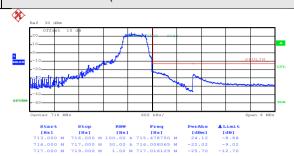


#### LTE band 12 (16QAM RB Size 3 &RB Offset 2)

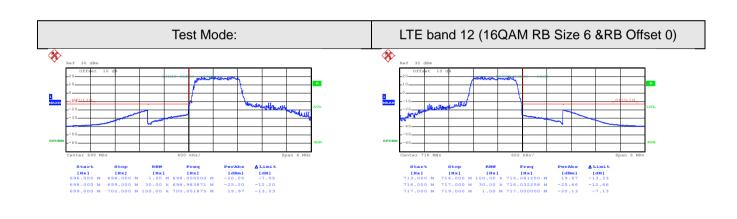


Date: 31.0CT.2016 18:11:03

Date: 31.0CT.2016 18:13:55

Lowest channel

Highest channel



Date: 31.OCT.2016 18:11:22

Date: 31.0CT.2016 18:14:15

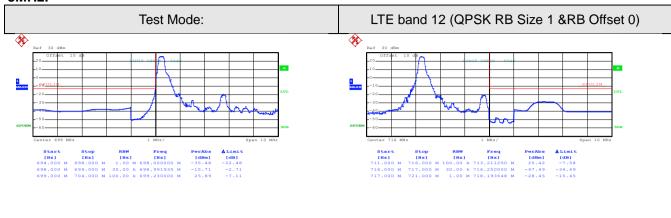
Lowest channel

Highest channel





#### 3MHz:

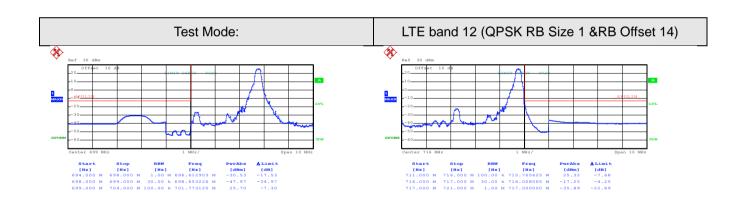


Date: 31.0CT.2016 18:15:36

Date: 31.0CT.2016 18:18:35

Lowest channel

Highest channel



Date: 31.0CT.2016 18:15:58

Date: 31.0CT.2016 18:18:53

Lowest channel

Highest channel





## 

#### LTE band 12 (QPSK RB Size 8 &RB Offset 0)

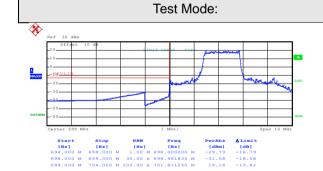


Date: 31.0CT.2016 18:16:28

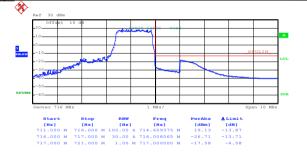
Date: 31.0CT.2016 18:19:14

Lowest channel

Highest channel



#### LTE band 12 (QPSK RB Size 8 &RB Offset 7)



Date: 31.0CT.2016 18:16:51

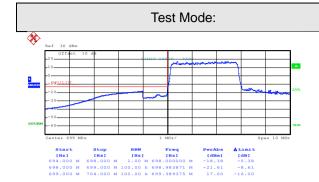
Date: 31.0CT.2016 18:19:35

Lowest channel

Highest channel







#### LTE band 12 (QPSK RB Size 15 &RB Offset 0)

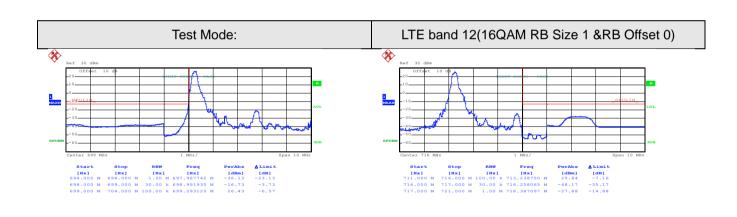


Date: 31.0CT.2016 18:17:20

Date: 31.OCT.2016 18:20:02

#### Lowest channel

#### Highest channel



Date: 31.0CT.2016 18:15:45

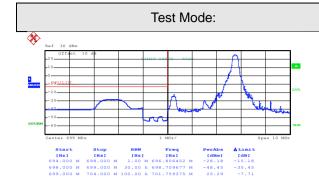
Date: 31.0CT.2016 18:18:43

Lowest channel

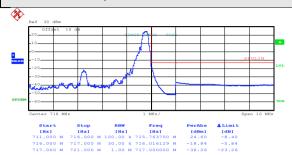
Highest channel







#### LTE band 12(16QAM RB Size 1 &RB Offset 14)

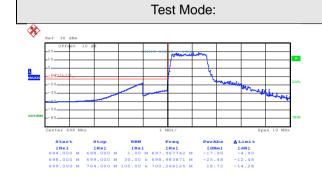


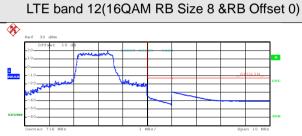
Date: 31.0CT.2016 18:16:13

Date: 31.OCT.2016 18:19:02

Lowest channel

Highest channel



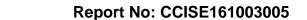


Date: 31.OCT.2016 18:16:37

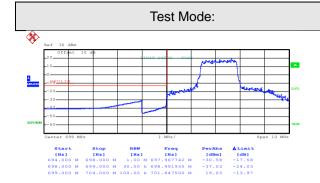
Date: 31.0CT.2016 18:19:24

Lowest channel

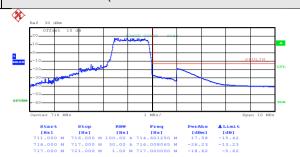
Highest channel







#### LTE band 12(16QAM RB Size 8 &RB Offset 7)

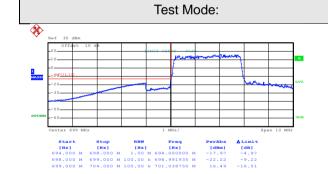


Date: 31.0CT.2016 18:17:00

Date: 31.OCT.2016 18:19:44

#### Lowest channel

Highest channel



### LTE band 12(16QAM RB Size 15 &RB Offset 0)



Date: 31.0CT.2016 18:17:27

Date: 31.0CT.2016 18:20:10

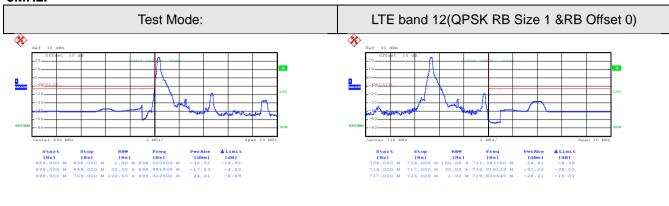
Lowest channel

Highest channel





#### 5MHz:

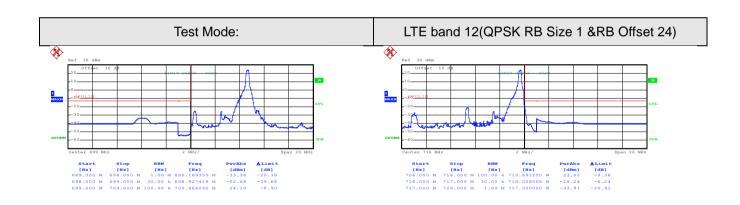


Date: 31.0CT.2016 18:21:10

Date: 31.0CT.2016 18:24:02

Lowest channel

Highest channel



Date: 31.0CT.2016 18:21:28

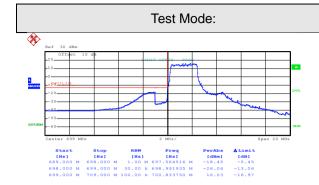
Date: 31.OCT.2016 18:24:22

Lowest channel

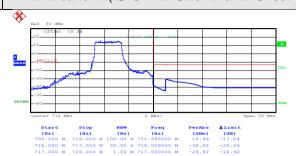
Highest channel







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

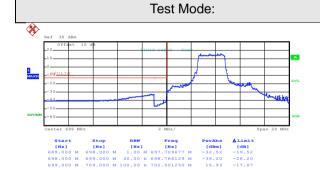


Date: 31.0CT.2016 18:22:00

Date: 31.OCT.2016 18:24:44

Lowest channel

Highest channel



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



Date: 31.0CT.2016 18:22:32

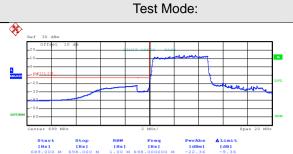
Date: 31.0CT.2016 18:25:04

Lowest channel

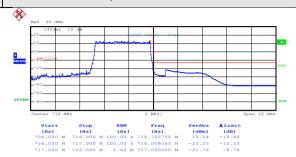
Highest channel



### <u>CCIS</u>



#### LTE band 12(QPSK RB Size 25 &RB Offset 0)

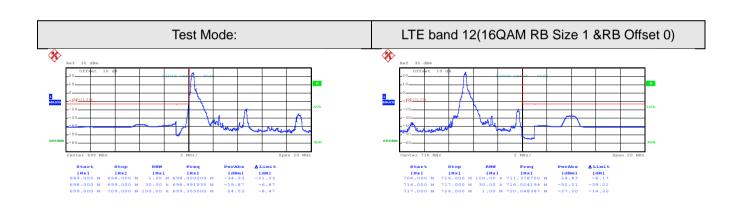


Date: 31.0CT.2016 18:23:25

Date: 31.0CT.2016 18:25:34

Lowest channel

Highest channel



Date: 31.OCT.2016 18:21:18

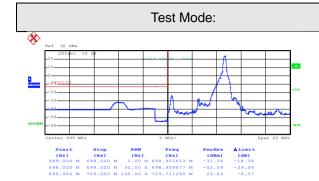
Date: 31.0CT.2016 18:24:11

Lowest channel

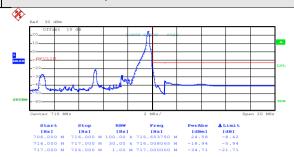
Highest channel







#### LTE band 12(16QAM RB Size 1 &RB Offset 24)

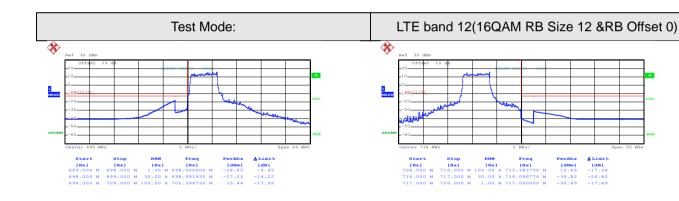


Date: 31.OCT.2016 18:21:41

Date: 31.0CT.2016 18:24:31

Lowest channel

Highest channel



Date: 31.OCT.2016 18:22:12

Date: 31.0CT.2016 18:24:52

Lowest channel

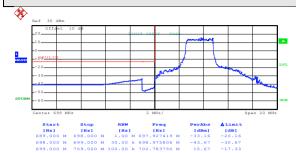
Highest channel

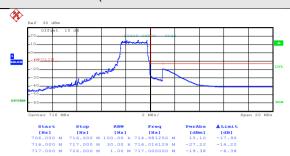






#### LTE band 12(16QAM RB Size 12 &RB Offset 11)





Date: 31.OCT.2016 18:22:53

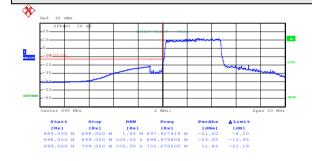
Date: 31.0CT.2016 18:25:15

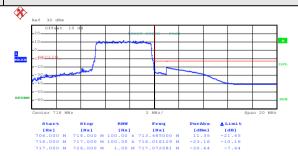
Lowest channel

Highest channel

#### Test Mode:

#### LTE band 12(16QAM RB Size 25 &RB Offset 0)





Date: 31.OCT.2016 18:23:31

Date: 31.0CT.2016 18:25:41

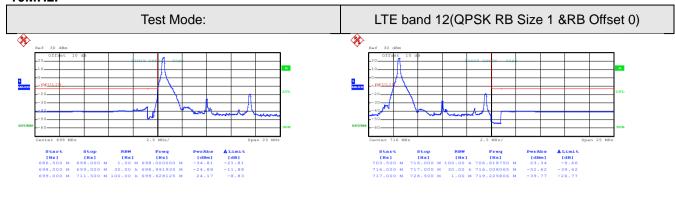
Lowest channel

Highest channel





#### 10MHz:

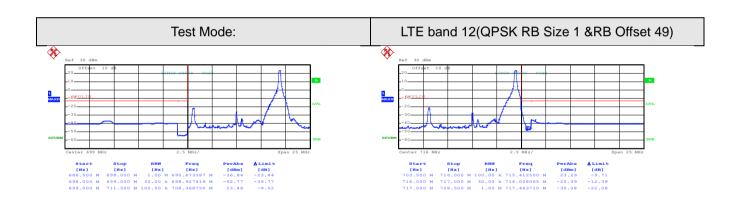


Date: 31.0CT.2016 18:27:23

Date: 31.0CT.2016 18:29:52

Lowest channel

Highest channel



Date: 31.OCT.2016 18:27:42

Date: 31.0CT.2016 18:30:11

Lowest channel

Highest channel





# 

#### LTE band 12(QPSK RB Size 25 &RB Offset 0)

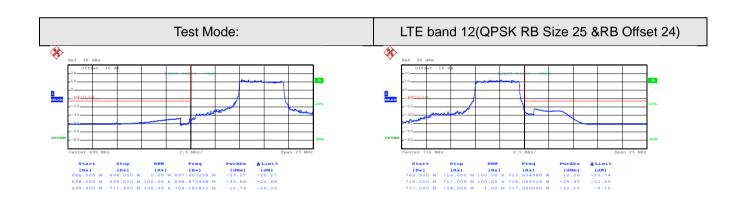


Date: 31.0CT.2016 18:28:12

Date: 31.OCT.2016 18:30:42

Lowest channel

Highest channel



Date: 31.OCT.2016 18:28:34

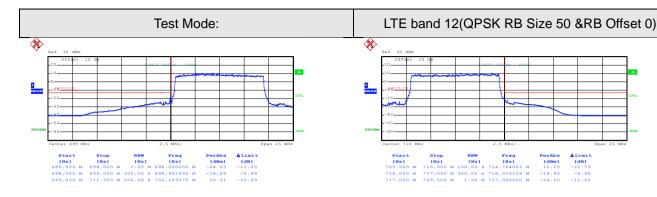
Date: 31.0CT.2016 18:31:02

Lowest channel

Highest channel





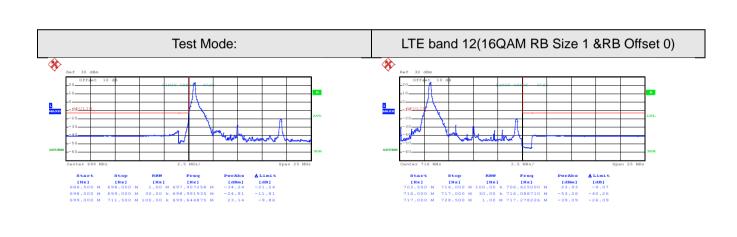


Date: 31.0CT.2016 18:29:02

Date: 31.0CT.2016 18:31:33

Lowest channel

Highest channel

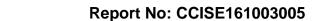


Date: 31.OCT.2016 18:27:31

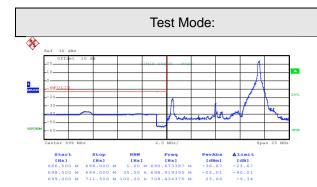
Date: 31.0CT.2016 18:30:00

Lowest channel

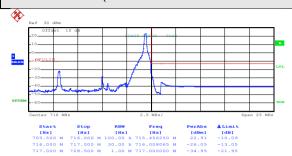
Highest channel







#### LTE band 12(16QAM RB Size 1 &RB Offset 49)

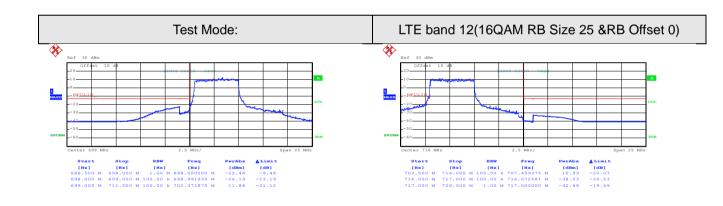


Date: 31.OCT.2016 18:27:51

Date: 31.OCT.2016 18:30:19

Lowest channel

Highest channel



Date: 31.0CT.2016 18:28:21

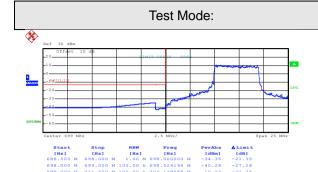
Date: 31.0CT.2016 18:30:50

Lowest channel

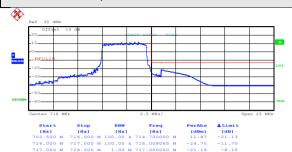
Highest channel







#### LTE band 12(16QAM RB Size 25 &RB Offset 24)

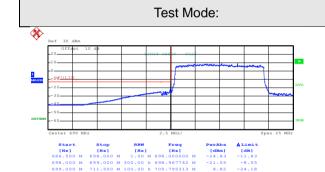


Date: 31.0CT.2016 18:28:44

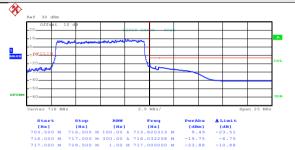
Date: 31.OCT.2016 18:31:16

Lowest channel

Highest channel







Date: 31.0CT.2016 18:29:10

Date: 31.0CT.2016 18:31:40

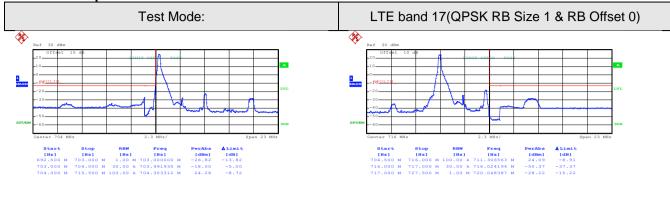
Lowest channel

Highest channel





#### LTE band 17 part:5MHz:

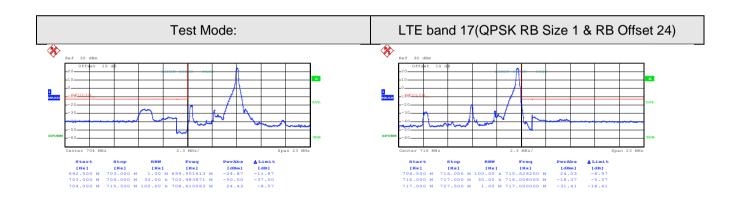


