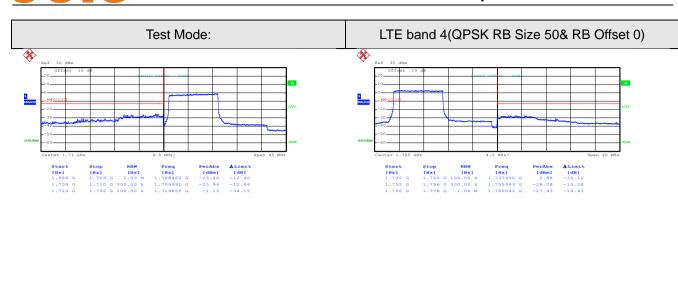


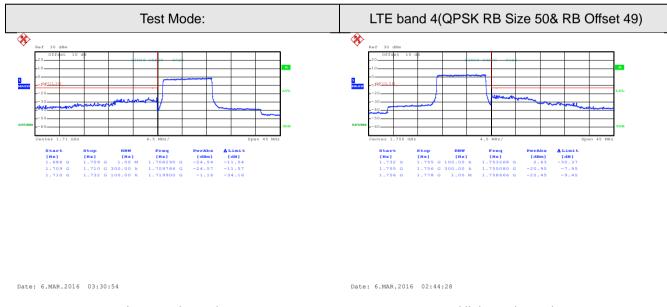
Date: 6.MAR.2016 03:30:06

Report No: CCISE160203407



Lowest channel Highest channel

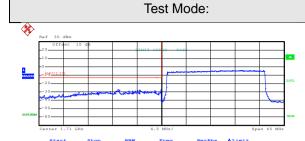
Date: 6.MAR.2016 02:42:39



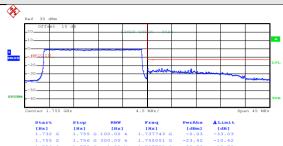
Lowest channel Highest channel







### LTE band 4(QPSK RB Size 100& RB Offset 0)

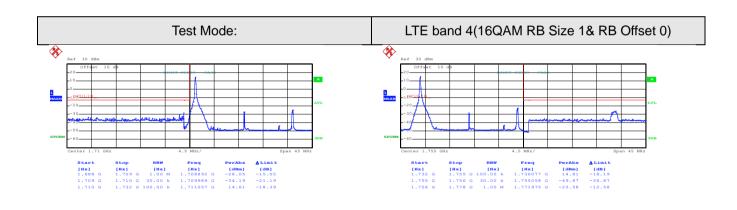


Date: 6.MAR.2016 03:31:11

Date: 6.MAR.2016 02:44:45

Lowest channel

Highest channel



Date: 6.MAR.2016 03:29:13

Date: 6.MAR.2016 03:32:31

Lowest channel

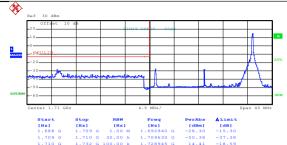
Highest channel

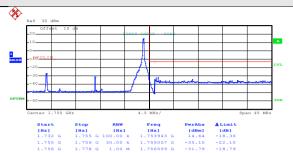






### LTE band 4(16QAM RB Size 1& RB Offset 99)



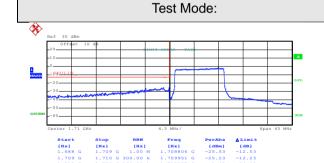


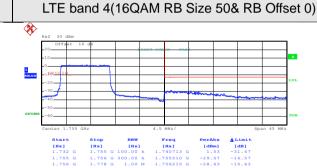
Date: 6.MAR.2016 03:29:26

Date: 6.MAR.2016 03:32:52

Lowest channel

Highest channel





Date: 6.MAR.2016 03:30:24

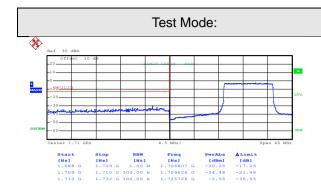
Date: 6.MAR.2016 02:42:54

Lowest channel

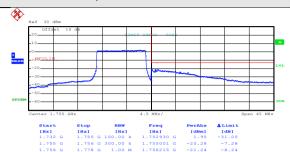
Highest channel







### LTE band 4(16QAM RB Size 50& RB Offset 49)



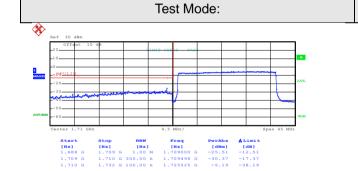
Date: 6.MAR.2016 03:30:37

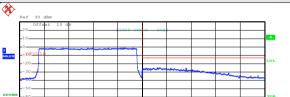
Date: 6.MAR.2016 02:44:14

Lowest channel

Highest channel

LTE band 4(16QAM RB Size 100& RB Offset 0)





Date: 6.MAR.2016 03:31:23

Date: 6.MAR.2016 02:44:56

Lowest channel

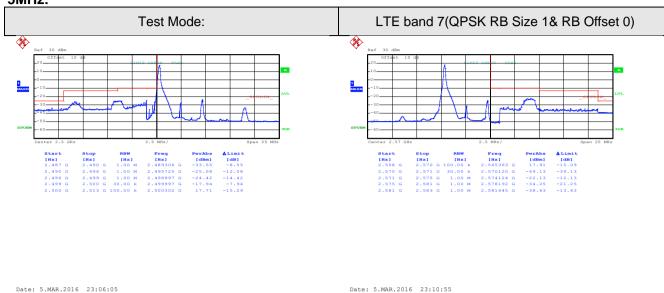
Highest channel





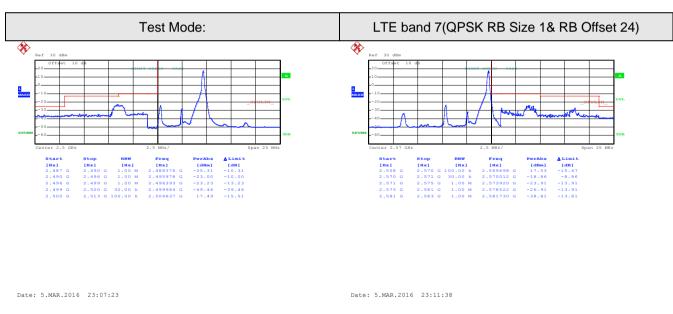
### LTE band 7 part:

### 5MHz:



Lowest channel

Highest channel



Lowest channel

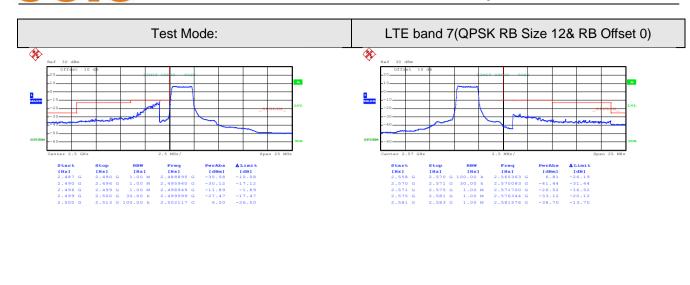
Highest channel



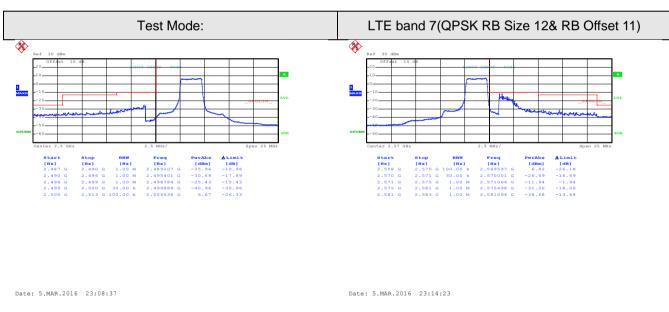
Date: 5.MAR.2016 23:13:31



Date: 5.MAR.2016 23:07:52



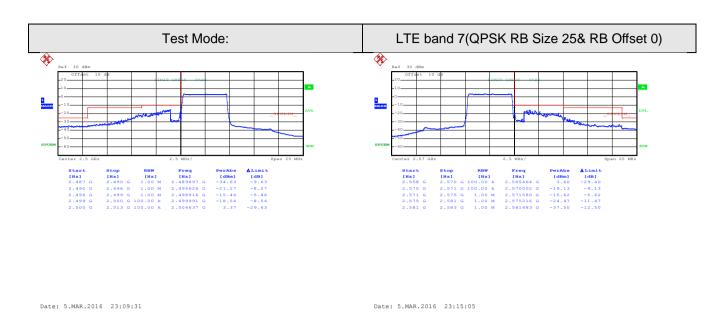
Lowest channel Highest channel



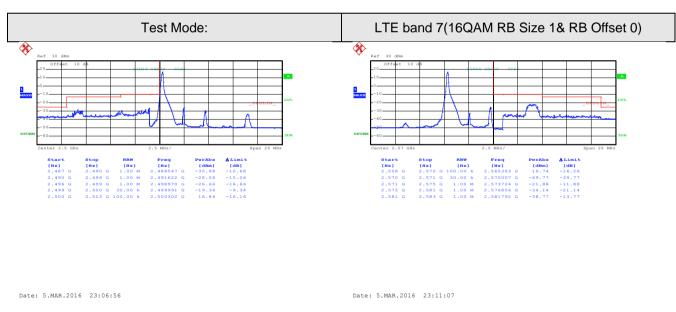
Lowest channel Highest channel







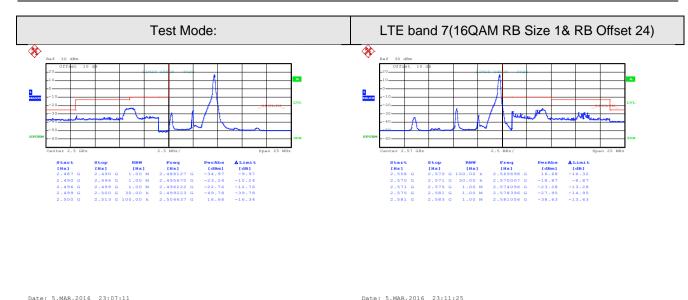
Lowest channel Highest channel



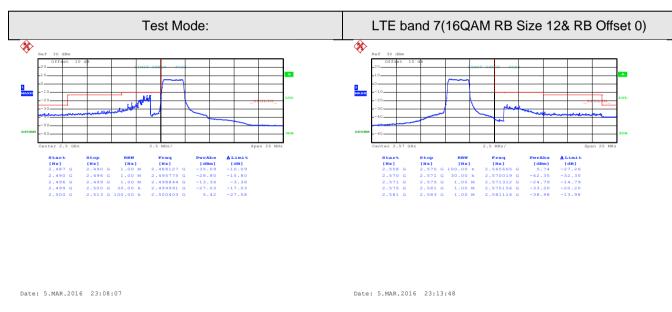
Lowest channel Highest channel







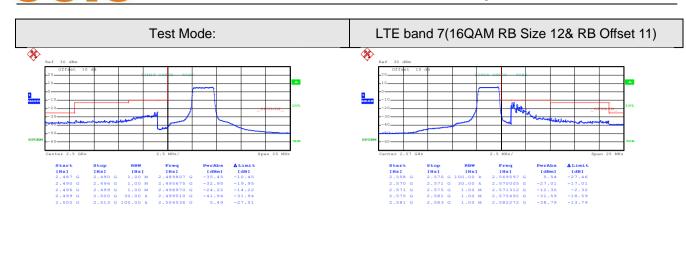
Lowest channel Highest channel



Lowest channel Highest channel





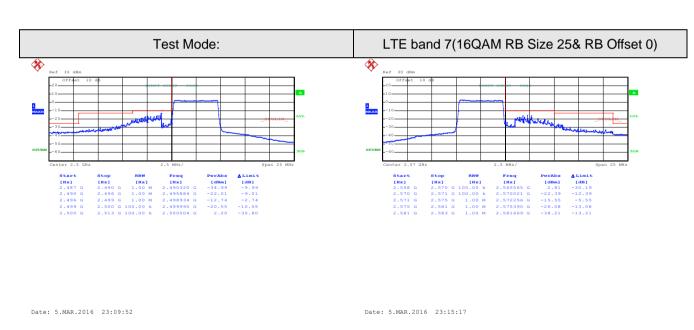


Date: 5.MAR.2016 23:08:22

Date: 5.MAR.2016 23:14:04

### Lowest channel

Highest channel



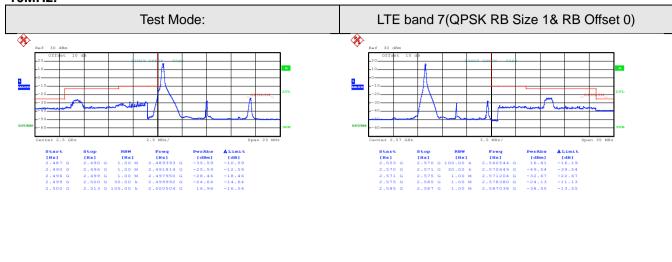
Lowest channel

Highest channel





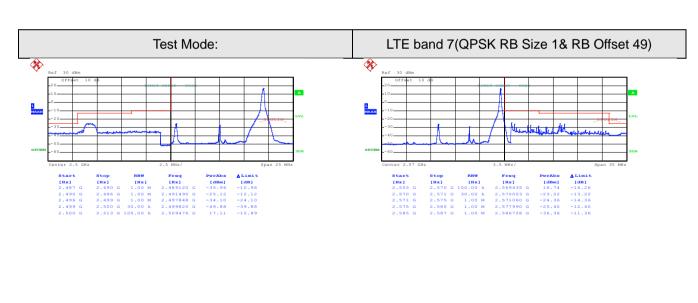
### 10MHz:



Lowest channel

Date: 5.MAR.2016 23:19:15

Highest channel



Date: 5.MAR.2016 23:20:42

Date: 6.MAR.2016 00:06:04

Date: 6.MAR.2016 00:05:20

Lowest channel

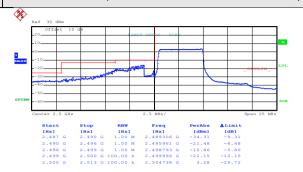
Highest channel





# 

### LTE band 7(QPSK RB Size 25& RB Offset 0)



Date: 5.MAR.2016 23:21:28

Date: 5.MAR.2016 23:21:28

### 

### LTE band 7(QPSK RB Size 25& RB Offset 24)



Date: 5.MAR.2016 23:22:16

Date: 6.MAR.2016 00:07:44

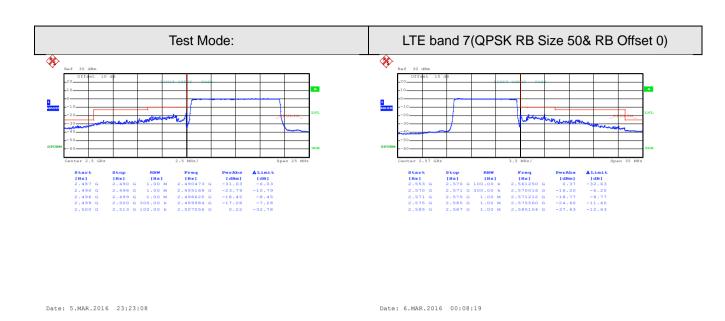
Lowest channel

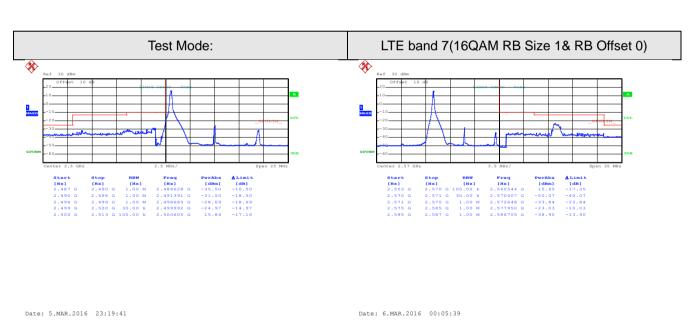
Highest channel



Highest channel

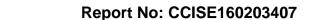






Lowest channel Highest channel

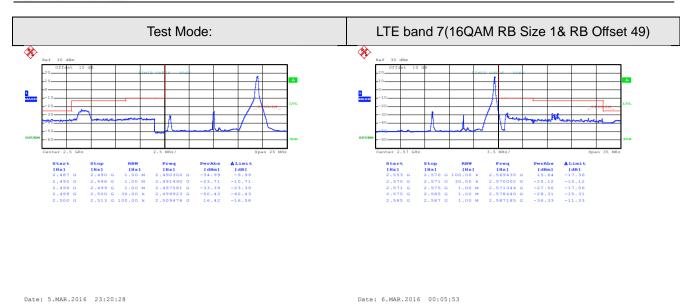
Lowest channel

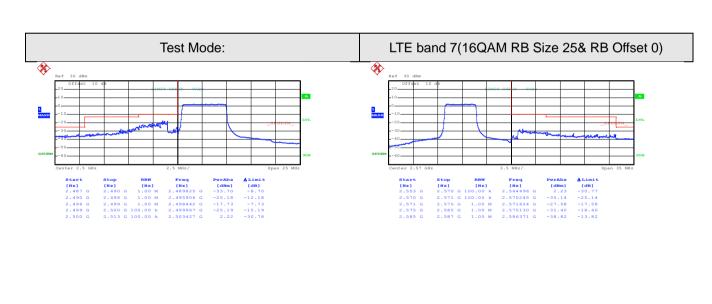


Highest channel



Date: 5.MAR.2016 23:21:42





Date: 6.MAR.2016 00:07:14

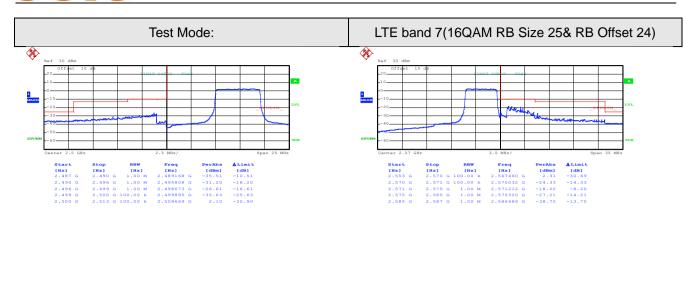
Lowest channel Highest channel

Lowest channel





Date: 5.MAR.2016 23:22:00



Date: 6.MAR.2016 00:07:29

Lowest channel Highest channel

## 

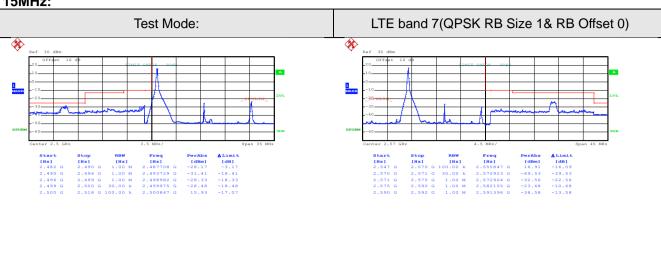
Date: 5.MAR.2016 23:23:20 Date: 6.MAR.2016 00:08:29

Lowest channel Highest channel





### 15MHz:

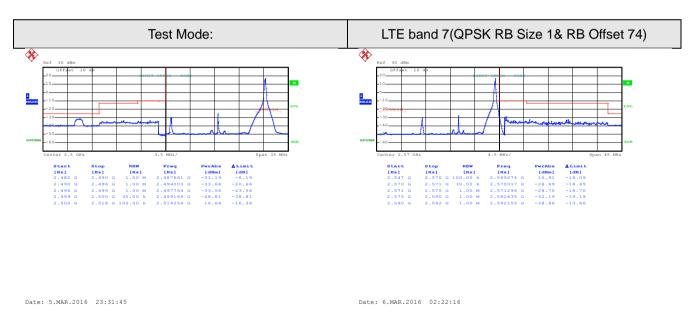


Lowest channel

Date: 5.MAR.2016 23:30:01

Highest channel

Date: 6.MAR.2016 02:21:26



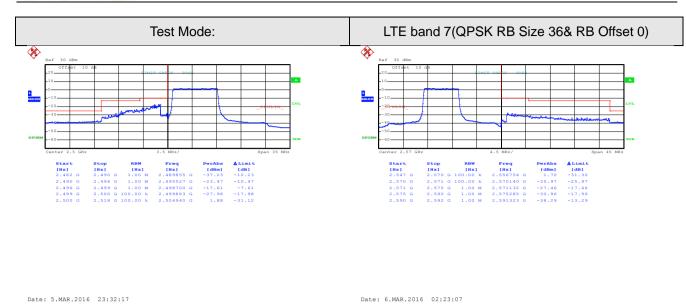
Lowest channel

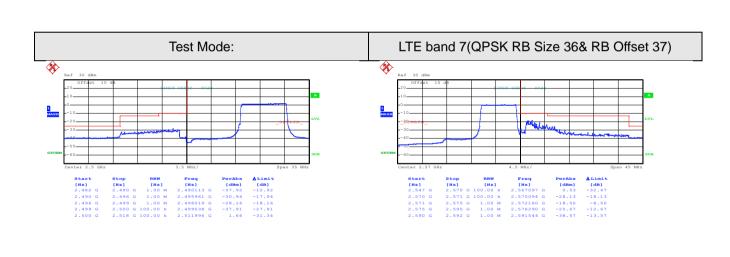
Highest channel



Highest channel







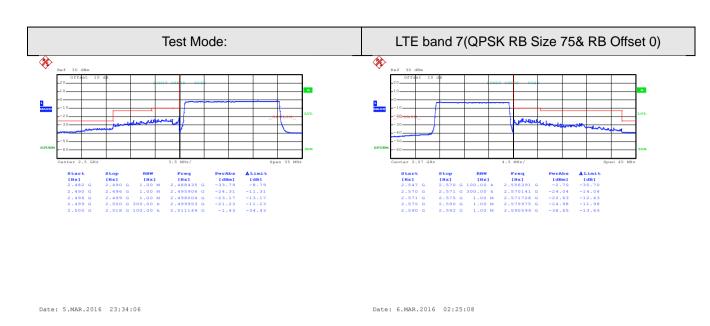
Date: 5.MAR.2016 23:33:11 Date: 6.MAR.2016 02:24:39

