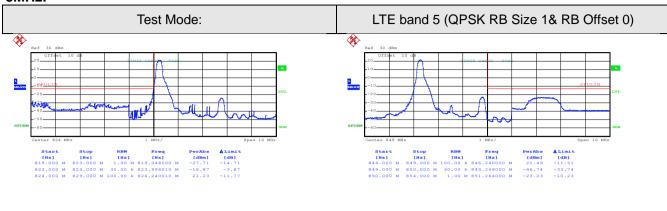




# 3MHz:

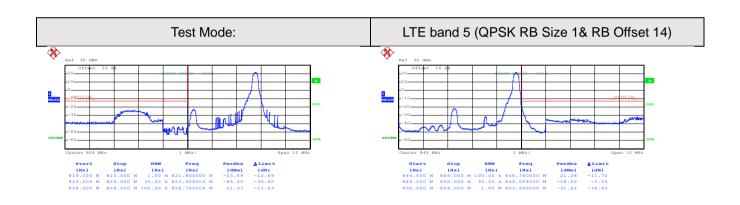


Date: 31.MAY.2016 16:34:25

Date: 31.MAY.2016 16:36:19

Lowest channel

Highest channel



Date: 31.MAY.2016 16:34:40

Date: 31.MAY.2016 16:36:33

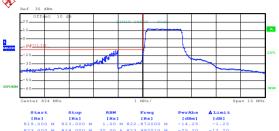
Lowest channel

Highest channel

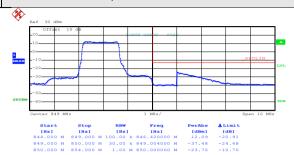








# LTE band 5 (QPSK RB Size 8& RB Offset 0)



Date: 31.MAY.2016 16:34:59

Date: 31.MAY.2016 16:36:52

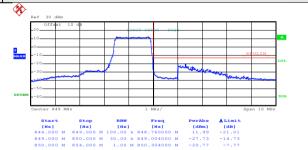
Lowest channel

Highest channel

# Test Mode:

# 

# LTE band 5 (QPSK RB Size 8& RB Offset 7)



Date: 31.MAY.2016 16:35:14

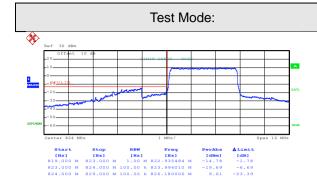
Date: 31.MAY.2016 16:37:09

Lowest channel

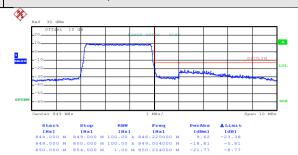
Highest channel







# LTE band 5(QPSK RB Size 15& RB Offset 0)

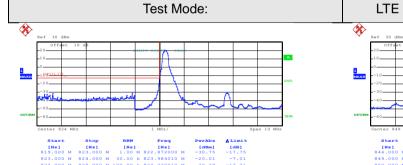


Date: 31.MAY.2016 16:35:44

Date: 31.MAY.2016 16:37:31

Lowest channel

Highest channel





Date: 31.MAY.2016 16:34:31

Date: 31.MAY.2016 16:36:25

Lowest channel

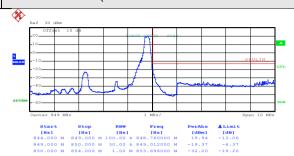
Highest channel





# 

# LTE band 5(16QAM RB Size 1& RB Offset 14)



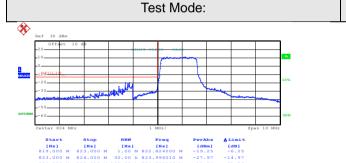
Date: 31.MAY.2016 16:34:48

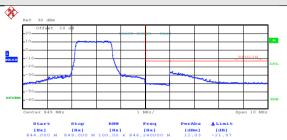
Date: 31.MAY.2016 16:36:39

Lowest channel

Highest channel

LTE band 5(16QAM RB Size 8& RB Offset 0)





Date: 31.MAY.2016 16:35:05

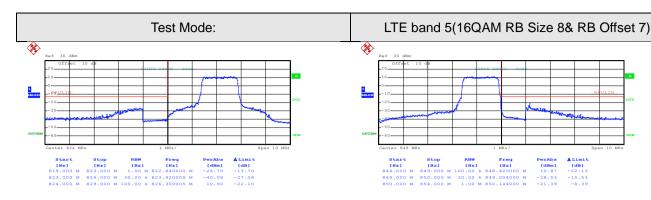
Date: 31.MAY.2016 16:37:00

Lowest channel

Highest channel





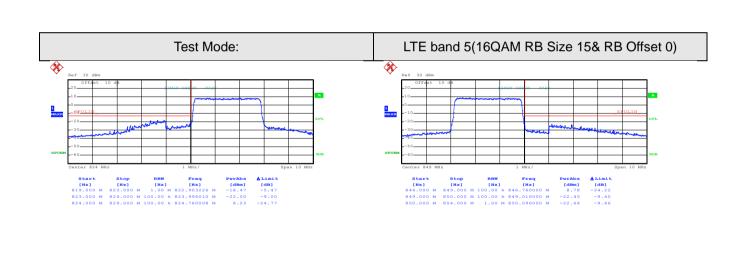


Date: 31.MAY.2016 16:35:22

Date: 31.MAY.2016 16:37:15

Lowest channel

Highest channel



Date: 31.MAY.2016 16:35:49

Date: 31.MAY.2016 16:37:36

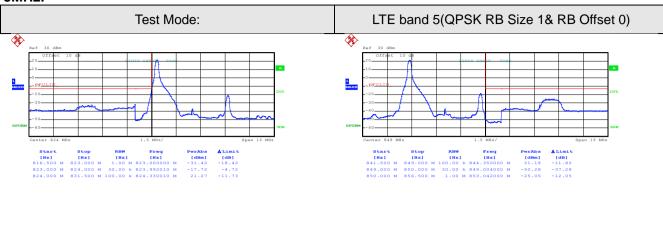
Lowest channel

Highest channel





# 5MHz:

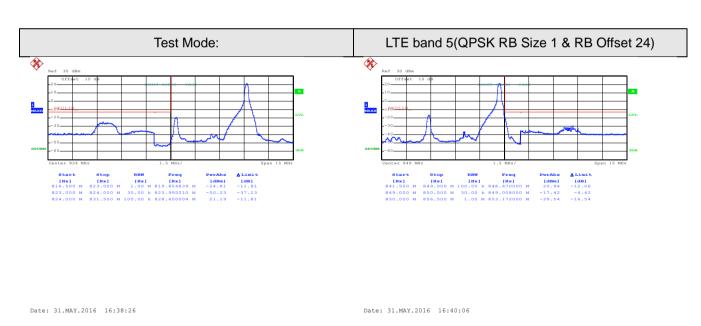


Date: 31.MAY.2016 16:38:12

Date: 31.MAY.2016 16:39:51

Lowest channel

Highest channel



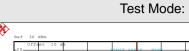
Lowest channel

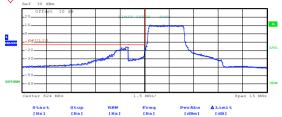
Highest channel

Shenzhen Zhongjian Nanfang Testing Co., Ltd. No.B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road, Bao'an District, Shenzhen, Guangdong, China Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366

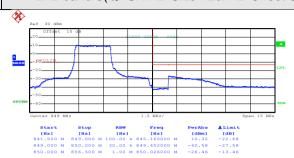








# LTE band 5(QPSK RB Size 12& RB Offset 0)



Date: 31.MAY.2016 16:38:43

Date: 31.MAY.2016 16:40:24

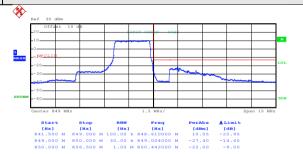
Lowest channel

Highest channel

# Test Mode:

# 

# LTE band 5(QPSK RB Size 12& RB Offset 11)



Date: 31.MAY.2016 16:39:08

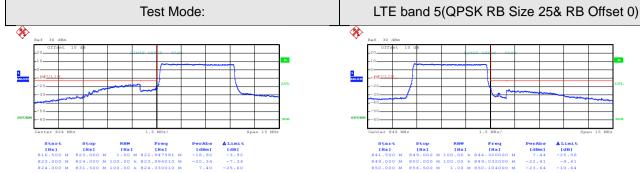
Date: 31.MAY.2016 16:40:45

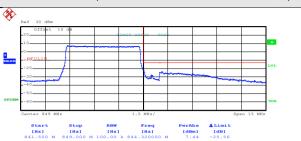
Lowest channel

Highest channel







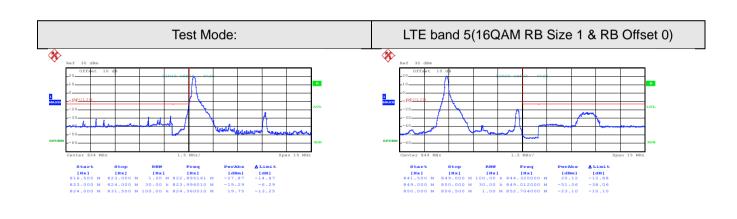


Date: 31.MAY.2016 16:39:29

Date: 31.MAY.2016 16:42:05

Lowest channel

Highest channel



Date: 31.MAY.2016 16:38:18

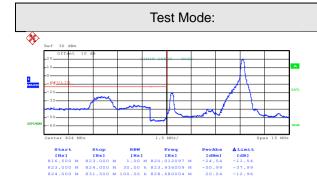
Date: 31.MAY.2016 16:39:57

Lowest channel

Highest channel







# LTE band 5(16QAM RB Size 1 & RB Offset 24)

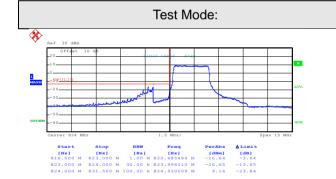


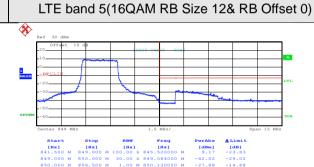
Date: 31.MAY.2016 16:38:33

Date: 31.MAY.2016 16:40:14

Lowest channel

Highest channel





Date: 31.MAY.2016 16:38:53

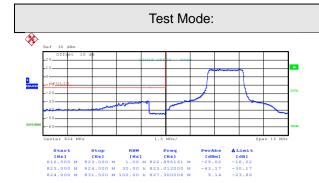
Date: 31.MAY.2016 16:40:34

Lowest channel

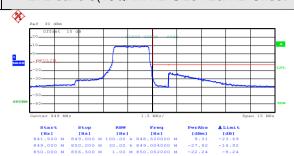
Highest channel







# LTE band 5(16QAM RB Size 12& RB Offset 11)

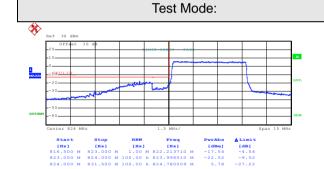


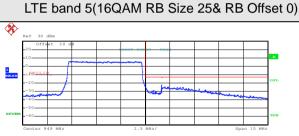
Date: 31.MAY.2016 16:39:15

Date: 31.MAY.2016 16:41:46

## Lowest channel

Highest channel





Date: 31.MAY.2016 16:39:34

Date: 31.MAY.2016 16:42:10

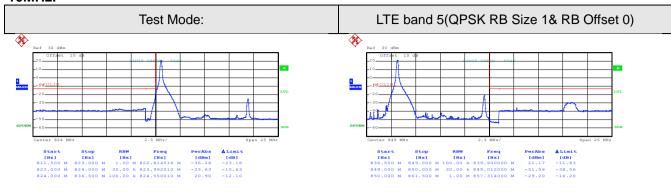
Lowest channel

Highest channel





# 10MHz:

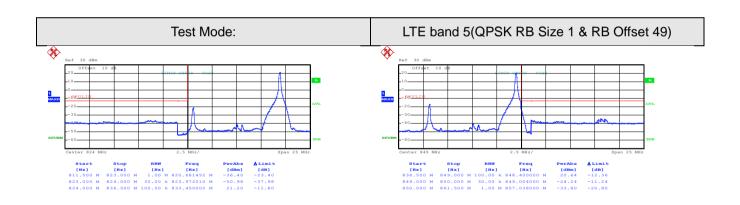


Date: 31.MAY.2016 16:42:57

Date: 31.MAY.2016 16:45:10

Lowest channel

Highest channel



Date: 31.MAY.2016 16:43:14

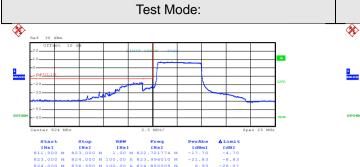
Date: 31.MAY.2016 16:45:24

Lowest channel

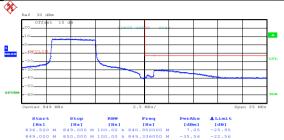
Highest channel







# LTE band 5(QPSK RB Size 25& RB Offset 0)



Date: 31.MAY.2016 16:43:42

Date: 31.MAY.2016 16:45:53

Lowest channel

Highest channel

# 

Date: 31.MAY.2016 16:44:04

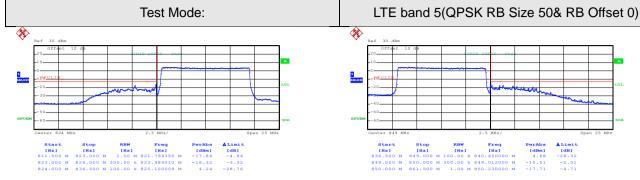
Date: 31.MAY.2016 16:46:15

Lowest channel

Highest channel





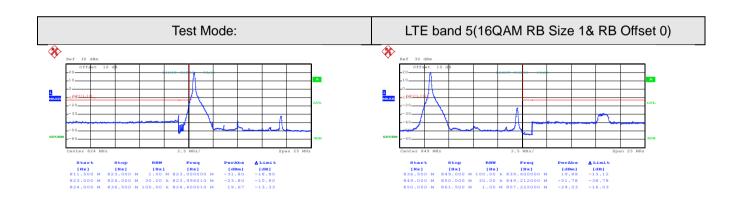


Date: 31.MAY.2016 16:44:26

Date: 31.MAY.2016 16:46:38

Lowest channel

Highest channel



Date: 31.MAY.2016 16:43:05

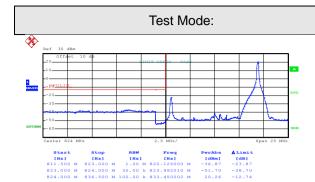
Date: 31.MAY.2016 16:45:16

Lowest channel

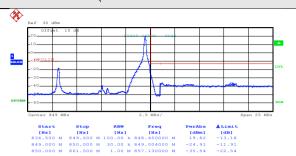
Highest channel







# LTE band 5(16QAM RB Size 1& RB Offset 49)

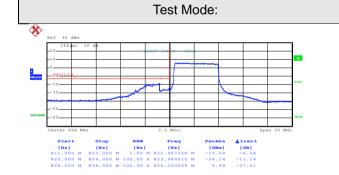


Date: 31.MAY.2016 16:43:22

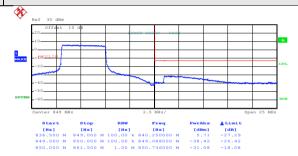
Date: 31.MAY.2016 16:45:34

Lowest channel

Highest channel



# LTE band 5(16QAM RB Size 25& RB Offset 0)



Date: 31.MAY.2016 16:43:53

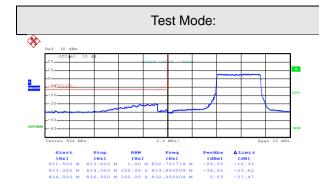
Date: 31.MAY.2016 16:46:02

Lowest channel

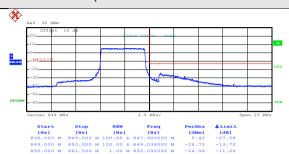
Highest channel







# LTE band 5(16QAM RB Size 25& RB Offset 24)

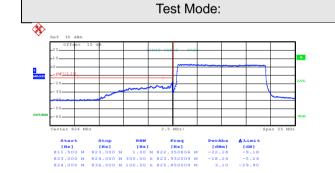


Date: 31.MAY.2016 16:44:11

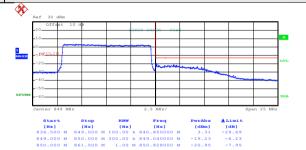
Date: 31.MAY.2016 16:46:24

## Lowest channel

# Highest channel



# LTE band 5(16QAM RB Size 50& RB Offset 0)



Date: 31.MAY.2016 16:44:35

Date: 31.MAY.2016 16:46:45

Lowest channel

Highest channel

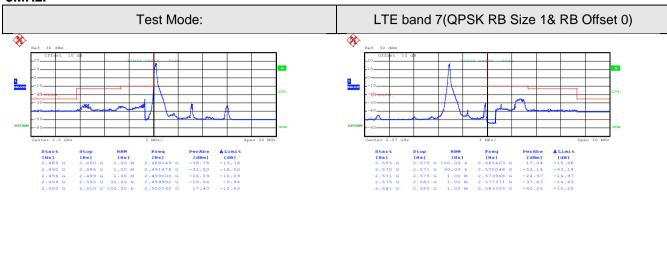




# LTE band 7 part:

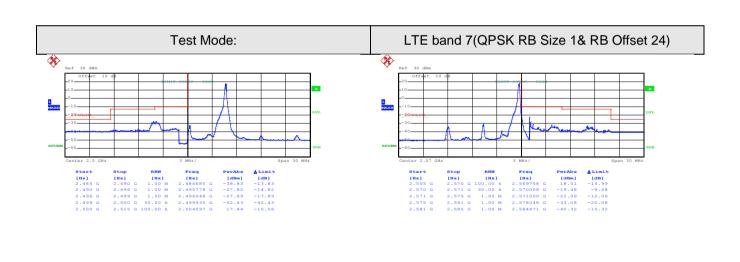
Date: 31.MAY.2016 18:42:41

## 5MHz:



Lowest channel

Highest channel



Date: 31.MAY.2016 18:43:00

Date: 31.MAY.2016 18:44:43

Date: 31.MAY.2016 18:44:26

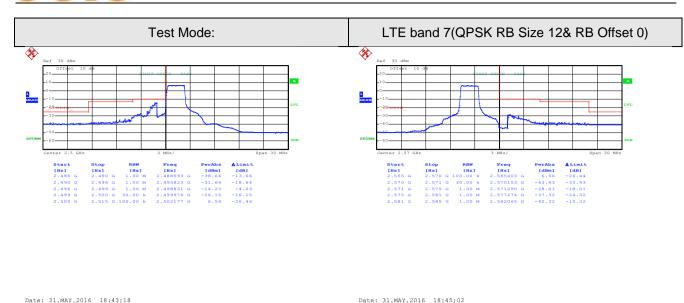
Lowest channel

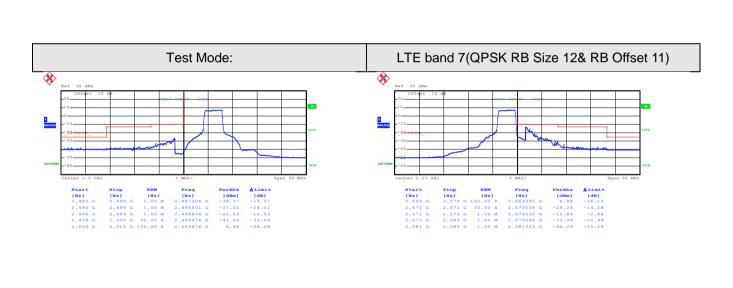
Highest channel



Highest channel







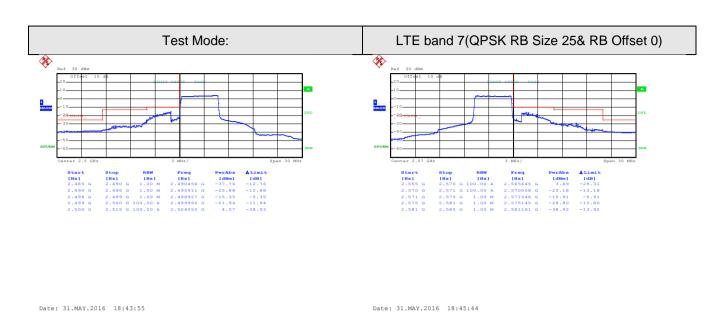
Date: 31.MAY.2016 18:43:34 Date: 31.MAY.2016 18:45:19