Date: 31.OCT.2016 17:52:48

Date: 31.0CT.2016 17:55:08

Lowest channel

Highest channel



Date: 31.0CT.2016 17:53:13

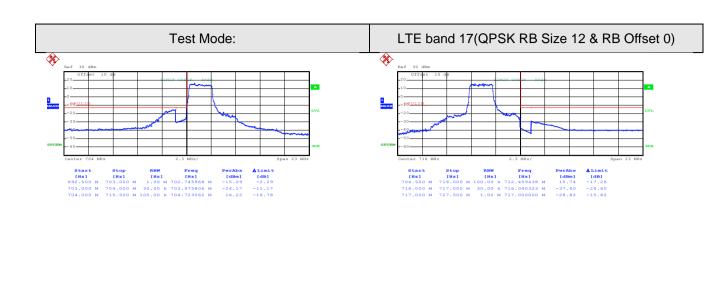
Date: 31.OCT.2016 17:55:28

Lowest channel

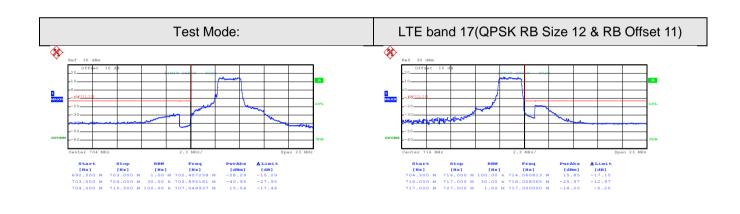
Highest channel







Highest channel



Date: 31.OCT.2016 17:53:58

Date: 31.0CT.2016 17:53:36

Date: 31.0CT.2016 17:56:14

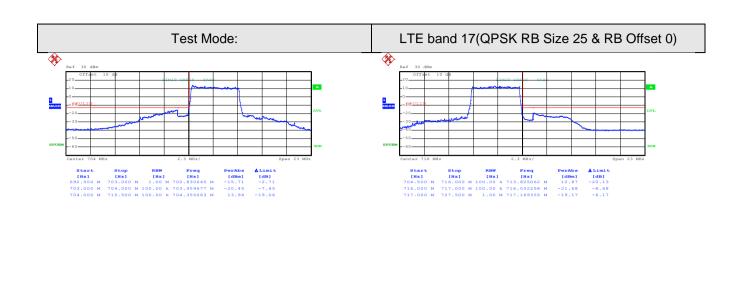
Date: 31.0CT.2016 17:55:54

Lowest channel

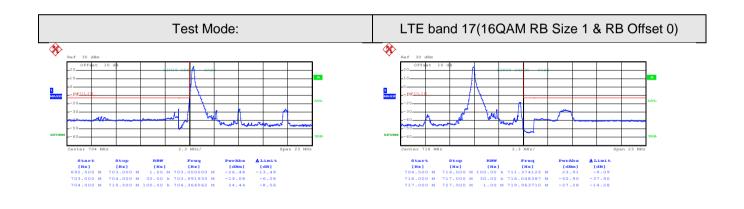
Highest channel







Highest channel



Date: 31.OCT.2016 17:52:56

Date: 31.OCT.2016 17:54:26

Date: 31.0CT.2016 17:55:15

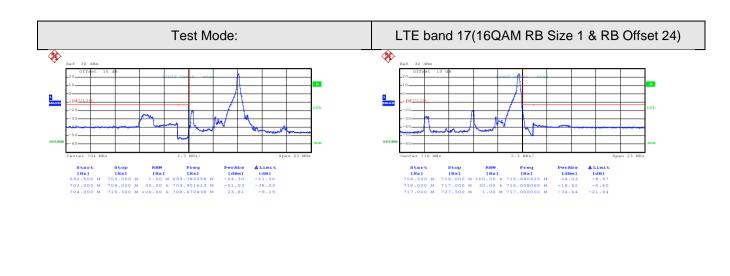
Date: 31.0CT.2016 17:56:42

Lowest channel

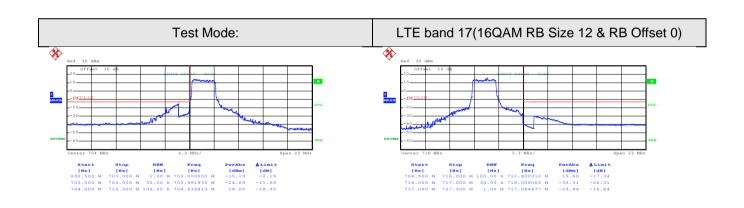
Highest channel







Highest channel



Date: 31.OCT.2016 17:53:46

Date: 31.0CT.2016 17:53:22

Date: 31.0CT.2016 17:56:02

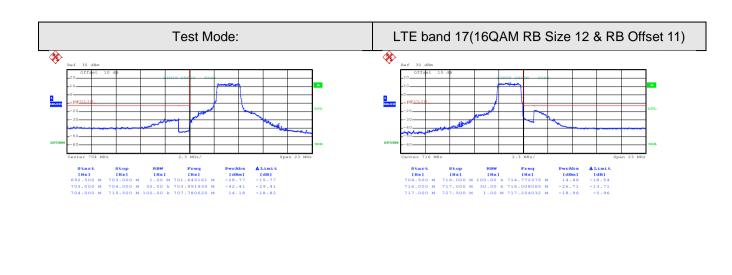
Date: 31.0CT.2016 17:55:37

Lowest channel

Highest channel





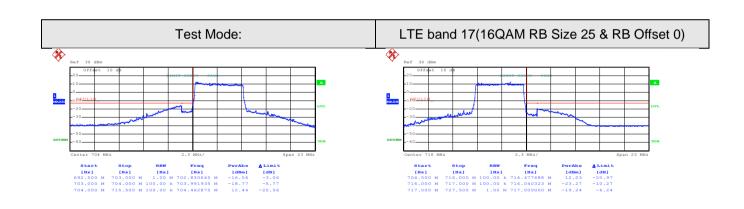


Date: 31.OCT.2016 17:54:09

Date: 31.0CT.2016 17:56:25

Lowest channel

Highest channel



Date: 31.0CT.2016 17:54:35

Date: 31.0CT.2016 17:56:49

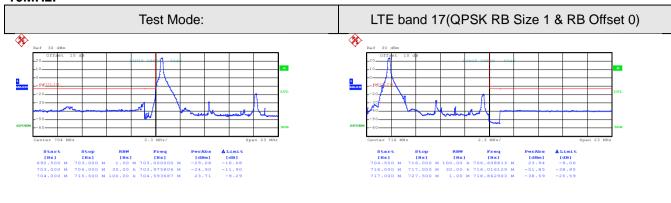
Lowest channel

Highest channel





#### 10MHz:

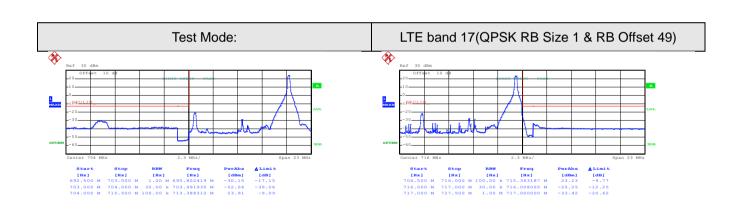


Date: 31.OCT.2016 18:00:12

Date: 31.0CT.2016 18:02:43

Lowest channel

Highest channel



Date: 31.OCT.2016 18:00:47

Date: 31.0CT.2016 18:03:03

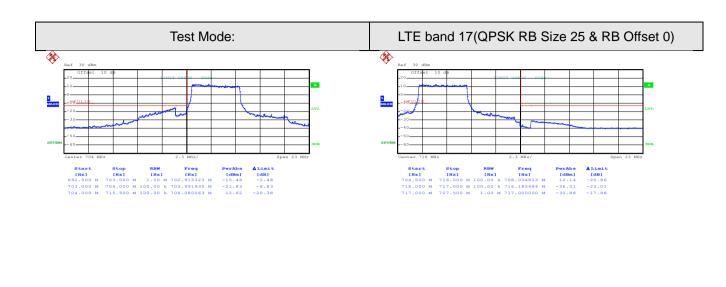
Lowest channel

Highest channel



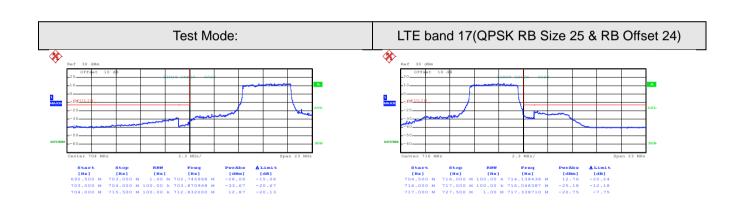


Date: 31.0CT.2016 18:01:16



Lowest channel Highest channel

Date: 31.0CT.2016 18:03:32



Date: 31.0CT.2016 18:01:36

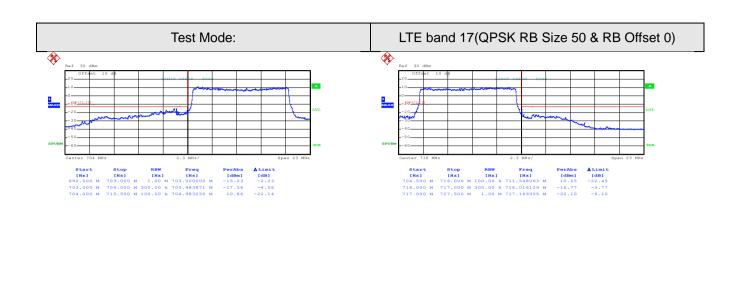
Date: 31.0CT.2016 18:03:53

Lowest channel

Highest channel

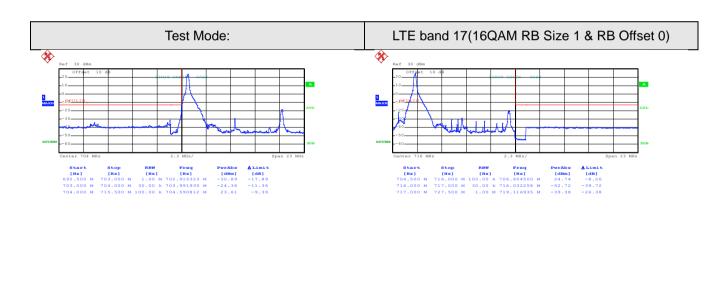






Lowest channel Highest channel

Date: 31.0CT.2016 18:04:21



Date: 31.OCT.2016 18:00:29

Date: 31.0CT.2016 18:02:02

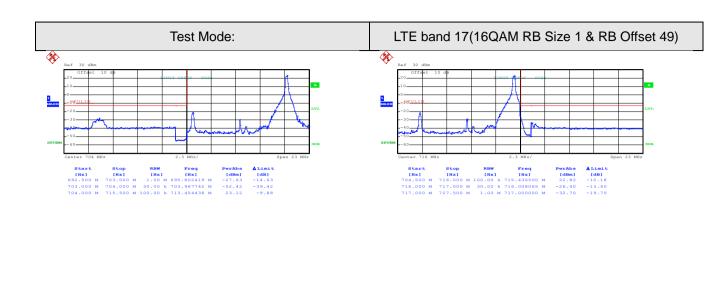
Date: 31.0CT.2016 18:02:51

Lowest channel

Highest channel





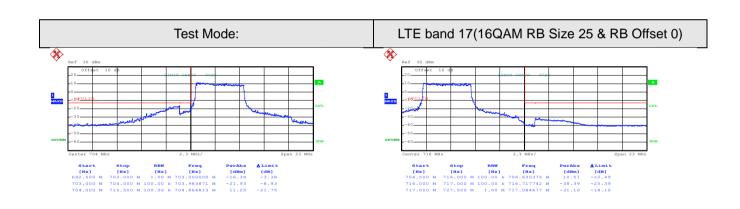


Date: 31.0CT.2016 18:00:56

Date: 31.OCT.2016 18:03:12

Lowest channel

Highest channel



Date: 31.0CT.2016 18:01:25

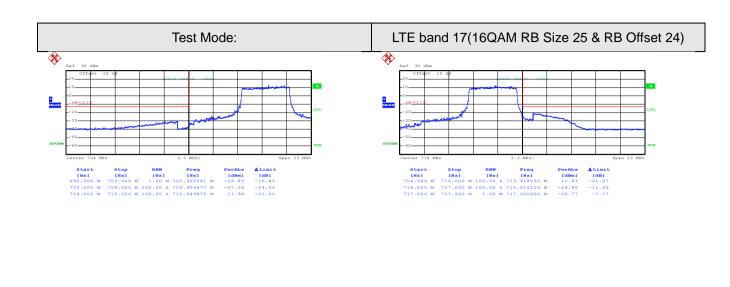
Date: 31.0CT.2016 18:03:40

Lowest channel

Highest channel

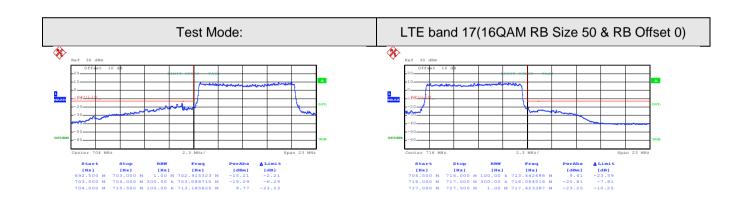






Date: 31.OCT.2016 18:01:45

Highest channel



Date: 31.0CT.2016 18:02:09

Date: 31.0CT.2016 18:04:28

Date: 31.0CT.2016 18:04:04

Lowest channel

Highest channel





#### 6.10 ERP, EIRP Measurement

<b>6.10</b> ERP, EIRP Measure	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 ERP LTE Band 7: 2W EIRP LTE Band 12: 3W ERP LTE Band 17: 3W EIRP
Test setup:	Antenna Tower  Search Antenna Tower  FF Test Receiver  Ground Plane  Above 1GHz  Antenna Tower  Horn Antenna Spectrum Analyzer  Antenna mast  Ground plane  d: distance in meters d: 3 meter  Substituted Dipole or Horn Antenna  Bi-Log Antenna or Horn Antenna  SPA  Substituted Dipole or Horn Antenna  SPA





	·
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	25.97				
1850.70	18607	QPSK	1.4	П	Н	24.49	33.00	Pass		
1850.70	18607	16QAM	1.4	Н	V	27.73	33.00	Pass		
1650.70	10007	IOQAW	1.4	П	Н	21.06				
	1.4MHz(RB size 3 & RB offset 0)									
1050.70	10607	ODSK	1.4	Н	V	27.91				
1850.70	18607	QPSK	1.4		Н	22.57	33.00	Pass		
1850.70	18607	16QAM	1.4	Н	V	28.06	33.00	Pass		
1650.70	10007	TOQAW	1.4	П	Н	22.51				
		1.	4MHz(RB s	size 6 & RB	offset 0)					
4050.70	40007	ODCK	4.4		V	26.49				
1850.70	18607	QPSK	1.4	Н	Н	22.67	22.00	Door		
1950.70	10607	16O A M	4.4	1.4		Н	V	27.12	33.00	Pass
1850.70	18607	16QAM	1.4		Н	21.84				

#### Middle channel

	Middle channel											
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result				
		1.4	4MHz(RB	size 1 & RE	3 offset 0)							
1880.00	18900	QPSK	1.4	Н	V	24.62						
1000.00	16900	QFSN	1.4	П	Н	23.39	33.00	Pass				
1880.00	18900	16QAM	1.4	Н	V	27.21	33.00	F 455				
1000.00	10900	TOQXIVI	1.4	- 11	Н	22.46						
	1.4MHz(RB size 3 & RB offset 0)											
1880.00	18900	QPSK	1.4	Н	<b>&gt;</b>	26.75						
1660.00	16900	QFSK	1.4	11	Н	23.34	33.00	Pass				
1880.00	18900	16QAM	1.4	Н	V	27.16	33.00	F 455				
1000.00	10900	TOQAW	1.4	11	Н	22.36						
		1.4	4MHz(RB	size 6 & RE	3 offset 0)							
1880.00	18900	QPSK	1.40	Н	V	26.34						
1880.00	16900	QFSK	1.40	П	Н	22.47	33.00	Page				
1880.00	18900 16QAM	16QAM	1.40	Н	<b>&gt;</b>	26.87	33.00	Pass				
1000.00	10900	TOQAW	1.40	П	Н	22.03						





**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)						
1909.30	19193	QPSK	1.4	Н	V	24.78					
1909.30	19193	QFSK	1.4	П	Н	23.31	33.00	Door			
1000 20	10102	16QAM	1.4	Н	V	26.64	33.00	Pass			
1909.30	19193	IOQAW	1.4	П	Н	23.24					
	1.4MHz(RB size 3 & RB offset 0)										
4000 20	40400	ODCK	,	1.4 H	V	25.79					
1909.30	19193	QPSK	1.4		Н	22.41	22.00	Doos			
1000 20	10102	160 AM	1.1	Н	V	26.31	33.00	Pass			
1909.30	19193	16QAM	1.4	П	Н	23.36					
			1.4MHz(RE	3 size 6 & F	RB offset 0)						
4000 20	40400	ODCK	4.4	11	V	25.69					
1909.30	19193	QPSK	1.4	Н	Н	22.04	33.00	Pass			
1000 20	10102	160AM	1.4	Ш	V	26.39					
1909.30	19193	16QAM	1.4	Н	Н	22.14					

#### 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)										
1960.00	10700	ODSK	20	Н	V	27.78					
1860.00	18700	QPSK	20	П	Н	22.04	33.00	Pass			
1860.00	18700	16QAM	20	Н	V	27.61	33.00	Fa55			
1000.00	10700	IOQAW	20	П	Н	21.94					
		2	0MHz(RB si	ze 50 & R	B offset 0)						
1860.00	18700	QPSK	20	Н	V	26.58					
1000.00	16700	QFSK	20	П	Н	21.28	33.00	Pass			
1860.00	18700	16QAM	20	Н	V	27.10	33.00	Fa55			
1000.00	10700	IOQAW	20	П	Н	21.39					
		20	MHz(RB siz	e 100 & R	B offset 0)						
1860.00	18700	QPSK	20	Н	V	24.44					
1000.00	16700	QFSK	20	П	Н	18.84	22.00	Door			
1860.00	19700	18700 16QAM	20	Н	V	25.43	33.00	Pass			
1000.00	16700	IOQAM	20	17	Н	19.55					