Lowest channel

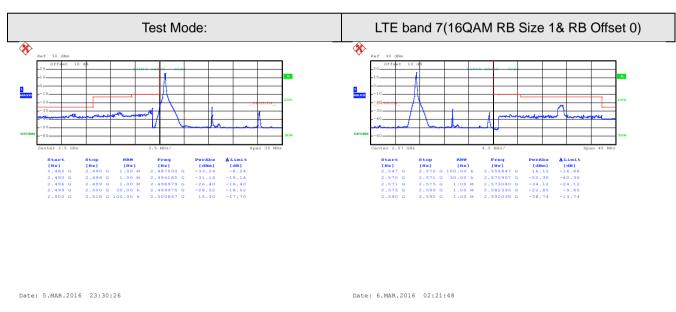
Lowest channel Highest channel







Lowest channel Highest channel

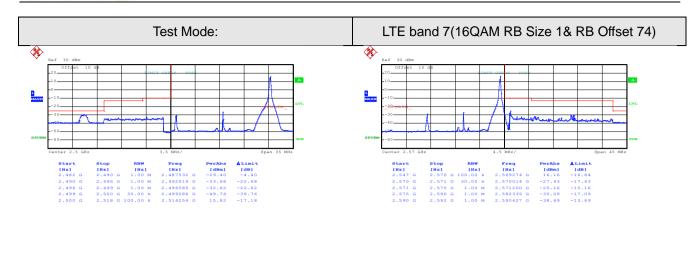


Lowest channel Highest channel



Date: 6.MAR.2016 02:22:05

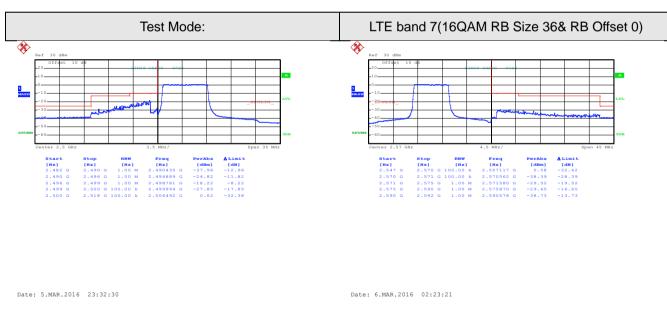




Date: 5.MAR.2016 23:31:32

Lowest channel

Highest channel

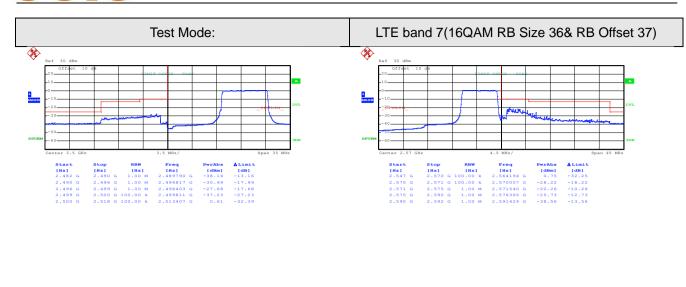


Lowest channel

Highest channel





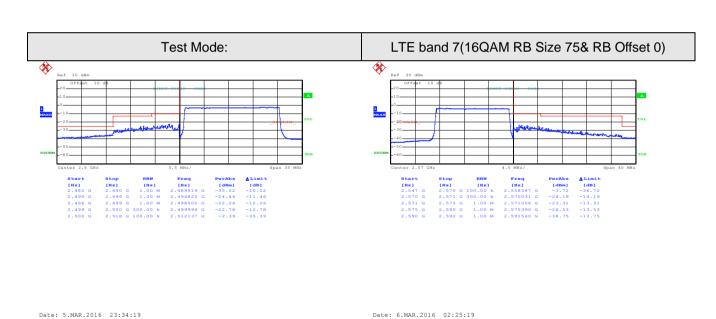


Lowest channel

Date: 5.MAR.2016 23:32:53

Highest channel

Date: 6.MAR.2016 02:23:34



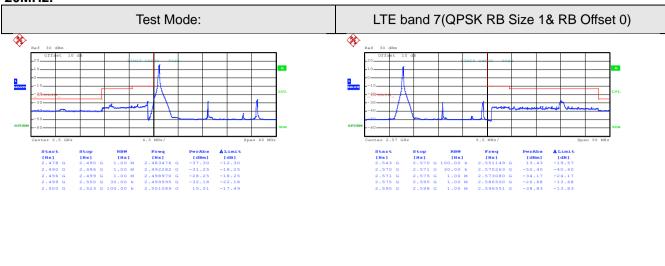
Lowest channel

Highest channel





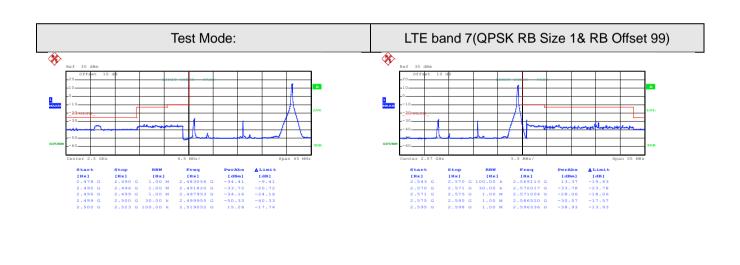
### 20MHz:



Date: 5.MAR.2016 23:41:11

Date: 6.MAR.2016 02:26:48

Lowest channel Highest channel



Date: 5.MAR.2016 23:41:53

Date: 6.MAR.2016 02:27:26

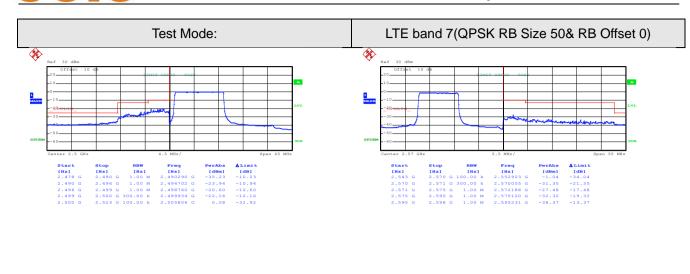
Lowest channel

Highest channel



Date: 6.MAR.2016 02:28:01

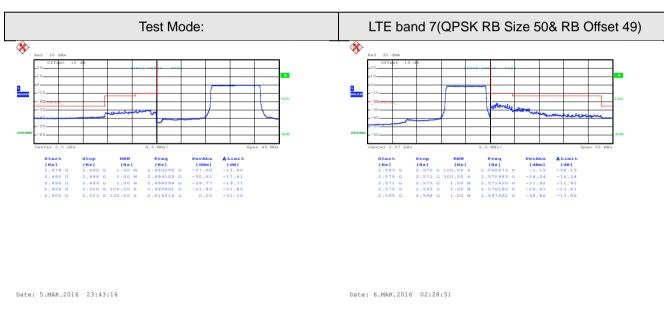




Date: 5.MAR.2016 23:42:28

Lowest channel

Highest channel

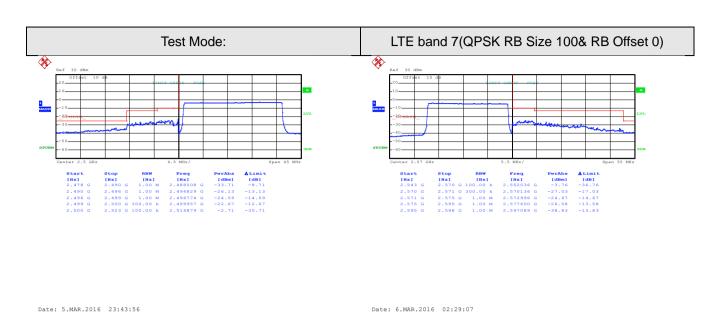


Lowest channel

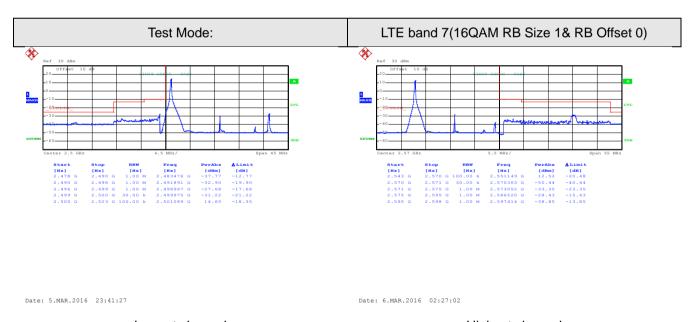
Highest channel







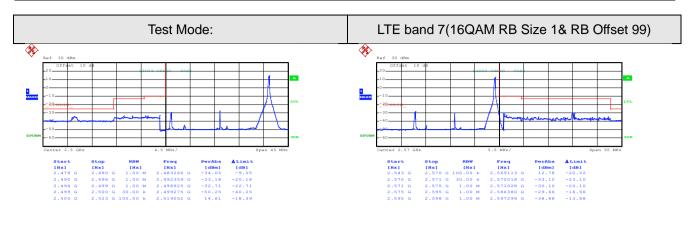
Lowest channel Highest channel



Lowest channel Highest channel





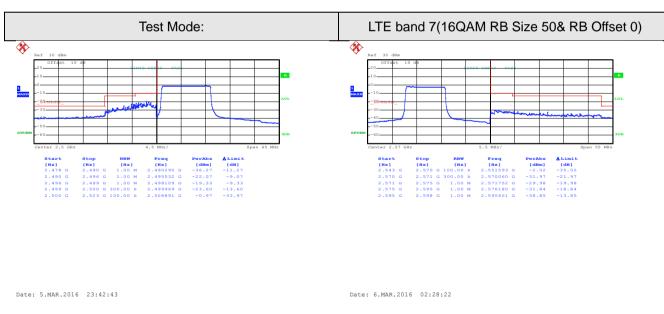


Date: 5.MAR.2016 23:41:41

Date: 6.MAR.2016 02:27:14

Lowest channel

Highest channel



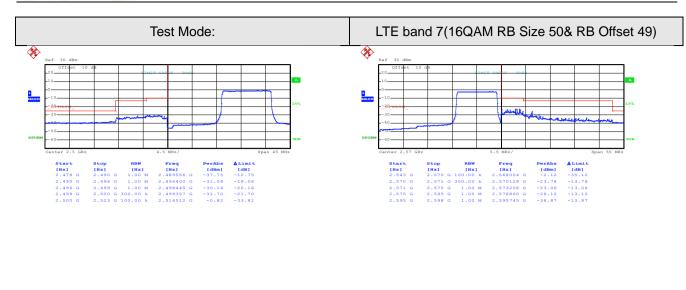
Lowest channel

Highest channel



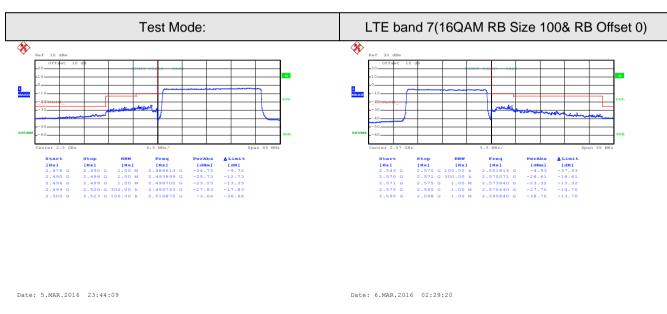


Date: 5.MAR.2016 23:42:58



Lowest channel Highest channel

Date: 6.MAR.2016 02:28:36



Lowest channel Highest channel





### 6.10 ERP, EIRP Measurement

Test Requirement:	FCC part 24.232 (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 7: 2W EIRP
Test setup:	Below 1GHz  Antenna Tower  Search Antenna  RF Test Receiver  Ground Plane  Above 1GHz
	Antenna Tower  Horn Antenna  Spectrum  Analyzer  Amplifier
	Substituted method:  Antenna mast  Ground plane  d: distance in meters d:3 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> </ol>
	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:
	<ul> <li>ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB)</li> <li>4. EIRP in frequency band above 1GHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:</li> </ul>
	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	size 1 & RB	offset 0)						
1850.70	18607	QPSK	1.4	Н	V	19.68					
1650.70	10007	QFSK	1.4	11	Н	18.02	33.00	Pass			
1850.70	18607	16QAM	1.4	Н	V	20.35	33.00	Fa55			
1650.70	10007	IOQAW	1.4	П	Н	18.15					
	1.4MHz(RB size 3 & RB offset 0)										
1850.70	18607	QPSK	1.4	Н	V	21.41					
1650.70	10007	QPSK	1.4		Н	18.57	33.00	Pass			
1850.70	18607	16QAM	1.4	Н	V	22.31	33.00	Fa55			
1650.70	10007	TOQAM	1.4		Н	23.05					
		1.	4MHz(RB s	size 6 & RB	offset 0)						
1050.70	10007	ODSK	1.1	Н	V	18.02					
1850.70	18607	QPSK	1.4	"	Н	23.25	22.00	Doos			
1950.70	10607	160 AM	1.4	Н	V	18.15	33.00	Pass			
1850.70	18607	16QAM	1.4	П	Н	20.35					

### 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)					
1000.00	19000	QPSK	1.1	Н	V	20.92				
1880.00	18900	QPSK	1.4	П	Н	17.16	33.00	Pass		
1880.00	18900	16QAM	1.4	Н	V	21.13	33.00	Pass		
1000.00	16900	IOQAW	1.4	П	Н	16.62				
	1.4MHz(RB size 3 & RB offset 0)									
1880.00	18900	QPSK	1.4	Н	V	20.77				
1000.00	16900	QFSR	1.4	11	Н	17.17	33.00	Pass		
1880.00	18900	16QAM	1.4	Н	V	21.40	33.00	F a 5 5		
1880.00	16900	IOQAW	1.4	11	Н	22.38				
		1.4	4MHz(RB	size 6 & RE	3 offset 0)					
1880.00	18900	QPSK	1.40	Н	V	17.82				
1000.00	16900	QFSR	1.40	11	Н	22.54	33.00	Pass		
1880.00	18900	16QAM	1.40	Н	V	17.90	33.00	F d 5 5		
1000.00	10300	IOQAW	1.40	11	Н	20.61				





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
			1.4MHz(RE	size 1 & F	RB offset 0)						
1000 20	10102	QPSK	1.1	Н	V	20.84					
1909.30	19193	QPSK	1.4	П	Н	18.03	33.00	Door			
1000 20	10102	16QAM	1.4	Н	V	21.25	33.00	Pass			
1909.30	19193	IOQAW	1.4	П	Н	17.71					
	1.4MHz(RB size 3 & RB offset 0)										
4000 20	40400	ODCK	4.4	1.1	V	21.11					
1909.30	19193	QPSK	1.4	Н	Н	18.03	22.00	Doos			
1000 20	10102	160AM	1 1	- 11	V	22.52	33.00	Pass			
1909.30	19193	16QAM	1.4	Н	Н	23.36					
			1.4MHz(RE	3 size 6 & F	RB offset 0)						
4000 20	40400	ODCK	4.4	1.1	V	18.04					
1909.30	19193	QPSK	1.4	Н	Н	23.51	22.00	Doos			
1000 20	10102	160AM	1.4	Н	V	18.05	33.00	Pass			
1909.30	19193	16QAM	1.4	П	Н	21.16					