Lowest channel

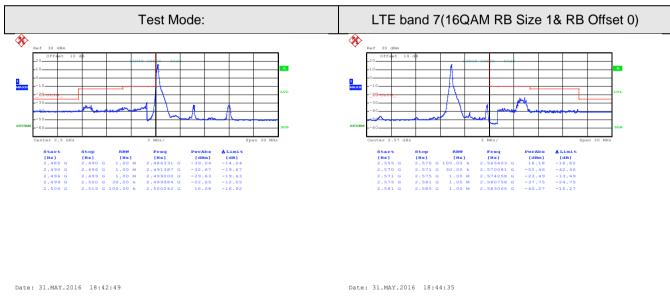
Lowest channel Highest channel







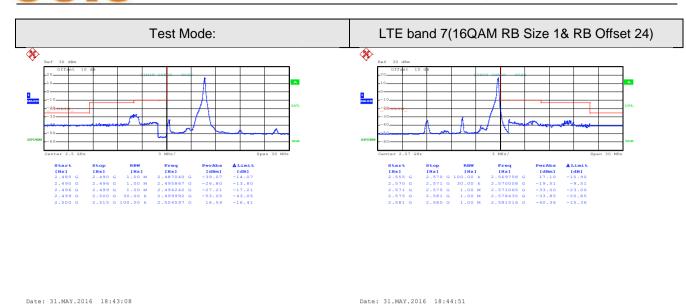
Lowest channel Highest channel

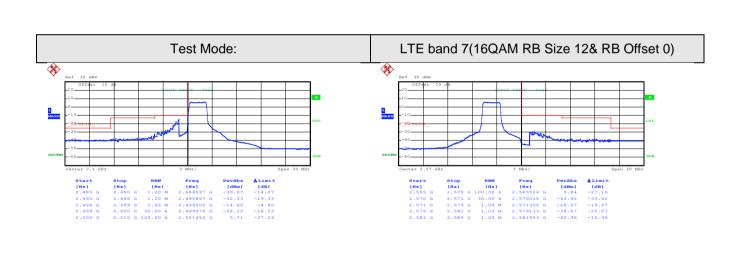


Lowest channel Highest channel









Date: 31.MAY.2016 18:43:25

Date: 31.MAY.2016 18:45:09

Lowest channel

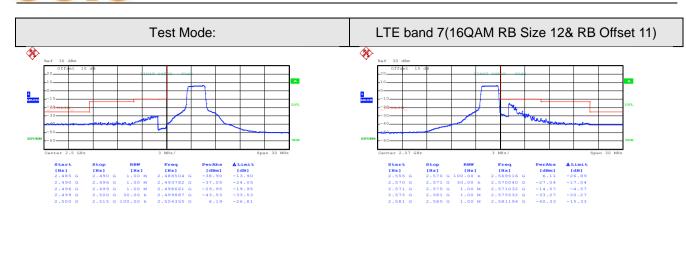
Lowest channel

Highest channel

Highest channel





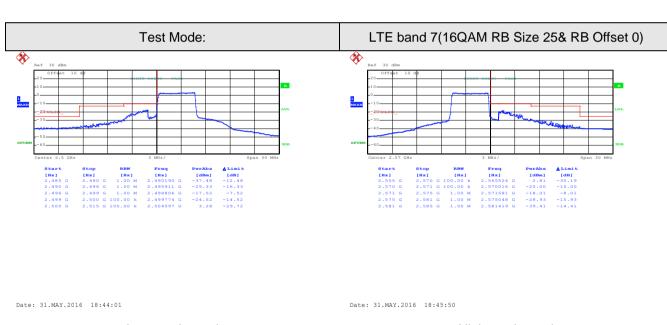


Date: 31.MAY.2016 18:43:41

Date: 31.MAY.2016 18:45:28

## Lowest channel

# Highest channel



Lowest channel

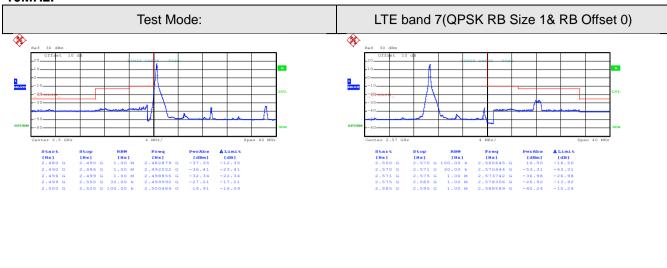
Highest channel





Date: 31.MAY.2016 18:47:22

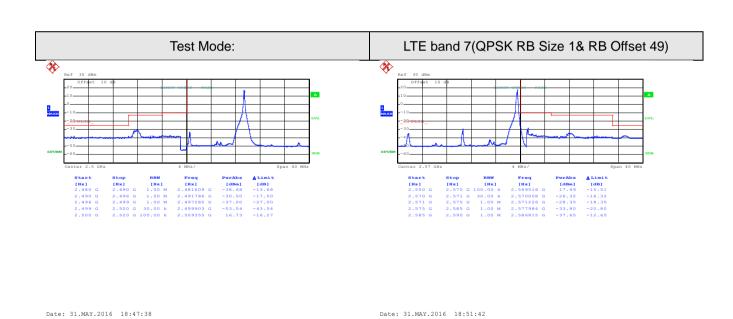
# 10MHz:



Lowest channel

Highest channel

Date: 31.MAY.2016 18:51:07



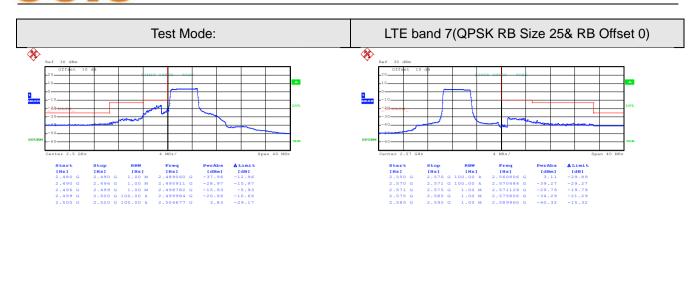
Lowest channel

Highest channel





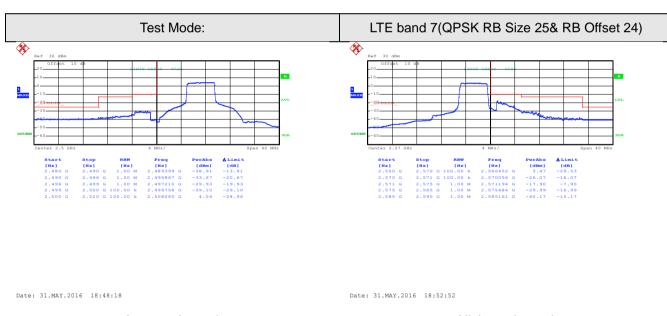
Date: 31.MAY.2016 18:48:00



Date: 31.MAY.2016 18:52:32

Lowest channel

Highest channel

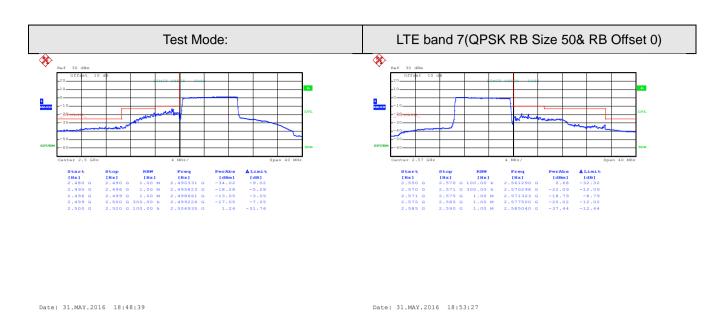


Lowest channel

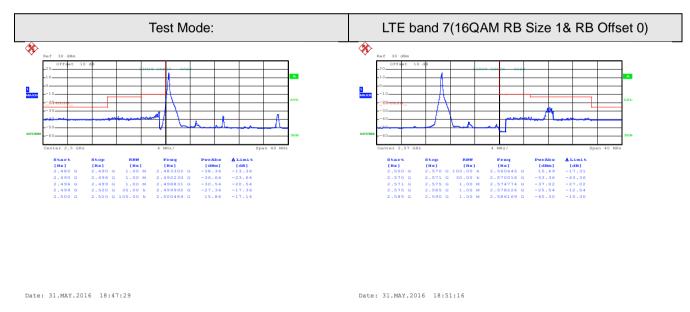
Highest channel







Lowest channel Highest channel

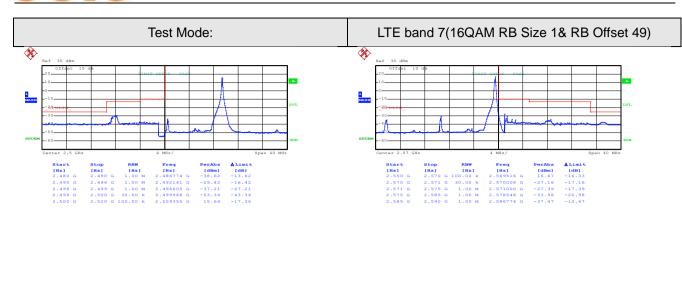


Lowest channel Highest channel





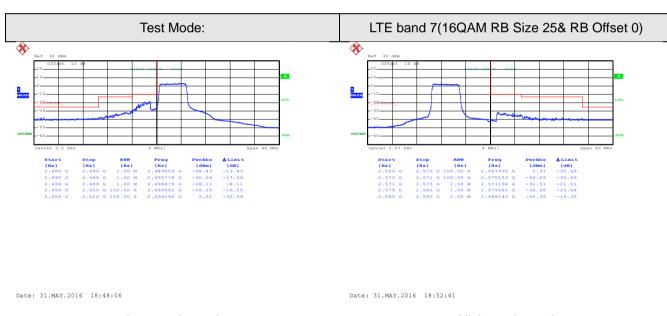
Date: 31.MAY.2016 18:47:46



Date: 31.MAY.2016 18:52:02

Lowest channel

Highest channel

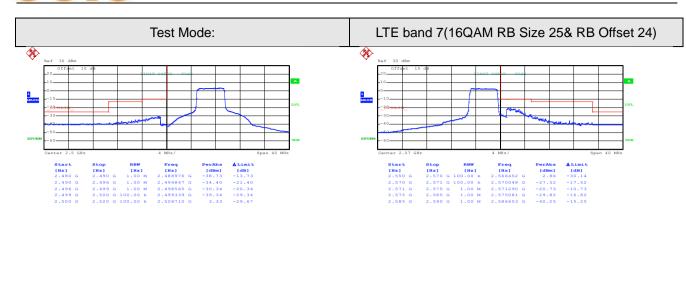


Lowest channel

Highest channel





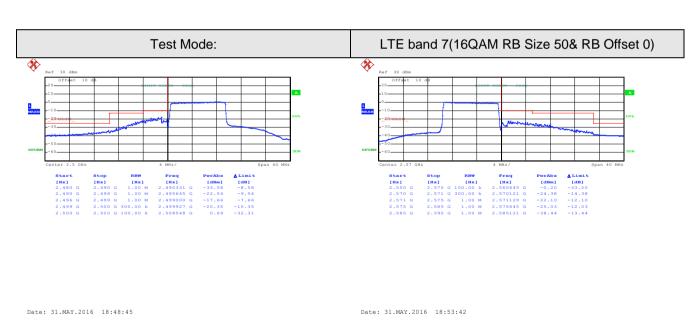


Date: 31.MAY.2016 18:48:25

Date: 31.MAY.2016 18:53:01

## Lowest channel

Highest channel



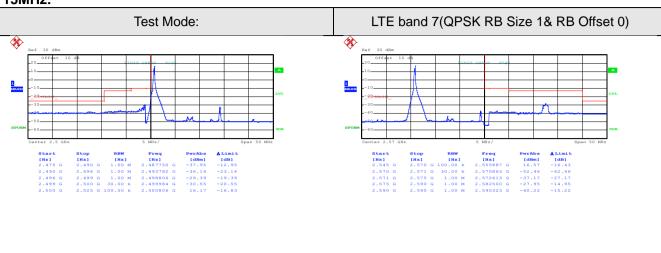
Lowest channel

Highest channel





# 15MHz:

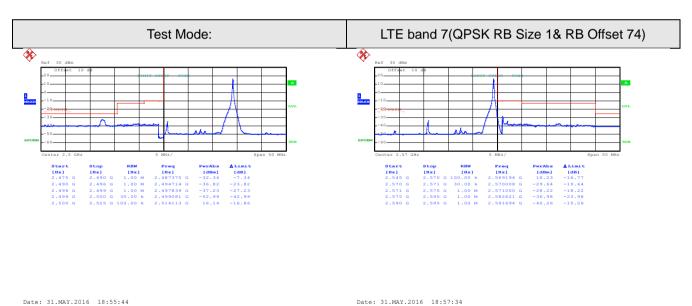


Lowest channel

Date: 31.MAY.2016 18:54:59

Date: 31.MAY.2016 18:57:17

Highest channel



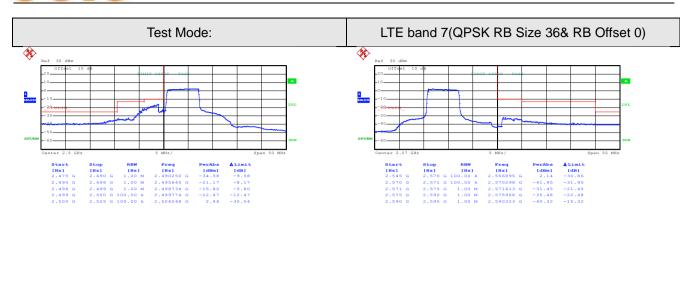
Date: 31.MAY.2016 18:57:34

Lowest channel

Highest channel





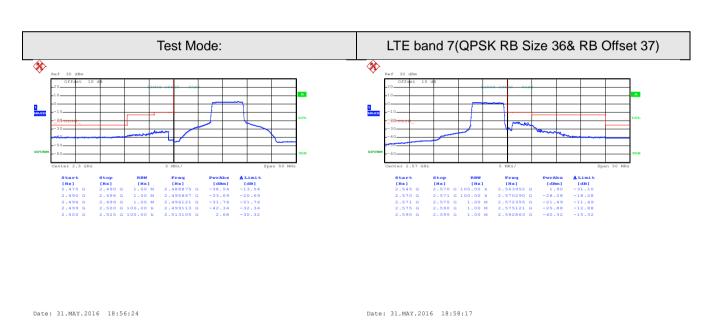


Date: 31.MAY.2016 18:57:59

Lowest channel

Date: 31.MAY.2016 18:56:07

Highest channel

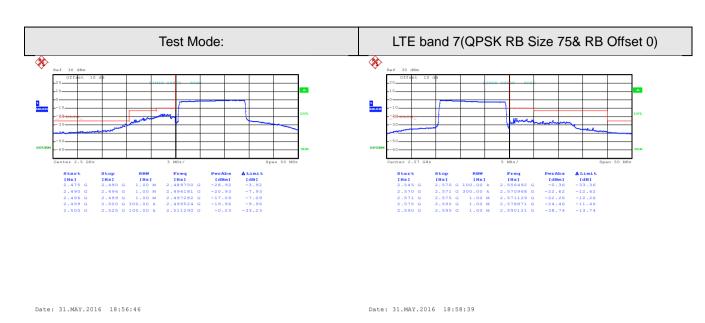


Lowest channel

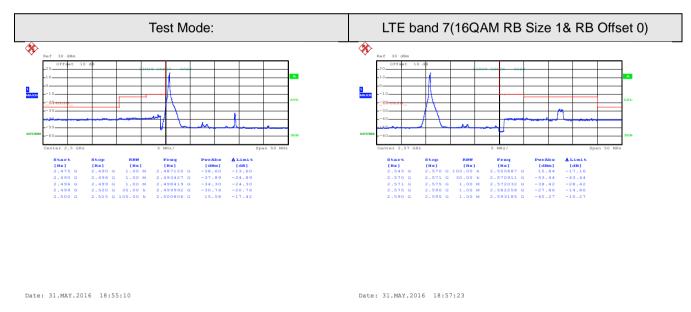
Highest channel







Lowest channel Highest channel

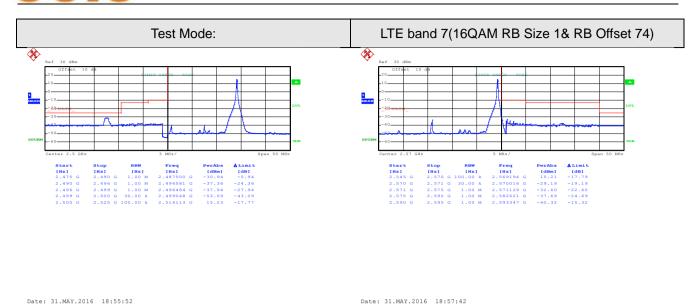


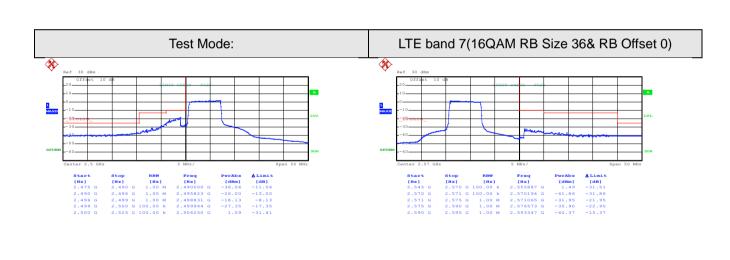
Lowest channel Highest channel



Highest channel







Date: 31.MAY.2016 18:56:14 Date: 31.MAY.2016 18:58:06

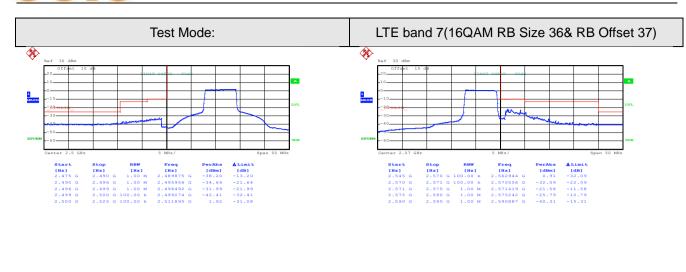
Lowest channel

Lowest channel Highest channel





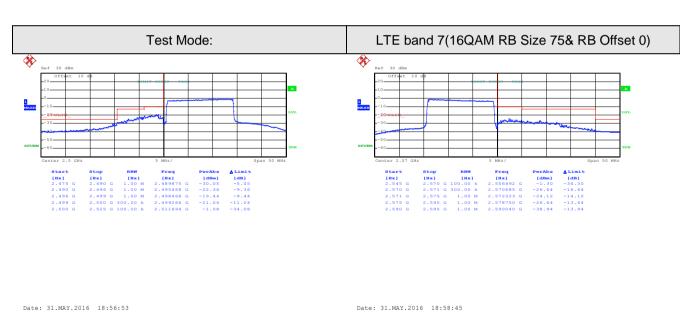
Date: 31.MAY.2016 18:56:32



Lowest channel

Highest channel

Date: 31.MAY.2016 18:58:25



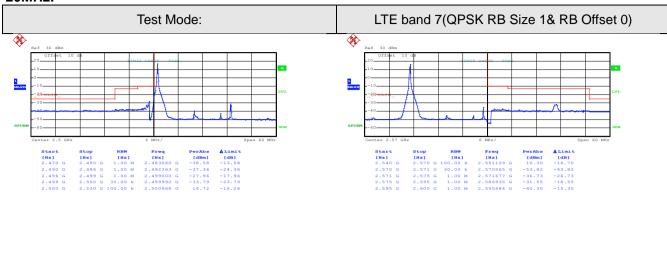
Lowest channel

Highest channel





# 20MHz:

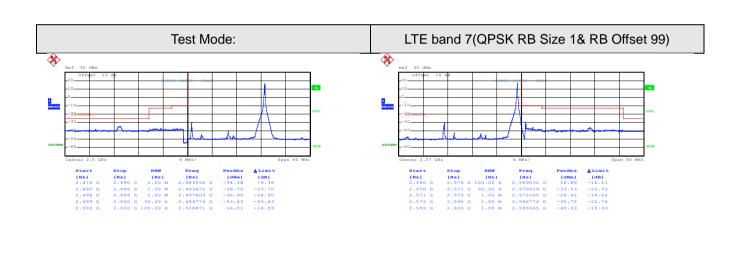


Date: 31.MAY.2016 18:59:49

Date: 31.MAY.2016 19:01:42

Lowest channel

Highest channel



Date: 31.MAY.2016 19:00:08

Date: 31.MAY.2016 19:01:59

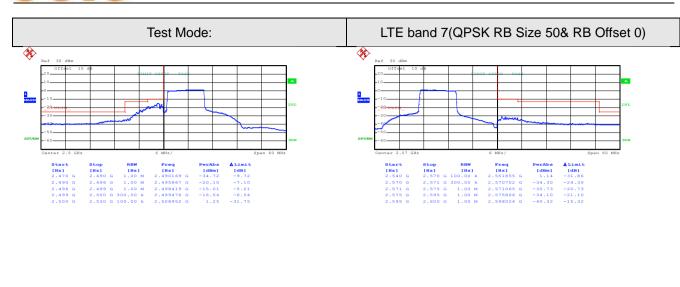
Lowest channel

Highest channel



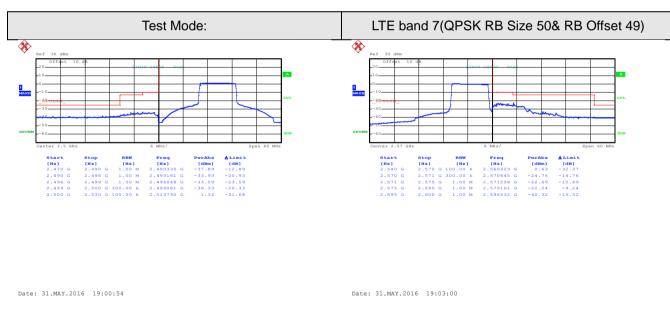


Date: 31.MAY.2016 19:00:34



Lowest channel Highest channel

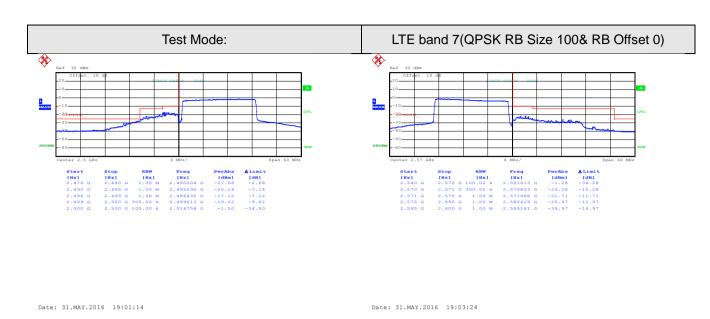
Date: 31.MAY.2016 19:02:28



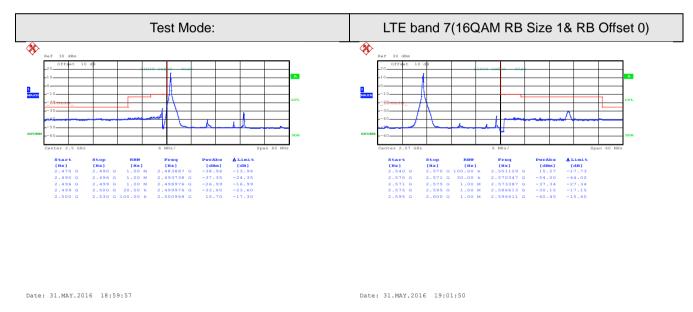
Lowest channel Highest channel







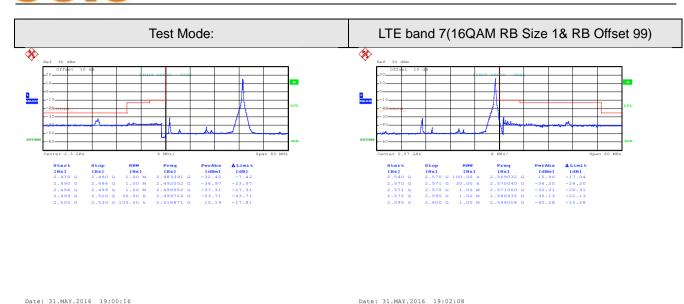
Lowest channel Highest channel



Lowest channel Highest channel

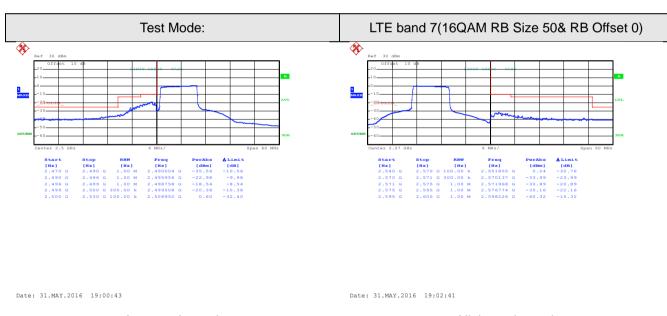






Lowest channel

Highest channel



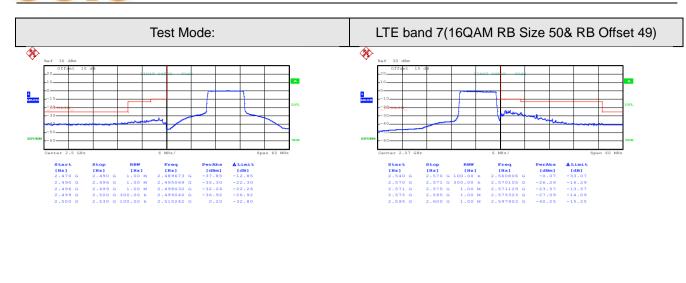
Lowest channel

Highest channel





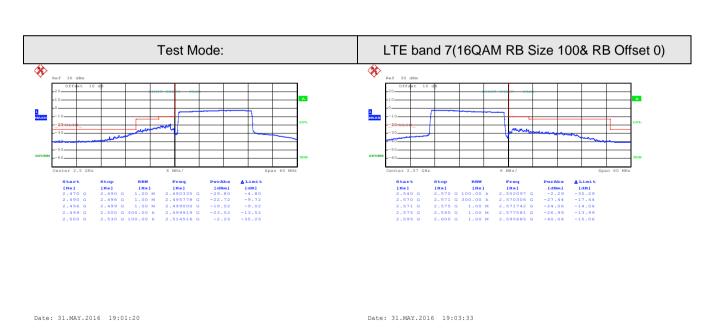
Date: 31.MAY.2016 19:01:03



Date: 31.MAY.2016 19:03:10

Lowest channel

Highest channel



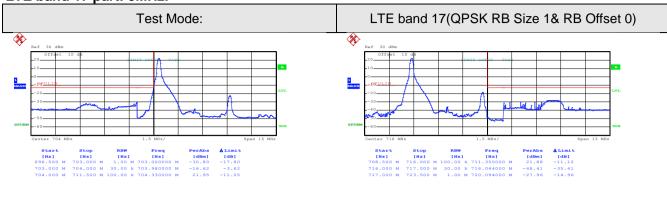
Lowest channel

Highest channel





# LTE band 17 part: 5MHz:

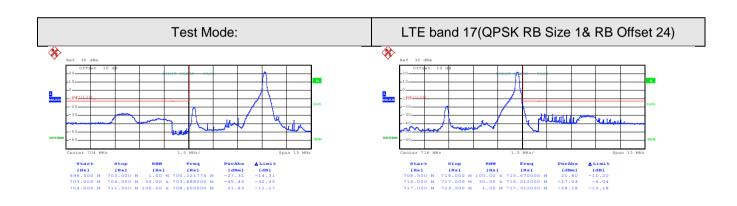


Date: 31.MAY.2016 16:52:46

Date: 31.MAY.2016 17:02:08

Lowest channel

Highest channel



Date: 31.MAY.2016 17:00:44

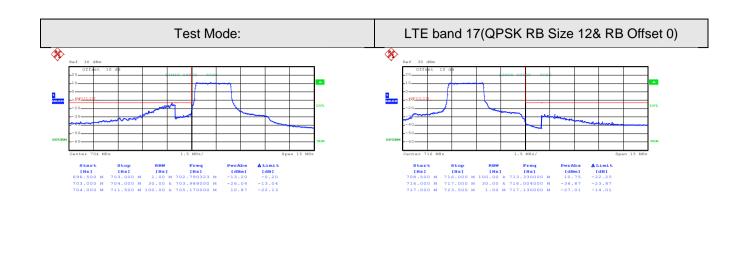
Date: 31.MAY.2016 17:02:22

Lowest channel

Highest channel





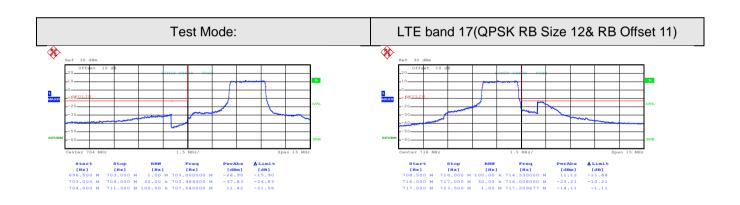


Date: 31.MAY.2016 17:01:02

Date: 31.MAY.2016 17:02:40

Lowest channel

Highest channel



Date: 31.MAY.2016 17:01:17

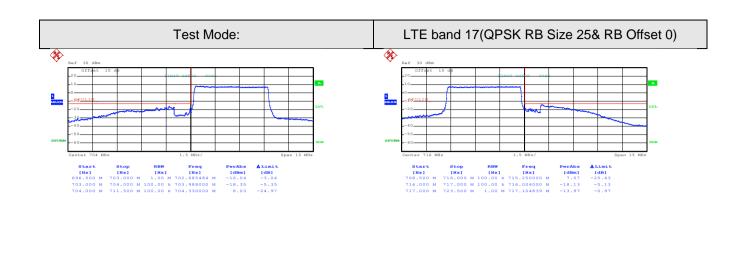
Date: 31.MAY.2016 17:03:07

Lowest channel

Highest channel

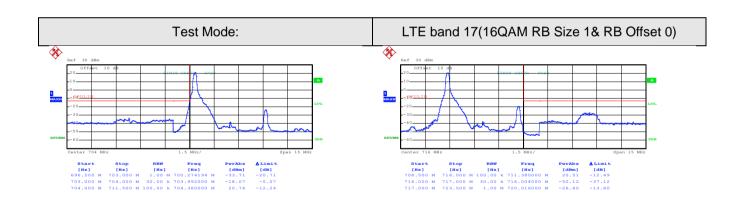






Lowest channel

Highest channel



Date: 31.MAY.2016 17:00:33

Date: 31.MAY.2016 17:01:38

Date: 31.MAY.2016 17:02:14

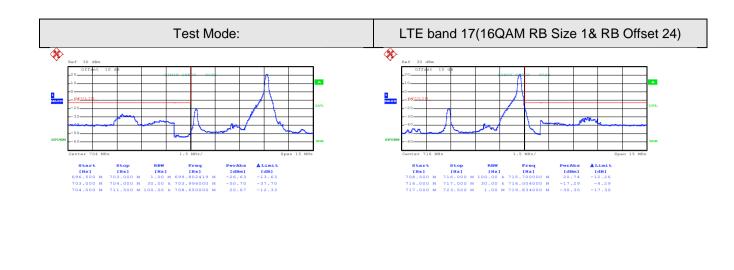
Date: 31.MAY.2016 17:03:29

Lowest channel

Highest channel



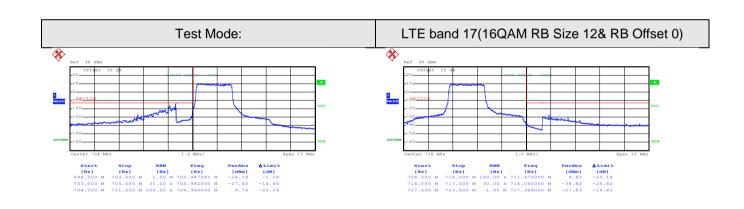




Lowest channel

Date: 31.MAY.2016 17:00:51

Highest channel



Date: 31.MAY.2016 17:01:08

Date: 31.MAY.2016 17:02:47

Date: 31.MAY.2016 17:02:30

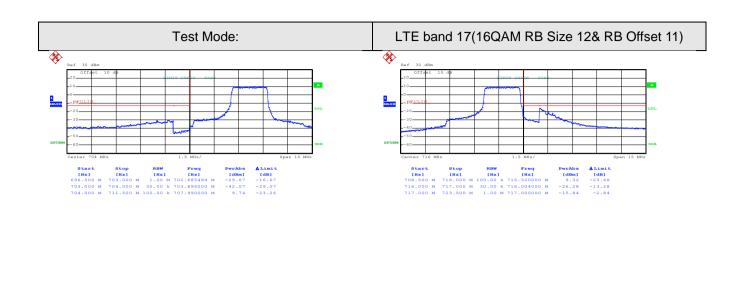
Lowest channel

Highest channel



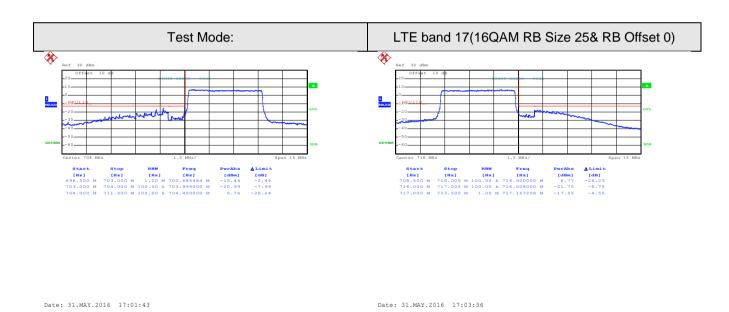


Date: 31.MAY.2016 17:01:24



Date: 31.MAY.2016 17:03:16

Lowest channel Highest channel

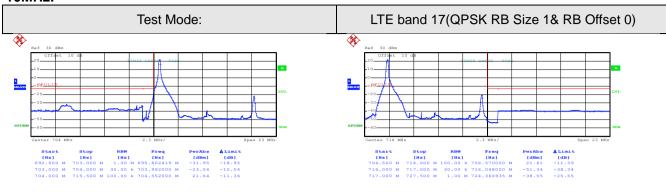


Lowest channel Highest channel





## 10MHz:

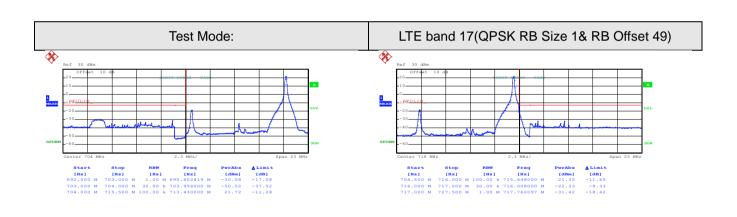


Date: 31.MAY.2016 17:04:16

Date: 31.MAY.2016 18:34:43

Lowest channel

Highest channel



Date: 31.MAY.2016 17:04:32

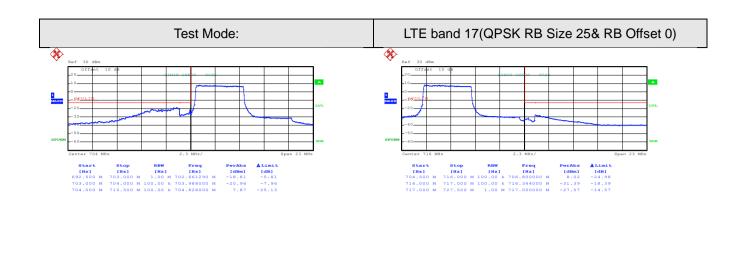
Date: 31.MAY.2016 18:35:01

Lowest channel

Highest channel



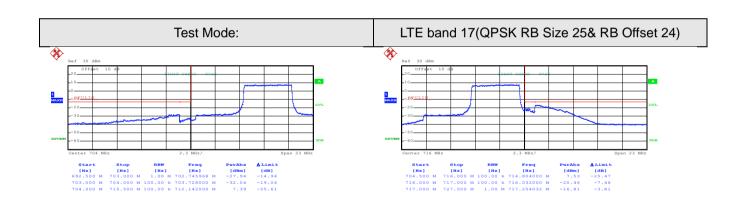




Lowest channel

Date: 31.MAY.2016 17:04:53

Highest channel



Date: 31.MAY.2016 18:33:09

Date: 31.MAY.2016 18:35:42

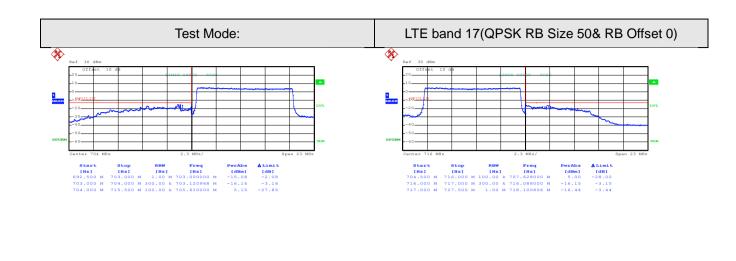
Date: 31.MAY.2016 18:35:27

Lowest channel

Highest channel





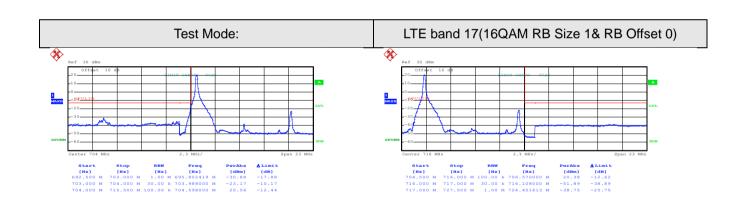


Date: 31.MAY.2016 18:33:48

Date: 31.MAY.2016 18:36:03

Lowest channel

Highest channel



Date: 31.MAY.2016 17:04:22

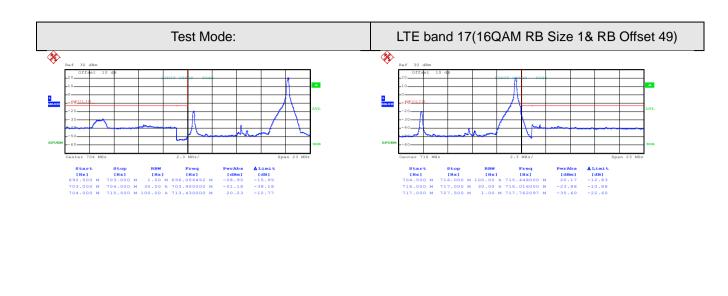
Date: 31.MAY.2016 18:34:50

Lowest channel

Highest channel

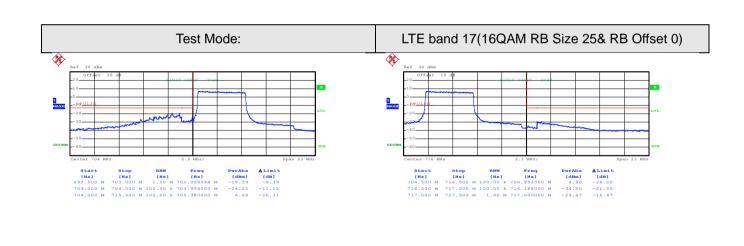






Lowest channel

Highest channel



Date: 31.MAY.2016 18:32:59

Date: 31.MAY.2016 17:04:40

Date: 31.MAY.2016 18:35:33

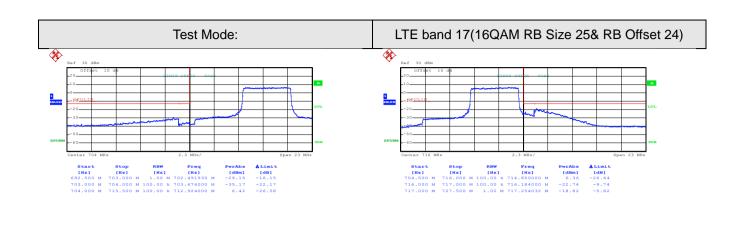
Date: 31.MAY.2016 18:35:08

Lowest channel

Highest channel





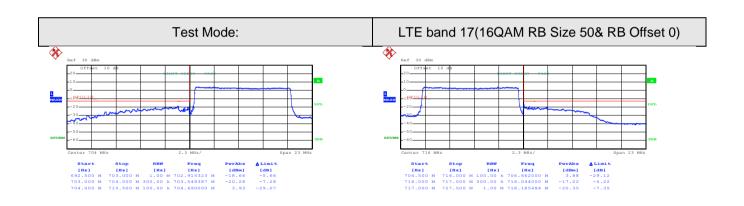


Date: 31.MAY.2016 18:33:18

Lowest channel

Date: 31.MAY.2016 18:35:49

Highest channel



Date: 31.MAY.2016 18:33:54

Date: 31.MAY.2016 18:36:08

Lowest channel

Highest channel





# 6.10 ERP, EIRP Measurement

<b>6.10</b> ERP, EIRP Measurer	ment
Test Requirement:	FCC part 22.913 (a), 24.232 (c), part 27.50(c), part 27.50(d), part 27.50 (h)
Test Method:	FCC part2.1046
Limit:	LTE Band 2: 2W EIRP LTE Band 4: 1W EIRP LTE Band 5: 7W EIRP LTE Band 7: 2W EIRP LTE Band 17: 3W EIRP
Test setup:	Below 1GHz
	Antenna Tower  Search Actenna  RF Test Receiver  Ground Plane  Above 1GHz
	FLIT  Jan  Spectrum  Analyser  Tuen  Table  A. Amplifier
	Substituted method:
	Ground plane  d: distance in meters d:3 meter  I-4 meter  S.G.  Substituted Dipole or Horn Antenna  Bi-Log Antenna or Horn Antenna





	T
Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.
	2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated.
	3. ERP in frequency band below 1GHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows:
	ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB)
	4. EIRP in frequency band above 1GHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:
	EIRP = S.G. output (dBm) + Antenna Gain (dBi) - Cable Loss (dB)
	5. The worse case was relating to the conducted output power.
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed





# Measurement Data (worst case):

# LTE band 2 part

## Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
		1.	4MHz(RB s	ize 1 & RB	offset 0)						
1050.70	10007	ODCK	1.1	Н	V	19.78					
1850.70	18607	QPSK	1.4	П	Н	15.62	33.00	Pass			
1050.70	10007	16001	1.1	Н	V	20.14	33.00	Fa55			
1850.70	18607	16QAM	1.4	П	Н	14.75					
	1.4MHz(RB size 3 & RB offset 0)										
1050.70	10607	ODSK	1.4	Н	V	20.08					
1850.70	18607	QPSK	1.4		Н	14.78	33.00	Pass			
1950.70	19607	16O A M	1.4	Н	V	19.65	33.00	rass			
1850.70	18607	16QAM	1.4		Н	14.78					
		1.	4MHz(RB s	ize 6 & RB	offset 0)						
4050.70	40007	ODCK	4.4		V	18.19					
1850.70	18607	QPSK	1.4	H	Н	10.93	22.00	Door			
1050.70	10007	160AM	1.4	Ш	V	18.94	33.00	Pass			
1850.70	18607	16QAM	1.4	Н	Н	12.48					

# Middle channel

	Middle channel											
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result				
	1.4MHz(RB size 1 & RB offset 0)											
1880.00	18900	QPSK	1.4	Н	V	19.18						
1000.00	16900		1.4	П	Н	15.85	33.00	Pass				
1880.00	18900 160		1.4	Н	V	20.50	33.00	F 455				
1000.00	10900	TOQXIVI	1.4	- 11	Н	14.07						
		1.4	4MHz(RB	size 3 & RE	3 offset 0)							
1880.00	18900	QPSK	1.4	Н	V	20.71						
1000.00	16900	QFSK	1.4	П	Н	14.11	33.00	Pass				
1880.00	18900	16QAM	1.4	Н	V	19.13	33.00	F 455				
1000.00	16900	TOQAW	1.4	П	Н	14.30						