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	26.32						
1000.00	10900	QFSK	20	П	Н	22.15	33.00	Pass				
1880.00	18900	16QAM	20	Н	V	27.84	33.00	Fa55				
1880.00	10900	TOQAW	20	П	Н	21.36						
	20MHz(RB size 50 & RB offset 0)											
1880.00	18900	QPSK	20	Н	V	26.32						
1000.00	10900	QF3K	20	П	Н	21.47	33.00	Pass				
1880.00	18900	16QAM	20	Н	V	26.32	33.00	F 4 5 5				
1000.00	10900	IOQAIVI	20	П	Н	22.02						
		20	MHz(RB siz	e 100 & R	B offset 0)							
1000.00	10000	ODSK	20	Ш	V	24.75						
1880.00	18900	QPSK	20	Н	Н	19.78	33.00	Pass				
1880.00	18900	16QAM	20	Н	V	25.21	33.00	F 455				
1000.00	10900	IOQAW	20	17	Н	20.47						

**Highest channel** 

	nighest chaintei										
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	26.78					
1900.00	19100	QFSK	20		Н	21.49	33.00	Door			
1900.00	19100	16QAM	20 H	V	26.65	33.00	Pass				
1900.00	19100	TOQAM	20 H		Н	22.41					
		2	20MHz(RB s	size 50 &	RB offset 0	)					
1900.00	19100	QPSK		н	V	26.32	33.00				
1900.00	19100	QFSK	20		Н	22.04		Pass			
1900.00	19100	16QAM	20	Н	V	26.31	33.00	F 455			
1900.00	19100	TOQAW	20	11	Н	22.47					
		2	0MHz(RB s	ize 100 8	RB offset (	))					
1900.00	19100	QPSK	20	Н	V	24.71					
1900.00	19100	QF 5K	20	11	Н	20.05	33.00	Page			
1900.00	19100	16QAM	20	Н	V	25.97	33.00	Pass			
1900.00	19100	ΙΟΩΛΙΝΙ	20	11	Н	20.41					





#### LTE band 4 part

#### Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
		•	I.4MHz(RE	3 size 1 &	RB offset 0)						
1710.70	19957	QPSK	1.4	Н	V	26.26					
1710.70	19937	QFSK	1.4		Н	21.18	20.00	Pass			
1710.70	19957	16QAM	1.4 H	ы	V	26.64	30.00	Fa55			
1710.70	19937	IOQAW	1.4		Н	18.65					
	1.4MHz(RB size 3 & RB offset 0)										
1710 70	100F7	QPSK	1.1	Ш	V	26.41	30.00	Door			
1710.70	19957	QPSK	1.4	Н	Н	19.31					
1710.70	19957	16QAM	1.4		Н	V	26.53	30.00	Pass		
1710.70	19937	IOQAW	1.4		Н	19.10		1			
		•	1.4MHz(RE	3 size 6 &	RB offset 0)						
1710 70	10057	ODSK	4.4	Н	V	25.23					
1710.70	19957	QPSK	1.4		Н	19.18	30.00	Pass			
1710.70	19957	16QAM	1.4	Н	V	24.49					
1710.70	19907	IOQAW	1.4	П	Н	19.49					

#### Middle channel

-	Middle 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)						
1722 FO	20175	ODCK	1.4	Н	V	25.21					
1732.50	20175	QPSK	1.4	П	Н	22.03	20.00	Doos			
1732.50	20175	16QAM	1.4 H	V	25.97	30.00	Pass				
1732.50	20173	IOQAW	1.4	П	Н	18.45					
	1.4MHz(RB size 3 & RB offset 0)										
1732.50	20175	QPSK	1.4	.4 H	V	26.32	30.00				
1732.50	20175	QPSK	1.4		Н	20.01		Pass			
1732.50	20175	16QAM	1.4	Н	V	26.95	30.00	F 455			
1732.50	20175	TOQAM	1.4	- 11	Н	19.74					
		1	.4MHz(RE	3 size 6 &	RB offset 0)						
1732.50	20175	QPSK	1.4	Н	V	25.47					
1732.50	20175	UPSK	1.4	П	Н	20.03	30.00	Door			
1732.50	20175	16QAM	1.4	Н	V	24.16	30.00	Pass			
1732.50	20175	TOQAM	1.4	17	Н	20.47					





**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	Н	V	26.34				
1754.50	20393	QFSK	1.4	П	Н	22.04	30.00	Pass		
1754.30	20393	16QAM	1.4	Н	V	25.14	30.00	F d 5 5		
1754.50	20393	IOQAW	1.4	П	Н	20.01				
	1.4MHz(RB size 3 & RB offset 0)									
1754.30	20393	QPSK	1.4	Н	V	26.31	30.00	Pass		
1754.50	20393	QFSK	1.4		Н	20.58				
1754.30	20393	16QAM	1.4	Н	V	26.35		Fd55		
1754.50	20393	IOQAW	1.4	П	Н	20.41				
		•	1.4MHz(RE	3 size 6 & I	RB offset 0)					
1754 20	20202	ODCK	1.4	Н	V	25.14				
1754.30	20393	QPSK	1.4		Н	20.31	20.00	Pass		
1754.30	20393	16QAM	1.4	Н	V	24.79	30.00			
1754.30	20393	IOQAW	1.4	П	Н	20.15				

#### 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	21.35				
1720.00	20050	QPSK	20	Н	Н	19.74	20.00	Doos		
1720.00	20050	16QAM	20	Н	V	21.93	30.00	Pass		
1720.00	20050	TOQAM	20	П	Н	19.62				
		20MHz	(RB size 50	& RB offse	et 0)					
1720.00	20050	QPSK	20	Н	V	23.52				
1720.00	20050	QFSK	20	П	Н	18.29	30.00	Pass		
1720.00	20050	16QAM	20	Н	V	22.03	30.00	Pa55		
1720.00	20050	TOQAM	20		Н	18.43				
		20MHz(	RB size 100	& RB offs	et 0)					
1720.00	20050	QPSK	20	Н	V	18.50				
1720.00	20050	QFSK	20	П	Н	19.57	20.00	Door		
1720.00	20050	16QAM	AM 20	Н	V	19.70	30.00	Pass		
1720.00	20000	TOQAM	20	17	Н	18.62				



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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)									
1732.50	20175	QPSK	20	Н	V	21.24	30.00		
1732.50	20175	QFSN	20	П	Н	20.01		Dace	
1732.50	20175	16QAM	20	Н	V	21.36		Pass	
1732.50	20175	TOQAM	20	П	Н	19.41			
		20	MHz(RB siz	ze 50 & RE	3 offset 0)				
1732.50	20175	5 QPSK	K 20	Н	V	23.71	30.00		
1732.50	20175	QFSK	20	П	Н	19.36		Pass	
1732.50	20175	16QAM	20	Н	V	22.45	30.00	F d 5 5	
1732.50	20175	TOQAM	20	П	Н	19.43			
		20	MHz(RB siz	e 100 & RI	B offset 0)				
1732.50	20175	QPSK	20	Н	V	19.41			
1732.50	20175	QFSN	20	П	Н	20.03	20.00	Pass	
1732.50	20175 16QAM	16QAM	16QAM 20	Н	V	19.46	30.00	F a 5 5	
1732.30	20173	IUQAW	20	11	Н	18.34			

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	21.34			
1745.00	20300	QFSK	20	П	Н	20.49	30.00	Pass	
1745.00	20300	16QAM	20 H	Н	V	21.78	30.00	Pa55	
1743.00	20300	TOQAM	20	!!	Н	19.34			
	20MHz(RB size 50 & RB offset 0)								
1745.00	20300	QPSK	20	20	Н	V	23.46		
1745.00	20300	QFSK			Н	19.78	30.00	Pass	
1745.00	20300	16QAM	20	20	Н	V	22.46	30.00	F 455
1743.00	20300	TOQAM	20	11	Н	20.45			
	20MHz(RB size 100 & RB offset 0)								
1745.00	1745.00 20300 QPSK	200 ODSK	20	Н	V	20.47			
1745.00		20	П	Н	20.36	30.00	Pass		
1745.00	20300 16QAM	16QAM	20	Н	V	19.78	30.00	газэ	
1745.00	20300	TOQAM		11	Н	18.65			





#### LTE band 5 part

#### Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result		
	1.4MHz(RB size 1 & RB offset 0)									
824.70	70 20407 QPSK	1.4	Н	V	22.49					
624.70	20407	QFSK	1.4 H	17	Н	23.14	38.45	Doos		
824.70	20407	16QAM		ш	V	21.91	38.45	Pass		
024.70	20407	TOQAW		"	Н	22.80				
		•	1.4MHz(RI	B size 3&	RB offset 0)					
824.70	20407	QPSK	1 1	Н	V	22.82		Pass		
624.70	20407	QPSK	1.4	17	Н	23.22	38.45			
824.70	20407	16QAM	1.4	н	V	22.35				
024.70	20407	IOQAW	1.4		Н	22.01				
		•	1.4MHz(RI	B size 6&	RB offset 0)					
924.70	824.70 20407 QPSK 1.4	4.4	Ш	V	22.68					
624.70		QPSK	1.4	Н	Н	22.14	38.45	Door		
924.70	324.70 20407 16QAM 1.4	160014	1.1	ш	V	21.54		Pass		
024.70		1.4	.4 H	Н	22.10					

#### Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result								
	1.4MHz(RB size 1 & RB offset 0)															
836.50	20525	QPSK	1.4	Н	V	22.36										
636.50	20525	QF3K	1.4	Н	23.46	20.45	Door									
836.50	20525	16QAM	1.4	1.4 H	V	21.45	38.45	Pass								
636.50	20323	IOQAW	1.4	П	Н	22.19										
		1	.4MHz(RI	B size 3&	RB offset 0)											
836.50	20525	QPSK	1 /	Н	V	22.75										
630.50	20323	QFSK	1.4		Н	23.64	38.45	Pass								
836.50	20525	16QAM	1.4	Н	V	22.15	30.43									
630.50	20323	IOQAW	1.4	1.4	1.4	1.4	1.4	1.4	1.4	Н	Н	22.46				
		1	.4MHz(RI	3 size 6&	RB offset 0)											
926 50	00505	20525	20525	20525	20525 ODCK	ODCK	4.4	ODCK 4.4		V	22.15					
836.50	20525	QPSK	1.4	Н	Н	22.49	20.45	Door								
936 50	20525 16QAM	1.1	Н	V	21.34	38.45	Pass									
836.50		IOQAW	IOQAM	ToQAM	TOQAM	ToQAM	16QAM	16QAM	TOQAM	ToQAM	ToQAM	1.4	[7]	Н	22.15	





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result						
	1.4MHz(RB size 1 & RB offset 0)													
848.30	20643	QPSK	1.4	Н	V	22.41								
040.30	20043	QFSK	1.4 H	П	Н	23.45	38.45	Pass						
848.30	20643	16QAM		V	21.78	30.43	Fa55							
646.30	20043	IOQAIVI	1.4	П	Н	22.16								
			1.4MHz(RE	3 size 3& F	RB offset 0)									
040.20	20642	QPSK	ODCK	1.1	Н	V	22.46							
848.30	20643		1.4	1.4	1.4	1.4	П	Н	23.61	38.45	Pass			
848.30	20642	16O A M	4.4	1 1	ы	V	22.74	30.40	Pass					
040.30	20643	20643	20643	IOQAM	16QAM	1.4	1.4	Н	Н	22.02				
			1.4MHz(RE	3 size 6& F	RB offset 0)									
040.20	848.30 20643 QPSK 1.4	20643 QPSK	20042	20642	20042	ODCK	ODCK	1.4	QPSK 1.4	4 11	V	22.46		
848.30			QPSK 1.4	QPSK	QP3N 1.4	1.4	1.4			1.4 H	Н	22.13	20.45	Door
949.20	20642	20042 400414	4.4	Н	V	21.47	38.45	Pass						
848.30	20643 16QAM 1.4	П	Н	22.16										

#### 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)									
920.00	20450	ODSK	10	Ш	V	22.81	20.45			
829.00	20450	QPSK	10	Н	Н	21.03		Doos		
920.00	20450	16O A M	10	ы	V	22.11	38.45	Pass		
829.00	20450	16QAM	10	Н	Н	21.99				
		10MHz	(RB size 25	& RB offse	et 0)					
920.00	20450	ODSK	10	Н	V	22.76				
829.00	20450	QPSK	10	П	Н	21.13	38.45	Pass		
920.00	20450	16QAM	40	10	Н	V	22.34	30.43	Pass	
829.00	20430	TOQAM	10	П	Н	21.16				
	10MHz(RB size 50& RB offset 0)									
920.00	000.00	40	10	10	Ш	V	23.48			
829.00	20450	QPSK 10			Н	Н	21.67	20 AE	Door	
829.00	20450 4004M	16QAM	OAM 10	Н	V	21.20	38.45	Pass		
029.00	20450	IOQAW	10	П	Н	21.95				



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# Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result	
		1	0MHz(RB si	ze 1 & RB	offset 0)				
926 50	20525	ODSK	10	Ш	V	22.34			
836.50	20525	QPSK	10	H	Н	21.64	38.45	Pass	
926 50	20525	16O A M	10	Н	V	22.76	30.43	Fa55	
836.50	20525	16QAM	10	П	Н	22.04			
10MHz(RB size 25& RB offset 0)									
926 50		10	ОН	V	22.46				
836.50	20525	QPSK	10	П	Н	21.34	20 15	Door	
836.50	20525	16QAM	10	Н	V	22.25	38.45	Pass	
636.30	20020	TOQAM	10	П	Н	21.78			
		10	MHz(RB siz	ze 50 & RE	3 offset 0)				
926 50	20525	QPSK	10	Н	V	23.36			
836.50	20525	QFSK	10	П	Н	21.41	20 15	Door	
836.50 20525	16QAM	10	Н	V	21.02	38.45	Pass		
030.50	20020	TOQAW	10	17	Н	21.58			

High channel

nigh channel										
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result		
	10MHz(RB size 1 & RB offset 0)									
844.00	20600	QPSK	10	Н	V	22.51				
044.00	20000	QFSK	10	П	Н	21.34	20 15	Pass		
844.00	20600	16QAM	10	Н	V	22.67	38.45	rass		
044.00	20000	TOQAM	10	11	Н	22.58				
	10MHz(RB size 25& RB offset 0)									
844.00	20600	QPSK	10	Н	V	22.64				
044.00	20000	QFSK	10	П	Н	21.37	38.45	Pass		
844.00	20600	16QAM	10	ы	V	22.49	30.43	rass		
044.00	20000	TOQAM	10	Н	Н	21.94				
		10	MHz(RB siz	e 50 & RE	3 offset 0)					
844.00	20600	QPSK	10	Н	V	23.34				
044.00	20000	QF5K	10	П	Н	21.45	20 15	Door		
844.00 20600	20600	16OAM	10	Н	V	21.06	38.45	Pass		
044.00	844.00 20600	IOQAM	6QAM 10	17	Н	21.34				





# 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 & I	RB offset 0)					
2502.50	20775	QPSK	5	Н	V	24.40				
2502.50	20773	QFSK	5	П	Н	20.33	33.00	Pass		
2502.50	20775	16QAM	5	Н	V	21.98	33.00	Fa55		
2502.50	20773	IOQAW	5	П	Н	20.87				
	5MHz(RB size 12& RB offset 0)									
2502.50	20775	ODCK	<u> </u>	_	1.1	V	20.65			
2502.50	20775	QPSK	5	Н	Н	21.72	22.00	Door		
2502.50	20775	160AM	E	Н	V	21.59	33.00	Pass		
2502.50	20775	16QAM	5	П	Н	20.57				
			5MHz(RB	size 25&	RB offset 0)					
2502.50	20775	ODCK	_	1.1	V	23.19				
2502.50	20775	QPSK	5	Н	Н	20.44	22.00	Door		
2502.50	20775	160AM		Н	V	22.69	33.00	Pass		
2502.50	20775	16QAM	5		Н	20.71				

#### Middle channel

	Middle Charinei											
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	24.15						
2535.00	21100	QPSK	5	Г	Н	20.36	33.00	Pass				
2535.00	21100	16QAM	5	Н	V	21.64	33.00	Fa55				
2555.00	21100	IOQAW	5	П	Н	20.71						
	5MHz(RB size 12& RB offset 0)											
2535.00	21100	QPSK	5	Н	V	20.45						
2555.00	21100	QFSK	5	П	Н	21.34	33.00	Pass				
2535.00	21100	16QAM	5	Н	V	21.67	33.00	Fa55				
2555.00	21100	IOQAW	5		Н	20.41						
		Ę	MHz(RB	size 25&	RB offset 0)							
2525.00	21100	ODCK	E	Ш	V	23.36						
2535.00	21100	QPSK	5	Н	Н	20.48	22.00	Door				
2525.00	21100	16OAM	16QAM 5	ш	Н				V	22.48	33.00	Pass
2535.00	21100	IOQAM		п	Н	20.16						





**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	21.45				
2567.50	21423	QFSK	3	П	Н	20.12	33.00	Pass		
2567.50	21425	16O A M	5	Н	V	21.41	33.00	Fa55		
2567.50	21423	16QAM	3	П	Н	20.13				
	5MHz(RB size 12& RB offset 0)									
2567.50	24.425	ODSK	,	5	Н	V	20.64			
2567.50	21425	QPSK	3	П	Н	21.87	33.00	Pass		
2567.50	21425	16QAM	5	Н	V	21.30	33.00	Fa55		
2567.50	21423	IOQAW	3	П	Н	20.61				
			5MHz(RB	size 25& R	B offset 0)					
2507.50	04.405	ODCK	-	1.1	V	23.31				
2567.50	21425	QPSK	5	Н	Н	21.04	22.00	Door		
2567.50	21.125	160 AM	5		V	22.68	33.00	Pass		
2567.50	21425	16QAM	ס	Н	Н	20.13				

## 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	23.70				
2510.00	20000	QF5K	20	П	Н	19.92	33.00	Door		
2510.00	20850	16QAM	20	Н	V	21.59	33.00	Pass		
2510.00	20000	IOQAW	20	П	Н	20.82				
	20MHz(RB size 50 & RB offset 0)									
2510.00		20	Н	V	23.07					
2510.00	20850	QPSK	20	П	Н	20.67	33.00	Pass		
2510.00	20850	16QAM	20	Н	V	23.55	33.00	F a 5 5		
2310.00	20030	TOQAIVI	20	11	Н	21.82				
		20MHz(	RB size 100	& RB offs	et 0)					
2510.00	20850	QPSK	20	Н	V	21.84				
2510.00	20030	QF 5K	20	20	20	П	Н	21.00	33.00	Pass
2510.00	0.00 20850 16QAM 20	20	Н	V	21.38	33.00	F a 5 5			
2510.00	20000	IOQAW	20	20	П	Н	20.24			