### Lowest channel

	Lowest Channel									
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result		
		2	20MHz(RB s	ize 1 & RE	3 offset 0)					
1860.00	18700	QPSK	20	Н	V	19.47				
1000.00	16700	QFSK	20	П	Н	24.26	33.00	Pass		
1860.00	18700	16QAM	20	Н	V	19.59	33.00	F a 5 5		
1800.00	18700	TOQAM	20	- 11	Н	25.03				
	20MHz(RB size 50 & RB offset 0)									
1860.00	18700	QPSK	20	Н	V	16.28				
1000.00	10700	QFSK	20	П	Н	23.31	33.00	Pass		
1860.00	18700	16QAM	20	Н	V	17.71	33.00	F a 5 5		
1800.00	18700	TOQAM	20	- 11	Н	23.69				
		20	MHz(RB siz	e 100 & R	B offset 0)					
1860.00	18700	QPSK	20	Н	V	19.15				
1000.00	16700	QFSK	20	П	Н	22.03	33.00	Pass		
1860.00	18700	16QAM	20	Н	V	20.18	33.00	Fa55		
1000.00	10700	IOQAM	20	11	Н	23.36				





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)											
1000.00	10000	ODCK	20	Н	V	19.56					
1880.00	18900	QPSK	20	П	Н	25.27	22.00	Door			
1990.00	19000	16O A M	20	Н	V	19.70	33.00	Pass			
1880.00	18900	16QAM	20	H 25.12							
20MHz(RB size 50 & RB offset 0)											
1000.00	10000	ODSK	20	Н	V	16.10					
1880.00	18900	QPSK	20	П	Н	22.89	33.00	Pass			
1990.00	10000	160 A M	20	Н	V	18.05	33.00	Fa55			
1880.00	18900	16QAM	20	П	Н	20.51					
		20	MHz(RB siz	ze 100 & R	B offset 0)						
4000.00	40000	ODCK	20	11	V	19.05					
1880.00	18900	QPSK	20	Н	Н	21.51	22.00	Desa			
1990.00	19000	16001	20	Н	V	19.05	33.00	Pass			
1880.00	18900	16QAM	20	П	Н	21.51					

Highest channel

	nignest channel										
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
	20MHz(RB size 1 & RB offset 0)										
1900.00	19100	QPSK	20	Н	V	19.61					
1900.00	19100	QFSK	20	П	Н	25.34	33.00	Pass			
1900.00	19100	16QAM	20	ы	V	19.82	33.00	F d 5 5			
1900.00	19100	TOQAM	20 H		Н	25.37					
	20MHz(RB size 50 & RB offset 0)										
1900.00	19100	QPSK	, ,	20 H	V	16.24	33.00				
1900.00	19100	QFSK	20	П	Н	23.03		Pass			
1900.00	19100	16QAM	20	Н	V	17.78	33.00	F 455			
1900.00	19100	TOQAM	20	11	Н	21.15					
		20	0MHz(RB s	ize 100 8	RB offset (	))					
1900.00	19100	QPSK	20	Н	V	19.41					
1900.00	19100	QF3N	20	П	Н	21.35	33.00	Pass			
1900.00	19100	9100 16QAM	20	Н	V	19.62	33.00	F 055			
1900.00	19100	TOQAM	20	11	Н	21.47					





### LTE band 4 part

### Lowest 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)					
1710.70	19957	QPSK	1.4	Н	V	20.08				
1710.70	19937	QFSK	1.4	1.4	Н	27.23	30.00	Pass		
1710.70	19957	16QAM	1.4	ш	V	21.07	30.00	Fa55		
1710.70	19931	TOQAW	1.4 H H 18.67		18.67					
	1.4MHz(RB size 3 & RB offset 0)									
1710.70	19957	QPSK	1.4	Н	V	19.96		Pass		
1710.70	19937	QFSK	1.4	П	Н	26.65	30.00			
1710.70	19957	16QAM	1.4	н	V	19.75	30.00	Fa55		
1710.70	19937	IOQAW	1.4	П	Н	27.78				
		1	I.4MHz(RE	3 size 6 &	RB offset 0)					
1710.70	19957	QPSK	1.4	Н	V	19.96				
1710.70	19957	QFSK	1.4	П	Н	26.68	20.00	Pass		
1710.70	19957	16QAM	1.4	Н	V	18.32	30.00			
1710.70	19907	IOQAW	1.4	П	Н	26.04				

### Middle channel

Middle channel											
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
	1.4MHz(RB size 1 & RB offset 0)										
1732.50	20175	QPSK	1.4	Н	V	21.11					
1732.50	20175	QFSK	1.4	П	Н	27.35	30.00	Docc			
1732.50	20175	16QAM	1.4 H		V	20.45	30.00	Pass			
1732.30	20173	TOQAM	1.4	1.1	Н	18.73					
	1.4MHz(RB size 3 & RB offset 0)										
1732.50	20175	QPSK	1.4	Н	V	20.81					
1732.30	20173	QFSK	1.4		Н	27.16	30.00	Pass			
1732.50	20175	16QAM	1.4	н	V	20.43	30.00	1 033			
1732.30	20173	TOQAM	1.4	1.1	Н	27.56					
		1	.4MHz(RE	3 size 6 &	RB offset 0)						
1732.50	20175	QPSK	1.4	Н	V	20.71					
1732.30	20173	Qi Si	1.4	1.1	Н	27.01	30.00	Pass			
1732.50	20175	16QAM	1.4	Н	V	18.42	50.00	1 033			
1732.30	20173	TOQAM	1.4	11	Н	26.17					





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result				
	1.4MHz(RB size 1 & RB offset 0)											
1754.30	20393	QPSK	1.4	Н	V	21.27						
1754.50	20393	QFSK	1.4	1.4	Н	28.62	30.00	Pass				
1754 20	20393	16QAM	1.4	Н	V	21.14	30.00	Fa55				
1754.30	20393	IOQAW	1.4	П	Н	19.03						
	1.4MHz(RB size 3 & RB offset 0)											
1754.30	20202	QPSK	1 1 1	1.4 H	V	21.35						
1754.30	20393	QPSK	1.4	П	Н	28.02	30.00	Pass				
1754.30	20393	16QAM	1.4	Н	V	21.13	30.00	Fa55				
1754.50	20393	IOQAW	1.4	П	Н	28.03						
		•	1.4MHz(RE	3 size 6 & F	RB offset 0)							
1751 20	20202	ODSK	1.1	Н	V	21.17						
1754.30	20393	QPSK	1.4		Н	28.06	20.00	Door				
1754 20	20202	160AM	4.4	Н	V	19.92	30.00	Pass				
1754.30	20393	16QAM	1.4	П	Н	26.37						

### Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result		
	20MHz(RB size 1 & RB offset 0)									
1720.00	20050	QPSK	20	Н	V	22.36				
1720.00	20030	QF 5K	20	11	Н	26.63	20.00	Pass		
1720 00 20050 16QAM 20 H V 23.41						Pass				
1720.00	20050	TOQAM	20	П	Н	25.58				
	20MHz(RB size 50 & RB offset 0)									
1720.00	20050	QPSK	20	Н	V	24.01				
1720.00	20050	QFSK	20	П	Н	25.61	30.00	Pass		
1720.00	20050	16QAM	20	Н	V	23.39	30.00	Fa55		
1720.00	20030	TOQAM	20	11	Н	25.74				
		20MHz(	RB size 100	& RB offs	et 0)					
1720.00	20050	QPSK	20	Н	V	22.41				
1720.00	20050	QFSK	20	П	Н	23.91	30.00	Pass		
1720.00	20050	16QAM	20	Н	V	23.71	30.00	газэ		
1720.00	20000	IOQAW	20	11	Н	24.05				



Report No: CCISE160203407

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	20.46	30.00				
1732.50	20175	QFSN	20	П	Н	27.64		Pass			
1732.50	20175	16QAM	20	20 H	V	20.19	30.00	Pass			
1732.50	20175	TOQAM	20	11	Н	27.27					
	20MHz(RB size 50 & RB offset 0)										
1732.50	20175	175 QPSK	K 20	Н	V	23.32					
1732.50	20175	QFSK		11	Н	24.54	30.00	Pass			
1732.50	20175	16QAM	20	н	V	22.48	30.00	rass			
1732.30	20173	TOQAM	20	11	Н	25.61					
		20	MHz(RB siz	e 100 & R	B offset 0)						
1732.50	20175	00475 ODCK	20	Н	V	22.38					
1732.50	20173	QPSK		Н	Н	23.81	30.00	Pass			
1732.50	20175	20175 16QAM	20	Н	V	23.04					
1732.30				11	Н	24.47					

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	21.39						
1745.00	20300	QFSK	20	П	Н	26.67	30.00	Pass				
1745.00	20300	16QAM	20	20 H —	V	22.58	30.00	Pass				
1745.00	20300	TOQAM	20	11	Н	27.06						
	20MHz(RB size 50 & RB offset 0)											
1745.00	20300	QPSK	20	Н	V	23.15						
1745.00	20300	QFSK	20	11	Н	25.57	30.00	Pass				
1745.00	20300	16QAM	20	Н	V	23.54	30.00	F a 5 5				
1745.00	20300	TOQAM	20	11	Н	26.37						
		2	20MHz(RB siz	e 100 & RI	B offset 0)							
1745.00	20200	QPSK	20	Н	V	22.71						
1745.00	1745.00 20300	QF3N	20	П	Н	24.48	30.00	Pass				
1745.00	20300	20300 16QAM 20	20	Н	V	23.39						
1745.00			20	11	Н	25.01						





### LTE band 7 part

### Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result				
	5MHz(RB size 1 & RB offset 0)											
2502.50	20775	QPSK	5	Н	V	14.56						
2502.50	20773	QFSK	5	П	Н	16.75	33.00	Pass				
2502.50	20775	16QAM	5	Н	V	16.69	33.00	Fa55				
2302.30	20773	TOQAW	5	11	Н	18.57						
			5MHz(RB	size 12 &	RB offset 0)							
2502.50	20775	QPSK	5	Н	V	15.01	33.00	Pass				
2302.30	20773	QFSK	5		Н	18.62						
2502.50	20775	16QAM	5	Н	V	14.52	33.00	Fa55				
2502.50	20773	IOQAW	5	П	Н	18.47						
			5MHz(RB	size 25 &	RB offset 0)							
2502.50	20775	QPSK	5	Н	V	14.51						
2502.50	20773	QFSK	5	П	Н	19.62	22.00	Pass				
2502.50	20775	40001	5	11	V	15.75	33.00					
2502.50	20113	16QAM	ິວ	Η	Н	18.68						

### Middle channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
	5MHz(RB size 1 & RB offset 0)										
2535.00	21100	QPSK	5	Н	V	14.20					
2535.00	21100	QPSK	5	П	Н	16.89	33.00	Door			
2535.00	21100	16QAM	5	Н	V	17.26	33.00	Pass			
2555.00	21100	IOQAW	5	П	Н	19.26					
		5	MHz(RB	size 12 &	RB offset 0)						
2535.00	21100	21100 QPSK	5	Н	V	14.86					
2555.00	21100	QFSK	5	] ''	Н	18.70	33.00	Pass			
2535.00	21100	16QAM	5	Н	<b>V</b>	14.82					
2555.00	21100	TOQAM	5	11	Н	18.79					
		5	MHz(RB	size 25 &	RB offset 0)						
2525.00	21100	OBSK	E	Н	V	14.58					
2000.00	2535.00   21100   QPSK   5	3	п	Н	19.41	22.00	Door				
2535.00	21100	16OAM	16QAM 5	Н	V	15.23	33.00	Pass			
2535.00	21100	16QAM	o o		Н	19.04					





**Highest channel** 

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result				
	5MHz(RB size 1 & RB offset 0)											
2567.50	21425	QPSK	5	Н	V	14.36						
2567.50	21423	QFSK	5	П	Н	17.01	33.00	Pass				
2567.50	21425	16QAM	5	Н	V	17.35	33.00	Fa55				
2567.50	21423	IOQAM	5	П	Н	19.14						
			5MHz(RB	size 12 & F	RB offset 0)							
2567.50	21425	QPSK	5	ы	V	14.03						
2567.50	21425	QPSK	5	Н	Н	17.96	33.00	Pass				
2567.50	21425	16QAM	5	Н	V	14.27	33.00	Fd55				
2567.50	21423	IOQAW	5	П	Н	17.68						
			5MHz(RB	size 25 & F	RB offset 0)							
2567.50	24.425	ODSK	E		V	14.69						
2567.50	21425	QPSK	5	Н	Н	19.25	22.00	Door				
2567.50	0507.50	_		V	14.27	33.00	Pass					
2567.50	21425	16QAM	5	Н	Н	18.32						

### Lowest channel

Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
		2	0MHz(RB si	ze 1 & RB	offset 0)			
2510.00	20050	QPSK	20	Н	V	14.03	22.00	
2510.00	20850	QFSK	20	П	Н	18.57		Door
2510.00	20050	160AM	20 4	Ш	V	14.03	33.00	Pass
2510.00	20850	16QAM	20	Н	Н	18.41		
		20MHz	(RB size 50	& RB offse	et 0)			
2510.00	00050	ODCK	20	1.1	V	13.69		
2510.00	20850	QPSK	20	Н	Н	17.24	22.00	Door
2510.00	20050	160014		Н	V	14.16	33.00	Pass
2510.00	20850	16QAM	20	П	Н	19.26		
		20MHz(	RB size 100	& RB offs	et 0)			
2510.00	20050	ODSK	00	Ш	V	12.03		
2510.00	20850 QPSK 20	20	Н	Н	18.30	22.00	Door	
2510.00	20850 160	16QAM 20	20	Н	V	14.42	33.00	Pass
2510.00	20000	IOQAW	20	17	Н	18.28		