		1.4	4MHz(RB	size 6 & RE	3 offset 0)							
1880.00	18900	QPSK	1.40	Н	V	18.04						
1880.00	16900	QFSK	1.40	П	Н	10.47	33.00	Page				
1880.00	0.00 18900 16QAM	16QAM	1.40	Н	<b>&gt;</b>	18.73	33.00	Pass				
1000.00	10900	TOQAW	1.40	П	Н	12.74						





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result		
			1.4MHz(RE	3 size 1 & F	RB offset 0)					
1000 20	10102	QPSK	1.4	1.4 H V 19.45	19.45					
1909.30	19193	QFSK		22.00	Door					
1000 20	10102	16QAM	1.4	Н	V	20.50	33.00	Pass		
1909.30	19193	IOQAW	1.4	П	Н	14.01				
	1.4MHz(RB size 3 & RB offset 0)									
1000 20	10102	ODSK		Н	V	20.12		Door		
1909.30	19193	QPSK	1.4	П	Н	14.24	22.00			
1909.30	19193	16QAM	1.4	Н	V	19.24	33.00	Pass		
1909.30	19193	IOQAW	1.4	П	Н	14.48				
			1.4MHz(RE	3 size 6 & F	RB offset 0)					
1000 20	10102	ODSK	1.4	Ш	V	18.83				
1909.30	19193	QPSK	1.4 H		Н	10.39	00.00	D		
1909.30	19193	16QAM	1.4 H	V	18.30	33.00	Pass			
1909.30	נפופו	IOQAW	1.4	П	Н	12.03				

#### Lowest channel

	Lowest Channel										
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
20MHz(RB size 1 & RB offset 0)											
1860.00	18700	QPSK	20	Н	V	19.88					
1000.00	16700	QF SIN	20	Г	Н	14.06	33.00	Pass			
1860.00	18700	16QAM	20	Н	V	20.67	33.00	Pass			
1000.00	16700	TOQAM	20	П	Н	14.24					
		2	0MHz(RB si	ze 50 & R	B offset 0)						
1860.00	18700	QPSK	20	Н	V	18.94					
1000.00	16700	QFSK	20	П	Н	13.07	33.00	Pass			
1860.00	18700	16QAM	20	Н	V	19.29	33.00	Pass			
1000.00	16700	TOQAM	20	П	Н	12.63					
		20	MHz(RB siz	e 100 & R	B offset 0)						
1960.00	10700	ODSK	20	Н	V	17.69					
1860.00	18700	QPSK	20		Н	11.60	33.00	Pass			
1860.00	00 18700 16QAM	20	Н	V	18.09	33.00	Fa55				
1000.00	10700	IOQAW	20	П	Н	11.56					





Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
20MHz(RB size 1 & RB offset 0)											
1880.00	18900	QPSK	20	Н	V	19.54					
1000.00	10900	Qi Sit	20	П	Н	14.41	33.00	Pass			
1880.00	18900	16QAM	20	Н	V	20.18	33.00	Fa55			
1000.00	10900	IOQAIVI	20	П	Н	14.81					
		2	0MHz(RB si	ze 50 & RI	3 offset 0)						
1000.00	10000	ODSK	20	Н	V	18.10					
1880.00	18900	QPSK	20	П	Н	13.03	33.00	Pass			
1880.00	18900	16QAM	20	Н	V	19.39	33.00	Fa55			
1000.00	10900	IOQAIVI	20	П	Н	12.93					
		20	MHz(RB siz	ze 100 & R	B offset 0)						
1000.00	10000	ODSK	20	Н	V	17.36					
1880.00	18900	QPSK	20	П	Н	11.65	33.00	Doos			
1880.00	18900	16QAM	20	Н	V	18.51	.51	Pass			
1000.00	10900	IOQAIVI	20	П	Н	11.11					

**Highest channel** 

	Hignest channel											
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result				
20MHz(RB size 1 & RB offset 0)												
1900.00	19100	QPSK	20	Н	V	19.14						
1900.00	19100	QFSK	20	20	20	- 1	Н	14.55	22.00	Pass		
1900.00	19100	16QAM	20		<b>V</b>	20.41	33.00	F 455				
1900.00	19100	TOQAM	20	20 H		14.13						
		2	20MHz(RB s	size 50 &	RB offset 0	)						
1900.00	19100	QPSK	20	20 H	V	18.34	33.00					
1900.00	19100	QFSK	20	- 1	Н	13.46		Pass				
1900.00	19100	16QAM	20	Н	<b>V</b>	19.58	33.00	F 455				
1900.00	19100	TOQAM	20	[1]	Н	12.81						
		2	0MHz(RB s	ize 100 8	RB offset (	0)						
1900.00	19100	QPSK	20	Н	V	17.17						
1900.00	19100	QF SN	20	11	Н	11.57	33.00	Pass				
1900.00	00 19100 16QAM	20	Н	V	18.73	33.00	газэ					
1300.00	13100	IOQAM	20	11	Н	11.41						





# LTE band 4 part

## Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
		1	I.4MHz(RE	3 size 1 &	RB offset 0)			
1710.70	19957	QPSK	1.4	Н	V	20.85		
1710.70	19937	QFSK	1.4	П	Н	16.84	30.00	Pass
1710.70	19957	16QAM	1 /	Н	V	20.84	30.00	Fa55
1710.70	19931	TOQAW	1.4 H H 16.03					
		1	I.4MHz(RE	3 size 3 &	RB offset 0)			
1710 70	100F7	ODSK	1.1	Ш	V	21.11	30.00	Pass
1710.70	19957	QPSK	1.4	Н	Н	15.89		
1710.70	19957	16QAM	1.4	4.4	V	20.26		
1710.70	19937	IOQAW	1.4	Н	Н	15.64		
		1	I.4MHz(RE	3 size 6 &	RB offset 0)			
1710 70	10057	ODSK	1.1	Ш	V	19.11		
1710.70	19957	QPSK	1.4 H		Н	14.60	-	
1710 70	10057	160 AM	AM 1.4		V	19.08	30.00	Pass
1710.70	19957	16QAM	1.4	Н	Н	14.65		

## Middle channel

	inidate channel										
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
		1	.4MHz(RE	3 size 1 &	RB offset 0)						
1732.50	20175	QPSK	1.4	Н	V	20.17					
1732.30	20175	QF3K	1.4	П	Н	16.71	20.00	Pass			
1732.50	20175	16QAM	1.4	Н	V	20.10	30.00	Fa55			
1732.30	20175	TOQAIVI	1.4		Н	16.06					
		1	.4MHz(RE	3 size 3 &	RB offset 0)						
1732.50	20175	QPSK	1.4	Н	V	21.69		Pass			
1732.50	20175	QFSK	1.4	1.4	Н	15.99	30.00				
1732.50	20175	16QAM	1.4	1.4 H	V	20.92	30.00	Fa55			
1732.30	20175	TOQAM	1.4		Н	15.27					
		1	.4MHz(RE	3 size 6 &	RB offset 0)						
1722.50	20175	ODSK	1.1	Ш	V	19.79					
1732.50	20175	QPSK	1.4 H		Н	14.96	20.00	Door			
1732.50	20175	16QAM	1.4	Н	V	19.63	30.00	Pass			
1732.50	20173	IOQAW	1.4	П	Н	14.37					





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result		
			1.4MHz(RE	size 1 & l	RB offset 0)					
1754.30	20393	QPSK	1.4 H V 20.73	20.73						
1754.50	20393	QFSK	1.4	I H I 1634 I	30.00	Pass				
1754 20	20393	16QAM	1.4	Н	V	20.45	30.00	Fa55		
1754.30	20393	IOQAW	1.4	П	Н	16.52				
	1.4MHz(RB size 3 & RB offset 0)									
1751 20	20202	ODSK	1.1	Н	V	21.27		Door		
1754.30	20393	QPSK	1.4		Н	15.70	30.00			
1754.30	20393	16QAM	1.4	Н	V	20.14	30.00	Pass		
1754.50	20393	IOQAW	1.4	П	Н	15.01				
		,	1.4MHz(RE	3 size 6 & F	RB offset 0)					
1751 20	20202	ODSK	1.4	Ш	V	19.46				
1754.30	20393	QPSK	1.4	Н	Н	14.65	20.00	Pass		
1754.20	20202	160 AM	1.4	Н	V	19.53	30.00			
1754.30	20393	16QAM	1.4	П	Н	14.39				

## 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	ODSK	20	Ш	V	20.59					
1720.00	20050	QPSK	20	Н	Н	16.17	20.00	Doos			
1720.00	20050	16QAM	20	Н	V	21.05	30.00	Pass			
1720.00	20050	TOQAM	20	П	Н	16.25					
		20MHz	(RB size 50	& RB offse	et 0)						
1720.00	20050	QPSK	20	Н	V	20.31					
1720.00	20050	QFSK	20	П	Н	15.57	30.00	Pass			
1720.00	20050	16QAM	20	Н	V	20.66	30.00	Pa55			
1720.00	20050	TOQAM	20		Н	20.33					
		20MHz(	RB size 100	& RB offs	et 0)						
1720.00	20050	QPSK	20	Н	V	18.19					
1720.00	20050	QFSK	20	П	Н	13.14	20.00	Door			
1720.00	20050	16QAM	20	20	20	20	- 11	V	18.38	30.00	Pass
1720.00	20000	TOQAM	20	Н	Н	13.71					



Report No: CCISE160507105

## Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result		
		2	0MHz(RB si	ze 1 & RB	offset 0)					
1732.50	20175	QPSK	20	Н	V	20.36				
1732.50	20175	QFSN	20	П	Н	16.64	30.00	Pass		
1732.50	20175	16QAM	20	Н	V	21.47	30.00	F 455		
1732.50	20175	TOQAM	20	П	Н	16.73				
	20MHz(RB size 50 & RB offset 0)									
1732.50	20175	ODSK	QPSK	20	Н	V	20.31			
1732.50	20175	QFSN	20	П	Н	15.10	30.00	Pass		
1732.50	20175	16QAM	20	Н	V	20.03	30.00	F 455		
1732.50	20175	TOQAM	20	П	Н	20.93				
		20	MHz(RB siz	e 100 & RI	B offset 0)					
1732.50	20175	QPSK	20	Н	V	18.38				
1732.50	20175	QF3K	20	П	Н	13.83	30.00	Pass		
1732.50 20175	20175	16QAM	20	Н	V	18.81	30.00	Fa55		
1732.50	20175	TOQAW	20	11	Н	13.10				

High channel

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	Н	V	20.71					
1745.00	20300	QFSK	20	П	Н	16.13	30.00	Pass			
1745.00	20300	16QAM	20	Н	V	21.38	30.00	F a 5 5			
1743.00	20300	TOQAM	20	11	Н	16.89					
20MHz(RB size 50 & RB offset 0)											
1745.00	5.00 20300 QPSK	20	Н	V	20.28						
1745.00	20300	QFSK	20	П	Н	15.89	30.00	Pass			
1745.00	20300	16QAM	20	20	20	20	Н	V	20.91	30.00	Fa55
1745.00	20300	TOQAM	20	П	Н	20.13					
		2	20MHz(RB siz	e 100 & RI	3 offset 0)						
1745.00	20300	QPSK	20	Н	V	18.37					
1745.00	20300	QF3N	20	П	Н	13.73	30.00	Page			
1745.00	1745.00 20300 16QAM	20	Н	V	18.55	30.00	Pass				
1745.00	20300	IOQAM	20	П	Н	13.27					





# LTE band 5 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)										
824.70	20407	QPSK	1.4	Н	V	24.45					
024.70	20407	QFSK	1.4	П	Н	22.08	38.45	Pass			
824.70	20407	16QAM	1.4	Н	V	23.36	30.43	Fa55			
024.70	20407	TOQAW	1.4		Н	21.93					
	1.4MHz(RB size 3& RB offset 0)										
024.70	824.70 20407 QPSK	1.4	Н	V	23.42						
624.70	20407	QPSK	1.4		Н	21.12	38.45	Pass			
824.70	20407	16QAM	1.4	Н	V	23.17	30.43	Fa55			
024.70	20407	IOQAW	1.4	П	Н	20.88					
			1.4MHz(RI	B size 6&	RB offset 0)						
824.70	20407	QPSK	1.4	Н	V	21.95					
024.70	20407	QFSK	1.4	П	Н	19.27	20 15	Door			
824.70	20407	160 AM	1.1	Н	V	21.96	38.45	Pass			
024.70	20407	07   16QAM   1.4	1.4	П	Н	18.98	<u> </u>				