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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	23.15					
2555.00	21100	QFSN	20	П	Н	20.03	33.00	Pass			
2535.00	21100	16QAM	20	Н	V	21.45	33.00	F 455			
2555.00	21100	TOQAM	20	П	Н	20.78					
20MHz(RB size 50 & RB offset 0)											
2535.00	0505.00	QPSK	20	Н	V	23.36					
2555.00	21100	QFSN	20	П	Н	20.41	33.00	Pass			
2535.00	21100	16QAM	20	Н	V	23.36	33.00	rass			
2333.00	21100	TOQAW	20	!!	Н	21.78					
		20	MHz(RB siz	e 100 & RI	3 offset 0)						
2535.00	21100	QPSK	20	Н	V	21.02					
2555.00	21100	QFSK	20	П	Н	22.46	33.00	Pass			
2535.00	2535.00 21100 16QAM	20	Н	<b>V</b>	21.34	33.00	га55				
2555.00	21100	TOQAW	20	11	Н	22.18					

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	24250	ODSK	20	Н	V	22.78			
2560.00	21350	QPSK	20		Н	21.45	22.00	Door	
2560.00	21350	16QAM	20	Н	V	21.34	33.00	Pass	
2500.00	21330	TOQAW	20		Н	20.69			
	20MHz(RB size 50 & RB offset 0)								
2560.00	21350	QPSK	20	Н	V	23.21			
2560.00	21330	QFSK	20	П	Н	20.42	33.00	Pass	
2560.00	21350	16QAM	20	Ι	V	23.25	33.00	F 455	
2500.00	21330	TOQAW	20		Н	21.49			
		2	20MHz(RB s	ize 100 8	RB offset 0	))			
2560.00	21350	QPSK	20	Н	V	21.41			
2560.00	21330	QFSK	20	Г	Н	22.16	22.00	Door	
2560.00	21350	16QAM	20	Н	V	21.24	33.00	Pass	
2500.00	21330	IOQAW	20	П	Н	22.06			





# LTE band 12 part

## Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
		1	I.4MHz(RE	3 size 1 &	RB offset 0)			
699.70	23017	QPSK	1.4	Н	V	24.58		
699.70	23017	QFSK	1.4	П	Н	22.18	34.77	Door
699.70	23017	16QAM	1.4	Н	V	24.04	34.77	Fa55
699.70	23017	IOQAW	1.4	П	Н	23.00		
			1.4MHz(RI	B size 3&	RB offset 0)			
600.70	22047	QPSK	4.4	Н	V	24.70		Poor
699.70	23017	QPSK	1.4	П	Н	22.45	34.77	
699.70	23017	16QAM	1.4	Н	V	24.55	34.77	Fa55
699.70	23017	IOQAW	1.4	П	Н	23.33		
			1.4MHz(RI	B size 6&	RB offset 0)			
600.70	22017	QPSK	1.1	Н	V	24.51		
699.70	23017	QPSK	1.4	П	Н	22.53	24 77	Door
600.70 22017	23017	16QAM	1.1	Н	V	24.48	34.77	Pass
699.70	23017	IOQAW	1.4	П	Н	22.66		

#### Middle channel

-	Middle Channel										
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result			
1.4MHz(RB size 1 & RB offset 0)											
707.50	707.50 23095 QPSK 1.4 H V 24.46										
707.50	23095	QPSK	1.4	П	Н	22.31	24.77	Door			
707.50	23095	16QAM	1.4	Н	V	24.67	34.77	Pass			
707.50	23093	IOQAW	1.4	П	Н	23.15					
	1.4MHz(RB size 3& RB offset 0)										
707.50	707.50 22005 0001/	QPSK	1.1	Н	V	24.15					
707.50	23095	QPSK	1.4		Н	22.67	34.77	Pass			
707.50	23095	16QAM	1 /		н	V	24.31	34.11	F 455		
707.50	23093	TOQAM	1.4	П	Н	23.58					
		1	.4MHz(RI	B size 6&	RB offset 0)						
707.50	23095	QPSK	1.1	Н	V	24.67					
707.50	23095	QPSK	1.4	П	Н	22.31	7 24 77	Door			
707.50	707.50 23095 16QAM	1.4	н	V	24.67	34.77	Pass				
707.50	23093	16QAM	1.4	П	Н	22.48					





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result		
			1.4MHz(RE	size 1 & l	RB offset 0)					
715.30	23173	QPSK	1.4	Н	V	24.67				
715.30	23173	QFSK	1.4	П	Н	23.02	34.77	Pass		
715.30	23173	16QAM	1.4	Н	V	24.63	34.77	Fa55		
715.30	23173	IOQAW	1.4	П	Н	23.37				
	1.4MHz(RB size 3& RB offset 0)									
715.30	22172	QPSK	<u> </u>	1.4	Н	V	24.45			
715.30	23173	QPSK	1.4	П	Н	22.64	34.77	Pass		
715.30	23173	16QAM	1.4	Н	V	24.15	34.77	Fa55		
715.30	23173	IOQAW	1.4	П	Н	23.34				
			1.4MHz(RE	3 size 6& F	RB offset 0)					
715.20	22472	ODSK	1.4	Ш	V	24.79				
715.30	23173	QPSK	1.4 H	"	Н	22.46	24.77	Pass		
715.30	22172	160 AM	1.4	Н	V	24.31	34.77			
7 15.30	23173	16QAM	1.4	П	Н	22.69				

# 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)									
704.00	22060	ODSK	10	Ш	V	24.27				
704.00	23060	QPSK	10	Н	Н	22.44	24 77	Doos		
704.00	22060	16O A M	10	Ш	V	24.04	34.77	Pass		
704.00	23060	16QAM	10	Н	Н	22.77				
	10MHz(RB size 25& RB offset 0)									
704.00	22060	ODSK	10	Н	V	24.39				
704.00	23060	QPSK	10	П	Н	22.57	34.77	Pass		
704.00	23060	16QAM	10	Н	V	24.59	34.77	Pa55		
704.00	23000	TOQAM	10		Н	23.72				
		10MHz	(RB size 50	& RB offse	et 0)					
704.00	23060	QPSK	10	Н	V	22.67				
704.00	23000	QFSK	10	П	Н	22.69	7 24 77	Door		
704.00	04.00 23060 16QAM	10	Н	V	23.17	34.77	Pass			
704.00	23000	TOQAM	10	17	Н	22.31				



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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)									
707.50	23095	QPSK	10	Н	V	24.16				
707.50	23095	QFSN	10	П	Н	22.34	34.77	Pass		
707.50	23095	16QAM	10	Н	V	24.79	34.77	F 455		
707.50	23093	TOQAM	10	П	Н	22.06				
	10MHz(RB size 25& RB offset 0)									
707.50	23095	QPSK	10	Н	V	24.16		Pass		
707.50	23095	QFSN	10	П	Н	22.76	34.77			
707.50	23095	16QAM	10	Н	V	24.13	34.77	F 455		
707.50	23093	IOQAW	10	П	Н	23.64				
		10	MHz(RB siz	ze 50 & RE	3 offset 0)					
707.50	23095	QPSK	10	Н	V	22.12				
707.50	23095	QPSK	10	П	Н	22.47	24 77	Door		
707.50	23095	16QAM	10	Ш	V	23.16	34.77	Pass		
707.50	23090	TOQAW	10	10 H V 23.36		23.36				

High channel

High channel										
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	ERP(dBm )	Limit (dBm)	Result		
	10MHz(RB size 1 & RB offset 0)									
711.00	23130	QPSK	10	Н	V	24.16				
711.00	23130	QFSK	10	П	Н	22.34	34.77	Pass		
711.00	23130	16QAM	10	Н	V	24.78	34.77	F 455		
711.00	23130	TOQAM	10	11	Н	22.36				
			10MHz(RB	size 25& RB	offset 0)					
711.00	23130	QPSK	10	Н	V	24.12				
711.00	23130	QFSK	10	П	Н	22.32	34.77	Pass		
711.00	23130	16QAM	10	Н	V	24.63	34.77	F 455		
711.00	23130	TOQAM	10	П	Н	22.67				
			10MHz(RB s	size 50 & RE	3 offset 0)					
711.00	23130	QPSK	10	Н	V	22.46				
711.00	23130	QFSN	10	П	Н	21.85	24 77	Door		
711.00	23130	16QAM	10	Н	V	23.03	34.77	Pass		
711.00	23130	IOQAM	10	17	Н	23.46				





# 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	24.95				
706.50	23733	QFSK	5	П	Н	24.16	34.77	Pass		
706.50	23755	16QAM	5	Н	V	24.78	34.77	Fa55		
706.50	23733	IOQAW	5	П	Н	21.81				
			5MHz(RB	size 12 8	RB offset 0)					
706.50	23755	QPSK	5	Н	V	21.84	34.77	Pass		
706.50	23733	QFSK	5		Н	20.04				
706.50	23755	16QAM	5	Н	V	22.13				
700.50	23733	TOQAW	5	!!	Н	25.21				
		!	5MHz(RB	size 25 8	RB offset 0)					
706.50	23755	QPSK	5	Н	V	24.55				
700.50	23700	QF3N	5	П	Н	23.02	34.77	Pass		
706.50	23755	16QAM	5	5 H	V	25.07	34.11	rass		
700.50	20700	IOQAW	3	11	Н	23.58				

#### 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	23.62				
710.00	23790	QFSK	5	11	Н	22.45	34.77	Pass		
710.00	23790	16QAM	5	Н	V	24.97	34.77	F a 5 5		
710.00	23790	IOQAW	5	П	Н	21.71				
			5MHz(RE	3 size 12 &	RB offset 0)					
710.00	22700	QPSK	T	Н	V	21.64	34.77	Pass		
710.00	23790	QPSK	5	П	Н	20.58				
710.00	23790	16QAM	5	Н	V	22.42				
710.00	23/90	IOQAW	5	П	Н	25.36				
			5MHz(RE	3 size 25 &	RB offset 0)					
740.00	22700	ODCK	_	1.1	V	24.15				
710.00	23790	QPSK	5	Н	Н	23.67	34.77	Pass		
710.00	23790	16QAM	5	Н	V	25.46	34.77	rass		
710.00	23790	TOQAM	3	П	Н	23.34				





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	ODSK	5	Н	V	23.34			
713.50	23825	QPSK	5	П	Н	22.15	34.77	Pass	
712.50	22025	160 A M	5	Н	V	24.79	34.77	Fa55	
713.50	23825	16QAM	5	П	Н	21.54			
	5MHz(RB size 12 & RB offset 0)								
712.50	22025	ODSK		_	5 H	V	21.64		
713.50	23825	QPSK	5	П	Н	20.03	24.77	Desa	
713.50	23825	16QAM	5	Н	V	22.41	34.77	Pass	
713.50	23020	IOQAW	5	П	Н	25.47			
			5MHz(RB	size 25 &	RB offset 0)				
740.50	22025	ODCK	_	1.1	V	24.19			
713.50	23825	QPSK	5	Н	Н	23.47	04.77	Door	
712.50	22025	160 AM	E	ы	V	25.49	34.77	Pass	
713.50	23825	16QAM	3	5 H	Н	23.31			

#### 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	25.12				
709.00	23760	QFSK	10		Н	23.52	34.77	Pass		
700.00	23780	16QAM	10	Н	V	25.03	34.77	F a 5 5		
709.00	23700	IOQAW	10	П	Н	24.29				
		•	10MHz(R	B size 258	RB offset 0)					
700.00	22700	QPSK	10	Н	V	24.66				
709.00	23780	QFSK	10	П	Н	23.10	34.77	Pass		
709.00	23780	16QAM	10	) Н	V	26.60	34.77			
709.00	23760	TOQAM	10		Н	24.28				
		•	10MHz(R	B size 508	RB offset 0)					
709.00	23780	QPSK	10	Н	V	24.68				
709.00	23/00	QF3N	10	П	Н	23.02	34.77	Pass		
709.00	23780	16QAM	10	Н	V	24.89	34.77	F d S S		
703.00	23700	IOQAW	10	11	Н	23.82				



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	Н	V	25.13				
7 10.00	23790	QFSK	10	П	Н	23.34	34.77	Page		
710.00	23790	16QAM	10	Н	V	25.69	34.77	Pass		
7 10.00	23790	IOQAW	10		Н	24.12				
			10MHz(R	B size 25&	RB offset 0)					
710.00	23790	QPSK	10	10	10	10 H	V	24.31		
7 10.00	23/90	QFSK	10	П	Н	23.41	34.77	Pass		
710.00	23790	16QAM	10	Н	V	25.79				
7 10.00	23790	IOQAW	10	IU H	Н	23.34				
			10MHz(R	B size 50&	RB offset 0)					
740.00	22700	ODCK	40		V	23.47				
710.00	23790	QPSK	10	Н	Н	23.16	24.77	Door		
710.00	22700	160AM	10	Ш	V	24.15	34.77	Pass		
710.00	23790	16QAM	10	Н	Н	23.71				

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	25.78				
711.00	23000	QFSK	10	П	Н	23.31	34.77	Pass		
711.00	23800	16QAM	10	Н	V	25.16	34.77	F455		
711.00	23000	TOQAW	10	П	Н	24.78				
	10MHz(RB size 25& RB offset 0)									
711.00	23800	QPSK	10 H		V	24.13				
711.00	23000	QFSK		10	П	Н	23.32	34.77	Pass	
711.00	22000	16QAM	10	Н	V	25.46	34.77	Fa55		
711.00	23800	IOQAW	10	П	Н	23.30				
		•	10MHz(R	B size 50&	RB offset 0)					
711.00	22000	ODSK	10	Н	V	23.49				
711.00	23800	QPSK	10		Н	23.15	34.77	Page		
711.00	23800	16QAM	10	10 H	V	24.71	34.77	Pass		
711.00	23000	IOQAW	10		Н	23.46	-			





# **6.11** Field strength of spurious radiation measurement

Test Requireme	ent: 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, LTE Band 12 and LTE Band 17: -13dBm, LTE Band 7: -25dBm
Test setup:	Below 1GHz  Antenna Tower  Search Antenna  RF Test Receiver  Ground Plane  Above 1GHz  Antenna Tower  Horn Antenna  Spectrum Analyzer  Antenna Tower
	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).</li> </ol>

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

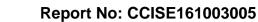
# Measurement Data (worst case):

# **Below 1GHz:**

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

# **Above 1GHz**

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





LTE band 2 part:

1.4MHz(RB size 1 & RB offset 0) for QPSK									
Frequency (MHz)	Spurious		Limit (dBm)	Result					
r requericy (Wir 12)	Polarization	Level (dBm)	Lillit (dDill)	Nesuit					
Lowest									
3701.40	Vertical	-34.17							
5552.10	V	-39.68							
7402.00	V	-36.95	12.00	Door					
3701.40	Horizontal	-39.13	-13.00	Pass					
5552.10	Н	-38.95							
7402.00	Н	-38.11							
Middle									
3760.00	Vertical	-35.27							
5640.00	V	-39.48							
7520.00	V	-40.57	42.00	Daga					
3760.00	Horizontal	-37.06	-13.00	Pass					
5640.00	Н	-41.58							
7520.00	Н	-39.72							
		Highest							
3816.60	Vertical	-39.56							
5724.90	V	-45.45							
7633.20	V	-39.79	40.00	Dana					
3816.60	Horizontal	-41.62	-13.00	Pass					
5724.90	Н	-43.69							
7633.20	Н	-41.55							





3MHz(RB size 1 & RB offset 0) for QPSK									
- (411)	<u>.                                      </u>	Emission		5 "					
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result					
Lowest									
3703.00	Vertical	-45.87							
5554.50	V	-46.31							
7406.00	V	-40.02	42.00	Door					
3703.00	Horizontal	-46.32	-13.00	Pass					
5554.50	Н	-43.15							
7406.00	Н	-40.78							
		Middle	<u> </u>	·					
3760.00	Vertical	-36.65		Pass					
5640.00	V	-45.87							
7520.00	V	-40.15	-13.00						
3760.00	Horizontal	-38.94	-13.00	Pass					
5640.00	Н	-42.25							
7520.00	Н	-40.78							
		Highest		·					
3817.00	Vertical	-40.78							
5725.50	V	-42.36							
7634.00	V	-41.27	12.00	Door					
3817.00	Horizontal	-42.69	-13.00	Pass					
5725.50	Н	-42.18							
7634.00	Н	-37.49							





		e 1 & RB offset 0) fo	or QPSK	
Frequency (MHz)	Spurious		Limit (dBm)	Result
1 , , ,	Polarization	Level (dBm)	, ,	
		Lowest		T
3705.00	Vertical	-35.64		
5557.50	V	-40.15		
7410.00	V	-36.32	-13.00	Pass
3705.00	Horizontal	-39.75	-13.00	Pass
5557.50	Н	-37.41		
7410.00	Н	-38.58		
<u>.</u>		Middle		·
3760.00	Vertical	-35.61		
5640.00	V	-39.46	40.00	
7520.00	V	-40.15		Door
3760.00	Horizontal	-37.16	-13.00	Pass
5640.00	Н	-41.02		
7520.00	Н	-39.76		
<u>.</u>		Highest		
3815.00	Vertical	-39.54		
5722.50	V	-45.16		
7630.00	V	-39.74	-13.00	Doca
3815.00	Horizontal	-42.15		Pass
5722.50	Н	-43.36		
7630.00	Н	-41.79		





	10MHz(RB size 1 & RB offset 0) for QPSK				
	Spurious Emission				
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result	
		Lowest			
3710.00	Vertical	-46.37			
5565.00	V	-46.25			
7420.00	V	-40.05	-13.00	Pass	
3710.00	Horizontal	-47.94	-13.00	F 455	
5565.00	Н	-43.36			
7420.00	Н	-40.05			
		Middle			
3760.00	Vertical	-36.64		Pass	
5640.00	V	-45.78			
7520.00	V	-40.16	-13.00		
3760.00	Horizontal	-38.80	-13.00	Pass	
5640.00	Н	-42.12			
7520.00	Н	-40.37			
		Highest			
3810.00	Vertical	-40.75			
5715.00	V	-42.61			
7620.00	V	-40.07	-13.00	Pass	
3810.00	Horizontal	-40.98		Pass	
5715.00	Н	-43.36			
7620.00	Н	-38.79			





