20	145	0.083694		
	-10	125	0.072150		
	0	140	0.080808		
	10	163	0.094084		
	20	147	0.084848		
	30	152	0.087734		
	40	112	0.064646		
	50	106	0.061183		

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	187	0.107937	±2.5	Pass
	-20	163	0.094084		
	-10	152	0.087734		
	0	136	0.078499		
	10	134	0.077345		
	20	125	0.072150		
	30	106	0.061183		
	40	185	0.106782		
	50	163	0.094084		
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	174	0.100433	±2.5	Pass
	-20	178	0.102742		
	-10	166	0.095815		
	0	152	0.087734		
	10	174	0.100433		
	20	105	0.060606		
	30	136	0.078499		
	40	155	0.089466		
	50	141	0.081385		
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	163	0.094084	±2.5	Pass
	-20	125	0.072150		
	-10	147	0.084848		
	0	152	0.087734		
	10	136	0.078499		
	20	105	0.060606		
	30	123	0.070996		
	40	141	0.081385		
	50	123	0.070996		

## 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		
3.70	-30	136	0.053649	±2.5	Pass
	-20	152	0.059961		
	-10	141	0.055621		
	0	105	0.041420		
	10	125	0.049310		
	20	136	0.053649		
	30	145	0.057199		
	40	156	0.061538		
	50	174	0.068639		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	156	0.061538	±2.5	Pass
	-20	152	0.059961		
	-10	123	0.048521		
	0	146	0.057594		
	10	155	0.061144		
	20	136	0.053649		
	30	108	0.042604		
	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		
3.70	-30	170	0.067061	±2.5	Pass
	-20	163	0.064300		
	-10	152	0.059961		
	0	141	0.055621		
	10	125	0.049310		
	20	136	0.053649		
	30	105	0.041420		
	40	141	0.055621		
	50	155	0.061144		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	157	0.061933	±2.5	Pass
	-20	136	0.053649		
	-10	105	0.041420		
	0	125	0.049310		
	10	148	0.058383		
	20	155	0.061144		
	30	163	0.064300		
	40	174	0.068639		
	50	125	0.049310		

## 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		
3.70	-30	163	0.064300	±2.5	Pass
	-20	147	0.057988		
	-10	155	0.061144		
	0	150	0.059172		
	10	136	0.053649		
	20	152	0.059961		
	30	141	0.055621		
	40	123	0.048521		
	50	105	0.041420		
Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	163	0.064300	±2.5	Pass
	-20	147	0.057988		
	-10	150	0.059172		
	0	122	0.048126		
	10	141	0.055621		
	20	136	0.053649		
	30	150	0.059172		
	40	158	0.062327		
	50	166	0.065483		
Reference Frequency: LTE Band 7(15MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	148	0.058383	2.5	Pass
	-20	136	0.053649		
	-10	152	0.059961		
	0	141	0.055621		
	10	137	0.054043		
	20	125	0.049310		
	30	142	0.056016		
	40	113	0.044576		
	50	105	0.041420		
Reference Frequency: LTE Band 7(20MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	160	0.063116	2.5	Pass
	-20	114	0.044970		
	-10	150	0.059172		
	0	174	0.068639		
	10	136	0.053649		
	20	152	0.059961		
	30	146	0.057594		
	40	105	0.041420		
	50	135	0.053254		

## 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>Note : Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> <li>Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage.</li> <li>Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.</li> <li>Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.</li> </ol>
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 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
	3.70	63	0.036364		
	3.23	52	0.030014		
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	74	0.042713	±2.5	Pass
	3.70	63	0.036364		
	3.23	55	0.031746		
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	52	0.030014	±2.5	Pass
	3.70	63	0.036364		
	3.23	90	0.051948		
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	70	0.040404	±2.5	Pass
	3.70	55	0.031746		
	3.23	60	0.034632		
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	75	0.043290	±2.5	Pass
	3.70	63	0.036364		
	3.23	52	0.030014		
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
	3.70	80	0.046176		
	3.23	42	0.024242		

**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	74	0.042713	±2.5	Pass
	3.70	56	0.032323		
	3.23	63	0.036364		
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	58	0.033478	±2.5	Pass
	3.70	47	0.027128		
	3.23	60	0.034632		
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	58	0.033478	±2.5	Pass
	3.70	79	0.045599		
	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	66	0.038095	±2.5	Pass
	3.70	69	0.039827		
	3.23	67	0.038672		
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	58	0.033478	±2.5	Pass
	3.70	74	0.042713		
	3.23	80	0.046176		
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	75	0.043290	±2.5	Pass
	3.70	90	0.051948		
	3.23	58	0.033478		

**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	63	0.024852	±2.5	Pass
	3.70	67	0.026430		
	3.23	58	0.022880		
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
	3.70	90	0.035503		
	3.23	84	0.033136		
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
	3.70	86	0.033925		
	3.23	57	0.022485		
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	70	0.027613	±2.5	Pass
	3.70	63	0.024852		
	3.23	89	0.035108		

**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	80	0.031558	±2.5	Pass
	3.70	45	0.017751		
	3.23	67	0.026430		
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	70	0.027613	±2.5	Pass
	3.70	69	0.027219		
	3.23	75	0.029586		
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	85	0.033531	±2.5	Pass
	3.70	67	0.026430		
	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	57	0.022485	±2.5	Pass
	3.70	46	0.018146		
	3.23	88	0.034714		