## 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)										
926 50	20525	QPSK	1.1	Н	V	24.82					
836.50	20525	QPSK	1.4	Г	Н	22.24	38.45	Pass			
836.50	20525	16QAM	1.4	Н	V	23.47	30.43	Fa55			
636.50	20323	IOQAW	1.4	П	Н	21.72					
	1.4MHz(RB size 3& RB offset 0)										
926 50	836.50 20525 QPSK	ODSK	1.4	Н	V	23.22					
636.50	20525	QFSK	1.4	П	Н	21.21	38.45	Pass			
836.50	20525	16QAM	1.4	.4 H	V	23.13	30.43	Fa55			
630.30	20323	IOQAW	1.4		Н	20.34					
		1	.4MHz(RI	3 size 6&	RB offset 0)						
926 50	20525	ODSK	1.1	Н	V	21.43					
836.50	20525	QPSK	1.4	П	Н	19.08	20.45				
926 50 20525 16	160AM	1.1	Н	V	21.34	38.45	Pass				
836.50	20323	20525 16QAM 1.4	1.4	П	Н	18.42					





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result		
			1.4MHz(RE	size 1 & F	RB offset 0)					
848.30	20643	QPSK	1.4	Н	V	24.27				
040.30	20043	QPSK	1.4	П	Н	22.70	20 15	Pass		
949 20	20643	16O A M	1.4	Н	V	23.21	38.45	Fa55		
848.30	20043	16QAM	1.4	П	Н	21.19				
	1.4MHz(RB size 3& RB offset 0)									
040.20	348.30 20643 QPSK 1.4	1.1	Н	V	23.96					
848.30	20043	QPSK	1.4	П	Н	21.63	38.45	Door		
848.30	20643	16QAM	1.4	Н	V	23.39	36.45	Pass		
040.30	20043	IOQAW	1.4	П	Н	20.30				
			1.4MHz(RE	3 size 6& F	RB offset 0)					
040.00	20042	ODCK	4.4		V	21.13				
848.30	20643	QPSK	1.4	Н	Н	19.37	20.45	D		
0.40.20	9.20 20642 46OAM 1.4	1.4	Н	V	21.71	38.45	Pass			
848.30	20643	16QAM	1.4	П	Н	18.15				

## Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result								
	10MHz(RB size 1 & RB offset 0)															
920.00	20450	ODSK	10	Ш	V	23.55										
829.00	20450	QPSK	10	Н	Н	21.41	20.45	Doos								
920.00	20450	16O A M	10	Ш	V	23.52	38.45	Pass								
829.00	20450	16QAM	10	Н	Н	21.45										
	10MHz(RB size 25& RB offset 0)															
920.00	20450	ODSK	10	Н	V	23.78										
829.00	20450	QPSK	10	П	Н	21.23	38.45	Pass								
920.00	20450	16QAM	10	Н	V	23.93	30.43	Pa55								
829.00	20430	TOQAM	10	П	Н	20.85										
		10MHz	(RB size 50	& RB offse	et 0)											
920.00	20450	OBSK	10	Ш	V	22.66										
829.00	20450	QPSK	10	Н	Н	20.45	20 AE	Door								
829.00	20450	16QAM	10	Ш	V	24.21	38.45	Pass								
029.00	20430	IOQAW	10	10	10	10	10	10	10	10	10	10 H	Н	21.36		



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Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
	10MHz(RB size 1 & RB offset 0)										
836.50	20525	QPSK	10	Н	V	23.88					
636.50	20525	QFSK	10	П	Н	21.86	38.45	Pass			
836.50	20525	16QAM	10	Н	V	23.68	30.43	Fa55			
636.50	20525	IOQAW	10	П	Н	21.63					
10MHz(RB size 25& RB offset 0)											
836.50	000 F0 0050F 0DCK	QPSK	10	Н	V	23.39					
636.50	20525	QFSK	10	П	Н	21.93	38.45	Pass			
836.50	20525	16QAM	10	Н	V	23.21	30.43	rass			
636.30	20020	TOQAM	10	П	Н	20.24					
		10	MHz(RB siz	ze 50 & RE	3 offset 0)						
926 50	20525	ODSK	10	Н	V	22.42					
836.50	20525	QPSK	10	П	Н	20.36	20.45	Door			
836.50 2	20525	16QAM	10	Н	V	24.46	38.45	Pass			
030.30	20020	TOQAW	10	10	10	10	17	Н	21.19		

High channe

High channel										
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result		
10MHz(RB size 1 & RB offset 0)										
844.00	20600	QPSK	10	Н	V	23.82				
044.00	20000	QFSK	10	Г	Н	21.25	38.45	Pass		
844.00	20600	16QAM	10	ı	V	23.55	30.43	Pass		
044.00	20000	TOQAM	10	10 H 21.59						
10MHz(RB size 25& RB offset 0)										
844.00	20600	QPSK	10	Н	V	23.10				
044.00	20000	QFSK	10		Н	21.09	38.45	Pass		
844.00	20600	16QAM	10	Ι	V	23.96	30.43	F 455		
044.00	20000	TOQAM	10	П	Н	20.63				
			10MHz(RB s	size 50 &	RB offset 0	)				
844.00	20600	QPSK	10	Н	V	22.91				
044.00	20000	QFSK	10	П	Н	20.42	20.45	Poor		
844.00	344.00 20600 16QAM 10	10	ш	V	24.26	38.45	Pass			
044.00	20000	TOQAM	10 H	Н	21.24					





# 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	С	V	16.19					
2502.50	20773	QFSK	5 H	3 11	Н	14.22	33.00	Pass			
2502.50	20775	16QAM	5	I	V	15.00	33.00	Fa55			
2502.50	20773	IOQAW	5	П	Н	15.93					
	5MHz(RB size 12 & RB offset 0)										
2502.50	20775	QPSK	5	H V 14.16							
2502.50	20775	QPSK	5	П	Н	13.64	22.00	Pass			
2502.50	20775	16QAM	5	Н	V	13.92	33.00	Fa55			
2502.50	20775	IOQAW	5	П	Н	13.88					
			5MHz(RB	size 25 &	RB offset 0)						
2502.50	20775	ODSK	E	Н	V	14.20					
2502.50	20775	QPSK	5	П	Н	14.24	22.00	Door			
2502.50	2502.50 20775 16QAM	E	ш	V	17.07	33.00	Pass				
2502.50	20773	IOQAW	5 H	П	Н	14.23					

#### Middle channel

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)											
2525.00	21100	OBSK	5	Н	V	16.25					
2535.00	21100	QPSK	5	Г	Н	14.50	33.00	Pass			
2535.00	21100	16QAM	5		V	15.01	33.00	Fa55			
2555.00	21100	IOQAW	5	5 H	Н	15.14					
5MHz(RB size 12 & RB offset 0)											
2535.00	21100	QPSK	5	Ш	H V 14.52	14.52					
2555.00	21100	QFSK	5	П	Н	13.28	33.00	Pass			
2535.00	21100	16QAM	5	Н	V	13.89	33.00	F 455			
2555.00	21100	TOQAM	5		Н	13.14					
		5	MHz(RB	size 25 &	RB offset 0)						
2535.00	21100	QPSK	E	П	V	14.36					
2555.00	21100	QFSK	5 H	5 H	Н	14.68	22.00	Door			
2525.00	2535.00 21100 16QAM	5	Н	V	17.88	33.00	Pass				
2555.00	21100	TOQAM	5	П	Н	14.17					





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result		
			5MHz(RB	size 1 & R	B offset 0)					
2567.50	21425	QPSK	5	Н	V	16.77				
2507.50	21423	QF3K	ວ	П	Н	14.75	33.00	Pass		
2567.50	21425	16QAM	5	Н	V	15.53	33.00	Fa55		
2567.50	21425	IOQAW	o .	Г	Н	15.39				
	5MHz(RB size 12 & RB offset 0)									
2567.50	50 21425 QPSK 5	5	Н	V	14.26					
2567.50	21425	QPSK	5	П	Н	13.25	22.00	Pass		
2567.50	21425	16QAM	5	Н	V	13.75	33.00	Fa55		
2567.50	21423	IOQAW	5	П	Н	13.39				
		;	5MHz(RB	size 25 & F	RB offset 0)					
2507.50	04.405	ODCK	-	1.1	V	14.37				
2567.50	21425	QPSK	5	Н	Н	14.31	22.00	Door		
2567.50	.50 21425 16QAM 5	E	Н	V	17.01	33.00	Pass			
2567.50	21423	IOQAIVI	5	П	Н	14.75				

#### 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	Н	V	17.75				
2510.00	20000	QFSK	20	П	Н	14.90	33.00	Pass		
2510.00	20850	16QAM	20	Н	V	15.07		Pa55		
2510.00	20000	TOQAM	20	П	Н	13.36				
	20MHz(RB size 50 & RB offset 0)									
2510.00	20850	QPSK	20	Н	V	13.63				
2510.00	20000	QFSK	20	П	Н	13.38	33.00	Pass		
2510.00	20850	16QAM	20	Н	V	14.10	33.00	F a 5 5		
2310.00	20030	TOQAM	20	11	Н	13.93				
		20MHz(	RB size 100	& RB offs	et 0)					
2510.00	20850	QPSK	20	Н	V	10.34				
2510.00	20030	QFSK	20		Н	11.95	33.00	Pass		
2510.00	2510.00 20850 16QAM	16O A M	20	Н	V	10.36	33.00	F a 5 5		
2510.00	20000	IOQAW	20	П	Н	11.28				



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## 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	Н	V	17.76				
2555.00	21100	QFSN	20	П	Н	14.62	33.00	Door		
2535.00	21100	16QAM	20	Н	V	15.28	33.00	Pass		
2555.00	21100	TOQAM	20	П	Н	13.83				
		20	MHz(RB siz	ze 50 & RE	3 offset 0)					
2535.00	21100	QPSK	20	Н	V	13.67				
2555.00	21100	QFSN	20	П	Н	13.31	33.00	Pass		
2535.00	21100	16QAM	20	Н	V	14.01	33.00			
2555.00	21100	TOQAM	20	П	Н	13.39				
		20	MHz(RB siz	e 100 & RI	B offset 0)					
2535.00	21100	QPSK	20	Н	V	10.34				
2555.00	21100	QF3K	20	П	Н	11.01	33.00	Door		
2535.00	21100	16QAM	20	ш	V	10.03	33.00	Pass		
2555.00	21100	IUQAW	20	20 H H		11.93				

High channel

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	Н	V	17.54			
2300.00	21330	QFSK	20		Н	14.63	33.00	Pass	
2560.00	21350	16QAM	20	Н	V	15.69	33.00	rass	
2300.00	21330	TOQAM	20	11	Н	13.19			
	20MHz(RB size 50 & RB offset 0)								
2560.00	21350	QPSK	20	Н	V	13.13			
2500.00	21350	QFSK	20	[1	Н	13.34	33.00	Pass	
2560.00	21350	16QAM	20	Н	V	14.68	33.00	rass	
2300.00	21330	TOQAM	20	11	Н	13.84			
		2	20MHz(RB s	ize 100 8	RB offset 0	))			
2560.00	21350	QPSK	20	Н	V	10.39			
2500.00	21330	QFSN	20	П	Н	11.51	33.00	Pass	
2560.00	21350	16QAM	20	Η	V	10.15	33.00	Fass	
2300.00	21330	IOQAW	20		Н	11.39			





# LTE band 17 part Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result		
	5MHz(RB size 1 & RB offset 0)									
706.50	23755	QPSK	5	Н	V	18.53				
706.50	23733	QFSK	5	П	Н	22.78	24 77	Pass		
706.50	23755	16QAM	5	Н	V	18.77	34.77	Fa55		
706.50	23/33	IOQAW	5	П	Н	21.26				
	5MHz(RB size 12 & RB offset 0)									
706.50	23755	QPSK	E	5 H	V	18.36	34.77	Pass		
706.50	23/33	QPSK	5		Н	22.74				
706.50	23755	16QAM	5	Н	V	18.51	34.77			
700.50	23755	TOQAW	5	[7]	Н	22.68				
		!	5MHz(RB	size 25 8	RB offset 0)					
706.50	23755	QPSK	5	Н	V	17.88				
700.50	23755	QFSK	5	11	Н	21.66	34.77	Page		
706.50	23755	16QAM	5	Н	V	18.40	34.77	Pass		
700.50	23733	TOQAM	3	11	Н	21.30				

#### Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result	
5MHz(RB size 1 & RB offset 0)									
710.00	23790	QPSK	5	Н	V	18.76			
710.00	23790	QFSK	5	П	Н	22.06	34.77	Pass	
710.00	23790	16QAM	5	Н	V	18.63	34.77	F a 5 5	
710.00	23790	IOQAM	5	П	Н	21.38			
			5MHz(RE	3 size 12 &	RB offset 0)				
710.00	22700	QPSK	E	5 H	V	18.89	24.77	Pass	
710.00	23790	QPSK	5		Н	22.91			
710.00	22700	160014	E	Н	V	18.15	34.77		
710.00	23790	16QAM	5	П	Н	22.57			
			5MHz(RE	size 25 &	RB offset 0)				
740.00	00700	ODOK	_		V	17.71			
710.00	23790	QPSK	5	Н	Н	21.12	24.77	Door	
710.00	23790	16QAM	E	Ш	V	18.29	34.77	Pass	
7 10.00	23790	IOQAW	3	5 H	Н	21.91			





Highest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result		
	5MHz(RB size 1 & RB offset 0)									
712.50	22025	OBSK	5	Н	V	18.16				
713.50	23825	QPSK	5	П	Н	22.18	34.77	Pass		
712.50	22025	160 AM	E	5 H	V	18.84	34.77	Pass		
713.50	23825	16QAM	5	п	Н	21.03				
	5MHz(RB size 12 & RB offset 0)									
712.50	22025	ODSK	E	5 H	V	18.39	24 77	Door		
713.50	23825	QPSK	5		Н	22.93				
712.50	22025	160 AM	5	Н	V	18.31	34.77	Pass		
713.50	23825	16QAM	5	П	Н	22.01				
			5MHz(RB	size 25 &	RB offset 0)					
740.50	00005	ODOK	_	1.1	V	17.13				
713.50	23825	QPSK	5	Н	Н	21.73	04.77	Door		
712.50	22025	160 AM	E	- 11	V	18.24	34.77	Pass		
713.50	23825	16QAM	5	Н	Н	21.46				

#### Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result	
10MHz(RB size 1 & RB offset 0)									
709.00	23780	QPSK	10	Н	V	18.60			
709.00	23760	QFSK	10		Н	22.90	34.77	Pass	
700.00	23780	16QAM	10	Н	V	18.71	34.77	F a 5 5	
709.00	23700	IOQAW	10	П	Н	22.95			
		•	10MHz(R	B size 258	RB offset 0)				
700.00	22700	QPSK	10	Н	V	18.36		Pass	
709.00	23780	QFSK	10	П	Н	22.55	24 77		
709.00	23780	16QAM	10	10 H	V	18.84	34.77		
709.00	23700	TOQAM	10		Н	22.40			
		•	10MHz(R	B size 508	RB offset 0)				
709.00	23780	QPSK	10	Н	V	18.34			
709.00	23/00	QF3N	10	П	Н	21.28	34.77	Pass	
709.00	23780	16QAM	10	Н	V	18.78	34.77	F d S S	
703.00	23700	IOQAW	10	11	Н	22.11			



CCIS

Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result	
10MHz(RB size 1 & RB offset 0)									
710.00	23790	QPSK	( 10 H V		18.32				
7 10.00	23790	QPSK	10	П	Н	22.24	34.77	Pass	
710.00	23790	16QAM	10	Н	V	18.47	34.77	Fa55	
7 10.00	23790	IOQAW	10	П	Н	22.73	1		
	10MHz(RB size 25& RB offset 0)								
710.00	22700	ODCK	10	10 H	V	18.31	24.77	Pass	
710.00	23790	QPSK	10	П	Н	22.01			
710.00	23790	16QAM	10	Н	V	18.39	34.77		
7 10.00	23790	IOQAW	10	П	Н	22.93			
			10MHz(R	B size 50&	RB offset 0)				
740.00	22700	ODCK	40	11	V	18.87			
710.00	23790	QPSK	10	Н	Н	21.18	24.77	Door	
710.00	23790	16QAM	10	10 H	V	18.78	34.77	Pass	
7 10.00	23790	IOQAW	10	П	Н	22.12			

Highest channel

Highest channel									
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result	
10MHz(RB size 1 & RB offset 0)									
711.00	23800	QPSK	10	Н	V	18.80			
711.00	23000	QFSK	10	П	Н	22.07	34.77	Pass	
711.00	23800	16QAM	10	Н	V	18.51	34.77	Fa55	
711.00	23000	TOQAW	10	П	Н	22.34			
	10MHz(RB size 25& RB offset 0)								
711.00	23800	QPSK	10	н	V	18.35	34.77	Door	
711.00	23000	QFSK	10		Н	22.42			
711.00	22000	16QAM	10	Н	V	18.12	34.77	Pass	
711.00	23800	IOQAW	10	П	Н	22.17			
		•	10MHz(R	B size 50&	RB offset 0)				
711.00	22000	ODSK	10	Н	V	18.78			
711.00	23800	QPSK	10		Н	21.39	24 77	Page	
711.00	23800	16QAM	10	Н	V	18.42	34.77	Pass	
711.00	23000	TOQAM	10	П	Н	22.34			





# 6.11 Field strength of spurious radiation measurement

Test Requirement:	FCC Part 22.917(a), Part 24.238 (a), Part 27.53(g), Part 27.53(m), Part 27.53(h)
Test Method:	FCC part2.1053
Limit:	LTE Band 2, LTE Band 4, LTE Band 5 and LTE Band 17: -13dBm, LTE Band 7: -25dBm
Test setup:	Below 1GHz  Antenna Tower
	Search Aextenna  RF Test Receiver  Turn Table  Ground Plane
	Above 1GHz
	FLIT  Antenna  Spectrum  Antilyzer  Turn  Table  0, 8ex Ires  Amplifier
	Substituted method:
	Ground plane  d: distance in meters d: 3 meter  I-4 meter  S.G.  Substituted Dipole or Horn Antenna  Bi-Log Antenna or Horn Antenna
Test Procedure:	<ol> <li>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>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>

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

# Measurement Data (worst case):

#### **Below 1GHz:**

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

#### **Above 1GHz**

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



**Report No: CCISE160507105** 

LTE band 2 part:

		ze 1 & RB offset 0) for	or QPSK		
Frequency (MHz)	Spurious I	Emission	Limit (dBm)	Result	
riequelicy (Miriz)	Polarization	Level (dBm)	Limit (ubin)	Nesuit	
		Lowest			
3701.40	Vertical	-51.67			
5552.10	V	-26.62			
7402.00	V	-40.83	42.00		
3701.40	Horizontal	-50.40	-13.00	Pass	
5552.10	Н	-24.00			
7402.00	Н	-38.05			
·		Middle			
3760.00	Vertical	-50.14		Pass	
5640.00	V	-23.68			
7520.00	V	-40.89	42.00		
3760.00	Horizontal	-50.77	-13.00		
5640.00	Н	-24.51			
7520.00	Н	-40.16			
		Highest			
3816.60	Vertical	-44.87			
5724.90	V	-26.86			
7633.20	V	-40.29	40.00		
3816.60	Horizontal	-45.97	-13.00	Pass	
5724.90	Н	-25.58			
7633.20	Н	-39.22			