Report No: CCISE160203407

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	13.66					
2555.00	21100	QF3K	20	П	Н	18.79	33.00	Pass			
2535.00	21100	16QAM	20	20 H	V	14.82	33.00	F 455			
2555.00	21100	IOQAW	20	11	Н	18.79					
		20	MHz(RB siz	ze 50 & RE	3 offset 0)						
2535.00	21100	QPSK	20	Н	V	13.34					
2555.00	21100	QFSK	20	П	Н	17.19	33.00	Pass			
2535.00	21100	16QAM	20	Н	V	13.75	33.00	rass			
2333.00	21100	TOQAIVI	20	!!	Н	19.14					
		20	MHz(RB siz	e 100 & RI	B offset 0)						
2535.00	21100	QPSK	20	Н	V	11.54					
2555.00	21100	QF3K		11	Н	17.29	33.00	Pass			
2535.00	21100	21100 16QAM	20	Н	V	13.07	33.00	rass			
2555.00	21100	IOQAW	20	11	Н	17.69					

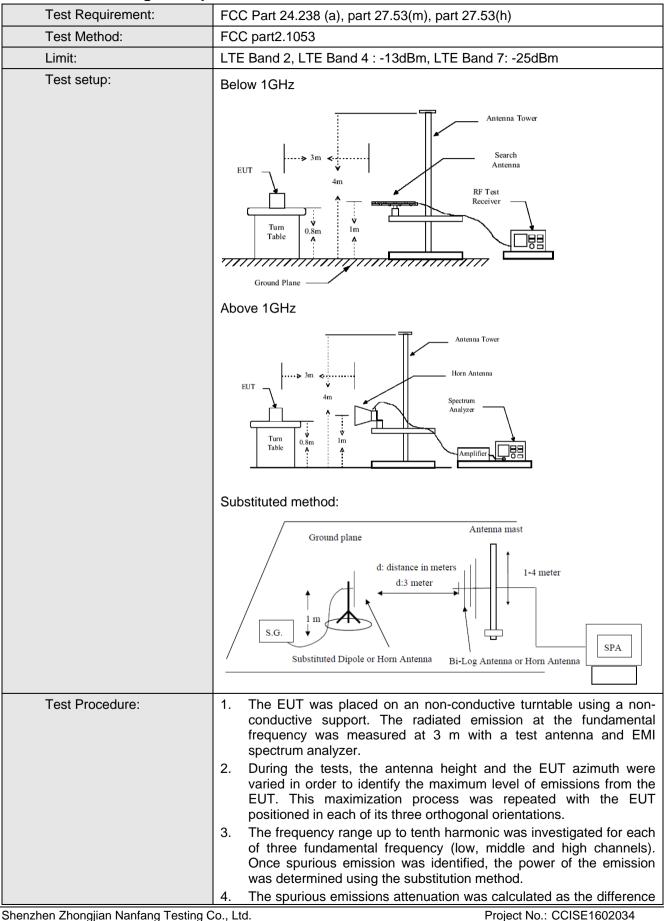
High channe

High channel											
Frequency (MHz)	UL Channel	Modulation	BW (MHz)	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result			
	20MHz(RB size 1 & RB offset 0)										
2560.00	21350	QPSK	20	Н	V	13.54					
2560.00	21330	QFSK	20	П	Н	18.66	33.00	Pass			
2560.00	21350	16QAM	20	Н	V	15.07	33.00	Fass			
2300.00	21330	TOQAM	20	11	Н	18.15					
	20MHz(RB size 50 & RB offset 0)										
2560.00	21250	21350 QPSK	20	н	V	14.02					
2300.00	21330	QFSK	20	11	Н	18.11	33.00	Pass			
2560.00	21350	16QAM	20	Н	V	14.26	33.00	rass			
2300.00	21330	TOQAM	20	- ''	Н	19.27					
		2	20MHz(RB s	ize 100 8	RB offset (	0)					
2560.00	21350	QPSK	20	20 H		V	11.74				
2300.00	21330	QF SIX	20		Н	18.15	33.00	Pass			
2560.00	21350	21350 16QAM	20	Н	V	14.03	33.00	F 435			
2300.00	21330	IOQAW	20	11	Н	18.11					





### 6.11 Field strength of spurious radiation measurement



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Page 296 of 330



Report No: CCISE160203407

	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.



Report No: CCISE160203407

LTE band 2 part:

	1 4MHz/PR e	ize 1 & RB offset 0	) for OPSK	
- 44.	Spurious			- ·
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3701.40	Vertical	-49.91		
5552.10	V	-30.40		
7402.00	V	-35.98	42.00	Door
3701.40	Horizontal	-49.32	-13.00	Pass
5552.10	Н	-38.12		
7402.00	Н	-37.42		
		Middle		·
3760.00	Vertical	-47.66		
5640.00	V	-28.68		
7520.00	V	-40.20	-13.00	Pass
3760.00	Horizontal	-50.36	-13.00	Pass
5640.00	Н	-37.26		
7520.00	Н	-38.44		
		Highest		
3816.60	Vertical	-45.87		
5724.90	V	-31.51		
7633.20	V	-40.51	-13.00	Pass
3816.60	Horizontal	-49.26		F d 5 5
5724.90	Н	-40.65		
7633.20	Н	-40.68		





	3MHz(RB siz	ze 1 & RB offset 0)	for QPSK	
[		Emission		Decelt
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3703.00	Vertical	-47.85		
5554.50	V	-32.26		
7406.00	V	-36.01	42.00	Dana
3703.00	Horizontal	-46.58	-13.00	Pass
5554.50	Н	-37.18	]	
7406.00	Н	-38.62	]	
		Middle		
3760.00	Vertical	-47.69		Pass
5640.00	V	-30.02		
7520.00	V	-38.62	-13.00	
3760.00	Horizontal	-47.02	-13.00	F 455
5640.00	Н	-40.02		
7520.00	Н	-39.15		
		Highest		
3817.00	Vertical	-47.56		
5725.50	V	-34.12		
7634.00	V	-39.97	-13.00	Pass
3817.00	Horizontal	-48.78		Pass
5725.50	Н	-39.01		
7634.00	Н	-39.61	]	





	5MHz(RB siz	ze 1 & RB offset 0) fo	or QPSK	
Eroguepov (MHz)	<del>-</del>	Emission		Result
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Resuit
		Lowest		
3705.00	Vertical	-48.28		
5557.50	V	-31.39		
7410.00	V	-38.03	-13.00	Pass
3705.00	Horizontal	-47.39	-13.00	Pass
5557.50	Н	-36.52		
7410.00	Н	-37.03		
<u> </u>		Middle		
3760.00	Vertical	-49.50		
5640.00	V	-27.75		
7520.00	V	-41.46	40.00	D
3760.00	Horizontal	-50.15	-13.00	Pass
5640.00	Н	-35.40		
7520.00	Н	-39.16		
		Highest		
3815.00	Vertical	-50.10		
5722.50	V	-32.08		
7630.00	V	-40.67	-13.00	Door
3815.00	Horizontal	-49.91		Pass
5722.50	Н	-40.18		
7630.00	Н	-40.42		





	10MHz(RB si	ze 1 & RB offset 0) fe	or QPSK	
	Spurious	Emission		
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3710.00	Vertical	-47.56		
5565.00	V	-31.25		
7420.00	V	-37.02	12.00	Door
3710.00	Horizontal	-46.69	-13.00	Pass
5565.00	Н	-37.74		
7420.00	Н	-39.95		
·		Middle		
3760.00	Vertical	-48.87		
5640.00	V	-29.54		
7520.00	V	-39.87	-13.00	Pass
3760.00	Horizontal	-48.32	-13.00	Pass
5640.00	Н	-39.15		
7520.00	Н	-40.03		
		Highest		
3810.00	Vertical	-49.66		
5715.00	V	-33.74		
7620.00	V	-40.01	-13.00	Pass
3810.00	Horizontal	-49.25		rass
5715.00	Н	-38.11		
7620.00	Н	-40.28		





	15MHz(RB	size 1 & RB offset (	)) for QPSK	
Frequency (MHz)	Spurious	Emission	Limit (dBm)	Result
r requericy (IVII 12)	Polarization	Level (dBm)	Limit (abin)	Nesuit
		Lowest		
3715.00	Vertical	-47.75		
5572.50	V	-32.02		
7430.00	V	-39.71	-13.00	Pass
3715.00	Horizontal	-48.25	-13.00	Pass
5572.50	Н	-37.14		
7430.00	Н	-38.02		
		Middle	<u>.</u>	
3760.00	Vertical	-48.15		
5640.00	V	-28.92		
7520.00	V	-40.25	12.00	Daga
3760.00	Horizontal	-50.21	-13.00	Pass
5640.00	Н	-36.62		
7520.00	Н	-40.02		
		Highest		
3805.00	Vertical	-49.51		
5707.50	V	-32.02		
7610.00	V	-39.98	-13.00	Dage
3805.00	Horizontal	-48.75		Pass
5707.50	Н	-41.25		
7610.00	Н	-40.81		





	20MHz(RB s	size 1 & RB offset 0	) for QPSK	
	Spurious	Emission		
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3720.00	Vertical	-48.21		
5580.00	V	-29.00		
7440.00	V	-36.97	12.00	Door
3720.00	Horizontal	-47.46	-13.00	Pass
5580.00	Н	-38.77		
7440.00	Н	-40.04		
		Middle		
3760.00	Vertical	-49.75		
5640.00	V	-30.41		
7520.00	V	-40.96	-13.00	Pass
3760.00	Horizontal	-49.62	-13.00	F d 5 5
5640.00	Н	-38.09		
7520.00	Н	-39.93		
		Highest		
3800.00	Vertical	-49.05		
5700.00	V	-32.74		
7600.00	V	-39.13	-13.00	Door
3800.00	Horizontal	-48.23		Pass
5700.00	Н	-39.02		
7600.00	Н	-39.83		





#### LTE Band 4 Part:

1.4MHz(RB size 1 & RB offset 0) for QPSK				
Frequency (MHz)	Spurious		Limit (dBm)	Result
r requericy (ivii iz)	Polarization	Level (dBm)	Limit (dbin)	Nesuit
Lowest				
3421.40	Vertical	-49.48		
5132.10	V	-38.58		
6842.80	V	-38.52	-13.00	Pass
3421.40	Horizontal	-48.72	-13.00	FdSS
5132.10	Н	-44.99		
6842.80	Н	-44.80		
		Middle		
3465.00	Vertical	-47.17		
5197.50	V	-37.94		
6930.00	V	-35.71	42.00	Door
3465.00	Horizontal	-48.62	-13.00	Pass
5197.50	Н	-42.06		
6930.00	Н	-38.14		
		Highest		
3508.60	Vertical	-49.61		
5262.90	V	-34.70		
7017.20	V	-37.34	12.00	Pass
3508.60	Horizontal	-50.25	-13.00	Pass
5262.90	Н	-43.67		
7017.20	Н	-40.53		





	3MHz(RB siz	e 1 & RB offset 0) fo	or QPSK	
Fraguana, (MUz)		Emission		Result
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3423.00	Vertical	-42.51		
5134.50	V	-34.16		
6846.00	V	-36.62	-13.00	Pass
3423.00	Horizontal	-49.85	-13.00	Pass
5134.50	Н	-42.27		
6846.00	Н	-41.18		
		Middle		
3465.00	Vertical	-49.25		Pass
5197.50	V	-44.17		
6930.00	V	-40.03	-13.00	
3465.00	Horizontal	-49.95	-13.00	F 455
5197.50	Н	-46.63		
6930.00	Н	-41.15		
		Highest		
3507.00	Vertical	-49.71		
5260.50	V	-41.15		
7014.00	V	-37.30	-13.00	Pass
3507.00	Horizontal	-48.81		Pass
5260.50	Н	-44.03		
7014.00	Н	-44.17		