	15MHz(RB	size 1 & RB offset 0	) for QPSK	
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
r requericy (Wir 12)	Polarization	Level (dBm)	Limit (abin)	Nesuit
		Lowest		
3715.00	Vertical	-36.45		
5572.50	V	-41.78		
7430.00	V	-35.94	-13.00	Pass
3715.00	Horizontal	-40.05	-13.00	Pass
5572.50	Н	-37.96		
7430.00	Н	-37.58		l
		Middle		
3760.00	Vertical	-35.61		Pass
5640.00	V	-36.34		
7520.00	V	-40.14	40.00	
3760.00	Horizontal	-36.98	-13.00	
5640.00	Н	-42.25		
7520.00	Н	-40.78		
		Highest		
3805.00	Vertical	-40.02		
5707.50	V	-45.63		
7610.00	V	-39.62	-13.00	Dava
3805.00	Horizontal	-42.25		Pass
5707.50	Н	-43.32		
7610.00	Н	-41.25	1	





	20MHz(RB size 1 & RB offset 0) for QPSK					
	Spurious Emission					
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result		
		Lowest				
3720.00	Vertical	-47.35				
5580.00	V	-45.90				
7440.00	V	-39.33	42.00	Desa		
3720.00	Horizontal	-47.06	-13.00	Pass		
5580.00	Н	-44.57				
7440.00	Н	-39.59				
		Middle				
3760.00	Vertical	-34.78				
5640.00	V	-44.18				
7520.00	V	-39.85	12.00	Door		
3760.00	Horizontal	-38.02	-13.00	Pass		
5640.00	Н	-42.70				
7520.00	Н	-40.19				
		Highest				
3800.00	Vertical	-39.66				
5700.00	V	-43.28				
7600.00	V	-39.02	-13.00	Door		
3800.00	Horizontal	-39.20		Pass		
5700.00	Н	-44.40				
7600.00	Н	-38.49				





#### LTE Band 4 Part:

		LIE Band 4 Part: ze 1 & RB offset 0) f	or QPSK	
Fraguenov (MUz)	Spurious Emission		Limit (dDm)	Result
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3421.40	Vertical	-39.02		
5132.10	V	-34.21	1	
6842.80	V	-37.65	-13.00	Pass
3421.40	Horizontal	-41.61	-13.00	Pass
5132.10	Н	-38.15		
6842.80	Н	-36.19		
		Middle		
3465.00	Vertical	-40.51		
5197.50	V	-30.40		
6930.00	V	-36.87	42.00	Door
3465.00	Horizontal	-38.53	-13.00	Pass
5197.50	Н	-33.60		
6930.00	Н	-36.55		
		Highest		
3508.60	Vertical	-43.89		
5262.90	V	-34.69		
7017.20	V	-38.15	-13.00	Door
3508.60	Horizontal	-39.27		Pass
5262.90	Н	-27.62		
7017.20	Н	-38.73		





	3MHz(RB siz	e 1 & RB offset 0) fo	or QPSK	
Fragues av (MIII-)	<del>-</del>	Emission		Decult
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3423.00	Vertical	-42.16		
5134.50	V	-36.45		
6846.00	V	-42.78	40.00	Dana
3423.00	Horizontal	-43.36	-13.00	Pass
5134.50	Н	-34.67		
6846.00	Н	-38.61		
		Middle		
3465.00	Vertical	-42.78		Pass
5197.50	V	-30.05		
6930.00	V	-40.78	42.00	
3465.00	Horizontal	-37.61	-13.00	
5197.50	Н	-33.36		
6930.00	Н	-36.46		
		Highest		
3507.00	Vertical	-38.79		
5260.50	V	-34.16		
7014.00	V	-40.25	-13.00	Dees
3507.00	Horizontal	-42.36		Pass
5260.50	Н	-34.78		
7014.00	Н	-41.74		





5MHz(RB size 1 & RB offset 0) for QPSK				
Fragues av (MHz)	Spurious Emission			Dogult
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3425.00	Vertical	-39.62		
5137.50	V	-34.51		
6850.00	V	-37.63	42.00	Door
3425.00	Horizontal	-42.21	-13.00	Pass
5137.50	Н	-38.67		
6850.00	Н	-36.49		
<u>.</u>		Middle		•
3465.00	Vertical	-41.25		
5197.50	V	-31.48		
6930.00	V	-36.97	-13.00	Pass
3465.00	Horizontal	-38.54	-13.00	Pass
5197.50	Н	-34.15		
6930.00	Н	-36.78		
<u>.</u>		Highest		•
3505.00	Vertical	-43.15		
5257.50	V	-34.96		
7010.00	V	-38.46	-13.00	Pass
3505.00	Horizontal	-39.61		Pass
5257.50	Н	-28.32		
7010.00	Н	-38.47		





	10MHz(RB si	ze 1 & RB offset 0) f	or QPSK	
Frequency (MHz)		Emission	Limit (dBm)	Result
Frequency (MHz)	Polarization	Level (dBm)	LIIIII (UDIII)	Result
		Lowest		
3430.00	Vertical	-41.27		
5145.00	V	-34.62		
6860.00	V	-42.21	-13.00	Pass
3430.00	Horizontal	-43.67	-13.00	Pass
5145.00	Н	-34.67		
6860.00	Н	-38.51		
<u> </u>		Middle		
3465.00	Vertical	-41.24		
5197.50	V	-29.87		
6930.00	V	-40.34	42.00	Door
3465.00	Horizontal	-37.85	-13.00	Pass
5197.50	Н	-32.65		
6930.00	Н	-36.48		
<u>.</u>		Highest		
3500.00	Vertical	-39.74		
5250.00	V	-34.25		
7000.00	V	-42.13	-13.00	Doo-
3500.00	Horizontal	-41.70		Pass
5250.00	Н	-34.61		
7000.00	Н	-40.05		





	15MHz(RB s	ize 1 & RB offset 0)	for QPSK	
F (AALL)		Emission		D II
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3435.00	Vertical	-40.15		
5152.50	V	-34.67		
6870.00	V	-37.69	-13.00	Door
3435.00	Horizontal	-42.16	-13.00	Pass
5152.50	Н	-38.79		
6870.00	Н	-35.78	]	
<u>.</u>		Middle		
3465.00	Vertical	-42.16		
5197.50	V	-31.45		
6930.00	V	-36.57	42.00	Pass
3465.00	Horizontal	-38.64	-13.00	
5197.50	Н	-34.61		
6930.00	Н	-36.78		
<u>.</u>		Highest		
3495.00	Vertical	-42.18		
5242.50	V	-36.32		
6990.00	V	-38.57	42.00	Pass
3495.00	Horizontal	-39.54	-13.00	F d 5 5
5242.50	Н	-29.67		
6990.00	Н	-38.21		





	20MHz(RB s	ize 1 & RB offset 0	) for QPSK	
Frequency (MHz)	Spurious	Spurious Emission		Result
r requericy (ivii iz)	Polarization	Level (dBm)	Limit (dBm)	Resuit
		Lowest		
3440.00	Vertical	-40.04		
5160.00	V	-33.17		
6880.00	V	-40.20	42.00	Dana
3440.00	Horizontal	-43.89	-13.00	Pass
5160.00	Н	-34.69		
6880.00	Н	-38.15		
		Middle		
3465.00	Vertical	-42.21		
5197.50	V	-27.86		
6930.00	V	-40.18	42.00	Daga
3465.00	Horizontal	-39.60	-13.00	Pass
5197.50	Н	-31.07		
6930.00	Н	-36.46		
		Highest		
3490.00	Vertical	-39.33		
5235.00	V	-34.78		
6980.00	V	-41.37	-13.00	Daga
3490.00	Horizontal	-41.89		Pass
5235.00	Н	-34.30	]	
6980.00	Н	-40.08	]	





# LTE Band 5 Part:

	1.4MHZ(RB S	ize 1 & RB offset 0)	TOT QPSK	
	Spurious Emission			
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
1649.40	Vertical	-50.82		
2474.10	V	-47.56		
3298.80	V	-44.45	-13	Door
1649.40	Horizontal	-57.08	-13	Pass
2474.10	Н	-44.91		
3298.80	Н	-42.88		
		Middle		
1673.00	Vertical	-53.14		
2509.50	V	-42.87		
3346.00	V	-44.43	12	Pass
1673.00	Horizontal	-60.82	-13	Pass
2509.50	Н	-45.76		
3346.00	Н	-47.94		
		Highest		
1696.60	Vertical	-50.90		
2544.90	V	-41.72	1	
3393.20	V	-39.71	10	Dese
1696.60	Horizontal	-57.70	-13	Pass
2544.90	Н	-39.42	1	
3393.20	Н	-45.46		





3MHz(RB size 1 & RB offset 0) for QPSK				
Гто су (МД I=)	Spurious Emission			D !!
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
1651.00	Vertical	-52.34		
2476.50	V	-40.01		
3302.00	V	-42.67	-13	Pass
1651.00	Horizontal	-58.64	-13	F d 5 5
2476.50	Н	-42.13		
3302.00	Н	-46.87		
		Middle		
1673.00	Vertical	-50.34		
2509.50	V	-39.62		
3346.00	V	-40.21	-13	Pass
1673.00	Horizontal	-58.79	-13	Pass
2509.50	Н	-40.02		
3346.00	Н	-45.16		
		Highest		
1695.00	Vertical	-53.64		
2542.50	V	-46.78		
3390.00	V	-38.61	10	Dane
1695.00	Horizontal	-61.45	-13	Pass
2542.50	Н	-45.21		
3390.00	Н	-42.37		





	5MHz(RB siz	ze 1 & RB offset 0) fo	or QPSK	
	Spurious	Emission		
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
<u>.</u>		Lowest		
1653.00	Vertical	-49.23		
2479.50	V	-46.32		Pass
3306.00	V	-44.12	13	
1653.00	Horizontal	-58.27	-13	
2479.50	Н	-45.31		
3306.00	Н	-42.36		
<u>.</u>		Middle		
1673.00	Vertical	-53.34		Pass
2509.50	V	-42.12		
3346.00	V	-44.76	13	
1673.00	Horizontal	-60.25	-13	
2509.50	Н	-45.79		
3346.00	Н	-47.31		
		Highest		
1693.00	Vertical	-50.48		
2539.50	V	-41.34		
3386.00	V	-40.03	]	Pass
1693.00	Horizontal	-58.64	-13	Fa55
2539.50	Н	-40.16		
3386.00	Н	-45.79		





10MHz(RB size 1 & RB offset 0) for QPSK				
Fragues ov (MHz)	Spurious Emission		Linnit (dDor)	Danult
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
1658.00	Vertical	-51.39		
2487.00	V	-39.69		
3316.00	V	-43.49	-13	Pass
1658.00	Horizontal	-58.39	-13	F 455
2487.00	Н	-40.03		
3316.00	Н	-47.06		
		Middle		
1673.00	Vertical	-50.67		Pass
2509.50	V	-38.14		
3346.00	V	-40.64	-13	
1673.00	Horizontal	-58.64	-13	F 455
2509.50	Н	-39.06		
3346.00	Н	-46.07		
		Highest		
1688.00	Vertical	-54.53		
2532.00	V	-45.04		
3376.00	V	-37.08	-13	Pass
1688.00	Horizontal	-62.84		Fa55
2532.00	Н	-44.55		
3376.00	Н	-43.70	1	





#### LTE Band 7 Part:

5MHz(RB size 1 & RB offset 0) for QPSK					
Frequency (MHz)	Spurious	Emission	Limit (dBm)	Result	
1 requericy (IVII 12)	Polarization	Level (dBm)	Limit (dbin)	Nesuit	
		Lowest			
5005.00	Vertical	-36.35			
7507.50	V	-32.20			
10010.00	V	-38.99	-25.00	Pass	
5005.00	Horizontal	-40.95	-25.00	Pass	
7507.50	Н	-35.47			
10010.00	Н	-39.48			
		Middle			
5070.00	Vertical	-36.62			
7605.00	V	-39.40		Pass	
10140.00	V	-38.27	35.00		
5070.00	Horizontal	-44.03	-25.00	F455	
7605.00	Н	-27.56			
10140.00	Н	-39.10			
		Highest			
5135.00	Vertical	-38.74			
7702.50	V	-34.47			
10270.00	V	-35.33	-25.00	Pass	
5135.00	Horizontal	-40.97		Pass	
7702.50	Н	-28.15			
10270.00	Н	-38.53			





	10MHz(RB si	ize 1 & RB offset 0) f	for QPSK	
Fraguenov (MHz)	Spurious Emission			Result
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
5010.00	Vertical	-38.24		
7515.00	V	-42.61		
10020.00	V	-38.46	-25.00	Pass
5010.00	Horizontal	-44.73	-25.00	Pass
7515.00	Н	-42.36		
10020.00	Н	-40.21		
		Middle		
5070.00	Vertical	-38.67		Pass
7605.00	V	-37.34		
10140.00	V	-36.91	-25.00	
5070.00	Horizontal	-48.21	-25.00	
7605.00	Н	-41.53		
10140.00	Н	-39.74		
		Highest		
5130.00	Vertical	-36.41		
7695.00	V	-40.15		
10260.00	V	-36.45	-25.00	Pass
5130.00	Horizontal	-45.78		Pass
7695.00	Н	-40.16		
10260.00	Н	-39.78		





	15MHz(RB s	size 1 & RB offset 0	) for QPSK	
Fraguency (MHz)	Spurious Emission			D !!
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
5015.00	Vertical	-35.62		
7522.50	V	-32.25		
10030.00	V	-39.78	05.00	D
5015.00	Horizontal	-70.15	-25.00	Pass
7522.50	Н	-35.34		
10030.00	Н	-39.67		
		Middle		
5070.00	Vertical	-35.25		Pass
7605.00	V	-39.76		
10140.00	V	-38.15	05.00	
5070.00	Horizontal	-43.36	-25.00	
7605.00	Н	-27.58		
10140.00	Н	-39.65		
<u> </u>		Highest		
5125.00	Vertical	-37.81		
7687.50	V	-34.56		
10250.00	V	-35.67	25.00	Desa
5125.00	Horizontal	-40.31	-25.00	Pass
7687.50	Н	-28.76		
10250.00	Н	-39.67		





	20MHz(RB s	ize 1 & RB offset 0	) for QPSK	
F (MIL)	Spurious Emission			5
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
5020.00	Vertical	-39.63		
7530.00	V	-40.63		
10040.00	V	-39.56	25.00	Door
5020.00	Horizontal	-45.11	-25.00	Pass
7530.00	Н	-41.49		
10040.00	Н	-40.73		
		Middle		
5070.00	Vertical	-38.19		Pass
7605.00	V	-39.02		
10140.00	V	-36.82	25.00	
5070.00	Horizontal	-48.53	-25.00	
7605.00	Н	-41.83		
10140.00	Н	-39.89		
		Highest		
5120.00	Vertical	-36.95		
7680.00	V	-40.75		
10240.00	V	-36.02	-25.00	Door
5120.00	Horizontal	-45.74		Pass
7680.00	Н	-40.29		
10240.00	Н	-39.22		





# LTE Band 12 Part:

	1.4MHz(RB s	ize 1 & RB offset 0)	for QPSK	
	Spurious Emission			
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
·		Lowest		
1399.40	Vertical	-37.66		
2099.10	V	-37.91		
2798.80	V	-41.31	-13	Door
1399.40	Horizontal	-43.33	-13	Pass
2099.10	Н	-36.87		
2798.80	Н	-45.22		
·		Middle		
1415.00	Vertical	-40.10		Pass
2122.50	V	-44.05		
2830.00	V	-41.25	-13	
1415.00	Horizontal	-46.71	-13	Fd55
2122.50	Н	-40.71		
2830.00	Н	-42.62		
·		Highest		
1430.60	Vertical	-41.39		
2145.90	V	-48.71		
2861.20	V	-41.19	10	Door
1430.60	Horizontal	-44.53	-13	Pass
2145.90	Н	-45.29		
2861.20	Н	-41.93	1	





	3MHz(RB si	ze 1 & RB offset 0) f	or QPSK	
_ (0.01.)	Spurious Emission			
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
1401.00	Vertical	-36.64		
2101.50	V	-42.15		
2802.00	V	-42.78	-13	Door
1401.00	Horizontal	-42.19	-13	Pass
2101.50	Н	-46.78		
2802.00	Н	-43.31		
<u>.</u>		Middle		
1415.00	Vertical	-40.78		Pass
2122.50	V	-45.63		
2830.00	V	-42.16	-13	
1415.00	Horizontal	-45.97	-13	
2122.50	Н	-50.43		
2830.00	Н	-41.25		
		Highest		
1429.00	Vertical	-37.65		
2143.50	V	-47.21		
2858.00	V	-44.21	-13	Pass
1429.00	Horizontal	-41.92	-13	rass
2143.50	Н	-51.63		
2858.00	Н	-46.97	]	





	5MHz(RB siz	e 1 & RB offset 0) fe	or QPSK	
	Spurious I	Emission		
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
1403.00	Vertical	-38.64		
2104.50	V	-37.25		
2806.00	V	-42.21	42	Pass
1403.00	Horizontal	-43.64	-13	
2104.50	Н	-37.81		
2806.00	Н	-46.31		
		Middle		
1415.00	Vertical	-41.57		Pass
2122.50	V	-44.31		
2830.00	V	-42.95	-13	
1415.00	Horizontal	-46.32	-13	
2122.50	Н	-40.15		
2830.00	Н	-43.62		
		Highest		
1427.00	Vertical	-42.34		
2410.50	V	-45.71		
2854.00	V	-41.23	-13	Pass
1427.00	Horizontal	-44.32		Fa55
2410.50	Н	-45.97		
2854.00	Н	-42.05	1	





		ze 1 & RB offset 0)	for QPSK	1
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
1 requeries (ivii iz)	Polarization	Level (dBm)	Limit (dBin)	result
		Lowest		
1408.00	Vertical	-35.05		
2112.00	V	-41.89		
2816.00	V	-41.76	-13	Pass
1408.00	Horizontal	-41.70	-13	Fd55
2112.00	Н	-47.85		
2816.00	Н	-43.19		
		Middle		
1415.00	Vertical	-39.61		Dogo
2122.50	V	-45.02		
2830.00	V	-41.25	- 13	
1415.00	Horizontal	-44.64	-13	Pass
2122.50	Н	-49.93		
2830.00	Н	-41.92		
		Highest		
1422.00	Vertical	-37.14		
2133.00	V	-47.47	]	
2844.00	V	-44.24	13	Door
1422.00	Horizontal	-41.19		Pass
2133.00	Н	-51.47		
2844.00	Н	-45.30		





#### LTE Band 17 Part:

5MHz(RB size 1 & RB offset 0) for QPSK							
Spurious Emission							
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result			
		Lowest					
1413.00	Vertical	-35.86					
2119.50	V	-39.81					
2826.00	V	-42.24	-13.00	Pass			
1413.00	Horizontal	-41.52	-13.00	Pass			
2119.50	Н	-41.01					
2826.00	Н	-43.32					
		Middle					
1420.00	Vertical	-39.45					
2130.00	V	-38.74		Door			
2840.00	V	-42.00	42.00				
1420.00	Horizontal	-44.80	-13.00	Pass			
2130.00	Н	-39.87					
2840.00	Н	-43.59					
		Highest					
1427.00	Vertical	-36.11					
2140.50	V	-42.97					
2854.00	V	-44.36	12.00	Door			
1427.00	Horizontal	-41.19	-13.00	Pass			
2140.50	Н	-41.58					
2854.00	Н	-45.41					





10MHz(RB size 1 & RB offset 0) for QPSK							
Fraguency (MHz)	Spurious	Emission	Limait (dDma)	Dogult			
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result			
Lowest							
1418.00	Vertical	-37.73					
2127.00	V	-39.93					
2836.00	V	-41.87	-13.00	Pass			
1418.00	Horizontal	-38.64	-13.00	Pass			
2127.00	Н	-40.15					
2836.00	Н	-42.31					
		Middle		·			
1420.00	Vertical	-37.43		Pass			
2130.00	V	-42.80					
2840.00	V	-40.53	-13.00				
1420.00	Horizontal	-42.34	-13.00				
2130.00	Н	-42.58					
2840.00	Н	-42.84					
		Highest					
1422.00	Vertical	-39.53					
2133.00	V	-41.42					
2844.00	V	-41.54	12.00	Door			
1422.00	Horizontal	-44.11	-13.00	Pass			
2133.00	Н	-42.37					
2844.00	Н	-42.38					



# 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  EUT  Att.  Variable Power Supply
	Note: Measurement setup for testing on Antenna connector
Test procedure:	<ol> <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℃ operating frequency as reference frequency.</li> <li>Turn EUT off and set the chamber temperature to -30℃. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> </ol>
	6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached
Test Instruments:	Refer to section 5.8 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	All three channels of all modulations have been tested, but only the worst channel and the worst modulation show in this test item.