	2MUz/DR ci-	ze 1 & RB offset 0)	for OPSK						
		Emission							
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result					
Lowest									
3703.00	Vertical	-50.56							
5554.50	V	-25.67							
7406.00	V	-39.74	42.00	Door					
3703.00	Horizontal	-39.48	-13.00	Pass					
5554.50	Н	-26.89							
7406.00	Н	-37.96							
		Middle		·					
3760.00	Vertical	-49.65		Pass					
5640.00	V	-21.50							
7520.00	V	-40.03	-13.00						
3760.00	Horizontal	-50.35	-13.00	Pass					
5640.00	Н	-21.54							
7520.00	Н	-40.47							
		Highest							
3817.00	Vertical	-46.71							
5725.50	V	-27.14							
7634.00	V	-41.41	-13.00	Pass					
3817.00	Horizontal	-45.11	-13.00	Fass					
5725.50	Н	-32.15							
7634.00	Н	-39.57							





		ze 1 & RB offset 0) fo	or QPSK	1
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		1.000
		Lowest		
3705.00	Vertical	-51.38		Pass
5557.50	V	-26.81		
7410.00	V	-40.15	-13.00	
3705.00	Horizontal	-50.50	-13.00	
5557.50	Н	-24.03		
7410.00	Н	-38.33		
<u>.</u>		Middle		
3760.00	Vertical	-50.56		Pass
5640.00	V	-23.63	-13.00	
7520.00	V	-40.35		
3760.00	Horizontal	-50.54		
5640.00	Н	-24.42		
7520.00	Н	-40.28		
		Highest		
3815.00	Vertical	-44.93		
5722.50	V	-26.09	-13.00	Pass
7630.00	V	-40.31		
3815.00	Horizontal	-45.40		
5722.50	Н	-25.06		
7630.00	Н	-39.63		





	10MHz(RB si	ze 1 & RB offset 0) f	or QPSK	
	Spurious Emission			
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
<u> </u>		Lowest		
3710.00	Vertical	-50.38		
5565.00	V	-25.80		Pass
7420.00	V	-39.05	-13.00	
3710.00	Horizontal	-39.53	-13.00	
5565.00	Н	-26.93		
7420.00	Н	-37.33		
·		Middle		
3760.00	Vertical	-49.34		Pass
5640.00	V	-21.45		
7520.00	V	-40.57	12.00	
3760.00	Horizontal	-50.74	-13.00	
5640.00	Н	-21.46		
7520.00	Н	-40.57		
·		Highest		
3810.00	Vertical	-46.64		
5715.00	V	-27.42	-13.00	Pass
7620.00	V	-41.28		
3810.00	Horizontal	-45.80		
5715.00	Н	-32.89		
7620.00	Н	-39.45		





	15MU-/DR	sizo 1 & DR offsot 0	) for OPSK			
	15MHz(RB size 1 & RB offset 0) for QPSK  Spurious Emission Limit (dBm) Beauth					
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result		
		Lowest				
3715.00	Vertical	-51.57				
5572.50	V	-26.73				
7430.00	V	-40.32	42.00	Desa		
3715.00	Horizontal	-50.29	-13.00	Pass		
5572.50	Н	-24.97				
7430.00	Н	-38.74	1			
		Middle				
3760.00	Vertical	-50.44		Pass		
5640.00	V	-23.45				
7520.00	V	-40.50	-13.00			
3760.00	Horizontal	-50.07				
5640.00	Н	-24.74				
7520.00	Н	-40.47				
		Highest				
3805.00	Vertical	-44.71	-13.00	Pass		
5707.50	V	-26.13				
7610.00	V	-40.31				
3805.00	Horizontal	-45.11				
5707.50	Н	-25.16				
7610.00	Н	-39.62				





	20MHz(RB s	size 1 & RB offset 0	) for QPSK	
	Spurious Emission			
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3720.00	Vertical	-50.09		Pass
5580.00	V	-25.04		
7440.00	V	-39.10	-13.00	
3720.00	Horizontal	-50.79	-13.00	
5580.00	Н	-26.45		
7440.00	Н	-37.61	1	
		Middle		
3760.00	Vertical	-49.90		Pass
5640.00	V	-21.45		
7520.00	V	-40.55	12.00	
3760.00	Horizontal	-50.06	-13.00	
5640.00	Н	-21.48		
7520.00	Н	-40.30		
		Highest		
3800.00	Vertical	-46.36		
5700.00	V	-27.66	-13.00	Pass
7600.00	V	-41.18		
3800.00	Horizontal	-45.94		
5700.00	Н	-32.11		
7600.00	Н	-39.52		





#### LTE Band 4 Part:

		ze 1 & RB offset 0) f	or QPSK	
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
Frequency (Miriz)	Polarization	Level (dBm)	LIIIII (UDIII)	Kesuit
		Lowest		
3421.40	Vertical	-48.02		Pass
5132.10	V	-36.26		
6842.80	V	-41.79	-13.00	
3421.40	Horizontal	-47.84	-13.00	
5132.10	Н	-34.74		
6842.80	Н	-42.14	1	
		Middle		
3465.00	Vertical	-46.36		Pass
5197.50	V	-30.97		
6930.00	V	-41.06	12.00	
3465.00	Horizontal	-47.44	-13.00	
5197.50	Н	-27.93		
6930.00	Н	-39.77		
		Highest		
3508.60	Vertical	-48.76		
5262.90	V	-25.95	-13.00	Pass
7017.20	V	-40.95		
3508.60	Horizontal	-46.08		
5262.90	Н	-20.66		
7017.20	Н	-40.36		





	3MHz/RR siz	e 1 & RB offset 0) fo	or OPSK	
- (A411.)		Emission	Limit (dBm)	Result
Frequency (MHz)	Polarization	Level (dBm)		
		Lowest		
3423.00	Vertical	-48.57		Pass
5134.50	V	-36.49		
6846.00	V	-41.13	42.00	
3423.00	Horizontal	-47.70	-13.00	
5134.50	Н	-34.09		
6846.00	Н	-42.99		
		Middle		•
3465.00	Vertical	-46.46		Pass
5197.50	V	-30.16	-13.00	
6930.00	V	-41.79		
3465.00	Horizontal	-47.99		
5197.50	Н	-27.67		
6930.00	Н	-39.36		
		Highest		•
3507.00	Vertical	-48.09		
5260.50	V	-25.12	-13.00	Pass
7014.00	V	-40.66		
3507.00	Horizontal	-46.41		
5260.50	Н	-20.08		
7014.00	Н	-40.37		





	5MHz(RB siz	ze 1 & RB offset 0) fo	or QPSK	
Fraguency (MUz)	Spurious	Emission	Limit (dBm)	Result
Frequency (MHz)	Polarization	Level (dBm)	LIIIII (UDIII)	Result
		Lowest		
3425.00	Vertical	-48.35		
5137.50	V	-36.50		
6850.00	V	-41.07	42.00	Dese
3425.00	Horizontal	-47.76	-13.00	Pass
5137.50	Н	-34.65		
6850.00	Н	-42.52		
<u> </u>		Middle		
3465.00	Vertical	-46.50		
5197.50	V	-30.26		
6930.00	V	-41.60	42.00	Dese
3465.00	Horizontal	-47.03	-13.00	Pass
5197.50	Н	-27.33		
6930.00	Н	-39.34		
<u>.</u>		Highest		<u>.</u>
3505.00	Vertical	-48.42		
5257.50	V	-25.24		
7010.00	V	-40.49	-13.00	Dogs
3505.00	Horizontal	-46.98		Pass
5257.50	Н	-20.87		
7010.00	Н	-40.93		





	10MHz(RB size	ze 1 & RB offset 0) for	or QPSK	
Frequency (MHz)	Spurious	Emission	Limit (dBm)	Result
r requericy (Wir 12)	Polarization	Level (dBm)	Limit (dbin)	Nesuit
		Lowest		
3430.00	Vertical	-48.70		
5145.00	V	-36.09		
6860.00	V	-41.99	-13.00	Pass
3430.00	Horizontal	-47.95	-13.00	Pass
5145.00	Н	-34.56		
6860.00	Н	-42.66		
<u>.</u>		Middle		
3465.00	Vertical	-46.61		
5197.50	V	-30.11		
6930.00	V	-47.13	42.00	Desc
3465.00	Horizontal	-47.35	-13.00	Pass
5197.50	Н	-27.50		
6930.00	Н	-39.01		
<u>.</u>		Highest		<u>.</u>
3500.00	Vertical	-48.16		
5250.00	V	-25.61		
7000.00	V	-40.12	-13.00	Door
3500.00	Horizontal	-46.20		Pass
5250.00	Н	-20.01		
7000.00	Н	-40.41		





	•	ize 1 & RB offset 0)	for QPSK	
Frequency (MHz)		Emission	Limit (dBm)	Result
1 requeries (Willie)	Polarization	Level (dBm)	Ellille (dDIII)	rtoodit
		Lowest		
3435.00	Vertical	-48.52		
5152.50	V	-36.25		
6870.00	V	-41.57	12.00	Pass
3435.00	Horizontal	-47.76	-13.00	Pass
5152.50	Н	-34.66		
6870.00	Н	-42.62		
		Middle		
3465.00	Vertical	-46.24		
5197.50	V	-30.43		
6930.00	V	-41.38	40.00	D
3465.00	Horizontal	-47.83	-13.00	Pass
5197.50	Н	-27.34		
6930.00	Н	-39.46		
		Highest		
3495.00	Vertical	-48.69		
5242.50	V	-25.95		
6990.00	V	-40.12	-13.00	Door
3495.00	Horizontal	-46.41		Pass
5242.50	Н	-20.99		
6990.00	Н	-40.96		





	20MHz(RB s	ize 1 & RB offset 0	) for QPSK	
Frequency (MHz)	Spurious	Emission	Limit (dBm)	Result
Frequency (MHZ)	Polarization	Level (dBm)	Limit (abm)	Result
		Lowest		
3440.00	Vertical	-48.69		
5160.00	V	-36.93		
6880.00	V	-41.38	-13.00	Door
3440.00	Horizontal	-47.89	-13.00	Pass
5160.00	Н	-34.94		
6880.00	Н	-42.42		
		Middle		
3465.00	Vertical	-46.26		
5197.50	V	-30.60		
6930.00	V	-47.02	42.00	Dese
3465.00	Horizontal	-47.26	-13.00	Pass
5197.50	Н	-27.64		
6930.00	Н	-39.49		
		Highest		
3490.00	Vertical	-48.98		
5235.00	V	-25.88		
6980.00	V	-40.81	-13.00	Door
3490.00	Horizontal	-46.11		Pass
5235.00	Н	-20.19		
6980.00	Н	-40.99		





### LTE Band 5 Part:

	1.4MHz(RB s	ize 1 & RB offset 0)	for QPSK		
	Spurious	Spurious Emission			
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result	
		Lowest			
1649.40	Vertical	-53.72			
2474.10	V	-49.26			
3298.80	V	-45.77	-13	Pass	
1649.40	Horizontal	-56.63	-13	Fa55	
2474.10	Н	-50.47			
3298.80	Н	-46.80			
	Middle				
1673.00	Vertical	-51.89			
2509.50	V	-46.48			
3346.00	V	-44.18	-13	Pass	
1673.00	Horizontal	-52.18		r ass	
2509.50	Н	-50.15			
3346.00	Н	-43.83			
		Highest			
1696.60	Vertical	-55.69			
2544.90	V	-43.37			
3393.20	V	-46.12	-13	Pass	
1696.60	Horizontal	-57.38		F 455	
2544.90	Н	-50.85			
3393.20	Н	-45.32			





	3MHz(RB siz	ze 1 & RB offset 0) fo	or QPSK	
- (AUL)	Spurious Emission			Б. "
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
1651.00	Vertical	-53.25		
2476.50	V	-49.53		
3302.00	V	-45.38	-13	Pass
1651.00	Horizontal	-56.87	-13	Fa55
2476.50	Н	-40.73	7	
3302.00	Н	-46.31		
		Middle		
1673.00	Vertical	-51.15		
2509.50	V	-46.58		
3346.00	V	-44.84	-13	Pass
1673.00	Horizontal	-52.44	-13	Pass
2509.50	Н	-50.43	1	
3346.00	Н	-43.39	1	l
		Highest		
1695.00	Vertical	-55.56		
2542.50	V	-43.56		
3390.00	V	-46.95	] 42	Door
1695.00	Horizontal	-57.53	-13	Pass
2542.50	Н	-50.39	]	
3390.00	Н	-45.93	7	





	5MHz(RB siz	ze 1 & RB offset 0) fo	or QPSK	
		Spurious Emission		
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
1653.00	Vertical	-53.16		
2479.50	V	-49.69		
3306.00	V	-45.93	-13	Pass
1653.00	Horizontal	-56.37	-13	F455
2479.50	Н	-50.71		
3306.00	Н	-46.16		
		Middle		
1673.00	Vertical	-51.65		
2509.50	V	-46.58		
3346.00	V	-44.89	-13	Pass
1673.00	Horizontal	-52.99	-13	F 455
2509.50	Н	-50.93		
3346.00	Н	-43.37		
		Highest		
1693.00	Vertical	-55.73		
2539.50	V	-43.34		
3386.00	V	-46.45	-13	Pass
1693.00	Horizontal	-57.52	-13	F d 5 5
2539.50	Н	-50.24		
3386.00	Н	-45.44		





	10MHz(RB si	ze 1 & RB offset 0) f	or QPSK	
Fraguency (MH=)	Spurious Emission		Limit (dPm)	Popult
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
1658.00	Vertical	-53.33		
2487.00	V	-49.34		
3316.00	V	-45.93	-13	Pass
1658.00	Horizontal	-56.34		rass
2487.00	Н	-40.47		
3316.00	Н	-46.77		
		Middle		
1673.00	Vertical	-51.75		
2509.50	V	-46.57		
3346.00	V	-44.74	-13	Pass
1673.00	Horizontal	-52.04	-13	rass
2509.50	Н	-50.42		
3346.00	Н	-43.23		
		Highest		
1688.00	Vertical	-55.33		
2532.00	V	-43.38	_	
3376.00	V	-46.85	-13	Pass
1688.00	Horizontal	-57.59	-13	Fd55
2532.00	Н	-50.93		
3376.00	Н	-45.38	]	





### LTE Band 7 Part:

	5MHz(RB siz	ze 1 & RB offset 0) f	or QPSK	
Frequency (MHz)	Spurious	Emission	Limit (dBm)	Result
1 requericy (Wil 12)	Polarization	Level (dBm)	Lillill (dbill)	Nesuit
		Lowest		
5005.00	Vertical	-50.50		
7507.50	V	-29.12		
10010.00	V	-38.74	-25.00	Pass
5005.00	Horizontal	-35.11	-25.00	Pass
7507.50	Н	-30.19		
10010.00	Н	-40.51		
		Middle	<u> </u>	
5070.00	Vertical	-36.35		
7605.00	V	-32.96		
10140.00	V	-40.15	-25.00	Pass
5070.00	Horizontal	-31.02	-25.00	F455
7605.00	Н	-32.59		
10140.00	Н	-39.62		
		Highest		
5135.00	Vertical	-35.11		
7702.50	V	-27.94	]	
10270.00	V	-38.22	-25.00	Door
5135.00	Horizontal	-28.88		Pass
7702.50	Н	-31.63	]	
10270.00	Н	-38.98		





	10MHz(RB s	ize 1 & RB offset 0)	for QPSK	
Frequency (MHz)		Emission	Limit (dBm)	Result
r requericy (Miriz)	Polarization	Level (dBm)	Limit (dbin)	Result
		Lowest		
5010.00	Vertical	-35.50		
7515.00	V	-32.09		
10020.00	V	-39.99	-25.00	Pass
5010.00	Horizontal	-32.94	-25.00	Pass
7515.00	Н	-31.48		
10020.00	Н	-41.87		
		Middle		
5070.00	Vertical	-36.75		
7605.00	V	-32.53		
10140.00	V	-39.38	-25.00	Pass
5070.00	Horizontal	-29.84	-25.00	Pass
7605.00	Н	-34.44		
10140.00	Н	-40.46		
		Highest		
5130.00	Vertical	-36.61		
7695.00	V	-31.10		
10260.00	V	-38.09	-25.00	Doos
5130.00	Horizontal	-31.36		Pass
7695.00	Н	-36.99		
10260.00	Н	-38.88		





	15MHz(RB s	size 1 & RB offset 0)	for QPSK	
Frequency (MHz)		Emission	Limit (dBm)	Result
Frequency (IVII 12)	Polarization	Level (dBm)	Limit (ubin)	Kesuit
		Lowest		
5015.00	Vertical	-50.51		
7522.50	V	-29.13		
10030.00	V	-38.38	25.00	Desc
5015.00	Horizontal	-35.85	-25.00	Pass
7522.50	Н	-30.57		
10030.00	Н	-40.79		
		Middle		
5070.00	Vertical	-36.95		
7605.00	V	-32.52		
10140.00	V	-40.23	25.00	Dana
5070.00	Horizontal	-31.35	-25.00	Pass
7605.00	Н	-32.54		
10140.00	Н	-39.46		
		Highest		
5125.00	Vertical	-35.51		
7687.50	V	-27.05		
10250.00	V	-38.55	-25.00	Door
5125.00	Horizontal	-28.84		Pass
7687.50	Н	-31.53		
10250.00	Н	-38.11		





	20MHz(RB si	ze 1 & RB offset 0)	for QPSK	
Frequency (MHz)		Emission	Limit (dBm)	Result
Frequency (MITIZ)	Polarization	Level (dBm)	Lillill (dbill)	Nesuit
		Lowest		
5020.00	Vertical	-35.51		
7530.00	V	-32.45		
10040.00	V	-39.75	-25.00	Door
5020.00	Horizontal	-32.37	-25.00	Pass
7530.00	Н	-31.68		
10040.00	Н	-41.10		
		Middle		
5070.00	Vertical	-36.37		
7605.00	V	-32.27		
10140.00	V	-39.89	-25.00	Pass
5070.00	Horizontal	-29.97	-25.00	Pass
7605.00	Н	-34.97		
10140.00	Н	-40.72		
		Highest		
5120.00	Vertical	-36.87		
7680.00	V	-31.80		
10240.00	V	-38.68	-25.00	Door
5120.00	Horizontal	-31.07		Pass
7680.00	Н	-36.37		
10240.00	Н	-38.62		





### LTE Band 17 Part:

		e 1 & RB offset 0) fo	or QPSK					
Spurious Emission								
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result				
		Lowest						
1413.00	Vertical	-51.91						
2119.50	V	-37.03						
2826.00	V	-43.78	-13.00	Pass				
1413.00	Horizontal	-54.43	-13.00	Pass				
2119.50	Н	-42.55						
2826.00	Н	-43.67						
		Middle						
1420.00	Vertical	-52.37		Pass				
2130.00	V	-42.43						
2840.00	V	-46.31	42.00					
1420.00	Horizontal	-56.35	-13.00					
2130.00	Н	-49.80						
2840.00	Н	-44.49						
		Highest						
1427.00	Vertical	-53.68						
2140.50	V	-34.70						
2854.00	V	-45.68	42.00	Doo-				
1427.00	Horizontal	-55.92	-13.00	Pass				
2140.50	Н	-45.68						
2854.00	Н	-44.20						





	10MHz(RB siz	e 1 & RB offset 0) fo	or QPSK					
Fraguenov (MHz)	Spurious	Emission	Limit (dDm)	Doguit.				
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result				
		Lowest						
1418.00	Vertical	-51.14						
2127.00	V	-37.42						
2836.00	V	-43.24	-13.00	Door				
1418.00	Horizontal	-54.45	-13.00	Pass				
2127.00	Н	-42.51						
2836.00	Н	-43.11						
Middle								
1420.00	Vertical	-52.15		Pass				
2130.00	V	-42.54						
2840.00	V	-46.44	-13.00					
1420.00	Horizontal	-56.43	-13.00					
2130.00	Н	-49.36						
2840.00	Н	-44.96						
		Highest						
1422.00	Vertical	-53.21						
2133.00	V	-34.13						
2844.00	V	-45.35	-13.00	Pass				
1422.00	Horizontal	-55.52	-13.00	Pass				
2133.00	Н	-45.21						
2844.00	Н	-44.17						