	5MHz(RB siz	ze 1 & RB offset 0) fo	or QPSK	
Farmer (MIL)	<del>-</del>	Emission		D II
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3425.00	Vertical	-48.74		
5137.50	V	-38.07		
6850.00	V	-40.02	-13.00	Pass
3425.00	Horizontal	-49.55	-13.00	Pass
5137.50	Н	-43.15		
6850.00	Н	-42.29		
<u>.</u>		Middle		·
3465.00	Vertical	-49.17		
5197.50	V	-40.87		
6930.00	V	-38.33	-13.00	Pass
3465.00	Horizontal	-48.44	-13.00	Pass
5197.50	Н	-40.81		
6930.00	Н	-41.47		
<u>.</u>		Highest		·
3505.00	Vertical	-47.99		
5257.50	V	-37.20		
7010.00	V	-37.53	-13.00	Door
3505.00	Horizontal	-48.90		Pass
5257.50	Н	-41.95		
7010.00	Н	-41.19		





	10MHz(RB s	ize 1 & RB offset 0)	for QPSK	
Fragues av (MHz)		Emission		Result
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3430.00	Vertical	-43.28		
5145.00	V	-33.38		
6860.00	V	-35.01	-13.00	Pass
3430.00	Horizontal	-48.75	-13.00	Pass
5145.00	Н	-41.16		
6860.00	Н	-42.03		
		Middle	<u> </u>	
3465.00	Vertical	-49.01		Pass
5197.50	V	-43.13		
6930.00	V	-39.79	-13.00	
3465.00	Horizontal	-48.81	-13.00	Pass
5197.50	Н	-45.02		
6930.00	Н	-42.31		
		Highest		
3500.00	Vertical	-48.71		
5250.00	V	-40.01		
7000.00	V	-36.62	-13.00	Pass
3500.00	Horizontal	-49.36		Pass
5250.00	Н	-43.32		
7000.00	Н	-43.71		





	15MHz(RB si	ize 1 & RB offset 0)	for QPSK	
Fraguanov (MUz)		Emission		Result
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
		Lowest		
3435.00	Vertical	-49.26		
5152.50	V	-39.15		
6870.00	V	-41.17	40.00	Dana
3435.00	Horizontal	-49.25	-13.00	Pass
5152.50	Н	-44.07	]	
6870.00	Н	-43.31	]	
<u> </u>		Middle	<u> </u>	
3465.00	Vertical	-48.85		
5197.50	V	-41.11		
6930.00	V	-39.62	40.00	Dana
3465.00	Horizontal	-49.02	-13.00	Pass
5197.50	Н	-41.17		
6930.00	Н	-42.25	]	
<u>.</u>		Highest		
3495.00	Vertical	-48.85		
5242.50	V	-38.62	1	
6990.00	V	-38.04	-13.00	Door
3495.00	Horizontal	-49.85		Pass
5242.50	Н	-42.35	1	
6990.00	Н	-42.17		





	20MHz(RB s	ize 1 & RB offset 0	) for QPSK		
Frequency (MHz)		Emission	Limit (dBm)	Result	
riequency (Min2)	Polarization	Level (dBm)	Lilliit (dbill)	Result	
		Lowest			
3440.00	Vertical	-44.09			
5160.00	V	-34.68			
6880.00	6880.00 V -34.94		-13.00	Door	
3440.00	Horizontal	-49.68	-13.00	Pass	
5160.00	Н	-42.37			
6880.00	Н	-41.57			
		Middle			
3465.00	Vertical	-49.22		Pass	
5197.50	V	-42.72			
6930.00	V	-40.04	12.00		
3465.00	Horizontal	-49.40	-13.00		
5197.50	Н	-44.59			
6930.00	Н	-41.34			
		Highest			
3490.00	Vertical	-49.15			
5235.00	V	-39.56			
6980.00	V -35.83		12.00	Door	
3490.00	Horizontal	-48.93	-13.00	Pass	
5235.00	Н	-42.66			
6980.00	Н	-42.75			





### LTE Band 7 Part:

		LTE Band 7 Part:			
	•	e 1 & RB offset 0) f	or QPSK	T	
Frequency (MHz)	Spurious		Limit (dBm)	Result	
1 7 ( )	Polarization	Level (dBm)	,		
		Lowest			
5005.00	Vertical	-42.19	_		
7507.50	V	-36.55	<u> </u> <del> </del>		
10010.00	V	-30.55	-25.00	Pass	
5005.00	Horizontal	-42.55			
7507.50	Н	-38.68			
10010.00	Н	-38.42			
		Middle			
5070.00	Vertical	-45.59			
7605.00	V	-40.99			
10140.00	V	-31.17	-25.00	Pass	
5070.00	Horizontal	-44.37	-23.00	Pa55	
7605.00	Н	-39.56			
10140.00	Н	-32.43			
		Highest			
5135.00	Vertical	-43.20			
7702.50	V	-38.54			
10270.00	V	-28.99			
5135.00	Horizontal	-44.16	-25.00	Pass	
7702.50	Н	-39.20			
10270.00	Н	-31.52			
	10MHz(RB siz	ze 1 & RB offset 0)	for QPSK	1	
Fraguency (MHz)	Spurious			Dogult	
Frequency (MHz)	Polarization	Level (dBm)	Limit (dBm)	Result	
		Lowest			
5010.00	Vertical	-44.15			
7515.00	V	-40.02			
10020.00	V	-30.25	-25.00	Pass	
5010.00	Horizontal	-45.58	-25.00	rass	
7515.00	H	-39.92			
10020.00	Н	-33.47			
		Middle			
5070.00	Vertical	-43.32			
7605.00	V	-40.15			
10140.00	V	-30.25	25.00	D	
5070.00	Horizontal	-45.58	-25.00	Pass	
7605.00	Н	-38.62	1		
10140.00	Н	-38.74	1		





		Highest			
5130.00	Vertical	-38.02			
7695.00	V	-42.26			
10260.00	V	-40.01	_		
5130.00	Horizontal	-41.25	-25.00	Pass	
7695.00	Н	-40.08	_		
10260.00	Н	-40.71			
	15MHz(RB s	size 1 & RB offset 0	) for QPSK		
Frequency (MHz)		Emission		Popult	
rrequency (IVITZ)	Polarization	Level (dBm)	Limit (dBm)	Result	
	<u>,                                      </u>	Lowest			
5015.00	Vertical	-41.25			
7522.50	V	-36.58			
10030.00	V	-30.74	-25.00	Pass	
5015.00	Horizontal	-43.03	-23.00	r ass	
7522.50	Н	-39.64			
10030.00	Н	-39.11			
		Middle			
5070.00	Vertical	-46.25		Pass	
7605.00	V	-41.12			
10140.00	V	-32.02	25.00		
5070.00	Horizontal	-45.58	-25.00		
7605.00	Н	-40.25			
10140.00	Н	-33.62			
		Highest			
5125.00	Vertical	-44.01			
7687.50	V	-39.62			
10250.00	V	-29.71	05.00	_	
5125.00	Horizontal	-44.18	-25.00	Pass	
7687.50	Н	-39.25			
10250.00	Н	-32.84			
	20MHz(RB s	size 1 & RB offset 0	) for QPSK	•	
Frequency (MHz)		Emission	Limit (dBm)	Result	
r requerity (Miriz)	Polarization	Level (dBm)	Littiit (dDitt)	Nesuit	
		Lowest			
5020.00	Vertical	-43.89			
7530.00	V	-39.21			
10040.00	V	-29.59	-25.00	Pass	
5020.00	Horizontal	-44.94		1 400	
7530.00	7530.00 H -38.58				
10040.00	Н	-32.53			





		Middle			
5070.00	Vertical	-42.83			
7605.00	V	-39.16			
10140.00	V	-29.20	-25.00	Pass	
5070.00	Horizontal	-44.17	-25.00	Fa55	
7605.00	Н	-37.76			
10140.00	Н	-37.62			
		Highest			
5120.00	Vertical	-37.48			
7680.00	V	-41.27			
10240.00	V	-39.97	-25.00	Pass	
5120.00	Horizontal	-40.24	-25.00	F a >>	
7680.00	Н	-39.49			
10240.00	Н	-41.20			



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

Measurement Data (the worst channel):





## LTE Band 2(QPSK):

	,	LIE Dallu			
Reference Fr	equency: LTE Band	2(1.4MHz) N	Middle channel=18900	channel=1880.00	)MHz
Power supplied	Temperature (°C)	Frequency error		Limit (ppm)	Result
(Vdc)	remperature ( c)	Hz	ppm	сини (ррии)	Nesuit
	-30	163	0.086702		
	-20	124	0.065957		
	-10	105	0.055851		
	0	125	0.066489		
3.80	10	133	0.070745	±2.5	Pass
0.00	20	135	0.071809		. 400
	30	140	0.074468		
	40	156	0.082979		
	50	159	0.084574		
Poforonco F			iddle channel=18900 c	hannal-1880 00	MU-7
	requericy. LTL barro				IVII IZ
Power supplied	Temperature (°ℂ)		equency error	Limit (ppm)	Result
(Vdc)		Hz	ppm	" ' '	
	-30	167	0.088830		
	-20	145	0.077128		
	-10	125	0.066489		
	0	126	0.067021	±2.5	
3.80	10	136	0.072340		Pass
	20	138	0.073404		
	30	149	0.079255		
	40	152	0.080851	]	
	50	155	0.082447		
Reference F	requency: LTE Band	2(5MHz) M	iddle channel=18900 c	hannel=1880.00	MHz
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (com	Result
Power supplied (vac)	remperature (C)	Hz	ppm	Limit (ppm)	Result
	-30	178	0.094681		
	-20	163	0.086702		
	-10	122	0.064894	_	
	0	155	0.082447		5
3.80	10	145	0.077128	±2.5	Pass
	20	123	0.065426		
	30 40	129	0.068617	-	
	50	136	0.072340	-	
	50	158	0.084043		





D 1: 10/1)	T(%C)	Fre	quency error	1: '( / )	Result
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	
	-30	193	0.102660		
	-20	152	0.080851		
	-10	145	0.077128		
	0	124	0.065957		
3.80	10	159	0.084574	±2.5	Pass
	20	163	0.086702		
	30	164	0.087234		
	40	174	0.092553		
	50	144	0.076596		
Reference F	requency: LTE Band			0 channel=1880.00	)MHz
Power supplied (Vdc)	Temperature (°C)		quency error	Limit (ppm)	Result
11 ( )	. ,	Hz	ppm	(11 /	Result
	-30	163	0.086702		
	-20	125	0.066489		
	-10	145	0.077128		
	0	122	0.064894		
3.80	10	108	0.057447	±2.5	Pass
	20	147	0.078191		
	30	149	0.079255		
	40	158	0.084043		
	50	136	0.072340		
Reference F	requency: LTE Band	2(20MHz) N	liddle channel=1890	0 channel=1880.00	)MHz
Power supplied (Vdc)	Temperature (°C)		quency error	Limit (ppm)	D !!
1 ower supplied (vdc)	remperature ( e)	Hz	ppm	Еппи (ррпп)	Result
	-30	174	0.092553		
	-20	155	0.082447		
	-10	136	0.072340		
	0	134	0.071277		
3.80	10	147	0.078191	±2.5	Pass
3.80			0.000070		. 400
3.80	20	156	0.082979		
3.80	20 30	156 152	0.082979	<del>-</del>	
3.80					





### LTE Band 2(16QAM):

		LIE Ballu Z			
Reference F	requency: LTE Band	2(1.4MHz)	Middle channel=18900	channel=1880.0	0MHz
	Temperature (°C)	Fı	requency error	Limit (nnm)	
Power supplied (Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Result
	-30	166	0.088298		
	-20	125	0.066489		
	-10	152	0.080851		
	0	140	0.074468		
3.80	10	104	0.055319	±2.5	Pass
0.00	20	125	0.066489		. 466
	30	126	0.067021		
	40	136	0.072340		
	50	150	0.079787		
Reference I	requency: LTE Band	d 2(3MHz) M	fiddle channel=18900	channel=1880.00	)MHz
	Tarana anatawa (°C)	Frequency error		1:: ( (	
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	177	0.094149		
	-20	126	0.067021		
	-10	135	0.071809	1	
	0	156	0.082979	1	
3.80	10	148	0.078723	±2.5	Pass
3.00	20	150	0.079787		Pa55
	30	126	0.067021		
	40	136	0.072340		
	50	169	0.089894	1	
Reference F			iddle channel=18900 c	hannel=1880.00	MHz
		Frequency error			
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	155	0.082447		
	-20	124	0.065957		
	-10	126	0.067021	_	
	0	133	0.070745	1	
3.80	10	130	0.069149	±2.5	Pass
	20	146	0.077660	_	
	30	150	0.079787	_	
	40	147	0.078191	-	
	50	126	0.067021		