Measurement Data (the worst channel):





LTE Band 2(QPSK):

		LTE Band	2(QPSK):		
Reference Fr	requency: LTE Band	2(1.4MHz) N	Middle channel=18900	channel=1880.00	OMHz
Power supplied	Temperature (°C)	Fr	equency error	Limit (ppm)	Result
(Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Resuit
	-30	196	0.104255		
	-20	123	0.065426		
	-10	165	0.087766		
	0	144	0.076596		
3.80	10	122	0.064894	±2.5	Pass
0.00	20	132	0.070213		1 400
	30	101	0.053723		
	40	184	0.097872		
	50	171	0.090957		
Potoronoo F			liddle channel=18900		L
	requency. LTE band	· · · · ·			IVII IZ
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result
(Vdc)	, ,	Hz	ppm	- (1-1- /	
	-30	152	0.080851		
	-20	123	0.065426		
	-10	136	0.072340		
	0	120	0.063830		
3.80	10	144	0.076596	±2.5	Pass
	20	107	0.056915		
	30	165	0.087766		
	40	108	0.057447		
	50	174	0.092553		
Reference F	requency: LTE Band	2(5MHz) M	liddle channel=18900	channel=1880.00	MHz
Dance and all (V/da)	Tomorous (°C)	Fr	equency error	Lineit (mmm)	Danielt
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	156	0.082979		
	-20	123	0.065426		
	-10	177	0.094149	_	
	0	144	0.076596		_
3.80	10	160	0.085106	±2.5	Pass
	20	155	0.082447		
	30	150	0.079787	_	
	40	104	0.055319	_	
	50	132	0.070213		





Reference F	requency: LTE Band	2(10MHz) N	fiddle channel=18900	channel=1880.00	MHz
Power supplied (Vdc)	Temperature (°C)		Frequency error		Result
i ower supplied (vdc)	. , ,	Hz	ppm	Limit (ppm)	Nesuit
	-30	181	0.096277		
	-20	123	0.065426		
	-10	165	0.087766		
	0	104	0.055319		
3.80	10	171	0.090957	±2.5	Pass
	20	146	0.077660		
	30	100	0.053191		
	40	118	0.062766	_	
	50	148	0.078723		
Reference Fi	requency: LTE Band	, ,	fiddle channel=18900	channel=1880.00	MHz
Power supplied (Vdc)	Temperature (°C)		Frequency error		Result
()		Hz	ppm	Limit (ppm)	Nesuit
	-30	155	0.082447		Pass
	-20	165	0.087766		
	-10	171	0.090957		
	0	144	0.076596		
3.80	10	120	0.063830	±2.5	
	20	133	0.070745		
	30	138	0.073404		
	40	104	0.055319	1	
	50	118	0.062766		
Reference Fi	requency: LTE Band		fiddle channel=18900	channel=1880.00	MHz
5 " 10/1	T (%0)	Fre	equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	199	0.105851		
	-20	123	0.065426		
	-10	132	0.070213		
	0	166	0.088298	7	
3.80	10	181	0.096277	±2.5	Door
0.00	20	175	0.093085		Pass
	30	148	0.078723	+	
	40	123		=	
			0.065426	+	
	50	107	0.056915		





LTE Band 2(16QAM):

LTE Band 2(16QAM):							
Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz							
	Temperature (°C)	F	Frequency error				
Power supplied (Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Result		
	-30	156	0.082979				
	-20	181	0.096277				
	-10	144	0.076596				
	0	171	0.090957				
3.80	10	141	0.075000	±2.5	Pass		
	20	133	0.070745				
	30	136	0.072340				
	40	108	0.057447				
	50	102	0.054255				
Reference F			/liddle channel=18900 d	hannel-1880 00	MH7		
Telefelice I	requericy. LTL band				IVII IZ		
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result		
. опо. оприот (тао)	romporatoro ( o)	Hz	ppm	(ββ)			
	-30	166	0.088298				
	-20	160	0.085106				
	-10	155	0.082447				
	0	123	0.065426	±2.5			
3.80	10	133	0.070745		Pass		
	20	126	0.067021				
	30	138	0.073404				
	40	144	0.076596				
	50	140	0.074468				
Reference F	requency: LTE Band	d 2(5MHz) N	Middle channel=18900 c	channel=1880.00	MHz		
Device eventied (1/-1-)	Tomporeture (°C)	F	requency error	Limit (mm.s.)	Daguit		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result		
	-30	177	0.094149				
	-20	123	0.065426				
	-10	132	0.070213				
0.00	0	133	0.070745		Б		
3.80	10	126	0.067021	±2.5	Pass		
	20 30	144 148	0.076596	-			
	40	166	0.078723 0.088298				
	50	160	0.085106				
	50	100	0.000100	ı			





Reference Fr	requency: LTE Band	2(10MHz) N	/liddle channel=18900	channel=1880.00	MHz
Power supplied (Vdc)	Temperature (°C)		Frequency error		Result
1 ower supplied (vde)	. , ,	Hz	ppm	Limit (ppm)	resuit
	-30	181	0.096277		
	-20	121	0.064362		
	-10	144	0.076596		
	0	155	0.082447		
3.80	10	160	0.085106	±2.5	Pass
	20	140	0.074468	_	
	30	108	0.057447	_	
	40	117	0.062234	_	
	50	103	0.054787		
Reference F	requency: LTE Band	,	Middle channel=18900	channel=1880.00	)MHz
Power supplied (Vdc)	Temperature (°C)		requency error	Limit (ppm)	Result
,		Hz	ppm	" " ,	
	-30	166	0.088298		Pass
	-20	160	0.085106		
	-10	112	0.059574		
	0	110	0.058511		
3.80	10	123	0.065426	±2.5	
	20	125	0.066489		
	30	133	0.070745		
	40	136	0.072340		
	50	107	0.056915	-	
Reference F			Middle channel=18900	channel=1880.00	)MHz
	Temperature (°C)	, ,	requency error		Result
Power supplied (Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Result
	-30	155	0.082447		
	-20	161	0.085638	7	
	-10	123	0.065426	1	
	0	133	0.070745	╡	
3.80	10	125	0.066489	±2.5	Pass
	20	136	0.072340	- <u>-</u>	
	30	166	0.088298	-	
	40	171		-	
			0.090957	<del>-</del>	
	50	104	0.055319		





LTE Band 4(QPSK):

LIE Band 4(QPSK):							
Reference Fr	equency: LTE Band	4(1.4MHz) N	Middle channel=20175	channel=1732.50	)MHz		
Power supplied	Temperature (°C)	Frequency error		Limit (ppm)	Result		
(Vdc)	romperature (C)	Hz	ppm	Limit (ppin)	Nesult		
	-30	199	0.114863				
	-20	123	0.070996				
	-10	131	0.075613				
	0	166	0.095815				
3.80	10	181	0.104473	±2.5	Pass		
	20	171	0.098701				
	30	188	0.108514				
	40	175	0.101010				
	50	144	0.083117				
Reference I	Frequency: LTF Rand	1 4(3MHz) N	/liddle channel=20175 d	hannel-1732 50	MHz		
TOICICIOC I	requeriey. LTE band			 	/IVII 12		
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result		
		Hz	ppm	,			
	-30	188	0.108514	±2.5	Pass		
	-20	123	0.070996				
	-10	132	0.076190				
	0	166	0.095815				
3.80	10	171	0.098701				
	20	141	0.081385				
	30	105	0.060606				
	40	108	0.062338				
	50	155	0.089466				
Reference I	Frequency: LTE Band	d 4(5MHz) N	Middle channel=20175 o	channel=1732.50	MHz		
Dower ounglied (\/-l-)	Tomporeture (%)	Fi	requency error	Livit (	Desult		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result		
	-30	164	0.094661				
	-20	132	0.076190				
	-10	136	0.078499				
	0	168	0.096970				
3.80	10	144	0.083117	±2.5	Pass		
	20	148	0.085426	-			
	30 40	101 108	0.058297	-			
	50	128	0.062338 0.073882	-			
	30	120	0.073002	1			





	equency: LTE Band	. ,	equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	166	0.095815		
	-20	123	0.070996		
	-10	133	0.076768		
	0	128	0.073882		
3.80	10	161	0.092929	±2.5	Pass
	20	144	0.083117		
	30	140	0.080808		
	40	171	0.098701		
	50	170	0.098124		
Reference F	requency: LTE Band	4(15MHz) M	liddle channel=2017	5 channel=1732.50	MHz
Power supplied (Vdc)	Temperature (°C)		equency error	Limit (ppm)	Result
r ower supplied (vde)	. ,	Hz	ppm	Limit (ppin)	Nesuit
	-30	155	0.089466		Pass
	-20	123	0.070996		
	-10	150	0.086580		
	0	126	0.072727		
3.80	10	144	0.083117	±2.5	
	20	148	0.085426		
-	30	133	0.076768		
	40	130	0.075036		
	50	114	0.065801		
Reference F	requency: LTE Band			5 channel=1732.50	MHz
			equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	191	0.110245		
	-20	171	0.098701		
	-				
	-10	175	0.707070		
	-10 0	175 161	0.101010 0.092929	7	
3.80	0	161	0.092929	+2.5	Pass
3.80	0 10	161 133	0.092929 0.076768	±2.5	Pass
3.80	0 10 20	161 133 148	0.092929 0.076768 0.085426	±2.5	Pass
3.80	0 10	161 133	0.092929 0.076768	±2.5	Pass





LTE Band 4(16QAM):

LTE Band 4(16QAM):							
Reference F	requency: LTE Band	4(1.4MHz)	Middle channel=20175	channel=1732.5	0MHz		
	Temperature (°C)	Fi	Frequency error				
Power supplied (Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Result		
	-30	166	0.095815				
	-20	152	0.087734				
	-10	121	0.069841				
	0	153	0.088312	=			
3.80	10	160	0.092352	±2.5	Pass		
	20	144	0.083117				
	30	148	0.085426				
	40	107	0.061760	<b>-</b>			
	50	109	0.062915	-			
Poforonco I			/liddle channel=20175 o	shannol_1722 50	MU-		
Neierence i	requency. LTL band	, ,			IVII IZ		
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result		
Towor supplied (vas)	romporatoro ( c)	Hz	ppm	Limit (ppini)	resuit		
	-30	165	0.095238				
	-20	142	0.081962				
	-10	148	0.085426	±2.5			
	0	160	0.092352				
3.80	10	132	0.076190		Pass		
	20	136	0.078499				
	30	126	0.072727				
	40	128	0.073882				
	50	107	0.061760				
Reference I	Frequency: LTE Band	d 4(5MHz) N	/liddle channel=20175 o	channel=1732.50	MHz		
5 " 10/1)	T (%C)	Fi	requency error		5 "		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result		
	-30	154	0.088889				
	-20	164	0.094661				
	-10	158	0.091198				
	0	160	0.092352		_		
3.80	10	123	0.070996	±2.5	Pass		
	20	131	0.075613	4			
	30 40	126 130	0.072727 0.075036	-			
	50	144	0.075036	-			
	อบ	144	0.003117				





5 "	T (%C)	Fr	equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	165	0.095238		
	-20	123	0.070996		
	-10	131	0.075613		
	0	144	0.083117		
3.80	10	128	0.073882	±2.5	Pass
	20	136	0.078499		
	30	148	0.085426		
	40	107	0.061760		
	50	109	0.062915		
Reference F	requency: LTE Band	4(15MHz) I	Middle channel=20175	channel=1732.50	MHz
Power supplied (Vdc)	Temperature (℃)		requency error	Limit (ppm)	Result
1 01101 0appiloa (1 ao)	. , ,	Hz	ppm	Σ (ββ)	Result
	-30	177	0.102165		Pass
	-20	141	0.081385		
	-10	162	0.093506		
	0	123	0.070996		
3.80	10	132	0.076190	±2.5	
	20	146	0.084271		
	30	160	0.092352		
	40	151	0.087157		
	50	158	0.091198		
Reference F			Middle channel=20175	channel=1732.50	MHz
		<u> </u>	requency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	166	0.095815		
	-20	162	0.093506		
	-10	132	0.076190	1	
-	0	135	0.077922	-	
3.80	10	144	0.083117	±2.5	Pass
3.00	20			- = = = = = = = = = = = = = = = = = = =	га55
-		140	0.080808	-	
	30	155	0.089466	4	
	40	150	0.086580	4	
	50	121	0.069841		





LTE Band 5(QPSK):

LTE Band 5(QPSK):  Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz							
	requency: LTE Band :			requency=836.50	)MHz		
Power supplied	Temperature (°C)		requency error	Limit (ppm)	Dogult		
(Vdc)	. ,	Hz	ppm	штік (ррті)	Result		
	-30	199	0.237896				
	-20	123	0.147041				
	-10	144	0.172146				
	0	155	0.185296				
3.80	10	160	0.191273	±2.5	Pass		
	20	150	0.179319	12.0	1 033		
	30	143	0.170950				
	40	171	0.204423				
	50	180	0.215182				
Deference					\\		
	Frequency: LTE Band	_ `	Middle channel=20525F	requency=836.50	JIVITZ		
Power supplied (Vdc)	Temperature (°C)	Hz	requency error	Limit (ppm)	Result		
(Vuc)	20		ppm	( - )			
	-30	166	0.198446				
	-20	123	0.147041				
	-10	130	0.155409				
	0	125	0.149432				
3.80	10	136	0.162582	±2.5	Pass		
	20	161	0.192469				
	30	144	0.172146				
	40	148	0.176928				
	50	150	0.179319				
Reference			Middle channel=20525F	requencv=836.50	)MHz		
Power supplied		i ' '	requency error				
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result		
, ,	-30	123	0.147041				
	-20	132	0.157800				
	-10	133	0.158996				
	0	162	0.193664				
3.80	10	128	0.153019	±2.5	Pass		
	20	144	0.172146				
	30	148	0.176928	_			
	40	171	0.204423				
	50	160	0.191273				
	requency: LTE Band	_ `	Middle channel=20525F	requency=836.5	0MHz		
Power supplied	Temperature (°C)		requency error	Limit (ppm)	Result		
(Vdc)	,	Hz	ppm	- (1.1. /			
	-30	155	0.185296	-			
	-20 10	123	0.147041	-			
	-10	130 151	0.155409 0.180514	1			
3.80	10	141	0.180514	±2.5	Pass		
3.00	20	161	0.192469	±2.0	F 055		
	30	107	0.192469	1			
1	40	144	0.172146	1			
	50	109	0.130305	-			
			3	L			





LTE Band 5(16QAM):

Reference Fr		LTE Band (		- reguency-836 50	)MHz		
Reference Frequency: LTE Band 5(1.4MHz) Middle channel=20525Frequency=836.50MHz							
Power supplied (Vdc)	Temperature (°C)	Hz	equency error ppm	Limit (ppm)	Result		
	-30	165	0.197250				
	-20	123	0.147041				
	-10	131	0.156605	1			
	0	126	0.150628	-			
3.80	10	160	0.191273	- I	_		
3.00				±2.5	Pass		
	20	144	0.172146	4			
	30	148	0.176928	4			
	40	171	0.204423	4			
	50	101	0.120741				
Reference I	requency: LTE Band	15(3MHz) M	liddle channel=20525F	requency=836.50	MHz		
Power supplied	Temperature (°C)	Fi	requency error	l : :t ( )	Danielt		
(Vdc)	Tomporataro ( o)	Hz	ppm	Limit (ppm)	Result		
	-30	168	0.200837				
	-20	162	0.193664				
	-10	132	0.157800				
	0	136	0.162582		Pass		
3.80	10	144	0.172146	125			
0.00	20	145	0.173341	±2.5			
	30	123	0.147041				
	40	126	0.150628	=			
	50	107	0.127914	-			
Deference			liddle channel=20525F		MILI-		
Power supplied	Trequency. LTE band		requency error	Tequency=636.30	IVII 1Z		
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result		
(100)	-30	171	0.204423				
	-20	141	0.168559				
	-10	146	0.174537	1			
	0	178	0.212791				
3.80	10	161	0.192469	2.5	Pass		
	20	133	0.158996				
	30	131	0.156605				
	40	123	0.147041	_			
	50	114	0.136282				
	requency: LTE Band	,	/liddle channel=20525	requency=836.50	)MHz		
Power supplied	Temperature (°C)		requency error	Limit (ppm)	Result		
(Vdc)	20	Hz	ppm	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
	-30 -20	156 123	0.186491 0.147041	-			
	-10	132	0.157800				
	0	126	0.157600				
3.80	10	131	0.156605	2.5	Pass		
	20	144	0.172146	<b> </b>	<del>-</del>		
	30	147	0.175732	7			
	40	160	0.191273	]			
	50	169	0.202032				