# 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:	Spectrum analyzer  Att.  Variable Power Supply
Test procedure:	<ol> <li>Note: Measurement setup for testing on Antenna connector</li> <li>The equipment under test was connected to an external DC power supply and input rated voltage.</li> <li>RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.</li> <li>The EUT was placed inside the temperature chamber.</li> <li>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>Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> <li>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 2(QPSK):

		LTE Band	2(QPSK):		
Reference Fr	equency: LTE Band	2(1.4MHz) N	Middle channel=18900	channel=1880.00	)MHz
Power supplied	Temperature (°C)	Fre	Frequency error		Result
(Vdc)	remperature ( c)	Hz	ppm	Limit (ppm)	Result
	-30	193	0.102660		
	-20	128	0.068085		
	-10	146	0.077660		
	0	151	0.080319		
3.80	10	178	0.094681	±2.5	Pass
0.00	20	111	0.059043		
	30	109	0.057979		
	40	134	0.071277		
	50	101	0.053723		
Reference F	requency: LTE Band	2(3MHz) M	iddle channel=18900	channel=1880.00	MHz
Power supplied	Tamanaratura (°C)	Fr	equency error	Limit (none)	Result
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	125	0.066489		Pass
	-20	151	0.080319		
	-10	122	0.064894		
	0	145	0.077128		
3.80	10	138	0.073404	±2.5	
0.00	20	131	0.069681		
	30	168	0.089362		
	40	101	0.053723		
	50	106	0.056383		
Reference F			iddle channel=18900	channel=1880.00	MHz
			equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	155	0.082447		
	-20	146	0.077660		
	-10	134	0.071277		
	0	138	0.073404		
3.80	10	161	0.085638	±2.5	Pass
	20	143	0.076064		
	30	108	0.057447		
	40	125	0.066489		
	50	114	0.060638		





		Fre	2(10MHz) Middle channel=18900 o		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	153	0.081383		
	-20	166	0.088298		
	-10	122	0.064894		
	0	136	0.072340		
3.80	10	131	0.069681	±2.5	Pass
	20	147	0.078191		
	30	141	0.075000		
	40	103	0.054787		
	50	111	0.059043		
Reference F	requency: LTE Band	2(15MHz) N	liddle channel=1890	0 channel=1880.00	MHz
Power supplied (Vdc)	Temperature (°C)	Fre	quency error	Limit (ppm)	Result
Tower supplied (vdc)	remperature ( c)	Hz	ppm	Limit (ppm)	
	-30	152	0.080851		Pass
	-20	123	0.065426		
	-10	168	0.089362		
	0	101	0.053723		
3.80	10	171	0.090957	±2.5	
	20	117	0.062234		
	30	122	0.064894		
	40	136	0.072340		
	50	138	0.073404		
Reference F	requency: LTE Band	2(20MHz) M		0 channel=1880.00	MHz
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	
rowei supplied (vdc)	remperature ( C)	Hz	ppm	Limit (ppm)	Result
	-30	186	0.098936		
	-20	123	0.065426		
	-10	138	0.073404		
	0	131	0.069681		
3.80	10	121	0.064362	±2.5	Pass
	20	103	0.054787		r ass
	30	118	0.062766	<del>- </del>	
	40	104	0.055319		
-	10		0.000010	<b>_</b> -	





LTE Band 2(16QAM):

		LTE Band 2	2(16QAM):		
Reference F	requency: LTE Band	2(1.4MHz)	Middle channel=18900	channel=1880.0	0MHz
	Temperature (°C)	Frequency error		Limit (ppm)	
Power supplied (Vdc)	remperature (C)	Hz	ppm	Еши (ррш)	Result
	-30	152	0.080851		
	-20	121	0.064362		
	-10	123	0.065426		
	0	107	0.056915		
3.80	10	106	0.056383	±2.5	Pass
0.00	20	111	0.059043		. 455
	30	148	0.078723		
	40	141	0.075000		
	50	133	0.070745		
Reference I	Frequency: LTE Band		/liddle channel=18900	channel=1880.00	MHz
	Temperature (°C)	Frequency error		Limit (ppm)	
Power supplied (Vdc)	remperature ( c)	Hz	ppm	Limit (ppm)	Result
	-30	169	0.089894		
	-20	126	0.067021		
	-10	121	0.064362		
	0	103	0.054787	±2.5	
3.80	10	117	0.062234		Pass
0.00	20	158	0.084043		1 400
	30	149	0.079255		
	40	144	0.076596	-	
	50	106	0.056383		
Reference F			iddle channel=18900 c	hannel=1880.00l	МНz
	<b>-</b> (00)	Fr	equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	169	0.089894		
	-20	135	0.071809		
	-10	126	0.067021	_	
	0	121	0.064362	_	
3.80	10	137	0.072872	±2.5	Pass
	20	142	0.075532	4	
	30	148	0.078723	_	
	40	101	0.053723	-	
	50	108	0.057447		





Reference F	requency: LTE Band	2(10MHz) N	liddle channel=18900	channel=1880.00	MHz
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
rower supplied (vac)	. , ,	Hz	ppm	Еши (ррш)	Nesuit
	-30	153	0.081383		
	-20	151	0.080319		
	-10	139	0.073936		
	0	147	0.078191		
3.80	10	146	0.077660	±2.5	Pass
	20	134	0.071277		
	30	108	0.057447		
	40	101	0.053723		
	50	119	0.063298		
	requency: LTE Band		liddle channel=18900	channel=1880.00	MHz
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result
(Vdc)	. ,	Hz	ppm	(F F)	
	-30	158	0.084043		Pass
	-20	122	0.064894		
	-10	124	0.065957		
	0	148	0.078723		
3.80	10	146	0.077660	±2.5	
	20	118	0.062766		
	30	133	0.070745		
	40	134	0.071277		
	50	106	0.056383		
Reference Fr			liddle channel=18900	channel=1880.00	MHz
Power supplied	Tomporature (°C)	Fre	equency error		
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	166	0.088298		
	-20	122	0.064894		
	-10	145	0.077128		
	0	144	0.076596		
3.80	10	123	0.065426	±2.5	Pass
1	20	105	0.055851		
		112	0.059574	$\dashv$	
	30	/		_	
	30 40	114	0.060638		





LTE Band 4(QPSK):

		LTE Band	4(QPSK):		
Reference Fr	requency: LTE Band	4(1.4MHz) N	Middle channel=20175	channel=1732.50	)MHz
Power supplied	Temperature (°C)	Fr	equency error	Limit (ppm)	Result
(Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Result
	-30	182	0.105051		
	-20	151	0.087157		
	-10	122	0.070418		
	0	131	0.075613		
3.80	10	103	0.059452	±2.5	Pass
0.00	20	108	0.062338	12.5	1 433
	30	114	0.065801		
	40	118	0.068110	7	
	50	145	0.083694		
Deference F			iddle channel=20175	shannal 1722 FO	MLI-
	requency. LTE band	` '		mannel=1732.50	VITZ
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result
(Vdc)	, ,	Hz	ppm	(PP)	
	-30	154	0.088889		
	-20	123	0.070996		
	-10	135	0.077922		
	0	166	0.095815		
3.80	10	144	0.083117	±2.5	Pass
	20	148	0.085426		
	30	101	0.058297		
	40	103	0.059452		
	50	115	0.066378		
Reference F	requency: LTE Band	4(5MHz) M	iddle channel=20175	channel=1732.50	MHz
D	T (°C)	Frequency error		Line ( ( comp)	D !!
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	155	0.089466		
	-20	126	0.072727		
	-10	136	0.078499	_	
	0	141	0.081385	_	
3.80	10	129	0.074459	±2.5	Pass
	20	135	0.077922	_	
	30	104	0.060029	4	
	40	114	0.065801	-	
	50	113	0.065224		





5 " 10(1)		Fre	quency error	11. 11. 1	
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	152	0.087734		
	-20	126	0.072727		
	-10	132	0.076190		
	0	136	0.078499		
3.80	10	124	0.071573	±2.5	Pass
	20	145	0.083694		
	30	140	0.080808		
	40	119	0.068687		
	50	114	0.065801		
Reference F	requency: LTE Band	4(15MHz) M	liddle channel=2017	5 channel=1732.50	MHz
Power supplied (Vdc)	Temperature (°C)		quency error	Limit (ppm)	Dooult
Towor supplied (Vdo)	• • • • • •	Hz	ppm	Ziiiii (ppiii)	Result
	-30	139	0.080231		Pass
	-20	126	0.072727		
	-10	121	0.069841		
	0	145	0.083694		
3.80	10	140	0.080808	±2.5	
	20	117	0.067532		1 400
	30	116	0.066955		
	40	103	0.059452		
	50	108	0.062338		ı
Reference F	requency: LTE Band	4(20MHz) M	liddle channel=2017	5 channel=1732.50	MHz
			quency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	199	0.114863		
	-20	125	0.072150		
	-10	181	0.104473		
	0	177	0.102165		
3.80	10	143	0.082540	±2.5	Pass
	20	166	0.095815		1 033
	30	123	0.070996	<del>- </del>	
	40	132	0.076190		





LTE Band 4(16QAM):

		LTE Band 4	+(16QAW):		
Reference F	requency: LTE Band	4(1.4MHz)	Middle channel=20175	channel=1732.5	0MHz
	Temperature (°C)	Frequency error		Limit (nnm)	
Power supplied (Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Result
	-30	126	0.072727		
	-20	110	0.063492		
	-10	145	0.083694		
	0	104	0.060029		
3.80	10	128	0.073882	±2.5	Pass
0.00	20	148	0.085426		1 433
	30	111	0.064069		
	40	104	0.060029		
	50	107	0.061760		
Deference				shannal 1722 FC	<u> </u>
Reference	requency. LTE band	1 4(31VITZ) IV	fiddle channel=20175	Tannel=1732.50	/IVITZ
Dawer augustical ()/da)	Temperature (°C)	Frequency error		Limit (ppm)	Result
Power supplied (Vdc)	romporataro ( c)	Hz	ppm	Ziiiii (ppiii)	Result
	-30	153	0.088312		
	-20	125	0.072150		
	-10	162	0.093506		
	0	120	0.069264		
3.80	10	145	0.083694	±2.5	Pass
0.00	20	147	0.084848		1 433
	30	140	0.080808		
	40	133	0.076768		
	50	138	0.079654		
Reference F			iddle channel=20175	channel=1732.50	MHz
			Frequency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	158	0.091198		
	-20	153	0.088312		
	-10	107	0.061760	_	
	0	101	0.058297		_
3.80	10	114	0.065801	±2.5	Pass
	20	116	0.066955	4	
	30	123	0.070996	4	
	40	122	0.070418	_	
	50	110	0.063492	1	





	requency: LTE Band		equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	156	0.090043		
	-20	128	0.073882		
	-10	108	0.062338		
	0	163	0.094084		
3.80	10	107	0.061760	±2.5	Pass
	20	112	0.064646		
	30	111	0.064069		
	40	120	0.069264		
	50	149	0.086003		
	requency: LTE Band	4(15MHz) M	iddle channel=20175	channel=1732.50	MHz
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result
(Vdc)	` ′	Hz	ppm	Еппт (ррпп)	rtesuit
	-30	167	0.096392		Pass
	-20	144	0.083117		
	-10	148	0.085426		
	0	155	0.089466		
3.80	10	123	0.070996	±2.5	
	20	132	0.076190		
	30	139	0.080231		
	40	128	0.073882		
	50	104	0.060029		
Reference F	requency: LTE Band			5 channel=1732.50	MHz
Power supplied		, ,	equency error		
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	168	0.096970		
	-20	126	0.072727		
	-10	121	0.069841	7	
			0.061760	<b>-</b>	
	0	107		-	İ
3.80	0	107			Dage
3.80	10	110	0.063492	±2.5	Pass
3.80	10 20	110 116	0.063492 0.066955	±2.5	Pass
3.80	10	110	0.063492	±2.5	Pass





LTE Band 5(QPSK):

Reference Frequency: LTE Band \$(1.4MHz) Middle channel=20525Frequency=836.50MHz			LTE Band	, ,		
Cydc    Temperature (C)   Hz		requency: LTE Band			requency=836.5	0MHz
Color	• •	Temperature (°C)	Fr	requency error	Limit ( )	D 1
3.80	(Vdc)	remperature ( C)	Hz	ppm	Limit (ppm)	Result
3.80	1	-30	199	0.237896		
3.80		-20	123	0.147041		
0		-10	125	0.149432		
3.80		0	121			
20	3.80	10	147		+2.5	Page
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					±2.5	F a 5 5
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					†	
S0					-	
Reference Frequency: LTE Band 5(3MHz) Middle channel=20525Frequency=836.50MHz					1	
Power supplied (Vdc)	Poforonco P				00110001-936 50	N/ILI->
(Vdc)         Hz         ppm         Limit (ppm)         Result           -30         126         0.150628         -20         102         0.121937         -10         131         0.150628         -20         102         0.121937         -30         143         0.170950         -30         108         0.129109         -20         165         0.197250         -30         108         0.129109         -20         104         0.124328         -30         108         0.129109         -30         108         0.129109         -30         108         0.129109         -20         -20         130         104         0.124328         -50         113         0.135087         -30         108         0.129109         -30         108         0.129109         -20         -20         129         0.150628         -20         -20         129         0.150628         -20         129         0.150628         -20         129         0.150628         -20         133         0.153019         ±2.5         Pass           Reference Frequency: LTE Band 5(10MHz) Middle channel=20525Frequency=836.50MHz           Power supplied (Vdc)         Temperature (°C)         Frequency error Hz         Limit		Tequency. LTE band	i ' '		equency=636.30	IVII 12
-30	• •	Temperature (°C)		· · · · ·	Limit (ppm)	Result
3.80	(vuc)	30			(11)	
3.80					+	
3.80					-	
3.80					-	
20					±2.5 F	
30	3.80			0.204423		Pass
A0		20	165	0.197250		
Temperature (°C)		30	108	0.129109		
Reference Frequency: LTE Band 5(5MHz) Middle channel=20525Frequency=836.50MHz		40	104	0.124328		
Power supplied (Vdc)		50	113	0.135087		
Column   C	Reference F	requency: LTE Band	5(5MHz) M	iddle channel=20525Fr	equency=836.50	MHz
126		Temperature (°C)		equency error	Limit (nnm)	Regult
-20	(Vdc)	` ` '			Еппі (рріп)	Nesuit
3.80						
3.80					_	
3.80					_	
20						_
30	3.80				±2.5	Pass
A0					4	
Temperature (°C)   Temperature					_	
Reference Frequency: LTE Band 5(10MHz) Middle channel=20525Frequency=836.50MHz   Power supplied (Vdc)   Temperature (°C)   Frequency error   Hz   ppm   Limit (ppm)   Result    -30					1	
Power supplied (Vdc)  Temperature (°C)  Hz ppm  -30 108 0.129109  -20 106 0.126718  -10 103 0.123132  0 114 0.136282  3.80 10 110 0.131500  20 123 0.147041  30 126 0.150628  40 128 0.153019  Limit (ppm) Result  Pass  A ppm  Limit (ppm) Result  Pass  Result  A ppm  Limit (ppm) Result  A ppm  -20 106 0.126718  -10 103 0.123132  0 114 0.136282  40 128 0.153019	Poforonco F				reguency-836 50	JMH-2
(Vdc)   Hz   ppm   Limit (ppm)   Result		Tequency. LTL band			Tequency=030.30	JIVII IZ
3.80  -30  -10  -10  103  0.129109  -10  103  0.123132  0  114  0.136282  3.80  10  110  0.131500  ±2.5  Pass  20  123  0.147041  30  126  0.150628  40  128  0.153019	• •	Temperature (°C)		· · · · · · · · · · · · · · · · · · ·	Limit (ppm)	Result
3.80  -20 106 0.126718 -10 103 0.123132 0 114 0.136282 3.80  10 110 0.131500 ±2.5  Pass  20 123 0.147041 30 126 0.150628 40 128 0.153019	( v do)	-30				
-10 103 0.123132 0 114 0.136282 3.80 10 110 0.131500 ±2.5 Pass 20 123 0.147041 30 126 0.150628 40 128 0.153019					1	
3.80					1	
3.80					1	
20     123     0.147041       30     126     0.150628       40     128     0.153019	3.80				±2.5	Pass
30 126 0.150628 40 128 0.153019					1	-
40 128 0.153019					1	
50 143 0.170950					]	
		50	143	0.170950		





LTE Band 5(16QAM):

Reference F	requency: LTE Band (	LTE Band 5		Frequency=836.50	MHz
Power supplied			equency error		
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	128	0.153019		
	-20	184	0.219964		
	-10	120	0.143455		
	0	131	0.156605		
3.80	10	116	0.138673	±2.5	Pass
0.00	20	114	0.136282	±2.5	Fa55
	30	117	0.139868		
	40	127	0.151823		
	50	138	0.164973		
Reference I	requency: LTE Band			reguencv=836.50N	ИНz
Power supplied			equency error		
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	126	0.150628		
	-20	145	0.173341	┥	
	-10	165	0.197250	<del>- </del>	
	0	166	0.198446		
3.80	10	134	0.160191		5
3.00	20	123		±2.5	Pass
	30	147	0.147041	_	
	40		0.175732	_	
		116	0.138673		
Deference	50	122	0.145846		AL I—
Power supplied	Frequency: LTE Band		equency error	requency=636.50	VIIIZ
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
(140)	-30	162	0.193664		
	-20	120	0.143455		
	-10	131	0.156605		
	0	141	0.168559		
3.80	10	174	0.208010	2.5	Pass
	20	160	0.191273		
	30	133	0.158996		
	40	138	0.164973		
Poforonco E	50 requency: LTE Band	107 5(10MHz) M	0.127914	Fraguency-936 50	NAMA
Power supplied		, , , , , , , , , , , , , , , , , , ,	equency error	rrequericy=636.50	IVII IZ
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
( : 30)	-30	116	0.138673		
	-20	112	0.133891		
	-10	104	0.124328		
	0	131	0.156605	_	
3.80	10	138	0.164973	2.5	Pass
	20	137	0.163778	_	
	30	144	0.172146	_	
	40	146	0.174537	_	
	50	126	0.150628		





LTE Band 7(QPSK):