	- (05)	Frequency error			_
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	170	0.090426		
	-20	125	0.066489		
	-10	146	0.077660		
	0	149	0.079255		
3.80	10	163	0.086702	±2.5	Pass
	20	160	0.085106		
	30	165	0.087766		
	40	166	0.088298		
	50	128	0.068085		
	requency: LTE Band	2(15MHz) M	iddle channel=18900	0 channel=1880.00	MHz
Power supplied	Temperature (°C)		quency error	Limit (ppm)	Result
(Vdc)	` '	Hz	ppm	Еппи (ррпп)	rtoouit
	-30	149	0.079255		Pass
	-20	126	0.067021		
	-10	123	0.065426		
	0	130	0.069149		
3.80	10	122	0.064894	±2.5	
	20	145	0.077128		
	30	140	0.074468		
	40	133	0.070745		
	50	135	0.071809		
Reference F	requency: LTE Band	L		channel=1880.00	MHz
Power supplied			quency error		
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	156	0.082979		
	-20	133	0.070745		
	-10	125	0.066489		
		134	0.071277		
	()		0.01 1211		
3.80	0	120	0.063830	+2.5	Pass
3.80	10	120	0.063830	±2.5	Pass
3.80	10 20	155	0.082447	±2.5	Pass
3.80	10			±2.5	Pass





## LTE Band 4(QPSK):

	LIE Band 4(QPSK):							
Reference Fr	equency: LTE Band	4(1.4MHz) N	Middle channel=20175	channel=1732.50	OMHz			
Power supplied	Temperature (°C)	Temperature (°C) Frequency error		Limit (ppm)	Result			
(Vdc)	` ` `	Hz	ppm	Еппт (ррпп)	resuit			
	-30	188	0.108514					
	-20	152	0.087734					
	-10	146	0.084271					
	0	136	0.078499					
3.80	10	163	0.094084	±2.5	Pass			
	20	166	0.095815					
	30	165	0.095238					
	40	125	0.072150					
	50	142	0.081962					
Reference F	requency: LTF Band	4(3MHz) M	liddle channel=20175 c	hannel=1732 50	MHz			
	roquonoy. ETE Bana				1711 12			
Power supplied (Vdc)	Temperature (°C)		equency error	Limit (ppm)	Result			
(vuc)	20	Hz 462	ppm					
	-30	163	0.094084					
	-20	123	0.070996					
	-10	140	0.080808					
	0	125	0.072150	±2.5				
3.80	10	106	0.061183		Pass			
	20	132	0.076190					
	30	135	0.077922					
	40	136	0.078499					
	50	145	0.083694					
Reference F	requency: LTE Band	4(5MHz) M	liddle channel=20175 c	hannel=1732.50	MHz			
Power supplied (Vdc)	Tomporature (°C)	Frequency error		Limit (nnm)	Result			
Power supplied (vac)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result			
	-30	147	0.084848					
	-20	126	0.072727					
	-10	130	0.075036					
	0	122	0.070418		_			
3.80	10	125	0.072150	±2.5	Pass			
	20 30	104	0.060029					
	40	102 136	0.058874 0.078499	1				
	50	133	0.076768	-				
	50	100	0.070700	]				





Reference Fi	equency: LTE Band	4(10MHz) M	iddle channel=20175	channel=1732.50	MHz
Power supplied (Vdc)	Temperature (°C)		quency error	Limit (ppm)	Result
rower supplied (vac)	remperature (C)	Hz	ppm	Еппі (рріп)	Nesuit
	-30	163	0.094084		
	-20	124	0.071573		
	-10	125	0.072150		
	0	105	0.060606		_
3.80	10	124	0.071573	±2.5	Pass
	20	145	0.083694		
	30 40	149	0.086003	_	
	50	160 159	0.092352 0.091775		
Reference F	requency: LTE Band	L .		5 channel=1732.5	OMHz
			equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	152	0.087734		Pass
	-20	136	0.078499		
	-10	142	0.081962		
	0	150	0.086580		
3.80	10	136	0.078499	±2.5	
	20	133	0.076768		
	30	126	0.072727		
	40	125	0.072150		
	50	150	0.086580		
Reference F	requency: LTE Band	LL		5 channel=1732.5	OMHz
			equency error		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	174	0.100433		
	-20	163	0.094084		
	-10	125	0.072150		
	0	122	0.070418		
3.80	10	136	0.078499	±2.5	Pass
	20	135	0.077922		1 433
	30	129	0.074459		
				1	
	40	128	0.073882		





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)	Fı	requency error	Limit (ppm)			
Power supplied (Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Result		
	-30	163	0.094084				
	-20	125	0.072150				
	-10	142	0.081962				
	0	150	0.086580				
3.80	10	148	0.085426	±2.5	Pass		
0.00	20	123	0.070996		. 400		
	30	133	0.076768				
	40	135	0.077922				
	50	137	0.079076				
Poforonco I			/liddle channel=20175	channel_1732 50	MHz		
Reference	riequency. LTE band	1 4(31VII 12) IV	mudie chaminei=20175		IVII IZ		
Power supplied (Vdc)	Temperature (℃)	Fı	requency error	Limit (ppm)	Dooult		
Power supplied (vac)	· • · · · · · · · · · · · · · · · · · ·	Hz	ppm		Result		
	-30	155	0.089466				
	-20	126	0.072727				
	-10	132	0.076190				
	0	125	0.072150				
3.80	10	124	0.071573	±2.5	Pass		
0.00	20	108	0.062338		. 466		
	30	104	0.060029				
	40	122	0.070418				
	50	116	0.066955				
Reference F	requency: LTE Band	4(5MHz) M	iddle channel=20175 c	hannel=1732.50l	MHz		
D	T(°C)	Frequency error			D !!		
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result		
	-30	169	0.097547				
	-20	132	0.076190				
	-10	152	0.087734	_			
	0	145	0.083694	_	_		
3.80	10	102	0.058874	±2.5	Pass		
	20	114	0.065801	4			
	30 40	166 152	0.095815	-			
	50	152	0.087734 0.091775	+			
	อบ	109	0.091773				





		Fre	equency error		_
Power supplied (Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
	-30	150	0.086580		
	-20	167	0.096392		
	-10	122	0.070418		
	0	140	0.080808		
3.80	10	160	0.092352	±2.5	Pass
	20	161	0.092929		
	30	152	0.087734		
	40	153	0.088312		
	50	142	0.081962		
	requency: LTE Band	4(15MHz) N	liddle channel=20175	channel=1732.50	MHz
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result
(Vdc)	, , ,	Hz	ppm	=····· (PP····)	
	-30	156	0.090043		
	-20	152	0.087734		
	-10	145	0.083694		
	0	125	0.072150		
3.80	10	133	0.076768	±2.5	Pass
	20	120	0.069264		
	30	126	0.072727		
	40	105	0.060606		
	50	108	0.062338		
Reference F	requency: LTE Band	4(20MHz) N	liddle channel=20175	5 channel=1732.50	MHz
Power supplied	Temperature (°ℂ)	Fre	equency error		
(Vdc)	remperature (C)	Hz	ppm	Limit (ppm)	Result
	-30	136	0.078499		
3.80	-20	134	0.077345		
	-10	120	0.069264		
	0	120	0.069264	7	
	10	122	0.070418	±2.5	Pass
	20	105	0.060606	±z.5	1-000
	30	131	0.075613	<b>-</b>	
	JU .				
	40	129	0.074459		





LTE Band 7(QPSK):

		LTE Band			
	requency: LTE Band 7		ddle channel=21100 Fr	equency=2535.00	)MHz
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Popult
(Vdc)	(0)	Hz	ppm	штік (ррті)	Result
	-30	192	0.075740		
	-20	122	0.048126		
	-10	174	0.068639		
	0	163	0.064300		
3.80	10	152	0.059961	±2.5	Pass
	20	182	0.071795		1 400
	30	152	0.059961		
	40	145	0.057199		
	50	170	0.067061		
Reference Fr			ddle channel=21100 Fi	requency=2535.0	0MHz
Power supplied		·	equency error		O 12
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
,	-30	165	0.065089		
	-20	124	0.048915		
	-10	126	0.049704		
	0	136	0.053649	±2.5 Pa	
3.80	10	145	0.057199		5
3.00	20	144	0.056805		Pass
	30	148	0.058383		
	40	157	0.061933	_	
D (	50	156	0.061538	0505.0	08.41.1
	equency: LTE Band 7	, ,	ddle channel=21100 F	requency=2535.0	UMHZ
Power supplied (Vdc)	Temperature (°C)	Hz	equency error	Limit (ppm)	Result
(vuc)	-30	160	ppm 0.063116		
	-20	122	0.048126	-	
	-10	134	0.052860		
	0	133	0.052465		
3.80	10	137	0.054043	±2.5	Pass
	20	129	0.050888		
	30	126	0.049704		
	40	104	0.041026		
	50	125	0.049310		
Reference Fr	equency: LTE Band 7	(20MHz) Mi	ddle channel=21100 Fi	requency=2535.0	0MHz
Power supplied	Temperature (°C)		equency error	Limit (ppm)	Result
(Vdc)		Hz	ppm	Еппи (ррпп)	rtoodit
	-30	154	0.060750	_	
	-20	124	0.048915	4	
	-10	126	0.049704	-	
2.00	0	136	0.053649		Dess
3.80	10	114	0.044970	±2.5	Pass
	20 30	117 105	0.046154 0.041420	-	
	40	105	0.041420	-	
	50	134	0.041813	-	
	1 00	107	0.002000	1	





LTE Band 7(16QAM):

Reference F		LTE Band 7	<b>7(16QAM):</b> ddle channel=21100 F	requency=2535 00	)MHz
	Tequency: ETE Band I			2000:00	//VII 12
Power supplied (Vdc)	Temperature (°C)	Hz	equency error ppm	Limit (ppm)	Result
	-30	174	0.068639		
	-20	146	0.057594		
	-10	163	0.064300		
	0	152	0.059961		
3.80	10	122	0.048126	I	_
3.00	20	105	0.041420	±2.5	Pass
				_	
	30	128	0.050493	_	
	40	136	0.053649	_	
D (	50	149	0.058777		08.41.1
	equency: LTE Band /		ddle channel=21100 F	requency=2535.0	UMHZ
Power supplied	Temperature (°C)	Fr	equency error	Limit (nnm)	Result
(Vdc)	(0)	Hz	ppm	Limit (ppm)	Result
	-30	177	0.069822		
	-20	145	0.057199		
	-10	128	0.050493		
	0	136	0.053649		
3.80	10	159	0.062722	±2.5	Pass
	20	149	0.058777		1 433
	30	162	0.063905		
	40	160	0.063116	<del>-</del>	
	50	127	0.050099		
Reference Fr			ddle channel=21100 F	Frequency-2535 0	OMH <sub>7</sub>
Power supplied		· · · · · · · · · · · · · · · · · · ·	equency error		
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
( 2 2)	-30	165	0.065089		
	-20	124	0.048915		
	-10	135	0.053254		
	0	130	0.051282		
3.80	10	125	0.049310	2.5	Pass
	20	124	0.048915		
	30	126	0.049704	_	
	40	158	0.062327	_	
Deference Fr	50	104	0.041026		ONAL I—
Power supplied	equency. LTE band <i>r</i>	·	ddle channel=21100 F equency error	requency=2535.0	UIVITZ
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Result
( v d o )	-30	170	0.067061		
	-20	165	0.065089	7	
	-10	133	0.052465	7	
	0	160	0.063116	7	
3.80	10	122	0.048126	2.5	Pass
	20	104	0.041026		
	30	108	0.042604	_	
	40	129	0.050888	_	
	50	126	0.049704		





## 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:	Temperature Chamber
	Spectrum analyzer  EUT  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):

		LTE Band 2(Q	PSK):		
Reference F	requency: LTE Band	2(1.4MHz) Middle	e channel=18900	channel=1880.00	MHz
Tomporatura (°C)	Power supplied	Freque	ncy error	Limit (nome)	Doordt
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.039362		
25	3.80	96	0.051064	±2.5	Pass
	3.23	80	0.042553		
Reference F	requency: LTE Band	d 2(3MHz) Middle	channel=18900 d	channel=1880.00N	ИHz
T (%C)	Power supplied	Frequei	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.039362		
25	3.80	88	0.046809	±2.5	Pass
	3.23	90	0.047872	7	
Reference F	requency: LTE Band	d 2(5MHz) Middle	channel=18900 d	channel=1880.00N	ЛНz
	Power supplied	,	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.039362		
25	3.80	63	0.033511	±2.5	Pass
	3.23	82	0.043617		. 0.00
Reference F	requency: LTE Band		channel=18900	channel=1880.00	MHz
	Power supplied		ncy error	Limit (ppm)	
Temperature (°C)	(Vdc)	Hz	ppm		Result
	4.37	52	0.027660		
25	3.80	46	0.024468	±2.5	Pass
	3.23	28	0.014894		. 0.00
Reference F	requency: LTE Band		channel=18900	channel=1880.00	MHz
	Power supplied	, , , , , , , , , , , , , , , , , , , ,	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	66	0.035106		
25	3.80	71	0.037766	±2.5	Pass
20	3.23	39	0.020745		. 0.00
Reference F	requency: LTE Band			 channel=1880.00	MHz
	Power supplied	,	ncy error		
Temperature $(^{\circ}\mathbb{C})$	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.039362		
25	3.80	89	0.047340	±2.5	Pass
_•	3.23	65	0.034574		1 433
			l .	_1	