LTE Band 7(QPSK):

LTE Band 7(QPSK):  Reference Frequency: LTE Band 7(5MHz) Middle channel=21100Frequency=2535.00MHz									
	requency: LTE Band	r ' ' '		equency=2535.00	)MHz				
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result				
(Vdc)		Hz	ppm	сини (ррии)	Result				
	-30	199	0.078501						
	-20	123	0.048521						
	-10	161	0.063511						
	0	193	0.076134						
3.80	10	144	0.056805	±2.5	Pass				
	20	171	0.067456	12.0	1 033				
	30	180	0.071006	1					
	40	110	0.043393						
	50	131							
Doforonco F			0.051677	roquency 2525 (					
	requency: LTE Band <i>i</i>	r `	liddle channel=21100 F	requency=2535.0	JUIVIHZ				
Power supplied (Vdc)	Temperature (°C)		requency error	Limit (ppm)	Result				
(Vuc)	20	Hz	ppm	( - )					
	-30	155	0.061144						
	-20	161	0.063511						
	-10	123	0.048521						
	0	136	0.053649						
3.80	10	166	0.065483	±2.5	Pass				
	20	171	0.067456						
	30	180	0.071006						
	40	153	0.060355						
	50	177	0.069822						
Reference F		l .	liddle channel=21100 F	requency=2535.0	00MHz				
Power supplied		r '	requency error						
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result				
	-30	123	0.048521						
	-20	166	0.065483						
	-10	168	0.066272						
	0	122	0.048126						
3.80	10	144	0.056805	±2.5	Pass				
	20	147	0.057988						
	30	101	0.039842						
	40	155	0.061144						
	50	150	0.059172						
	requency: LTE Band 7	· · · · · · · · · · · · · · · · · · ·	liddle channel=21100 F	requency=2535.0	DOMHz				
Power supplied	Temperature (°C)		requency error	Limit (ppm)	Result				
(Vdc)	` ` ` `	Hz	ppm	(PP)					
	-30	196	0.077318	-					
	-20	123	0.048521	-					
	-10	171	0.067456	-					
2 00	0 10	182 161	0.071795	12.5	Door				
3.80		144	0.063511	±2.5	Pass				
	20 30	150	0.056805 0.059172	1					
	40	155	0.059172	1					
	50	108	0.042604	1					
	1 30	100	0.042004						





LTE Band 7(16QAM):

Reference F		LTE Band 7 7(5MHz) Mid	<b>7(16QAM):</b> ddle channel=21100Fr	requencv=2535.00	MHz
Power supplied		equency error			
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	123	0.048521		
	-20	155	0.061144		
	-10	166	0.065483	7	
	0	161	0.063511	1	
3.80	10	150	0.059172	±2.5	Pass
	20	134	0.052860		1 433
	30	145	0.057199		
	40	114	0.044970		
	50	107	0.042209	7	
Reference F			iddle channel=21100 I	Frequency=2535.0	0MHz
Power supplied	Temperature (°C)	F	requency error	Limit (nnm)	Result
(Vdc)	Tomporataro ( o)	Hz	ppm	Limit (ppm)	Resuit
	-30	181	0.071400		
	-20	123	0.048521		
	-10	136	0.053649		
	0	124	0.048915		Pass
3.80	10	138	0.054438	±2.5	
	20	104	0.041026	1 22.0	
	30	177	0.069822		
	40	160	0.063116		
	50	166	0.065483		
Reference F			iddle channel=21100 I	Frequency=2535.0	00MHz
Power supplied			requency error		
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	158	0.062327		
	-20	121	0.047732		
	-10	169	0.066667	_	
2.00	0	171	0.067456		Daga
3.80	10 20	178 151	0.070217	2.5	Pass
	30	145	0.059566 0.057199	-	
	40	146	0.057594	-	
	50	108	0.042604	1	
Reference F			iddle channel=21100 l	Frequency=2535.0	00MHz
Power supplied	Temperature (°C)		requency error	Limit (ppm)	Result
(Vdc)	` ` `	Hz	ppm	Еппі (рріп)	Kesuit
	-30	144	0.056805	_	
	-20	151	0.059566	_	
	-10	146	0.057594		
3.80	0 10	158 123	0.062327	2.5	Page
3.00	20	136	0.048521 0.053649	_	Pass
	30	104	0.033649		
	40	171	0.067456	┪	
	40	1 1/1			





LTE Band 12(QPSK):

LTE Band 12(QPSK):  Reference Frequency: LTE Band 12(1.4MHz) Middle channel=23095Frequency=707.50MHz									
	equency. Lie band i			requency=707.5	UIVIMZ				
Power supplied (Vdc)	Temperature (°C)	Hz	equency error	Limit (ppm)	Result				
(vuc)	-30		ppm	- (11-7					
		197	0.278445	-					
	-20	141	0.199293						
	-10	151	0.213428						
	0	164	0.231802	-					
3.70	10	158	0.223322	±2.5	Pass				
	20	148	0.209187						
	30	166	0.234629						
	40	171	0.241696						
	50	189	0.267138						
Reference F	requency: LTE Band	12(3MHz) N	Middle channel=23095F	requency=707.50	OMHz				
Power supplied	Tomporeture (°C)	F	requency error						
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result				
	-30	155	0.219081						
	-20	184	0.260071						
	-10	174	0.245936						
	0	176	0.248763		Pass				
3.70	10	180	0.254417	±2.5					
	20	161	0.227562						
	30	169	0.238869						
	40	104	0.146996						
	50	125	0.176678						
Reference F			Middle channel=23095F	reguency-707 50	JMH2				
Power supplied		`	requency error						
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result				
( 2 2)	-30	169	0.238869						
	-20	123	0.173852						
	-10	138	0.195053						
	0	129	0.182332						
3.70	10	144	0.203534	±2.5	Pass				
	20	150	0.212014						
	30	156	0.220495						
	40	101	0.142756	=					
	50	108	0.152650						
	requency: LTE Band	_ `	Middle channel=23095	Frequency=707.5	0MHz				
Power supplied	Temperature (°C)		requency error	Limit (ppm)	Result				
(Vdc)		Hz	ppm	(1-1)					
	00		0.074005	T					
	-30	194	0.274205	-					
	-20	194 123	0.173852	-					
	-20 -10	194 123 135	0.173852 0.190813						
3 70	-20 -10 0	194 123 135 126	0.173852 0.190813 0.178092	+2.5	Pace				
3.70	-20 -10 0 10	194 123 135 126 138	0.173852 0.190813 0.178092 0.195053	±2.5	Pass				
3.70	-20 -10 0 10 20	194 123 135 126 138 144	0.173852 0.190813 0.178092 0.195053 0.203534	±2.5	Pass				
3.70	-20 -10 0 10	194 123 135 126 138	0.173852 0.190813 0.178092 0.195053	±2.5	Pass				





LTE Band 12(16QAM):

Power supplied (Vdc)	LTE Band 12(16QAM):  Reference Frequency: LTE Band 12(1.4MHz) Middle channel=23095Frequency=707.50MHz								
Comparative (***)   Hz		Frequency=707.5	UIVIMZ						
155   0.219081   20   123   0.173852   -10   136   0.192226   0   144   0.203534   10   171   0.241696   20   101   0.142756   30   160   0.226148   40   168   0.237456   50   148   0.209187	• •	Temperature (°C)		equency error	Limit (ppm)	Result			
123   0.173852   144   0.203534   144   0.203534   144   0.203534   144   0.203534   145	(vac)				(PP)				
3.70		-30	155	0.219081					
3.70		-20	123	0.173852					
3.70		-10	136	0.192226					
20		0	144	0.203534					
20	3.70	10	171	0.241696	+2.5	Pass			
30		20	101	0.142756		1 400			
40			160						
S0									
Reference Frequency: LTE Band 12(3MHz) Middle channel=23095Frequency=707.50MHz									
Power supplied (Vdc)	Reference Fu				Frequency-707 50	NMH-2			
Temperature (°C)         Hz ppm         Limit (ppm)         Result           -30         148         0.209187         0.213428         0.213428         0.213428         0.213428         0.213428         0.213428         0.213428         0.213428         0.219081         0.225         0.219081         0.225         0.2219081         0.225         0.2219081         0.225         0.225         0.225         0.2219081         0.225		equency. LTL band			requericy=707.50	JIVII IZ			
148   0.209187   -20   151   0.213428   -10   123   0.173852   0   136   0.192226   3.70   10   155   0.219081   +2.5   Pass   20   141   0.199293   30   101   0.142756   40   105   0.148410   50   118   0.166784		Temperature (°C)		requency error	Limit (ppm)	Result			
3.70	(vac)				(PP)				
3.70									
3.70		-20	151	0.213428					
3.70		-10	123	0.173852					
20		0	136	0.192226		Pass			
20	3.70	10	155	0.219081	+2.5				
30		20	141	0.199293					
40		30	101						
Temperature (°C)   Temperature									
Reference Frequency: LTE Band 12(5MHz) Middle channel=23095Frequency=707.50MHz   Power supplied (Vdc)   Temperature (°C)   Hz   ppm   Limit (ppm)   Result    -30									
Power supplied (Vdc)         Temperature (°C)         Frequency error ppm         Limit (ppm)         Result           -30         123         0.173852         0.185159         0.185159         0.207774         0.207774         0.212014         0.2120	Reference Fu				Frequency=707.5	)MHz			
(Vdc)									
-30 123 0.173852 -20 131 0.185159 -10 147 0.207774 0 150 0.212014		Temperature (°C)			Limit (ppm)	Result			
-10 147 0.207774 0 150 0.212014		-30							
0 150 0.212014			131						
		-10	147	0.207774					
3.70 10 155 0.219081 2.5 Dass		0	150	0.212014					
5.75 10 100 0.219001 2.0 Fd55	3.70	10	155	0.219081	2.5	Pass			
20 160 0.226148									
30 141 0.199293									
40 107 0.151237									
50 118 0.166784									
Reference Frequency: LTE Band 12(10MHz) Middle channel=23095Frequency=707.50MHz		equency: LTE Band			5Frequency=707.5	0MHz			
Power supplied Temperature (°C) Frequency error Limit (ppm) Result	• •	Temperature (°C)			Limit (ppm)	Result			
(Vac) Hz ppm " ' /	(Vac)	. ,			(11)				
-30 166 0.234629 -20 169 0.238869	-				-				
-20 169 0.238869 -10 144 0.203534					-				
0 151 0.213428									
3.70 10 158 0.223322 2.5 Pass	3 70				- 25	Pass			
20 171 0.241696	5.70				- Z.5	1 433			
30 176 0.248763					┥				
40 101 0.142756									
		40	101	0.142756					





LTE Band 17(QPSK):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz								
Power supplied	Temperature (°C)	Fr	Frequency error		5			
(Vdc)	Temperature ( C)	Hz	ppm	Limit (ppm)	Result			
	-30	199	0.280282					
	-20	171	0.240845					
	-10	180	0.253521					
	0	186	0.261972					
3.80	10	175	0.246479	±2.5	Pass			
	20	123	0.173239					
	30	136	0.191549					
	40	128	0.180282					
	50	140	0.197183					
Reference F	requency: LTE Band	l 17(10MHz)	Middle channel=23790	channel=710.0	OMHz			
Power supplied	Temperature (°C)	F	requency error		5 "			
(Vdc)	remperature ( C)	Hz	ppm	Limit (ppm)	Result			
	-30	197	0.277465					
	-20	141	0.198592					
	-10	151	0.212676					
	0	168	0.236620					
3.80	10	158	0.222535	±2.5	Pass			
	20	149	0.209859					
	30	171	0.240845					
	40	189	0.266197					
	50	180	0.253521					

LTE Band 17(16QAM):

LTE Band 17(16QAM):									
Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz									
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result				
(Vdc)		Hz	ppm	Σ (ββ)	rtoodit				
	-30	165	0.232394						
	-20	141	0.198592						
	-10	181	0.254930						
	0	123	0.173239						
3.80	10	138	0.194366	±2.5	Pass				
	20	171	0.240845						
	30	186	0.261972						
	40	169	0.238028						
	50	107	0.150704						
Reference	Frequency: LTE Band	17(10MHz)	Middle channel=23790	channel=710.0	OMHz				
Power supplied	Temperature (°C)	Frequency error		Limit (nnm)	Dogul <del>t</del>				
(Vdc)	10porataro ( 0)	Hz	ppm	Limit (ppm)	Result				
	-30	107	0.150704						
	-20	181	0.254930						
	-10	141	0.198592						
	0	156	0.219718						
3.80	10	158	0.222535	±2.5	Pass				
	20	123	0.173239	],					
	30	168	0.236620	1					
	40	118	0.166197	]					
	50	172	0.242254	1					

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# 6.13 Frequency stability V.S. Voltage measurement

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

Reference F	requency: LTE Band	2(1.4MHz) Middle	•	channel=1880.00	)MHz			
	Power supplied	,	ncy error					
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result			
	4.37	99	0.052660					
25	3.80	87	0.046277	±2.5	Pass			
	3.23	68	0.036170					
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz								
<b>-</b> (00)	Power supplied	Freque	ncy error		_			
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result			
	4.37	75	0.039894					
25	3.80	84	0.044681	±2.5	Pass			
	3.23	64	0.034043					
Reference F	requency: LTE Band	d 2(5MHz) Middle	channel=18900 d	channel=1880.00l	MHz			
- (00)	Power supplied	Frequei	ncy error		_			
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result			
	4.37	82	0.043617					
25	3.80	90	0.047872	±2.5	Pass			
	3.23	74	0.039362					
Reference F	requency: LTE Band	2(10MHz) Middle	channel=18900	channel=1880.00	MHz			
- (00)	Power supplied	Freque	ncy error		_			
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result			
	4.37	77	0.040957					
25	3.80	84	0.044681	±2.5	Pass			
	3.23	96	0.051064					
Reference F	requency: LTE Band	2(15MHz) Middle	channel=18900	channel=1880.00	MHz			
T(°C)	Power supplied	Frequei	ncy error	1				
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result			
	4.37	92	0.048936					
25	3.80	96	0.051064	±2.5	Pass			
-	3.23	76	0.040426					
Reference F	requency: LTE Band	2(20MHz) Middle	channel=20175	channel=1880.00	MHz			
Town and the (°C)	Power supplied Frequency error		12	D				
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result			
	4.37	88	0.046809					
25	3.80	64	0.034043	±2.5	Pass			
	3.23	71	0.037766					





LTE Band 2(16QAM):

Reference Frequency: LTE Band 2(1.4MHz) Middle channel=18900 channel=1880.00MHz			LTE Band 2(16	QAM):		
Comperature (C)	Reference Fr	requency: LTE Band	2(1.4MHz) Middle	channel=18900	channel=1880.00	)MHz
(Vdc)	Tomporatura (°C)	Power supplied	Frequer	ncy error		Danult
25   3.80   81   0.043085   ±2.5   Pass	remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
3.23   76   0.040426		4.37	90	0.047872		
Reference Frequency: LTE Band 2(3MHz) Middle channel=18900 channel=1880.00MHz	25	3.80	81	0.043085	±2.5	Pass
Temperature (°C)		3.23	76	0.040426		
Power supplied (Vdc)	Reference F	requency: LTE Band	2(3MHz) Middle	channel=18900 c	hannel=1880.00l	MHz
A.37   99   0.052660   3.80   84   0.044681   ±2.5   Pass	T (°C)	Power supplied	Frequer	ncy error		- ·
25   3.80   84   0.044681   ±2.5   Pass	Temperature (°C)				Limit (ppm)	Result
3.23   75   0.039894		4.37	99			
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz	25	3.80	84	0.044681	±2.5	Pass
Temperature (°C)		3.23	75	0.039894	1	
Power supplied (Vdc)	Reference F	requency: LTE Band	2(5MHz) Middle	channel=18900 c	hannel=1880.00l	ИНz
Power supplied (Vdc)		Power supplied	Frequer	ncy error		
A.37   93   0.049468   ±2.5   Pass	Temperature (℃)	• •		•	Limit (ppm)	Result
3.80       75       0.039894       ±2.5       Pass         3.23       81       0.043085       ±2.5       Pass         Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz         Temperature (°C)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         25       3.80       81       0.043085       ±2.5       Pass         Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz         Temperature (°C)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         25       3.80       82       0.043617       ±2.5       Pass         Zesult         Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz         Temperature (°C)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         Temperature (°C)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         Temperature (°C)       A.37       93       0.049468       ±2.5       Pass         25       3.80       82       0.043617       ±2.5       Pass		, ,				
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz   Temperature (°C)	25	3.80			±2.5	Pass
Reference Frequency: LTE Band 2(5MHz) Middle channel=18900 channel=1880.00MHz   Temperature (°C)   Power supplied (Vdc)   Hz   ppm   Limit (ppm)   Result	-	3.23				
Temperature (°C)	Reference F	requency: LTE Band	2(5MHz) Middle		hannel=1880.00l	ИНz
Temperature (C)		Power supplied	Frequer	ncv error		
25   3.80   81   0.041489   ±2.5   Pass	Temperature (℃)	• •			Limit (ppm)	Result
25       3.80       81       0.043085       ±2.5       Pass         Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz         Temperature (℃)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         25       3.80       82       0.043617       ±2.5       Pass         3.23       76       0.040426       ±2.5       Pass         Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz         Temperature (℃)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         4.37       93       0.049468       ±2.5       Pass         25       3.80       82       0.043617       ±2.5       Pass		, ,				
3.23       74       0.039362         Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz         Temperature (℃)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         25       3.80       82       0.043617       ±2.5       Pass         3.23       76       0.040426       +2.5       Pass         Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz         Temperature (℃)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         4.37       93       0.049468       ±2.5       Pass	25	3.80	81		±2.5	Pass
Reference Frequency: LTE Band 2(15MHz) Middle channel=18900 channel=1880.00MHz   Temperature (°C)	-	3.23				
Temperature (℃)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           25         3.80         82         0.043617         ±2.5         Pass           3.23         76         0.040426         temperature (°C)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           Temperature (°C)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           4.37         93         0.049468         temperature (ppm)         Experimental temperature (ppm)         temperature (ppm)         Pass	Reference F	requency: LTE Band			channel=1880.00	MHz
Columbia						
25       3.80       82       0.043617       ±2.5       Pass         3.23       76       0.040426       t=2.5       Pass         Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz         Temperature (°C)       Power supplied (Vdc)       Frequency error (Ddc)       Limit (ppm)       Result         4.37       93       0.049468       25       3.80       82       0.043617       ±2.5       Pass	Temperature (℃)	• •			Limit (ppm)	Result
25     3.80     82     0.043617     ±2.5     Pass       3.23     76     0.040426       Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz       Temperature (°C)     Power supplied (Vdc)     Frequency error (Vdc)     Limit (ppm)     Result       4.37     93     0.049468       25     3.80     82     0.043617     ±2.5     Pass						
3.23   76   0.040426	25	3.80			±2.5	Pass
Reference Frequency: LTE Band 2(20MHz) Middle channel=18900 channel=1880.00MHz           Temperature (°C)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           4.37         93         0.049468         25         3.80         82         0.043617         ±2.5         Pass		3.23				
Temperature (°C)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           4.37         93         0.049468         25         3.80         82         0.043617         ±2.5         Pass	Reference F	requency: LTE Band			channel=1880.00	MHz
Comperature (C)		Power supplied Frequency error				
4.37 93 0.049468 25 3.80 82 0.043617 ±2.5 Pass	remperature (T)	• •			Limit (ppm)	Result
25 3.80 82 0.043617 ±2.5 Pass		` ,				
	25	3.80			±2.5	Pass
		3.23		0.034043		