		LTE Band			
	requency: LTE Band 7		ldle channel=21100 Fr	equency=2535.00	)MHz
Power supplied	Temperature (°C)		equency error	Limit (nnm)	Result
(Vdc)	Tomporataro ( o)	Hz	ppm	Limit (ppm)	Result
	-30	182	0.071795		
	-20	100	0.039448		
	-10	138	0.054438		
	0	145	0.057199		
3.80	10	164	0.064694	±2.5	Pass
	20	175	0.069034	<u> </u>	1 433
	30	107	0.042209	-	
	40	118	0.046548		
	50	133	0.052465		
Poforonco Er			ddle channel=21100 F	reguency=2535 0	
Power supplied	equency. LTL band r	·	equency error		OIVII IZ
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
( v do)	-30	128	0.050493	,	
	-20	134		_	
		+	0.052860	-	
	-10	145	0.057199	_	
	0	120	0.047337		
3.80	10	132	0.052071	±2.5	Pass
	20	144	0.056805		
	30	127	0.050099		
	40	119	0.046943		
	50	116	0.045759		
Reference Fr	equency: LTE Band 7	(15MHz) Mid	ddle channel=21100 F	requency=2535.0	0MHz
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result
(Vdc)	` ` ` `	Hz	ppm	Еши (ррш)	Nesuit
	-30	159	0.062722		
	-20	130	0.051282		
	-10	134	0.052860	_	
• • •	0	144	0.056805		_
3.80	10	146	0.057594	±2.5	Pass
	20	131	0.051677	_	
	30	150	0.059172	_	
	40 50	117 115	0.046154 0.045365	-	
Poforonco Er			ddle channel=21100 F	rogueney-2535 0	
	equency. LTE band <i>T</i>	` ,		Tequency=2555.0	UIVII 12
Power supplied (Vdc)	Temperature (°C)	Hz	equency error	Limit (ppm)	Result
(vuc)	-30	198	ppm 0.078107		
	-20	124	0.048915		
	-10	165	0.065089	<del> </del>	
	0	151	0.059566	†	
3.80	10	132	0.052071	±2.5	Pass
	20	138	0.054438	<b>1</b>	<del>-</del>
	30	167	0.065878	]	
	40	104	0.041026	]	
	50	112	0.044181		





LTE Band 7(16QAM):

			requency=2535.00	IMHz
equeriey. ETE Baria I				IVII IZ
Temperature (°C)		· · · · · · · · · · · · · · · · · · ·	Limit (ppm)	Result
-30	167			
-20	142			
			-0.5	Dana
			±2.5	Pass
			Frequency-2535 0	NMH2
equency. LTL band 7			requericy=2555.00	JIVII IZ
Temperature (°C)		equency error	Limit (ppm)	Result
		ppm	(PP)	
		0.048521		
-10		0.065089		
0	147	0.057988	±2.5	
10	115	0.045365		Pass
20	113	0.044576		
30	144	0.056805		
40	108	0.042604		
50	104	0.041026		
quency: LTE Band 7	(15MHz) Mi	ddle channel=21100 F	requency=2535.0	OMHz
Temperature (°C)	Fre	equency error	Limit (nnm)	Result
` ′	Hz	ppm	Еши (ррш)	rtoodit
			_	
			_	
			2.5	Pass
				1 433
50	116			
quency: LTE Band 7	(20MHz) Mic		requency=2535.0	OMHz
Tomporature (°C)	Fre	equency error	Limit (nnm)	Popult
remperature ( C)	Hz	ppm	Limit (ppm)	Result
-30	126	0.049704		
-20	107	0.042209	_	
			_	
0	133	0.052465	2.5	5
	400	0 050071		Pass
10	132	0.052071	_ 2.5	Pass
10 20	117	0.046154	2.5	Pass
10			2.5	Pass
	requency: LTE Band 7  Temperature (°C)  -30  -20  -10  0  10  20  30  40  50  rquency: LTE Band 7  Temperature (°C)  -30  -20  -10  0  10  20  30  40  50  rquency: LTE Band 7  Temperature (°C)  -30  -20  -10  0  10  20  30  40  50  rquency: LTE Band 7  Temperature (°C)  -30  -20  -10  0  10  20  30  40  50  rquency: LTE Band 7  Temperature (°C)  -30  -20  -10  0  10  20  30  40  50  rquency: LTE Band 7  Temperature (°C)  -30  -20  -10  -30  -20  -10  -30  -20  -10  -30  -20  -10  -30  -20  -10  -30  -20  -10	requency: LTE Band 7(5MHz) Mic  Temperature (°C)  Hz  -30	Temperature (°C)	Temperature (°C)   Frequency error   Limit (ppm)





LTE Band 17(QPSK):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz							
Power supplied	Temperature (°C)	Fr	Frequency error		) :		
(Vdc)	Temperature ( C)	Hz	ppm	Limit (ppm)	Result		
	-30	199	0.280282				
	-20	165	0.232394				
	-10	123	0.173239				
	0	135	0.190141				
3.80	10	145	0.204225	±2.5	Pass		
	20	147	0.207042				
	30	174	0.245070				
	40	180	0.253521				
	50	103	0.145070				
Reference F	requency: LTE Band	17(10MHz)	Middle channel=23790	channel=710.00	MHz		
Power supplied	Temperature (°C)	Fr	equency error	l ::t ()			
(Vdc)	remperature ( C)	Hz	ppm	Limit (ppm)	Result		
	-30	197	0.277465				
	-20	126	0.177465				
	-10	123	0.173239				
	0	108	0.152113				
3.80	10	116	0.163380	±2.5	Pass		
	20	145	0.204225		1 2.00		
	30	140	0.197183				
	40	139	0.195775	1			

LTE Band 17(16QAM):

Reference Frequency: LTE Band 17(15QAM):  Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz							
Power supplied	Temperature (°C)	Frequency error		1	5 "		
(Vdc)	remperature ( 0)	Hz	ppm	Limit (ppm)	Result		
	-30	126	0.177465				
	-20	132	0.185915				
	-10	105	0.147887				
	0	145	0.204225				
3.80	10	168	0.236620	±2.5	Pass		
	20	107	0.150704				
	30	114	0.160563				
	40	110	0.154930				
	50	117	0.164789				
Reference F	requency: LTE Band	17(10MHz)	Middle channel=23790	channel=710.00	MHz		
Power supplied	Temperature (°C)	Frequency error		Limit (nnm)	Pocult		
(Vdc)		Hz	ppm	Limit (ppm)	Result		
	-30	158	0.222535				
	-20	132	0.185915				
	-10	136	0.191549				
	0	145	0.204225				
3.80	10	150	0.211268	±2.5	Pass		
	20	114	0.160563				
	30	117	0.164789	]			
	40	107	0.150704				
	50	103	0.145070				



# 6.13 Frequency stability V.S. Voltage measurement

Toot Descripement	
Test Requirement:	FCC Part2.1055(d)(1)(2)
Test Method:	FCC Part2.1055(d)(1)(2)
Limit:	2.5ppm
Test setup:	Spectrum analyzer  EUT  Att.  Variable Power Supply
Test procedure:	<ol> <li>Note: Measurement setup for testing on Antenna connector</li> <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 2(QPSK):

		LIE Band 2(Q	ronj.		
Reference F	requency: LTE Band	2(1.4MHz) Middle	e channel=18900	channel=1880.00	)MHz
Tamparatura (°C)	Power supplied	Frequency error		1.1.2.1( ( , , , , , , )	
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	63	0.033511		
25	3.80	71	0.037766	±2.5	Pass
	3.23	90	0.047872		
Reference F	requency: LTE Band	d 2(3MHz) Middle	channel=18900 c	channel=1880.00l	MHz
	Power supplied	Freque	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	82	0.043617		
25	3.80	64	0.034043	±2.5	Pass
	3.23	71	0.037766		
Reference F	requency: LTE Band	d 2(5MHz) Middle	channel=18900 c	channel=1880.00l	MHz
	Power supplied		ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	82	0.043617		
25	3.80	56	0.029787	±2.5	Pass
	3.23	96	0.051064		
Reference F	requency: LTE Band	2(10MHz) Middle	channel=18900	channel=1880.00	MHz
	Power supplied		ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	75	0.039894		
25	3.80	52	0.027660	±2.5	Pass
	3.23	94	0.050000		
Reference F	requency: LTE Band	2(15MHz) Middle	channel=18900	channel=1880.00	MHz
	Power supplied		ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	98	0.052128		
25	3.80	53	0.028191	±2.5	Pass
	3.23	74	0.039362		. 400
Reference F	requency: LTE Band			channel=1880.00	MHz
Power supplied Frequency error					
Temperature $(^{\circ}\mathbb{C})$	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	77	0.040957		
25	3.80	41	0.021809	±2.5	Pass
20	3.23	96	0.051064		. 400
	<u> </u>		0.00.00.	L	





LTE Band 2(16QAM):

		LTE Band 2(16	QAM):		
Reference F	requency: LTE Band	2(1.4MHz) Middle	e channel=18900	channel=1880.00	MHz
Tomporeture (°C)	Power supplied	Frequer	ncy error	1	D !!
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	78	0.041489		
25	3.80	45	0.023936	±2.5	Pass
	3.23	82	0.043617		
Reference F	requency: LTE Band	I 2(3MHz) Middle	channel=18900 c	hannel=1880.00 <b>l</b>	ЛHz
- (25)	Power supplied	Frequer	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	63	0.033511		
25	3.80	96	0.051064	±2.5	Pass
	3.23	74	0.039362	7	
Reference F	requency: LTE Band	2(5MHz) Middle	channel=18900 c	hannel=1880.00N	ЛHz
	Power supplied	Frequer	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	82	0.043617		
25	3.80	51	0.027128	±2.5	Pass
	3.23	64	0.034043		
Reference F	requency: LTE Band	2(10MHz) Middle	channel=18900	channel=1880.00	MHz
	Power supplied	Frequency error			
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	72	0.038298		
25	3.80	86	0.045745	±2.5	Pass
	3.23	97	0.051596	7	
Reference F	requency: LTE Band	2(15MHz) Middle	channel=18900	channel=1880.00	MHz
- (2-)	Power supplied	Frequer	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	88	0.046809		
25	3.80	43	0.022872	±2.5	Pass
	3.23	61	0.032447		
Reference F	requency: LTE Band	2(20MHz) Middle	channel=18900	channel=1880.00	MHz
_	Power supplied	Frequer	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	85	0.045213		
25	3.80	52	0.027660	±2.5	Pass
	3.23	74	0.039362		





		LTE Band 4(Q	PSK):		
Reference Fr	equency: LTE Band	4(1.4MHz) Middle	e channel=20175	channel=1732.50	MHz
Townserstons (°C)	Power supplied	Frequer	ncy error		D !!
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	73	0.042136		
25	3.80	45	0.025974	±2.5	Pass
	3.23	82	0.047330		
Reference F	requency: LTE Band	4 4(3MHz) Middle	channel=20175 c	hannel=1732.50N	ИHz
	Power supplied	Frequer	ncy error		
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	82	0.047330		
25	3.80	94	0.054257	±2.5	Pass
	3.23	65	0.037518	1	
Reference F	requency: LTE Band	4(5MHz) Middle	channel=20175 c	hannel=1732.50N	ИНz
	Power supplied	Freguer	ncy error		
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	78	0.045022		
25	3.80	84	0.048485	±2.5	Pass
	3.23	62	0.035786		
Reference F	requency: LTE Band	4(10MHz) Middle	channel=20175	channel=1732.50	MHz
	Power supplied	Frequency error			
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	95	0.054834		
25	3.80	82	0.047330	±2.5	Pass
	3.23	71	0.040981	1	
Reference F	requency: LTE Band	4(15MHz) Middle	channel=20175	channel=1732.50	MHz
	Power supplied	Frequer	ncy error		
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	84	0.048485		
25	3.80	63	0.036364	±2.5	Pass
	3.23	98	0.056566	1	
Reference F	requency: LTE Band		channel=20175	channel=1732.50	MHz
	Power supplied	Frequer	ncy error		
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	81	0.046753		
25	3.80	23	0.013276	±2.5	Pass
20				7 -2.0	





LTE Band 4(16QAM):

		LTE Band 4(16	QAM):		
Reference F	requency: LTE Band	4(1.4MHz) Middle	e channel=20175	channel=1732.50	MHz
Tomporoture (°C)	Power supplied	Frequer	ncy error	Limait (numa)	Deside
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	72	0.041558		
25	3.80	80	0.046176	±2.5	Pass
	3.23	93	0.053680		
Reference F	requency: LTE Band	d 4(3MHz) Middle	channel=20175 c	:hannel=1732.50	ИHz
T(°C)	Power supplied	Frequer	ncy error		5
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	85	0.049062		
25	3.80	53	0.030592	±2.5	Pass
	3.23	41	0.023665	1	
Reference F	requency: LTE Band	4(5MHz) Middle	channel=20175 c	hannel=1732.50	ИHz
T (°C)	Power supplied	Frequer	ncy error		- ·
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	84	0.048485		
25	3.80	95	0.054834	±2.5	Pass
	3.23	42	0.024242	]	
Reference F	requency: LTE Band	4(10MHz) Middle	channel=20175	channel=1732.50	MHz
_ (00)	Power supplied	Frequency error			
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	73	0.042136		
25	3.80	41	0.023665	±2.5	Pass
	3.23	46	0.026551	1	
Reference F	requency: LTE Band	4(15MHz) Middle	channel=20175	channel=1732.50	MHz
- (00)	Power supplied	Frequer	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	94	0.054257		
25	3.80	85	0.049062	±2.5	Pass
	3.23	57	0.032900	1	
Reference F	requency: LTE Band		channel=20175	channel=1732.50	MHz
T (°C)	Power supplied	Frequer	ncy error		5 "
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	87	0.050216		
25	3.80	63	0.036364	±2.5	Pass
	3.23	74	0.042713		





LTE Band 5(QPSK):

		LIE Band o(Q	ronj.		
Reference Fr	equency: LTE Band	5(1.4MHz) Middle	channel=20525F	requency=836.5	0MHz
Temperature (℃)	Power supplied	Freque	ncy error	Limit (ppm)	Result
remperature (C)	(Vdc)	Hz	ppm	Ешик (ррии)	Nesuit
	4.37	53	0.063359		
25	3.80	32	0.038255	±2.5	Pass
	3.23	95	0.113568		
Reference F	requency: LTE Band	5(3MHz) Middle	channel=20525Fr	equency=836.50	MHz
Temperature (°C)	Power supplied	Freque	ncy error	Limit (nnm)	Result
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	45	0.053796	±2.5	
25	3.80	68	0.081291		Pass
	3.23	31	0.037059		
Reference F	requency: LTE Band	5(5MHz) Middle	channel=20525Fr	equency=836.50	MHz
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Result
Temperature (C)	(Vdc)	Hz	ppm	Limit (ppin)	Result
	4.37	77	0.092050		
25	3.80	46	0.054991	±2.5	Pass
	3.23	54	0.064555		
Reference F	requency: LTE Band	5(10MHz) Middle	channel=20525F	requency=836.50	)MHz
Temperature (°C)	Power supplied	Freque	ncy error	Limit (ppm)	Result
Tomporature (C)	(Vdc)	Hz	ppm	Lillin (ppill)	Nesult
	4.37	67	0.080096		
25	3.80	23	0.027496	±2.5	Pass
	3.23	55	0.065750		





LTE Band 5(16QAM):

		LIL Dana 3(10	WAIVI).		
Reference Fi	requency: LTE Band	5(1.4MHz) Middle	channel=20525F	requency=836.5	0MHz
Temperature (°C)	Power supplied	Freque	ncy error	Limit (ppm)	Result
Temperature (C)	(Vdc)	Hz	ppm	Еши (ррш)	Nesuit
	4.37	59	0.070532		
25	3.80	95	0.113568	±2.5	Pass
	3.23	41	0.049014		
Reference F	requency: LTE Band	5(3MHz) Middle	channel=20525Fr	equency=836.50	MHz
Tomporatura (°C)	Power supplied	Freque	ncy error	Limit (nnm)	Result
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	47	0.056186	±2.5	Pass
25	3.80	53	0.063359		
	3.23	64	0.076509		
Reference F	requency: LTE Band	5(5MHz) Middle	channel=20525Fr	equency=836.50	MHz
Temperature (°C)	Power supplied	Frequency error		Limit (nnm)	Result
Temperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	72	0.086073		
25	3.80	66	0.078900	±2.5	Pass
	3.23	84	0.100418		
Reference F	requency: LTE Band	5(10MHz) Middle	channel=20525F	requency=836.50	OMHz
Temperature (°C)	Power supplied	Freque	ncy error	Limit (ppm)	Result
Tomporature (C)	(Vdc)	Hz	ppm	Еппі (рріп)	result
	4.37	55	0.065750		
25	3.80	81	0.096832	±2.5	Pass
	3.23	93	0.111178		





LTE Band 7(QPSK):

		LIE Ballu / (Q	ronj.		
Reference Fi	equency: LTE Band	7(5MHz) Middle c	hannel=21100 Fr	equency=2535.0	0MHz
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm	Lillit (ppill)	IVESUIL
25	4.37	83	0.032742		Pass
	3.80	91	0.035897	±2.5	
	3.23	47	0.018540		
Reference Fro	equency: LTE Band 7	(10MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Temperature (°C)	Power supplied	Frequency error		Limit (nnm)	Dogult
	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	78	0.030769	±2.5	Pass
25	3.80	64	0.025247		
	3.23	82	0.032347		
Reference Fr	equency: LTE Band 7	(15MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Result
	(Vdc)	Hz	ppm	Limit (ppm)	Kesult
25	4.37	86	0.033925	±2.5	Pass
	3.80	59	0.023274		
	3.23	92	0.036292		
Reference From	equency: LTE Band 7	(20MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Result
	(Vdc)	Hz	ppm	Lillit (ppill)	Nesult
25	4.37	98	0.038659	±2.5	Pass
	3.80	62	0.024458		
	3.23	53	0.020907		





LTE Band 7(16QAM):

		LIE Band /(10	OQAIVI).		
Reference Fr	equency: LTE Band	7(5MHz) Middle o	channel=21100 Fr	equency=2535.0	0MHz
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Result
	(Vdc)	Hz	ppm	Limit (ppin)	resuit
25	4.37	89	0.035108	±2.5	Pass
	3.80	62	0.024458		
	3.23	44	0.017357		
Reference Fre	equency: LTE Band 7	(10MHz) Middle	channel=21100 F	requency=2535.0	00MHz
T(%0)	Power supplied	Frequency error		Limit (nnm)	Result
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	87	0.034320	±2.5	Pass
25	3.80	62	0.024458		
	3.23	36	0.014201		
Reference Fre	equency: LTE Band 7	(15MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Temperature (°C)	Power supplied	Frequency error		Limit (nnm)	Popult
	(Vdc)	Hz	ppm	Limit (ppm)	Result
25	4.37	51	0.020118	±2.5	Pass
	3.80	56	0.022091		
	3.23	35	0.013807		
Reference Fre	equency: LTE Band 7	(20MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Result
	(Vdc)	Hz	ppm	Еппі (рріп)	Kesuit
25	4.37	83	0.032742	±2.5	
	3.80	48	0.018935		Pass
	3.23	94	0.037081		





LTE Band 17(QPSK):

ETE Balla 17 (4) Oity.						
Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz						
Temperature (°C)	Power supplied	Freque	ncy error	Limit (nnm)	Result	
	(Vdc)	Hz	ppm	Limit (ppm)		
	4.37	63	0.088732			
25	3.80	42	0.059155	±2.5	Pass	
	3.23	73	0.102817			
Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz						
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Result	
	(Vdc)	Hz	ppm	Еппі (рріп)	Nesult	
	4.37	98	0.138028			
25	3.80	85	0.119718	±2.5	Pass	
	3.23	64	0.090141			

## LTE Band 17(16QAM):

LTE Band 17(16QAM):							
Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz							
Temperature (°C)	Power supplied	Freque	ncy error	Limit (ppm)	Result		
	(Vdc)	Hz	ppm	Еши (ррш)	rtosuit		
25	4.37	71	0.100000	±2.5	Pass		
	3.80	43	0.060563				
	3.23	68	0.095775				
Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz							
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Result		
	(Vdc)	Hz	ppm	Limit (ppin)	Nesuit		
	4.37	72	0.101408				
25	3.80	95	0.133803	±2.5	Pass		
	3.23	64	0.090141				