LTE Band 2(16QAM):

		LTE Band 2(16	QAM):		
Reference F	requency: LTE Band	2(1.4MHz) Middle	e channel=18900	channel=1880.00	MHz
Tomporatura (°C)	Power supplied	Freque	ncy error	Limit (none)	Dooult
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.039362		
25	3.80	70	0.037234	±2.5	Pass
	3.23	66	0.035106		
Reference I	Frequency: LTE Band	d 2(3MHz) Middle	channel=18900 d	channel=1880.00N	1Hz
- (00)	Power supplied	Frequei	ncy error		5
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	96	0.051064		
25	3.80	63	0.033511	±2.5	Pass
	3.23	35	0.018617	_	
Reference I	requency: LTE Band	d 2(5MHz) Middle	channel=18900 d	channel=1880.00N	1Hz
T (00)	Power supplied	Freque	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	71	0.037766	±2.5	
25	3.80	58	0.030851		Pass
	3.23	59	0.031383		
Reference F	requency: LTE Band	2(10MHz) Middle	channel=18900	channel=1880.00l	ИНz
	Power supplied	Freque	ncy error	Limit (ppm)	
Temperature (℃)	(Vdc)	Hz	ppm		Result
	4.37	74	0.039362		
25	3.80	49	0.026064	±2.5	Pass
	3.23	45	0.023936		
Reference F	requency: LTE Band	2(15MHz) Middle	channel=18900	channel=1880.00l	ИНz
	Power supplied		ncy error		
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	52	0.027660		
25	3.80	80	0.042553	±2.5	Pass
	3.23	46	0.024468	7	
Reference F	requency: LTE Band	2(20MHz) Middle	channel=18900	channel=1880.00l	ИНz
Power supplied		Freque	ncy error		D !!
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	90	0.047872		
25	3.80	74	0.039362	±2.5	Pass
20	3.23	56	0.029787		





LTE Band 4(QPSK):

Reference Frequency: LTE Band 4(1.4MHz) Middle channel=20175 channel=1732.50MHz			LTE Band 4(Q	PSK):		
Comperature (C)	Reference Fr	requency: LTE Band	4(1.4MHz) Middle	e channel=20175	channel=1732.50	MHz
(Vdc)   Hz   ppm	Tomporature (°C)	Power supplied	Frequer	ncy error	Limit (none)	Doordt
25   3.80	remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz		4.37	90	0.051948	_	
Reference Frequency: LTE Band 4(3MHz) Middle channel=20175 channel=1732.50MHz	25	3.80	47	0.027128	±2.5	Pass
Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           25         3.80         74         0.042713         ±2.5         Pass           3.23         49         0.028283         ±2.5         Pass           Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz           Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           25         3.80         90         0.051948         ±2.5         Pass           3.23         45         0.025974         ±2.5         Pass           Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz           Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           Temperature (°C)         3.80         59		3.23	85	0.049062		
Comparature (C)	Reference F	requency: LTE Band	d 4(3MHz) Middle	channel=20175 c	channel=1732.50ľ	ИHz
Result   R	T (%C)	Power supplied	Frequer	ncy error		
A.37	Temperature (C)			-	Limit (ppm)	Result
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz   Temperature (°C)		4.37	63			
Reference Frequency: LTE Band 4(5MHz) Middle channel=20175 channel=1732.50MHz	25	3.80	74	0.042713	±2.5	Pass
Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           25         3.80         90         0.046176         ±2.5         Pass           3.23         45         0.025974         ±2.5         Pass           Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           4.37         70         0.040404         1.000000000000000000000000000000000000		3.23	49	0.028283	1	
Comparature	Reference F	requency: LTE Band	d 4(5MHz) Middle	channel=20175 c	channel=1732.50ľ	ИНz
Comparature	- (00)	Power supplied	Frequer	ncy error		
A	Temperature (°C)	• •			Limit (ppm)	Result
Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz   Temperature (°C)		4.37	80	•		
3.23       45       0.025974         Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz         Temperature (℃)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         25       3.80       56       0.032323       ±2.5       Pass         3.23       63       0.036364       ±2.5       Pass         Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz         Temperature (℃)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         25       3.80       59       0.034055       ±2.5       Pass         3.23       63       0.036364       ±2.5       Pass         Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz         Temperature (℃)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result         Temperature (℃)       Power supplied (Vdc)       Frequency error       Limit (ppm)       Result	25	3.80	90	0.051948	±2.5	Pass
Temperature (℃)         Power supplied (Vdc)         Frequency error pppm         Limit (ppm)         Result           25         4.37         70         0.040404         ±2.5         Pass           3.80         56         0.032323         ±2.5         Pass           3.23         63         0.036364         1.000000000000000000000000000000000000				0.025974	1	
Columberature (C)	Reference F	requency: LTE Band	4(10MHz) Middle	channel=20175	channel=1732.50	MHz
Color   Colo	- (22)	Power supplied	Frequer	ncv error	Limit (ppm)	
25       3.80       56       0.032323       ±2.5       Pass         Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz         Temperature (°C)       Power supplied (Vdc)       Frequency error Hz       Limit (ppm)       Result         4.37       74       0.042713       ±2.5       Pass         3.23       63       0.034055       ±2.5       Pass         Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz         Temperature (°C)       Power supplied (Vdc)       Frequency error Limit (ppm)       Limit (ppm)       Result         4.37       80       0.046176       Limit (ppm)       Result	Temperature (°C)					Result
3.23   63   0.036364		4.37	70			
Reference Frequency: LTE Band 4(15MHz) Middle channel=20175 channel=1732.50MHz           Temperature (°C)         Power supplied (Vdc)         Frequency error         Limit (ppm)         Result           25         3.80         59         0.034055         ±2.5         Pass           3.23         63         0.036364         ±2.5         Pass           Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz           Temperature (°C)         Power supplied (Vdc)         Frequency error Limit (ppm)         Limit (ppm)         Result           4.37         80         0.046176         Limit (ppm)         Result	25	3.80	56	0.032323	±2.5	Pass
Temperature (℃)         Power supplied (Vdc)         Frequency error Hz         Limit (ppm)         Result           25         4.37         74         0.042713         25         25         3.80         59         0.034055         ±2.5         Pass           3.23         63         0.036364         59         0.036364         10.036366         10.036366 <td></td> <td></td> <td>63</td> <td>0.036364</td> <td>1</td> <td></td>			63	0.036364	1	
Column   C	Reference F	requency: LTE Band	4(15MHz) Middle	channel=20175	channel=1732.50	MHz
Column   C	T (%C)	Power supplied	Frequer	ncy error		
25 3.80 59 0.034055 ±2.5 Pass  3.23 63 0.036364  Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz  Temperature (°C) Power supplied (Vdc) Hz ppm  4.37 80 0.046176	Temperature (C)		Hz	ppm	Limit (ppm)	Result
3.23   63   0.036364		4.37	74	0.042713		
3.23         63         0.036364           Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz           Temperature (°C)         Power supplied (Vdc)         Frequency error (Vdc)         Limit (ppm)         Result           4.37         80         0.046176         0.04	25	3.80	59	0.034055	±2.5	Pass
Reference Frequency: LTE Band 4(20MHz) Middle channel=20175 channel=1732.50MHz  Temperature (°C) Power supplied (Vdc) Hz ppm Limit (ppm) Result  4.37 80 0.046176			63	0.036364	1	
Temperature (°C)  Power supplied Frequency error Limit (ppm)  (Vdc)  Hz ppm  4.37 80 0.046176	Reference F			channel=20175	channel=1732.50	MHz
Comperature (C)						
4.37 80 0.046176	Temperature (°C)		•		Limit (ppm)	Result
		` ´		•		
<del> </del>	25			0.034055	±2.5	Pass
3.23 66 0.038095				0.038095	]	. 200





LTE Band 4(16QAM):

		LTE Band 4(16	QAM):		
Reference F	requency: LTE Band	4(1.4MHz) Middle	e channel=20175	channel=1732.50	MHz
Tomporatura (°C)	Power supplied	Frequer	ncy error	limit (mmm)	Doords
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	70	0.040404		
25	3.80	49	0.028283	±2.5	Pass
	3.23	88	0.050794		
Reference F	requency: LTE Band	d 4(3MHz) Middle	channel=20175 c	channel=1732.50ľ	ИHz
	Power supplied	Frequer	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.042713		
25	3.80	96	0.055411	±2.5	Pass
	3.23	85	0.049062	1	
Reference F	requency: LTE Band	d 4(5MHz) Middle	channel=20175 c	channel=1732.50	ИНz
	Power supplied		ncy error		
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	63	0.036364		
25	3.80	58	0.033478	±2.5	Pass
_0	3.23	88	0.050794		. 6.65
Reference F	requency: LTE Band	4(10MHz) Middle	channel=20175	channel=1732.50	MHz
	Power supplied	,	ncy error		
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.042713		
25	3.80	63	0.036364	±2.5	Pass
_0	3.23	59	0.034055		. 0.00
Reference F	requency: LTE Band		channel=20175	channel=1732.50	MHz
	Power supplied	,	ncy error		
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	59	0.034055		
25	3.80	63	0.036364	±2.5	Pass
20	3.23	82	0.047330		1 400
Reference F	requency: LTE Band			channel=1732.50	MHz
Power supplied Frequency error					
Temperature (℃)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.042713		
25	3.80	59	0.034055	±2.5	Pass
-	3.23	85	0.049062		1 433
	l .			1	





LTE Band 7(QPSK):

Reference Fr	requency: LTE Band	7(5MHz) Middle c	hannel=21100 Fre	equency=2535.0	0MHz
Temperature (°ℂ)	Power supplied	Power supplied Frequency error		Limit (nnm)	Decult
remperature ( C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	57	0.022485		
25	3.80	46	0.018146	±2.5	Pass
	3.23	63	0.024852		
Reference Fre	equency: LTE Band 7	7(10MHz) Middle	channel=21100 Fr	equency=2535.0	00MHz
Temperature (°ℂ)	Power supplied	Freque	ncy error	Limit (nnm)	Result
remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	90	0.035503	±2.5	
25	3.80	52	0.020513		Pass
	3.23	46	0.018146		
Reference Fre	equency: LTE Band 7	7(15MHz) Middle	channel=21100 Fr	equency=2535.0	00MHz
Tomporeture (°C)	Power supplied	Frequency error		Limit (mmm)	Danult
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	74	0.029191		
25	3.80	77	0.030375	±2.5	Pass
	3.23	85	0.033531		
Reference Fre	equency: LTE Band 7	7(20MHz) Middle	channel=21100 Fr	equency=2535.0	00MHz
Temperature (°ℂ)	Power supplied	Frequei	ncy error	Limit (nnm)	Result
remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	63	0.024852		
25	3.80	49	0.019329	±2.5	Pass
	3.23	80	0.031558		





LTE Band 7(16QAM):

Reference Fr	equency: LTE Band	7(5MHz) Middle c	hannel=21100 Fre	equency=2535.0	0MHz
Temperature (°ℂ)	Power supplied		ncy error	Limit (ppm)	Result
, , , , , , , , , , , , , , , , , , , ,	(Vdc)	Hz	ppm	2(pp)	rtoodit
	4.37	74	0.029191	<u></u>	
25	3.80	89	0.035108	±2.5	Pass
	3.23	88	0.034714		
Reference Fre	equency: LTE Band 7	7(10MHz) Middle	channel=21100 Fr	equency=2535.0	00MHz
Temperature (°ℂ)	Power supplied	Freque	ncy error	Limit (ppm)	Result
remperature ( C)	(Vdc)	Hz	ppm	Limit (ppm)	Nesuit
	4.37	74	0.029191	±2.5	
25	3.80	75	0.029586		Pass
	3.23	62	0.024458		
Reference Fre	equency: LTE Band 7	7(15MHz) Middle	channel=21100 Fr	equency=2535.0	00MHz
Temperature (°ℂ)	Power supplied	Frequency error		Limit (nnm)	Result
remperature (C)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	63	0.024852		
25	3.80	90	0.035503	±2.5	Pass
	3.23	56	0.022091		
Reference Fre	equency: LTE Band 7	(20MHz) Middle	channel=21100 Fr	equency=2535.0	00MHz
Tomporature (°C)	Power supplied	Freque	ncy error	Limit (nnm)	Dooult
Temperature (°ℂ)	(Vdc)	Hz	ppm	Limit (ppm)	Result
	4.37	49	0.019329		
25	3.80	85	0.033531	±2.5	Pass
	3.23	67	0.026430	1	

-----End of report-----