LTE Band 4(QPSK):

		LTE Band 4(Q	PSK):		
Reference F	requency: LTE Band	4(1.4MHz) Middle	e channel=20175	channel=1732.50	)MHz
Tomporature (°C)	Power supplied	Freque	ncy error	Limit (name)	Docult
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	98	0.056566		
25	3.80	75	0.043290	±2.5	Pass
	3.23	64	0.036941		
Reference F	requency: LTE Band	d 4(3MHz) Middle	channel=20175 c	channel=1732.50l	MHz
T(°C)	Power supplied	Frequei	ncy error	1	
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	90	0.051948		
25	3.80	99	0.057143	±2.5	Pass
	3.23	85	0.049062		
Reference F	requency: LTE Band	4(5MHz) Middle	channel=20175 c	hannel=1732.50l	ИНz
- (00)	Power supplied	Freque	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	86	0.049639		
25	3.80	74	0.042713	±2.5	Pass
	3.23	92	0.053102		
Reference F	requency: LTE Band	4(10MHz) Middle	channel=20175	channel=1732.50	MHz
- (00)	Power supplied	Freque	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	95	0.054834		
25	3.80	91	0.052525	±2.5	Pass
	3.23	81	0.046753		
Reference F	requency: LTE Band	4(15MHz) Middle	channel=20175	channel=1732.50	MHz
	Power supplied		ncy error		
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	77	0.044444		
25	3.80	84	0.048485	±2.5	Pass
	3.23	68	0.039250		
Reference F	requency: LTE Band				MHz
	Power supplied	, ,	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	90	0.051948		
25	3.80	87	0.050216	+2.5	Pass
	3.23	64	0.036941	<u> </u>	
	U.=U	<u> </u>	0.000011		





LTE Band 4(16QAM):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz	LTE Band 4(16QAM):									
Comperature (C)	Reference Fi	requency: LTE Band	4(1.4MHz) Middle	e channel=20175	channel=1732.50	)MHz				
(Vdc)	Tomporaturo (°C)	Power supplied	Freque	ncy error	Limit (nnm)	Decult				
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz	remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result				
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz   Temperature (°C)		4.37	88	0.050794						
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz	25	3.80	75	0.043290	±2.5	Pass				
Temperature (°C)		3.23	71	0.040981						
Comparature (C)	Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz									
Comparature (C)	T (%C)	Power supplied	Frequei	ncy error						
25         3.80         84         0.048485         ±2.5         Pass           Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz           Temperature (℃)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           25         3.80         87         0.050216         ±2.5         Pass           Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz           Temperature (℃)         Power supplied (Vdc)         Hz ppm         Limit (ppm)         Result           Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz           Temperature (℃)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           Temperature (℃)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           Temperature (℃)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           Temperature (℃)         Power supplied (Vdc)         Frequency error <td colsp<="" td=""><td>Temperature (°C)</td><td>(Vdc)</td><td></td><td></td><td>Limit (ppm)</td><td>Result</td></td>	<td>Temperature (°C)</td> <td>(Vdc)</td> <td></td> <td></td> <td>Limit (ppm)</td> <td>Result</td>	Temperature (°C)	(Vdc)			Limit (ppm)	Result			
3.23   52   0.030014		4.37	66	0.038095						
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz	25	3.80	84	0.048485	±2.5	Pass				
Temperature (°C)		3.23	52	0.030014						
Color   Colo	Reference F	requency: LTE Band	d 4(5MHz) Middle	channel=20175 c	:hannel=1732.50ľ	ИНz				
Color   Colo	- (00)	Power supplied	Freque	ncy error		_				
25   3.80   87   0.050216   ±2.5   Pass	Temperature (*C)	• •		-	Limit (ppm)	Result				
Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz   Temperature (°C)		4.37	55	0.031746						
Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz   Temperature (°C)   Power supplied (Vdc)   Hz   ppm   Limit (ppm)   Result	25	3.80	87	0.050216	±2.5	Pass				
Temperature (℃)         Power supplied (Vdc)         Frequency error (Pdc)         Limit (ppm)         Result           25         4.37         99         0.057143         ±2.5         Pass           3.23         87         0.050216         ±2.5         Pass           Temperature (℃)         Power supplied (Vdc)         Frequency error (Vdc)         Limit (ppm)         Result           4.37         68         0.039250         ±2.5         Pass           3.23         81         0.046753         ±2.5         Pass           Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz         Frequency error (Vdc)         Limit (ppm)         Result           Temperature (℃)         Power supplied (Vdc)         Frequency error (Vdc)         Limit (ppm)         Result           4.37         86         0.049639         Limit (ppm)         Result           4.37         86         0.049639         ±2.5         Pass		3.23	48	0.027706						
Temperature ( C )	Reference F	requency: LTE Band	4(10MHz) Middle	channel=20175	channel=1732.50	MHz				
Temperature ( C )	- (00)	Power supplied	Freque	ncy error						
25   3.80   65   0.037518   ±2.5   Pass     3.23   87   0.050216     Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz   Temperature (°C)   Power supplied (Vdc)   Hz   ppm   Limit (ppm)   Result     4.37   68   0.039250	Temperature (℃)	• •			Limit (ppm)	Result				
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz   Temperature (°C)		4.37	99	0.057143						
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz           Temperature (℃)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           25         3.80         75         0.043290         ±2.5         Pass           3.23         81         0.046753         ±2.5         Pass           Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz           Temperature (℃)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           4.37         86         0.049639         ±2.5         Pass           25         3.80         94         0.054257         ±2.5         Pass	25	3.80	65	0.037518	±2.5	Pass				
Temperature (℃)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           25         4.37         68         0.039250         ±2.5         Pass           3.23         81         0.043290         ±2.5         Pass           Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz           Temperature (℃)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           4.37         86         0.049639         4.37         4.37         86         0.049639         25         Pass		3.23	87	0.050216						
Temperature (°C)	Reference F	requency: LTE Band	4(15MHz) Middle	channel=20175	channel=1732.50	MHz				
Columbia	T (%C)	Power supplied	Freque	ncy error		_				
25     3.80     75     0.043290     ±2.5     Pass       3.23     81     0.046753       Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz       Temperature (°C)     Power supplied (Vdc)     Frequency error     Limit (ppm)     Result       4.37     86     0.049639       25     3.80     94     0.054257     ±2.5     Pass	Temperature (*C)	(Vdc)			Limit (ppm)	Result				
3.23   81   0.046753		4.37	68							
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz           Temperature (°C)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           4.37         86         0.049639         25         3.80         94         0.054257         ±2.5         Pass	25	3.80	75	0.043290	±2.5	Pass				
Temperature (℃)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           4.37         86         0.049639         25         3.80         94         0.054257         ±2.5         Pass		3.23	81	0.046753						
Columbia   Columbia	Reference F	requency: LTE Band	4(20MHz) Middle	channel=20175	channel=1732.50	MHz				
(Vdc) Hz ppm 4.37 86 0.049639 25 3.80 94 0.054257 ±2.5 Pass	Tomorough (°C)	Power supplied Frequency error				D !				
4.37     86     0.049639       25     3.80     94     0.054257     ±2.5     Pass	i emperature ( C)	(Vdc)	Hz	ppm	Limit (ppm)	Result				
		4.37	86	• •						
3.23 71 0.040981	25	3.80	94		±2.5	Pass				
		3.23	71	0.040981						





LTE Band 5(QPSK):

		LIE Ballu 3(Q	: 1 OK).		
Reference Fr	equency: LTE Band	5(1.4MHz) Middle	channel=20525F	requency=836.5	0MHz
Temperature (℃)	Power supplied	Frequency error		Limit (ppm)	Result
remperature (c)	(Vdc)	Hz	ppm	Еши (ррш)	Result
	4.37	99	0.118350		
25	3.80	85	0.101614	±2.5	Pass
	3.23	64	0.076509		
Reference F	requency: LTE Band	5(3MHz) Middle	channel=20525Fr	equency=836.50	MHz
Temperature (℃)	Power supplied	Freque	ncy error	Limit (ppm)	Result
remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
25	4.37	88	0.105200	±2.5	Pass
	3.80	74	0.088464		
	3.23	90	0.107591		
Reference F	requency: LTE Band	5(5MHz) Middle	channel=20525Fr	equency=836.50	MHz
Temperature (℃)	Power supplied	Frequency error		Limit (nnm)	Result
remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	84	0.100418		
25	3.80	74	0.088464	±2.5	Pass
	3.23	90	0.107591		
Reference F	requency: LTE Band	5(10MHz) Middle	channel=20525F	requency=836.50	)MHz
Tomporatura (°C)	Power supplied	Freque	ncy error	Limit (nnm)	Dogult.
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	96	0.114764		
25	3.80	45	0.053796	±2.5	Pass
	3.23	80	0.095637	]	





LTE Band 5(16QAM):

		ETE Bana of Te	·		
Reference Fro	equency: LTE Band	5(1.4MHz) Middle	channel=20525F	requency=836.50	MHz
Temperature (℃)	Power supplied	Frequency error		Limit (ppm)	Result
Tomporatoro (e)	(Vdc)	Hz	ppm	Σ (ρρ)	- Troodit
	4.37	84	0.100418		Pass
25	3.80	64	0.076509	±2.5	
	3.23	70	0.083682		
Reference F	requency: LTE Band	5(3MHz) Middle	channel=20525Fr	equency=836.50 <b>l</b>	ИНz
Temperature (°C)	Power supplied	Freque	ncy error	Limit (nom)	Dogult
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	99	0.118350	±2.5	
25	3.80	78	0.093246		Pass
	3.23	80	0.095637		
Reference F	requency: LTE Band	5(5MHz) Middle	channel=20525Fr	equency=836.50ľ	ИНz
Temperature (°C)	Power supplied	Frequency error		Limit (nnm)	Popult
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	93	0.111178		
25	3.80	64	0.076509	±2.5	Pass
	3.23	82	0.098027		
Reference Fr	equency: LTE Band	5(10MHz) Middle	channel=20525F	requency=836.50	MHz
Tomporature (°C)	Power supplied	Freque	ncy error	Limit (nnm)	Dogult
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	84	0.100418		
25	3.80	75	0.089659	±2.5	Pass
	3.23	90	0.107591	1	





LTE Band 7(QPSK):

		LIE Ballu / (G	•		
Reference Fr	equency: LTE Band	7(5MHz) Middle	channel=21100 Fr	equency=2535.0	0MHz
Temperature (°C)	Power supplied	Frequency error		Limit (nnrs)	Dogult
remperature ( C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	90	0.035503		
25	3.80	81	0.031953	±2.5	Pass
	3.23	65	0.025641		
Reference Fre	equency: LTE Band 7	(10MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Tomporoture (°C)	Power supplied	Freque	ncy error	Limit (nam)	Popult
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.029191	±2.5	Pass
25	3.80	81	0.031953		
	3.23	96	0.037870		
Reference Fre	equency: LTE Band 7	(15MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Town or other (%C)	Power supplied	Frequency error		error Limit (ppm)	
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	88	0.034714		Pass
25	3.80	75	0.029586	±2.5	
	3.23	64	0.025247		
Reference Fre	equency: LTE Band 7	(20MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Tomporature (%C)	Power supplied	Freque	ncy error	Limit (nors)	Doord
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	84	0.033136		
25	3.80	97	0.038264	±2.5	Pass
	3.23	40	0.015779	1	





LTE Band 7(16QAM):

		LIE Ballu /(II	Janinj.		
Reference Fr	equency: LTE Band	7(5MHz) Middle	channel=21100 Fr	equency=2535.0	0MHz
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Dogult
remperature ( C)	(Vdc)	Hz	ppm	Еши (ррш)	Result
	4.37	74	0.029191		Pass
25	3.80	84	0.033136	±2.5	
	3.23	96	0.037870		
Reference Fre	equency: LTE Band 7	(10MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Tomporature (°C)	Power supplied	Freque	ncy error	Limit (name)	Dogult
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	99	0.039053	±2.5	Pass
25	3.80	85	0.033531		
	3.23	64	0.025247		
Reference Fre	equency: LTE Band 7	(15MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Towns and the (%C)	Power supplied	Frequency error		cy error Limit (nom)	
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	58	0.022880		
25	3.80	74	0.029191	±2.5	Pass
	3.23	90	0.035503		
Reference Fre	equency: LTE Band 7	(20MHz) Middle	channel=21100 F	requency=2535.0	00MHz
Tomporature (°C)	Power supplied	Freque	ncy error	Limit (nnss)	Doguit
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	65	0.025641		
25	3.80	81	0.031953	±2.5	Pass
	3.23	74	0.029191	1	





LTE Band 12(QPSK):

		ETE Bana 12/4	· - /			
Reference Fre	equency: LTE Band 1	2(1.4MHz) Middle	e channel=23095l	requency=707.5	50MHz	
Temperature (℃)	Power supplied	Frequency error		Limit (ppm)	Result	
	(Vdc)	Hz	ppm	Еппі (рріп)	Nesuit	
	4.37	78	0.110247			
25	3.80	94	0.132862	±2.5	Pass	
	3.23	80	0.113074			
Reference Fr	requency: LTE Band	12(3MHz) Middle	channel=23095F	requency=707.50	OMHz	
Temperature (℃)	Power supplied	Freque	ncy error	Limit (ppm)	Result	
remperature (C)	(Vdc)	Hz	ppm	Еппі (рріп)	Nesuit	
	4.37	88	0.124382	±2.5		
25	3.80	86	0.121555		Pass	
	3.23	91	0.128622			
Reference Fr	equency: LTE Band	12(5MHz) Middle	channel=23095F	requency=707.50	OMHz	
Temperature (℃)	Power supplied	Freque	uency error		Popult	
remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result	
	4.37	95	0.134276			
25	3.80	64	0.090459	±2.5	Pass	
	3.23	72	0.101767			
Reference Frequency: LTE Band 12(10MHz) Middle channel=23095Frequency=707.50MHz						
Temperature (℃)	Power supplied	Freque	ncy error	Limit (nnm)	Dooult	
	(Vdc)	Hz	ppm	Limit (ppm)	Result	
	4.37	84	0.118728			
25	3.80	67	0.094700	±2.5	Pass	
	3.23	47	0.066431			





LTE Band 12(16QAM):

		ETE Bana 12(1)	<u> </u>		
Reference Fre	equency: LTE Band 1	2(1.4MHz) Middle	e channel=23095l	Frequency=707.5	60MHz
Temperature (℃)	Power supplied	Frequency error		Limit (ppm)	Result
	(Vdc)	Hz	ppm	Еппі (рріп)	Nesuit
	4.37	90	0.127208		
25	3.80	81	0.114488	±2.5	Pass
	3.23	74	0.104594		
Reference Fr	equency: LTE Band	12(3MHz) Middle	channel=23095F	requency=707.50	)MHz
Tomporature (°C)	Power supplied	Freque	ncy error	Limit (ppm)	Result
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	88	0.124382	±2.5	
25	3.80	64	0.090459		Pass
	3.23	71	0.100353		
Reference Fr	equency: LTE Band	12(5MHz) Middle	channel=23095F	requency=707.50	MHz
Temperature (℃)	Power supplied	Freque	quency error		Dooult
remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	56	0.079152		
25	3.80	64	0.090459	±2.5	Pass
	3.23	71	0.100353		
Reference Fre	equency: LTE Band	12(10MHz) Middle	channel=23095F	requency=707.5	0MHz
Temperature (°C)	Power supplied	Freque	ncy error	Limit (nnm)	Dogult
	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	81	0.114488		
25	3.80	93	0.131449	±2.5	Pass
	3.23	37	0.052297	1	





LTE Band 17(QPSK):

Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz							
Temperature (℃)	Power supplied		ncy error	Limit (ppm)	Result		
• • • • • • • • • • • • • • • • • • • •	(Vdc)	Hz	ppm	(			
25	4.37	66	0.092958	±2.5			
	3.80	87	0.122535		Pass		
	3.23	90	0.126761				
Reference F	Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz						
Temperature (°C)	Power supplied	Freque	quency error		Result		
remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result		
25	4.37	84	0.118310	±2.5			
	3.80	71	0.100000		Pass		
	3.23	90	0.126761				

### LTE Band 17(16QAM):

LTE Band 17(16QAM):							
Reference Frequency: LTE Band 17(5MHz) Middle channel=23790 channel=710.00MHz							
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)	Result		
Temperature (e)	(Vdc)	Hz	ppm	Еши (ррш)	rtoodit		
	4.37	66	0.092958	±2.5			
25	3.80	85	0.119718		Pass		
	3.23	74	0.104225				
Reference F	requency: LTE Band	17(10MHz) Midd	le channel=23790	channel=710.00	MHz		
Temperature (℃)	Power supplied	Frequer	ncy error	Limit (ppm)	Result		
remperature (C)	(Vdc)	Hz	ppm	сини (ррии)	Result		
	4.37	63	0.088732				
25	3.80	52	0.073239	±2.5	Pass		
	3.23	48	0.067606	1			